

Pantheon Report

Generated at 2018-02-17 09:26:21 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

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

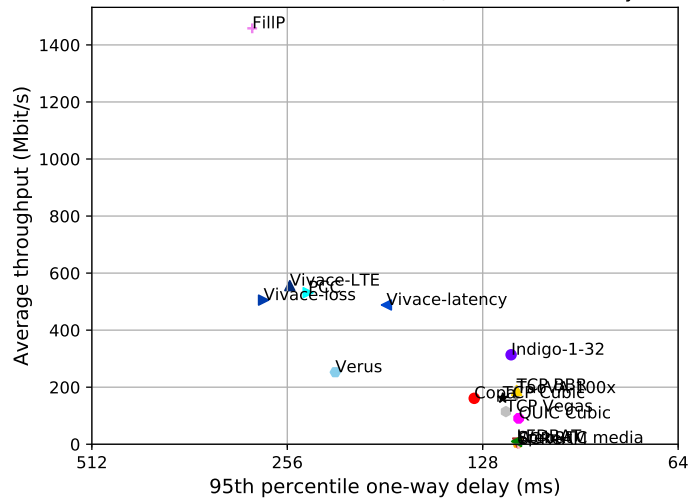
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

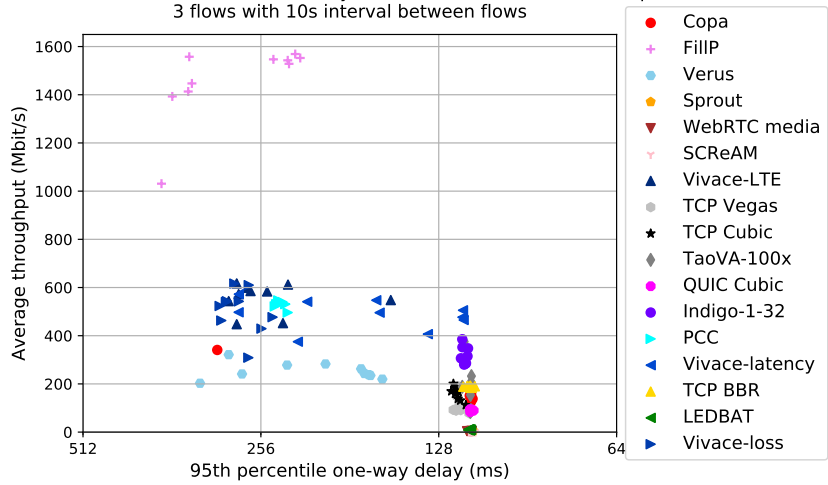
Git summary:

```
branch: master @ cccb2d77344969a7bac1df6edf6c0cfb6c77a6f8
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 8400b8926887fc4cf8c795a1d7ce2c8ac041ec72
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	96.51	94.80	88.02	113.31	113.48	113.81	0.00	0.00	0.01
TCP Cubic	10	87.91	81.25	60.53	118.81	119.14	120.64	0.00	0.04	0.20
LEDBAT	10	6.52	3.86	2.24	113.56	113.43	113.27	0.00	0.00	0.00
PCC	10	490.89	43.79	34.79	237.72	237.21	237.11	2.12	1.46	2.55
QUIC Cubic	10	49.78	46.38	31.65	112.13	112.28	111.92	0.00	0.01	0.01
SCReAM	10	0.22	0.20	0.22	112.35	111.96	111.93	0.03	0.00	0.00
WebRTC media	10	2.11	1.32	0.49	111.75	112.33	112.84	0.00	0.00	0.02
Sprout	10	2.38	1.99	1.87	113.11	113.23	112.93	0.00	0.04	0.00
TaoVA-100x	10	67.93	104.70	127.15	114.09	113.43	113.28	0.00	0.01	0.03
TCP Vegas	10	57.92	62.59	45.27	116.83	117.85	116.83	0.00	0.00	0.17
Verus	10	153.91	108.06	84.60	185.18	232.75	232.64	0.48	1.40	1.97
Copa	10	97.58	62.58	65.47	131.92	125.46	125.07	4.11	1.84	1.83
FillP	10	770.66	721.00	627.40	291.38	263.85	279.42	7.50	9.28	13.46
Indigo-1-32	10	170.14	150.05	137.43	114.70	116.58	116.70	0.00	0.00	0.01
Vivace-latency	10	293.80	225.96	136.06	181.54	164.66	148.70	1.01	0.30	0.51
Vivace-loss	10	290.05	239.72	171.80	267.88	268.60	288.62	3.95	3.68	6.60
Vivace-LTE	10	321.19	280.40	147.60	236.34	221.93	186.17	0.69	0.78	1.96

Run 1: Statistics of TCP BBR

Start at: 2018-02-17 02:12:55

End at: 2018-02-17 02:13:25

Below is generated by plot.py at 2018-02-17 07:36:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 185.96 Mbit/s

95th percentile per-packet one-way delay: 113.121 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 93.90 Mbit/s

95th percentile per-packet one-way delay: 113.023 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 94.96 Mbit/s

95th percentile per-packet one-way delay: 113.096 ms

Loss rate: 0.01%

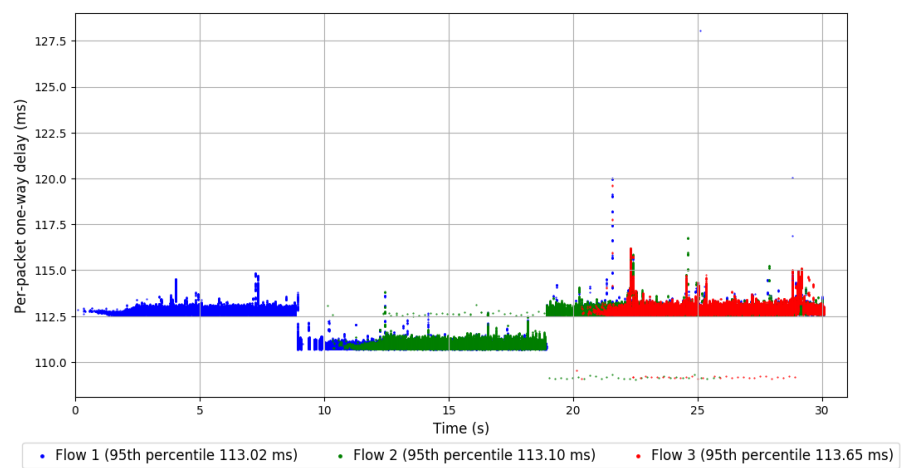
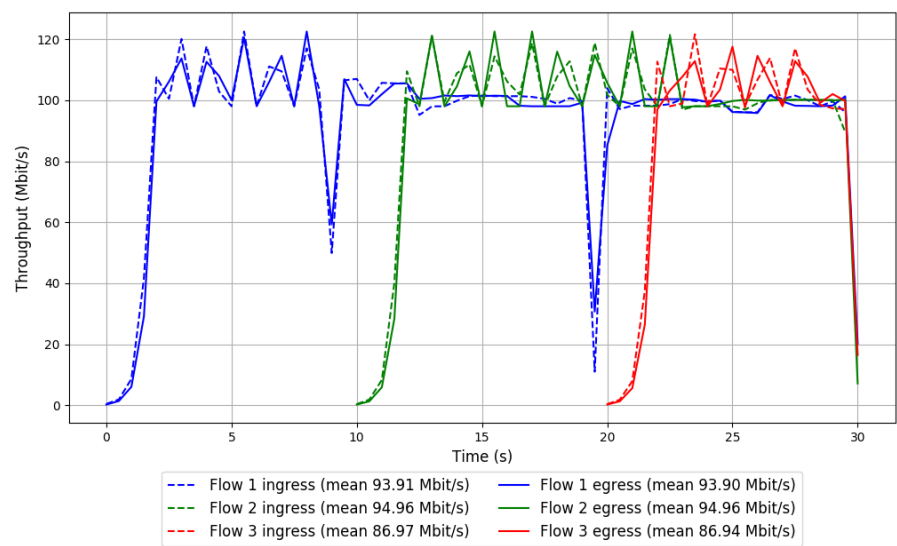
-- Flow 3:

Average throughput: 86.94 Mbit/s

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

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-17 02:32:15

End at: 2018-02-17 02:32:45

Below is generated by plot.py at 2018-02-17 07:36:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.92 Mbit/s

95th percentile per-packet one-way delay: 113.251 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 100.63 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 92.01 Mbit/s

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

Loss rate: 0.01%

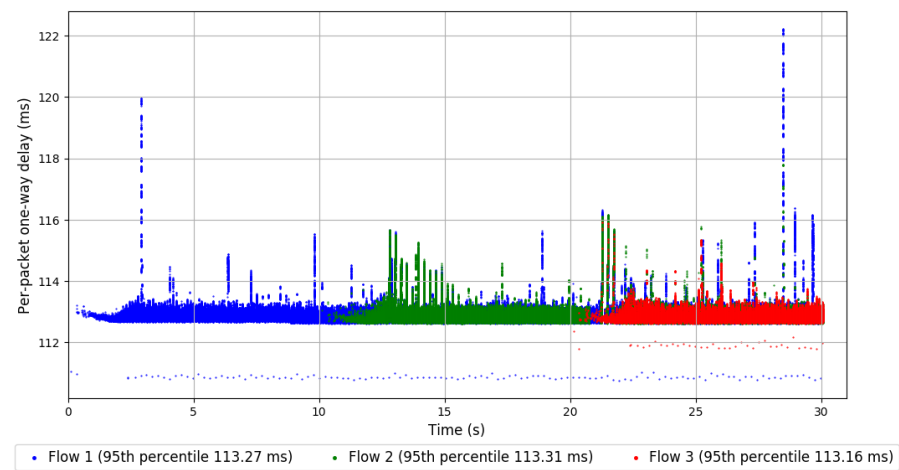
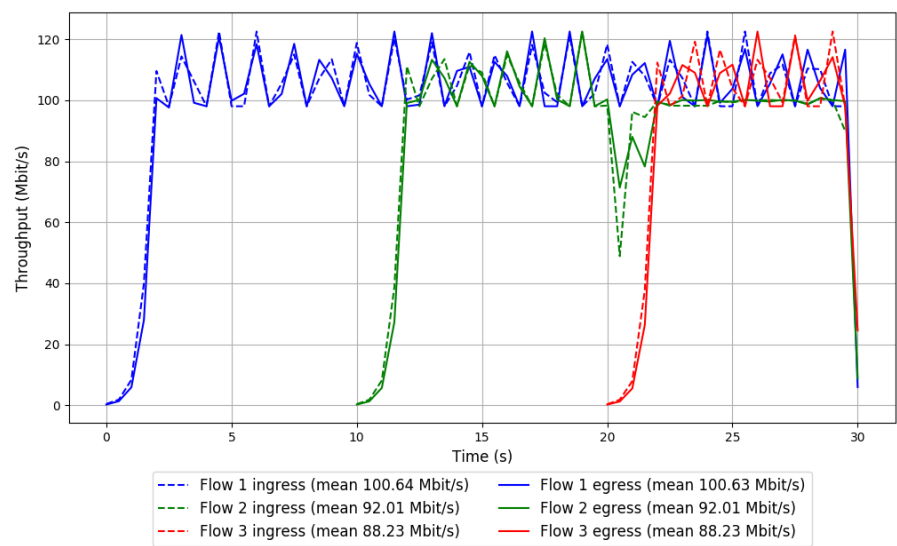
-- Flow 3:

Average throughput: 88.23 Mbit/s

95th percentile per-packet one-way delay: 113.159 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-17 02:52:15

End at: 2018-02-17 02:52:45

Below is generated by plot.py at 2018-02-17 07:36:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.83 Mbit/s

95th percentile per-packet one-way delay: 114.103 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 98.21 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 91.53 Mbit/s

95th percentile per-packet one-way delay: 113.127 ms

Loss rate: 0.00%

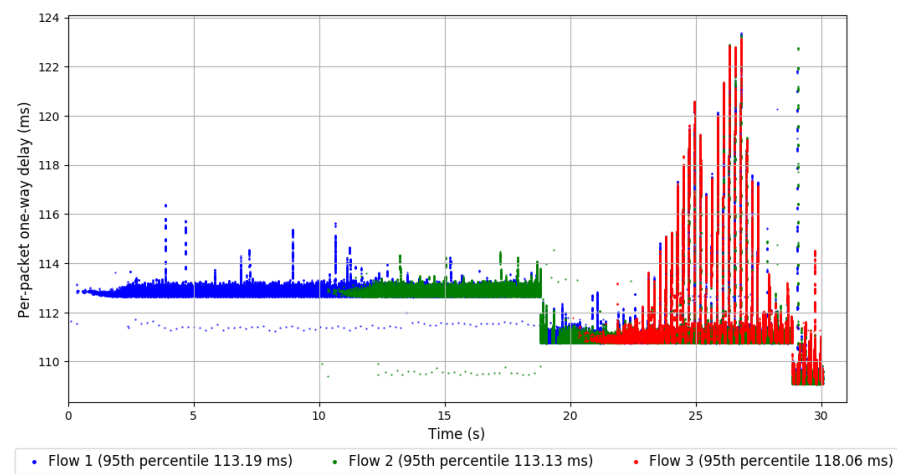
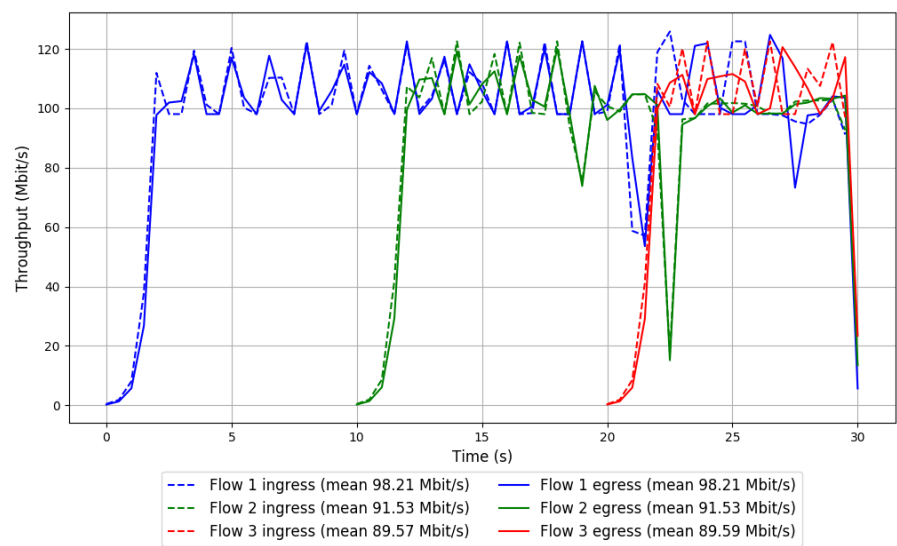
-- Flow 3:

Average throughput: 89.59 Mbit/s

95th percentile per-packet one-way delay: 118.062 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-17 03:12:04

End at: 2018-02-17 03:12:34

Below is generated by plot.py at 2018-02-17 07:36:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.92 Mbit/s

95th percentile per-packet one-way delay: 111.218 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 94.16 Mbit/s

95th percentile per-packet one-way delay: 111.110 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.39 Mbit/s

95th percentile per-packet one-way delay: 111.362 ms

Loss rate: 0.00%

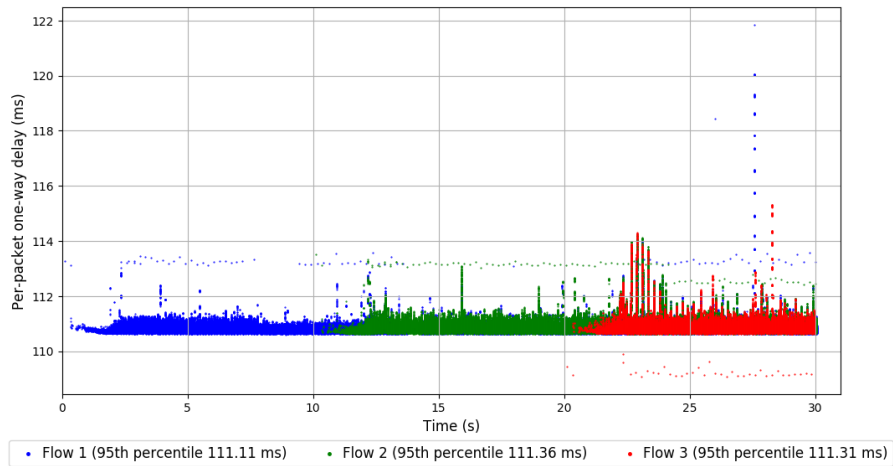
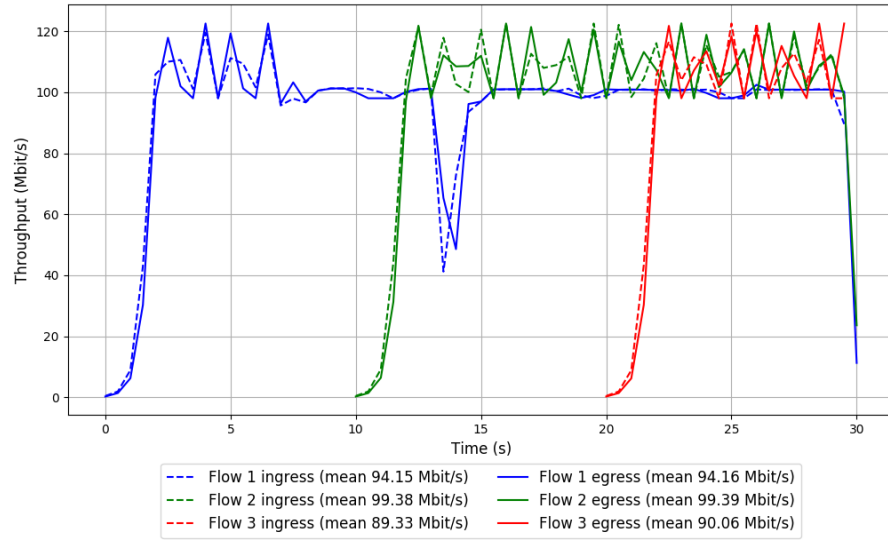
-- Flow 3:

Average throughput: 90.06 Mbit/s

95th percentile per-packet one-way delay: 111.313 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-17 03:31:36

End at: 2018-02-17 03:32:06

Below is generated by plot.py at 2018-02-17 07:37:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 193.00 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 99.78 Mbit/s

95th percentile per-packet one-way delay: 112.953 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 95.73 Mbit/s

95th percentile per-packet one-way delay: 113.079 ms

Loss rate: 0.01%

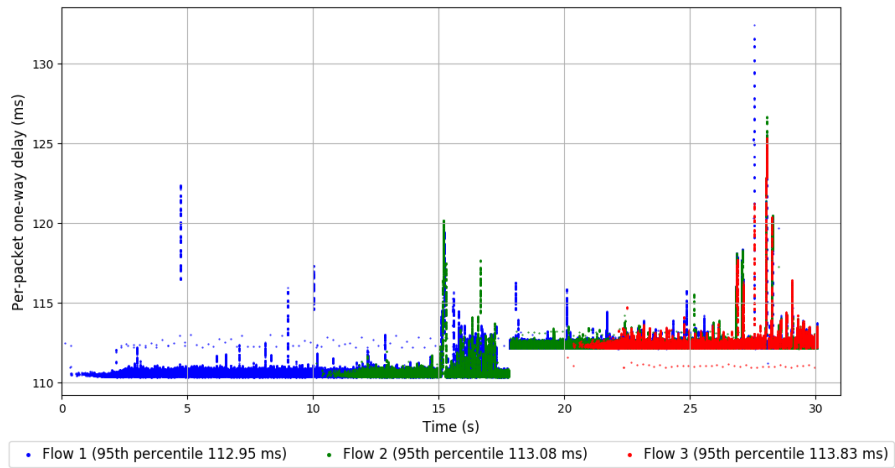
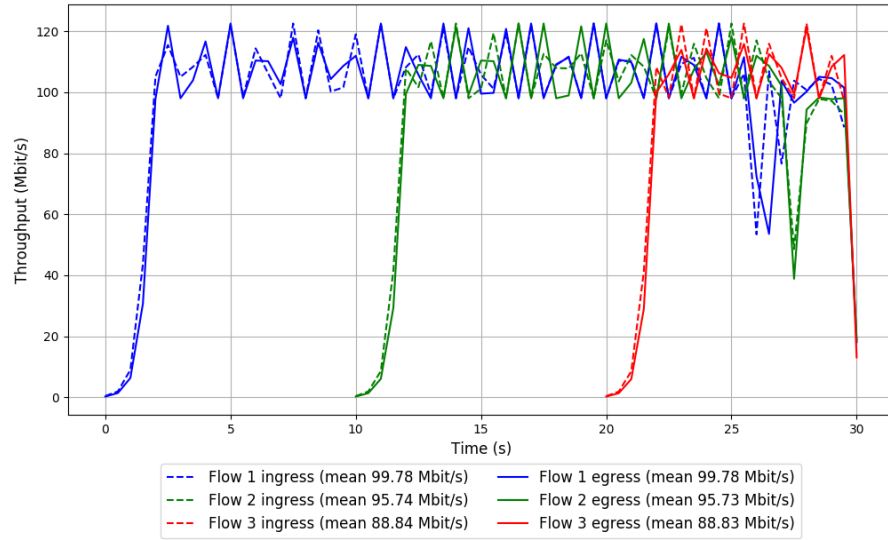
-- Flow 3:

Average throughput: 88.83 Mbit/s

95th percentile per-packet one-way delay: 113.826 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-17 03:51:24

End at: 2018-02-17 03:51:54

Below is generated by plot.py at 2018-02-17 07:37:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 183.64 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 93.90 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 93.68 Mbit/s

95th percentile per-packet one-way delay: 112.592 ms

Loss rate: 0.01%

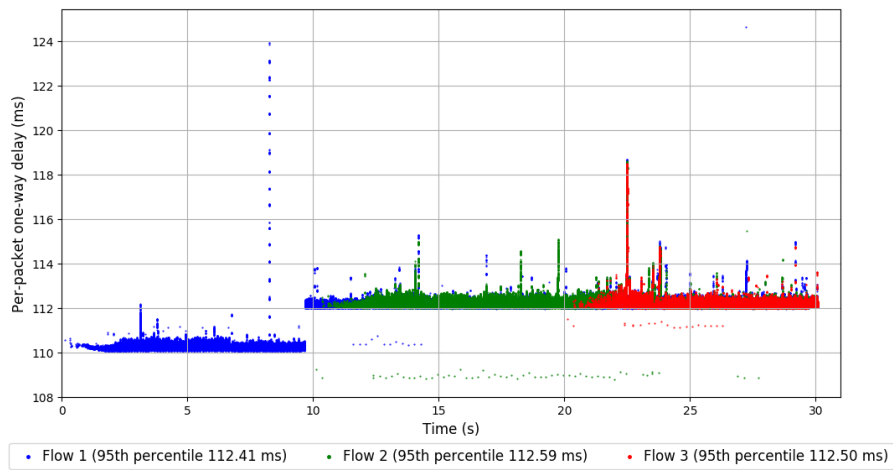
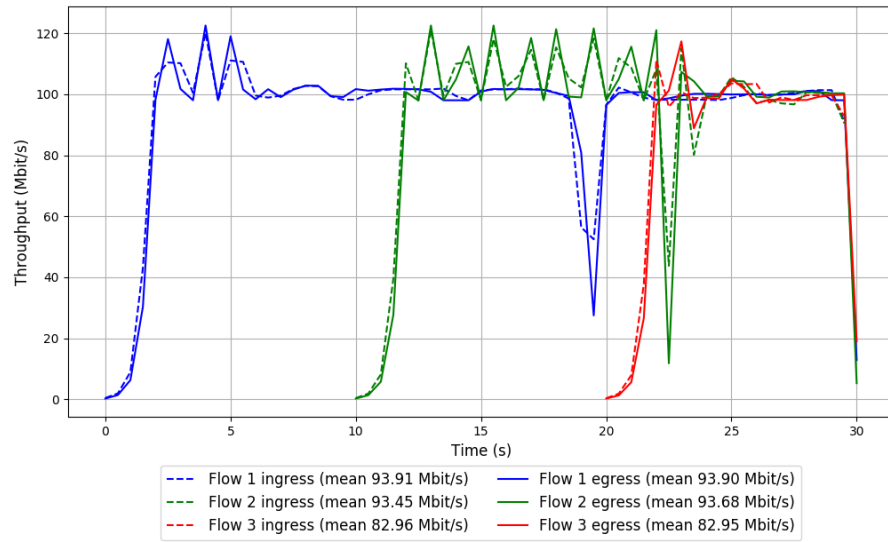
-- Flow 3:

Average throughput: 82.95 Mbit/s

95th percentile per-packet one-way delay: 112.505 ms

Loss rate: 0.03%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-17 04:10:58

End at: 2018-02-17 04:11:28

Below is generated by plot.py at 2018-02-17 07:37:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.75 Mbit/s

95th percentile per-packet one-way delay: 113.322 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 93.44 Mbit/s

95th percentile per-packet one-way delay: 113.126 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.18 Mbit/s

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

Loss rate: 0.00%

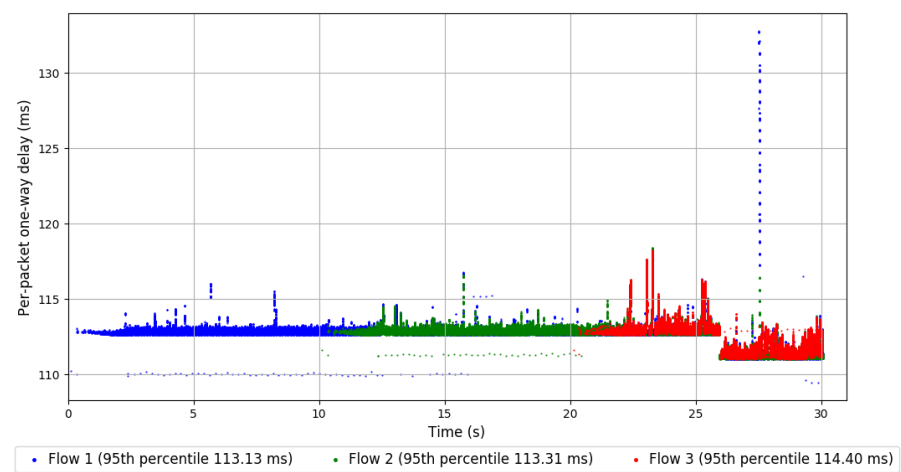
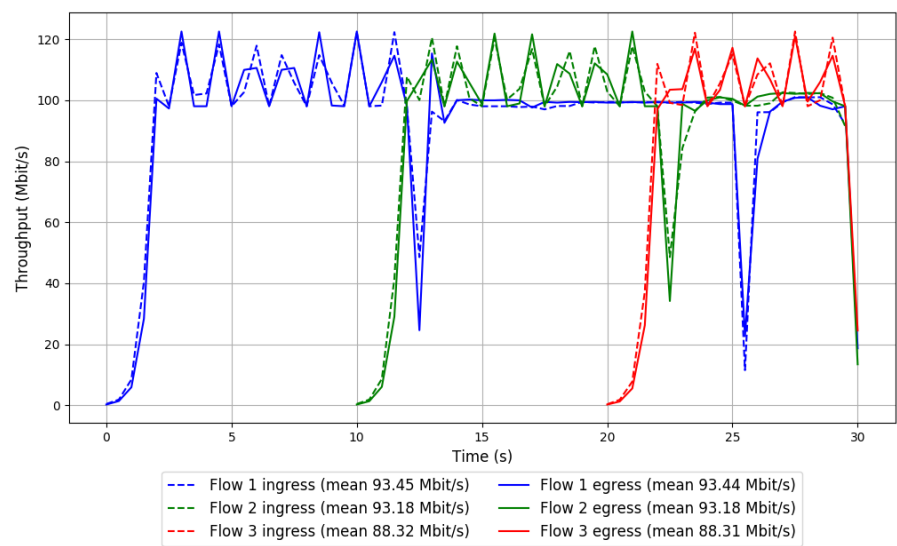
-- Flow 3:

Average throughput: 88.31 Mbit/s

95th percentile per-packet one-way delay: 114.401 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-17 04:30:40

End at: 2018-02-17 04:31:10

Below is generated by plot.py at 2018-02-17 07:37:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.34 Mbit/s

95th percentile per-packet one-way delay: 116.335 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 98.39 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 91.30 Mbit/s

95th percentile per-packet one-way delay: 116.845 ms

Loss rate: 0.00%

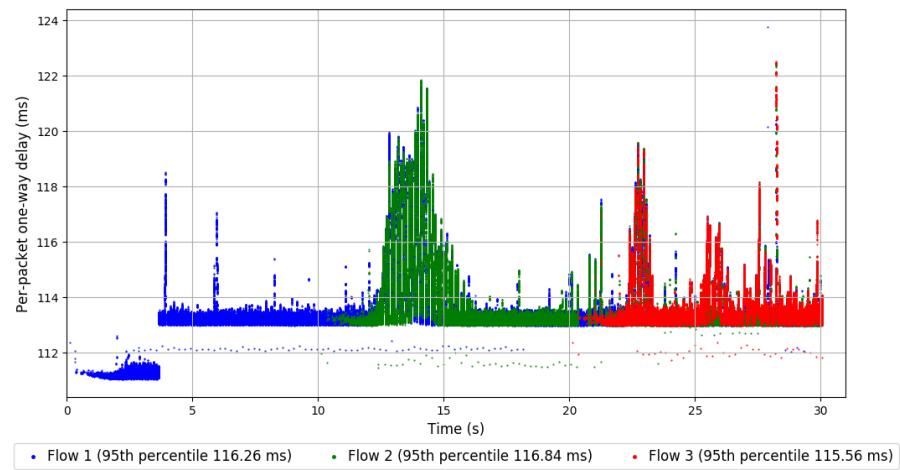
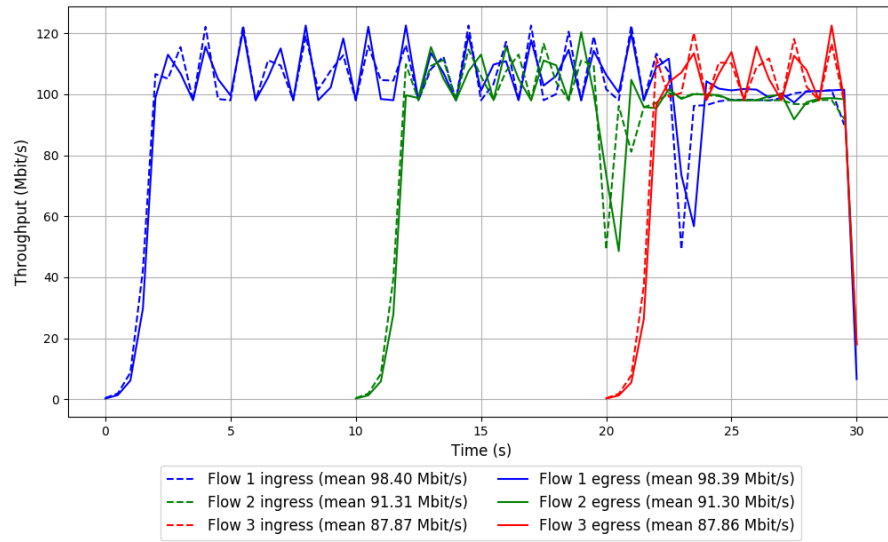
-- Flow 3:

Average throughput: 87.86 Mbit/s

95th percentile per-packet one-way delay: 115.556 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-17 04:50:24

End at: 2018-02-17 04:50:54

Below is generated by plot.py at 2018-02-17 07:39:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 191.36 Mbit/s

95th percentile per-packet one-way delay: 114.530 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 96.51 Mbit/s

95th percentile per-packet one-way delay: 114.594 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 98.34 Mbit/s

95th percentile per-packet one-way delay: 114.839 ms

Loss rate: 0.00%

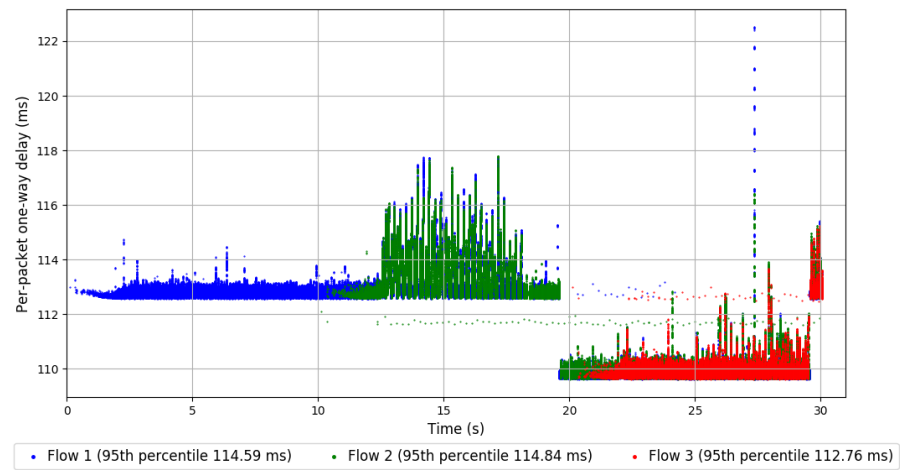
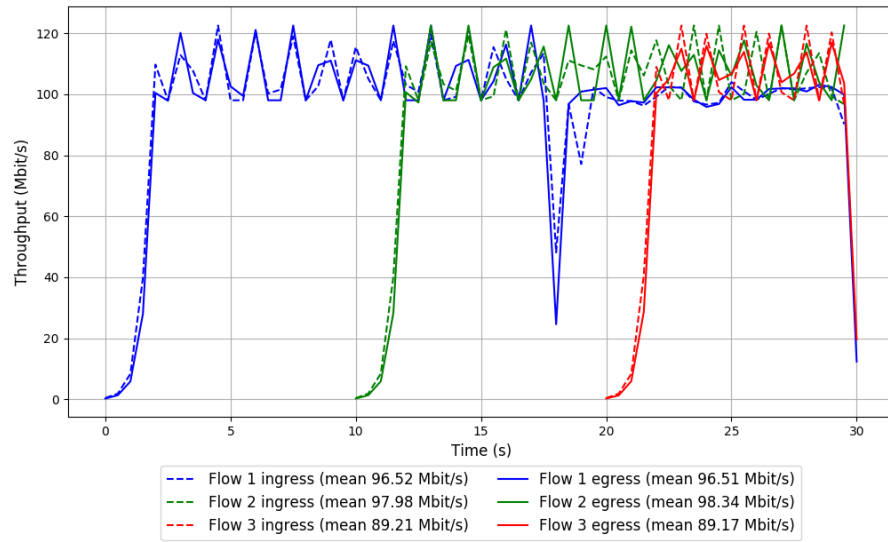
-- Flow 3:

Average throughput: 89.17 Mbit/s

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

Loss rate: 0.07%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-17 05:10:25

End at: 2018-02-17 05:10:55

Below is generated by plot.py at 2018-02-17 07:39:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.63 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 96.18 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 97.87 Mbit/s

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

Loss rate: 0.00%

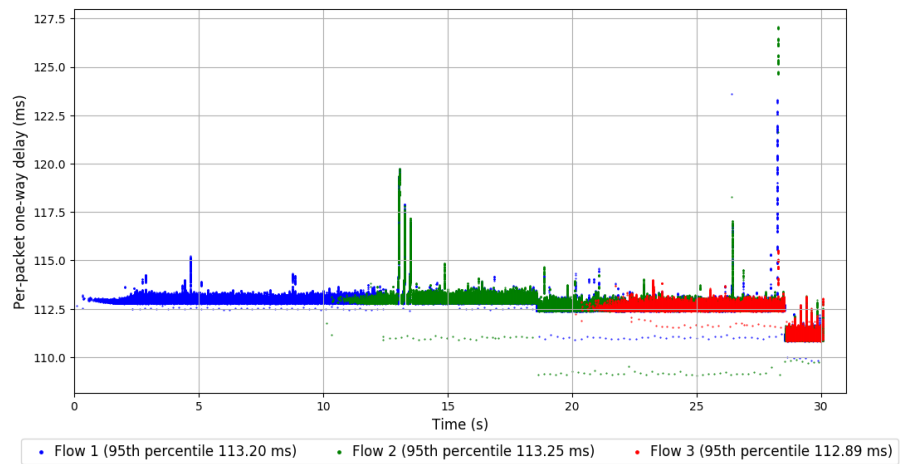
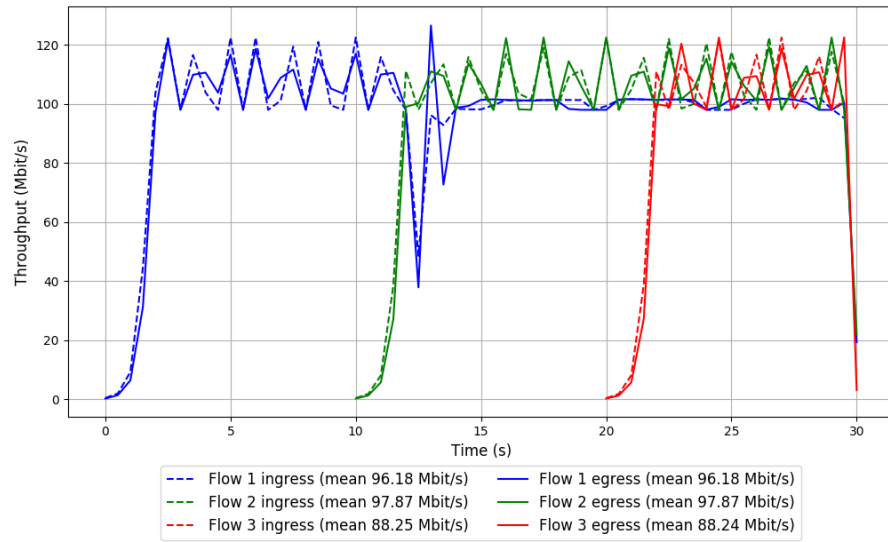
-- Flow 3:

Average throughput: 88.24 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-17 02:08:59

End at: 2018-02-17 02:09:29

Below is generated by plot.py at 2018-02-17 07:39:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 130.98 Mbit/s

95th percentile per-packet one-way delay: 117.732 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.51 Mbit/s

95th percentile per-packet one-way delay: 117.737 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 62.99 Mbit/s

95th percentile per-packet one-way delay: 116.734 ms

Loss rate: 0.00%

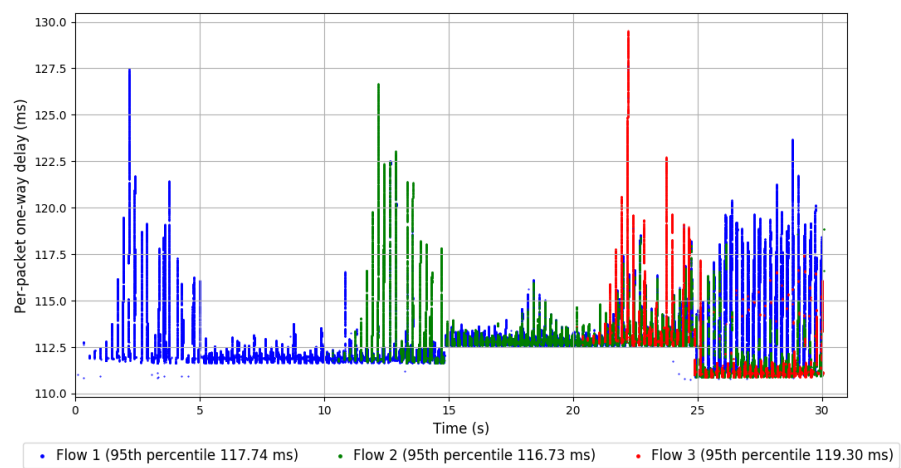
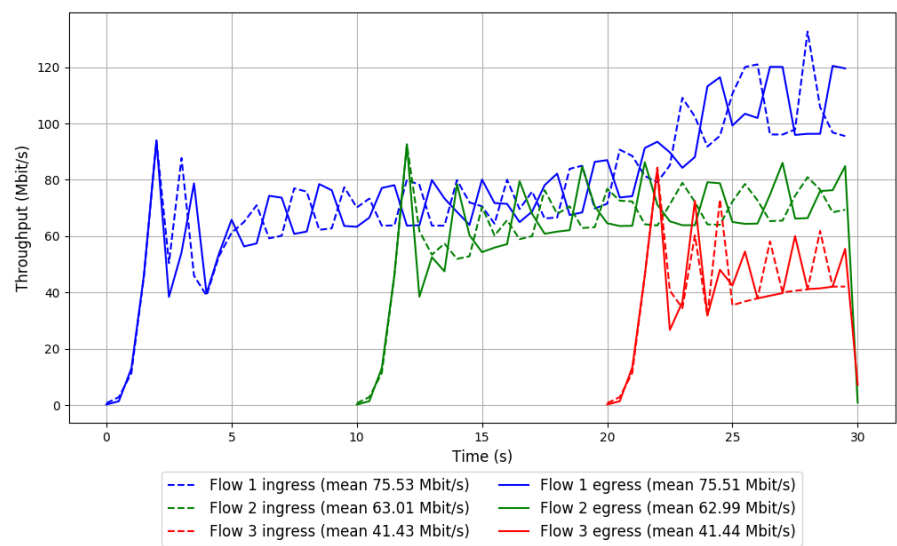
-- Flow 3:

Average throughput: 41.44 Mbit/s

95th percentile per-packet one-way delay: 119.303 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-17 02:28:15

End at: 2018-02-17 02:28:45

Below is generated by plot.py at 2018-02-17 07:39:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 183.91 Mbit/s

95th percentile per-packet one-way delay: 120.026 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 102.65 Mbit/s

95th percentile per-packet one-way delay: 119.759 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 96.75 Mbit/s

95th percentile per-packet one-way delay: 119.966 ms

Loss rate: 0.00%

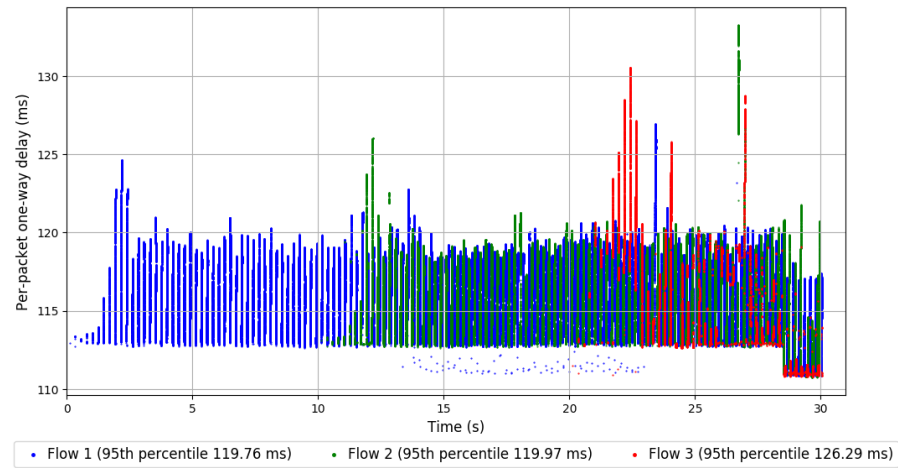
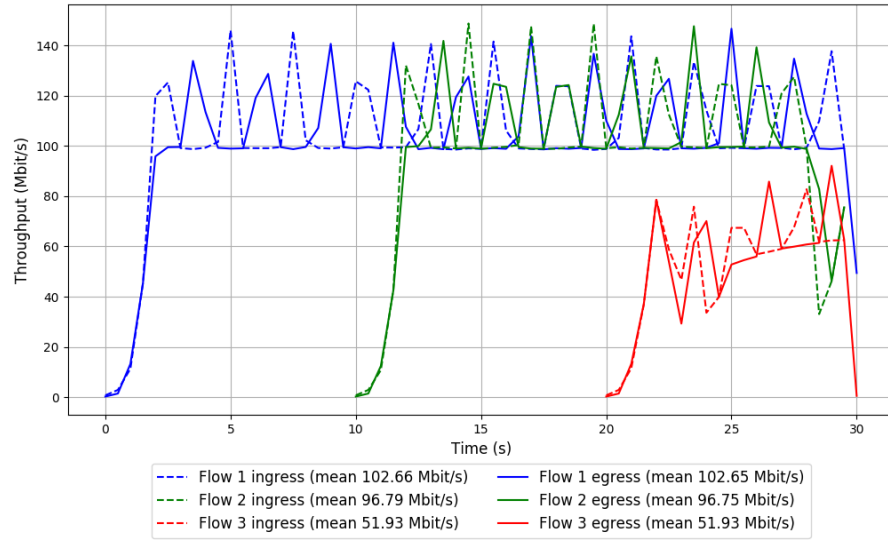
-- Flow 3:

Average throughput: 51.93 Mbit/s

95th percentile per-packet one-way delay: 126.294 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-17 02:47:52

End at: 2018-02-17 02:48:22

Below is generated by plot.py at 2018-02-17 07:39:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 169.37 Mbit/s

95th percentile per-packet one-way delay: 121.898 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 72.93 Mbit/s

95th percentile per-packet one-way delay: 122.129 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.35 Mbit/s

95th percentile per-packet one-way delay: 121.603 ms

Loss rate: 0.00%

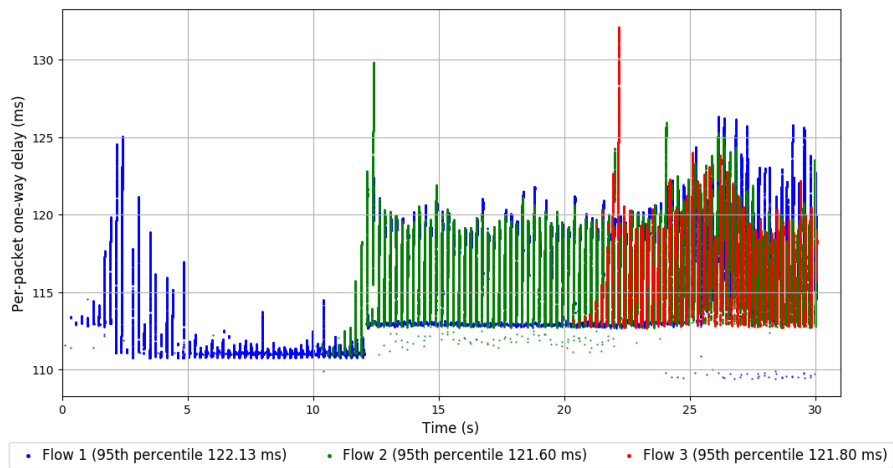
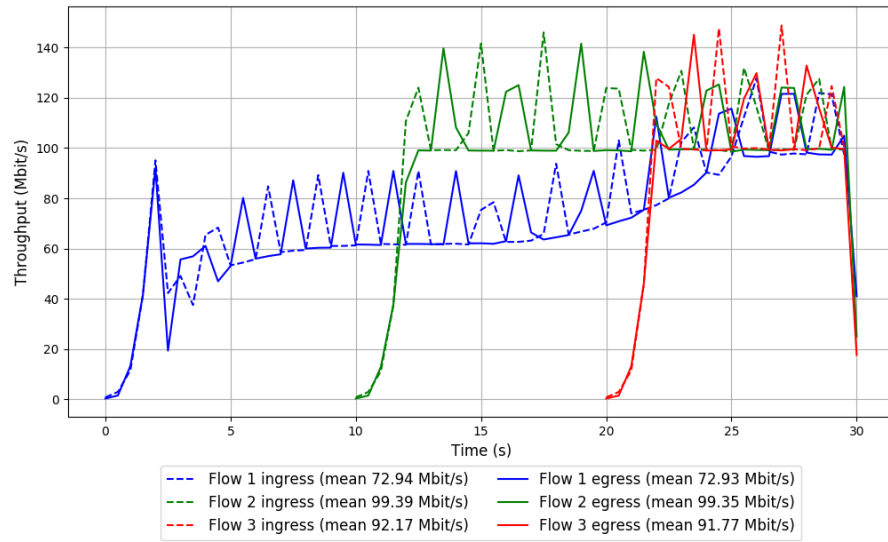
-- Flow 3:

Average throughput: 91.77 Mbit/s

95th percentile per-packet one-way delay: 121.795 ms

Loss rate: 0.41%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-17 03:08:04

End at: 2018-02-17 03:08:34

Below is generated by plot.py at 2018-02-17 07:39:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 172.07 Mbit/s

95th percentile per-packet one-way delay: 119.690 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 88.36 Mbit/s

95th percentile per-packet one-way delay: 120.183 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.95 Mbit/s

95th percentile per-packet one-way delay: 118.842 ms

Loss rate: 0.00%

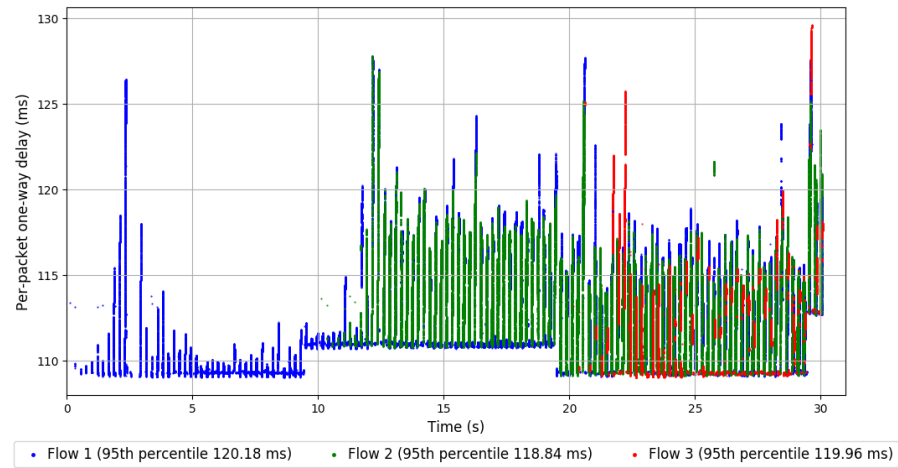
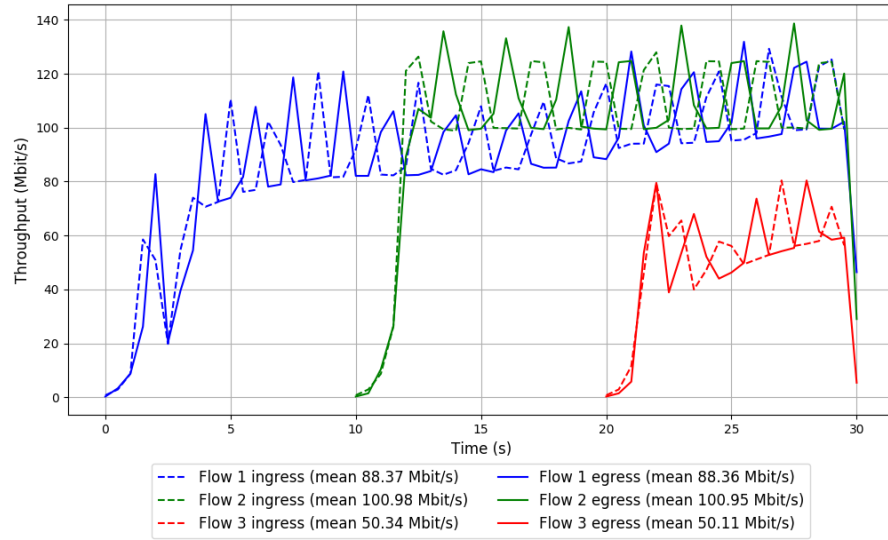
-- Flow 3:

Average throughput: 50.11 Mbit/s

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

Loss rate: 0.46%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-17 03:27:35

End at: 2018-02-17 03:28:05

Below is generated by plot.py at 2018-02-17 07:40:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 200.55 Mbit/s

95th percentile per-packet one-way delay: 120.890 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 103.68 Mbit/s

95th percentile per-packet one-way delay: 118.485 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.61 Mbit/s

95th percentile per-packet one-way delay: 121.918 ms

Loss rate: 0.12%

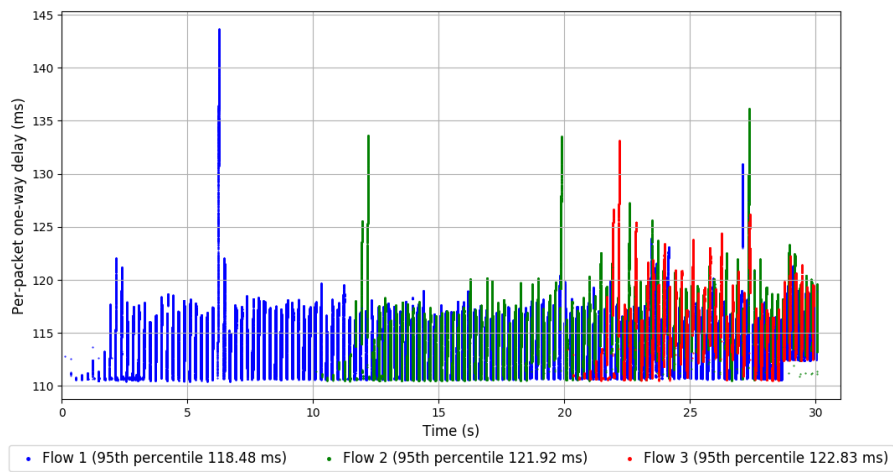
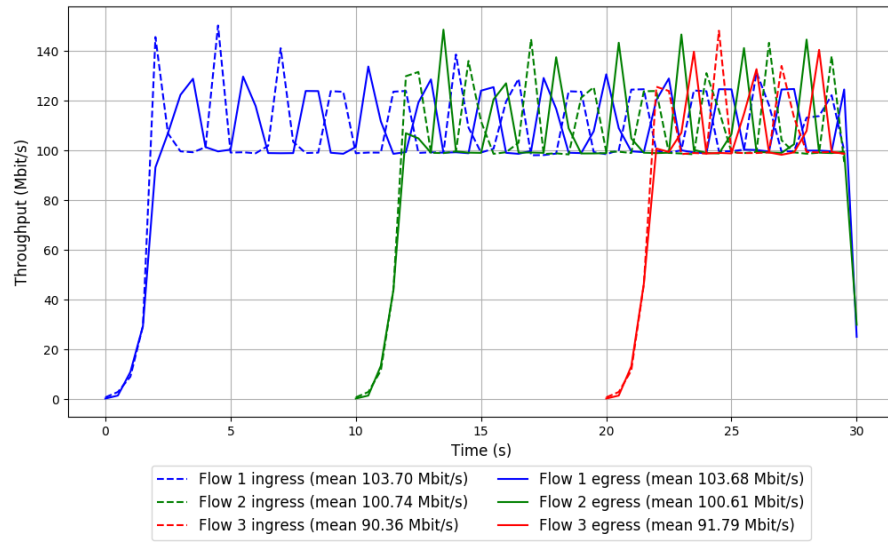
-- Flow 3:

Average throughput: 91.79 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-17 03:47:23

End at: 2018-02-17 03:47:53

Below is generated by plot.py at 2018-02-17 07:40:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 185.65 Mbit/s

95th percentile per-packet one-way delay: 119.542 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 98.46 Mbit/s

95th percentile per-packet one-way delay: 119.444 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.15 Mbit/s

95th percentile per-packet one-way delay: 119.056 ms

Loss rate: 0.00%

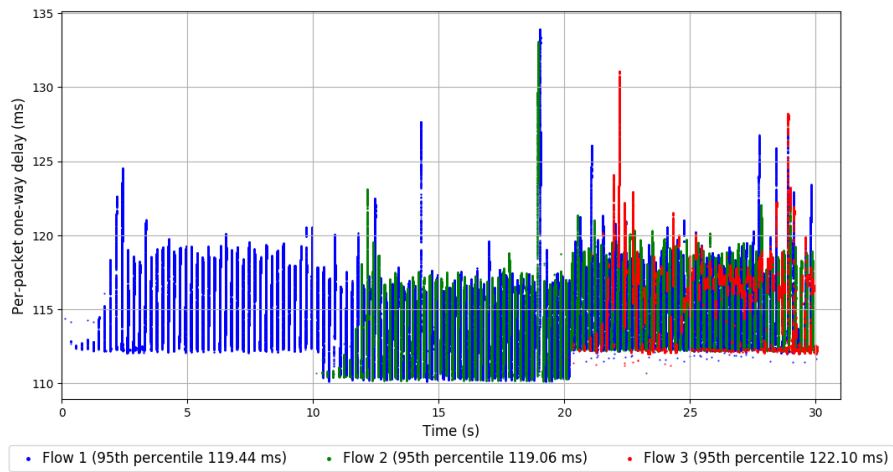
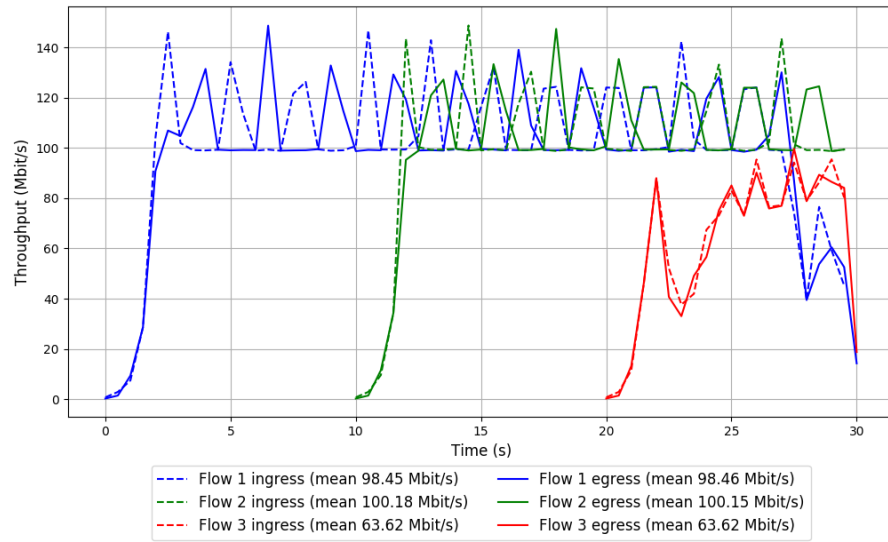
-- Flow 3:

Average throughput: 63.62 Mbit/s

95th percentile per-packet one-way delay: 122.101 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-17 04:07:02

End at: 2018-02-17 04:07:32

Below is generated by plot.py at 2018-02-17 07:41:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.07 Mbit/s

95th percentile per-packet one-way delay: 115.183 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 79.94 Mbit/s

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

Loss rate: 0.03%

-- Flow 2:

Average throughput: 22.56 Mbit/s

95th percentile per-packet one-way delay: 115.039 ms

Loss rate: 0.14%

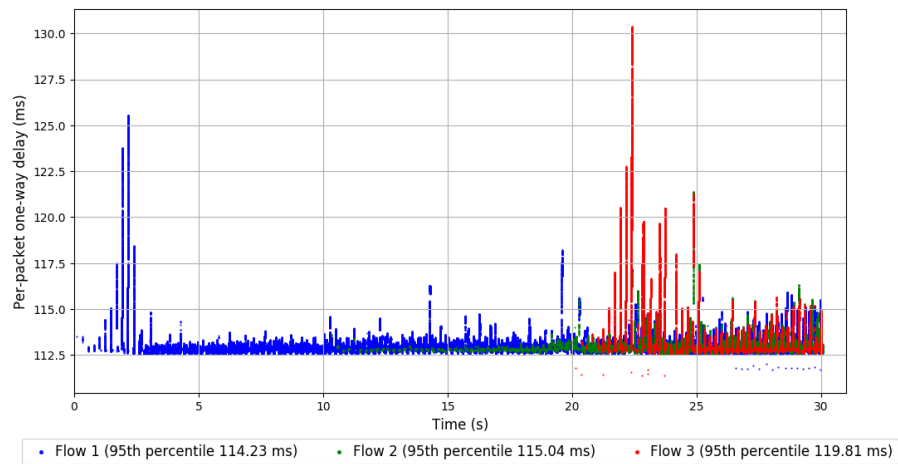
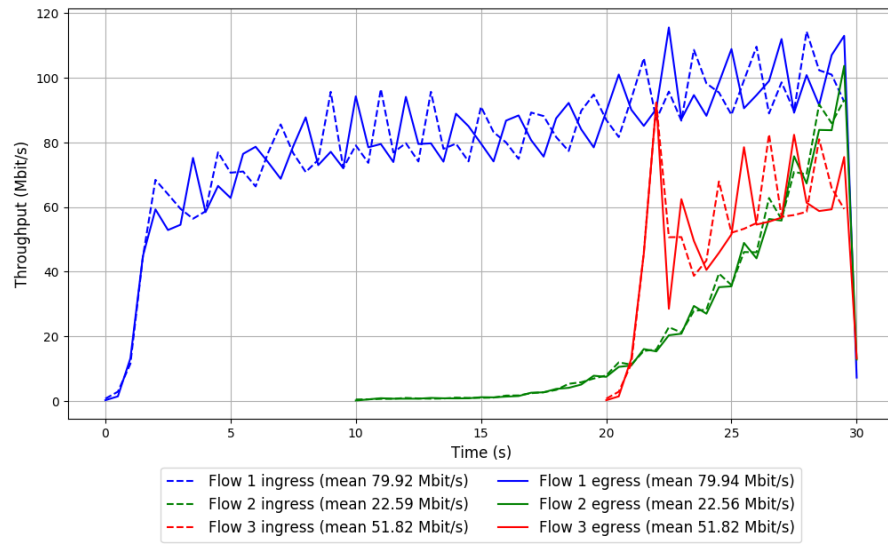
-- Flow 3:

Average throughput: 51.82 Mbit/s

95th percentile per-packet one-way delay: 119.807 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-17 04:26:55

End at: 2018-02-17 04:27:25

Below is generated by plot.py at 2018-02-17 07:42:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 166.29 Mbit/s

95th percentile per-packet one-way delay: 118.520 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 103.43 Mbit/s

95th percentile per-packet one-way delay: 118.353 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 60.59 Mbit/s

95th percentile per-packet one-way delay: 118.869 ms

Loss rate: 0.07%

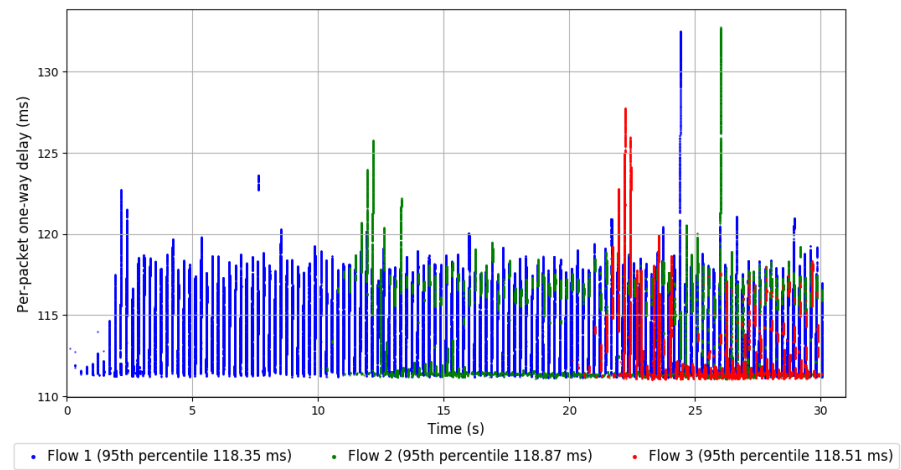
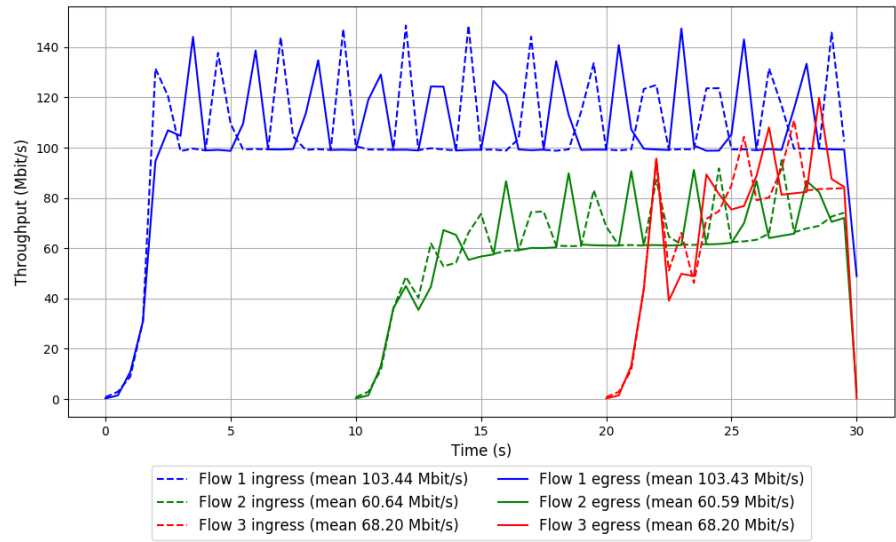
-- Flow 3:

Average throughput: 68.20 Mbit/s

95th percentile per-packet one-way delay: 118.508 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-17 04:46:26

End at: 2018-02-17 04:46:56

Below is generated by plot.py at 2018-02-17 07:42:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.41 Mbit/s

95th percentile per-packet one-way delay: 118.797 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 61.97 Mbit/s

95th percentile per-packet one-way delay: 117.894 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.67 Mbit/s

95th percentile per-packet one-way delay: 118.720 ms

Loss rate: 0.03%

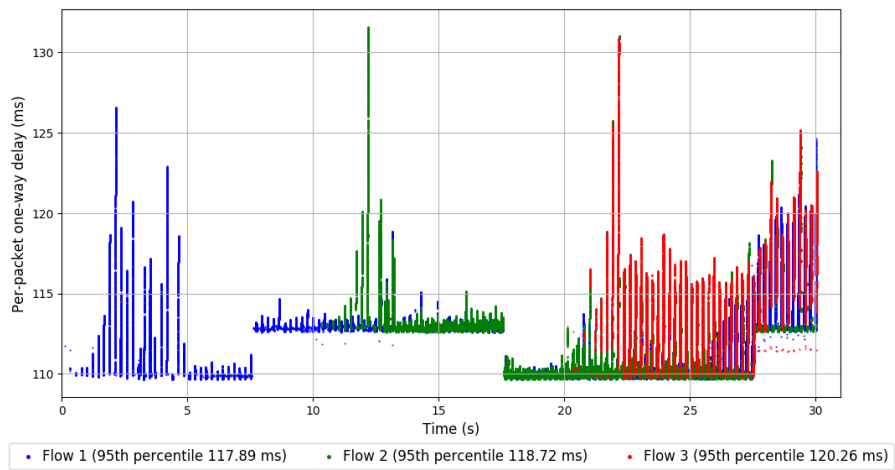
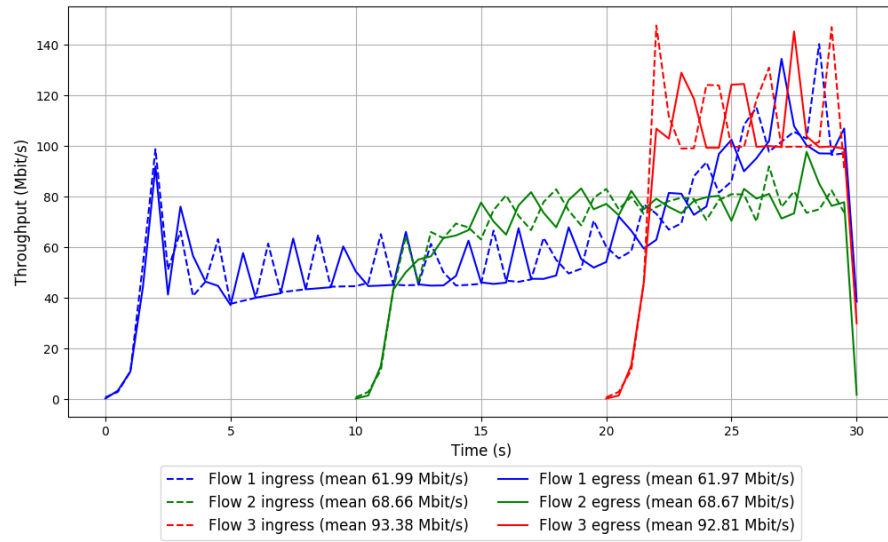
-- Flow 3:

Average throughput: 92.81 Mbit/s

95th percentile per-packet one-way delay: 120.263 ms

Loss rate: 0.62%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-17 05:06:27

End at: 2018-02-17 05:06:57

Below is generated by plot.py at 2018-02-17 07:42:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 159.07 Mbit/s

95th percentile per-packet one-way delay: 120.160 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 92.19 Mbit/s

95th percentile per-packet one-way delay: 119.909 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.92 Mbit/s

95th percentile per-packet one-way delay: 120.615 ms

Loss rate: 0.00%

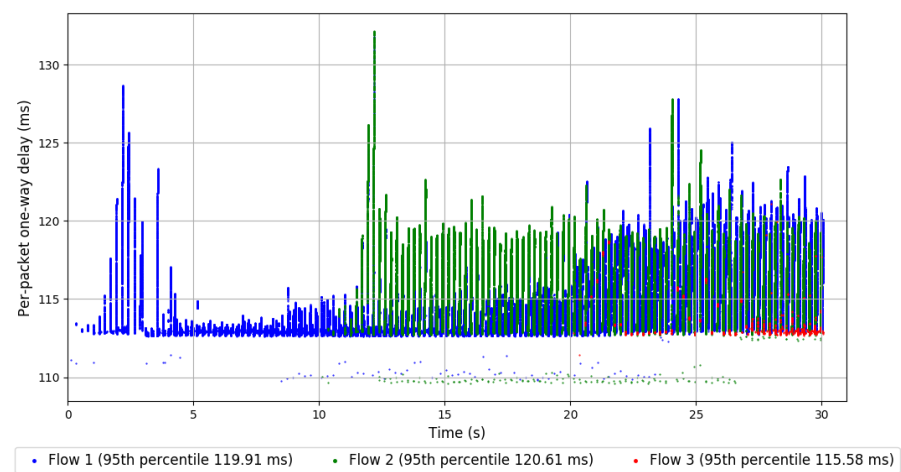
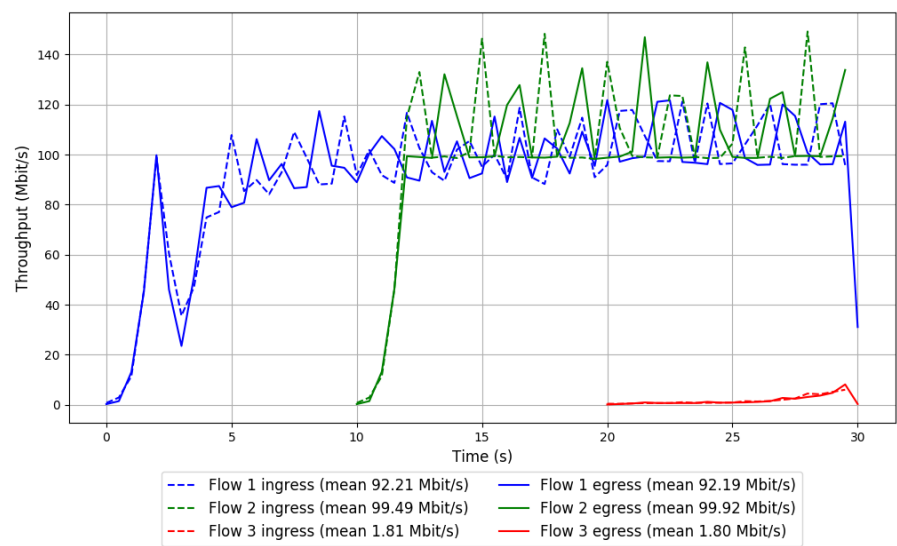
-- Flow 3:

Average throughput: 1.80 Mbit/s

95th percentile per-packet one-way delay: 115.577 ms

Loss rate: 0.47%

Run 10: Report of TCP Cubic — Data Link

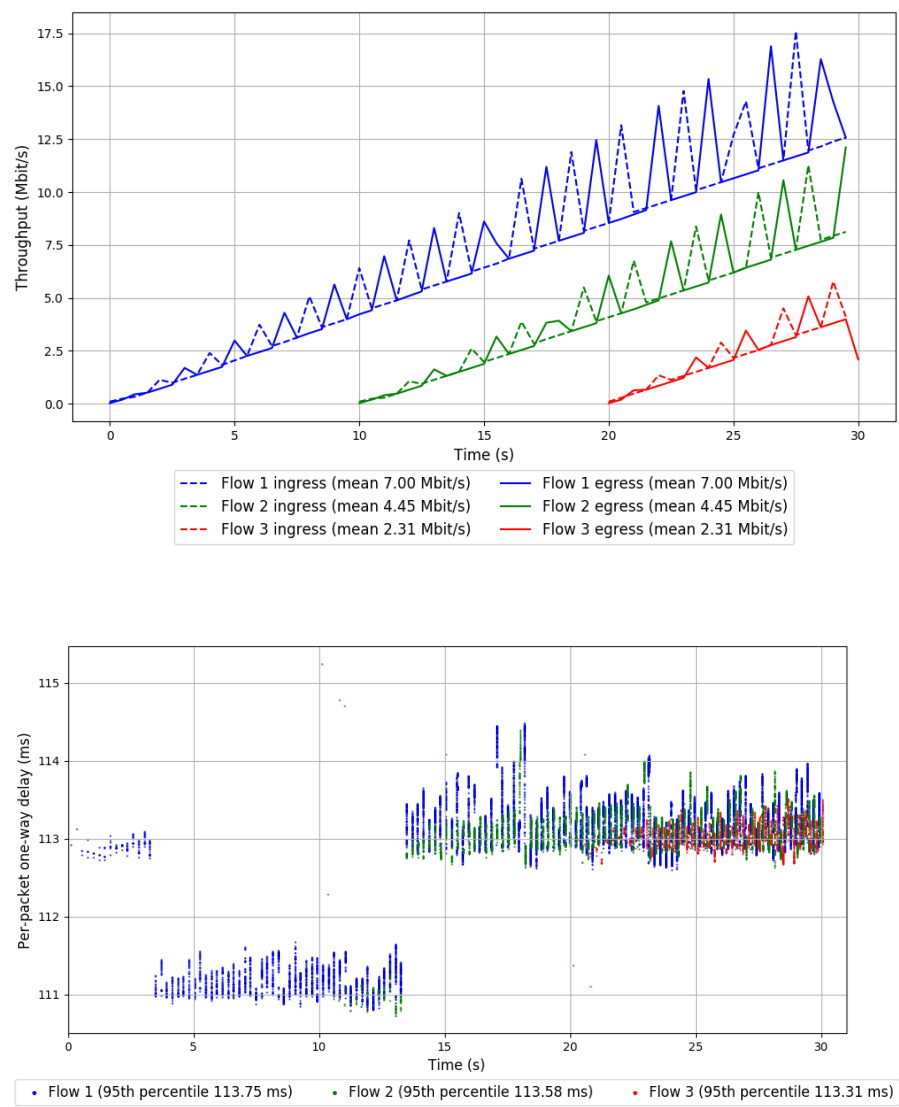


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-17 02:15:10
End at: 2018-02-17 02:15:40

# Below is generated by plot.py at 2018-02-17 07:42:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.68 Mbit/s
95th percentile per-packet one-way delay: 113.707 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.00 Mbit/s
95th percentile per-packet one-way delay: 113.755 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.45 Mbit/s
95th percentile per-packet one-way delay: 113.583 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 113.314 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

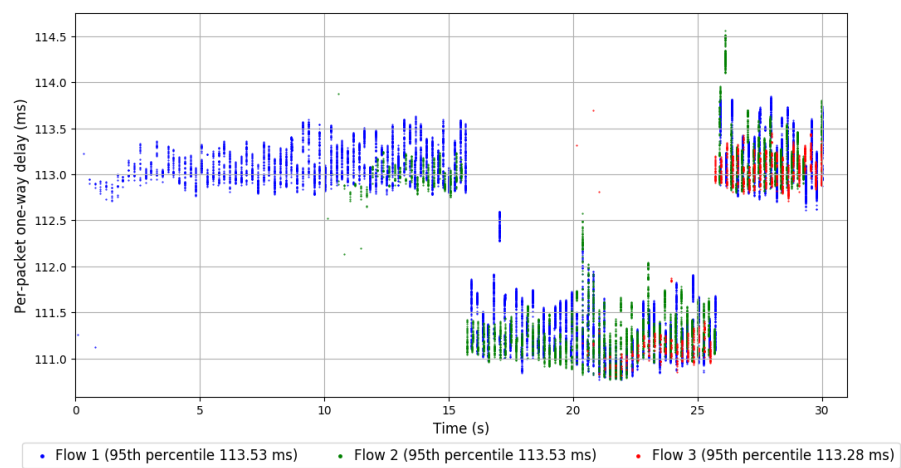
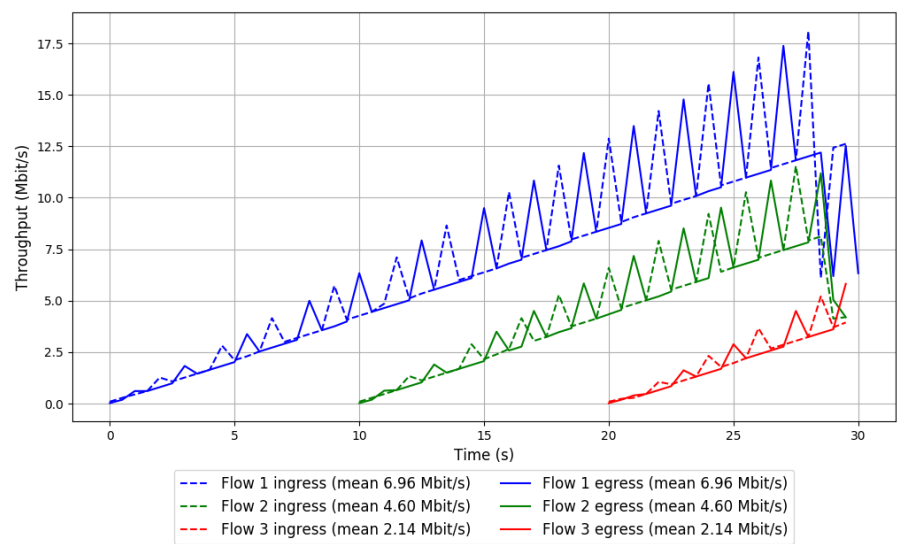


