

Pantheon Report

Generated at 2018-02-21 03:34:31 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

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

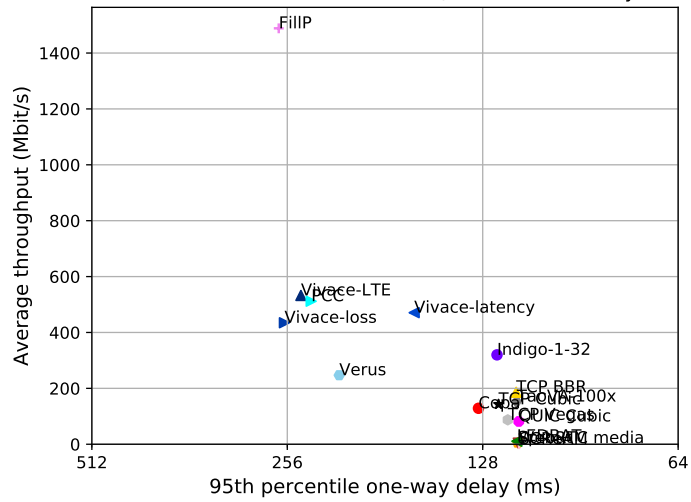
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

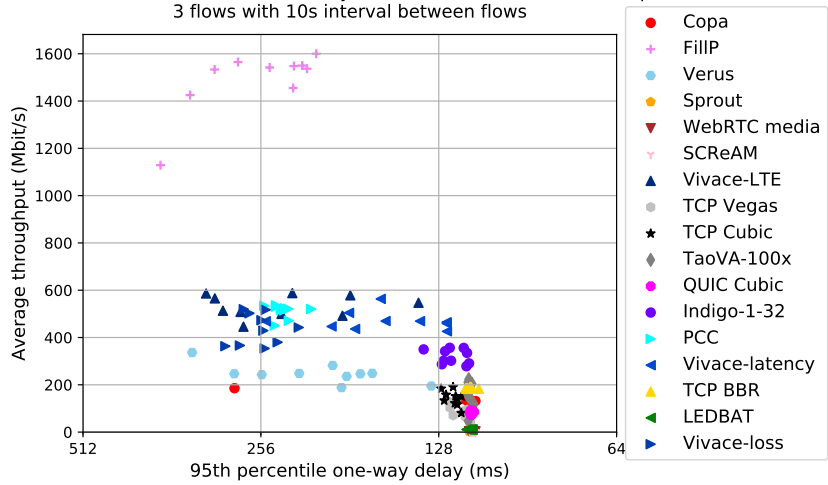
Git summary:

```
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	95.30	93.51	86.34	112.89	113.75	114.82	0.00	0.00	0.00
TCP Cubic	10	81.45	72.05	41.28	120.40	120.79	120.29	0.04	0.03	0.16
LEDBAT	10	7.09	4.43	2.26	113.48	113.27	113.02	0.00	0.00	0.00
PCC	10	438.46	74.66	72.18	236.64	225.01	221.55	1.93	1.43	2.01
QUIC Cubic	10	46.53	41.19	24.18	112.18	112.10	111.09	0.00	0.01	0.01
SCReAM	10	0.21	0.20	0.21	111.91	111.90	111.65	0.00	0.00	0.00
WebRTC media	10	2.10	1.31	0.48	111.82	112.21	112.51	0.00	0.00	0.01
Sprout	10	2.58	2.54	2.02	113.07	113.09	112.89	0.00	0.00	0.00
TaoVA-100x	10	84.89	65.16	78.67	113.00	113.39	113.57	0.00	0.00	0.01
TCP Vegas	10	48.91	40.47	34.92	116.20	117.27	117.96	0.01	0.12	0.27
Verus	10	159.48	104.58	58.19	202.91	210.68	221.34	1.11	1.78	2.13
Copa	10	69.22	60.35	58.17	112.12	125.74	136.39	0.23	1.05	1.88
FillP	10	778.81	752.50	631.13	252.25	260.88	256.93	7.59	7.31	11.18
Indigo-1-32	10	169.67	152.40	153.84	117.97	121.18	130.96	0.01	0.01	0.01
Vivace-latency	10	287.99	190.73	170.44	161.65	133.54	180.44	0.55	0.25	0.43
Vivace-loss	10	260.25	191.13	144.49	260.68	190.95	256.45	2.93	1.35	8.28
Vivace-LTE	10	293.36	276.79	167.58	208.95	232.14	206.84	1.07	1.21	1.86

Run 1: Statistics of TCP BBR

Start at: 2018-02-20 20:31:05

End at: 2018-02-20 20:31:35

Below is generated by plot.py at 2018-02-21 01:49:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 183.66 Mbit/s

95th percentile per-packet one-way delay: 109.513 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 94.51 Mbit/s

95th percentile per-packet one-way delay: 109.328 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 91.63 Mbit/s

95th percentile per-packet one-way delay: 109.664 ms

Loss rate: 0.00%

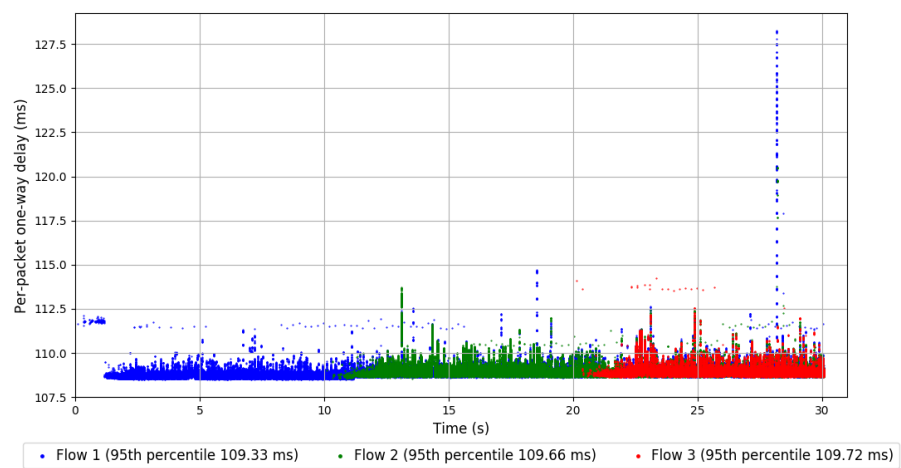
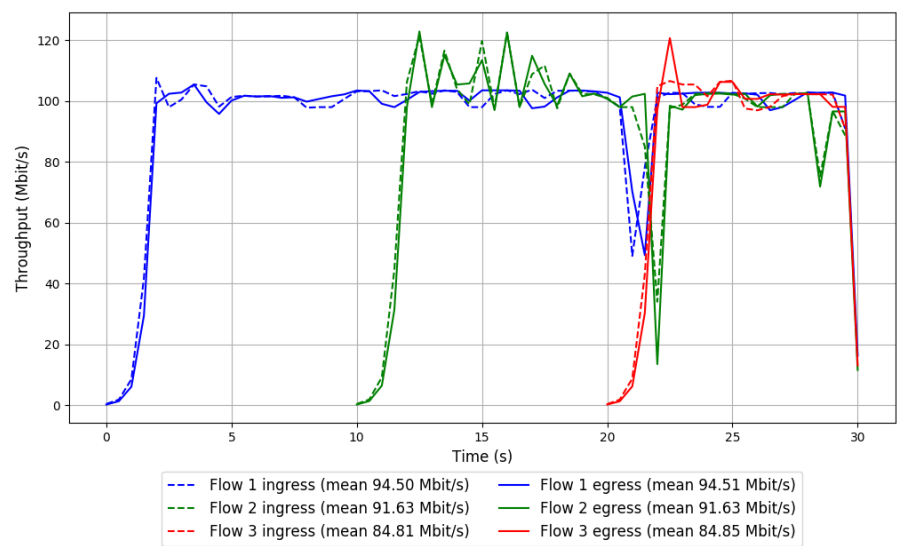
-- Flow 3:

Average throughput: 84.85 Mbit/s

95th percentile per-packet one-way delay: 109.718 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-20 20:50:46

End at: 2018-02-20 20:51:16

Below is generated by plot.py at 2018-02-21 01:49:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.30 Mbit/s

95th percentile per-packet one-way delay: 112.706 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 99.17 Mbit/s

95th percentile per-packet one-way delay: 112.775 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 95.08 Mbit/s

95th percentile per-packet one-way delay: 113.290 ms

Loss rate: 0.00%

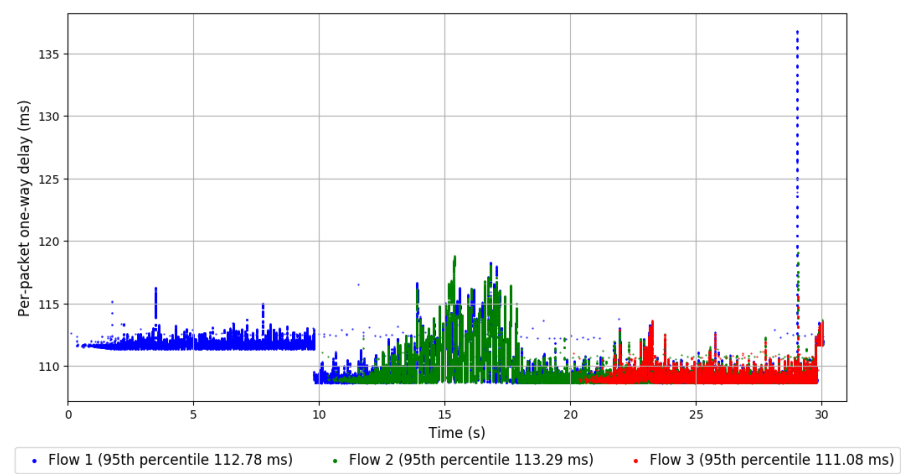
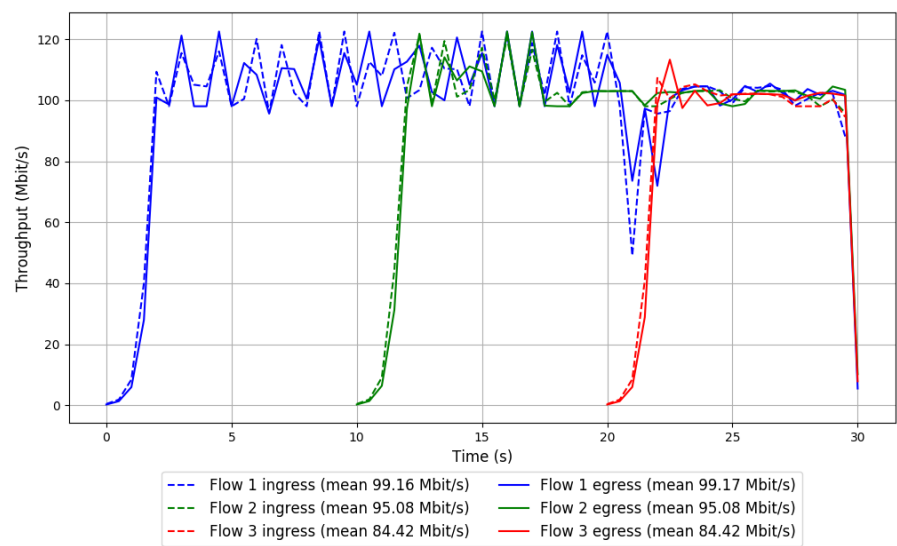
-- Flow 3:

Average throughput: 84.42 Mbit/s

95th percentile per-packet one-way delay: 111.084 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-20 21:10:18

End at: 2018-02-20 21:10:48

Below is generated by plot.py at 2018-02-21 01:49:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.30 Mbit/s

95th percentile per-packet one-way delay: 115.096 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 94.62 Mbit/s

95th percentile per-packet one-way delay: 113.677 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 94.38 Mbit/s

95th percentile per-packet one-way delay: 114.695 ms

Loss rate: 0.01%

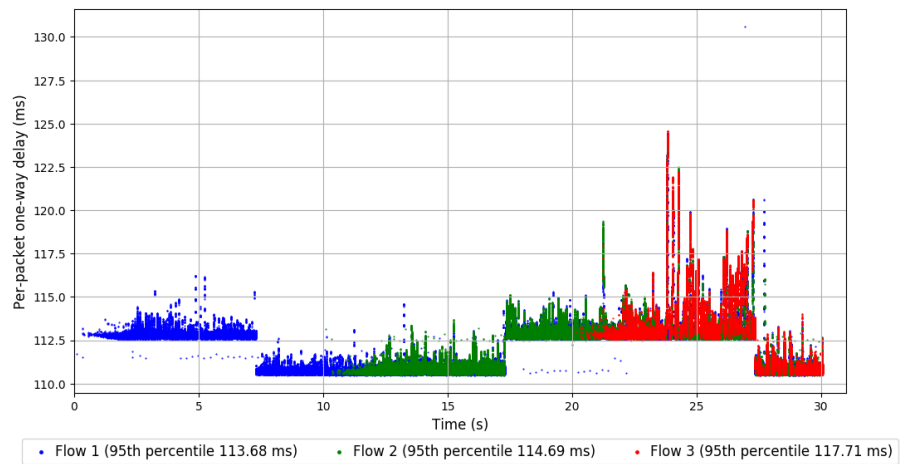
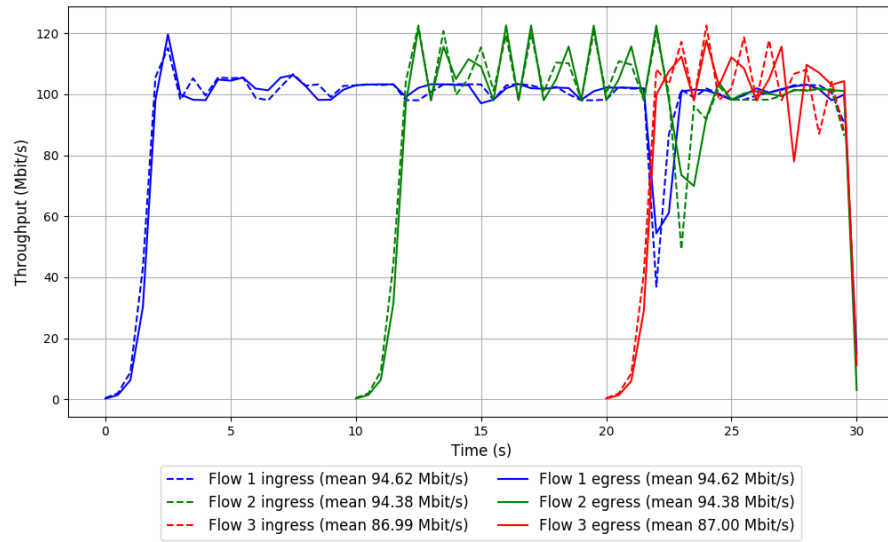
-- Flow 3:

Average throughput: 87.00 Mbit/s

95th percentile per-packet one-way delay: 117.711 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-20 21:29:45

End at: 2018-02-20 21:30:15

Below is generated by plot.py at 2018-02-21 01:49:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.97 Mbit/s

95th percentile per-packet one-way delay: 113.151 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 95.66 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.43 Mbit/s

95th percentile per-packet one-way delay: 113.196 ms

Loss rate: 0.00%

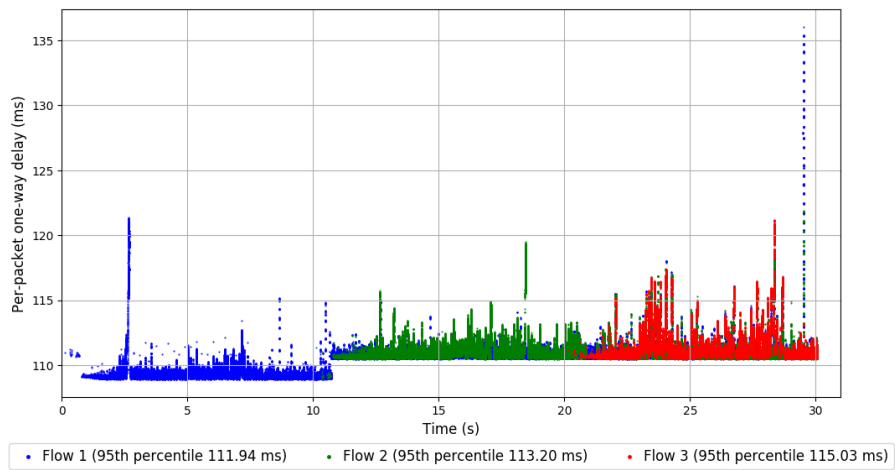
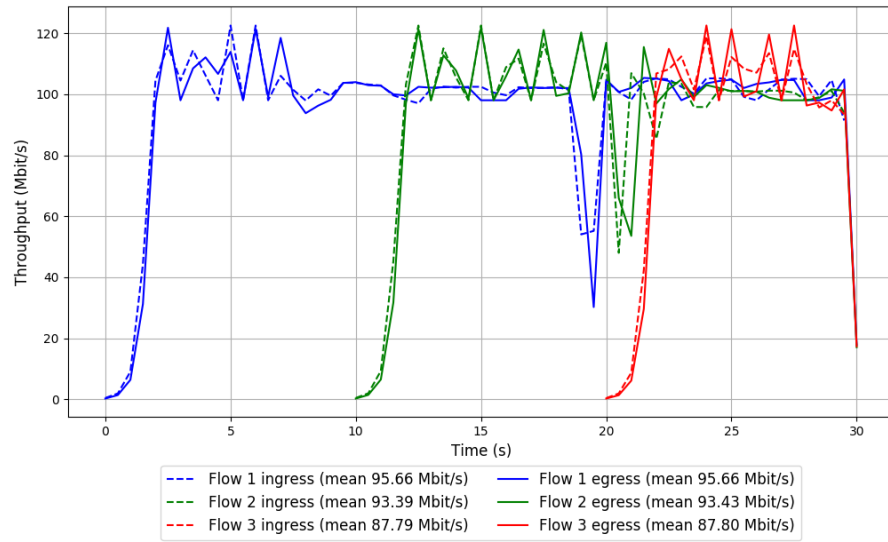
-- Flow 3:

Average throughput: 87.80 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-20 21:49:26

End at: 2018-02-20 21:49:56

Below is generated by plot.py at 2018-02-21 01:49:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.93 Mbit/s

95th percentile per-packet one-way delay: 113.301 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 97.74 Mbit/s

95th percentile per-packet one-way delay: 111.975 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 95.89 Mbit/s

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

Loss rate: 0.00%

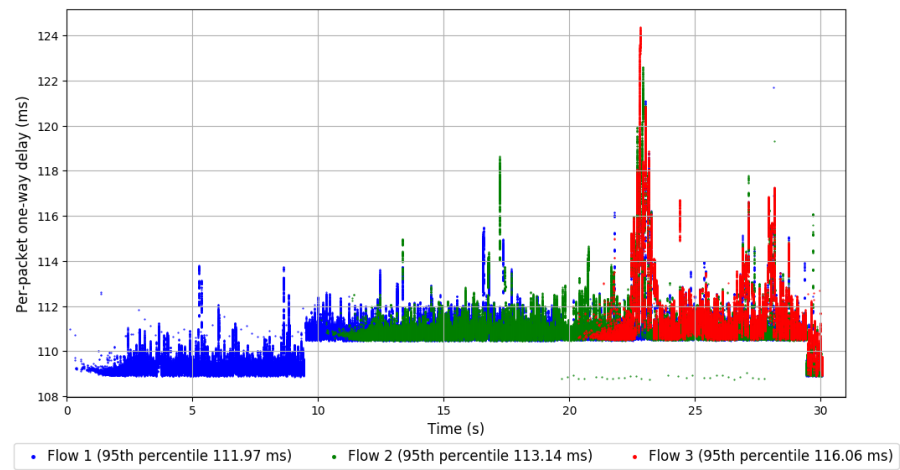
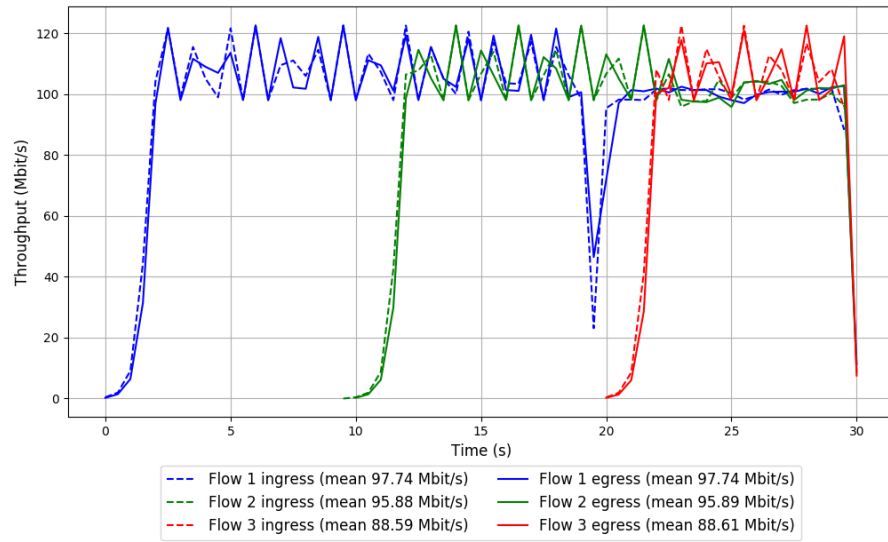
-- Flow 3:

Average throughput: 88.61 Mbit/s

95th percentile per-packet one-way delay: 116.062 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-20 22:08:55

End at: 2018-02-20 22:09:25

Below is generated by plot.py at 2018-02-21 01:49:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 183.07 Mbit/s

95th percentile per-packet one-way delay: 113.695 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 92.36 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 92.43 Mbit/s

95th percentile per-packet one-way delay: 113.420 ms

Loss rate: 0.00%

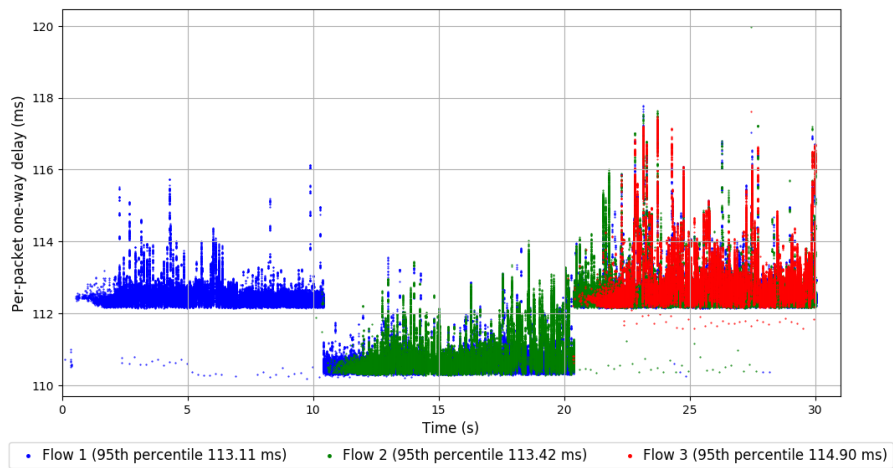
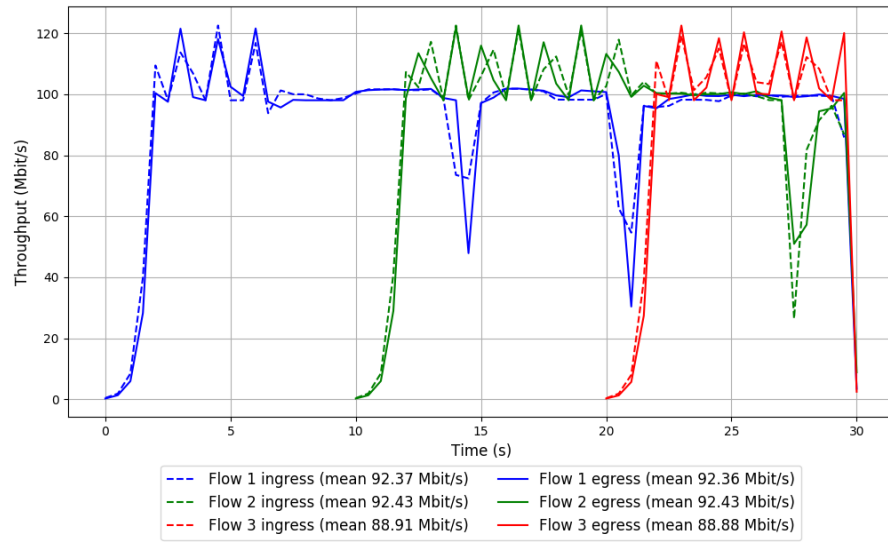
-- Flow 3:

Average throughput: 88.88 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-20 22:28:39

End at: 2018-02-20 22:29:09

Below is generated by plot.py at 2018-02-21 01:49:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.45 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 95.20 Mbit/s

95th percentile per-packet one-way delay: 113.568 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 95.99 Mbit/s

95th percentile per-packet one-way delay: 115.294 ms

Loss rate: 0.00%

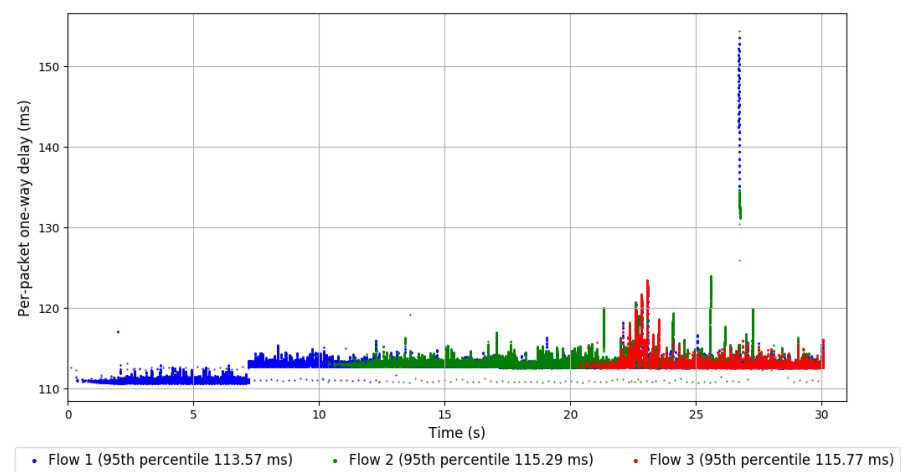
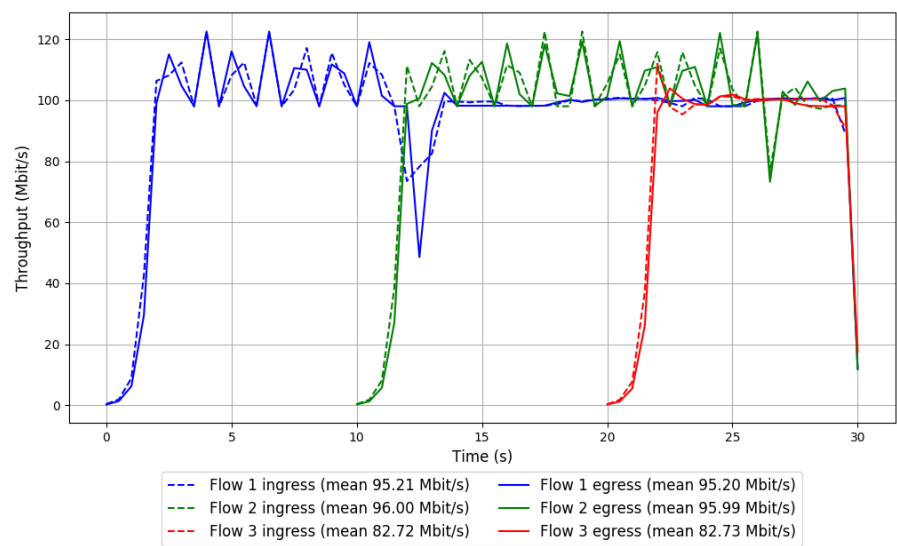
-- Flow 3:

Average throughput: 82.73 Mbit/s

95th percentile per-packet one-way delay: 115.768 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-20 22:48:01

End at: 2018-02-20 22:48:31

Below is generated by plot.py at 2018-02-21 01:49:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.23 Mbit/s

95th percentile per-packet one-way delay: 115.232 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 94.13 Mbit/s

95th percentile per-packet one-way delay: 114.211 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 92.48 Mbit/s

95th percentile per-packet one-way delay: 115.455 ms

Loss rate: 0.01%

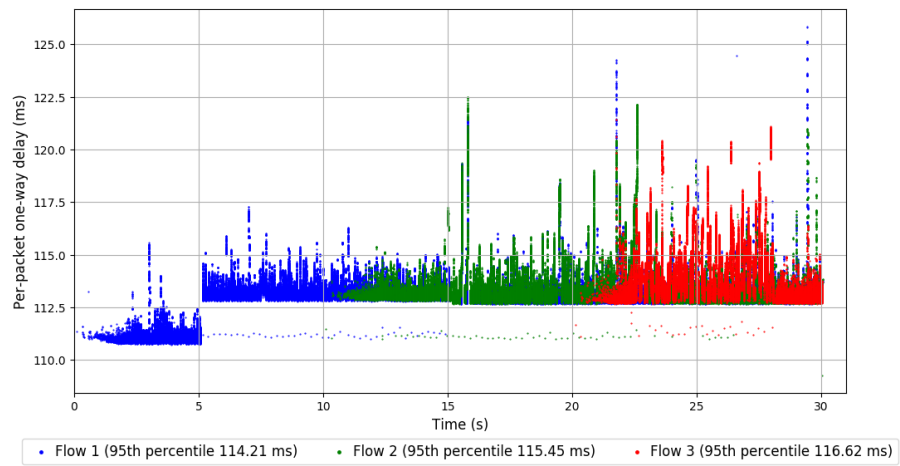
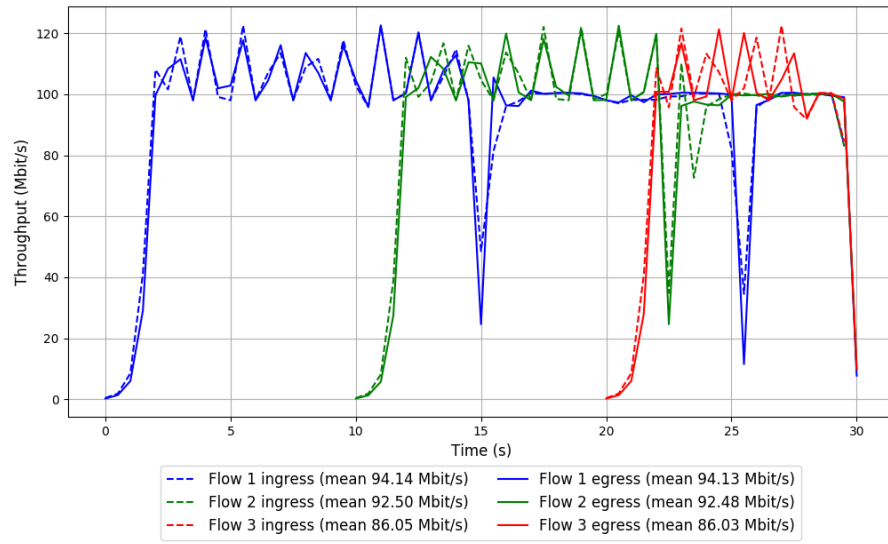
-- Flow 3:

Average throughput: 86.03 Mbit/s

95th percentile per-packet one-way delay: 116.618 ms

Loss rate: 0.02%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-20 23:07:19

End at: 2018-02-20 23:07:49

Below is generated by plot.py at 2018-02-21 01:52:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 185.49 Mbit/s

95th percentile per-packet one-way delay: 115.094 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 95.17 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.63 Mbit/s

95th percentile per-packet one-way delay: 115.020 ms

Loss rate: 0.00%

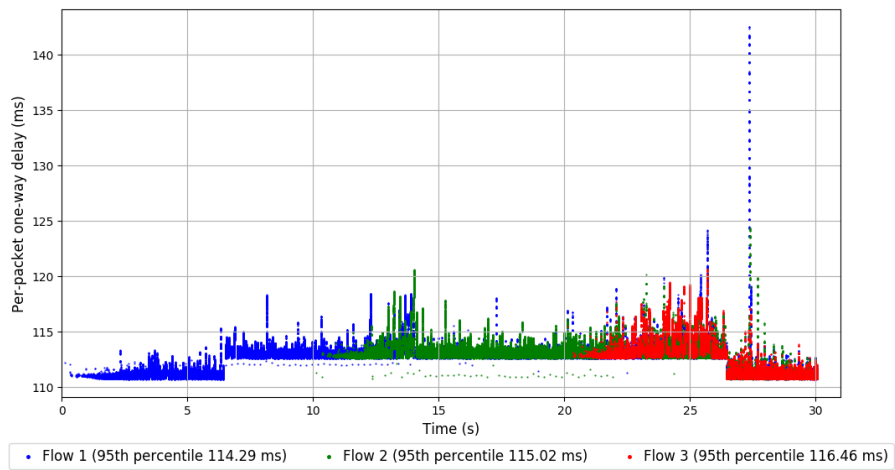
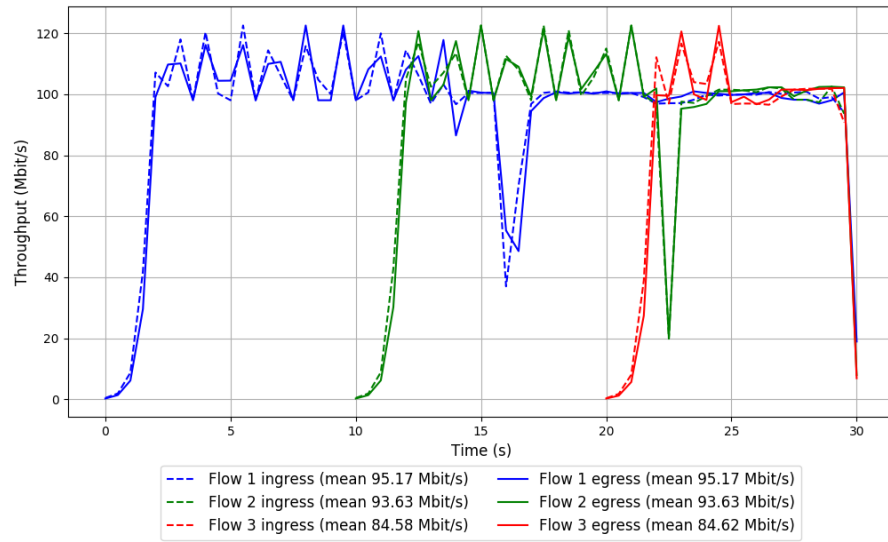
-- Flow 3:

Average throughput: 84.62 Mbit/s

95th percentile per-packet one-way delay: 116.456 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-20 23:27:00

End at: 2018-02-20 23:27:30

Below is generated by plot.py at 2018-02-21 01:52:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 183.70 Mbit/s

95th percentile per-packet one-way delay: 114.361 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 94.45 Mbit/s

95th percentile per-packet one-way delay: 114.037 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 90.19 Mbit/s

95th percentile per-packet one-way delay: 114.335 ms

Loss rate: 0.00%

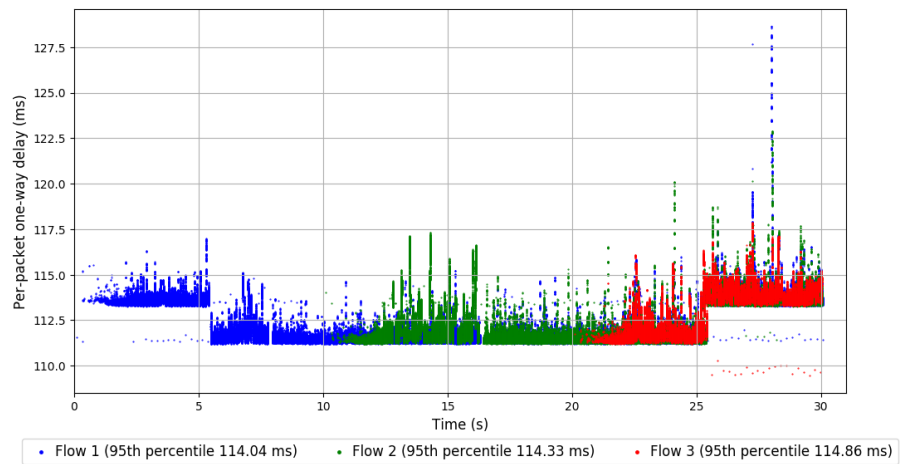
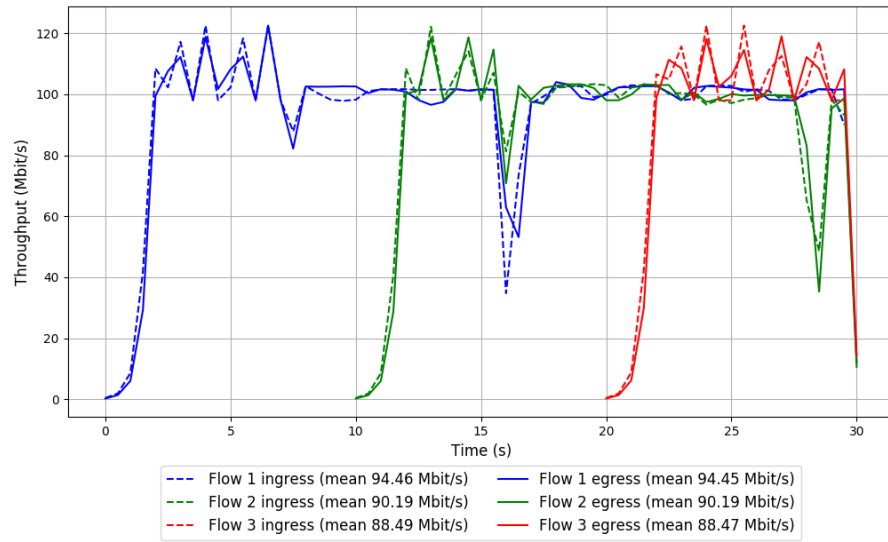
-- Flow 3:

Average throughput: 88.47 Mbit/s

95th percentile per-packet one-way delay: 114.855 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link

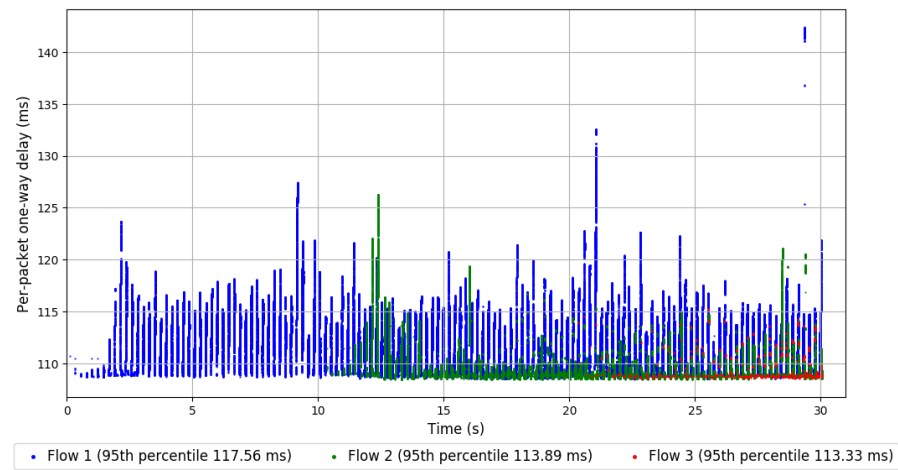
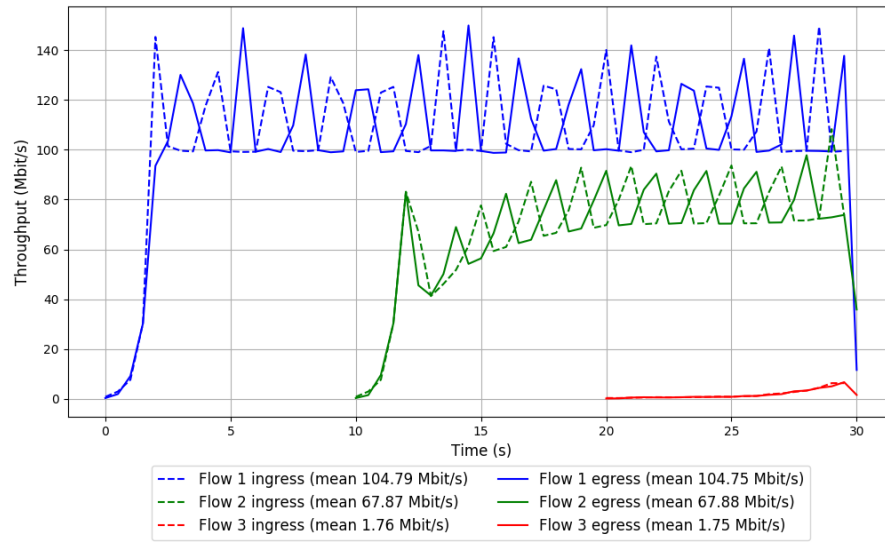


```
Run 1: Statistics of TCP Cubic

Start at: 2018-02-20 20:28:14
End at: 2018-02-20 20:28:44

# Below is generated by plot.py at 2018-02-21 01:52:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 150.34 Mbit/s
95th percentile per-packet one-way delay: 117.147 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 104.75 Mbit/s
95th percentile per-packet one-way delay: 117.563 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 67.88 Mbit/s
95th percentile per-packet one-way delay: 113.887 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.75 Mbit/s
95th percentile per-packet one-way delay: 113.330 ms
Loss rate: 0.55%
```

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-20 20:47:56

End at: 2018-02-20 20:48:26

Below is generated by plot.py at 2018-02-21 01:52:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.56 Mbit/s

95th percentile per-packet one-way delay: 119.026 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 73.02 Mbit/s

95th percentile per-packet one-way delay: 118.678 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.10 Mbit/s

95th percentile per-packet one-way delay: 119.063 ms

Loss rate: 0.03%

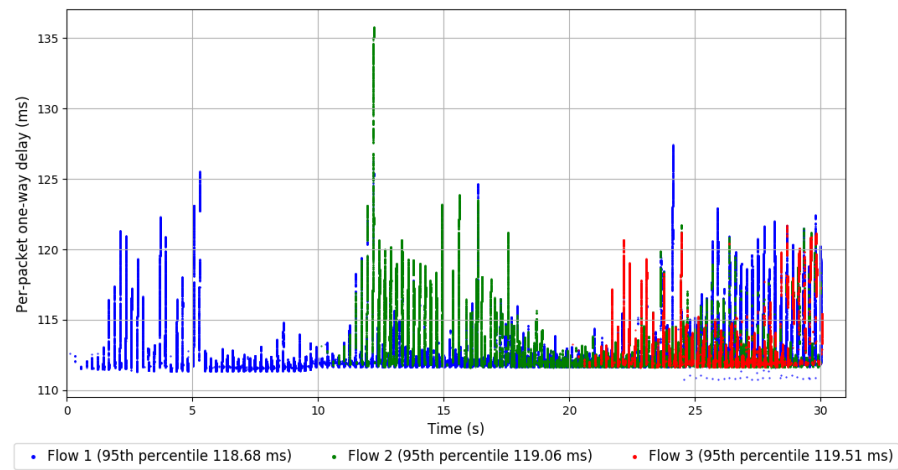
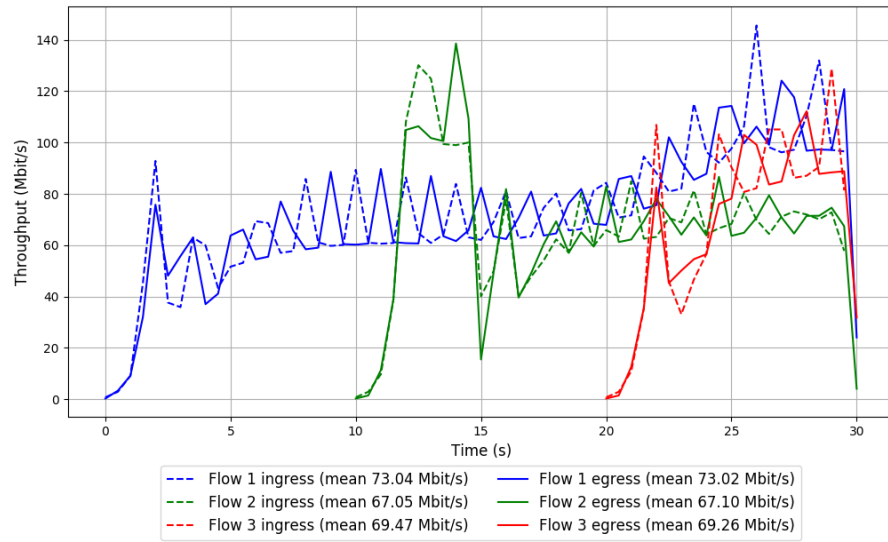
-- Flow 3:

Average throughput: 69.26 Mbit/s

95th percentile per-packet one-way delay: 119.510 ms

Loss rate: 0.32%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-20 21:07:33

End at: 2018-02-20 21:08:03

Below is generated by plot.py at 2018-02-21 01:52:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.10 Mbit/s

95th percentile per-packet one-way delay: 117.229 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 65.88 Mbit/s

95th percentile per-packet one-way delay: 117.649 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.90 Mbit/s

95th percentile per-packet one-way delay: 114.320 ms

Loss rate: 0.02%

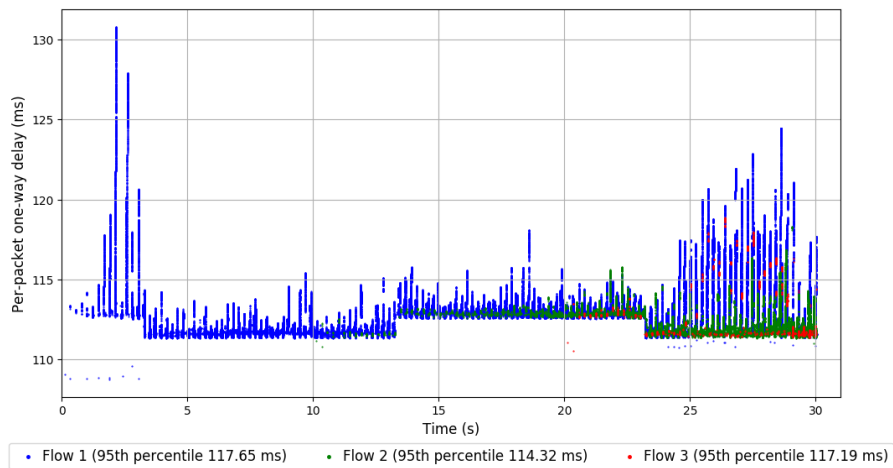
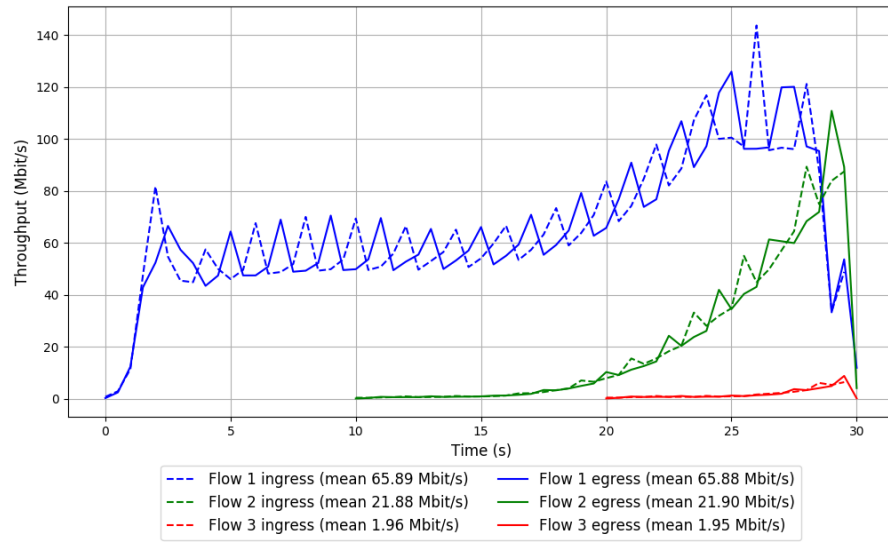
-- Flow 3:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 117.187 ms

Loss rate: 0.37%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-20 21:26:53

End at: 2018-02-20 21:27:23

Below is generated by plot.py at 2018-02-21 01:52:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 191.00 Mbit/s

95th percentile per-packet one-way delay: 121.033 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 104.49 Mbit/s

95th percentile per-packet one-way delay: 121.020 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 84.16 Mbit/s

95th percentile per-packet one-way delay: 120.227 ms

Loss rate: 0.00%

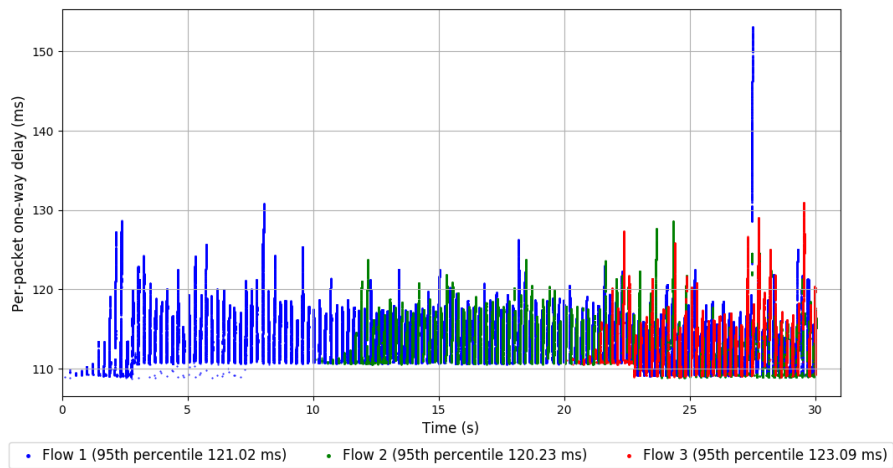
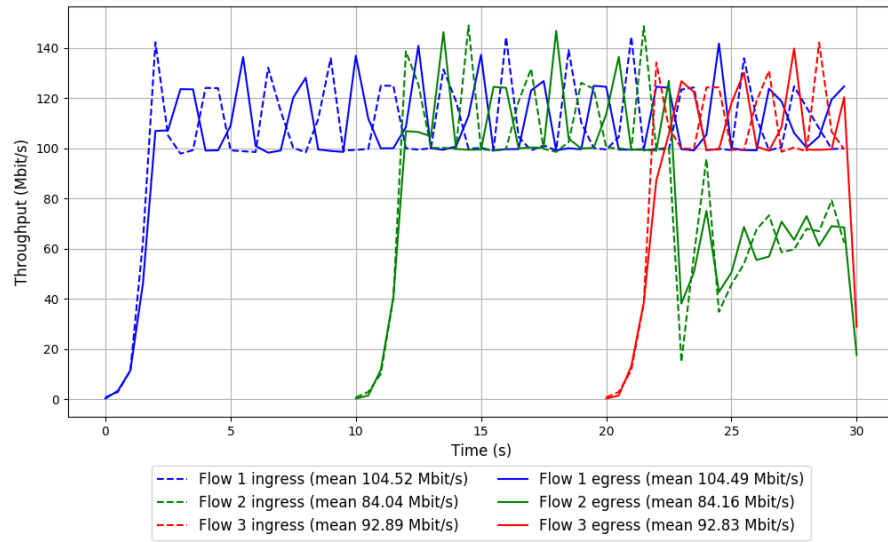
-- Flow 3:

Average throughput: 92.83 Mbit/s

95th percentile per-packet one-way delay: 123.094 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-20 21:46:37

End at: 2018-02-20 21:47:08

Below is generated by plot.py at 2018-02-21 01:52:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.59 Mbit/s

95th percentile per-packet one-way delay: 119.854 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 78.99 Mbit/s

95th percentile per-packet one-way delay: 119.568 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.71 Mbit/s

95th percentile per-packet one-way delay: 120.909 ms

Loss rate: 0.00%

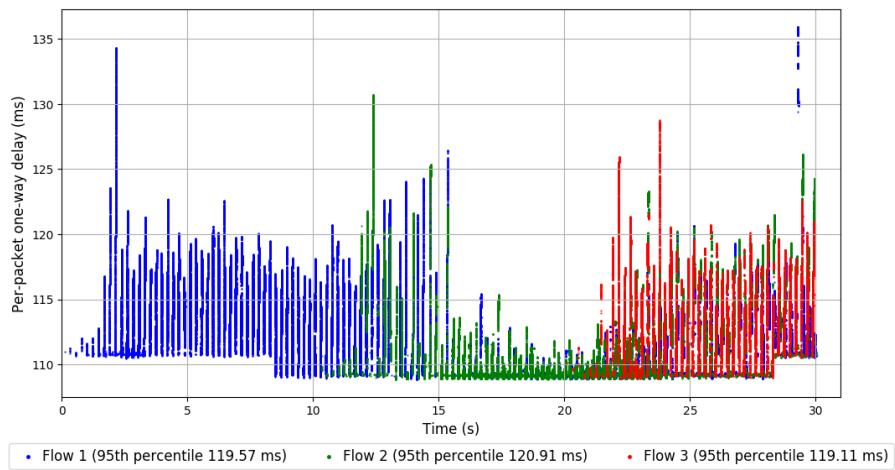
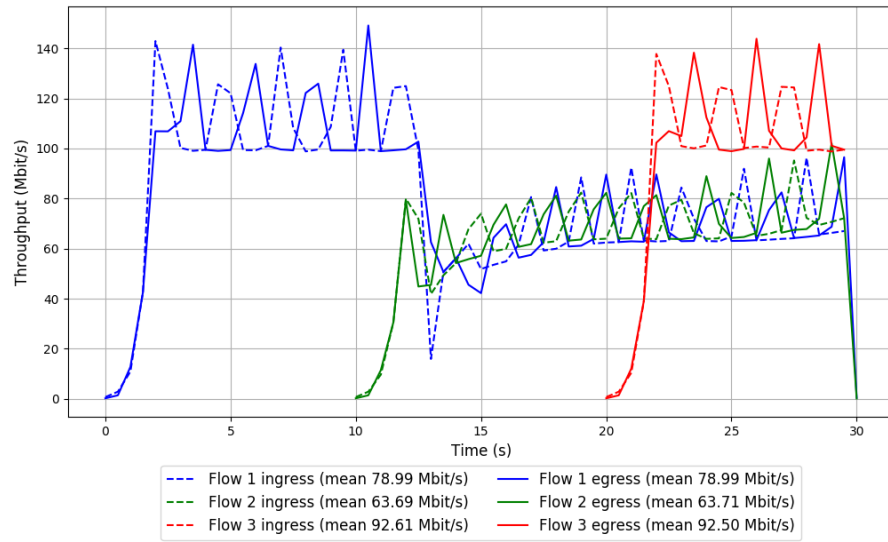
-- Flow 3:

Average throughput: 92.50 Mbit/s

95th percentile per-packet one-way delay: 119.114 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-20 22:06:06

End at: 2018-02-20 22:06:36

Below is generated by plot.py at 2018-02-21 01:52:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 116.62 Mbit/s

95th percentile per-packet one-way delay: 119.103 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.77 Mbit/s

95th percentile per-packet one-way delay: 119.869 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 62.47 Mbit/s

95th percentile per-packet one-way delay: 117.791 ms

Loss rate: 0.00%

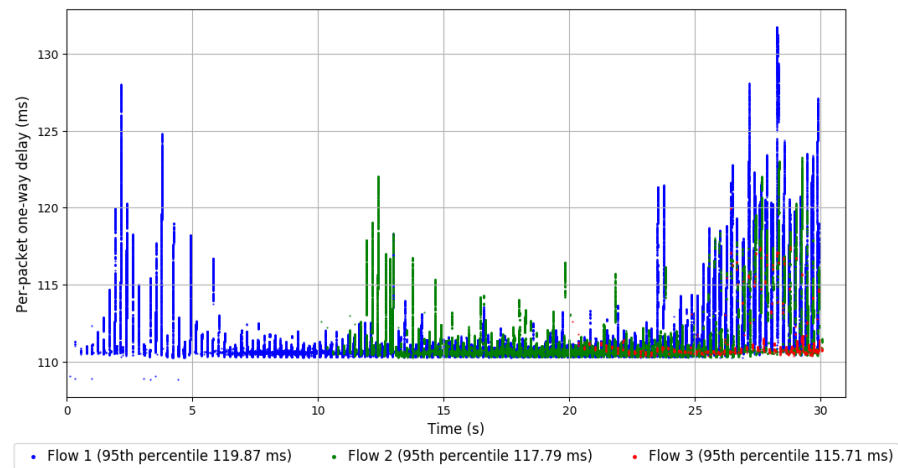
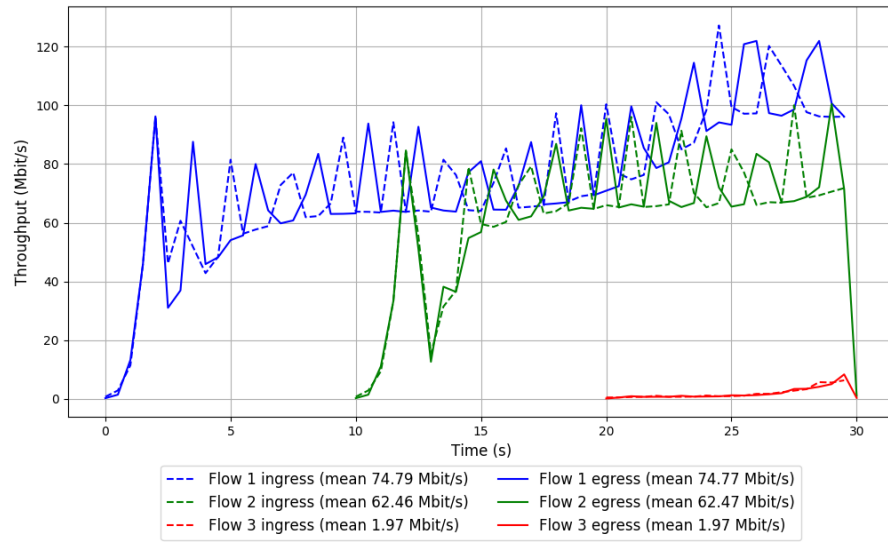
-- Flow 3:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 115.710 ms

Loss rate: 0.31%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-20 22:25:48

End at: 2018-02-20 22:26:18

Below is generated by plot.py at 2018-02-21 01:52:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 133.58 Mbit/s

95th percentile per-packet one-way delay: 125.320 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.96 Mbit/s

95th percentile per-packet one-way delay: 120.134 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 98.50 Mbit/s

95th percentile per-packet one-way delay: 127.772 ms

Loss rate: 0.00%

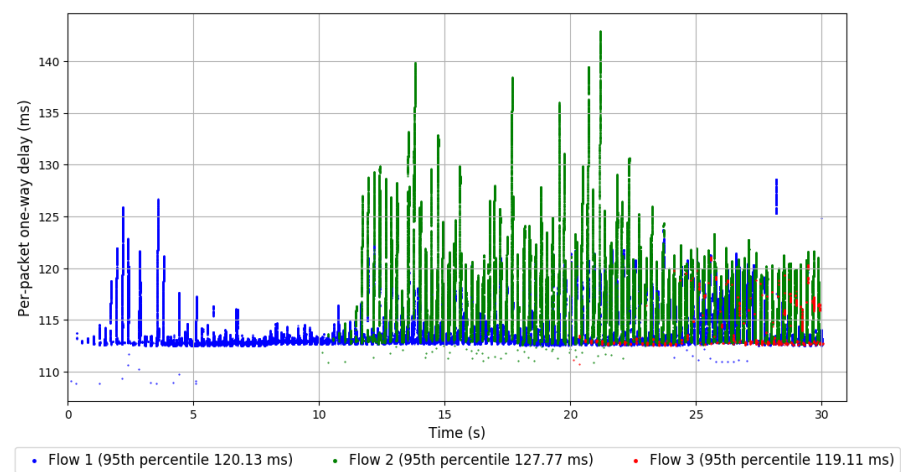
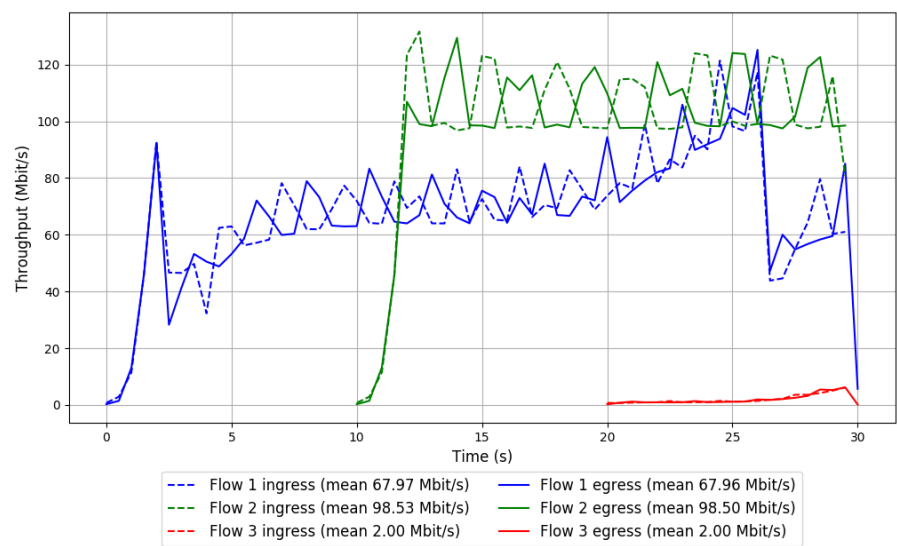
-- Flow 3:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 119.105 ms

Loss rate: 0.06%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-20 22:45:11

End at: 2018-02-20 22:45:41

Below is generated by plot.py at 2018-02-21 01:53:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.25 Mbit/s

95th percentile per-packet one-way delay: 120.190 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 67.87 Mbit/s

95th percentile per-packet one-way delay: 119.834 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 55.86 Mbit/s

95th percentile per-packet one-way delay: 120.838 ms

Loss rate: 0.18%

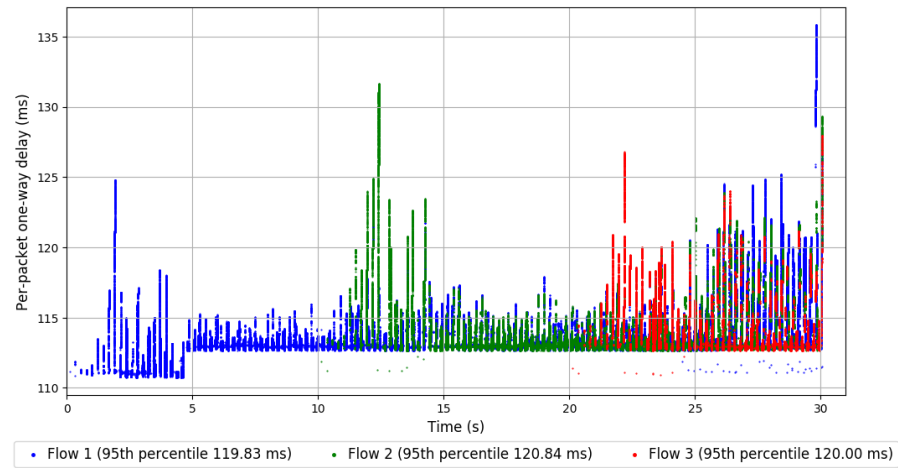
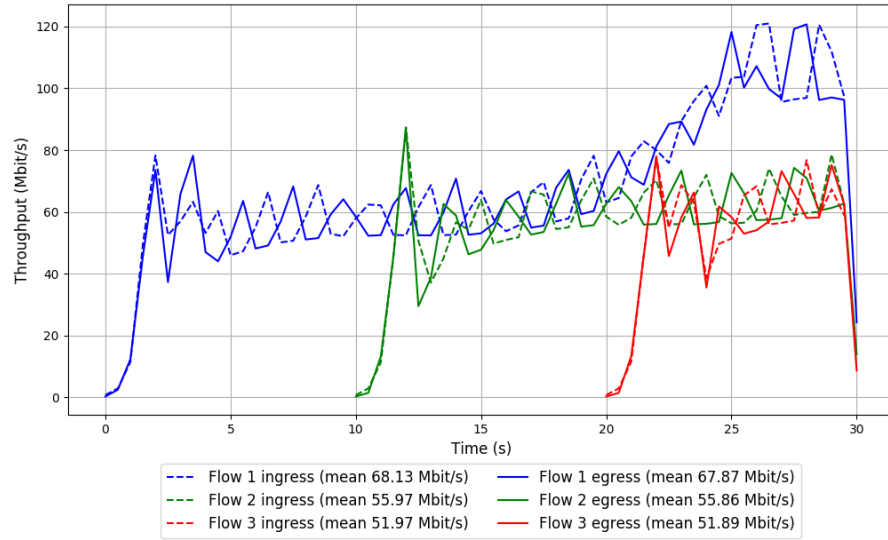
-- Flow 3:

Average throughput: 51.89 Mbit/s

95th percentile per-packet one-way delay: 119.998 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-20 23:04:26

End at: 2018-02-20 23:04:56

Below is generated by plot.py at 2018-02-21 01:54:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 183.71 Mbit/s

95th percentile per-packet one-way delay: 126.818 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 103.16 Mbit/s

95th percentile per-packet one-way delay: 125.309 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.06 Mbit/s

95th percentile per-packet one-way delay: 128.358 ms

Loss rate: 0.00%

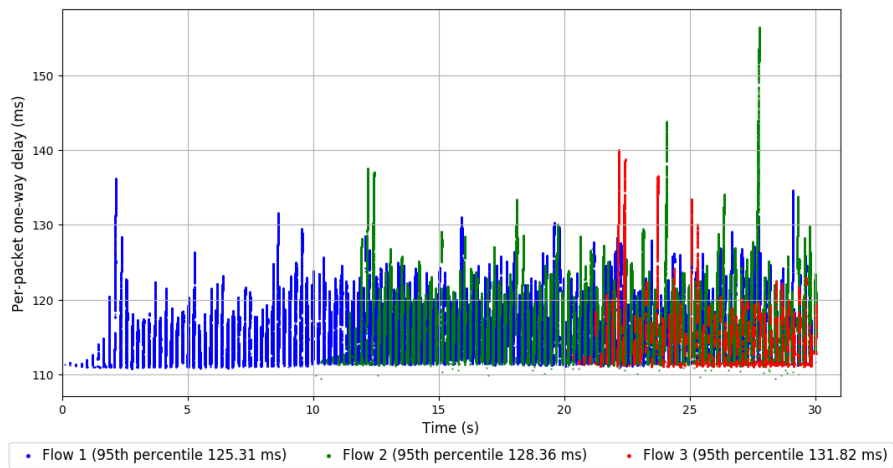
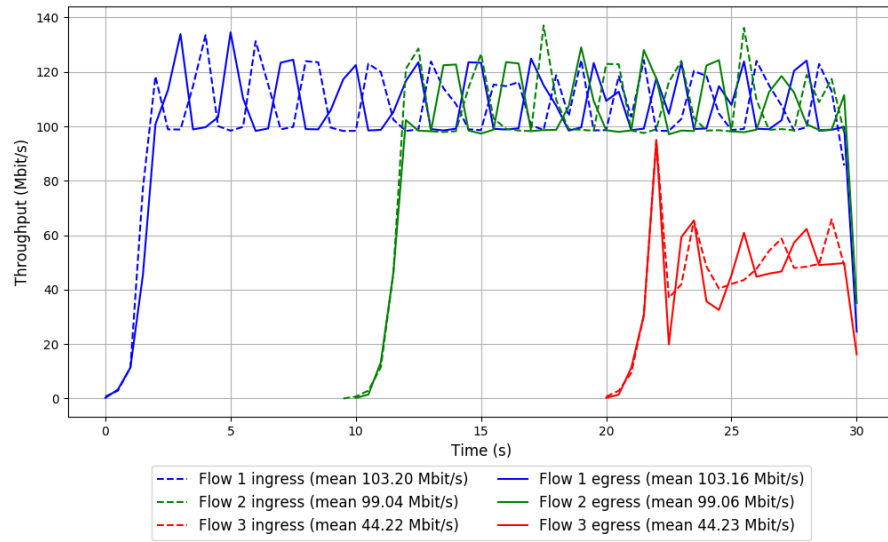
-- Flow 3:

Average throughput: 44.23 Mbit/s

95th percentile per-packet one-way delay: 131.818 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-20 23:24:12

End at: 2018-02-20 23:24:42

Below is generated by plot.py at 2018-02-21 01:54:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 157.98 Mbit/s

95th percentile per-packet one-way delay: 124.419 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 73.60 Mbit/s

95th percentile per-packet one-way delay: 124.354 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.84 Mbit/s

95th percentile per-packet one-way delay: 124.743 ms

Loss rate: 0.12%

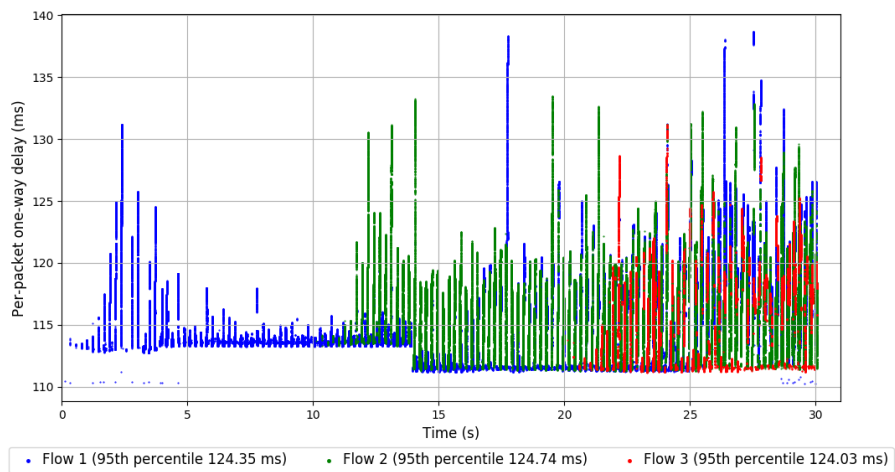
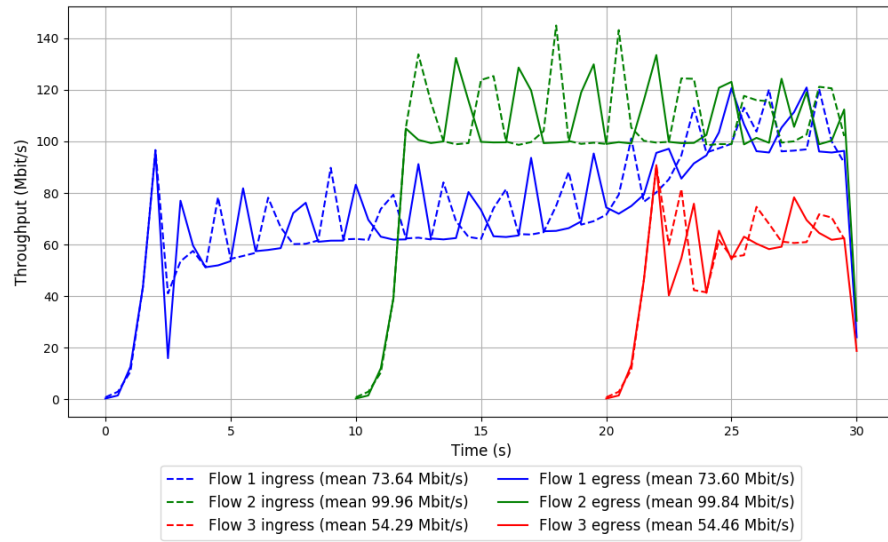
-- Flow 3:

Average throughput: 54.46 Mbit/s

95th percentile per-packet one-way delay: 124.032 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

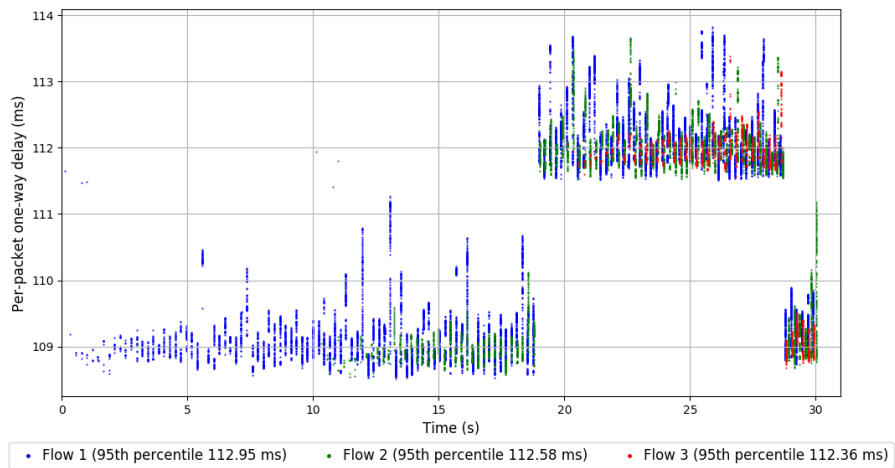
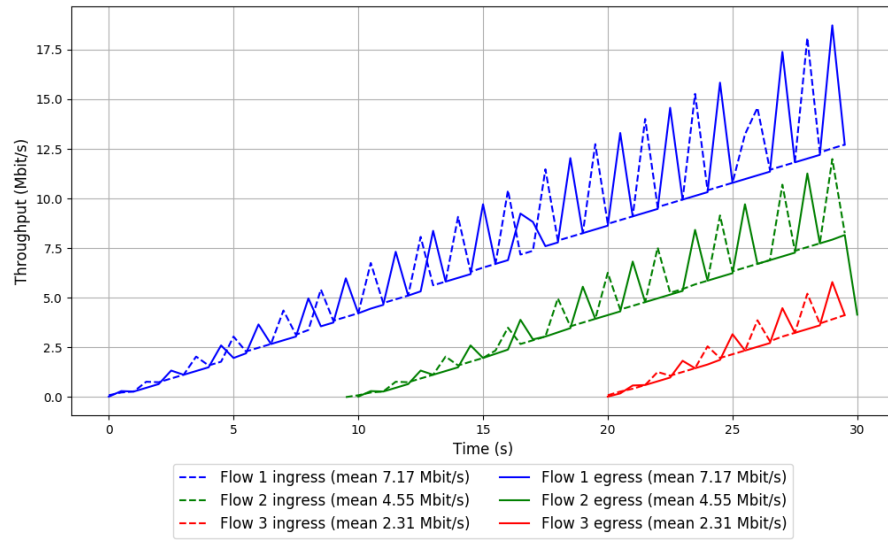


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-20 20:27:27
End at: 2018-02-20 20:27:57

# Below is generated by plot.py at 2018-02-21 01:54:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.92 Mbit/s
95th percentile per-packet one-way delay: 112.827 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.17 Mbit/s
95th percentile per-packet one-way delay: 112.953 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.55 Mbit/s
95th percentile per-packet one-way delay: 112.581 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 112.361 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

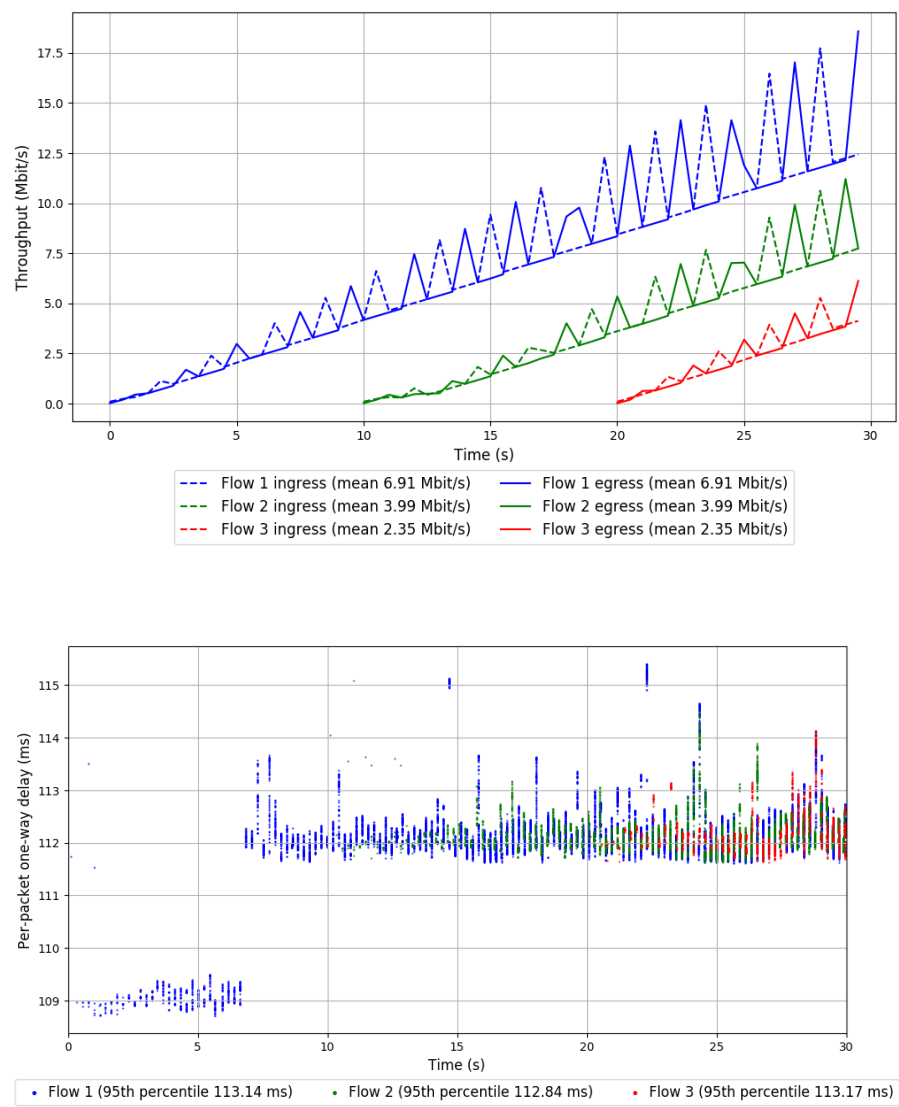


