

Pantheon Report

Generated at 2018-02-14 05:31:18 (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.

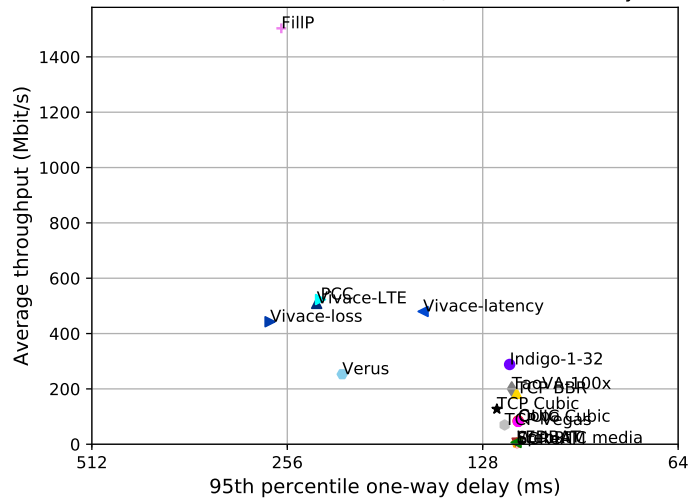
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

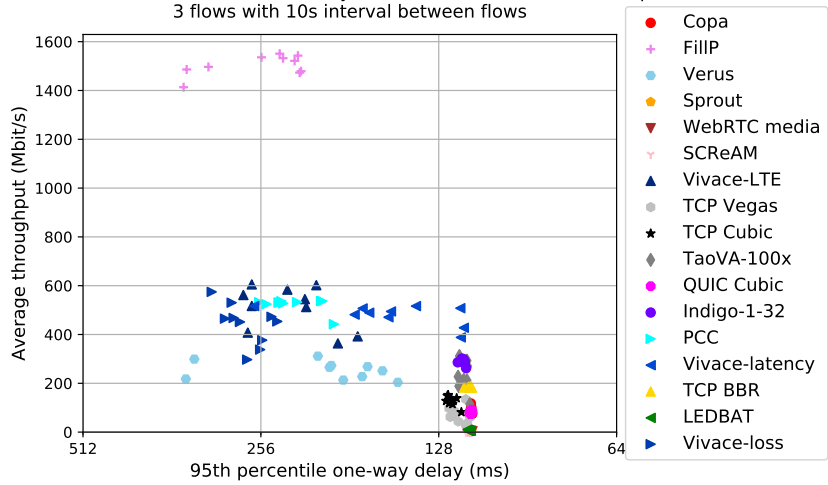
Git summary:

```
branch: master @ 2efdad57c2c56a9458b0d01ff33345e11732665
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from 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	93.30	93.48	86.28	113.03	113.52	114.15	0.01	0.01	0.01
TCP Cubic	10	52.13	75.57	75.17	120.59	121.20	123.34	0.02	0.00	0.06
LEDBAT	10	3.88	2.58	2.06	113.86	113.56	113.17	0.06	0.02	0.02
PCC	10	459.93	75.14	40.35	228.31	222.48	211.39	1.76	1.03	1.30
QUIC Cubic	10	47.20	41.60	21.16	112.69	112.49	111.67	0.00	0.00	0.00
SCReAM	10	0.20	0.20	0.21	112.83	112.69	112.72	0.00	0.00	0.00
WebRTC media	10	2.09	1.29	0.47	112.57	112.41	113.19	0.00	0.00	0.01
Sprout	10	2.40	2.57	1.79	113.35	113.44	113.22	0.09	0.08	0.04
TaoVA-100x	10	101.11	96.37	104.98	114.86	115.06	115.66	0.04	0.00	0.06
TCP Vegas	10	28.80	45.16	32.64	116.93	118.77	116.15	0.03	0.01	0.02
Verus	10	162.58	107.46	60.28	206.00	197.42	184.02	2.10	1.04	0.88
Copa	10	48.28	38.27	30.70	112.78	112.91	112.62	0.00	0.00	0.01
FillP	10	789.59	753.87	640.89	248.52	254.88	263.00	7.89	8.65	13.23
Indigo-1-32	10	152.08	146.87	122.02	115.77	116.79	116.94	0.01	0.02	0.01
Vivace-latency	10	285.01	234.04	119.52	138.40	160.19	150.12	0.11	0.64	0.60
Vivace-loss	10	244.30	219.82	160.02	270.30	265.55	253.59	3.99	5.45	5.85
Vivace-LTE	10	287.29	263.93	141.37	212.52	231.01	208.91	0.78	0.89	2.46

Run 1: Statistics of TCP BBR

Start at: 2018-02-13 22:15:49

End at: 2018-02-13 22:16:19

Below is generated by plot.py at 2018-02-14 03:38:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 185.74 Mbit/s

95th percentile per-packet one-way delay: 113.857 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 95.02 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 92.92 Mbit/s

95th percentile per-packet one-way delay: 114.816 ms

Loss rate: 0.00%

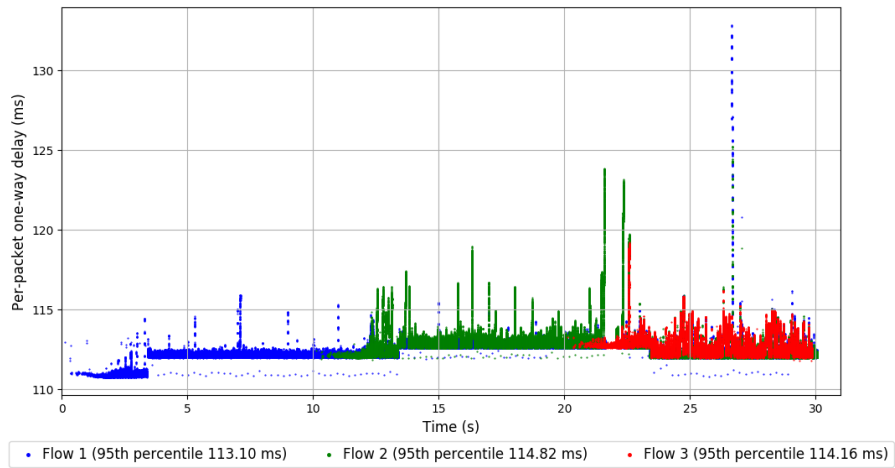
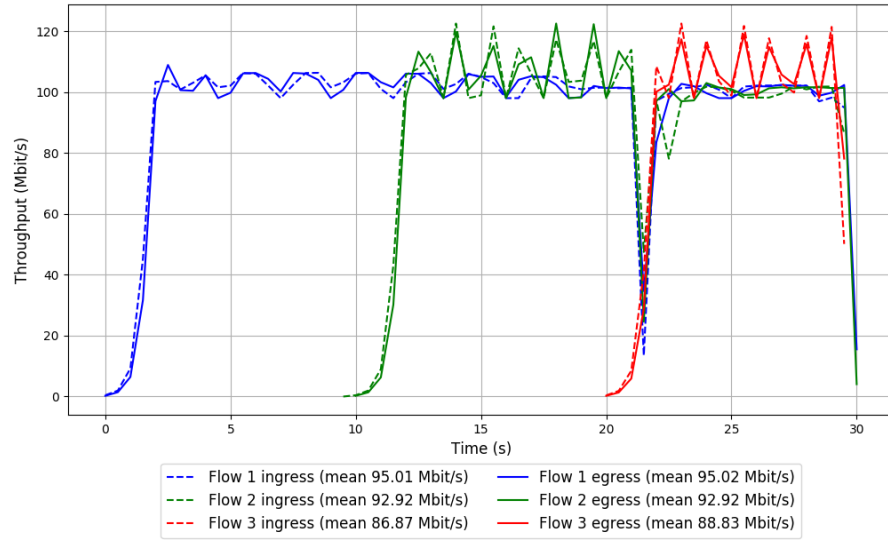
-- Flow 3:

Average throughput: 88.83 Mbit/s

95th percentile per-packet one-way delay: 114.155 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-13 22:35:36

End at: 2018-02-13 22:36:06

Below is generated by plot.py at 2018-02-14 03:38:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.30 Mbit/s

95th percentile per-packet one-way delay: 113.266 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 93.70 Mbit/s

95th percentile per-packet one-way delay: 112.920 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 91.18 Mbit/s

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

Loss rate: 0.01%

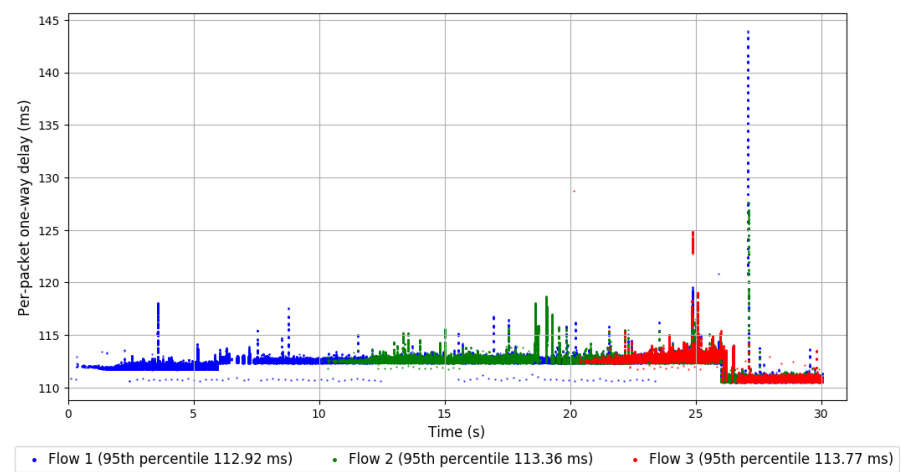
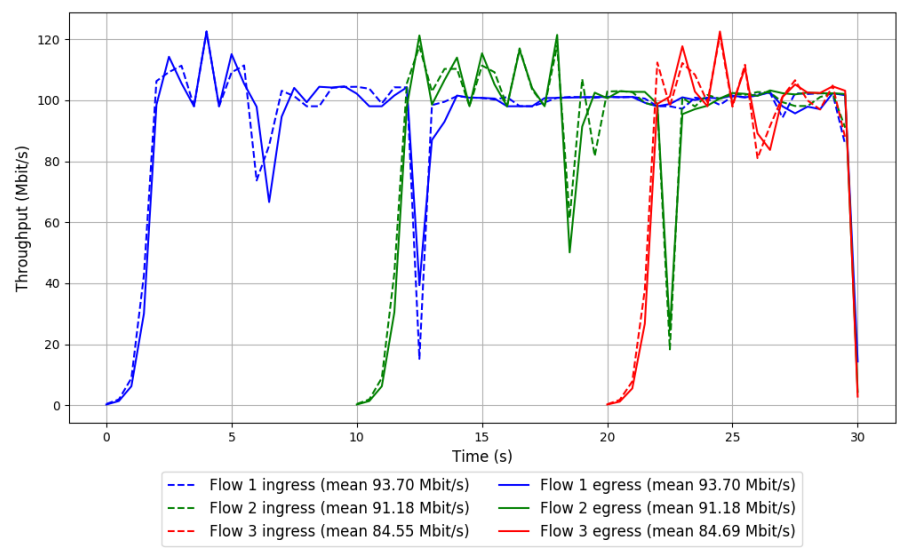
-- Flow 3:

Average throughput: 84.69 Mbit/s

95th percentile per-packet one-way delay: 113.768 ms

Loss rate: 0.01%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-13 22:54:55

End at: 2018-02-13 22:55:25

Below is generated by plot.py at 2018-02-14 03:38:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.07 Mbit/s

95th percentile per-packet one-way delay: 112.470 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 93.80 Mbit/s

95th percentile per-packet one-way delay: 112.163 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 91.01 Mbit/s

95th percentile per-packet one-way delay: 112.722 ms

Loss rate: 0.00%

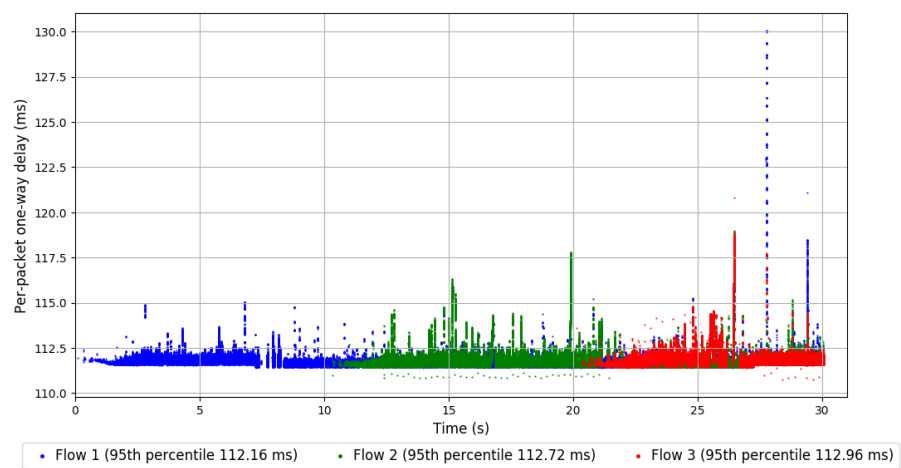
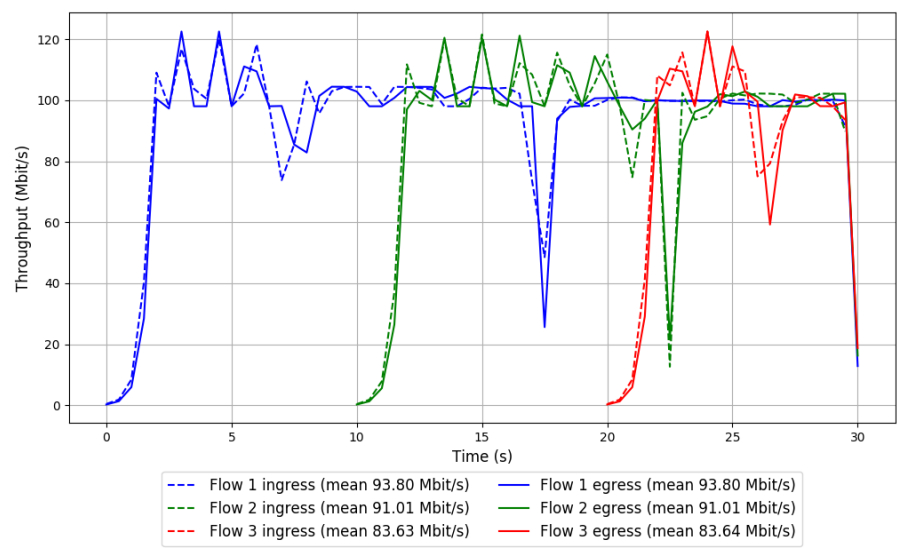
-- Flow 3:

Average throughput: 83.64 Mbit/s

95th percentile per-packet one-way delay: 112.959 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-13 23:14:24

End at: 2018-02-13 23:14:54

Below is generated by plot.py at 2018-02-14 03:38:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.44 Mbit/s

95th percentile per-packet one-way delay: 113.142 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 91.00 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 91.74 Mbit/s

95th percentile per-packet one-way delay: 112.871 ms

Loss rate: 0.02%

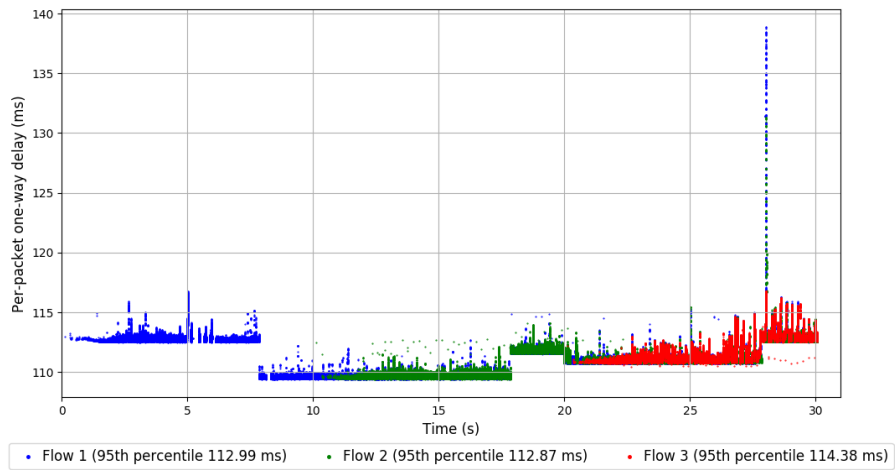
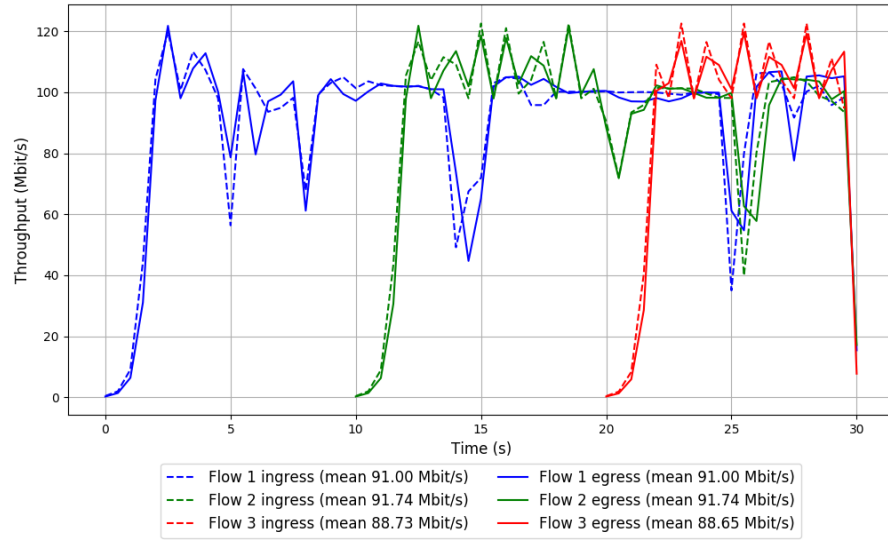
-- Flow 3:

Average throughput: 88.65 Mbit/s

95th percentile per-packet one-way delay: 114.382 ms

Loss rate: 0.11%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-13 23:33:45

End at: 2018-02-13 23:34:15

Below is generated by plot.py at 2018-02-14 03:38:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.69 Mbit/s

95th percentile per-packet one-way delay: 113.060 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 91.43 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 95.60 Mbit/s

95th percentile per-packet one-way delay: 112.909 ms

Loss rate: 0.02%

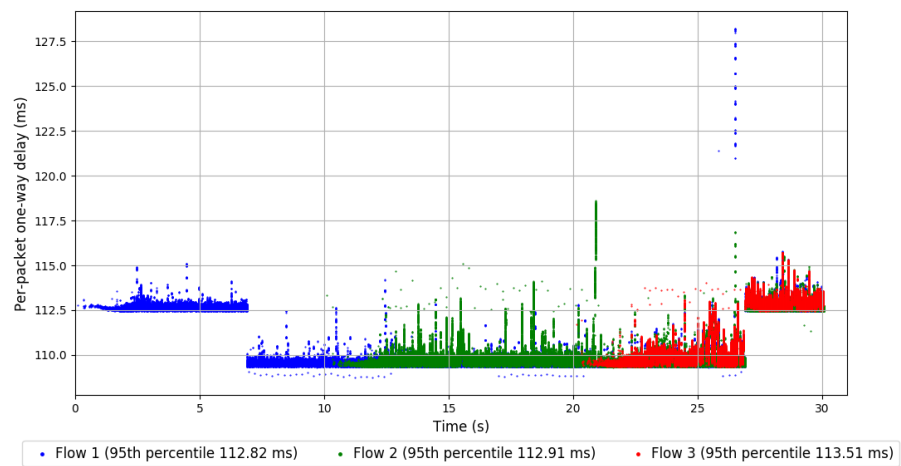
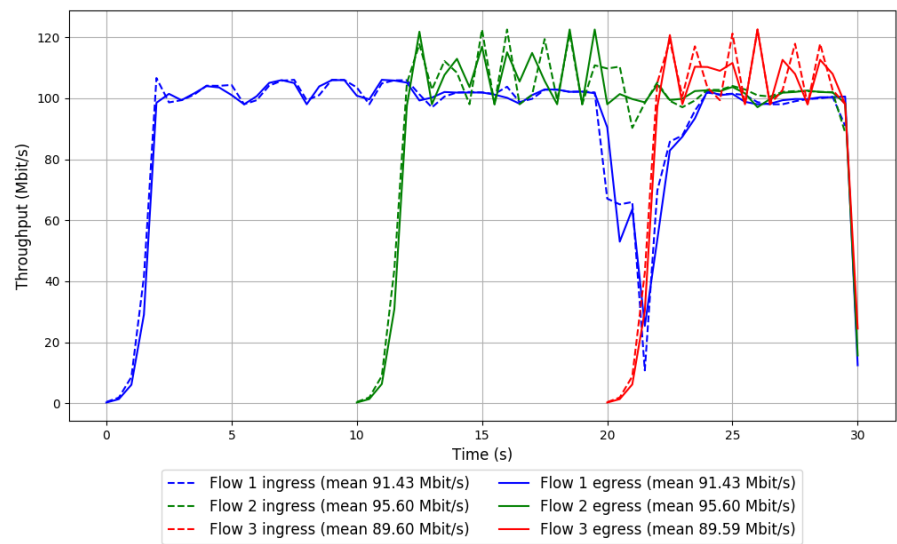
-- Flow 3:

Average throughput: 89.59 Mbit/s

95th percentile per-packet one-way delay: 113.511 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-13 23:53:04

End at: 2018-02-13 23:53:34

Below is generated by plot.py at 2018-02-14 03:38:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.23 Mbit/s

95th percentile per-packet one-way delay: 112.829 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 96.02 Mbit/s

95th percentile per-packet one-way delay: 112.550 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.20 Mbit/s

95th percentile per-packet one-way delay: 112.952 ms

Loss rate: 0.00%

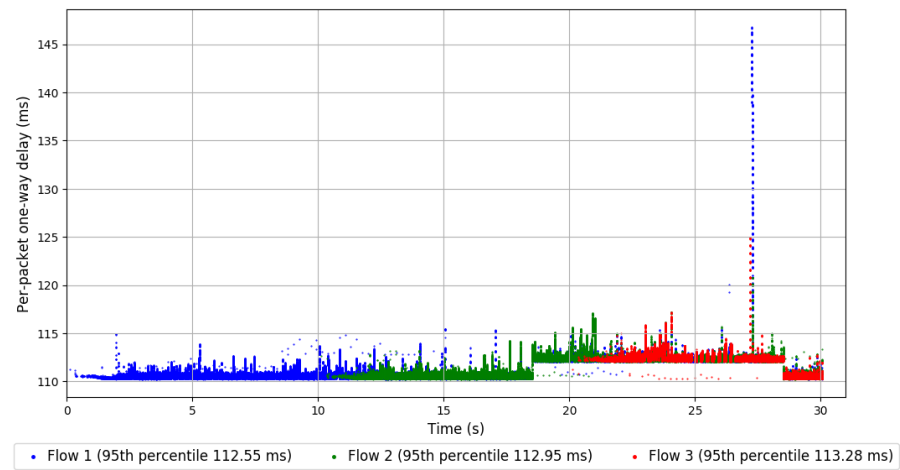
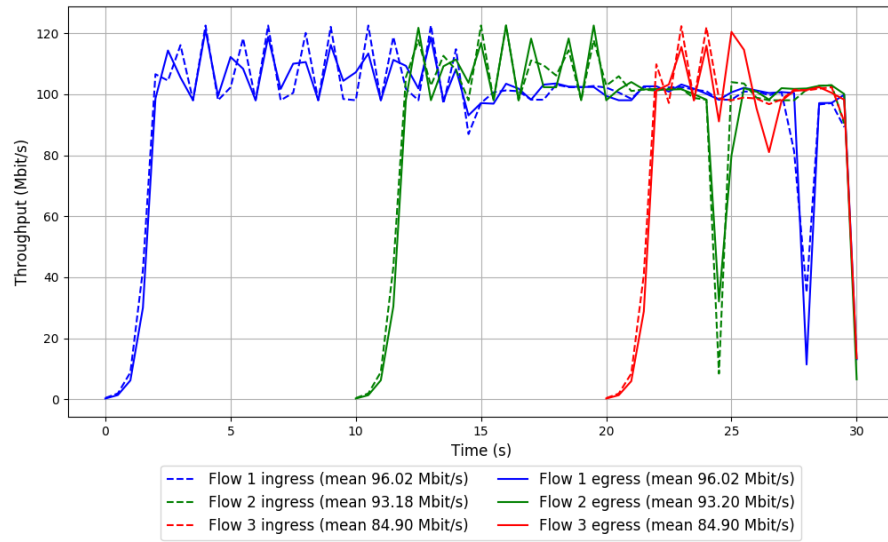
-- Flow 3:

Average throughput: 84.90 Mbit/s

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

Loss rate: 0.02%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-14 00:12:46

End at: 2018-02-14 00:13:16

Below is generated by plot.py at 2018-02-14 03:38:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.81 Mbit/s

95th percentile per-packet one-way delay: 114.218 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 91.71 Mbit/s

95th percentile per-packet one-way delay: 113.694 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 94.74 Mbit/s

95th percentile per-packet one-way delay: 114.549 ms

Loss rate: 0.00%

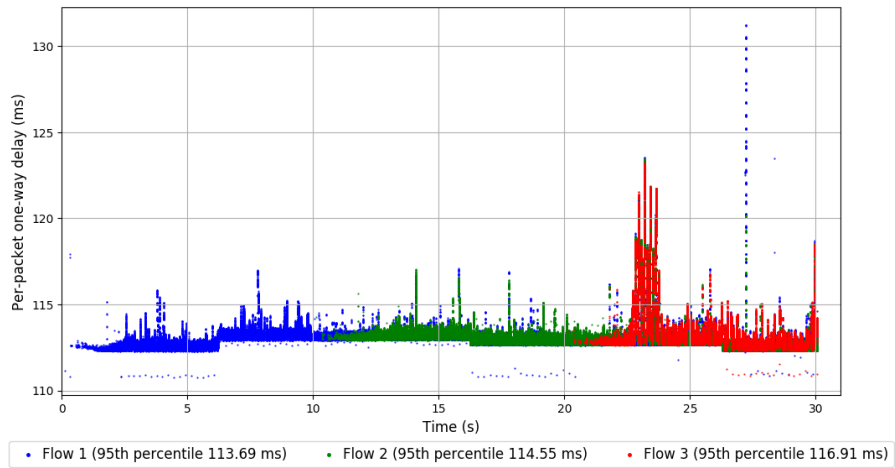
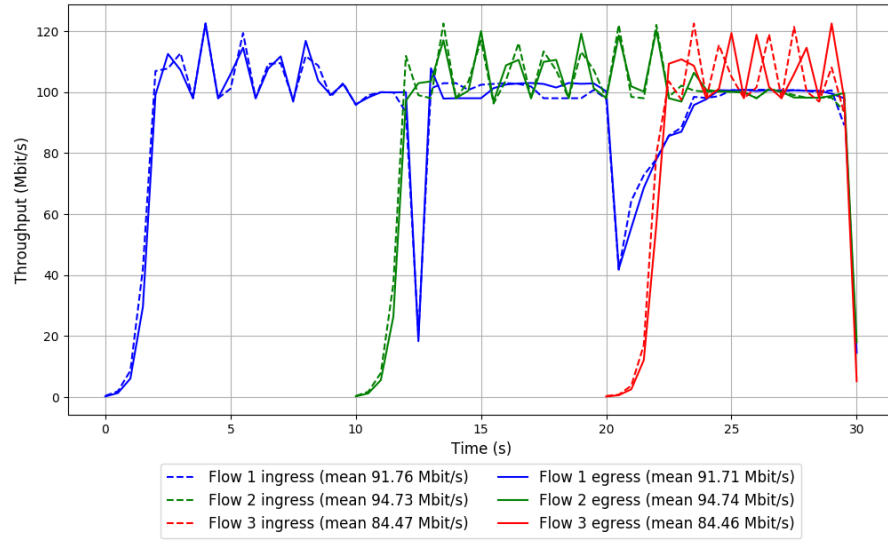
-- Flow 3:

Average throughput: 84.46 Mbit/s

95th percentile per-packet one-way delay: 116.908 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-14 00:32:36

End at: 2018-02-14 00:33:06

Below is generated by plot.py at 2018-02-14 03:38:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.59 Mbit/s

95th percentile per-packet one-way delay: 115.962 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 91.29 Mbit/s

95th percentile per-packet one-way delay: 113.782 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 95.37 Mbit/s

95th percentile per-packet one-way delay: 116.099 ms

Loss rate: 0.00%

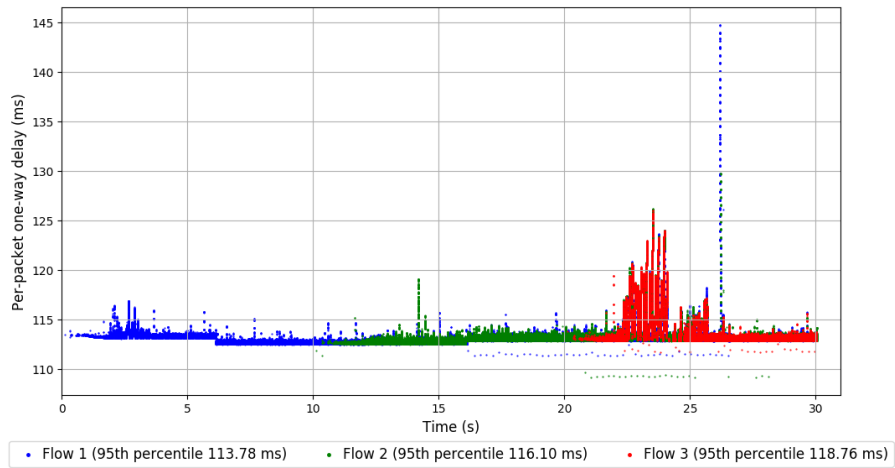
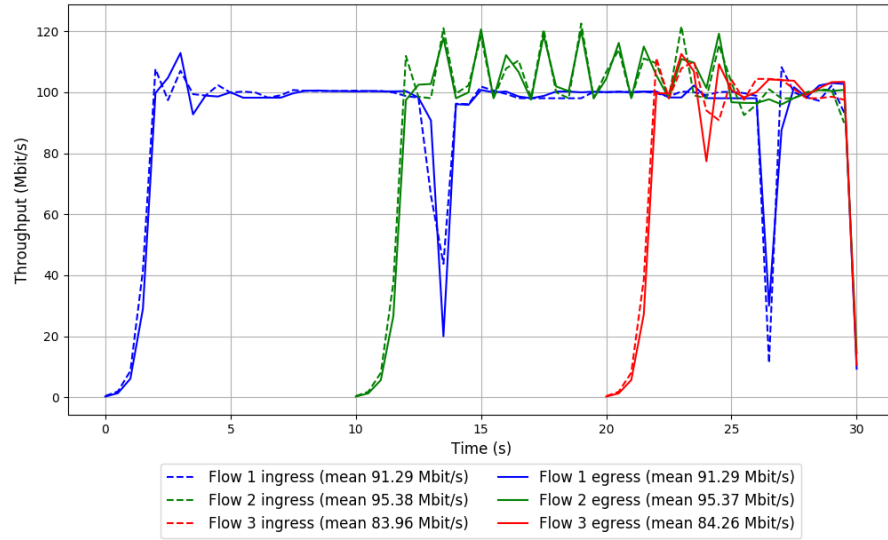
-- Flow 3:

Average throughput: 84.26 Mbit/s

95th percentile per-packet one-way delay: 118.763 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-14 00:51:48

End at: 2018-02-14 00:52:18

Below is generated by plot.py at 2018-02-14 03:41:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.34 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 94.97 Mbit/s

95th percentile per-packet one-way delay: 113.135 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 89.70 Mbit/s

95th percentile per-packet one-way delay: 111.780 ms

Loss rate: 0.00%

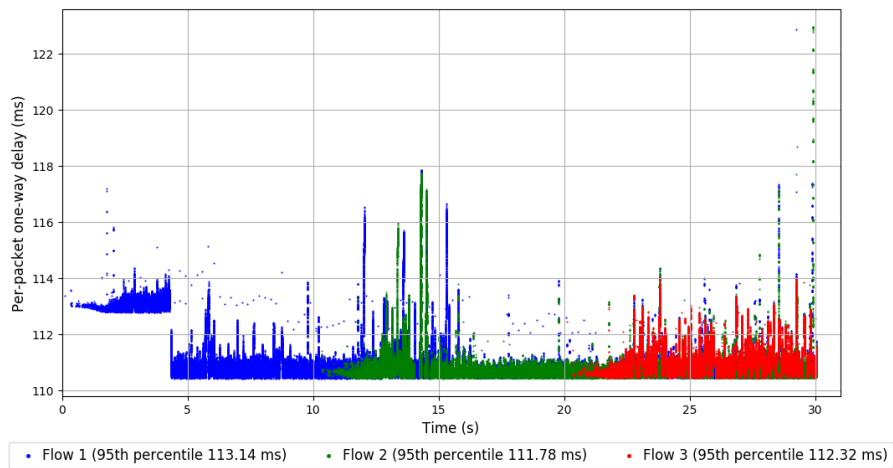
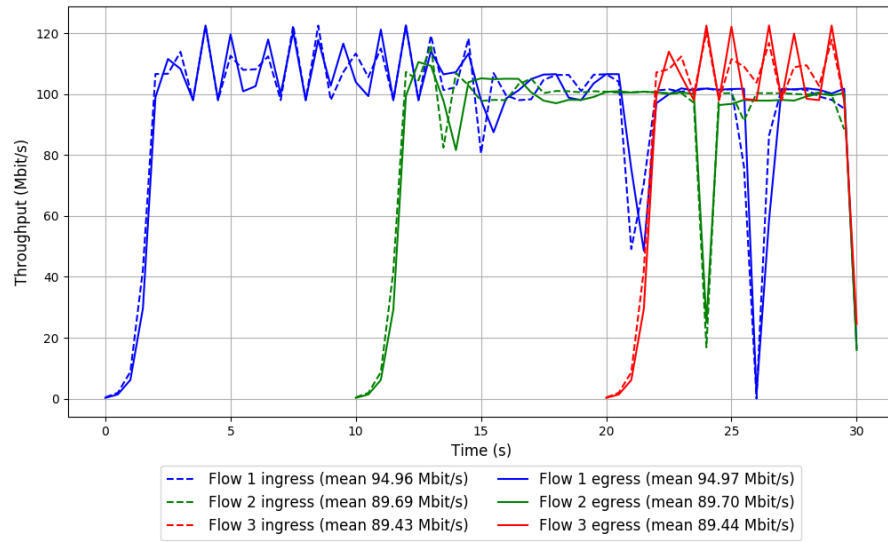
-- Flow 3:

Average throughput: 89.44 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-14 01:11:10

End at: 2018-02-14 01:11:40

Below is generated by plot.py at 2018-02-14 03:42:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.10 Mbit/s

95th percentile per-packet one-way delay: 113.086 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 94.06 Mbit/s

95th percentile per-packet one-way delay: 113.103 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.33 Mbit/s

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

Loss rate: 0.00%

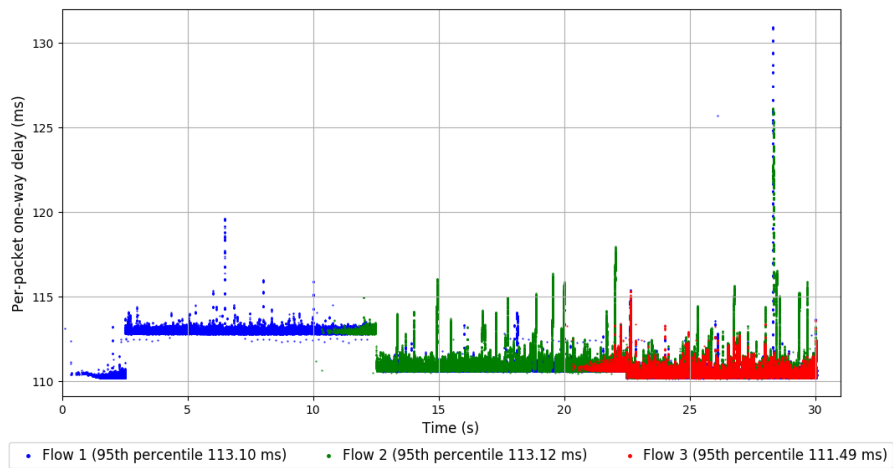
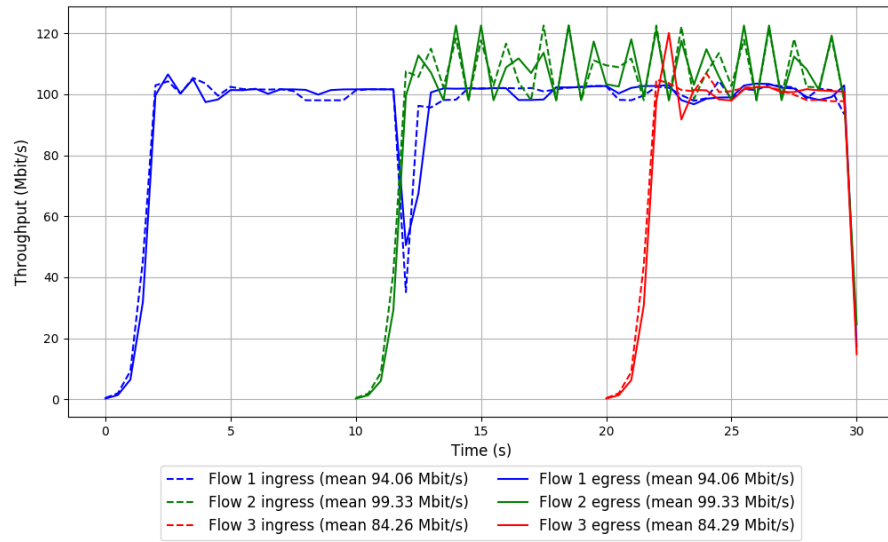
-- Flow 3:

Average throughput: 84.29 Mbit/s

95th percentile per-packet one-way delay: 111.487 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link

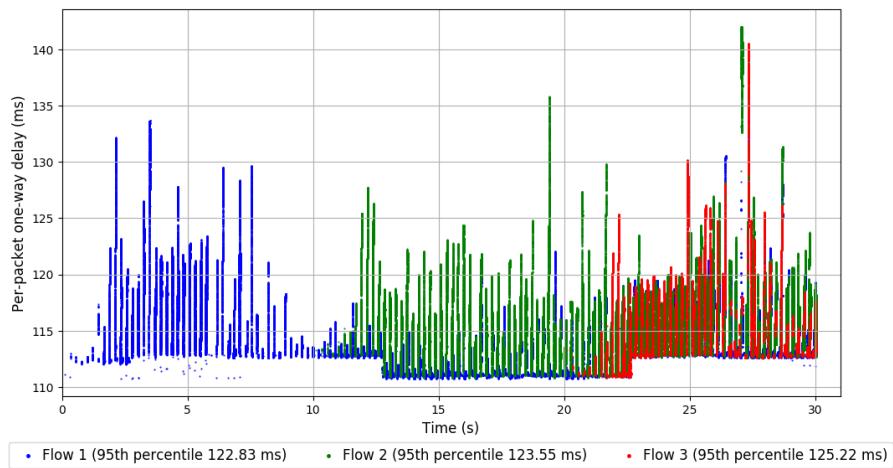
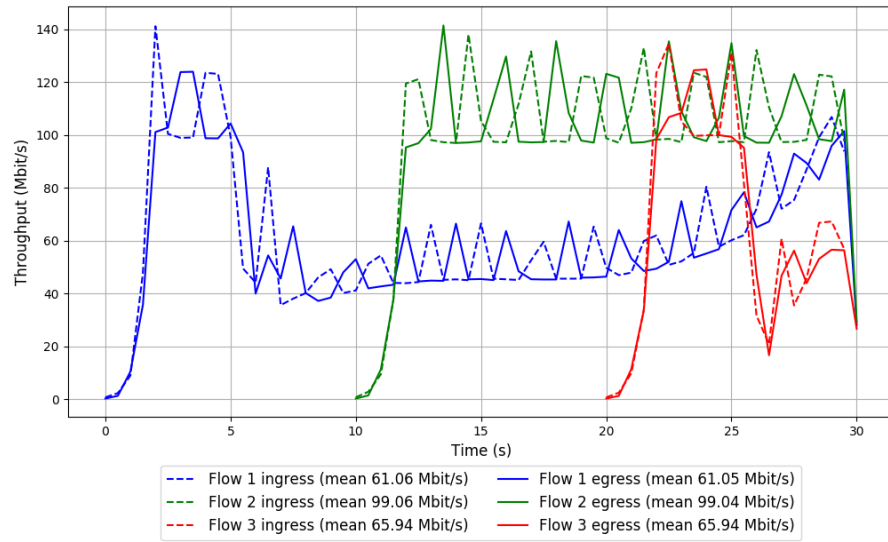


```
Run 1: Statistics of TCP Cubic

Start at: 2018-02-13 22:22:59
End at: 2018-02-13 22:23:29

# Below is generated by plot.py at 2018-02-14 03:42:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 148.78 Mbit/s
95th percentile per-packet one-way delay: 123.732 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.05 Mbit/s
95th percentile per-packet one-way delay: 122.828 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 99.04 Mbit/s
95th percentile per-packet one-way delay: 123.546 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 65.94 Mbit/s
95th percentile per-packet one-way delay: 125.219 ms
Loss rate: 0.01%
```

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-13 22:42:37

End at: 2018-02-13 22:43:07

Below is generated by plot.py at 2018-02-14 03:42:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.81 Mbit/s

95th percentile per-packet one-way delay: 117.183 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 32.90 Mbit/s

95th percentile per-packet one-way delay: 115.141 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 46.93 Mbit/s

95th percentile per-packet one-way delay: 114.676 ms

Loss rate: 0.00%

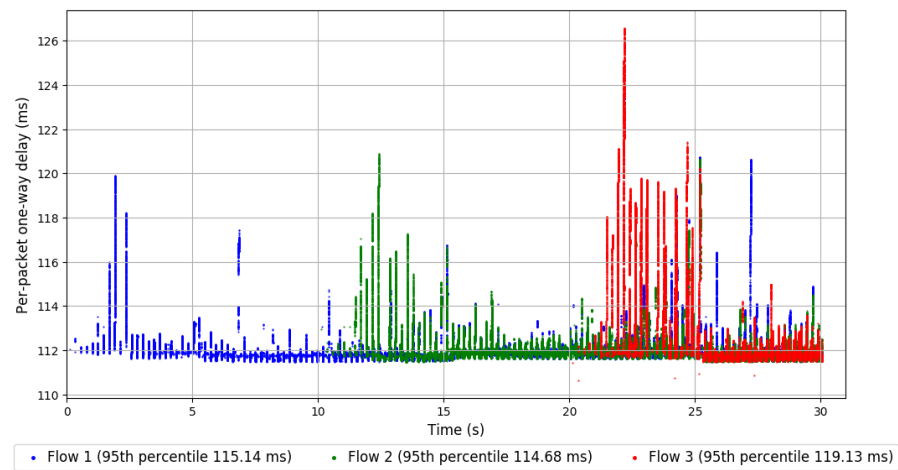
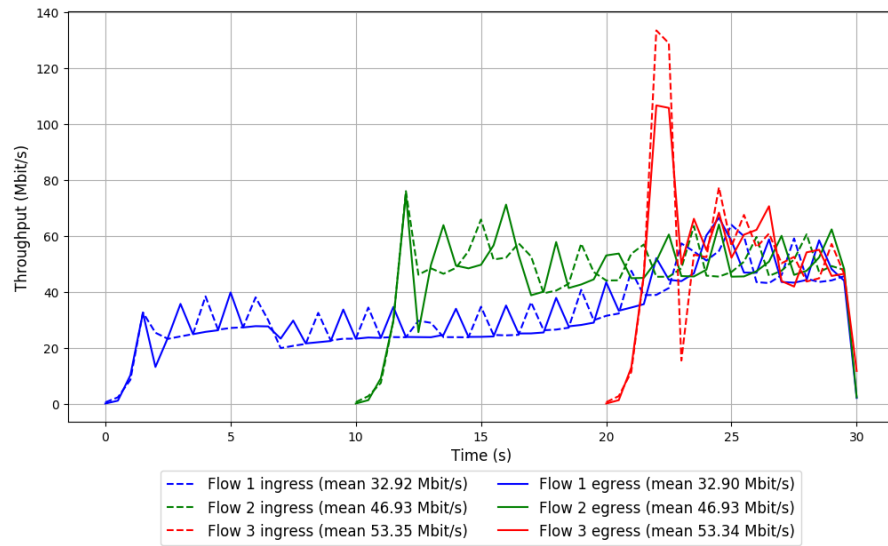
-- Flow 3:

Average throughput: 53.34 Mbit/s

95th percentile per-packet one-way delay: 119.133 ms

Loss rate: 0.03%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-13 23:01:47

End at: 2018-02-13 23:02:17

Below is generated by plot.py at 2018-02-14 03:42:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.94 Mbit/s

95th percentile per-packet one-way delay: 119.386 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 73.74 Mbit/s

95th percentile per-packet one-way delay: 118.928 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 51.89 Mbit/s

95th percentile per-packet one-way delay: 116.470 ms

Loss rate: 0.02%

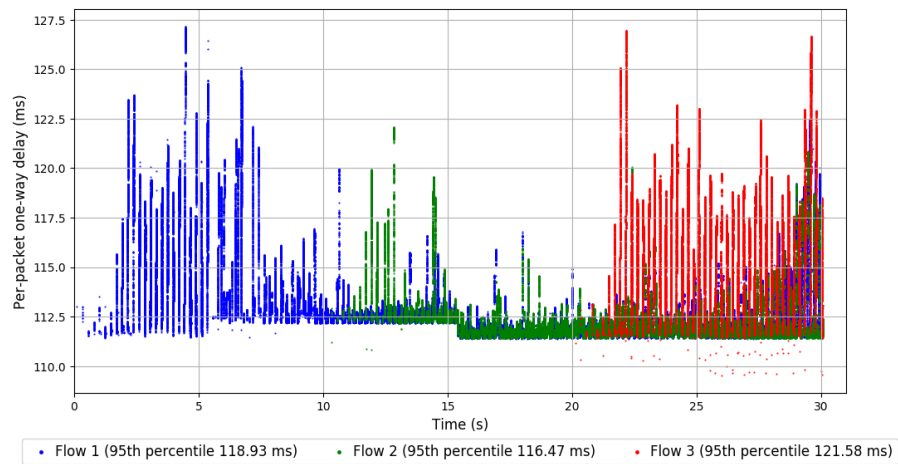
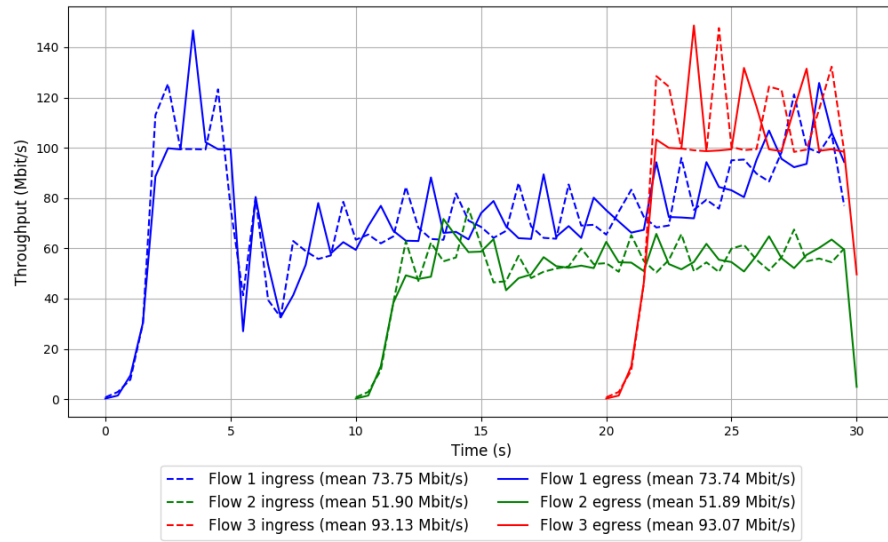
-- Flow 3:

Average throughput: 93.07 Mbit/s

95th percentile per-packet one-way delay: 121.581 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-13 23:21:29

End at: 2018-02-13 23:21:59

Below is generated by plot.py at 2018-02-14 03:42:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.34 Mbit/s

95th percentile per-packet one-way delay: 122.264 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 40.22 Mbit/s

95th percentile per-packet one-way delay: 121.412 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 80.98 Mbit/s

95th percentile per-packet one-way delay: 122.522 ms

Loss rate: 0.00%

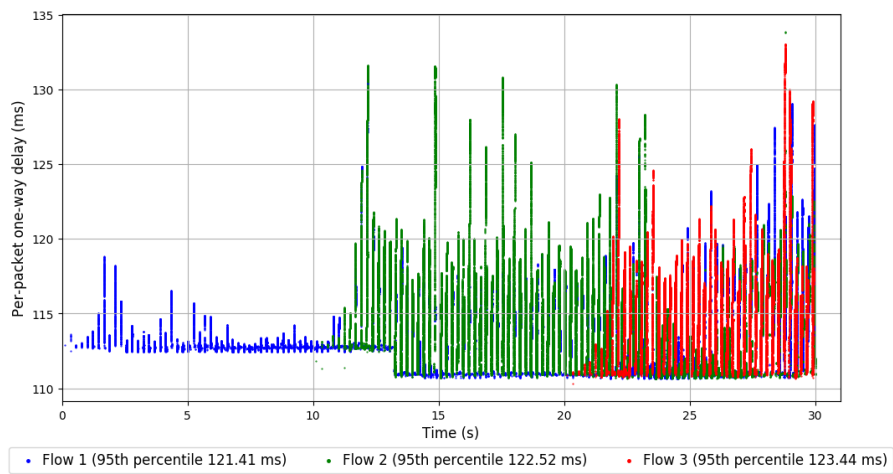
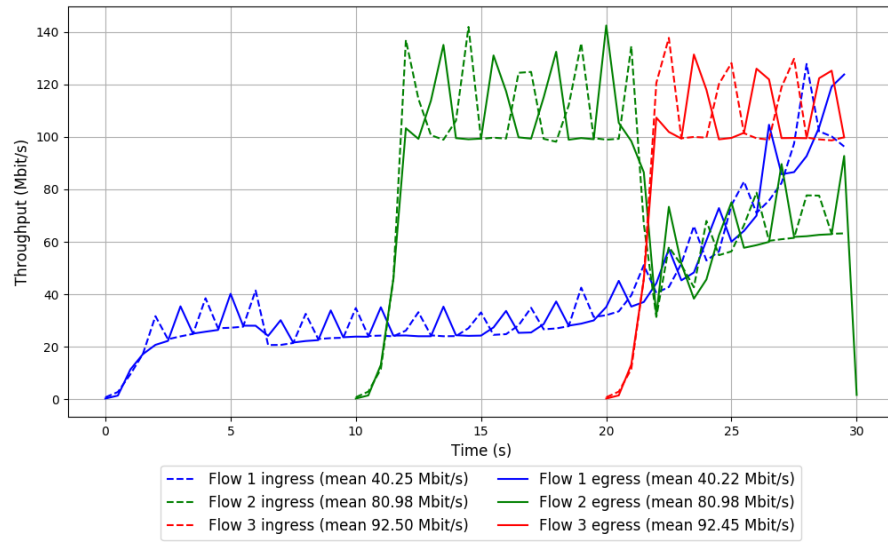
-- Flow 3:

Average throughput: 92.45 Mbit/s

95th percentile per-packet one-way delay: 123.437 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-13 23:40:39

End at: 2018-02-13 23:41:09

Below is generated by plot.py at 2018-02-14 03:42:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 127.52 Mbit/s

95th percentile per-packet one-way delay: 120.887 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 62.45 Mbit/s

95th percentile per-packet one-way delay: 120.259 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 77.69 Mbit/s

95th percentile per-packet one-way delay: 121.249 ms

Loss rate: 0.00%

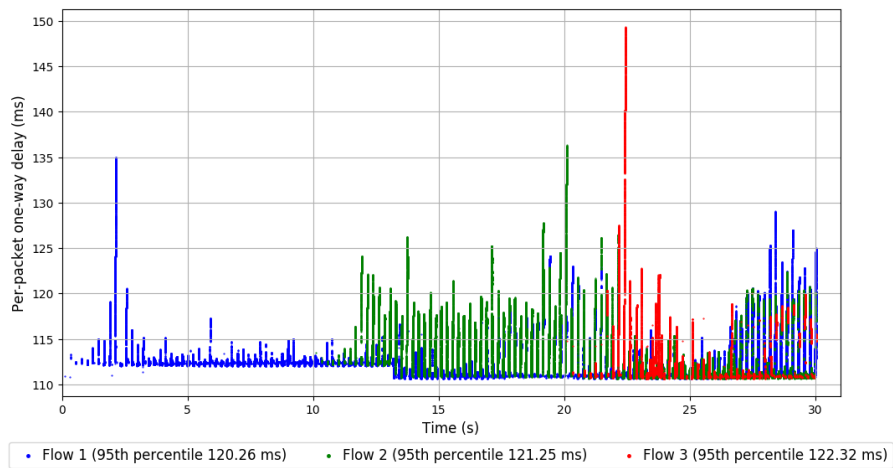
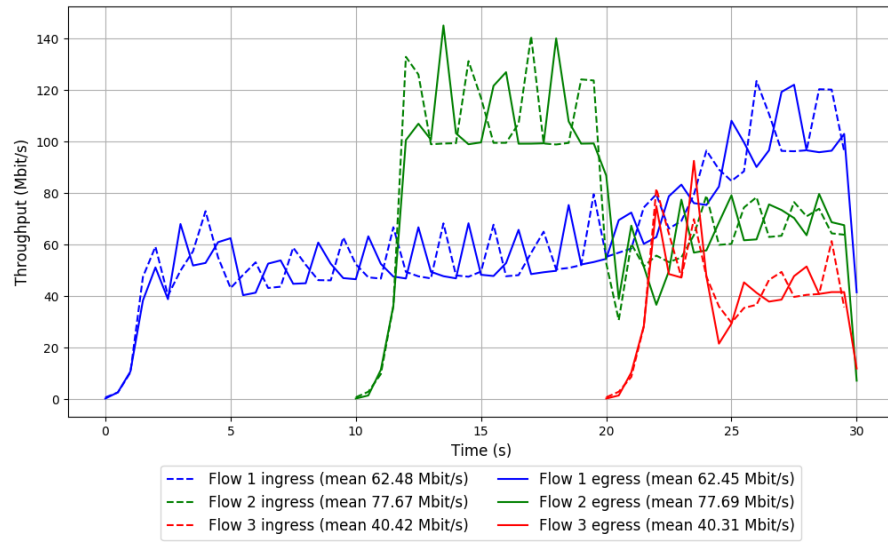
-- Flow 3:

Average throughput: 40.31 Mbit/s

95th percentile per-packet one-way delay: 122.320 ms

Loss rate: 0.29%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-14 00:00:23

End at: 2018-02-14 00:00:53

Below is generated by plot.py at 2018-02-14 03:42:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 136.93 Mbit/s

95th percentile per-packet one-way delay: 121.882 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.68 Mbit/s

95th percentile per-packet one-way delay: 120.874 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 71.40 Mbit/s

95th percentile per-packet one-way delay: 121.670 ms

Loss rate: 0.00%

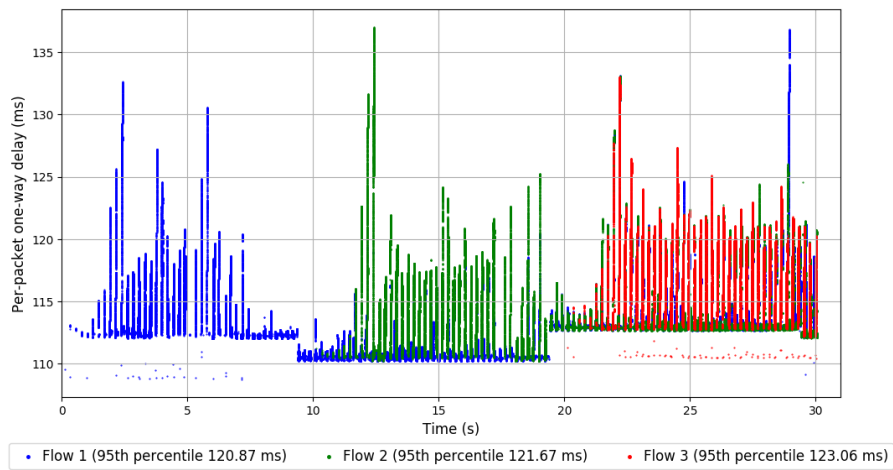
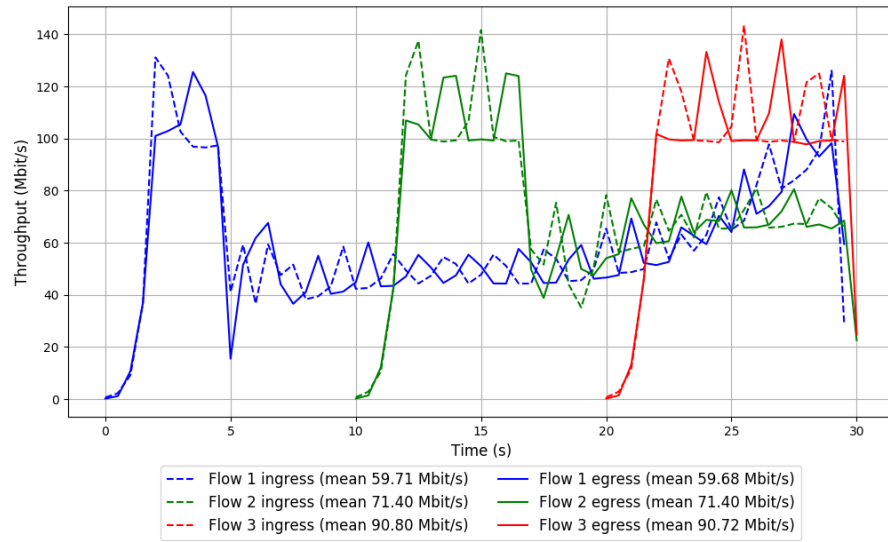
-- Flow 3:

Average throughput: 90.72 Mbit/s

95th percentile per-packet one-way delay: 123.065 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-14 00:20:01

End at: 2018-02-14 00:20:31

Below is generated by plot.py at 2018-02-14 03:42:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.59 Mbit/s

95th percentile per-packet one-way delay: 122.913 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 35.72 Mbit/s

95th percentile per-packet one-way delay: 121.097 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 90.18 Mbit/s

95th percentile per-packet one-way delay: 122.986 ms

Loss rate: 0.00%

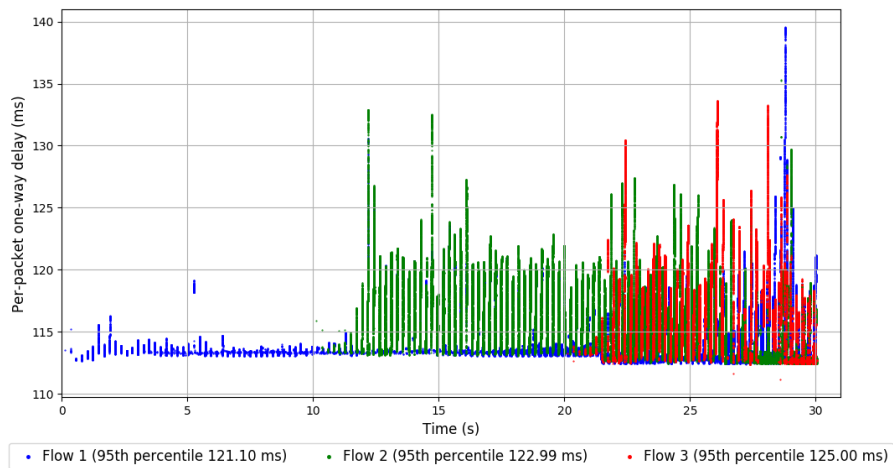
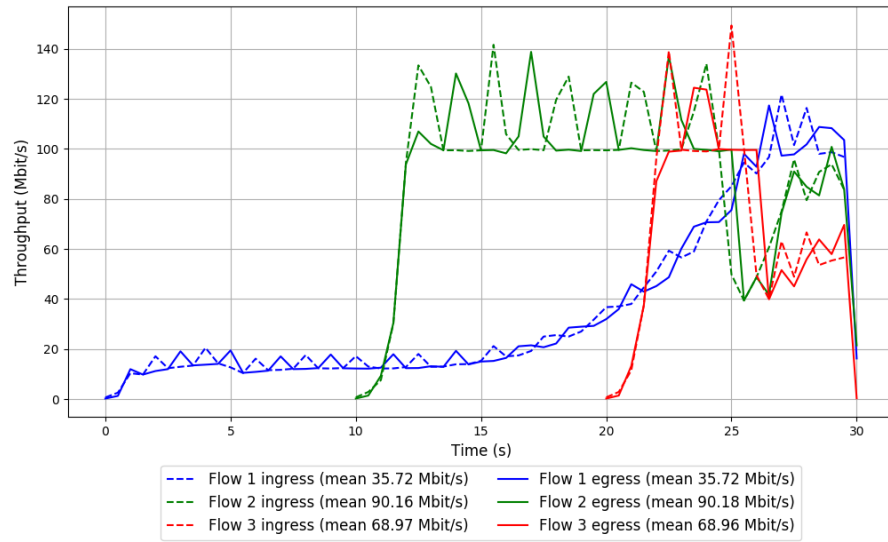
-- Flow 3:

Average throughput: 68.96 Mbit/s

95th percentile per-packet one-way delay: 124.995 ms

Loss rate: 0.02%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-14 00:39:33

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

Below is generated by plot.py at 2018-02-14 03:43:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 127.94 Mbit/s

95th percentile per-packet one-way delay: 124.386 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 34.67 Mbit/s

95th percentile per-packet one-way delay: 123.458 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 95.38 Mbit/s

95th percentile per-packet one-way delay: 125.225 ms

Loss rate: 0.00%

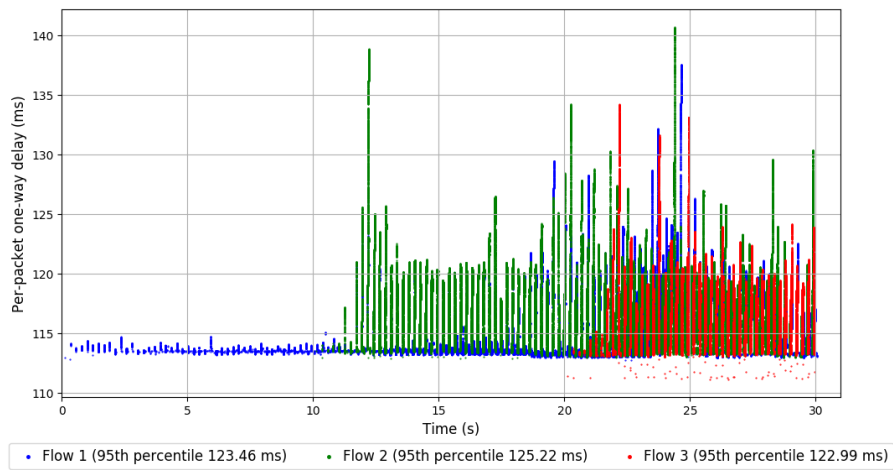
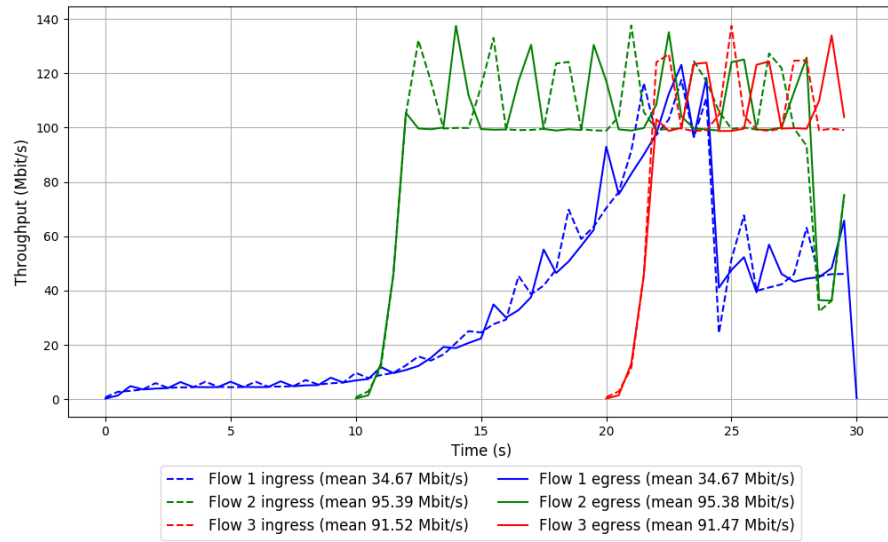
-- Flow 3:

Average throughput: 91.47 Mbit/s

95th percentile per-packet one-way delay: 122.988 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-14 00:58:47

End at: 2018-02-14 00:59:17

Below is generated by plot.py at 2018-02-14 03:43:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.98 Mbit/s

95th percentile per-packet one-way delay: 121.329 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 49.16 Mbit/s

95th percentile per-packet one-way delay: 120.283 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 67.19 Mbit/s

95th percentile per-packet one-way delay: 120.932 ms

Loss rate: 0.01%

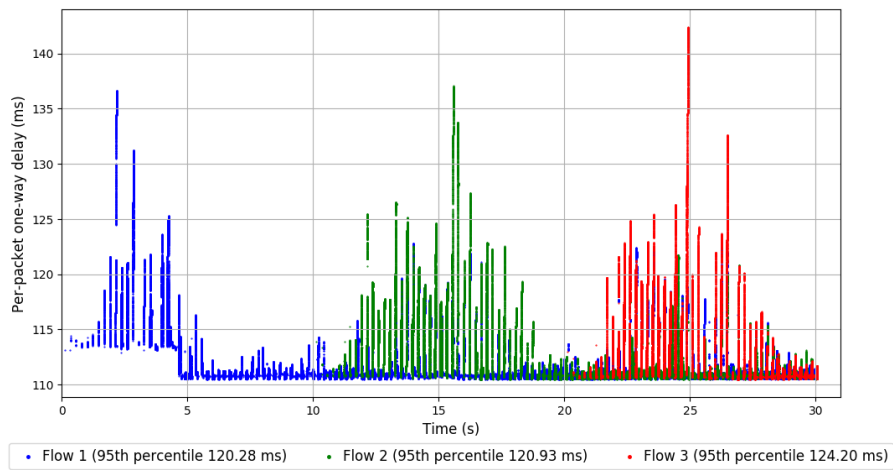
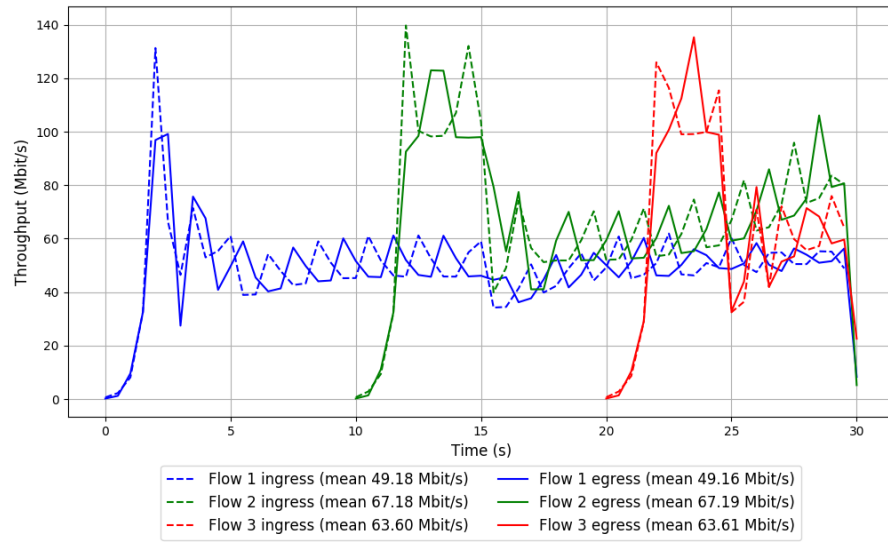
-- Flow 3:

Average throughput: 63.61 Mbit/s

95th percentile per-packet one-way delay: 124.205 ms

Loss rate: 0.02%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-14 01:18:08

End at: 2018-02-14 01:18:38

Below is generated by plot.py at 2018-02-14 03:43:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.83 Mbit/s

95th percentile per-packet one-way delay: 123.411 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 71.74 Mbit/s

95th percentile per-packet one-way delay: 121.577 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 75.03 Mbit/s

95th percentile per-packet one-way delay: 122.742 ms

Loss rate: 0.00%

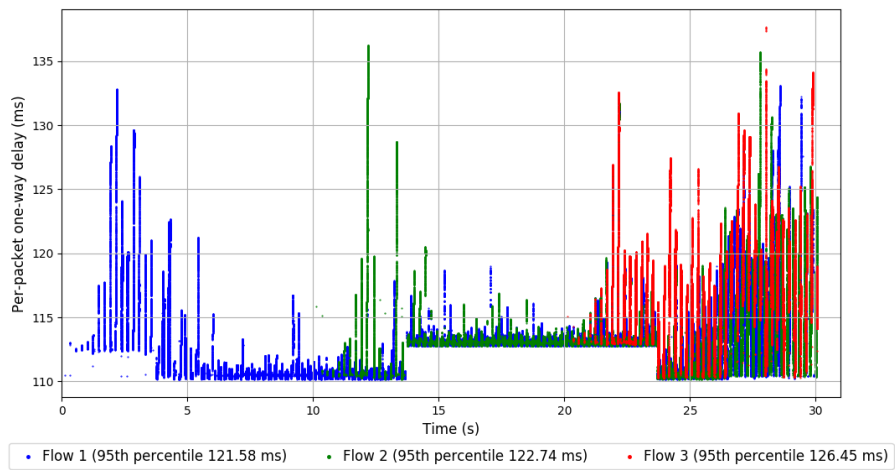
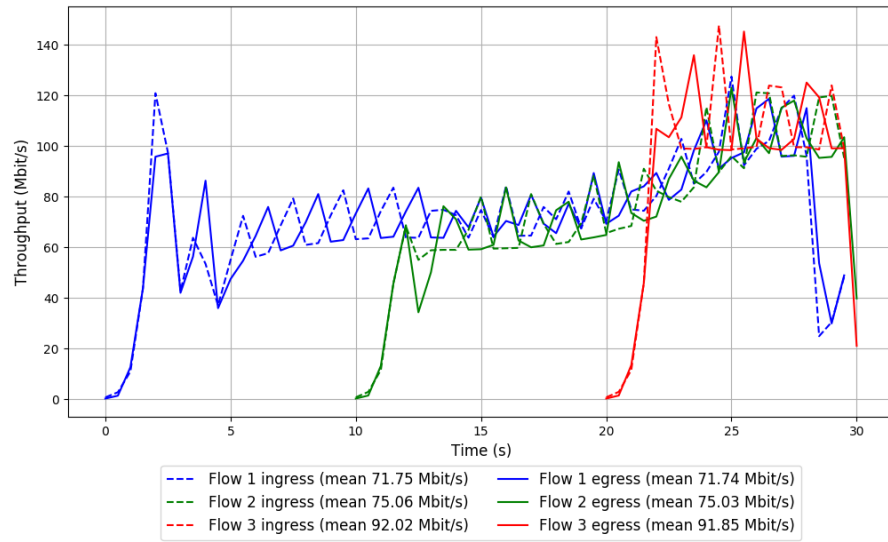
-- Flow 3:

Average throughput: 91.85 Mbit/s

95th percentile per-packet one-way delay: 126.449 ms

Loss rate: 0.20%

Run 10: Report of TCP Cubic — Data Link

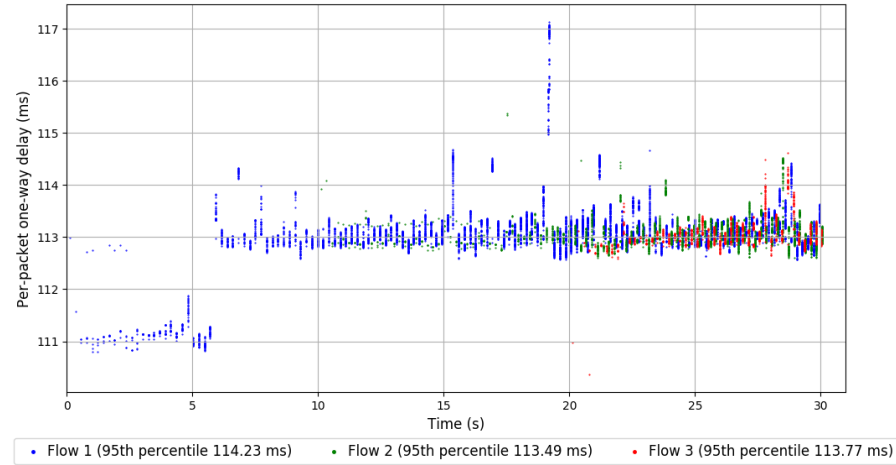
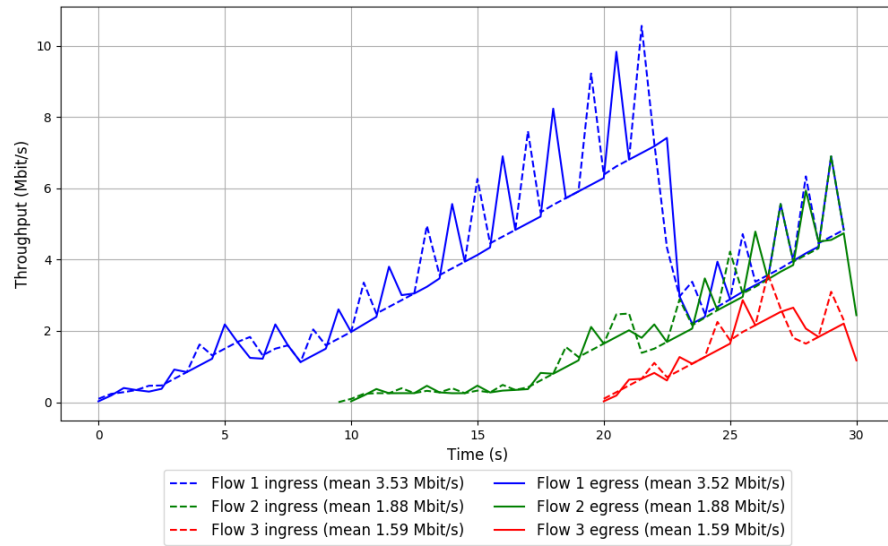


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-13 22:16:46
End at: 2018-02-13 22:17:16

# Below is generated by plot.py at 2018-02-14 03:43:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.28 Mbit/s
95th percentile per-packet one-way delay: 113.894 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 3.52 Mbit/s
95th percentile per-packet one-way delay: 114.235 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 113.491 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 113.767 ms
Loss rate: 0.22%
```


