

Pantheon Report

Generated at 2018-02-14 05:07:46 (UTC).

Data path: GCE Iowa Ethernet (*local*) → GCE Sydney 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.

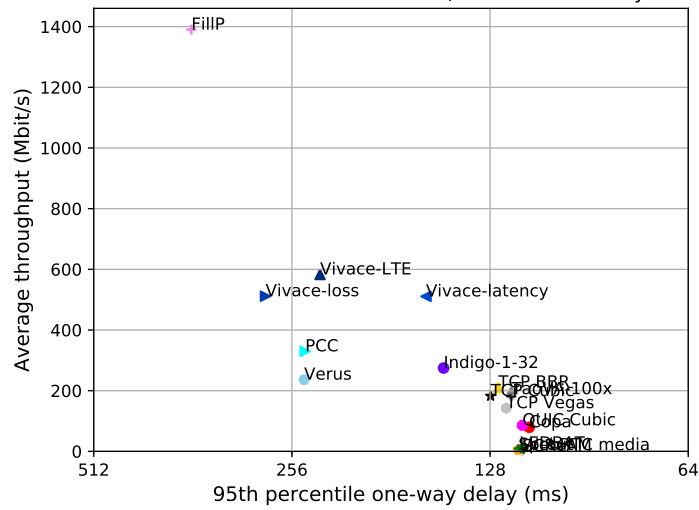
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

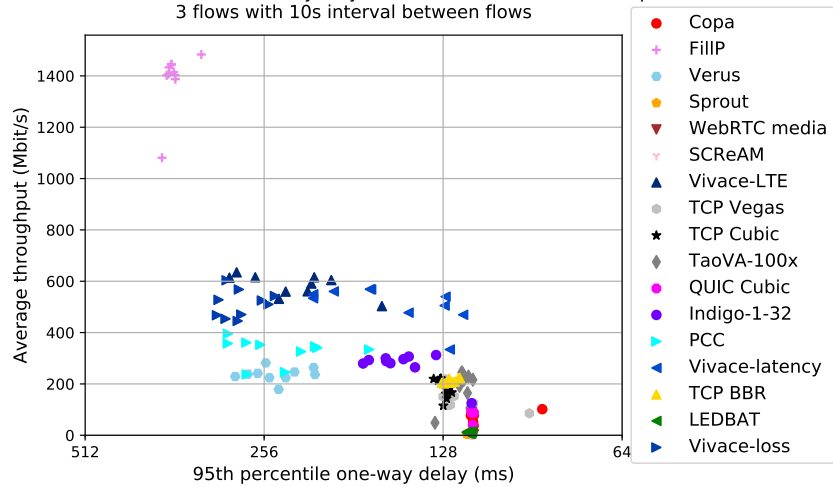
Git summary:

```
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-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeab30b267cde681
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 Iowa Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE Iowa Ethernet to GCE Sydney 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	107.71	105.64	98.44	122.20	124.53	125.73	0.08	0.01	0.01
TCP Cubic	10	100.83	85.23	75.35	127.54	126.74	126.36	0.06	0.14	0.47
LEDBAT	10	6.08	4.00	2.45	115.64	112.87	112.77	0.15	0.00	0.00
PCC	10	277.45	71.70	13.79	241.58	241.65	243.55	1.35	1.00	1.08
QUIC Cubic	10	47.05	44.23	29.19	111.54	114.28	111.52	0.01	0.00	0.01
SCReAM	10	0.21	0.22	0.22	111.53	108.77	114.34	0.01	0.02	0.06
WebRTC media	10	2.11	1.36	0.53	111.60	108.81	112.61	0.01	0.02	0.06
Sprout	10	2.55	2.80	1.32	115.73	116.02	115.17	0.21	0.15	0.00
TaoVA-100x	10	107.40	84.05	97.31	118.22	120.99	119.68	0.03	0.00	0.00
TCP Vegas	10	67.25	83.46	59.25	120.67	118.55	115.61	0.12	0.21	0.03
Verus	10	144.29	106.23	69.53	246.27	235.90	244.48	2.47	0.69	0.96
Copa	10	44.75	37.67	29.12	111.58	111.67	111.78	0.01	0.02	0.06
FillP	10	708.45	698.18	655.27	358.68	364.13	368.13	11.01	12.01	14.81
Indigo-1-32	10	144.66	148.52	98.46	141.16	151.56	159.60	0.07	0.07	0.12
Vivace-latency	10	300.74	256.79	119.44	159.01	167.89	127.00	0.27	0.15	0.04
Vivace-loss	10	273.14	277.73	163.93	265.80	232.82	311.02	3.82	2.97	11.03
Vivace-LTE	10	344.38	266.44	187.87	220.04	197.68	211.75	0.88	0.70	1.56

Run 1: Statistics of TCP BBR

Start at: 2018-02-13 22:08:54

End at: 2018-02-13 22:09:24

Below is generated by plot.py at 2018-02-14 03:29:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 220.31 Mbit/s

95th percentile per-packet one-way delay: 125.073 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 115.88 Mbit/s

95th percentile per-packet one-way delay: 120.298 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 107.92 Mbit/s

95th percentile per-packet one-way delay: 124.473 ms

Loss rate: 0.02%

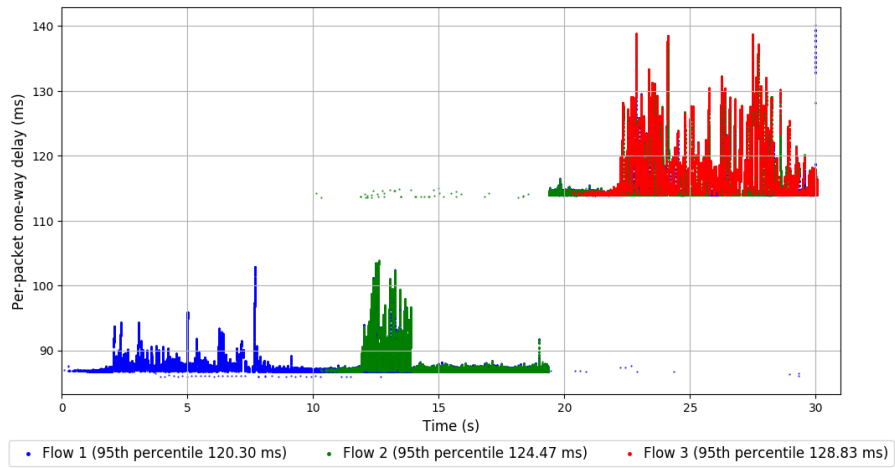
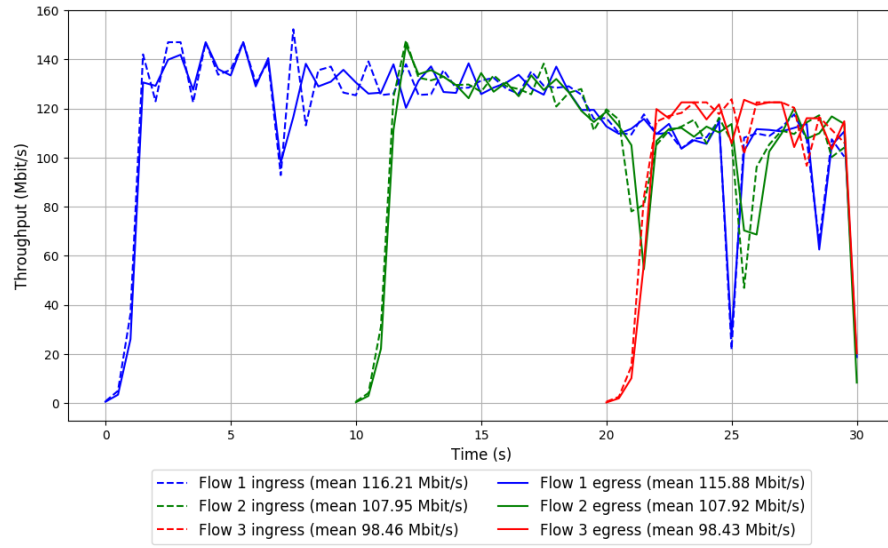
-- Flow 3:

Average throughput: 98.43 Mbit/s

95th percentile per-packet one-way delay: 128.828 ms

Loss rate: 0.02%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-13 22:27:17

End at: 2018-02-13 22:27:47

Below is generated by plot.py at 2018-02-14 03:29:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 204.95 Mbit/s

95th percentile per-packet one-way delay: 124.773 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 104.98 Mbit/s

95th percentile per-packet one-way delay: 122.560 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 101.90 Mbit/s

95th percentile per-packet one-way delay: 124.773 ms

Loss rate: 0.00%

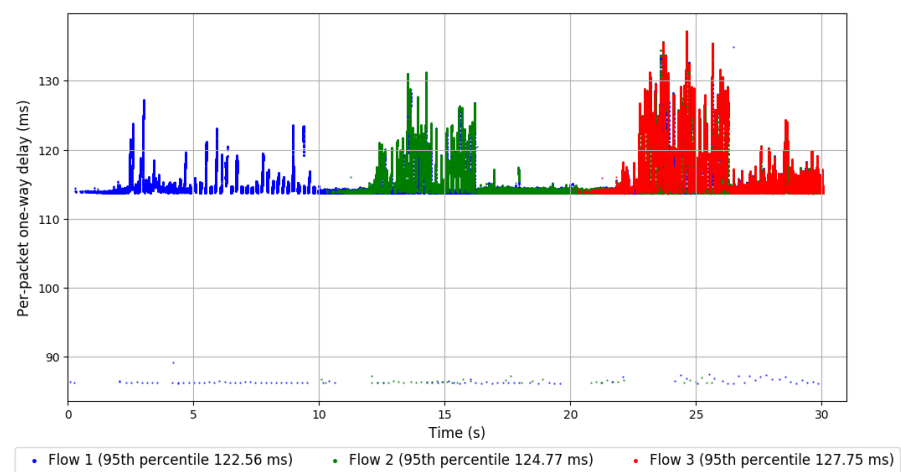
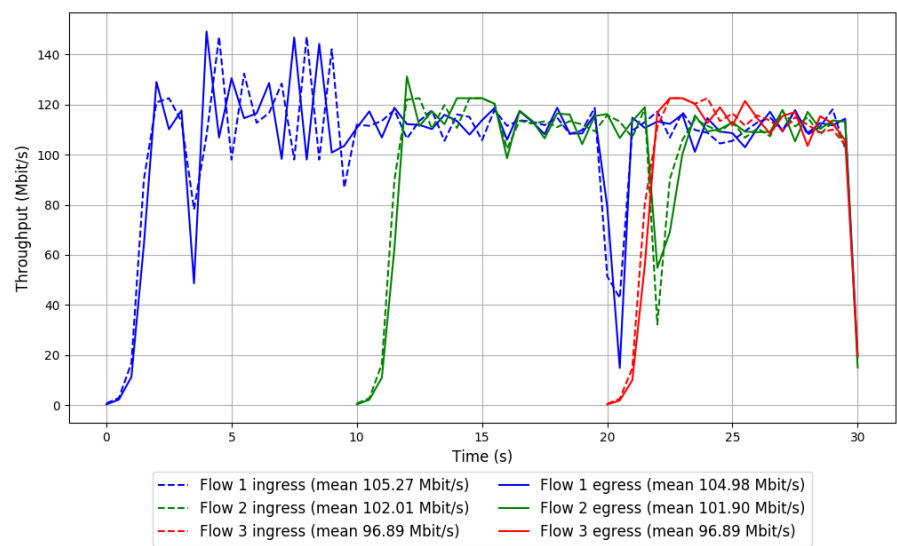
-- Flow 3:

Average throughput: 96.89 Mbit/s

95th percentile per-packet one-way delay: 127.747 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

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

End at: 2018-02-13 22:46:11

Below is generated by plot.py at 2018-02-14 03:29:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 206.63 Mbit/s

95th percentile per-packet one-way delay: 125.280 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 105.31 Mbit/s

95th percentile per-packet one-way delay: 124.129 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 104.95 Mbit/s

95th percentile per-packet one-way delay: 125.322 ms

Loss rate: 0.02%

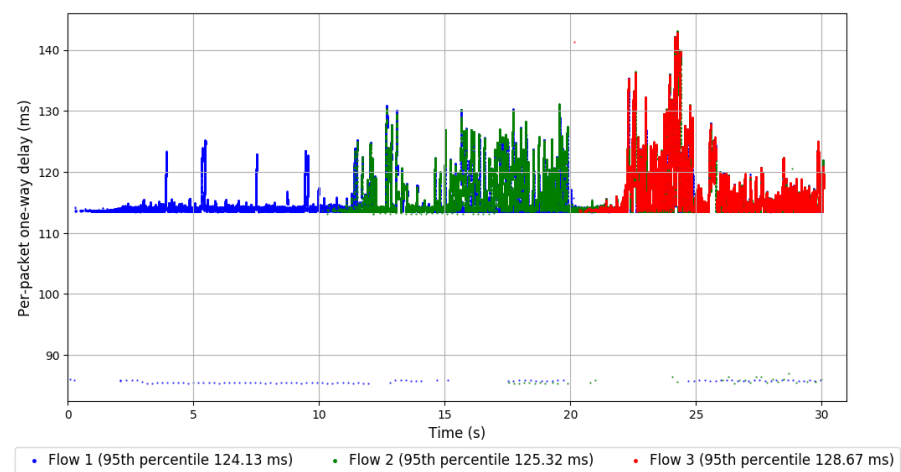
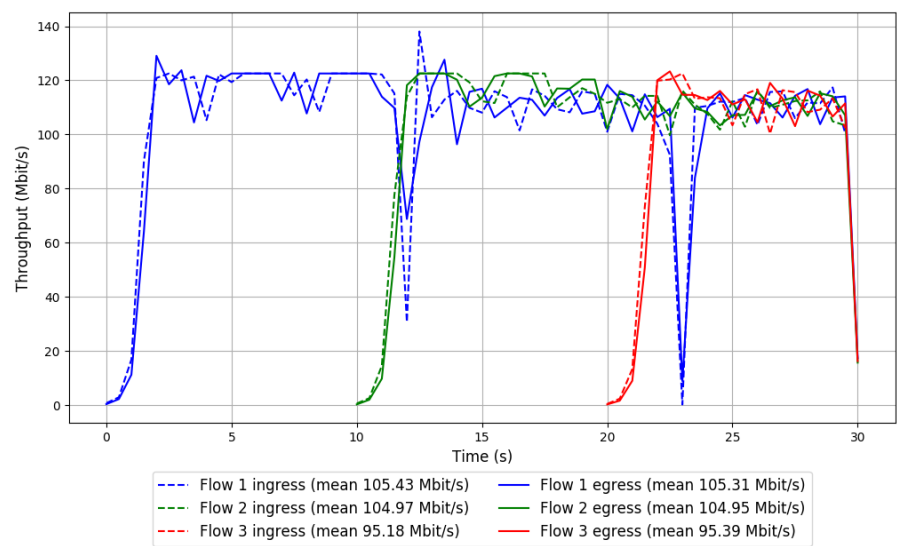
-- Flow 3:

Average throughput: 95.39 Mbit/s

95th percentile per-packet one-way delay: 128.667 ms

Loss rate: 0.04%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-13 23:04:18

End at: 2018-02-13 23:04:48

Below is generated by plot.py at 2018-02-14 03:29:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 206.14 Mbit/s

95th percentile per-packet one-way delay: 125.784 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 103.11 Mbit/s

95th percentile per-packet one-way delay: 123.468 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 106.21 Mbit/s

95th percentile per-packet one-way delay: 127.193 ms

Loss rate: 0.03%

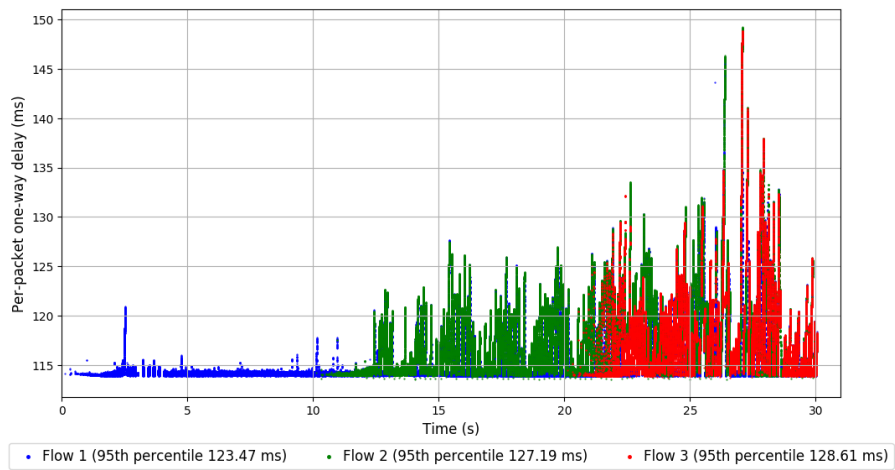
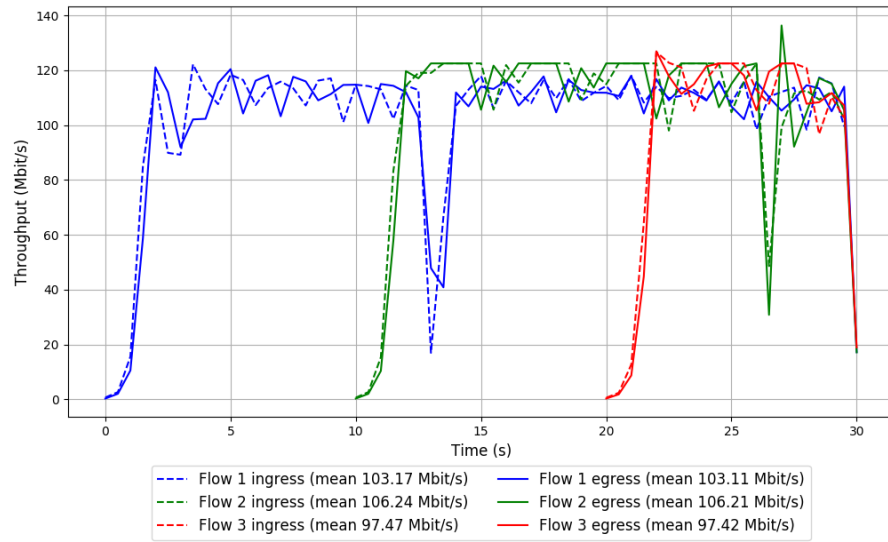
-- Flow 3:

Average throughput: 97.42 Mbit/s

95th percentile per-packet one-way delay: 128.606 ms

Loss rate: 0.05%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

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

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

Below is generated by plot.py at 2018-02-14 03:29:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 201.82 Mbit/s

95th percentile per-packet one-way delay: 127.558 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 100.87 Mbit/s

95th percentile per-packet one-way delay: 125.540 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 104.06 Mbit/s

95th percentile per-packet one-way delay: 127.894 ms

Loss rate: 0.00%

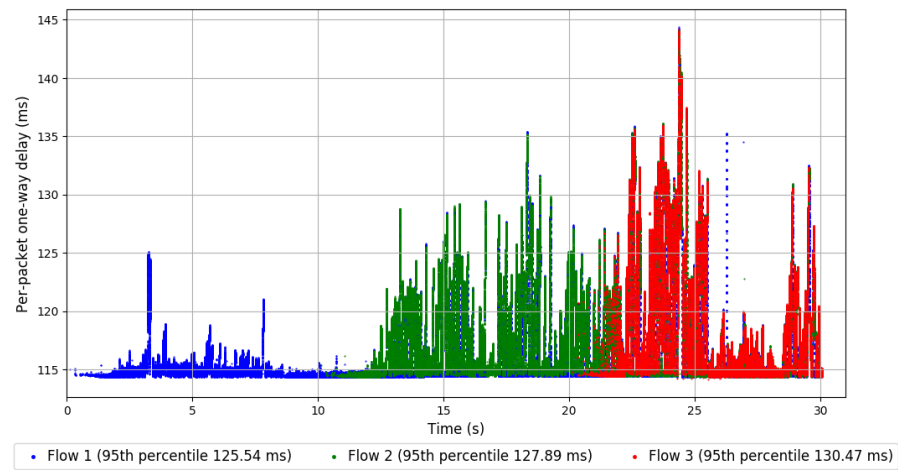
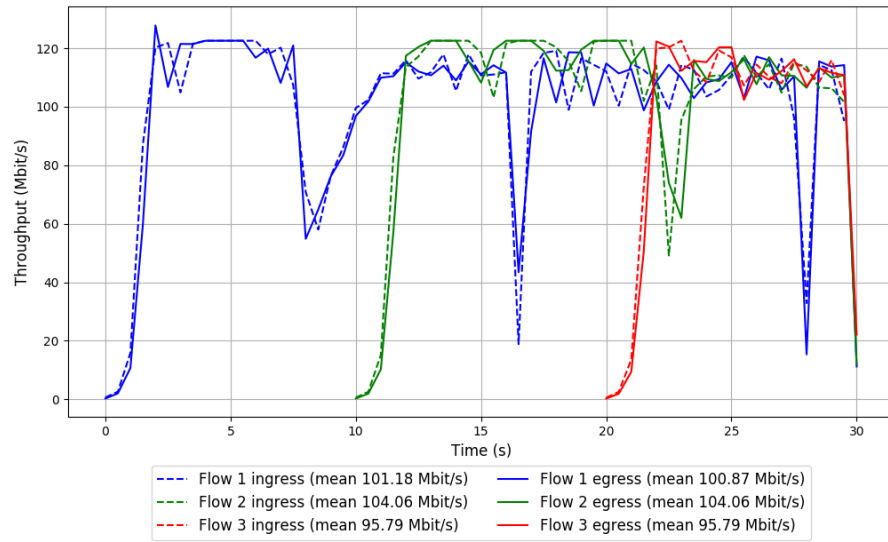
-- Flow 3:

Average throughput: 95.79 Mbit/s

95th percentile per-packet one-way delay: 130.471 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-13 23:42:11

End at: 2018-02-13 23:42:41

Below is generated by plot.py at 2018-02-14 03:29:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 204.83 Mbit/s

95th percentile per-packet one-way delay: 128.625 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 105.53 Mbit/s

95th percentile per-packet one-way delay: 126.860 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 99.76 Mbit/s

95th percentile per-packet one-way delay: 128.430 ms

Loss rate: 0.00%

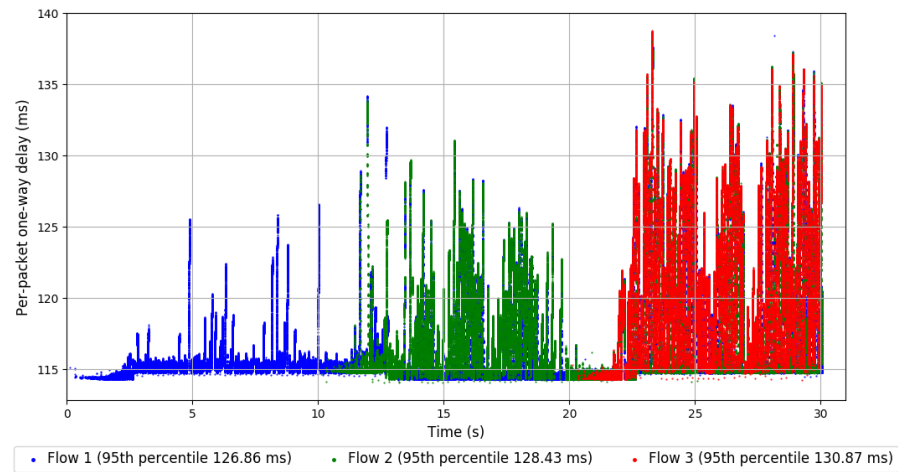
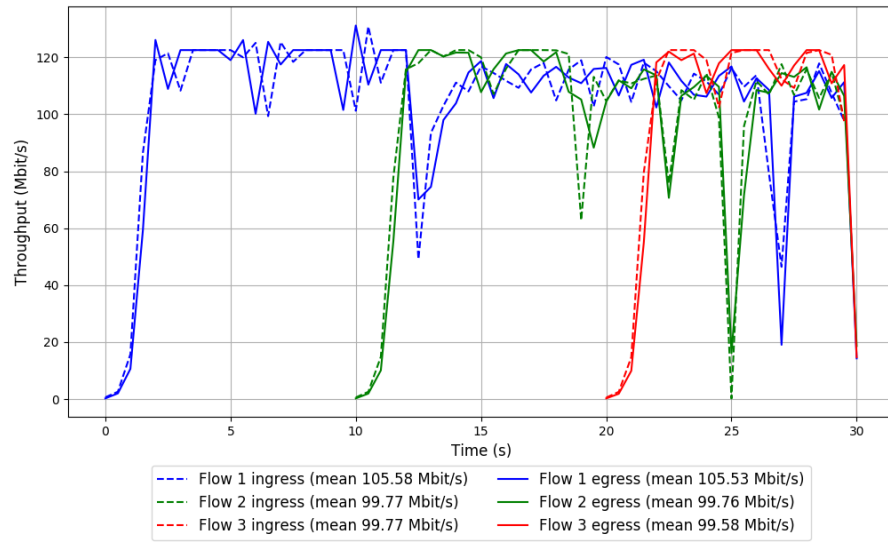
-- Flow 3:

Average throughput: 99.58 Mbit/s

95th percentile per-packet one-way delay: 130.873 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-14 00:01:28

End at: 2018-02-14 00:01:58

Below is generated by plot.py at 2018-02-14 03:29:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 222.16 Mbit/s

95th percentile per-packet one-way delay: 120.541 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 113.40 Mbit/s

95th percentile per-packet one-way delay: 116.449 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 109.69 Mbit/s

95th percentile per-packet one-way delay: 118.324 ms

Loss rate: 0.00%

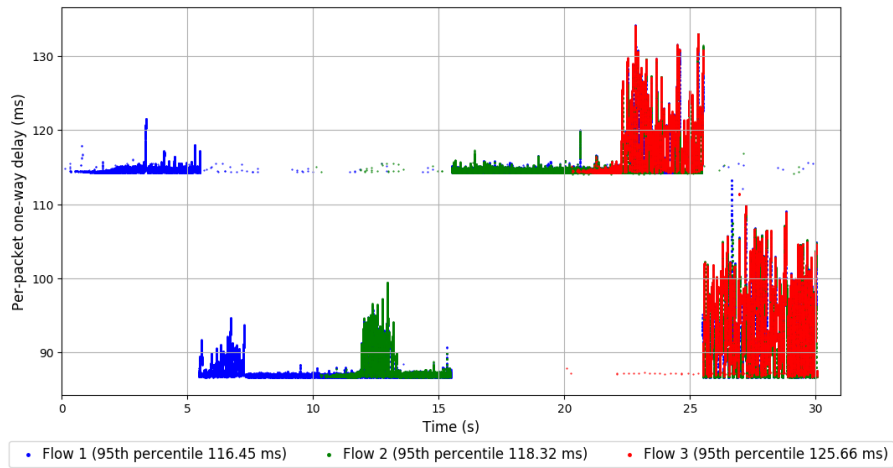
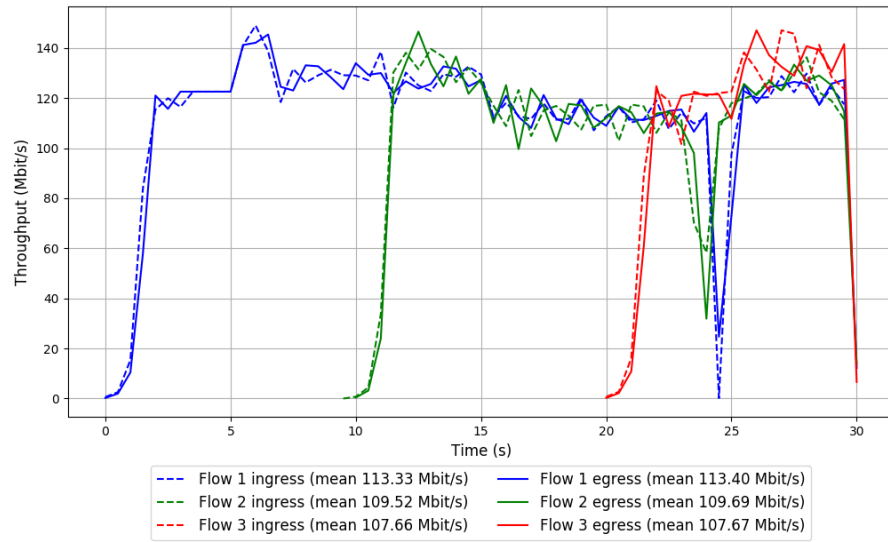
-- Flow 3:

Average throughput: 107.67 Mbit/s

95th percentile per-packet one-way delay: 125.660 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

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

End at: 2018-02-14 00:20:33

Below is generated by plot.py at 2018-02-14 03:29:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 222.98 Mbit/s

95th percentile per-packet one-way delay: 119.958 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 111.29 Mbit/s

95th percentile per-packet one-way delay: 119.093 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 114.63 Mbit/s

95th percentile per-packet one-way delay: 121.414 ms

Loss rate: 0.02%

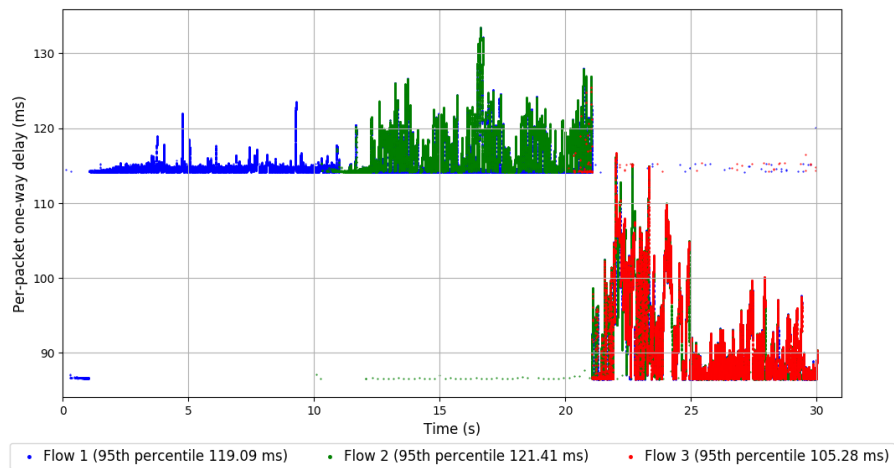
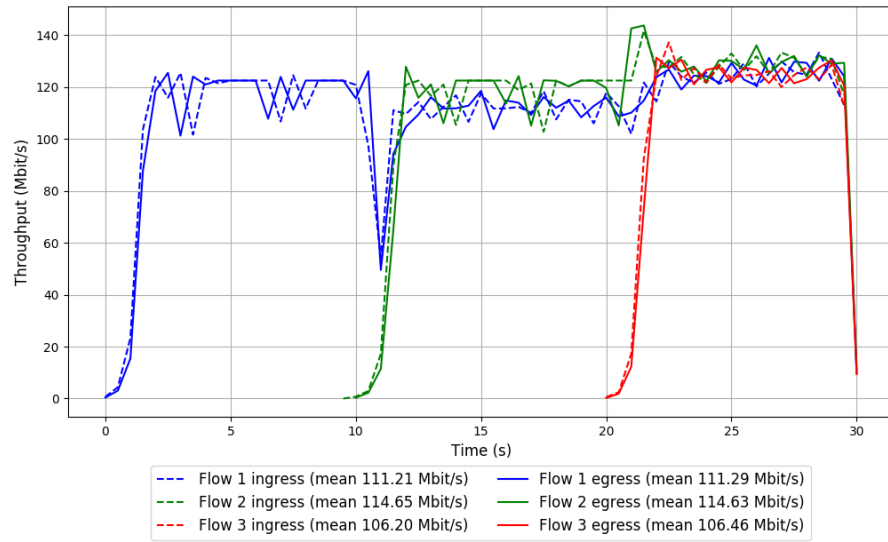
-- Flow 3:

Average throughput: 106.46 Mbit/s

95th percentile per-packet one-way delay: 105.284 ms

Loss rate: 0.04%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-14 00:39:01

End at: 2018-02-14 00:39:31

Below is generated by plot.py at 2018-02-14 03:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 207.46 Mbit/s

95th percentile per-packet one-way delay: 123.786 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 107.73 Mbit/s

95th percentile per-packet one-way delay: 122.775 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 102.64 Mbit/s

95th percentile per-packet one-way delay: 124.303 ms

Loss rate: 0.00%

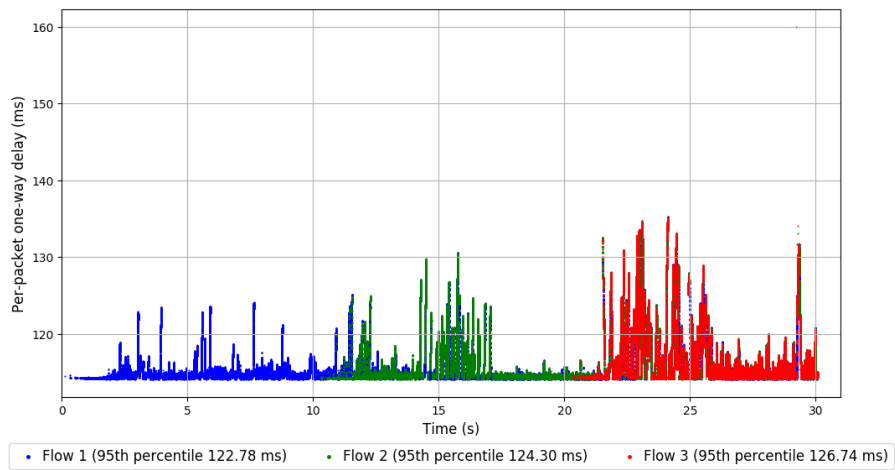
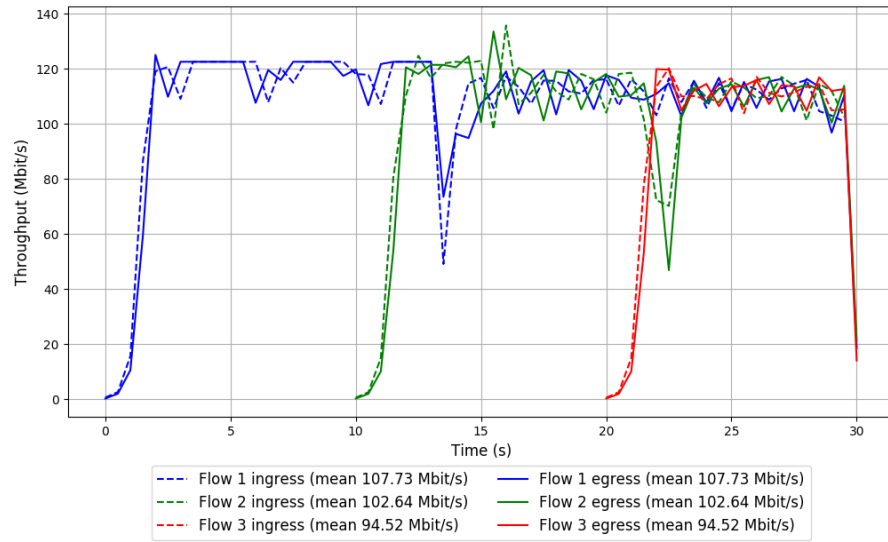
-- Flow 3:

Average throughput: 94.52 Mbit/s

95th percentile per-packet one-way delay: 126.738 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-14 00:58:20

End at: 2018-02-14 00:58:50

Below is generated by plot.py at 2018-02-14 03:32:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 209.21 Mbit/s

95th percentile per-packet one-way delay: 122.387 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 109.01 Mbit/s

95th percentile per-packet one-way delay: 120.860 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 104.62 Mbit/s

95th percentile per-packet one-way delay: 123.189 ms

Loss rate: 0.00%

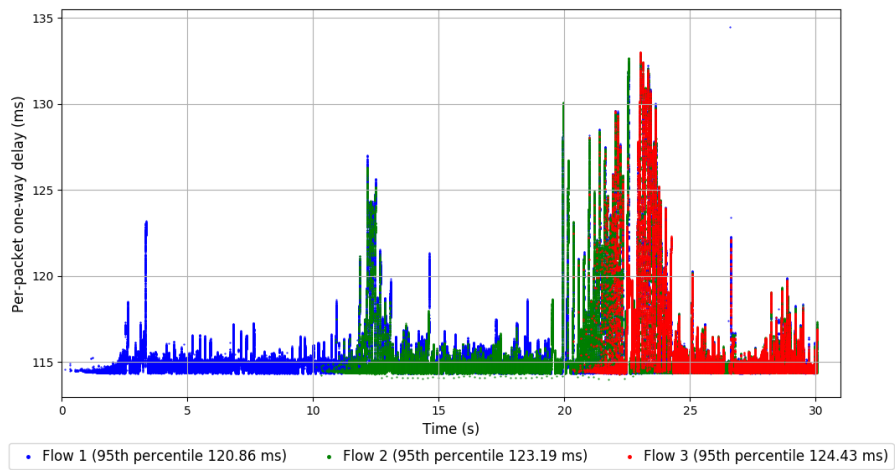
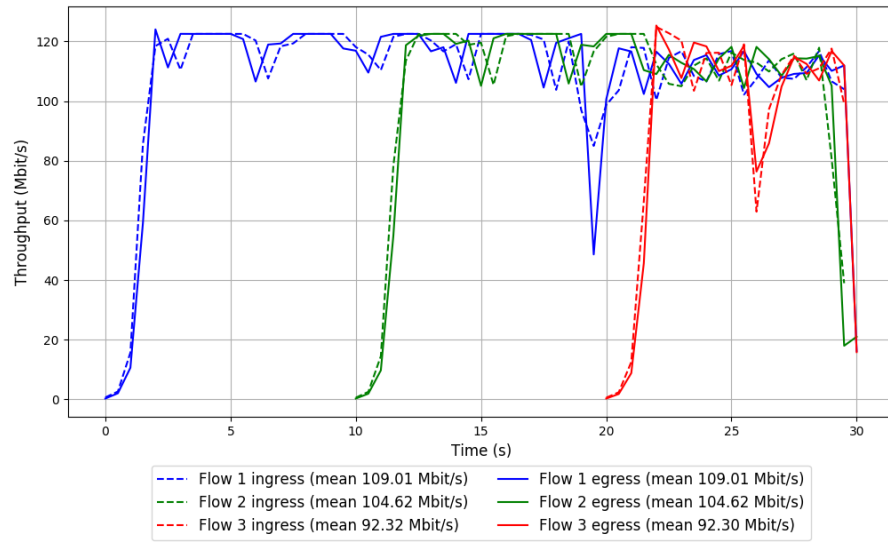
-- Flow 3:

Average throughput: 92.30 Mbit/s

95th percentile per-packet one-way delay: 124.431 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-13 22:06:09

End at: 2018-02-13 22:06:39

Below is generated by plot.py at 2018-02-14 03:32:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 166.65 Mbit/s

95th percentile per-packet one-way delay: 123.765 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 99.10 Mbit/s

95th percentile per-packet one-way delay: 124.679 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 41.17 Mbit/s

95th percentile per-packet one-way delay: 114.171 ms

Loss rate: 0.13%

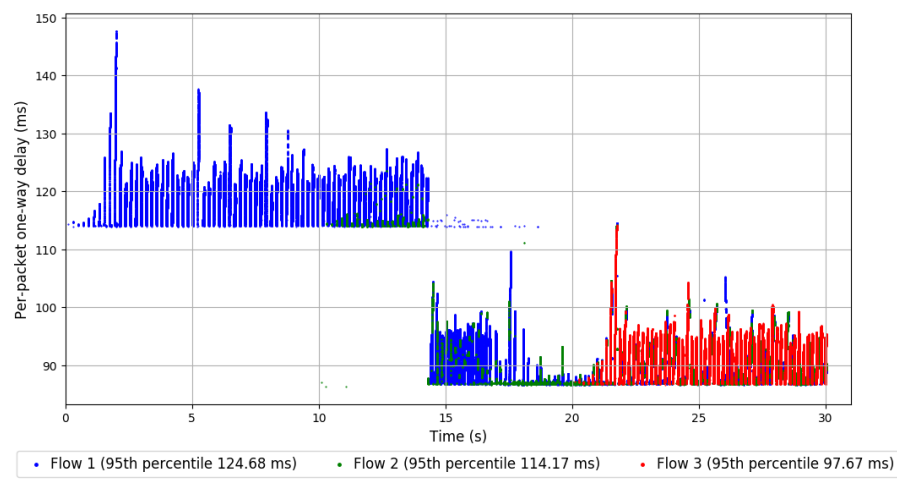
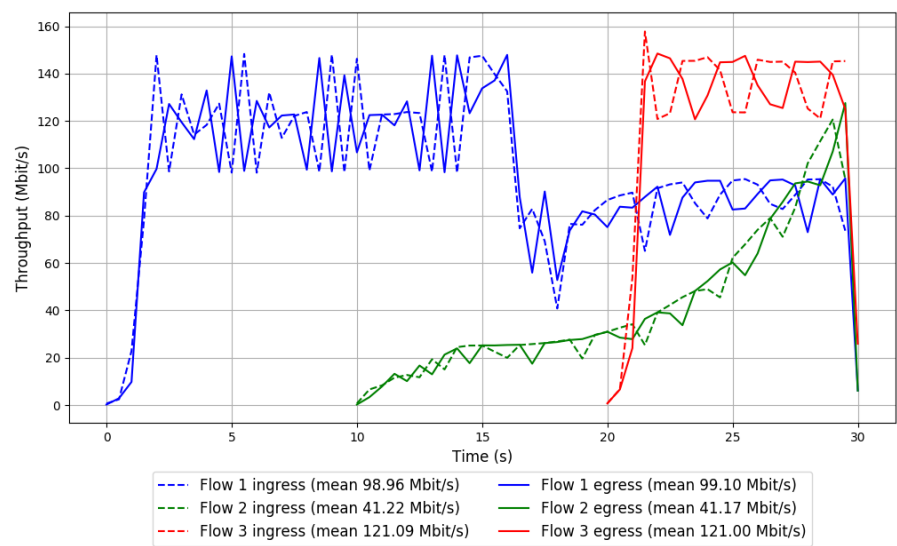
-- Flow 3:

Average throughput: 121.00 Mbit/s

95th percentile per-packet one-way delay: 97.673 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-13 22:24:26

End at: 2018-02-13 22:24:56

Below is generated by plot.py at 2018-02-14 03:32:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.98 Mbit/s

95th percentile per-packet one-way delay: 126.260 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 73.00 Mbit/s

95th percentile per-packet one-way delay: 125.965 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 74.56 Mbit/s

95th percentile per-packet one-way delay: 124.606 ms

Loss rate: 0.01%

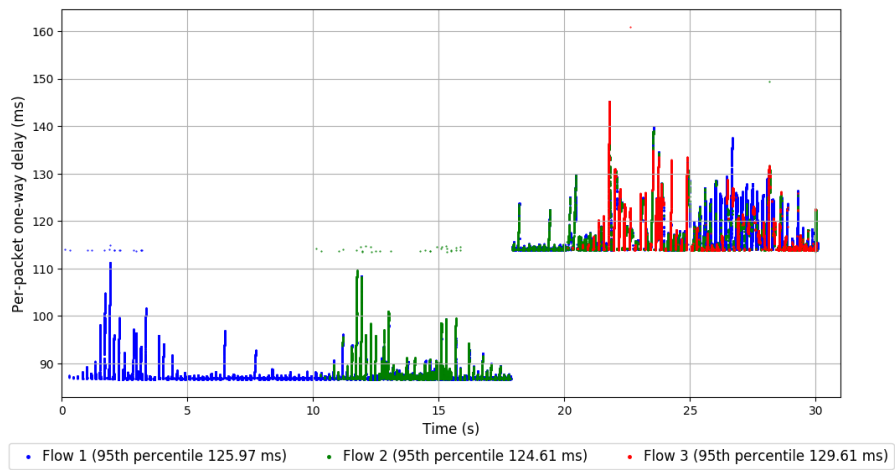
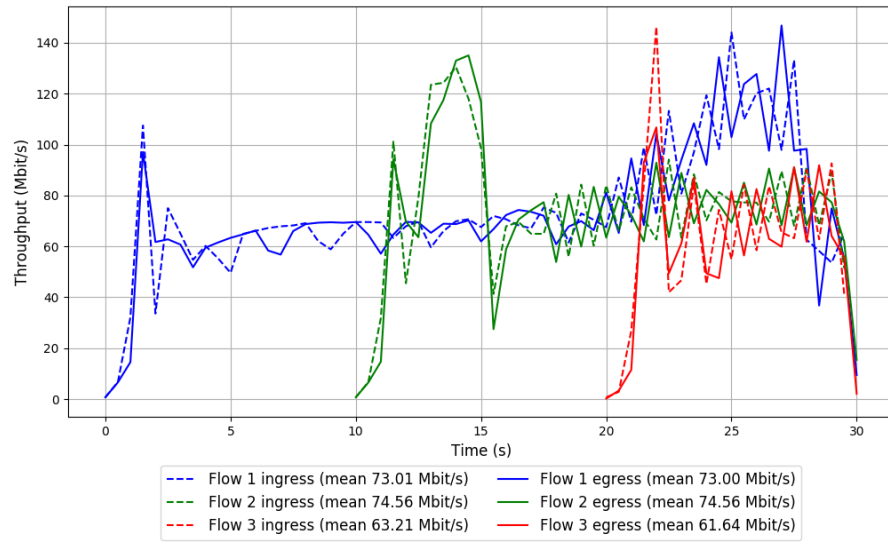
-- Flow 3:

Average throughput: 61.64 Mbit/s

95th percentile per-packet one-way delay: 129.610 ms

Loss rate: 2.49%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-13 22:42:46

End at: 2018-02-13 22:43:16

Below is generated by plot.py at 2018-02-14 03:32:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 115.04 Mbit/s

95th percentile per-packet one-way delay: 127.936 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 72.37 Mbit/s

95th percentile per-packet one-way delay: 126.979 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.42 Mbit/s

95th percentile per-packet one-way delay: 129.513 ms

Loss rate: 1.01%

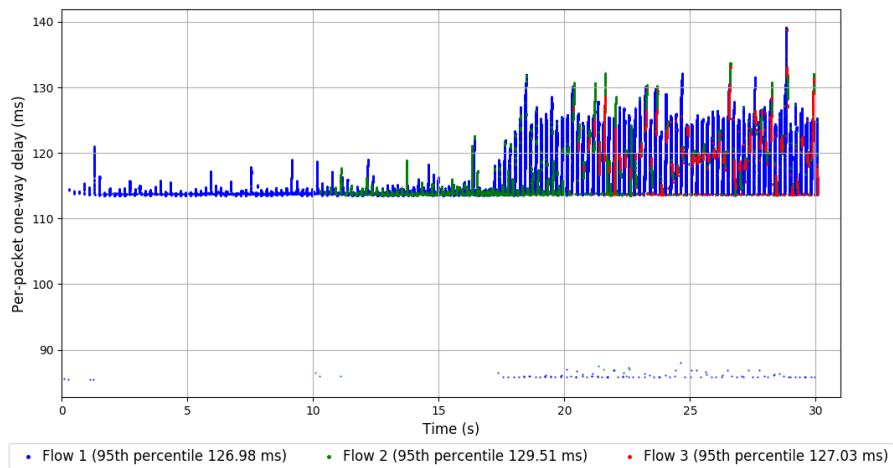
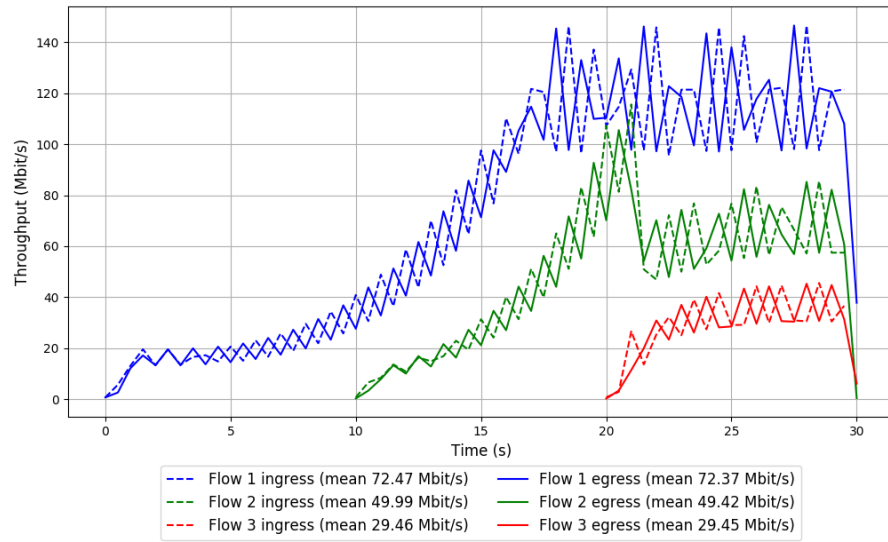
-- Flow 3:

Average throughput: 29.45 Mbit/s

95th percentile per-packet one-way delay: 127.025 ms

Loss rate: 0.01%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-13 23:01:19

End at: 2018-02-13 23:01:49

Below is generated by plot.py at 2018-02-14 03:32:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 161.43 Mbit/s

95th percentile per-packet one-way delay: 126.596 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 108.41 Mbit/s

95th percentile per-packet one-way delay: 126.685 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 78.86 Mbit/s

95th percentile per-packet one-way delay: 126.292 ms

Loss rate: 0.12%

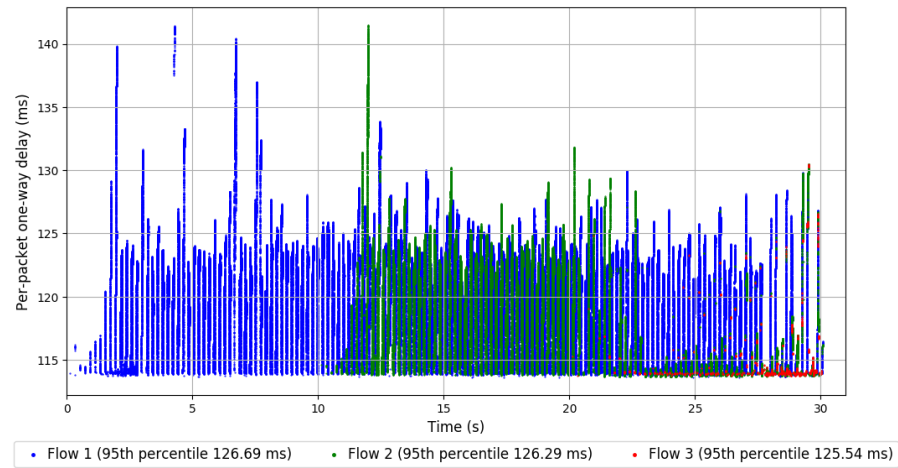
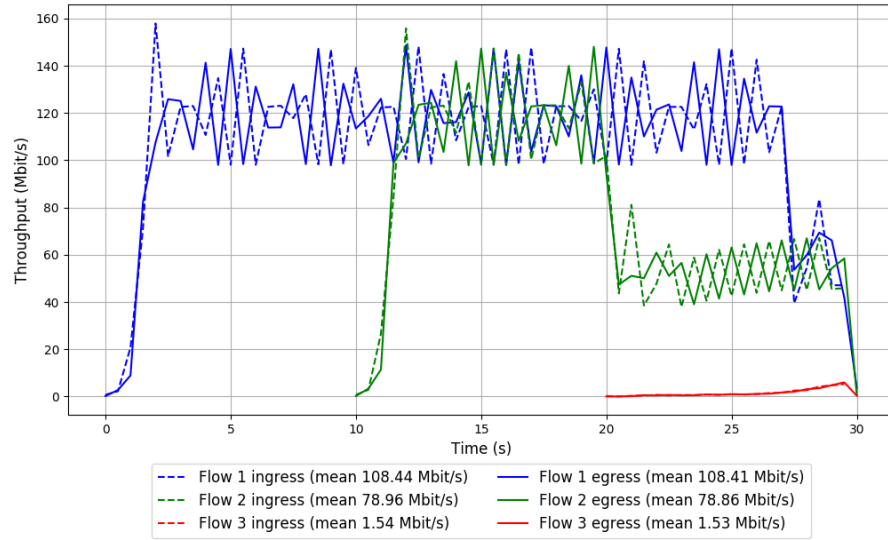
-- Flow 3:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 125.538 ms

Loss rate: 0.78%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-13 23:20:16

End at: 2018-02-13 23:20:46

Below is generated by plot.py at 2018-02-14 03:33:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 219.03 Mbit/s

95th percentile per-packet one-way delay: 129.550 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 113.14 Mbit/s

95th percentile per-packet one-way delay: 128.309 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 108.54 Mbit/s

95th percentile per-packet one-way delay: 129.898 ms

Loss rate: 0.00%

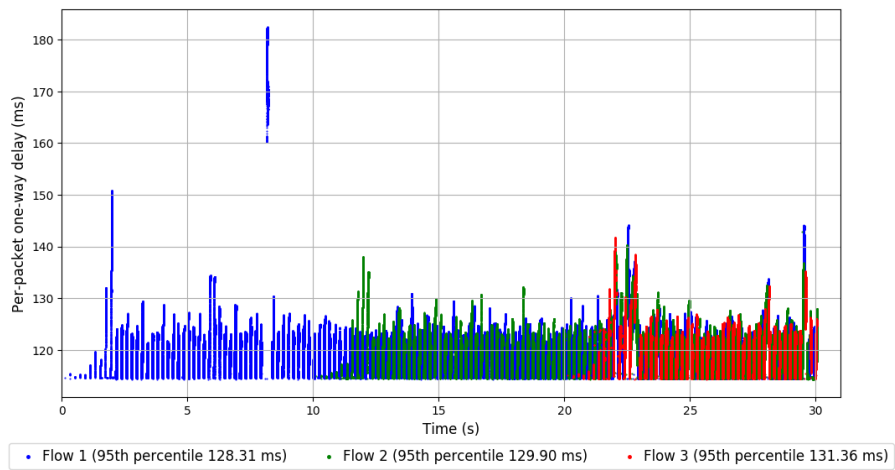
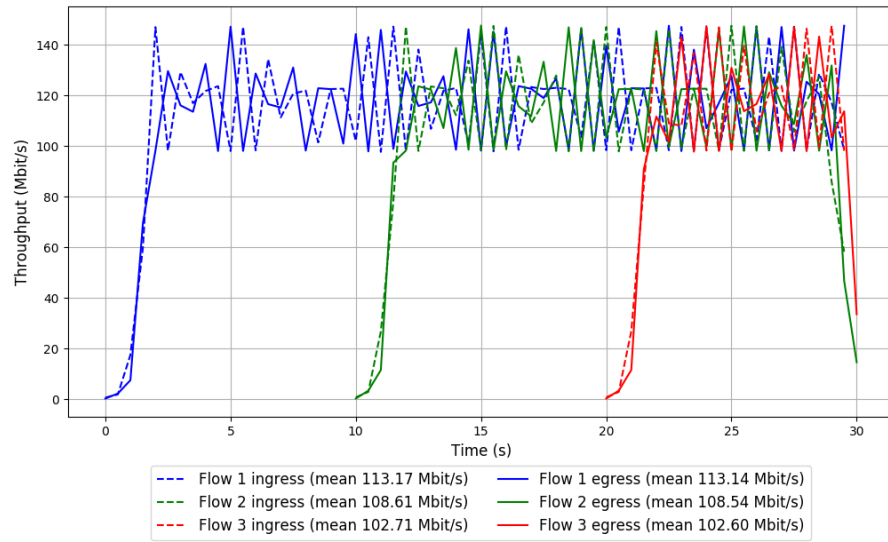
-- Flow 3:

Average throughput: 102.60 Mbit/s

95th percentile per-packet one-way delay: 131.356 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-13 23:39:06

End at: 2018-02-13 23:39:36

Below is generated by plot.py at 2018-02-14 03:33:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 219.54 Mbit/s

95th percentile per-packet one-way delay: 132.804 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 113.30 Mbit/s

95th percentile per-packet one-way delay: 131.088 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 110.14 Mbit/s

95th percentile per-packet one-way delay: 134.236 ms

Loss rate: 0.00%

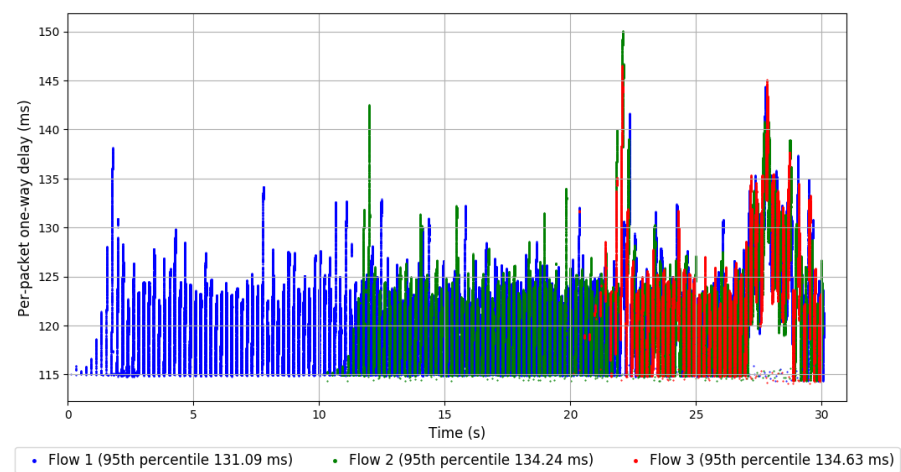
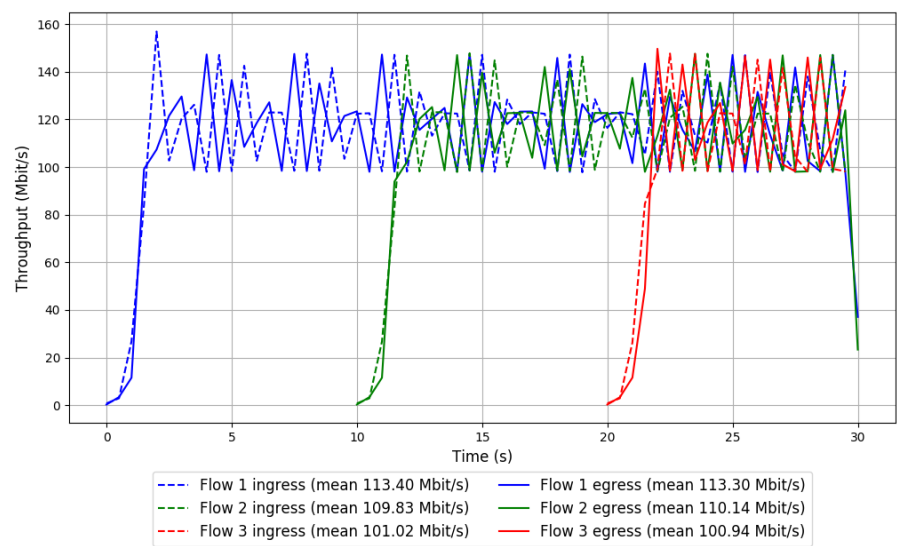
-- Flow 3:

Average throughput: 100.94 Mbit/s

95th percentile per-packet one-way delay: 134.632 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-13 23:58:25

End at: 2018-02-13 23:58:55

Below is generated by plot.py at 2018-02-14 03:34:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 180.88 Mbit/s

95th percentile per-packet one-way delay: 126.628 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 84.20 Mbit/s

95th percentile per-packet one-way delay: 127.806 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 111.11 Mbit/s

95th percentile per-packet one-way delay: 125.523 ms

Loss rate: 0.11%

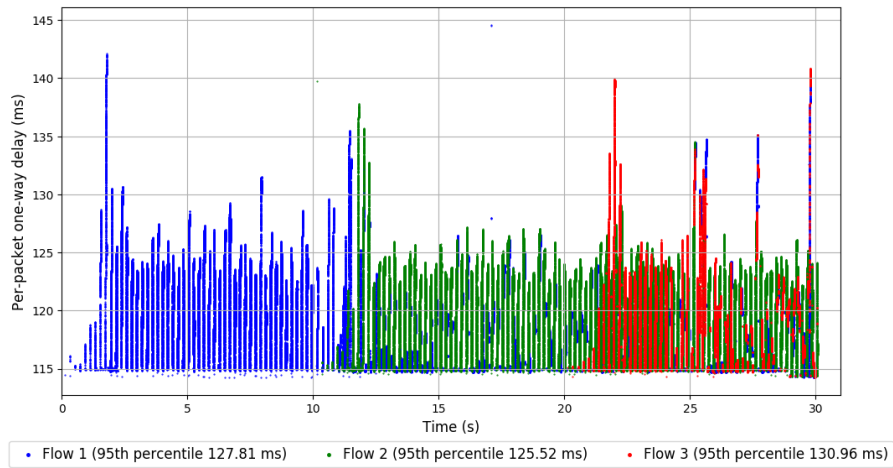
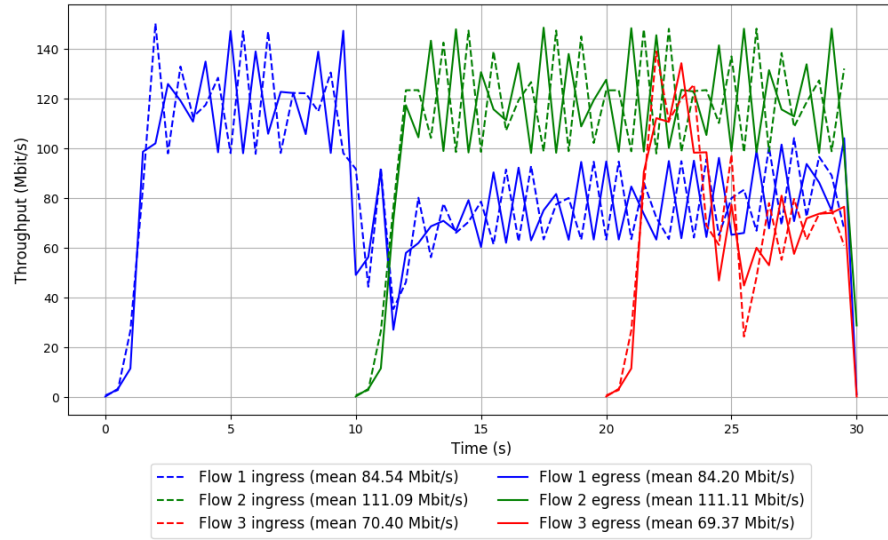
-- Flow 3:

Average throughput: 69.37 Mbit/s

95th percentile per-packet one-way delay: 130.959 ms

Loss rate: 1.42%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-14 00:17:01

End at: 2018-02-14 00:17:31

Below is generated by plot.py at 2018-02-14 03:34:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.23 Mbit/s

95th percentile per-packet one-way delay: 124.504 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 126.01 Mbit/s

95th percentile per-packet one-way delay: 124.013 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 57.07 Mbit/s

95th percentile per-packet one-way delay: 125.408 ms

Loss rate: 0.00%

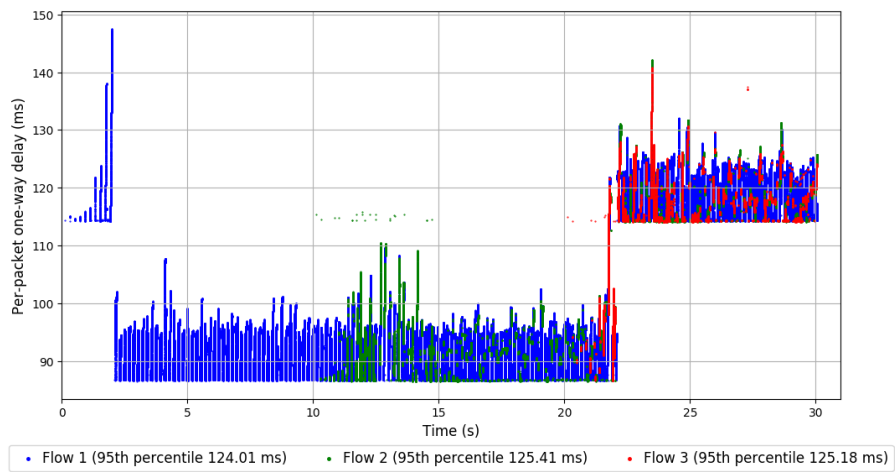
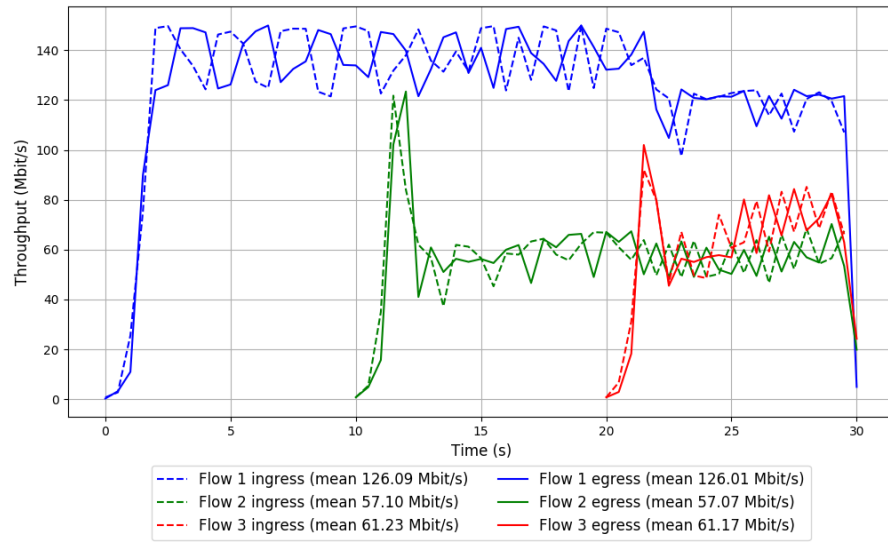
-- Flow 3:

Average throughput: 61.17 Mbit/s

95th percentile per-packet one-way delay: 125.183 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-14 00:35:58

End at: 2018-02-14 00:36:28

Below is generated by plot.py at 2018-02-14 03:35:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 212.36 Mbit/s

95th percentile per-packet one-way delay: 130.578 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 104.94 Mbit/s

95th percentile per-packet one-way delay: 129.241 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 110.46 Mbit/s

95th percentile per-packet one-way delay: 131.210 ms

Loss rate: 0.02%

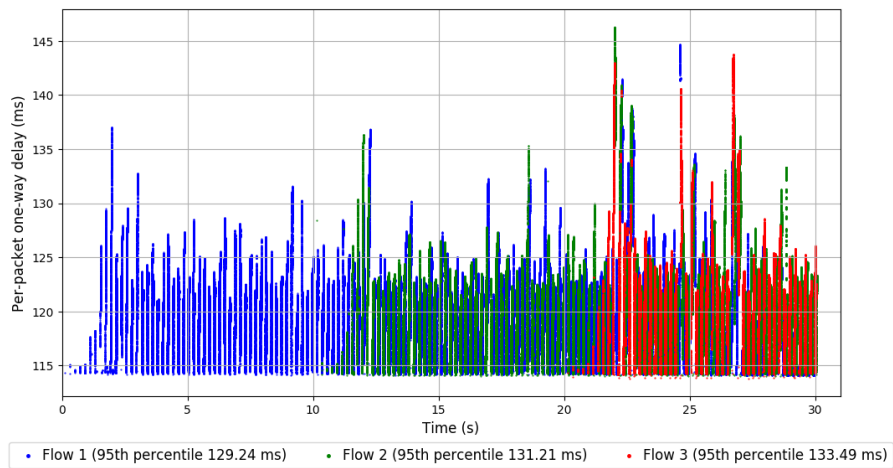
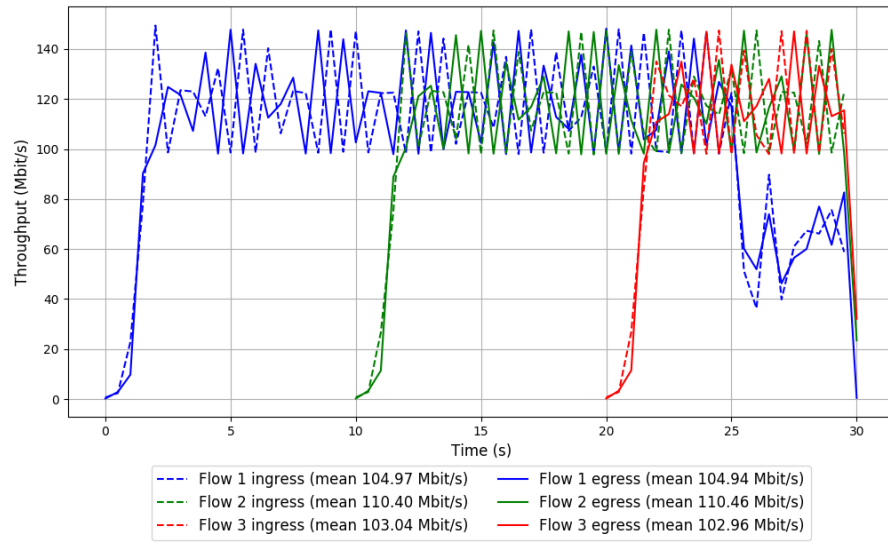
-- Flow 3:

Average throughput: 102.96 Mbit/s

95th percentile per-packet one-way delay: 133.490 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-14 00:55:16

End at: 2018-02-14 00:55:46

Below is generated by plot.py at 2018-02-14 03:35:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 221.19 Mbit/s

95th percentile per-packet one-way delay: 129.135 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 113.78 Mbit/s

95th percentile per-packet one-way delay: 130.629 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 111.00 Mbit/s

95th percentile per-packet one-way delay: 126.542 ms

Loss rate: 0.01%

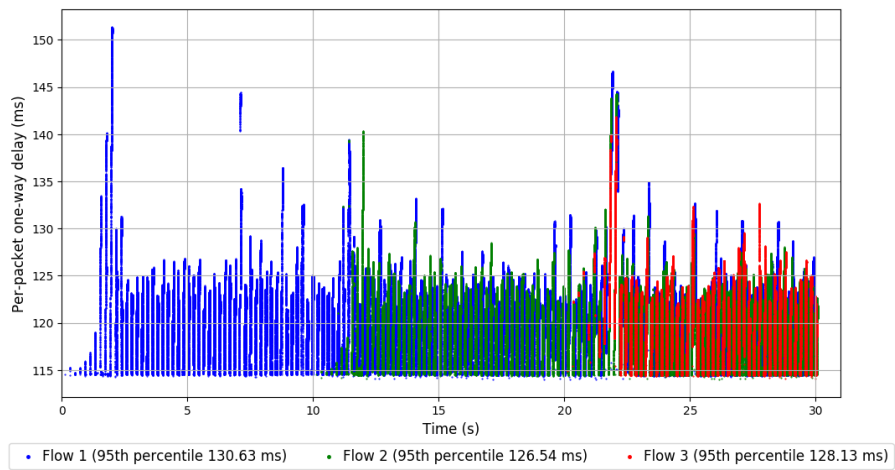
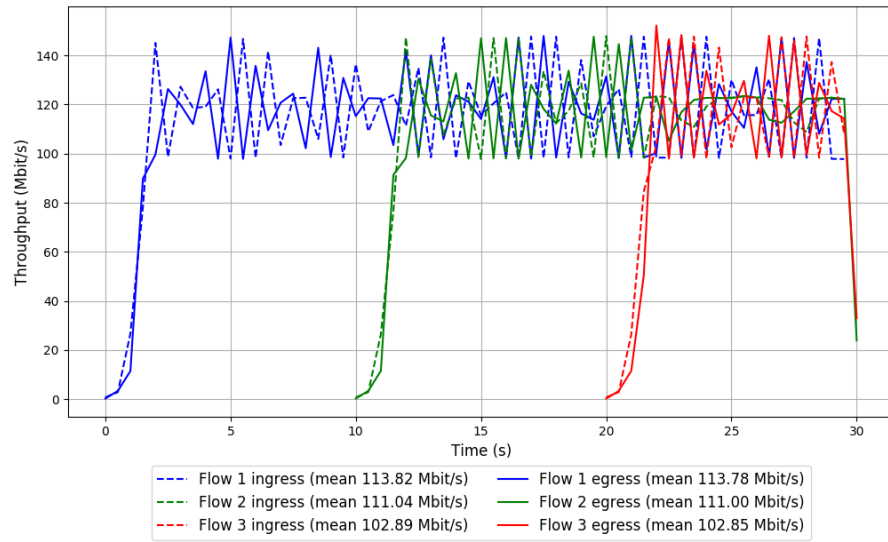
-- Flow 3:

Average throughput: 102.85 Mbit/s

95th percentile per-packet one-way delay: 128.130 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

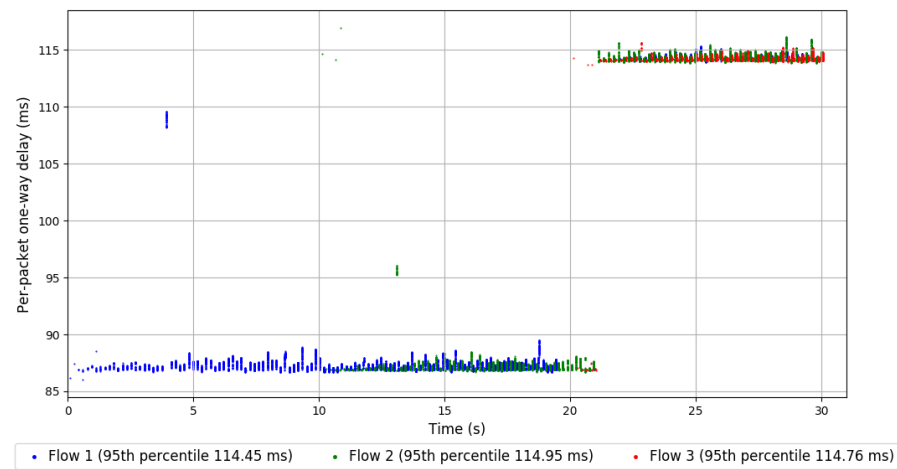
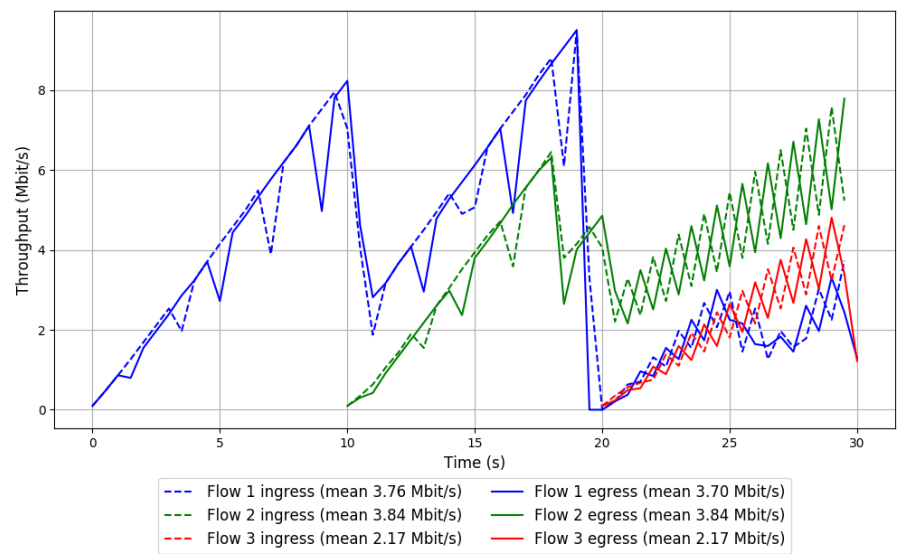