```
Run 2: Statistics of LEDBAT

Start at: 2018-02-20 20:47:09
End at: 2018-02-20 20:47:39

# Below is generated by plot.py at 2018-02-21 01:54:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.33 Mbit/s
95th percentile per-packet one-way delay: 113.068 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.91 Mbit/s
95th percentile per-packet one-way delay: 113.139 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.99 Mbit/s
95th percentile per-packet one-way delay: 112.840 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 113.166 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-20 21:06:45

End at: 2018-02-20 21:07:15

Below is generated by plot.py at 2018-02-21 01:54:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.10 Mbit/s

95th percentile per-packet one-way delay: 114.208 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.23 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.78 Mbit/s

95th percentile per-packet one-way delay: 114.041 ms

Loss rate: 0.00%

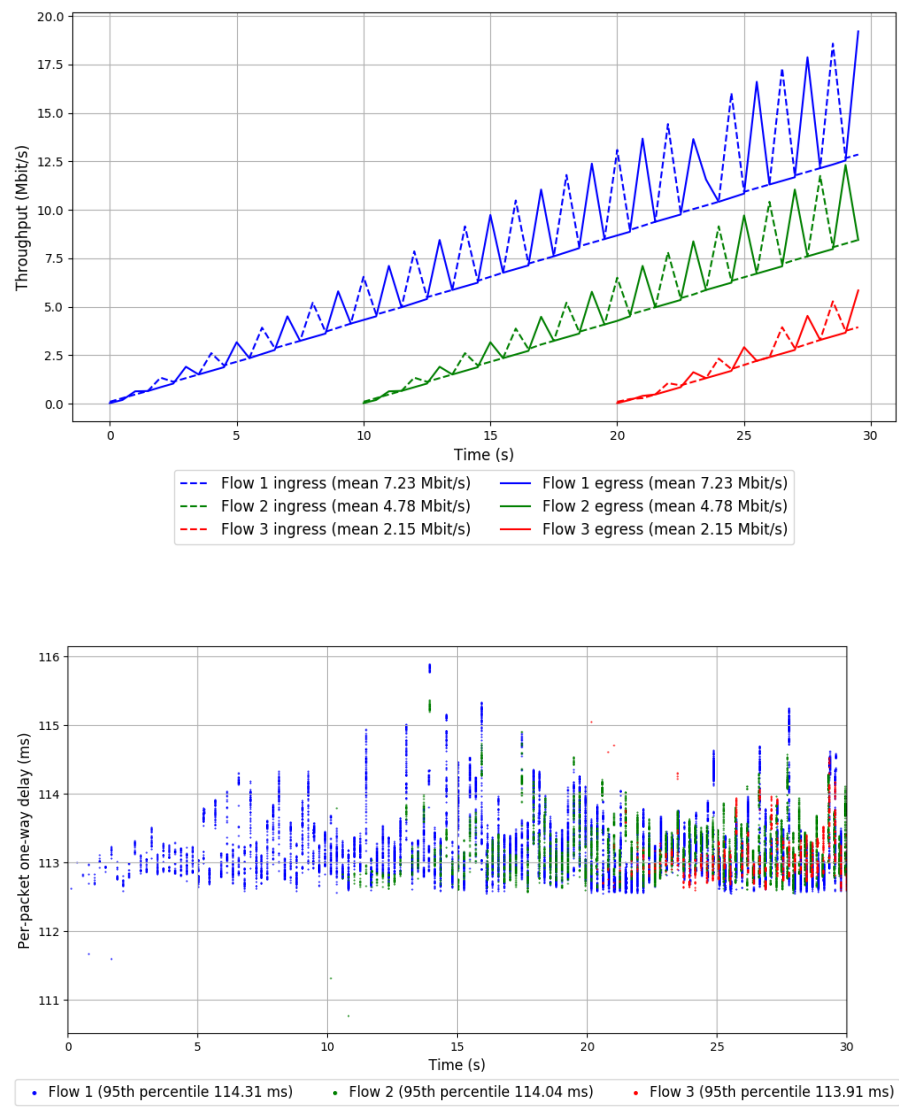
-- Flow 3:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 113.912 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-20 21:26:06

End at: 2018-02-20 21:26:36

Below is generated by plot.py at 2018-02-21 01:54:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.21 Mbit/s

95th percentile per-packet one-way delay: 112.215 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.27 Mbit/s

95th percentile per-packet one-way delay: 112.245 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.81 Mbit/s

95th percentile per-packet one-way delay: 112.205 ms

Loss rate: 0.00%

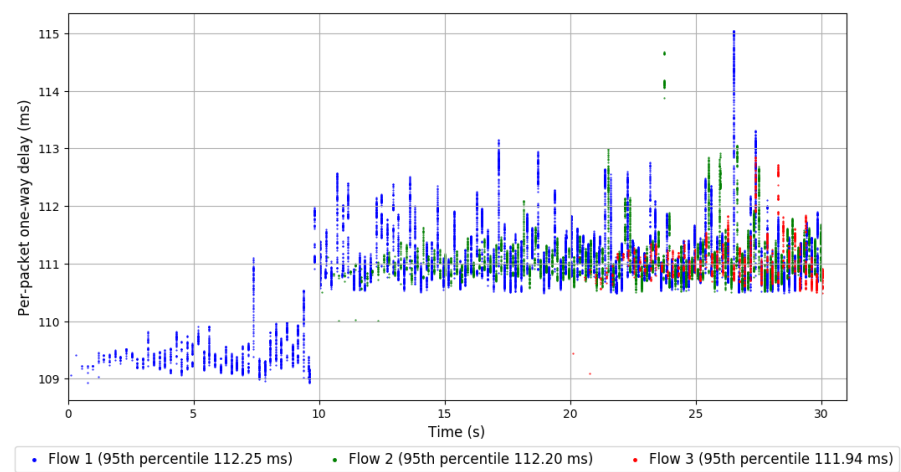
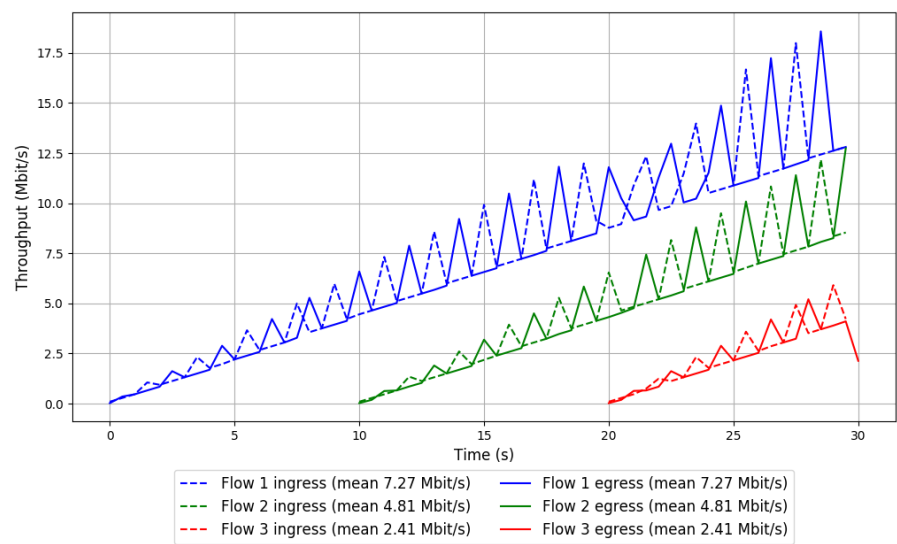
-- Flow 3:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 111.942 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-20 21:45:50

End at: 2018-02-20 21:46:20

Below is generated by plot.py at 2018-02-21 01:54:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.64 Mbit/s

95th percentile per-packet one-way delay: 112.188 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.68 Mbit/s

95th percentile per-packet one-way delay: 112.312 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.83 Mbit/s

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

Loss rate: 0.00%

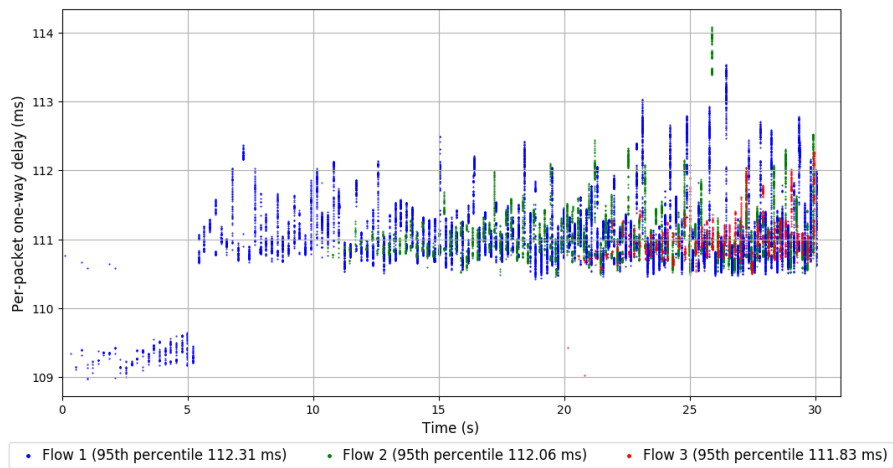
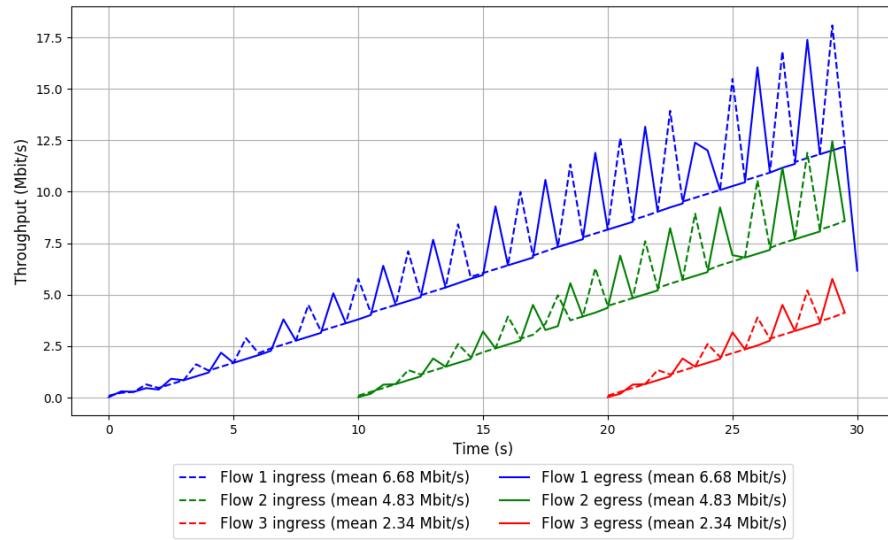
-- Flow 3:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 111.835 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-20 22:05:19

End at: 2018-02-20 22:05:49

Below is generated by plot.py at 2018-02-21 01:54:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.44 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.14 Mbit/s

95th percentile per-packet one-way delay: 112.711 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.03 Mbit/s

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

Loss rate: 0.00%

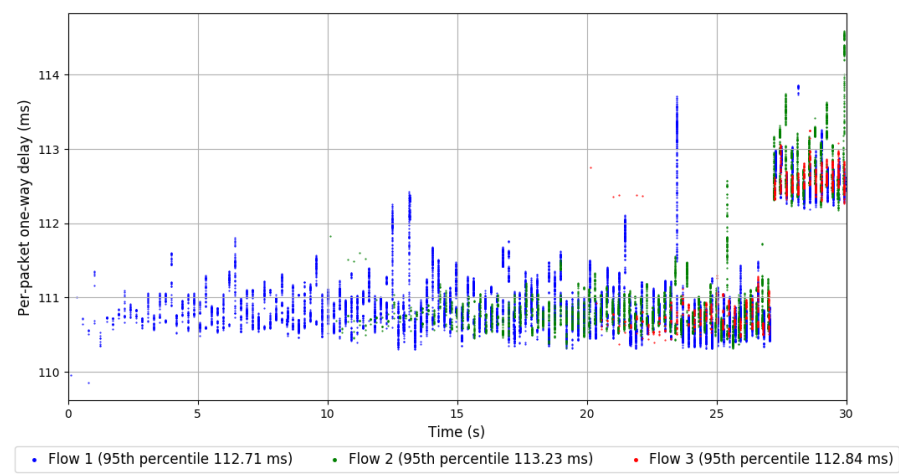
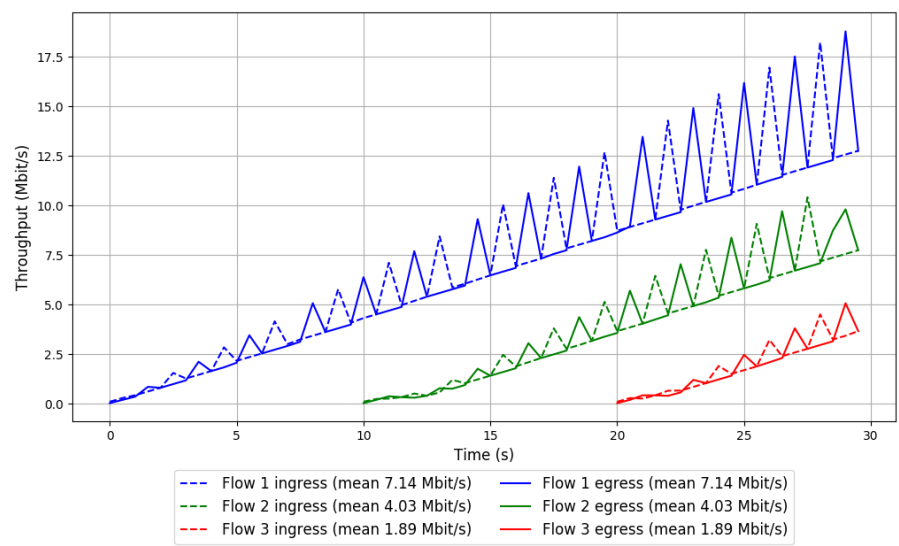
-- Flow 3:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 112.845 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-02-20 22:25:01

End at: 2018-02-20 22:25:31

Below is generated by plot.py at 2018-02-21 01:54:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.39 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.23 Mbit/s

95th percentile per-packet one-way delay: 113.972 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.65 Mbit/s

95th percentile per-packet one-way delay: 113.517 ms

Loss rate: 0.00%

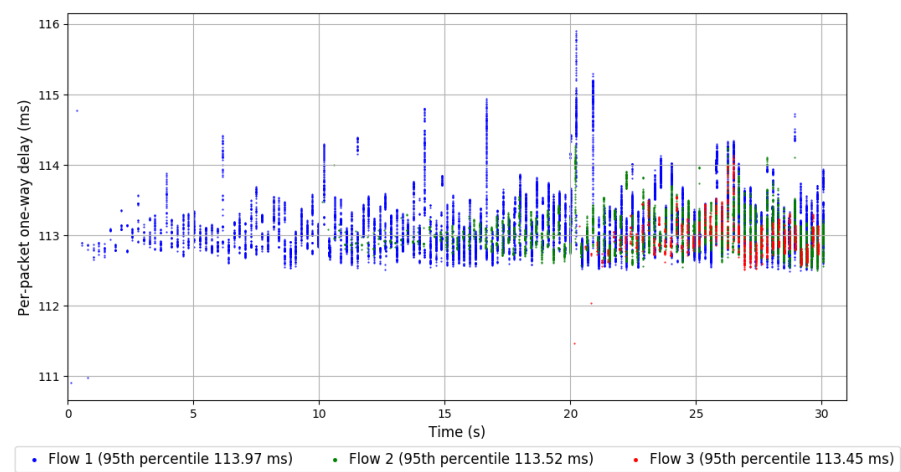
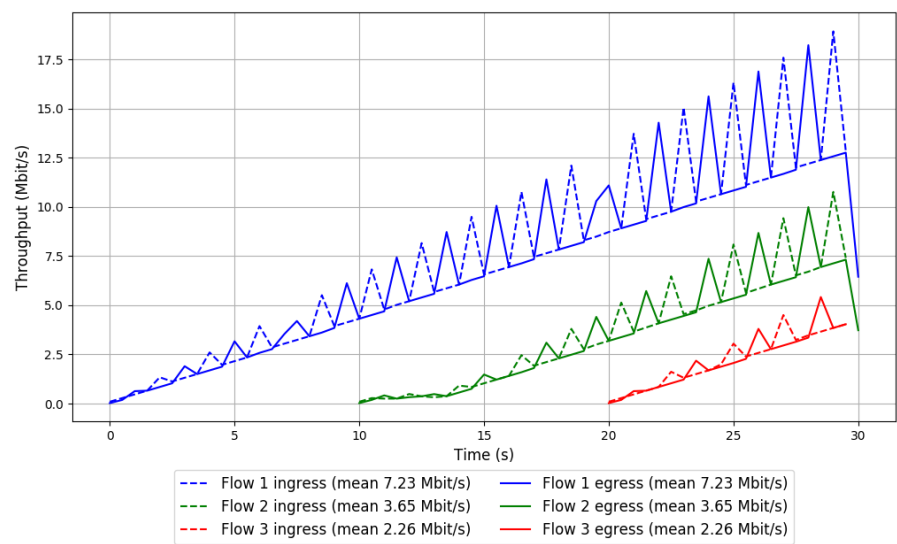
-- Flow 3:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 113.447 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-20 22:44:24

End at: 2018-02-20 22:44:54

Below is generated by plot.py at 2018-02-21 01:54:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.92 Mbit/s

95th percentile per-packet one-way delay: 114.732 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.32 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.35 Mbit/s

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

Loss rate: 0.00%

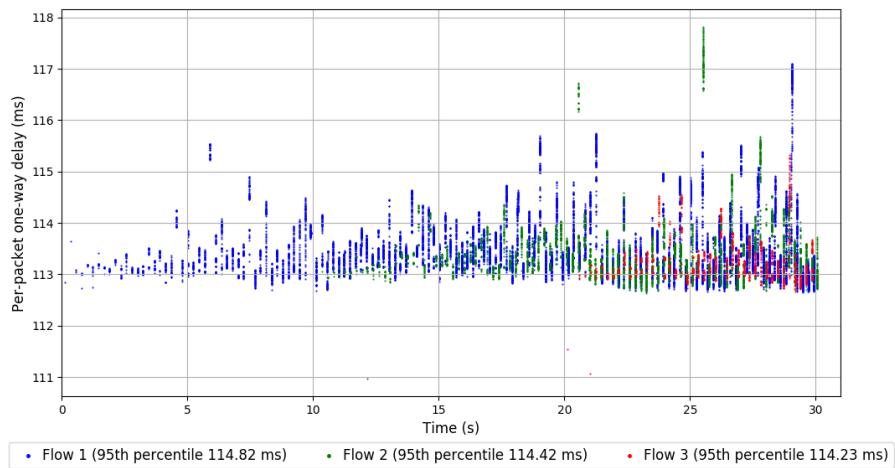
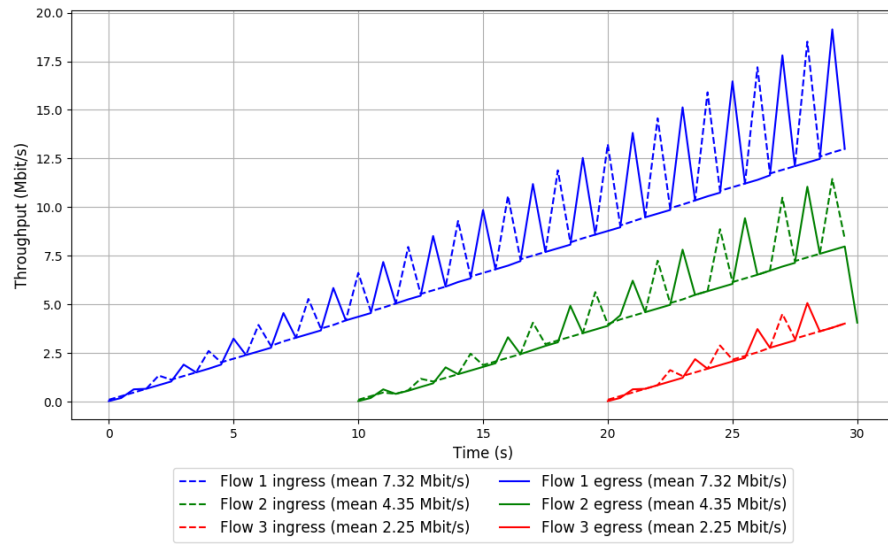
-- Flow 3:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 114.233 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-20 23:03:39

End at: 2018-02-20 23:04:09

Below is generated by plot.py at 2018-02-21 01:54:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.73 Mbit/s

95th percentile per-packet one-way delay: 113.314 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.84 Mbit/s

95th percentile per-packet one-way delay: 113.399 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.70 Mbit/s

95th percentile per-packet one-way delay: 113.133 ms

Loss rate: 0.00%

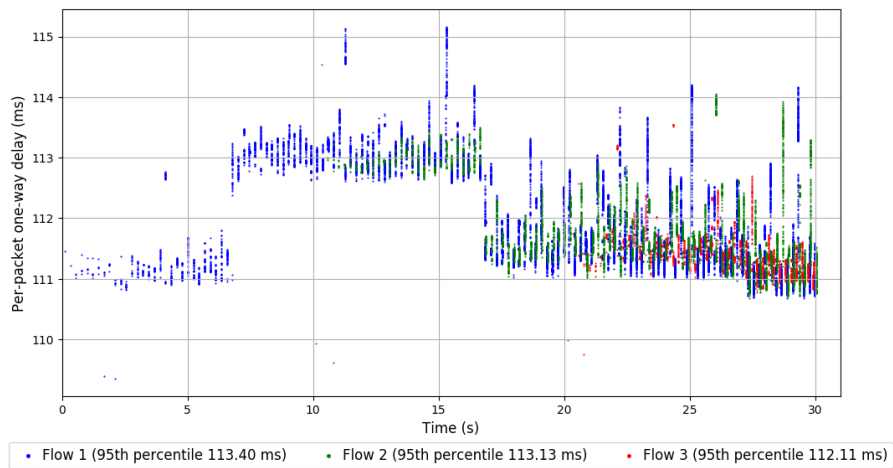
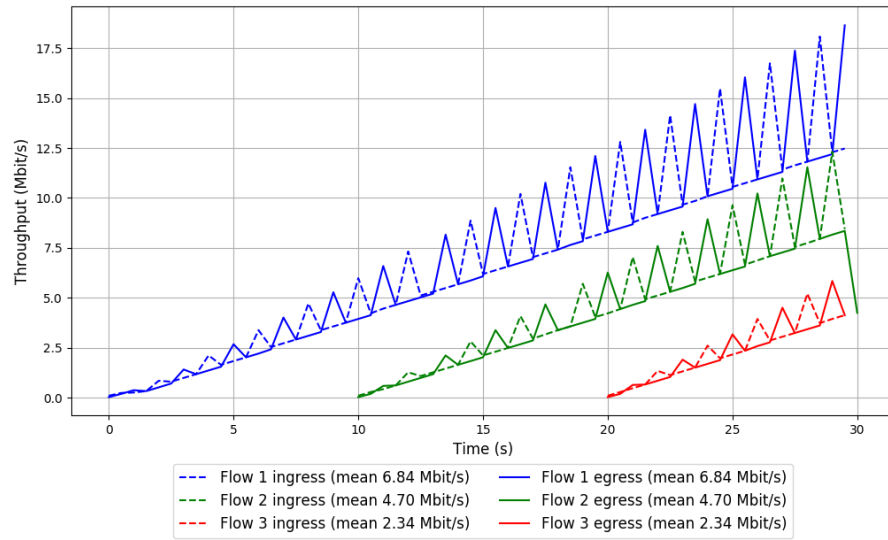
-- Flow 3:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 112.115 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-02-20 23:23:25

End at: 2018-02-20 23:23:55

Below is generated by plot.py at 2018-02-21 01:54:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.94 Mbit/s

95th percentile per-packet one-way delay: 114.884 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.12 Mbit/s

95th percentile per-packet one-way delay: 114.982 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.60 Mbit/s

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

Loss rate: 0.00%

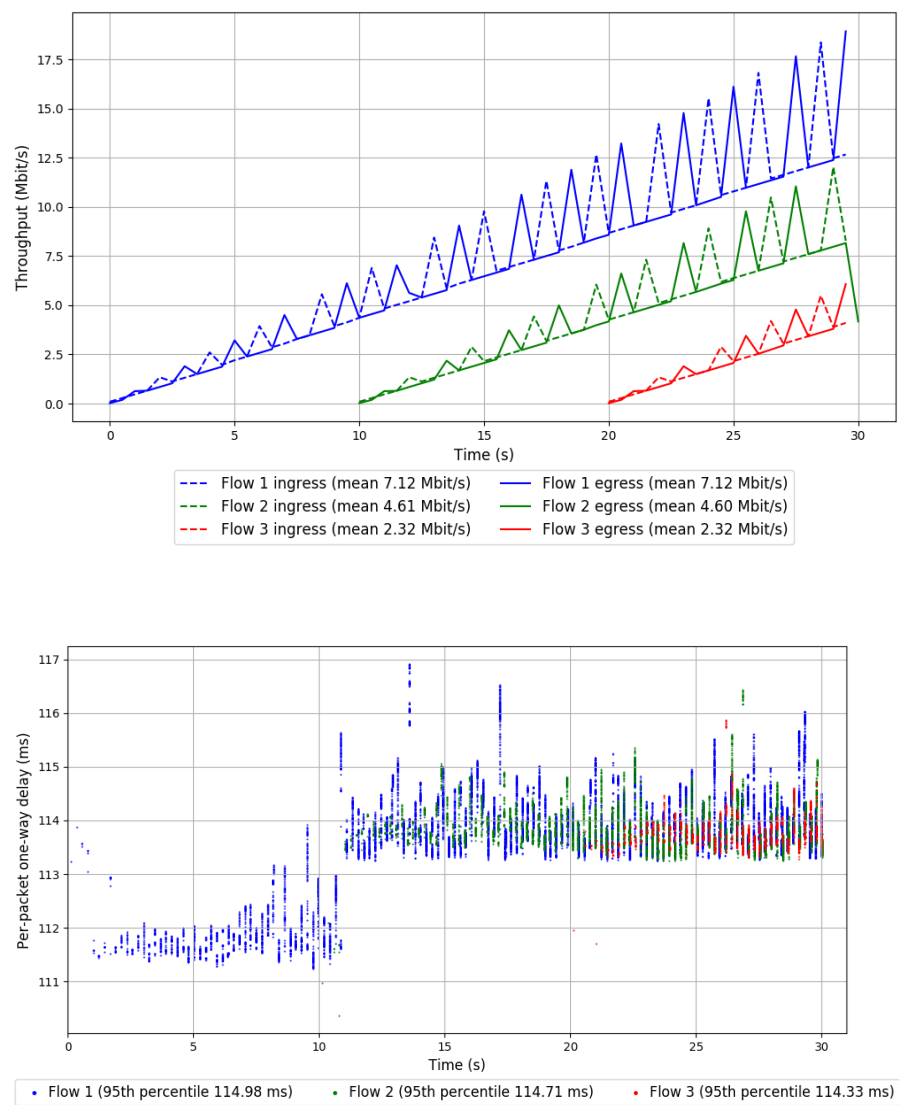
-- Flow 3:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 114.326 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

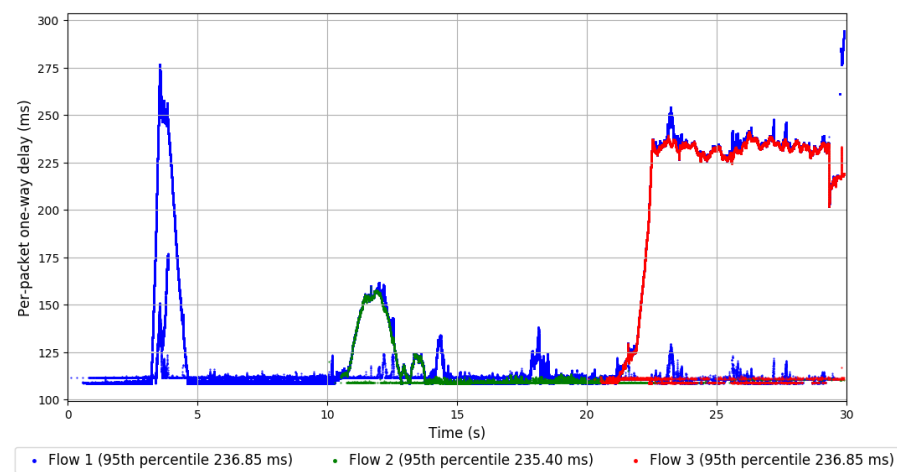
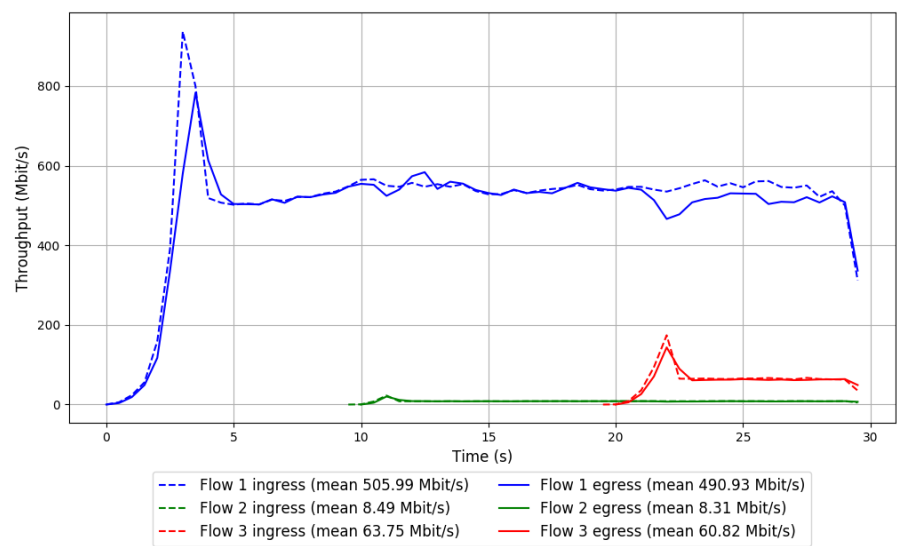


```
Run 1: Statistics of PCC

Start at: 2018-02-20 20:29:10
End at: 2018-02-20 20:29:40

# Below is generated by plot.py at 2018-02-21 02:00:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 516.56 Mbit/s
95th percentile per-packet one-way delay: 236.830 ms
Loss rate: 3.03%
-- Flow 1:
Average throughput: 490.93 Mbit/s
95th percentile per-packet one-way delay: 236.849 ms
Loss rate: 2.98%
-- Flow 2:
Average throughput: 8.31 Mbit/s
95th percentile per-packet one-way delay: 235.400 ms
Loss rate: 2.23%
-- Flow 3:
Average throughput: 60.82 Mbit/s
95th percentile per-packet one-way delay: 236.849 ms
Loss rate: 4.60%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-02-20 20:48:51

End at: 2018-02-20 20:49:21

Below is generated by plot.py at 2018-02-21 02:01:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 520.32 Mbit/s

95th percentile per-packet one-way delay: 210.370 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 487.40 Mbit/s

95th percentile per-packet one-way delay: 212.774 ms

Loss rate: 1.37%

-- Flow 2:

Average throughput: 33.40 Mbit/s

95th percentile per-packet one-way delay: 159.982 ms

Loss rate: 0.01%

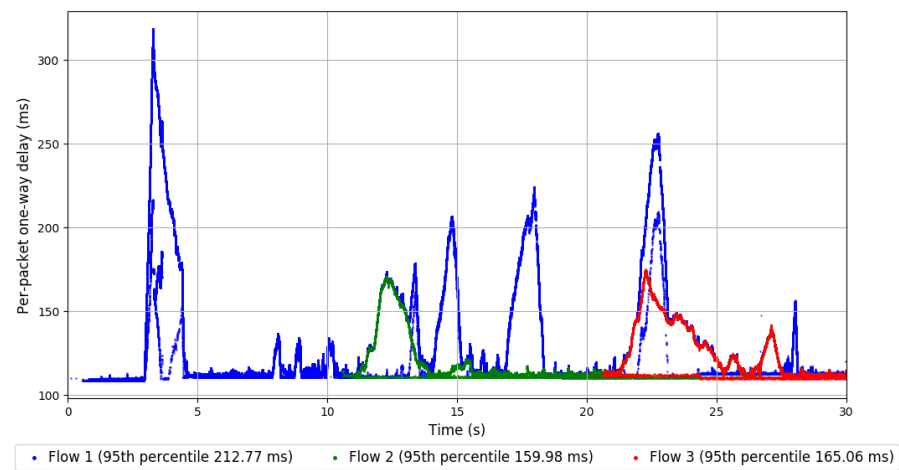
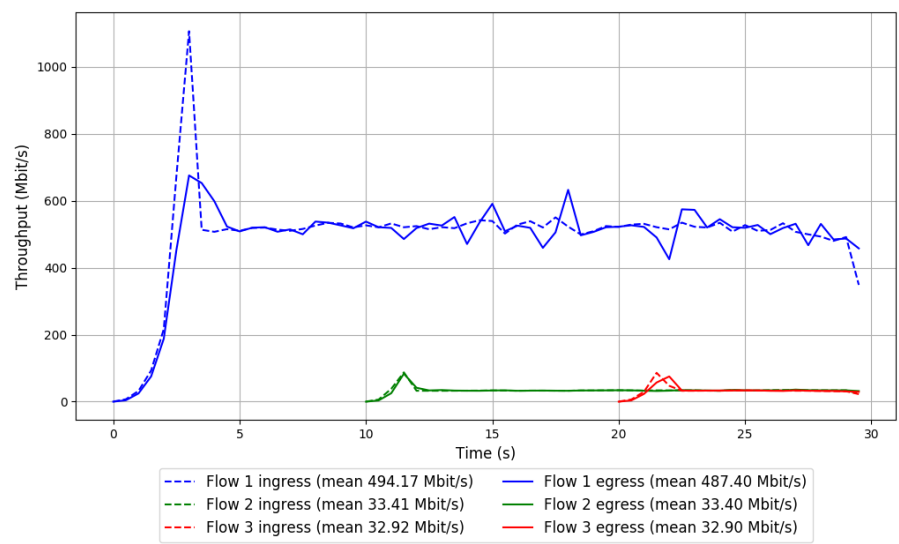
-- Flow 3:

Average throughput: 32.90 Mbit/s

95th percentile per-packet one-way delay: 165.058 ms

Loss rate: 0.02%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-20 21:08:24

End at: 2018-02-20 21:08:54

Below is generated by plot.py at 2018-02-21 02:01:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 514.72 Mbit/s

95th percentile per-packet one-way delay: 233.931 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 473.05 Mbit/s

95th percentile per-packet one-way delay: 234.203 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 31.70 Mbit/s

95th percentile per-packet one-way delay: 223.625 ms

Loss rate: 0.05%

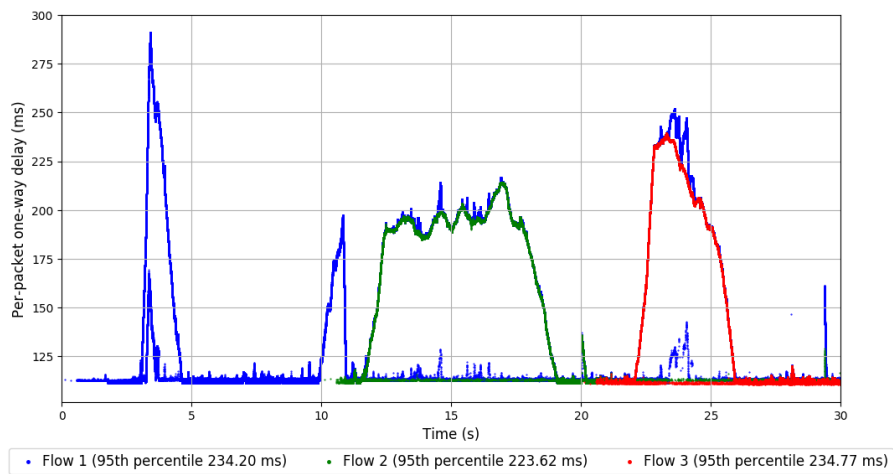
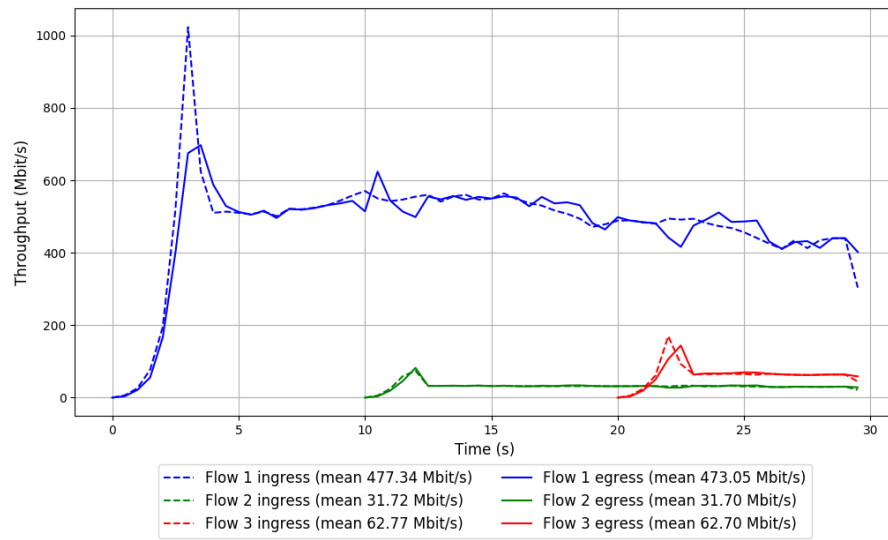
-- Flow 3:

Average throughput: 62.70 Mbit/s

95th percentile per-packet one-way delay: 234.772 ms

Loss rate: 0.11%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-02-20 21:27:50

End at: 2018-02-20 21:28:20

Below is generated by plot.py at 2018-02-21 02:01:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 523.53 Mbit/s

95th percentile per-packet one-way delay: 232.916 ms

Loss rate: 2.25%

-- Flow 1:

Average throughput: 443.15 Mbit/s

95th percentile per-packet one-way delay: 237.368 ms

Loss rate: 2.11%

-- Flow 2:

Average throughput: 63.85 Mbit/s

95th percentile per-packet one-way delay: 226.528 ms

Loss rate: 1.35%

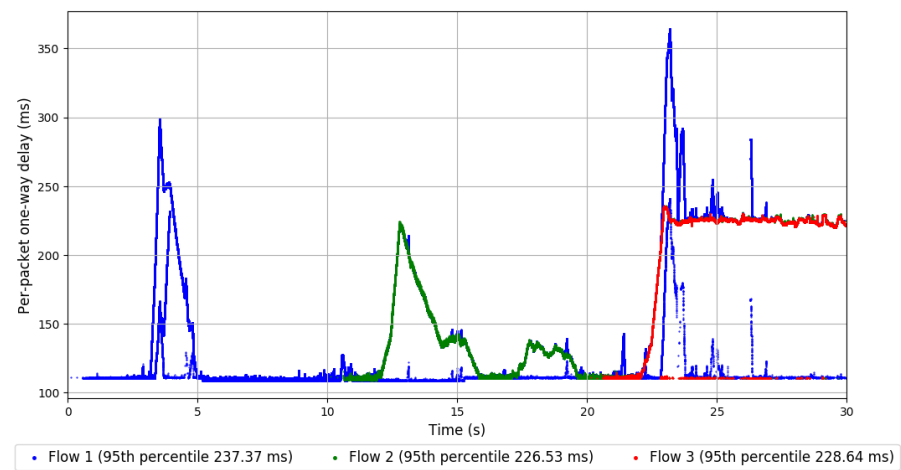
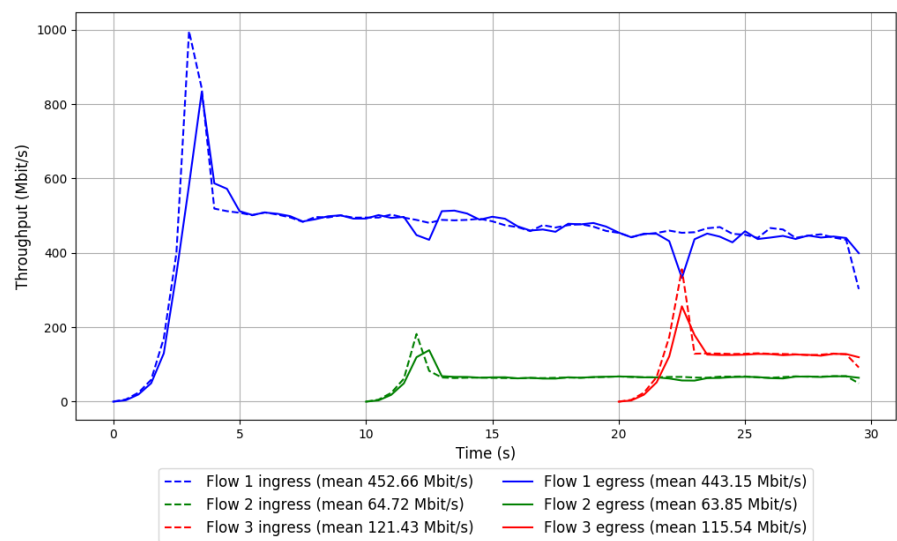
-- Flow 3:

Average throughput: 115.54 Mbit/s

95th percentile per-packet one-way delay: 228.640 ms

Loss rate: 4.87%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-20 21:47:33

End at: 2018-02-20 21:48:03

Below is generated by plot.py at 2018-02-21 02:01:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 470.79 Mbit/s

95th percentile per-packet one-way delay: 229.597 ms

Loss rate: 3.12%

-- Flow 1:

Average throughput: 317.96 Mbit/s

95th percentile per-packet one-way delay: 229.606 ms

Loss rate: 3.13%

-- Flow 2:

Average throughput: 118.75 Mbit/s

95th percentile per-packet one-way delay: 227.476 ms

Loss rate: 2.51%

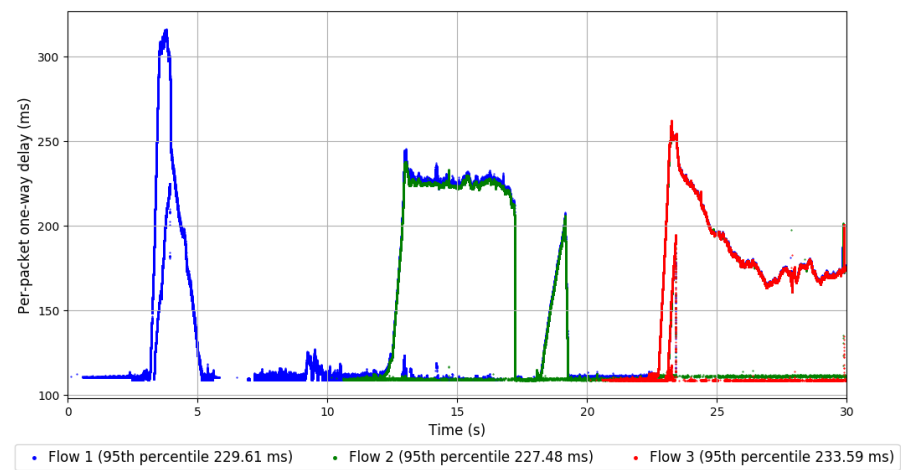
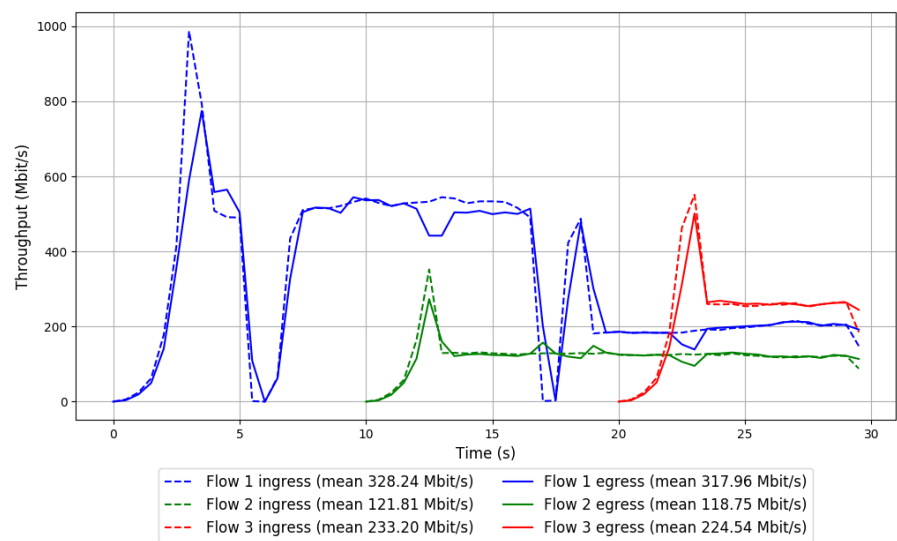
-- Flow 3:

Average throughput: 224.54 Mbit/s

95th percentile per-packet one-way delay: 233.586 ms

Loss rate: 3.69%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-20 22:07:00

End at: 2018-02-20 22:07:30

Below is generated by plot.py at 2018-02-21 02:02:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 536.36 Mbit/s

95th percentile per-packet one-way delay: 241.260 ms

Loss rate: 1.86%

-- Flow 1:

Average throughput: 474.34 Mbit/s

95th percentile per-packet one-way delay: 242.624 ms

Loss rate: 1.90%

-- Flow 2:

Average throughput: 61.83 Mbit/s

95th percentile per-packet one-way delay: 235.385 ms

Loss rate: 1.50%

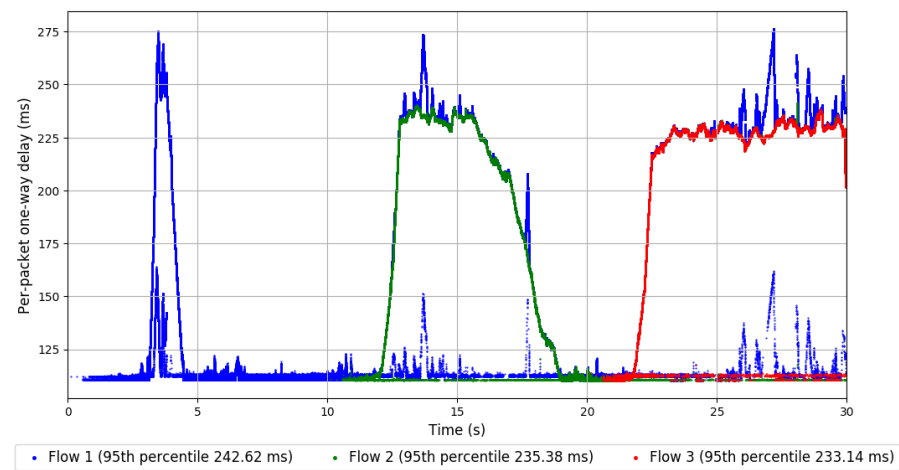
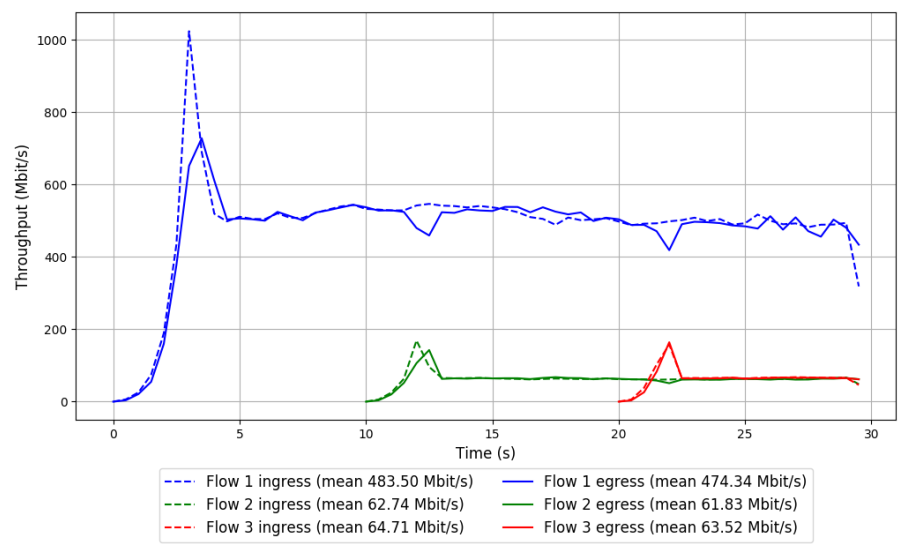
-- Flow 3:

Average throughput: 63.52 Mbit/s

95th percentile per-packet one-way delay: 233.138 ms

Loss rate: 1.85%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-02-20 22:26:43

End at: 2018-02-20 22:27:13

Below is generated by plot.py at 2018-02-21 02:03:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 534.39 Mbit/s

95th percentile per-packet one-way delay: 252.720 ms

Loss rate: 3.09%

-- Flow 1:

Average throughput: 452.69 Mbit/s

95th percentile per-packet one-way delay: 255.461 ms

Loss rate: 3.08%

-- Flow 2:

Average throughput: 121.70 Mbit/s

95th percentile per-packet one-way delay: 234.402 ms

Loss rate: 3.18%

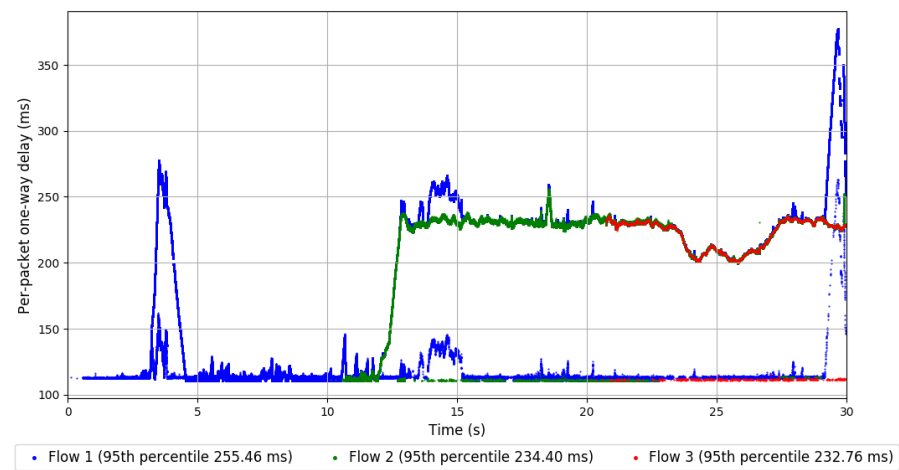
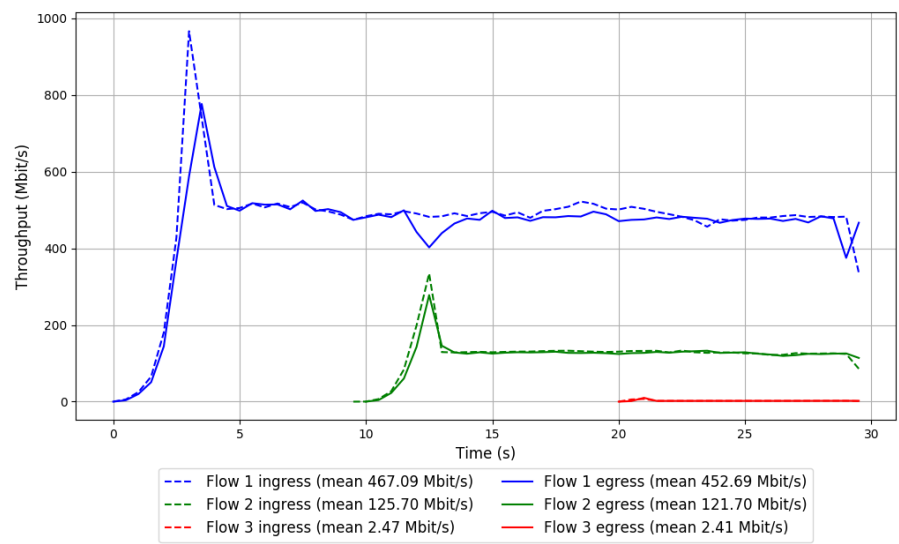
-- Flow 3:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 232.759 ms

Loss rate: 2.48%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-20 22:46:05

End at: 2018-02-20 22:46:35

Below is generated by plot.py at 2018-02-21 02:03:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 521.30 Mbit/s

95th percentile per-packet one-way delay: 230.094 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 469.44 Mbit/s

95th percentile per-packet one-way delay: 230.217 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 62.10 Mbit/s

95th percentile per-packet one-way delay: 230.158 ms

Loss rate: 0.37%

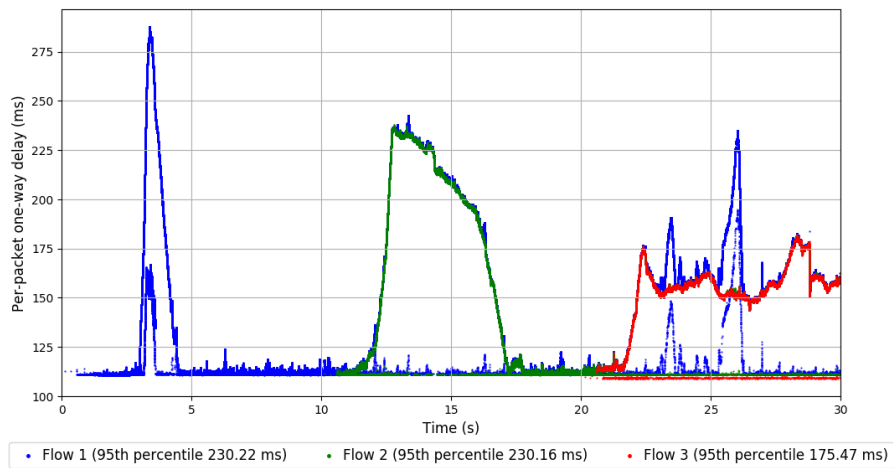
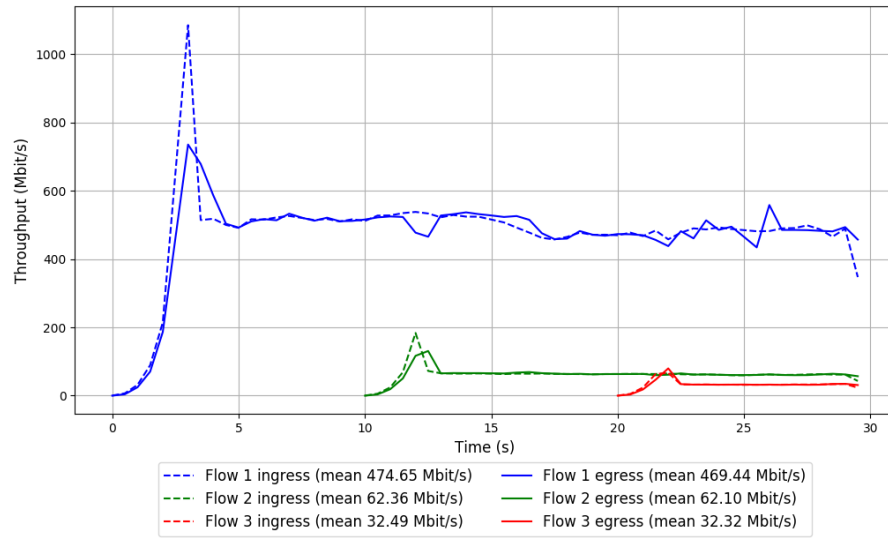
-- Flow 3:

Average throughput: 32.32 Mbit/s

95th percentile per-packet one-way delay: 175.467 ms

Loss rate: 0.43%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-20 23:05:24

End at: 2018-02-20 23:05:54

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 530.09 Mbit/s

95th percentile per-packet one-way delay: 241.441 ms

Loss rate: 1.51%

-- Flow 1:

Average throughput: 427.60 Mbit/s

95th percentile per-packet one-way delay: 244.461 ms

Loss rate: 1.57%

-- Flow 2:

Average throughput: 123.25 Mbit/s

95th percentile per-packet one-way delay: 235.099 ms

Loss rate: 1.49%

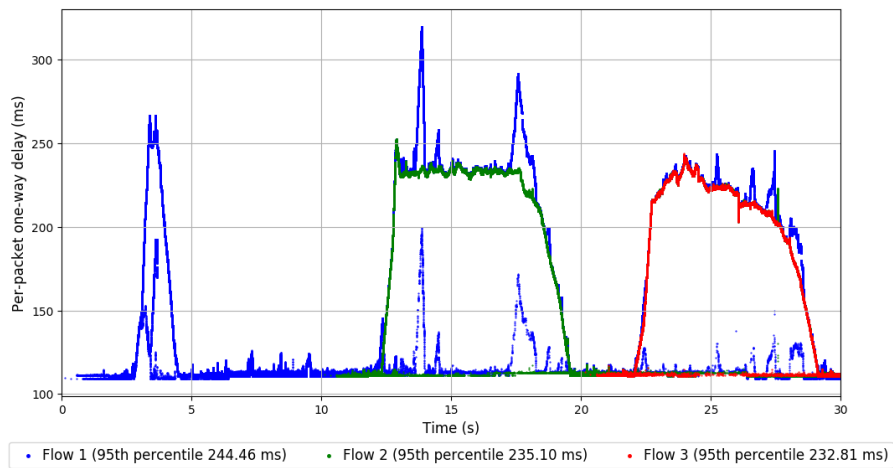
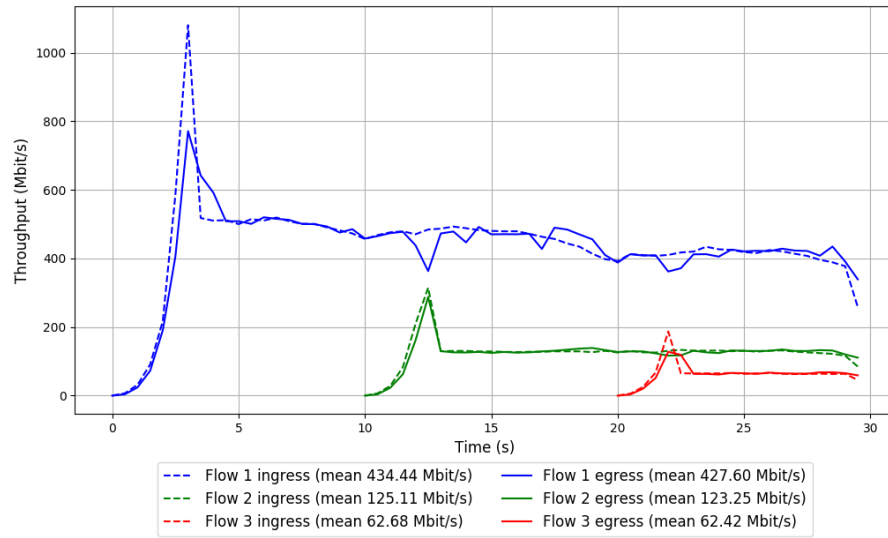
-- Flow 3:

Average throughput: 62.42 Mbit/s

95th percentile per-packet one-way delay: 232.809 ms

Loss rate: 0.44%

Run 9: Report of PCC — Data Link

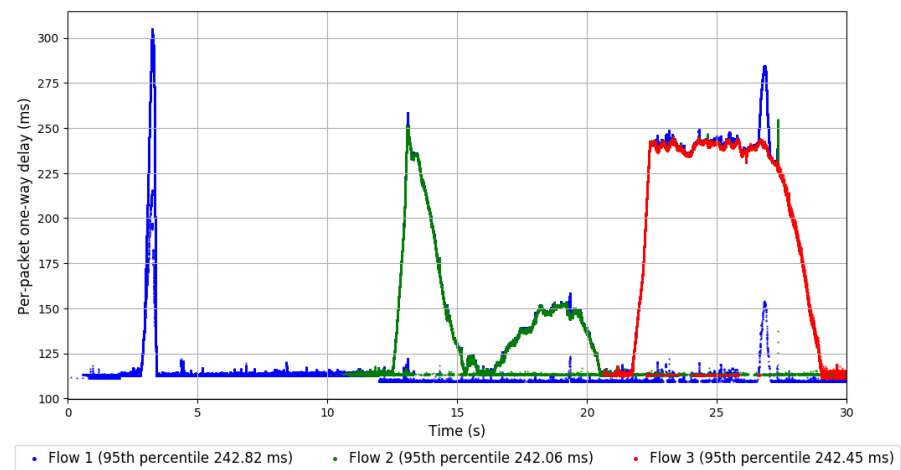
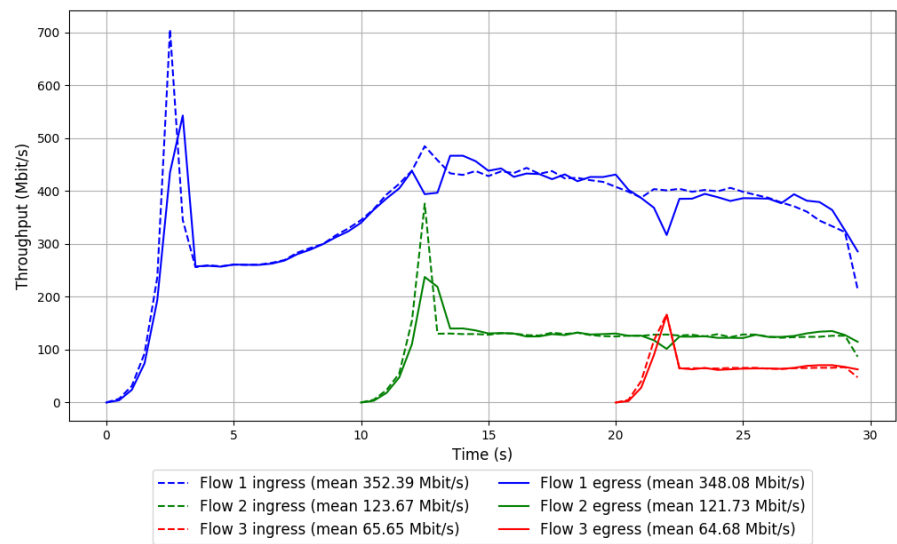