Run 1: Report of LEDBAT — Data Link

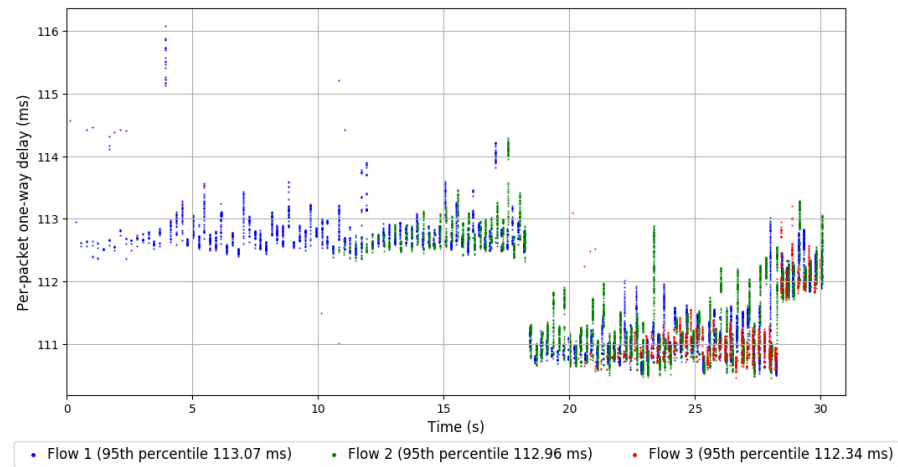
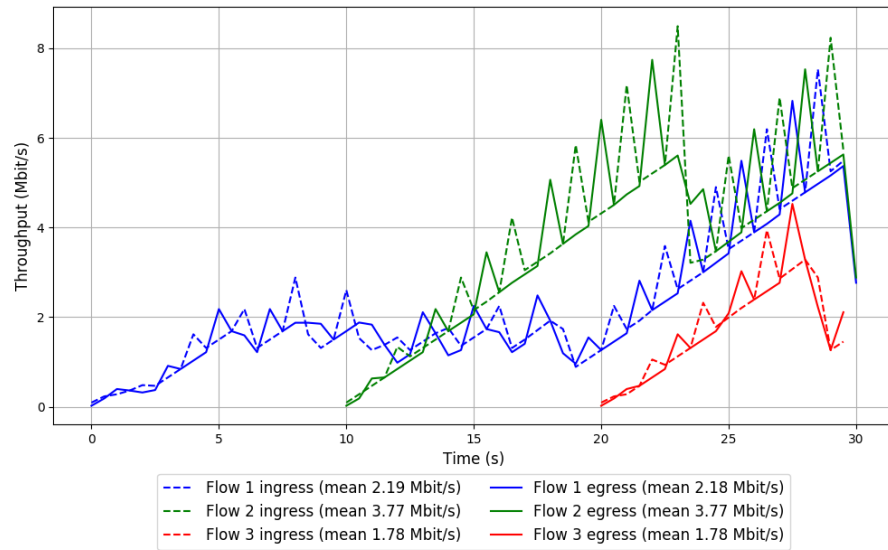


```
Run 2: Statistics of LEDBAT

Start at: 2018-02-13 22:36:34
End at: 2018-02-13 22:37:04

# Below is generated by plot.py at 2018-02-14 03:43:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.27 Mbit/s
95th percentile per-packet one-way delay: 112.984 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 113.070 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 112.959 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 112.345 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-13 22:55:52

End at: 2018-02-13 22:56:22

Below is generated by plot.py at 2018-02-14 03:43:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.16 Mbit/s

95th percentile per-packet one-way delay: 113.717 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 3.30 Mbit/s

95th percentile per-packet one-way delay: 114.140 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 1.66 Mbit/s

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

Loss rate: 0.00%

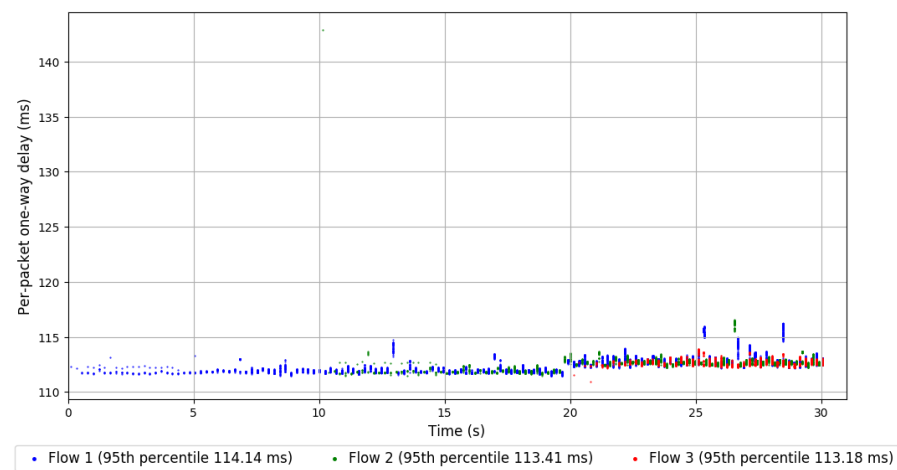
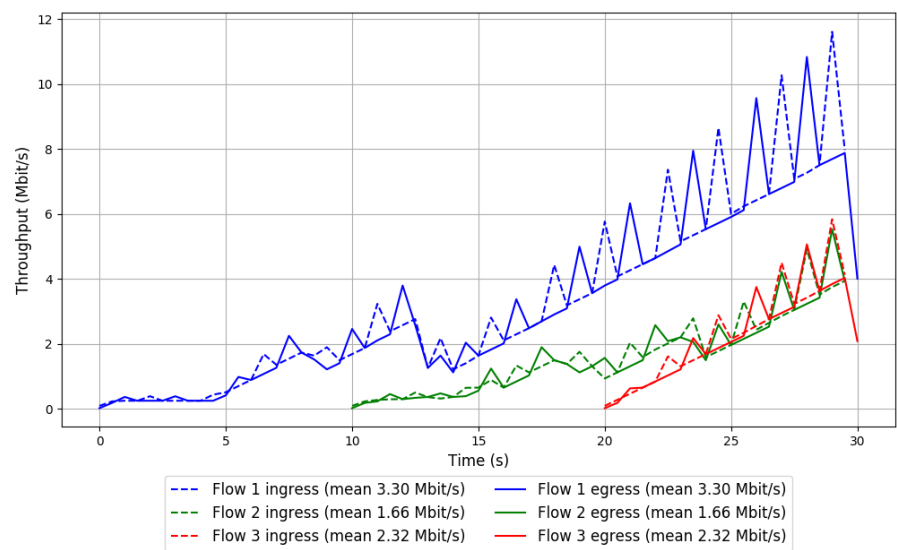
-- Flow 3:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 113.178 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-13 23:15:22

End at: 2018-02-13 23:15:52

Below is generated by plot.py at 2018-02-14 03:43:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.57 Mbit/s

95th percentile per-packet one-way delay: 114.398 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.08 Mbit/s

95th percentile per-packet one-way delay: 114.471 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.10 Mbit/s

95th percentile per-packet one-way delay: 114.421 ms

Loss rate: 0.00%

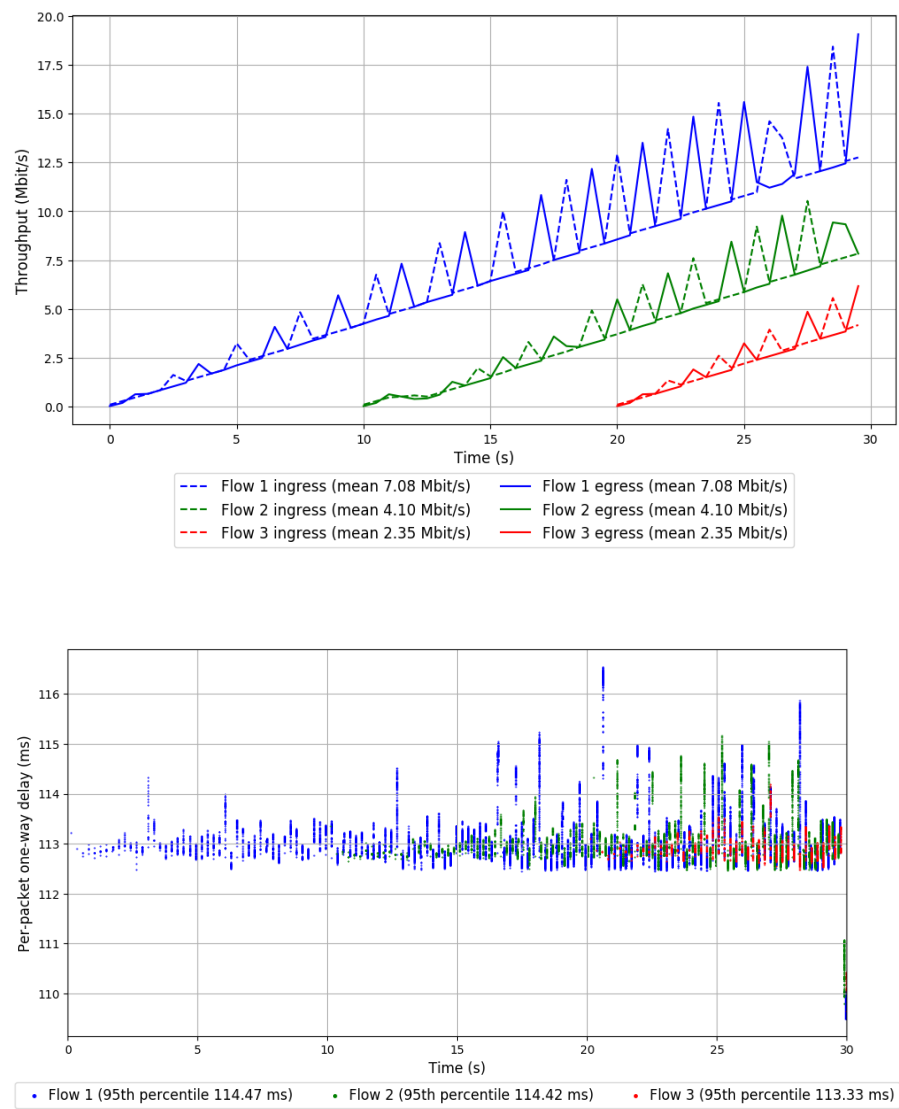
-- Flow 3:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 113.334 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-13 23:34:43

End at: 2018-02-13 23:35:13

Below is generated by plot.py at 2018-02-14 03:43:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.70 Mbit/s

95th percentile per-packet one-way delay: 113.215 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 113.372 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 3.02 Mbit/s

95th percentile per-packet one-way delay: 113.090 ms

Loss rate: 0.14%

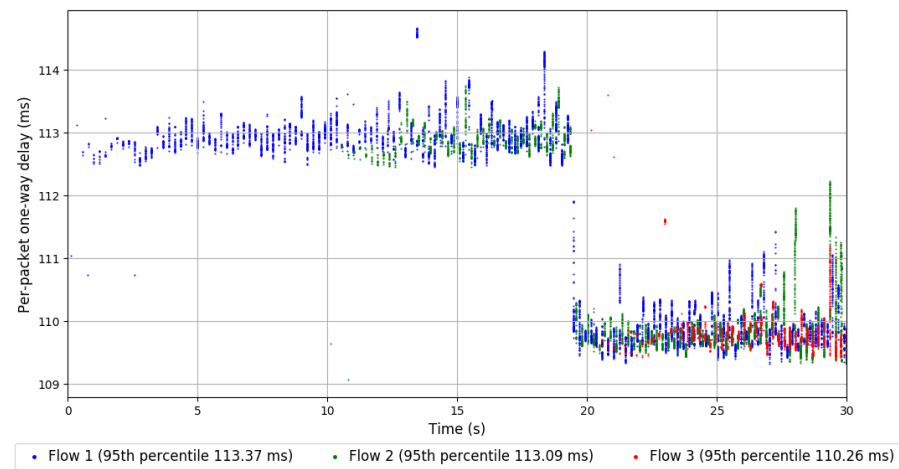
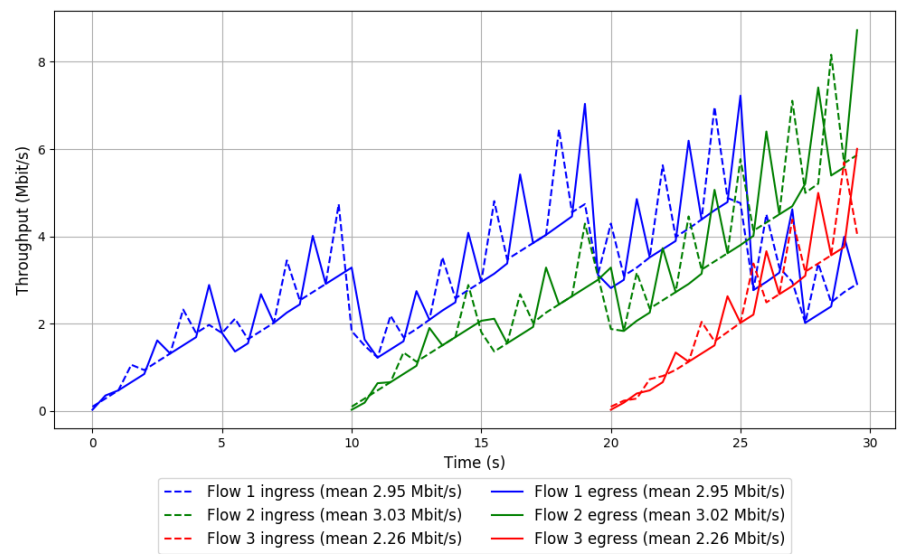
-- Flow 3:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 110.258 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-13 23:54:02

End at: 2018-02-13 23:54:32

Below is generated by plot.py at 2018-02-14 03:43:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.67 Mbit/s

95th percentile per-packet one-way delay: 113.758 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.67 Mbit/s

95th percentile per-packet one-way delay: 113.767 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 113.746 ms

Loss rate: 0.00%

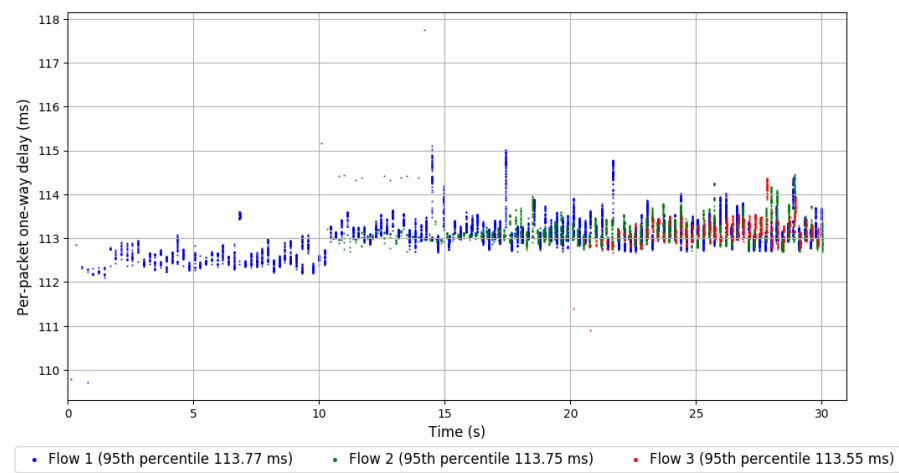
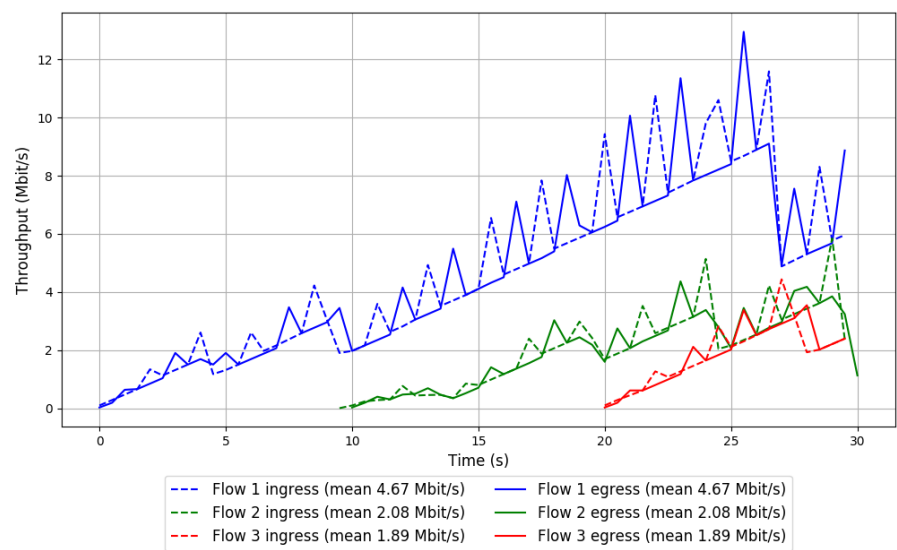
-- Flow 3:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 113.554 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-02-14 00:13:44

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

Below is generated by plot.py at 2018-02-14 03:43:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.74 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.74 Mbit/s

95th percentile per-packet one-way delay: 113.794 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 113.442 ms

Loss rate: 0.00%

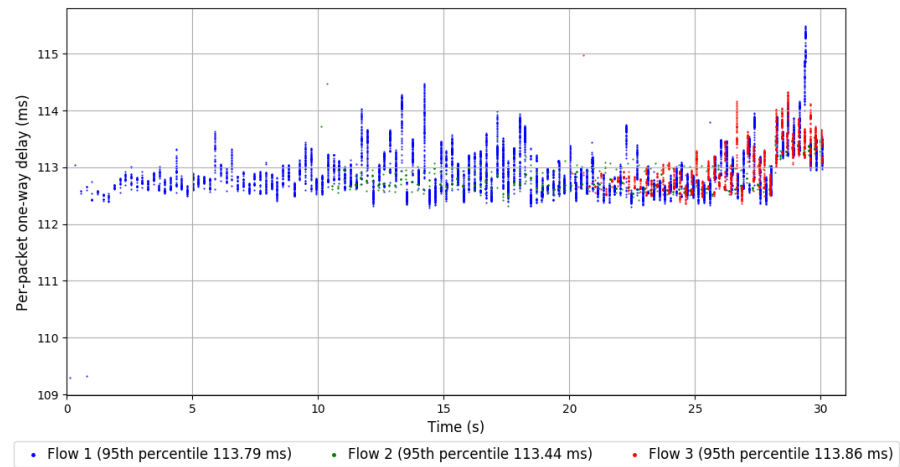
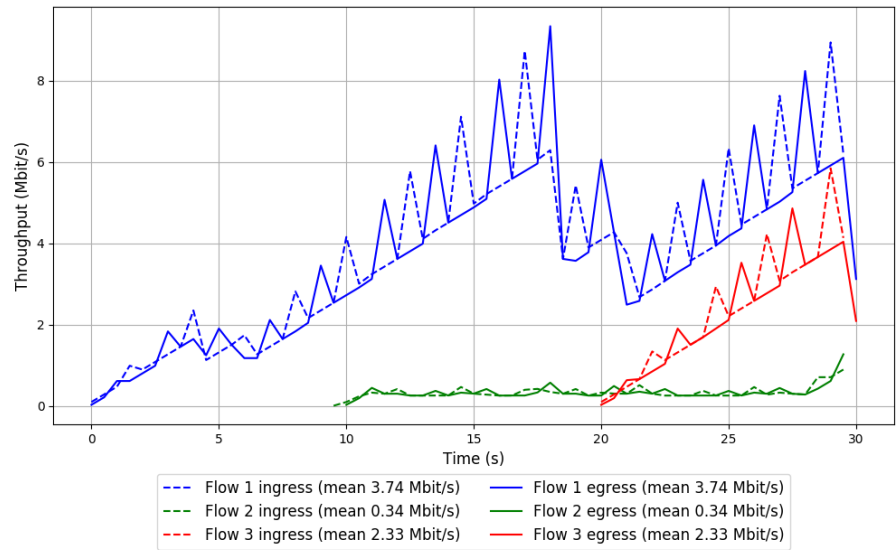
-- Flow 3:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 113.865 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-14 00:33:33

End at: 2018-02-14 00:34:03

Below is generated by plot.py at 2018-02-14 03:43:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.13 Mbit/s

95th percentile per-packet one-way delay: 113.816 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 3.61 Mbit/s

95th percentile per-packet one-way delay: 113.851 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 113.657 ms

Loss rate: 0.09%

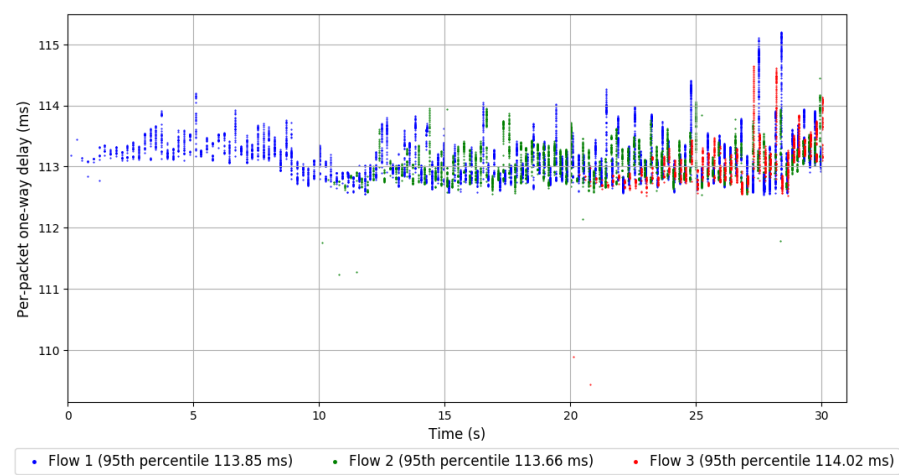
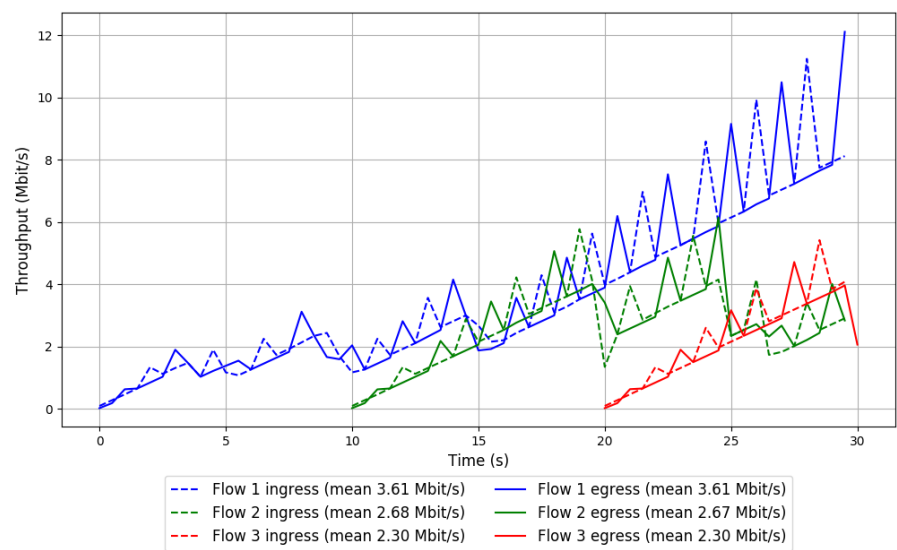
-- Flow 3:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 114.020 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-14 00:52:45

End at: 2018-02-14 00:53:15

Below is generated by plot.py at 2018-02-14 03:43:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.21 Mbit/s

95th percentile per-packet one-way delay: 113.960 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.58 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.14 Mbit/s

95th percentile per-packet one-way delay: 113.595 ms

Loss rate: 0.00%

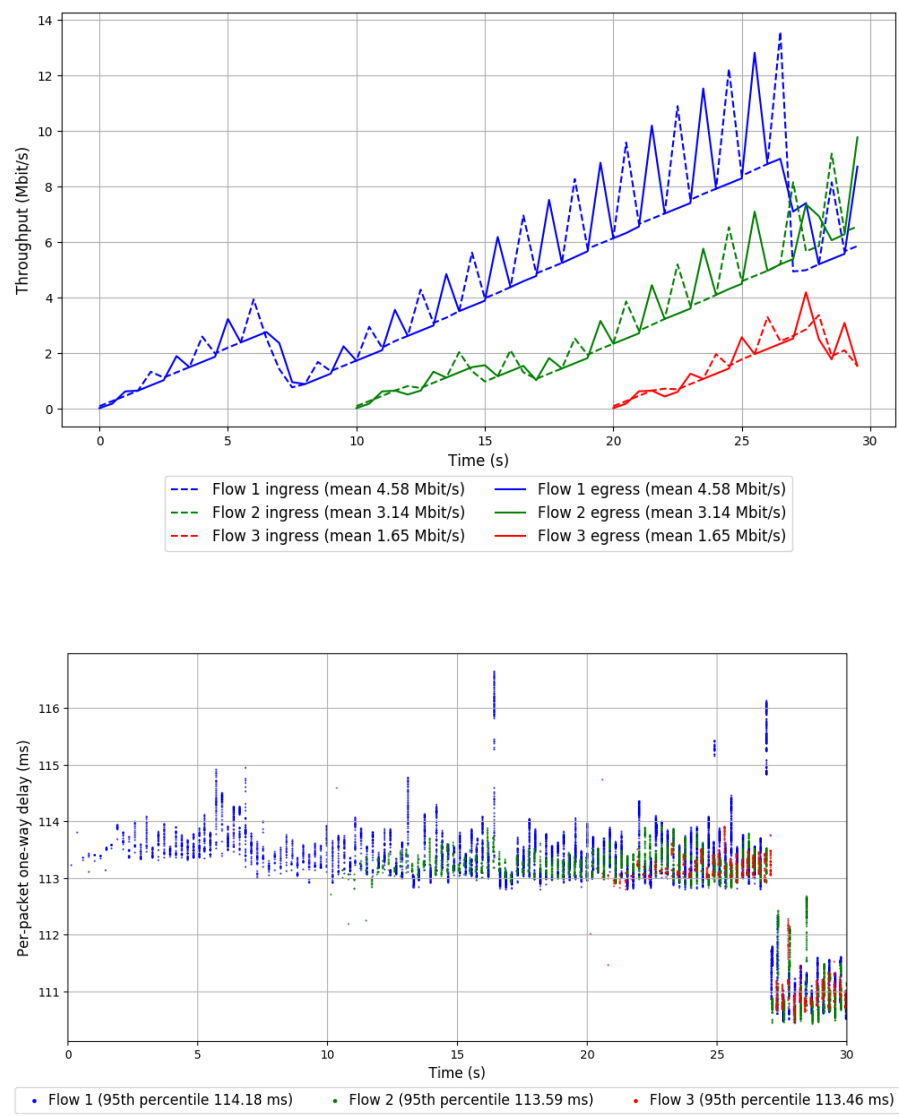
-- Flow 3:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 113.462 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

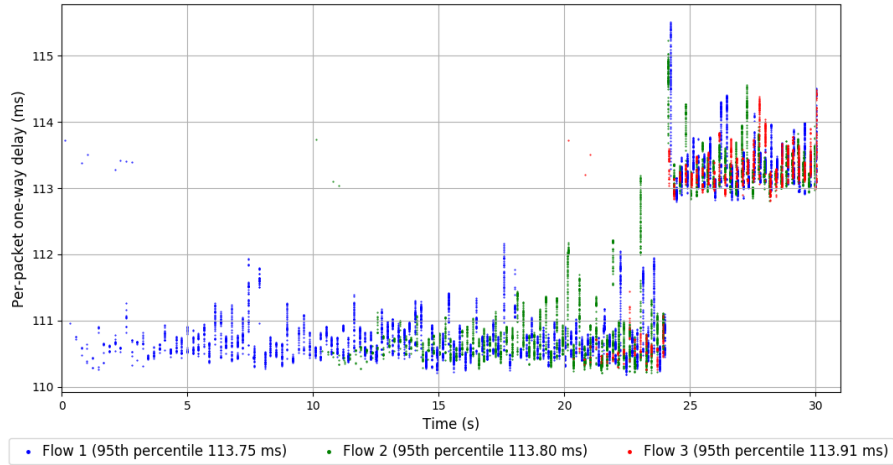
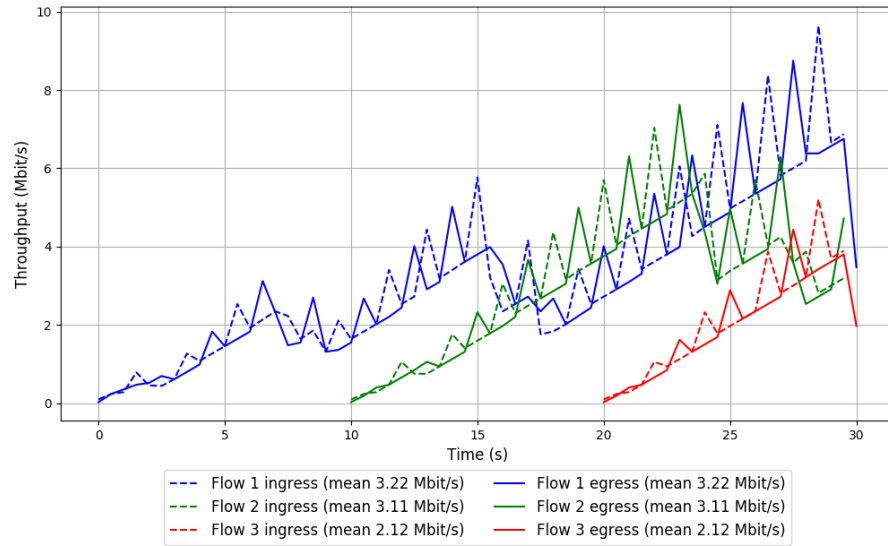


```
Run 10: Statistics of LEDBAT

Start at: 2018-02-14 01:12:08
End at: 2018-02-14 01:12:38

# Below is generated by plot.py at 2018-02-14 03:43:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.98 Mbit/s
95th percentile per-packet one-way delay: 113.803 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 3.22 Mbit/s
95th percentile per-packet one-way delay: 113.748 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 3.11 Mbit/s
95th percentile per-packet one-way delay: 113.801 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 113.914 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

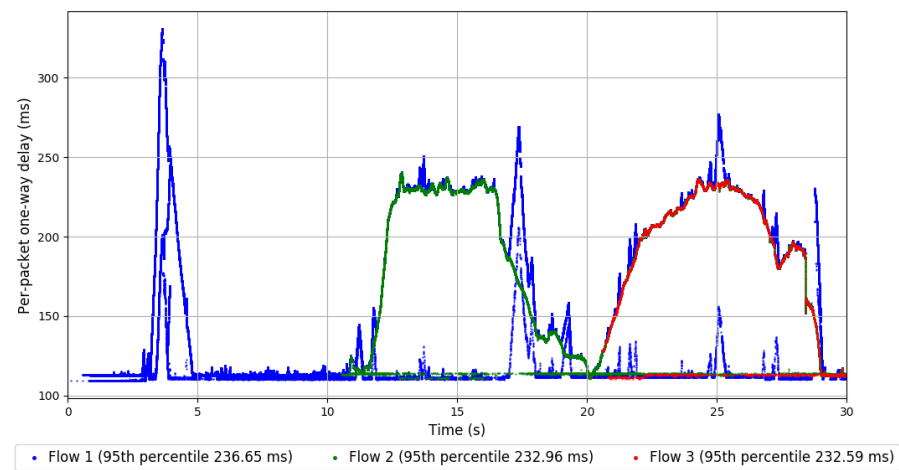
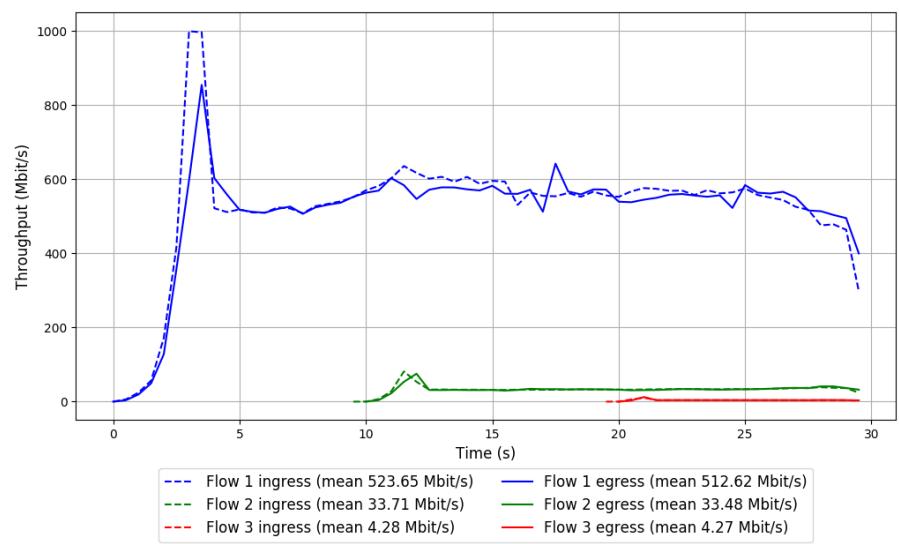


```
Run 1: Statistics of PCC

Start at: 2018-02-13 22:14:40
End at: 2018-02-13 22:15:10

# Below is generated by plot.py at 2018-02-14 03:51:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 536.29 Mbit/s
95th percentile per-packet one-way delay: 236.307 ms
Loss rate: 2.03%
-- Flow 1:
Average throughput: 512.62 Mbit/s
95th percentile per-packet one-way delay: 236.647 ms
Loss rate: 2.09%
-- Flow 2:
Average throughput: 33.48 Mbit/s
95th percentile per-packet one-way delay: 232.962 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 4.27 Mbit/s
95th percentile per-packet one-way delay: 232.594 ms
Loss rate: 0.29%
```

Run 1: Report of PCC — Data Link

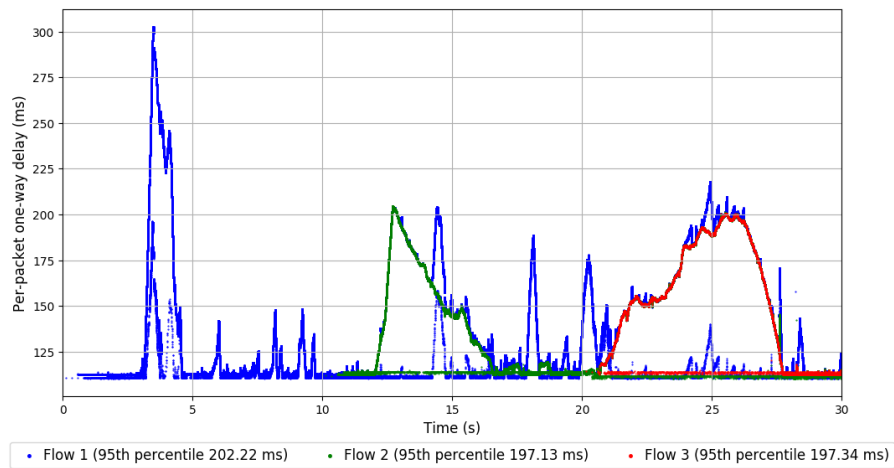
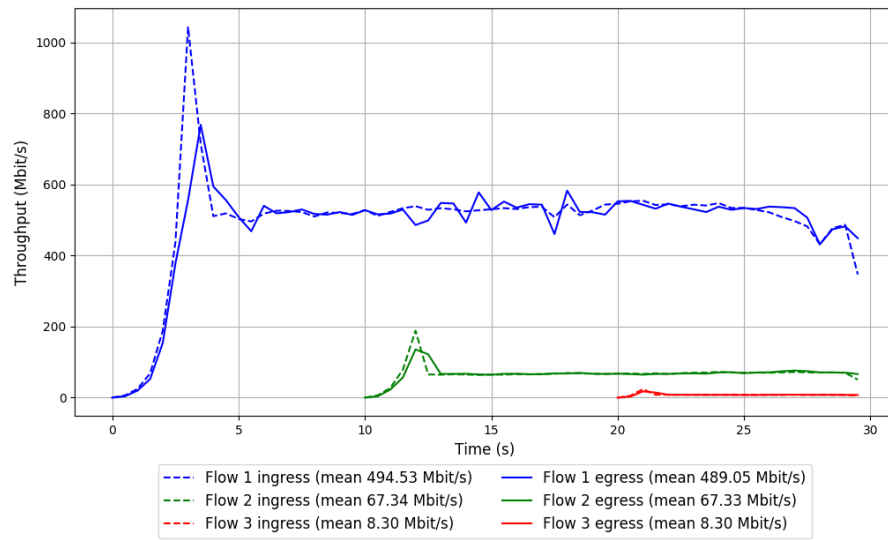


```
Run 2: Statistics of PCC

Start at: 2018-02-13 22:34:26
End at: 2018-02-13 22:34:56

# Below is generated by plot.py at 2018-02-14 03:51:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 536.54 Mbit/s
95th percentile per-packet one-way delay: 201.510 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 489.05 Mbit/s
95th percentile per-packet one-way delay: 202.220 ms
Loss rate: 1.10%
-- Flow 2:
Average throughput: 67.33 Mbit/s
95th percentile per-packet one-way delay: 197.133 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.30 Mbit/s
95th percentile per-packet one-way delay: 197.342 ms
Loss rate: 0.00%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-13 22:53:45

End at: 2018-02-13 22:54:15

Below is generated by plot.py at 2018-02-14 03:51:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 524.18 Mbit/s

95th percentile per-packet one-way delay: 250.368 ms

Loss rate: 2.20%

-- Flow 1:

Average throughput: 448.62 Mbit/s

95th percentile per-packet one-way delay: 251.066 ms

Loss rate: 2.18%

-- Flow 2:

Average throughput: 55.55 Mbit/s

95th percentile per-packet one-way delay: 247.924 ms

Loss rate: 1.55%

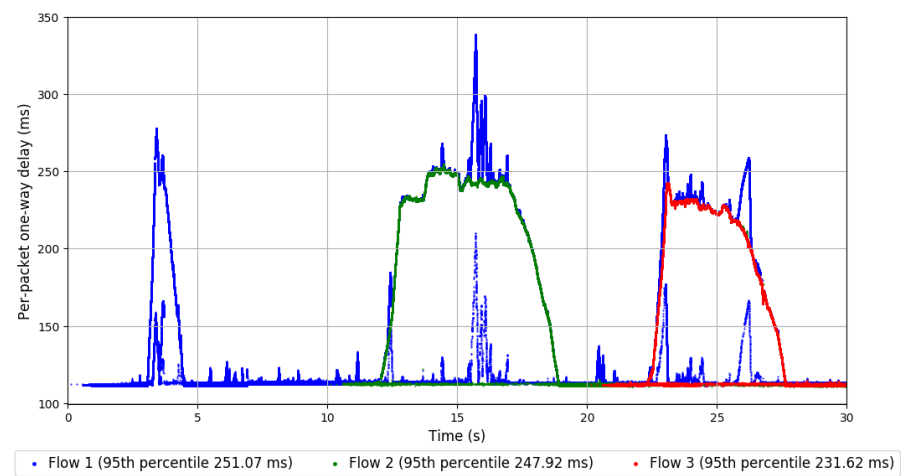
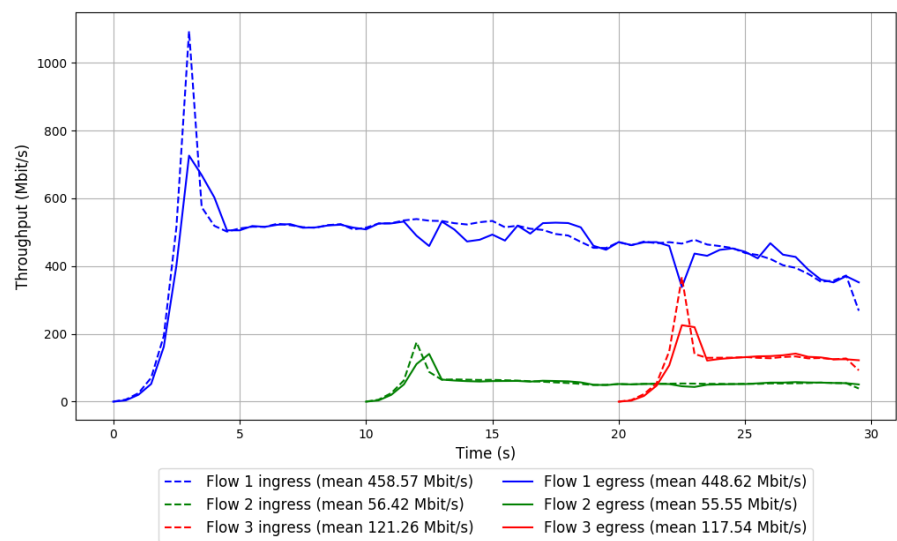
-- Flow 3:

Average throughput: 117.54 Mbit/s

95th percentile per-packet one-way delay: 231.618 ms

Loss rate: 3.09%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-02-13 23:13:14

End at: 2018-02-13 23:13:44

Below is generated by plot.py at 2018-02-14 03:51:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 532.28 Mbit/s

95th percentile per-packet one-way delay: 257.617 ms

Loss rate: 3.83%

-- Flow 1:

Average throughput: 472.17 Mbit/s

95th percentile per-packet one-way delay: 259.755 ms

Loss rate: 3.79%

-- Flow 2:

Average throughput: 62.48 Mbit/s

95th percentile per-packet one-way delay: 238.314 ms

Loss rate: 3.30%

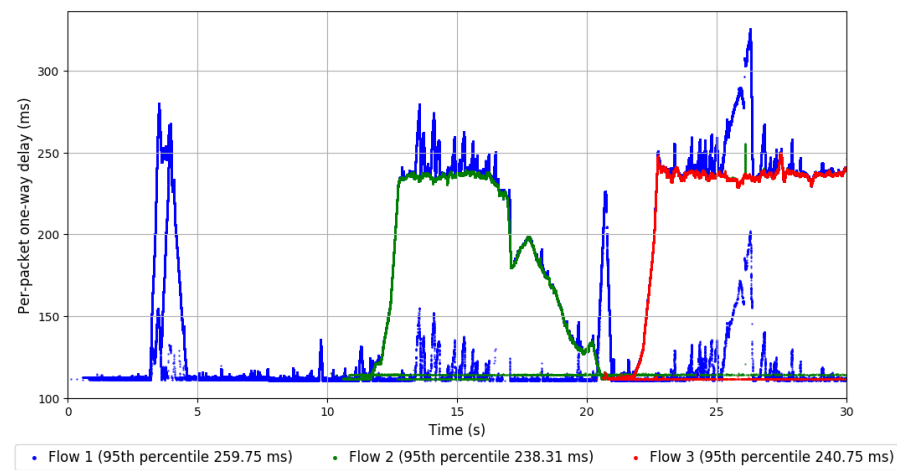
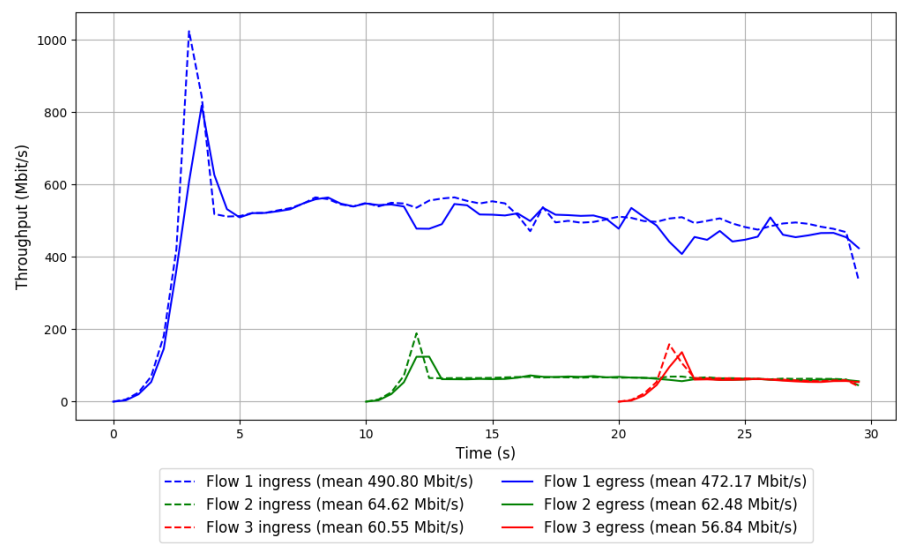
-- Flow 3:

Average throughput: 56.84 Mbit/s

95th percentile per-packet one-way delay: 240.752 ms

Loss rate: 6.08%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-13 23:32:36

End at: 2018-02-13 23:33:06

Below is generated by plot.py at 2018-02-14 03:51:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 530.83 Mbit/s

95th percentile per-packet one-way delay: 238.998 ms

Loss rate: 1.44%

-- Flow 1:

Average throughput: 466.81 Mbit/s

95th percentile per-packet one-way delay: 241.342 ms

Loss rate: 1.51%

-- Flow 2:

Average throughput: 66.33 Mbit/s

95th percentile per-packet one-way delay: 234.638 ms

Loss rate: 0.66%

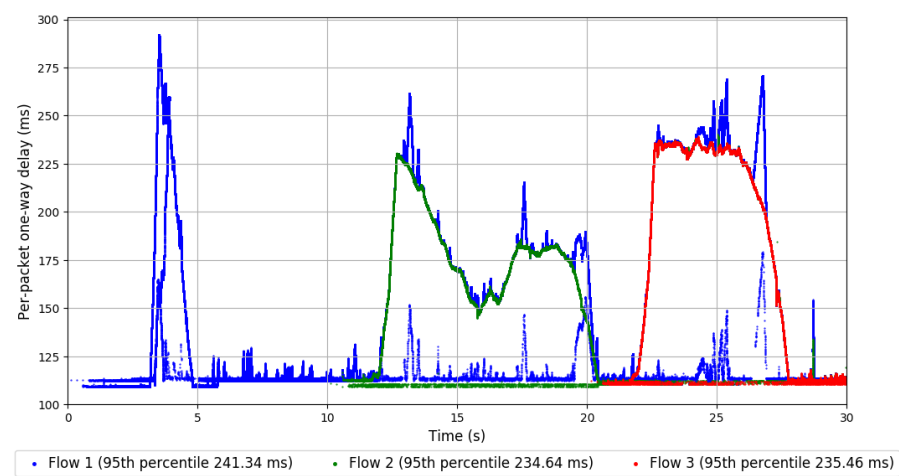
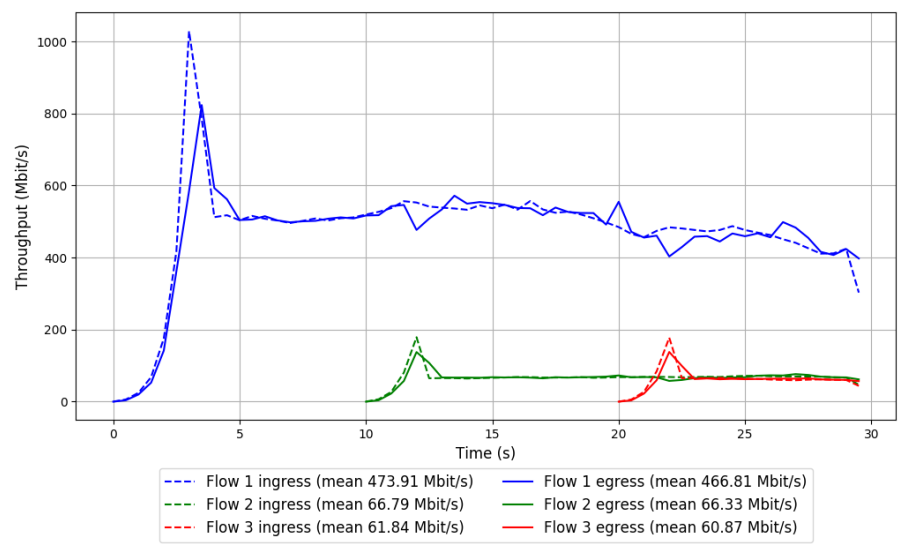
-- Flow 3:

Average throughput: 60.87 Mbit/s

95th percentile per-packet one-way delay: 235.461 ms

Loss rate: 1.59%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-13 23:51:58

End at: 2018-02-13 23:52:28

Below is generated by plot.py at 2018-02-14 03:51:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 442.30 Mbit/s

95th percentile per-packet one-way delay: 192.621 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 342.08 Mbit/s

95th percentile per-packet one-way delay: 192.198 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 142.53 Mbit/s

95th percentile per-packet one-way delay: 193.389 ms

Loss rate: 0.70%

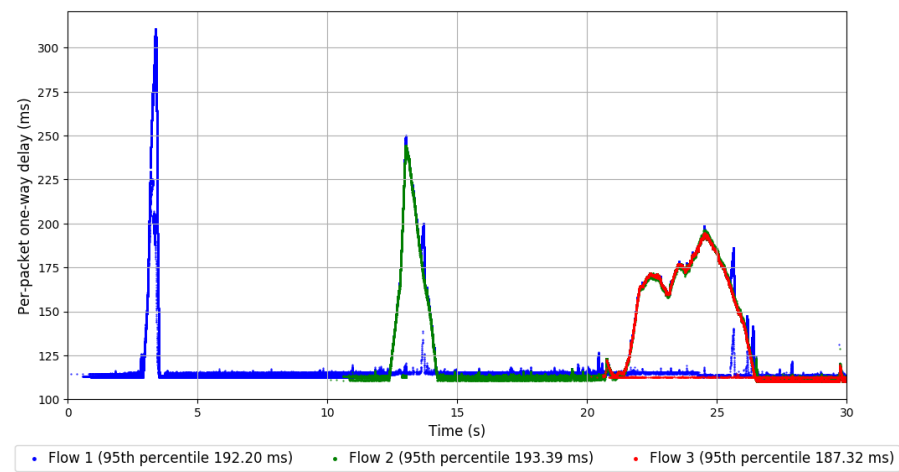
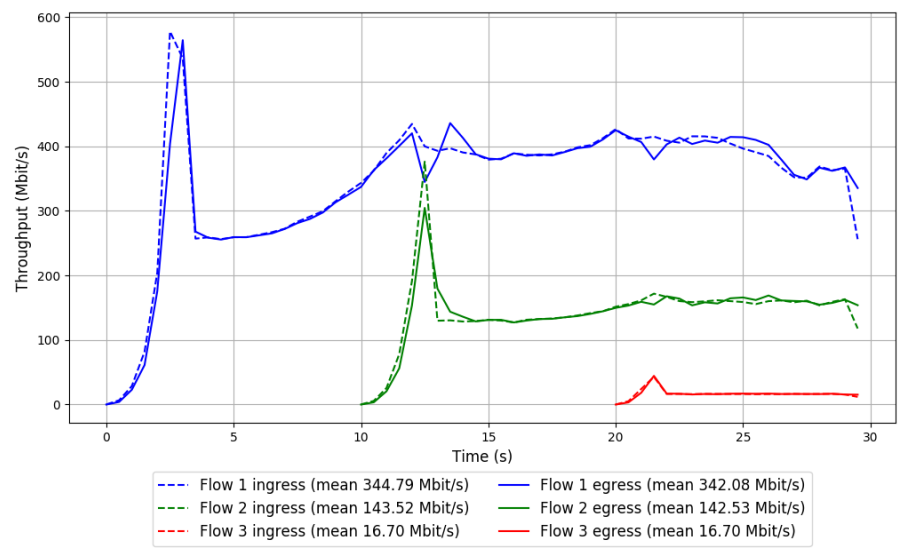
-- Flow 3:

Average throughput: 16.70 Mbit/s

95th percentile per-packet one-way delay: 187.317 ms

Loss rate: 0.01%

Run 6: Report of PCC — Data Link

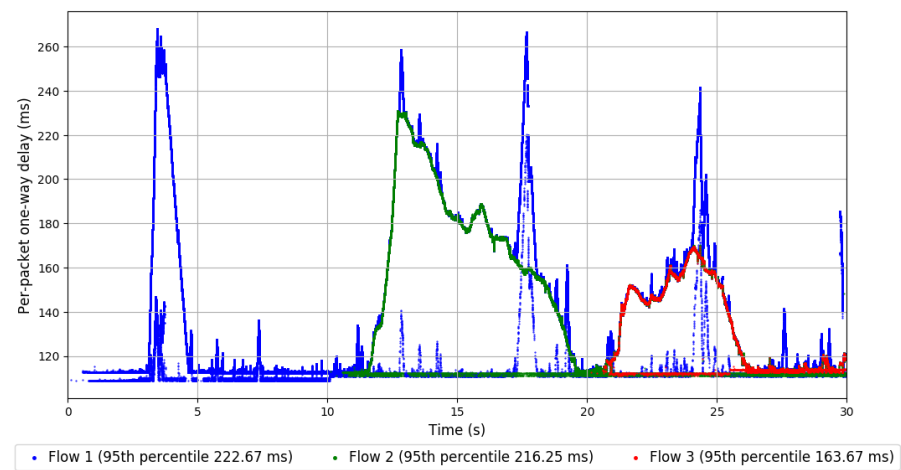
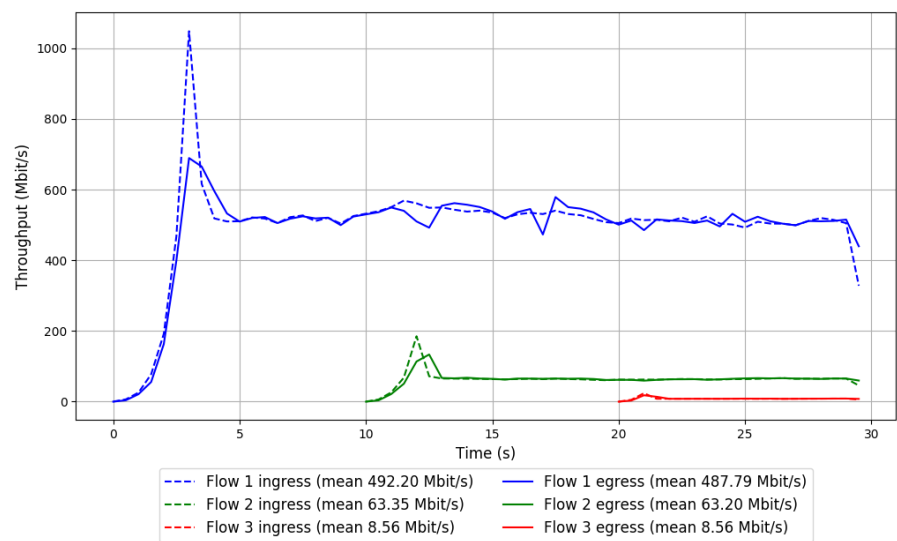


```
Run 7: Statistics of PCC

Start at: 2018-02-14 00:11:36
End at: 2018-02-14 00:12:06

# Below is generated by plot.py at 2018-02-14 03:52:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 532.59 Mbit/s
95th percentile per-packet one-way delay: 222.255 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 487.79 Mbit/s
95th percentile per-packet one-way delay: 222.674 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 63.20 Mbit/s
95th percentile per-packet one-way delay: 216.255 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 8.56 Mbit/s
95th percentile per-packet one-way delay: 163.674 ms
Loss rate: 0.04%
```


Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-14 00:31:26

End at: 2018-02-14 00:31:56

Below is generated by plot.py at 2018-02-14 03:53:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 531.21 Mbit/s

95th percentile per-packet one-way delay: 238.052 ms

Loss rate: 2.30%

-- Flow 1:

Average throughput: 424.72 Mbit/s

95th percentile per-packet one-way delay: 238.997 ms

Loss rate: 2.46%

-- Flow 2:

Average throughput: 128.66 Mbit/s

95th percentile per-packet one-way delay: 235.916 ms

Loss rate: 2.09%

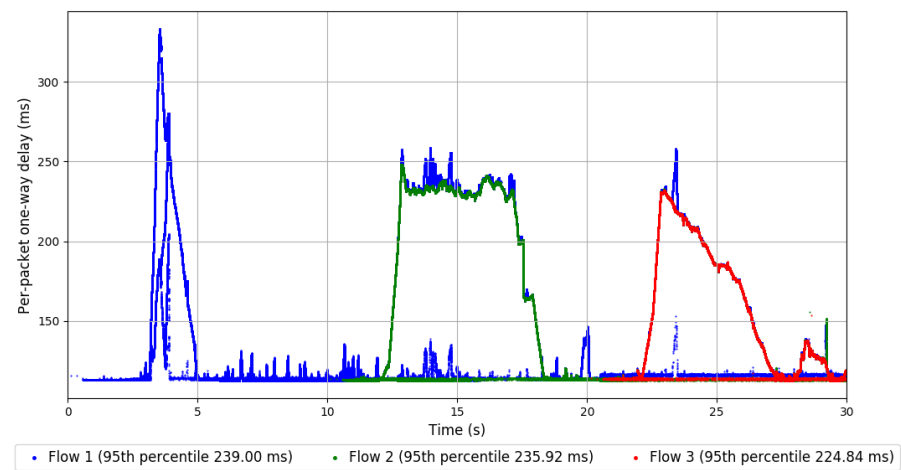
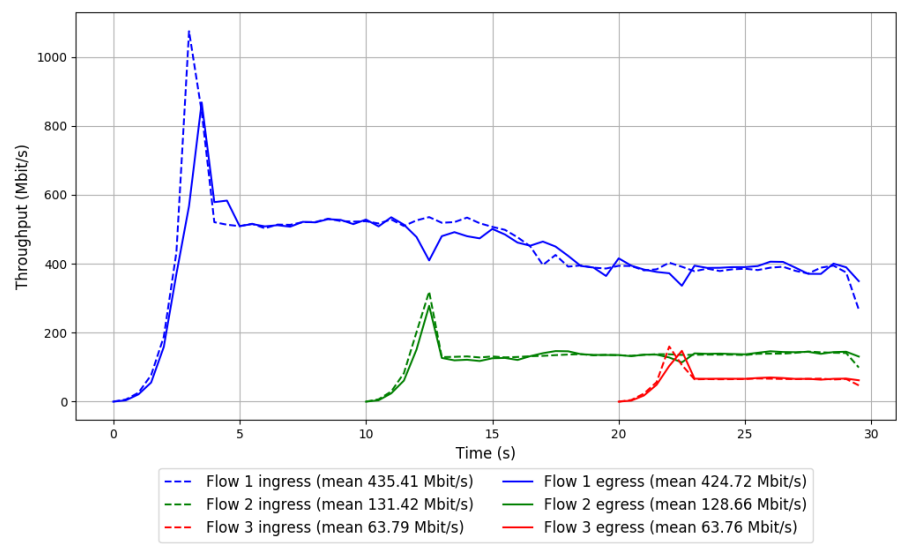
-- Flow 3:

Average throughput: 63.76 Mbit/s

95th percentile per-packet one-way delay: 224.838 ms

Loss rate: 0.03%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-14 00:50:38

End at: 2018-02-14 00:51:08

Below is generated by plot.py at 2018-02-14 04:00:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 527.44 Mbit/s

95th percentile per-packet one-way delay: 234.709 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 472.53 Mbit/s

95th percentile per-packet one-way delay: 234.862 ms

Loss rate: 1.51%

-- Flow 2:

Average throughput: 67.09 Mbit/s

95th percentile per-packet one-way delay: 232.556 ms

Loss rate: 0.80%

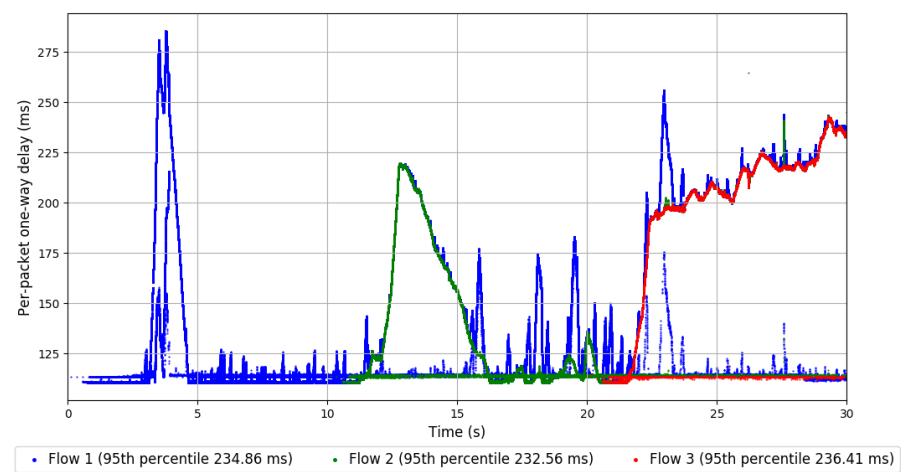
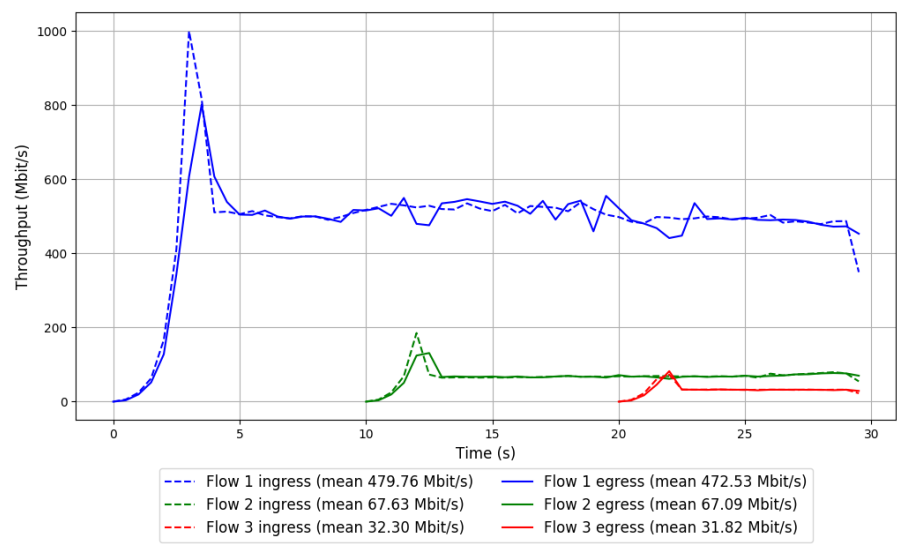
-- Flow 3:

Average throughput: 31.82 Mbit/s

95th percentile per-packet one-way delay: 236.409 ms

Loss rate: 1.40%

Run 9: Report of PCC — Data Link

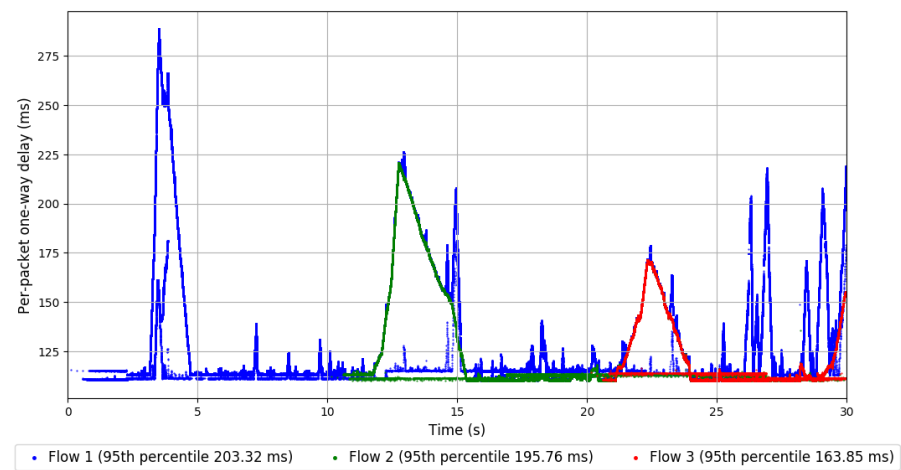
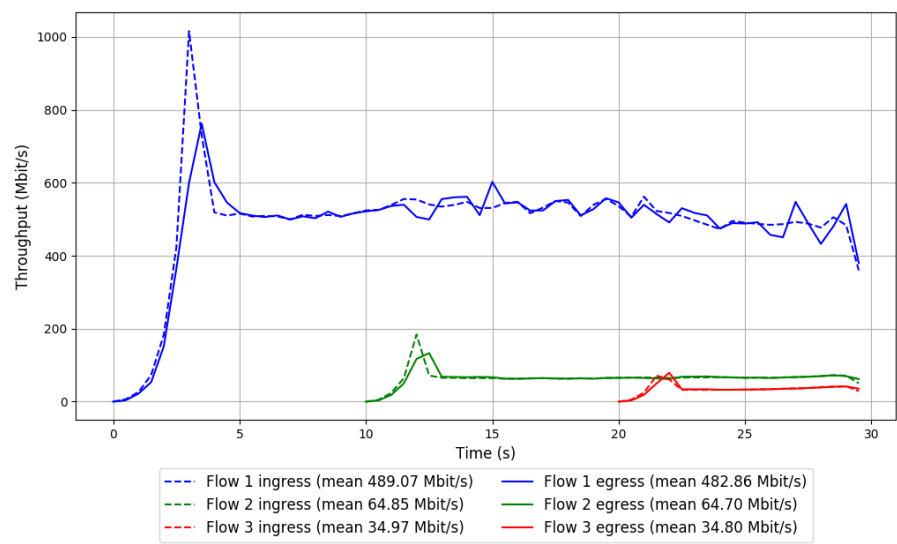