```
Run 1: Statistics of LEDBAT

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

# Below is generated by plot.py at 2018-02-14 03:35:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.96 Mbit/s
95th percentile per-packet one-way delay: 114.747 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 3.70 Mbit/s
95th percentile per-packet one-way delay: 114.446 ms
Loss rate: 1.46%
-- Flow 2:
Average throughput: 3.84 Mbit/s
95th percentile per-packet one-way delay: 114.953 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 114.759 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

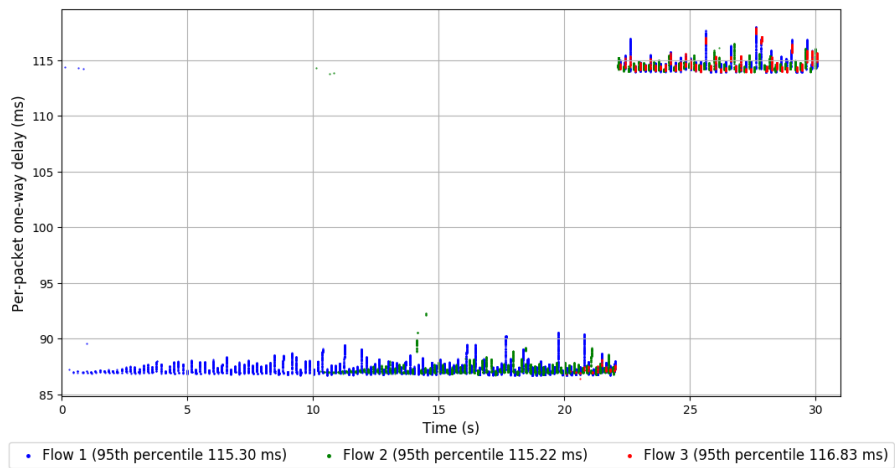
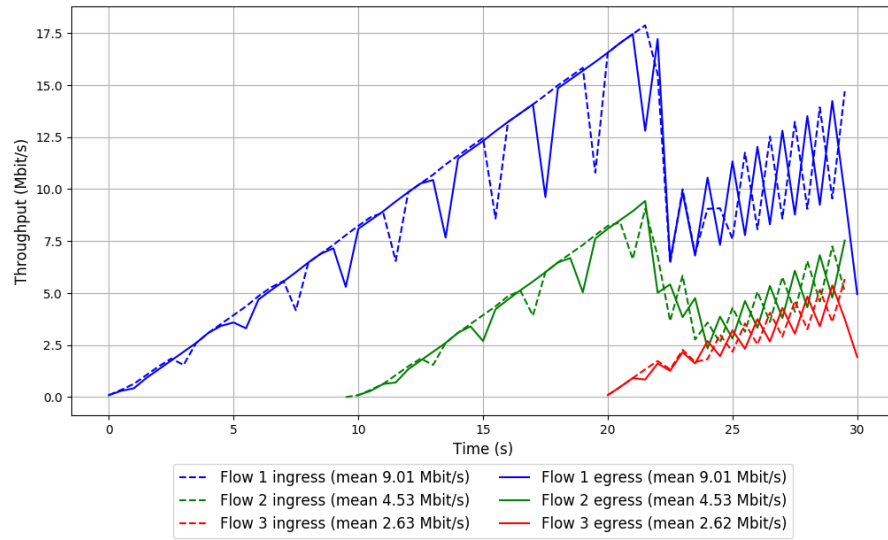


```
Run 2: Statistics of LEDBAT

Start at: 2018-02-13 22:21:01
End at: 2018-02-13 22:21:31

# Below is generated by plot.py at 2018-02-14 03:35:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.89 Mbit/s
95th percentile per-packet one-way delay: 115.414 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.01 Mbit/s
95th percentile per-packet one-way delay: 115.297 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.53 Mbit/s
95th percentile per-packet one-way delay: 115.221 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.62 Mbit/s
95th percentile per-packet one-way delay: 116.830 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-13 22:39:24

End at: 2018-02-13 22:39:54

Below is generated by plot.py at 2018-02-14 03:35:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.09 Mbit/s

95th percentile per-packet one-way delay: 114.930 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.92 Mbit/s

95th percentile per-packet one-way delay: 114.866 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.37 Mbit/s

95th percentile per-packet one-way delay: 114.944 ms

Loss rate: 0.00%

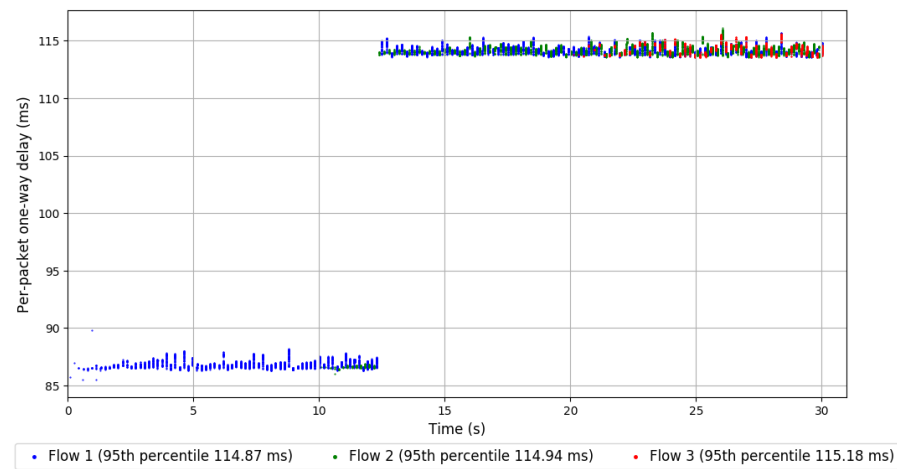
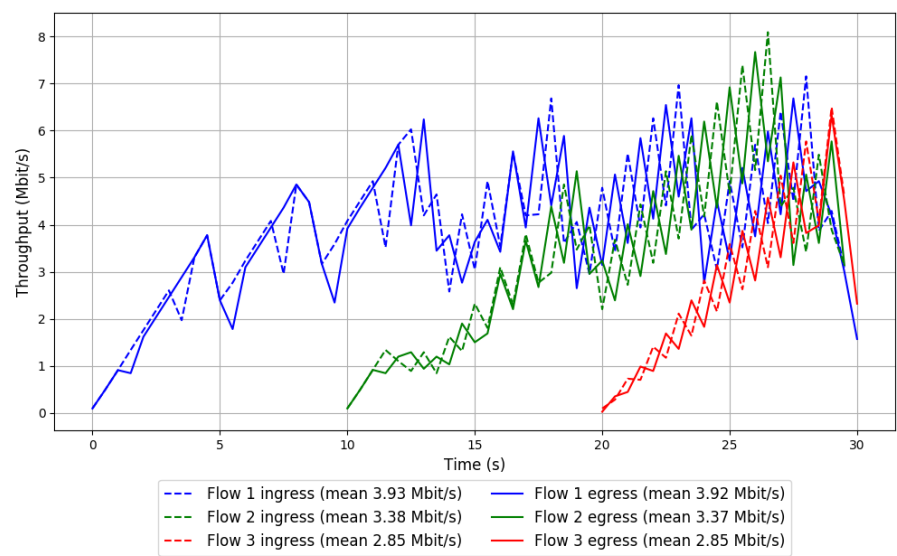
-- Flow 3:

Average throughput: 2.85 Mbit/s

95th percentile per-packet one-way delay: 115.181 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-13 22:57:40

End at: 2018-02-13 22:58:10

Below is generated by plot.py at 2018-02-14 03:35:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 115.152 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 5.51 Mbit/s

95th percentile per-packet one-way delay: 115.261 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 114.735 ms

Loss rate: 0.00%

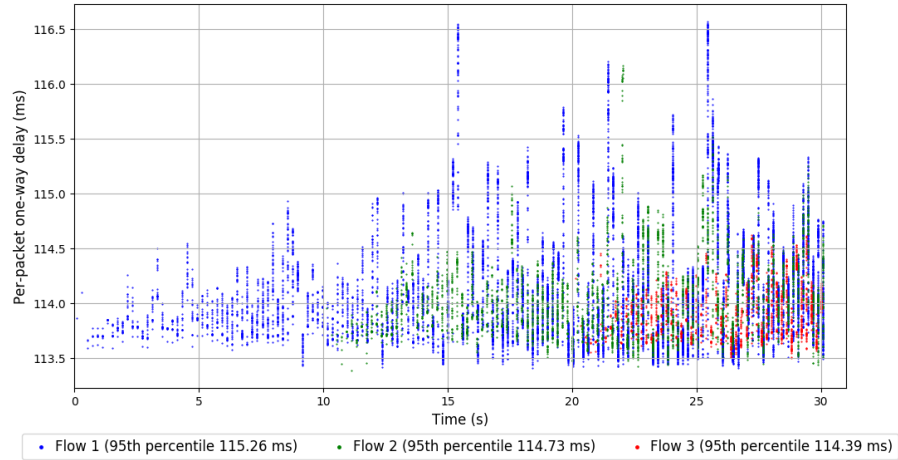
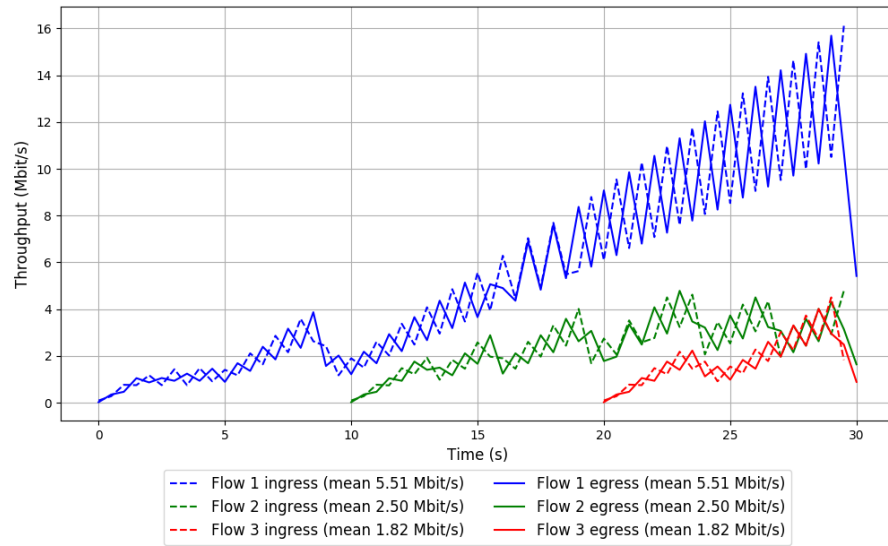
-- Flow 3:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 114.395 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-13 23:16:35

End at: 2018-02-13 23:17:05

Below is generated by plot.py at 2018-02-14 03:35:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.11 Mbit/s

95th percentile per-packet one-way delay: 116.154 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 116.315 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.53 Mbit/s

95th percentile per-packet one-way delay: 115.845 ms

Loss rate: 0.00%

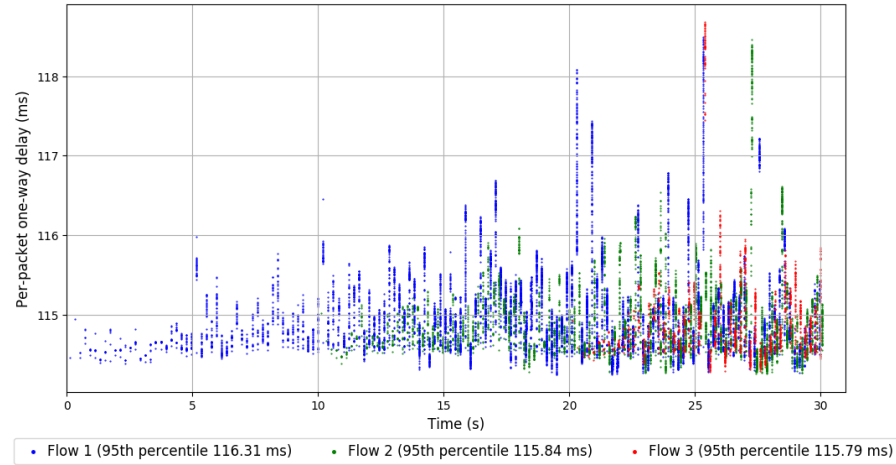
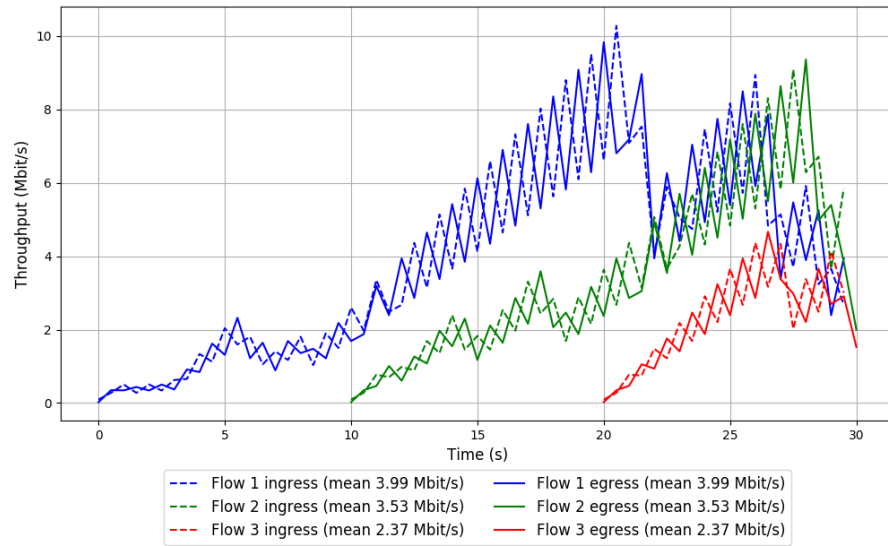
-- Flow 3:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 115.788 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-13 23:35:33

End at: 2018-02-13 23:36:03

Below is generated by plot.py at 2018-02-14 03:35:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 116.341 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.01 Mbit/s

95th percentile per-packet one-way delay: 116.437 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.84 Mbit/s

95th percentile per-packet one-way delay: 116.270 ms

Loss rate: 0.00%

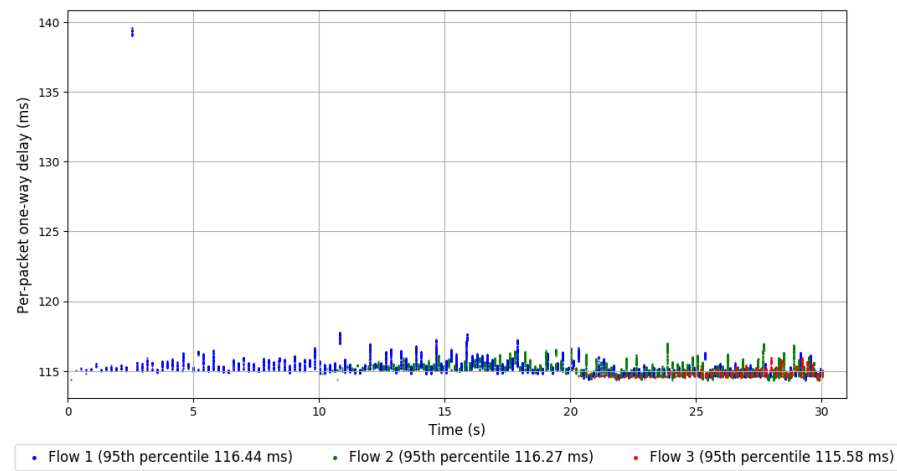
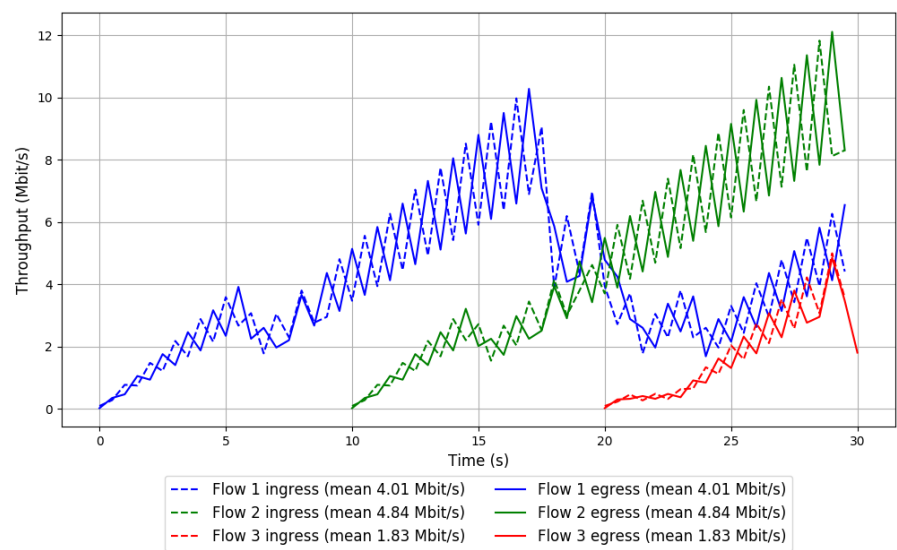
-- Flow 3:

Average throughput: 1.83 Mbit/s

95th percentile per-packet one-way delay: 115.581 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link

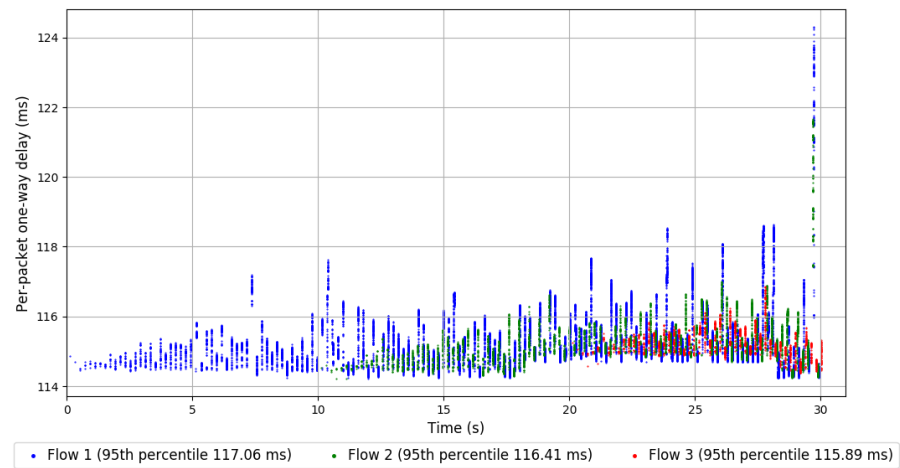
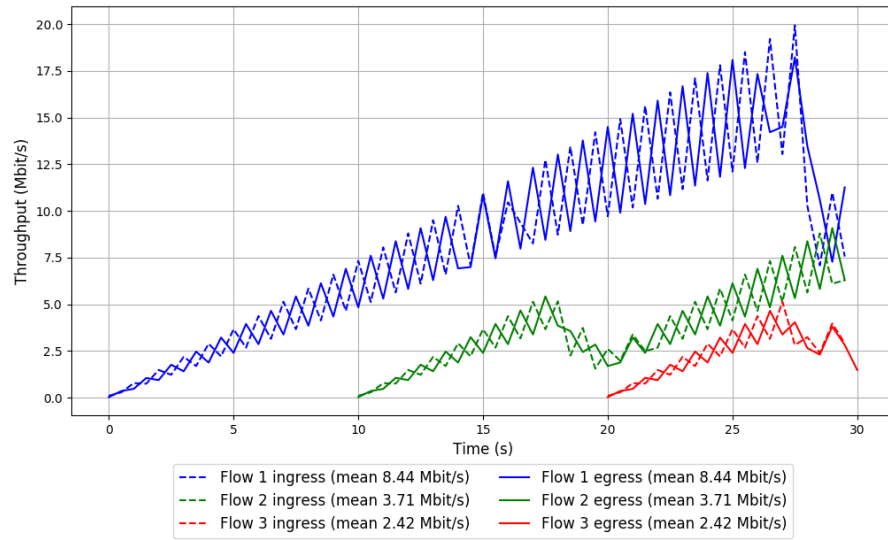


```
Run 7: Statistics of LEDBAT

Start at: 2018-02-13 23:54:45
End at: 2018-02-13 23:55:15

# Below is generated by plot.py at 2018-02-14 03:35:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.67 Mbit/s
95th percentile per-packet one-way delay: 116.855 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 8.44 Mbit/s
95th percentile per-packet one-way delay: 117.057 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.71 Mbit/s
95th percentile per-packet one-way delay: 116.406 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 115.891 ms
Loss rate: 0.00%
```

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-14 00:13:33

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

Below is generated by plot.py at 2018-02-14 03:35:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.44 Mbit/s

95th percentile per-packet one-way delay: 114.393 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.49 Mbit/s

95th percentile per-packet one-way delay: 114.665 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.12 Mbit/s

95th percentile per-packet one-way delay: 88.266 ms

Loss rate: 0.00%

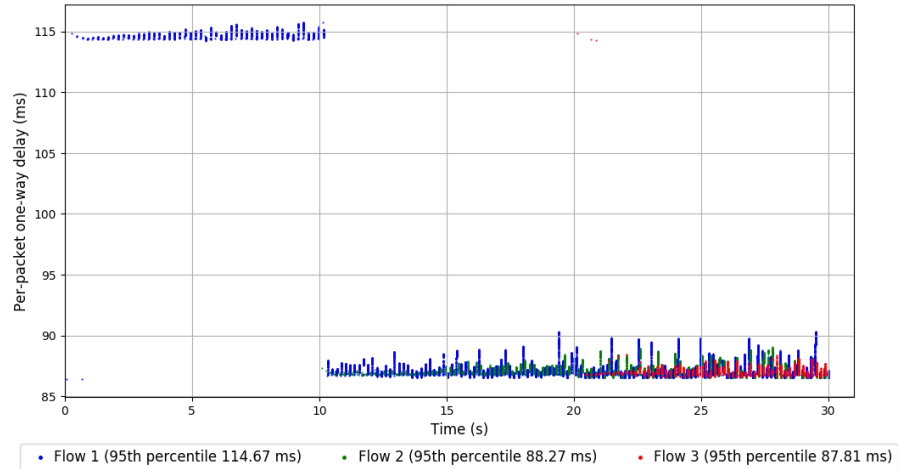
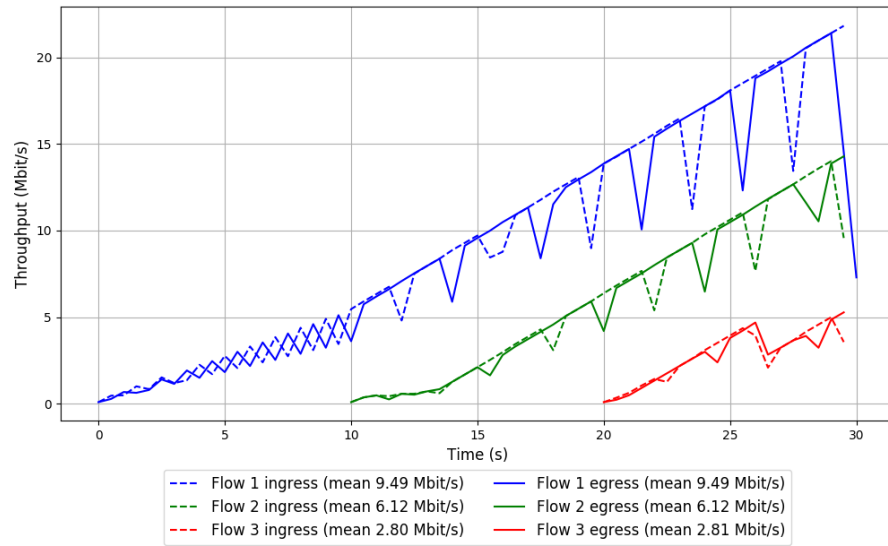
-- Flow 3:

Average throughput: 2.81 Mbit/s

95th percentile per-packet one-way delay: 87.809 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-14 00:32:12

End at: 2018-02-14 00:32:42

Below is generated by plot.py at 2018-02-14 03:35:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.33 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 115.357 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 115.537 ms

Loss rate: 0.00%

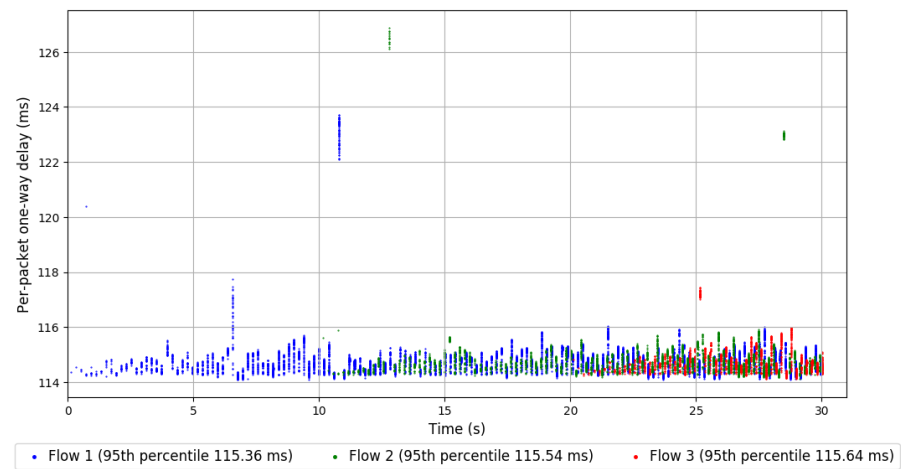
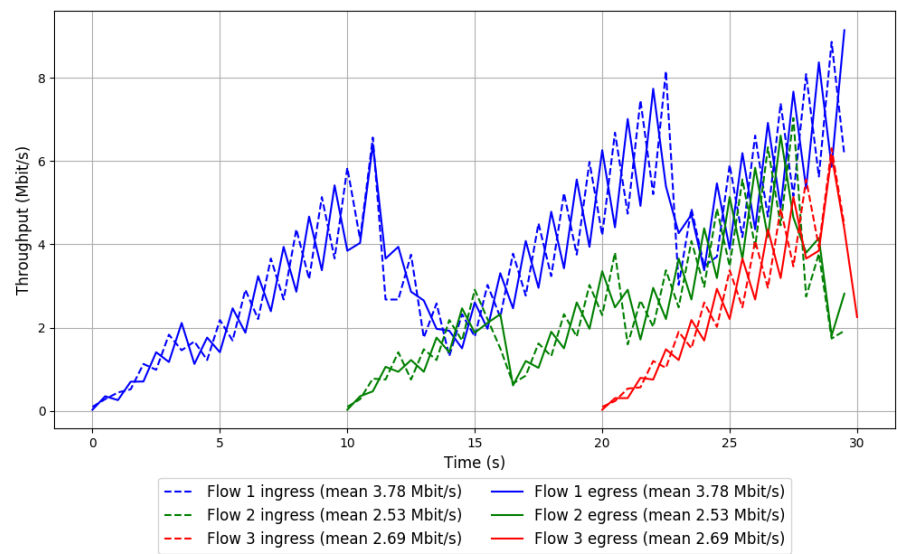
-- Flow 3:

Average throughput: 2.69 Mbit/s

95th percentile per-packet one-way delay: 115.644 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

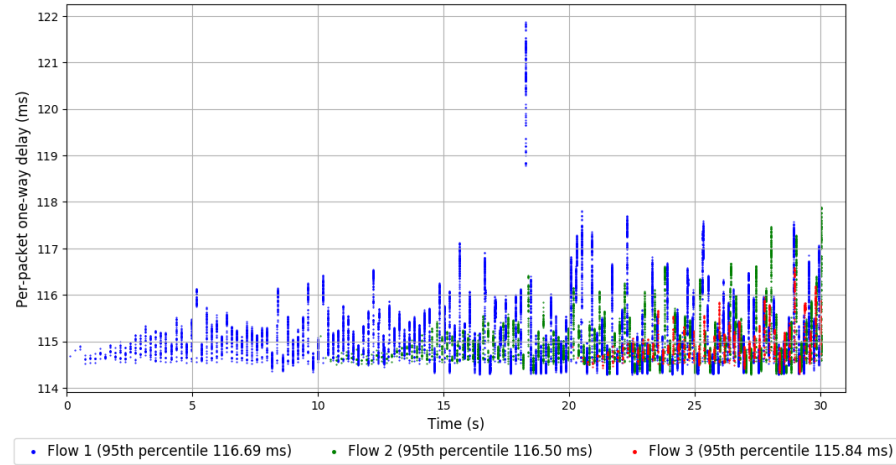
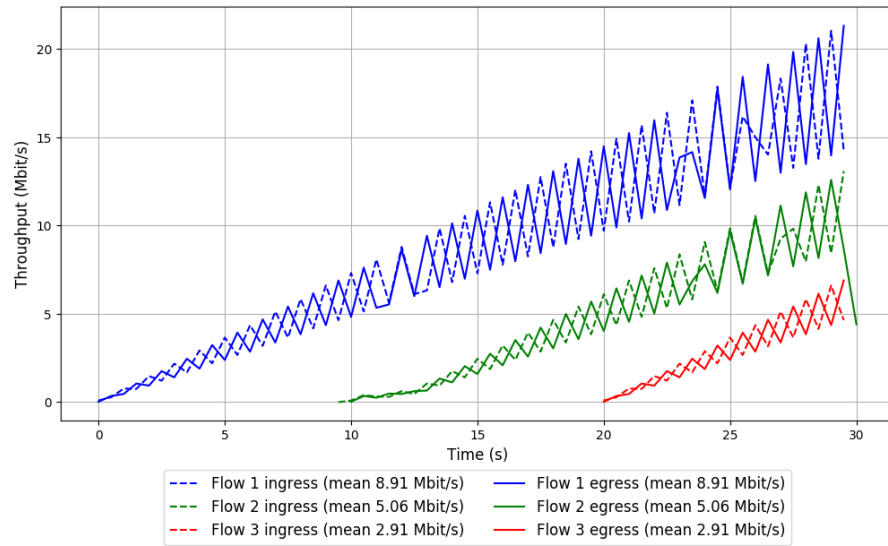


```
Run 10: Statistics of LEDBAT

Start at: 2018-02-14 00:51:33
End at: 2018-02-14 00:52:03

# Below is generated by plot.py at 2018-02-14 03:35:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.21 Mbit/s
95th percentile per-packet one-way delay: 116.566 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 8.91 Mbit/s
95th percentile per-packet one-way delay: 116.690 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.06 Mbit/s
95th percentile per-packet one-way delay: 116.497 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.91 Mbit/s
95th percentile per-packet one-way delay: 115.839 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

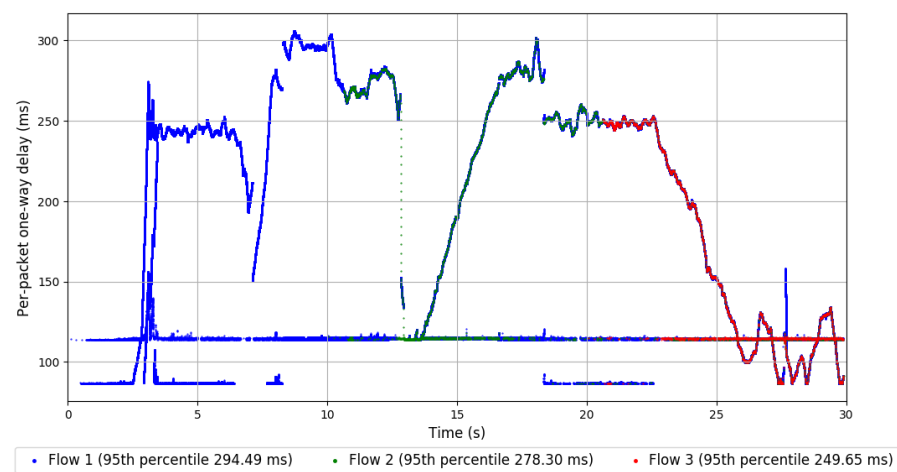
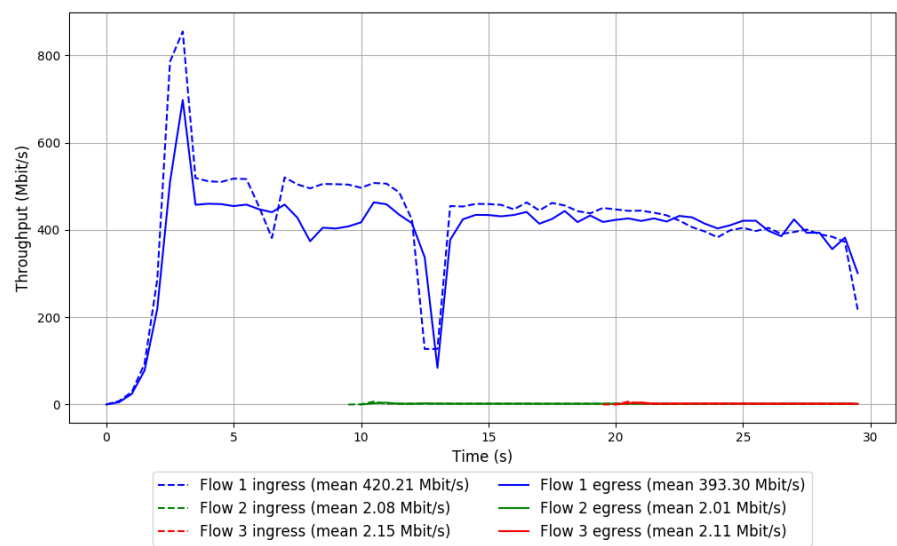


```
Run 1: Statistics of PCC

Start at: 2018-02-13 22:07:55
End at: 2018-02-13 22:08:25

# Below is generated by plot.py at 2018-02-14 03:39:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 395.30 Mbit/s
95th percentile per-packet one-way delay: 294.455 ms
Loss rate: 6.47%
-- Flow 1:
Average throughput: 393.30 Mbit/s
95th percentile per-packet one-way delay: 294.488 ms
Loss rate: 6.49%
-- Flow 2:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 278.295 ms
Loss rate: 3.67%
-- Flow 3:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 249.650 ms
Loss rate: 1.88%
```

Run 1: Report of PCC — Data Link

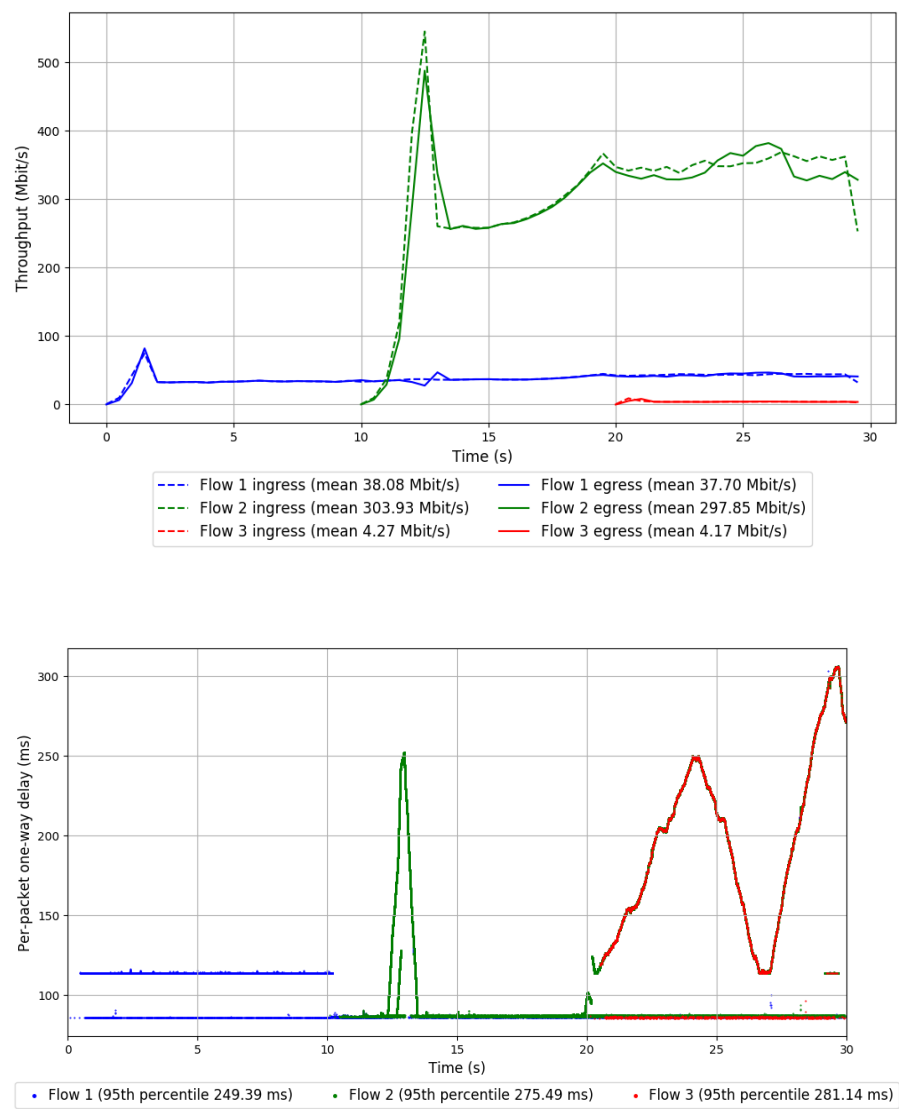


```
Run 2: Statistics of PCC

Start at: 2018-02-13 22:26:23
End at: 2018-02-13 22:26:53

# Below is generated by plot.py at 2018-02-14 03:39:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 237.09 Mbit/s
95th percentile per-packet one-way delay: 273.900 ms
Loss rate: 1.72%
-- Flow 1:
Average throughput: 37.70 Mbit/s
95th percentile per-packet one-way delay: 249.393 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 297.85 Mbit/s
95th percentile per-packet one-way delay: 275.485 ms
Loss rate: 1.87%
-- Flow 3:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 281.145 ms
Loss rate: 2.06%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-13 22:44:45

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

Below is generated by plot.py at 2018-02-14 03:39:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 245.75 Mbit/s

95th percentile per-packet one-way delay: 236.153 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 48.43 Mbit/s

95th percentile per-packet one-way delay: 235.055 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 288.95 Mbit/s

95th percentile per-packet one-way delay: 236.714 ms

Loss rate: 0.97%

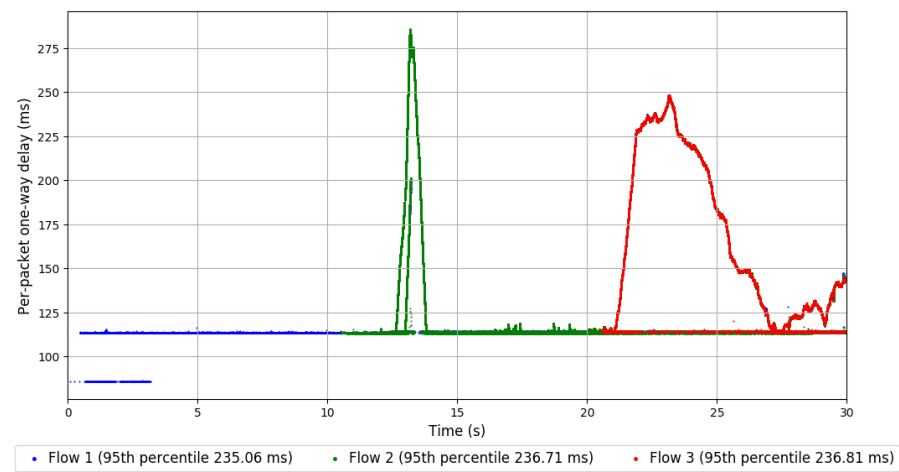
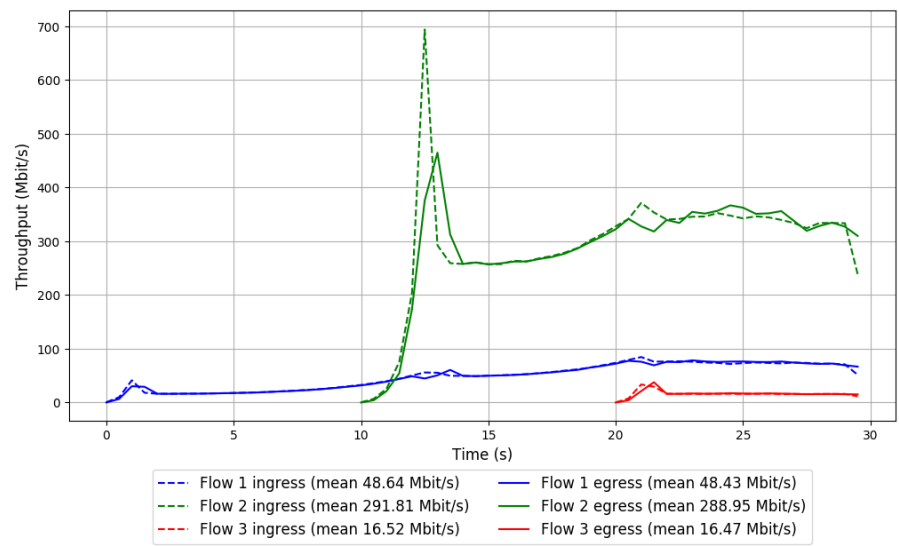
-- Flow 3:

Average throughput: 16.47 Mbit/s

95th percentile per-packet one-way delay: 236.807 ms

Loss rate: 0.29%

Run 3: Report of PCC — Data Link

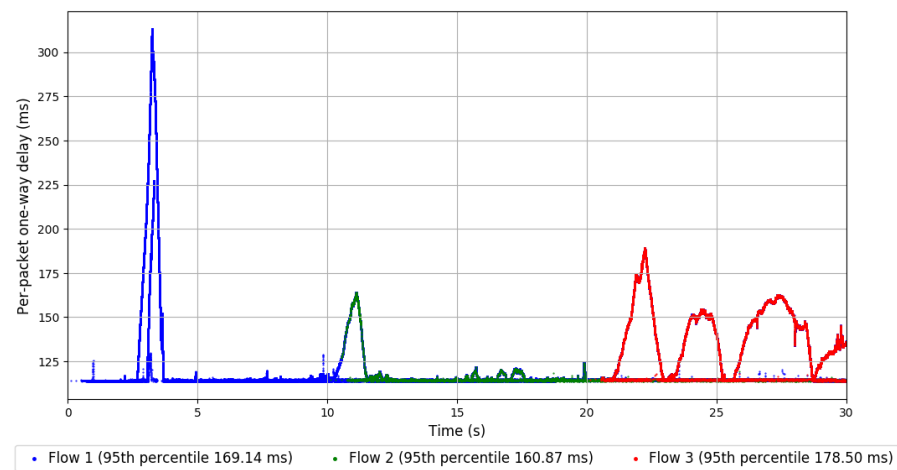
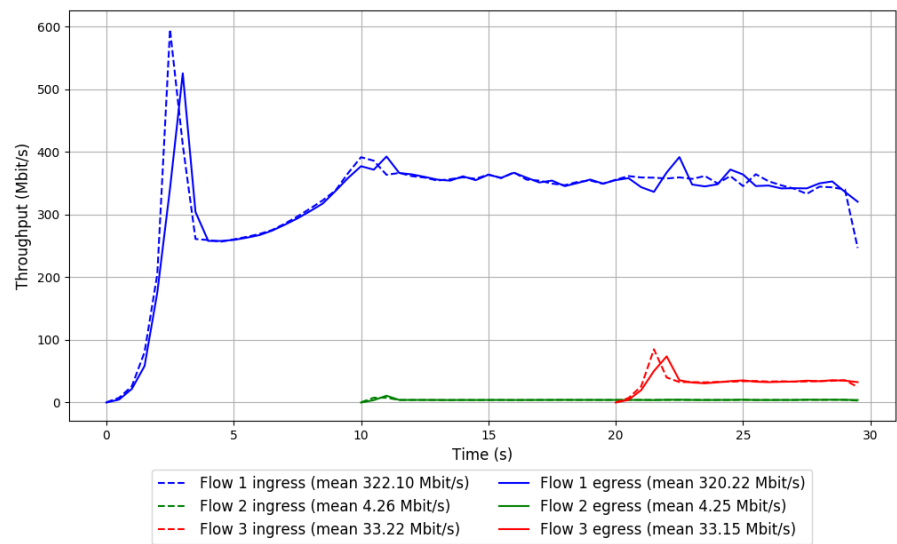


```
Run 4: Statistics of PCC

Start at: 2018-02-13 23:03:19
End at: 2018-02-13 23:03:49

# Below is generated by plot.py at 2018-02-14 03:39:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 333.97 Mbit/s
95th percentile per-packet one-way delay: 170.460 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 320.22 Mbit/s
95th percentile per-packet one-way delay: 169.139 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 4.25 Mbit/s
95th percentile per-packet one-way delay: 160.866 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 33.15 Mbit/s
95th percentile per-packet one-way delay: 178.499 ms
Loss rate: 0.22%
```

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-13 23:22:20

End at: 2018-02-13 23:22:50

Below is generated by plot.py at 2018-02-14 03:39:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 346.22 Mbit/s

95th percentile per-packet one-way delay: 210.144 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 339.08 Mbit/s

95th percentile per-packet one-way delay: 210.148 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 8.62 Mbit/s

95th percentile per-packet one-way delay: 206.597 ms

Loss rate: 0.06%

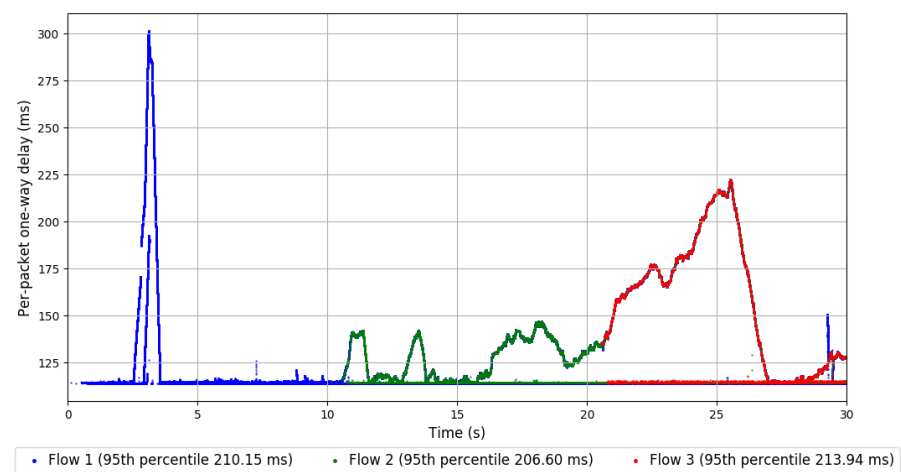
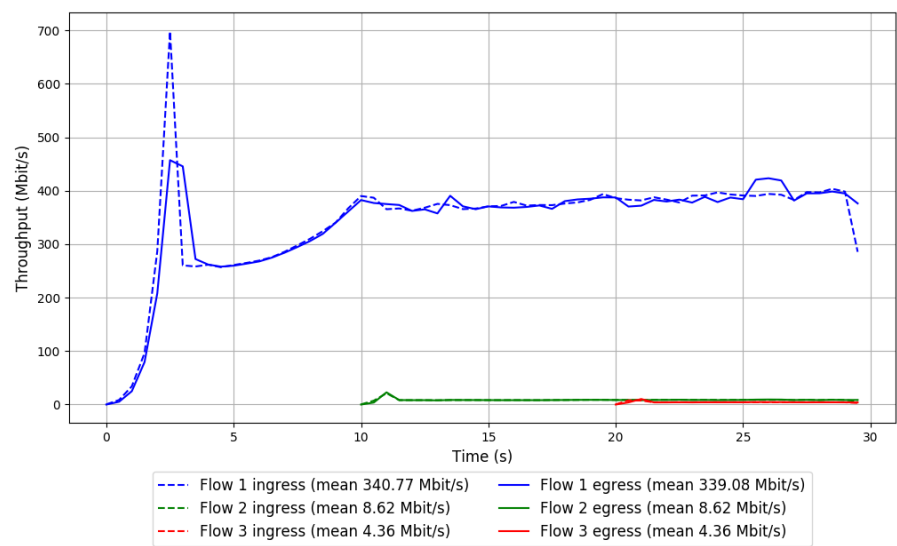
-- Flow 3:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 213.940 ms

Loss rate: 0.14%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-13 23:41:11

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

Below is generated by plot.py at 2018-02-14 03:40:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 357.64 Mbit/s

95th percentile per-packet one-way delay: 294.691 ms

Loss rate: 1.61%

-- Flow 1:

Average throughput: 314.54 Mbit/s

95th percentile per-packet one-way delay: 294.499 ms

Loss rate: 1.63%

-- Flow 2:

Average throughput: 63.69 Mbit/s

95th percentile per-packet one-way delay: 295.359 ms

Loss rate: 1.45%

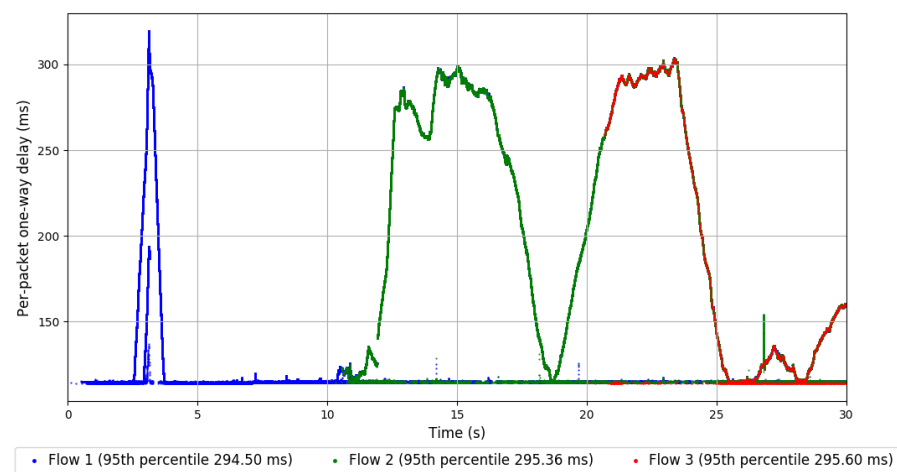
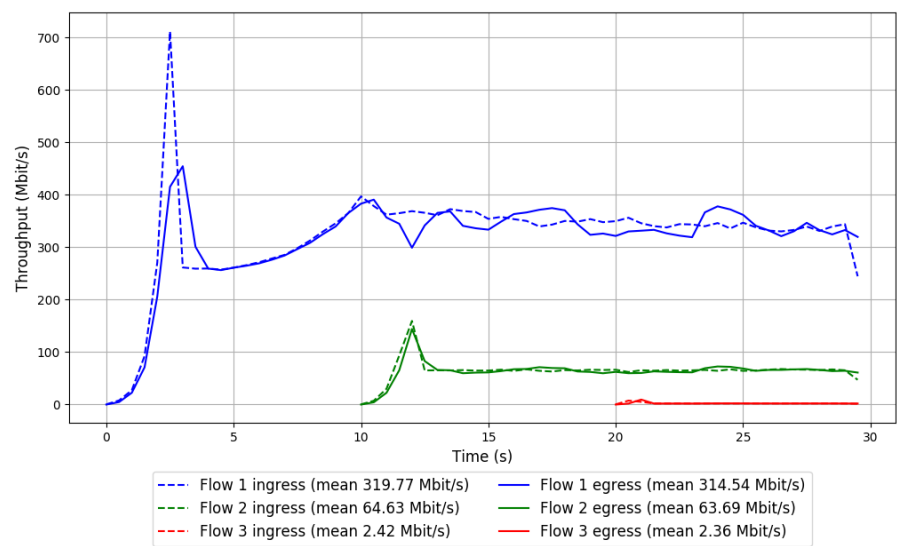
-- Flow 3:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 295.595 ms

Loss rate: 2.57%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

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

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

Below is generated by plot.py at 2018-02-14 03:41:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 360.88 Mbit/s

95th percentile per-packet one-way delay: 274.231 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 318.29 Mbit/s

95th percentile per-packet one-way delay: 273.325 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 33.25 Mbit/s

95th percentile per-packet one-way delay: 274.656 ms

Loss rate: 0.96%

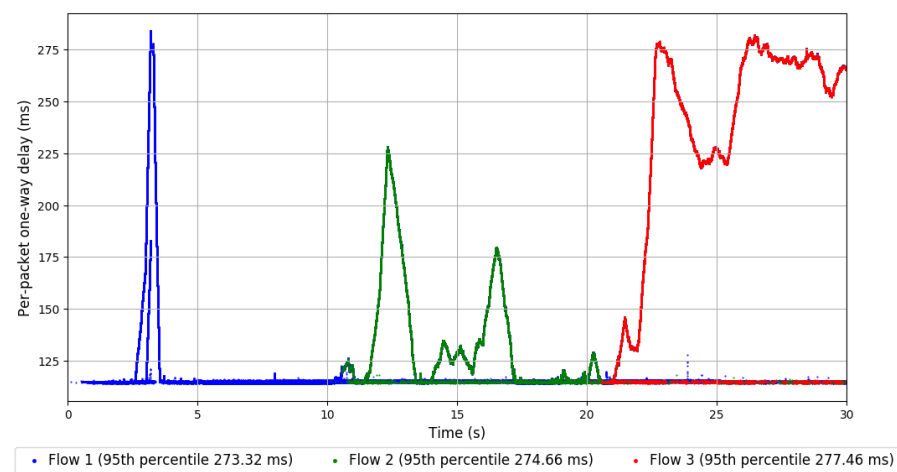
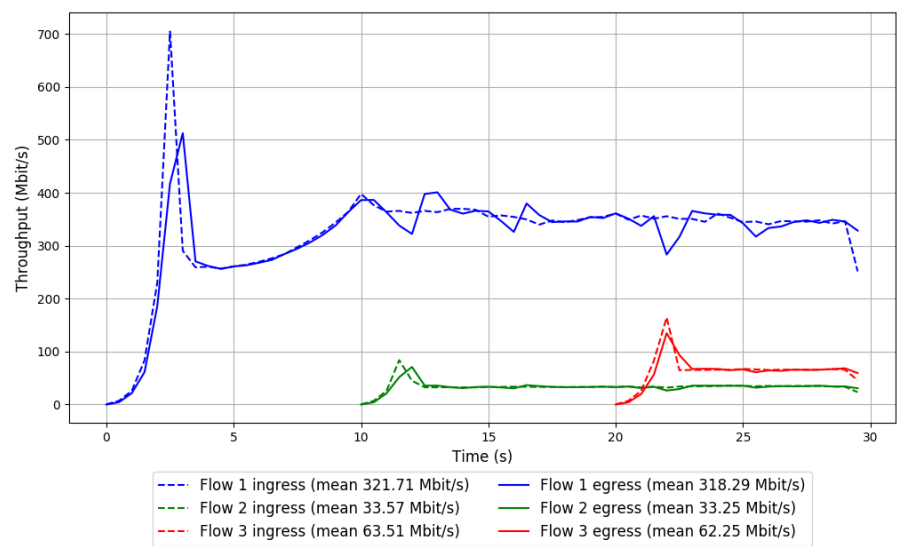
-- Flow 3:

Average throughput: 62.25 Mbit/s

95th percentile per-packet one-way delay: 277.462 ms

Loss rate: 1.98%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-14 00:19:04

End at: 2018-02-14 00:19:34

Below is generated by plot.py at 2018-02-14 03:41:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 352.55 Mbit/s

95th percentile per-packet one-way delay: 259.769 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 347.35 Mbit/s

95th percentile per-packet one-way delay: 259.691 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 5.65 Mbit/s

95th percentile per-packet one-way delay: 260.795 ms

Loss rate: 0.89%

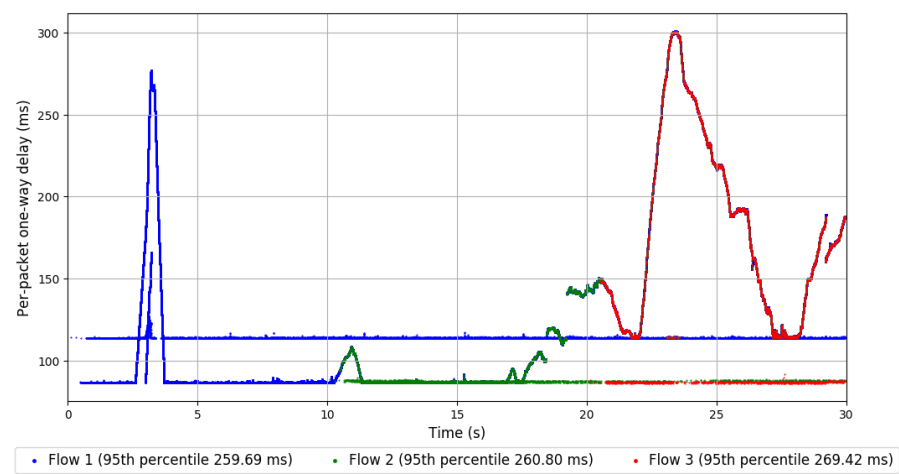
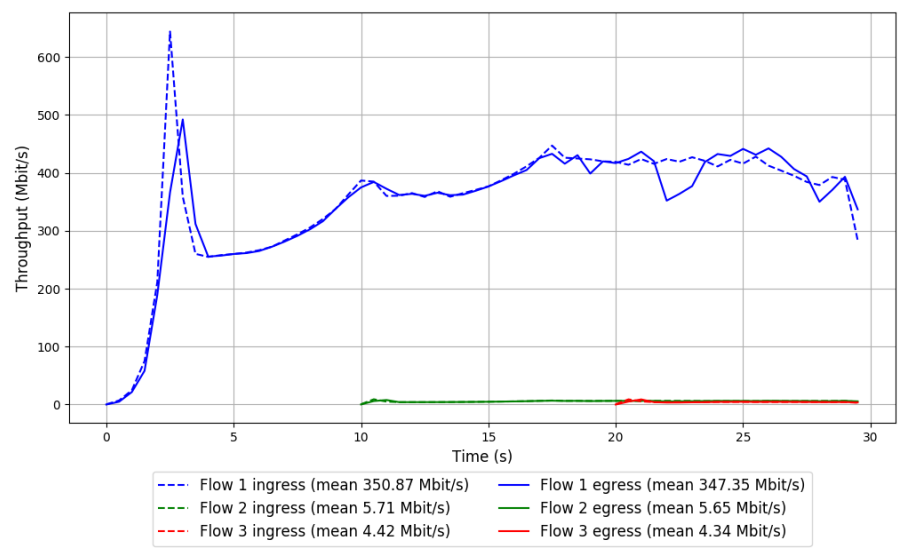
-- Flow 3:

Average throughput: 4.34 Mbit/s

95th percentile per-packet one-way delay: 269.416 ms

Loss rate: 1.63%

Run 8: Report of PCC — Data Link

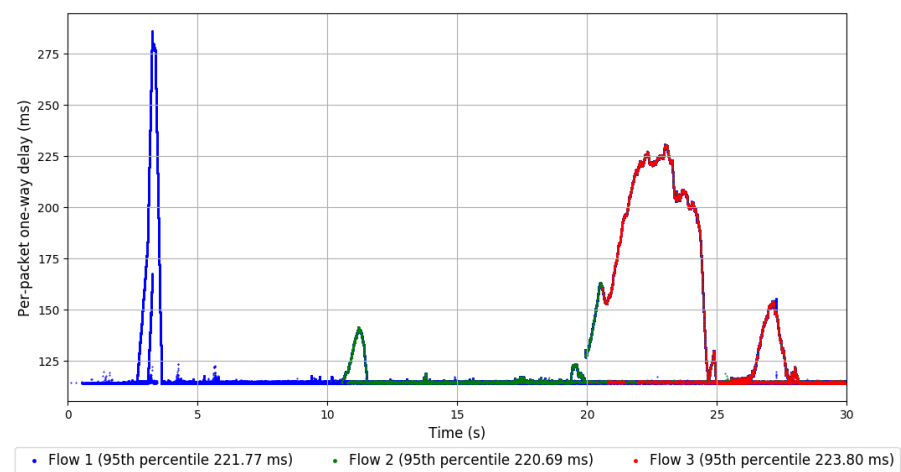
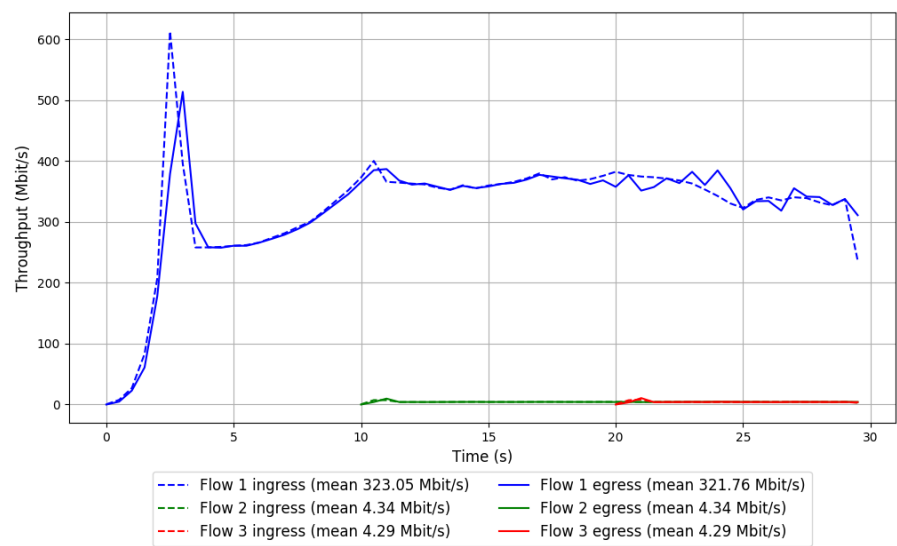


```
Run 9: Statistics of PCC

Start at: 2018-02-14 00:38:03
End at: 2018-02-14 00:38:33

# Below is generated by plot.py at 2018-02-14 03:42:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 326.06 Mbit/s
95th percentile per-packet one-way delay: 221.778 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 321.76 Mbit/s
95th percentile per-packet one-way delay: 221.772 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 4.34 Mbit/s
95th percentile per-packet one-way delay: 220.694 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.29 Mbit/s
95th percentile per-packet one-way delay: 223.800 ms
Loss rate: 0.00%
```

Run 9: Report of PCC — Data Link

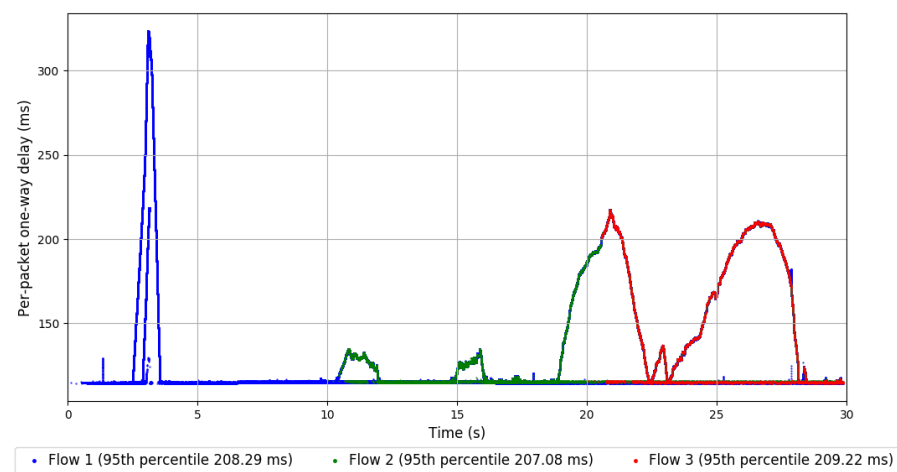
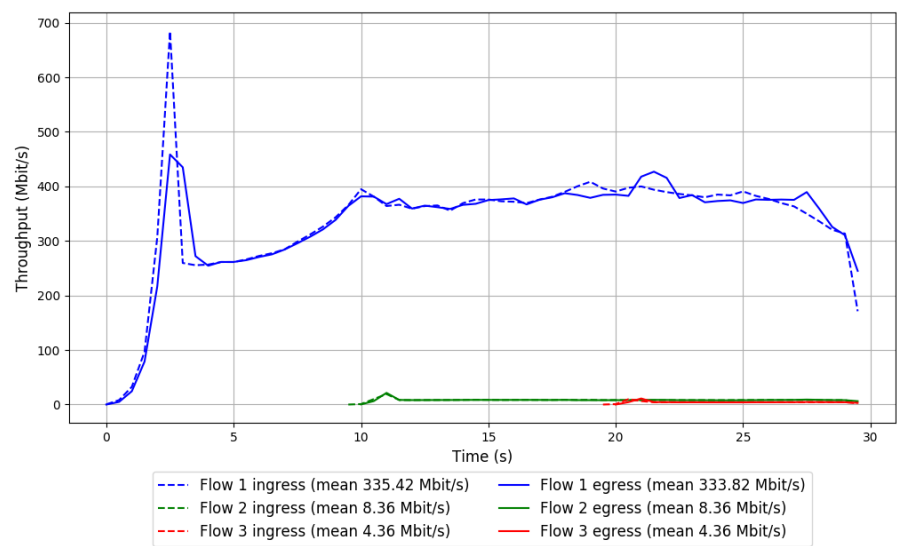


```
Run 10: Statistics of PCC

Start at: 2018-02-14 00:57:21
End at: 2018-02-14 00:57:51

# Below is generated by plot.py at 2018-02-14 03:43:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 340.84 Mbit/s
95th percentile per-packet one-way delay: 208.281 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 333.82 Mbit/s
95th percentile per-packet one-way delay: 208.291 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 8.36 Mbit/s
95th percentile per-packet one-way delay: 207.082 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.36 Mbit/s
95th percentile per-packet one-way delay: 209.217 ms
Loss rate: 0.00%
```

Run 10: Report of PCC — Data Link

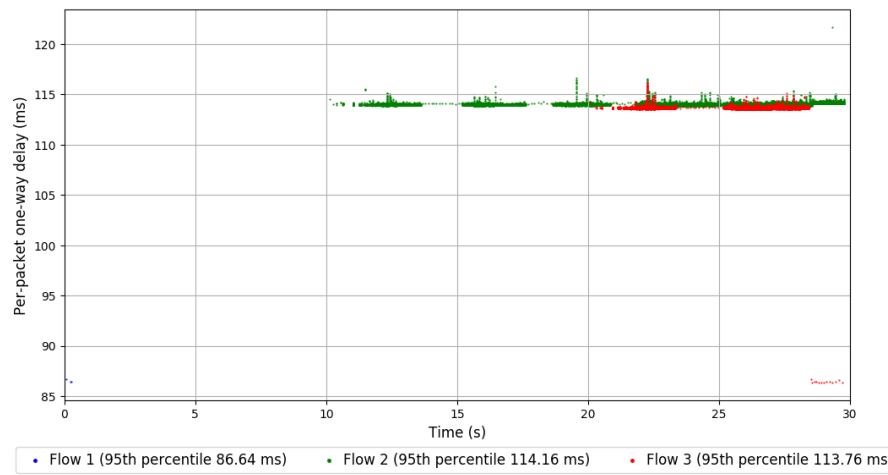
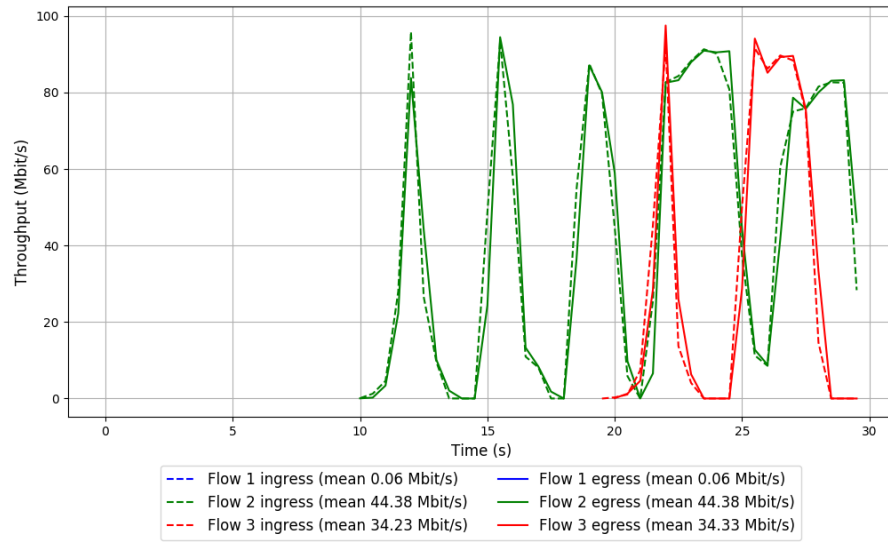


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-13 22:15:35
End at: 2018-02-13 22:16:05

# Below is generated by plot.py at 2018-02-14 03:43:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.47 Mbit/s
95th percentile per-packet one-way delay: 114.145 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 86.641 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.38 Mbit/s
95th percentile per-packet one-way delay: 114.161 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.33 Mbit/s
95th percentile per-packet one-way delay: 113.756 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link

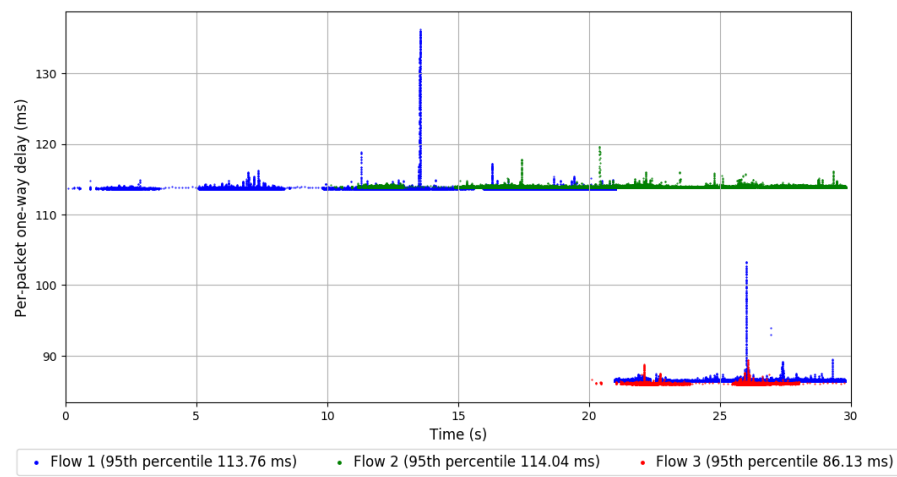
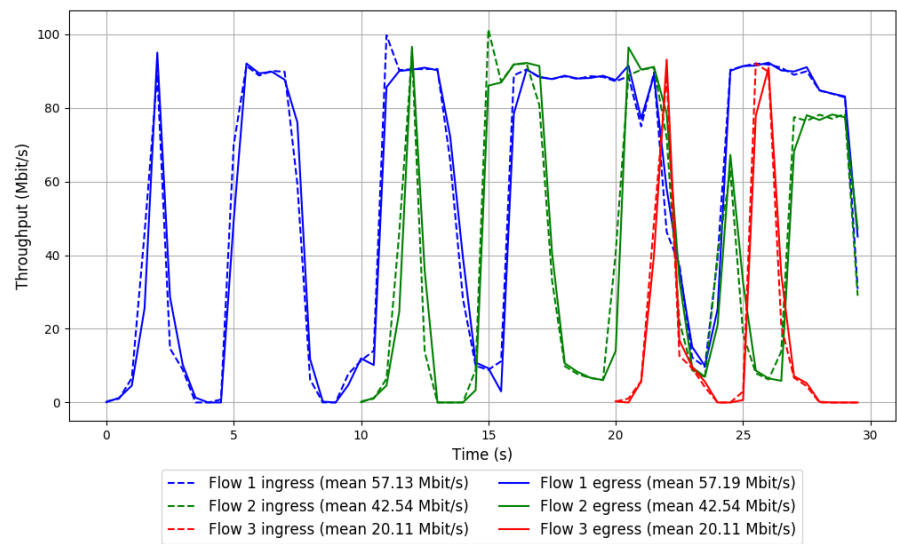