```
Run 10: Statistics of PCC

Start at: 2018-02-20 23:25:08
End at: 2018-02-20 23:25:38

# Below is generated by plot.py at 2018-02-21 02:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 450.19 Mbit/s
95th percentile per-packet one-way delay: 242.585 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 348.08 Mbit/s
95th percentile per-packet one-way delay: 242.819 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 121.73 Mbit/s
95th percentile per-packet one-way delay: 242.060 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 64.68 Mbit/s
95th percentile per-packet one-way delay: 242.453 ms
Loss rate: 1.63%
```

Run 10: Report of PCC — Data Link

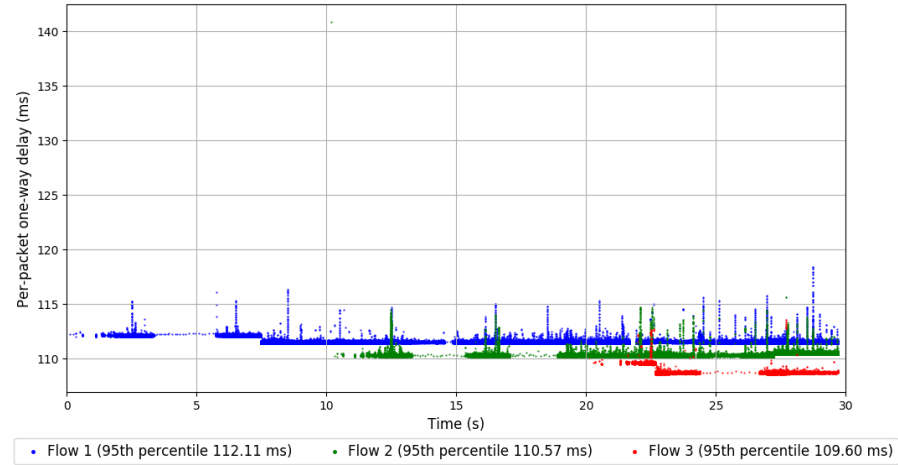
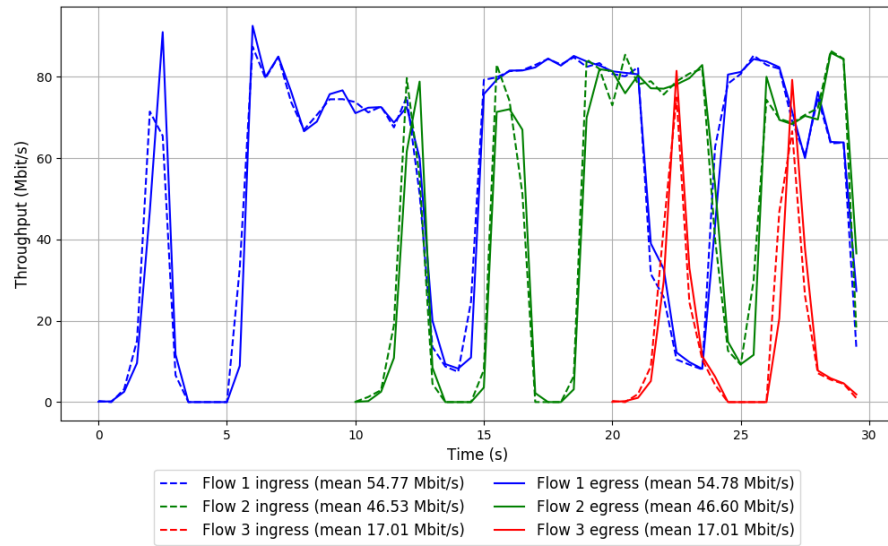


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-20 20:23:53
End at: 2018-02-20 20:24:23

# Below is generated by plot.py at 2018-02-21 02:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.04 Mbit/s
95th percentile per-packet one-way delay: 112.076 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.78 Mbit/s
95th percentile per-packet one-way delay: 112.111 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.60 Mbit/s
95th percentile per-packet one-way delay: 110.568 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.01 Mbit/s
95th percentile per-packet one-way delay: 109.603 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-20 20:43:34

End at: 2018-02-20 20:44:04

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.80 Mbit/s

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

Loss rate: 0.02%

-- Flow 1:

Average throughput: 46.84 Mbit/s

95th percentile per-packet one-way delay: 110.586 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.04 Mbit/s

95th percentile per-packet one-way delay: 112.707 ms

Loss rate: 0.03%

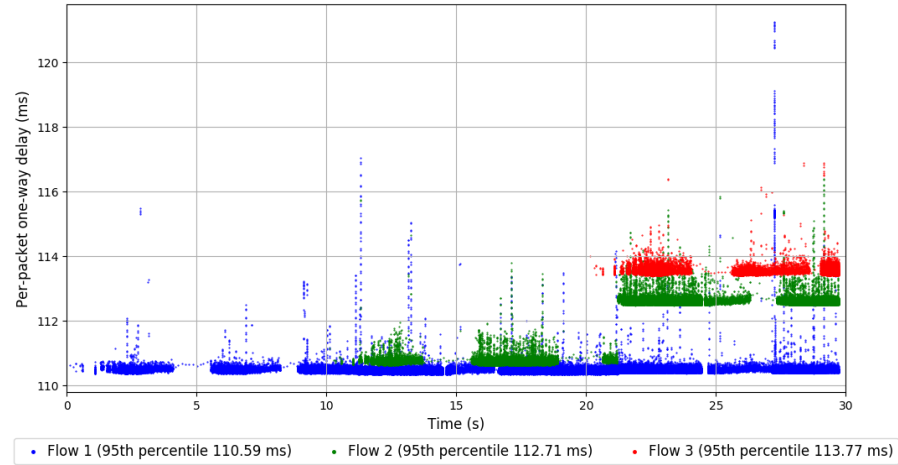
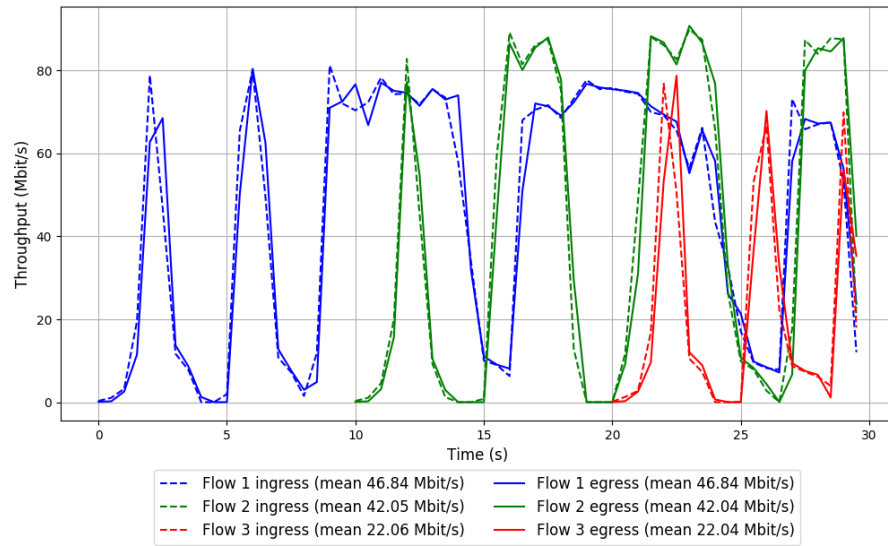
-- Flow 3:

Average throughput: 22.04 Mbit/s

95th percentile per-packet one-way delay: 113.771 ms

Loss rate: 0.12%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-20 21:03:11

End at: 2018-02-20 21:03:41

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.65 Mbit/s

95th percentile per-packet one-way delay: 112.720 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 49.89 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 44.14 Mbit/s

95th percentile per-packet one-way delay: 112.684 ms

Loss rate: 0.01%

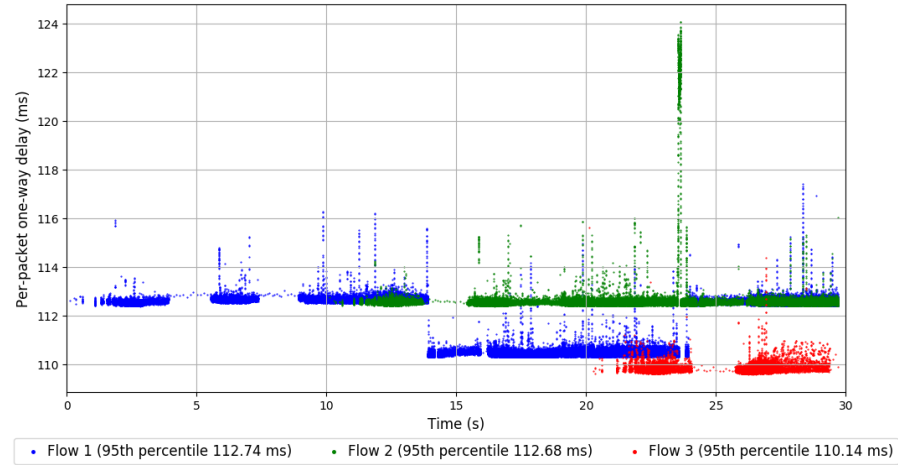
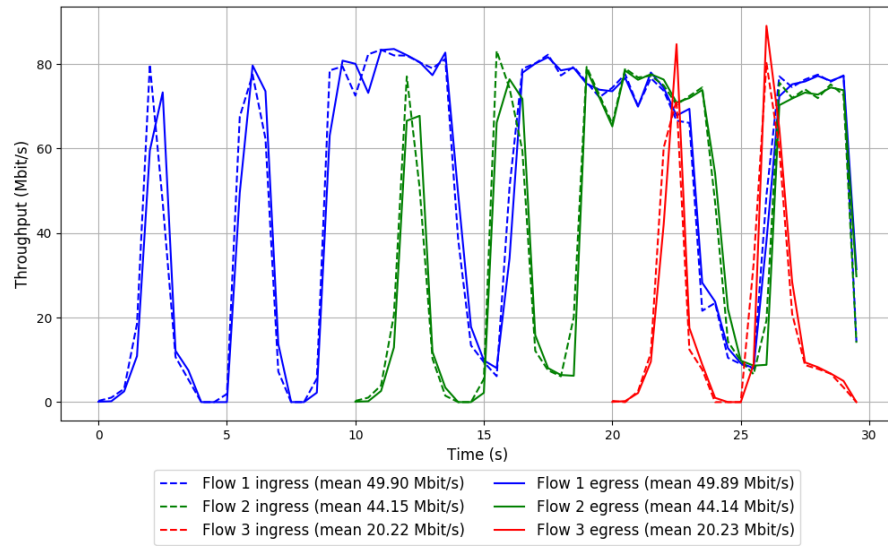
-- Flow 3:

Average throughput: 20.23 Mbit/s

95th percentile per-packet one-way delay: 110.142 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-20 21:22:32

End at: 2018-02-20 21:23:02

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.29 Mbit/s

95th percentile per-packet one-way delay: 112.797 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.48 Mbit/s

95th percentile per-packet one-way delay: 112.827 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.65 Mbit/s

95th percentile per-packet one-way delay: 111.741 ms

Loss rate: 0.00%

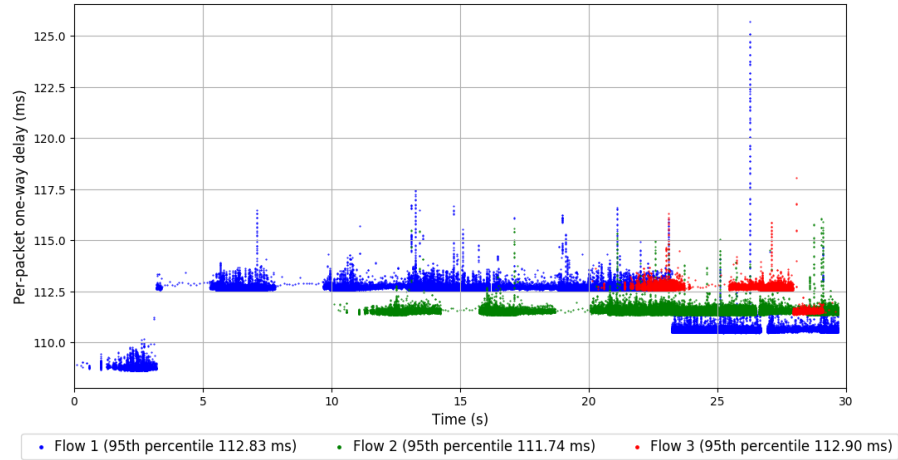
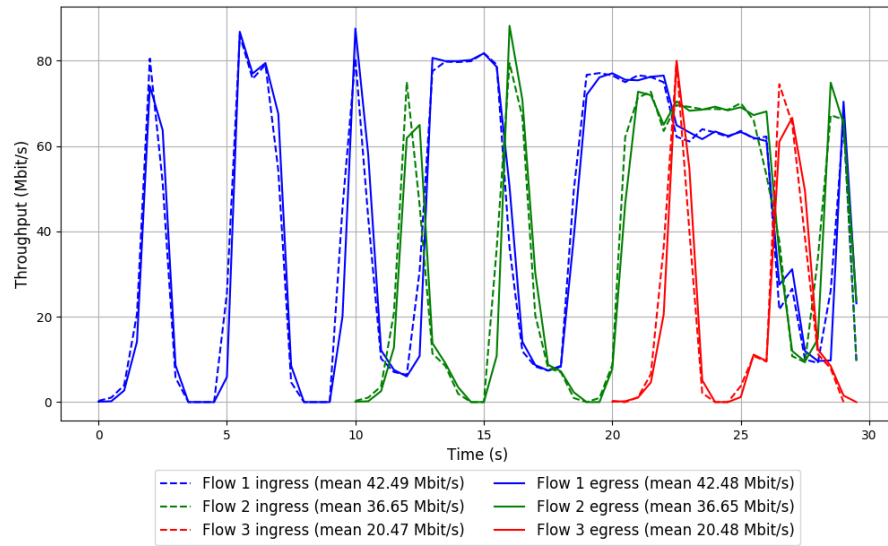
-- Flow 3:

Average throughput: 20.48 Mbit/s

95th percentile per-packet one-way delay: 112.901 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-20 21:42:15

End at: 2018-02-20 21:42:45

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.07 Mbit/s

95th percentile per-packet one-way delay: 111.480 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 49.53 Mbit/s

95th percentile per-packet one-way delay: 111.523 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 43.70 Mbit/s

95th percentile per-packet one-way delay: 110.683 ms

Loss rate: 0.01%

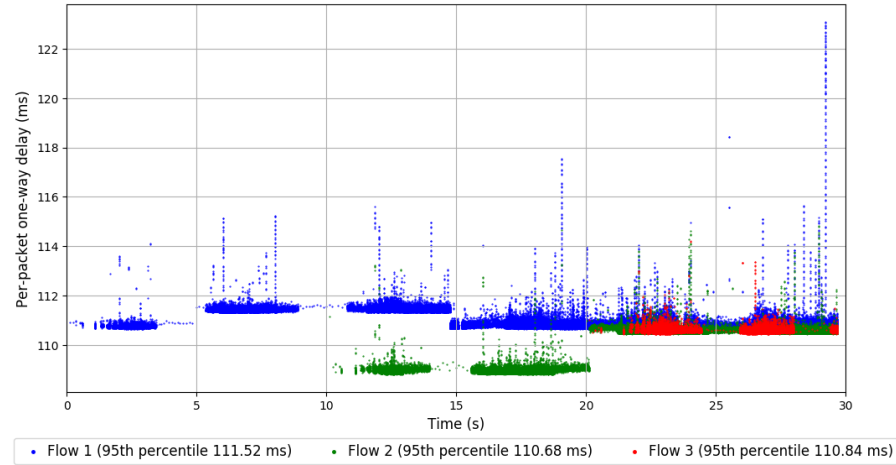
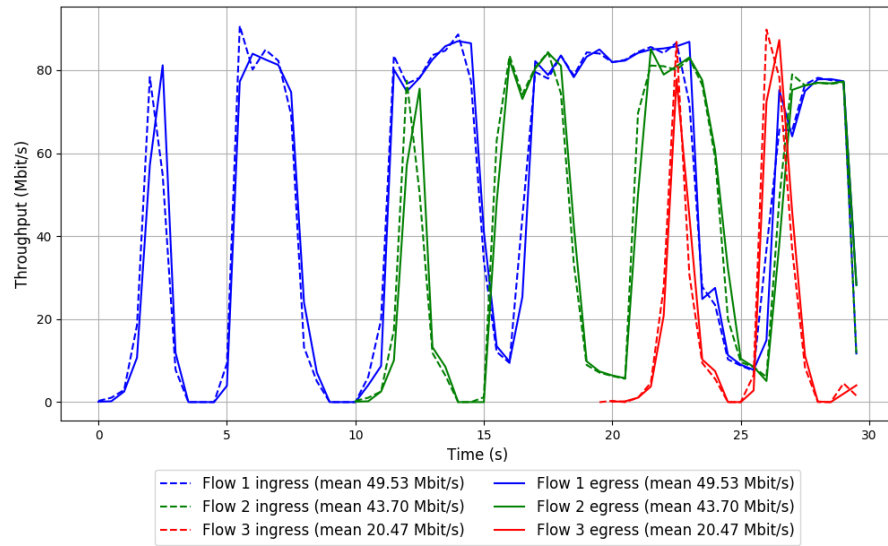
-- Flow 3:

Average throughput: 20.47 Mbit/s

95th percentile per-packet one-way delay: 110.838 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-20 22:01:38

End at: 2018-02-20 22:02:08

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.61 Mbit/s

95th percentile per-packet one-way delay: 112.415 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.96 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 34.37 Mbit/s

95th percentile per-packet one-way delay: 112.593 ms

Loss rate: 0.01%

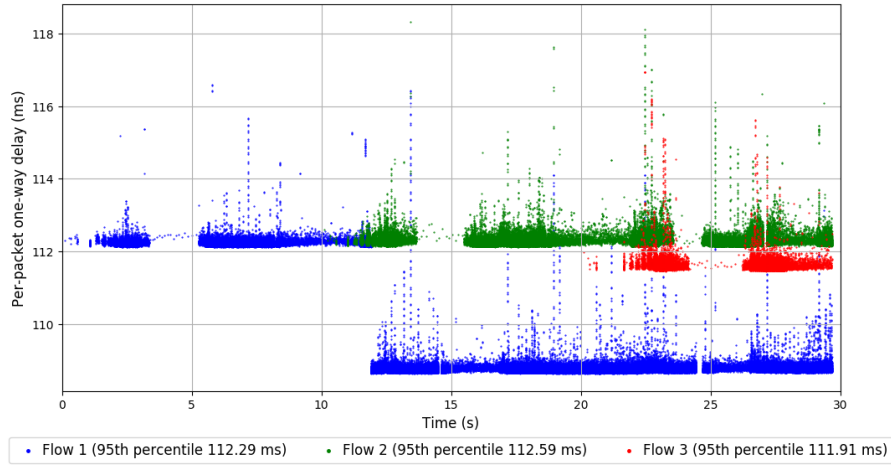
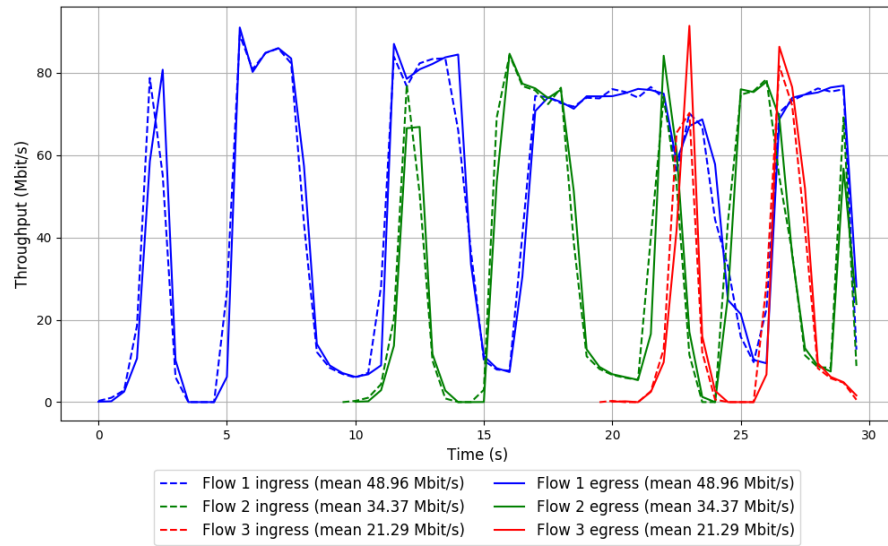
-- Flow 3:

Average throughput: 21.29 Mbit/s

95th percentile per-packet one-way delay: 111.912 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-20 22:21:25

End at: 2018-02-20 22:21:55

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.28 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.48 Mbit/s

95th percentile per-packet one-way delay: 112.473 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.37 Mbit/s

95th percentile per-packet one-way delay: 112.539 ms

Loss rate: 0.00%

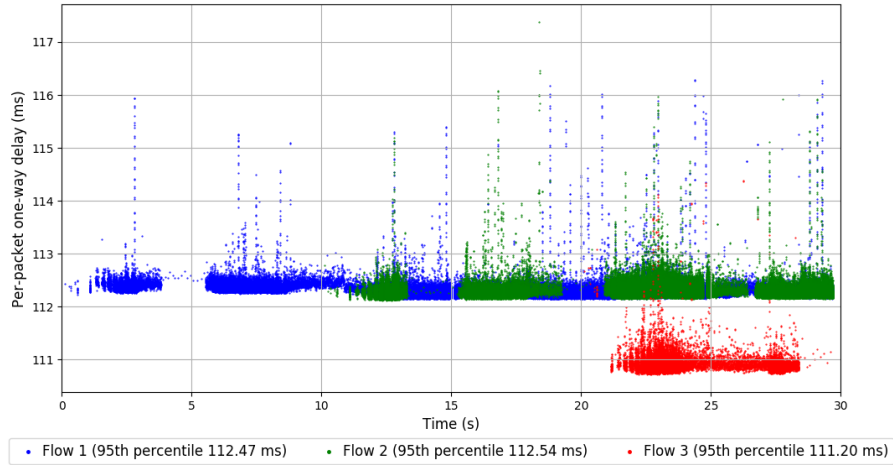
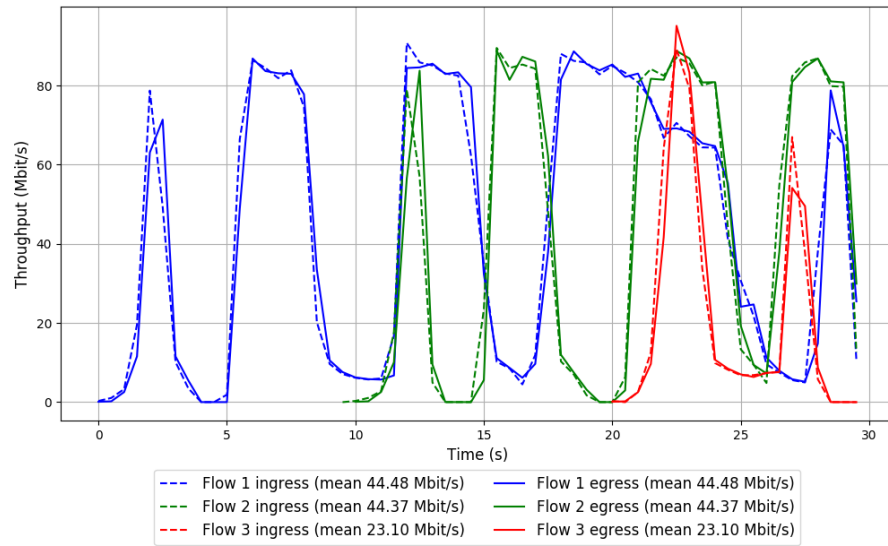
-- Flow 3:

Average throughput: 23.10 Mbit/s

95th percentile per-packet one-way delay: 111.196 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-20 22:40:44

End at: 2018-02-20 22:41:14

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.81 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.31 Mbit/s

95th percentile per-packet one-way delay: 113.183 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 51.21 Mbit/s

95th percentile per-packet one-way delay: 112.716 ms

Loss rate: 0.00%

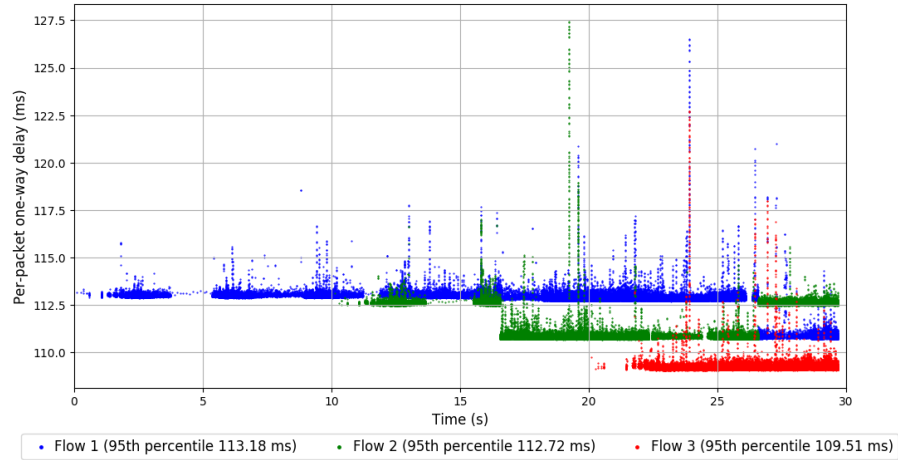
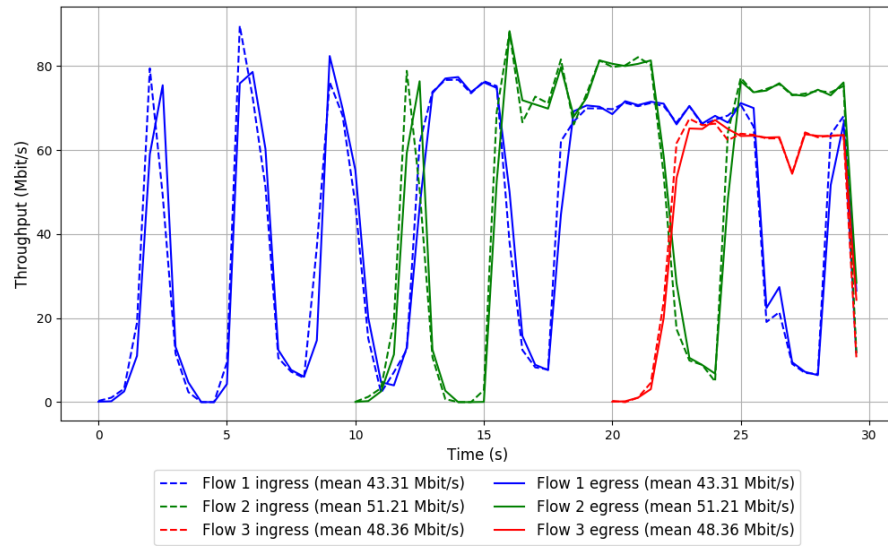
-- Flow 3:

Average throughput: 48.36 Mbit/s

95th percentile per-packet one-way delay: 109.510 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-20 23:00:13

End at: 2018-02-20 23:00:43

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.96 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.78 Mbit/s

95th percentile per-packet one-way delay: 110.958 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.59 Mbit/s

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

Loss rate: 0.00%

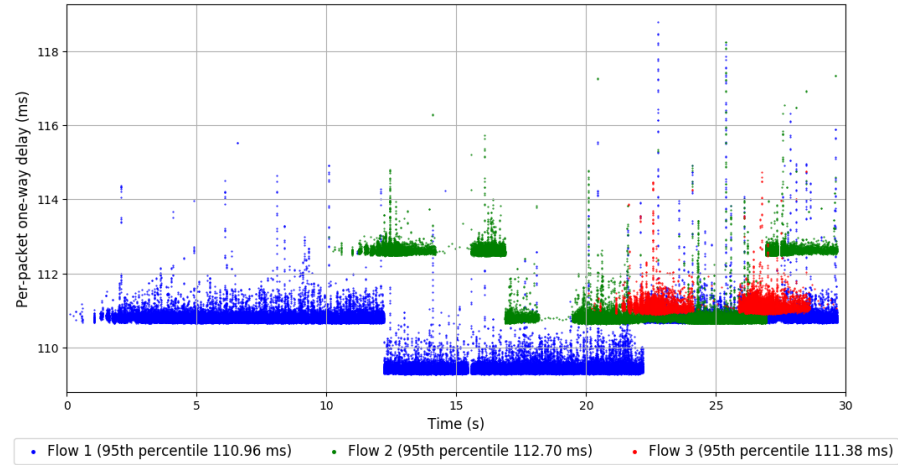
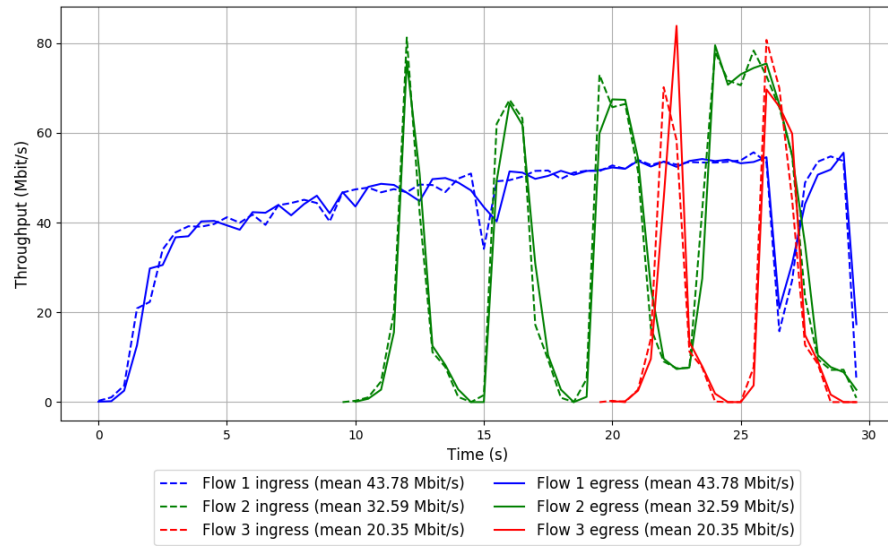
-- Flow 3:

Average throughput: 20.35 Mbit/s

95th percentile per-packet one-way delay: 111.379 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

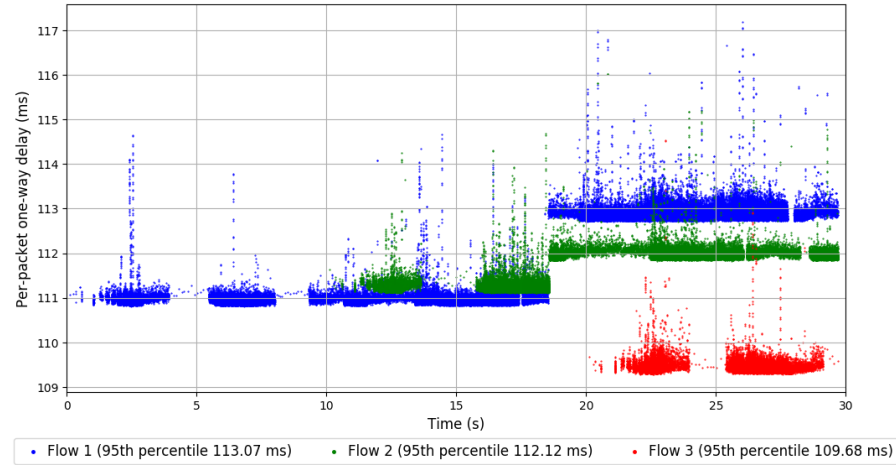
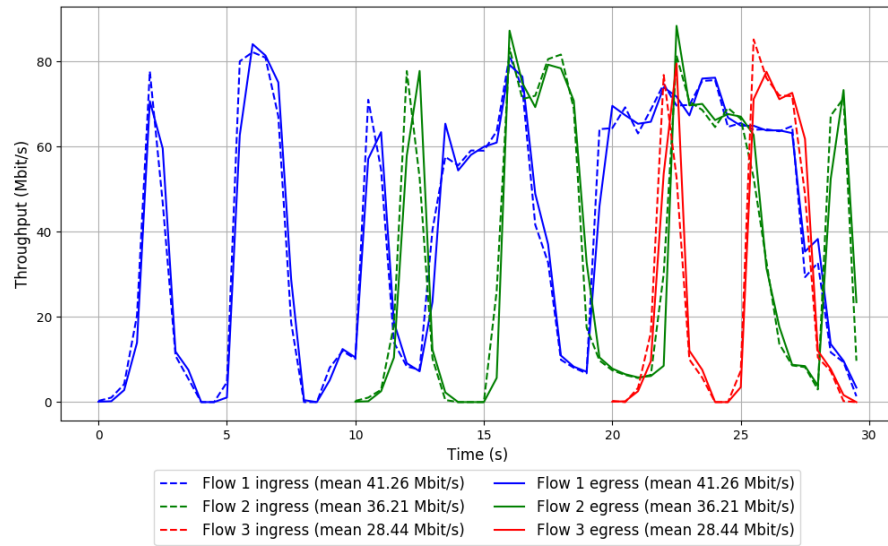


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-02-20 23:19:47
End at: 2018-02-20 23:20:17

# Below is generated by plot.py at 2018-02-21 02:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.43 Mbit/s
95th percentile per-packet one-way delay: 112.989 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.26 Mbit/s
95th percentile per-packet one-way delay: 113.069 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.21 Mbit/s
95th percentile per-packet one-way delay: 112.118 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 28.44 Mbit/s
95th percentile per-packet one-way delay: 109.680 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

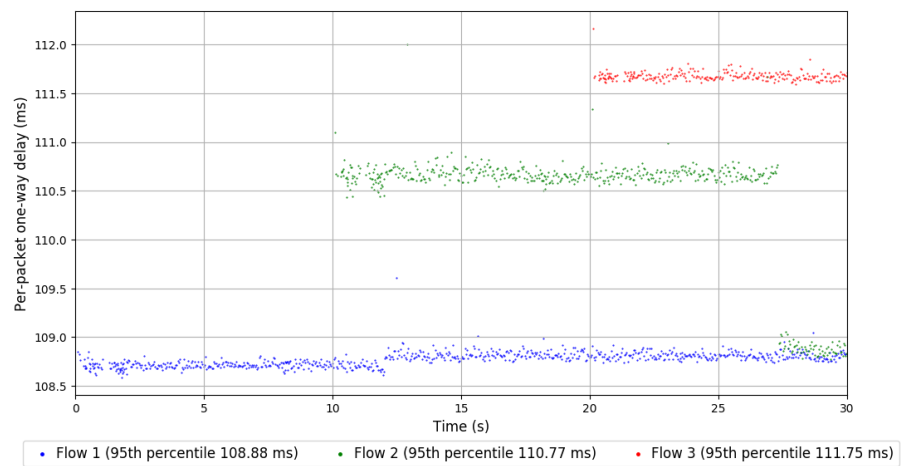
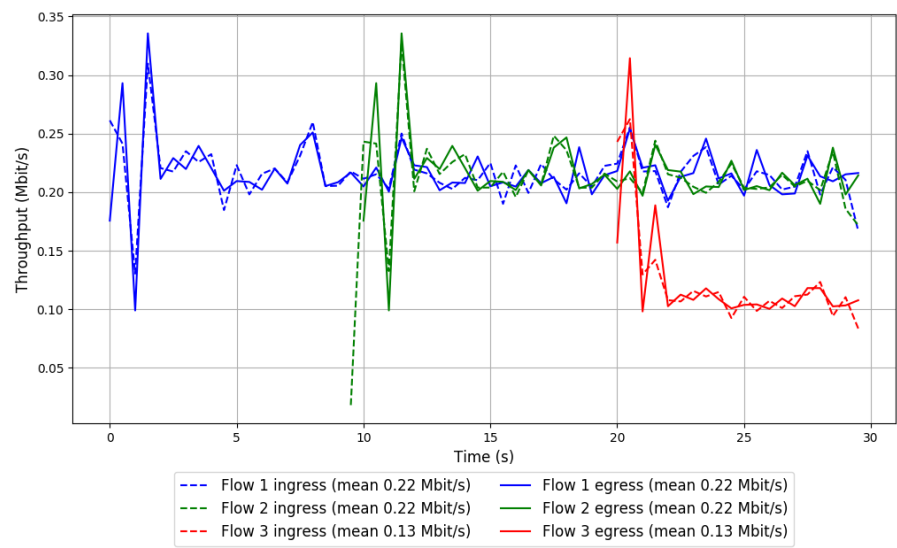


```
Run 1: Statistics of SCReAM

Start at: 2018-02-20 20:30:18
End at: 2018-02-20 20:30:48

# Below is generated by plot.py at 2018-02-21 02:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 111.692 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.878 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.772 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 111.750 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

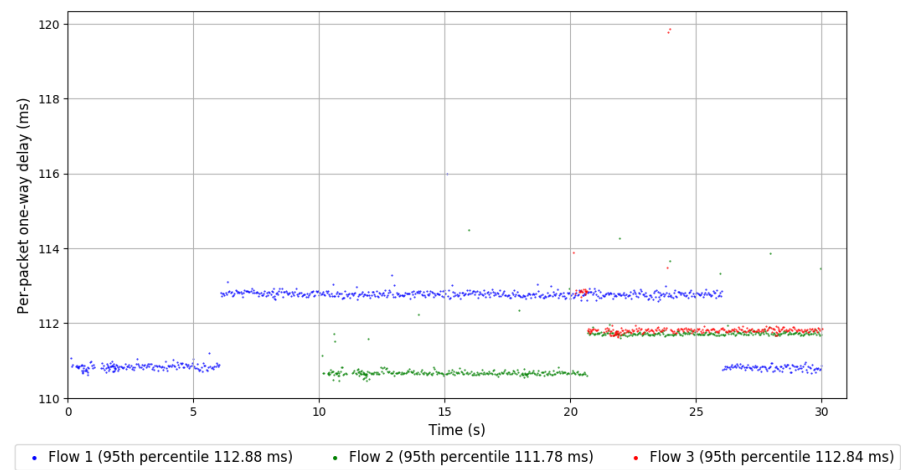
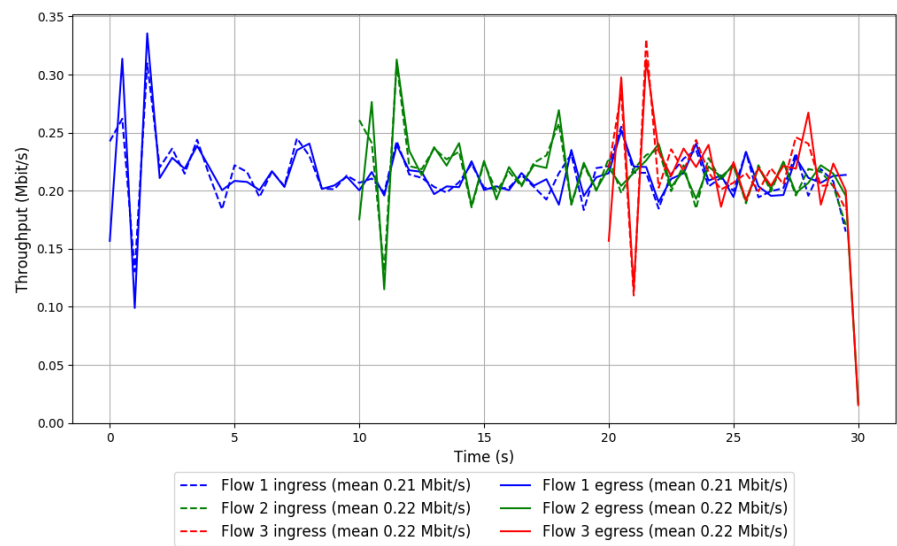


```
Run 2: Statistics of SCReAM

Start at: 2018-02-20 20:50:00
End at: 2018-02-20 20:50:30

# Below is generated by plot.py at 2018-02-21 02:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.856 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.875 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.783 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.840 ms
Loss rate: 0.00%
```

Run 2: Report of SCSReAM — Data Link

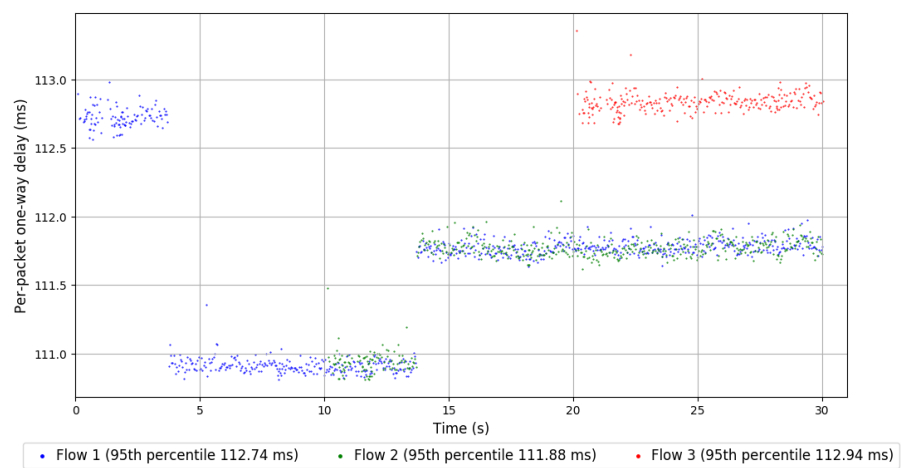
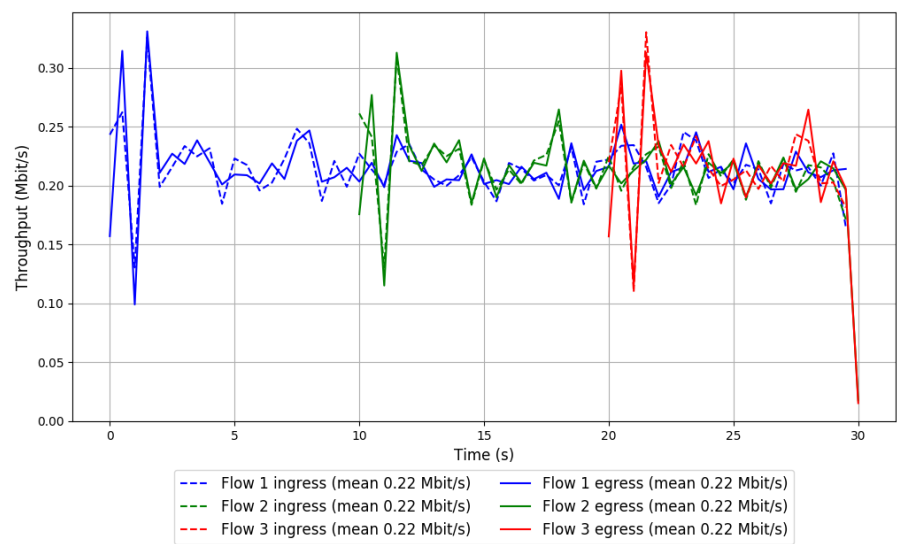


```
Run 3: Statistics of SReAM

Start at: 2018-02-20 21:09:32
End at: 2018-02-20 21:10:02

# Below is generated by plot.py at 2018-02-21 02:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.867 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.740 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.876 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.940 ms
Loss rate: 0.00%
```


Run 3: Report of SCSReAM — Data Link

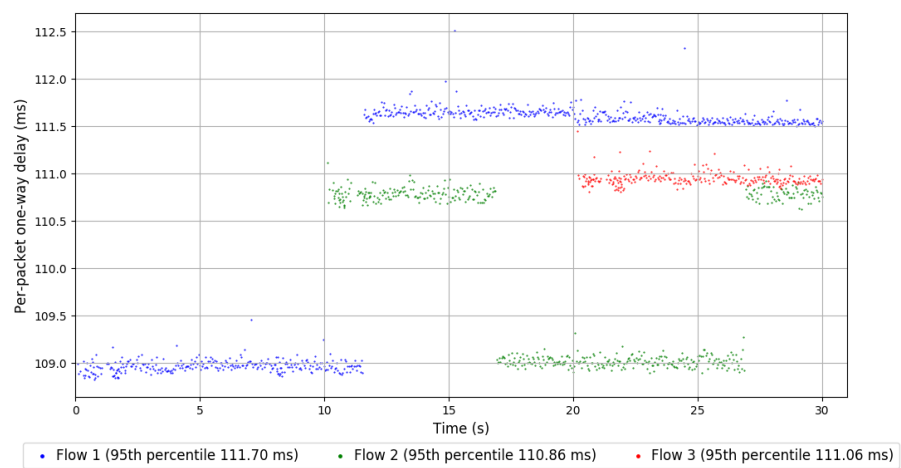
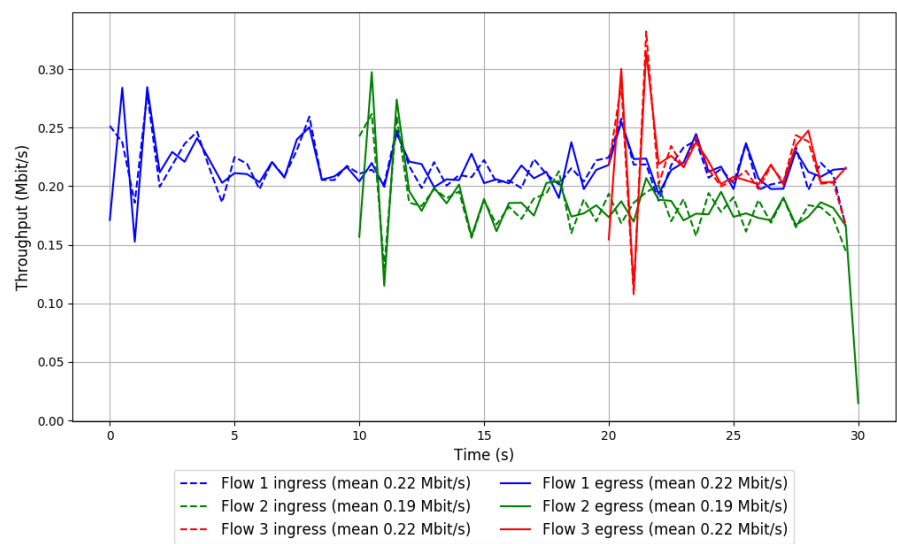


```
Run 4: Statistics of SCReAM

Start at: 2018-02-20 21:28:59
End at: 2018-02-20 21:29:29

# Below is generated by plot.py at 2018-02-21 02:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 111.671 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.701 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 110.864 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.056 ms
Loss rate: 0.00%
```

Run 4: Report of SCSReAM — Data Link

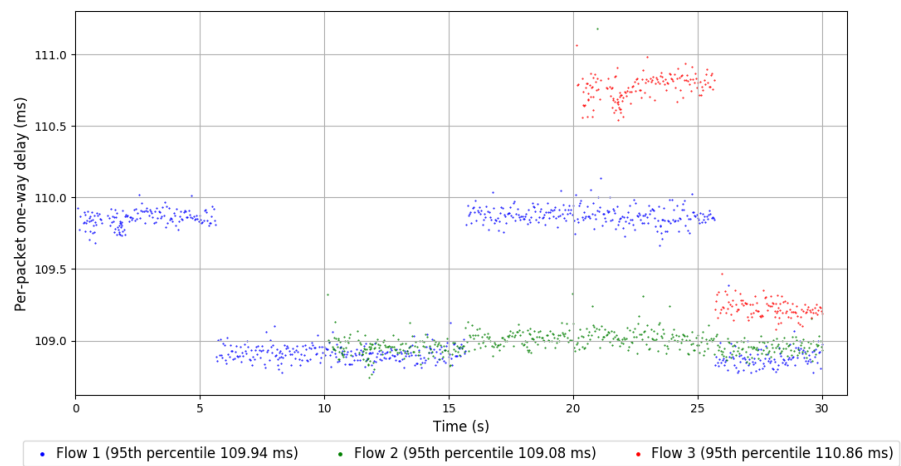
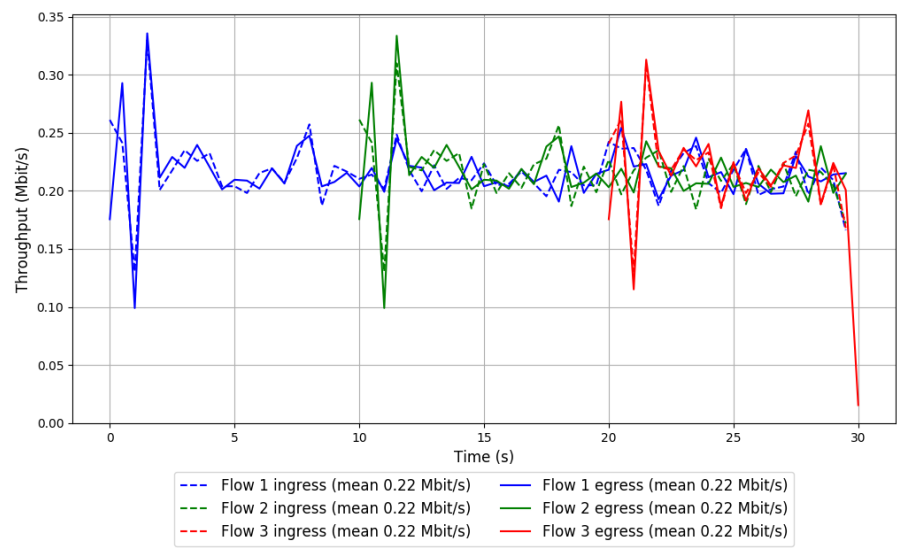


```
Run 5: Statistics of SReAM

Start at: 2018-02-20 21:48:40
End at: 2018-02-20 21:49:10

# Below is generated by plot.py at 2018-02-21 02:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 110.778 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.937 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.085 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.861 ms
Loss rate: 0.00%
```

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-02-20 22:08:09

End at: 2018-02-20 22:08:39

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.570 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.521 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.632 ms

Loss rate: 0.00%

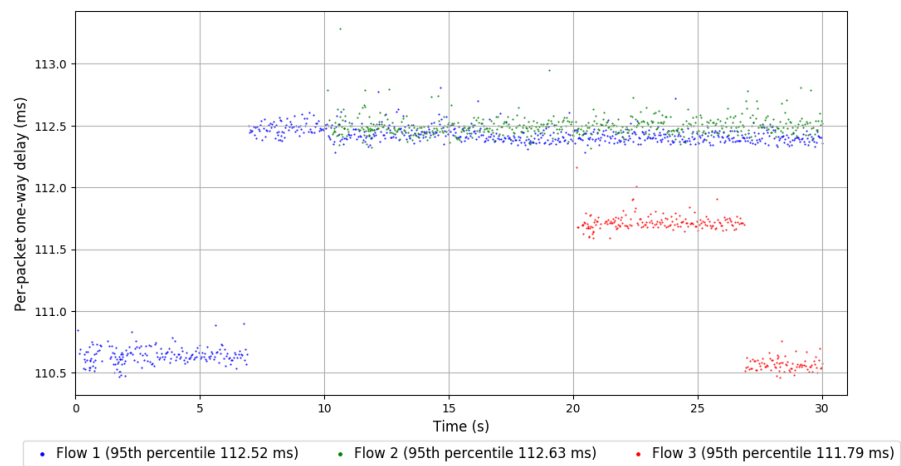
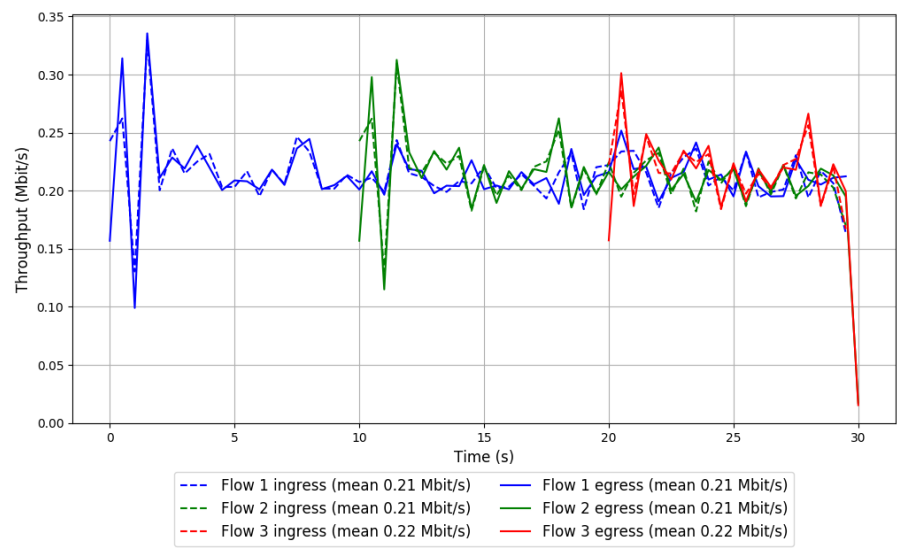
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.792 ms

Loss rate: 0.00%

Run 6: Report of SCRaM — Data Link

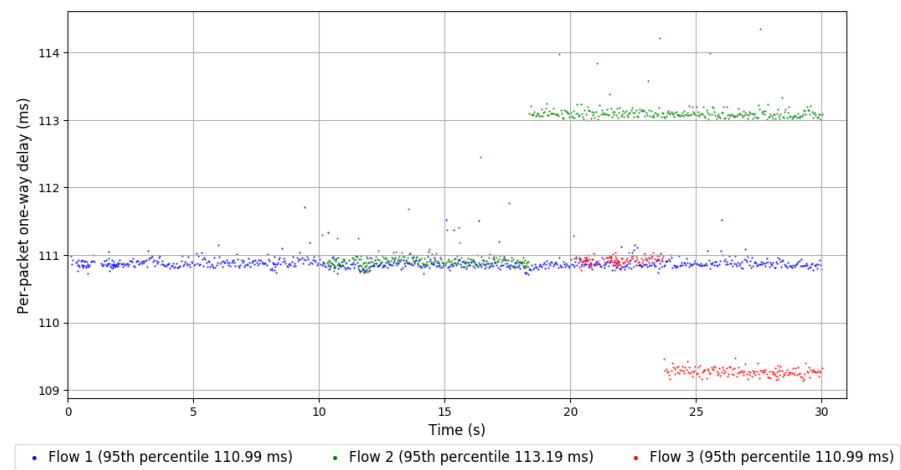
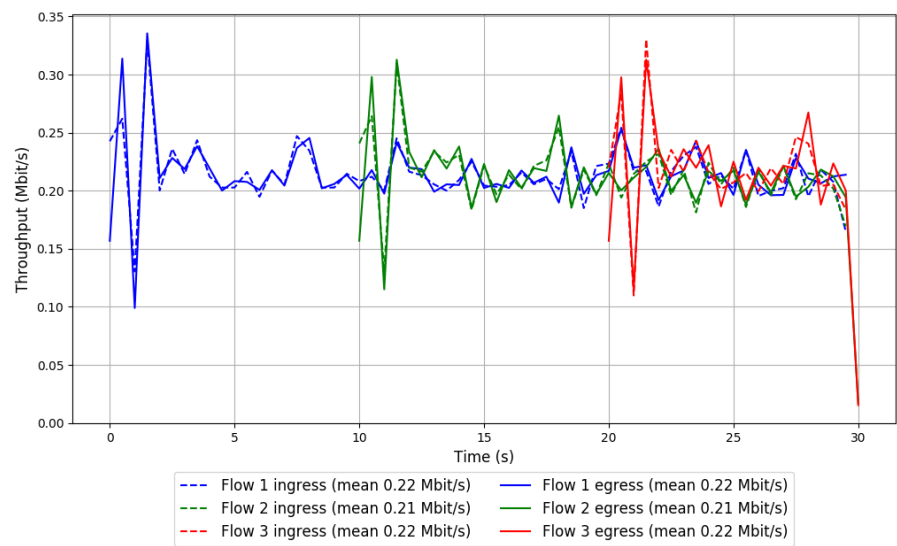


```
Run 7: Statistics of SCReAM

Start at: 2018-02-20 22:27:52
End at: 2018-02-20 22:28:22

# Below is generated by plot.py at 2018-02-21 02:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.123 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.986 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.190 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.986 ms
Loss rate: 0.00%
```


Run 7: Report of SCSReAM — Data Link

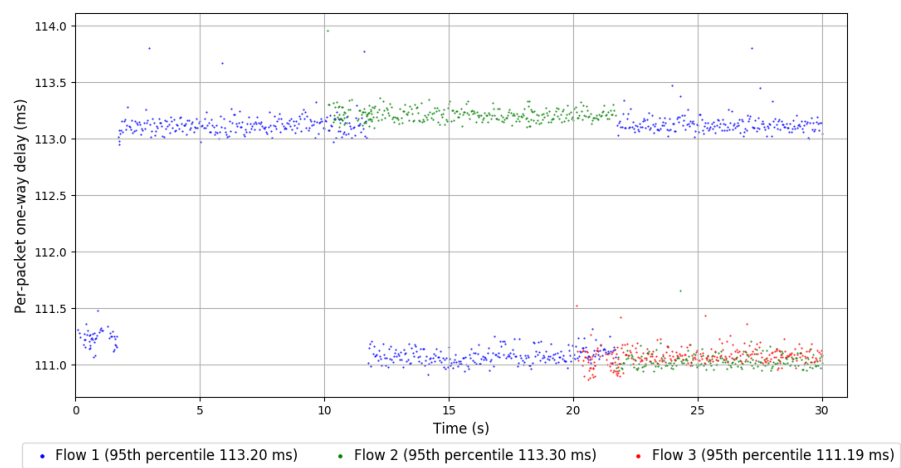
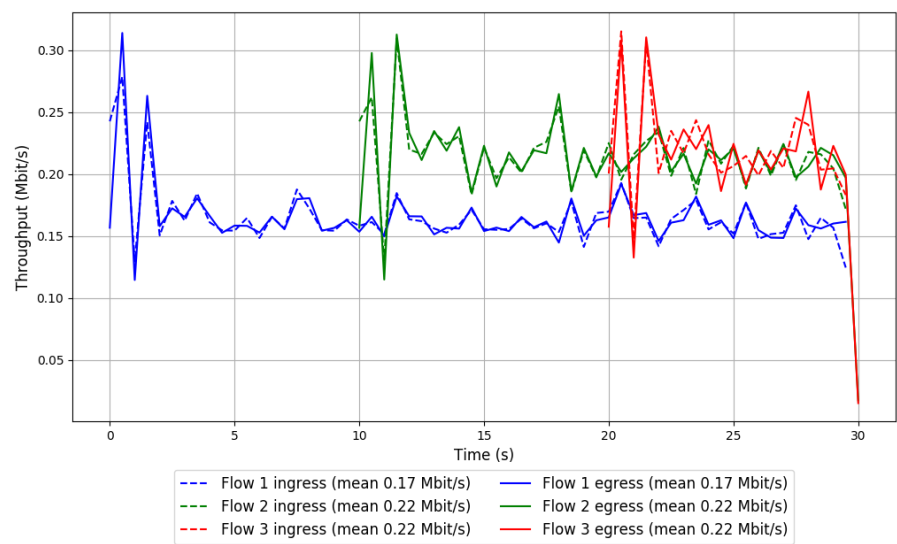


```
Run 8: Statistics of SCReAM

Start at: 2018-02-20 22:47:14
End at: 2018-02-20 22:47:44

# Below is generated by plot.py at 2018-02-21 02:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 113.257 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 113.203 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.295 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.191 ms
Loss rate: 0.00%
```

Run 8: Report of SReAM — Data Link

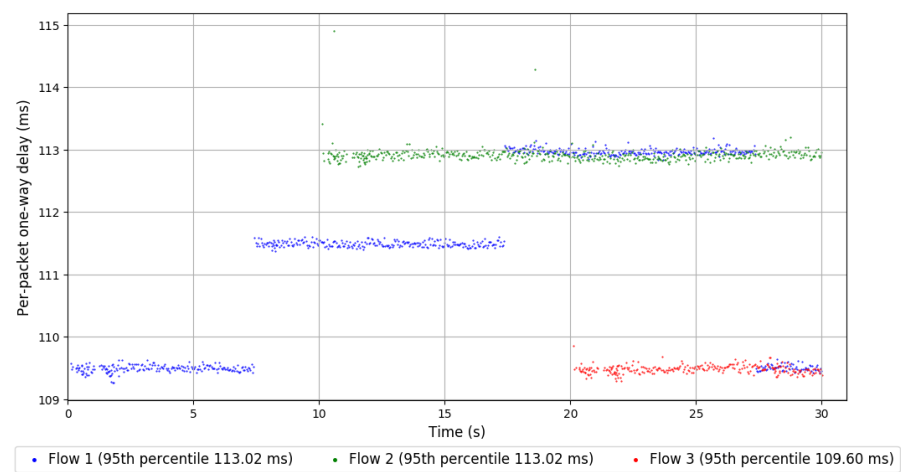
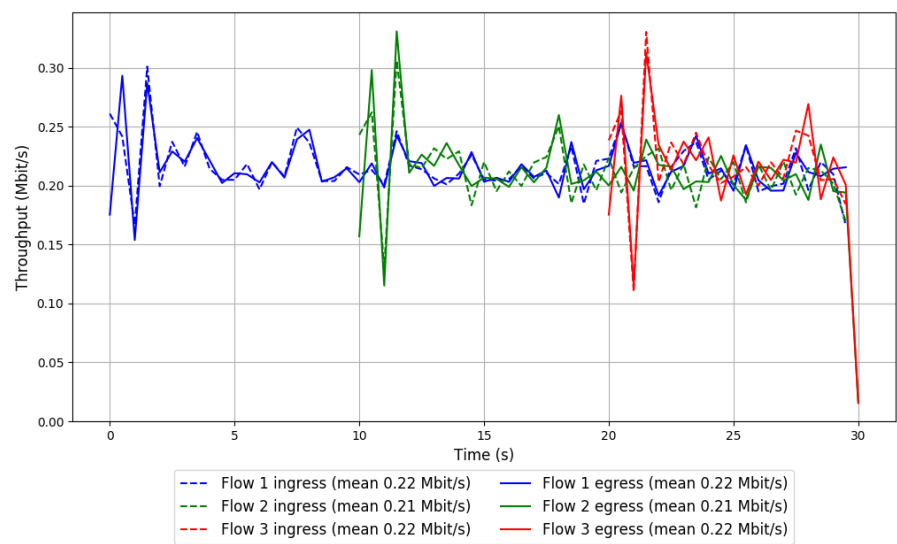


```
Run 9: Statistics of SCReAM

Start at: 2018-02-20 23:06:33
End at: 2018-02-20 23:07:03

# Below is generated by plot.py at 2018-02-21 02:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.009 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.020 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.015 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.596 ms
Loss rate: 0.00%
```

Run 9: Report of SReAM — Data Link

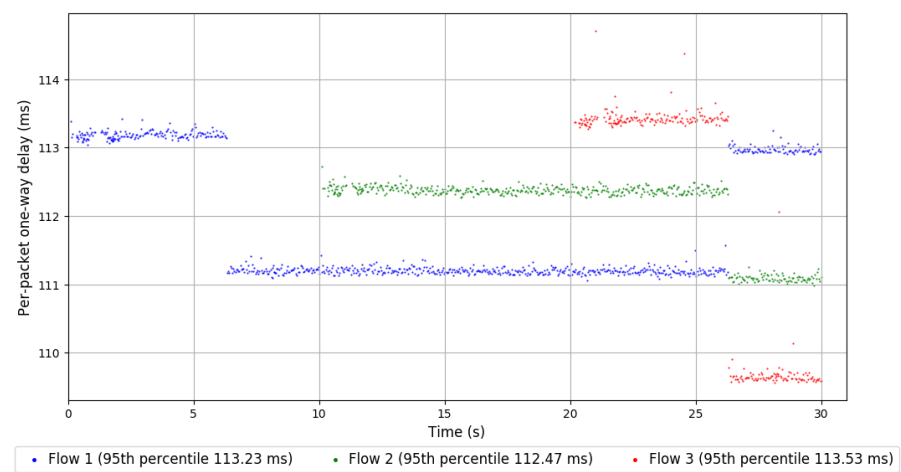
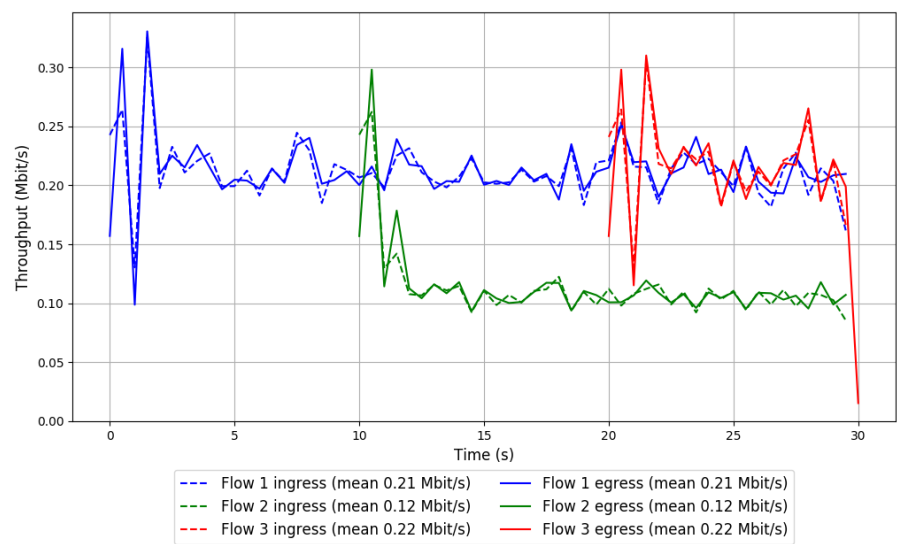


```
Run 10: Statistics of SReAM

Start at: 2018-02-20 23:26:14
End at: 2018-02-20 23:26:44

# Below is generated by plot.py at 2018-02-21 02:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 113.417 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.226 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 112.466 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.527 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

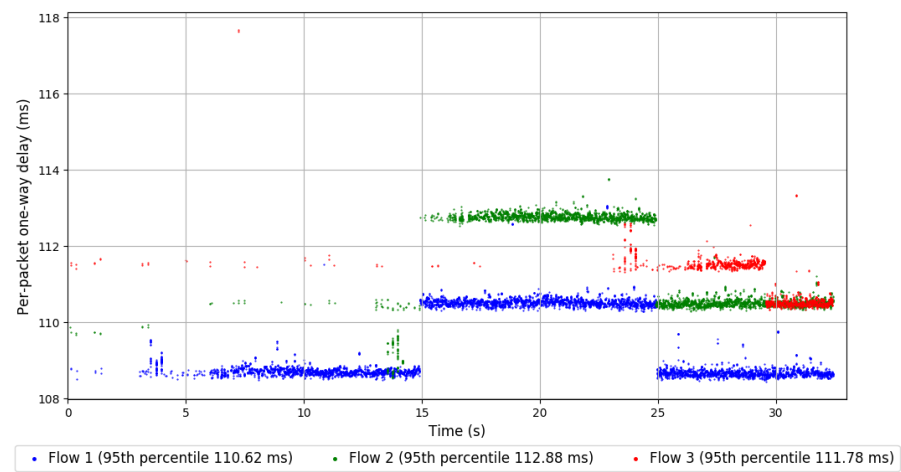
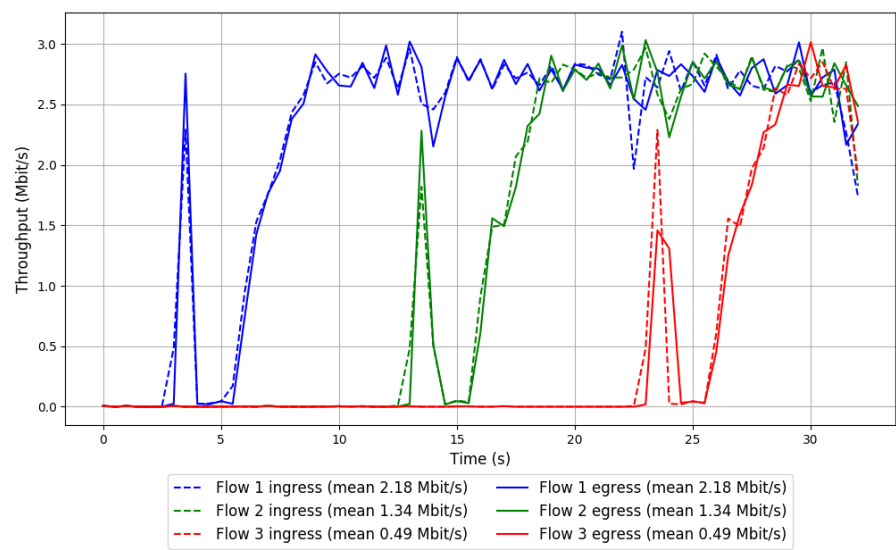


```
Run 1: Statistics of WebRTC media

Start at: 2018-02-20 20:34:43
End at: 2018-02-20 20:35:13

# Below is generated by plot.py at 2018-02-21 02:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.01 Mbit/s
95th percentile per-packet one-way delay: 112.811 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 110.620 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 112.876 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 111.776 ms
Loss rate: 0.06%
```


Run 1: Report of WebRTC media — Data Link

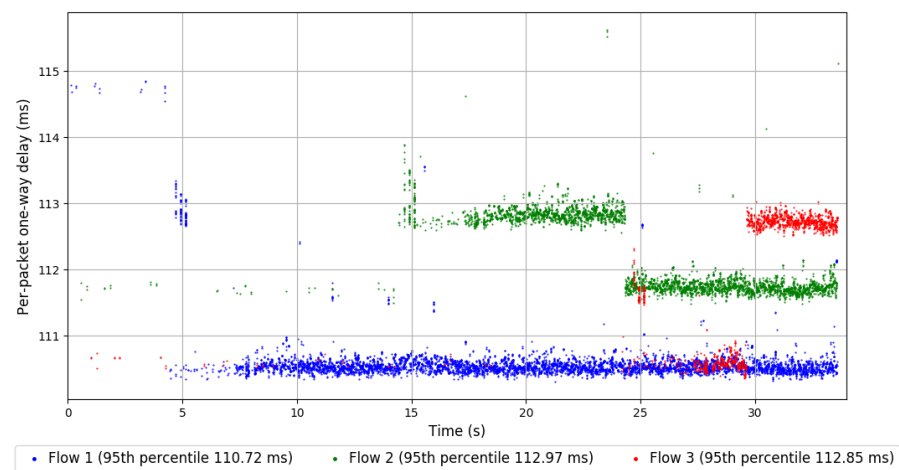
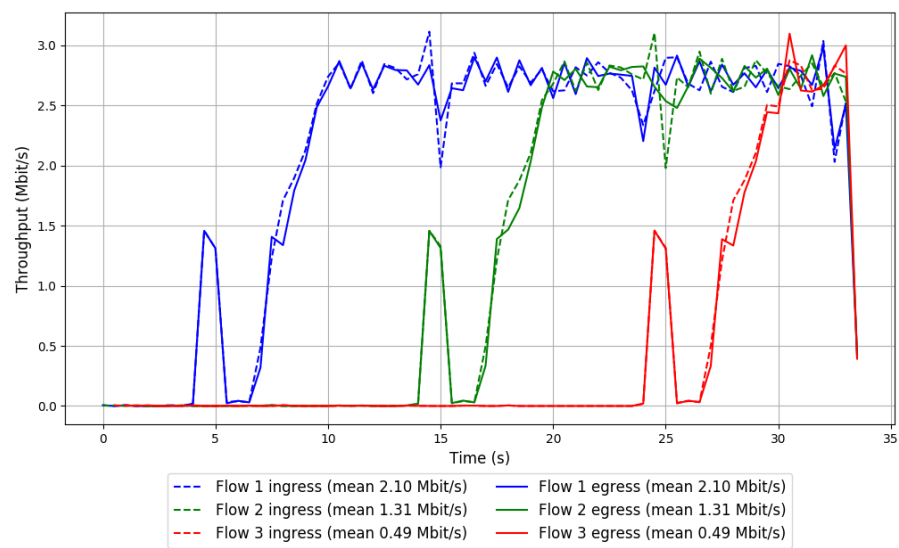


```
Run 2: Statistics of WebRTC media

Start at: 2018-02-20 20:54:20
End at: 2018-02-20 20:54:50

# Below is generated by plot.py at 2018-02-21 02:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: 112.878 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 110.719 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 112.966 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 112.854 ms
Loss rate: 0.06%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-20 21:14:04

End at: 2018-02-20 21:14:34

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 112.872 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 111.136 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

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

Loss rate: 0.00%

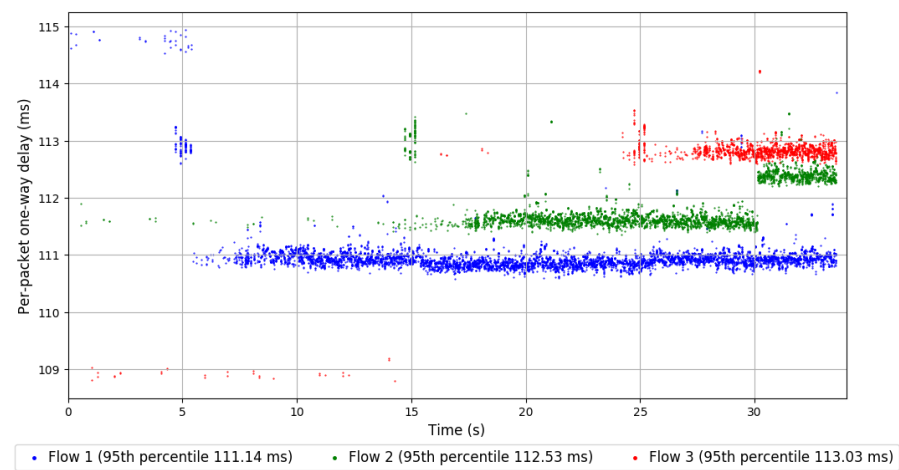
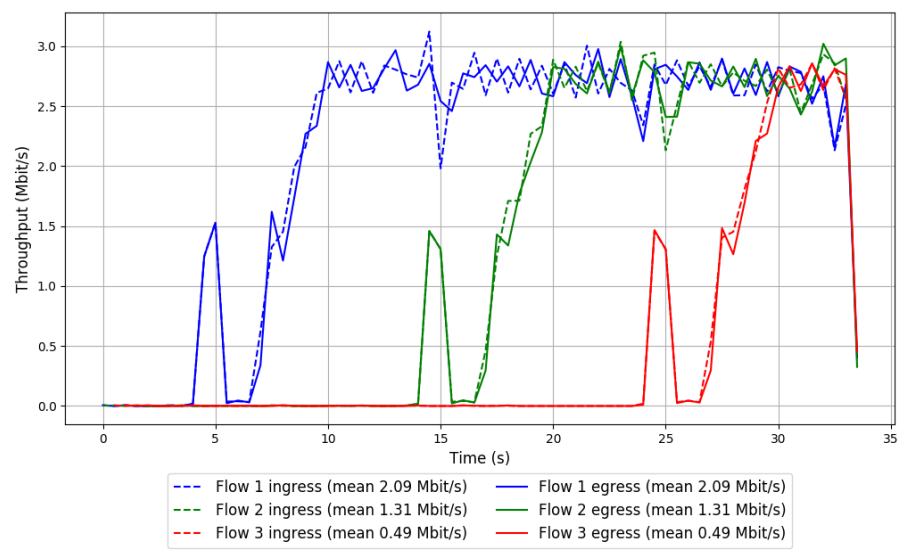
-- Flow 3:

Average throughput: 0.49 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-20 21:33:27

End at: 2018-02-20 21:33:57

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 110.917 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 110.963 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 109.265 ms

Loss rate: 0.00%

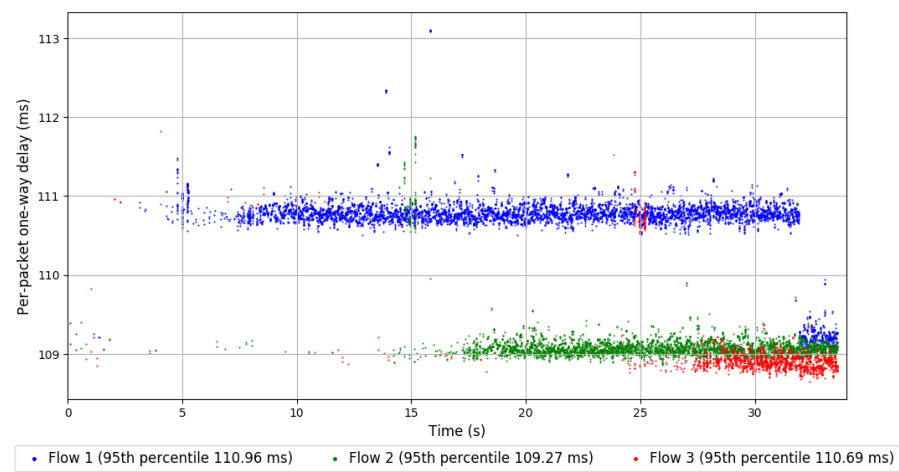
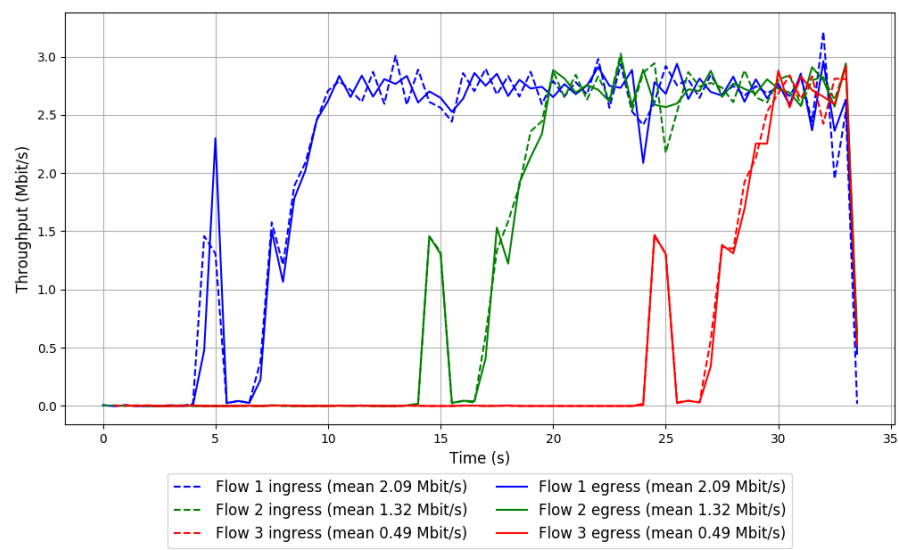
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 110.691 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-20 21:53:00