```
Run 10: Statistics of PCC

Start at: 2018-02-14 01:10:00
End at: 2018-02-14 01:10:30

# Below is generated by plot.py at 2018-02-14 04:00:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 537.27 Mbit/s
95th percentile per-packet one-way delay: 202.481 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 482.86 Mbit/s
95th percentile per-packet one-way delay: 203.320 ms
Loss rate: 1.27%
-- Flow 2:
Average throughput: 64.70 Mbit/s
95th percentile per-packet one-way delay: 195.756 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 34.80 Mbit/s
95th percentile per-packet one-way delay: 163.849 ms
Loss rate: 0.48%
```

Run 10: Report of PCC — Data Link

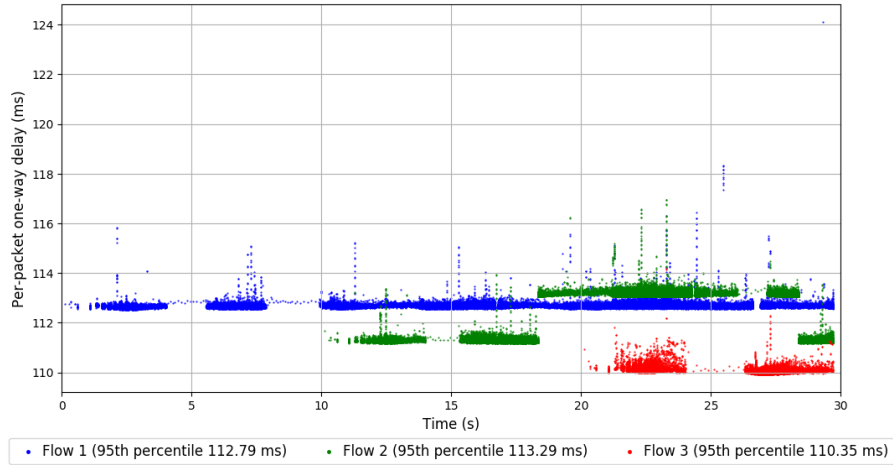
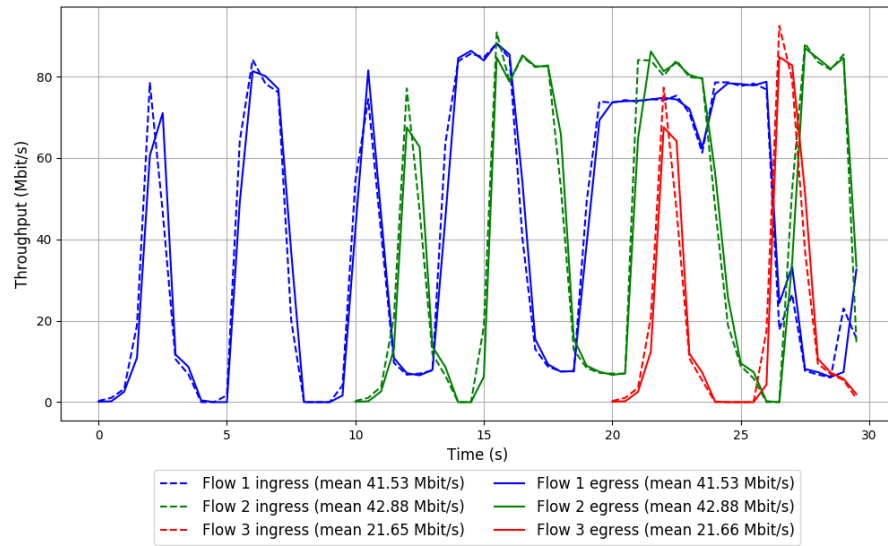


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-13 22:22:08
End at: 2018-02-13 22:22:38

# Below is generated by plot.py at 2018-02-14 04:00:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.94 Mbit/s
95th percentile per-packet one-way delay: 113.212 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.53 Mbit/s
95th percentile per-packet one-way delay: 112.790 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.88 Mbit/s
95th percentile per-packet one-way delay: 113.294 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.66 Mbit/s
95th percentile per-packet one-way delay: 110.350 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-13 22:41:45

End at: 2018-02-13 22:42:15

Below is generated by plot.py at 2018-02-14 04:00:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.97 Mbit/s

95th percentile per-packet one-way delay: 112.503 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 55.66 Mbit/s

95th percentile per-packet one-way delay: 111.545 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.22 Mbit/s

95th percentile per-packet one-way delay: 112.536 ms

Loss rate: 0.01%

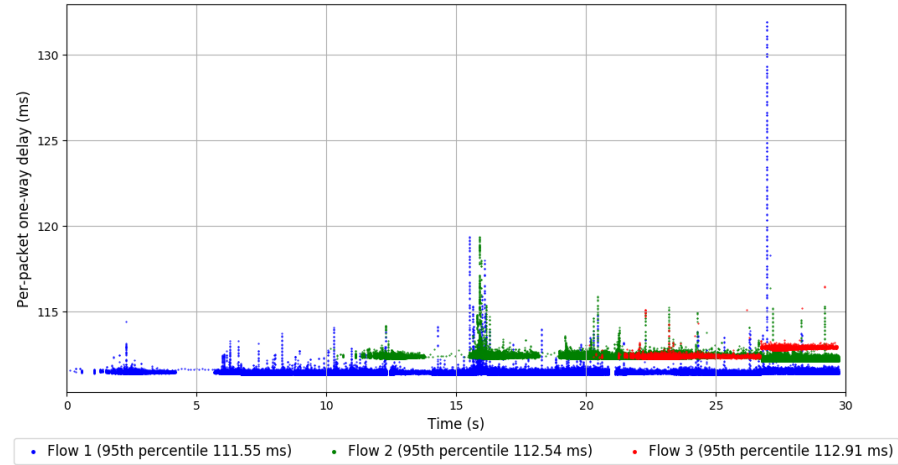
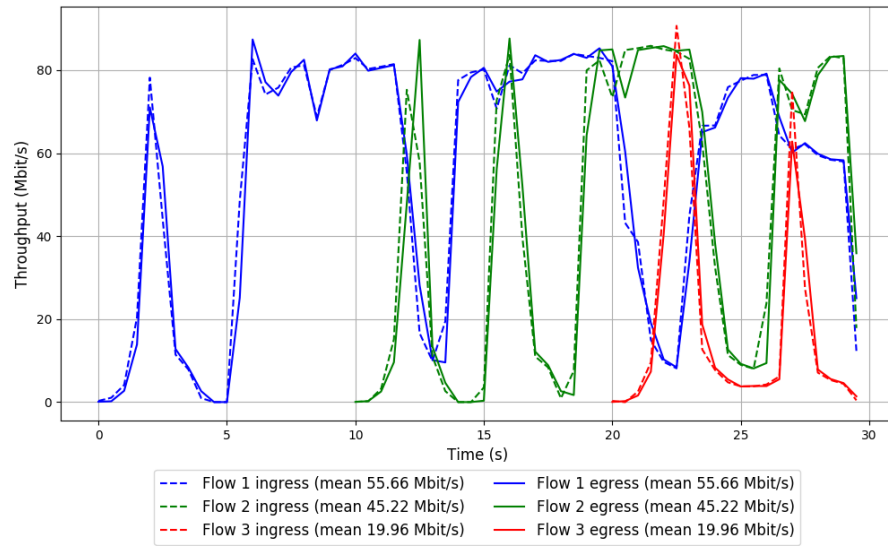
-- Flow 3:

Average throughput: 19.96 Mbit/s

95th percentile per-packet one-way delay: 112.910 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-13 23:00:55

End at: 2018-02-13 23:01:25

Below is generated by plot.py at 2018-02-14 04:00:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.34 Mbit/s

95th percentile per-packet one-way delay: 113.558 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.37 Mbit/s

95th percentile per-packet one-way delay: 113.596 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 41.20 Mbit/s

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

Loss rate: 0.00%

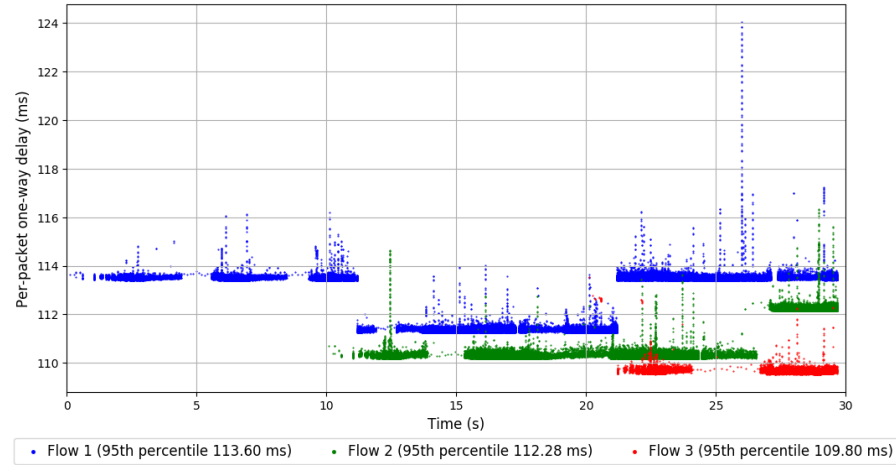
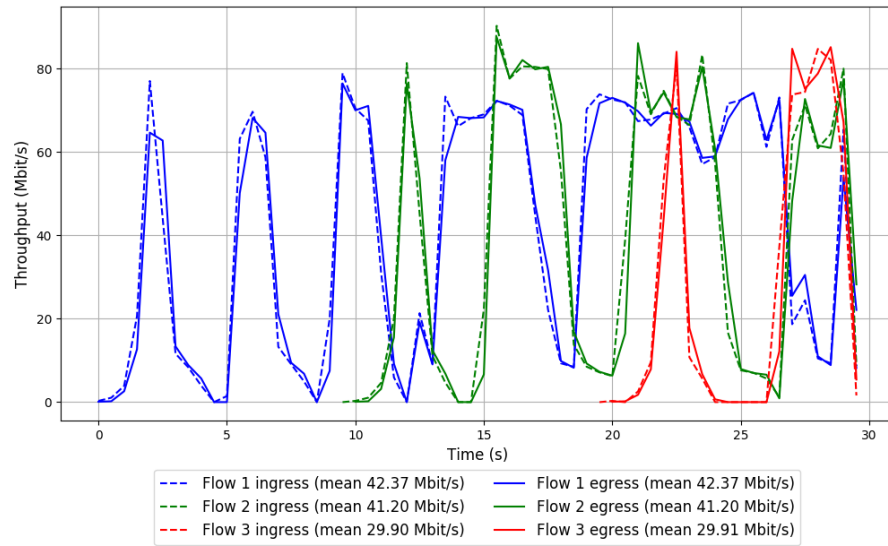
-- Flow 3:

Average throughput: 29.91 Mbit/s

95th percentile per-packet one-way delay: 109.804 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-13 23:20:38

End at: 2018-02-13 23:21:08

Below is generated by plot.py at 2018-02-14 04:00:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.20 Mbit/s

95th percentile per-packet one-way delay: 112.700 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.86 Mbit/s

95th percentile per-packet one-way delay: 112.740 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 34.62 Mbit/s

95th percentile per-packet one-way delay: 112.652 ms

Loss rate: 0.00%

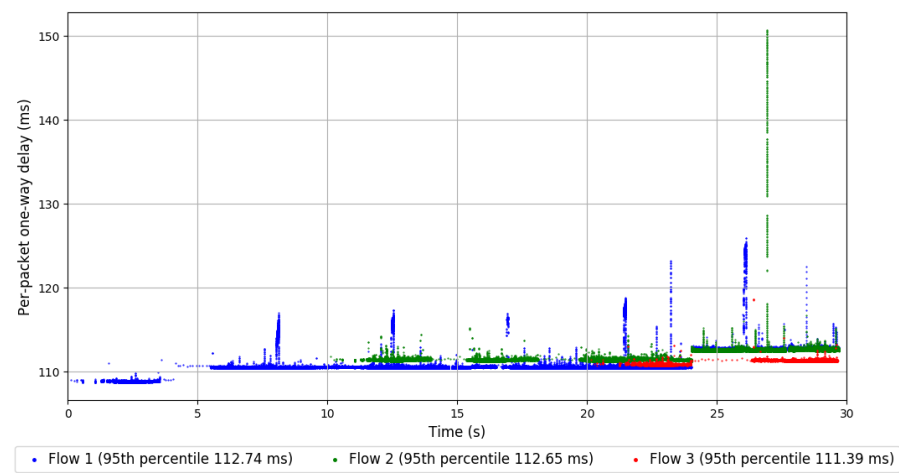
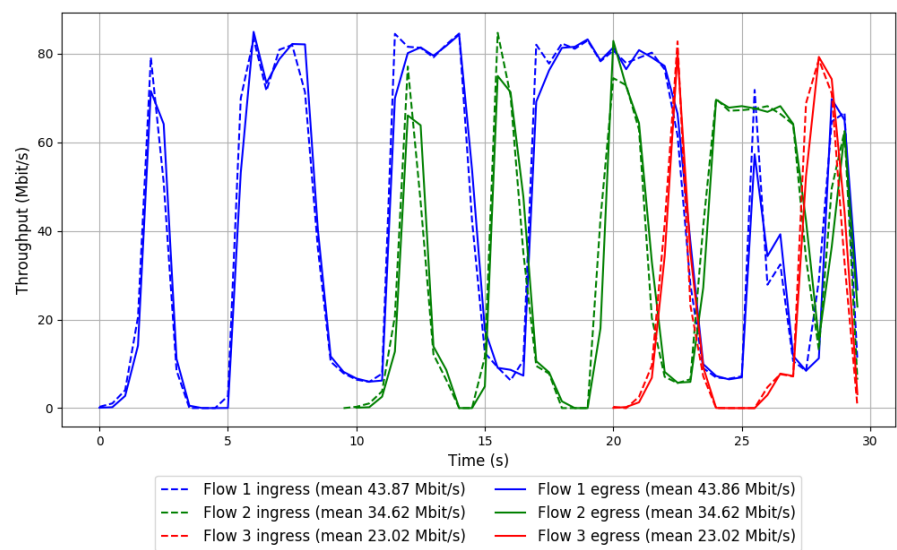
-- Flow 3:

Average throughput: 23.02 Mbit/s

95th percentile per-packet one-way delay: 111.388 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-13 23:39:47

End at: 2018-02-13 23:40:17

Below is generated by plot.py at 2018-02-14 04:00:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.05 Mbit/s

95th percentile per-packet one-way delay: 112.260 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.11 Mbit/s

95th percentile per-packet one-way delay: 112.158 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.95 Mbit/s

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

Loss rate: 0.00%

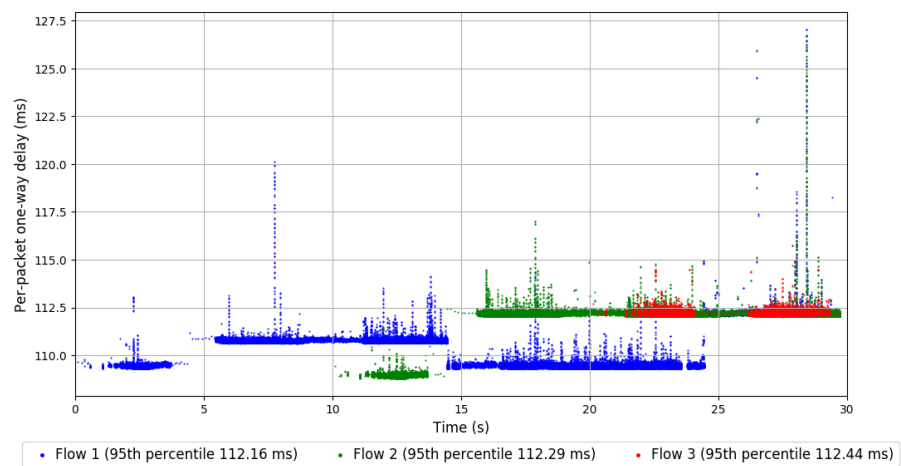
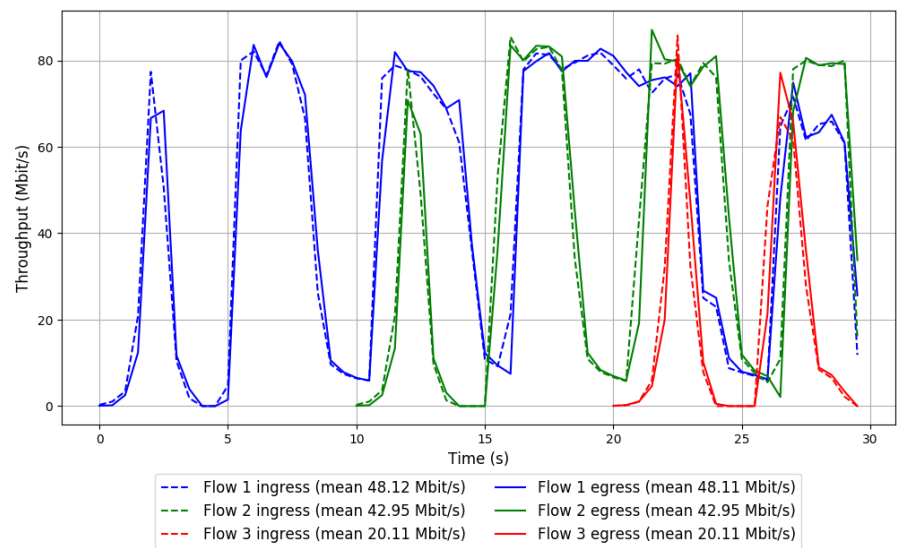
-- Flow 3:

Average throughput: 20.11 Mbit/s

95th percentile per-packet one-way delay: 112.440 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-13 23:59:31

End at: 2018-02-14 00:00:01

Below is generated by plot.py at 2018-02-14 04:00:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.15 Mbit/s

95th percentile per-packet one-way delay: 112.719 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 50.33 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 42.71 Mbit/s

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

Loss rate: 0.02%

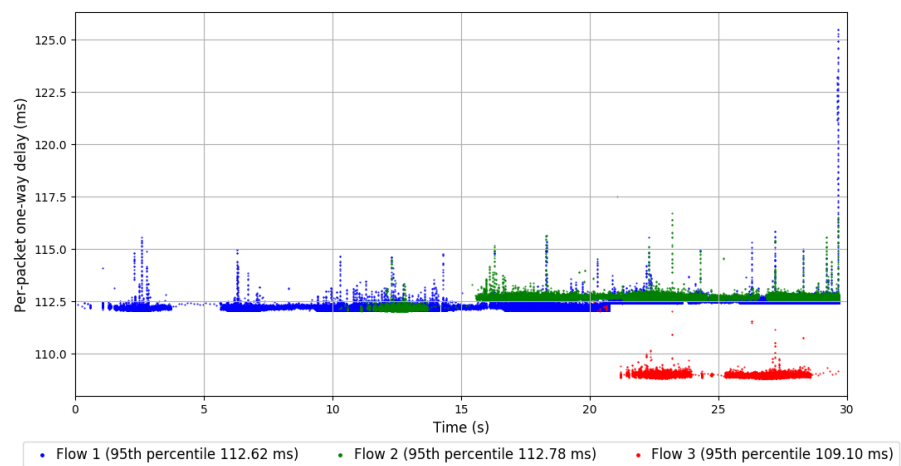
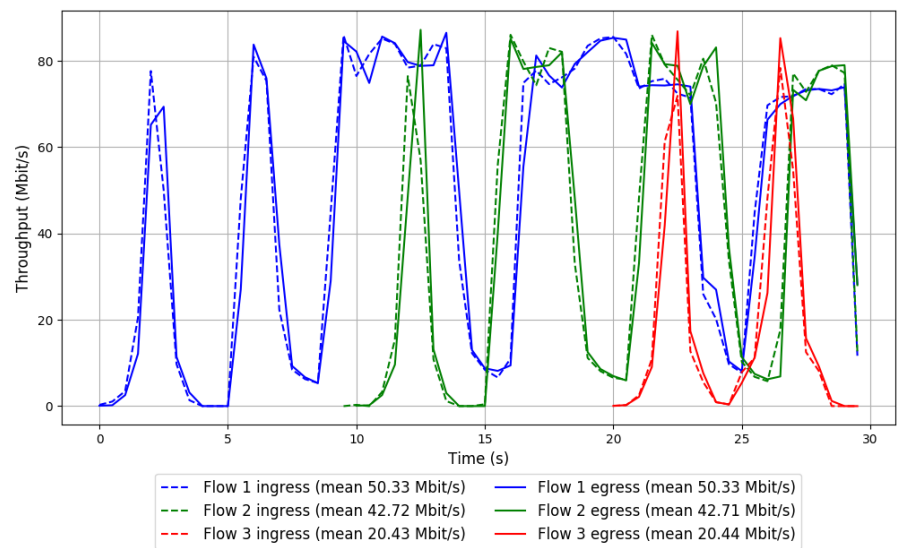
-- Flow 3:

Average throughput: 20.44 Mbit/s

95th percentile per-packet one-way delay: 109.096 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-14 00:19:10

End at: 2018-02-14 00:19:40

Below is generated by plot.py at 2018-02-14 04:00:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.98 Mbit/s

95th percentile per-packet one-way delay: 113.130 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.48 Mbit/s

95th percentile per-packet one-way delay: 113.097 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.08 Mbit/s

95th percentile per-packet one-way delay: 113.190 ms

Loss rate: 0.00%

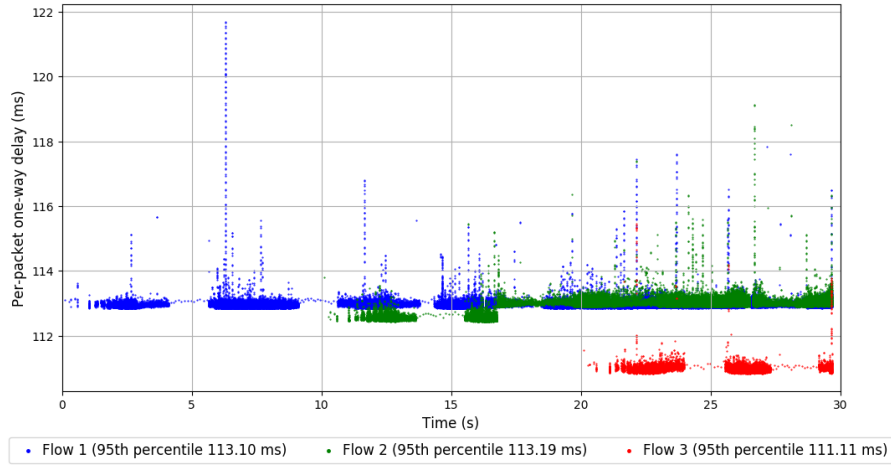
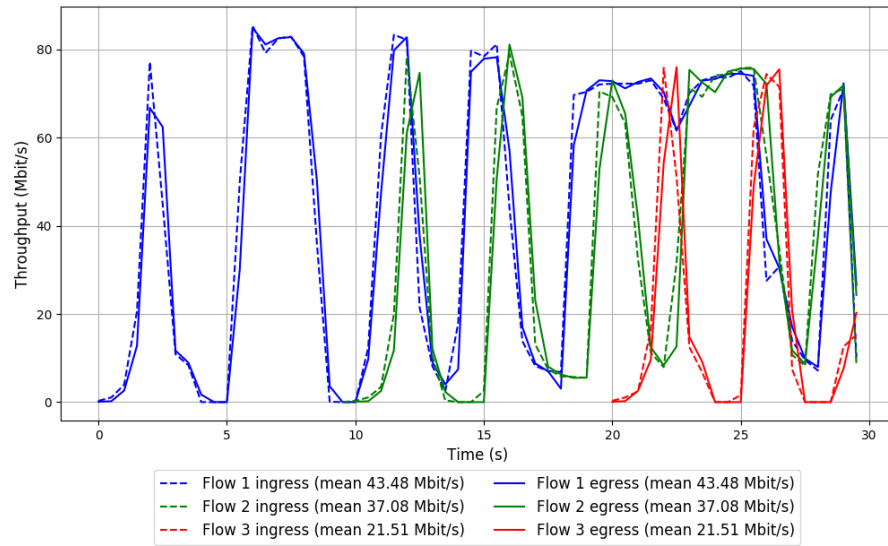
-- Flow 3:

Average throughput: 21.51 Mbit/s

95th percentile per-packet one-way delay: 111.111 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-14 00:38:42

End at: 2018-02-14 00:39:12

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.81 Mbit/s

95th percentile per-packet one-way delay: 113.115 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.75 Mbit/s

95th percentile per-packet one-way delay: 113.125 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 41.59 Mbit/s

95th percentile per-packet one-way delay: 111.892 ms

Loss rate: 0.00%

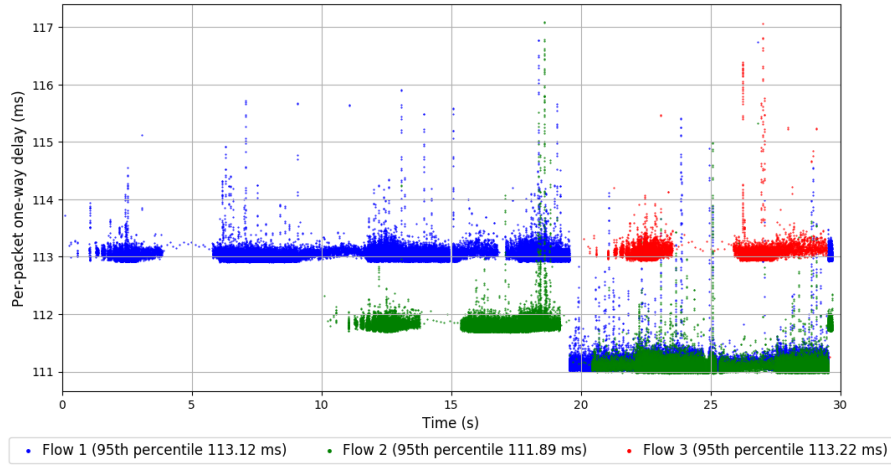
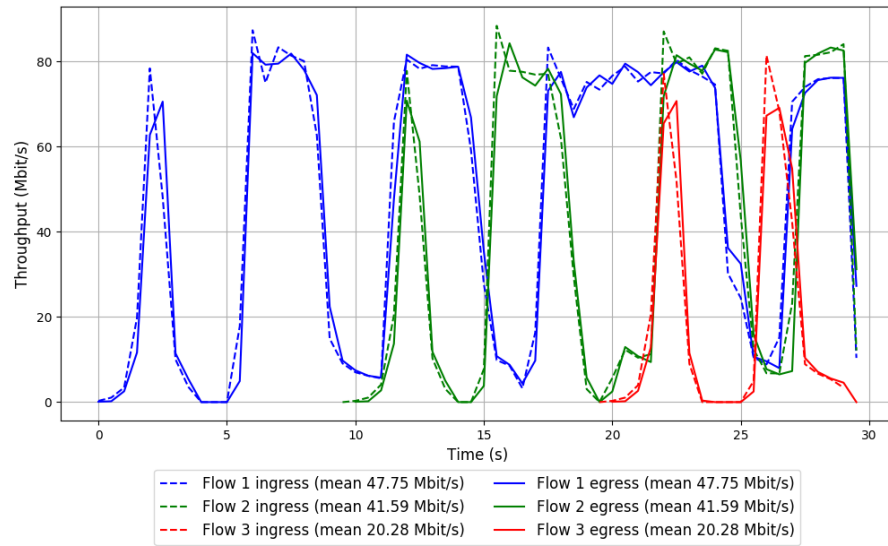
-- Flow 3:

Average throughput: 20.28 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-14 00:57:56

End at: 2018-02-14 00:58:26

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.69 Mbit/s

95th percentile per-packet one-way delay: 113.252 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.91 Mbit/s

95th percentile per-packet one-way delay: 112.971 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.16 Mbit/s

95th percentile per-packet one-way delay: 113.195 ms

Loss rate: 0.00%

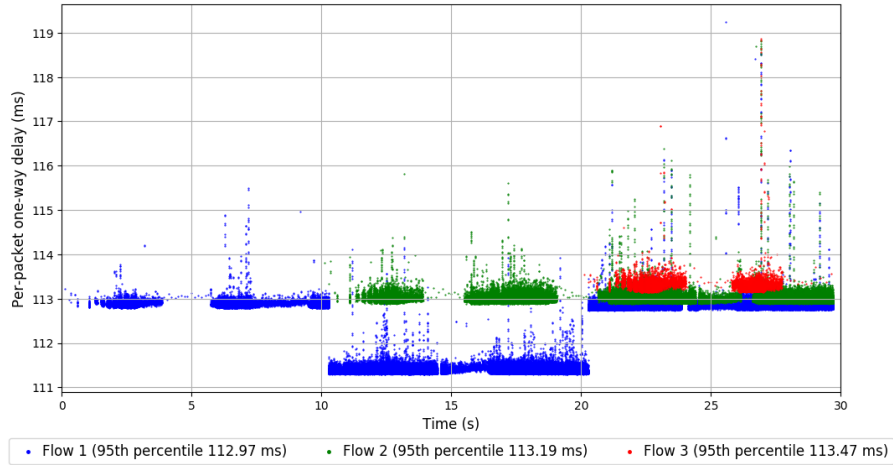
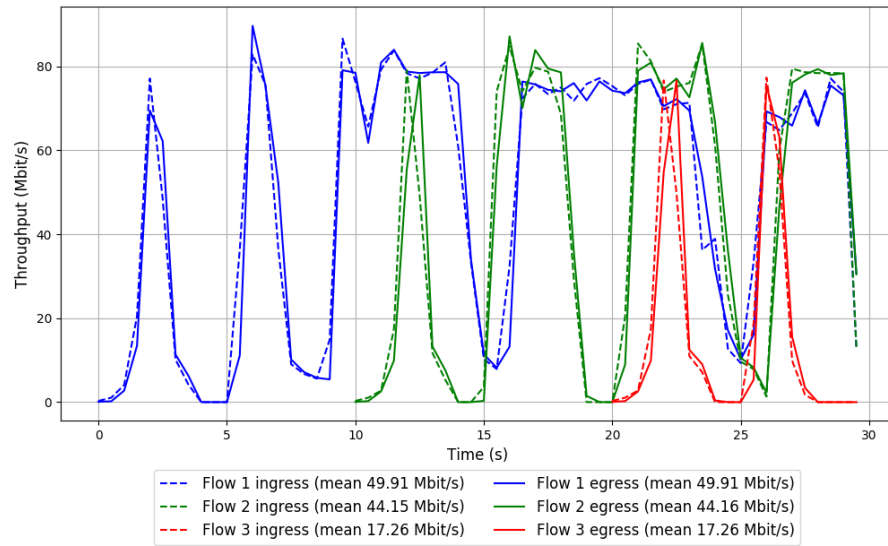
-- Flow 3:

Average throughput: 17.26 Mbit/s

95th percentile per-packet one-way delay: 113.467 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

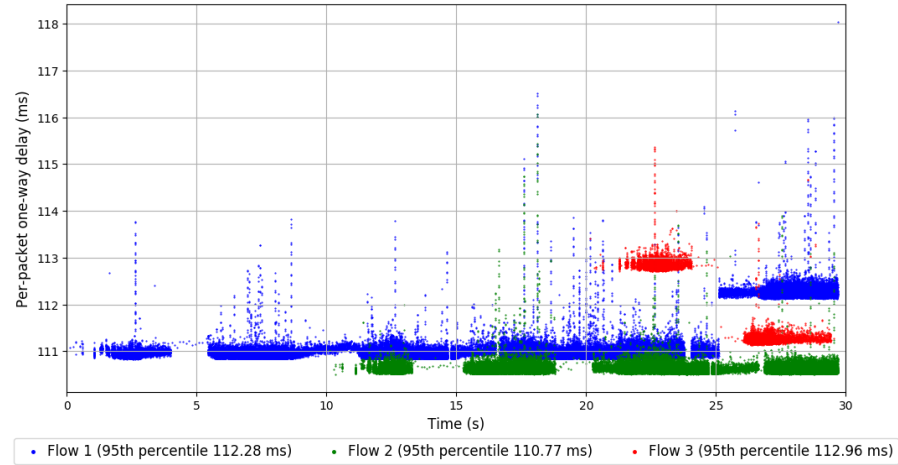
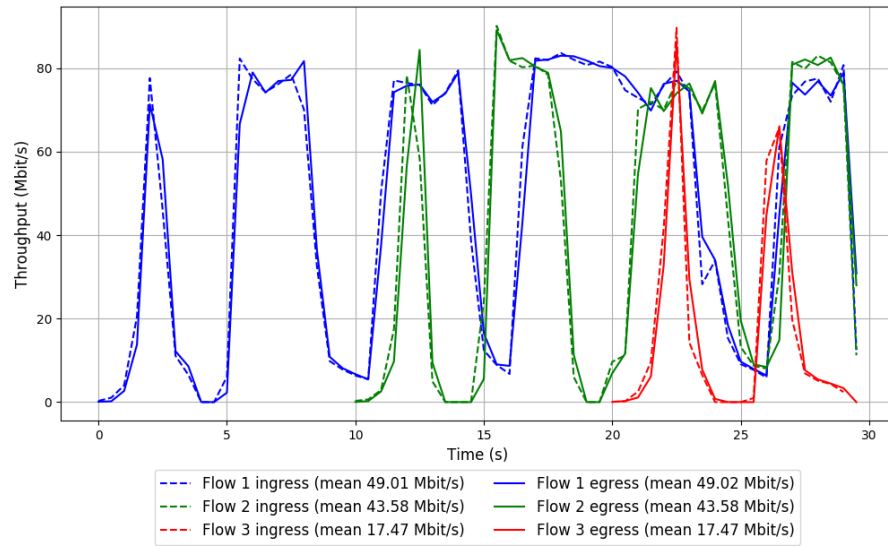


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-02-14 01:17:17
End at: 2018-02-14 01:17:47

# Below is generated by plot.py at 2018-02-14 04:00:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.38 Mbit/s
95th percentile per-packet one-way delay: 112.336 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.02 Mbit/s
95th percentile per-packet one-way delay: 112.277 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 43.58 Mbit/s
95th percentile per-packet one-way delay: 110.768 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.47 Mbit/s
95th percentile per-packet one-way delay: 112.962 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

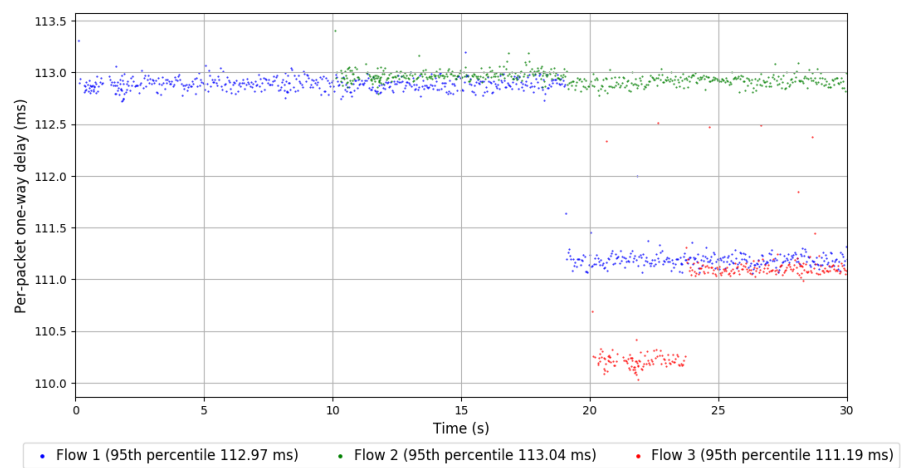
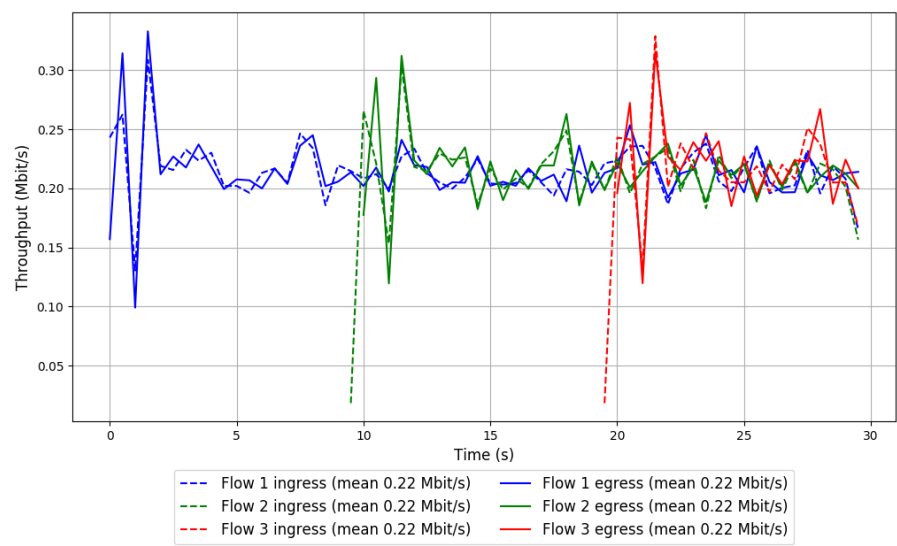


```
Run 1: Statistics of SCReAM

Start at: 2018-02-13 22:17:33
End at: 2018-02-13 22:18:03

# Below is generated by plot.py at 2018-02-14 04:00:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.003 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.968 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.038 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.195 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

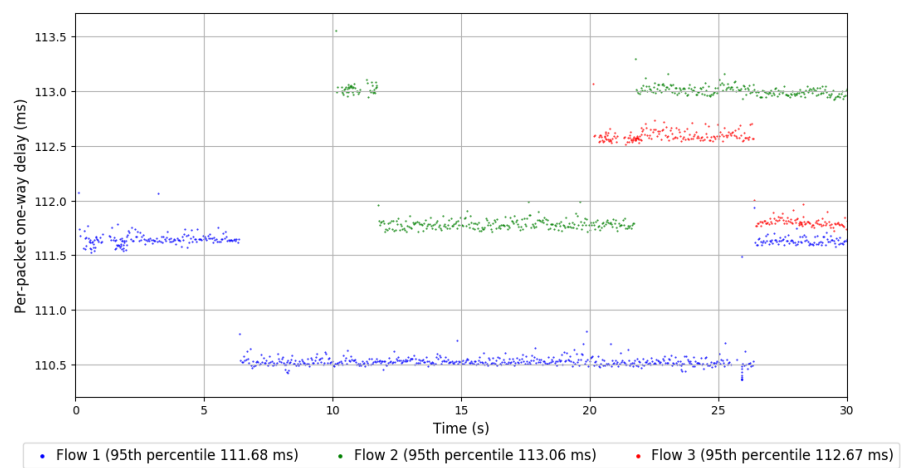
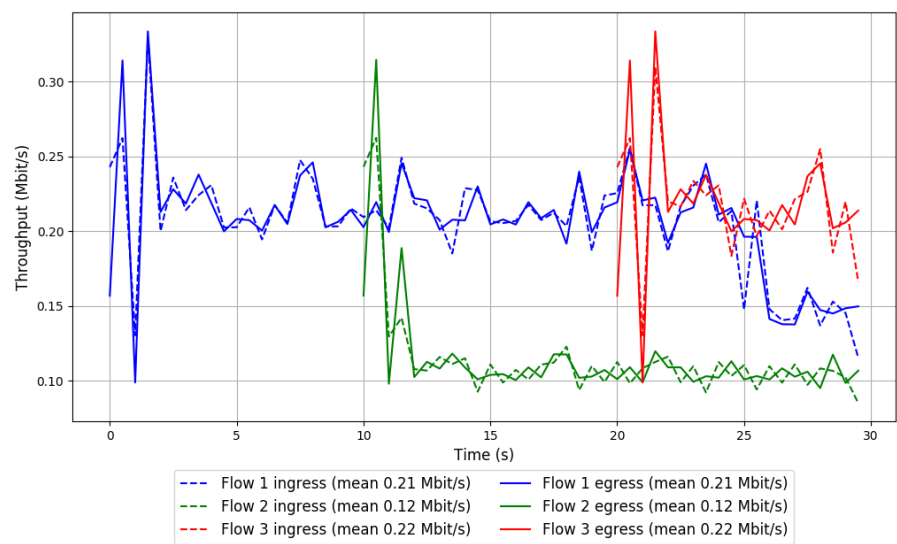


```
Run 2: Statistics of SCReAM

Start at: 2018-02-13 22:37:20
End at: 2018-02-13 22:37:50

# Below is generated by plot.py at 2018-02-14 04:00:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 113.029 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 111.676 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 113.057 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.665 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

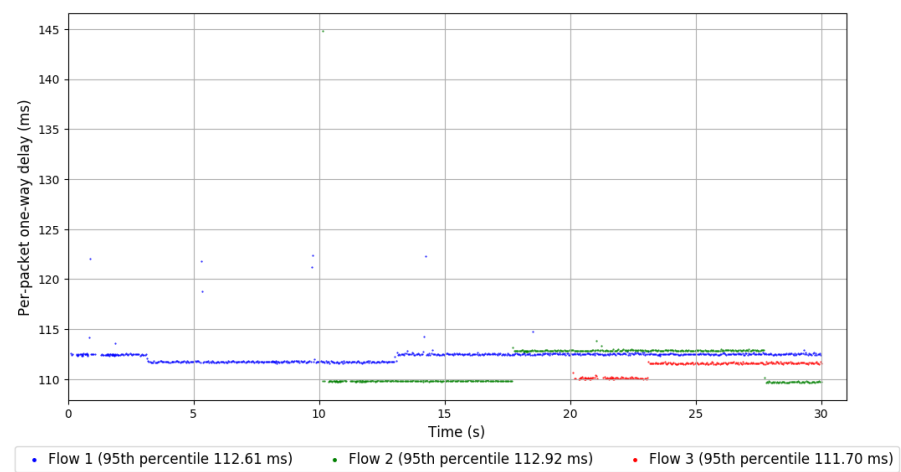
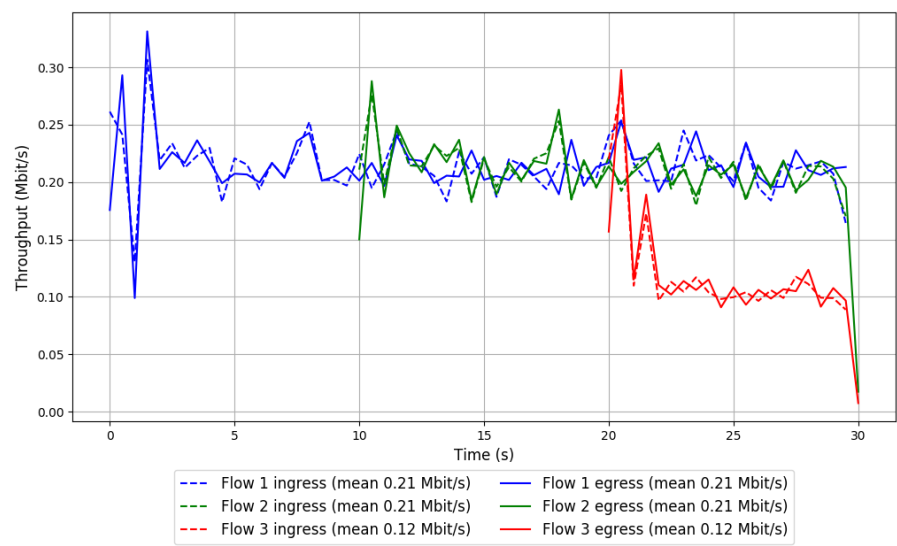


```
Run 3: Statistics of SCReAM

Start at: 2018-02-13 22:56:39
End at: 2018-02-13 22:57:09

# Below is generated by plot.py at 2018-02-14 04:00:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 112.893 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.615 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.924 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 111.703 ms
Loss rate: 0.00%
```


Run 3: Report of SReAM — Data Link

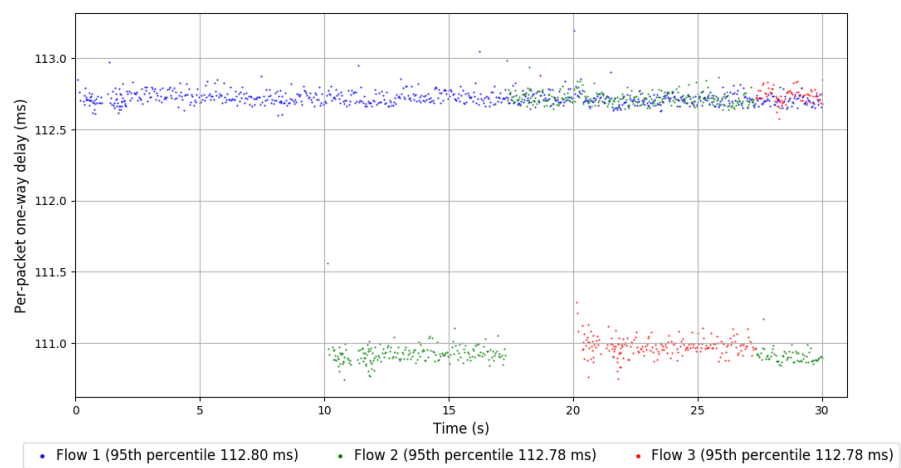
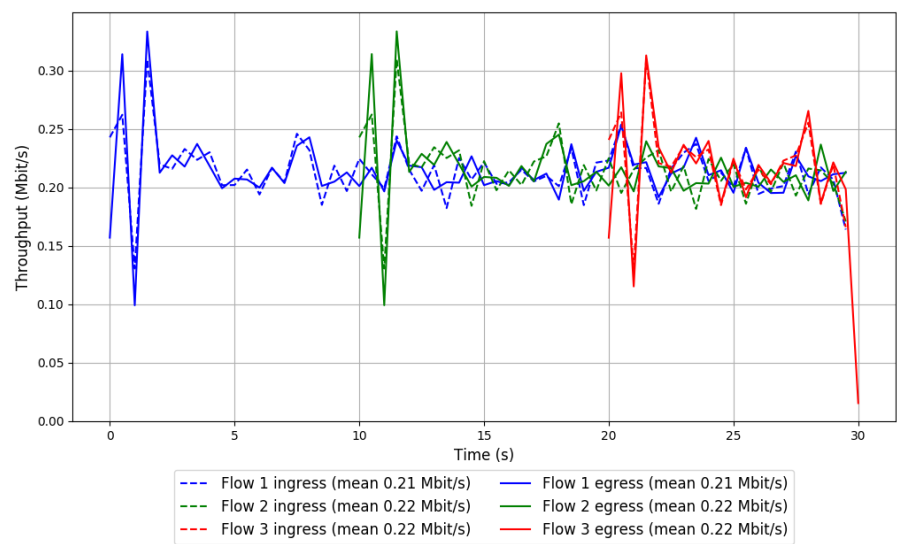


```
Run 4: Statistics of SCReAM

Start at: 2018-02-13 23:16:09
End at: 2018-02-13 23:16:39

# Below is generated by plot.py at 2018-02-14 04:00:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.789 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.798 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.776 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.776 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-02-13 23:35:29

End at: 2018-02-13 23:35:59

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.779 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.960 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.817 ms

Loss rate: 0.00%

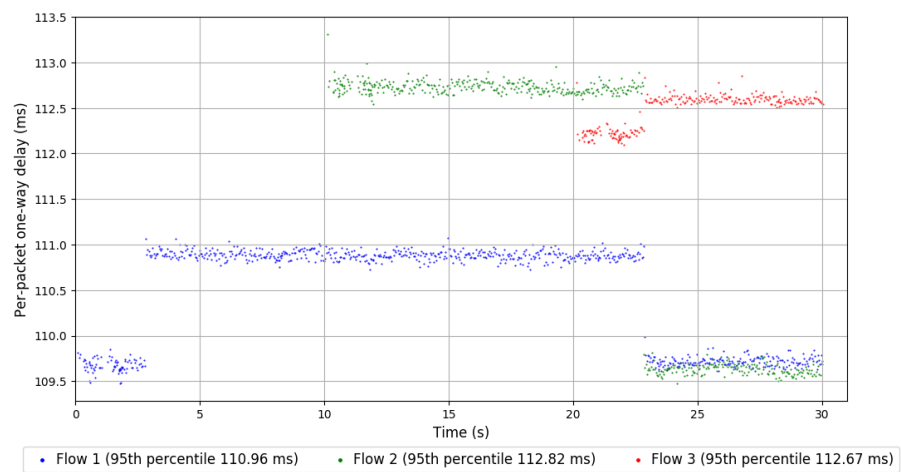
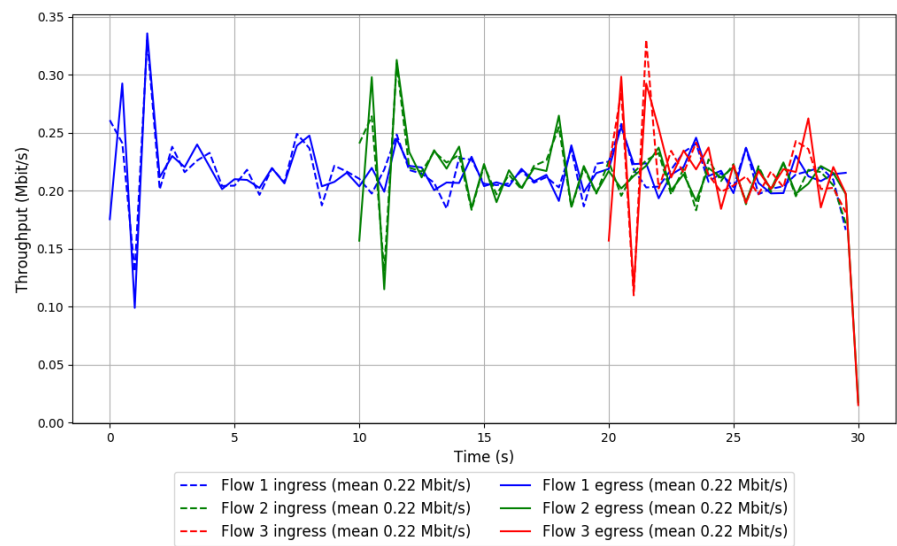
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.670 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-02-13 23:54:49

End at: 2018-02-13 23:55:19

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.870 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.874 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.876 ms

Loss rate: 0.00%

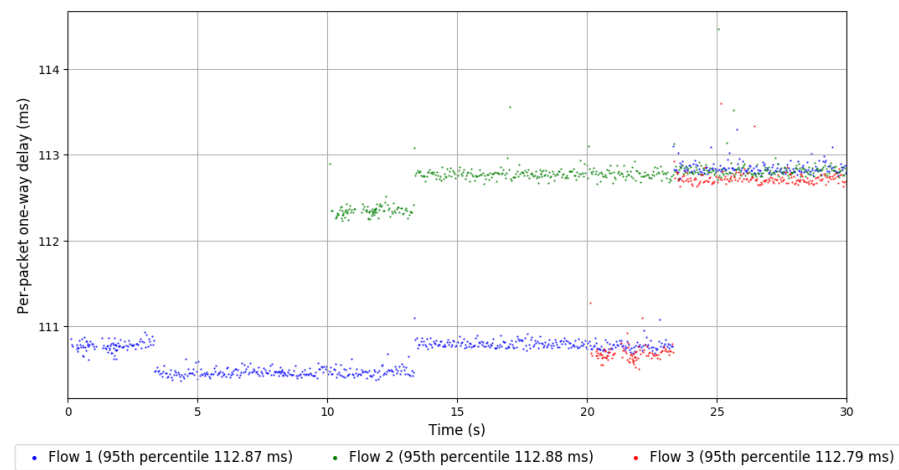
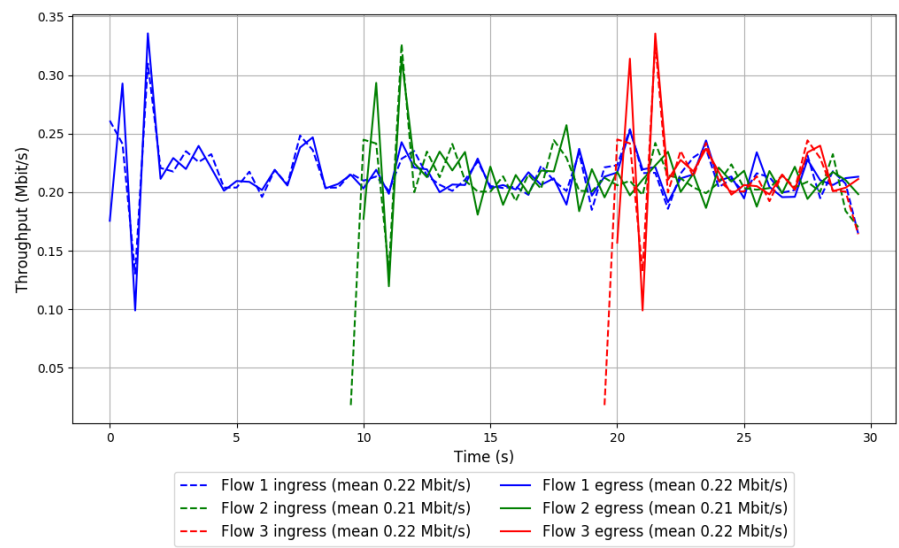
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

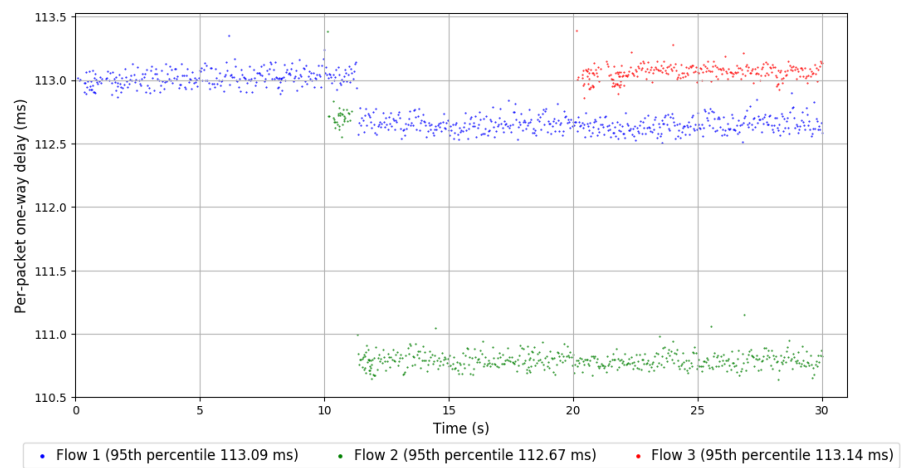
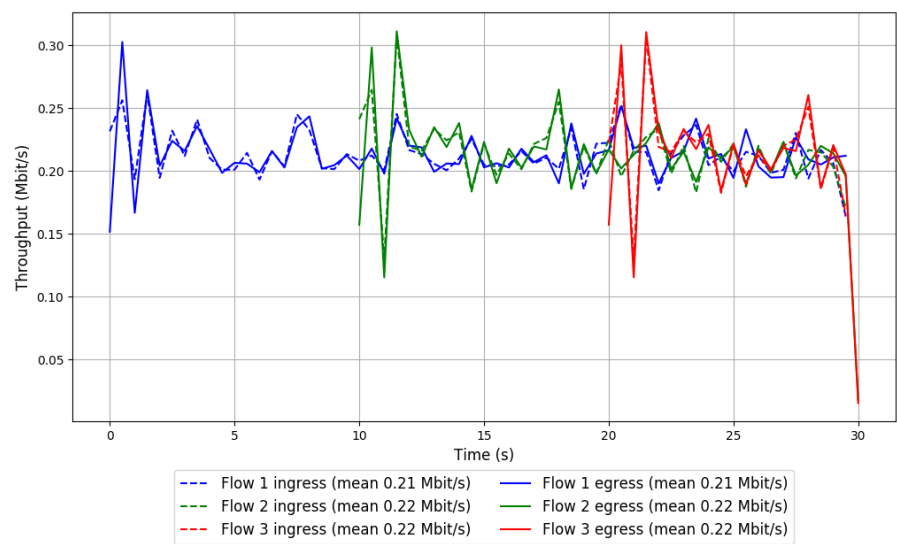


```
Run 7: Statistics of SCReAM

Start at: 2018-02-14 00:14:31
End at: 2018-02-14 00:15:01

# Below is generated by plot.py at 2018-02-14 04:00:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.105 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.090 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.669 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.143 ms
Loss rate: 0.00%
```


Run 7: Report of SCReAM — Data Link

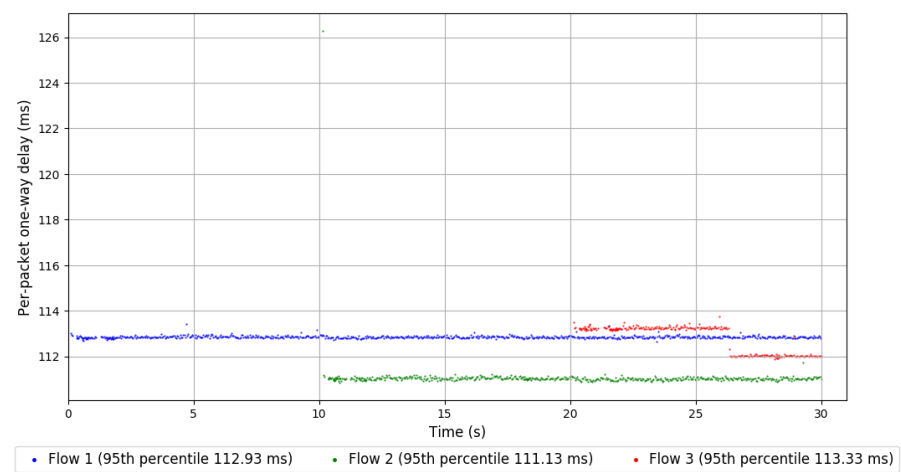
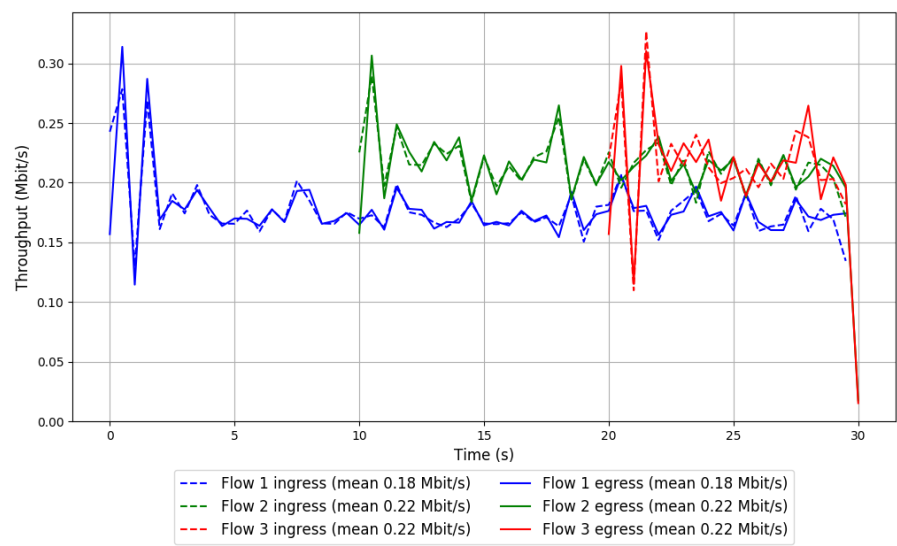


```
Run 8: Statistics of SReAM

Start at: 2018-02-14 00:34:20
End at: 2018-02-14 00:34:50

# Below is generated by plot.py at 2018-02-14 04:00:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 113.239 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 112.930 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.127 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.329 ms
Loss rate: 0.00%
```

Run 8: Report of SReAM — Data Link

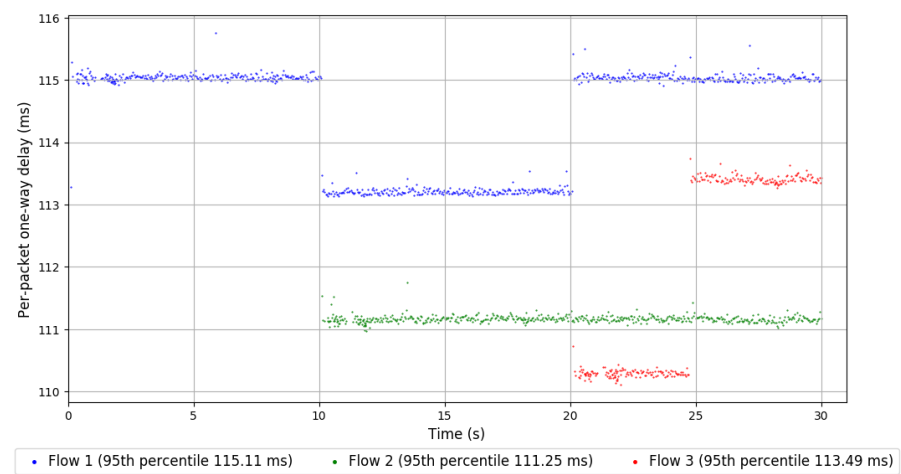
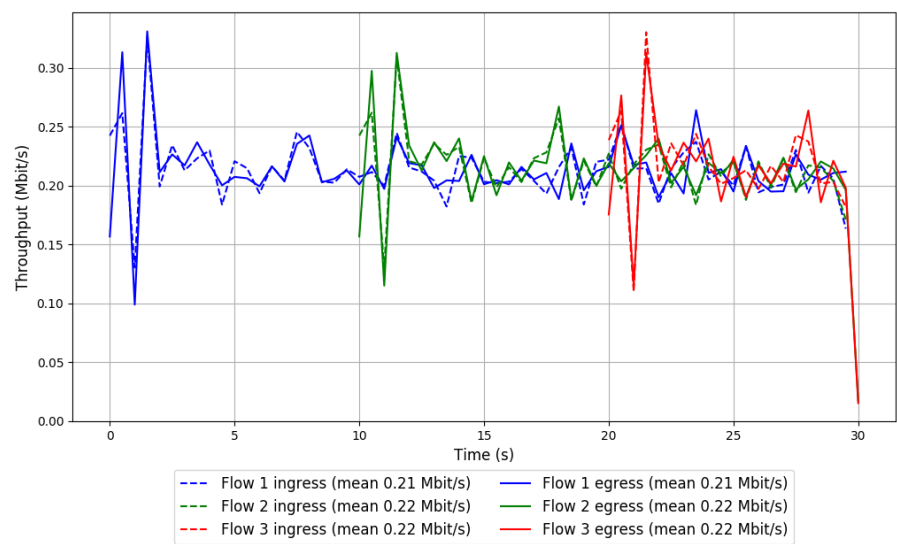


```
Run 9: Statistics of SCReAM

Start at: 2018-02-14 00:53:32
End at: 2018-02-14 00:54:02

# Below is generated by plot.py at 2018-02-14 04:00:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 115.085 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 115.106 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.245 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.488 ms
Loss rate: 0.00%
```

Run 9: Report of SReAM — Data Link

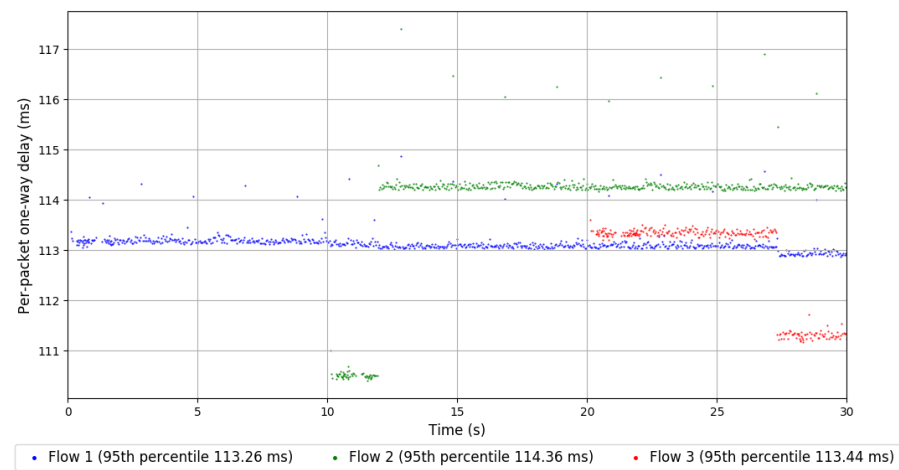
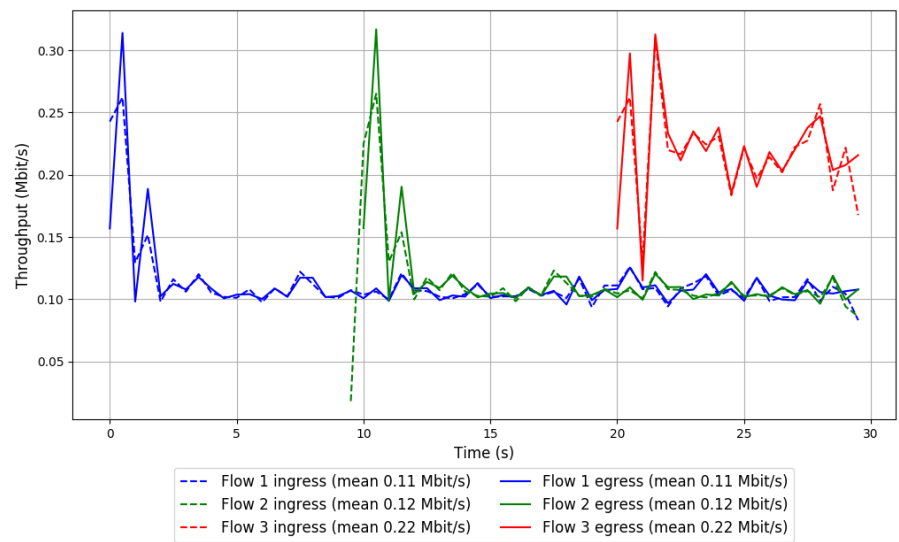


```
Run 10: Statistics of SReAM

Start at: 2018-02-14 01:12:55
End at: 2018-02-14 01:13:25

# Below is generated by plot.py at 2018-02-14 04:00:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 114.316 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 113.263 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 114.360 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.436 ms
Loss rate: 0.00%
```

Run 10: Report of SCReAM — Data Link

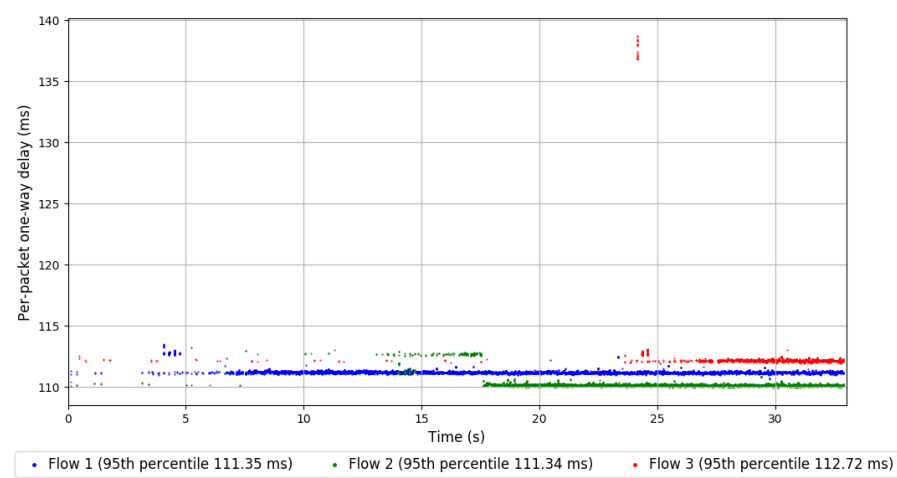
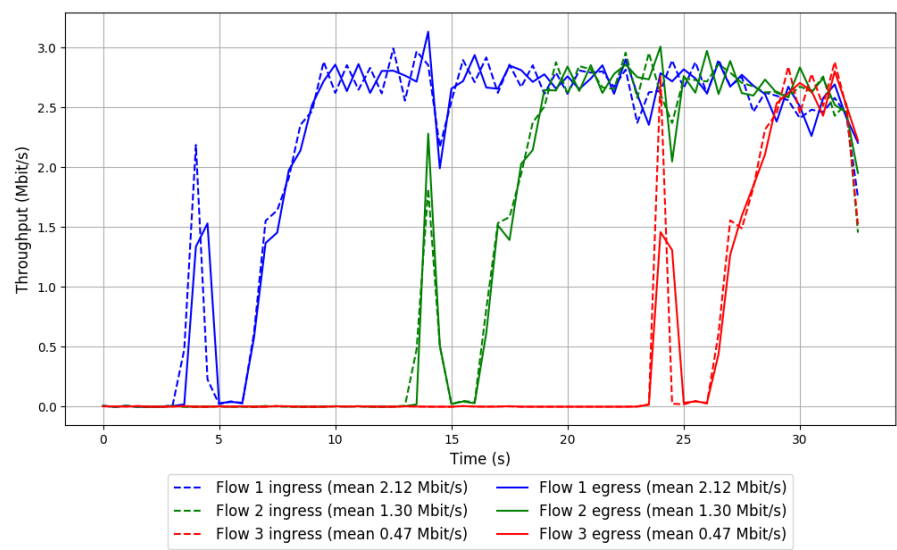


```
Run 1: Statistics of WebRTC media

Start at: 2018-02-13 22:11:07
End at: 2018-02-13 22:11:37

# Below is generated by plot.py at 2018-02-14 04:00:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 112.237 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 111.350 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 111.338 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 112.717 ms
Loss rate: 0.06%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-02-13 22:30:47

End at: 2018-02-13 22:31:17

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 114.620 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 113.221 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 111.972 ms

Loss rate: 0.02%

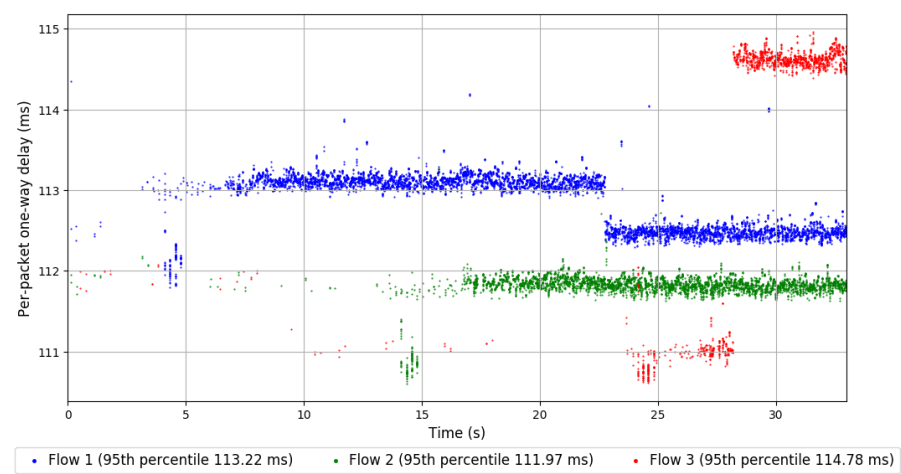
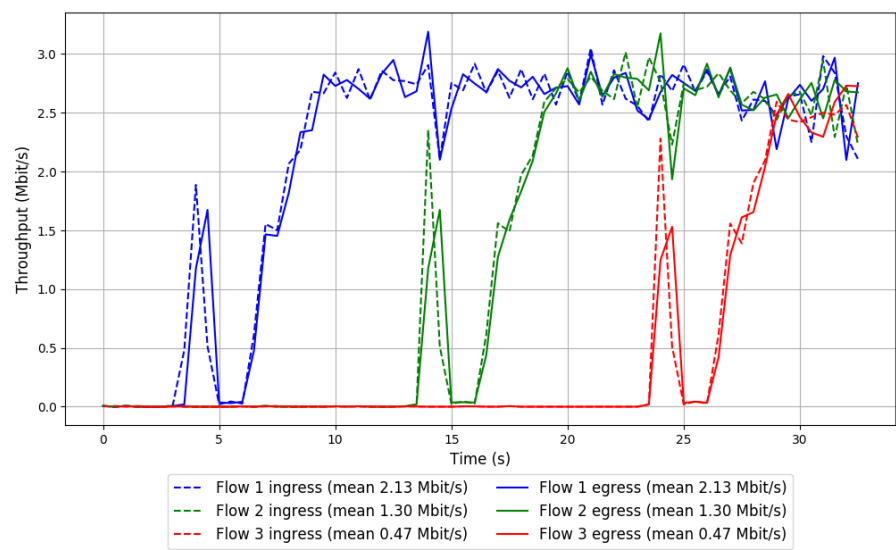
-- Flow 3:

Average throughput: 0.47 Mbit/s

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

Loss rate: 0.06%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-13 22:50:11

End at: 2018-02-13 22:50:41

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 112.740 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.09 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 111.885 ms

Loss rate: 0.00%

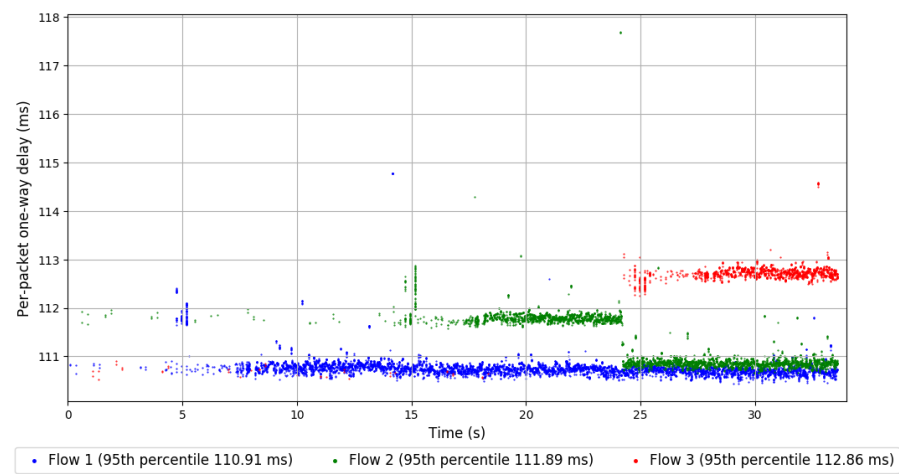
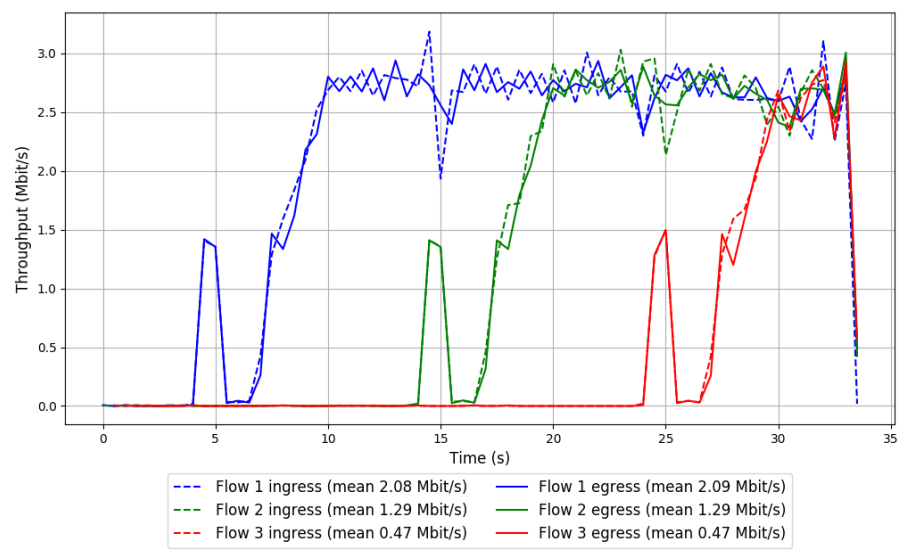
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 112.861 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-13 23:09:40

End at: 2018-02-13 23:10:10

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.79 Mbit/s

95th percentile per-packet one-way delay: 112.910 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.07 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 112.902 ms

Loss rate: 0.00%

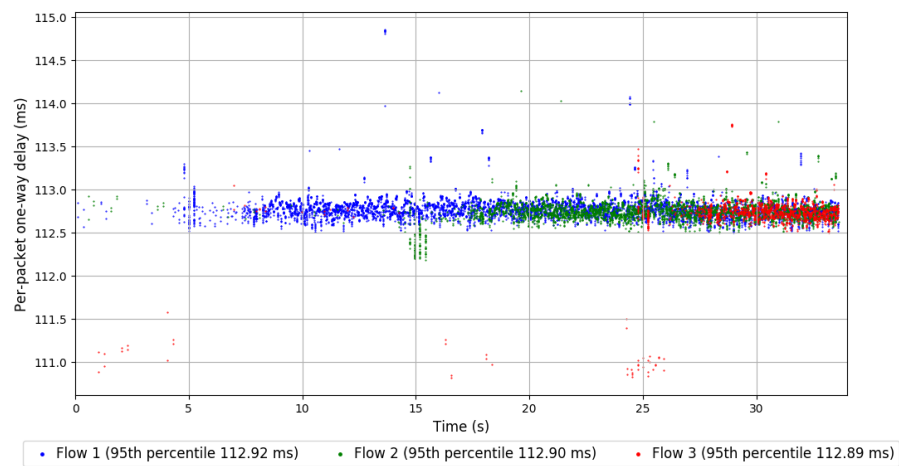
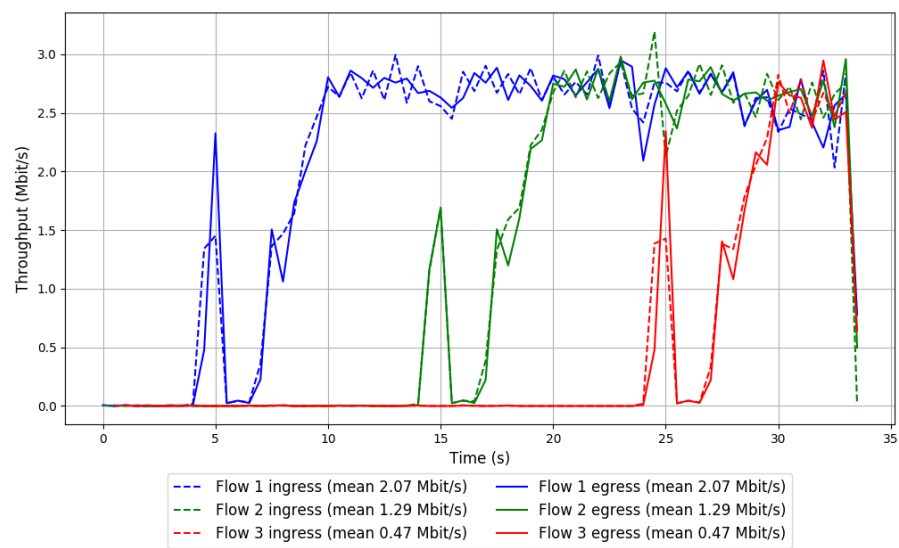
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 112.888 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-13 23:29:03

End at: 2018-02-13 23:29:33

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.80 Mbit/s

95th percentile per-packet one-way delay: 112.852 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.890 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 110.848 ms

Loss rate: 0.00%

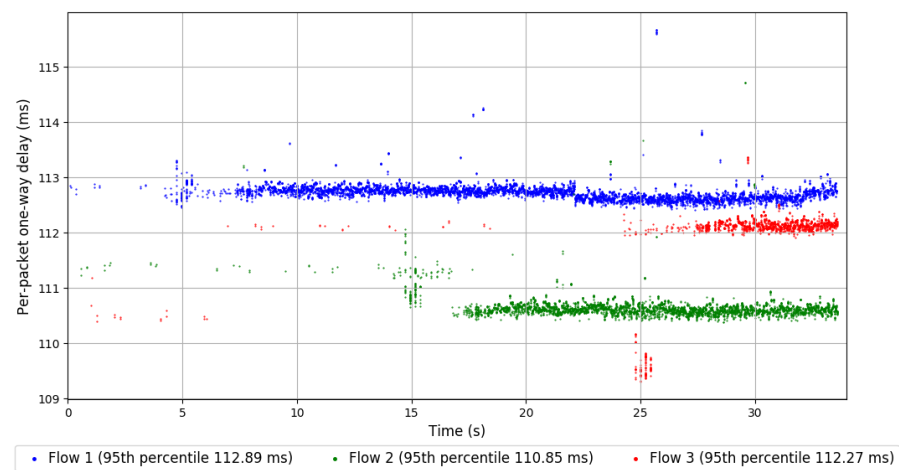
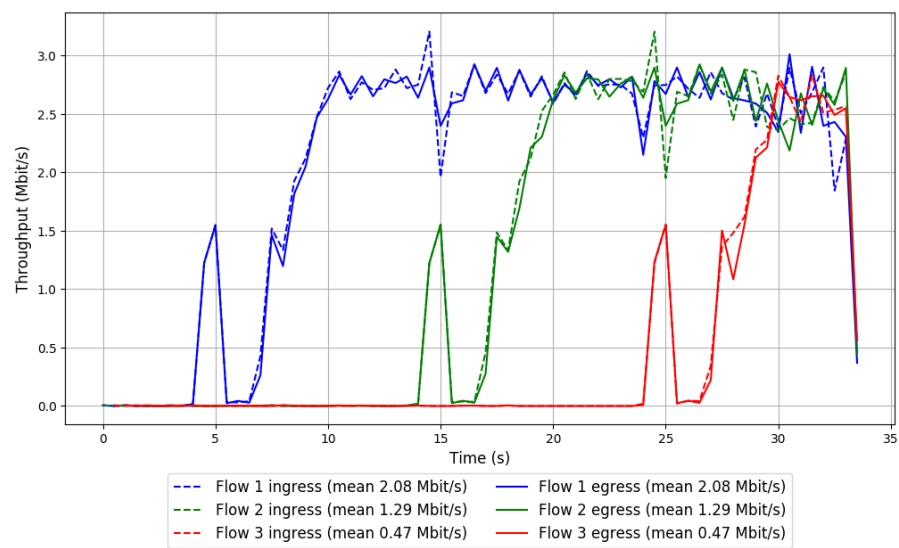
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 112.265 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-13 23:48:21

End at: 2018-02-13 23:48:51

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.79 Mbit/s

95th percentile per-packet one-way delay: 114.309 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.347 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 112.467 ms

Loss rate: 0.00%

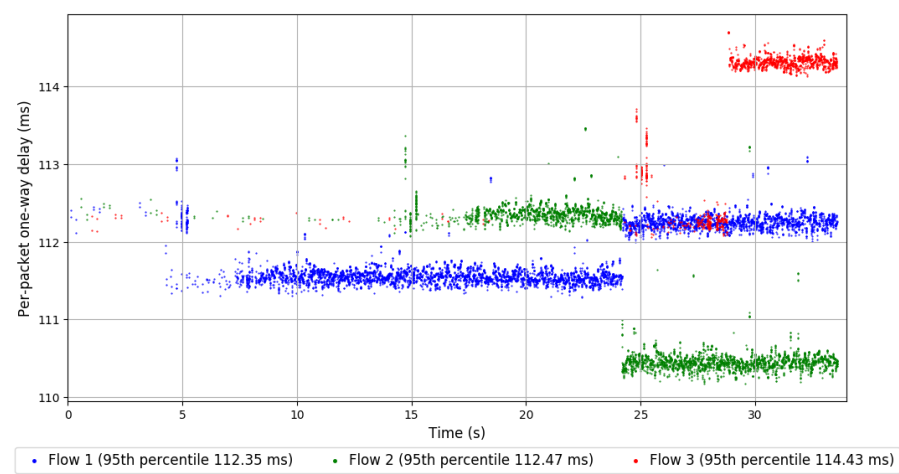
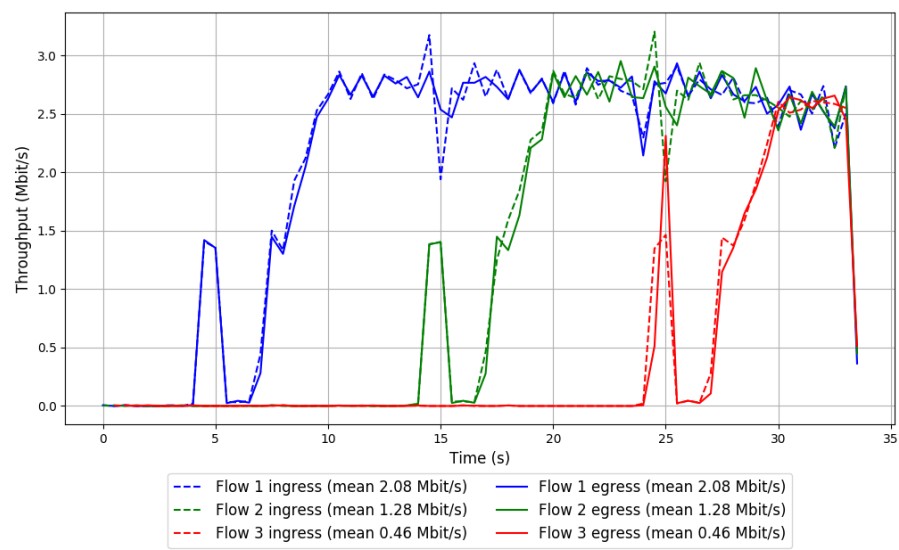
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 114.426 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link

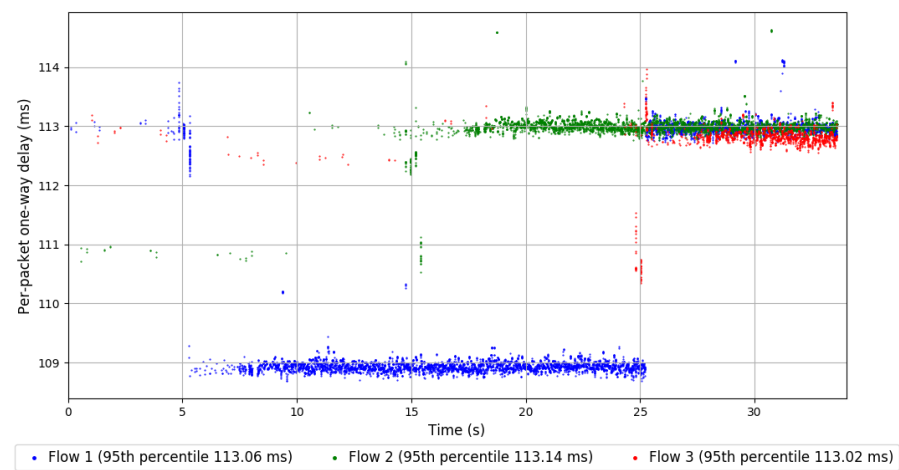
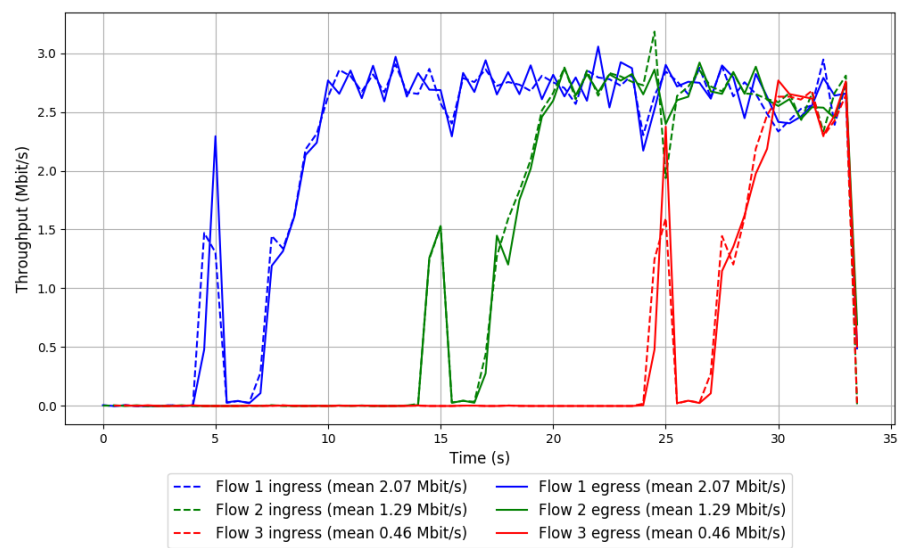