```
Run 2: Statistics of QUIC Cubic

Start at: 2018-02-13 22:34:02
End at: 2018-02-13 22:34:32

# Below is generated by plot.py at 2018-02-14 03:43:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.87 Mbit/s
95th percentile per-packet one-way delay: 113.970 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.19 Mbit/s
95th percentile per-packet one-way delay: 113.764 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.54 Mbit/s
95th percentile per-packet one-way delay: 114.042 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.11 Mbit/s
95th percentile per-packet one-way delay: 86.126 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-13 22:52:08

End at: 2018-02-13 22:52:38

Below is generated by plot.py at 2018-02-14 03:43:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.56 Mbit/s

95th percentile per-packet one-way delay: 113.567 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.60 Mbit/s

95th percentile per-packet one-way delay: 113.429 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.40 Mbit/s

95th percentile per-packet one-way delay: 113.641 ms

Loss rate: 0.00%

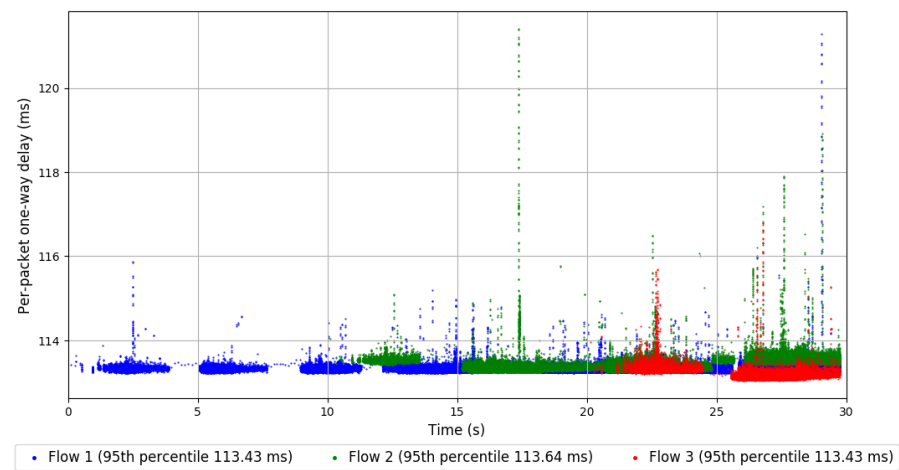
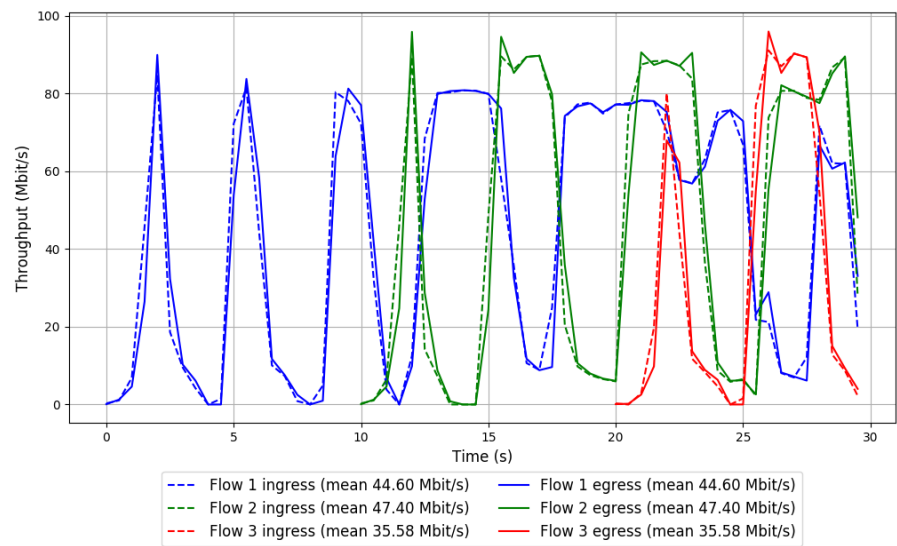
-- Flow 3:

Average throughput: 35.58 Mbit/s

95th percentile per-packet one-way delay: 113.429 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-13 23:11:00

End at: 2018-02-13 23:11:30

Below is generated by plot.py at 2018-02-14 03:43:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.41 Mbit/s

95th percentile per-packet one-way delay: 114.418 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.93 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.47 Mbit/s

95th percentile per-packet one-way delay: 114.263 ms

Loss rate: 0.00%

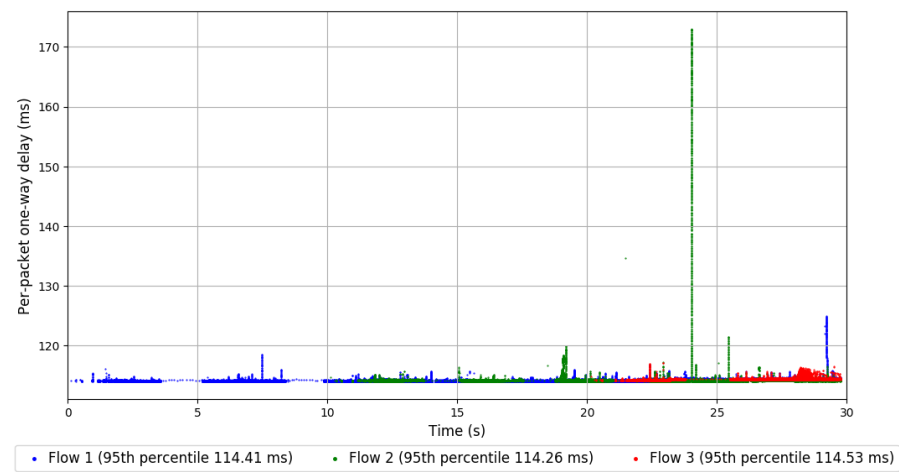
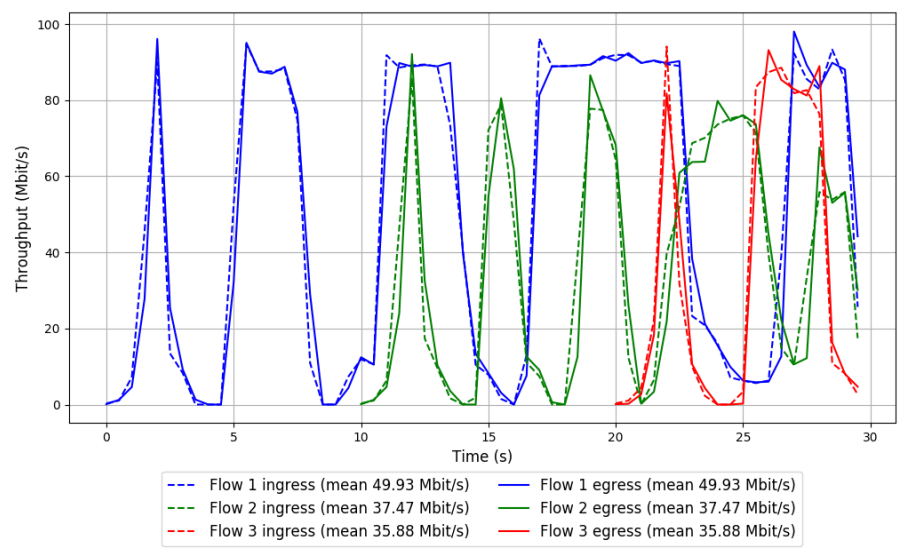
-- Flow 3:

Average throughput: 35.88 Mbit/s

95th percentile per-packet one-way delay: 114.529 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-13 23:30:00

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

Below is generated by plot.py at 2018-02-14 03:43:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.08 Mbit/s

95th percentile per-packet one-way delay: 114.711 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 55.26 Mbit/s

95th percentile per-packet one-way delay: 114.403 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.79 Mbit/s

95th percentile per-packet one-way delay: 114.768 ms

Loss rate: 0.00%

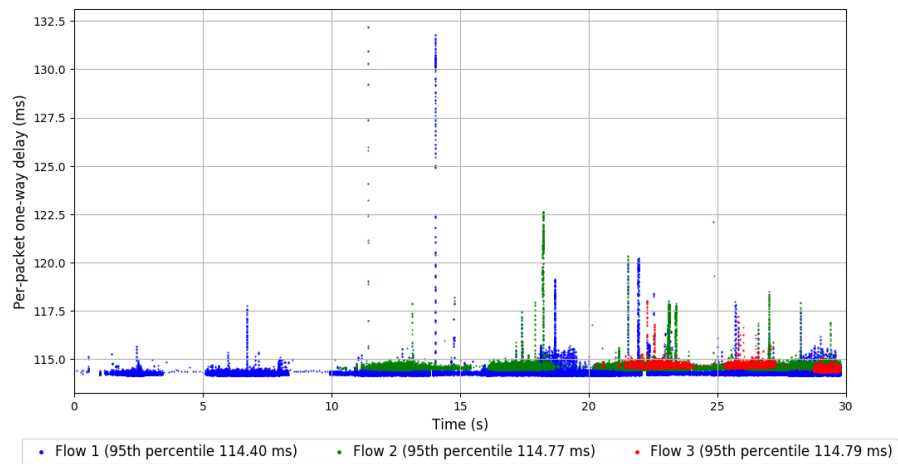
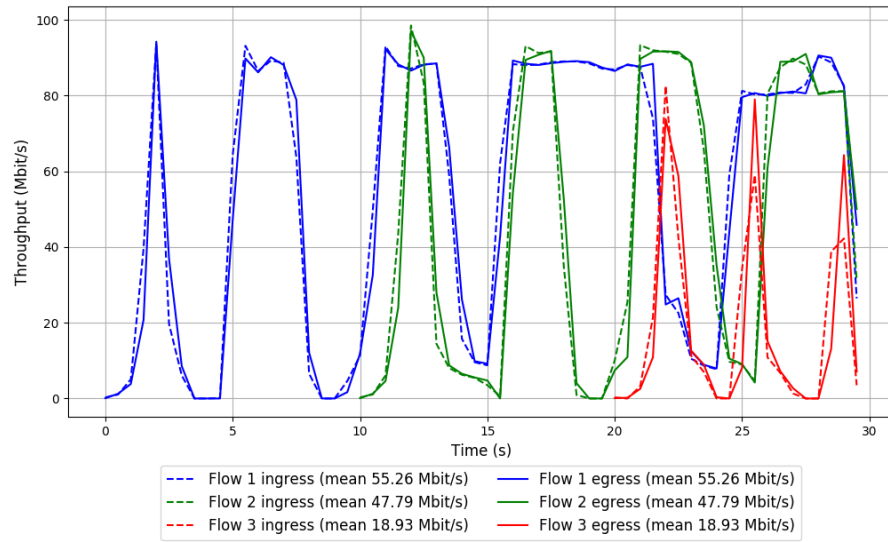
-- Flow 3:

Average throughput: 18.93 Mbit/s

95th percentile per-packet one-way delay: 114.794 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-13 23:49:04

End at: 2018-02-13 23:49:34

Below is generated by plot.py at 2018-02-14 03:43:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.88 Mbit/s

95th percentile per-packet one-way delay: 114.554 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.42 Mbit/s

95th percentile per-packet one-way delay: 114.865 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.12 Mbit/s

95th percentile per-packet one-way delay: 114.274 ms

Loss rate: 0.00%

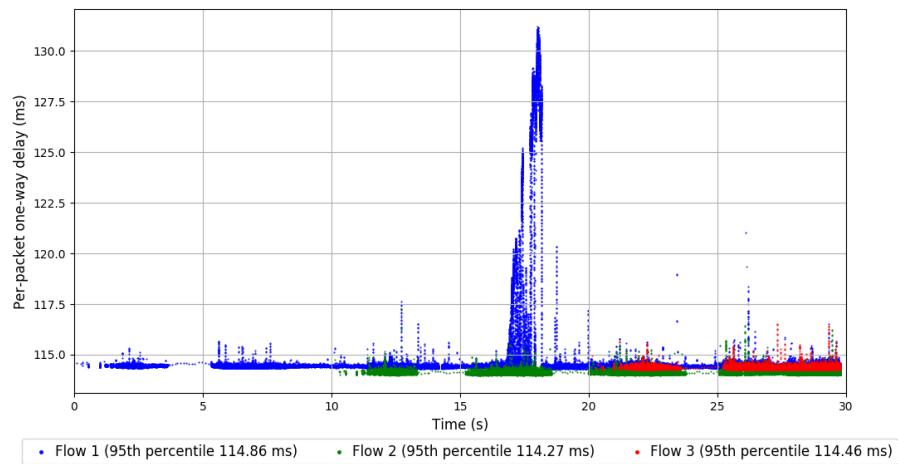
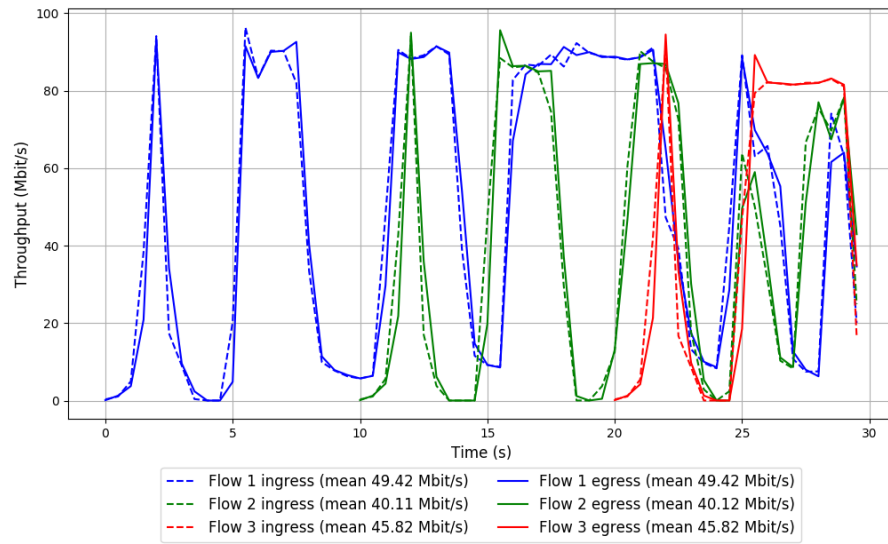
-- Flow 3:

Average throughput: 45.82 Mbit/s

95th percentile per-packet one-way delay: 114.464 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-14 00:08:06

End at: 2018-02-14 00:08:36

Below is generated by plot.py at 2018-02-14 03:43:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.91 Mbit/s

95th percentile per-packet one-way delay: 114.396 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 55.04 Mbit/s

95th percentile per-packet one-way delay: 114.420 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 41.54 Mbit/s

95th percentile per-packet one-way delay: 114.275 ms

Loss rate: 0.00%

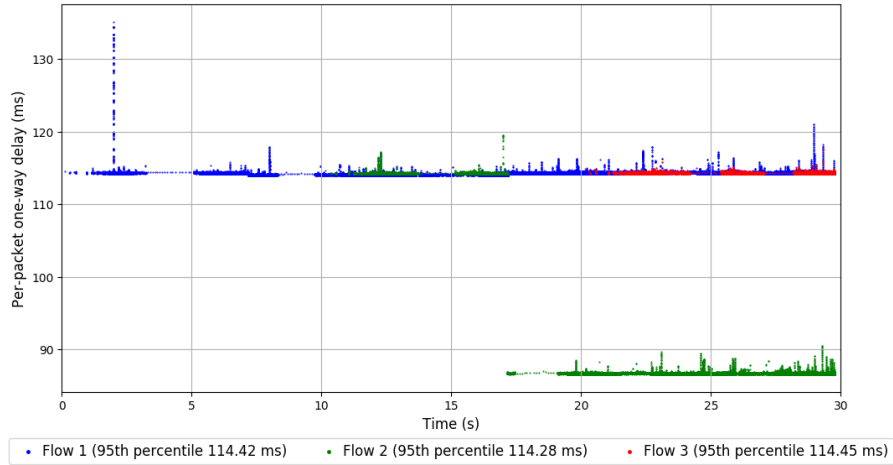
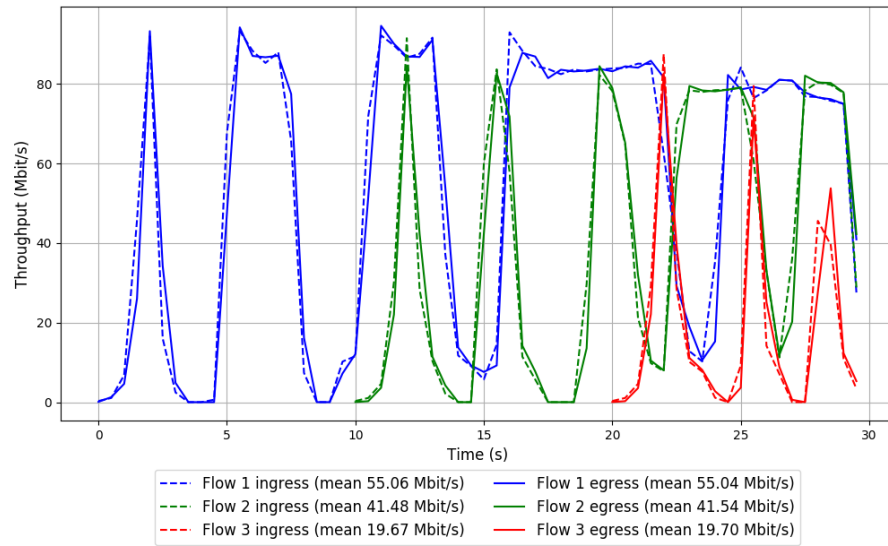
-- Flow 3:

Average throughput: 19.70 Mbit/s

95th percentile per-packet one-way delay: 114.446 ms

Loss rate: 0.12%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-14 00:26:47

End at: 2018-02-14 00:27:17

Below is generated by plot.py at 2018-02-14 03:43:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.05 Mbit/s

95th percentile per-packet one-way delay: 114.428 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.01 Mbit/s

95th percentile per-packet one-way delay: 114.447 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 41.47 Mbit/s

95th percentile per-packet one-way delay: 114.404 ms

Loss rate: 0.00%

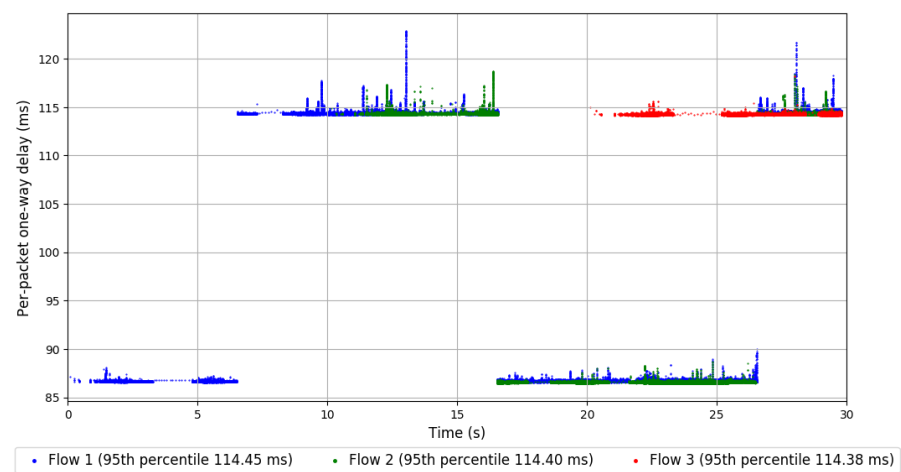
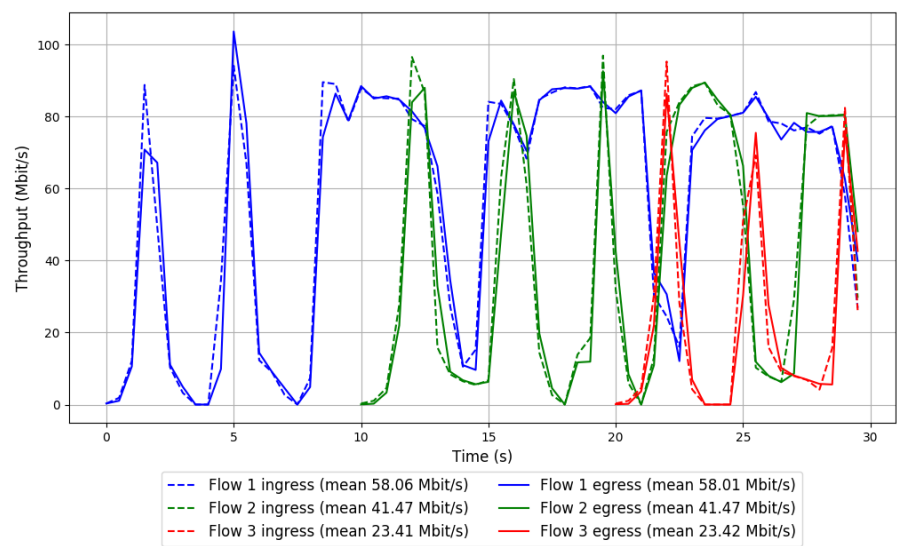
-- Flow 3:

Average throughput: 23.42 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-14 00:45:53

End at: 2018-02-14 00:46:23

Below is generated by plot.py at 2018-02-14 03:43:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.72 Mbit/s

95th percentile per-packet one-way delay: 114.486 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 51.30 Mbit/s

95th percentile per-packet one-way delay: 114.503 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.01 Mbit/s

95th percentile per-packet one-way delay: 114.432 ms

Loss rate: 0.00%

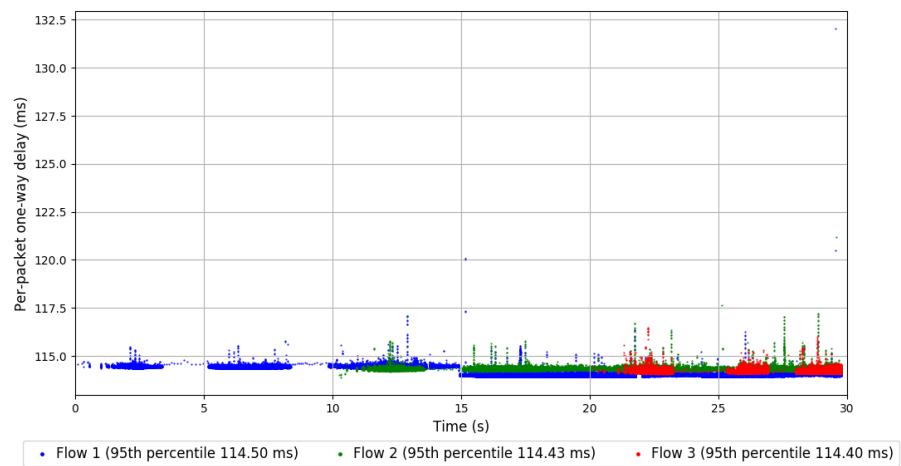
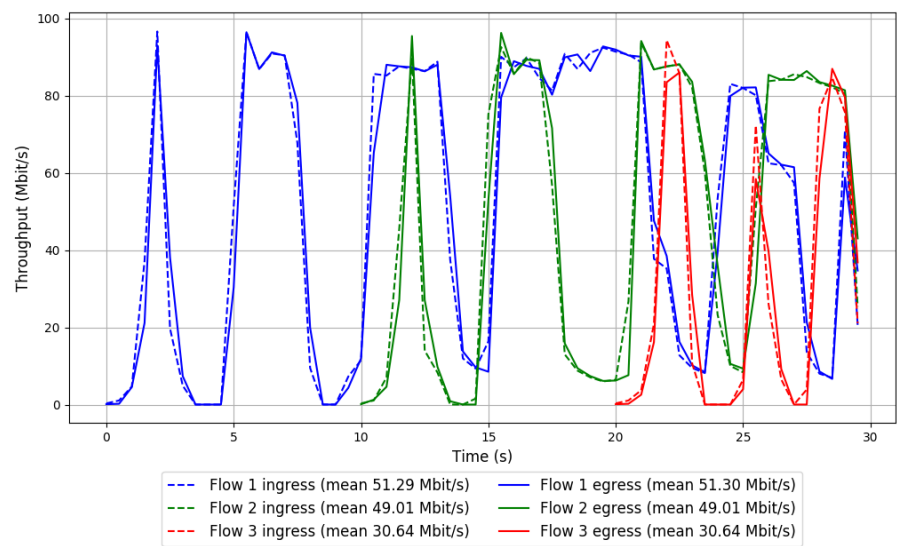
-- Flow 3:

Average throughput: 30.64 Mbit/s

95th percentile per-packet one-way delay: 114.397 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

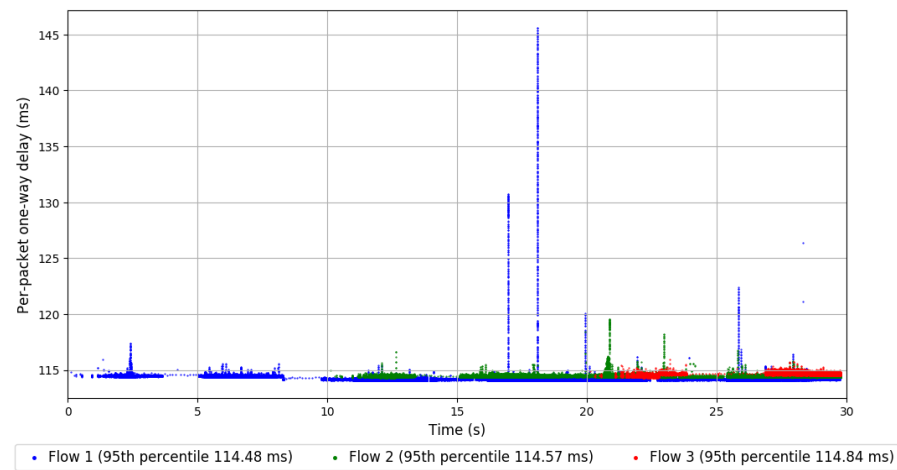
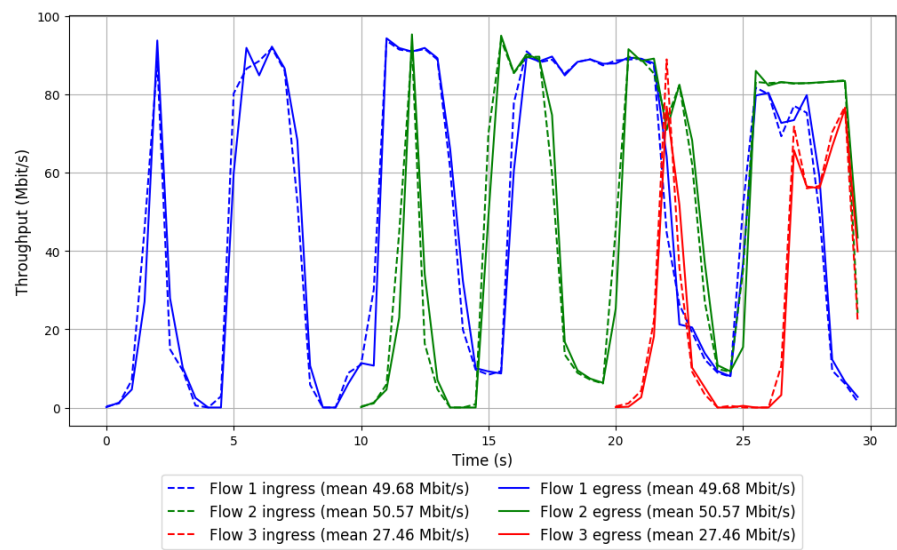


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-02-14 01:05:05
End at: 2018-02-14 01:05:35

# Below is generated by plot.py at 2018-02-14 03:43:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.10 Mbit/s
95th percentile per-packet one-way delay: 114.638 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.68 Mbit/s
95th percentile per-packet one-way delay: 114.484 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.57 Mbit/s
95th percentile per-packet one-way delay: 114.573 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 27.46 Mbit/s
95th percentile per-packet one-way delay: 114.843 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

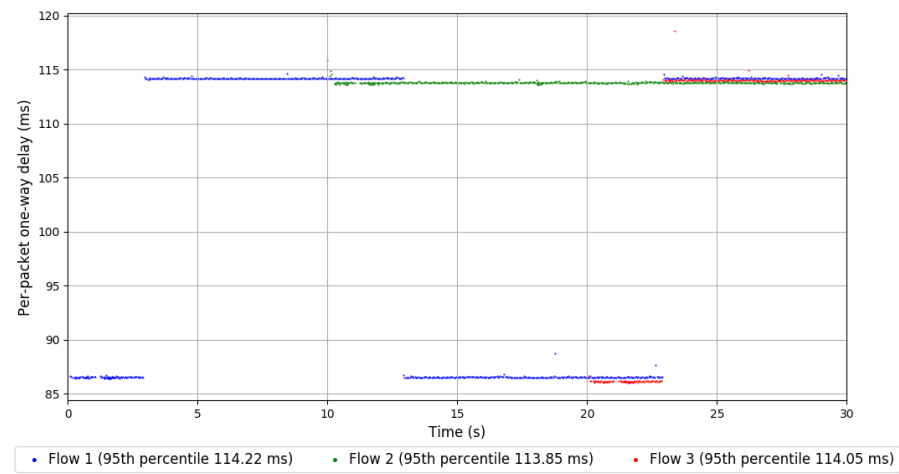
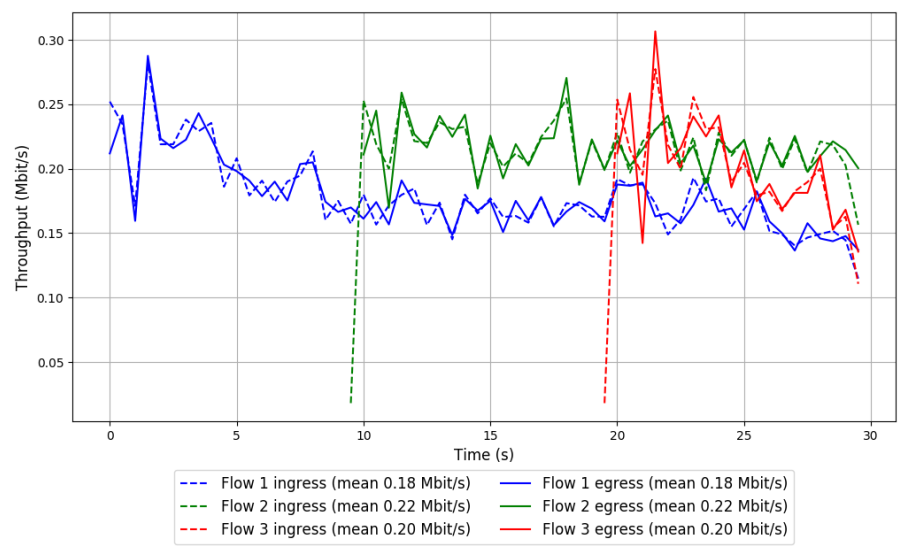


```
Run 1: Statistics of SCReAM

Start at: 2018-02-13 22:14:50
End at: 2018-02-13 22:15:21

# Below is generated by plot.py at 2018-02-14 03:43:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 114.202 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 114.223 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.852 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 114.048 ms
Loss rate: 0.28%
```

Run 1: Report of SReAM — Data Link

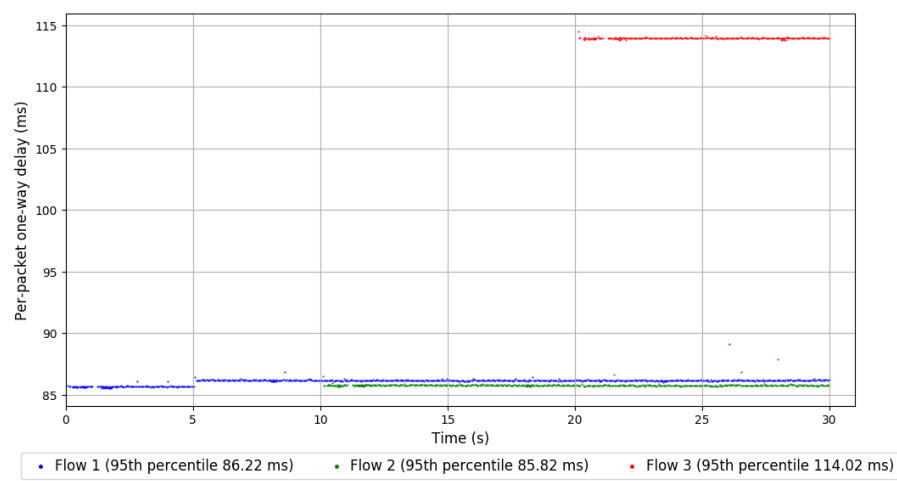
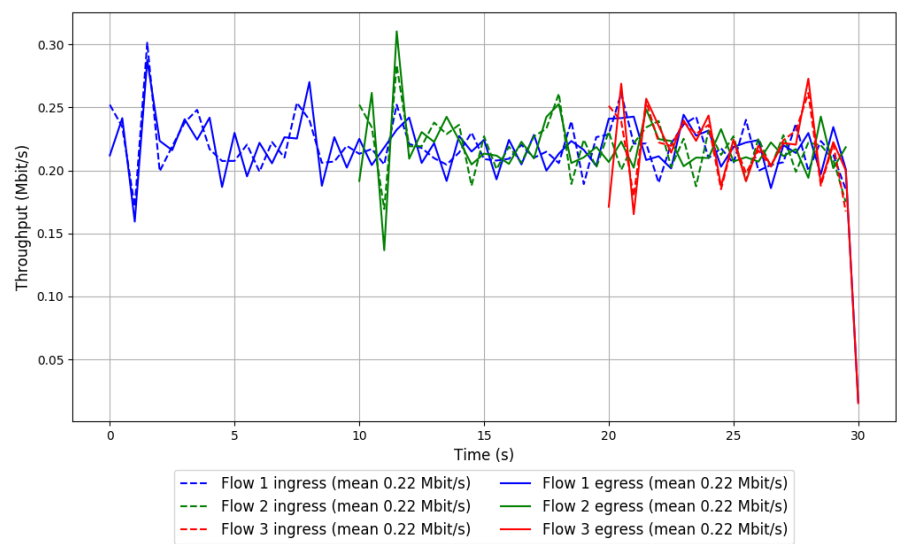


```
Run 2: Statistics of SReAM

Start at: 2018-02-13 22:33:18
End at: 2018-02-13 22:33:48

# Below is generated by plot.py at 2018-02-14 03:43:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 113.980 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.218 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.822 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.023 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-02-13 22:51:24

End at: 2018-02-13 22:51:54

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 113.682 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.477 ms

Loss rate: 0.00%

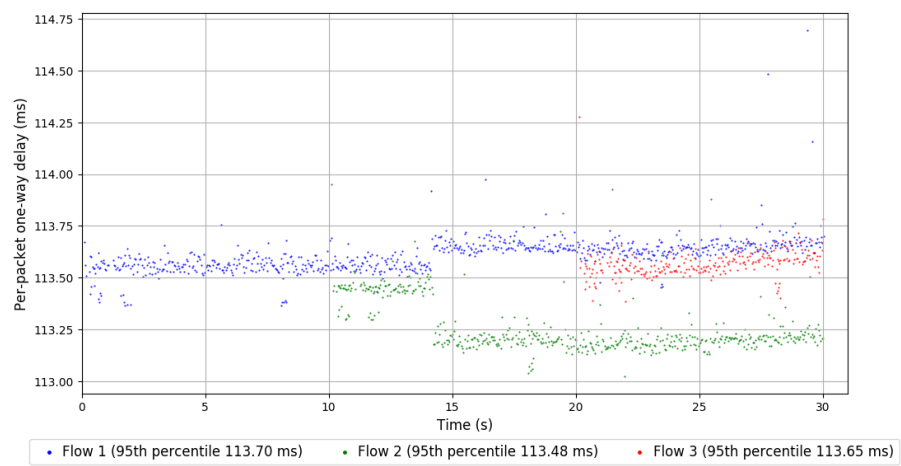
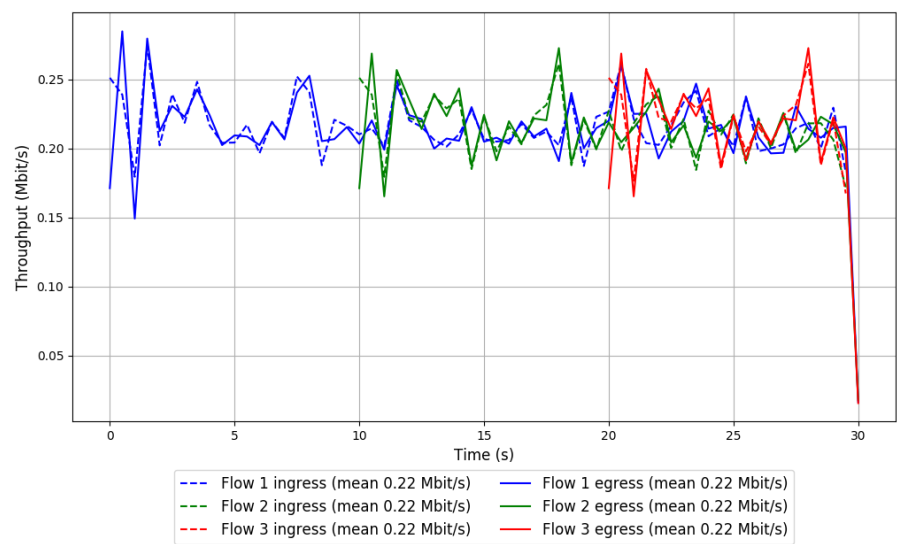
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.648 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2018-02-13 23:10:15

End at: 2018-02-13 23:10:45

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.352 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.474 ms

Loss rate: 0.00%

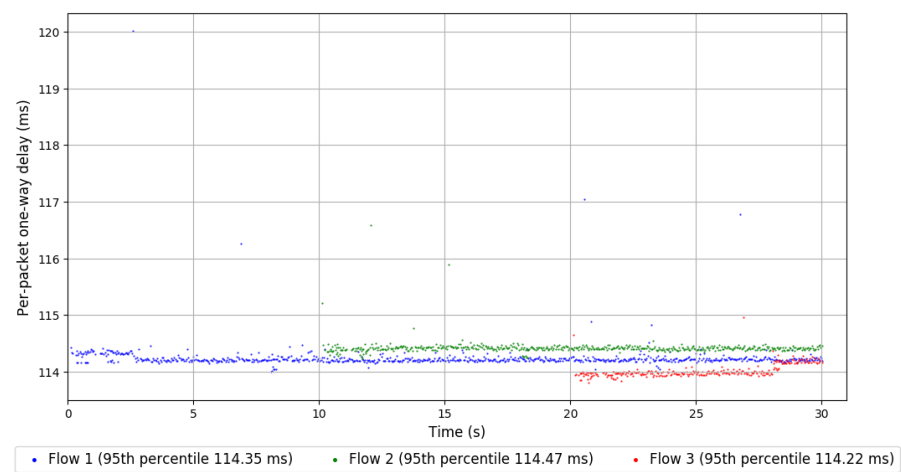
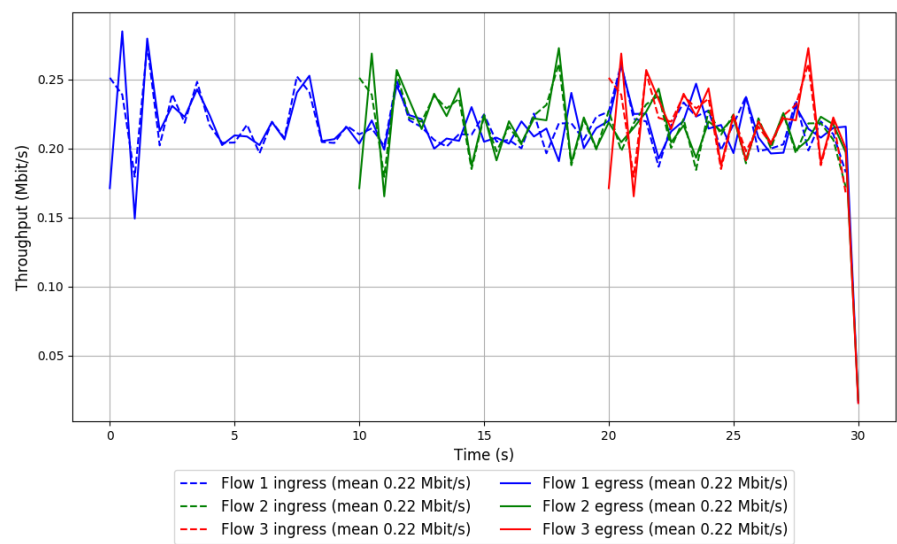
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.219 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-02-13 23:29:15

End at: 2018-02-13 23:29:45

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.792 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.688 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.830 ms

Loss rate: 0.00%

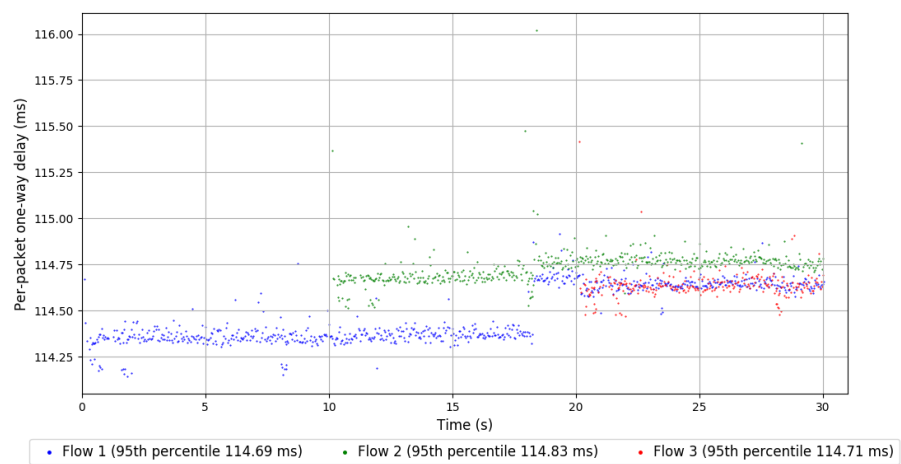
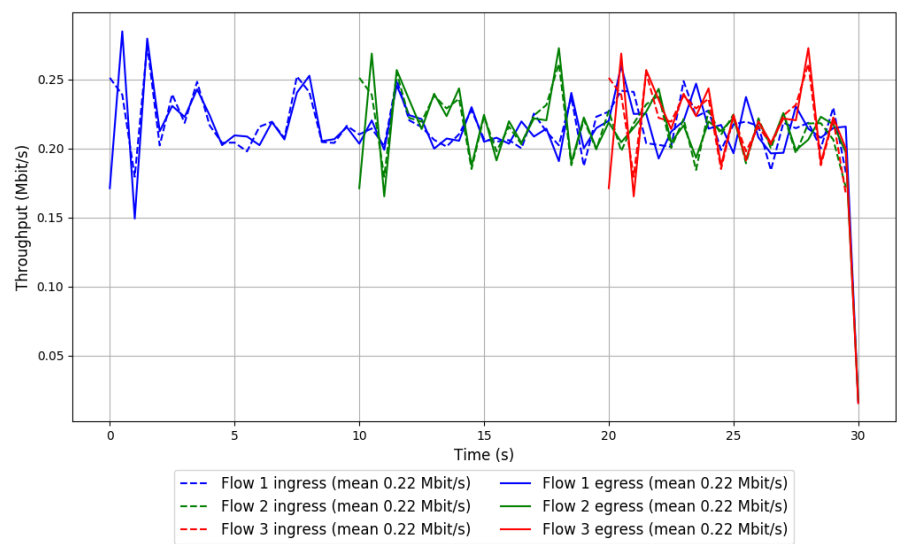
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.710 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-02-13 23:48:19

End at: 2018-02-13 23:48:49

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.950 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.447 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 115.001 ms

Loss rate: 0.00%

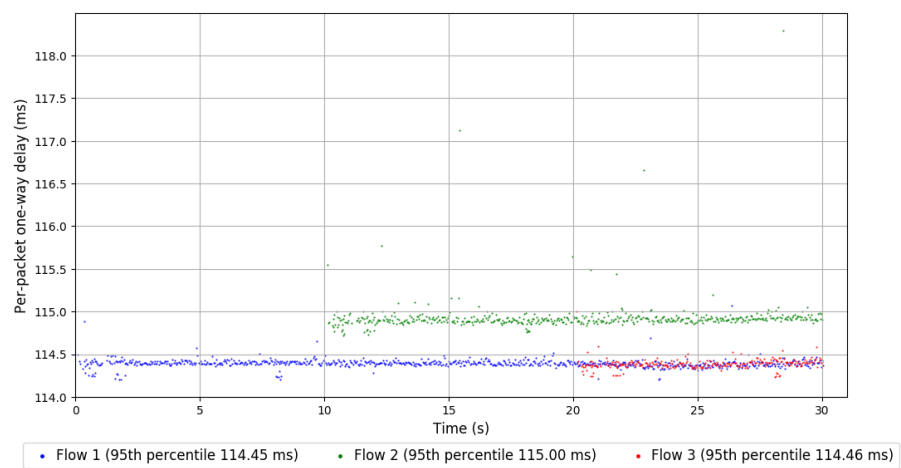
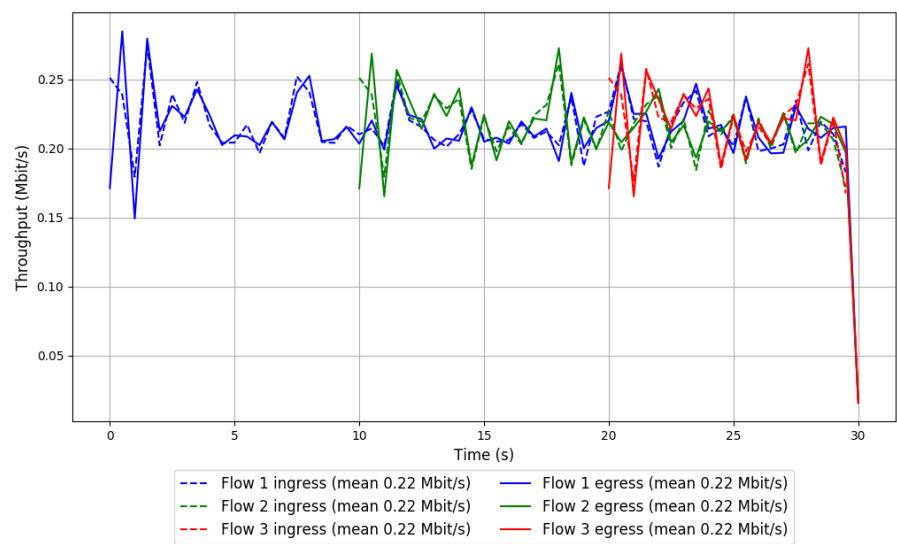
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.458 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SReAM

Start at: 2018-02-14 00:07:21

End at: 2018-02-14 00:07:52

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.241 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.904 ms

Loss rate: 0.00%

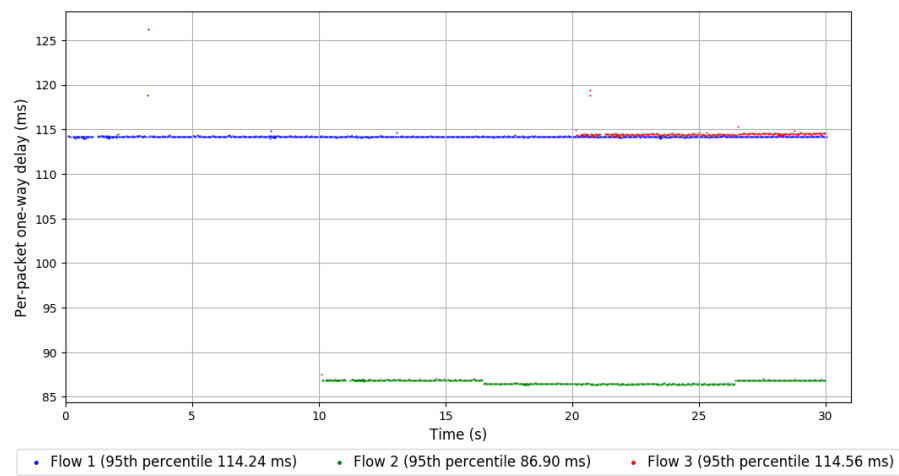
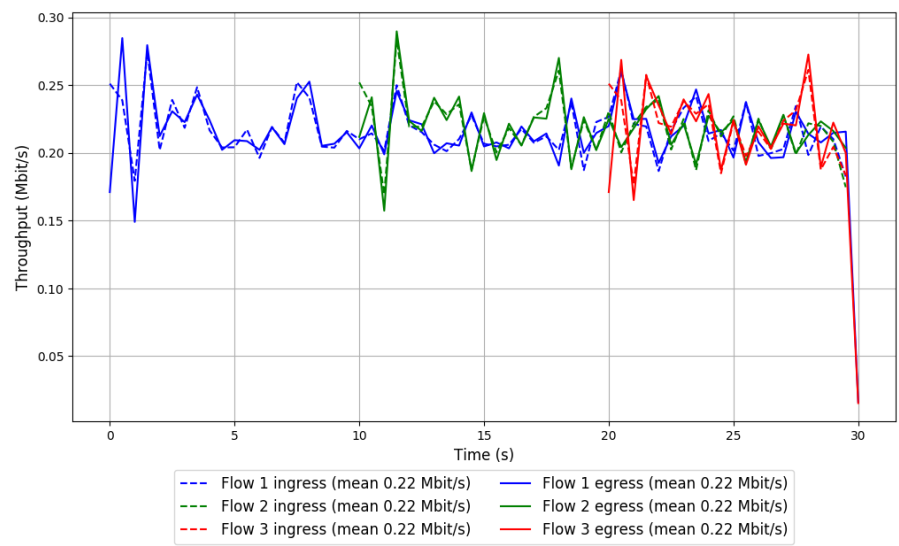
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.564 ms

Loss rate: 0.00%

Run 7: Report of SCReAM — Data Link



Run 8: Statistics of SCReAM

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

End at: 2018-02-14 00:26:32

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 114.451 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 114.385 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.393 ms

Loss rate: 0.20%

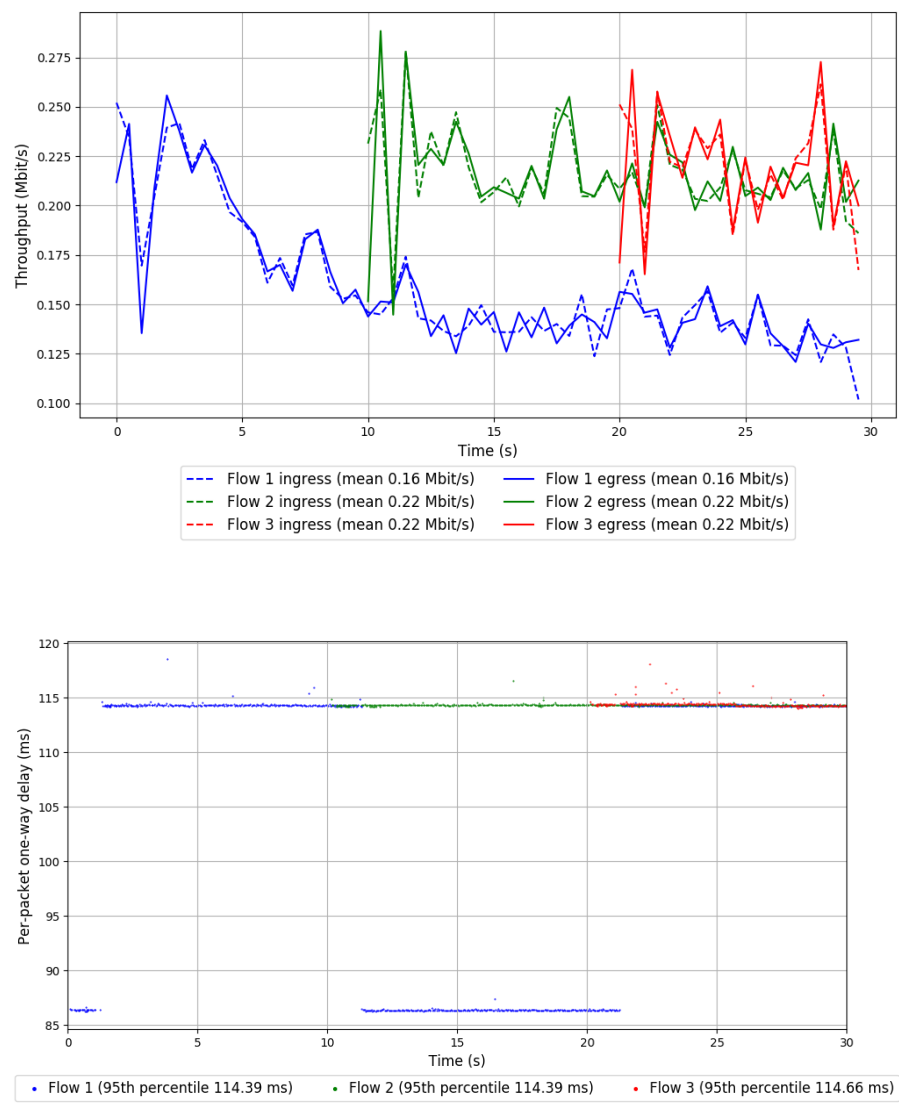
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.655 ms

Loss rate: 0.35%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-02-14 00:45:08

End at: 2018-02-14 00:45:38

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.579 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.482 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.604 ms

Loss rate: 0.00%

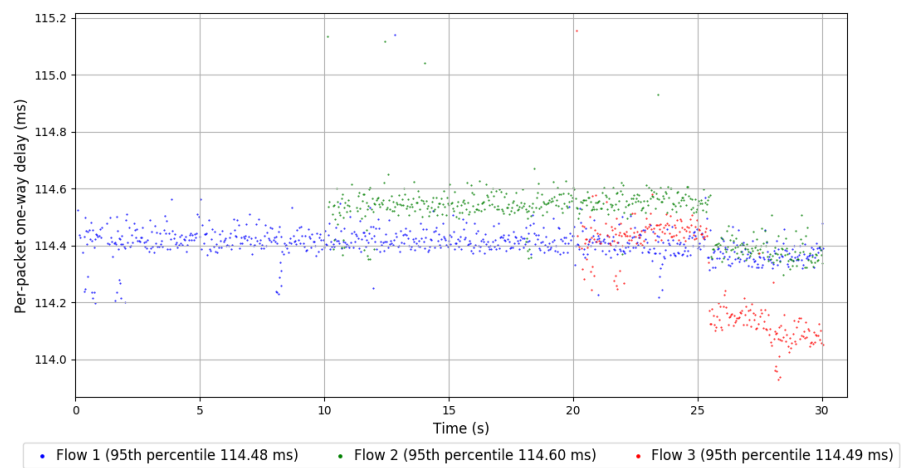
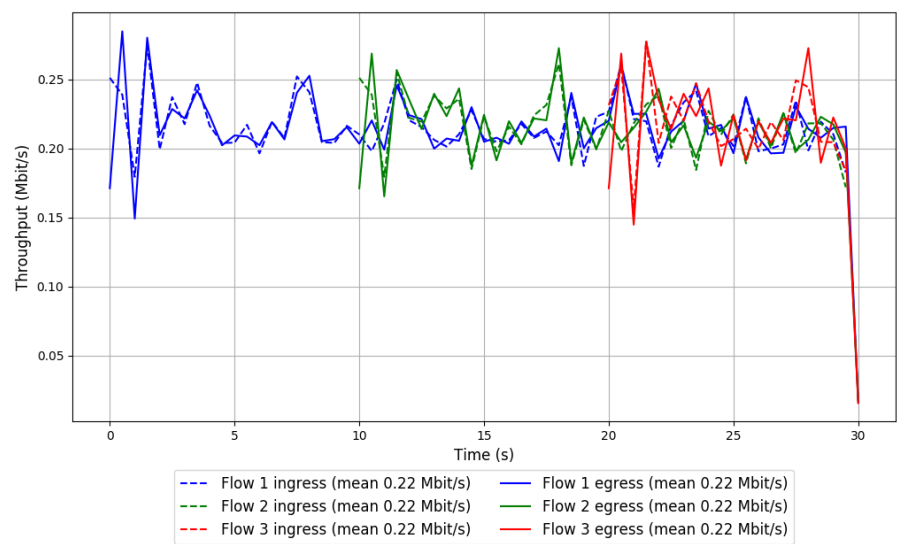
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.494 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

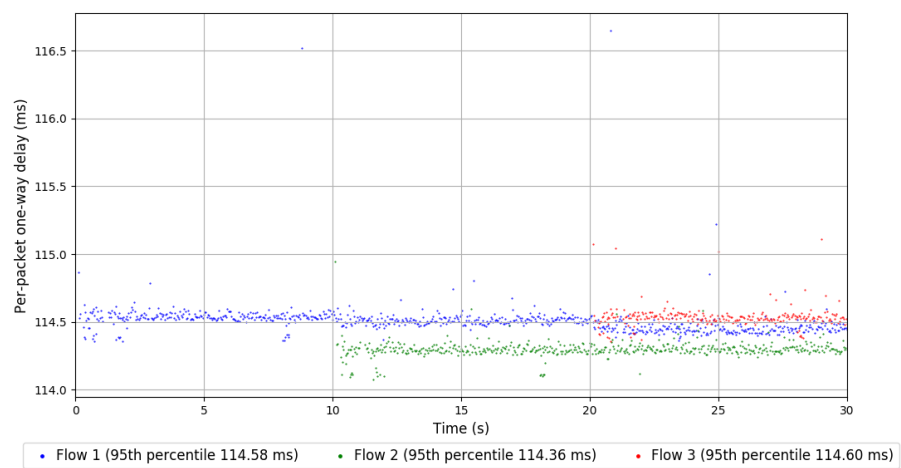
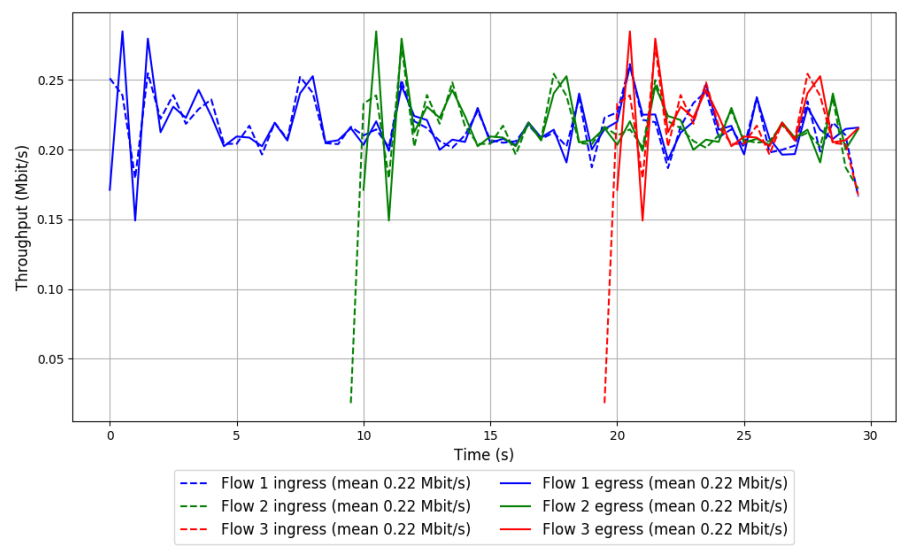


```
Run 10: Statistics of SReAM

Start at: 2018-02-14 01:04:20
End at: 2018-02-14 01:04:50

# Below is generated by plot.py at 2018-02-14 03:43:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 114.575 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.583 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.362 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.600 ms
Loss rate: 0.00%
```

Run 10: Report of SCReAM — Data Link

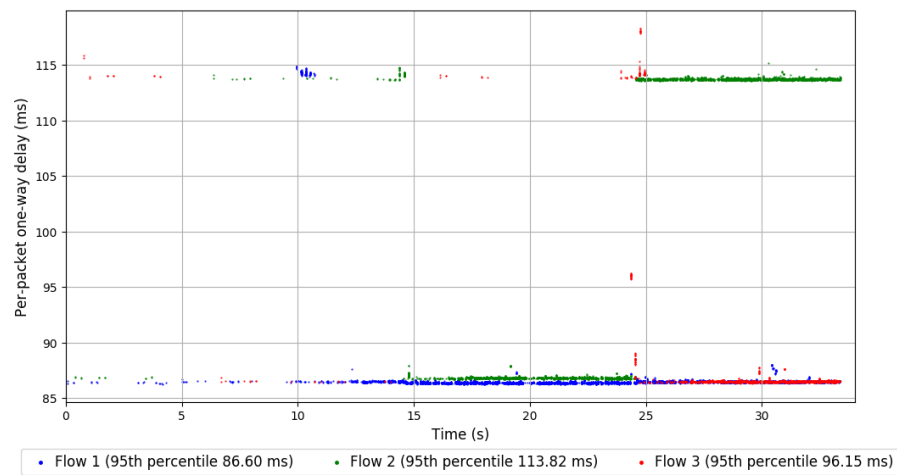
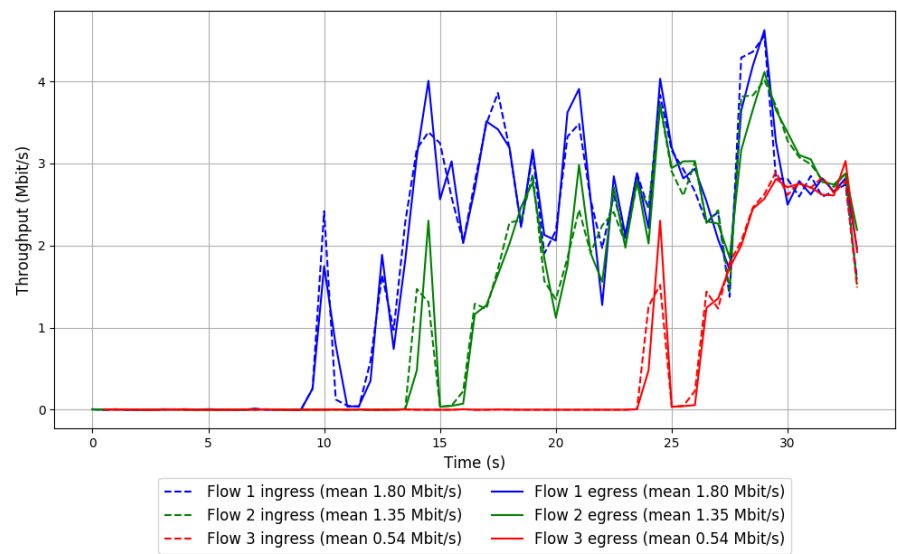


```
Run 1: Statistics of WebRTC media

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

# Below is generated by plot.py at 2018-02-14 03:43:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.66 Mbit/s
95th percentile per-packet one-way delay: 113.784 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 86.599 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 113.821 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 96.151 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-02-13 22:31:08

End at: 2018-02-13 22:31:38

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.32 Mbit/s

95th percentile per-packet one-way delay: 113.936 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.30 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 85.935 ms

Loss rate: 0.00%

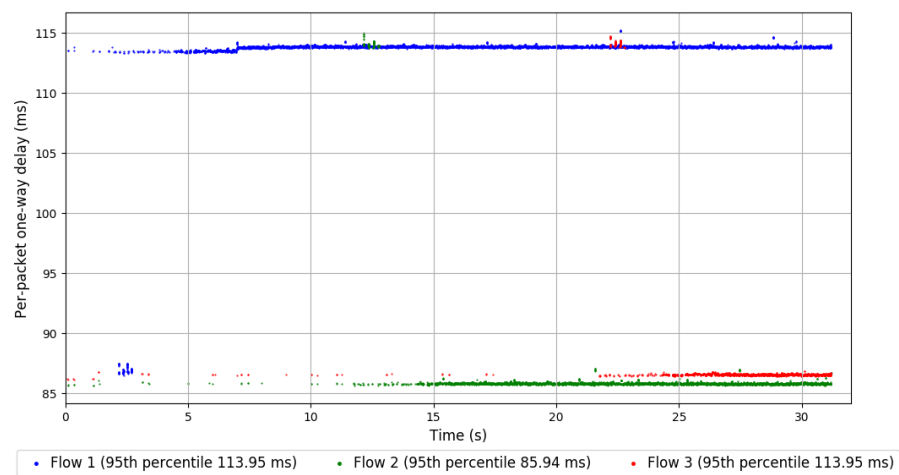
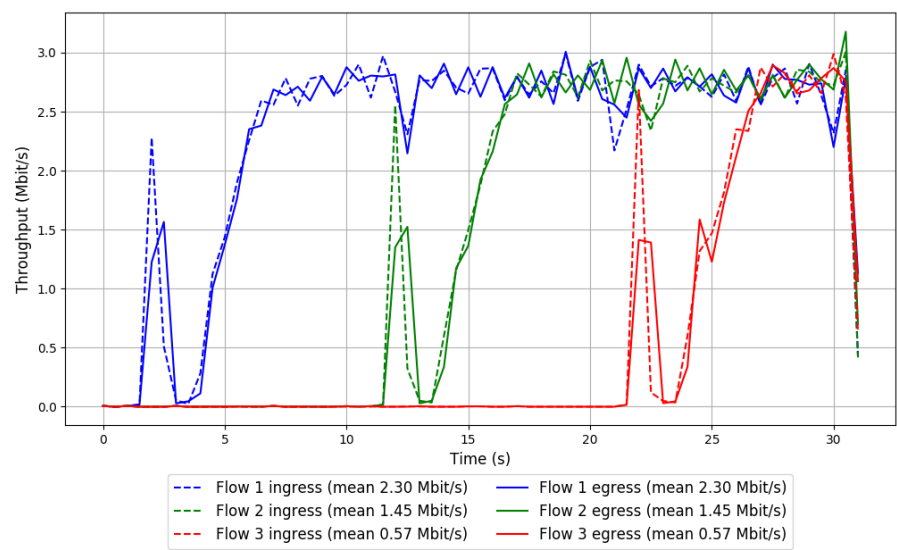
-- Flow 3:

Average throughput: 0.57 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-13 22:49:14

End at: 2018-02-13 22:49:44

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 113.660 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 113.574 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 113.640 ms

Loss rate: 0.00%

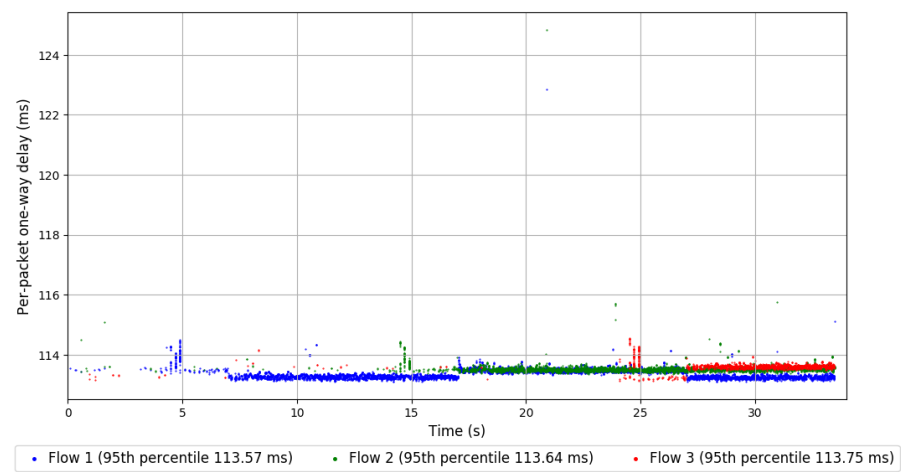
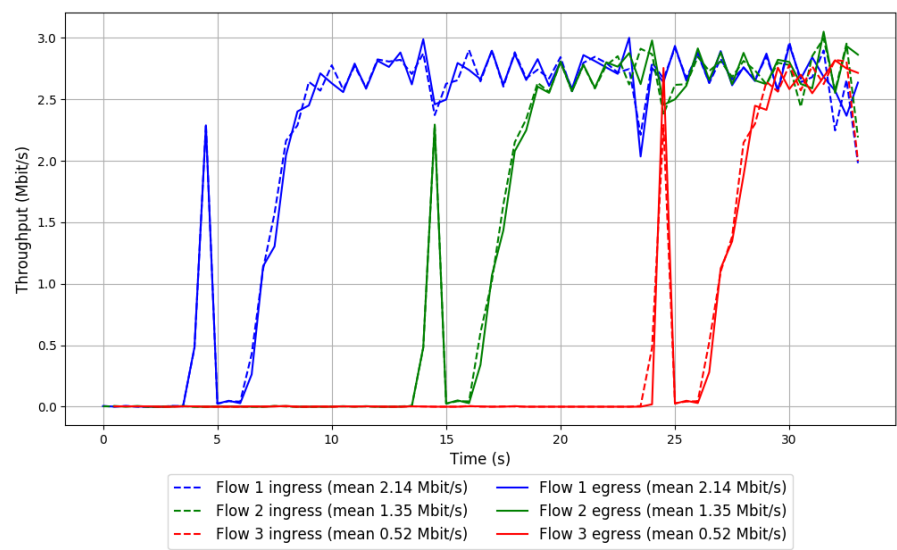
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 113.750 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-13 23:08:09

End at: 2018-02-13 23:08:39

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 114.423 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 114.425 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 114.294 ms

Loss rate: 0.00%

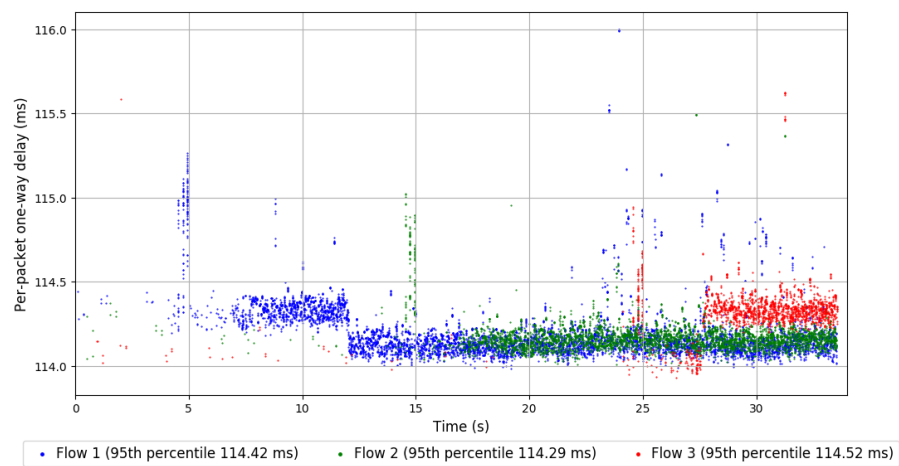
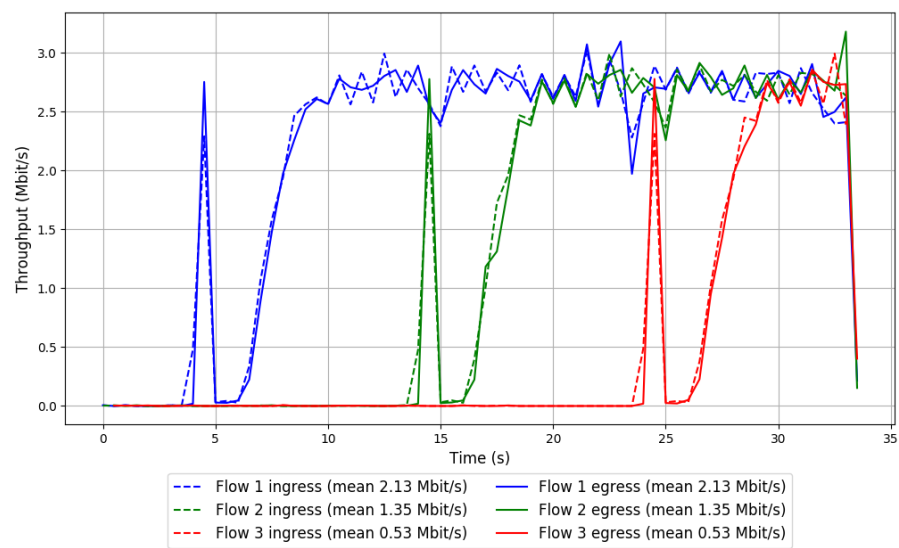
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 114.517 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-13 23:27:11

End at: 2018-02-13 23:27:41

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 114.822 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 114.836 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 114.761 ms