```
Run 2: Statistics of LEDBAT

Start at: 2018-02-17 02:34:38
End at: 2018-02-17 02:35:08

# Below is generated by plot.py at 2018-02-17 07:42:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.72 Mbit/s
95th percentile per-packet one-way delay: 113.520 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.96 Mbit/s
95th percentile per-packet one-way delay: 113.532 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.60 Mbit/s
95th percentile per-packet one-way delay: 113.526 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 113.279 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-17 02:54:39

End at: 2018-02-17 02:55:09

Below is generated by plot.py at 2018-02-17 07:42:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.14 Mbit/s

95th percentile per-packet one-way delay: 113.313 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.07 Mbit/s

95th percentile per-packet one-way delay: 113.332 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.50 Mbit/s

95th percentile per-packet one-way delay: 113.318 ms

Loss rate: 0.00%

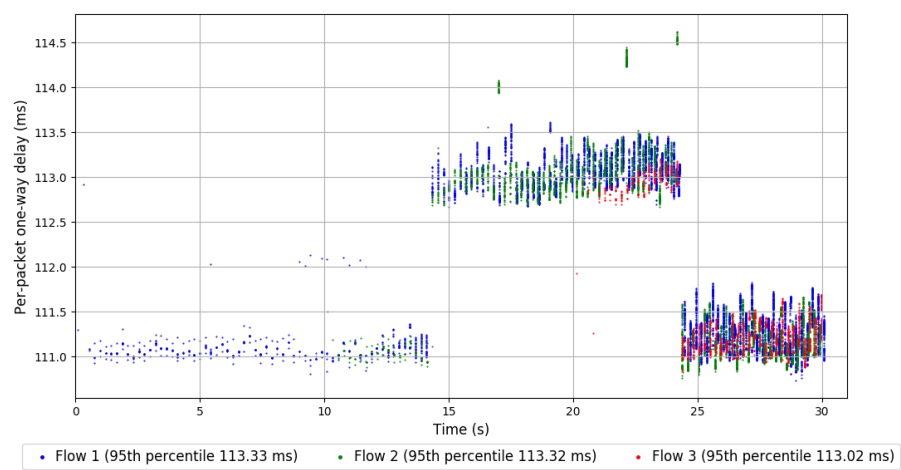
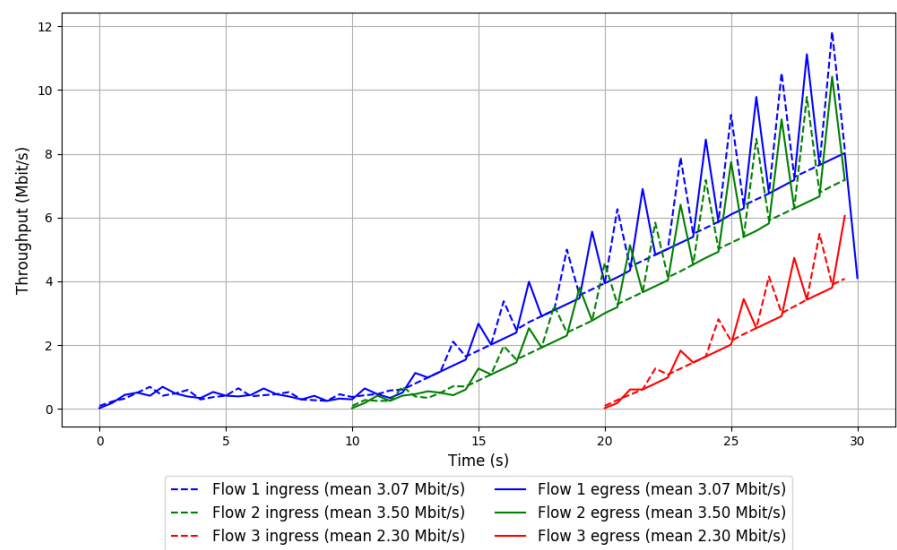
-- Flow 3:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 113.021 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-17 03:14:18

End at: 2018-02-17 03:14:48

Below is generated by plot.py at 2018-02-17 07:42:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.41 Mbit/s

95th percentile per-packet one-way delay: 113.545 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.43 Mbit/s

95th percentile per-packet one-way delay: 113.606 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.83 Mbit/s

95th percentile per-packet one-way delay: 113.427 ms

Loss rate: 0.00%

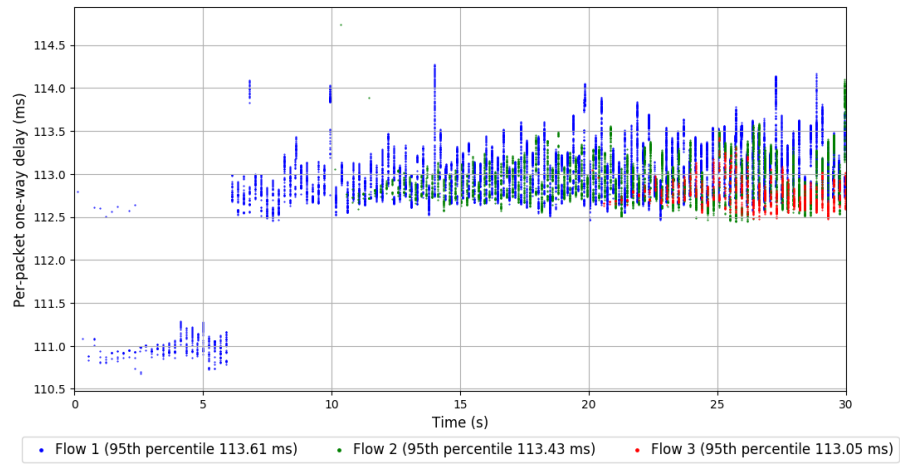
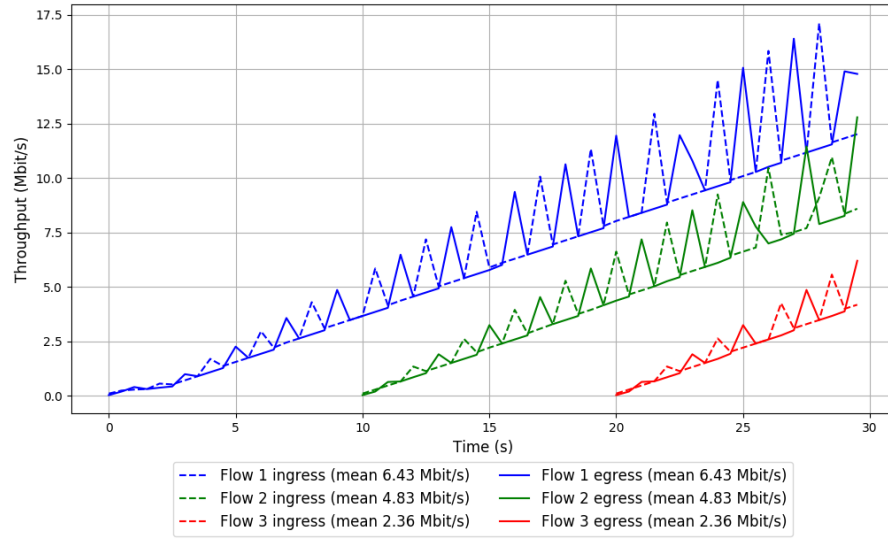
-- Flow 3:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 113.046 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-17 03:33:59

End at: 2018-02-17 03:34:29

Below is generated by plot.py at 2018-02-17 07:42:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.19 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.35 Mbit/s

95th percentile per-packet one-way delay: 112.678 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.17 Mbit/s

95th percentile per-packet one-way delay: 112.885 ms

Loss rate: 0.00%

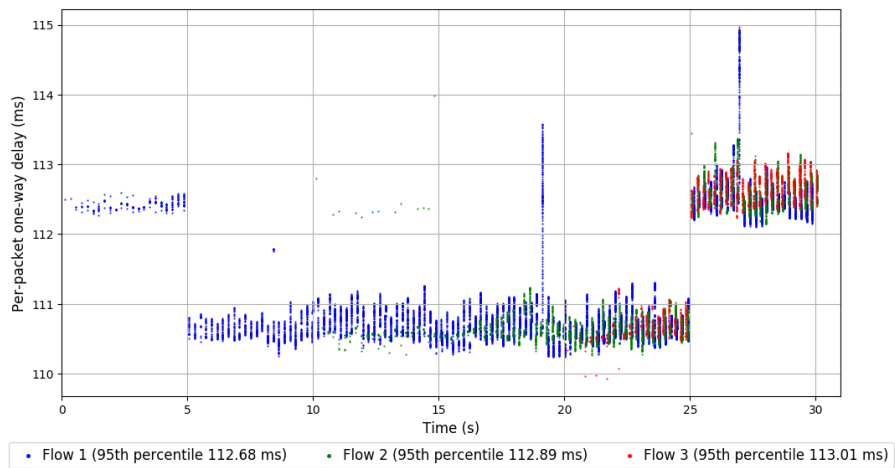
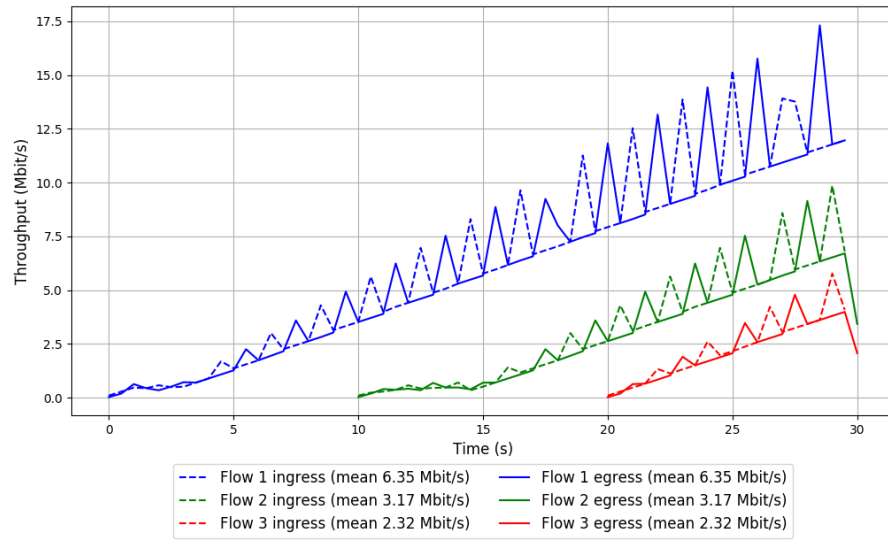
-- Flow 3:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 113.009 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-17 03:53:50

End at: 2018-02-17 03:54:20

Below is generated by plot.py at 2018-02-17 07:42:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.99 Mbit/s

95th percentile per-packet one-way delay: 113.099 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.04 Mbit/s

95th percentile per-packet one-way delay: 113.170 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.81 Mbit/s

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

Loss rate: 0.00%

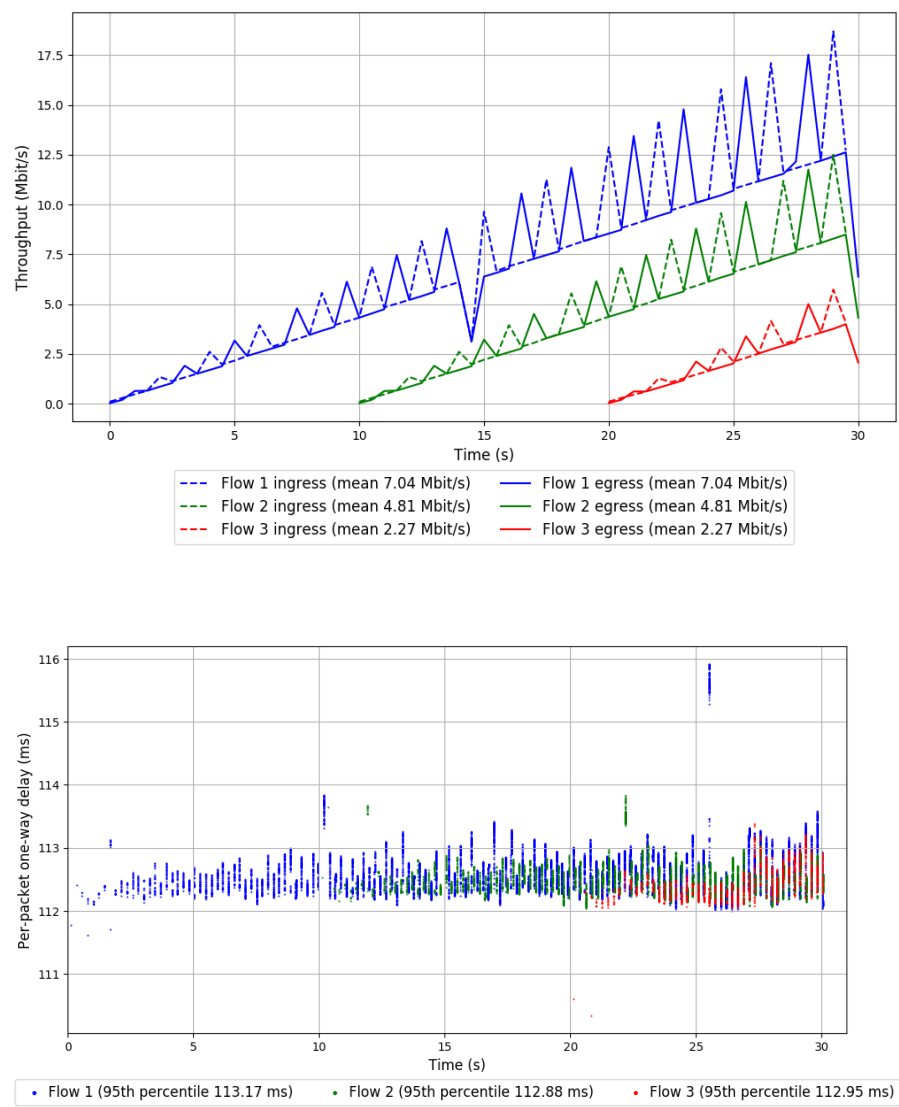
-- Flow 3:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 112.949 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-02-17 04:13:24

End at: 2018-02-17 04:13:54

Below is generated by plot.py at 2018-02-17 07:42:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.19 Mbit/s

95th percentile per-packet one-way delay: 114.107 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.90 Mbit/s

95th percentile per-packet one-way delay: 114.176 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.84 Mbit/s

95th percentile per-packet one-way delay: 113.538 ms

Loss rate: 0.00%

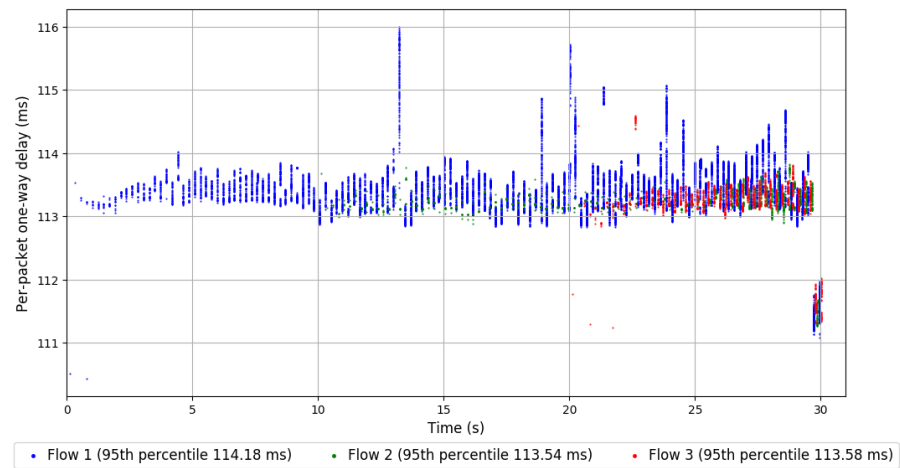
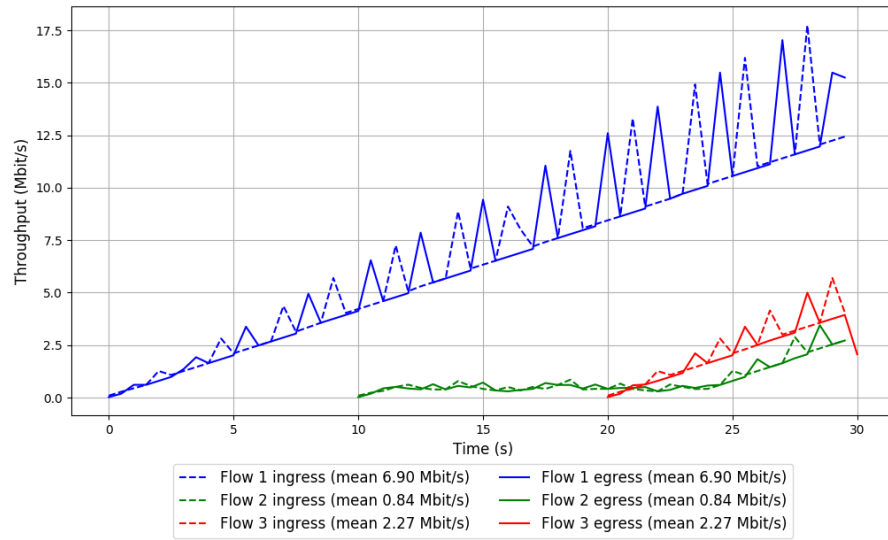
-- Flow 3:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 113.582 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-17 04:33:01

End at: 2018-02-17 04:33:31

Below is generated by plot.py at 2018-02-17 07:42:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.05 Mbit/s

95th percentile per-packet one-way delay: 113.911 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.29 Mbit/s

95th percentile per-packet one-way delay: 114.011 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.81 Mbit/s

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

Loss rate: 0.00%

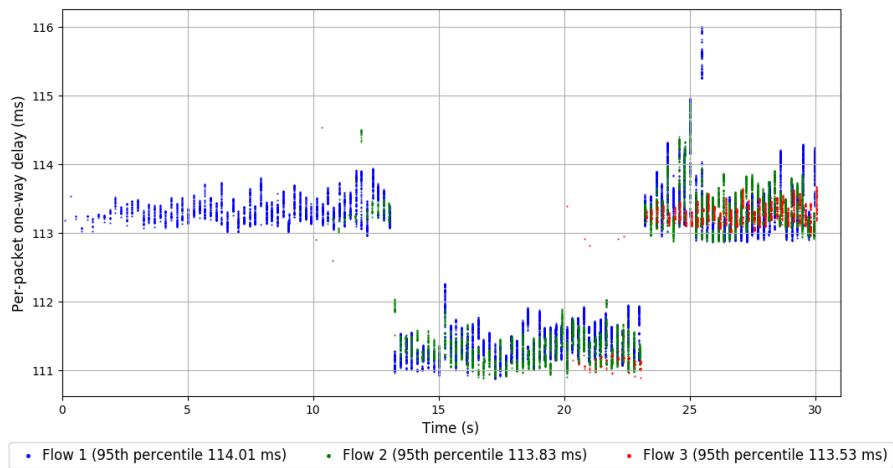
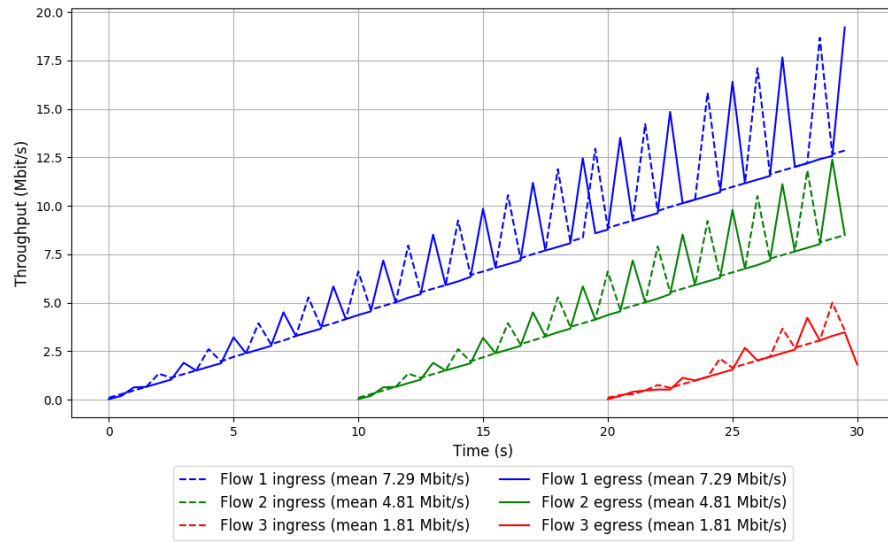
-- Flow 3:

Average throughput: 1.81 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-17 04:52:54

End at: 2018-02-17 04:53:24

Below is generated by plot.py at 2018-02-17 07:42:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.21 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.14 Mbit/s

95th percentile per-packet one-way delay: 113.490 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.53 Mbit/s

95th percentile per-packet one-way delay: 113.559 ms

Loss rate: 0.00%

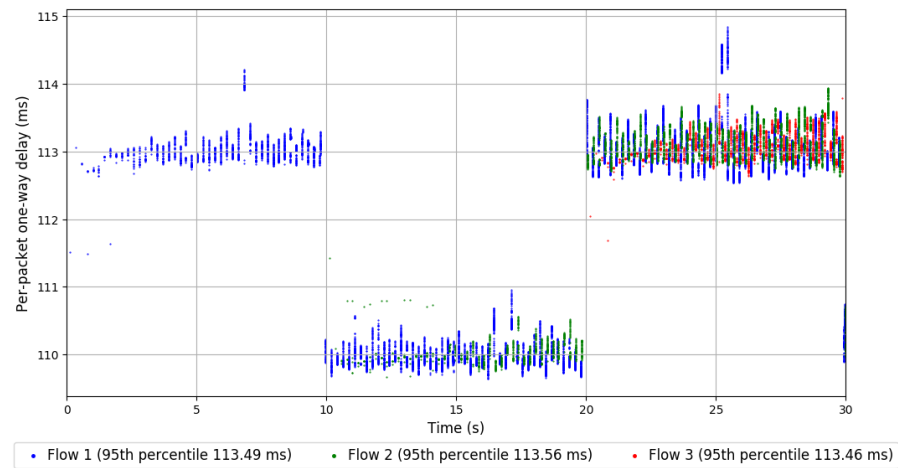
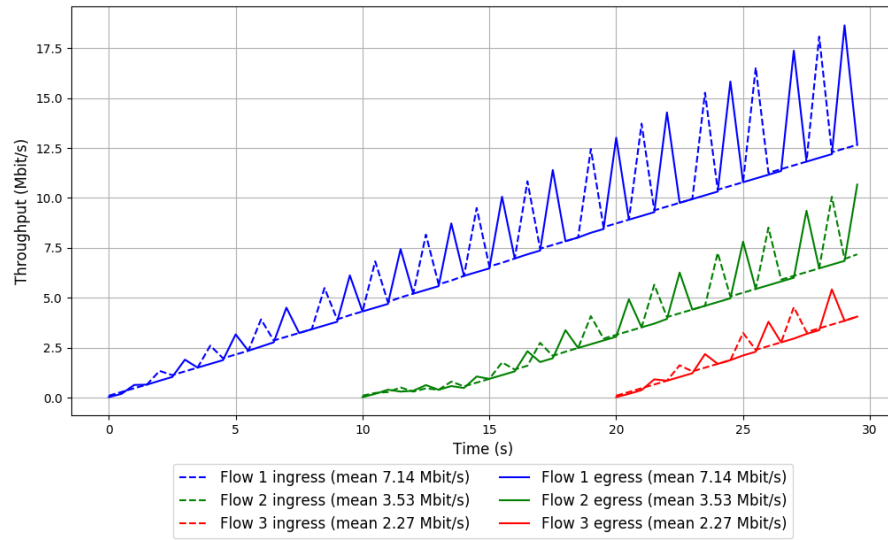
-- Flow 3:

Average throughput: 2.27 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

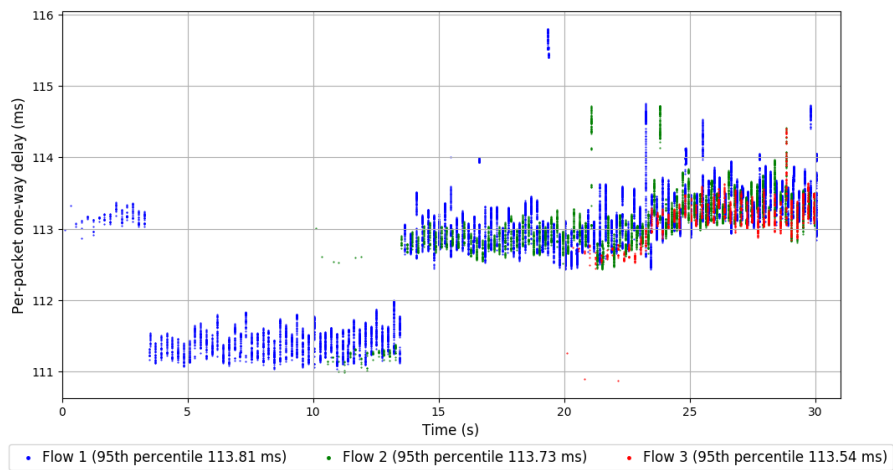
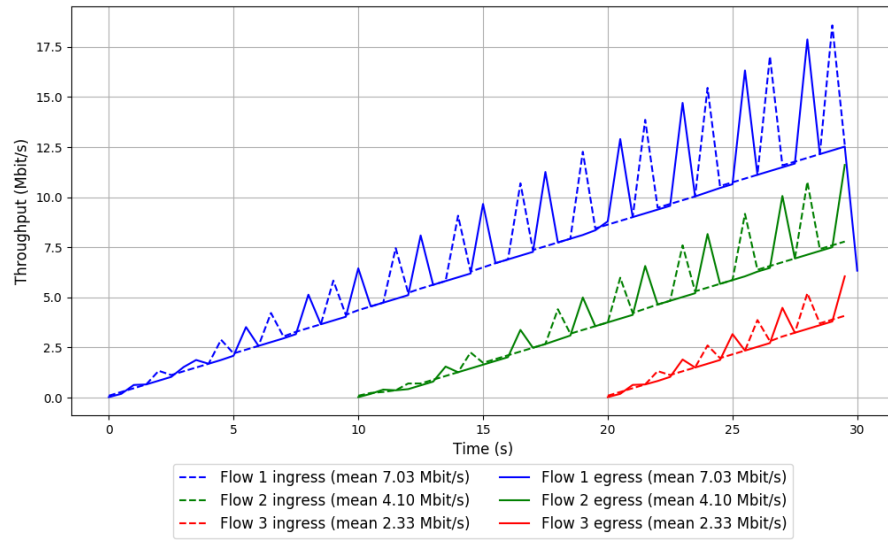


```
Run 10: Statistics of LEDBAT

Start at: 2018-02-17 05:12:50
End at: 2018-02-17 05:13:20

# Below is generated by plot.py at 2018-02-17 07:42:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.51 Mbit/s
95th percentile per-packet one-way delay: 113.771 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.03 Mbit/s
95th percentile per-packet one-way delay: 113.807 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 113.726 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 113.538 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

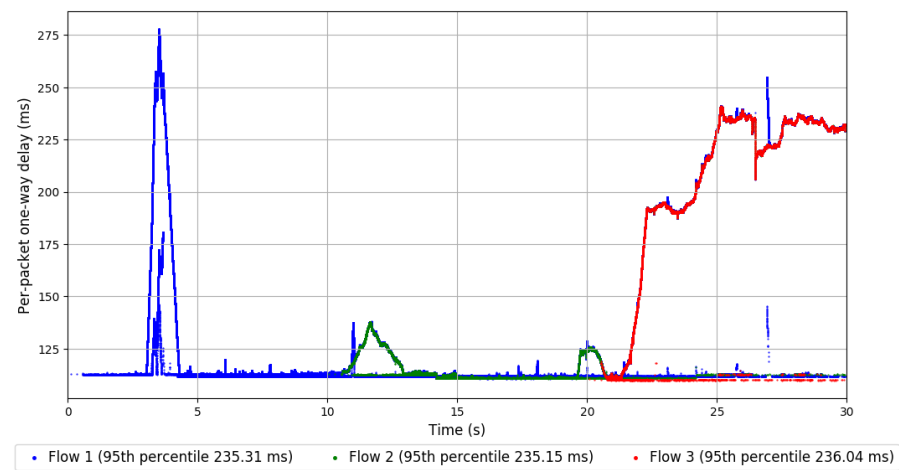
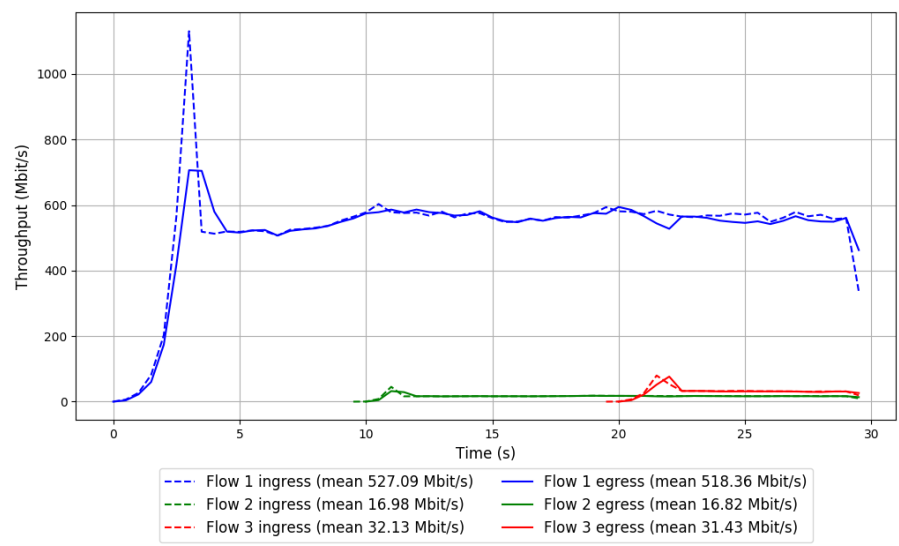


```
Run 1: Statistics of PCC

Start at: 2018-02-17 02:16:49
End at: 2018-02-17 02:17:19

# Below is generated by plot.py at 2018-02-17 07:49:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 539.95 Mbit/s
95th percentile per-packet one-way delay: 235.336 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 518.36 Mbit/s
95th percentile per-packet one-way delay: 235.307 ms
Loss rate: 1.65%
-- Flow 2:
Average throughput: 16.82 Mbit/s
95th percentile per-packet one-way delay: 235.153 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 31.43 Mbit/s
95th percentile per-packet one-way delay: 236.044 ms
Loss rate: 2.19%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

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

End at: 2018-02-17 02:36:47

Below is generated by plot.py at 2018-02-17 07:49:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 546.55 Mbit/s

95th percentile per-packet one-way delay: 239.158 ms

Loss rate: 2.26%

-- Flow 1:

Average throughput: 533.28 Mbit/s

95th percentile per-packet one-way delay: 239.150 ms

Loss rate: 2.25%

-- Flow 2:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 237.794 ms

Loss rate: 1.66%

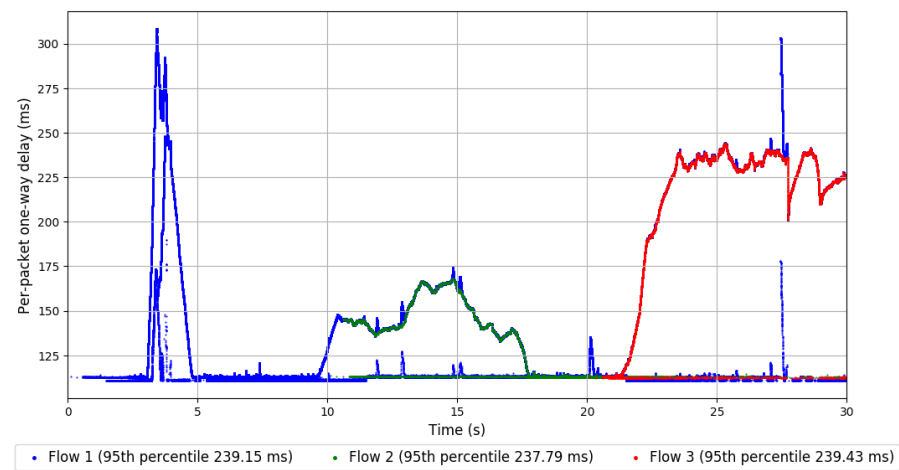
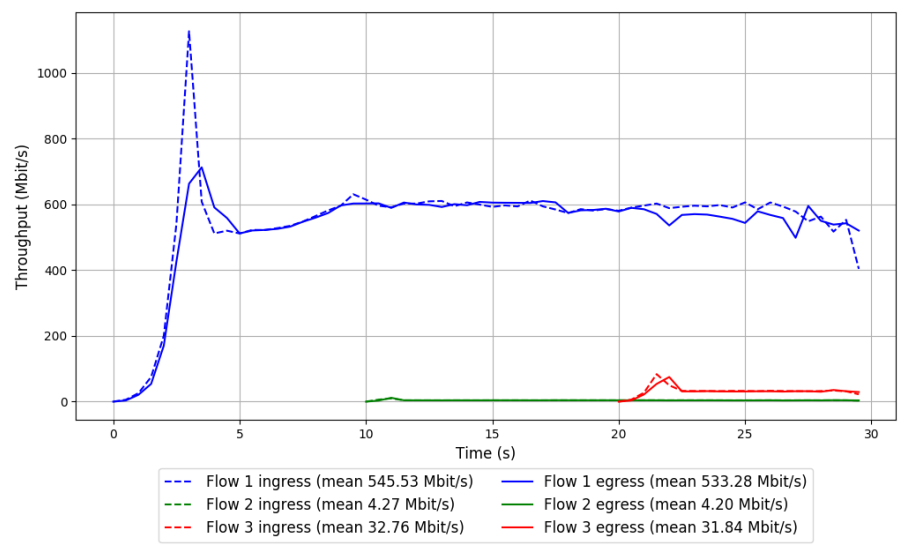
-- Flow 3:

Average throughput: 31.84 Mbit/s

95th percentile per-packet one-way delay: 239.428 ms

Loss rate: 2.80%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-17 02:56:18

End at: 2018-02-17 02:56:48

Below is generated by plot.py at 2018-02-17 07:49:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 530.57 Mbit/s

95th percentile per-packet one-way delay: 241.086 ms

Loss rate: 2.58%

-- Flow 1:

Average throughput: 499.46 Mbit/s

95th percentile per-packet one-way delay: 241.037 ms

Loss rate: 2.52%

-- Flow 2:

Average throughput: 17.04 Mbit/s

95th percentile per-packet one-way delay: 240.967 ms

Loss rate: 2.02%

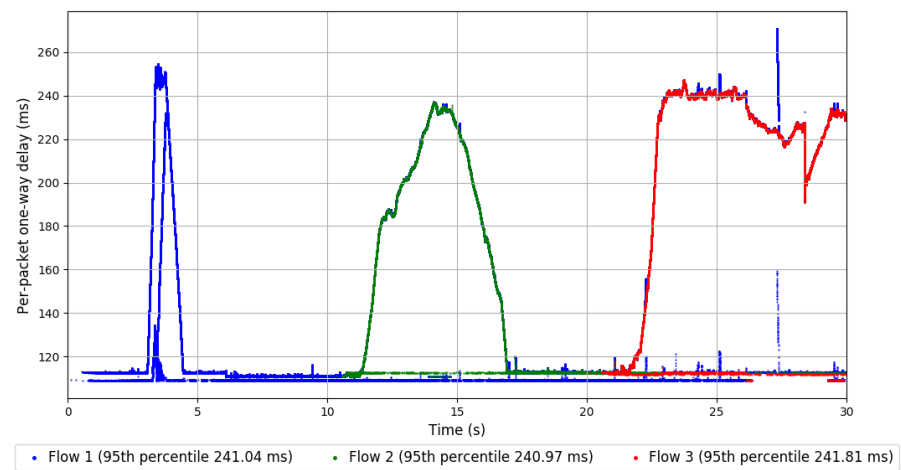
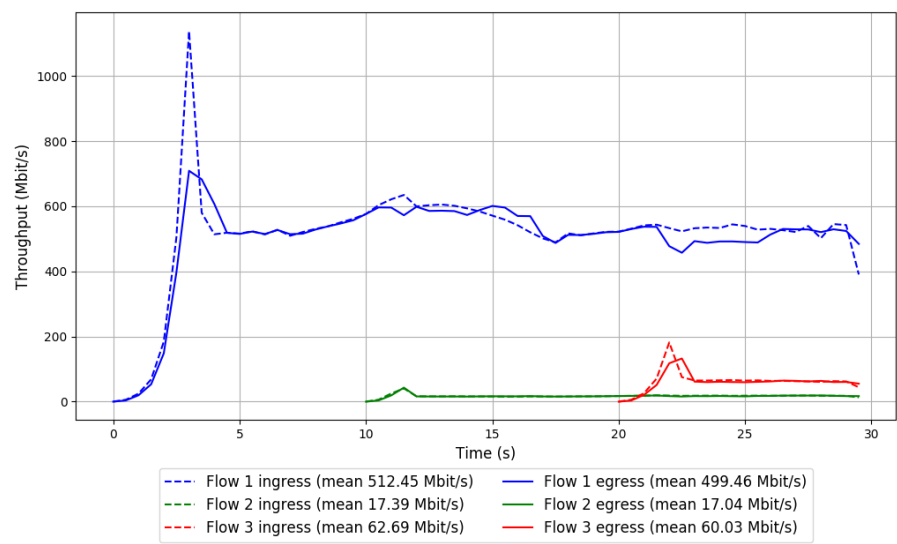
-- Flow 3:

Average throughput: 60.03 Mbit/s

95th percentile per-packet one-way delay: 241.807 ms

Loss rate: 4.24%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-02-17 03:15:56

End at: 2018-02-17 03:16:26

Below is generated by plot.py at 2018-02-17 07:49:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 496.17 Mbit/s

95th percentile per-packet one-way delay: 230.576 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 452.07 Mbit/s

95th percentile per-packet one-way delay: 230.659 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 65.07 Mbit/s

95th percentile per-packet one-way delay: 229.843 ms

Loss rate: 0.06%

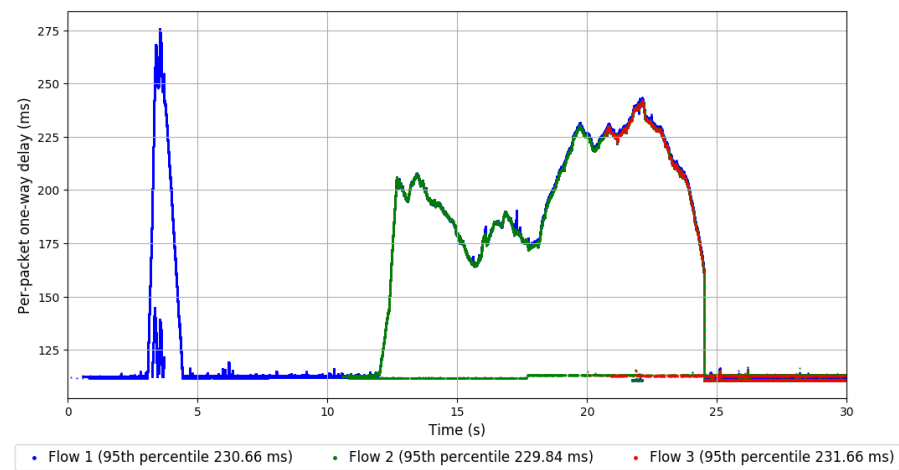
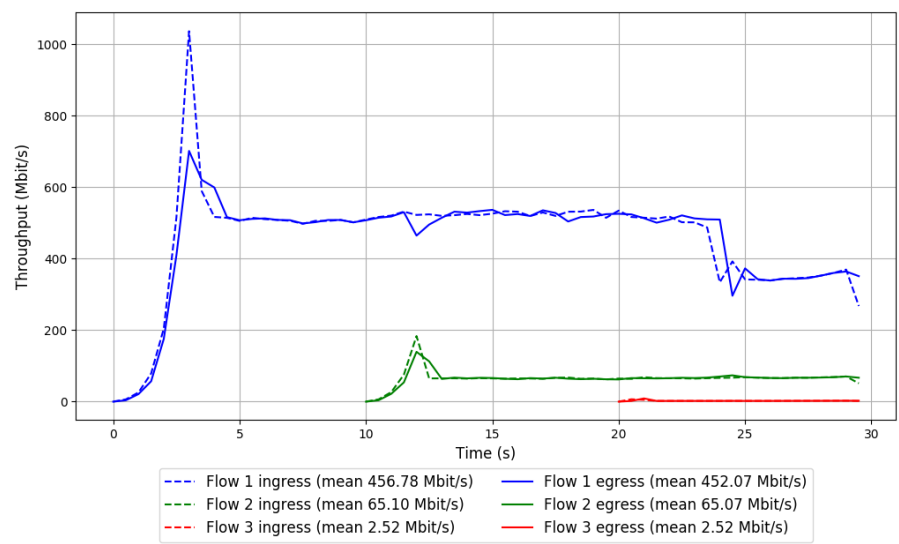
-- Flow 3:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 231.662 ms

Loss rate: 0.00%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-17 03:35:37

End at: 2018-02-17 03:36:07

Below is generated by plot.py at 2018-02-17 07:49:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 529.61 Mbit/s

95th percentile per-packet one-way delay: 240.600 ms

Loss rate: 1.48%

-- Flow 1:

Average throughput: 525.26 Mbit/s

95th percentile per-packet one-way delay: 240.615 ms

Loss rate: 1.49%

-- Flow 2:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 240.201 ms

Loss rate: 0.88%

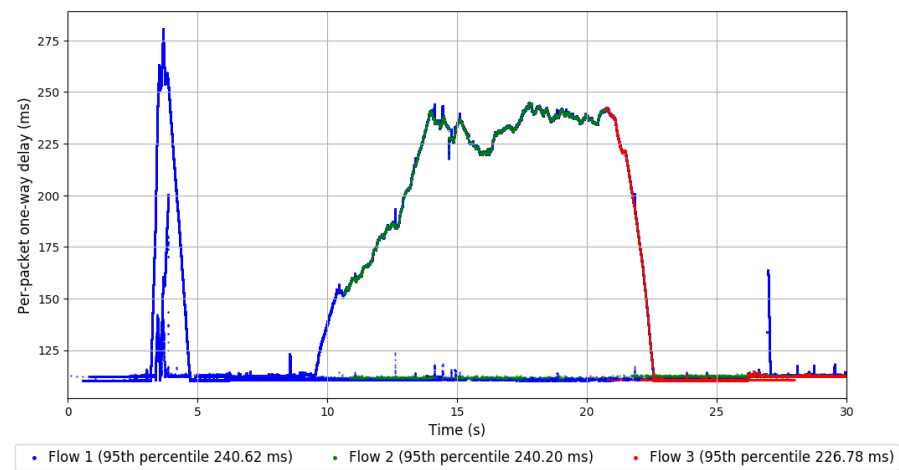
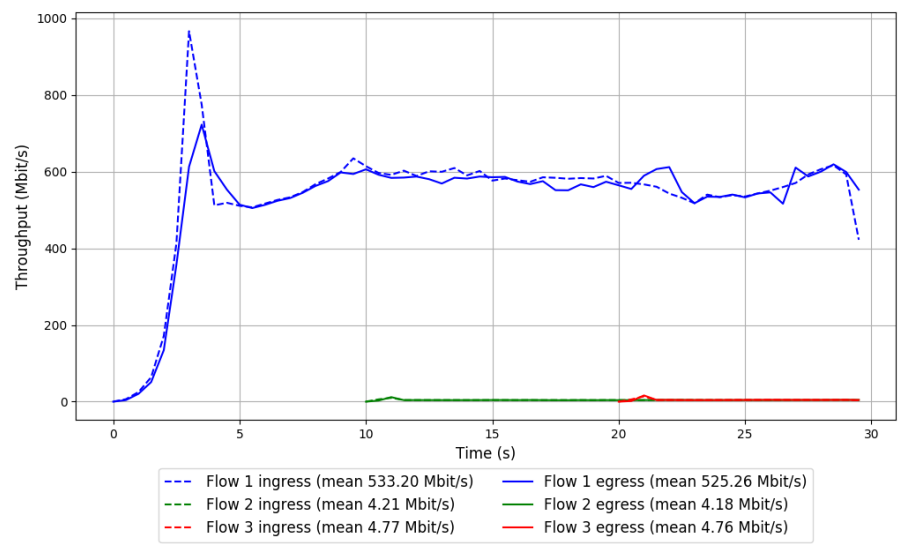
-- Flow 3:

Average throughput: 4.76 Mbit/s

95th percentile per-packet one-way delay: 226.776 ms

Loss rate: 0.13%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-17 03:55:29

End at: 2018-02-17 03:55:59

Below is generated by plot.py at 2018-02-17 07:50:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 530.94 Mbit/s

95th percentile per-packet one-way delay: 232.774 ms

Loss rate: 1.94%

-- Flow 1:

Average throughput: 499.52 Mbit/s

95th percentile per-packet one-way delay: 232.656 ms

Loss rate: 1.98%

-- Flow 2:

Average throughput: 16.66 Mbit/s

95th percentile per-packet one-way delay: 232.392 ms

Loss rate: 0.78%

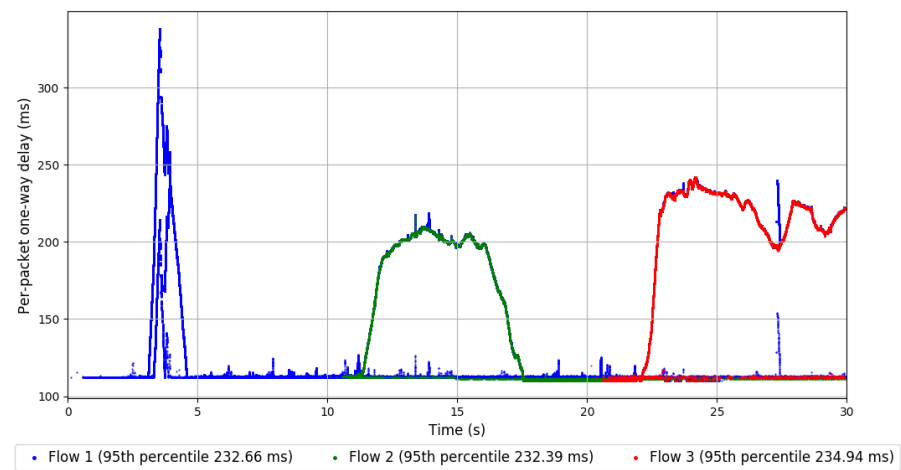
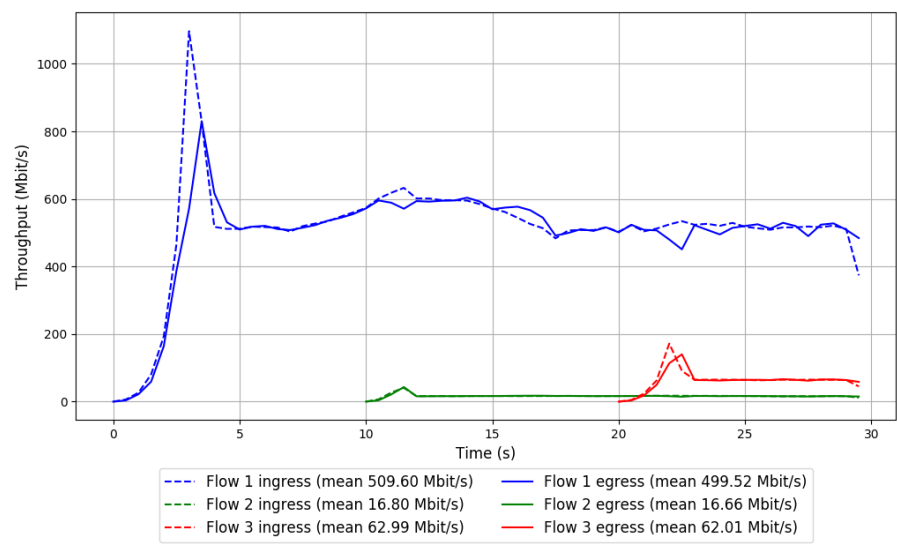
-- Flow 3:

Average throughput: 62.01 Mbit/s

95th percentile per-packet one-way delay: 234.945 ms

Loss rate: 1.61%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-02-17 04:15:04

End at: 2018-02-17 04:15:34

Below is generated by plot.py at 2018-02-17 07:50:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 539.93 Mbit/s

95th percentile per-packet one-way delay: 238.392 ms

Loss rate: 1.95%

-- Flow 1:

Average throughput: 485.86 Mbit/s

95th percentile per-packet one-way delay: 238.295 ms

Loss rate: 1.98%

-- Flow 2:

Average throughput: 65.74 Mbit/s

95th percentile per-packet one-way delay: 238.451 ms

Loss rate: 1.35%

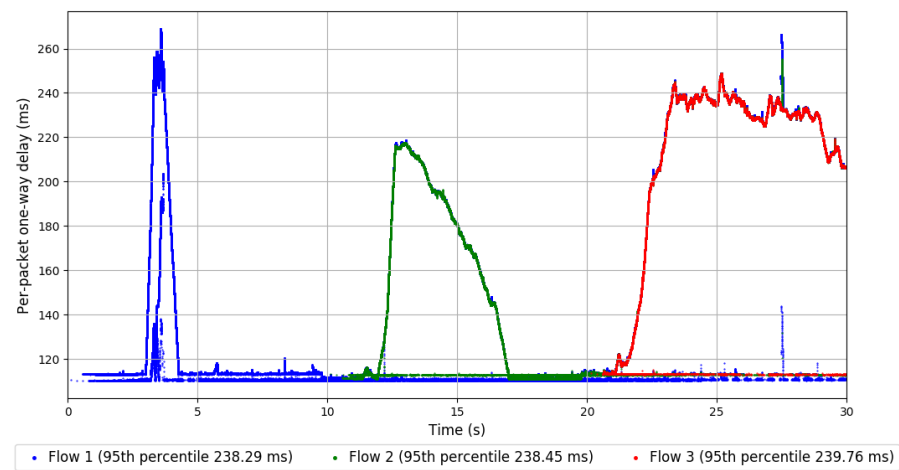
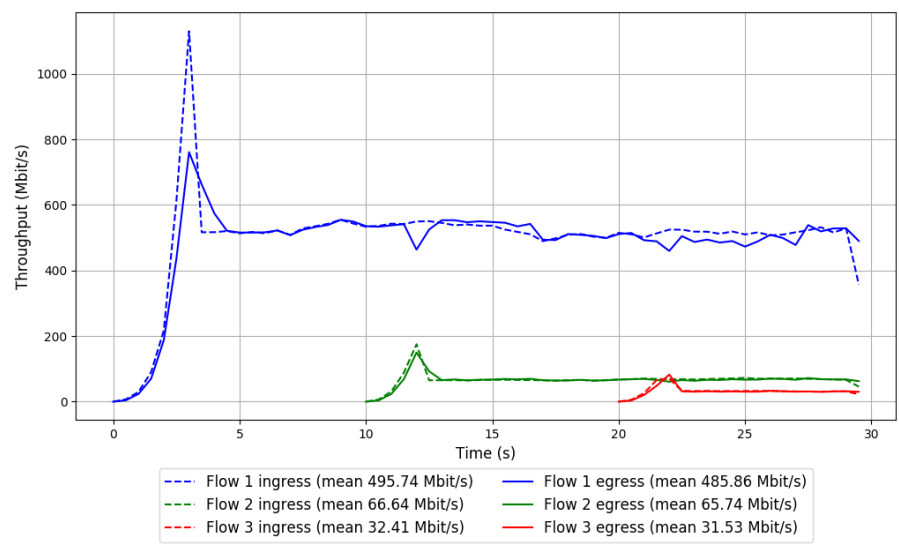
-- Flow 3:

Average throughput: 31.53 Mbit/s

95th percentile per-packet one-way delay: 239.757 ms

Loss rate: 2.72%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-17 04:34:39

End at: 2018-02-17 04:35:09

Below is generated by plot.py at 2018-02-17 07:51:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 537.98 Mbit/s

95th percentile per-packet one-way delay: 239.024 ms

Loss rate: 2.84%

-- Flow 1:

Average throughput: 487.95 Mbit/s

95th percentile per-packet one-way delay: 239.037 ms

Loss rate: 2.88%

-- Flow 2:

Average throughput: 59.56 Mbit/s

95th percentile per-packet one-way delay: 238.655 ms

Loss rate: 2.06%

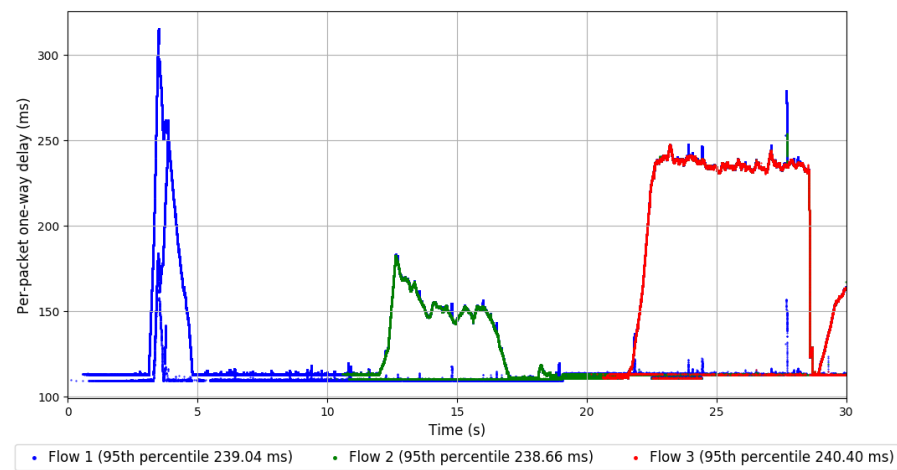
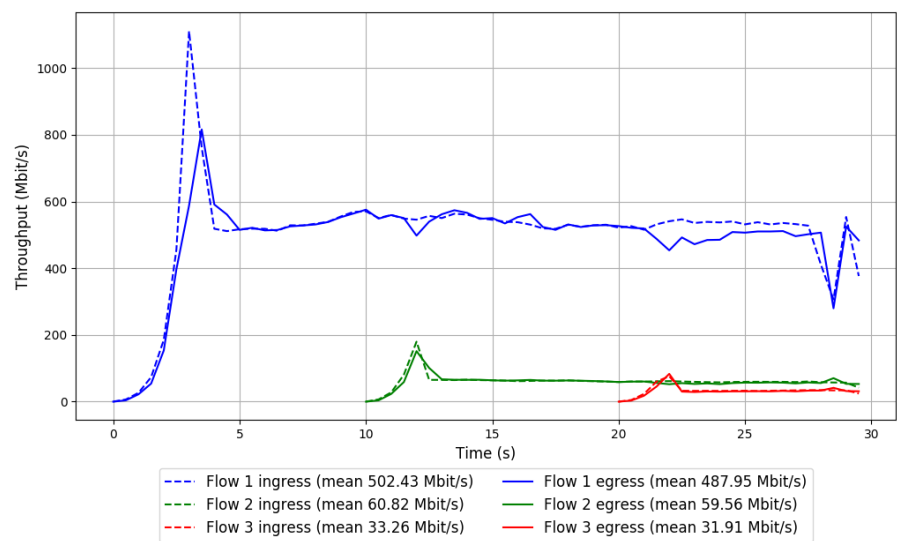
-- Flow 3:

Average throughput: 31.91 Mbit/s

95th percentile per-packet one-way delay: 240.395 ms

Loss rate: 4.07%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-17 04:54:33

End at: 2018-02-17 04:55:03

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 541.14 Mbit/s

95th percentile per-packet one-way delay: 237.669 ms

Loss rate: 2.97%

-- Flow 1:

Average throughput: 479.88 Mbit/s

95th percentile per-packet one-way delay: 237.955 ms

Loss rate: 2.94%

-- Flow 2:

Average throughput: 62.41 Mbit/s

95th percentile per-packet one-way delay: 236.306 ms

Loss rate: 2.27%

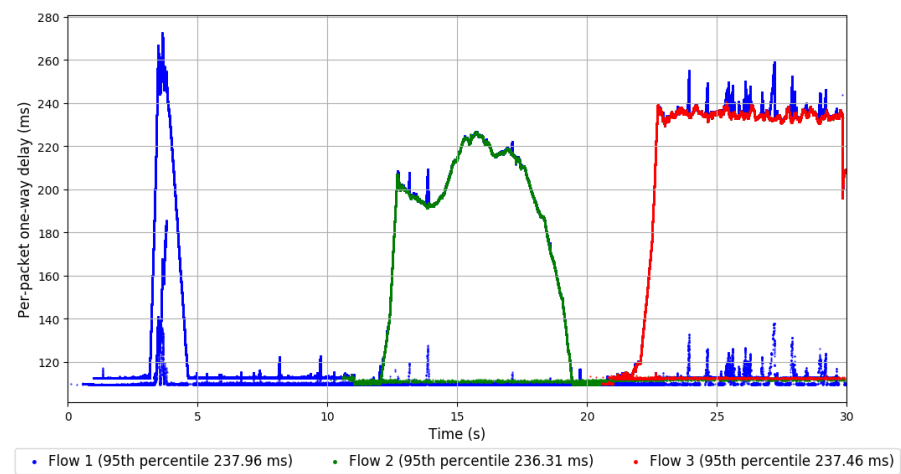
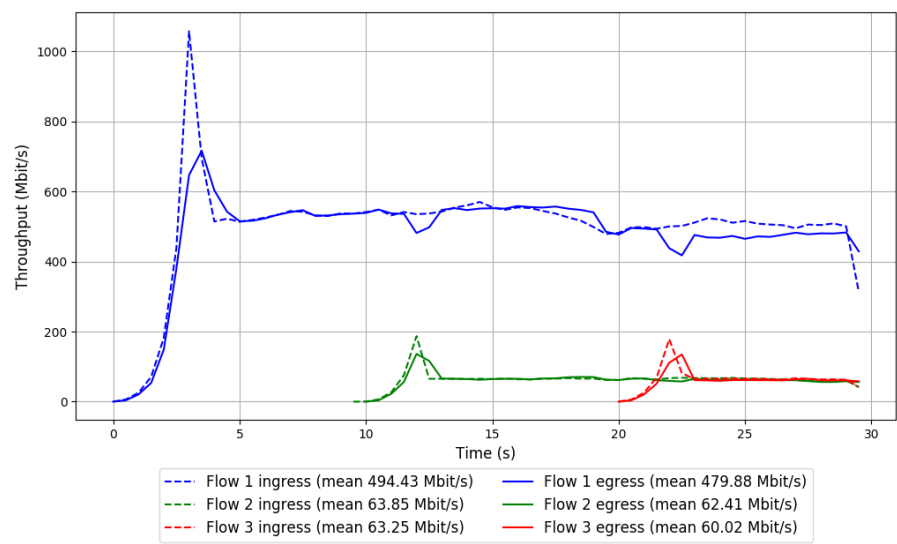
-- Flow 3:

Average throughput: 60.02 Mbit/s

95th percentile per-packet one-way delay: 237.457 ms

Loss rate: 5.13%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-02-17 05:14:29

End at: 2018-02-17 05:14:59

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 521.62 Mbit/s

95th percentile per-packet one-way delay: 242.517 ms

Loss rate: 2.50%

-- Flow 1:

Average throughput: 427.25 Mbit/s

95th percentile per-packet one-way delay: 242.538 ms

Loss rate: 2.49%

-- Flow 2:

Average throughput: 126.22 Mbit/s

95th percentile per-packet one-way delay: 242.374 ms

Loss rate: 2.52%

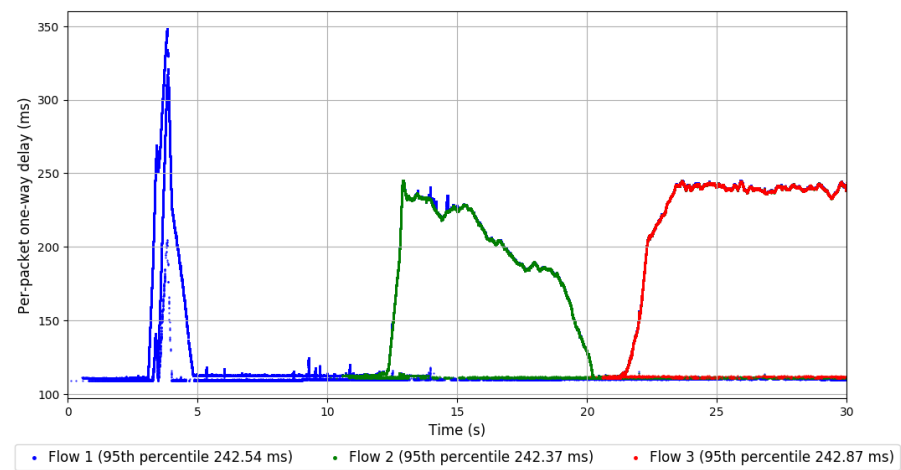
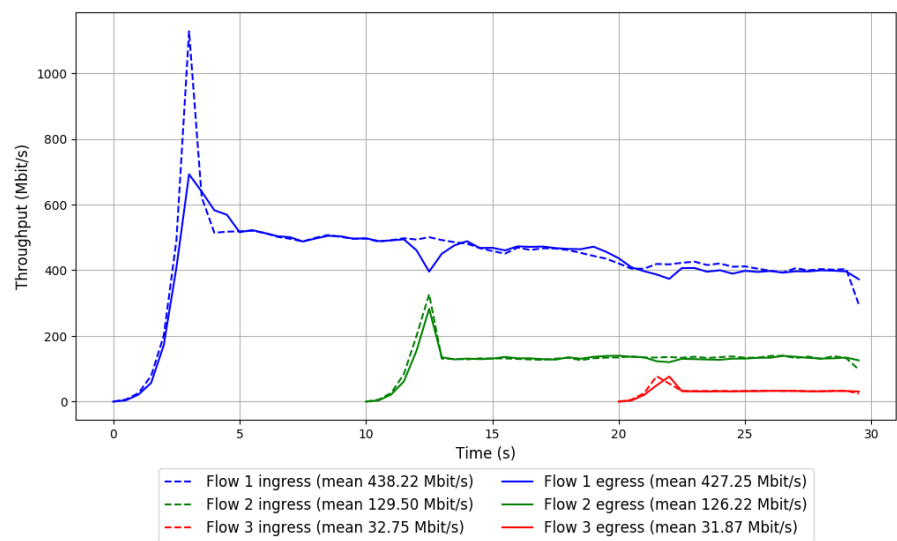
-- Flow 3:

Average throughput: 31.87 Mbit/s

95th percentile per-packet one-way delay: 242.869 ms

Loss rate: 2.64%

Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-02-17 02:15:57

End at: 2018-02-17 02:16:27

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.78 Mbit/s

95th percentile per-packet one-way delay: 112.747 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.71 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.37 Mbit/s

95th percentile per-packet one-way delay: 111.207 ms

Loss rate: 0.00%

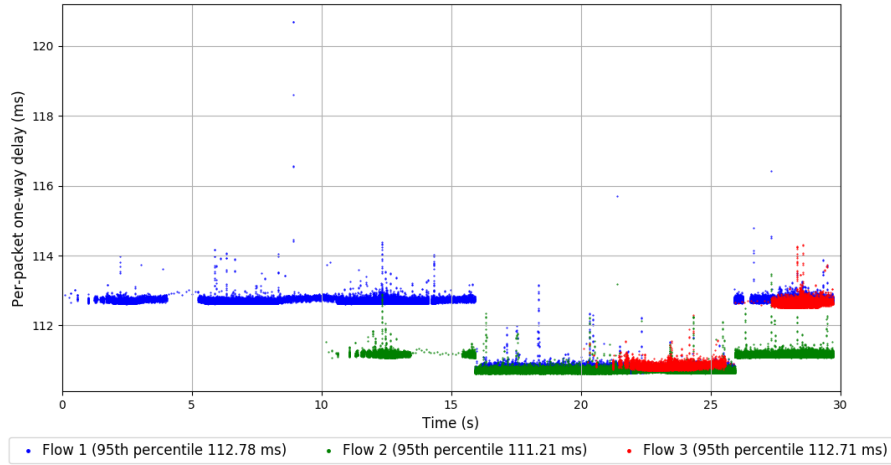
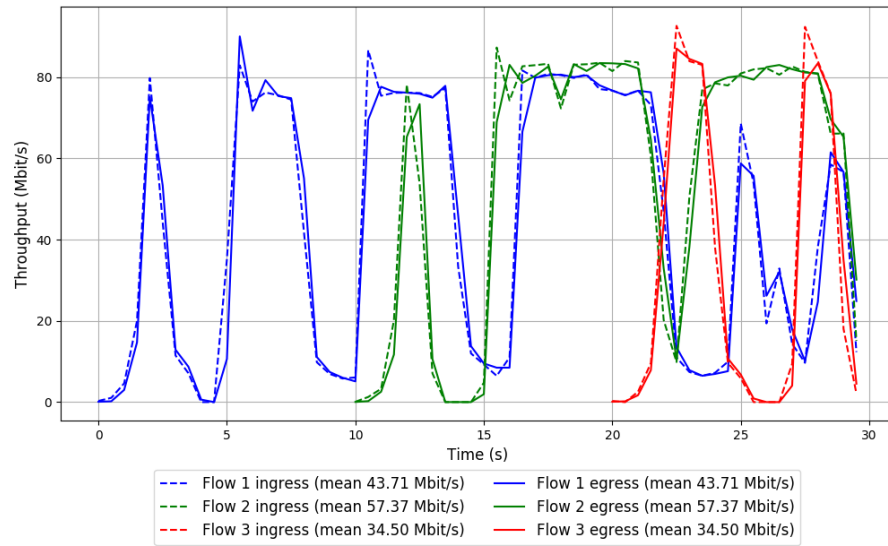
-- Flow 3:

Average throughput: 34.50 Mbit/s

95th percentile per-packet one-way delay: 112.708 ms

Loss rate: 0.00%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-17 02:35:25

End at: 2018-02-17 02:35:55

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.48 Mbit/s

95th percentile per-packet one-way delay: 113.019 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.64 Mbit/s

95th percentile per-packet one-way delay: 111.070 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.60 Mbit/s

