

Pantheon Report

Generated at 2018-03-07 03:09:11 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

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

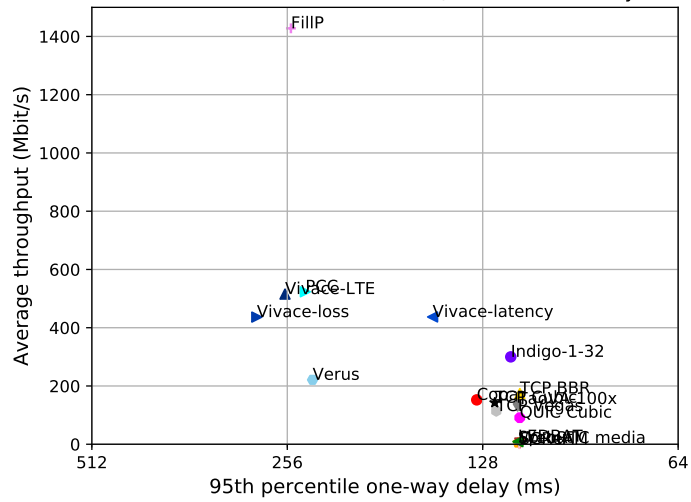
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

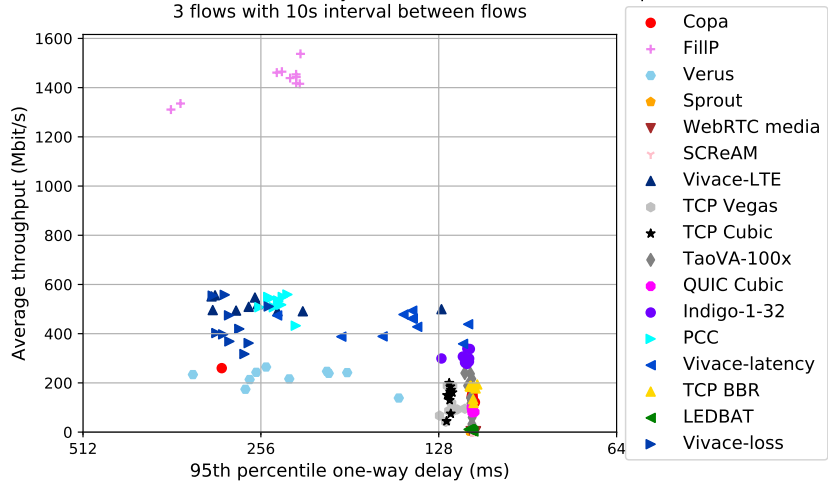
Git summary:

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

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



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	88.17	88.00	83.33	112.11	112.20	112.11	0.02	0.02	0.01
TCP Cubic	10	77.17	69.72	58.31	121.90	122.90	121.94	0.02	0.01	0.04
LEDBAT	10	5.81	3.66	2.08	113.00	112.94	112.66	0.01	0.00	0.04
PCC	10	485.43	31.18	53.28	240.44	235.68	238.63	2.51	1.58	2.32
QUIC Cubic	10	52.99	44.82	26.23	112.19	111.51	111.42	0.01	0.00	0.01
SCReAM	10	0.20	0.21	0.21	111.91	111.97	111.64	0.01	0.00	0.00
WebRTC media	10	2.10	1.31	0.49	112.12	111.78	111.91	0.00	0.01	0.02
Sprout	10	2.55	2.47	2.14	112.91	112.89	112.44	0.00	0.00	0.00
TaoVA-100x	10	65.53	68.84	85.57	112.61	112.81	113.03	0.01	0.01	0.01
TCP Vegas	10	50.01	64.56	63.78	121.21	122.10	120.64	0.01	0.02	0.08
Verus	10	140.70	79.35	87.14	217.03	219.70	253.01	1.56	1.35	3.96
Copa	10	74.11	75.42	84.12	111.97	130.28	131.49	0.13	2.28	3.62
FillP	10	738.90	715.69	642.92	251.06	250.86	240.09	10.34	11.10	13.65
Indigo-1-32	10	161.31	139.95	142.95	114.32	115.78	120.75	0.02	0.01	0.01
Vivace-latency	10	269.18	190.37	125.31	146.10	145.41	154.51	0.26	0.17	0.15
Vivace-loss	10	238.61	238.56	119.57	267.29	265.60	300.56	3.56	3.33	8.58
Vivace-LTE	10	310.14	240.00	141.21	254.91	222.00	205.40	1.10	1.08	1.69

Run 1: Statistics of TCP BBR

Start at: 2018-03-06 20:26:55

End at: 2018-03-06 20:27:25

Below is generated by plot.py at 2018-03-07 01:27:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 177.56 Mbit/s

95th percentile per-packet one-way delay: 110.876 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 88.21 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 90.86 Mbit/s

95th percentile per-packet one-way delay: 109.009 ms

Loss rate: 0.00%

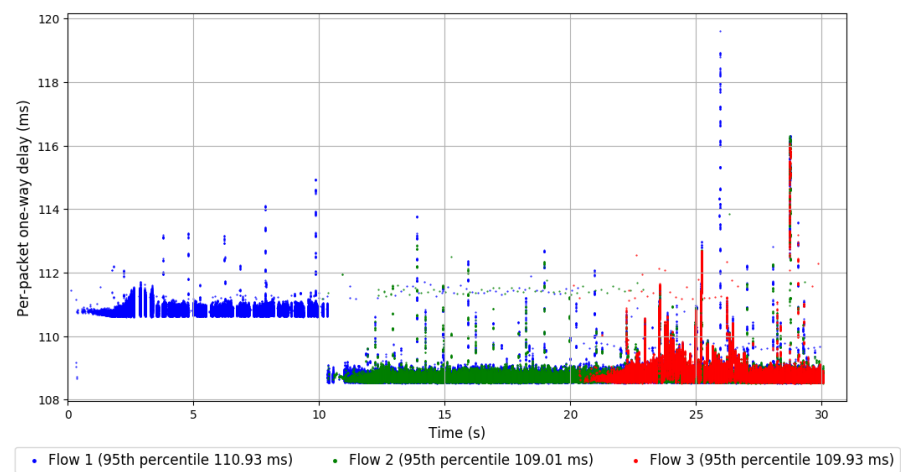
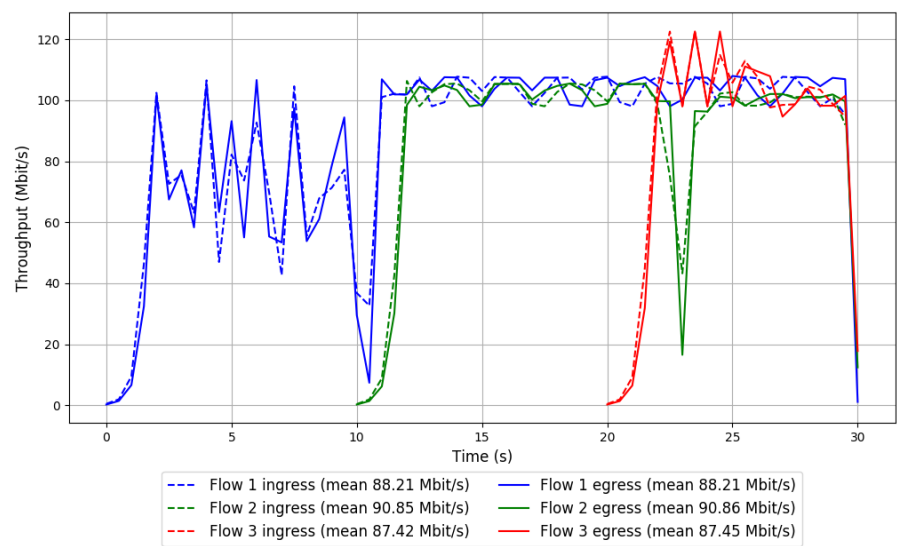
-- Flow 3:

Average throughput: 87.45 Mbit/s

95th percentile per-packet one-way delay: 109.926 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-03-06 20:45:43

End at: 2018-03-06 20:46:13

Below is generated by plot.py at 2018-03-07 01:27:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.26 Mbit/s

95th percentile per-packet one-way delay: 111.644 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 93.95 Mbit/s

95th percentile per-packet one-way delay: 111.631 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 91.01 Mbit/s

95th percentile per-packet one-way delay: 111.514 ms

Loss rate: 0.01%

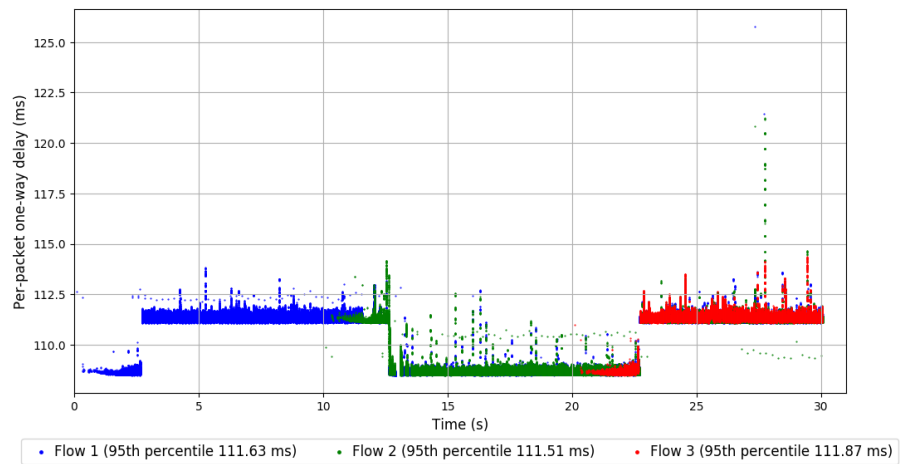
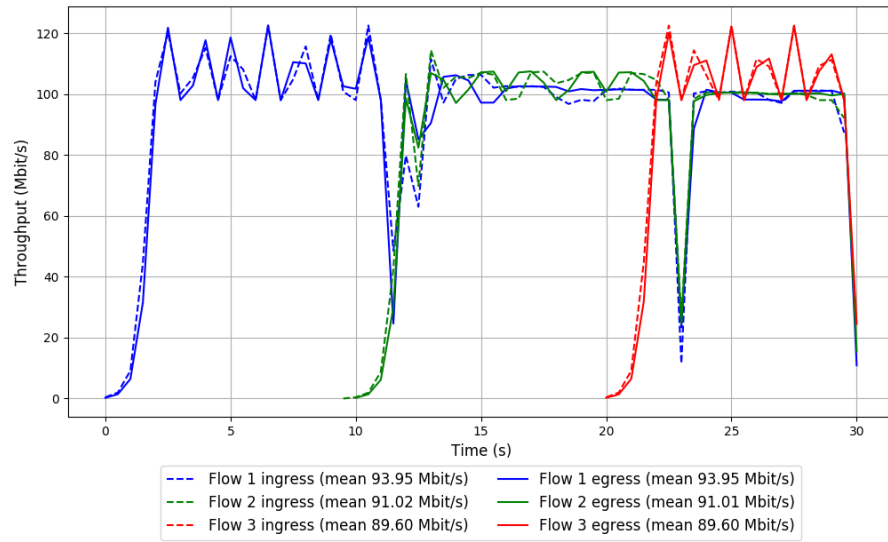
-- Flow 3:

Average throughput: 89.60 Mbit/s

95th percentile per-packet one-way delay: 111.867 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-03-06 21:04:57

End at: 2018-03-06 21:05:27

Below is generated by plot.py at 2018-03-07 01:28:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 193.71 Mbit/s

95th percentile per-packet one-way delay: 110.153 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 99.16 Mbit/s

95th percentile per-packet one-way delay: 110.154 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.88 Mbit/s

95th percentile per-packet one-way delay: 110.220 ms

Loss rate: 0.00%

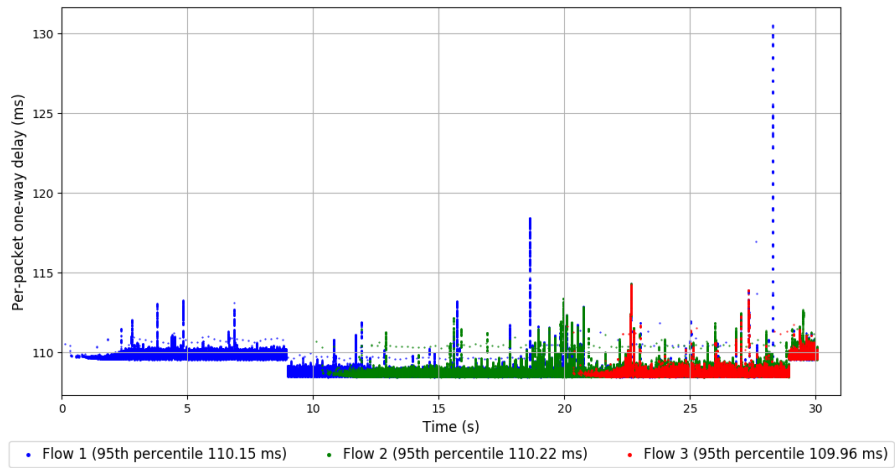
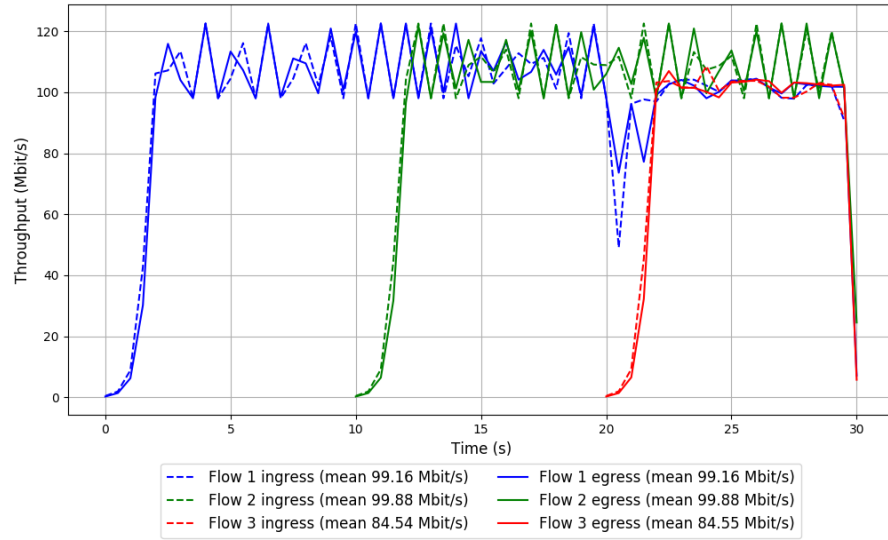
-- Flow 3:

Average throughput: 84.55 Mbit/s

95th percentile per-packet one-way delay: 109.963 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-03-06 21:24:23

End at: 2018-03-06 21:24:53

Below is generated by plot.py at 2018-03-07 01:28:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.52 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 95.47 Mbit/s

95th percentile per-packet one-way delay: 113.522 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 92.81 Mbit/s

95th percentile per-packet one-way delay: 113.764 ms

Loss rate: 0.01%

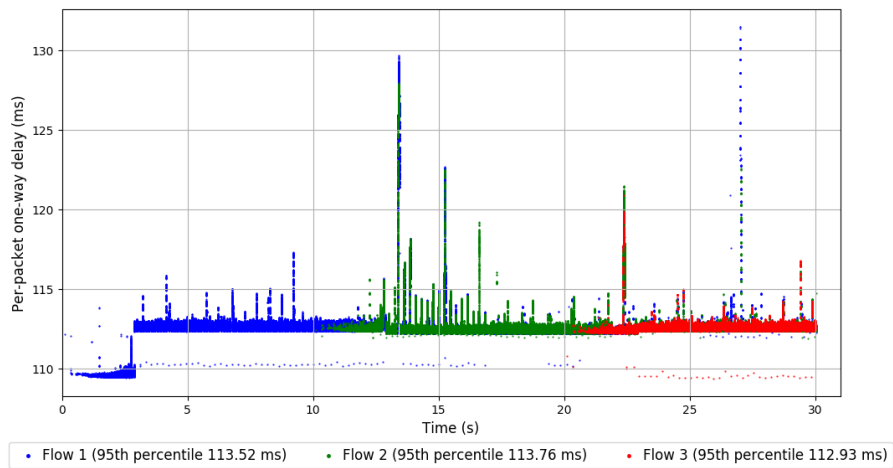
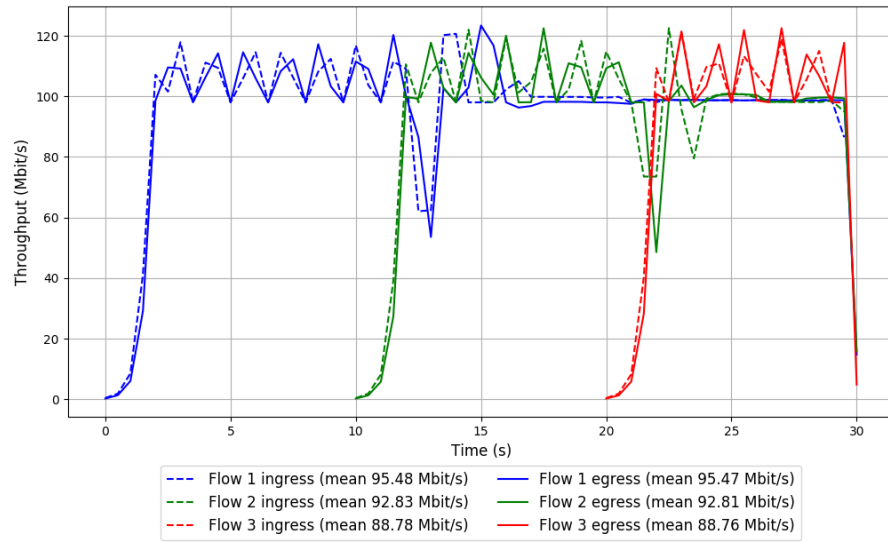
-- Flow 3:

Average throughput: 88.76 Mbit/s

95th percentile per-packet one-way delay: 112.932 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-03-06 21:43:20

End at: 2018-03-06 21:43:50

Below is generated by plot.py at 2018-03-07 01:28:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.34 Mbit/s

95th percentile per-packet one-way delay: 112.997 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 95.85 Mbit/s

95th percentile per-packet one-way delay: 112.821 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 94.10 Mbit/s

95th percentile per-packet one-way delay: 113.279 ms

Loss rate: 0.00%

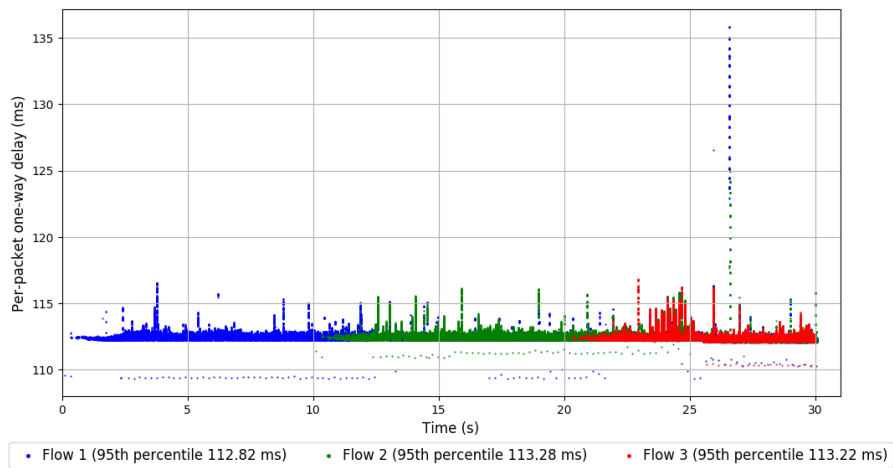
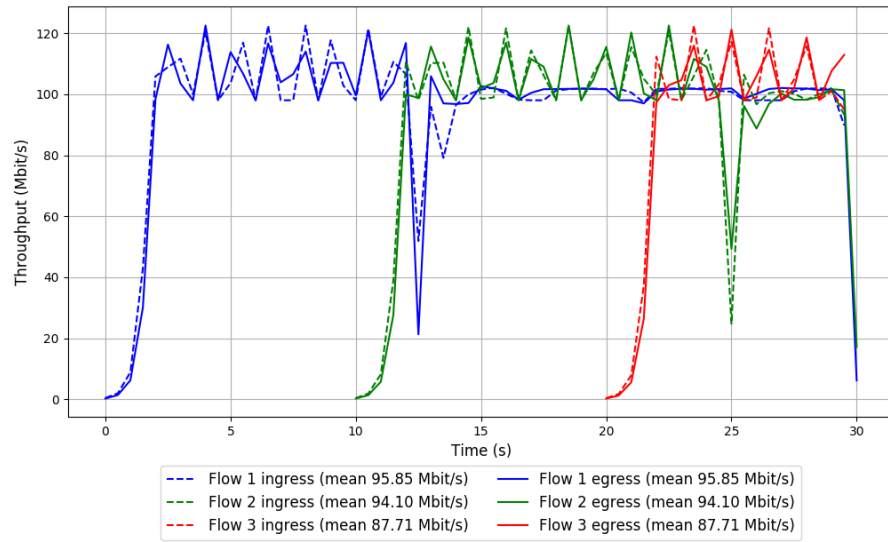
-- Flow 3:

Average throughput: 87.71 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-03-06 22:02:49

End at: 2018-03-06 22:03:19

Below is generated by plot.py at 2018-03-07 01:28:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.05 Mbit/s

95th percentile per-packet one-way delay: 113.071 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 96.70 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.21 Mbit/s

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

Loss rate: 0.00%

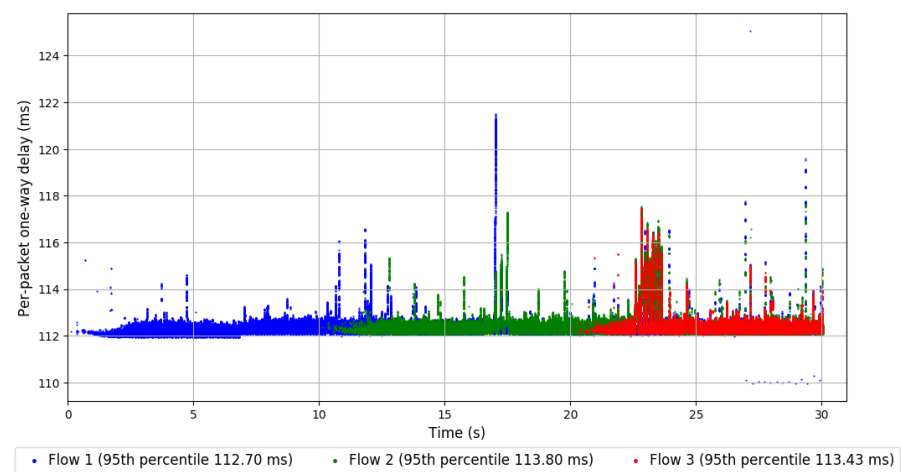
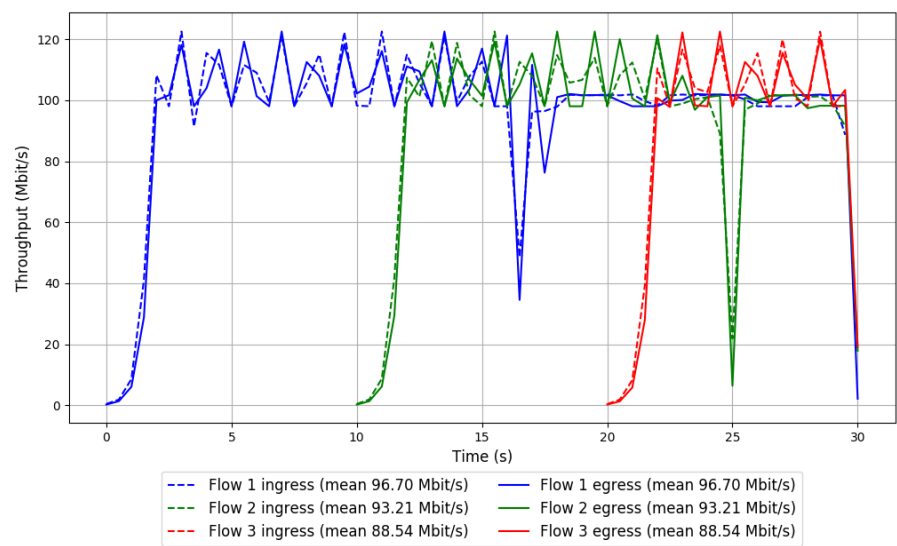
-- Flow 3:

Average throughput: 88.54 Mbit/s

95th percentile per-packet one-way delay: 113.428 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-03-06 22:22:14

End at: 2018-03-06 22:22:44

Below is generated by plot.py at 2018-03-07 01:28:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.20 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 96.71 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.54 Mbit/s

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

Loss rate: 0.00%

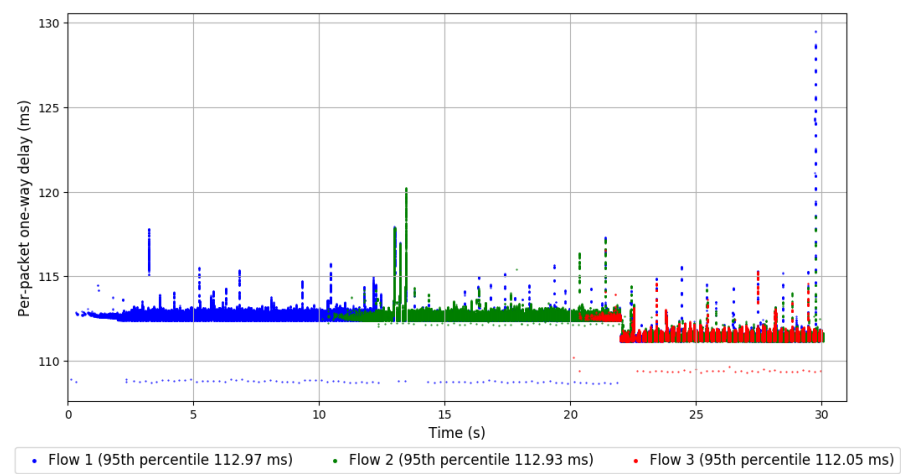
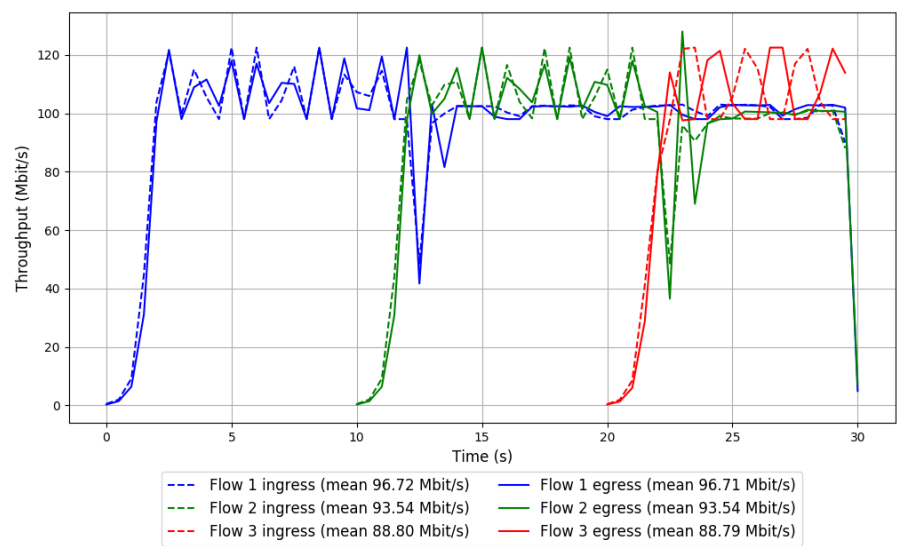
-- Flow 3:

Average throughput: 88.79 Mbit/s

95th percentile per-packet one-way delay: 112.051 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-03-06 22:41:48

End at: 2018-03-06 22:42:18

Below is generated by plot.py at 2018-03-07 01:28:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.54 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 91.76 Mbit/s

95th percentile per-packet one-way delay: 112.597 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 95.43 Mbit/s

95th percentile per-packet one-way delay: 113.766 ms

Loss rate: 0.00%

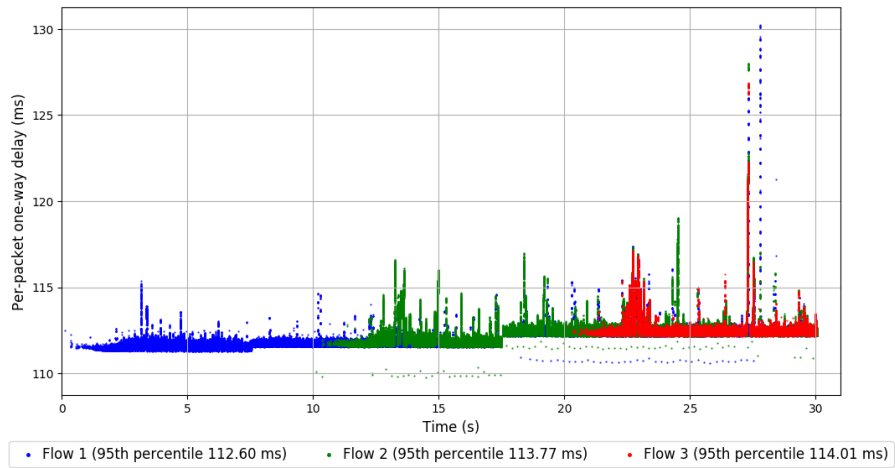
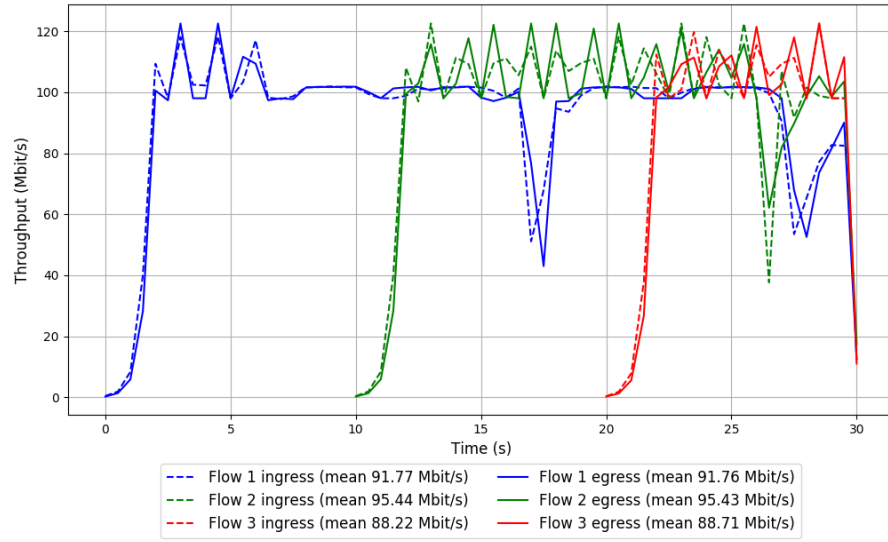
-- Flow 3:

Average throughput: 88.71 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-03-06 23:01:05

End at: 2018-03-06 23:01:35

Below is generated by plot.py at 2018-03-07 01:29:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.61 Mbit/s

95th percentile per-packet one-way delay: 111.787 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 60.61 Mbit/s

95th percentile per-packet one-way delay: 111.790 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 60.67 Mbit/s

