

Pantheon Report

Generated at 2018-01-31 15:17:45 (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.

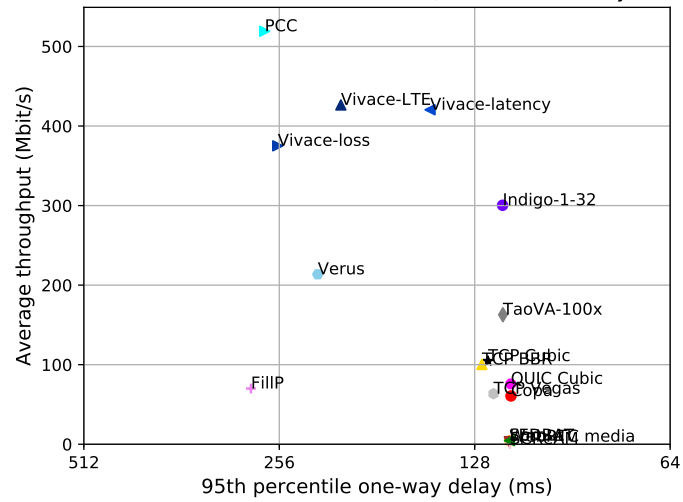
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

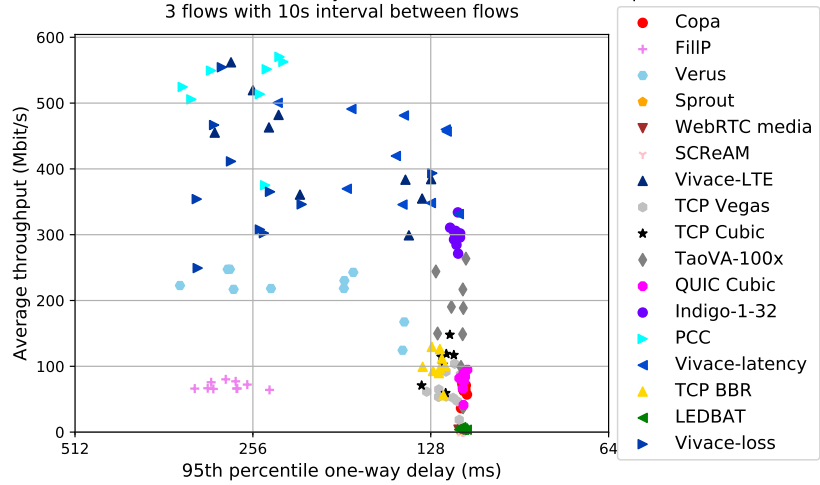
Git summary:

```
branch: master @ 70217998b3c9a7166a95460a70c0854d1326e100
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ fb9c9ab842e5614ad52911a76fb9bd1c1b0dca86
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



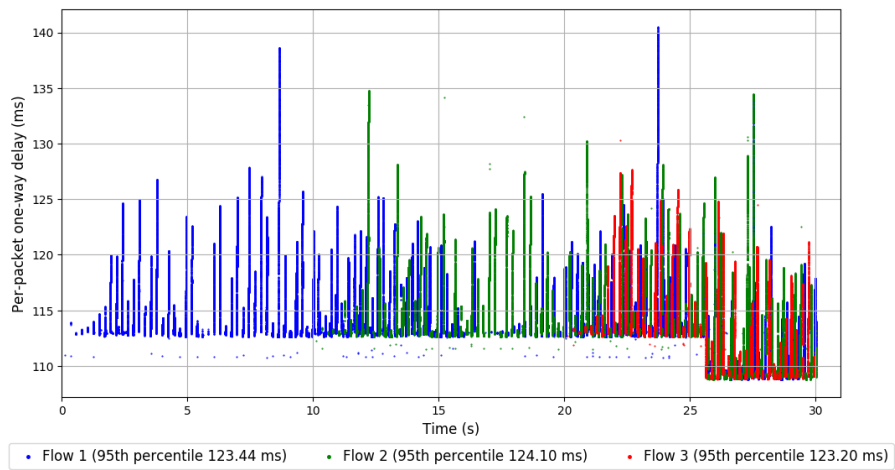
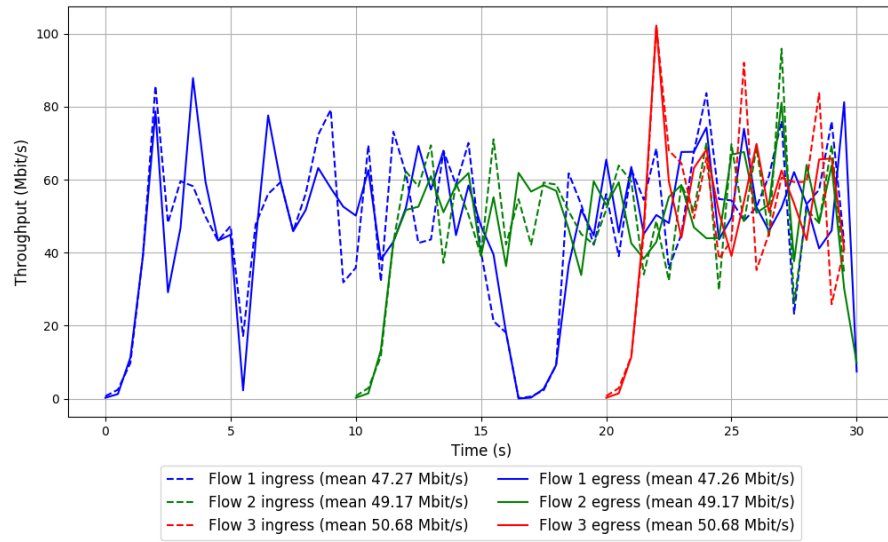
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	9	47.08	52.25	56.61	751.48	124.75	126.08	0.60	0.24	0.14
TCP Cubic	7	45.29	57.36	64.02	116.70	121.57	122.11	0.34	0.03	0.16
LEDBAT	10	2.42	2.73	0.95	113.23	113.08	113.58	0.55	0.39	0.69
PCC	8	414.61	119.27	68.25	788.15	223.30	210.96	3.43	1.50	1.81
QUIC Cubic	10	41.66	40.38	23.05	111.90	112.15	111.63	0.00	0.00	0.01
SCReAM	10	0.18	0.20	0.22	112.35	112.33	111.94	0.00	0.00	0.00
WebRTC media	10	1.74	1.10	0.41	112.83	112.31	112.94	0.00	0.01	0.00
Sprout	10	2.46	2.29	1.98	113.31	113.19	112.96	0.55	0.33	0.65
TaoVA-100x	10	79.47	89.71	71.50	114.22	116.16	115.38	0.05	0.01	0.04
TCP Vegas	10	29.08	32.91	37.83	117.88	118.48	117.60	0.17	0.12	0.01
Verus	10	115.07	110.32	79.21	184.36	242.37	211.04	1.08	3.82	2.61
Copa	10	30.46	31.45	27.91	112.31	112.20	112.71	0.00	0.01	0.00
FillP	10	22.84	37.20	67.98	282.52	286.66	282.21	15.26	12.15	15.50
Indigo-1-32	10	157.74	145.18	144.64	115.55	116.69	116.14	0.10	0.03	0.03
Vivace-latency	10	265.98	171.71	122.73	154.34	150.10	133.49	0.30	0.97	0.31
Vivace-loss	10	216.01	171.55	137.05	267.23	190.69	254.02	4.81	2.16	6.13
Vivace-LTE	10	252.51	196.03	132.26	670.97	132.07	182.49	0.61	0.11	1.77

```
Run 1: Statistics of TCP BBR

Start at: 2018-01-31 10:05:49
End at: 2018-01-31 10:06:19

# Below is generated by plot.py at 2018-01-31 14:16:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.57 Mbit/s
95th percentile per-packet one-way delay: 123.614 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 47.26 Mbit/s
95th percentile per-packet one-way delay: 123.444 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 49.17 Mbit/s
95th percentile per-packet one-way delay: 124.100 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 50.68 Mbit/s
95th percentile per-packet one-way delay: 123.198 ms
Loss rate: 0.01%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-31 10:23:38

End at: 2018-01-31 10:24:08

Below is generated by plot.py at 2018-01-31 14:16:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.93 Mbit/s

95th percentile per-packet one-way delay: 126.849 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 43.75 Mbit/s

95th percentile per-packet one-way delay: 126.389 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 48.32 Mbit/s

95th percentile per-packet one-way delay: 127.473 ms

Loss rate: 0.70%

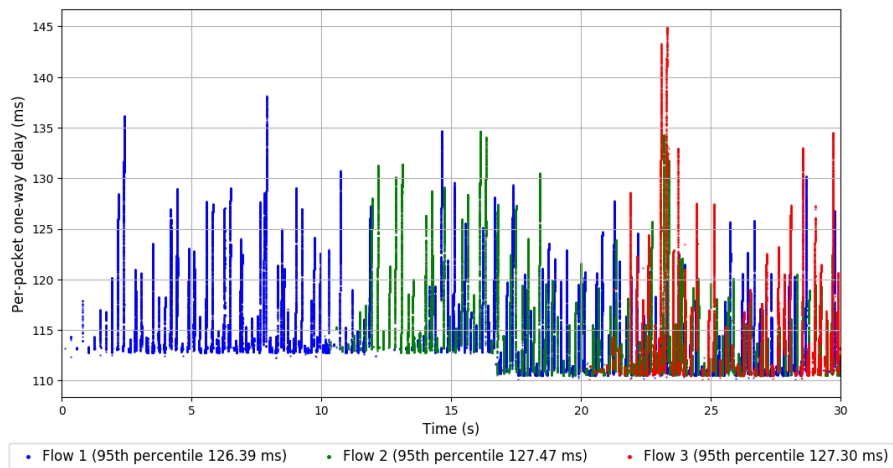
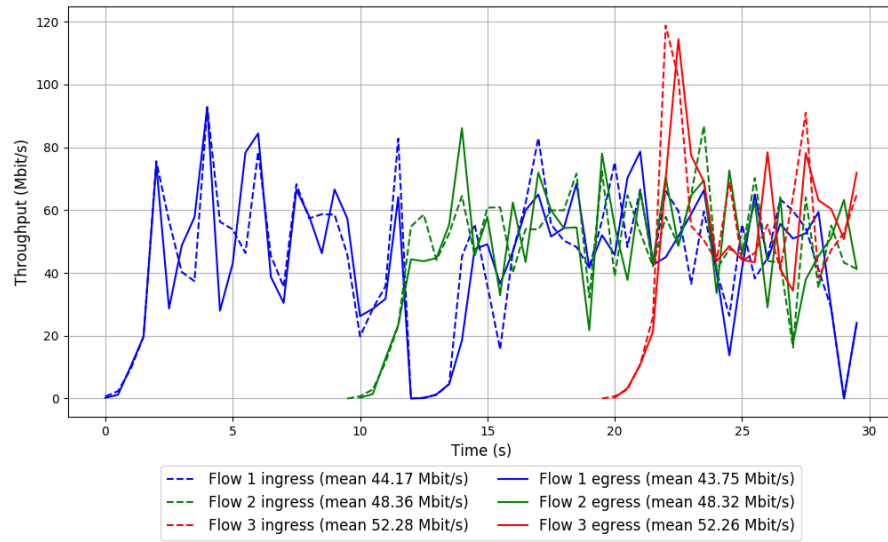
-- Flow 3:

Average throughput: 52.26 Mbit/s

95th percentile per-packet one-way delay: 127.299 ms

Loss rate: 0.02%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-31 10:41:20

End at: 2018-01-31 10:41:50

Below is generated by plot.py at 2018-01-31 14:16:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.69 Mbit/s

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

Loss rate: 0.81%

-- Flow 1:

Average throughput: 44.51 Mbit/s

95th percentile per-packet one-way delay: 124.626 ms

Loss rate: 1.32%

-- Flow 2:

Average throughput: 44.82 Mbit/s

95th percentile per-packet one-way delay: 123.446 ms

Loss rate: 0.45%

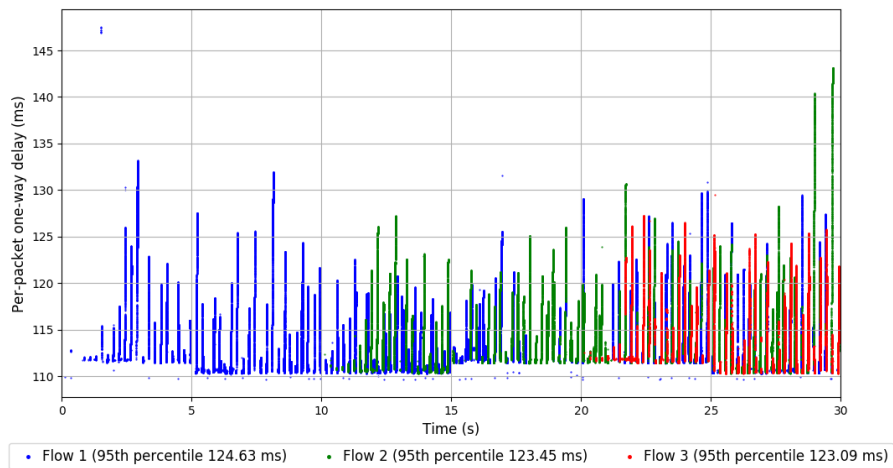
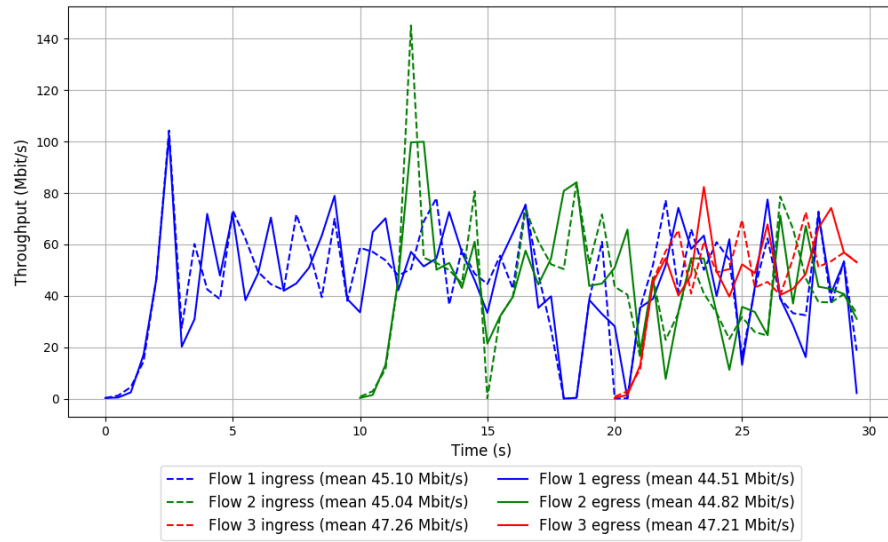
-- Flow 3:

Average throughput: 47.21 Mbit/s

95th percentile per-packet one-way delay: 123.088 ms

Loss rate: 0.03%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-31 10:58:52

End at: 2018-01-31 10:59:22

Below is generated by plot.py at 2018-01-31 14:16:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 56.07 Mbit/s

95th percentile per-packet one-way delay: 121.814 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 11.52 Mbit/s

95th percentile per-packet one-way delay: 5765.338 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.66 Mbit/s

95th percentile per-packet one-way delay: 121.587 ms

Loss rate: 0.91%

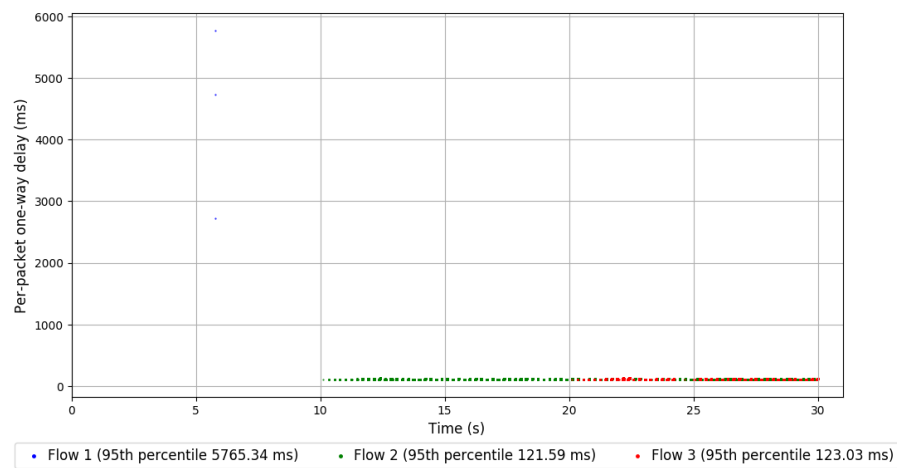
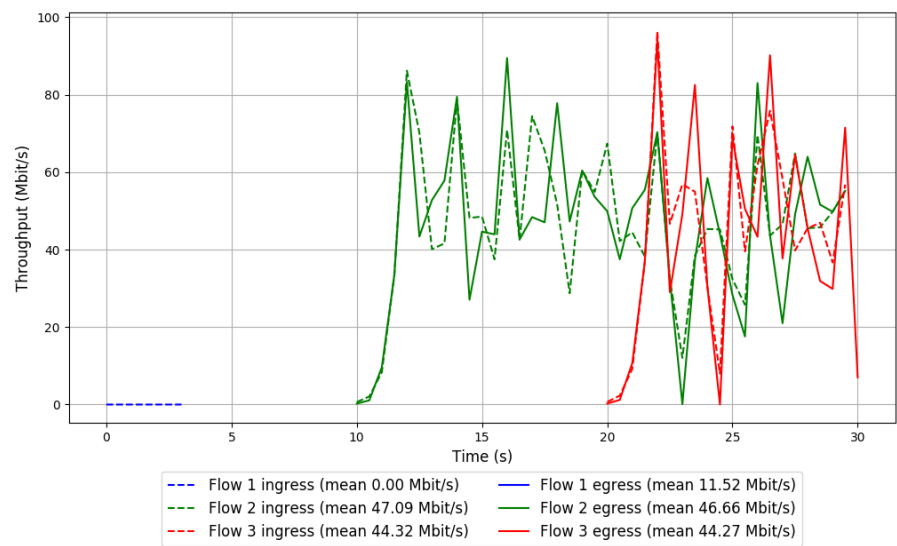
-- Flow 3:

Average throughput: 44.27 Mbit/s

95th percentile per-packet one-way delay: 123.033 ms

Loss rate: 0.02%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-31 11:16:41

End at: 2018-01-31 11:17:11

Below is generated by plot.py at 2018-01-31 14:16:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.22 Mbit/s

95th percentile per-packet one-way delay: 132.106 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 51.57 Mbit/s

95th percentile per-packet one-way delay: 130.267 ms

Loss rate: 1.89%

-- Flow 2:

Average throughput: 49.14 Mbit/s

95th percentile per-packet one-way delay: 131.510 ms

Loss rate: 0.07%

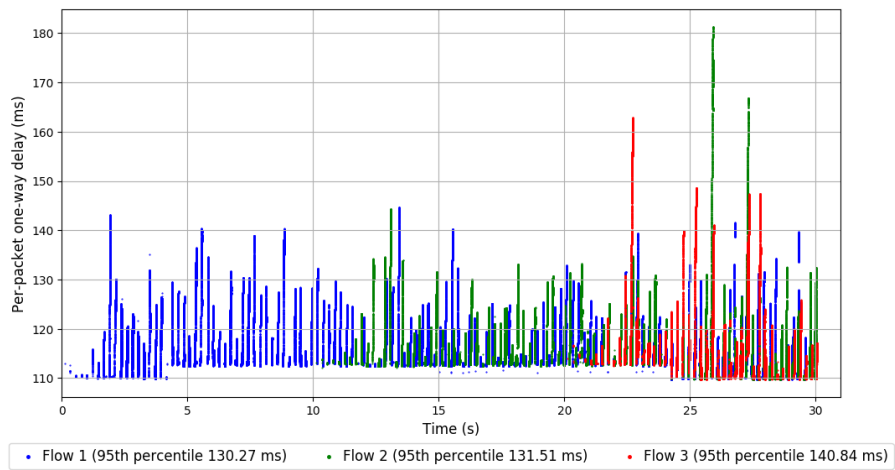
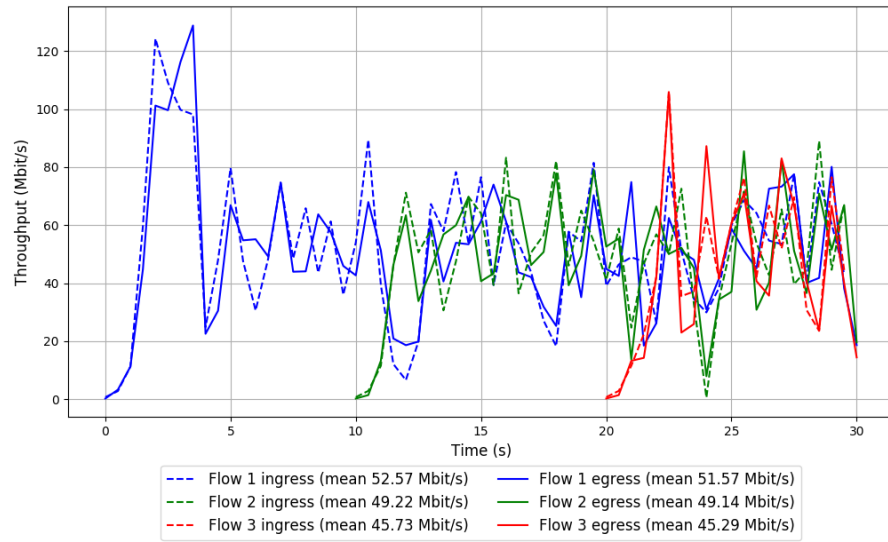
-- Flow 3:

Average throughput: 45.29 Mbit/s

95th percentile per-packet one-way delay: 140.837 ms

Loss rate: 0.92%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-31 11:34:25

End at: 2018-01-31 11:34:55

Below is generated by plot.py at 2018-01-31 14:16:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.35 Mbit/s

95th percentile per-packet one-way delay: 121.035 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 50.32 Mbit/s

95th percentile per-packet one-way delay: 120.064 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 50.59 Mbit/s

95th percentile per-packet one-way delay: 121.338 ms

Loss rate: 0.01%

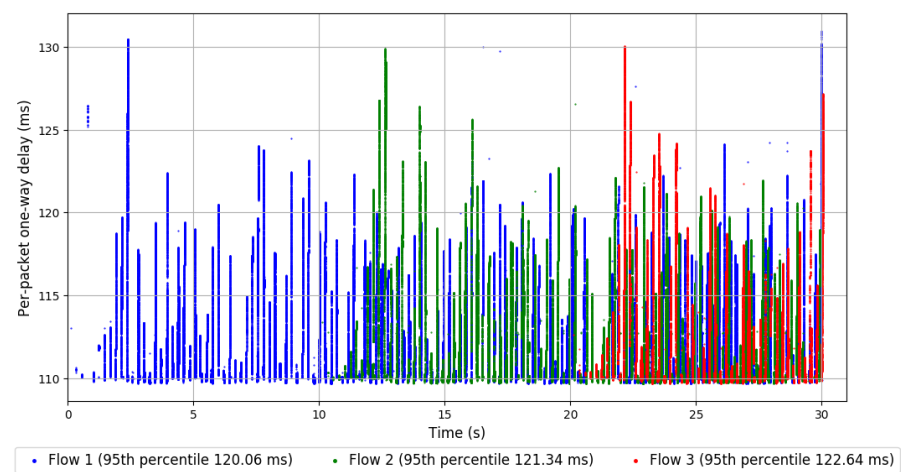
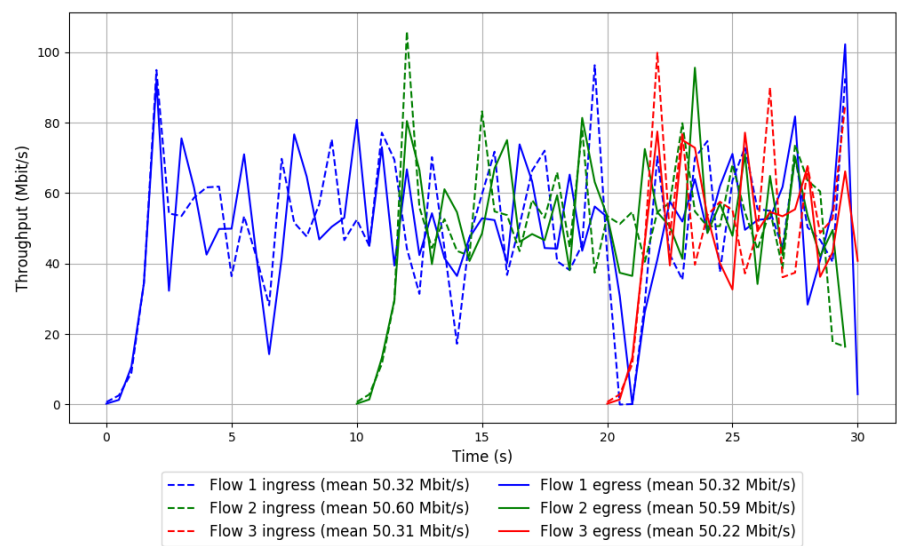
-- Flow 3:

Average throughput: 50.22 Mbit/s

95th percentile per-packet one-way delay: 122.635 ms

Loss rate: 0.03%

Run 6: Report of TCP BBR — Data Link

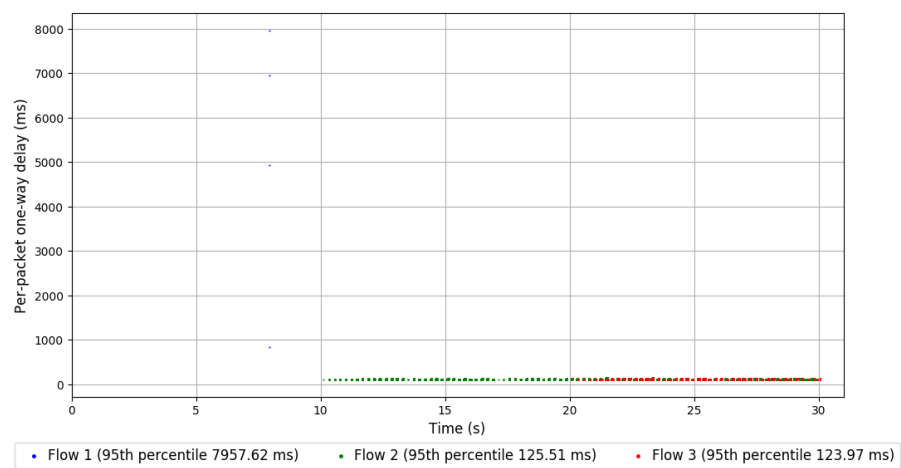
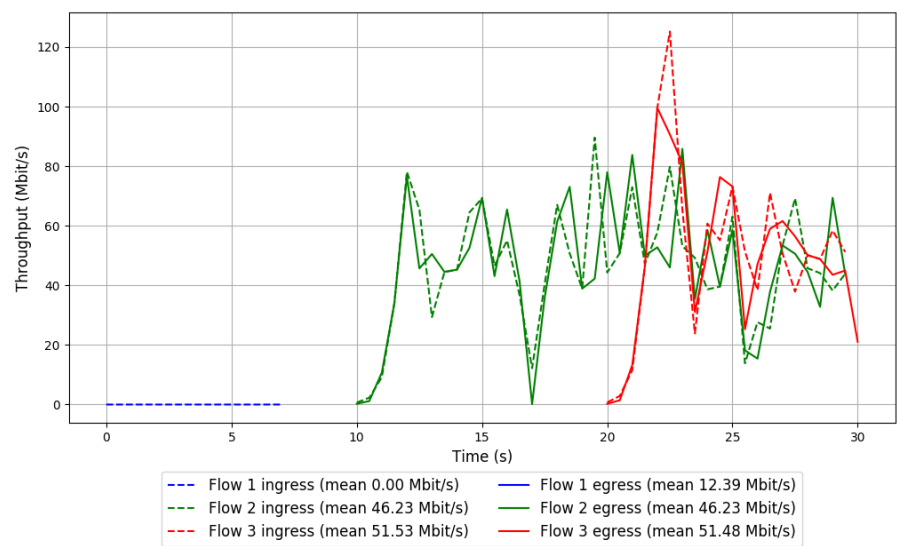


Run 7: Statistics of TCP BBR

Start at: 2018-01-31 11:51:55

End at: 2018-01-31 11:52:25

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-31 12:09:52

End at: 2018-01-31 12:10:22

Below is generated by plot.py at 2018-01-31 14:17:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.53 Mbit/s

95th percentile per-packet one-way delay: 127.476 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 61.16 Mbit/s

95th percentile per-packet one-way delay: 127.577 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 78.14 Mbit/s

95th percentile per-packet one-way delay: 127.121 ms

Loss rate: 0.00%

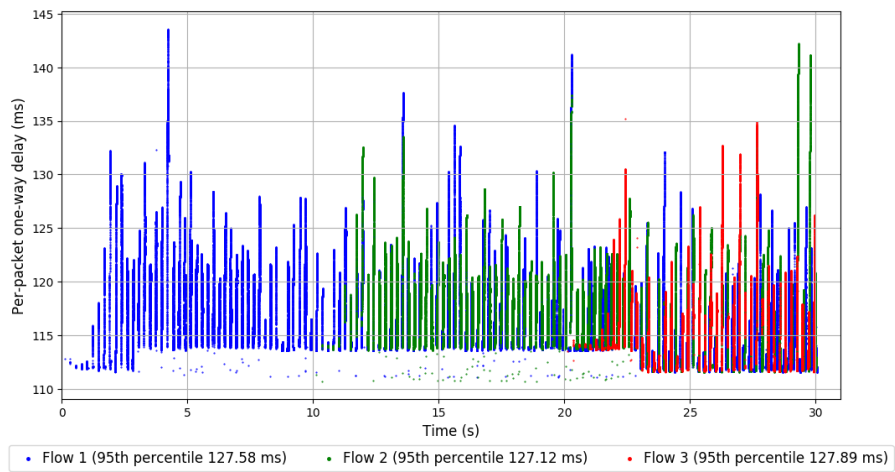
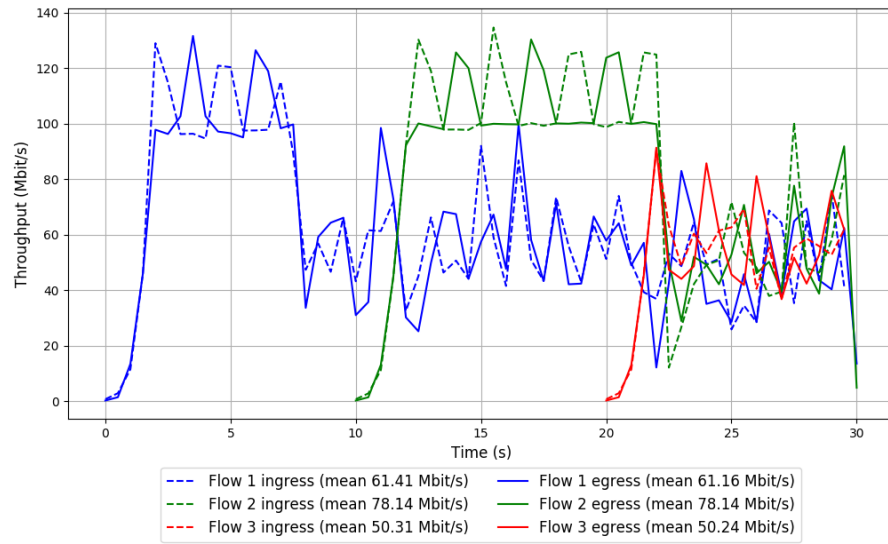
-- Flow 3:

Average throughput: 50.24 Mbit/s

95th percentile per-packet one-way delay: 127.895 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-31 12:27:34

End at: 2018-01-31 12:28:04

Below is generated by plot.py at 2018-01-31 14:18:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.20 Mbit/s

95th percentile per-packet one-way delay: 123.547 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 62.96 Mbit/s

95th percentile per-packet one-way delay: 123.372 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.68 Mbit/s

95th percentile per-packet one-way delay: 122.778 ms

Loss rate: 0.01%

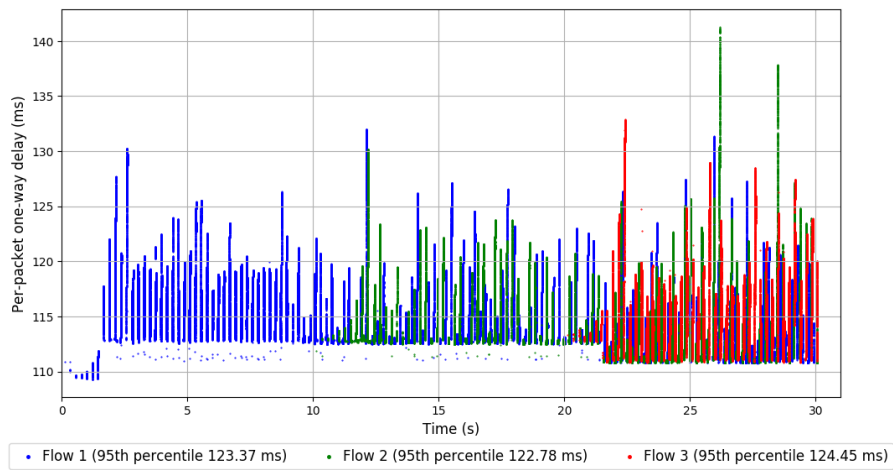
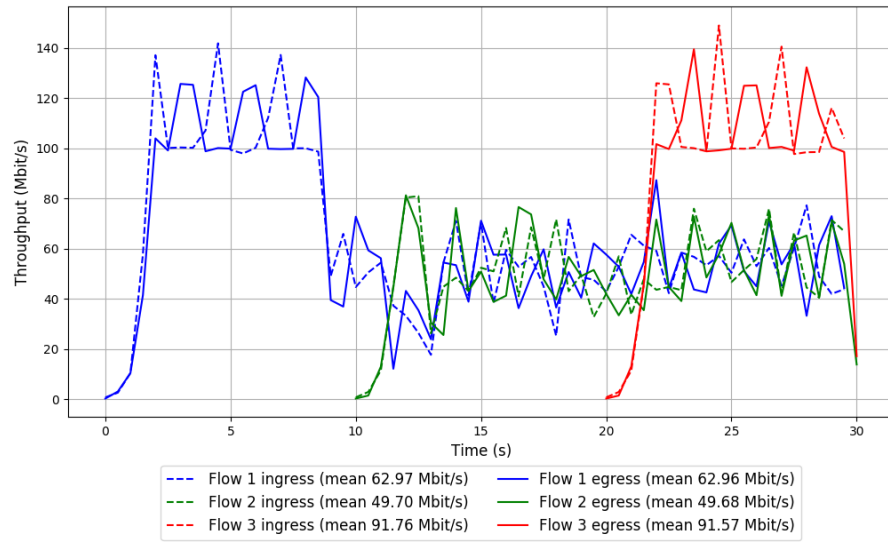
-- Flow 3:

Average throughput: 91.57 Mbit/s

95th percentile per-packet one-way delay: 124.451 ms

Loss rate: 0.21%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-31 12:45:52

End at: 2018-01-31 12:46:22

Below is generated by plot.py at 2018-01-31 14:18:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.75 Mbit/s

95th percentile per-packet one-way delay: 122.570 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 50.67 Mbit/s

95th percentile per-packet one-way delay: 122.216 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 53.70 Mbit/s

95th percentile per-packet one-way delay: 123.427 ms

Loss rate: 0.00%

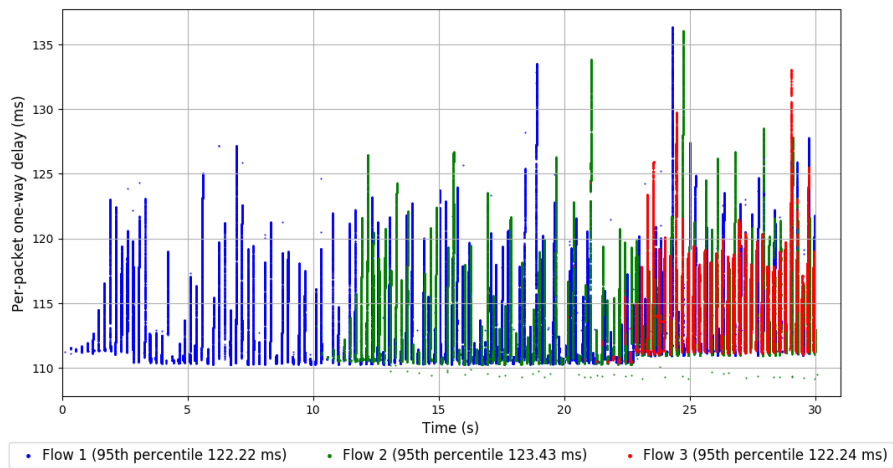
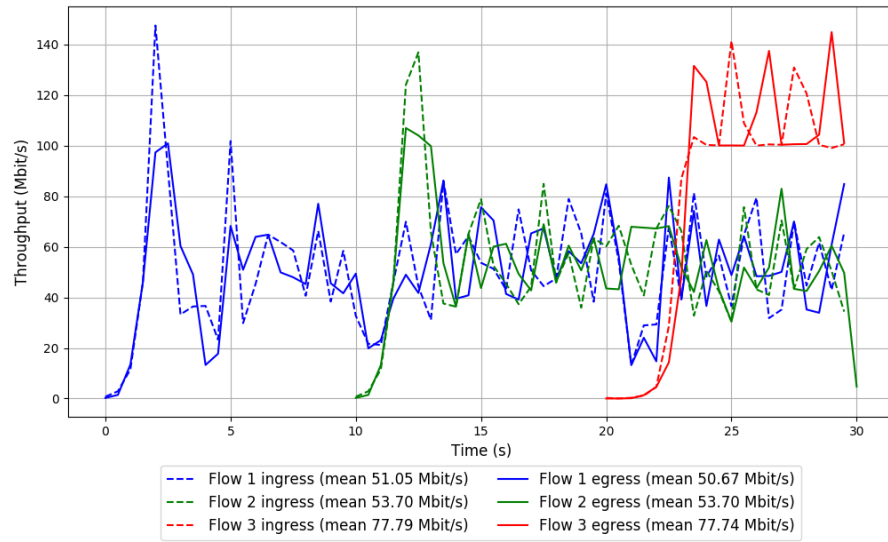
-- Flow 3:

Average throughput: 77.74 Mbit/s

95th percentile per-packet one-way delay: 122.244 ms

Loss rate: 0.02%

Run 10: Report of TCP BBR — Data Link

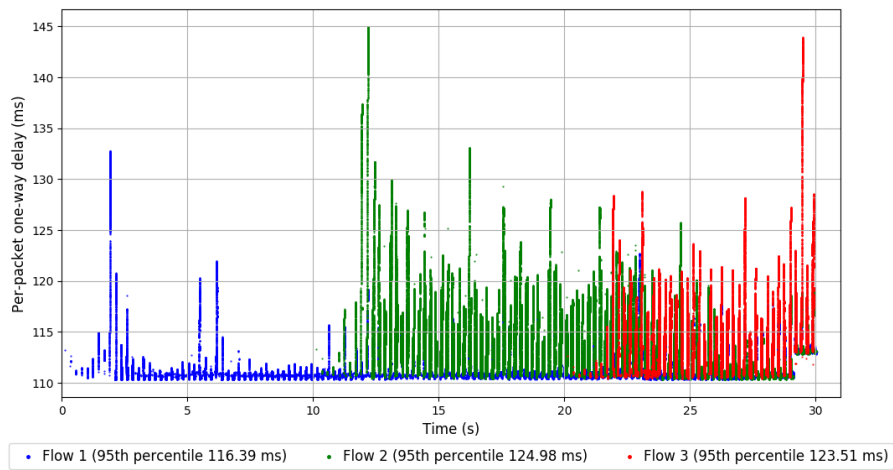
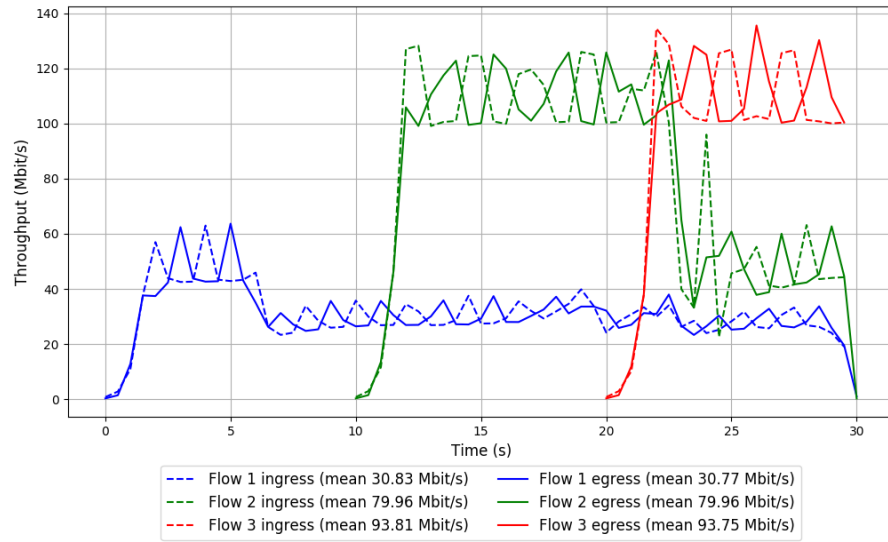


```
Run 1: Statistics of TCP Cubic

Start at: 2018-01-31 10:19:56
End at: 2018-01-31 10:20:26

# Below is generated by plot.py at 2018-01-31 14:18:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 114.54 Mbit/s
95th percentile per-packet one-way delay: 122.883 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 30.77 Mbit/s
95th percentile per-packet one-way delay: 116.390 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 79.96 Mbit/s
95th percentile per-packet one-way delay: 124.985 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 93.75 Mbit/s
95th percentile per-packet one-way delay: 123.507 ms
Loss rate: 0.00%
```

Run 1: Report of TCP Cubic — Data Link

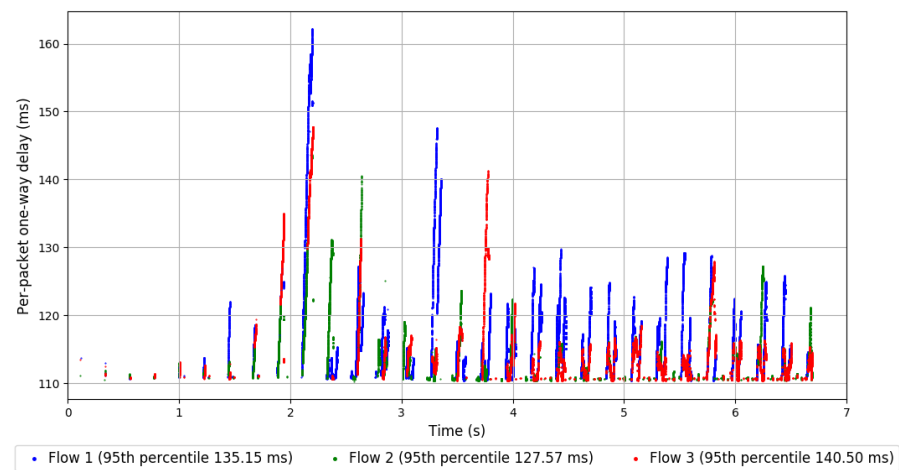
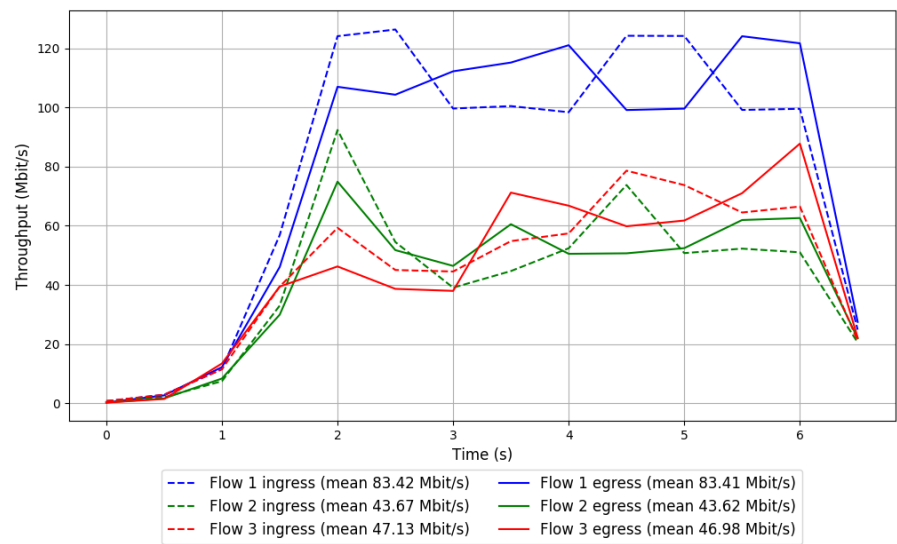


Run 2: Statistics of TCP Cubic

Start at: 2018-01-31 10:37:38

End at: 2018-01-31 10:38:08

Run 2: Report of TCP Cubic — Data Link

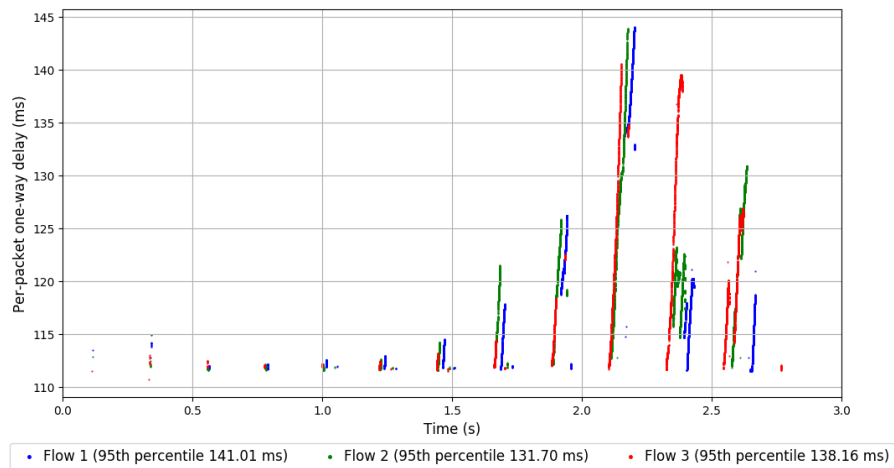
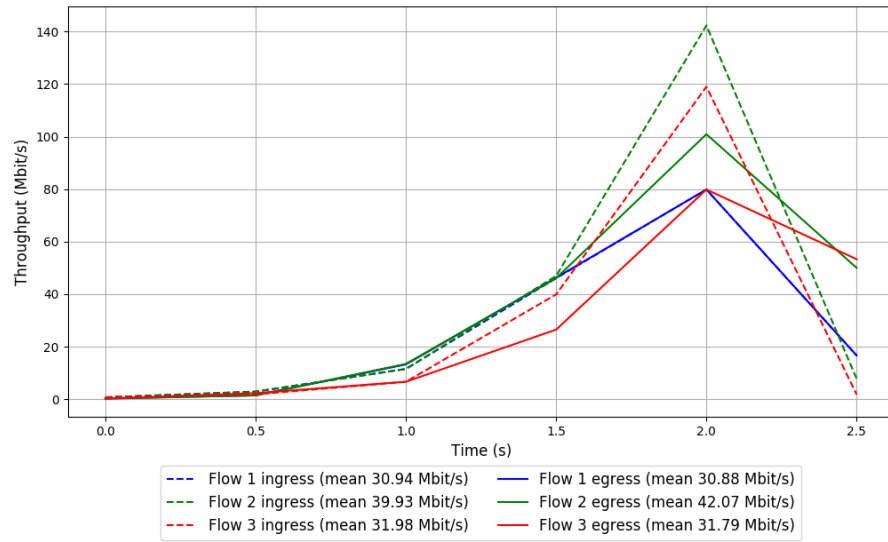


Run 3: Statistics of TCP Cubic

Start at: 2018-01-31 10:55:13

End at: 2018-01-31 10:55:43

Run 3: Report of TCP Cubic — Data Link

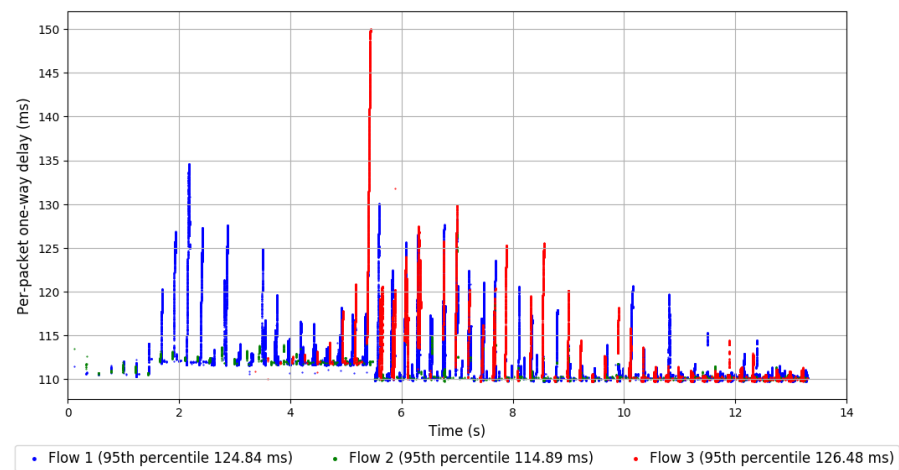
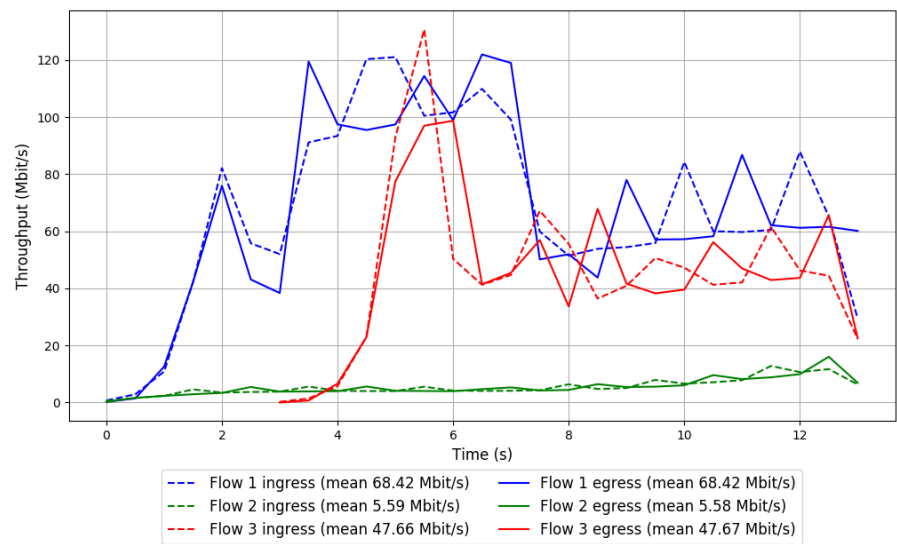


Run 4: Statistics of TCP Cubic

Start at: 2018-01-31 11:13:01

End at: 2018-01-31 11:13:31

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-31 11:30:37

End at: 2018-01-31 11:31:07

Below is generated by plot.py at 2018-01-31 14:18:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.17 Mbit/s

95th percentile per-packet one-way delay: 116.986 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 69.59 Mbit/s

95th percentile per-packet one-way delay: 115.584 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.60 Mbit/s

95th percentile per-packet one-way delay: 120.047 ms

Loss rate: 0.00%

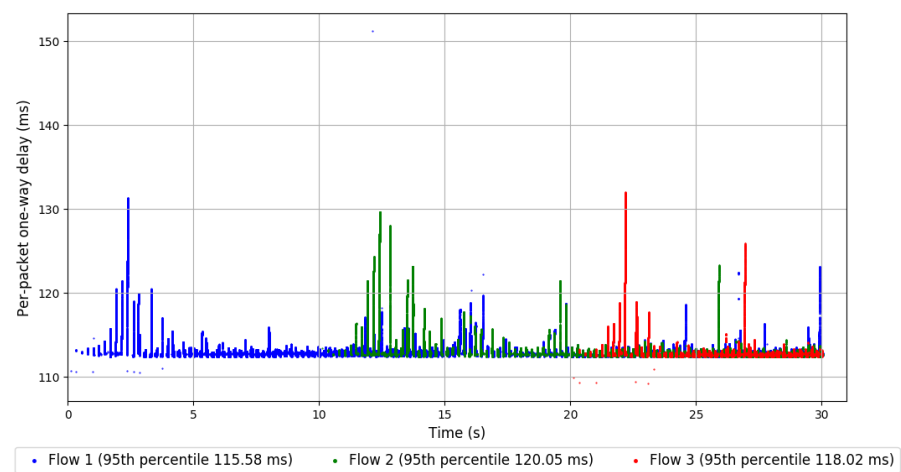
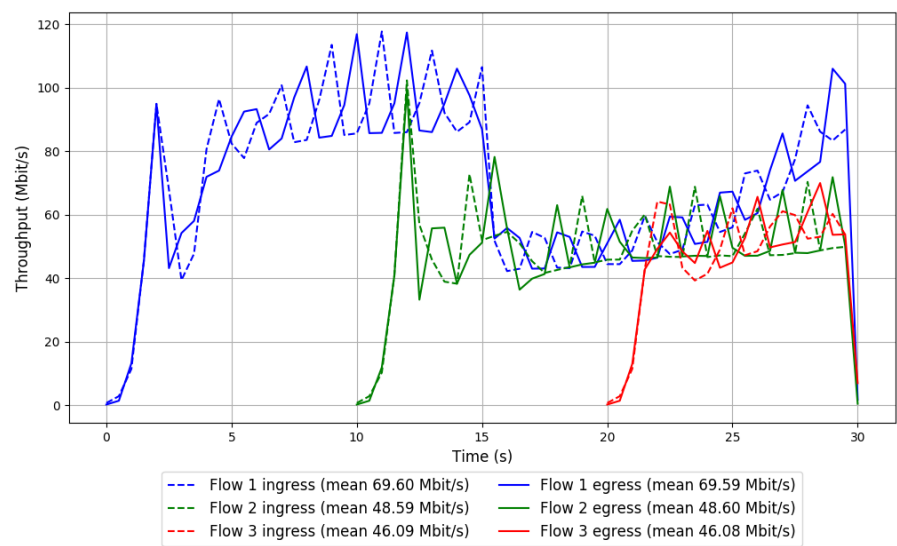
-- Flow 3:

Average throughput: 46.08 Mbit/s

95th percentile per-packet one-way delay: 118.024 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-31 11:48:14

End at: 2018-01-31 11:48:44

Below is generated by plot.py at 2018-01-31 14:18:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.90 Mbit/s

95th percentile per-packet one-way delay: 132.636 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 29.37 Mbit/s

95th percentile per-packet one-way delay: 117.934 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 18.52 Mbit/s

95th percentile per-packet one-way delay: 118.404 ms

Loss rate: 0.00%

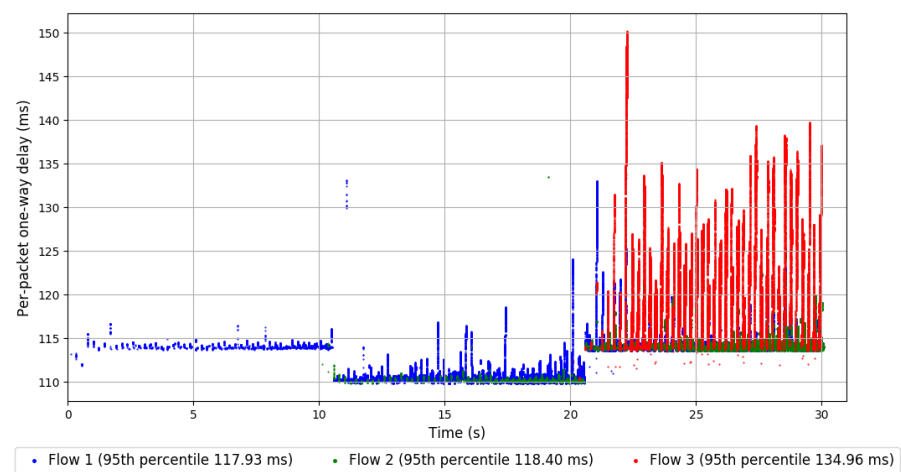
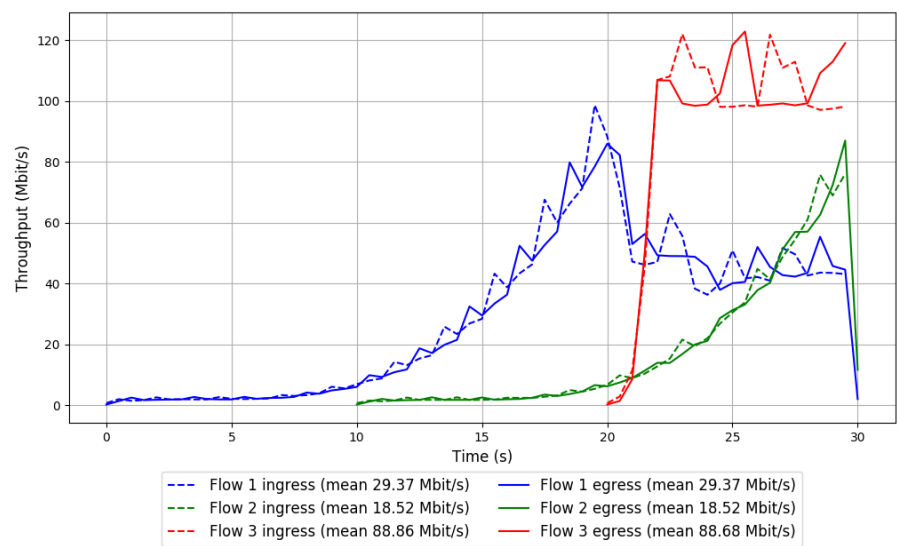
-- Flow 3:

Average throughput: 88.68 Mbit/s

95th percentile per-packet one-way delay: 134.958 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-31 12:06:07

End at: 2018-01-31 12:06:37

Below is generated by plot.py at 2018-01-31 14:19:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.64 Mbit/s

95th percentile per-packet one-way delay: 122.149 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 62.19 Mbit/s

95th percentile per-packet one-way delay: 119.269 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 59.93 Mbit/s

95th percentile per-packet one-way delay: 123.859 ms

Loss rate: 0.02%

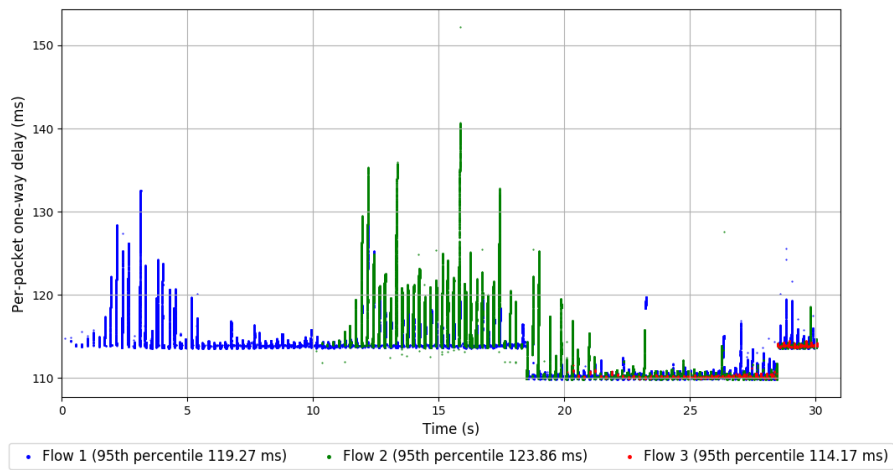
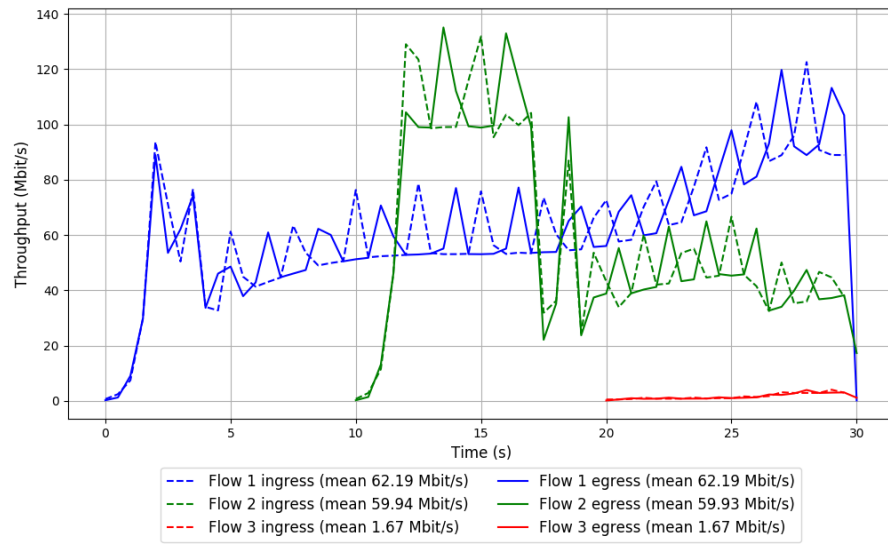
-- Flow 3:

Average throughput: 1.67 Mbit/s

95th percentile per-packet one-way delay: 114.167 ms

Loss rate: 0.29%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-31 12:23:57

End at: 2018-01-31 12:24:27

Below is generated by plot.py at 2018-01-31 14:19:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.77 Mbit/s

95th percentile per-packet one-way delay: 120.455 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 59.83 Mbit/s

95th percentile per-packet one-way delay: 117.412 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 61.04 Mbit/s

95th percentile per-packet one-way delay: 121.454 ms

Loss rate: 0.01%

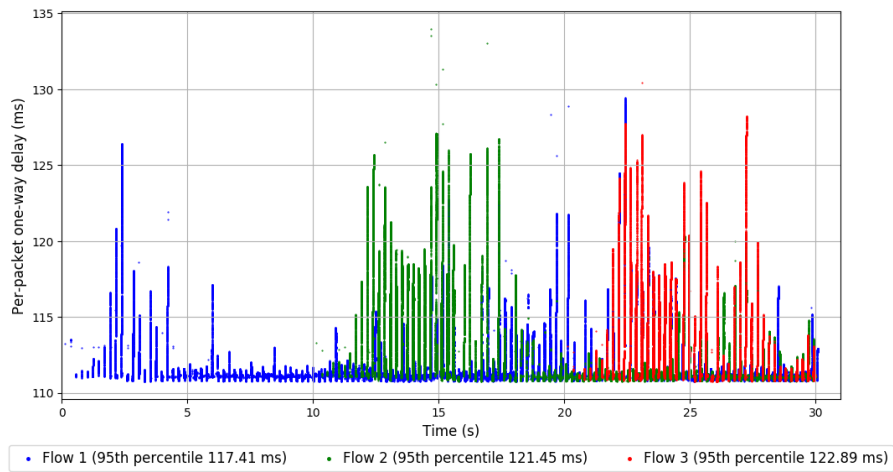
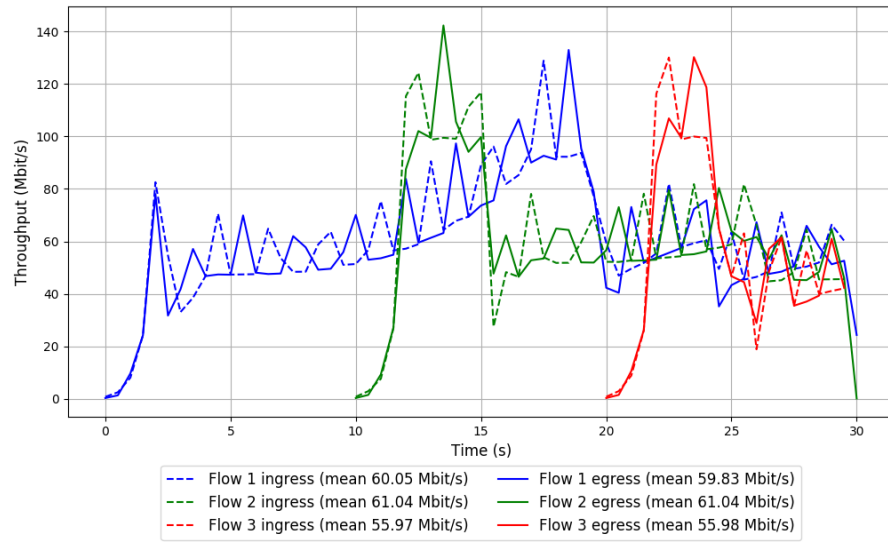
-- Flow 3:

Average throughput: 55.98 Mbit/s

95th percentile per-packet one-way delay: 122.888 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-31 12:42:05

End at: 2018-01-31 12:42:35

Below is generated by plot.py at 2018-01-31 14:20:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 147.93 Mbit/s

95th percentile per-packet one-way delay: 118.811 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 52.44 Mbit/s

95th percentile per-packet one-way delay: 116.233 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 98.27 Mbit/s

95th percentile per-packet one-way delay: 120.107 ms

Loss rate: 0.01%

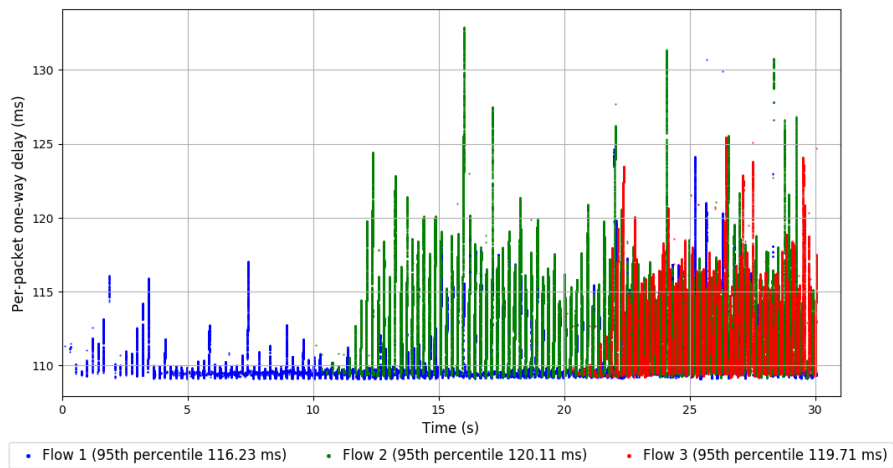
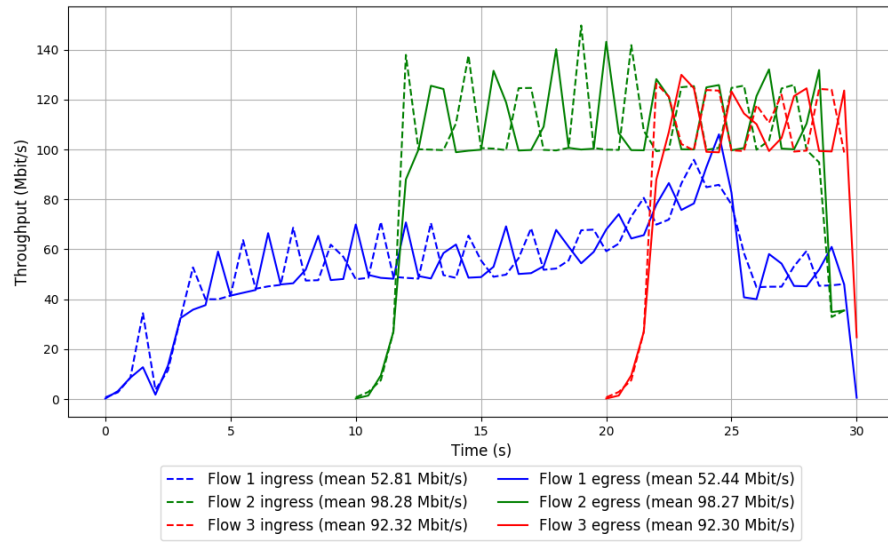
-- Flow 3:

Average throughput: 92.30 Mbit/s

95th percentile per-packet one-way delay: 119.708 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-31 13:00:26

End at: 2018-01-31 13:00:56

Below is generated by plot.py at 2018-01-31 14:20:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.38 Mbit/s

95th percentile per-packet one-way delay: 120.788 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 12.86 Mbit/s

95th percentile per-packet one-way delay: 114.068 ms

Loss rate: 1.10%

-- Flow 2:

Average throughput: 35.19 Mbit/s

95th percentile per-packet one-way delay: 122.124 ms

Loss rate: 0.17%

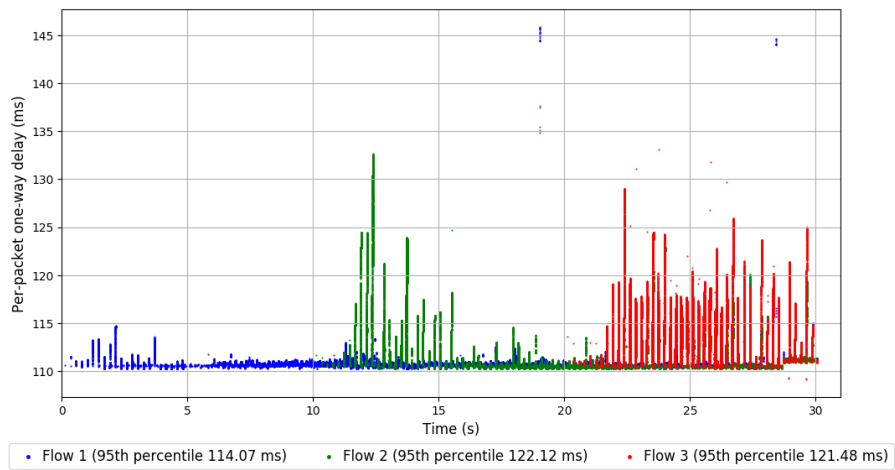
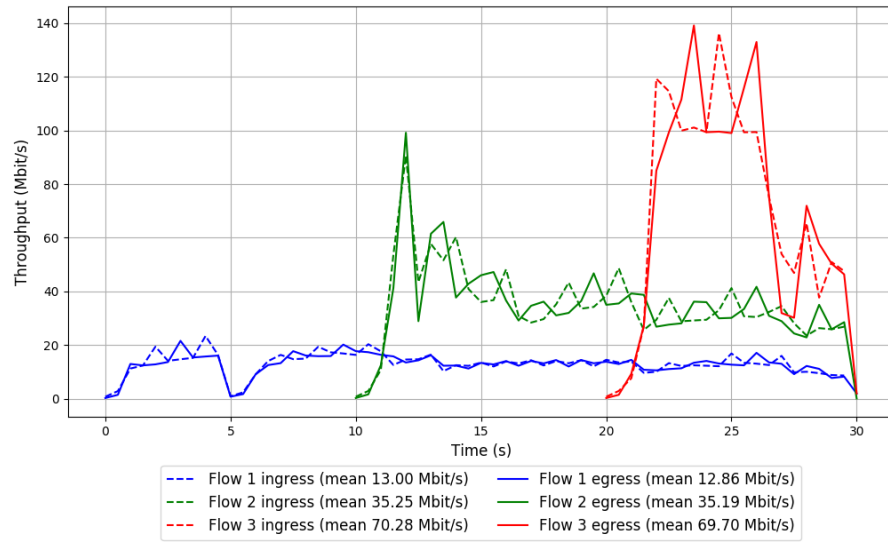
-- Flow 3:

Average throughput: 69.70 Mbit/s

95th percentile per-packet one-way delay: 121.485 ms

Loss rate: 0.86%

Run 10: Report of TCP Cubic — Data Link

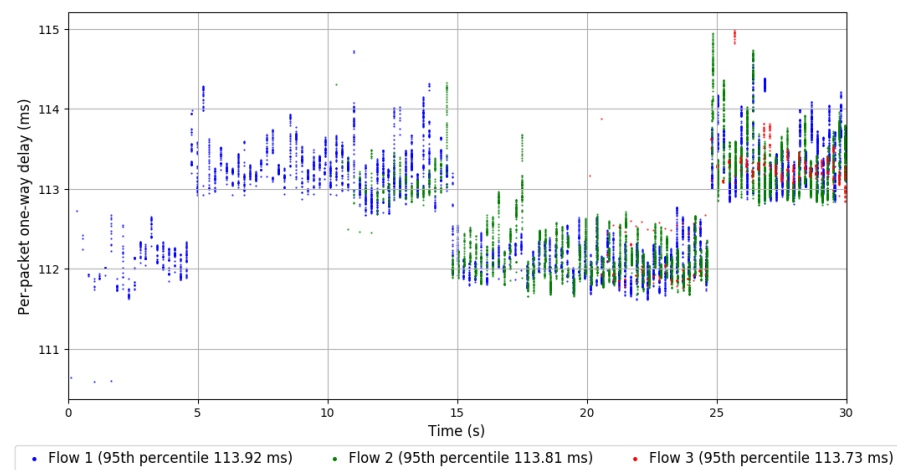
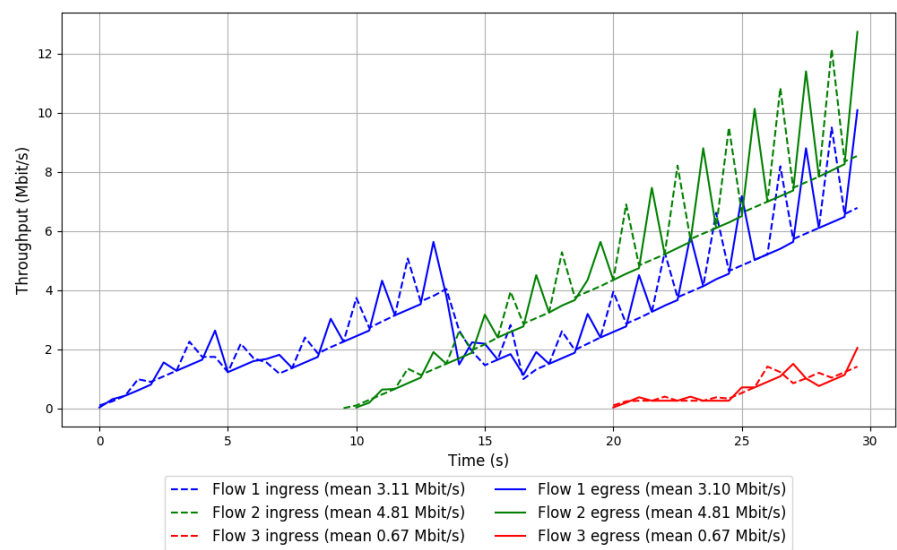


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-31 10:10:00
End at: 2018-01-31 10:10:30

# Below is generated by plot.py at 2018-01-31 14:20:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.52 Mbit/s
95th percentile per-packet one-way delay: 113.868 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 113.920 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 4.81 Mbit/s
95th percentile per-packet one-way delay: 113.813 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 113.726 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

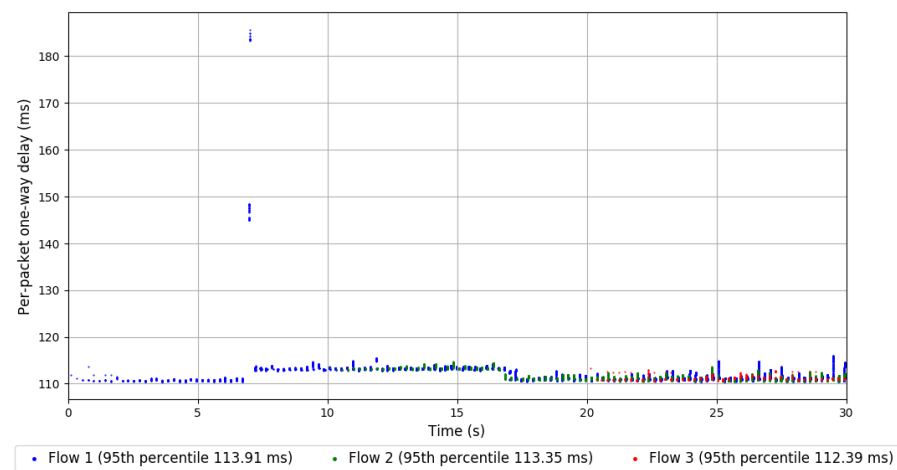
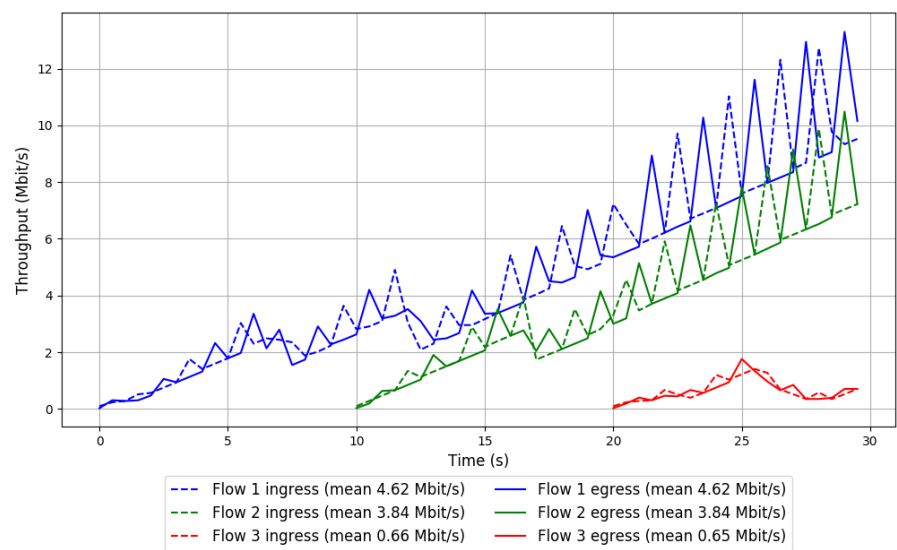


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-31 10:27:28
End at: 2018-01-31 10:27:58

# Below is generated by plot.py at 2018-01-31 14:20:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.39 Mbit/s
95th percentile per-packet one-way delay: 113.659 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 4.62 Mbit/s
95th percentile per-packet one-way delay: 113.911 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.84 Mbit/s
95th percentile per-packet one-way delay: 113.348 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 112.395 ms
Loss rate: 0.55%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-31 10:45:25

End at: 2018-01-31 10:45:55

Below is generated by plot.py at 2018-01-31 14:20:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.42 Mbit/s

95th percentile per-packet one-way delay: 113.284 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 113.405 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 2.46 Mbit/s

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

Loss rate: 0.24%

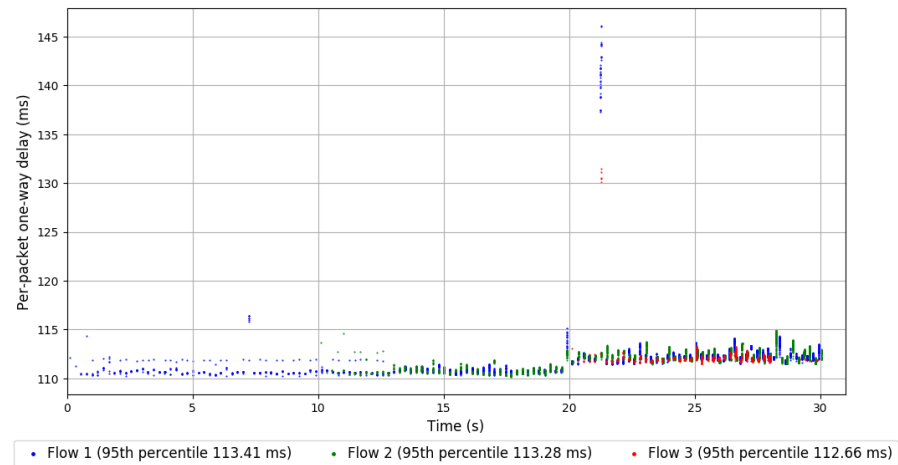
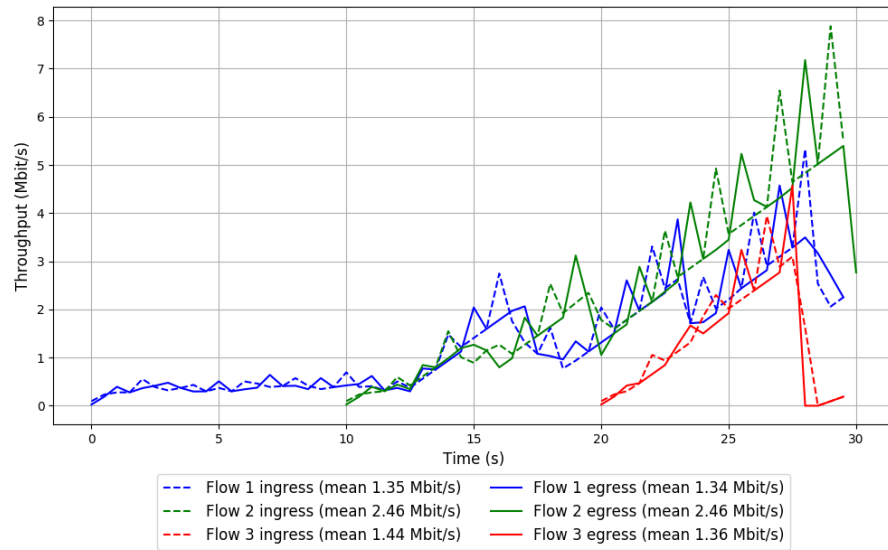
-- Flow 3:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 112.660 ms

Loss rate: 5.76%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-31 11:02:46

End at: 2018-01-31 11:03:16

Below is generated by plot.py at 2018-01-31 14:20:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.03 Mbit/s

95th percentile per-packet one-way delay: 112.686 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 112.686 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.89 Mbit/s

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

Loss rate: 0.32%

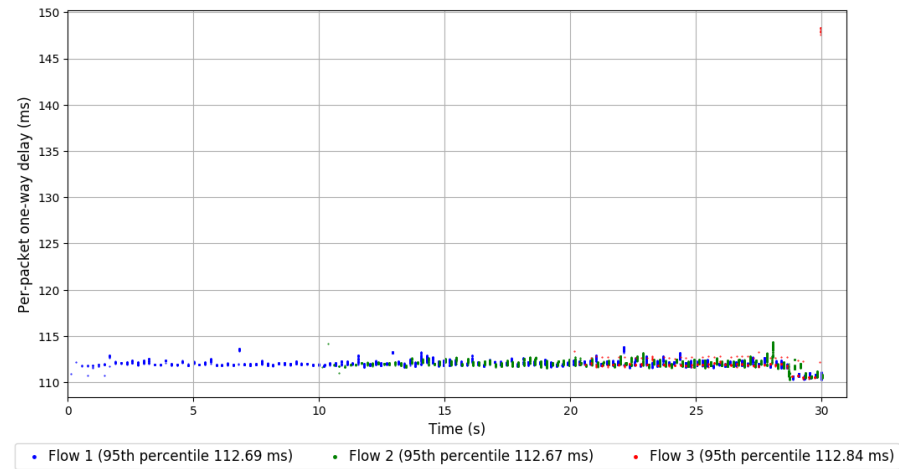
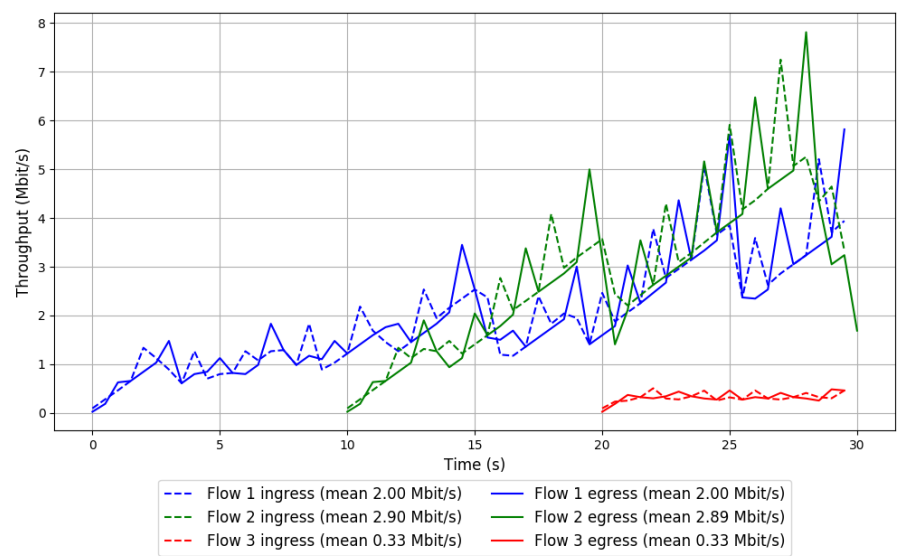
-- Flow 3:

Average throughput: 0.33 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-31 11:20:41

End at: 2018-01-31 11:21:11

Below is generated by plot.py at 2018-01-31 14:20:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 113.475 ms

Loss rate: 1.74%

-- Flow 1:

Average throughput: 1.91 Mbit/s

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

Loss rate: 1.14%

-- Flow 2:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 113.340 ms

Loss rate: 3.14%

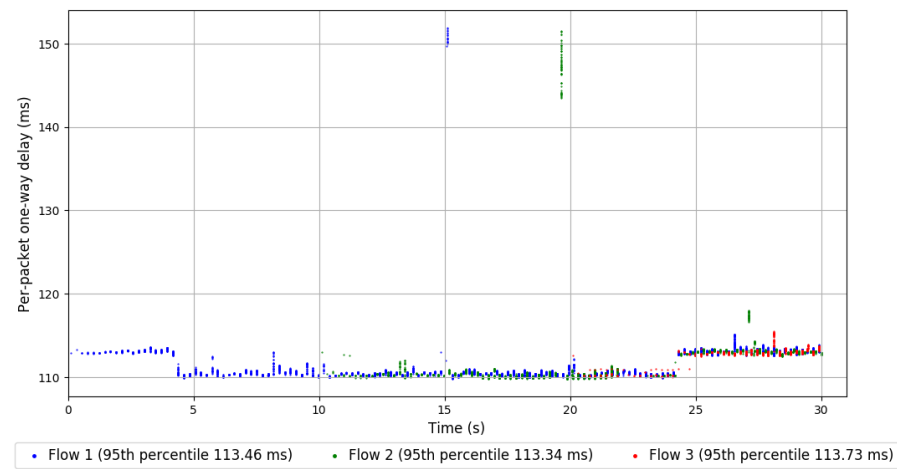
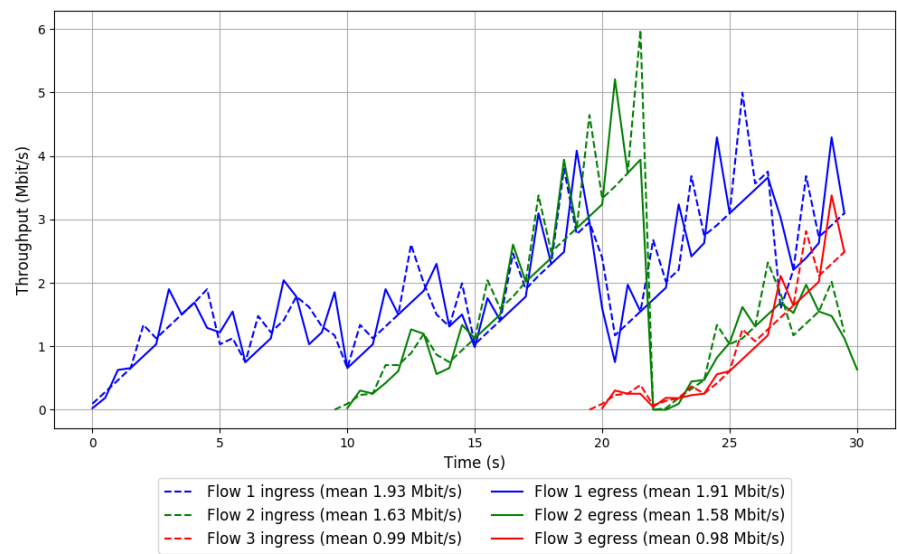
-- Flow 3:

Average throughput: 0.98 Mbit/s

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

Loss rate: 0.60%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-31 11:38:20

End at: 2018-01-31 11:38:50

Below is generated by plot.py at 2018-01-31 14:20:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.06 Mbit/s

95th percentile per-packet one-way delay: 113.537 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 113.566 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 113.382 ms

Loss rate: 0.06%

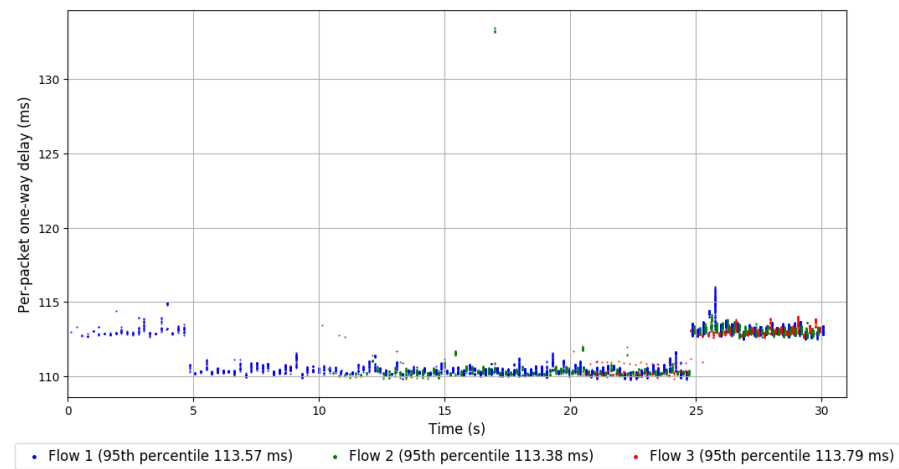
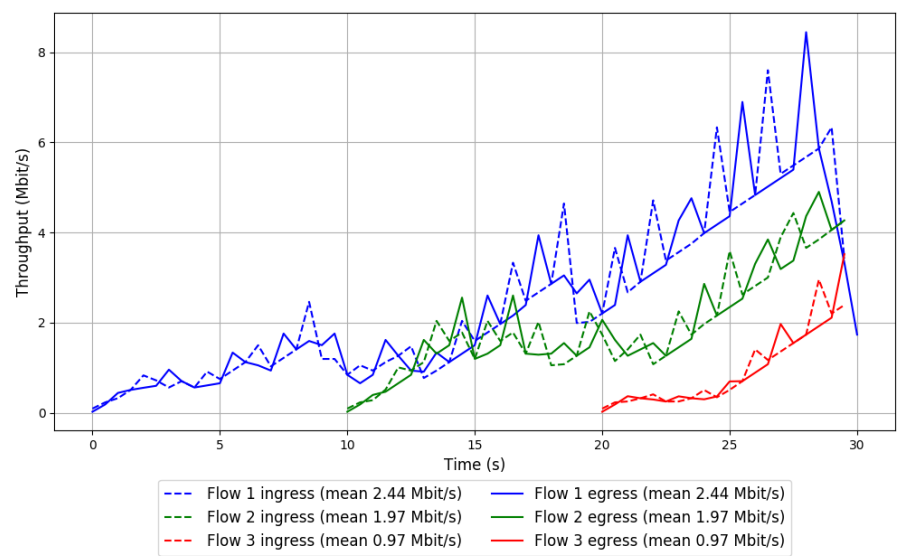
-- Flow 3:

Average throughput: 0.97 Mbit/s

95th percentile per-packet one-way delay: 113.790 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-31 11:55:51

End at: 2018-01-31 11:56:21

Below is generated by plot.py at 2018-01-31 14:20:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.83 Mbit/s

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

Loss rate: 0.84%

-- Flow 1:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 114.468 ms

Loss rate: 2.83%

-- Flow 2:

Average throughput: 3.45 Mbit/s

95th percentile per-packet one-way delay: 114.581 ms

Loss rate: 0.07%

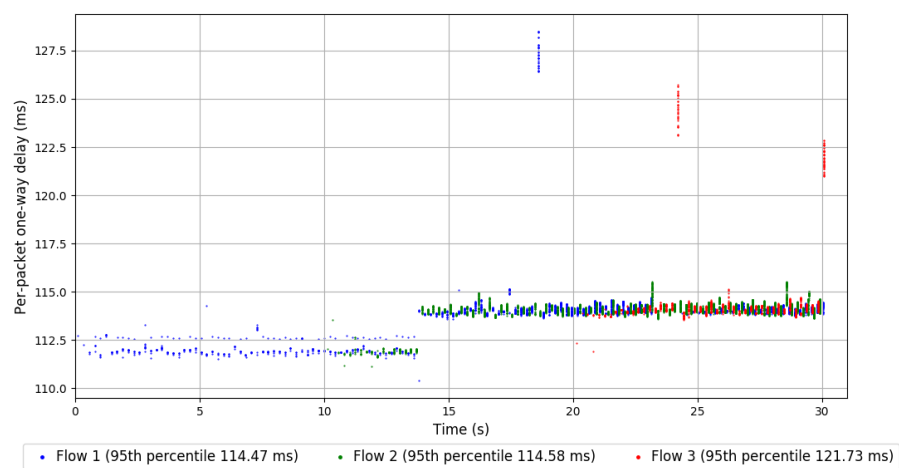
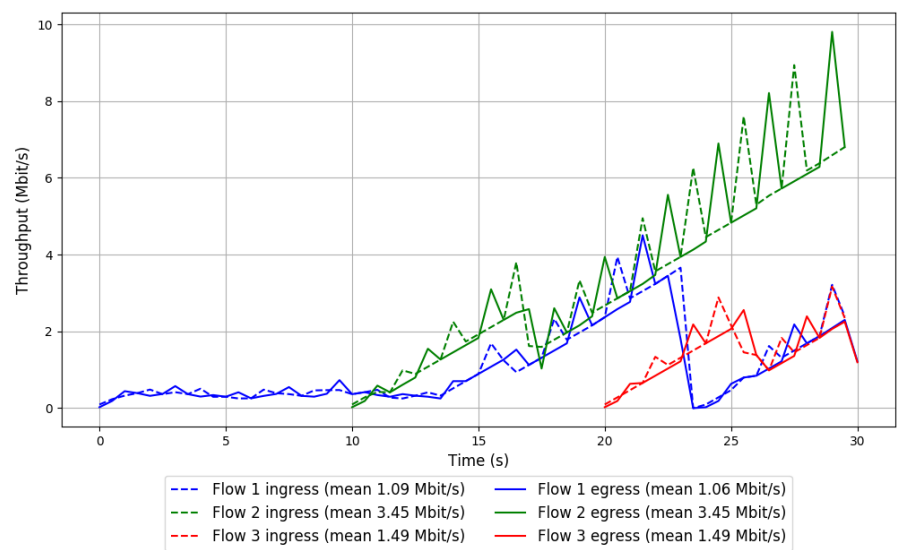
-- Flow 3:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 121.733 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-31 12:13:58

End at: 2018-01-31 12:14:28

Below is generated by plot.py at 2018-01-31 14:20:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.49 Mbit/s

95th percentile per-packet one-way delay: 112.514 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 112.572 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 112.542 ms

Loss rate: 0.11%

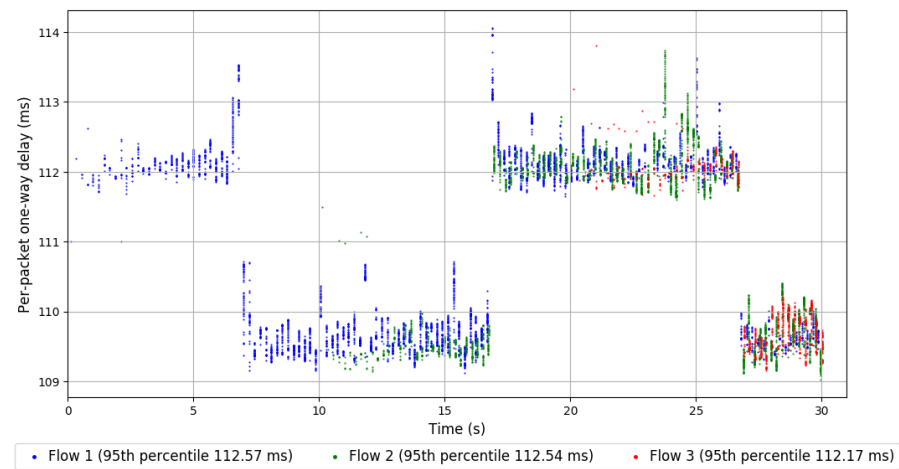
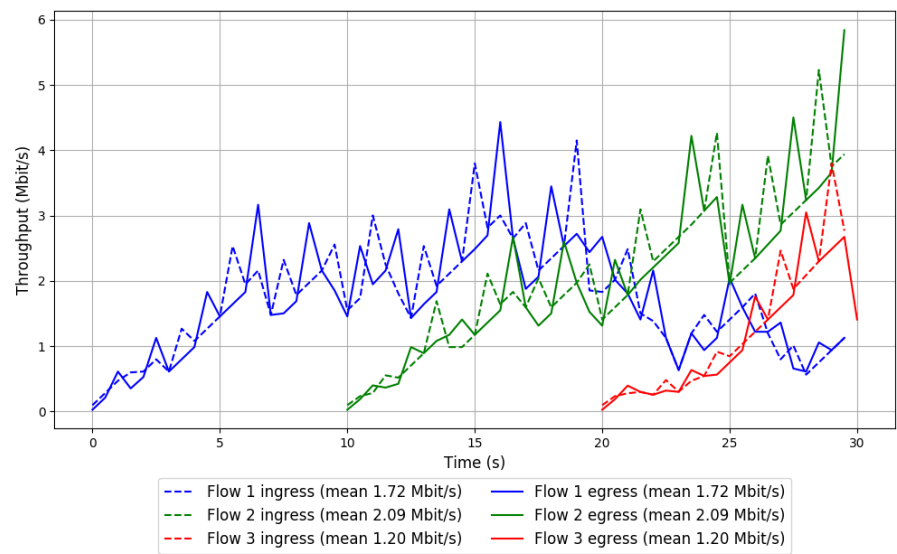
-- Flow 3:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 112.168 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-31 12:31:50

End at: 2018-01-31 12:32:20

Below is generated by plot.py at 2018-01-31 14:20:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.80 Mbit/s

95th percentile per-packet one-way delay: 113.017 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 3.48 Mbit/s

95th percentile per-packet one-way delay: 113.113 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 2.75 Mbit/s

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

Loss rate: 0.00%

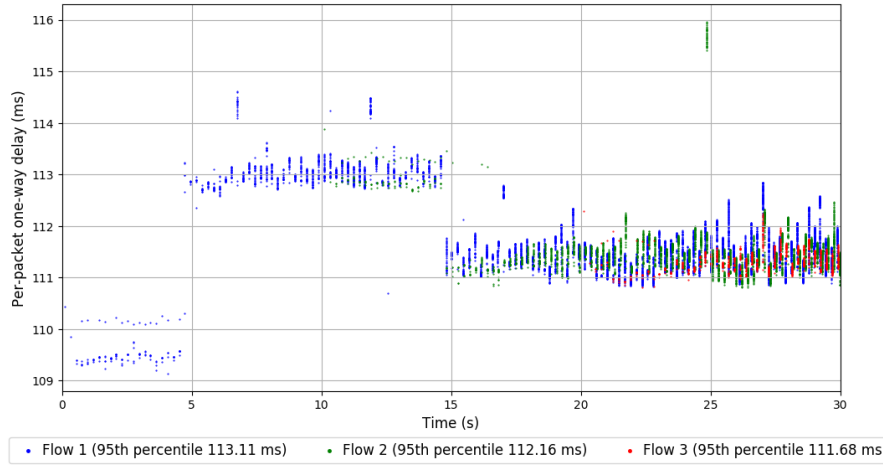
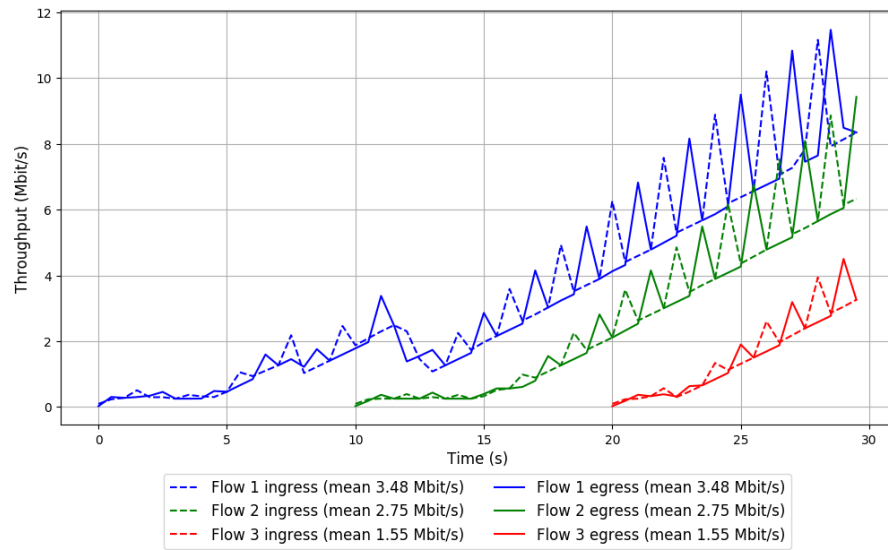
-- Flow 3:

Average throughput: 1.55 Mbit/s

95th percentile per-packet one-way delay: 111.683 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

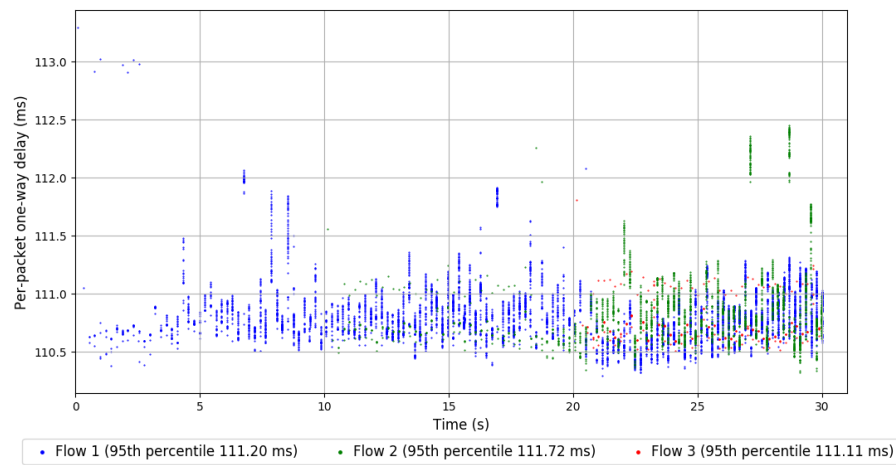
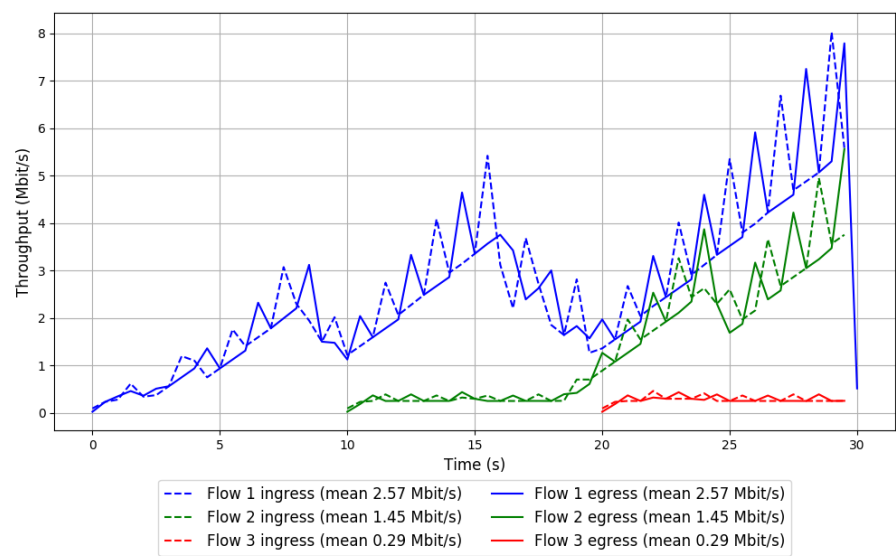


```
Run 10: Statistics of LEDBAT

Start at: 2018-01-31 12:50:07
End at: 2018-01-31 12:50:37

# Below is generated by plot.py at 2018-01-31 14:20:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.62 Mbit/s
95th percentile per-packet one-way delay: 111.247 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 2.57 Mbit/s
95th percentile per-packet one-way delay: 111.197 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 111.724 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 111.114 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

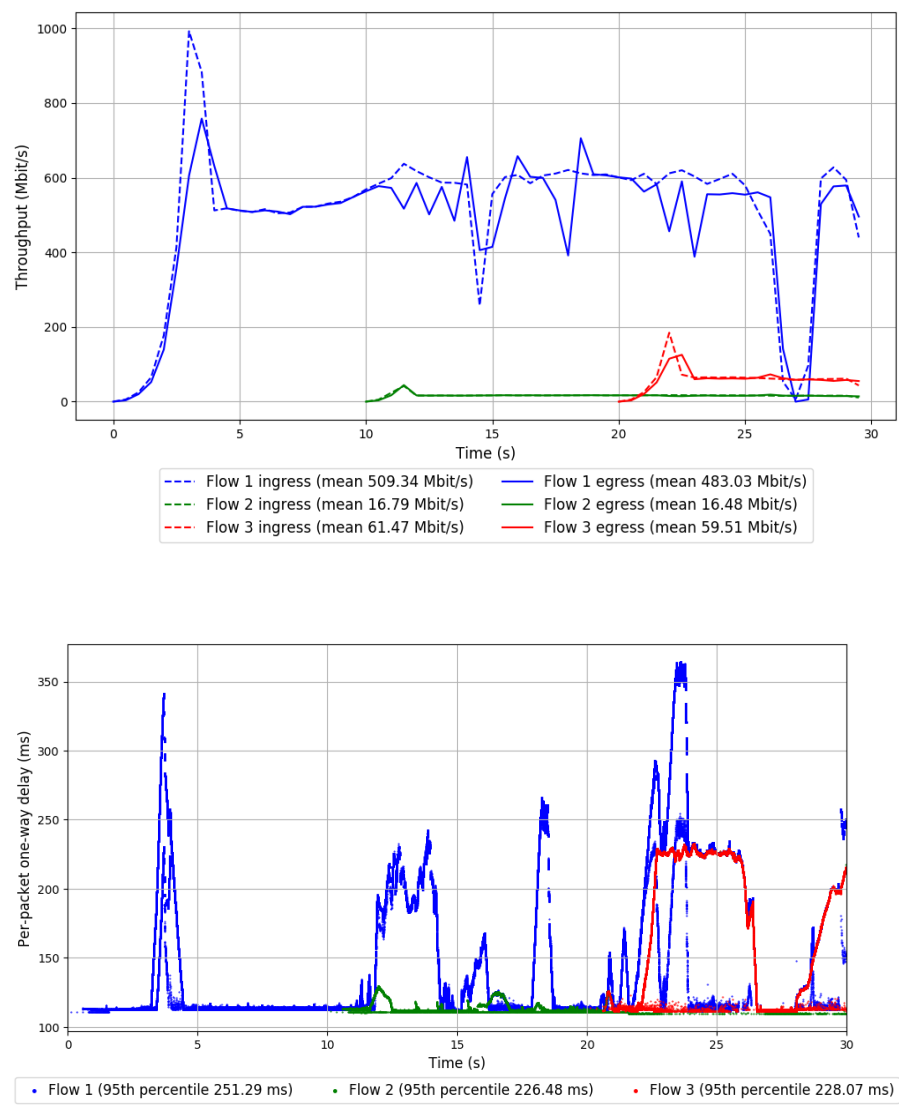


```
Run 1: Statistics of PCC

Start at: 2018-01-31 10:11:33
End at: 2018-01-31 10:12:03

# Below is generated by plot.py at 2018-01-31 14:26:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 513.54 Mbit/s
95th percentile per-packet one-way delay: 249.168 ms
Loss rate: 5.02%
-- Flow 1:
Average throughput: 483.03 Mbit/s
95th percentile per-packet one-way delay: 251.292 ms
Loss rate: 5.17%
-- Flow 2:
Average throughput: 16.48 Mbit/s
95th percentile per-packet one-way delay: 226.477 ms
Loss rate: 1.82%
-- Flow 3:
Average throughput: 59.51 Mbit/s
95th percentile per-packet one-way delay: 228.075 ms
Loss rate: 3.22%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-31 10:29:02

End at: 2018-01-31 10:29:32

Below is generated by plot.py at 2018-01-31 14:26:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 505.69 Mbit/s

95th percentile per-packet one-way delay: 325.306 ms

Loss rate: 4.60%

-- Flow 1:

Average throughput: 441.00 Mbit/s

95th percentile per-packet one-way delay: 326.688 ms

Loss rate: 5.19%

-- Flow 2:

Average throughput: 65.88 Mbit/s

95th percentile per-packet one-way delay: 215.430 ms

Loss rate: 0.26%

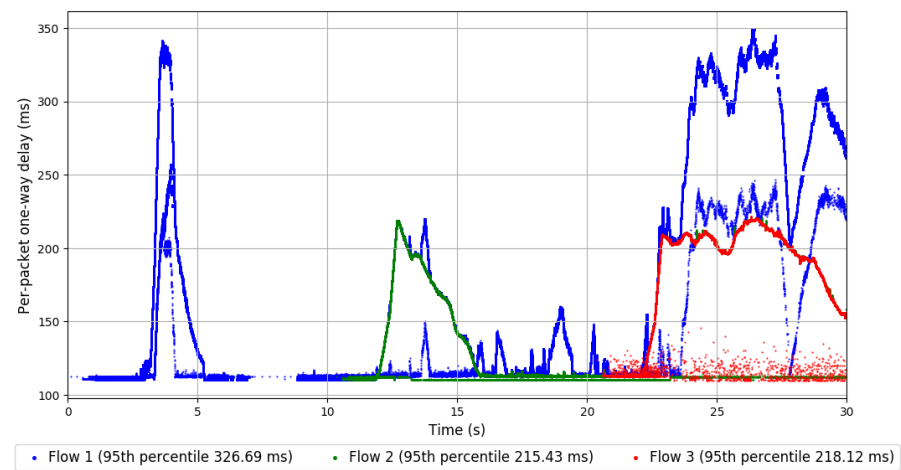
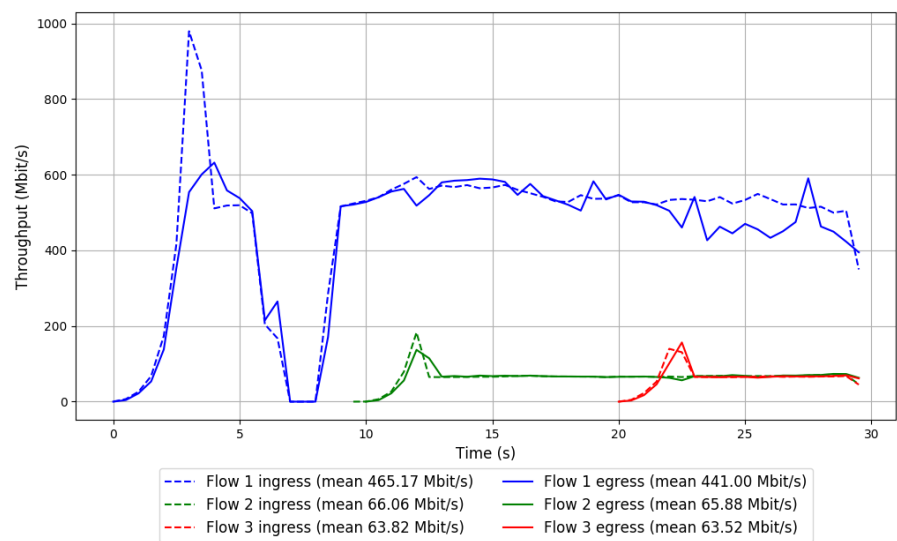
-- Flow 3:

Average throughput: 63.52 Mbit/s

95th percentile per-packet one-way delay: 218.121 ms

Loss rate: 0.51%

Run 2: Report of PCC — Data Link

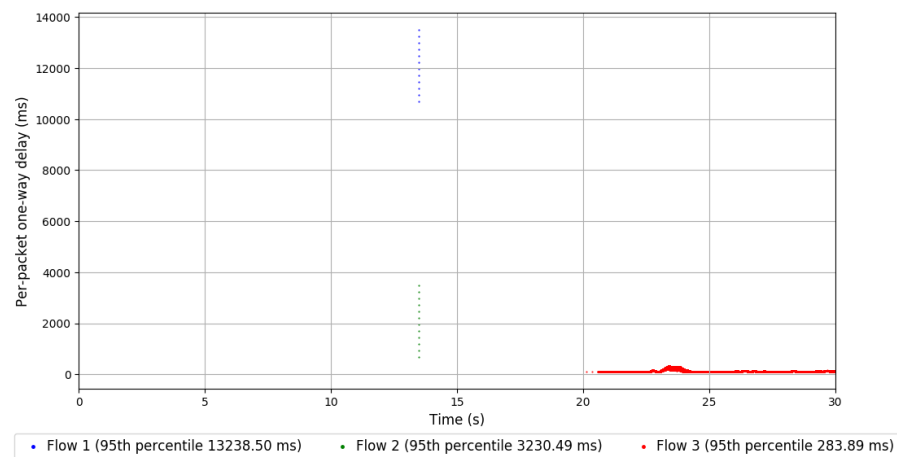
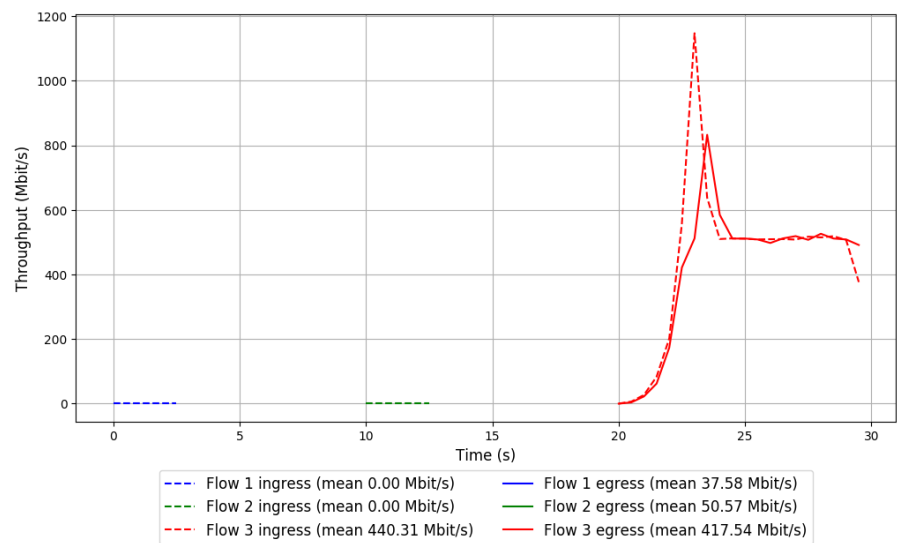


Run 3: Statistics of PCC

Start at: 2018-01-31 10:46:58

End at: 2018-01-31 10:47:28

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-31 11:04:19

End at: 2018-01-31 11:04:49

Below is generated by plot.py at 2018-01-31 14:27:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 549.38 Mbit/s

95th percentile per-packet one-way delay: 301.388 ms

Loss rate: 4.25%

-- Flow 1:

Average throughput: 449.78 Mbit/s

95th percentile per-packet one-way delay: 306.456 ms

Loss rate: 4.55%

-- Flow 2:

Average throughput: 119.45 Mbit/s

95th percentile per-packet one-way delay: 225.738 ms

Loss rate: 2.59%

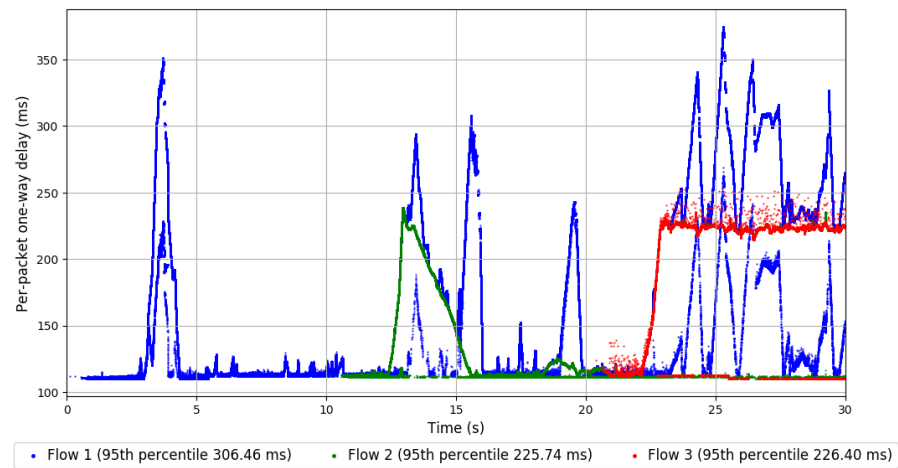
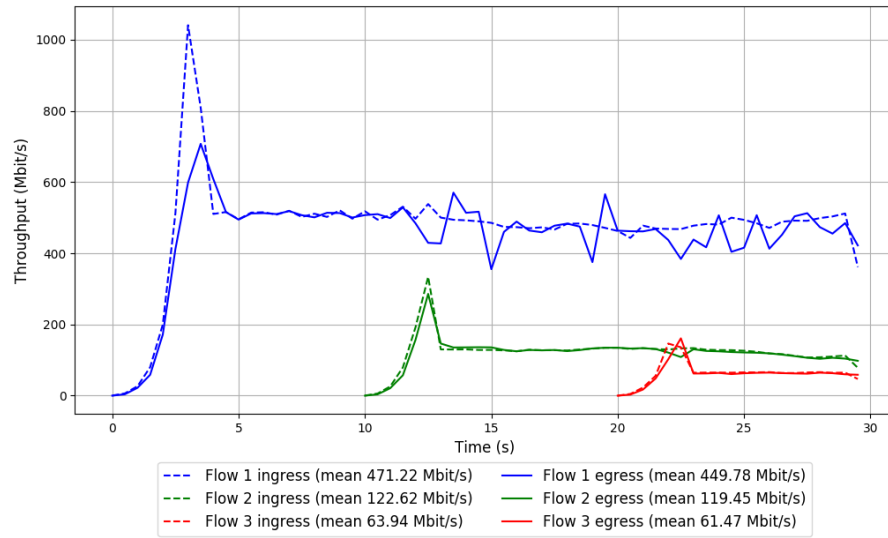
-- Flow 3:

Average throughput: 61.47 Mbit/s

95th percentile per-packet one-way delay: 226.399 ms

Loss rate: 3.91%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-31 11:22:14

End at: 2018-01-31 11:22:44

Below is generated by plot.py at 2018-01-31 14:27:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 375.14 Mbit/s

95th percentile per-packet one-way delay: 244.030 ms

Loss rate: 3.59%

-- Flow 1:

Average throughput: 42.23 Mbit/s

95th percentile per-packet one-way delay: 4365.584 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 365.17 Mbit/s

95th percentile per-packet one-way delay: 248.796 ms

Loss rate: 3.66%

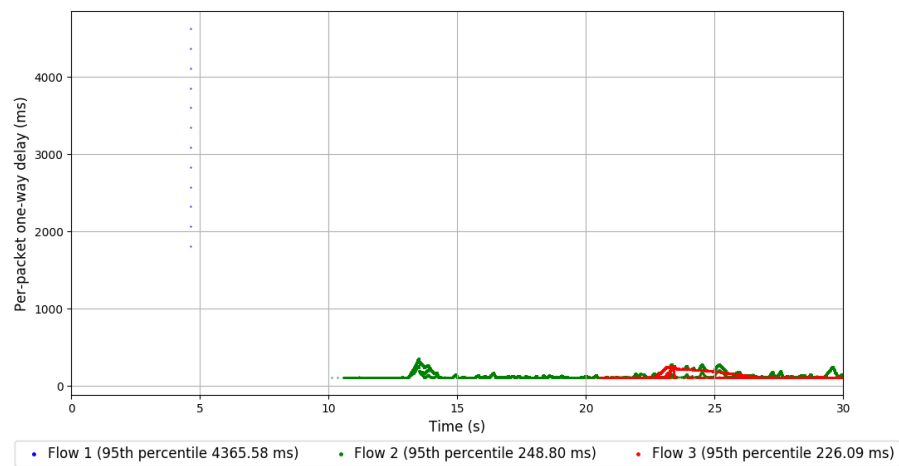
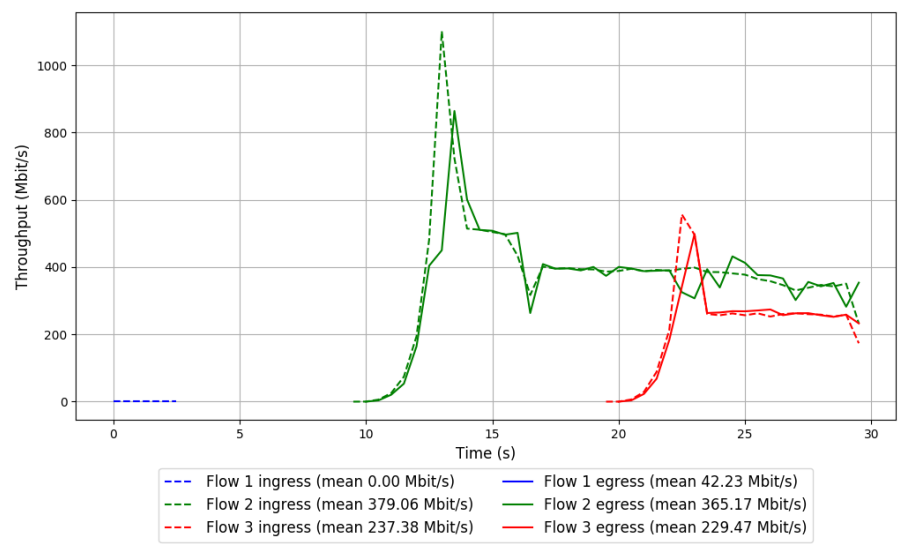
-- Flow 3:

Average throughput: 229.47 Mbit/s

95th percentile per-packet one-way delay: 226.089 ms

Loss rate: 3.35%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-31 11:39:53

End at: 2018-01-31 11:40:23

Below is generated by plot.py at 2018-01-31 14:27:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 562.73 Mbit/s

95th percentile per-packet one-way delay: 227.251 ms

Loss rate: 3.27%

-- Flow 1:

Average throughput: 454.93 Mbit/s

95th percentile per-packet one-way delay: 234.999 ms

Loss rate: 3.39%

-- Flow 2:

Average throughput: 120.80 Mbit/s

95th percentile per-packet one-way delay: 225.692 ms

Loss rate: 2.59%

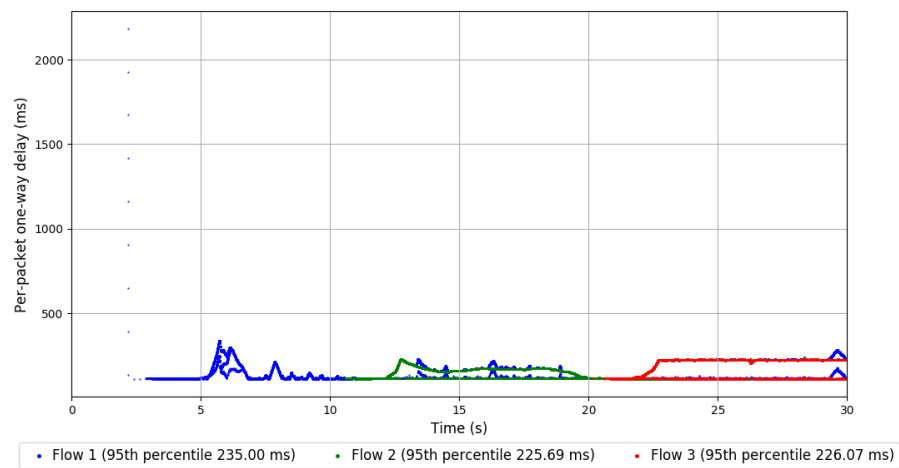
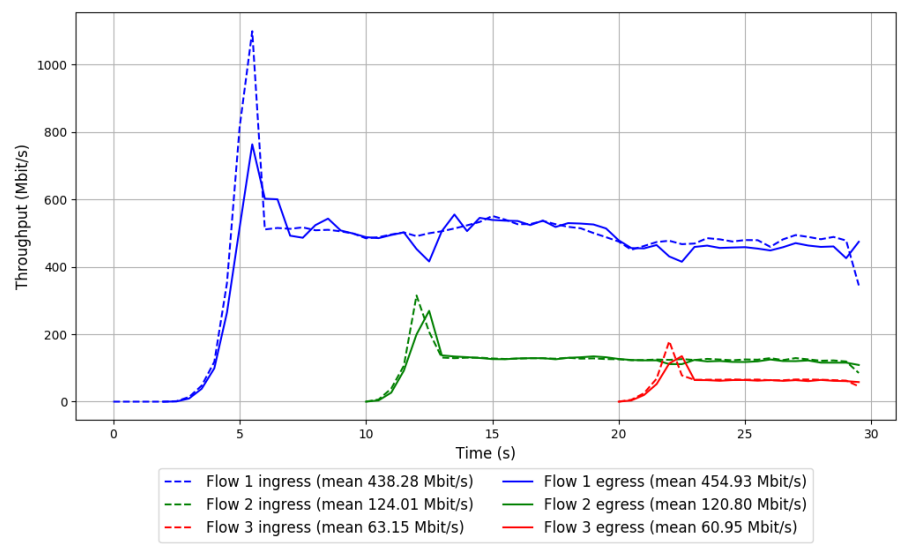
-- Flow 3:

Average throughput: 60.95 Mbit/s

95th percentile per-packet one-way delay: 226.074 ms

Loss rate: 3.46%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-31 11:57:24

End at: 2018-01-31 11:57:54

Below is generated by plot.py at 2018-01-31 14:28:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 570.37 Mbit/s

95th percentile per-packet one-way delay: 230.787 ms

Loss rate: 1.52%

-- Flow 1:

Average throughput: 513.33 Mbit/s

95th percentile per-packet one-way delay: 237.512 ms

Loss rate: 1.68%

-- Flow 2:

Average throughput: 69.28 Mbit/s

95th percentile per-packet one-way delay: 194.591 ms

Loss rate: 0.00%

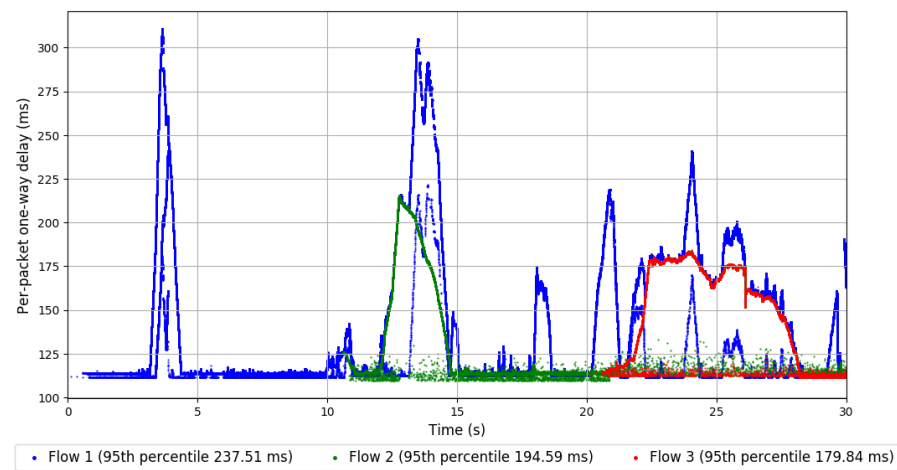
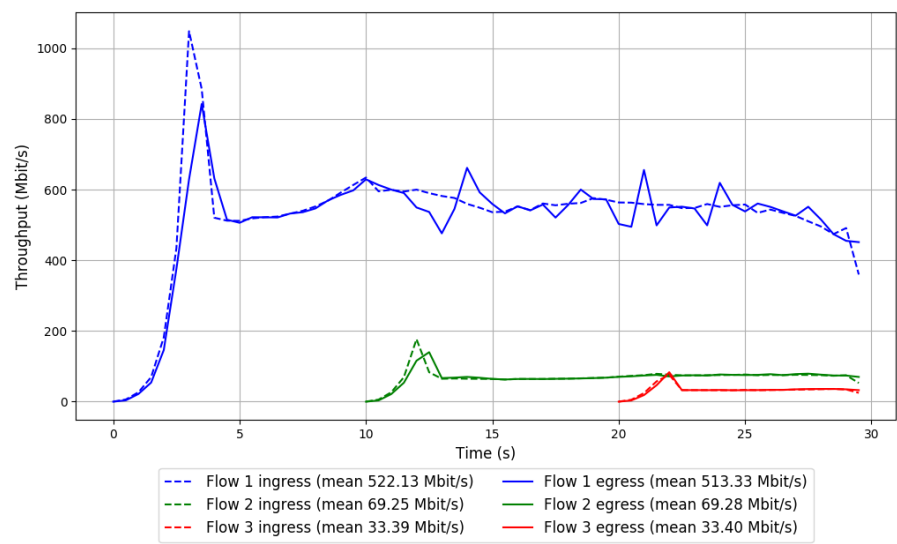
-- Flow 3:

Average throughput: 33.40 Mbit/s

95th percentile per-packet one-way delay: 179.843 ms

Loss rate: 0.00%

Run 7: Report of PCC — Data Link

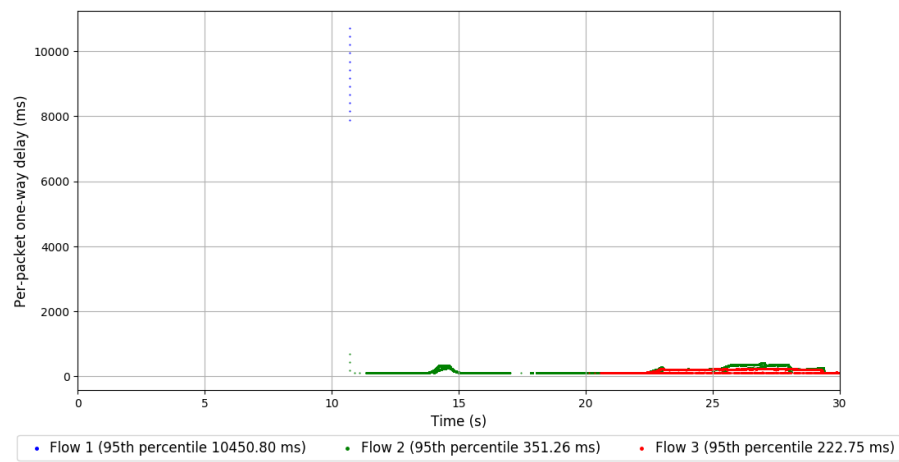
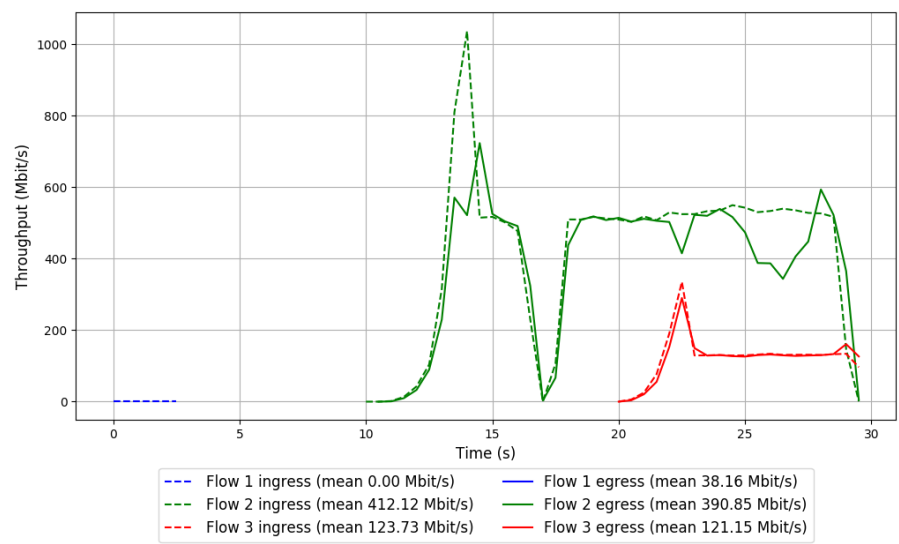


Run 8: Statistics of PCC

Start at: 2018-01-31 12:15:31

End at: 2018-01-31 12:16:01

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-31 12:33:24

End at: 2018-01-31 12:33:54

Below is generated by plot.py at 2018-01-31 14:30:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 551.43 Mbit/s

95th percentile per-packet one-way delay: 242.496 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 496.85 Mbit/s

95th percentile per-packet one-way delay: 244.337 ms

Loss rate: 1.26%

-- Flow 2:

Average throughput: 65.65 Mbit/s

95th percentile per-packet one-way delay: 228.536 ms

Loss rate: 0.18%

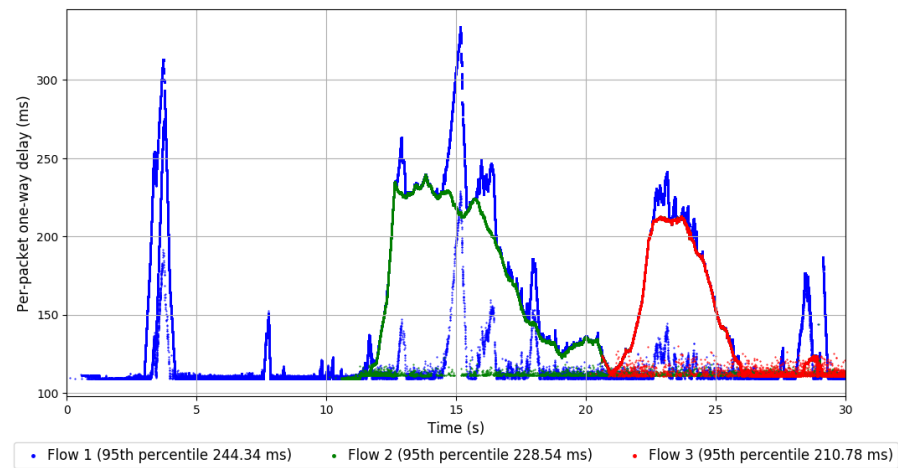
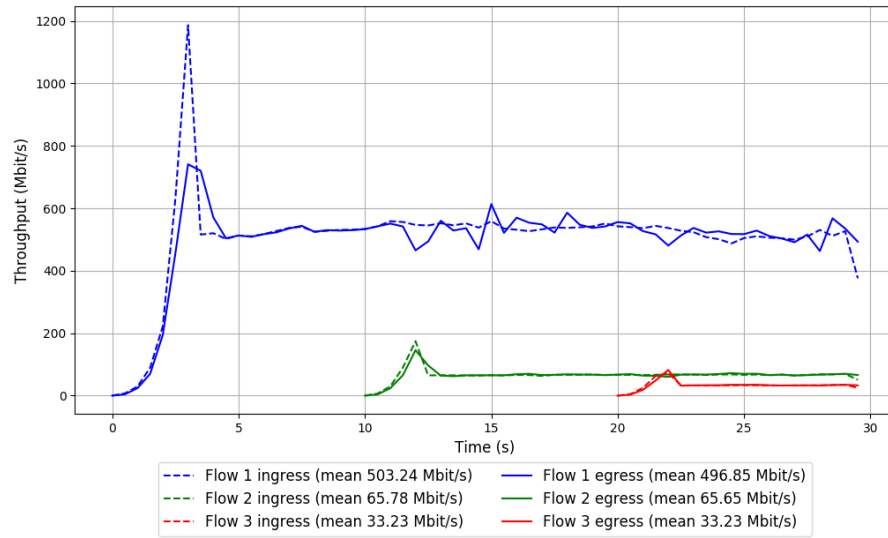
-- Flow 3:

Average throughput: 33.23 Mbit/s

95th percentile per-packet one-way delay: 210.777 ms

Loss rate: 0.02%

Run 9: Report of PCC — Data Link

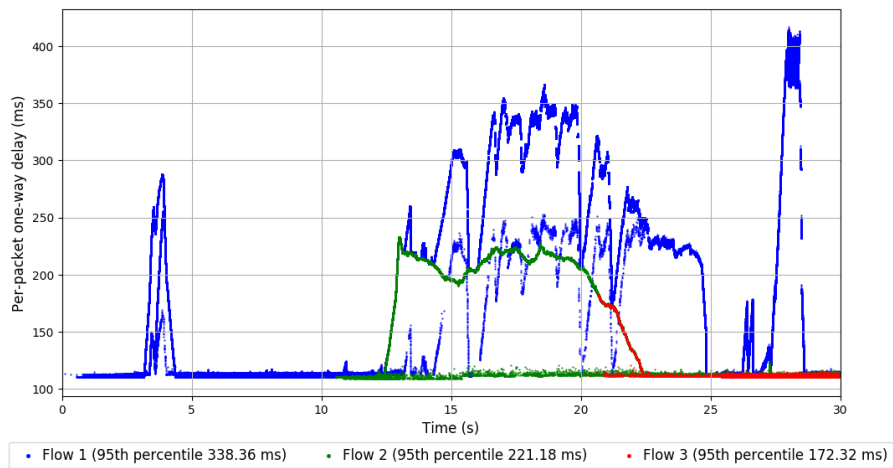
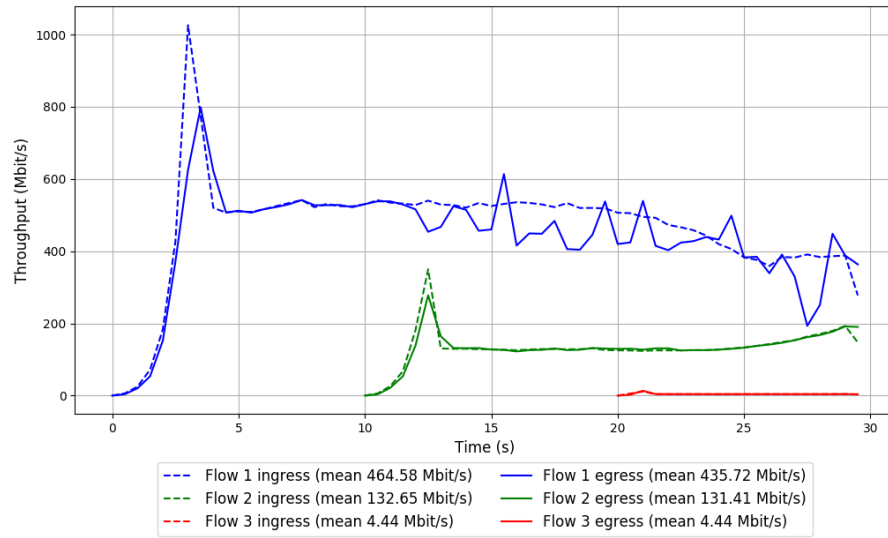


```
Run 10: Statistics of PCC

Start at: 2018-01-31 12:51:40
End at: 2018-01-31 12:52:10

# Below is generated by plot.py at 2018-01-31 14:33:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 524.54 Mbit/s
95th percentile per-packet one-way delay: 336.426 ms
Loss rate: 5.36%
-- Flow 1:
Average throughput: 435.72 Mbit/s
95th percentile per-packet one-way delay: 338.363 ms
Loss rate: 6.22%
-- Flow 2:
Average throughput: 131.41 Mbit/s
95th percentile per-packet one-way delay: 221.178 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 4.44 Mbit/s
95th percentile per-packet one-way delay: 172.321 ms
Loss rate: 0.00%
```

Run 10: Report of PCC — Data Link

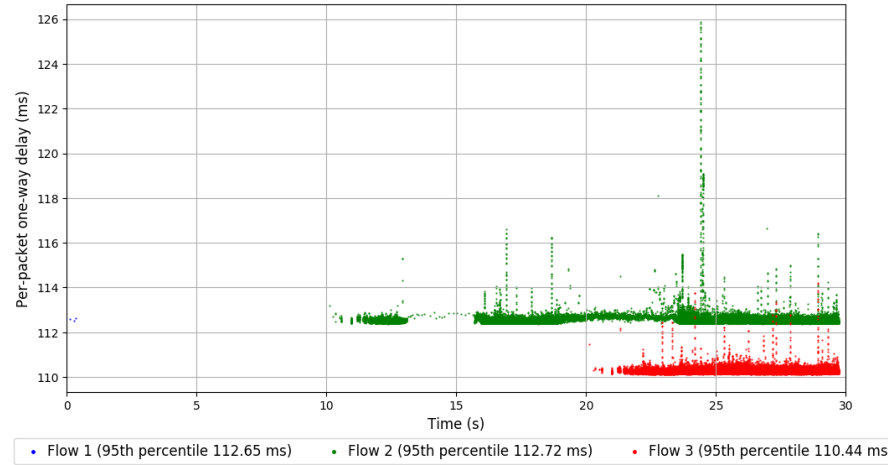
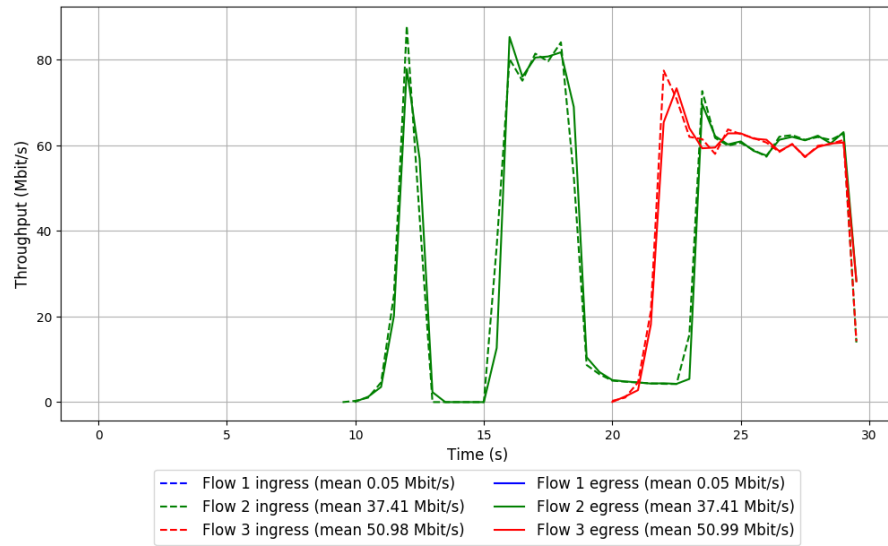


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-31 10:12:42
End at: 2018-01-31 10:13:12

# Below is generated by plot.py at 2018-01-31 14:33:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.30 Mbit/s
95th percentile per-packet one-way delay: 112.663 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 112.647 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.41 Mbit/s
95th percentile per-packet one-way delay: 112.720 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 50.99 Mbit/s
95th percentile per-packet one-way delay: 110.438 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-31 10:30:09

End at: 2018-01-31 10:30:39

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.06 Mbit/s

95th percentile per-packet one-way delay: 112.463 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 47.07 Mbit/s

95th percentile per-packet one-way delay: 112.392 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 41.22 Mbit/s

95th percentile per-packet one-way delay: 112.519 ms

Loss rate: 0.00%

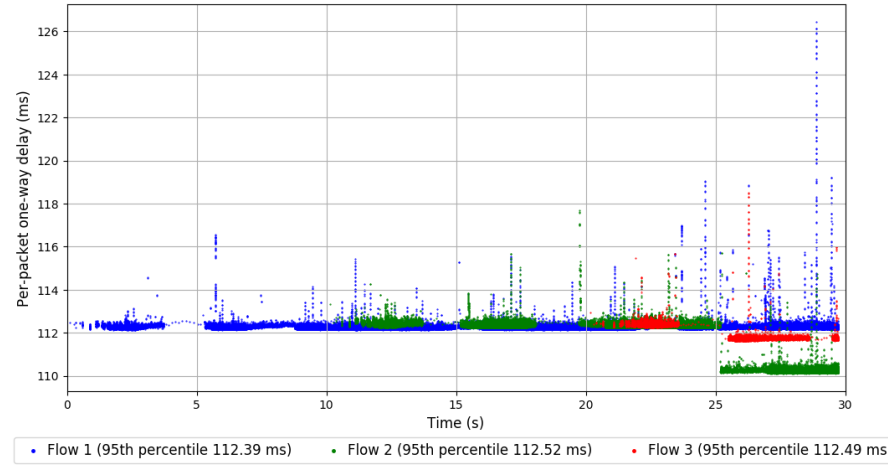
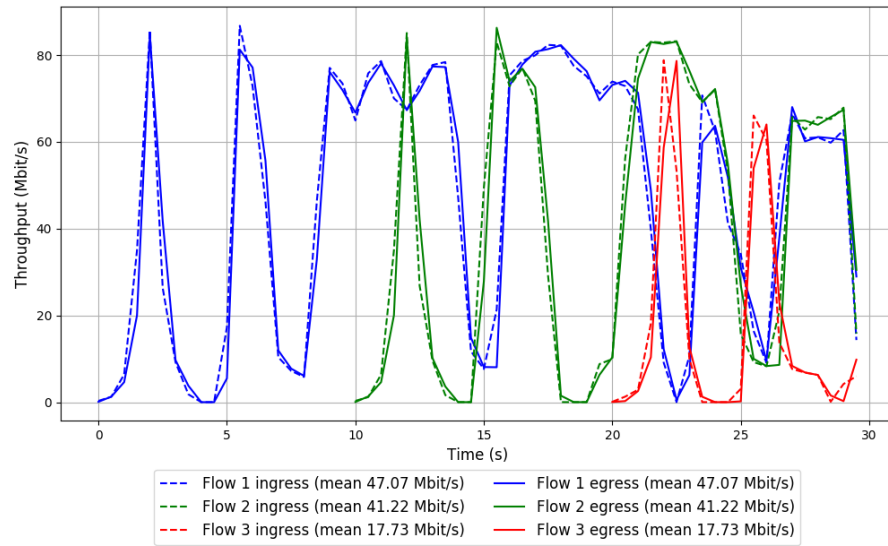
-- Flow 3:

Average throughput: 17.73 Mbit/s

95th percentile per-packet one-way delay: 112.489 ms

Loss rate: 0.04%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-31 10:47:50

End at: 2018-01-31 10:48:20

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.13 Mbit/s

95th percentile per-packet one-way delay: 112.942 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 49.37 Mbit/s

95th percentile per-packet one-way delay: 112.967 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 32.94 Mbit/s

95th percentile per-packet one-way delay: 110.432 ms

Loss rate: 0.00%

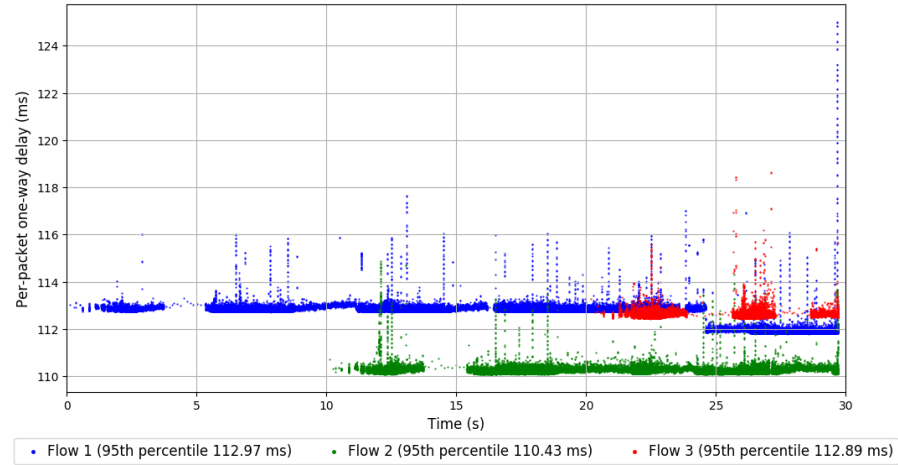
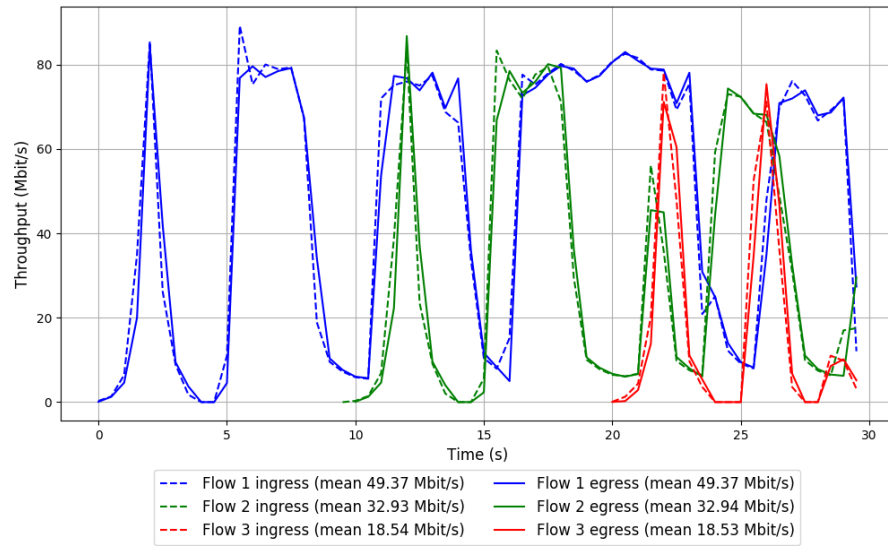
-- Flow 3:

Average throughput: 18.53 Mbit/s

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

Loss rate: 0.03%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-31 11:05:30

End at: 2018-01-31 11:06:00

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.72 Mbit/s

95th percentile per-packet one-way delay: 112.469 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 41.70 Mbit/s

95th percentile per-packet one-way delay: 112.519 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.90 Mbit/s

95th percentile per-packet one-way delay: 109.888 ms

Loss rate: 0.00%

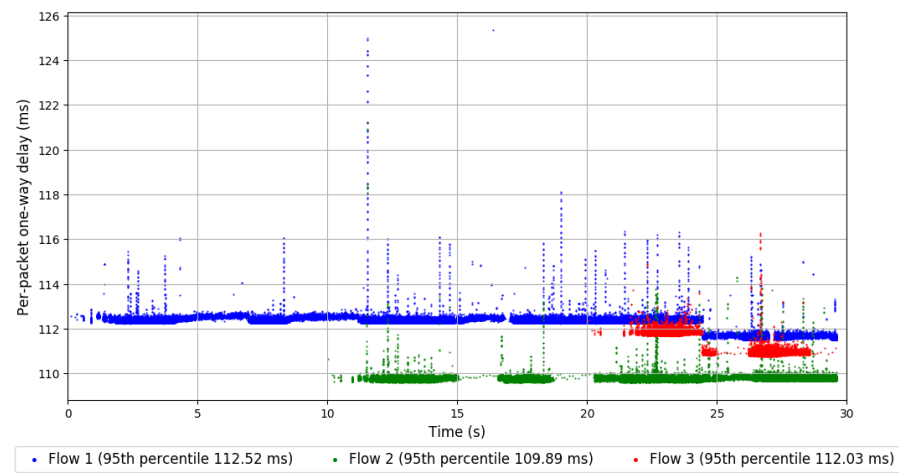
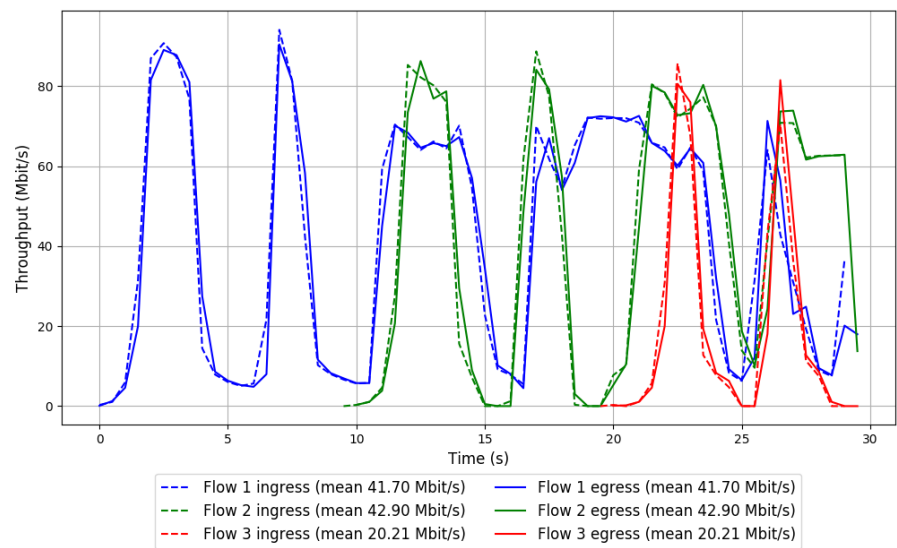
-- Flow 3:

Average throughput: 20.21 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-31 11:23:15

End at: 2018-01-31 11:23:45

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.87 Mbit/s

95th percentile per-packet one-way delay: 112.988 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 38.99 Mbit/s

95th percentile per-packet one-way delay: 110.121 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.60 Mbit/s

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

Loss rate: 0.00%

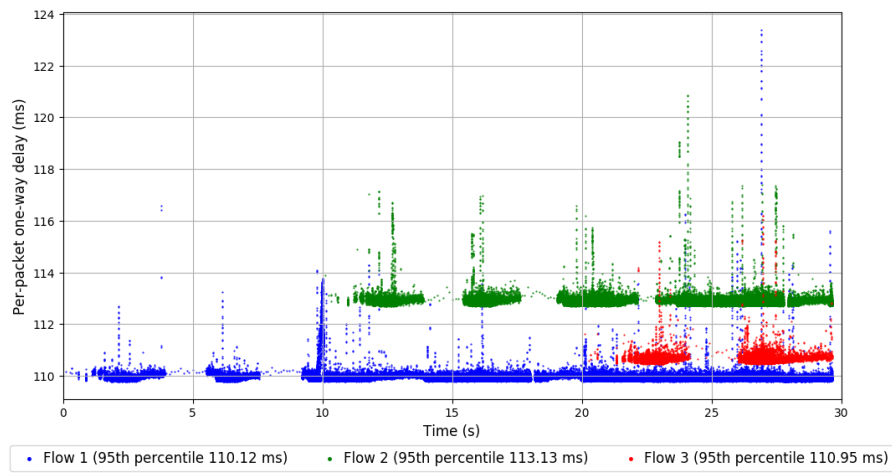
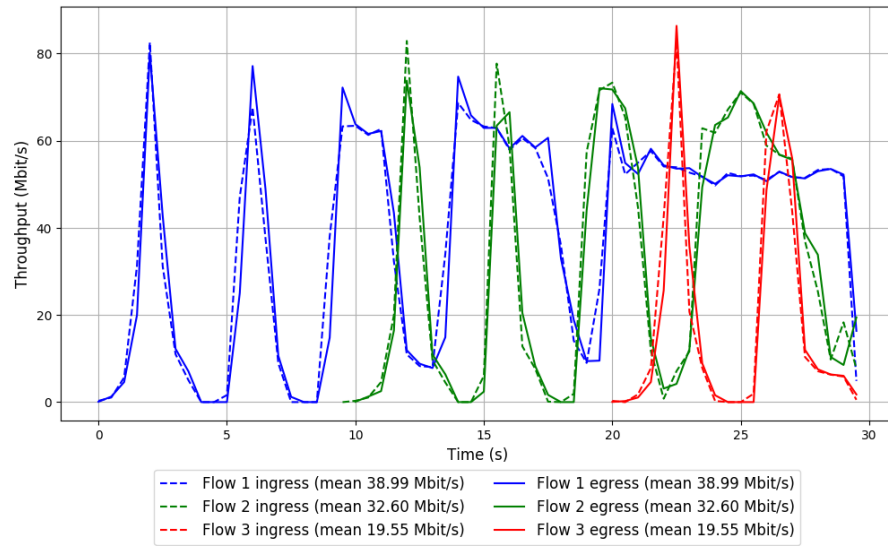
-- Flow 3:

Average throughput: 19.55 Mbit/s

95th percentile per-packet one-way delay: 110.954 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-31 11:41:02

End at: 2018-01-31 11:41:32

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.04 Mbit/s

95th percentile per-packet one-way delay: 112.790 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 37.92 Mbit/s

95th percentile per-packet one-way delay: 111.854 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 33.83 Mbit/s

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

Loss rate: 0.00%

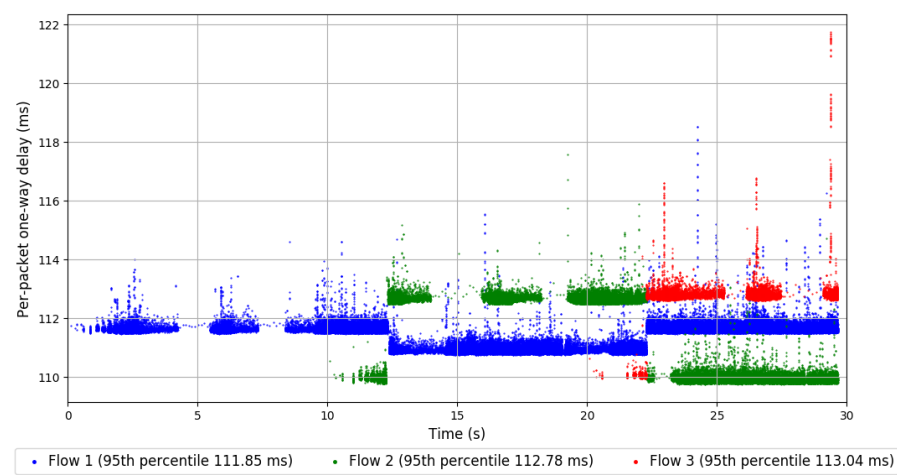
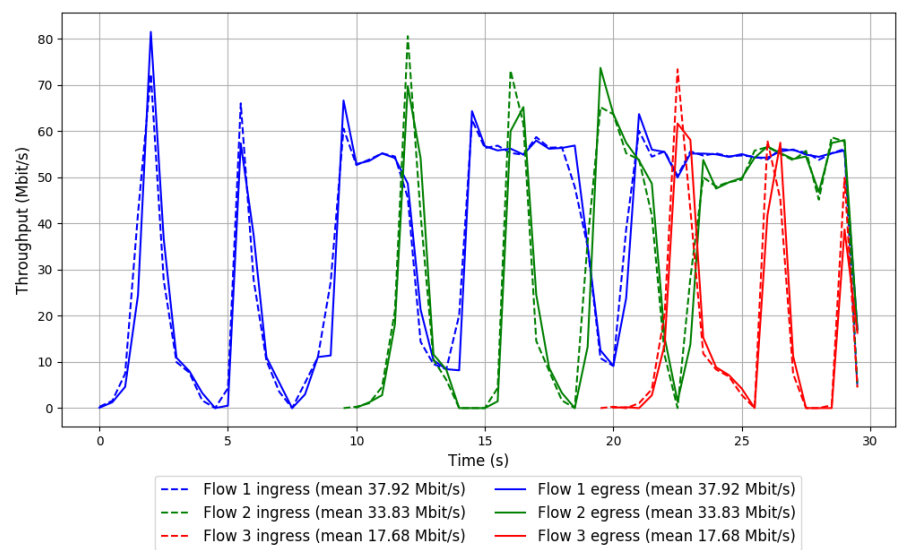
-- Flow 3:

Average throughput: 17.68 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-31 11:58:34

End at: 2018-01-31 11:59:04

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.80 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.24 Mbit/s

95th percentile per-packet one-way delay: 111.807 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.55 Mbit/s

95th percentile per-packet one-way delay: 114.616 ms

Loss rate: 0.00%

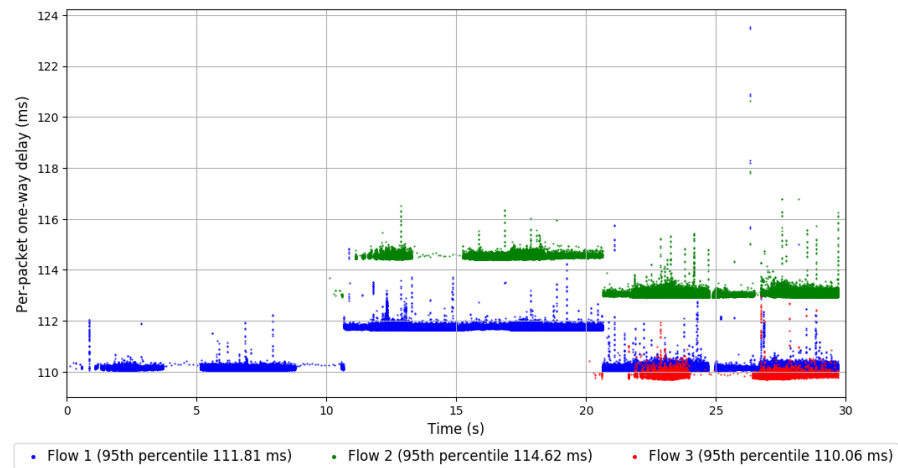
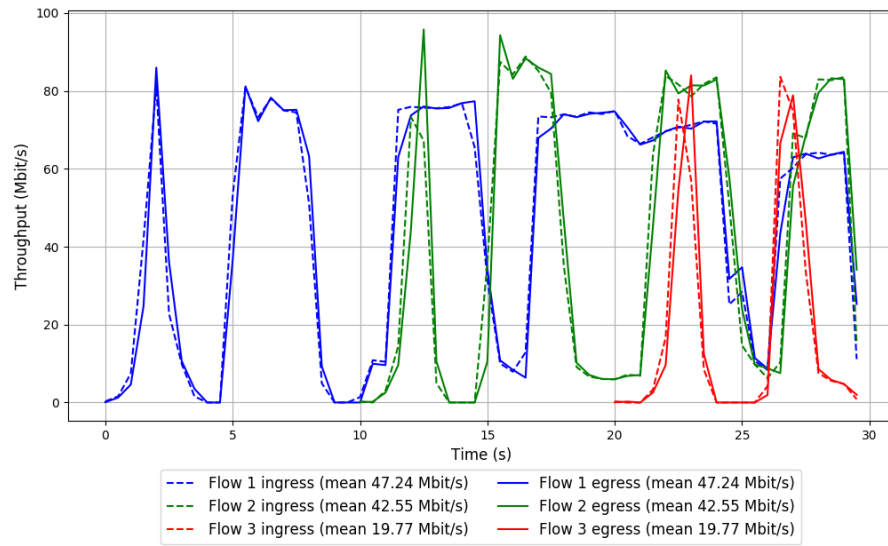
-- Flow 3:

Average throughput: 19.77 Mbit/s

95th percentile per-packet one-way delay: 110.057 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-31 12:16:30

End at: 2018-01-31 12:17:00

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.52 Mbit/s

95th percentile per-packet one-way delay: 112.617 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 51.84 Mbit/s

95th percentile per-packet one-way delay: 111.957 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.01 Mbit/s

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

Loss rate: 0.00%

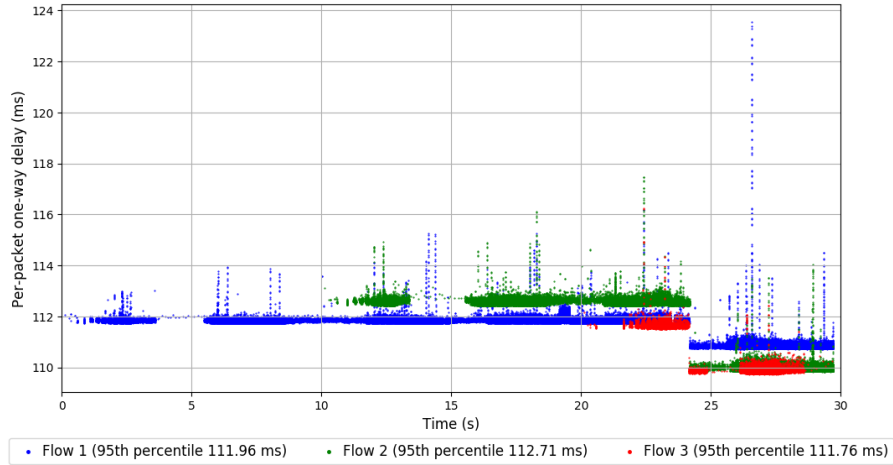
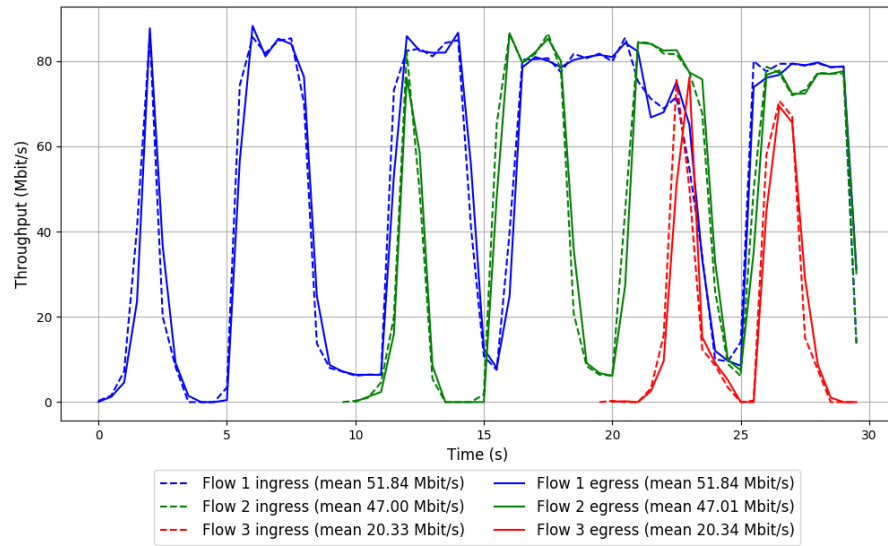
-- Flow 3:

Average throughput: 20.34 Mbit/s

95th percentile per-packet one-way delay: 111.760 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-31 12:34:33

End at: 2018-01-31 12:35:03

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.15 Mbit/s

95th percentile per-packet one-way delay: 111.960 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.55 Mbit/s

95th percentile per-packet one-way delay: 111.977 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.50 Mbit/s

95th percentile per-packet one-way delay: 111.747 ms

Loss rate: 0.00%

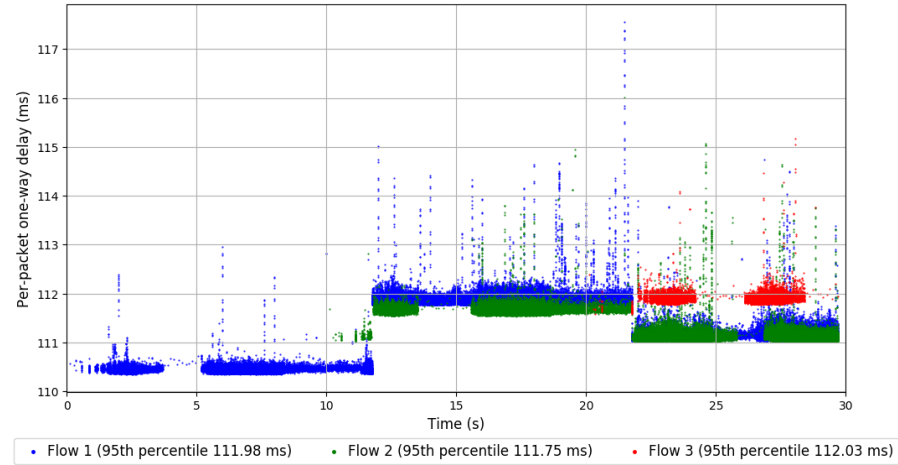
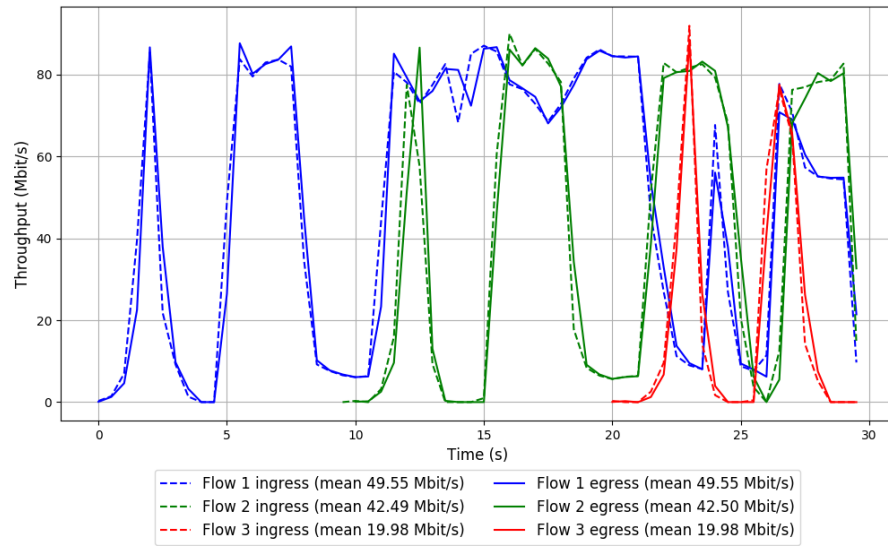
-- Flow 3:

Average throughput: 19.98 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

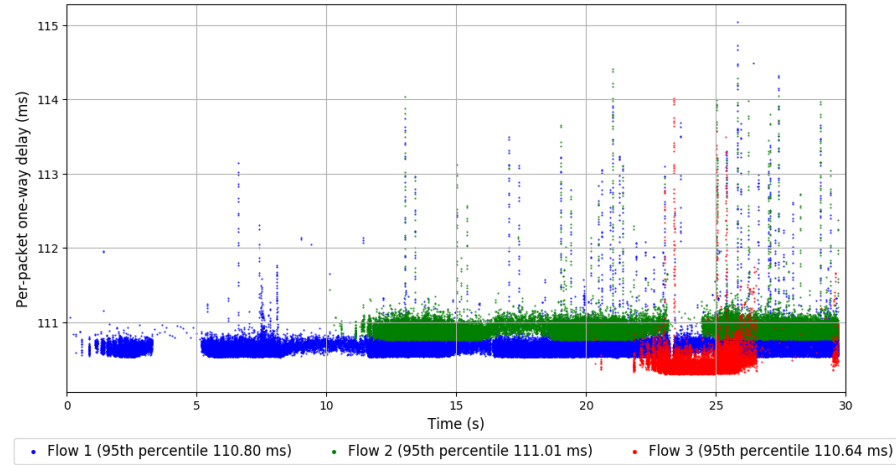
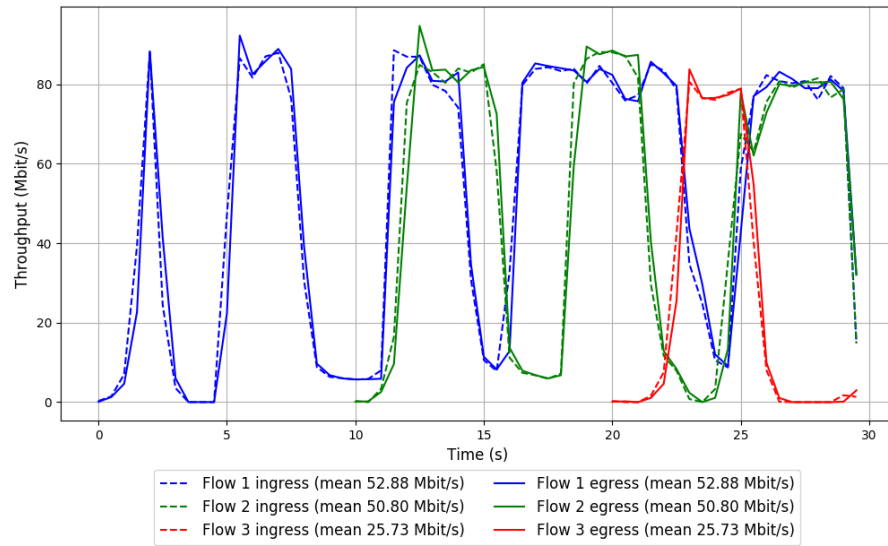


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-31 12:52:47
End at: 2018-01-31 12:53:17

# Below is generated by plot.py at 2018-01-31 14:33:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.84 Mbit/s
95th percentile per-packet one-way delay: 110.950 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 52.88 Mbit/s
95th percentile per-packet one-way delay: 110.803 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 50.80 Mbit/s
95th percentile per-packet one-way delay: 111.006 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 25.73 Mbit/s
95th percentile per-packet one-way delay: 110.643 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

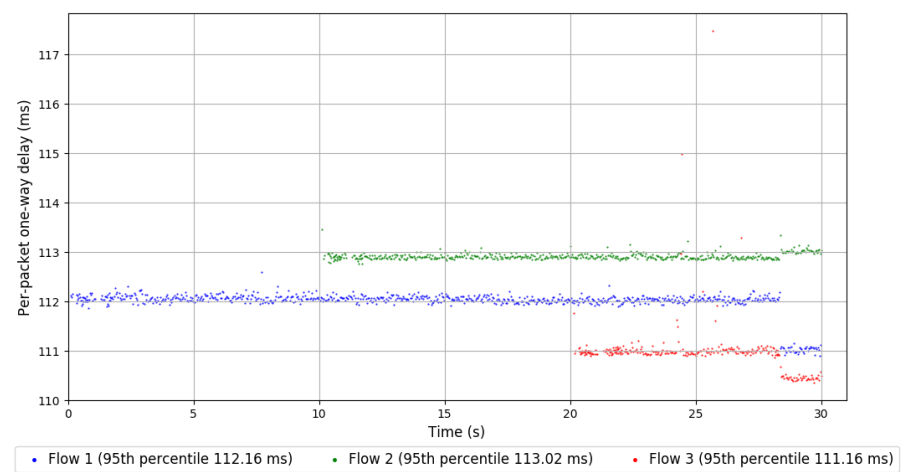
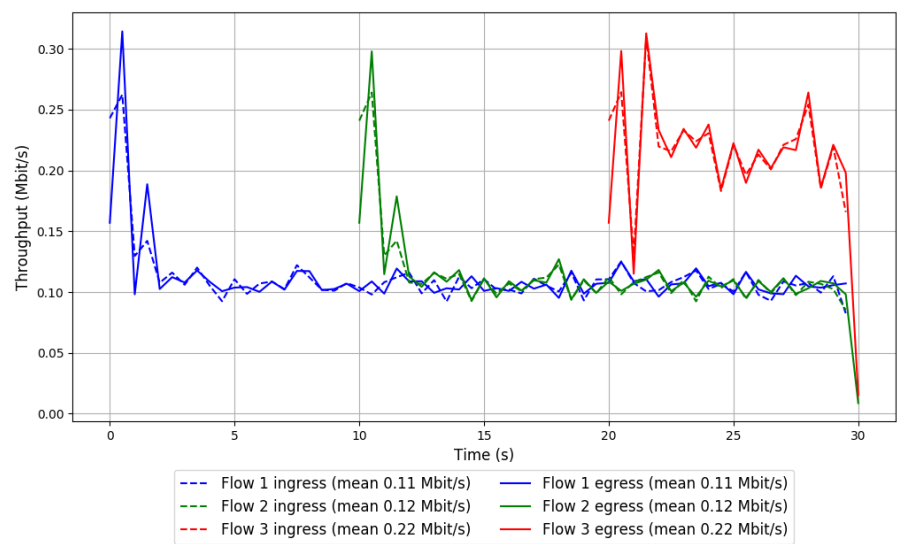


```
Run 1: Statistics of SCReAM

Start at: 2018-01-31 10:08:07
End at: 2018-01-31 10:08:37

# Below is generated by plot.py at 2018-01-31 14:33:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 112.975 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 112.163 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 113.024 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.163 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

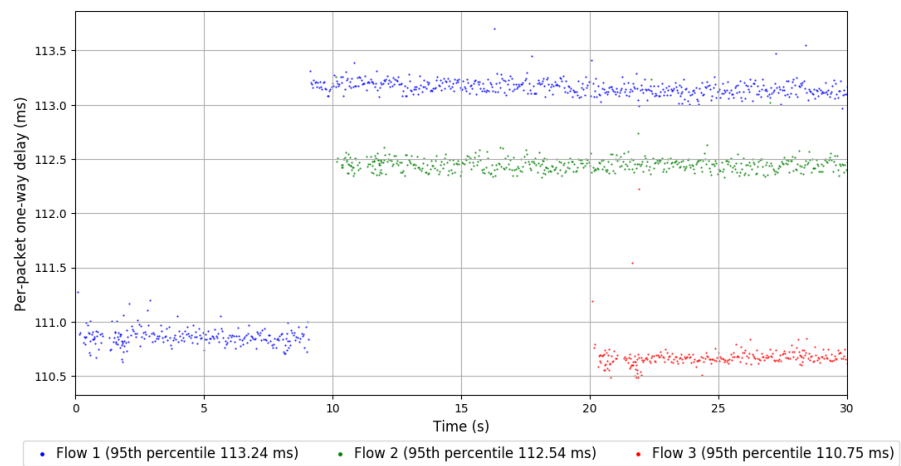
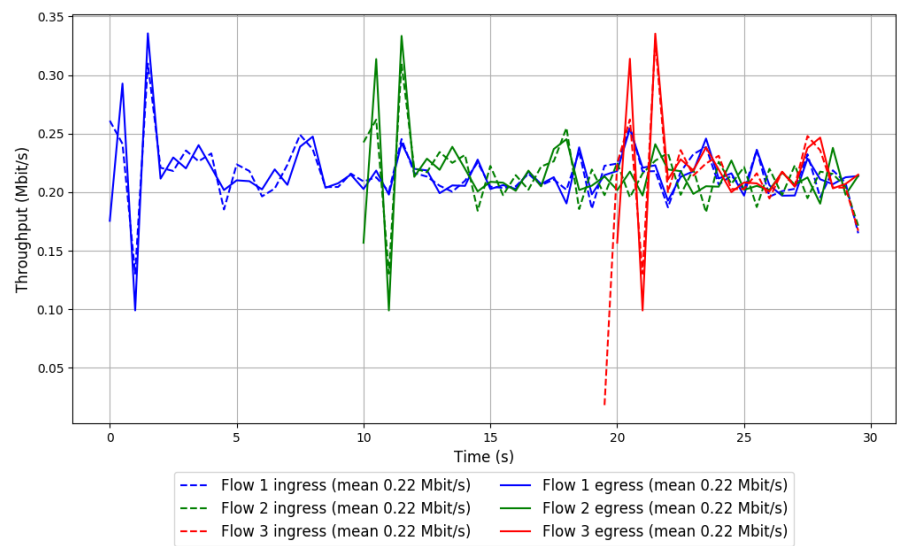


```
Run 2: Statistics of SCReAM

Start at: 2018-01-31 10:25:46
End at: 2018-01-31 10:26:16

# Below is generated by plot.py at 2018-01-31 14:33:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.223 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.242 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.544 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.751 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

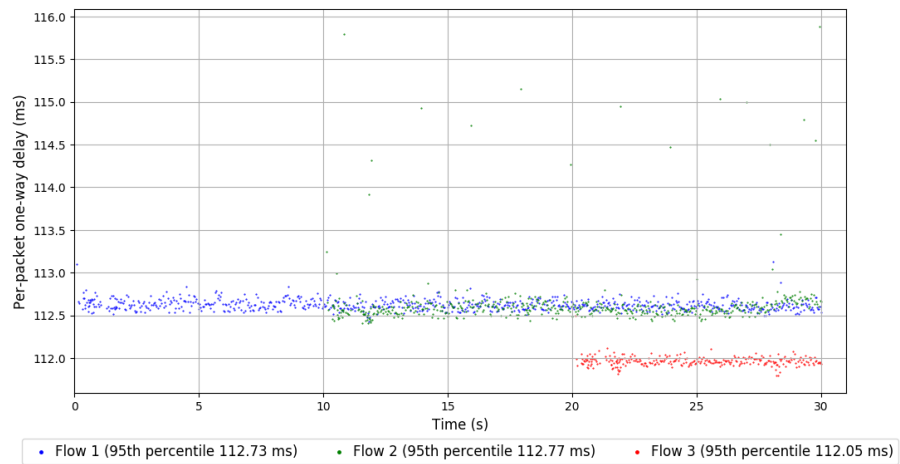
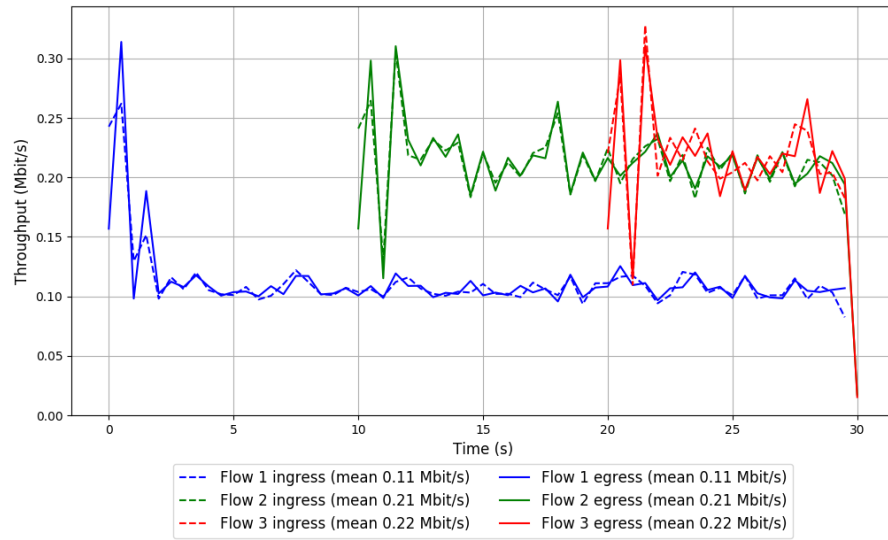


```
Run 3: Statistics of SCReAM

Start at: 2018-01-31 10:43:27
End at: 2018-01-31 10:43:57

# Below is generated by plot.py at 2018-01-31 14:33:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 112.726 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 112.727 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.765 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.047 ms
Loss rate: 0.00%
```


Run 3: Report of SReAM — Data Link

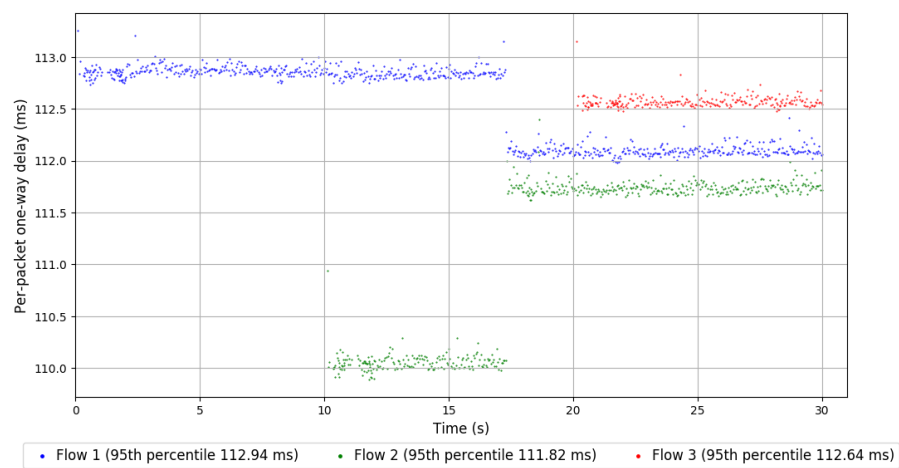
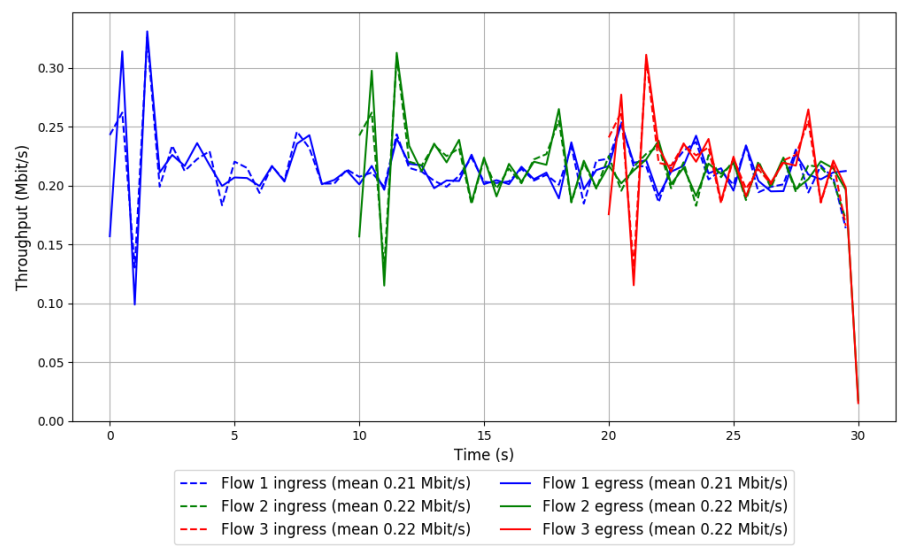


```
Run 4: Statistics of SCReAM

Start at: 2018-01-31 11:00:58
End at: 2018-01-31 11:01:28

# Below is generated by plot.py at 2018-01-31 14:33:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.901 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.935 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.816 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.641 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

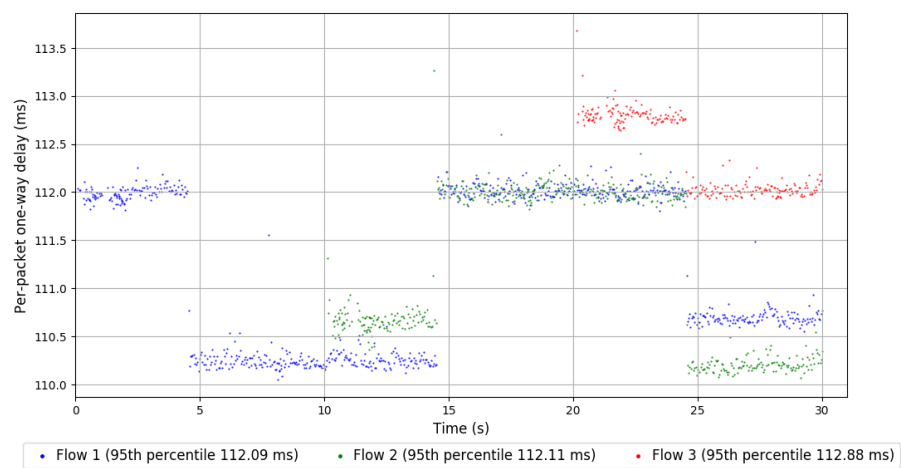
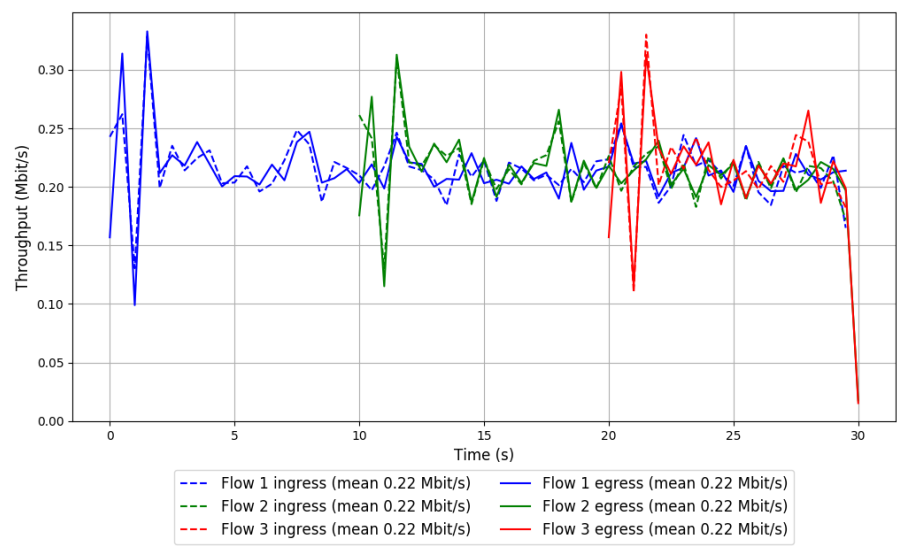


```
Run 5: Statistics of SReAM

Start at: 2018-01-31 11:18:50
End at: 2018-01-31 11:19:20

# Below is generated by plot.py at 2018-01-31 14:33:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.766 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.091 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.112 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.883 ms
Loss rate: 0.00%
```

Run 5: Report of SReAM — Data Link

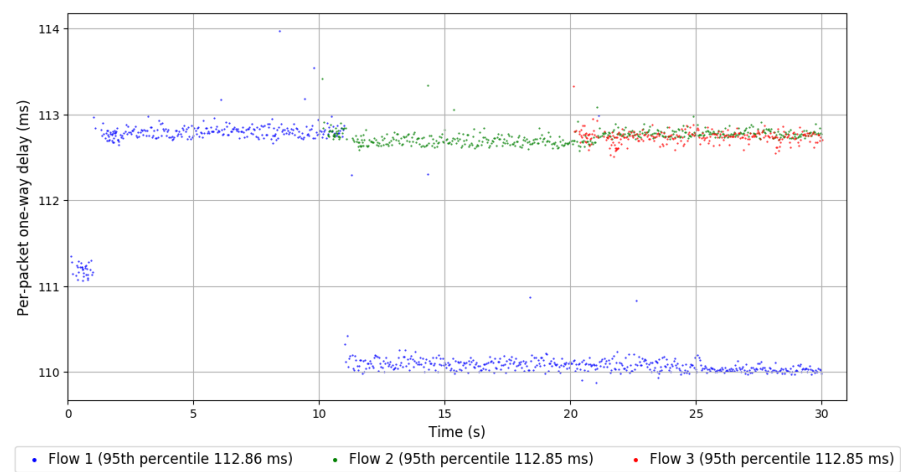
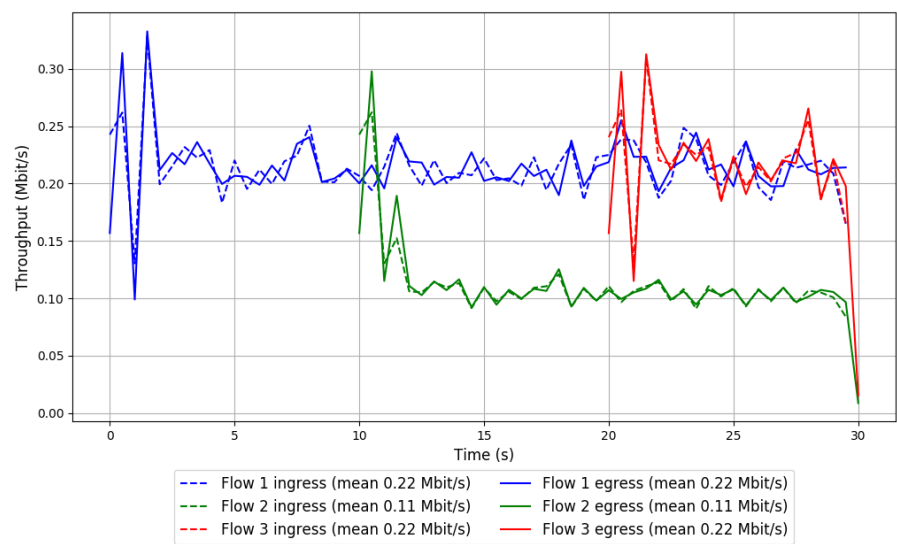


```
Run 6: Statistics of SCReAM

Start at: 2018-01-31 11:36:44
End at: 2018-01-31 11:37:14

# Below is generated by plot.py at 2018-01-31 14:33:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 112.853 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.856 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 112.847 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.849 ms
Loss rate: 0.00%
```

Run 6: Report of SReAM — Data Link

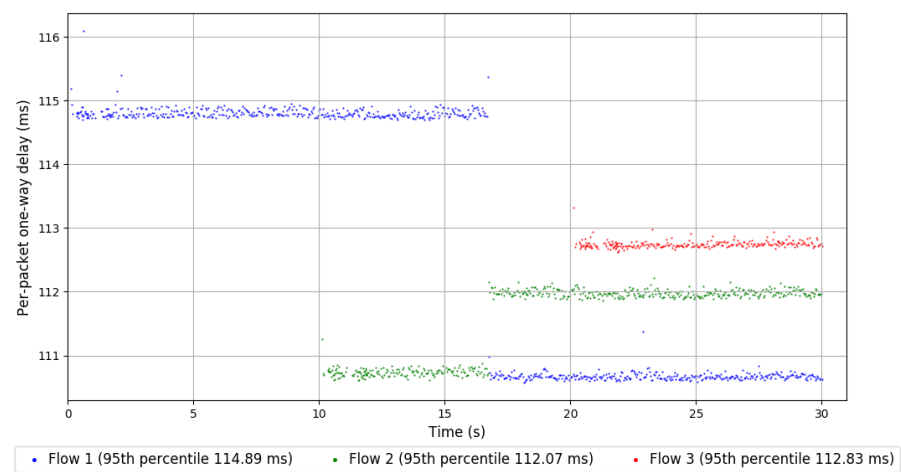
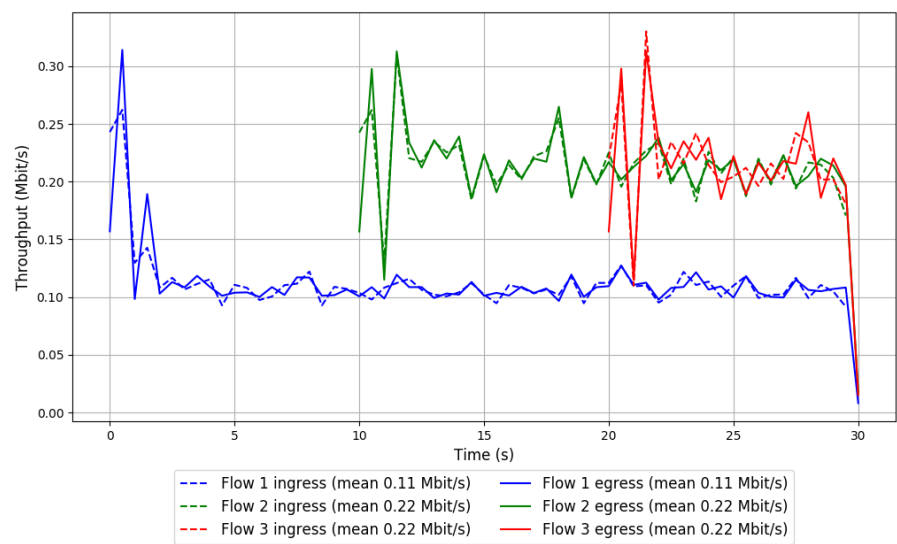


```
Run 7: Statistics of SCReAM

Start at: 2018-01-31 11:54:08
End at: 2018-01-31 11:54:38

# Below is generated by plot.py at 2018-01-31 14:33:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 114.865 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 114.892 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.068 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.831 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-31 12:12:07

End at: 2018-01-31 12:12:37

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 112.764 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 109.293 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.19 Mbit/s

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

Loss rate: 0.00%

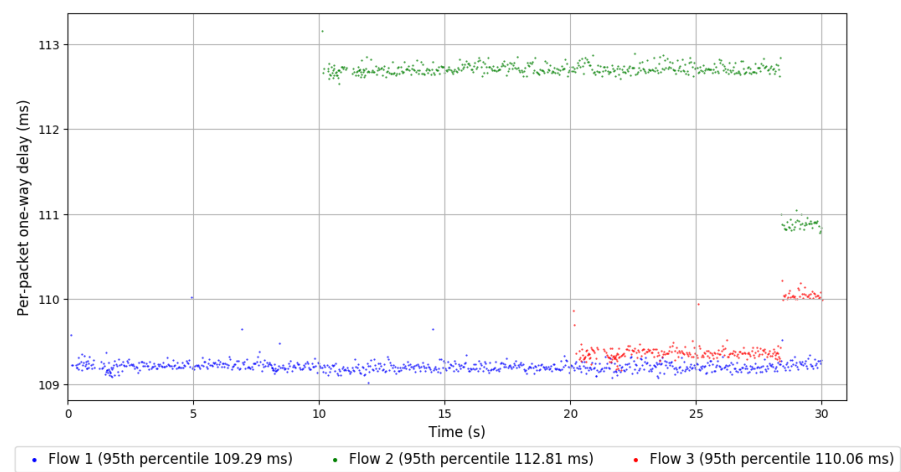
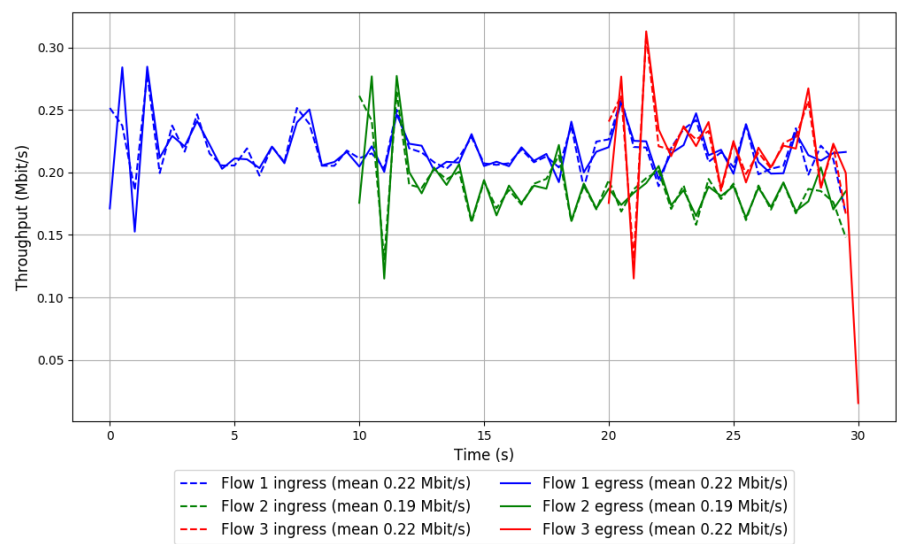
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.057 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link

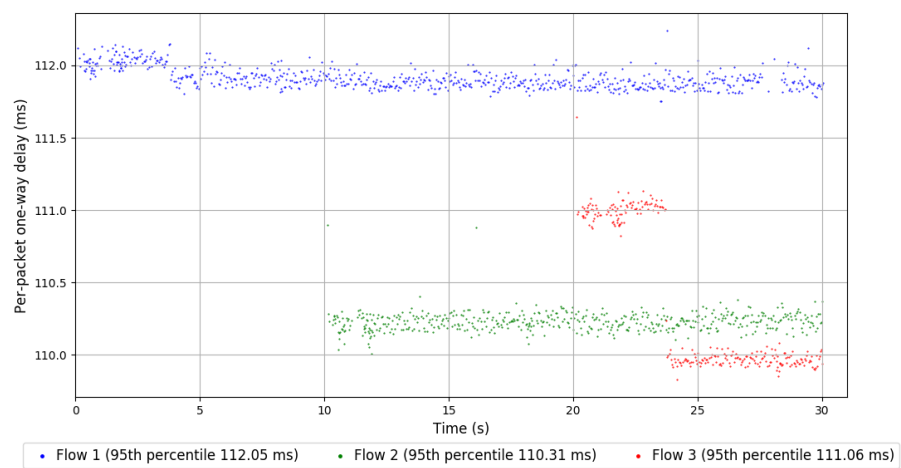
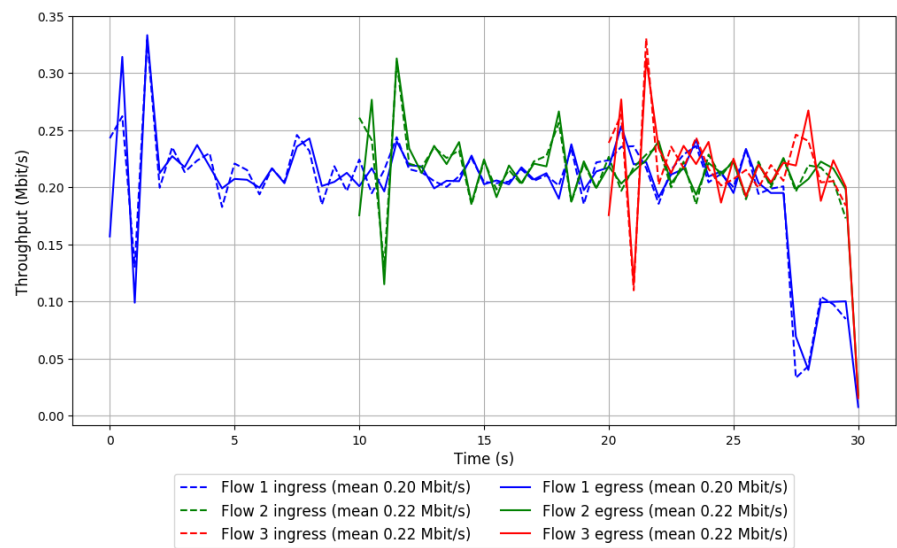


```
Run 9: Statistics of SCReAM

Start at: 2018-01-31 12:29:51
End at: 2018-01-31 12:30:21

# Below is generated by plot.py at 2018-01-31 14:33:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 112.021 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 112.052 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.313 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.055 ms
Loss rate: 0.00%
```

Run 9: Report of SReAM — Data Link

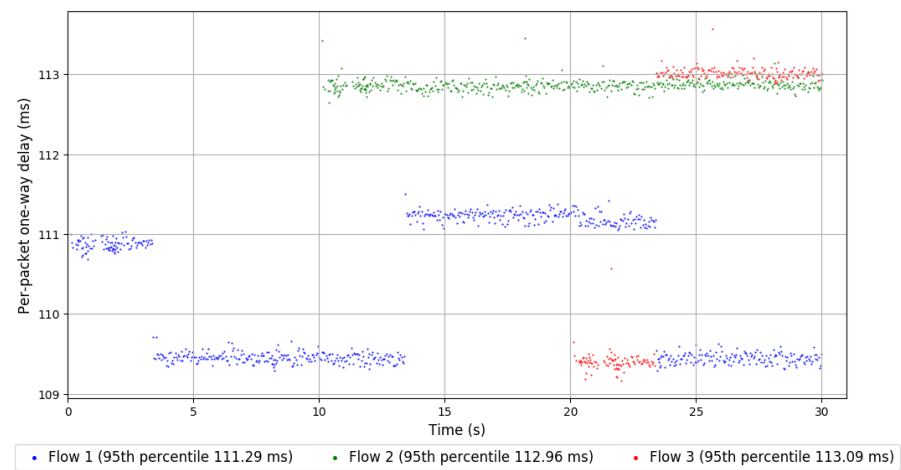
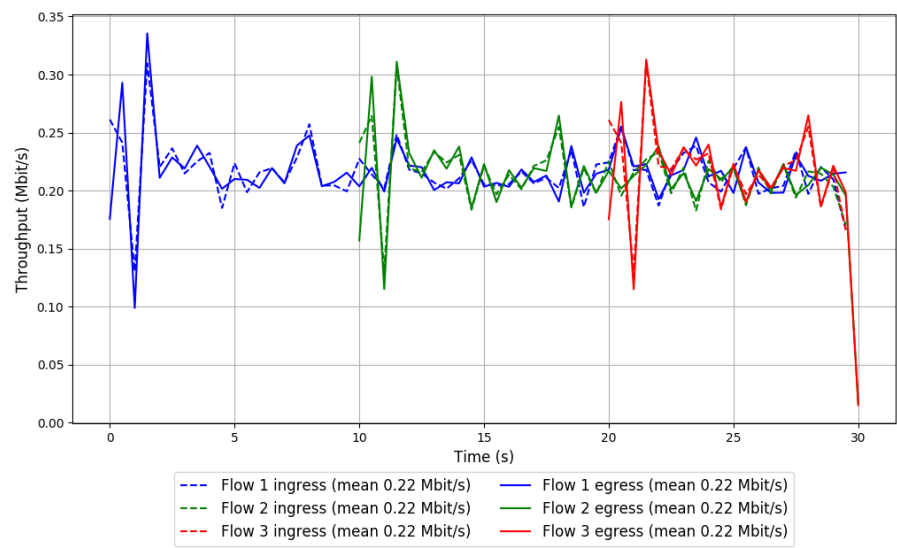


```
Run 10: Statistics of SReAM

Start at: 2018-01-31 12:48:12
End at: 2018-01-31 12:48:42

# Below is generated by plot.py at 2018-01-31 14:33:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.022 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.287 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.959 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.087 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

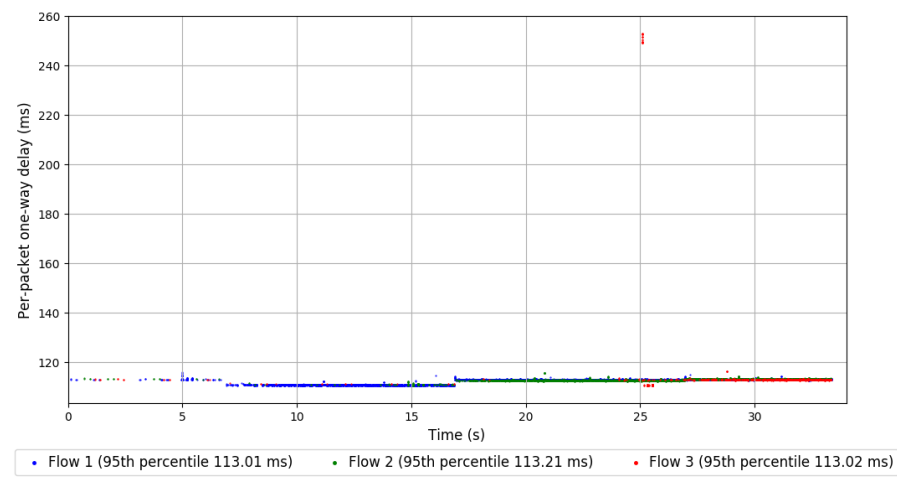
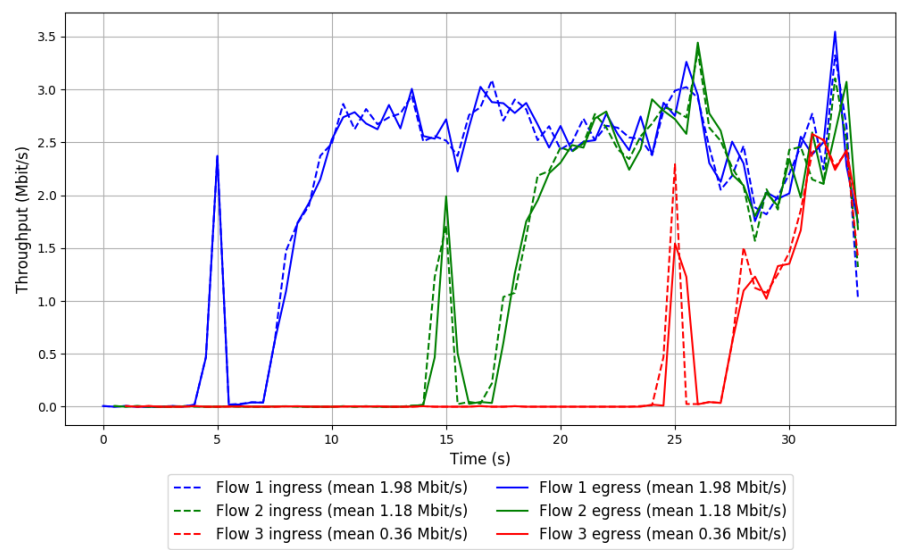


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-31 10:16:41
End at: 2018-01-31 10:17:11

# Below is generated by plot.py at 2018-01-31 14:33:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.48 Mbit/s
95th percentile per-packet one-way delay: 113.133 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 113.008 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 113.206 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 113.019 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link

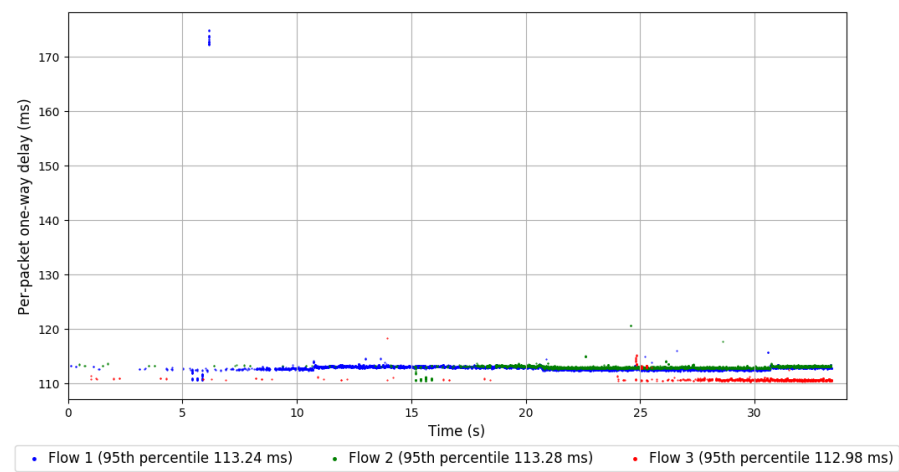
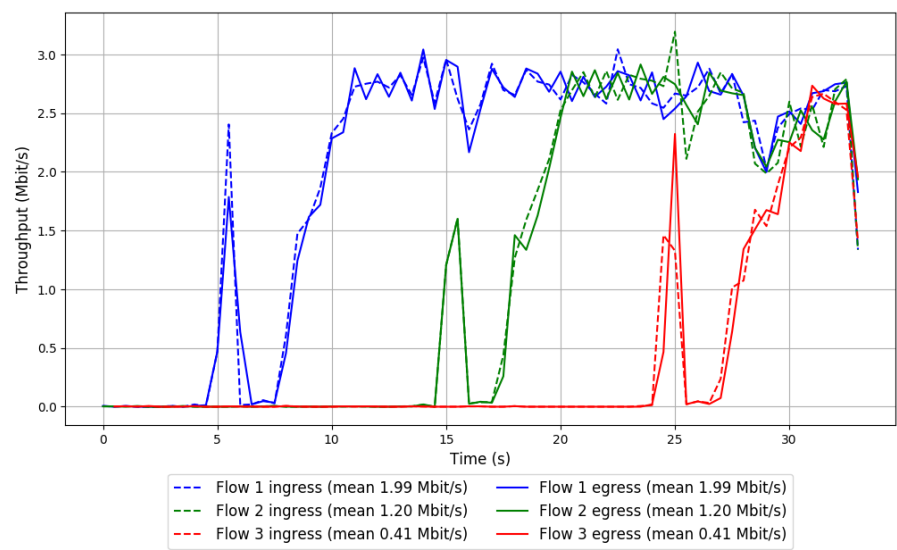


```
Run 2: Statistics of WebRTC media

Start at: 2018-01-31 10:34:18
End at: 2018-01-31 10:34:48

# Below is generated by plot.py at 2018-01-31 14:33:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.58 Mbit/s
95th percentile per-packet one-way delay: 113.252 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 113.243 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 113.278 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 112.981 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-31 10:51:58

End at: 2018-01-31 10:52:28

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.57 Mbit/s

95th percentile per-packet one-way delay: 112.899 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 112.027 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.18 Mbit/s

95th percentile per-packet one-way delay: 111.173 ms

Loss rate: 0.00%

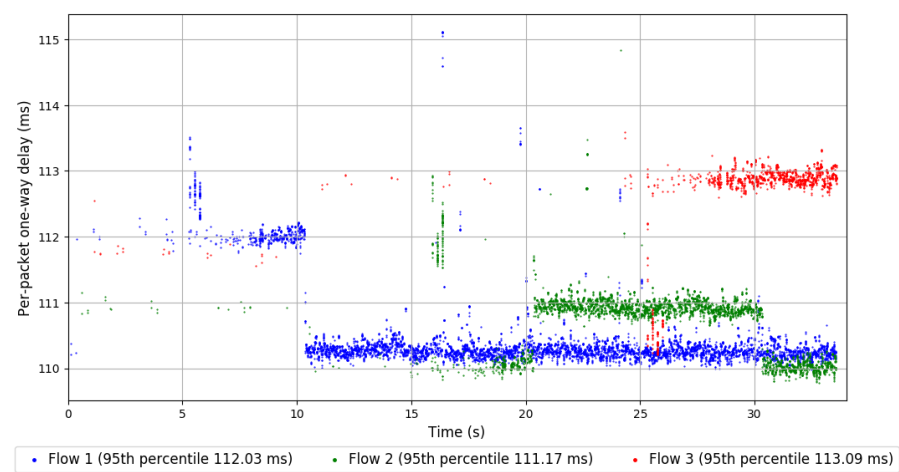
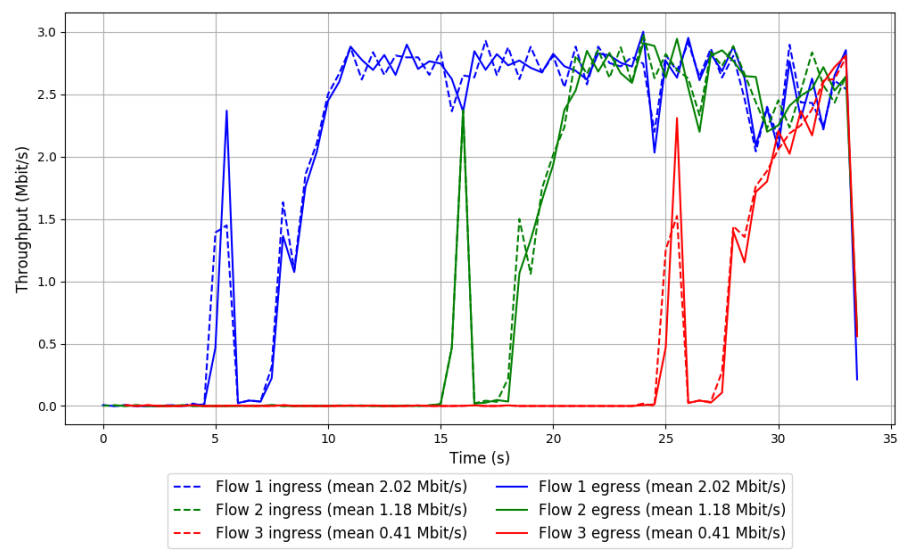
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 113.088 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-31 11:09:37

End at: 2018-01-31 11:10:07

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.70 Mbit/s

95th percentile per-packet one-way delay: 114.874 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 114.911 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 111.143 ms

Loss rate: 0.00%

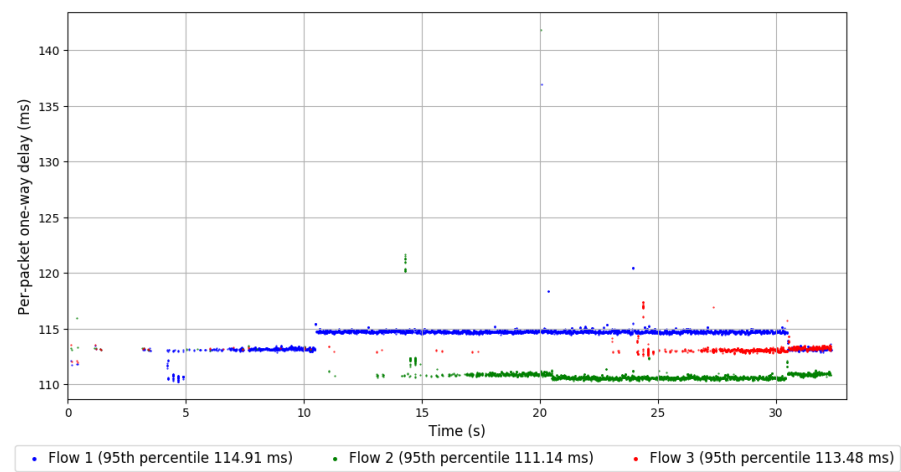
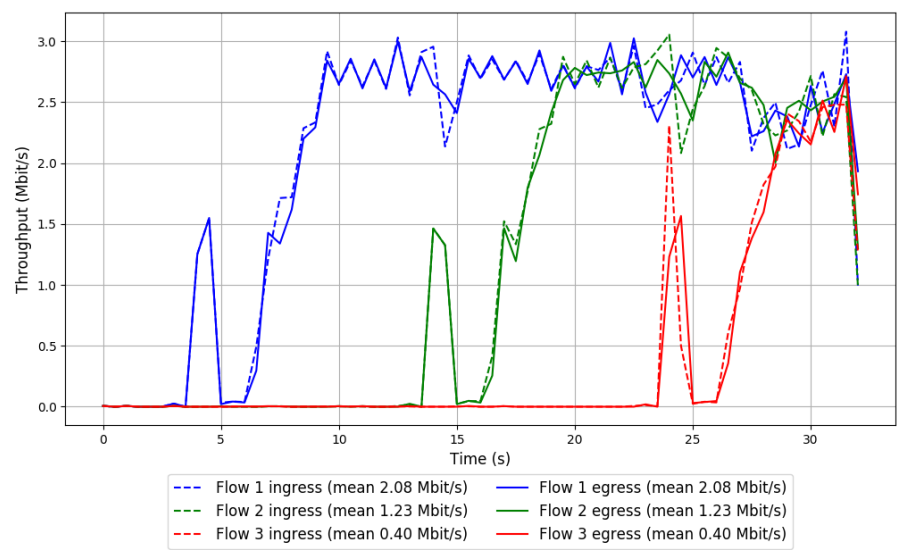
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 113.478 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-31 11:27:23

End at: 2018-01-31 11:27:53

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 113.020 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 112.837 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 113.061 ms