End at: 2018-02-20 21:53:30

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 112.591 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.609 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 112.584 ms

Loss rate: 0.00%

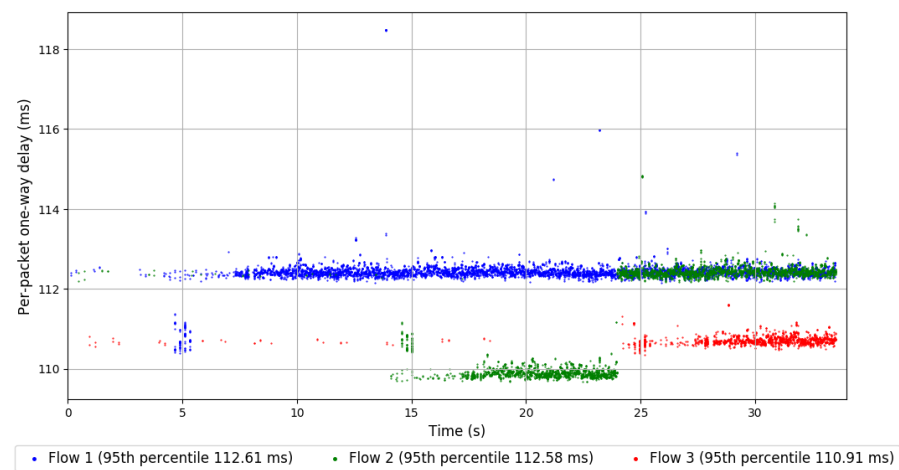
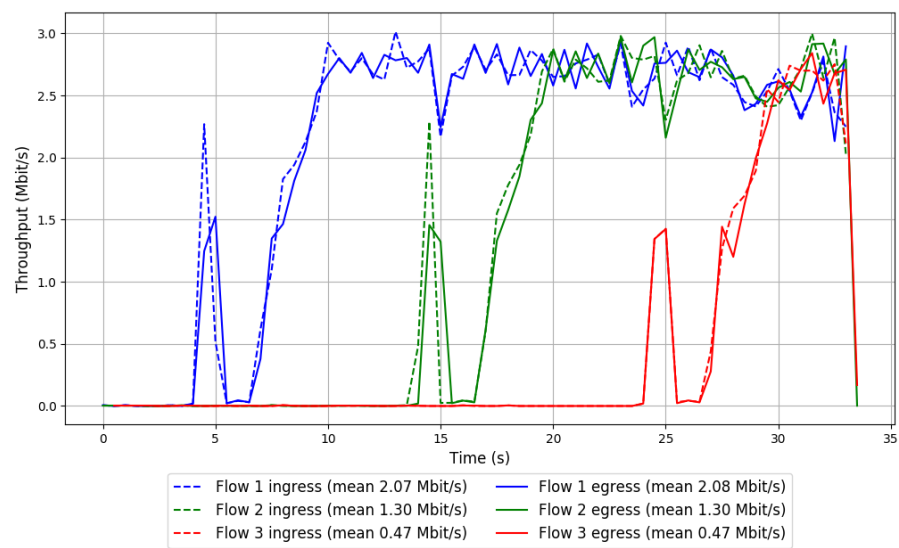
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 110.910 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-20 22:12:31

End at: 2018-02-20 22:13:01

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 112.588 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 111.009 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.29 Mbit/s

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

Loss rate: 0.02%

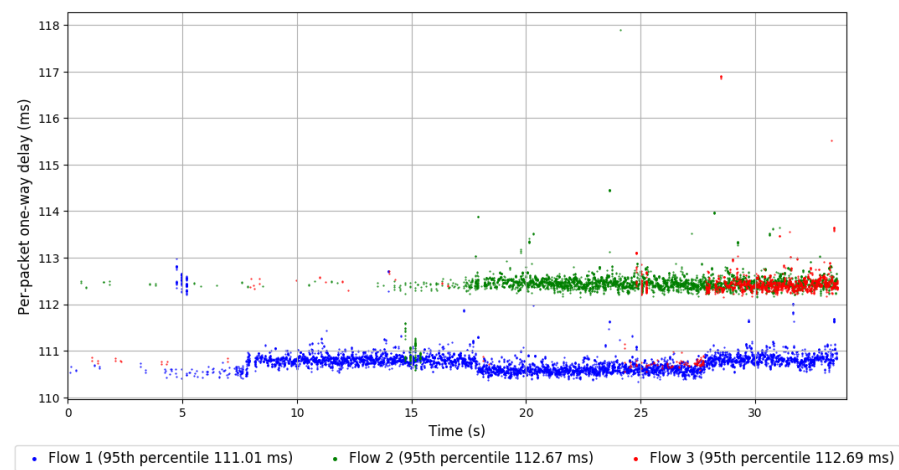
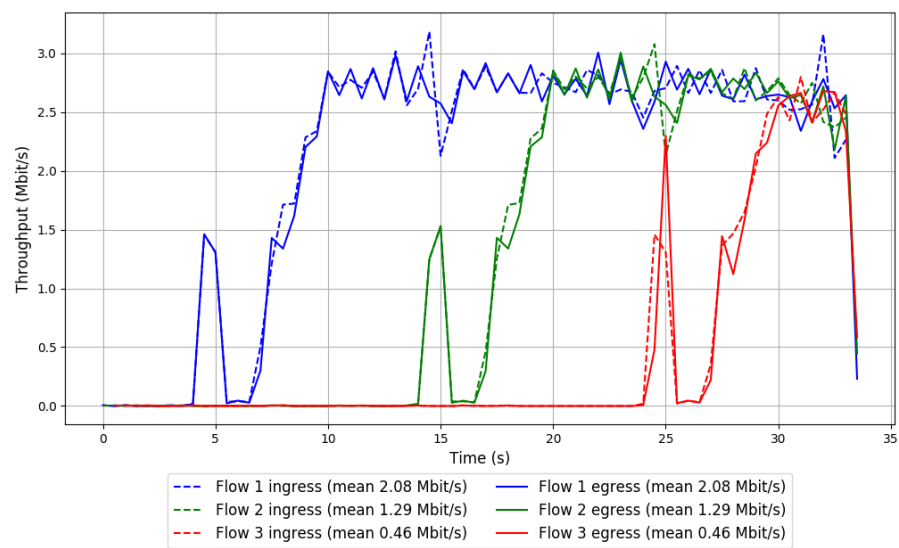
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 112.689 ms

Loss rate: 0.01%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-20 22:32:18

End at: 2018-02-20 22:32:48

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.84 Mbit/s

95th percentile per-packet one-way delay: 113.154 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 113.208 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 111.084 ms

Loss rate: 0.00%

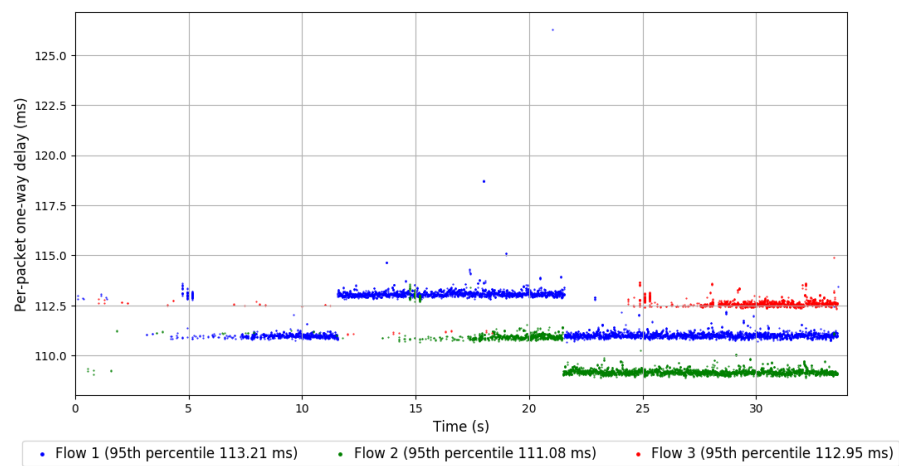
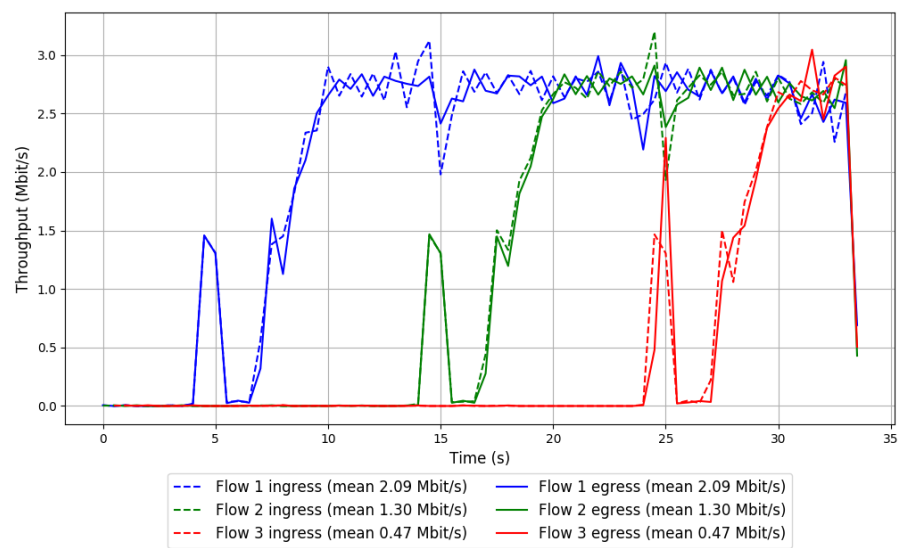
-- Flow 3:

Average throughput: 0.47 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-20 22:51:35

End at: 2018-02-20 22:52:05

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.86 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 111.288 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 113.293 ms

Loss rate: 0.00%

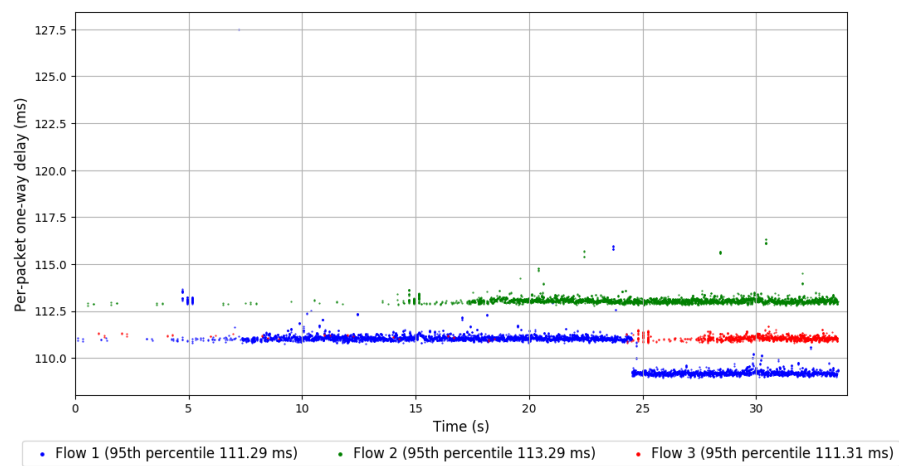
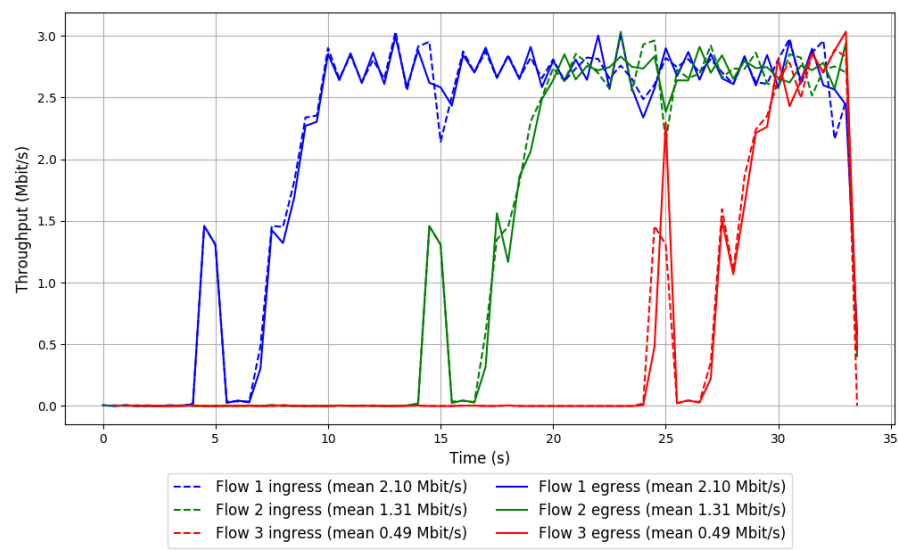
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 111.307 ms

Loss rate: 0.01%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-20 23:11:04

End at: 2018-02-20 23:11:34

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.82 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 113.305 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 113.216 ms

Loss rate: 0.00%

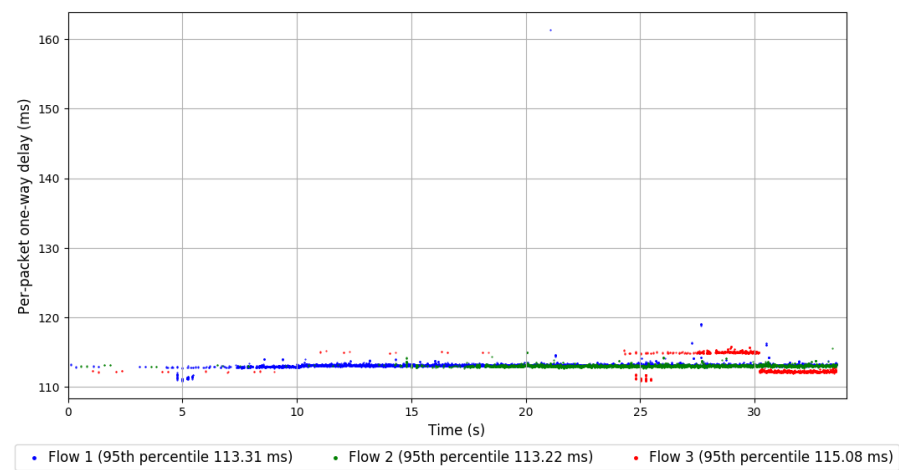
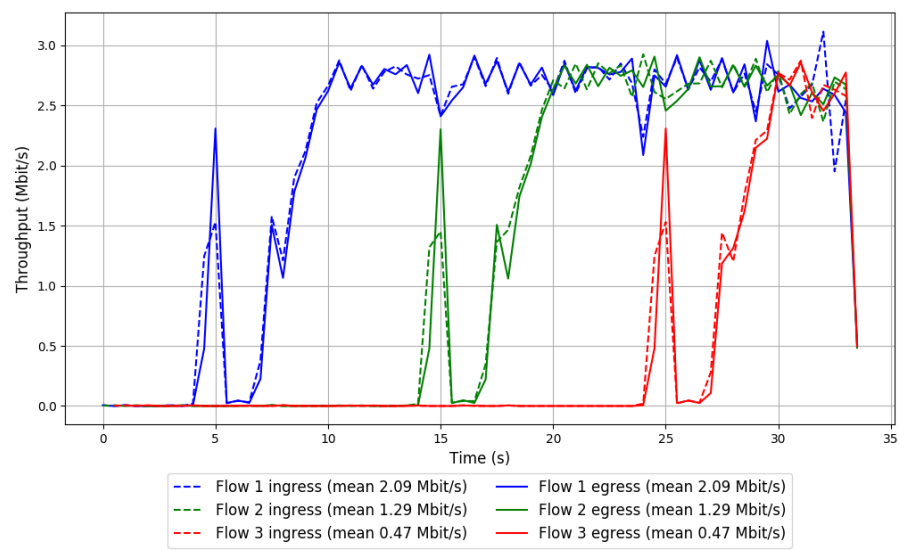
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 115.076 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link

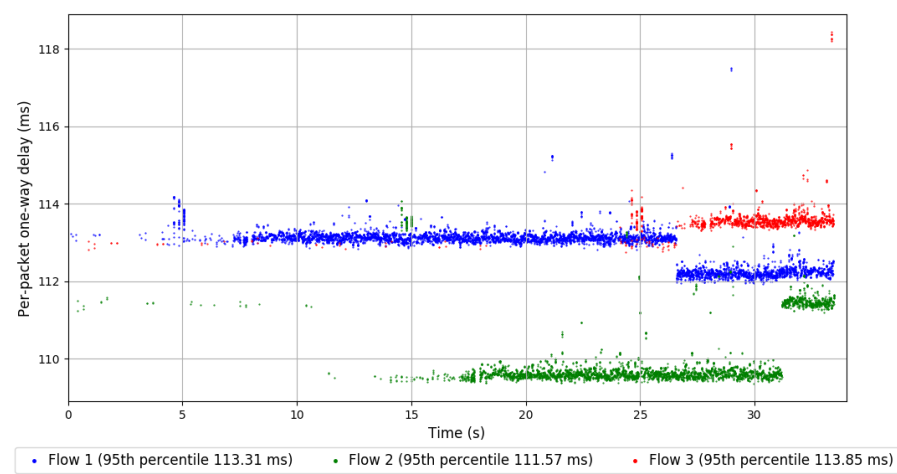
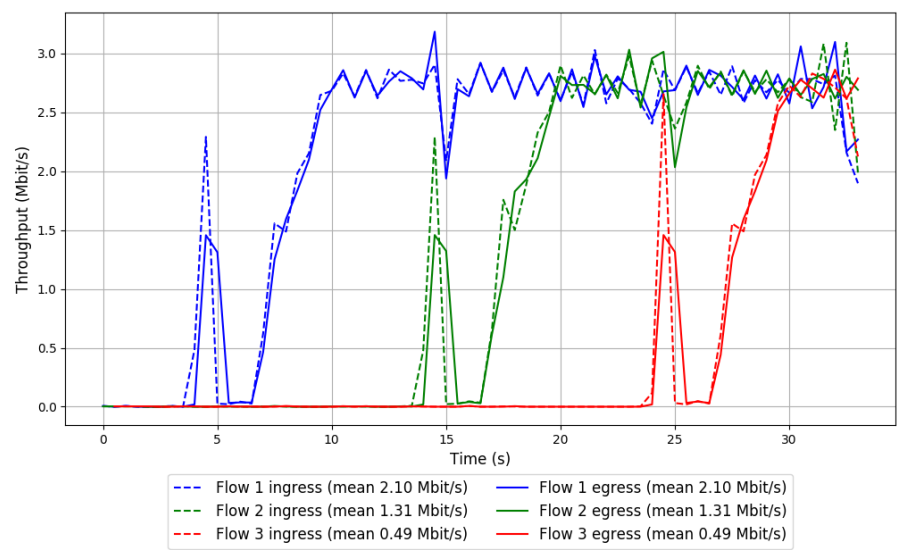


```
Run 10: Statistics of WebRTC media

Start at: 2018-02-20 23:30:33
End at: 2018-02-20 23:31:03

# Below is generated by plot.py at 2018-02-21 02:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 113.609 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 113.310 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 111.573 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 113.853 ms
Loss rate: 0.00%
```

Run 10: Report of WebRTC media — Data Link

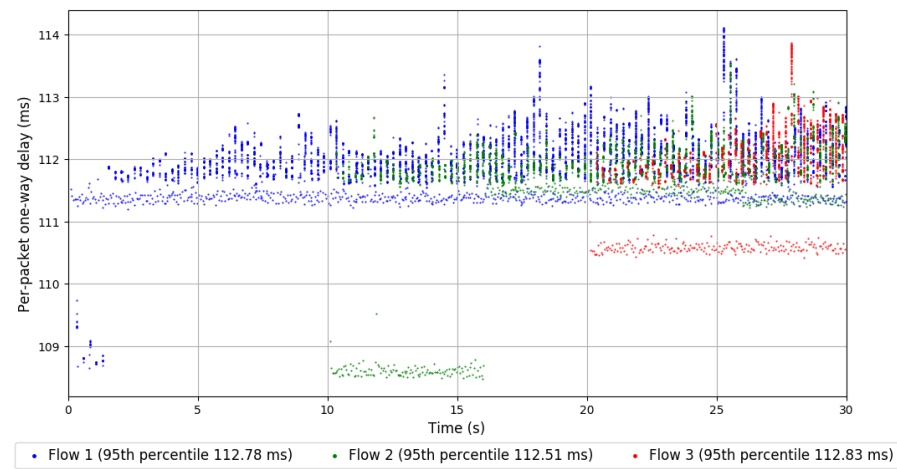
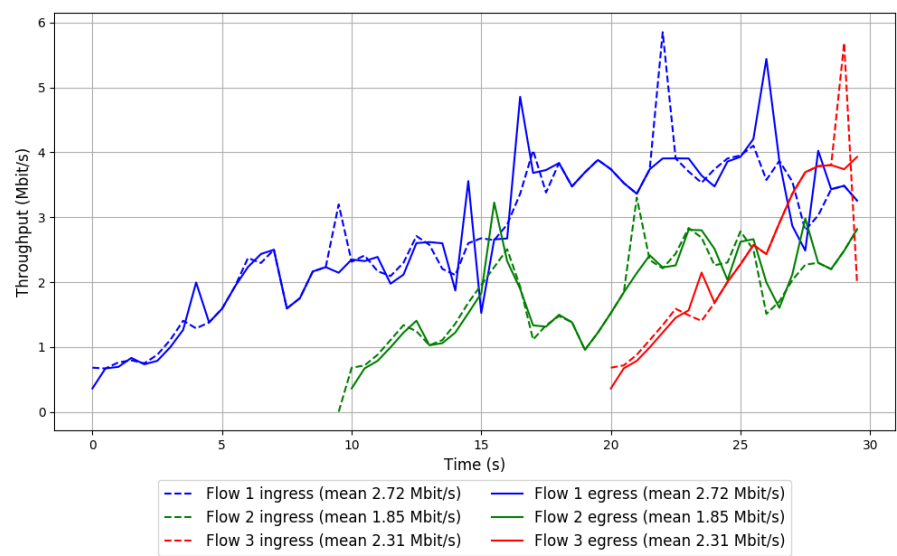


```
Run 1: Statistics of Sprout

Start at: 2018-02-20 20:36:54
End at: 2018-02-20 20:37:24

# Below is generated by plot.py at 2018-02-21 02:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: 112.743 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.72 Mbit/s
95th percentile per-packet one-way delay: 112.784 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.85 Mbit/s
95th percentile per-packet one-way delay: 112.507 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 112.830 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-20 20:56:27

End at: 2018-02-20 20:56:57

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.73 Mbit/s

95th percentile per-packet one-way delay: 113.673 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.62 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 113.575 ms

Loss rate: 0.00%

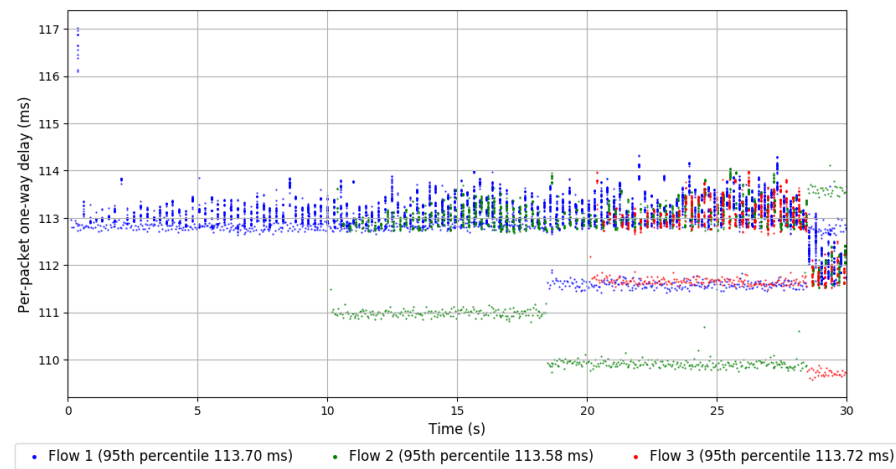
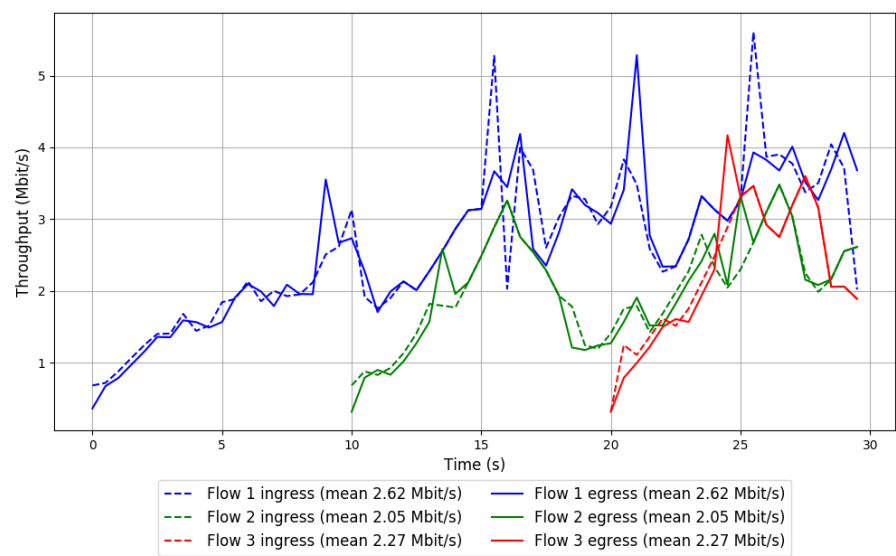
-- Flow 3:

Average throughput: 2.27 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-20 21:16:06

End at: 2018-02-20 21:16:36

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.07 Mbit/s

95th percentile per-packet one-way delay: 113.673 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.97 Mbit/s

95th percentile per-packet one-way delay: 113.733 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 113.598 ms

Loss rate: 0.00%

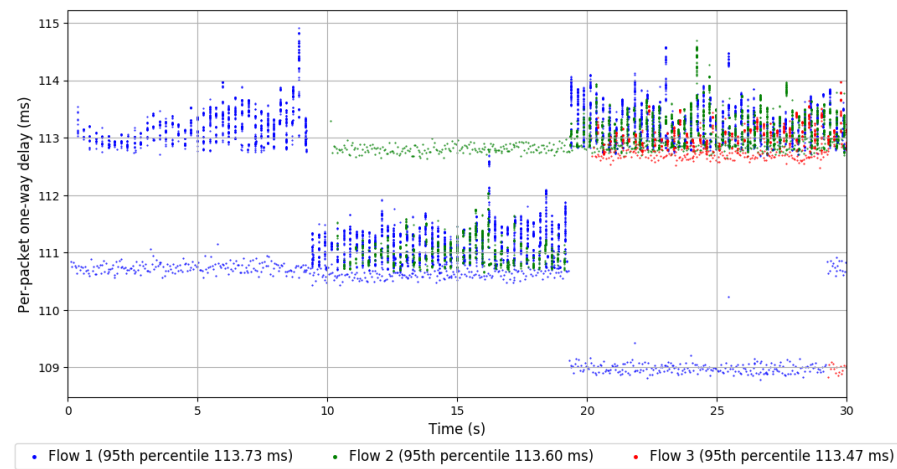
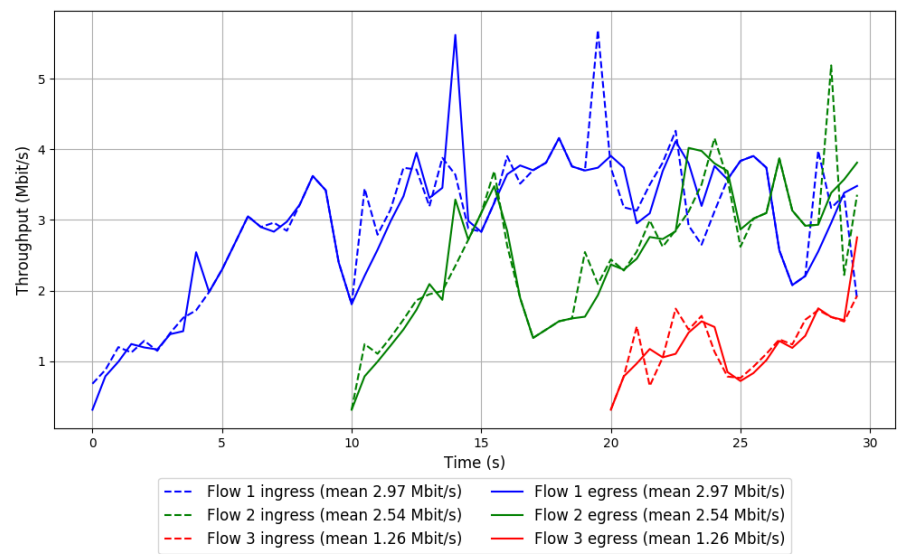
-- Flow 3:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 113.469 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-20 21:35:41

End at: 2018-02-20 21:36:11

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.65 Mbit/s

95th percentile per-packet one-way delay: 111.517 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.47 Mbit/s

95th percentile per-packet one-way delay: 111.275 ms

Loss rate: 0.00%

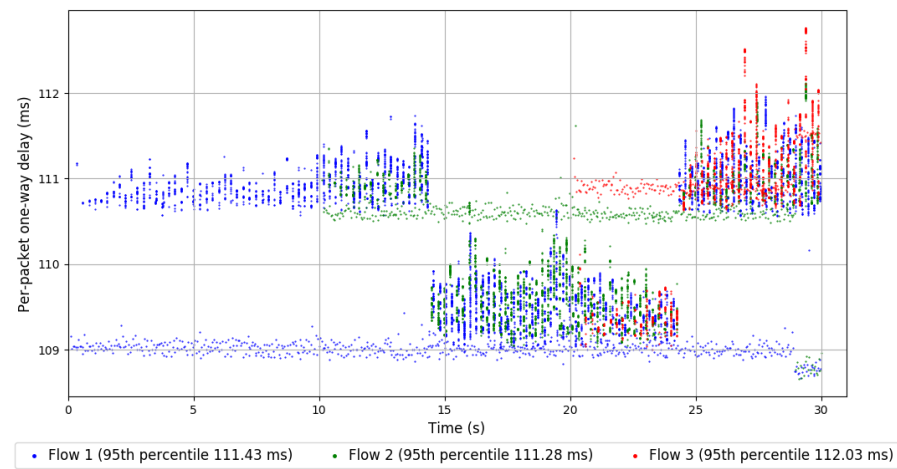
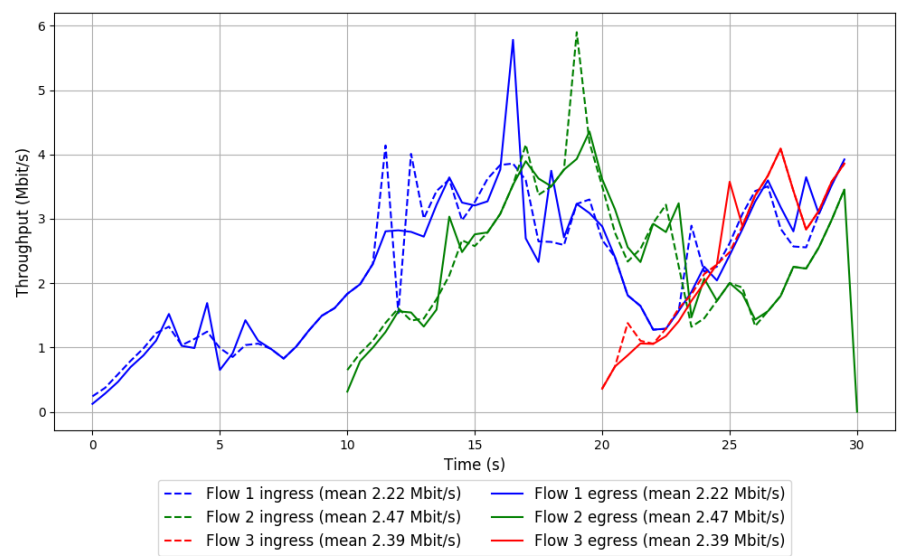
-- Flow 3:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 112.029 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-20 21:55:13

End at: 2018-02-20 21:55:43

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.49 Mbit/s

95th percentile per-packet one-way delay: 112.944 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 112.872 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.26 Mbit/s

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

Loss rate: 0.00%

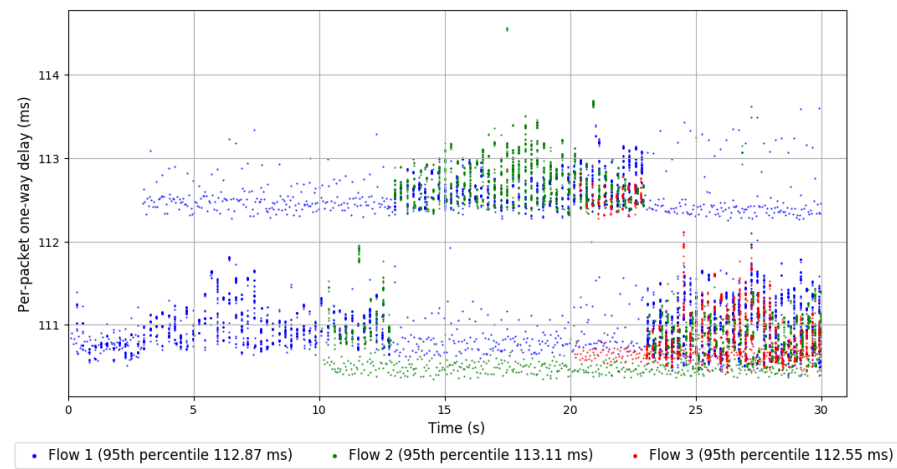
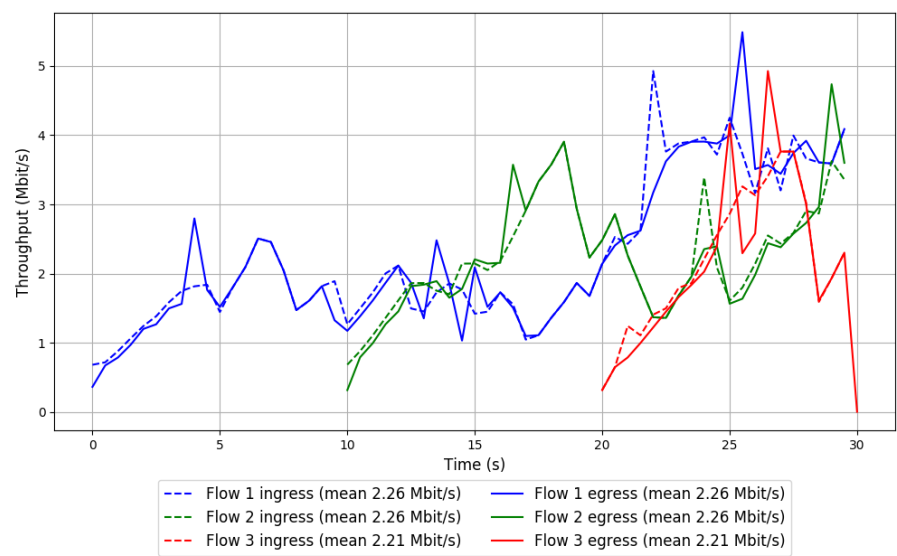
-- Flow 3:

Average throughput: 2.21 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-20 22:14:46

End at: 2018-02-20 22:15:16

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.89 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.11 Mbit/s

95th percentile per-packet one-way delay: 112.854 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.25 Mbit/s

95th percentile per-packet one-way delay: 112.094 ms

Loss rate: 0.00%

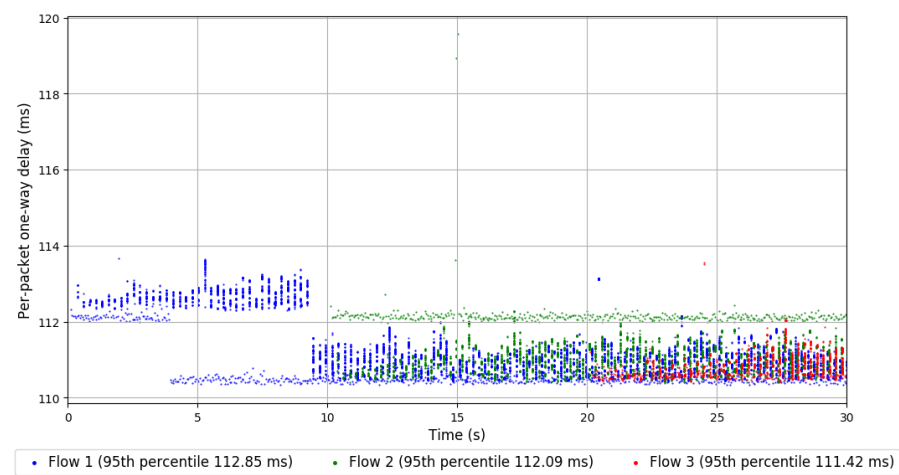
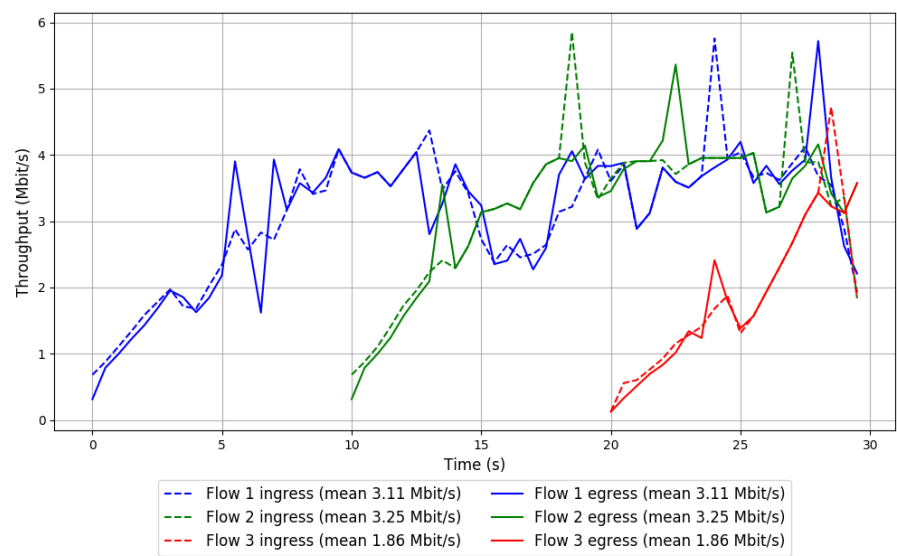
-- Flow 3:

Average throughput: 1.86 Mbit/s

95th percentile per-packet one-way delay: 111.418 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-20 22:34:20

End at: 2018-02-20 22:34:50

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.36 Mbit/s

95th percentile per-packet one-way delay: 113.610 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.02 Mbit/s

95th percentile per-packet one-way delay: 113.579 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.59 Mbit/s

95th percentile per-packet one-way delay: 113.781 ms

Loss rate: 0.00%

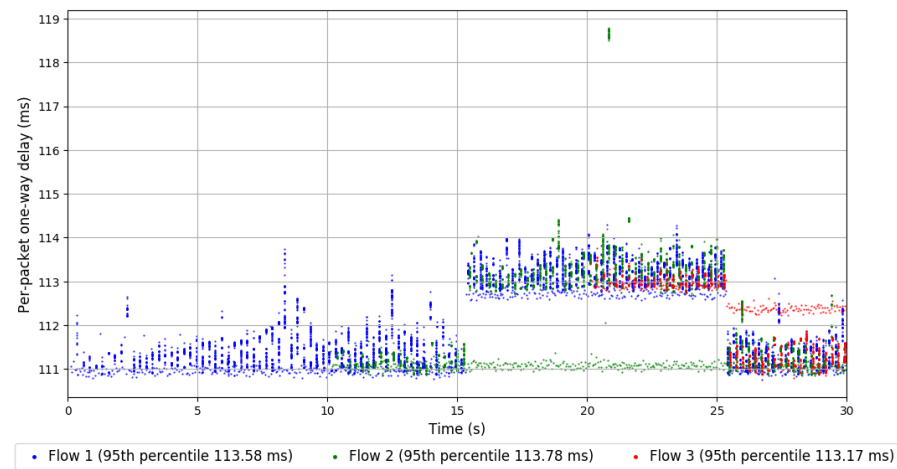
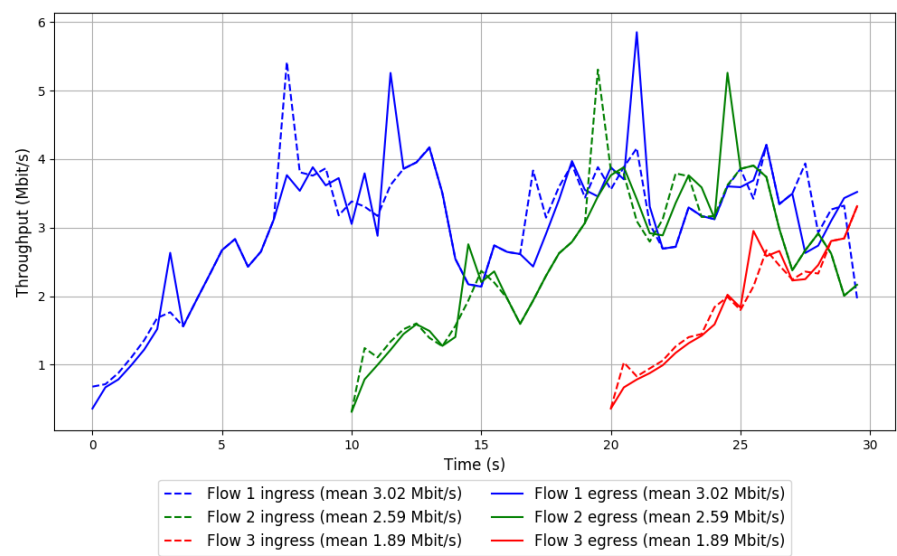
-- Flow 3:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 113.169 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-20 22:53:43

End at: 2018-02-20 22:54:13

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.06 Mbit/s

95th percentile per-packet one-way delay: 112.579 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 112.582 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 112.697 ms

Loss rate: 0.00%

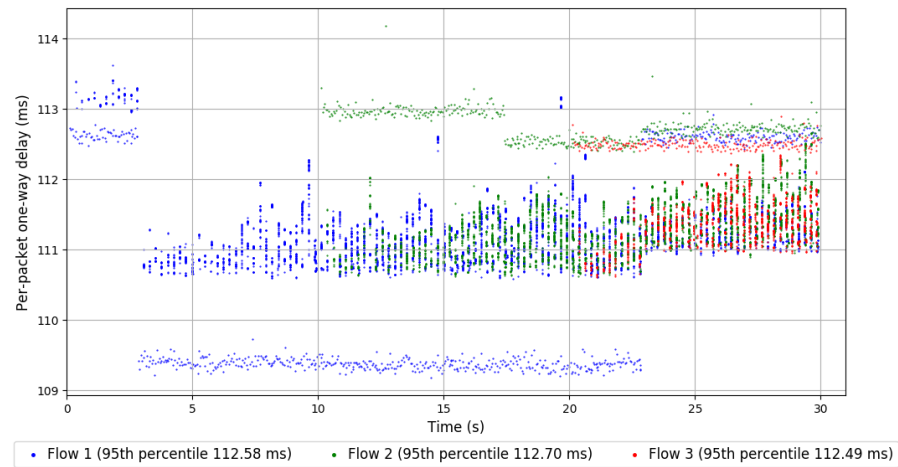
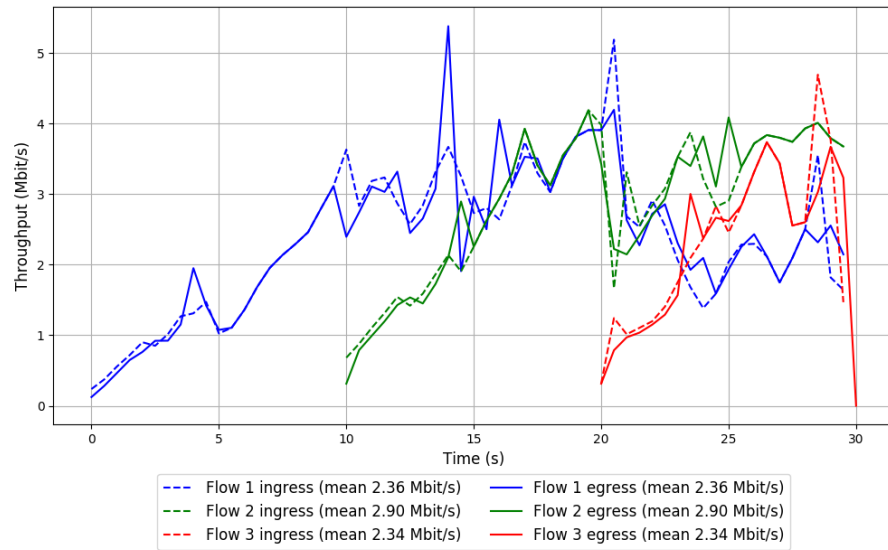
-- Flow 3:

Average throughput: 2.34 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-20 23:13:08

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

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.65 Mbit/s

95th percentile per-packet one-way delay: 113.723 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 113.469 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 114.427 ms

Loss rate: 0.00%

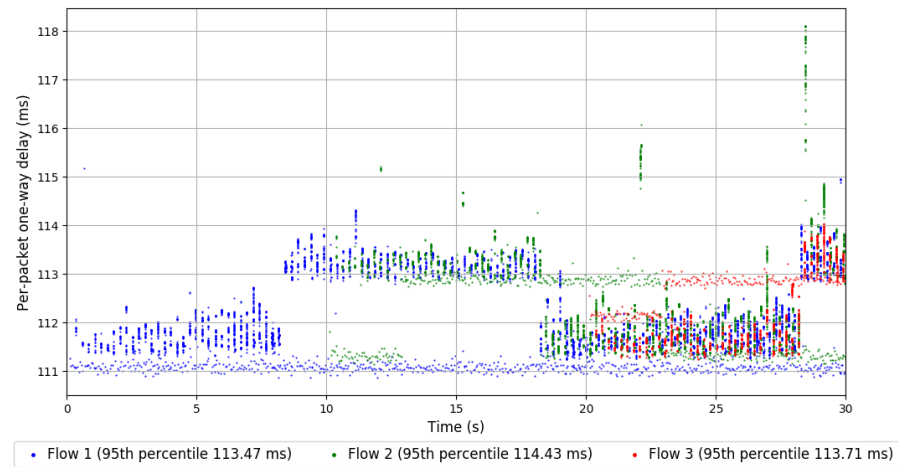
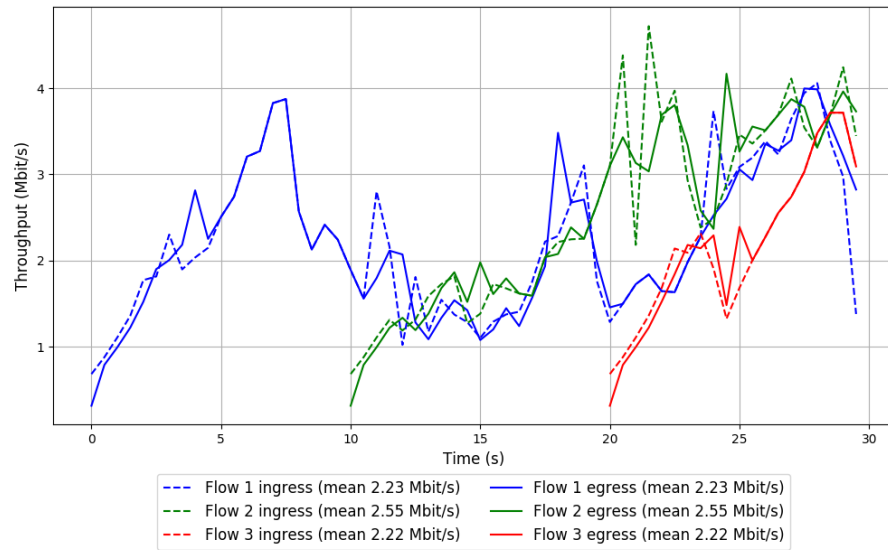
-- Flow 3:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 113.711 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-20 23:32:35

End at: 2018-02-20 23:33:05

Below is generated by plot.py at 2018-02-21 02:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.71 Mbit/s

95th percentile per-packet one-way delay: 113.744 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 113.732 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.92 Mbit/s

95th percentile per-packet one-way delay: 113.854 ms

Loss rate: 0.00%

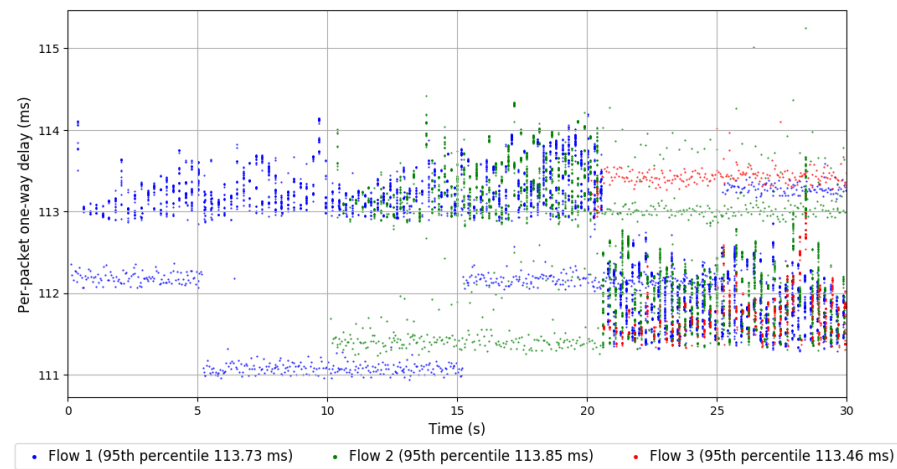
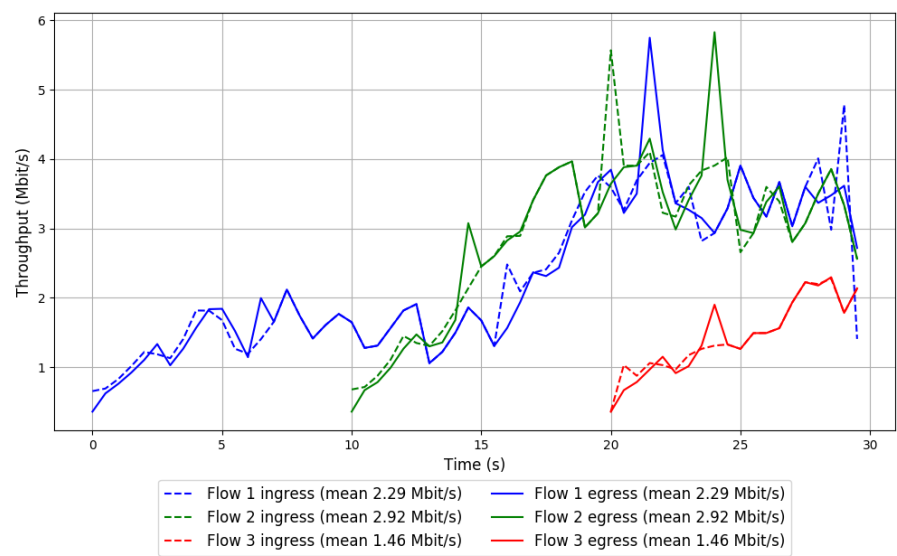
-- Flow 3:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 113.459 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

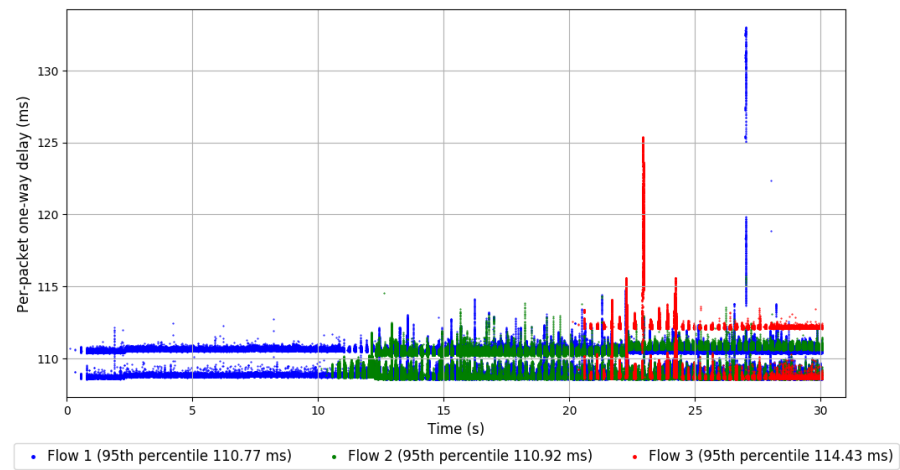
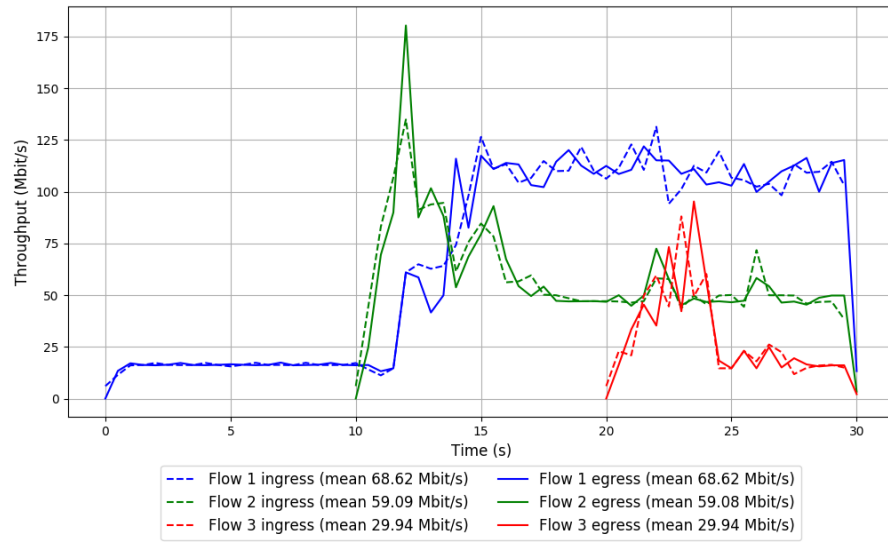


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-20 20:22:53
End at: 2018-02-20 20:23:23

# Below is generated by plot.py at 2018-02-21 02:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 117.88 Mbit/s
95th percentile per-packet one-way delay: 111.571 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 68.62 Mbit/s
95th percentile per-packet one-way delay: 110.773 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.08 Mbit/s
95th percentile per-packet one-way delay: 110.917 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.94 Mbit/s
95th percentile per-packet one-way delay: 114.429 ms
Loss rate: 0.00%
```


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

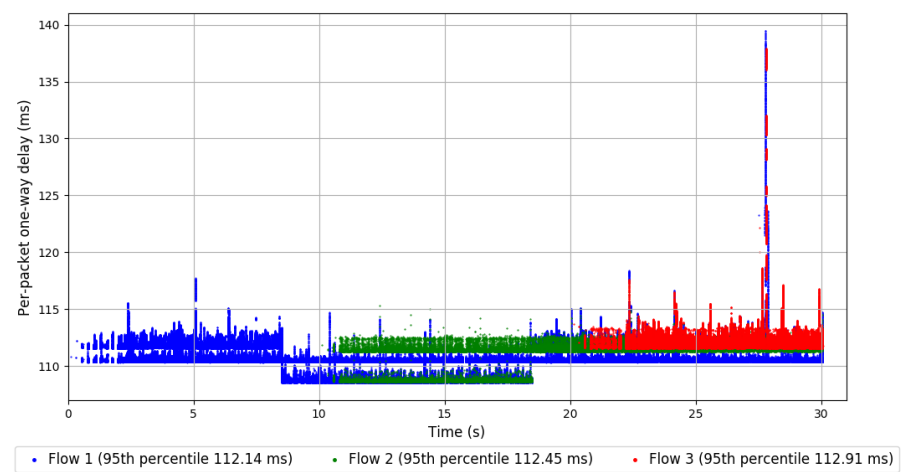
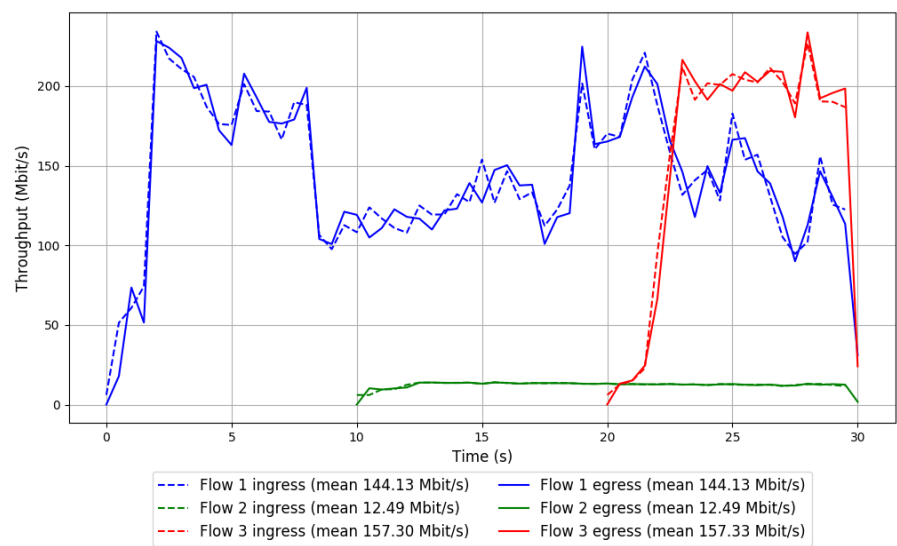


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-20 20:42:27
End at: 2018-02-20 20:42:57

# Below is generated by plot.py at 2018-02-21 02:11:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 204.59 Mbit/s
95th percentile per-packet one-way delay: 112.461 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 144.13 Mbit/s
95th percentile per-packet one-way delay: 112.142 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 12.49 Mbit/s
95th percentile per-packet one-way delay: 112.453 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 157.33 Mbit/s
95th percentile per-packet one-way delay: 112.907 ms
Loss rate: 0.00%
```

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

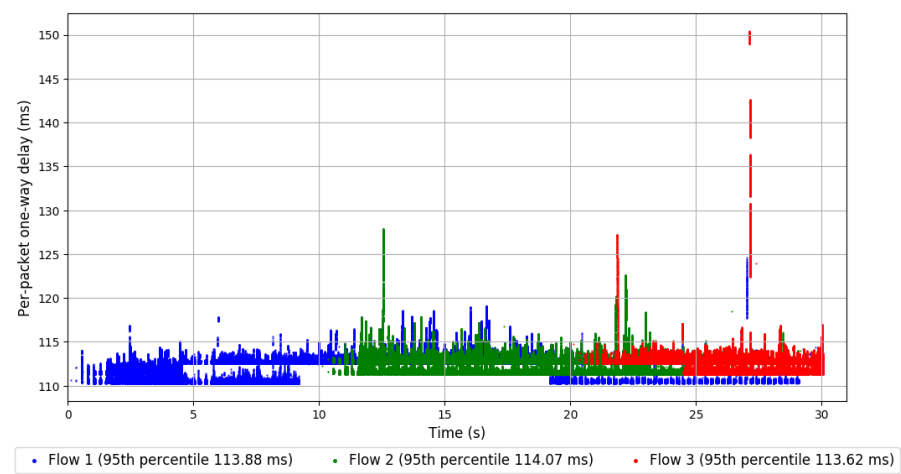
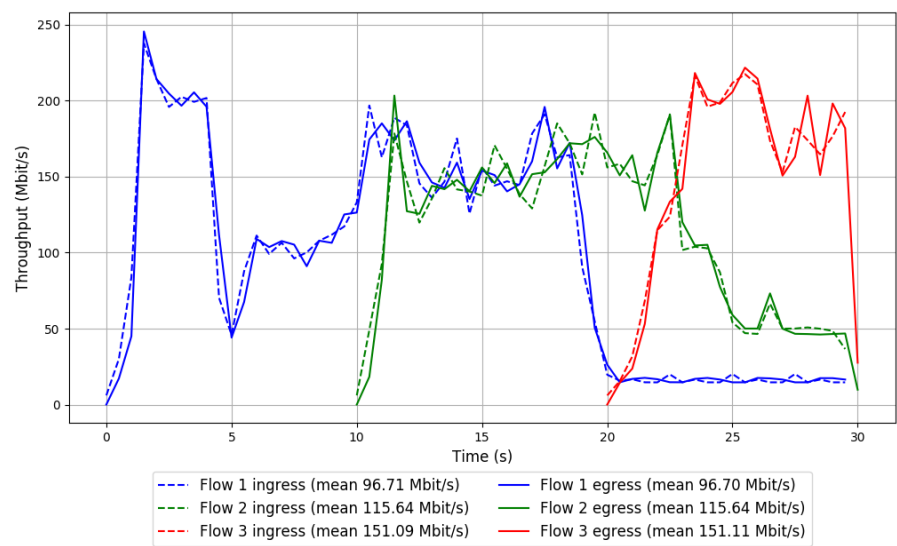


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-20 21:02:01
End at: 2018-02-20 21:02:31

# Below is generated by plot.py at 2018-02-21 02:11:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 223.54 Mbit/s
95th percentile per-packet one-way delay: 113.880 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 96.70 Mbit/s
95th percentile per-packet one-way delay: 113.879 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 115.64 Mbit/s
95th percentile per-packet one-way delay: 114.070 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 151.11 Mbit/s
95th percentile per-packet one-way delay: 113.622 ms
Loss rate: 0.02%
```

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

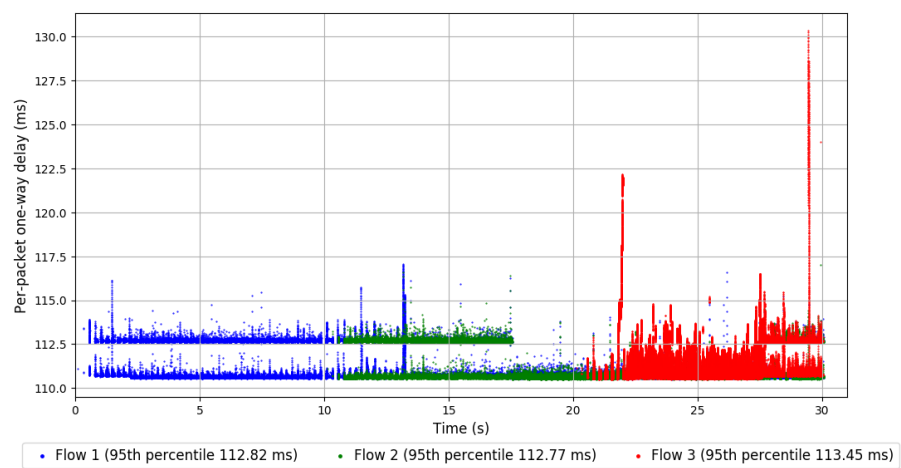
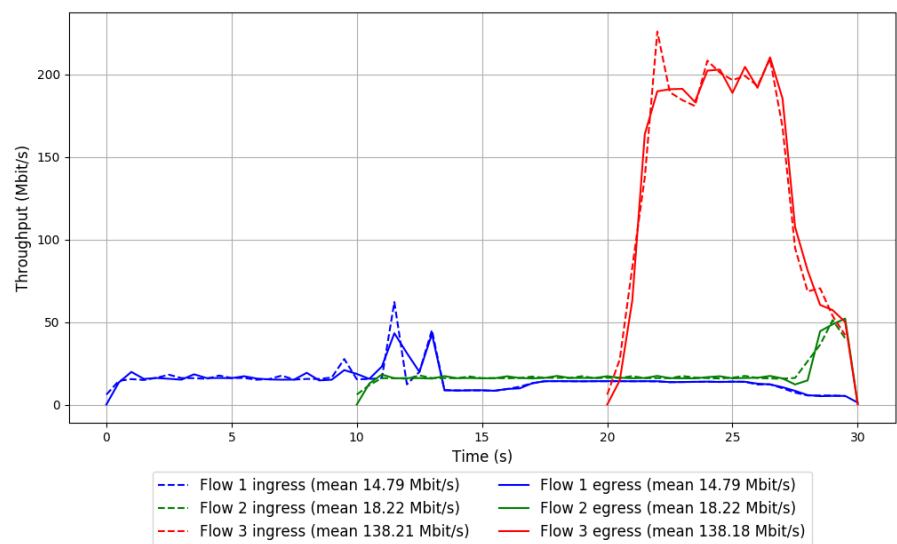


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-02-20 21:21:38
End at: 2018-02-20 21:22:08

# Below is generated by plot.py at 2018-02-21 02:11:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.68 Mbit/s
95th percentile per-packet one-way delay: 112.930 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 14.79 Mbit/s
95th percentile per-packet one-way delay: 112.818 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 18.22 Mbit/s
95th percentile per-packet one-way delay: 112.767 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 138.18 Mbit/s
95th percentile per-packet one-way delay: 113.448 ms
Loss rate: 0.00%
```

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

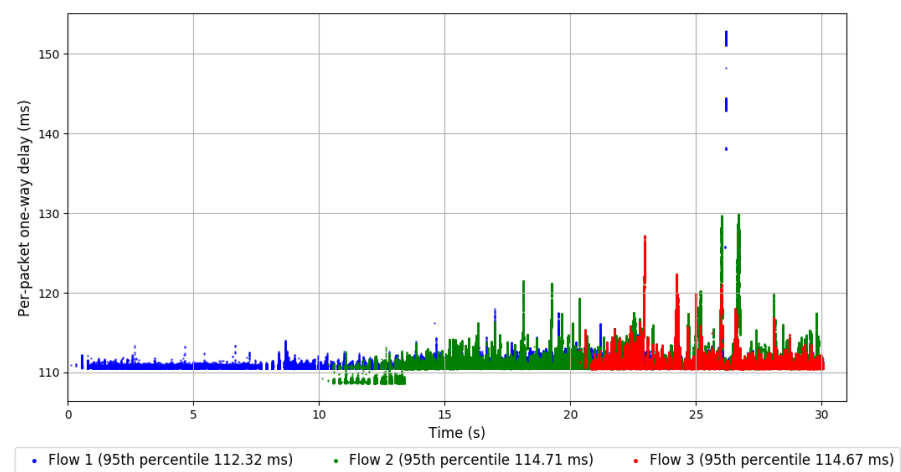
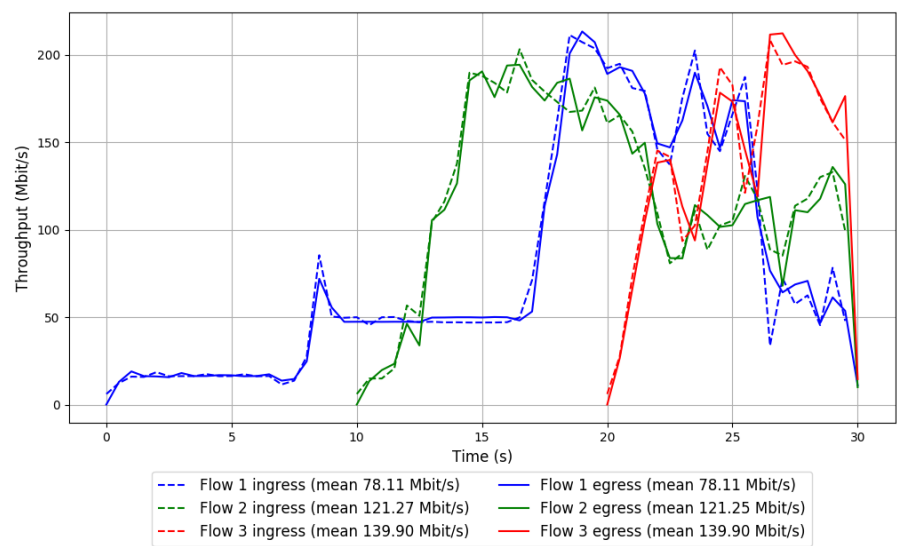