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

Loss rate: 0.08%

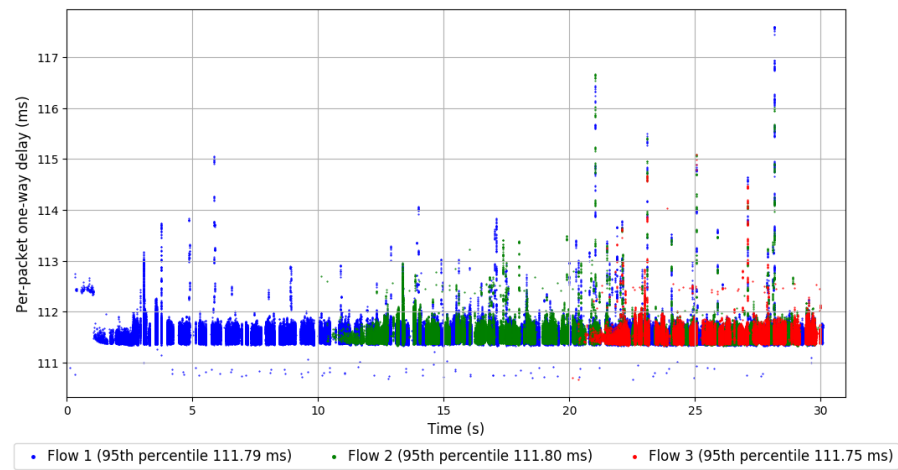
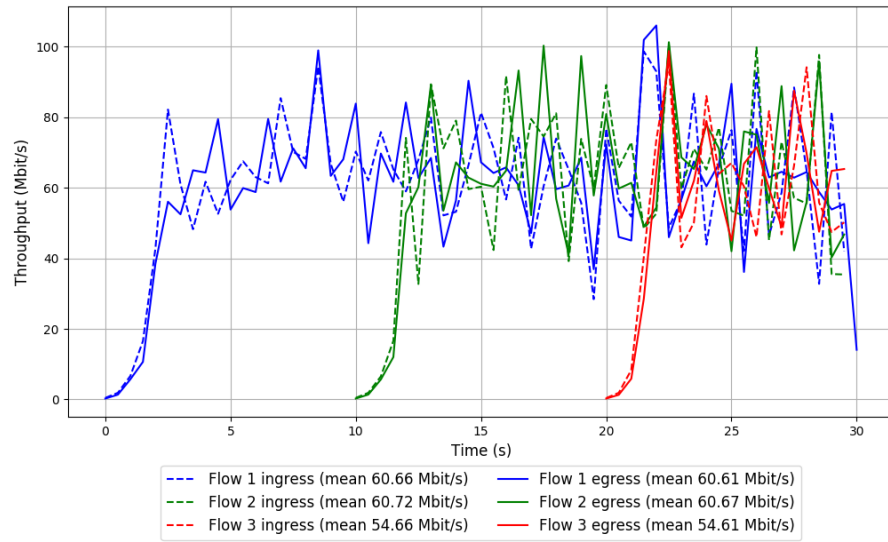
-- Flow 3:

Average throughput: 54.61 Mbit/s

95th percentile per-packet one-way delay: 111.755 ms

Loss rate: 0.08%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-03-06 23:19:49

End at: 2018-03-06 23:20:19

Below is generated by plot.py at 2018-03-07 01:29:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 133.67 Mbit/s

95th percentile per-packet one-way delay: 111.951 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 63.29 Mbit/s

95th percentile per-packet one-way delay: 111.935 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 68.49 Mbit/s

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

Loss rate: 0.05%

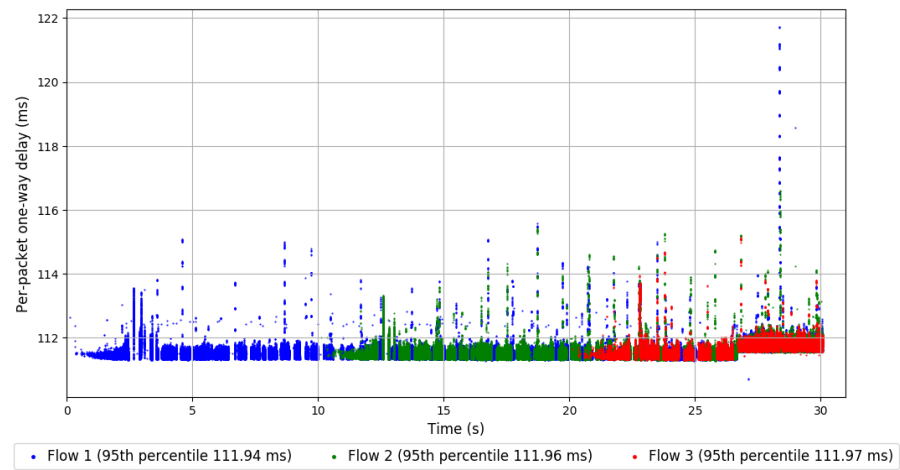
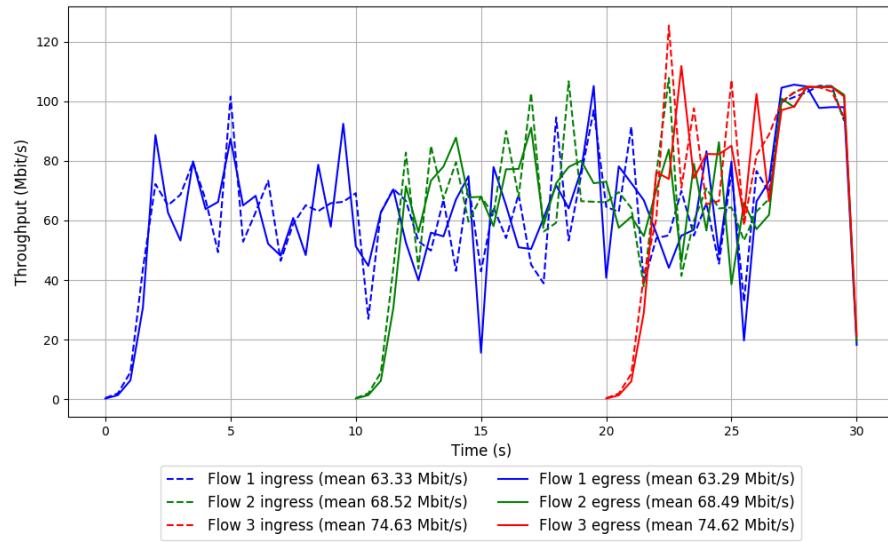
-- Flow 3:

Average throughput: 74.62 Mbit/s

95th percentile per-packet one-way delay: 111.969 ms

Loss rate: 0.01%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-03-06 20:16:34

End at: 2018-03-06 20:17:04

Below is generated by plot.py at 2018-03-07 01:30:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 164.20 Mbit/s

95th percentile per-packet one-way delay: 122.388 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 102.96 Mbit/s

95th percentile per-packet one-way delay: 122.556 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.24 Mbit/s

95th percentile per-packet one-way delay: 123.685 ms

Loss rate: 0.00%

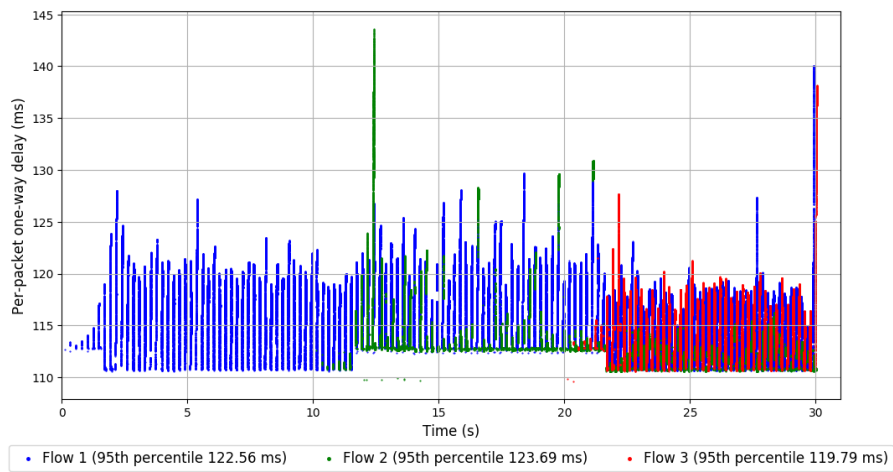
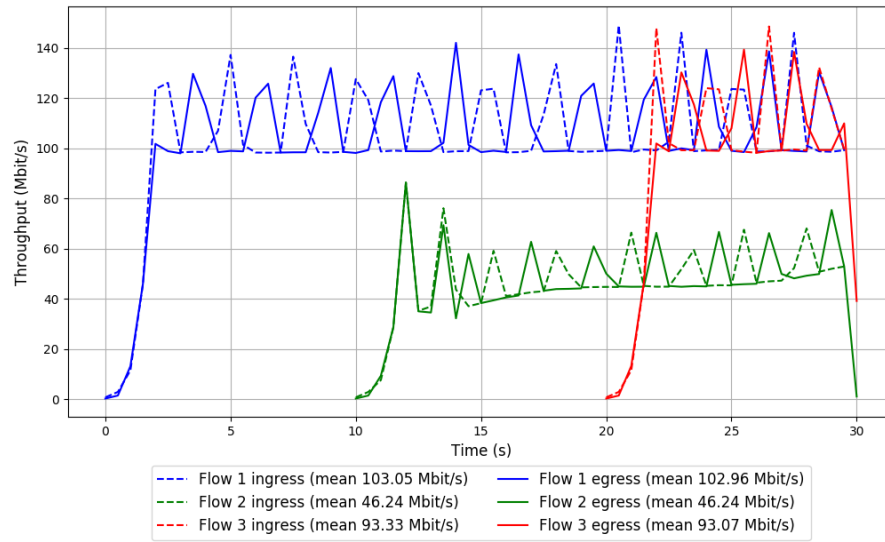
-- Flow 3:

Average throughput: 93.07 Mbit/s

95th percentile per-packet one-way delay: 119.791 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-03-06 20:35:30

End at: 2018-03-06 20:36:00

Below is generated by plot.py at 2018-03-07 01:30:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.73 Mbit/s

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

Loss rate: 0.02%

-- Flow 1:

Average throughput: 31.28 Mbit/s

95th percentile per-packet one-way delay: 121.365 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 21.06 Mbit/s

95th percentile per-packet one-way delay: 121.952 ms

Loss rate: 0.02%

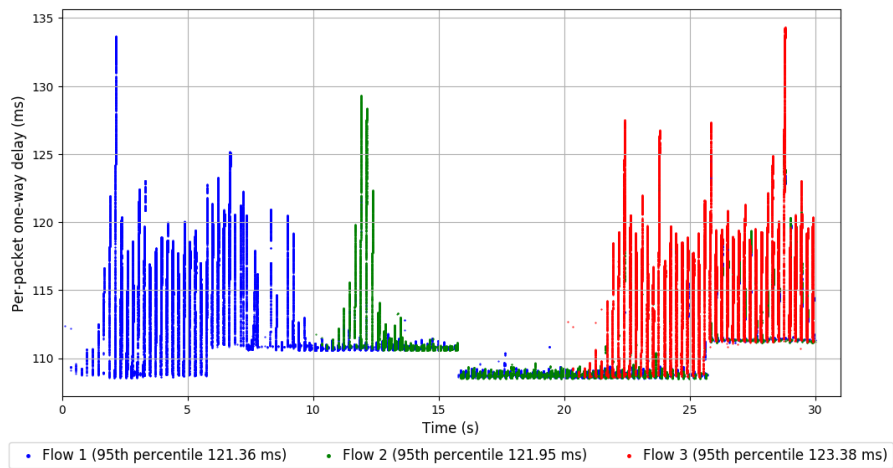
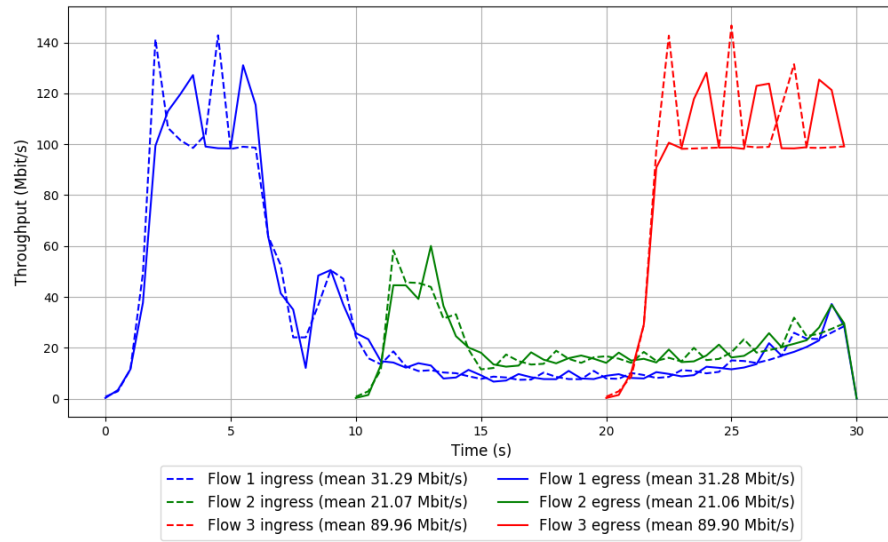
-- Flow 3:

Average throughput: 89.90 Mbit/s

95th percentile per-packet one-way delay: 123.376 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-03-06 20:54:30

End at: 2018-03-06 20:55:00

Below is generated by plot.py at 2018-03-07 01:30:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 171.31 Mbit/s

95th percentile per-packet one-way delay: 122.031 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 91.02 Mbit/s

95th percentile per-packet one-way delay: 121.252 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.65 Mbit/s

95th percentile per-packet one-way delay: 122.926 ms

Loss rate: 0.00%

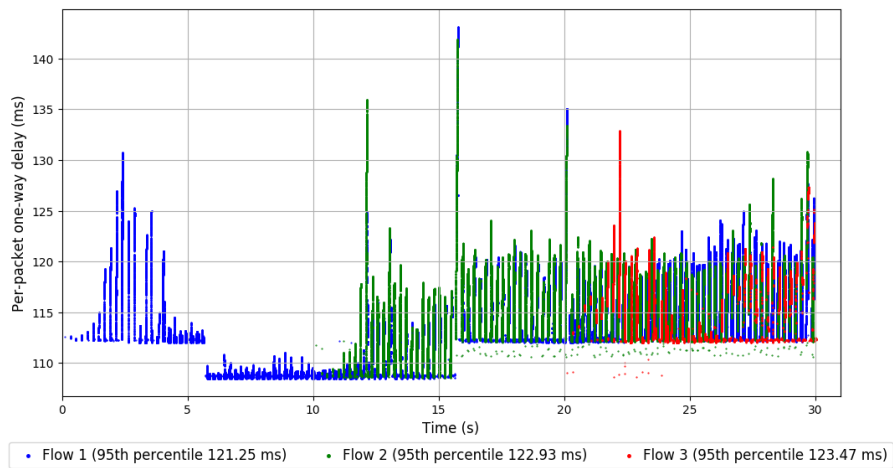
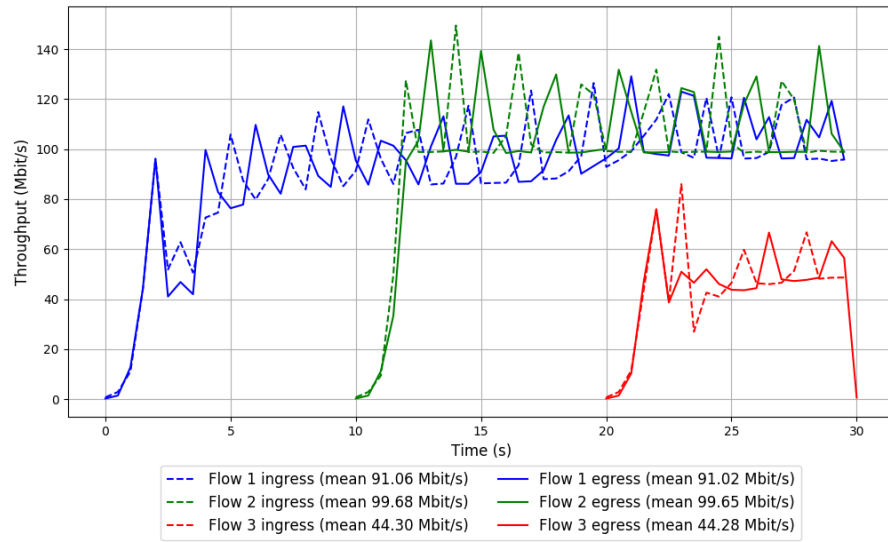
-- Flow 3:

Average throughput: 44.28 Mbit/s

95th percentile per-packet one-way delay: 123.467 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-03-06 21:13:53

End at: 2018-03-06 21:14:23

Below is generated by plot.py at 2018-03-07 01:30:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 160.85 Mbit/s

95th percentile per-packet one-way delay: 121.370 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 102.84 Mbit/s

95th percentile per-packet one-way delay: 121.578 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 61.40 Mbit/s