Loss rate: 0.00%

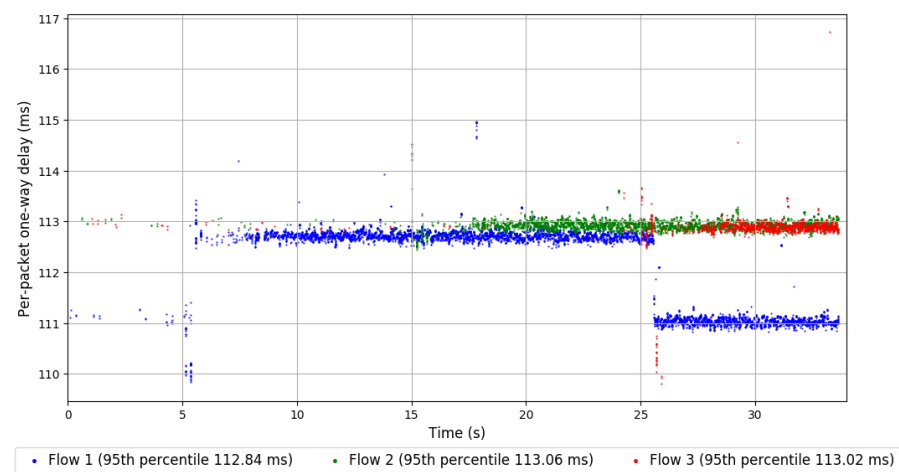
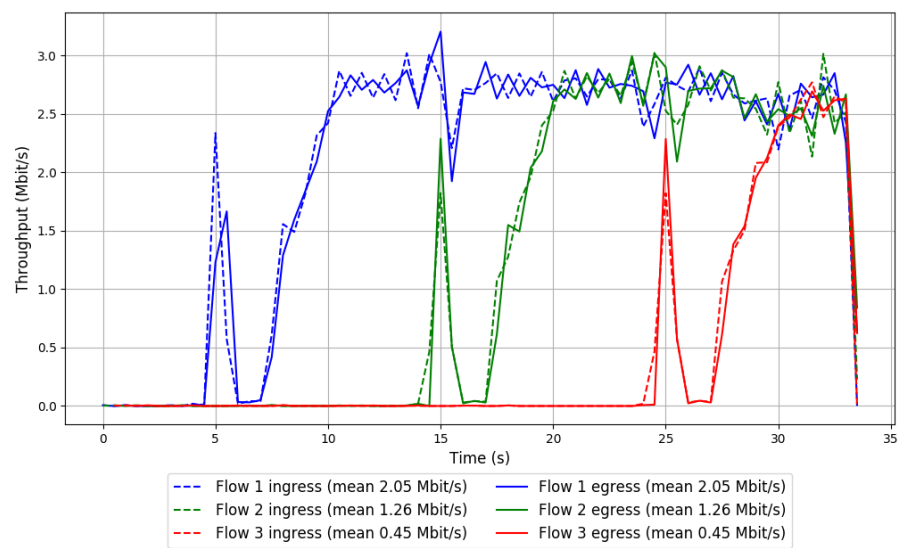
-- Flow 3:

Average throughput: 0.45 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-31 11:44:59

End at: 2018-01-31 11:45:29

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.73 Mbit/s

95th percentile per-packet one-way delay: 112.886 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 110.158 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

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

Loss rate: 0.00%

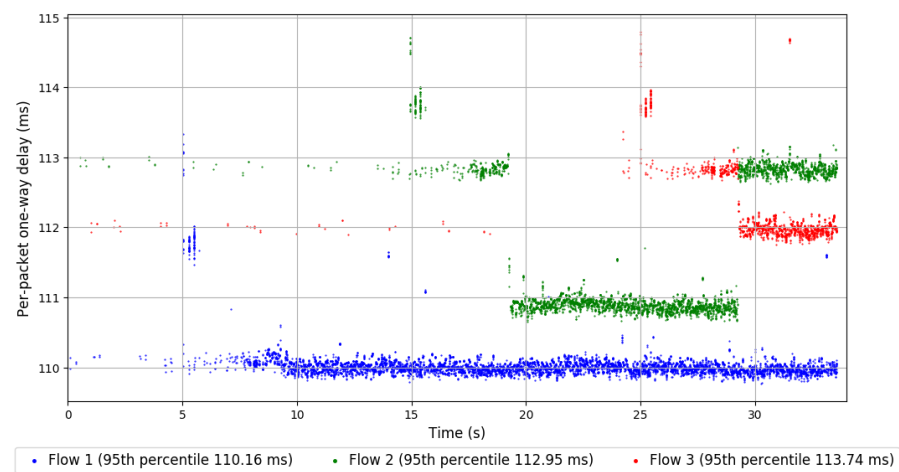
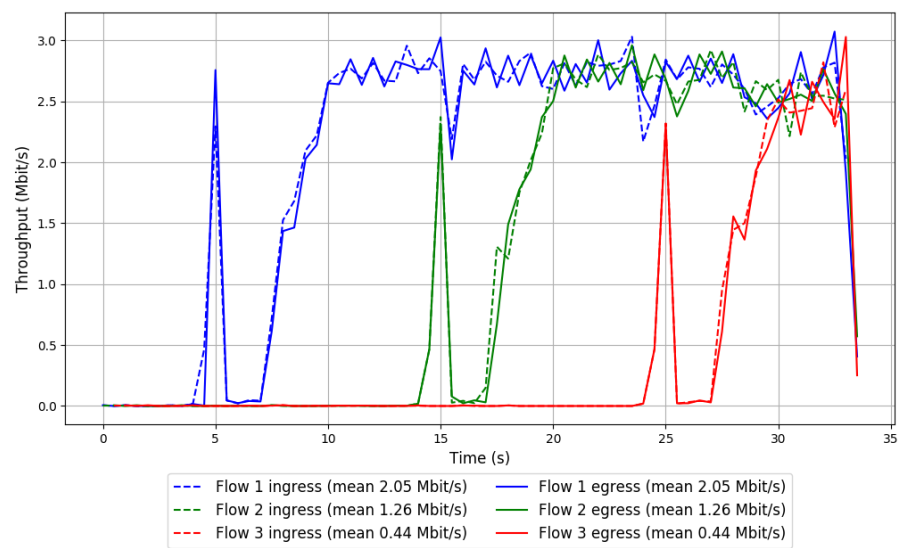
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 113.736 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-31 12:02:46

End at: 2018-01-31 12:03:16

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.73 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.05 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 113.141 ms

Loss rate: 0.00%

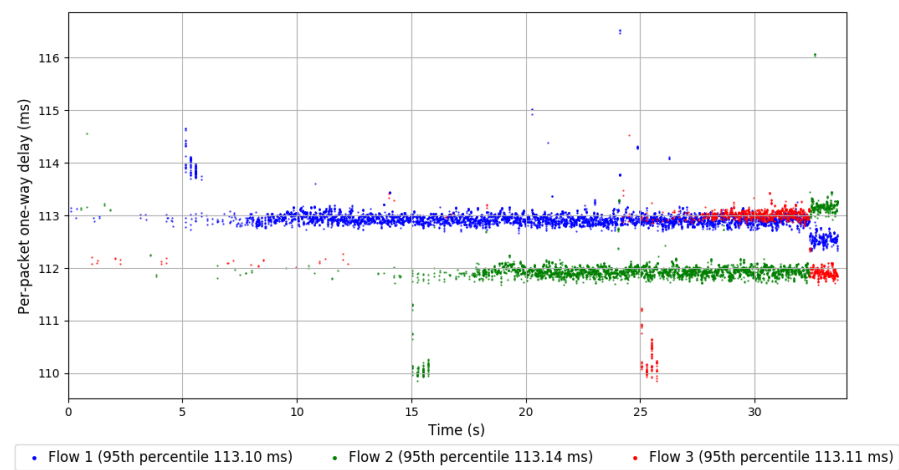
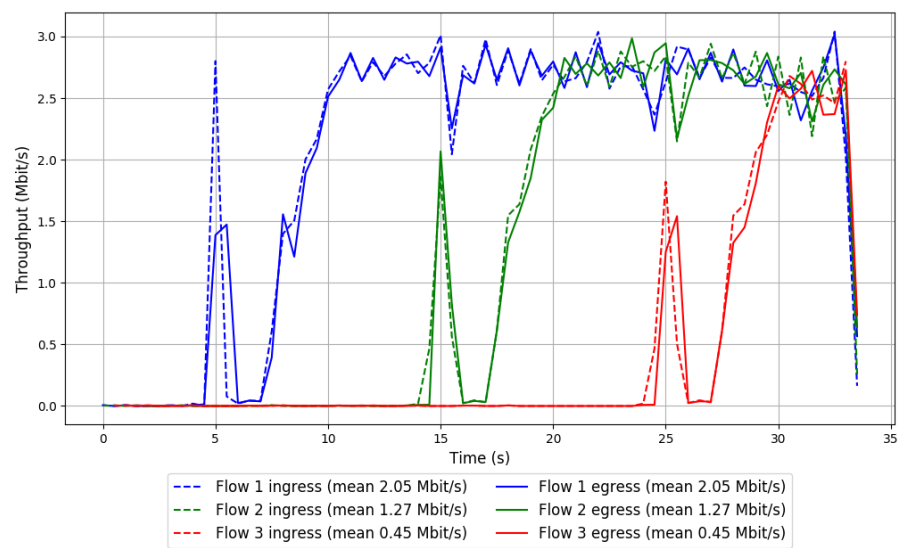
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 113.114 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-31 12:20:53

End at: 2018-01-31 12:21:23

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.30 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.93 Mbit/s

95th percentile per-packet one-way delay: 112.832 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.93 Mbit/s

95th percentile per-packet one-way delay: 110.821 ms

Loss rate: 0.00%

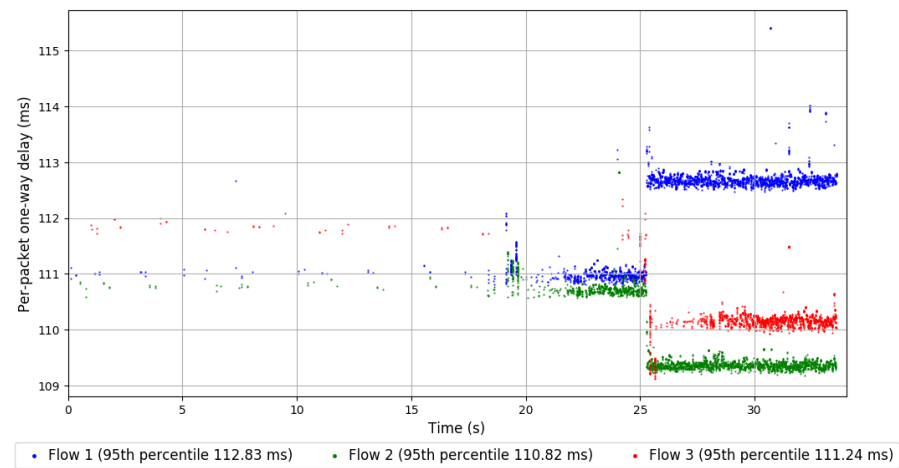
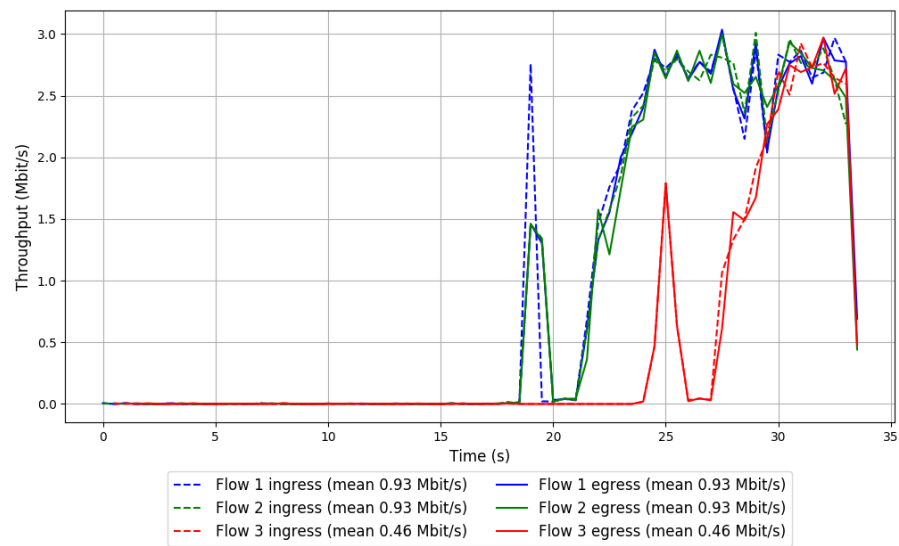
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 111.238 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-31 12:38:37

End at: 2018-01-31 12:39:07

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.74 Mbit/s

95th percentile per-packet one-way delay: 113.246 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.05 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 113.018 ms

Loss rate: 0.02%

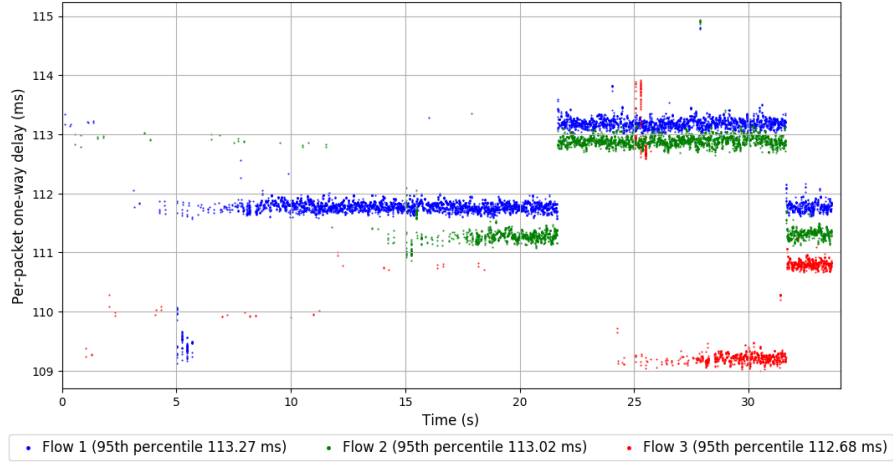
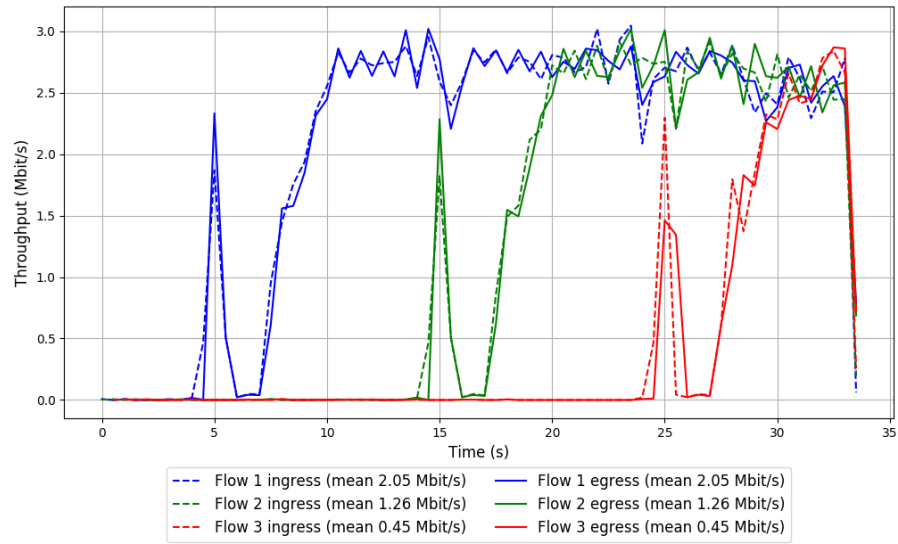
-- Flow 3:

Average throughput: 0.45 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link

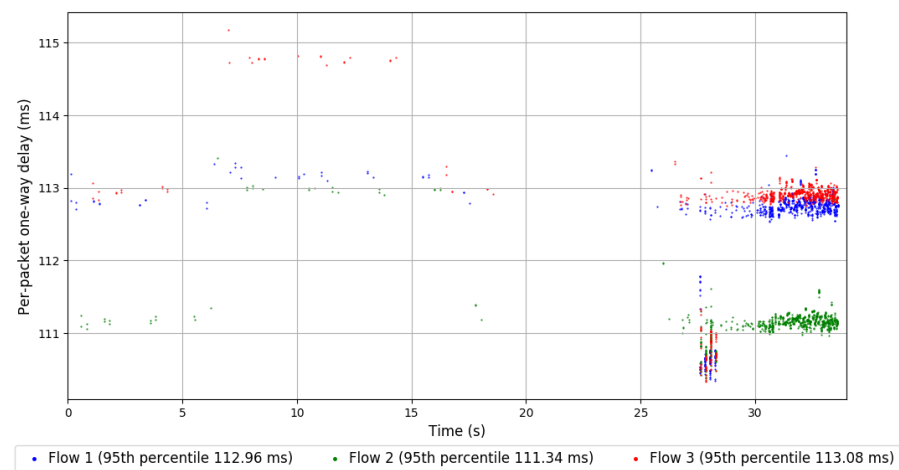
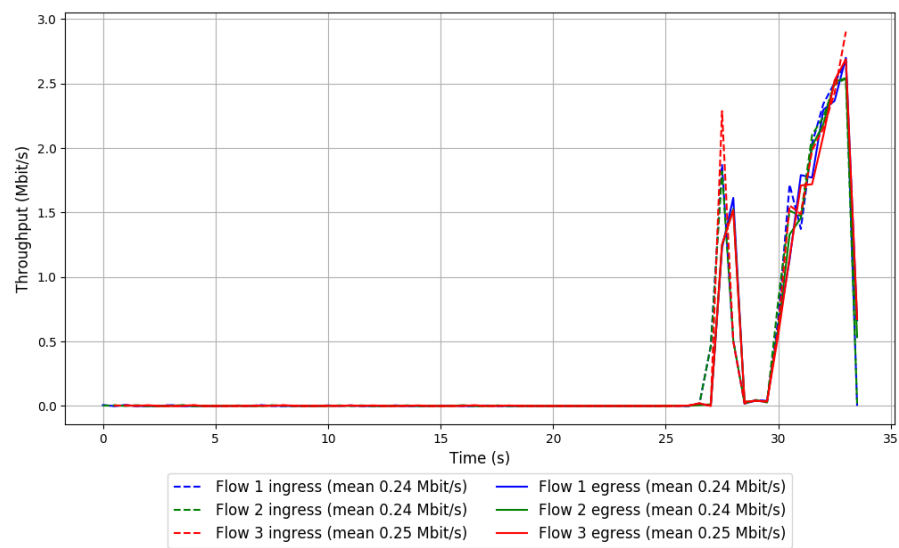


```
Run 10: Statistics of WebRTC media

Start at: 2018-01-31 12:57:02
End at: 2018-01-31 12:57:32

# Below is generated by plot.py at 2018-01-31 14:33:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 113.012 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 112.959 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 111.341 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 113.085 ms
Loss rate: 0.00%
```

Run 10: Report of WebRTC media — Data Link

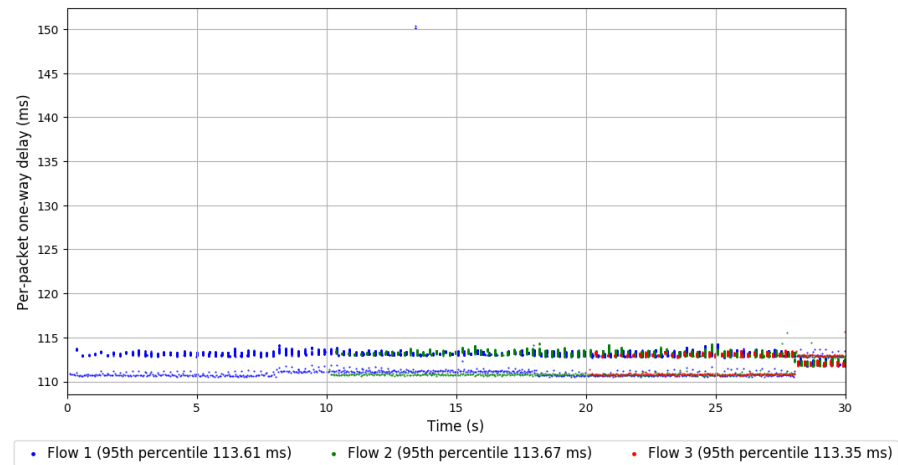
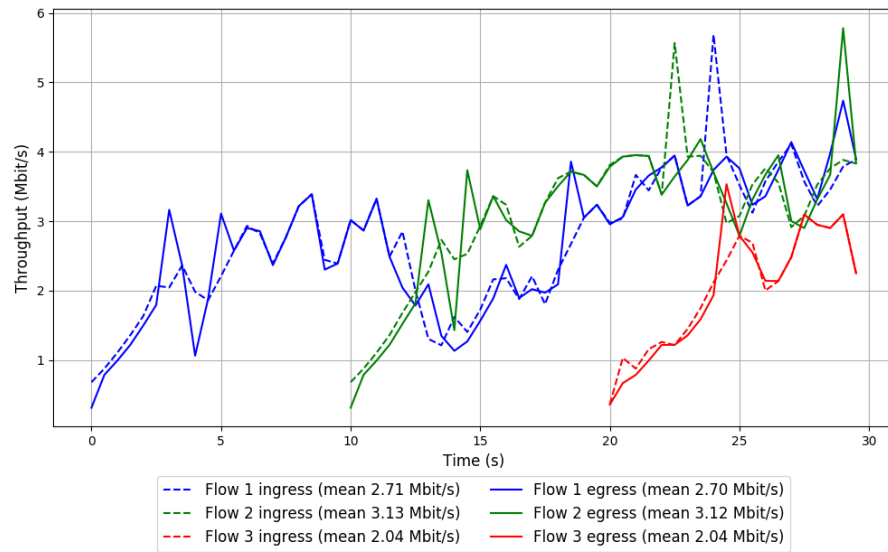


```
Run 1: Statistics of Sprout

Start at: 2018-01-31 10:10:47
End at: 2018-01-31 10:11:17

# Below is generated by plot.py at 2018-01-31 14:33:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.45 Mbit/s
95th percentile per-packet one-way delay: 113.623 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 2.70 Mbit/s
95th percentile per-packet one-way delay: 113.607 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 3.12 Mbit/s
95th percentile per-packet one-way delay: 113.667 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 113.354 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-31 10:28:15

End at: 2018-01-31 10:28:45

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.91 Mbit/s

95th percentile per-packet one-way delay: 113.736 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 113.998 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.62 Mbit/s

95th percentile per-packet one-way delay: 113.395 ms

Loss rate: 0.00%

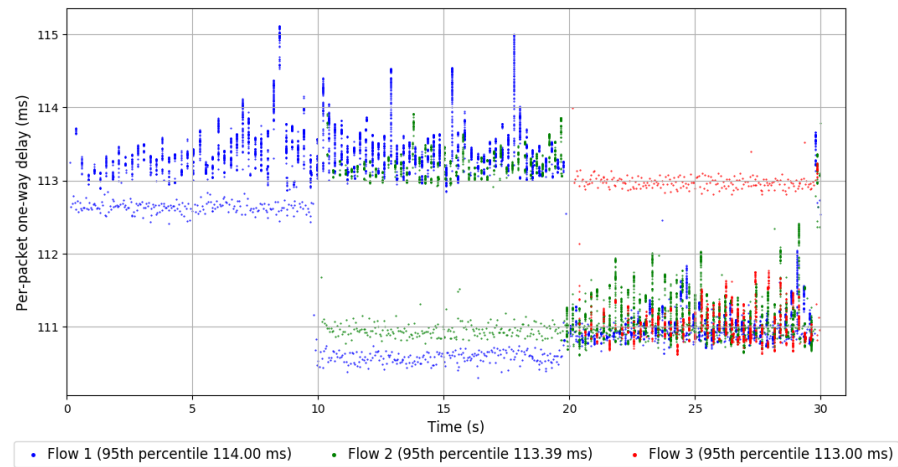
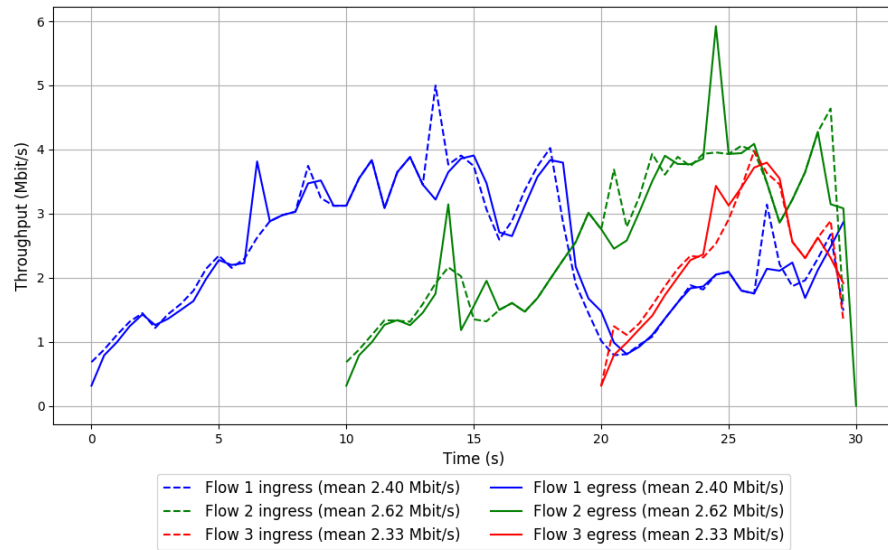
-- Flow 3:

Average throughput: 2.33 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-31 10:46:11

End at: 2018-01-31 10:46:41

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.85 Mbit/s

95th percentile per-packet one-way delay: 112.648 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 2.77 Mbit/s

95th percentile per-packet one-way delay: 112.784 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 112.511 ms

Loss rate: 0.30%

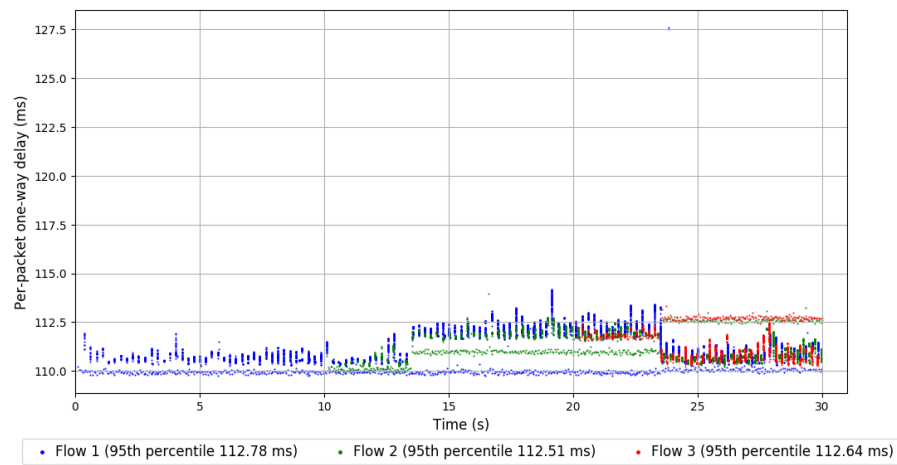
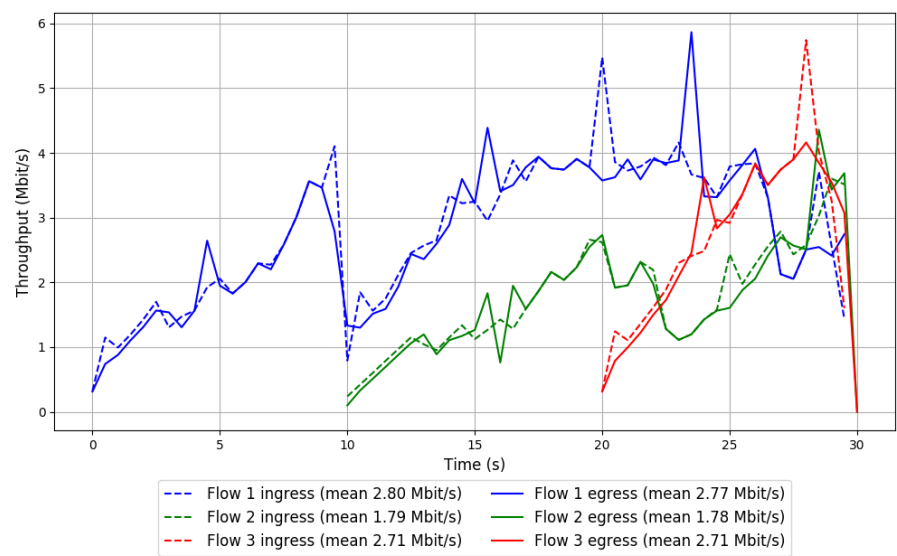
-- Flow 3:

Average throughput: 2.71 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-31 11:03:33

End at: 2018-01-31 11:04:03

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.22 Mbit/s

95th percentile per-packet one-way delay: 112.807 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 2.73 Mbit/s

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

Loss rate: 0.52%

-- Flow 2:

Average throughput: 2.79 Mbit/s

95th percentile per-packet one-way delay: 113.068 ms

Loss rate: 0.19%

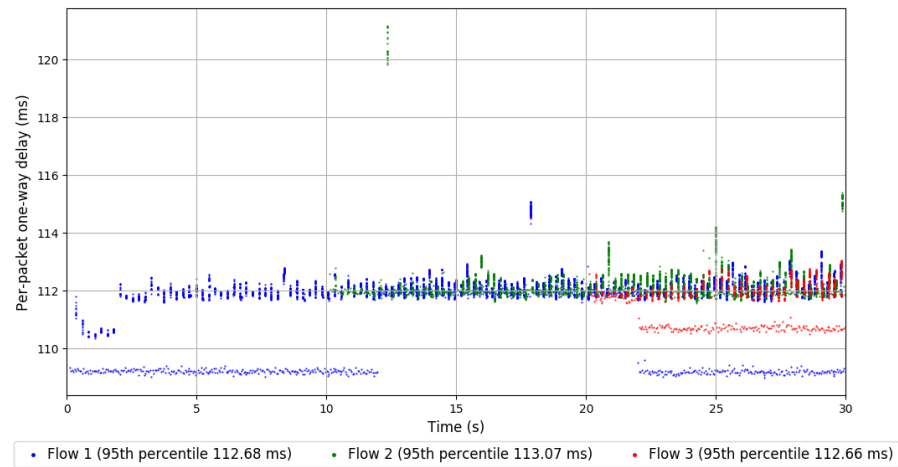
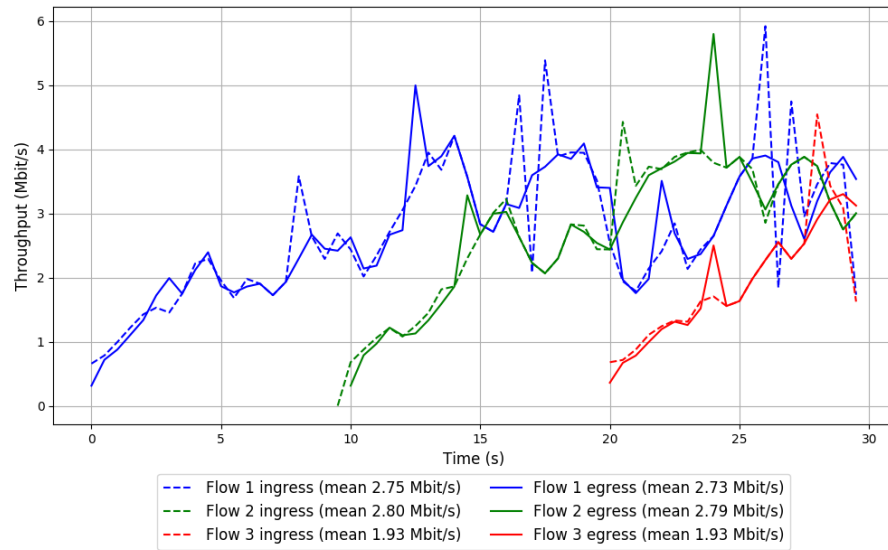
-- Flow 3:

Average throughput: 1.93 Mbit/s

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

Loss rate: 0.37%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-31 11:21:27

End at: 2018-01-31 11:21:57

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.41 Mbit/s

95th percentile per-packet one-way delay: 113.737 ms

Loss rate: 1.43%

-- Flow 1:

Average throughput: 2.48 Mbit/s

95th percentile per-packet one-way delay: 113.778 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 1.67 Mbit/s

95th percentile per-packet one-way delay: 113.670 ms

Loss rate: 2.23%

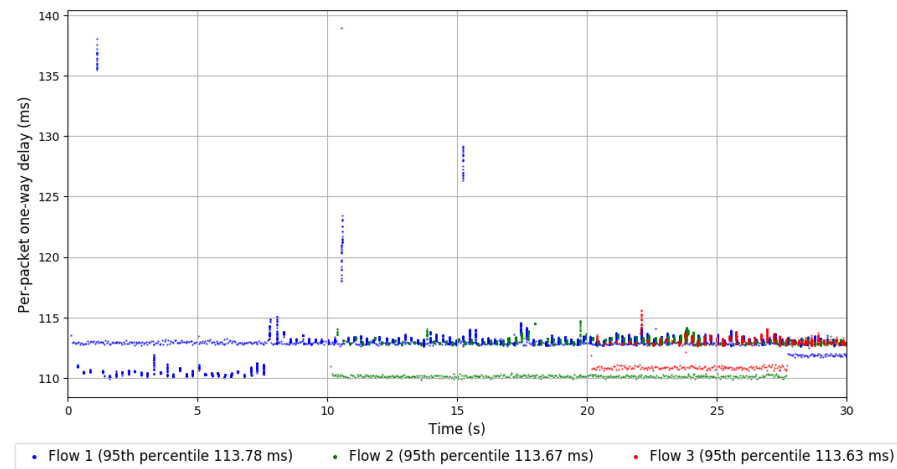
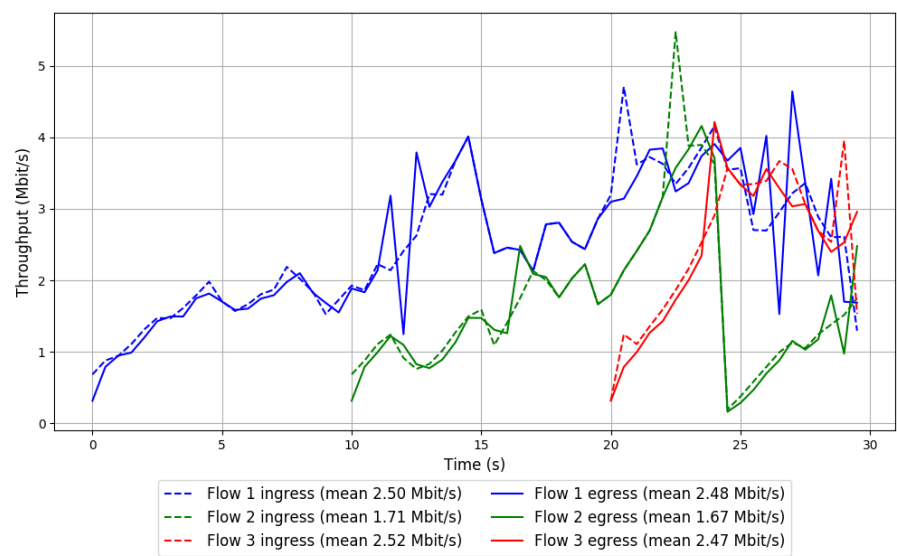
-- Flow 3:

Average throughput: 2.47 Mbit/s

95th percentile per-packet one-way delay: 113.628 ms

Loss rate: 2.10%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-31 11:39:07

End at: 2018-01-31 11:39:37

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.34 Mbit/s

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

Loss rate: 0.46%

-- Flow 1:

Average throughput: 1.85 Mbit/s

95th percentile per-packet one-way delay: 113.464 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 113.348 ms

Loss rate: 0.35%

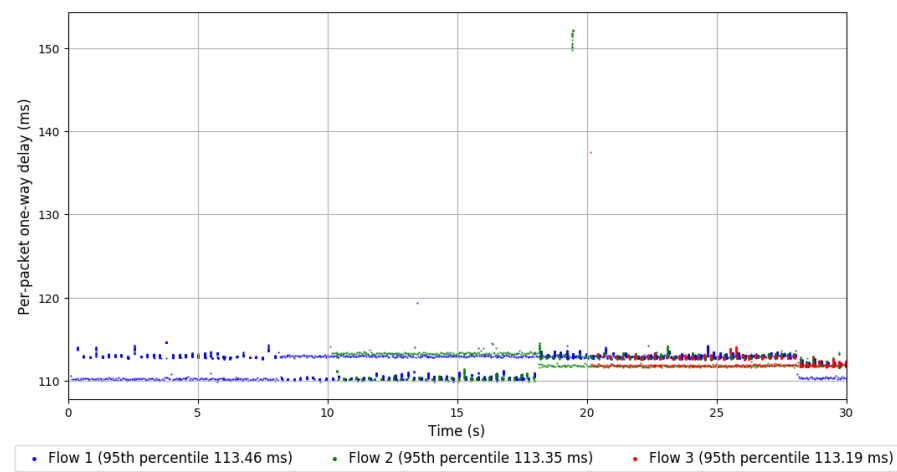
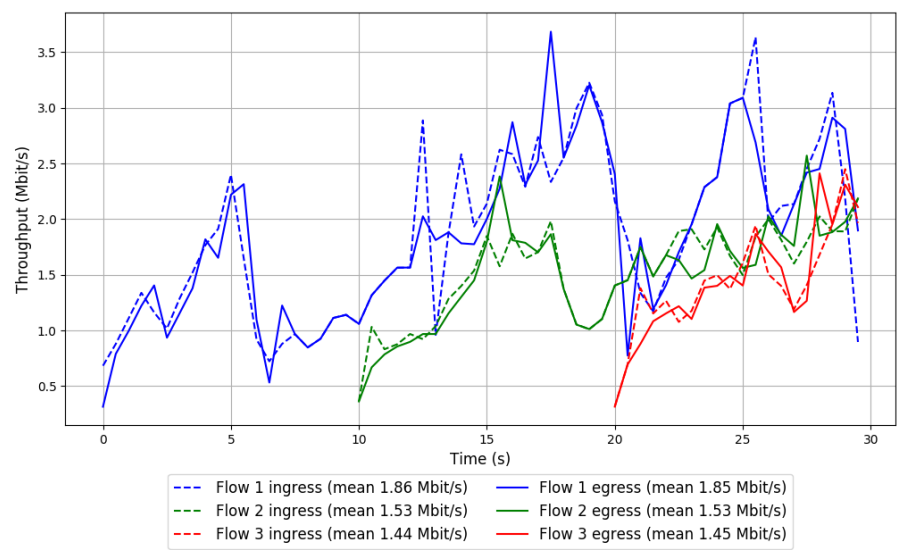
-- Flow 3:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 113.191 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-31 11:56:38

End at: 2018-01-31 11:57:08

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 114.350 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 1.75 Mbit/s

95th percentile per-packet one-way delay: 114.414 ms

Loss rate: 1.89%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 114.093 ms

Loss rate: 0.00%

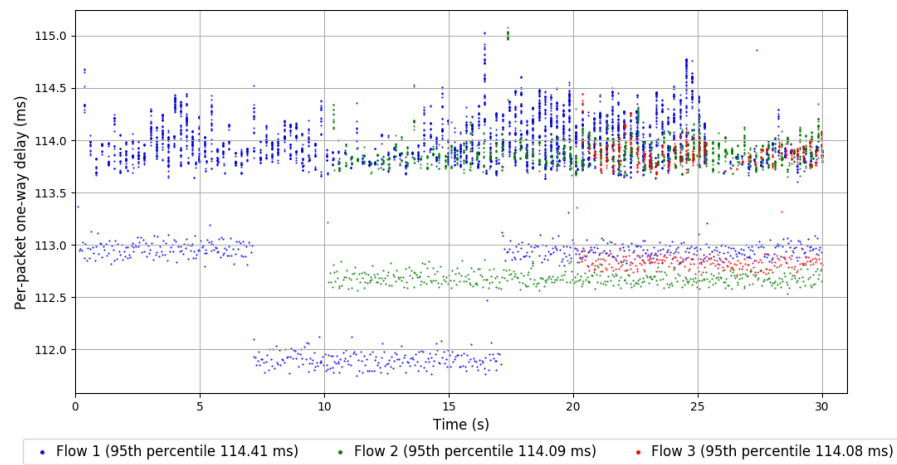
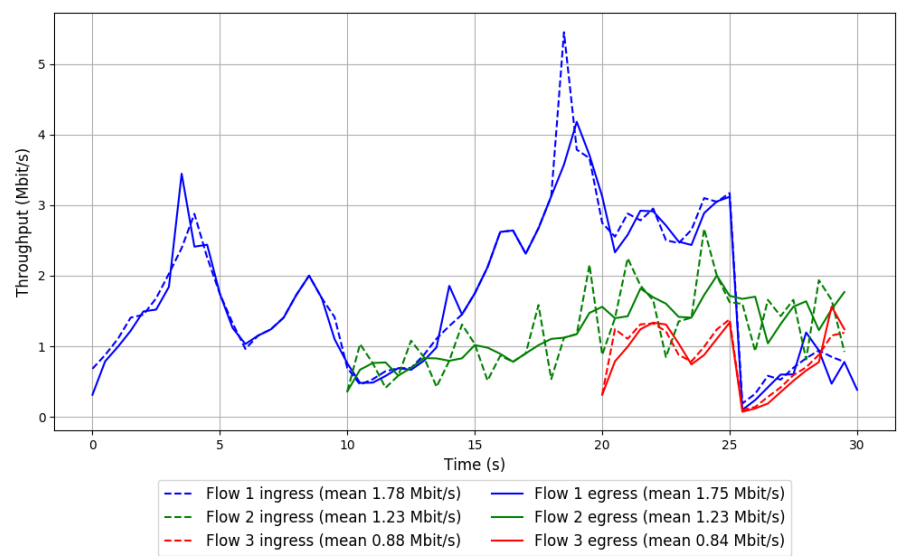
-- Flow 3:

Average throughput: 0.84 Mbit/s

95th percentile per-packet one-way delay: 114.079 ms

Loss rate: 3.98%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-31 12:14:45

End at: 2018-01-31 12:15:15

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.46 Mbit/s

95th percentile per-packet one-way delay: 112.643 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 2.84 Mbit/s

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

Loss rate: 0.28%

-- Flow 2:

Average throughput: 2.87 Mbit/s

95th percentile per-packet one-way delay: 112.657 ms

Loss rate: 0.00%

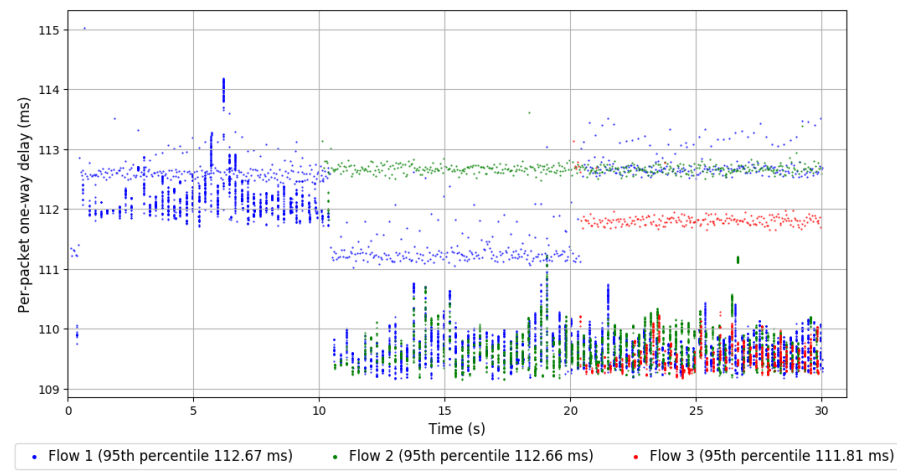
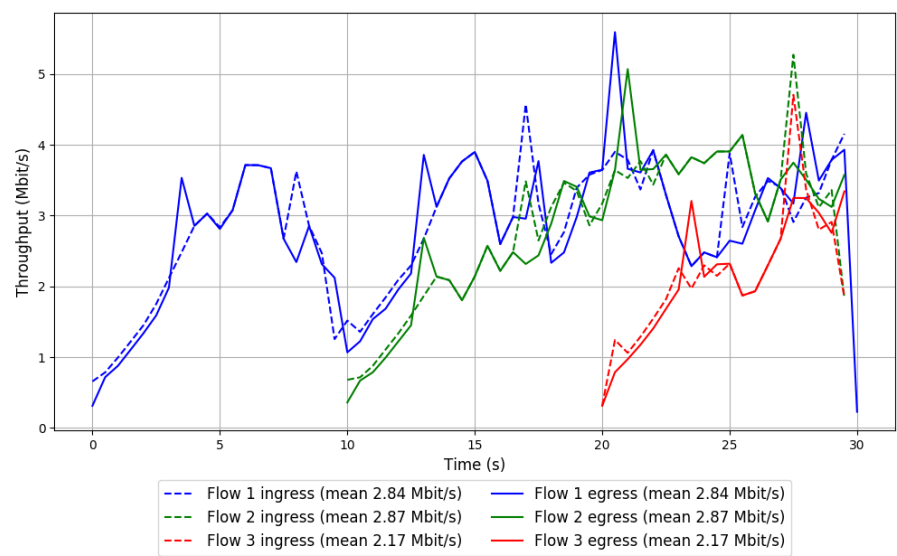
-- Flow 3:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 111.815 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-31 12:32:37

End at: 2018-01-31 12:33:07

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.54 Mbit/s

95th percentile per-packet one-way delay: 113.391 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 2.32 Mbit/s

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

Loss rate: 0.07%

-- Flow 2:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 113.430 ms

Loss rate: 0.00%

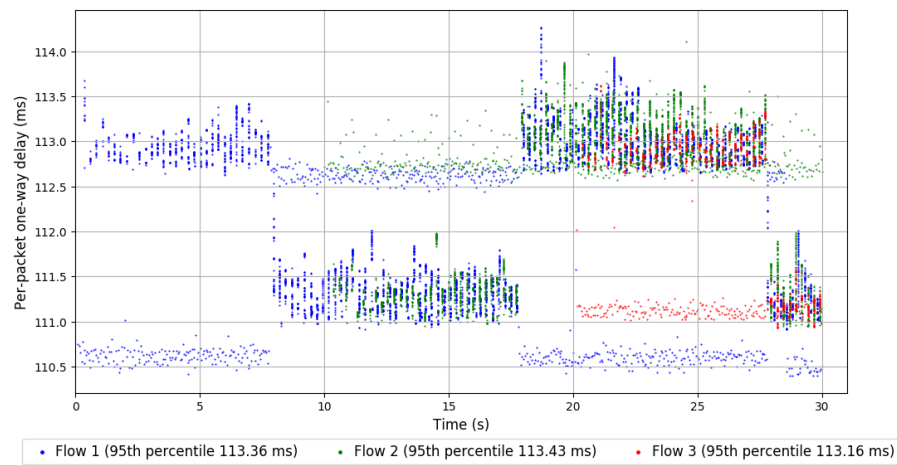
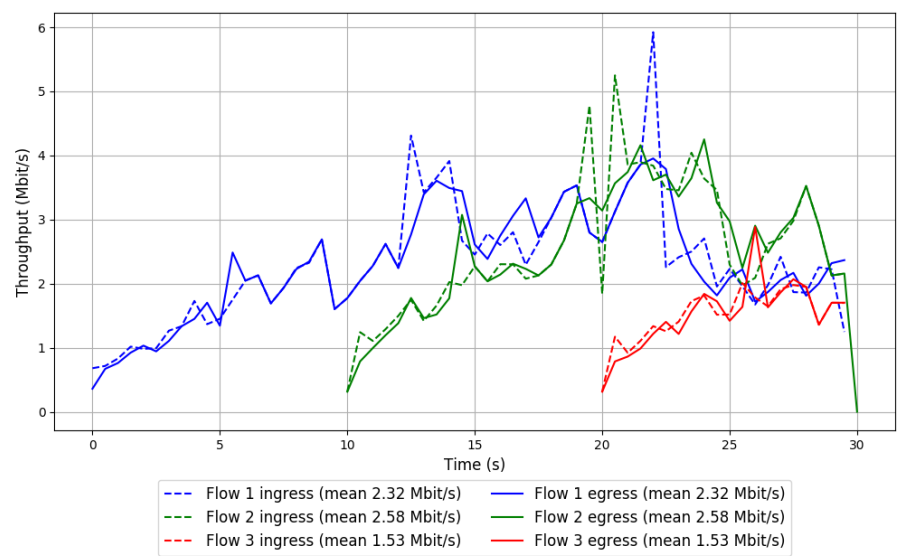
-- Flow 3:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 113.160 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-31 12:50:53

End at: 2018-01-31 12:51:23

Below is generated by plot.py at 2018-01-31 14:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.33 Mbit/s

95th percentile per-packet one-way delay: 112.098 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 2.73 Mbit/s

95th percentile per-packet one-way delay: 112.382 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 2.76 Mbit/s

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

Loss rate: 0.00%

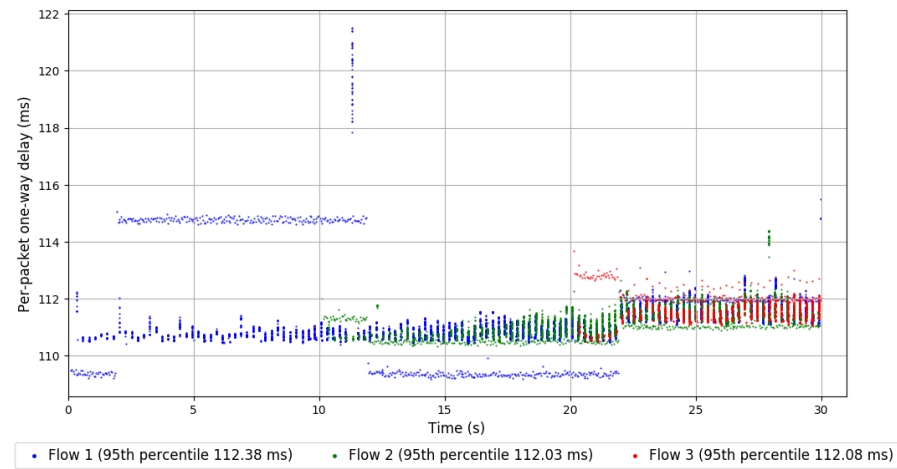
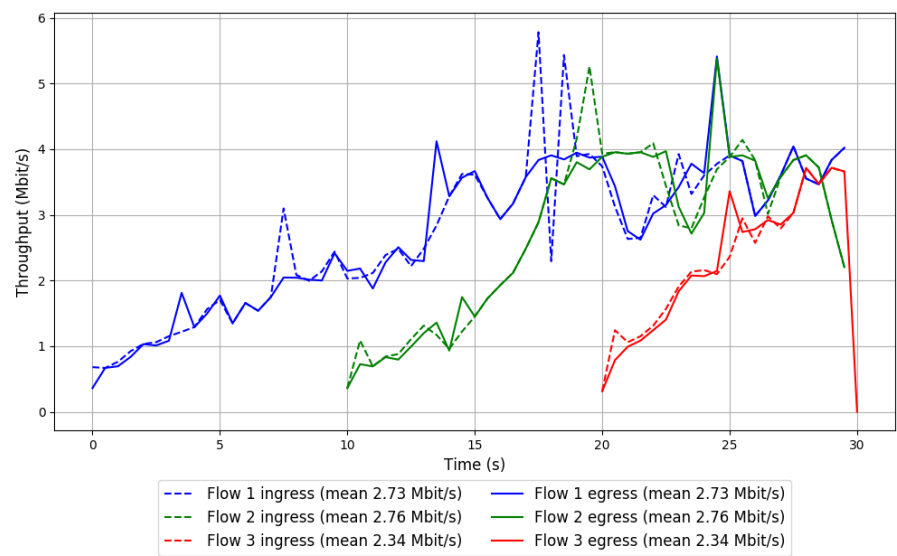
-- Flow 3:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 112.079 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

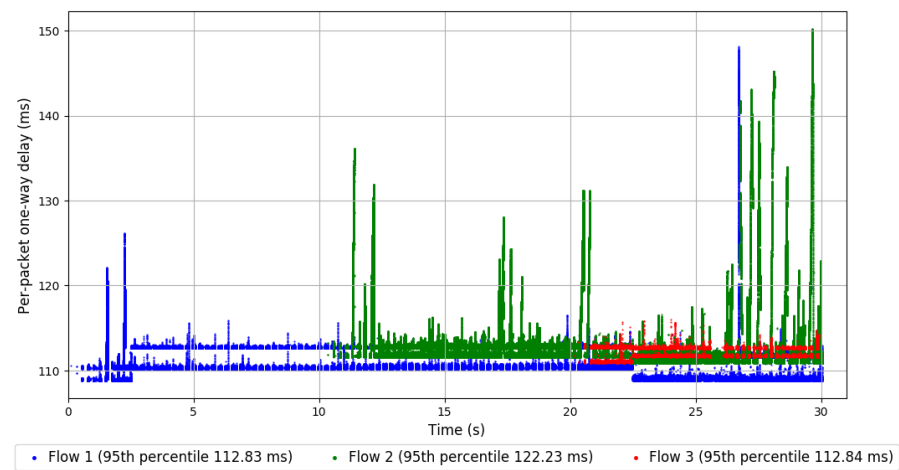
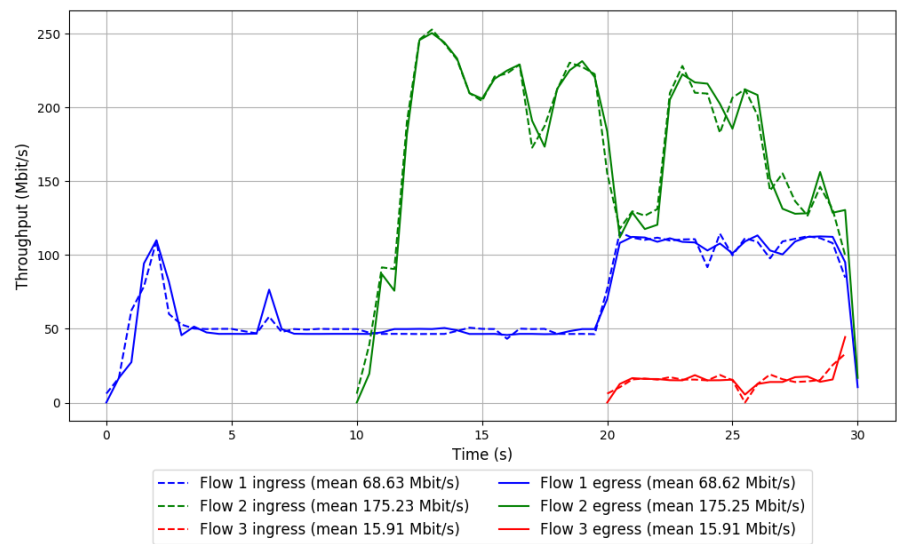


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-31 10:08:52
End at: 2018-01-31 10:09:22

# Below is generated by plot.py at 2018-01-31 14:35:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 190.35 Mbit/s
95th percentile per-packet one-way delay: 118.095 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 68.62 Mbit/s
95th percentile per-packet one-way delay: 112.828 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 175.25 Mbit/s
95th percentile per-packet one-way delay: 122.227 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 15.91 Mbit/s
95th percentile per-packet one-way delay: 112.839 ms
Loss rate: 0.00%
```


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

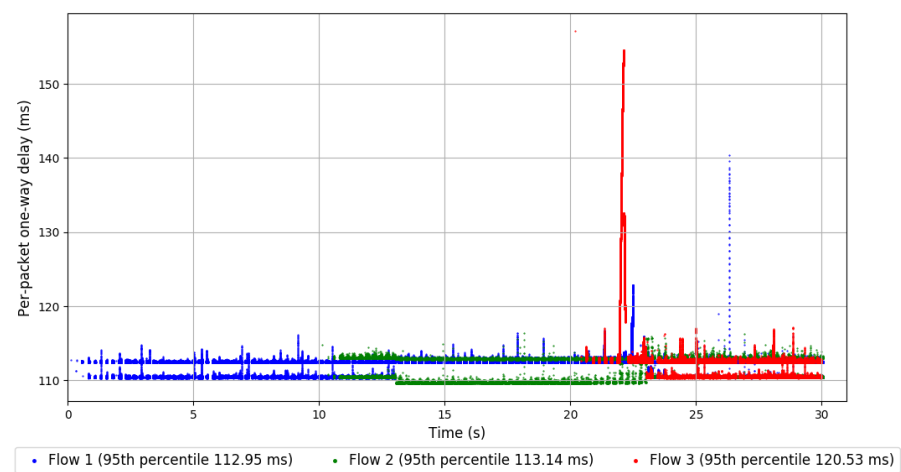
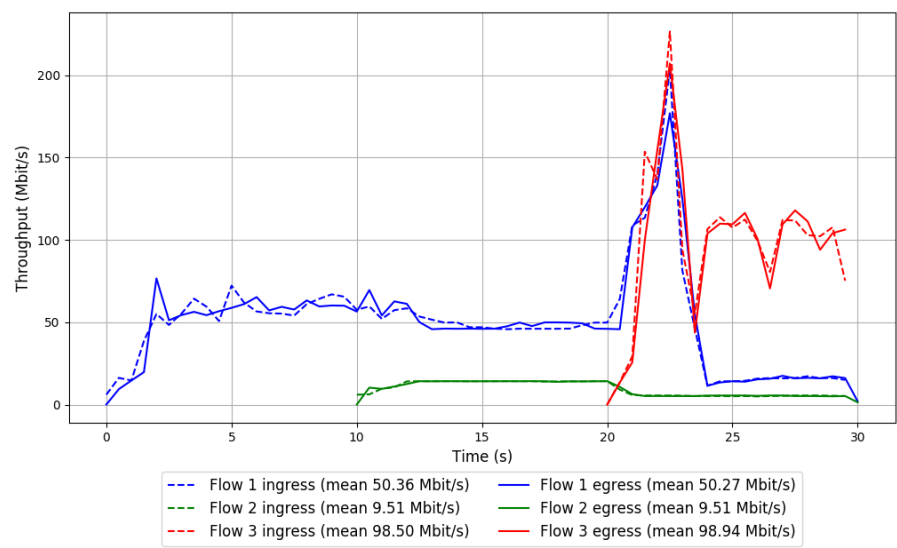


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-31 10:26:32
End at: 2018-01-31 10:27:02

# Below is generated by plot.py at 2018-01-31 14:35:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.02 Mbit/s
95th percentile per-packet one-way delay: 113.077 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 50.27 Mbit/s
95th percentile per-packet one-way delay: 112.951 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 9.51 Mbit/s
95th percentile per-packet one-way delay: 113.139 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 98.94 Mbit/s
95th percentile per-packet one-way delay: 120.535 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-01-31 10:44:13

End at: 2018-01-31 10:44:43

Below is generated by plot.py at 2018-01-31 14:36:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 244.09 Mbit/s

95th percentile per-packet one-way delay: 125.463 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 109.54 Mbit/s

95th percentile per-packet one-way delay: 114.238 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 150.33 Mbit/s

95th percentile per-packet one-way delay: 129.226 ms

Loss rate: 0.02%

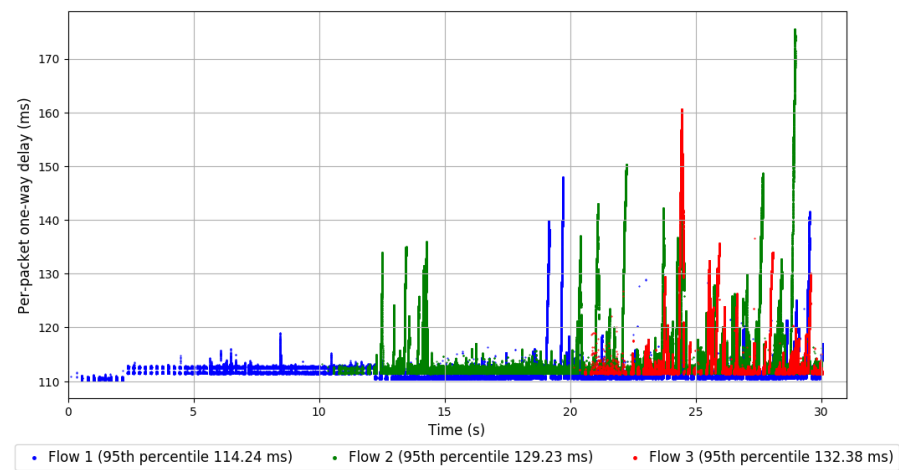
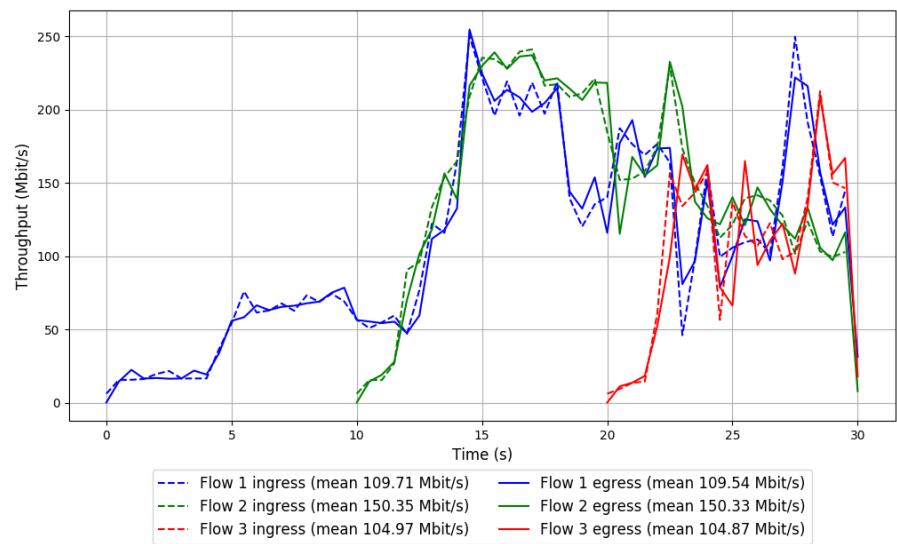
-- Flow 3:

Average throughput: 104.87 Mbit/s

95th percentile per-packet one-way delay: 132.382 ms

Loss rate: 0.11%

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

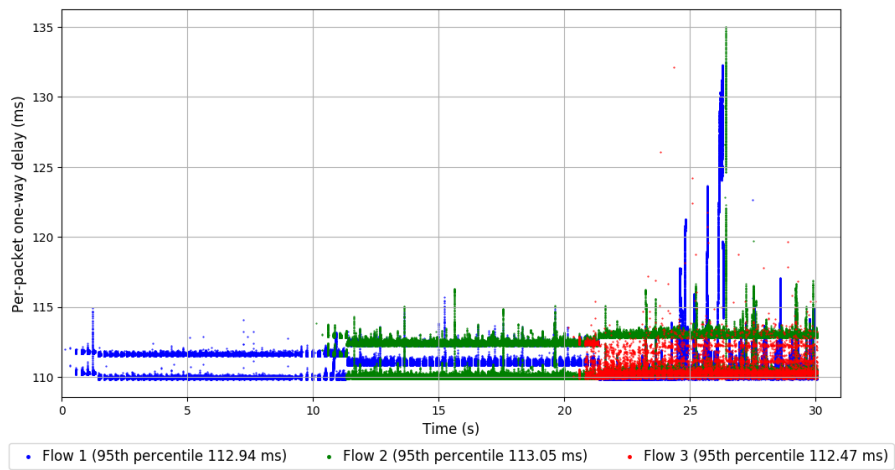
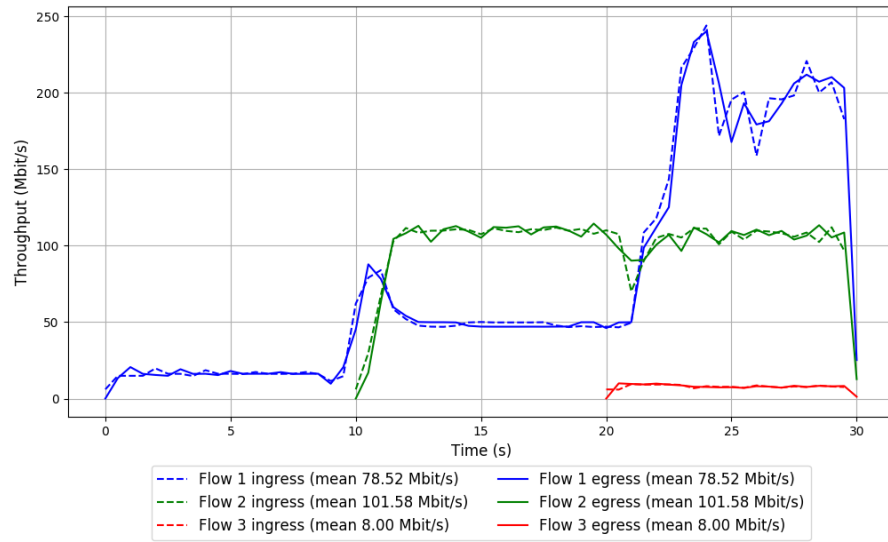


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-01-31 11:01:44
End at: 2018-01-31 11:02:14

# Below is generated by plot.py at 2018-01-31 14:36:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 148.79 Mbit/s
95th percentile per-packet one-way delay: 113.042 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 78.52 Mbit/s
95th percentile per-packet one-way delay: 112.937 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 101.58 Mbit/s
95th percentile per-packet one-way delay: 113.048 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.00 Mbit/s
95th percentile per-packet one-way delay: 112.474 ms
Loss rate: 0.00%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-31 11:19:37

End at: 2018-01-31 11:20:07

Below is generated by plot.py at 2018-01-31 14:36:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 149.82 Mbit/s

95th percentile per-packet one-way delay: 124.630 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 91.76 Mbit/s

95th percentile per-packet one-way delay: 126.559 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 79.47 Mbit/s

95th percentile per-packet one-way delay: 118.798 ms

Loss rate: 0.02%

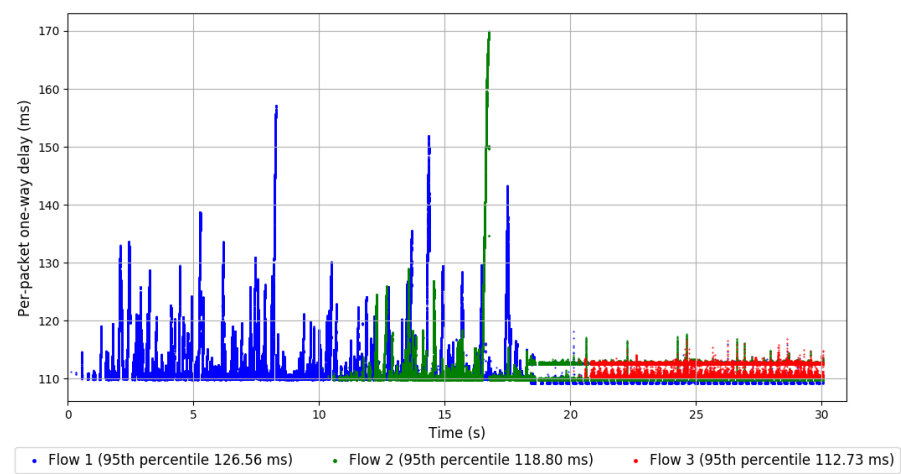
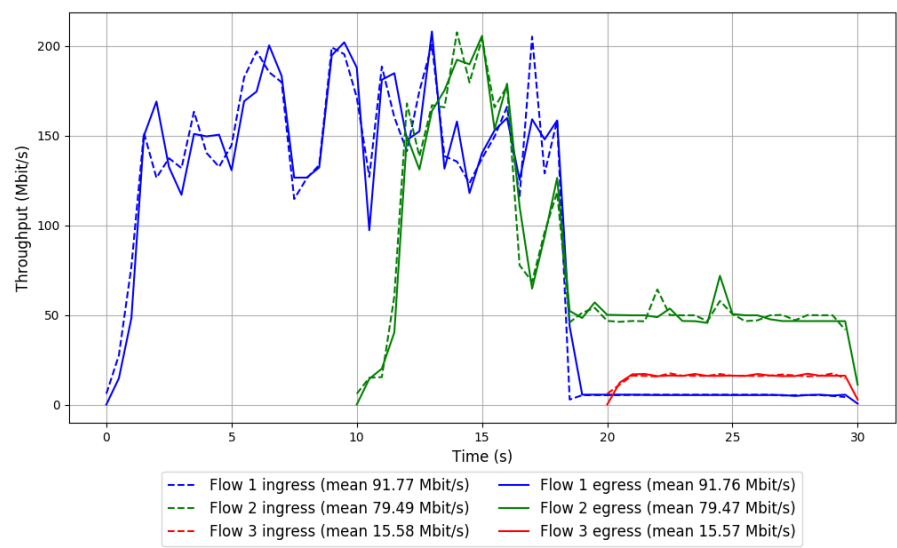
-- Flow 3:

Average throughput: 15.57 Mbit/s

95th percentile per-packet one-way delay: 112.730 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-31 11:37:30

End at: 2018-01-31 11:38:00

Below is generated by plot.py at 2018-01-31 14:36:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 37.76 Mbit/s

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

Loss rate: 0.12%

-- Flow 1:

Average throughput: 15.14 Mbit/s

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

Loss rate: 0.20%

-- Flow 2:

Average throughput: 27.09 Mbit/s

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

Loss rate: 0.00%

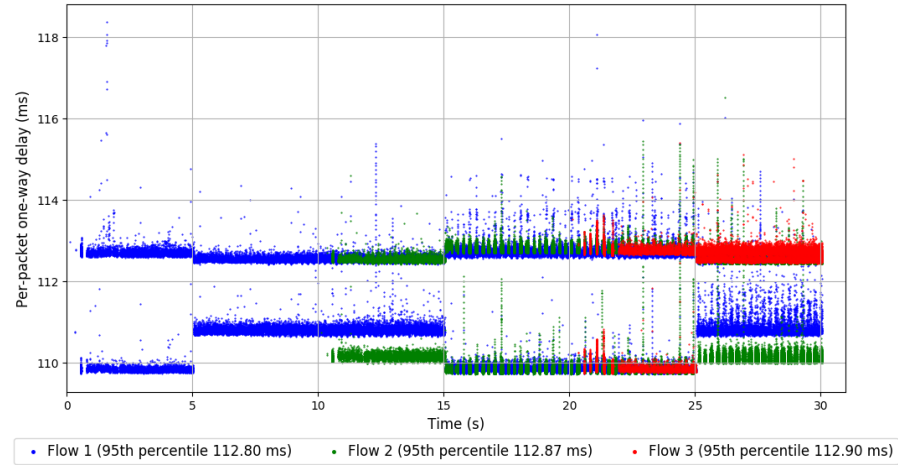
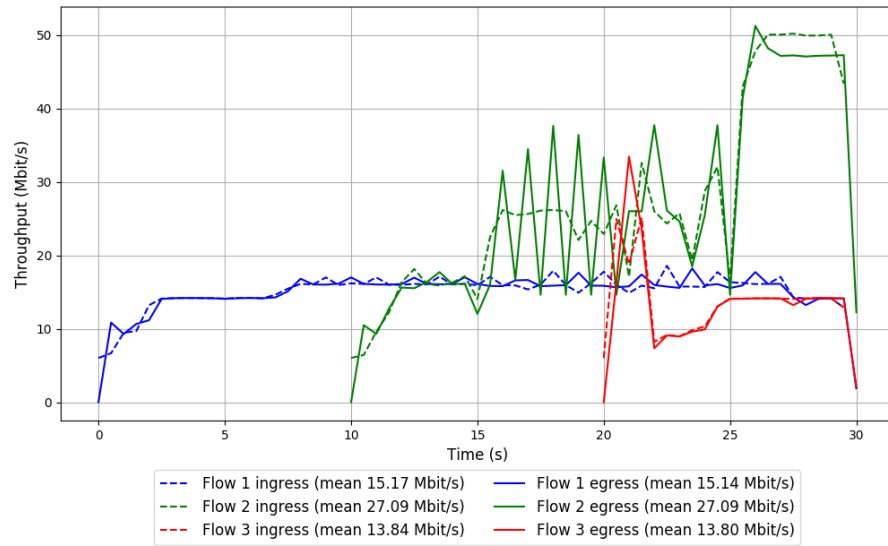
-- Flow 3:

Average throughput: 13.80 Mbit/s

95th percentile per-packet one-way delay: 112.896 ms

Loss rate: 0.32%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-31 11:54:54

End at: 2018-01-31 11:55:24

Below is generated by plot.py at 2018-01-31 14:36:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.02 Mbit/s

95th percentile per-packet one-way delay: 113.777 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 24.70 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 86.81 Mbit/s