95th percentile per-packet one-way delay: 113.058 ms

Loss rate: 0.01%

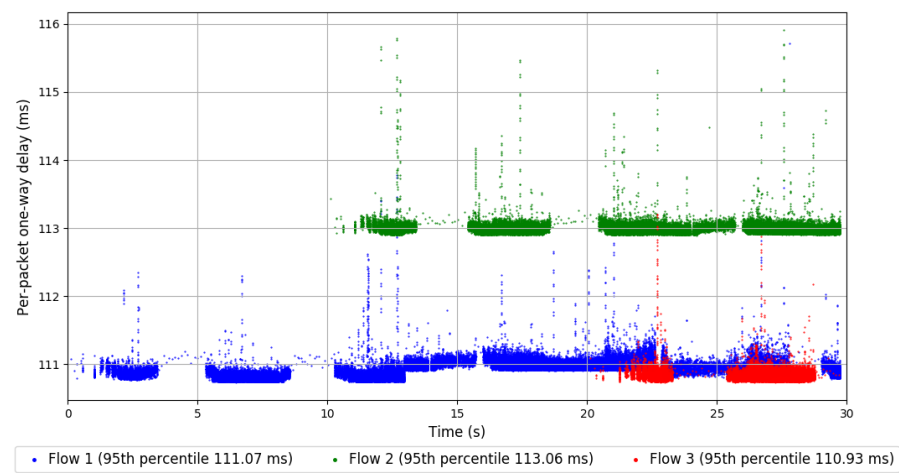
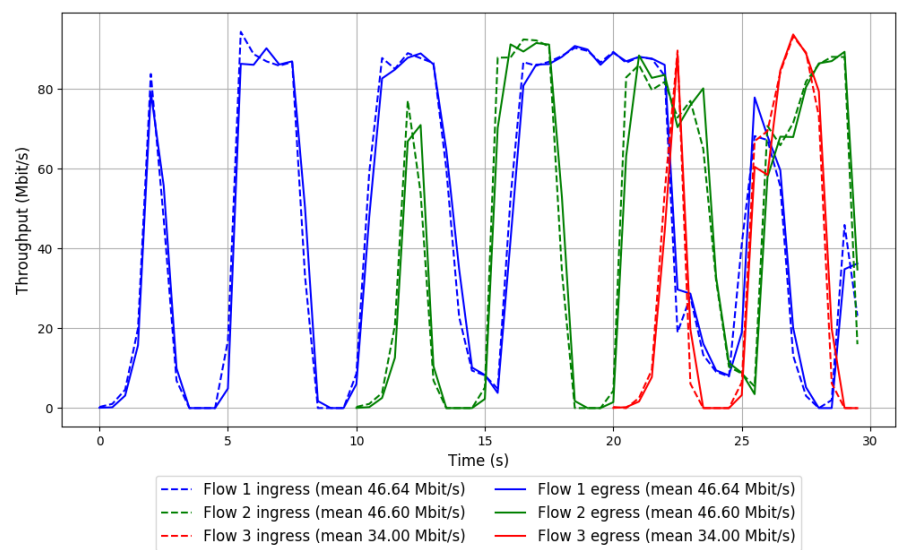
-- Flow 3:

Average throughput: 34.00 Mbit/s

95th percentile per-packet one-way delay: 110.933 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-17 02:55:26

End at: 2018-02-17 02:55:56

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.83 Mbit/s

95th percentile per-packet one-way delay: 112.059 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 50.94 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.81 Mbit/s

95th percentile per-packet one-way delay: 112.080 ms

Loss rate: 0.01%

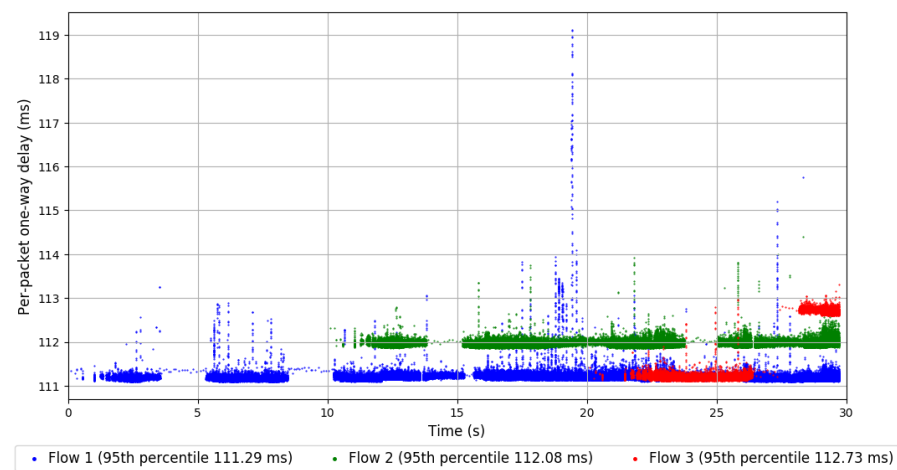
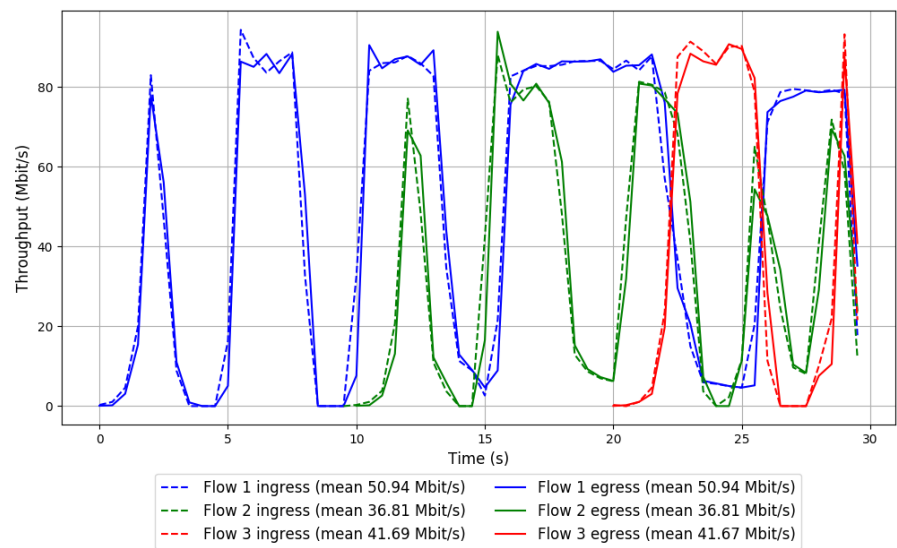
-- Flow 3:

Average throughput: 41.67 Mbit/s

95th percentile per-packet one-way delay: 112.731 ms

Loss rate: 0.05%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-17 03:15:05

End at: 2018-02-17 03:15:35

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.24 Mbit/s

95th percentile per-packet one-way delay: 113.255 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.50 Mbit/s

95th percentile per-packet one-way delay: 112.566 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.15 Mbit/s

95th percentile per-packet one-way delay: 113.303 ms

Loss rate: 0.00%

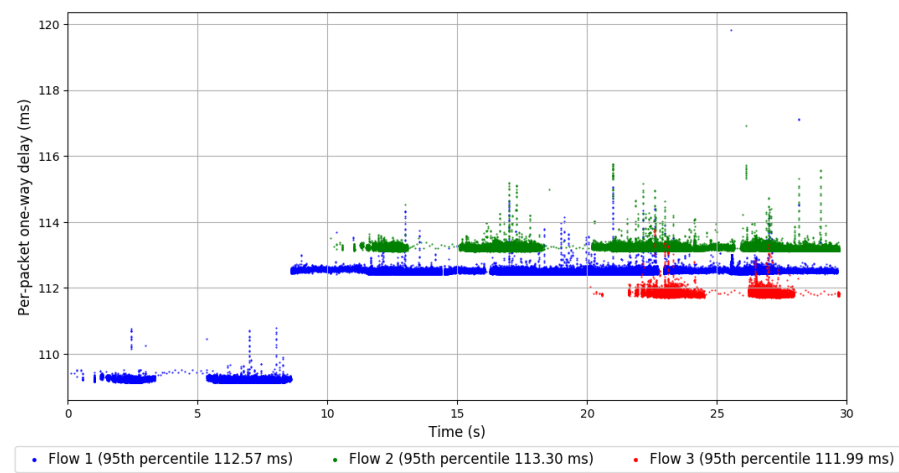
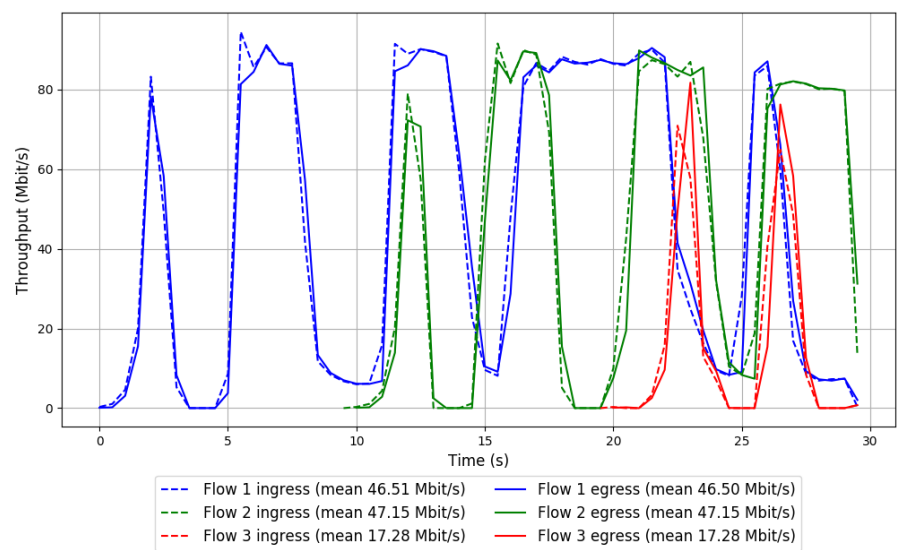
-- Flow 3:

Average throughput: 17.28 Mbit/s

95th percentile per-packet one-way delay: 111.989 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-17 03:34:46

End at: 2018-02-17 03:35:16

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.88 Mbit/s

95th percentile per-packet one-way delay: 111.697 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.52 Mbit/s

95th percentile per-packet one-way delay: 111.723 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.40 Mbit/s

95th percentile per-packet one-way delay: 110.655 ms

Loss rate: 0.00%

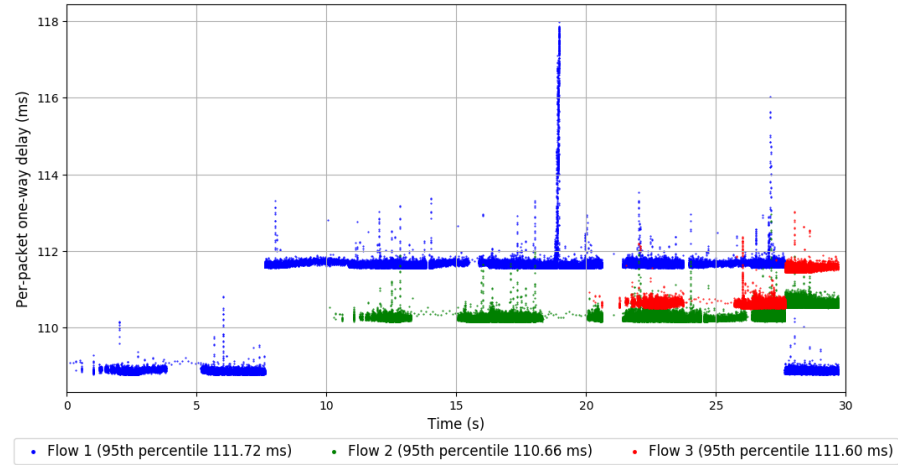
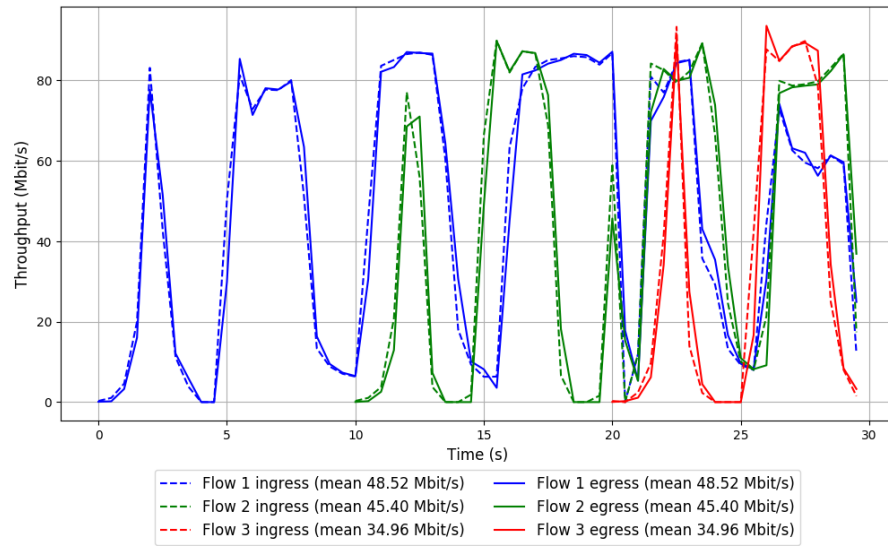
-- Flow 3:

Average throughput: 34.96 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-17 03:54:37

End at: 2018-02-17 03:55:07

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.90 Mbit/s

95th percentile per-packet one-way delay: 112.485 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 51.86 Mbit/s

95th percentile per-packet one-way delay: 112.301 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.71 Mbit/s

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

Loss rate: 0.02%

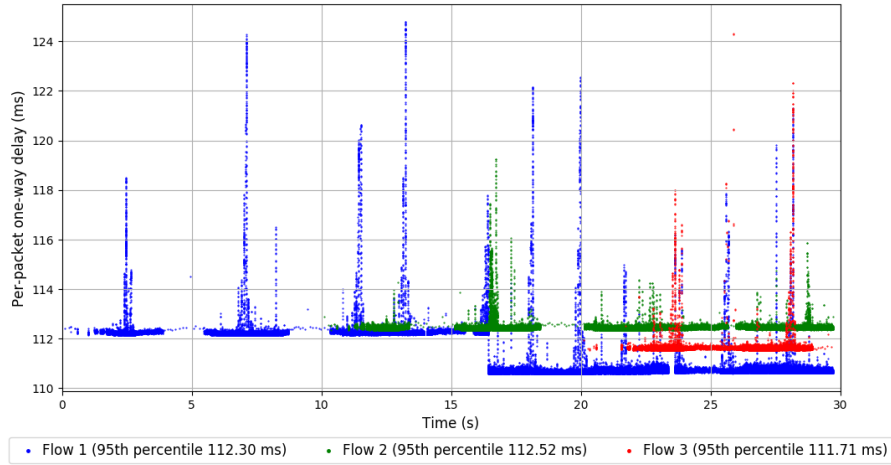
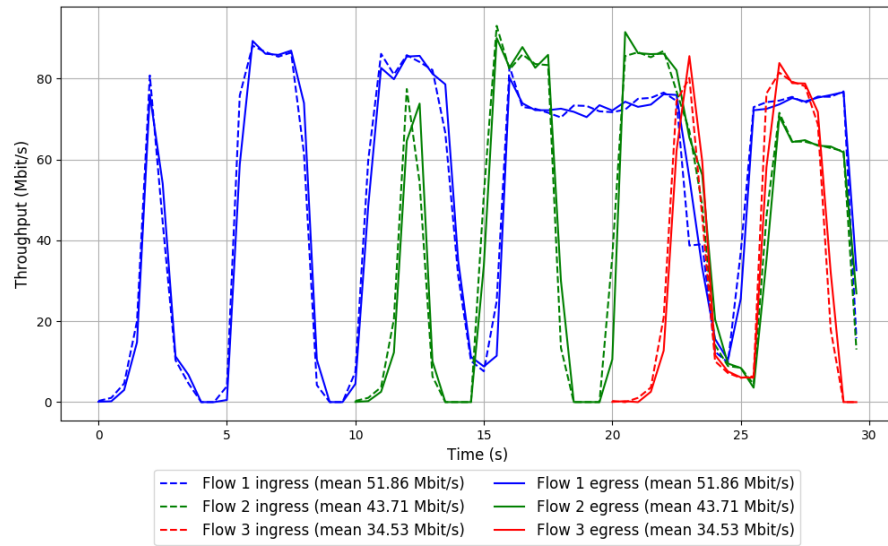
-- Flow 3:

Average throughput: 34.53 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-17 04:14:12

End at: 2018-02-17 04:14:42

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.98 Mbit/s

95th percentile per-packet one-way delay: 113.363 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 52.94 Mbit/s

95th percentile per-packet one-way delay: 111.393 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.42 Mbit/s

95th percentile per-packet one-way delay: 113.415 ms

Loss rate: 0.02%

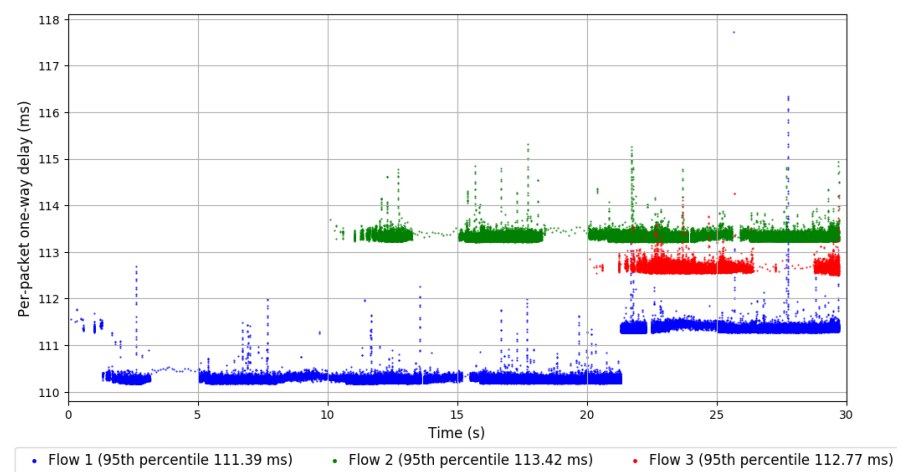
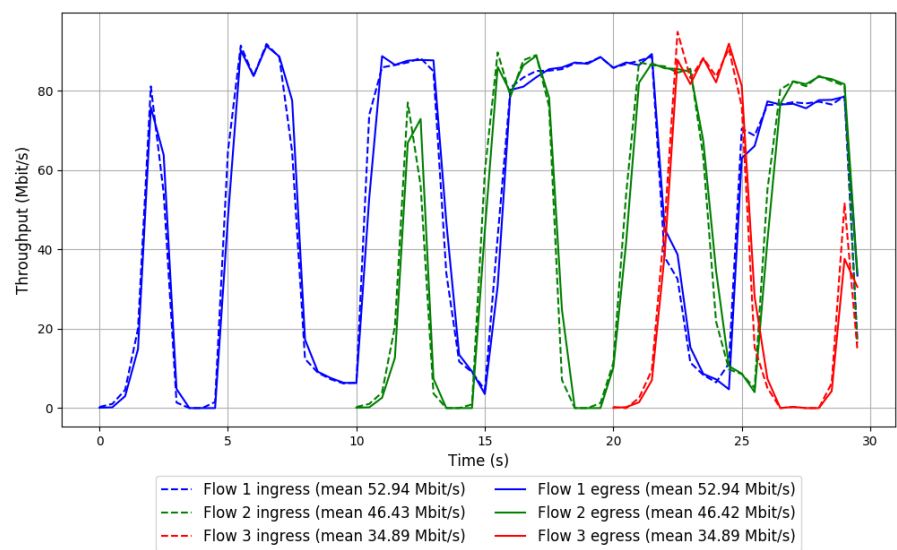
-- Flow 3:

Average throughput: 34.89 Mbit/s

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

Loss rate: 0.03%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-17 04:33:48

End at: 2018-02-17 04:34:18

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.73 Mbit/s

95th percentile per-packet one-way delay: 113.076 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 52.54 Mbit/s

95th percentile per-packet one-way delay: 113.098 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 46.71 Mbit/s

95th percentile per-packet one-way delay: 112.979 ms

Loss rate: 0.02%

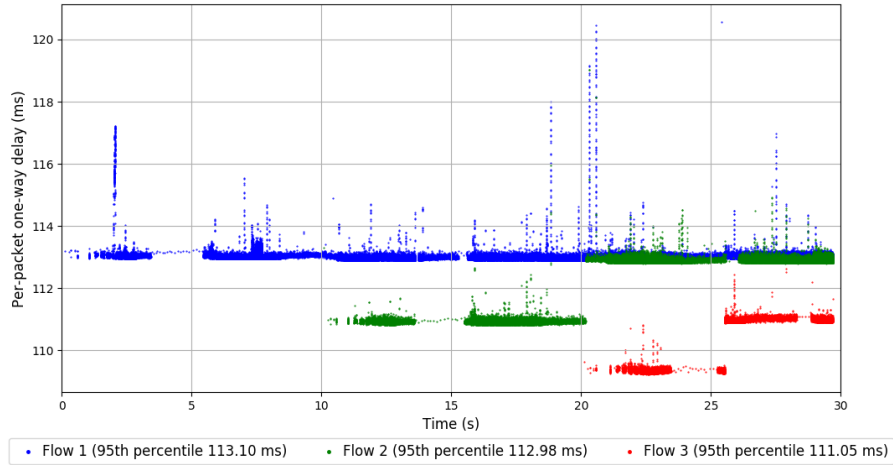
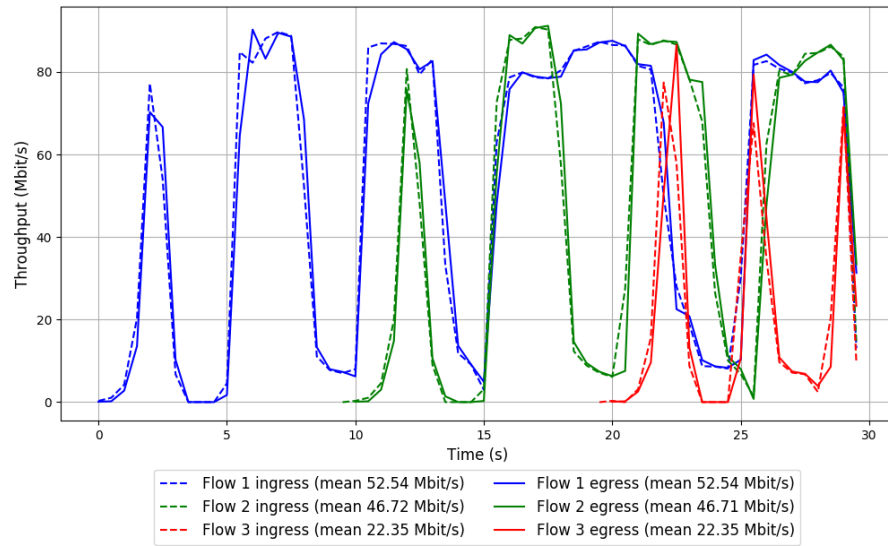
-- Flow 3:

Average throughput: 22.35 Mbit/s

95th percentile per-packet one-way delay: 111.051 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-17 04:53:41

End at: 2018-02-17 04:54:11

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.11 Mbit/s

95th percentile per-packet one-way delay: 112.543 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 51.72 Mbit/s

95th percentile per-packet one-way delay: 112.512 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 41.49 Mbit/s

95th percentile per-packet one-way delay: 112.585 ms

Loss rate: 0.01%

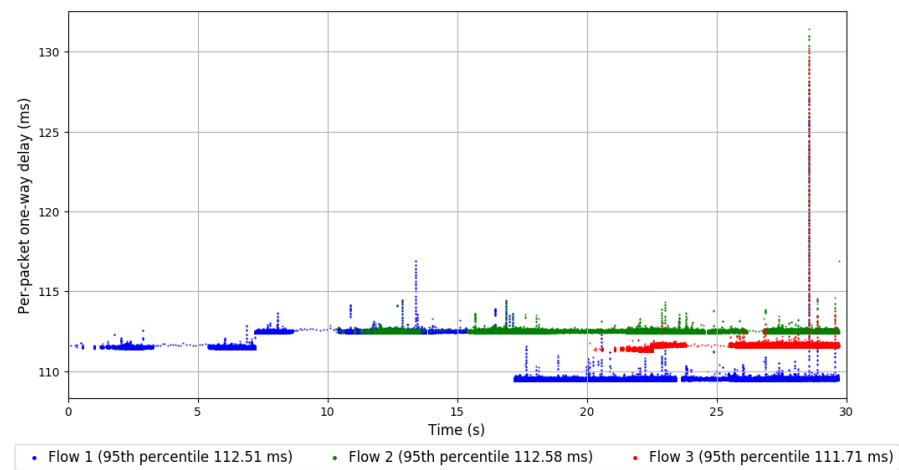
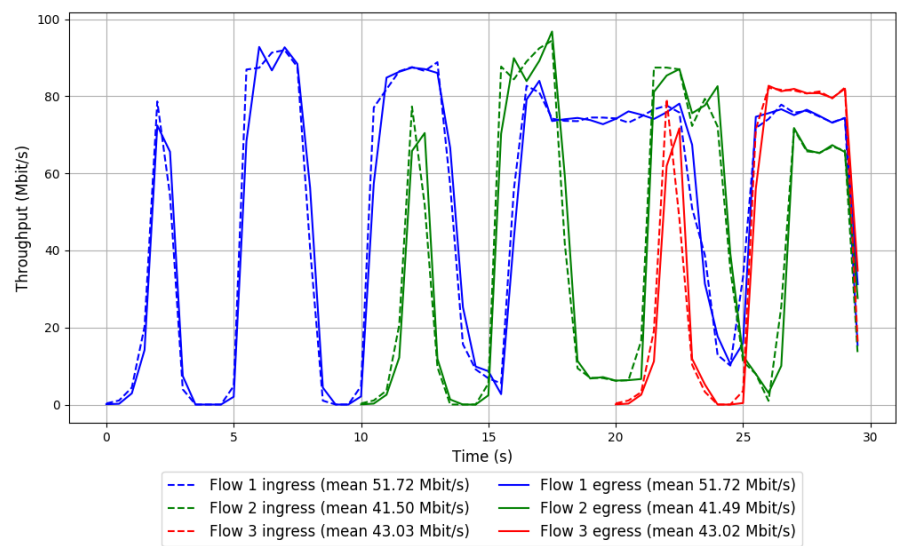
-- Flow 3:

Average throughput: 43.02 Mbit/s

95th percentile per-packet one-way delay: 111.711 ms

Loss rate: 0.01%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-02-17 05:13:38

End at: 2018-02-17 05:14:08

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.23 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 52.44 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 52.18 Mbit/s

95th percentile per-packet one-way delay: 110.997 ms

Loss rate: 0.00%

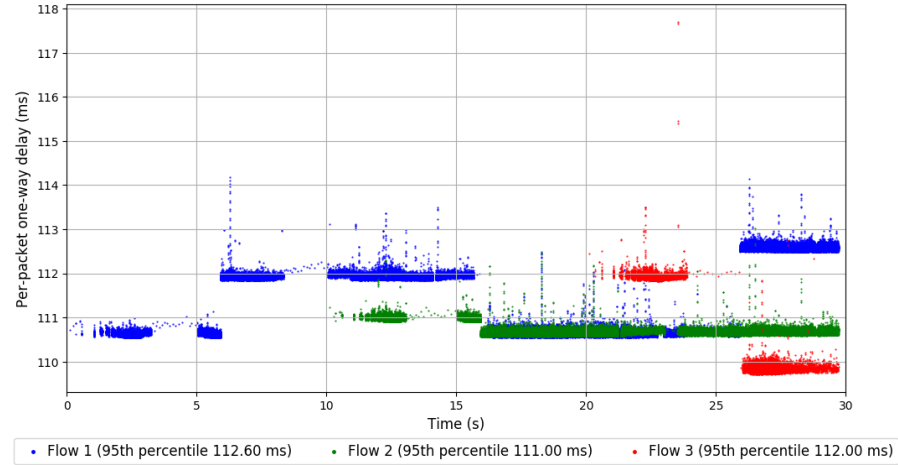
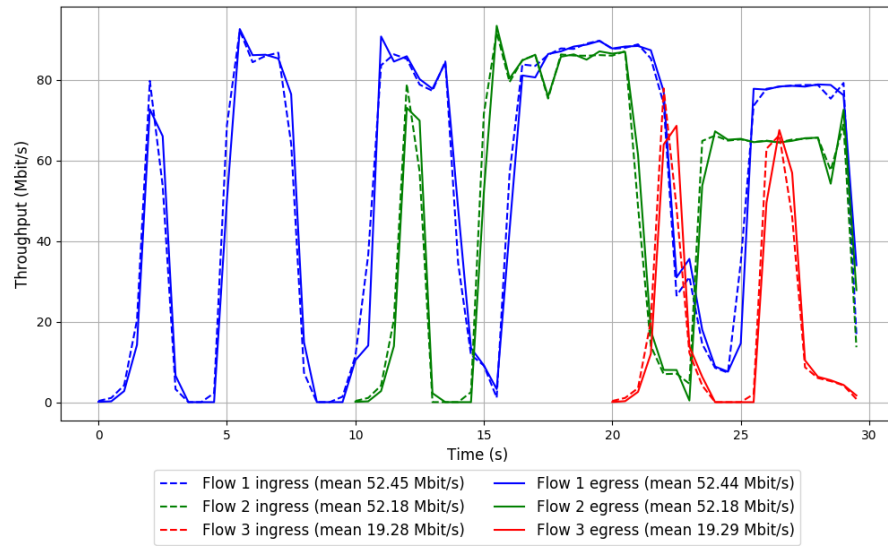
-- Flow 3:

Average throughput: 19.29 Mbit/s

95th percentile per-packet one-way delay: 112.005 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

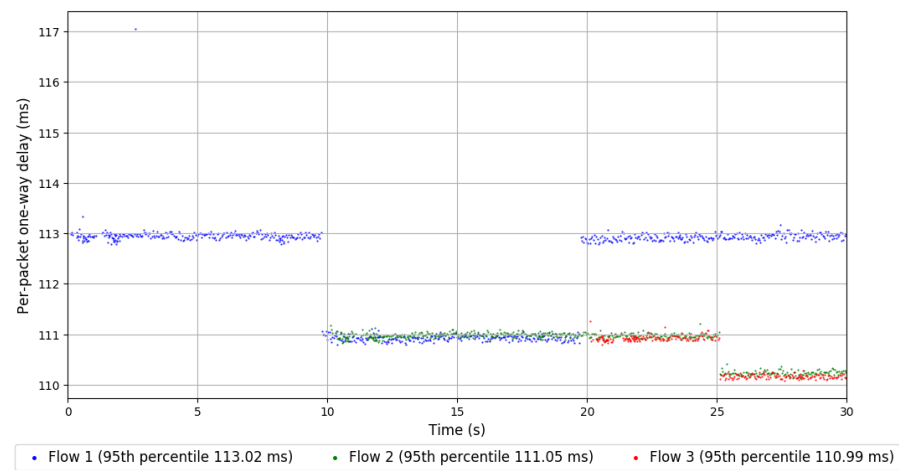
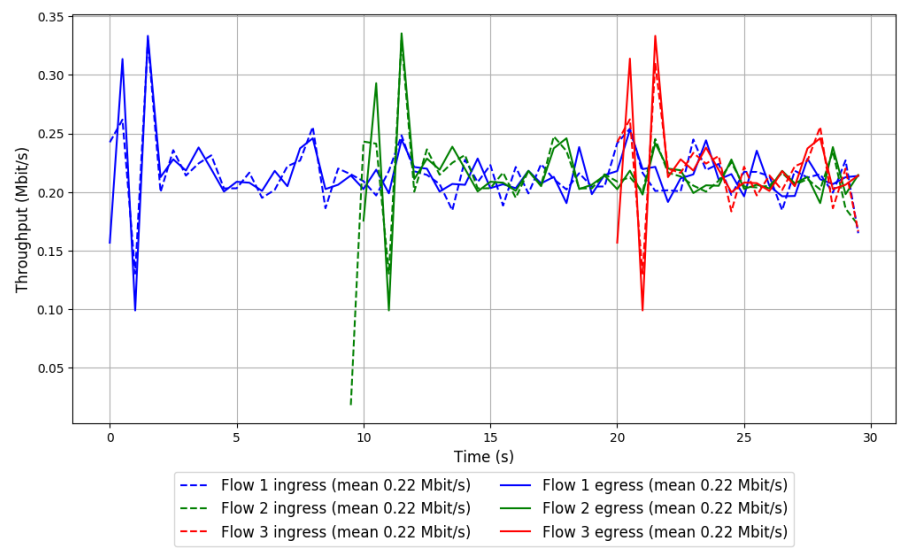


```
Run 1: Statistics of SCReAM

Start at: 2018-02-17 02:24:29
End at: 2018-02-17 02:24:59

# Below is generated by plot.py at 2018-02-17 07:57:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.999 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.023 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.049 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.994 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

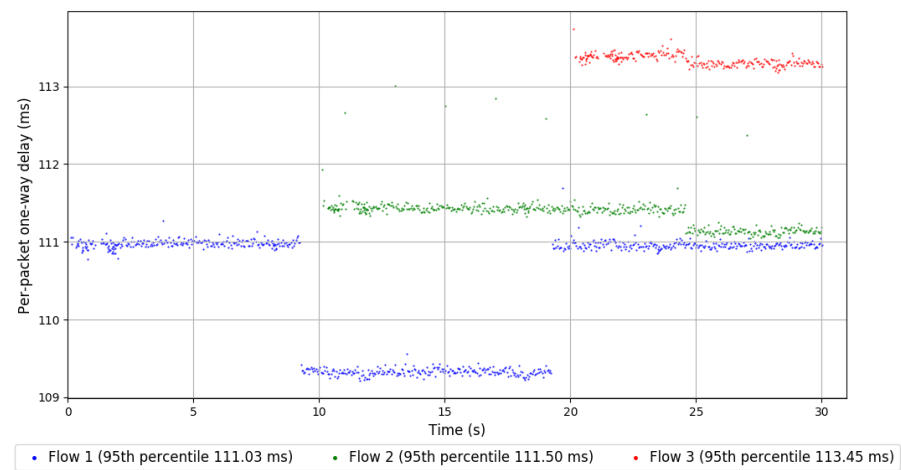
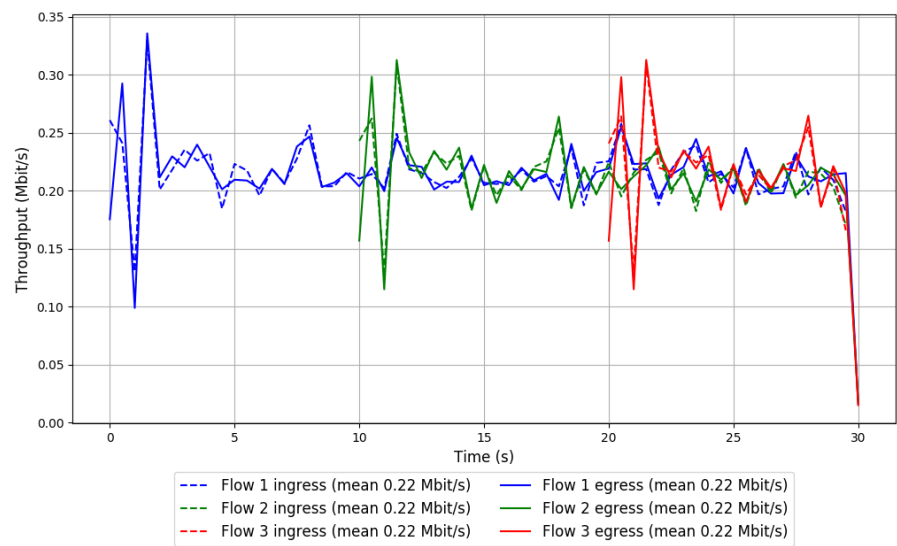


```
Run 2: Statistics of SReAM

Start at: 2018-02-17 02:44:09
End at: 2018-02-17 02:44:39

# Below is generated by plot.py at 2018-02-17 07:57:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.384 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.032 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.505 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.448 ms
Loss rate: 0.00%
```

Run 2: Report of SCSReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-02-17 03:04:16

End at: 2018-02-17 03:04:46

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 113.471 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.491 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.046 ms

Loss rate: 0.00%

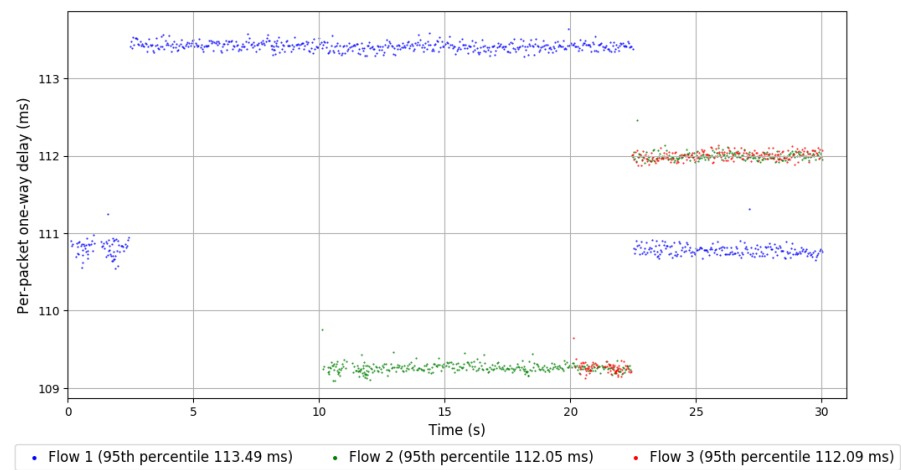
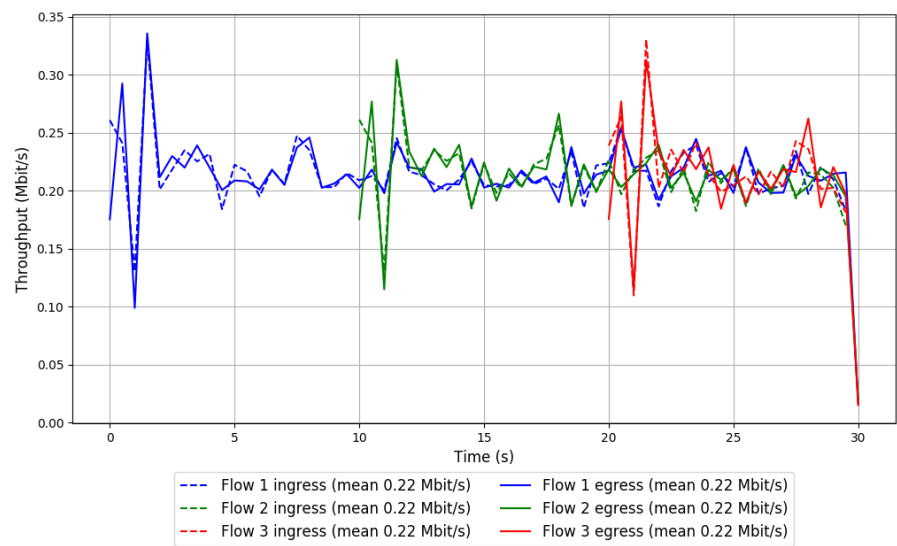
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.088 ms

Loss rate: 0.00%

Run 3: Report of SCRaM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-02-17 03:23:44

End at: 2018-02-17 03:24:14

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 112.050 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 111.105 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 112.082 ms

Loss rate: 0.00%

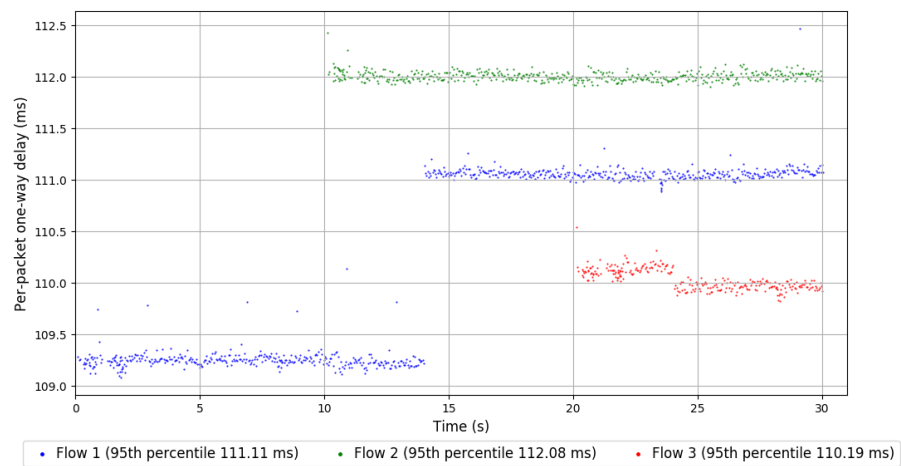
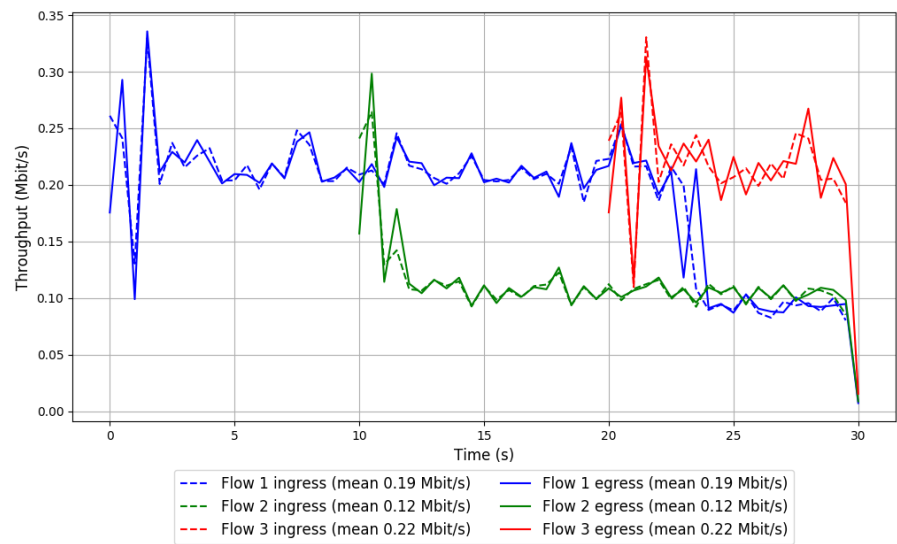
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.188 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-02-17 03:43:33

End at: 2018-02-17 03:44:03

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.39 Mbit/s

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

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.767 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 111.763 ms

Loss rate: 0.00%

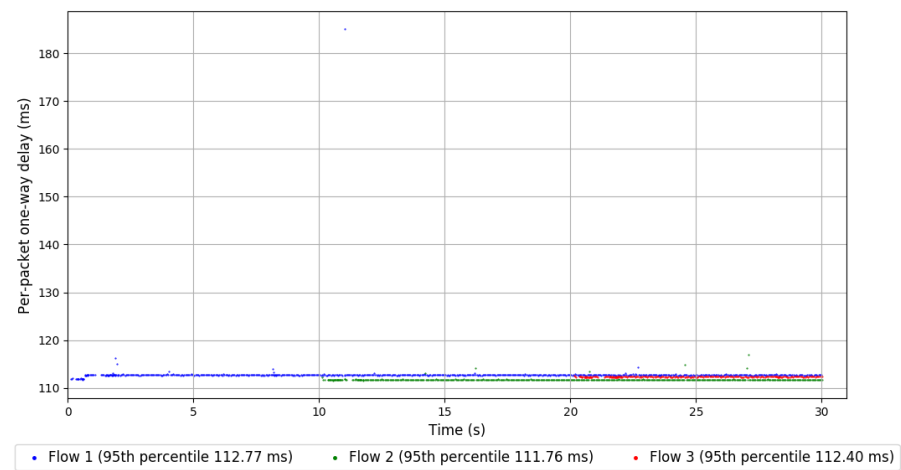
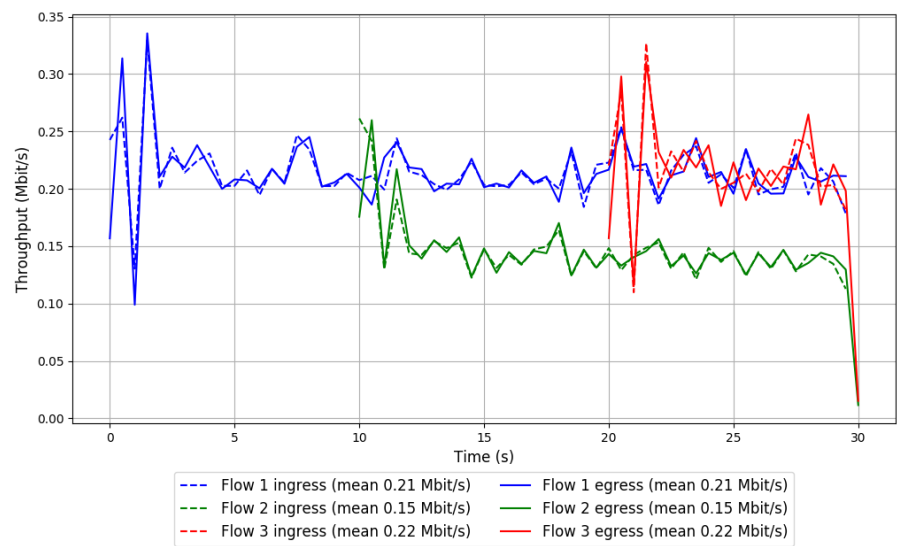
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.400 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-02-17 04:03:15

End at: 2018-02-17 04:03:45

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.725 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

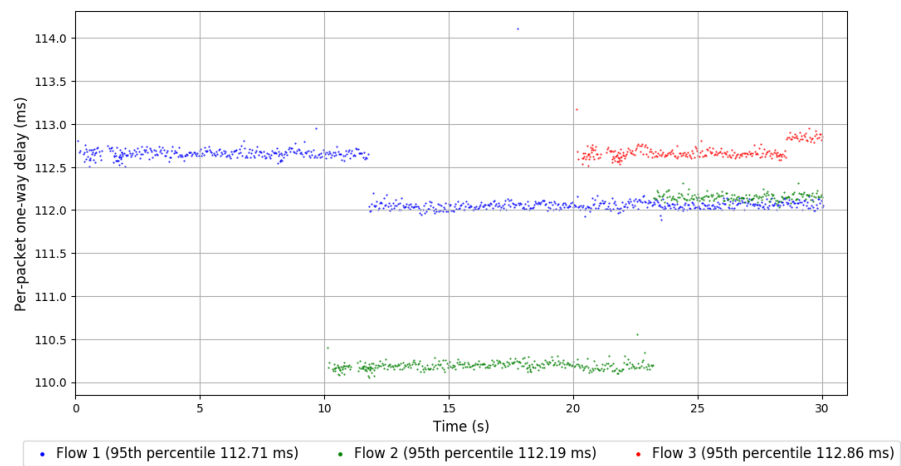
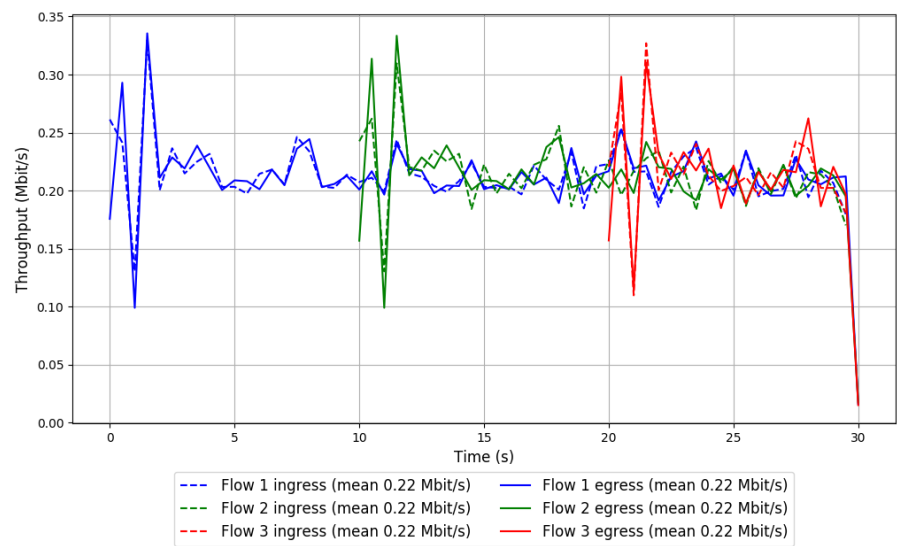
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.859 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

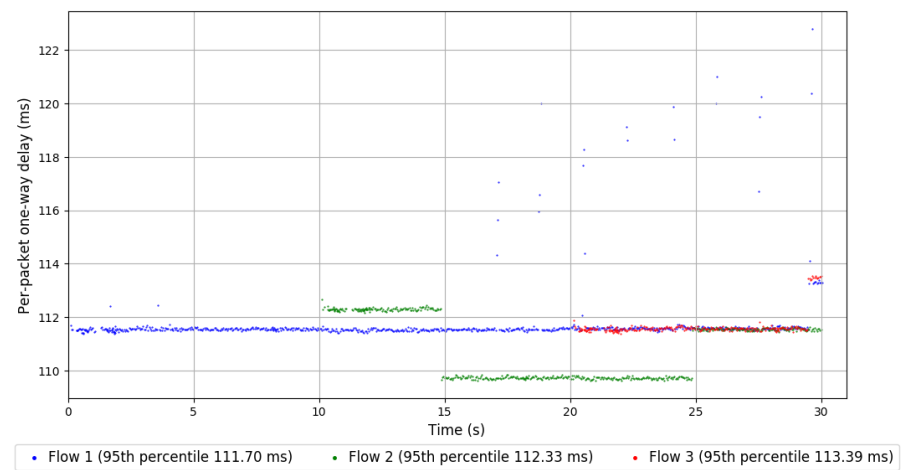
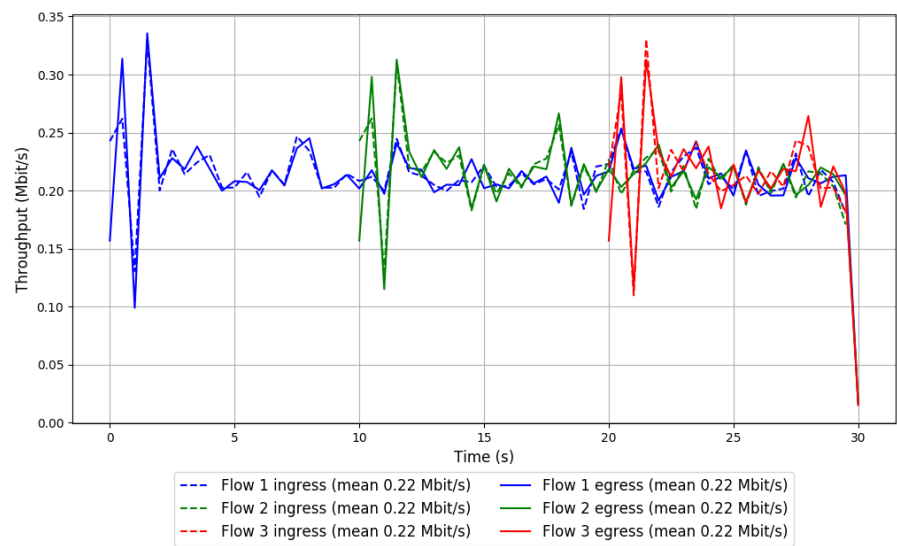


```
Run 7: Statistics of SReAM

Start at: 2018-02-17 04:23:09
End at: 2018-02-17 04:23:39

# Below is generated by plot.py at 2018-02-17 07:57:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.323 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.698 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.328 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.385 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-02-17 04:42:25

End at: 2018-02-17 04:42:55

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.961 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.00%

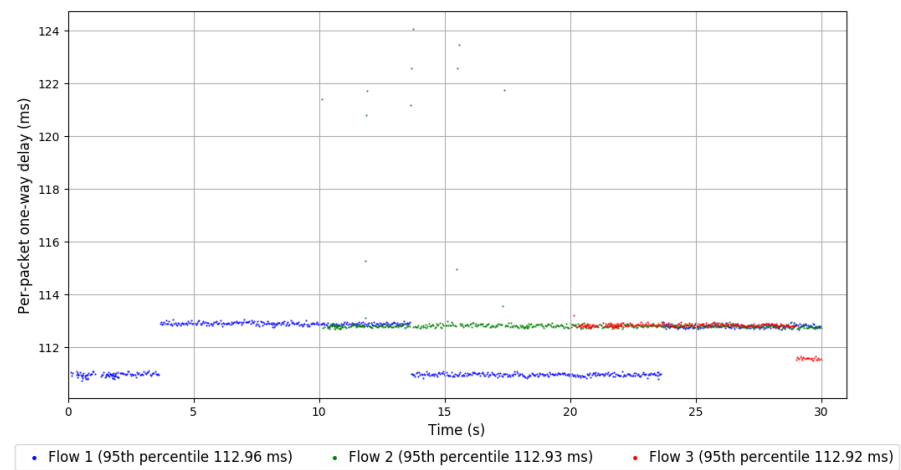
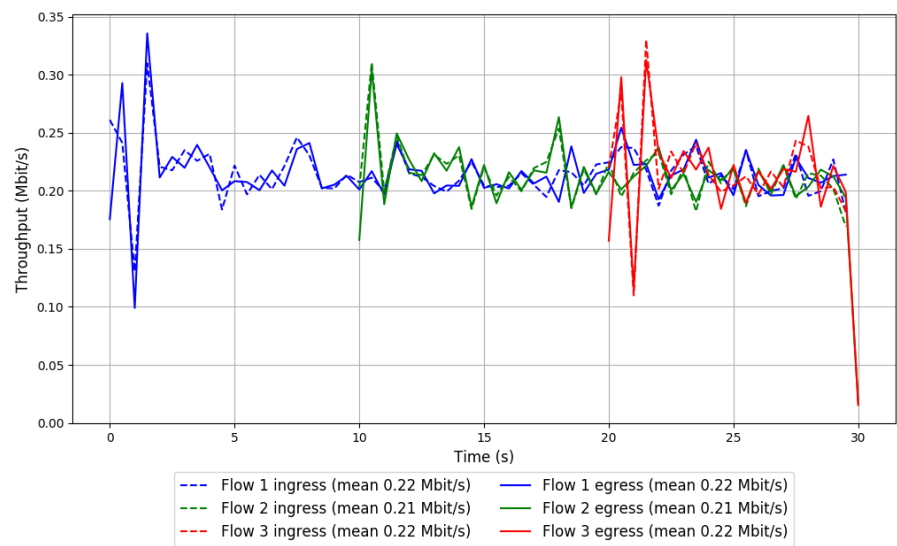
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.925 ms

Loss rate: 0.00%

Run 8: Report of SCRaM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-02-17 05:02:32

End at: 2018-02-17 05:03:02

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.739 ms

Loss rate: 0.00%

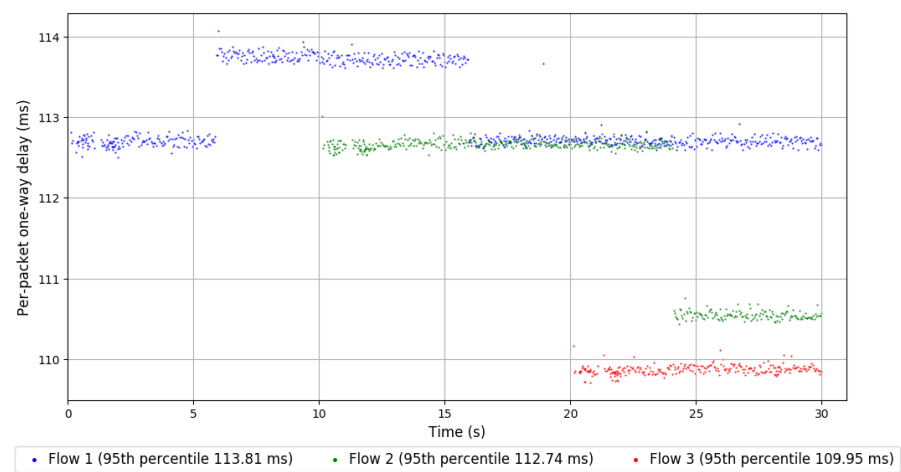
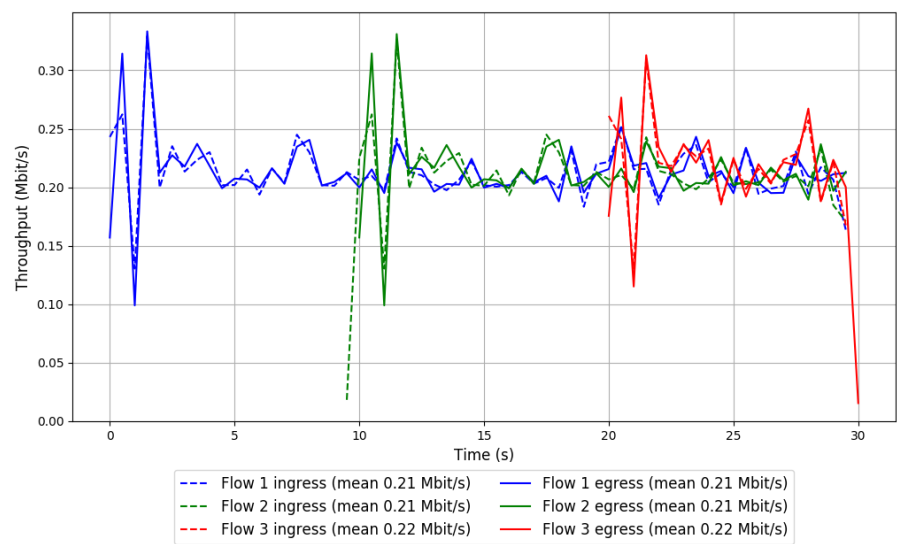
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 109.955 ms

Loss rate: 0.00%

Run 9: Report of SCReAM — Data Link

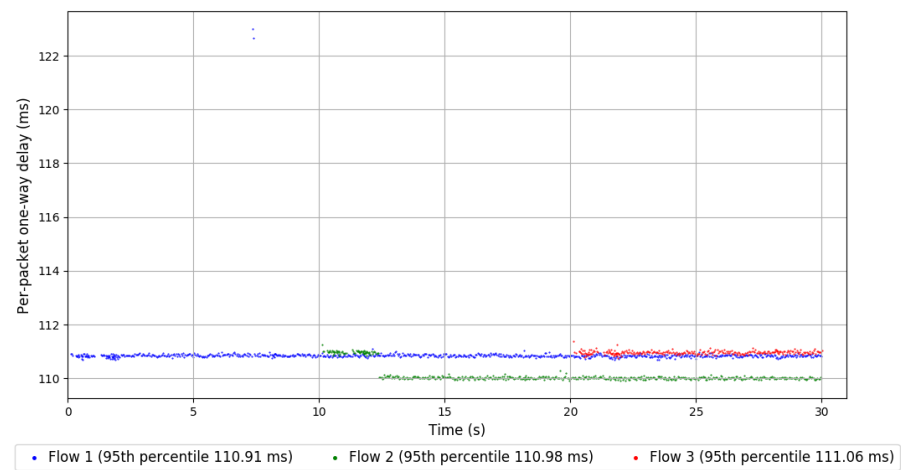
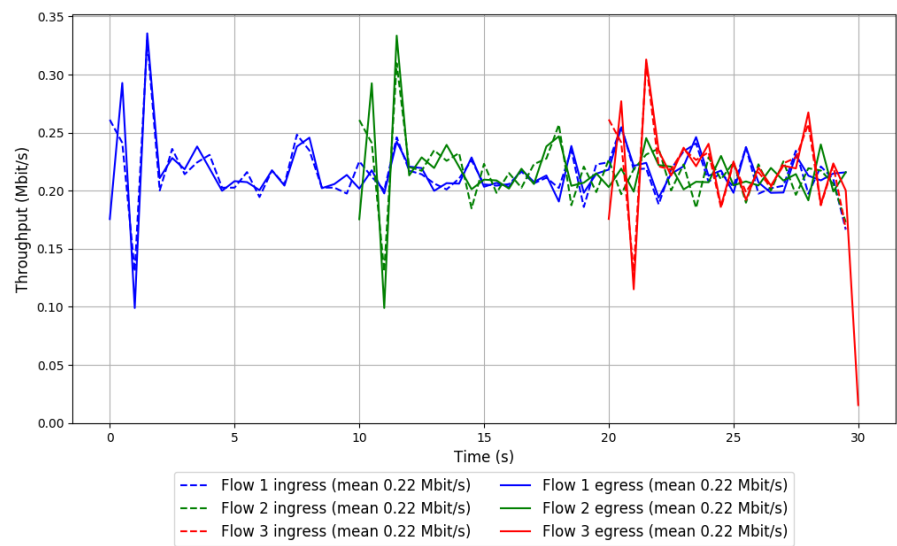


```
Run 10: Statistics of SCReAM

Start at: 2018-02-17 05:22:01
End at: 2018-02-17 05:22:31

# Below is generated by plot.py at 2018-02-17 07:57:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 110.995 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.910 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.985 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.064 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

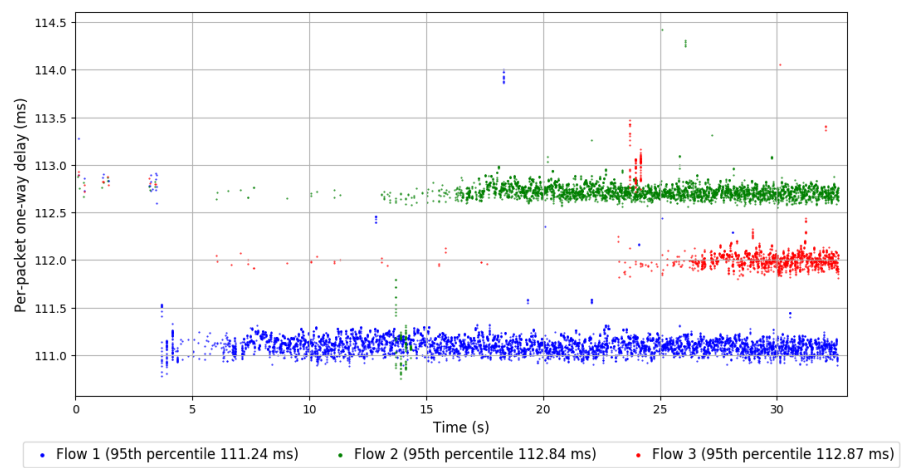
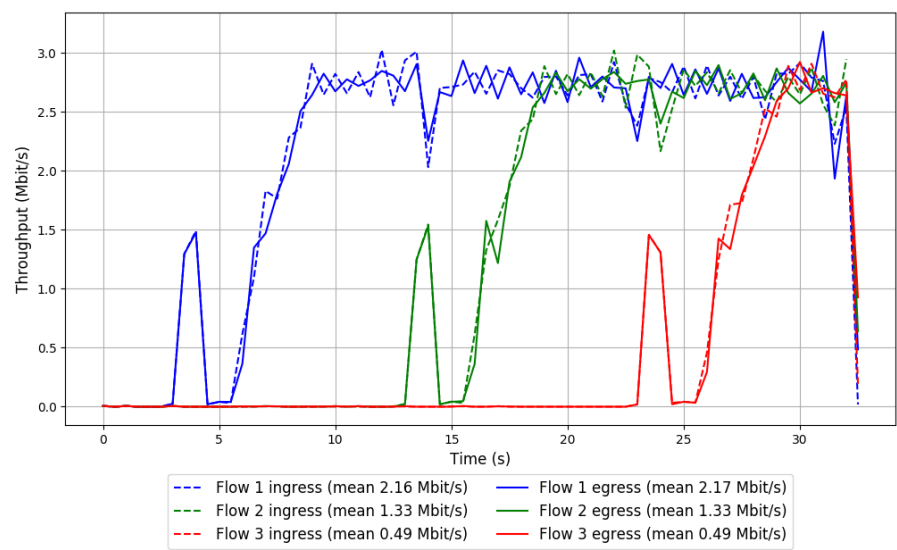


```
Run 1: Statistics of WebRTC media

Start at: 2018-02-17 02:21:23
End at: 2018-02-17 02:21:53

# Below is generated by plot.py at 2018-02-17 07:57:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.99 Mbit/s
95th percentile per-packet one-way delay: 112.800 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 111.244 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 112.836 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 112.870 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-02-17 02:41:08

End at: 2018-02-17 02:41:38

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 112.904 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 111.510 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 112.960 ms

Loss rate: 0.00%

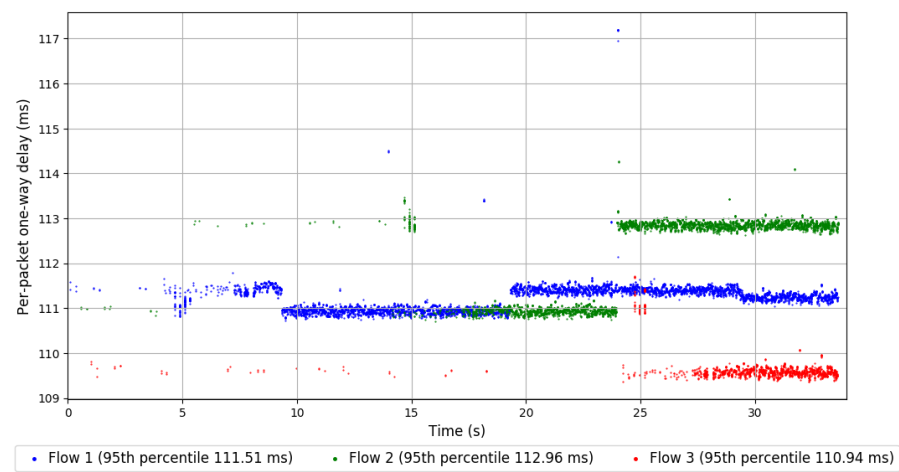
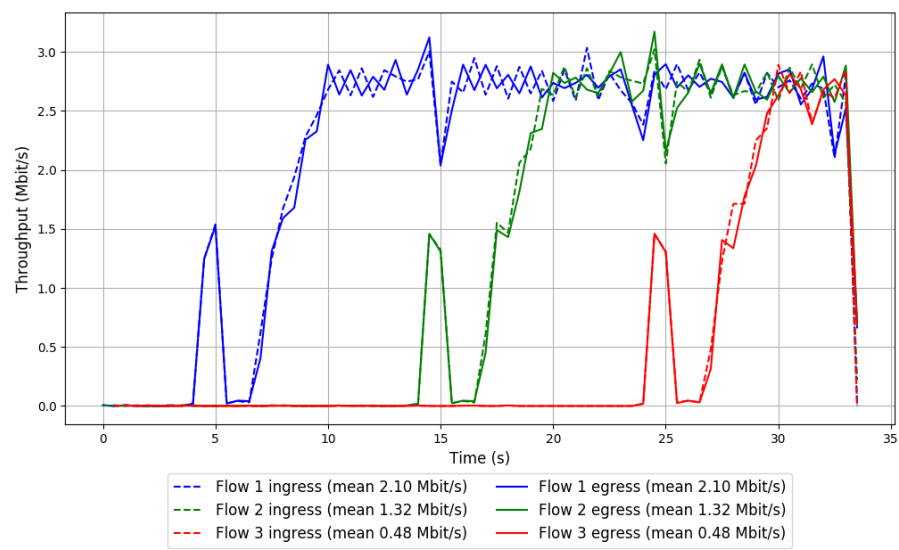
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 110.935 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-17 03:01:09

End at: 2018-02-17 03:01:39

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 112.813 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 111.167 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 111.484 ms

Loss rate: 0.00%

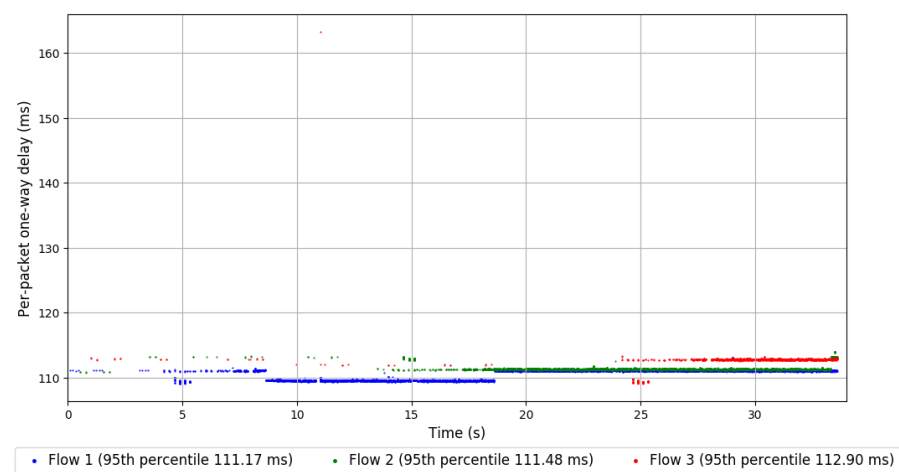
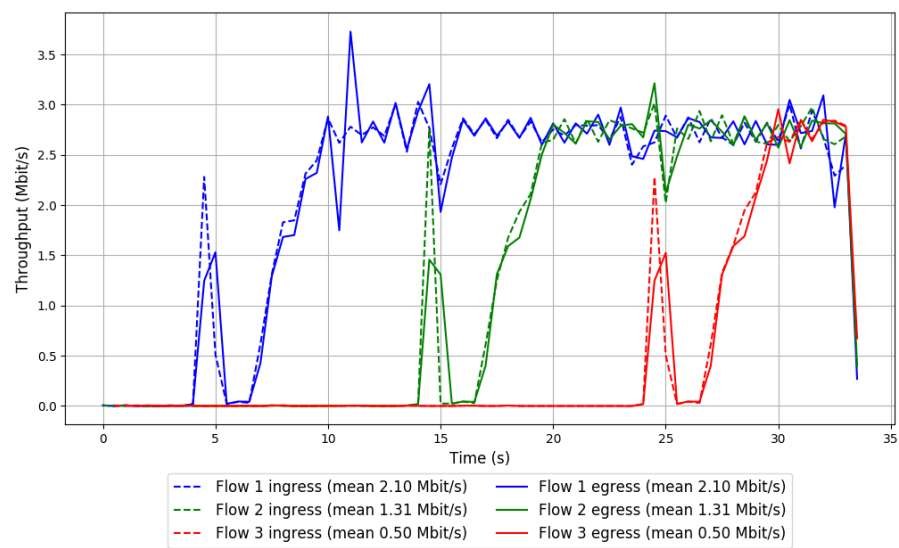
-- Flow 3:

Average throughput: 0.50 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-17 03:20:40

End at: 2018-02-17 03:21:10

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 113.149 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 111.374 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 110.810 ms

Loss rate: 0.00%

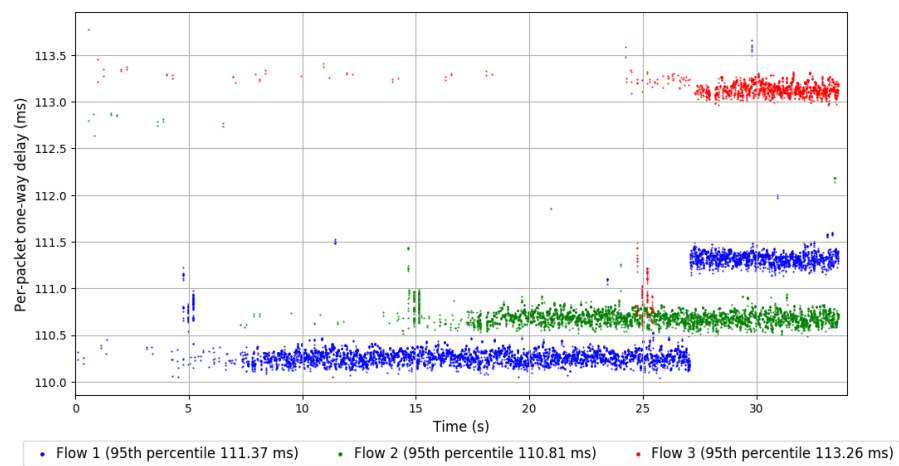
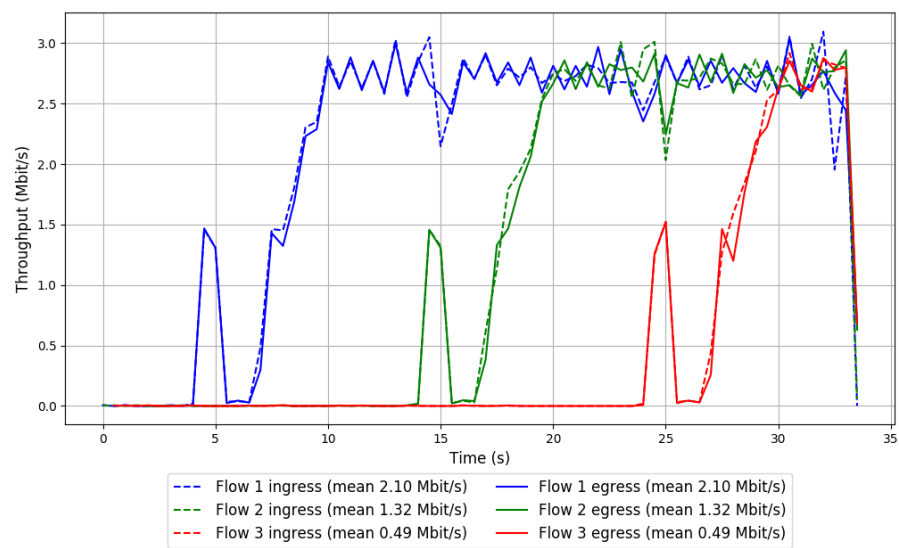
-- Flow 3:

Average throughput: 0.49 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-17 03:40:29

End at: 2018-02-17 03:40:59

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 112.605 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 110.156 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 112.357 ms

Loss rate: 0.00%

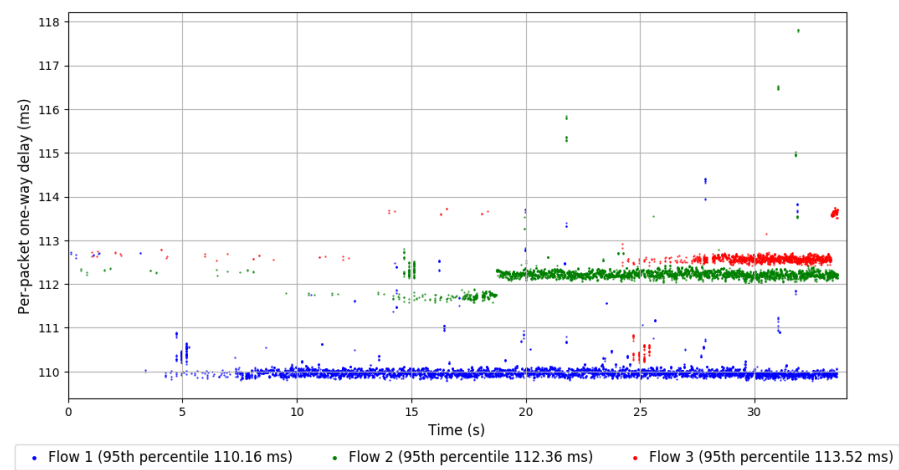
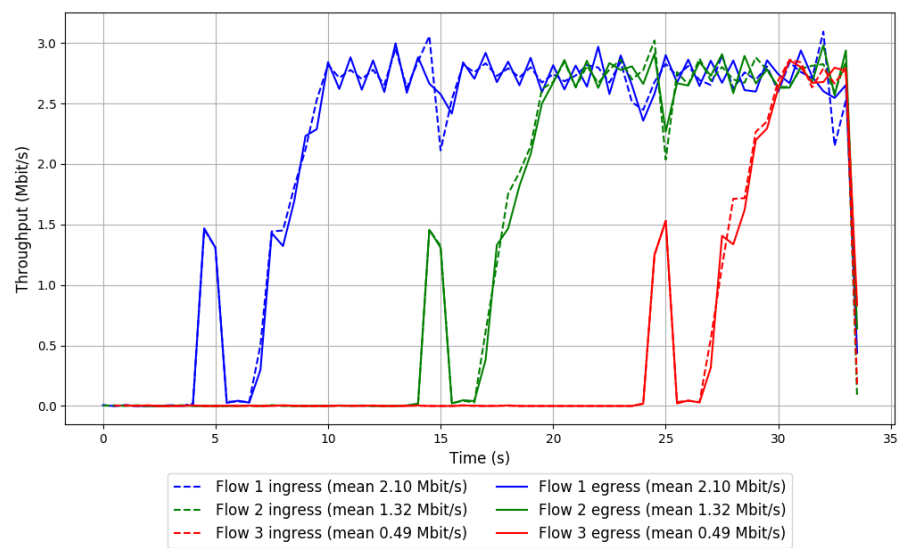
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 113.516 ms

Loss rate: 0.06%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-17 04:00:11

End at: 2018-02-17 04:00:41

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 114.609 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 112.978 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 112.819 ms

Loss rate: 0.02%

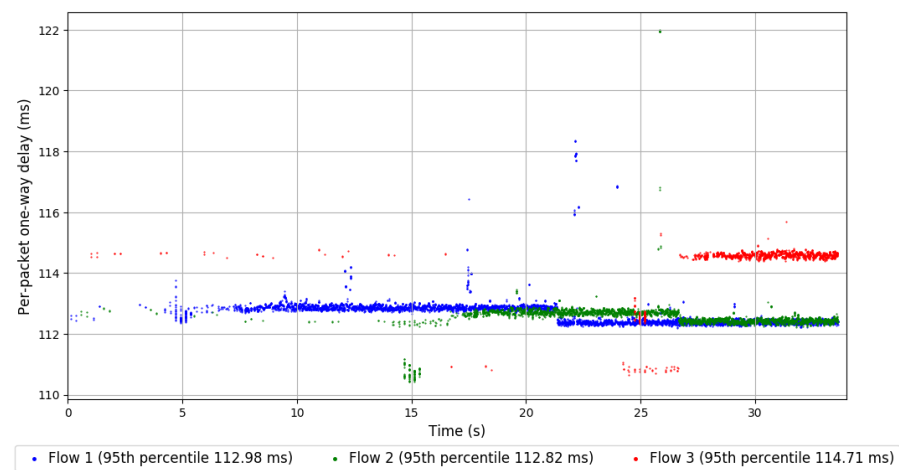
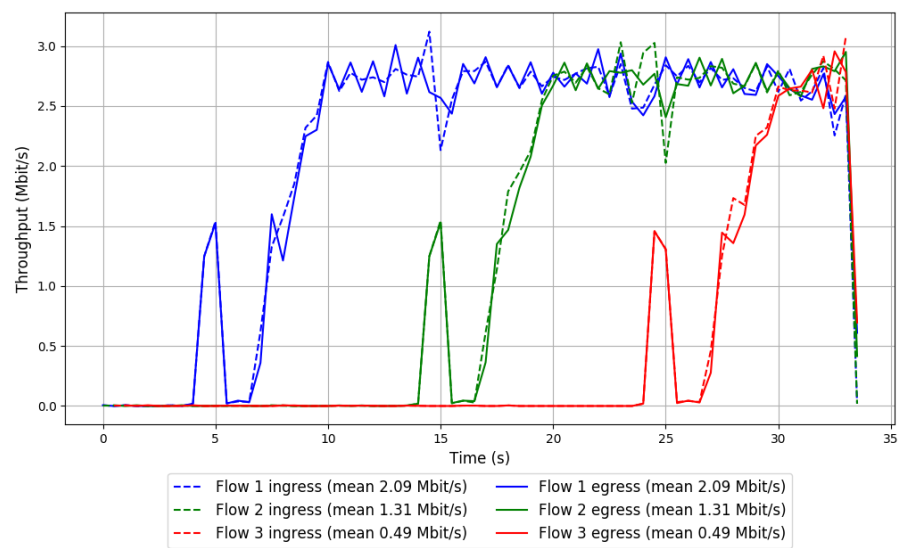
-- Flow 3:

Average throughput: 0.49 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-17 04:20:07

End at: 2018-02-17 04:20:37

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.86 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 113.583 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

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

Loss rate: 0.02%

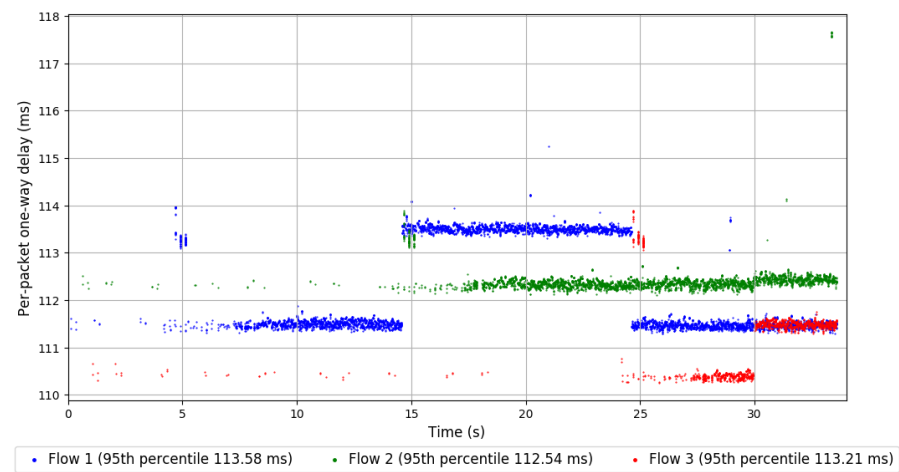
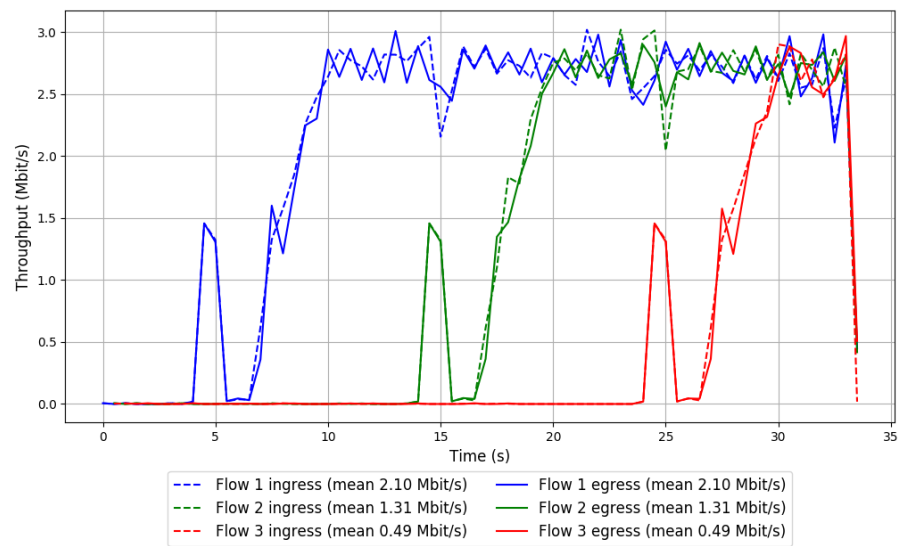
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 113.210 ms

Loss rate: 0.06%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-17 04:39:31

End at: 2018-02-17 04:40:01

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.84 Mbit/s

95th percentile per-packet one-way delay: 112.712 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 111.096 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 111.981 ms

Loss rate: 0.00%

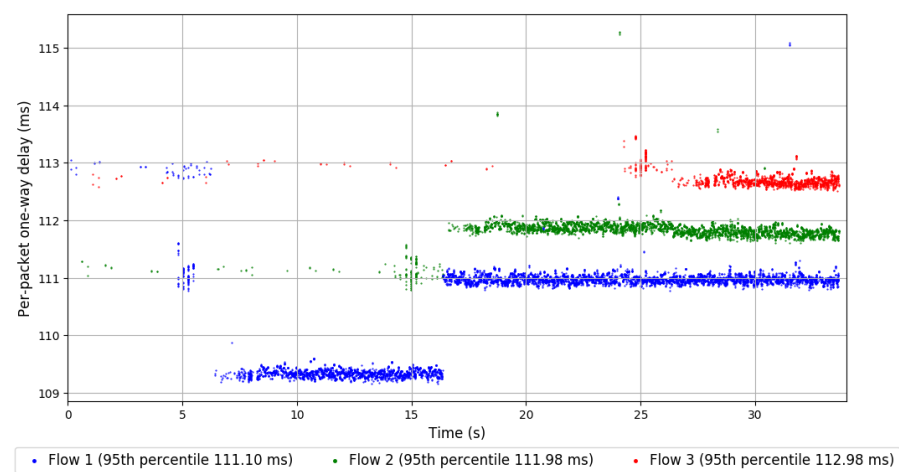
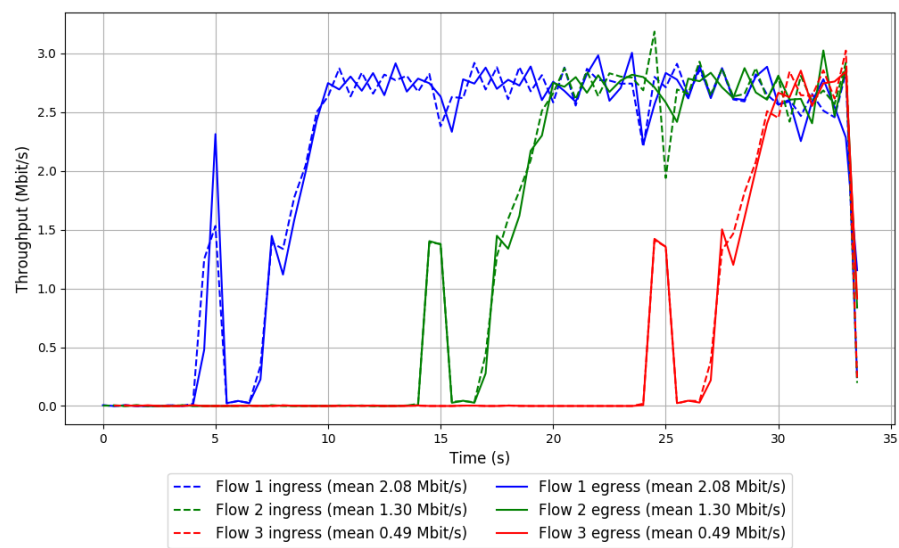
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 112.979 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-17 04:59:28

End at: 2018-02-17 04:59:58

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.01 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 111.590 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.34 Mbit/s

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

Loss rate: 0.00%

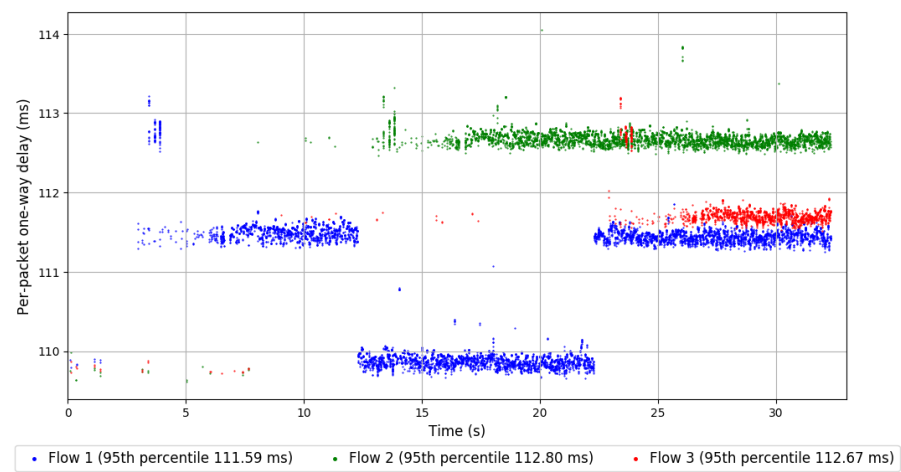
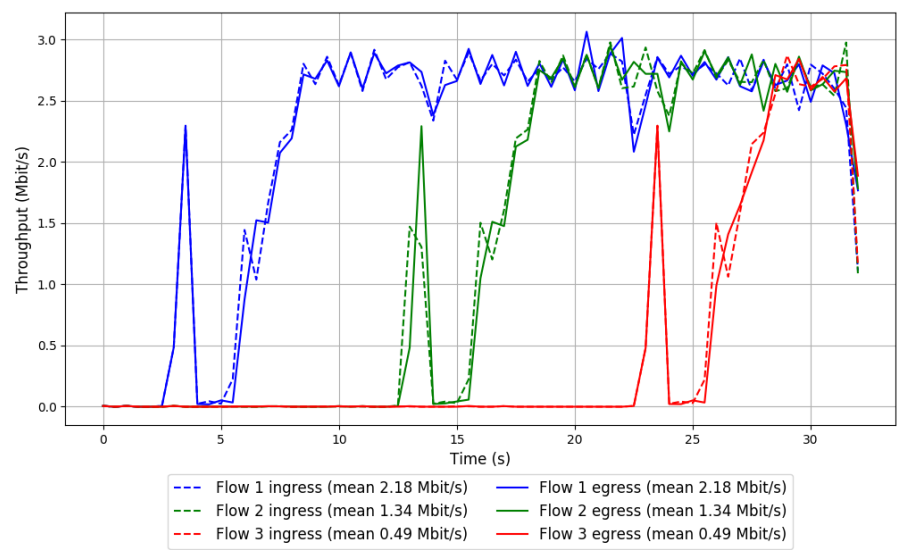
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 112.673 ms

Loss rate: 0.06%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-17 05:19:07

End at: 2018-02-17 05:19:37

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 112.765 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 112.786 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 112.733 ms

Loss rate: 0.00%

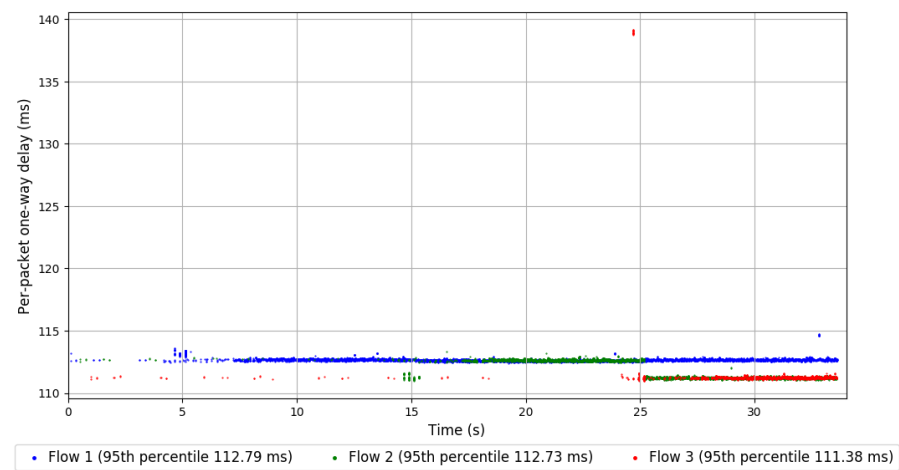
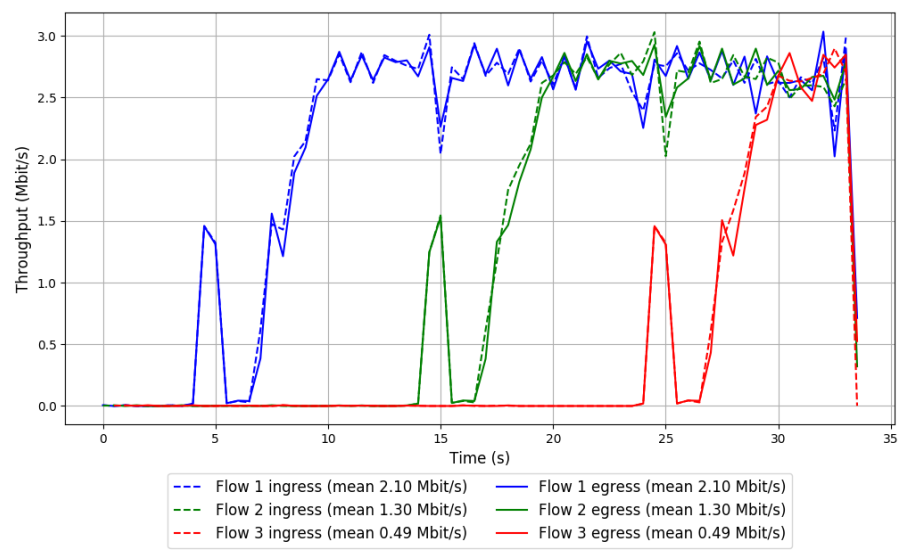
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 111.375 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-02-17 02:22:09

End at: 2018-02-17 02:22:39

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 113.630 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 113.547 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.47 Mbit/s

95th percentile per-packet one-way delay: 113.570 ms

Loss rate: 0.00%

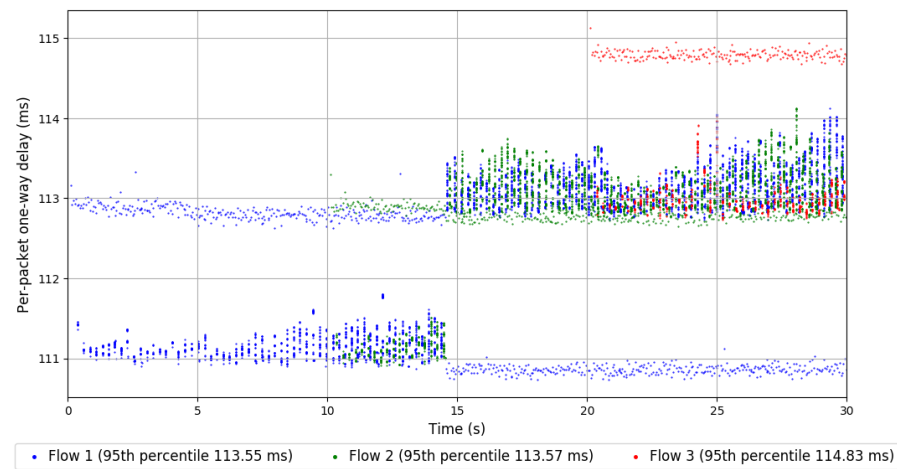
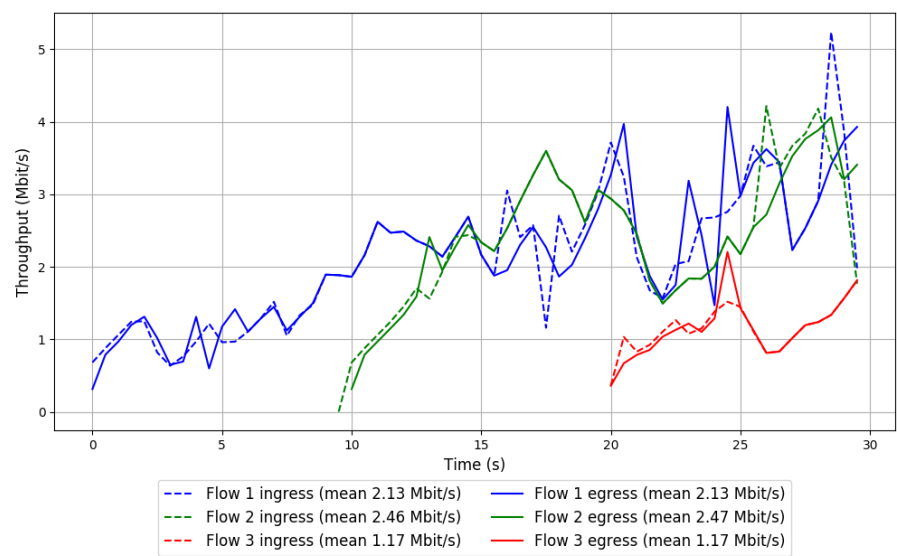
-- Flow 3:

Average throughput: 1.17 Mbit/s

95th percentile per-packet one-way delay: 114.833 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-17 02:41:54

End at: 2018-02-17 02:42:25

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.77 Mbit/s

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

Loss rate: 0.10%

-- Flow 1:

Average throughput: 2.85 Mbit/s

95th percentile per-packet one-way delay: 113.627 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 113.368 ms

Loss rate: 0.41%

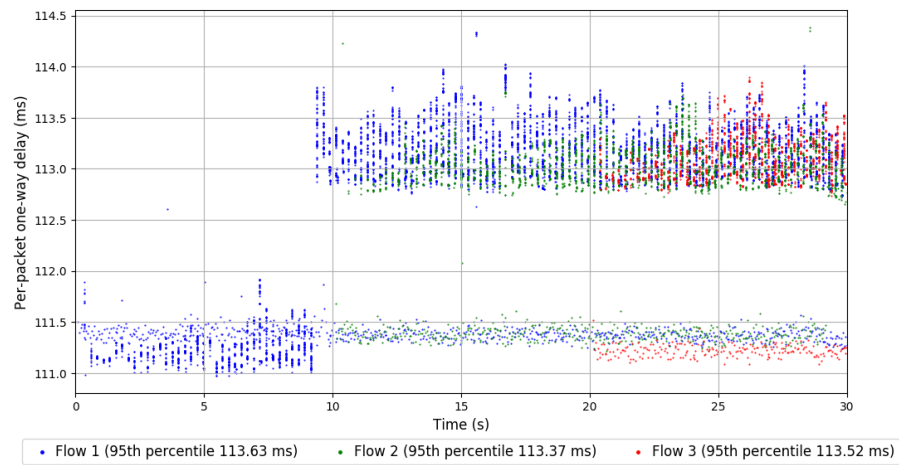
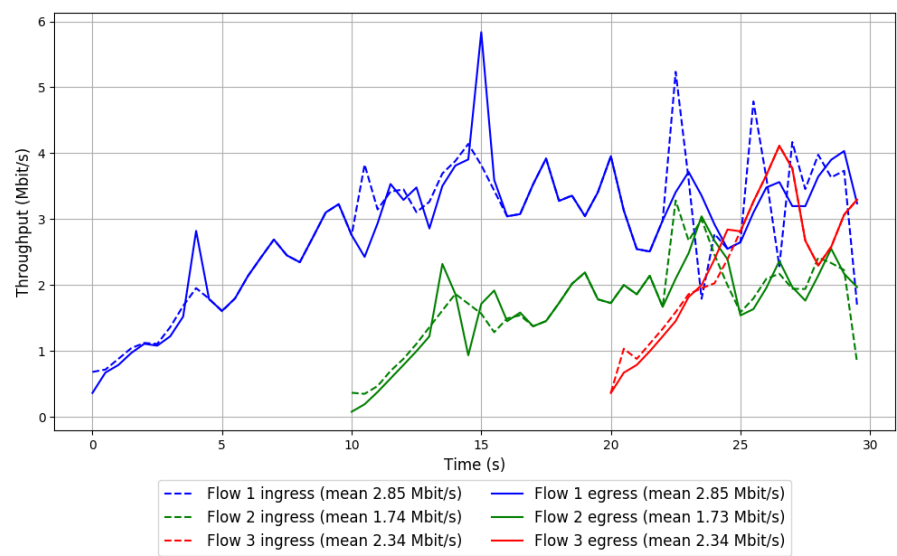
-- Flow 3:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 113.519 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-17 03:01:55

End at: 2018-02-17 03:02:25

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.10 Mbit/s

95th percentile per-packet one-way delay: 113.422 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 113.421 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 113.466 ms

Loss rate: 0.00%

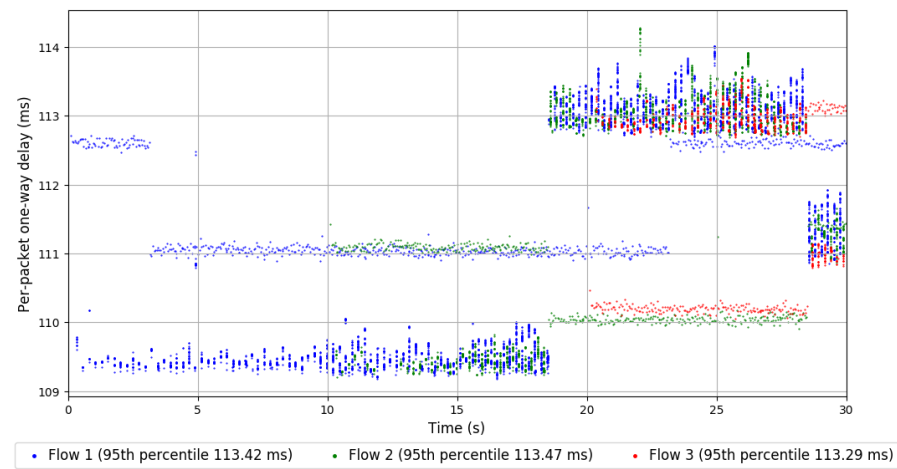
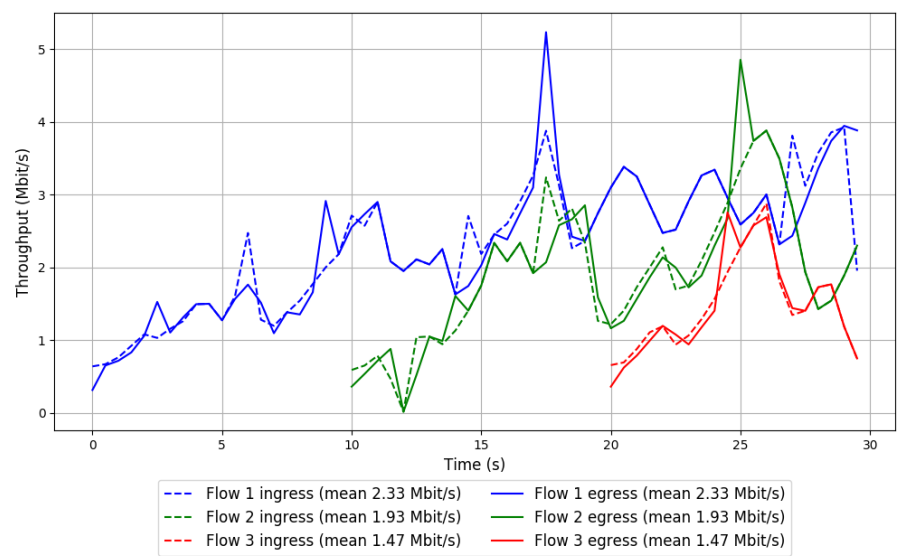
-- Flow 3:

Average throughput: 1.47 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-17 03:21:27

End at: 2018-02-17 03:21:57

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.87 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.71 Mbit/s

95th percentile per-packet one-way delay: 111.515 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.96 Mbit/s

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

Loss rate: 0.00%

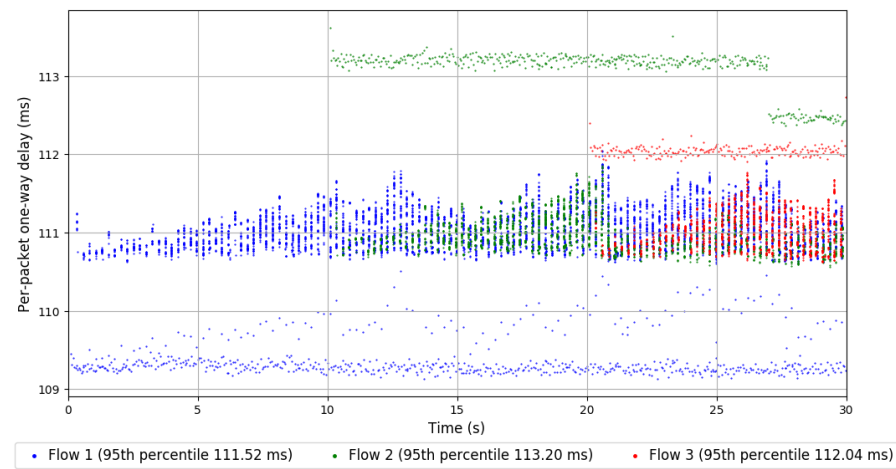
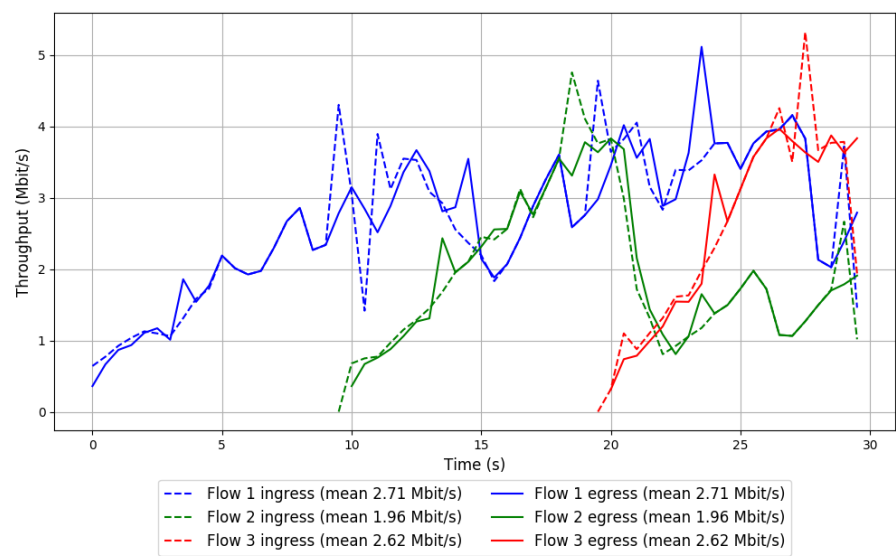
-- Flow 3:

Average throughput: 2.62 Mbit/s

95th percentile per-packet one-way delay: 112.037 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-17 03:41:16

End at: 2018-02-17 03:41:46

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.52 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.75 Mbit/s

95th percentile per-packet one-way delay: 112.887 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 112.787 ms

Loss rate: 0.00%

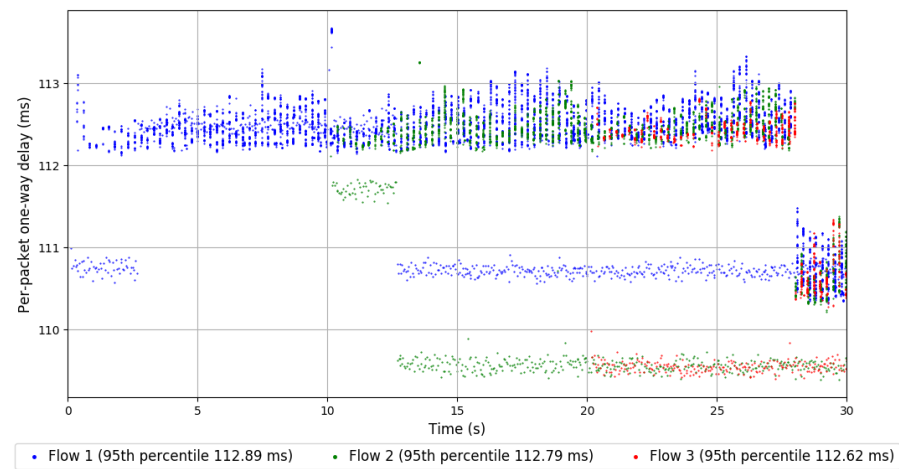
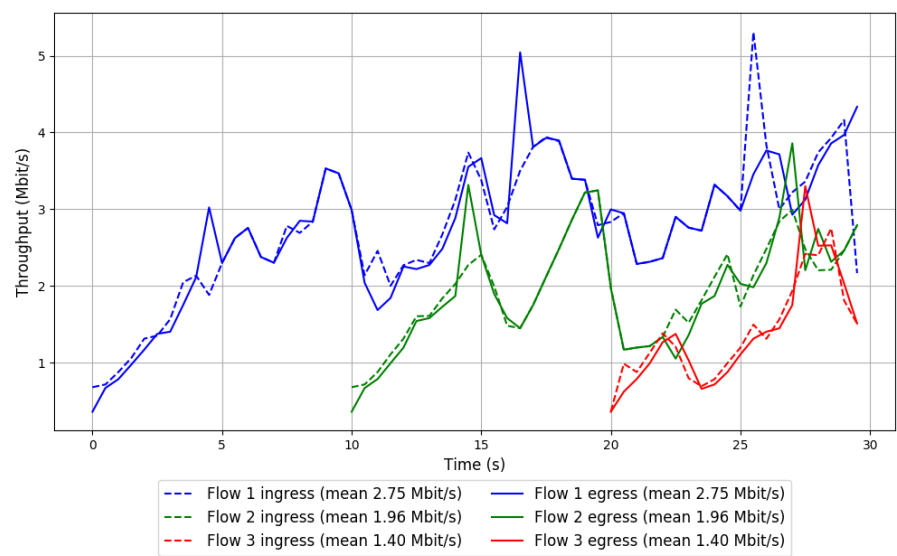
-- Flow 3:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 112.620 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-17 04:00:57

End at: 2018-02-17 04:01:27

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.91 Mbit/s

95th percentile per-packet one-way delay: 113.076 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 113.075 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.00 Mbit/s

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

Loss rate: 0.00%

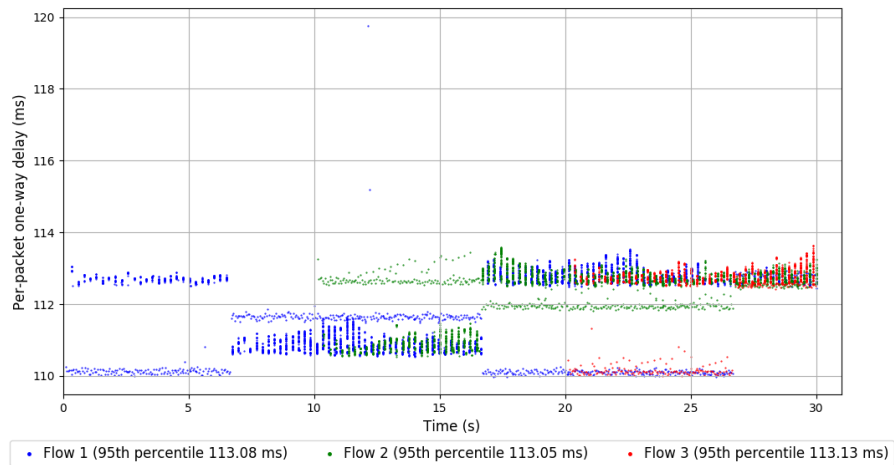
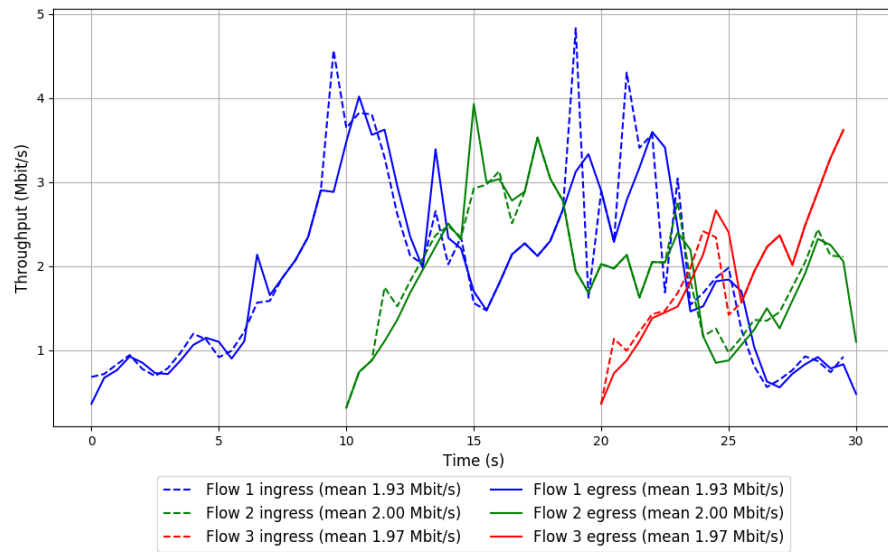
-- Flow 3:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 113.132 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-17 04:20:54

End at: 2018-02-17 04:21:24

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.47 Mbit/s

95th percentile per-packet one-way delay: 113.185 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.68 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 113.194 ms

Loss rate: 0.00%

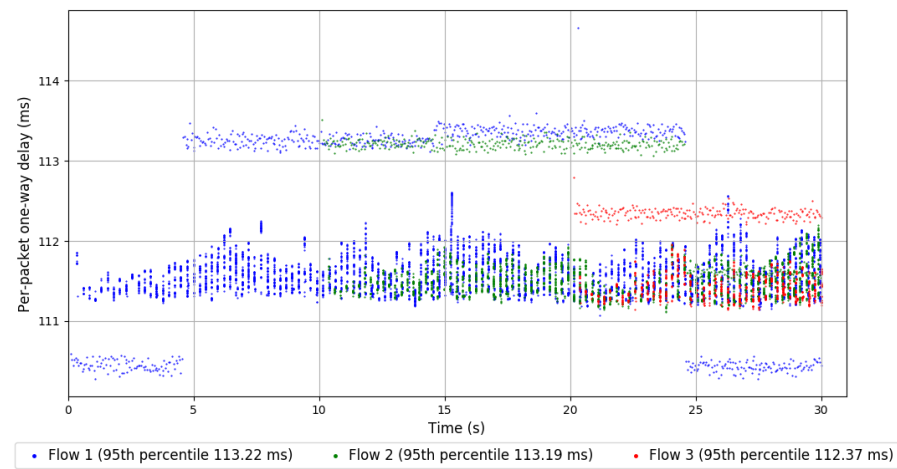
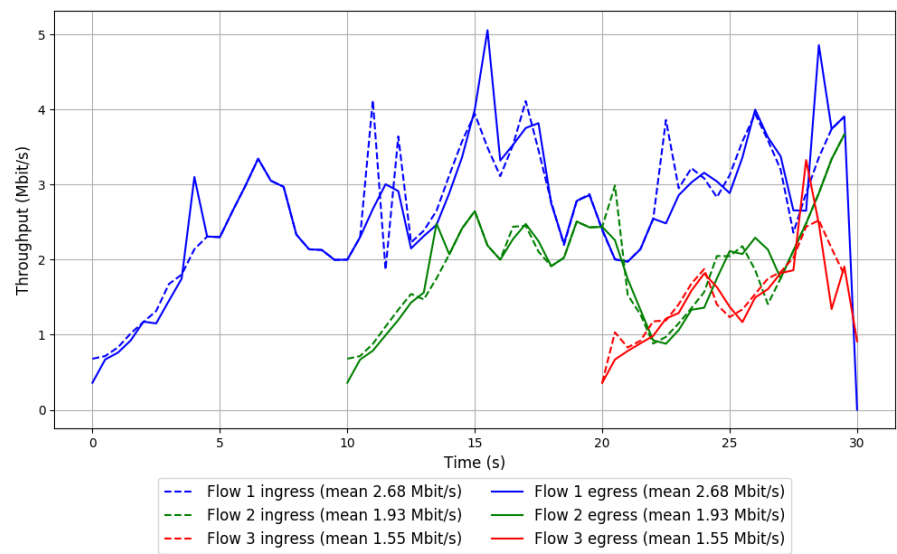
-- Flow 3:

Average throughput: 1.55 Mbit/s

95th percentile per-packet one-way delay: 112.368 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-17 04:40:17

End at: 2018-02-17 04:40:47

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.53 Mbit/s

95th percentile per-packet one-way delay: 113.283 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 113.333 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 113.220 ms

Loss rate: 0.00%

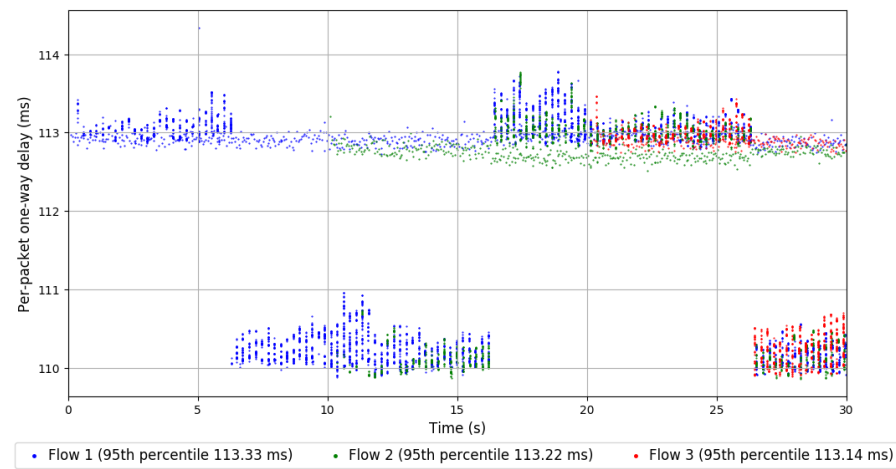
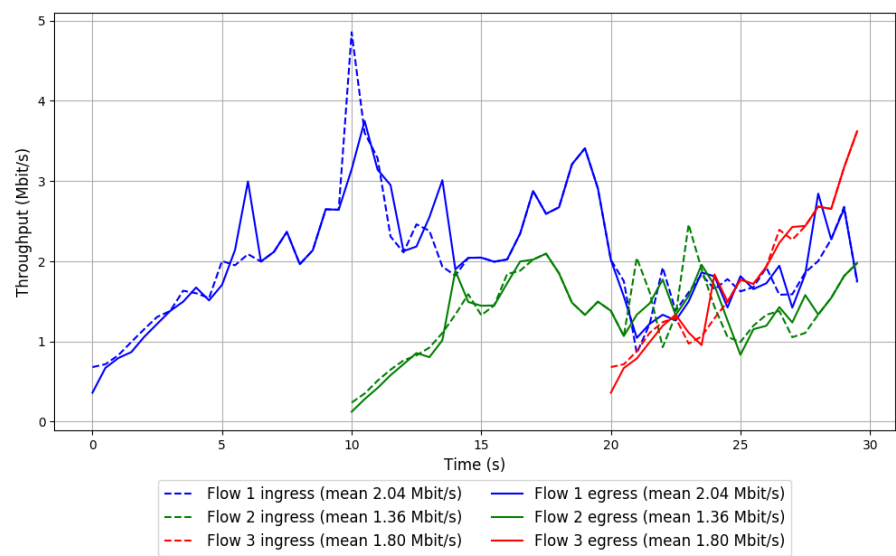
-- Flow 3:

Average throughput: 1.80 Mbit/s

95th percentile per-packet one-way delay: 113.140 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-17 05:00:15

End at: 2018-02-17 05:00:45

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.49 Mbit/s

95th percentile per-packet one-way delay: 113.069 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 113.080 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.34 Mbit/s

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

Loss rate: 0.00%

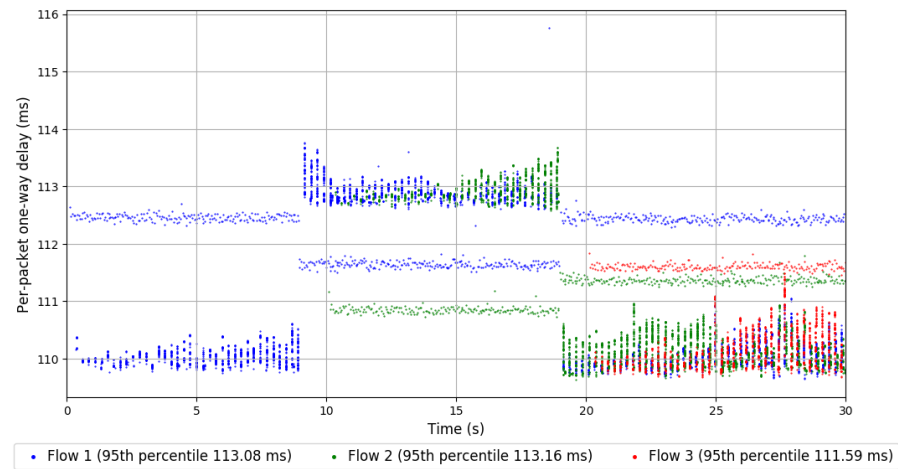
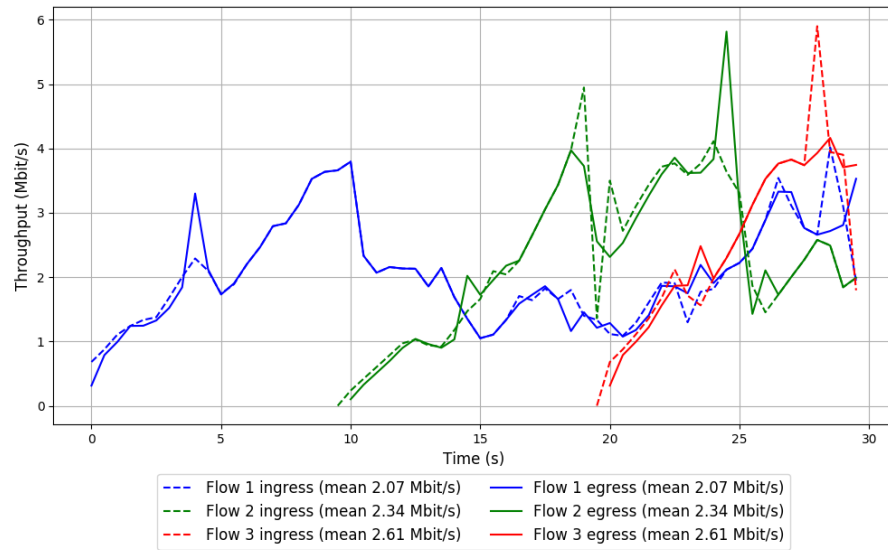
-- Flow 3:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 111.586 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-17 05:19:53

End at: 2018-02-17 05:20:23

Below is generated by plot.py at 2018-02-17 07:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.38 Mbit/s

95th percentile per-packet one-way delay: 113.376 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 113.419 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.20 Mbit/s

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

Loss rate: 0.00%

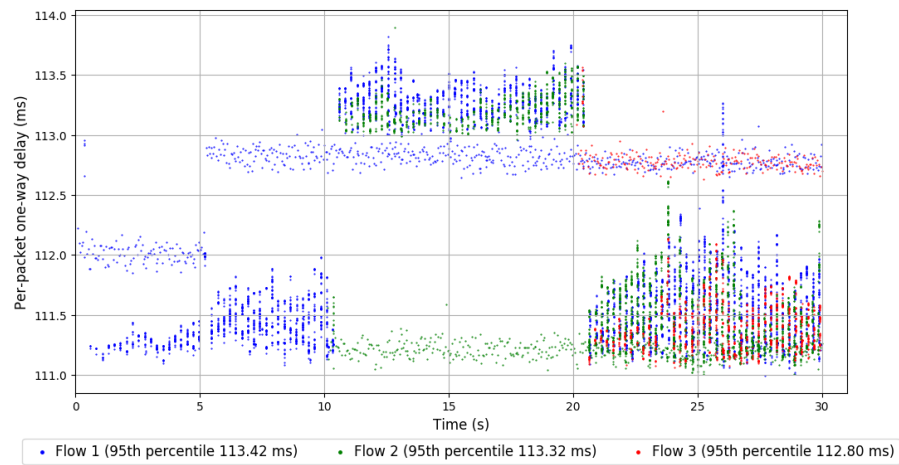
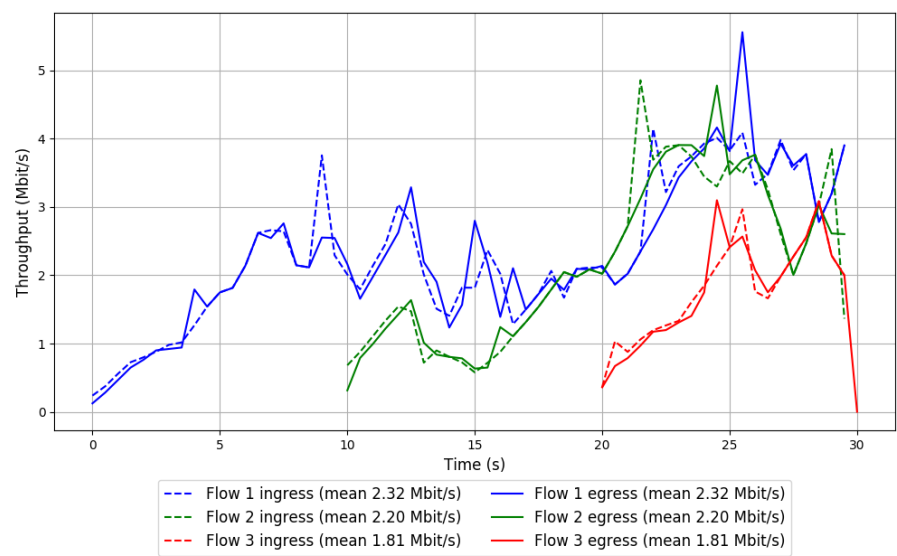
-- Flow 3:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 112.801 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

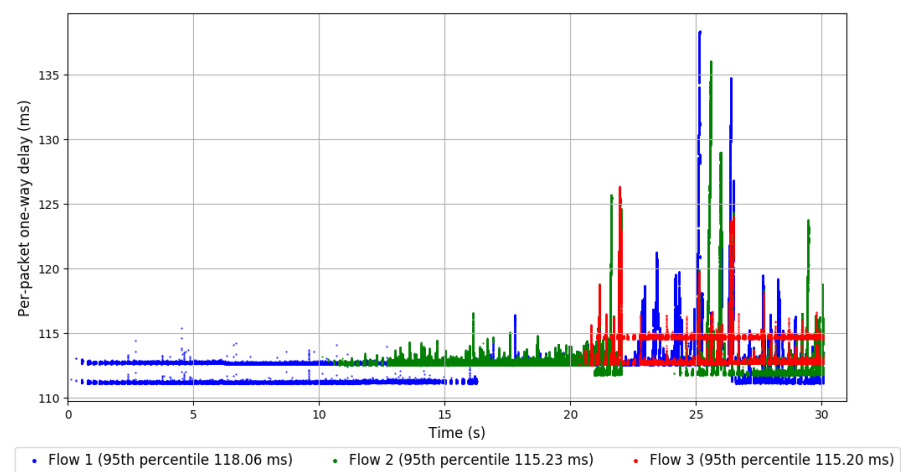
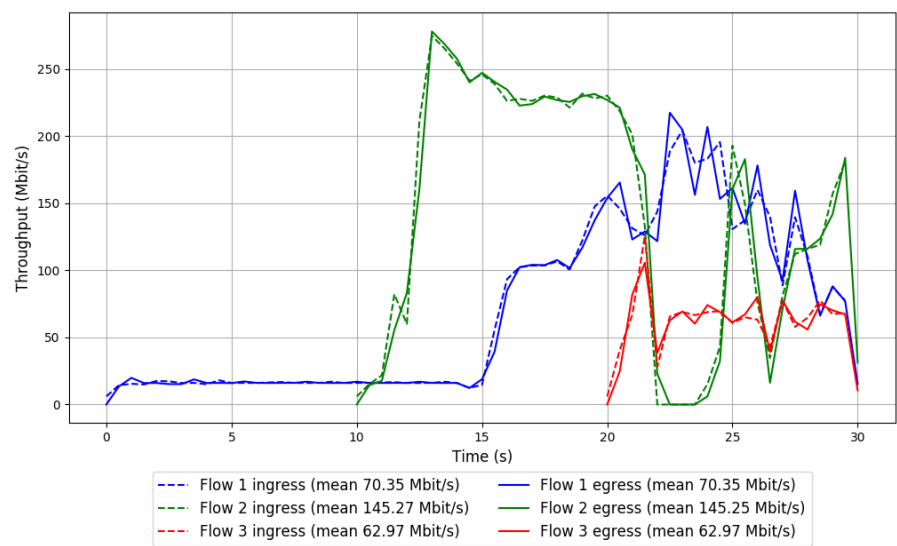


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-17 02:17:57
End at: 2018-02-17 02:18:27

# Below is generated by plot.py at 2018-02-17 07:58:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 187.95 Mbit/s
95th percentile per-packet one-way delay: 116.773 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 70.35 Mbit/s
95th percentile per-packet one-way delay: 118.060 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 145.25 Mbit/s
95th percentile per-packet one-way delay: 115.234 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 62.97 Mbit/s
95th percentile per-packet one-way delay: 115.203 ms
Loss rate: 0.03%
```


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

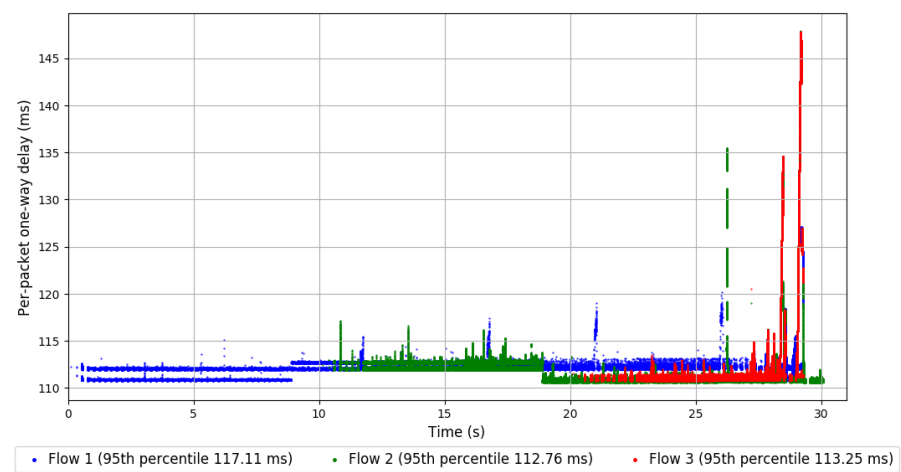
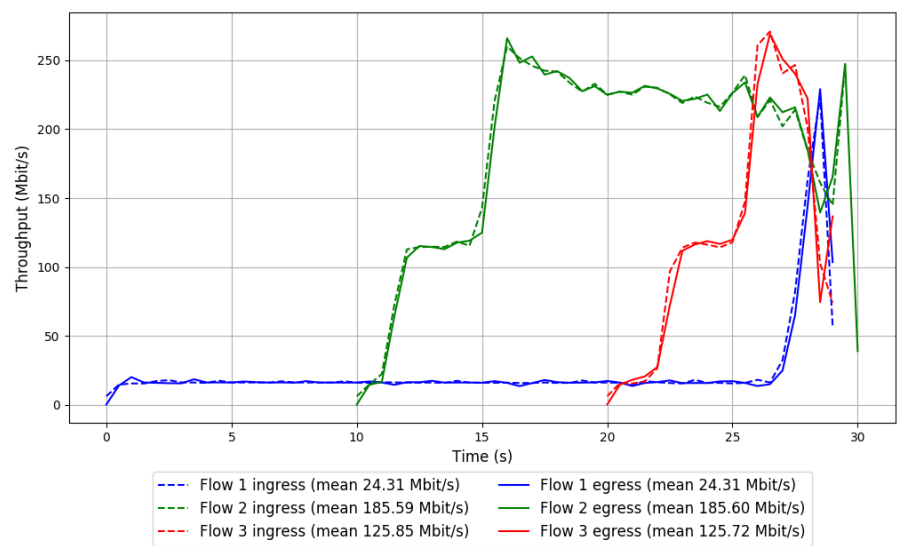


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-17 02:37:25
End at: 2018-02-17 02:37:55

# Below is generated by plot.py at 2018-02-17 07:58:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 185.51 Mbit/s
95th percentile per-packet one-way delay: 112.802 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.31 Mbit/s
95th percentile per-packet one-way delay: 117.107 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 185.60 Mbit/s
95th percentile per-packet one-way delay: 112.762 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 125.72 Mbit/s
95th percentile per-packet one-way delay: 113.254 ms
Loss rate: 0.00%
```

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

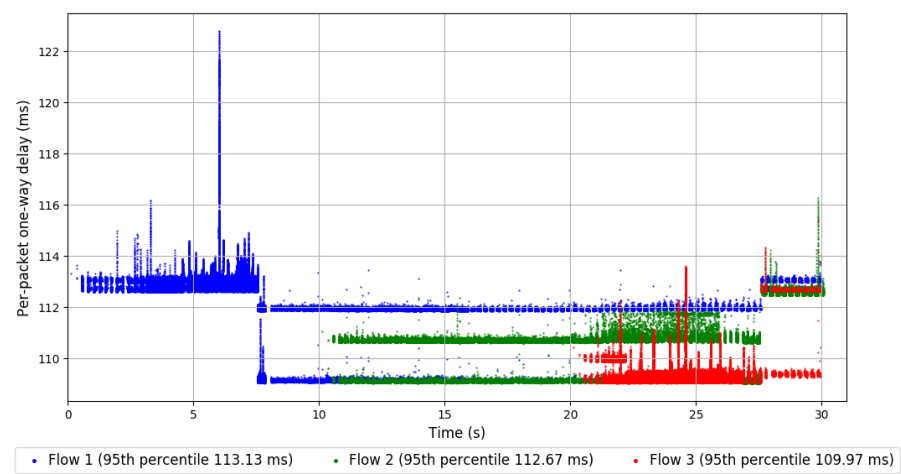
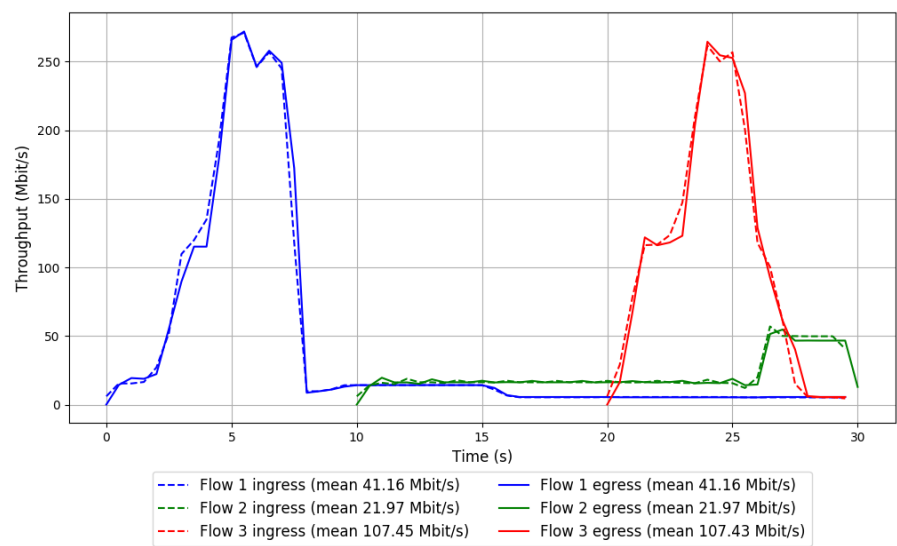


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-17 02:57:26
End at: 2018-02-17 02:57:56