Loss rate: 0.00%

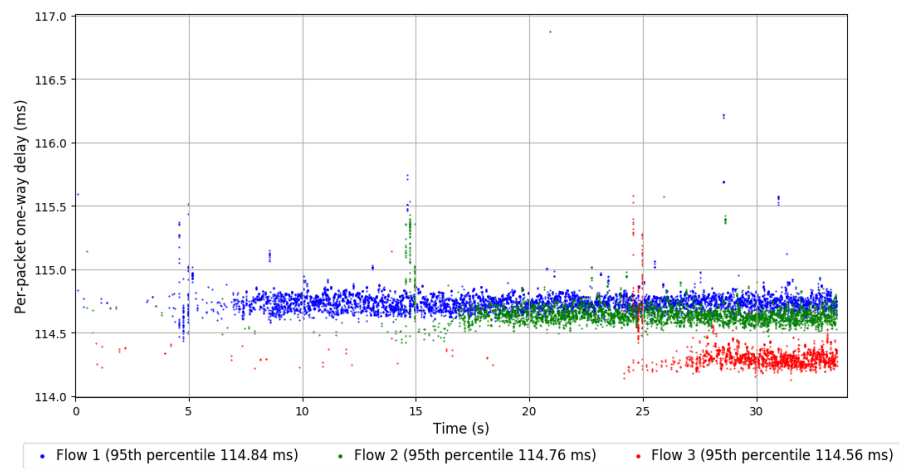
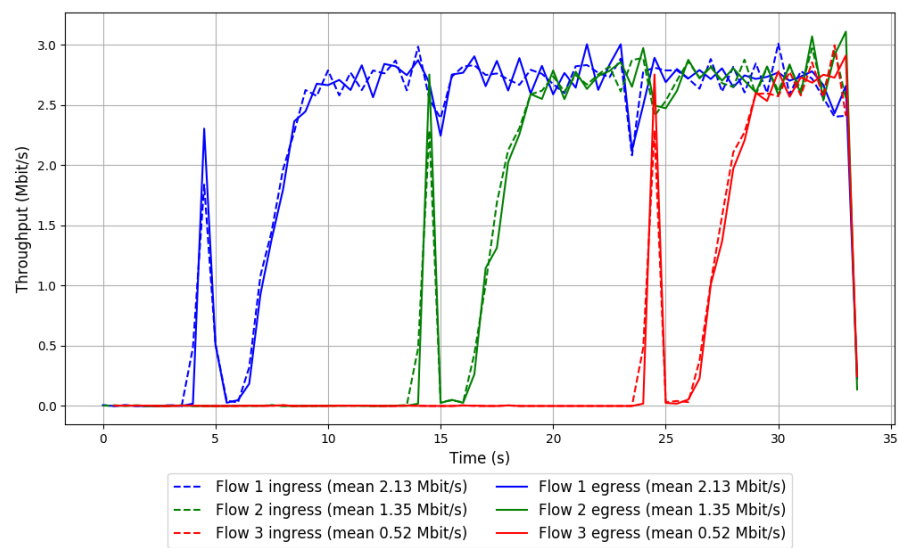
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 114.558 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-13 23:46:08

End at: 2018-02-13 23:46:38

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 114.705 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 114.725 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 114.708 ms

Loss rate: 0.02%

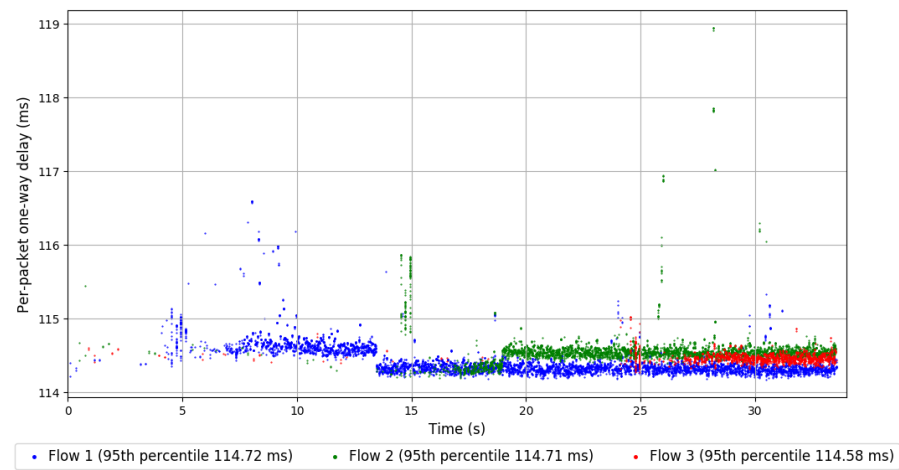
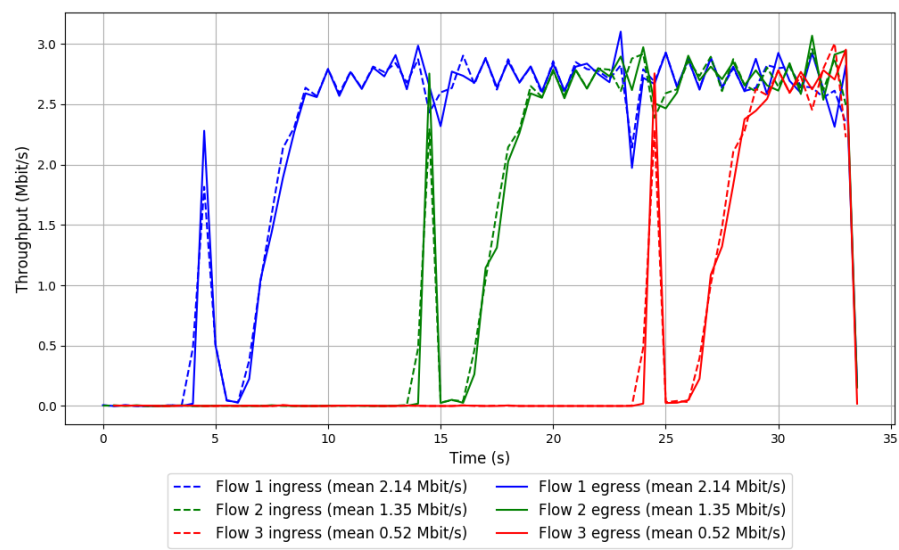
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 114.576 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-14 00:05:20

End at: 2018-02-14 00:05:50

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 114.434 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 114.425 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 87.258 ms

Loss rate: 0.00%

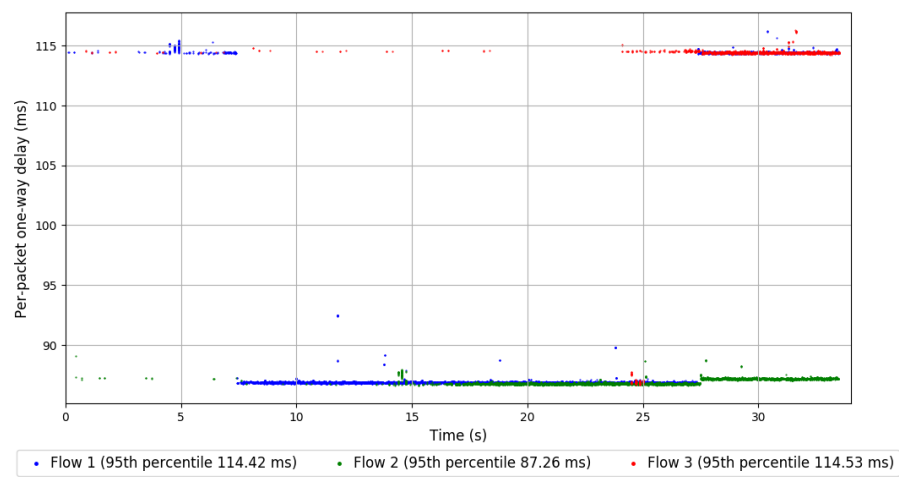
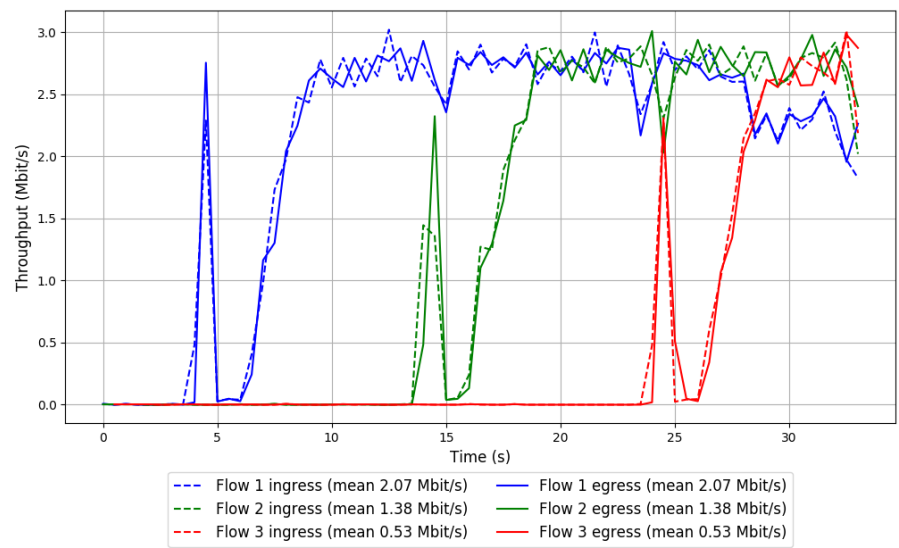
-- Flow 3:

Average throughput: 0.53 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-14 00:23:55

End at: 2018-02-14 00:24:25

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.96 Mbit/s

95th percentile per-packet one-way delay: 114.537 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 2.11 Mbit/s

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

Loss rate: 0.11%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 114.578 ms

Loss rate: 0.15%

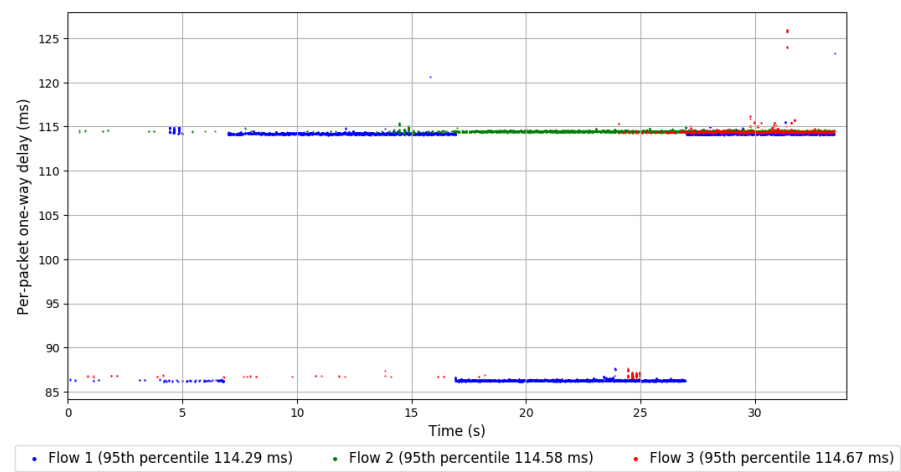
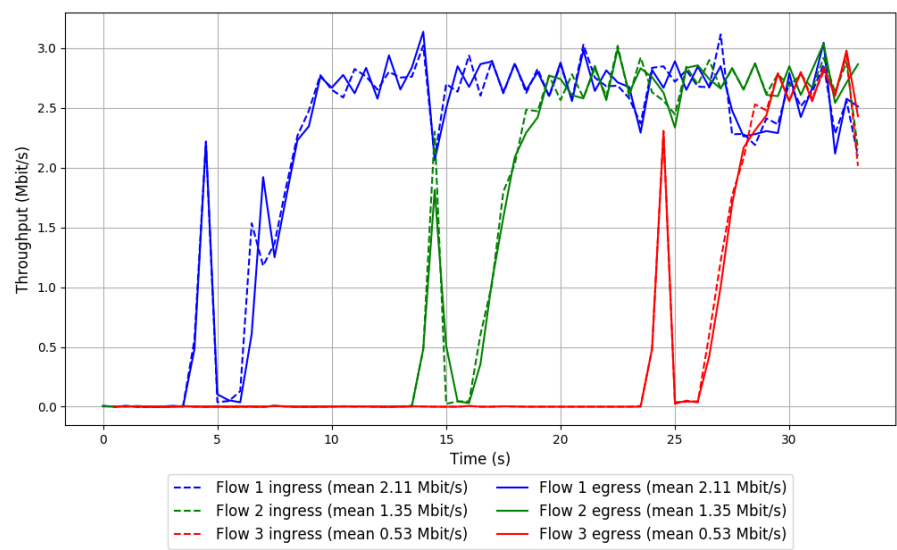
-- Flow 3:

Average throughput: 0.53 Mbit/s

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

Loss rate: 0.55%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-14 00:42:52

End at: 2018-02-14 00:43:22

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.00 Mbit/s

95th percentile per-packet one-way delay: 114.541 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 114.547 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 114.462 ms

Loss rate: 0.00%

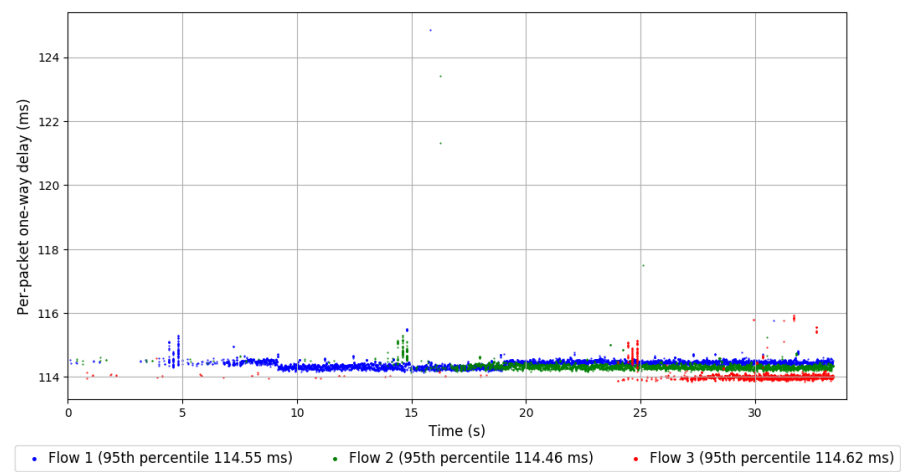
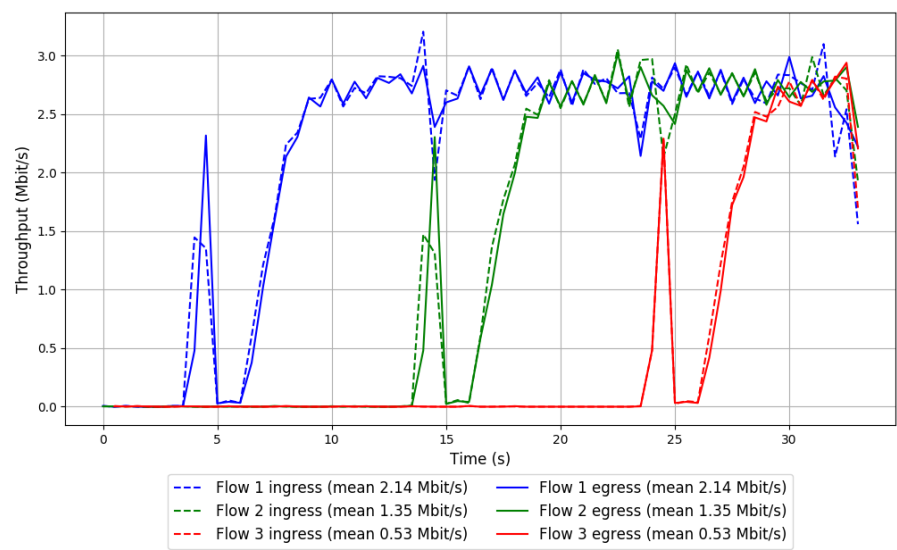
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 114.619 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

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

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

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 114.711 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 114.586 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 114.605 ms

Loss rate: 0.00%

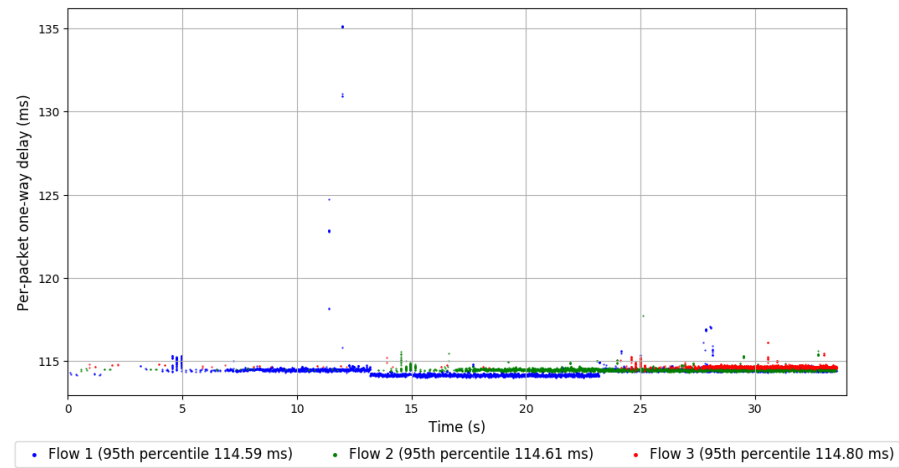
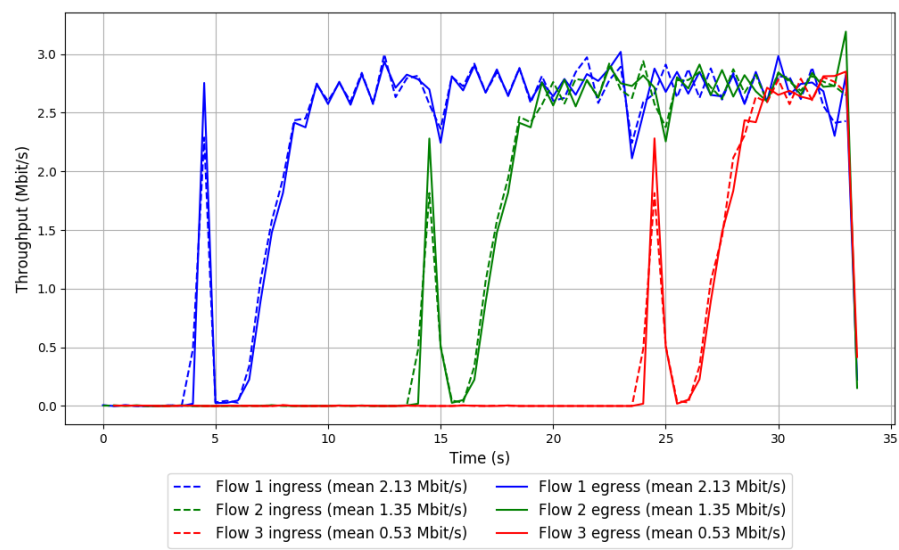
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 114.800 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-02-13 22:00:57

End at: 2018-02-13 22:01:27

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.71 Mbit/s

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

Loss rate: 0.73%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 114.206 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 114.859 ms

Loss rate: 0.00%

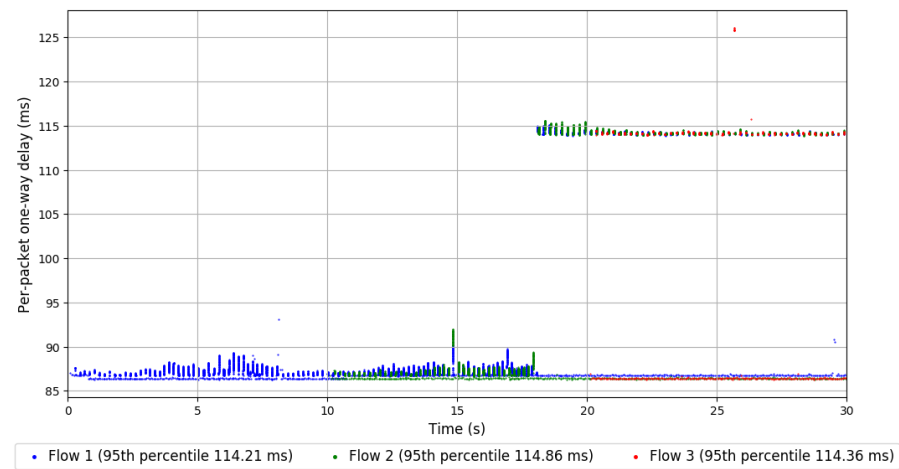
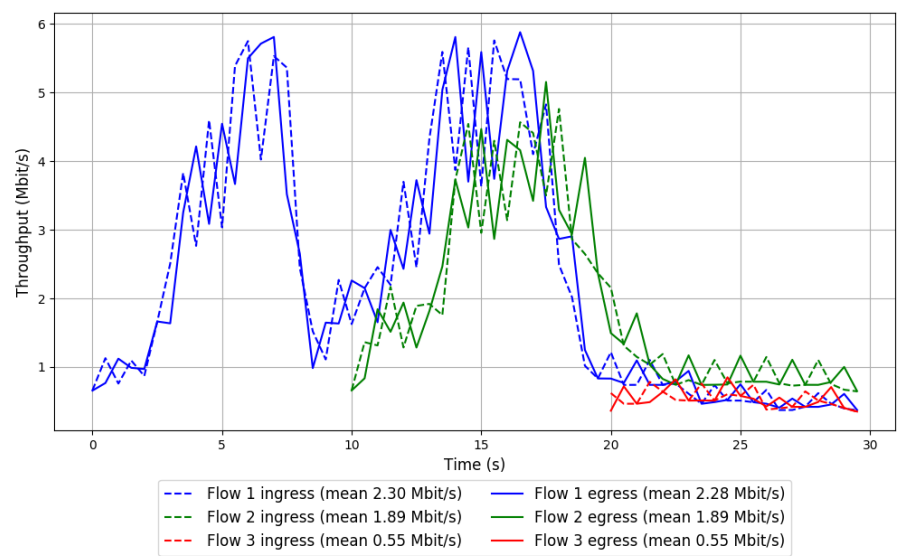
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 114.356 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-13 22:19:24

End at: 2018-02-13 22:19:54

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 115.879 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 114.441 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.60 Mbit/s

95th percentile per-packet one-way delay: 116.081 ms

Loss rate: 0.00%

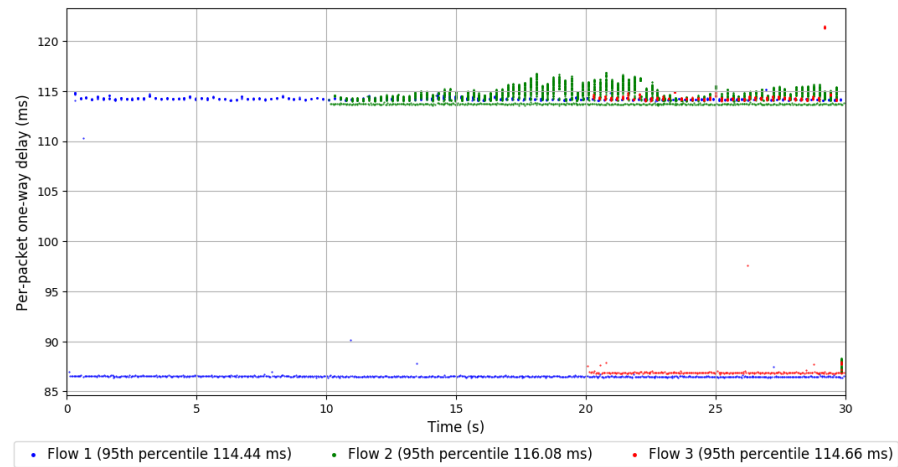
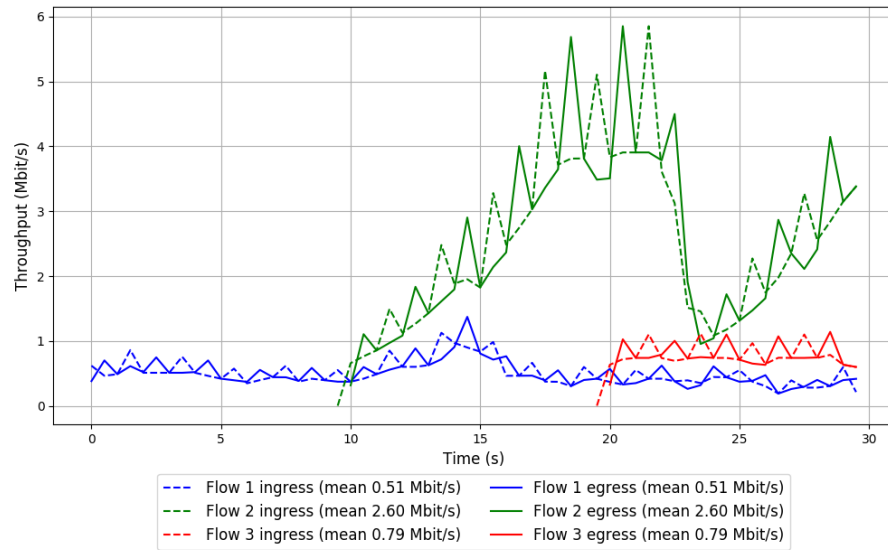
-- Flow 3:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 114.662 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-13 22:37:53

End at: 2018-02-13 22:38:23

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.98 Mbit/s

95th percentile per-packet one-way delay: 115.537 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 2.97 Mbit/s

95th percentile per-packet one-way delay: 115.588 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.62 Mbit/s

95th percentile per-packet one-way delay: 115.495 ms

Loss rate: 0.18%

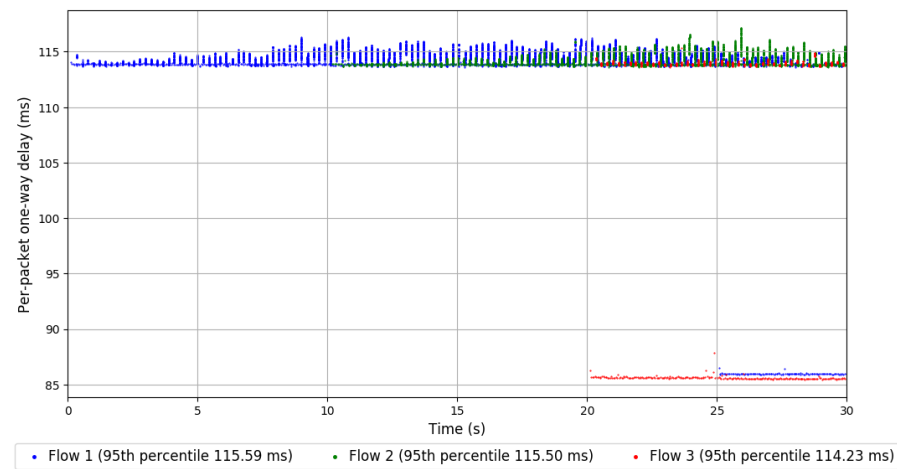
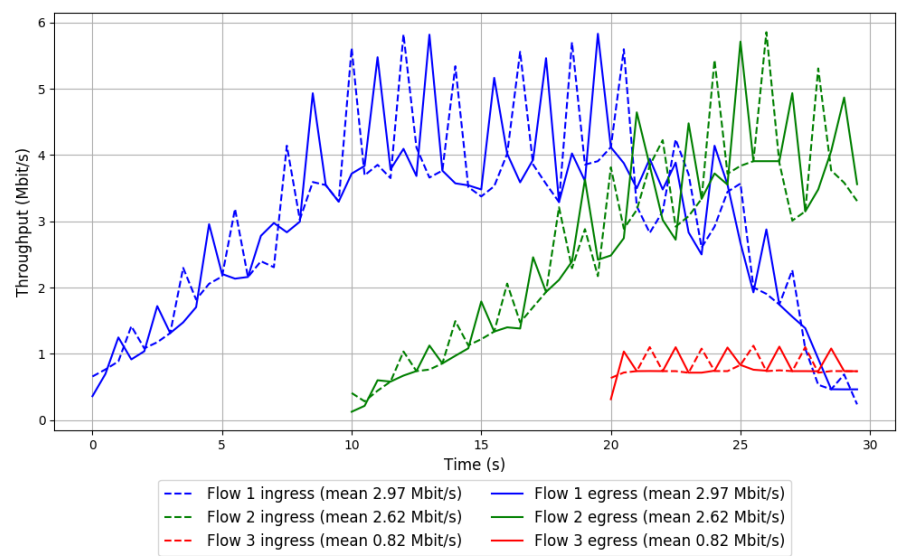
-- Flow 3:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 114.231 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

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

End at: 2018-02-13 22:56:32

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.61 Mbit/s

95th percentile per-packet one-way delay: 115.425 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 2.72 Mbit/s

95th percentile per-packet one-way delay: 115.388 ms

Loss rate: 0.95%

-- Flow 2:

Average throughput: 3.12 Mbit/s

95th percentile per-packet one-way delay: 115.445 ms

Loss rate: 0.00%

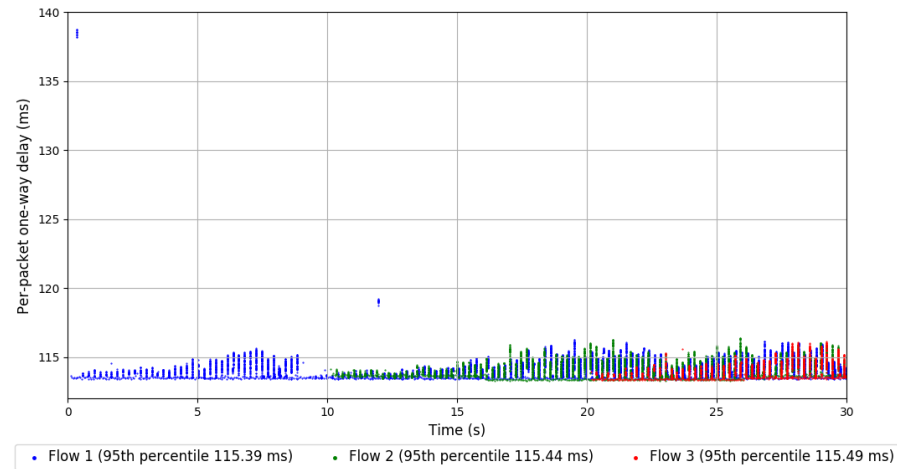
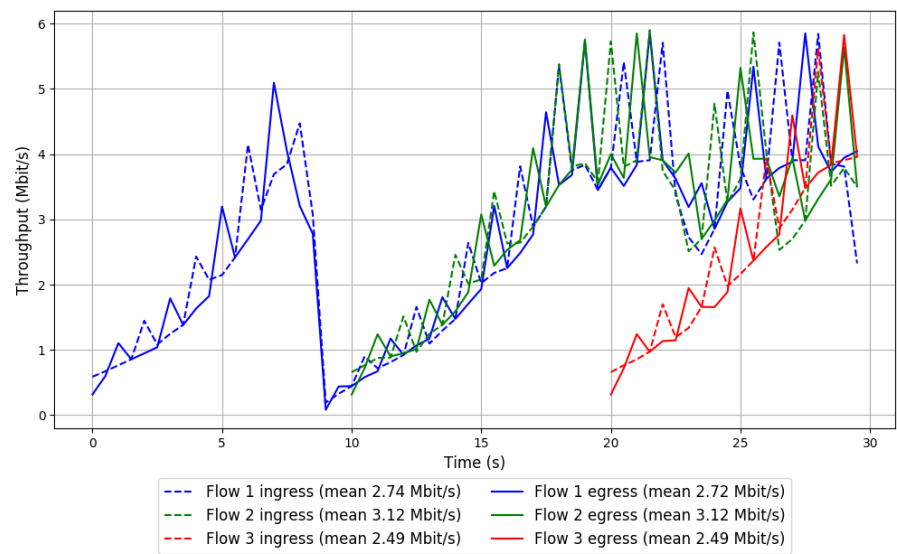
-- Flow 3:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 115.492 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

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

End at: 2018-02-13 23:15:24

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.79 Mbit/s

95th percentile per-packet one-way delay: 116.375 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 116.416 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.87 Mbit/s

95th percentile per-packet one-way delay: 116.352 ms

Loss rate: 0.00%

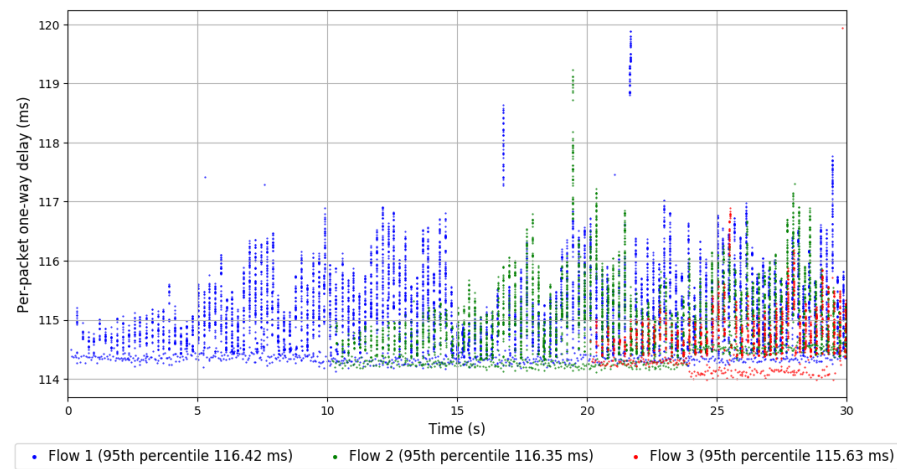
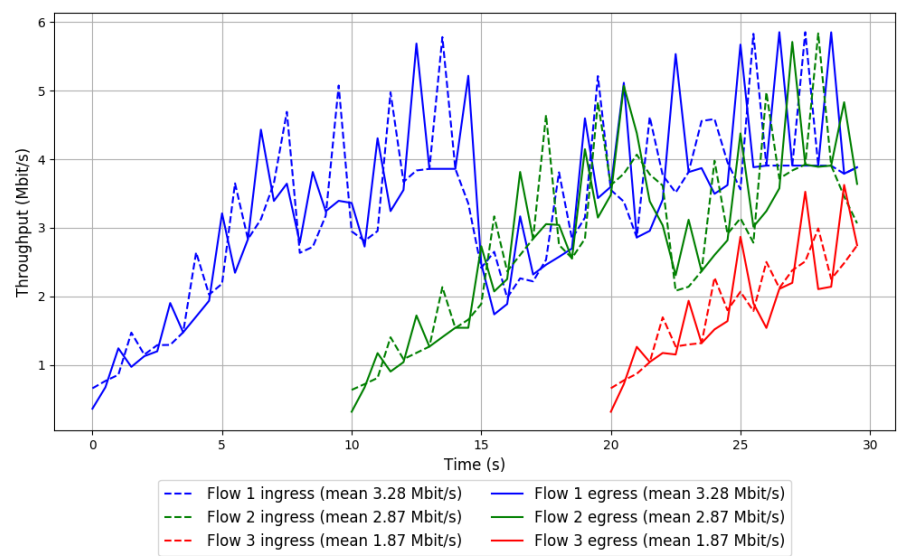
-- Flow 3:

Average throughput: 1.87 Mbit/s

95th percentile per-packet one-way delay: 115.627 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-13 23:33:55

End at: 2018-02-13 23:34:25

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.78 Mbit/s

95th percentile per-packet one-way delay: 116.935 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.04 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.12 Mbit/s

95th percentile per-packet one-way delay: 117.055 ms

Loss rate: 0.00%

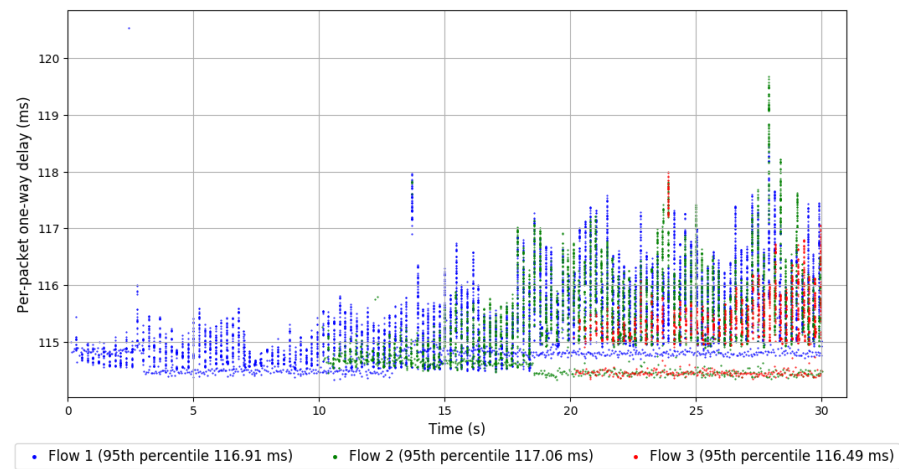
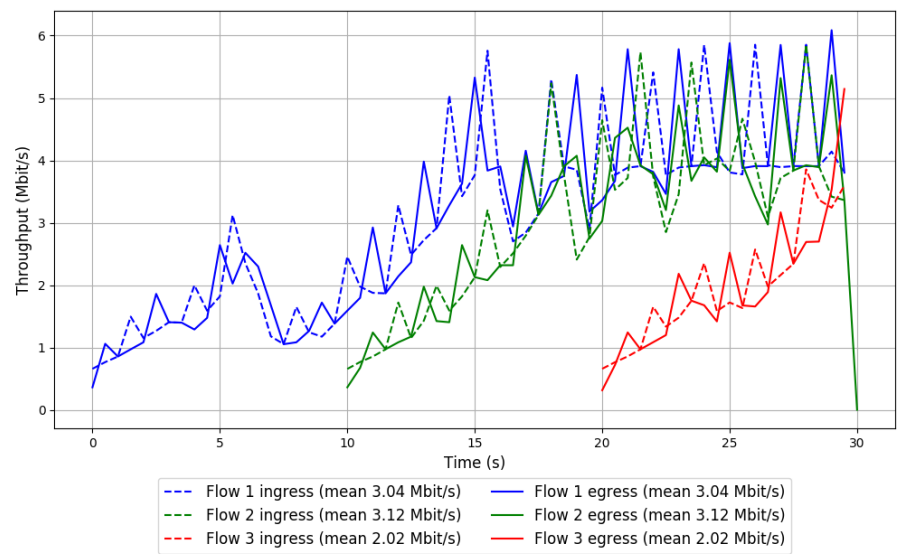
-- Flow 3:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 116.494 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-13 23:53:07

End at: 2018-02-13 23:53:37

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.72 Mbit/s

95th percentile per-packet one-way delay: 116.512 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 116.619 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 116.381 ms

Loss rate: 0.00%

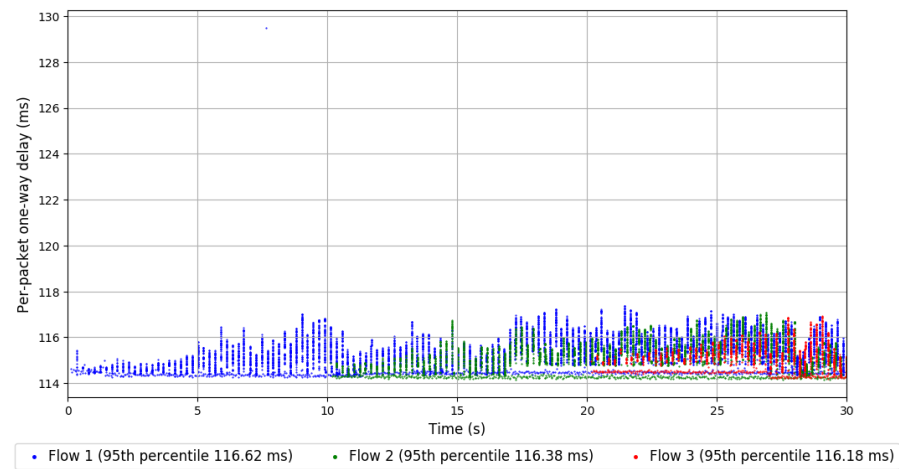
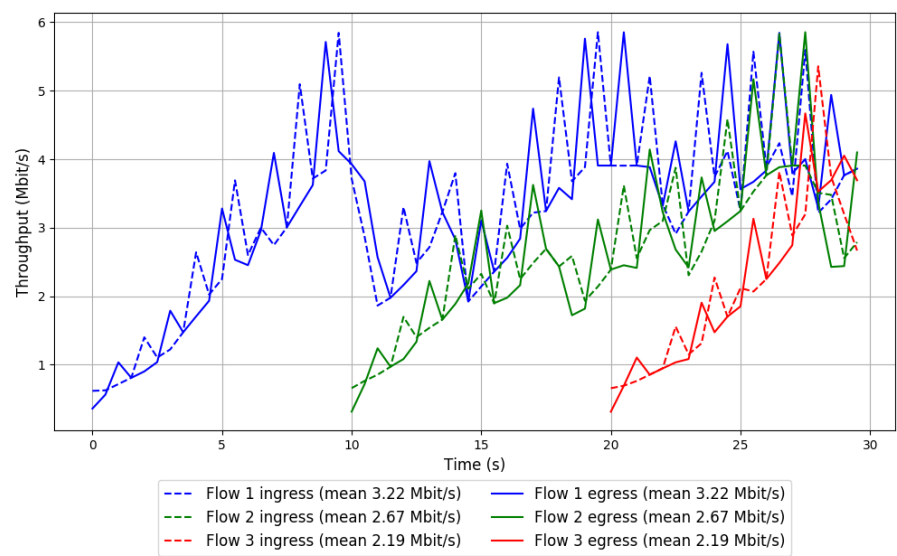
-- Flow 3:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 116.183 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-14 00:11:56

End at: 2018-02-14 00:12:26

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 116.102 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.73 Mbit/s

95th percentile per-packet one-way delay: 115.645 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.06 Mbit/s

95th percentile per-packet one-way delay: 116.200 ms

Loss rate: 0.00%

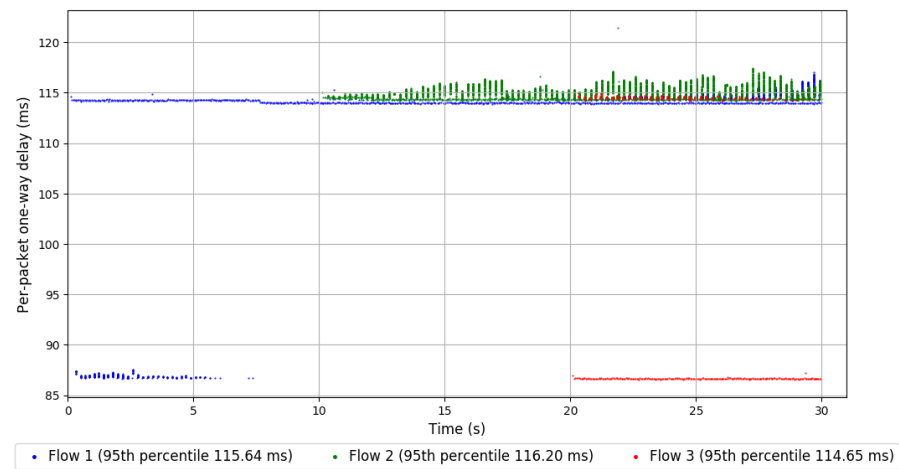
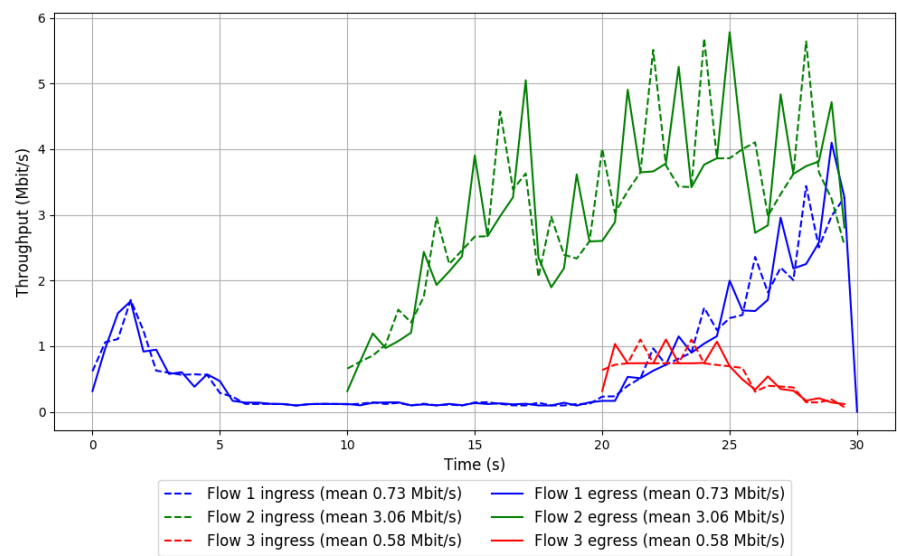
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 114.647 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-14 00:30:34

End at: 2018-02-14 00:31:04

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.01 Mbit/s

95th percentile per-packet one-way delay: 115.856 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 3.71 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.05 Mbit/s

95th percentile per-packet one-way delay: 116.036 ms

Loss rate: 1.28%

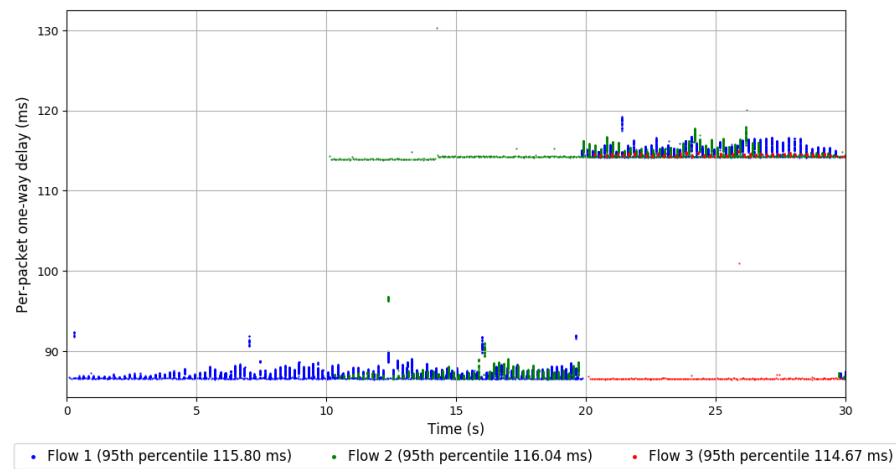
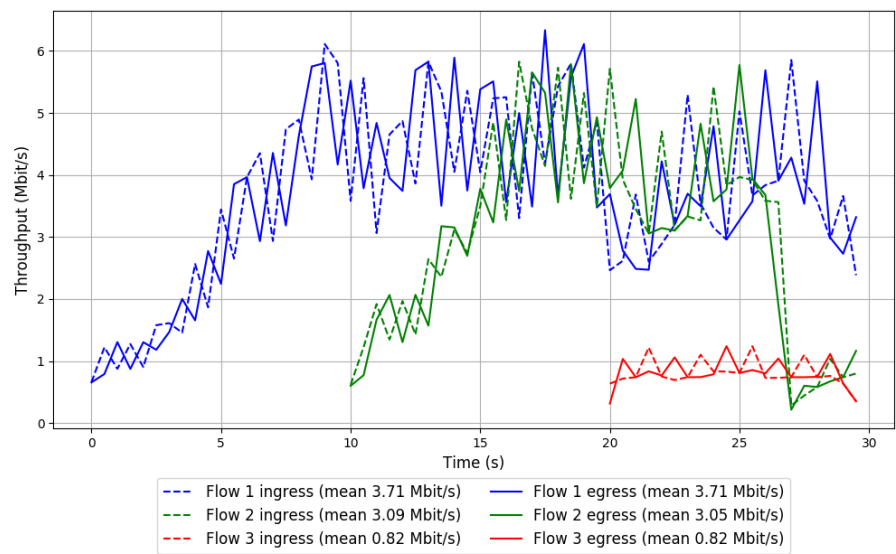
-- Flow 3:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 114.667 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-14 00:49:52

End at: 2018-02-14 00:50:22

Below is generated by plot.py at 2018-02-14 03:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.44 Mbit/s

95th percentile per-packet one-way delay: 116.288 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.08 Mbit/s

95th percentile per-packet one-way delay: 116.315 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.02 Mbit/s

95th percentile per-packet one-way delay: 116.302 ms

Loss rate: 0.00%

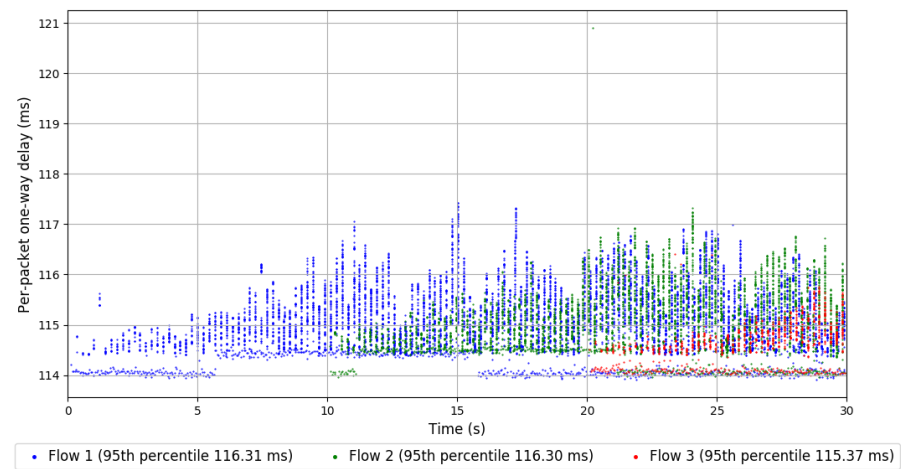
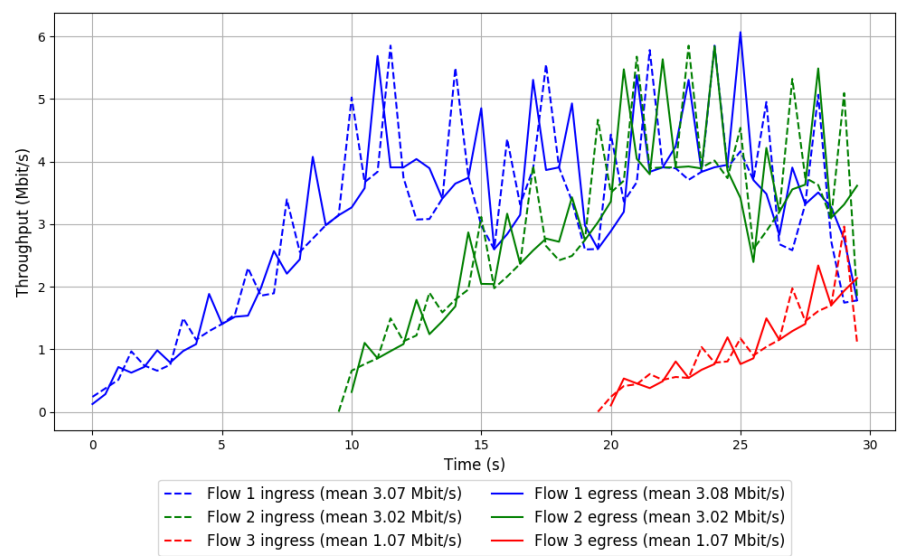
-- Flow 3:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 115.369 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

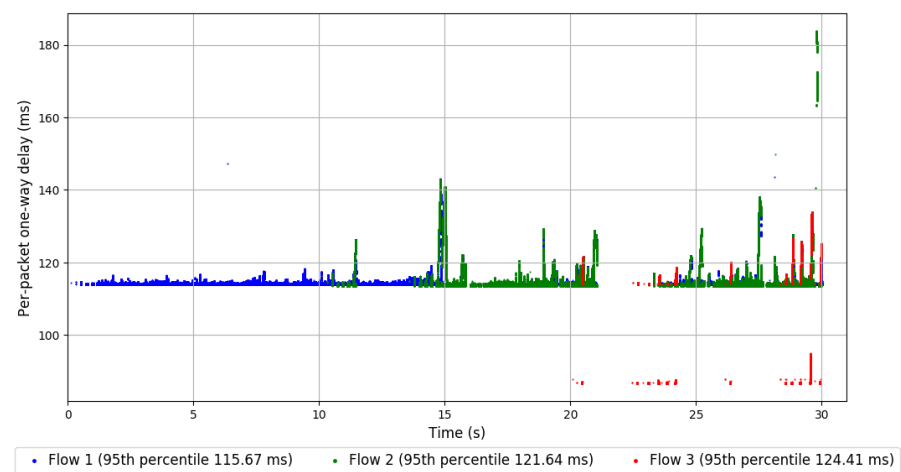
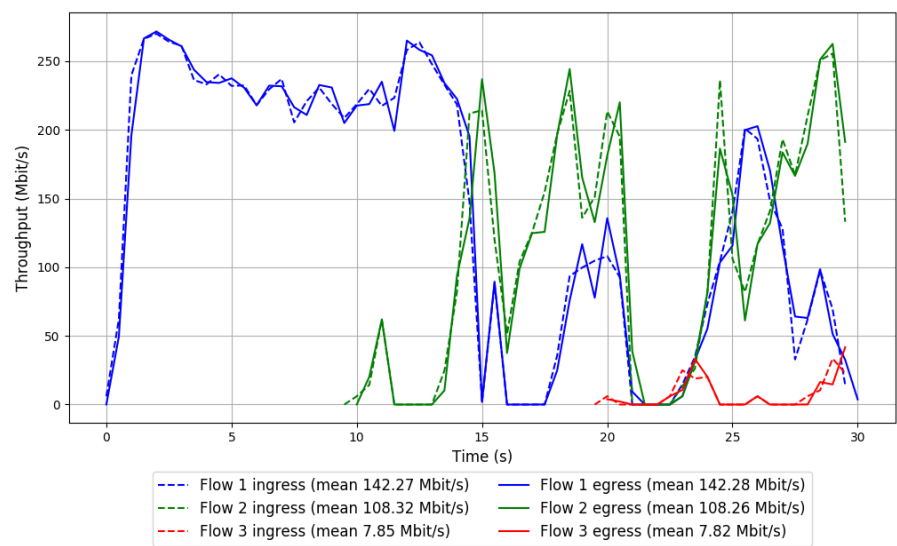


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-13 22:05:04
End at: 2018-02-13 22:05:34

# Below is generated by plot.py at 2018-02-14 03:48:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 216.86 Mbit/s
95th percentile per-packet one-way delay: 118.030 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 142.28 Mbit/s
95th percentile per-packet one-way delay: 115.669 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 108.26 Mbit/s
95th percentile per-packet one-way delay: 121.645 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.82 Mbit/s
95th percentile per-packet one-way delay: 124.412 ms
Loss rate: 0.00%
```

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

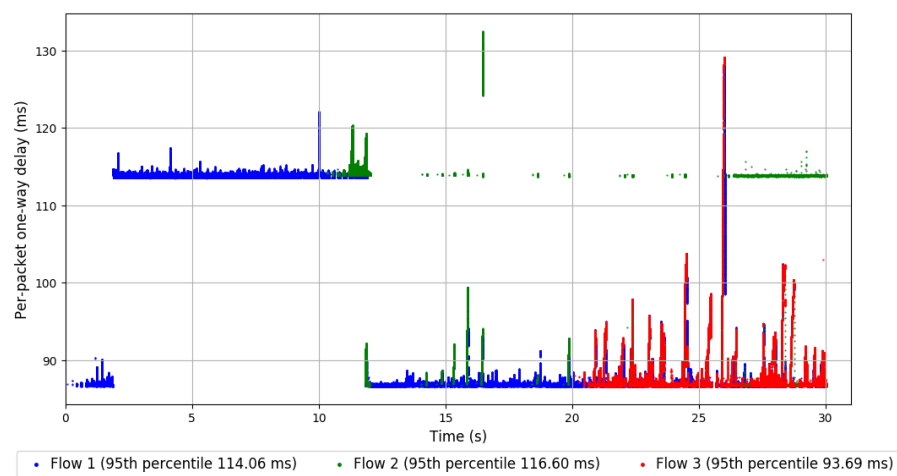
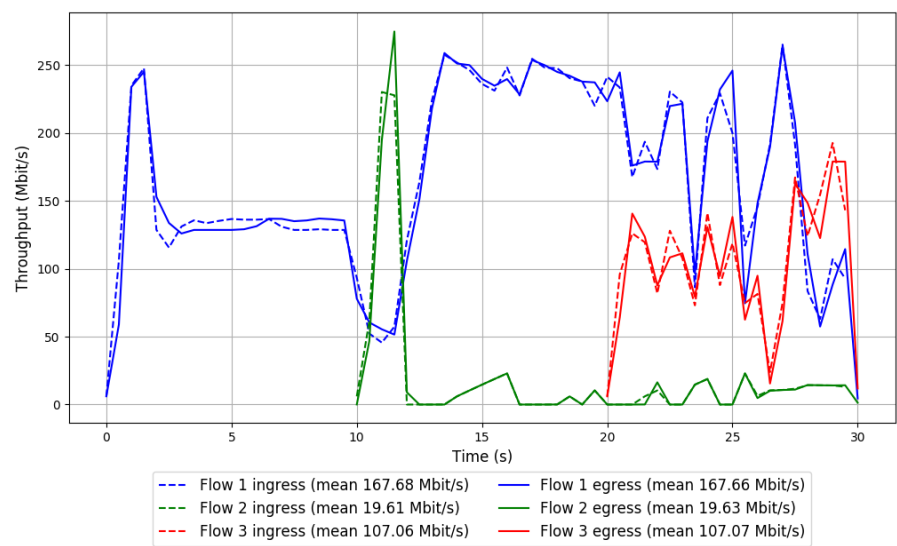


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-13 22:23:22
End at: 2018-02-13 22:23:52

# Below is generated by plot.py at 2018-02-14 03:48:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 216.14 Mbit/s
95th percentile per-packet one-way delay: 114.070 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 167.66 Mbit/s
95th percentile per-packet one-way delay: 114.061 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 19.63 Mbit/s
95th percentile per-packet one-way delay: 116.600 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 107.07 Mbit/s
95th percentile per-packet one-way delay: 93.694 ms
Loss rate: 0.00%
```

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

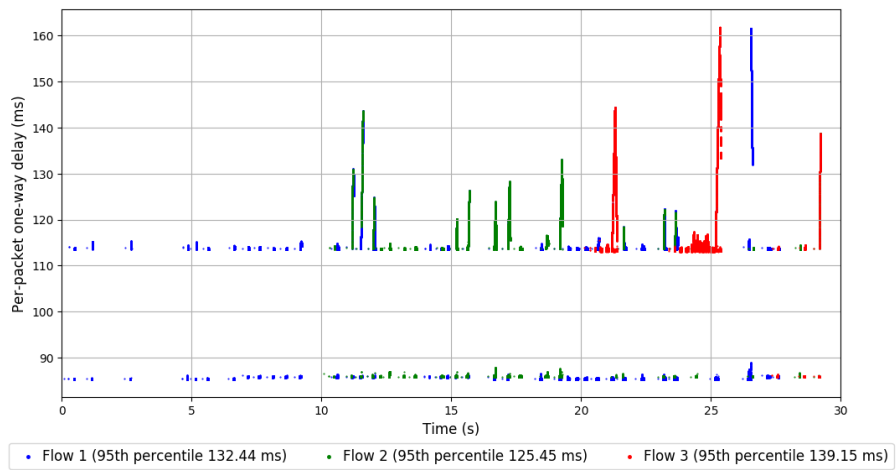
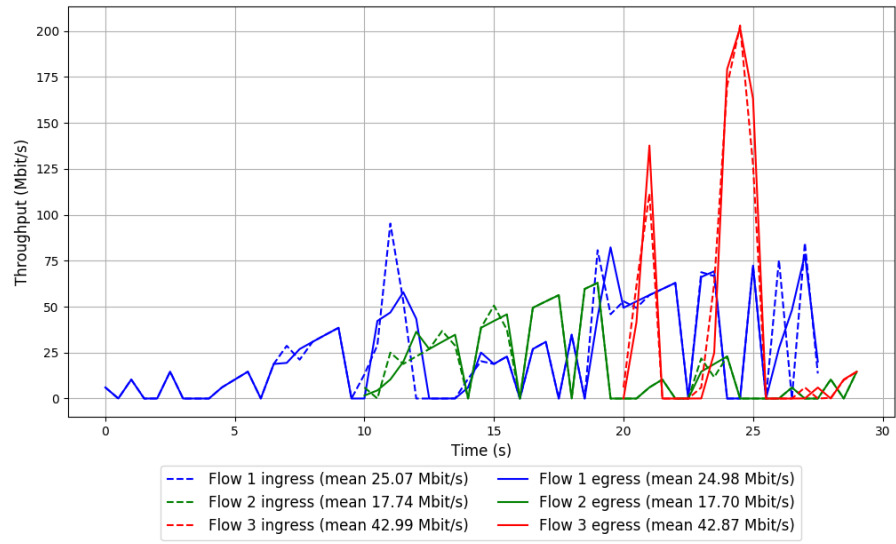


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-13 22:41:57
End at: 2018-02-13 22:42:27

# Below is generated by plot.py at 2018-02-14 03:48:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.61 Mbit/s
95th percentile per-packet one-way delay: 132.094 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 24.98 Mbit/s
95th percentile per-packet one-way delay: 132.440 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 17.70 Mbit/s
95th percentile per-packet one-way delay: 125.448 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 42.87 Mbit/s
95th percentile per-packet one-way delay: 139.152 ms
Loss rate: 0.00%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-02-13 23:00:12

End at: 2018-02-13 23:00:42

Below is generated by plot.py at 2018-02-14 03:49:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 228.70 Mbit/s

95th percentile per-packet one-way delay: 116.061 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 179.84 Mbit/s

95th percentile per-packet one-way delay: 114.788 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.05 Mbit/s

95th percentile per-packet one-way delay: 128.526 ms

Loss rate: 0.00%

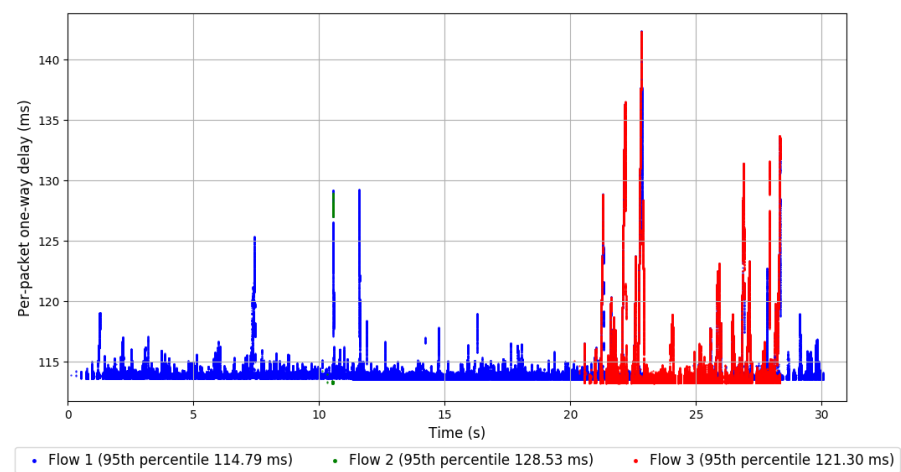
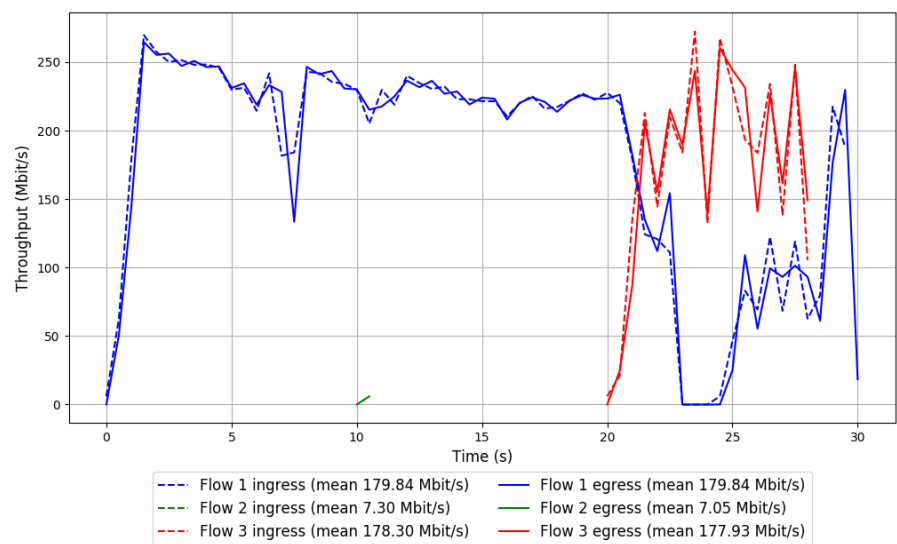
-- Flow 3:

Average throughput: 177.93 Mbit/s

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

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-13 23:19:09

End at: 2018-02-13 23:19:39

Below is generated by plot.py at 2018-02-14 03:49:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 227.10 Mbit/s

95th percentile per-packet one-way delay: 118.027 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 126.84 Mbit/s

95th percentile per-packet one-way delay: 116.501 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.59 Mbit/s

95th percentile per-packet one-way delay: 122.383 ms

Loss rate: 0.00%

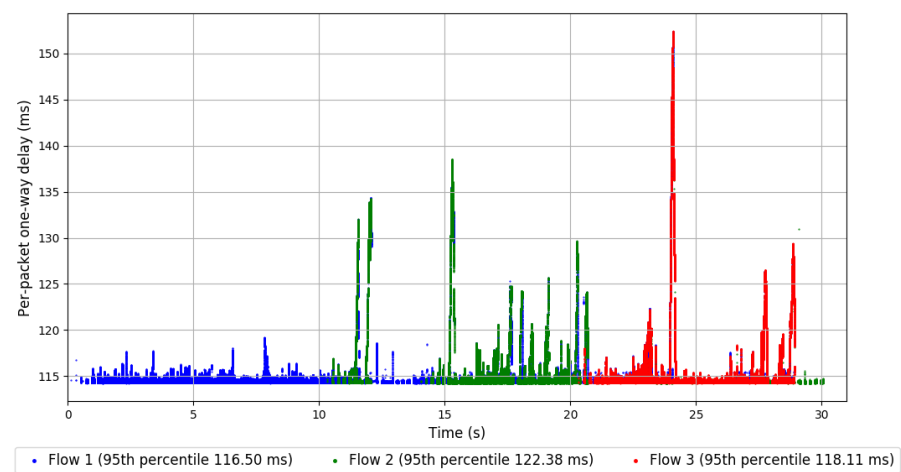
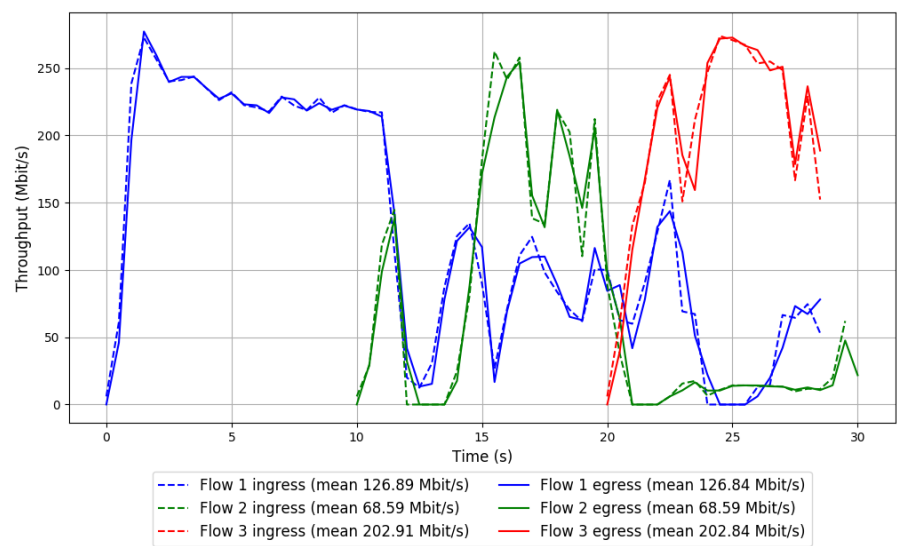
-- Flow 3:

Average throughput: 202.84 Mbit/s

95th percentile per-packet one-way delay: 118.111 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-13 23:38:04

End at: 2018-02-13 23:38:34

Below is generated by plot.py at 2018-02-14 03:49:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 164.58 Mbit/s

95th percentile per-packet one-way delay: 116.455 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 54.53 Mbit/s

95th percentile per-packet one-way delay: 119.150 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 133.21 Mbit/s

95th percentile per-packet one-way delay: 115.409 ms

Loss rate: 0.00%

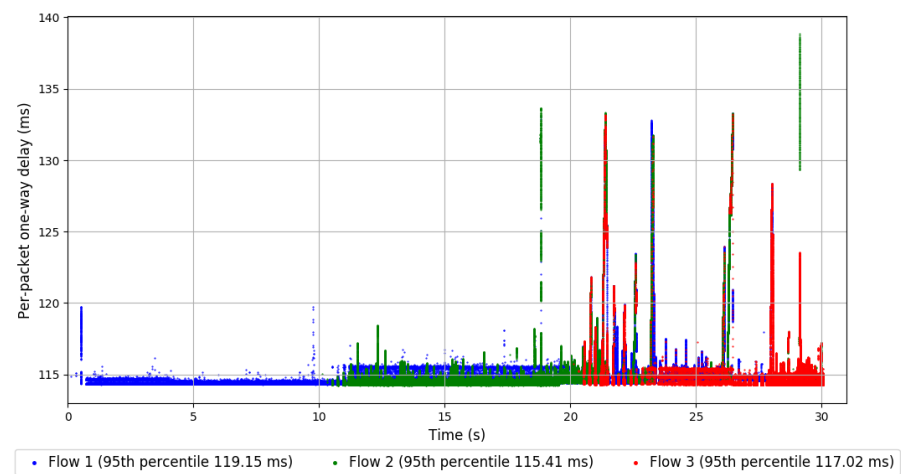
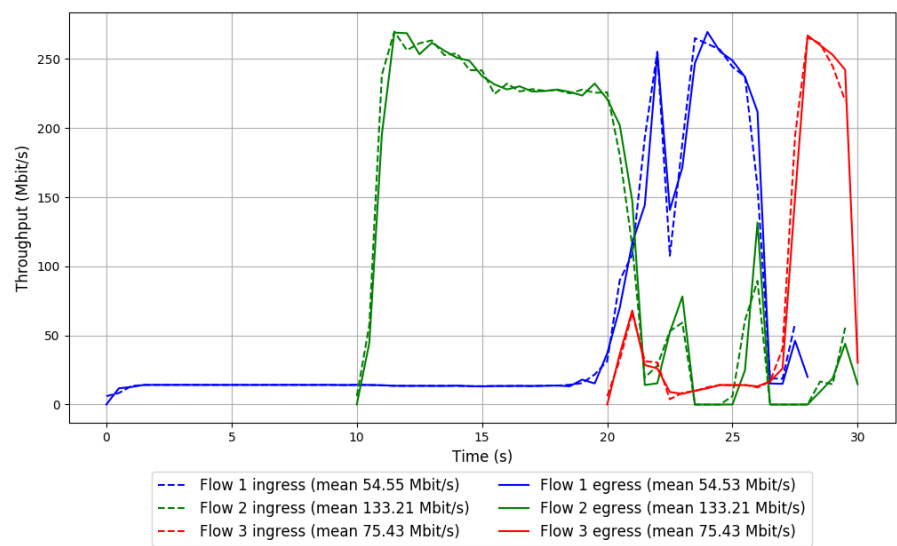
-- Flow 3:

Average throughput: 75.43 Mbit/s

95th percentile per-packet one-way delay: 117.019 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-02-13 23:57:21

End at: 2018-02-13 23:57:51

Below is generated by plot.py at 2018-02-14 03:49:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 192.36 Mbit/s

95th percentile per-packet one-way delay: 120.121 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 85.59 Mbit/s

95th percentile per-packet one-way delay: 120.056 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 125.75 Mbit/s