95th percentile per-packet one-way delay: 113.835 ms

Loss rate: 0.02%

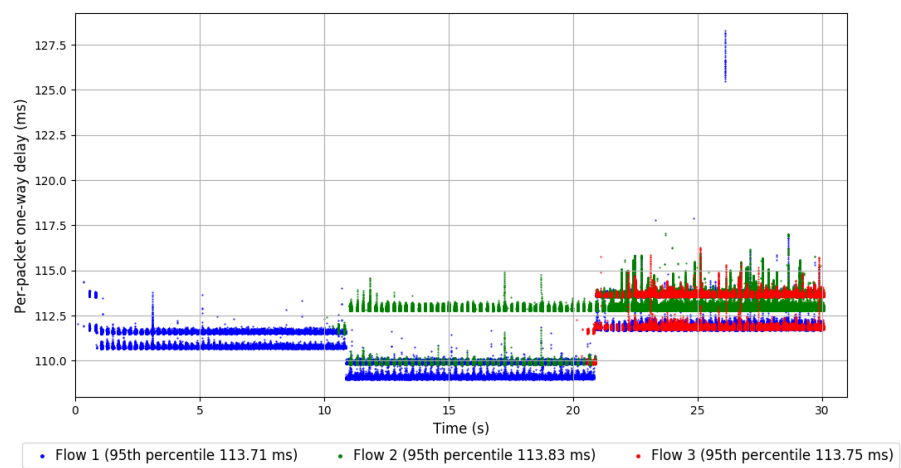
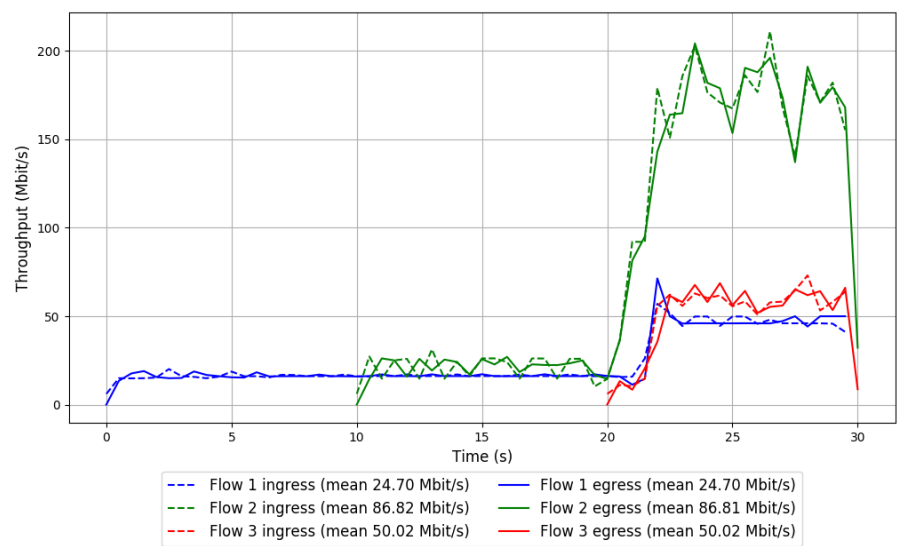
-- Flow 3:

Average throughput: 50.02 Mbit/s

95th percentile per-packet one-way delay: 113.747 ms

Loss rate: 0.02%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-31 12:12:52

End at: 2018-01-31 12:13:22

Below is generated by plot.py at 2018-01-31 14:36:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.59 Mbit/s

95th percentile per-packet one-way delay: 112.741 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 86.79 Mbit/s

95th percentile per-packet one-way delay: 111.805 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 54.03 Mbit/s

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

Loss rate: 0.00%

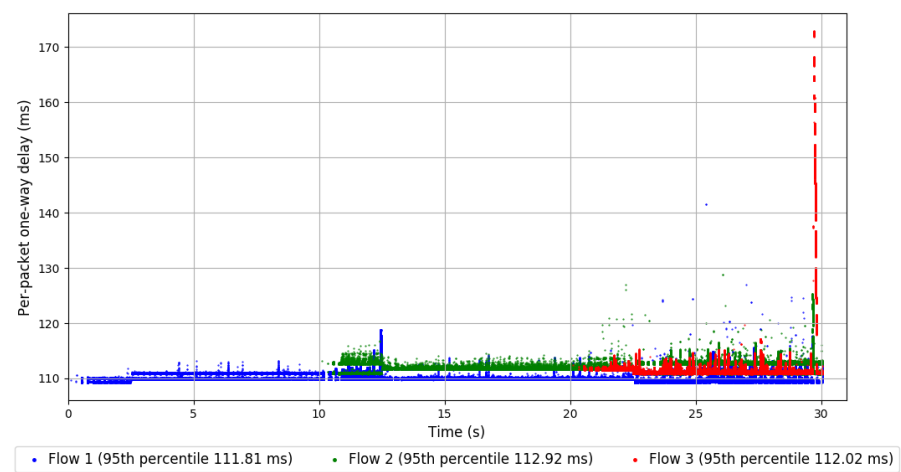
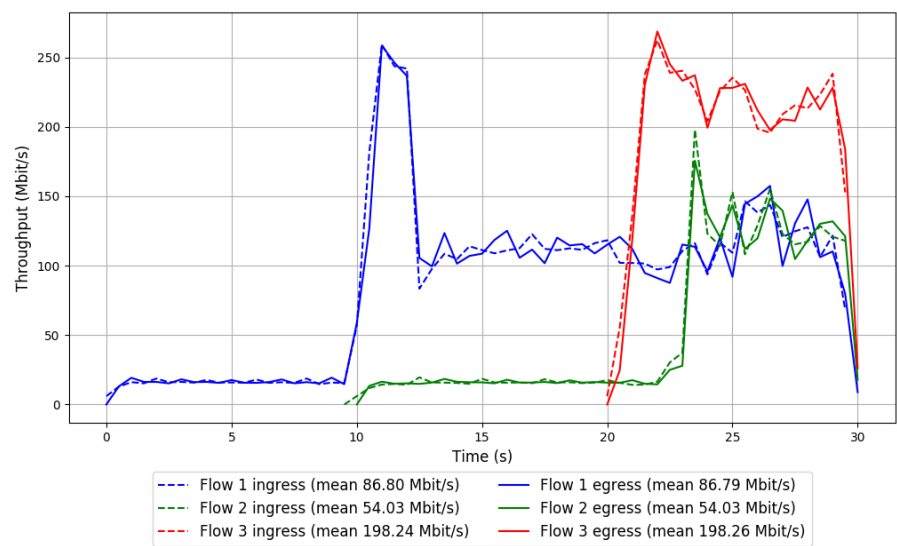
-- Flow 3:

Average throughput: 198.26 Mbit/s

95th percentile per-packet one-way delay: 112.015 ms

Loss rate: 0.00%

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

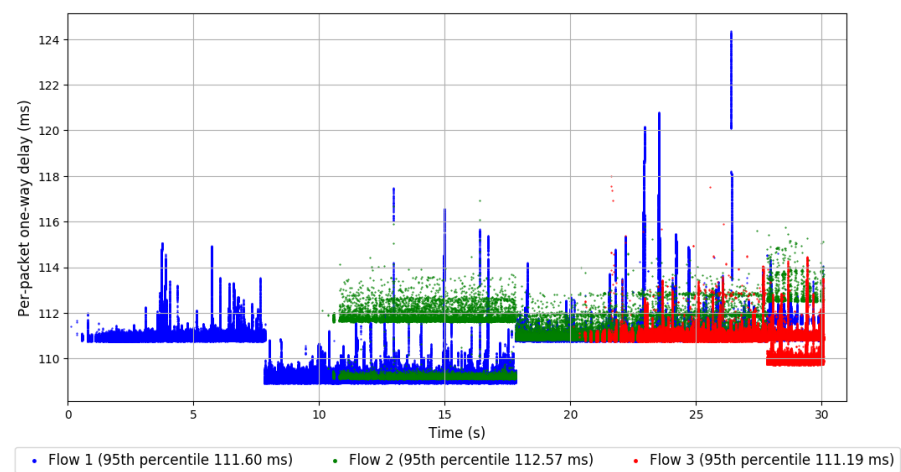
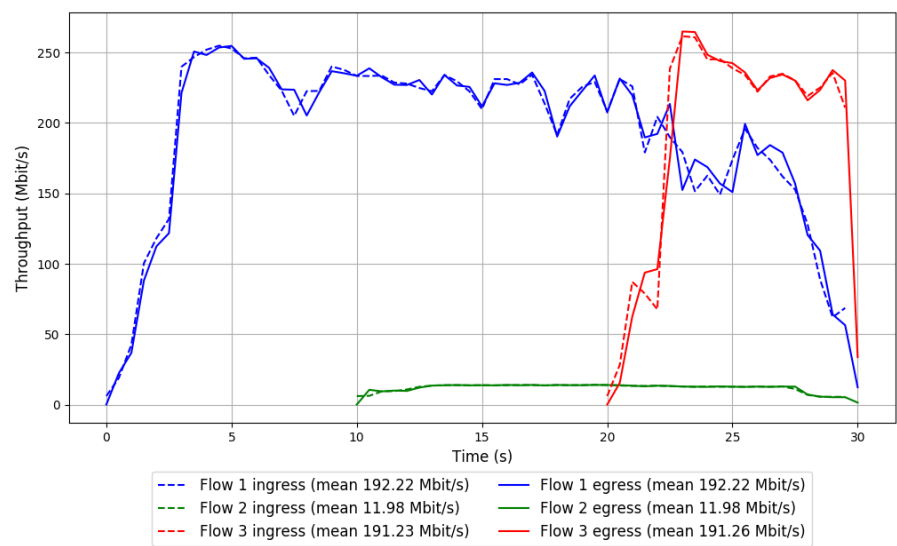


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-01-31 12:30:37
End at: 2018-01-31 12:31:07

# Below is generated by plot.py at 2018-01-31 14:39:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 263.62 Mbit/s
95th percentile per-packet one-way delay: 111.598 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 192.22 Mbit/s
95th percentile per-packet one-way delay: 111.602 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.98 Mbit/s
95th percentile per-packet one-way delay: 112.573 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 191.26 Mbit/s
95th percentile per-packet one-way delay: 111.189 ms
Loss rate: 0.00%
```


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

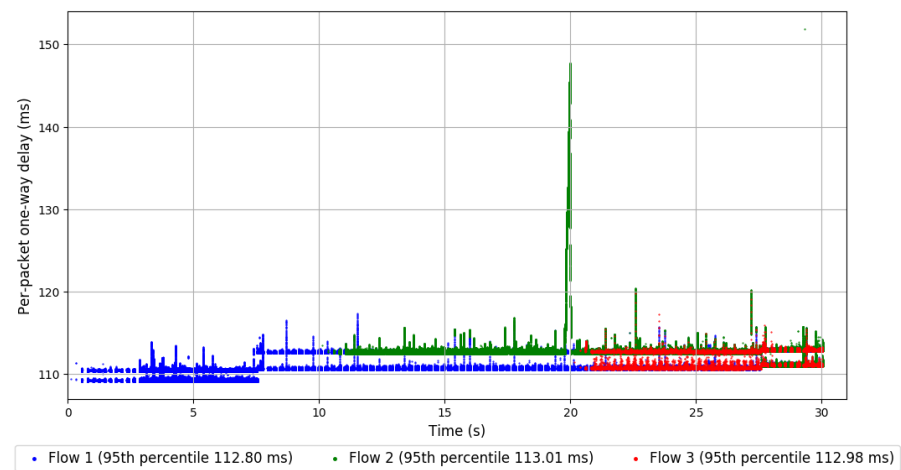
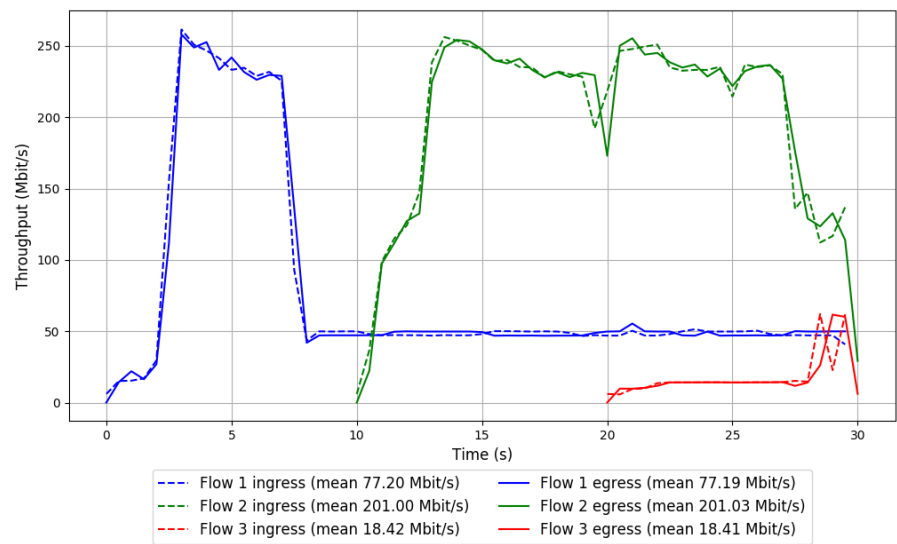


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-31 12:48:57
End at: 2018-01-31 12:49:27

# Below is generated by plot.py at 2018-01-31 14:39:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 216.81 Mbit/s
95th percentile per-packet one-way delay: 112.942 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 77.19 Mbit/s
95th percentile per-packet one-way delay: 112.801 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 201.03 Mbit/s
95th percentile per-packet one-way delay: 113.008 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 18.41 Mbit/s
95th percentile per-packet one-way delay: 112.976 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-31 10:13:31

End at: 2018-01-31 10:14:01

Below is generated by plot.py at 2018-01-31 14:39:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.74 Mbit/s

95th percentile per-packet one-way delay: 114.555 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 5.04 Mbit/s

95th percentile per-packet one-way delay: 113.761 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 9.64 Mbit/s

95th percentile per-packet one-way delay: 114.468 ms

Loss rate: 0.06%

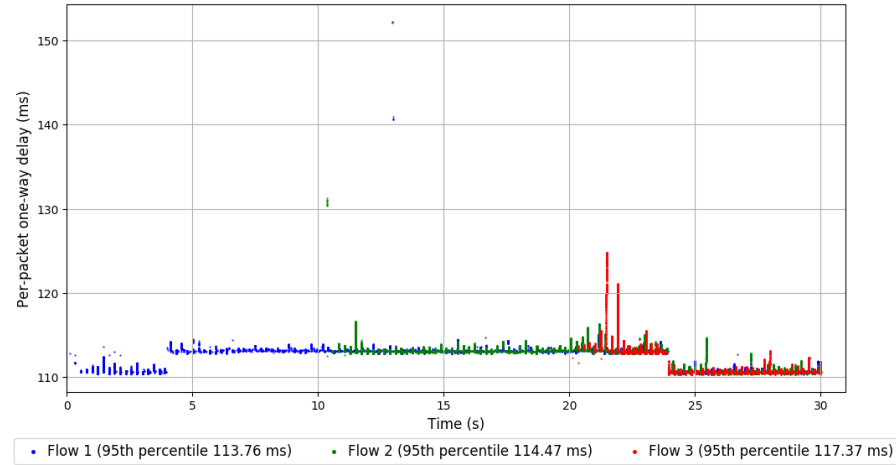
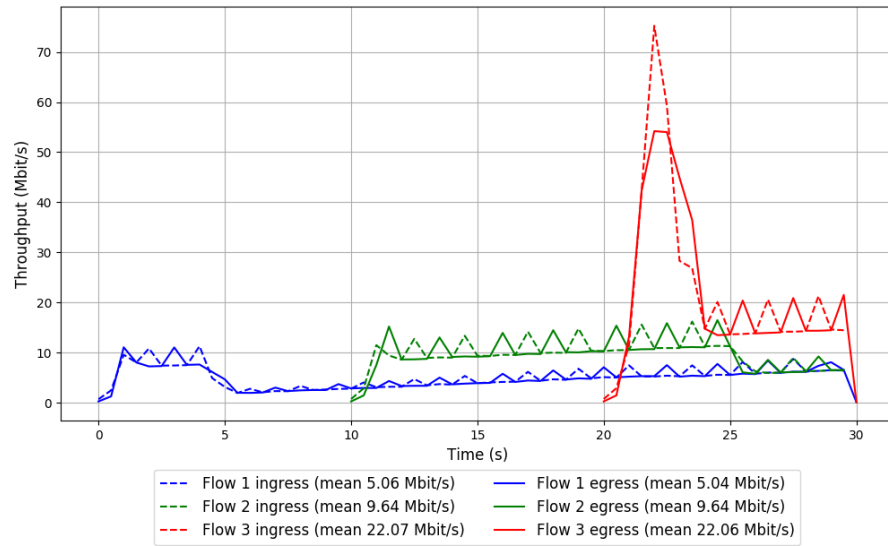
-- Flow 3:

Average throughput: 22.06 Mbit/s

95th percentile per-packet one-way delay: 117.367 ms

Loss rate: 0.05%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-31 10:31:01

End at: 2018-01-31 10:31:31

Below is generated by plot.py at 2018-01-31 14:39:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 53.49 Mbit/s

95th percentile per-packet one-way delay: 124.161 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 37.34 Mbit/s

95th percentile per-packet one-way delay: 125.339 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 14.43 Mbit/s

95th percentile per-packet one-way delay: 114.658 ms

Loss rate: 0.10%

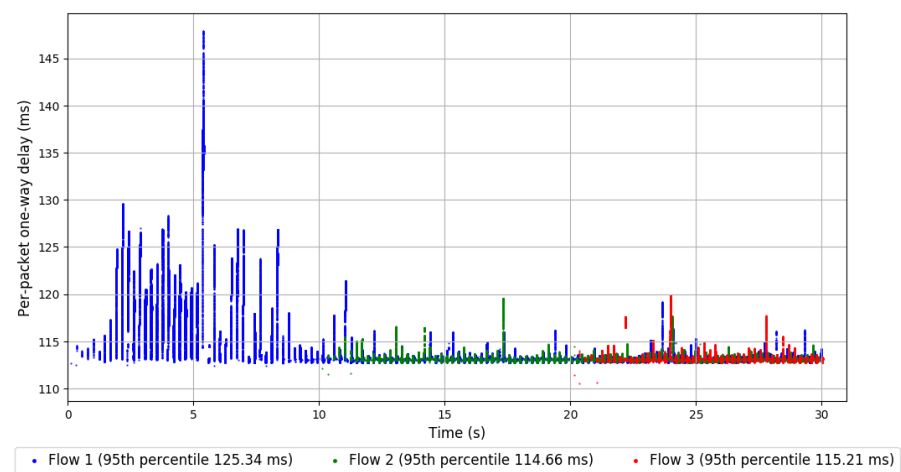
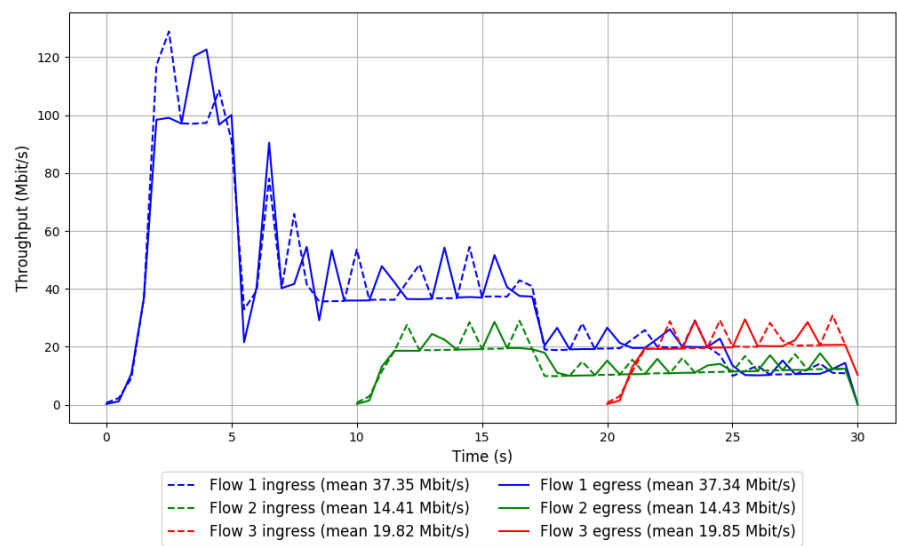
-- Flow 3:

Average throughput: 19.85 Mbit/s

95th percentile per-packet one-way delay: 115.207 ms

Loss rate: 0.01%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-31 10:48:41

End at: 2018-01-31 10:49:11

Below is generated by plot.py at 2018-01-31 14:39:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.87 Mbit/s

95th percentile per-packet one-way delay: 124.056 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 21.55 Mbit/s

95th percentile per-packet one-way delay: 125.658 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 29.65 Mbit/s

95th percentile per-packet one-way delay: 117.905 ms

Loss rate: 0.03%

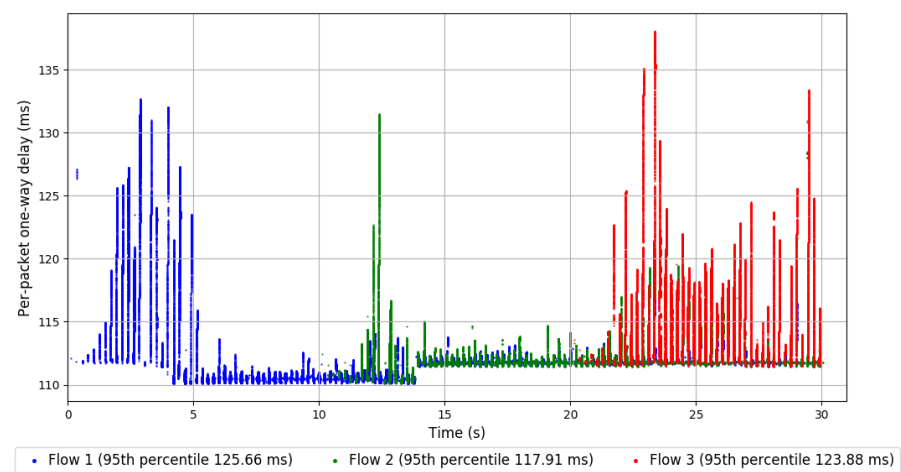
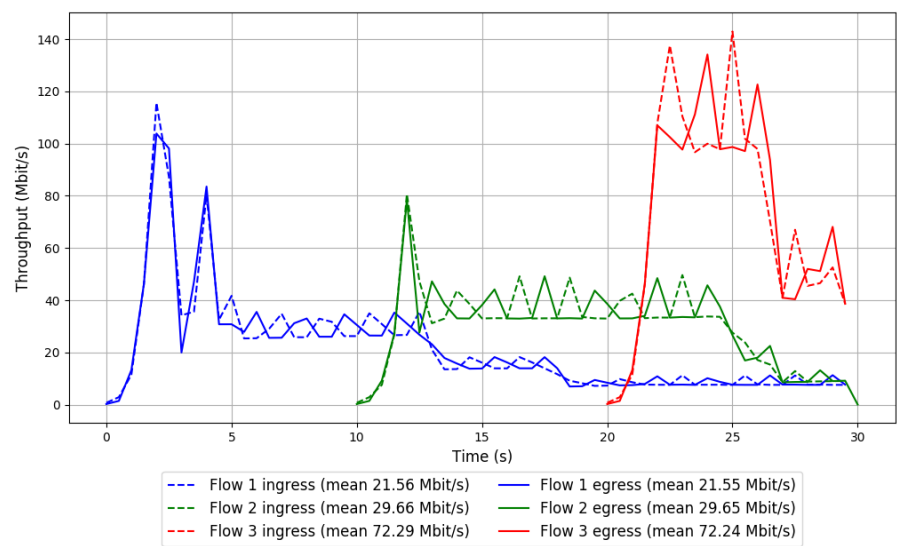
-- Flow 3:

Average throughput: 72.24 Mbit/s

95th percentile per-packet one-way delay: 123.875 ms

Loss rate: 0.05%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-31 11:06:22

End at: 2018-01-31 11:06:52

Below is generated by plot.py at 2018-01-31 14:39:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 52.00 Mbit/s

95th percentile per-packet one-way delay: 117.290 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 6.04 Mbit/s

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

Loss rate: 0.96%

-- Flow 2:

Average throughput: 43.67 Mbit/s

95th percentile per-packet one-way delay: 115.985 ms

Loss rate: 0.53%

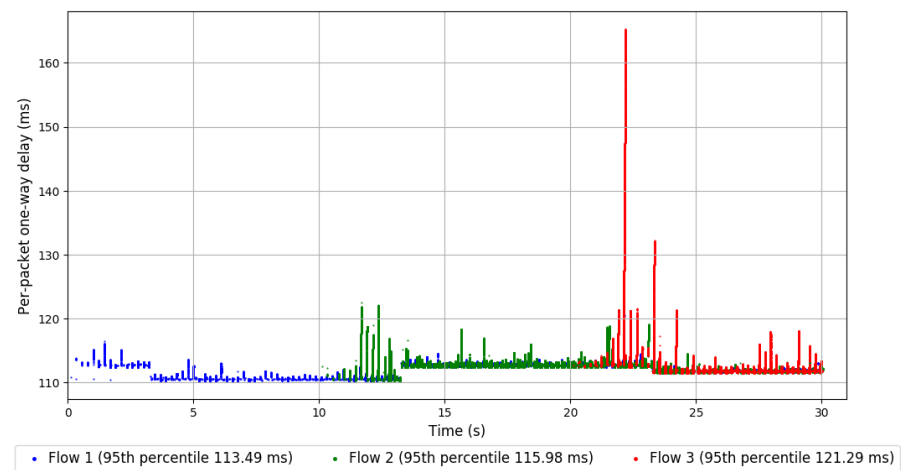
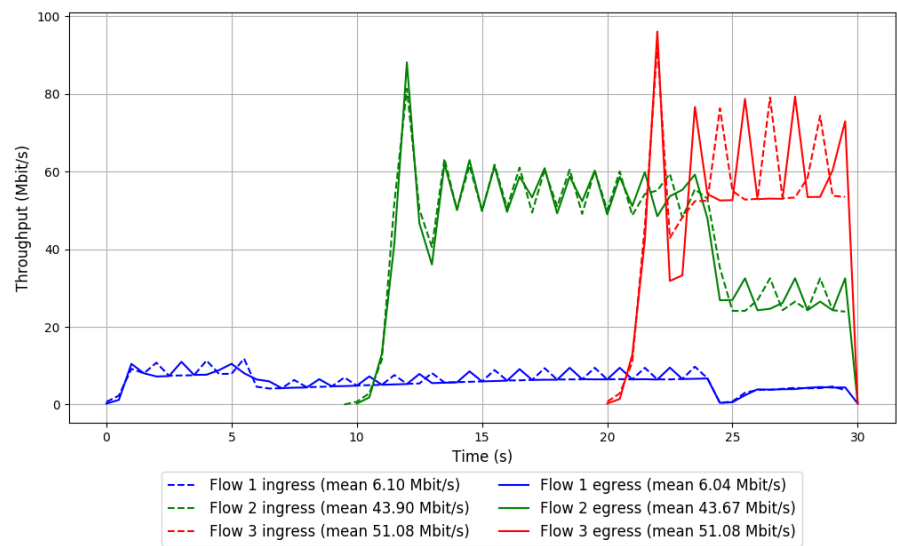
-- Flow 3:

Average throughput: 51.08 Mbit/s

95th percentile per-packet one-way delay: 121.292 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-31 11:24:05

End at: 2018-01-31 11:24:35

Below is generated by plot.py at 2018-01-31 14:39:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 46.94 Mbit/s

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

Loss rate: 0.02%

-- Flow 1:

Average throughput: 21.31 Mbit/s

95th percentile per-packet one-way delay: 116.838 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 22.02 Mbit/s

95th percentile per-packet one-way delay: 114.237 ms

Loss rate: 0.00%

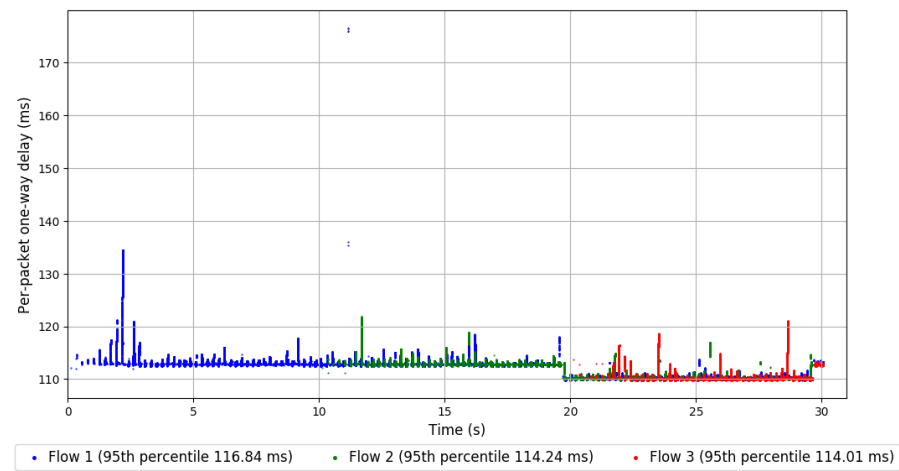
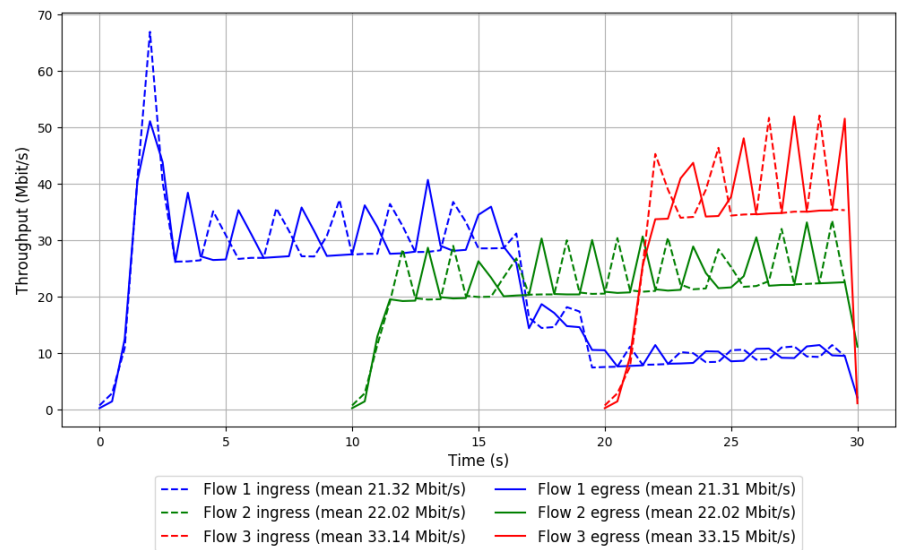
-- Flow 3:

Average throughput: 33.15 Mbit/s

95th percentile per-packet one-way delay: 114.013 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-31 11:41:53

End at: 2018-01-31 11:42:23

Below is generated by plot.py at 2018-01-31 14:39:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.42 Mbit/s

95th percentile per-packet one-way delay: 130.045 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 3.39 Mbit/s

95th percentile per-packet one-way delay: 114.808 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 70.55 Mbit/s

95th percentile per-packet one-way delay: 130.906 ms

Loss rate: 0.05%

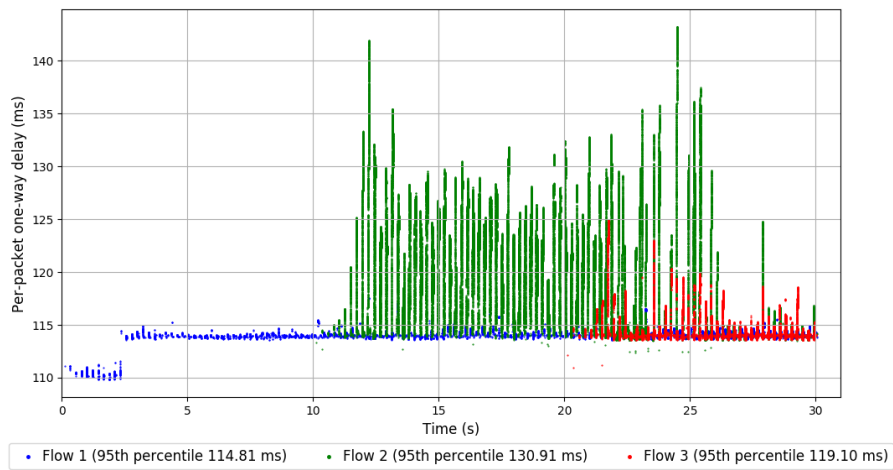
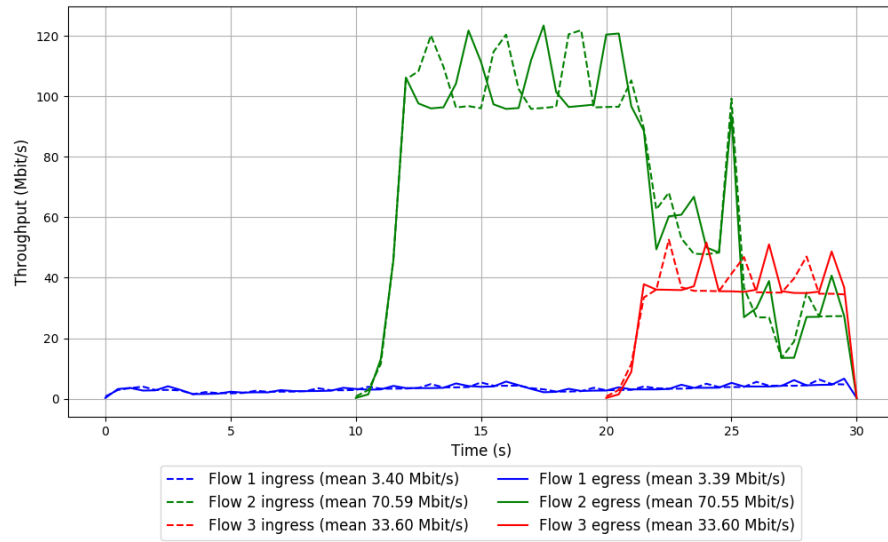
-- Flow 3:

Average throughput: 33.60 Mbit/s

95th percentile per-packet one-way delay: 119.096 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-31 11:59:25

End at: 2018-01-31 11:59:55

Below is generated by plot.py at 2018-01-31 14:39:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.92 Mbit/s

95th percentile per-packet one-way delay: 120.632 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.43 Mbit/s

95th percentile per-packet one-way delay: 120.030 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.81 Mbit/s

95th percentile per-packet one-way delay: 122.422 ms

Loss rate: 0.01%

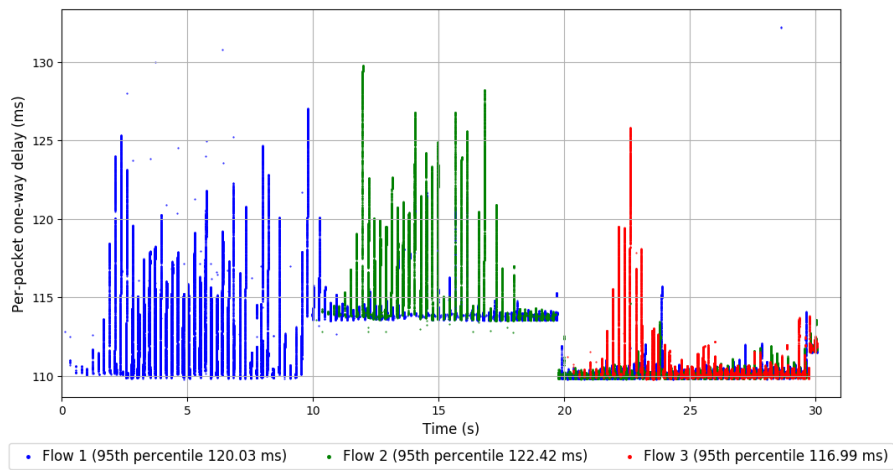
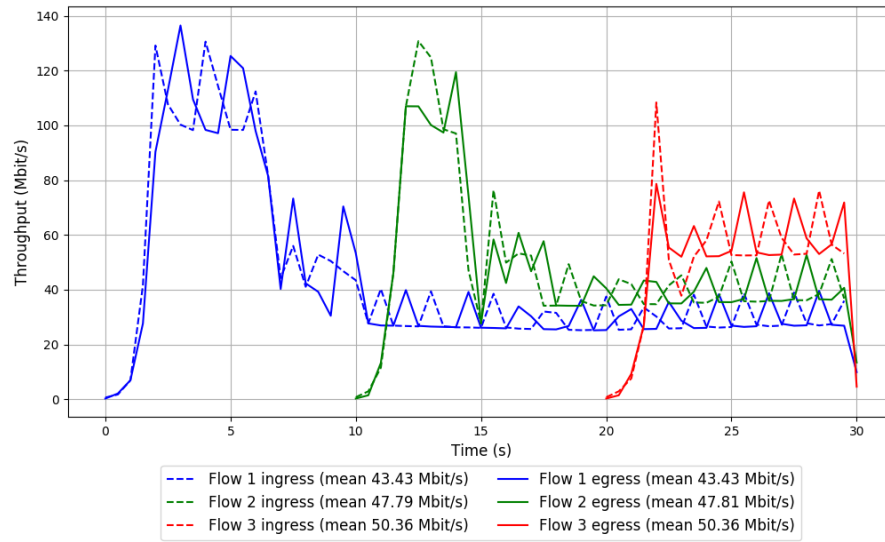
-- Flow 3:

Average throughput: 50.36 Mbit/s

95th percentile per-packet one-way delay: 116.991 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-31 12:17:22

End at: 2018-01-31 12:17:52

Below is generated by plot.py at 2018-01-31 14:39:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.37 Mbit/s

95th percentile per-packet one-way delay: 114.015 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.72 Mbit/s

95th percentile per-packet one-way delay: 112.721 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 34.98 Mbit/s

95th percentile per-packet one-way delay: 114.148 ms

Loss rate: 0.00%

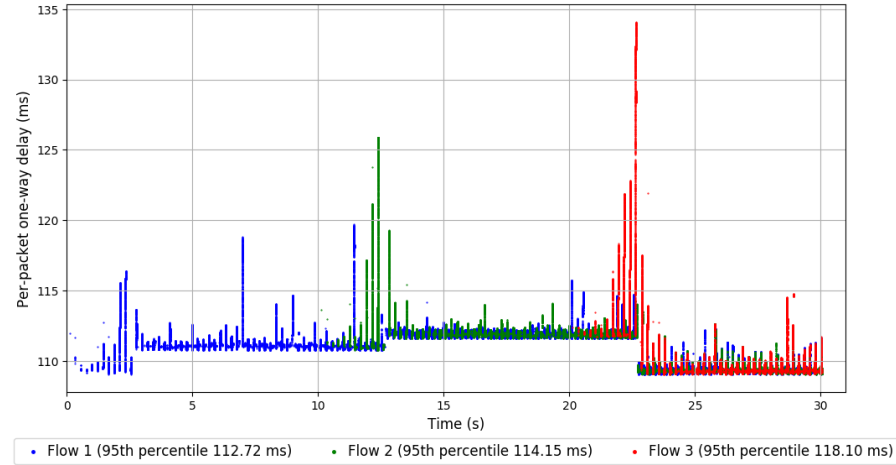
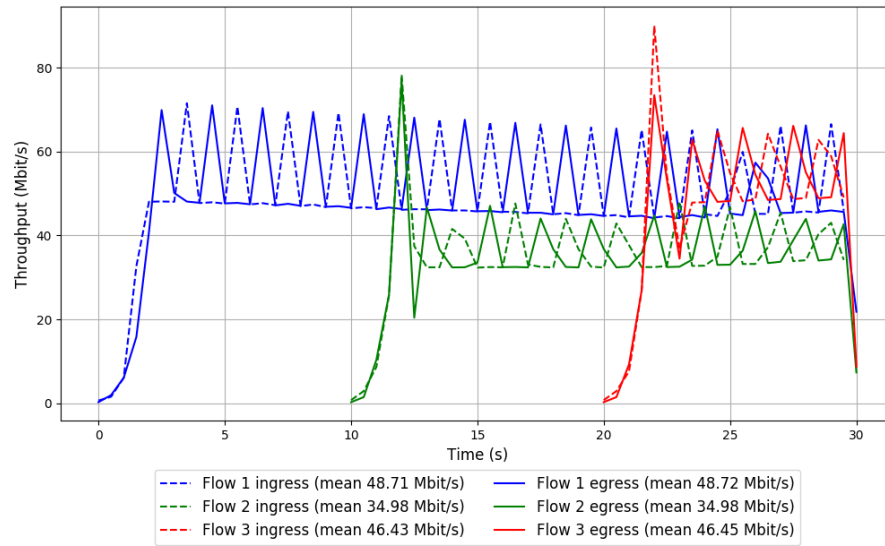
-- Flow 3:

Average throughput: 46.45 Mbit/s

95th percentile per-packet one-way delay: 118.103 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-31 12:35:24

End at: 2018-01-31 12:35:54

Below is generated by plot.py at 2018-01-31 14:39:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.84 Mbit/s

95th percentile per-packet one-way delay: 116.605 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 76.85 Mbit/s

95th percentile per-packet one-way delay: 114.765 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 30.61 Mbit/s

95th percentile per-packet one-way delay: 120.527 ms

Loss rate: 0.01%

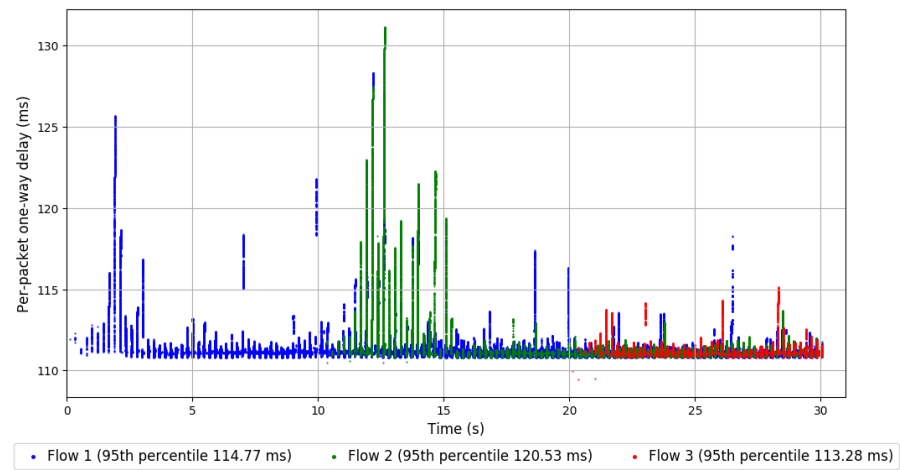
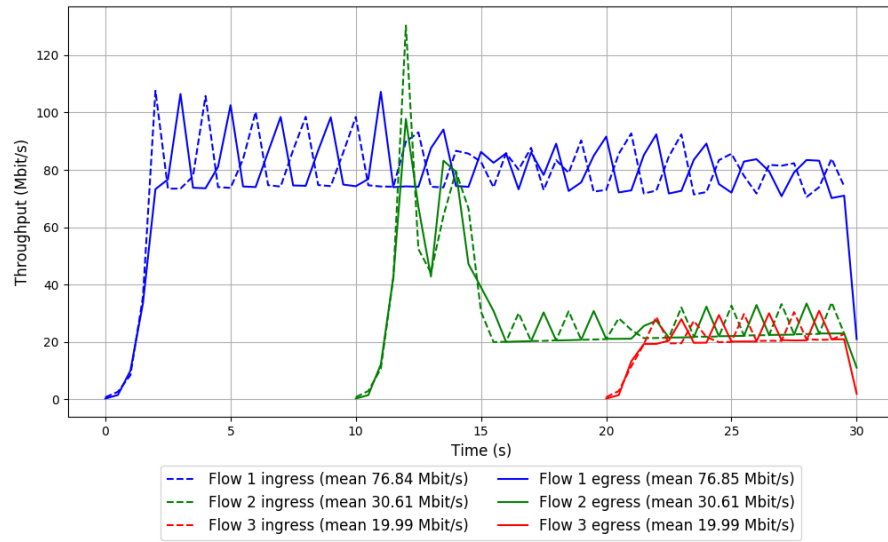
-- Flow 3:

Average throughput: 19.99 Mbit/s

95th percentile per-packet one-way delay: 113.278 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-31 12:53:39

End at: 2018-01-31 12:54:09

Below is generated by plot.py at 2018-01-31 14:39:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 54.07 Mbit/s

95th percentile per-packet one-way delay: 120.532 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 27.14 Mbit/s

95th percentile per-packet one-way delay: 121.395 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 25.78 Mbit/s

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

Loss rate: 0.44%

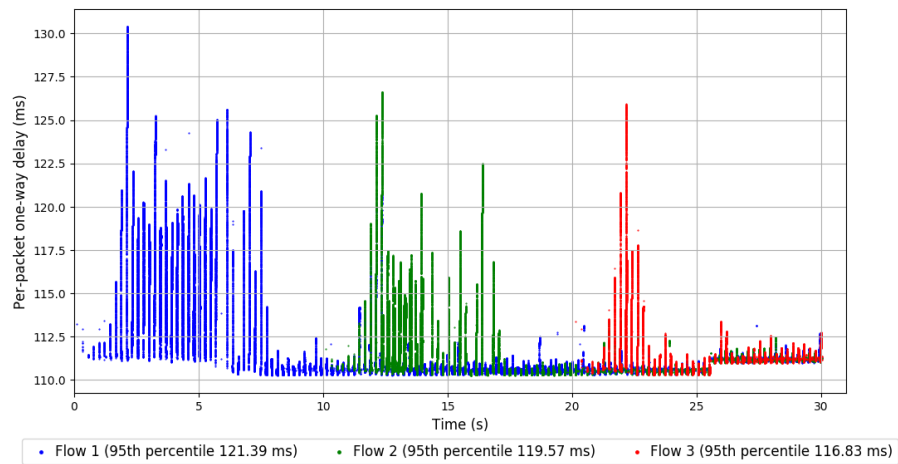
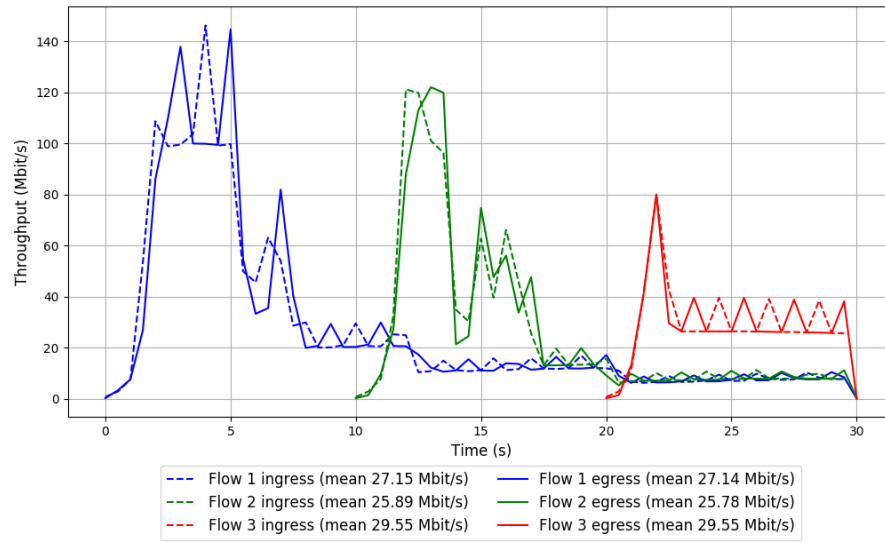
-- Flow 3:

Average throughput: 29.55 Mbit/s

95th percentile per-packet one-way delay: 116.827 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

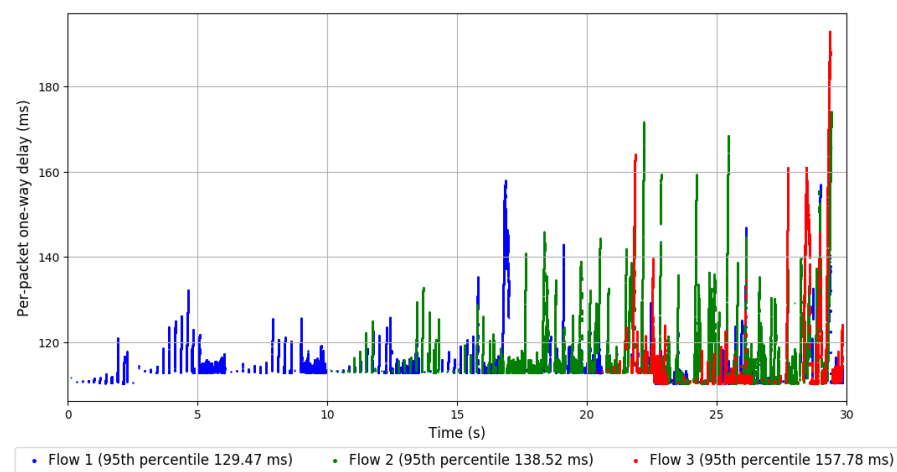
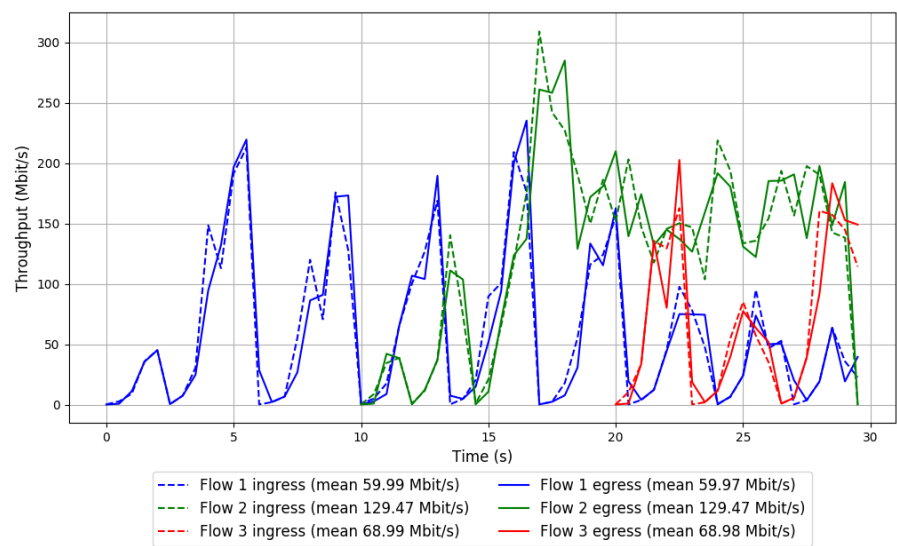


```
Run 1: Statistics of Verus

Start at: 2018-01-31 10:21:42
End at: 2018-01-31 10:22:12

# Below is generated by plot.py at 2018-01-31 14:39:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 167.42 Mbit/s
95th percentile per-packet one-way delay: 141.909 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 59.97 Mbit/s
95th percentile per-packet one-way delay: 129.474 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 129.47 Mbit/s
95th percentile per-packet one-way delay: 138.517 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 68.98 Mbit/s
95th percentile per-packet one-way delay: 157.785 ms
Loss rate: 0.03%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-31 10:39:21

End at: 2018-01-31 10:39:51

Below is generated by plot.py at 2018-01-31 14:40:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 216.93 Mbit/s

95th percentile per-packet one-way delay: 275.968 ms

Loss rate: 4.67%

-- Flow 1:

Average throughput: 145.05 Mbit/s

95th percentile per-packet one-way delay: 249.026 ms

Loss rate: 3.99%

-- Flow 2:

Average throughput: 59.05 Mbit/s

95th percentile per-packet one-way delay: 306.865 ms

Loss rate: 1.93%

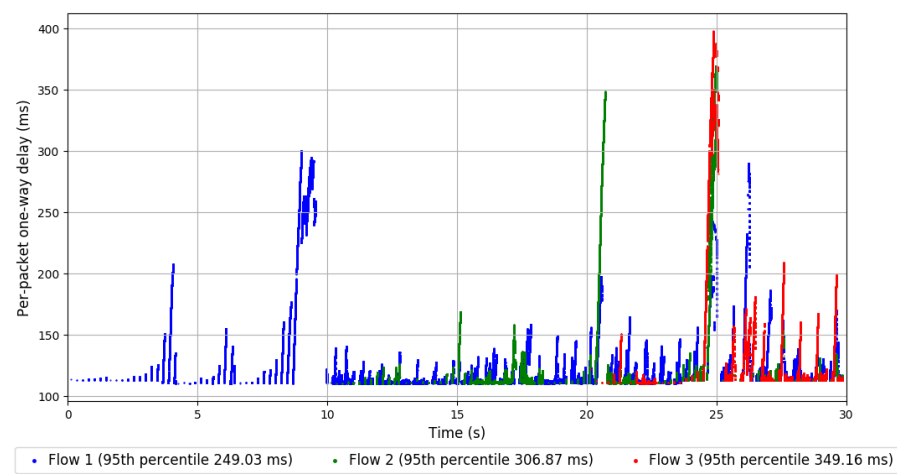
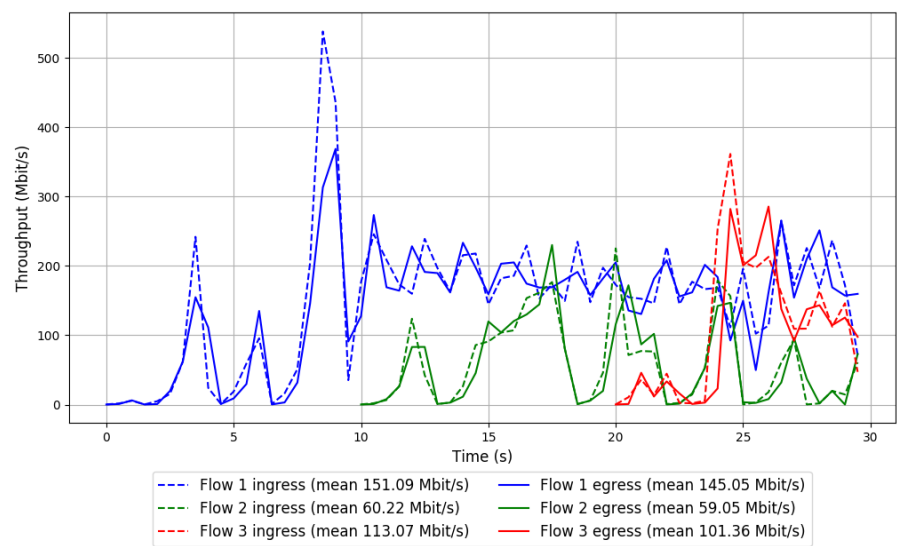
-- Flow 3:

Average throughput: 101.36 Mbit/s

95th percentile per-packet one-way delay: 349.164 ms

Loss rate: 10.42%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-31 10:56:52

End at: 2018-01-31 10:57:23

Below is generated by plot.py at 2018-01-31 14:40:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 222.74 Mbit/s

95th percentile per-packet one-way delay: 340.127 ms

Loss rate: 10.74%

-- Flow 1:

Average throughput: 65.71 Mbit/s

95th percentile per-packet one-way delay: 197.181 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 221.12 Mbit/s

95th percentile per-packet one-way delay: 353.844 ms

Loss rate: 15.32%

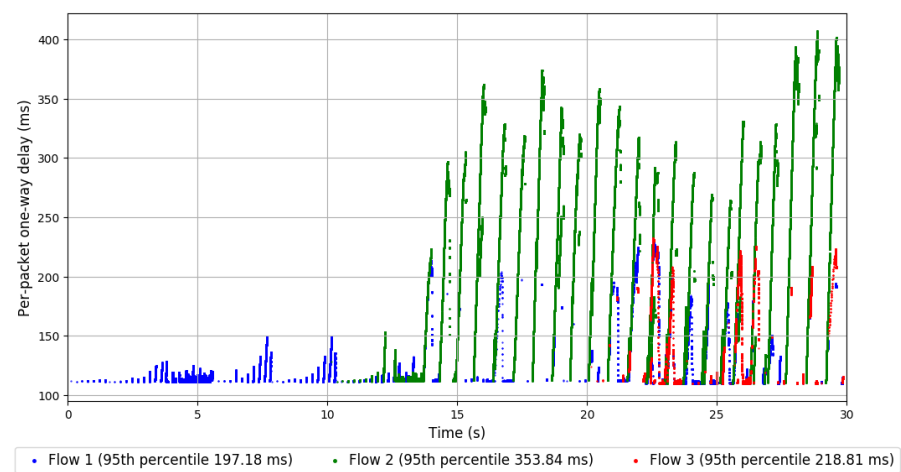
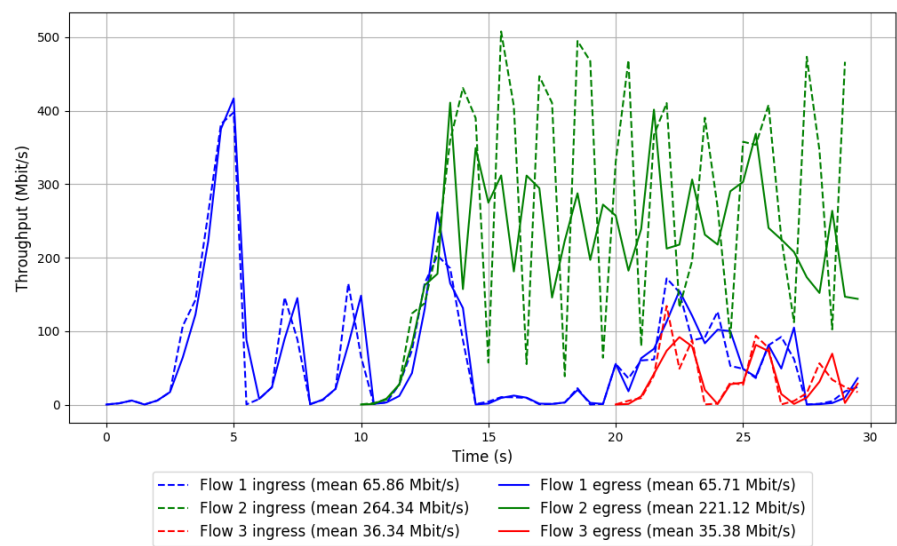
-- Flow 3:

Average throughput: 35.38 Mbit/s

95th percentile per-packet one-way delay: 218.809 ms

Loss rate: 2.75%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-31 11:14:44

End at: 2018-01-31 11:15:14

Below is generated by plot.py at 2018-01-31 14:40:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 218.36 Mbit/s

95th percentile per-packet one-way delay: 179.568 ms

Loss rate: 2.21%

-- Flow 1:

Average throughput: 93.78 Mbit/s

95th percentile per-packet one-way delay: 135.110 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 148.63 Mbit/s

95th percentile per-packet one-way delay: 204.573 ms

Loss rate: 4.24%

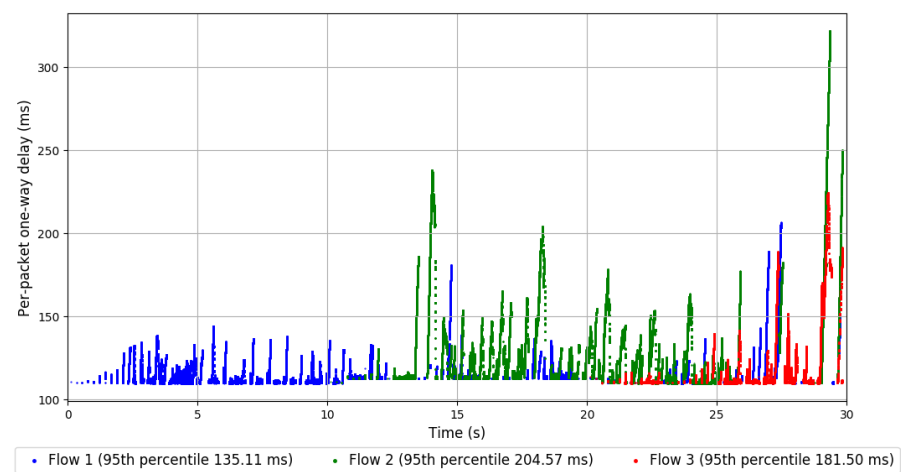
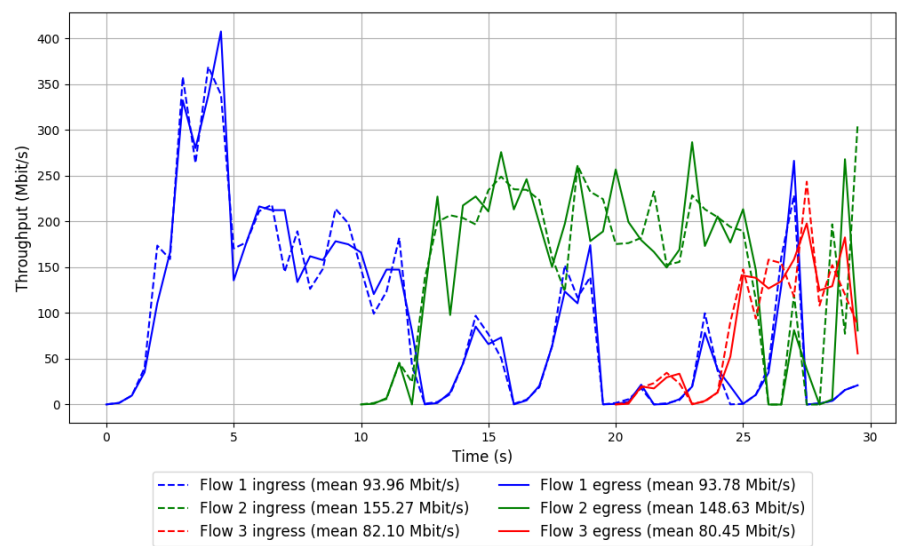
-- Flow 3:

Average throughput: 80.45 Mbit/s

95th percentile per-packet one-way delay: 181.498 ms

Loss rate: 1.98%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-31 11:32:24

End at: 2018-01-31 11:32:54

Below is generated by plot.py at 2018-01-31 14:40:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 247.43 Mbit/s

95th percentile per-packet one-way delay: 282.412 ms

Loss rate: 2.88%

-- Flow 1:

Average throughput: 101.30 Mbit/s

95th percentile per-packet one-way delay: 255.888 ms

Loss rate: 2.67%

-- Flow 2:

Average throughput: 193.80 Mbit/s

95th percentile per-packet one-way delay: 296.753 ms

Loss rate: 3.15%

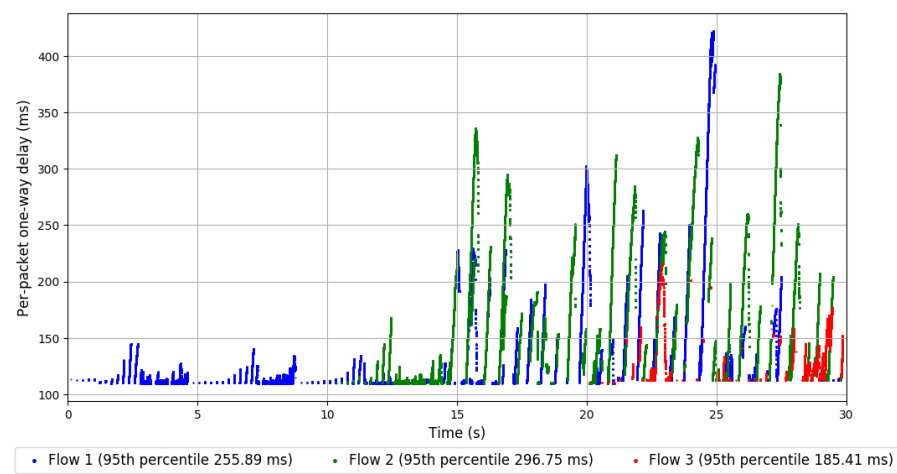
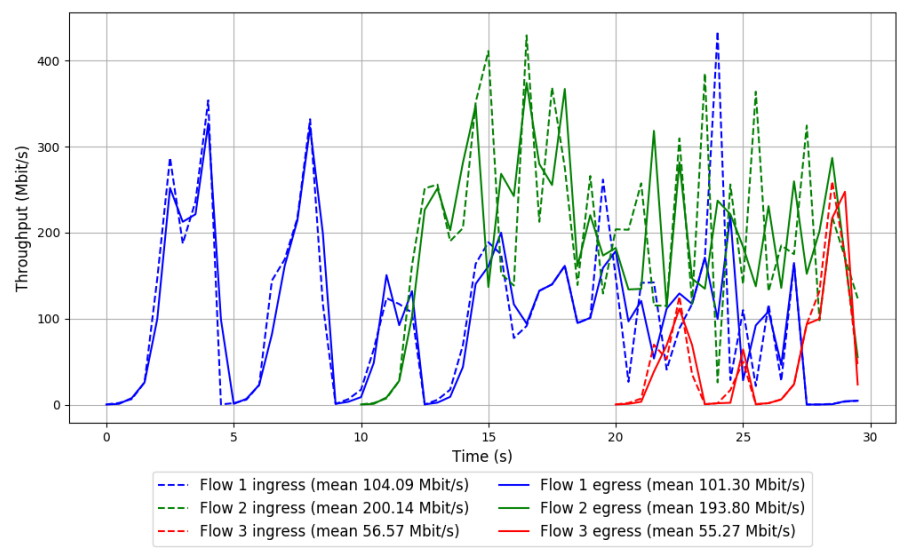
-- Flow 3:

Average throughput: 55.27 Mbit/s

95th percentile per-packet one-way delay: 185.407 ms

Loss rate: 2.02%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-31 11:49:58

End at: 2018-01-31 11:50:28

Below is generated by plot.py at 2018-01-31 14:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 247.52 Mbit/s

95th percentile per-packet one-way delay: 280.000 ms

Loss rate: 4.08%

-- Flow 1:

Average throughput: 164.55 Mbit/s

95th percentile per-packet one-way delay: 200.033 ms

Loss rate: 1.79%

-- Flow 2:

Average throughput: 50.86 Mbit/s

95th percentile per-packet one-way delay: 314.382 ms

Loss rate: 7.89%

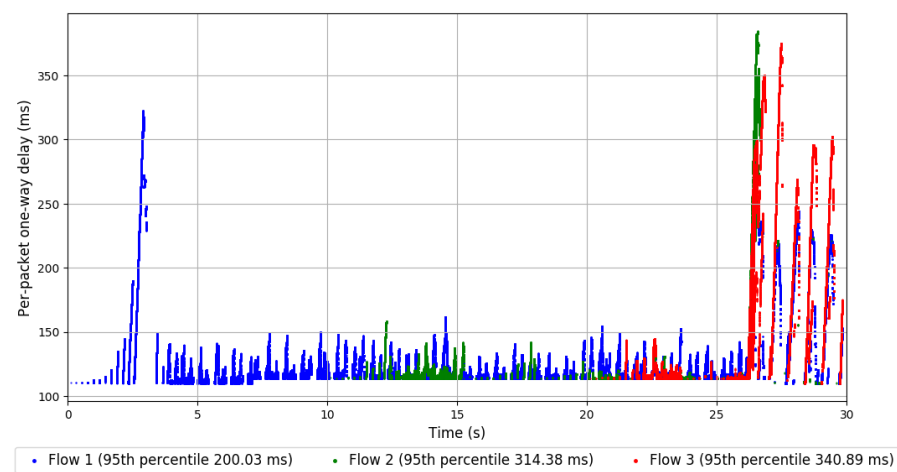
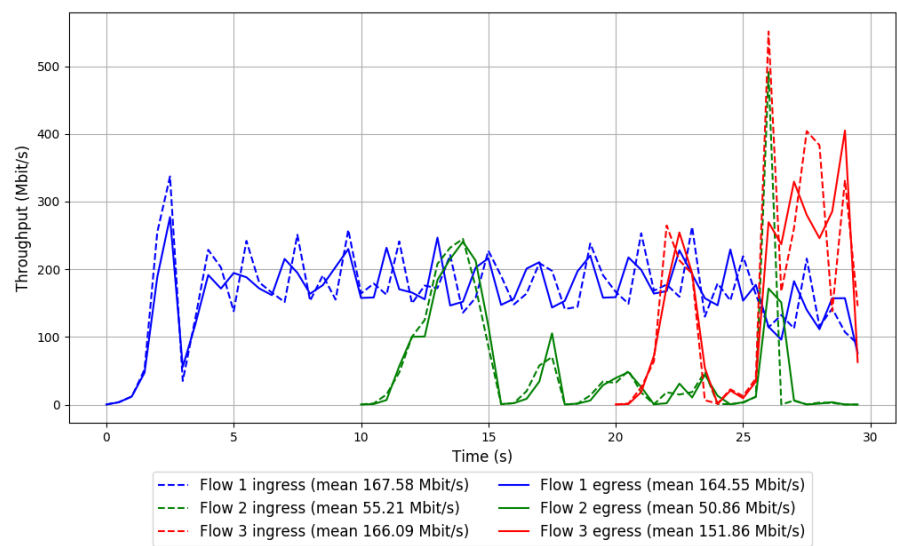
-- Flow 3:

Average throughput: 151.86 Mbit/s

95th percentile per-packet one-way delay: 340.890 ms

Loss rate: 8.59%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-31 12:07:53

End at: 2018-01-31 12:08:23

Below is generated by plot.py at 2018-01-31 14:42:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 218.22 Mbit/s

95th percentile per-packet one-way delay: 238.560 ms

Loss rate: 2.58%

-- Flow 1:

Average throughput: 143.18 Mbit/s

95th percentile per-packet one-way delay: 183.453 ms

Loss rate: 1.51%

-- Flow 2:

Average throughput: 90.55 Mbit/s

95th percentile per-packet one-way delay: 280.915 ms

Loss rate: 5.60%

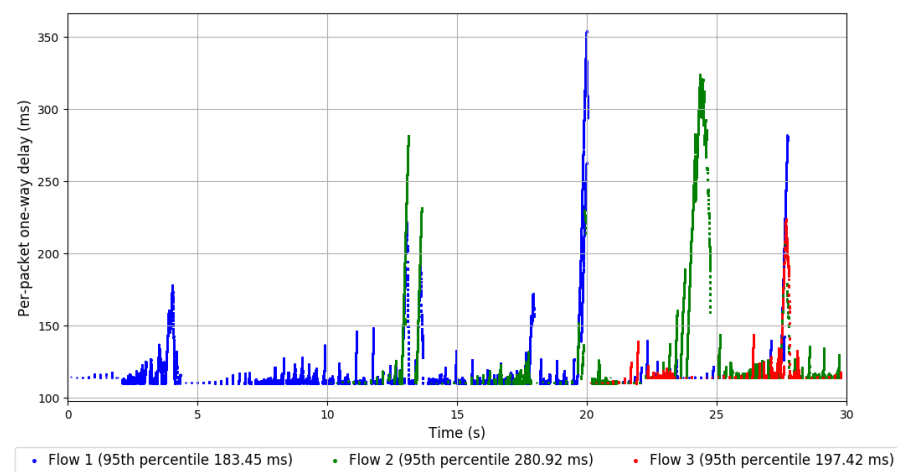
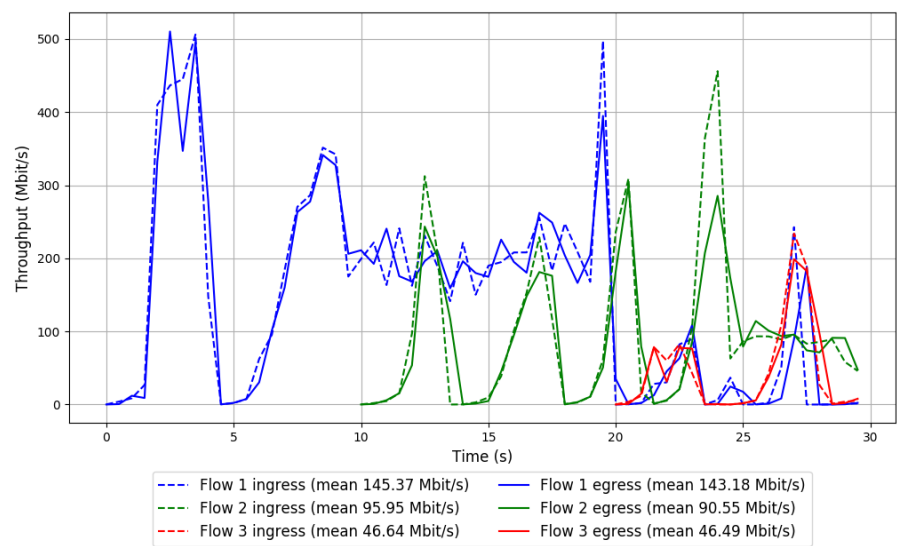
-- Flow 3:

Average throughput: 46.49 Mbit/s

95th percentile per-packet one-way delay: 197.422 ms

Loss rate: 0.25%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-31 12:25:43

End at: 2018-01-31 12:26:13

Below is generated by plot.py at 2018-01-31 14:42:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.35 Mbit/s

95th percentile per-packet one-way delay: 142.838 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 79.32 Mbit/s

95th percentile per-packet one-way delay: 157.165 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 40.77 Mbit/s