95th percentile per-packet one-way delay: 121.321 ms

Loss rate: 0.00%

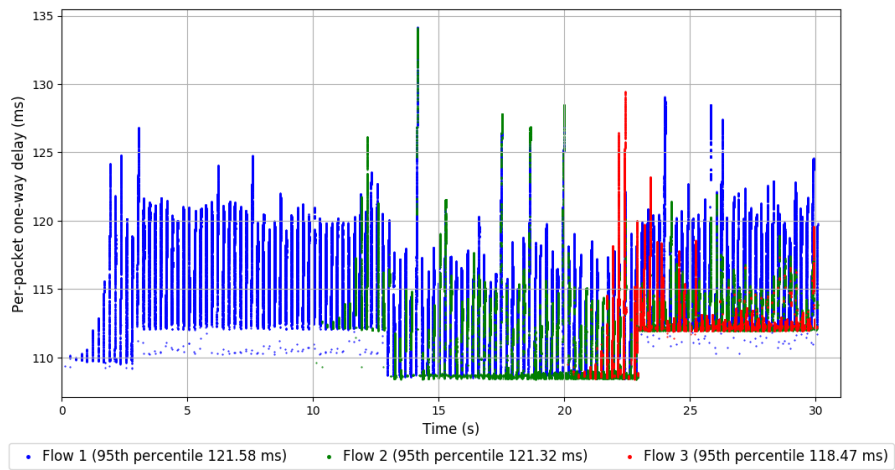
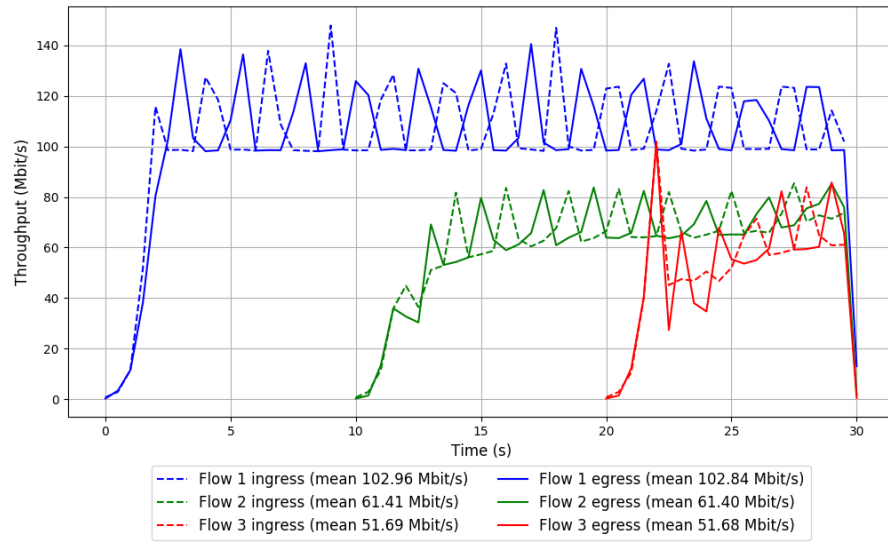
-- Flow 3:

Average throughput: 51.68 Mbit/s

95th percentile per-packet one-way delay: 118.471 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-03-06 21:33:07

End at: 2018-03-06 21:33:37

Below is generated by plot.py at 2018-03-07 01:30:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.14 Mbit/s

95th percentile per-packet one-way delay: 122.639 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.53 Mbit/s

95th percentile per-packet one-way delay: 122.241 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.95 Mbit/s

95th percentile per-packet one-way delay: 122.855 ms

Loss rate: 0.00%

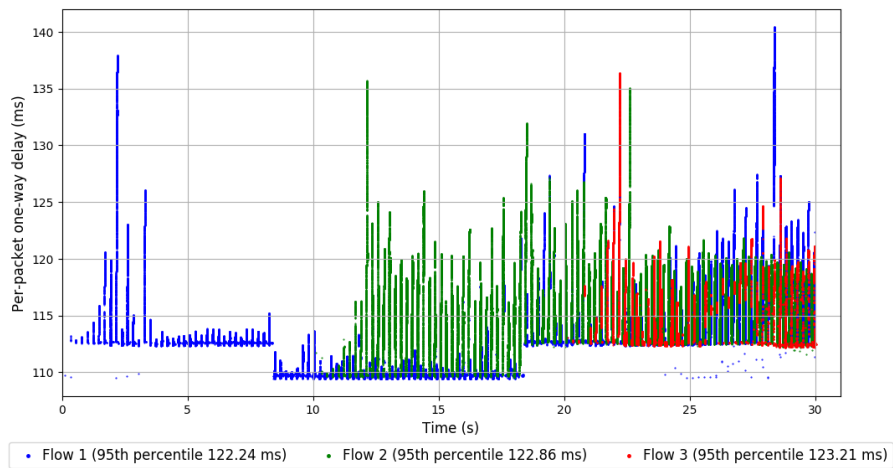
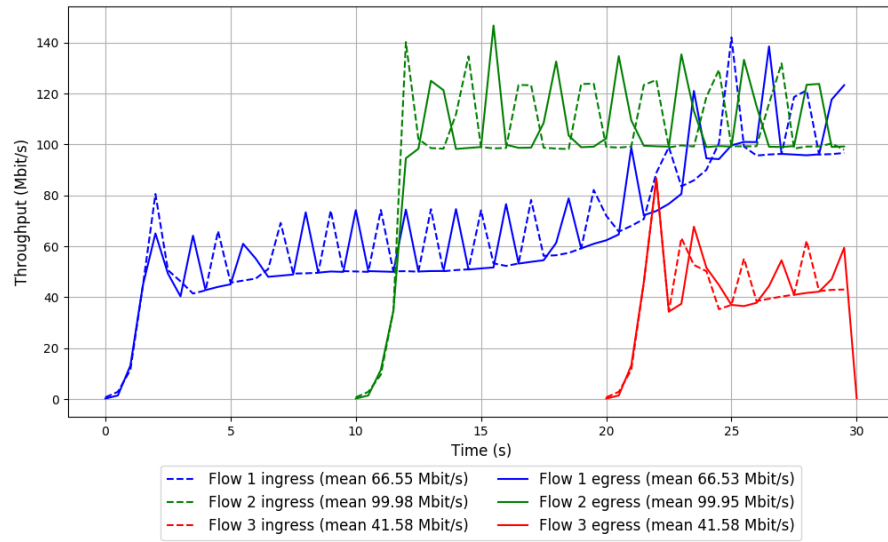
-- Flow 3:

Average throughput: 41.58 Mbit/s

95th percentile per-packet one-way delay: 123.211 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-03-06 21:52:10

End at: 2018-03-06 21:52:40

Below is generated by plot.py at 2018-03-07 01:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 199.42 Mbit/s

95th percentile per-packet one-way delay: 122.874 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 102.71 Mbit/s

95th percentile per-packet one-way delay: 122.818 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.10 Mbit/s

95th percentile per-packet one-way delay: 123.341 ms

Loss rate: 0.00%

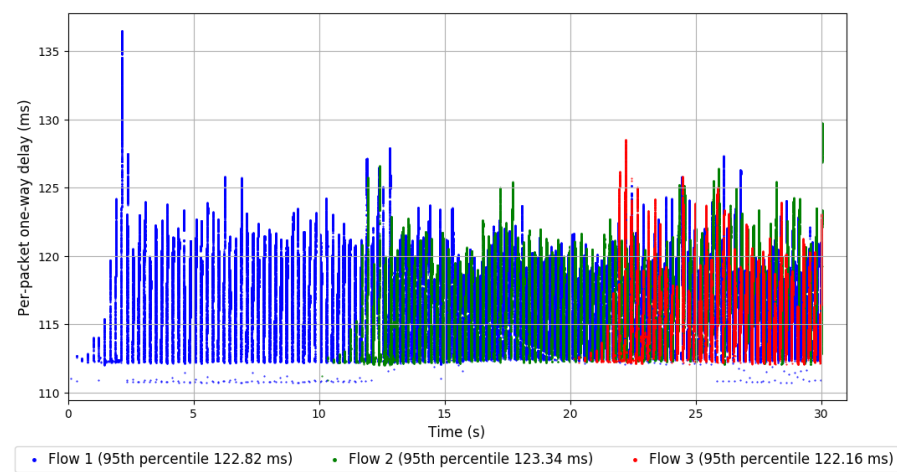
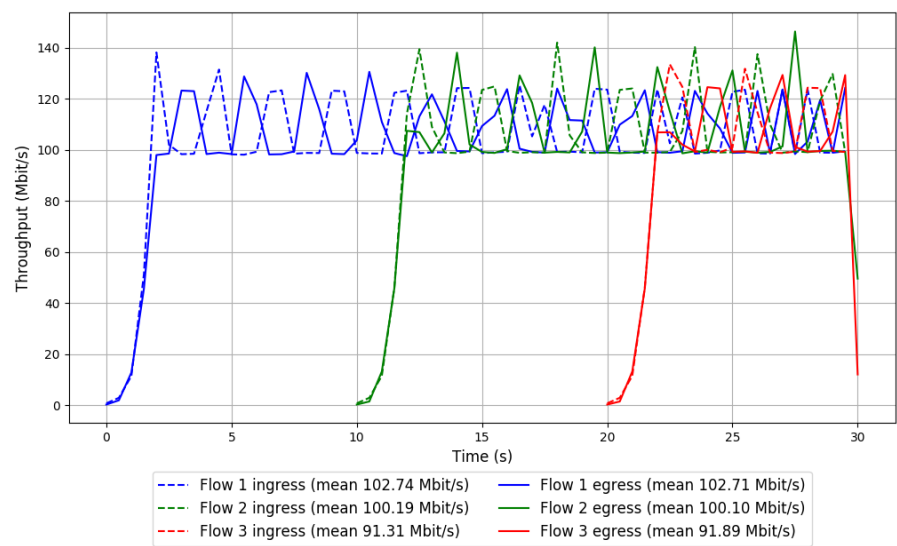
-- Flow 3:

Average throughput: 91.89 Mbit/s

95th percentile per-packet one-way delay: 122.157 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-03-06 22:11:55

End at: 2018-03-06 22:12:25

Below is generated by plot.py at 2018-03-07 01:32:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 185.09 Mbit/s

95th percentile per-packet one-way delay: 122.353 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 102.09 Mbit/s

95th percentile per-packet one-way delay: 122.297 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.03 Mbit/s

95th percentile per-packet one-way delay: 122.319 ms

Loss rate: 0.00%

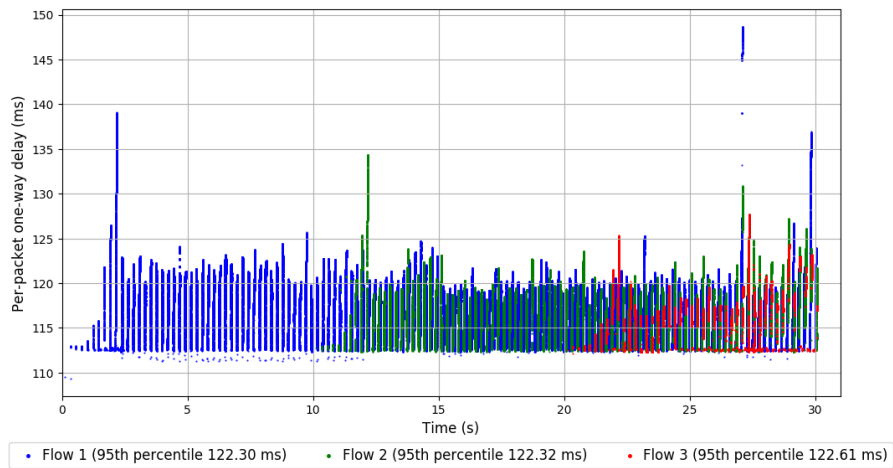
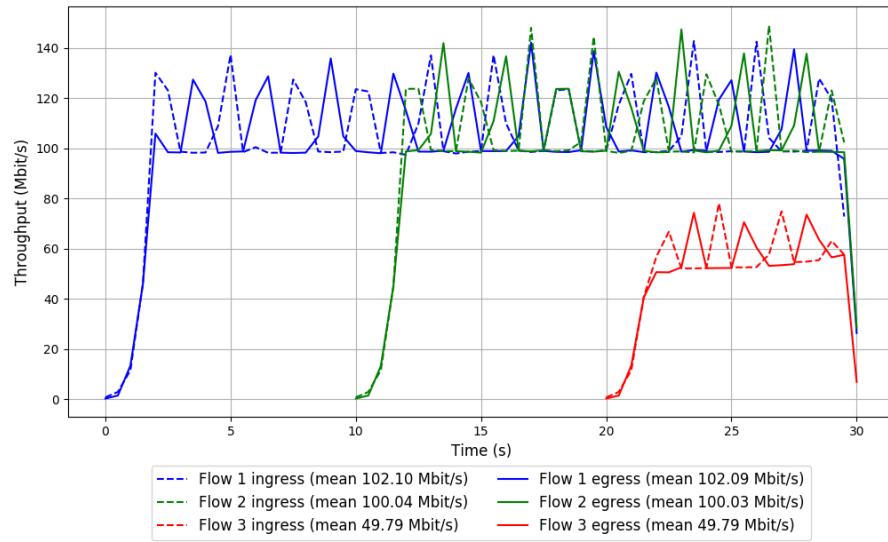
-- Flow 3:

Average throughput: 49.79 Mbit/s

95th percentile per-packet one-way delay: 122.606 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-03-06 22:31:11

End at: 2018-03-06 22:31:41

Below is generated by plot.py at 2018-03-07 01:32:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 130.11 Mbit/s

95th percentile per-packet one-way delay: 122.681 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 97.17 Mbit/s

95th percentile per-packet one-way delay: 122.676 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.19 Mbit/s

95th percentile per-packet one-way delay: 121.389 ms

Loss rate: 0.02%

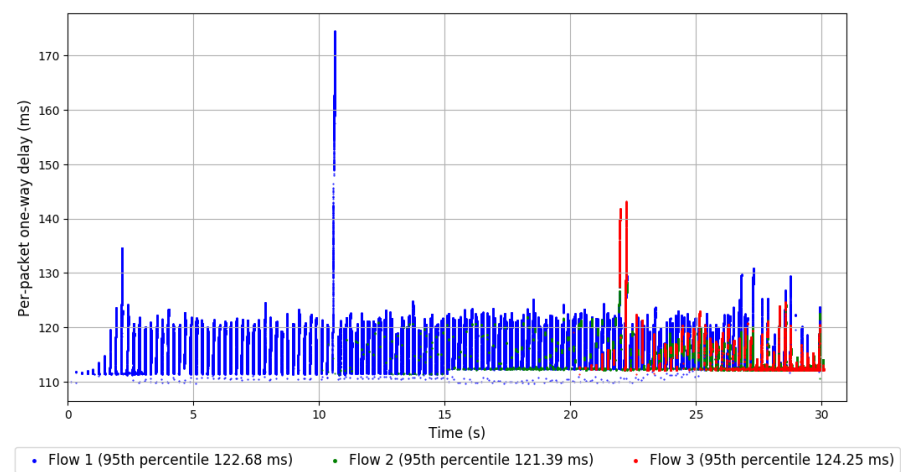
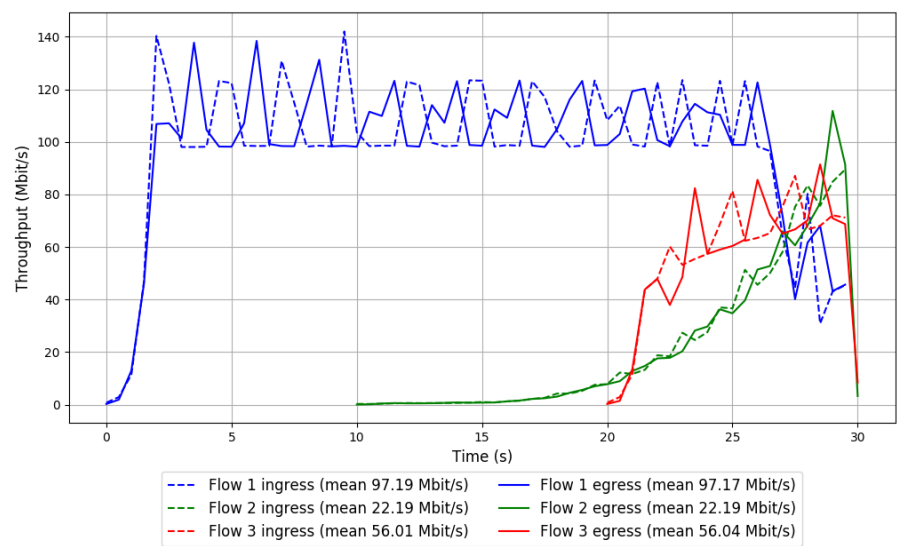
-- Flow 3:

Average throughput: 56.04 Mbit/s

95th percentile per-packet one-way delay: 124.247 ms

Loss rate: 0.01%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-03-06 22:50:46

End at: 2018-03-06 22:51:16

Below is generated by plot.py at 2018-03-07 01:32:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 149.85 Mbit/s

95th percentile per-packet one-way delay: 123.926 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 65.89 Mbit/s

95th percentile per-packet one-way delay: 123.603 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.15 Mbit/s