95th percentile per-packet one-way delay: 119.534 ms

Loss rate: 0.00%

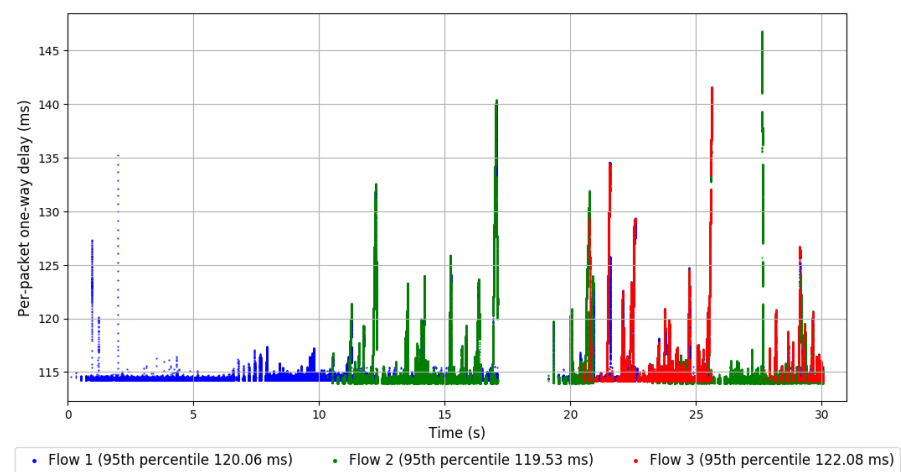
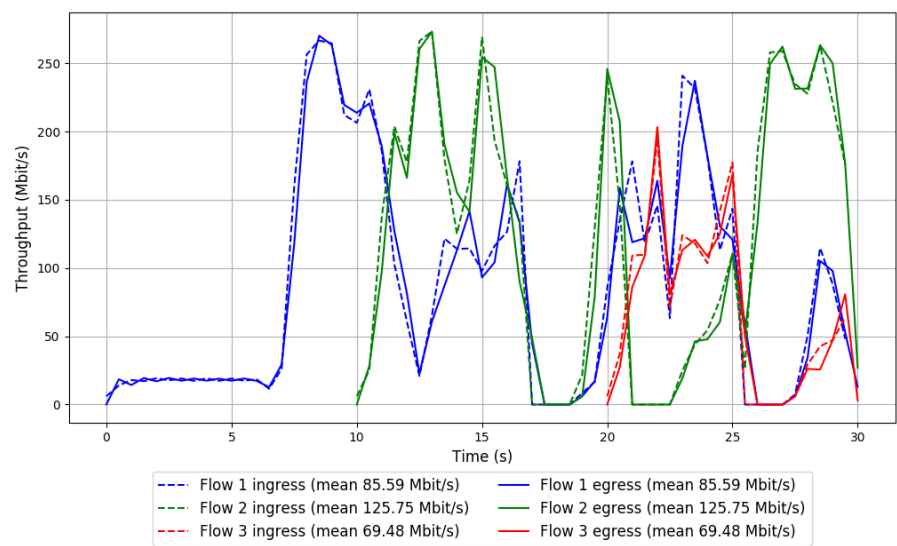
-- Flow 3:

Average throughput: 69.48 Mbit/s

95th percentile per-packet one-way delay: 122.077 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-14 00:16:06

End at: 2018-02-14 00:16:36

Below is generated by plot.py at 2018-02-14 03:49:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 105.88 Mbit/s

95th percentile per-packet one-way delay: 115.419 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 23.02 Mbit/s

95th percentile per-packet one-way delay: 117.067 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 143.98 Mbit/s

95th percentile per-packet one-way delay: 115.306 ms

Loss rate: 0.00%

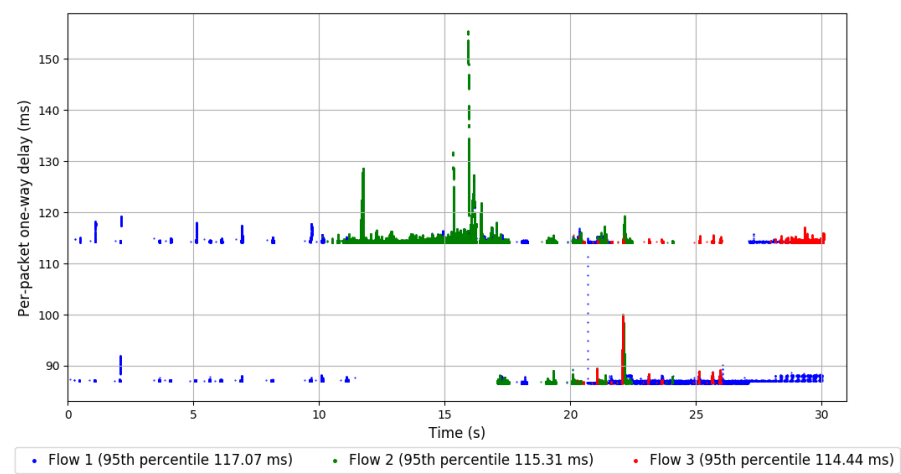
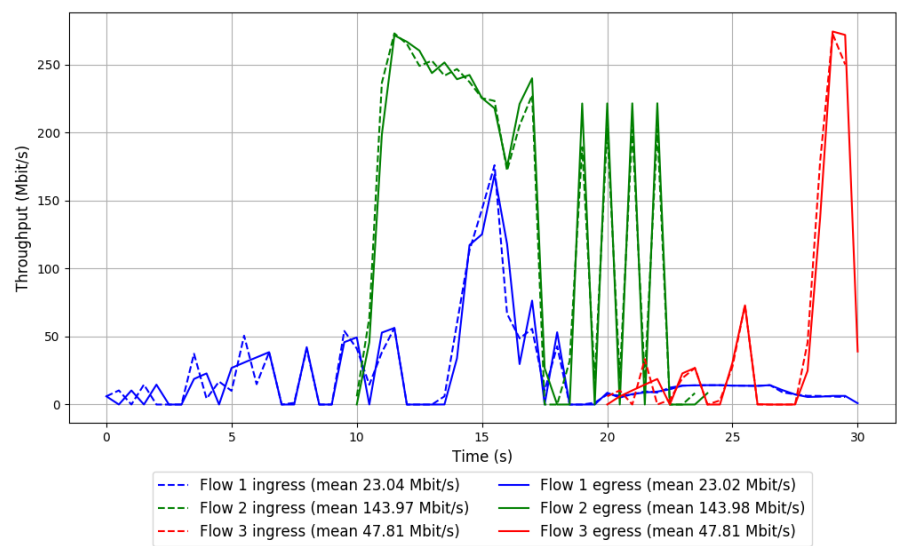
-- Flow 3:

Average throughput: 47.81 Mbit/s

95th percentile per-packet one-way delay: 114.443 ms

Loss rate: 0.00%

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

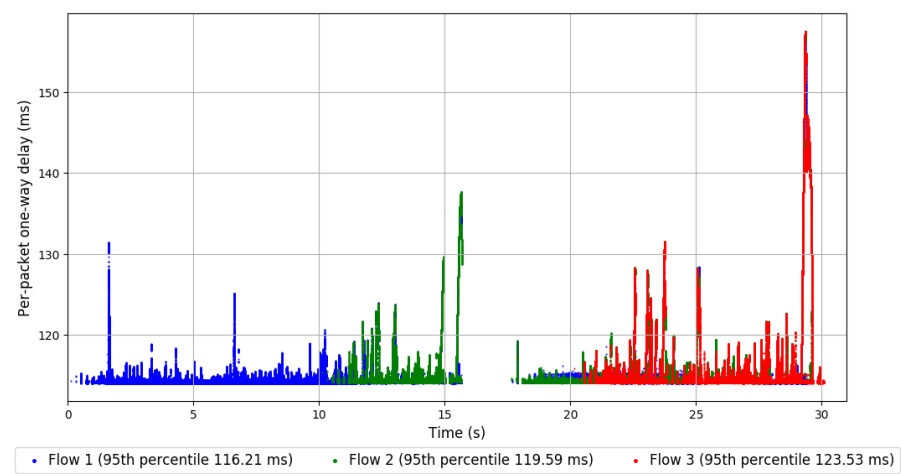
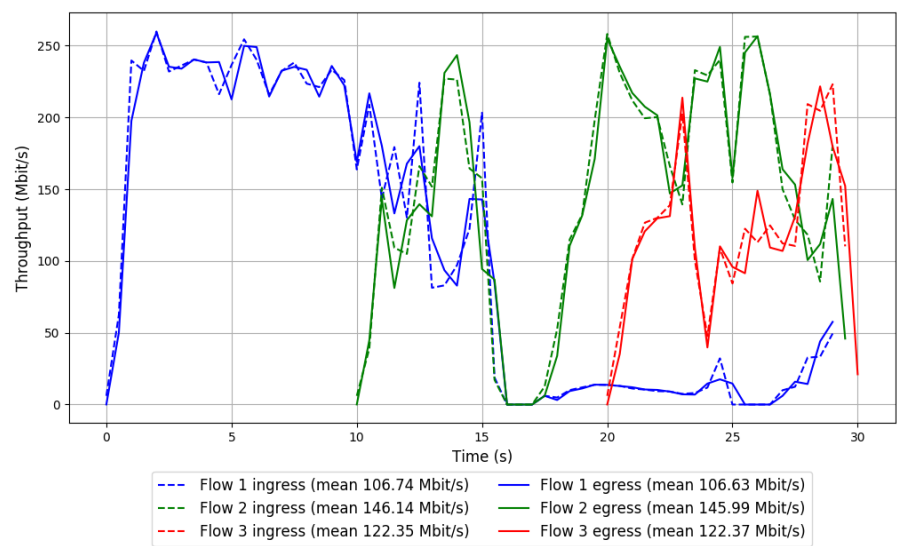


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-02-14 00:34:46
End at: 2018-02-14 00:35:17

# Below is generated by plot.py at 2018-02-14 03:51:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 239.78 Mbit/s
95th percentile per-packet one-way delay: 118.598 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 106.63 Mbit/s
95th percentile per-packet one-way delay: 116.214 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 145.99 Mbit/s
95th percentile per-packet one-way delay: 119.595 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 122.37 Mbit/s
95th percentile per-packet one-way delay: 123.533 ms
Loss rate: 0.00%
```

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

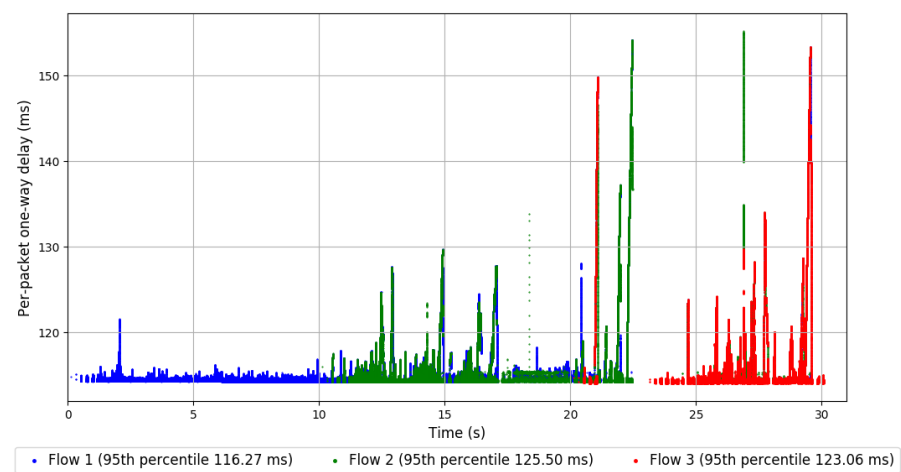
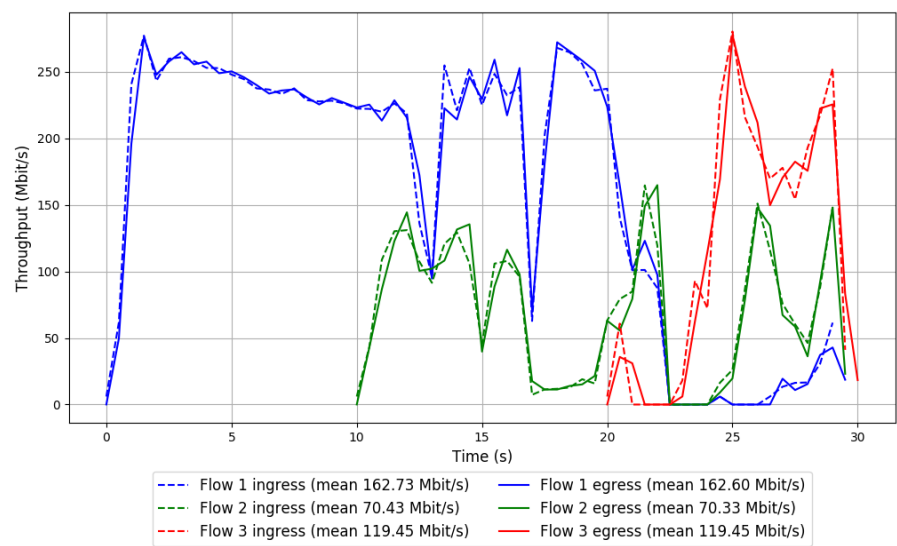


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-14 00:54:07
End at: 2018-02-14 00:54:38

# Below is generated by plot.py at 2018-02-14 03:53:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 245.19 Mbit/s
95th percentile per-packet one-way delay: 119.077 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 162.60 Mbit/s
95th percentile per-packet one-way delay: 116.267 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 70.33 Mbit/s
95th percentile per-packet one-way delay: 125.500 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 119.45 Mbit/s
95th percentile per-packet one-way delay: 123.065 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-13 22:17:24

End at: 2018-02-13 22:17:54

Below is generated by plot.py at 2018-02-14 03:53:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 152.15 Mbit/s

95th percentile per-packet one-way delay: 122.647 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.64 Mbit/s

95th percentile per-packet one-way delay: 119.619 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 79.45 Mbit/s

95th percentile per-packet one-way delay: 125.536 ms

Loss rate: 0.00%

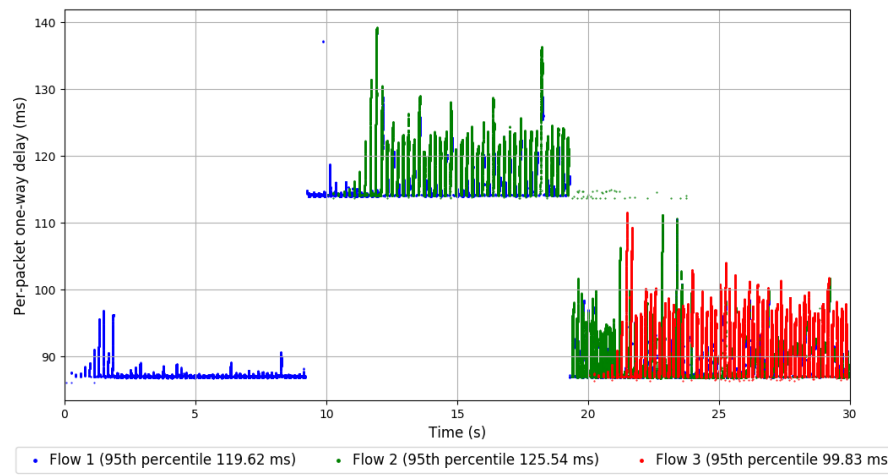
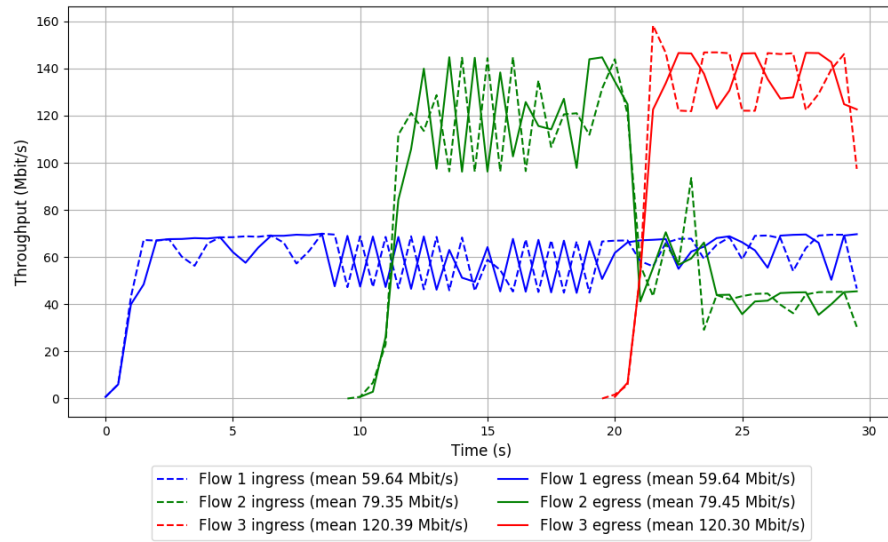
-- Flow 3:

Average throughput: 120.30 Mbit/s

95th percentile per-packet one-way delay: 99.835 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-13 22:35:54

End at: 2018-02-13 22:36:24

Below is generated by plot.py at 2018-02-14 03:53:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 125.07 Mbit/s

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

Loss rate: 0.17%

-- Flow 1:

Average throughput: 48.18 Mbit/s

95th percentile per-packet one-way delay: 114.418 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 108.68 Mbit/s

95th percentile per-packet one-way delay: 99.057 ms

Loss rate: 0.29%

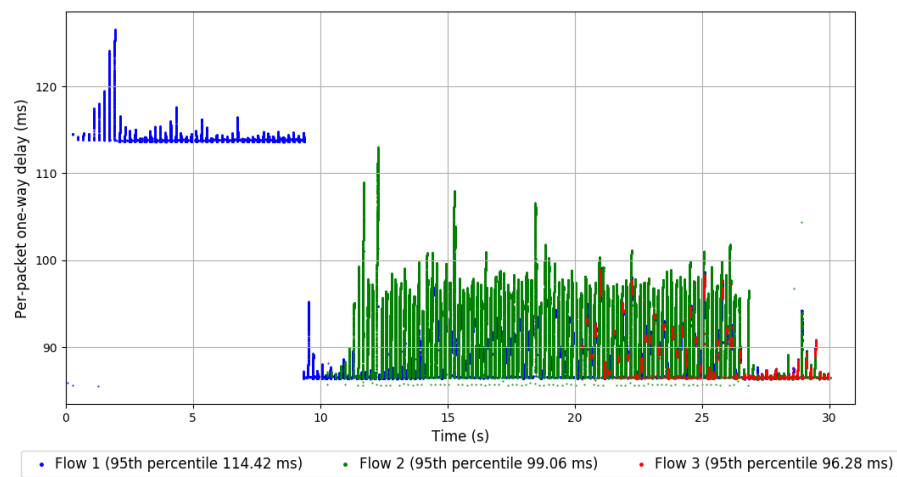
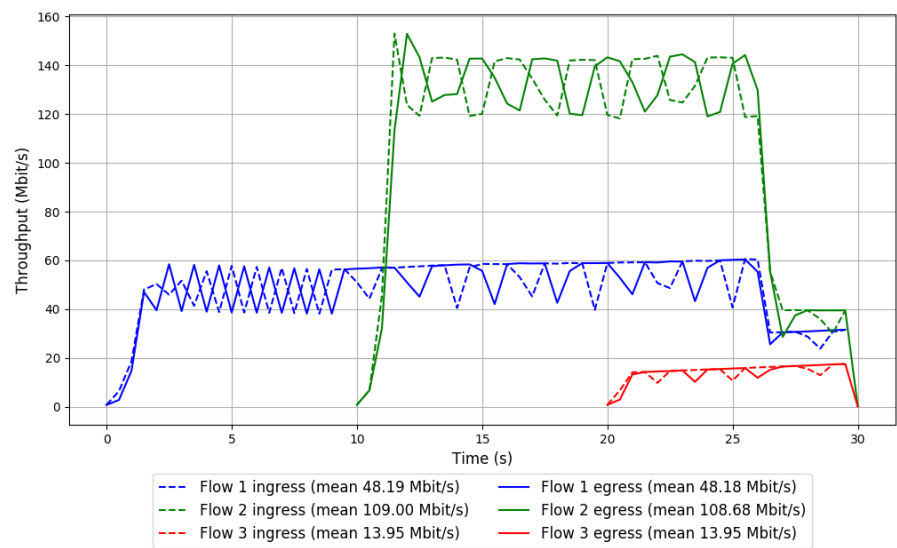
-- Flow 3:

Average throughput: 13.95 Mbit/s

95th percentile per-packet one-way delay: 96.276 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

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

End at: 2018-02-13 22:54:32

Below is generated by plot.py at 2018-02-14 03:53:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.83 Mbit/s

95th percentile per-packet one-way delay: 124.507 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 43.88 Mbit/s

95th percentile per-packet one-way delay: 121.592 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 110.21 Mbit/s

95th percentile per-packet one-way delay: 125.125 ms

Loss rate: 0.00%

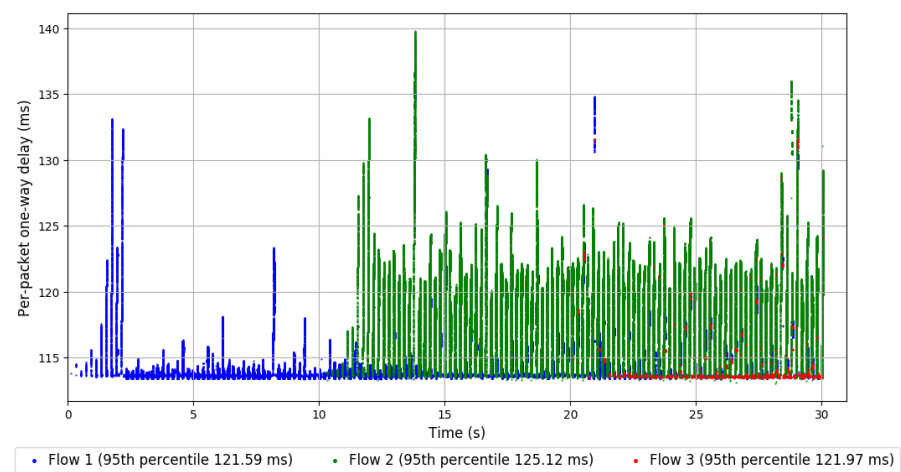
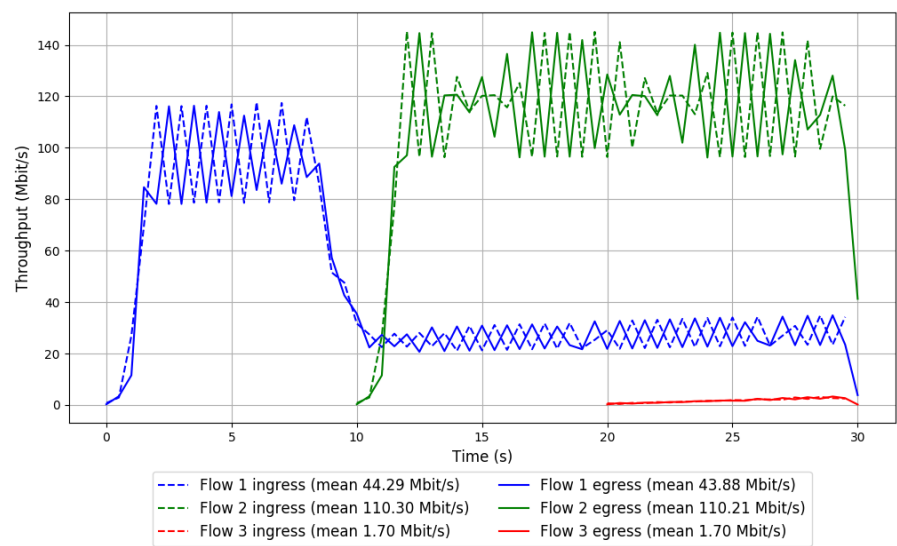
-- Flow 3:

Average throughput: 1.70 Mbit/s

95th percentile per-packet one-way delay: 121.967 ms

Loss rate: 0.14%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-13 23:12:53

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

Below is generated by plot.py at 2018-02-14 03:53:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 149.21 Mbit/s

95th percentile per-packet one-way delay: 124.601 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 80.12 Mbit/s

95th percentile per-packet one-way delay: 125.572 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 83.08 Mbit/s

95th percentile per-packet one-way delay: 122.186 ms

Loss rate: 0.00%

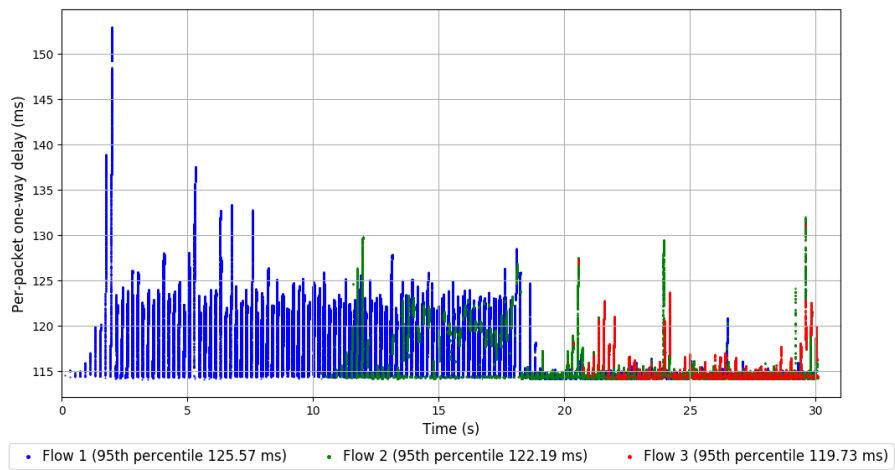
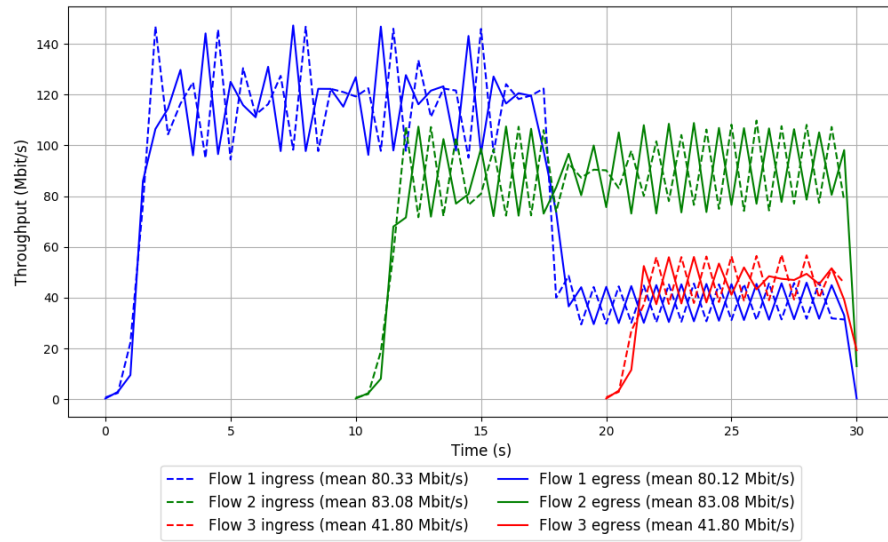
-- Flow 3:

Average throughput: 41.80 Mbit/s

95th percentile per-packet one-way delay: 119.735 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-13 23:31:52

End at: 2018-02-13 23:32:22

Below is generated by plot.py at 2018-02-14 03:53:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.78 Mbit/s

95th percentile per-packet one-way delay: 128.045 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 101.31 Mbit/s

95th percentile per-packet one-way delay: 128.444 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 50.70 Mbit/s

95th percentile per-packet one-way delay: 125.762 ms

Loss rate: 0.00%

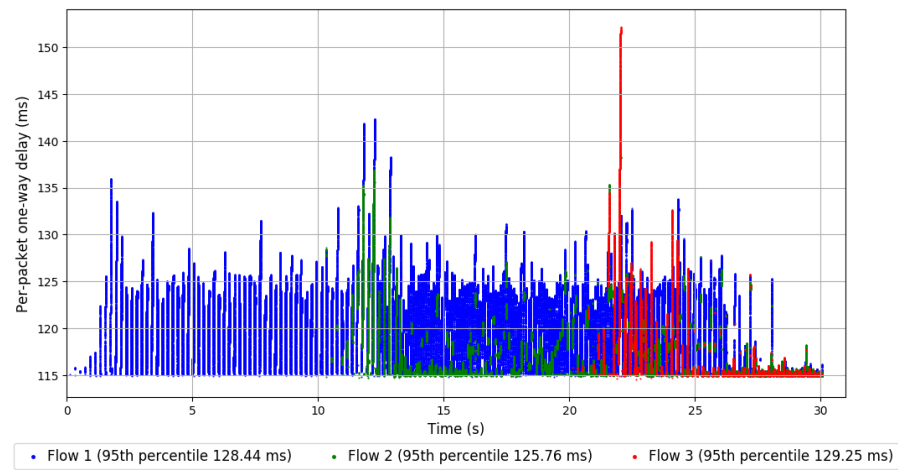
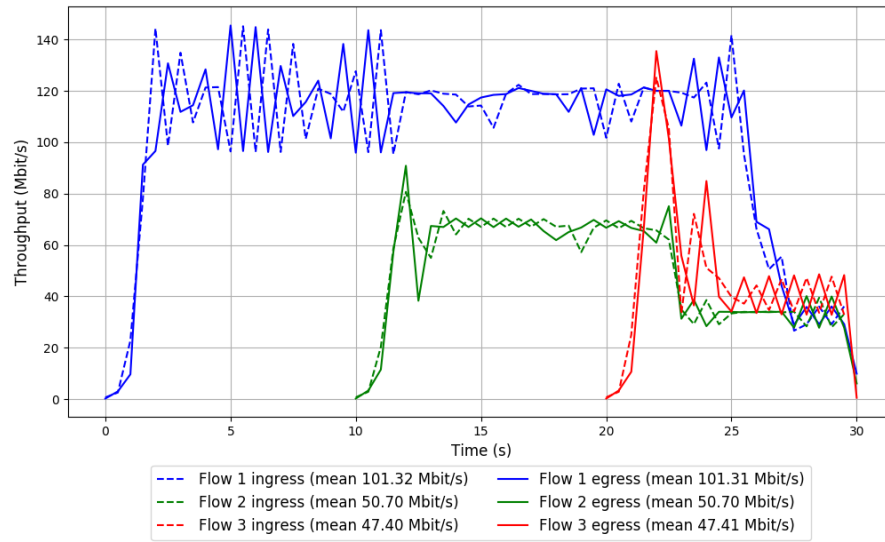
-- Flow 3:

Average throughput: 47.41 Mbit/s

95th percentile per-packet one-way delay: 129.246 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-13 23:50:58

End at: 2018-02-13 23:51:28

Below is generated by plot.py at 2018-02-14 03:53:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.30 Mbit/s

95th percentile per-packet one-way delay: 126.431 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 84.76 Mbit/s

95th percentile per-packet one-way delay: 127.398 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 106.01 Mbit/s

95th percentile per-packet one-way delay: 124.796 ms

Loss rate: 0.00%

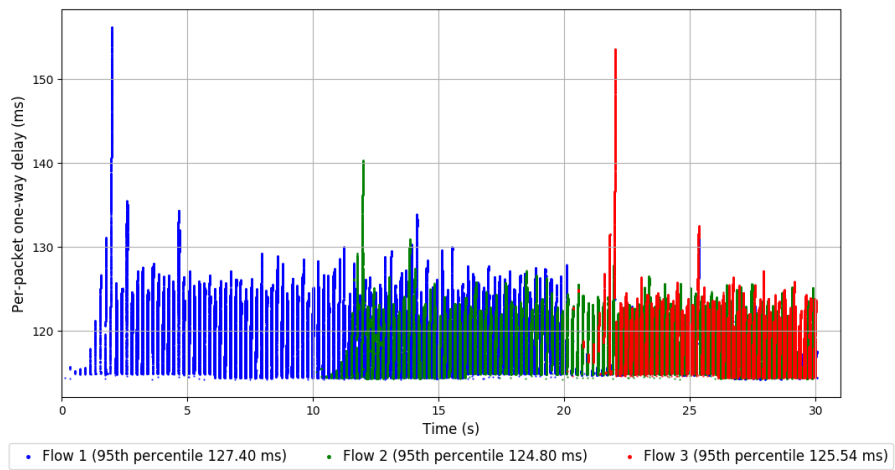
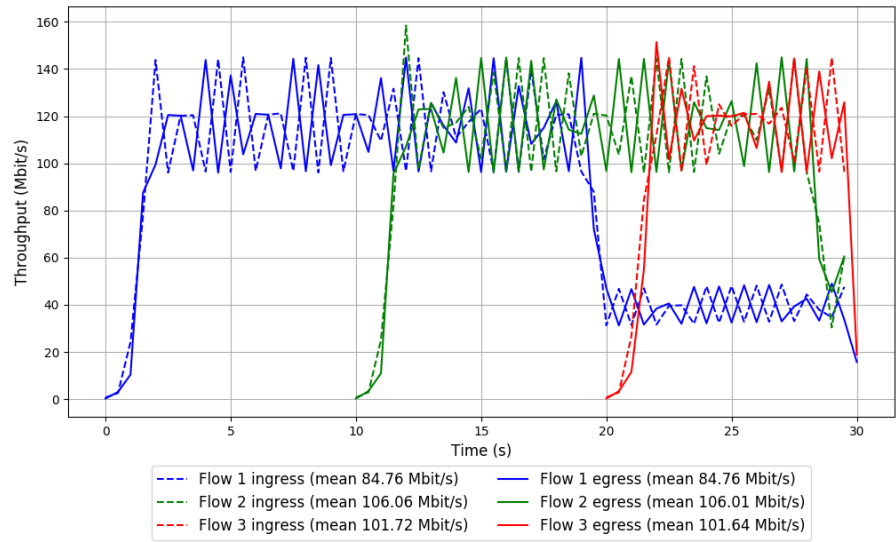
-- Flow 3:

Average throughput: 101.64 Mbit/s

95th percentile per-packet one-way delay: 125.544 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

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

End at: 2018-02-14 00:10:32

Below is generated by plot.py at 2018-02-14 03:53:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.35 Mbit/s

95th percentile per-packet one-way delay: 91.660 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 31.99 Mbit/s

95th percentile per-packet one-way delay: 89.859 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 63.12 Mbit/s

95th percentile per-packet one-way delay: 91.459 ms

Loss rate: 0.56%

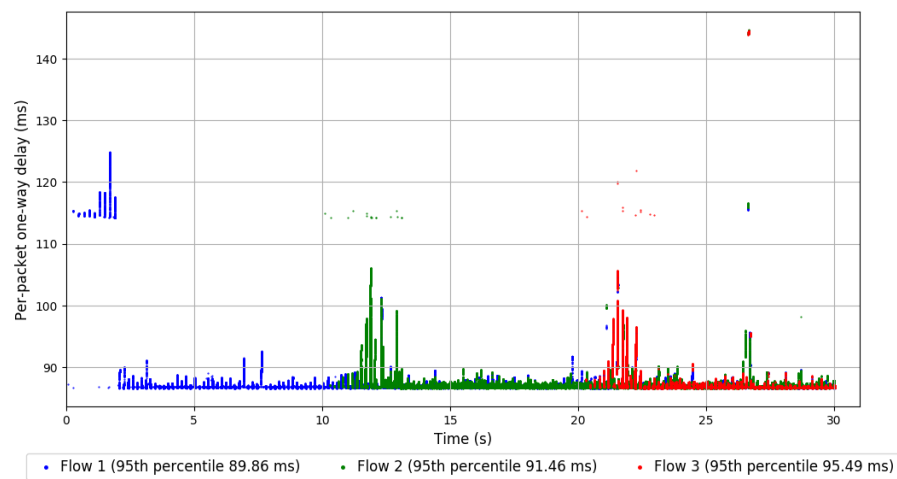
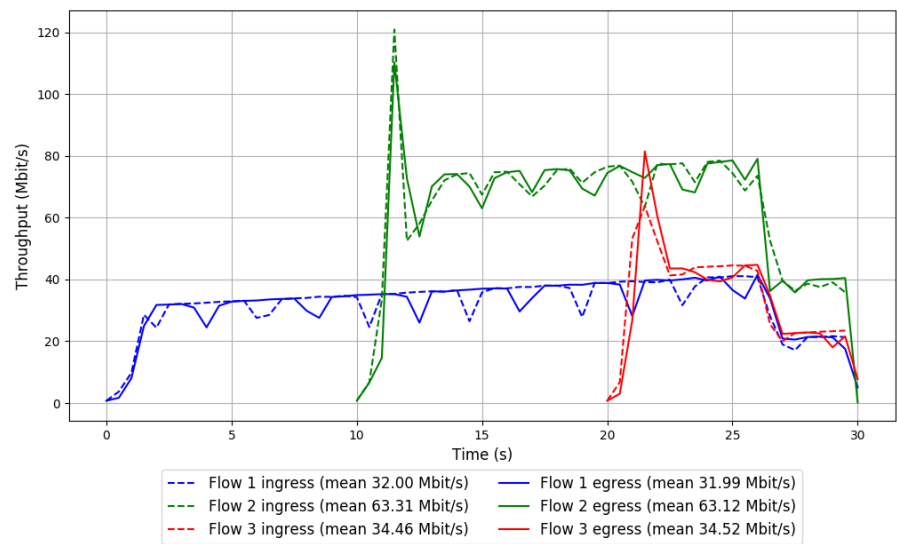
-- Flow 3:

Average throughput: 34.52 Mbit/s

95th percentile per-packet one-way delay: 95.489 ms

Loss rate: 0.13%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-14 00:28:35

End at: 2018-02-14 00:29:05

Below is generated by plot.py at 2018-02-14 03:53:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.63 Mbit/s

95th percentile per-packet one-way delay: 125.748 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 76.25 Mbit/s

95th percentile per-packet one-way delay: 126.475 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.70 Mbit/s

95th percentile per-packet one-way delay: 121.662 ms

Loss rate: 0.81%

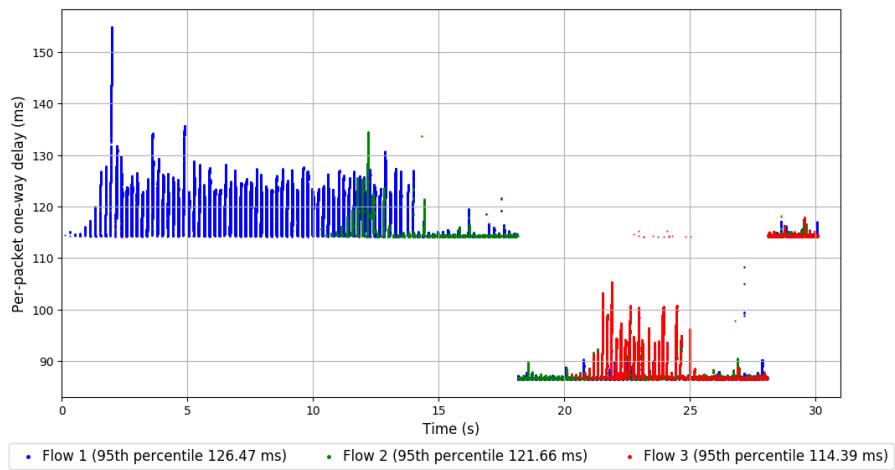
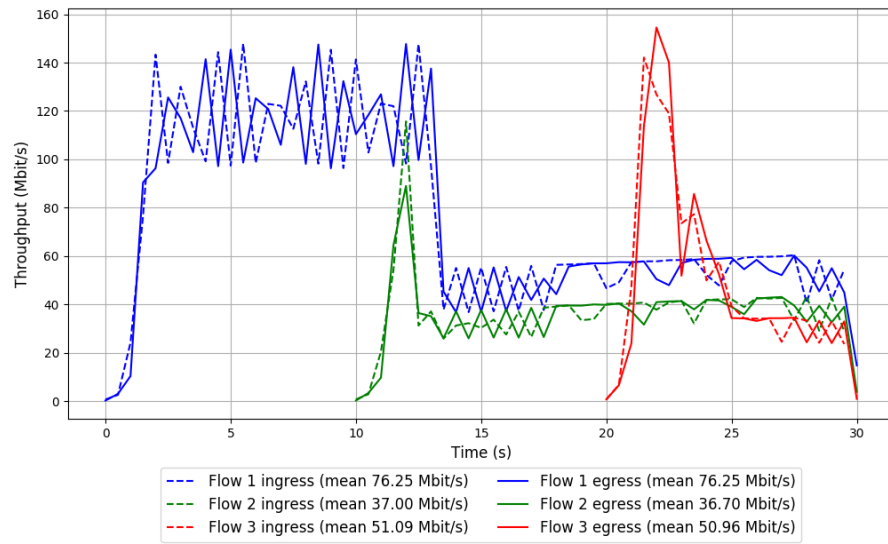
-- Flow 3:

Average throughput: 50.96 Mbit/s

95th percentile per-packet one-way delay: 114.392 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-14 00:47:46

End at: 2018-02-14 00:48:16

Below is generated by plot.py at 2018-02-14 03:54:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 218.58 Mbit/s

95th percentile per-packet one-way delay: 126.737 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 112.01 Mbit/s

95th percentile per-packet one-way delay: 127.479 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 110.00 Mbit/s

95th percentile per-packet one-way delay: 125.863 ms

Loss rate: 0.00%

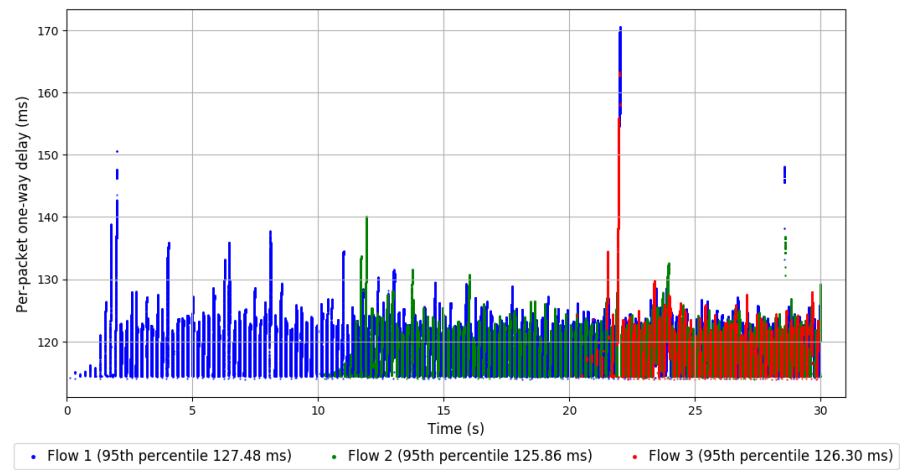
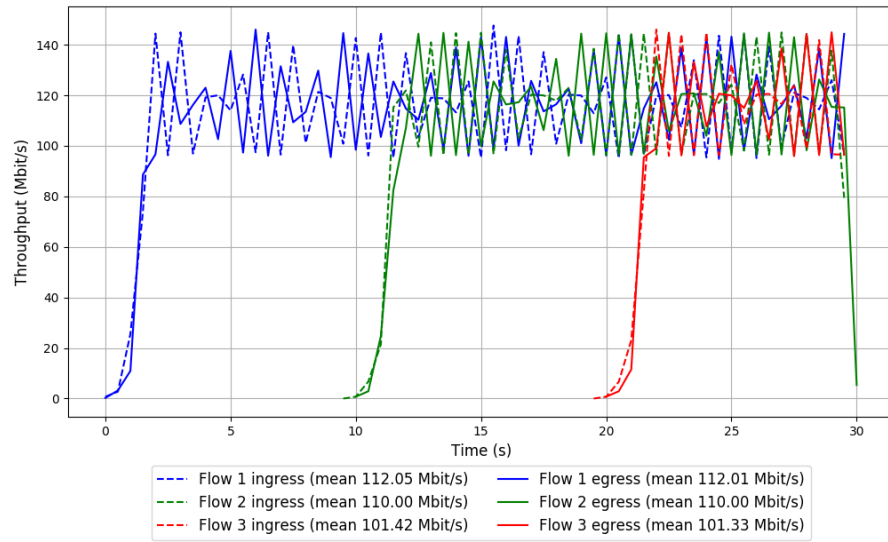
-- Flow 3:

Average throughput: 101.33 Mbit/s

95th percentile per-packet one-way delay: 126.295 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-14 01:06:59

End at: 2018-02-14 01:07:29

Below is generated by plot.py at 2018-02-14 03:54:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.12 Mbit/s

95th percentile per-packet one-way delay: 125.663 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 34.36 Mbit/s

95th percentile per-packet one-way delay: 125.862 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 86.66 Mbit/s

95th percentile per-packet one-way delay: 124.077 ms

Loss rate: 0.42%

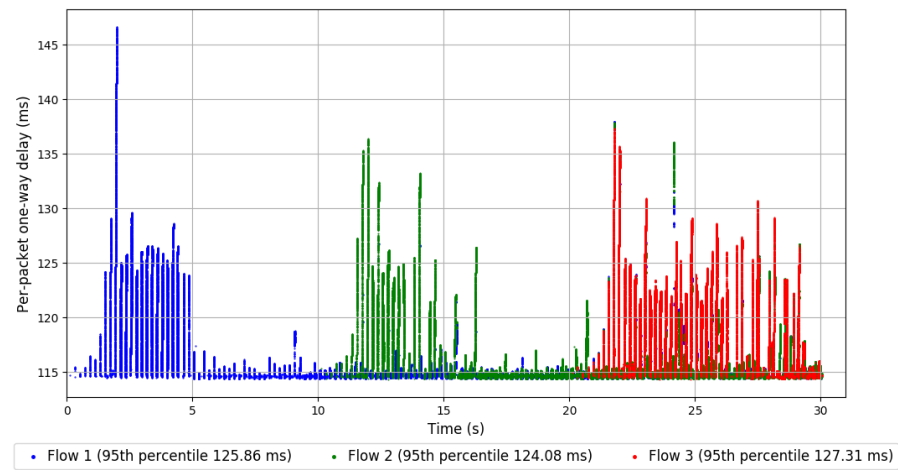
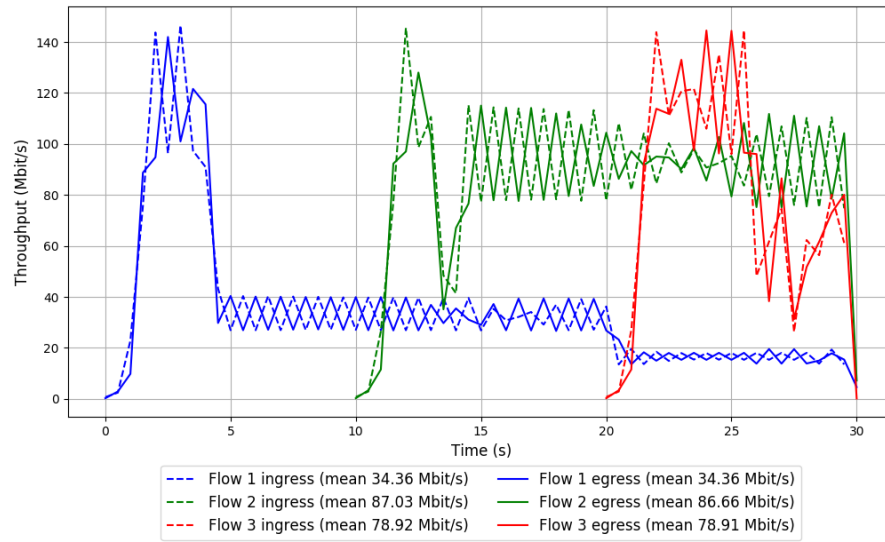
-- Flow 3:

Average throughput: 78.91 Mbit/s

95th percentile per-packet one-way delay: 127.307 ms

Loss rate: 0.01%

Run 10: Report of TCP Vegas — Data Link

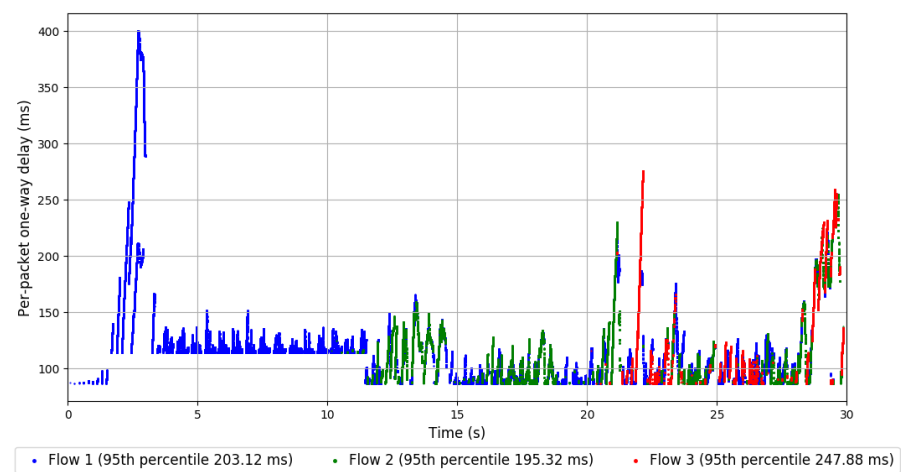
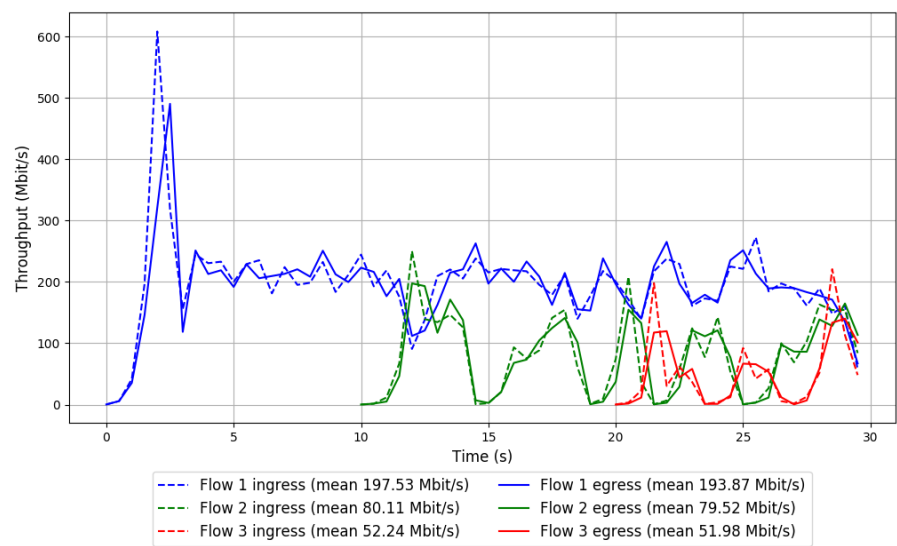


```
Run 1: Statistics of Verus

Start at: 2018-02-13 22:16:22
End at: 2018-02-13 22:16:52

# Below is generated by plot.py at 2018-02-14 03:55:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 263.48 Mbit/s
95th percentile per-packet one-way delay: 211.390 ms
Loss rate: 1.58%
-- Flow 1:
Average throughput: 193.87 Mbit/s
95th percentile per-packet one-way delay: 203.125 ms
Loss rate: 1.84%
-- Flow 2:
Average throughput: 79.52 Mbit/s
95th percentile per-packet one-way delay: 195.318 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 51.98 Mbit/s
95th percentile per-packet one-way delay: 247.883 ms
Loss rate: 0.75%
```

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-13 22:34:53

End at: 2018-02-13 22:35:23

Below is generated by plot.py at 2018-02-14 03:55:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 224.14 Mbit/s

95th percentile per-packet one-way delay: 235.491 ms

Loss rate: 1.61%

-- Flow 1:

Average throughput: 122.68 Mbit/s

95th percentile per-packet one-way delay: 243.357 ms

Loss rate: 2.79%

-- Flow 2:

Average throughput: 129.54 Mbit/s

95th percentile per-packet one-way delay: 237.092 ms

Loss rate: 0.17%

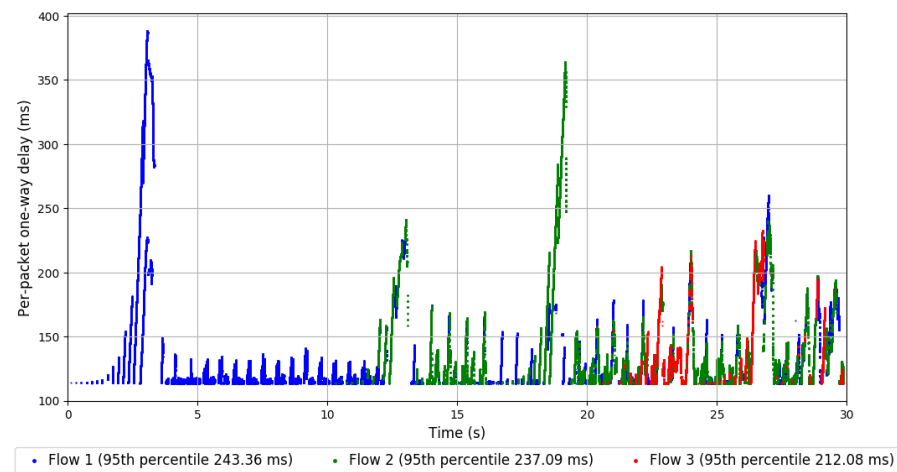
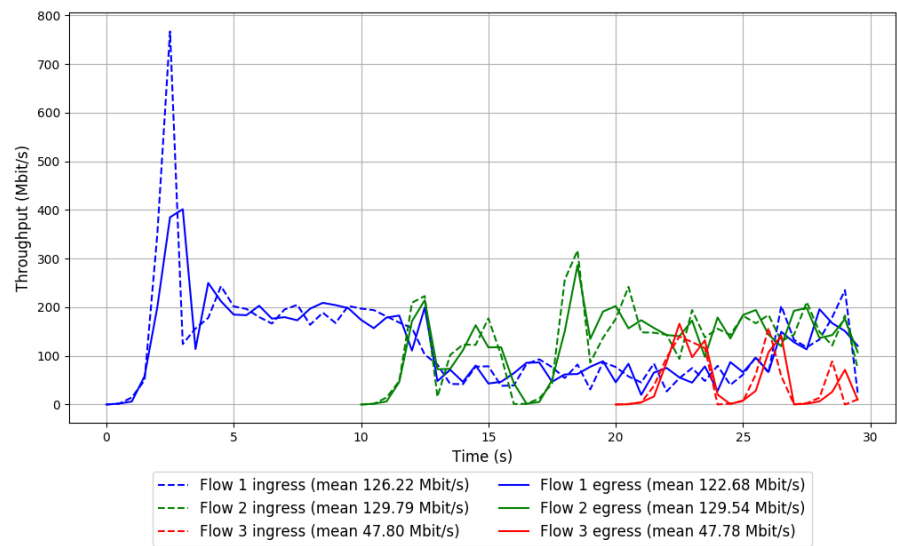
-- Flow 3:

Average throughput: 47.78 Mbit/s

95th percentile per-packet one-way delay: 212.084 ms

Loss rate: 0.07%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-13 22:52:59

End at: 2018-02-13 22:53:29

Below is generated by plot.py at 2018-02-14 03:55:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 236.72 Mbit/s

95th percentile per-packet one-way delay: 210.252 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 141.15 Mbit/s

95th percentile per-packet one-way delay: 212.102 ms

Loss rate: 2.18%

-- Flow 2:

Average throughput: 119.56 Mbit/s

95th percentile per-packet one-way delay: 193.989 ms

Loss rate: 0.00%

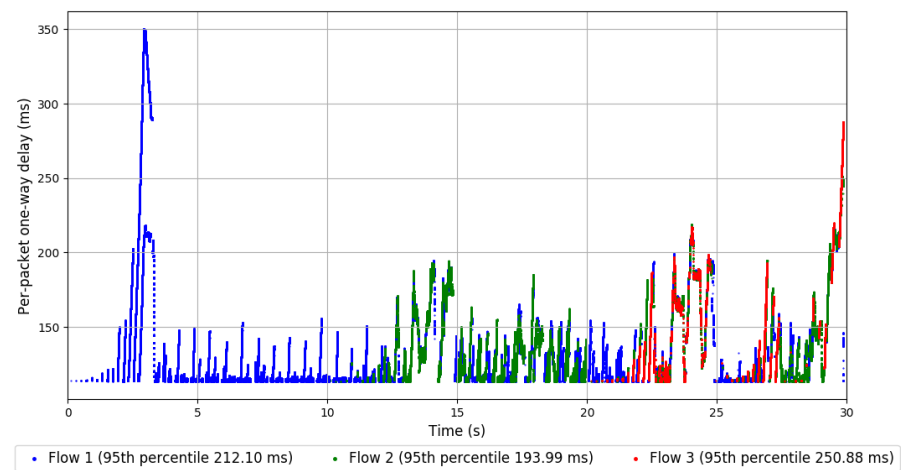
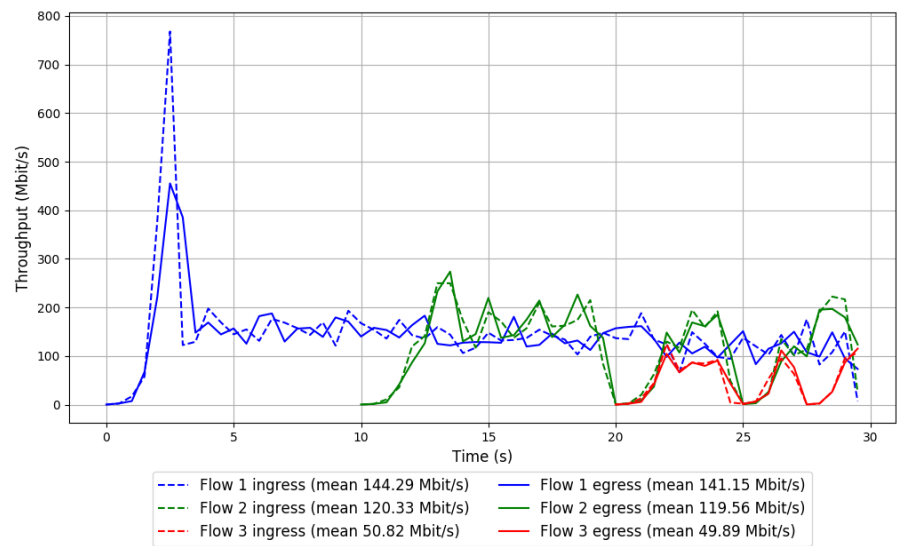
-- Flow 3:

Average throughput: 49.89 Mbit/s

95th percentile per-packet one-way delay: 250.875 ms

Loss rate: 0.04%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-13 23:11:50

End at: 2018-02-13 23:12:20

Below is generated by plot.py at 2018-02-14 03:56:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 246.54 Mbit/s

95th percentile per-packet one-way delay: 227.612 ms

Loss rate: 1.39%

-- Flow 1:

Average throughput: 178.93 Mbit/s

95th percentile per-packet one-way delay: 223.045 ms

Loss rate: 1.90%

-- Flow 2:

Average throughput: 79.55 Mbit/s

95th percentile per-packet one-way delay: 233.196 ms

Loss rate: 0.00%

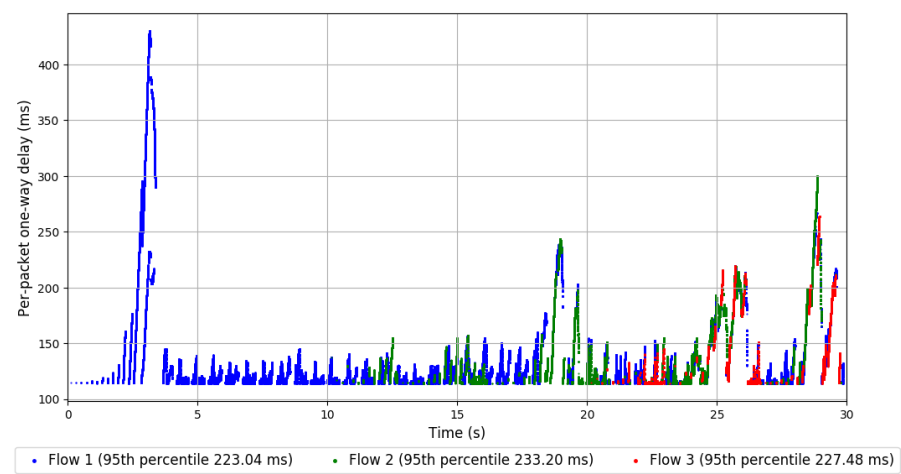
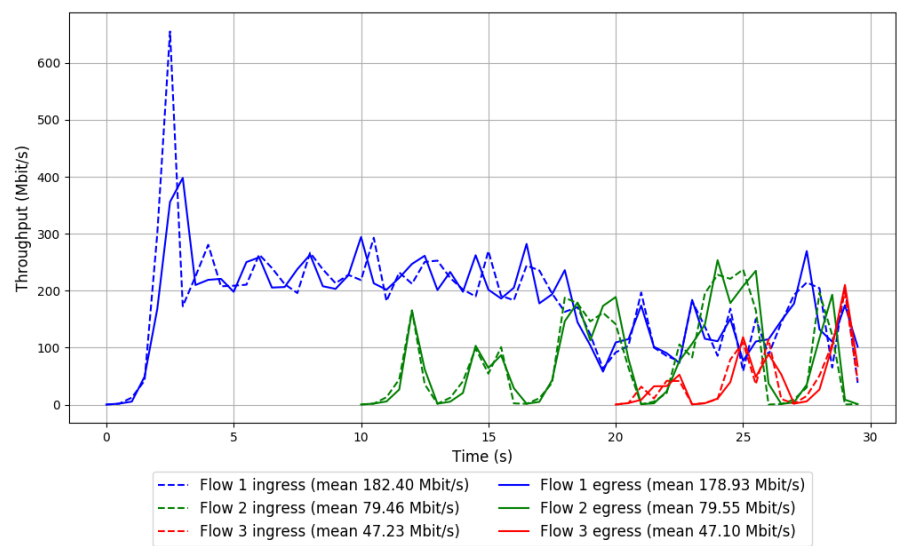
-- Flow 3:

Average throughput: 47.10 Mbit/s

95th percentile per-packet one-way delay: 227.481 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-13 23:30:51

End at: 2018-02-13 23:31:21

Below is generated by plot.py at 2018-02-14 03:56:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 224.10 Mbit/s

95th percentile per-packet one-way delay: 250.848 ms

Loss rate: 2.27%

-- Flow 1:

Average throughput: 137.29 Mbit/s

95th percentile per-packet one-way delay: 255.129 ms

Loss rate: 2.90%

-- Flow 2:

Average throughput: 83.07 Mbit/s

95th percentile per-packet one-way delay: 229.313 ms

Loss rate: 0.47%

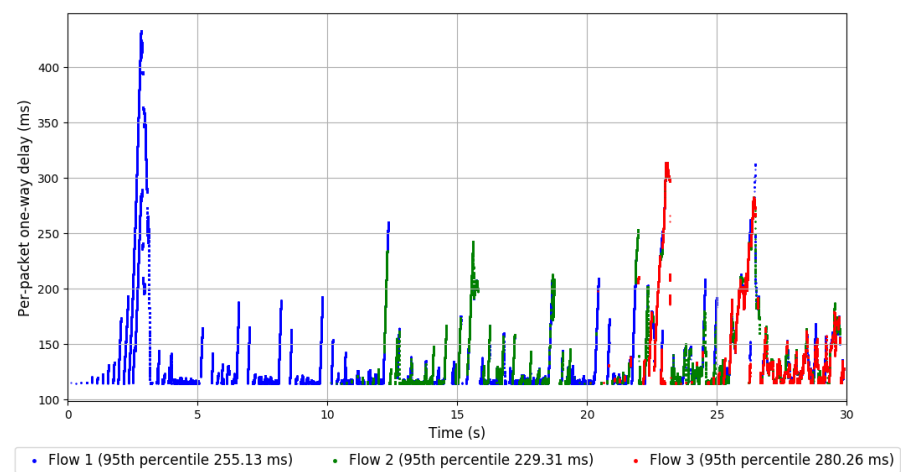
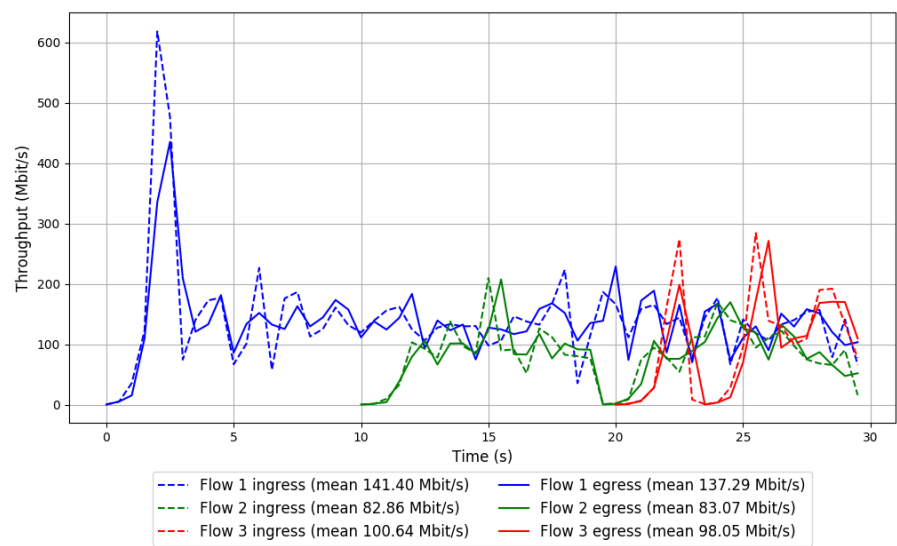
-- Flow 3:

Average throughput: 98.05 Mbit/s

95th percentile per-packet one-way delay: 280.264 ms

Loss rate: 2.57%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

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

End at: 2018-02-13 23:50:24

Below is generated by plot.py at 2018-02-14 03:57:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 241.22 Mbit/s

95th percentile per-packet one-way delay: 262.403 ms

Loss rate: 2.01%

-- Flow 1:

Average throughput: 117.76 Mbit/s

95th percentile per-packet one-way delay: 273.719 ms

Loss rate: 3.75%

-- Flow 2:

Average throughput: 155.14 Mbit/s

95th percentile per-packet one-way delay: 261.891 ms

Loss rate: 0.24%

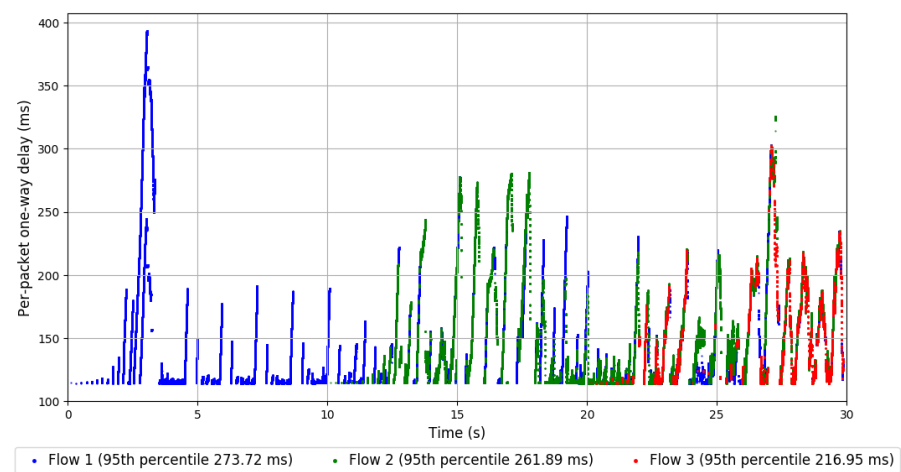
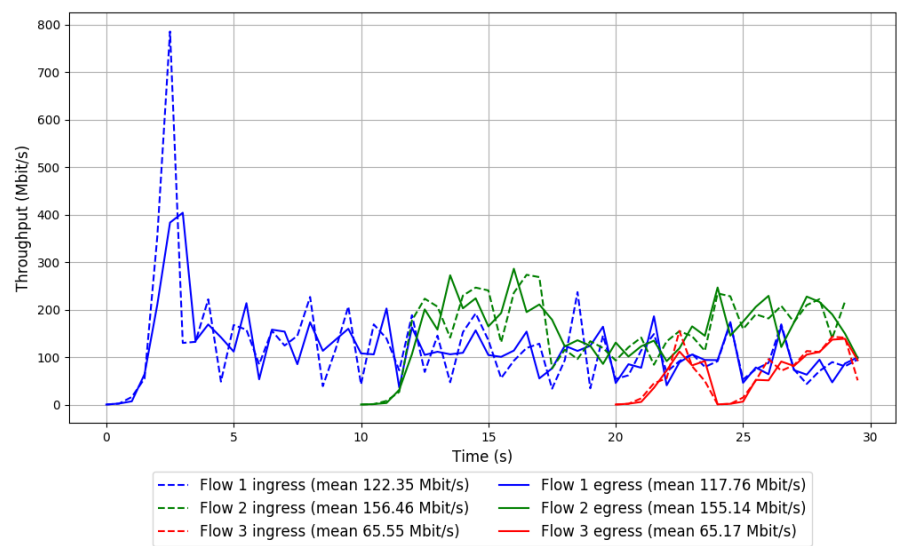
-- Flow 3:

Average throughput: 65.17 Mbit/s

95th percentile per-packet one-way delay: 216.949 ms

Loss rate: 0.59%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-14 00:08:56

End at: 2018-02-14 00:09:26

Below is generated by plot.py at 2018-02-14 03:58:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 281.85 Mbit/s

95th percentile per-packet one-way delay: 254.353 ms

Loss rate: 1.38%

-- Flow 1:

Average throughput: 185.05 Mbit/s

95th percentile per-packet one-way delay: 244.106 ms

Loss rate: 1.61%

-- Flow 2:

Average throughput: 117.90 Mbit/s

95th percentile per-packet one-way delay: 268.908 ms

Loss rate: 1.21%

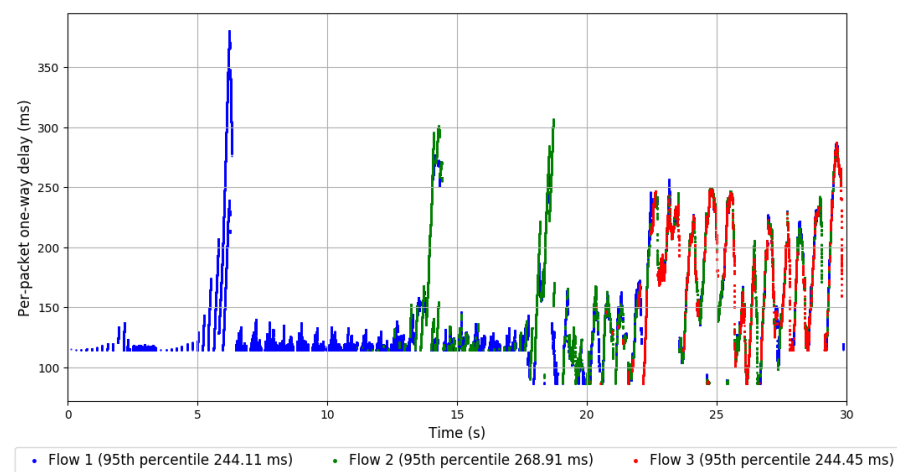
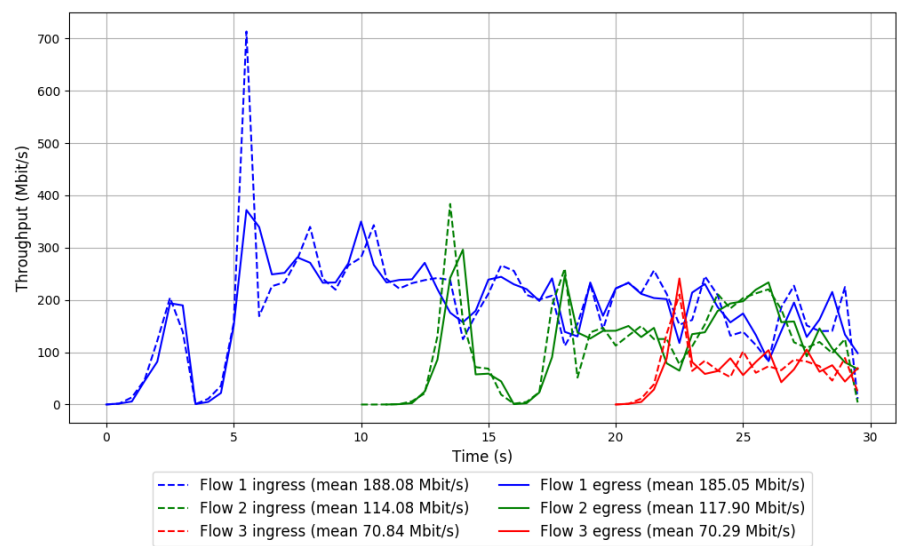
-- Flow 3:

Average throughput: 70.29 Mbit/s

95th percentile per-packet one-way delay: 244.453 ms

Loss rate: 0.04%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-14 00:27:38

End at: 2018-02-14 00:28:08

Below is generated by plot.py at 2018-02-14 03:58:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 178.77 Mbit/s

95th percentile per-packet one-way delay: 242.024 ms

Loss rate: 1.73%

-- Flow 1:

Average throughput: 93.48 Mbit/s

95th percentile per-packet one-way delay: 285.632 ms

Loss rate: 3.22%

-- Flow 2:

Average throughput: 84.73 Mbit/s

95th percentile per-packet one-way delay: 185.457 ms

Loss rate: 0.06%

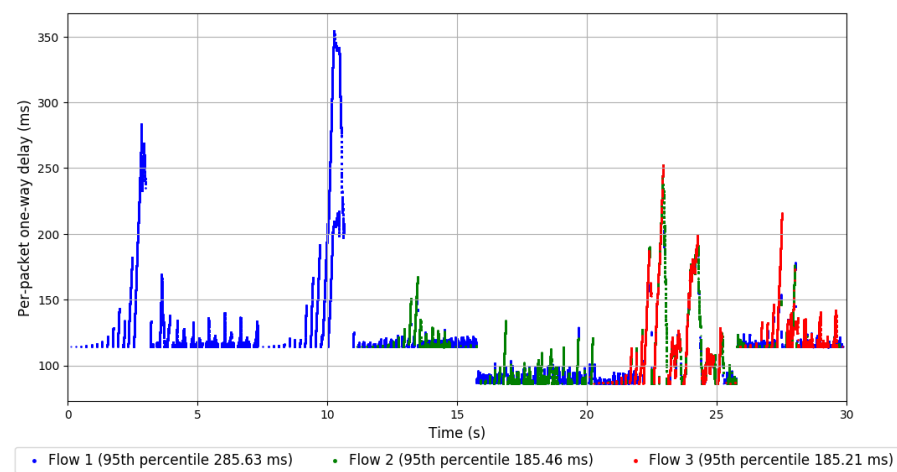
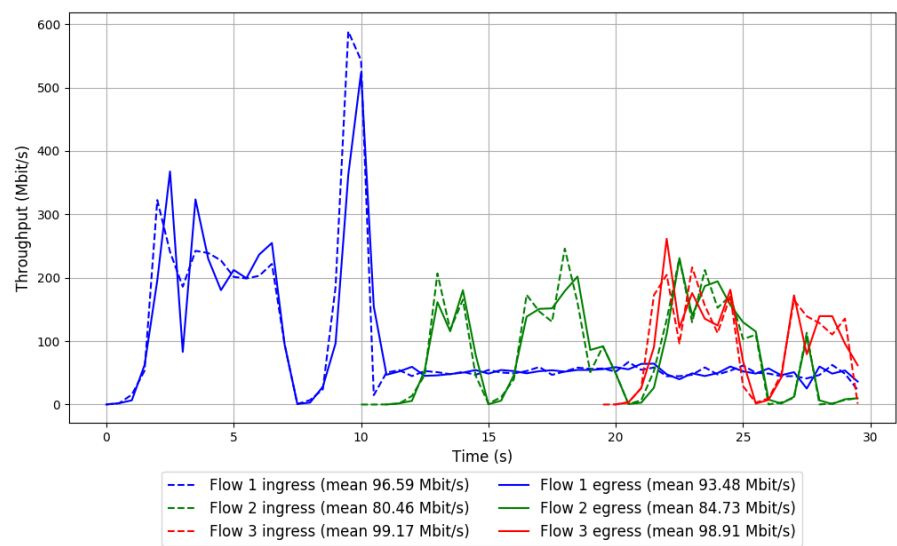
-- Flow 3:

Average throughput: 98.91 Mbit/s

95th percentile per-packet one-way delay: 185.208 ms

Loss rate: 0.02%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-14 00:46:43

End at: 2018-02-14 00:47:13

Below is generated by plot.py at 2018-02-14 03:58:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 228.81 Mbit/s

95th percentile per-packet one-way delay: 286.362 ms

Loss rate: 2.11%

-- Flow 1:

Average throughput: 141.43 Mbit/s

95th percentile per-packet one-way delay: 263.244 ms

Loss rate: 2.27%

-- Flow 2:

Average throughput: 106.42 Mbit/s

95th percentile per-packet one-way delay: 337.248 ms

Loss rate: 2.28%

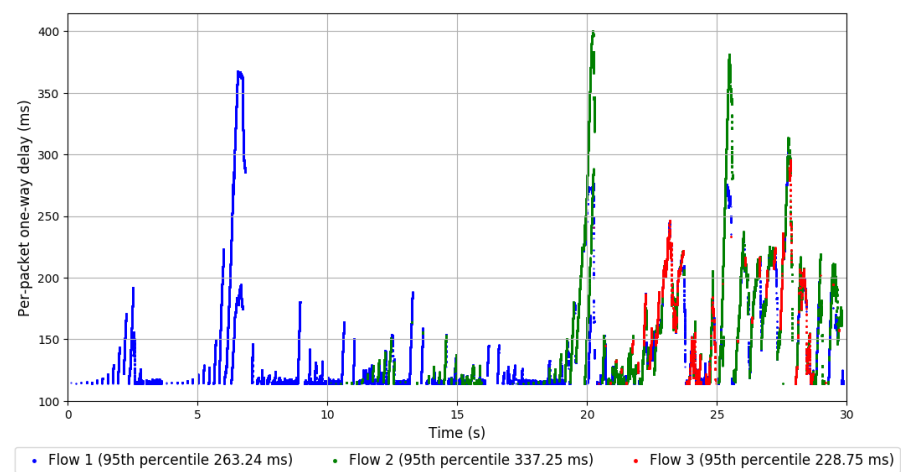
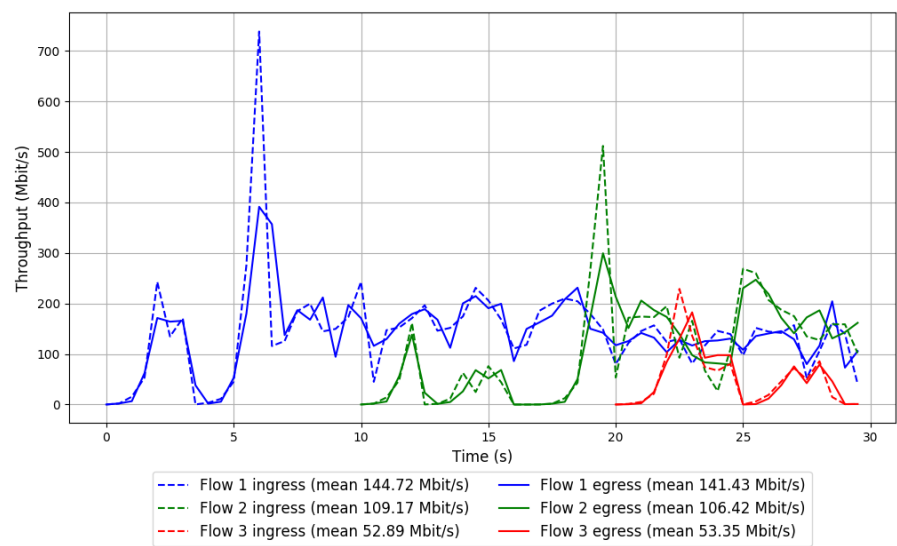
-- Flow 3:

Average throughput: 53.35 Mbit/s

95th percentile per-packet one-way delay: 228.746 ms

Loss rate: 0.00%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-14 01:05:55

End at: 2018-02-14 01:06:25

Below is generated by plot.py at 2018-02-14 03:59:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 238.06 Mbit/s

95th percentile per-packet one-way delay: 272.690 ms

Loss rate: 2.55%

-- Flow 1:

Average throughput: 131.30 Mbit/s

95th percentile per-packet one-way delay: 259.252 ms

Loss rate: 2.20%

-- Flow 2:

Average throughput: 106.83 Mbit/s

95th percentile per-packet one-way delay: 216.629 ms

Loss rate: 1.59%

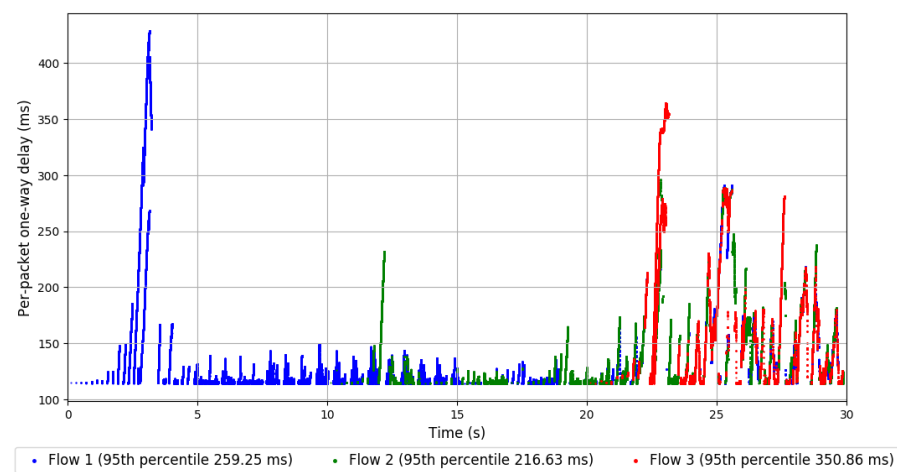
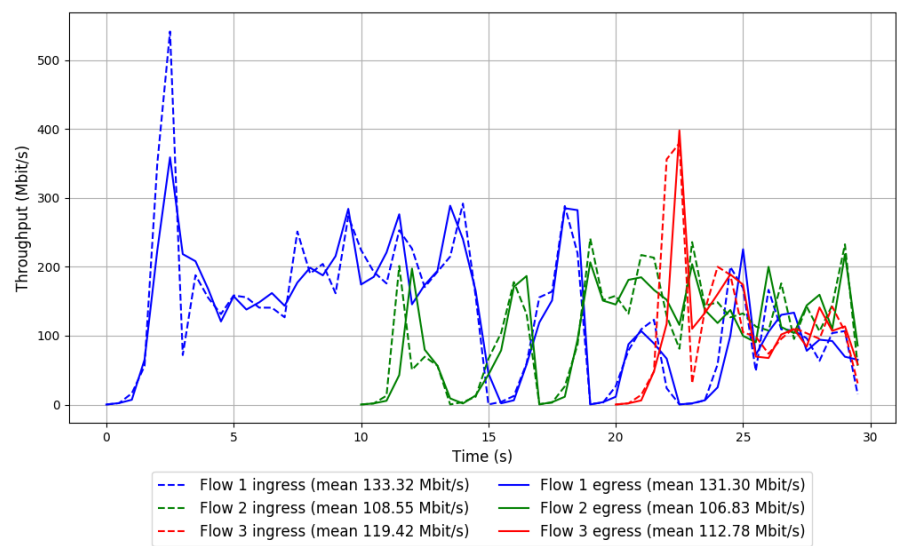
-- Flow 3:

Average throughput: 112.78 Mbit/s

95th percentile per-packet one-way delay: 350.864 ms

Loss rate: 5.51%

Run 10: Report of Verus — Data Link

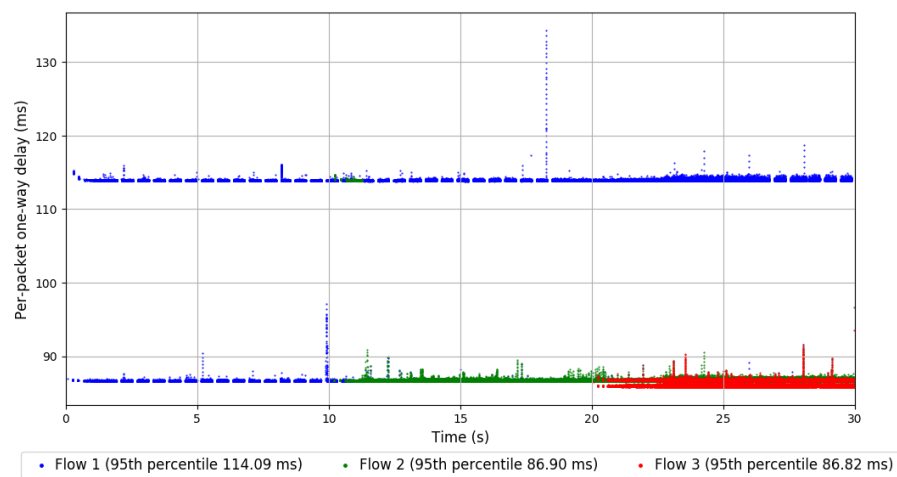
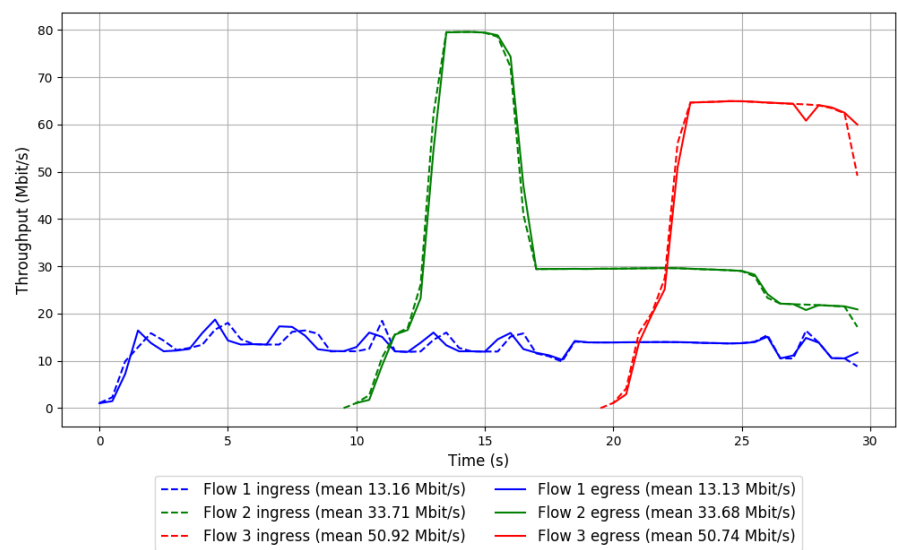