```
Run 5: Statistics of TaoVA-100x

Start at: 2018-02-20 21:41:07
End at: 2018-02-20 21:41:37

# Below is generated by plot.py at 2018-02-21 02:11:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 205.26 Mbit/s
95th percentile per-packet one-way delay: 113.807 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 78.11 Mbit/s
95th percentile per-packet one-way delay: 112.317 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 121.25 Mbit/s
95th percentile per-packet one-way delay: 114.709 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 139.90 Mbit/s
95th percentile per-packet one-way delay: 114.669 ms
Loss rate: 0.02%
```


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



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-20 22:00:36

End at: 2018-02-20 22:01:06

Below is generated by plot.py at 2018-02-21 02:11:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.03 Mbit/s

95th percentile per-packet one-way delay: 113.796 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 130.23 Mbit/s

95th percentile per-packet one-way delay: 113.979 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 16.01 Mbit/s

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

Loss rate: 0.00%

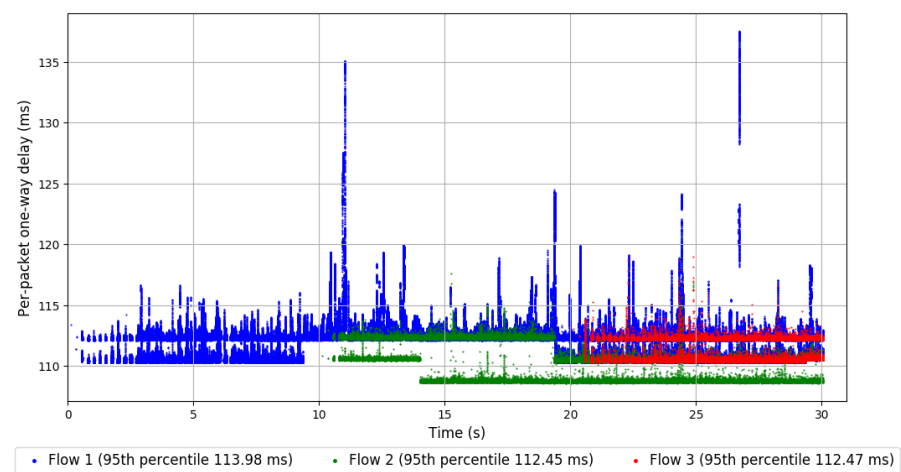
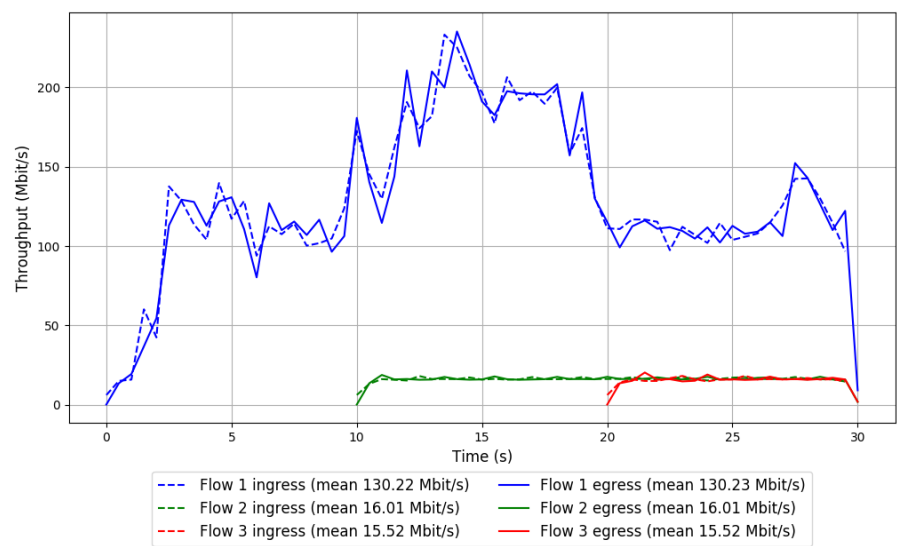
-- Flow 3:

Average throughput: 15.52 Mbit/s

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

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

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

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

Below is generated by plot.py at 2018-02-21 02:11:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.74 Mbit/s

95th percentile per-packet one-way delay: 113.163 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 123.69 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.55 Mbit/s

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

Loss rate: 0.00%

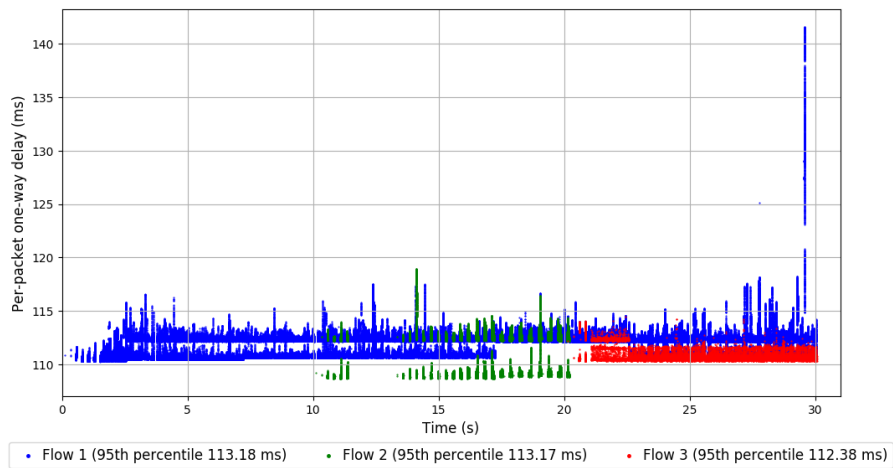
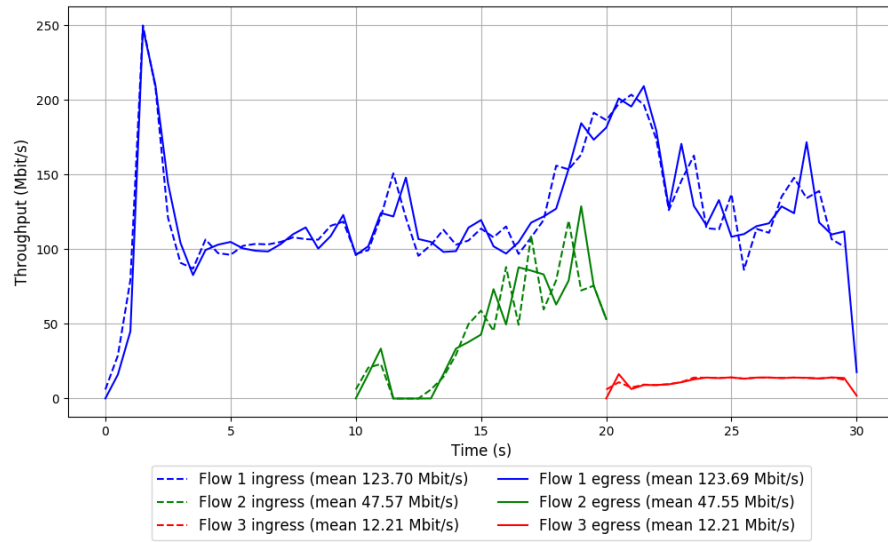
-- Flow 3:

Average throughput: 12.21 Mbit/s

95th percentile per-packet one-way delay: 112.384 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-20 22:39:52

End at: 2018-02-20 22:40:22

Below is generated by plot.py at 2018-02-21 02:11:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 46.95 Mbit/s

95th percentile per-packet one-way delay: 114.127 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 14.07 Mbit/s

95th percentile per-packet one-way delay: 113.057 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.18 Mbit/s

95th percentile per-packet one-way delay: 114.490 ms

Loss rate: 0.00%

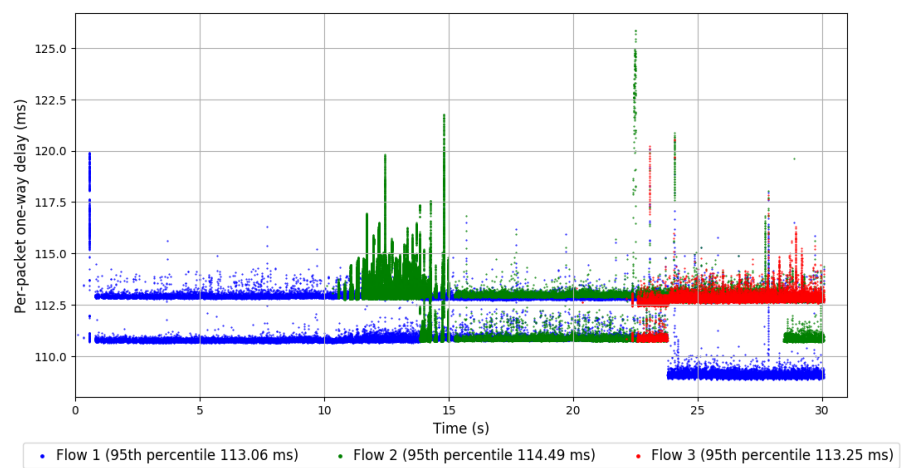
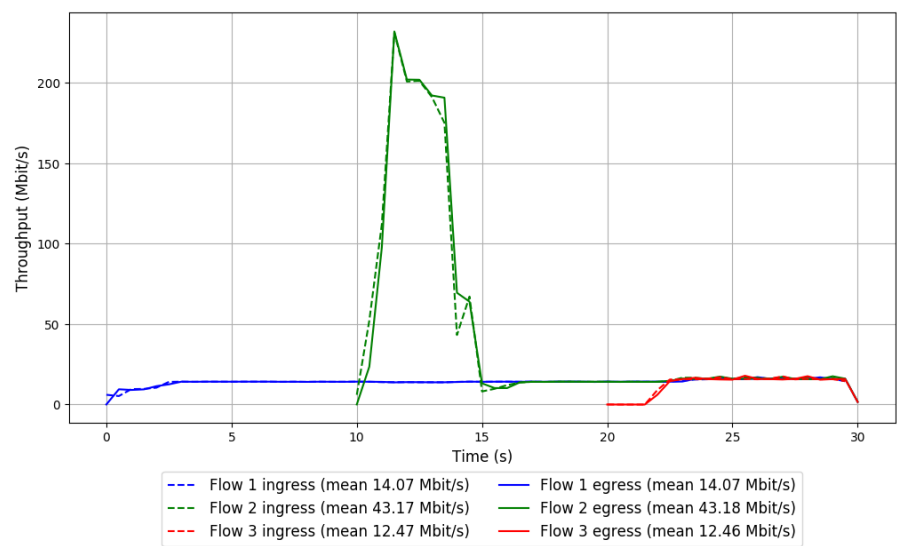
-- Flow 3:

Average throughput: 12.46 Mbit/s

95th percentile per-packet one-way delay: 113.247 ms

Loss rate: 0.02%

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

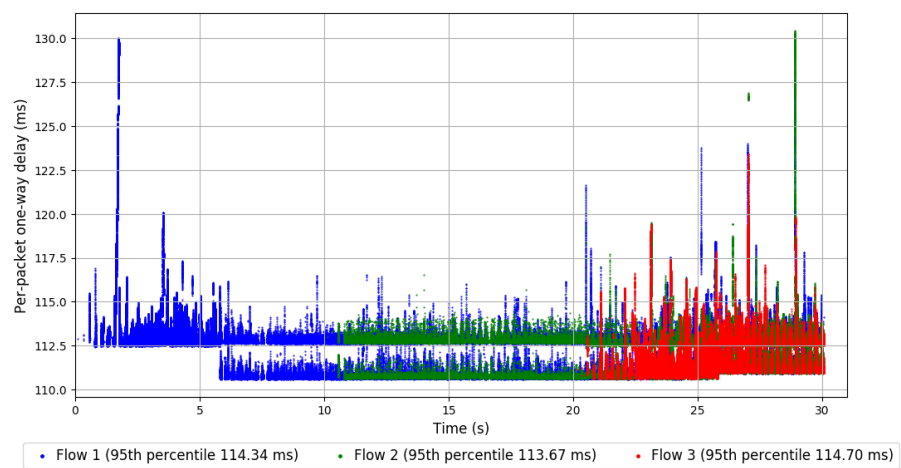
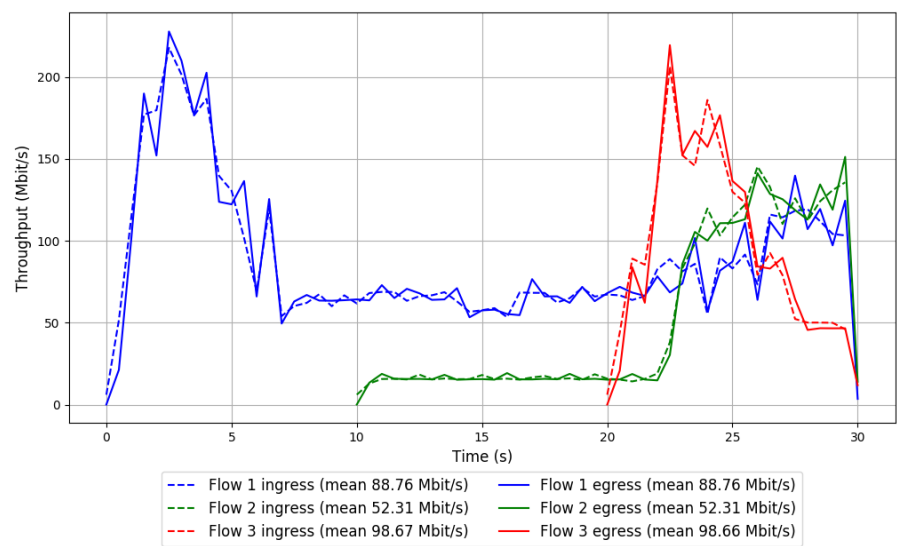


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-02-20 22:59:10
End at: 2018-02-20 22:59:40

# Below is generated by plot.py at 2018-02-21 02:13:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 156.32 Mbit/s
95th percentile per-packet one-way delay: 114.269 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 88.76 Mbit/s
95th percentile per-packet one-way delay: 114.337 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 52.31 Mbit/s
95th percentile per-packet one-way delay: 113.671 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 98.66 Mbit/s
95th percentile per-packet one-way delay: 114.699 ms
Loss rate: 0.00%
```


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

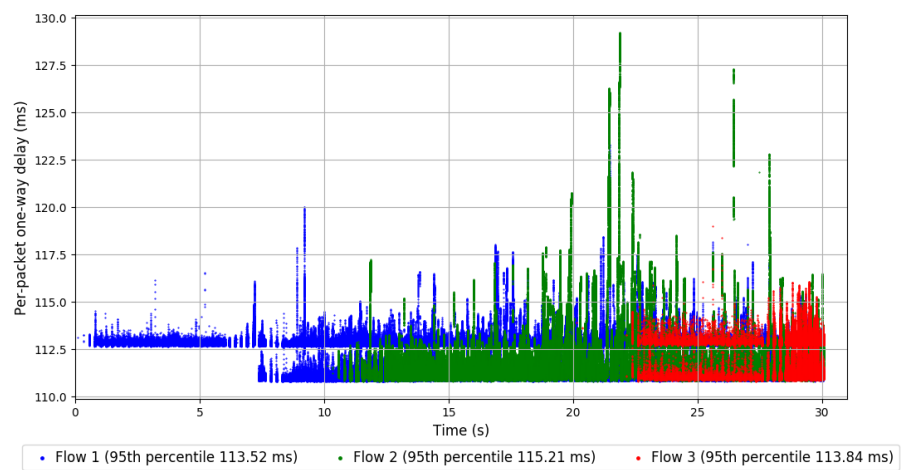
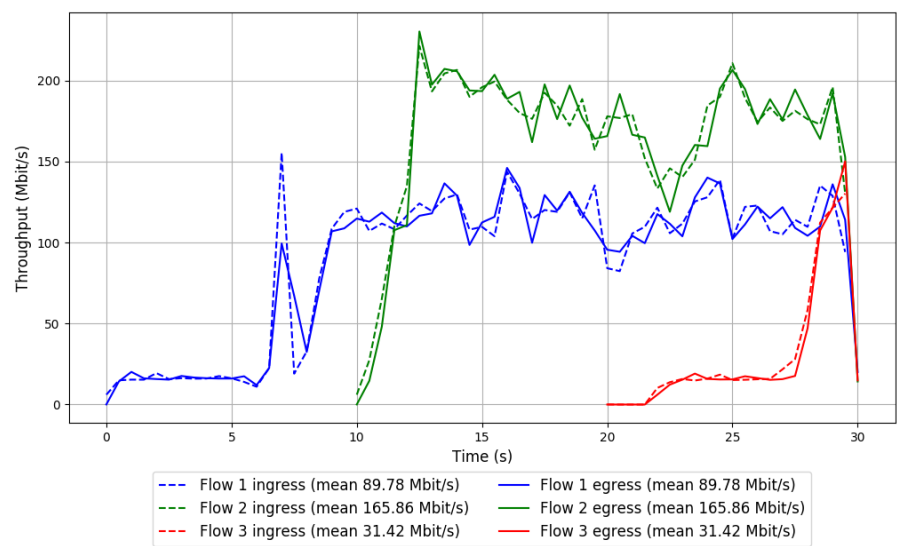


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-20 23:18:38
End at: 2018-02-20 23:19:08

# Below is generated by plot.py at 2018-02-21 02:16:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 210.58 Mbit/s
95th percentile per-packet one-way delay: 114.238 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 89.78 Mbit/s
95th percentile per-packet one-way delay: 113.519 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 165.86 Mbit/s
95th percentile per-packet one-way delay: 115.211 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.42 Mbit/s
95th percentile per-packet one-way delay: 113.844 ms
Loss rate: 0.01%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-20 20:24:45

End at: 2018-02-20 20:25:15

Below is generated by plot.py at 2018-02-21 02:16:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 39.25 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 31.69 Mbit/s

95th percentile per-packet one-way delay: 113.128 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 112.185 ms

Loss rate: 0.29%

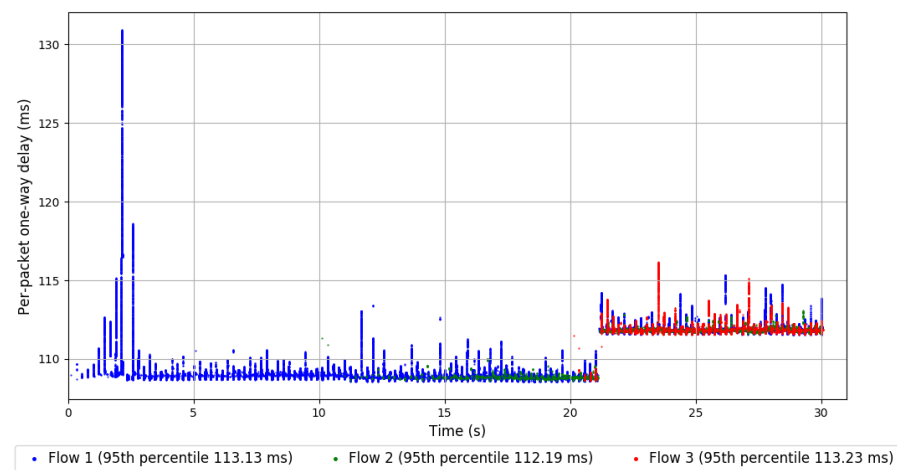
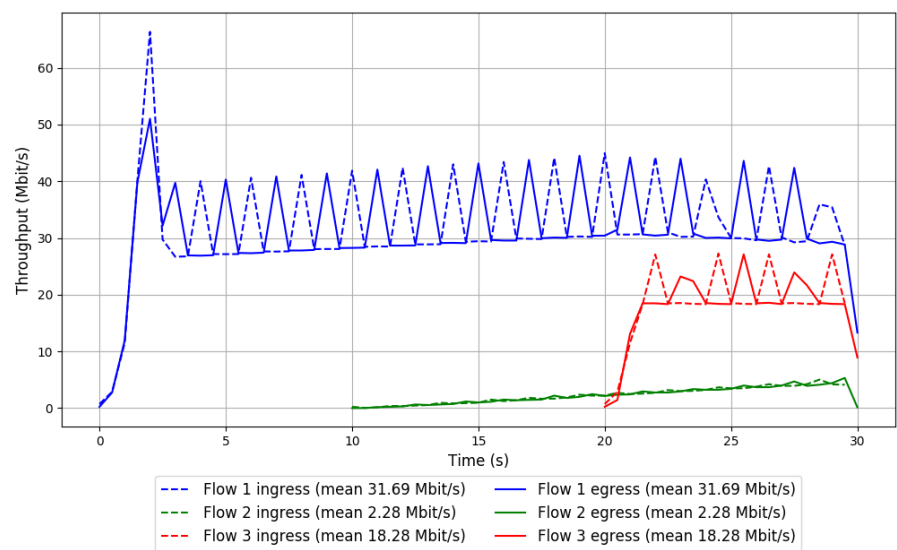
-- Flow 3:

Average throughput: 18.28 Mbit/s

95th percentile per-packet one-way delay: 113.230 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-20 20:44:25

End at: 2018-02-20 20:44:55

Below is generated by plot.py at 2018-02-21 02:16:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 57.69 Mbit/s

95th percentile per-packet one-way delay: 113.834 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 19.72 Mbit/s

95th percentile per-packet one-way delay: 113.369 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.81 Mbit/s

95th percentile per-packet one-way delay: 113.273 ms

Loss rate: 0.00%

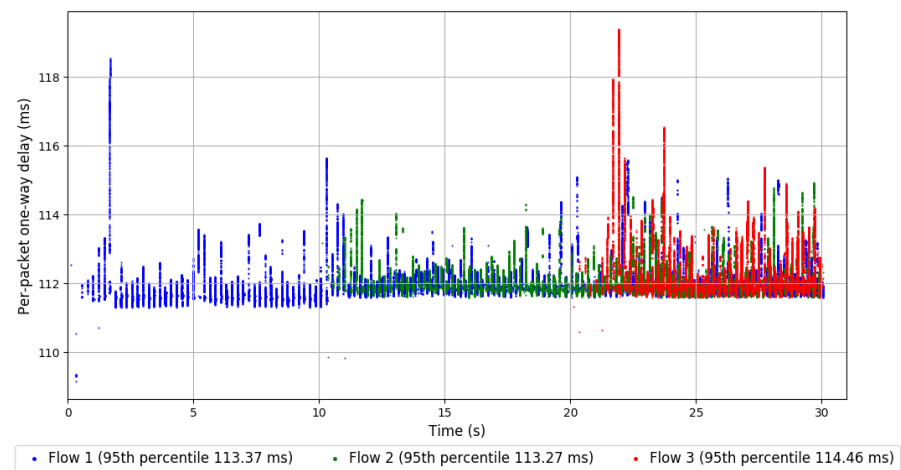
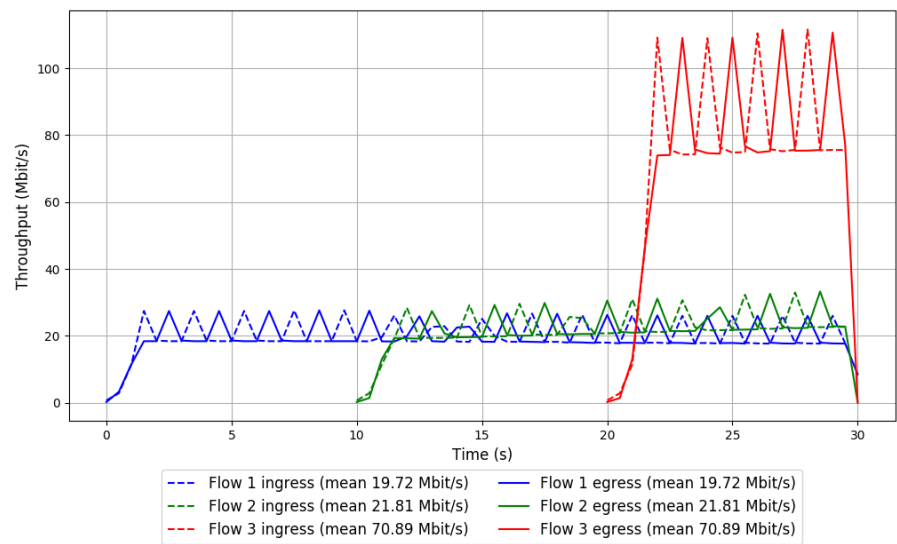
-- Flow 3:

Average throughput: 70.89 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-20 21:04:03

End at: 2018-02-20 21:04:33

Below is generated by plot.py at 2018-02-21 02:16:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.58 Mbit/s

95th percentile per-packet one-way delay: 115.456 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 33.45 Mbit/s

95th percentile per-packet one-way delay: 115.188 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 27.44 Mbit/s

95th percentile per-packet one-way delay: 115.710 ms

Loss rate: 0.00%

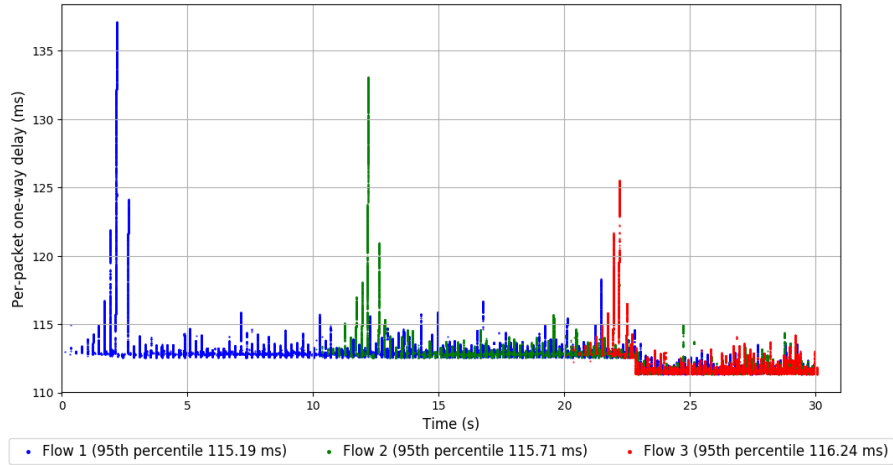
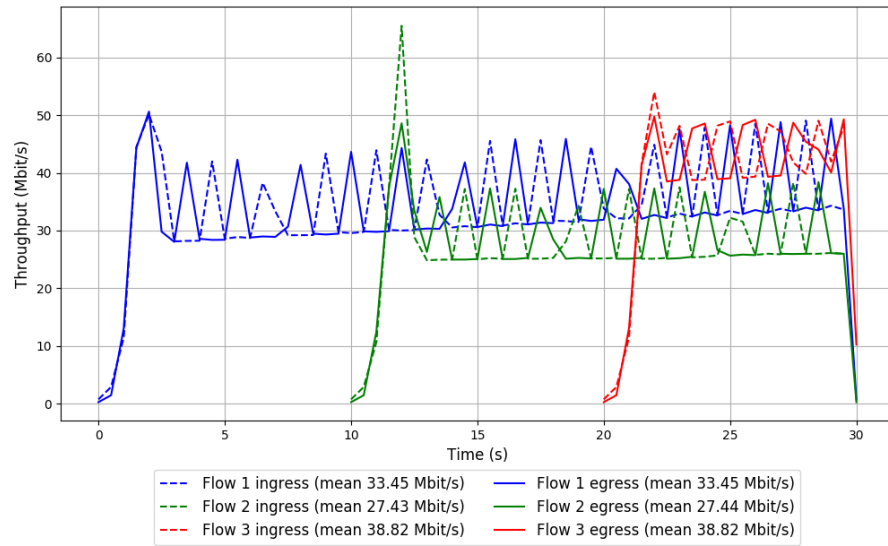
-- Flow 3:

Average throughput: 38.82 Mbit/s

95th percentile per-packet one-way delay: 116.240 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-20 21:23:23

End at: 2018-02-20 21:23:53

Below is generated by plot.py at 2018-02-21 02:16:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.47 Mbit/s

95th percentile per-packet one-way delay: 122.476 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 36.25 Mbit/s

95th percentile per-packet one-way delay: 118.269 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.19 Mbit/s

95th percentile per-packet one-way delay: 124.462 ms

Loss rate: 0.00%

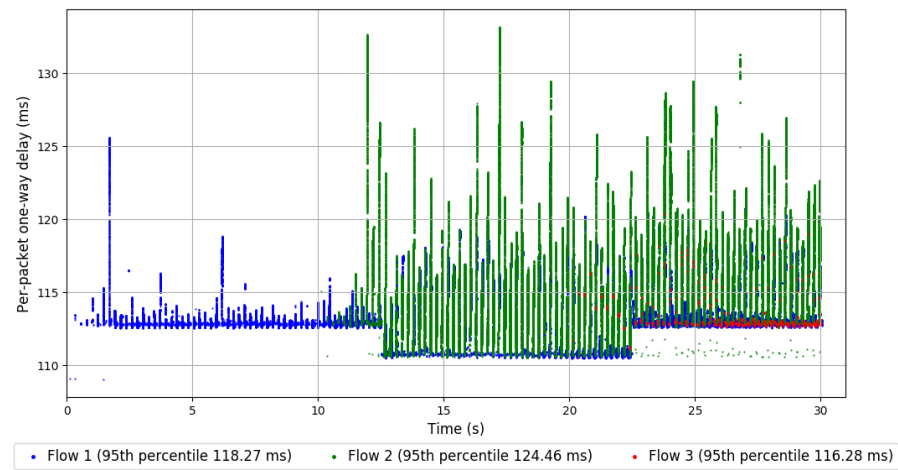
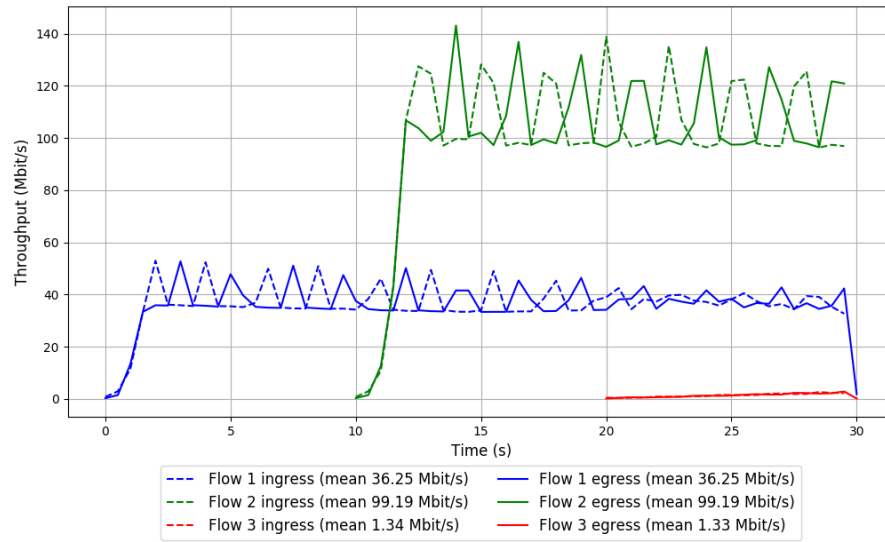
-- Flow 3:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 116.275 ms

Loss rate: 0.81%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-20 21:43:07

End at: 2018-02-20 21:43:37

Below is generated by plot.py at 2018-02-21 02:16:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.66 Mbit/s

95th percentile per-packet one-way delay: 112.180 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 23.47 Mbit/s

95th percentile per-packet one-way delay: 111.664 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 81.21 Mbit/s

95th percentile per-packet one-way delay: 111.469 ms

Loss rate: 0.04%

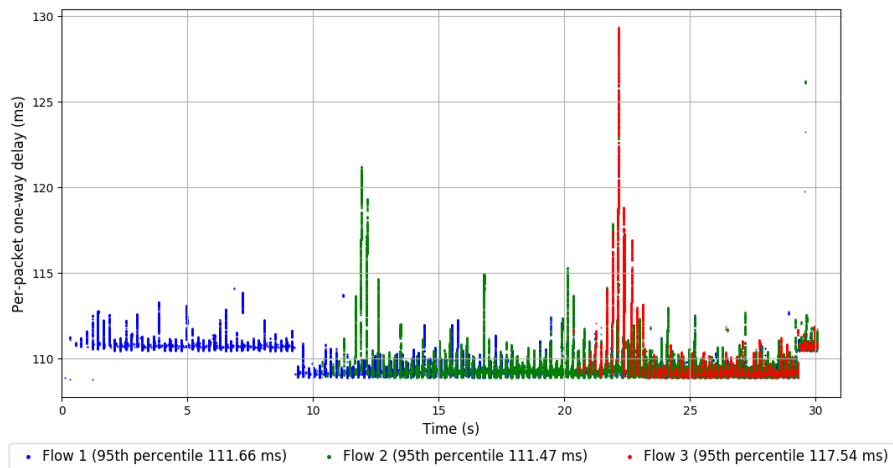
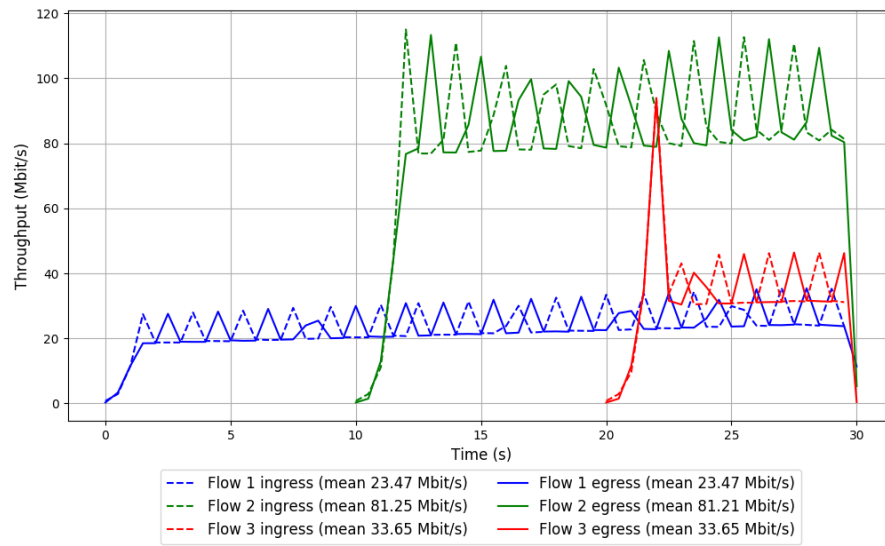
-- Flow 3:

Average throughput: 33.65 Mbit/s

95th percentile per-packet one-way delay: 117.542 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-20 22:02:29

End at: 2018-02-20 22:02:59

Below is generated by plot.py at 2018-02-21 02:16:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.58 Mbit/s

95th percentile per-packet one-way delay: 119.375 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 102.84 Mbit/s

95th percentile per-packet one-way delay: 119.404 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.78 Mbit/s

95th percentile per-packet one-way delay: 119.109 ms

Loss rate: 0.07%

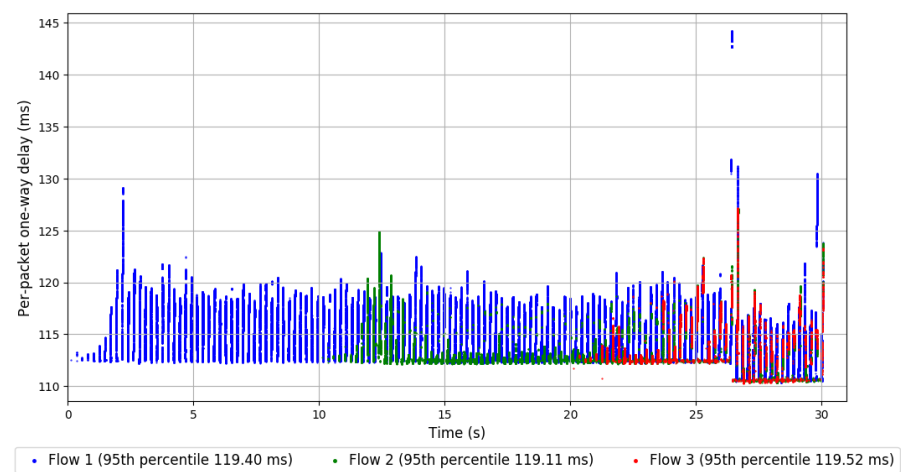
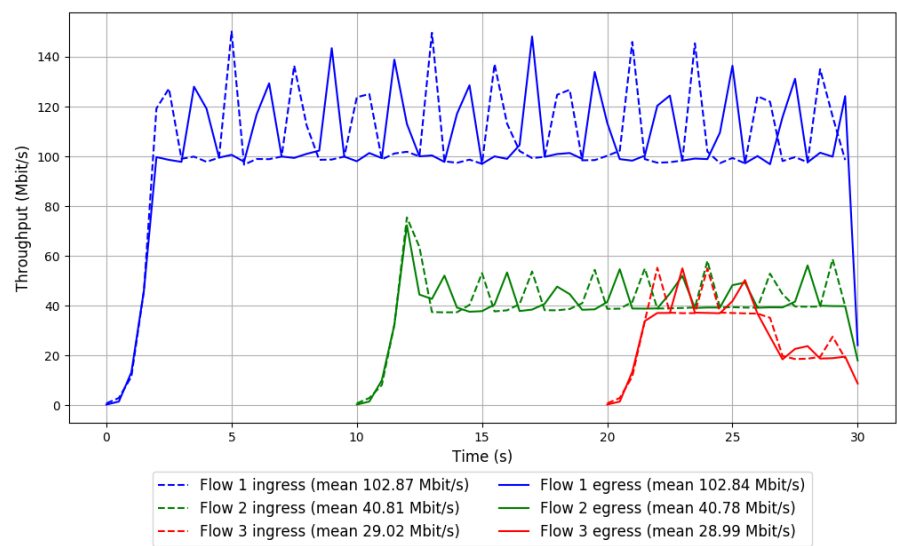
-- Flow 3:

Average throughput: 28.99 Mbit/s

95th percentile per-packet one-way delay: 119.517 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-20 22:22:16

End at: 2018-02-20 22:22:46

Below is generated by plot.py at 2018-02-21 02:16:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.44 Mbit/s

95th percentile per-packet one-way delay: 120.994 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 26.22 Mbit/s

95th percentile per-packet one-way delay: 119.504 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 21.36 Mbit/s

95th percentile per-packet one-way delay: 120.017 ms

Loss rate: 0.58%

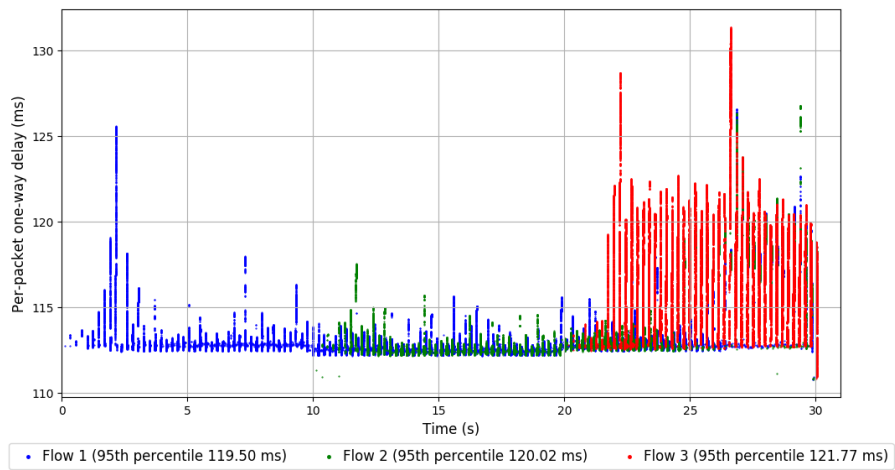
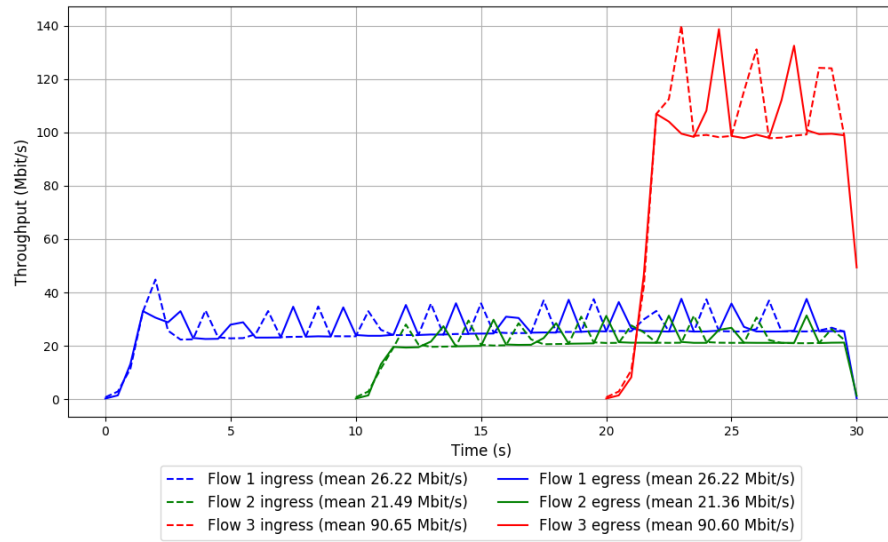
-- Flow 3:

Average throughput: 90.60 Mbit/s

95th percentile per-packet one-way delay: 121.769 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-20 22:41:36

End at: 2018-02-20 22:42:06

Below is generated by plot.py at 2018-02-21 02:16:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 128.40 Mbit/s

95th percentile per-packet one-way delay: 122.852 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 99.80 Mbit/s

95th percentile per-packet one-way delay: 122.825 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 29.42 Mbit/s

95th percentile per-packet one-way delay: 123.125 ms

Loss rate: 0.00%

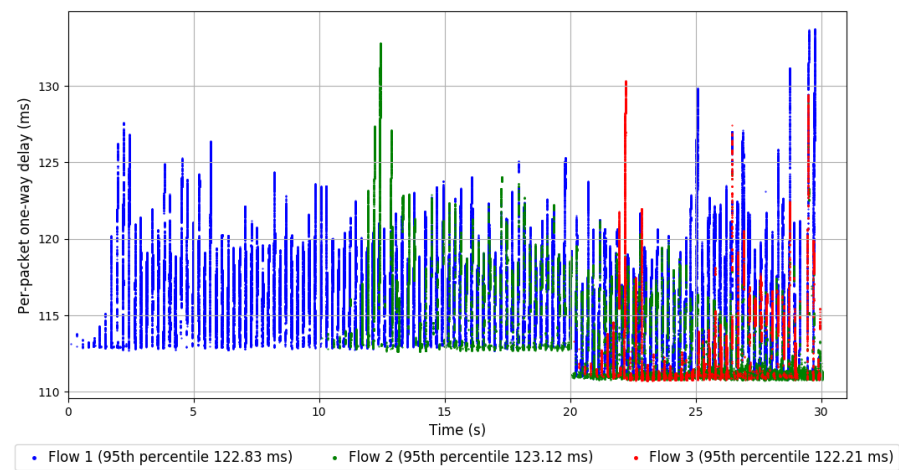
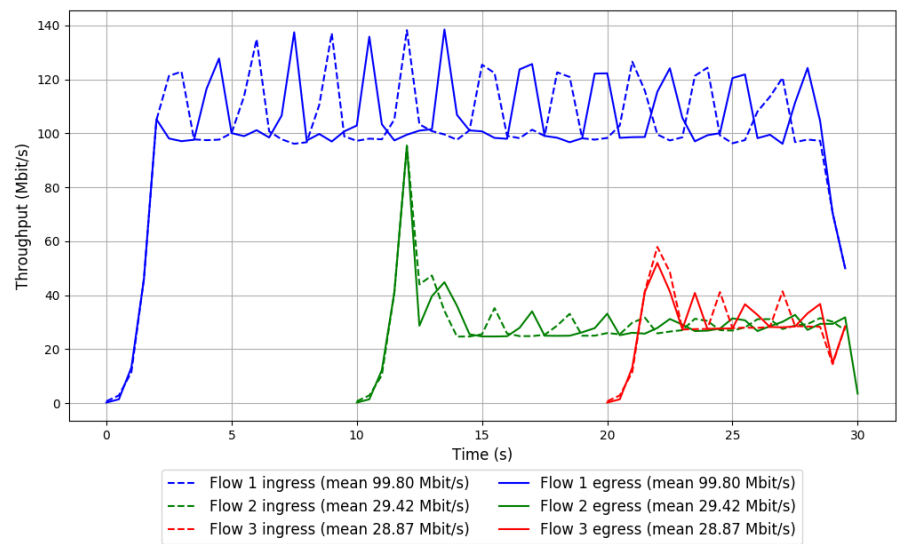
-- Flow 3:

Average throughput: 28.87 Mbit/s

95th percentile per-packet one-way delay: 122.211 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-20 23:01:04

End at: 2018-02-20 23:01:34

Below is generated by plot.py at 2018-02-21 02:16:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.50 Mbit/s

95th percentile per-packet one-way delay: 116.282 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 59.13 Mbit/s

95th percentile per-packet one-way delay: 114.660 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 24.43 Mbit/s

95th percentile per-packet one-way delay: 117.659 ms

Loss rate: 0.25%

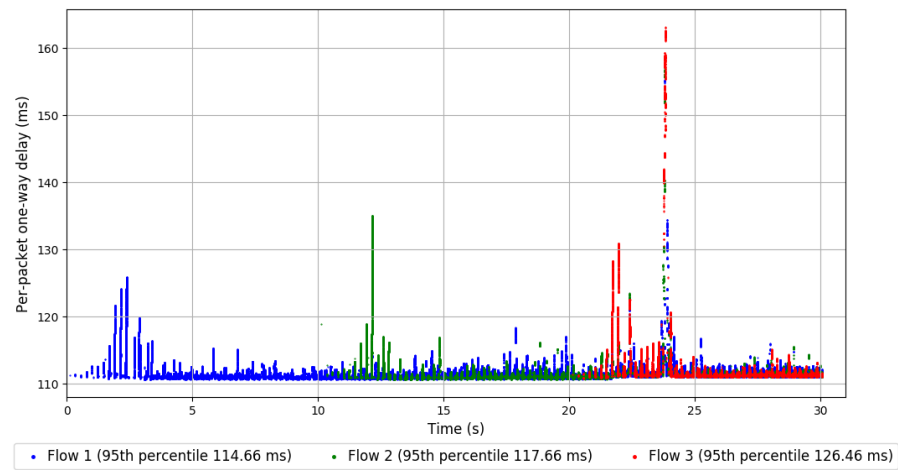
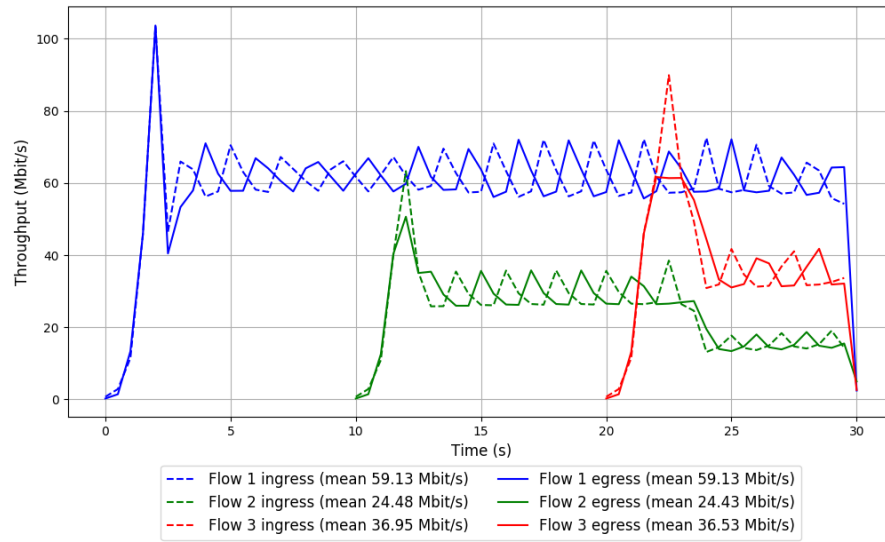
-- Flow 3:

Average throughput: 36.53 Mbit/s

95th percentile per-packet one-way delay: 126.458 ms

Loss rate: 1.14%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

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

End at: 2018-02-20 23:21:08

Below is generated by plot.py at 2018-02-21 02:16:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.62 Mbit/s

95th percentile per-packet one-way delay: 114.648 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 56.48 Mbit/s

95th percentile per-packet one-way delay: 113.992 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 56.77 Mbit/s

95th percentile per-packet one-way delay: 115.678 ms

Loss rate: 0.00%

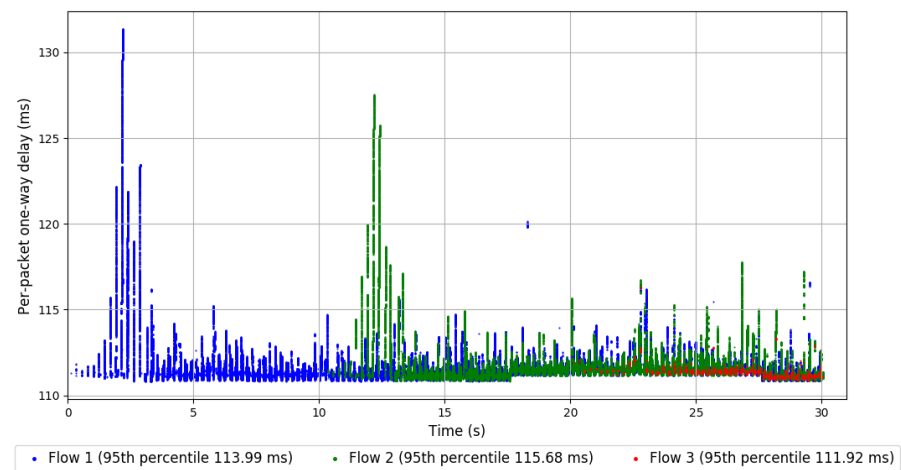
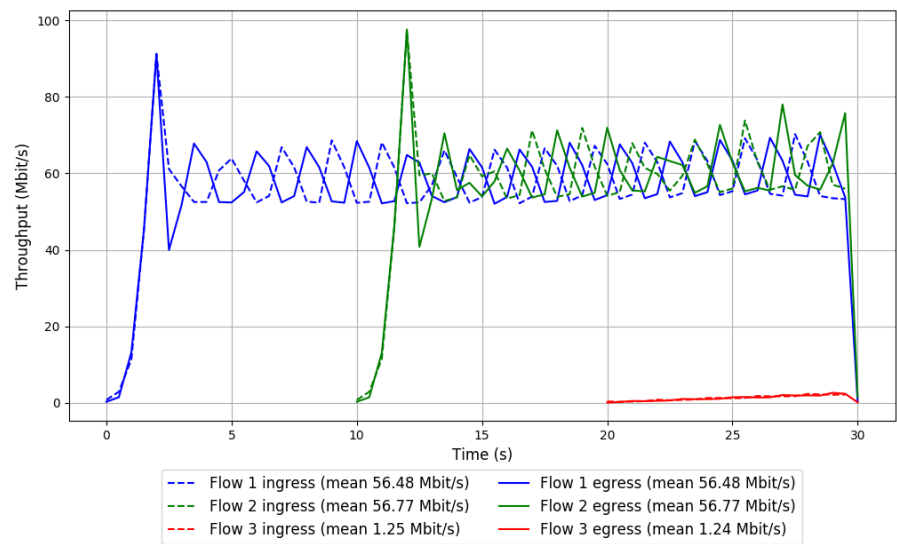
-- Flow 3:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 111.916 ms