```
Run 7: Statistics of WebRTC media

Start at: 2018-02-14 00:08:00
End at: 2018-02-14 00:08:30

# Below is generated by plot.py at 2018-02-14 04:00:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.79 Mbit/s
95th percentile per-packet one-way delay: 113.103 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 113.057 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 113.139 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 113.022 ms
Loss rate: 0.00%
```

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-14 00:27:51

End at: 2018-02-14 00:28:21

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.79 Mbit/s

95th percentile per-packet one-way delay: 113.398 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.012 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 113.454 ms

Loss rate: 0.00%

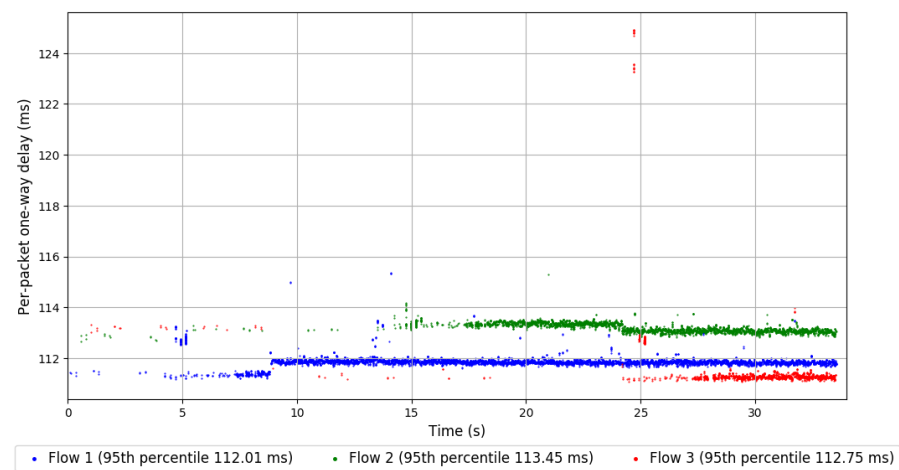
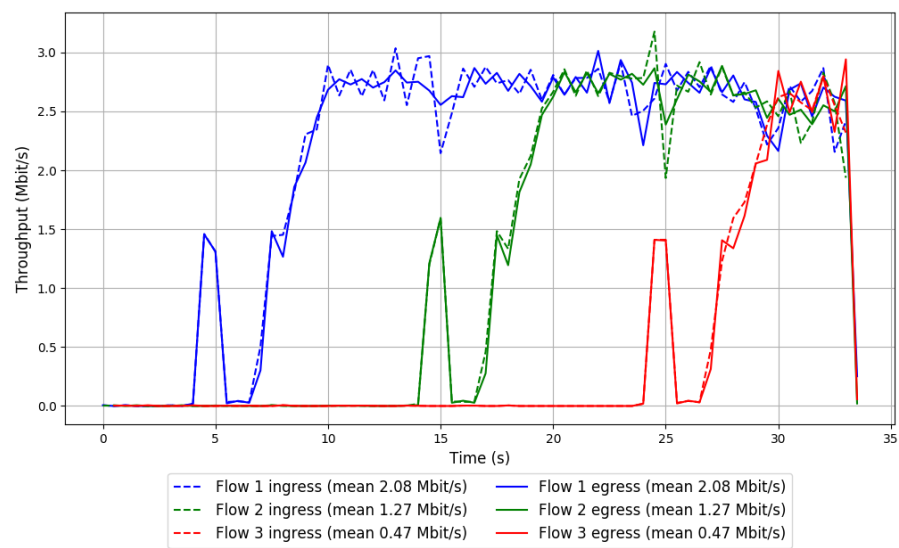
-- Flow 3:

Average throughput: 0.47 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-14 00:47:05

End at: 2018-02-14 00:47:35

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.79 Mbit/s

95th percentile per-packet one-way delay: 113.259 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.06 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 112.454 ms

Loss rate: 0.02%

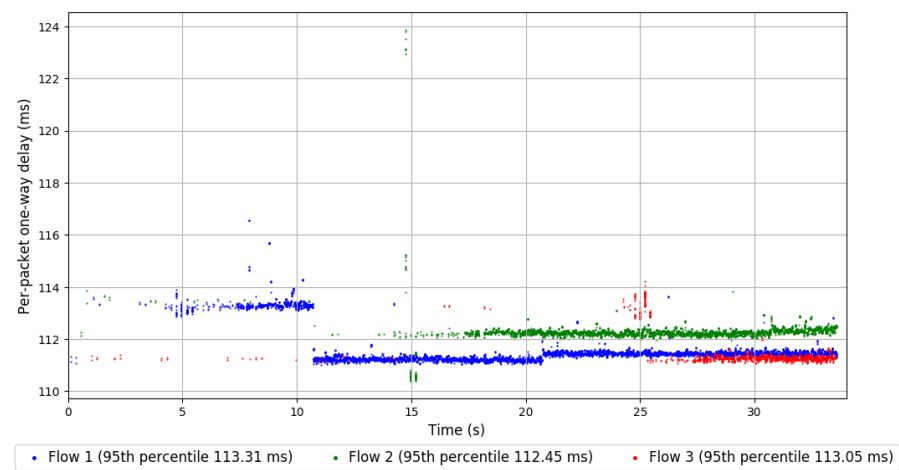
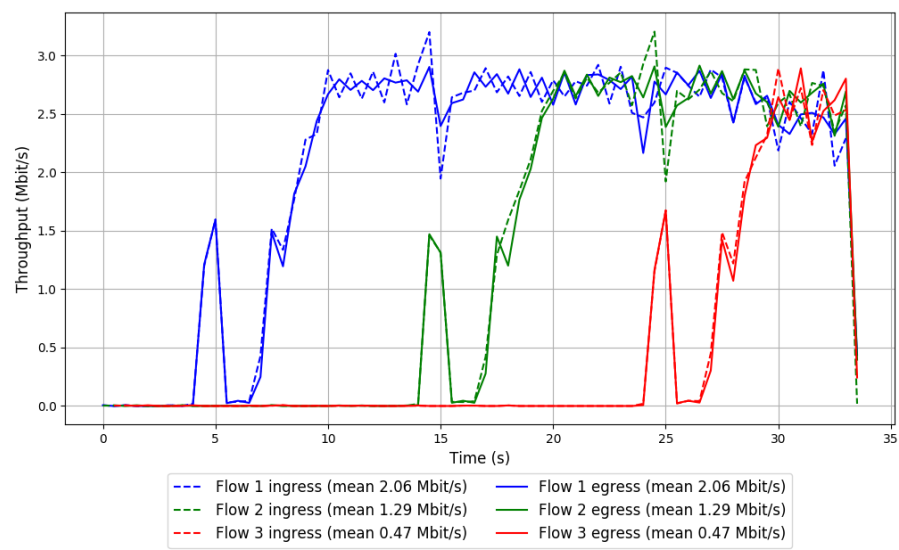
-- Flow 3:

Average throughput: 0.47 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-14 01:06:30

End at: 2018-02-14 01:07:00

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.80 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 113.684 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 113.685 ms

Loss rate: 0.00%

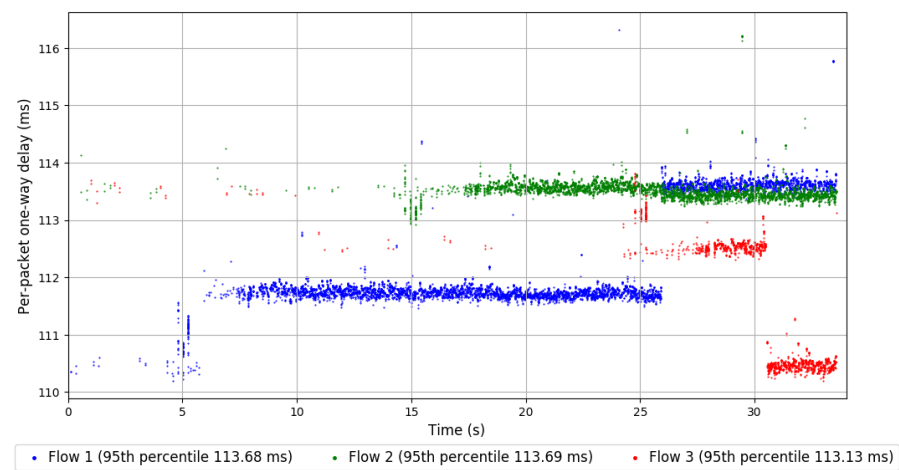
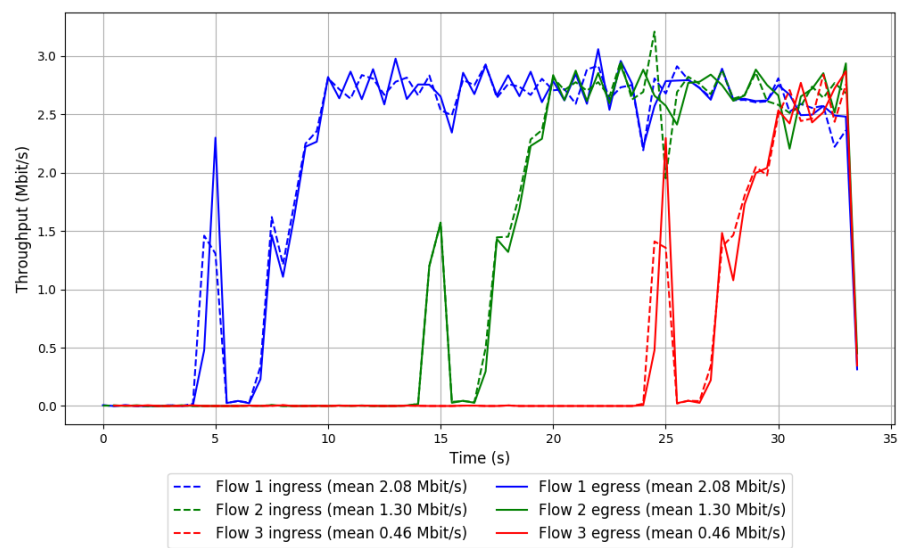
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 113.134 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

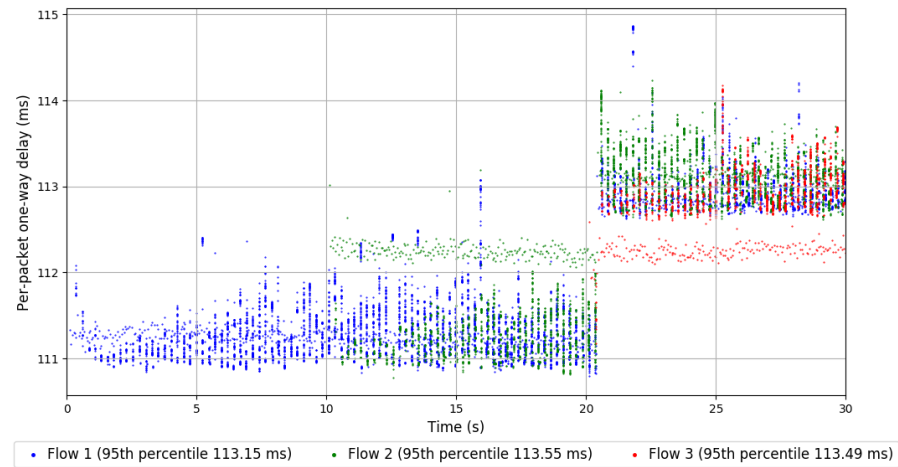
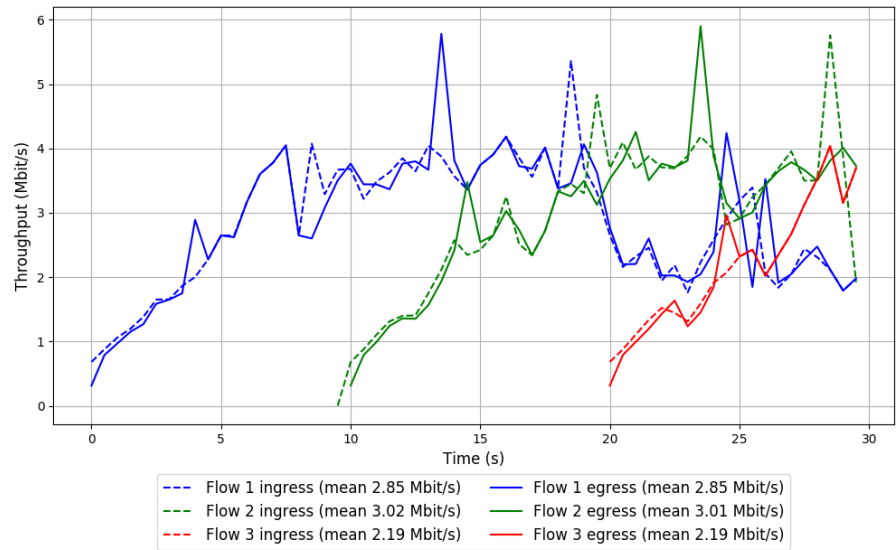


```
Run 1: Statistics of Sprout

Start at: 2018-02-13 22:07:42
End at: 2018-02-13 22:08:12

# Below is generated by plot.py at 2018-02-14 04:00:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.57 Mbit/s
95th percentile per-packet one-way delay: 113.434 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 113.151 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 3.01 Mbit/s
95th percentile per-packet one-way delay: 113.548 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 2.19 Mbit/s
95th percentile per-packet one-way delay: 113.492 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-13 22:27:22

End at: 2018-02-13 22:27:52

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.07 Mbit/s

95th percentile per-packet one-way delay: 113.454 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 113.493 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 113.361 ms

Loss rate: 0.00%

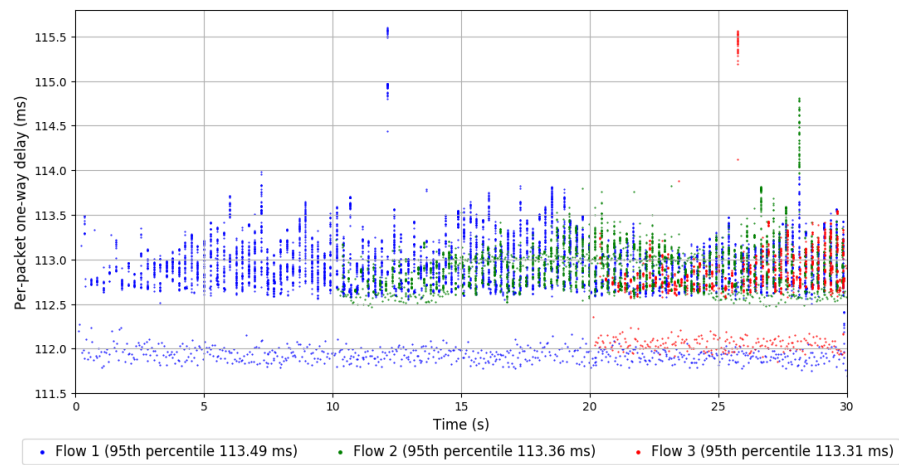
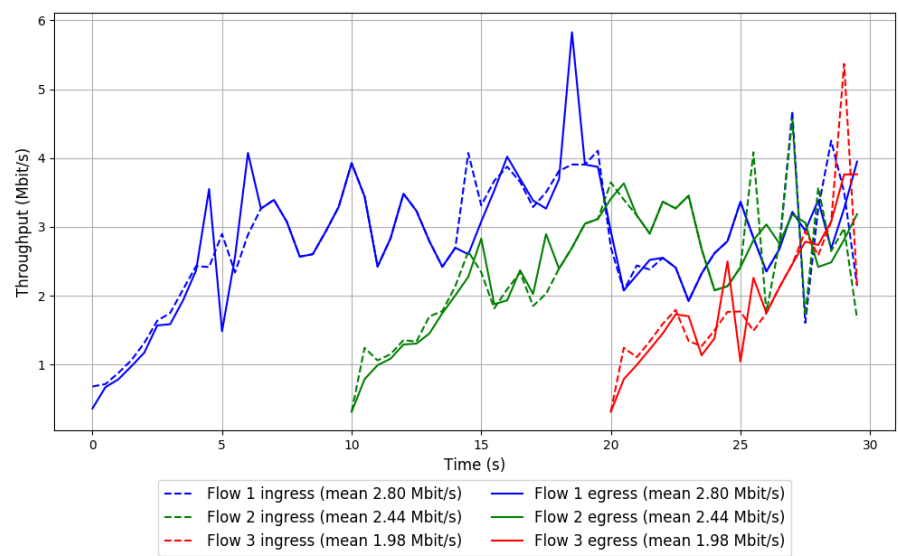
-- Flow 3:

Average throughput: 1.98 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-13 22:46:49

End at: 2018-02-13 22:47:19

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 113.224 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 113.203 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 113.356 ms

Loss rate: 0.00%

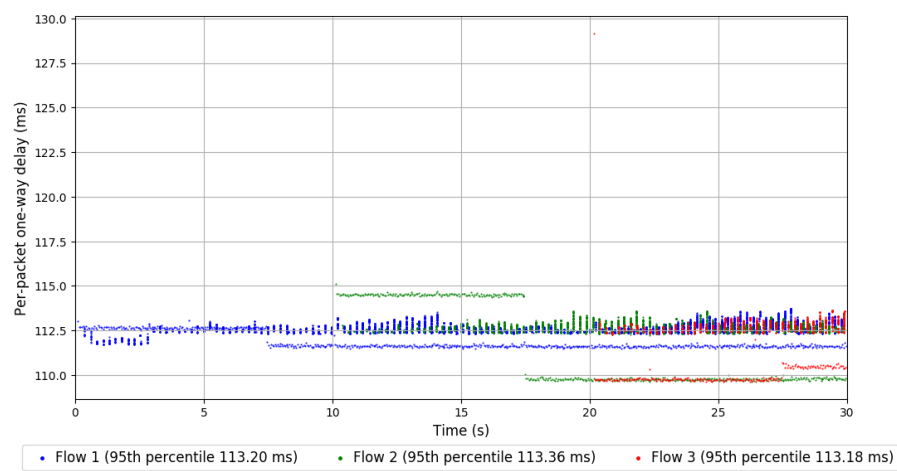
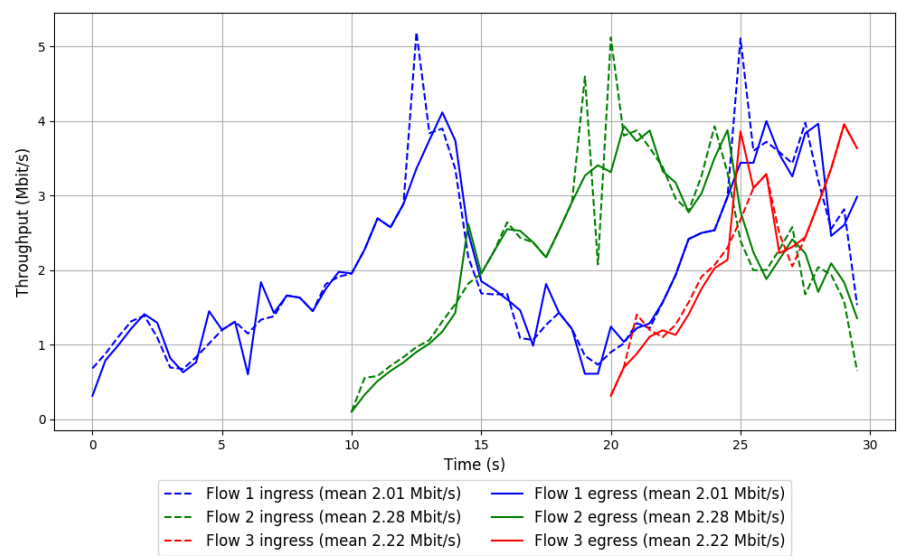
-- Flow 3:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 113.182 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-13 23:06:15

End at: 2018-02-13 23:06:45

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.28 Mbit/s

95th percentile per-packet one-way delay: 112.567 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 112.589 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 3.13 Mbit/s

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

Loss rate: 0.10%

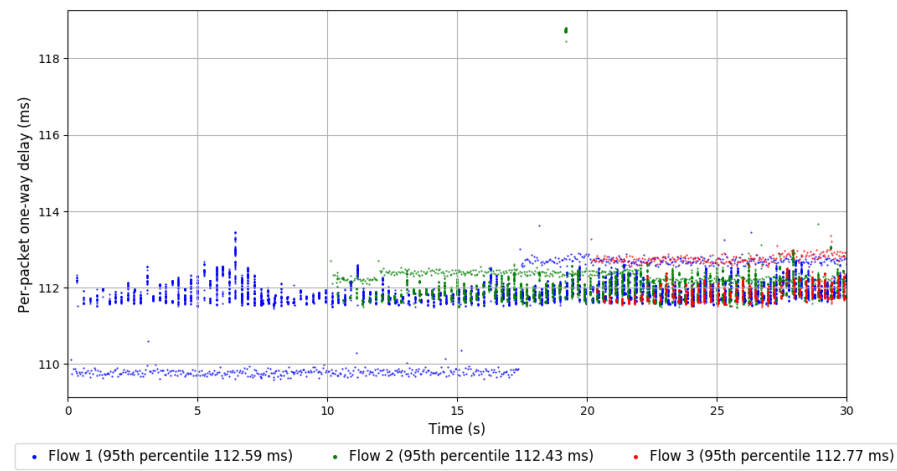
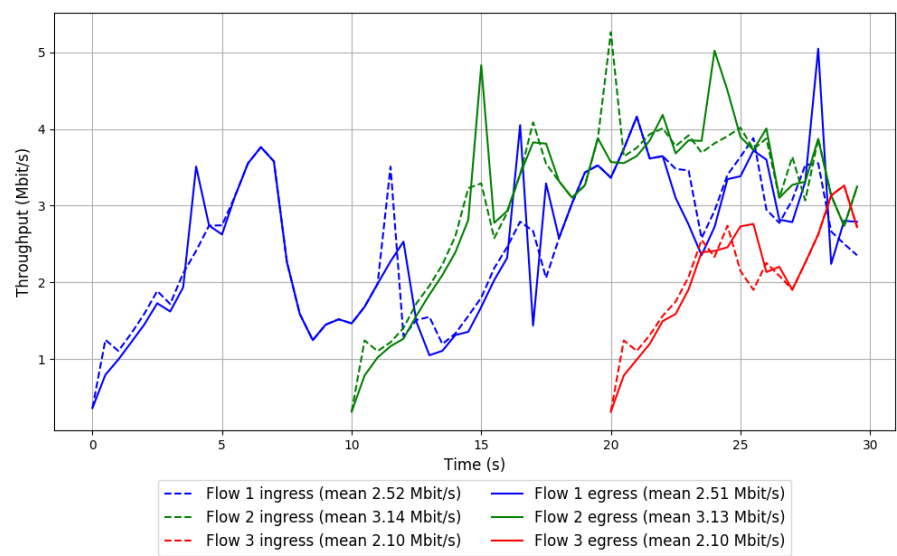
-- Flow 3:

Average throughput: 2.10 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-13 23:25:44

End at: 2018-02-13 23:26:14

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.03 Mbit/s

95th percentile per-packet one-way delay: 113.190 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 112.737 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 113.436 ms

Loss rate: 0.08%

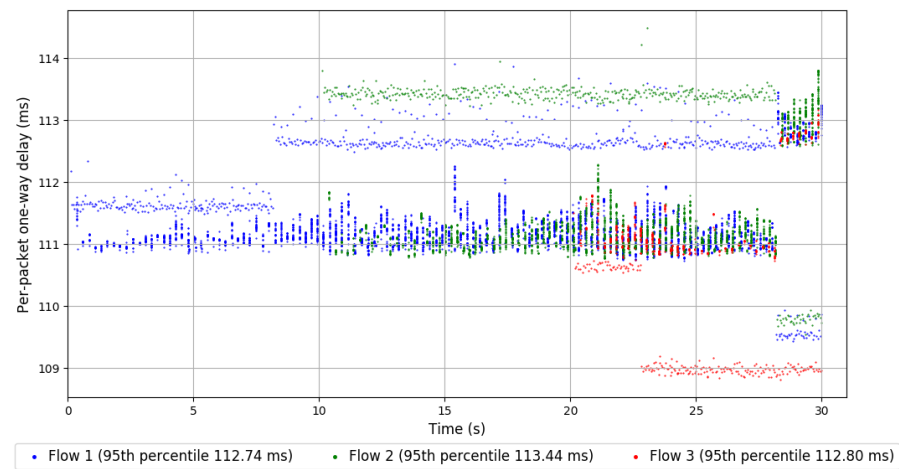
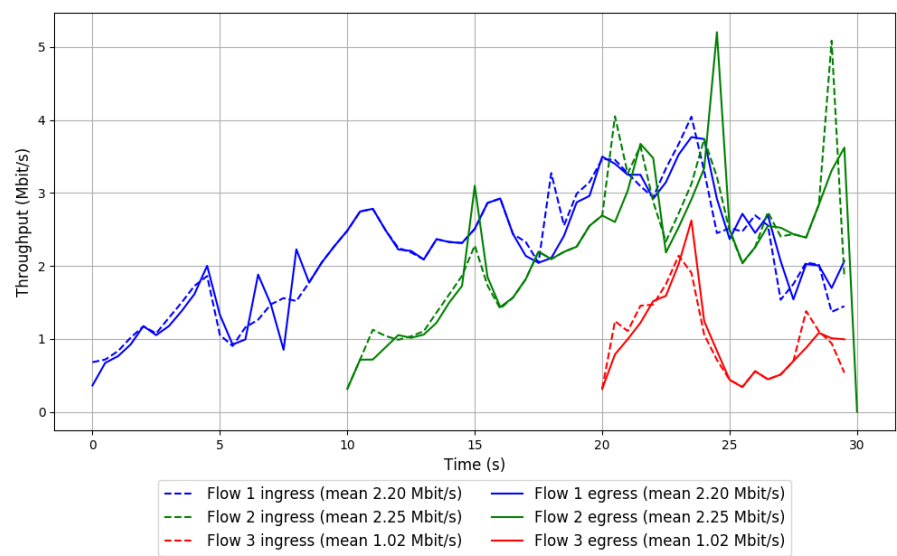
-- Flow 3:

Average throughput: 1.02 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-13 23:44:56

End at: 2018-02-13 23:45:26

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.57 Mbit/s

95th percentile per-packet one-way delay: 113.287 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.54 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.60 Mbit/s

95th percentile per-packet one-way delay: 113.175 ms

Loss rate: 0.00%

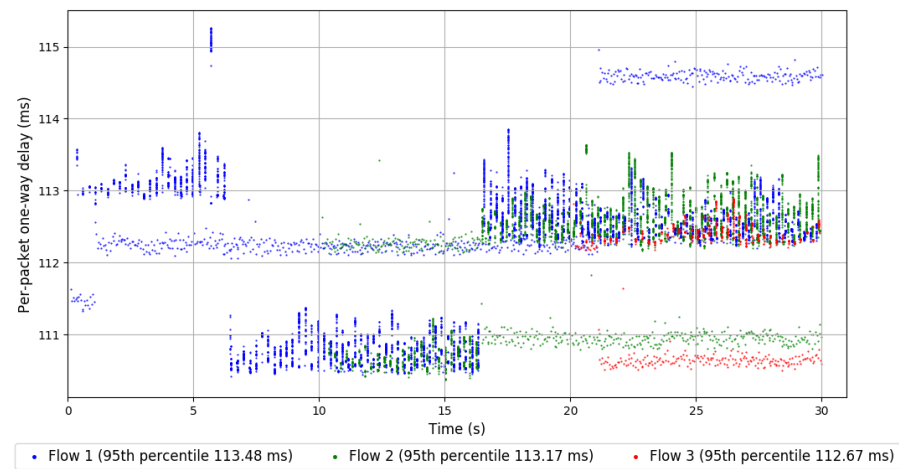
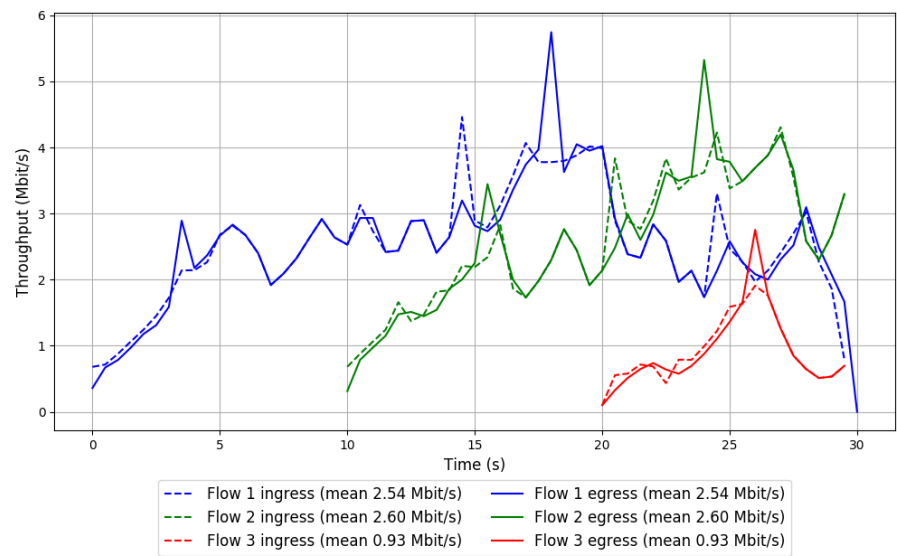
-- Flow 3:

Average throughput: 0.93 Mbit/s

95th percentile per-packet one-way delay: 112.669 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-14 00:04:34

End at: 2018-02-14 00:05:04

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.90 Mbit/s

95th percentile per-packet one-way delay: 113.234 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 113.310 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 113.205 ms

Loss rate: 0.03%

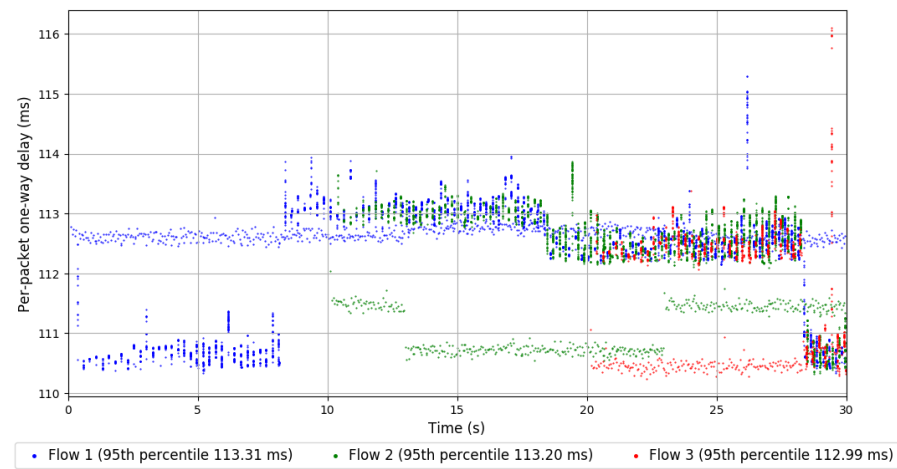
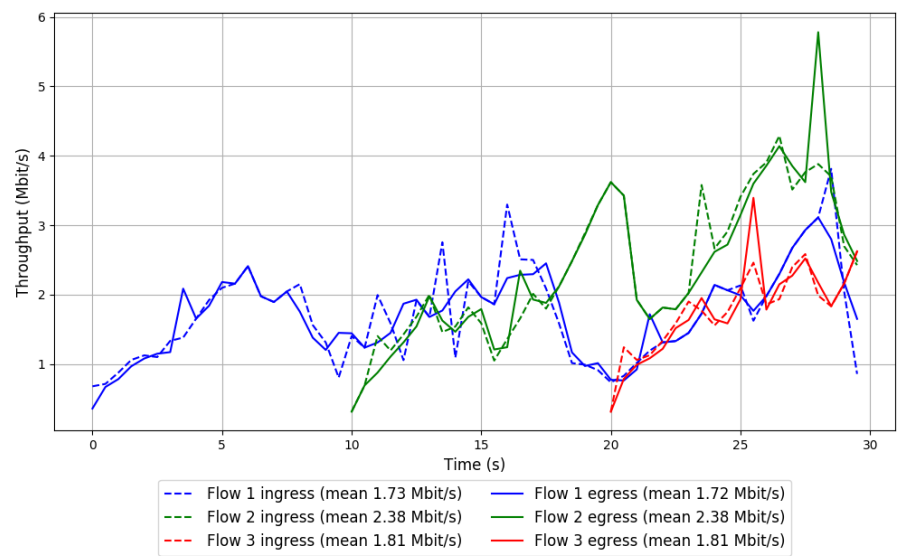
-- Flow 3:

Average throughput: 1.81 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-14 00:24:29

End at: 2018-02-14 00:24:59

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.44 Mbit/s

95th percentile per-packet one-way delay: 113.768 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 2.65 Mbit/s

95th percentile per-packet one-way delay: 113.768 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 113.849 ms

Loss rate: 0.30%

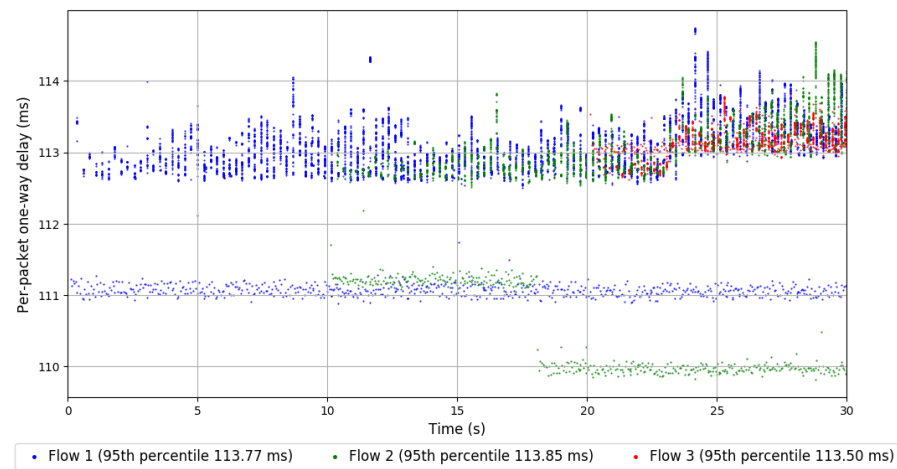
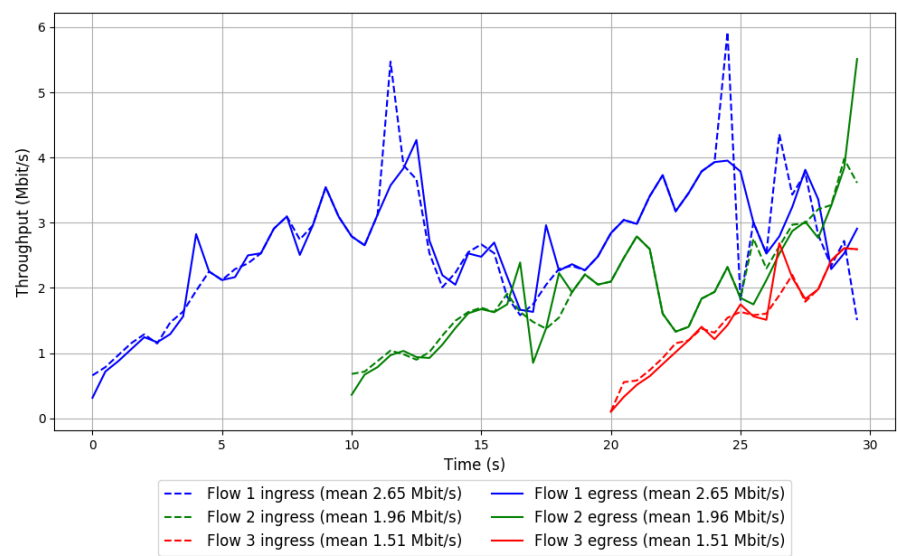
-- Flow 3:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 113.500 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-14 00:43:49

End at: 2018-02-14 00:44:19

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.95 Mbit/s

95th percentile per-packet one-way delay: 113.985 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 2.59 Mbit/s

95th percentile per-packet one-way delay: 113.985 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 114.074 ms

Loss rate: 0.00%

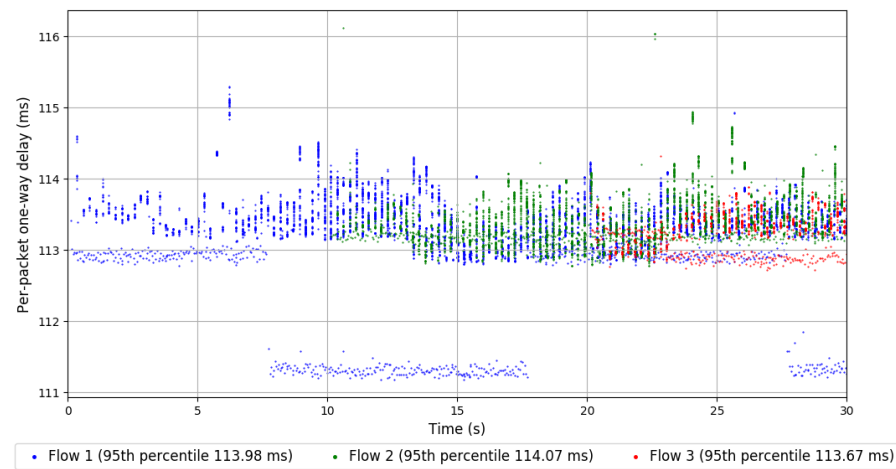
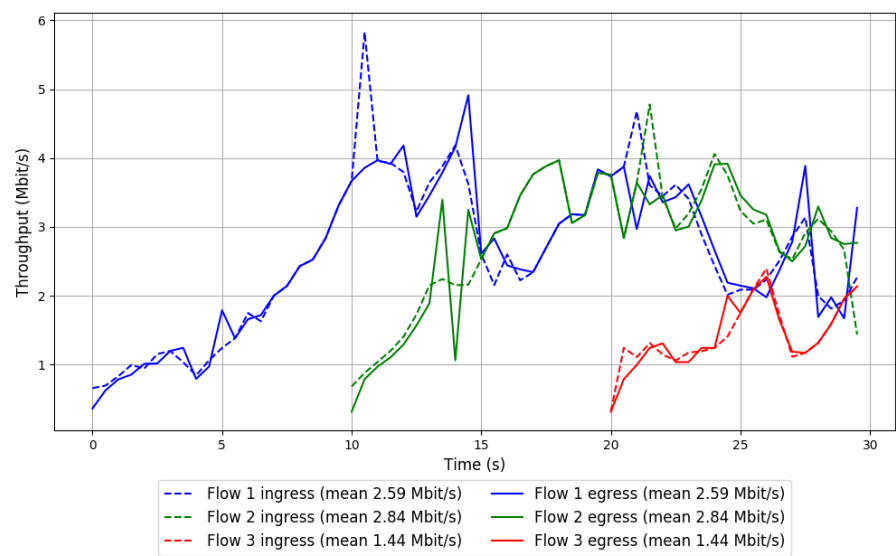
-- Flow 3:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 113.666 ms

Loss rate: 0.42%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-14 01:03:05

End at: 2018-02-14 01:03:35

Below is generated by plot.py at 2018-02-14 04:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.91 Mbit/s

95th percentile per-packet one-way delay: 113.860 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 113.802 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 113.942 ms

Loss rate: 0.06%

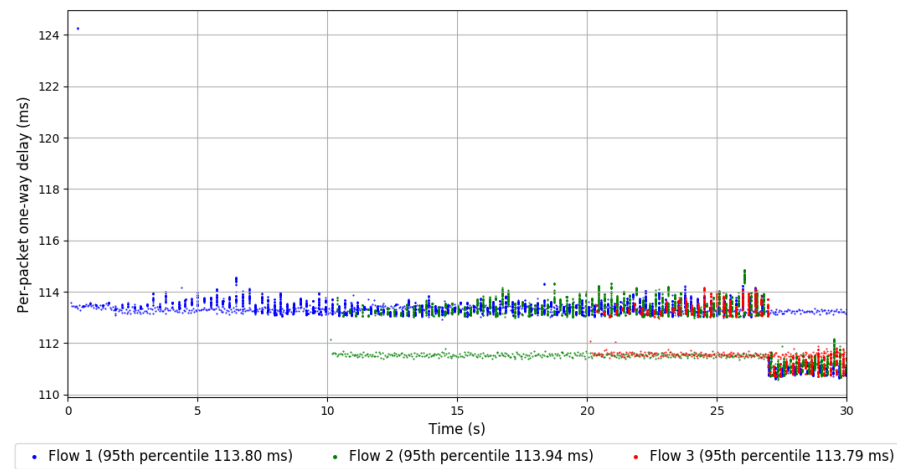
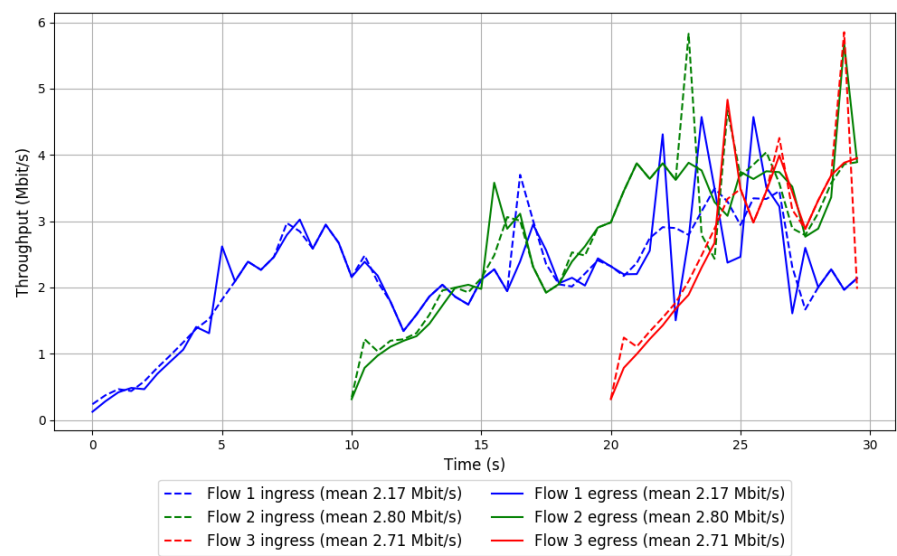
-- Flow 3:

Average throughput: 2.71 Mbit/s

95th percentile per-packet one-way delay: 113.792 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

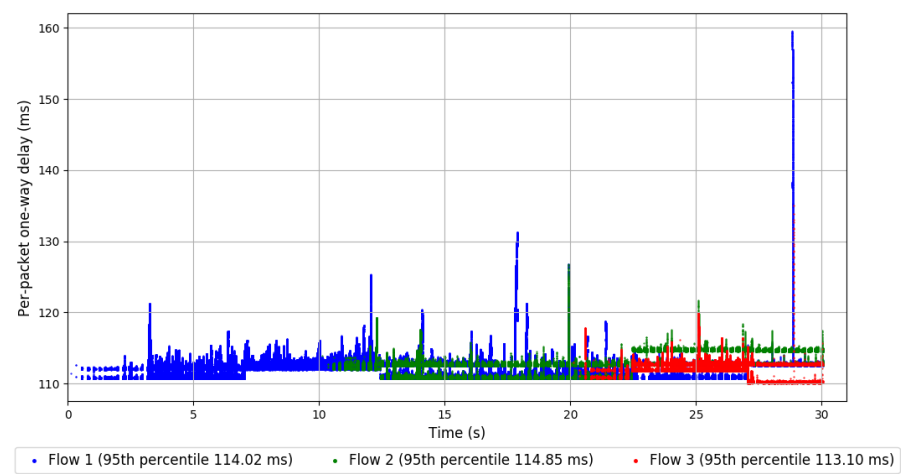
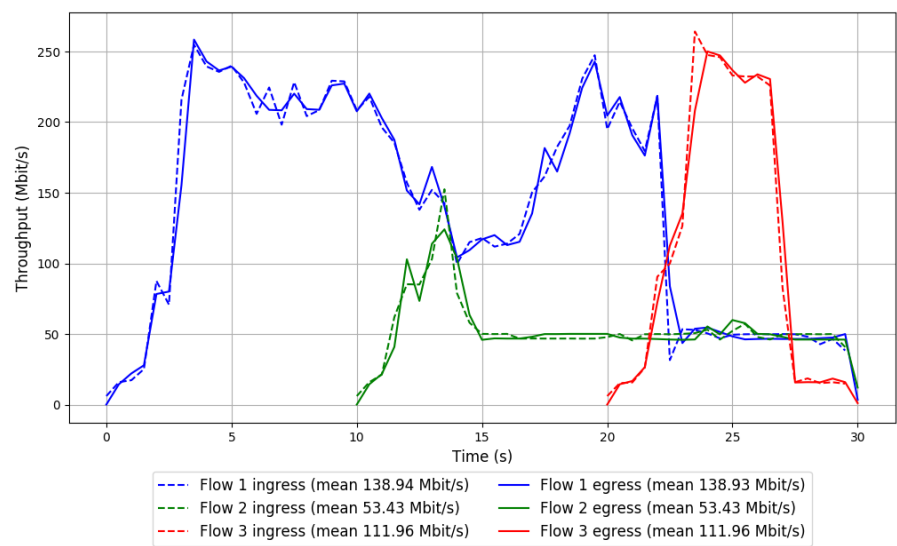


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-13 22:21:00
End at: 2018-02-13 22:21:30

# Below is generated by plot.py at 2018-02-14 04:01:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 211.62 Mbit/s
95th percentile per-packet one-way delay: 114.648 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 138.93 Mbit/s
95th percentile per-packet one-way delay: 114.018 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 53.43 Mbit/s
95th percentile per-packet one-way delay: 114.854 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 111.96 Mbit/s
95th percentile per-packet one-way delay: 113.096 ms
Loss rate: 0.00%
```


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

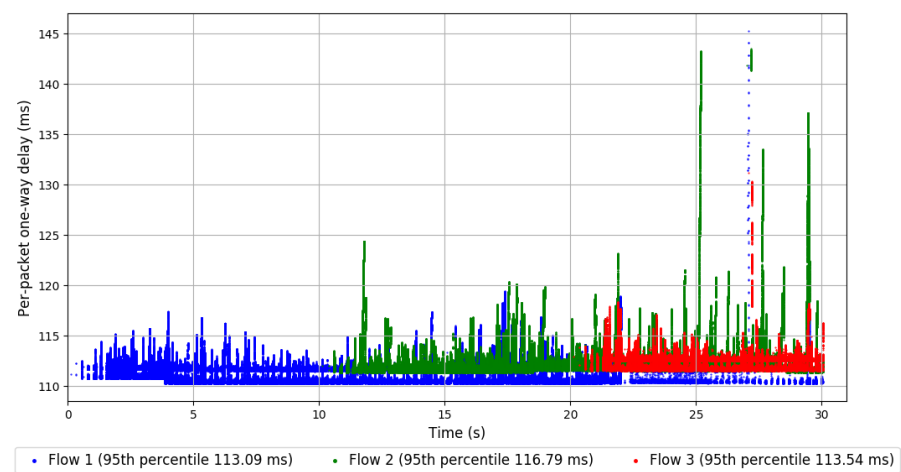
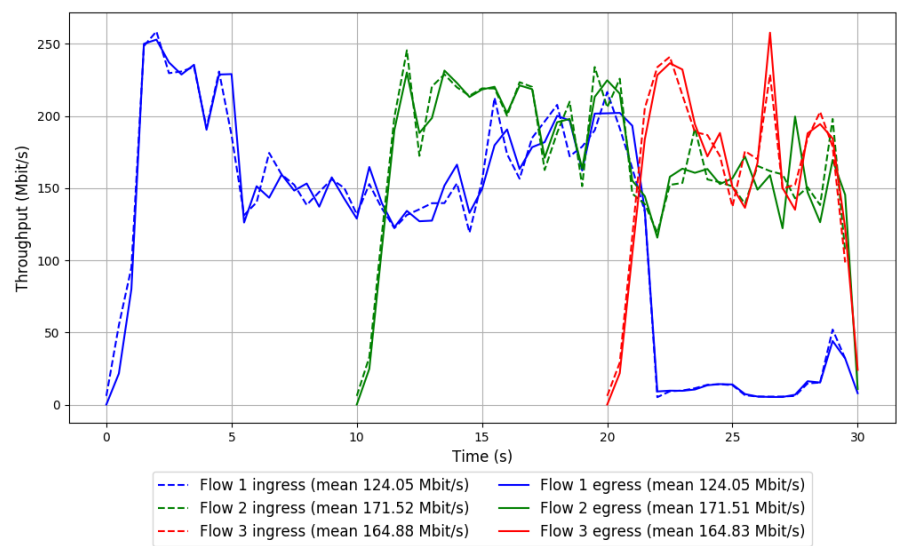


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-13 22:40:28
End at: 2018-02-13 22:40:58

# Below is generated by plot.py at 2018-02-14 04:04:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 292.88 Mbit/s
95th percentile per-packet one-way delay: 114.652 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 124.05 Mbit/s
95th percentile per-packet one-way delay: 113.088 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 171.51 Mbit/s
95th percentile per-packet one-way delay: 116.793 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 164.83 Mbit/s
95th percentile per-packet one-way delay: 113.543 ms
Loss rate: 0.00%
```

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

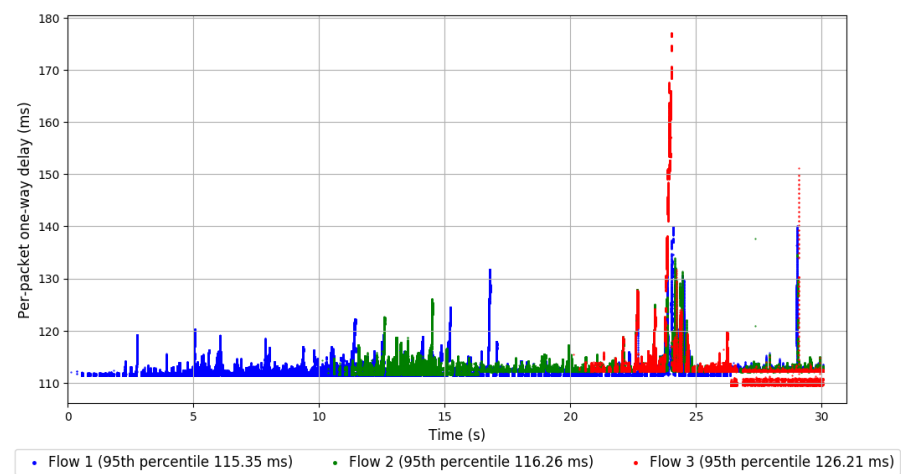
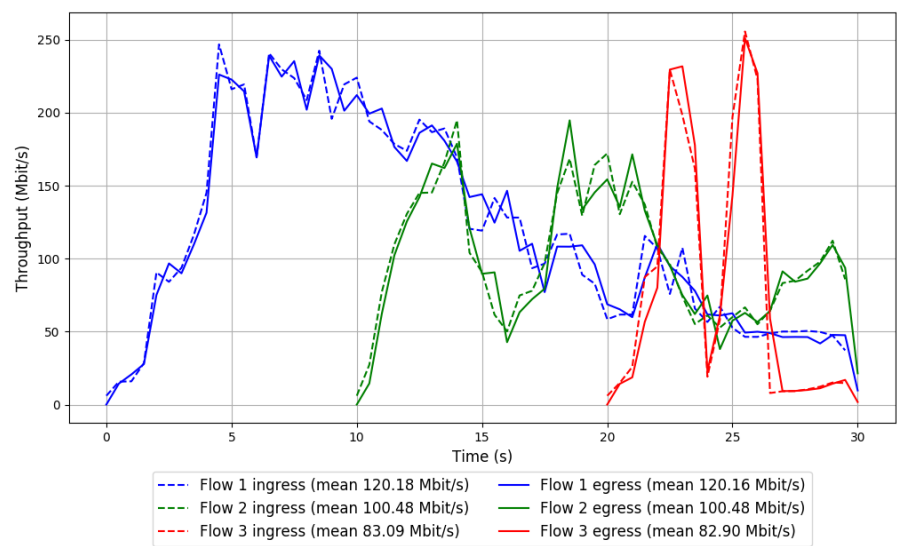


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-13 22:59:46
End at: 2018-02-13 23:00:16

# Below is generated by plot.py at 2018-02-14 04:04:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 214.54 Mbit/s
95th percentile per-packet one-way delay: 116.099 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 120.16 Mbit/s
95th percentile per-packet one-way delay: 115.349 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 100.48 Mbit/s
95th percentile per-packet one-way delay: 116.261 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 82.90 Mbit/s
95th percentile per-packet one-way delay: 126.214 ms
Loss rate: 0.27%
```

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

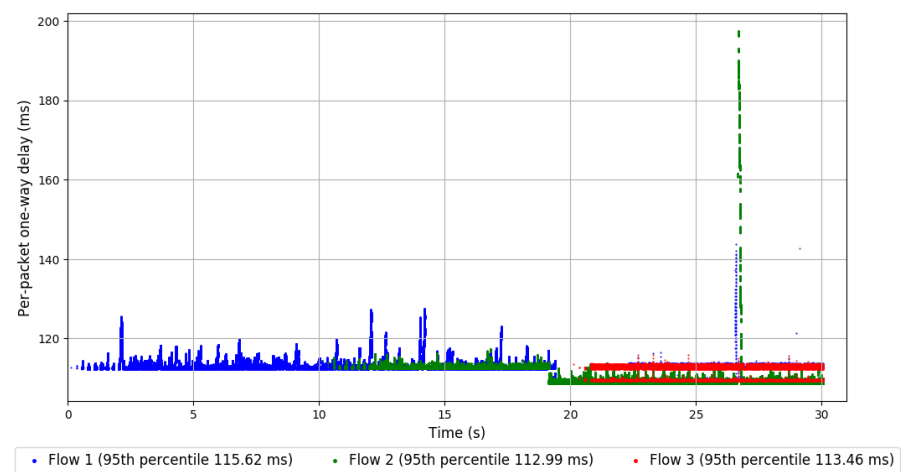
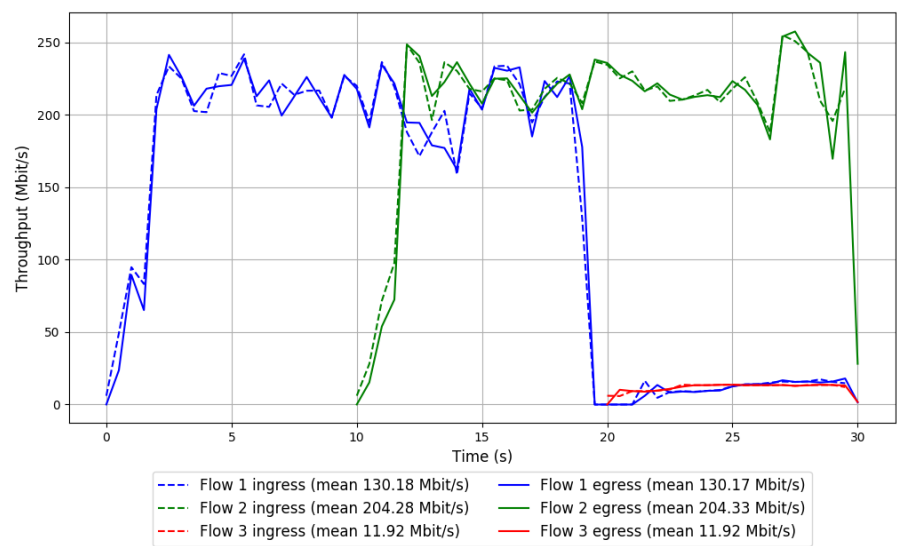


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-02-13 23:19:23
End at: 2018-02-13 23:19:53

# Below is generated by plot.py at 2018-02-14 04:04:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 270.15 Mbit/s
95th percentile per-packet one-way delay: 114.423 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 130.17 Mbit/s
95th percentile per-packet one-way delay: 115.625 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 204.33 Mbit/s
95th percentile per-packet one-way delay: 112.989 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.92 Mbit/s
95th percentile per-packet one-way delay: 113.458 ms
Loss rate: 0.00%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-13 23:38:52

End at: 2018-02-13 23:39:22

Below is generated by plot.py at 2018-02-14 04:04:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.09 Mbit/s

95th percentile per-packet one-way delay: 112.404 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 16.09 Mbit/s

95th percentile per-packet one-way delay: 112.177 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 15.80 Mbit/s

95th percentile per-packet one-way delay: 112.544 ms

Loss rate: 0.00%

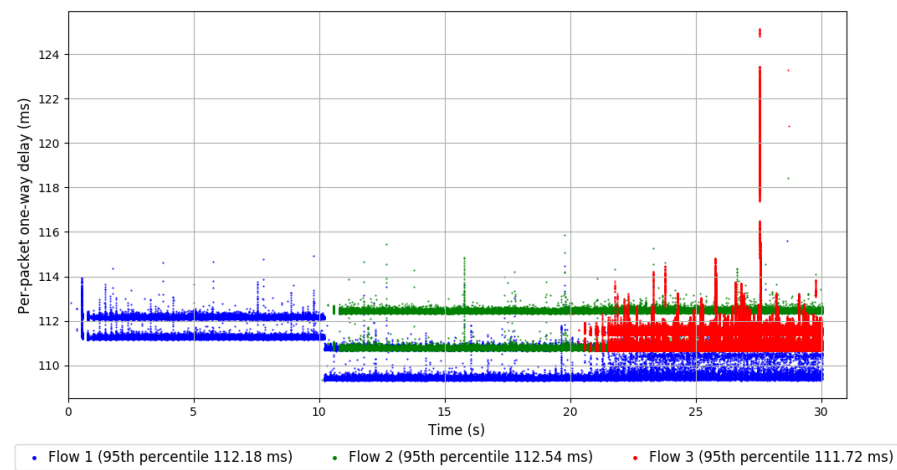
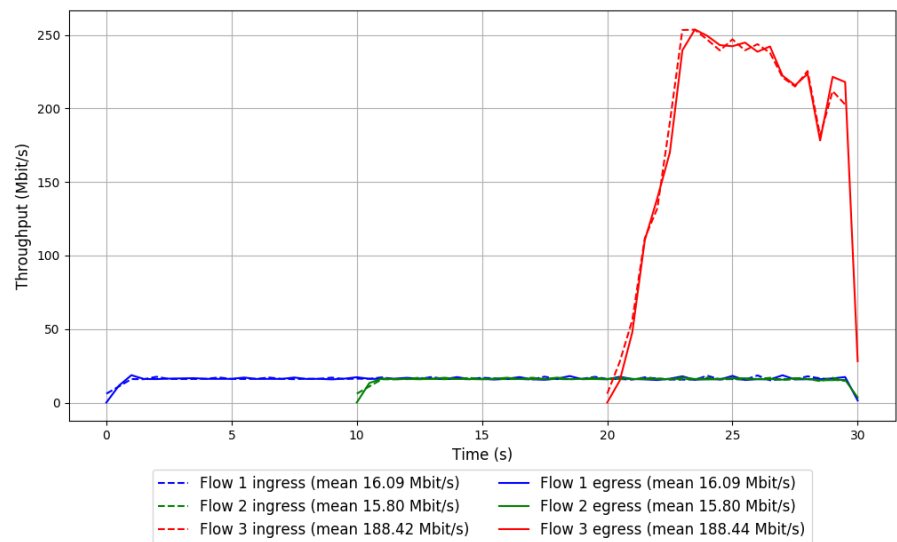
-- Flow 3:

Average throughput: 188.44 Mbit/s

95th percentile per-packet one-way delay: 111.722 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-13 23:58:11

End at: 2018-02-13 23:58:41

Below is generated by plot.py at 2018-02-14 04:06:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 311.82 Mbit/s

95th percentile per-packet one-way delay: 118.085 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 167.85 Mbit/s

95th percentile per-packet one-way delay: 114.151 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 141.03 Mbit/s

95th percentile per-packet one-way delay: 122.627 ms

Loss rate: 0.00%

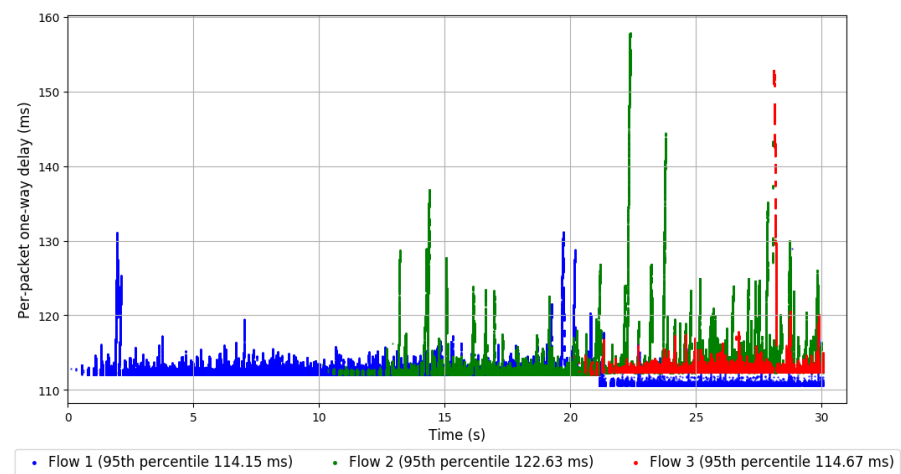
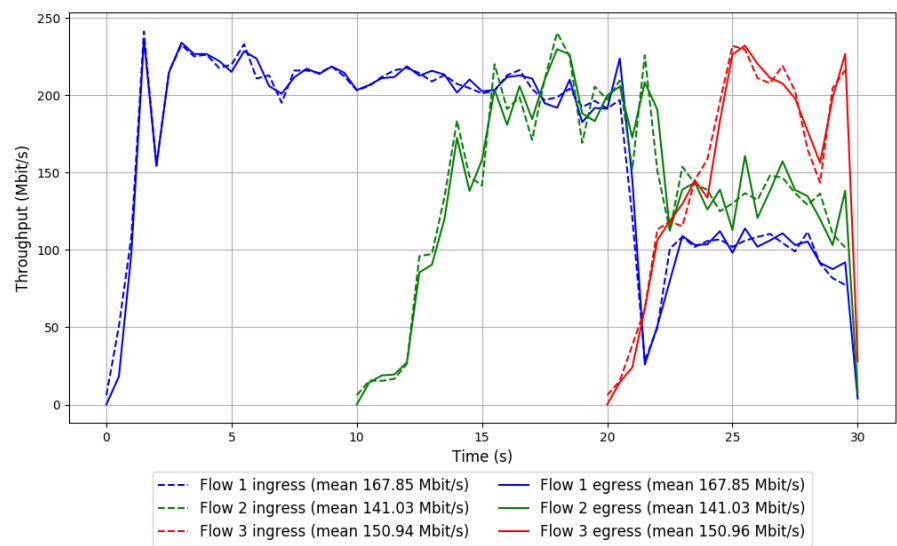
-- Flow 3:

Average throughput: 150.96 Mbit/s

95th percentile per-packet one-way delay: 114.672 ms

Loss rate: 0.00%

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

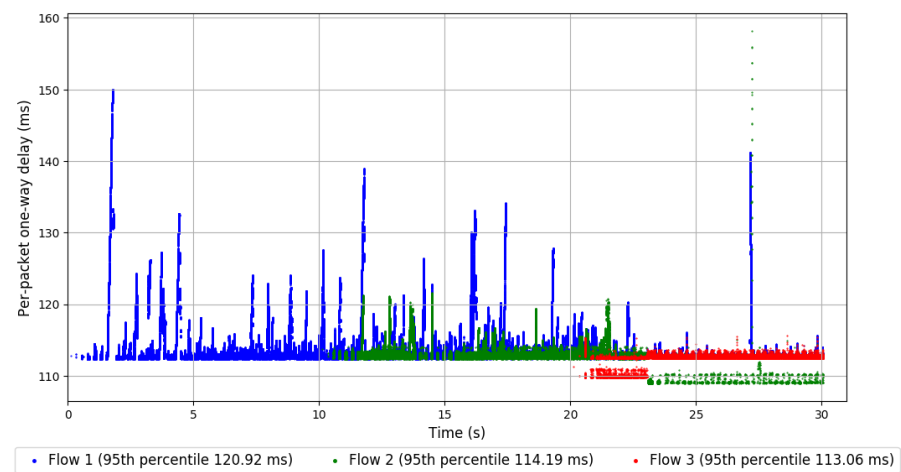
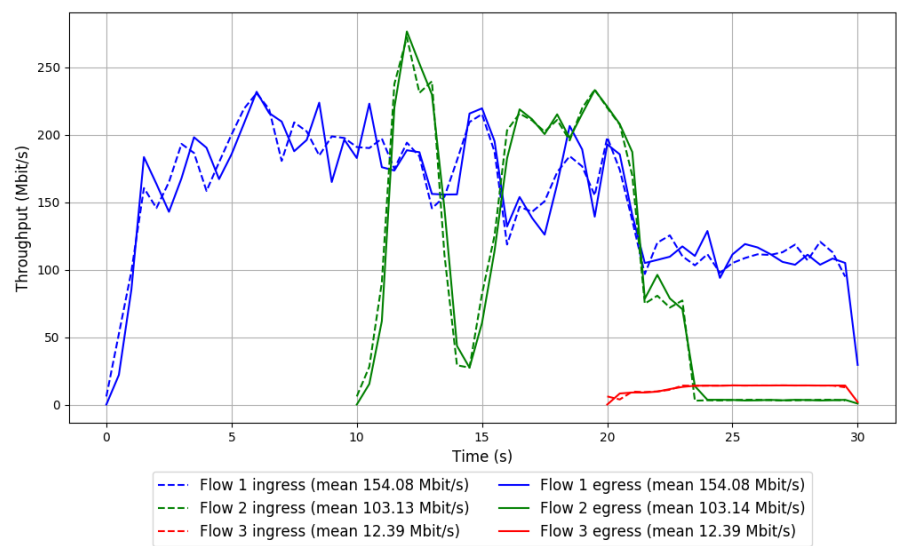


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-02-14 00:17:59
End at: 2018-02-14 00:18:29

# Below is generated by plot.py at 2018-02-14 04:06:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 226.87 Mbit/s
95th percentile per-packet one-way delay: 118.708 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 154.08 Mbit/s
95th percentile per-packet one-way delay: 120.922 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 103.14 Mbit/s
95th percentile per-packet one-way delay: 114.192 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.39 Mbit/s
95th percentile per-packet one-way delay: 113.057 ms
Loss rate: 0.00%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-14 00:37:48

End at: 2018-02-14 00:38:18

Below is generated by plot.py at 2018-02-14 04:06:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.99 Mbit/s

95th percentile per-packet one-way delay: 113.943 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 11.66 Mbit/s

95th percentile per-packet one-way delay: 113.308 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 16.40 Mbit/s

95th percentile per-packet one-way delay: 113.438 ms

Loss rate: 0.00%

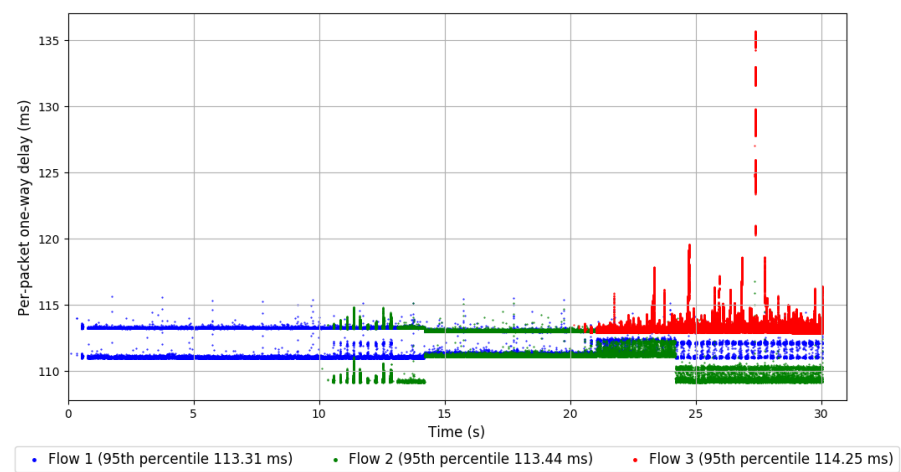
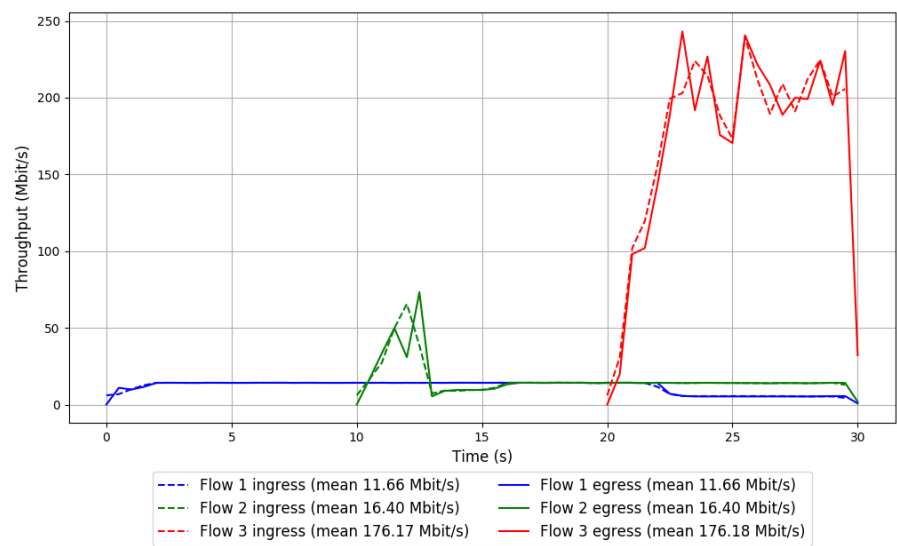
-- Flow 3:

Average throughput: 176.18 Mbit/s

95th percentile per-packet one-way delay: 114.255 ms

Loss rate: 0.00%

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

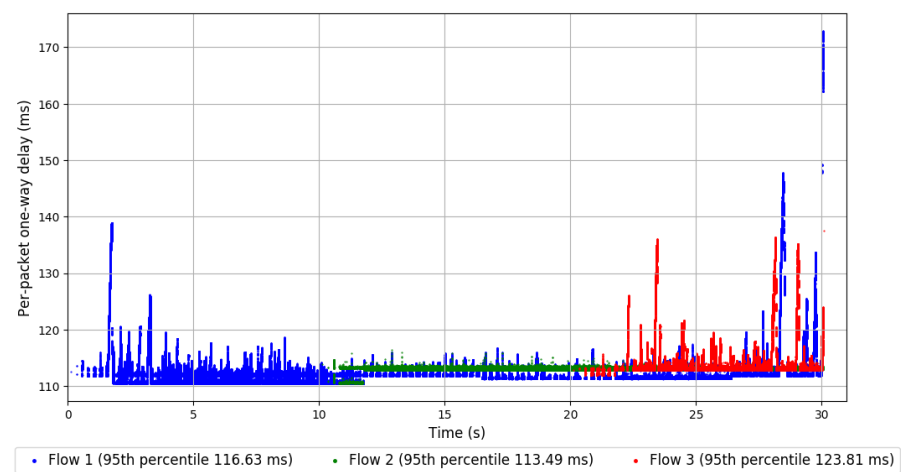
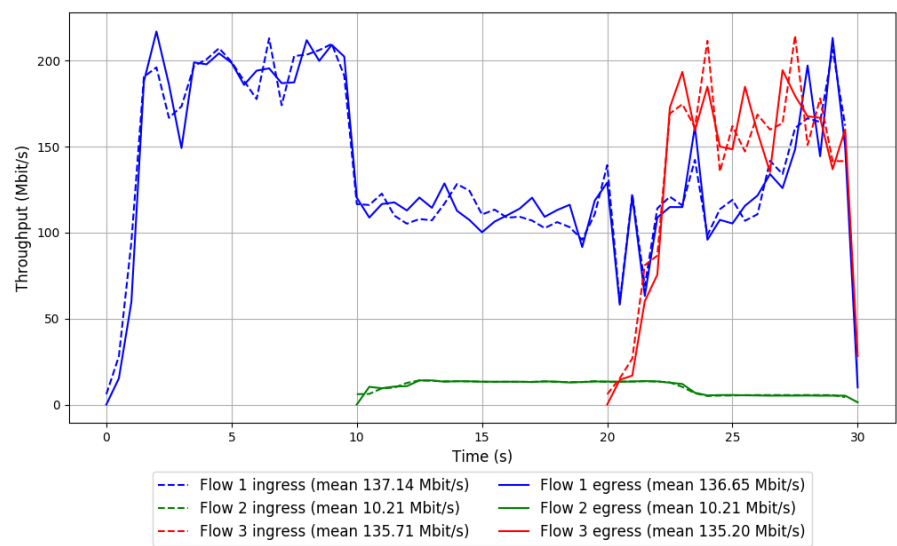


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-02-14 00:56:50
End at: 2018-02-14 00:57:20

# Below is generated by plot.py at 2018-02-14 04:07:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 188.26 Mbit/s
95th percentile per-packet one-way delay: 118.381 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 136.65 Mbit/s
95th percentile per-packet one-way delay: 116.631 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 10.21 Mbit/s
95th percentile per-packet one-way delay: 113.493 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 135.20 Mbit/s
95th percentile per-packet one-way delay: 123.809 ms
Loss rate: 0.30%
```