95th percentile per-packet one-way delay: 124.446 ms

Loss rate: 0.00%

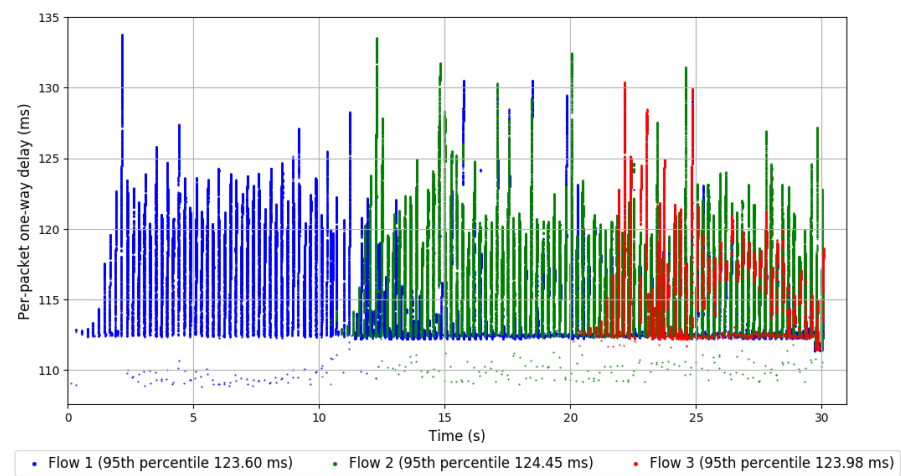
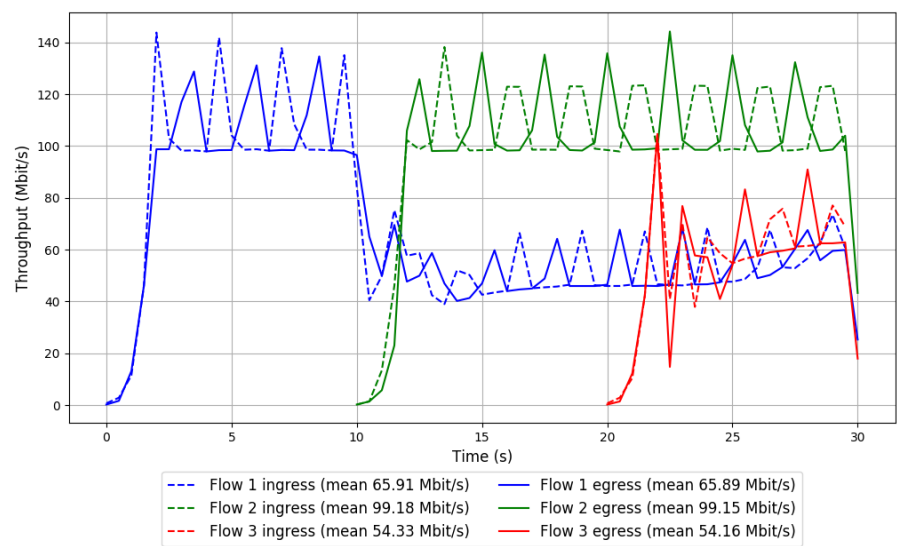
-- Flow 3:

Average throughput: 54.16 Mbit/s

95th percentile per-packet one-way delay: 123.980 ms

Loss rate: 0.27%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-03-06 23:09:48

End at: 2018-03-06 23:10:18

Below is generated by plot.py at 2018-03-07 01:32:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 44.40 Mbit/s

95th percentile per-packet one-way delay: 124.154 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 9.26 Mbit/s

95th percentile per-packet one-way delay: 118.608 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 47.41 Mbit/s

95th percentile per-packet one-way delay: 124.791 ms

Loss rate: 0.03%

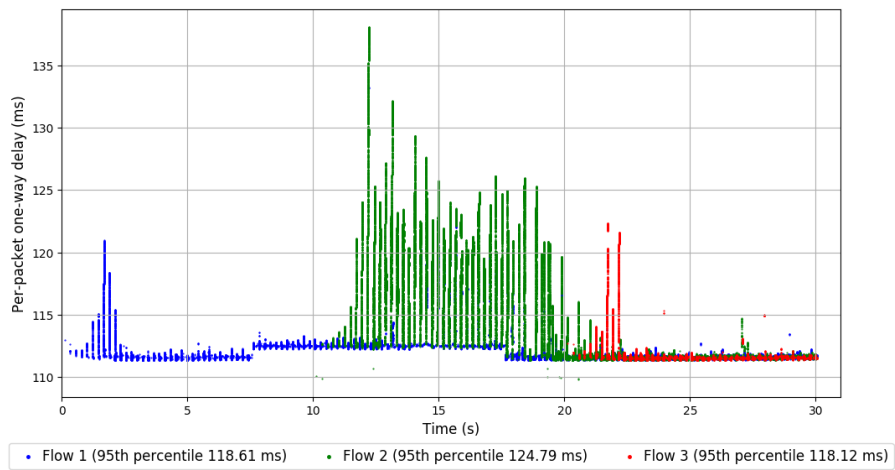
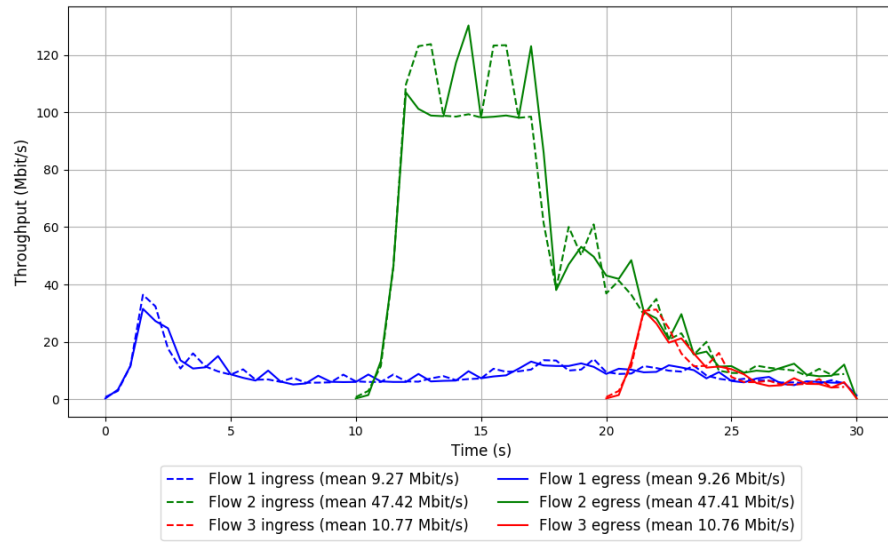
-- Flow 3:

Average throughput: 10.76 Mbit/s

95th percentile per-packet one-way delay: 118.125 ms

Loss rate: 0.10%

Run 10: Report of TCP Cubic — Data Link

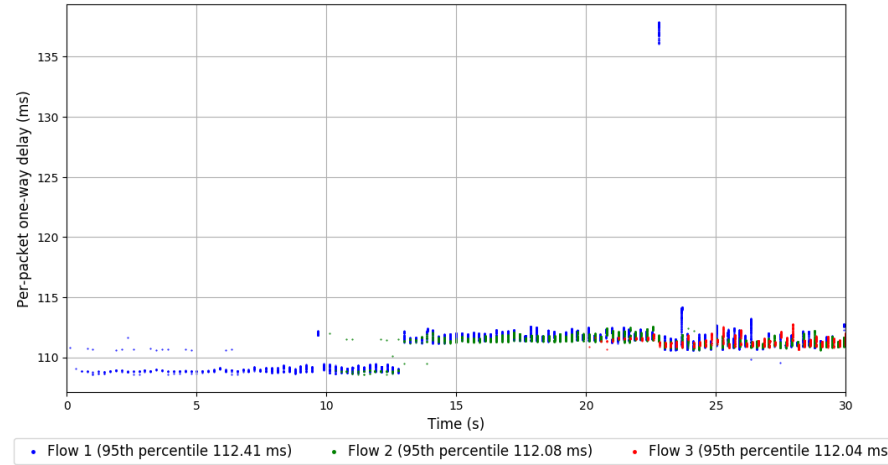
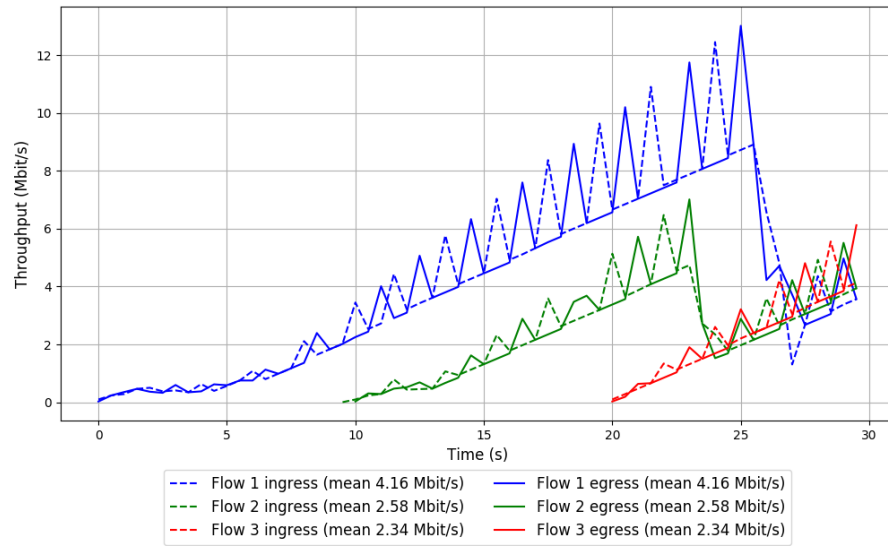


```
Run 1: Statistics of LEDBAT

Start at: 2018-03-06 20:30:53
End at: 2018-03-06 20:31:23

# Below is generated by plot.py at 2018-03-07 01:32:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.64 Mbit/s
95th percentile per-packet one-way delay: 112.312 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 112.413 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 112.082 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 112.039 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

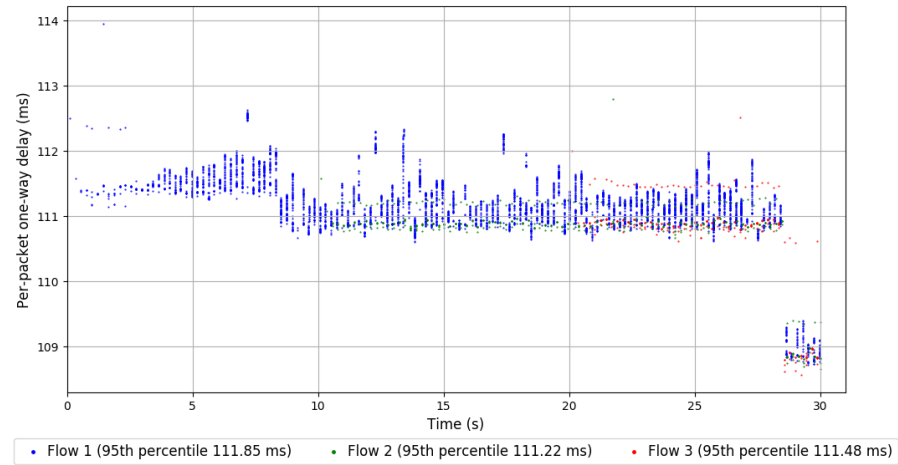
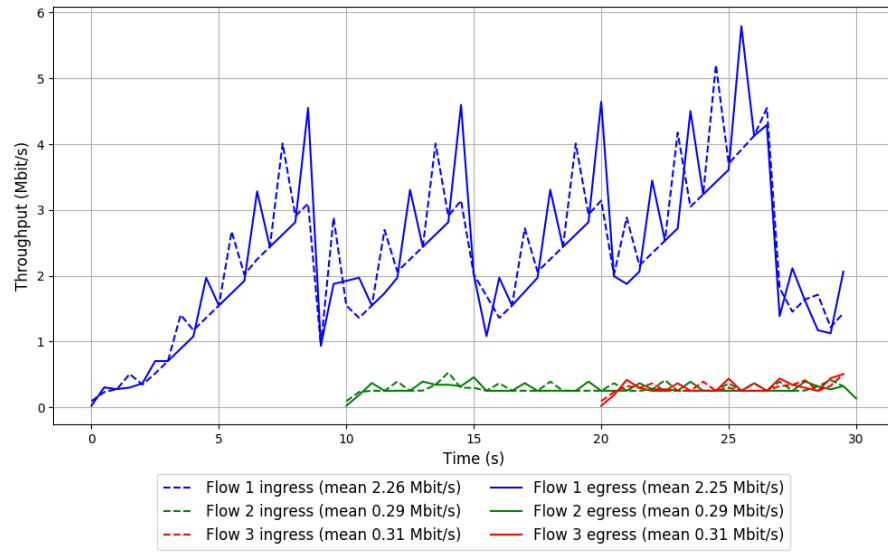


```
Run 2: Statistics of LEDBAT

Start at: 2018-03-06 20:49:47
End at: 2018-03-06 20:50:17

# Below is generated by plot.py at 2018-03-07 01:32:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.55 Mbit/s
95th percentile per-packet one-way delay: 111.829 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 111.854 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 111.223 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 111.478 ms
Loss rate: 0.39%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-03-06 21:09:08

End at: 2018-03-06 21:09:38

Below is generated by plot.py at 2018-03-07 01:32:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.52 Mbit/s

95th percentile per-packet one-way delay: 113.212 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.32 Mbit/s

95th percentile per-packet one-way delay: 113.258 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.69 Mbit/s

95th percentile per-packet one-way delay: 113.192 ms

Loss rate: 0.00%

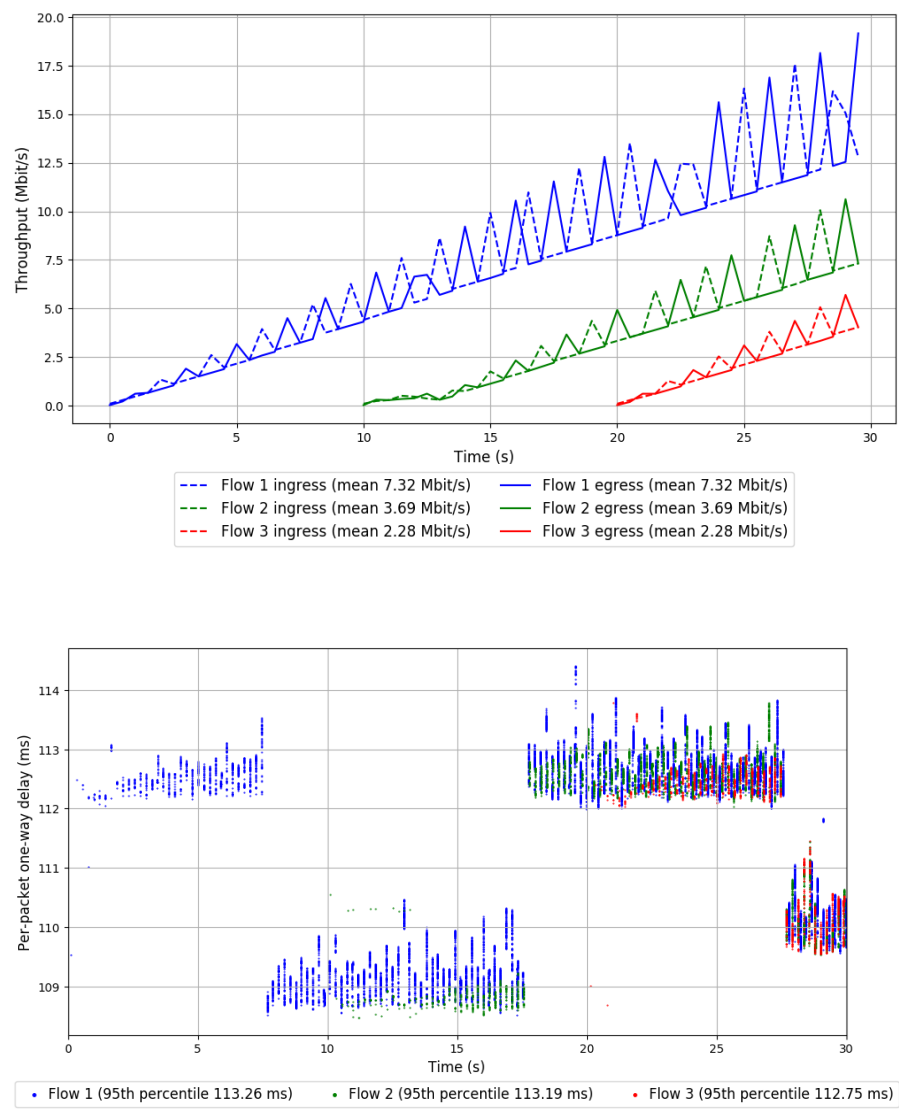
-- Flow 3:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 112.753 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