Loss rate: 0.78%

Run 10: Report of TCP Vegas — Data Link

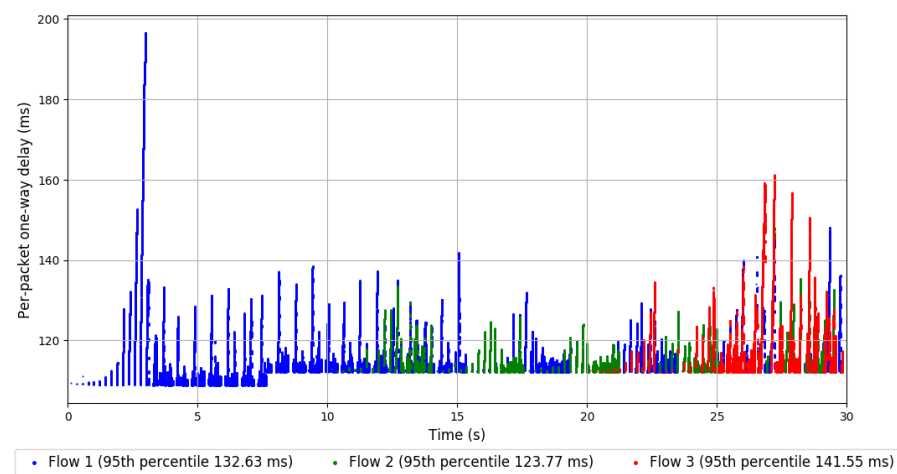
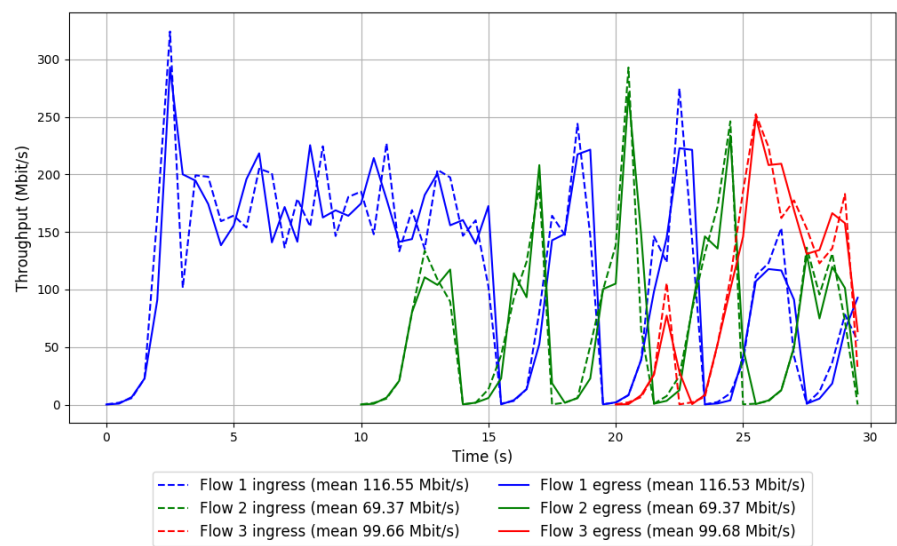


```
Run 1: Statistics of Verus

Start at: 2018-02-20 20:19:28
End at: 2018-02-20 20:19:58

# Below is generated by plot.py at 2018-02-21 02:16:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 194.94 Mbit/s
95th percentile per-packet one-way delay: 131.762 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 116.53 Mbit/s
95th percentile per-packet one-way delay: 132.633 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 69.37 Mbit/s
95th percentile per-packet one-way delay: 123.772 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 99.68 Mbit/s
95th percentile per-packet one-way delay: 141.548 ms
Loss rate: 0.00%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-20 20:38:53

End at: 2018-02-20 20:39:23

Below is generated by plot.py at 2018-02-21 02:16:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 248.57 Mbit/s

95th percentile per-packet one-way delay: 165.845 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 128.74 Mbit/s

95th percentile per-packet one-way delay: 152.301 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 148.38 Mbit/s

95th percentile per-packet one-way delay: 186.620 ms

Loss rate: 0.00%

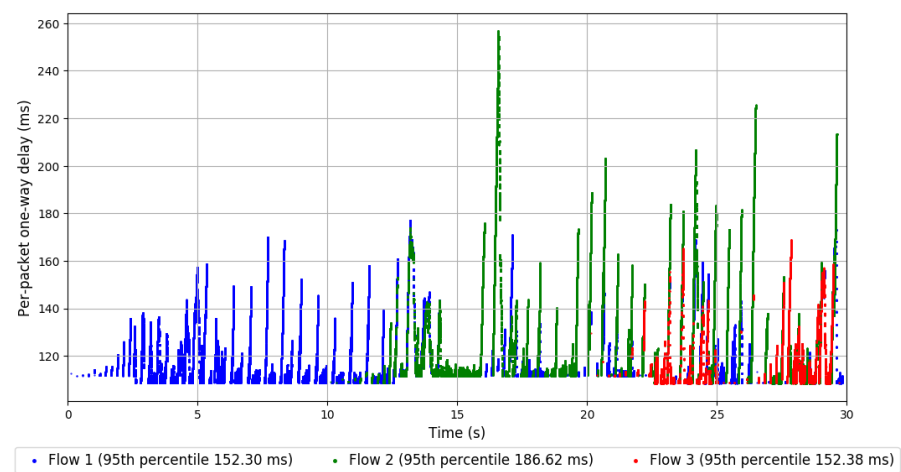
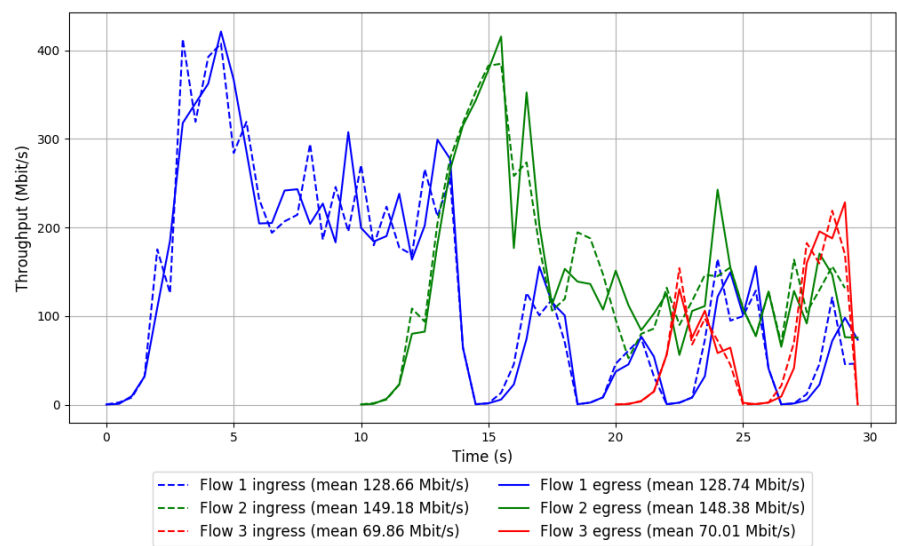
-- Flow 3:

Average throughput: 70.01 Mbit/s

95th percentile per-packet one-way delay: 152.378 ms

Loss rate: 0.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-20 20:58:26

End at: 2018-02-20 20:58:56

Below is generated by plot.py at 2018-02-21 02:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 336.57 Mbit/s

95th percentile per-packet one-way delay: 334.614 ms

Loss rate: 6.01%

-- Flow 1:

Average throughput: 181.52 Mbit/s

95th percentile per-packet one-way delay: 233.090 ms

Loss rate: 2.22%

-- Flow 2:

Average throughput: 217.07 Mbit/s

95th percentile per-packet one-way delay: 350.503 ms

Loss rate: 10.39%

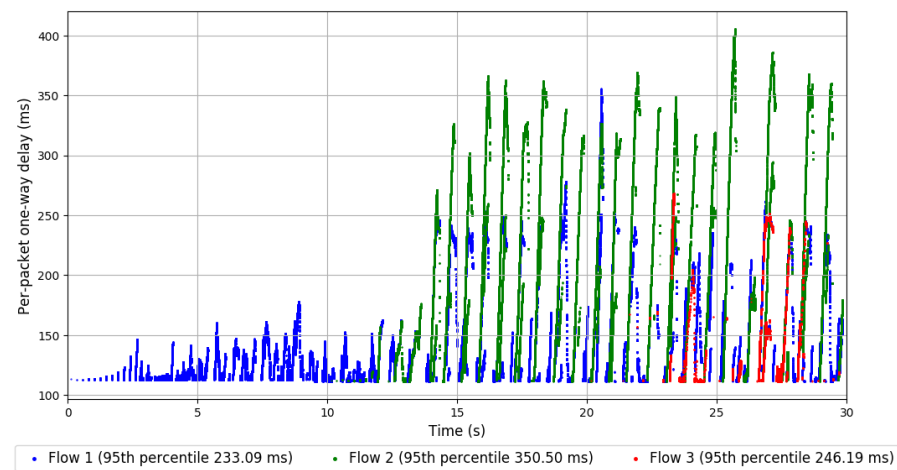
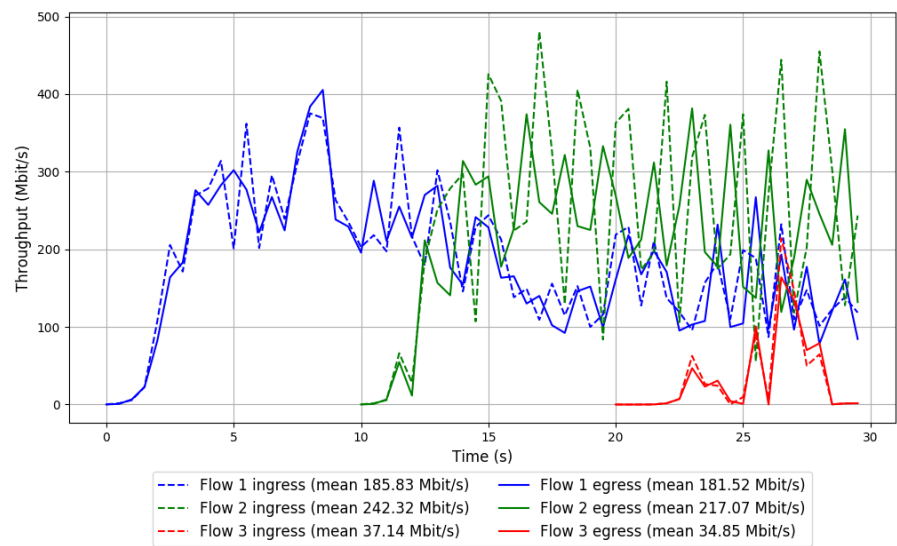
-- Flow 3:

Average throughput: 34.85 Mbit/s

95th percentile per-packet one-way delay: 246.192 ms

Loss rate: 6.09%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-20 21:18:06

End at: 2018-02-20 21:18:36

Below is generated by plot.py at 2018-02-21 02:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 248.09 Mbit/s

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

Loss rate: 0.30%

-- Flow 1:

Average throughput: 185.91 Mbit/s

95th percentile per-packet one-way delay: 220.821 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 66.94 Mbit/s

95th percentile per-packet one-way delay: 224.882 ms

Loss rate: 0.16%

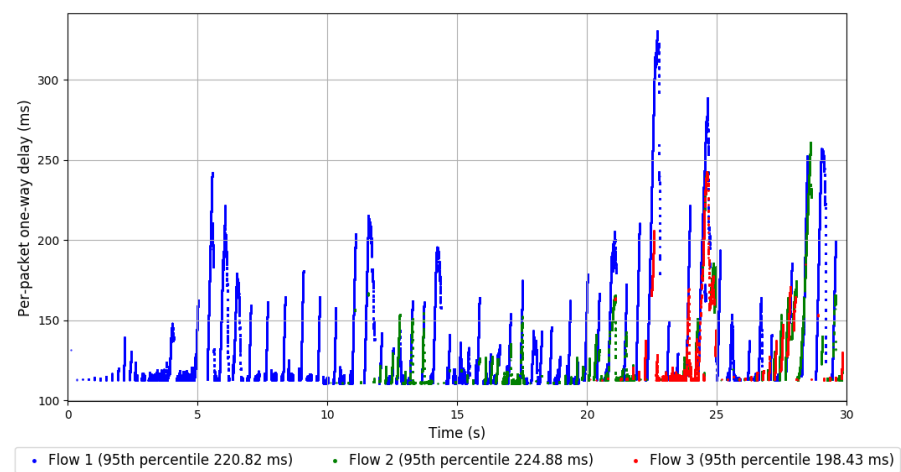
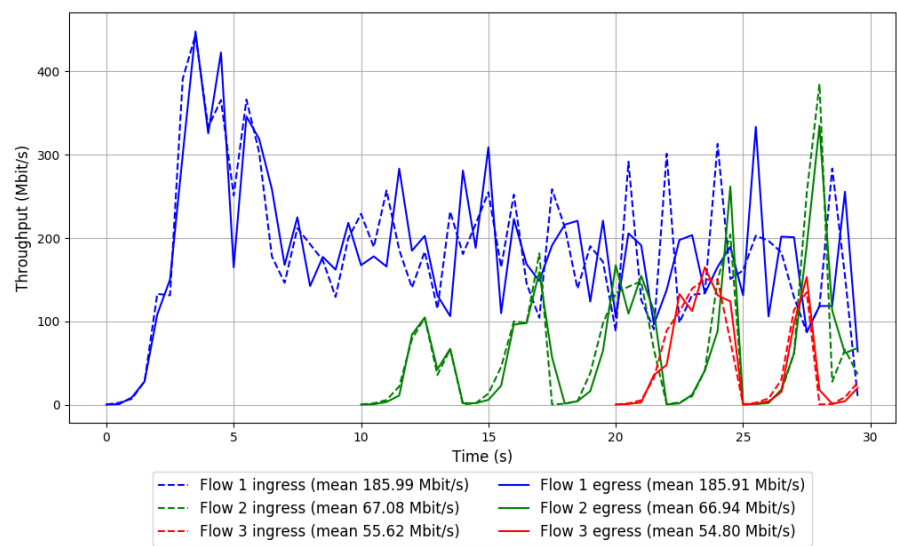
-- Flow 3:

Average throughput: 54.80 Mbit/s

95th percentile per-packet one-way delay: 198.433 ms

Loss rate: 1.35%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-20 21:37:40

End at: 2018-02-20 21:38:10

Below is generated by plot.py at 2018-02-21 02:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 246.80 Mbit/s

95th percentile per-packet one-way delay: 283.954 ms

Loss rate: 2.70%

-- Flow 1:

Average throughput: 194.03 Mbit/s

95th percentile per-packet one-way delay: 276.540 ms

Loss rate: 1.71%

-- Flow 2:

Average throughput: 71.43 Mbit/s

95th percentile per-packet one-way delay: 348.434 ms

Loss rate: 6.49%

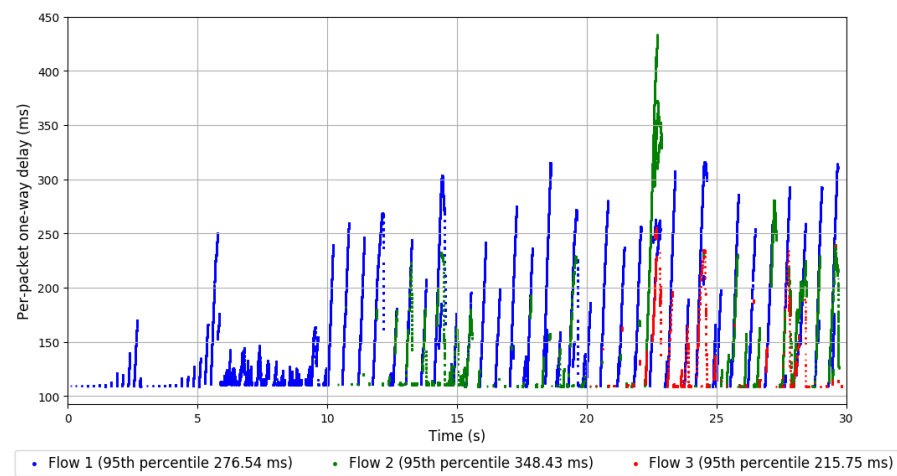
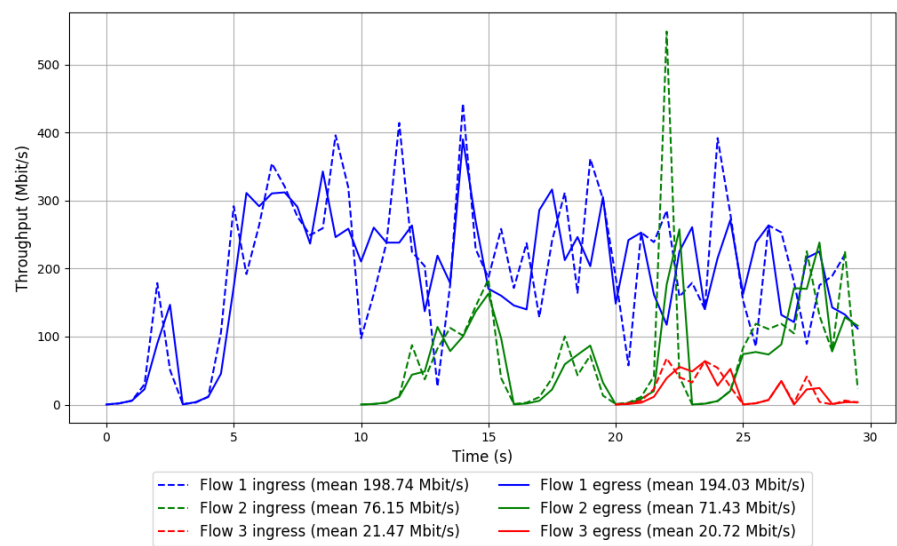
-- Flow 3:

Average throughput: 20.72 Mbit/s

95th percentile per-packet one-way delay: 215.750 ms

Loss rate: 3.52%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-20 21:57:12

End at: 2018-02-20 21:57:42

Below is generated by plot.py at 2018-02-21 02:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.04 Mbit/s

95th percentile per-packet one-way delay: 186.950 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 102.83 Mbit/s

95th percentile per-packet one-way delay: 232.035 ms

Loss rate: 2.32%

-- Flow 2:

Average throughput: 106.51 Mbit/s

95th percentile per-packet one-way delay: 178.062 ms

Loss rate: 0.00%

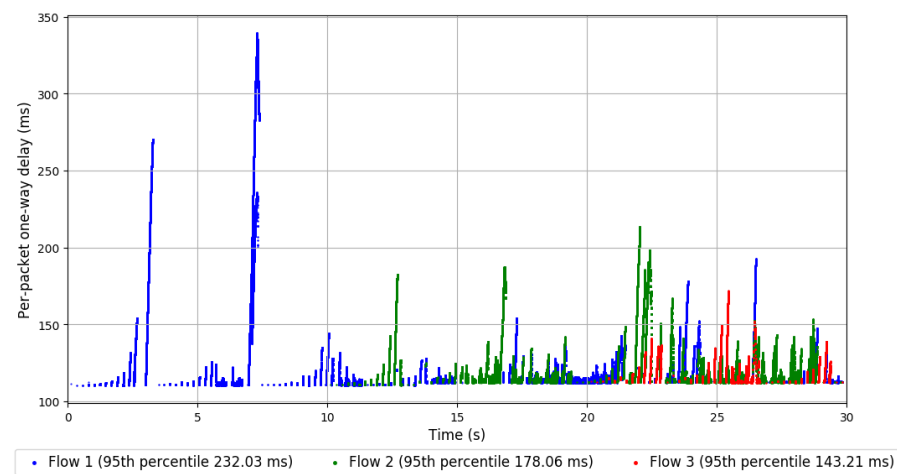
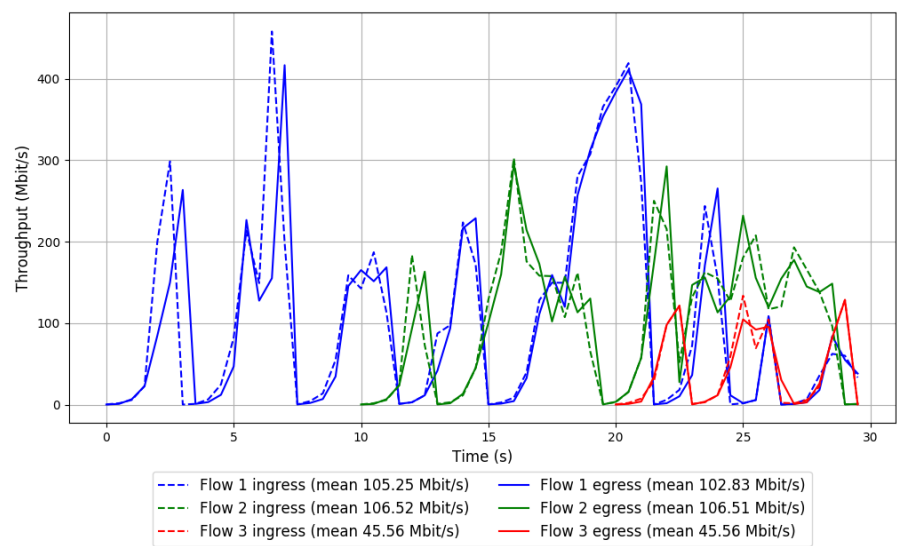
-- Flow 3:

Average throughput: 45.56 Mbit/s

95th percentile per-packet one-way delay: 143.211 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-20 22:16:45

End at: 2018-02-20 22:17:15

Below is generated by plot.py at 2018-02-21 02:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 246.52 Mbit/s

95th percentile per-packet one-way delay: 173.727 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 156.11 Mbit/s

95th percentile per-packet one-way delay: 167.512 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 109.89 Mbit/s

95th percentile per-packet one-way delay: 192.955 ms

Loss rate: 0.00%

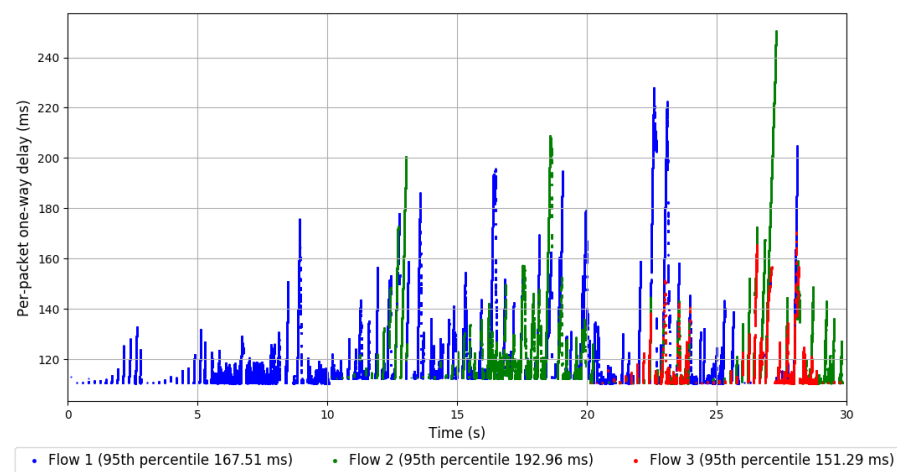
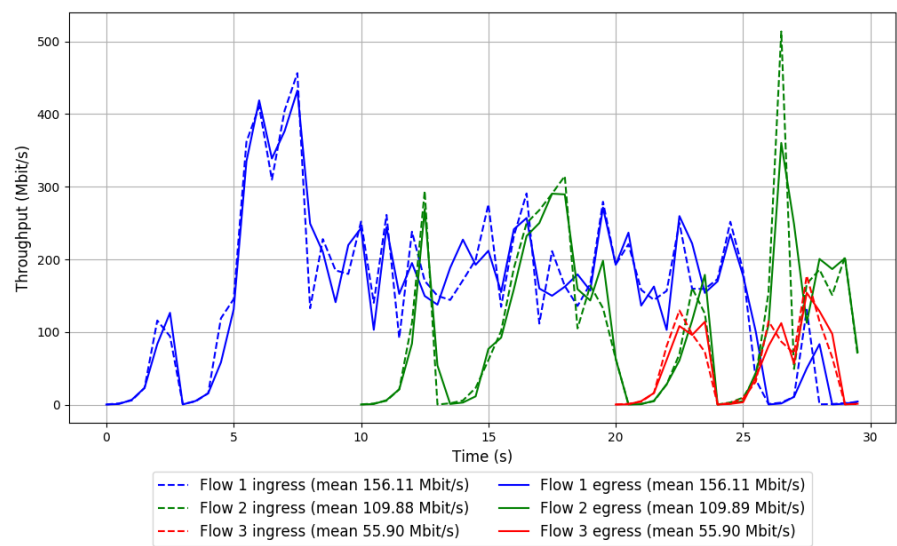
-- Flow 3:

Average throughput: 55.90 Mbit/s

95th percentile per-packet one-way delay: 151.292 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-20 22:36:20

End at: 2018-02-20 22:36:50

Below is generated by plot.py at 2018-02-21 02:20:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 281.95 Mbit/s

95th percentile per-packet one-way delay: 193.546 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 194.14 Mbit/s

95th percentile per-packet one-way delay: 193.376 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 101.85 Mbit/s

95th percentile per-packet one-way delay: 192.392 ms

Loss rate: 0.00%

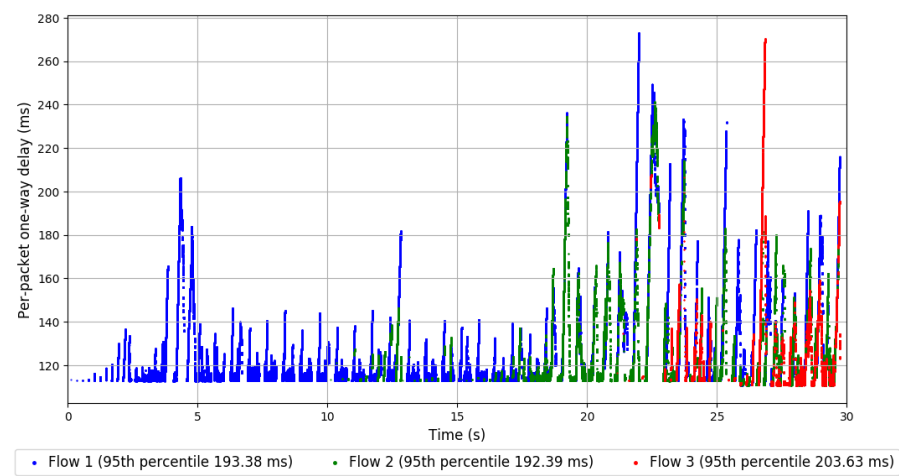
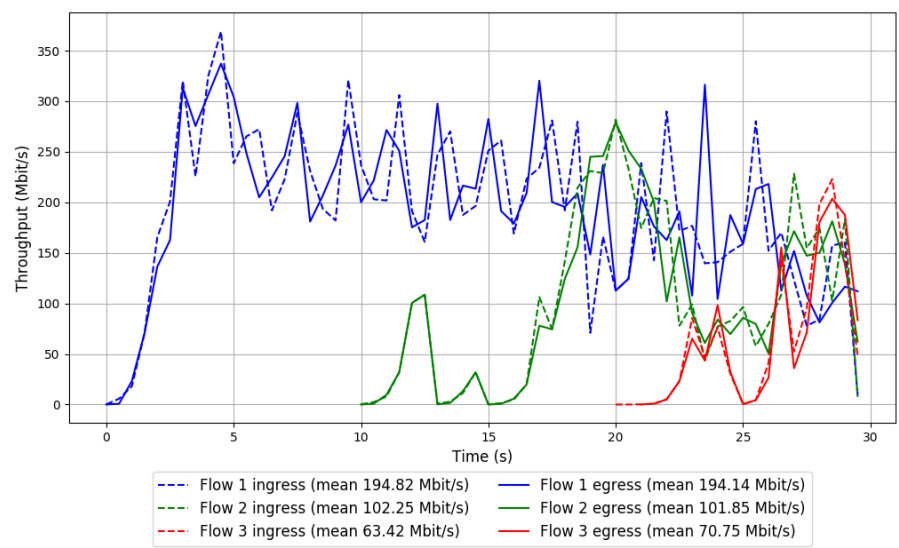
-- Flow 3:

Average throughput: 70.75 Mbit/s

95th percentile per-packet one-way delay: 203.633 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-20 22:55:42

End at: 2018-02-20 22:56:12

Below is generated by plot.py at 2018-02-21 02:20:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 242.91 Mbit/s

95th percentile per-packet one-way delay: 255.139 ms

Loss rate: 3.83%

-- Flow 1:

Average throughput: 187.81 Mbit/s

95th percentile per-packet one-way delay: 240.825 ms

Loss rate: 3.89%

-- Flow 2:

Average throughput: 45.61 Mbit/s

95th percentile per-packet one-way delay: 149.128 ms

Loss rate: 0.55%

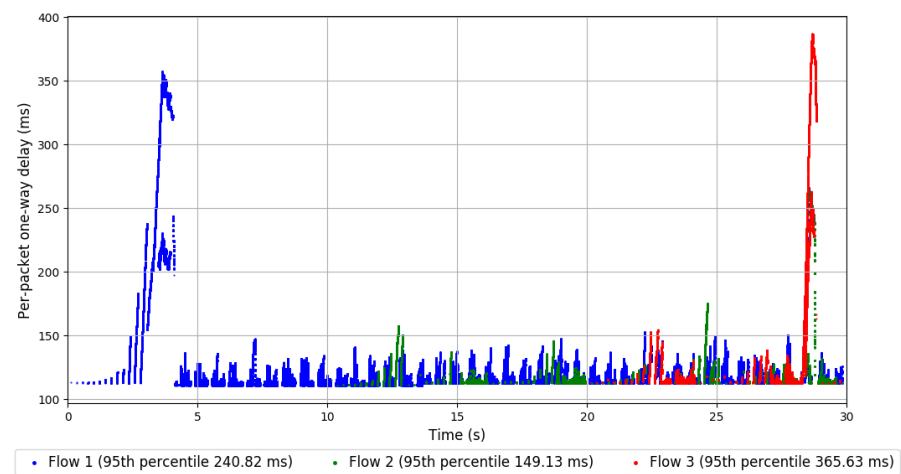
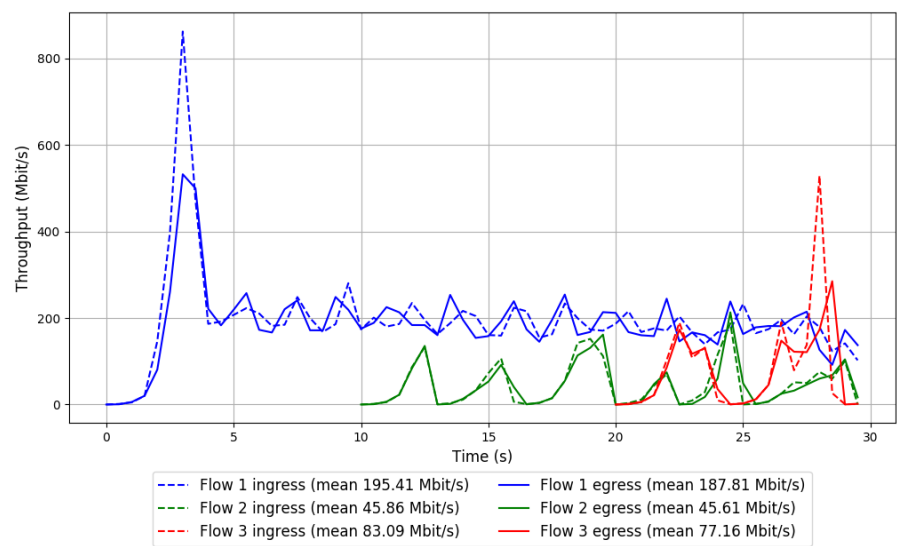
-- Flow 3:

Average throughput: 77.16 Mbit/s

95th percentile per-packet one-way delay: 365.631 ms

Loss rate: 7.13%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-20 23:15:07

End at: 2018-02-20 23:15:37

Below is generated by plot.py at 2018-02-21 02:20:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 235.81 Mbit/s

95th percentile per-packet one-way delay: 183.237 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 147.15 Mbit/s

95th percentile per-packet one-way delay: 179.959 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 108.78 Mbit/s

95th percentile per-packet one-way delay: 160.026 ms

Loss rate: 0.24%

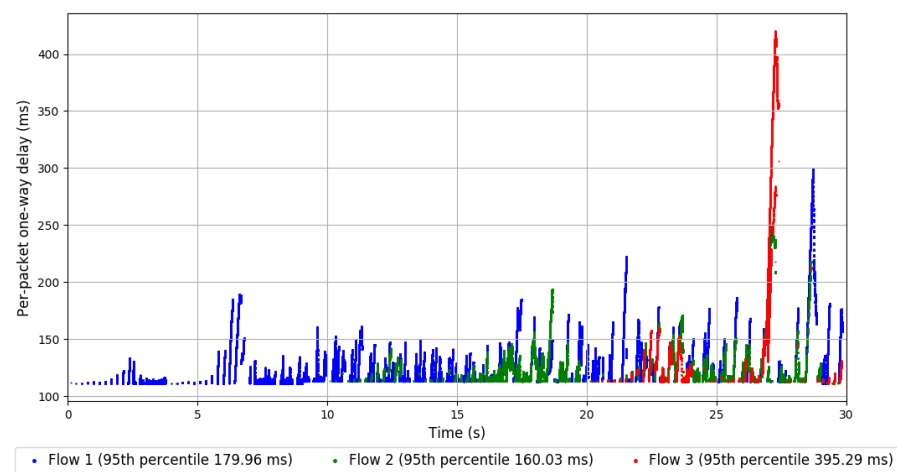
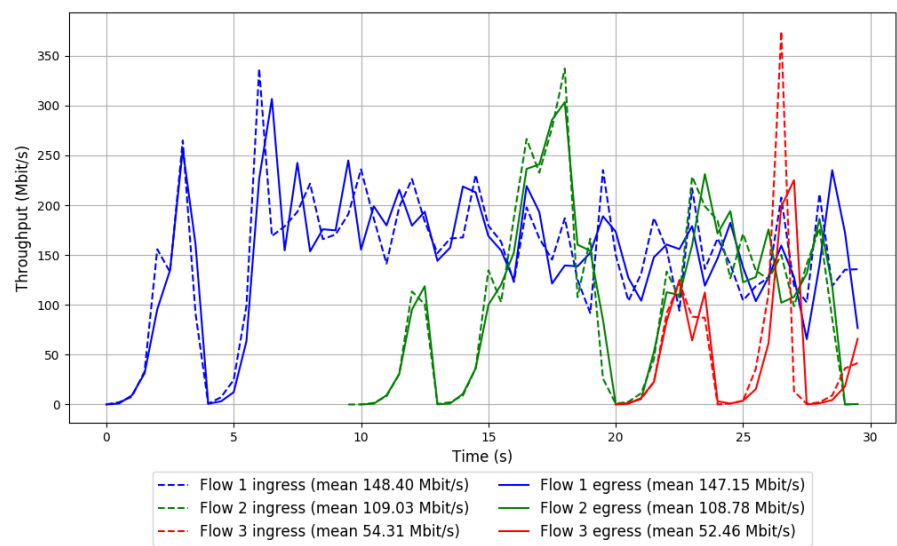
-- Flow 3:

Average throughput: 52.46 Mbit/s

95th percentile per-packet one-way delay: 395.287 ms

Loss rate: 3.24%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-02-20 20:21:53

End at: 2018-02-20 20:22:23

Below is generated by plot.py at 2018-02-21 02:20:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 57.38 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.89 Mbit/s

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

Loss rate: 0.00%

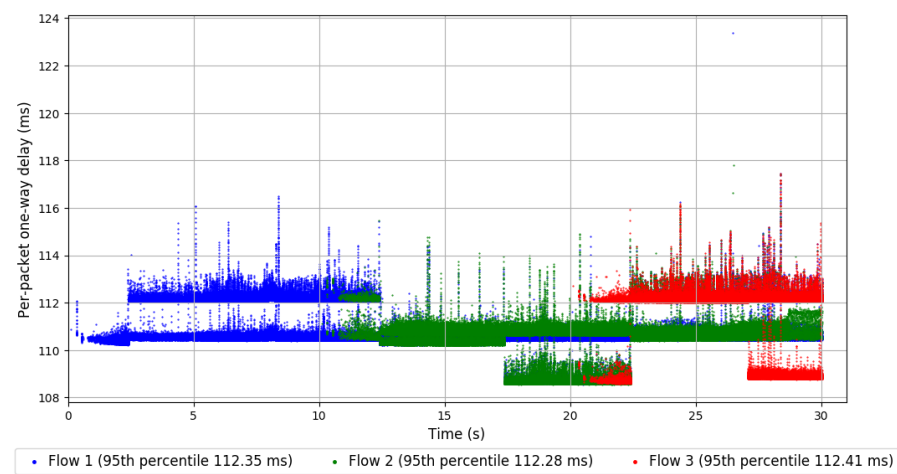
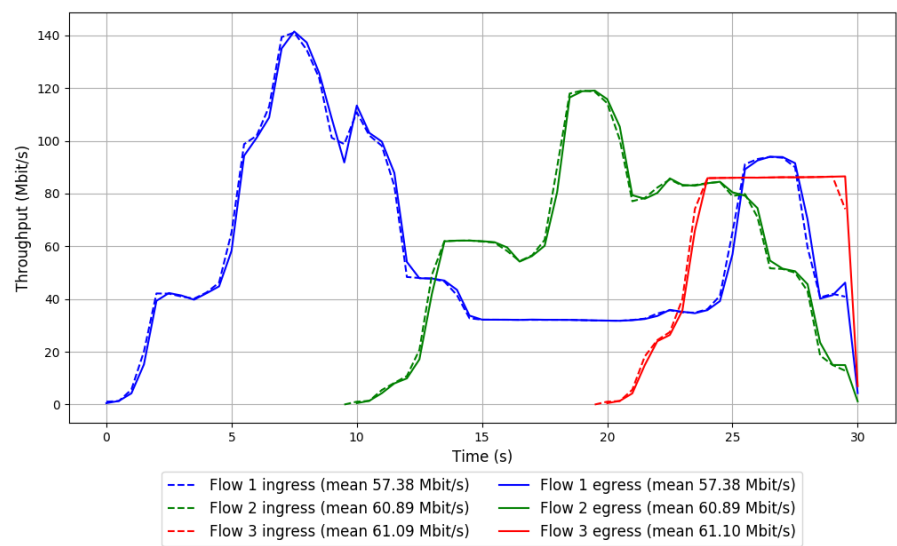
-- Flow 3:

Average throughput: 61.10 Mbit/s

95th percentile per-packet one-way delay: 112.406 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-20 20:41:22

End at: 2018-02-20 20:41:52

Below is generated by plot.py at 2018-02-21 02:23:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 185.54 Mbit/s

95th percentile per-packet one-way delay: 283.705 ms

Loss rate: 10.06%

-- Flow 1:

Average throughput: 74.62 Mbit/s

95th percentile per-packet one-way delay: 110.024 ms

Loss rate: 2.29%

-- Flow 2:

Average throughput: 74.13 Mbit/s

95th percentile per-packet one-way delay: 244.022 ms

Loss rate: 10.47%

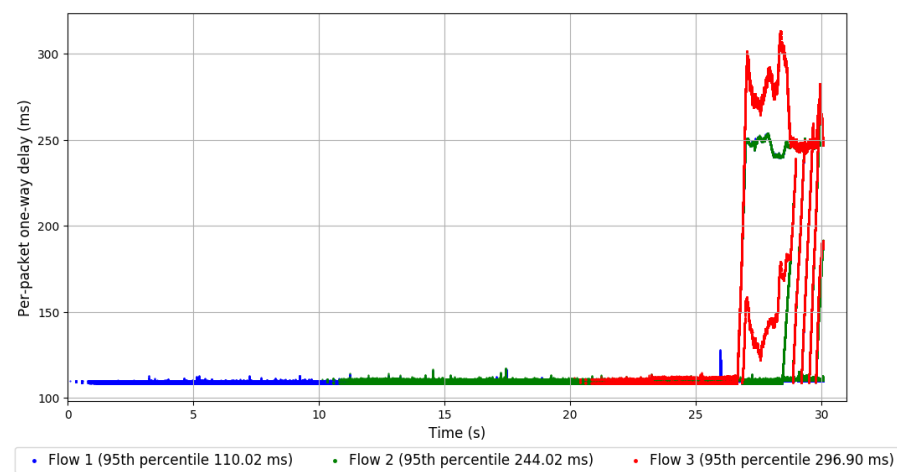
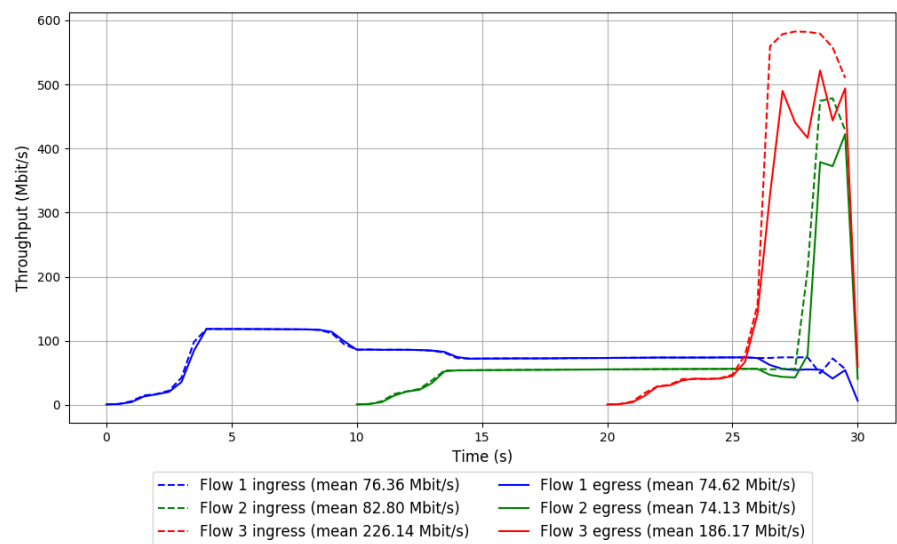
-- Flow 3:

Average throughput: 186.17 Mbit/s

95th percentile per-packet one-way delay: 296.902 ms

Loss rate: 17.69%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-20 21:01:02

End at: 2018-02-20 21:01:32

Below is generated by plot.py at 2018-02-21 02:23:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.75 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.53 Mbit/s

95th percentile per-packet one-way delay: 112.863 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.02 Mbit/s

95th percentile per-packet one-way delay: 112.901 ms

Loss rate: 0.00%

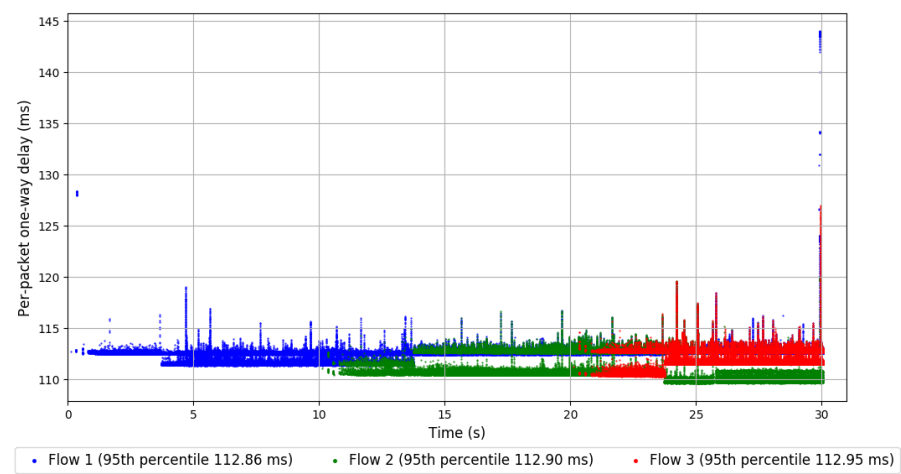
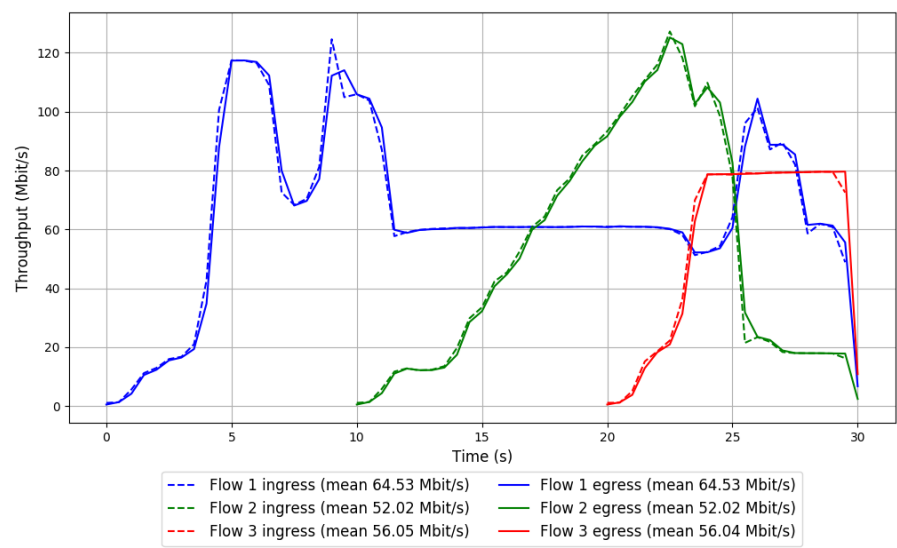
-- Flow 3:

Average throughput: 56.04 Mbit/s

95th percentile per-packet one-way delay: 112.947 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-20 21:20:36

End at: 2018-02-20 21:21:06

Below is generated by plot.py at 2018-02-21 02:23:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 136.03 Mbit/s

95th percentile per-packet one-way delay: 115.166 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 74.74 Mbit/s

95th percentile per-packet one-way delay: 112.931 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.31 Mbit/s

95th percentile per-packet one-way delay: 112.934 ms

Loss rate: 0.00%

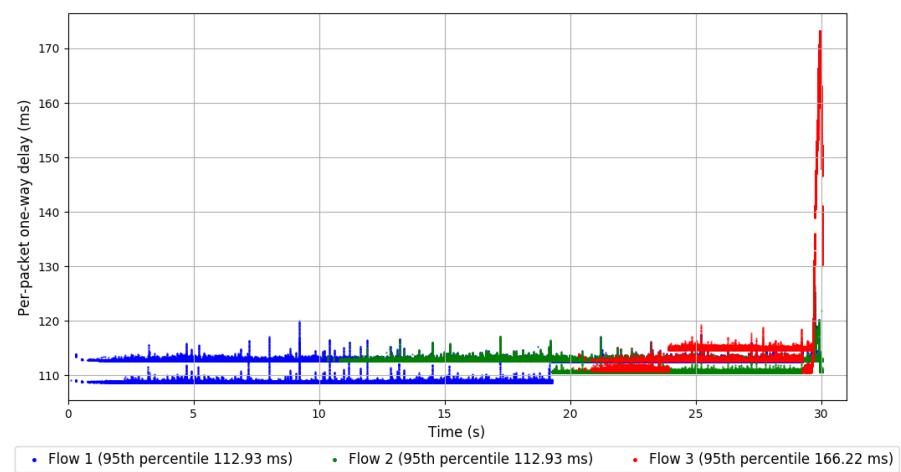
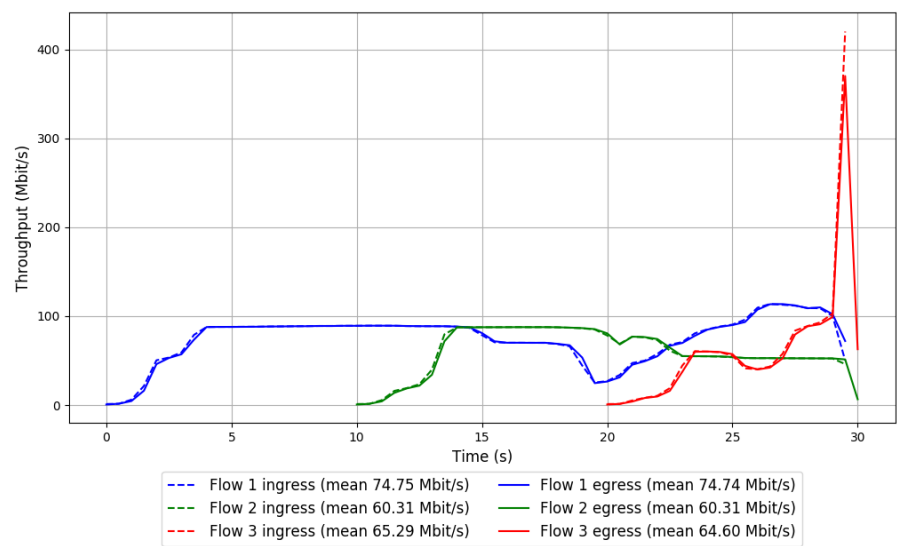
-- Flow 3:

Average throughput: 64.60 Mbit/s

95th percentile per-packet one-way delay: 166.217 ms

Loss rate: 1.05%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-20 21:40:06

End at: 2018-02-20 21:40:36

Below is generated by plot.py at 2018-02-21 02:23:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 131.51 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.99 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 76.39 Mbit/s

95th percentile per-packet one-way delay: 110.946 ms

Loss rate: 0.01%

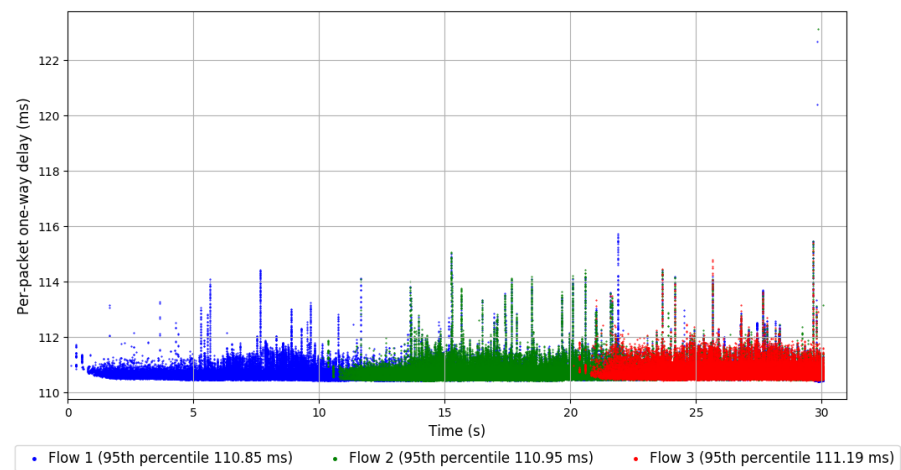
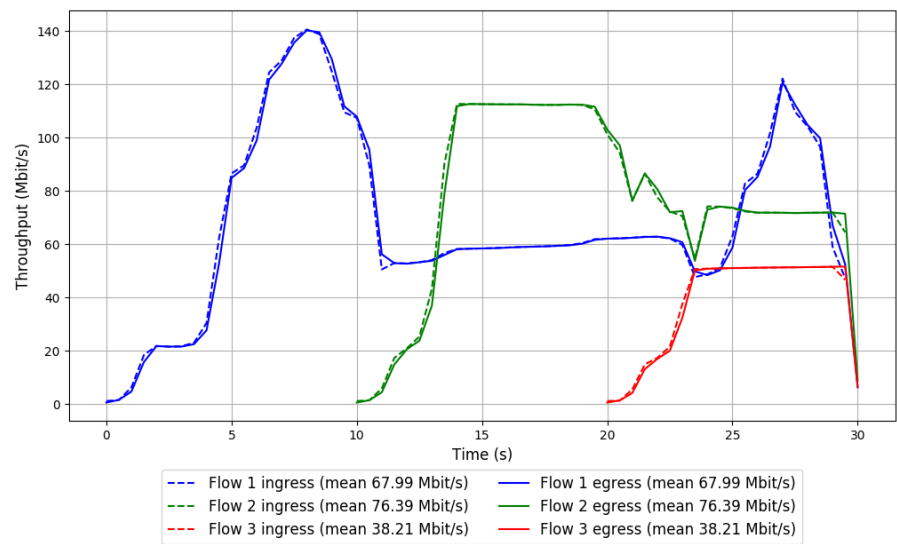
-- Flow 3:

Average throughput: 38.21 Mbit/s

95th percentile per-packet one-way delay: 111.191 ms

Loss rate: 0.01%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-20 21:59:36

End at: 2018-02-20 22:00:06

Below is generated by plot.py at 2018-02-21 02:24:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 119.27 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.61 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.15 Mbit/s

95th percentile per-packet one-way delay: 112.420 ms

Loss rate: 0.00%

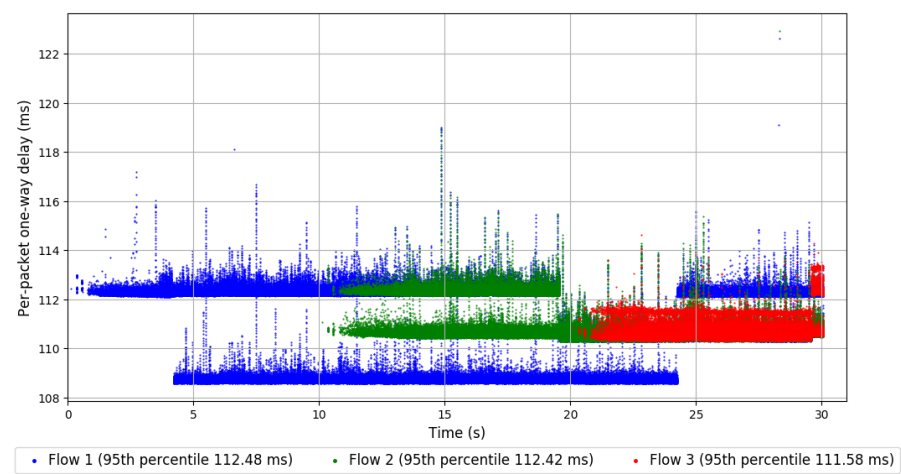
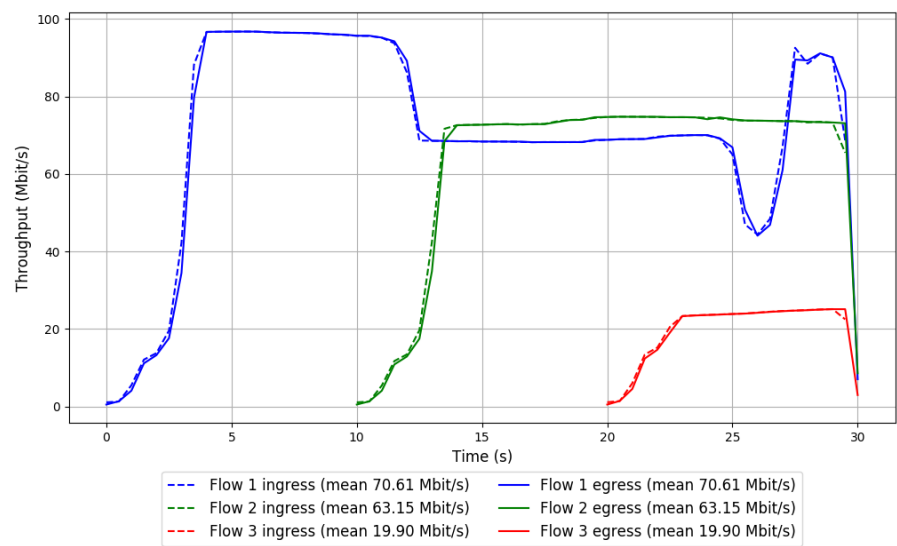
-- Flow 3:

Average throughput: 19.90 Mbit/s

95th percentile per-packet one-way delay: 111.585 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-20 22:19:22

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

Below is generated by plot.py at 2018-02-21 02:24:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.49 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.80 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 74.17 Mbit/s

95th percentile per-packet one-way delay: 112.386 ms

Loss rate: 0.00%

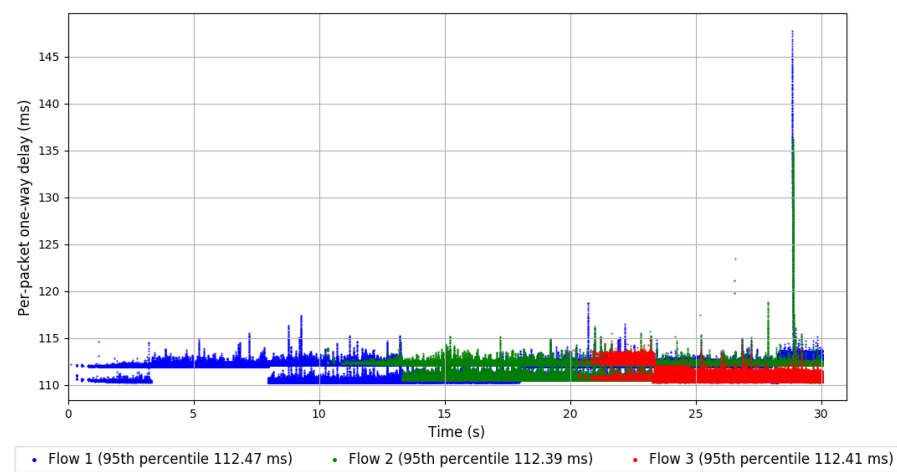
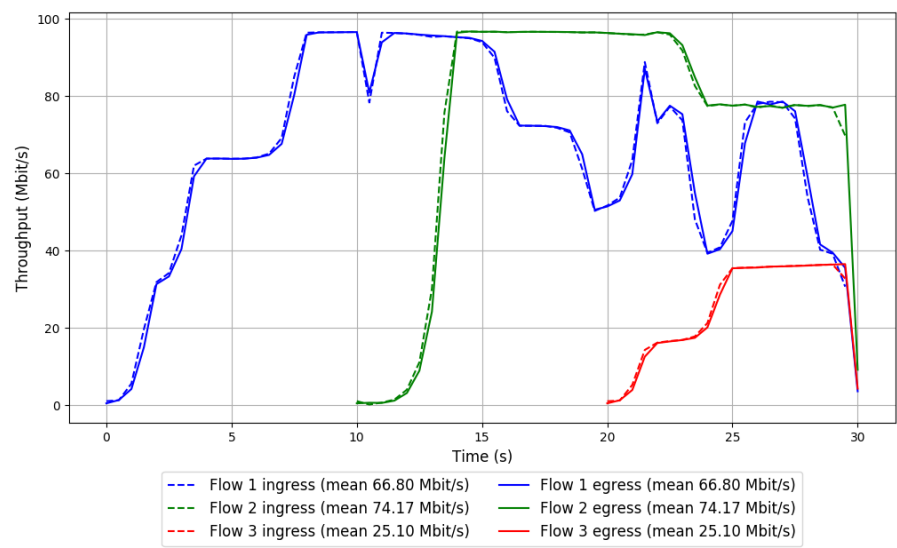
-- Flow 3:

Average throughput: 25.10 Mbit/s

95th percentile per-packet one-way delay: 112.414 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-20 22:38:52

End at: 2018-02-20 22:39:22

Below is generated by plot.py at 2018-02-21 02:24:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 125.54 Mbit/s

95th percentile per-packet one-way delay: 113.314 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.97 Mbit/s

95th percentile per-packet one-way delay: 113.250 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.42 Mbit/s

95th percentile per-packet one-way delay: 113.319 ms

Loss rate: 0.00%

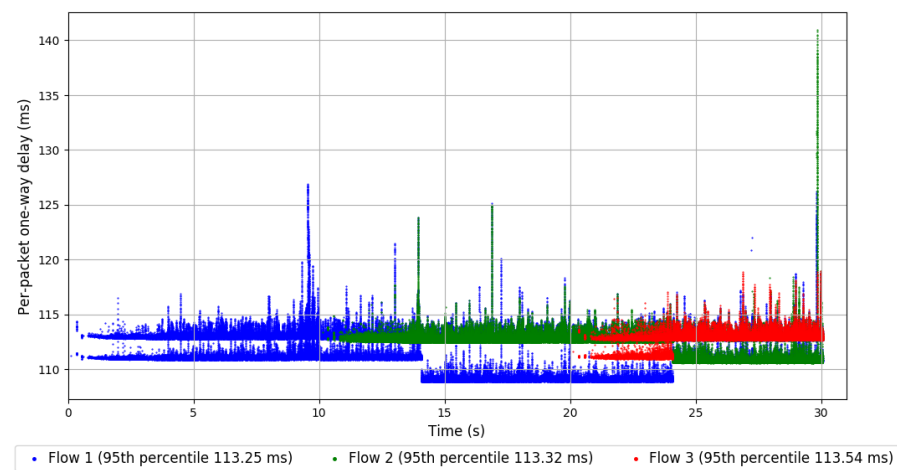
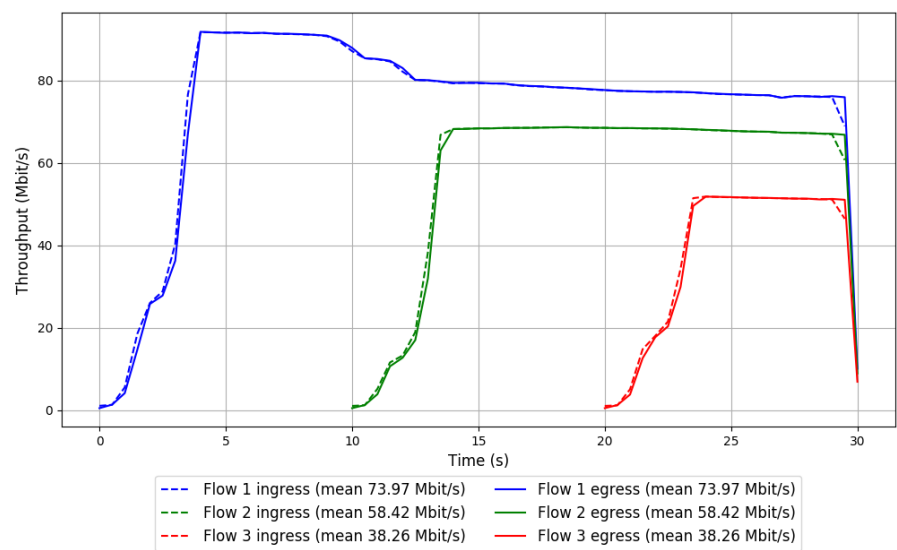
-- Flow 3:

Average throughput: 38.26 Mbit/s

95th percentile per-packet one-way delay: 113.539 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-20 22:58:11

End at: 2018-02-20 22:58:41

Below is generated by plot.py at 2018-02-21 02:24:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 113.05 Mbit/s

95th percentile per-packet one-way delay: 112.758 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.21 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.06 Mbit/s

95th percentile per-packet one-way delay: 112.814 ms

Loss rate: 0.00%

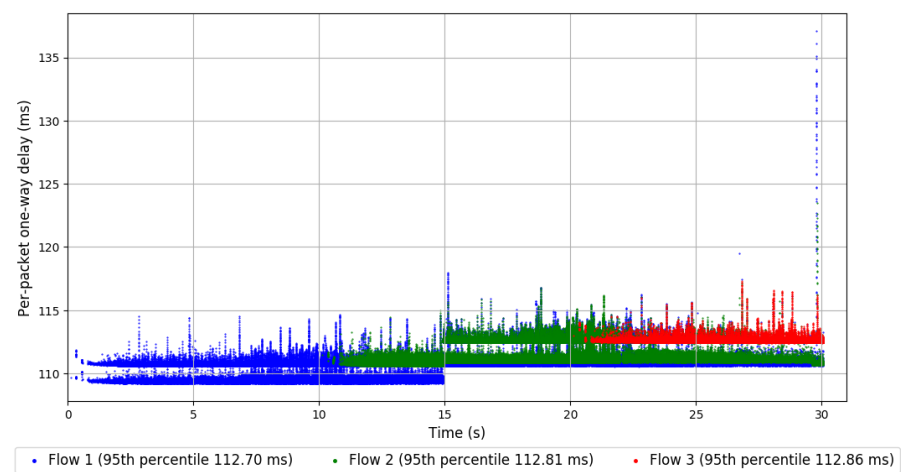
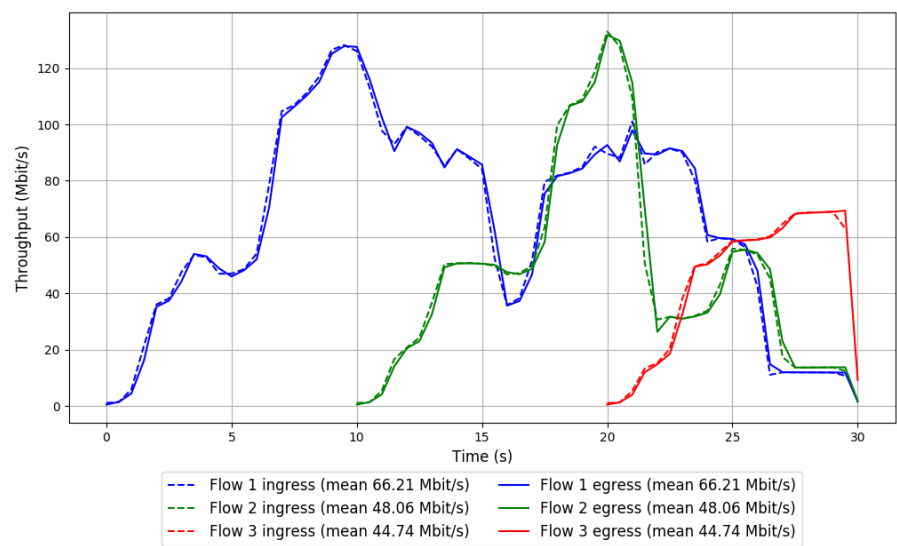
-- Flow 3:

Average throughput: 44.74 Mbit/s

95th percentile per-packet one-way delay: 112.857 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-20 23:17:39

End at: 2018-02-20 23:18:09

Below is generated by plot.py at 2018-02-21 02:25:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 115.12 Mbit/s

95th percentile per-packet one-way delay: 113.385 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.40 Mbit/s

95th percentile per-packet one-way delay: 111.254 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.98 Mbit/s

95th percentile per-packet one-way delay: 113.389 ms

Loss rate: 0.00%

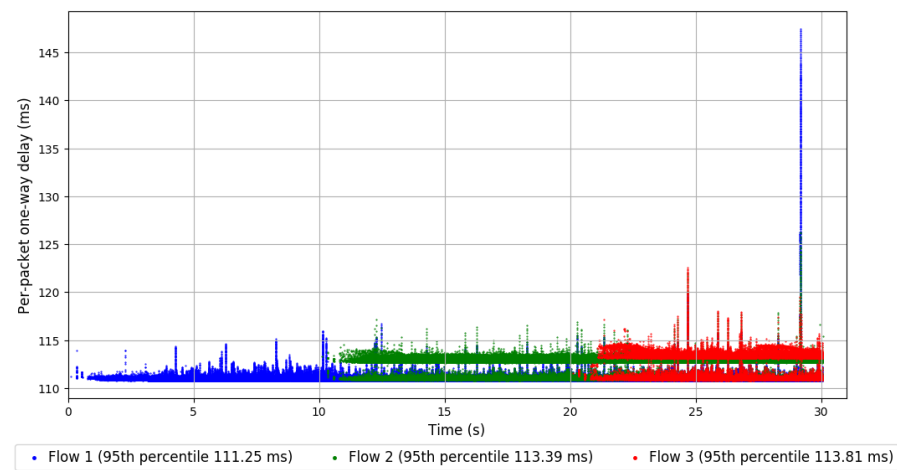
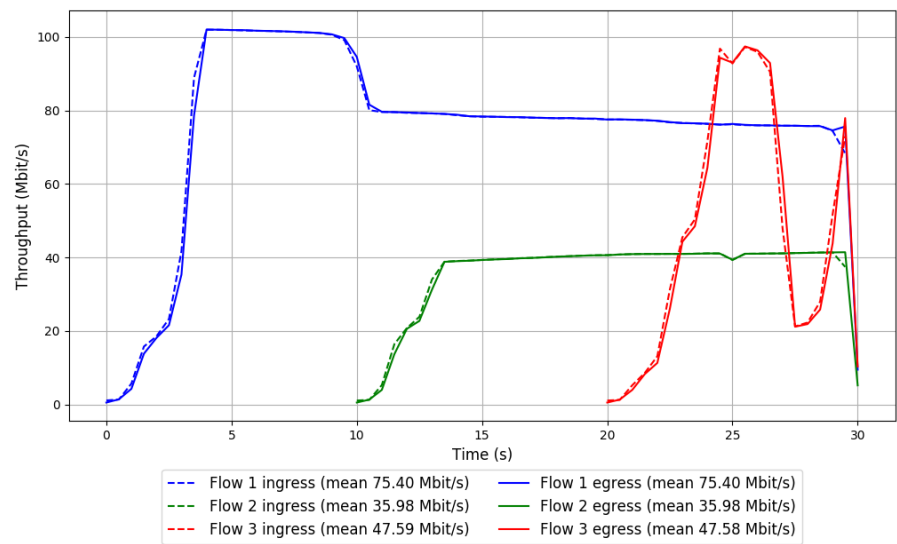
-- Flow 3:

Average throughput: 47.58 Mbit/s

95th percentile per-packet one-way delay: 113.806 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

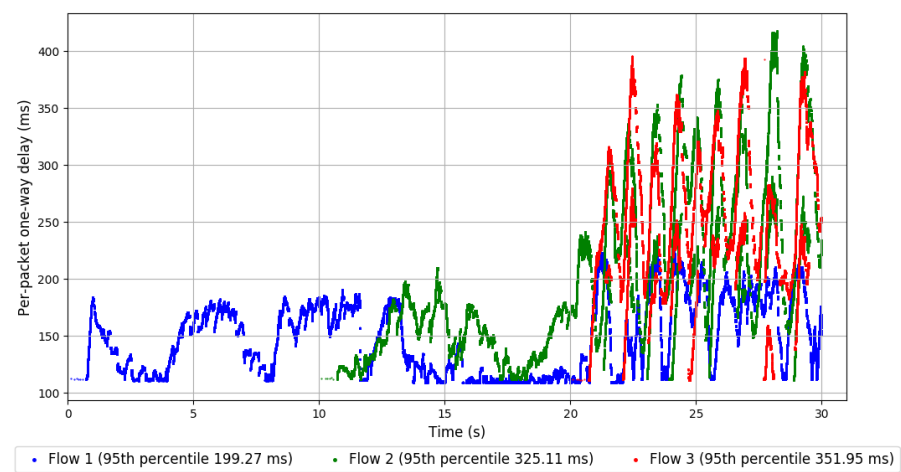
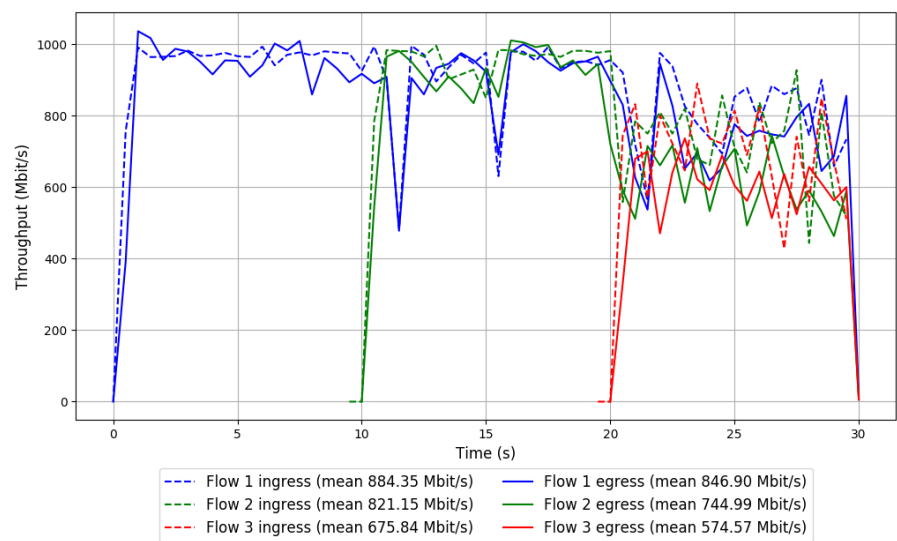


```
Run 1: Statistics of FillP

Start at: 2018-02-20 20:25:33
End at: 2018-02-20 20:26:03

# Below is generated by plot.py at 2018-02-21 02:49:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1533.42 Mbit/s
95th percentile per-packet one-way delay: 306.573 ms
Loss rate: 7.36%
-- Flow 1:
Average throughput: 846.90 Mbit/s
95th percentile per-packet one-way delay: 199.271 ms
Loss rate: 4.24%
-- Flow 2:
Average throughput: 744.99 Mbit/s
95th percentile per-packet one-way delay: 325.106 ms
Loss rate: 9.28%
-- Flow 3:
Average throughput: 574.57 Mbit/s
95th percentile per-packet one-way delay: 351.951 ms
Loss rate: 14.98%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-02-20 20:45:15

End at: 2018-02-20 20:45:45

Below is generated by plot.py at 2018-02-21 02:50:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 1547.92 Mbit/s

95th percentile per-packet one-way delay: 225.123 ms

Loss rate: 8.36%

-- Flow 1:

Average throughput: 799.66 Mbit/s

95th percentile per-packet one-way delay: 219.708 ms

Loss rate: 7.76%

-- Flow 2:

Average throughput: 801.03 Mbit/s

95th percentile per-packet one-way delay: 225.149 ms

Loss rate: 7.02%

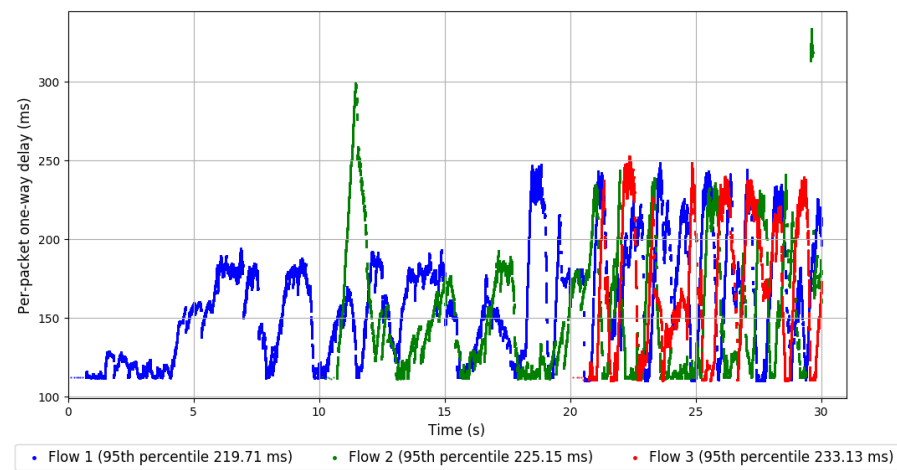
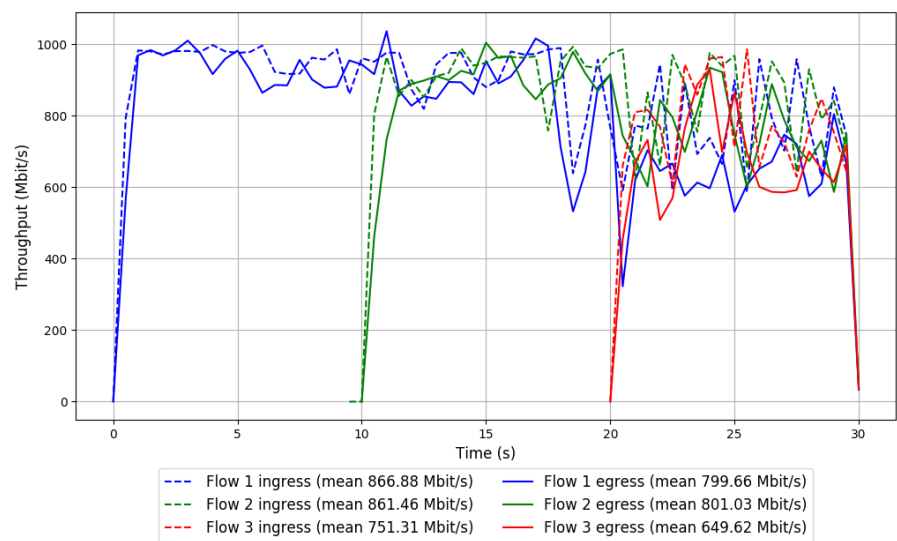
-- Flow 3:

Average throughput: 649.62 Mbit/s

95th percentile per-packet one-way delay: 233.129 ms

Loss rate: 13.55%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-20 21:04:53

End at: 2018-02-20 21:05:23

Below is generated by plot.py at 2018-02-21 02:51:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 1536.78 Mbit/s

95th percentile per-packet one-way delay: 213.879 ms

Loss rate: 8.01%

-- Flow 1:

Average throughput: 753.28 Mbit/s

95th percentile per-packet one-way delay: 214.891 ms

Loss rate: 9.99%

-- Flow 2:

Average throughput: 809.87 Mbit/s

95th percentile per-packet one-way delay: 214.486 ms

Loss rate: 5.70%

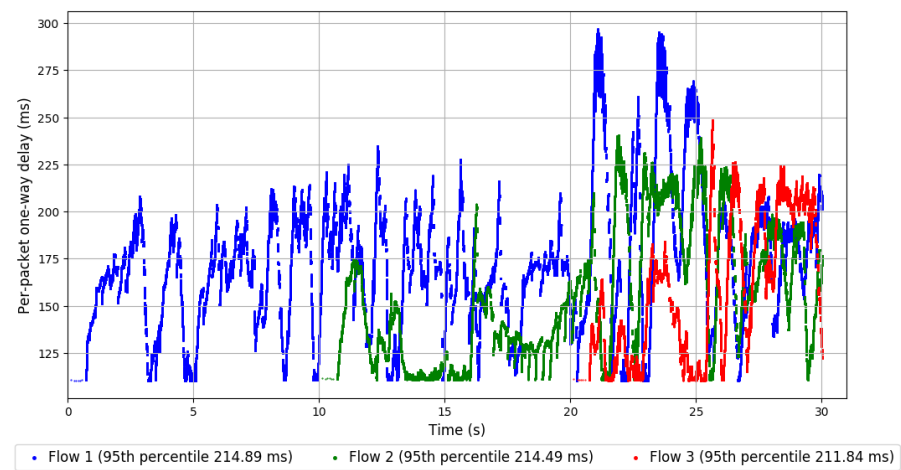
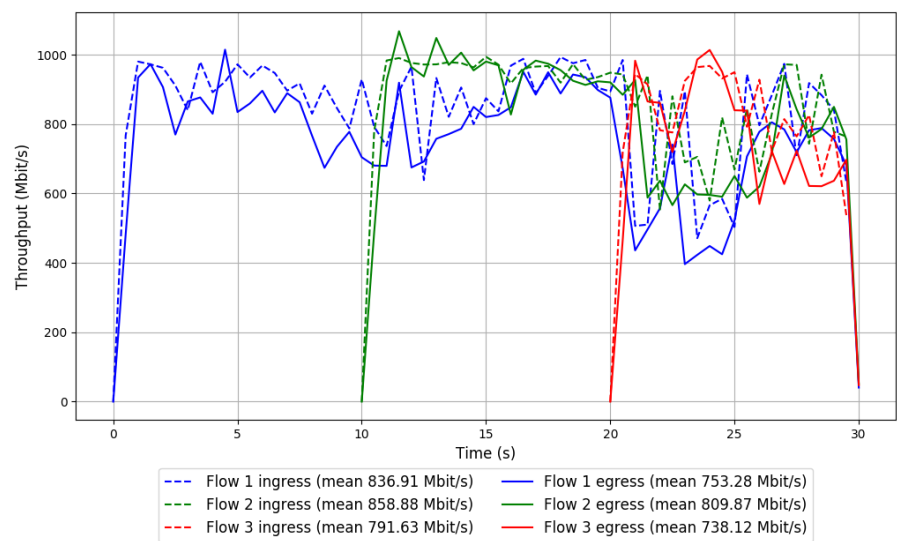
-- Flow 3:

Average throughput: 738.12 Mbit/s

95th percentile per-packet one-way delay: 211.837 ms

Loss rate: 6.74%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-20 21:24:16

End at: 2018-02-20 21:24:46

Below is generated by plot.py at 2018-02-21 02:51:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 1455.22 Mbit/s

95th percentile per-packet one-way delay: 225.721 ms

Loss rate: 10.83%

-- Flow 1:

Average throughput: 751.02 Mbit/s

95th percentile per-packet one-way delay: 218.667 ms

Loss rate: 10.05%

-- Flow 2:

Average throughput: 718.15 Mbit/s

95th percentile per-packet one-way delay: 232.232 ms

Loss rate: 11.17%

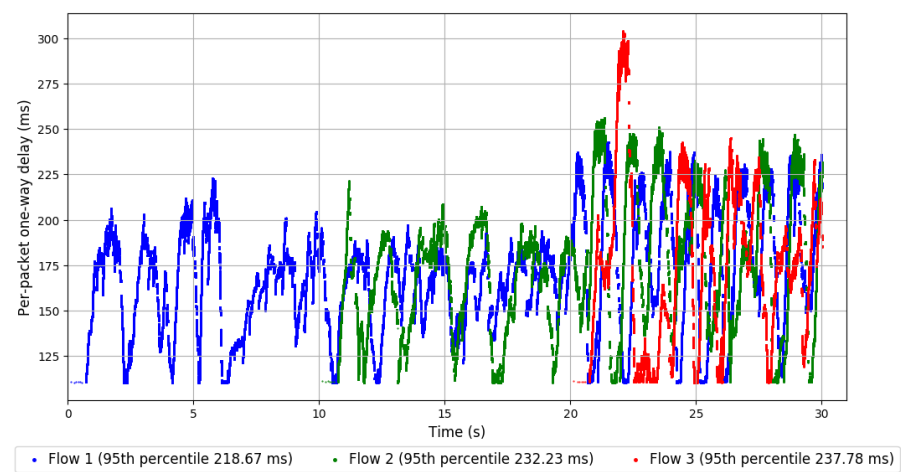
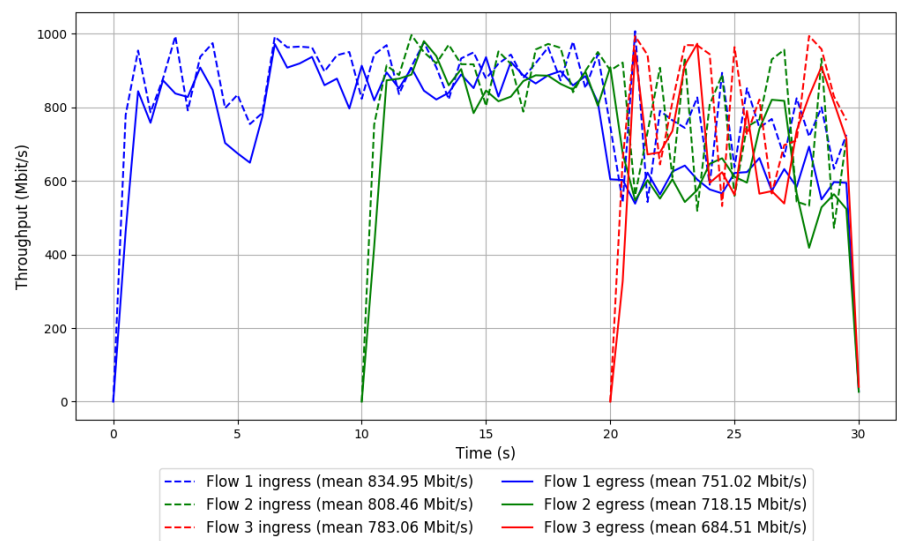
-- Flow 3:

Average throughput: 684.51 Mbit/s

95th percentile per-packet one-way delay: 237.777 ms

Loss rate: 12.59%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-20 21:43:58

End at: 2018-02-20 21:44:28

Below is generated by plot.py at 2018-02-21 02:51:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 1564.77 Mbit/s

95th percentile per-packet one-way delay: 279.910 ms

Loss rate: 6.74%

-- Flow 1:

Average throughput: 791.45 Mbit/s

95th percentile per-packet one-way delay: 293.046 ms

Loss rate: 6.27%

-- Flow 2:

Average throughput: 787.45 Mbit/s

95th percentile per-packet one-way delay: 255.013 ms

Loss rate: 7.04%

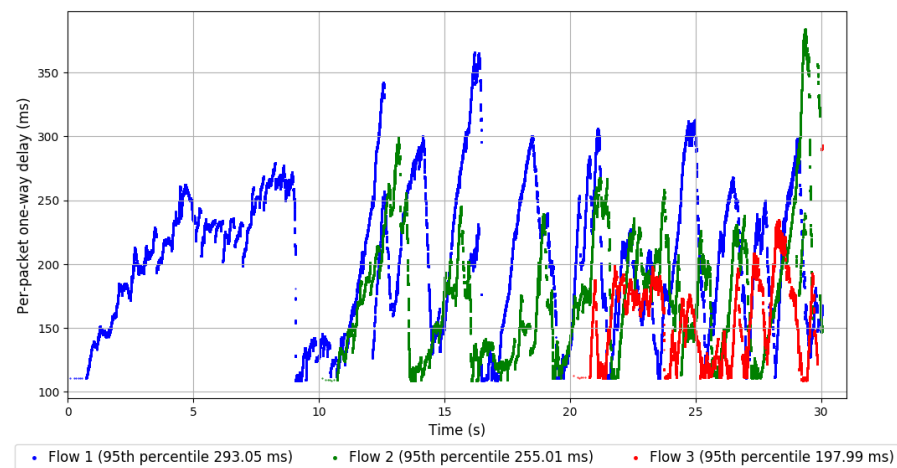
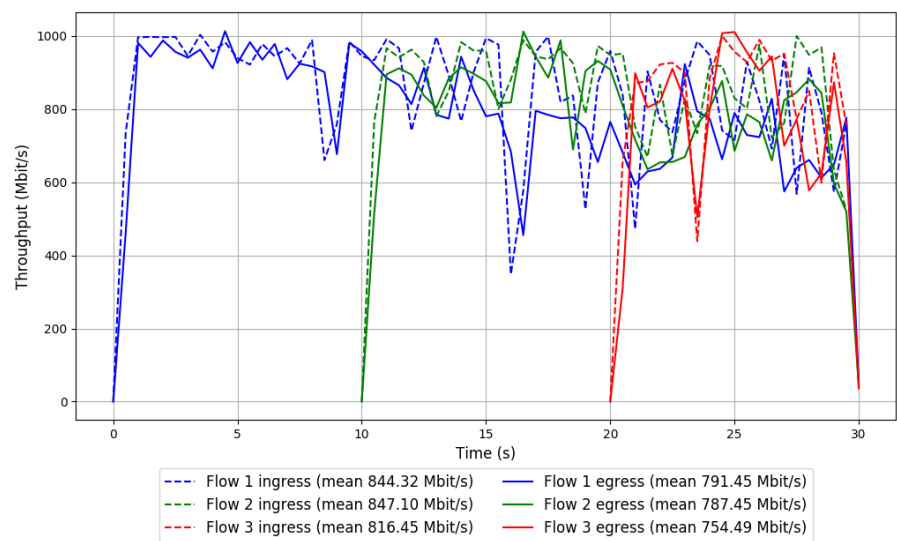
-- Flow 3:

Average throughput: 754.49 Mbit/s

95th percentile per-packet one-way delay: 197.986 ms

Loss rate: 7.61%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-20 22:03:25

End at: 2018-02-20 22:03:55

Below is generated by plot.py at 2018-02-21 02:51:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 1550.07 Mbit/s

95th percentile per-packet one-way delay: 217.925 ms

Loss rate: 7.95%

-- Flow 1:

Average throughput: 814.12 Mbit/s

95th percentile per-packet one-way delay: 204.525 ms

Loss rate: 6.74%

-- Flow 2:

Average throughput: 752.45 Mbit/s

95th percentile per-packet one-way delay: 225.661 ms

Loss rate: 8.30%

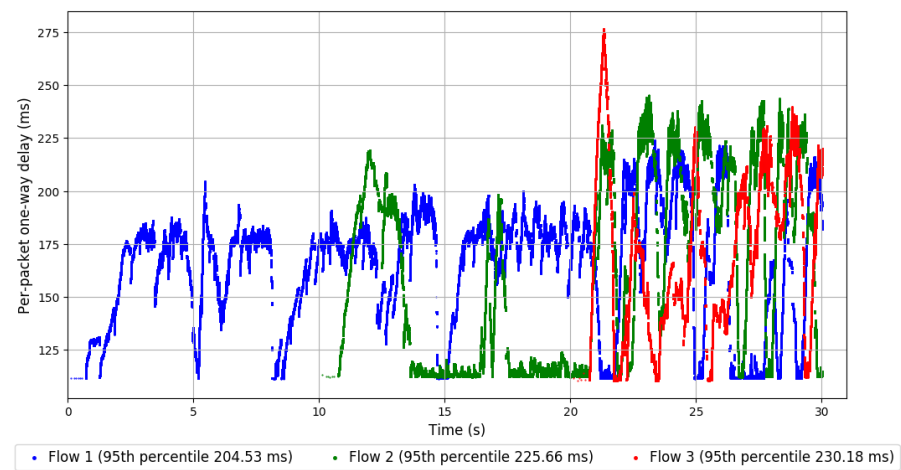
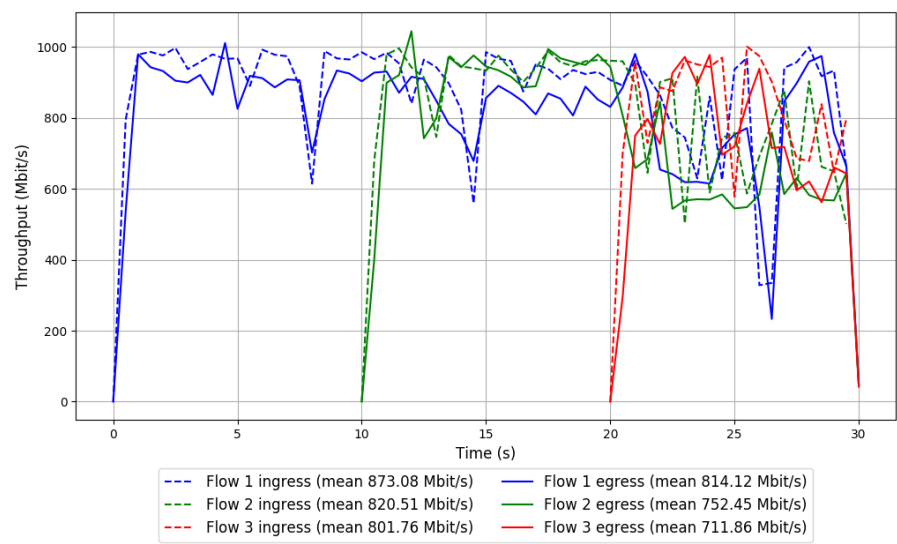
-- Flow 3:

Average throughput: 711.86 Mbit/s

95th percentile per-packet one-way delay: 230.181 ms

Loss rate: 11.21%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-20 22:23:06

End at: 2018-02-20 22:23:36

Below is generated by plot.py at 2018-02-21 02:51:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 1425.07 Mbit/s

95th percentile per-packet one-way delay: 337.358 ms

Loss rate: 5.96%

-- Flow 1:

Average throughput: 773.52 Mbit/s

95th percentile per-packet one-way delay: 327.498 ms

Loss rate: 3.82%

-- Flow 2:

Average throughput: 674.62 Mbit/s

95th percentile per-packet one-way delay: 349.148 ms

Loss rate: 5.46%

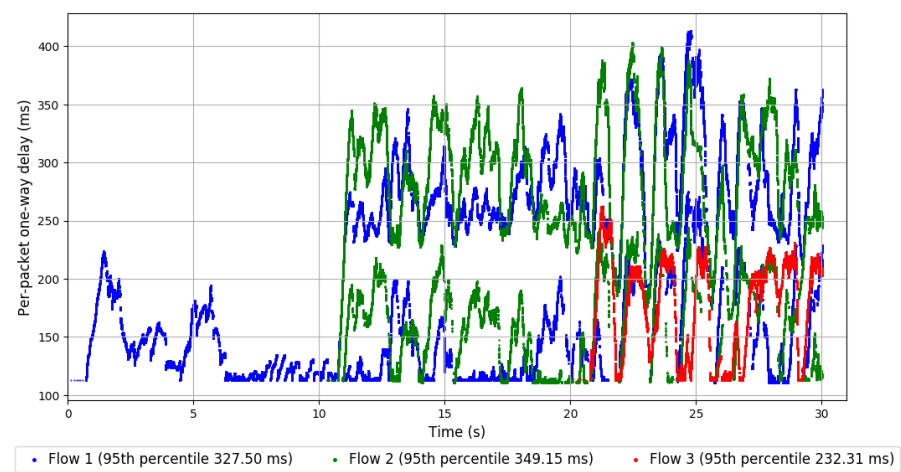
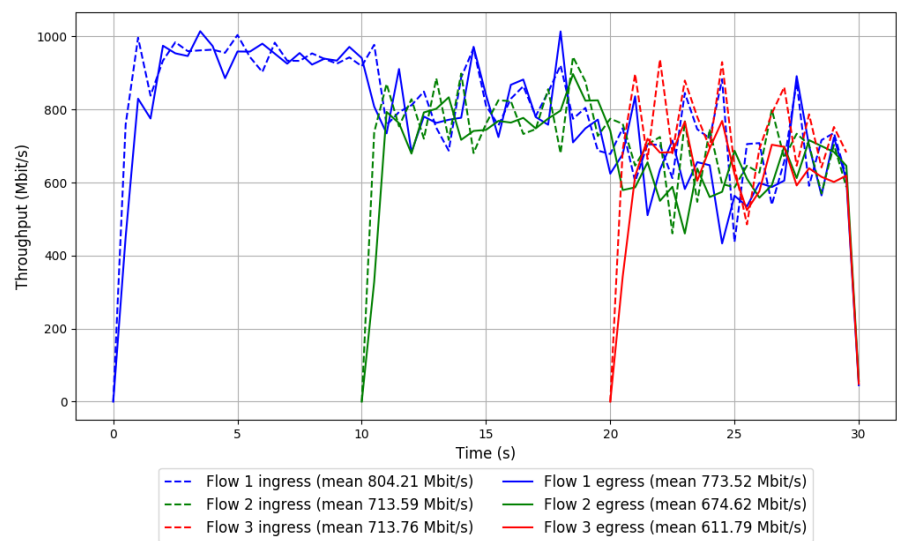
-- Flow 3:

Average throughput: 611.79 Mbit/s

95th percentile per-packet one-way delay: 232.314 ms

Loss rate: 14.24%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-20 22:42:30

End at: 2018-02-20 22:43:00

Below is generated by plot.py at 2018-02-21 02:53:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 1541.98 Mbit/s

95th percentile per-packet one-way delay: 247.382 ms

Loss rate: 7.25%

-- Flow 1:

Average throughput: 791.83 Mbit/s

95th percentile per-packet one-way delay: 262.873 ms

Loss rate: 6.33%

-- Flow 2:

Average throughput: 810.74 Mbit/s

95th percentile per-packet one-way delay: 207.969 ms

Loss rate: 6.33%

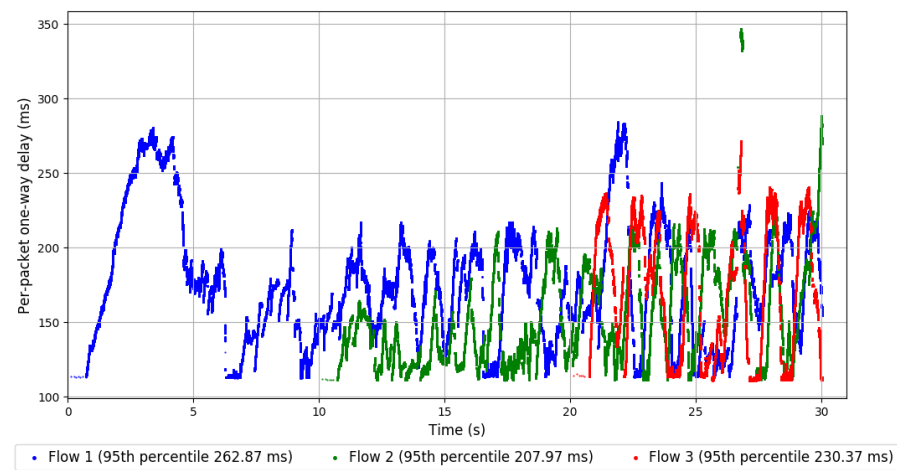
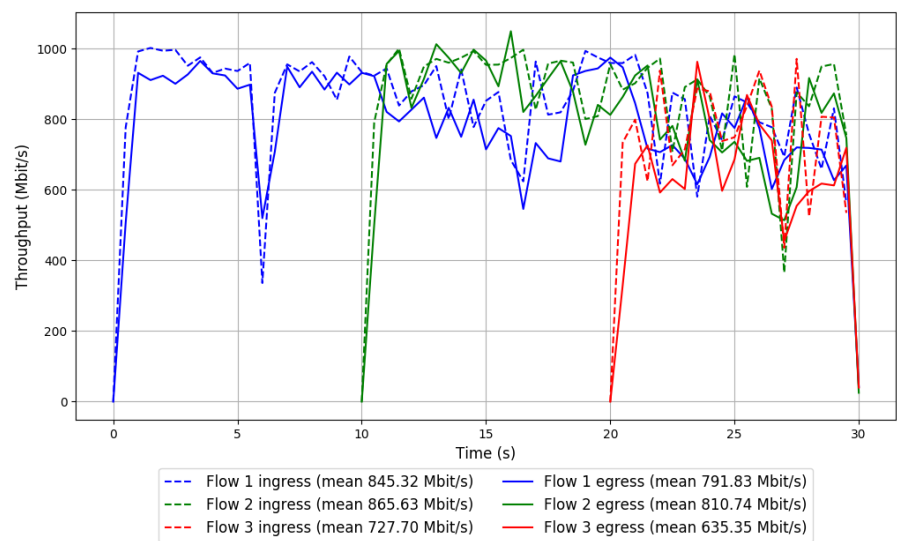
-- Flow 3:

Average throughput: 635.35 Mbit/s

95th percentile per-packet one-way delay: 230.372 ms

Loss rate: 12.70%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-20 23:01:56

End at: 2018-02-20 23:02:26

Below is generated by plot.py at 2018-02-21 03:10:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 1128.93 Mbit/s

95th percentile per-packet one-way delay: 378.552 ms

Loss rate: 10.64%

-- Flow 1:

Average throughput: 667.40 Mbit/s

95th percentile per-packet one-way delay: 371.504 ms

Loss rate: 12.15%

-- Flow 2:

Average throughput: 593.50 Mbit/s

95th percentile per-packet one-way delay: 371.098 ms

Loss rate: 8.12%

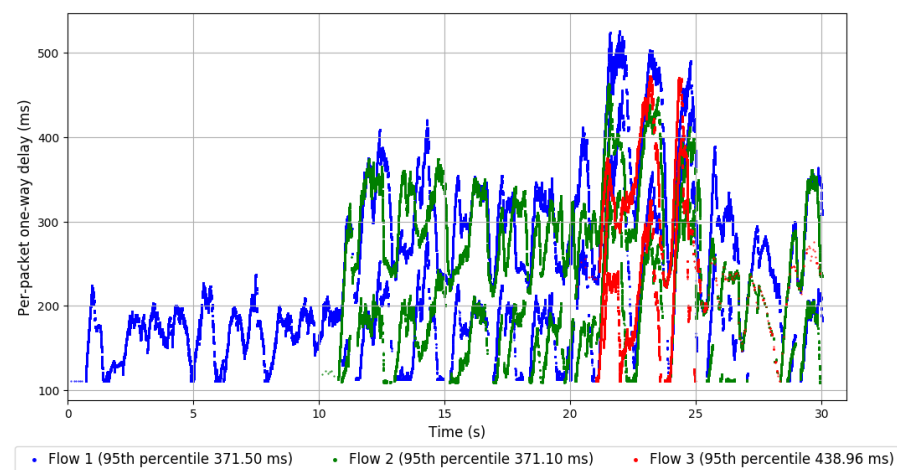
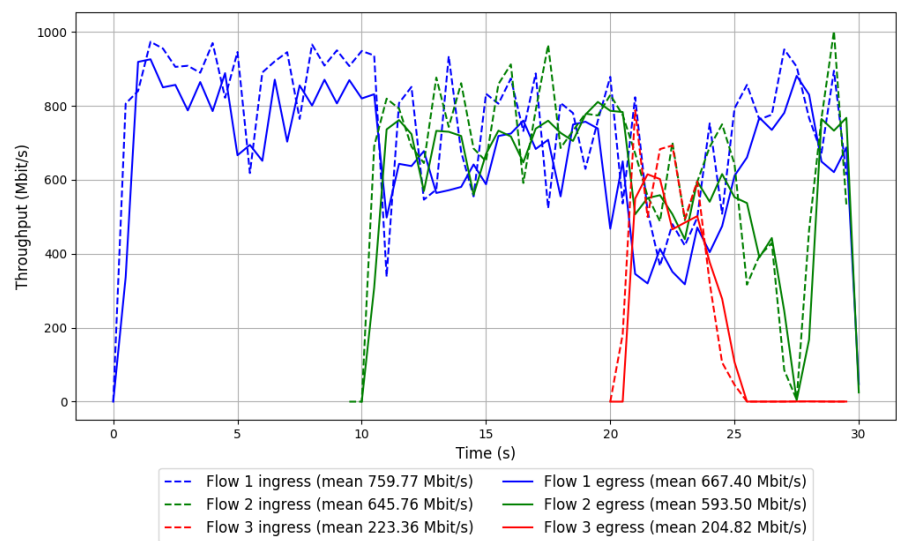
-- Flow 3:

Average throughput: 204.82 Mbit/s

95th percentile per-packet one-way delay: 438.964 ms

Loss rate: 9.72%

Run 9: Report of FillP — Data Link

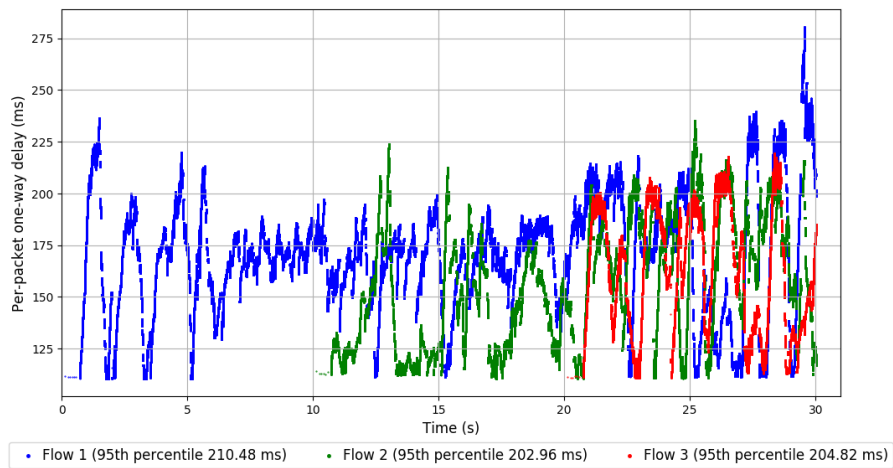
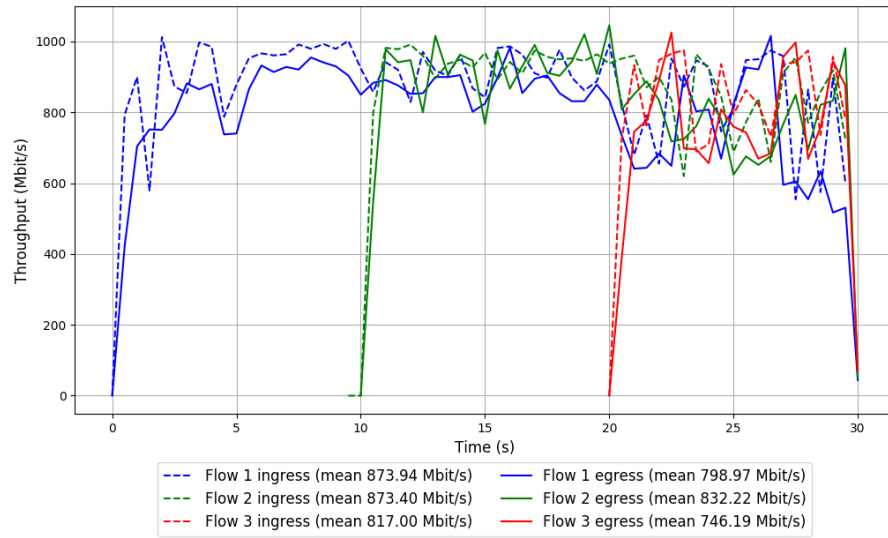


```
Run 10: Statistics of FillP

Start at: 2018-02-20 23:21:30
End at: 2018-02-20 23:22:00

# Below is generated by plot.py at 2018-02-21 03:19:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1600.11 Mbit/s
95th percentile per-packet one-way delay: 206.305 ms
Loss rate: 7.23%
-- Flow 1:
Average throughput: 798.97 Mbit/s
95th percentile per-packet one-way delay: 210.484 ms
Loss rate: 8.52%
-- Flow 2:
Average throughput: 832.22 Mbit/s
95th percentile per-packet one-way delay: 202.958 ms
Loss rate: 4.70%
-- Flow 3:
Average throughput: 746.19 Mbit/s
95th percentile per-packet one-way delay: 204.819 ms
Loss rate: 8.48%
```

Run 10: Report of FillP — Data Link

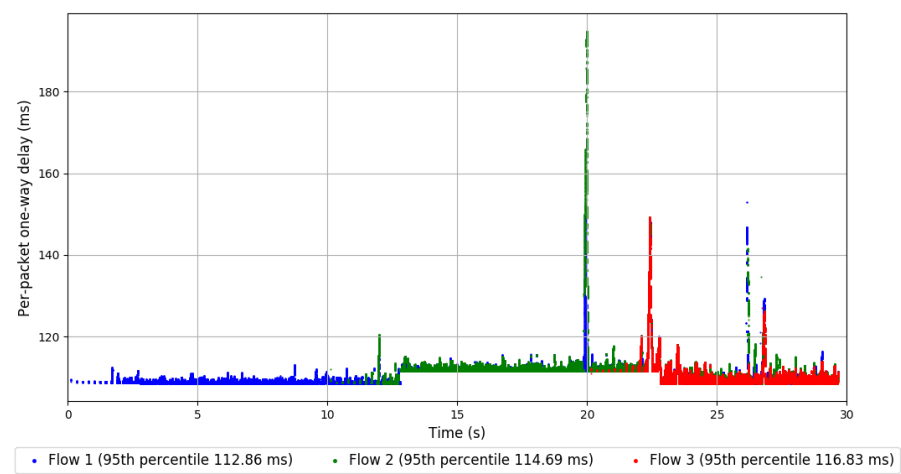
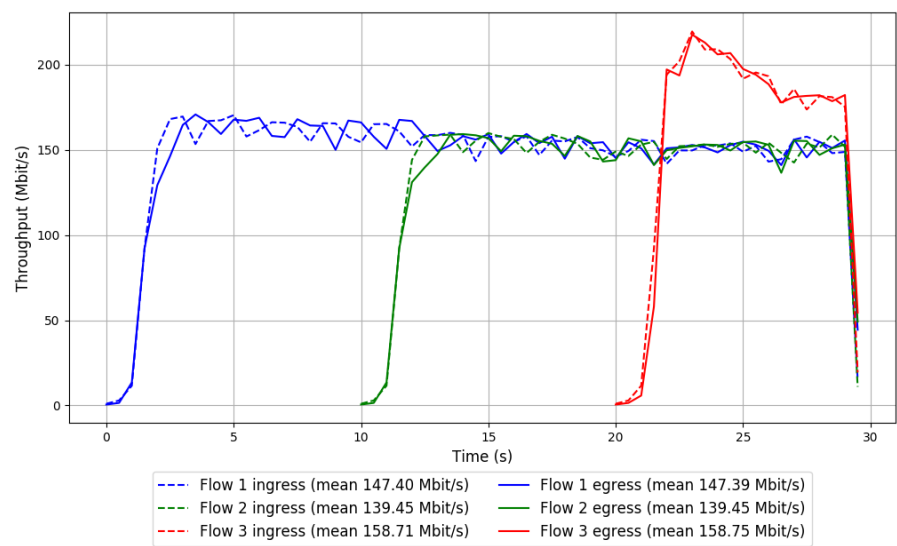


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-20 20:32:03
End at: 2018-02-20 20:32:33

# Below is generated by plot.py at 2018-02-21 03:19:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 290.71 Mbit/s
95th percentile per-packet one-way delay: 113.736 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 147.39 Mbit/s
95th percentile per-packet one-way delay: 112.862 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 139.45 Mbit/s
95th percentile per-packet one-way delay: 114.689 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 158.75 Mbit/s
95th percentile per-packet one-way delay: 116.825 ms
Loss rate: 0.00%
```

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



Run 2: Statistics of Indigo-1-32

Start at: 2018-02-20 20:51:44

End at: 2018-02-20 20:52:14

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.93 Mbit/s

95th percentile per-packet one-way delay: 122.000 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 150.22 Mbit/s

95th percentile per-packet one-way delay: 116.160 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 142.96 Mbit/s

95th percentile per-packet one-way delay: 121.483 ms

Loss rate: 0.02%

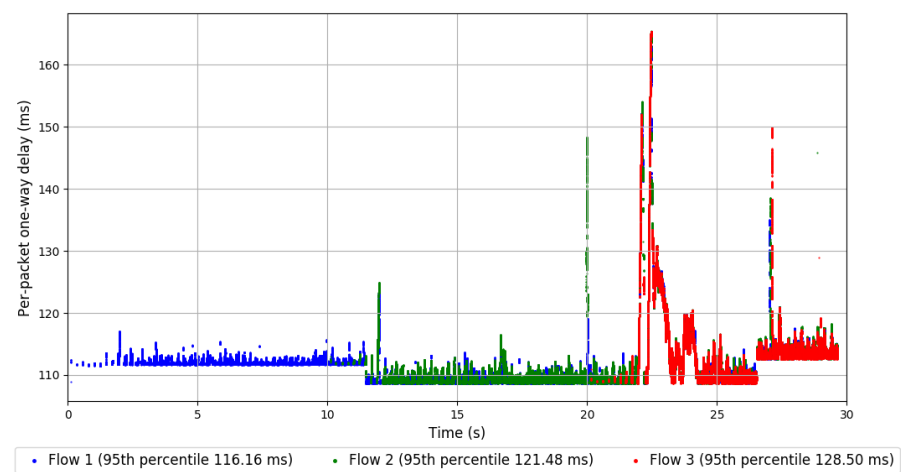
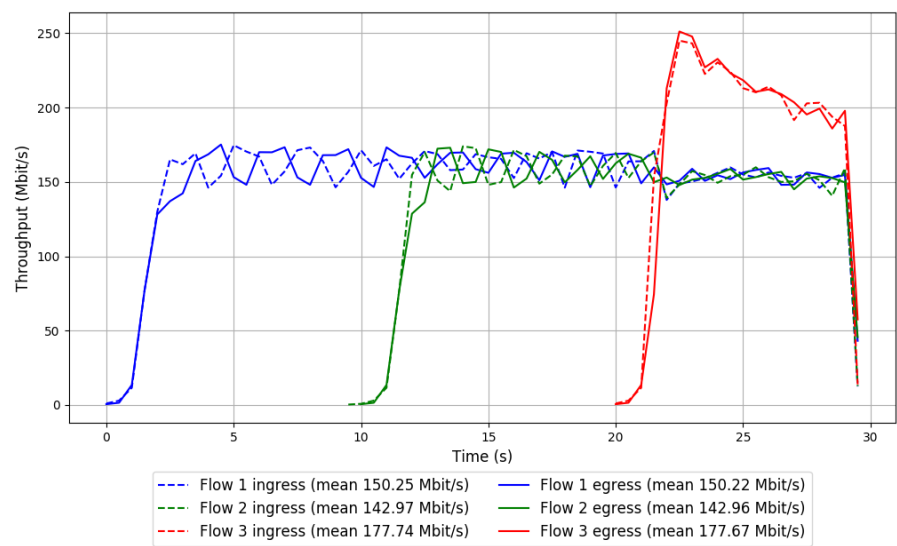
-- Flow 3:

Average throughput: 177.67 Mbit/s

95th percentile per-packet one-way delay: 128.496 ms

Loss rate: 0.02%

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

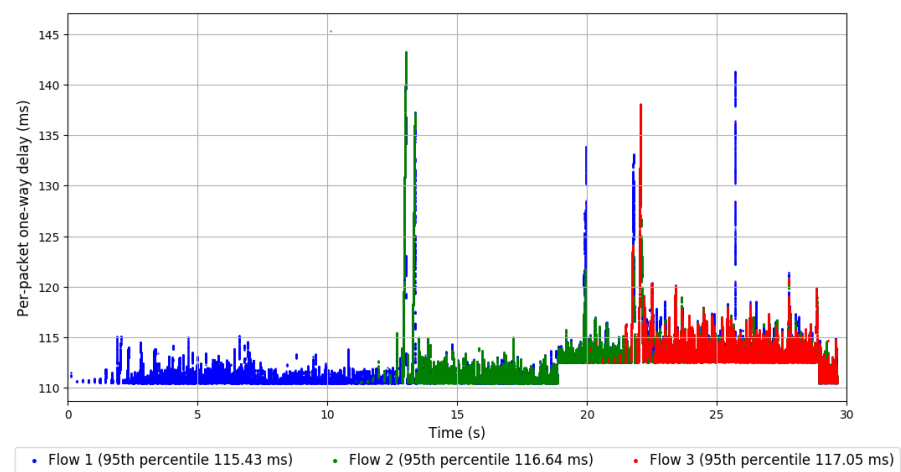
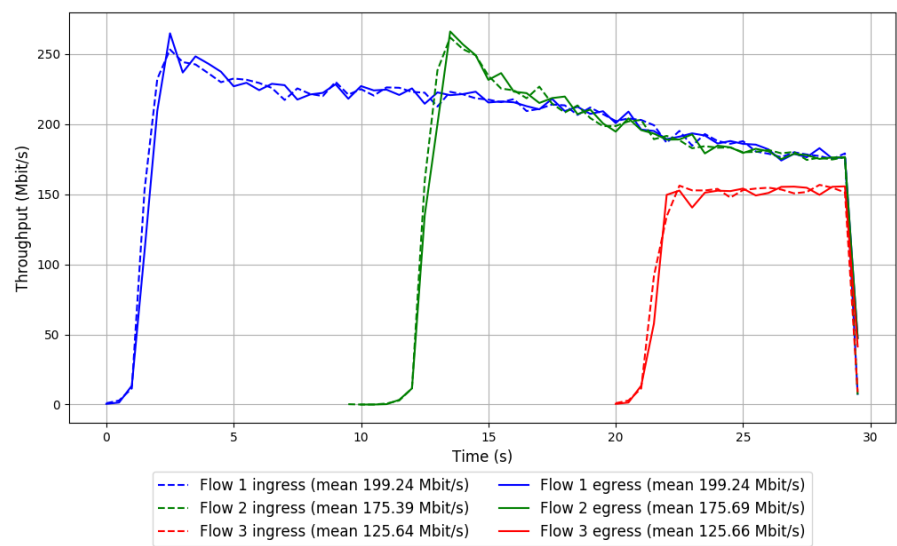


```
Run 3: Statistics of Indigo-1-32

Start at: 2018-02-20 21:11:16
End at: 2018-02-20 21:11:46

# Below is generated by plot.py at 2018-02-21 03:19:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.95 Mbit/s
95th percentile per-packet one-way delay: 116.136 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 199.24 Mbit/s
95th percentile per-packet one-way delay: 115.426 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 175.69 Mbit/s
95th percentile per-packet one-way delay: 116.644 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 125.66 Mbit/s
95th percentile per-packet one-way delay: 117.045 ms
Loss rate: 0.00%
```


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



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-20 21:30:43

End at: 2018-02-20 21:31:13

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 334.99 Mbit/s

95th percentile per-packet one-way delay: 114.640 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 203.25 Mbit/s

95th percentile per-packet one-way delay: 113.631 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 139.71 Mbit/s

95th percentile per-packet one-way delay: 115.255 ms

Loss rate: 0.01%

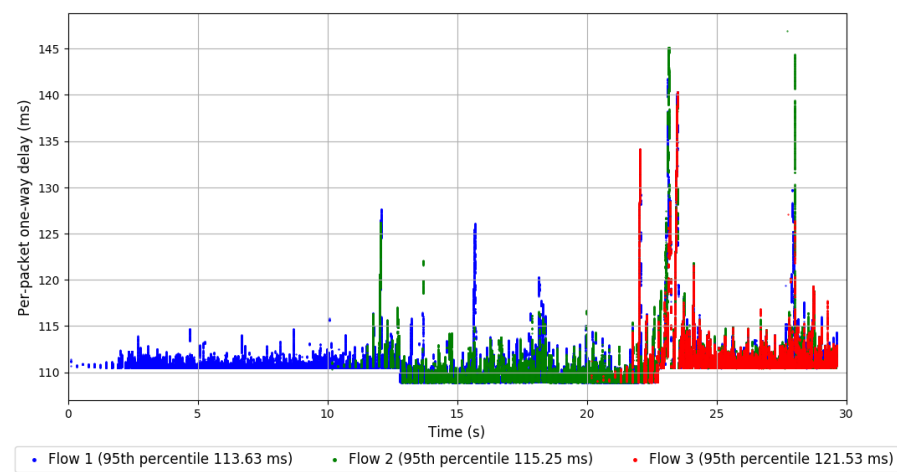
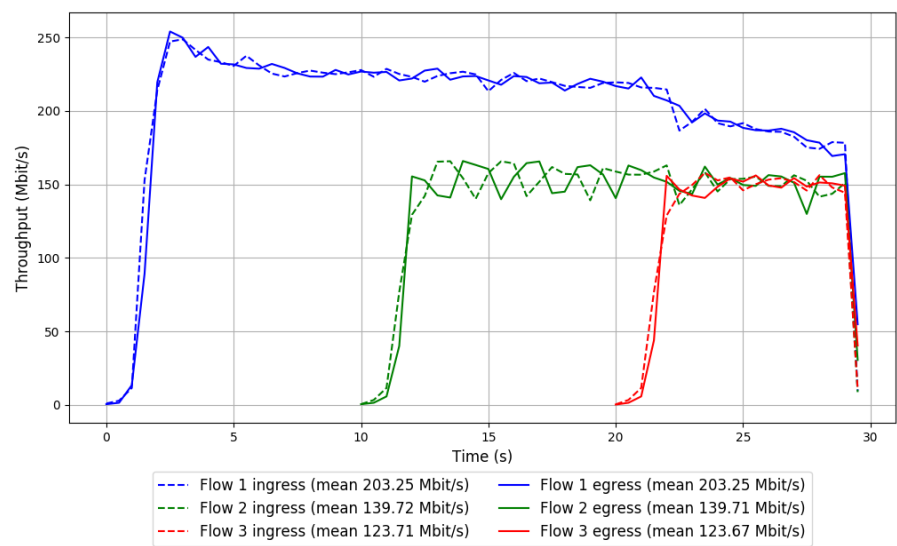
-- Flow 3:

Average throughput: 123.67 Mbit/s

95th percentile per-packet one-way delay: 121.532 ms

Loss rate: 0.04%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-20 21:50:24

End at: 2018-02-20 21:50:54

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.48 Mbit/s

95th percentile per-packet one-way delay: 125.588 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 151.36 Mbit/s

95th percentile per-packet one-way delay: 117.267 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 145.14 Mbit/s

95th percentile per-packet one-way delay: 126.867 ms

Loss rate: 0.00%

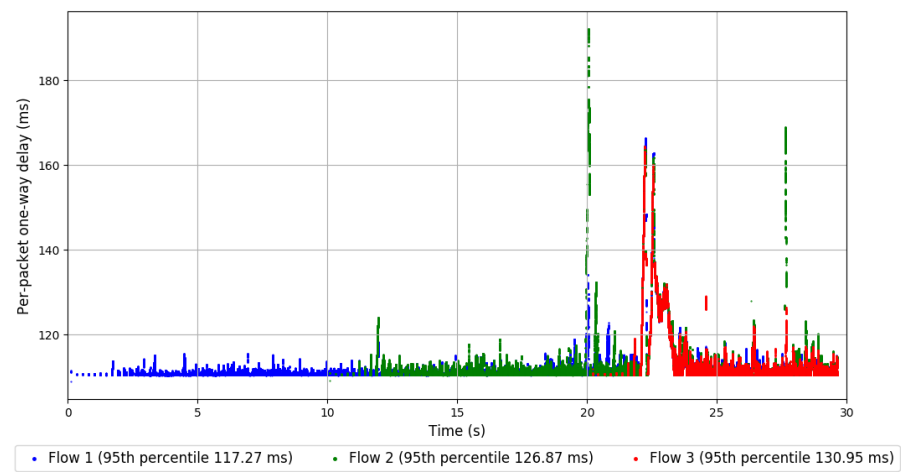
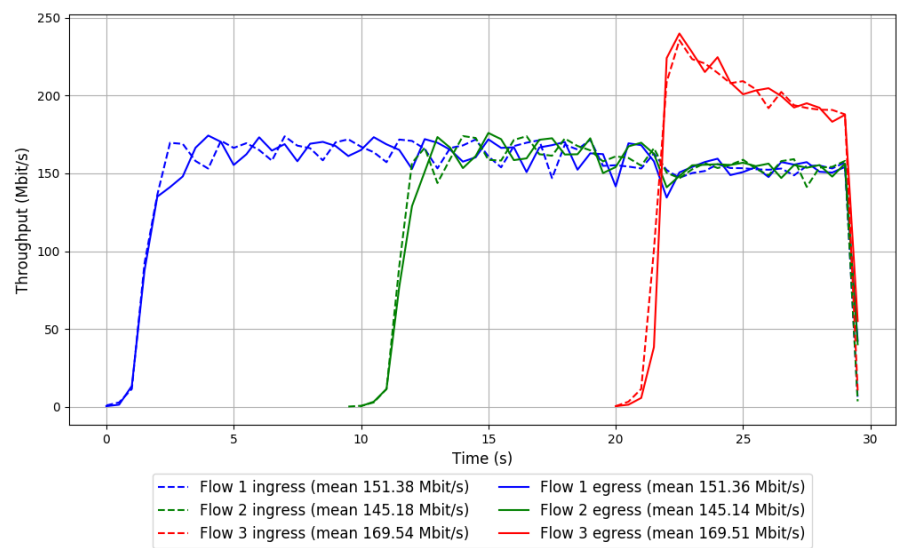
-- Flow 3:

Average throughput: 169.51 Mbit/s

95th percentile per-packet one-way delay: 130.951 ms

Loss rate: 0.02%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-20 22:09:53

End at: 2018-02-20 22:10:23

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 278.59 Mbit/s

95th percentile per-packet one-way delay: 114.918 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 141.27 Mbit/s

95th percentile per-packet one-way delay: 114.433 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 143.70 Mbit/s

95th percentile per-packet one-way delay: 115.504 ms

Loss rate: 0.02%

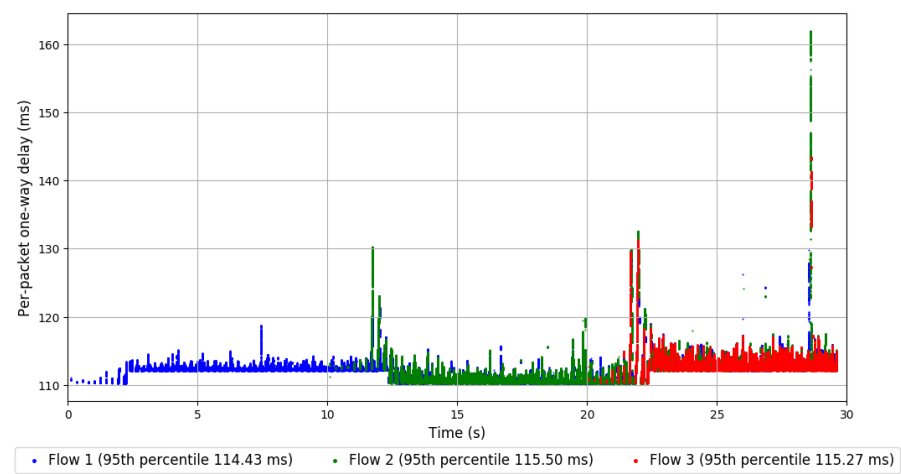
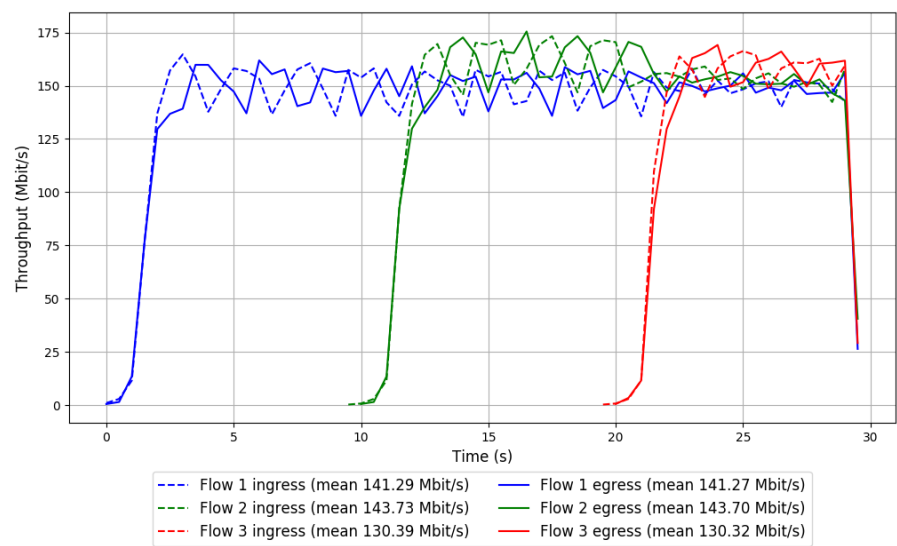
-- Flow 3:

Average throughput: 130.32 Mbit/s

95th percentile per-packet one-way delay: 115.269 ms

Loss rate: 0.03%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-20 22:29:37

End at: 2018-02-20 22:30:07

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 341.92 Mbit/s

95th percentile per-packet one-way delay: 124.891 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 190.43 Mbit/s

95th percentile per-packet one-way delay: 122.755 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 146.70 Mbit/s

95th percentile per-packet one-way delay: 124.399 ms

Loss rate: 0.00%

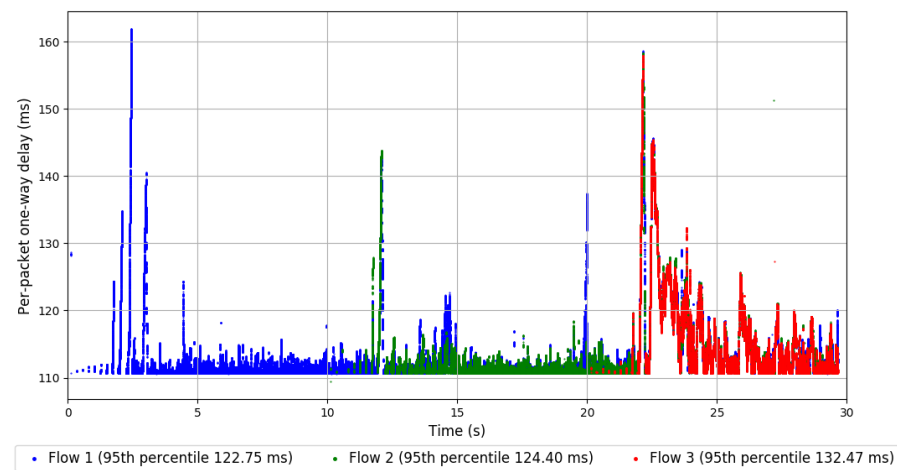
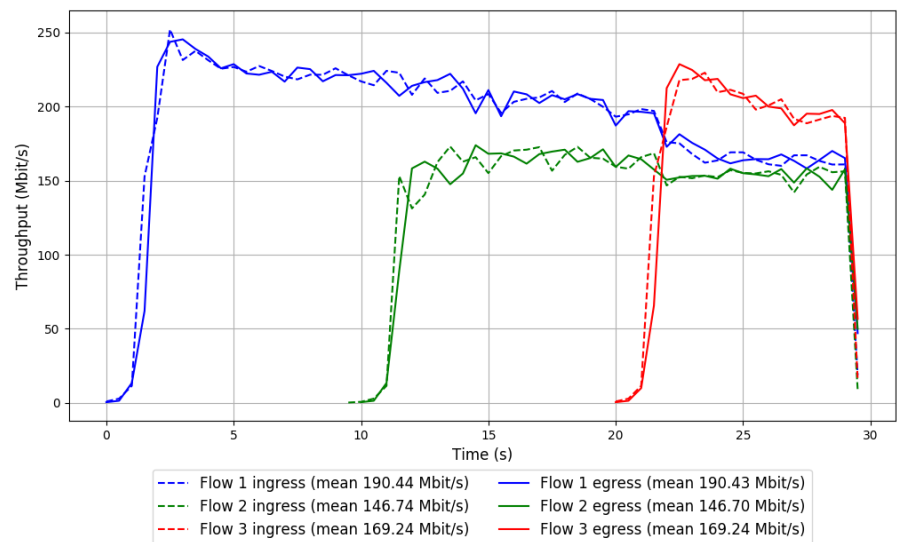
-- Flow 3:

Average throughput: 169.24 Mbit/s

95th percentile per-packet one-way delay: 132.471 ms

Loss rate: 0.00%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-20 22:48:59

End at: 2018-02-20 22:49:29

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 349.77 Mbit/s

95th percentile per-packet one-way delay: 135.768 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 187.81 Mbit/s

95th percentile per-packet one-way delay: 129.961 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 171.45 Mbit/s

95th percentile per-packet one-way delay: 135.232 ms

Loss rate: 0.02%

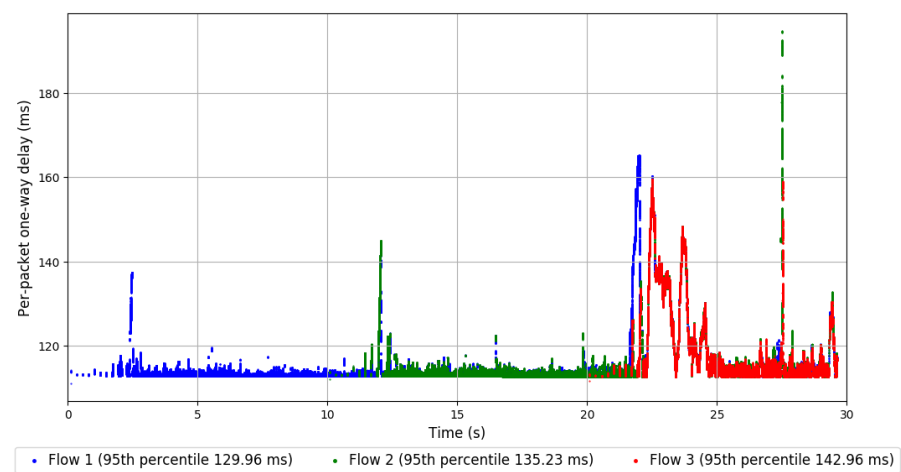
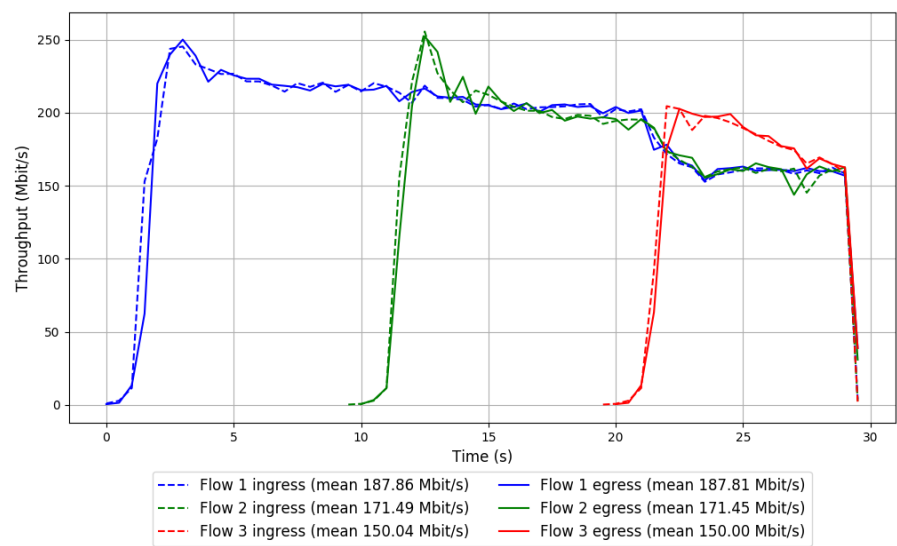
-- Flow 3:

Average throughput: 150.00 Mbit/s

95th percentile per-packet one-way delay: 142.956 ms

Loss rate: 0.01%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-20 23:08:17

End at: 2018-02-20 23:08:47

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 356.52 Mbit/s

95th percentile per-packet one-way delay: 122.624 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 183.71 Mbit/s

95th percentile per-packet one-way delay: 119.611 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 178.52 Mbit/s

95th percentile per-packet one-way delay: 123.197 ms

Loss rate: 0.00%

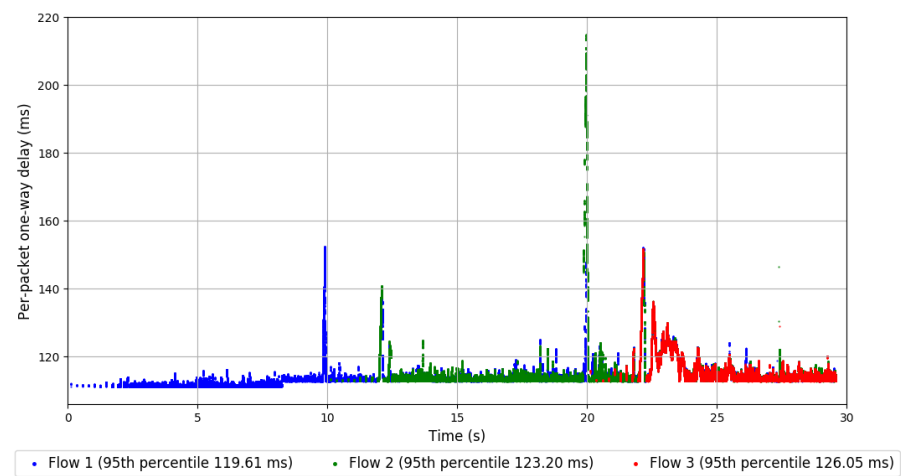
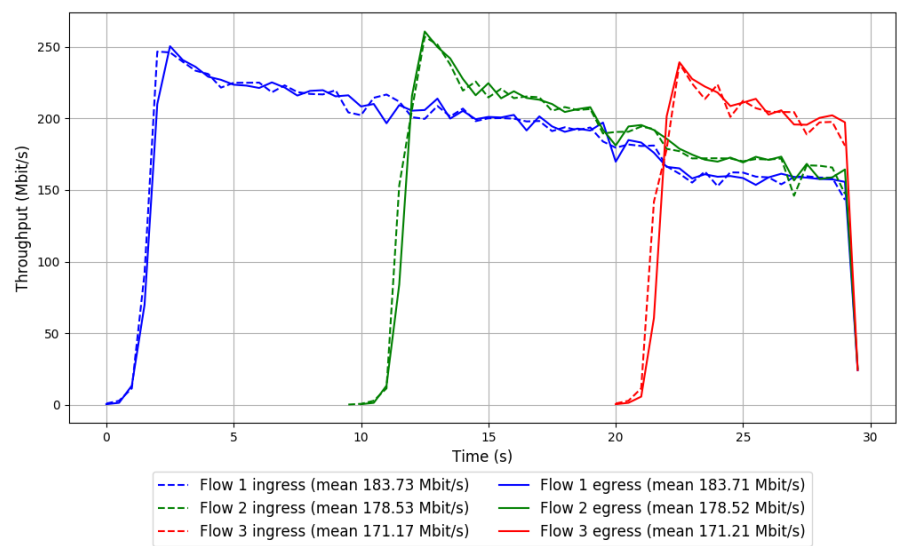
-- Flow 3:

Average throughput: 171.21 Mbit/s

95th percentile per-packet one-way delay: 126.049 ms

Loss rate: 0.01%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-20 23:27:58

End at: 2018-02-20 23:28:28

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 286.89 Mbit/s

95th percentile per-packet one-way delay: 126.457 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 142.06 Mbit/s

95th percentile per-packet one-way delay: 117.569 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 140.70 Mbit/s

95th percentile per-packet one-way delay: 118.504 ms

Loss rate: 0.01%

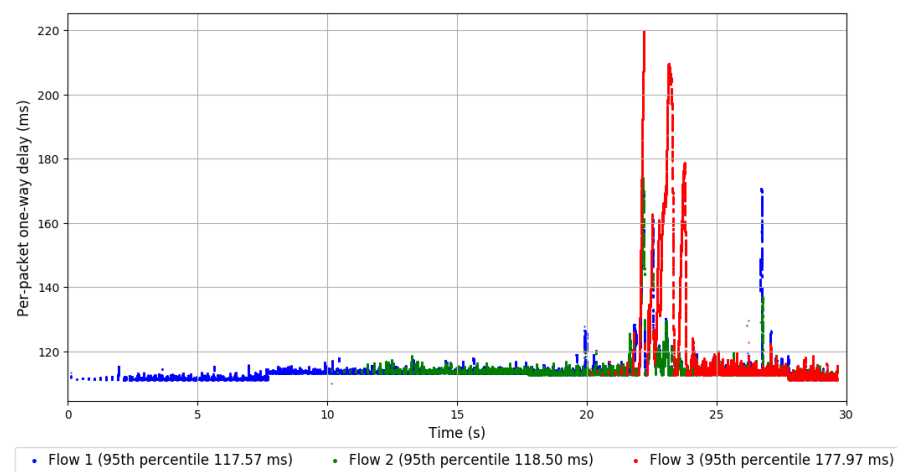
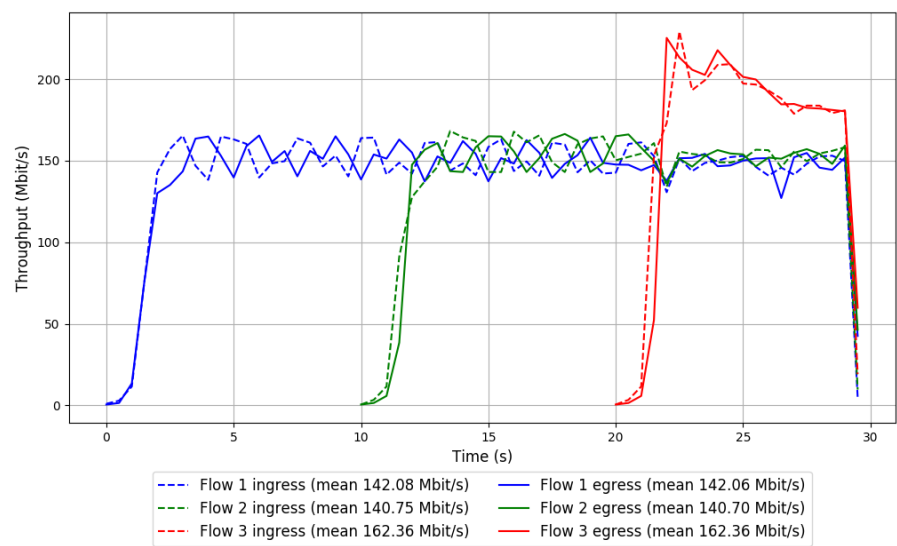
-- Flow 3:

Average throughput: 162.36 Mbit/s

95th percentile per-packet one-way delay: 177.965 ms

Loss rate: 0.02%

Run 10: Report of Indigo-1-32 — Data Link

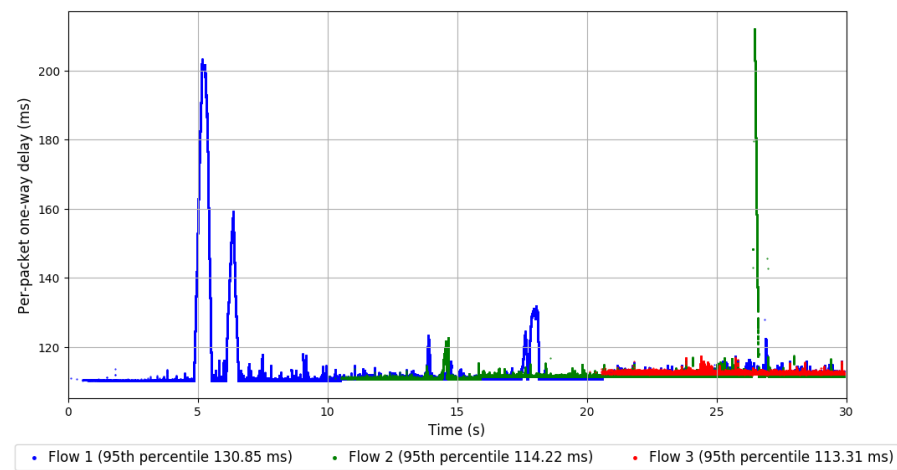
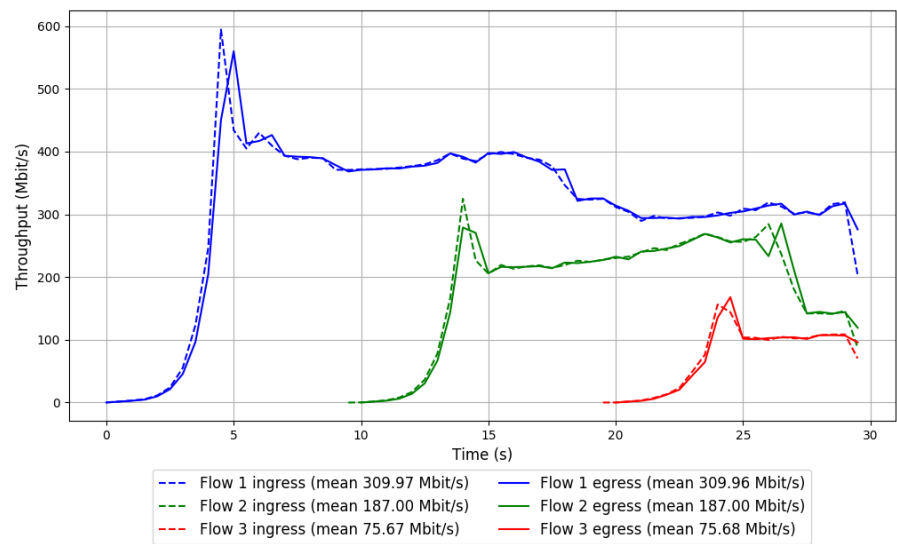