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

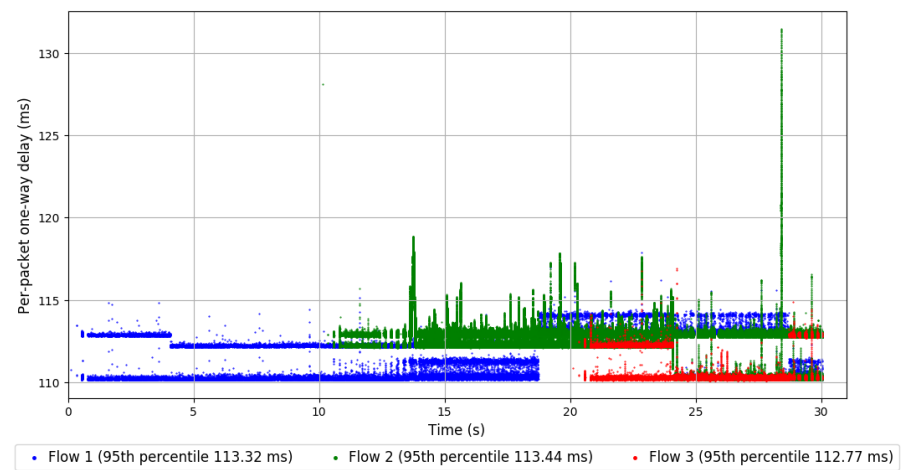
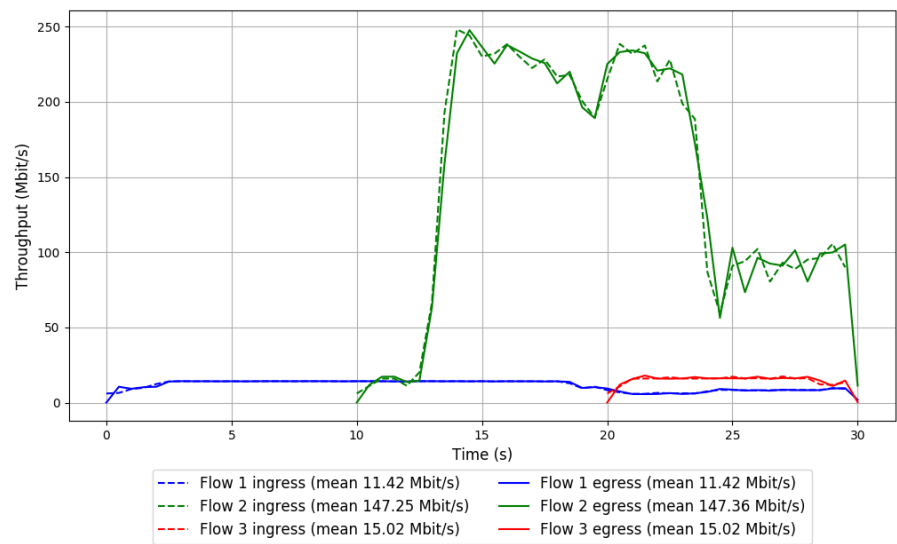


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-14 01:16:18
End at: 2018-02-14 01:16:48

# Below is generated by plot.py at 2018-02-14 04:07:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 114.43 Mbit/s
95th percentile per-packet one-way delay: 113.395 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.42 Mbit/s
95th percentile per-packet one-way delay: 113.318 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 147.36 Mbit/s
95th percentile per-packet one-way delay: 113.435 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.02 Mbit/s
95th percentile per-packet one-way delay: 112.770 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-13 22:26:33

End at: 2018-02-13 22:27:03

Below is generated by plot.py at 2018-02-14 04:07:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 31.60 Mbit/s

95th percentile per-packet one-way delay: 115.305 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 8.27 Mbit/s

95th percentile per-packet one-way delay: 115.027 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 25.84 Mbit/s

95th percentile per-packet one-way delay: 115.663 ms

Loss rate: 0.06%

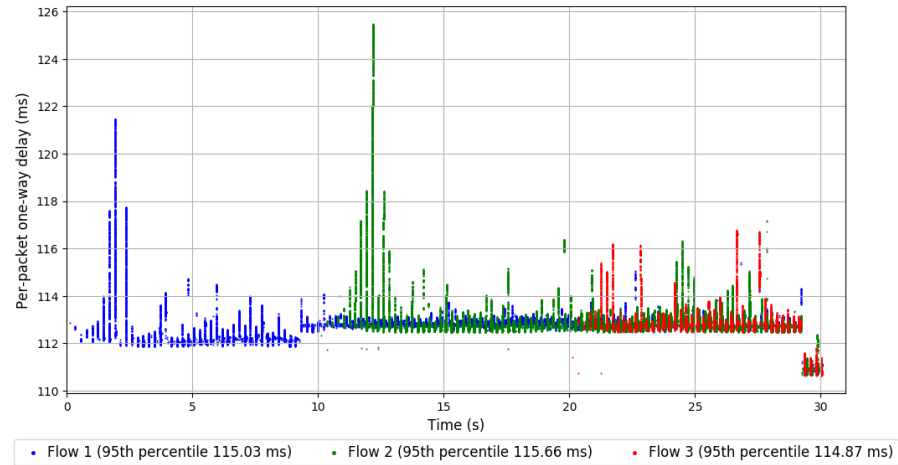
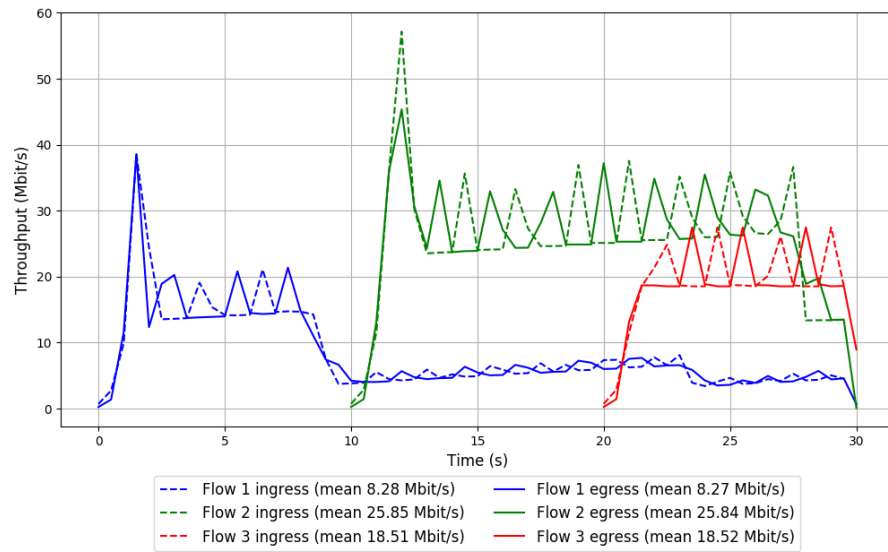
-- Flow 3:

Average throughput: 18.52 Mbit/s

95th percentile per-packet one-way delay: 114.871 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-13 22:45:57

End at: 2018-02-13 22:46:27

Below is generated by plot.py at 2018-02-14 04:07:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.22 Mbit/s

95th percentile per-packet one-way delay: 120.523 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 14.25 Mbit/s

95th percentile per-packet one-way delay: 118.931 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 63.37 Mbit/s

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

Loss rate: 0.00%

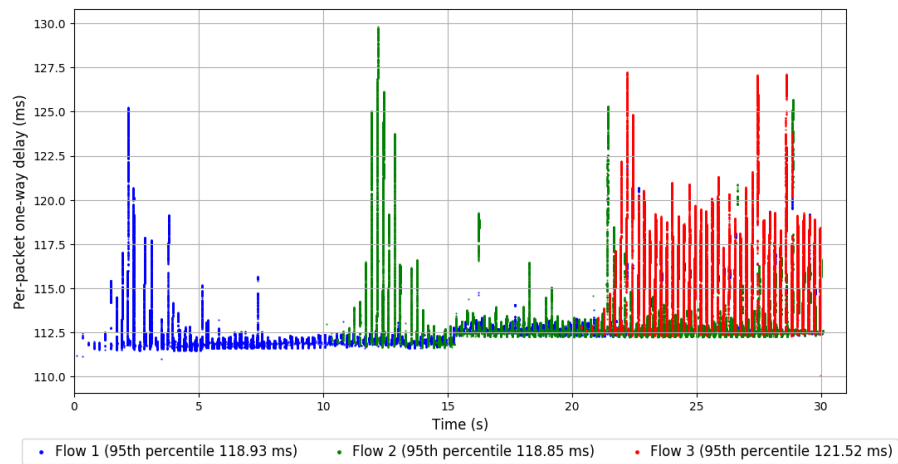
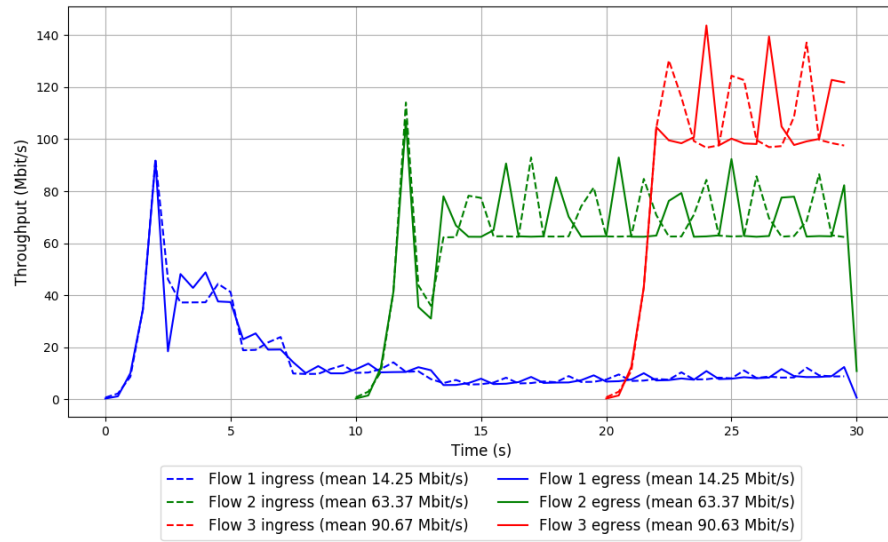
-- Flow 3:

Average throughput: 90.63 Mbit/s

95th percentile per-packet one-way delay: 121.520 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-13 23:05:20

End at: 2018-02-13 23:05:50

Below is generated by plot.py at 2018-02-14 04:07:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.41 Mbit/s

95th percentile per-packet one-way delay: 115.190 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 77.31 Mbit/s

95th percentile per-packet one-way delay: 115.102 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 64.45 Mbit/s

95th percentile per-packet one-way delay: 114.560 ms

Loss rate: 0.00%

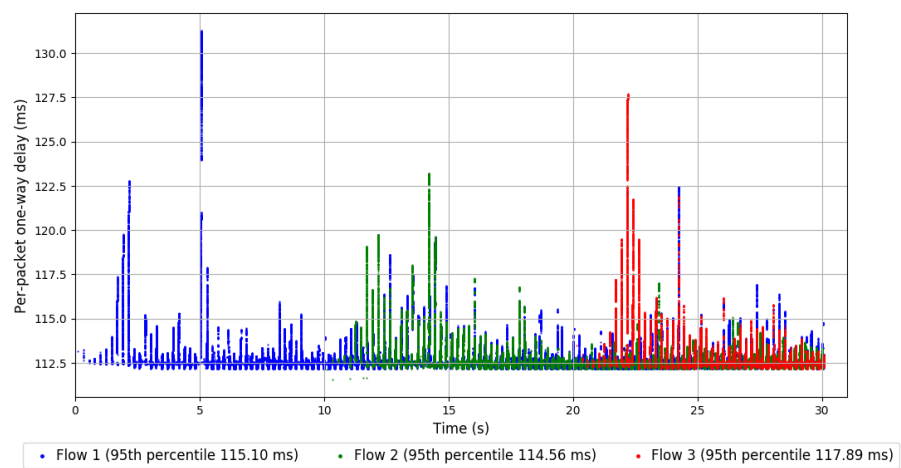
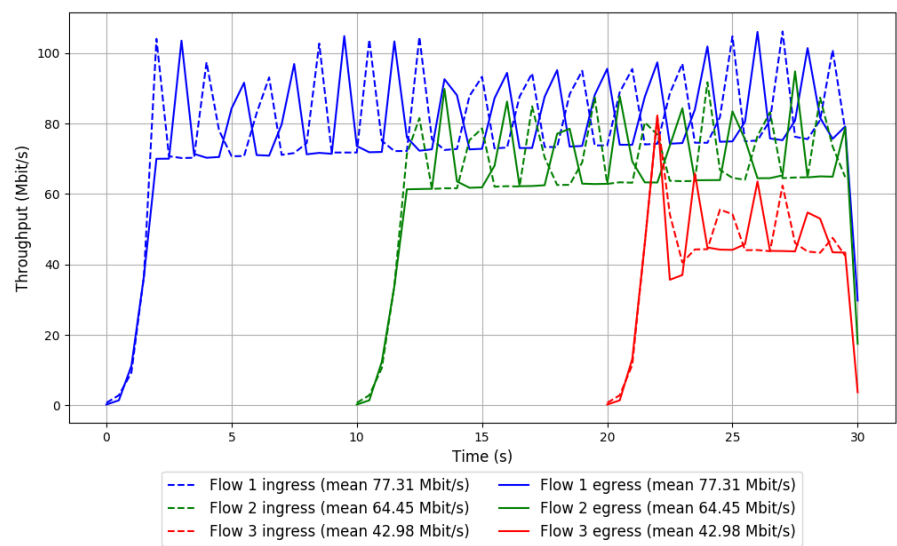
-- Flow 3:

Average throughput: 42.98 Mbit/s

95th percentile per-packet one-way delay: 117.895 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-13 23:24:55

End at: 2018-02-13 23:25:25

Below is generated by plot.py at 2018-02-14 04:07:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 35.83 Mbit/s

95th percentile per-packet one-way delay: 114.450 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 7.28 Mbit/s

95th percentile per-packet one-way delay: 113.317 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 29.98 Mbit/s

95th percentile per-packet one-way delay: 114.795 ms

Loss rate: 0.01%

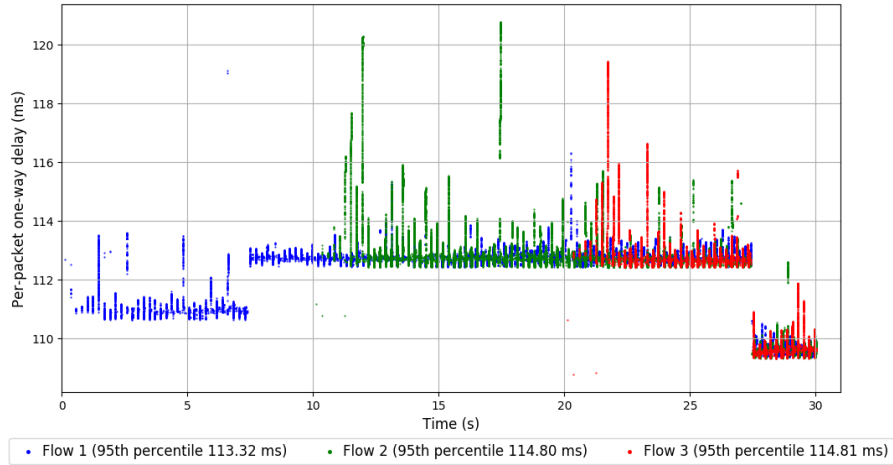
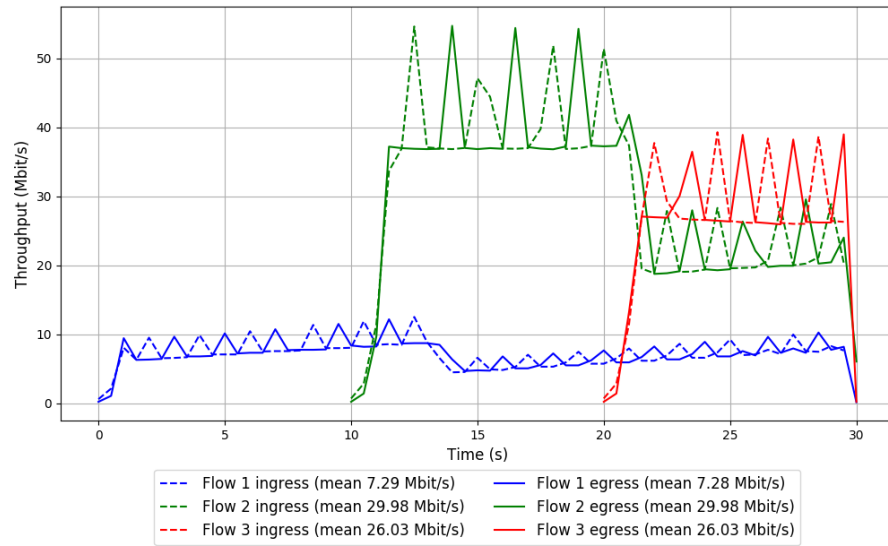
-- Flow 3:

Average throughput: 26.03 Mbit/s

95th percentile per-packet one-way delay: 114.809 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-13 23:44:05

End at: 2018-02-13 23:44:35

Below is generated by plot.py at 2018-02-14 04:07:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.40 Mbit/s

95th percentile per-packet one-way delay: 113.367 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.05 Mbit/s

95th percentile per-packet one-way delay: 113.848 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 17.86 Mbit/s

95th percentile per-packet one-way delay: 112.249 ms

Loss rate: 0.01%

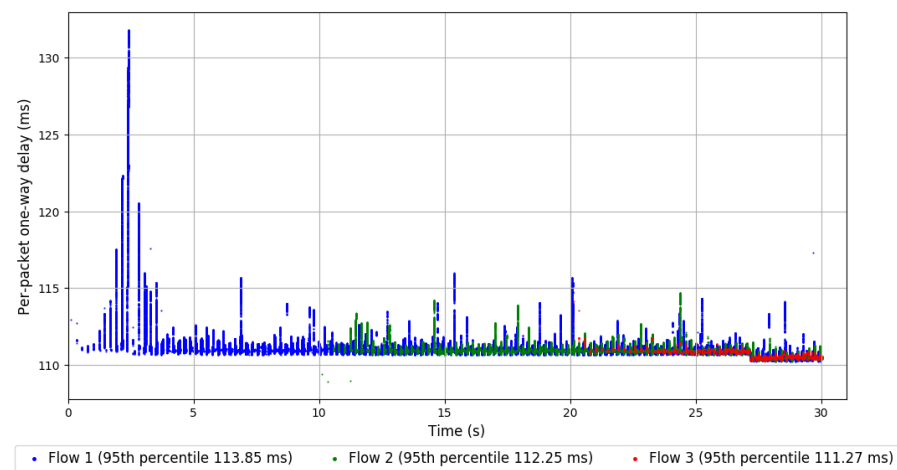
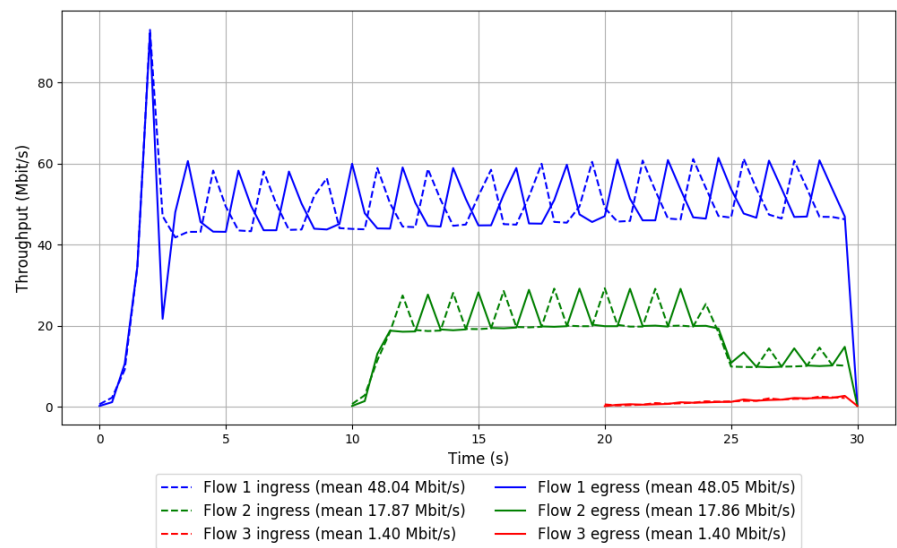
-- Flow 3:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 111.265 ms

Loss rate: 0.17%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-14 00:03:41

End at: 2018-02-14 00:04:11

Below is generated by plot.py at 2018-02-14 04:07:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.45 Mbit/s

95th percentile per-packet one-way delay: 122.984 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 23.85 Mbit/s

95th percentile per-packet one-way delay: 119.700 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 98.69 Mbit/s

95th percentile per-packet one-way delay: 124.450 ms

Loss rate: 0.00%

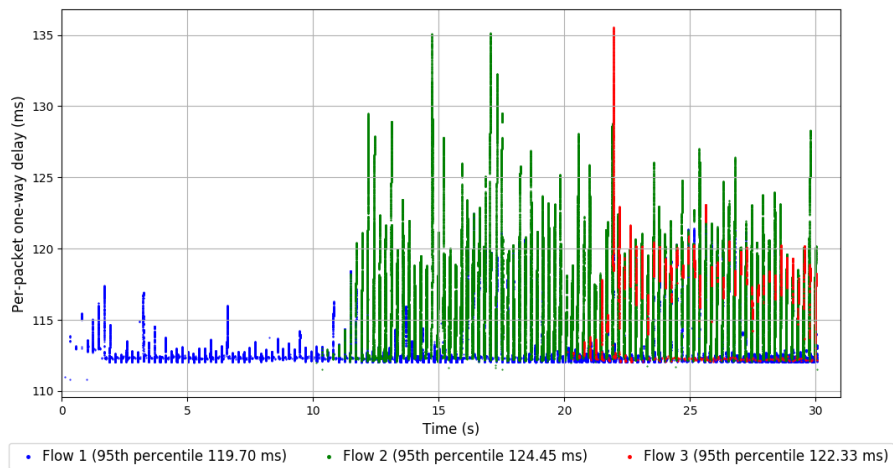
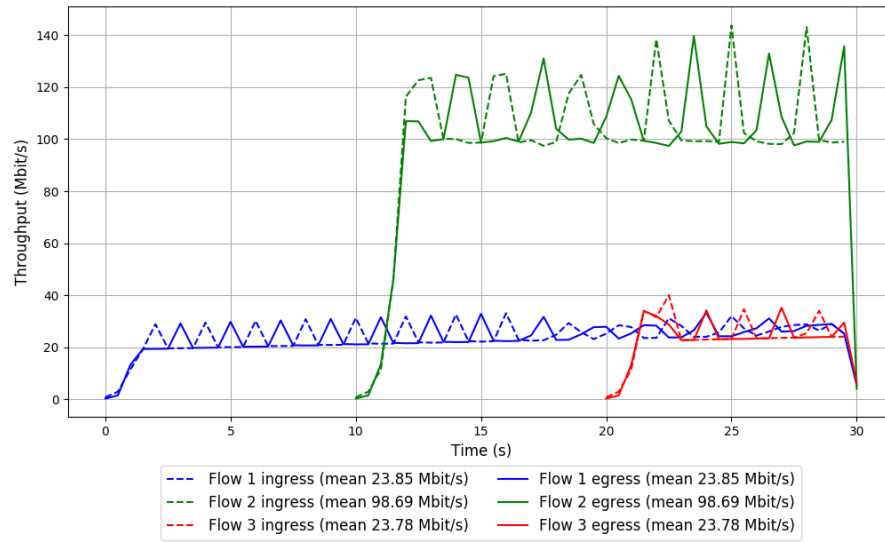
-- Flow 3:

Average throughput: 23.78 Mbit/s

95th percentile per-packet one-way delay: 122.328 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-14 00:23:36

End at: 2018-02-14 00:24:06

Below is generated by plot.py at 2018-02-14 04:07:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.97 Mbit/s

95th percentile per-packet one-way delay: 120.424 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 59.27 Mbit/s

95th percentile per-packet one-way delay: 120.806 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 21.68 Mbit/s

95th percentile per-packet one-way delay: 120.102 ms

Loss rate: 0.01%

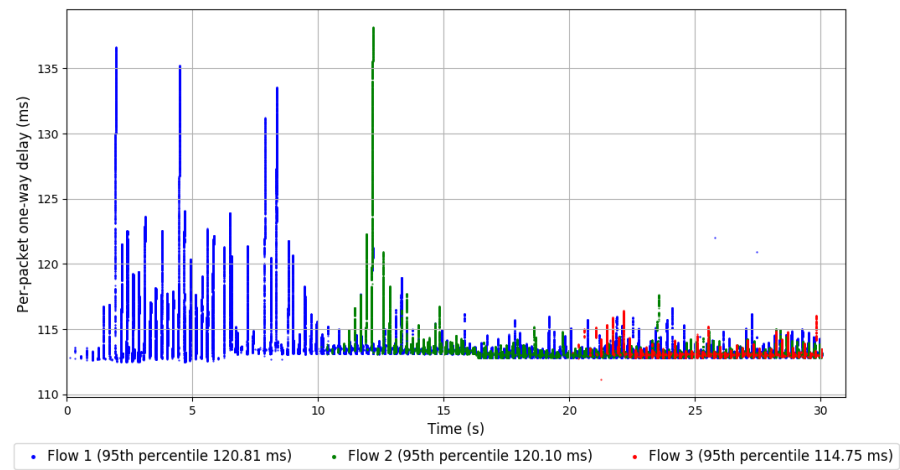
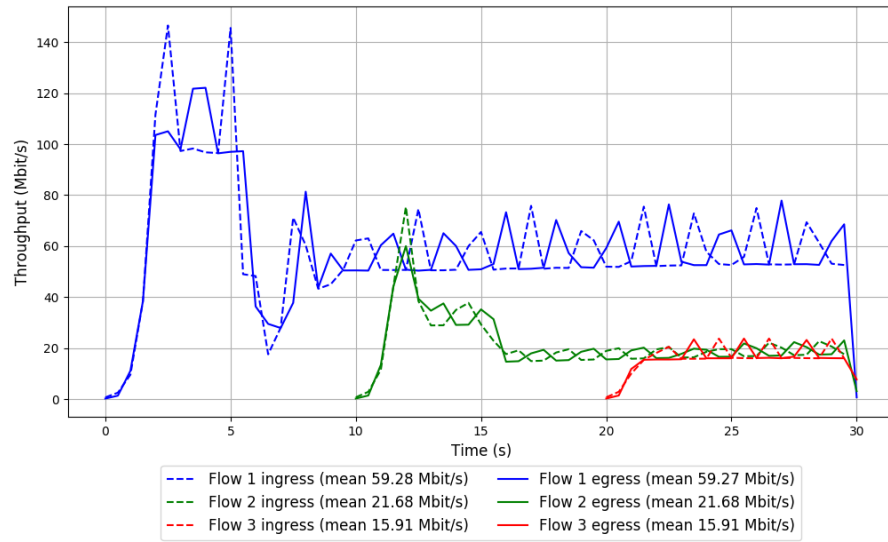
-- Flow 3:

Average throughput: 15.91 Mbit/s

95th percentile per-packet one-way delay: 114.745 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-14 00:42:59

End at: 2018-02-14 00:43:29

Below is generated by plot.py at 2018-02-14 04:07:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 43.56 Mbit/s

95th percentile per-packet one-way delay: 118.630 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 4.35 Mbit/s

95th percentile per-packet one-way delay: 114.087 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 49.52 Mbit/s

95th percentile per-packet one-way delay: 119.750 ms

Loss rate: 0.02%

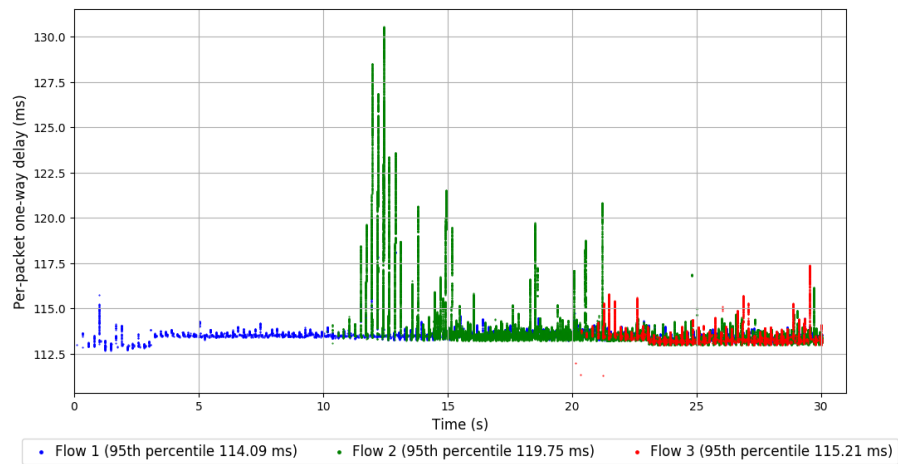
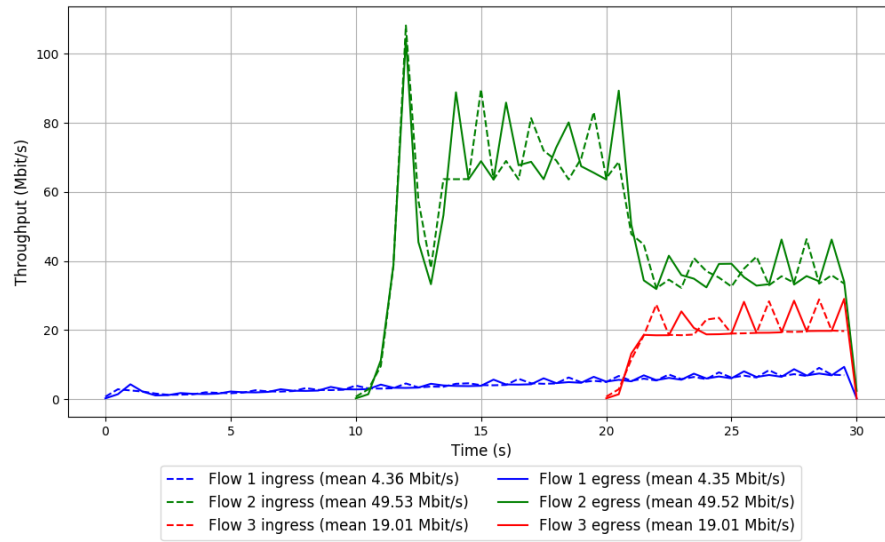
-- Flow 3:

Average throughput: 19.01 Mbit/s

95th percentile per-packet one-way delay: 115.210 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

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

End at: 2018-02-14 01:02:44

Below is generated by plot.py at 2018-02-14 04:07:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.22 Mbit/s

95th percentile per-packet one-way delay: 122.413 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 13.85 Mbit/s

95th percentile per-packet one-way delay: 117.051 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 46.35 Mbit/s

95th percentile per-packet one-way delay: 125.108 ms

Loss rate: 0.01%

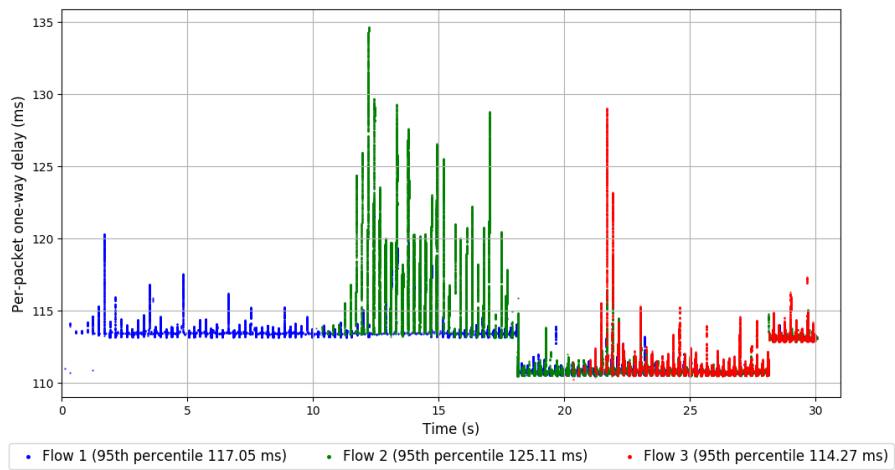
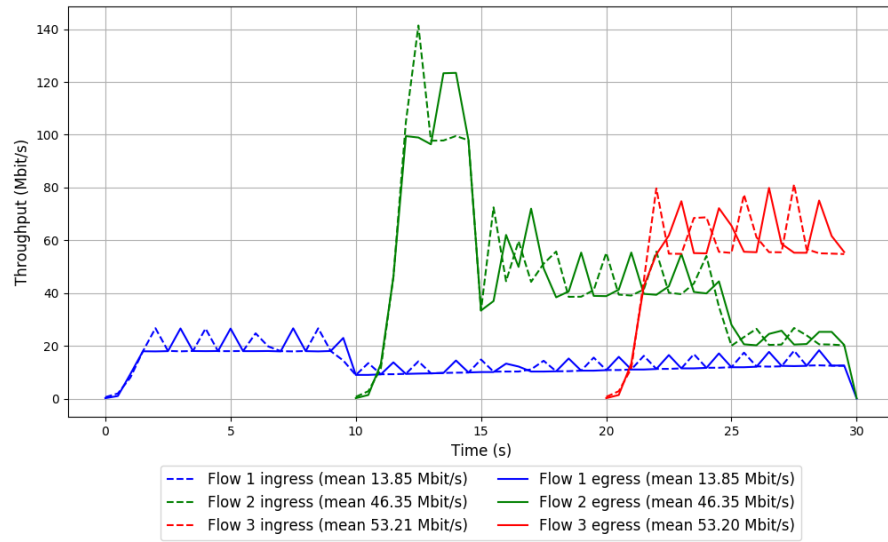
-- Flow 3:

Average throughput: 53.20 Mbit/s

95th percentile per-packet one-way delay: 114.265 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-14 01:21:24

End at: 2018-02-14 01:21:54

Below is generated by plot.py at 2018-02-14 04:07:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.62 Mbit/s

95th percentile per-packet one-way delay: 121.077 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 31.50 Mbit/s

95th percentile per-packet one-way delay: 121.420 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 33.90 Mbit/s

95th percentile per-packet one-way delay: 122.203 ms

Loss rate: 0.01%

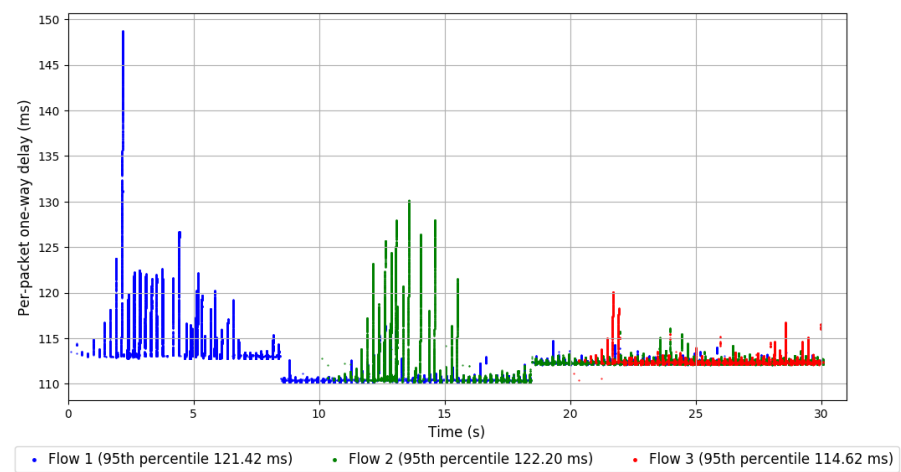
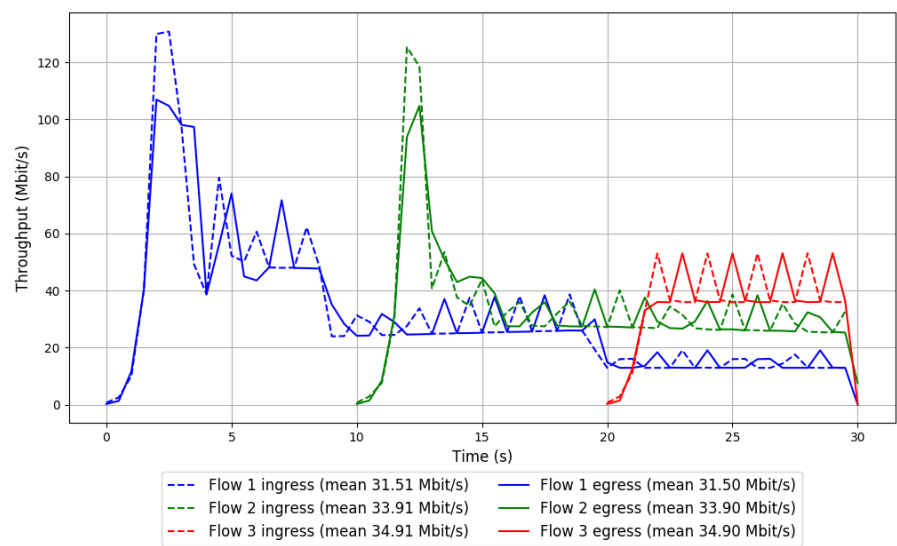
-- Flow 3:

Average throughput: 34.90 Mbit/s

95th percentile per-packet one-way delay: 114.618 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

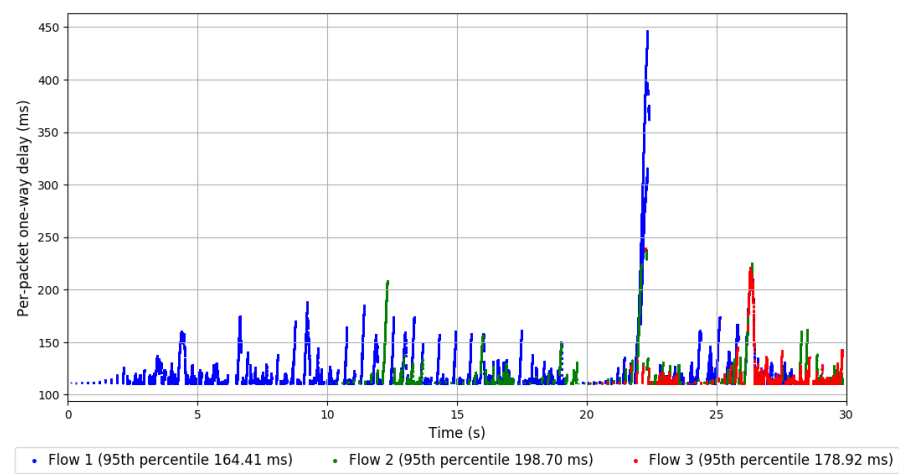
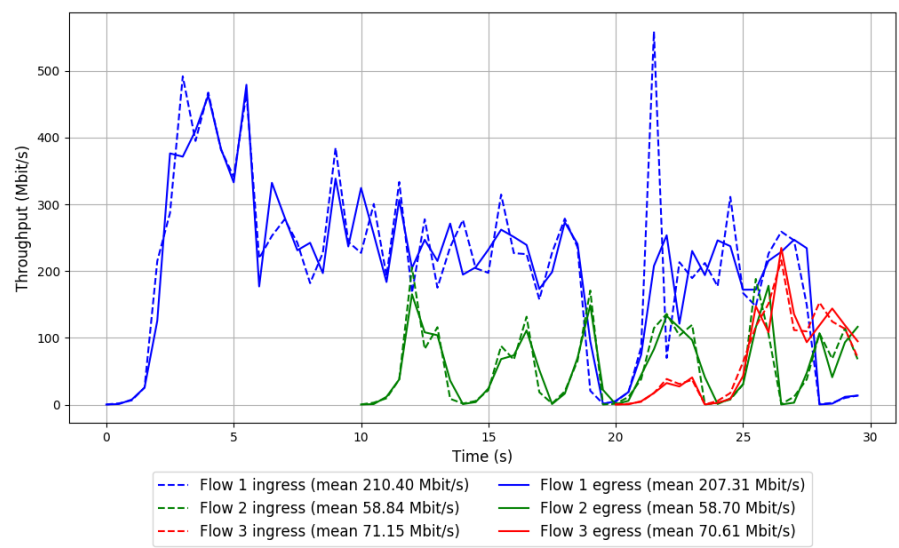


```
Run 1: Statistics of Verus

Start at: 2018-02-13 22:19:52
End at: 2018-02-13 22:20:22

# Below is generated by plot.py at 2018-02-14 04:10:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 268.29 Mbit/s
95th percentile per-packet one-way delay: 168.923 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 207.31 Mbit/s
95th percentile per-packet one-way delay: 164.414 ms
Loss rate: 1.44%
-- Flow 2:
Average throughput: 58.70 Mbit/s
95th percentile per-packet one-way delay: 198.704 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 70.61 Mbit/s
95th percentile per-packet one-way delay: 178.923 ms
Loss rate: 0.72%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-13 22:39:25

End at: 2018-02-13 22:39:55

Below is generated by plot.py at 2018-02-14 04:10:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 203.94 Mbit/s

95th percentile per-packet one-way delay: 150.134 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 107.63 Mbit/s

95th percentile per-packet one-way delay: 144.945 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 119.63 Mbit/s

95th percentile per-packet one-way delay: 159.943 ms

Loss rate: 0.14%

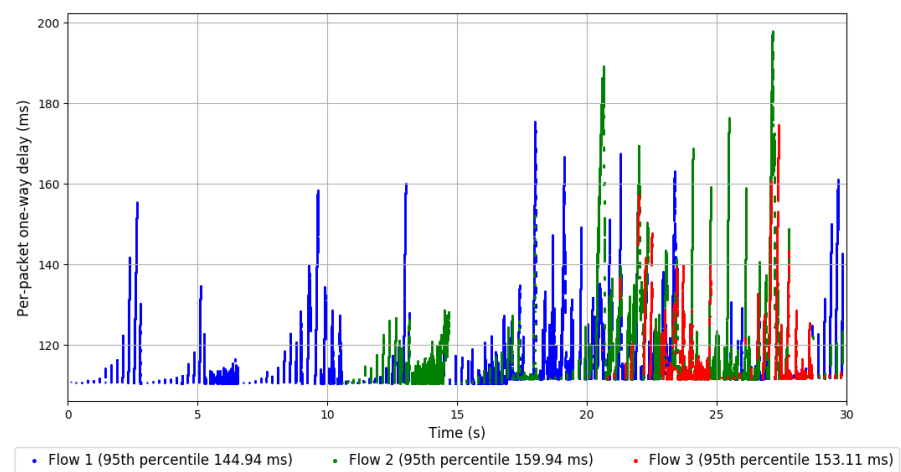
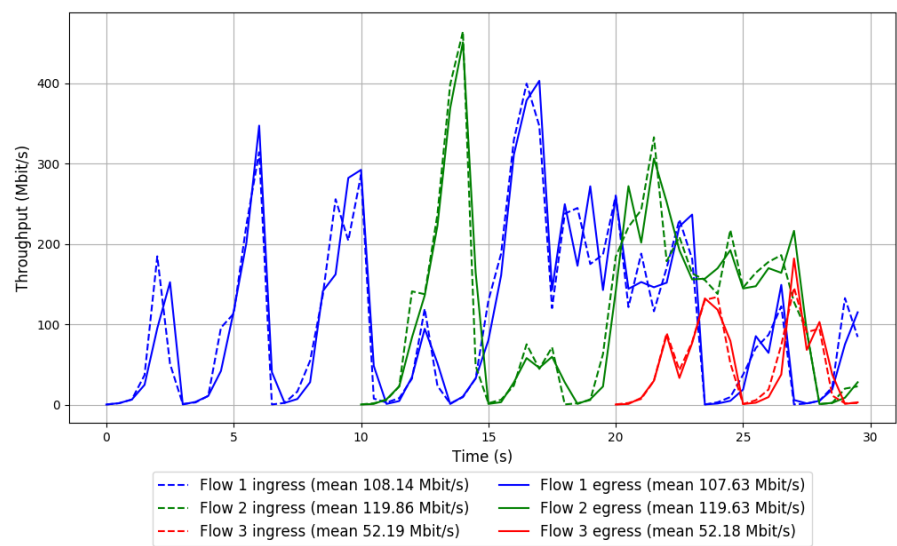
-- Flow 3:

Average throughput: 52.18 Mbit/s

95th percentile per-packet one-way delay: 153.107 ms

Loss rate: 0.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-13 22:58:43

End at: 2018-02-13 22:59:13

Below is generated by plot.py at 2018-02-14 04:10:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 213.16 Mbit/s

95th percentile per-packet one-way delay: 185.675 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 137.60 Mbit/s

95th percentile per-packet one-way delay: 151.611 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 64.46 Mbit/s

95th percentile per-packet one-way delay: 188.972 ms

Loss rate: 0.00%

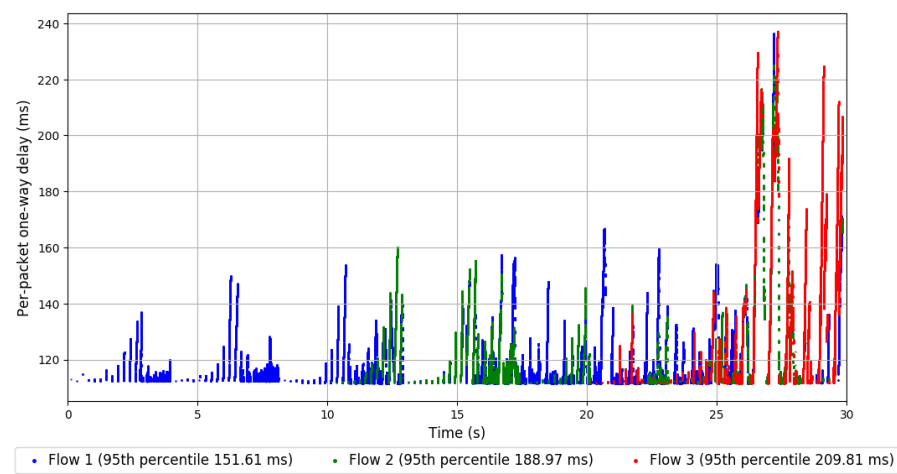
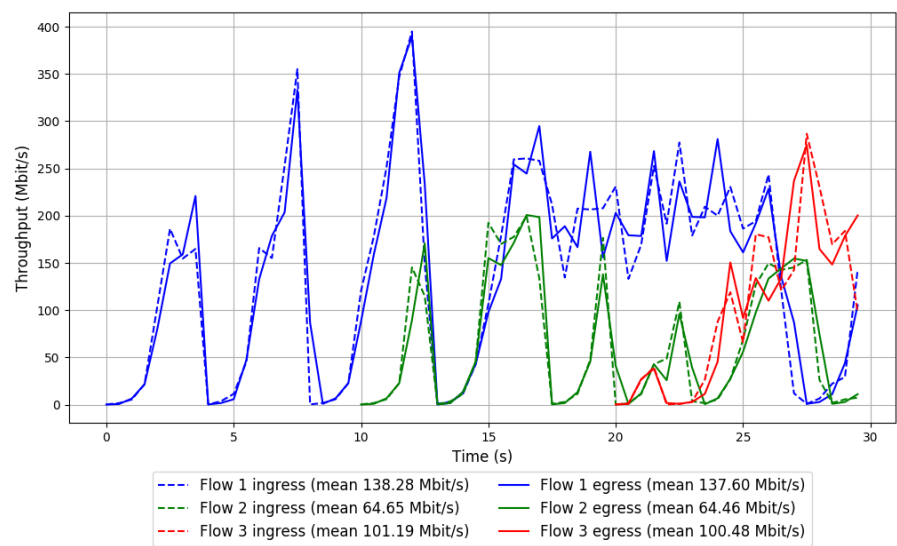
-- Flow 3:

Average throughput: 100.48 Mbit/s

95th percentile per-packet one-way delay: 209.811 ms

Loss rate: 0.42%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-13 23:18:16

End at: 2018-02-13 23:18:46

Below is generated by plot.py at 2018-02-14 04:10:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 251.09 Mbit/s

95th percentile per-packet one-way delay: 159.378 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 151.58 Mbit/s

95th percentile per-packet one-way delay: 152.360 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 138.99 Mbit/s

95th percentile per-packet one-way delay: 164.083 ms

Loss rate: 0.00%

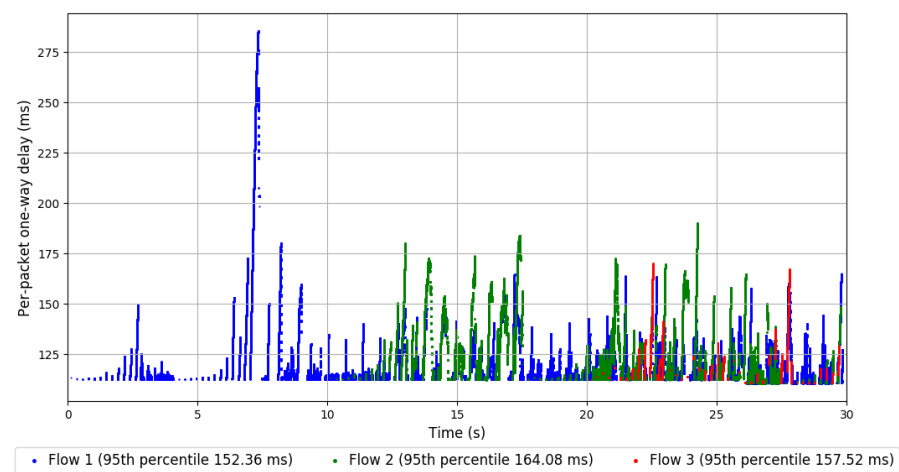
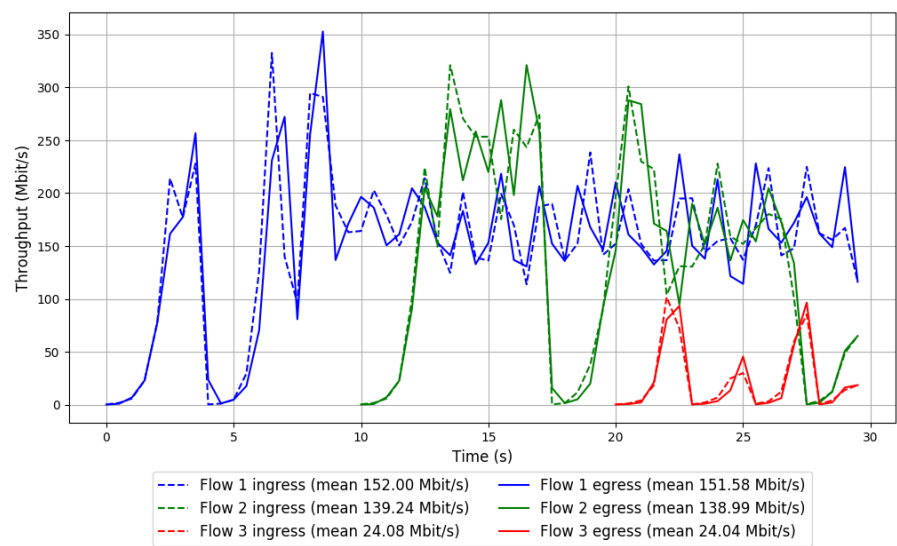
-- Flow 3:

Average throughput: 24.04 Mbit/s

95th percentile per-packet one-way delay: 157.521 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-13 23:37:48

End at: 2018-02-13 23:38:18

Below is generated by plot.py at 2018-02-14 04:10:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 217.69 Mbit/s

95th percentile per-packet one-way delay: 342.986 ms

Loss rate: 7.79%

-- Flow 1:

Average throughput: 149.60 Mbit/s

95th percentile per-packet one-way delay: 348.022 ms

Loss rate: 9.66%

-- Flow 2:

Average throughput: 93.23 Mbit/s

95th percentile per-packet one-way delay: 233.094 ms

Loss rate: 3.22%

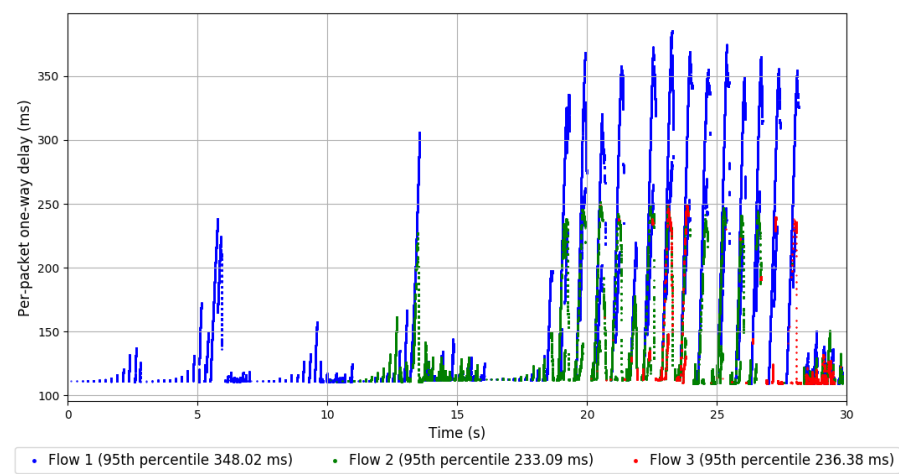
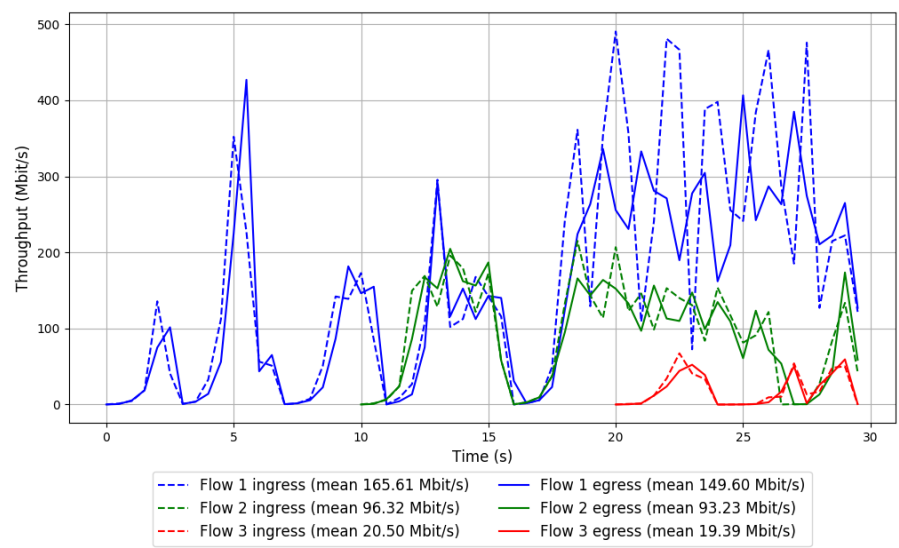
-- Flow 3:

Average throughput: 19.39 Mbit/s

95th percentile per-packet one-way delay: 236.381 ms

Loss rate: 5.32%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-13 23:57:03

End at: 2018-02-13 23:57:33

Below is generated by plot.py at 2018-02-14 04:11:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 272.84 Mbit/s

95th percentile per-packet one-way delay: 194.529 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 162.42 Mbit/s

95th percentile per-packet one-way delay: 187.337 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 148.19 Mbit/s

95th percentile per-packet one-way delay: 209.423 ms

Loss rate: 0.07%

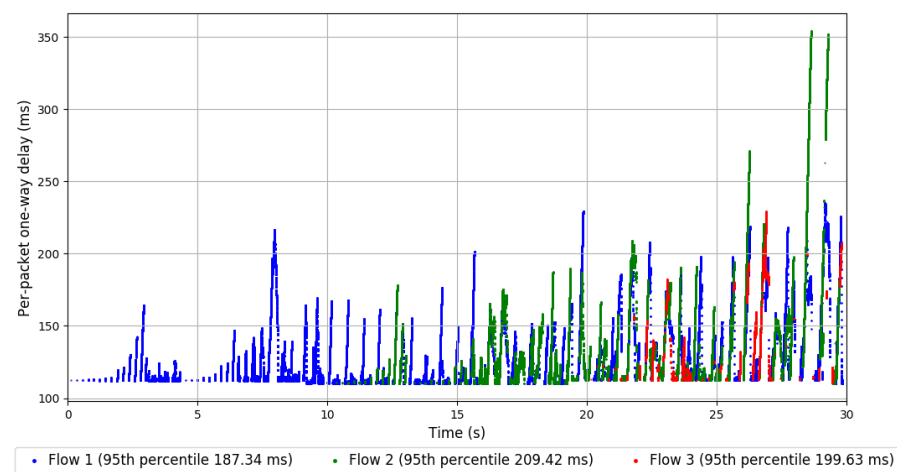
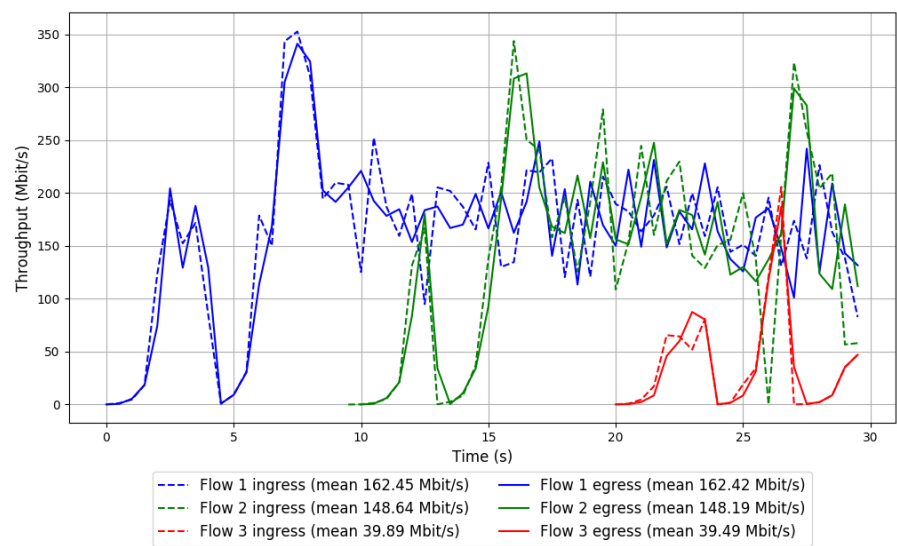
-- Flow 3:

Average throughput: 39.49 Mbit/s

95th percentile per-packet one-way delay: 199.633 ms

Loss rate: 0.04%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-14 00:16:50

End at: 2018-02-14 00:17:20

Below is generated by plot.py at 2018-02-14 04:12:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 299.10 Mbit/s

95th percentile per-packet one-way delay: 331.799 ms

Loss rate: 7.45%

-- Flow 1:

Average throughput: 257.33 Mbit/s

95th percentile per-packet one-way delay: 335.316 ms

Loss rate: 8.00%

-- Flow 2:

Average throughput: 38.32 Mbit/s

95th percentile per-packet one-way delay: 277.674 ms

Loss rate: 6.32%

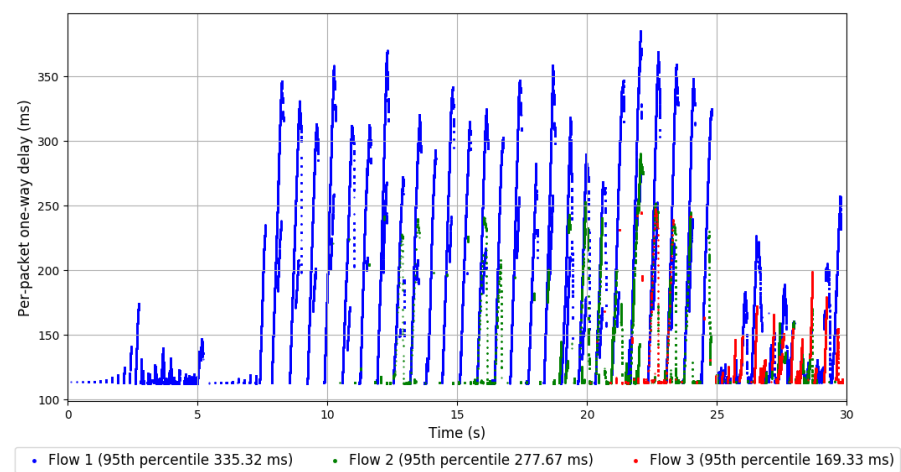
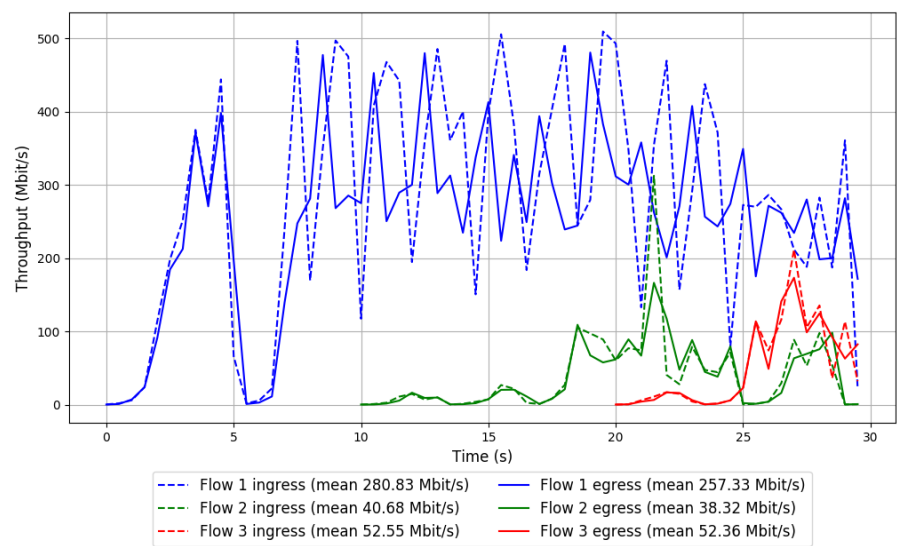
-- Flow 3:

Average throughput: 52.36 Mbit/s

95th percentile per-packet one-way delay: 169.333 ms

Loss rate: 0.36%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-14 00:36:37

End at: 2018-02-14 00:37:07

Below is generated by plot.py at 2018-02-14 04:13:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 311.27 Mbit/s

95th percentile per-packet one-way delay: 205.020 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 193.33 Mbit/s

95th percentile per-packet one-way delay: 225.981 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 165.76 Mbit/s

95th percentile per-packet one-way delay: 166.119 ms

Loss rate: 0.35%

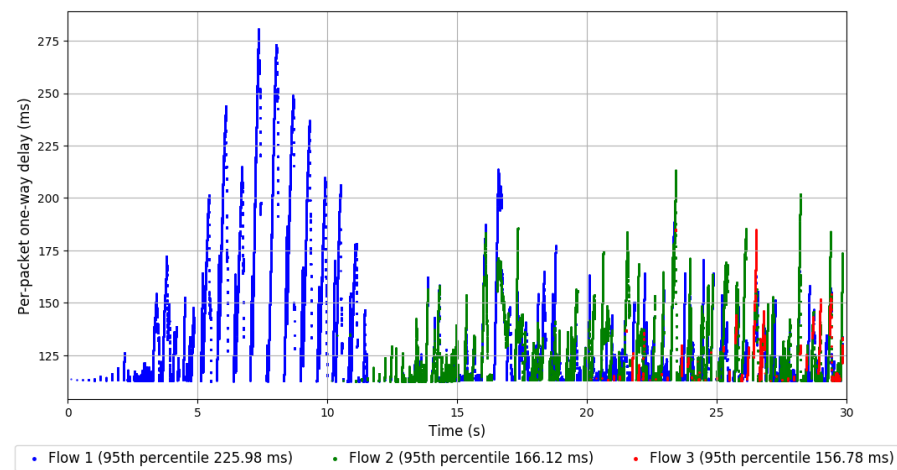
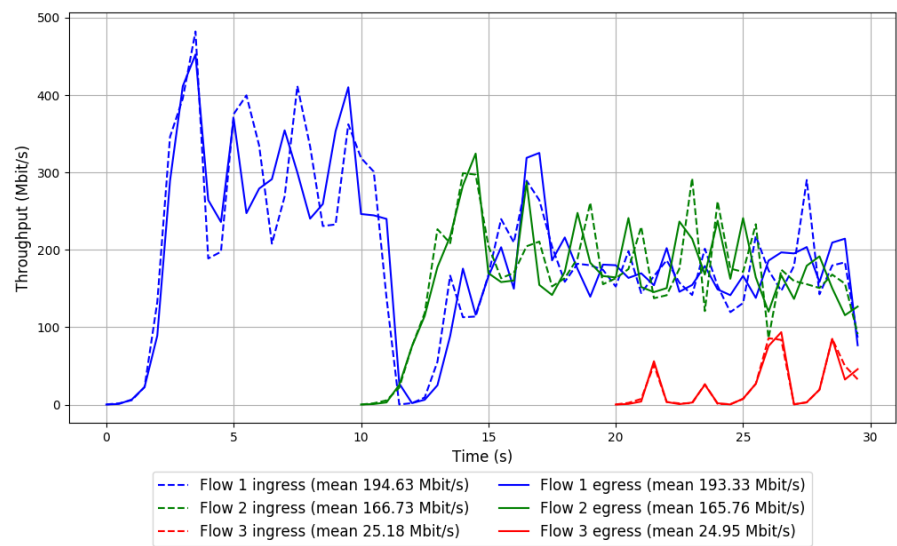
-- Flow 3:

Average throughput: 24.95 Mbit/s

95th percentile per-packet one-way delay: 156.785 ms

Loss rate: 0.91%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-14 00:55:45

End at: 2018-02-14 00:56:15

Below is generated by plot.py at 2018-02-14 04:14:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 227.49 Mbit/s

95th percentile per-packet one-way delay: 172.492 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 81.17 Mbit/s

95th percentile per-packet one-way delay: 154.703 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 140.76 Mbit/s

95th percentile per-packet one-way delay: 180.501 ms

Loss rate: 0.11%

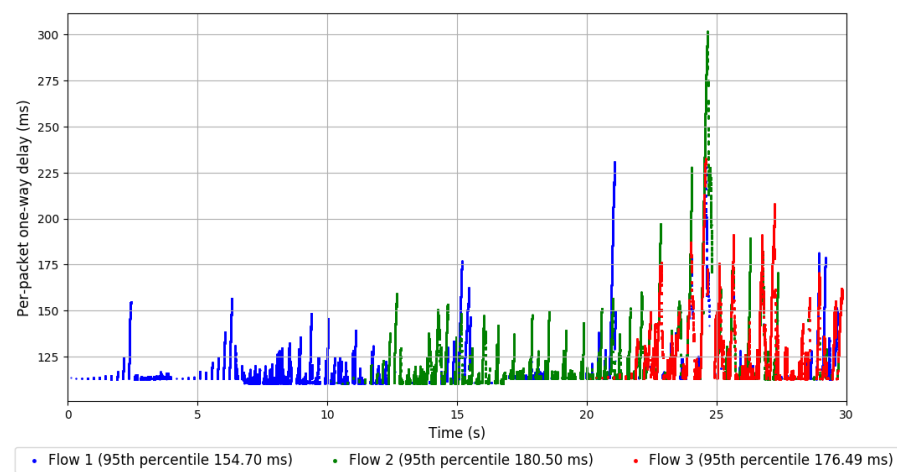
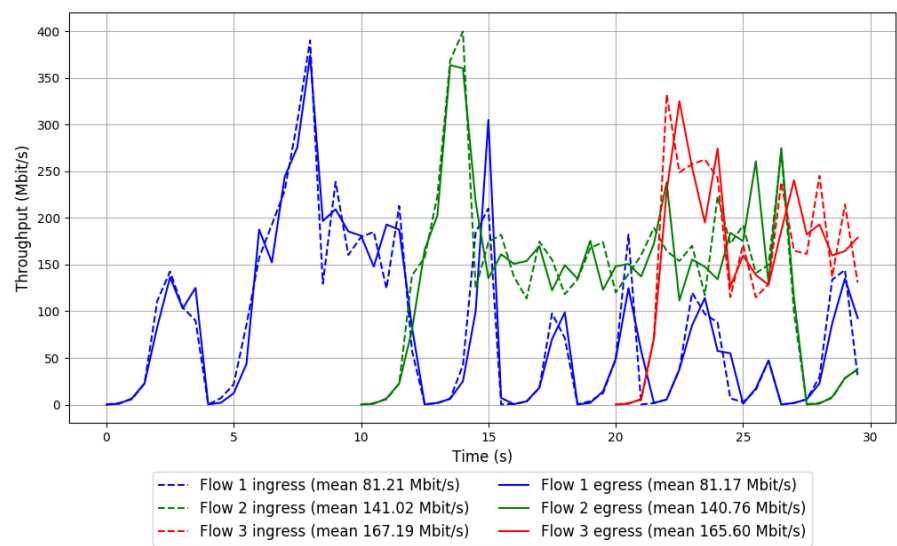
-- Flow 3:

Average throughput: 165.60 Mbit/s

95th percentile per-packet one-way delay: 176.489 ms

Loss rate: 0.97%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-14 01:15:10

End at: 2018-02-14 01:15:40

Below is generated by plot.py at 2018-02-14 04:14:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 265.79 Mbit/s

95th percentile per-packet one-way delay: 195.932 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 177.87 Mbit/s

95th percentile per-packet one-way delay: 195.309 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 106.56 Mbit/s

95th percentile per-packet one-way delay: 195.681 ms

Loss rate: 0.02%

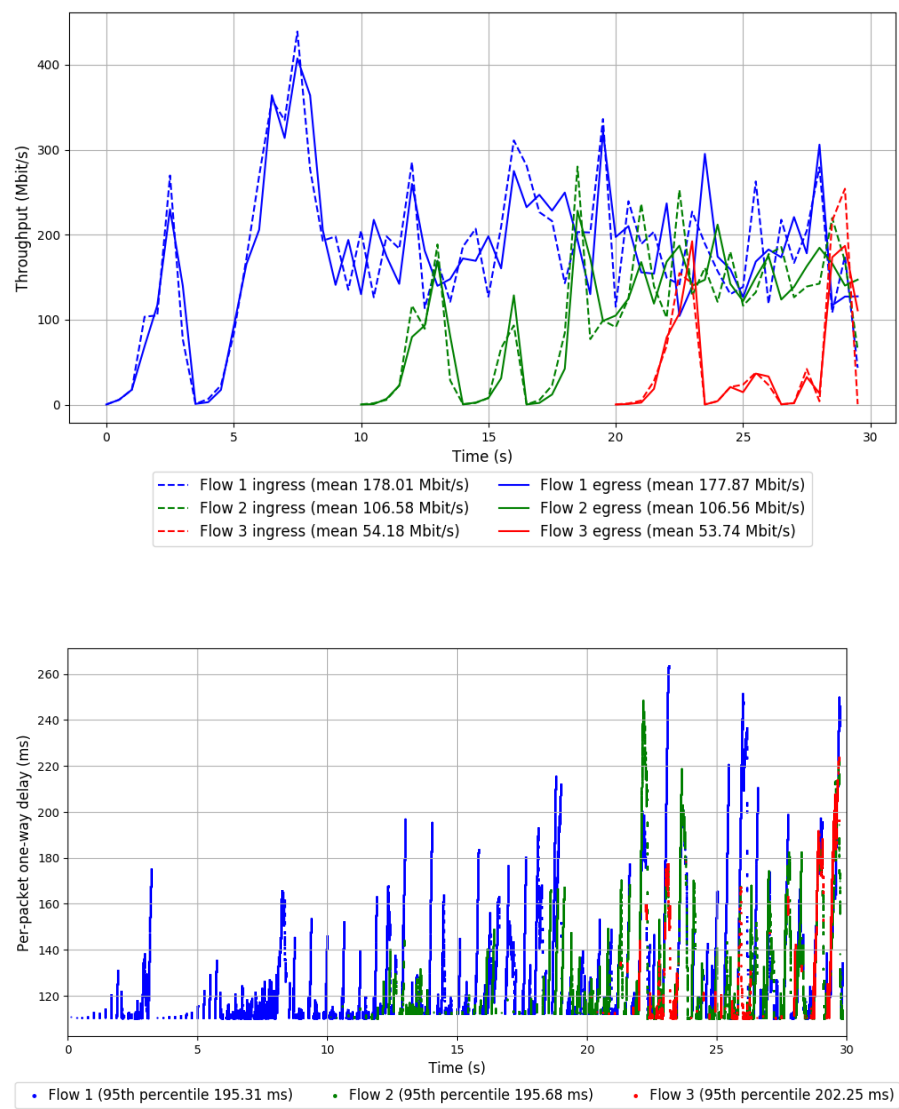
-- Flow 3:

Average throughput: 53.74 Mbit/s

95th percentile per-packet one-way delay: 202.255 ms

Loss rate: 0.01%

Run 10: Report of Verus — Data Link

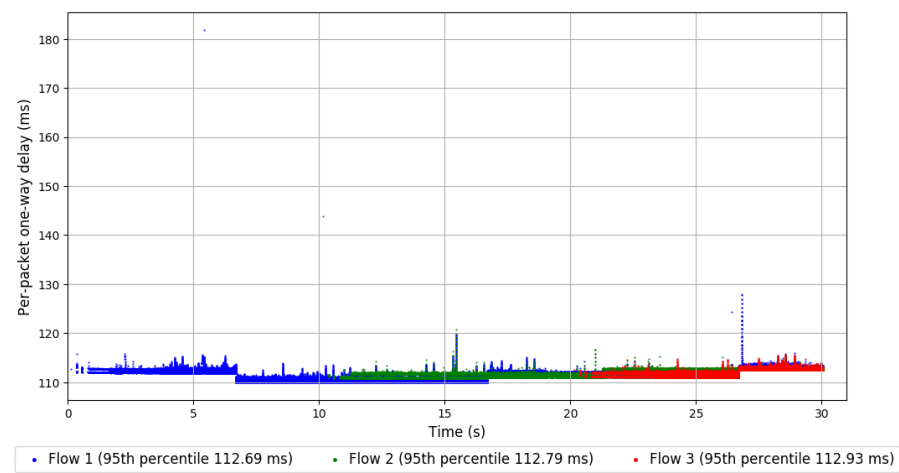
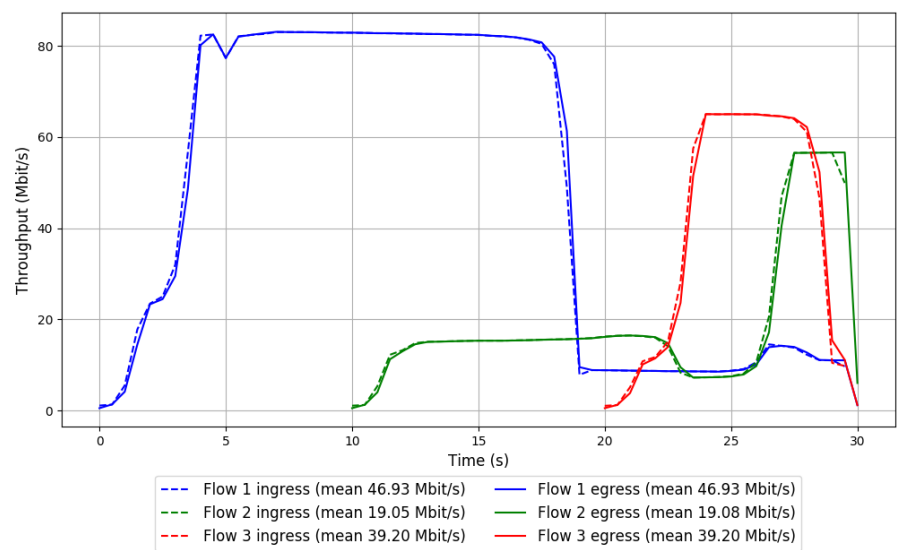