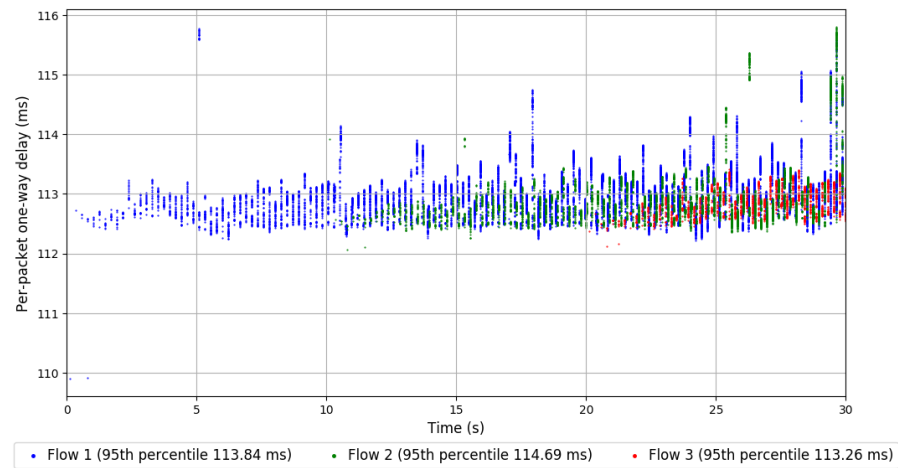
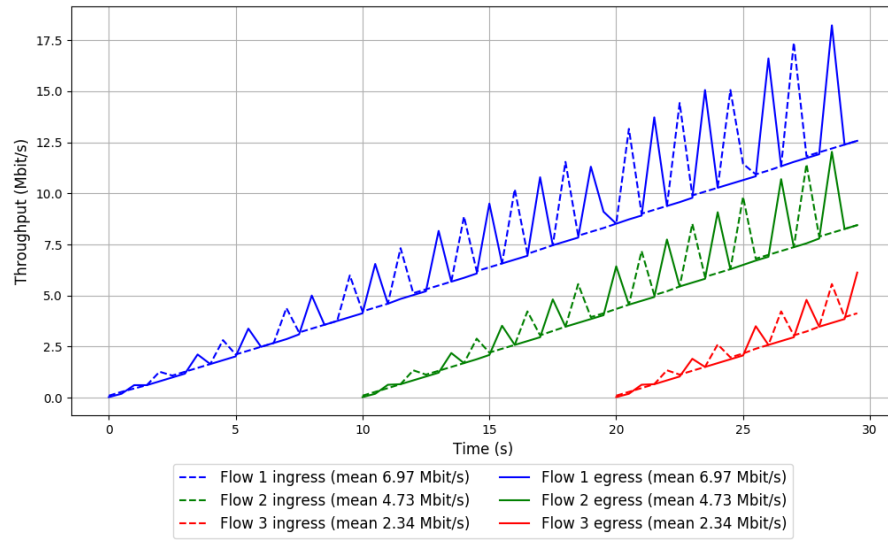


```
Run 4: Statistics of LEDBAT

Start at: 2018-03-06 21:28:21
End at: 2018-03-06 21:28:51

# Below is generated by plot.py at 2018-03-07 01:32:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.84 Mbit/s
95th percentile per-packet one-way delay: 113.983 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.97 Mbit/s
95th percentile per-packet one-way delay: 113.841 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.73 Mbit/s
95th percentile per-packet one-way delay: 114.695 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 113.262 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-03-06 21:47:31

End at: 2018-03-06 21:48:01

Below is generated by plot.py at 2018-03-07 01:32:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.86 Mbit/s

95th percentile per-packet one-way delay: 113.355 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.91 Mbit/s

95th percentile per-packet one-way delay: 113.404 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.77 Mbit/s

95th percentile per-packet one-way delay: 113.388 ms

Loss rate: 0.00%

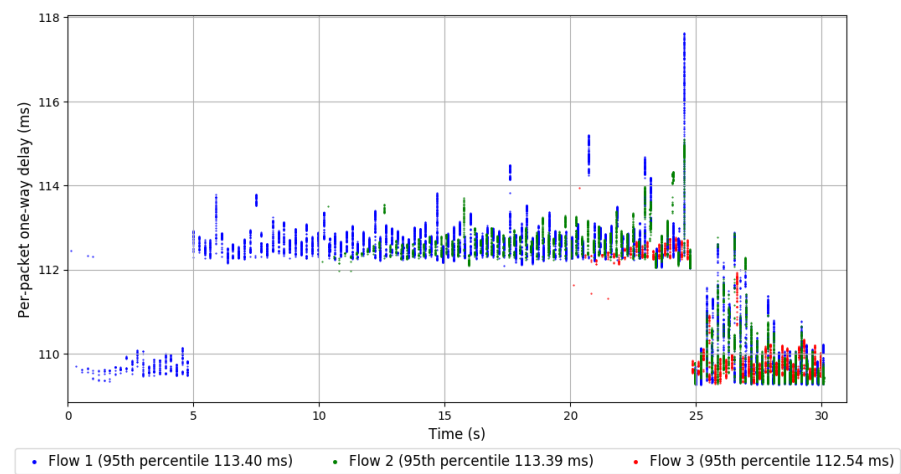
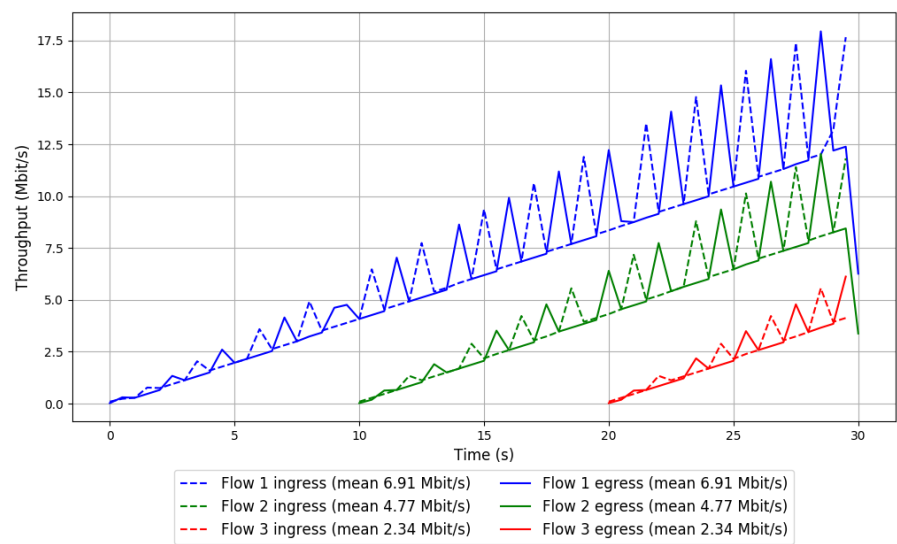
-- Flow 3:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 112.541 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-03-06 22:07:08

End at: 2018-03-06 22:07:38

Below is generated by plot.py at 2018-03-07 01:32:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.03 Mbit/s

95th percentile per-packet one-way delay: 113.592 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.20 Mbit/s

95th percentile per-packet one-way delay: 113.569 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.73 Mbit/s

95th percentile per-packet one-way delay: 113.651 ms

Loss rate: 0.00%

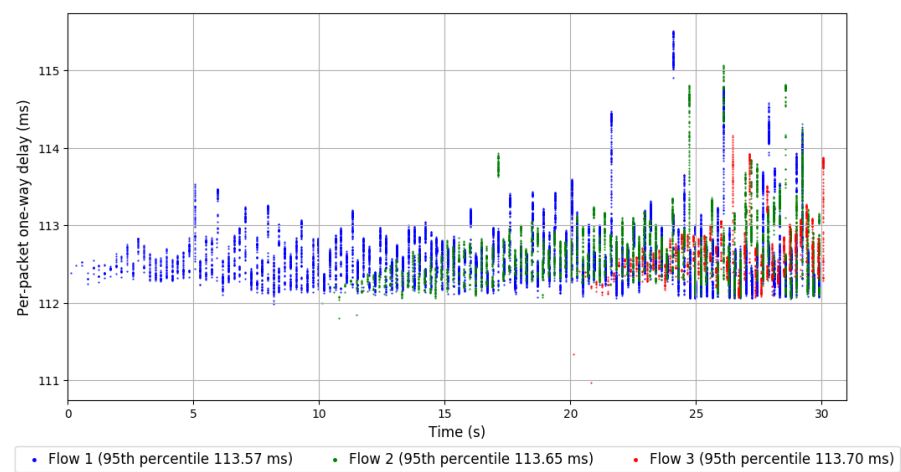
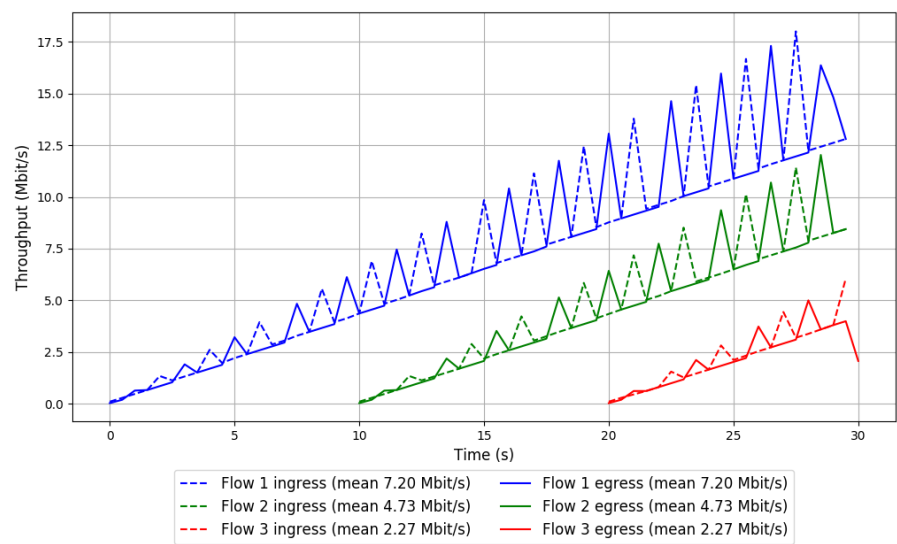
-- Flow 3:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 113.696 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-03-06 22:26:33

End at: 2018-03-06 22:27:03

Below is generated by plot.py at 2018-03-07 01:32:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.99 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.05 Mbit/s

95th percentile per-packet one-way delay: 113.066 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.80 Mbit/s

95th percentile per-packet one-way delay: 113.164 ms

Loss rate: 0.00%

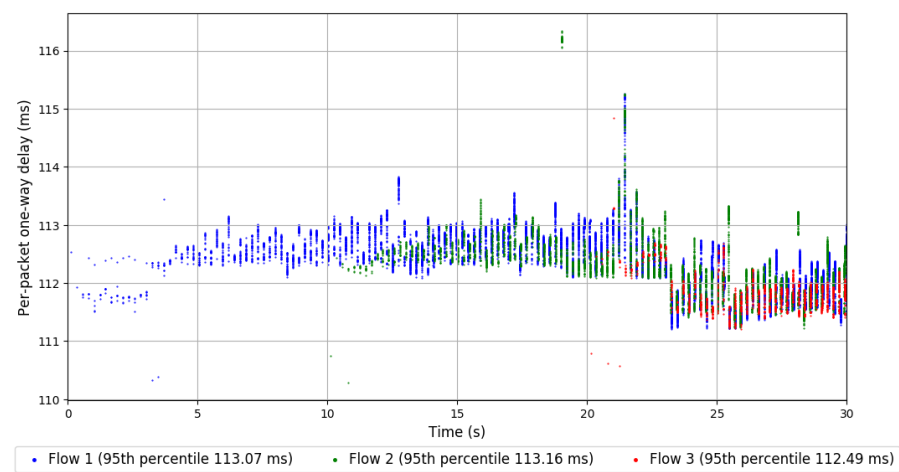
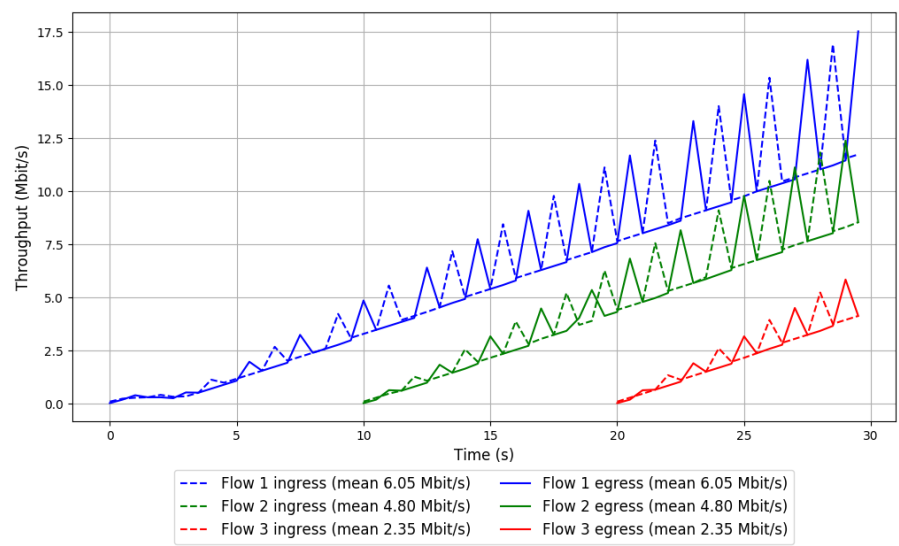
-- Flow 3:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 112.486 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-03-06 22:46:02

End at: 2018-03-06 22:46:32

Below is generated by plot.py at 2018-03-07 01:32:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.06 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.18 Mbit/s

95th percentile per-packet one-way delay: 112.799 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.72 Mbit/s

95th percentile per-packet one-way delay: 112.727 ms

Loss rate: 0.00%

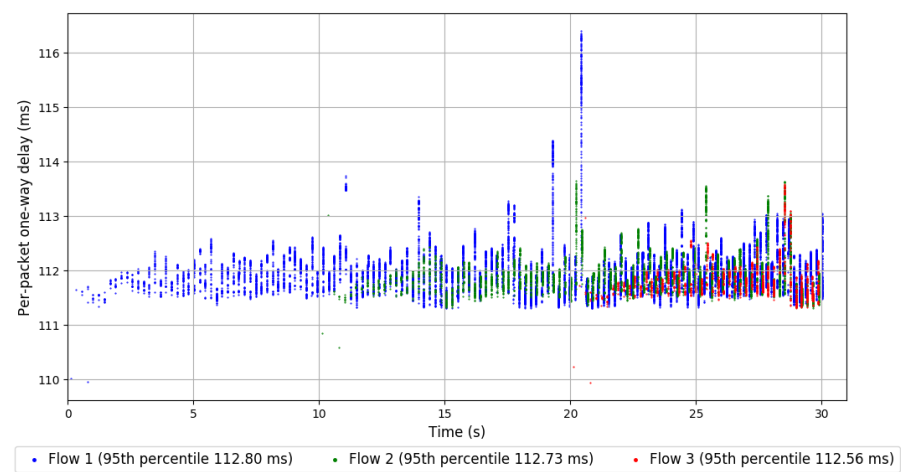
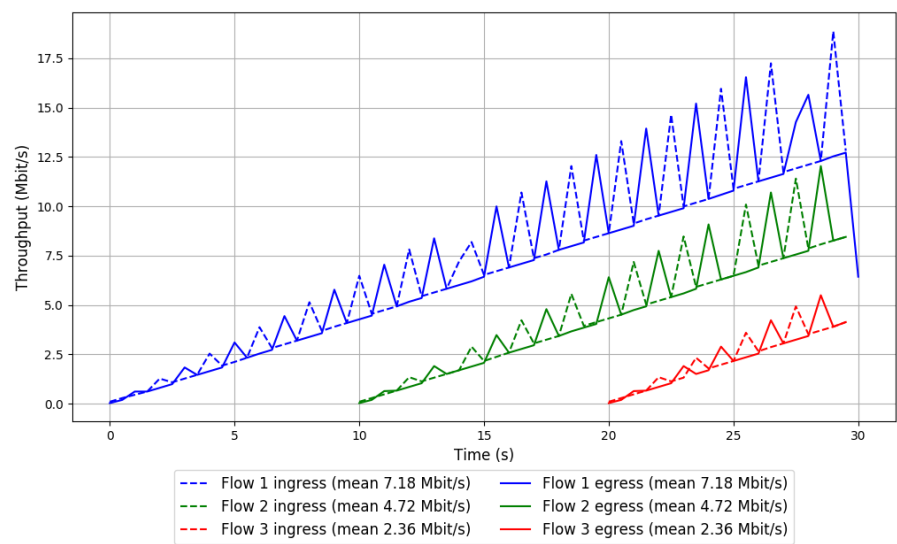
-- Flow 3:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 112.560 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-03-06 23:05:01

End at: 2018-03-06 23:05:31

Below is generated by plot.py at 2018-03-07 01:32:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.66 Mbit/s

95th percentile per-packet one-way delay: 113.180 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 5.71 Mbit/s

95th percentile per-packet one-way delay: 113.295 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.80 Mbit/s

95th percentile per-packet one-way delay: 112.936 ms

Loss rate: 0.00%

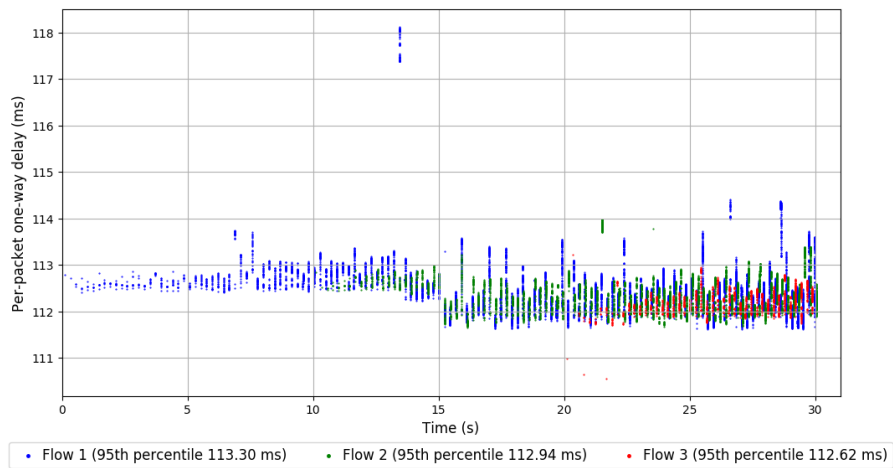
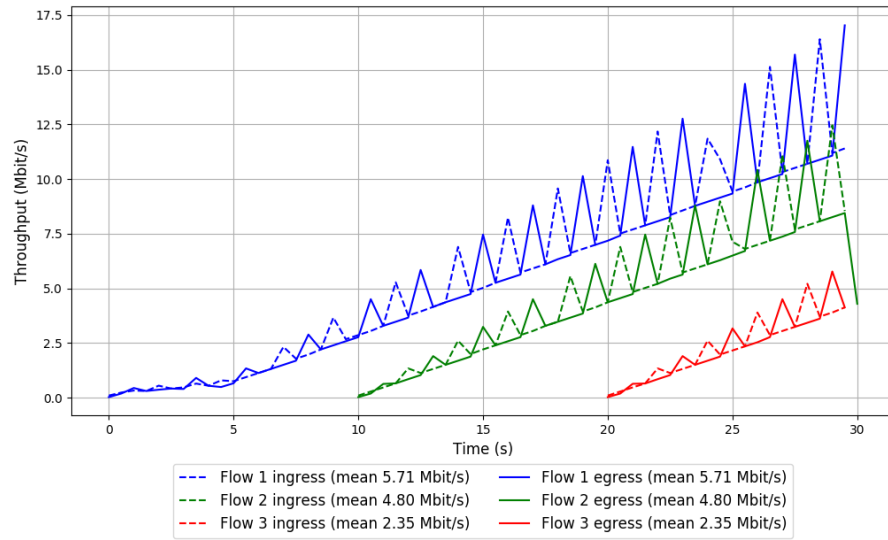
-- Flow 3:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 112.625 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

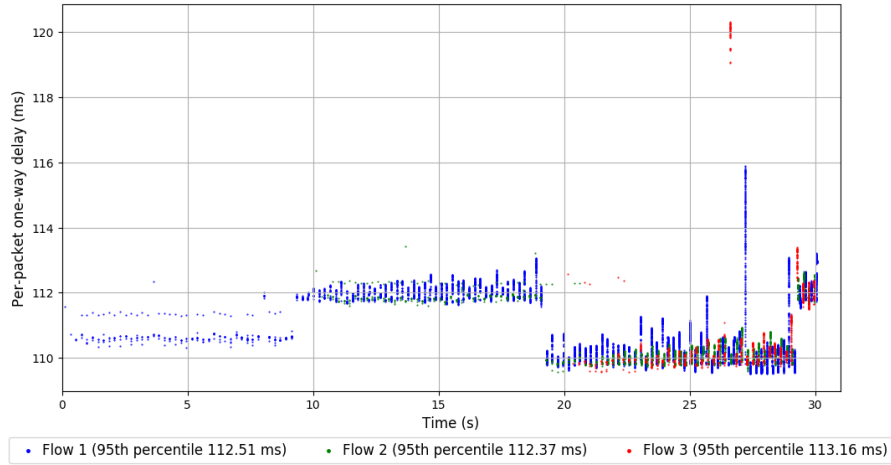
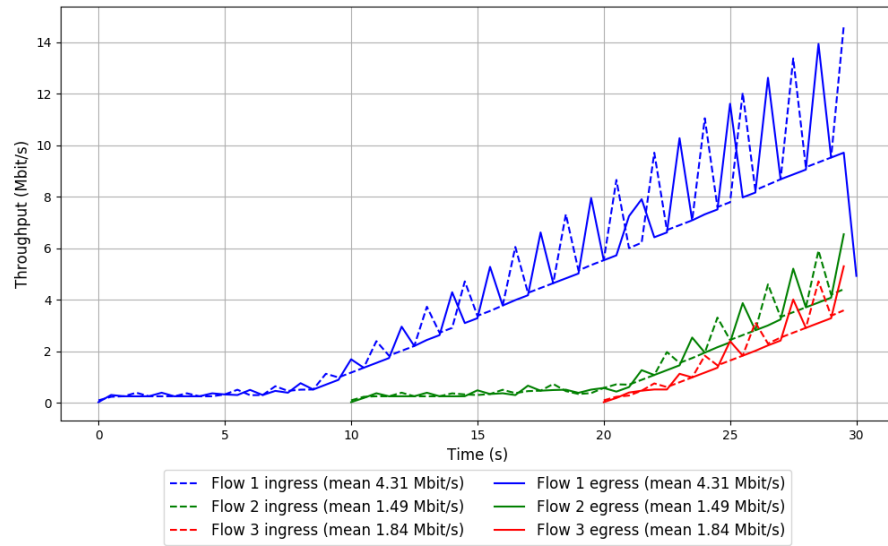