95th percentile per-packet one-way delay: 125.559 ms

Loss rate: 0.01%

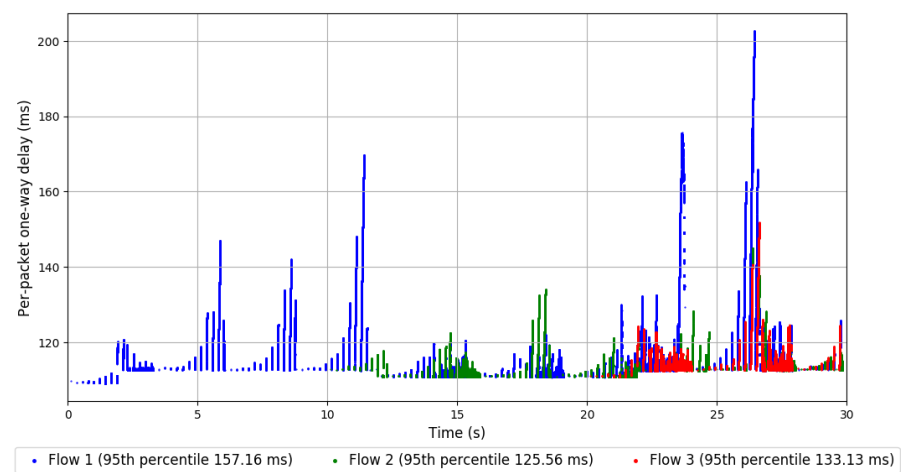
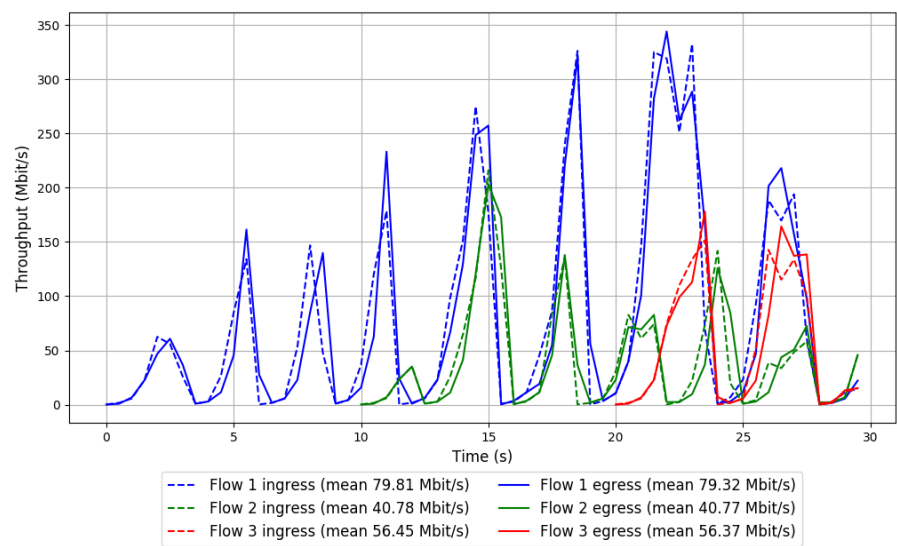
-- Flow 3:

Average throughput: 56.37 Mbit/s

95th percentile per-packet one-way delay: 133.135 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-31 12:43:52

End at: 2018-01-31 12:44:22

Below is generated by plot.py at 2018-01-31 14:43:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 242.78 Mbit/s

95th percentile per-packet one-way delay: 173.122 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 137.22 Mbit/s

95th percentile per-packet one-way delay: 160.035 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 106.16 Mbit/s

95th percentile per-packet one-way delay: 179.524 ms

Loss rate: 0.00%

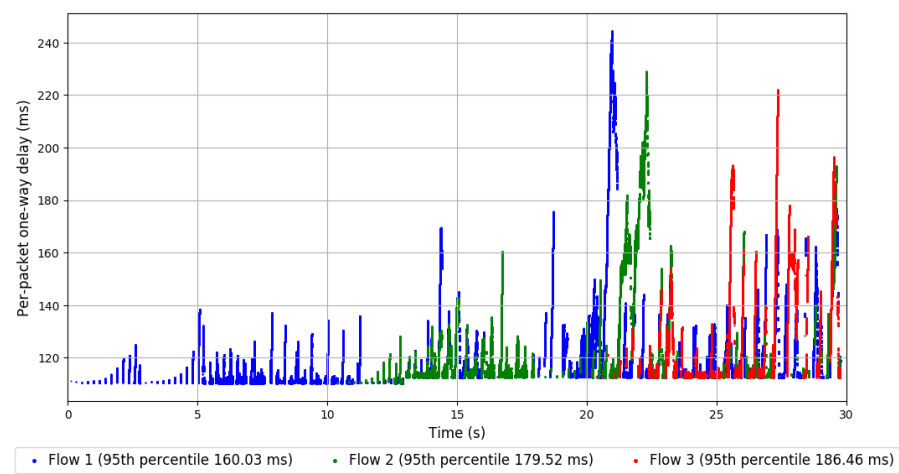
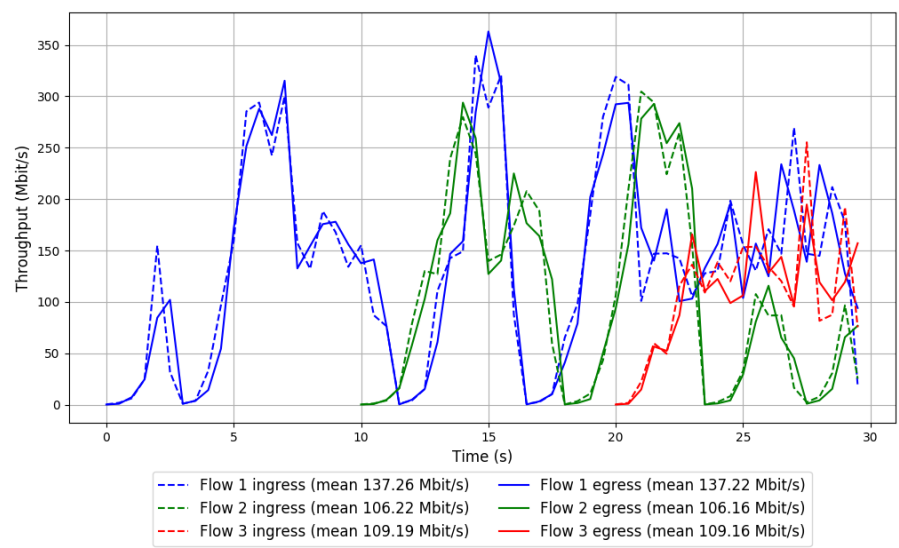
-- Flow 3:

Average throughput: 109.16 Mbit/s

95th percentile per-packet one-way delay: 186.464 ms

Loss rate: 0.00%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-31 13:02:09

End at: 2018-01-31 13:02:39

Below is generated by plot.py at 2018-01-31 14:43:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 230.22 Mbit/s

95th percentile per-packet one-way delay: 179.230 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 160.58 Mbit/s

95th percentile per-packet one-way delay: 176.280 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 62.82 Mbit/s

95th percentile per-packet one-way delay: 222.802 ms

Loss rate: 0.02%

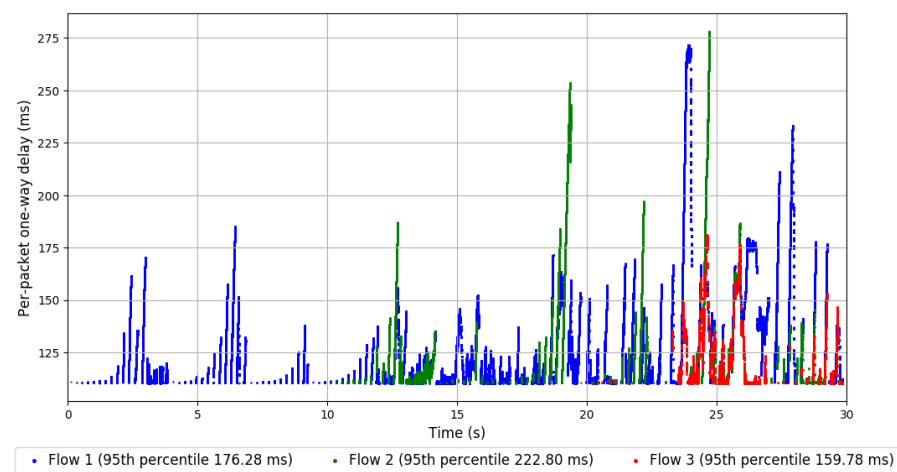
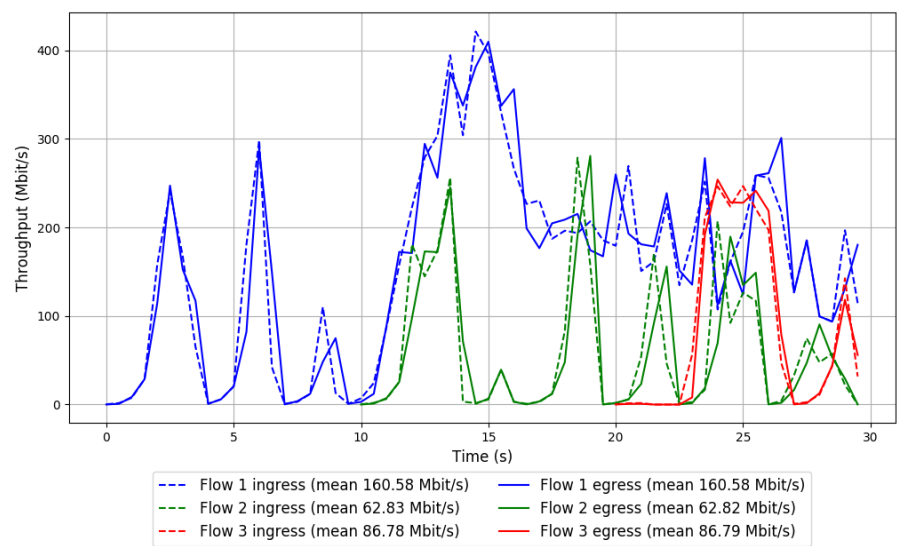
-- Flow 3:

Average throughput: 86.79 Mbit/s

95th percentile per-packet one-way delay: 159.784 ms

Loss rate: 0.10%

Run 10: Report of Verus — Data Link

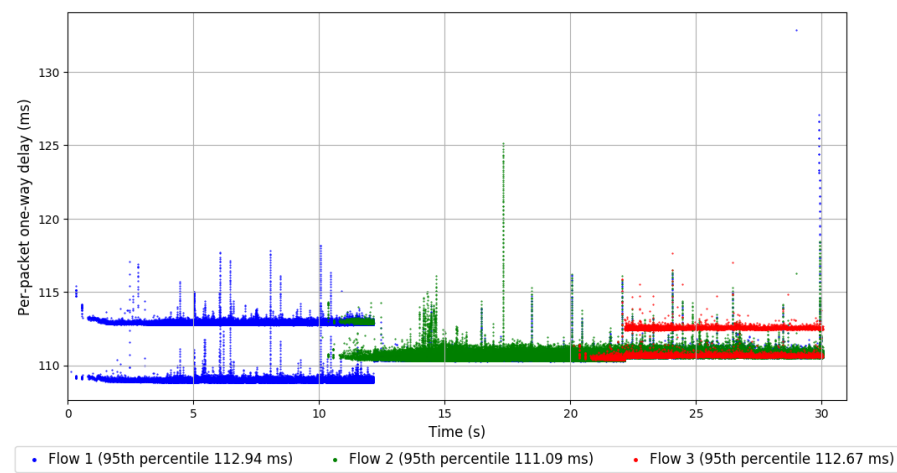
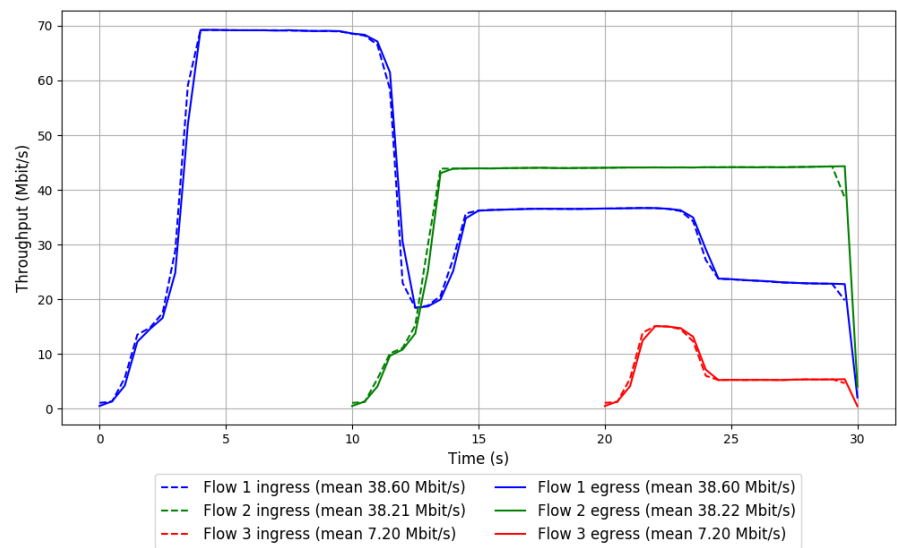


```
Run 1: Statistics of Copa

Start at: 2018-01-31 10:22:43
End at: 2018-01-31 10:23:13

# Below is generated by plot.py at 2018-01-31 14:43:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.42 Mbit/s
95th percentile per-packet one-way delay: 112.895 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 38.60 Mbit/s
95th percentile per-packet one-way delay: 112.940 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.22 Mbit/s
95th percentile per-packet one-way delay: 111.092 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.20 Mbit/s
95th percentile per-packet one-way delay: 112.666 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-31 10:40:24

End at: 2018-01-31 10:40:54

Below is generated by plot.py at 2018-01-31 14:43:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.24 Mbit/s

95th percentile per-packet one-way delay: 111.663 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 26.07 Mbit/s

95th percentile per-packet one-way delay: 111.607 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 51.63 Mbit/s

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

Loss rate: 0.00%

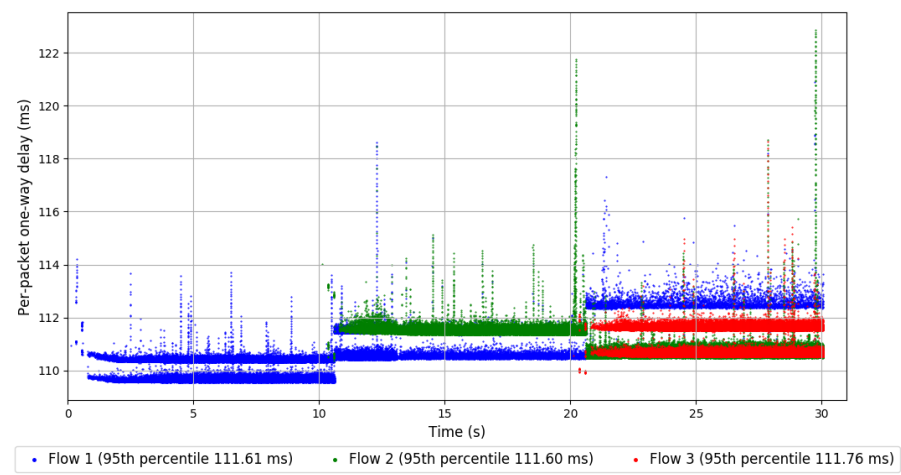
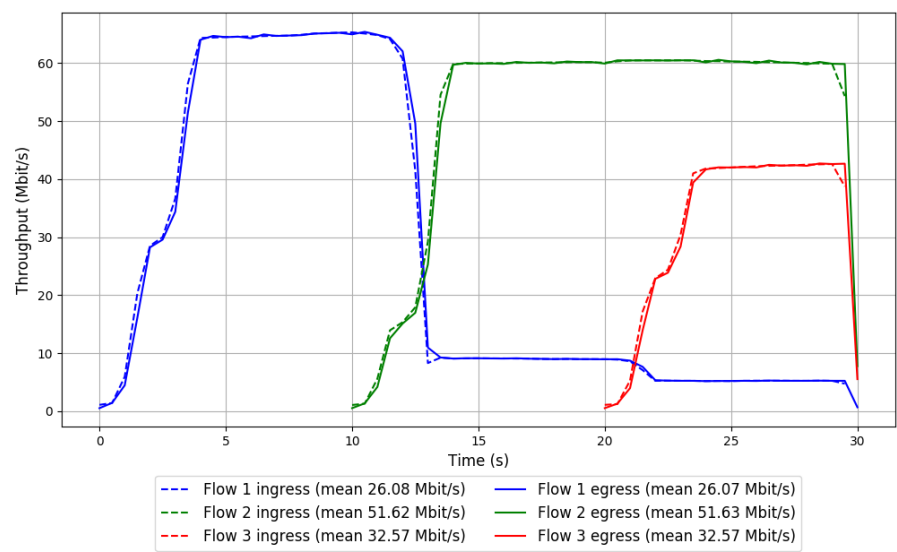
-- Flow 3:

Average throughput: 32.57 Mbit/s

95th percentile per-packet one-way delay: 111.756 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-31 10:57:57

End at: 2018-01-31 10:58:27

Below is generated by plot.py at 2018-01-31 14:43:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.51 Mbit/s

95th percentile per-packet one-way delay: 111.846 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 40.34 Mbit/s

95th percentile per-packet one-way delay: 111.789 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 11.49 Mbit/s

95th percentile per-packet one-way delay: 112.170 ms

Loss rate: 0.00%

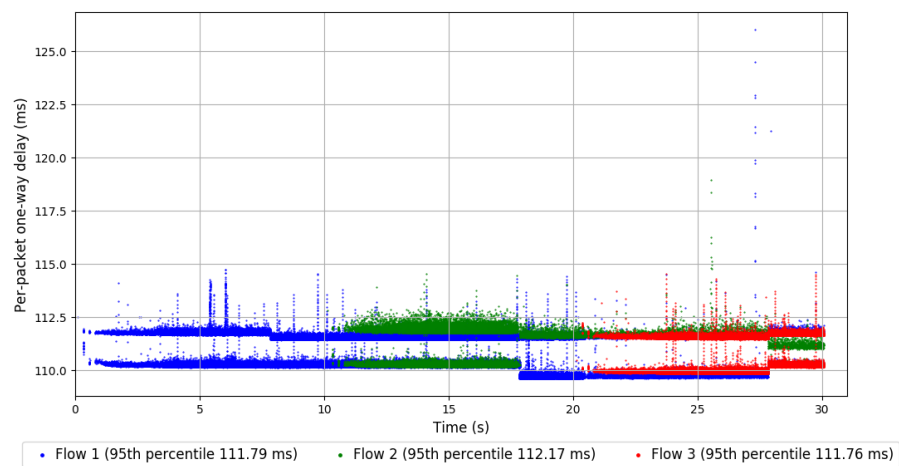
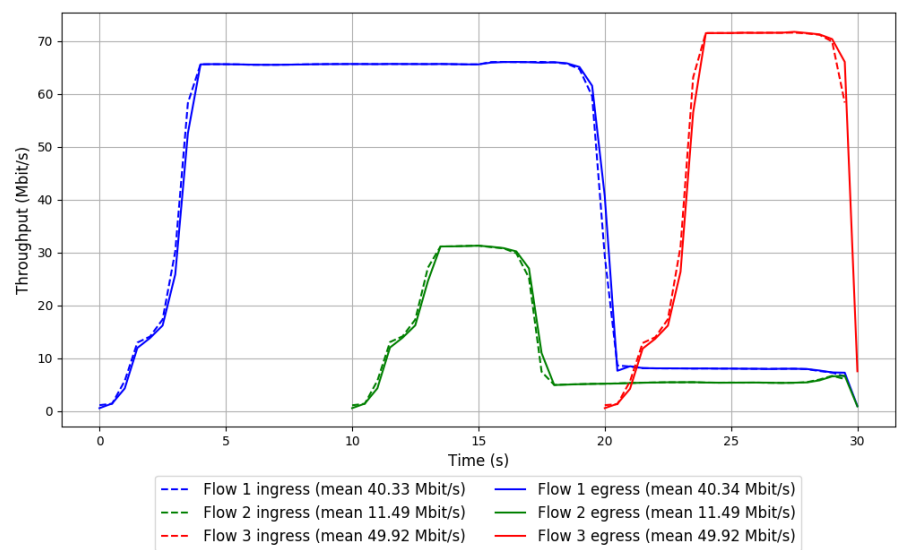
-- Flow 3:

Average throughput: 49.92 Mbit/s

95th percentile per-packet one-way delay: 111.758 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-31 11:15:48

End at: 2018-01-31 11:16:18

Below is generated by plot.py at 2018-01-31 14:43:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 40.10 Mbit/s

95th percentile per-packet one-way delay: 112.954 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 25.57 Mbit/s

95th percentile per-packet one-way delay: 112.785 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.80 Mbit/s

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

Loss rate: 0.00%

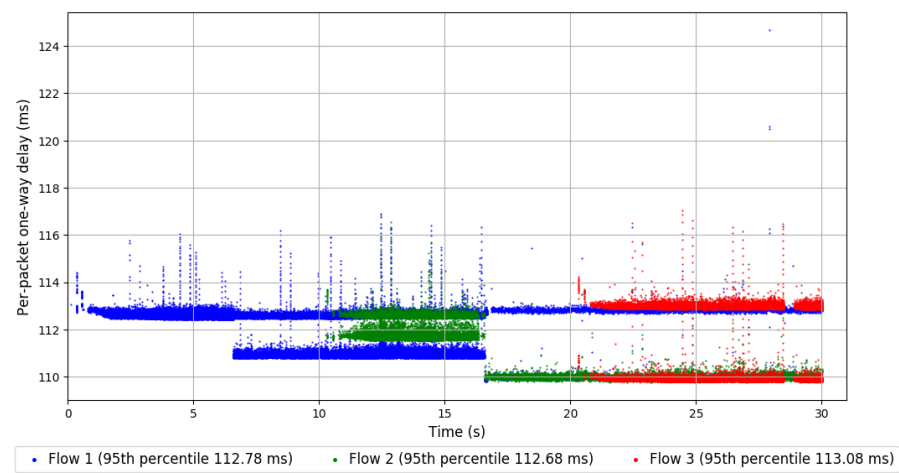
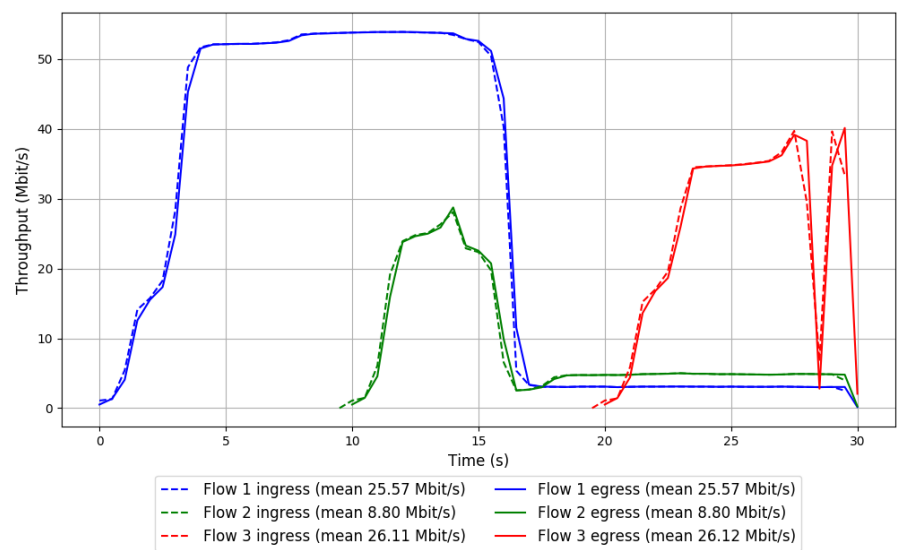
-- Flow 3:

Average throughput: 26.12 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-31 11:33:30

End at: 2018-01-31 11:34:00

Below is generated by plot.py at 2018-01-31 14:43:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.94 Mbit/s

95th percentile per-packet one-way delay: 112.612 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 24.17 Mbit/s

95th percentile per-packet one-way delay: 112.457 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 41.01 Mbit/s

95th percentile per-packet one-way delay: 112.724 ms

Loss rate: 0.00%

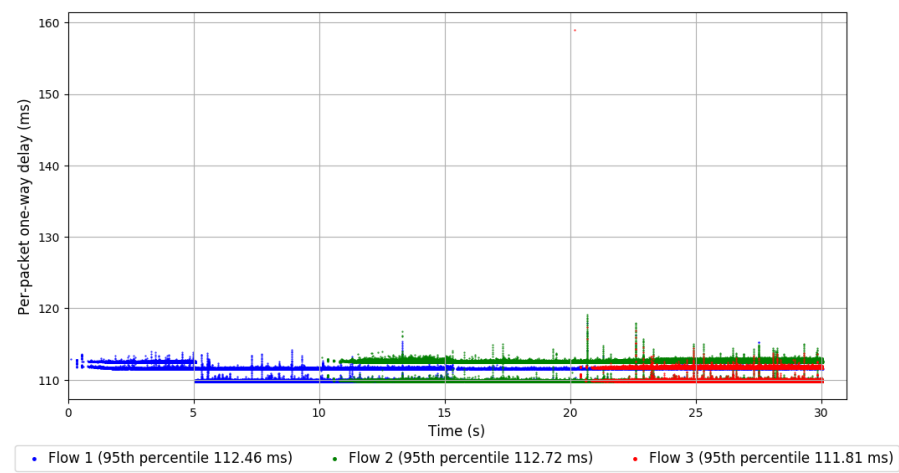
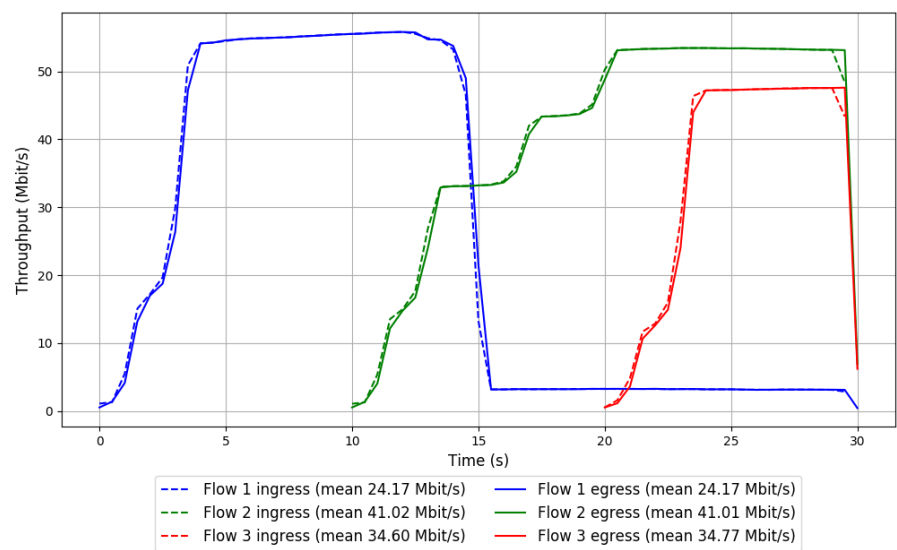
-- Flow 3:

Average throughput: 34.77 Mbit/s

95th percentile per-packet one-way delay: 111.813 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-31 11:51:03

End at: 2018-01-31 11:51:33

Below is generated by plot.py at 2018-01-31 14:43:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 36.43 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 19.39 Mbit/s

95th percentile per-packet one-way delay: 113.661 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 9.40 Mbit/s

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

Loss rate: 0.00%

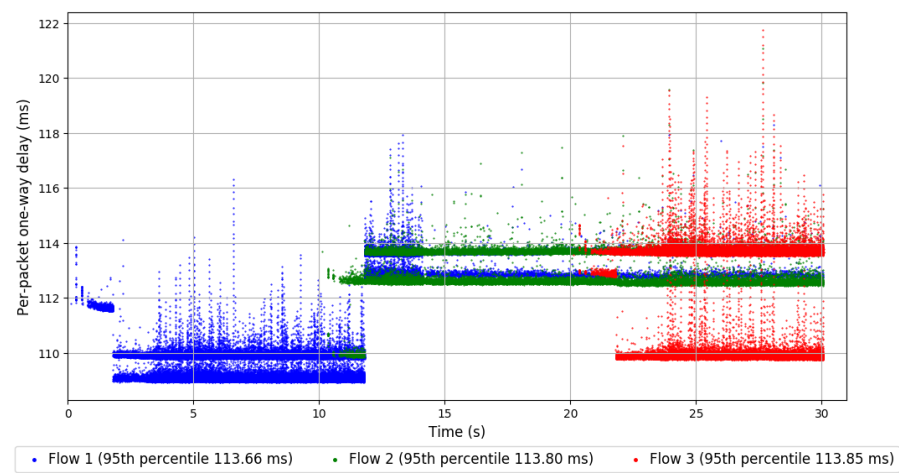
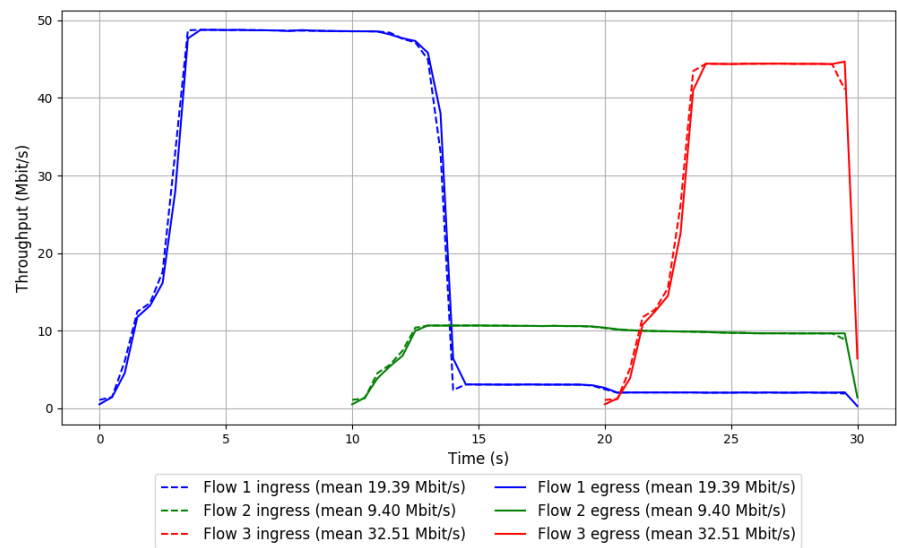
-- Flow 3:

Average throughput: 32.51 Mbit/s

95th percentile per-packet one-way delay: 113.852 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-31 12:08:56

End at: 2018-01-31 12:09:26

Below is generated by plot.py at 2018-01-31 14:44:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.55 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.15 Mbit/s

95th percentile per-packet one-way delay: 112.994 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 16.21 Mbit/s

95th percentile per-packet one-way delay: 111.735 ms

Loss rate: 0.00%

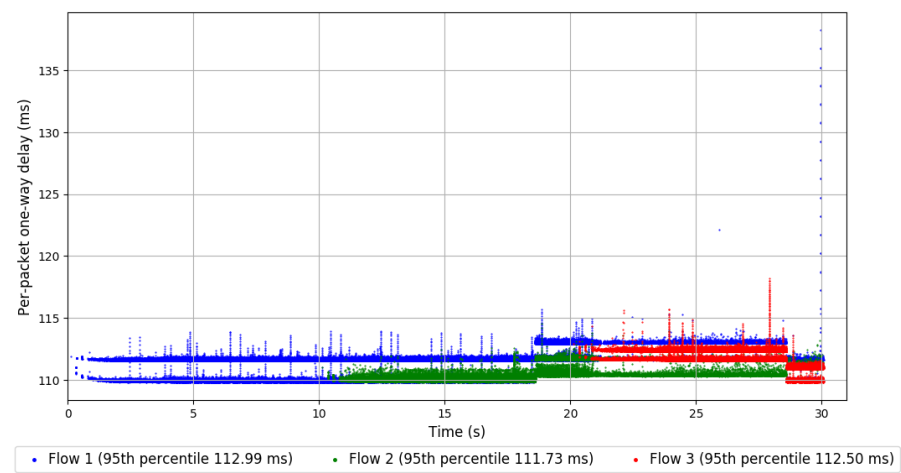
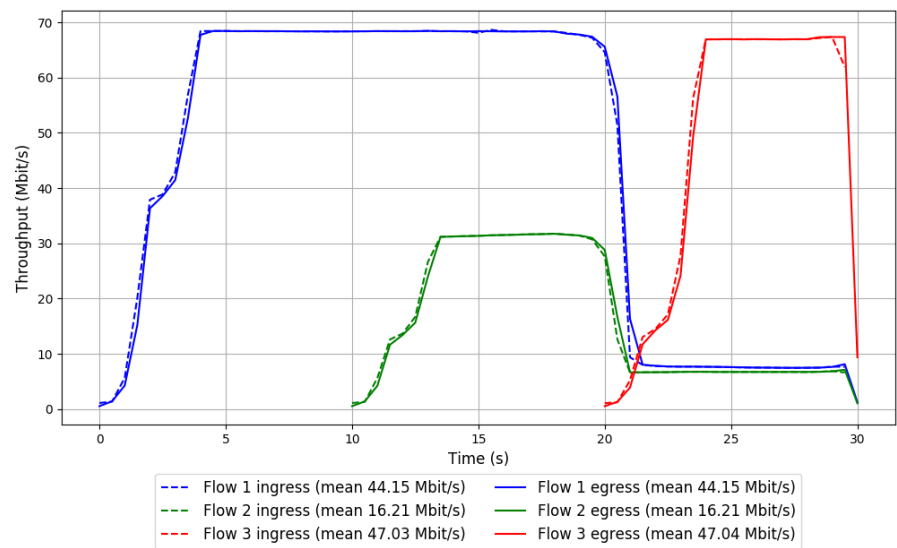
-- Flow 3:

Average throughput: 47.04 Mbit/s

95th percentile per-packet one-way delay: 112.496 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-31 12:26:39

End at: 2018-01-31 12:27:09

Below is generated by plot.py at 2018-01-31 14:44:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 63.39 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 11.43 Mbit/s

95th percentile per-packet one-way delay: 111.220 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.18 Mbit/s

95th percentile per-packet one-way delay: 111.198 ms

Loss rate: 0.00%

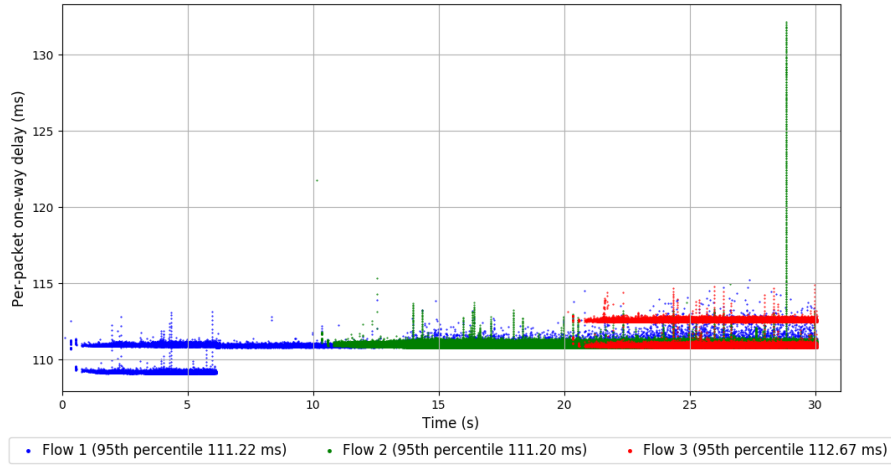
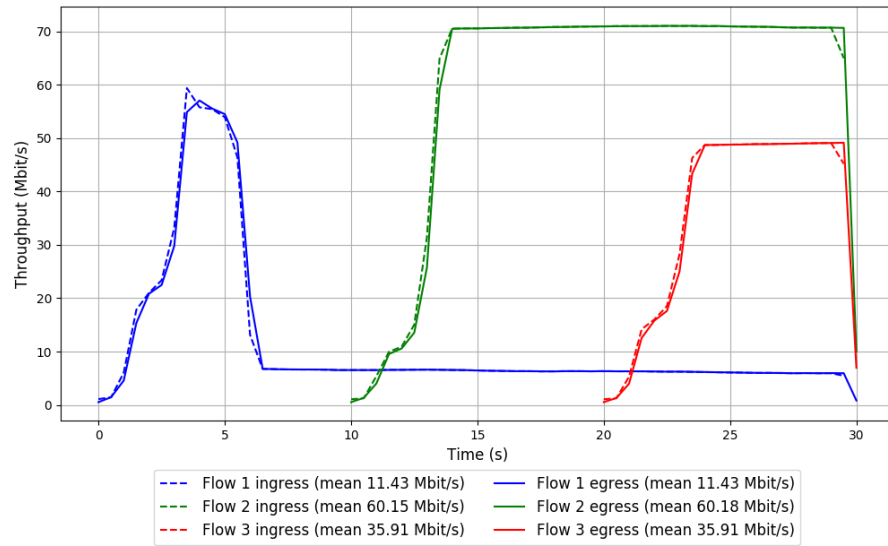
-- Flow 3:

Average throughput: 35.91 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-31 12:44:57

End at: 2018-01-31 12:45:27

Below is generated by plot.py at 2018-01-31 14:45:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.72 Mbit/s

95th percentile per-packet one-way delay: 113.184 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 28.73 Mbit/s

95th percentile per-packet one-way delay: 112.646 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 64.77 Mbit/s

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

Loss rate: 0.13%

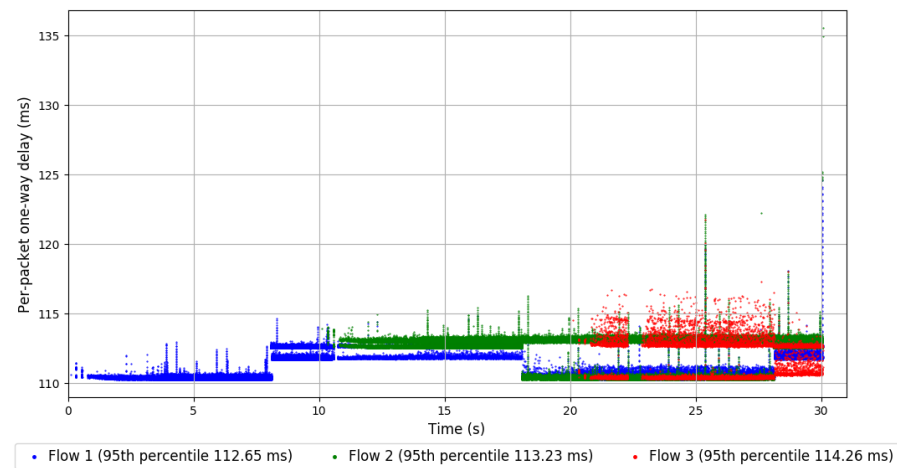
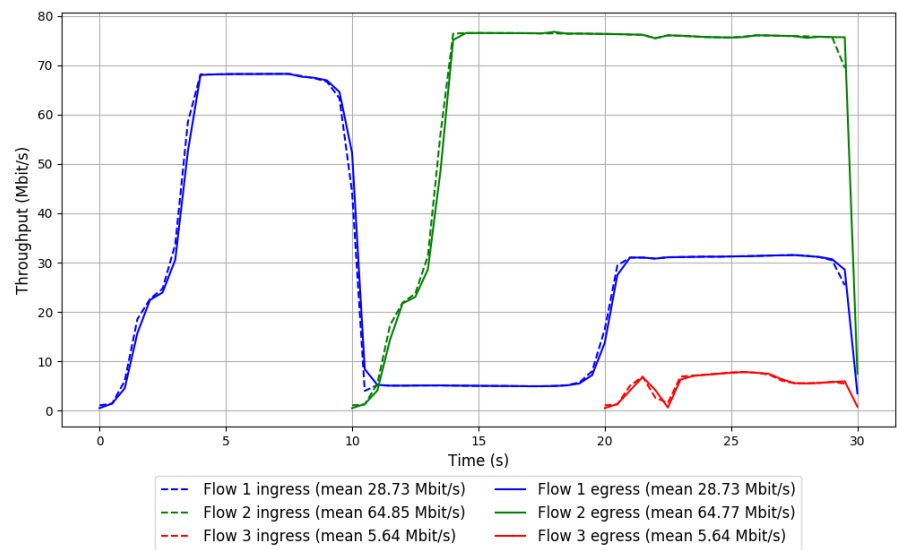
-- Flow 3:

Average throughput: 5.64 Mbit/s

95th percentile per-packet one-way delay: 114.259 ms

Loss rate: 0.02%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-31 13:03:13

End at: 2018-01-31 13:03:43

Below is generated by plot.py at 2018-01-31 14:45:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 57.12 Mbit/s

95th percentile per-packet one-way delay: 111.155 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.19 Mbit/s

95th percentile per-packet one-way delay: 111.035 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 12.74 Mbit/s

95th percentile per-packet one-way delay: 111.795 ms

Loss rate: 0.00%

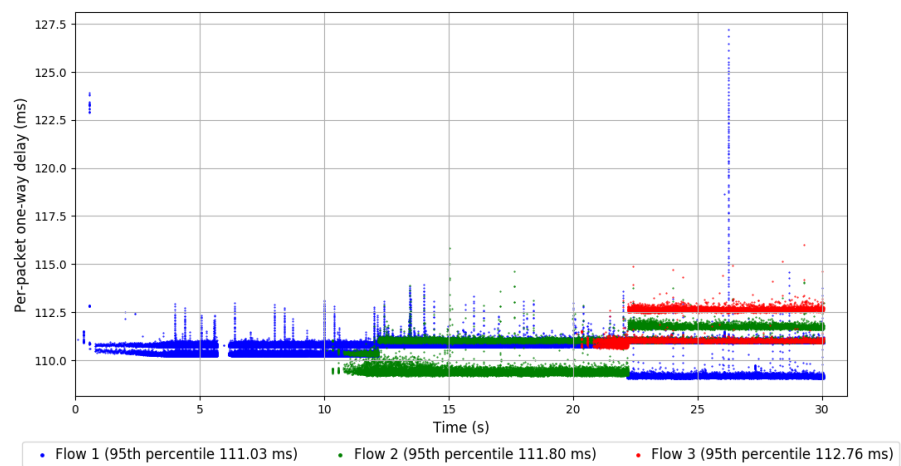
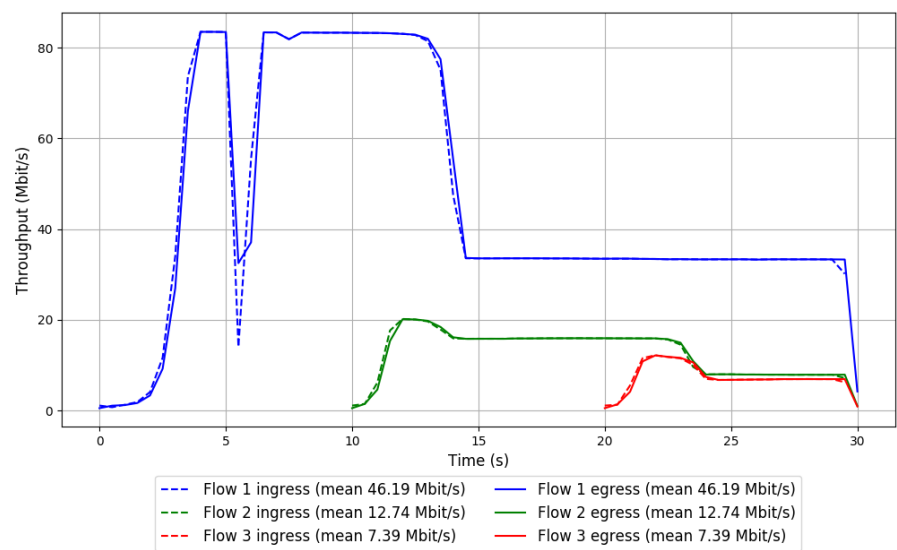
-- Flow 3:

Average throughput: 7.39 Mbit/s

95th percentile per-packet one-way delay: 112.763 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

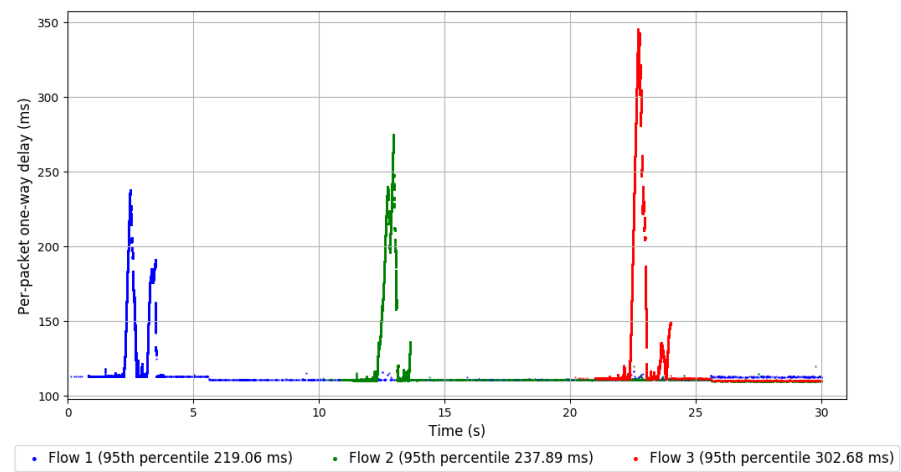
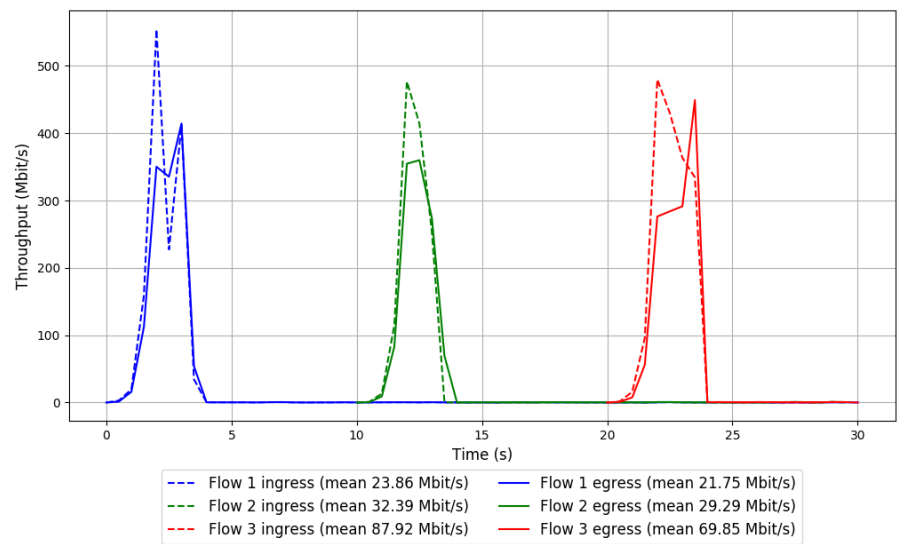


```
Run 1: Statistics of FillP

Start at: 2018-01-31 10:20:49
End at: 2018-01-31 10:21:19

# Below is generated by plot.py at 2018-01-31 14:45:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.13 Mbit/s
95th percentile per-packet one-way delay: 239.932 ms
Loss rate: 13.63%
-- Flow 1:
Average throughput: 21.75 Mbit/s
95th percentile per-packet one-way delay: 219.059 ms
Loss rate: 8.86%
-- Flow 2:
Average throughput: 29.29 Mbit/s
95th percentile per-packet one-way delay: 237.892 ms
Loss rate: 9.59%
-- Flow 3:
Average throughput: 69.85 Mbit/s
95th percentile per-packet one-way delay: 302.683 ms
Loss rate: 20.57%
```


Run 1: Report of FillP — Data Link

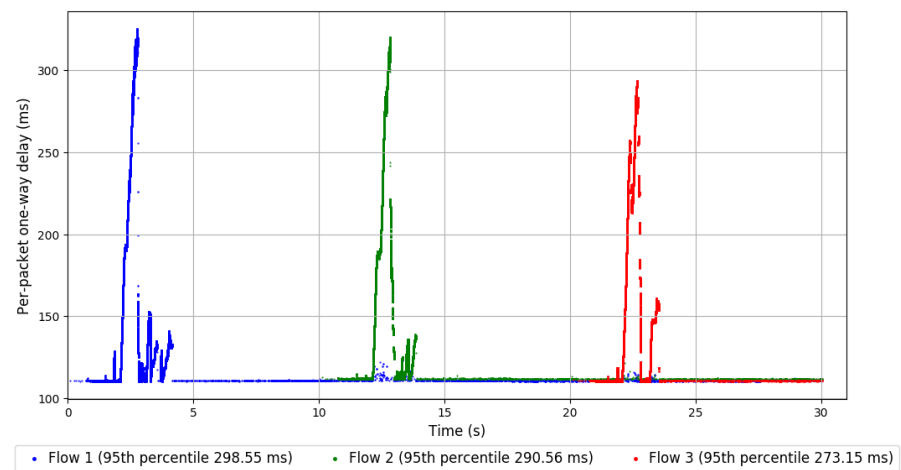
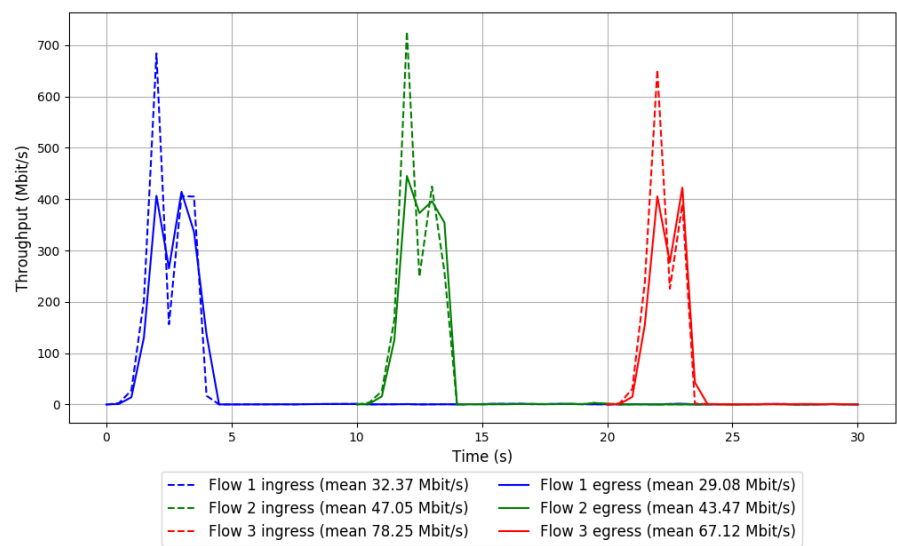


```
Run 2: Statistics of FillP

Start at: 2018-01-31 10:38:27
End at: 2018-01-31 10:38:57

# Below is generated by plot.py at 2018-01-31 14:46:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.21 Mbit/s
95th percentile per-packet one-way delay: 284.540 ms
Loss rate: 10.44%
-- Flow 1:
Average throughput: 29.08 Mbit/s
95th percentile per-packet one-way delay: 298.547 ms
Loss rate: 10.15%
-- Flow 2:
Average throughput: 43.47 Mbit/s
95th percentile per-packet one-way delay: 290.557 ms
Loss rate: 7.62%
-- Flow 3:
Average throughput: 67.12 Mbit/s
95th percentile per-packet one-way delay: 273.152 ms
Loss rate: 14.22%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-31 10:56:00

End at: 2018-01-31 10:56:30

Below is generated by plot.py at 2018-01-31 14:46:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.11 Mbit/s

95th percentile per-packet one-way delay: 321.074 ms

Loss rate: 15.33%

-- Flow 1:

Average throughput: 22.64 Mbit/s

95th percentile per-packet one-way delay: 321.252 ms

Loss rate: 16.31%

-- Flow 2:

Average throughput: 32.74 Mbit/s

95th percentile per-packet one-way delay: 320.810 ms

Loss rate: 15.70%

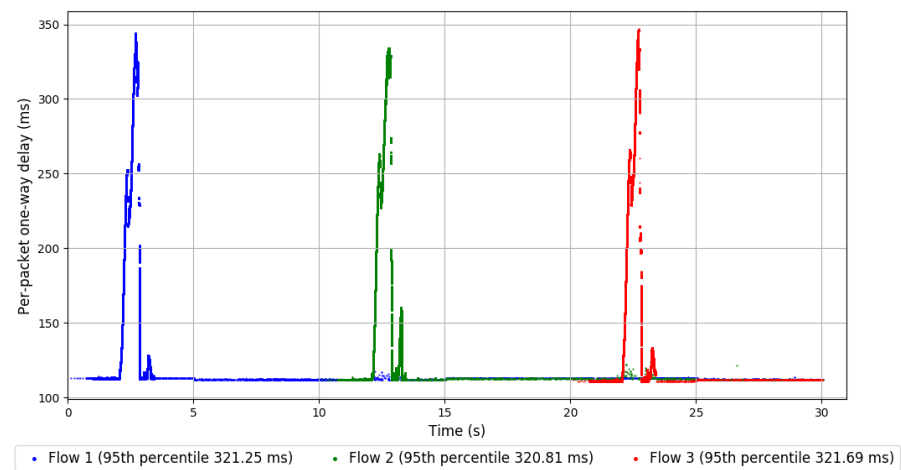
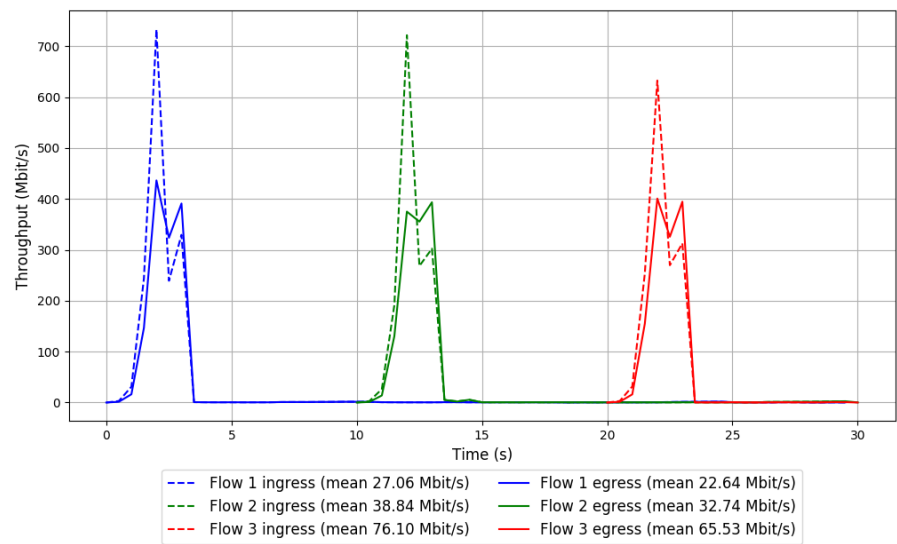
-- Flow 3:

Average throughput: 65.53 Mbit/s

95th percentile per-packet one-way delay: 321.692 ms

Loss rate: 13.88%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-31 11:13:50

End at: 2018-01-31 11:14:20

Below is generated by plot.py at 2018-01-31 14:46:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.17 Mbit/s

95th percentile per-packet one-way delay: 273.742 ms

Loss rate: 13.41%

-- Flow 1:

Average throughput: 21.95 Mbit/s

95th percentile per-packet one-way delay: 291.267 ms

Loss rate: 19.00%

-- Flow 2:

Average throughput: 41.64 Mbit/s

95th percentile per-packet one-way delay: 273.646 ms

Loss rate: 13.88%

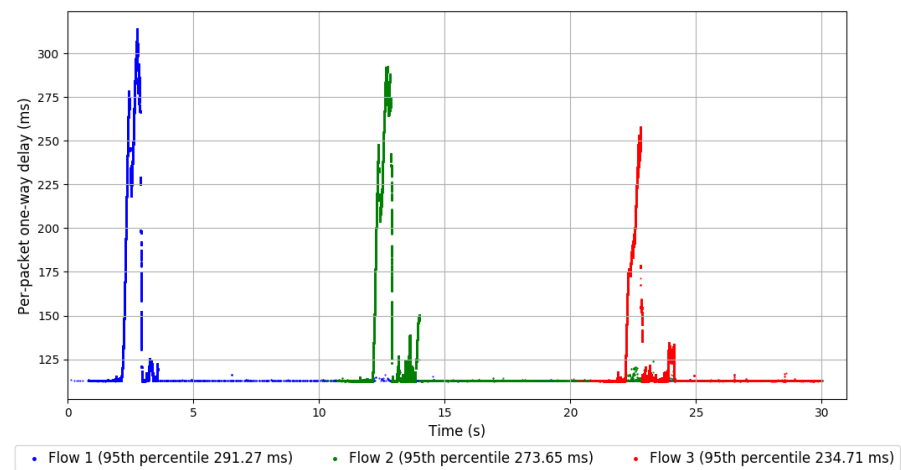
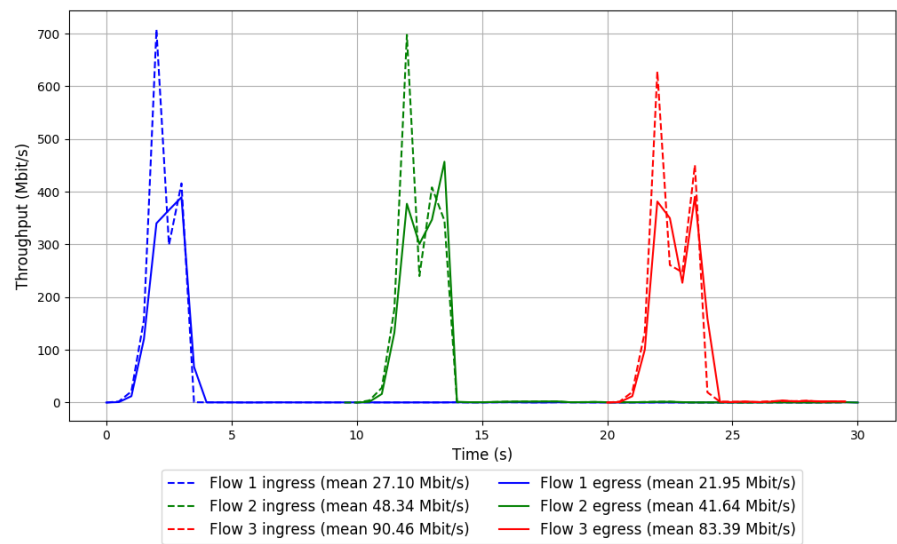
-- Flow 3:

Average throughput: 83.39 Mbit/s

95th percentile per-packet one-way delay: 234.712 ms

Loss rate: 7.83%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-31 11:31:30

End at: 2018-01-31 11:32:00

Below is generated by plot.py at 2018-01-31 14:46:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.21 Mbit/s

95th percentile per-packet one-way delay: 261.669 ms

Loss rate: 13.78%

-- Flow 1:

Average throughput: 21.40 Mbit/s

95th percentile per-packet one-way delay: 278.057 ms

Loss rate: 20.24%

-- Flow 2:

Average throughput: 43.26 Mbit/s

95th percentile per-packet one-way delay: 245.523 ms

Loss rate: 5.69%

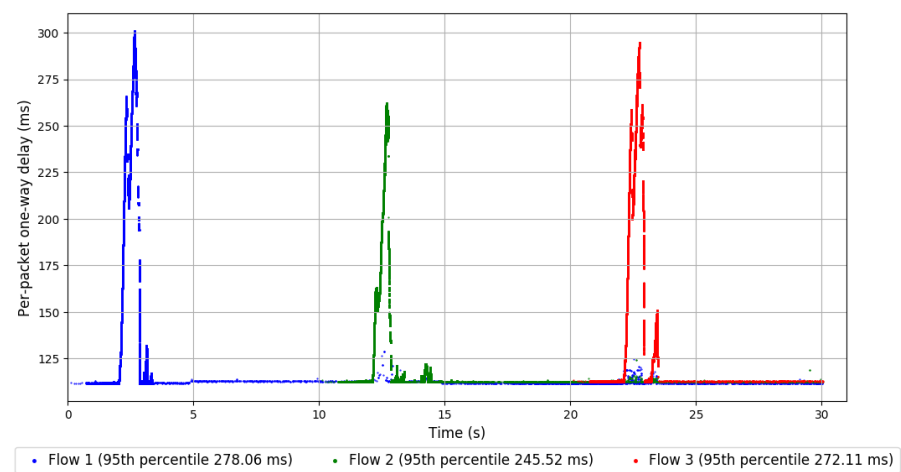
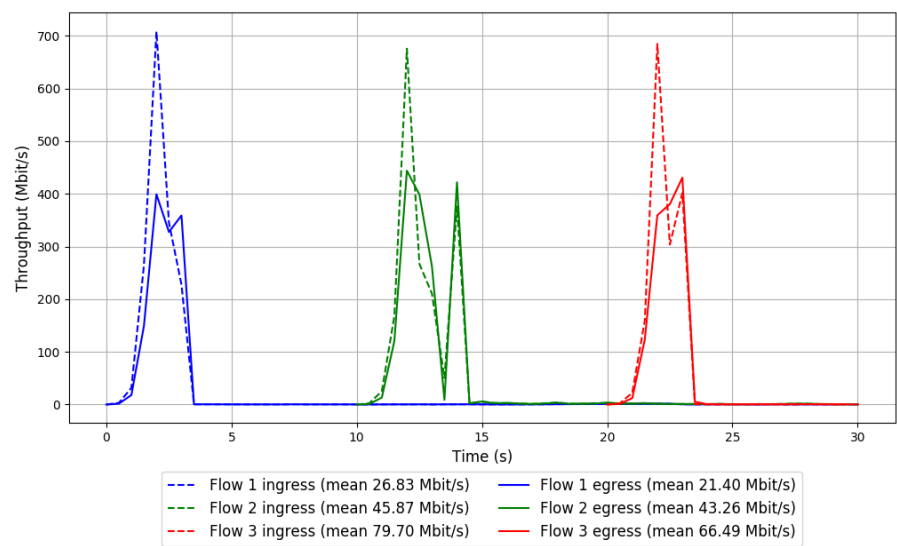
-- Flow 3:

Average throughput: 66.49 Mbit/s

95th percentile per-packet one-way delay: 272.113 ms

Loss rate: 16.58%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-31 11:49:05

End at: 2018-01-31 11:49:35

Below is generated by plot.py at 2018-01-31 14:46:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.26 Mbit/s

95th percentile per-packet one-way delay: 272.042 ms

Loss rate: 12.34%

-- Flow 1:

Average throughput: 22.58 Mbit/s

95th percentile per-packet one-way delay: 280.471 ms

Loss rate: 13.06%

-- Flow 2:

Average throughput: 33.56 Mbit/s

95th percentile per-packet one-way delay: 214.510 ms

Loss rate: 5.10%

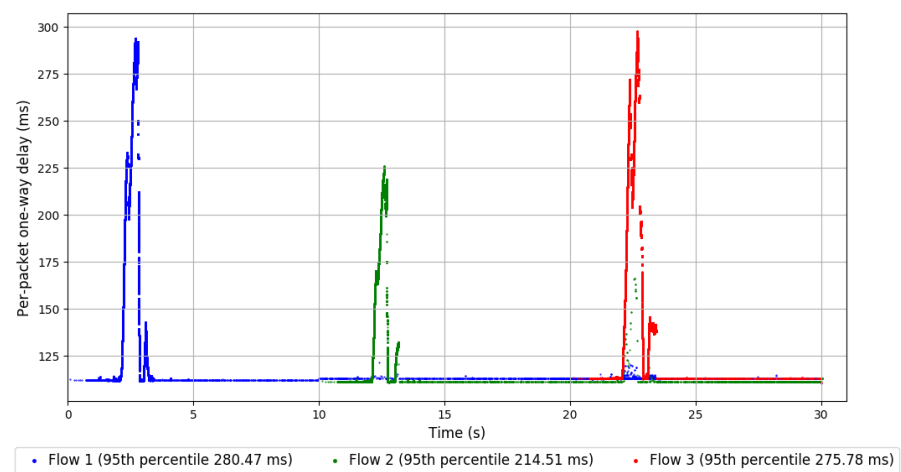
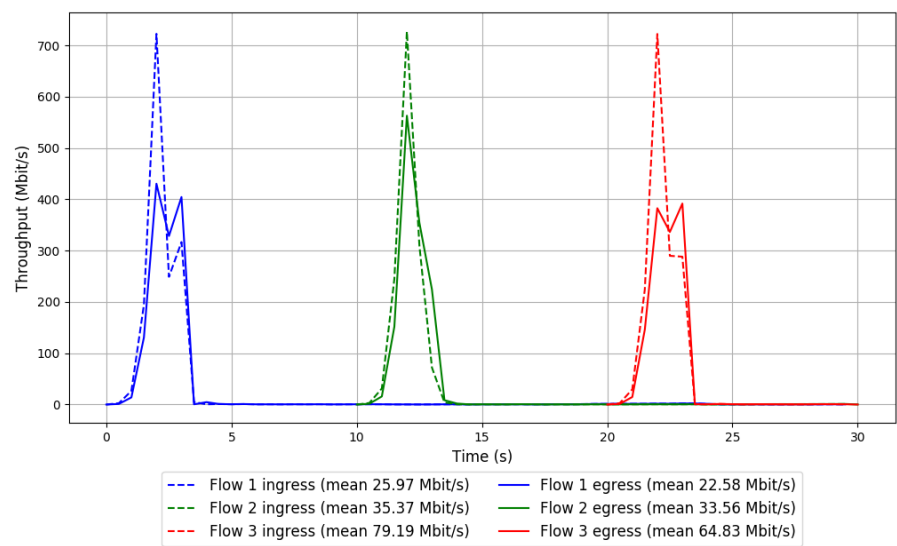
-- Flow 3:

Average throughput: 64.83 Mbit/s

95th percentile per-packet one-way delay: 275.776 ms

Loss rate: 18.15%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-31 12:06:59

End at: 2018-01-31 12:07:29

Below is generated by plot.py at 2018-01-31 14:47:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.79 Mbit/s

95th percentile per-packet one-way delay: 301.187 ms

Loss rate: 16.46%

-- Flow 1:

Average throughput: 22.38 Mbit/s

95th percentile per-packet one-way delay: 282.239 ms

Loss rate: 11.84%

-- Flow 2:

Average throughput: 47.36 Mbit/s

95th percentile per-packet one-way delay: 347.911 ms

Loss rate: 19.28%

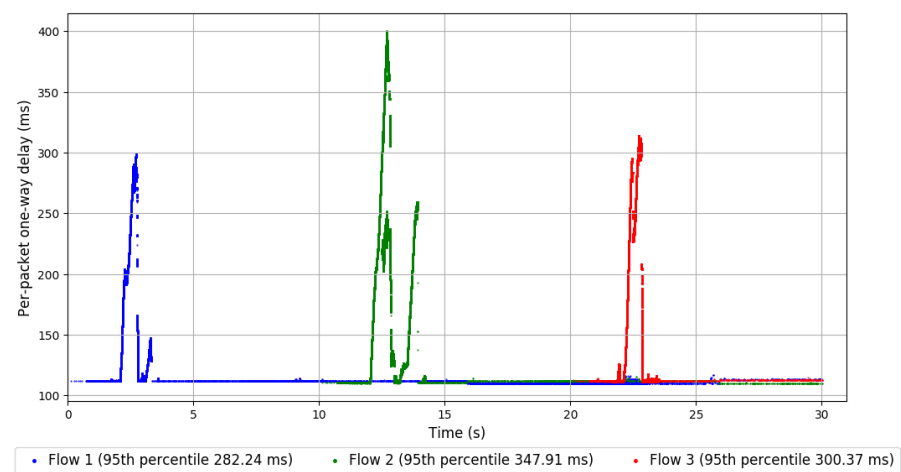
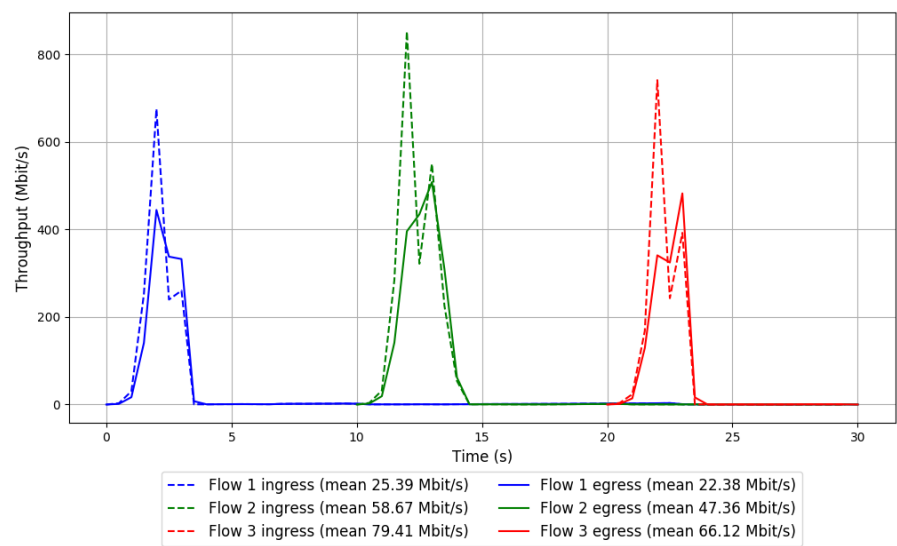
-- Flow 3:

Average throughput: 66.12 Mbit/s

95th percentile per-packet one-way delay: 300.373 ms

Loss rate: 16.74%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-31 12:24:50

End at: 2018-01-31 12:25:20

Below is generated by plot.py at 2018-01-31 14:47:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.25 Mbit/s

95th percentile per-packet one-way delay: 272.830 ms

Loss rate: 17.34%

-- Flow 1:

Average throughput: 22.55 Mbit/s

95th percentile per-packet one-way delay: 262.580 ms

Loss rate: 16.85%

-- Flow 2:

Average throughput: 33.73 Mbit/s

95th percentile per-packet one-way delay: 295.413 ms

Loss rate: 15.75%

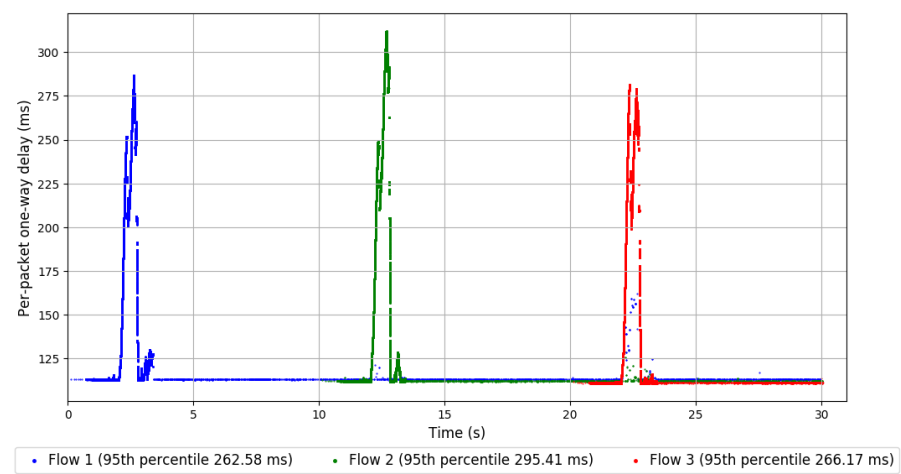
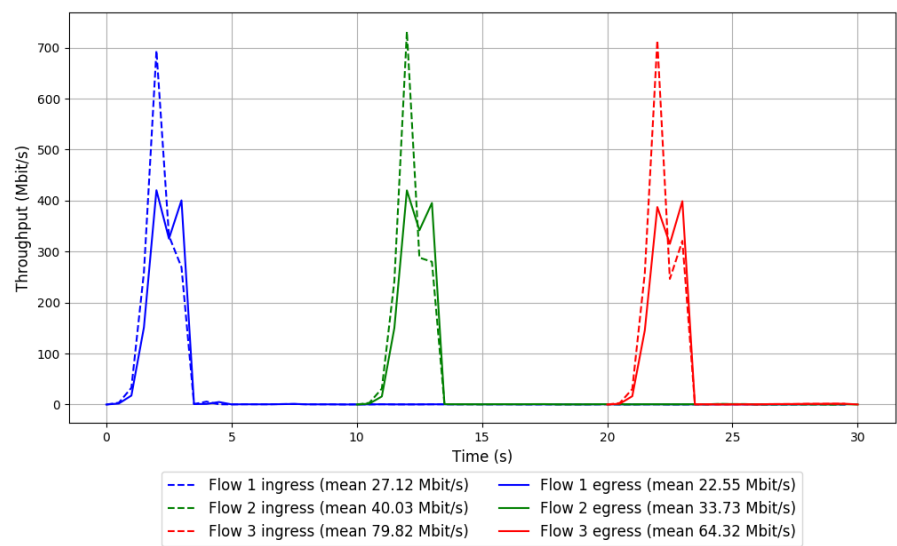
-- Flow 3:

Average throughput: 64.32 Mbit/s

95th percentile per-packet one-way delay: 266.169 ms

Loss rate: 19.42%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-31 12:42:59

End at: 2018-01-31 12:43:29

Below is generated by plot.py at 2018-01-31 14:47:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.68 Mbit/s