```
Run 1: Statistics of Copa

Start at: 2018-02-13 22:13:45
End at: 2018-02-13 22:14:15

# Below is generated by plot.py at 2018-02-14 04:14:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.58 Mbit/s
95th percentile per-packet one-way delay: 112.786 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.93 Mbit/s
95th percentile per-packet one-way delay: 112.692 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 19.08 Mbit/s
95th percentile per-packet one-way delay: 112.790 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.20 Mbit/s
95th percentile per-packet one-way delay: 112.932 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-13 22:33:26

End at: 2018-02-13 22:33:56

Below is generated by plot.py at 2018-02-14 04:14:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.56 Mbit/s

95th percentile per-packet one-way delay: 112.933 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 76.74 Mbit/s

95th percentile per-packet one-way delay: 112.554 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.87 Mbit/s

95th percentile per-packet one-way delay: 113.042 ms

Loss rate: 0.00%

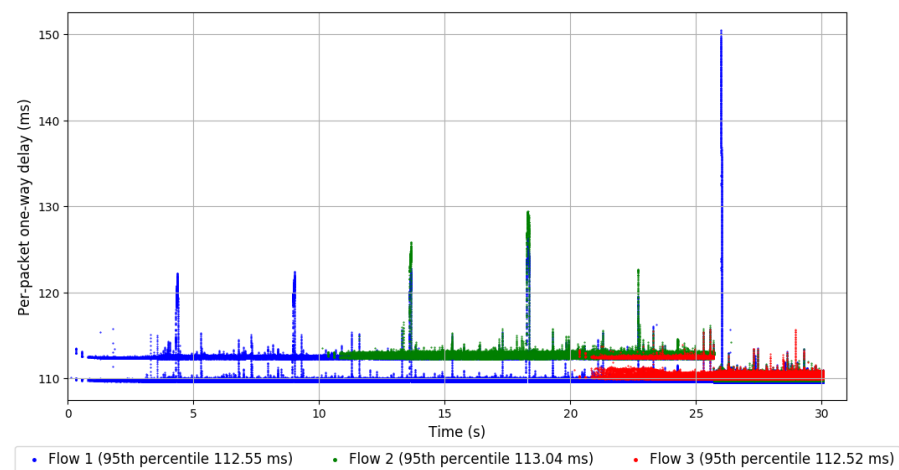
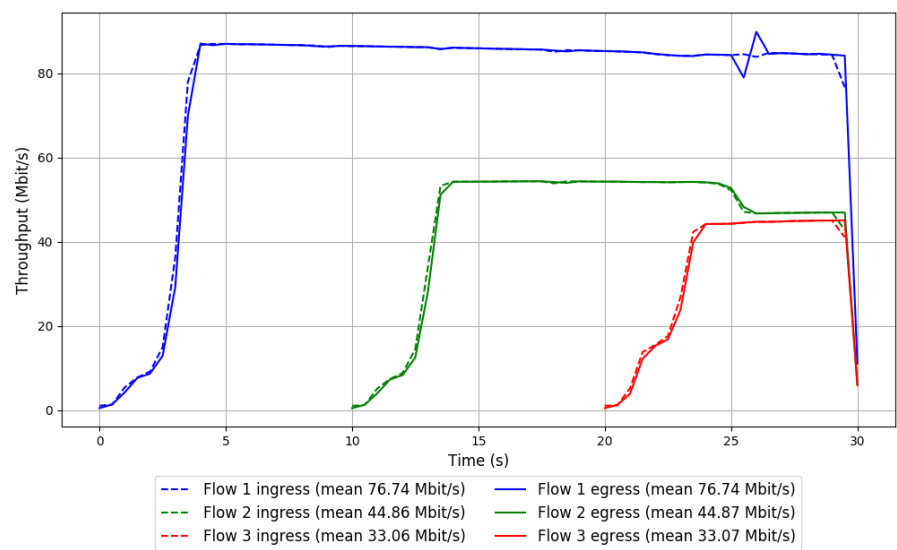
-- Flow 3:

Average throughput: 33.07 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-13 22:52:50

End at: 2018-02-13 22:53:20

Below is generated by plot.py at 2018-02-14 04:14:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.00 Mbit/s

95th percentile per-packet one-way delay: 112.321 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 28.04 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.32 Mbit/s

95th percentile per-packet one-way delay: 112.701 ms

Loss rate: 0.00%

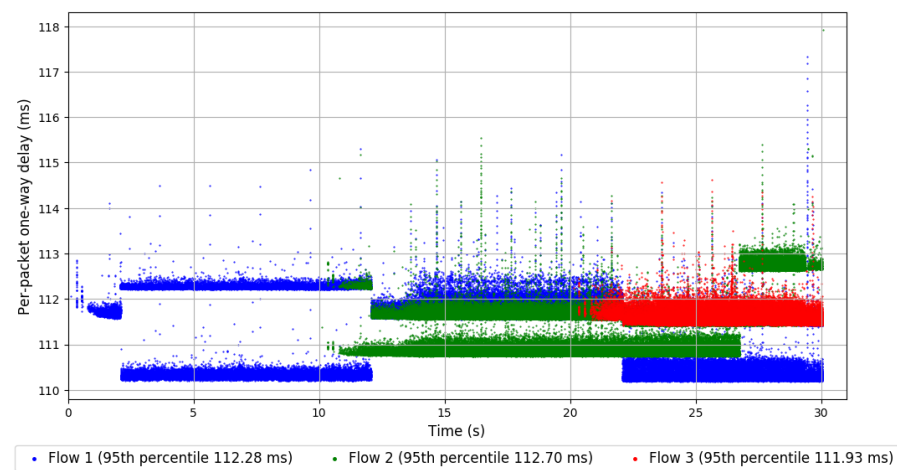
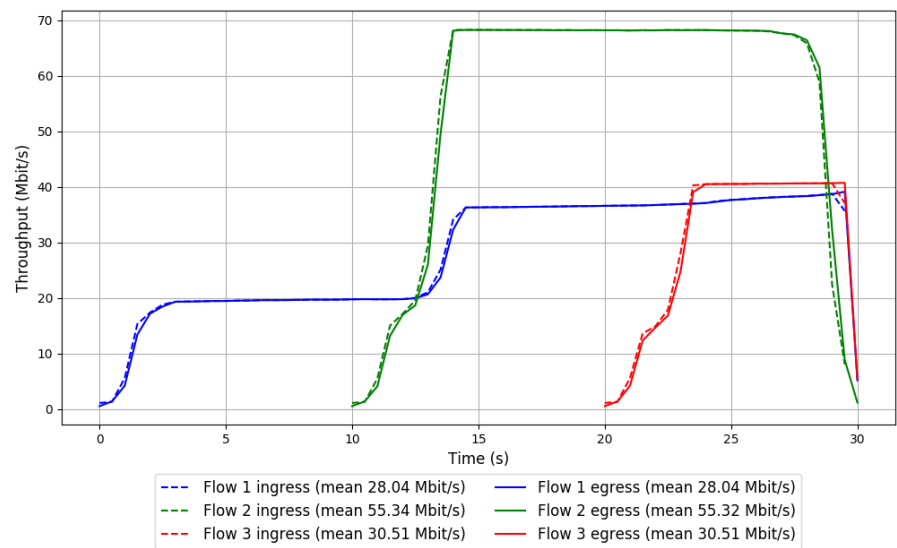
-- Flow 3:

Average throughput: 30.51 Mbit/s

95th percentile per-packet one-way delay: 111.932 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-13 23:12:18

End at: 2018-02-13 23:12:48

Below is generated by plot.py at 2018-02-14 04:14:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.15 Mbit/s

95th percentile per-packet one-way delay: 112.702 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 52.48 Mbit/s

95th percentile per-packet one-way delay: 112.583 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.99 Mbit/s

95th percentile per-packet one-way delay: 112.759 ms

Loss rate: 0.00%

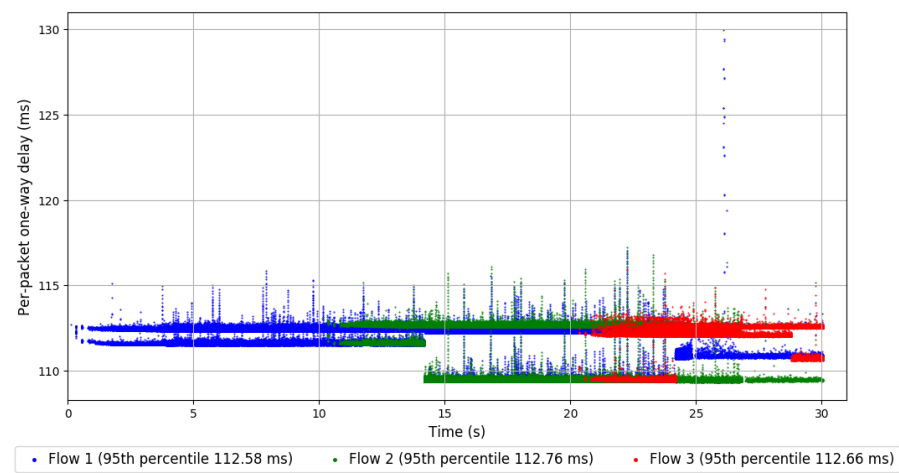
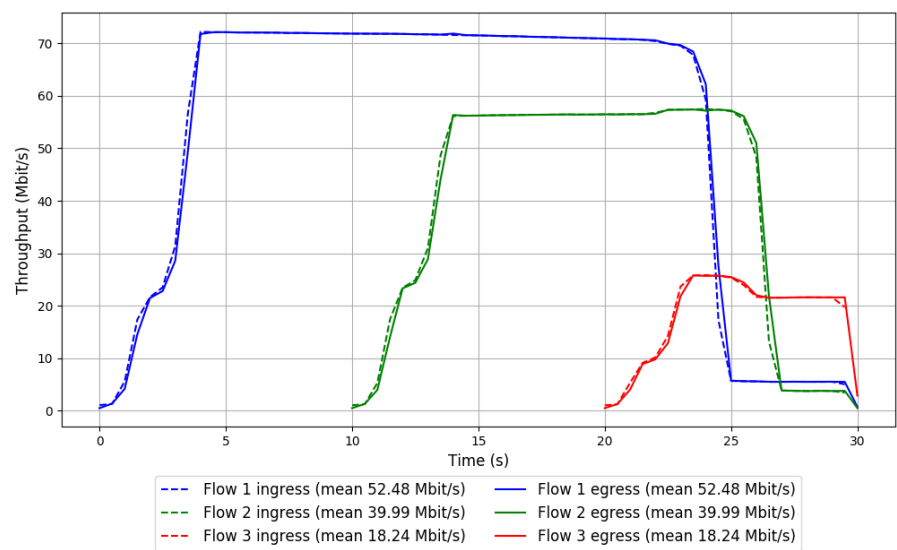
-- Flow 3:

Average throughput: 18.24 Mbit/s

95th percentile per-packet one-way delay: 112.659 ms

Loss rate: 0.03%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-13 23:31:41

End at: 2018-02-13 23:32:11

Below is generated by plot.py at 2018-02-14 04:15:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.07 Mbit/s

95th percentile per-packet one-way delay: 112.630 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 47.68 Mbit/s

95th percentile per-packet one-way delay: 112.628 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 32.83 Mbit/s

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

Loss rate: 0.00%

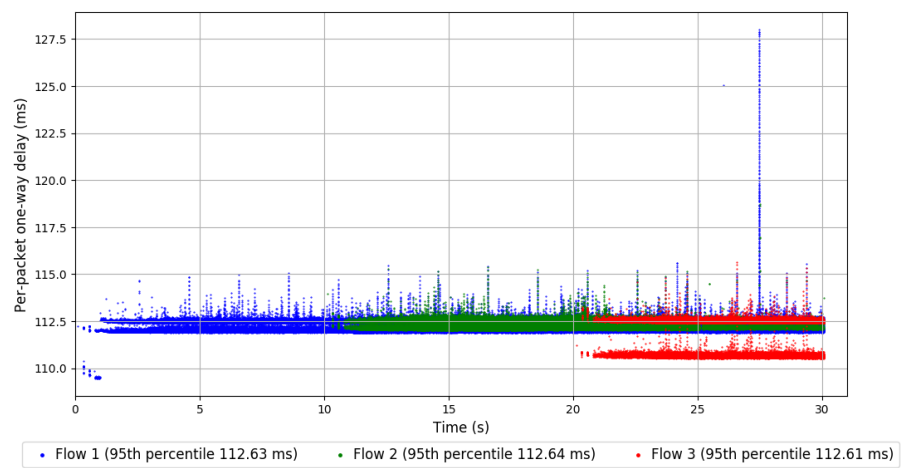
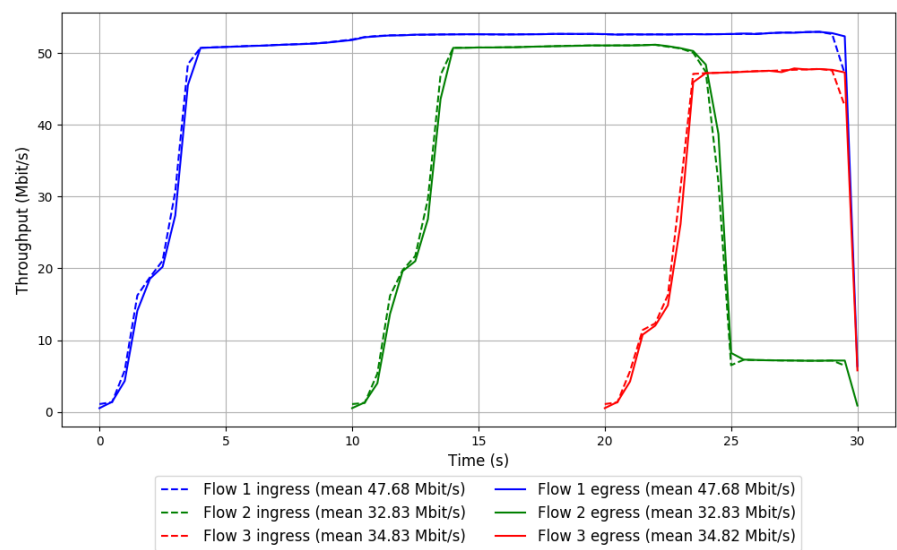
-- Flow 3:

Average throughput: 34.82 Mbit/s

95th percentile per-packet one-way delay: 112.610 ms

Loss rate: 0.03%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-13 23:51:03

End at: 2018-02-13 23:51:33

Below is generated by plot.py at 2018-02-14 04:15:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.31 Mbit/s

95th percentile per-packet one-way delay: 112.892 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 24.94 Mbit/s

95th percentile per-packet one-way delay: 112.834 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.23 Mbit/s

95th percentile per-packet one-way delay: 112.906 ms

Loss rate: 0.00%

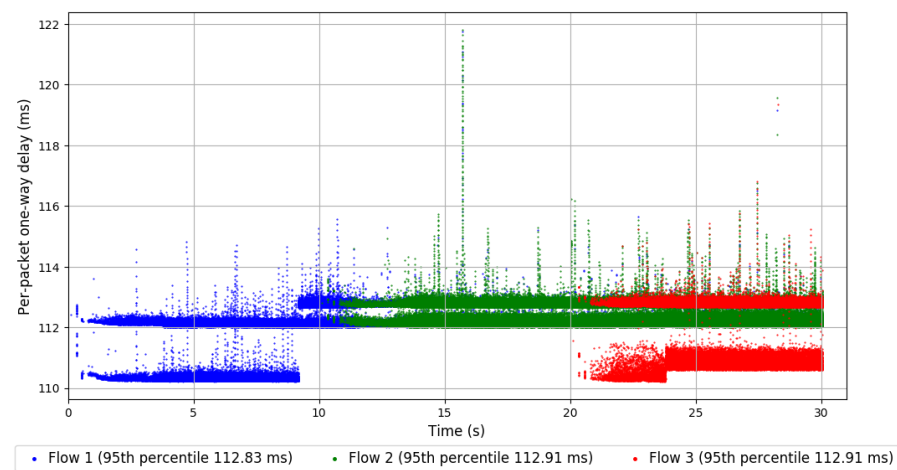
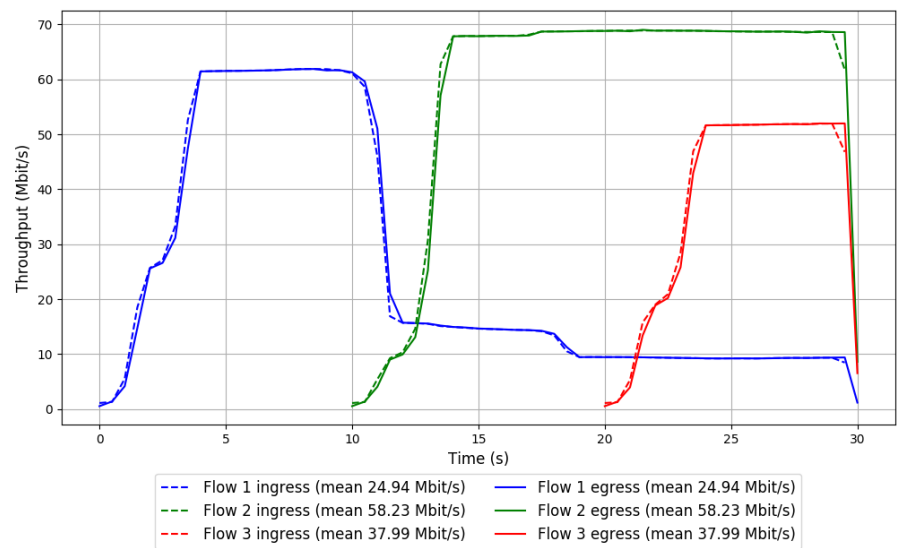
-- Flow 3:

Average throughput: 37.99 Mbit/s

95th percentile per-packet one-way delay: 112.914 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-14 00:10:38

End at: 2018-02-14 00:11:08

Below is generated by plot.py at 2018-02-14 04:16:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.73 Mbit/s

95th percentile per-packet one-way delay: 112.773 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.12 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.03 Mbit/s

95th percentile per-packet one-way delay: 112.492 ms

Loss rate: 0.00%

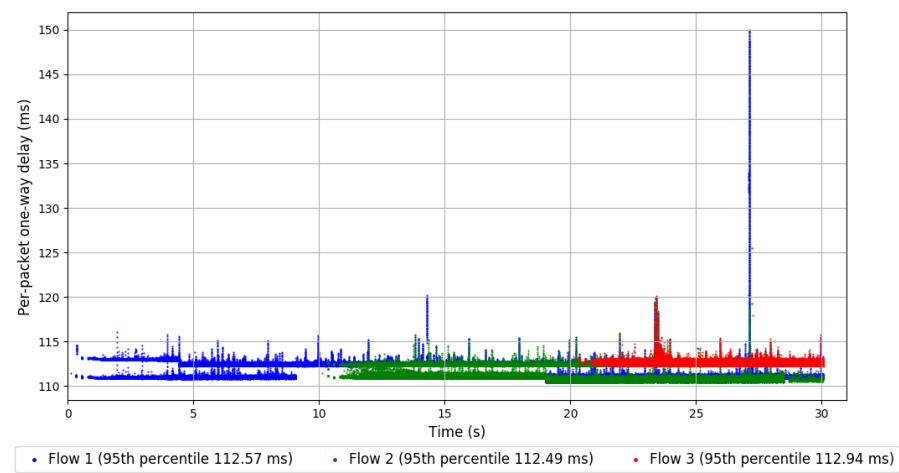
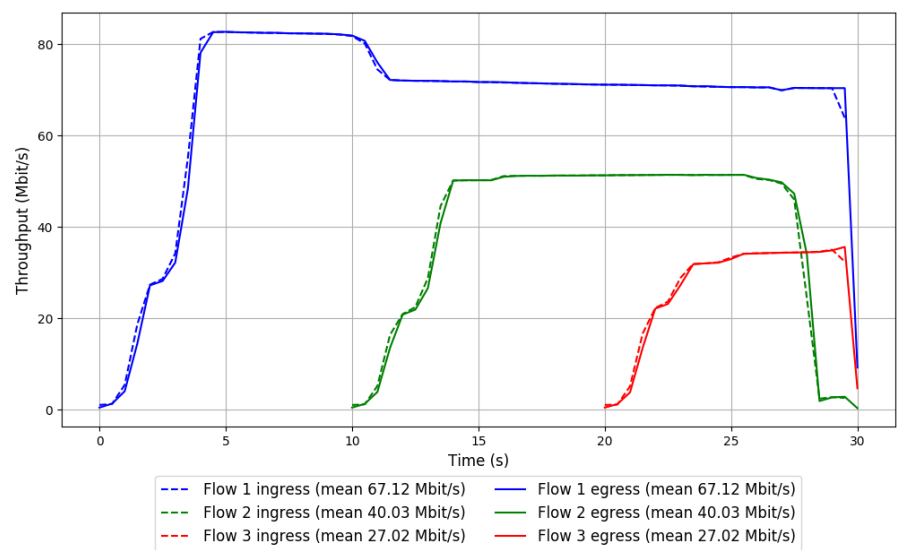
-- Flow 3:

Average throughput: 27.02 Mbit/s

95th percentile per-packet one-way delay: 112.937 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-14 00:30:30

End at: 2018-02-14 00:31:00

Below is generated by plot.py at 2018-02-14 04:16:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.82 Mbit/s

95th percentile per-packet one-way delay: 113.213 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.65 Mbit/s

95th percentile per-packet one-way delay: 113.235 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 26.23 Mbit/s

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

Loss rate: 0.00%

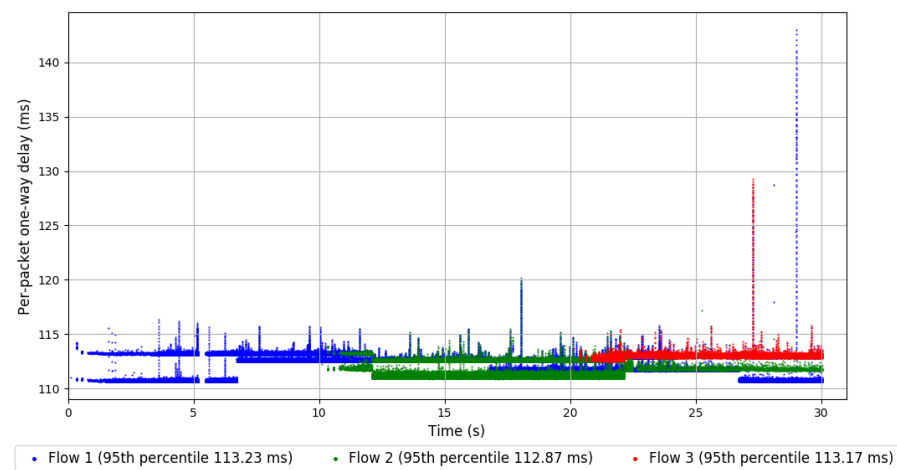
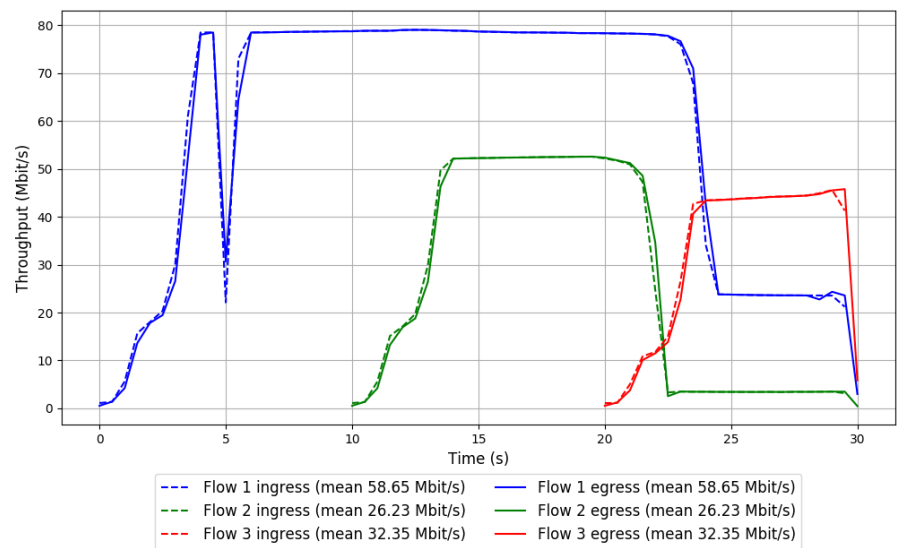
-- Flow 3:

Average throughput: 32.35 Mbit/s

95th percentile per-packet one-way delay: 113.165 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-14 00:49:44

End at: 2018-02-14 00:50:14

Below is generated by plot.py at 2018-02-14 04:16:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.76 Mbit/s

95th percentile per-packet one-way delay: 113.211 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 55.18 Mbit/s

95th percentile per-packet one-way delay: 113.148 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 9.35 Mbit/s

95th percentile per-packet one-way delay: 113.549 ms

Loss rate: 0.00%

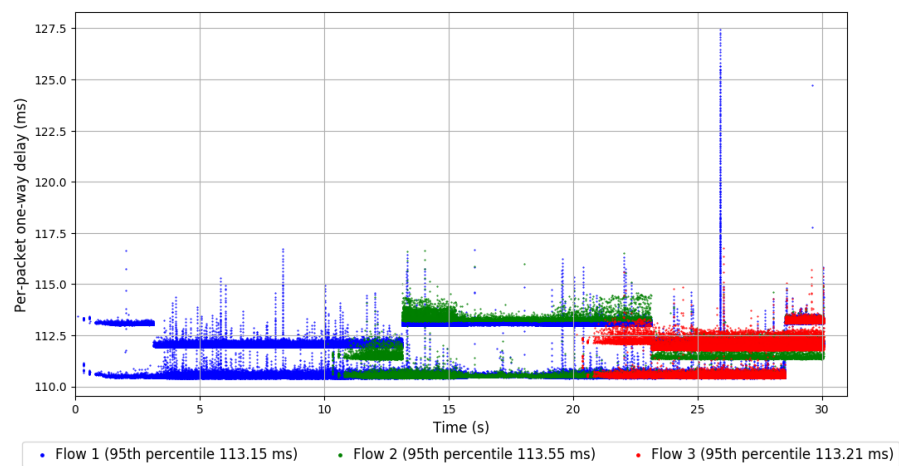
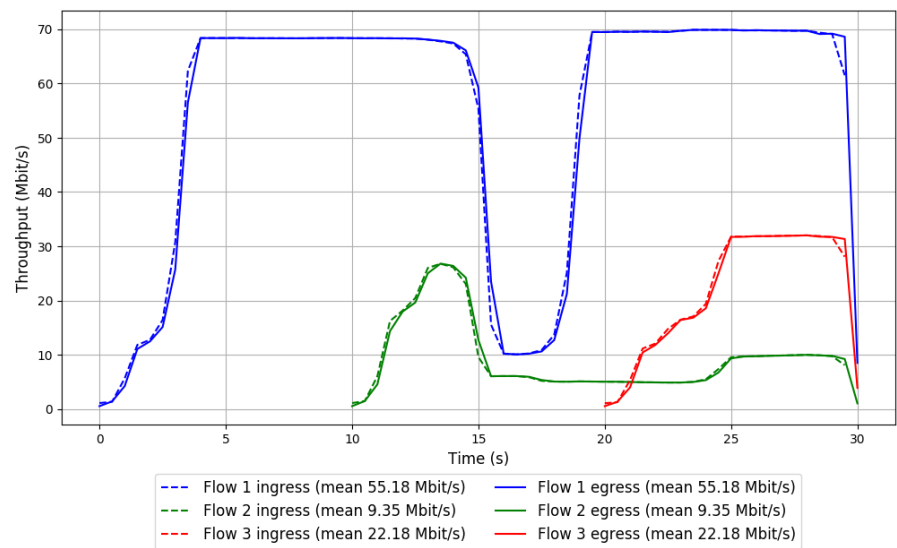
-- Flow 3:

Average throughput: 22.18 Mbit/s

95th percentile per-packet one-way delay: 113.214 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-14 01:09:05

End at: 2018-02-14 01:09:35

Below is generated by plot.py at 2018-02-14 04:17:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.29 Mbit/s

95th percentile per-packet one-way delay: 113.275 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 25.04 Mbit/s

95th percentile per-packet one-way delay: 113.249 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 56.72 Mbit/s

95th percentile per-packet one-way delay: 113.307 ms

Loss rate: 0.00%

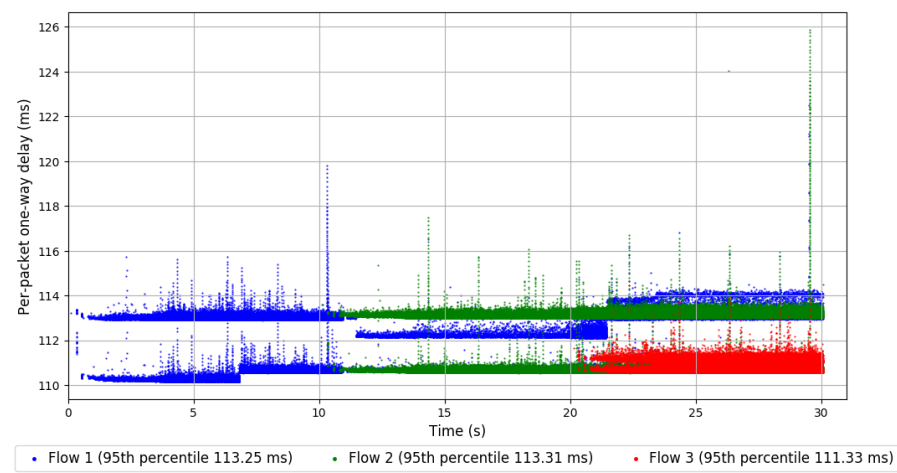
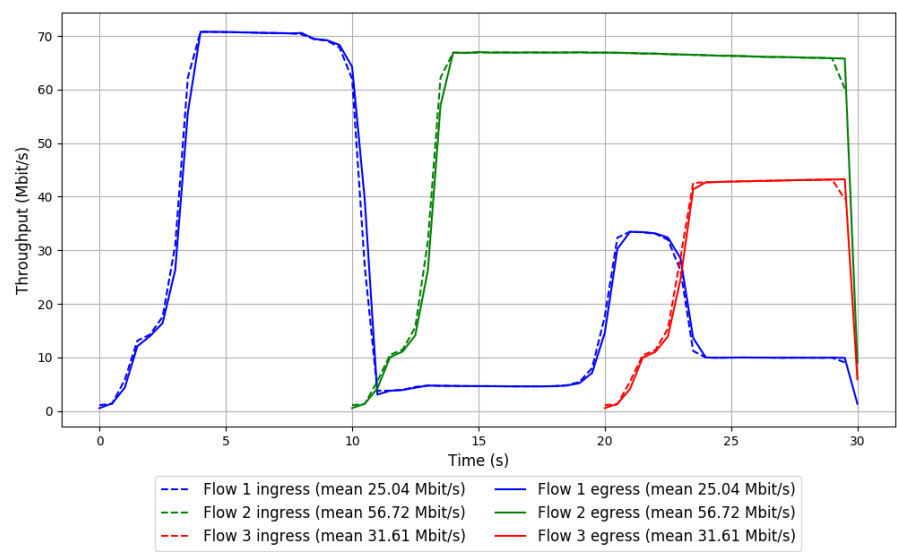
-- Flow 3:

Average throughput: 31.61 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

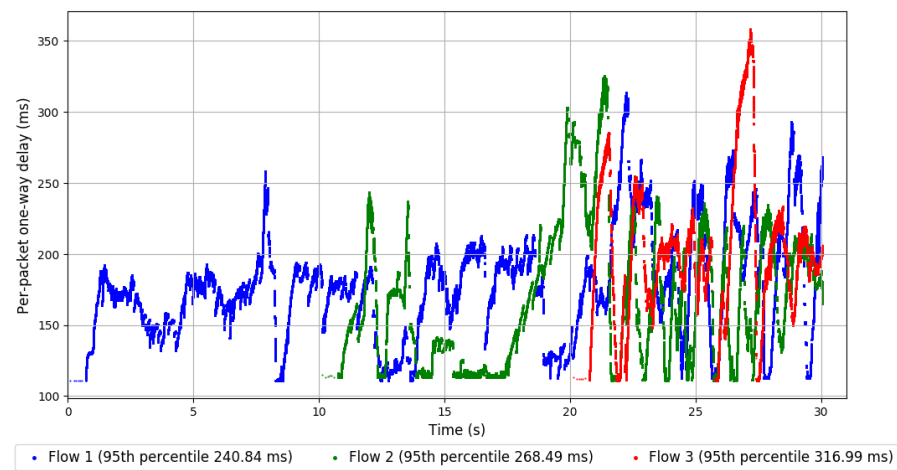
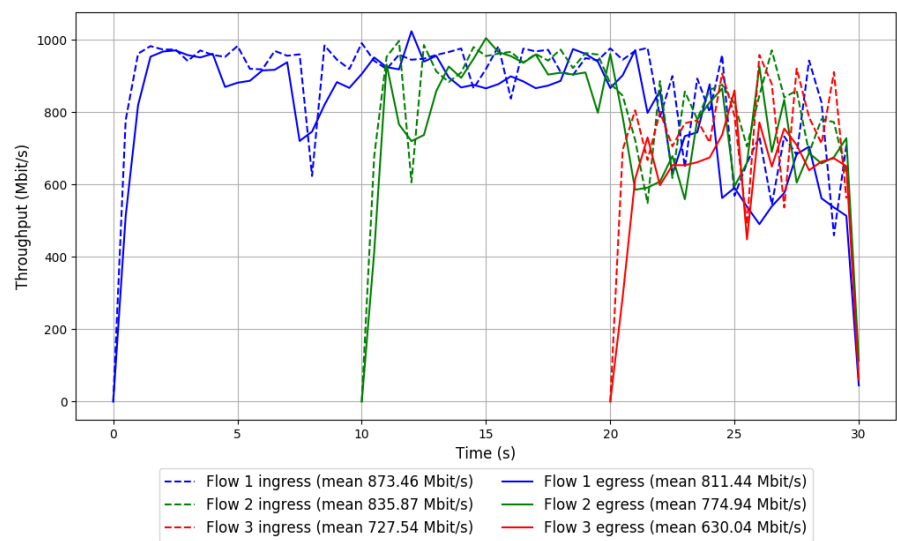


```
Run 1: Statistics of FillP

Start at: 2018-02-13 22:11:54
End at: 2018-02-13 22:12:24

# Below is generated by plot.py at 2018-02-14 04:43:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1535.91 Mbit/s
95th percentile per-packet one-way delay: 255.373 ms
Loss rate: 7.95%
-- Flow 1:
Average throughput: 811.44 Mbit/s
95th percentile per-packet one-way delay: 240.841 ms
Loss rate: 7.01%
-- Flow 2:
Average throughput: 774.94 Mbit/s
95th percentile per-packet one-way delay: 268.490 ms
Loss rate: 7.17%
-- Flow 3:
Average throughput: 630.04 Mbit/s
95th percentile per-packet one-way delay: 316.985 ms
Loss rate: 13.16%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-02-13 22:31:33

End at: 2018-02-13 22:32:03

Below is generated by plot.py at 2018-02-14 04:43:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 1486.10 Mbit/s

95th percentile per-packet one-way delay: 341.853 ms

Loss rate: 8.84%

-- Flow 1:

Average throughput: 769.52 Mbit/s

95th percentile per-packet one-way delay: 340.841 ms

Loss rate: 7.69%

-- Flow 2:

Average throughput: 790.77 Mbit/s

95th percentile per-packet one-way delay: 216.716 ms

Loss rate: 8.42%

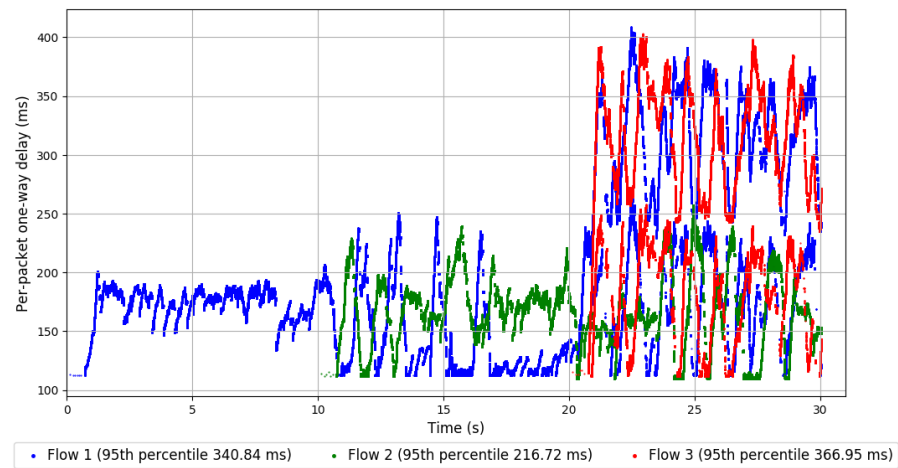
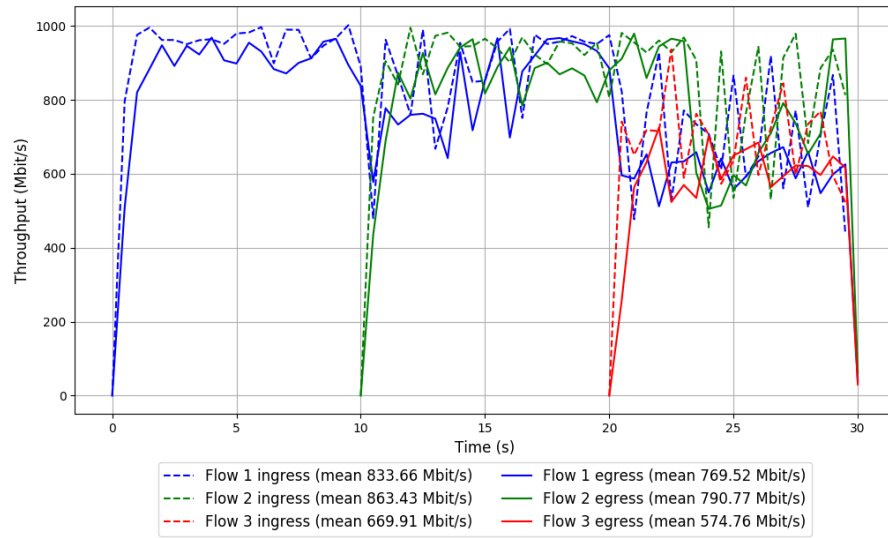
-- Flow 3:

Average throughput: 574.76 Mbit/s

95th percentile per-packet one-way delay: 366.949 ms

Loss rate: 14.22%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-13 22:50:58

End at: 2018-02-13 22:51:28

Below is generated by plot.py at 2018-02-14 04:44:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 1542.87 Mbit/s

95th percentile per-packet one-way delay: 221.589 ms

Loss rate: 9.06%

-- Flow 1:

Average throughput: 800.20 Mbit/s

95th percentile per-packet one-way delay: 215.837 ms

Loss rate: 7.94%

-- Flow 2:

Average throughput: 767.99 Mbit/s

95th percentile per-packet one-way delay: 237.965 ms

Loss rate: 9.24%

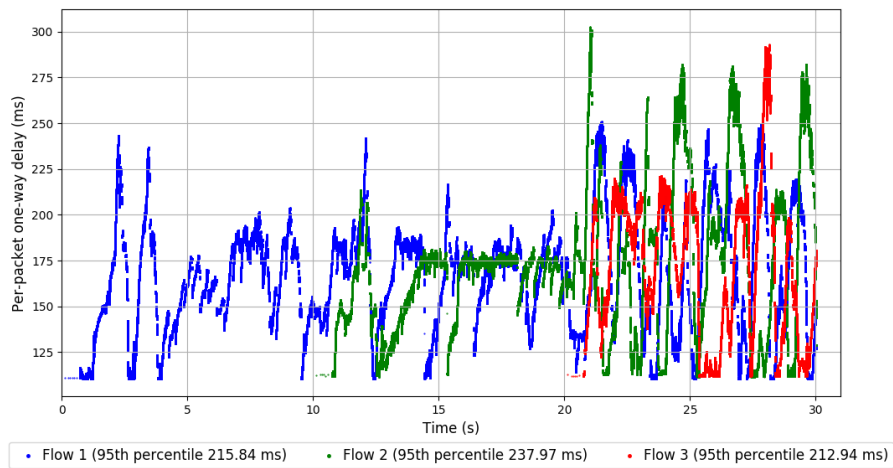
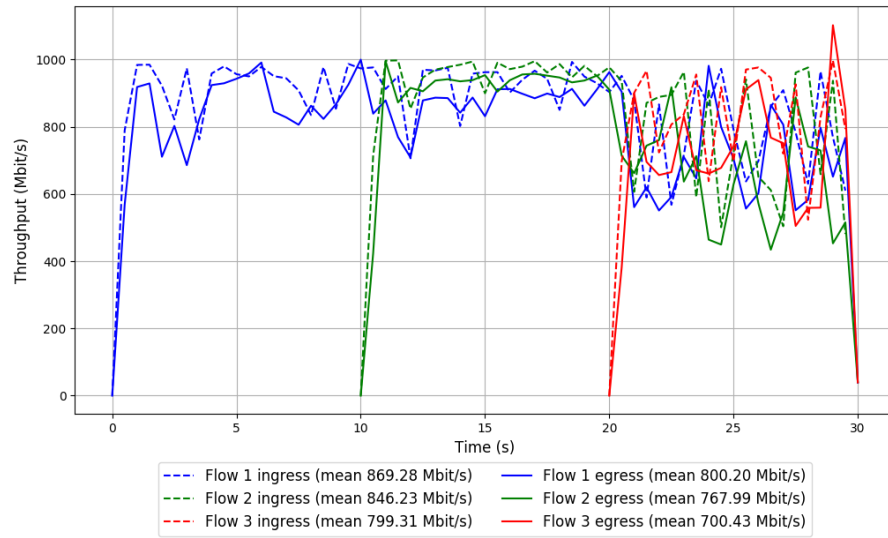
-- Flow 3:

Average throughput: 700.43 Mbit/s

95th percentile per-packet one-way delay: 212.942 ms

Loss rate: 12.37%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-13 23:10:26

End at: 2018-02-13 23:10:56

Below is generated by plot.py at 2018-02-14 04:44:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 1550.83 Mbit/s

95th percentile per-packet one-way delay: 237.920 ms

Loss rate: 8.60%

-- Flow 1:

Average throughput: 827.01 Mbit/s

95th percentile per-packet one-way delay: 214.996 ms

Loss rate: 6.49%

-- Flow 2:

Average throughput: 770.10 Mbit/s

95th percentile per-packet one-way delay: 273.064 ms

Loss rate: 8.77%

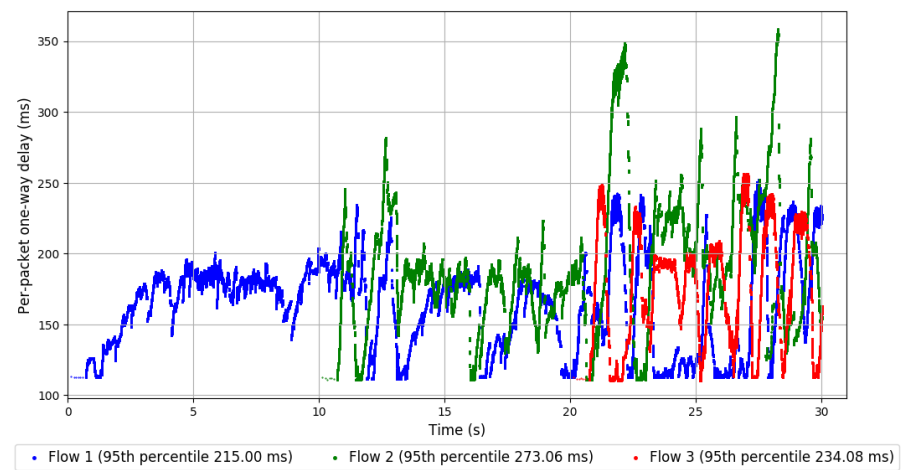
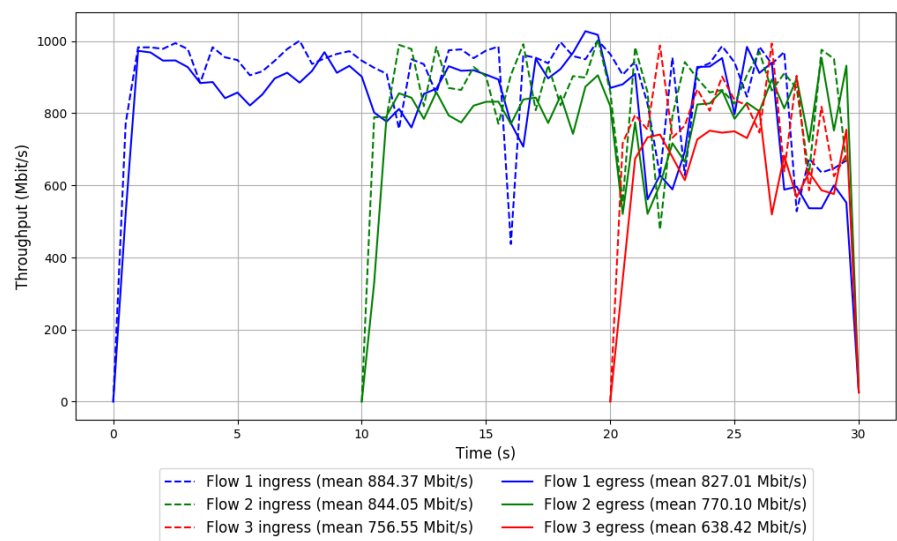
-- Flow 3:

Average throughput: 638.42 Mbit/s

95th percentile per-packet one-way delay: 234.077 ms

Loss rate: 15.63%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-13 23:29:50

End at: 2018-02-13 23:30:20

Below is generated by plot.py at 2018-02-14 04:45:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 1521.40 Mbit/s

95th percentile per-packet one-way delay: 224.448 ms

Loss rate: 9.47%

-- Flow 1:

Average throughput: 848.12 Mbit/s

95th percentile per-packet one-way delay: 208.059 ms

Loss rate: 5.69%

-- Flow 2:

Average throughput: 687.70 Mbit/s

95th percentile per-packet one-way delay: 233.350 ms

Loss rate: 13.28%

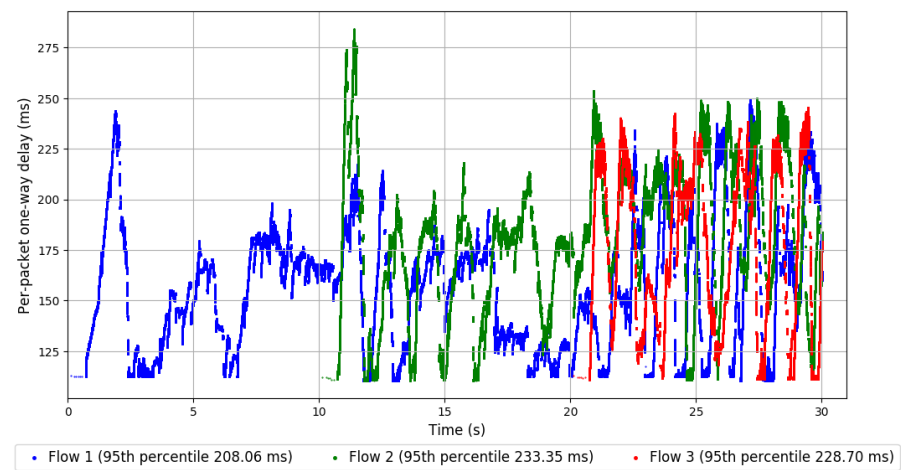
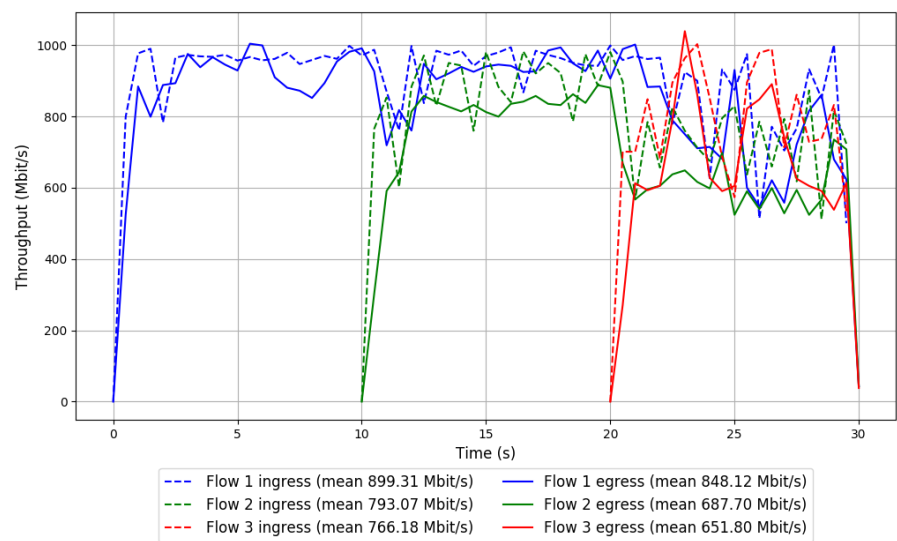
-- Flow 3:

Average throughput: 651.80 Mbit/s

95th percentile per-packet one-way delay: 228.700 ms

Loss rate: 14.92%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-13 23:49:08

End at: 2018-02-13 23:49:38

Below is generated by plot.py at 2018-02-14 04:45:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 1496.65 Mbit/s

95th percentile per-packet one-way delay: 314.034 ms

Loss rate: 7.82%

-- Flow 1:

Average throughput: 770.78 Mbit/s

95th percentile per-packet one-way delay: 234.682 ms

Loss rate: 9.61%

-- Flow 2:

Average throughput: 781.27 Mbit/s

95th percentile per-packet one-way delay: 314.132 ms

Loss rate: 4.59%

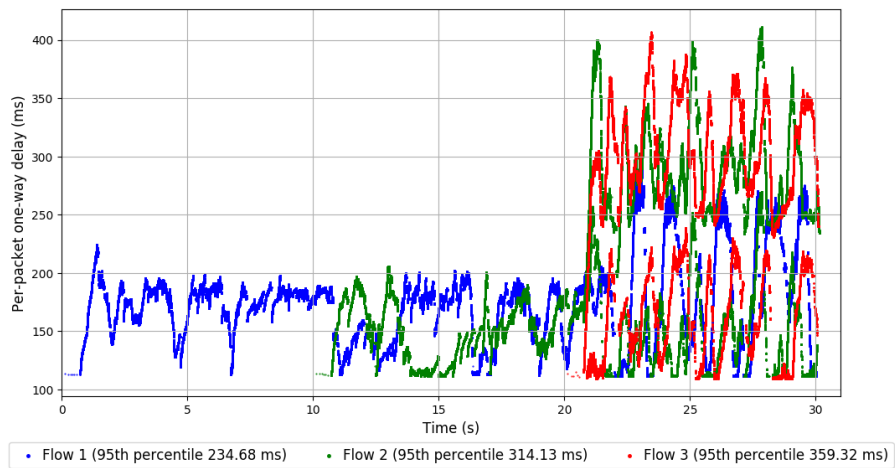
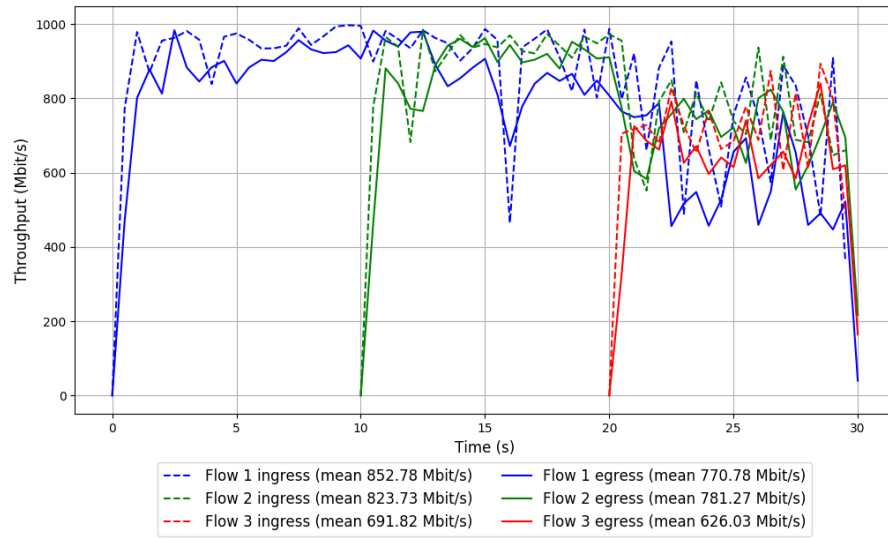
-- Flow 3:

Average throughput: 626.03 Mbit/s

95th percentile per-packet one-way delay: 359.322 ms

Loss rate: 8.85%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-14 00:08:47

End at: 2018-02-14 00:09:17

Below is generated by plot.py at 2018-02-14 04:45:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 1478.96 Mbit/s

95th percentile per-packet one-way delay: 218.865 ms

Loss rate: 10.65%

-- Flow 1:

Average throughput: 770.03 Mbit/s

95th percentile per-packet one-way delay: 218.958 ms

Loss rate: 10.05%

-- Flow 2:

Average throughput: 770.32 Mbit/s

95th percentile per-packet one-way delay: 211.880 ms

Loss rate: 8.46%

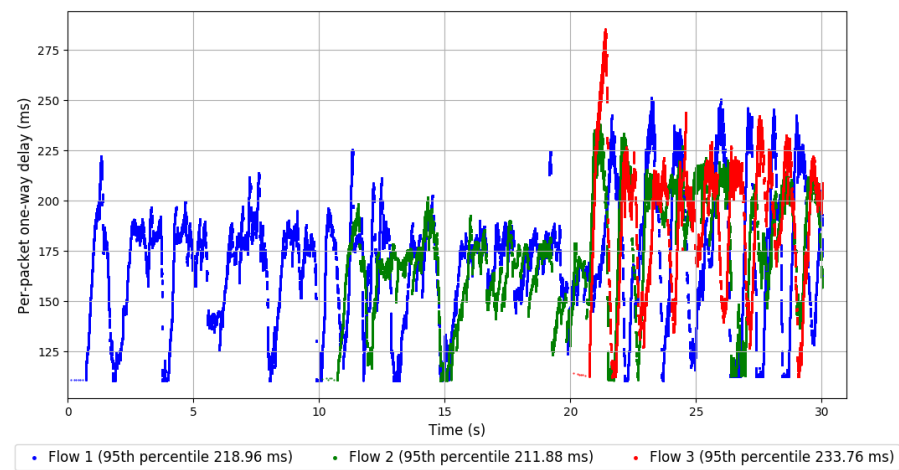
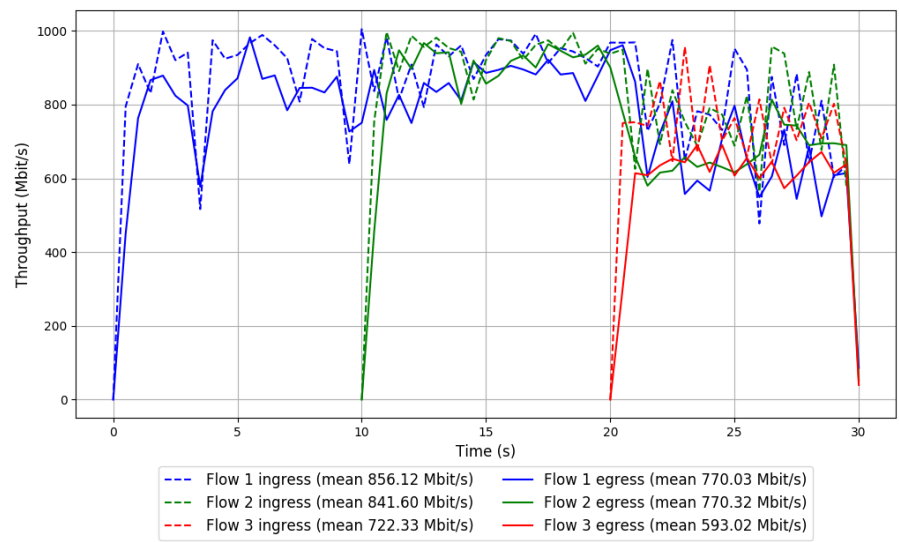
-- Flow 3:

Average throughput: 593.02 Mbit/s

95th percentile per-packet one-way delay: 233.762 ms

Loss rate: 17.91%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-14 00:28:38

End at: 2018-02-14 00:29:08

Below is generated by plot.py at 2018-02-14 04:45:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 1413.38 Mbit/s

95th percentile per-packet one-way delay: 345.966 ms

Loss rate: 7.52%

-- Flow 1:

Average throughput: 744.11 Mbit/s

95th percentile per-packet one-way delay: 345.594 ms

Loss rate: 6.40%

-- Flow 2:

Average throughput: 678.87 Mbit/s

95th percentile per-packet one-way delay: 357.392 ms

Loss rate: 7.36%

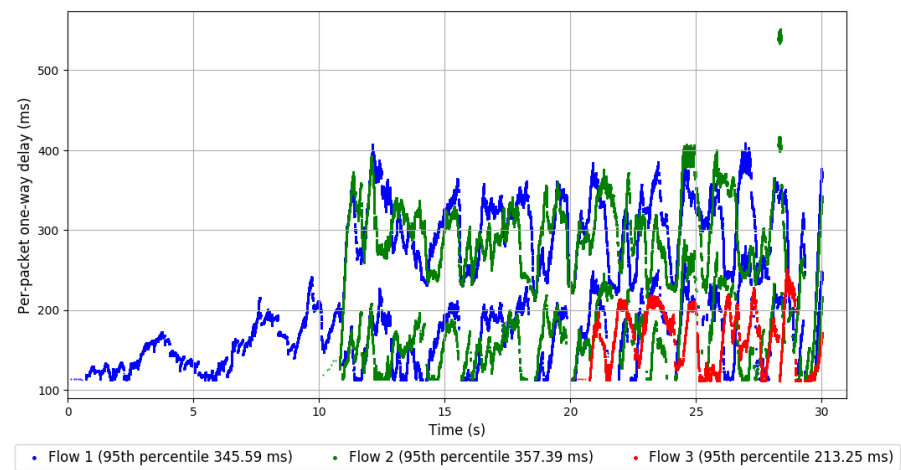
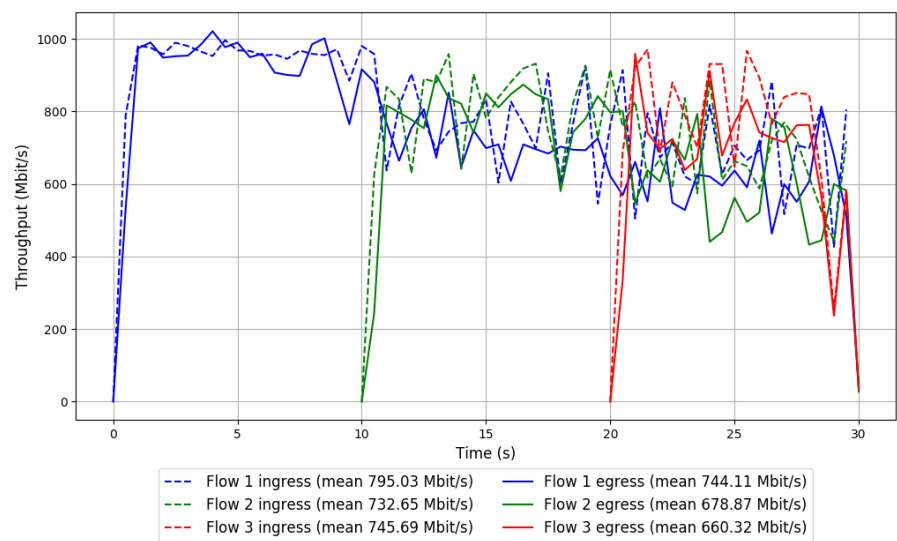
-- Flow 3:

Average throughput: 660.32 Mbit/s

95th percentile per-packet one-way delay: 213.255 ms

Loss rate: 11.45%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-14 00:47:51

End at: 2018-02-14 00:48:21

Below is generated by plot.py at 2018-02-14 05:13:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 1532.30 Mbit/s

95th percentile per-packet one-way delay: 234.819 ms

Loss rate: 8.91%

-- Flow 1:

Average throughput: 787.90 Mbit/s

95th percentile per-packet one-way delay: 249.101 ms

Loss rate: 8.43%

-- Flow 2:

Average throughput: 772.49 Mbit/s

95th percentile per-packet one-way delay: 225.213 ms

Loss rate: 8.20%

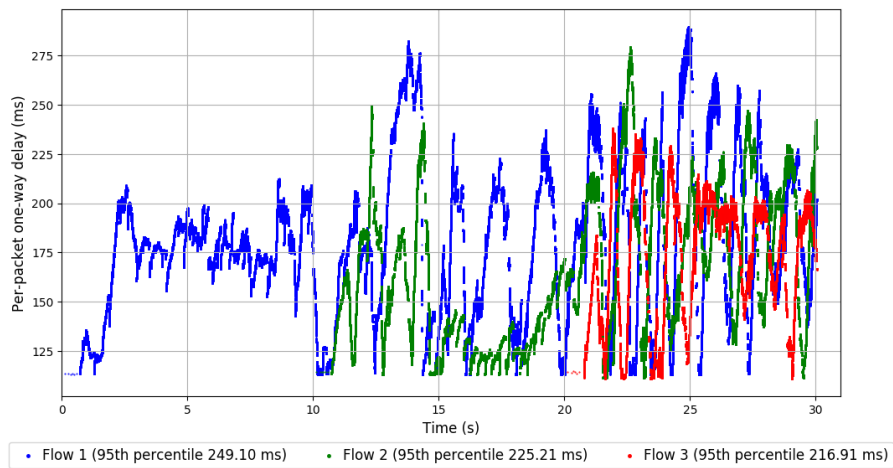
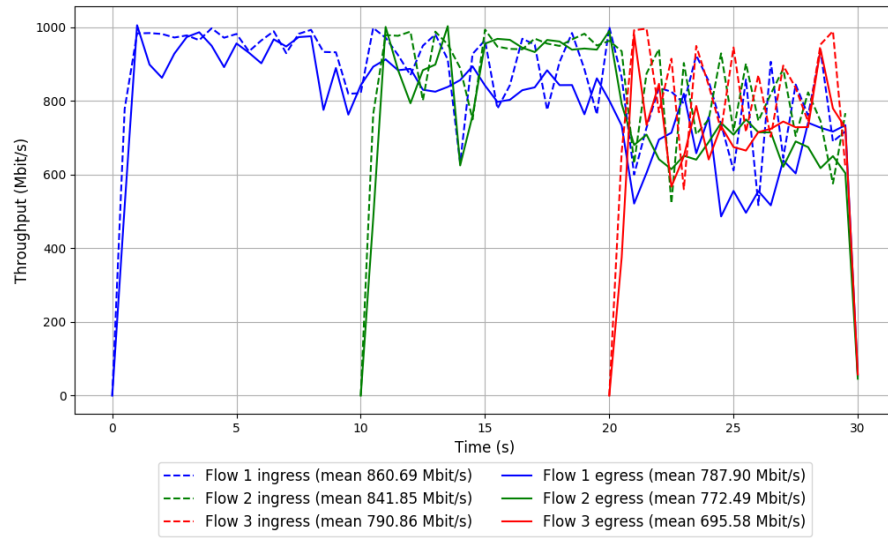
-- Flow 3:

Average throughput: 695.58 Mbit/s

95th percentile per-packet one-way delay: 216.912 ms

Loss rate: 11.99%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-02-14 01:07:16

End at: 2018-02-14 01:07:46

Below is generated by plot.py at 2018-02-14 05:13:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 1472.96 Mbit/s

95th percentile per-packet one-way delay: 220.113 ms

Loss rate: 10.36%

-- Flow 1:

Average throughput: 766.80 Mbit/s

95th percentile per-packet one-way delay: 216.308 ms

Loss rate: 9.55%

-- Flow 2:

Average throughput: 744.25 Mbit/s

95th percentile per-packet one-way delay: 210.635 ms

Loss rate: 10.99%

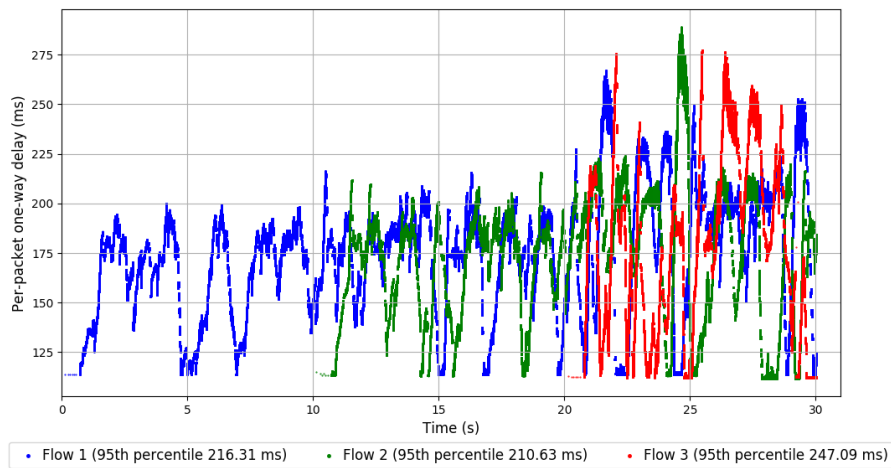
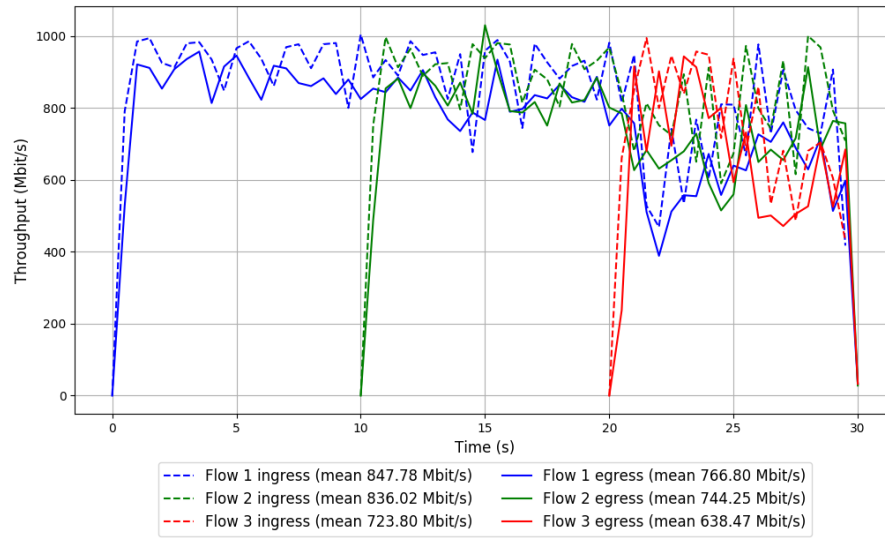
-- Flow 3:

Average throughput: 638.47 Mbit/s

95th percentile per-packet one-way delay: 247.089 ms

Loss rate: 11.79%

Run 10: Report of FillP — Data Link

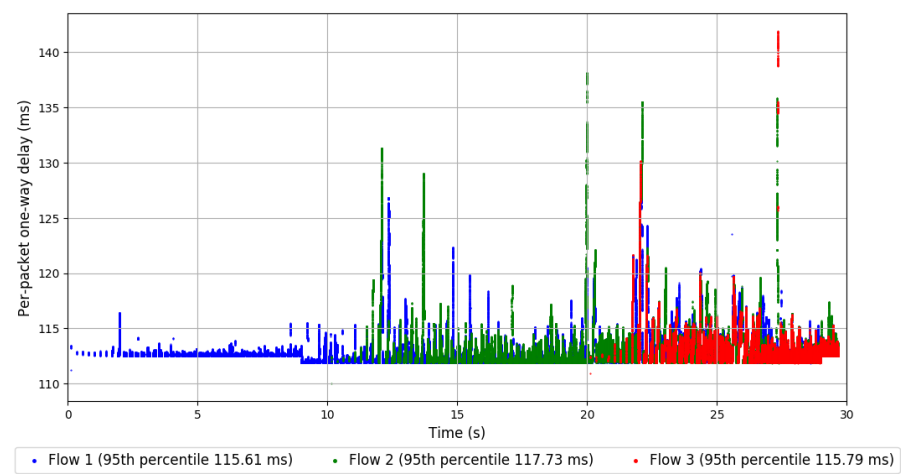
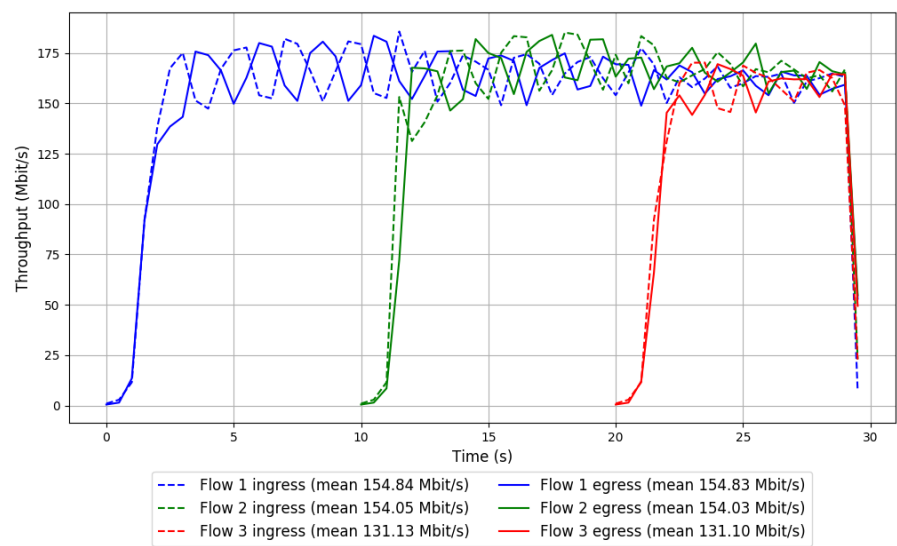


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-13 22:25:23
End at: 2018-02-13 22:25:53

# Below is generated by plot.py at 2018-02-14 05:13:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 298.90 Mbit/s
95th percentile per-packet one-way delay: 116.276 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 154.83 Mbit/s
95th percentile per-packet one-way delay: 115.611 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 154.03 Mbit/s
95th percentile per-packet one-way delay: 117.732 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 131.10 Mbit/s
95th percentile per-packet one-way delay: 115.787 ms
Loss rate: 0.00%
```