```
Run 10: Statistics of LEDBAT

Start at: 2018-03-06 23:24:17
End at: 2018-03-06 23:24:47

# Below is generated by plot.py at 2018-03-07 01:32:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.90 Mbit/s
95th percentile per-packet one-way delay: 112.487 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.31 Mbit/s
95th percentile per-packet one-way delay: 112.510 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 112.369 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.84 Mbit/s
95th percentile per-packet one-way delay: 113.160 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

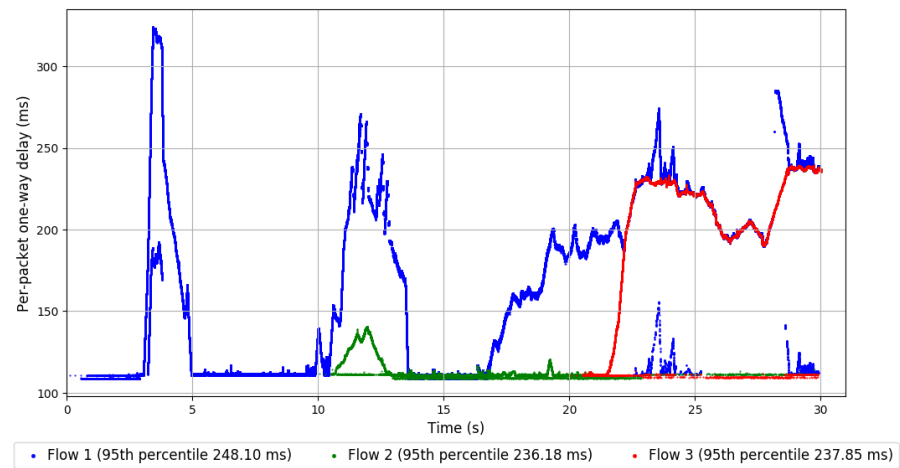
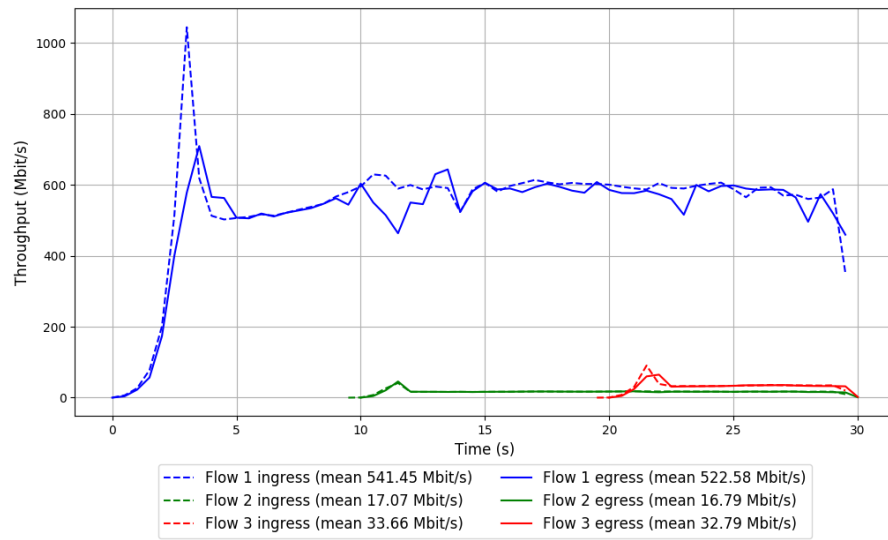


```
Run 1: Statistics of PCC

Start at: 2018-03-06 20:23:43
End at: 2018-03-06 20:24:13

# Below is generated by plot.py at 2018-03-07 01:39:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 543.07 Mbit/s
95th percentile per-packet one-way delay: 247.144 ms
Loss rate: 3.30%
-- Flow 1:
Average throughput: 522.58 Mbit/s
95th percentile per-packet one-way delay: 248.104 ms
Loss rate: 3.39%
-- Flow 2:
Average throughput: 16.79 Mbit/s
95th percentile per-packet one-way delay: 236.182 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 32.79 Mbit/s
95th percentile per-packet one-way delay: 237.850 ms
Loss rate: 1.36%
```

Run 1: Report of PCC — Data Link

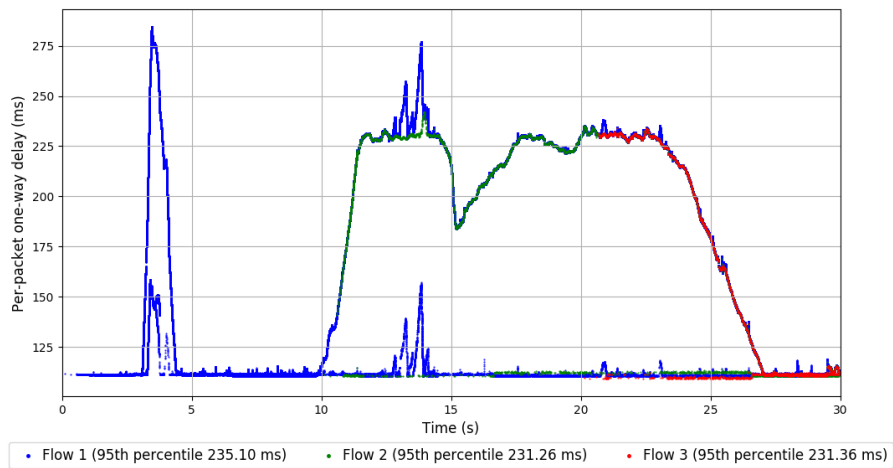
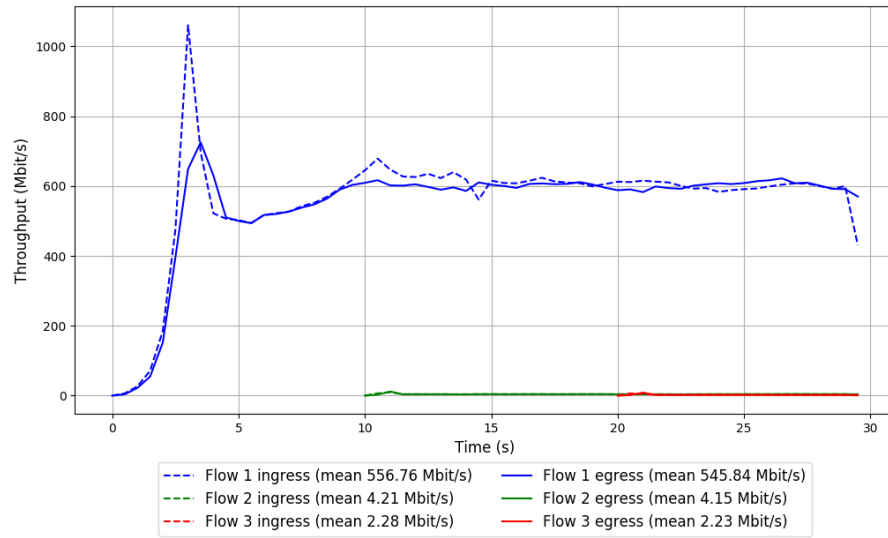


```
Run 2: Statistics of PCC

Start at: 2018-03-06 20:42:29
End at: 2018-03-06 20:42:59

# Below is generated by plot.py at 2018-03-07 01:39:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 549.34 Mbit/s
95th percentile per-packet one-way delay: 235.048 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 545.84 Mbit/s
95th percentile per-packet one-way delay: 235.097 ms
Loss rate: 1.96%
-- Flow 2:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 231.261 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 231.363 ms
Loss rate: 1.93%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-03-06 21:01:39

End at: 2018-03-06 21:02:09

Below is generated by plot.py at 2018-03-07 01:39:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 517.59 Mbit/s

95th percentile per-packet one-way delay: 236.508 ms

Loss rate: 3.13%

-- Flow 1:

Average throughput: 392.35 Mbit/s

95th percentile per-packet one-way delay: 236.466 ms

Loss rate: 3.23%

-- Flow 2:

Average throughput: 131.76 Mbit/s

95th percentile per-packet one-way delay: 235.652 ms

Loss rate: 2.82%

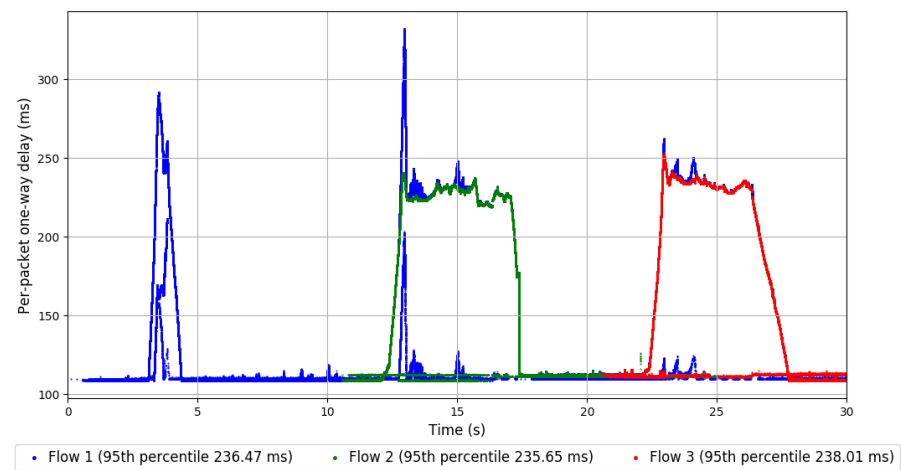
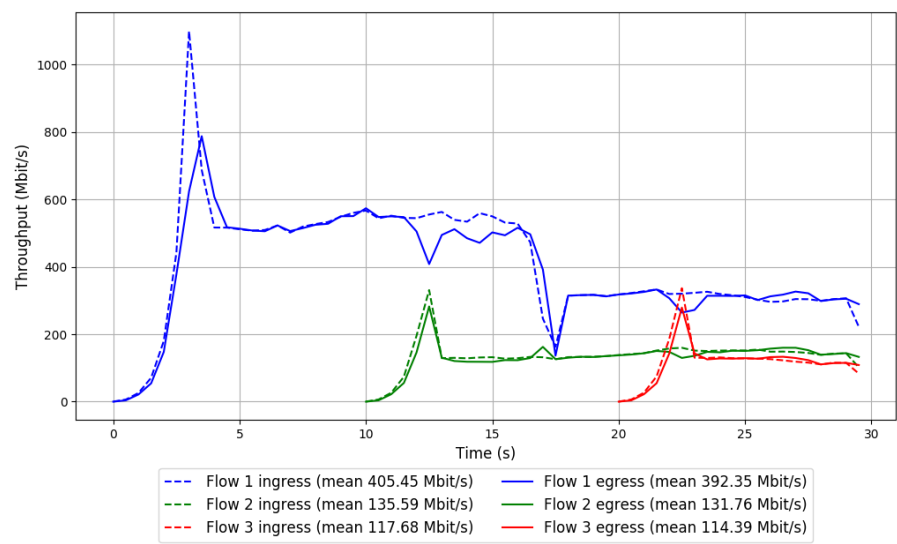
-- Flow 3:

Average throughput: 114.39 Mbit/s

95th percentile per-packet one-way delay: 238.012 ms

Loss rate: 2.81%

Run 3: Report of PCC — Data Link

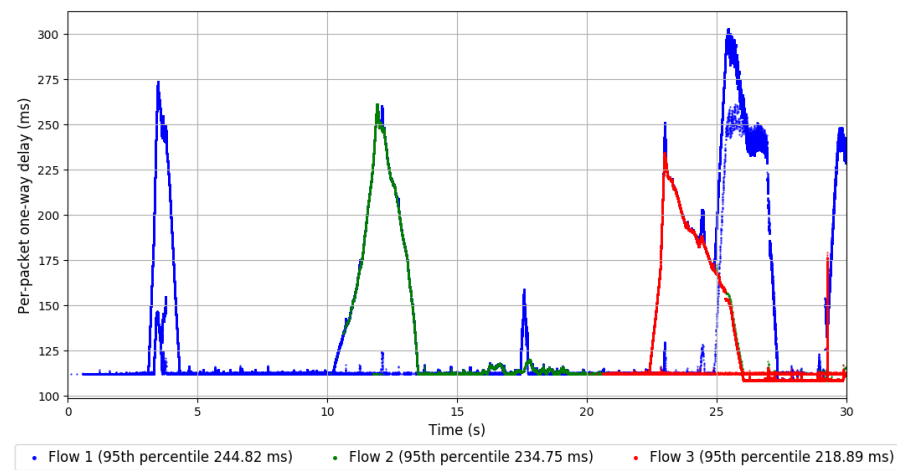
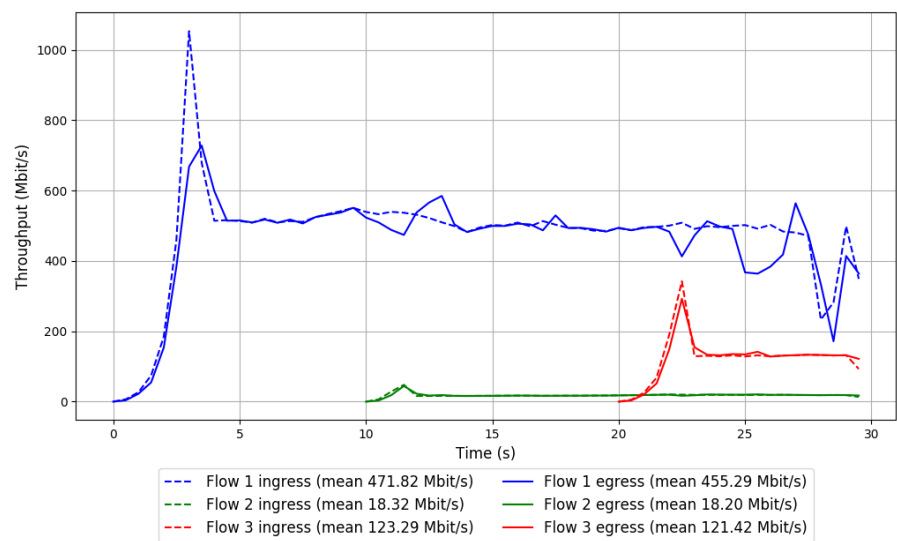