95th percentile per-packet one-way delay: 305.248 ms

Loss rate: 14.06%

-- Flow 1:

Average throughput: 22.01 Mbit/s

95th percentile per-packet one-way delay: 296.339 ms

Loss rate: 17.10%

-- Flow 2:

Average throughput: 33.37 Mbit/s

95th percentile per-packet one-way delay: 315.893 ms

Loss rate: 13.91%

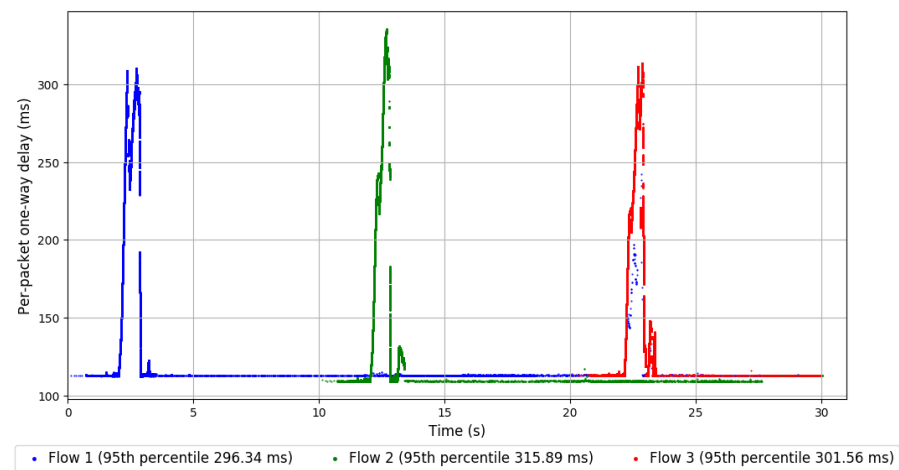
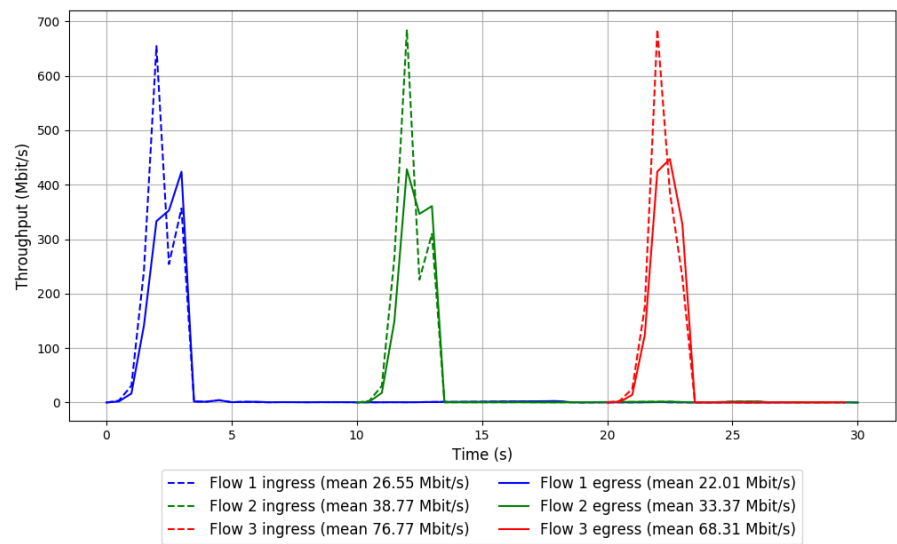
-- Flow 3:

Average throughput: 68.31 Mbit/s

95th percentile per-packet one-way delay: 301.556 ms

Loss rate: 11.02%

Run 9: Report of FillP — Data Link

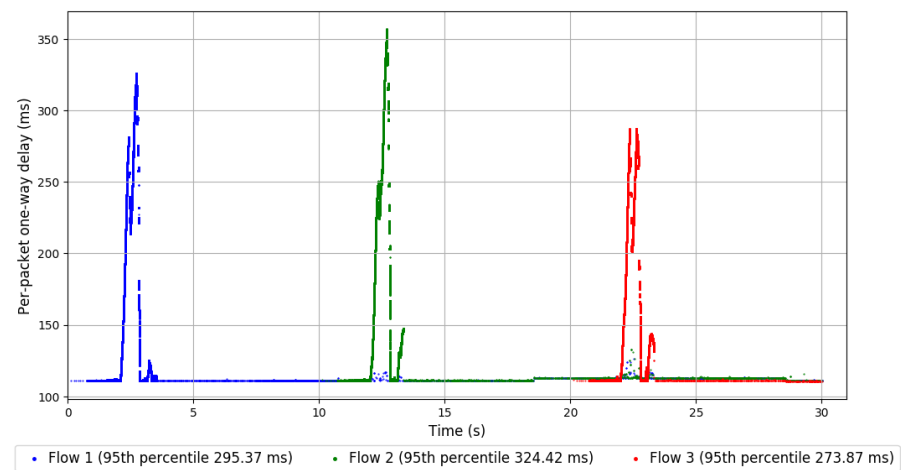
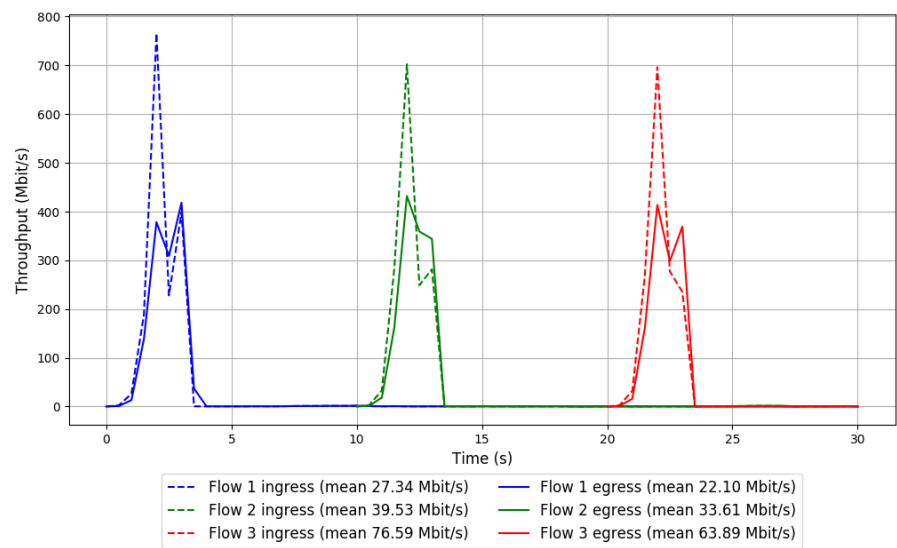


```
Run 10: Statistics of FillP

Start at: 2018-01-31 13:01:16
End at: 2018-01-31 13:01:46

# Below is generated by plot.py at 2018-01-31 14:48:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.62 Mbit/s
95th percentile per-packet one-way delay: 298.636 ms
Loss rate: 16.94%
-- Flow 1:
Average throughput: 22.10 Mbit/s
95th percentile per-packet one-way delay: 295.365 ms
Loss rate: 19.17%
-- Flow 2:
Average throughput: 33.61 Mbit/s
95th percentile per-packet one-way delay: 324.421 ms
Loss rate: 14.96%
-- Flow 3:
Average throughput: 63.89 Mbit/s
95th percentile per-packet one-way delay: 273.867 ms
Loss rate: 16.58%
```

Run 10: Report of FillP — Data Link

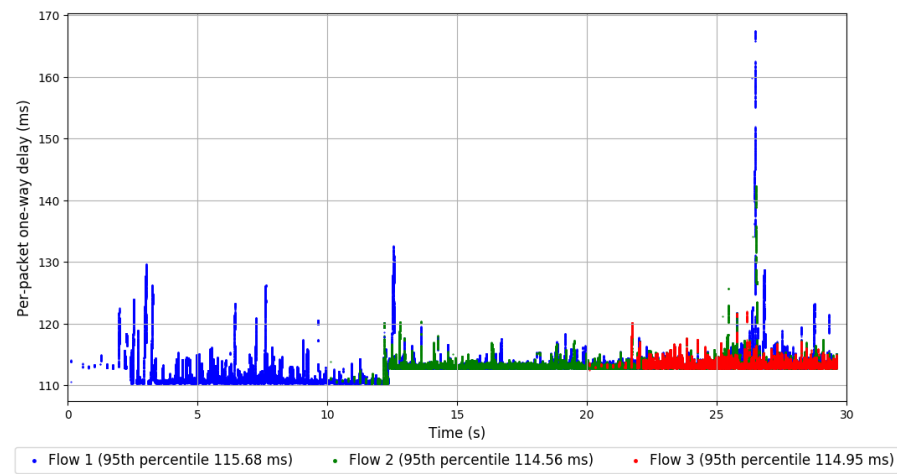
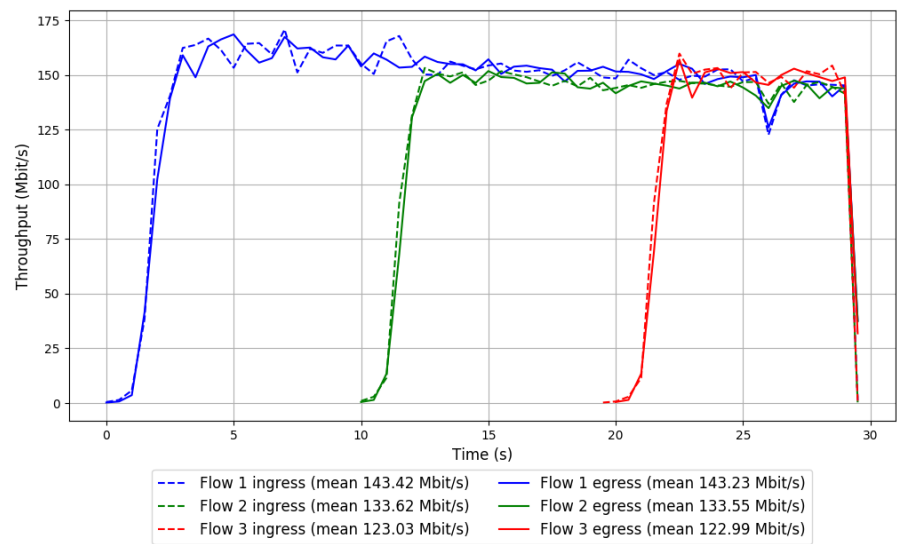


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-01-31 10:15:32
End at: 2018-01-31 10:16:02

# Below is generated by plot.py at 2018-01-31 14:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 271.20 Mbit/s
95th percentile per-packet one-way delay: 115.049 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 143.23 Mbit/s
95th percentile per-packet one-way delay: 115.680 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 133.55 Mbit/s
95th percentile per-packet one-way delay: 114.556 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 122.99 Mbit/s
95th percentile per-packet one-way delay: 114.954 ms
Loss rate: 0.03%
```

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

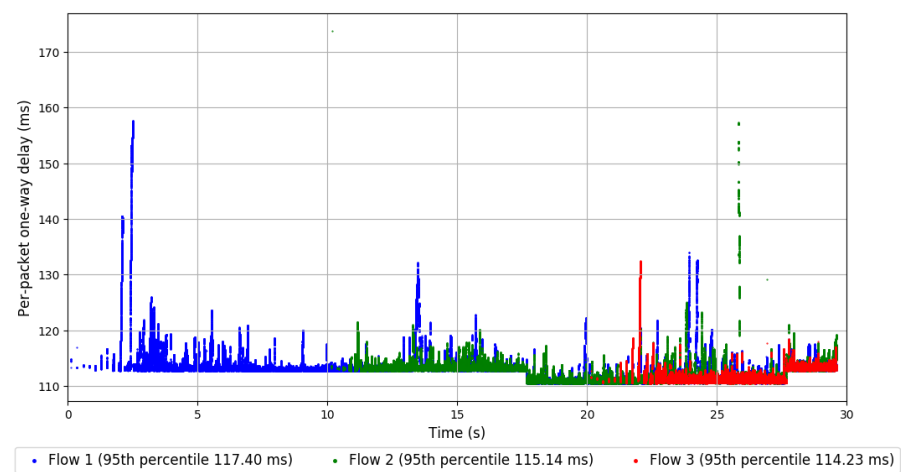
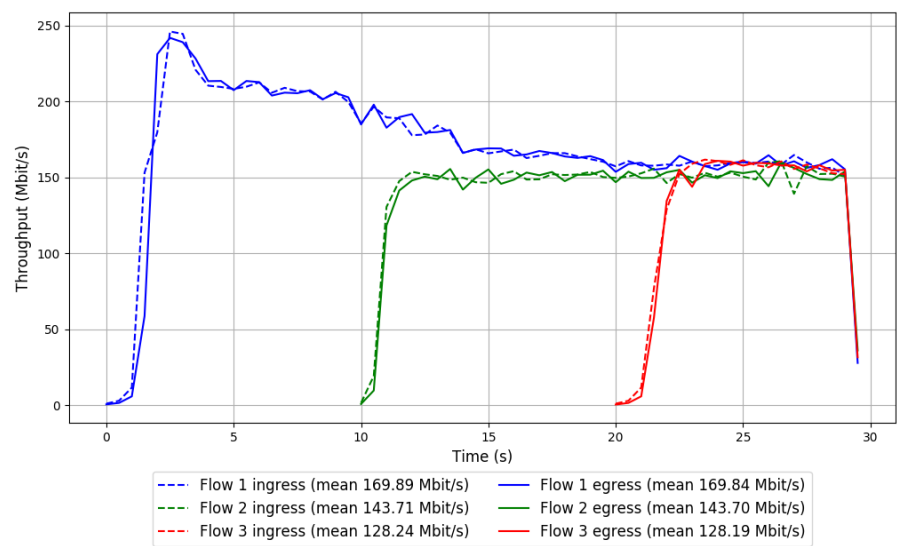


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-01-31 10:33:07
End at: 2018-01-31 10:33:37

# Below is generated by plot.py at 2018-01-31 14:50:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 305.80 Mbit/s
95th percentile per-packet one-way delay: 116.164 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 169.84 Mbit/s
95th percentile per-packet one-way delay: 117.402 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 143.70 Mbit/s
95th percentile per-packet one-way delay: 115.138 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 128.19 Mbit/s
95th percentile per-packet one-way delay: 114.235 ms
Loss rate: 0.03%
```

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-01-31 10:50:49

End at: 2018-01-31 10:51:19

Below is generated by plot.py at 2018-01-31 14:50:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 284.52 Mbit/s

95th percentile per-packet one-way delay: 115.782 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 150.20 Mbit/s

95th percentile per-packet one-way delay: 114.764 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 139.78 Mbit/s

95th percentile per-packet one-way delay: 116.698 ms

Loss rate: 0.02%

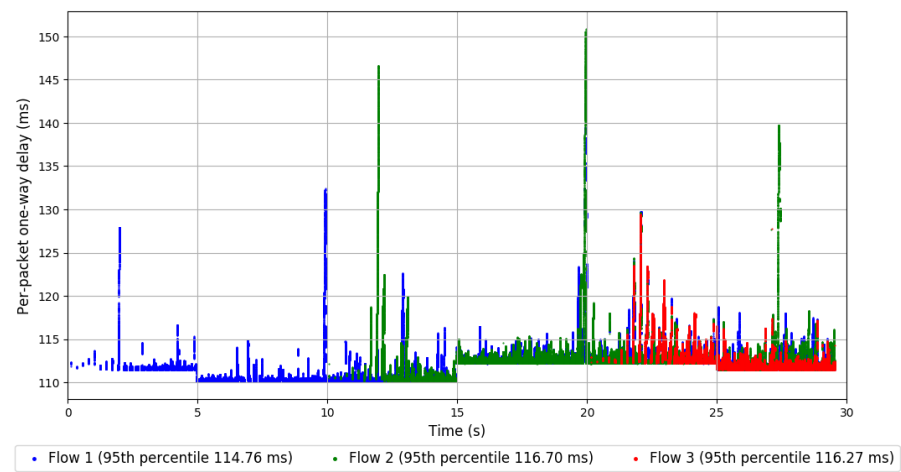
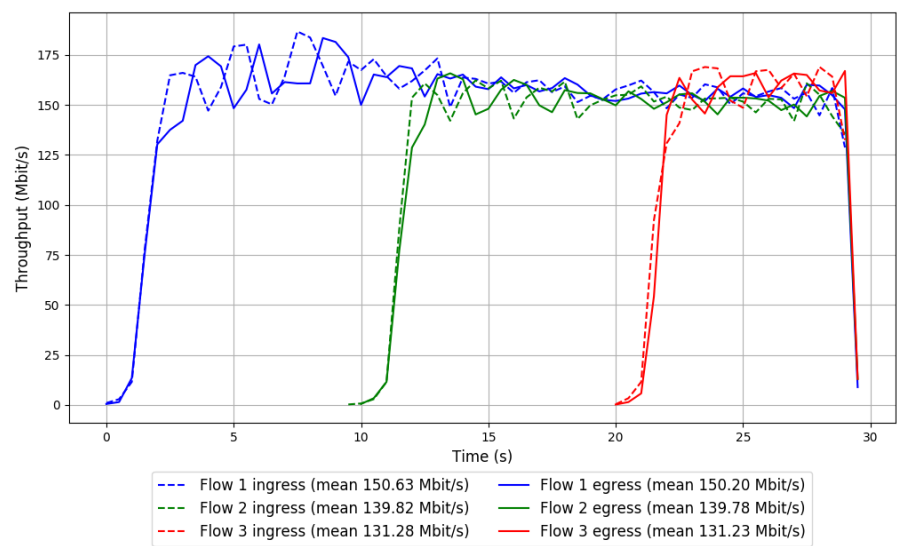
-- Flow 3:

Average throughput: 131.23 Mbit/s

95th percentile per-packet one-way delay: 116.265 ms

Loss rate: 0.02%

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



Run 4: Statistics of Indigo-1-32

Start at: 2018-01-31 11:08:28

End at: 2018-01-31 11:08:58

Below is generated by plot.py at 2018-01-31 14:51:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 292.73 Mbit/s

95th percentile per-packet one-way delay: 116.917 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 145.87 Mbit/s

95th percentile per-packet one-way delay: 116.531 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 137.41 Mbit/s

95th percentile per-packet one-way delay: 117.011 ms

Loss rate: 0.03%

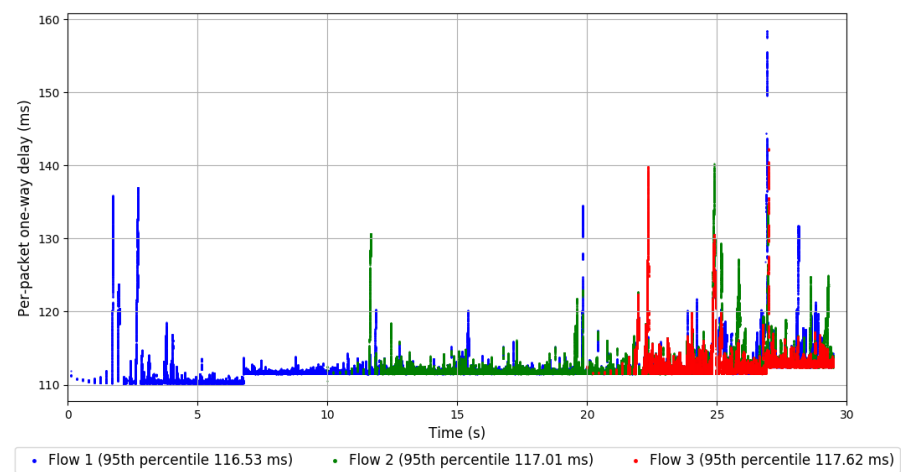
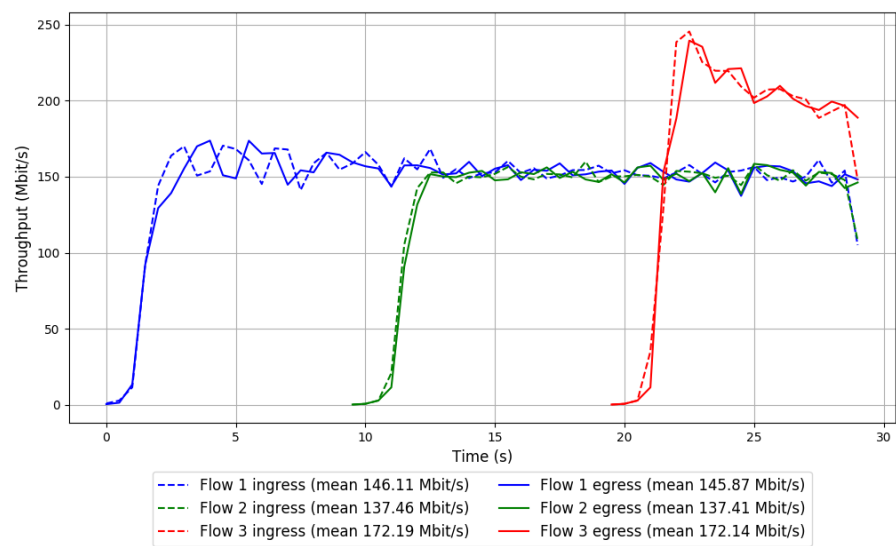
-- Flow 3:

Average throughput: 172.14 Mbit/s

95th percentile per-packet one-way delay: 117.624 ms

Loss rate: 0.03%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-01-31 11:26:10

End at: 2018-01-31 11:26:40

Below is generated by plot.py at 2018-01-31 14:52:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 333.91 Mbit/s

95th percentile per-packet one-way delay: 115.148 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 204.71 Mbit/s

95th percentile per-packet one-way delay: 114.730 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 132.65 Mbit/s

95th percentile per-packet one-way delay: 114.934 ms

Loss rate: 0.01%

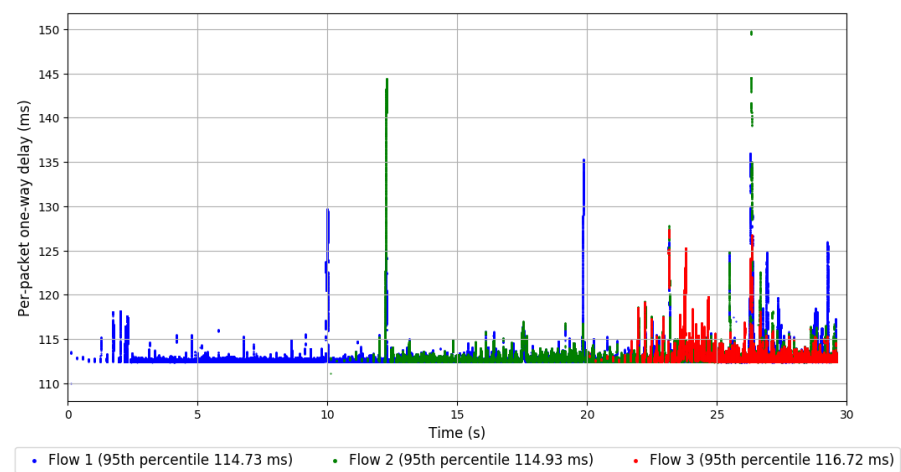
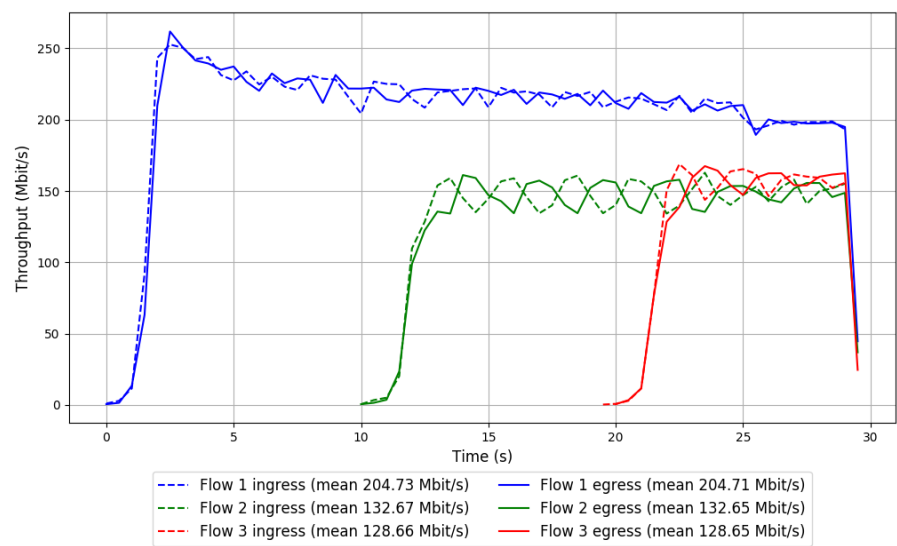
-- Flow 3:

Average throughput: 128.65 Mbit/s

95th percentile per-packet one-way delay: 116.724 ms

Loss rate: 0.02%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-01-31 11:43:50

End at: 2018-01-31 11:44:20

Below is generated by plot.py at 2018-01-31 14:52:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 305.47 Mbit/s

95th percentile per-packet one-way delay: 116.891 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 152.26 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 141.65 Mbit/s

95th percentile per-packet one-way delay: 118.177 ms

Loss rate: 0.01%

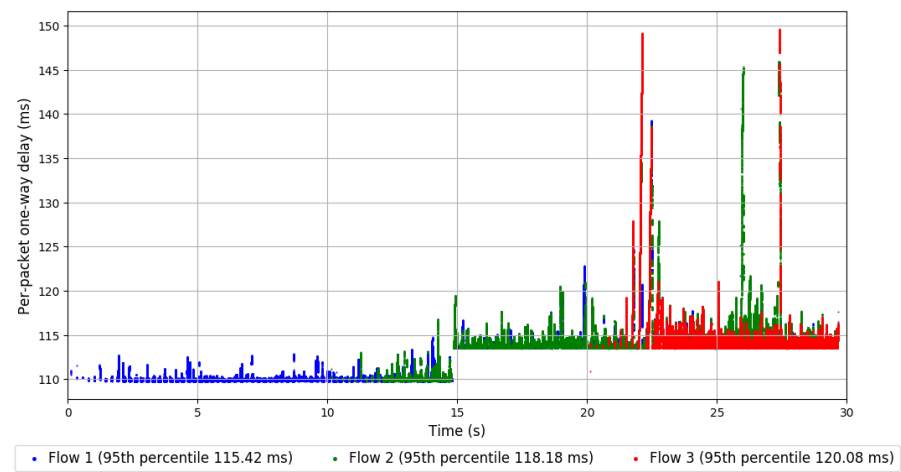
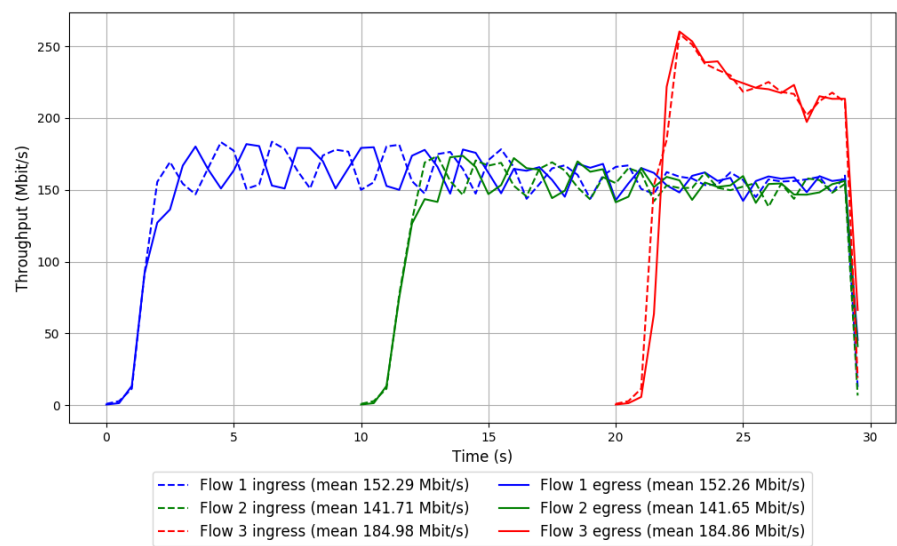
-- Flow 3:

Average throughput: 184.86 Mbit/s

95th percentile per-packet one-way delay: 120.078 ms

Loss rate: 0.04%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-01-31 12:01:37

End at: 2018-01-31 12:02:07

Below is generated by plot.py at 2018-01-31 14:52:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.65 Mbit/s

95th percentile per-packet one-way delay: 116.546 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 144.87 Mbit/s

95th percentile per-packet one-way delay: 116.147 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 144.85 Mbit/s

95th percentile per-packet one-way delay: 116.771 ms

Loss rate: 0.01%

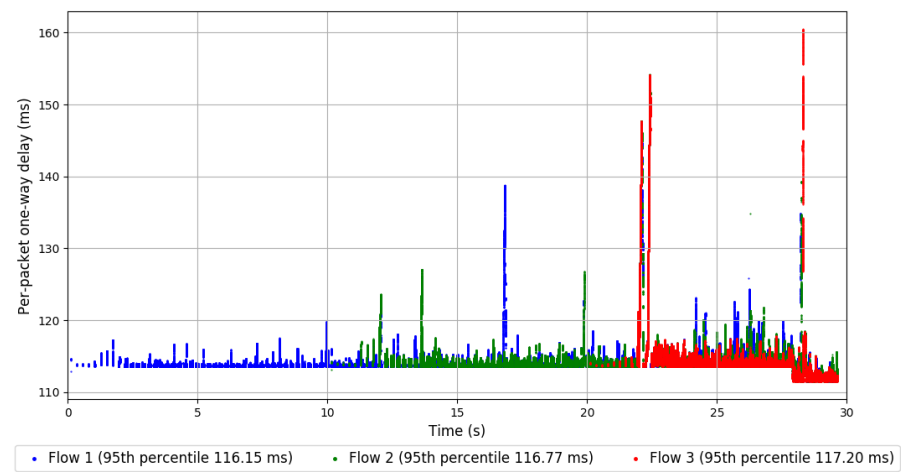
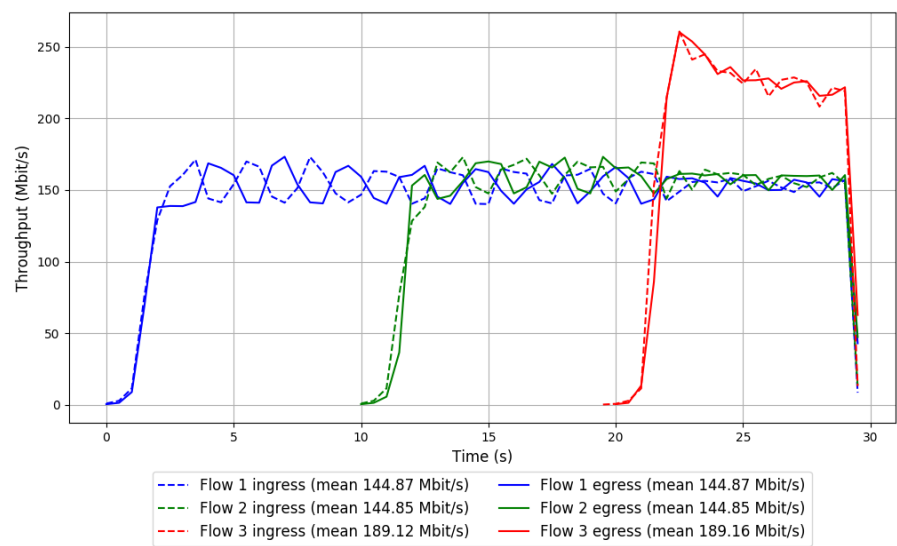
-- Flow 3:

Average throughput: 189.16 Mbit/s

95th percentile per-packet one-way delay: 117.204 ms

Loss rate: 0.00%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-01-31 12:19:44

End at: 2018-01-31 12:20:14

Below is generated by plot.py at 2018-01-31 14:52:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.98 Mbit/s

95th percentile per-packet one-way delay: 114.146 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 165.96 Mbit/s

95th percentile per-packet one-way delay: 113.563 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 140.48 Mbit/s

95th percentile per-packet one-way delay: 114.737 ms

Loss rate: 0.02%

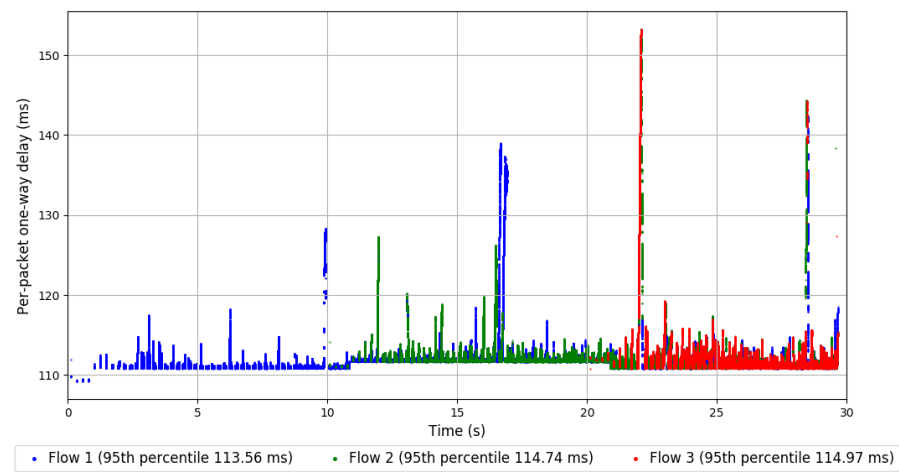
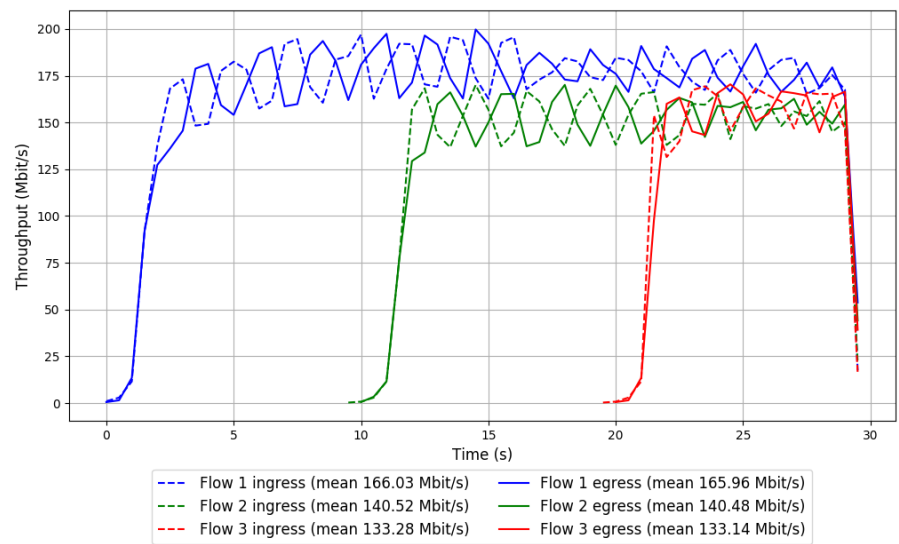
-- Flow 3:

Average throughput: 133.14 Mbit/s

95th percentile per-packet one-way delay: 114.968 ms

Loss rate: 0.10%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-01-31 12:37:28

End at: 2018-01-31 12:37:58

Below is generated by plot.py at 2018-01-31 14:54:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 295.78 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 160.39 Mbit/s

95th percentile per-packet one-way delay: 113.872 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 143.29 Mbit/s

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

Loss rate: 0.00%

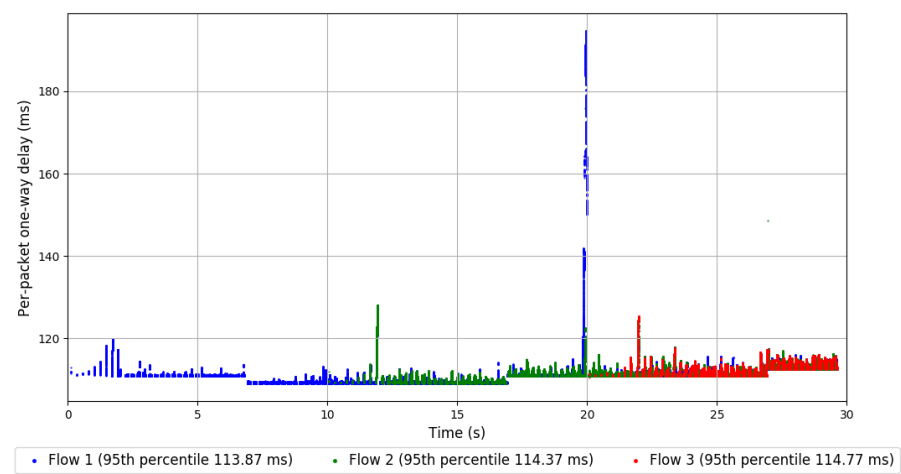
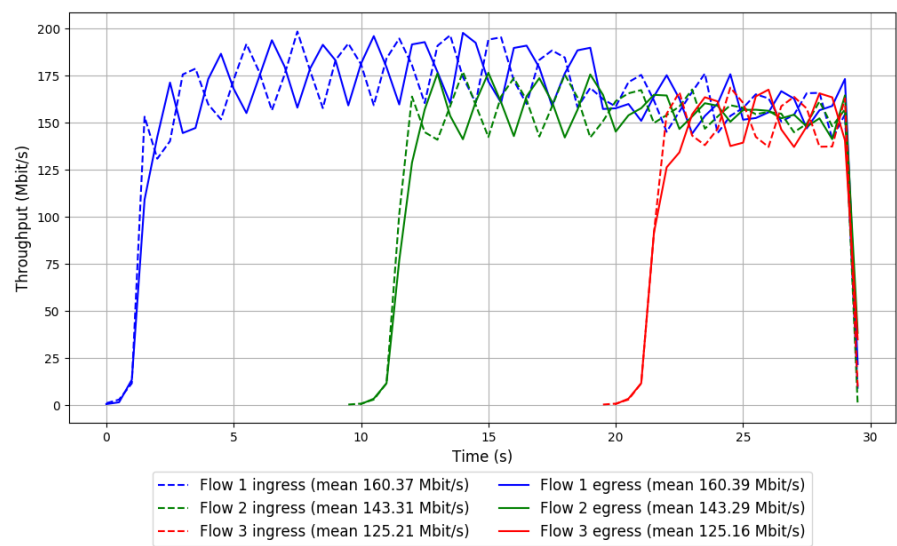
-- Flow 3:

Average throughput: 125.16 Mbit/s

95th percentile per-packet one-way delay: 114.766 ms

Loss rate: 0.02%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-01-31 12:55:52

End at: 2018-01-31 12:56:22

Below is generated by plot.py at 2018-01-31 14:55:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 310.64 Mbit/s

95th percentile per-packet one-way delay: 118.701 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 140.07 Mbit/s

95th percentile per-packet one-way delay: 117.339 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 194.44 Mbit/s

95th percentile per-packet one-way delay: 124.537 ms

Loss rate: 0.14%

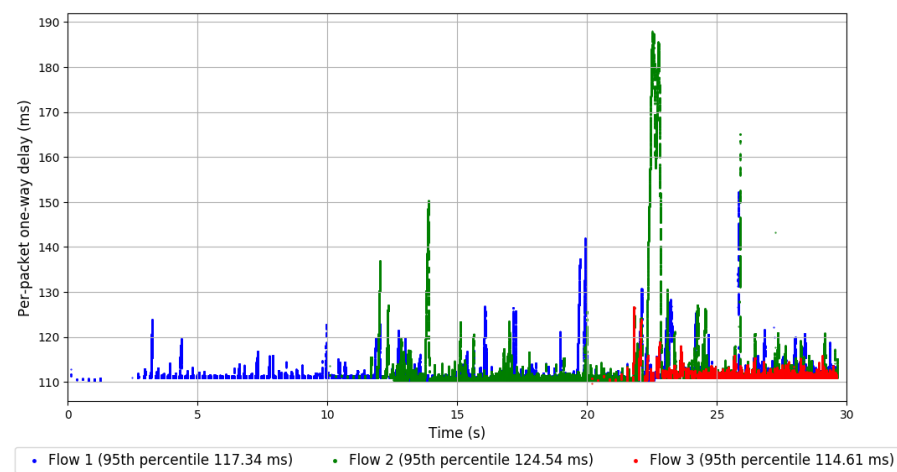
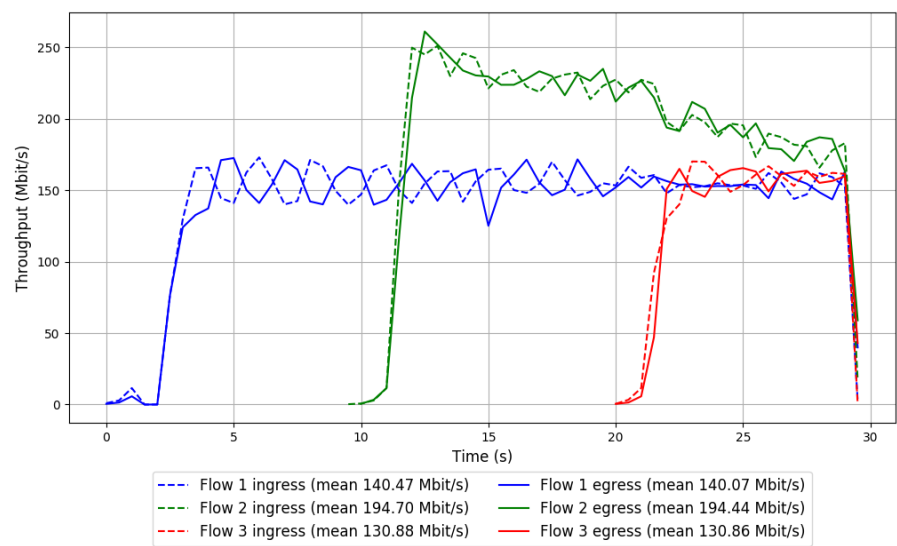
-- Flow 3:

Average throughput: 130.86 Mbit/s

95th percentile per-packet one-way delay: 114.613 ms

Loss rate: 0.00%

Run 10: Report of Indigo-1-32 — Data Link

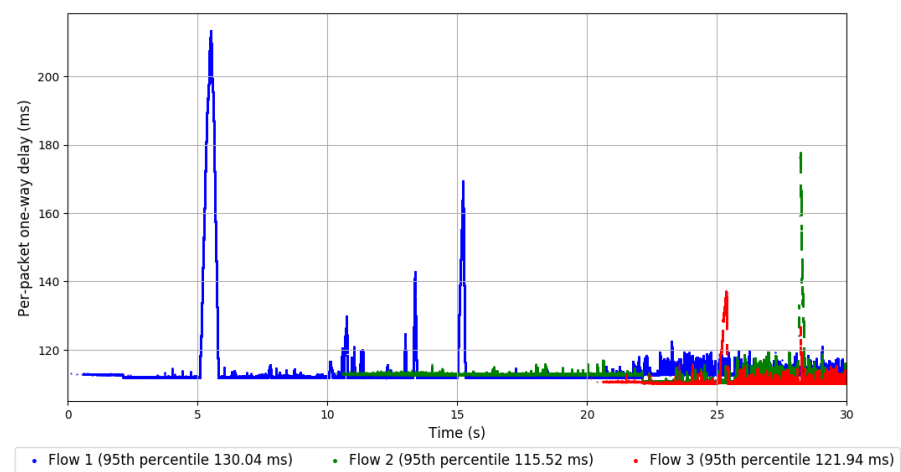
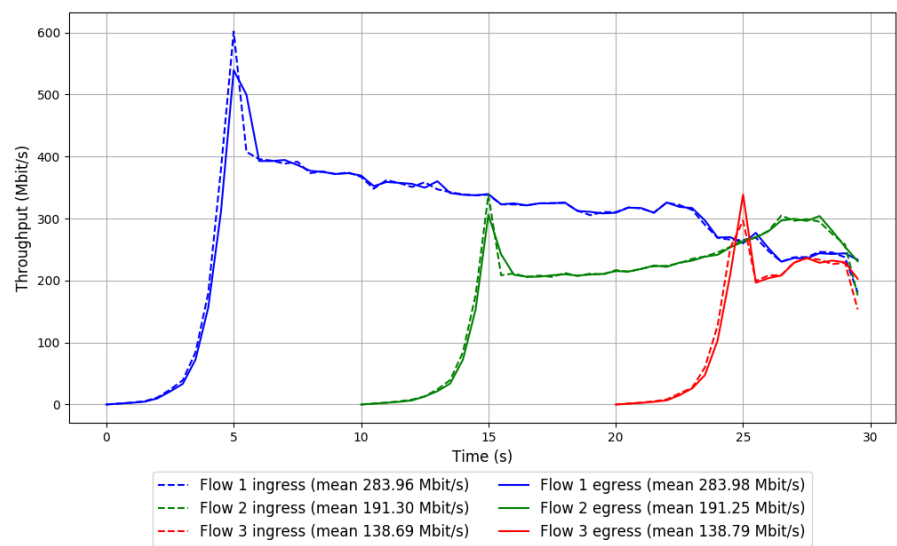


```
Run 1: Statistics of Vivace-latency

Start at: 2018-01-31 10:06:43
End at: 2018-01-31 10:07:13

# Below is generated by plot.py at 2018-01-31 14:58:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 456.71 Mbit/s
95th percentile per-packet one-way delay: 120.296 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 283.98 Mbit/s
95th percentile per-packet one-way delay: 130.042 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 191.25 Mbit/s
95th percentile per-packet one-way delay: 115.515 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 138.79 Mbit/s
95th percentile per-packet one-way delay: 121.936 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-01-31 10:24:32

End at: 2018-01-31 10:25:02

Below is generated by plot.py at 2018-01-31 14:58:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 331.35 Mbit/s

95th percentile per-packet one-way delay: 114.743 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 180.85 Mbit/s

95th percentile per-packet one-way delay: 117.650 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 190.43 Mbit/s

95th percentile per-packet one-way delay: 113.323 ms

Loss rate: 0.00%

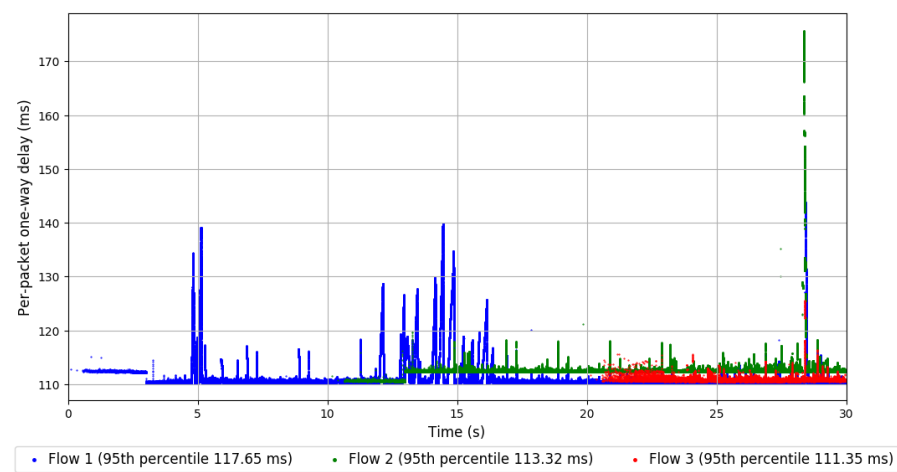
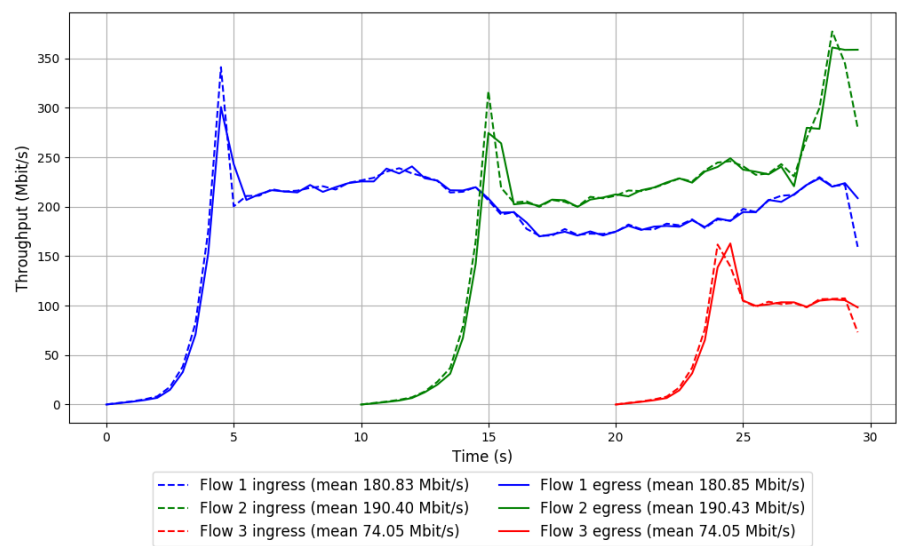
-- Flow 3:

Average throughput: 74.05 Mbit/s

95th percentile per-packet one-way delay: 111.347 ms

Loss rate: 0.00%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-01-31 10:42:12

End at: 2018-01-31 10:42:42

Below is generated by plot.py at 2018-01-31 14:58:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 345.75 Mbit/s

95th percentile per-packet one-way delay: 142.922 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 171.98 Mbit/s

95th percentile per-packet one-way delay: 156.160 ms

Loss rate: 1.42%

-- Flow 2:

Average throughput: 195.87 Mbit/s

95th percentile per-packet one-way delay: 135.244 ms

Loss rate: 0.01%

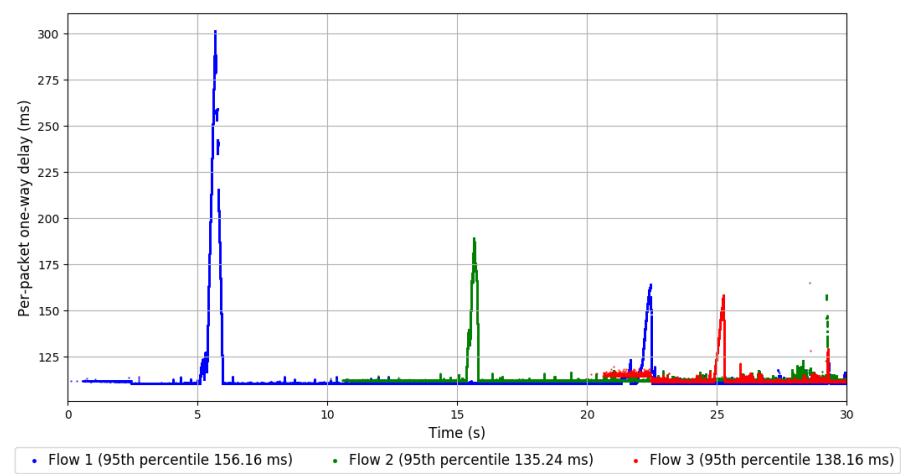
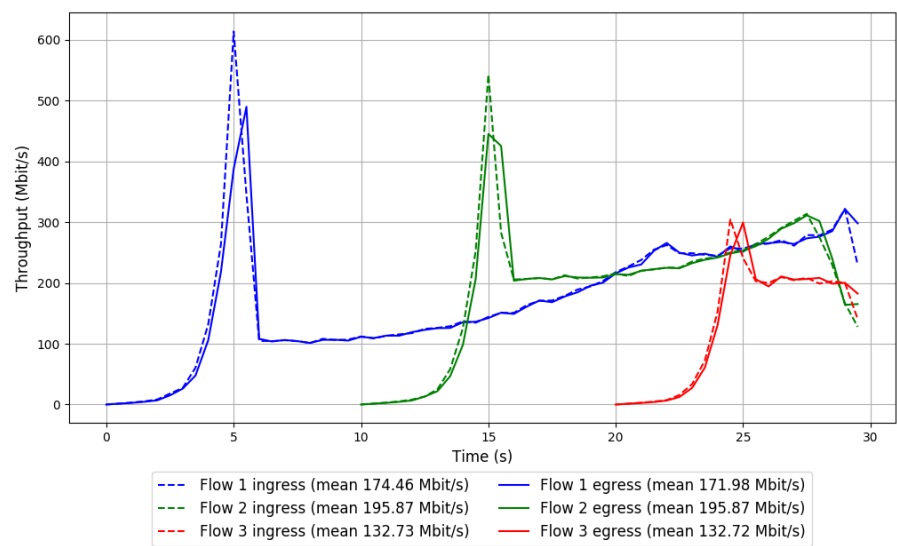
-- Flow 3:

Average throughput: 132.72 Mbit/s

95th percentile per-packet one-way delay: 138.163 ms

Loss rate: 0.01%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-01-31 10:59:42

End at: 2018-01-31 11:00:12

Below is generated by plot.py at 2018-01-31 14:58:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 369.79 Mbit/s

95th percentile per-packet one-way delay: 177.546 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 271.77 Mbit/s

95th percentile per-packet one-way delay: 197.619 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 142.24 Mbit/s

95th percentile per-packet one-way delay: 117.315 ms

Loss rate: 0.02%

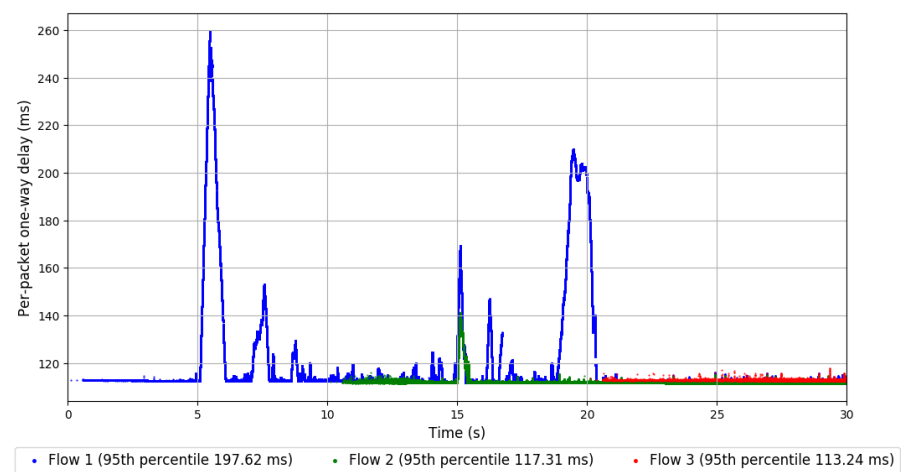
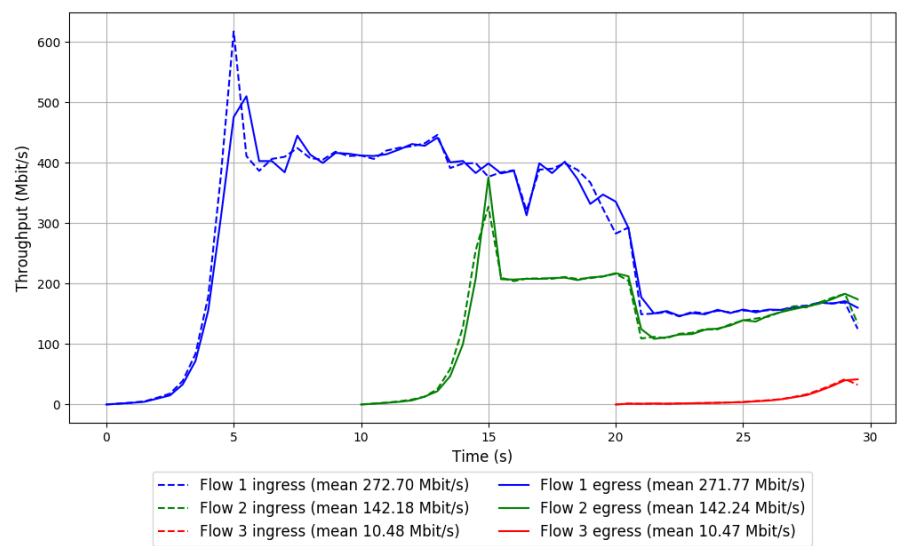
-- Flow 3:

Average throughput: 10.47 Mbit/s

95th percentile per-packet one-way delay: 113.243 ms

Loss rate: 0.21%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-01-31 11:17:34

End at: 2018-01-31 11:18:04

Below is generated by plot.py at 2018-01-31 14:58:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 348.15 Mbit/s

95th percentile per-packet one-way delay: 127.932 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 201.42 Mbit/s

95th percentile per-packet one-way delay: 129.951 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 157.56 Mbit/s

95th percentile per-packet one-way delay: 129.332 ms

Loss rate: 0.00%

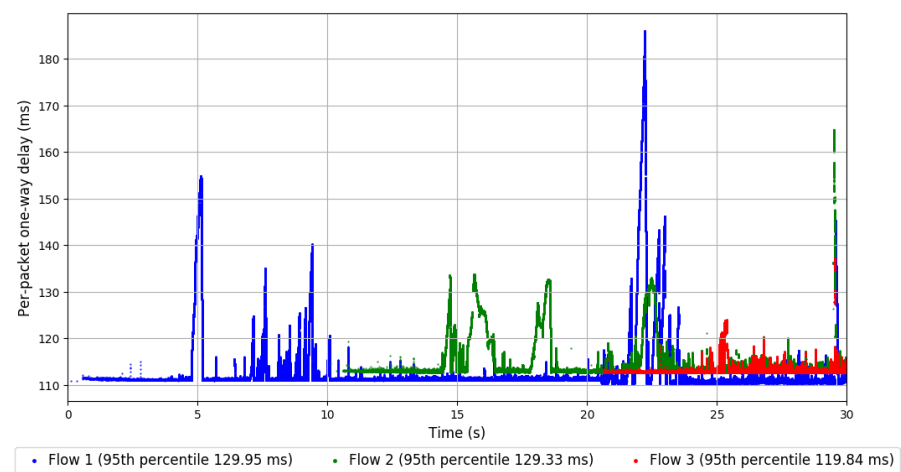
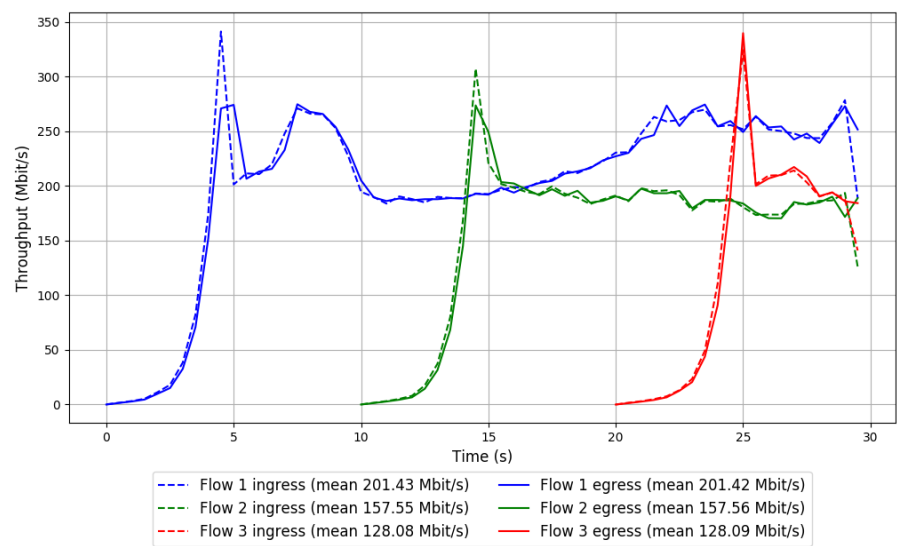
-- Flow 3:

Average throughput: 128.09 Mbit/s

95th percentile per-packet one-way delay: 119.845 ms

Loss rate: 0.00%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-01-31 11:35:19

End at: 2018-01-31 11:35:49

Below is generated by plot.py at 2018-01-31 15:01:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 491.04 Mbit/s

95th percentile per-packet one-way delay: 174.413 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 308.47 Mbit/s

95th percentile per-packet one-way delay: 147.867 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 208.49 Mbit/s

95th percentile per-packet one-way delay: 186.199 ms

Loss rate: 0.00%

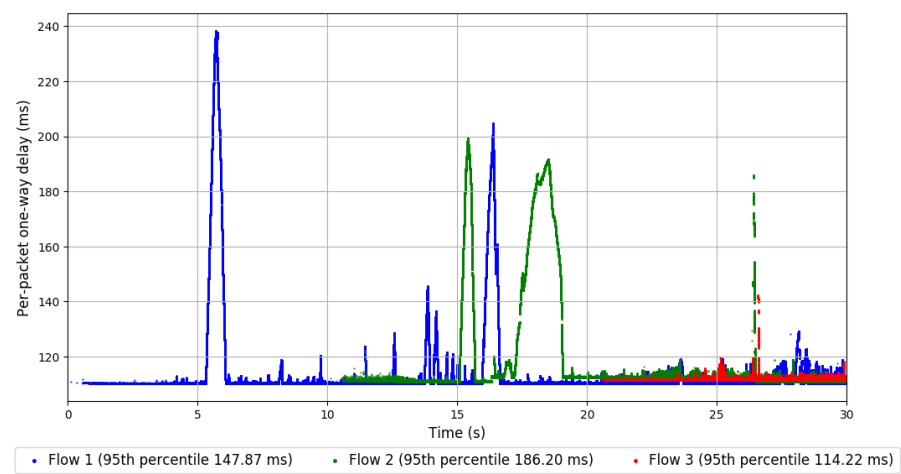
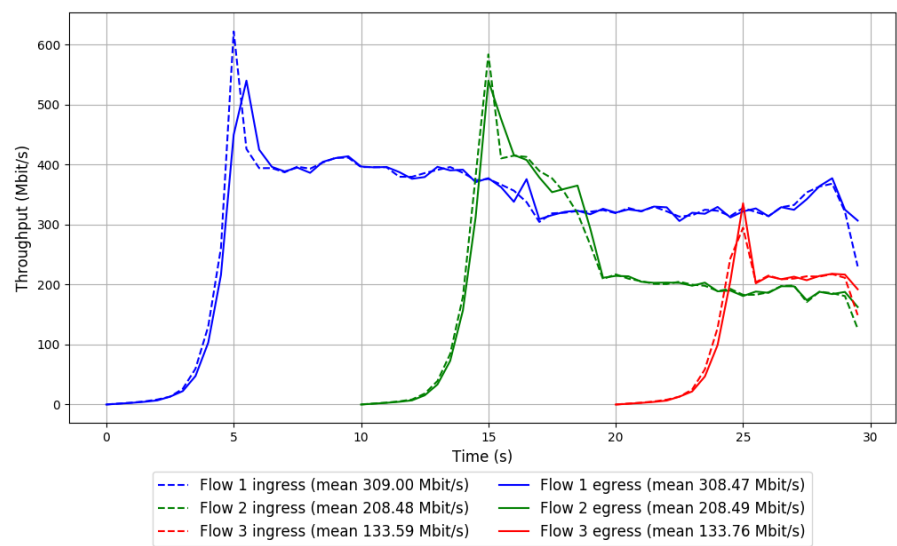
-- Flow 3:

Average throughput: 133.76 Mbit/s

95th percentile per-packet one-way delay: 114.216 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-01-31 11:52:45

End at: 2018-01-31 11:53:15

Below is generated by plot.py at 2018-01-31 15:02:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 481.20 Mbit/s

95th percentile per-packet one-way delay: 142.125 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 324.32 Mbit/s

95th percentile per-packet one-way delay: 146.357 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 168.71 Mbit/s

95th percentile per-packet one-way delay: 115.147 ms

Loss rate: 0.00%

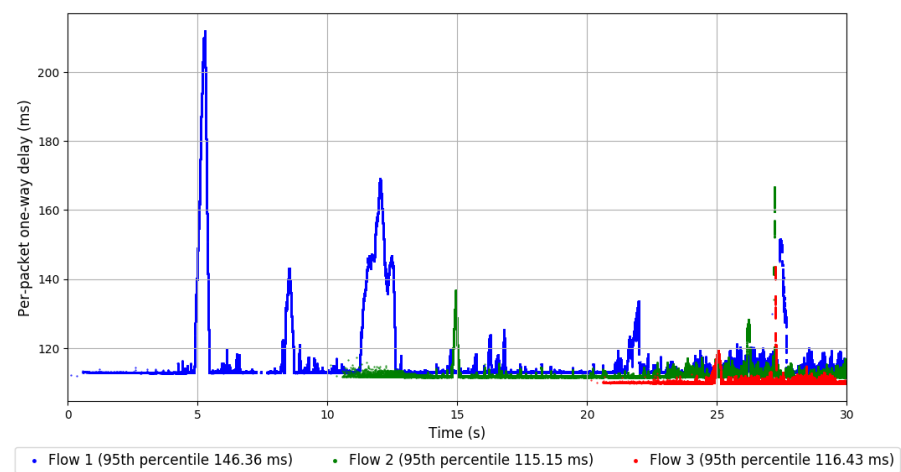
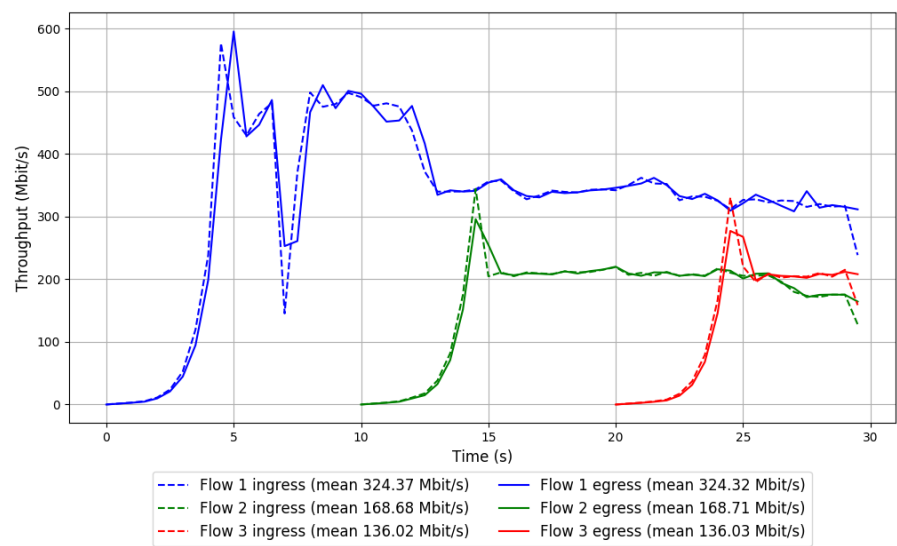
-- Flow 3:

Average throughput: 136.03 Mbit/s

95th percentile per-packet one-way delay: 116.429 ms

Loss rate: 0.00%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-01-31 12:10:47

End at: 2018-01-31 12:11:17

Below is generated by plot.py at 2018-01-31 15:02:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 419.67 Mbit/s

95th percentile per-packet one-way delay: 146.652 ms

Loss rate: 1.44%

-- Flow 1:

Average throughput: 318.00 Mbit/s

95th percentile per-packet one-way delay: 135.744 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 83.54 Mbit/s

95th percentile per-packet one-way delay: 364.833 ms

Loss rate: 9.58%

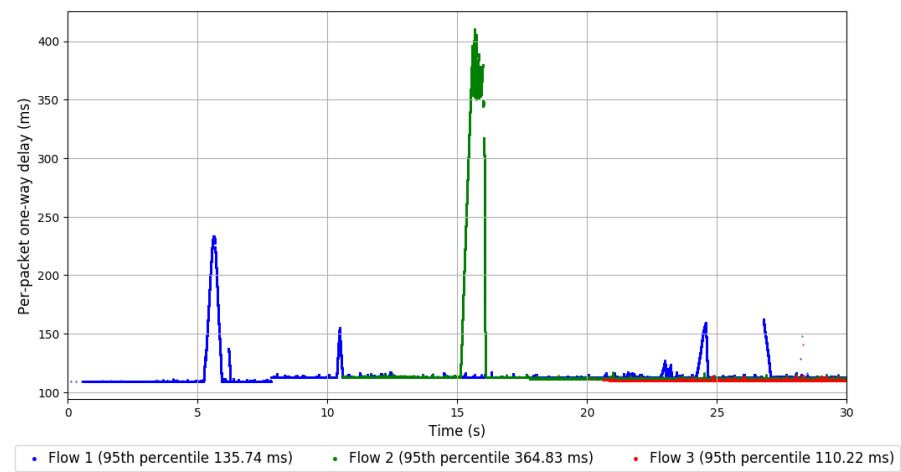
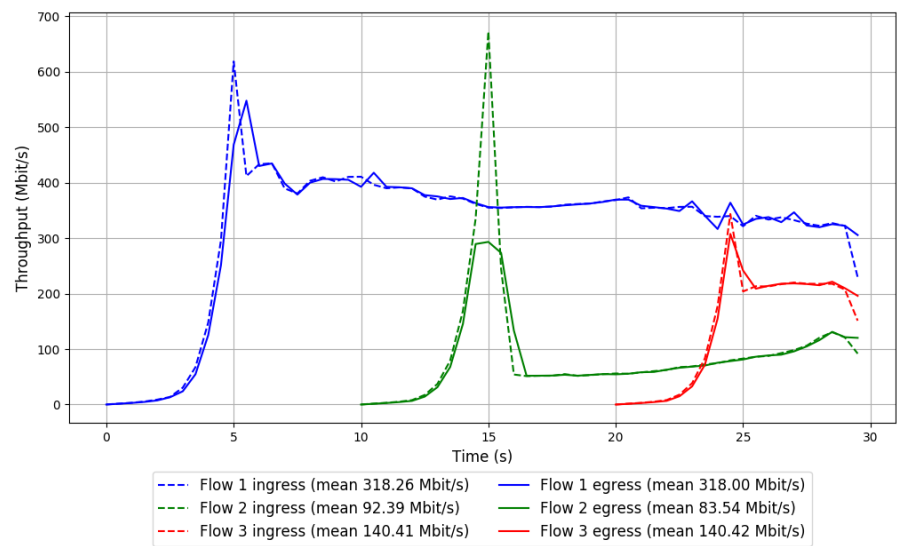
-- Flow 3:

Average throughput: 140.42 Mbit/s

95th percentile per-packet one-way delay: 110.221 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-01-31 12:28:28

End at: 2018-01-31 12:28:58

Below is generated by plot.py at 2018-01-31 15:04:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 459.96 Mbit/s

95th percentile per-packet one-way delay: 120.740 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 291.17 Mbit/s

95th percentile per-packet one-way delay: 140.046 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 186.38 Mbit/s

95th percentile per-packet one-way delay: 112.236 ms

Loss rate: 0.00%

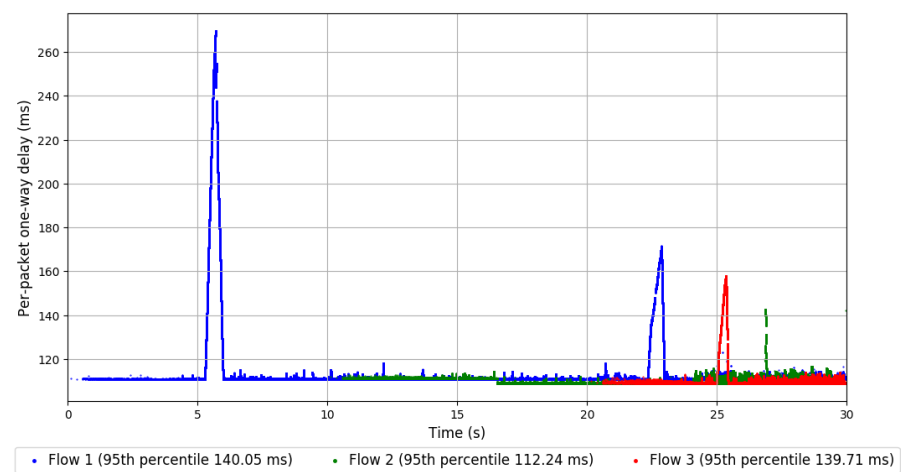
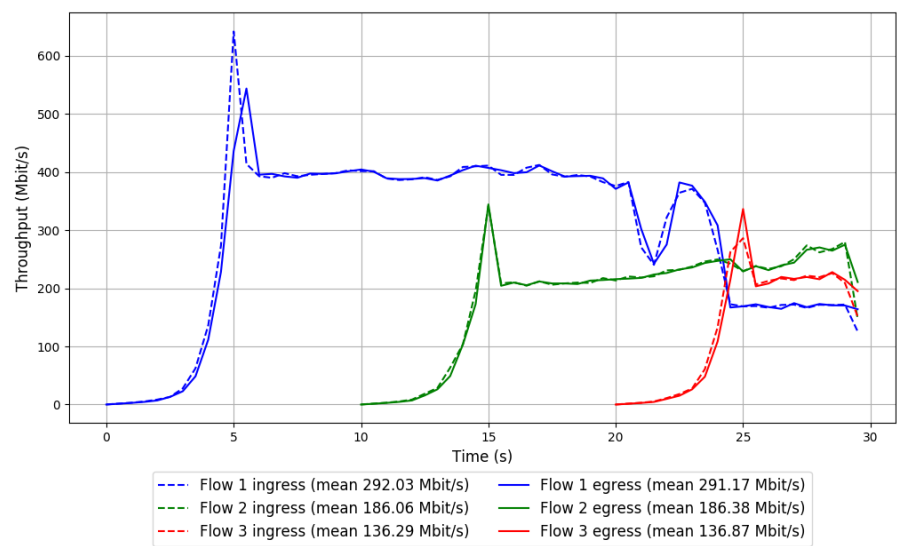
-- Flow 3:

Average throughput: 136.87 Mbit/s

95th percentile per-packet one-way delay: 139.714 ms

Loss rate: 0.00%

Run 9: Report of Vivace-latency — Data Link

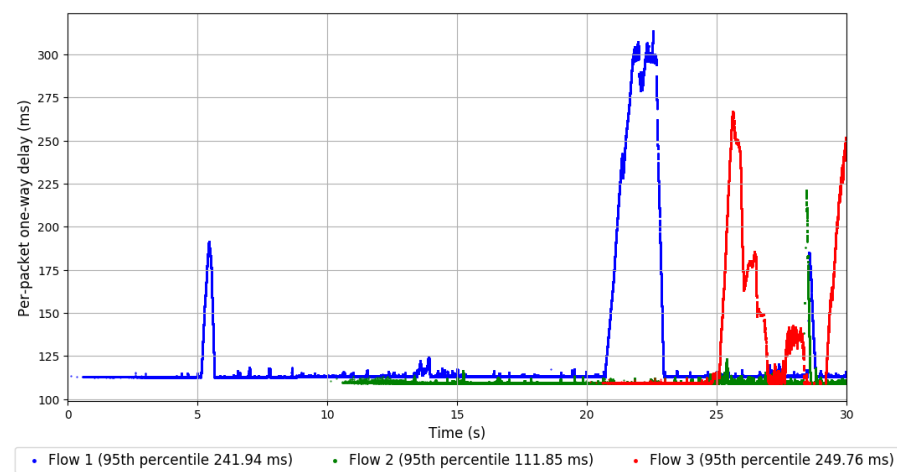
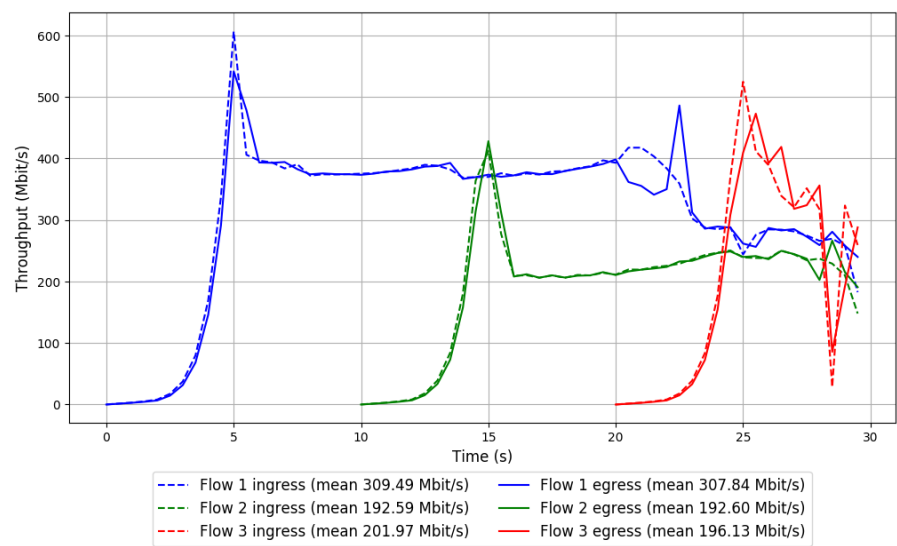