# Below is generated by plot.py at 2018-02-17 07:58:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.91 Mbit/s
95th percentile per-packet one-way delay: 113.088 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.16 Mbit/s
95th percentile per-packet one-way delay: 113.134 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 21.97 Mbit/s
95th percentile per-packet one-way delay: 112.673 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 107.43 Mbit/s
95th percentile per-packet one-way delay: 109.970 ms
Loss rate: 0.00%
```

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



Run 4: Statistics of TaoVA-100x

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

End at: 2018-02-17 03:17:33

Below is generated by plot.py at 2018-02-17 07:58:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.34 Mbit/s

95th percentile per-packet one-way delay: 113.177 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 8.24 Mbit/s

95th percentile per-packet one-way delay: 113.423 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 14.73 Mbit/s

95th percentile per-packet one-way delay: 113.343 ms

Loss rate: 0.00%

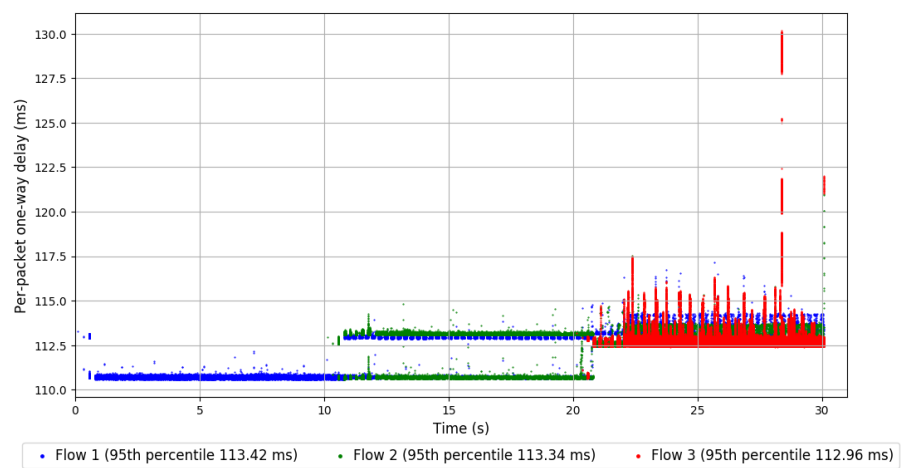
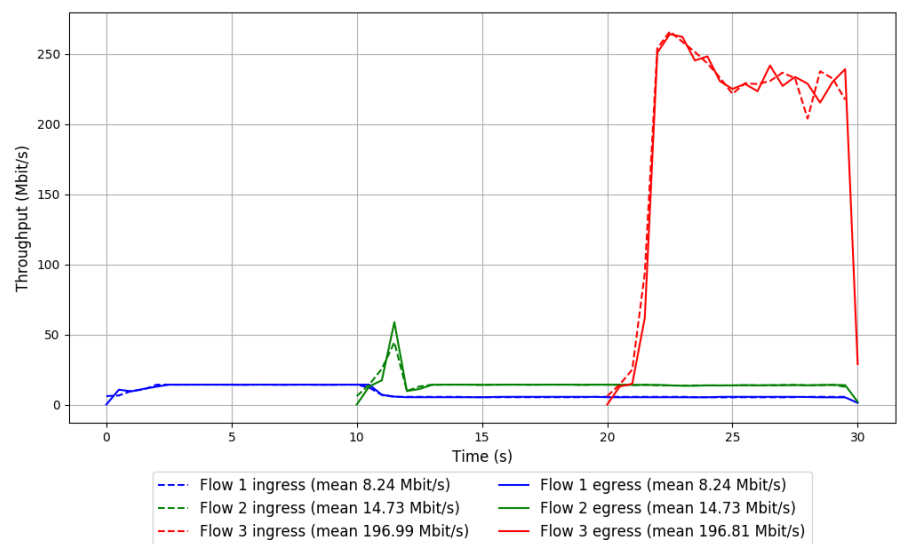
-- Flow 3:

Average throughput: 196.81 Mbit/s

95th percentile per-packet one-way delay: 112.956 ms

Loss rate: 0.08%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-17 03:36:45

End at: 2018-02-17 03:37:15

Below is generated by plot.py at 2018-02-17 08:00:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 232.29 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 153.58 Mbit/s

95th percentile per-packet one-way delay: 112.672 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.56 Mbit/s

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

Loss rate: 0.00%

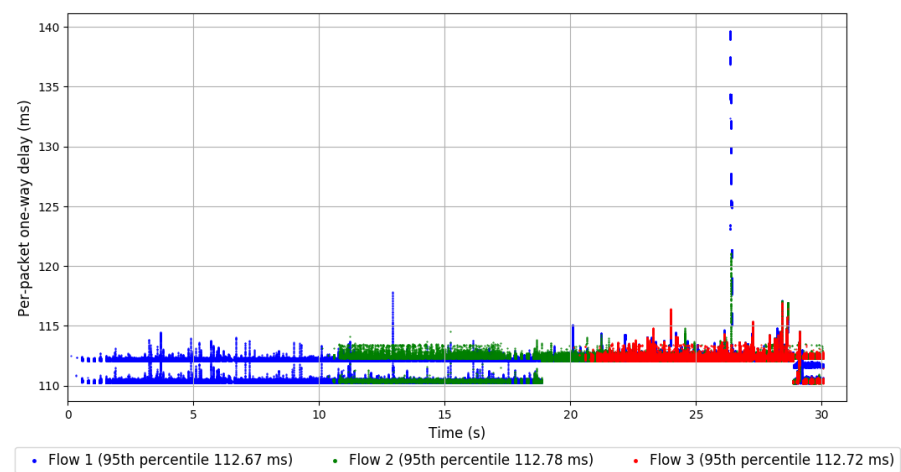
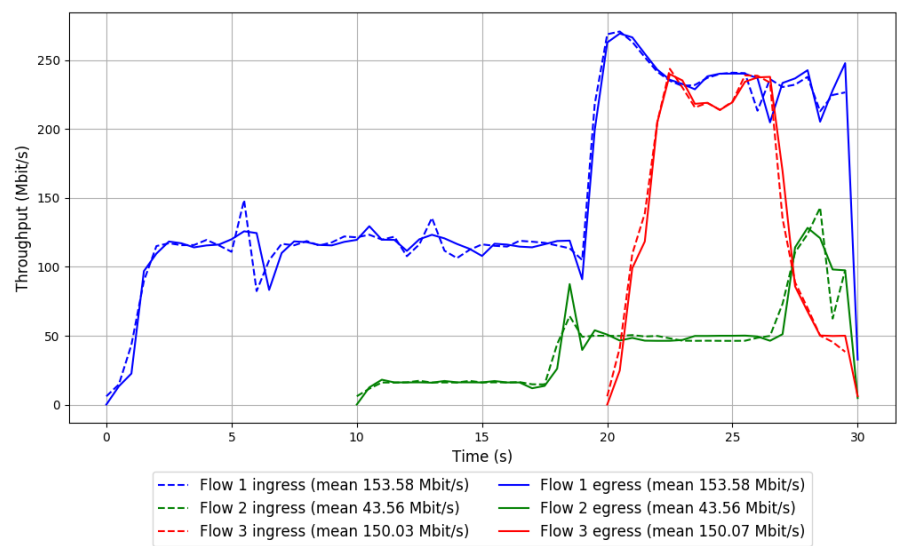
-- Flow 3:

Average throughput: 150.07 Mbit/s

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

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-17 03:56:37

End at: 2018-02-17 03:57:07

Below is generated by plot.py at 2018-02-17 08:00:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.13 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 123.14 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 15.75 Mbit/s

95th percentile per-packet one-way delay: 112.650 ms

Loss rate: 0.00%

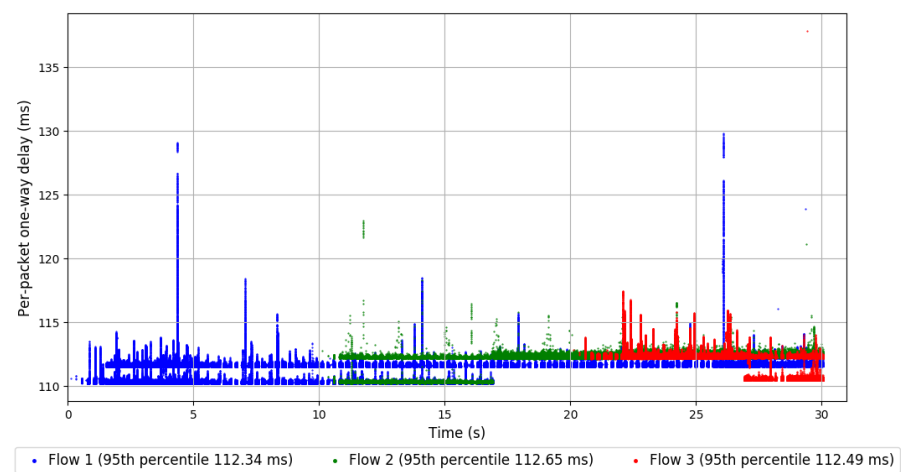
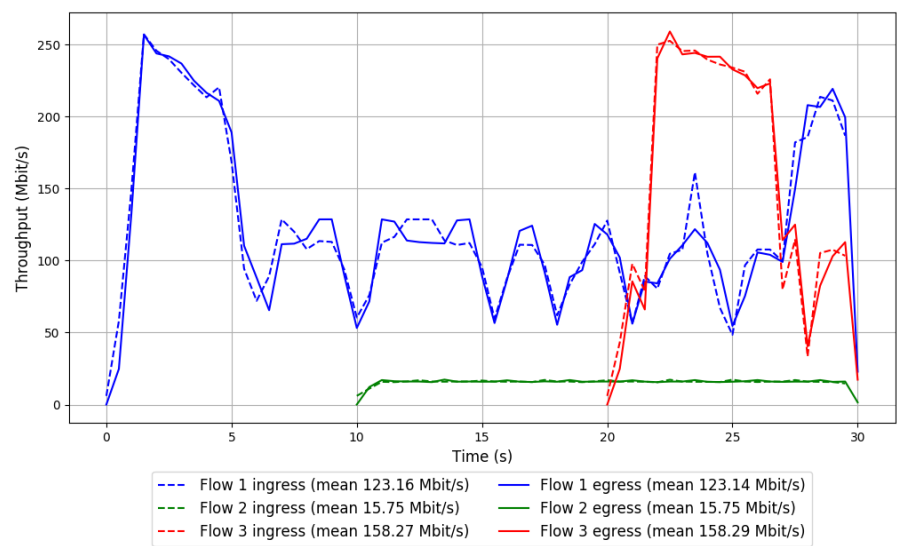
-- Flow 3:

Average throughput: 158.29 Mbit/s

95th percentile per-packet one-way delay: 112.487 ms

Loss rate: 0.02%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-02-17 04:16:12

End at: 2018-02-17 04:16:42

Below is generated by plot.py at 2018-02-17 08:06:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 375.50 Mbit/s

95th percentile per-packet one-way delay: 115.920 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 206.93 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 180.60 Mbit/s

95th percentile per-packet one-way delay: 116.202 ms

Loss rate: 0.00%

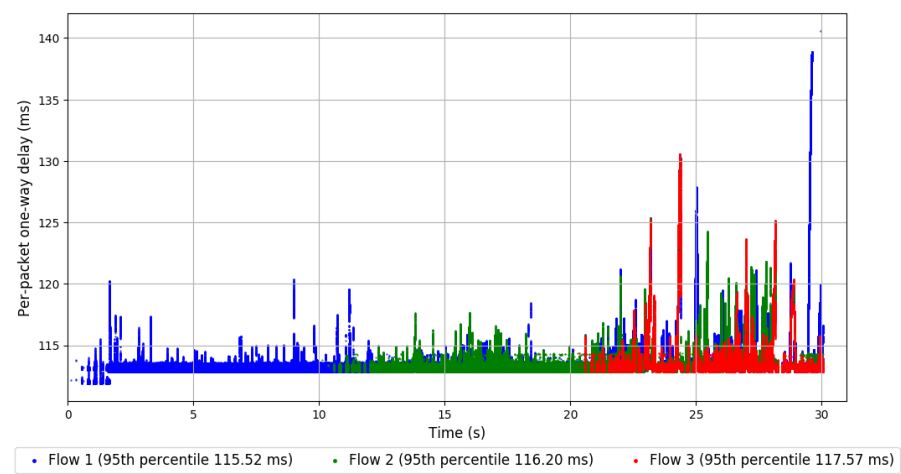
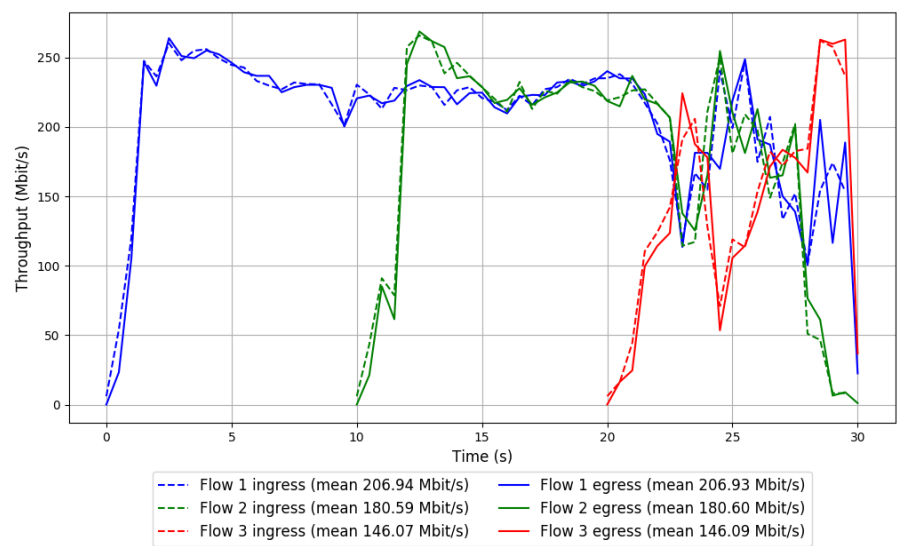
-- Flow 3:

Average throughput: 146.09 Mbit/s

95th percentile per-packet one-way delay: 117.566 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-17 04:35:48

End at: 2018-02-17 04:36:18

Below is generated by plot.py at 2018-02-17 08:06:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 154.04 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 16.62 Mbit/s

95th percentile per-packet one-way delay: 113.032 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 199.70 Mbit/s

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

Loss rate: 0.01%

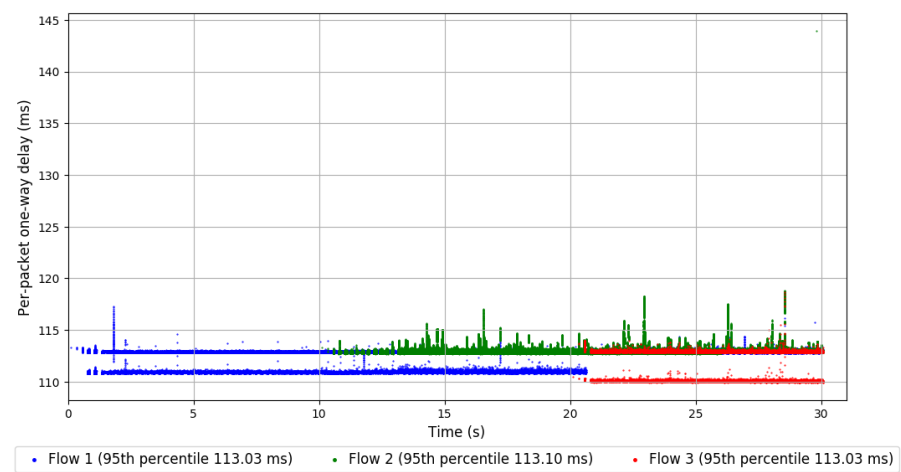
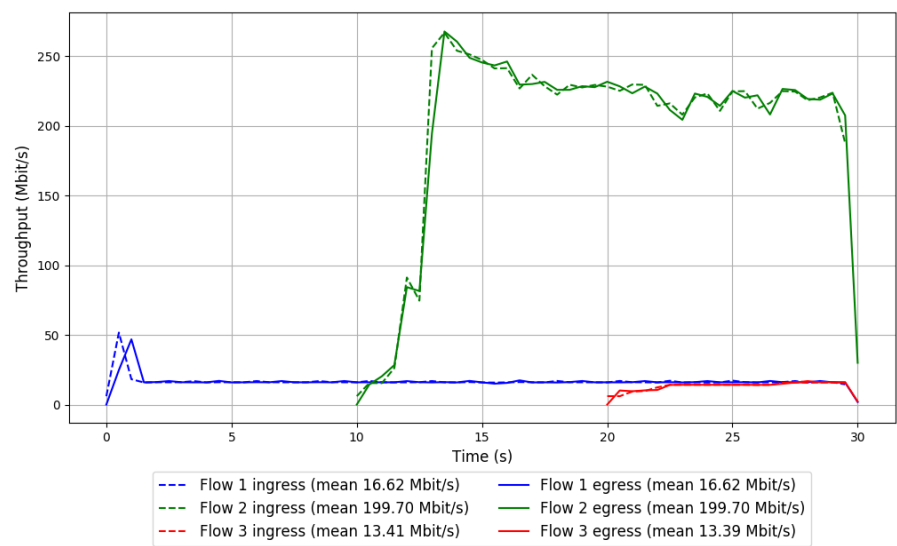
-- Flow 3:

Average throughput: 13.39 Mbit/s

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

Loss rate: 0.11%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-02-17 04:55:41

End at: 2018-02-17 04:56:11

Below is generated by plot.py at 2018-02-17 08:06:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 207.67 Mbit/s

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

Loss rate: 0.02%

-- Flow 1:

Average throughput: 13.16 Mbit/s

95th percentile per-packet one-way delay: 112.742 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 200.02 Mbit/s

95th percentile per-packet one-way delay: 112.810 ms

Loss rate: 0.02%

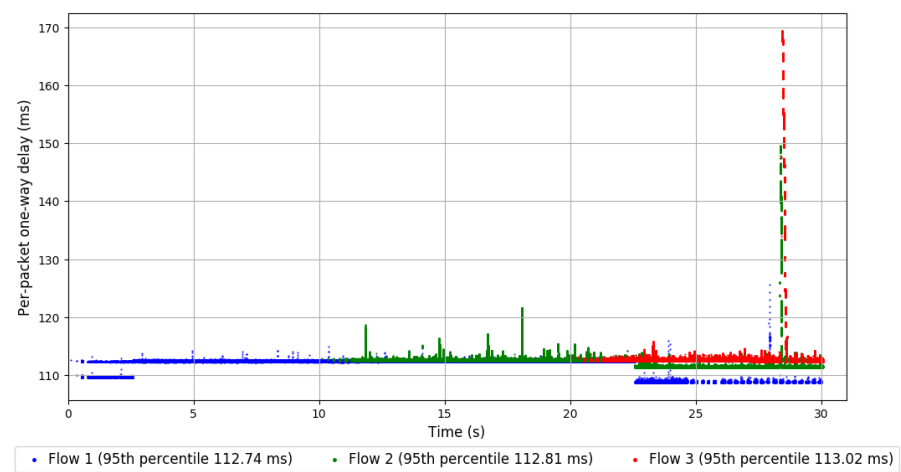
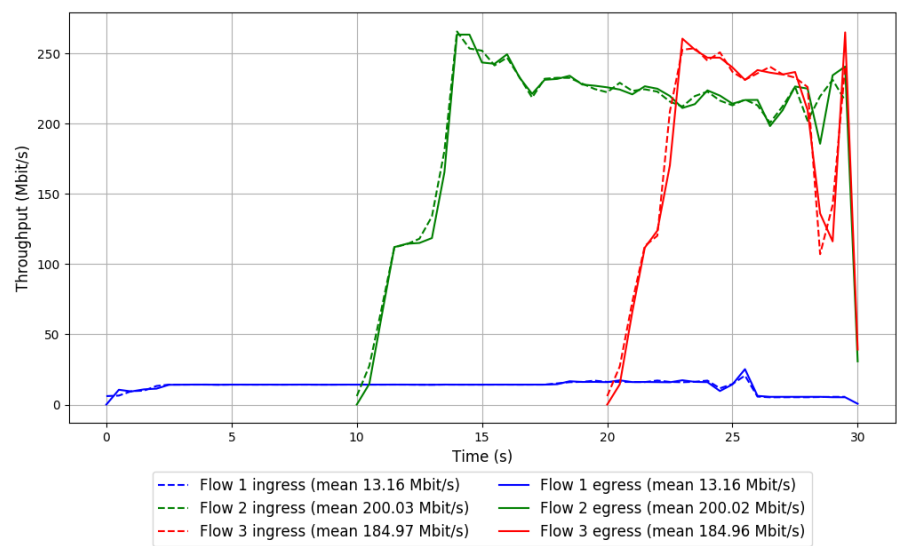
-- Flow 3:

Average throughput: 184.96 Mbit/s

95th percentile per-packet one-way delay: 113.019 ms

Loss rate: 0.04%

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

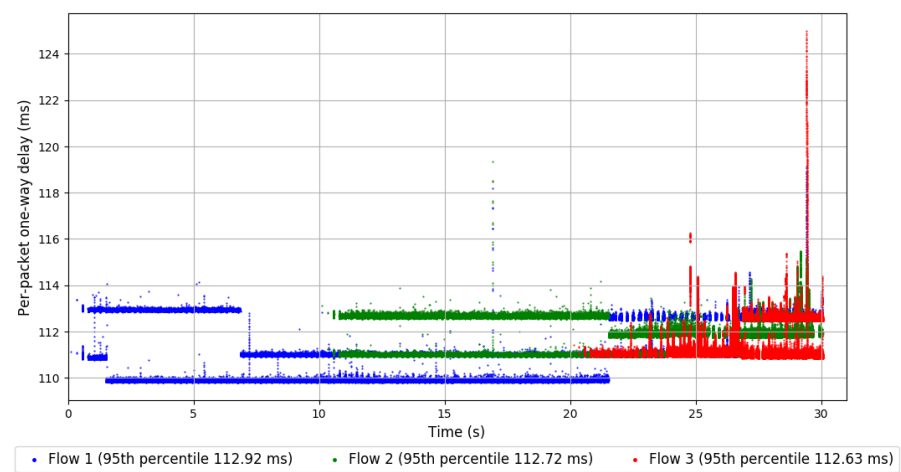
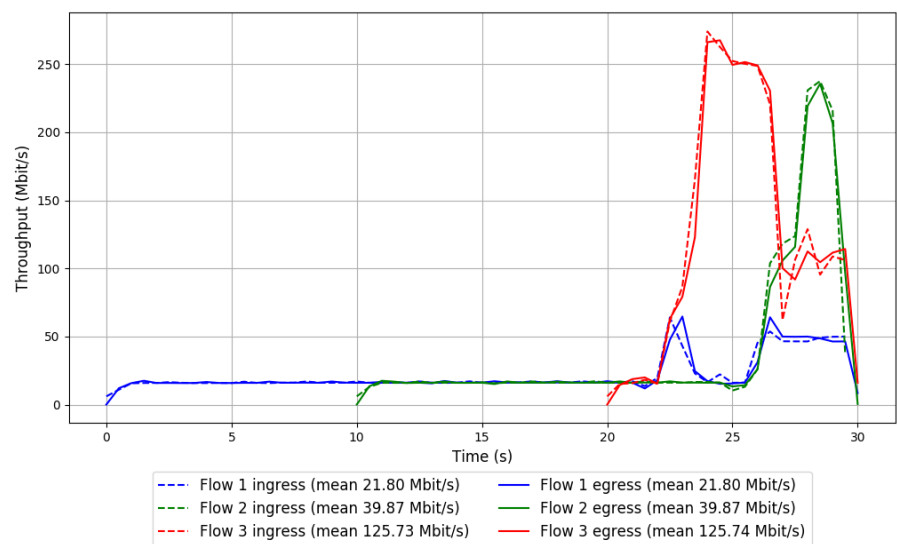


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-17 05:15:37
End at: 2018-02-17 05:16:07

# Below is generated by plot.py at 2018-02-17 08:06:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.03 Mbit/s
95th percentile per-packet one-way delay: 112.733 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 21.80 Mbit/s
95th percentile per-packet one-way delay: 112.915 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.87 Mbit/s
95th percentile per-packet one-way delay: 112.715 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 125.74 Mbit/s
95th percentile per-packet one-way delay: 112.633 ms
Loss rate: 0.02%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-17 02:07:07

End at: 2018-02-17 02:07:37

Below is generated by plot.py at 2018-02-17 08:06:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.50 Mbit/s

95th percentile per-packet one-way delay: 113.752 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 54.08 Mbit/s

95th percentile per-packet one-way delay: 113.602 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 19.51 Mbit/s

95th percentile per-packet one-way delay: 112.946 ms

Loss rate: 0.00%

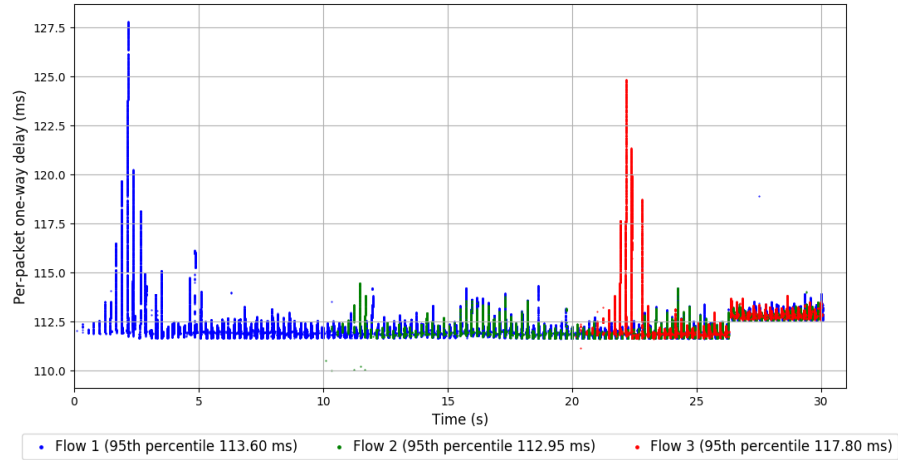
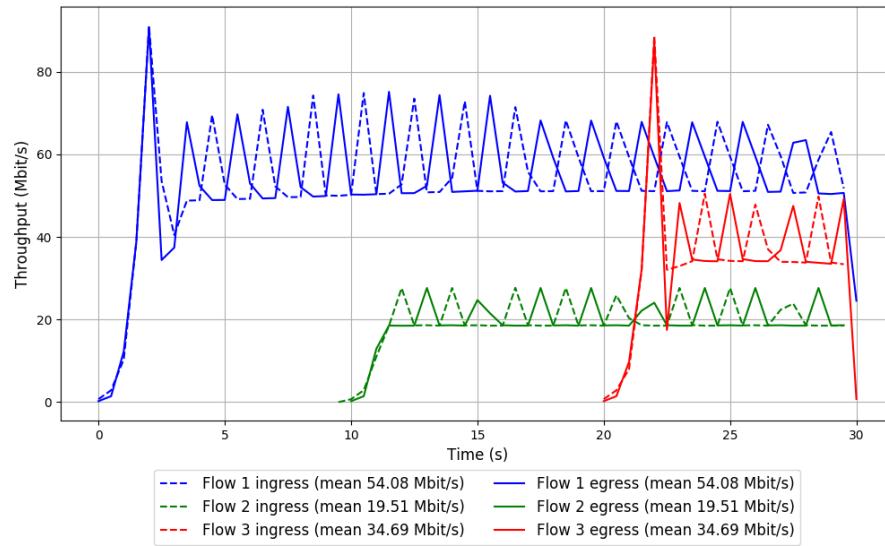
-- Flow 3:

Average throughput: 34.69 Mbit/s

95th percentile per-packet one-way delay: 117.804 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-17 02:26:21

End at: 2018-02-17 02:26:51

Below is generated by plot.py at 2018-02-17 08:06:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.50 Mbit/s

95th percentile per-packet one-way delay: 118.942 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 32.18 Mbit/s

95th percentile per-packet one-way delay: 117.281 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.63 Mbit/s

95th percentile per-packet one-way delay: 119.248 ms

Loss rate: 0.00%

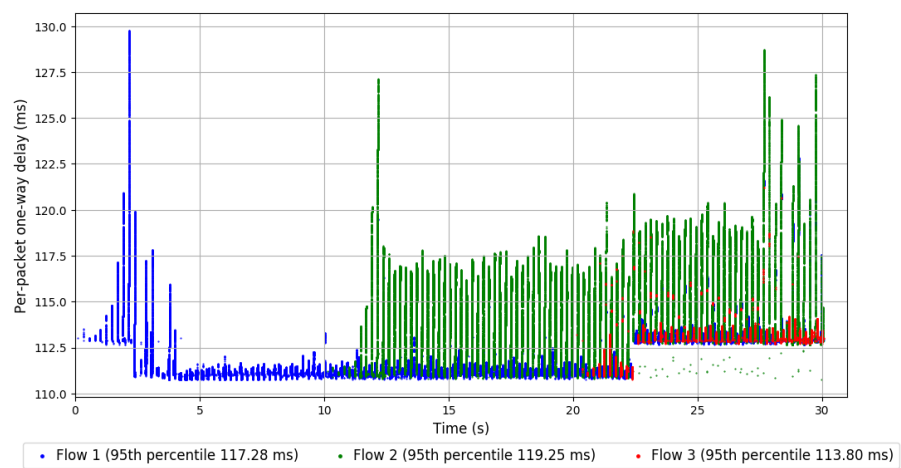
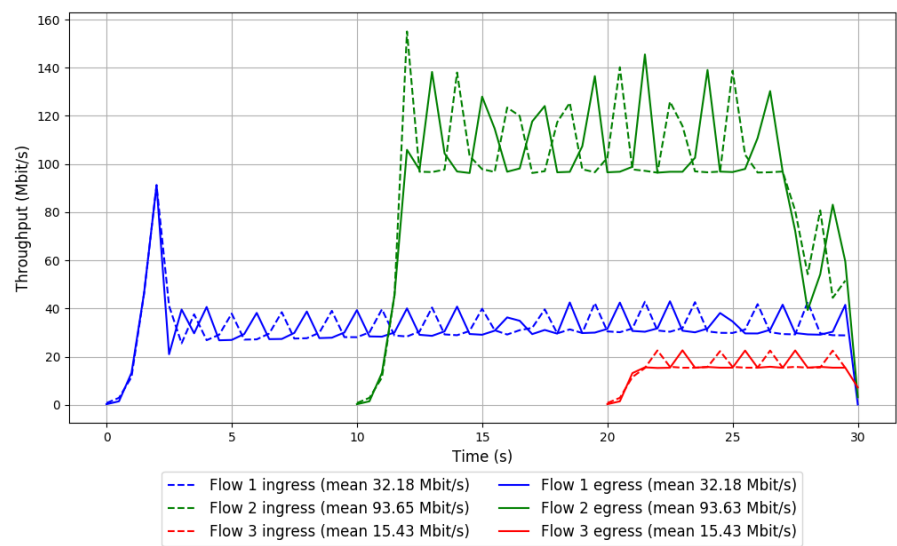
-- Flow 3:

Average throughput: 15.43 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-17 02:46:00

End at: 2018-02-17 02:46:30

Below is generated by plot.py at 2018-02-17 08:06:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.66 Mbit/s

95th percentile per-packet one-way delay: 113.419 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 65.03 Mbit/s

95th percentile per-packet one-way delay: 113.316 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.81 Mbit/s

95th percentile per-packet one-way delay: 113.220 ms

Loss rate: 0.00%

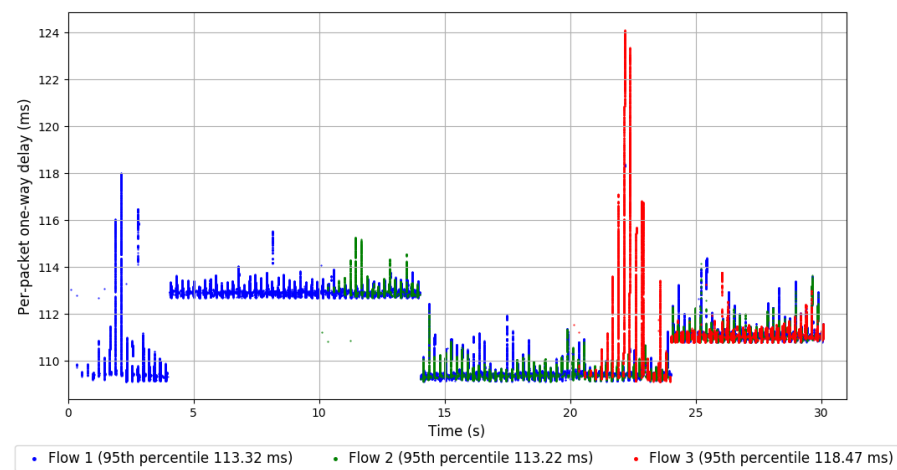
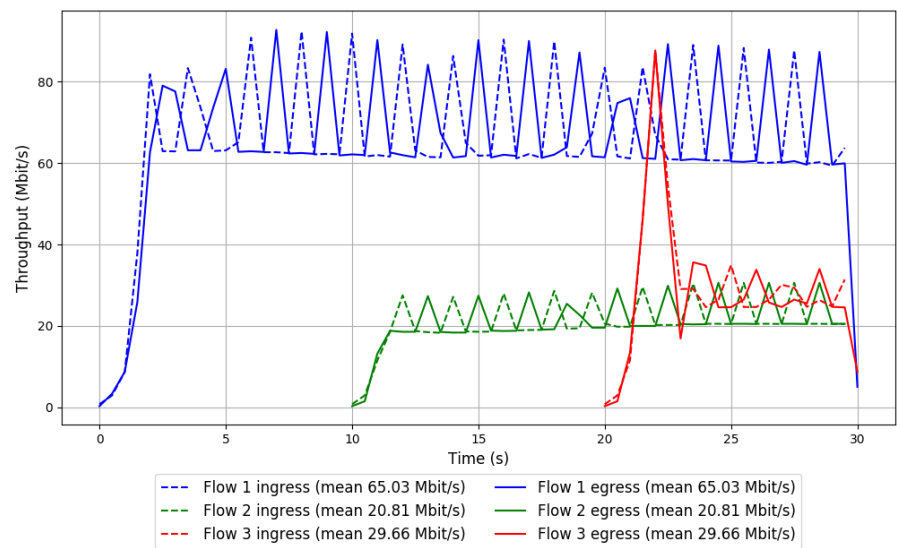
-- Flow 3:

Average throughput: 29.66 Mbit/s

95th percentile per-packet one-way delay: 118.475 ms

Loss rate: 0.02%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-17 03:06:07

End at: 2018-02-17 03:06:37

Below is generated by plot.py at 2018-02-17 08:06:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.31 Mbit/s

95th percentile per-packet one-way delay: 118.943 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.86 Mbit/s

95th percentile per-packet one-way delay: 115.692 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.74 Mbit/s

95th percentile per-packet one-way delay: 119.526 ms

Loss rate: 0.00%

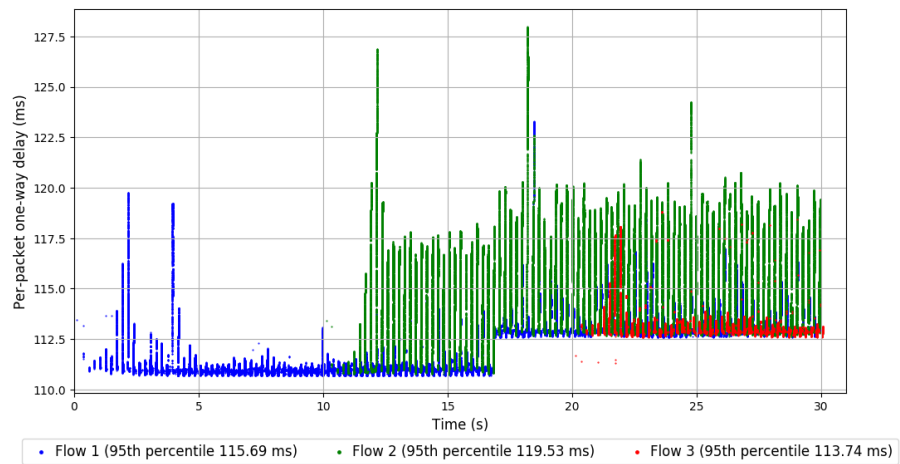
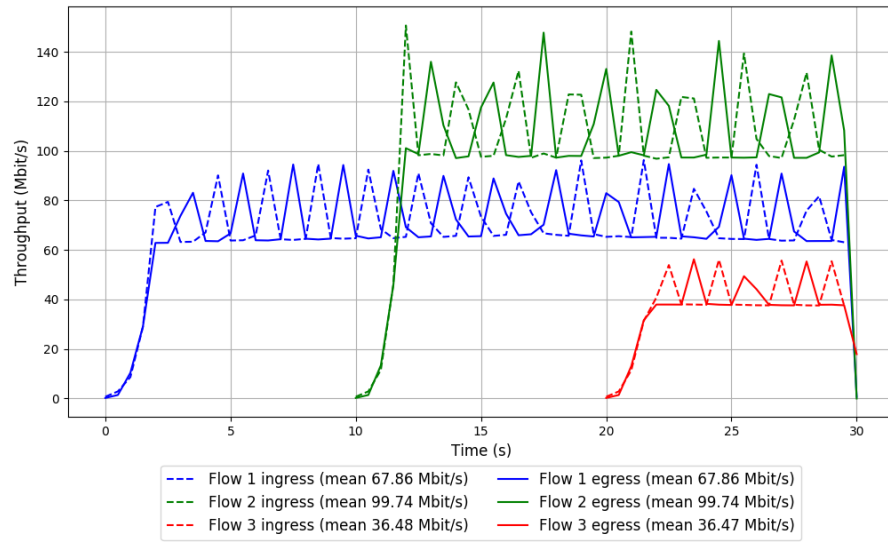
-- Flow 3:

Average throughput: 36.47 Mbit/s

95th percentile per-packet one-way delay: 113.741 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-17 03:25:39

End at: 2018-02-17 03:26:09

Below is generated by plot.py at 2018-02-17 08:06:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 147.09 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 88.88 Mbit/s

95th percentile per-packet one-way delay: 119.028 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 86.98 Mbit/s

95th percentile per-packet one-way delay: 119.235 ms

Loss rate: 0.00%

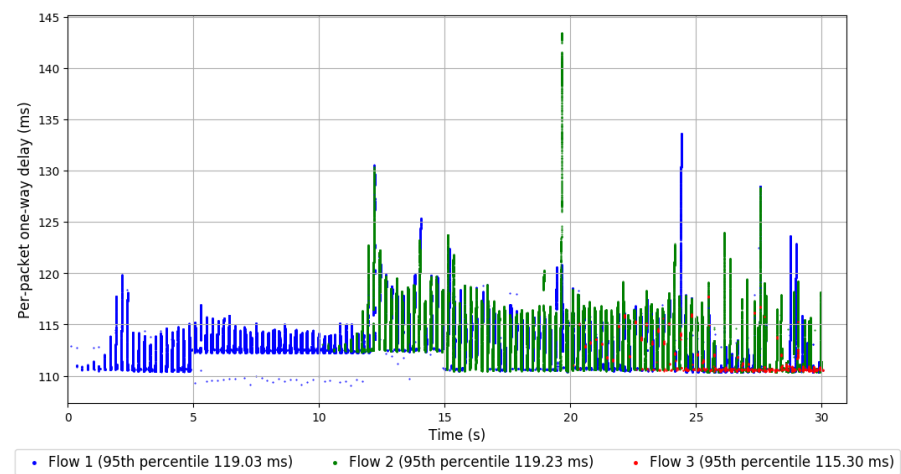
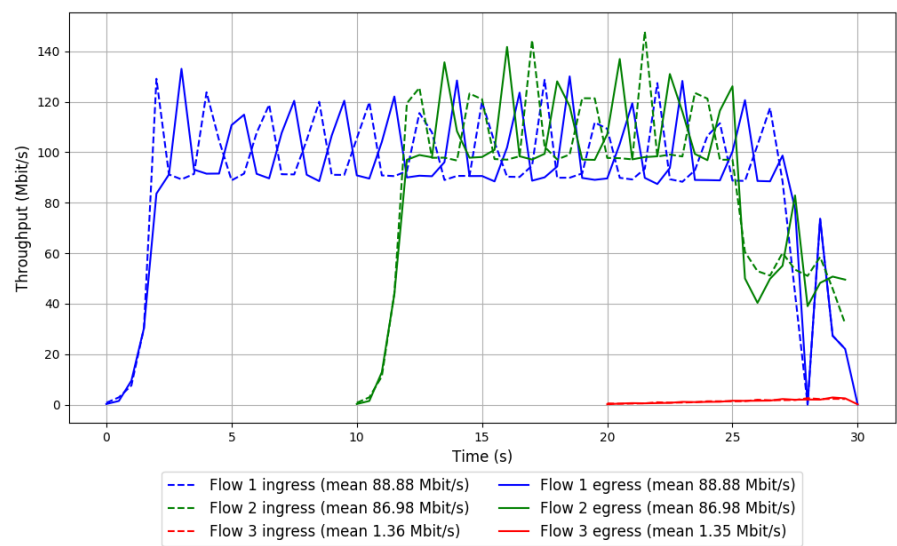
-- Flow 3:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 115.296 ms

Loss rate: 0.45%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-17 03:45:31

End at: 2018-02-17 03:46:01

Below is generated by plot.py at 2018-02-17 08:06:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.27 Mbit/s

95th percentile per-packet one-way delay: 120.979 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 36.17 Mbit/s

95th percentile per-packet one-way delay: 121.149 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.79 Mbit/s

95th percentile per-packet one-way delay: 121.055 ms

Loss rate: 0.00%

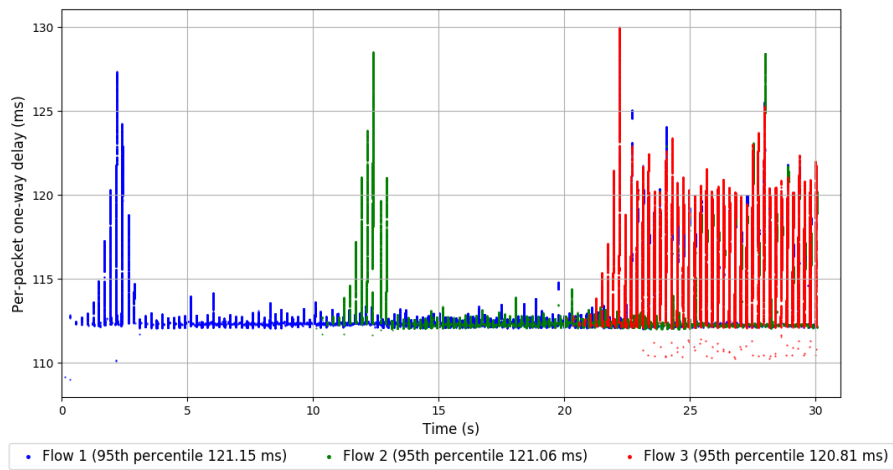
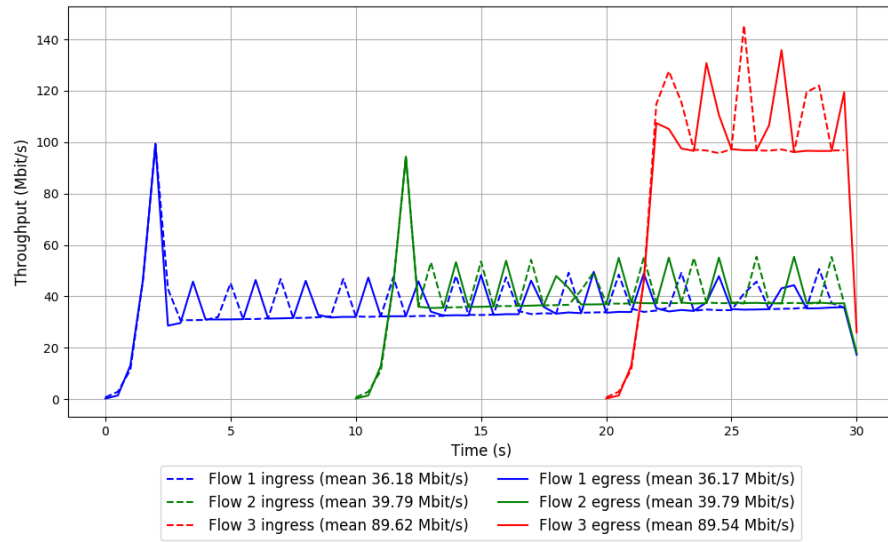
-- Flow 3:

Average throughput: 89.54 Mbit/s

95th percentile per-packet one-way delay: 120.807 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-17 04:05:07

End at: 2018-02-17 04:05:37

Below is generated by plot.py at 2018-02-17 08:06:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.92 Mbit/s

95th percentile per-packet one-way delay: 117.483 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 38.73 Mbit/s

95th percentile per-packet one-way delay: 114.258 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 33.13 Mbit/s

95th percentile per-packet one-way delay: 115.347 ms

Loss rate: 0.00%

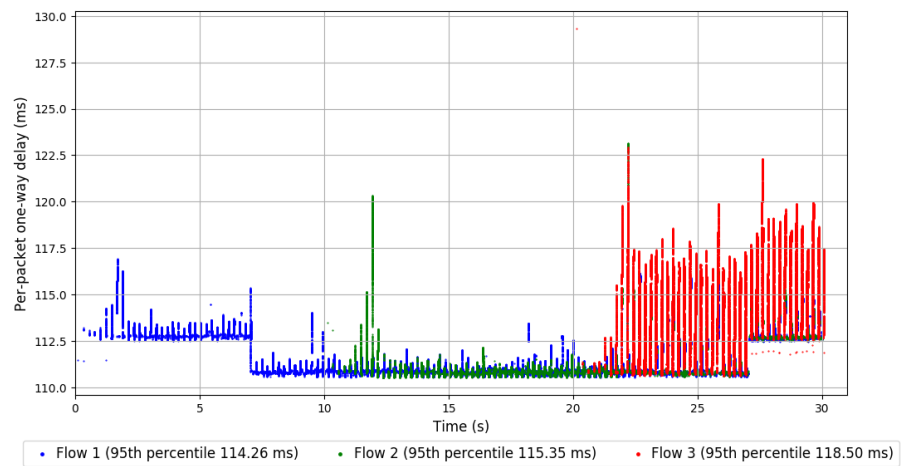
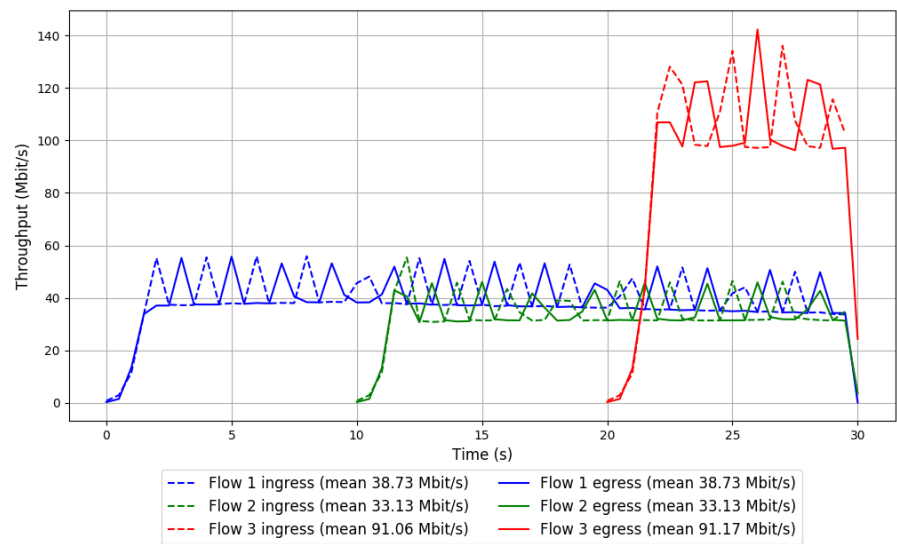
-- Flow 3:

Average throughput: 91.17 Mbit/s

95th percentile per-packet one-way delay: 118.504 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-17 04:25:01

End at: 2018-02-17 04:25:31

Below is generated by plot.py at 2018-02-17 08:06:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.70 Mbit/s

95th percentile per-packet one-way delay: 119.640 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 21.70 Mbit/s

95th percentile per-packet one-way delay: 119.005 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.62 Mbit/s

95th percentile per-packet one-way delay: 119.793 ms

Loss rate: 0.00%

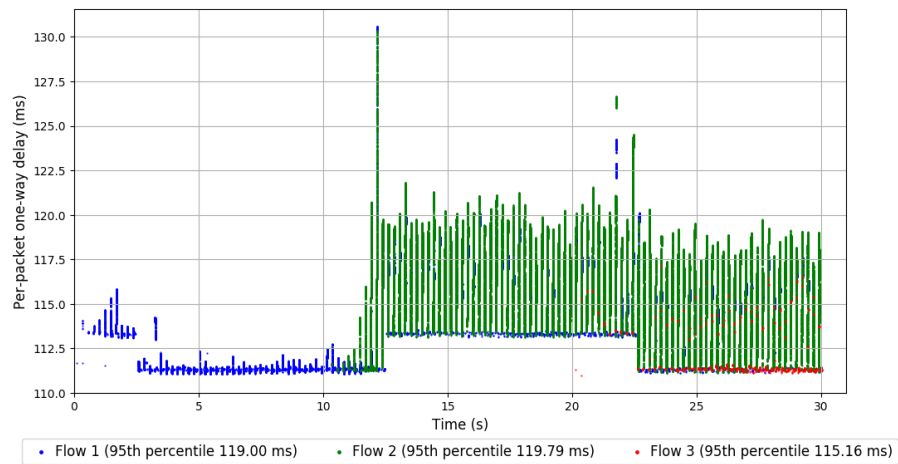
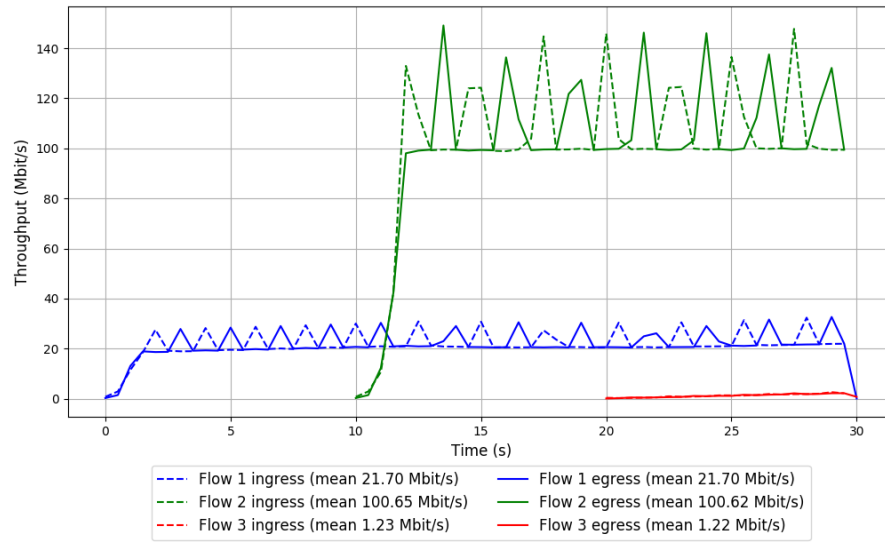
-- Flow 3:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 115.157 ms

Loss rate: 0.78%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-17 04:44:16

End at: 2018-02-17 04:44:46

Below is generated by plot.py at 2018-02-17 08:06:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.58 Mbit/s

95th percentile per-packet one-way delay: 118.219 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 71.81 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 31.38 Mbit/s

95th percentile per-packet one-way delay: 119.002 ms

Loss rate: 0.00%

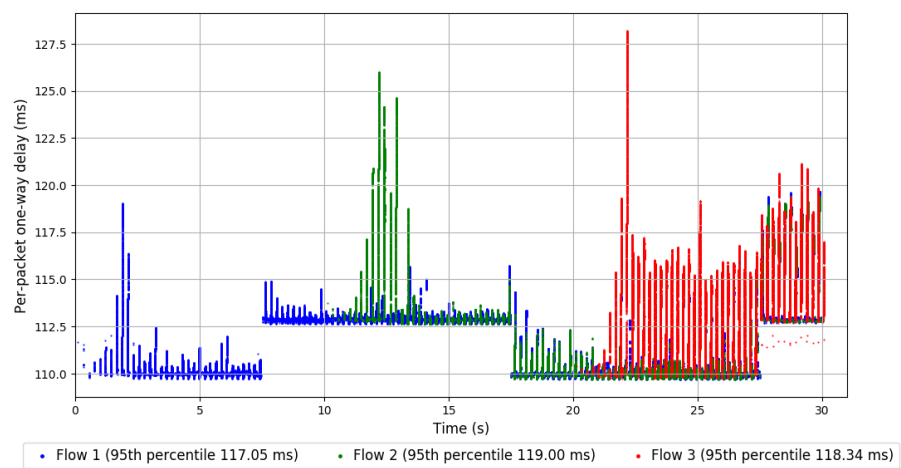
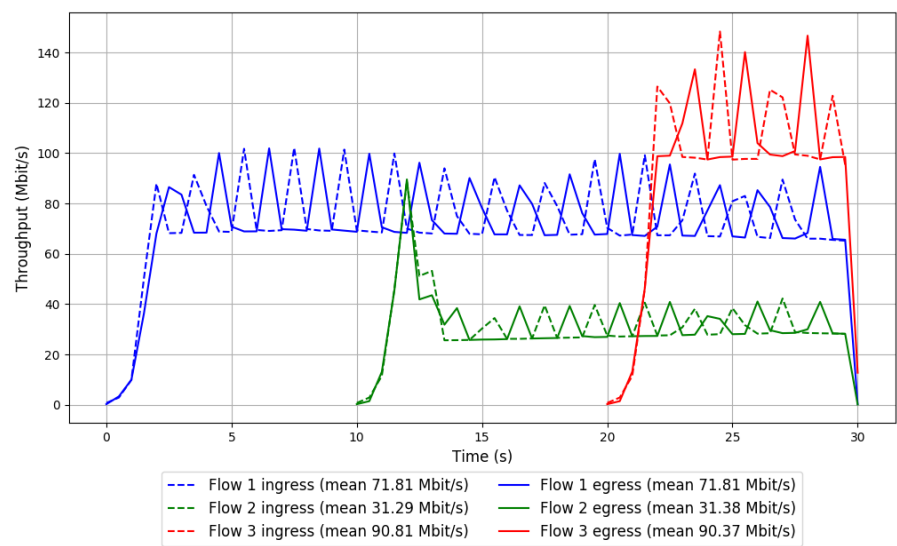
-- Flow 3:

Average throughput: 90.37 Mbit/s

95th percentile per-packet one-way delay: 118.340 ms

Loss rate: 0.48%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-17 05:04:27

End at: 2018-02-17 05:04:57

Below is generated by plot.py at 2018-02-17 08:06:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.94 Mbit/s

95th percentile per-packet one-way delay: 118.511 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 102.81 Mbit/s

95th percentile per-packet one-way delay: 117.942 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.34 Mbit/s

95th percentile per-packet one-way delay: 119.129 ms

Loss rate: 0.00%

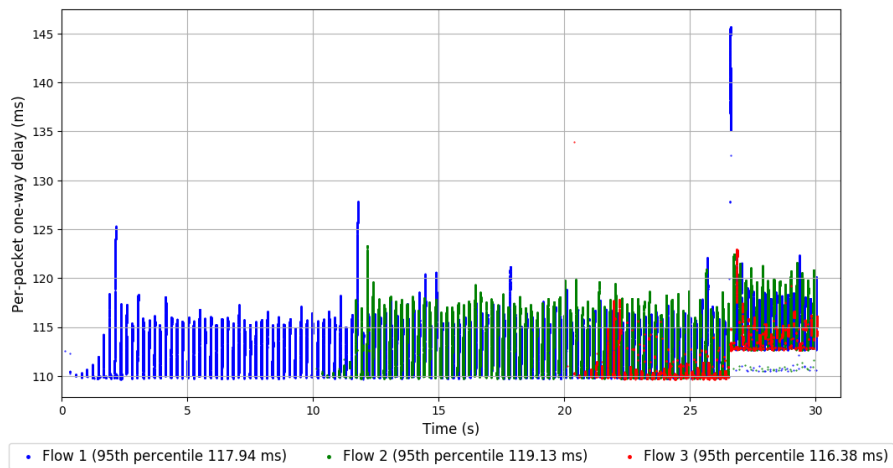
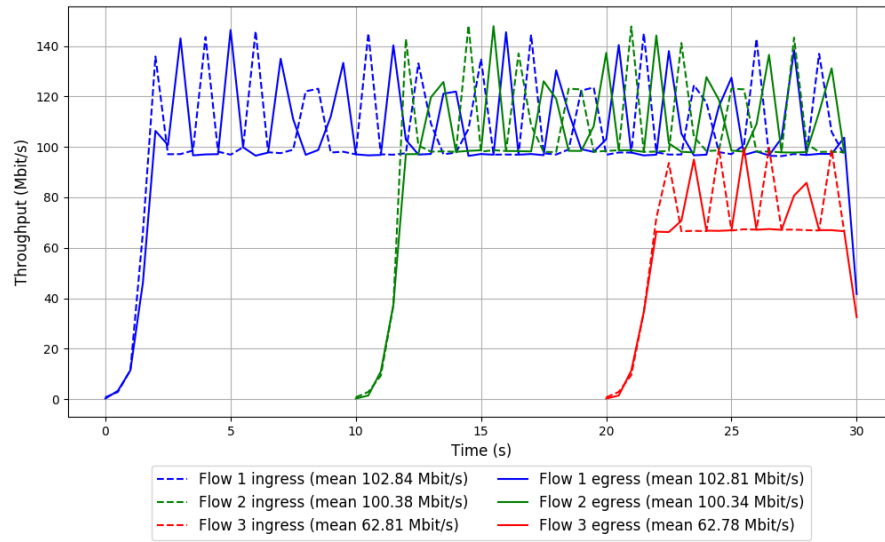
-- Flow 3:

Average throughput: 62.78 Mbit/s

95th percentile per-packet one-way delay: 116.379 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

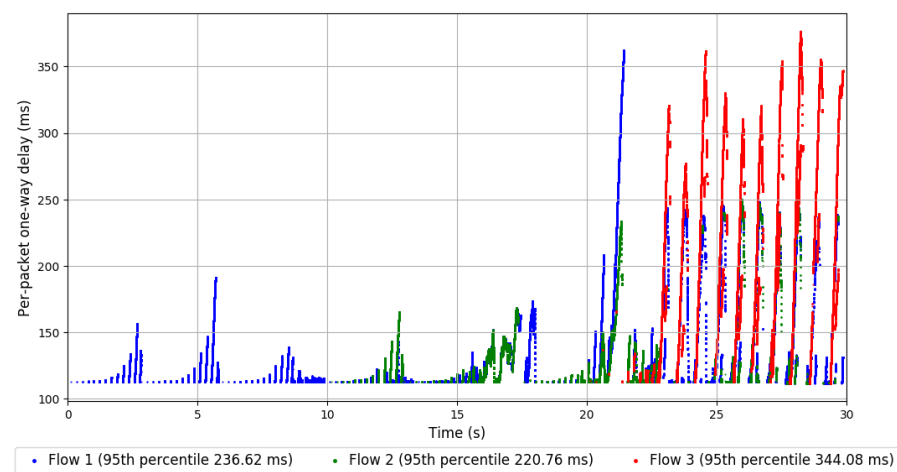
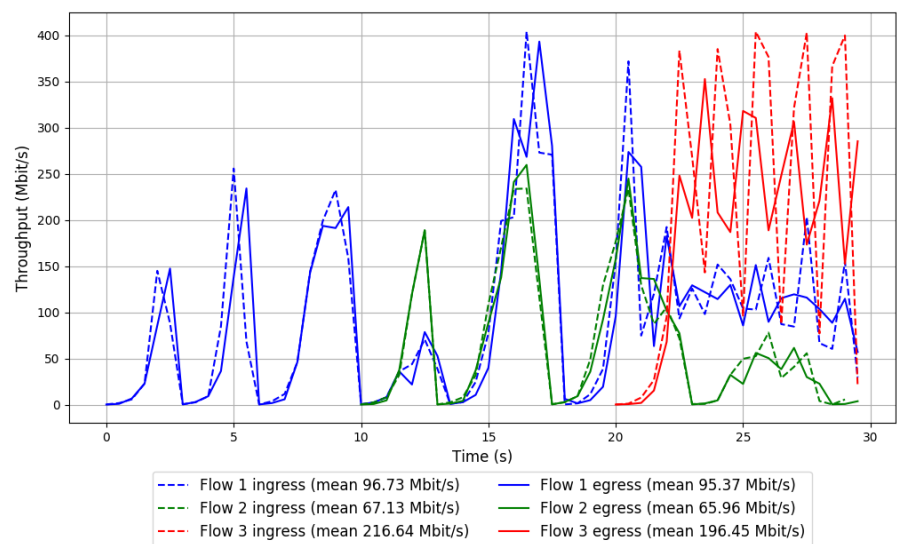


```
Run 1: Statistics of Verus

Start at: 2018-02-17 02:06:06
End at: 2018-02-17 02:06:36

# Below is generated by plot.py at 2018-02-17 08:06:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 202.81 Mbit/s
95th percentile per-packet one-way delay: 324.495 ms
Loss rate: 3.64%
-- Flow 1:
Average throughput: 95.37 Mbit/s
95th percentile per-packet one-way delay: 236.624 ms
Loss rate: 1.40%
-- Flow 2:
Average throughput: 65.96 Mbit/s
95th percentile per-packet one-way delay: 220.757 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 196.45 Mbit/s
95th percentile per-packet one-way delay: 344.077 ms
Loss rate: 8.29%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-17 02:25:15

End at: 2018-02-17 02:25:45

Below is generated by plot.py at 2018-02-17 08:06:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 262.56 Mbit/s

95th percentile per-packet one-way delay: 173.250 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 206.19 Mbit/s

95th percentile per-packet one-way delay: 171.966 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 56.72 Mbit/s

95th percentile per-packet one-way delay: 157.011 ms

Loss rate: 0.00%

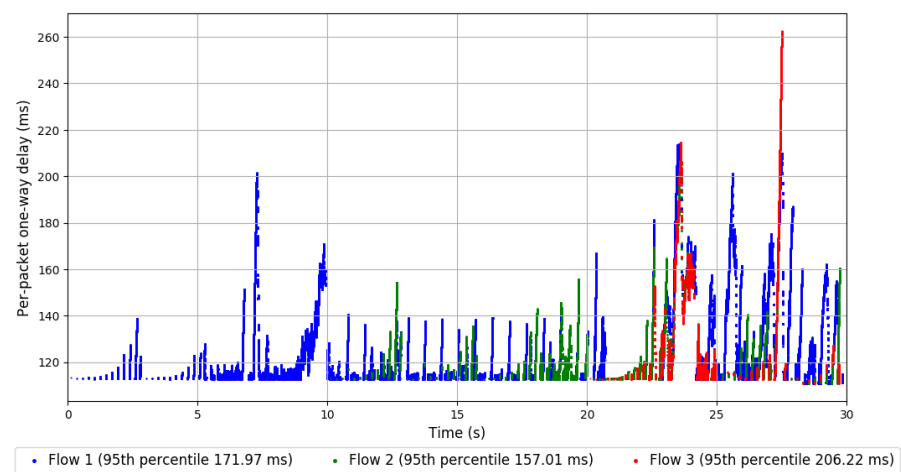
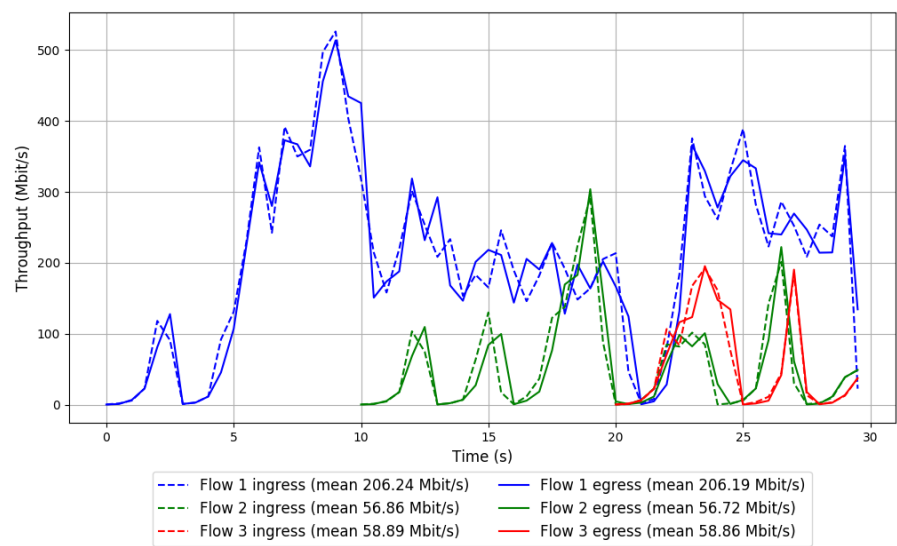
-- Flow 3:

Average throughput: 58.86 Mbit/s

95th percentile per-packet one-way delay: 206.222 ms

Loss rate: 0.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-17 02:44:56

End at: 2018-02-17 02:45:26

Below is generated by plot.py at 2018-02-17 08:06:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 219.75 Mbit/s

95th percentile per-packet one-way delay: 159.470 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 84.41 Mbit/s

95th percentile per-packet one-way delay: 145.763 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 166.97 Mbit/s

95th percentile per-packet one-way delay: 156.786 ms

Loss rate: 0.33%

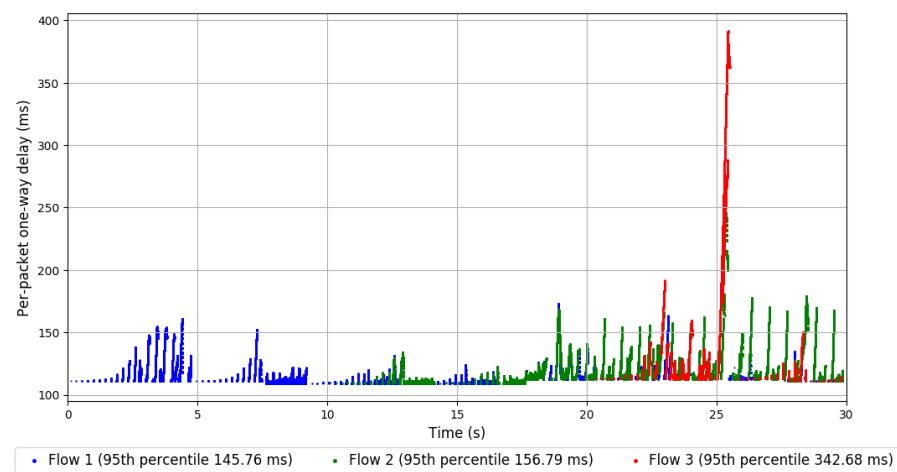
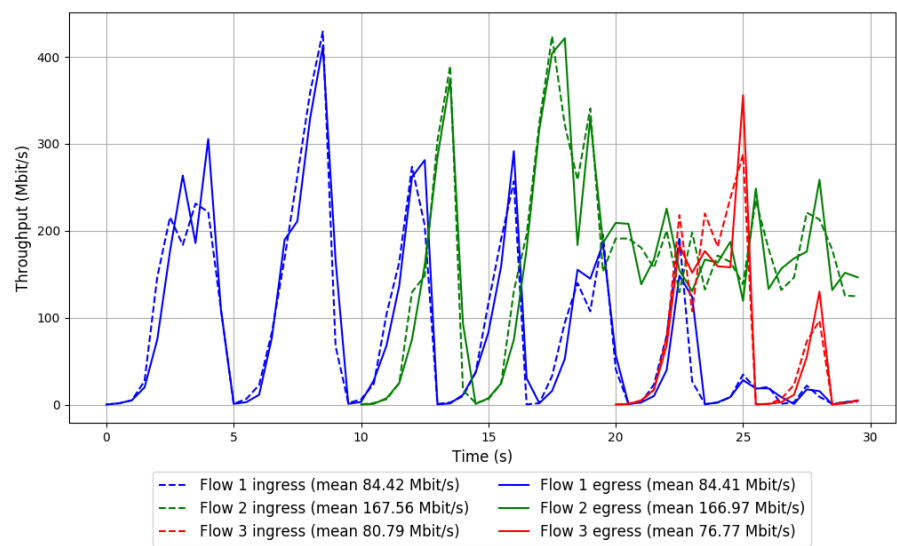
-- Flow 3:

Average throughput: 76.77 Mbit/s

95th percentile per-packet one-way delay: 342.683 ms

Loss rate: 4.97%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-17 03:05:03

End at: 2018-02-17 03:05:33

Below is generated by plot.py at 2018-02-17 08:06:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 238.44 Mbit/s

95th percentile per-packet one-way delay: 168.220 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 195.74 Mbit/s

95th percentile per-packet one-way delay: 158.044 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 49.80 Mbit/s

95th percentile per-packet one-way delay: 284.555 ms

Loss rate: 0.96%

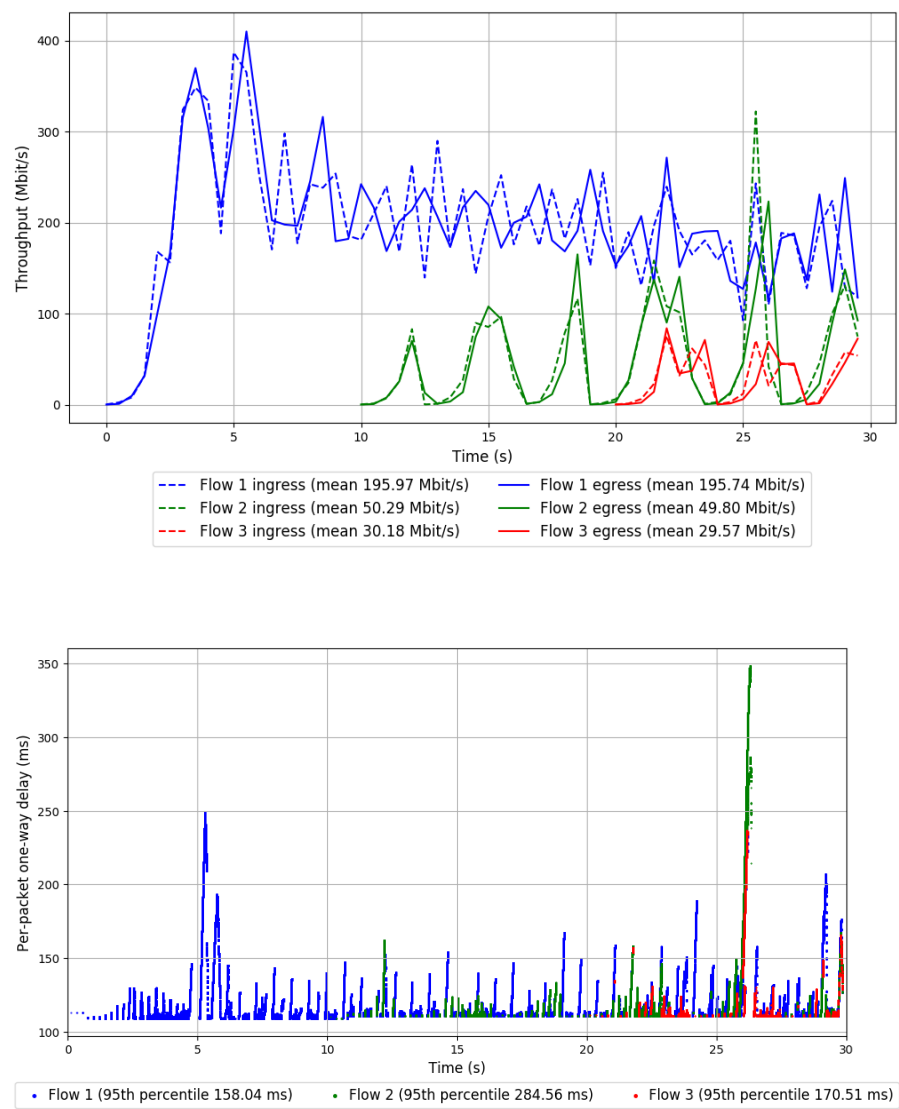
-- Flow 3:

Average throughput: 29.57 Mbit/s

95th percentile per-packet one-way delay: 170.511 ms

Loss rate: 1.99%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-17 03:24:31

End at: 2018-02-17 03:25:01

Below is generated by plot.py at 2018-02-17 08:07:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 278.12 Mbit/s

95th percentile per-packet one-way delay: 231.112 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 115.83 Mbit/s

95th percentile per-packet one-way delay: 172.855 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 150.33 Mbit/s

95th percentile per-packet one-way delay: 203.815 ms

Loss rate: 0.32%

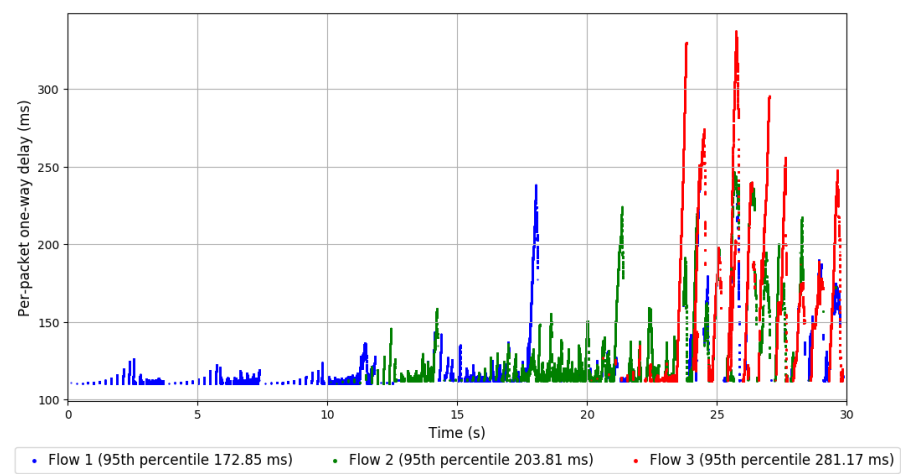
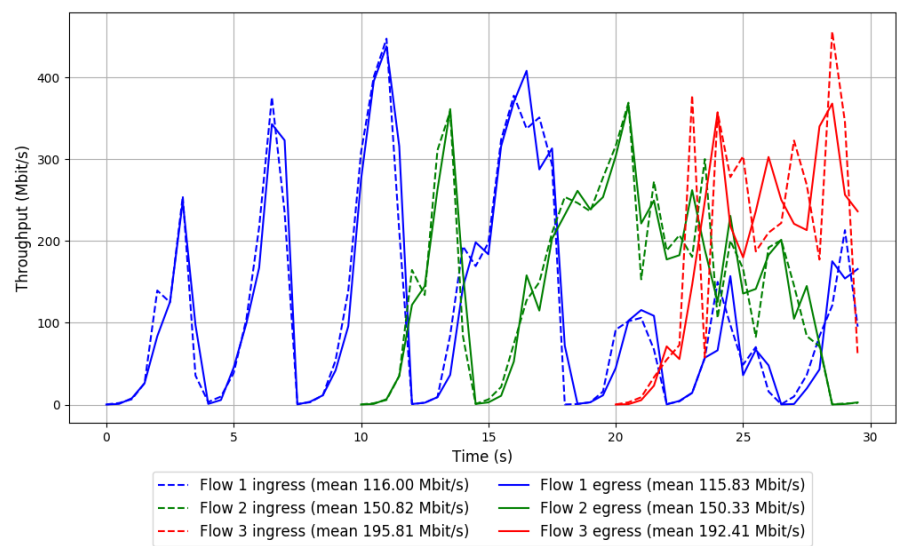
-- Flow 3:

Average throughput: 192.41 Mbit/s

95th percentile per-packet one-way delay: 281.166 ms

Loss rate: 1.75%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-17 03:44:20

End at: 2018-02-17 03:44:50

Below is generated by plot.py at 2018-02-17 08:09:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 321.38 Mbit/s

95th percentile per-packet one-way delay: 290.187 ms

Loss rate: 2.43%

-- Flow 1:

Average throughput: 210.18 Mbit/s

95th percentile per-packet one-way delay: 234.076 ms

Loss rate: 1.34%

-- Flow 2:

Average throughput: 150.81 Mbit/s

95th percentile per-packet one-way delay: 346.490 ms

Loss rate: 4.76%

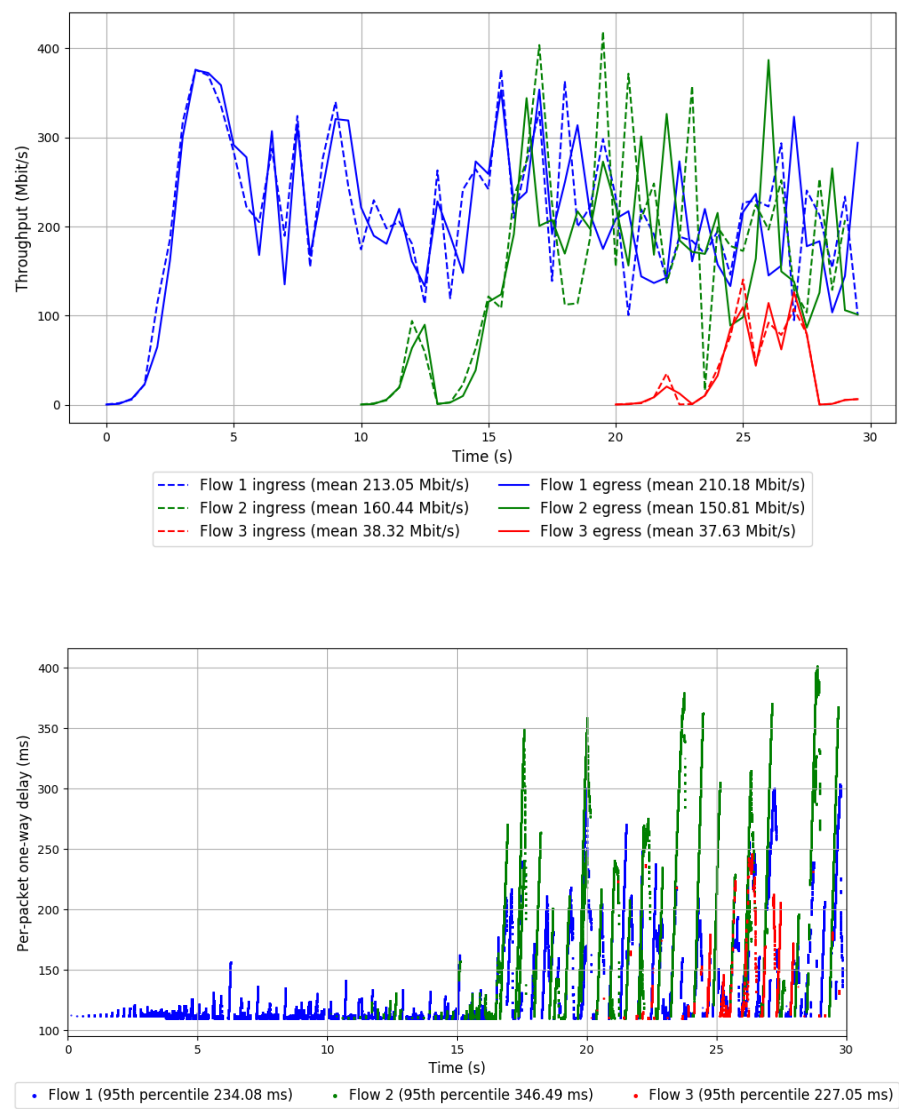
-- Flow 3:

Average throughput: 37.63 Mbit/s

95th percentile per-packet one-way delay: 227.051 ms

Loss rate: 1.58%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-17 04:04:02

End at: 2018-02-17 04:04:32

Below is generated by plot.py at 2018-02-17 08:09:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 235.04 Mbit/s

95th percentile per-packet one-way delay: 167.041 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 172.63 Mbit/s

95th percentile per-packet one-way delay: 162.140 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 72.00 Mbit/s

95th percentile per-packet one-way delay: 181.568 ms

Loss rate: 0.00%

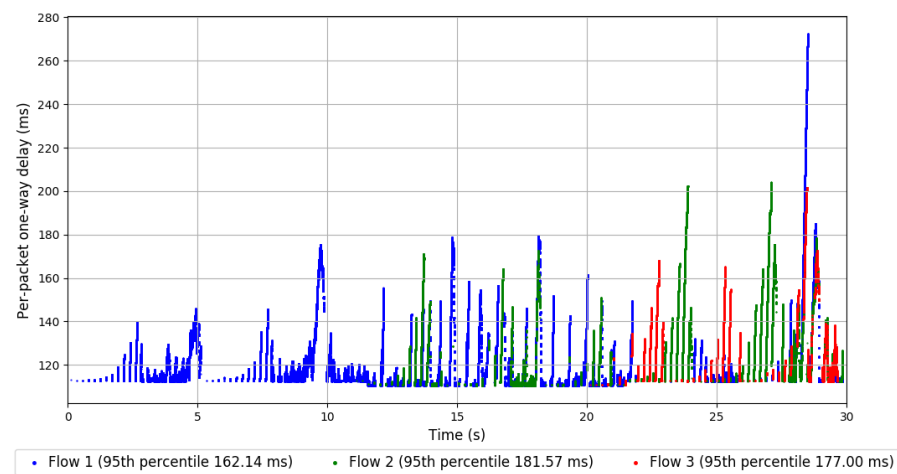
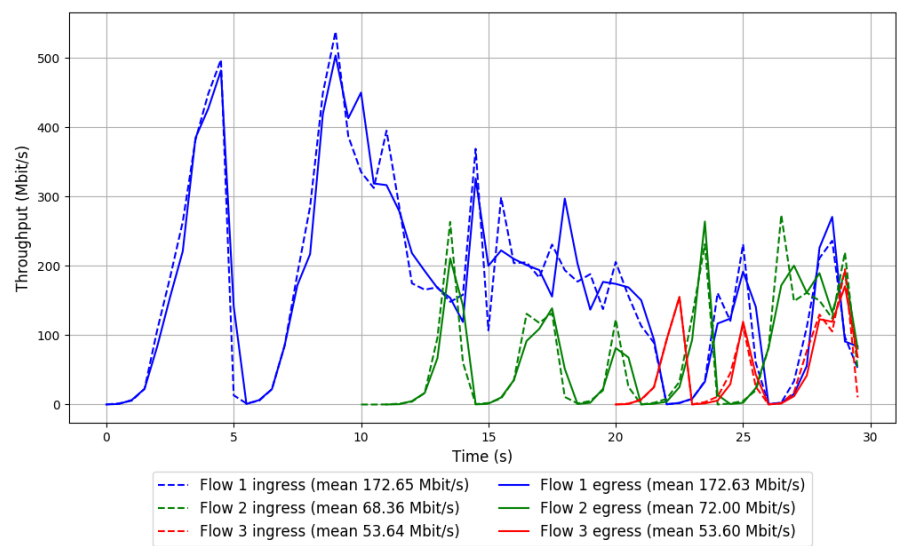
-- Flow 3:

Average throughput: 53.60 Mbit/s

95th percentile per-packet one-way delay: 177.004 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-17 04:23:56

End at: 2018-02-17 04:24:26

Below is generated by plot.py at 2018-02-17 08:09:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 241.25 Mbit/s

95th percentile per-packet one-way delay: 275.499 ms

Loss rate: 3.04%

-- Flow 1:

Average throughput: 122.54 Mbit/s

95th percentile per-packet one-way delay: 234.480 ms

Loss rate: 1.74%

-- Flow 2:

Average throughput: 152.33 Mbit/s

95th percentile per-packet one-way delay: 319.194 ms

Loss rate: 4.91%

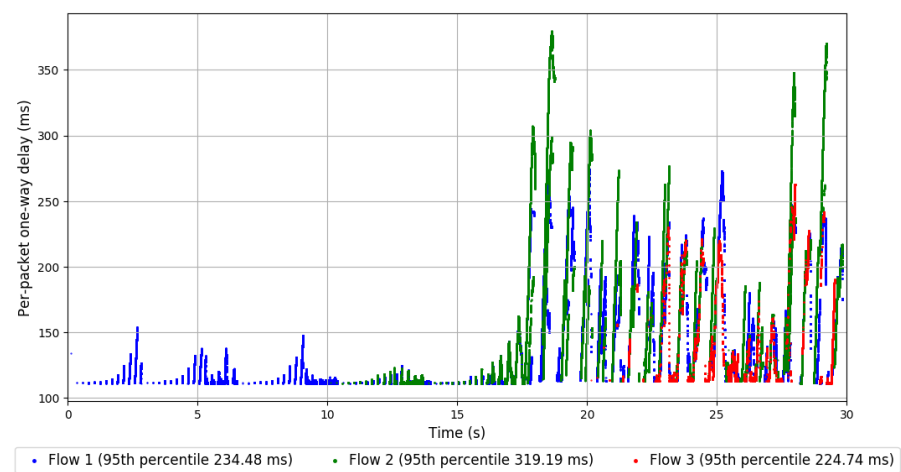
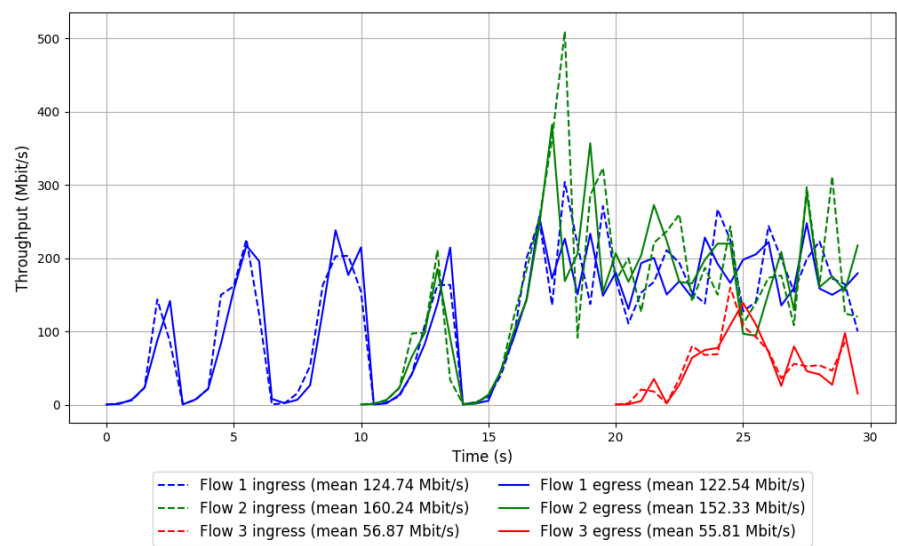
-- Flow 3:

Average throughput: 55.81 Mbit/s

95th percentile per-packet one-way delay: 224.742 ms

Loss rate: 1.05%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-17 04:43:11

End at: 2018-02-17 04:43:41

Below is generated by plot.py at 2018-02-17 08:09:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 243.10 Mbit/s

95th percentile per-packet one-way delay: 171.007 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 145.91 Mbit/s

95th percentile per-packet one-way delay: 156.951 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 98.22 Mbit/s

95th percentile per-packet one-way delay: 185.466 ms

Loss rate: 0.00%

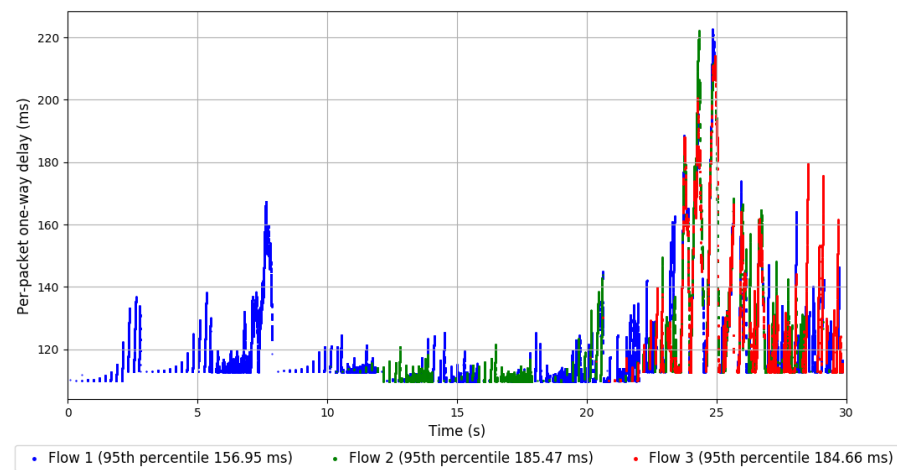
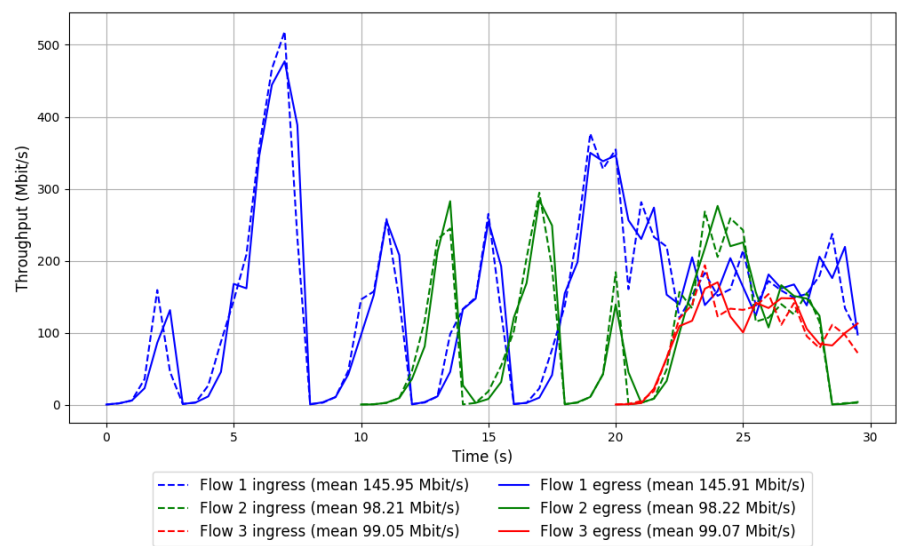
-- Flow 3:

Average throughput: 99.07 Mbit/s

95th percentile per-packet one-way delay: 184.665 ms

Loss rate: 0.04%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-17 05:03:19

End at: 2018-02-17 05:03:49

Below is generated by plot.py at 2018-02-17 08:10:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 282.76 Mbit/s

95th percentile per-packet one-way delay: 199.005 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 190.26 Mbit/s

95th percentile per-packet one-way delay: 178.947 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 117.48 Mbit/s

95th percentile per-packet one-way delay: 271.901 ms

Loss rate: 1.58%

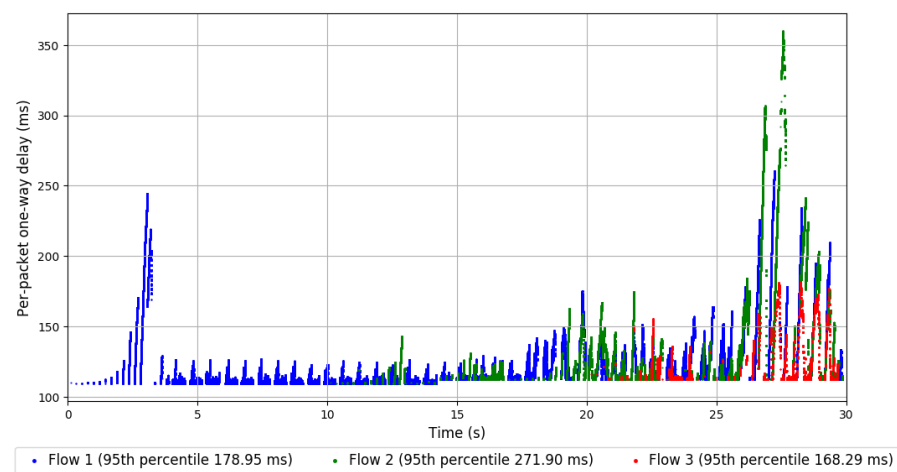
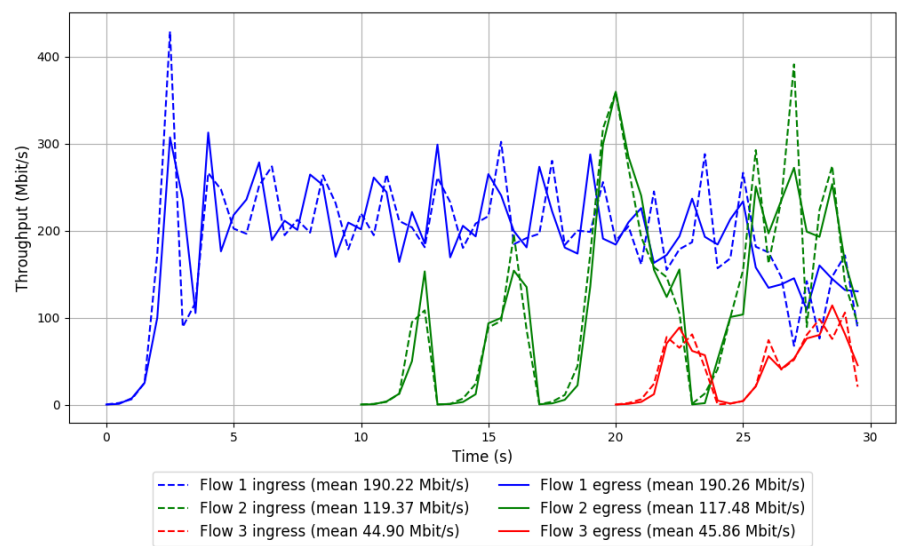
-- Flow 3:

Average throughput: 45.86 Mbit/s

95th percentile per-packet one-way delay: 168.295 ms

Loss rate: 0.00%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-02-17 02:07:58

End at: 2018-02-17 02:08:28

Below is generated by plot.py at 2018-02-17 08:10:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 133.02 Mbit/s

95th percentile per-packet one-way delay: 112.715 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.67 Mbit/s

95th percentile per-packet one-way delay: 112.676 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 73.74 Mbit/s

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

Loss rate: 0.00%

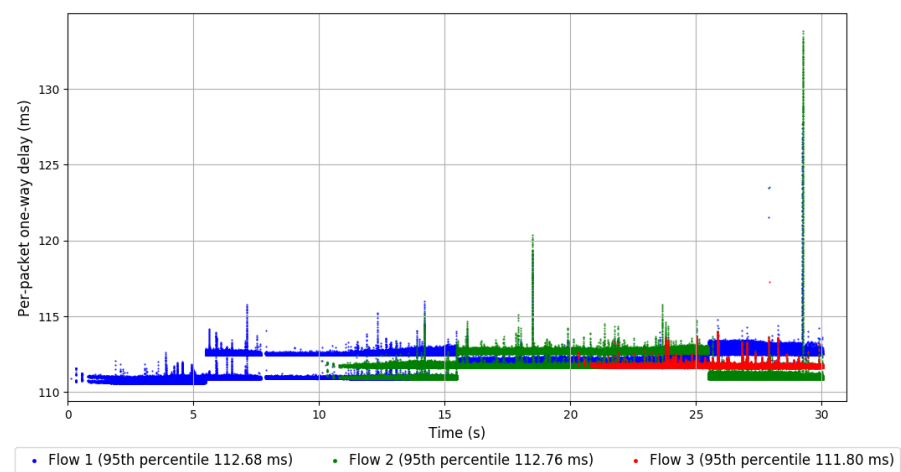
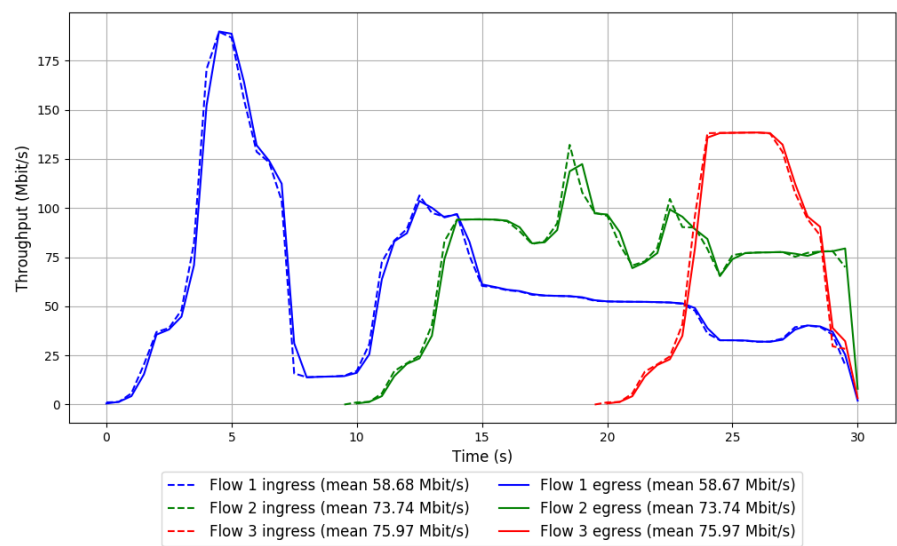
-- Flow 3:

Average throughput: 75.97 Mbit/s

95th percentile per-packet one-way delay: 111.798 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

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

End at: 2018-02-17 02:27:43

Below is generated by plot.py at 2018-02-17 08:11:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.42 Mbit/s

95th percentile per-packet one-way delay: 112.930 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 68.00 Mbit/s

95th percentile per-packet one-way delay: 113.033 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 66.18 Mbit/s

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

Loss rate: 0.00%

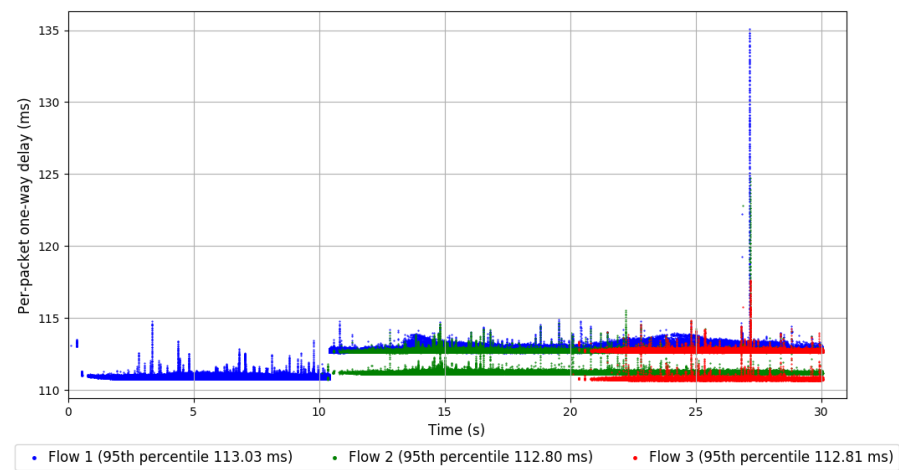
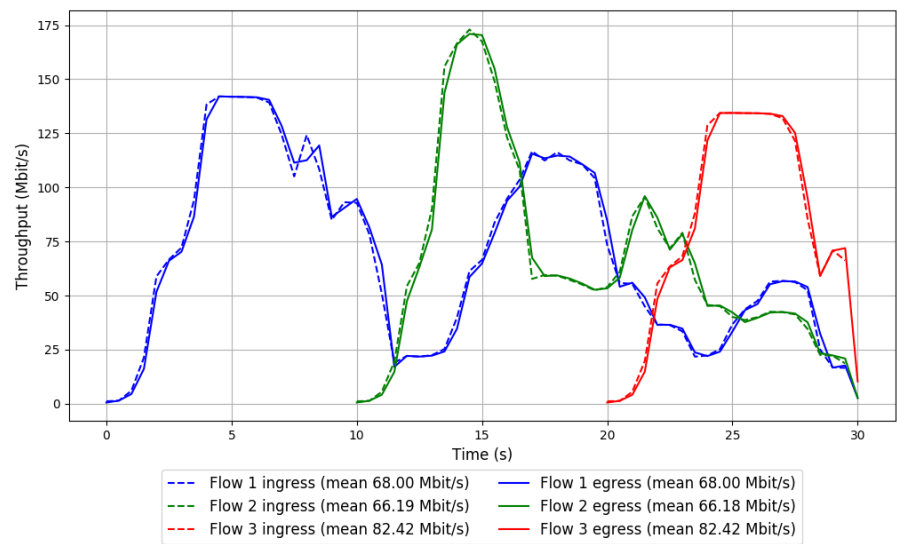
-- Flow 3:

Average throughput: 82.42 Mbit/s

95th percentile per-packet one-way delay: 112.805 ms

Loss rate: 0.01%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-17 02:46:51

End at: 2018-02-17 02:47:21

Below is generated by plot.py at 2018-02-17 08:11:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 127.20 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.96 Mbit/s

95th percentile per-packet one-way delay: 112.825 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.19 Mbit/s

95th percentile per-packet one-way delay: 112.865 ms

Loss rate: 0.00%

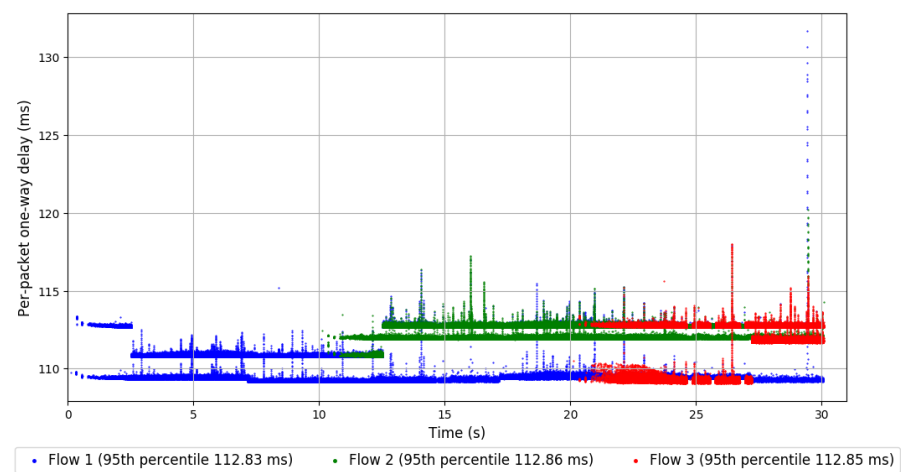
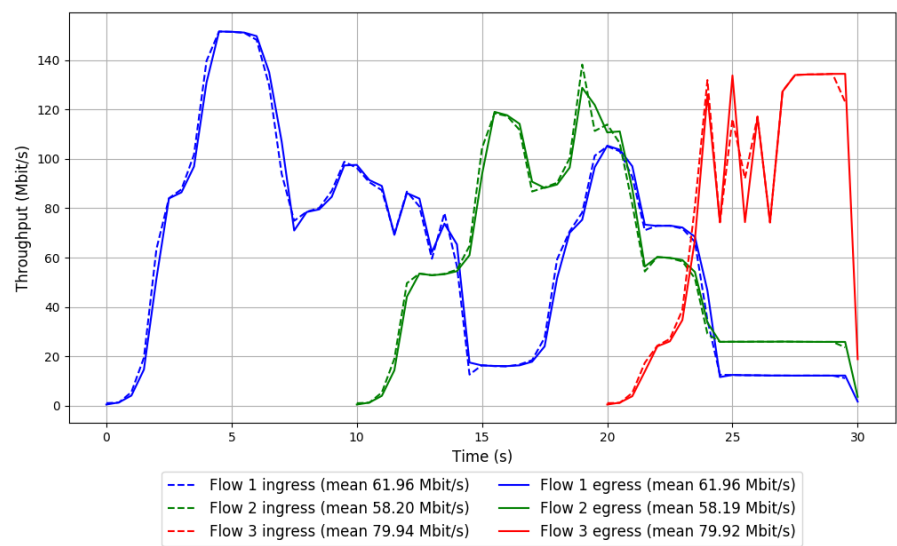
-- Flow 3:

Average throughput: 79.92 Mbit/s

95th percentile per-packet one-way delay: 112.847 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-17 03:07:02

End at: 2018-02-17 03:07:32

Below is generated by plot.py at 2018-02-17 08:12:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 144.95 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 78.05 Mbit/s

95th percentile per-packet one-way delay: 113.217 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 62.84 Mbit/s

95th percentile per-packet one-way delay: 111.873 ms

Loss rate: 0.00%

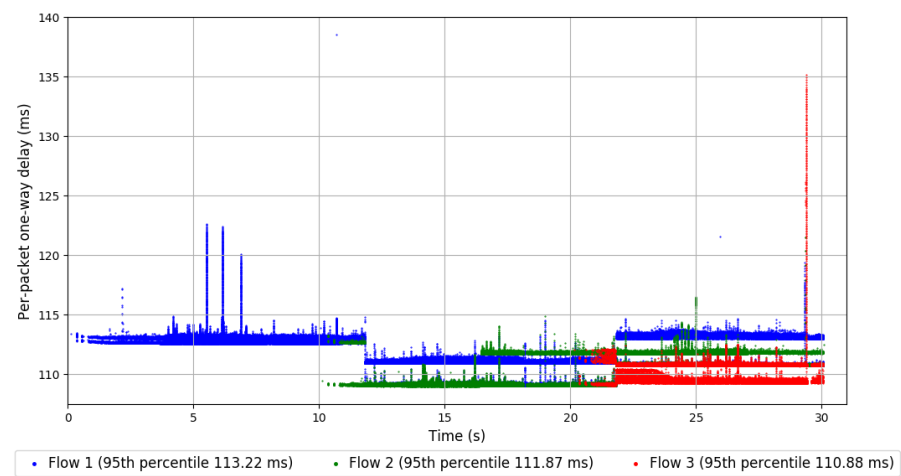
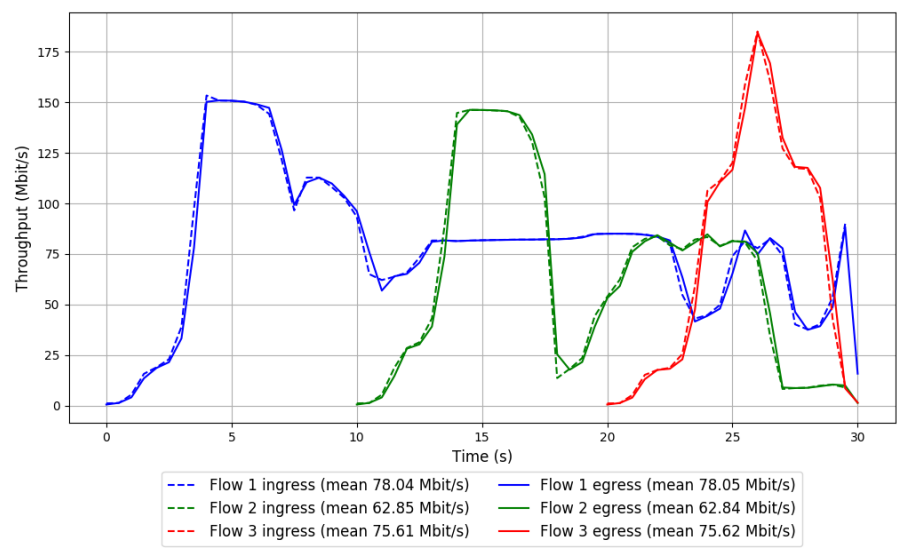
-- Flow 3:

Average throughput: 75.62 Mbit/s

95th percentile per-packet one-way delay: 110.877 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-17 03:26:34

End at: 2018-02-17 03:27:04

Below is generated by plot.py at 2018-02-17 08:13:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 136.97 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.19 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.30 Mbit/s

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

Loss rate: 0.00%

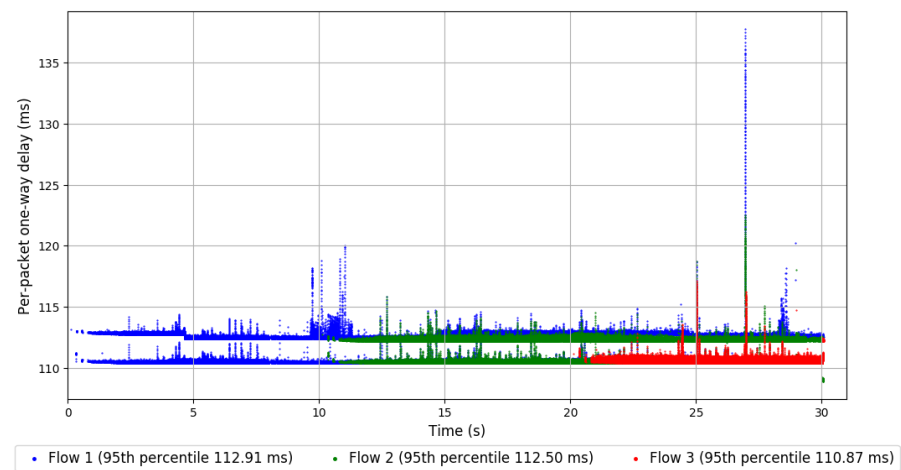
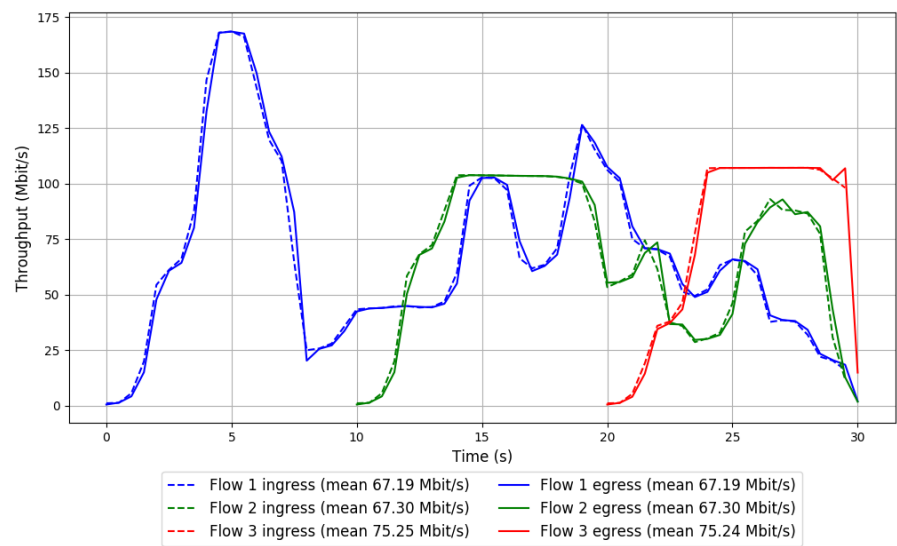
-- Flow 3:

Average throughput: 75.24 Mbit/s

95th percentile per-packet one-way delay: 110.871 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-17 03:46:22

End at: 2018-02-17 03:46:52

Below is generated by plot.py at 2018-02-17 08:13:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.24 Mbit/s

95th percentile per-packet one-way delay: 112.199 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 62.24 Mbit/s

95th percentile per-packet one-way delay: 112.210 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 76.93 Mbit/s

95th percentile per-packet one-way delay: 112.202 ms

Loss rate: 0.00%

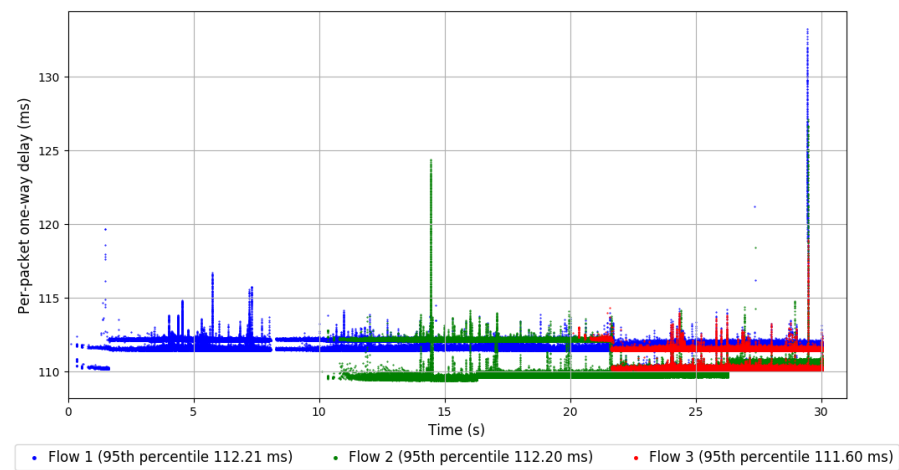
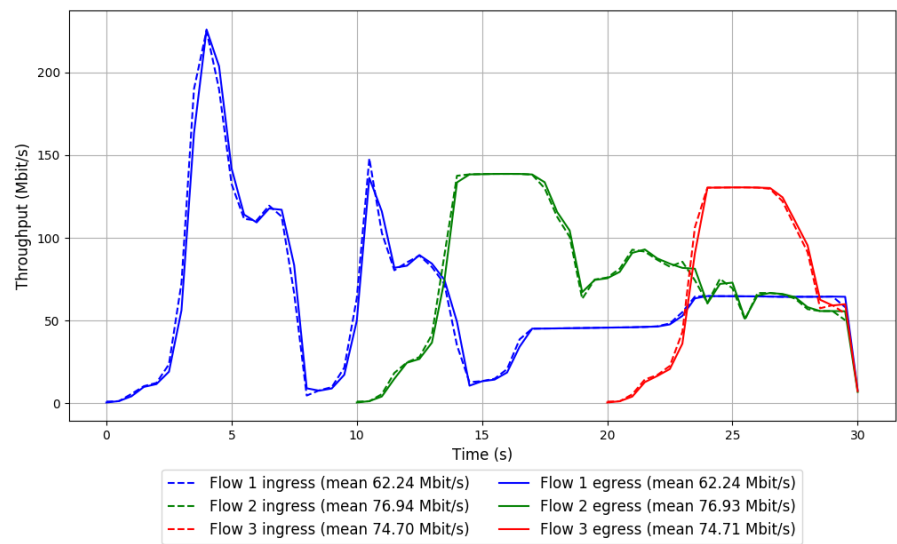
-- Flow 3:

Average throughput: 74.71 Mbit/s

95th percentile per-packet one-way delay: 111.597 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-17 04:05:58

End at: 2018-02-17 04:06:28

Below is generated by plot.py at 2018-02-17 08:14:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 157.00 Mbit/s

95th percentile per-packet one-way delay: 112.824 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 82.24 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 73.70 Mbit/s

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

Loss rate: 0.00%

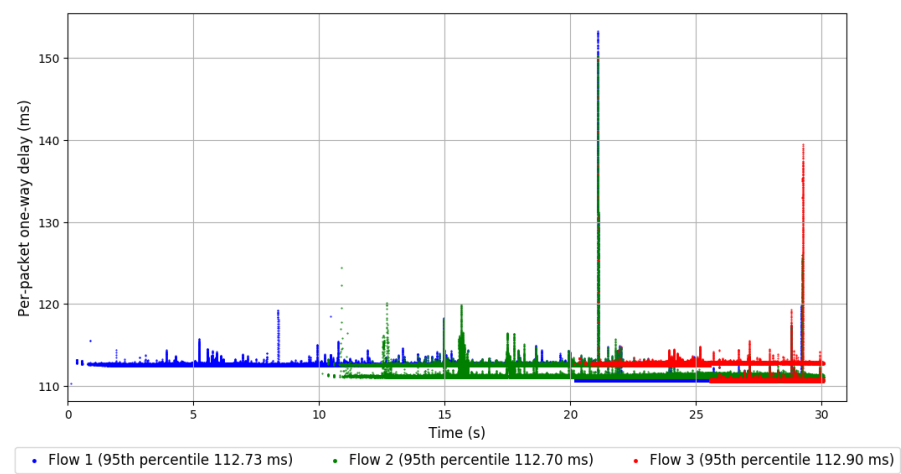
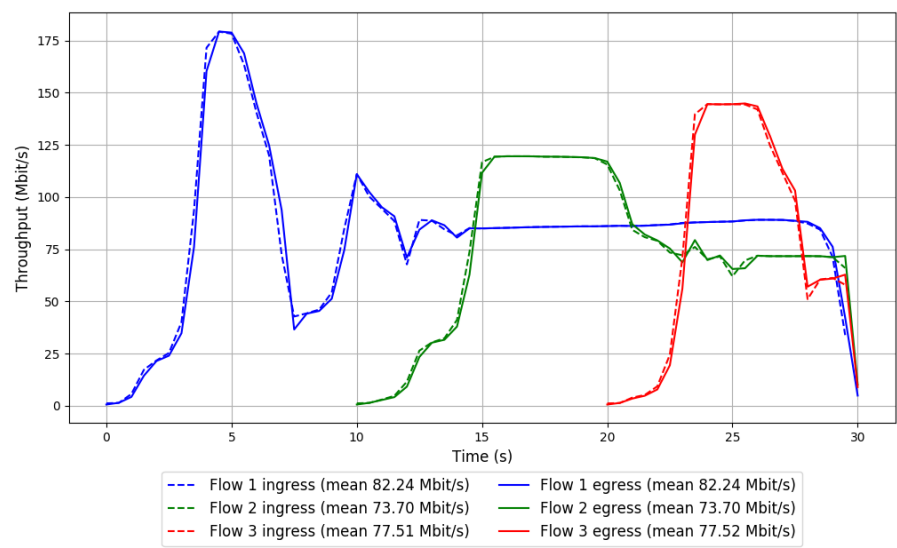
-- Flow 3:

Average throughput: 77.52 Mbit/s

95th percentile per-packet one-way delay: 112.898 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-17 04:25:52

End at: 2018-02-17 04:26:22

Below is generated by plot.py at 2018-02-17 08:14:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.36 Mbit/s

95th percentile per-packet one-way delay: 113.424 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 81.07 Mbit/s

95th percentile per-packet one-way delay: 113.479 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 70.71 Mbit/s

95th percentile per-packet one-way delay: 113.239 ms

Loss rate: 0.01%

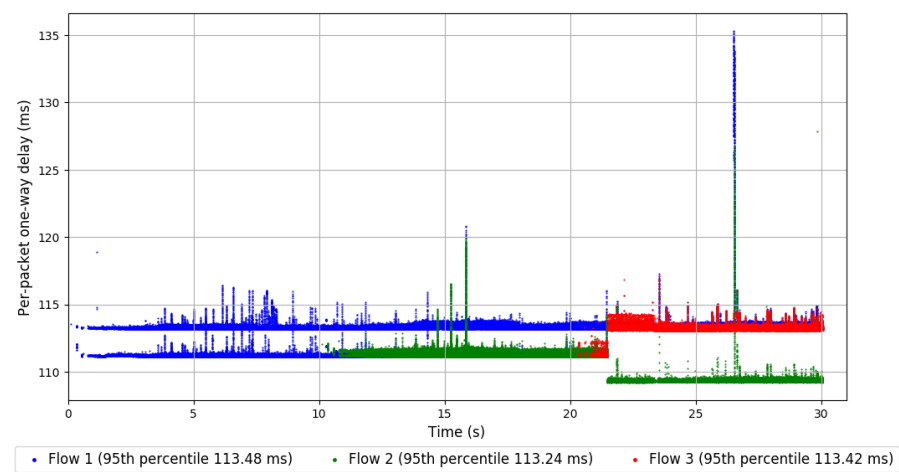
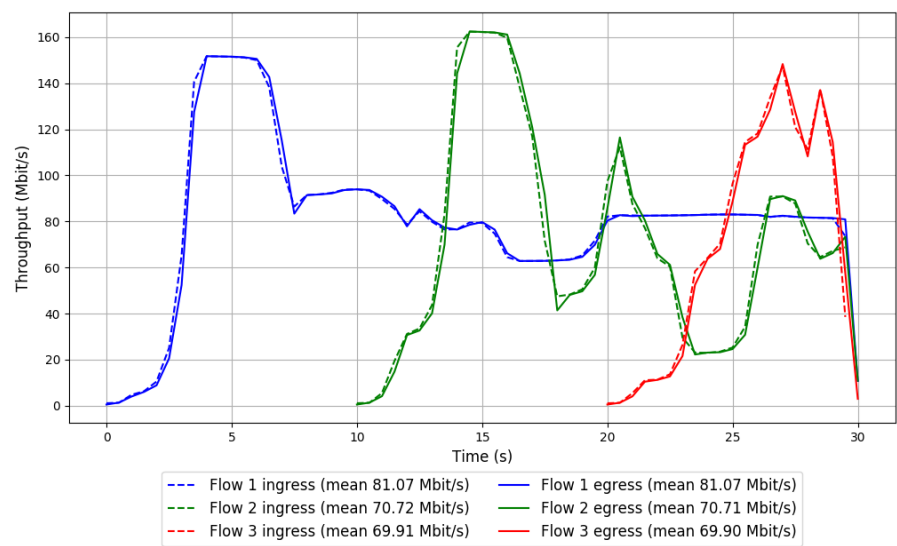
-- Flow 3:

Average throughput: 69.90 Mbit/s

95th percentile per-packet one-way delay: 113.415 ms

Loss rate: 0.01%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-17 04:45:10

End at: 2018-02-17 04:45:40

Below is generated by plot.py at 2018-02-17 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 340.88 Mbit/s

95th percentile per-packet one-way delay: 303.419 ms

Loss rate: 41.04%

-- Flow 1:

Average throughput: 340.65 Mbit/s

95th percentile per-packet one-way delay: 303.423 ms

Loss rate: 41.05%

-- Flow 2:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 240.877 ms

Loss rate: 18.34%

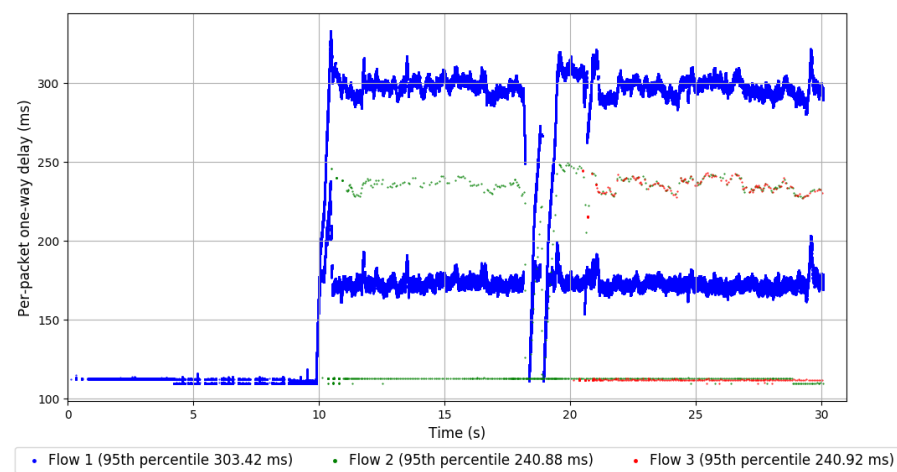
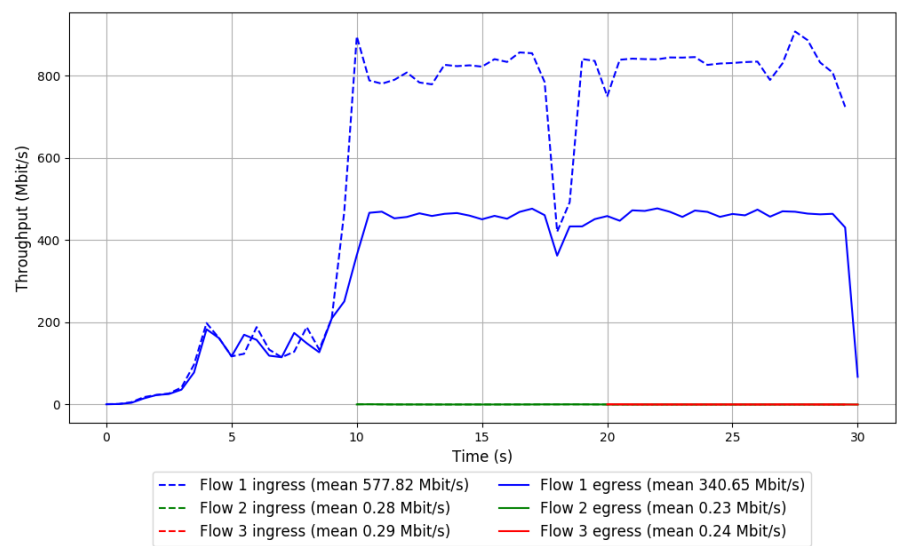
-- Flow 3:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 240.916 ms

Loss rate: 18.30%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-17 05:05:25

End at: 2018-02-17 05:05:55

Below is generated by plot.py at 2018-02-17 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.69 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 75.74 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 76.00 Mbit/s

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

Loss rate: 0.01%

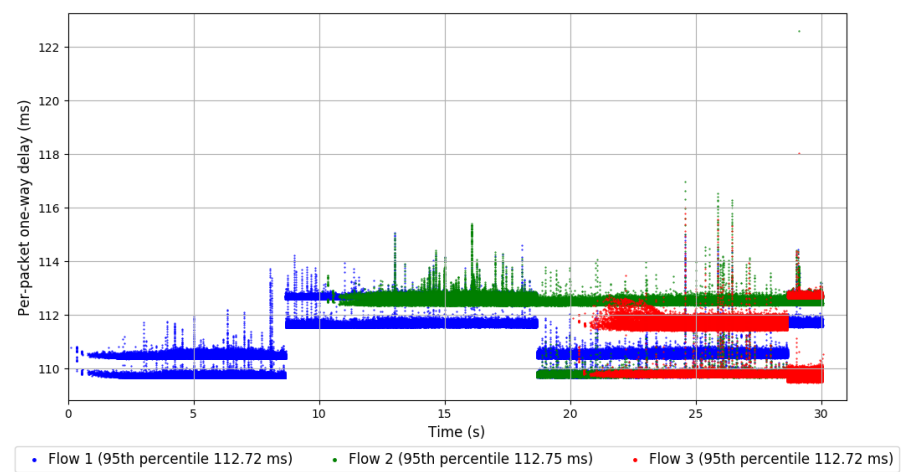
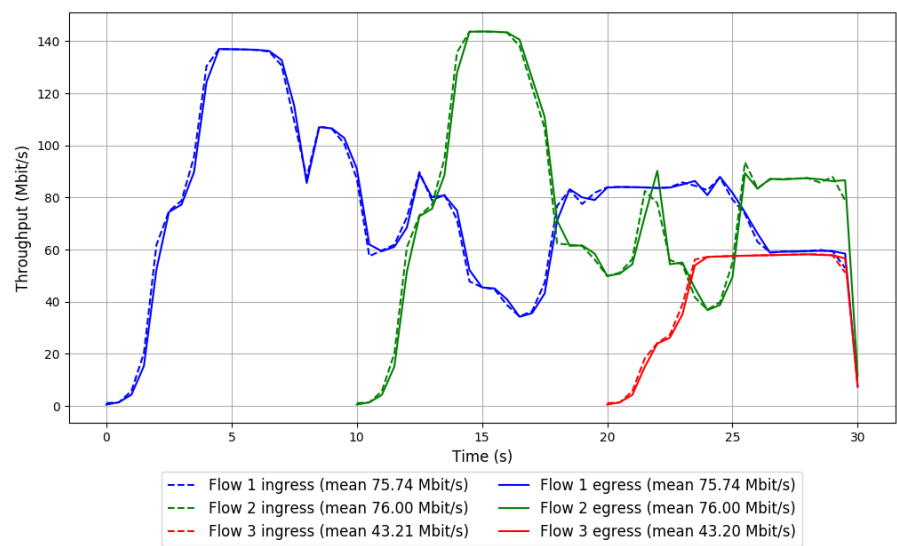
-- Flow 3:

Average throughput: 43.20 Mbit/s

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

Loss rate: 0.02%

Run 10: Report of Copa — Data Link

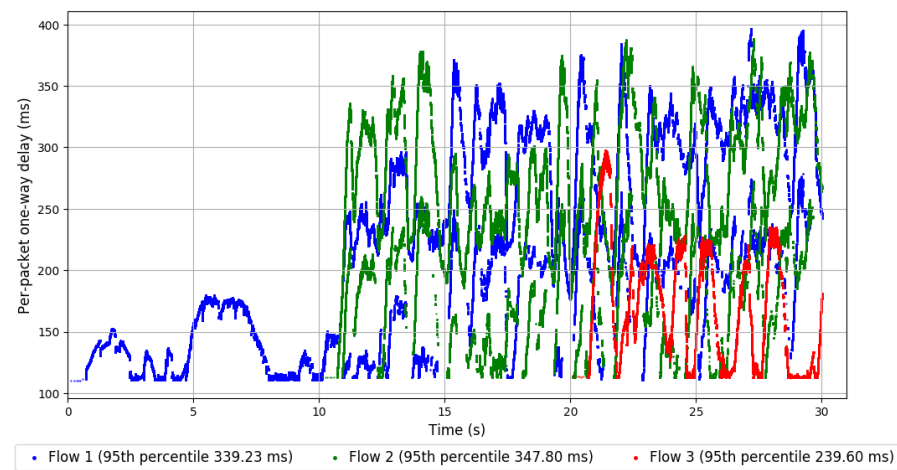
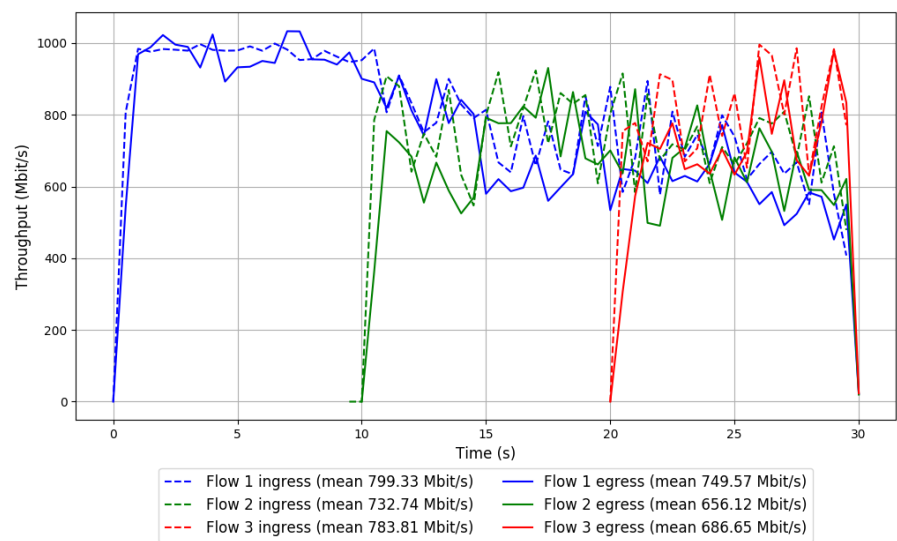


```
Run 1: Statistics of FillP

Start at: 2018-02-17 02:09:53
End at: 2018-02-17 02:10:23

# Below is generated by plot.py at 2018-02-17 08:35:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1413.38 Mbit/s
95th percentile per-packet one-way delay: 339.800 ms
Loss rate: 8.60%
-- Flow 1:
Average throughput: 749.57 Mbit/s
95th percentile per-packet one-way delay: 339.233 ms
Loss rate: 6.22%
-- Flow 2:
Average throughput: 656.12 Mbit/s
95th percentile per-packet one-way delay: 347.802 ms
Loss rate: 10.47%
-- Flow 3:
Average throughput: 686.65 Mbit/s
95th percentile per-packet one-way delay: 239.598 ms
Loss rate: 12.42%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-02-17 02:29:12

End at: 2018-02-17 02:29:42

Below is generated by plot.py at 2018-02-17 08:37:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 1446.99 Mbit/s

95th percentile per-packet one-way delay: 334.956 ms

Loss rate: 9.44%

-- Flow 1:

Average throughput: 742.47 Mbit/s

95th percentile per-packet one-way delay: 339.843 ms

Loss rate: 9.39%

-- Flow 2:

Average throughput: 742.49 Mbit/s

95th percentile per-packet one-way delay: 215.857 ms

Loss rate: 9.65%

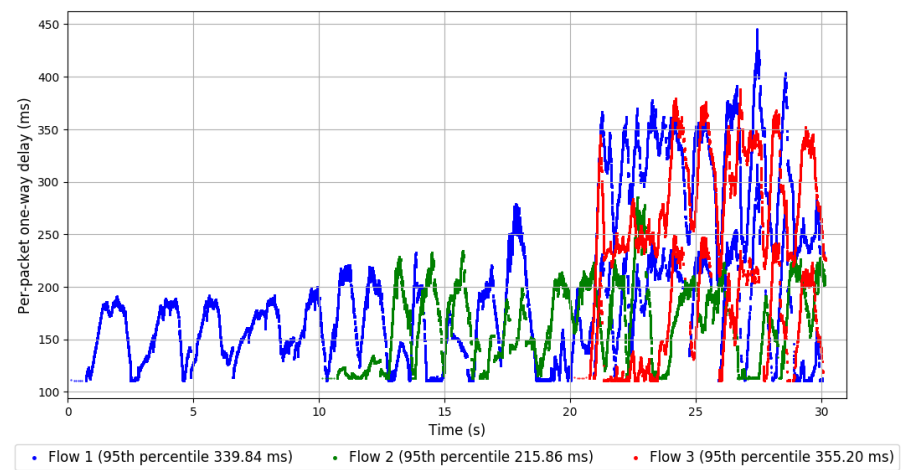
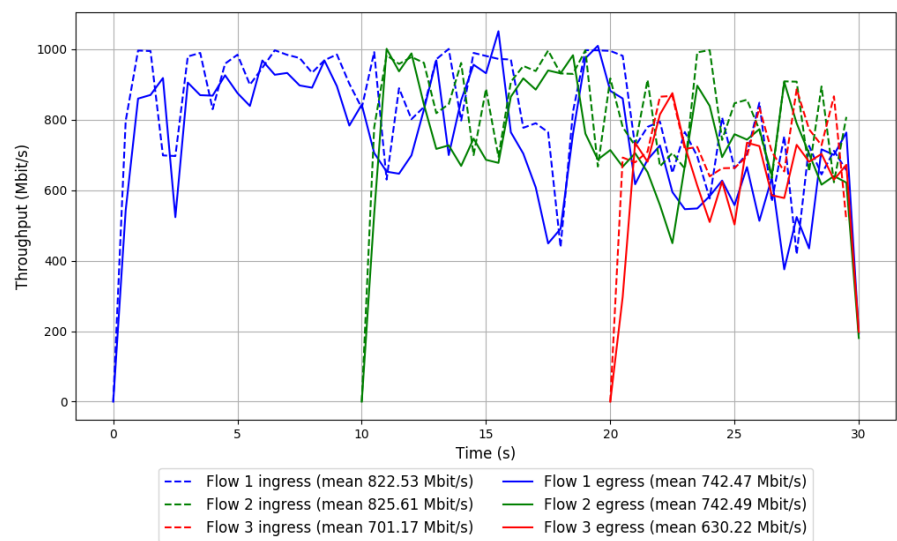
-- Flow 3:

Average throughput: 630.22 Mbit/s

95th percentile per-packet one-way delay: 355.205 ms

Loss rate: 9.10%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-17 02:48:50

End at: 2018-02-17 02:49:20

Below is generated by plot.py at 2018-02-17 08:39:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 1552.59 Mbit/s

95th percentile per-packet one-way delay: 219.601 ms

Loss rate: 8.79%

-- Flow 1:

Average throughput: 835.35 Mbit/s

95th percentile per-packet one-way delay: 215.949 ms

Loss rate: 6.12%

-- Flow 2:

Average throughput: 759.39 Mbit/s

95th percentile per-packet one-way delay: 216.044 ms

Loss rate: 9.98%

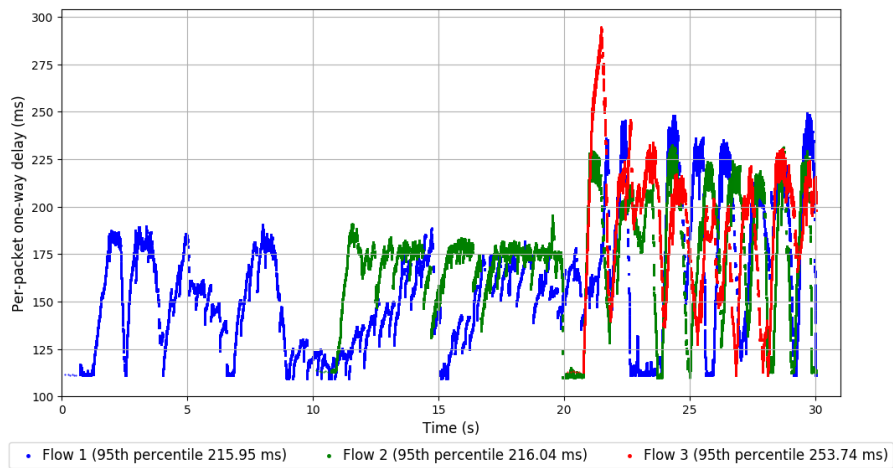
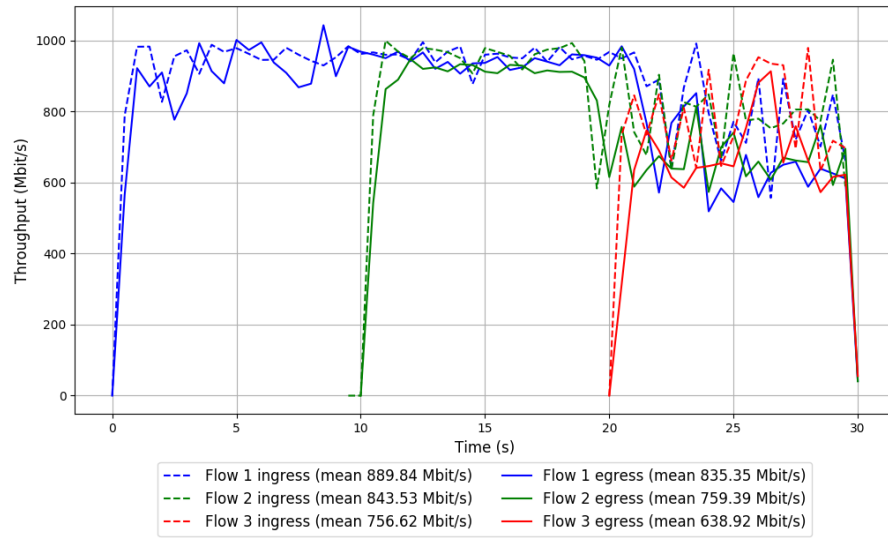
-- Flow 3:

Average throughput: 638.92 Mbit/s

95th percentile per-packet one-way delay: 253.737 ms

Loss rate: 15.56%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-17 03:09:01

End at: 2018-02-17 03:09:31

Below is generated by plot.py at 2018-02-17 08:39:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 1546.88 Mbit/s

95th percentile per-packet one-way delay: 243.804 ms

Loss rate: 7.99%

-- Flow 1:

Average throughput: 821.43 Mbit/s

95th percentile per-packet one-way delay: 238.907 ms

Loss rate: 6.29%

-- Flow 2:

Average throughput: 721.18 Mbit/s

95th percentile per-packet one-way delay: 247.816 ms

Loss rate: 9.53%

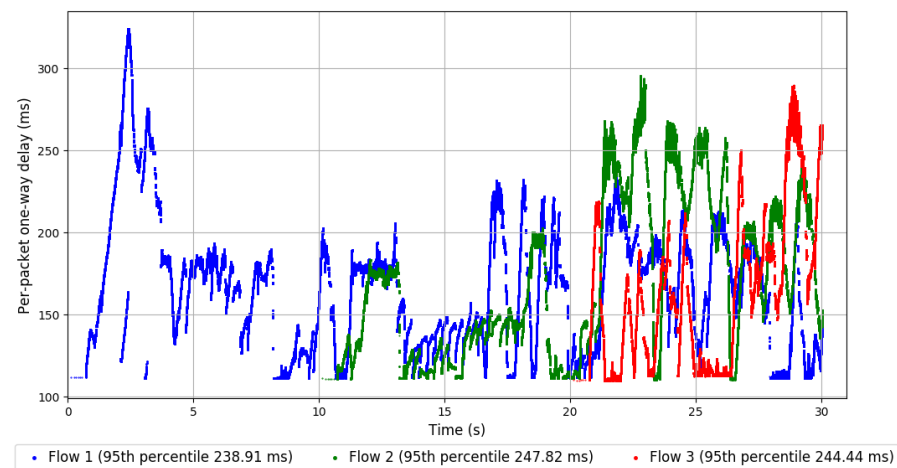
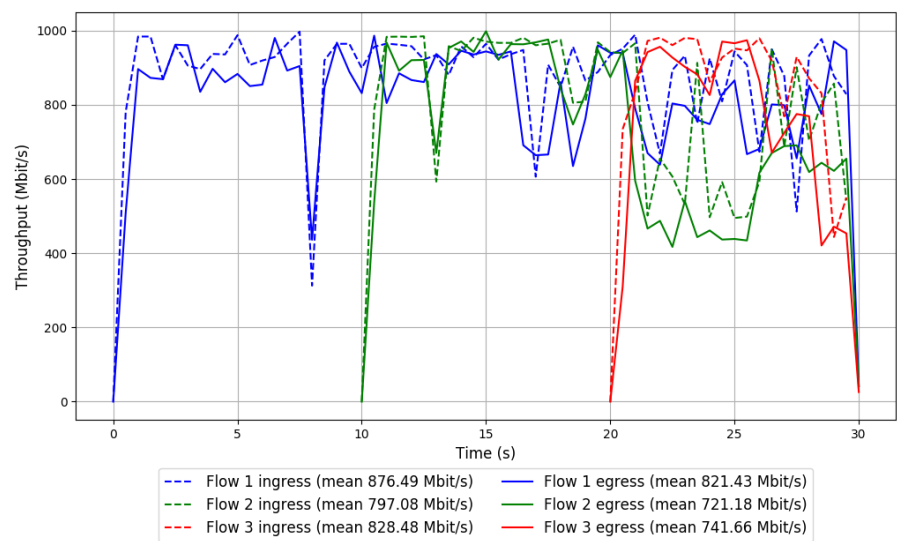
-- Flow 3:

Average throughput: 741.66 Mbit/s

95th percentile per-packet one-way delay: 244.441 ms

Loss rate: 10.48%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-17 03:28:33

End at: 2018-02-17 03:29:03

Below is generated by plot.py at 2018-02-17 08:40:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 1528.42 Mbit/s

95th percentile per-packet one-way delay: 229.410 ms

Loss rate: 10.02%

-- Flow 1:

Average throughput: 801.07 Mbit/s

95th percentile per-packet one-way delay: 230.588 ms

Loss rate: 8.68%

-- Flow 2:

Average throughput: 739.90 Mbit/s

95th percentile per-packet one-way delay: 222.858 ms

Loss rate: 11.31%

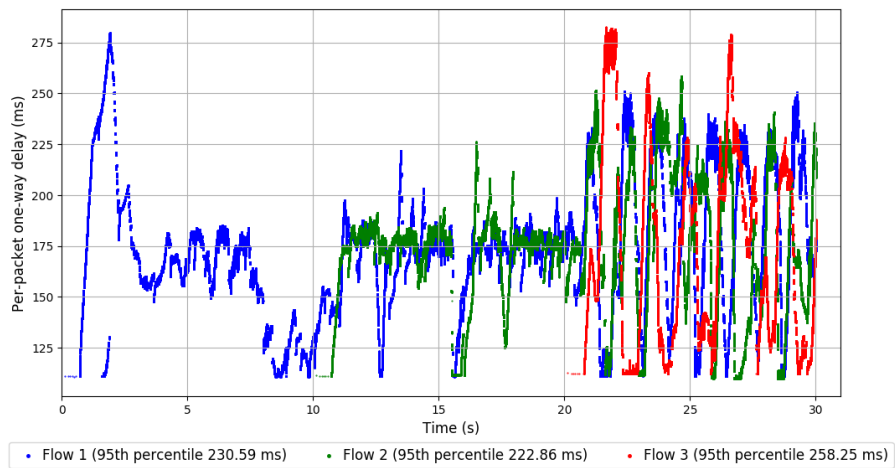
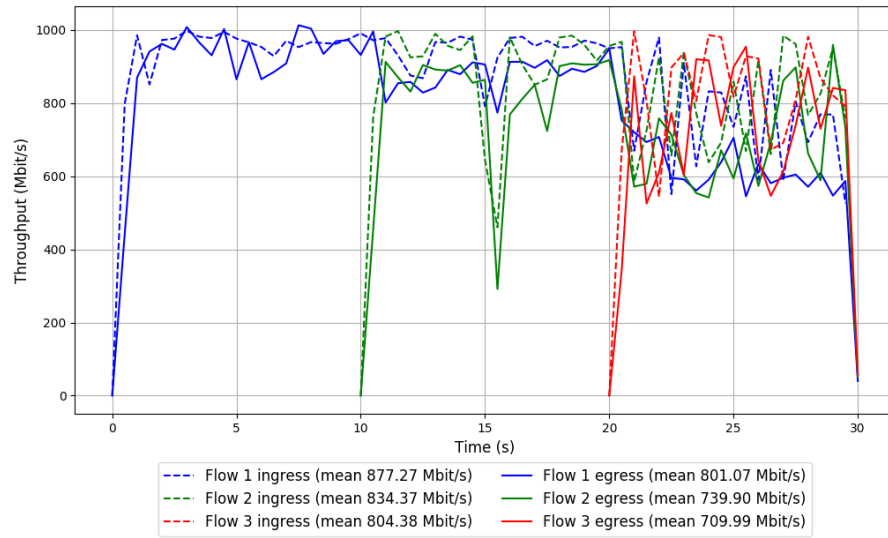
-- Flow 3:

Average throughput: 709.99 Mbit/s

95th percentile per-packet one-way delay: 258.249 ms

Loss rate: 11.73%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-17 03:48:21

End at: 2018-02-17 03:48:52

Below is generated by plot.py at 2018-02-17 08:41:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 1542.82 Mbit/s

95th percentile per-packet one-way delay: 230.568 ms

Loss rate: 8.79%

-- Flow 1:

Average throughput: 794.69 Mbit/s

95th percentile per-packet one-way delay: 213.311 ms

Loss rate: 8.55%

-- Flow 2:

Average throughput: 812.28 Mbit/s

95th percentile per-packet one-way delay: 227.800 ms

Loss rate: 5.93%

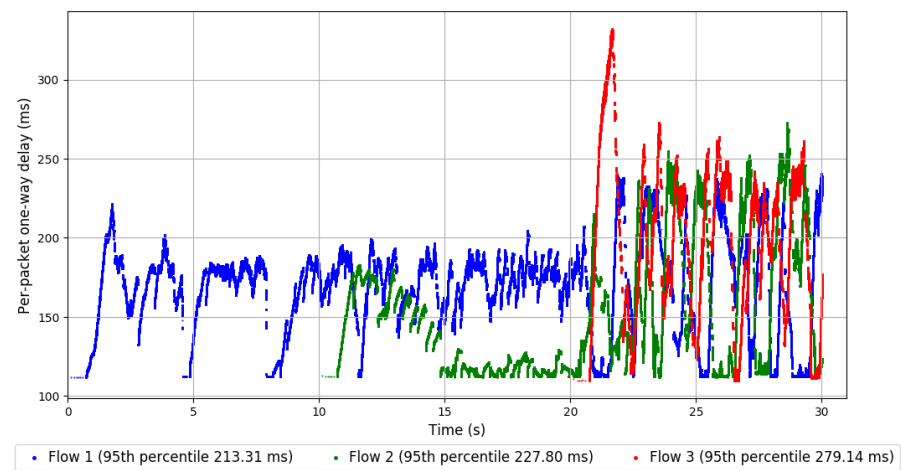
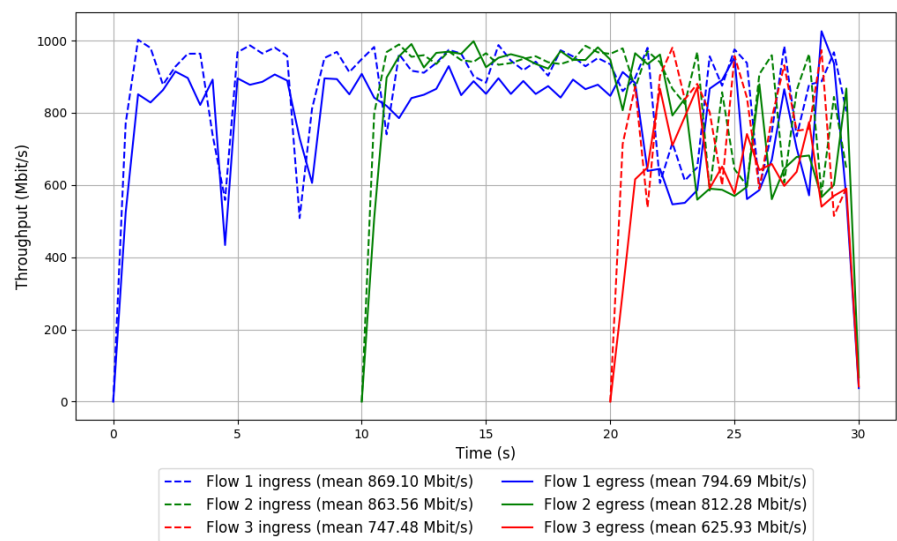
-- Flow 3:

Average throughput: 625.93 Mbit/s

95th percentile per-packet one-way delay: 279.145 ms

Loss rate: 16.23%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-17 04:07:55

End at: 2018-02-17 04:08:25

Below is generated by plot.py at 2018-02-17 08:41:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 1392.94 Mbit/s

95th percentile per-packet one-way delay: 361.546 ms

Loss rate: 9.42%

-- Flow 1:

Average throughput: 697.98 Mbit/s

95th percentile per-packet one-way delay: 372.980 ms

Loss rate: 9.12%

-- Flow 2:

Average throughput: 664.30 Mbit/s

95th percentile per-packet one-way delay: 360.915 ms

Loss rate: 10.66%

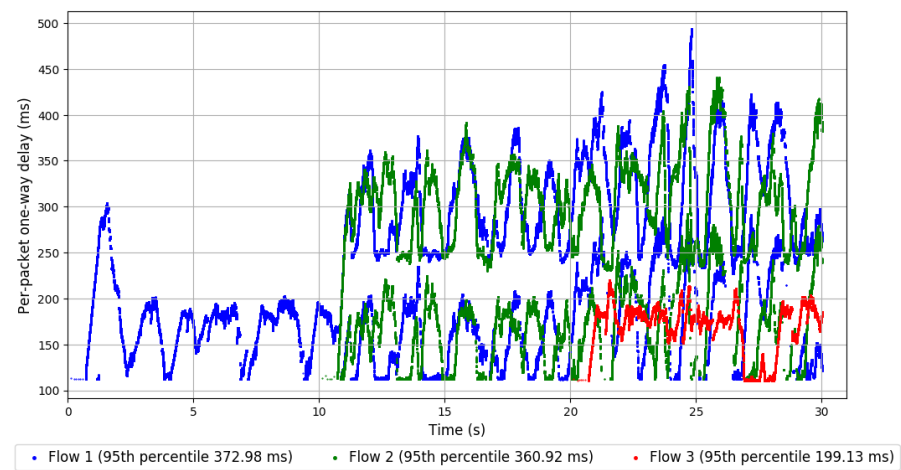
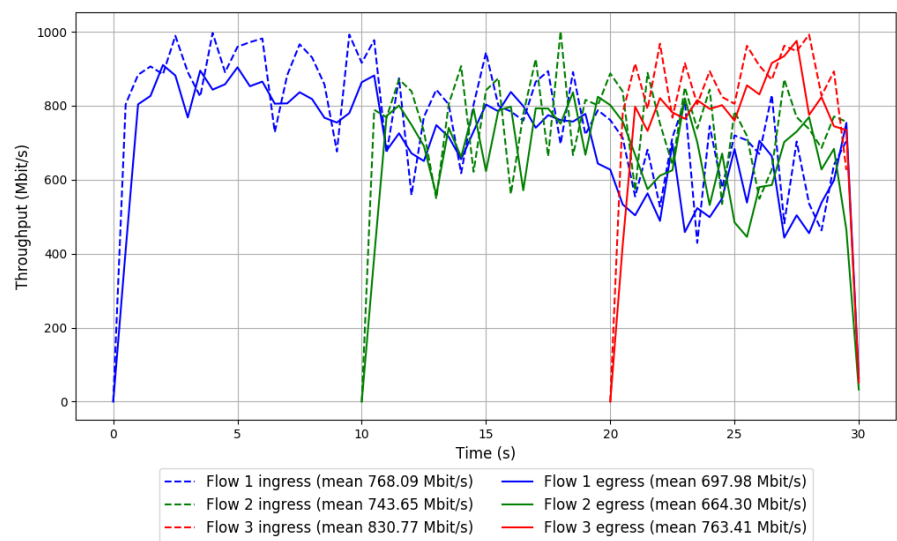
-- Flow 3:

Average throughput: 763.41 Mbit/s

95th percentile per-packet one-way delay: 199.134 ms

Loss rate: 8.05%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-17 04:27:51

End at: 2018-02-17 04:28:21

Below is generated by plot.py at 2018-02-17 08:43:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 1030.93 Mbit/s

95th percentile per-packet one-way delay: 377.103 ms

Loss rate: 8.79%

-- Flow 1:

Average throughput: 618.65 Mbit/s

95th percentile per-packet one-way delay: 374.757 ms

Loss rate: 7.74%

-- Flow 2:

Average throughput: 503.10 Mbit/s

95th percentile per-packet one-way delay: 371.291 ms

Loss rate: 8.24%

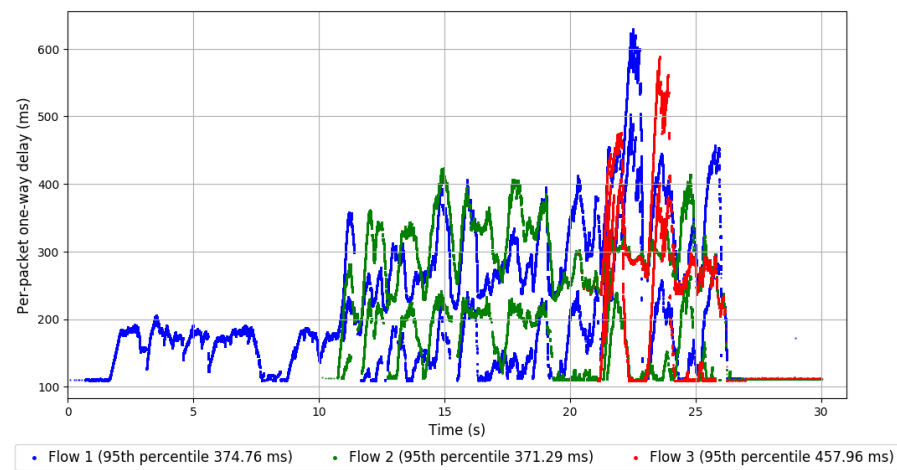
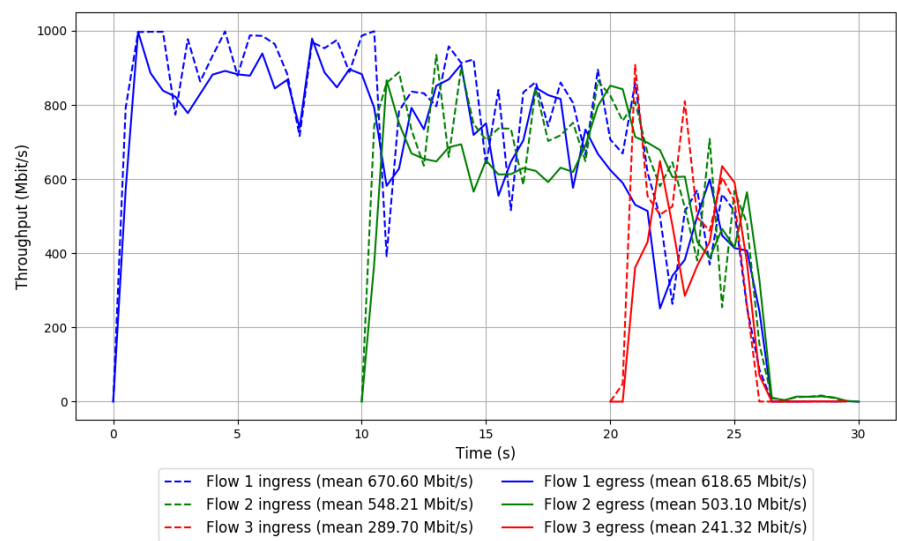
-- Flow 3:

Average throughput: 241.32 Mbit/s

95th percentile per-packet one-way delay: 457.960 ms

Loss rate: 18.25%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-17 04:47:20

End at: 2018-02-17 04:47:50

Below is generated by plot.py at 2018-02-17 09:04:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 1557.63 Mbit/s

95th percentile per-packet one-way delay: 338.416 ms

Loss rate: 9.02%

-- Flow 1:

Average throughput: 826.61 Mbit/s

95th percentile per-packet one-way delay: 363.293 ms

Loss rate: 6.76%

-- Flow 2:

Average throughput: 819.31 Mbit/s

95th percentile per-packet one-way delay: 219.234 ms

Loss rate: 7.83%

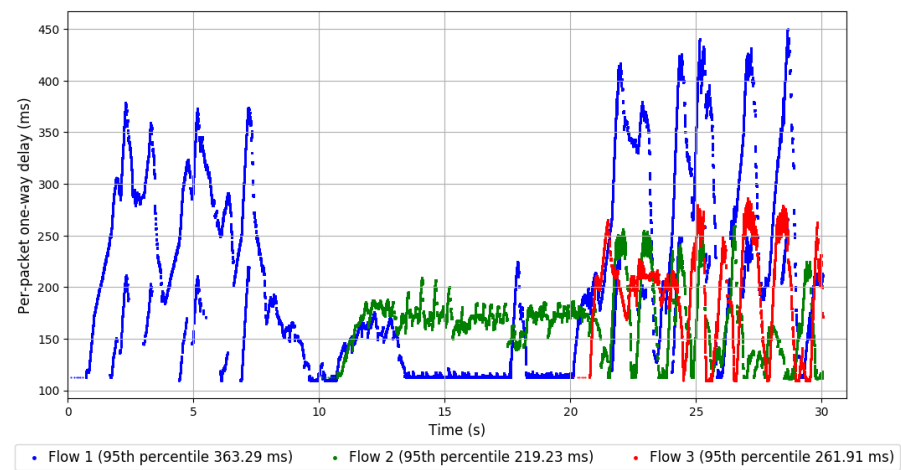
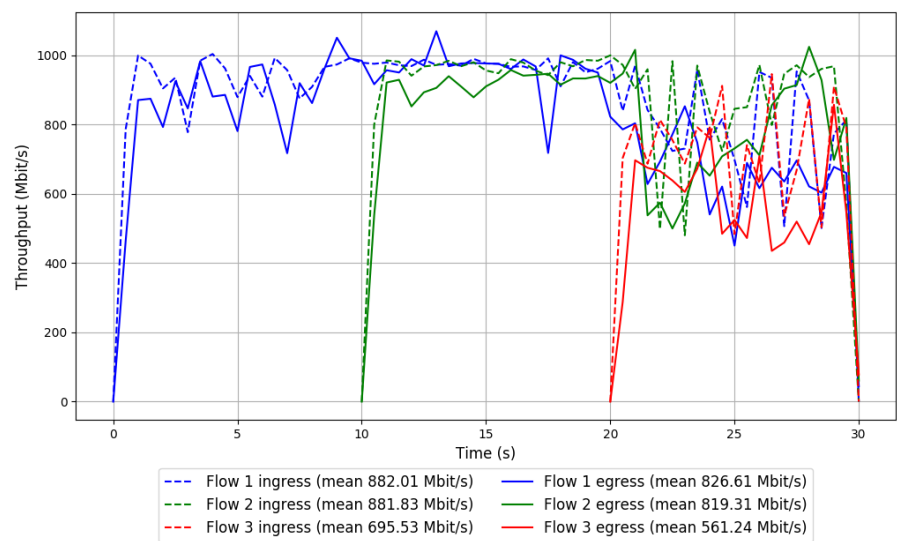
-- Flow 3:

Average throughput: 561.24 Mbit/s

95th percentile per-packet one-way delay: 261.912 ms

Loss rate: 20.55%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-02-17 05:07:23

End at: 2018-02-17 05:07:53

Below is generated by plot.py at 2018-02-17 09:06:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 1568.97 Mbit/s

95th percentile per-packet one-way delay: 223.933 ms

Loss rate: 8.11%

-- Flow 1:

Average throughput: 818.77 Mbit/s

95th percentile per-packet one-way delay: 224.962 ms

Loss rate: 6.17%

-- Flow 2:

Average throughput: 791.97 Mbit/s

95th percentile per-packet one-way delay: 208.897 ms

Loss rate: 9.23%

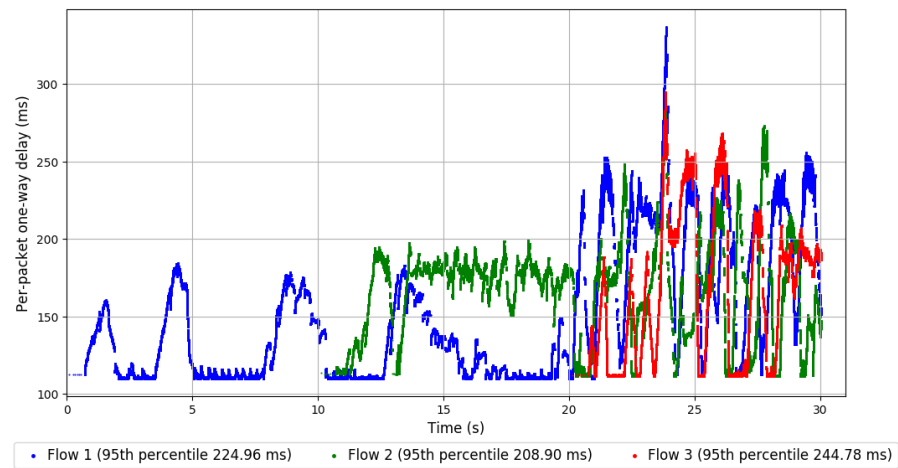
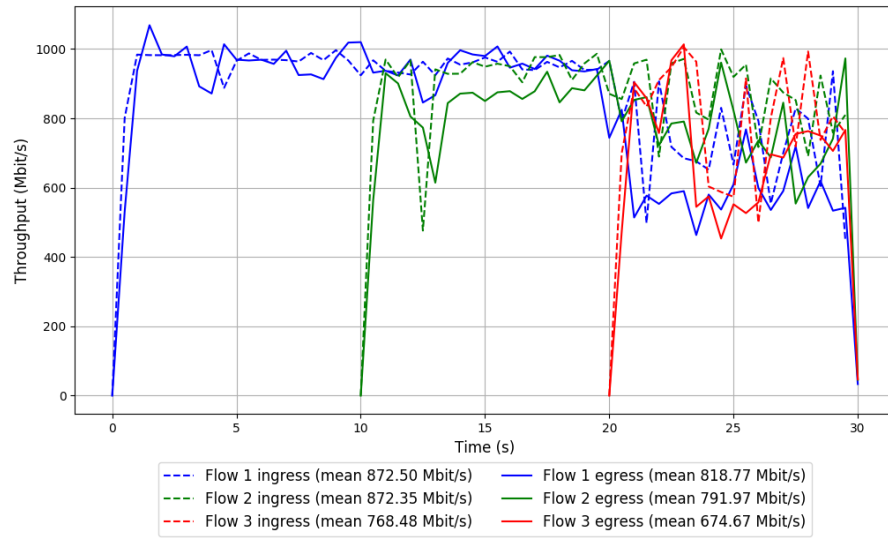
-- Flow 3:

Average throughput: 674.67 Mbit/s

95th percentile per-packet one-way delay: 244.775 ms

Loss rate: 12.23%

Run 10: Report of FillP — Data Link

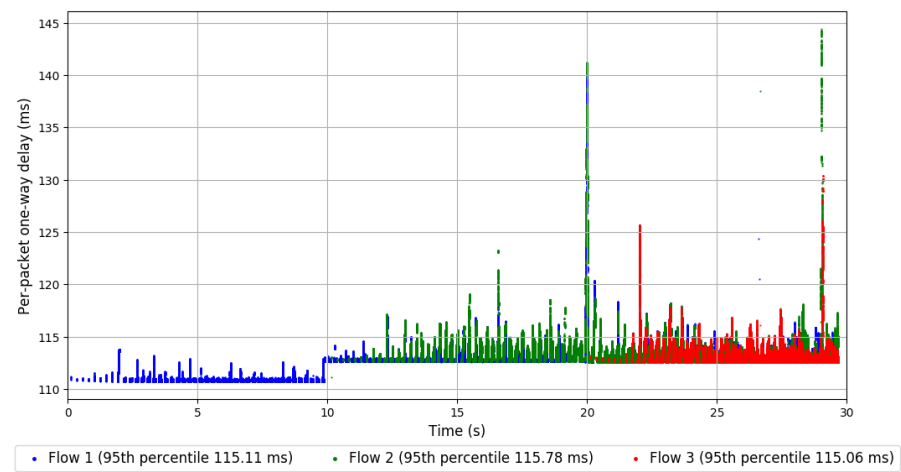
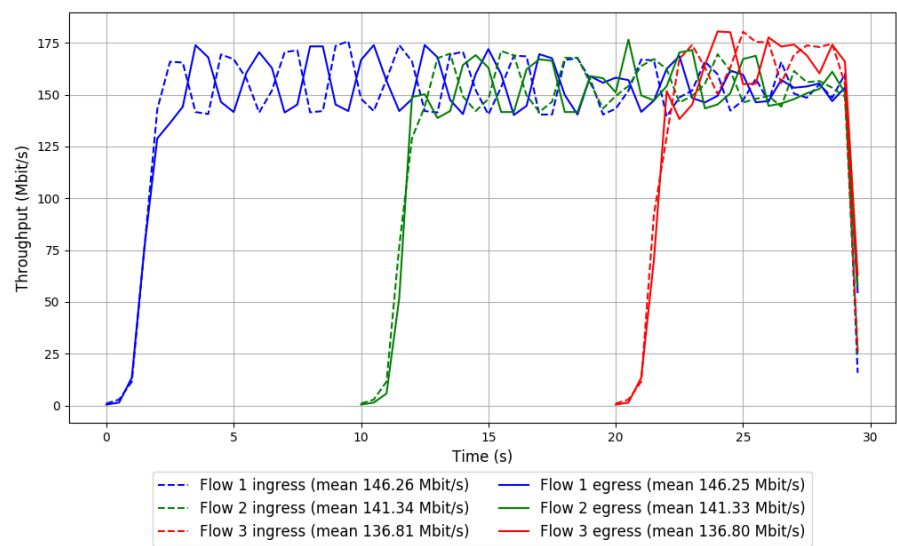


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-17 02:19:03
End at: 2018-02-17 02:19:33

# Below is generated by plot.py at 2018-02-17 09:06:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 283.79 Mbit/s
95th percentile per-packet one-way delay: 115.369 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 146.25 Mbit/s
95th percentile per-packet one-way delay: 115.115 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 141.33 Mbit/s
95th percentile per-packet one-way delay: 115.779 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 136.80 Mbit/s
95th percentile per-packet one-way delay: 115.062 ms
Loss rate: 0.02%
```