```
Run 1: Statistics of Vivace-latency

Start at: 2018-02-20 20:20:30
End at: 2018-02-20 20:21:00

# Below is generated by plot.py at 2018-02-21 03:19:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 459.35 Mbit/s
95th percentile per-packet one-way delay: 124.132 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 309.96 Mbit/s
95th percentile per-packet one-way delay: 130.848 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 187.00 Mbit/s
95th percentile per-packet one-way delay: 114.218 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 75.68 Mbit/s
95th percentile per-packet one-way delay: 113.307 ms
Loss rate: 0.02%
```


Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-20 20:39:59

End at: 2018-02-20 20:40:29

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 464.66 Mbit/s

95th percentile per-packet one-way delay: 124.153 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 297.22 Mbit/s

95th percentile per-packet one-way delay: 131.257 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 188.25 Mbit/s

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

Loss rate: 0.00%

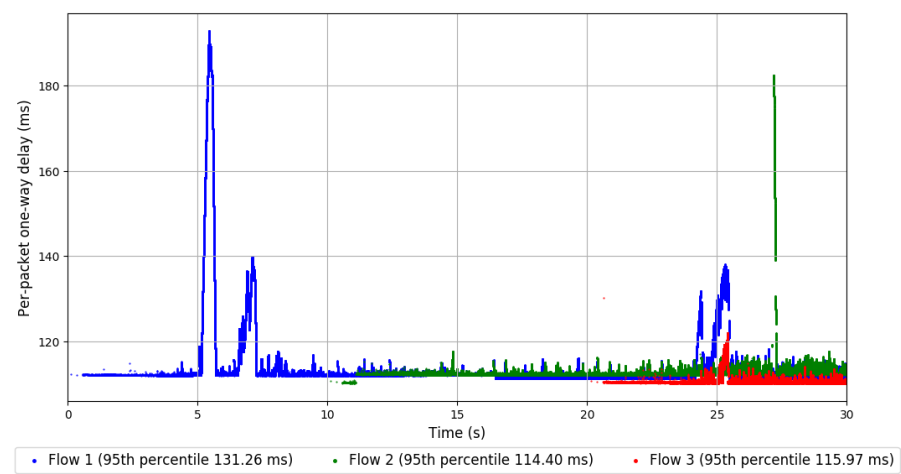
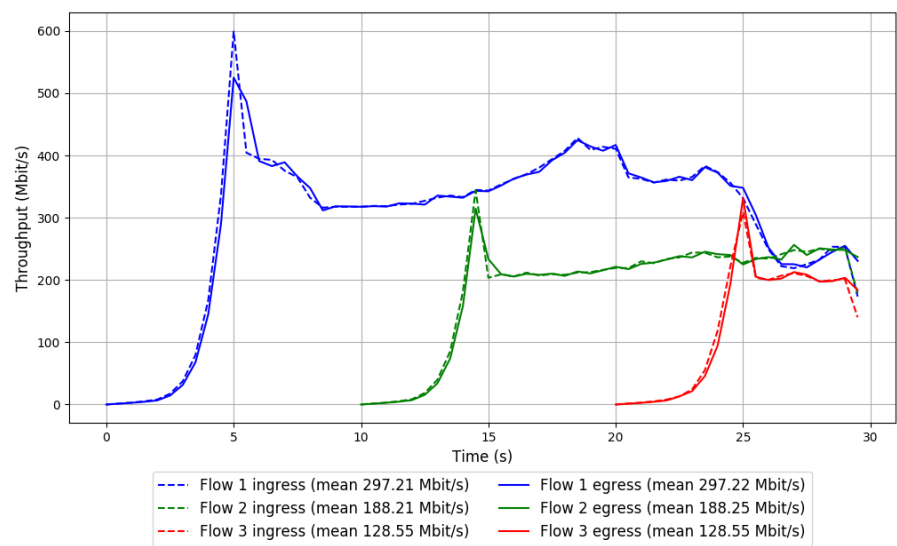
-- Flow 3:

Average throughput: 128.55 Mbit/s

95th percentile per-packet one-way delay: 115.968 ms

Loss rate: 0.00%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-20 20:59:39

End at: 2018-02-20 21:00:09

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 446.73 Mbit/s

95th percentile per-packet one-way delay: 194.382 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 269.99 Mbit/s

95th percentile per-packet one-way delay: 219.334 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 200.83 Mbit/s

95th percentile per-packet one-way delay: 114.925 ms

Loss rate: 0.00%

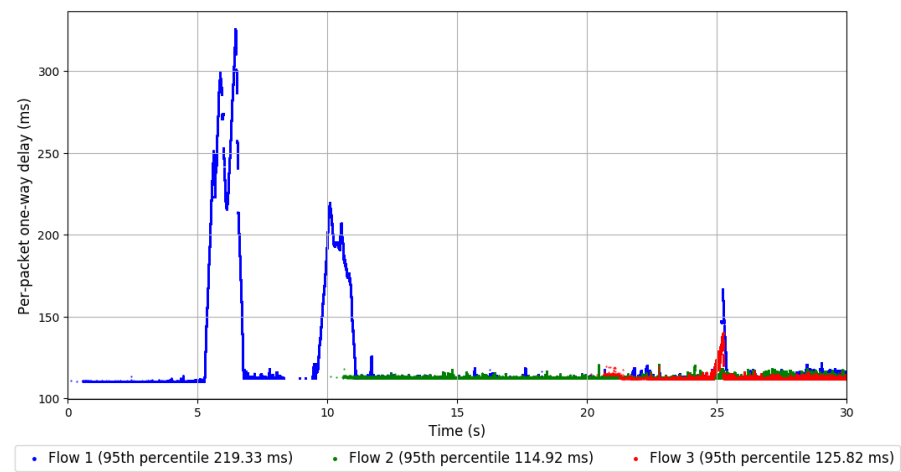
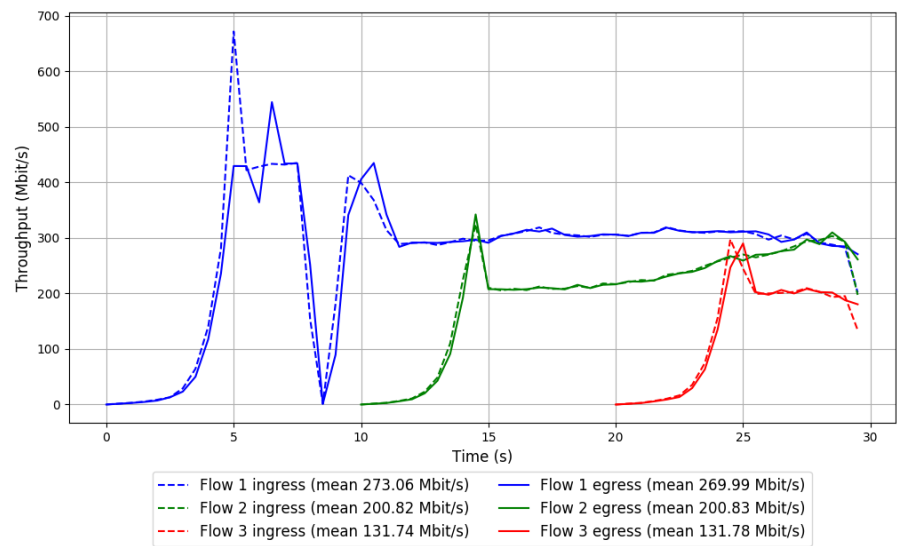
-- Flow 3:

Average throughput: 131.78 Mbit/s

95th percentile per-packet one-way delay: 125.823 ms

Loss rate: 0.00%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-20 21:19:12

End at: 2018-02-20 21:19:42

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 469.27 Mbit/s

95th percentile per-packet one-way delay: 137.704 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 301.90 Mbit/s

95th percentile per-packet one-way delay: 143.671 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 185.86 Mbit/s

95th percentile per-packet one-way delay: 114.559 ms

Loss rate: 0.00%

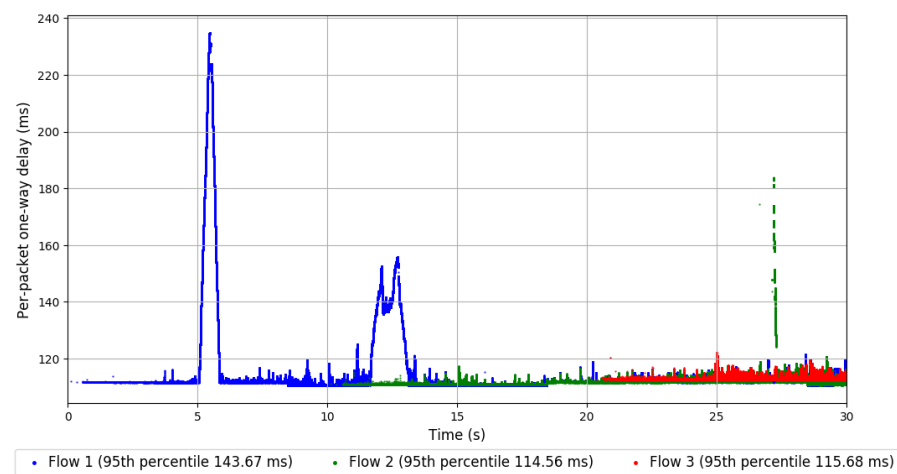
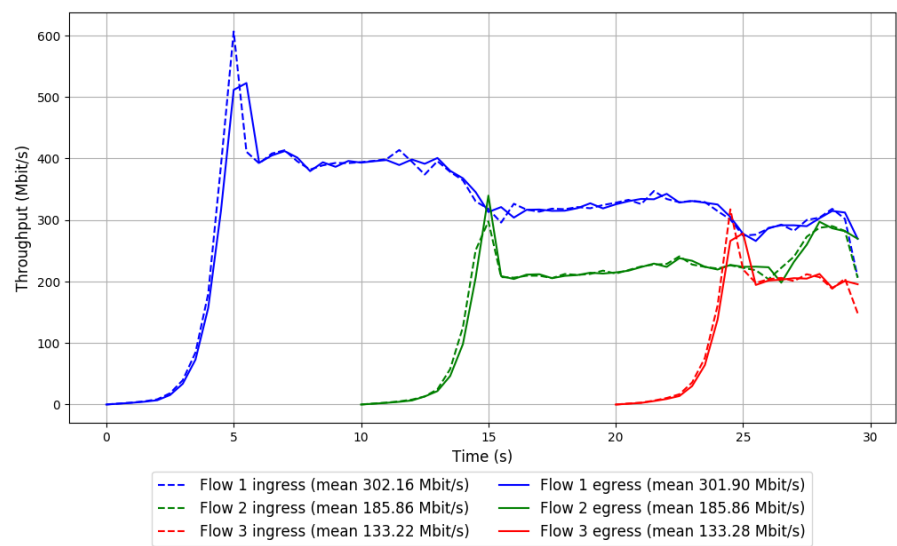
-- Flow 3:

Average throughput: 133.28 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-20 21:38:46

End at: 2018-02-20 21:39:16

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 425.97 Mbit/s

95th percentile per-packet one-way delay: 123.990 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 224.64 Mbit/s

95th percentile per-packet one-way delay: 113.953 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 195.05 Mbit/s

95th percentile per-packet one-way delay: 131.950 ms

Loss rate: 0.00%

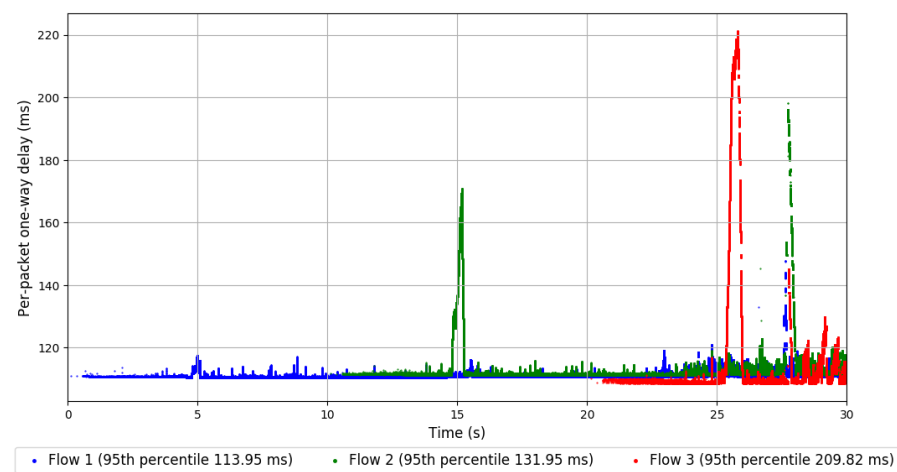
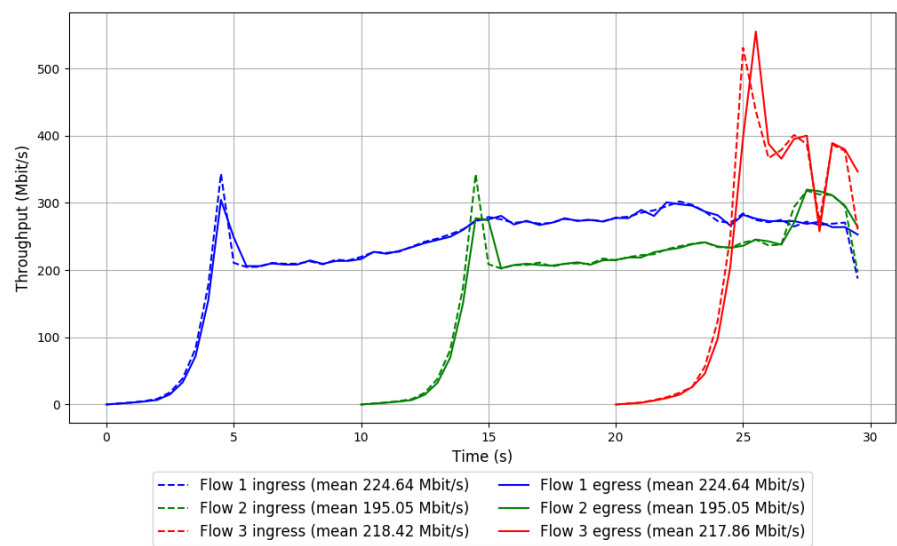
-- Flow 3:

Average throughput: 217.86 Mbit/s

95th percentile per-packet one-way delay: 209.822 ms

Loss rate: 0.25%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-20 21:58:14

End at: 2018-02-20 21:58:44

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 436.19 Mbit/s

95th percentile per-packet one-way delay: 177.342 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 284.52 Mbit/s

95th percentile per-packet one-way delay: 181.906 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 121.93 Mbit/s

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

Loss rate: 0.00%

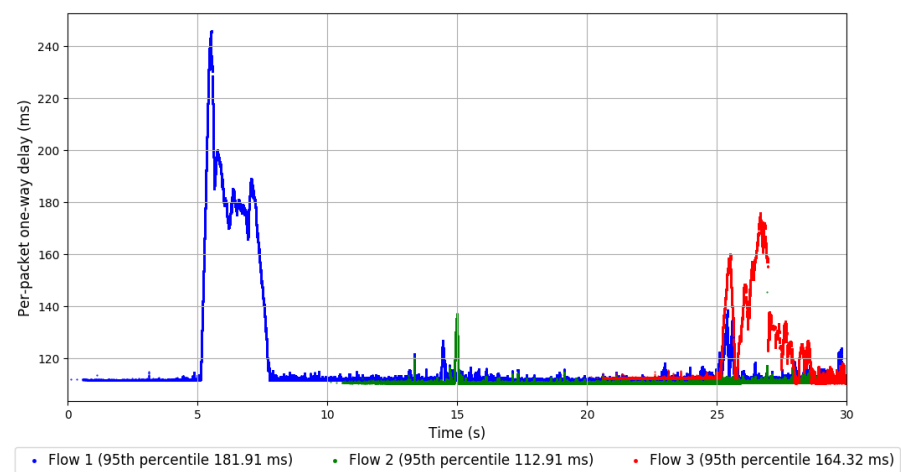
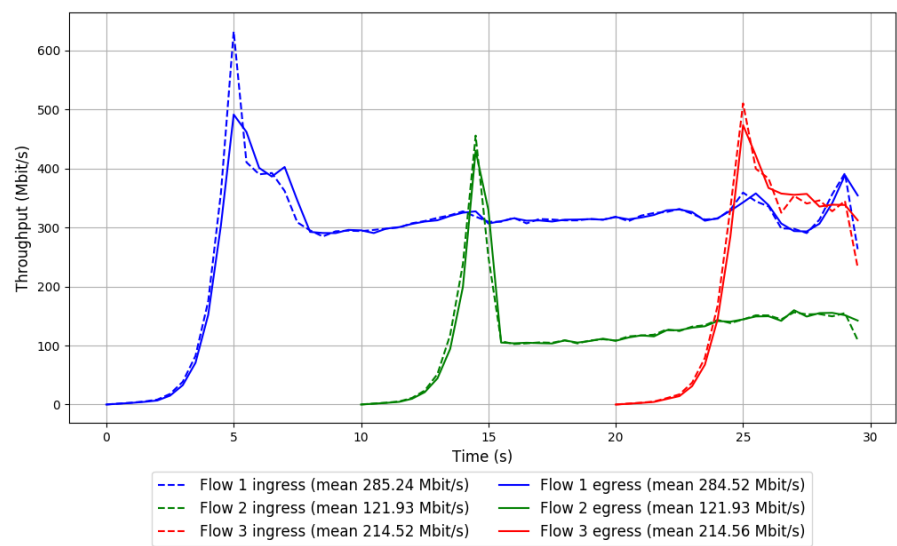
-- Flow 3:

Average throughput: 214.56 Mbit/s

95th percentile per-packet one-way delay: 164.316 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-20 22:17:51

End at: 2018-02-20 22:18:21

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 563.29 Mbit/s

95th percentile per-packet one-way delay: 160.512 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 311.97 Mbit/s

95th percentile per-packet one-way delay: 140.450 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 270.93 Mbit/s

95th percentile per-packet one-way delay: 161.482 ms

Loss rate: 0.00%

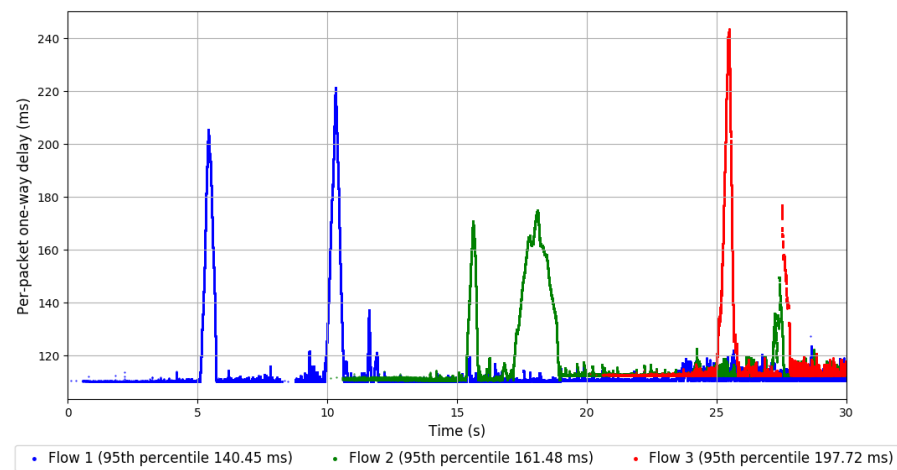
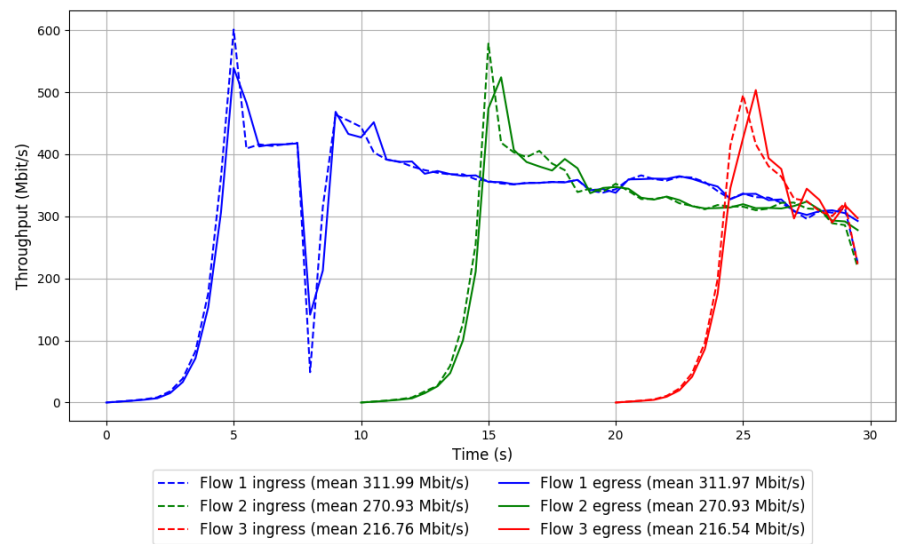
-- Flow 3:

Average throughput: 216.54 Mbit/s

95th percentile per-packet one-way delay: 197.720 ms

Loss rate: 0.12%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-20 22:37:28

End at: 2018-02-20 22:37:58

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 468.88 Mbit/s

95th percentile per-packet one-way delay: 251.226 ms

Loss rate: 2.57%

-- Flow 1:

Average throughput: 291.97 Mbit/s

95th percentile per-packet one-way delay: 268.015 ms

Loss rate: 3.83%

-- Flow 2:

Average throughput: 190.62 Mbit/s

95th percentile per-packet one-way delay: 117.480 ms

Loss rate: 0.00%

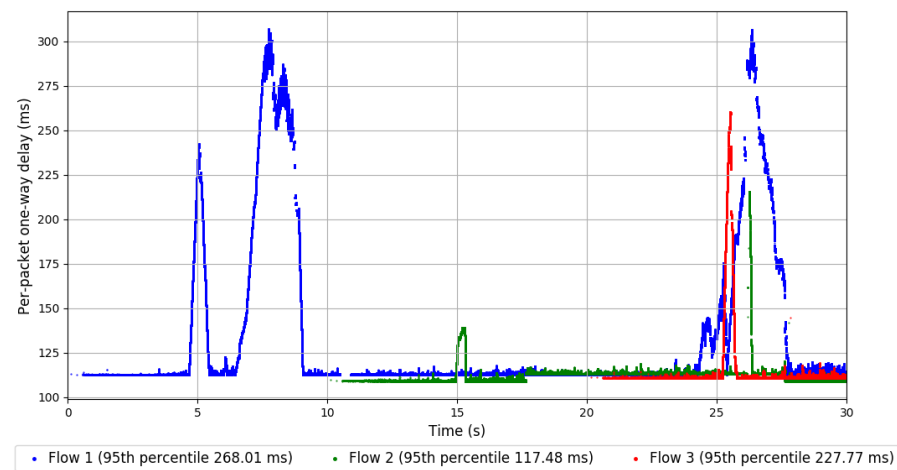
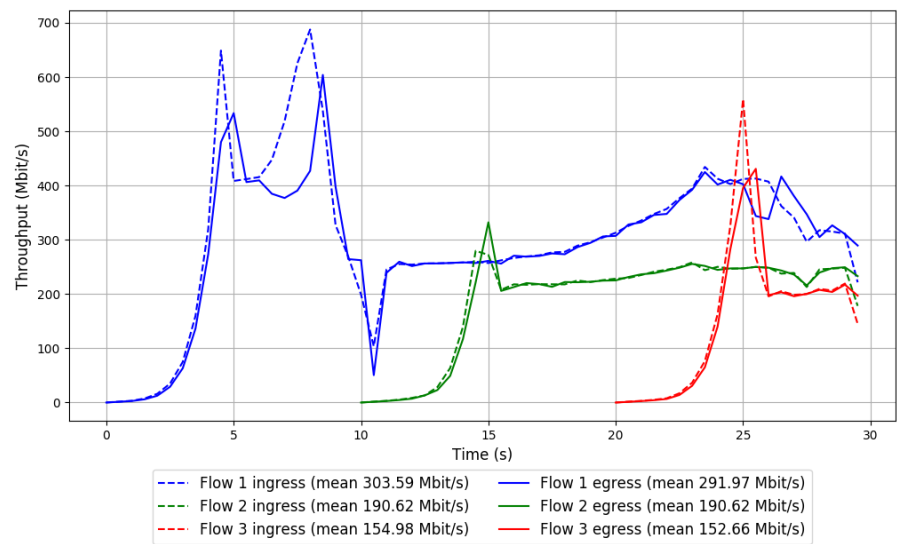
-- Flow 3:

Average throughput: 152.66 Mbit/s

95th percentile per-packet one-way delay: 227.774 ms

Loss rate: 1.50%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-20 22:56:47

End at: 2018-02-20 22:57:17

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 469.63 Mbit/s

95th percentile per-packet one-way delay: 157.505 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 282.61 Mbit/s

95th percentile per-packet one-way delay: 152.549 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 175.53 Mbit/s

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

Loss rate: 0.00%

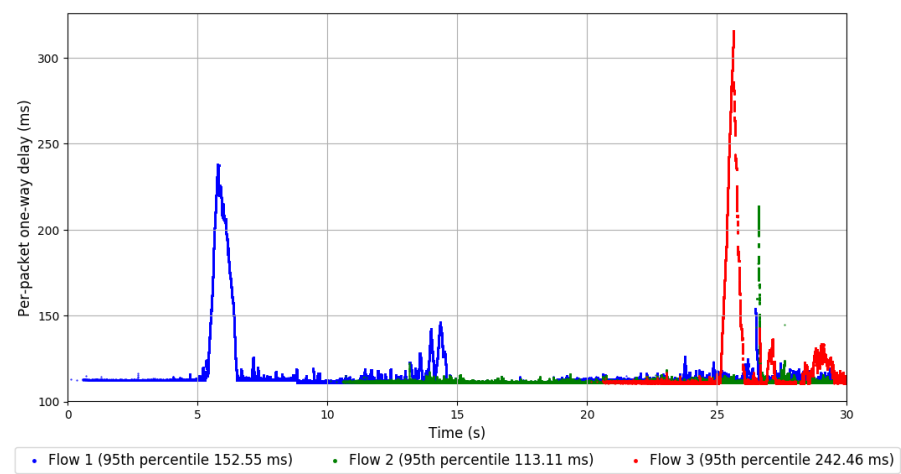
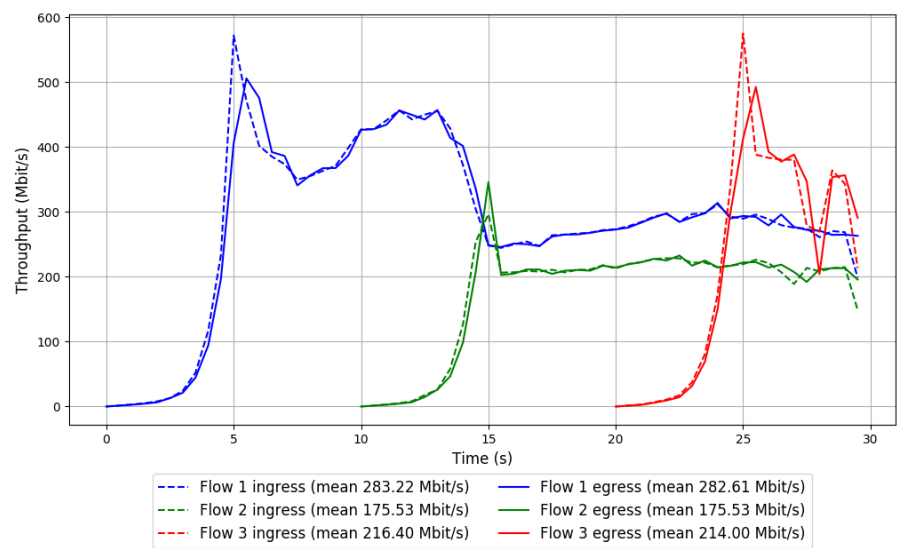
-- Flow 3:

Average throughput: 214.00 Mbit/s

95th percentile per-packet one-way delay: 242.464 ms

Loss rate: 1.10%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-20 23:16:12

End at: 2018-02-20 23:16:42

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 504.37 Mbit/s

95th percentile per-packet one-way delay: 181.570 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 305.07 Mbit/s

95th percentile per-packet one-way delay: 134.493 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 191.33 Mbit/s

95th percentile per-packet one-way delay: 240.323 ms

Loss rate: 2.52%

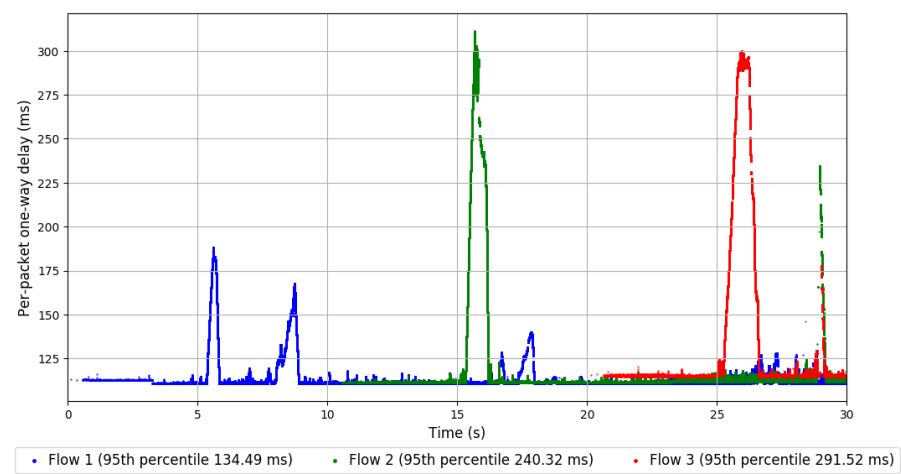
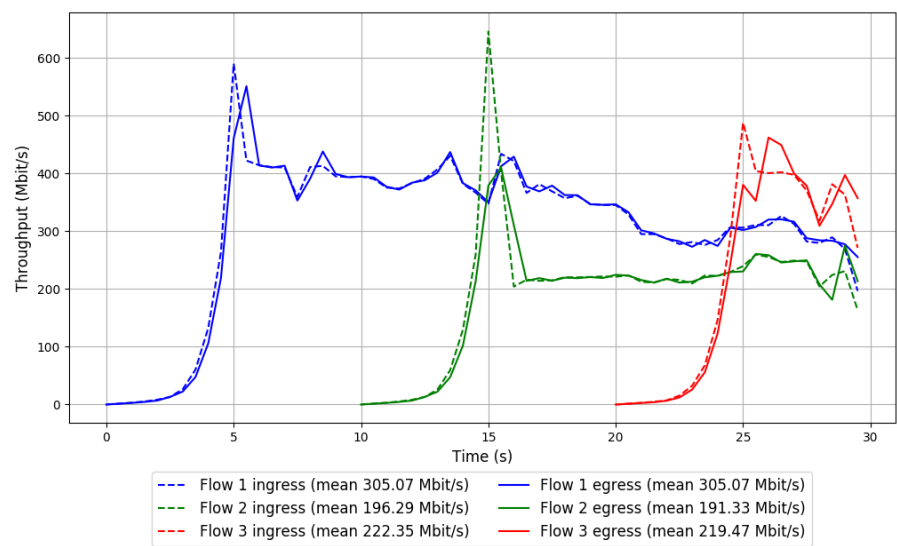
-- Flow 3:

Average throughput: 219.47 Mbit/s

95th percentile per-packet one-way delay: 291.525 ms

Loss rate: 1.31%

Run 10: Report of Vivace-latency — Data Link

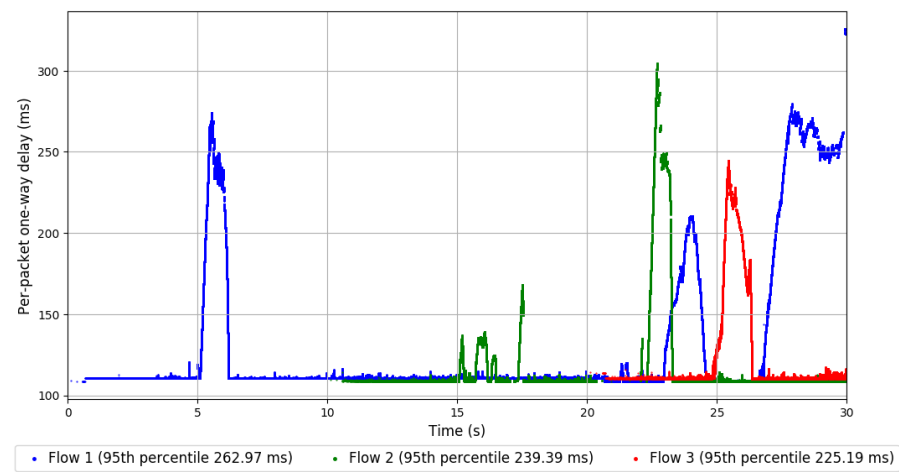
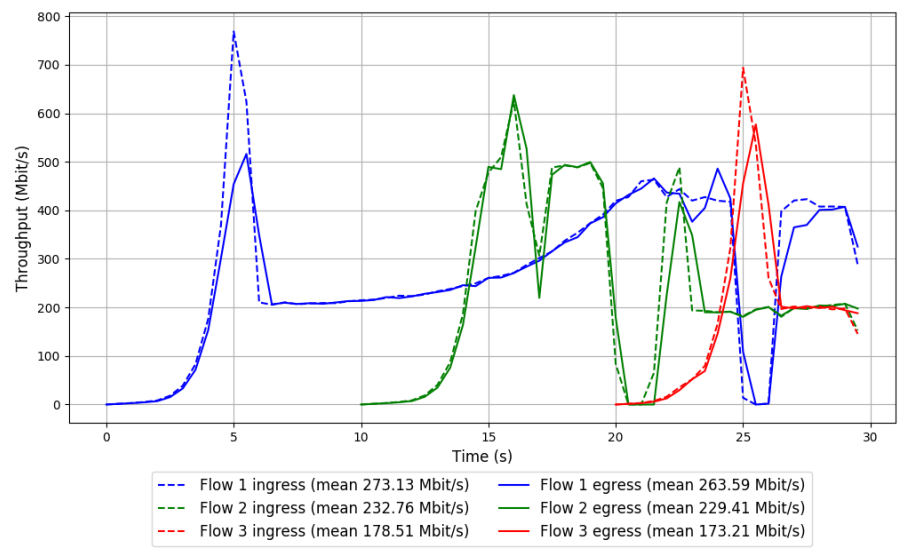


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-20 20:35:30
End at: 2018-02-20 20:36:00

# Below is generated by plot.py at 2018-02-21 03:19:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 473.15 Mbit/s
95th percentile per-packet one-way delay: 255.409 ms
Loss rate: 2.78%
-- Flow 1:
Average throughput: 263.59 Mbit/s
95th percentile per-packet one-way delay: 262.972 ms
Loss rate: 3.49%
-- Flow 2:
Average throughput: 229.41 Mbit/s
95th percentile per-packet one-way delay: 239.393 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 173.21 Mbit/s
95th percentile per-packet one-way delay: 225.189 ms
Loss rate: 3.00%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-02-20 20:55:06

End at: 2018-02-20 20:55:36

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 429.19 Mbit/s

95th percentile per-packet one-way delay: 253.491 ms

Loss rate: 1.80%

-- Flow 1:

Average throughput: 241.72 Mbit/s

95th percentile per-packet one-way delay: 273.011 ms

Loss rate: 2.41%

-- Flow 2:

Average throughput: 212.83 Mbit/s

95th percentile per-packet one-way delay: 225.965 ms

Loss rate: 1.33%

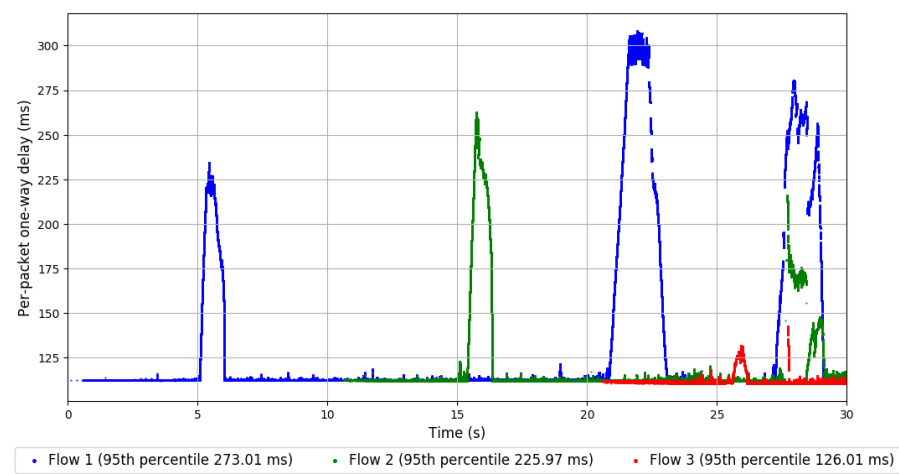
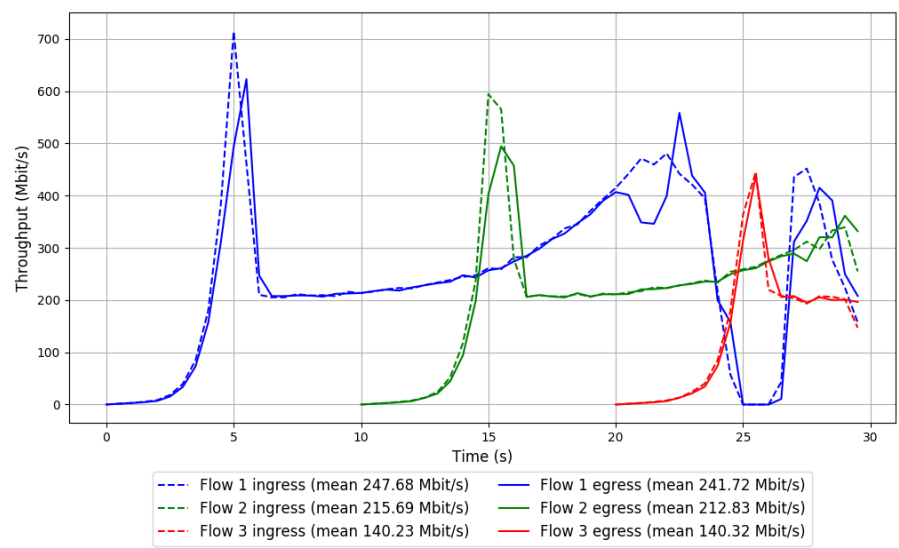
-- Flow 3:

Average throughput: 140.32 Mbit/s

95th percentile per-packet one-way delay: 126.007 ms

Loss rate: 0.00%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-20 21:14:50

End at: 2018-02-20 21:15:20

Below is generated by plot.py at 2018-02-21 03:19:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 363.13 Mbit/s

95th percentile per-packet one-way delay: 293.964 ms

Loss rate: 5.70%

-- Flow 1:

Average throughput: 177.14 Mbit/s

95th percentile per-packet one-way delay: 294.715 ms

Loss rate: 6.56%

-- Flow 2:

Average throughput: 204.05 Mbit/s

95th percentile per-packet one-way delay: 156.645 ms

Loss rate: 0.00%

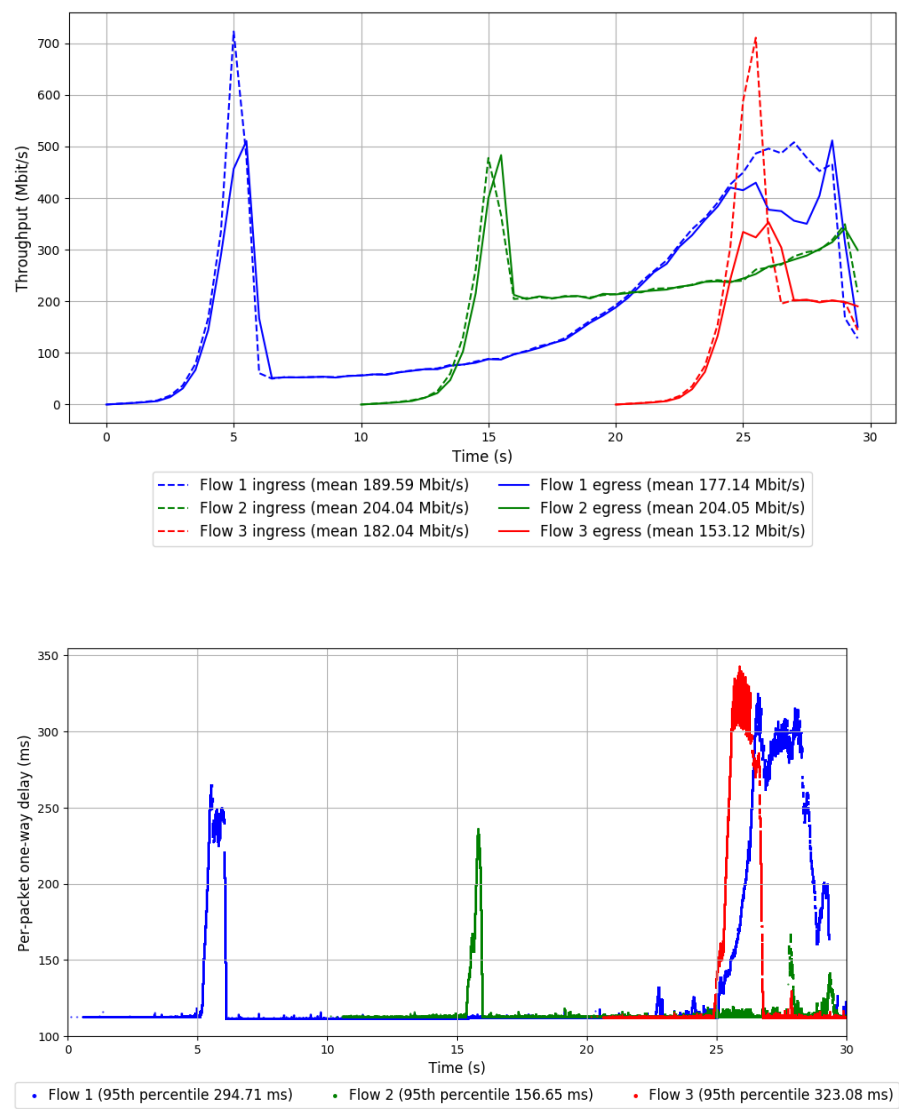
-- Flow 3:

Average throughput: 153.12 Mbit/s

95th percentile per-packet one-way delay: 323.077 ms

Loss rate: 15.89%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-20 21:34:14

End at: 2018-02-20 21:34:44

Below is generated by plot.py at 2018-02-21 03:23:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 519.62 Mbit/s

95th percentile per-packet one-way delay: 273.625 ms

Loss rate: 2.01%

-- Flow 1:

Average throughput: 330.29 Mbit/s

95th percentile per-packet one-way delay: 274.627 ms

Loss rate: 2.66%

-- Flow 2:

Average throughput: 209.46 Mbit/s

95th percentile per-packet one-way delay: 129.027 ms

Loss rate: 0.10%

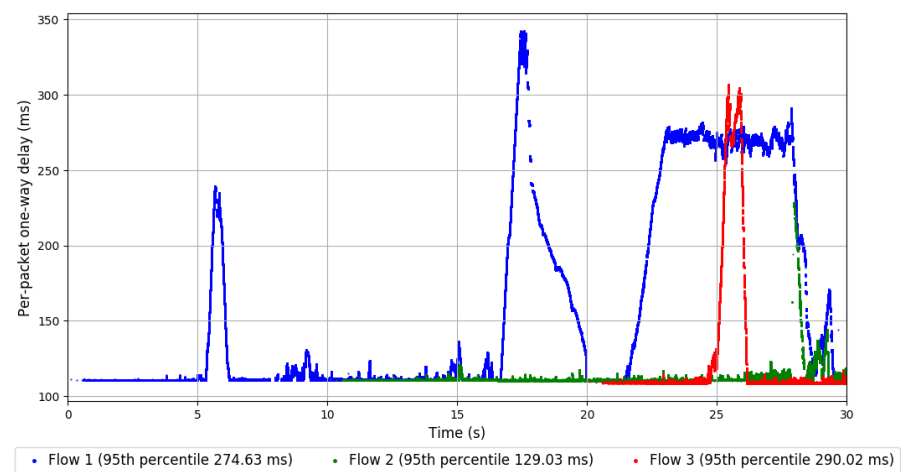
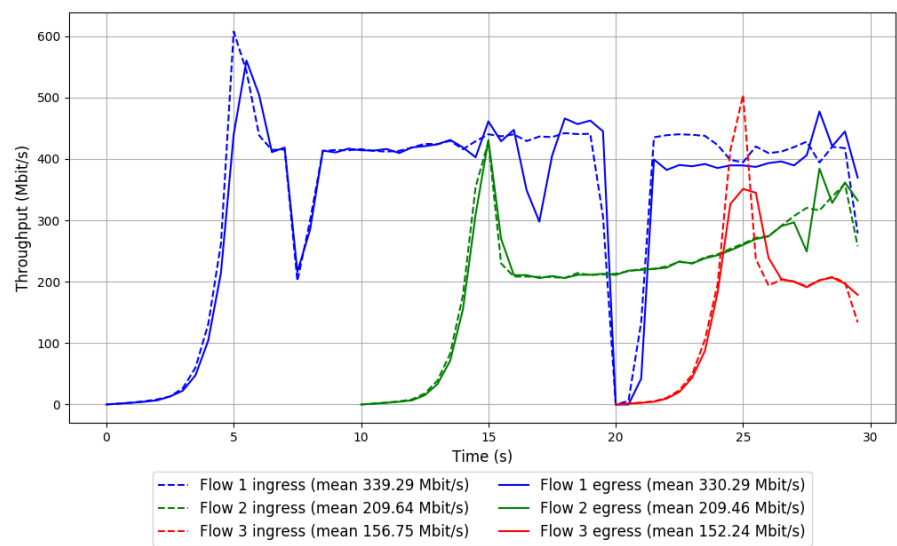
-- Flow 3:

Average throughput: 152.24 Mbit/s

95th percentile per-packet one-way delay: 290.023 ms

Loss rate: 2.89%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-20 21:53:46

End at: 2018-02-20 21:54:16

Below is generated by plot.py at 2018-02-21 03:23:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 502.37 Mbit/s

95th percentile per-packet one-way delay: 267.600 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 319.81 Mbit/s

95th percentile per-packet one-way delay: 271.744 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 200.39 Mbit/s

95th percentile per-packet one-way delay: 114.159 ms

Loss rate: 0.00%

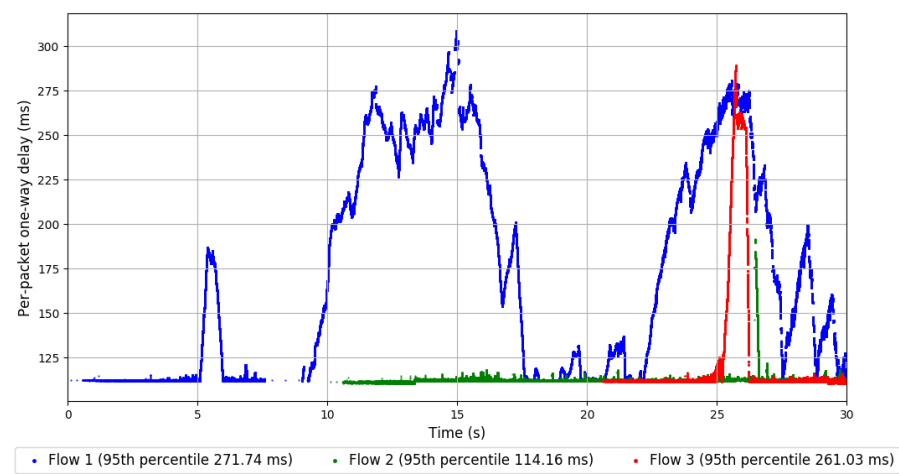
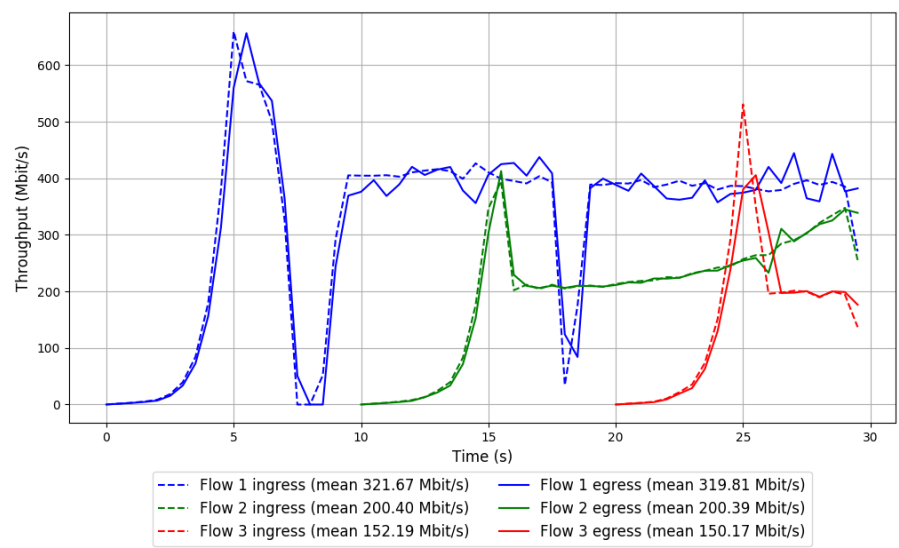
-- Flow 3:

Average throughput: 150.17 Mbit/s

95th percentile per-packet one-way delay: 261.026 ms

Loss rate: 1.34%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-20 22:13:18

End at: 2018-02-20 22:13:48

Below is generated by plot.py at 2018-02-21 03:24:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 517.24 Mbit/s

95th percentile per-packet one-way delay: 251.254 ms

Loss rate: 2.01%

-- Flow 1:

Average throughput: 336.77 Mbit/s

95th percentile per-packet one-way delay: 250.528 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 214.47 Mbit/s

95th percentile per-packet one-way delay: 187.746 ms

Loss rate: 0.18%

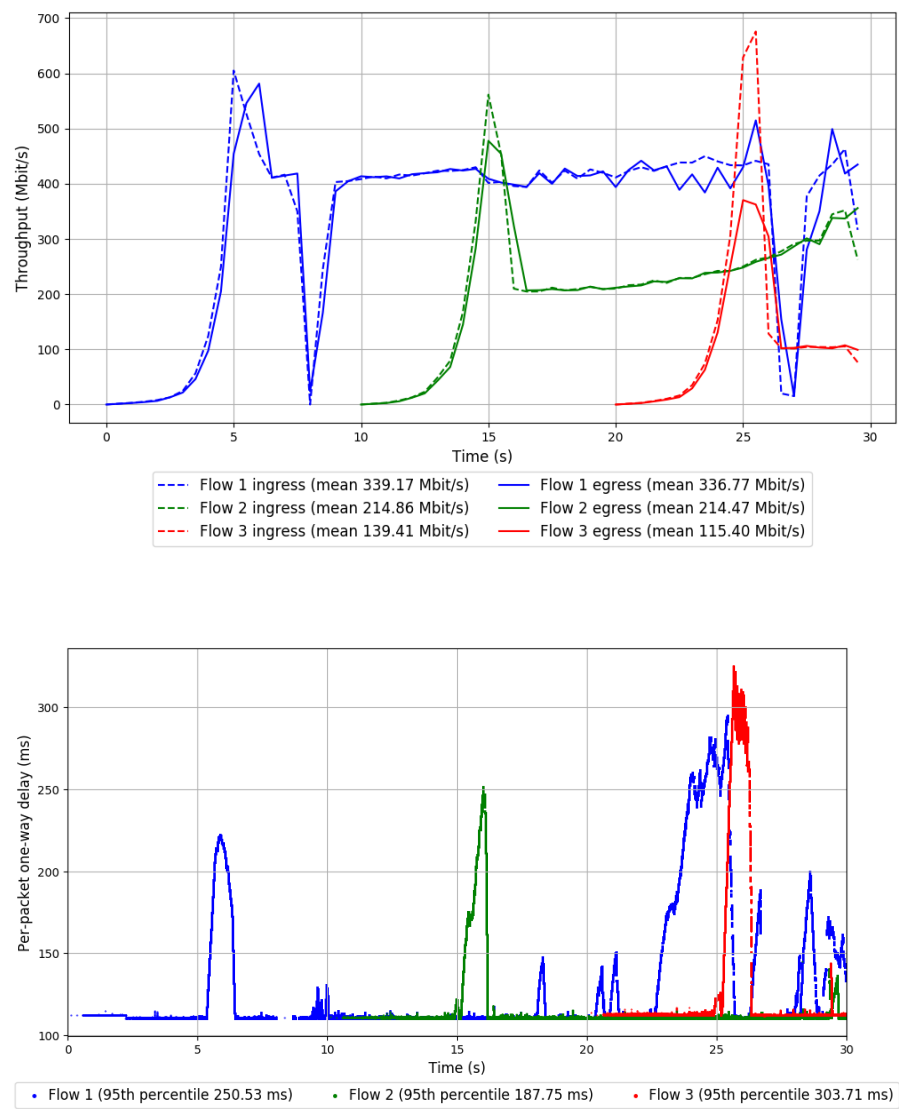
-- Flow 3:

Average throughput: 115.40 Mbit/s

95th percentile per-packet one-way delay: 303.714 ms

Loss rate: 17.24%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-20 22:33:04

End at: 2018-02-20 22:33:34

Below is generated by plot.py at 2018-02-21 03:24:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 353.71 Mbit/s

95th percentile per-packet one-way delay: 252.198 ms

Loss rate: 4.56%

-- Flow 1:

Average throughput: 192.04 Mbit/s

95th percentile per-packet one-way delay: 259.625 ms

Loss rate: 5.17%

-- Flow 2:

Average throughput: 133.46 Mbit/s

95th percentile per-packet one-way delay: 233.078 ms

Loss rate: 5.71%

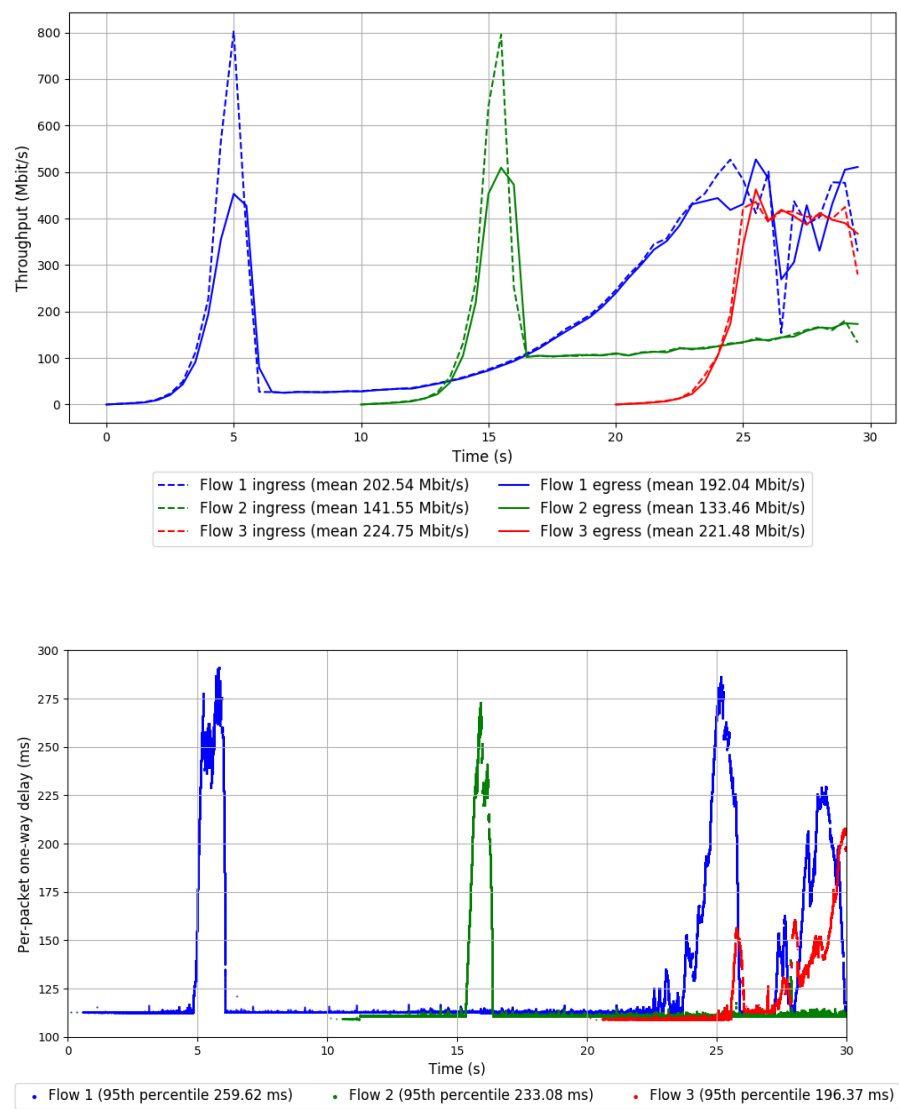
-- Flow 3:

Average throughput: 221.48 Mbit/s

95th percentile per-packet one-way delay: 196.373 ms

Loss rate: 1.40%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-20 22:52:21

End at: 2018-02-20 22:52:51

Below is generated by plot.py at 2018-02-21 03:24:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 442.44 Mbit/s

95th percentile per-packet one-way delay: 220.859 ms

Loss rate: 2.18%

-- Flow 1:

Average throughput: 334.17 Mbit/s

95th percentile per-packet one-way delay: 215.193 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 113.80 Mbit/s

95th percentile per-packet one-way delay: 111.973 ms

Loss rate: 0.05%

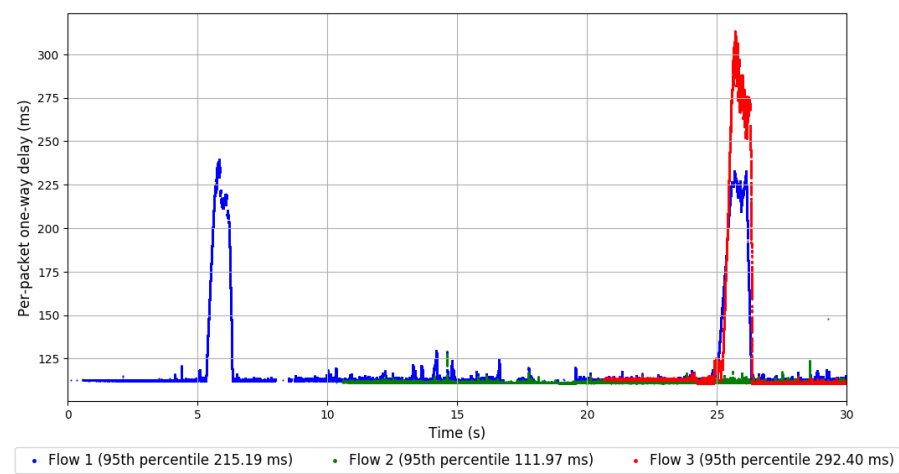
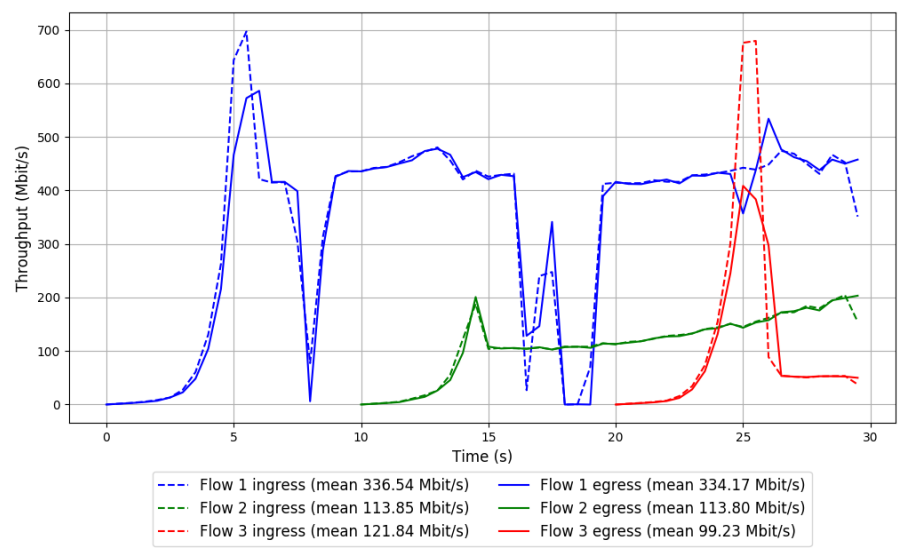
-- Flow 3:

Average throughput: 99.23 Mbit/s

95th percentile per-packet one-way delay: 292.396 ms

Loss rate: 18.58%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-20 23:11:50

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

Below is generated by plot.py at 2018-02-21 03:24:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 379.94 Mbit/s

95th percentile per-packet one-way delay: 239.784 ms

Loss rate: 2.22%

-- Flow 1:

Average throughput: 202.84 Mbit/s

95th percentile per-packet one-way delay: 242.614 ms

Loss rate: 2.30%

-- Flow 2:

Average throughput: 194.49 Mbit/s

95th percentile per-packet one-way delay: 233.948 ms

Loss rate: 2.07%

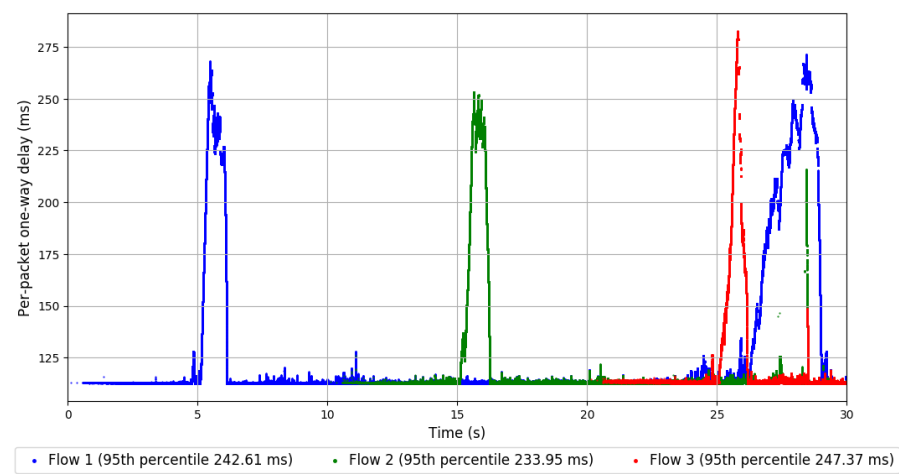
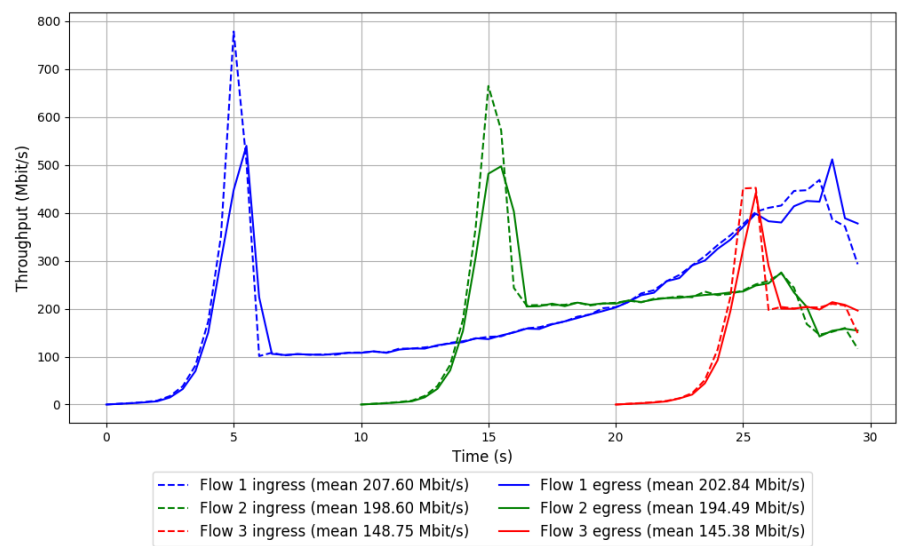
-- Flow 3:

Average throughput: 145.38 Mbit/s

95th percentile per-packet one-way delay: 247.369 ms

Loss rate: 2.27%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-20 23:31:19

End at: 2018-02-20 23:31:49

Below is generated by plot.py at 2018-02-21 03:24:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 366.38 Mbit/s

95th percentile per-packet one-way delay: 277.786 ms

Loss rate: 5.54%

-- Flow 1:

Average throughput: 204.14 Mbit/s

95th percentile per-packet one-way delay: 261.793 ms

Loss rate: 4.71%

-- Flow 2:

Average throughput: 198.94 Mbit/s

95th percentile per-packet one-way delay: 277.533 ms

Loss rate: 2.66%

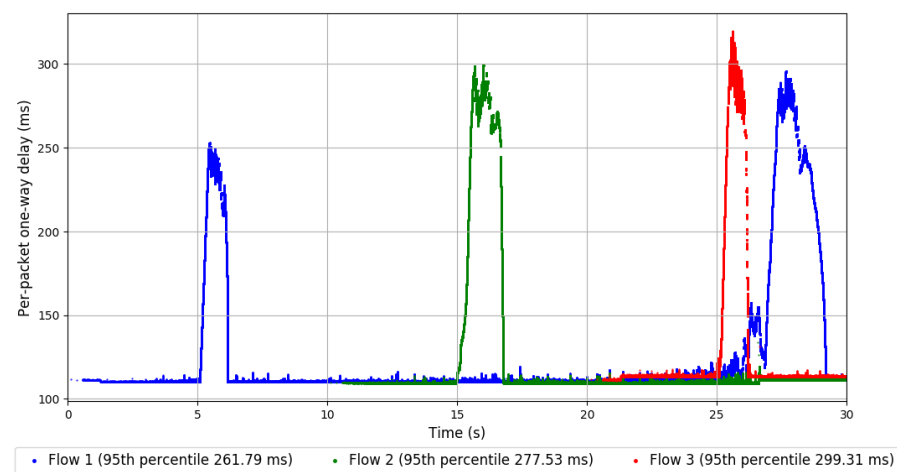
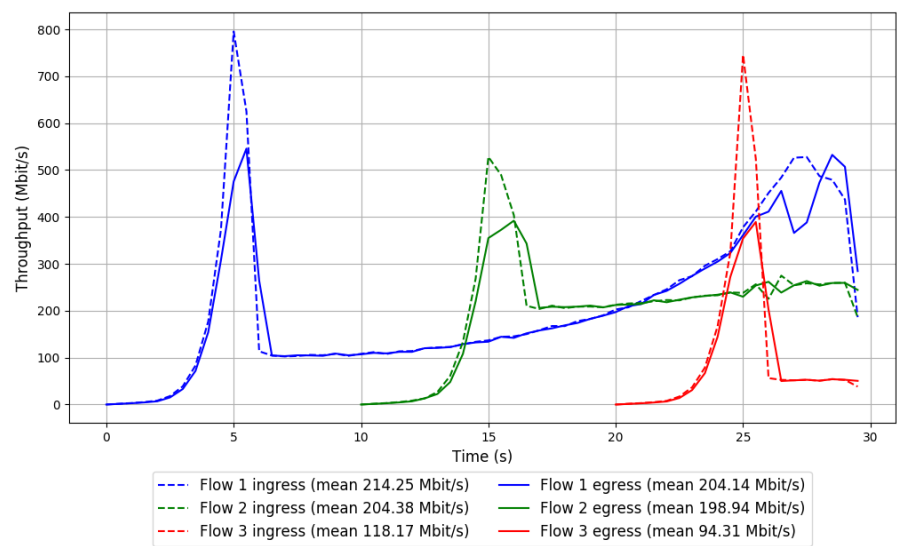
-- Flow 3:

Average throughput: 94.31 Mbit/s

95th percentile per-packet one-way delay: 299.307 ms

Loss rate: 20.18%

Run 10: Report of Vivace-loss — Data Link

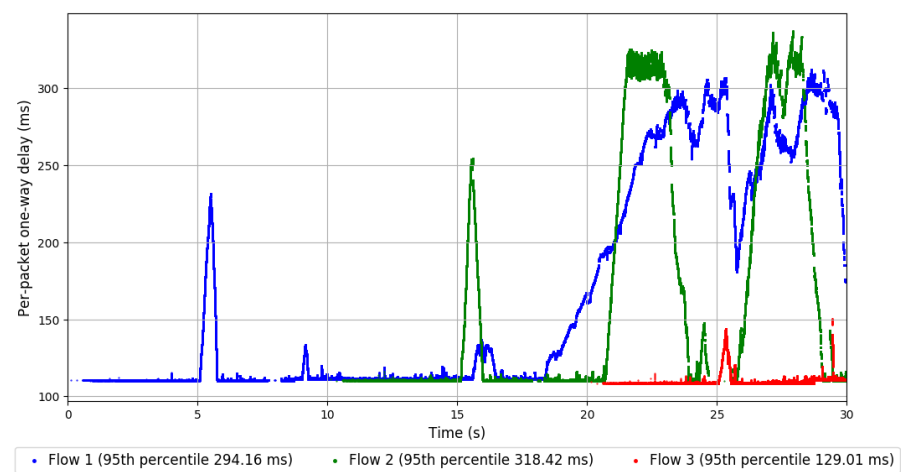
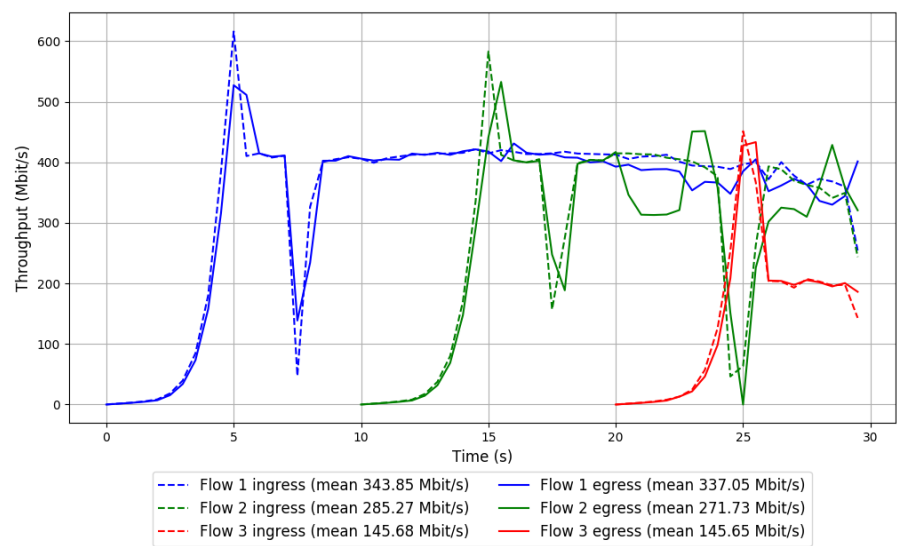


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-20 20:33:12
End at: 2018-02-20 20:33:42

# Below is generated by plot.py at 2018-02-21 03:29:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 565.53 Mbit/s
95th percentile per-packet one-way delay: 306.340 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 337.05 Mbit/s
95th percentile per-packet one-way delay: 294.160 ms
Loss rate: 1.97%
-- Flow 2:
Average throughput: 271.73 Mbit/s
95th percentile per-packet one-way delay: 318.424 ms
Loss rate: 4.74%
-- Flow 3:
Average throughput: 145.65 Mbit/s
95th percentile per-packet one-way delay: 129.015 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-20 20:52:54

End at: 2018-02-20 20:53:24

Below is generated by plot.py at 2018-02-21 03:31:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 499.97 Mbit/s

95th percentile per-packet one-way delay: 236.202 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 262.69 Mbit/s

95th percentile per-packet one-way delay: 264.843 ms

Loss rate: 1.22%

-- Flow 2:

Average throughput: 293.88 Mbit/s

95th percentile per-packet one-way delay: 220.796 ms

Loss rate: 0.01%

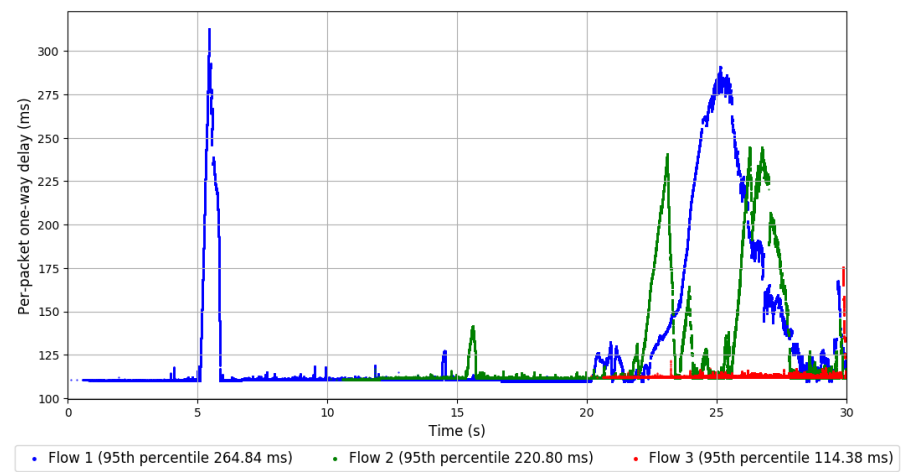
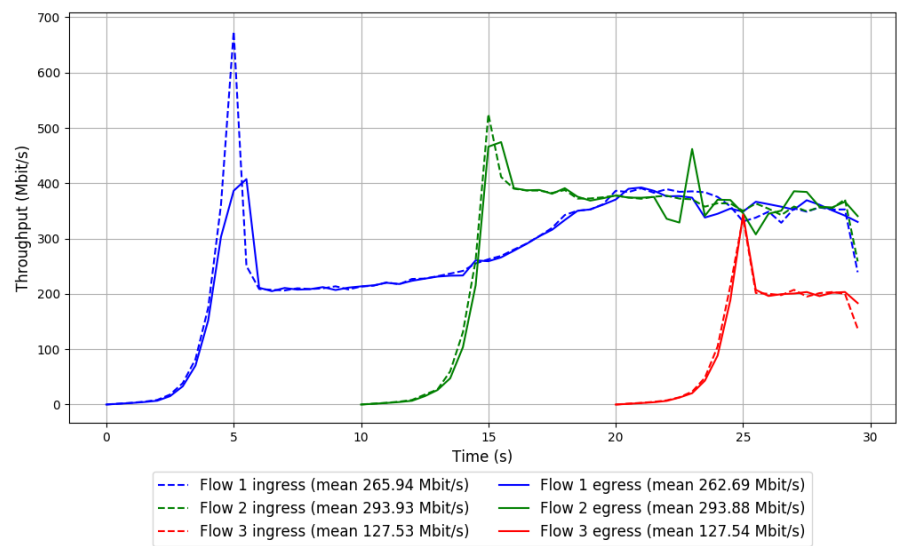
-- Flow 3:

Average throughput: 127.54 Mbit/s

95th percentile per-packet one-way delay: 114.378 ms

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-20 21:12:31

End at: 2018-02-20 21:13:01

Below is generated by plot.py at 2018-02-21 03:33:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 586.29 Mbit/s

95th percentile per-packet one-way delay: 316.971 ms

Loss rate: 2.38%

-- Flow 1:

Average throughput: 307.23 Mbit/s

95th percentile per-packet one-way delay: 340.975 ms

Loss rate: 3.94%

-- Flow 2:

Average throughput: 315.84 Mbit/s

95th percentile per-packet one-way delay: 178.137 ms

Loss rate: 0.01%

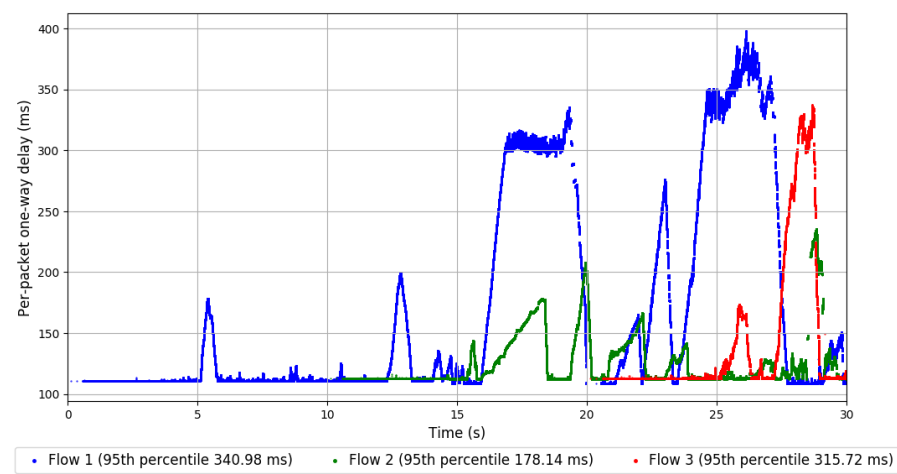
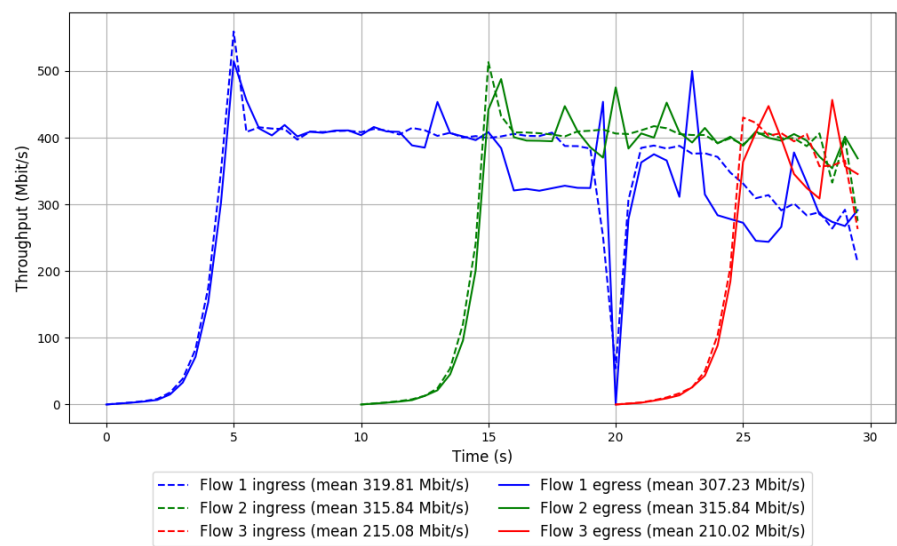
-- Flow 3:

Average throughput: 210.02 Mbit/s

95th percentile per-packet one-way delay: 315.718 ms

Loss rate: 2.37%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-20 21:31:55

End at: 2018-02-20 21:32:25

Below is generated by plot.py at 2018-02-21 03:33:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 587.71 Mbit/s

95th percentile per-packet one-way delay: 226.480 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 328.82 Mbit/s

95th percentile per-packet one-way delay: 171.000 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 275.38 Mbit/s

95th percentile per-packet one-way delay: 238.168 ms

Loss rate: 0.76%

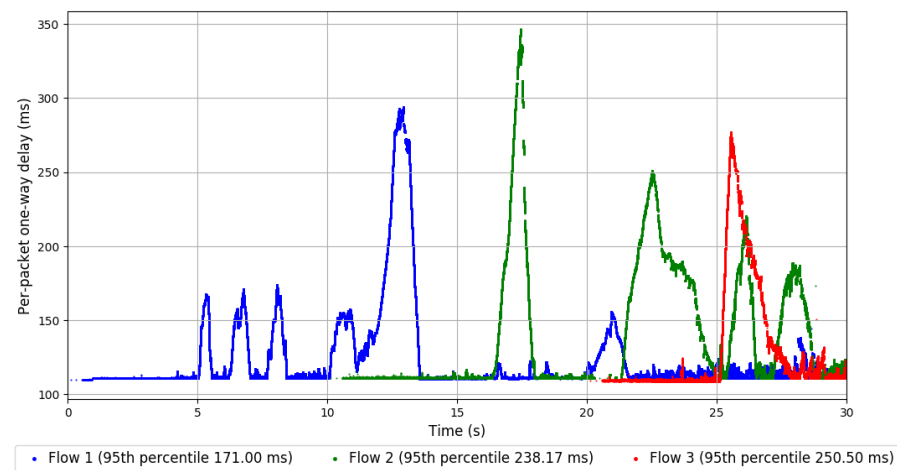
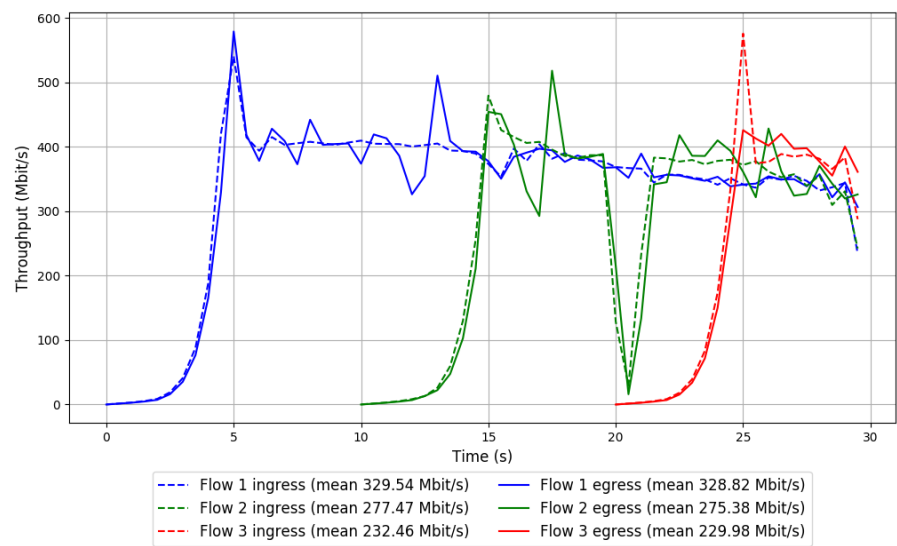
-- Flow 3:

Average throughput: 229.98 Mbit/s

95th percentile per-packet one-way delay: 250.498 ms

Loss rate: 1.06%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-20 21:51:34

End at: 2018-02-20 21:52:04

Below is generated by plot.py at 2018-02-21 03:33:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 492.14 Mbit/s

95th percentile per-packet one-way delay: 186.264 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 254.60 Mbit/s

95th percentile per-packet one-way delay: 140.967 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 305.23 Mbit/s

95th percentile per-packet one-way delay: 203.399 ms

Loss rate: 0.76%

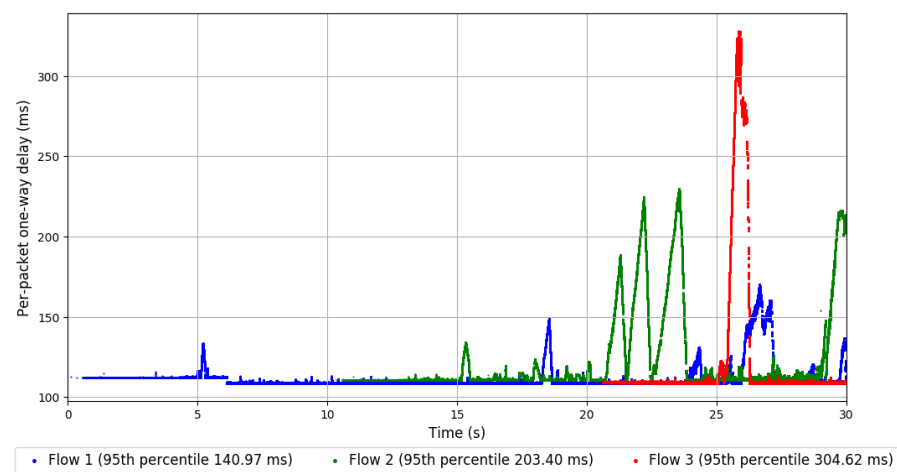
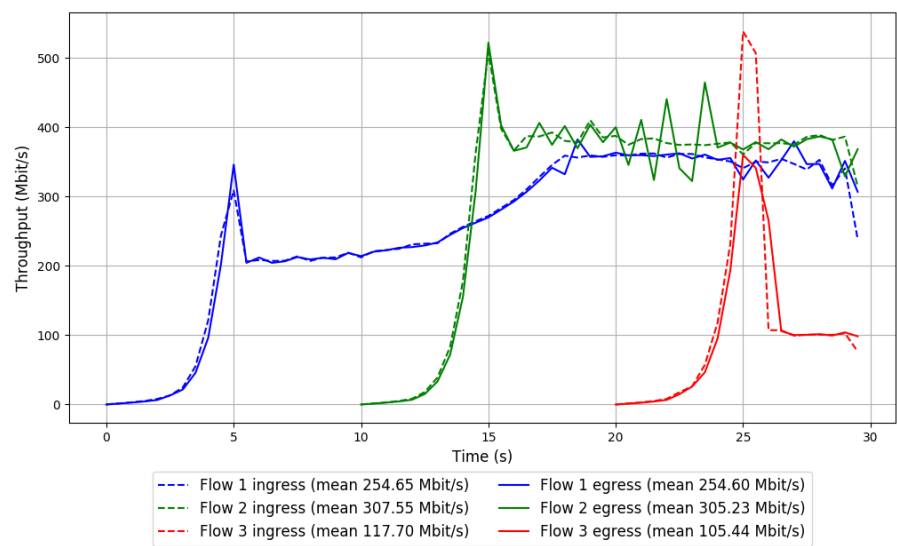
-- Flow 3:

Average throughput: 105.44 Mbit/s

95th percentile per-packet one-way delay: 304.624 ms

Loss rate: 10.42%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-20 22:11:02

End at: 2018-02-20 22:11:32

Below is generated by plot.py at 2018-02-21 03:33:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 547.04 Mbit/s

95th percentile per-packet one-way delay: 138.501 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 340.50 Mbit/s

95th percentile per-packet one-way delay: 139.474 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 198.84 Mbit/s

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

Loss rate: 0.00%

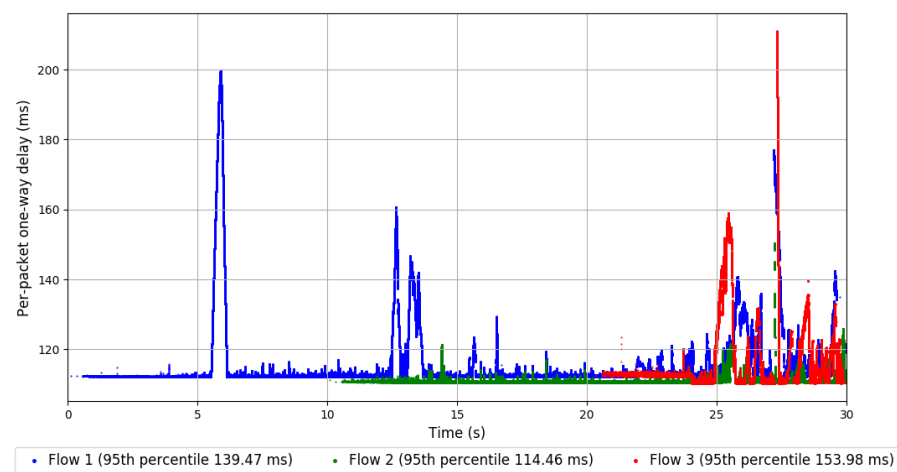
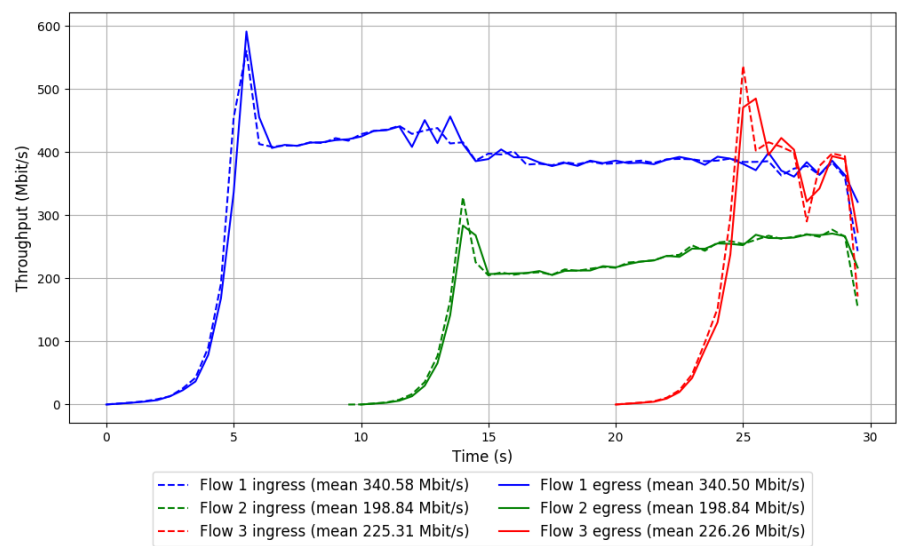
-- Flow 3:

Average throughput: 226.26 Mbit/s

95th percentile per-packet one-way delay: 153.978 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-20 22:30:50

End at: 2018-02-20 22:31:20

Below is generated by plot.py at 2018-02-21 03:33:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 513.33 Mbit/s

95th percentile per-packet one-way delay: 296.813 ms

Loss rate: 2.06%

-- Flow 1:

Average throughput: 322.03 Mbit/s

95th percentile per-packet one-way delay: 291.478 ms

Loss rate: 1.78%

-- Flow 2:

Average throughput: 220.28 Mbit/s

95th percentile per-packet one-way delay: 299.409 ms

Loss rate: 3.29%

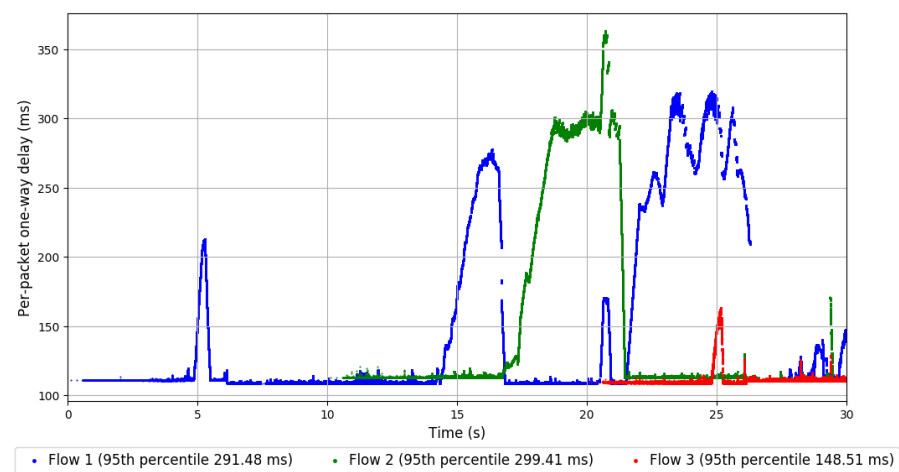
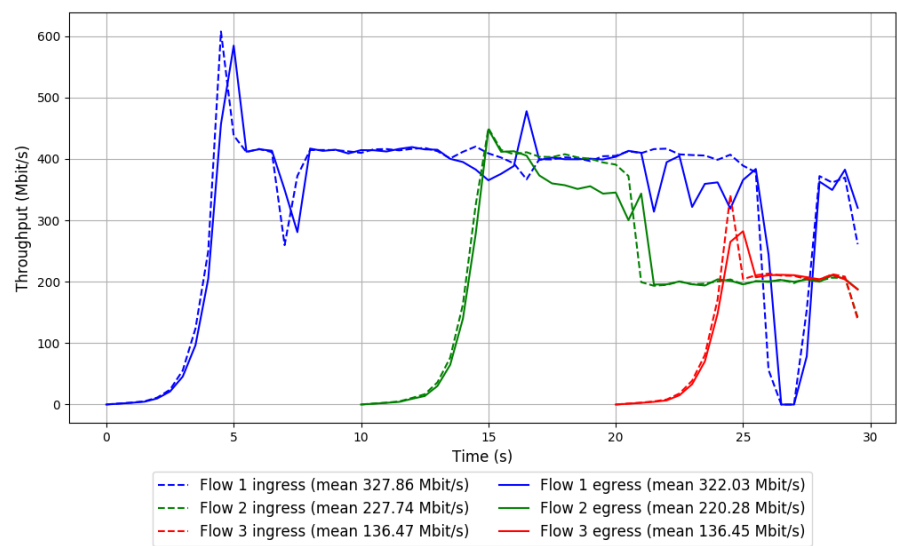
-- Flow 3:

Average throughput: 136.45 Mbit/s

95th percentile per-packet one-way delay: 148.514 ms

Loss rate: 0.00%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

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

End at: 2018-02-20 22:50:43

Below is generated by plot.py at 2018-02-21 03:33:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 445.88 Mbit/s

95th percentile per-packet one-way delay: 273.961 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 194.62 Mbit/s

95th percentile per-packet one-way delay: 153.645 ms

Loss rate: 1.13%

-- Flow 2:

Average throughput: 311.34 Mbit/s

95th percentile per-packet one-way delay: 285.293 ms

Loss rate: 1.00%

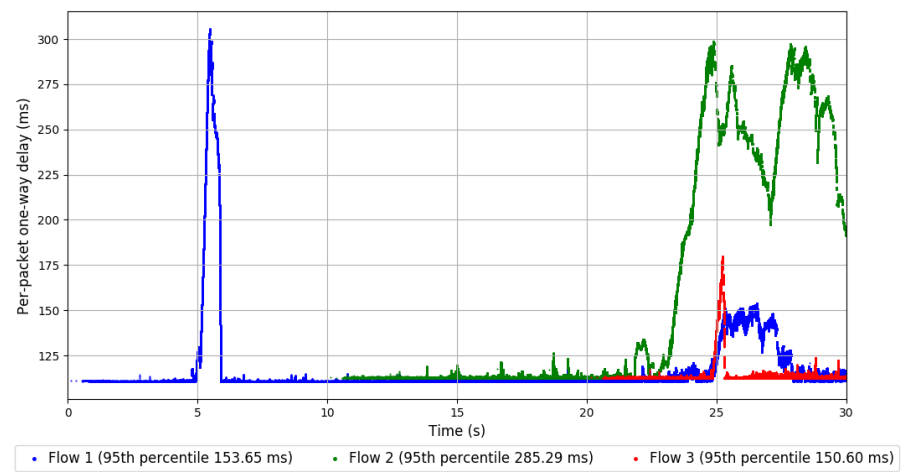
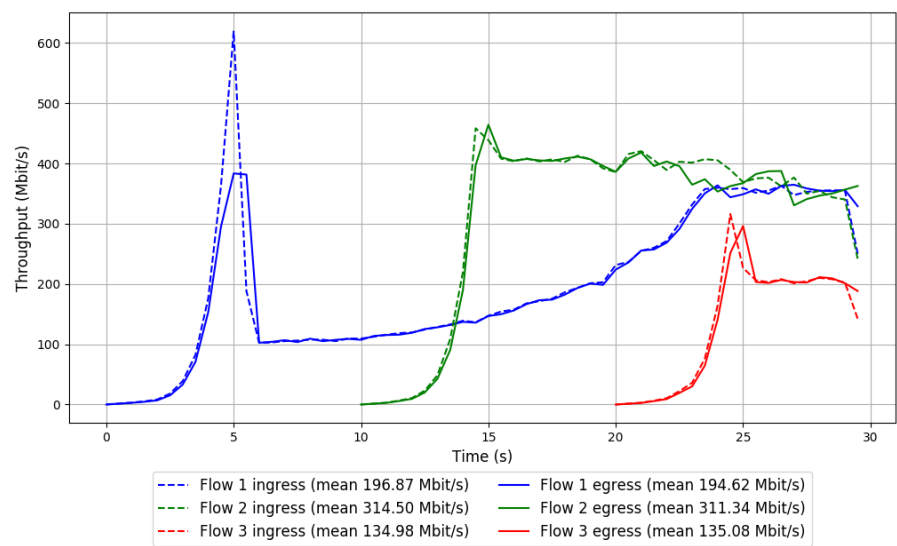
-- Flow 3:

Average throughput: 135.08 Mbit/s

95th percentile per-packet one-way delay: 150.602 ms

Loss rate: 0.00%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-20 23:09:31

End at: 2018-02-20 23:10:01

Below is generated by plot.py at 2018-02-21 03:34:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 578.46 Mbit/s

95th percentile per-packet one-way delay: 180.646 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 327.48 Mbit/s

95th percentile per-packet one-way delay: 165.925 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 273.82 Mbit/s

95th percentile per-packet one-way delay: 166.440 ms

Loss rate: 0.04%

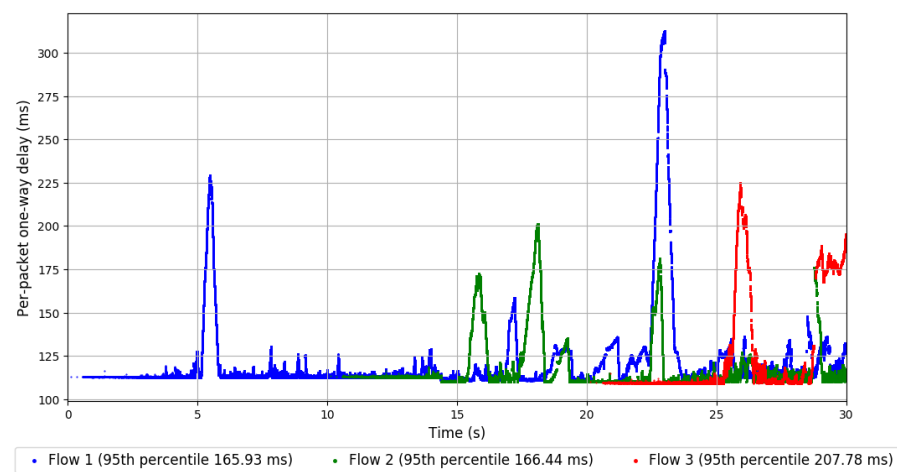
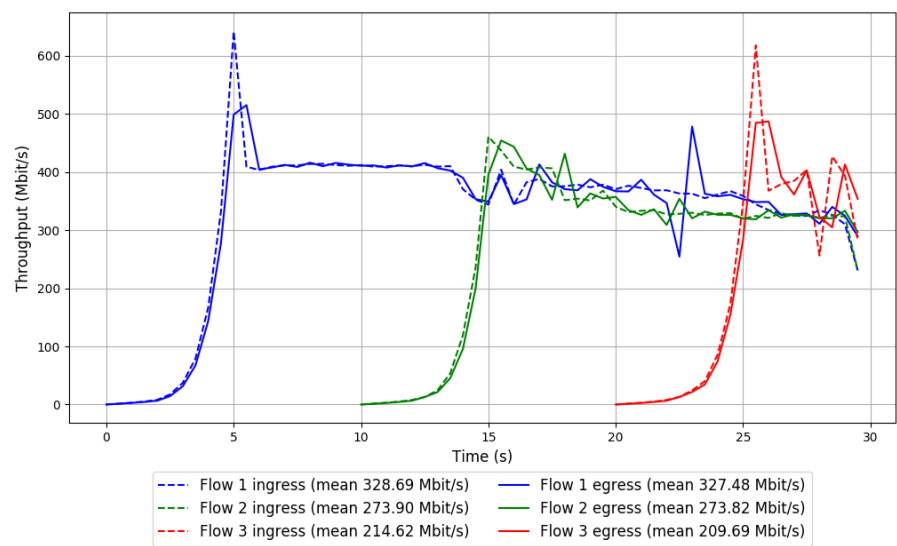
-- Flow 3:

Average throughput: 209.69 Mbit/s

95th percentile per-packet one-way delay: 207.784 ms

Loss rate: 2.28%

Run 9: Report of Vivace-LTE — Data Link



```
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-20 23:29:06
End at: 2018-02-20 23:29:36

# Below is generated by plot.py at 2018-02-21 03:34:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 508.27 Mbit/s
95th percentile per-packet one-way delay: 277.085 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 258.56 Mbit/s
95th percentile per-packet one-way delay: 127.073 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 301.59 Mbit/s
95th percentile per-packet one-way delay: 296.862 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 149.68 Mbit/s
95th percentile per-packet one-way delay: 293.283 ms
Loss rate: 2.45%
```

Run 10: Report of Vivace-LTE — Data Link