```
Run 10: Statistics of Vivace-latency

Start at: 2018-01-31 12:46:46
End at: 2018-01-31 12:47:16

# Below is generated by plot.py at 2018-01-31 15:05:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 500.46 Mbit/s
95th percentile per-packet one-way delay: 232.445 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 307.84 Mbit/s
95th percentile per-packet one-way delay: 241.936 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 192.60 Mbit/s
95th percentile per-packet one-way delay: 111.851 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 196.13 Mbit/s
95th percentile per-packet one-way delay: 249.759 ms
Loss rate: 2.90%
```

Run 10: Report of Vivace-latency — Data Link

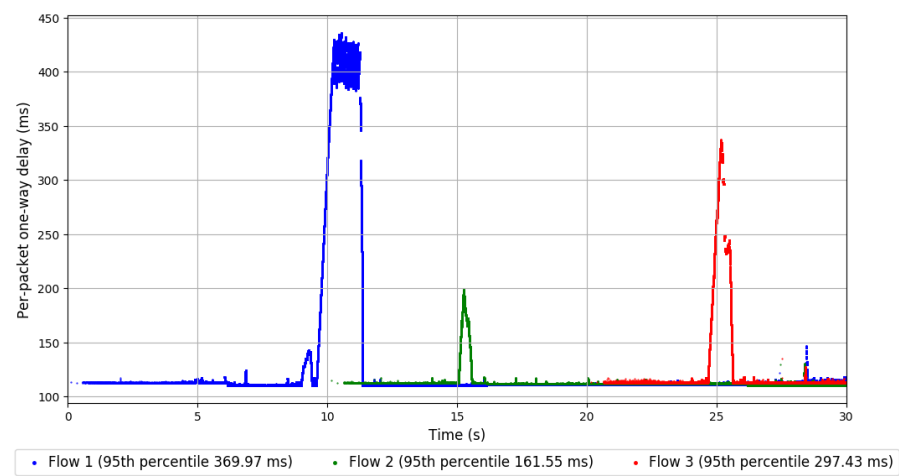
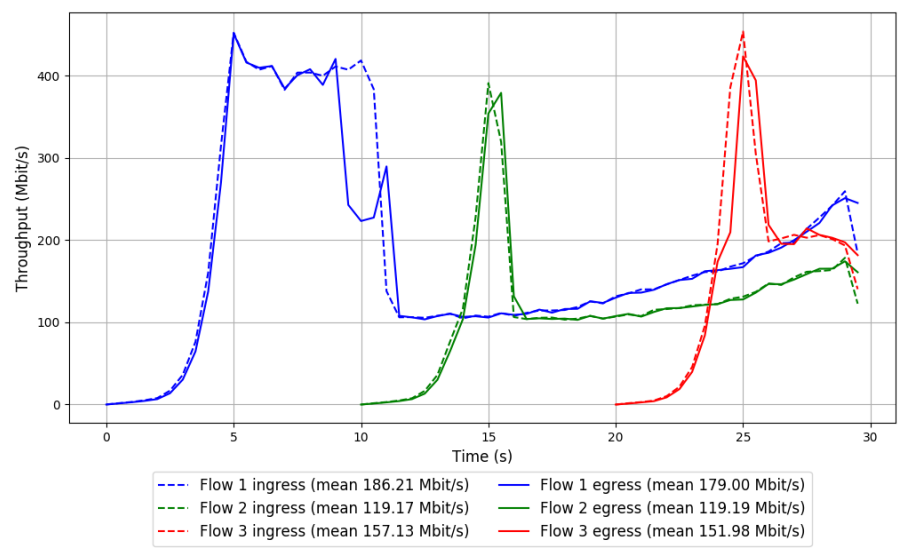


```
Run 1: Statistics of Vivace-loss

Start at: 2018-01-31 10:14:19
End at: 2018-01-31 10:14:49

# Below is generated by plot.py at 2018-01-31 15:05:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 307.85 Mbit/s
95th percentile per-packet one-way delay: 249.107 ms
Loss rate: 2.82%
-- Flow 1:
Average throughput: 179.00 Mbit/s
95th percentile per-packet one-way delay: 369.968 ms
Loss rate: 3.88%
-- Flow 2:
Average throughput: 119.19 Mbit/s
95th percentile per-packet one-way delay: 161.552 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 151.98 Mbit/s
95th percentile per-packet one-way delay: 297.433 ms
Loss rate: 3.31%
```

Run 1: Report of Vivace-loss — Data Link

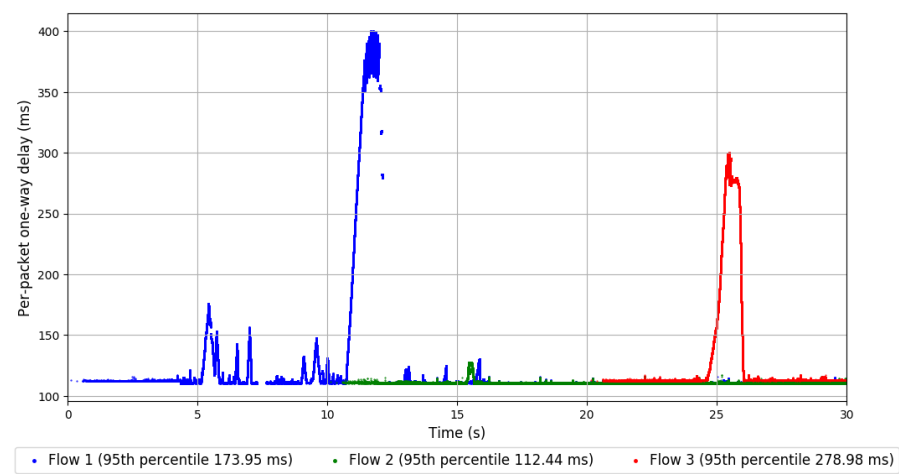
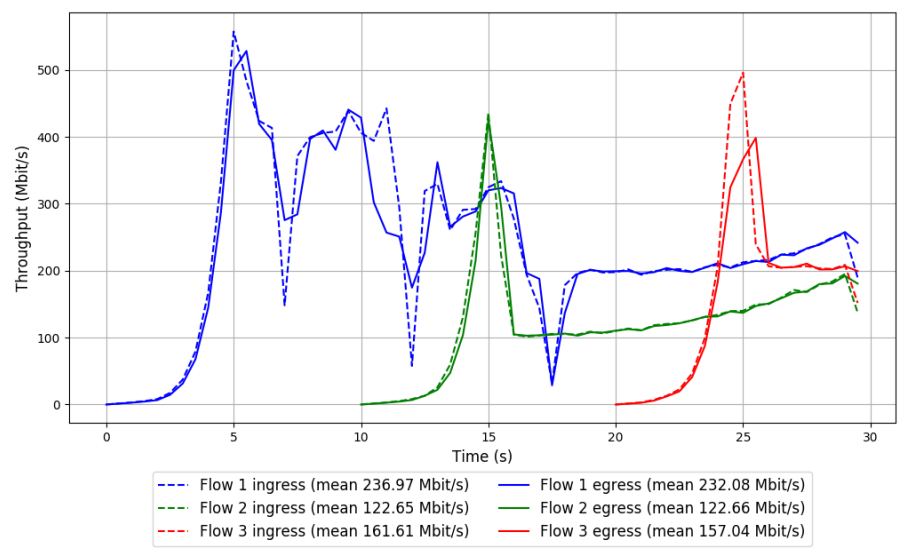


```
Run 2: Statistics of Vivace-loss

Start at: 2018-01-31 10:31:51
End at: 2018-01-31 10:32:21

# Below is generated by plot.py at 2018-01-31 15:05:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.20 Mbit/s
95th percentile per-packet one-way delay: 239.462 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 232.08 Mbit/s
95th percentile per-packet one-way delay: 173.949 ms
Loss rate: 2.07%
-- Flow 2:
Average throughput: 122.66 Mbit/s
95th percentile per-packet one-way delay: 112.441 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 157.04 Mbit/s
95th percentile per-packet one-way delay: 278.980 ms
Loss rate: 2.83%
```

Run 2: Report of Vivace-loss — Data Link

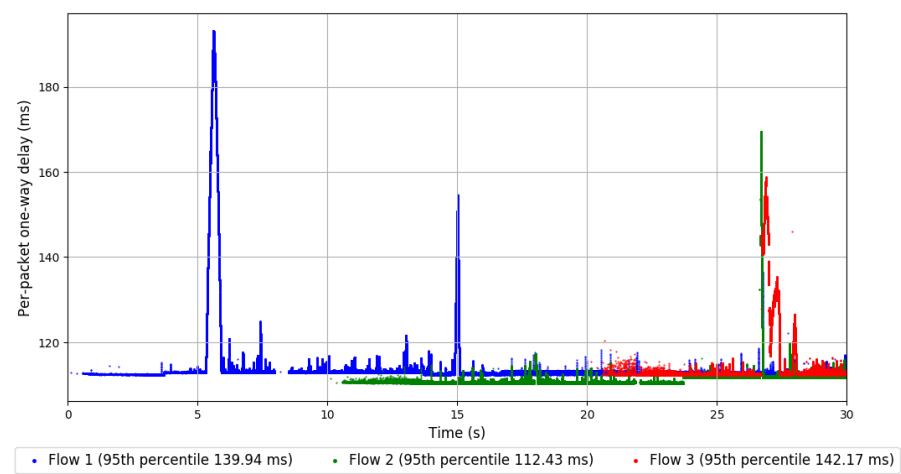
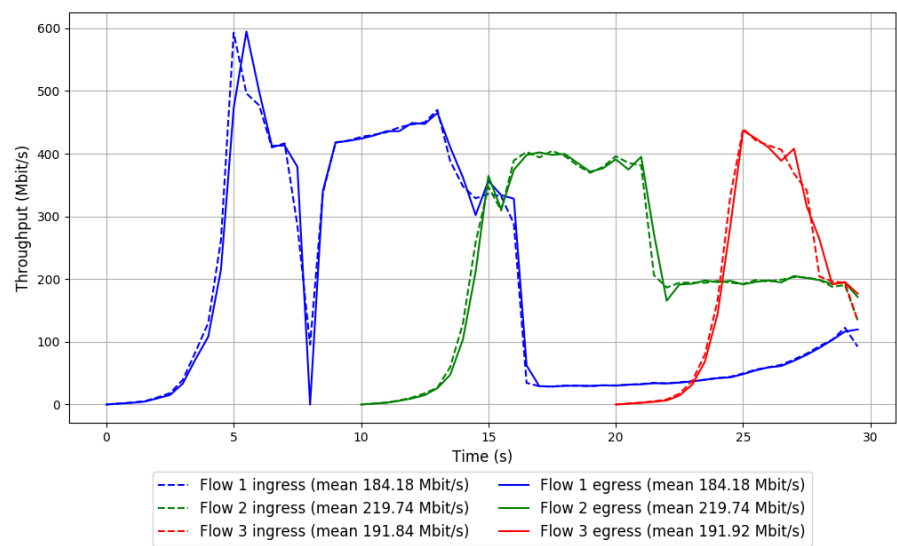


```
Run 3: Statistics of Vivace-loss

Start at: 2018-01-31 10:49:31
End at: 2018-01-31 10:50:01

# Below is generated by plot.py at 2018-01-31 15:05:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.44 Mbit/s
95th percentile per-packet one-way delay: 127.218 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 184.18 Mbit/s
95th percentile per-packet one-way delay: 139.944 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 219.74 Mbit/s
95th percentile per-packet one-way delay: 112.431 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 191.92 Mbit/s
95th percentile per-packet one-way delay: 142.172 ms
Loss rate: 0.01%
```


Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-01-31 11:07:11

End at: 2018-01-31 11:07:41

Below is generated by plot.py at 2018-01-31 15:07:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 354.12 Mbit/s

95th percentile per-packet one-way delay: 318.552 ms

Loss rate: 8.25%

-- Flow 1:

Average throughput: 240.19 Mbit/s

95th percentile per-packet one-way delay: 320.951 ms

Loss rate: 10.45%

-- Flow 2:

Average throughput: 119.21 Mbit/s

95th percentile per-packet one-way delay: 112.981 ms

Loss rate: 0.01%

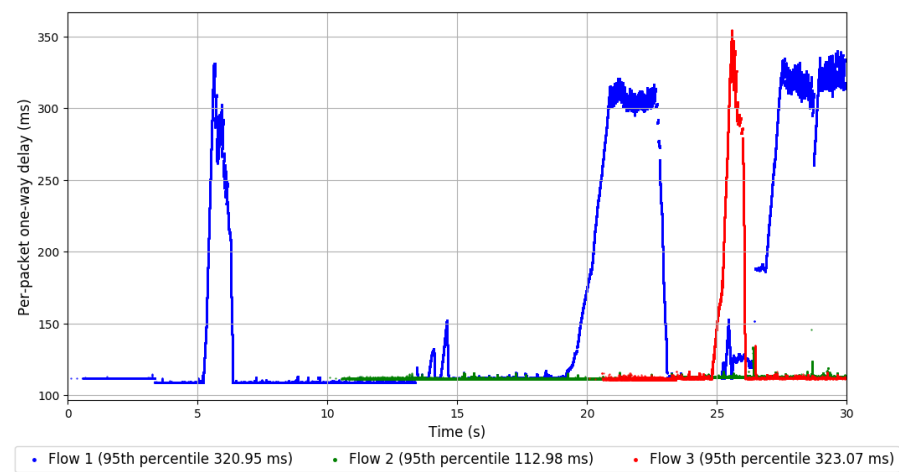
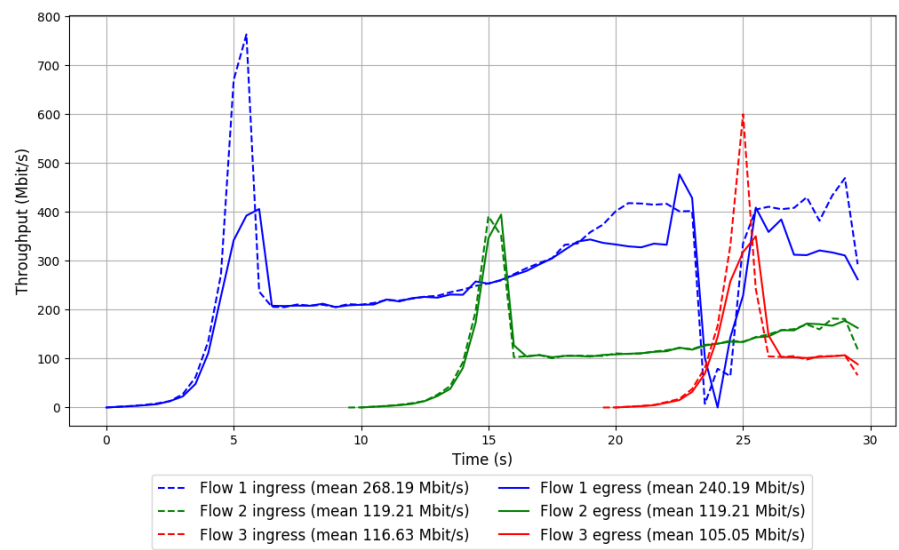
-- Flow 3:

Average throughput: 105.05 Mbit/s

95th percentile per-packet one-way delay: 323.066 ms

Loss rate: 9.97%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-01-31 11:24:54

End at: 2018-01-31 11:25:24

Below is generated by plot.py at 2018-01-31 15:08:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 346.12 Mbit/s

95th percentile per-packet one-way delay: 211.651 ms

Loss rate: 1.46%

-- Flow 1:

Average throughput: 176.14 Mbit/s

95th percentile per-packet one-way delay: 227.609 ms

Loss rate: 2.71%

-- Flow 2:

Average throughput: 207.14 Mbit/s

95th percentile per-packet one-way delay: 130.455 ms

Loss rate: 0.16%

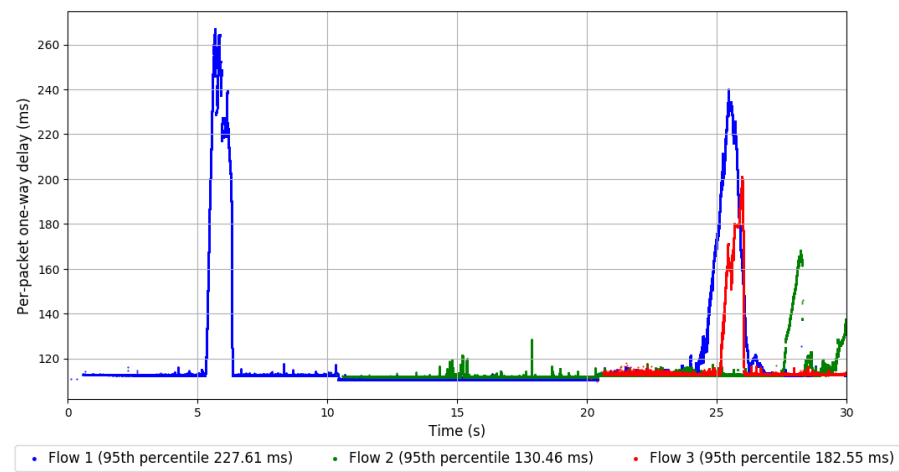
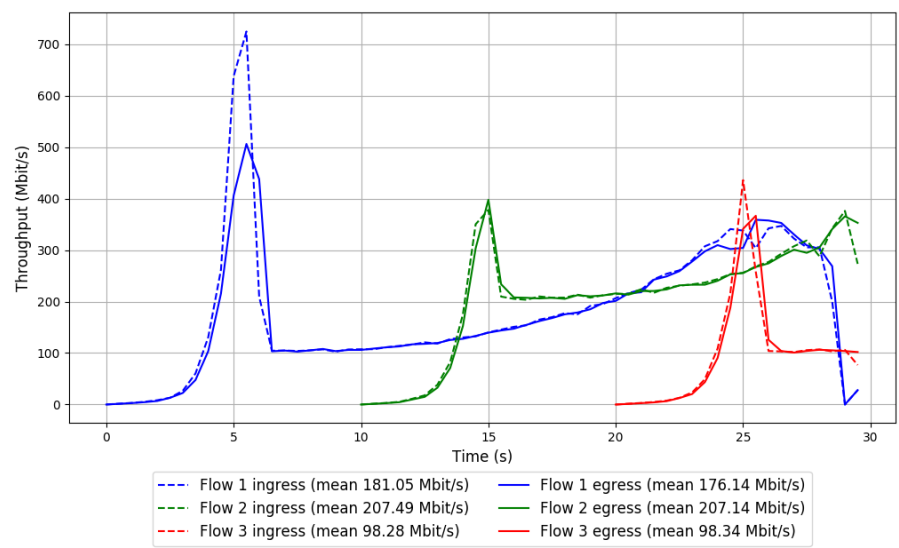
-- Flow 3:

Average throughput: 98.34 Mbit/s

95th percentile per-packet one-way delay: 182.547 ms

Loss rate: 0.00%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-01-31 11:42:43

End at: 2018-01-31 11:43:13

Below is generated by plot.py at 2018-01-31 15:08:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 249.28 Mbit/s

95th percentile per-packet one-way delay: 317.371 ms

Loss rate: 10.76%

-- Flow 1:

Average throughput: 165.06 Mbit/s

95th percentile per-packet one-way delay: 310.536 ms

Loss rate: 10.52%

-- Flow 2:

Average throughput: 85.90 Mbit/s

95th percentile per-packet one-way delay: 313.286 ms

Loss rate: 8.02%

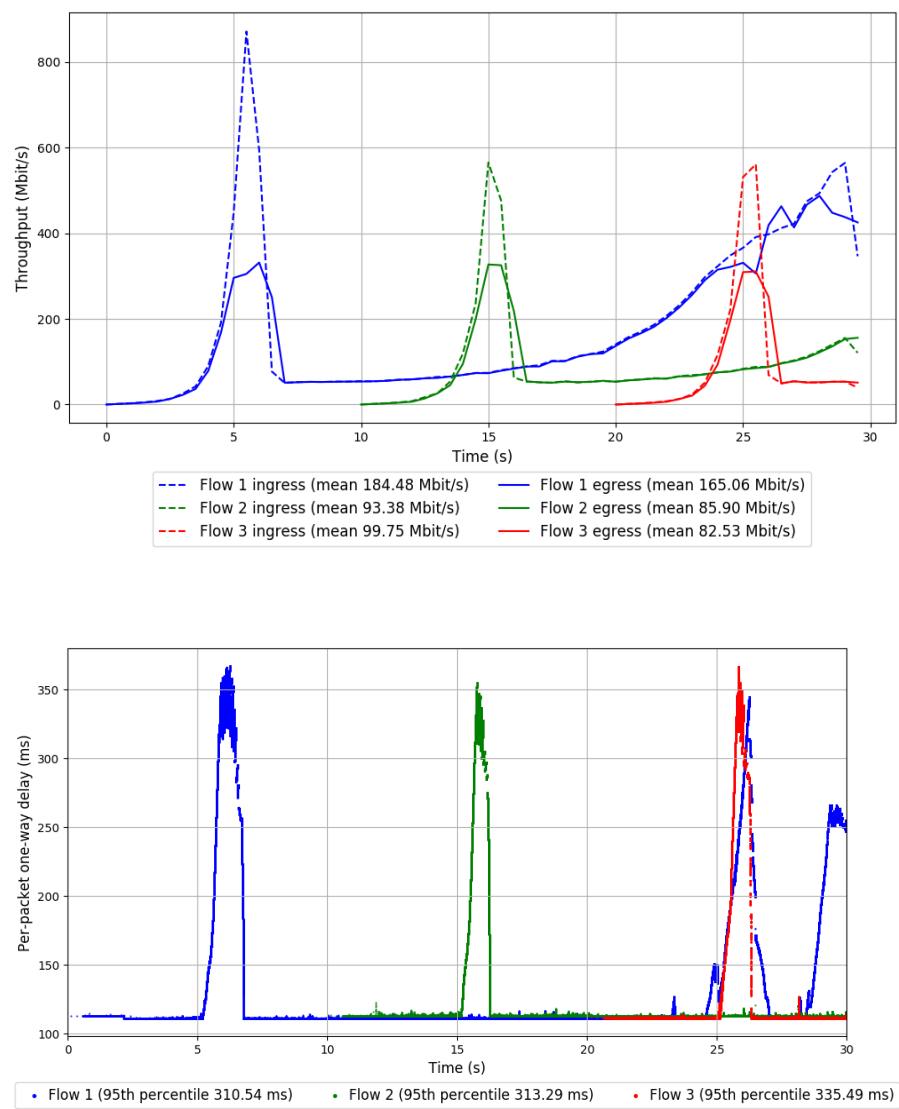
-- Flow 3:

Average throughput: 82.53 Mbit/s

95th percentile per-packet one-way delay: 335.490 ms

Loss rate: 17.28%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-01-31 12:00:17

End at: 2018-01-31 12:00:47

Below is generated by plot.py at 2018-01-31 15:09:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 411.43 Mbit/s

95th percentile per-packet one-way delay: 278.772 ms

Loss rate: 4.85%

-- Flow 1:

Average throughput: 188.19 Mbit/s

95th percentile per-packet one-way delay: 259.870 ms

Loss rate: 7.56%

-- Flow 2:

Average throughput: 267.11 Mbit/s

95th percentile per-packet one-way delay: 280.722 ms

Loss rate: 3.06%

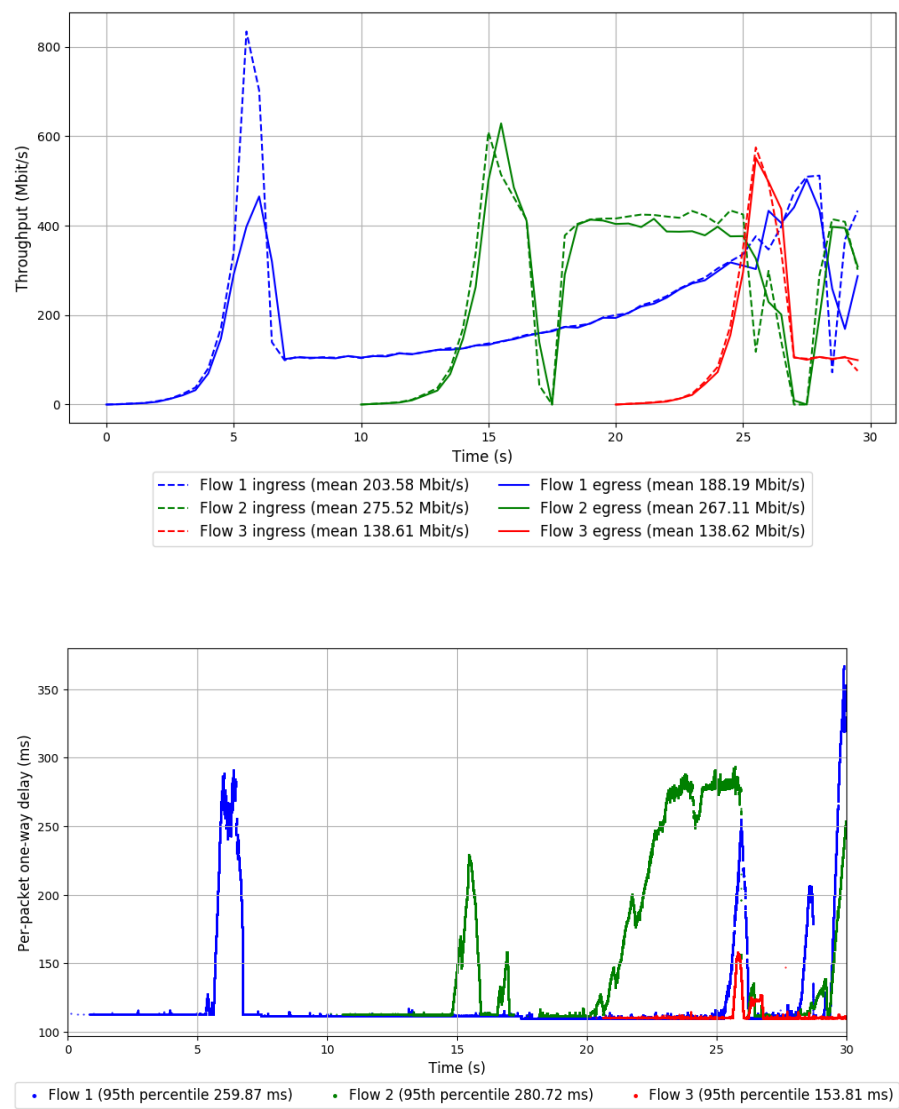
-- Flow 3:

Average throughput: 138.62 Mbit/s

95th percentile per-packet one-way delay: 153.808 ms

Loss rate: 0.00%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-01-31 12:18:14

End at: 2018-01-31 12:18:44

Below is generated by plot.py at 2018-01-31 15:13:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 554.46 Mbit/s

95th percentile per-packet one-way delay: 288.864 ms

Loss rate: 5.33%

-- Flow 1:

Average throughput: 331.62 Mbit/s

95th percentile per-packet one-way delay: 267.071 ms

Loss rate: 3.63%

-- Flow 2:

Average throughput: 284.04 Mbit/s

95th percentile per-packet one-way delay: 342.735 ms

Loss rate: 7.39%

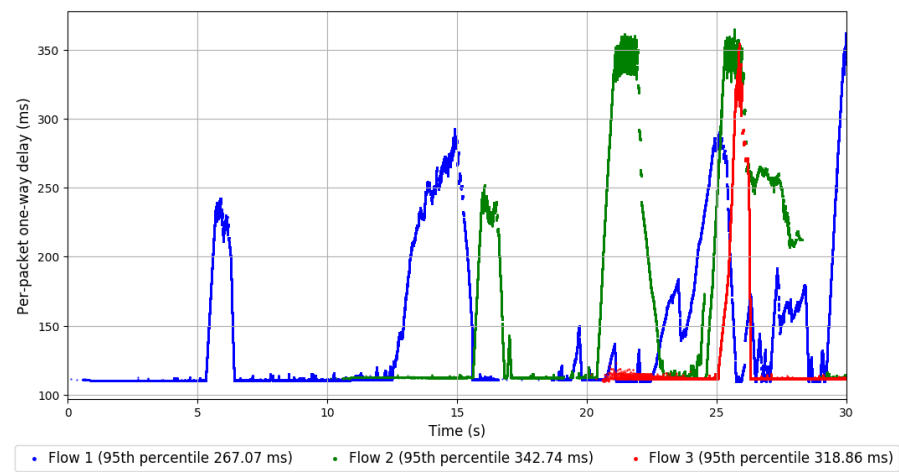
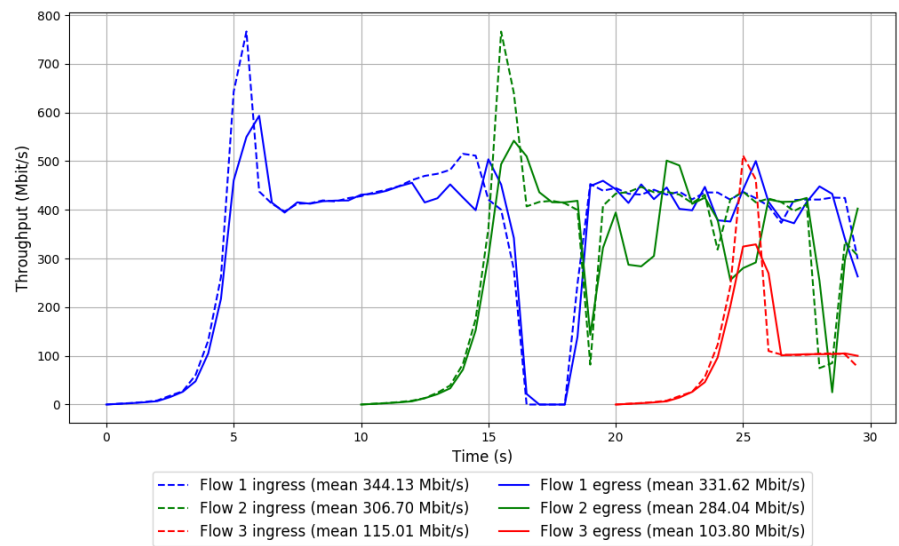
-- Flow 3:

Average throughput: 103.80 Mbit/s

95th percentile per-packet one-way delay: 318.861 ms

Loss rate: 9.76%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-01-31 12:36:17

End at: 2018-01-31 12:36:47

Below is generated by plot.py at 2018-01-31 15:13:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 302.33 Mbit/s

95th percentile per-packet one-way delay: 245.234 ms

Loss rate: 3.61%

-- Flow 1:

Average throughput: 168.41 Mbit/s

95th percentile per-packet one-way delay: 295.081 ms

Loss rate: 4.87%

-- Flow 2:

Average throughput: 93.77 Mbit/s

95th percentile per-packet one-way delay: 227.001 ms

Loss rate: 2.96%

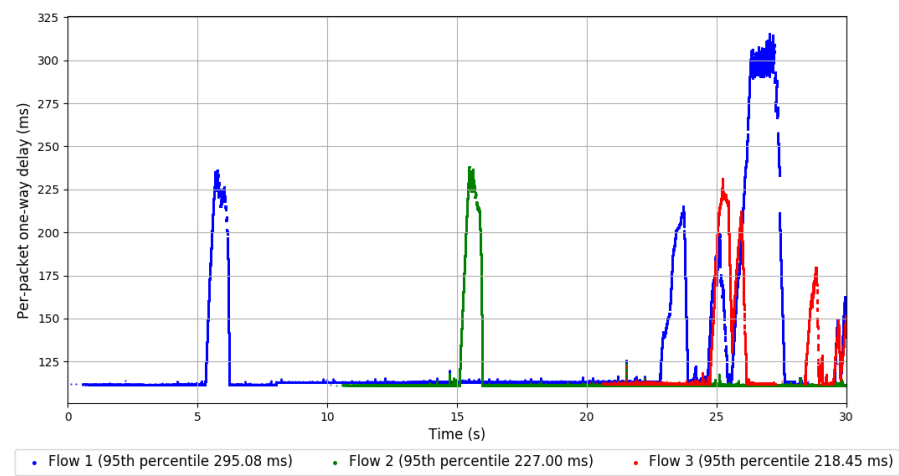
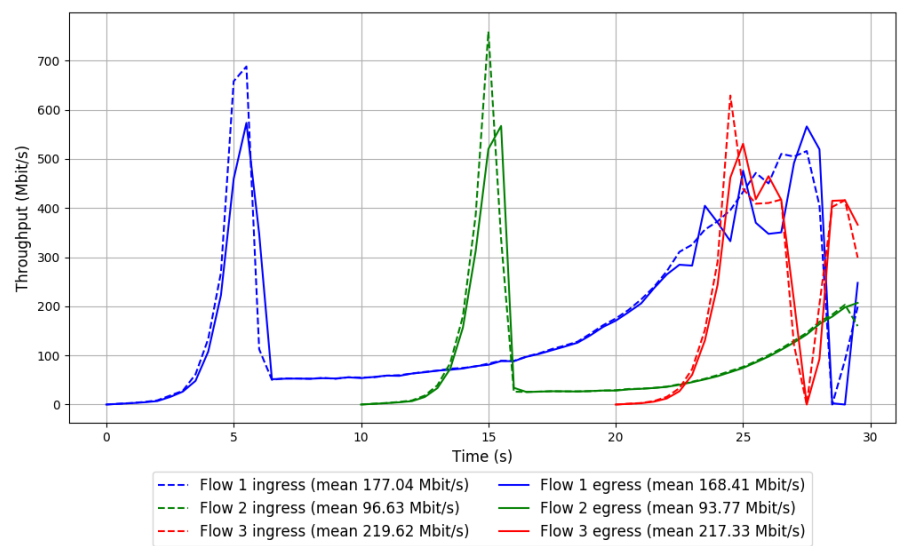
-- Flow 3:

Average throughput: 217.33 Mbit/s

95th percentile per-packet one-way delay: 218.454 ms

Loss rate: 1.09%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-01-31 12:54:29

End at: 2018-01-31 12:54:59

Below is generated by plot.py at 2018-01-31 15:13:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 466.68 Mbit/s

95th percentile per-packet one-way delay: 297.761 ms

Loss rate: 3.28%

-- Flow 1:

Average throughput: 295.21 Mbit/s

95th percentile per-packet one-way delay: 307.333 ms

Loss rate: 2.46%

-- Flow 2:

Average throughput: 196.76 Mbit/s

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

Loss rate: 0.00%

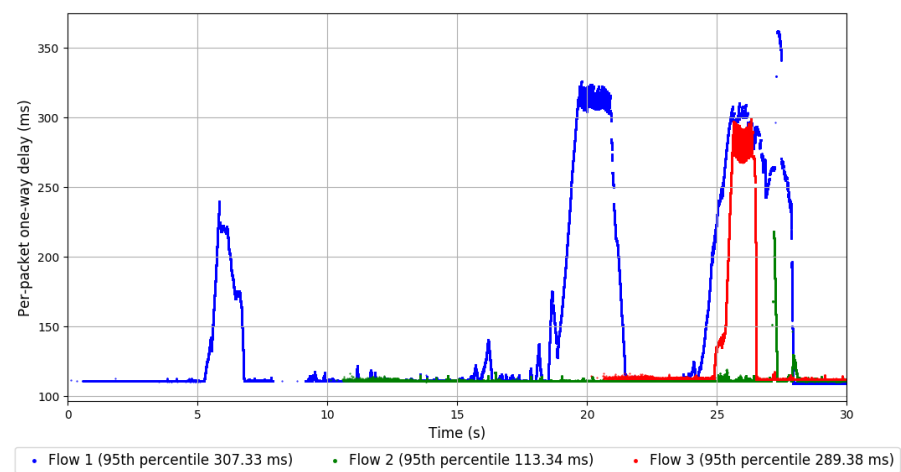
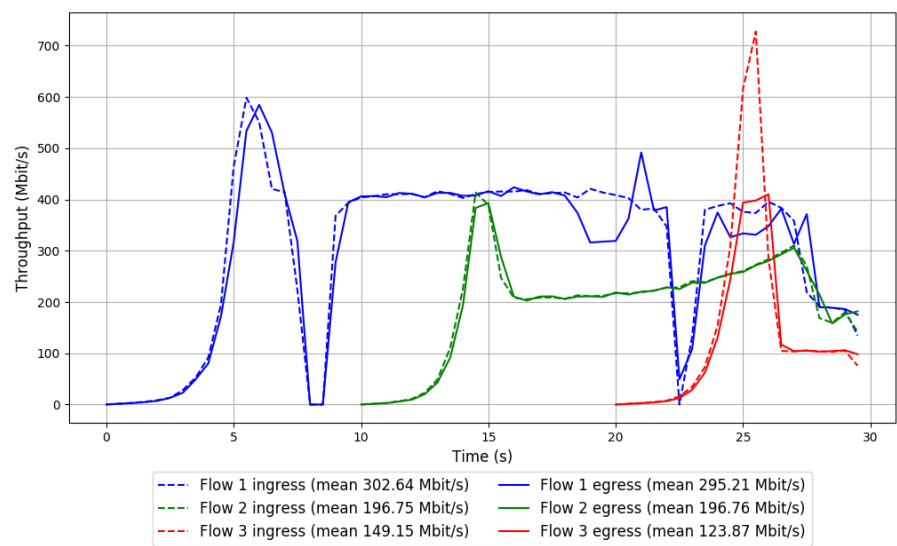
-- Flow 3:

Average throughput: 123.87 Mbit/s

95th percentile per-packet one-way delay: 289.378 ms

Loss rate: 17.03%

Run 10: Report of Vivace-loss — Data Link

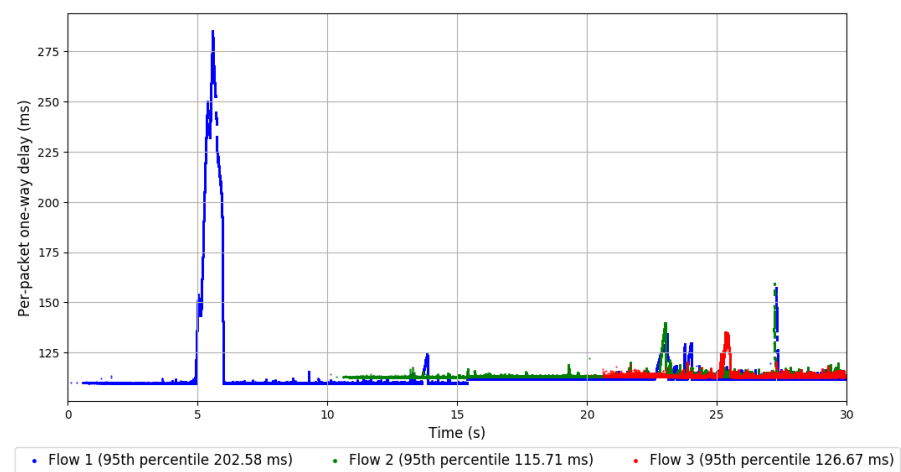
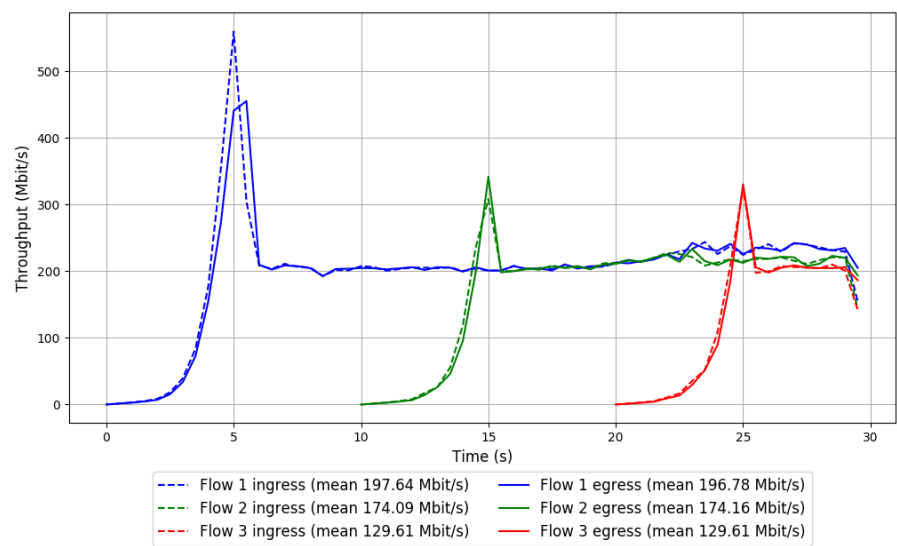


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-01-31 10:18:39
End at: 2018-01-31 10:19:09

# Below is generated by plot.py at 2018-01-31 15:13:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 354.99 Mbit/s
95th percentile per-packet one-way delay: 132.371 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 196.78 Mbit/s
95th percentile per-packet one-way delay: 202.578 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 174.16 Mbit/s
95th percentile per-packet one-way delay: 115.712 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 129.61 Mbit/s
95th percentile per-packet one-way delay: 126.665 ms
Loss rate: 0.03%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-01-31 10:36:15

End at: 2018-01-31 10:36:45

Below is generated by plot.py at 2018-01-31 15:14:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 463.07 Mbit/s

95th percentile per-packet one-way delay: 240.460 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 291.72 Mbit/s

95th percentile per-packet one-way delay: 282.486 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 190.10 Mbit/s

95th percentile per-packet one-way delay: 113.780 ms

Loss rate: 0.00%

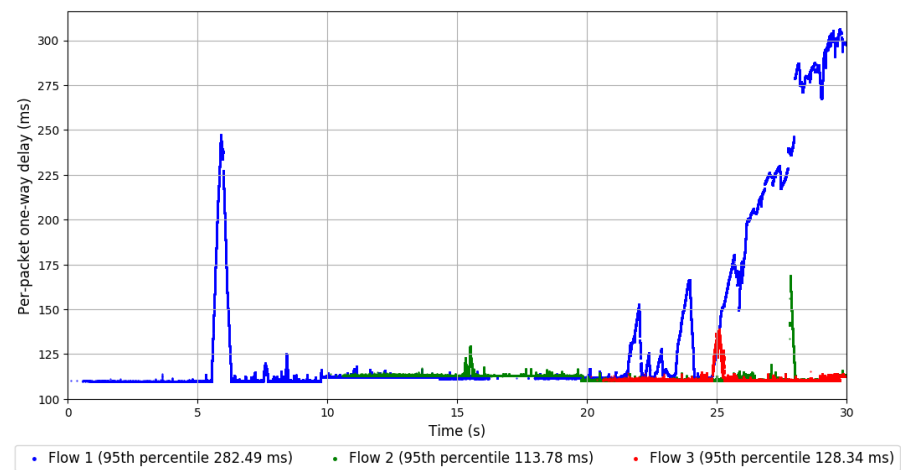
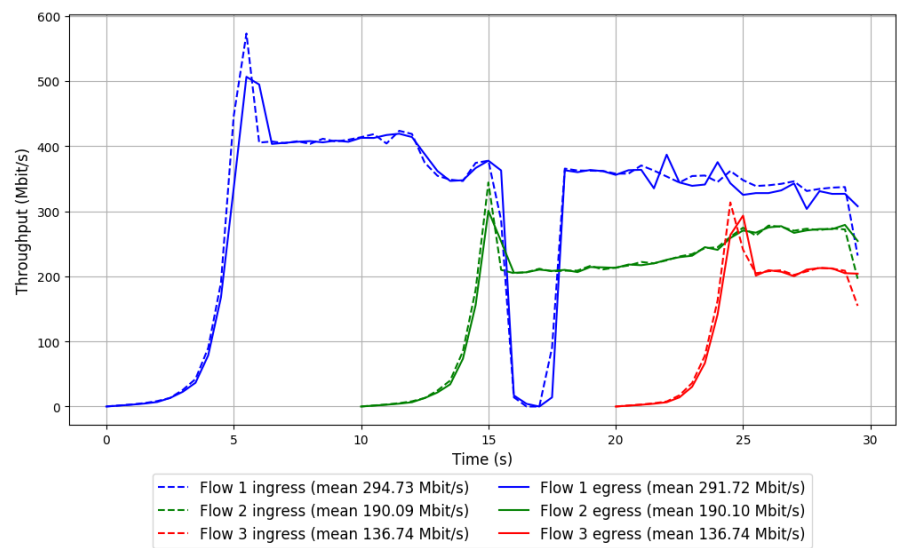
-- Flow 3:

Average throughput: 136.74 Mbit/s

95th percentile per-packet one-way delay: 128.342 ms

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-01-31 10:53:56

End at: 2018-01-31 10:54:26

Below is generated by plot.py at 2018-01-31 15:14:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 384.47 Mbit/s

95th percentile per-packet one-way delay: 127.824 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 218.94 Mbit/s

95th percentile per-packet one-way delay: 136.243 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 183.11 Mbit/s

95th percentile per-packet one-way delay: 113.736 ms

Loss rate: 0.00%

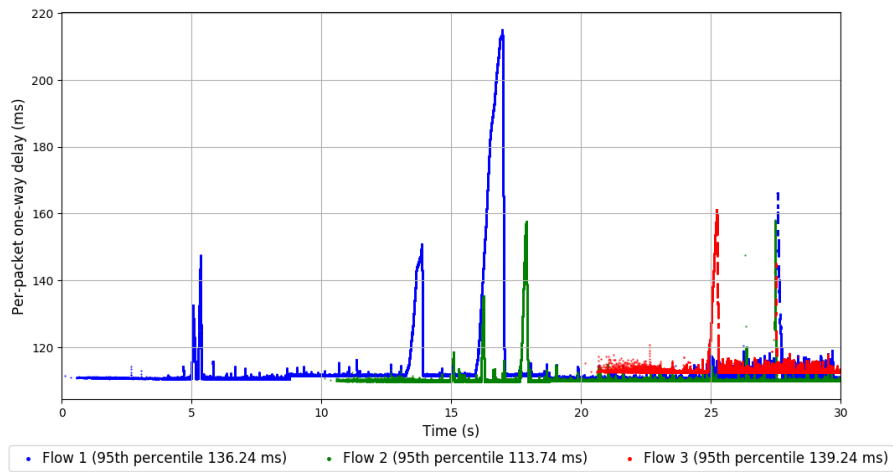
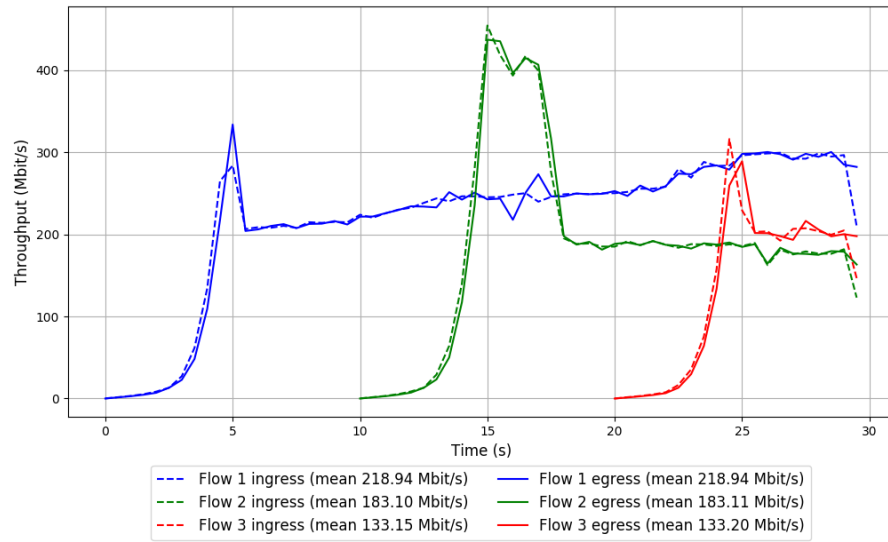
-- Flow 3:

Average throughput: 133.20 Mbit/s

95th percentile per-packet one-way delay: 139.238 ms

Loss rate: 0.00%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-01-31 11:11:35

End at: 2018-01-31 11:12:05

Below is generated by plot.py at 2018-01-31 15:16:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 482.08 Mbit/s

95th percentile per-packet one-way delay: 231.608 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 301.06 Mbit/s

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

Loss rate: 0.47%

-- Flow 2:

Average throughput: 203.26 Mbit/s

95th percentile per-packet one-way delay: 193.747 ms

Loss rate: 0.74%

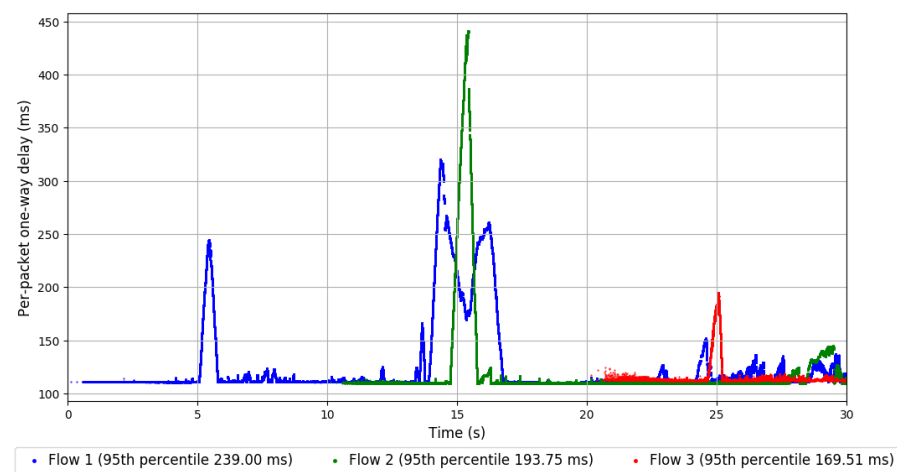
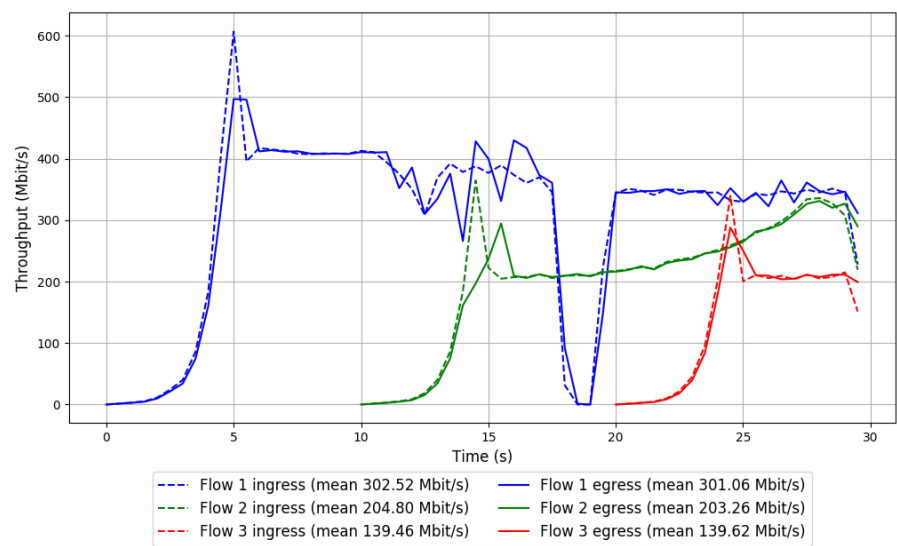
-- Flow 3:

Average throughput: 139.62 Mbit/s

95th percentile per-packet one-way delay: 169.513 ms

Loss rate: 0.00%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-01-31 11:29:22

End at: 2018-01-31 11:29:52

Below is generated by plot.py at 2018-01-31 15:16:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 360.95 Mbit/s

95th percentile per-packet one-way delay: 213.087 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 271.56 Mbit/s

95th percentile per-packet one-way delay: 227.836 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 83.51 Mbit/s

95th percentile per-packet one-way delay: 113.693 ms

Loss rate: 0.00%

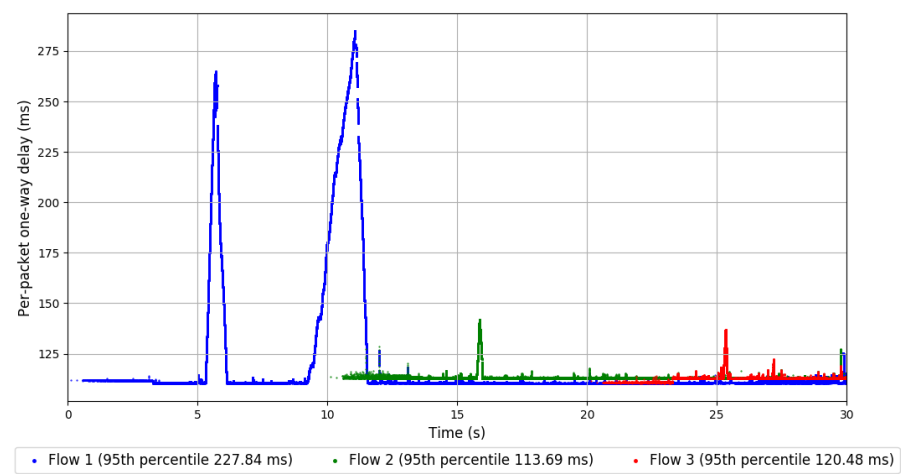
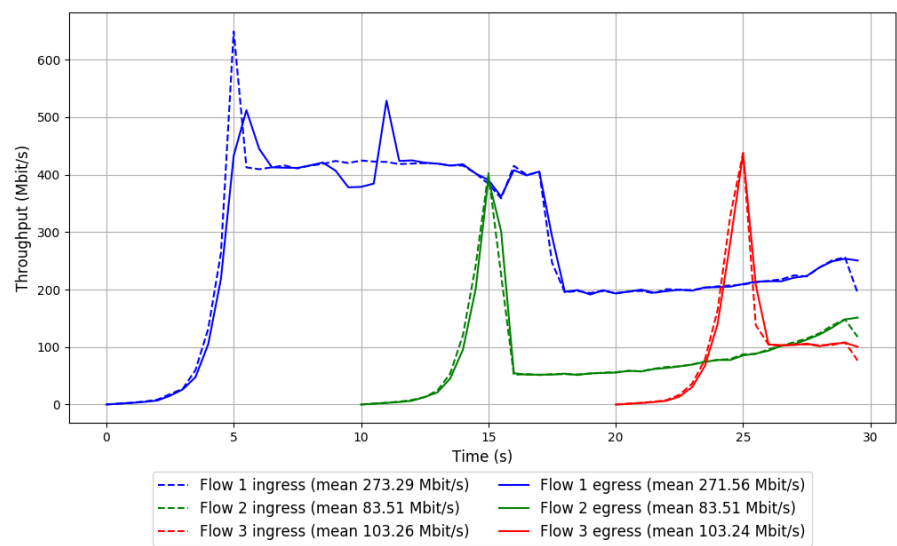
-- Flow 3:

Average throughput: 103.24 Mbit/s

95th percentile per-packet one-way delay: 120.482 ms

Loss rate: 0.00%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-01-31 11:46:57

End at: 2018-01-31 11:47:27

Below is generated by plot.py at 2018-01-31 15:16:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 383.64 Mbit/s

95th percentile per-packet one-way delay: 141.260 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 222.50 Mbit/s

95th percentile per-packet one-way delay: 141.975 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 177.04 Mbit/s

95th percentile per-packet one-way delay: 118.674 ms

Loss rate: 0.01%

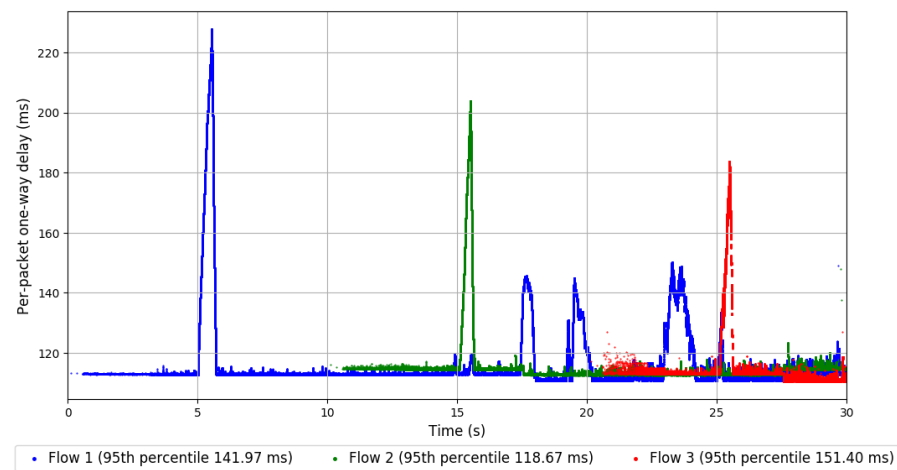
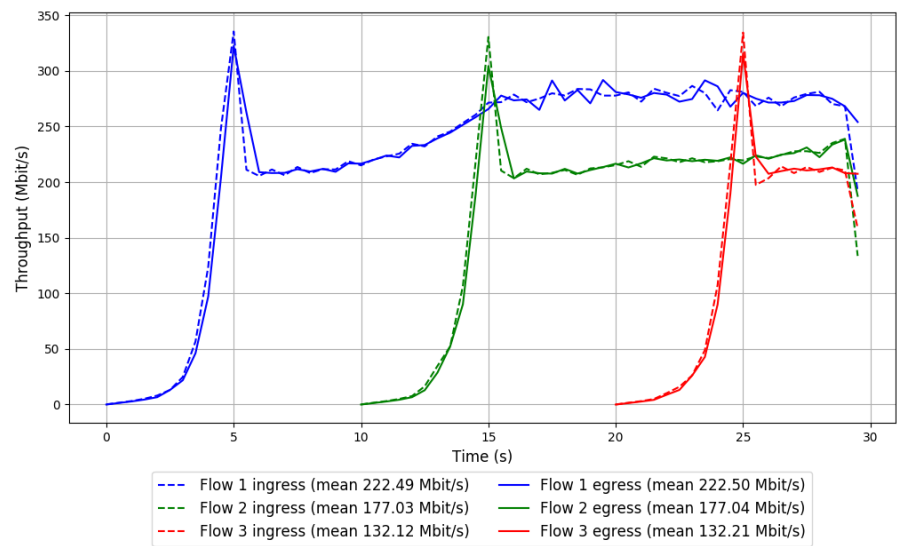
-- Flow 3:

Average throughput: 132.21 Mbit/s

95th percentile per-packet one-way delay: 151.403 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-01-31 12:04:44

End at: 2018-01-31 12:05:14

Below is generated by plot.py at 2018-01-31 15:16:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 455.18 Mbit/s

95th percentile per-packet one-way delay: 297.028 ms

Loss rate: 1.78%

-- Flow 1:

Average throughput: 319.54 Mbit/s

95th percentile per-packet one-way delay: 299.873 ms

Loss rate: 2.05%

-- Flow 2:

Average throughput: 126.27 Mbit/s

95th percentile per-packet one-way delay: 113.377 ms

Loss rate: 0.00%

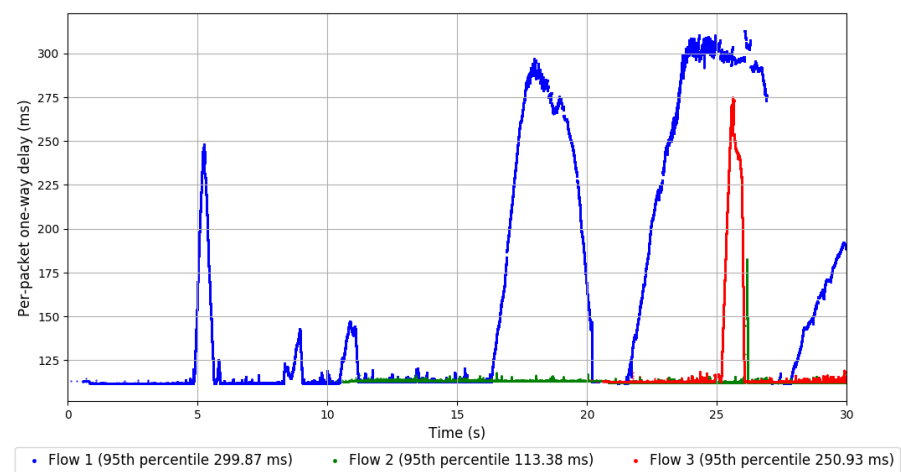
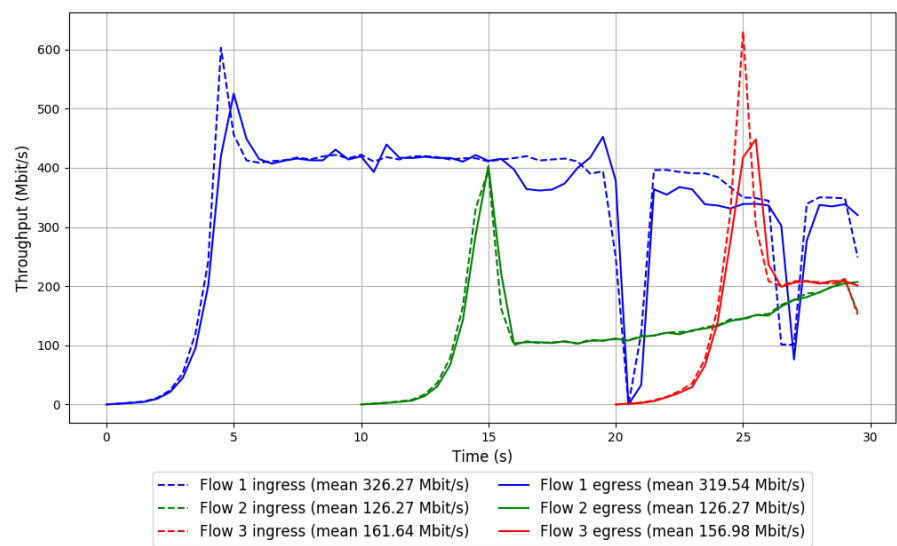
-- Flow 3:

Average throughput: 156.98 Mbit/s

95th percentile per-packet one-way delay: 250.932 ms

Loss rate: 2.89%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-01-31 12:22:51

End at: 2018-01-31 12:23:21

Below is generated by plot.py at 2018-01-31 15:16:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 299.08 Mbit/s

95th percentile per-packet one-way delay: 139.383 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 46.02 Mbit/s

95th percentile per-packet one-way delay: 4662.568 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 339.61 Mbit/s

95th percentile per-packet one-way delay: 145.427 ms

Loss rate: 0.31%

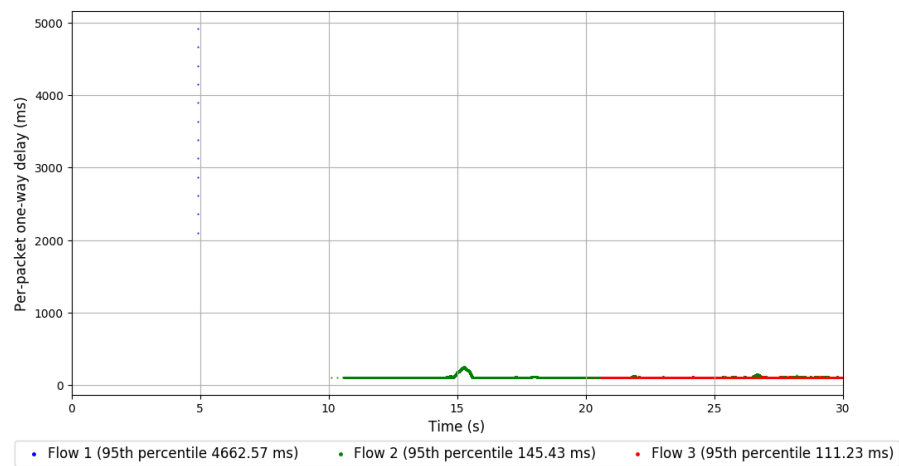
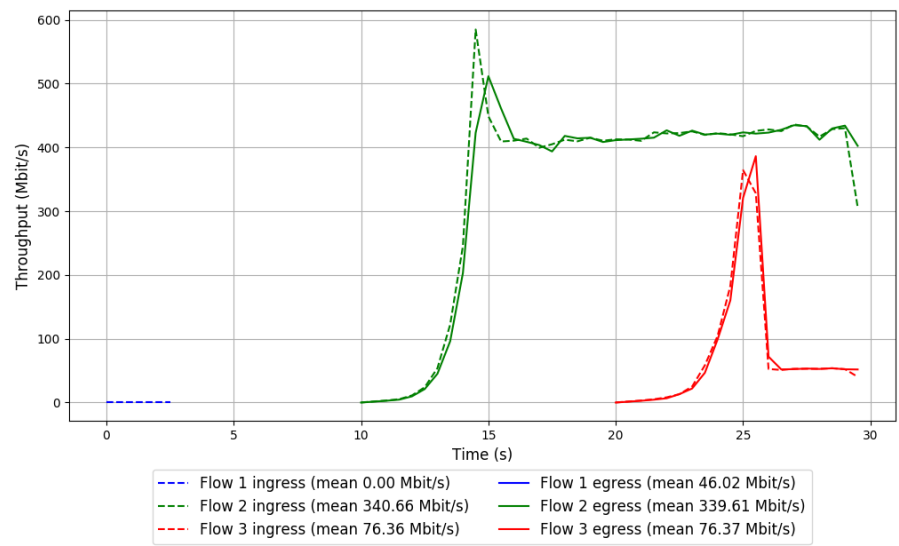
-- Flow 3:

Average throughput: 76.37 Mbit/s

95th percentile per-packet one-way delay: 111.234 ms

Loss rate: 0.00%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-01-31 12:40:35

End at: 2018-01-31 12:41:05

Below is generated by plot.py at 2018-01-31 15:17:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 562.01 Mbit/s

95th percentile per-packet one-way delay: 278.771 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 324.90 Mbit/s

95th percentile per-packet one-way delay: 288.533 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 303.36 Mbit/s

95th percentile per-packet one-way delay: 177.653 ms

Loss rate: 0.02%

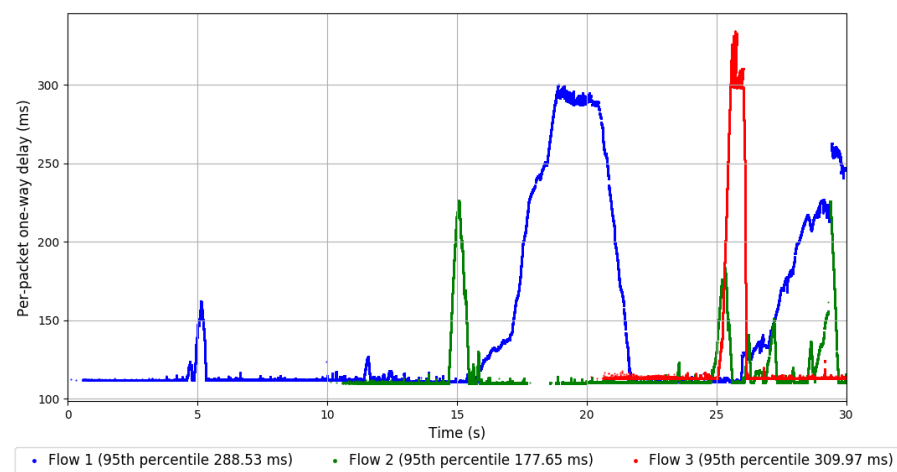
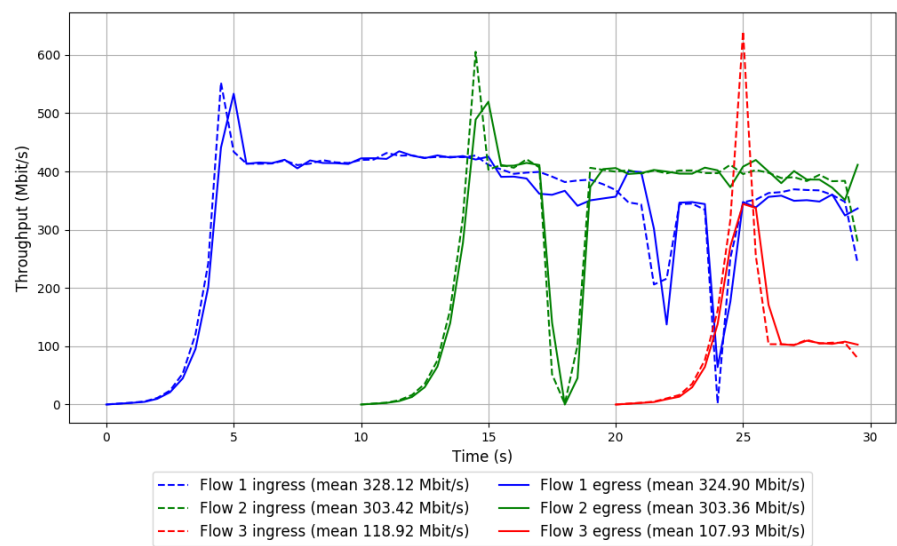
-- Flow 3:

Average throughput: 107.93 Mbit/s

95th percentile per-packet one-way delay: 309.969 ms

Loss rate: 9.25%

Run 9: Report of Vivace-LTE — Data Link



```
Run 10: Statistics of Vivace-LTE

Start at: 2018-01-31 12:58:59
End at: 2018-01-31 12:59:29

# Below is generated by plot.py at 2018-01-31 15:17:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 519.65 Mbit/s
95th percentile per-packet one-way delay: 255.956 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 332.05 Mbit/s
95th percentile per-packet one-way delay: 228.617 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 179.88 Mbit/s
95th percentile per-packet one-way delay: 114.940 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 206.68 Mbit/s
95th percentile per-packet one-way delay: 317.107 ms
Loss rate: 5.56%
```

Run 10: Report of Vivace-LTE — Data Link