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

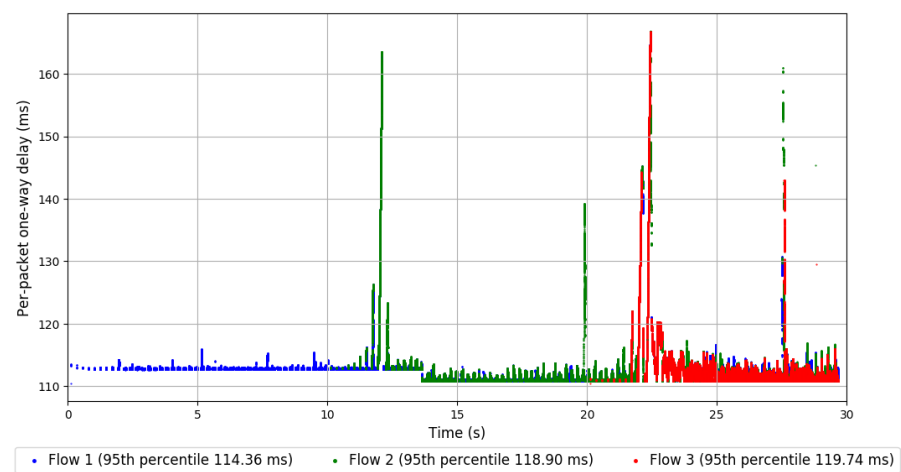
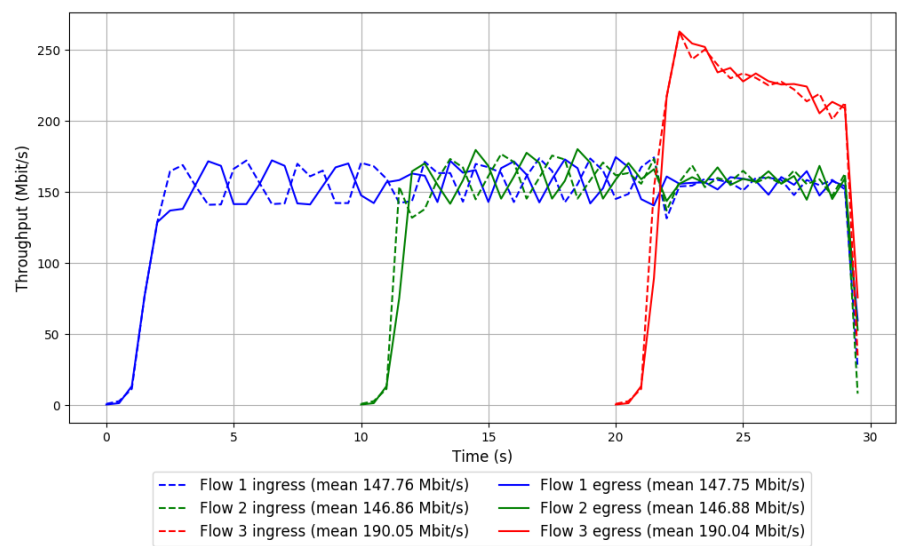


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-17 02:38:30
End at: 2018-02-17 02:39:00

# Below is generated by plot.py at 2018-02-17 09:06:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 306.37 Mbit/s
95th percentile per-packet one-way delay: 117.403 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 147.75 Mbit/s
95th percentile per-packet one-way delay: 114.357 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 146.88 Mbit/s
95th percentile per-packet one-way delay: 118.897 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 190.04 Mbit/s
95th percentile per-packet one-way delay: 119.739 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-17 02:58:22

End at: 2018-02-17 02:58:52

Below is generated by plot.py at 2018-02-17 09:06:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 347.60 Mbit/s

95th percentile per-packet one-way delay: 114.198 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 213.39 Mbit/s

95th percentile per-packet one-way delay: 113.728 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 142.45 Mbit/s

95th percentile per-packet one-way delay: 114.653 ms

Loss rate: 0.01%

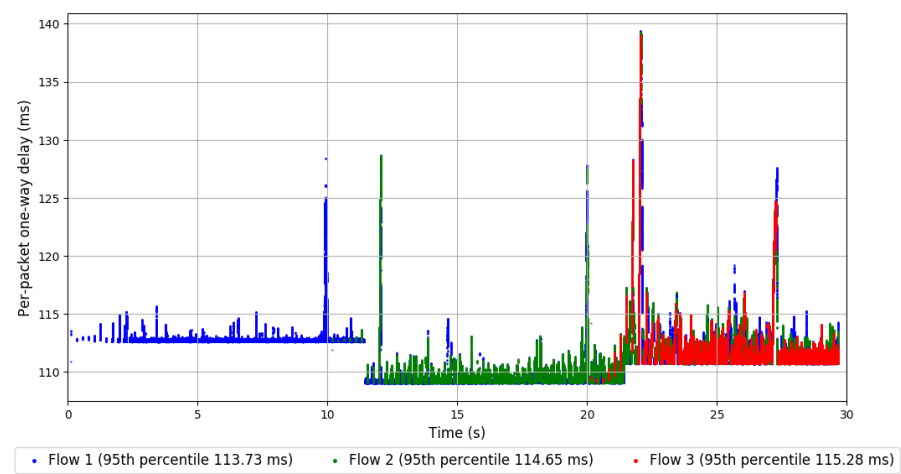
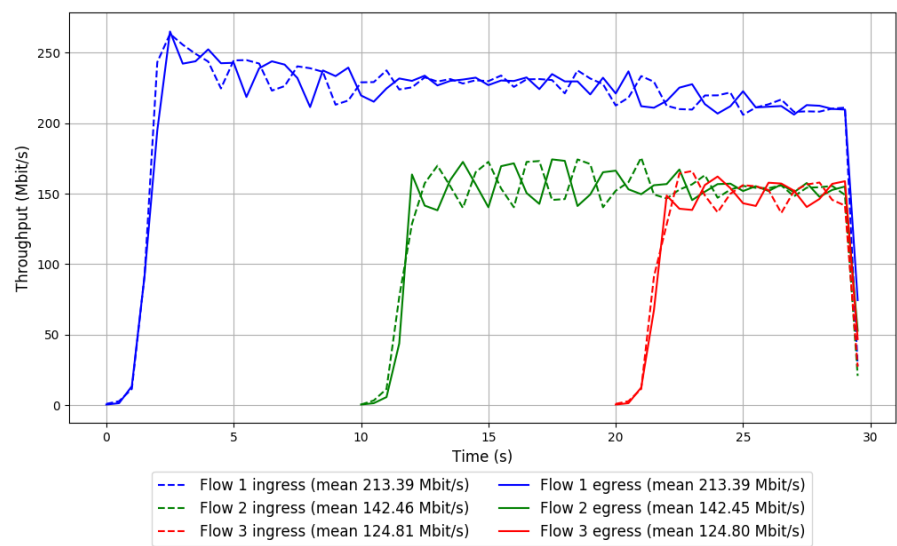
-- Flow 3:

Average throughput: 124.80 Mbit/s

95th percentile per-packet one-way delay: 115.280 ms

Loss rate: 0.00%

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



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-17 03:17:57

End at: 2018-02-17 03:18:27

Below is generated by plot.py at 2018-02-17 09:06:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 385.26 Mbit/s

95th percentile per-packet one-way delay: 116.785 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 209.14 Mbit/s

95th percentile per-packet one-way delay: 115.634 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 201.53 Mbit/s

95th percentile per-packet one-way delay: 117.654 ms

Loss rate: 0.00%

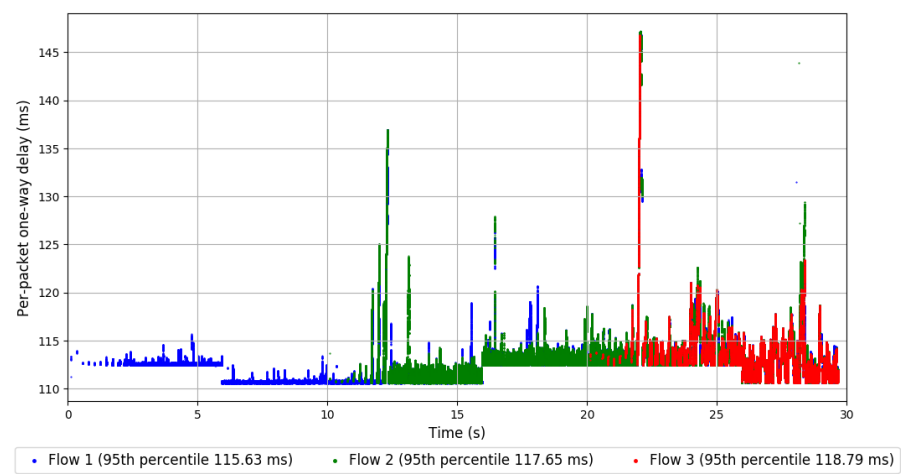
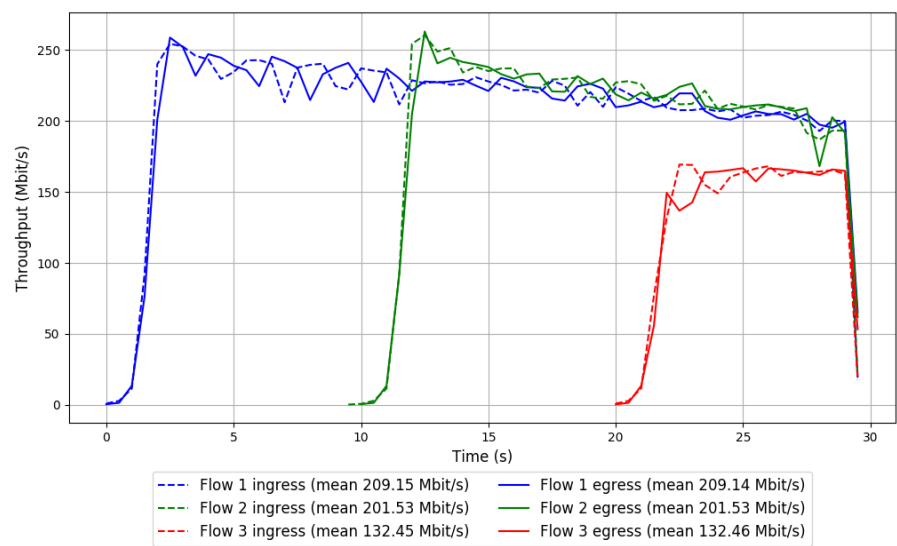
-- Flow 3:

Average throughput: 132.46 Mbit/s

95th percentile per-packet one-way delay: 118.787 ms

Loss rate: 0.00%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-17 03:37:54

End at: 2018-02-17 03:38:24

Below is generated by plot.py at 2018-02-17 09:06:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 314.99 Mbit/s

95th percentile per-packet one-way delay: 114.430 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 172.56 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 148.18 Mbit/s

95th percentile per-packet one-way delay: 116.348 ms

Loss rate: 0.00%

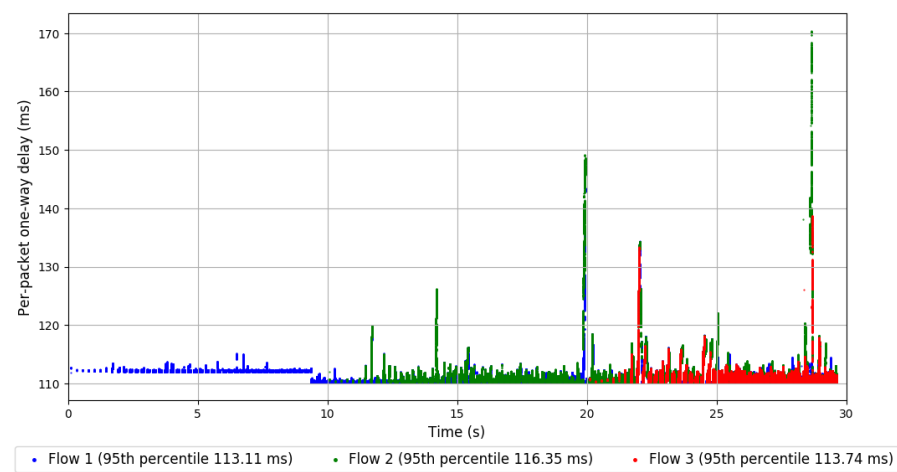
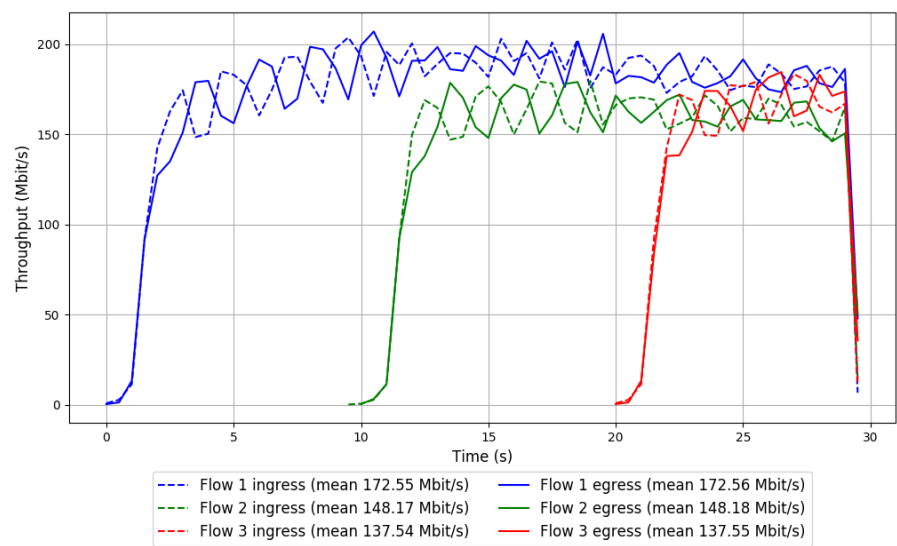
-- Flow 3:

Average throughput: 137.55 Mbit/s

95th percentile per-packet one-way delay: 113.738 ms

Loss rate: 0.00%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-17 03:57:42

End at: 2018-02-17 03:58:12

Below is generated by plot.py at 2018-02-17 09:06:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 285.82 Mbit/s

95th percentile per-packet one-way delay: 115.105 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 146.54 Mbit/s

95th percentile per-packet one-way delay: 114.303 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 144.29 Mbit/s

95th percentile per-packet one-way delay: 115.679 ms

Loss rate: 0.00%

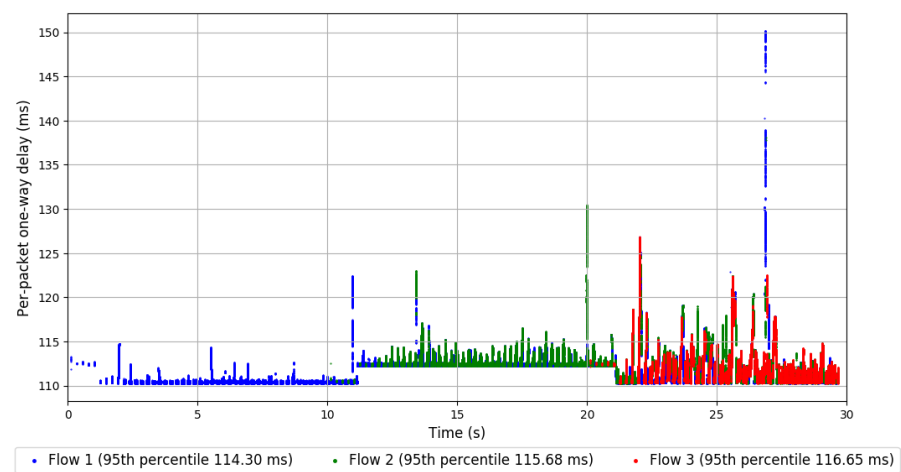
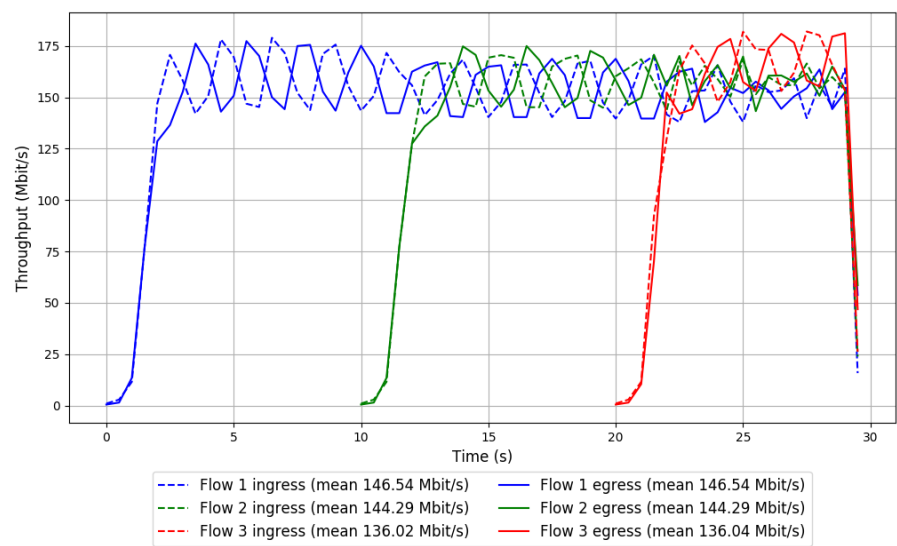
-- Flow 3:

Average throughput: 136.04 Mbit/s

95th percentile per-packet one-way delay: 116.652 ms

Loss rate: 0.00%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-17 04:17:36

End at: 2018-02-17 04:18:06

Below is generated by plot.py at 2018-02-17 09:06:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 293.47 Mbit/s

95th percentile per-packet one-way delay: 116.048 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 155.39 Mbit/s

95th percentile per-packet one-way delay: 115.353 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 146.07 Mbit/s

95th percentile per-packet one-way delay: 116.294 ms

Loss rate: 0.00%

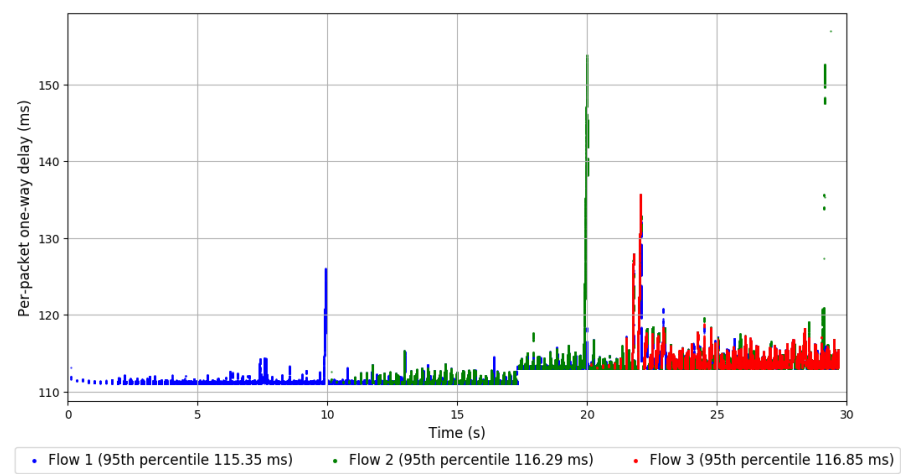
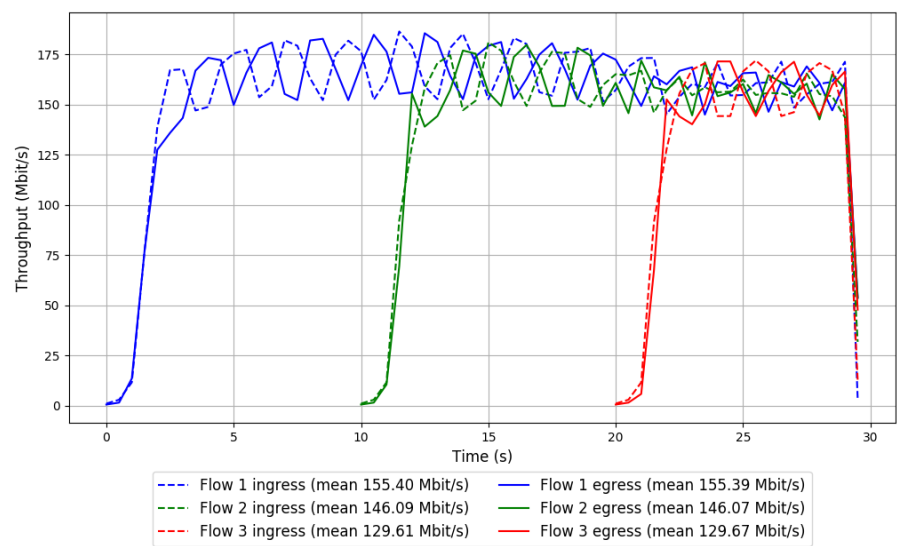
-- Flow 3:

Average throughput: 129.67 Mbit/s

95th percentile per-packet one-way delay: 116.846 ms

Loss rate: 0.01%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-17 04:36:50

End at: 2018-02-17 04:37:20

Below is generated by plot.py at 2018-02-17 09:06:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 286.85 Mbit/s

95th percentile per-packet one-way delay: 115.415 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 147.67 Mbit/s

95th percentile per-packet one-way delay: 115.184 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 148.65 Mbit/s

95th percentile per-packet one-way delay: 115.835 ms

Loss rate: 0.00%

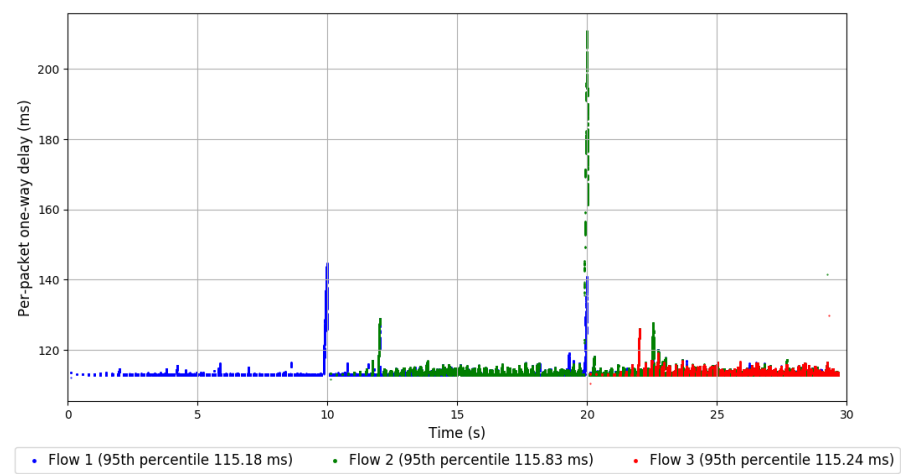
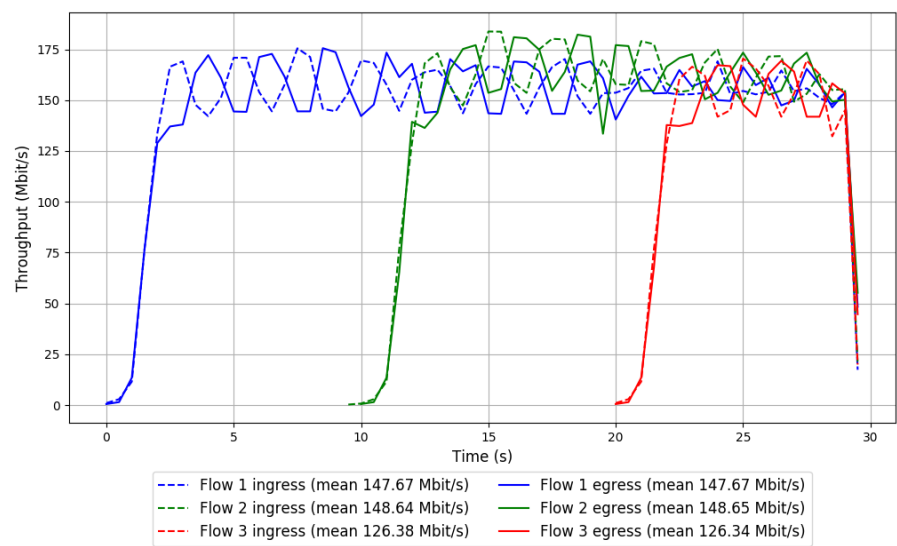
-- Flow 3:

Average throughput: 126.34 Mbit/s

95th percentile per-packet one-way delay: 115.244 ms

Loss rate: 0.03%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-17 04:56:48

End at: 2018-02-17 04:57:18

Below is generated by plot.py at 2018-02-17 09:06:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 352.30 Mbit/s

95th percentile per-packet one-way delay: 116.718 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 214.53 Mbit/s

95th percentile per-packet one-way delay: 115.149 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 143.64 Mbit/s

95th percentile per-packet one-way delay: 118.372 ms

Loss rate: 0.02%

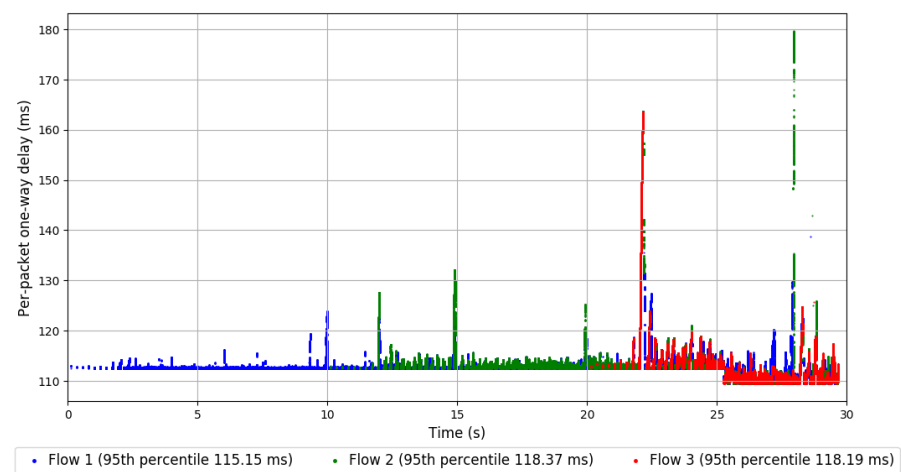
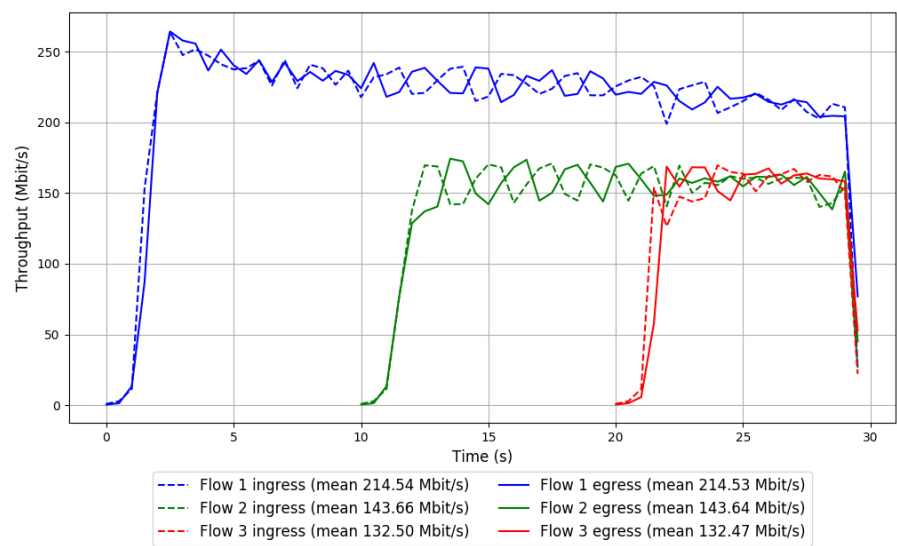
-- Flow 3:

Average throughput: 132.47 Mbit/s

95th percentile per-packet one-way delay: 118.188 ms

Loss rate: 0.04%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-17 05:16:32

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

Below is generated by plot.py at 2018-02-17 09:06:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 280.09 Mbit/s

95th percentile per-packet one-way delay: 115.939 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 148.22 Mbit/s

95th percentile per-packet one-way delay: 115.095 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 137.45 Mbit/s

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

Loss rate: 0.00%

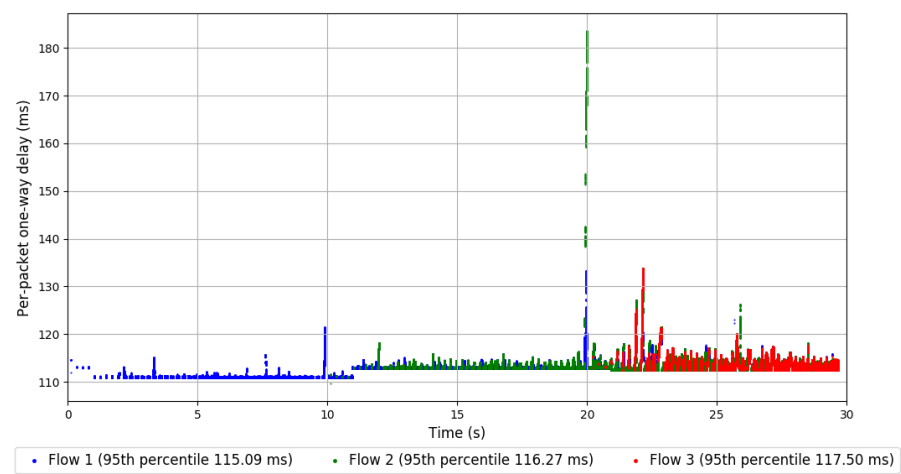
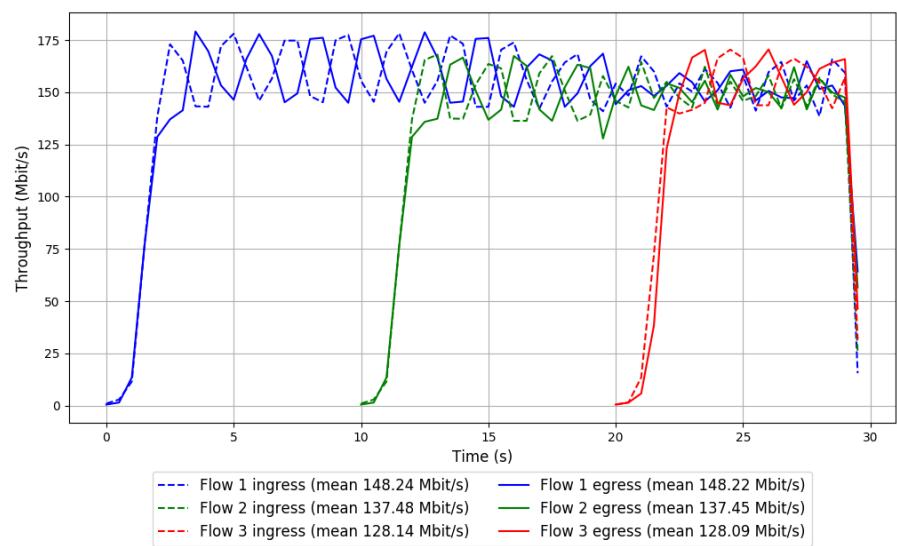
-- Flow 3:

Average throughput: 128.09 Mbit/s

95th percentile per-packet one-way delay: 117.502 ms

Loss rate: 0.04%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-02-17 02:13:52

End at: 2018-02-17 02:14:22

Below is generated by plot.py at 2018-02-17 09:06:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 406.55 Mbit/s

95th percentile per-packet one-way delay: 133.572 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 314.65 Mbit/s

95th percentile per-packet one-way delay: 134.990 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 73.43 Mbit/s

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

Loss rate: 0.00%

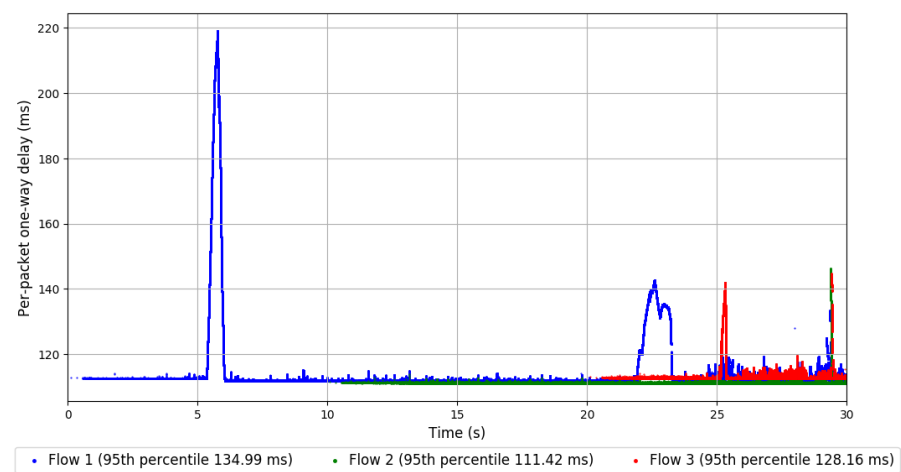
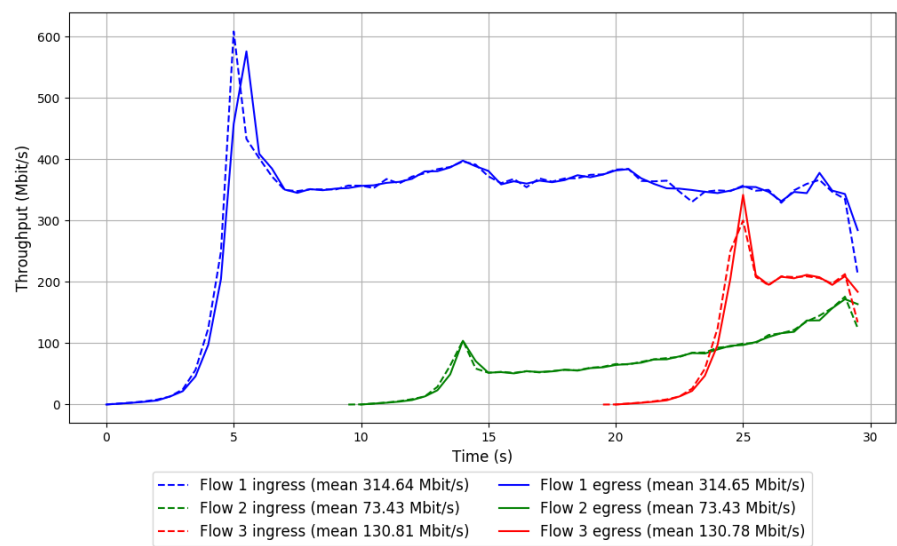
-- Flow 3:

Average throughput: 130.78 Mbit/s

95th percentile per-packet one-way delay: 128.161 ms

Loss rate: 0.00%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-17 02:33:12

End at: 2018-02-17 02:33:42

Below is generated by plot.py at 2018-02-17 09:06:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 497.21 Mbit/s

95th percentile per-packet one-way delay: 279.250 ms

Loss rate: 4.92%

-- Flow 1:

Average throughput: 314.51 Mbit/s

95th percentile per-packet one-way delay: 279.936 ms

Loss rate: 6.99%

-- Flow 2:

Average throughput: 211.52 Mbit/s

95th percentile per-packet one-way delay: 287.954 ms

Loss rate: 1.47%

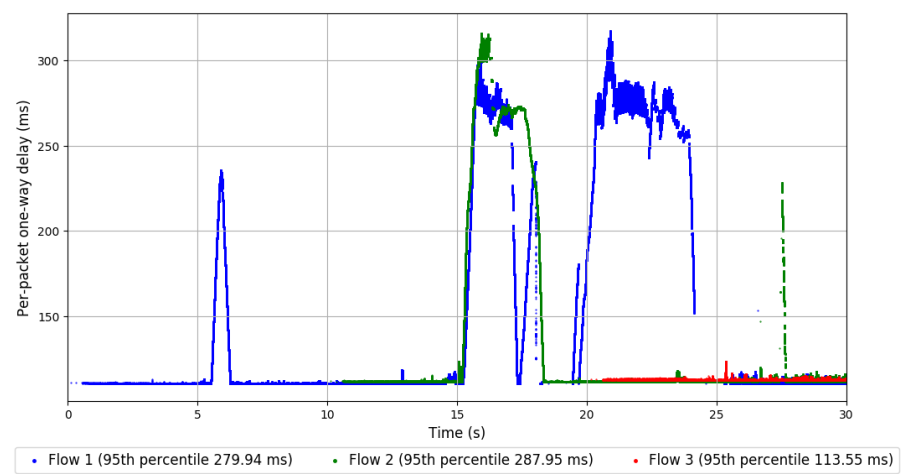
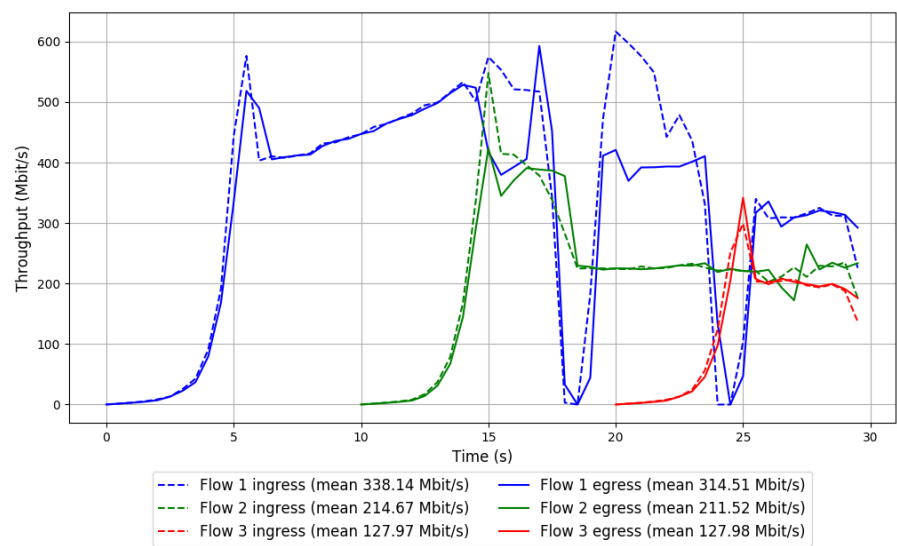
-- Flow 3:

Average throughput: 127.98 Mbit/s

95th percentile per-packet one-way delay: 113.551 ms

Loss rate: 0.00%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-17 02:53:14

End at: 2018-02-17 02:53:44

Below is generated by plot.py at 2018-02-17 09:06:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 505.55 Mbit/s

95th percentile per-packet one-way delay: 116.471 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 328.16 Mbit/s

95th percentile per-packet one-way delay: 118.203 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 198.50 Mbit/s

95th percentile per-packet one-way delay: 113.886 ms

Loss rate: 0.00%

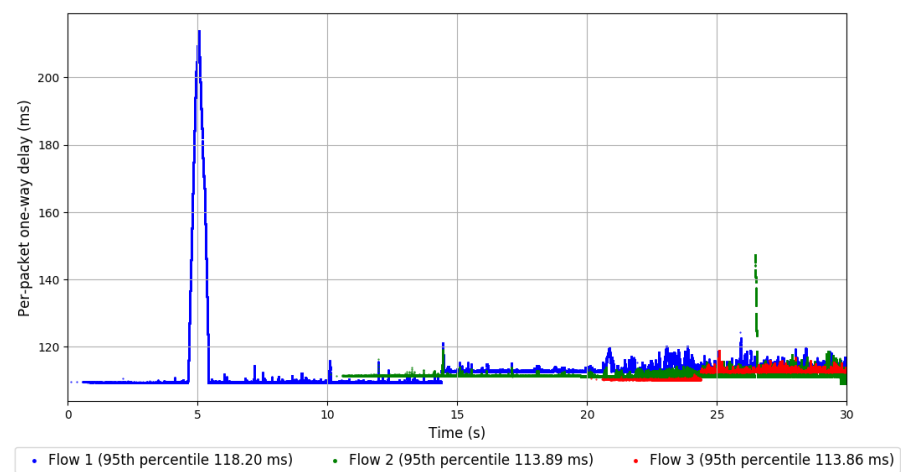
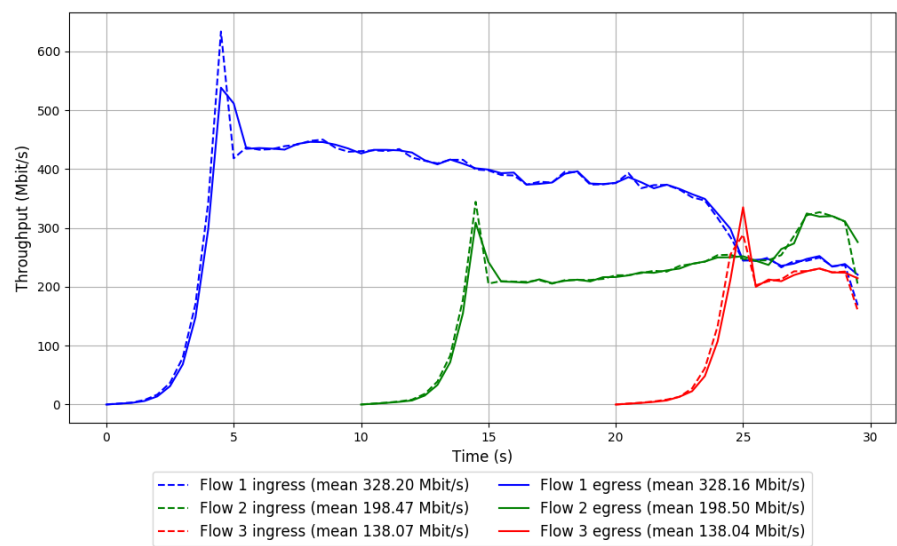
-- Flow 3:

Average throughput: 138.04 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-17 03:13:02

End at: 2018-02-17 03:13:32

Below is generated by plot.py at 2018-02-17 09:06:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 375.15 Mbit/s

95th percentile per-packet one-way delay: 221.669 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 141.68 Mbit/s

95th percentile per-packet one-way delay: 211.211 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 285.90 Mbit/s

95th percentile per-packet one-way delay: 260.773 ms

Loss rate: 0.23%

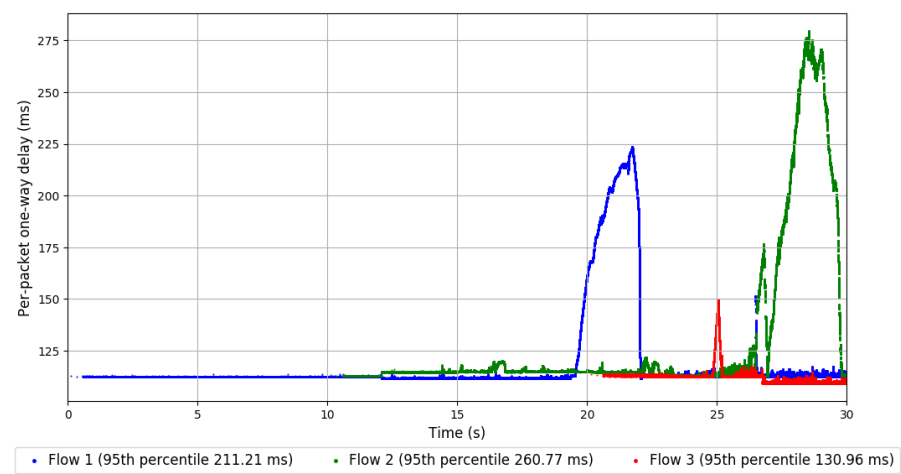
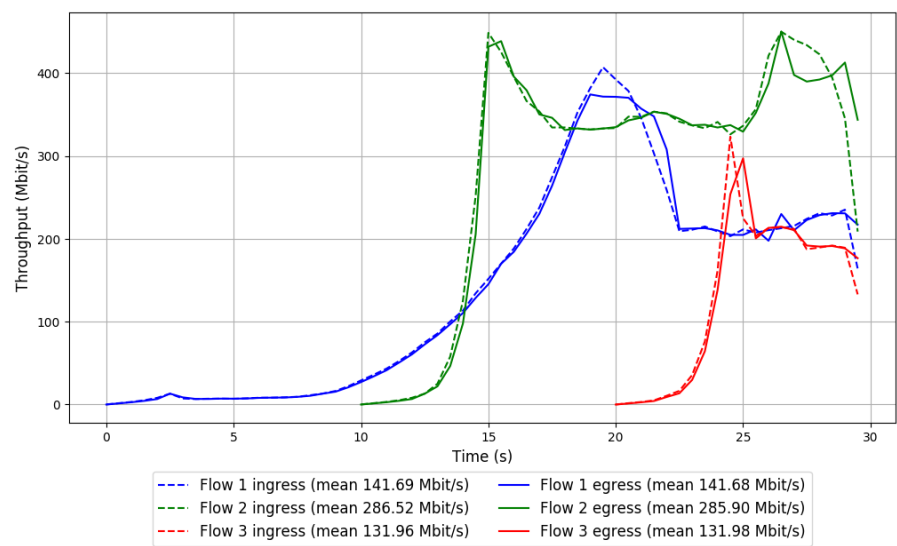
-- Flow 3:

Average throughput: 131.98 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-17 03:32:34

End at: 2018-02-17 03:33:04

Below is generated by plot.py at 2018-02-17 09:06:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 495.65 Mbit/s

95th percentile per-packet one-way delay: 161.196 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 286.96 Mbit/s

95th percentile per-packet one-way delay: 163.621 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 279.85 Mbit/s

95th percentile per-packet one-way delay: 166.384 ms

Loss rate: 1.23%

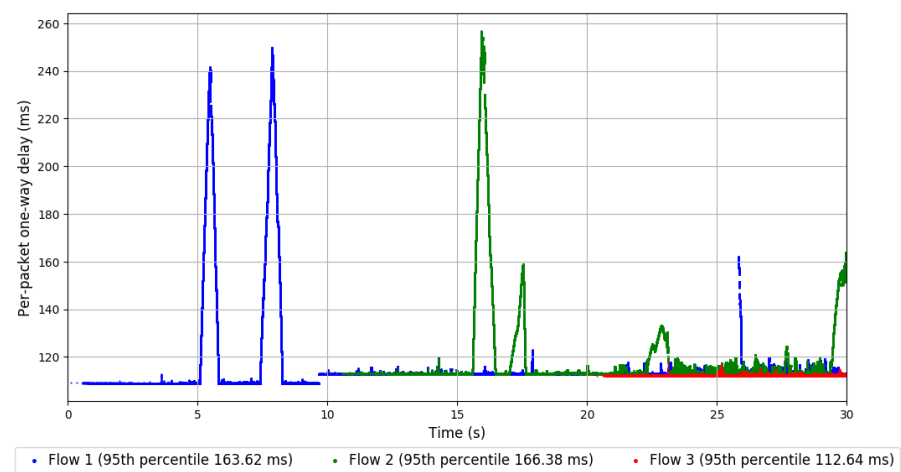
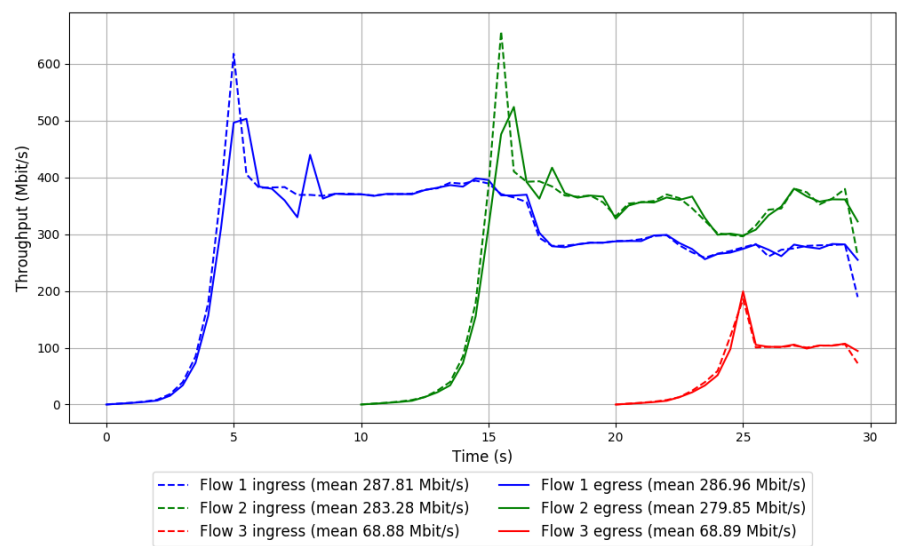
-- Flow 3:

Average throughput: 68.89 Mbit/s

95th percentile per-packet one-way delay: 112.638 ms

Loss rate: 0.03%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-17 03:52:21

End at: 2018-02-17 03:52:51

Below is generated by plot.py at 2018-02-17 09:06:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 540.99 Mbit/s

95th percentile per-packet one-way delay: 213.721 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 325.71 Mbit/s

95th percentile per-packet one-way delay: 231.144 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 261.10 Mbit/s

95th percentile per-packet one-way delay: 118.890 ms

Loss rate: 0.01%

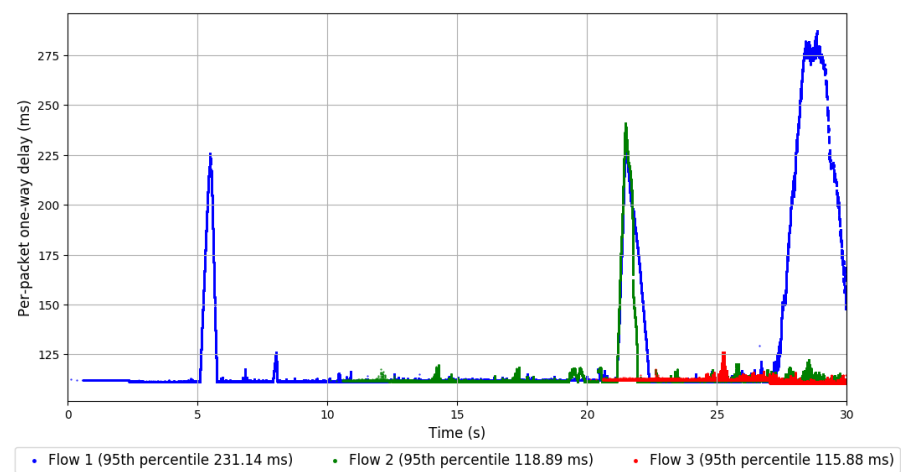
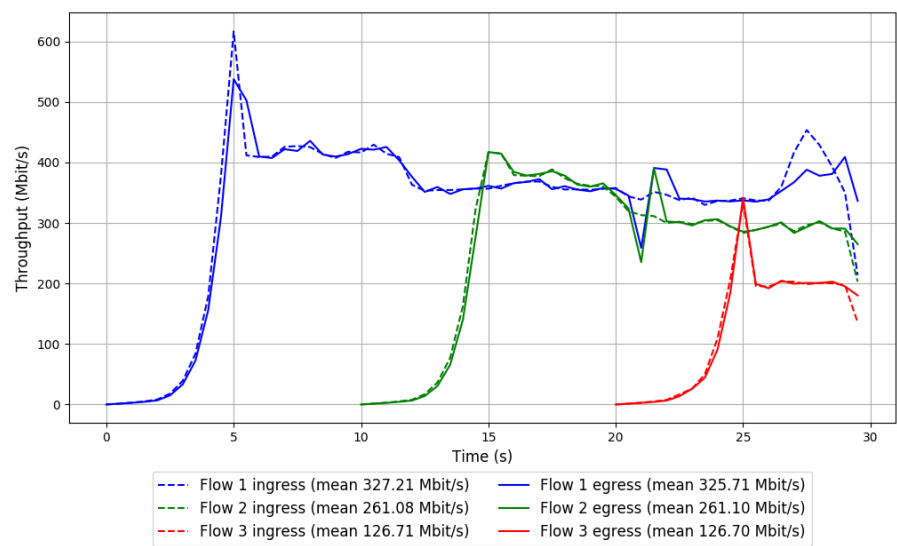
-- Flow 3:

Average throughput: 126.70 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-17 04:11:55

End at: 2018-02-17 04:12:25

Below is generated by plot.py at 2018-02-17 09:06:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 547.14 Mbit/s

95th percentile per-packet one-way delay: 163.298 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 303.49 Mbit/s

95th percentile per-packet one-way delay: 119.674 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 265.02 Mbit/s

95th percentile per-packet one-way delay: 161.248 ms

Loss rate: 0.00%

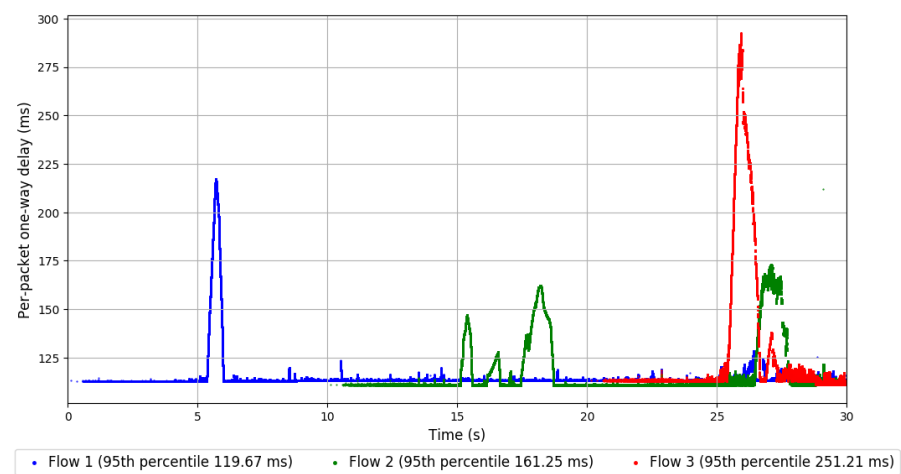
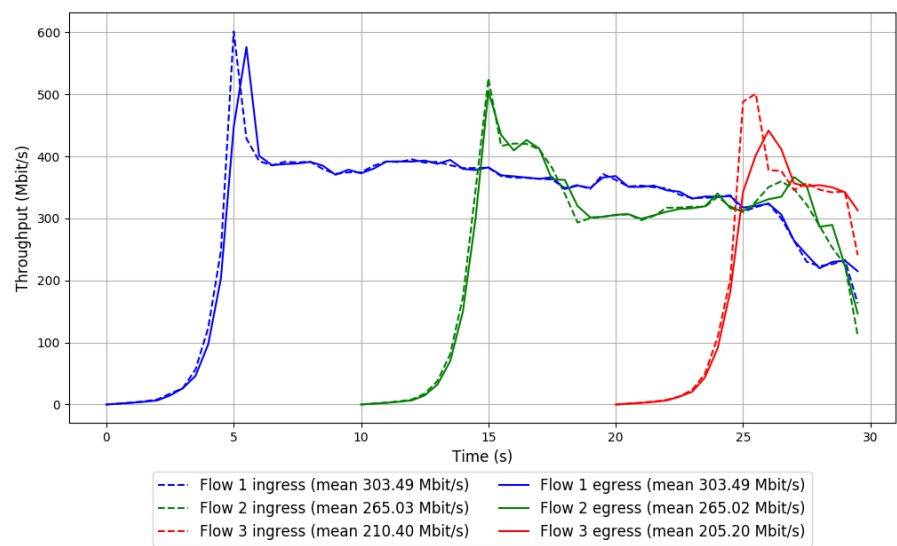
-- Flow 3:

Average throughput: 205.20 Mbit/s

95th percentile per-packet one-way delay: 251.209 ms

Loss rate: 2.49%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-17 04:31:38

End at: 2018-02-17 04:32:08

Below is generated by plot.py at 2018-02-17 09:06:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 465.15 Mbit/s

95th percentile per-packet one-way delay: 116.178 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 303.64 Mbit/s

95th percentile per-packet one-way delay: 116.397 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 180.05 Mbit/s

95th percentile per-packet one-way delay: 114.370 ms

Loss rate: 0.00%

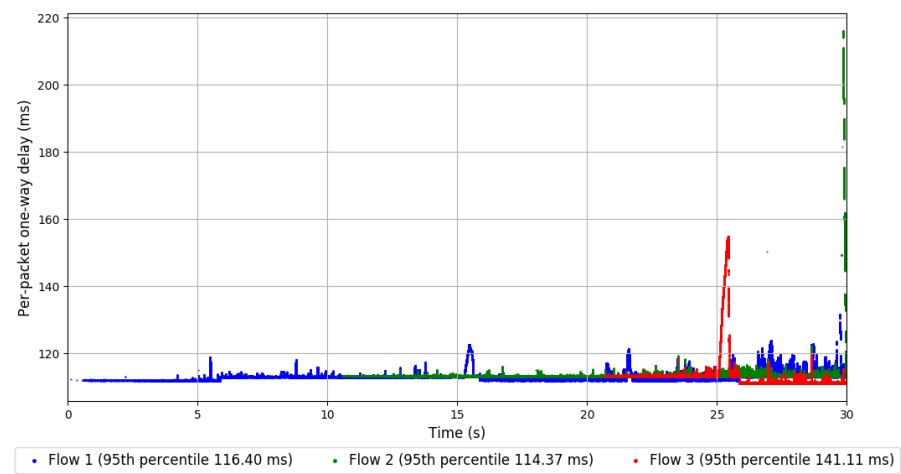
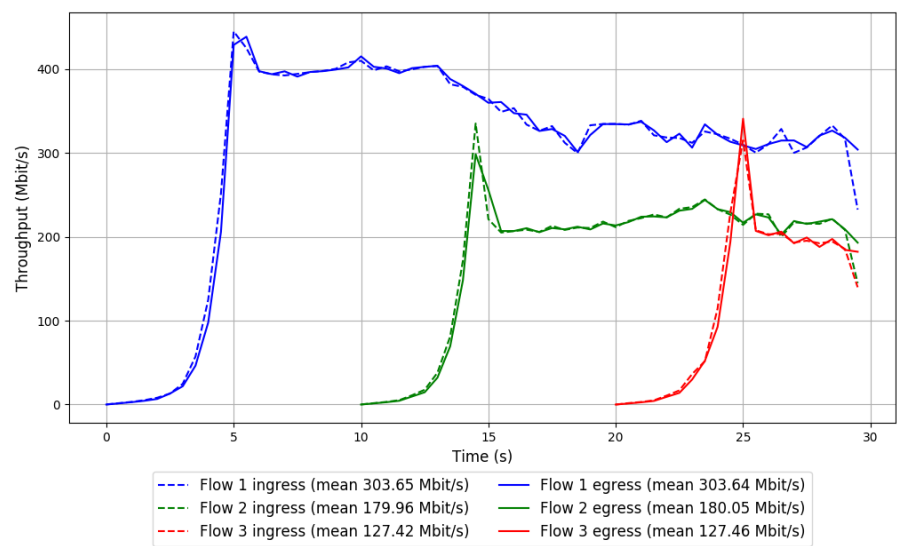
-- Flow 3:

Average throughput: 127.46 Mbit/s

95th percentile per-packet one-way delay: 141.112 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-17 04:51:22

End at: 2018-02-17 04:51:52

Below is generated by plot.py at 2018-02-17 09:06:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 572.27 Mbit/s

95th percentile per-packet one-way delay: 279.026 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 311.59 Mbit/s

95th percentile per-packet one-way delay: 322.699 ms

Loss rate: 2.30%

-- Flow 2:

Average throughput: 317.09 Mbit/s

95th percentile per-packet one-way delay: 199.742 ms

Loss rate: 0.02%

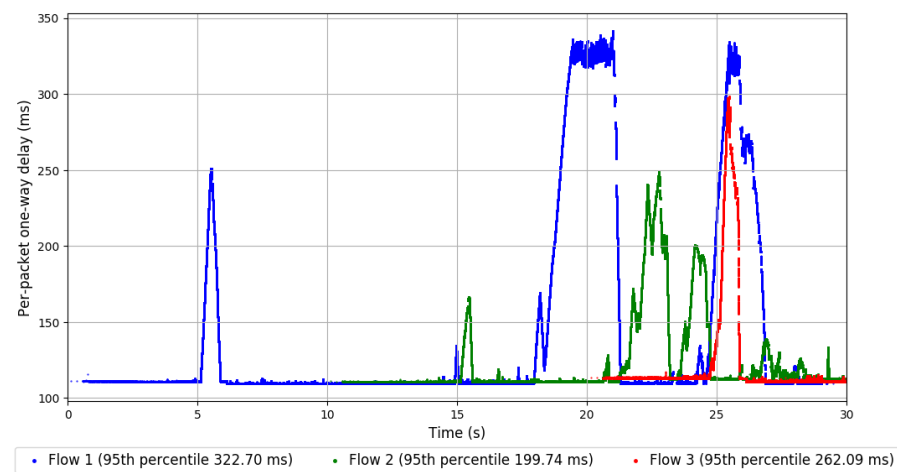
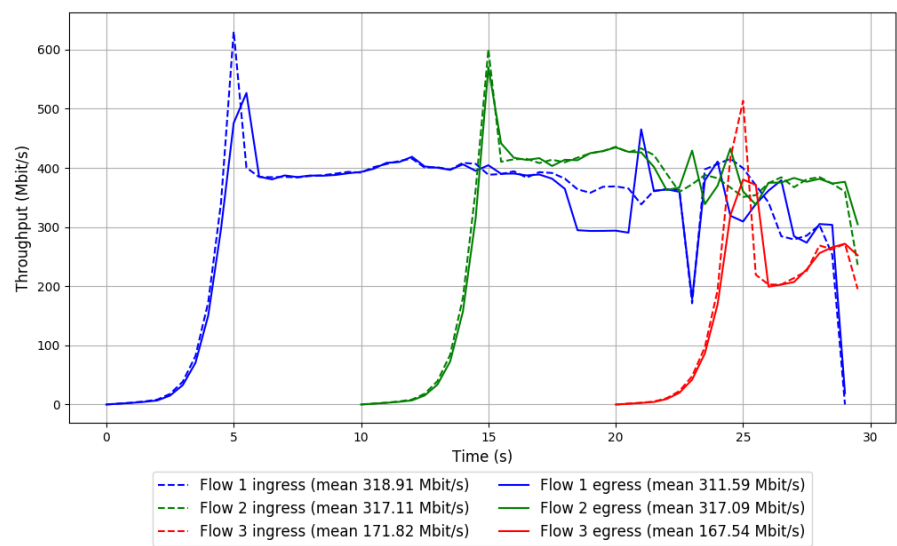
-- Flow 3:

Average throughput: 167.54 Mbit/s

95th percentile per-packet one-way delay: 262.091 ms

Loss rate: 2.51%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-17 05:11:24

End at: 2018-02-17 05:11:54

Below is generated by plot.py at 2018-02-17 09:06:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 476.62 Mbit/s

95th percentile per-packet one-way delay: 116.755 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 307.63 Mbit/s

95th percentile per-packet one-way delay: 117.534 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 187.16 Mbit/s

95th percentile per-packet one-way delay: 111.911 ms

Loss rate: 0.01%

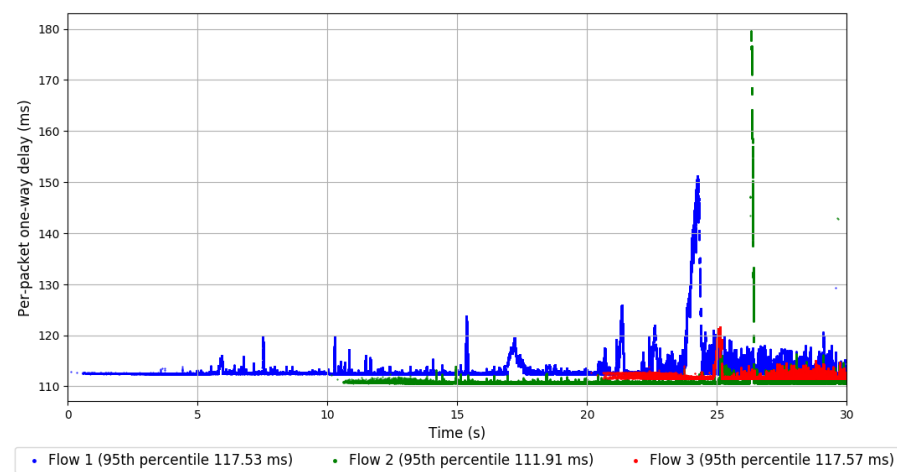
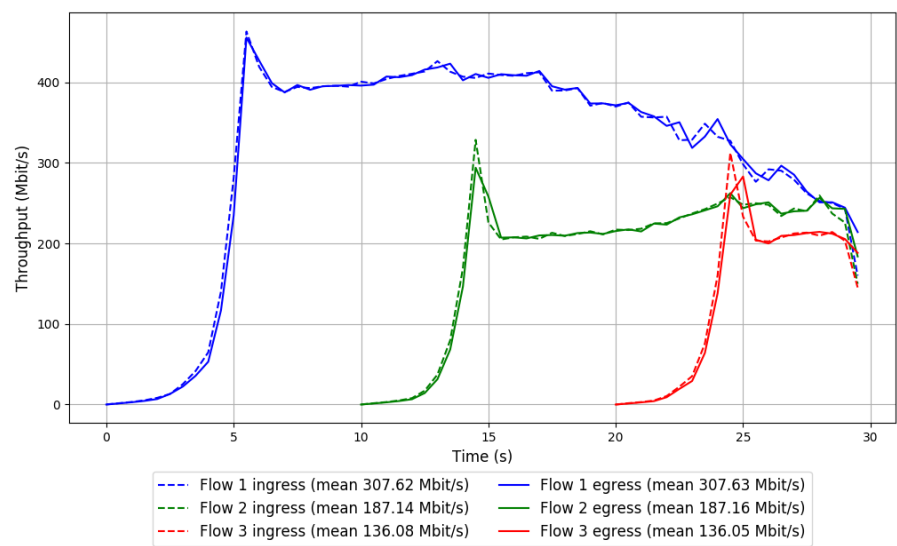
-- Flow 3:

Average throughput: 136.05 Mbit/s

95th percentile per-packet one-way delay: 117.573 ms

Loss rate: 0.07%

Run 10: Report of Vivace-latency — Data Link

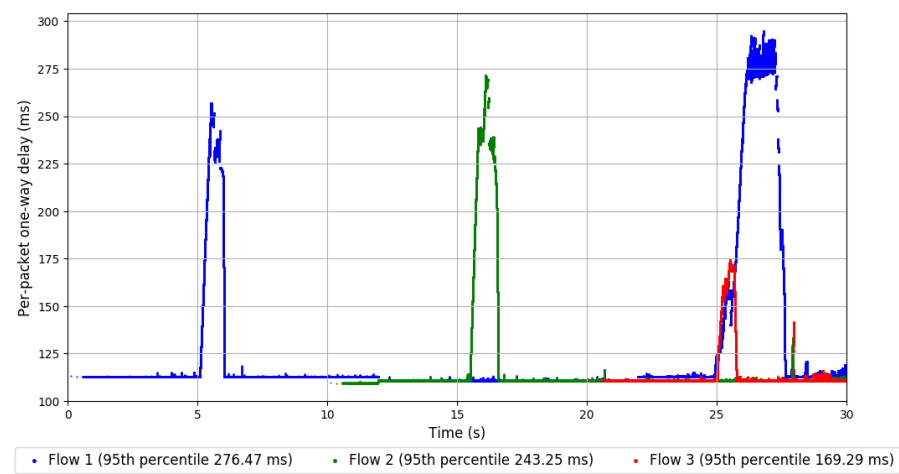
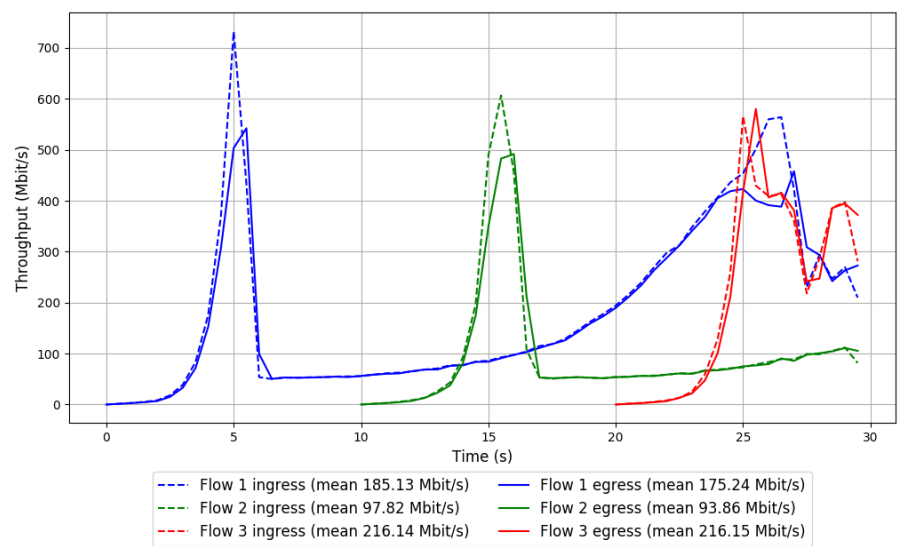


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-17 02:20:12
End at: 2018-02-17 02:20:42

# Below is generated by plot.py at 2018-02-17 09:06:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 308.84 Mbit/s
95th percentile per-packet one-way delay: 268.790 ms
Loss rate: 3.90%
-- Flow 1:
Average throughput: 175.24 Mbit/s
95th percentile per-packet one-way delay: 276.471 ms
Loss rate: 5.34%
-- Flow 2:
Average throughput: 93.86 Mbit/s
95th percentile per-packet one-way delay: 243.254 ms
Loss rate: 4.06%
-- Flow 3:
Average throughput: 216.15 Mbit/s
95th percentile per-packet one-way delay: 169.294 ms
Loss rate: 0.00%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

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

End at: 2018-02-17 02:40:09

Below is generated by plot.py at 2018-02-17 09:09:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 543.08 Mbit/s

95th percentile per-packet one-way delay: 292.233 ms

Loss rate: 4.52%

-- Flow 1:

Average throughput: 281.20 Mbit/s

95th percentile per-packet one-way delay: 280.388 ms

Loss rate: 2.70%

-- Flow 2:

Average throughput: 318.55 Mbit/s

95th percentile per-packet one-way delay: 303.723 ms

Loss rate: 5.37%

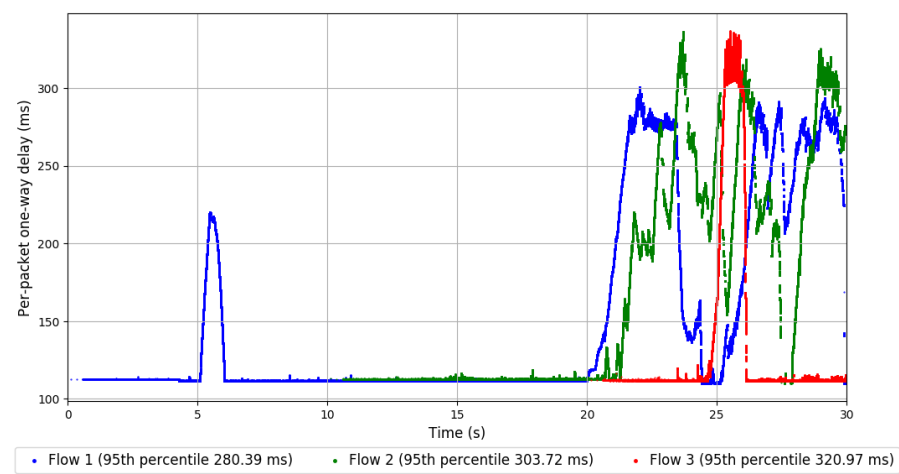
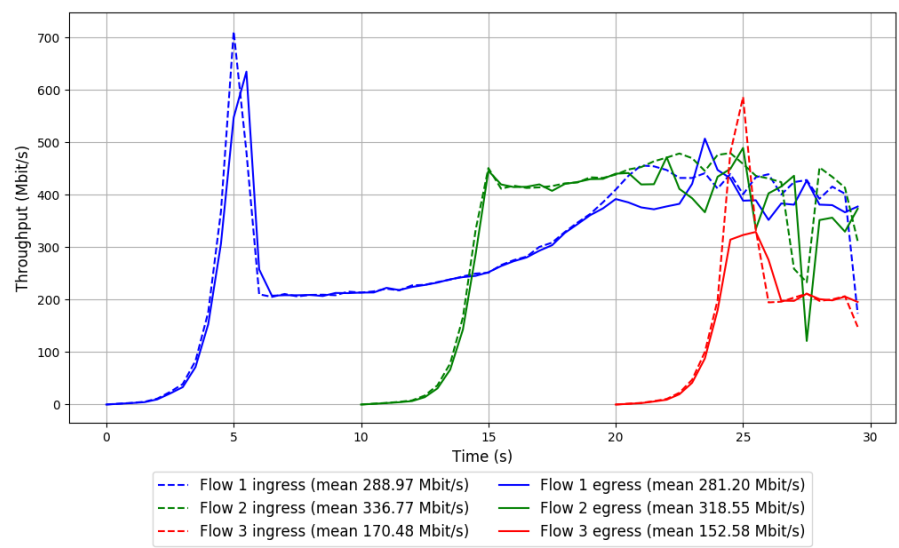
-- Flow 3:

Average throughput: 152.58 Mbit/s

95th percentile per-packet one-way delay: 320.973 ms

Loss rate: 10.49%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-17 02:59:35

End at: 2018-02-17 03:00:05

Below is generated by plot.py at 2018-02-17 09:14:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 616.41 Mbit/s

95th percentile per-packet one-way delay: 283.883 ms

Loss rate: 3.39%

-- Flow 1:

Average throughput: 398.68 Mbit/s

95th percentile per-packet one-way delay: 236.465 ms

Loss rate: 2.02%

-- Flow 2:

Average throughput: 268.77 Mbit/s

95th percentile per-packet one-way delay: 289.948 ms

Loss rate: 3.16%

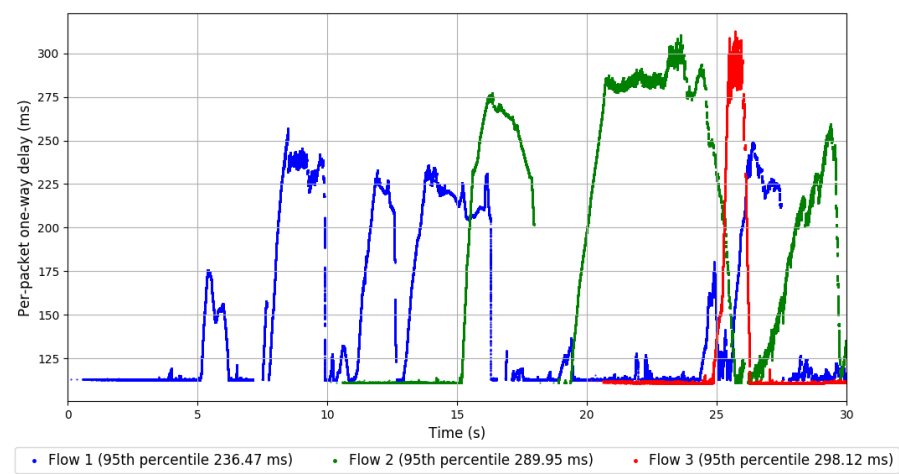
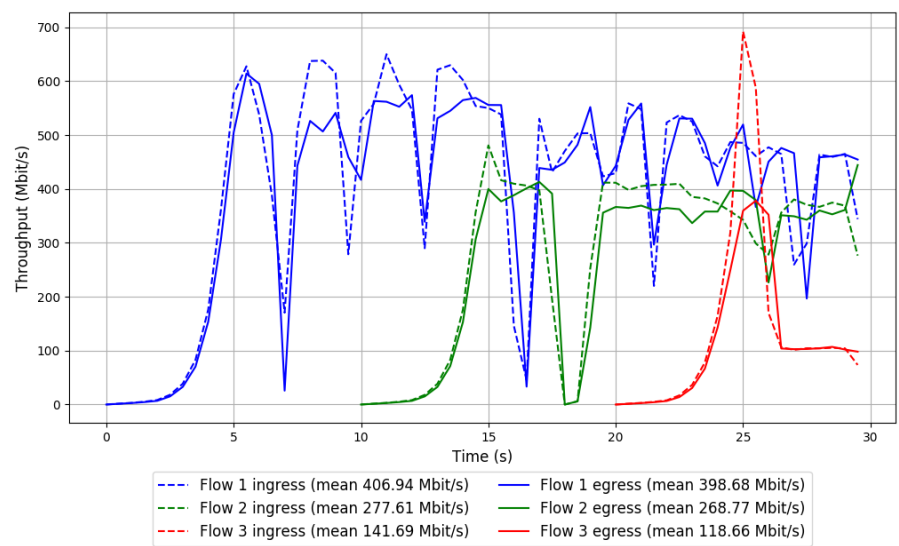
-- Flow 3:

Average throughput: 118.66 Mbit/s

95th percentile per-packet one-way delay: 298.120 ms

Loss rate: 16.26%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-17 03:19:12

End at: 2018-02-17 03:19:42

Below is generated by plot.py at 2018-02-17 09:14:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 539.59 Mbit/s

95th percentile per-packet one-way delay: 293.358 ms

Loss rate: 3.33%

-- Flow 1:

Average throughput: 264.70 Mbit/s

95th percentile per-packet one-way delay: 260.469 ms

Loss rate: 1.91%

-- Flow 2:

Average throughput: 304.60 Mbit/s

95th percentile per-packet one-way delay: 298.206 ms

Loss rate: 4.86%

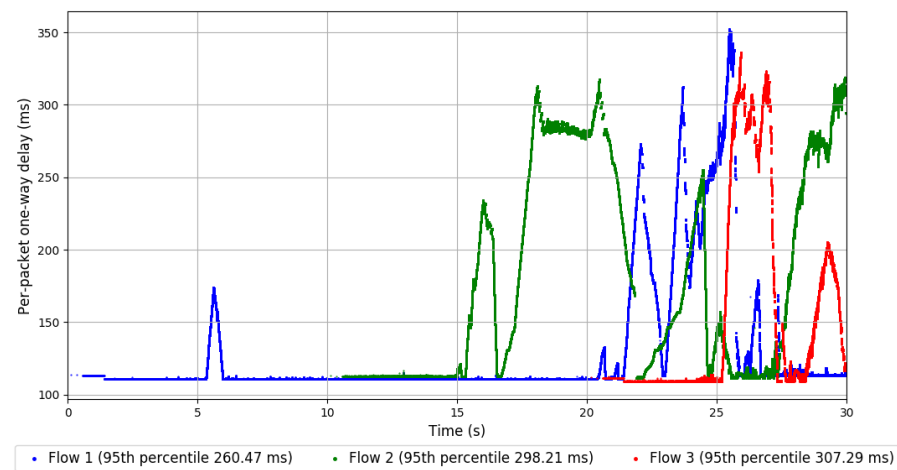
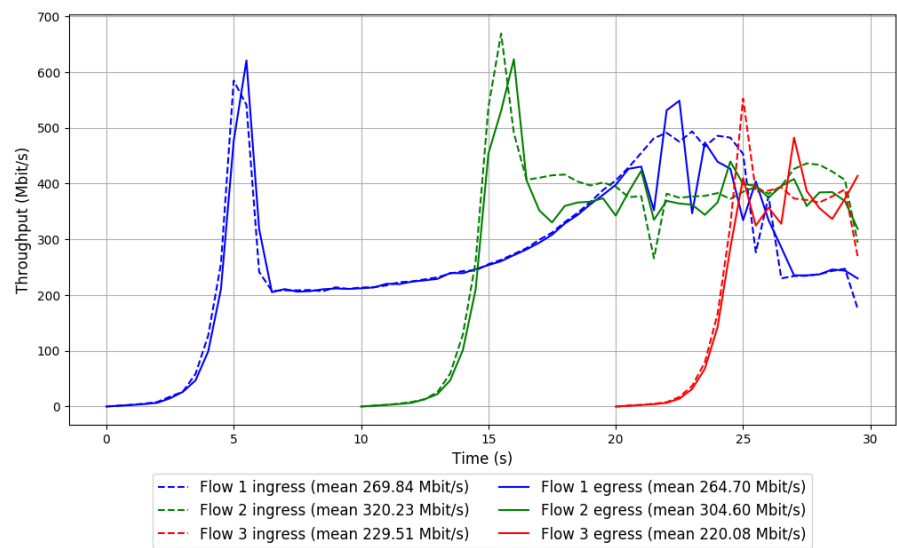
-- Flow 3:

Average throughput: 220.08 Mbit/s

95th percentile per-packet one-way delay: 307.286 ms

Loss rate: 4.07%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-17 03:39:04

End at: 2018-02-17 03:39:34

Below is generated by plot.py at 2018-02-17 09:14:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 476.90 Mbit/s

95th percentile per-packet one-way delay: 244.582 ms

Loss rate: 8.01%

-- Flow 1:

Average throughput: 295.94 Mbit/s

95th percentile per-packet one-way delay: 246.464 ms

Loss rate: 10.14%

-- Flow 2:

Average throughput: 189.09 Mbit/s

95th percentile per-packet one-way delay: 233.019 ms

Loss rate: 3.18%

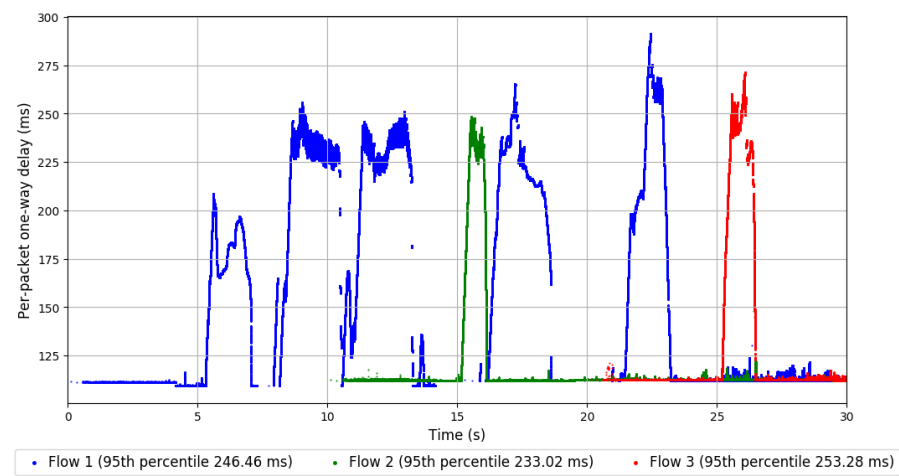
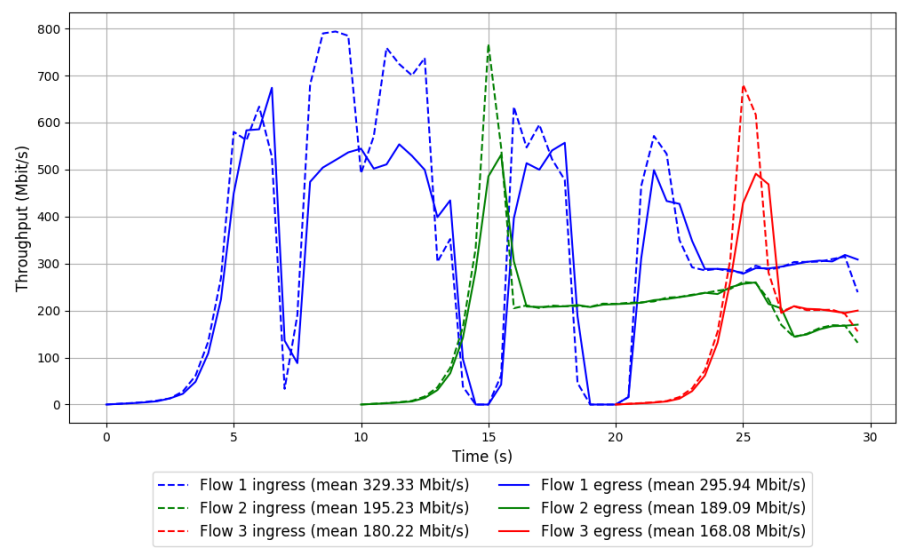
-- Flow 3:

Average throughput: 168.08 Mbit/s

95th percentile per-packet one-way delay: 253.275 ms

Loss rate: 6.73%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-17 03:58:51

End at: 2018-02-17 03:59:21

Below is generated by plot.py at 2018-02-17 09:14:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 429.36 Mbit/s

95th percentile per-packet one-way delay: 255.394 ms

Loss rate: 5.06%

-- Flow 1:

Average throughput: 285.24 Mbit/s

95th percentile per-packet one-way delay: 246.764 ms

Loss rate: 5.18%

-- Flow 2:

Average throughput: 133.21 Mbit/s

95th percentile per-packet one-way delay: 223.094 ms

Loss rate: 1.83%

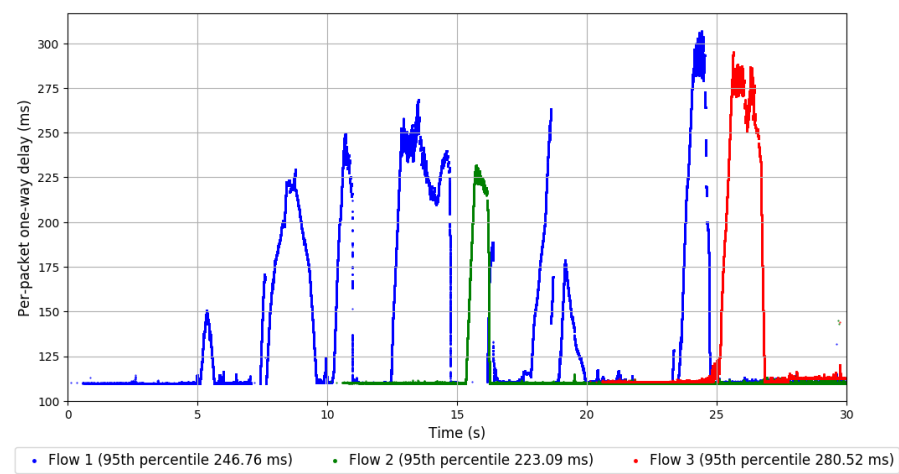
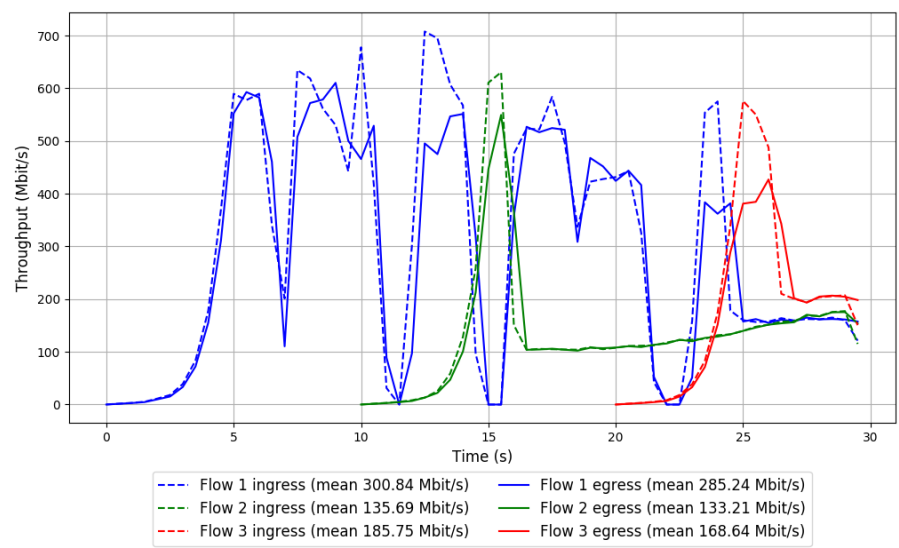
-- Flow 3:

Average throughput: 168.64 Mbit/s

95th percentile per-packet one-way delay: 280.520 ms

Loss rate: 9.21%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-17 04:18:45

End at: 2018-02-17 04:19:15

Below is generated by plot.py at 2018-02-17 09:14:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 463.03 Mbit/s

95th percentile per-packet one-way delay: 298.683 ms

Loss rate: 4.65%

-- Flow 1:

Average throughput: 191.63 Mbit/s

95th percentile per-packet one-way delay: 299.902 ms

Loss rate: 6.59%

-- Flow 2:

Average throughput: 304.53 Mbit/s

95th percentile per-packet one-way delay: 298.747 ms

Loss rate: 3.87%

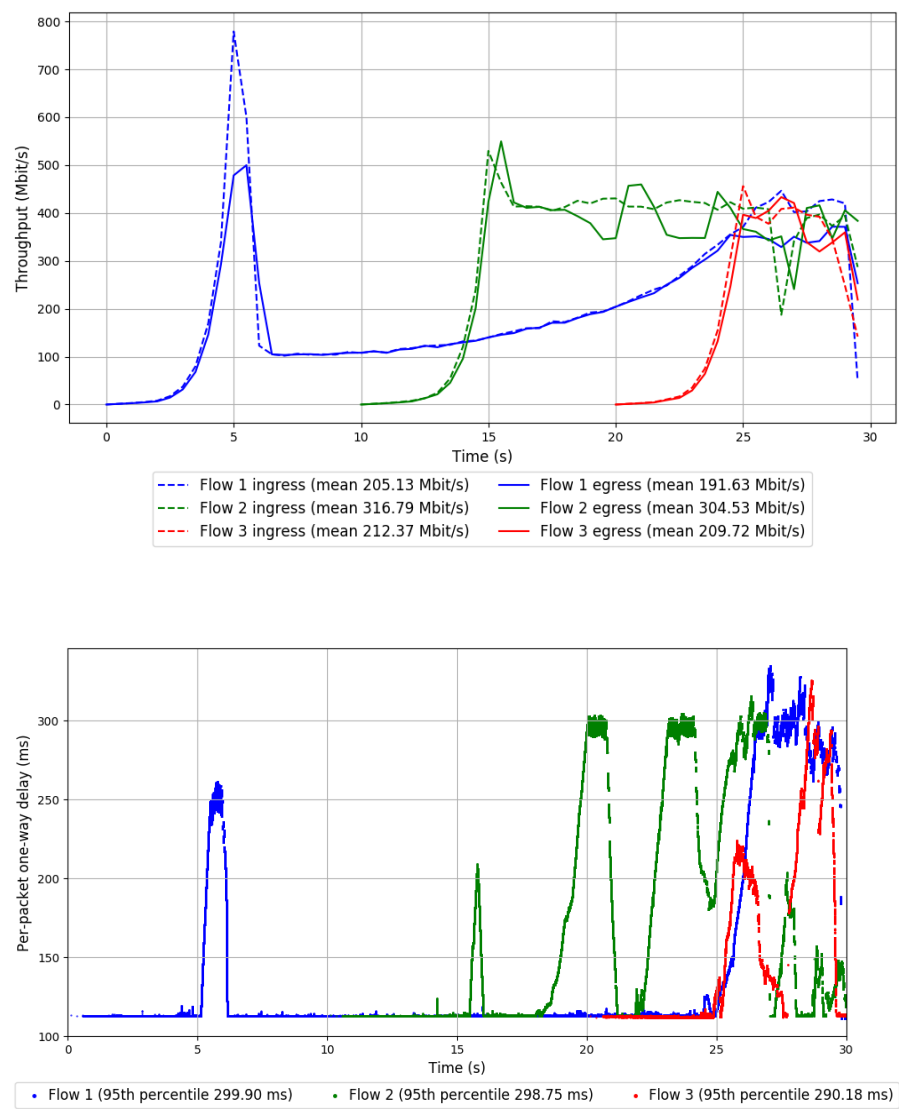
-- Flow 3:

Average throughput: 209.72 Mbit/s

95th percentile per-packet one-way delay: 290.179 ms

Loss rate: 1.30%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-17 04:37:58

End at: 2018-02-17 04:38:28

Below is generated by plot.py at 2018-02-17 09:16:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 609.87 Mbit/s

95th percentile per-packet one-way delay: 268.369 ms

Loss rate: 2.60%

-- Flow 1:

Average throughput: 359.94 Mbit/s

95th percentile per-packet one-way delay: 254.118 ms

Loss rate: 2.36%

-- Flow 2:

Average throughput: 304.91 Mbit/s

95th percentile per-packet one-way delay: 273.724 ms

Loss rate: 2.81%

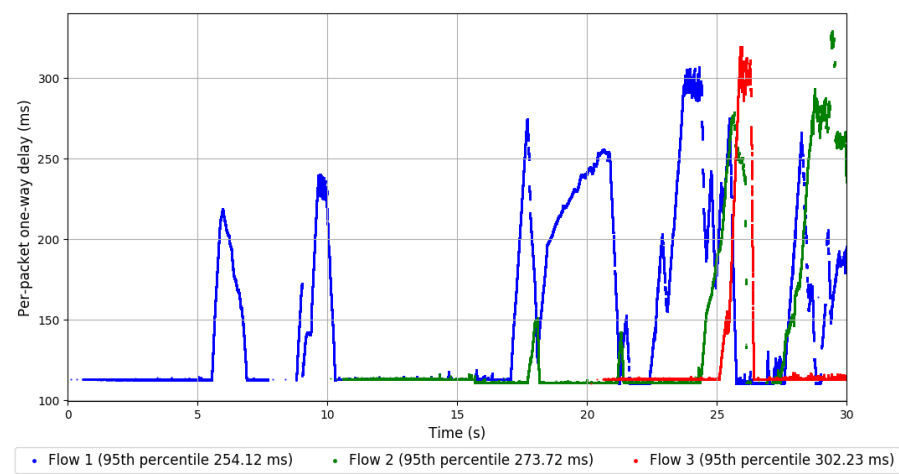
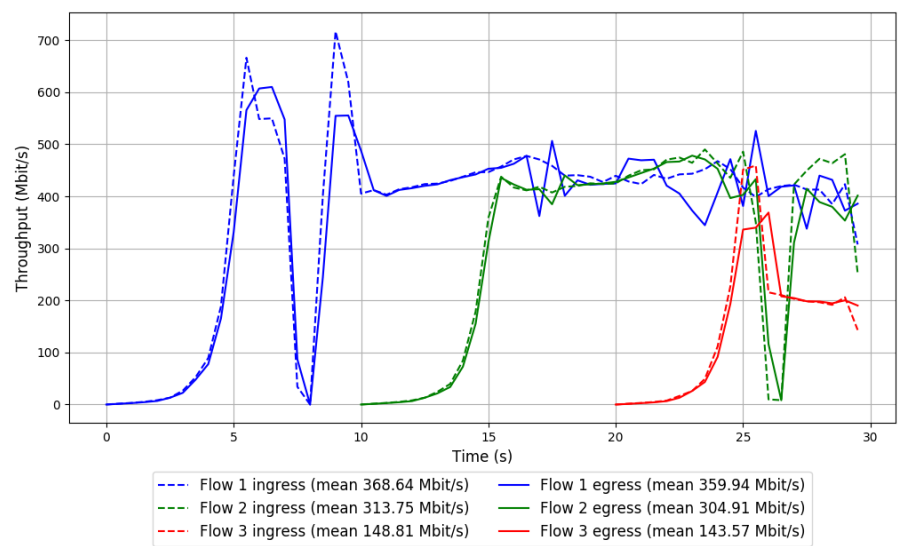
-- Flow 3:

Average throughput: 143.57 Mbit/s

95th percentile per-packet one-way delay: 302.234 ms

Loss rate: 3.49%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-17 04:58:00

End at: 2018-02-17 04:58:30

Below is generated by plot.py at 2018-02-17 09:16:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 542.53 Mbit/s

95th percentile per-packet one-way delay: 278.956 ms

Loss rate: 2.31%

-- Flow 1:

Average throughput: 331.29 Mbit/s

95th percentile per-packet one-way delay: 278.903 ms

Loss rate: 1.43%

-- Flow 2:

Average throughput: 221.54 Mbit/s

95th percentile per-packet one-way delay: 224.735 ms

Loss rate: 2.92%

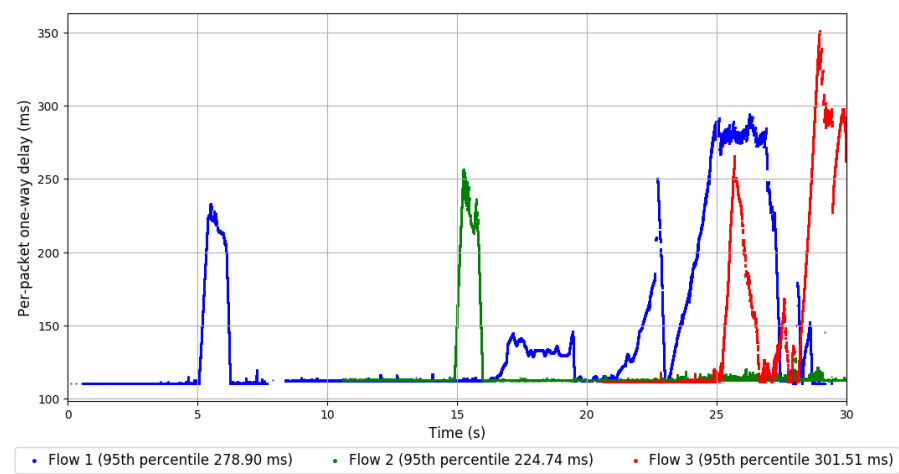
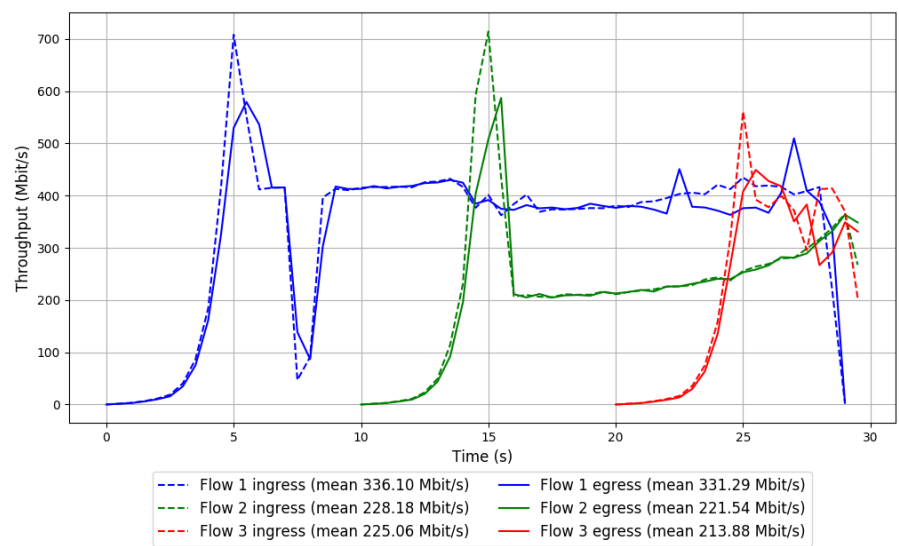
-- Flow 3:

Average throughput: 213.88 Mbit/s

95th percentile per-packet one-way delay: 301.514 ms

Loss rate: 4.98%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-17 05:17:40

End at: 2018-02-17 05:18:10

Below is generated by plot.py at 2018-02-17 09:19:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 523.38 Mbit/s

95th percentile per-packet one-way delay: 300.615 ms

Loss rate: 3.35%

-- Flow 1:

Average throughput: 316.66 Mbit/s

95th percentile per-packet one-way delay: 298.899 ms

Loss rate: 1.87%

-- Flow 2:

Average throughput: 258.14 Mbit/s

95th percentile per-packet one-way delay: 297.512 ms

Loss rate: 4.71%

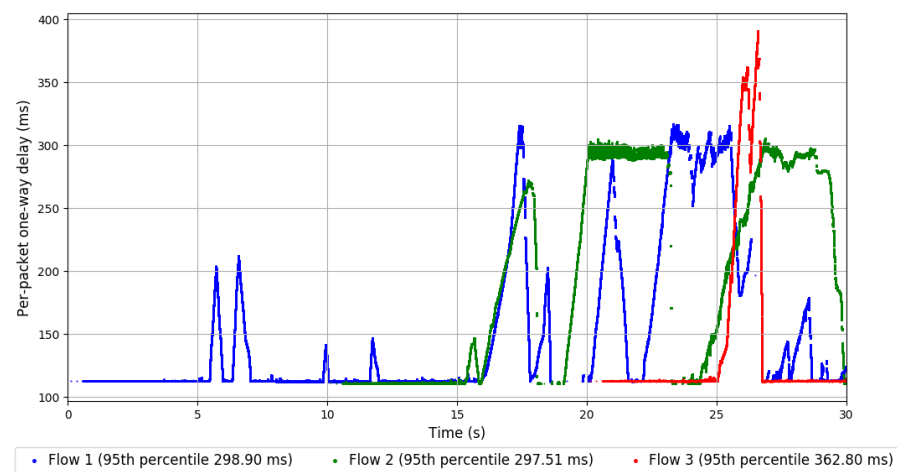
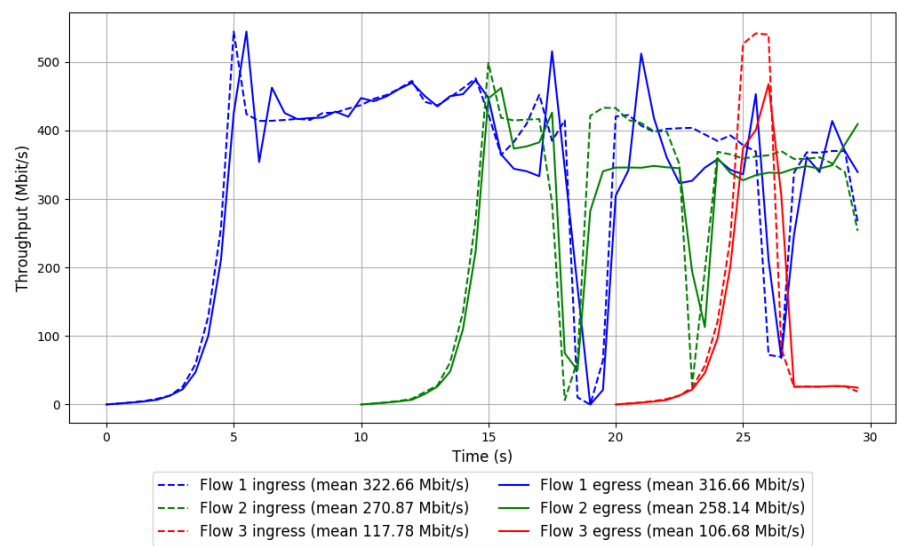
-- Flow 3:

Average throughput: 106.68 Mbit/s

95th percentile per-packet one-way delay: 362.804 ms

Loss rate: 9.43%

Run 10: Report of Vivace-loss — Data Link

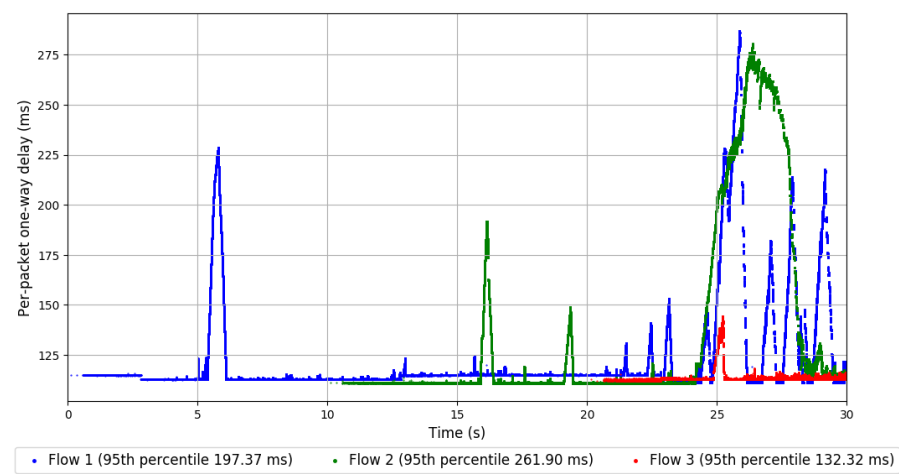
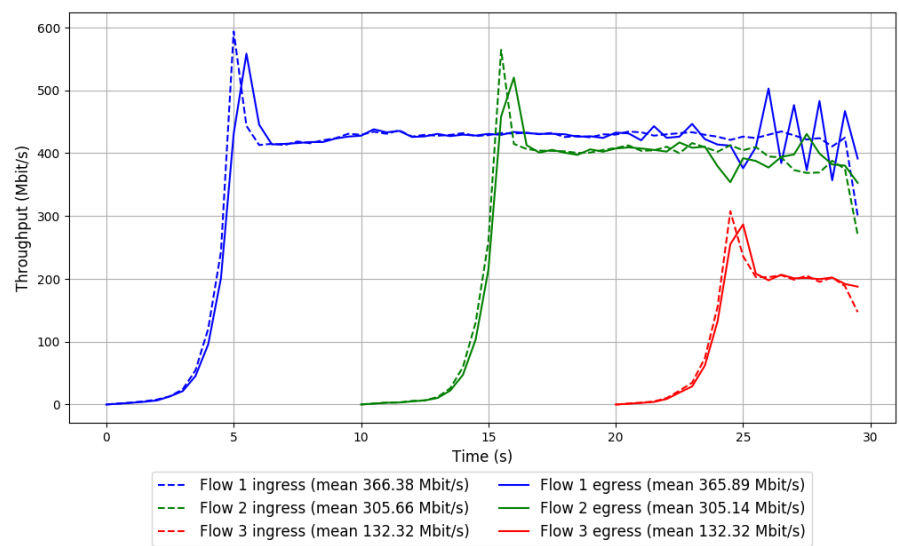


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-17 02:22:55
End at: 2018-02-17 02:23:25

# Below is generated by plot.py at 2018-02-17 09:22:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 612.30 Mbit/s
95th percentile per-packet one-way delay: 230.319 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 365.89 Mbit/s
95th percentile per-packet one-way delay: 197.368 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 305.14 Mbit/s
95th percentile per-packet one-way delay: 261.905 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 132.32 Mbit/s
95th percentile per-packet one-way delay: 132.321 ms
Loss rate: 0.02%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-17 02:42:41

End at: 2018-02-17 02:43:11

Below is generated by plot.py at 2018-02-17 09:22:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 547.91 Mbit/s

95th percentile per-packet one-way delay: 154.308 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 322.74 Mbit/s

95th percentile per-packet one-way delay: 150.203 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 286.59 Mbit/s

95th percentile per-packet one-way delay: 137.739 ms

Loss rate: 0.00%

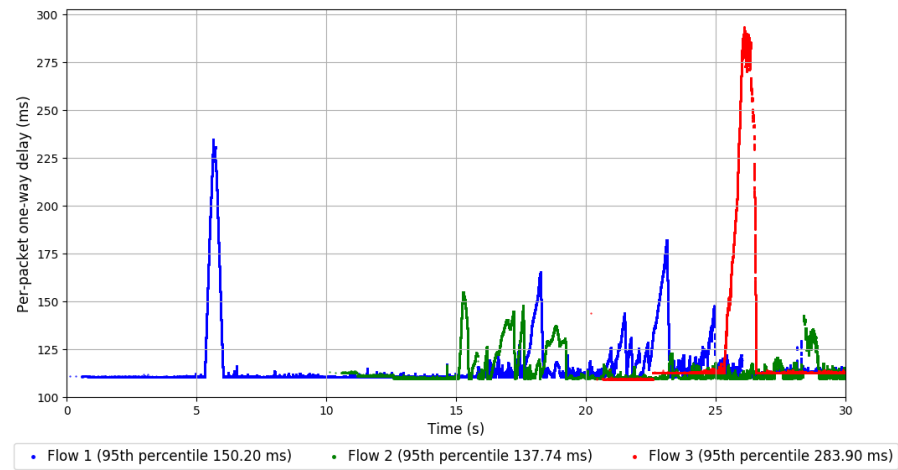
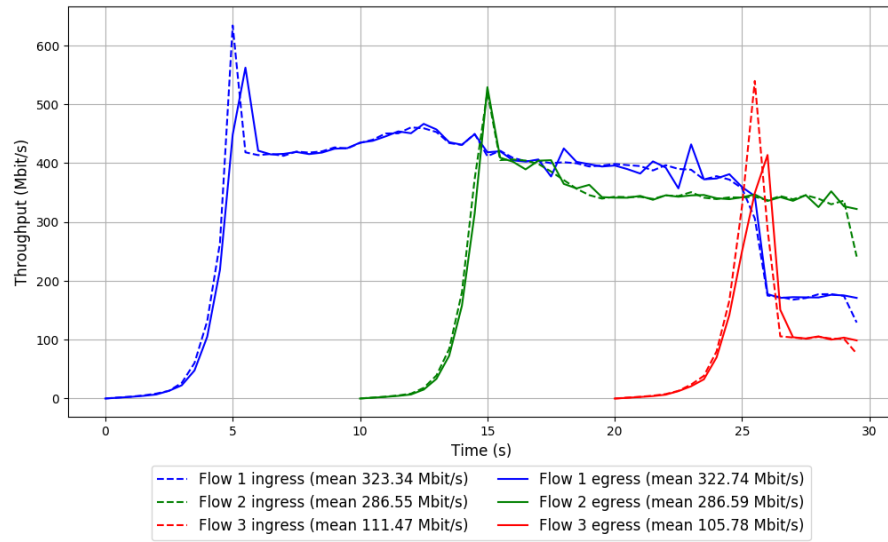
-- Flow 3:

Average throughput: 105.78 Mbit/s

95th percentile per-packet one-way delay: 283.898 ms

Loss rate: 5.40%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-17 03:02:41

End at: 2018-02-17 03:03:11

Below is generated by plot.py at 2018-02-17 09:23:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 617.15 Mbit/s

95th percentile per-packet one-way delay: 281.310 ms

Loss rate: 1.75%

-- Flow 1:

Average throughput: 337.99 Mbit/s

95th percentile per-packet one-way delay: 281.289 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 303.36 Mbit/s

95th percentile per-packet one-way delay: 257.252 ms

Loss rate: 1.32%

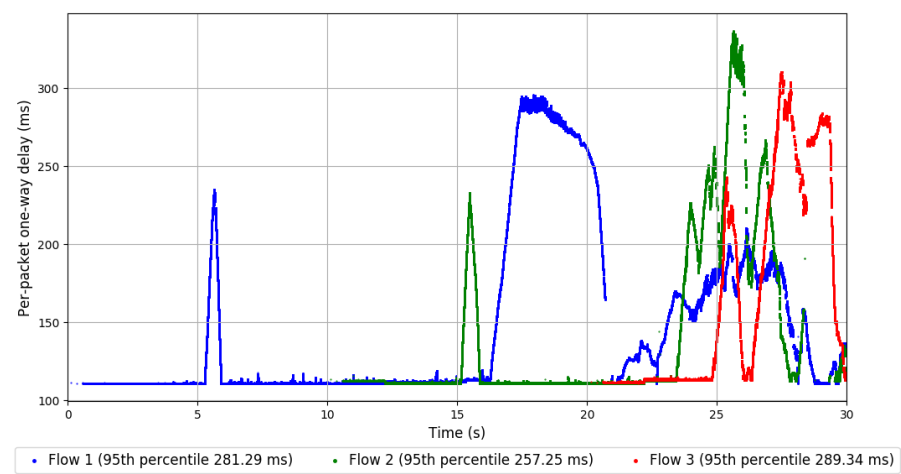
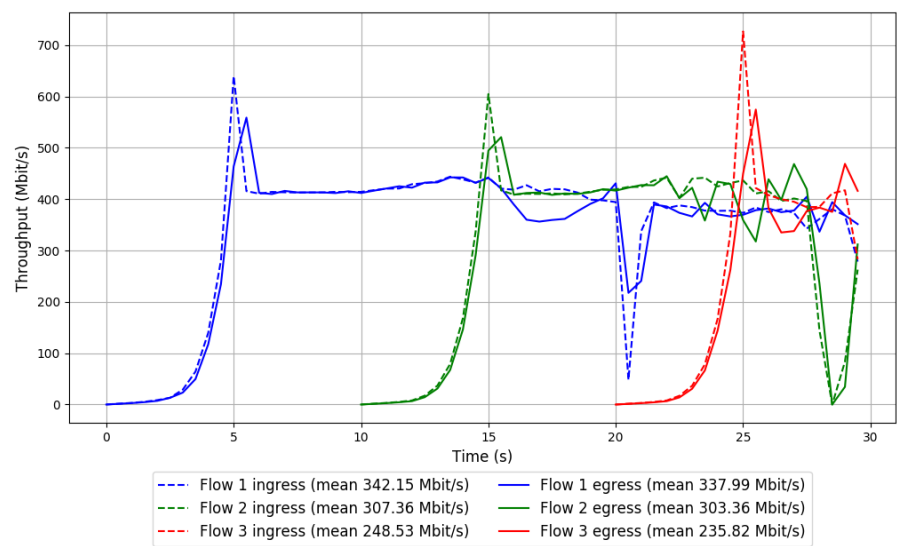
-- Flow 3:

Average throughput: 235.82 Mbit/s

95th percentile per-packet one-way delay: 289.340 ms

Loss rate: 5.11%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-17 03:22:13

End at: 2018-02-17 03:22:43

Below is generated by plot.py at 2018-02-17 09:23:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 583.69 Mbit/s

95th percentile per-packet one-way delay: 249.831 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 349.09 Mbit/s

95th percentile per-packet one-way delay: 270.001 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 287.59 Mbit/s

95th percentile per-packet one-way delay: 175.626 ms

Loss rate: 0.38%

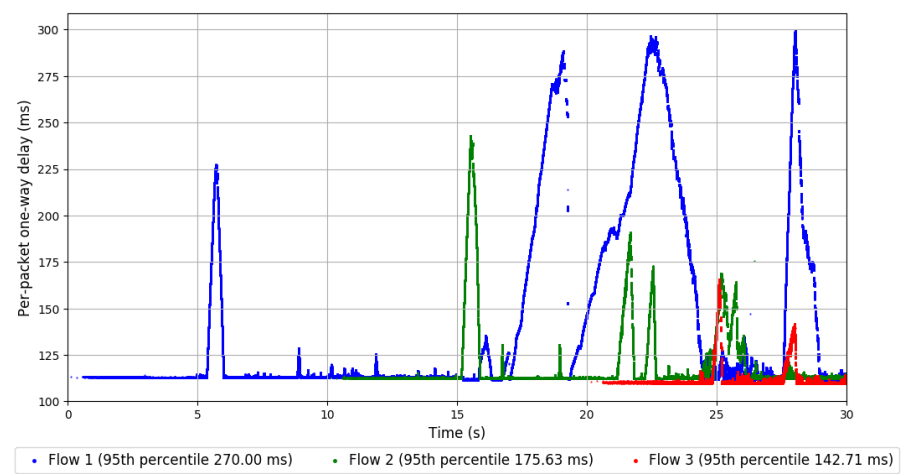
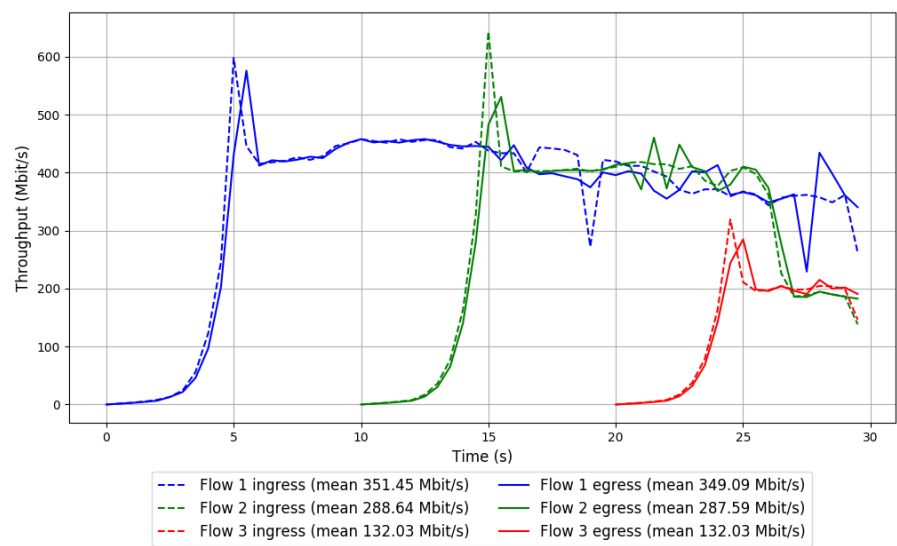
-- Flow 3:

Average throughput: 132.03 Mbit/s

95th percentile per-packet one-way delay: 142.705 ms

Loss rate: 0.00%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-17 03:42:02

End at: 2018-02-17 03:42:32

Below is generated by plot.py at 2018-02-17 09:23:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 572.53 Mbit/s

95th percentile per-packet one-way delay: 279.202 ms

Loss rate: 1.76%

-- Flow 1:

Average throughput: 320.76 Mbit/s

95th percentile per-packet one-way delay: 297.705 ms

Loss rate: 1.63%

-- Flow 2:

Average throughput: 325.50 Mbit/s

95th percentile per-packet one-way delay: 256.048 ms

Loss rate: 0.71%

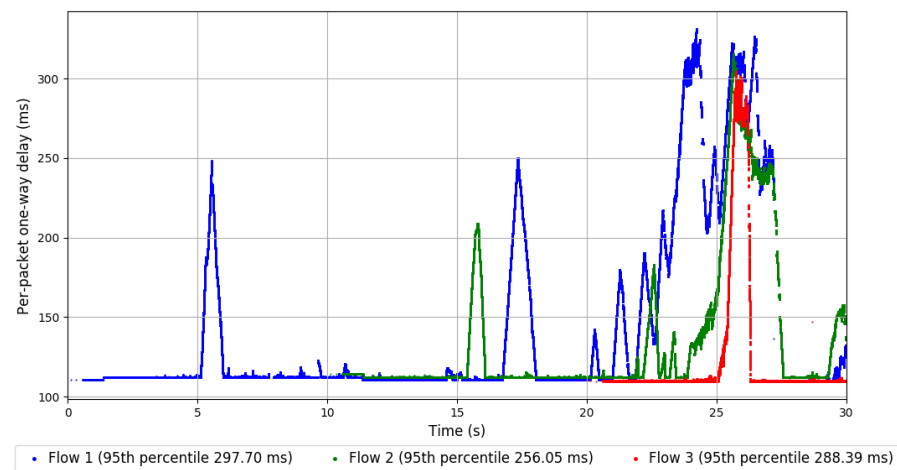
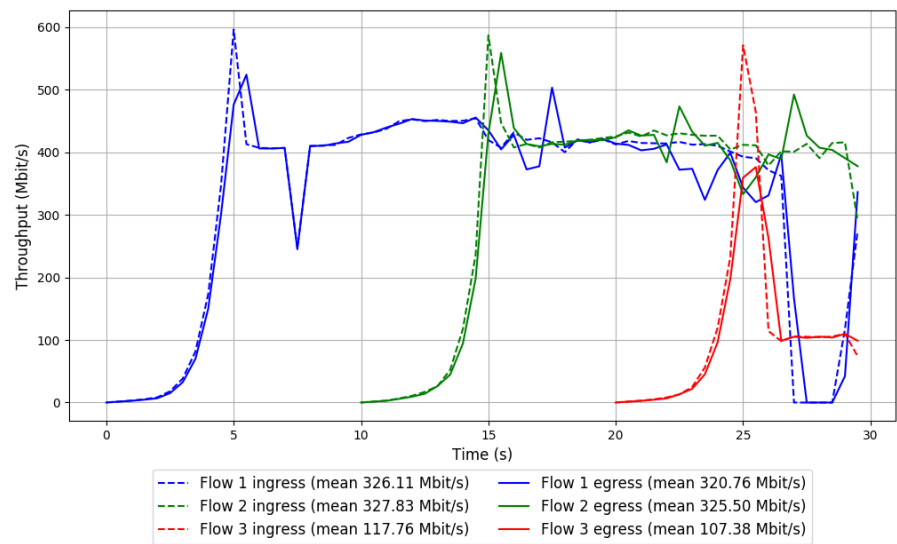
-- Flow 3:

Average throughput: 107.38 Mbit/s

95th percentile per-packet one-way delay: 288.390 ms

Loss rate: 8.81%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-17 04:01:44

End at: 2018-02-17 04:02:14

Below is generated by plot.py at 2018-02-17 09:25:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 598.73 Mbit/s

95th percentile per-packet one-way delay: 269.290 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 350.63 Mbit/s

95th percentile per-packet one-way delay: 272.261 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 304.83 Mbit/s

95th percentile per-packet one-way delay: 150.065 ms

Loss rate: 0.00%

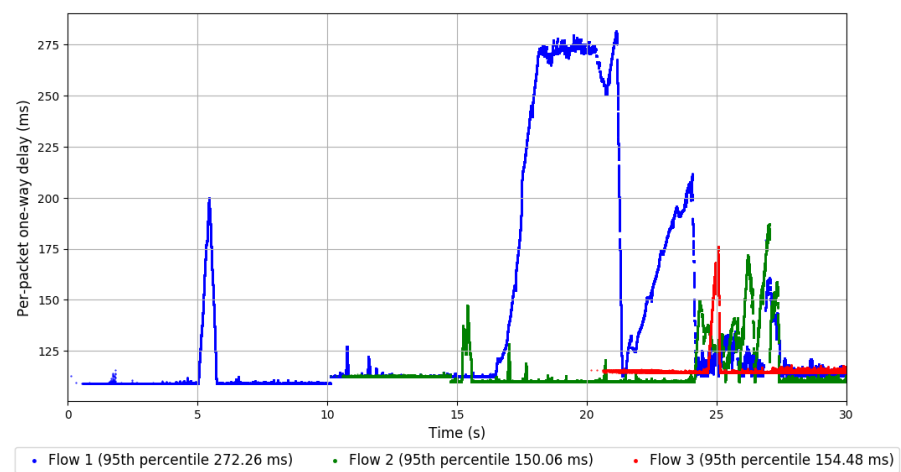
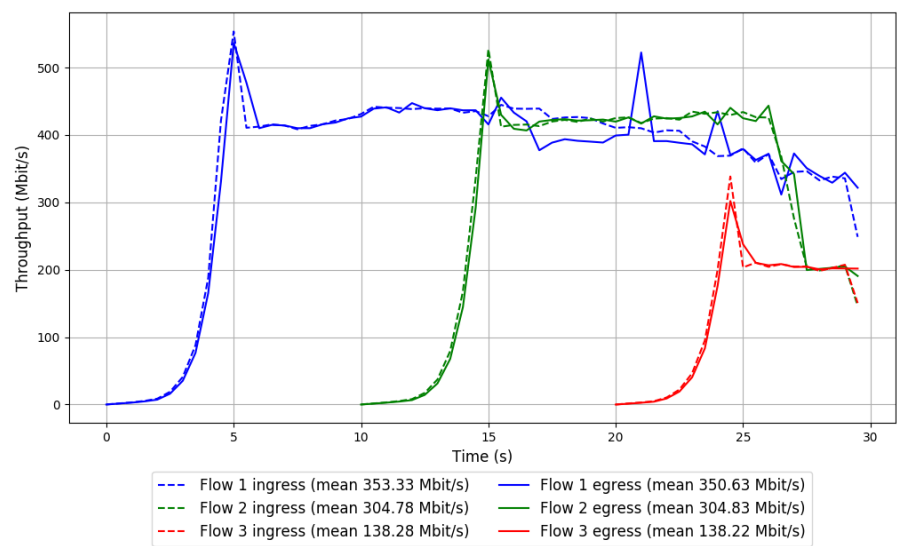
-- Flow 3:

Average throughput: 138.22 Mbit/s

95th percentile per-packet one-way delay: 154.482 ms

Loss rate: 0.06%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-17 04:21:40

End at: 2018-02-17 04:22:10

Below is generated by plot.py at 2018-02-17 09:25:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 543.56 Mbit/s

95th percentile per-packet one-way delay: 290.239 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 324.84 Mbit/s

95th percentile per-packet one-way delay: 127.265 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 263.81 Mbit/s

95th percentile per-packet one-way delay: 299.457 ms

Loss rate: 2.53%

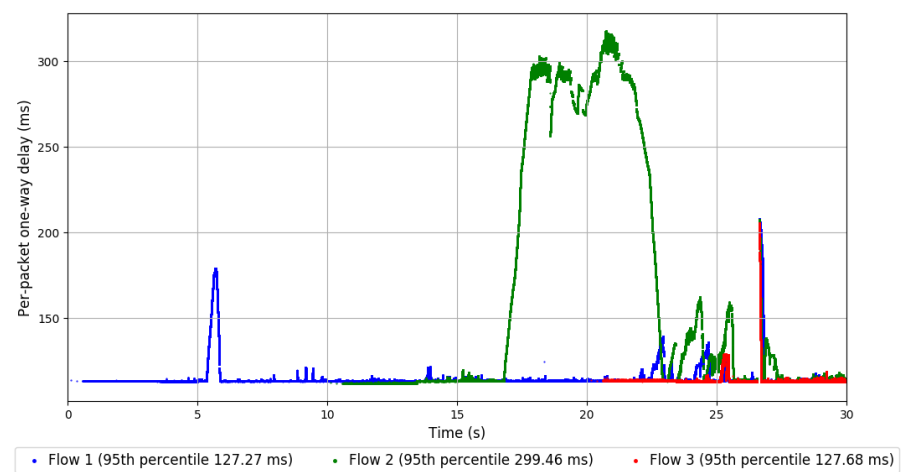
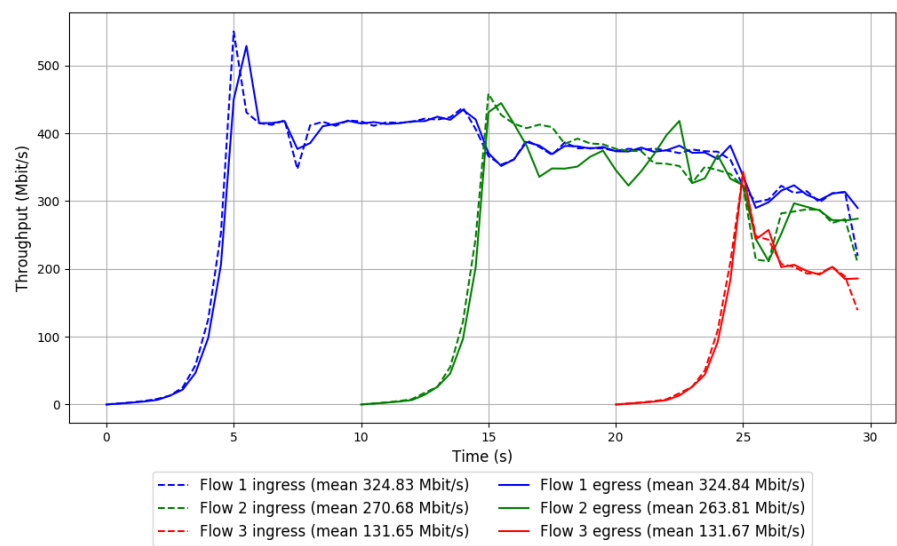
-- Flow 3:

Average throughput: 131.67 Mbit/s

95th percentile per-packet one-way delay: 127.676 ms

Loss rate: 0.00%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-17 04:41:04

End at: 2018-02-17 04:41:34

Below is generated by plot.py at 2018-02-17 09:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 447.86 Mbit/s

95th percentile per-packet one-way delay: 281.281 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 166.21 Mbit/s

95th percentile per-packet one-way delay: 290.632 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 309.45 Mbit/s

95th percentile per-packet one-way delay: 283.677 ms

Loss rate: 1.35%

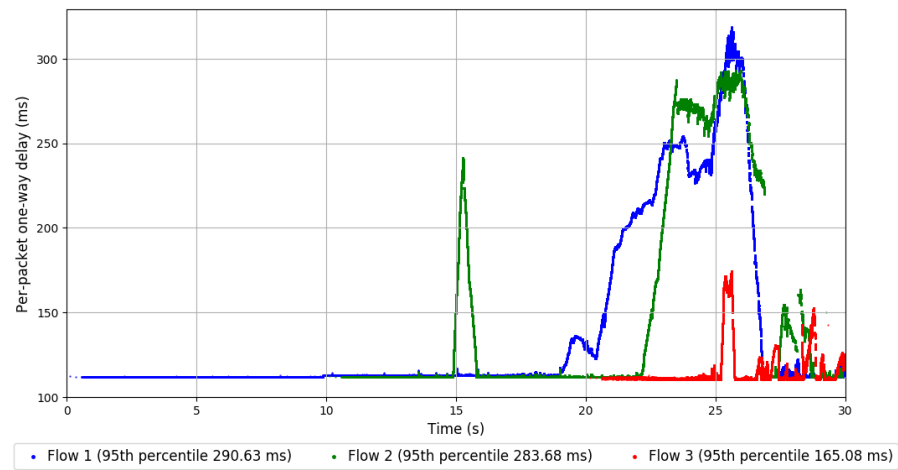
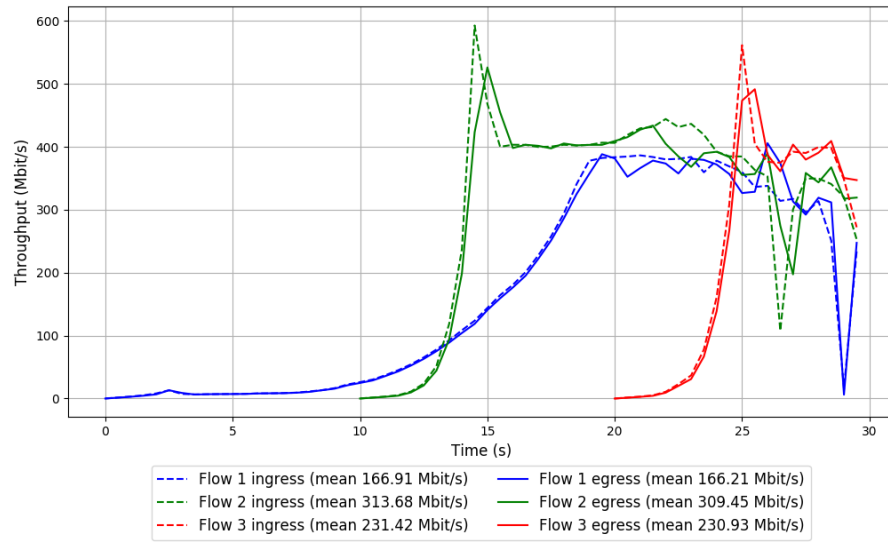
-- Flow 3:

Average throughput: 230.93 Mbit/s

95th percentile per-packet one-way delay: 165.084 ms

Loss rate: 0.21%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-17 05:01:01

End at: 2018-02-17 05:01:31

Below is generated by plot.py at 2018-02-17 09:26:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 585.37 Mbit/s

95th percentile per-packet one-way delay: 266.522 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 342.58 Mbit/s

95th percentile per-packet one-way delay: 233.132 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 298.44 Mbit/s

95th percentile per-packet one-way delay: 285.403 ms

Loss rate: 1.34%

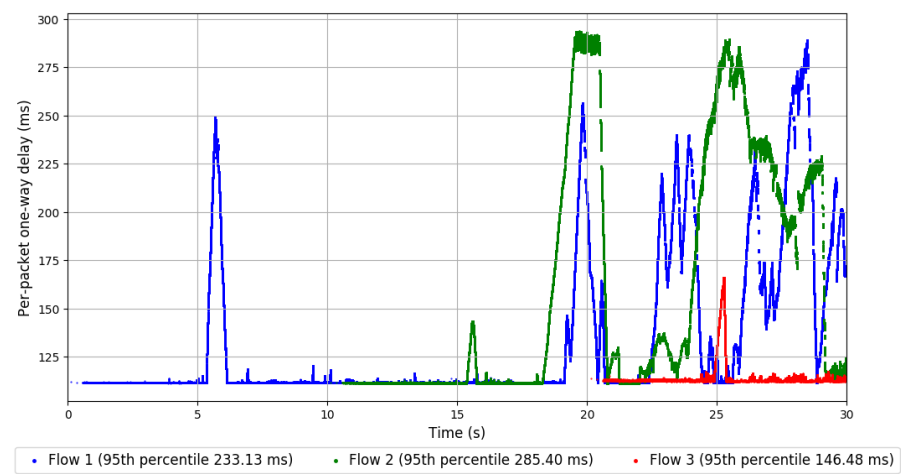
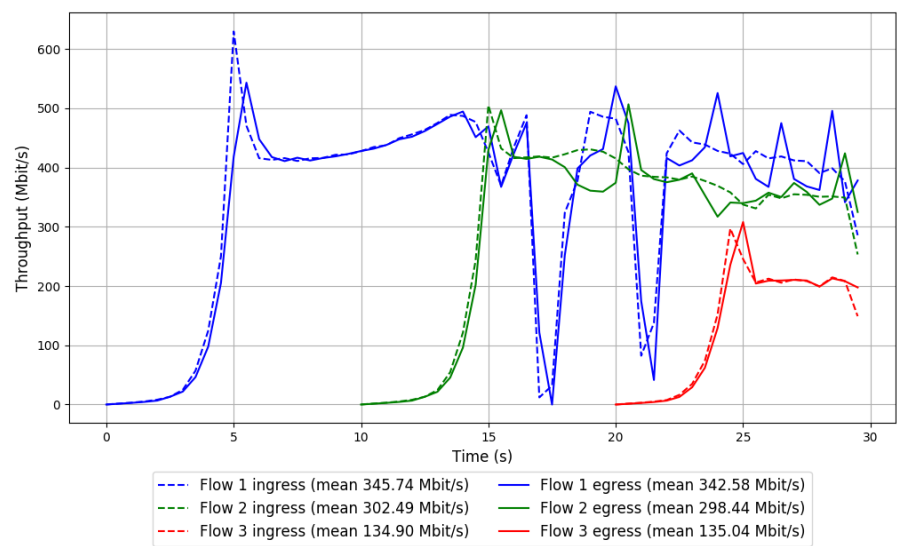
-- Flow 3:

Average throughput: 135.04 Mbit/s

95th percentile per-packet one-way delay: 146.477 ms

Loss rate: 0.00%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-02-17 05:20:40

End at: 2018-02-17 05:21:10

Below is generated by plot.py at 2018-02-17 09:26:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 452.22 Mbit/s

95th percentile per-packet one-way delay: 234.892 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 331.22 Mbit/s

95th percentile per-packet one-way delay: 243.572 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 119.27 Mbit/s

95th percentile per-packet one-way delay: 112.119 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 126.78 Mbit/s

95th percentile per-packet one-way delay: 131.313 ms

Loss rate: 0.00%

Run 10: Report of Vivace-LTE — Data Link