```
Run 1: Statistics of Copa

Start at: 2018-02-13 22:01:42
End at: 2018-02-13 22:02:12

# Below is generated by plot.py at 2018-02-14 03:59:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.40 Mbit/s
95th percentile per-packet one-way delay: 113.946 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 13.13 Mbit/s
95th percentile per-packet one-way delay: 114.089 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 33.68 Mbit/s
95th percentile per-packet one-way delay: 86.901 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 50.74 Mbit/s
95th percentile per-packet one-way delay: 86.816 ms
Loss rate: 0.34%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-13 22:20:07

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

Below is generated by plot.py at 2018-02-14 03:59:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.61 Mbit/s

95th percentile per-packet one-way delay: 87.191 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.54 Mbit/s

95th percentile per-packet one-way delay: 86.936 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.31 Mbit/s

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

Loss rate: 0.00%

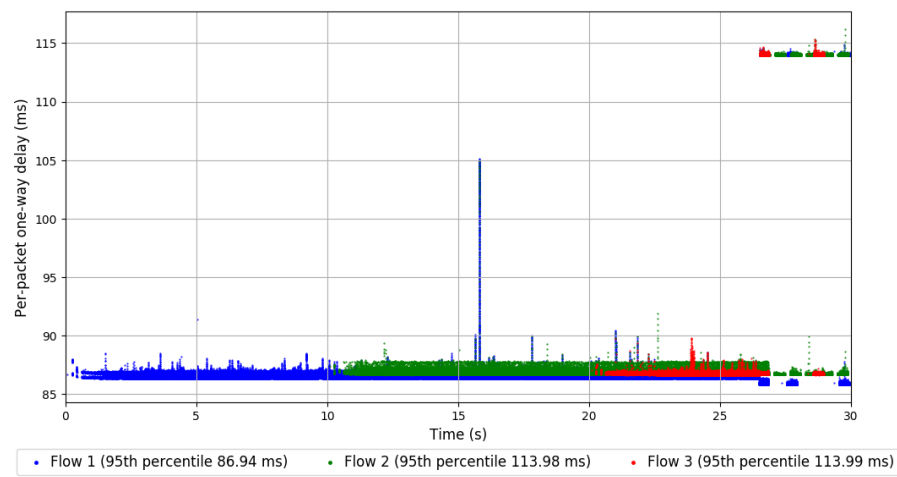
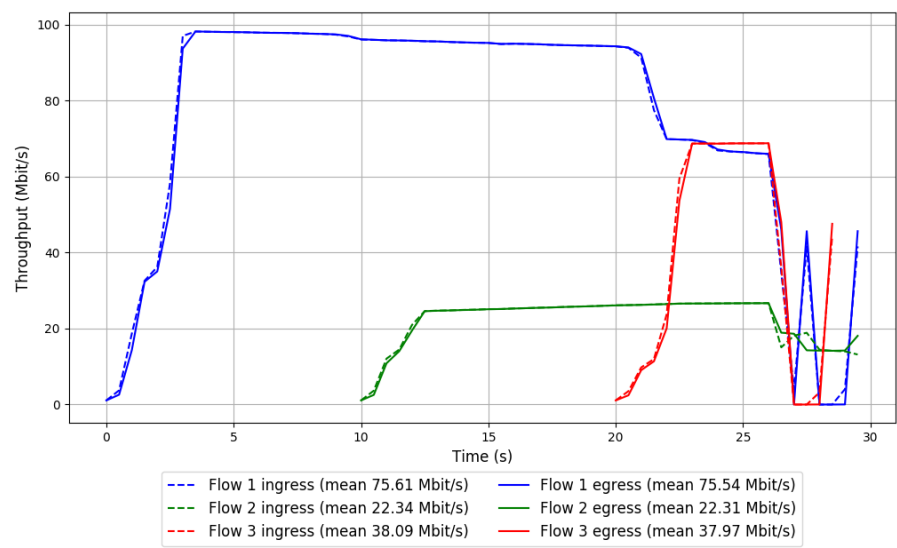
-- Flow 3:

Average throughput: 37.97 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-13 22:38:37

End at: 2018-02-13 22:39:07

Below is generated by plot.py at 2018-02-14 03:59:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 37.16 Mbit/s

95th percentile per-packet one-way delay: 113.739 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 19.43 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 18.65 Mbit/s

95th percentile per-packet one-way delay: 113.804 ms

Loss rate: 0.00%

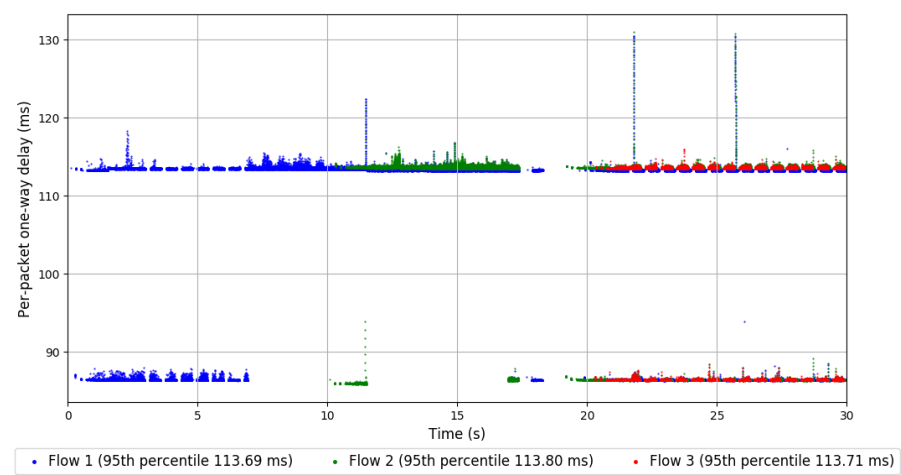
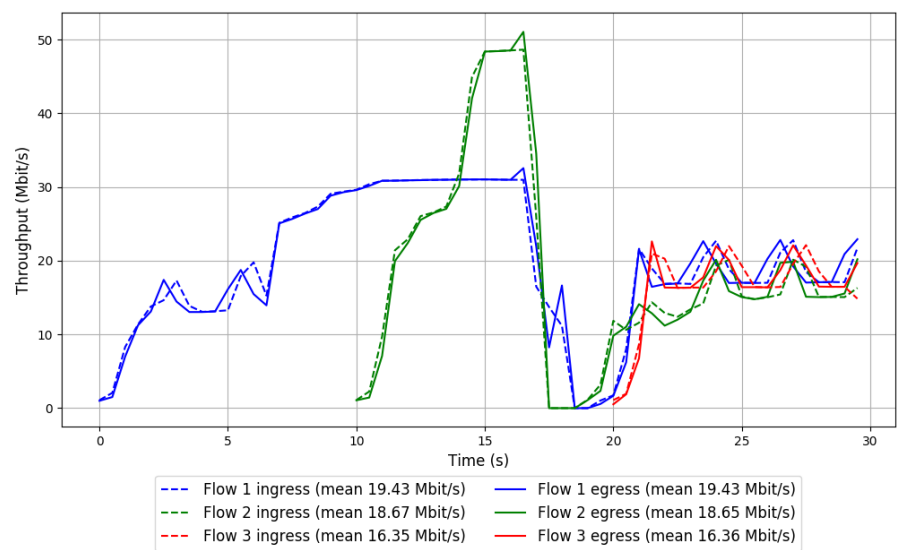
-- Flow 3:

Average throughput: 16.36 Mbit/s

95th percentile per-packet one-way delay: 113.708 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-13 22:56:47

End at: 2018-02-13 22:57:17

Below is generated by plot.py at 2018-02-14 03:59:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.10 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 34.41 Mbit/s

95th percentile per-packet one-way delay: 113.525 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.09 Mbit/s

95th percentile per-packet one-way delay: 113.656 ms

Loss rate: 0.00%

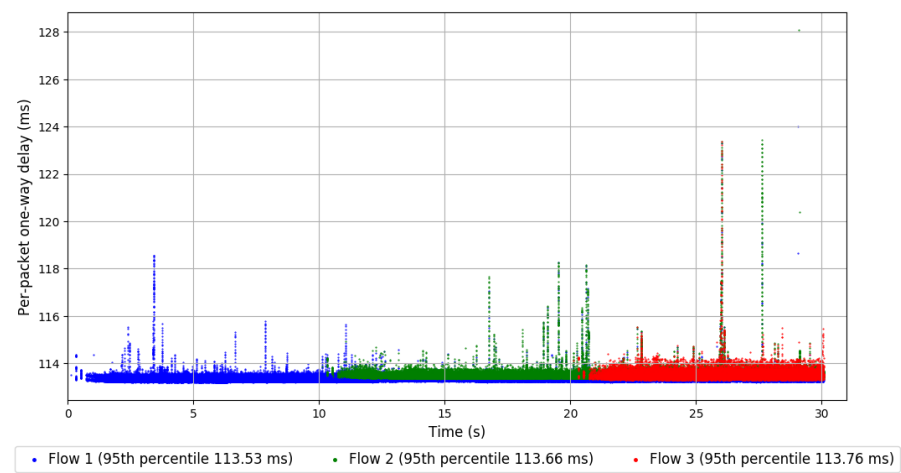
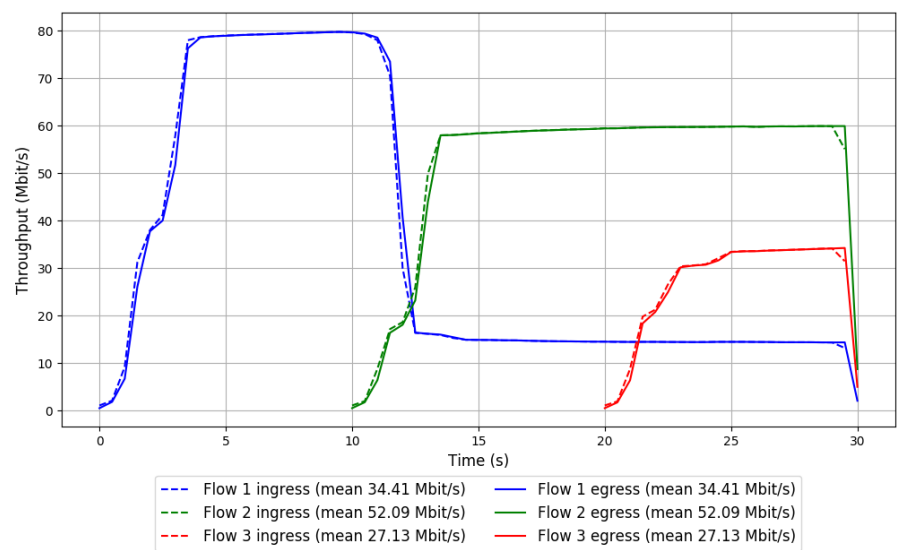
-- Flow 3:

Average throughput: 27.13 Mbit/s

95th percentile per-packet one-way delay: 113.762 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-13 23:15:39

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

Below is generated by plot.py at 2018-02-14 04:00:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.46 Mbit/s

95th percentile per-packet one-way delay: 114.551 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.48 Mbit/s

95th percentile per-packet one-way delay: 114.478 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.12 Mbit/s

95th percentile per-packet one-way delay: 114.623 ms

Loss rate: 0.00%

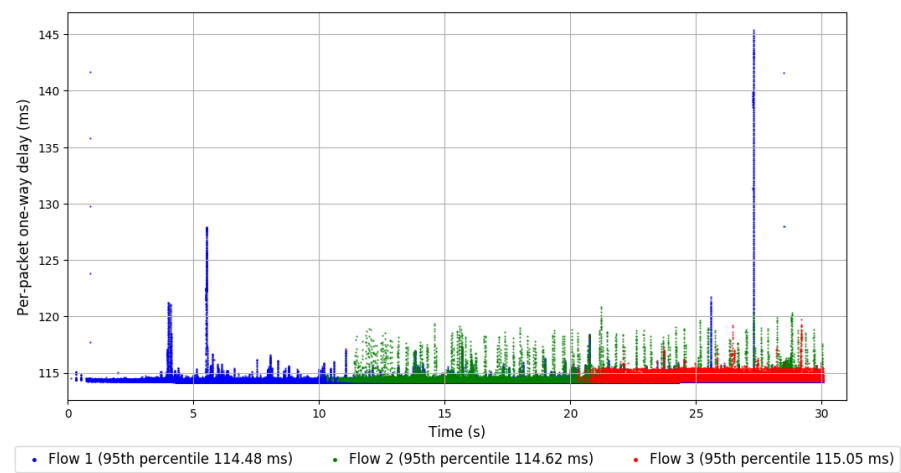
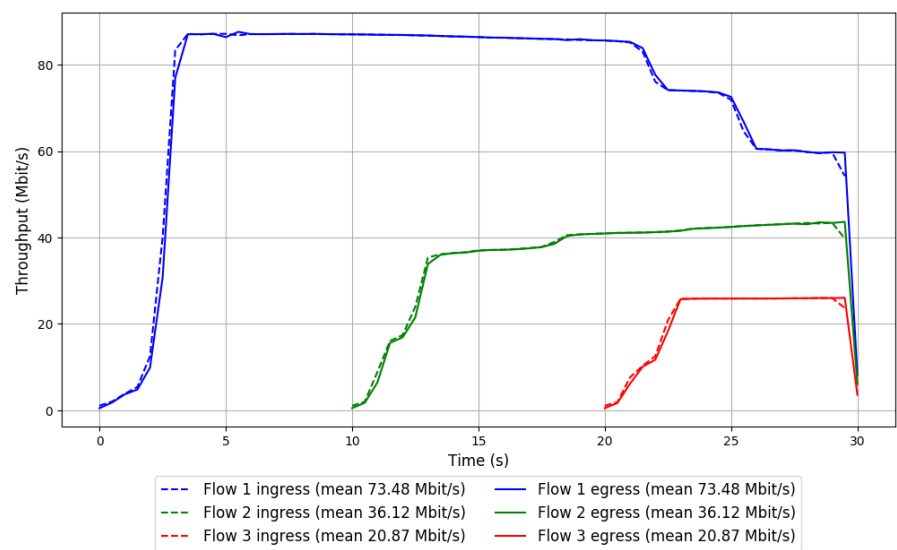
-- Flow 3:

Average throughput: 20.87 Mbit/s

95th percentile per-packet one-way delay: 115.045 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-13 23:34:40

End at: 2018-02-13 23:35:10

Below is generated by plot.py at 2018-02-14 04:00:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.07 Mbit/s

95th percentile per-packet one-way delay: 114.928 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 37.09 Mbit/s

95th percentile per-packet one-way delay: 114.906 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.78 Mbit/s

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

Loss rate: 0.00%

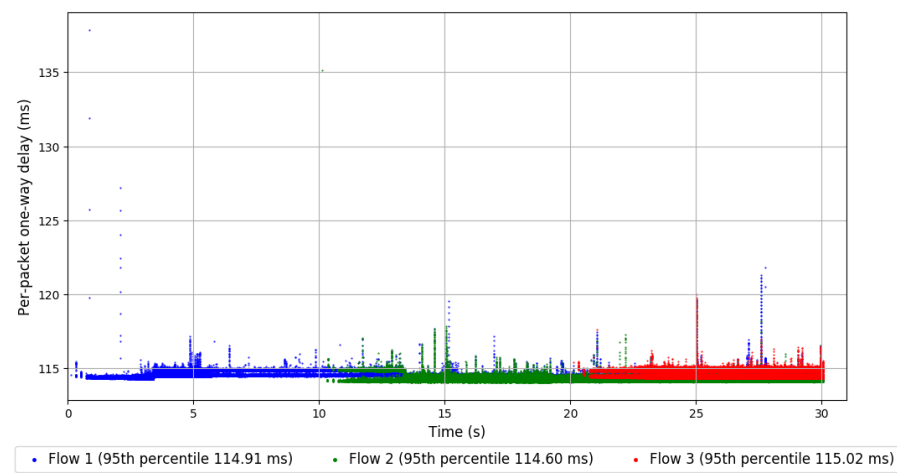
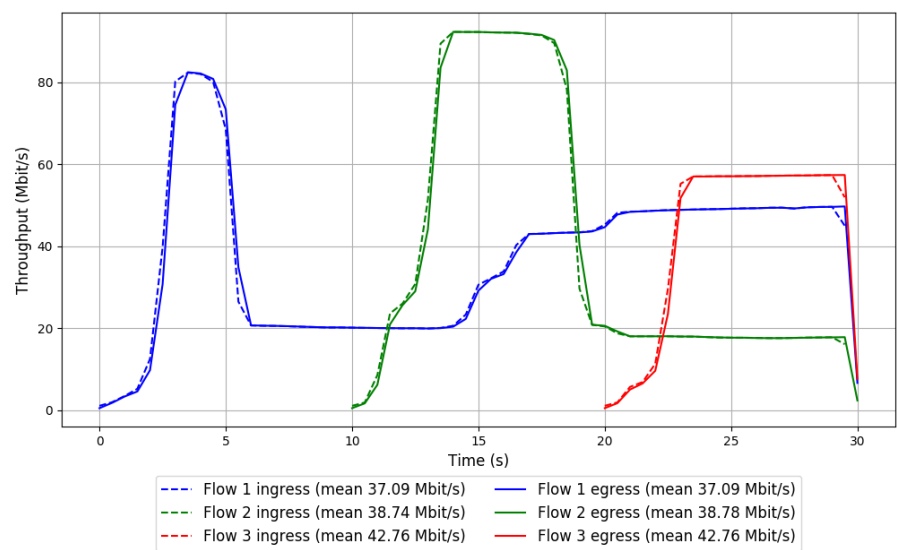
-- Flow 3:

Average throughput: 42.76 Mbit/s

95th percentile per-packet one-way delay: 115.016 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-13 23:53:52

End at: 2018-02-13 23:54:22

Below is generated by plot.py at 2018-02-14 04:00:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.79 Mbit/s

95th percentile per-packet one-way delay: 114.849 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 21.28 Mbit/s

95th percentile per-packet one-way delay: 114.850 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 80.91 Mbit/s

95th percentile per-packet one-way delay: 114.837 ms

Loss rate: 0.00%

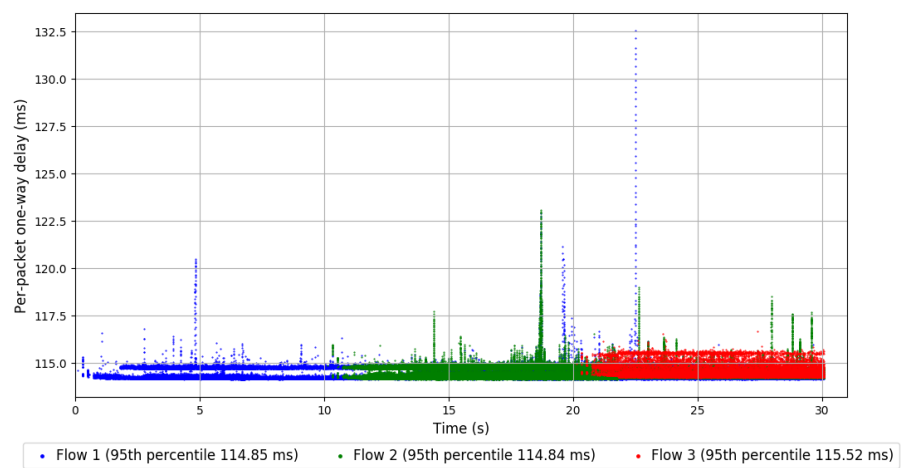
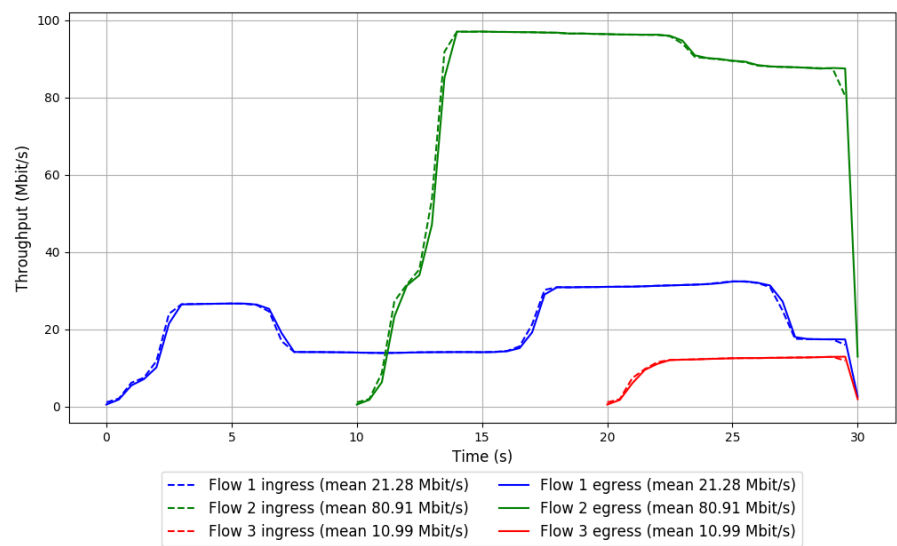
-- Flow 3:

Average throughput: 10.99 Mbit/s

95th percentile per-packet one-way delay: 115.519 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-14 00:12:41

End at: 2018-02-14 00:13:11

Below is generated by plot.py at 2018-02-14 04:00:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.15 Mbit/s

95th percentile per-packet one-way delay: 114.501 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.08 Mbit/s

95th percentile per-packet one-way delay: 114.408 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 15.81 Mbit/s

95th percentile per-packet one-way delay: 115.093 ms

Loss rate: 0.00%

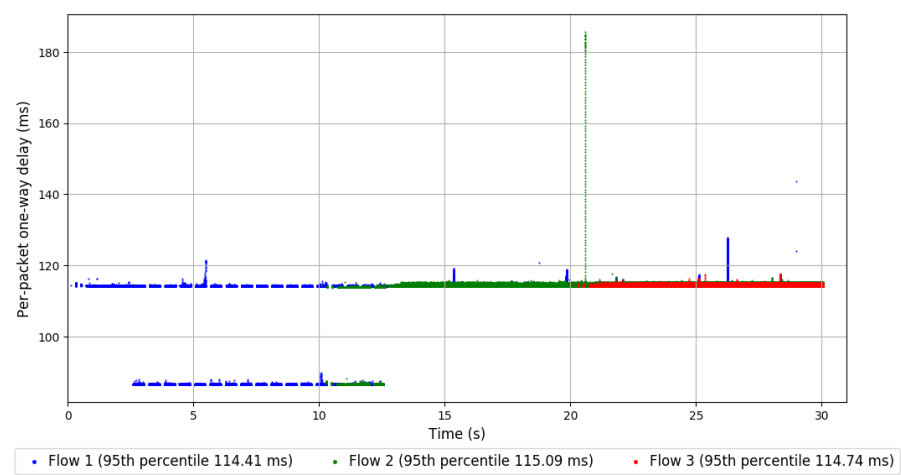
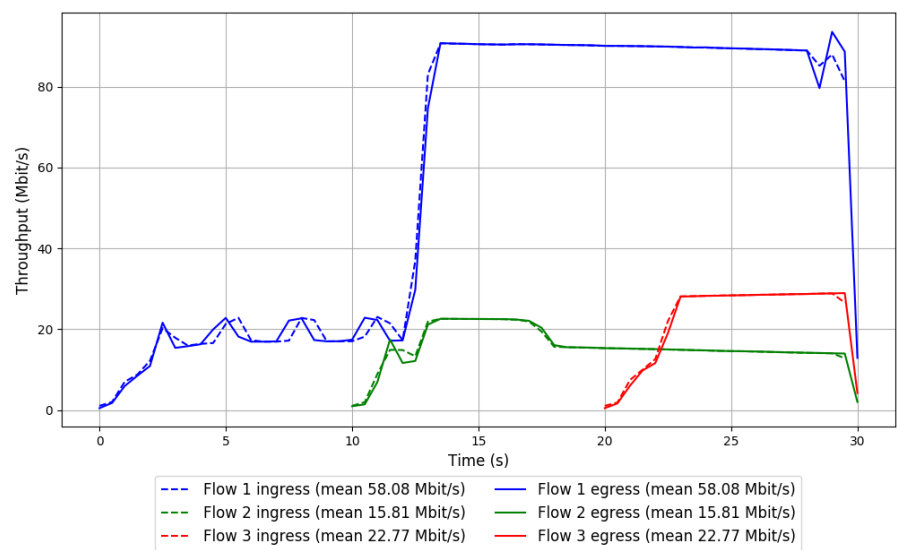
-- Flow 3:

Average throughput: 22.77 Mbit/s

95th percentile per-packet one-way delay: 114.739 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-14 00:31:18

End at: 2018-02-14 00:31:48

Below is generated by plot.py at 2018-02-14 04:01:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.36 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.82 Mbit/s

95th percentile per-packet one-way delay: 114.506 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.64 Mbit/s

95th percentile per-packet one-way delay: 114.366 ms

Loss rate: 0.00%

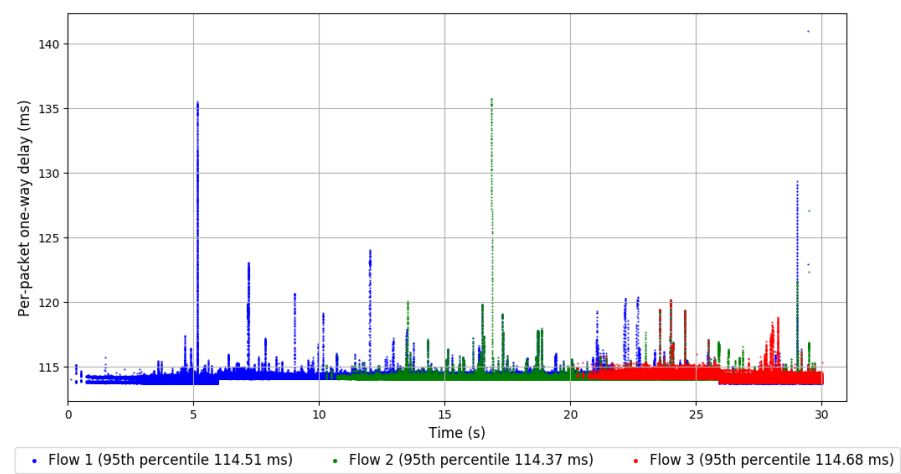
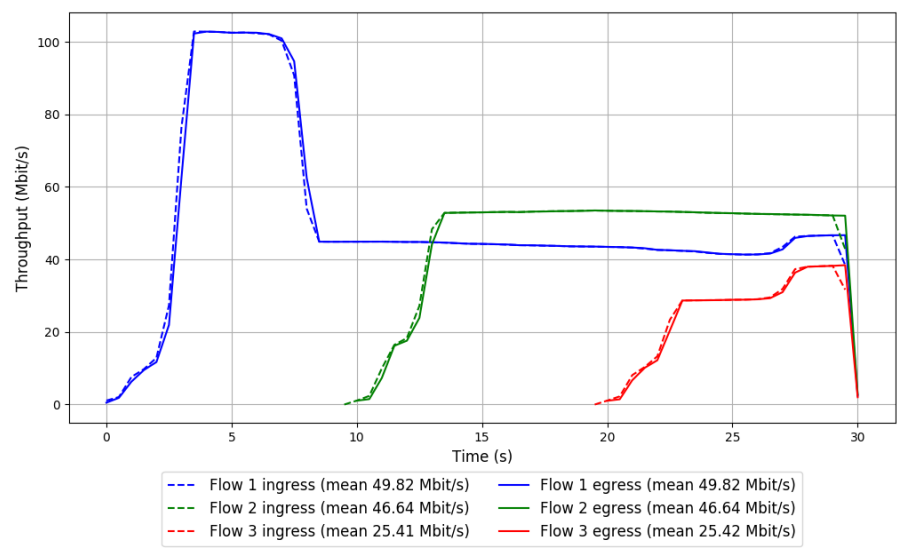
-- Flow 3:

Average throughput: 25.42 Mbit/s

95th percentile per-packet one-way delay: 114.677 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

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 04:01:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.36 Mbit/s

95th percentile per-packet one-way delay: 114.589 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 65.25 Mbit/s

95th percentile per-packet one-way delay: 114.458 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 31.70 Mbit/s

95th percentile per-packet one-way delay: 114.810 ms

Loss rate: 0.13%

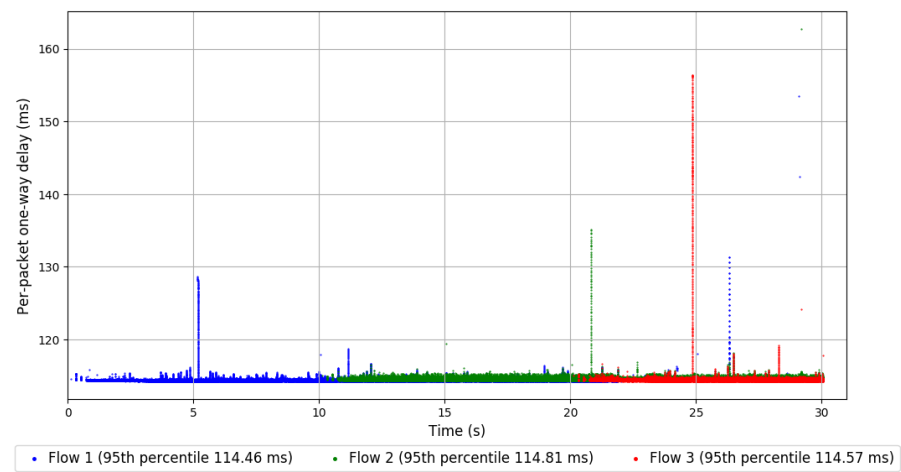
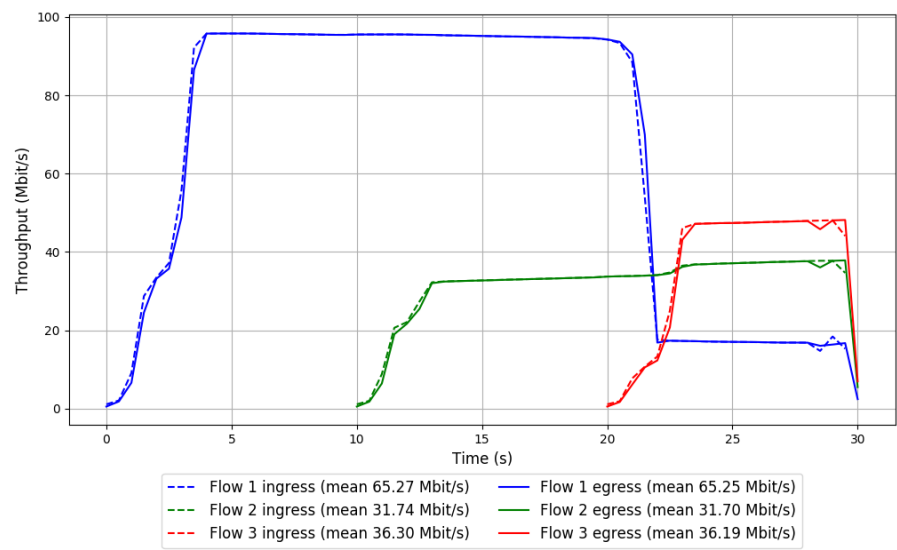
-- Flow 3:

Average throughput: 36.19 Mbit/s

95th percentile per-packet one-way delay: 114.566 ms

Loss rate: 0.30%

Run 10: Report of Copa — Data Link

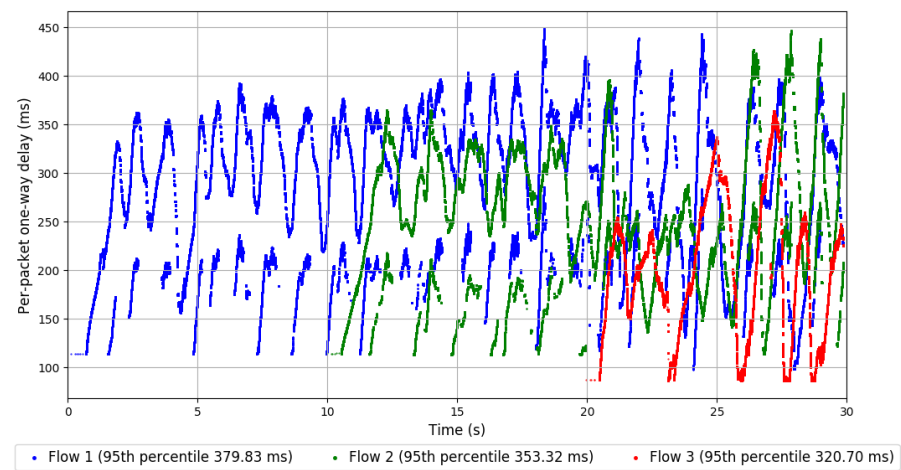
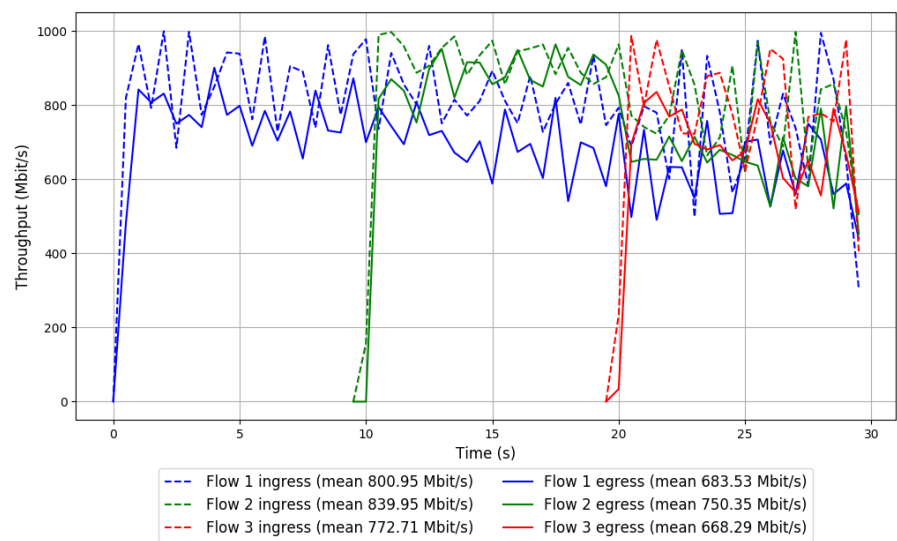


```
Run 1: Statistics of FillP

Start at: 2018-02-13 22:03:18
End at: 2018-02-13 22:03:48

# Below is generated by plot.py at 2018-02-14 04:22:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1407.39 Mbit/s
95th percentile per-packet one-way delay: 370.514 ms
Loss rate: 13.17%
-- Flow 1:
Average throughput: 683.53 Mbit/s
95th percentile per-packet one-way delay: 379.835 ms
Loss rate: 14.74%
-- Flow 2:
Average throughput: 750.35 Mbit/s
95th percentile per-packet one-way delay: 353.324 ms
Loss rate: 10.79%
-- Flow 3:
Average throughput: 668.29 Mbit/s
95th percentile per-packet one-way delay: 320.698 ms
Loss rate: 13.52%
```

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-02-13 22:21:48

End at: 2018-02-13 22:22:18

Below is generated by plot.py at 2018-02-14 04:22:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 1081.35 Mbit/s

95th percentile per-packet one-way delay: 380.189 ms

Loss rate: 13.79%

-- Flow 1:

Average throughput: 390.24 Mbit/s

95th percentile per-packet one-way delay: 397.244 ms

Loss rate: 15.00%

-- Flow 2:

Average throughput: 702.74 Mbit/s

95th percentile per-packet one-way delay: 373.957 ms

Loss rate: 12.44%

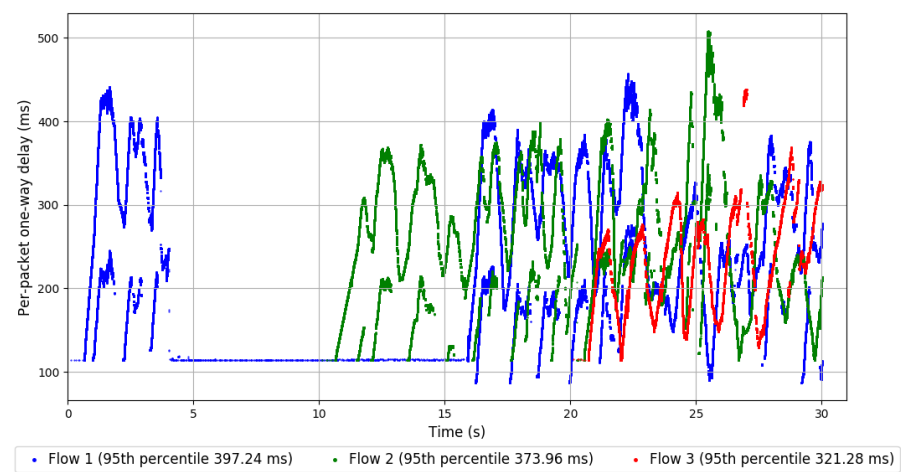
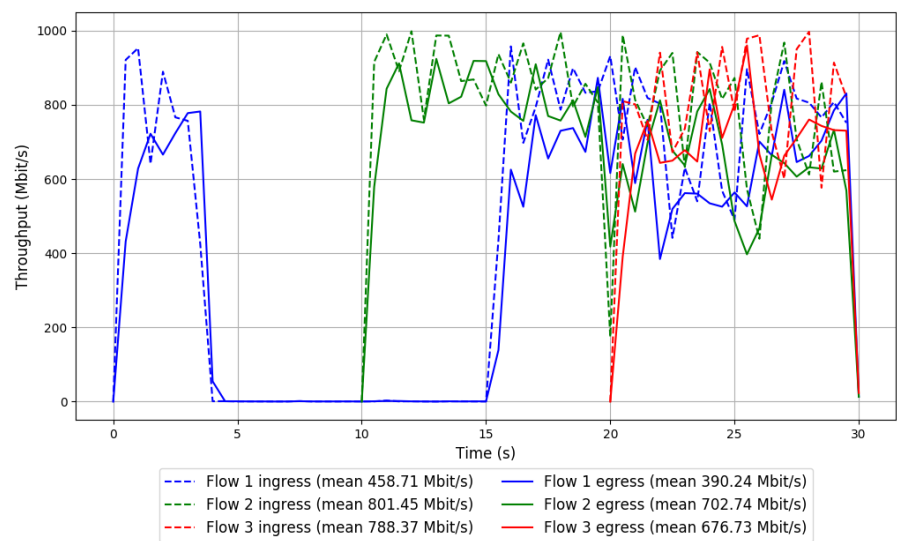
-- Flow 3:

Average throughput: 676.73 Mbit/s

95th percentile per-packet one-way delay: 321.284 ms

Loss rate: 14.40%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-13 22:40:09

End at: 2018-02-13 22:40:39

Below is generated by plot.py at 2018-02-14 04:22:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 1387.24 Mbit/s

95th percentile per-packet one-way delay: 361.027 ms

Loss rate: 12.05%

-- Flow 1:

Average throughput: 774.42 Mbit/s

95th percentile per-packet one-way delay: 327.609 ms

Loss rate: 8.93%

-- Flow 2:

Average throughput: 588.51 Mbit/s

95th percentile per-packet one-way delay: 369.655 ms

Loss rate: 15.52%

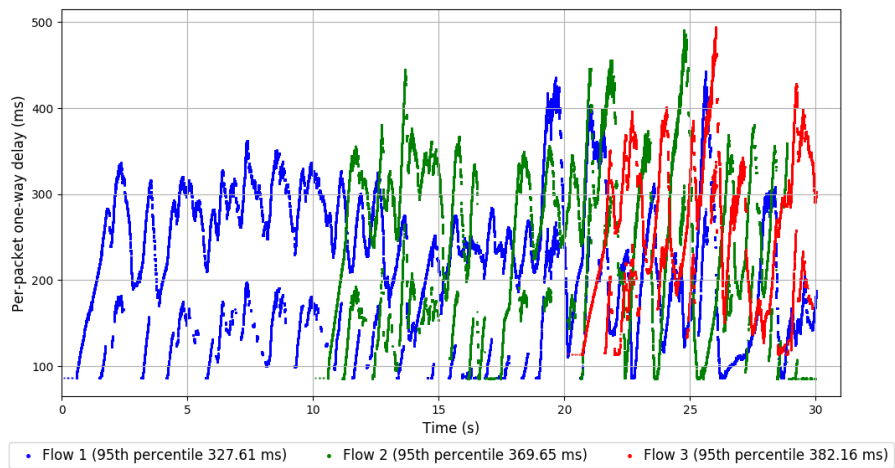
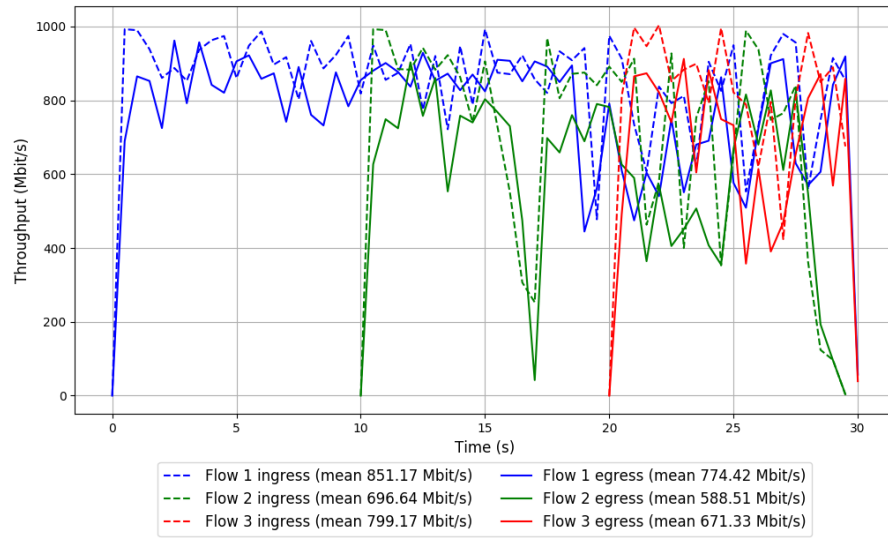
-- Flow 3:

Average throughput: 671.33 Mbit/s

95th percentile per-packet one-way delay: 382.160 ms

Loss rate: 16.00%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-13 22:58:26

End at: 2018-02-13 22:58:56

Below is generated by plot.py at 2018-02-14 04:22:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 1414.33 Mbit/s

95th percentile per-packet one-way delay: 363.279 ms

Loss rate: 12.25%

-- Flow 1:

Average throughput: 735.75 Mbit/s

95th percentile per-packet one-way delay: 357.881 ms

Loss rate: 10.53%

-- Flow 2:

Average throughput: 691.01 Mbit/s

95th percentile per-packet one-way delay: 356.872 ms

Loss rate: 13.95%

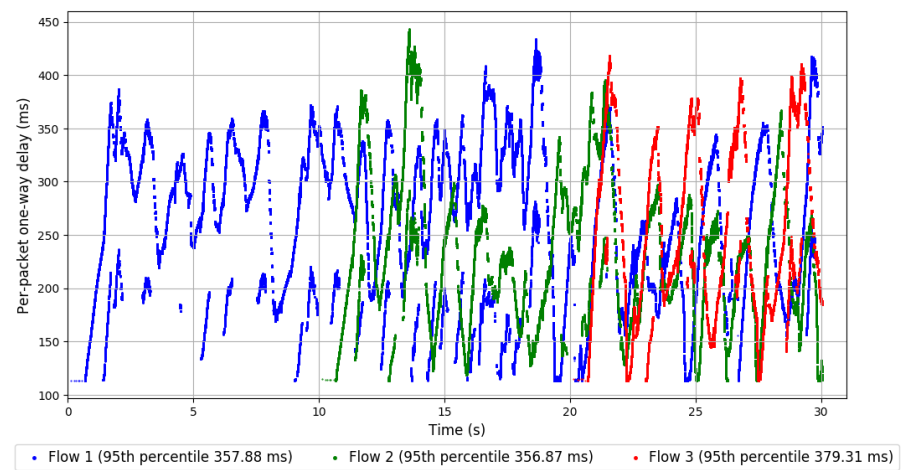
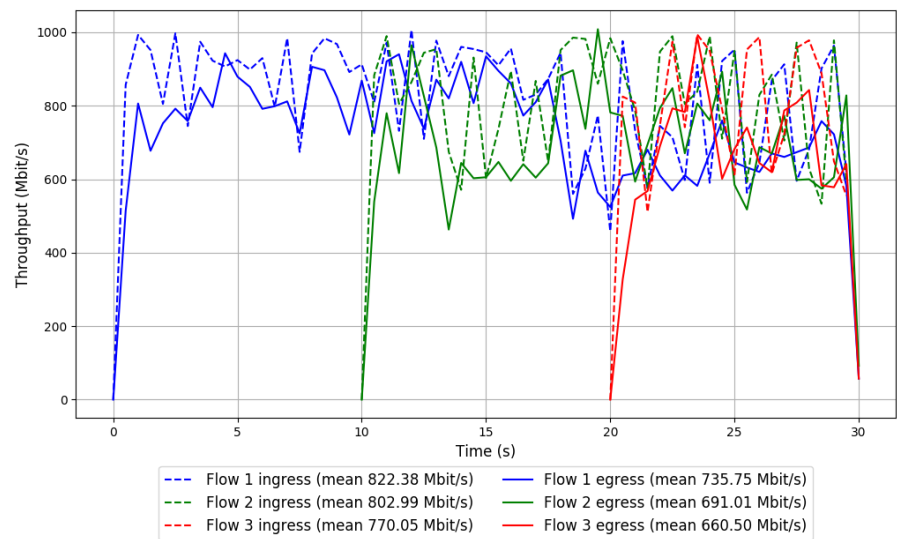
-- Flow 3:

Average throughput: 660.50 Mbit/s

95th percentile per-packet one-way delay: 379.310 ms

Loss rate: 14.22%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-13 23:17:21

End at: 2018-02-13 23:17:51

Below is generated by plot.py at 2018-02-14 04:23:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 1433.42 Mbit/s

95th percentile per-packet one-way delay: 369.939 ms

Loss rate: 10.36%

-- Flow 1:

Average throughput: 754.08 Mbit/s

95th percentile per-packet one-way delay: 373.484 ms

Loss rate: 8.76%

-- Flow 2:

Average throughput: 695.88 Mbit/s

95th percentile per-packet one-way delay: 347.967 ms

Loss rate: 10.87%

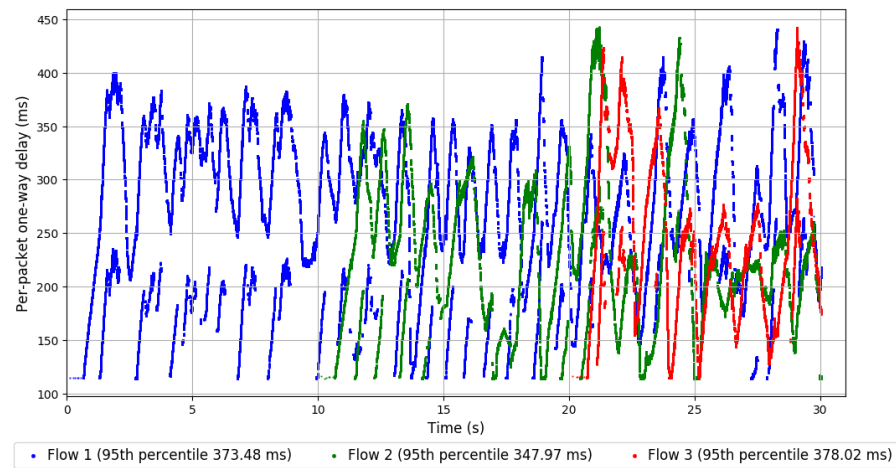
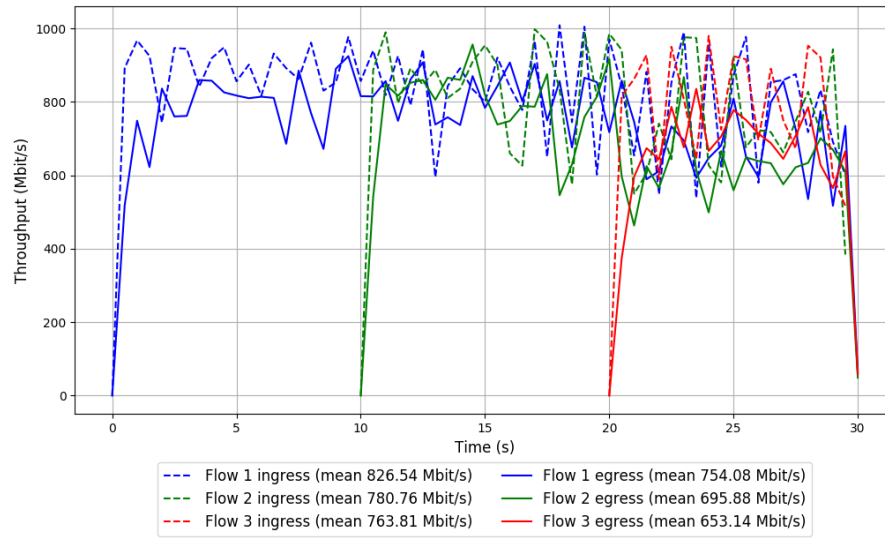
-- Flow 3:

Average throughput: 653.14 Mbit/s

95th percentile per-packet one-way delay: 378.019 ms

Loss rate: 14.49%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-13 23:36:19

End at: 2018-02-13 23:36:49

Below is generated by plot.py at 2018-02-14 04:23:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 1402.89 Mbit/s

95th percentile per-packet one-way delay: 361.257 ms

Loss rate: 11.64%

-- Flow 1:

Average throughput: 717.36 Mbit/s

95th percentile per-packet one-way delay: 354.973 ms

Loss rate: 9.44%

-- Flow 2:

Average throughput: 699.26 Mbit/s

95th percentile per-packet one-way delay: 358.630 ms

Loss rate: 13.38%

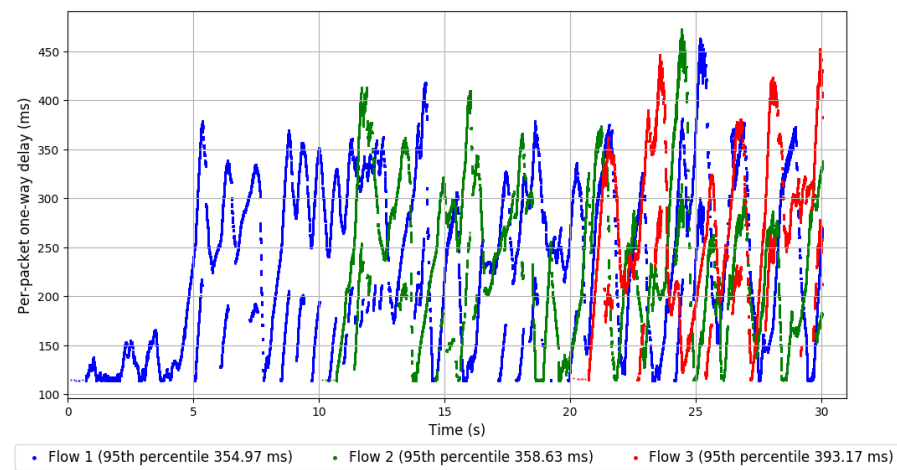
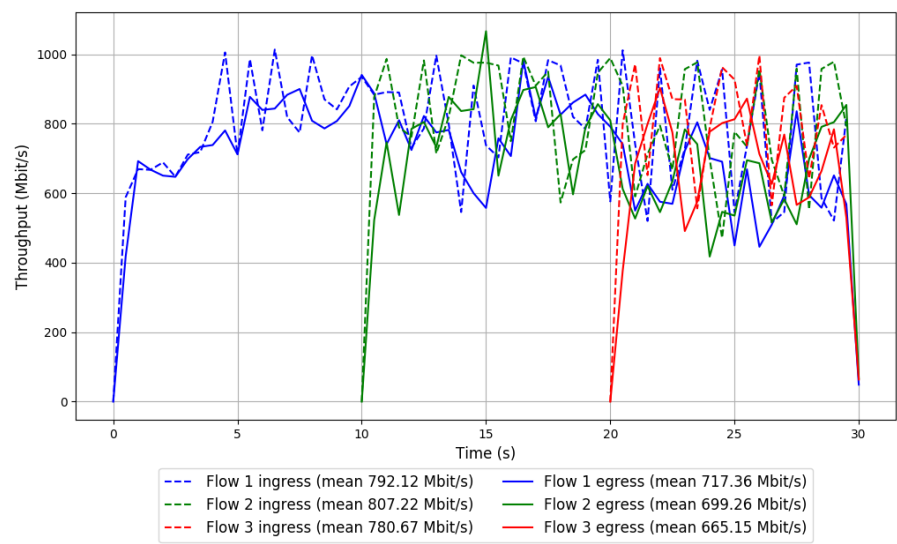
-- Flow 3:

Average throughput: 665.15 Mbit/s

95th percentile per-packet one-way delay: 393.166 ms

Loss rate: 14.81%

Run 6: Report of FillP — Data Link

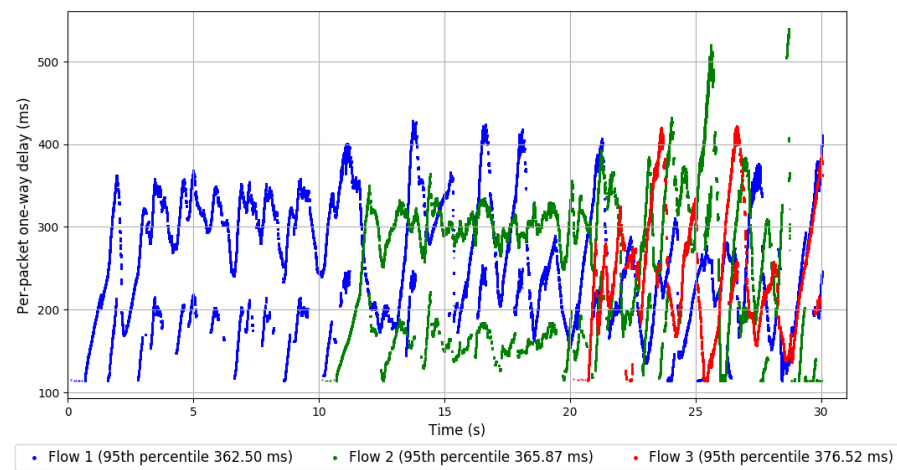
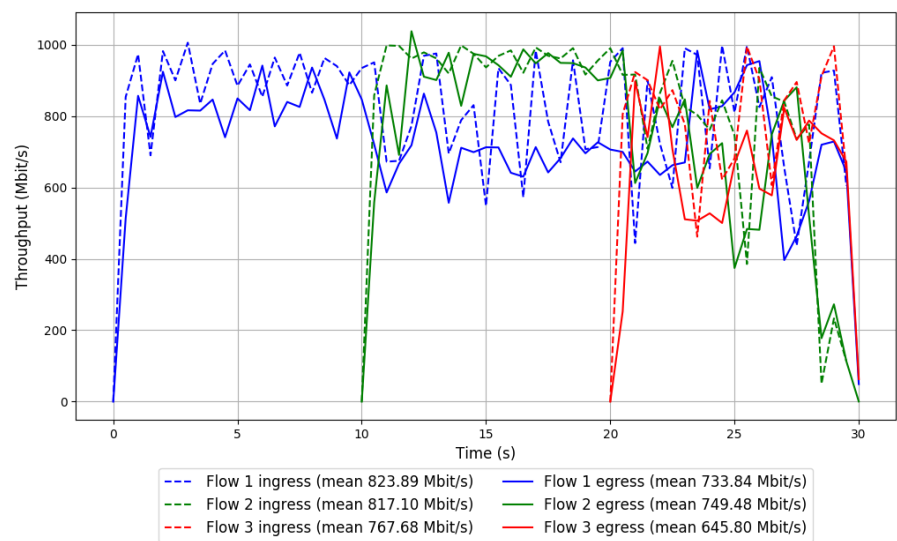


```
Run 7: Statistics of FillP

Start at: 2018-02-13 23:55:31
End at: 2018-02-13 23:56:01

# Below is generated by plot.py at 2018-02-14 04:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1445.40 Mbit/s
95th percentile per-packet one-way delay: 366.716 ms
Loss rate: 10.82%
-- Flow 1:
Average throughput: 733.84 Mbit/s
95th percentile per-packet one-way delay: 362.501 ms
Loss rate: 10.93%
-- Flow 2:
Average throughput: 749.48 Mbit/s
95th percentile per-packet one-way delay: 365.865 ms
Loss rate: 8.28%
-- Flow 3:
Average throughput: 645.80 Mbit/s
95th percentile per-packet one-way delay: 376.524 ms
Loss rate: 15.90%
```

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-14 00:14:18

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

Below is generated by plot.py at 2018-02-14 04:26:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 1483.36 Mbit/s

95th percentile per-packet one-way delay: 326.491 ms

Loss rate: 10.78%

-- Flow 1:

Average throughput: 771.20 Mbit/s

95th percentile per-packet one-way delay: 319.376 ms

Loss rate: 10.44%

-- Flow 2:

Average throughput: 767.51 Mbit/s

95th percentile per-packet one-way delay: 336.135 ms

Loss rate: 9.00%

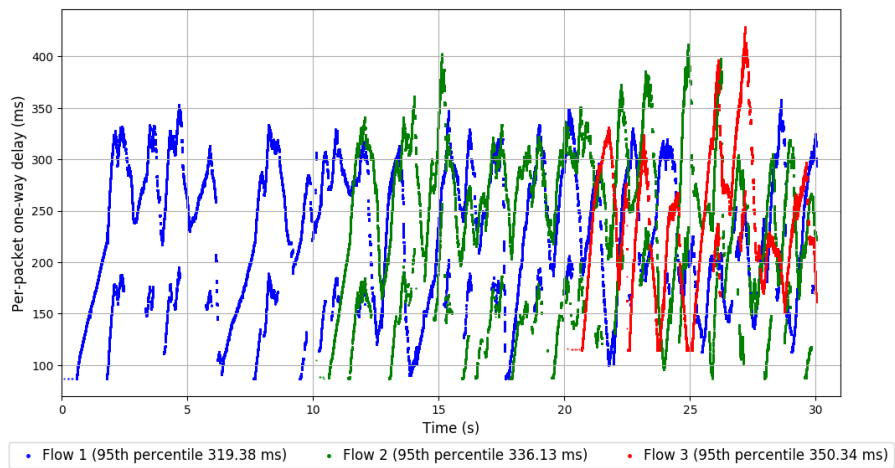
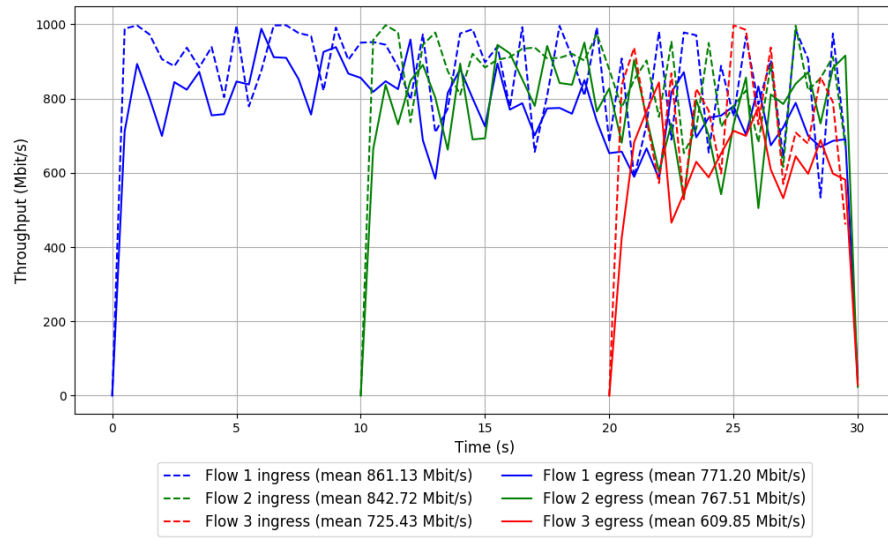
-- Flow 3:

Average throughput: 609.85 Mbit/s

95th percentile per-packet one-way delay: 350.341 ms

Loss rate: 16.17%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-14 00:32:58

End at: 2018-02-14 00:33:28

Below is generated by plot.py at 2018-02-14 04:43:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 1443.84 Mbit/s

95th percentile per-packet one-way delay: 366.499 ms

Loss rate: 11.12%

-- Flow 1:

Average throughput: 762.79 Mbit/s

95th percentile per-packet one-way delay: 349.430 ms

Loss rate: 9.59%

-- Flow 2:

Average throughput: 718.91 Mbit/s

95th percentile per-packet one-way delay: 382.052 ms

Loss rate: 10.66%

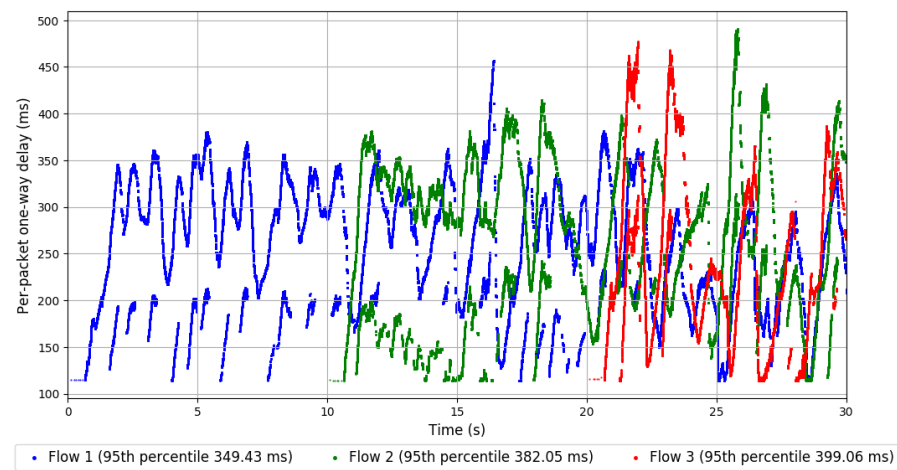
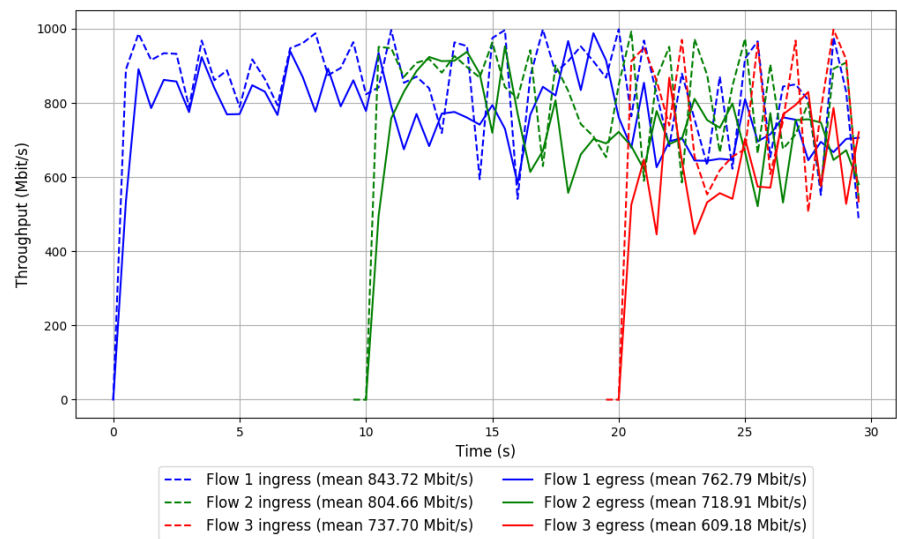
-- Flow 3:

Average throughput: 609.18 Mbit/s

95th percentile per-packet one-way delay: 399.064 ms

Loss rate: 17.43%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-02-14 00:52:19

End at: 2018-02-14 00:52:49

Below is generated by plot.py at 2018-02-14 04:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 1401.93 Mbit/s

95th percentile per-packet one-way delay: 373.411 ms

Loss rate: 12.71%

-- Flow 1:

Average throughput: 761.29 Mbit/s

95th percentile per-packet one-way delay: 364.478 ms

Loss rate: 11.74%

-- Flow 2:

Average throughput: 618.20 Mbit/s

95th percentile per-packet one-way delay: 396.841 ms

Loss rate: 15.24%

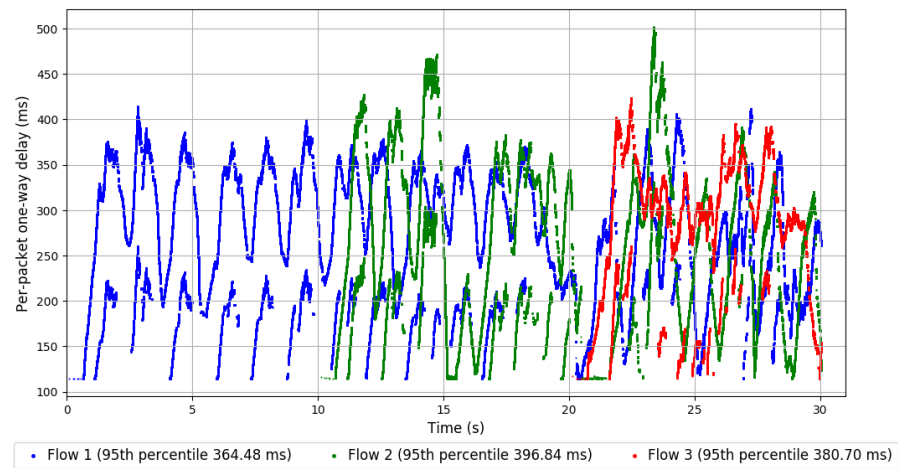
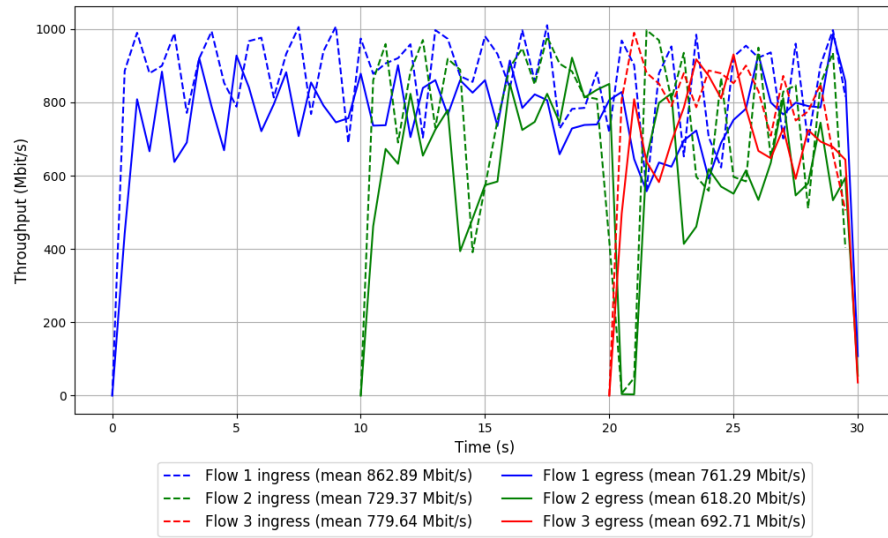
-- Flow 3:

Average throughput: 692.71 Mbit/s

95th percentile per-packet one-way delay: 380.701 ms

Loss rate: 11.17%

Run 10: Report of FillP — Data Link

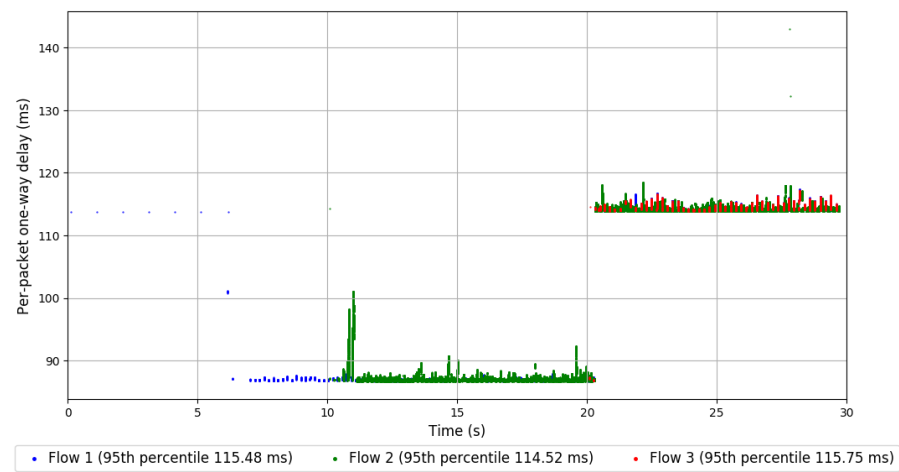
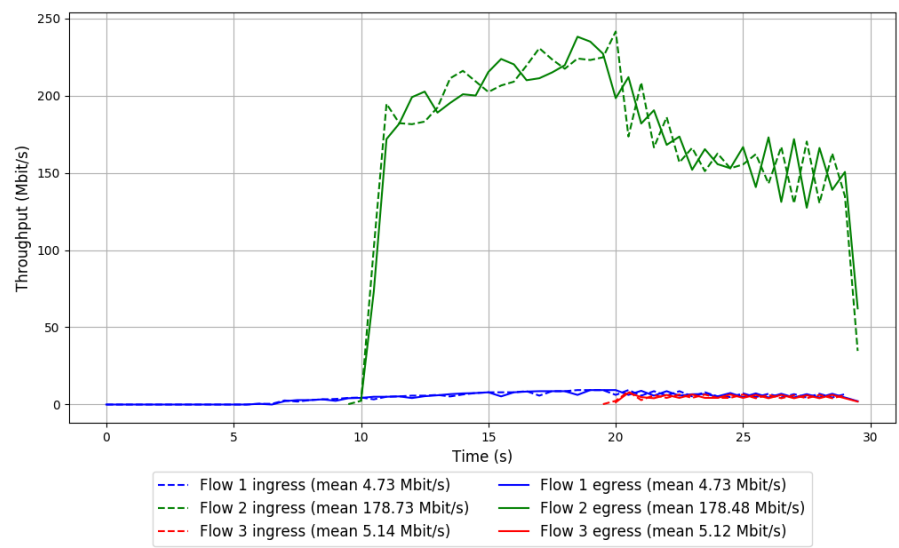


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-13 22:07:03
End at: 2018-02-13 22:07:33

# Below is generated by plot.py at 2018-02-14 04:47:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.78 Mbit/s
95th percentile per-packet one-way delay: 114.628 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.73 Mbit/s
95th percentile per-packet one-way delay: 115.481 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 178.48 Mbit/s
95th percentile per-packet one-way delay: 114.521 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 115.745 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 22:25:19

End at: 2018-02-13 22:25:49

Below is generated by plot.py at 2018-02-14 04:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 264.66 Mbit/s

95th percentile per-packet one-way delay: 142.730 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 123.27 Mbit/s

95th percentile per-packet one-way delay: 129.100 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 150.76 Mbit/s

95th percentile per-packet one-way delay: 148.110 ms

Loss rate: 0.02%

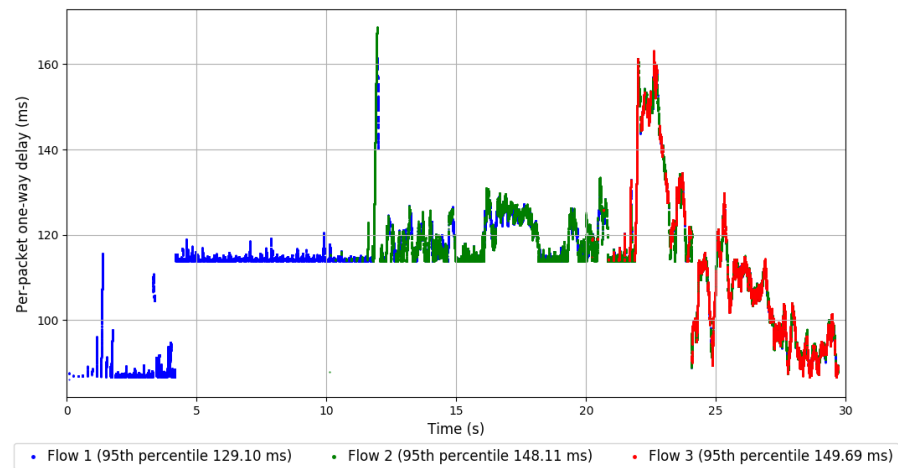
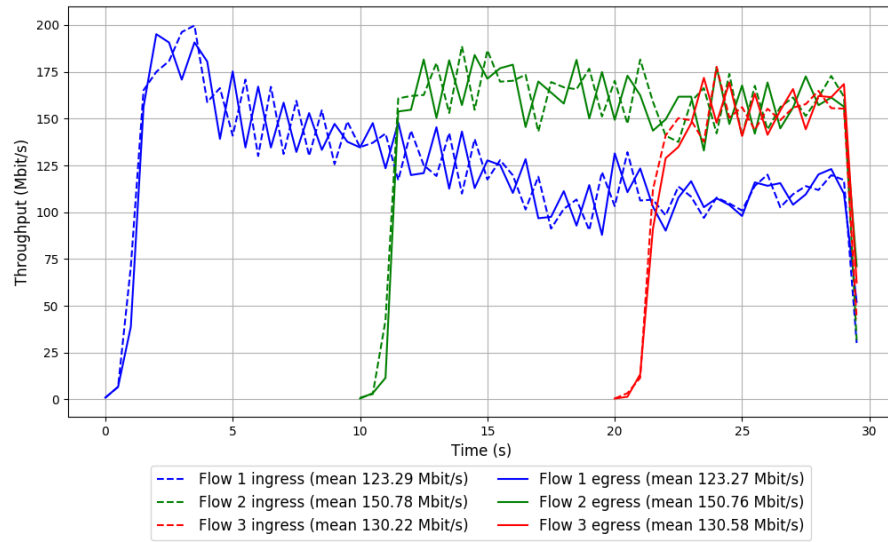
-- Flow 3:

Average throughput: 130.58 Mbit/s

95th percentile per-packet one-way delay: 149.695 ms

Loss rate: 0.00%

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-13 22:43:38

End at: 2018-02-13 22:44:08

Below is generated by plot.py at 2018-02-14 04:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 296.46 Mbit/s

95th percentile per-packet one-way delay: 149.257 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 164.24 Mbit/s

95th percentile per-packet one-way delay: 147.719 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 141.85 Mbit/s

95th percentile per-packet one-way delay: 149.907 ms

Loss rate: 0.02%

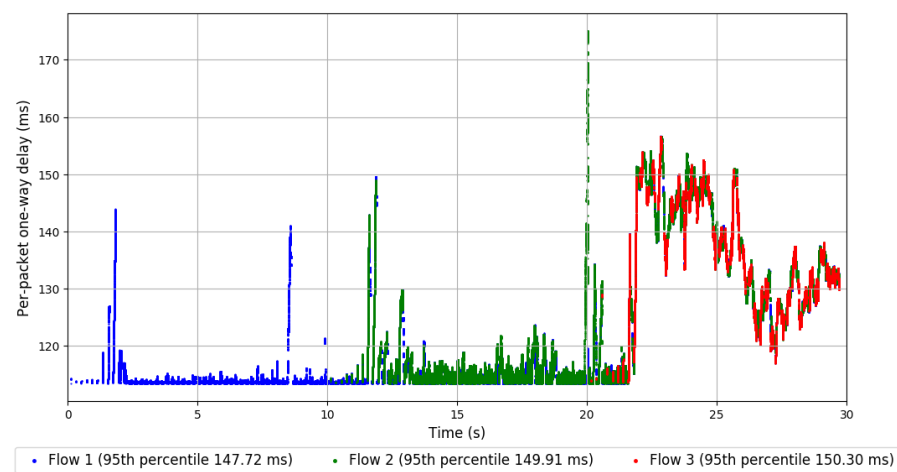
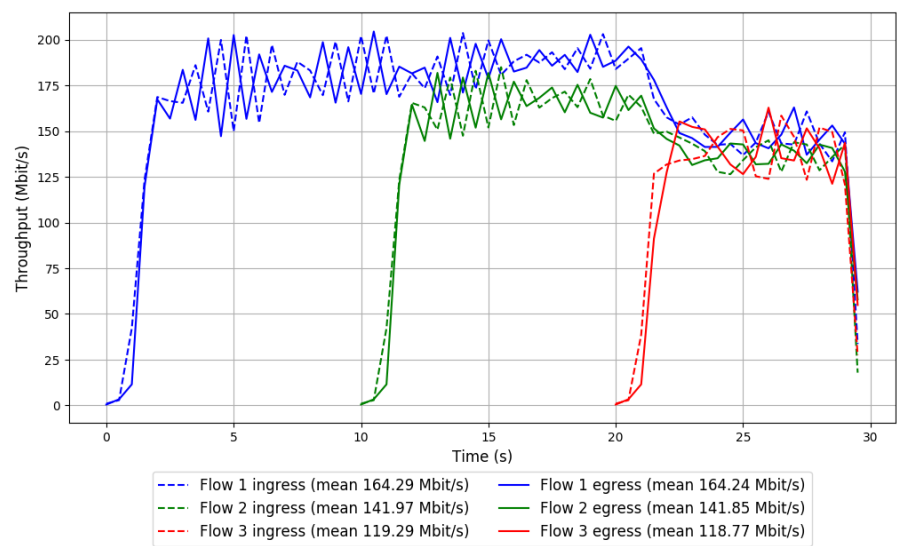
-- Flow 3:

Average throughput: 118.77 Mbit/s

95th percentile per-packet one-way delay: 150.297 ms

Loss rate: 0.43%

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



Run 4: Statistics of Indigo-1-32

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

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

Below is generated by plot.py at 2018-02-14 04:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 280.54 Mbit/s

95th percentile per-packet one-way delay: 156.990 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 149.97 Mbit/s

95th percentile per-packet one-way delay: 151.173 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 137.76 Mbit/s

95th percentile per-packet one-way delay: 156.276 ms

Loss rate: 0.06%

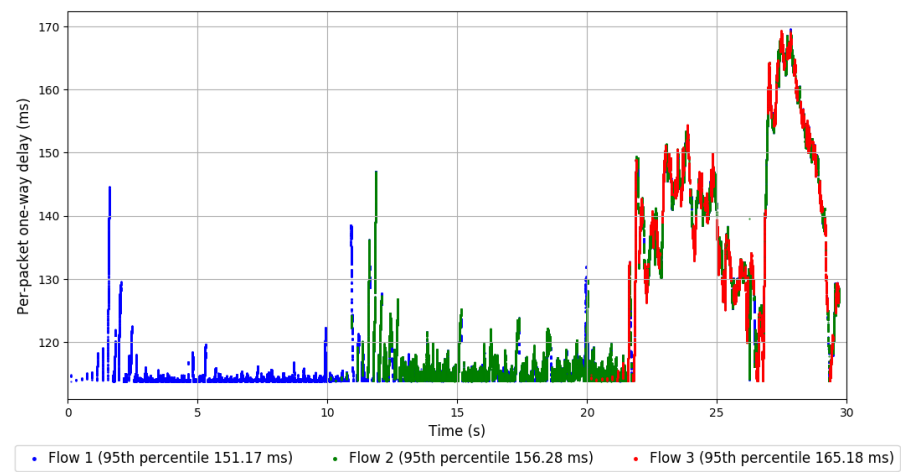
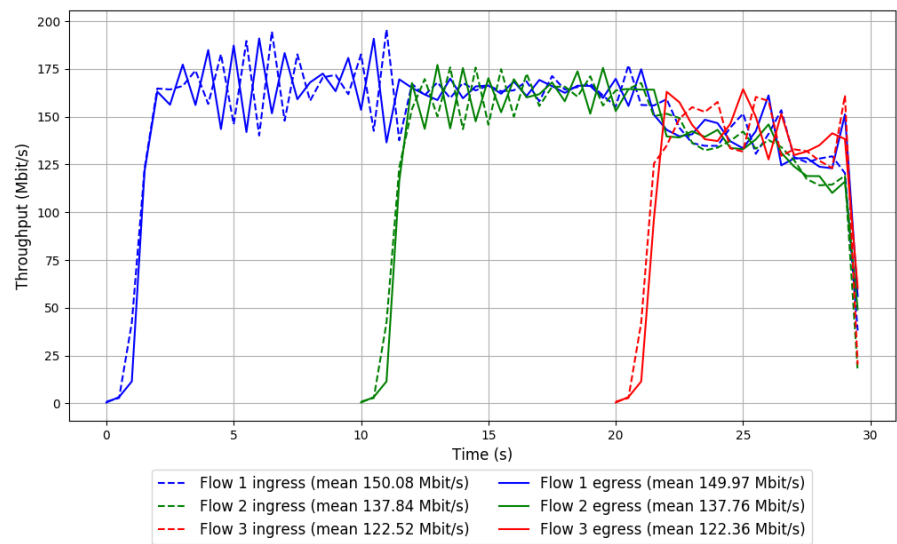
-- Flow 3:

Average throughput: 122.36 Mbit/s

95th percentile per-packet one-way delay: 165.175 ms

Loss rate: 0.00%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-13 23:21:14

End at: 2018-02-13 23:21:44

Below is generated by plot.py at 2018-02-14 04:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 279.45 Mbit/s

95th percentile per-packet one-way delay: 174.505 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 158.02 Mbit/s

95th percentile per-packet one-way delay: 150.761 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 138.03 Mbit/s

95th percentile per-packet one-way delay: 175.344 ms

Loss rate: 0.23%

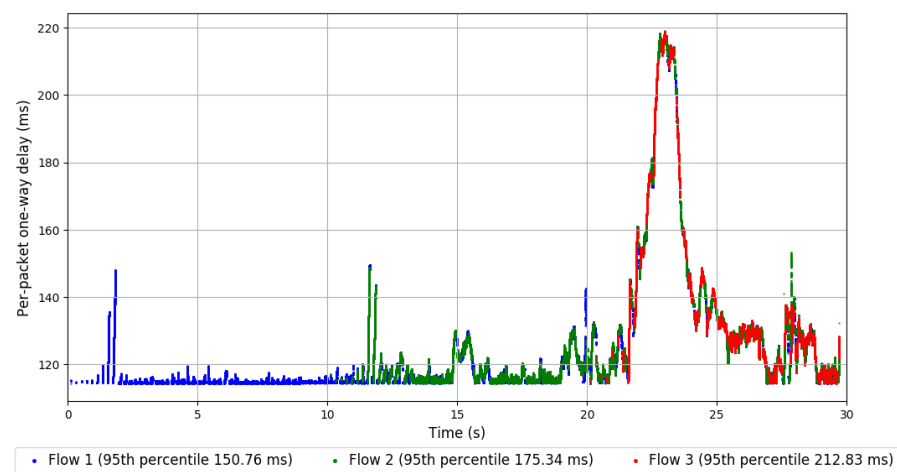
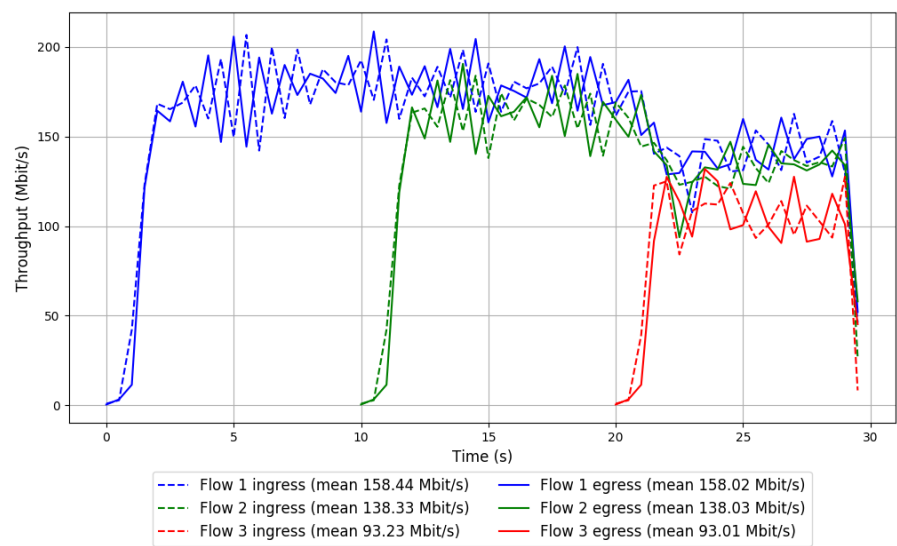
-- Flow 3:

Average throughput: 93.01 Mbit/s

95th percentile per-packet one-way delay: 212.833 ms

Loss rate: 0.13%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-13 23:40:04

End at: 2018-02-13 23:40:34

Below is generated by plot.py at 2018-02-14 04:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 289.01 Mbit/s

95th percentile per-packet one-way delay: 159.563 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 161.24 Mbit/s

95th percentile per-packet one-way delay: 147.903 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 139.77 Mbit/s

95th percentile per-packet one-way delay: 159.618 ms

Loss rate: 0.18%

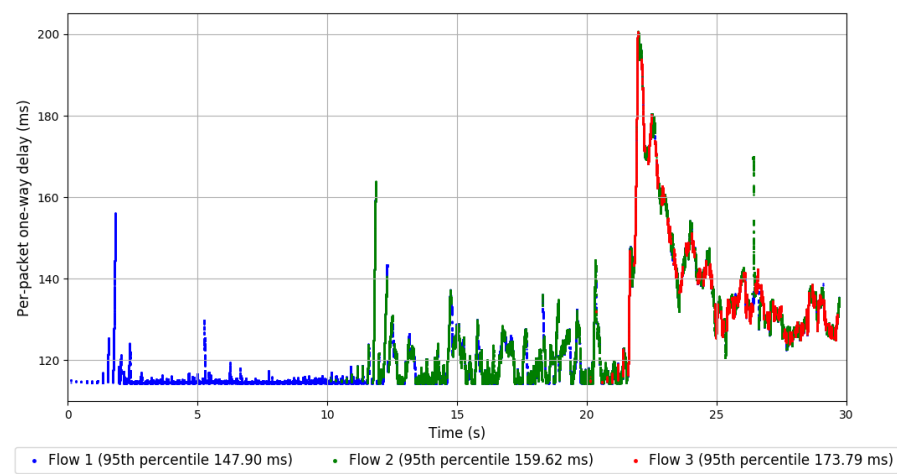
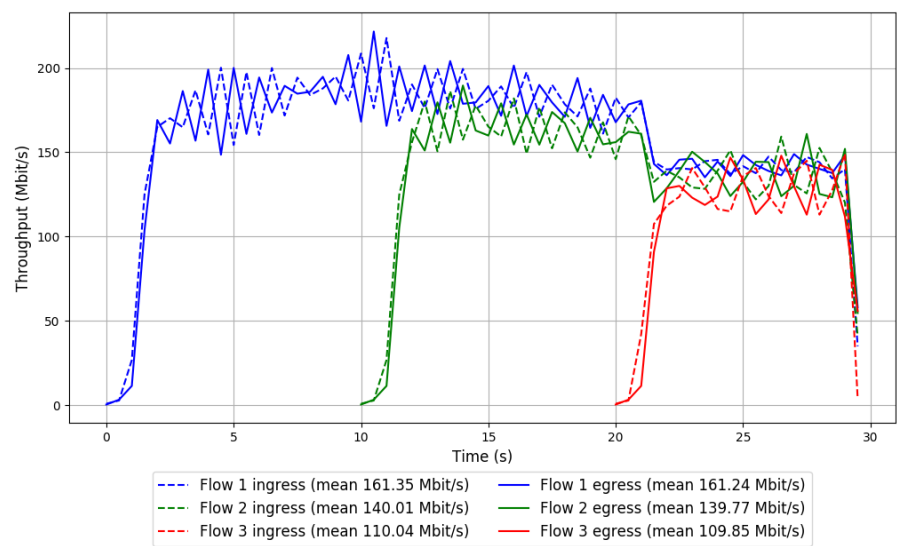
-- Flow 3:

Average throughput: 109.85 Mbit/s

95th percentile per-packet one-way delay: 173.788 ms

Loss rate: 0.00%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

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

End at: 2018-02-13 23:59:51

Below is generated by plot.py at 2018-02-14 04:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 306.63 Mbit/s

95th percentile per-packet one-way delay: 146.227 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 164.61 Mbit/s

95th percentile per-packet one-way delay: 142.632 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 155.29 Mbit/s

95th percentile per-packet one-way delay: 146.509 ms

Loss rate: 0.12%

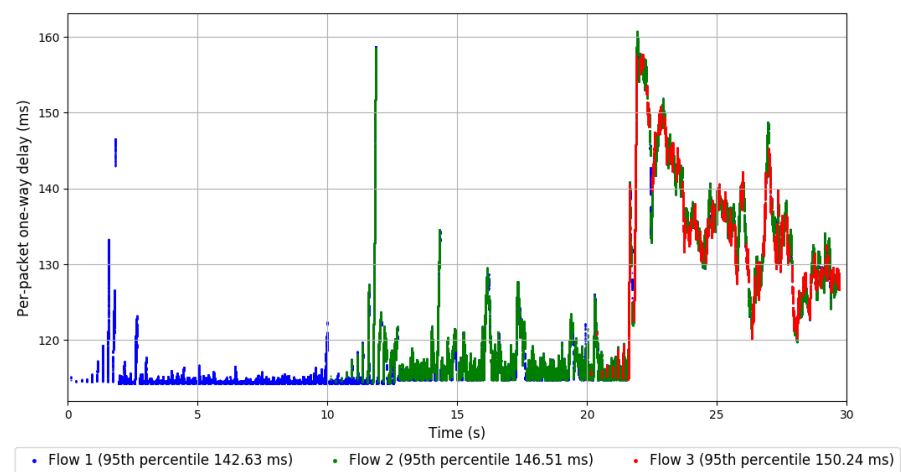
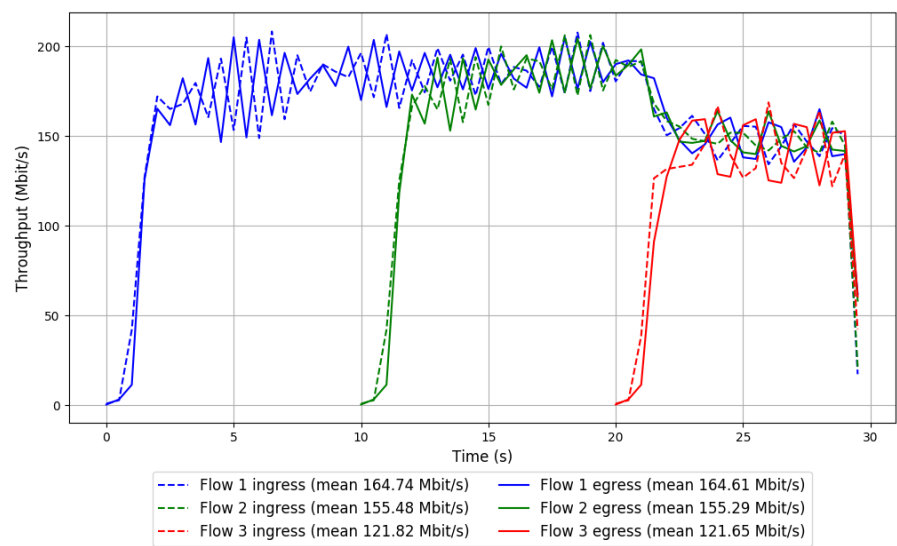
-- Flow 3:

Average throughput: 121.65 Mbit/s

95th percentile per-packet one-way delay: 150.236 ms

Loss rate: 0.00%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-14 00:17:57

End at: 2018-02-14 00:18:27

Below is generated by plot.py at 2018-02-14 04:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 312.46 Mbit/s

95th percentile per-packet one-way delay: 131.542 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 183.15 Mbit/s

95th percentile per-packet one-way delay: 120.610 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 157.15 Mbit/s

95th percentile per-packet one-way delay: 132.749 ms

Loss rate: 0.00%

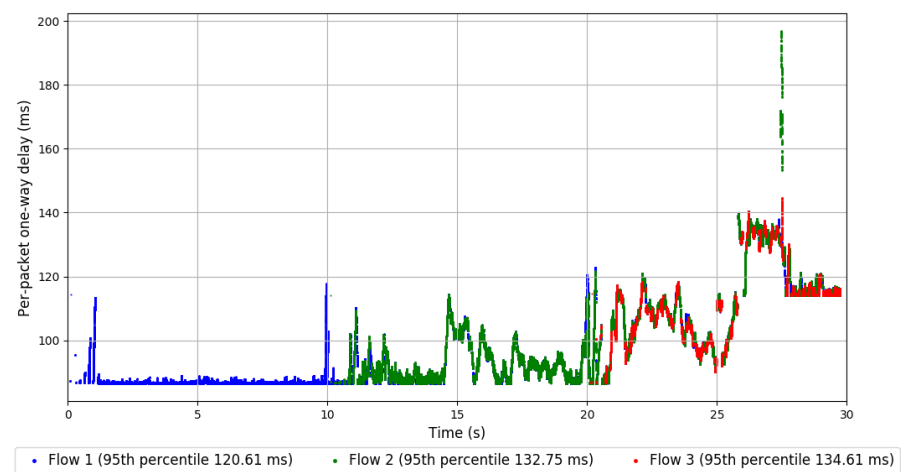
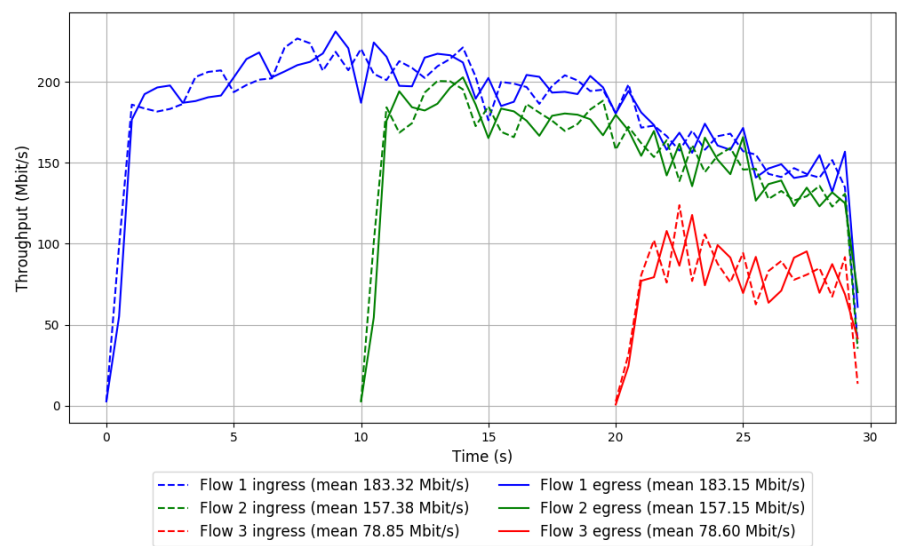
-- Flow 3:

Average throughput: 78.60 Mbit/s

95th percentile per-packet one-way delay: 134.611 ms

Loss rate: 0.02%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-14 00:36:56

End at: 2018-02-14 00:37:26

Below is generated by plot.py at 2018-02-14 04:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 293.01 Mbit/s

95th percentile per-packet one-way delay: 170.700 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 164.54 Mbit/s

95th percentile per-packet one-way delay: 150.071 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 150.71 Mbit/s

95th percentile per-packet one-way delay: 172.768 ms

Loss rate: 0.02%

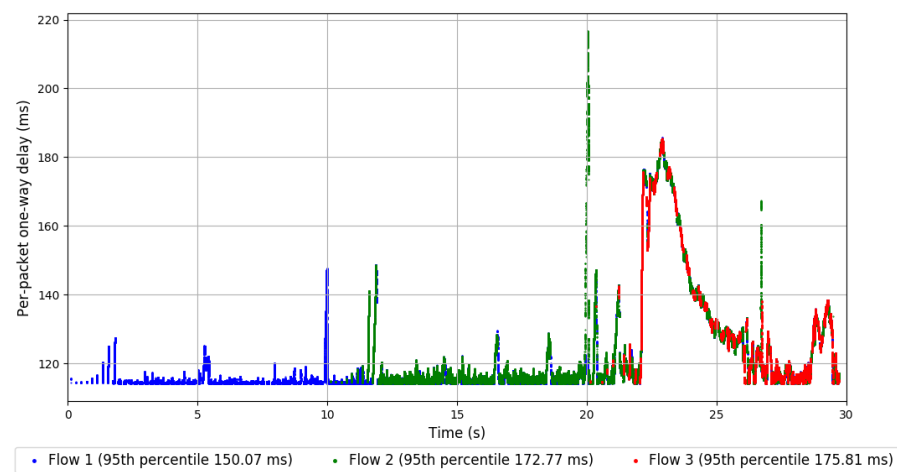
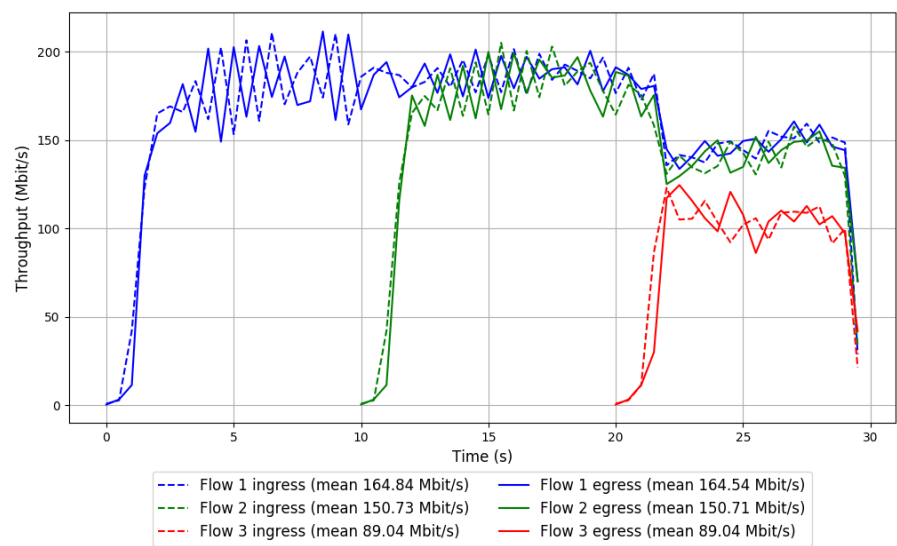
-- Flow 3:

Average throughput: 89.04 Mbit/s

95th percentile per-packet one-way delay: 175.812 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 00:56:14

End at: 2018-02-14 00:56:44

Below is generated by plot.py at 2018-02-14 04:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 299.66 Mbit/s

95th percentile per-packet one-way delay: 159.843 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 172.80 Mbit/s

95th percentile per-packet one-way delay: 156.152 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 135.42 Mbit/s

95th percentile per-packet one-way delay: 159.790 ms

Loss rate: 0.09%

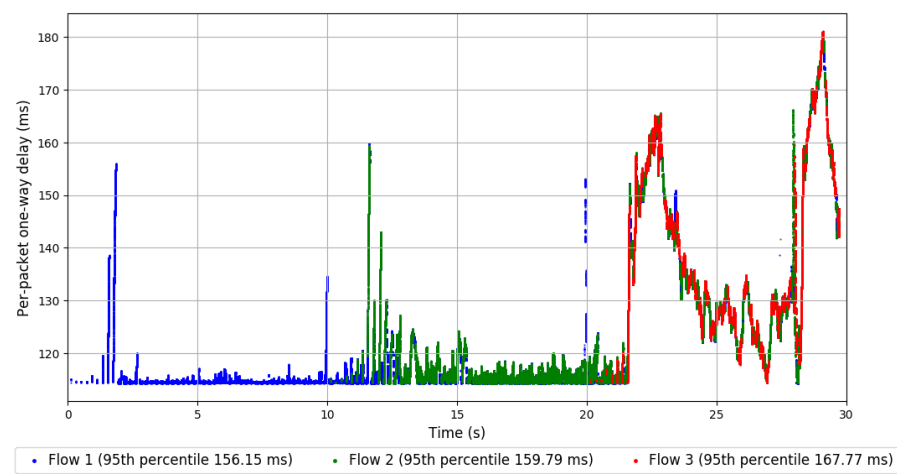
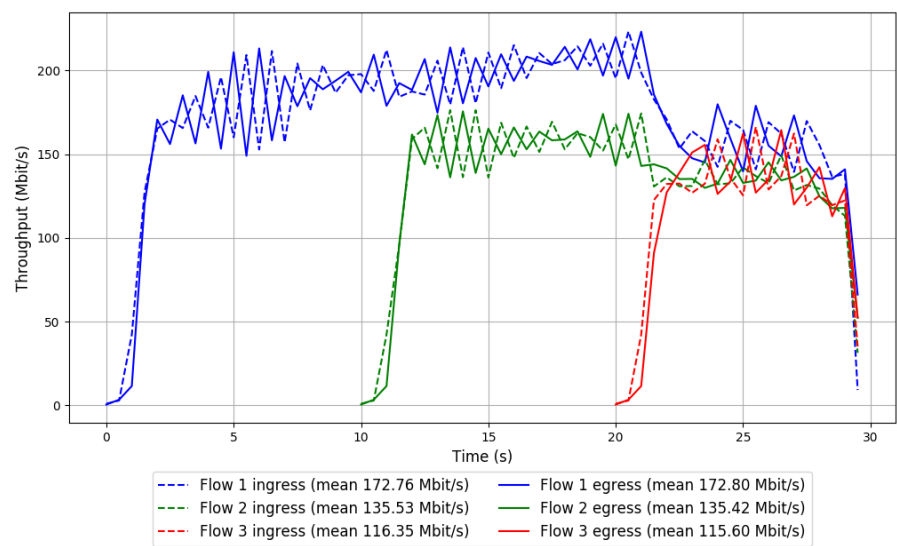
-- Flow 3:

Average throughput: 115.60 Mbit/s

95th percentile per-packet one-way delay: 167.766 ms

Loss rate: 0.63%

Run 10: Report of Indigo-1-32 — Data Link

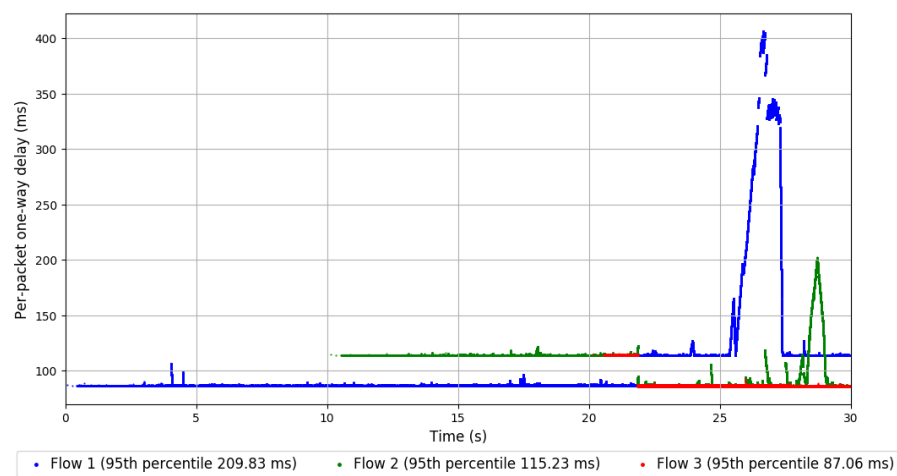
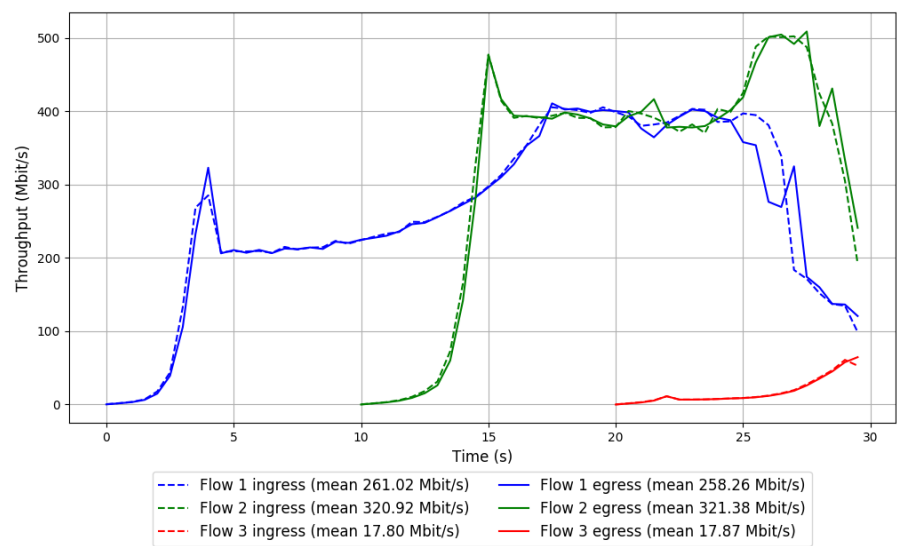


```
Run 1: Statistics of Vivace-latency

Start at: 2018-02-13 22:11:22
End at: 2018-02-13 22:11:52

# Below is generated by plot.py at 2018-02-14 04:47:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 477.46 Mbit/s
95th percentile per-packet one-way delay: 146.364 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 258.26 Mbit/s
95th percentile per-packet one-way delay: 209.827 ms
Loss rate: 1.06%
-- Flow 2:
Average throughput: 321.38 Mbit/s
95th percentile per-packet one-way delay: 115.230 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.87 Mbit/s
95th percentile per-packet one-way delay: 87.057 ms
Loss rate: 0.01%
```

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-13 22:29:43

End at: 2018-02-13 22:30:13

Below is generated by plot.py at 2018-02-14 04:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 540.17 Mbit/s

95th percentile per-packet one-way delay: 126.828 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 290.65 Mbit/s

95th percentile per-packet one-way delay: 129.082 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 306.25 Mbit/s

95th percentile per-packet one-way delay: 127.424 ms

Loss rate: 0.19%

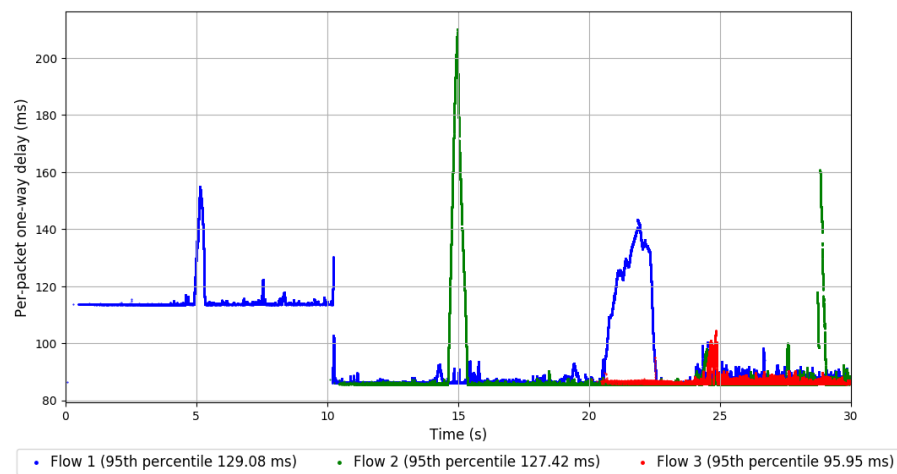
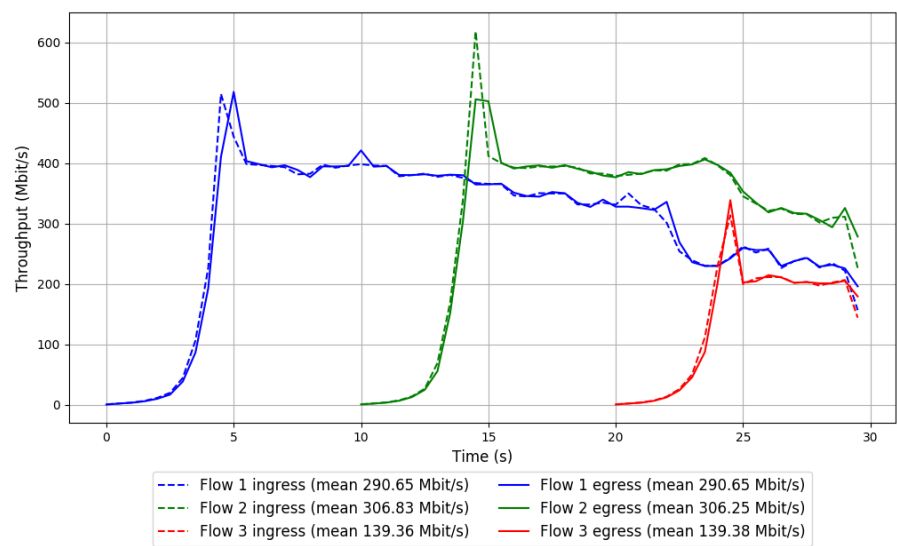
-- Flow 3:

Average throughput: 139.38 Mbit/s

95th percentile per-packet one-way delay: 95.951 ms

Loss rate: 0.00%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-13 22:48:03

End at: 2018-02-13 22:48:33

Below is generated by plot.py at 2018-02-14 04:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 334.08 Mbit/s

95th percentile per-packet one-way delay: 124.747 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 216.69 Mbit/s

95th percentile per-packet one-way delay: 121.621 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 138.66 Mbit/s

95th percentile per-packet one-way delay: 128.450 ms

Loss rate: 0.14%

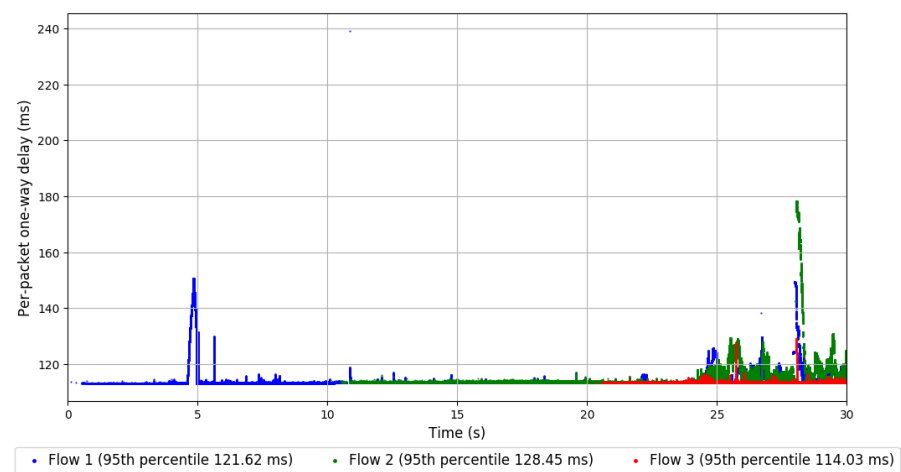
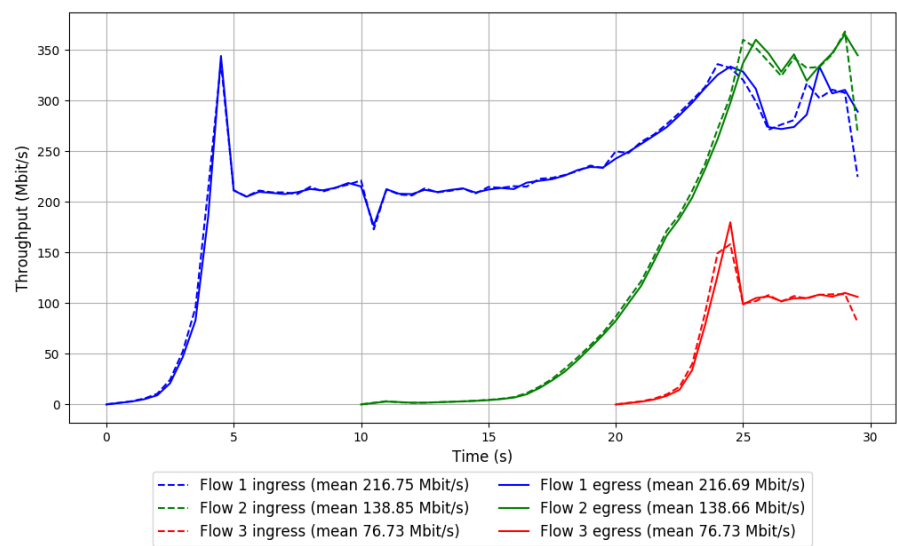
-- Flow 3:

Average throughput: 76.73 Mbit/s

95th percentile per-packet one-way delay: 114.031 ms

Loss rate: 0.00%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-13 23:06:48

End at: 2018-02-13 23:07:18

Below is generated by plot.py at 2018-02-14 04:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 469.32 Mbit/s

95th percentile per-packet one-way delay: 118.460 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 305.76 Mbit/s

95th percentile per-packet one-way delay: 122.556 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 179.91 Mbit/s

95th percentile per-packet one-way delay: 116.146 ms

Loss rate: 0.00%

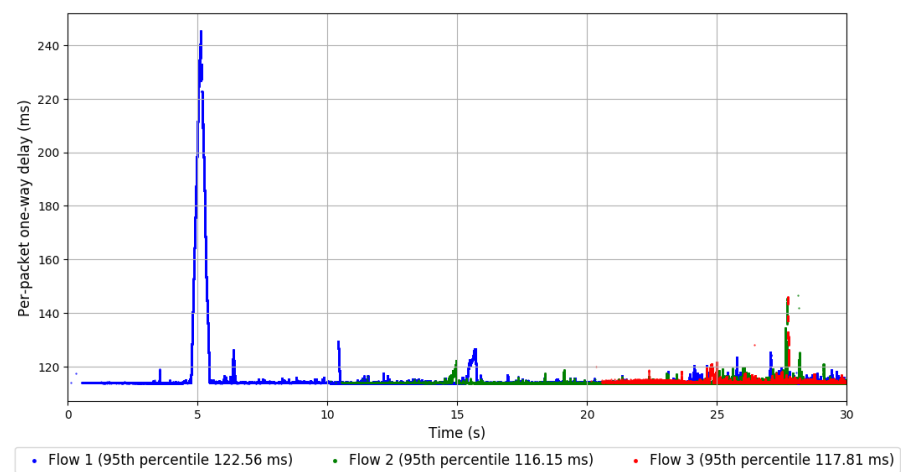
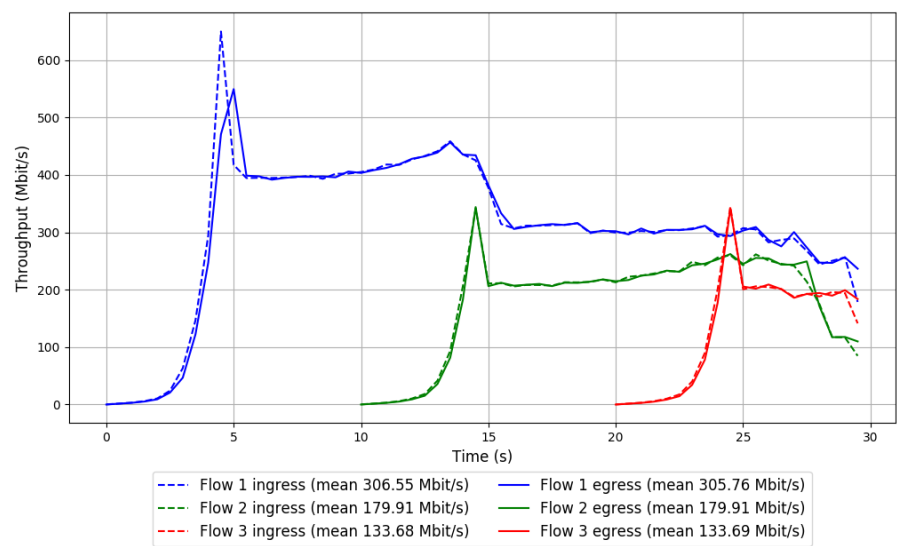
-- Flow 3:

Average throughput: 133.69 Mbit/s

95th percentile per-packet one-way delay: 117.810 ms

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

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 04:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 549.25 Mbit/s

95th percentile per-packet one-way delay: 211.685 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 305.76 Mbit/s

95th percentile per-packet one-way delay: 172.142 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 266.35 Mbit/s

95th percentile per-packet one-way delay: 188.311 ms

Loss rate: 0.00%

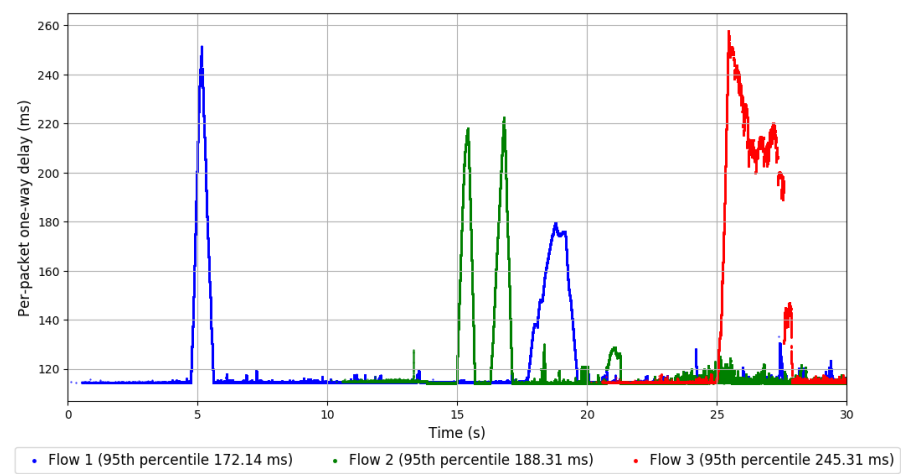
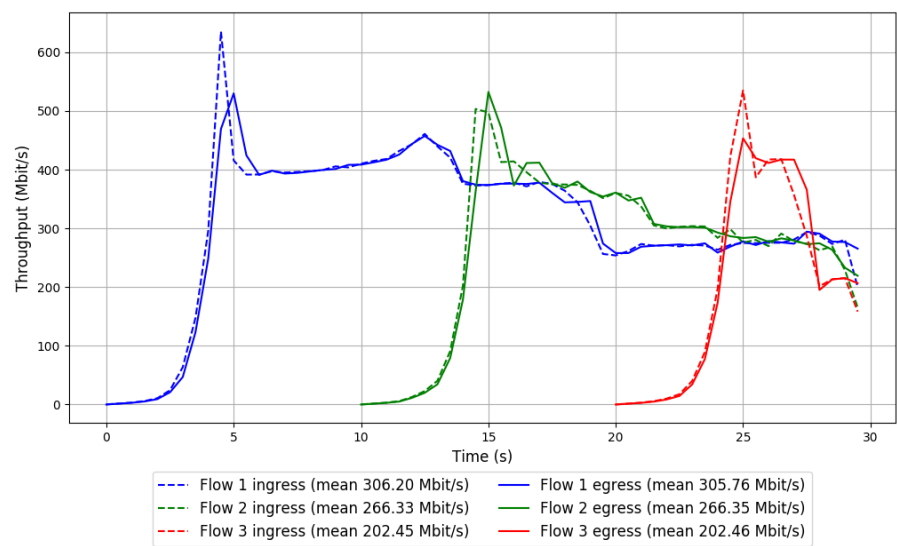
-- Flow 3:

Average throughput: 202.46 Mbit/s

95th percentile per-packet one-way delay: 245.308 ms

Loss rate: 0.00%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-13 23:44:40

End at: 2018-02-13 23:45:10

Below is generated by plot.py at 2018-02-14 04:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 567.92 Mbit/s

95th percentile per-packet one-way delay: 169.165 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 339.92 Mbit/s

95th percentile per-packet one-way delay: 162.875 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 276.07 Mbit/s

95th percentile per-packet one-way delay: 189.995 ms

Loss rate: 0.01%

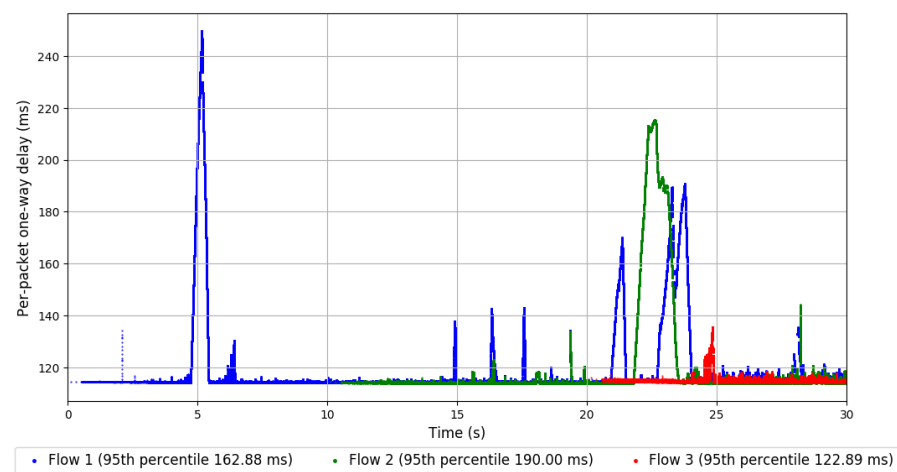
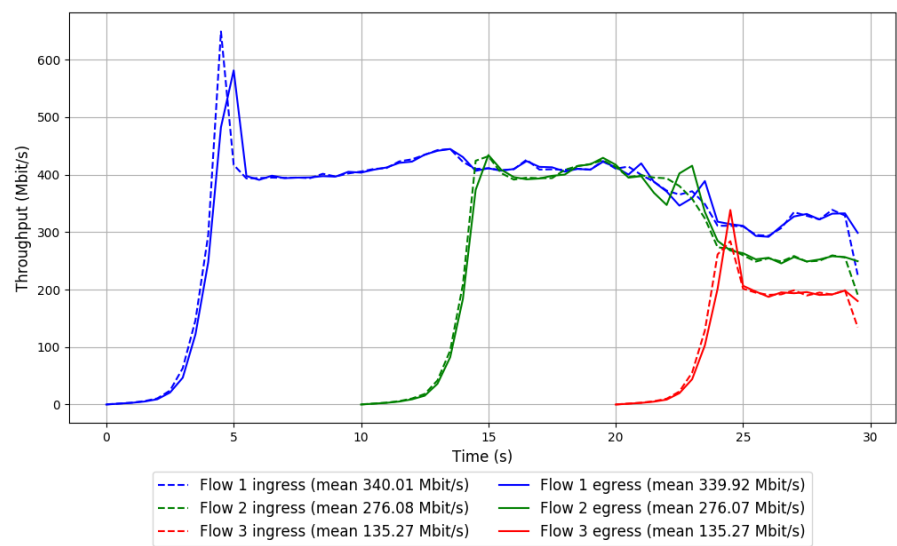
-- Flow 3:

Average throughput: 135.27 Mbit/s

95th percentile per-packet one-way delay: 122.888 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-14 00:03:53

End at: 2018-02-14 00:04:23

Below is generated by plot.py at 2018-02-14 04:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 560.32 Mbit/s

95th percentile per-packet one-way delay: 195.482 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 337.29 Mbit/s

95th percentile per-packet one-way delay: 218.218 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 266.85 Mbit/s

95th percentile per-packet one-way delay: 162.565 ms

Loss rate: 0.52%

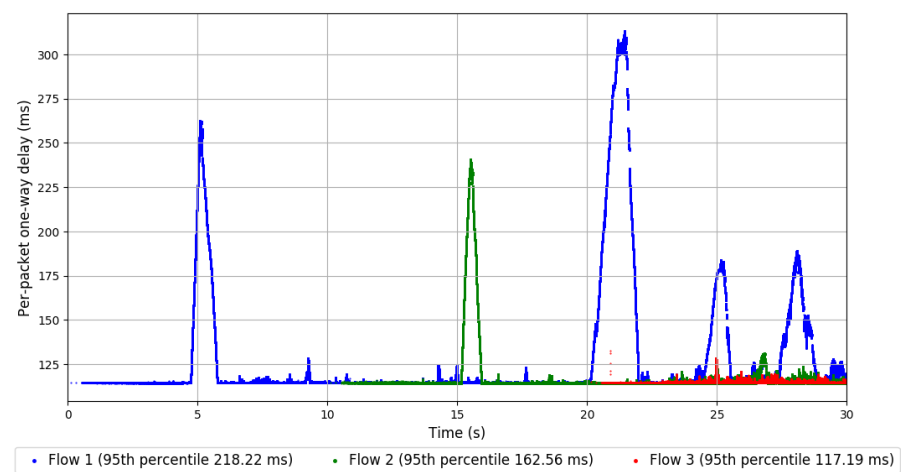
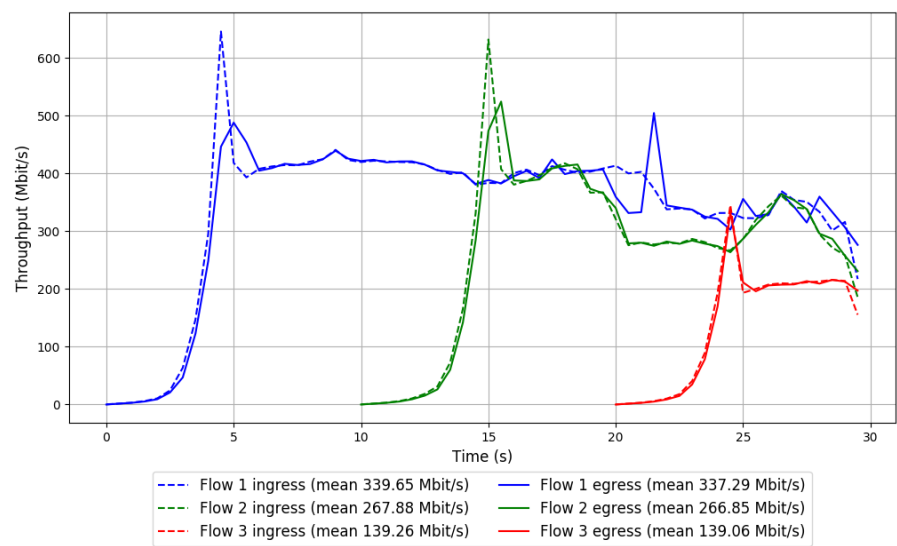
-- Flow 3:

Average throughput: 139.06 Mbit/s

95th percentile per-packet one-way delay: 117.193 ms

Loss rate: 0.42%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-14 00:22:29

End at: 2018-02-14 00:22:59

Below is generated by plot.py at 2018-02-14 04:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 505.27 Mbit/s

95th percentile per-packet one-way delay: 127.276 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 283.08 Mbit/s

95th percentile per-packet one-way delay: 128.419 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 266.25 Mbit/s

95th percentile per-packet one-way delay: 126.029 ms

Loss rate: 0.00%

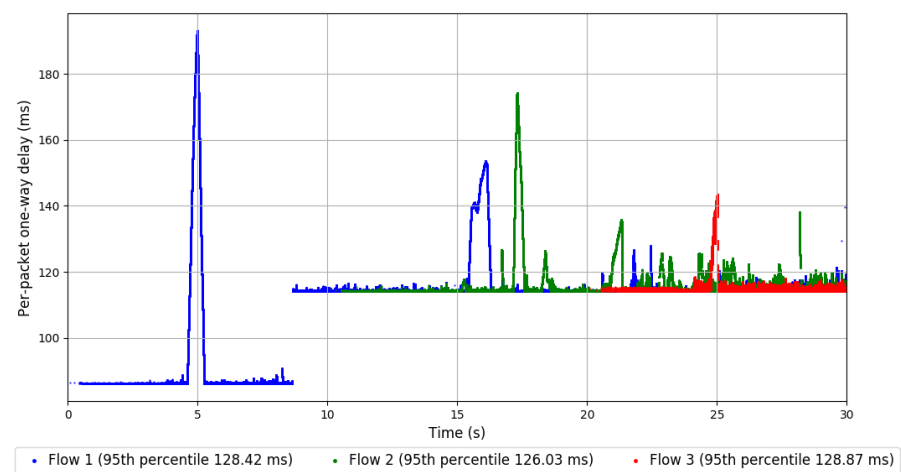
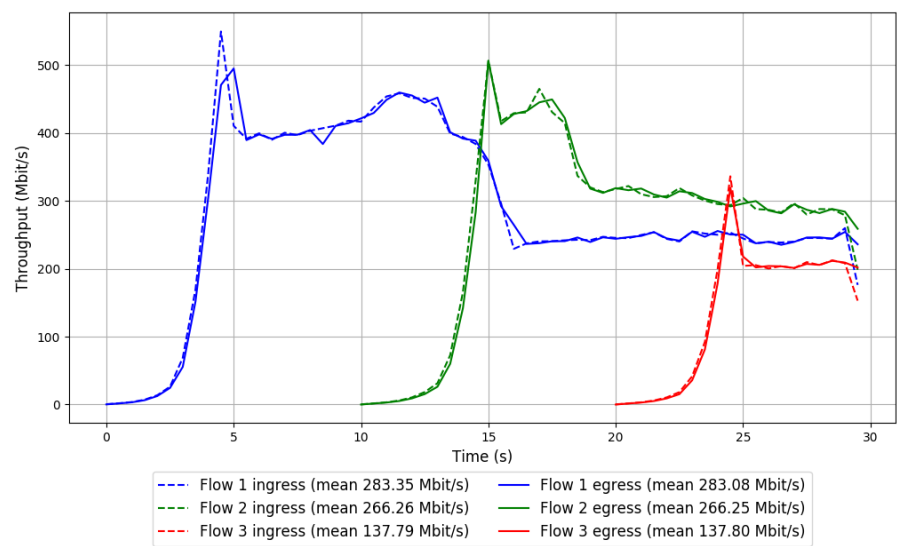
-- Flow 3:

Average throughput: 137.80 Mbit/s

95th percentile per-packet one-way delay: 128.871 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-14 00:41:24

End at: 2018-02-14 00:41:54

Below is generated by plot.py at 2018-02-14 04:48:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 568.96 Mbit/s

95th percentile per-packet one-way delay: 170.044 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 338.04 Mbit/s

95th percentile per-packet one-way delay: 128.606 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 280.19 Mbit/s

95th percentile per-packet one-way delay: 281.983 ms

Loss rate: 0.43%

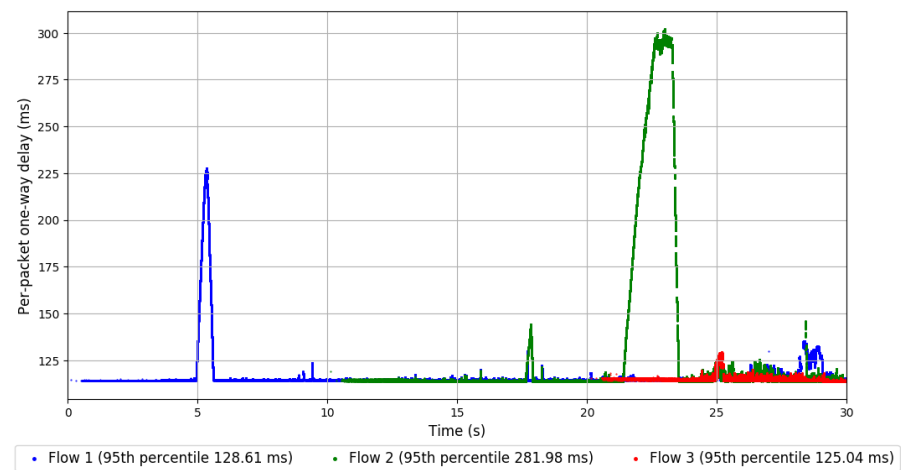
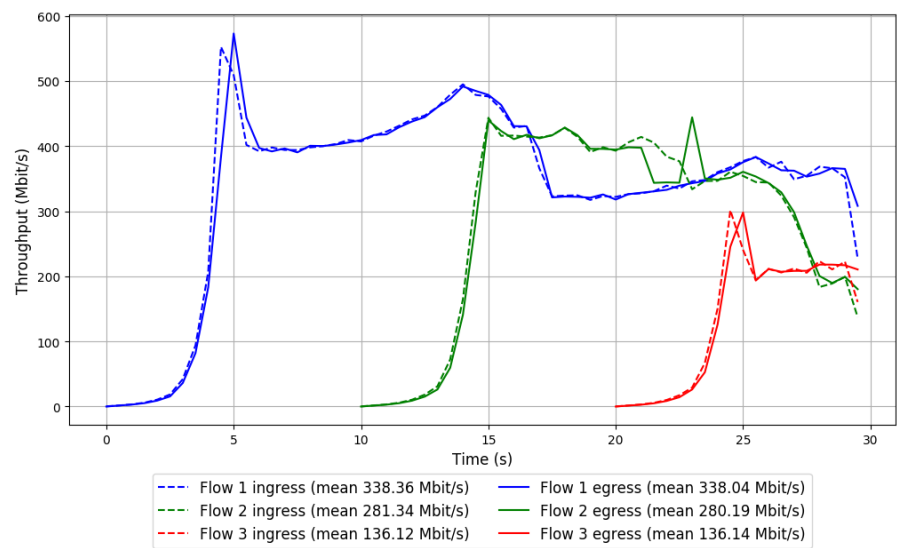
-- Flow 3:

Average throughput: 136.14 Mbit/s

95th percentile per-packet one-way delay: 125.044 ms

Loss rate: 0.00%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-14 01:00:49

End at: 2018-02-14 01:01:19

Below is generated by plot.py at 2018-02-14 04:48:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 533.79 Mbit/s

95th percentile per-packet one-way delay: 211.815 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 331.97 Mbit/s

95th percentile per-packet one-way delay: 196.732 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 266.02 Mbit/s