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

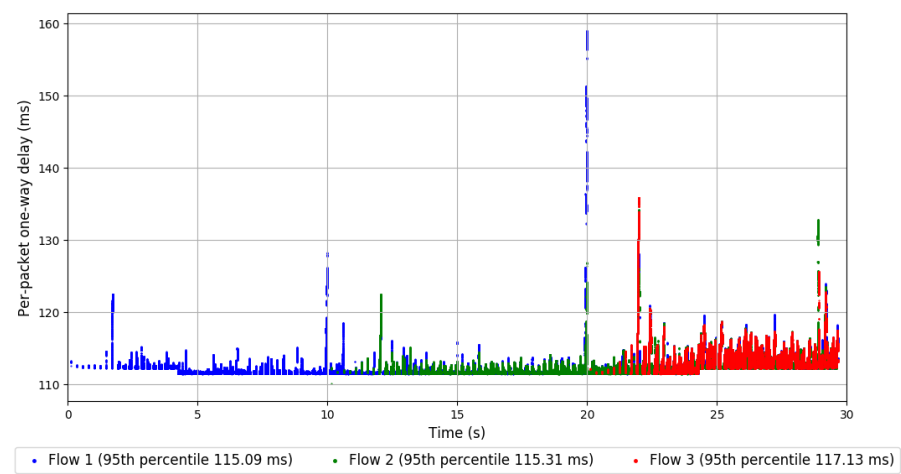
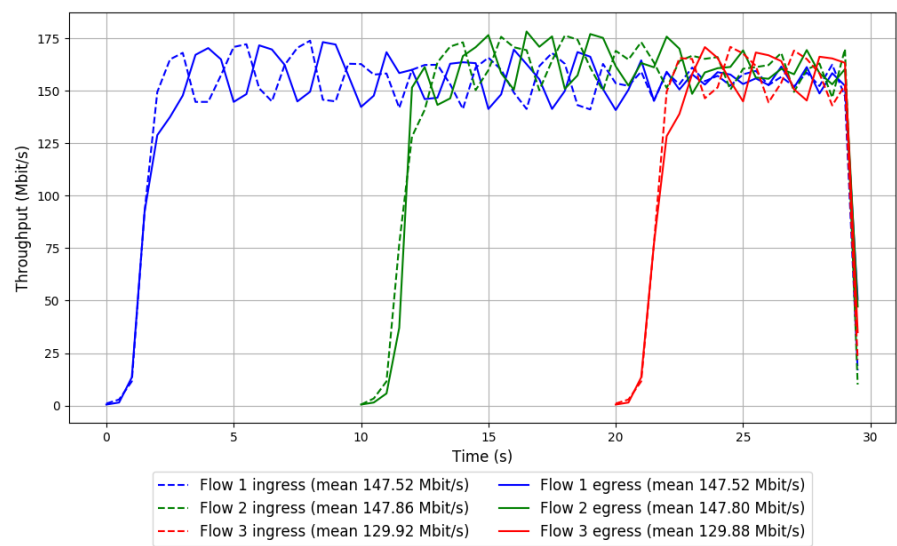


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-13 22:44:47
End at: 2018-02-13 22:45:17

# Below is generated by plot.py at 2018-02-14 05:13:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 286.92 Mbit/s
95th percentile per-packet one-way delay: 115.641 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 147.52 Mbit/s
95th percentile per-packet one-way delay: 115.093 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 147.80 Mbit/s
95th percentile per-packet one-way delay: 115.314 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 129.88 Mbit/s
95th percentile per-packet one-way delay: 117.134 ms
Loss rate: 0.03%
```

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-13 23:04:13

End at: 2018-02-13 23:04:43

Below is generated by plot.py at 2018-02-14 05:13:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 262.14 Mbit/s

95th percentile per-packet one-way delay: 115.052 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 145.71 Mbit/s

95th percentile per-packet one-way delay: 114.904 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 150.66 Mbit/s

95th percentile per-packet one-way delay: 115.246 ms

Loss rate: 0.01%

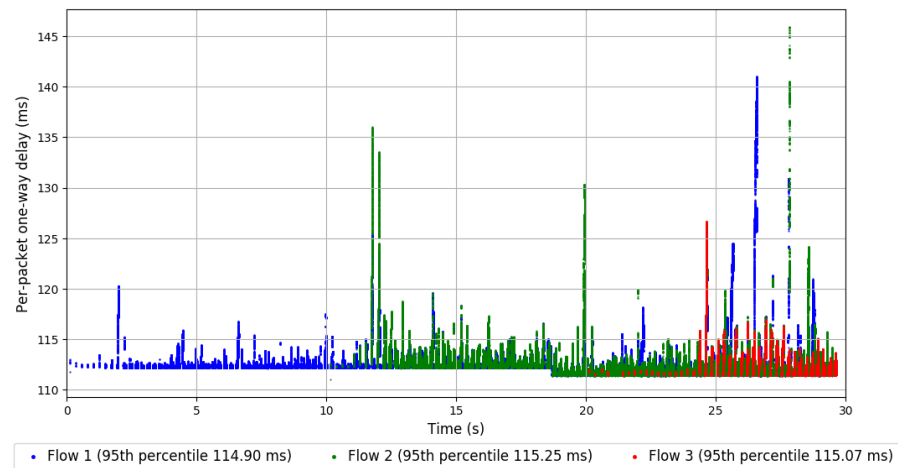
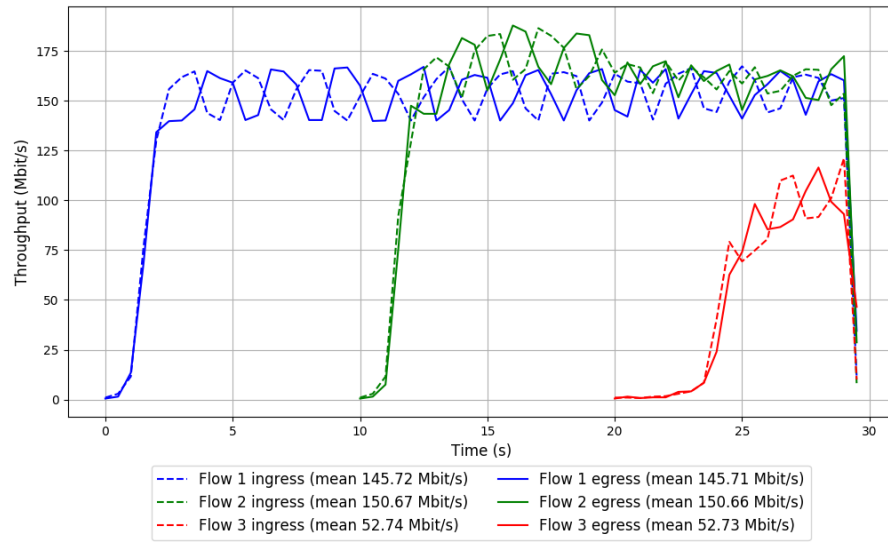
-- Flow 3:

Average throughput: 52.73 Mbit/s

95th percentile per-packet one-way delay: 115.074 ms

Loss rate: 0.00%

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



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-13 23:23:46

End at: 2018-02-13 23:24:16

Below is generated by plot.py at 2018-02-14 05:13:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 289.71 Mbit/s

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

Loss rate: 0.07%

-- Flow 1:

Average throughput: 152.06 Mbit/s

95th percentile per-packet one-way delay: 115.078 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 147.91 Mbit/s

95th percentile per-packet one-way delay: 116.566 ms

Loss rate: 0.17%

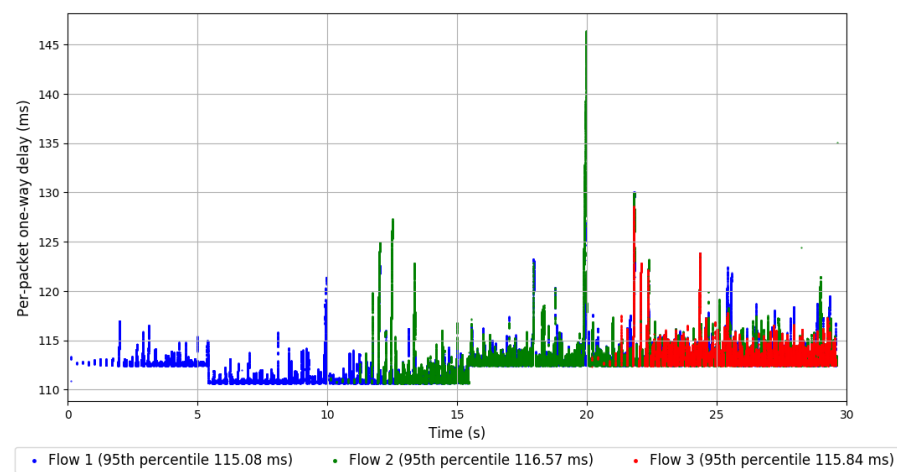
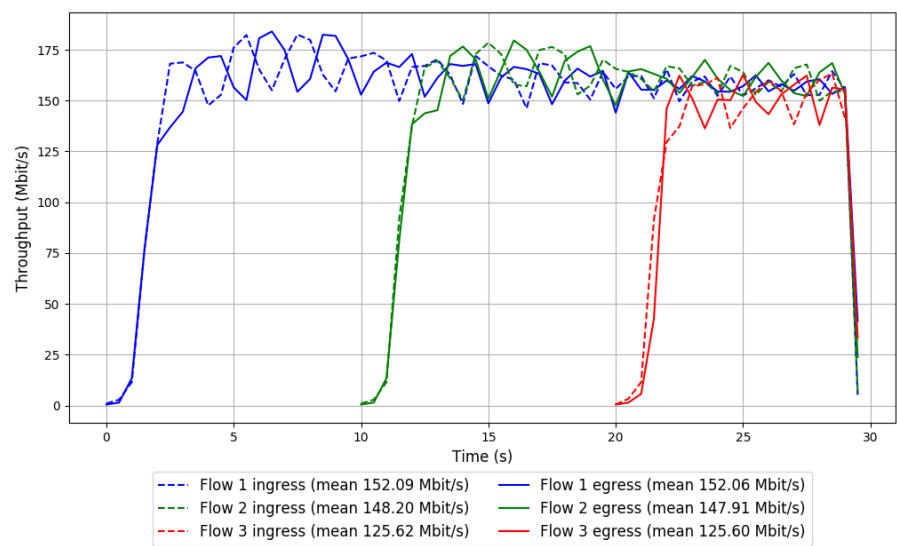
-- Flow 3:

Average throughput: 125.60 Mbit/s

95th percentile per-packet one-way delay: 115.843 ms

Loss rate: 0.01%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-13 23:42:57

End at: 2018-02-13 23:43:27

Below is generated by plot.py at 2018-02-14 05:13:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 286.02 Mbit/s

95th percentile per-packet one-way delay: 118.856 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 147.37 Mbit/s

95th percentile per-packet one-way delay: 117.126 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 150.23 Mbit/s

95th percentile per-packet one-way delay: 119.007 ms

Loss rate: 0.02%

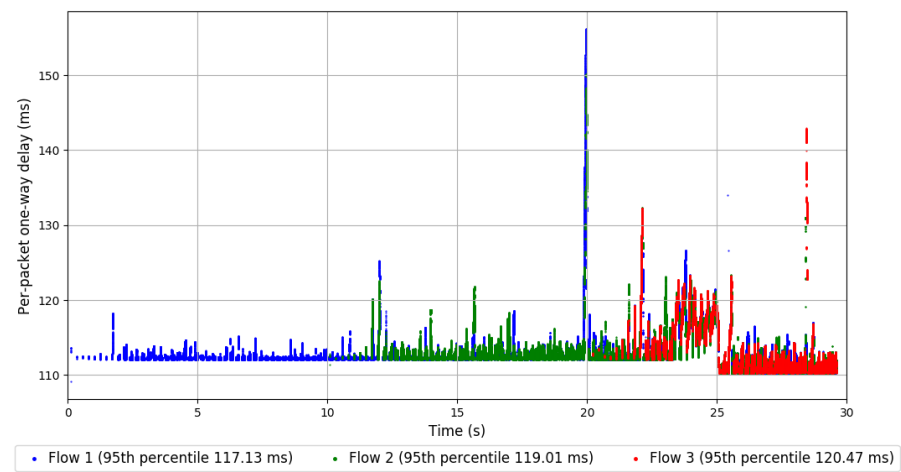
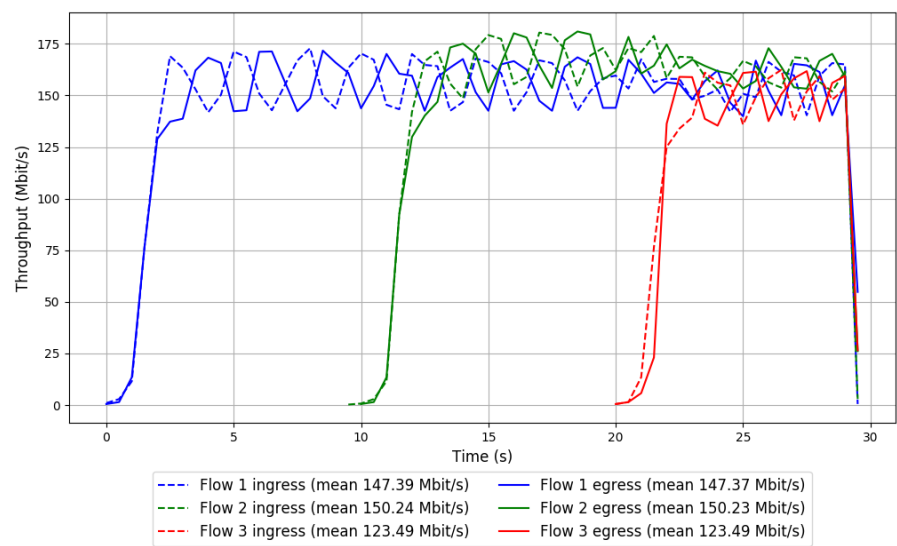
-- Flow 3:

Average throughput: 123.49 Mbit/s

95th percentile per-packet one-way delay: 120.467 ms

Loss rate: 0.02%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-14 00:02:32

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

Below is generated by plot.py at 2018-02-14 05:13:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 291.04 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 149.81 Mbit/s

95th percentile per-packet one-way delay: 115.858 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 148.14 Mbit/s

95th percentile per-packet one-way delay: 117.628 ms

Loss rate: 0.00%

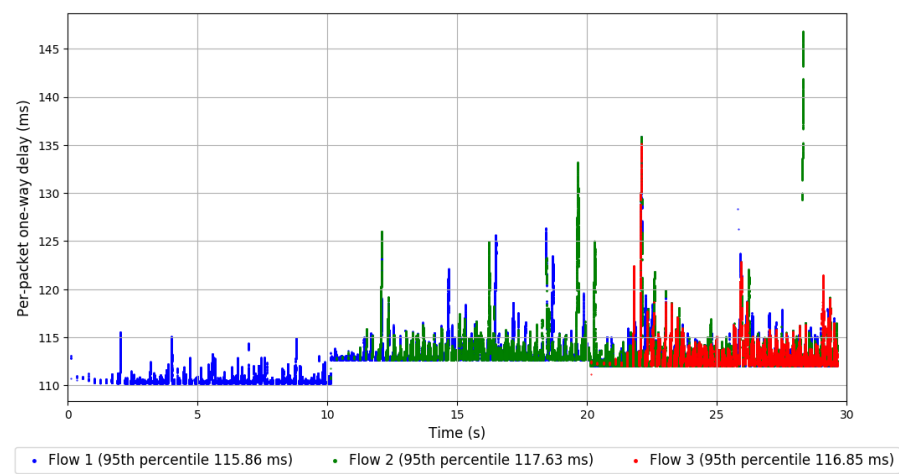
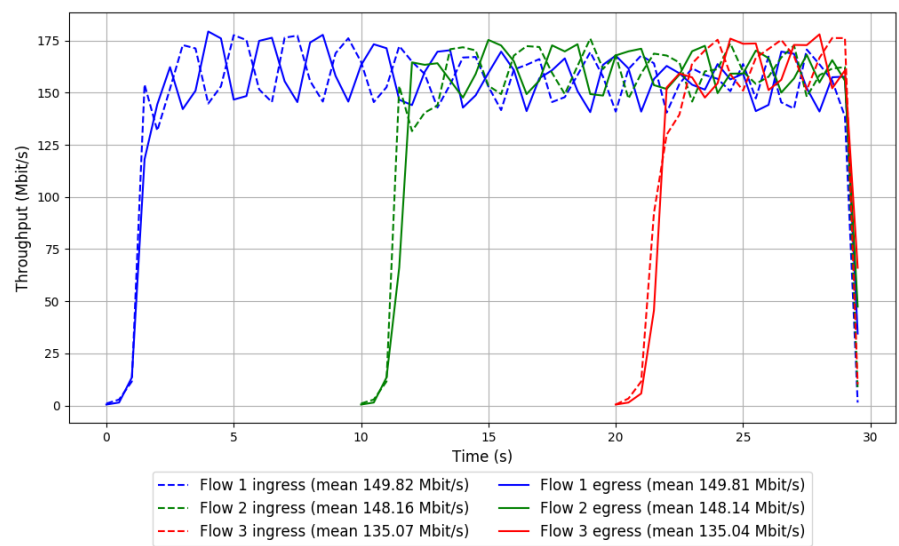
-- Flow 3:

Average throughput: 135.04 Mbit/s

95th percentile per-packet one-way delay: 116.851 ms

Loss rate: 0.01%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-14 00:22:19

End at: 2018-02-14 00:22:49

Below is generated by plot.py at 2018-02-14 05:13:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.45 Mbit/s

95th percentile per-packet one-way delay: 116.977 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 168.50 Mbit/s

95th percentile per-packet one-way delay: 116.309 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 139.35 Mbit/s

95th percentile per-packet one-way delay: 118.469 ms

Loss rate: 0.01%

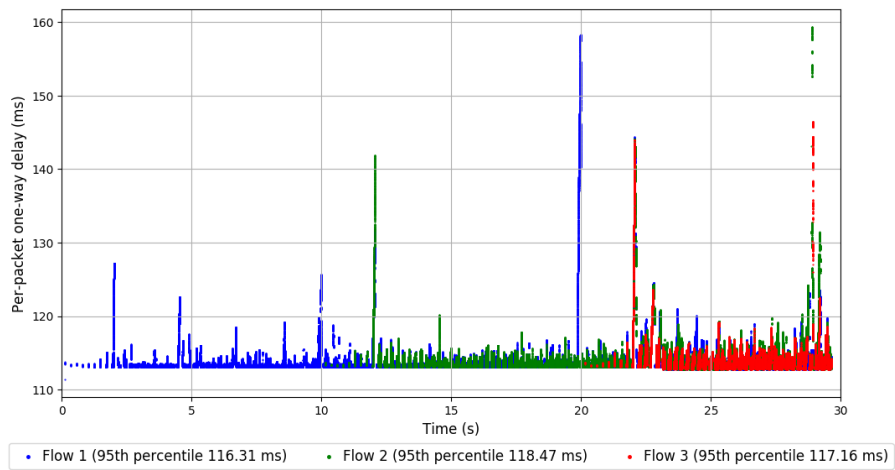
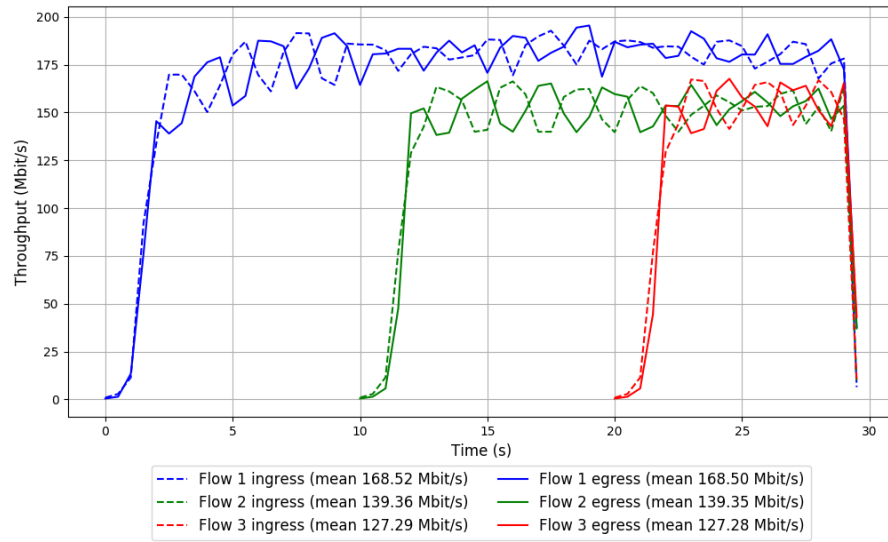
-- Flow 3:

Average throughput: 127.28 Mbit/s

95th percentile per-packet one-way delay: 117.157 ms

Loss rate: 0.01%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-14 00:41:50

End at: 2018-02-14 00:42:20

Below is generated by plot.py at 2018-02-14 05:13:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 285.32 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 147.53 Mbit/s

95th percentile per-packet one-way delay: 116.371 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 145.18 Mbit/s

95th percentile per-packet one-way delay: 116.033 ms

Loss rate: 0.01%

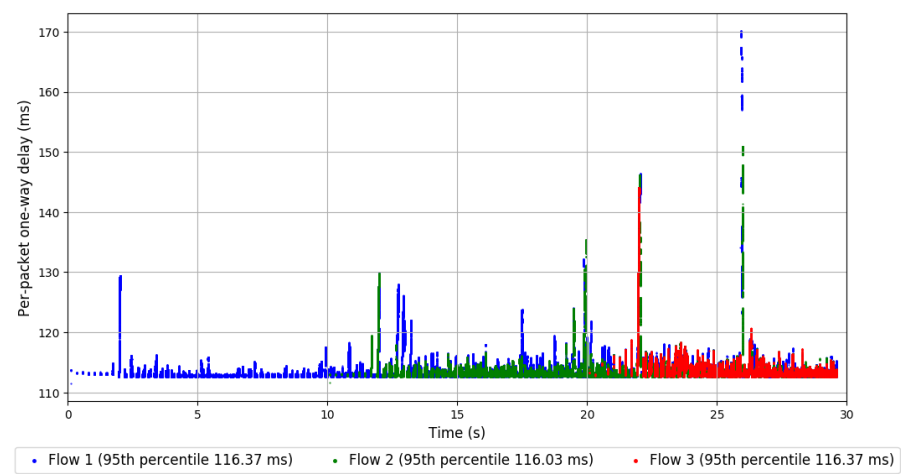
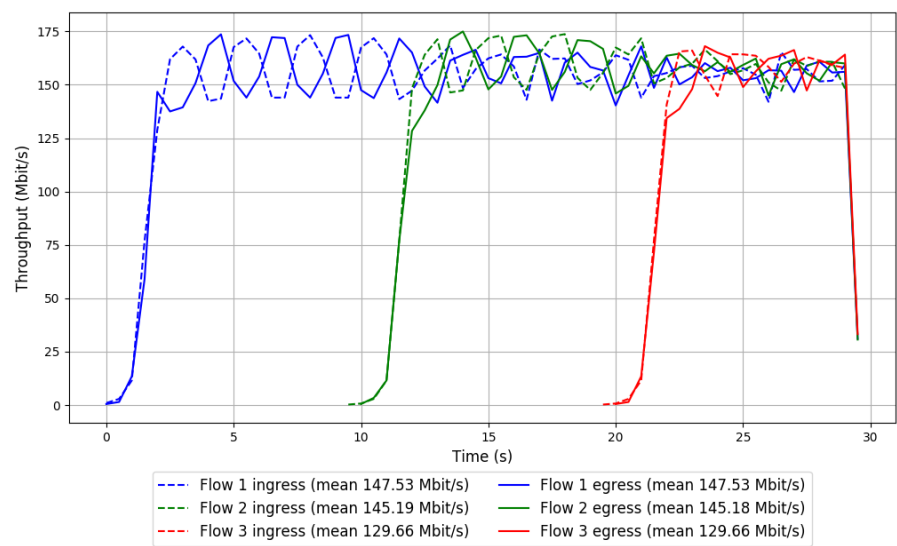
-- Flow 3:

Average throughput: 129.66 Mbit/s

95th percentile per-packet one-way delay: 116.371 ms

Loss rate: 0.01%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-14 01:01:04

End at: 2018-02-14 01:01:34

Below is generated by plot.py at 2018-02-14 05:13:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 296.99 Mbit/s

95th percentile per-packet one-way delay: 116.183 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 161.34 Mbit/s

95th percentile per-packet one-way delay: 115.430 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 140.41 Mbit/s

95th percentile per-packet one-way delay: 115.950 ms

Loss rate: 0.00%

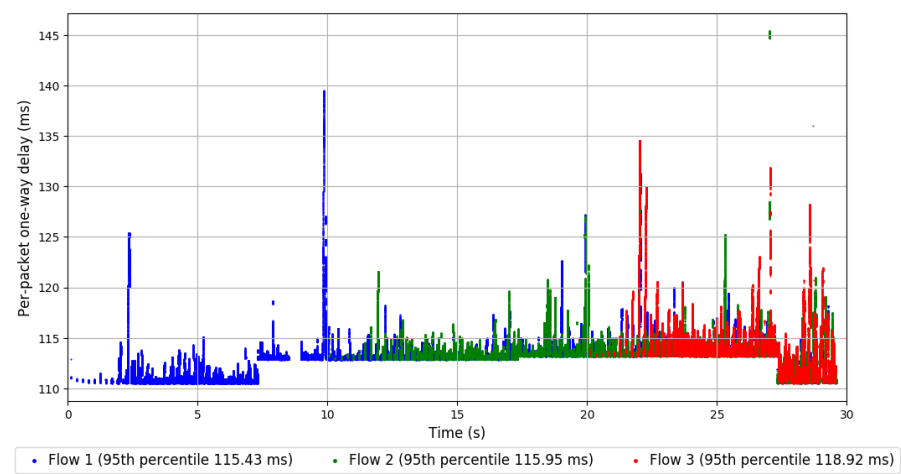
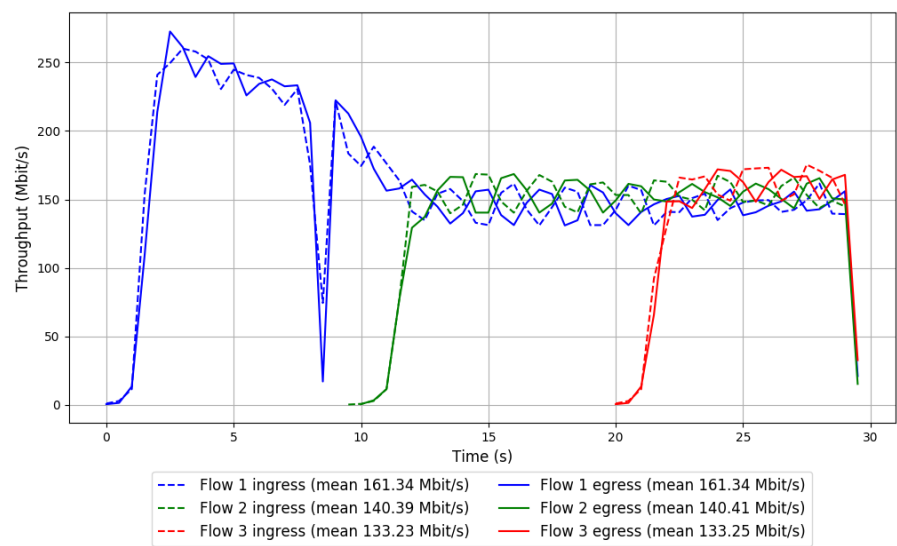
-- Flow 3:

Average throughput: 133.25 Mbit/s

95th percentile per-packet one-way delay: 118.925 ms

Loss rate: 0.00%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-14 01:20:15

End at: 2018-02-14 01:20:45

Below is generated by plot.py at 2018-02-14 05:13:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 284.33 Mbit/s

95th percentile per-packet one-way delay: 115.882 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 146.18 Mbit/s

95th percentile per-packet one-way delay: 115.886 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 145.02 Mbit/s

95th percentile per-packet one-way delay: 115.929 ms

Loss rate: 0.00%

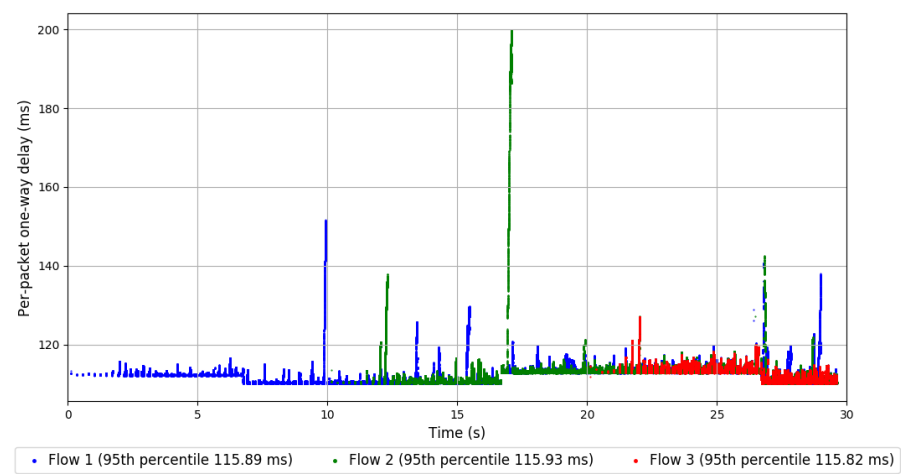
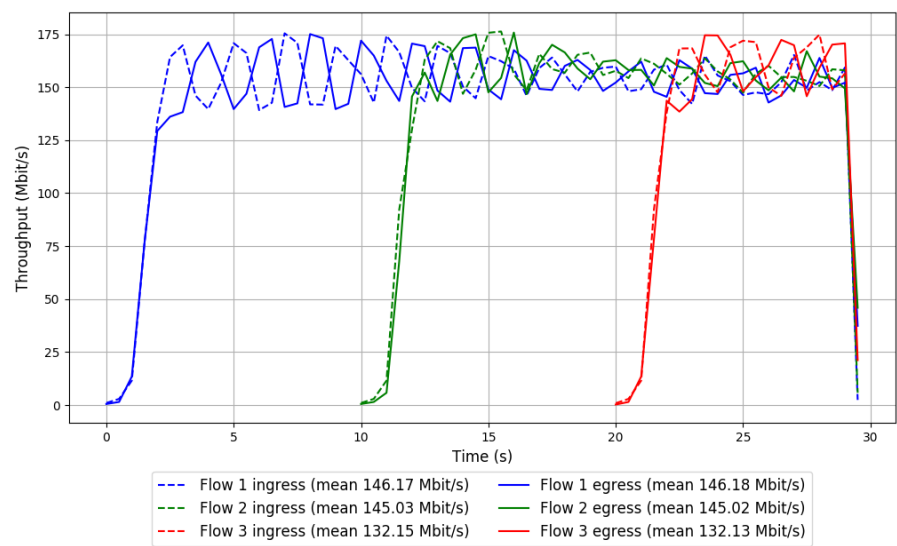
-- Flow 3:

Average throughput: 132.13 Mbit/s

95th percentile per-packet one-way delay: 115.816 ms

Loss rate: 0.01%

Run 10: Report of Indigo-1-32 — Data Link

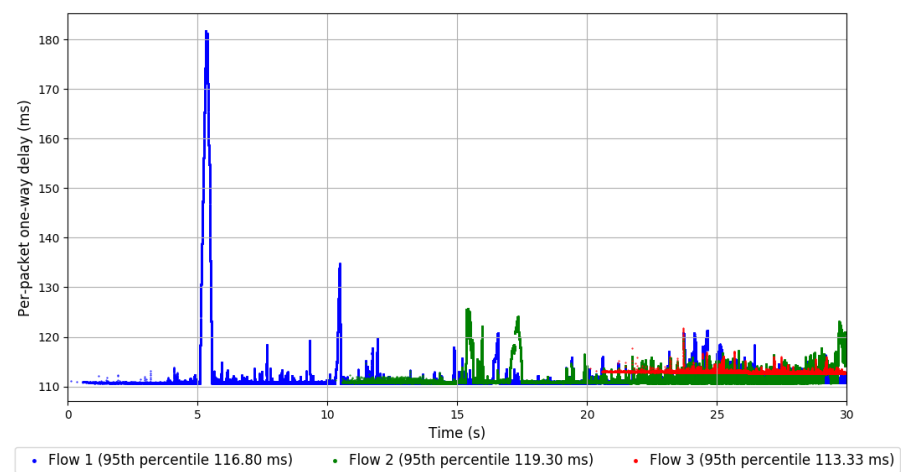
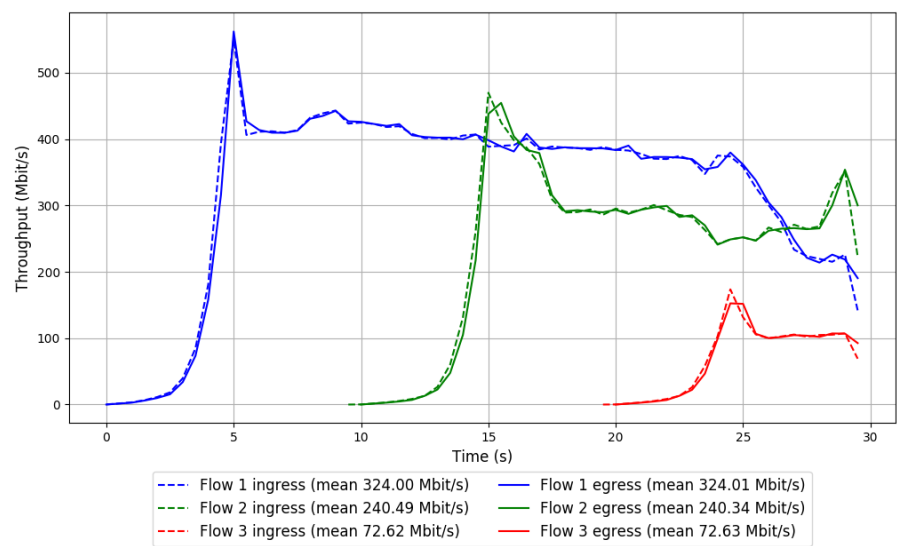


```
Run 1: Statistics of Vivace-latency

Start at: 2018-02-13 22:09:40
End at: 2018-02-13 22:10:10

# Below is generated by plot.py at 2018-02-14 05:13:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 507.75 Mbit/s
95th percentile per-packet one-way delay: 117.688 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 324.01 Mbit/s
95th percentile per-packet one-way delay: 116.796 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 240.34 Mbit/s
95th percentile per-packet one-way delay: 119.303 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 72.63 Mbit/s
95th percentile per-packet one-way delay: 113.334 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-13 22:29:21

End at: 2018-02-13 22:29:51

Below is generated by plot.py at 2018-02-14 05:13:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 489.38 Mbit/s

95th percentile per-packet one-way delay: 167.836 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 311.07 Mbit/s

95th percentile per-packet one-way delay: 136.904 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 175.16 Mbit/s

95th percentile per-packet one-way delay: 115.266 ms

Loss rate: 0.00%

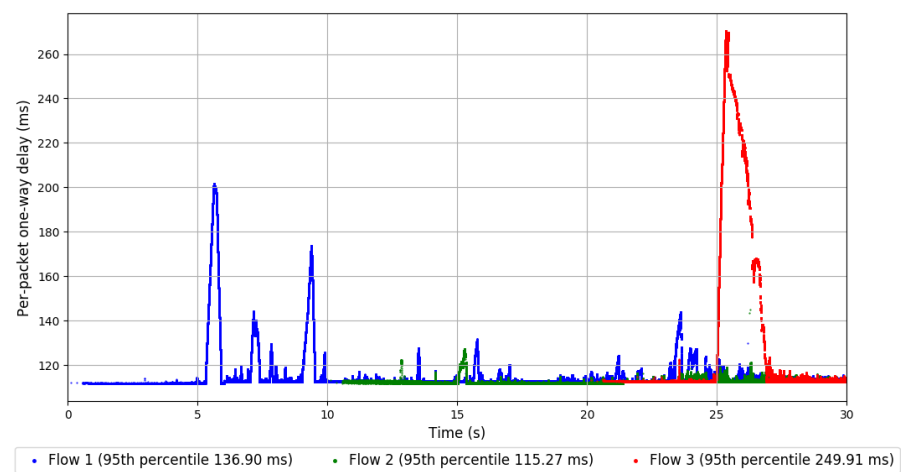
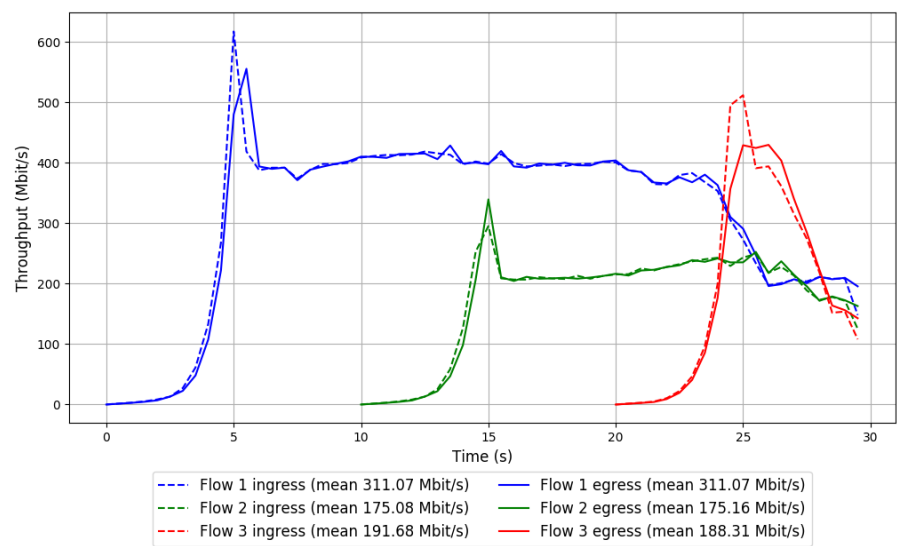
-- Flow 3:

Average throughput: 188.31 Mbit/s

95th percentile per-packet one-way delay: 249.912 ms

Loss rate: 1.76%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-13 22:48:47

End at: 2018-02-13 22:49:17

Below is generated by plot.py at 2018-02-14 05:13:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 481.43 Mbit/s

95th percentile per-packet one-way delay: 177.673 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 320.52 Mbit/s

95th percentile per-packet one-way delay: 175.341 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 187.88 Mbit/s

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

Loss rate: 0.00%

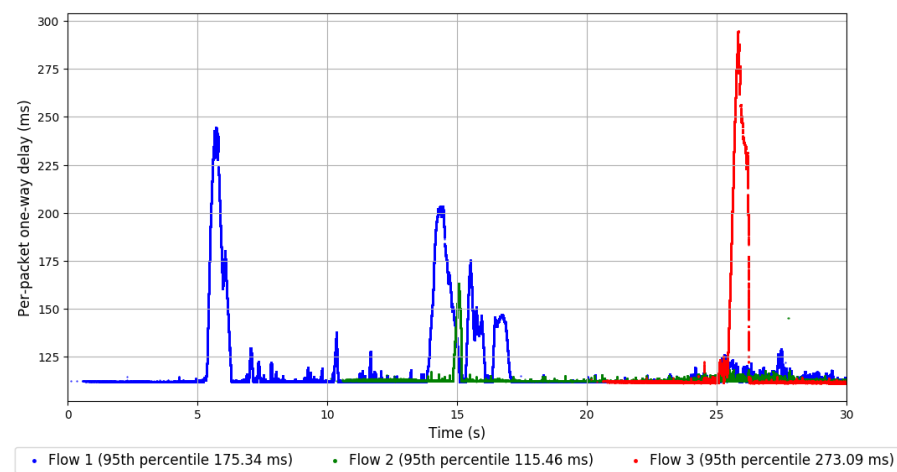
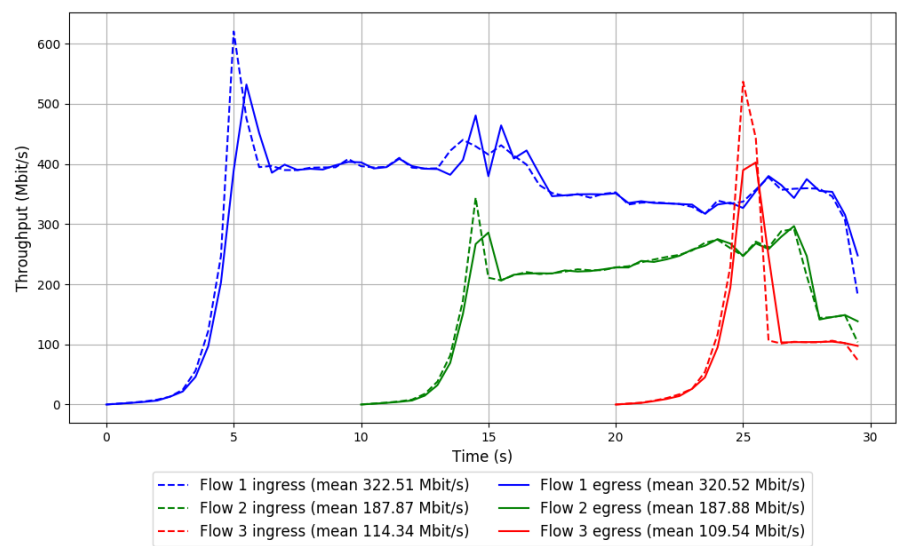
-- Flow 3:

Average throughput: 109.54 Mbit/s

95th percentile per-packet one-way delay: 273.086 ms

Loss rate: 4.22%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-13 23:08:14

End at: 2018-02-13 23:08:44

Below is generated by plot.py at 2018-02-14 05:13:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 506.82 Mbit/s

95th percentile per-packet one-way delay: 172.235 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 269.18 Mbit/s

95th percentile per-packet one-way delay: 178.391 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 291.37 Mbit/s

95th percentile per-packet one-way delay: 175.468 ms

Loss rate: 0.93%

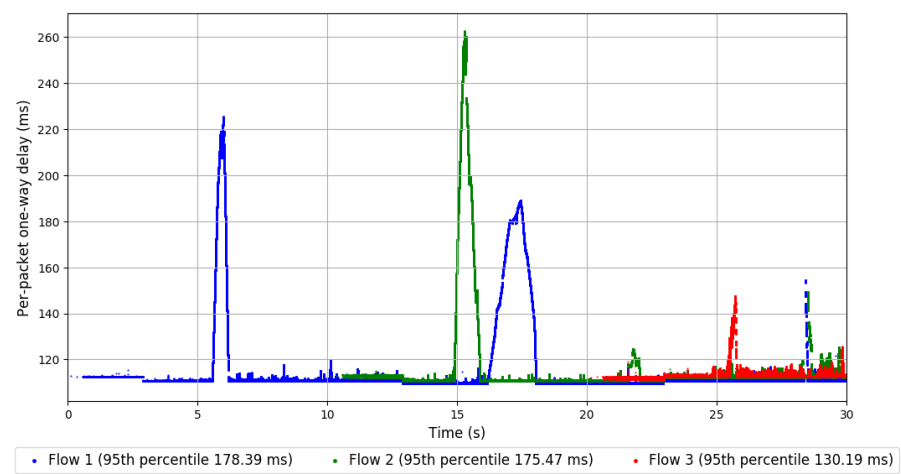
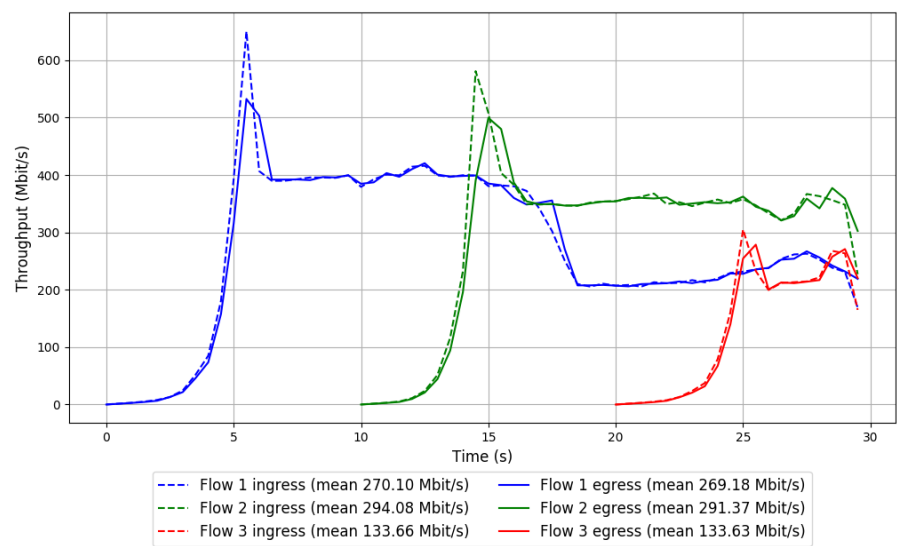
-- Flow 3:

Average throughput: 133.63 Mbit/s

95th percentile per-packet one-way delay: 130.194 ms

Loss rate: 0.03%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-13 23:27:42

End at: 2018-02-13 23:28:12

Below is generated by plot.py at 2018-02-14 05:13:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 427.51 Mbit/s

95th percentile per-packet one-way delay: 116.084 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 250.96 Mbit/s

95th percentile per-packet one-way delay: 115.853 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 203.97 Mbit/s

95th percentile per-packet one-way delay: 115.562 ms

Loss rate: 0.00%

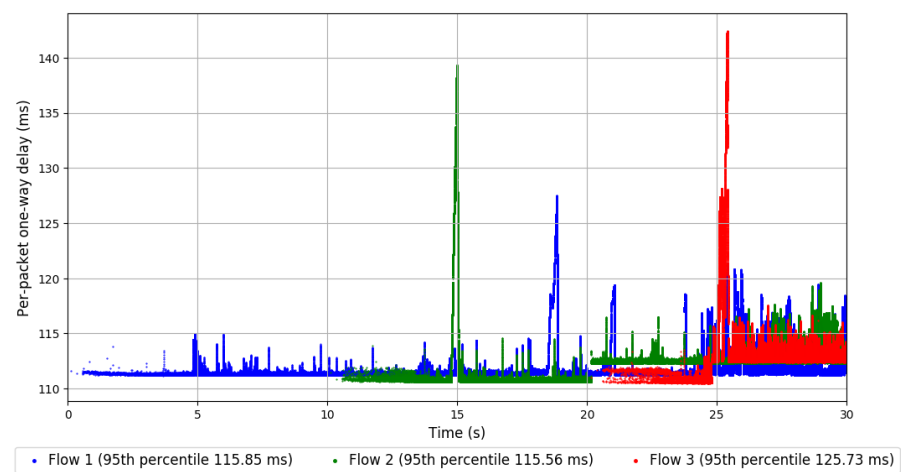
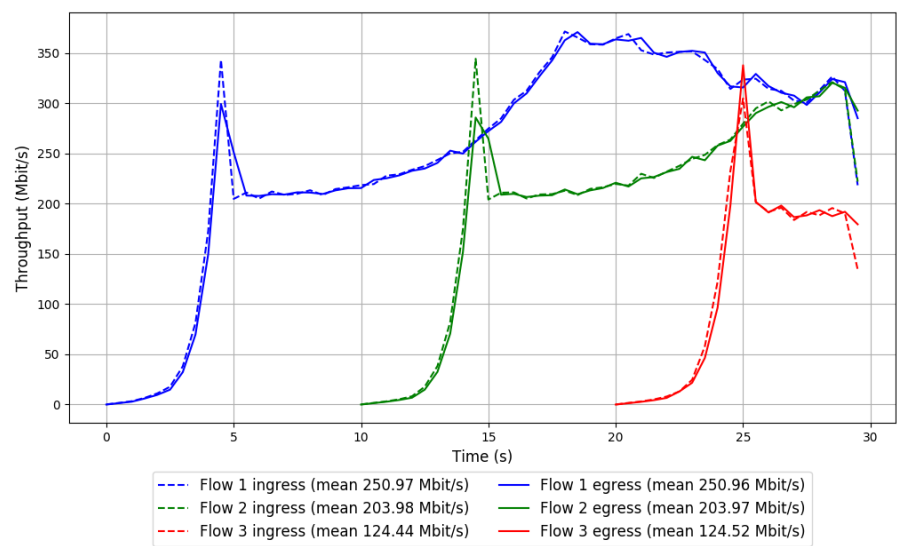
-- Flow 3:

Average throughput: 124.52 Mbit/s

95th percentile per-packet one-way delay: 125.729 ms

Loss rate: 0.00%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-13 23:46:54

End at: 2018-02-13 23:47:24

Below is generated by plot.py at 2018-02-14 05:13:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 516.44 Mbit/s

95th percentile per-packet one-way delay: 262.797 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 327.66 Mbit/s

95th percentile per-packet one-way delay: 147.835 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 272.78 Mbit/s

95th percentile per-packet one-way delay: 266.539 ms

Loss rate: 3.06%

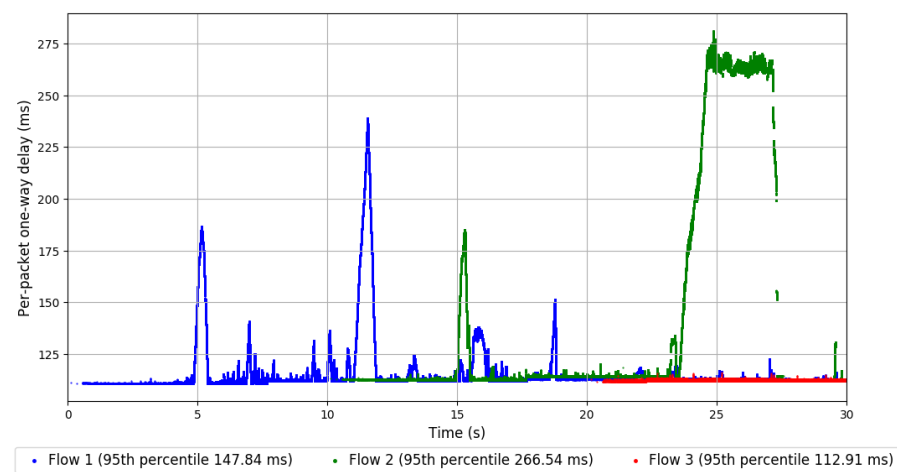
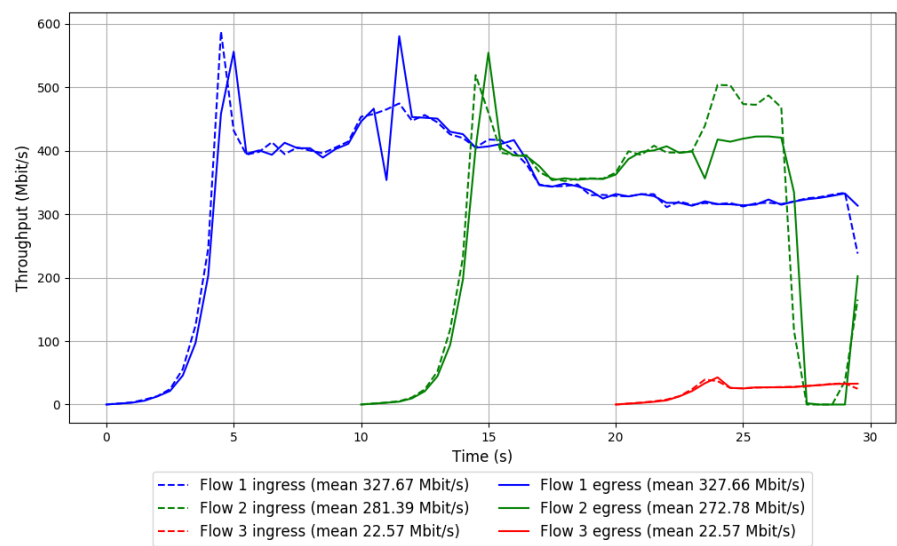
-- Flow 3:

Average throughput: 22.57 Mbit/s

95th percentile per-packet one-way delay: 112.909 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-14 00:06:32

End at: 2018-02-14 00:07:02

Below is generated by plot.py at 2018-02-14 05:13:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 516.36 Mbit/s

95th percentile per-packet one-way delay: 139.893 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 272.82 Mbit/s

95th percentile per-packet one-way delay: 122.638 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 290.34 Mbit/s

95th percentile per-packet one-way delay: 145.626 ms

Loss rate: 0.84%

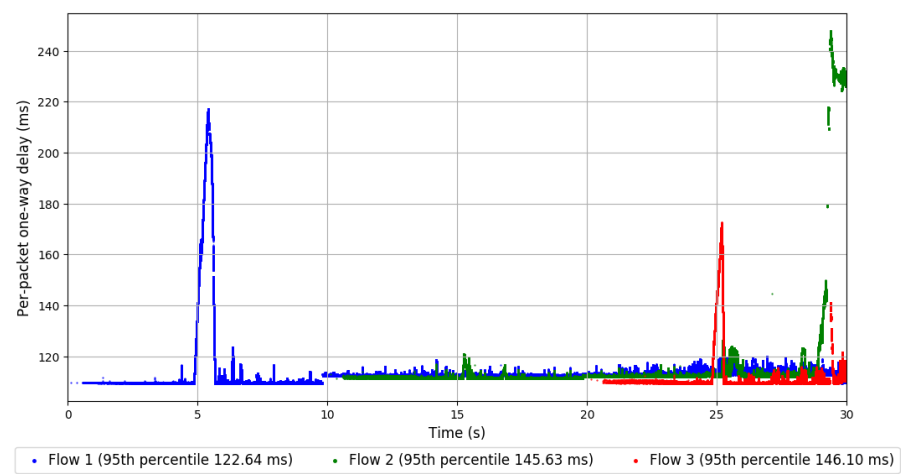
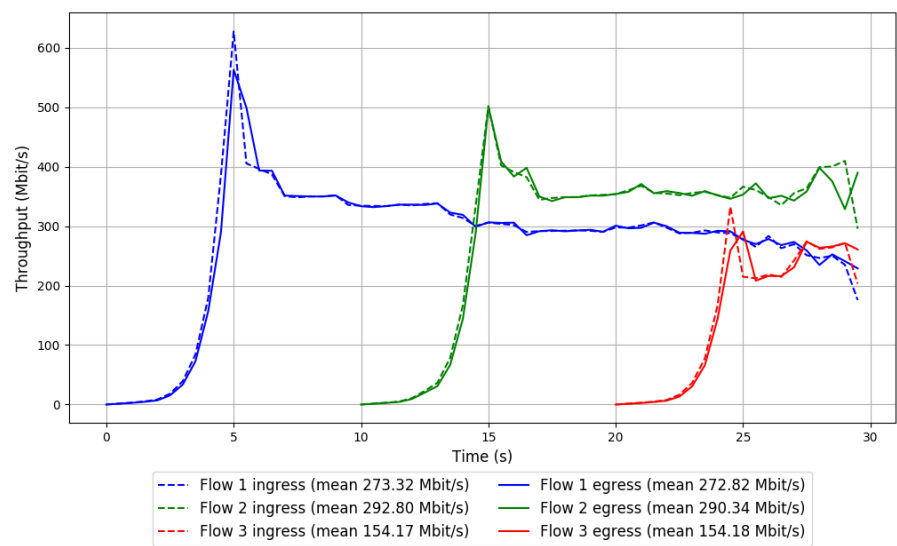
-- Flow 3:

Average throughput: 154.18 Mbit/s

95th percentile per-packet one-way delay: 146.099 ms

Loss rate: 0.00%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-14 00:26:27

End at: 2018-02-14 00:26:57

Below is generated by plot.py at 2018-02-14 05:13:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 470.65 Mbit/s

95th percentile per-packet one-way delay: 155.721 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 247.38 Mbit/s

95th percentile per-packet one-way delay: 119.019 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 268.54 Mbit/s

95th percentile per-packet one-way delay: 174.527 ms

Loss rate: 0.00%

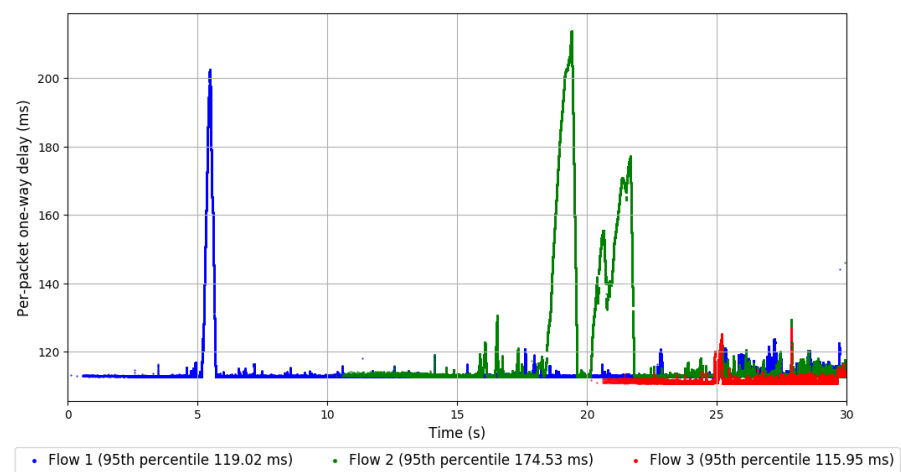
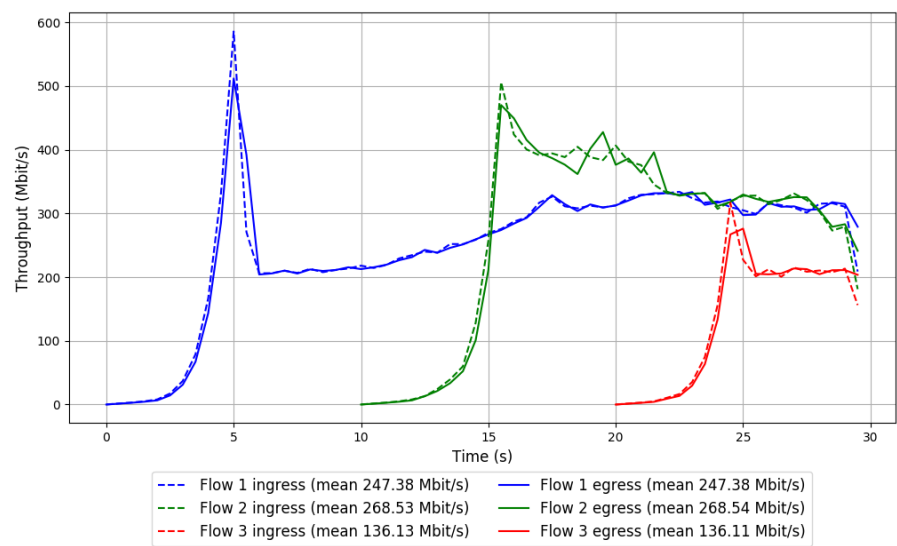
-- Flow 3:

Average throughput: 136.11 Mbit/s

95th percentile per-packet one-way delay: 115.952 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-14 00:45:47

End at: 2018-02-14 00:46:17

Below is generated by plot.py at 2018-02-14 05:13:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 387.99 Mbit/s

95th percentile per-packet one-way delay: 117.470 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 208.08 Mbit/s

95th percentile per-packet one-way delay: 115.712 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 209.27 Mbit/s

95th percentile per-packet one-way delay: 206.715 ms

Loss rate: 1.51%

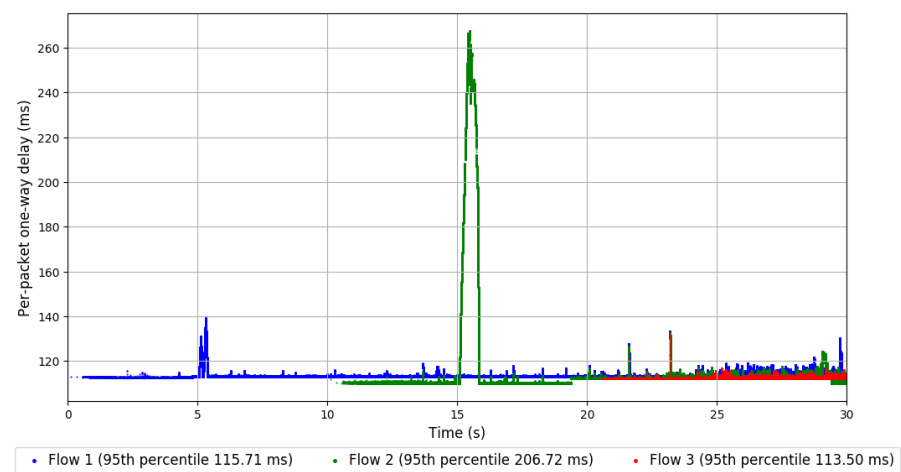
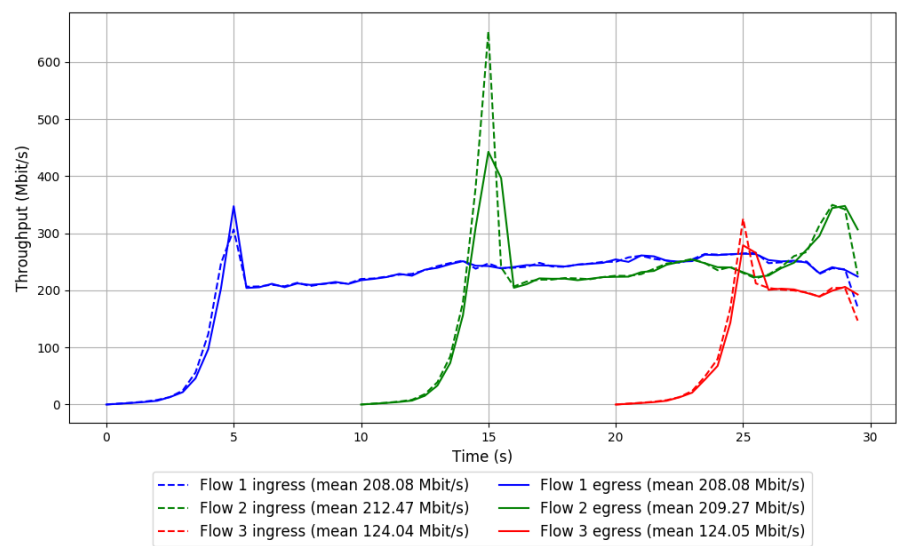
-- Flow 3:

Average throughput: 124.05 Mbit/s

95th percentile per-packet one-way delay: 113.499 ms

Loss rate: 0.00%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-14 01:05:04

End at: 2018-02-14 01:05:34

Below is generated by plot.py at 2018-02-14 05:13:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 494.45 Mbit/s

95th percentile per-packet one-way delay: 154.200 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 318.39 Mbit/s

95th percentile per-packet one-way delay: 155.512 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 200.77 Mbit/s

95th percentile per-packet one-way delay: 167.441 ms

Loss rate: 0.00%

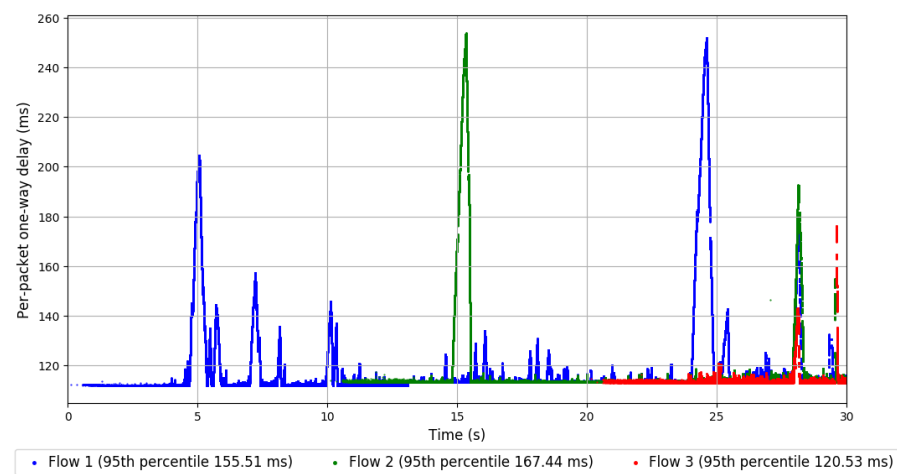
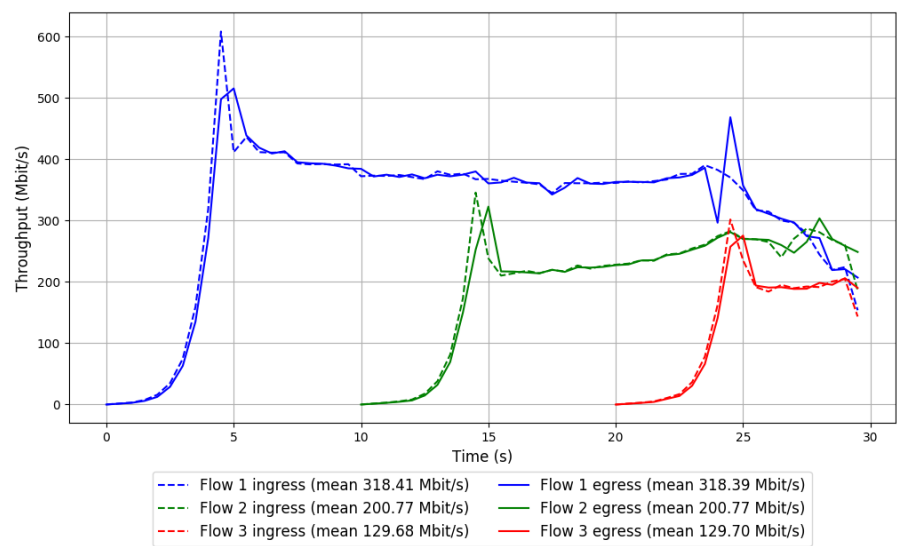
-- Flow 3:

Average throughput: 129.70 Mbit/s

95th percentile per-packet one-way delay: 120.526 ms

Loss rate: 0.00%

Run 10: Report of Vivace-latency — Data Link

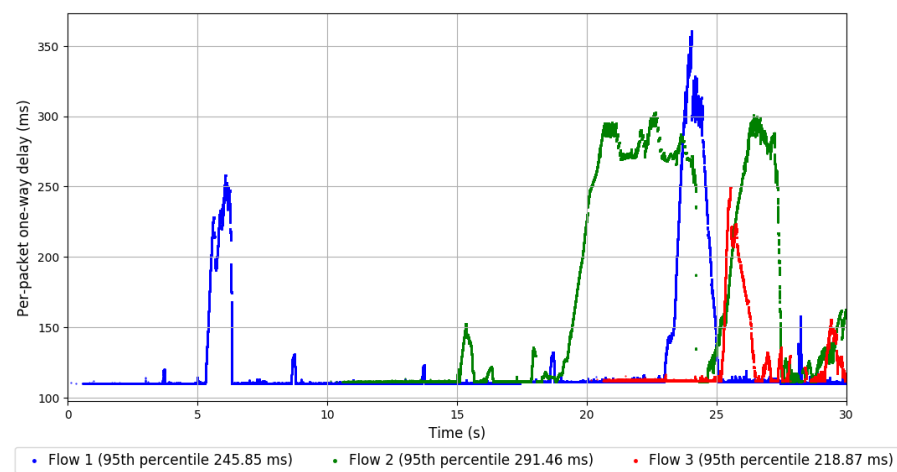
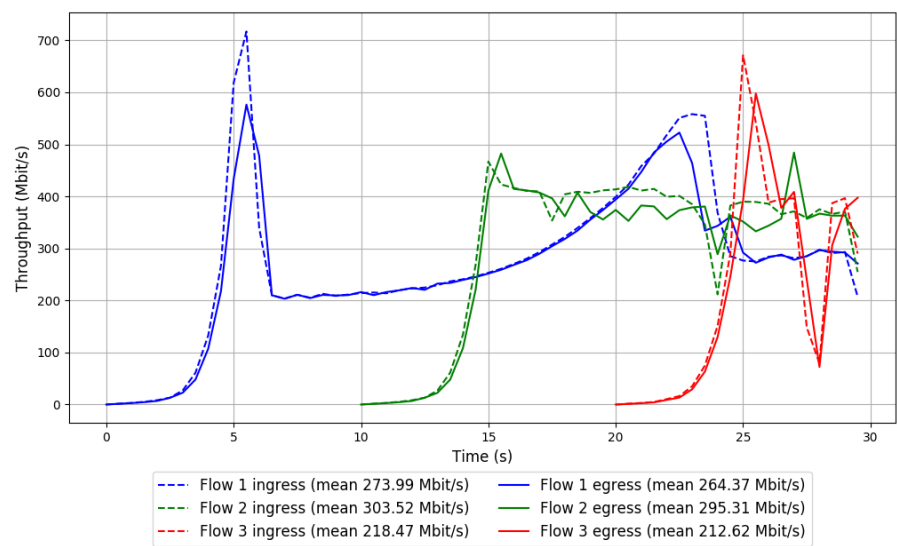


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-13 22:23:55
End at: 2018-02-13 22:24:25

# Below is generated by plot.py at 2018-02-14 05:13:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 530.39 Mbit/s
95th percentile per-packet one-way delay: 286.863 ms
Loss rate: 3.10%
-- Flow 1:
Average throughput: 264.37 Mbit/s
95th percentile per-packet one-way delay: 245.852 ms
Loss rate: 3.51%
-- Flow 2:
Average throughput: 295.31 Mbit/s
95th percentile per-packet one-way delay: 291.464 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 212.62 Mbit/s
95th percentile per-packet one-way delay: 218.872 ms
Loss rate: 2.66%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-02-13 22:43:29

End at: 2018-02-13 22:43:59

Below is generated by plot.py at 2018-02-14 05:13:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 376.68 Mbit/s

95th percentile per-packet one-way delay: 254.652 ms

Loss rate: 4.17%

-- Flow 1:

Average throughput: 203.81 Mbit/s

95th percentile per-packet one-way delay: 247.018 ms

Loss rate: 2.05%

-- Flow 2:

Average throughput: 214.26 Mbit/s

95th percentile per-packet one-way delay: 234.266 ms

Loss rate: 2.64%

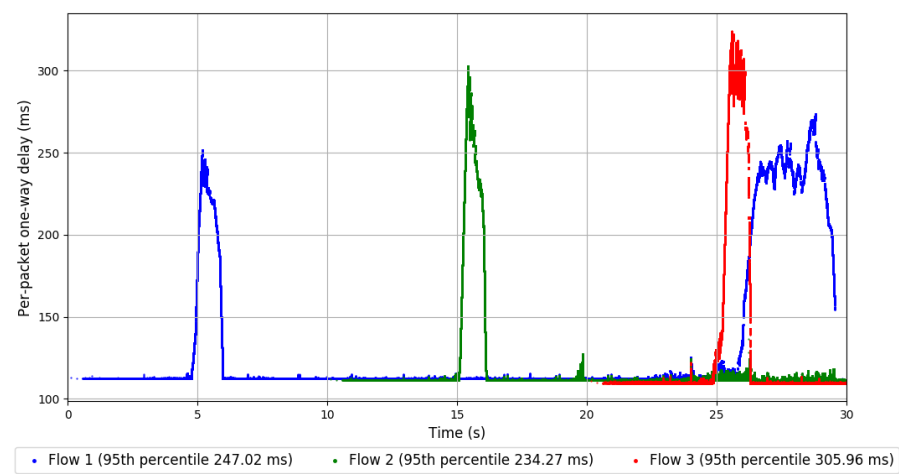
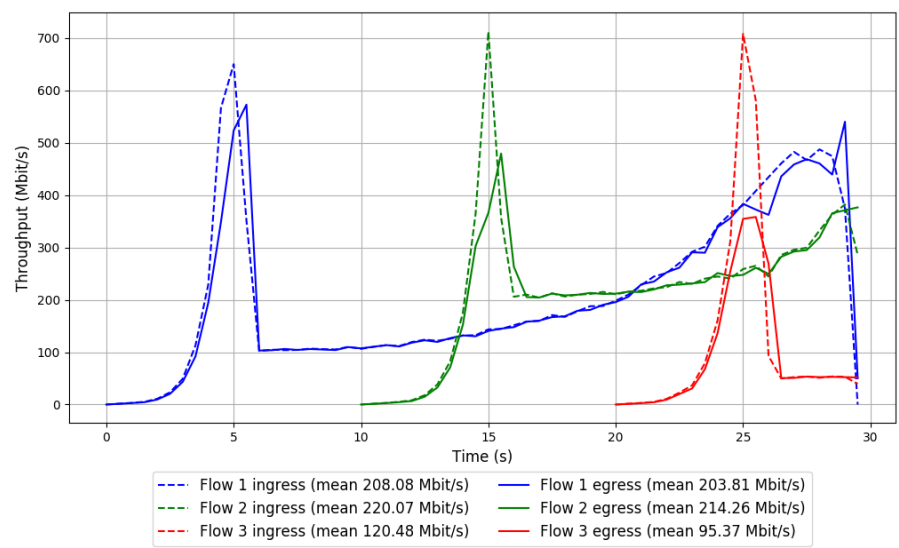
-- Flow 3:

Average throughput: 95.37 Mbit/s

95th percentile per-packet one-way delay: 305.965 ms

Loss rate: 20.84%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-13 23:02:42

End at: 2018-02-13 23:03:12

Below is generated by plot.py at 2018-02-14 05:19:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 574.58 Mbit/s

95th percentile per-packet one-way delay: 310.039 ms

Loss rate: 4.56%

-- Flow 1:

Average throughput: 362.36 Mbit/s

95th percentile per-packet one-way delay: 271.946 ms

Loss rate: 1.95%

-- Flow 2:

Average throughput: 246.91 Mbit/s

95th percentile per-packet one-way delay: 322.676 ms

Loss rate: 11.00%

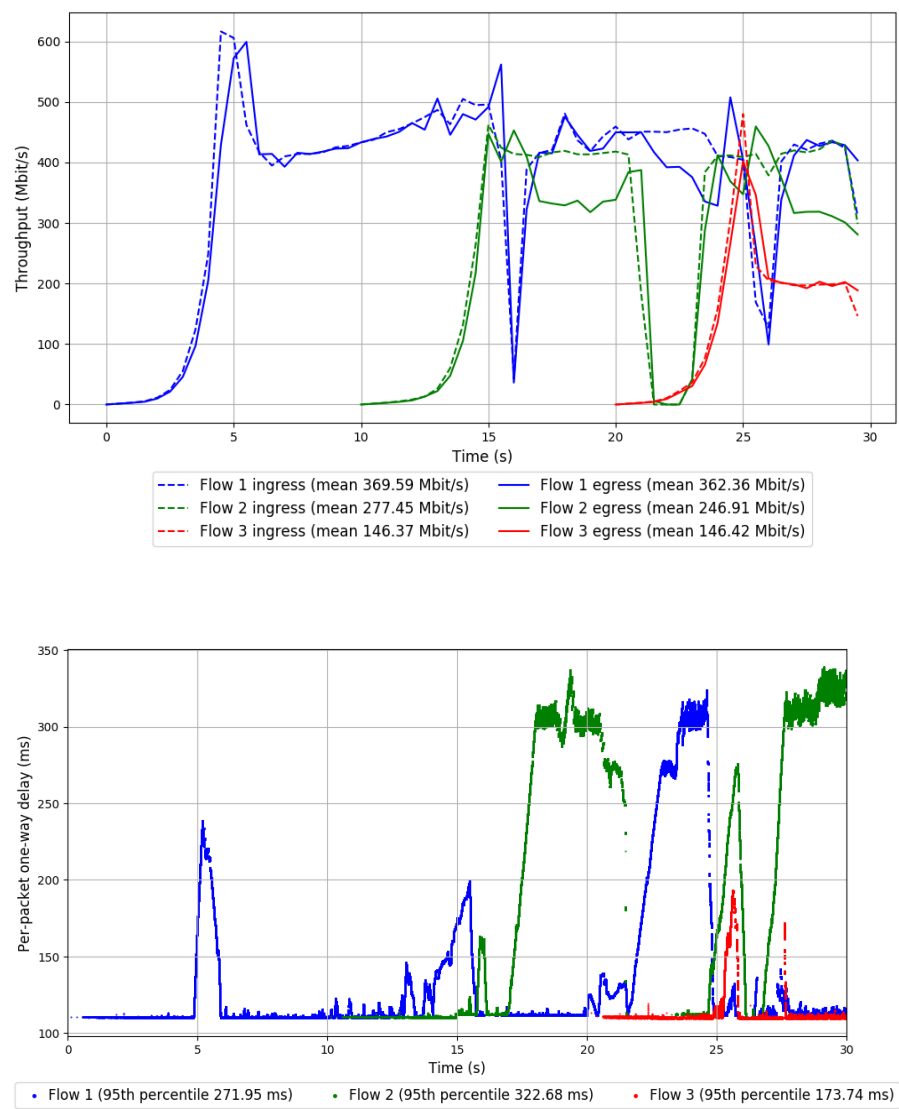
-- Flow 3:

Average throughput: 146.42 Mbit/s

95th percentile per-packet one-way delay: 173.738 ms

Loss rate: 0.00%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-13 23:22:22

End at: 2018-02-13 23:22:52

Below is generated by plot.py at 2018-02-14 05:19:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 472.67 Mbit/s

95th percentile per-packet one-way delay: 245.597 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 180.88 Mbit/s

95th percentile per-packet one-way delay: 285.704 ms

Loss rate: 2.11%

-- Flow 2:

Average throughput: 333.11 Mbit/s

95th percentile per-packet one-way delay: 220.764 ms

Loss rate: 0.39%

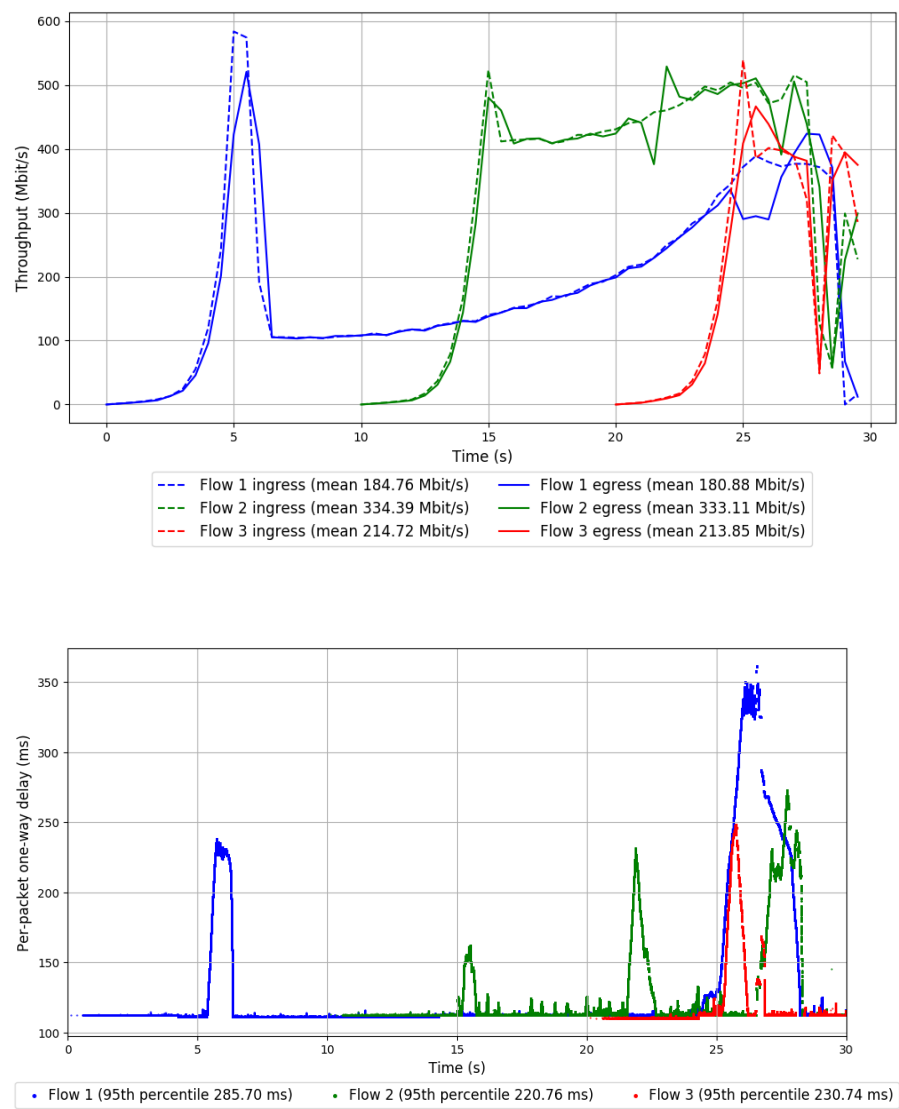
-- Flow 3:

Average throughput: 213.85 Mbit/s

95th percentile per-packet one-way delay: 230.741 ms

Loss rate: 0.40%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-13 23:41:33

End at: 2018-02-13 23:42:03

Below is generated by plot.py at 2018-02-14 05:19:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 453.60 Mbit/s

95th percentile per-packet one-way delay: 240.113 ms

Loss rate: 2.54%

-- Flow 1:

Average throughput: 268.65 Mbit/s

95th percentile per-packet one-way delay: 240.843 ms

Loss rate: 3.55%

-- Flow 2:

Average throughput: 204.80 Mbit/s

95th percentile per-packet one-way delay: 152.965 ms

Loss rate: 0.01%

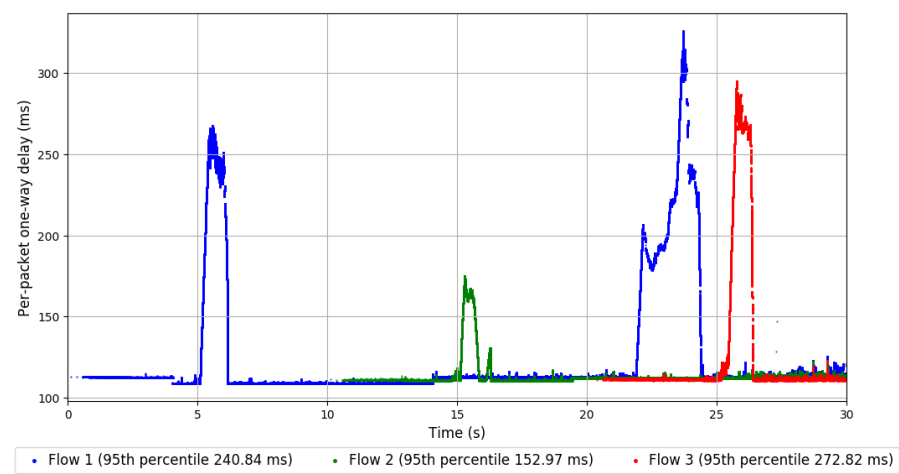
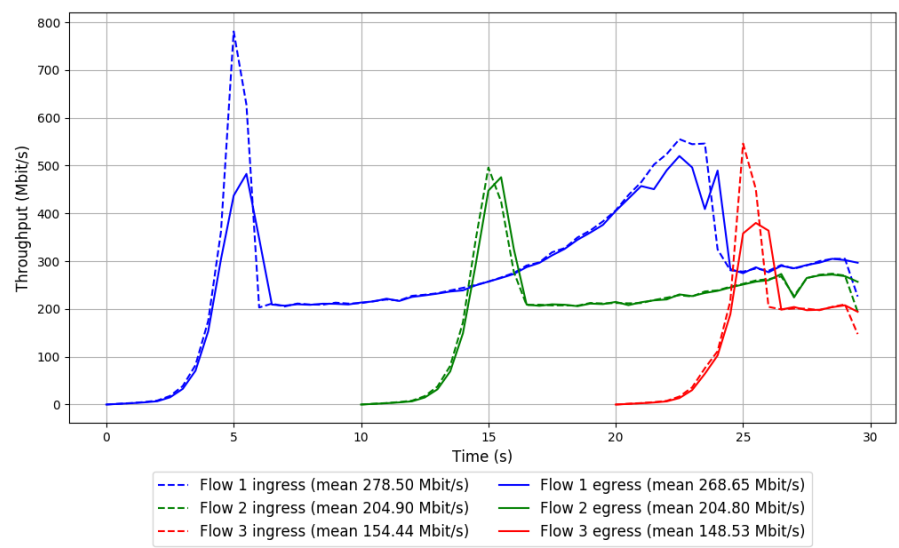
-- Flow 3:

Average throughput: 148.53 Mbit/s

95th percentile per-packet one-way delay: 272.824 ms

Loss rate: 3.77%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-14 00:01:17

End at: 2018-02-14 00:01:47

Below is generated by plot.py at 2018-02-14 05:19:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 338.06 Mbit/s

95th percentile per-packet one-way delay: 256.713 ms

Loss rate: 6.79%

-- Flow 1:

Average throughput: 205.43 Mbit/s

95th percentile per-packet one-way delay: 251.650 ms

Loss rate: 4.27%

-- Flow 2:

Average throughput: 120.32 Mbit/s

95th percentile per-packet one-way delay: 337.890 ms

Loss rate: 10.95%

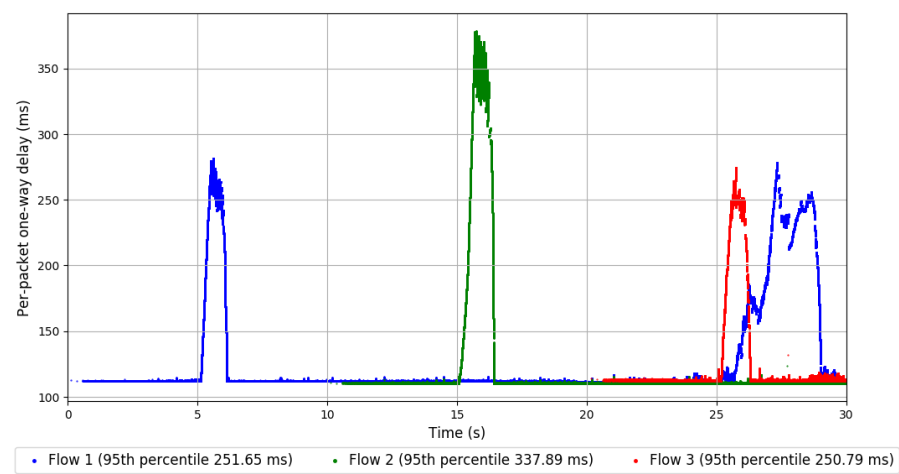
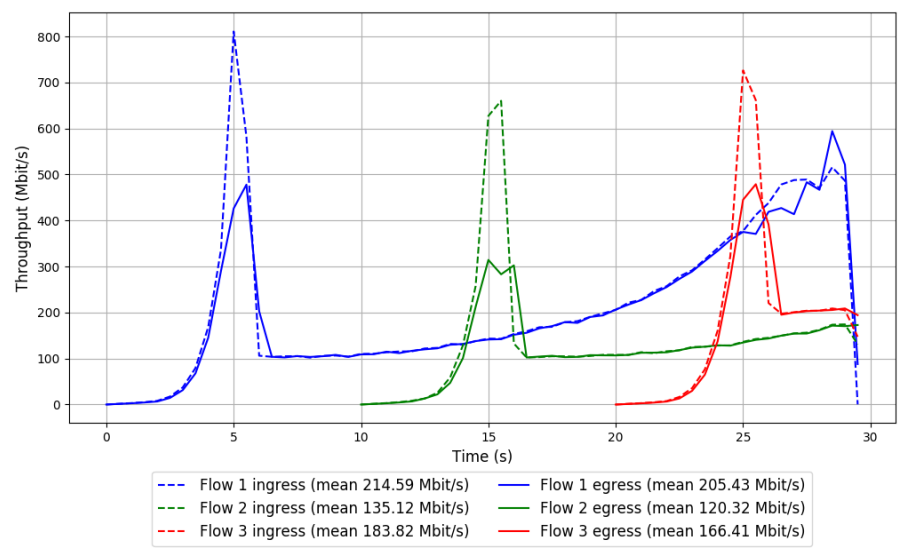
-- Flow 3:

Average throughput: 166.41 Mbit/s

95th percentile per-packet one-way delay: 250.794 ms

Loss rate: 9.49%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-14 00:20:54

End at: 2018-02-14 00:21:24

Below is generated by plot.py at 2018-02-14 05:20:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 464.97 Mbit/s

95th percentile per-packet one-way delay: 294.441 ms

Loss rate: 4.47%

-- Flow 1:

Average throughput: 321.50 Mbit/s

95th percentile per-packet one-way delay: 293.293 ms

Loss rate: 3.58%

-- Flow 2:

Average throughput: 160.65 Mbit/s

95th percentile per-packet one-way delay: 309.959 ms

Loss rate: 6.86%

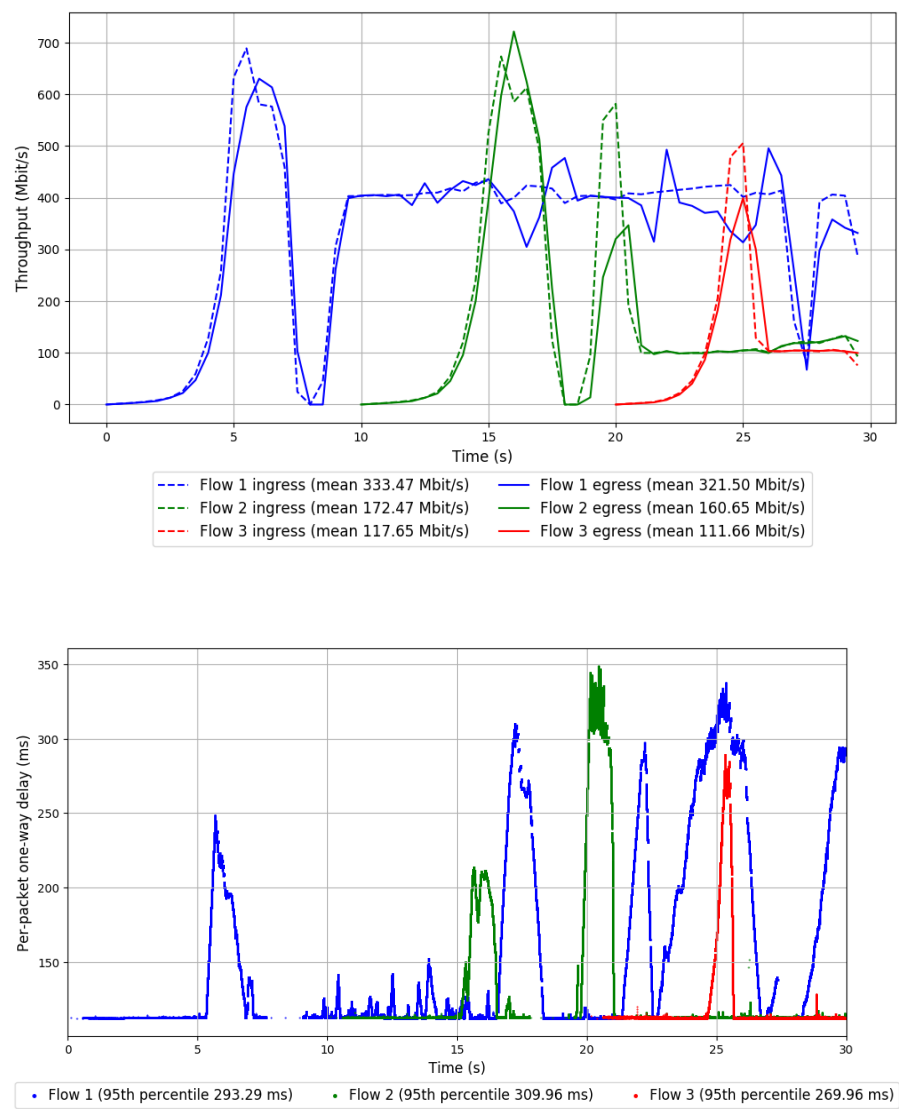
-- Flow 3:

Average throughput: 111.66 Mbit/s

95th percentile per-packet one-way delay: 269.961 ms

Loss rate: 5.11%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-14 00:40:27

End at: 2018-02-14 00:40:57

Below is generated by plot.py at 2018-02-14 05:21:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 451.41 Mbit/s

95th percentile per-packet one-way delay: 277.768 ms

Loss rate: 4.24%

-- Flow 1:

Average throughput: 205.10 Mbit/s

95th percentile per-packet one-way delay: 278.107 ms

Loss rate: 6.15%

-- Flow 2:

Average throughput: 311.03 Mbit/s

95th percentile per-packet one-way delay: 264.309 ms

Loss rate: 0.51%

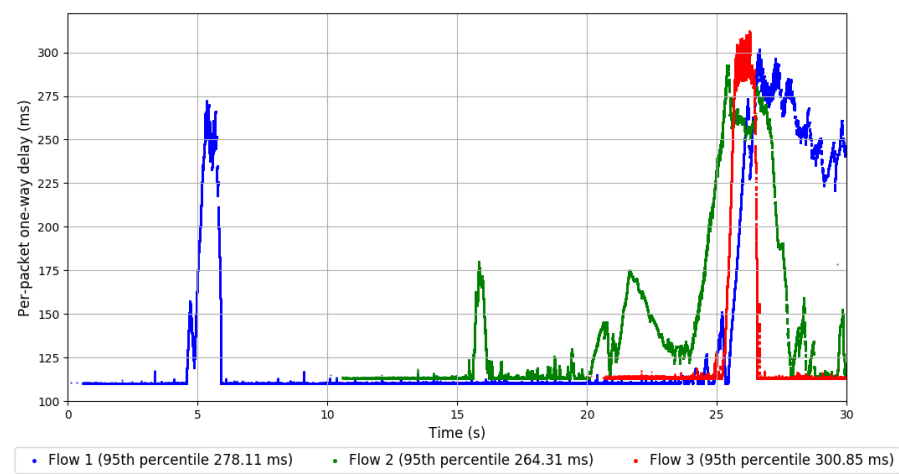
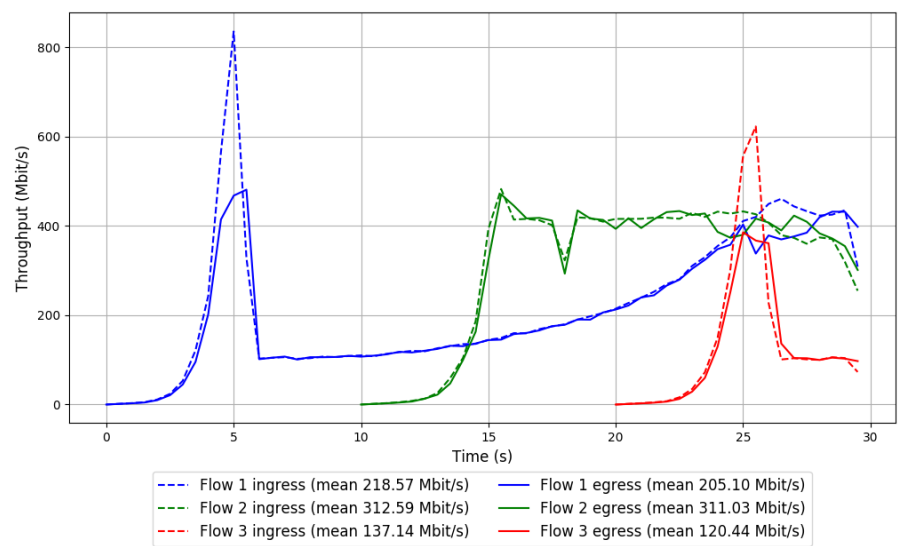
-- Flow 3:

Average throughput: 120.44 Mbit/s

95th percentile per-packet one-way delay: 300.852 ms

Loss rate: 12.19%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-14 00:59:41

End at: 2018-02-14 01:00:11

Below is generated by plot.py at 2018-02-14 05:22:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 467.73 Mbit/s

95th percentile per-packet one-way delay: 284.651 ms

Loss rate: 3.80%

-- Flow 1:

Average throughput: 252.72 Mbit/s

95th percentile per-packet one-way delay: 320.425 ms

Loss rate: 5.11%

-- Flow 2:

Average throughput: 217.06 Mbit/s

95th percentile per-packet one-way delay: 226.548 ms

Loss rate: 2.54%

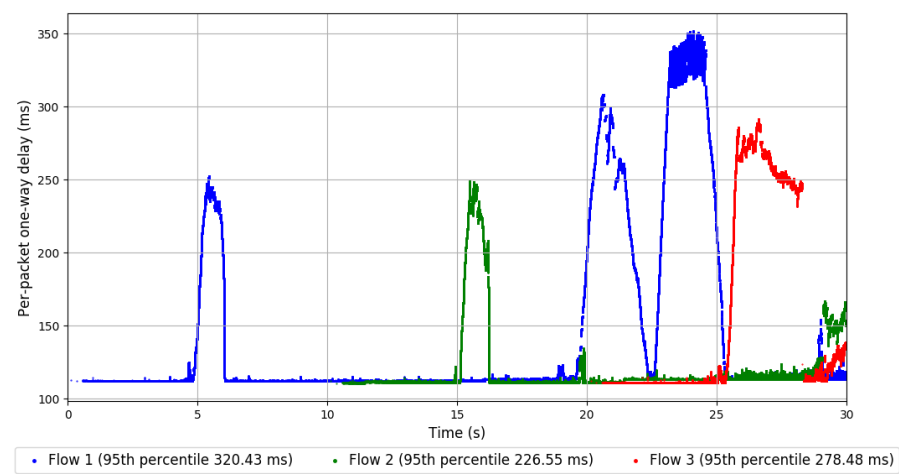
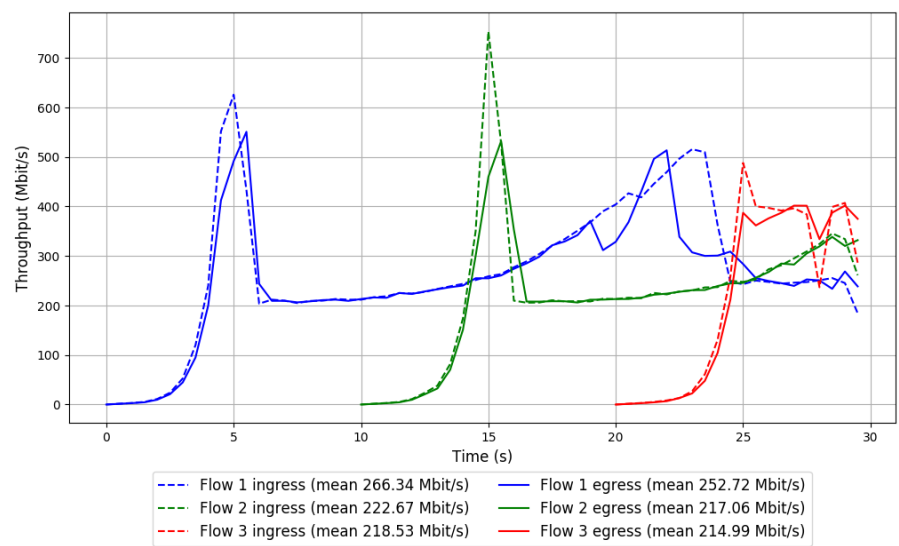
-- Flow 3:

Average throughput: 214.99 Mbit/s

95th percentile per-packet one-way delay: 278.482 ms

Loss rate: 1.56%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-14 01:19:04

End at: 2018-02-14 01:19:34

Below is generated by plot.py at 2018-02-14 05:22:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 297.09 Mbit/s

95th percentile per-packet one-way delay: 270.021 ms

Loss rate: 8.84%

-- Flow 1:

Average throughput: 178.20 Mbit/s

95th percentile per-packet one-way delay: 268.187 ms

Loss rate: 7.59%

-- Flow 2:

Average throughput: 94.72 Mbit/s

95th percentile per-packet one-way delay: 294.633 ms

Loss rate: 16.89%

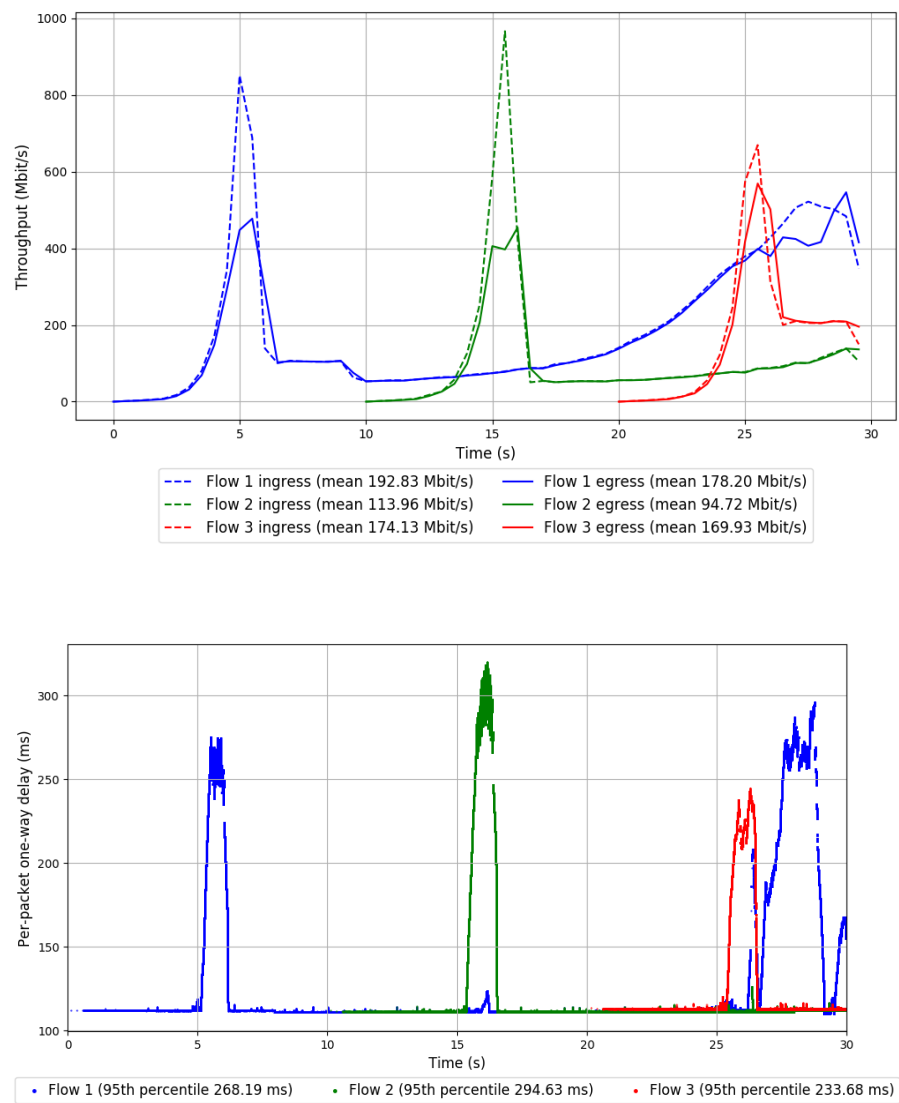
-- Flow 3:

Average throughput: 169.93 Mbit/s

95th percentile per-packet one-way delay: 233.681 ms

Loss rate: 2.46%

Run 10: Report of Vivace-loss — Data Link

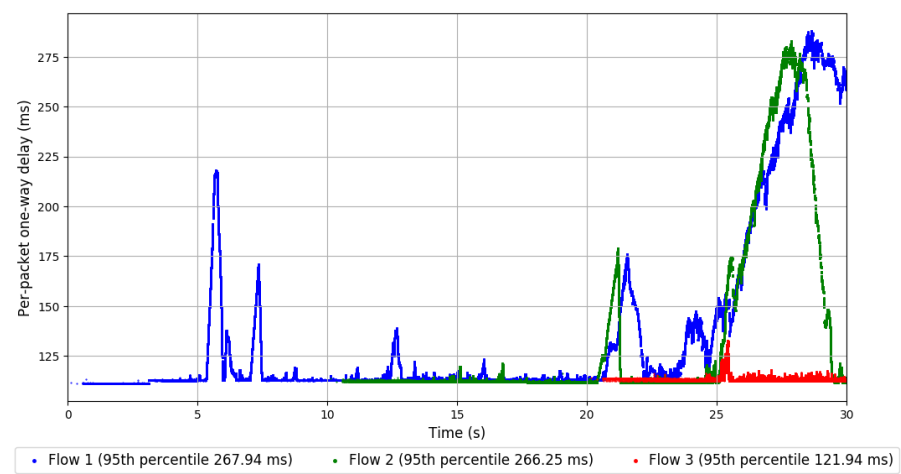
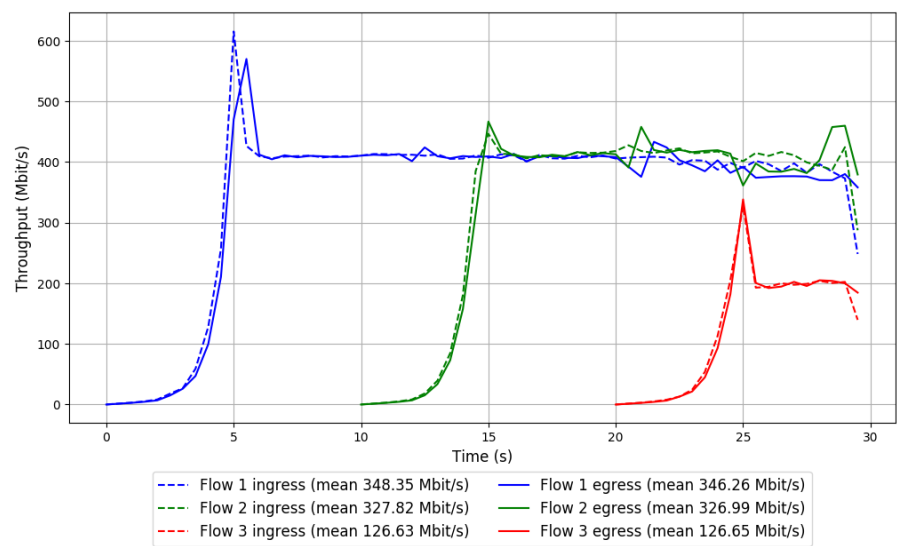


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-13 22:18:19
End at: 2018-02-13 22:18:49

# Below is generated by plot.py at 2018-02-14 05:27:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 605.25 Mbit/s
95th percentile per-packet one-way delay: 265.277 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 346.26 Mbit/s
95th percentile per-packet one-way delay: 267.935 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 326.99 Mbit/s
95th percentile per-packet one-way delay: 266.247 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 126.65 Mbit/s
95th percentile per-packet one-way delay: 121.945 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-13 22:38:06

End at: 2018-02-13 22:38:36

Below is generated by plot.py at 2018-02-14 05:27:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 392.39 Mbit/s

95th percentile per-packet one-way delay: 175.562 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 266.81 Mbit/s

95th percentile per-packet one-way delay: 167.847 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 128.02 Mbit/s

95th percentile per-packet one-way delay: 239.824 ms

Loss rate: 2.81%

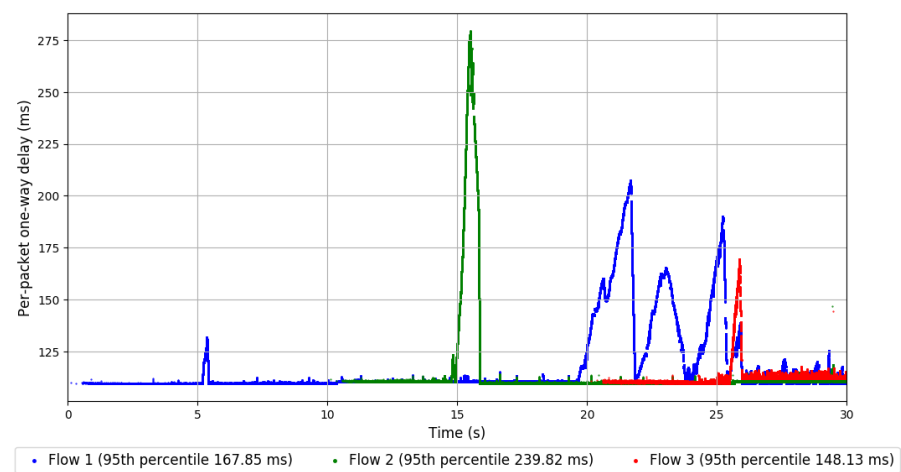
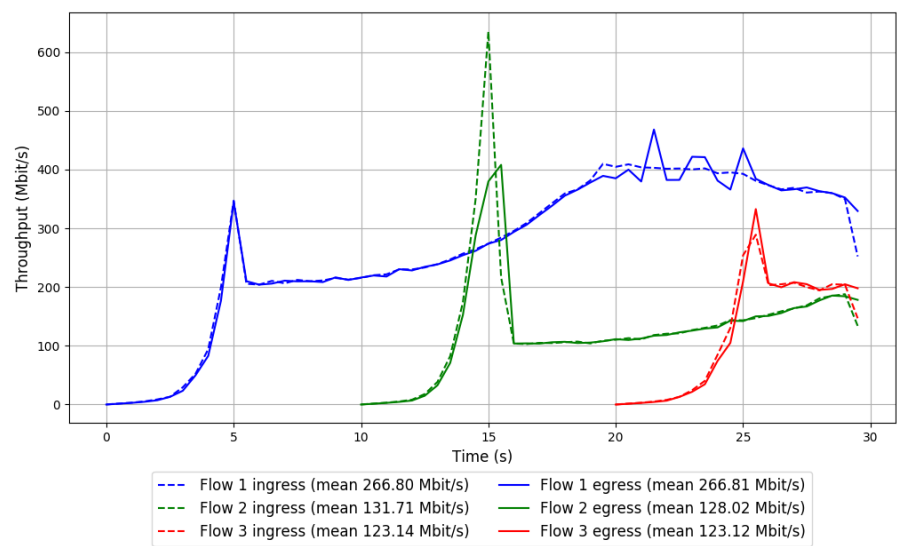
-- Flow 3:

Average throughput: 123.12 Mbit/s

95th percentile per-packet one-way delay: 148.134 ms

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-13 22:57:25

End at: 2018-02-13 22:57:55

Below is generated by plot.py at 2018-02-14 05:27:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 363.65 Mbit/s

95th percentile per-packet one-way delay: 189.632 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 206.18 Mbit/s

95th percentile per-packet one-way delay: 213.862 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 173.22 Mbit/s

95th percentile per-packet one-way delay: 165.047 ms

Loss rate: 0.00%

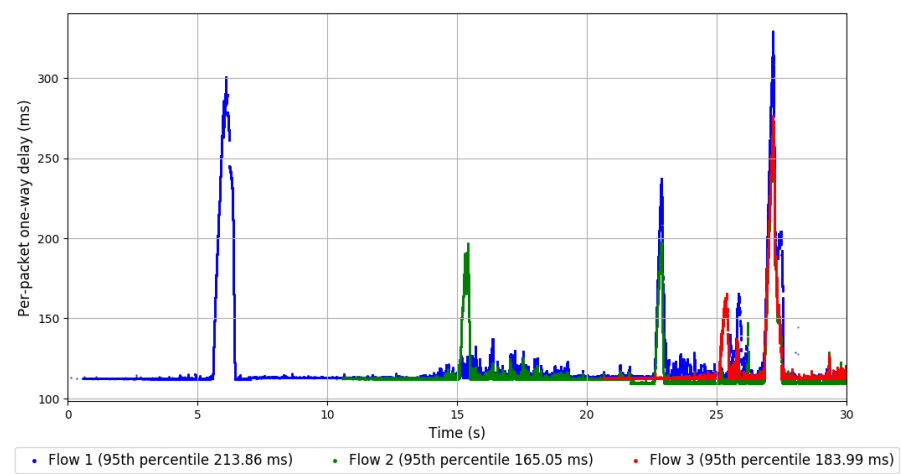
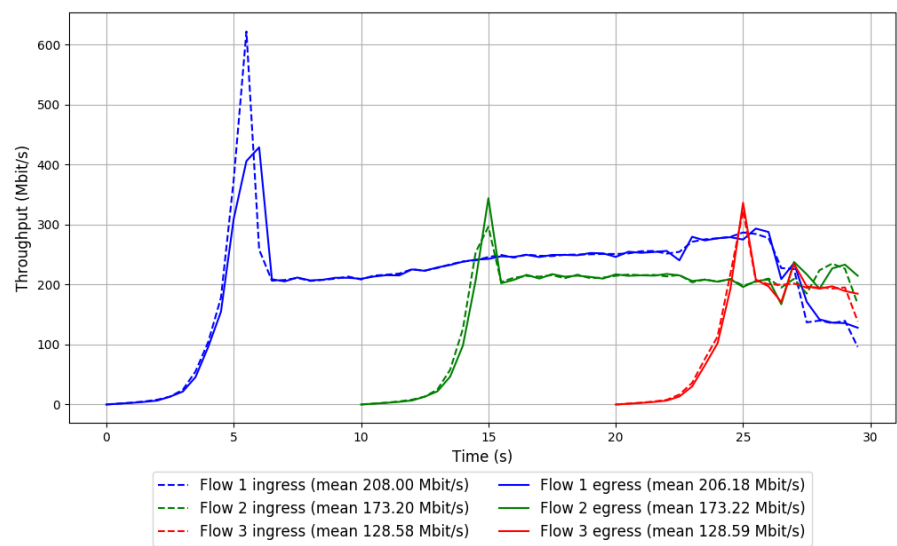
-- Flow 3:

Average throughput: 128.59 Mbit/s

95th percentile per-packet one-way delay: 183.988 ms

Loss rate: 0.01%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-13 23:16:55

End at: 2018-02-13 23:17:25

Below is generated by plot.py at 2018-02-14 05:27:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 407.76 Mbit/s

95th percentile per-packet one-way delay: 269.411 ms

Loss rate: 2.19%

-- Flow 1:

Average throughput: 156.54 Mbit/s

95th percentile per-packet one-way delay: 267.185 ms

Loss rate: 3.27%

-- Flow 2:

Average throughput: 325.03 Mbit/s

95th percentile per-packet one-way delay: 266.173 ms

Loss rate: 0.79%

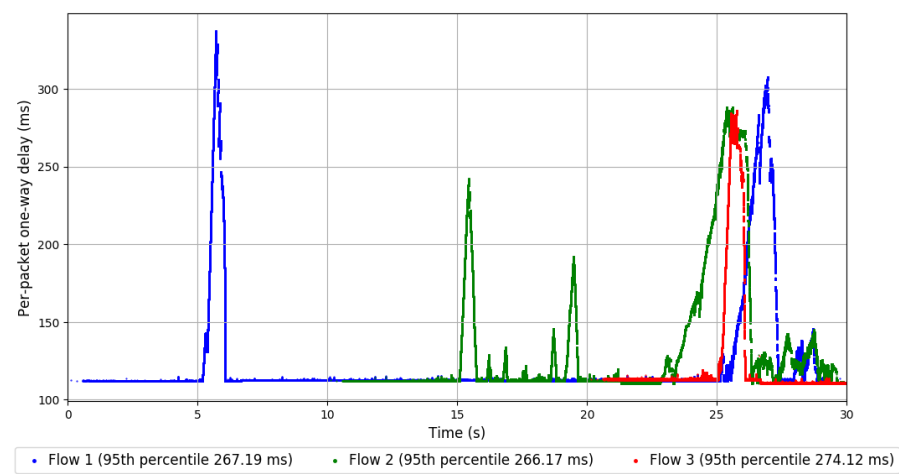
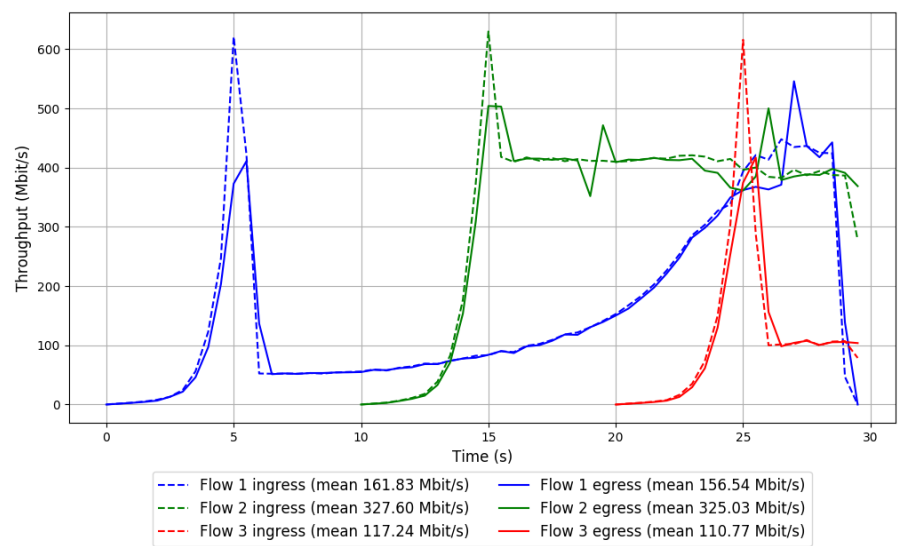
-- Flow 3:

Average throughput: 110.77 Mbit/s

95th percentile per-packet one-way delay: 274.118 ms

Loss rate: 5.54%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-13 23:36:15

End at: 2018-02-13 23:36:45

Below is generated by plot.py at 2018-02-14 05:29:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 583.92 Mbit/s

95th percentile per-packet one-way delay: 230.888 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 346.85 Mbit/s

95th percentile per-packet one-way delay: 233.576 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 303.76 Mbit/s

95th percentile per-packet one-way delay: 212.464 ms

Loss rate: 0.11%

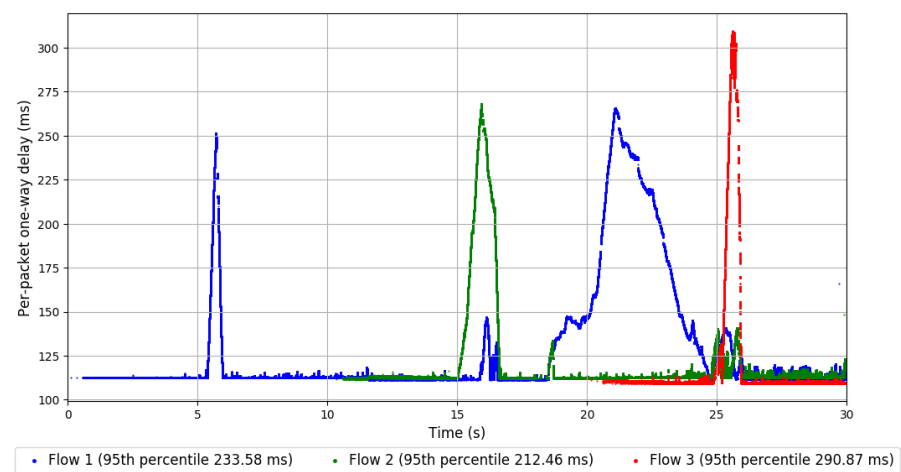
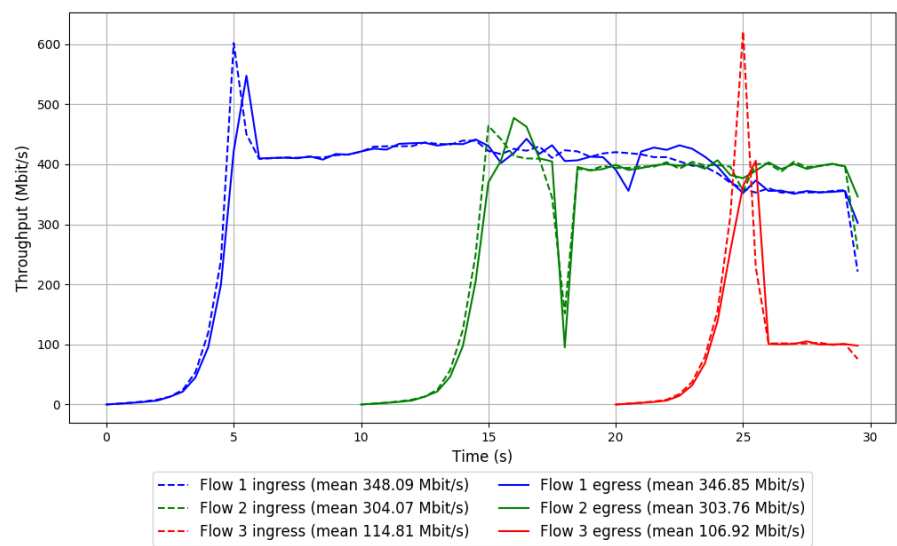
-- Flow 3:

Average throughput: 106.92 Mbit/s

95th percentile per-packet one-way delay: 290.866 ms

Loss rate: 6.89%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-13 23:55:35

End at: 2018-02-13 23:56:05

Below is generated by plot.py at 2018-02-14 05:29:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 512.54 Mbit/s

95th percentile per-packet one-way delay: 214.539 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 233.35 Mbit/s

95th percentile per-packet one-way delay: 118.916 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 315.14 Mbit/s

95th percentile per-packet one-way delay: 243.844 ms

Loss rate: 0.47%

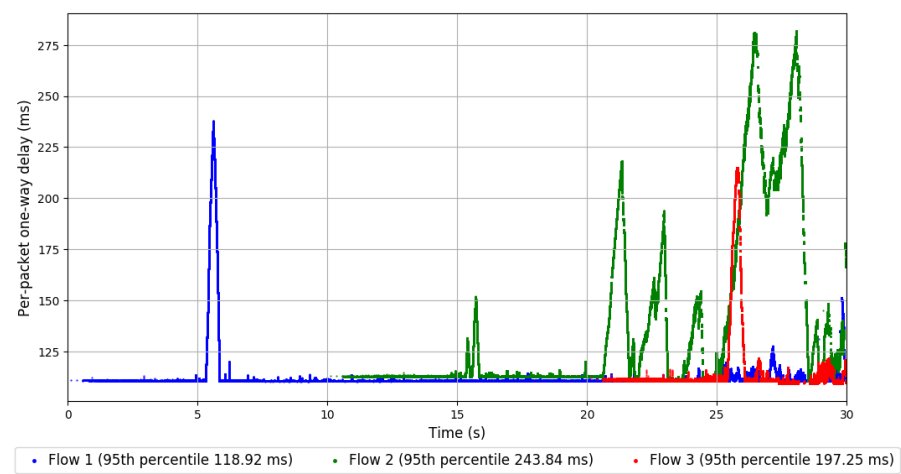
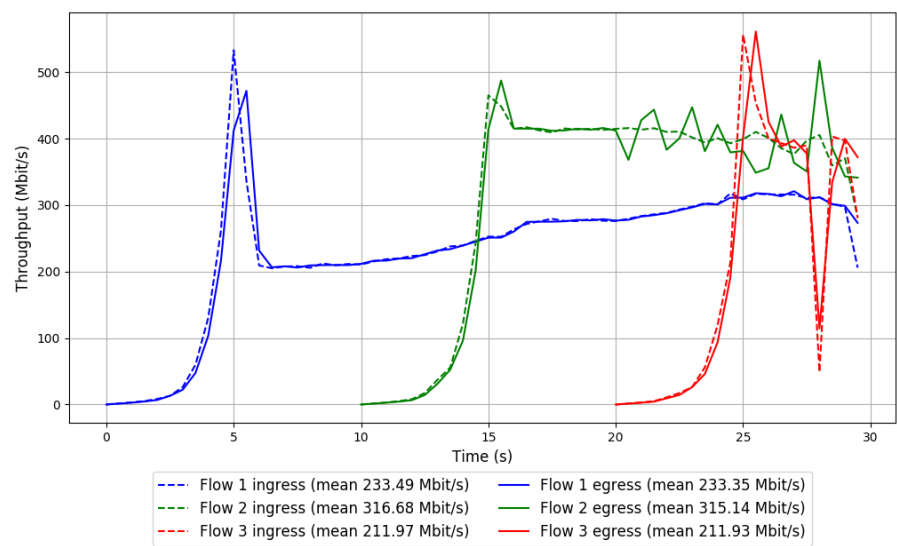
-- Flow 3:

Average throughput: 211.93 Mbit/s

95th percentile per-packet one-way delay: 197.250 ms

Loss rate: 0.03%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-14 00:15:17

End at: 2018-02-14 00:15:47

Below is generated by plot.py at 2018-02-14 05:30:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 602.11 Mbit/s

95th percentile per-packet one-way delay: 206.263 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 331.75 Mbit/s

95th percentile per-packet one-way delay: 190.846 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 302.38 Mbit/s

95th percentile per-packet one-way delay: 274.660 ms

Loss rate: 1.04%

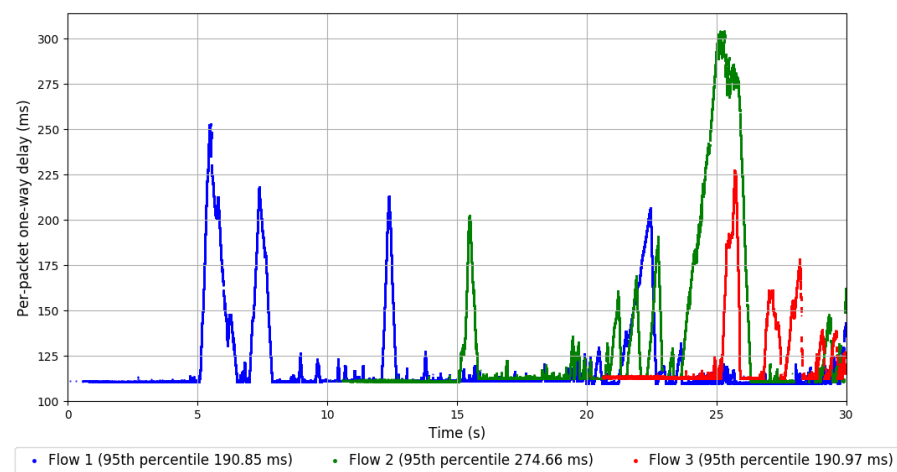
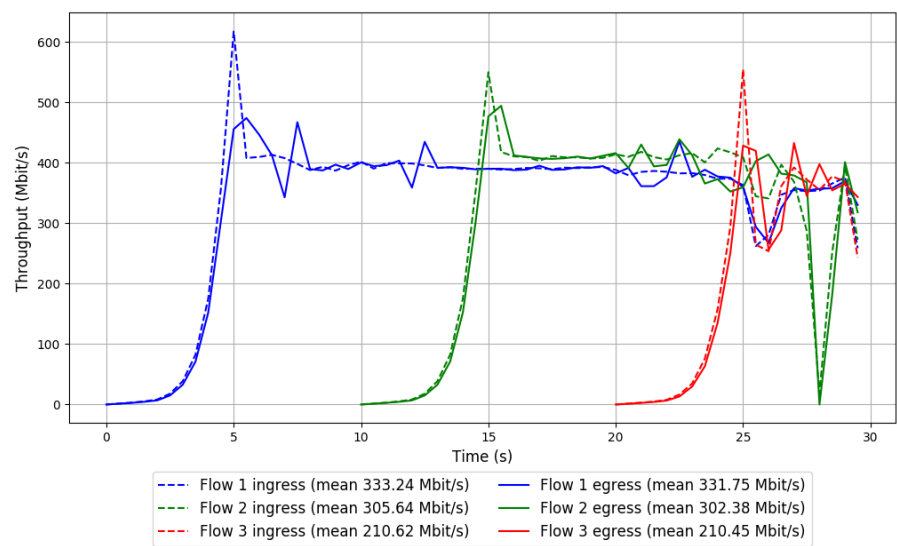
-- Flow 3:

Average throughput: 210.45 Mbit/s

95th percentile per-packet one-way delay: 190.966 ms

Loss rate: 0.05%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-14 00:35:06

End at: 2018-02-14 00:35:36

Below is generated by plot.py at 2018-02-14 05:30:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 561.82 Mbit/s

95th percentile per-packet one-way delay: 274.070 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 360.78 Mbit/s

95th percentile per-packet one-way delay: 179.696 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 240.79 Mbit/s

95th percentile per-packet one-way delay: 292.852 ms

Loss rate: 3.15%

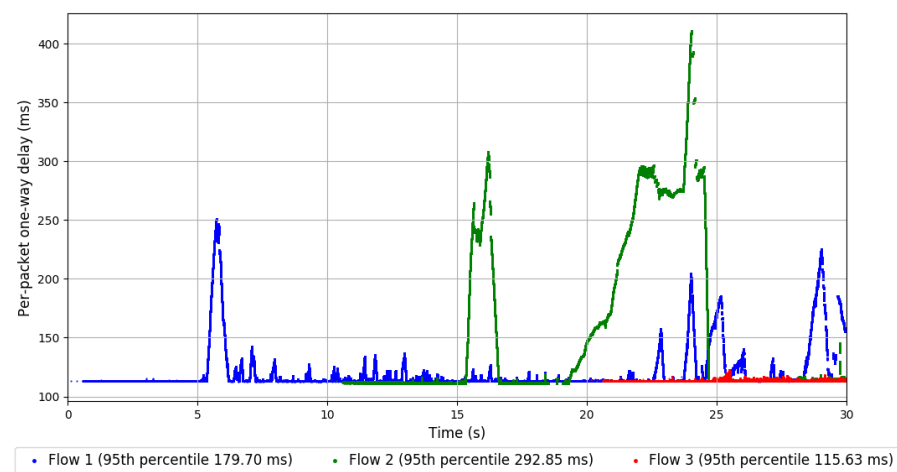
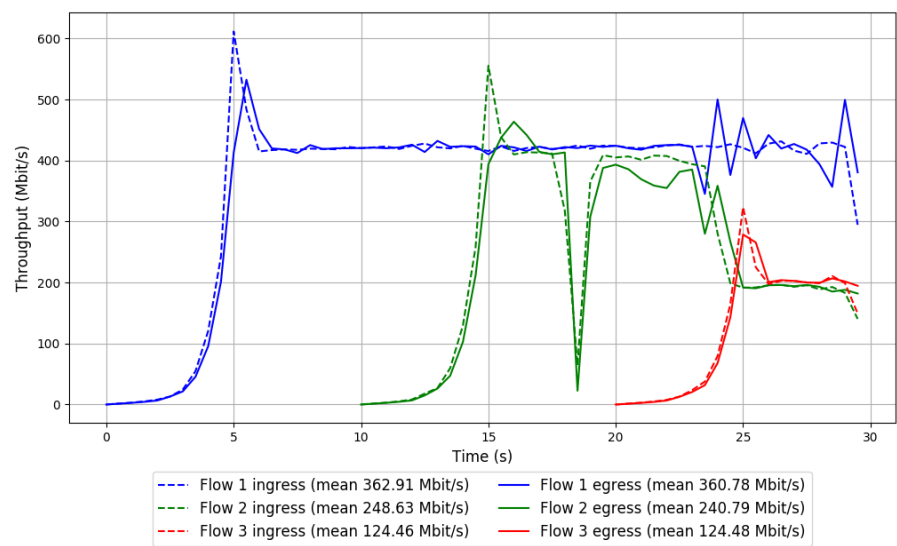
-- Flow 3:

Average throughput: 124.48 Mbit/s

95th percentile per-packet one-way delay: 115.626 ms

Loss rate: 0.00%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-14 00:54:18

End at: 2018-02-14 00:54:48

Below is generated by plot.py at 2018-02-14 05:31:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 516.85 Mbit/s

95th percentile per-packet one-way delay: 265.215 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 271.08 Mbit/s

95th percentile per-packet one-way delay: 266.576 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 314.99 Mbit/s

95th percentile per-packet one-way delay: 232.440 ms

Loss rate: 0.25%

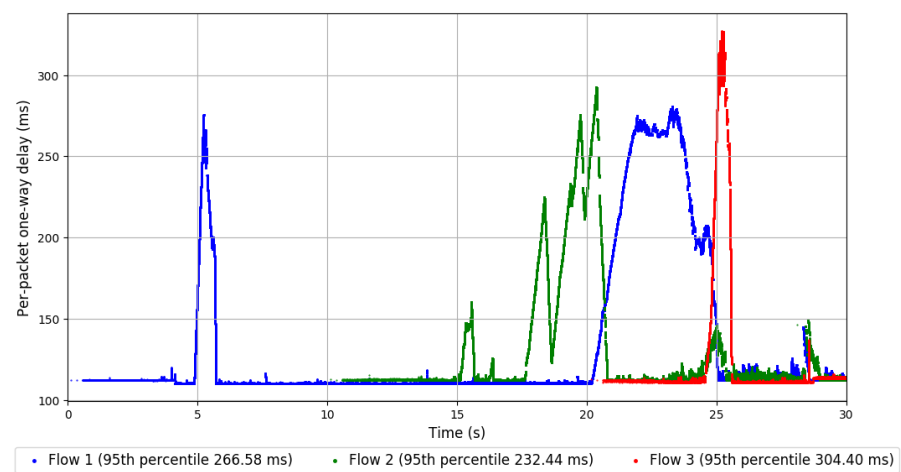
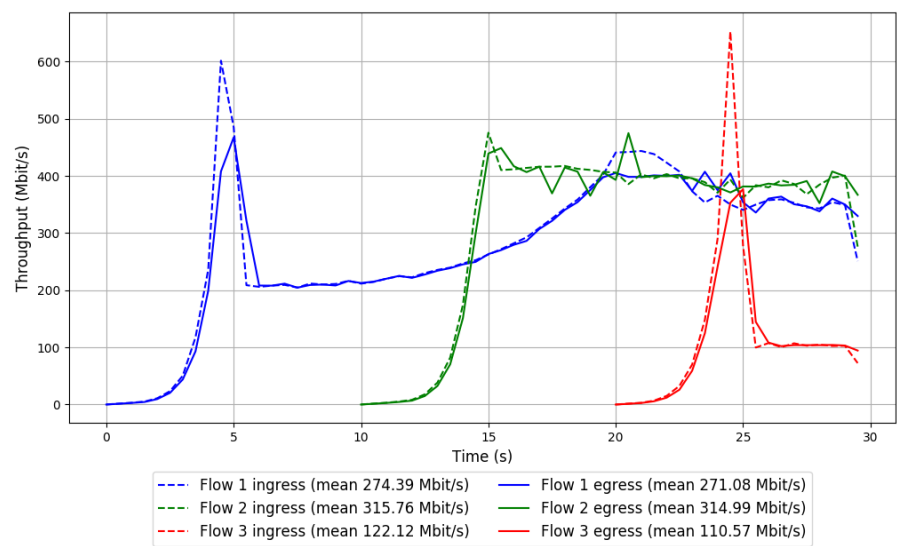
-- Flow 3:

Average throughput: 110.57 Mbit/s

95th percentile per-packet one-way delay: 304.396 ms

Loss rate: 9.45%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-02-14 01:13:41

End at: 2018-02-14 01:14:11

Below is generated by plot.py at 2018-02-14 05:31:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 545.01 Mbit/s

95th percentile per-packet one-way delay: 215.646 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 353.33 Mbit/s

95th percentile per-packet one-way delay: 218.762 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 209.01 Mbit/s

95th percentile per-packet one-way delay: 116.546 ms

Loss rate: 0.02%

-- Flow 3:

Average throughput: 160.21 Mbit/s

95th percentile per-packet one-way delay: 261.784 ms

Loss rate: 2.64%

Run 10: Report of Vivace-LTE — Data Link