95th percentile per-packet one-way delay: 242.814 ms

Loss rate: 0.21%

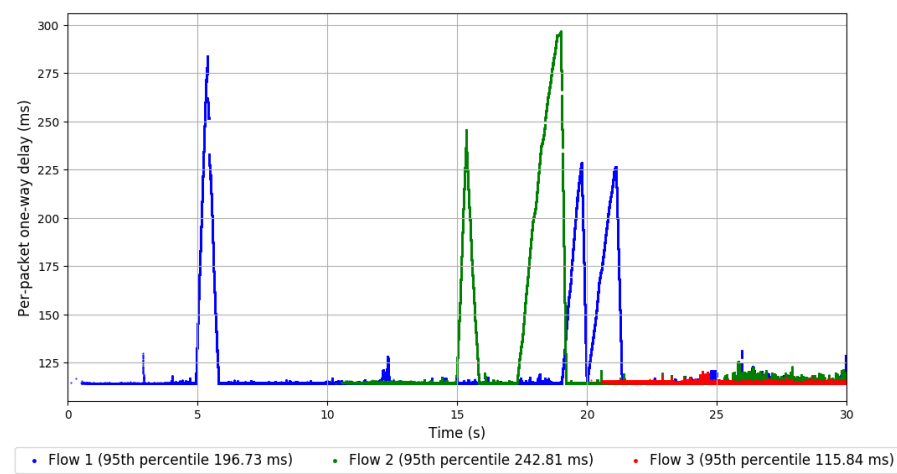
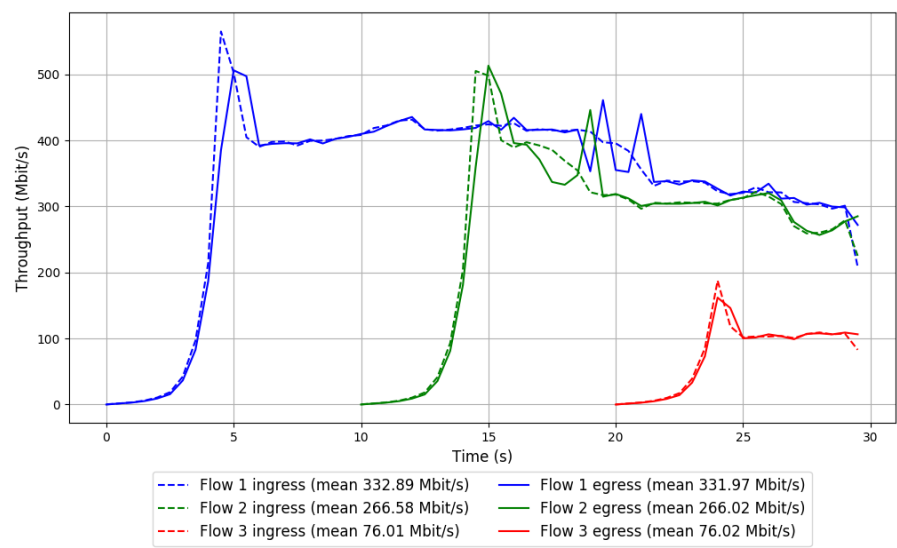
-- Flow 3:

Average throughput: 76.02 Mbit/s

95th percentile per-packet one-way delay: 115.837 ms

Loss rate: 0.00%

Run 10: Report of Vivace-latency — Data Link

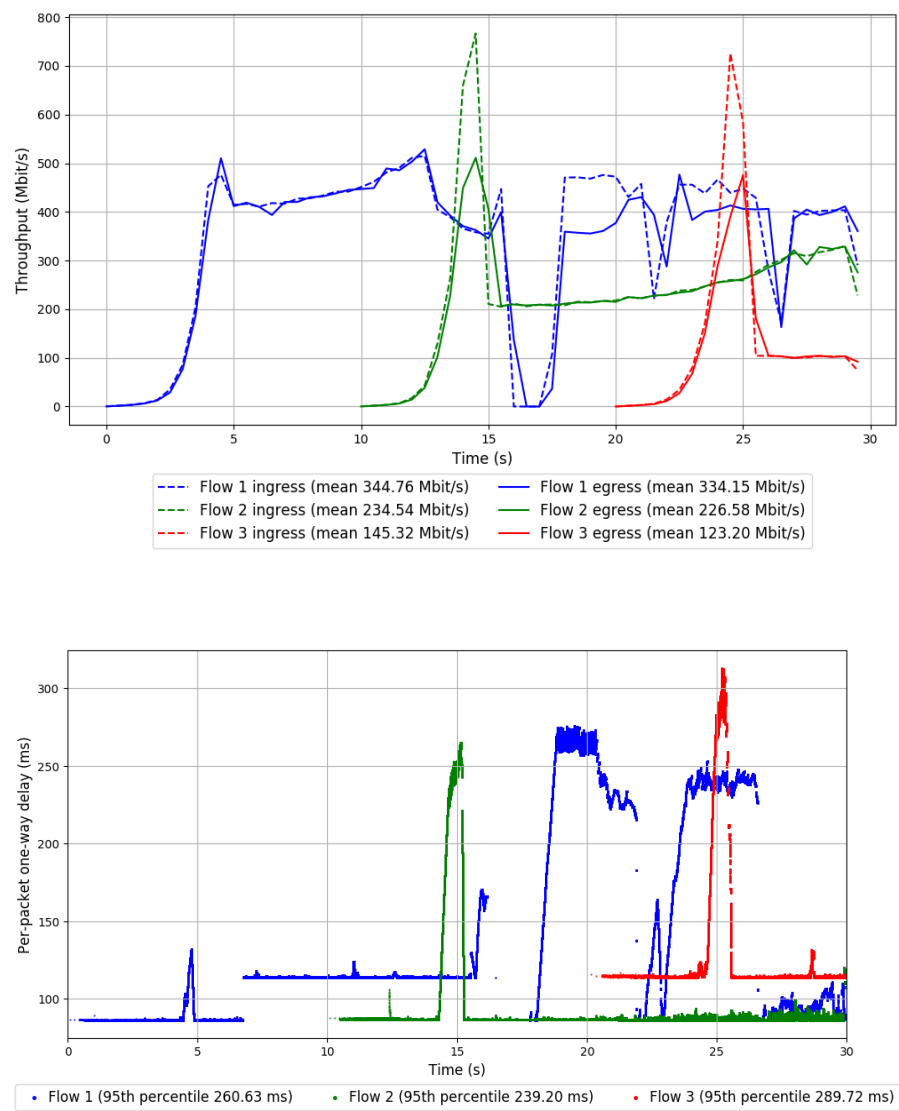


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-13 22:13:27
End at: 2018-02-13 22:13:57

# Below is generated by plot.py at 2018-02-14 04:49:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 525.14 Mbit/s
95th percentile per-packet one-way delay: 258.272 ms
Loss rate: 4.25%
-- Flow 1:
Average throughput: 334.15 Mbit/s
95th percentile per-packet one-way delay: 260.631 ms
Loss rate: 3.08%
-- Flow 2:
Average throughput: 226.58 Mbit/s
95th percentile per-packet one-way delay: 239.199 ms
Loss rate: 3.40%
-- Flow 3:
Average throughput: 123.20 Mbit/s
95th percentile per-packet one-way delay: 289.723 ms
Loss rate: 15.47%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-02-13 22:31:52

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

Below is generated by plot.py at 2018-02-14 04:51:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 568.04 Mbit/s

95th percentile per-packet one-way delay: 282.272 ms

Loss rate: 3.52%

-- Flow 1:

Average throughput: 278.57 Mbit/s

95th percentile per-packet one-way delay: 261.992 ms

Loss rate: 3.10%

-- Flow 2:

Average throughput: 306.45 Mbit/s

95th percentile per-packet one-way delay: 285.613 ms

Loss rate: 4.08%

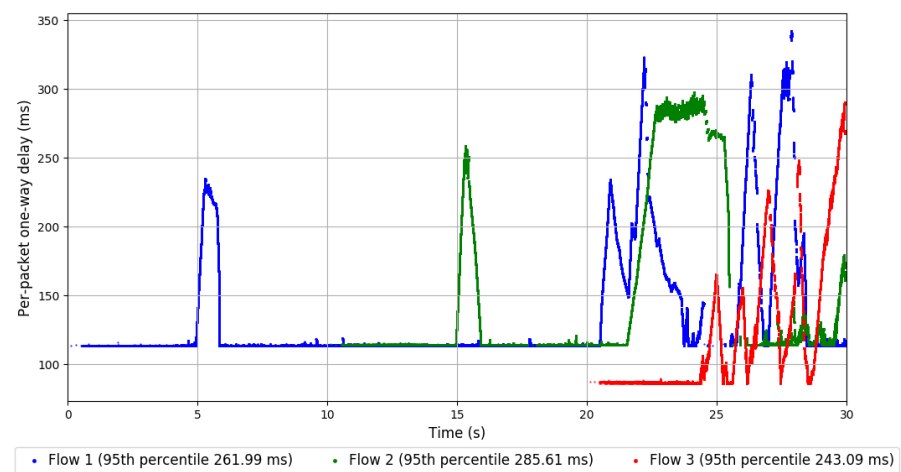
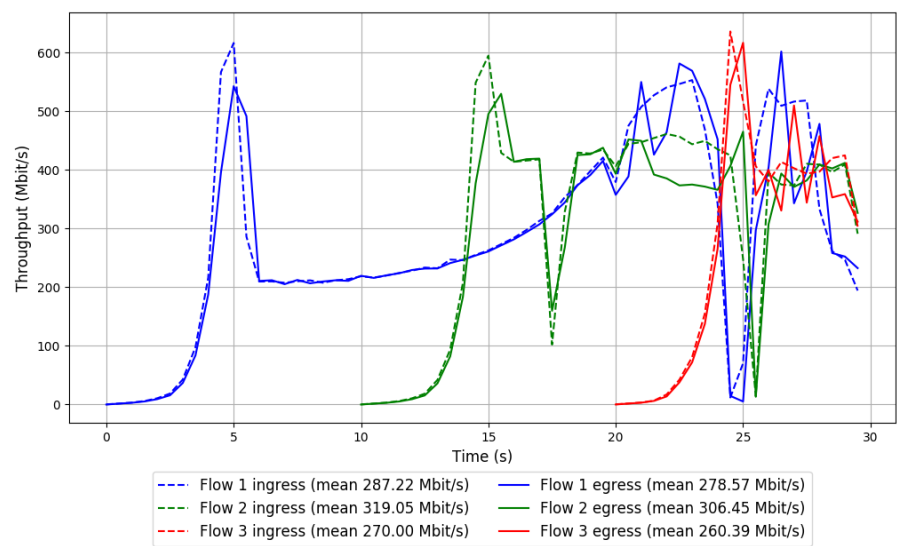
-- Flow 3:

Average throughput: 260.39 Mbit/s

95th percentile per-packet one-way delay: 243.092 ms

Loss rate: 3.56%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-13 22:50:00

End at: 2018-02-13 22:50:30

Below is generated by plot.py at 2018-02-14 04:52:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 509.85 Mbit/s

95th percentile per-packet one-way delay: 251.796 ms

Loss rate: 2.25%

-- Flow 1:

Average throughput: 256.46 Mbit/s

95th percentile per-packet one-way delay: 210.330 ms

Loss rate: 1.22%

-- Flow 2:

Average throughput: 340.20 Mbit/s

95th percentile per-packet one-way delay: 253.868 ms

Loss rate: 2.02%

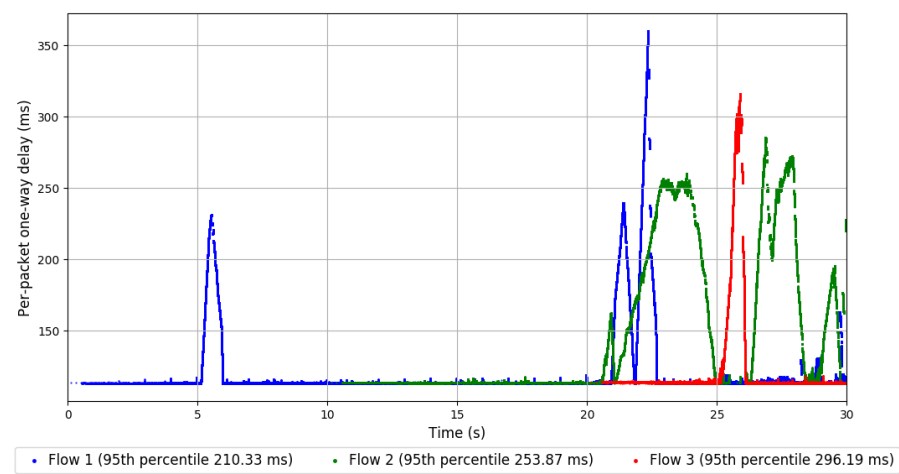
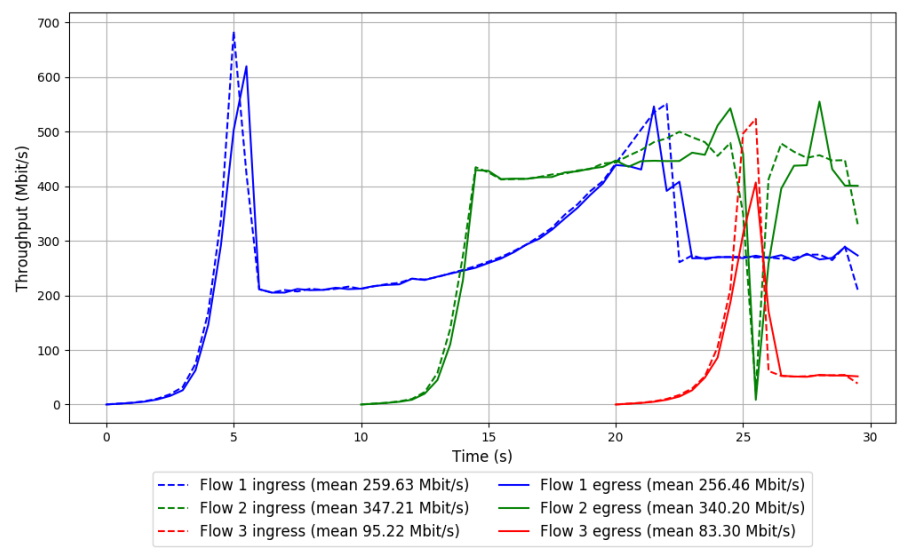
-- Flow 3:

Average throughput: 83.30 Mbit/s

95th percentile per-packet one-way delay: 296.185 ms

Loss rate: 12.53%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-13 23:08:55

End at: 2018-02-13 23:09:25

Below is generated by plot.py at 2018-02-14 04:52:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 467.56 Mbit/s

95th percentile per-packet one-way delay: 307.281 ms

Loss rate: 6.98%

-- Flow 1:

Average throughput: 225.98 Mbit/s

95th percentile per-packet one-way delay: 253.958 ms

Loss rate: 3.39%

-- Flow 2:

Average throughput: 305.82 Mbit/s

95th percentile per-packet one-way delay: 315.780 ms

Loss rate: 9.17%

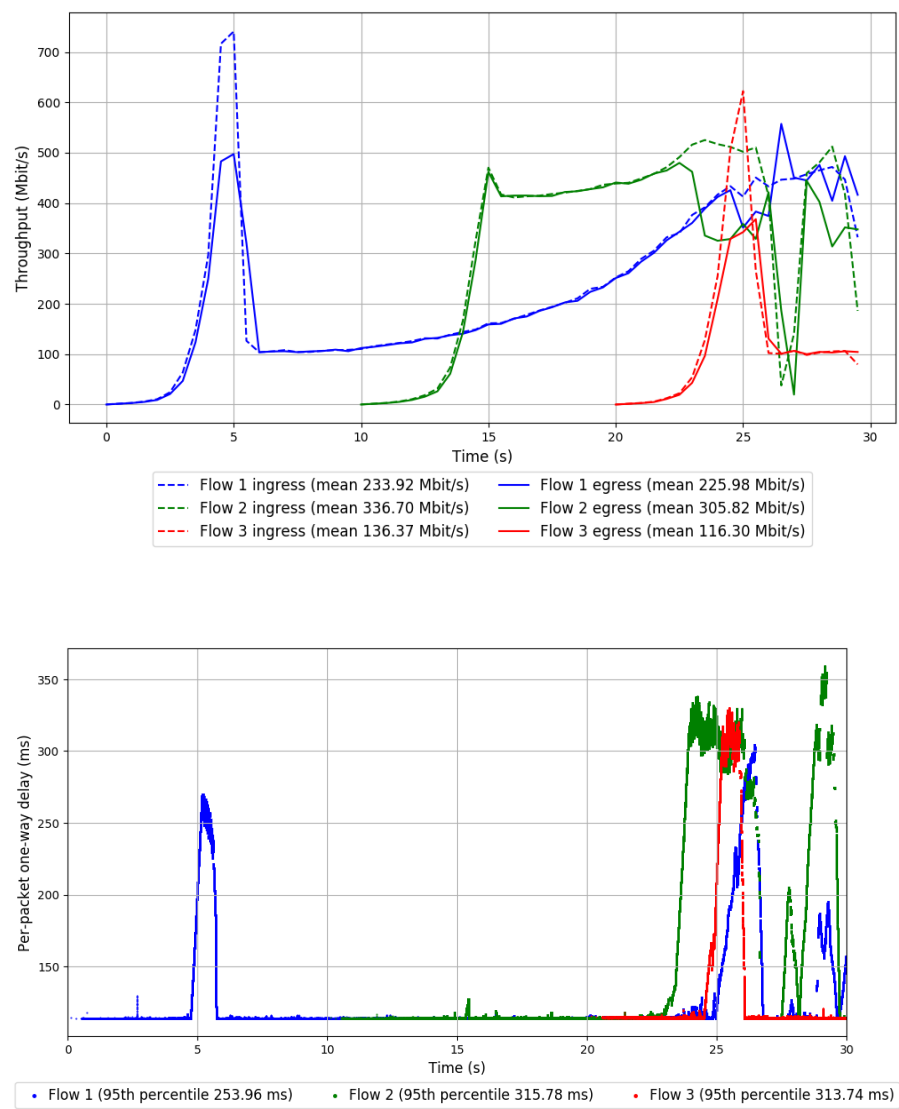
-- Flow 3:

Average throughput: 116.30 Mbit/s

95th percentile per-packet one-way delay: 313.740 ms

Loss rate: 14.74%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-13 23:27:56

End at: 2018-02-13 23:28:26

Below is generated by plot.py at 2018-02-14 04:53:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 445.24 Mbit/s

95th percentile per-packet one-way delay: 283.576 ms

Loss rate: 5.08%

-- Flow 1:

Average throughput: 207.76 Mbit/s

95th percentile per-packet one-way delay: 265.492 ms

Loss rate: 4.22%

-- Flow 2:

Average throughput: 303.66 Mbit/s

95th percentile per-packet one-way delay: 297.176 ms

Loss rate: 5.11%

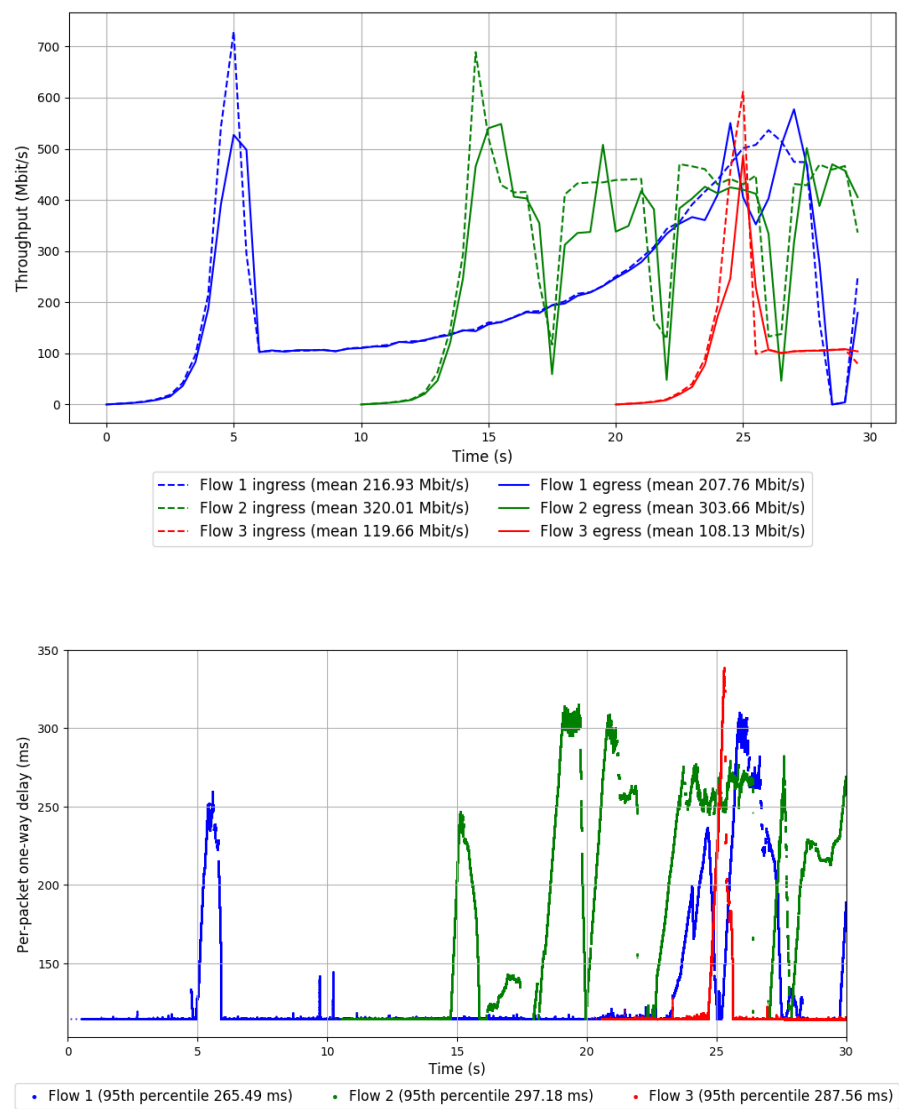
-- Flow 3:

Average throughput: 108.13 Mbit/s

95th percentile per-packet one-way delay: 287.562 ms

Loss rate: 9.65%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-13 23:46:53

End at: 2018-02-13 23:47:23

Below is generated by plot.py at 2018-02-14 04:55:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 527.63 Mbit/s

95th percentile per-packet one-way delay: 305.409 ms

Loss rate: 2.95%

-- Flow 1:

Average throughput: 314.27 Mbit/s

95th percentile per-packet one-way delay: 294.587 ms

Loss rate: 2.85%

-- Flow 2:

Average throughput: 212.64 Mbit/s

95th percentile per-packet one-way delay: 122.420 ms

Loss rate: 0.00%

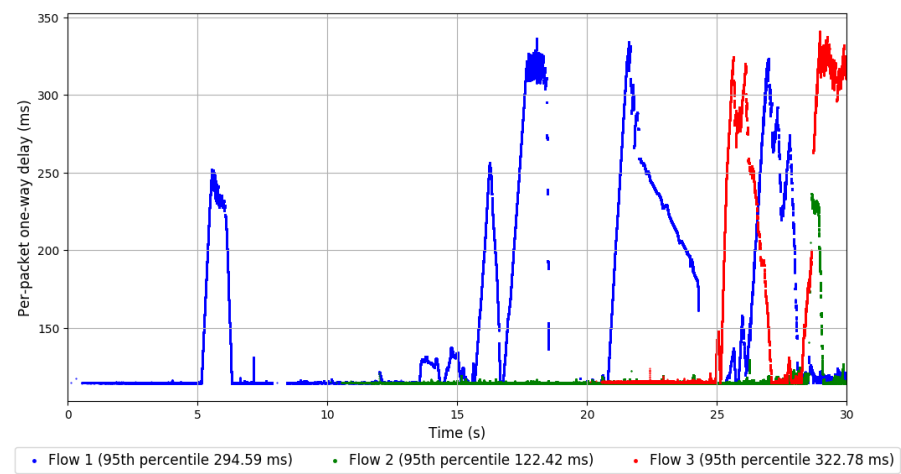
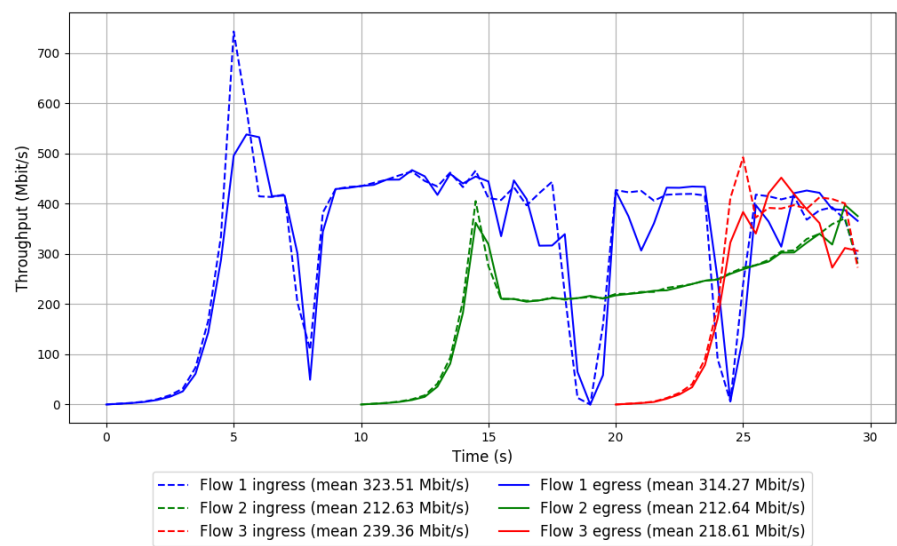
-- Flow 3:

Average throughput: 218.61 Mbit/s

95th percentile per-packet one-way delay: 322.780 ms

Loss rate: 8.66%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-14 00:06:04

End at: 2018-02-14 00:06:34

Below is generated by plot.py at 2018-02-14 04:55:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 453.66 Mbit/s

95th percentile per-packet one-way delay: 297.283 ms

Loss rate: 4.94%

-- Flow 1:

Average throughput: 202.92 Mbit/s

95th percentile per-packet one-way delay: 305.405 ms

Loss rate: 7.87%

-- Flow 2:

Average throughput: 296.52 Mbit/s

95th percentile per-packet one-way delay: 158.135 ms

Loss rate: 1.49%

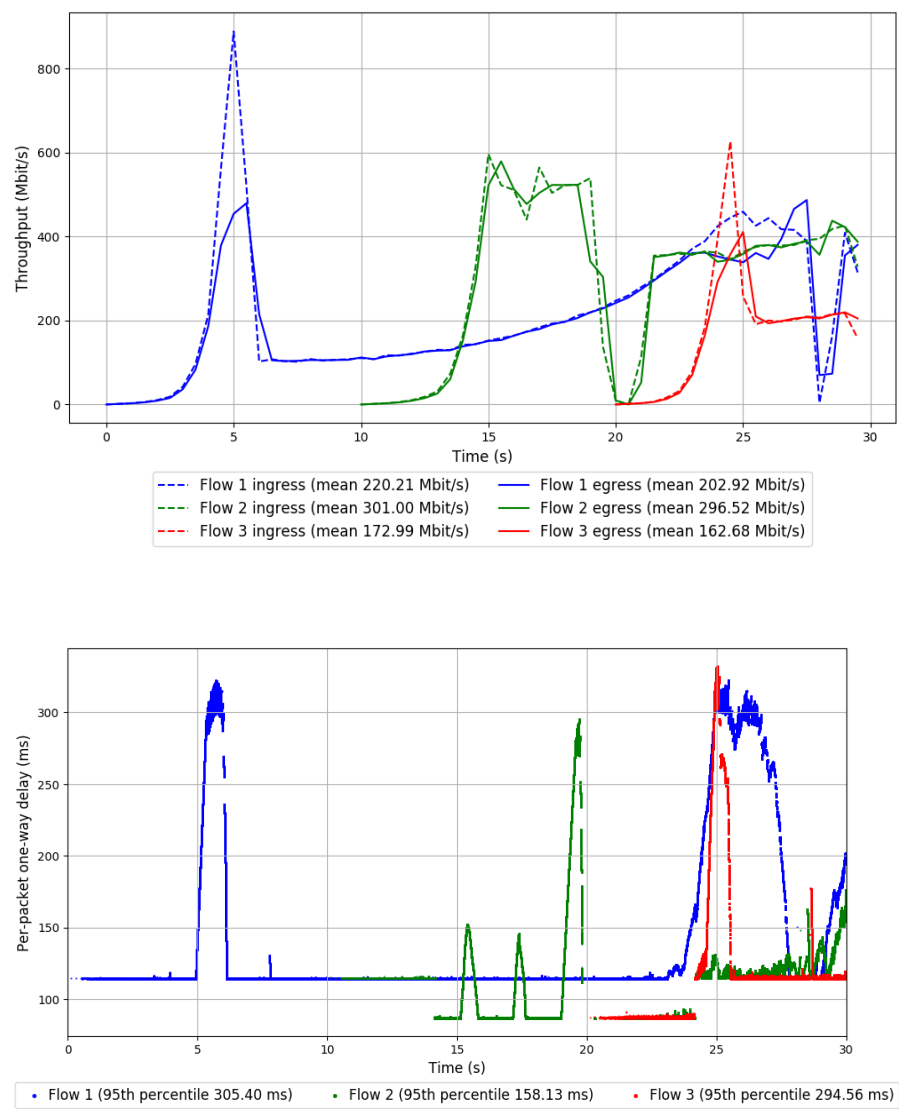
-- Flow 3:

Average throughput: 162.68 Mbit/s

95th percentile per-packet one-way delay: 294.557 ms

Loss rate: 5.70%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-14 00:24:38

End at: 2018-02-14 00:25:08

Below is generated by plot.py at 2018-02-14 04:57:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 542.37 Mbit/s

95th percentile per-packet one-way delay: 245.525 ms

Loss rate: 4.03%

-- Flow 1:

Average throughput: 341.73 Mbit/s

95th percentile per-packet one-way delay: 223.708 ms

Loss rate: 1.81%

-- Flow 2:

Average throughput: 211.56 Mbit/s

95th percentile per-packet one-way delay: 182.290 ms

Loss rate: 0.60%

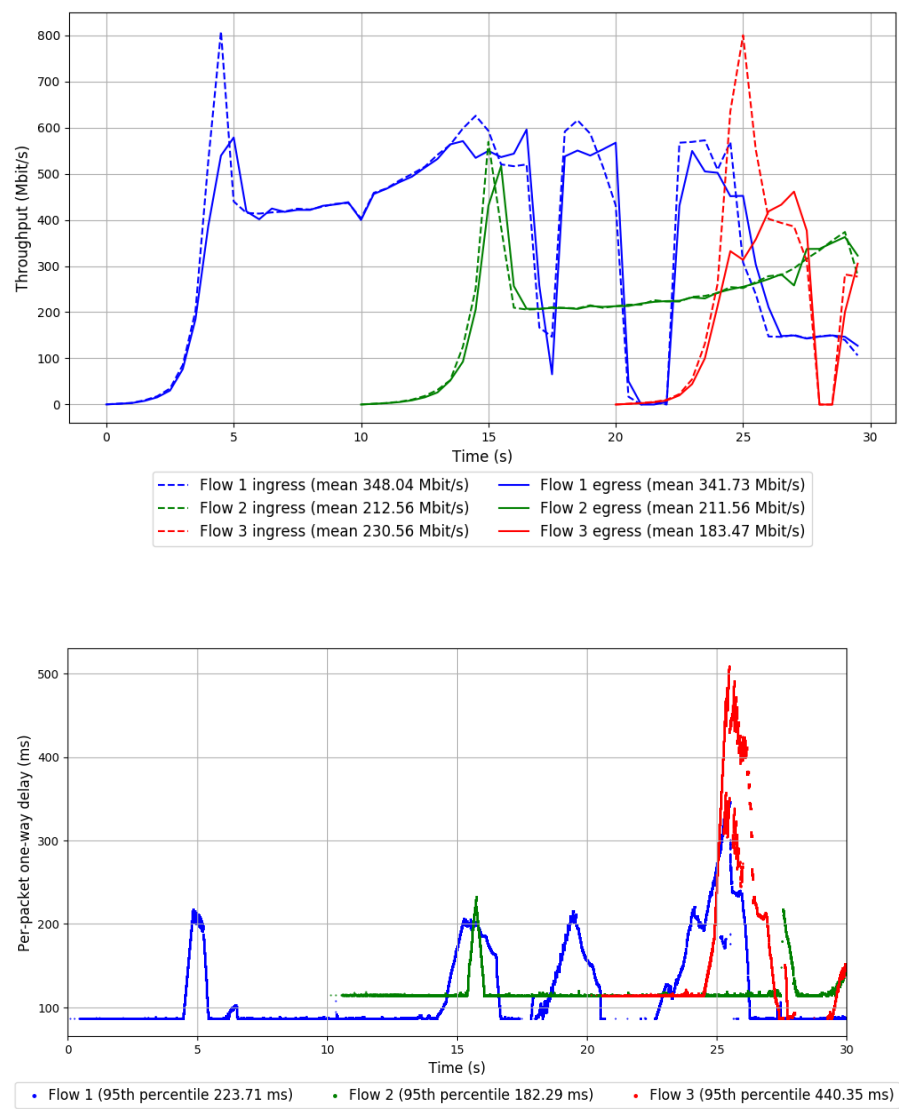
-- Flow 3:

Average throughput: 183.47 Mbit/s

95th percentile per-packet one-way delay: 440.351 ms

Loss rate: 20.64%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-14 00:43:38

End at: 2018-02-14 00:44:08

Below is generated by plot.py at 2018-02-14 05:00:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 603.73 Mbit/s

95th percentile per-packet one-way delay: 296.032 ms

Loss rate: 4.66%

-- Flow 1:

Average throughput: 303.03 Mbit/s

95th percentile per-packet one-way delay: 299.139 ms

Loss rate: 6.35%

-- Flow 2:

Average throughput: 349.68 Mbit/s

95th percentile per-packet one-way delay: 242.276 ms

Loss rate: 1.22%

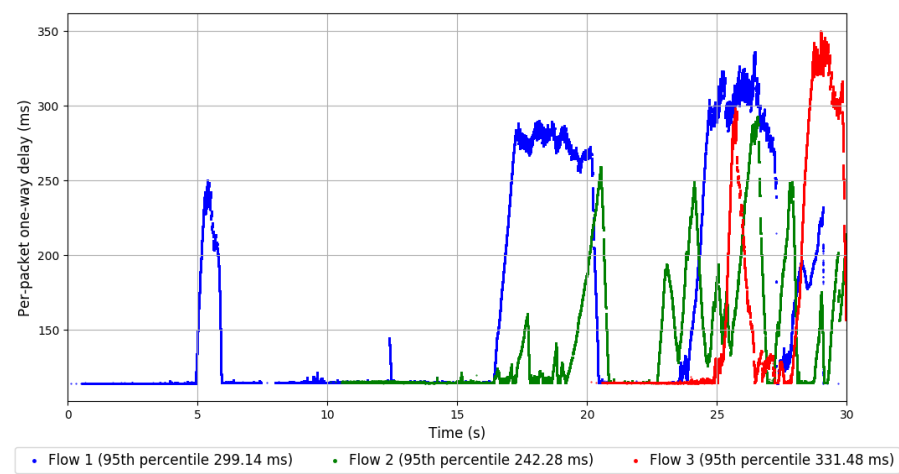
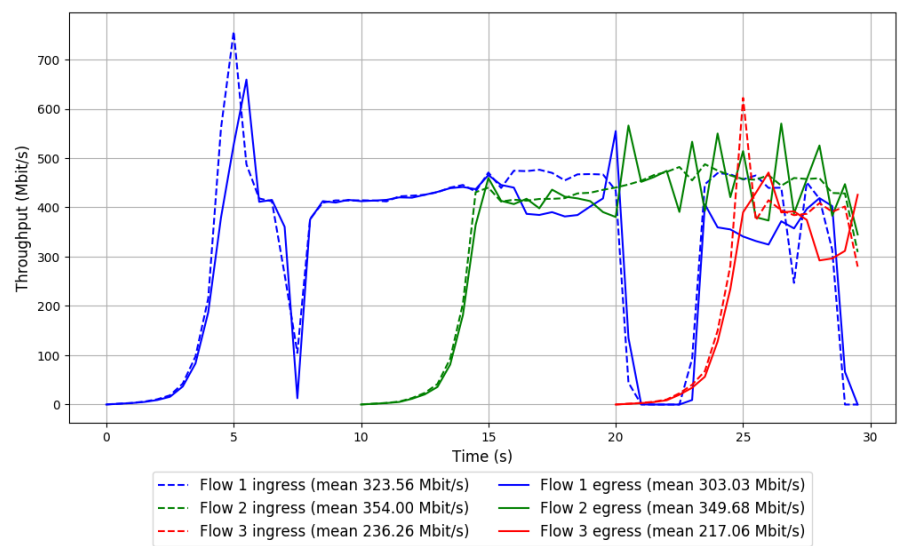
-- Flow 3:

Average throughput: 217.06 Mbit/s

95th percentile per-packet one-way delay: 331.475 ms

Loss rate: 8.13%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-14 01:02:59

End at: 2018-02-14 01:03:29

Below is generated by plot.py at 2018-02-14 05:00:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 470.26 Mbit/s

95th percentile per-packet one-way delay: 279.677 ms

Loss rate: 4.63%

-- Flow 1:

Average throughput: 266.50 Mbit/s

95th percentile per-packet one-way delay: 282.748 ms

Loss rate: 4.27%

-- Flow 2:

Average throughput: 224.19 Mbit/s

95th percentile per-packet one-way delay: 231.448 ms

Loss rate: 2.64%

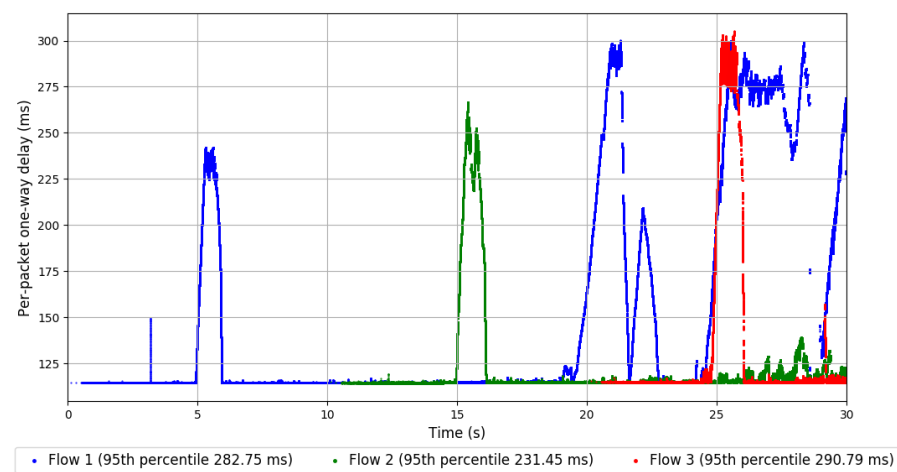
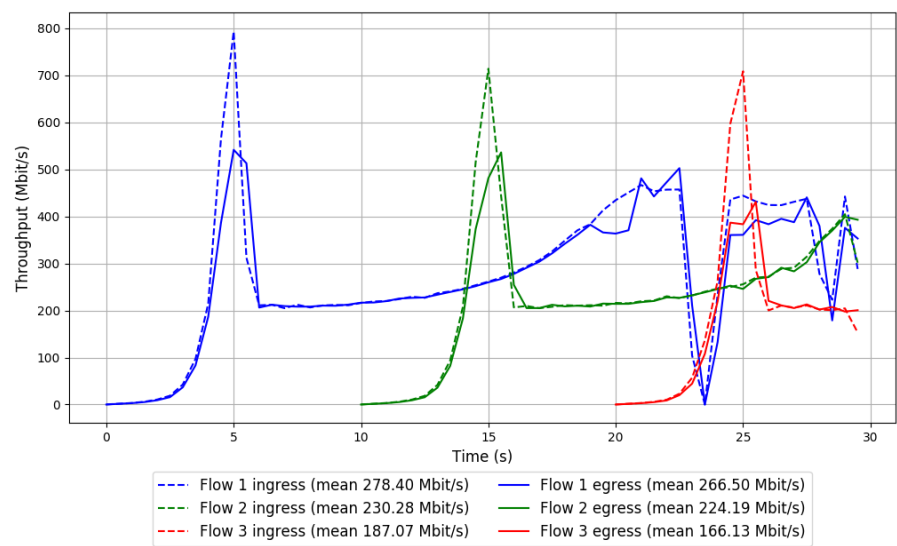
-- Flow 3:

Average throughput: 166.13 Mbit/s

95th percentile per-packet one-way delay: 290.785 ms

Loss rate: 11.20%

Run 10: Report of Vivace-loss — Data Link

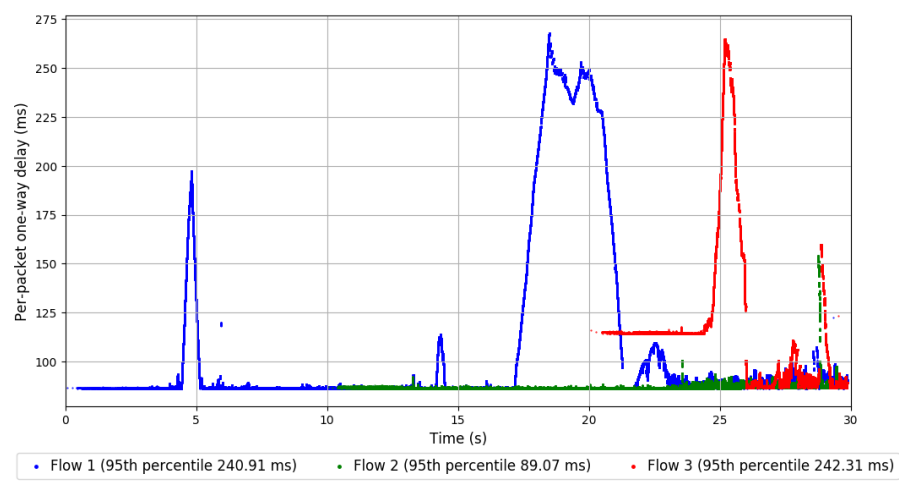
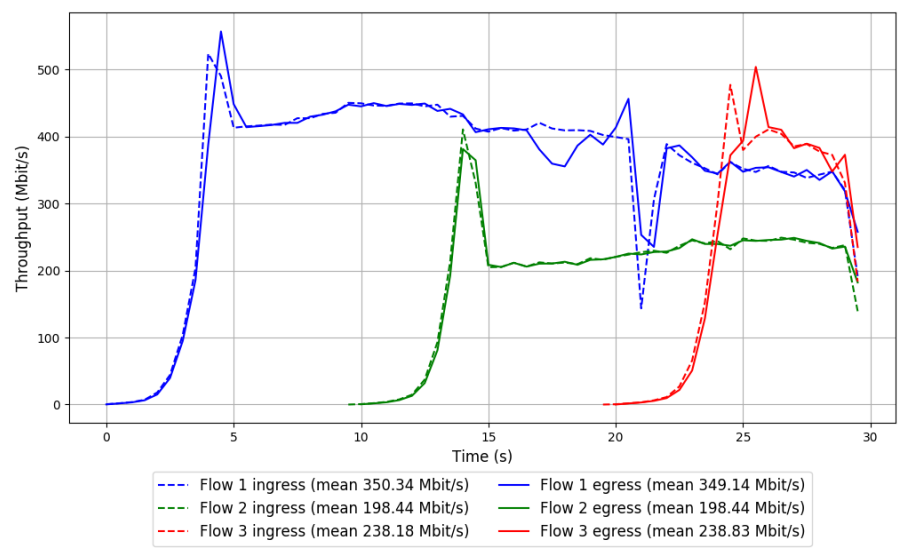


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-13 22:09:52
End at: 2018-02-13 22:10:22

# Below is generated by plot.py at 2018-02-14 05:01:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 559.79 Mbit/s
95th percentile per-packet one-way delay: 235.524 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 349.14 Mbit/s
95th percentile per-packet one-way delay: 240.913 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 198.44 Mbit/s
95th percentile per-packet one-way delay: 89.072 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 238.83 Mbit/s
95th percentile per-packet one-way delay: 242.312 ms
Loss rate: 0.00%
```

Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-13 22:28:13

End at: 2018-02-13 22:28:43

Below is generated by plot.py at 2018-02-14 05:03:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 615.69 Mbit/s

95th percentile per-packet one-way delay: 264.944 ms

Loss rate: 1.97%

-- Flow 1:

Average throughput: 346.80 Mbit/s

95th percentile per-packet one-way delay: 266.331 ms

Loss rate: 2.79%

-- Flow 2:

Average throughput: 325.58 Mbit/s

95th percentile per-packet one-way delay: 218.332 ms

Loss rate: 0.58%

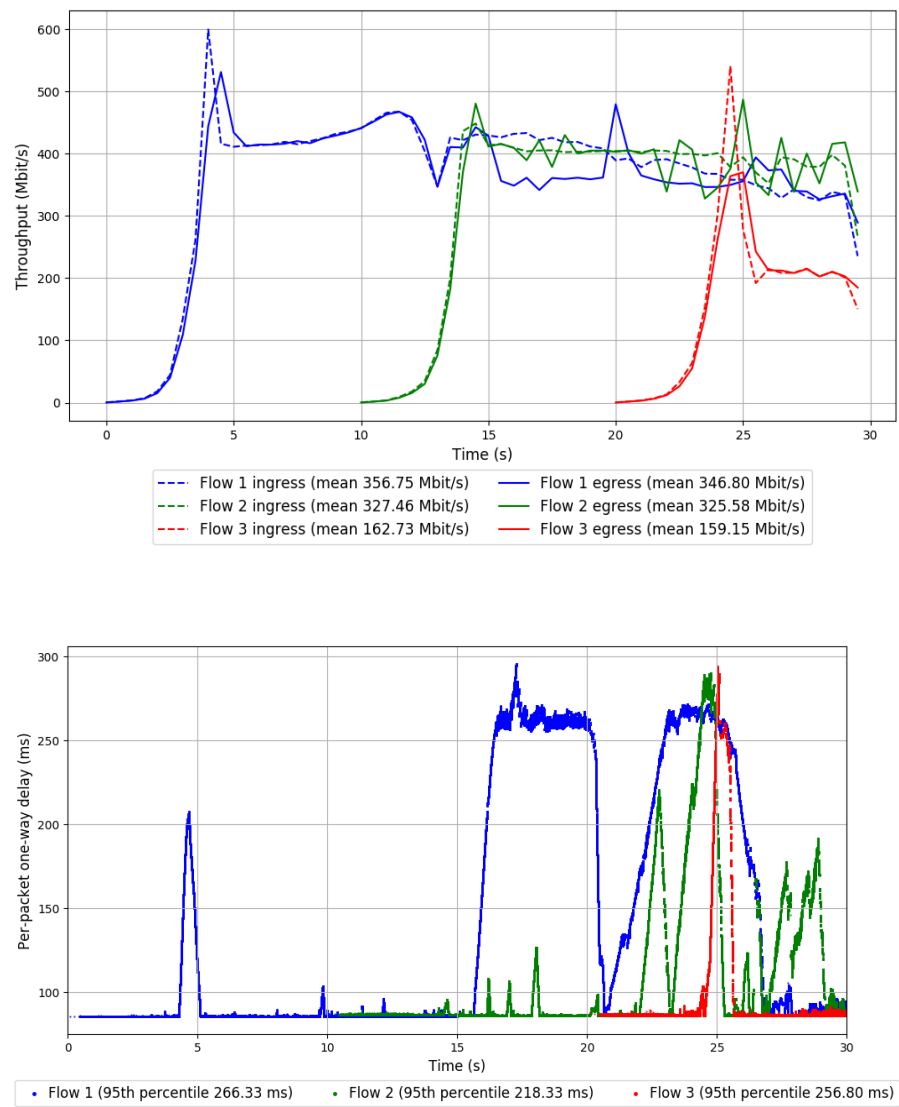
-- Flow 3:

Average throughput: 159.15 Mbit/s

95th percentile per-packet one-way delay: 256.799 ms

Loss rate: 2.21%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-13 22:46:38

End at: 2018-02-13 22:47:08

Below is generated by plot.py at 2018-02-14 05:03:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 531.64 Mbit/s

95th percentile per-packet one-way delay: 241.815 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 351.16 Mbit/s

95th percentile per-packet one-way delay: 253.205 ms

Loss rate: 1.50%

-- Flow 2:

Average throughput: 197.13 Mbit/s

95th percentile per-packet one-way delay: 117.606 ms

Loss rate: 0.30%

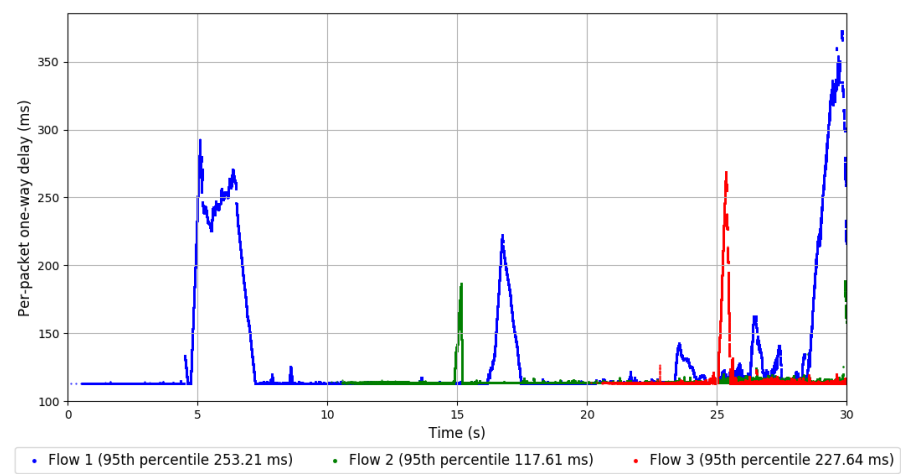
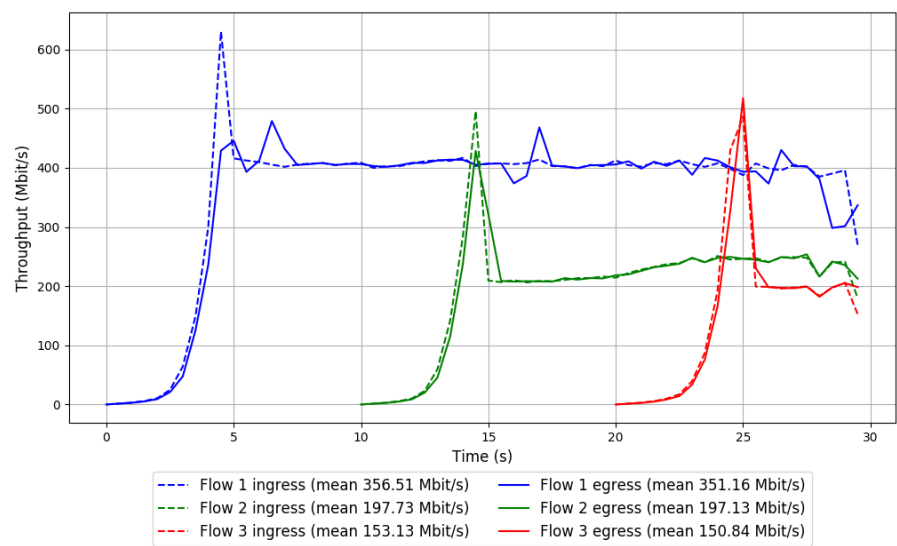
-- Flow 3:

Average throughput: 150.84 Mbit/s

95th percentile per-packet one-way delay: 227.636 ms

Loss rate: 1.50%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-13 23:05:16

End at: 2018-02-13 23:05:46

Below is generated by plot.py at 2018-02-14 05:04:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 615.54 Mbit/s

95th percentile per-packet one-way delay: 210.826 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 369.60 Mbit/s

95th percentile per-packet one-way delay: 216.360 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 295.56 Mbit/s

95th percentile per-packet one-way delay: 203.150 ms

Loss rate: 0.00%

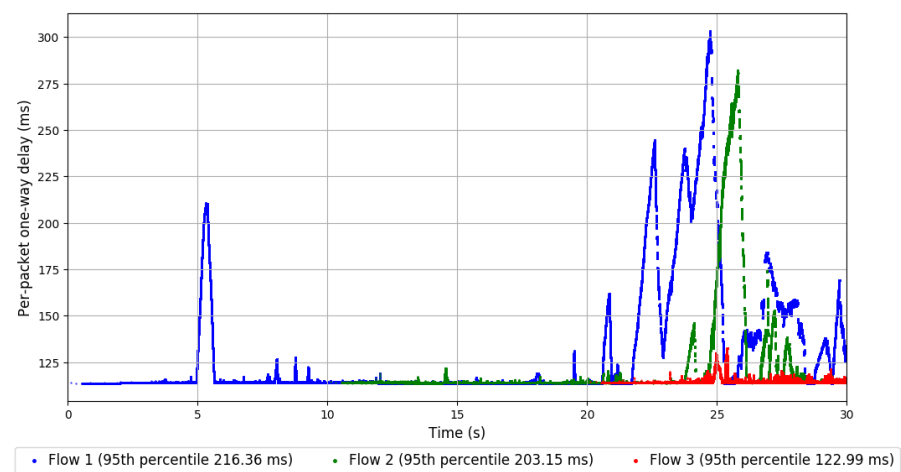
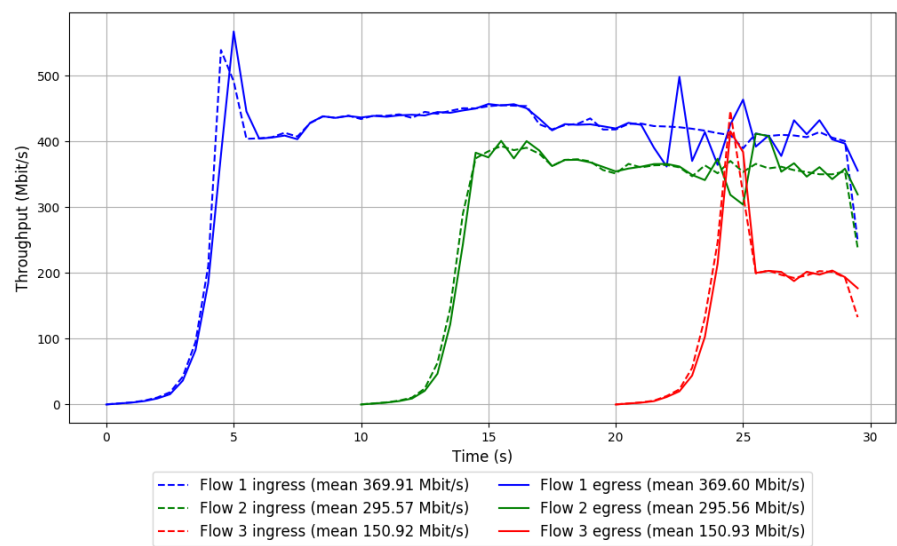
-- Flow 3:

Average throughput: 150.93 Mbit/s

95th percentile per-packet one-way delay: 122.991 ms

Loss rate: 0.00%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

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

End at: 2018-02-13 23:24:46

Below is generated by plot.py at 2018-02-14 05:04:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 560.79 Mbit/s

95th percentile per-packet one-way delay: 216.298 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 349.90 Mbit/s

95th percentile per-packet one-way delay: 268.422 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 198.04 Mbit/s

95th percentile per-packet one-way delay: 127.372 ms

Loss rate: 0.00%

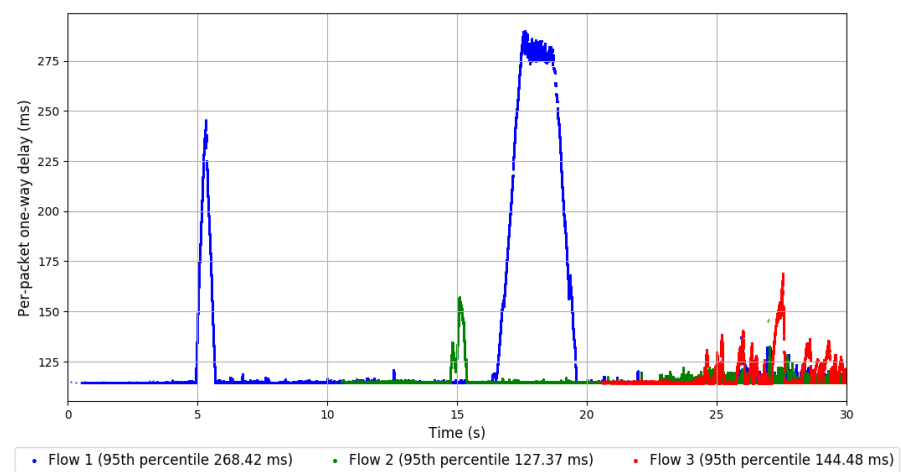
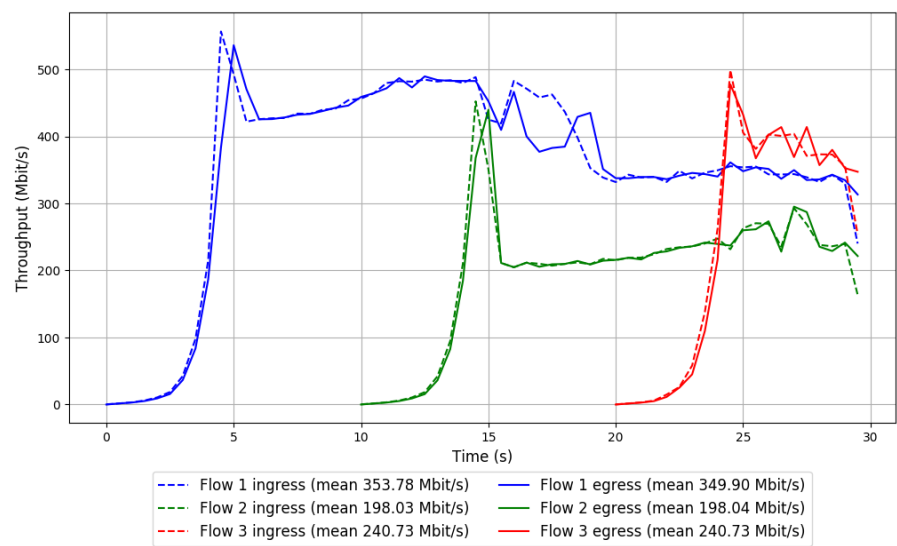
-- Flow 3:

Average throughput: 240.73 Mbit/s

95th percentile per-packet one-way delay: 144.484 ms

Loss rate: 0.00%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-13 23:43:07

End at: 2018-02-13 23:43:37

Below is generated by plot.py at 2018-02-14 05:06:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 634.88 Mbit/s

95th percentile per-packet one-way delay: 284.795 ms

Loss rate: 1.38%

-- Flow 1:

Average throughput: 342.64 Mbit/s

95th percentile per-packet one-way delay: 254.892 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 326.63 Mbit/s

95th percentile per-packet one-way delay: 298.914 ms

Loss rate: 2.83%

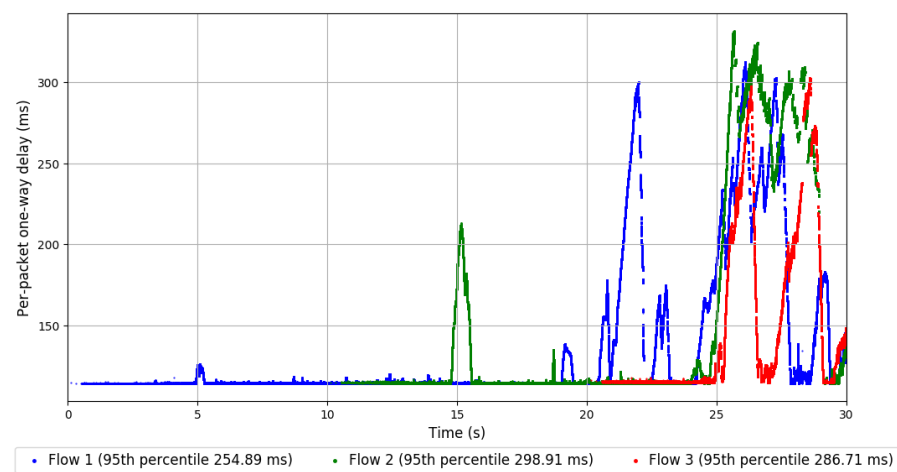
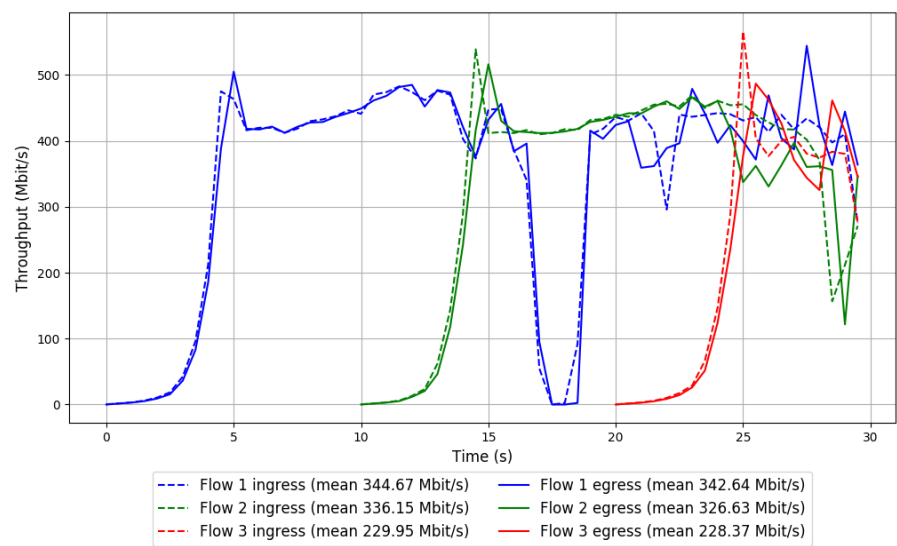
-- Flow 3:

Average throughput: 228.37 Mbit/s

95th percentile per-packet one-way delay: 286.709 ms

Loss rate: 0.70%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-14 00:02:25

End at: 2018-02-14 00:02:55

Below is generated by plot.py at 2018-02-14 05:06:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 591.06 Mbit/s

95th percentile per-packet one-way delay: 213.238 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 365.65 Mbit/s

95th percentile per-packet one-way delay: 88.938 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 285.99 Mbit/s

95th percentile per-packet one-way delay: 244.229 ms

Loss rate: 0.46%

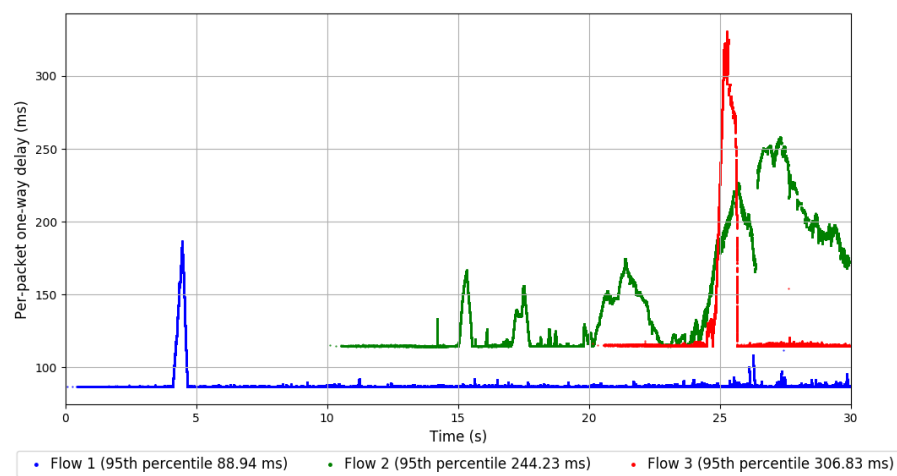
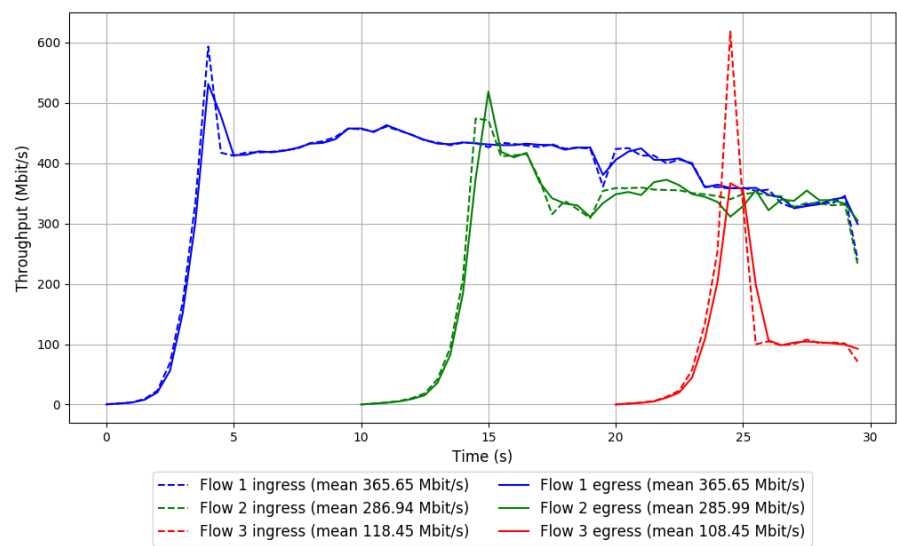
-- Flow 3:

Average throughput: 108.45 Mbit/s

95th percentile per-packet one-way delay: 306.833 ms

Loss rate: 8.68%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-14 00:20:59

End at: 2018-02-14 00:21:29

Below is generated by plot.py at 2018-02-14 05:07:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 604.60 Mbit/s

95th percentile per-packet one-way delay: 197.376 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 313.42 Mbit/s

95th percentile per-packet one-way delay: 116.122 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 329.49 Mbit/s

95th percentile per-packet one-way delay: 257.874 ms

Loss rate: 0.42%

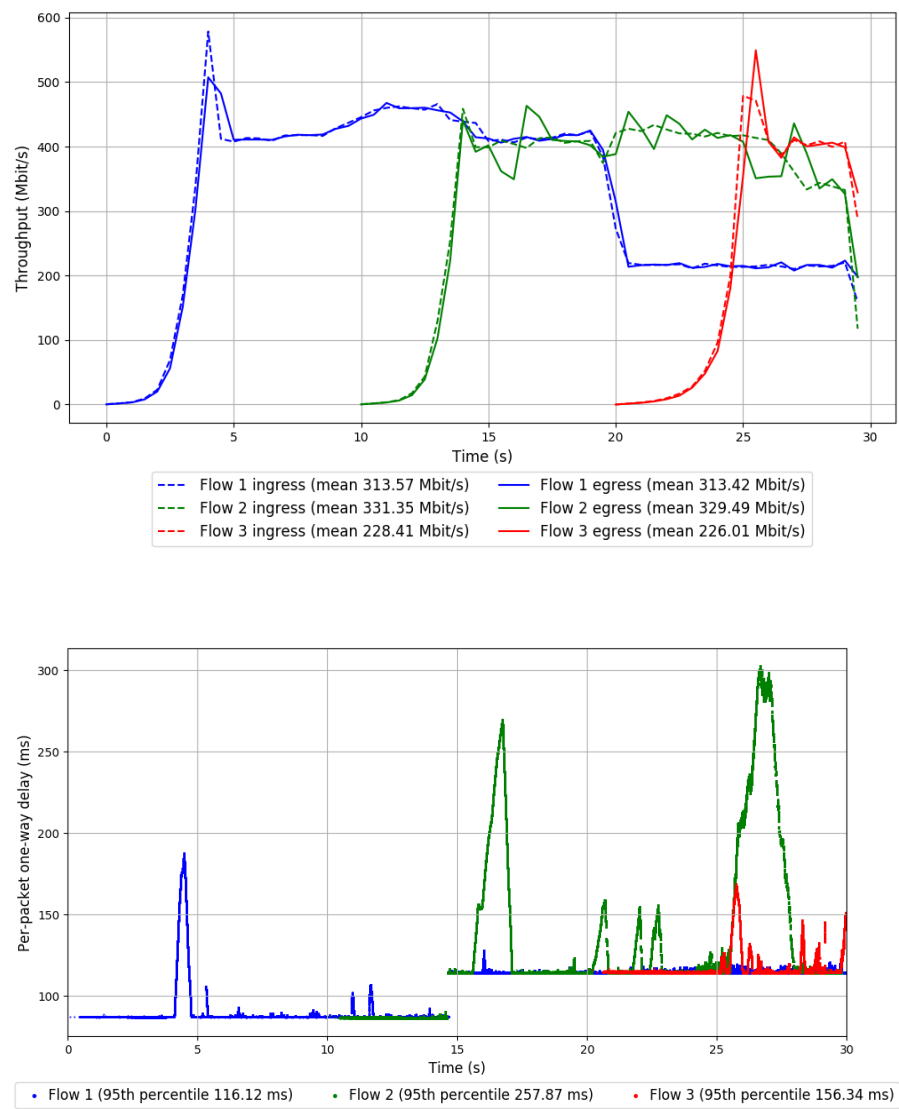
-- Flow 3:

Average throughput: 226.01 Mbit/s

95th percentile per-packet one-way delay: 156.338 ms

Loss rate: 1.33%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-14 00:39:58

End at: 2018-02-14 00:40:28

Below is generated by plot.py at 2018-02-14 05:07:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 503.12 Mbit/s

95th percentile per-packet one-way delay: 162.253 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 323.35 Mbit/s

95th percentile per-packet one-way delay: 201.558 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 202.56 Mbit/s

95th percentile per-packet one-way delay: 116.203 ms

Loss rate: 0.00%

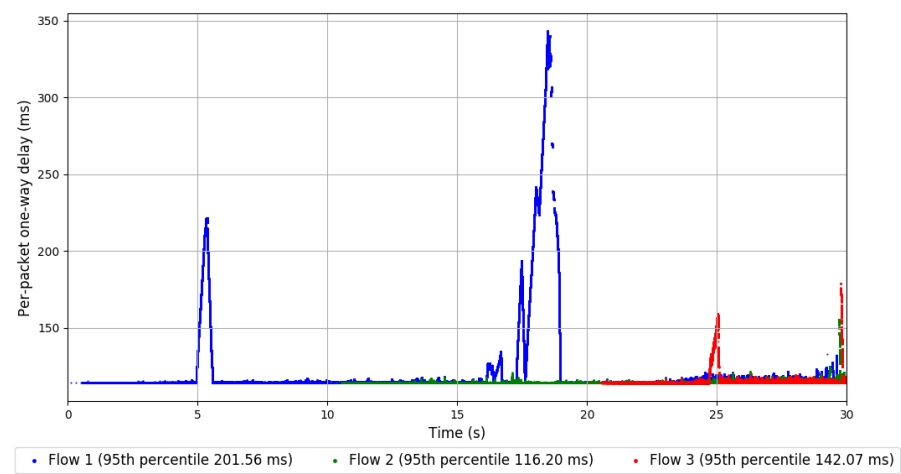
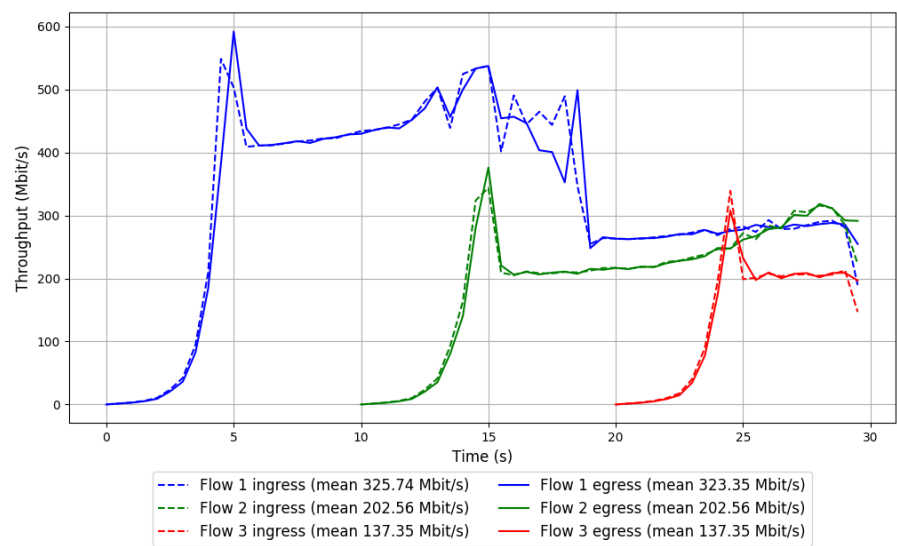
-- Flow 3:

Average throughput: 137.35 Mbit/s

95th percentile per-packet one-way delay: 142.067 ms

Loss rate: 0.00%

Run 9: Report of Vivace-LTE — Data Link



```
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-14 00:59:18
End at: 2018-02-14 00:59:48

# Below is generated by plot.py at 2018-02-14 05:07:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 614.07 Mbit/s
95th percentile per-packet one-way delay: 292.816 ms
Loss rate: 1.80%
-- Flow 1:
Average throughput: 332.18 Mbit/s
95th percentile per-packet one-way delay: 293.634 ms
Loss rate: 1.53%
-- Flow 2:
Average throughput: 305.00 Mbit/s
95th percentile per-packet one-way delay: 304.092 ms
Loss rate: 2.46%
-- Flow 3:
Average throughput: 238.04 Mbit/s
95th percentile per-packet one-way delay: 231.375 ms
Loss rate: 1.20%
```

Run 10: Report of Vivace-LTE — Data Link