```
Run 4: Statistics of PCC

Start at: 2018-03-06 21:21:00
End at: 2018-03-06 21:21:30

# Below is generated by plot.py at 2018-03-07 01:39:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 507.39 Mbit/s
95th percentile per-packet one-way delay: 243.393 ms
Loss rate: 3.28%
-- Flow 1:
Average throughput: 455.29 Mbit/s
95th percentile per-packet one-way delay: 244.825 ms
Loss rate: 3.49%
-- Flow 2:
Average throughput: 18.20 Mbit/s
95th percentile per-packet one-way delay: 234.746 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 121.42 Mbit/s
95th percentile per-packet one-way delay: 218.889 ms
Loss rate: 1.52%
```

Run 4: Report of PCC — Data Link

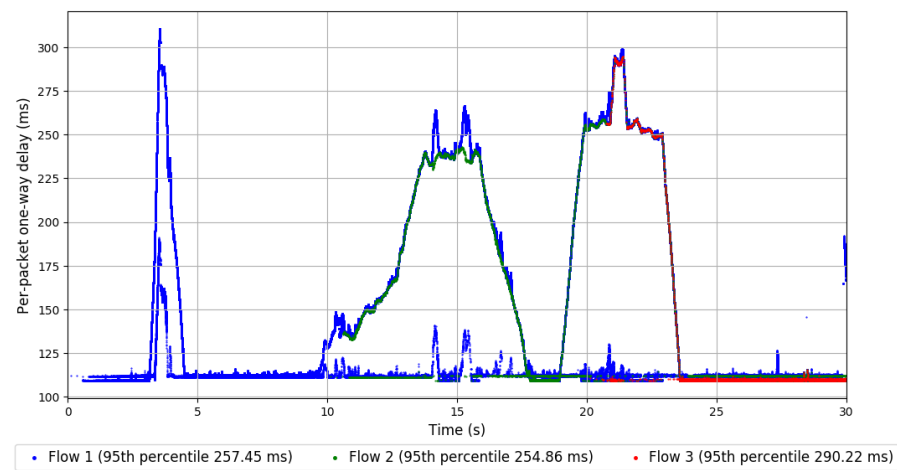
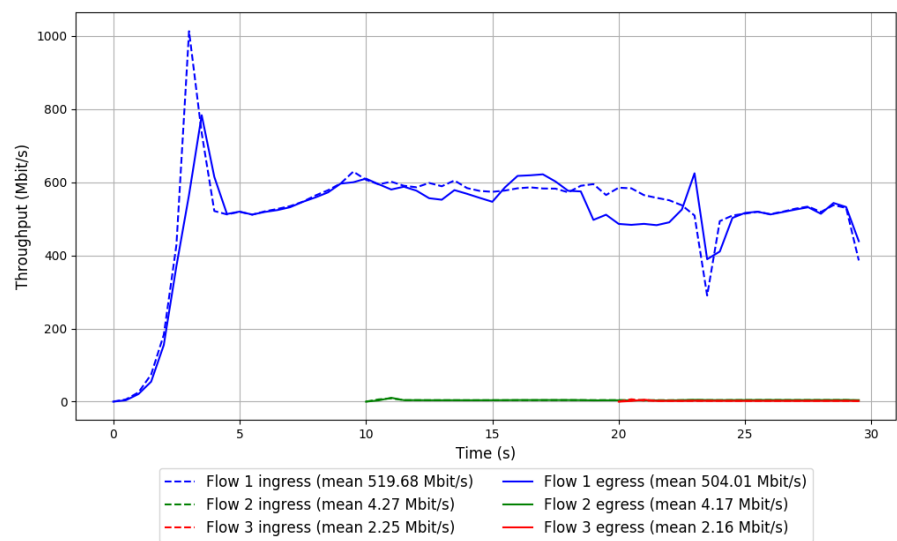


```
Run 5: Statistics of PCC

Start at: 2018-03-06 21:40:11
End at: 2018-03-06 21:40:41

# Below is generated by plot.py at 2018-03-07 01:39:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 507.50 Mbit/s
95th percentile per-packet one-way delay: 257.439 ms
Loss rate: 3.02%
-- Flow 1:
Average throughput: 504.01 Mbit/s
95th percentile per-packet one-way delay: 257.454 ms
Loss rate: 3.02%
-- Flow 2:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 254.857 ms
Loss rate: 2.52%
-- Flow 3:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 290.218 ms
Loss rate: 4.00%
```

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-03-06 21:59:25

End at: 2018-03-06 21:59:55

Below is generated by plot.py at 2018-03-07 01:40:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 559.23 Mbit/s

95th percentile per-packet one-way delay: 230.804 ms

Loss rate: 2.08%

-- Flow 1:

Average throughput: 519.03 Mbit/s

95th percentile per-packet one-way delay: 230.876 ms

Loss rate: 2.12%

-- Flow 2:

Average throughput: 32.14 Mbit/s

95th percentile per-packet one-way delay: 230.424 ms

Loss rate: 1.11%

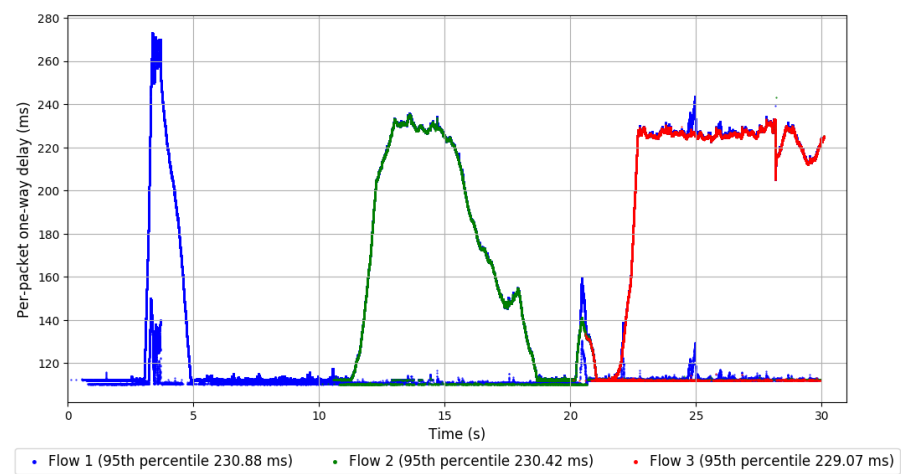
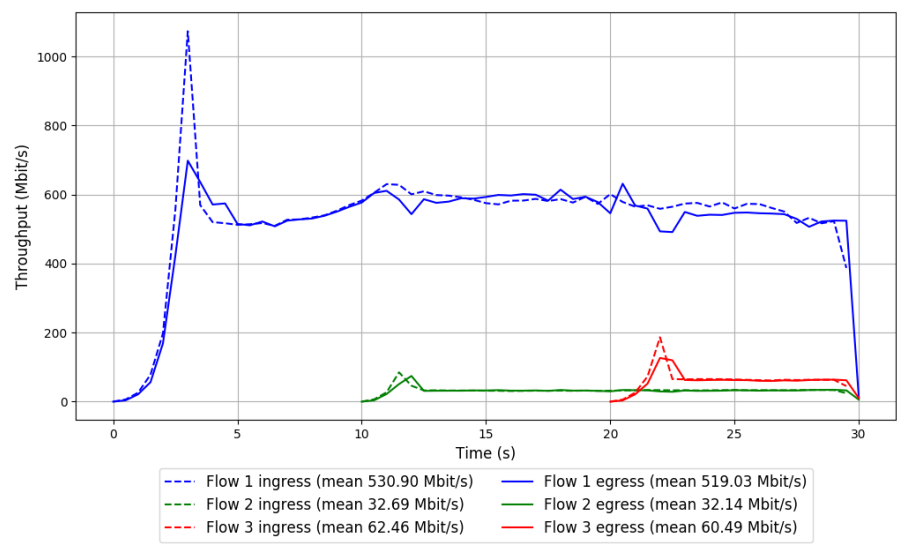
-- Flow 3:

Average throughput: 60.49 Mbit/s

95th percentile per-packet one-way delay: 229.072 ms

Loss rate: 2.06%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-03-06 22:19:03

End at: 2018-03-06 22:19:33

Below is generated by plot.py at 2018-03-07 01:40:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 549.37 Mbit/s

95th percentile per-packet one-way delay: 248.722 ms

Loss rate: 2.56%

-- Flow 1:

Average throughput: 496.42 Mbit/s

95th percentile per-packet one-way delay: 249.929 ms

Loss rate: 2.52%

-- Flow 2:

Average throughput: 64.63 Mbit/s

95th percentile per-packet one-way delay: 237.783 ms

Loss rate: 2.65%

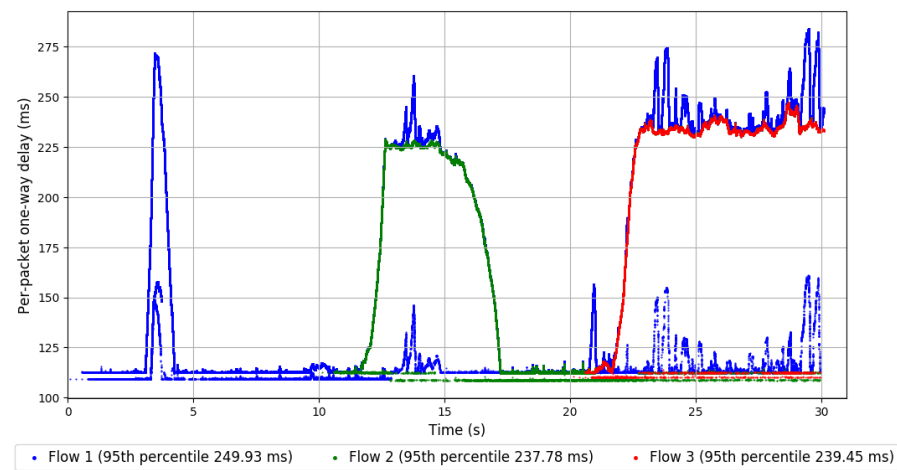
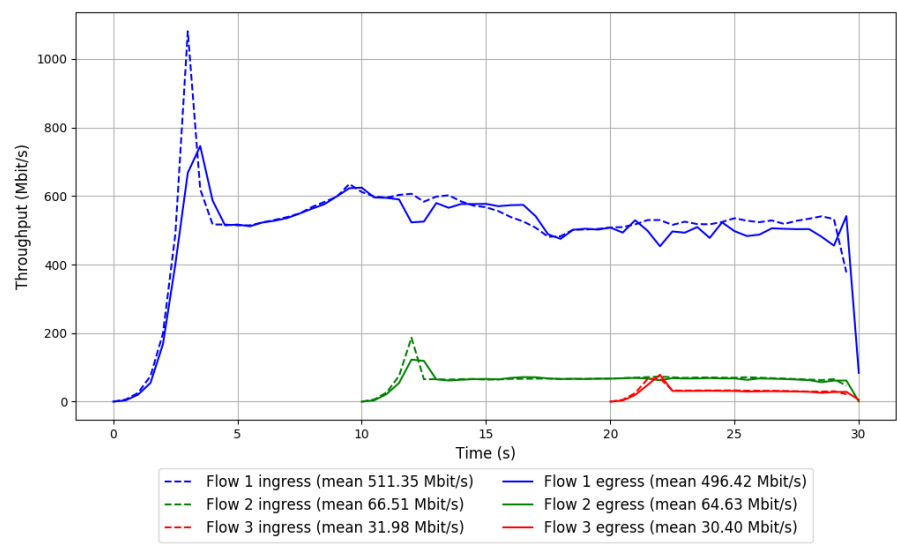
-- Flow 3:

Average throughput: 30.40 Mbit/s

95th percentile per-packet one-way delay: 239.449 ms

Loss rate: 3.77%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-03-06 22:38:28

End at: 2018-03-06 22:38:58

Below is generated by plot.py at 2018-03-07 01:40:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 534.96 Mbit/s

95th percentile per-packet one-way delay: 239.369 ms

Loss rate: 2.20%

-- Flow 1:

Average throughput: 522.94 Mbit/s

95th percentile per-packet one-way delay: 239.542 ms

Loss rate: 2.20%

-- Flow 2:

Average throughput: 4.82 Mbit/s

95th percentile per-packet one-way delay: 236.252 ms

Loss rate: 1.56%

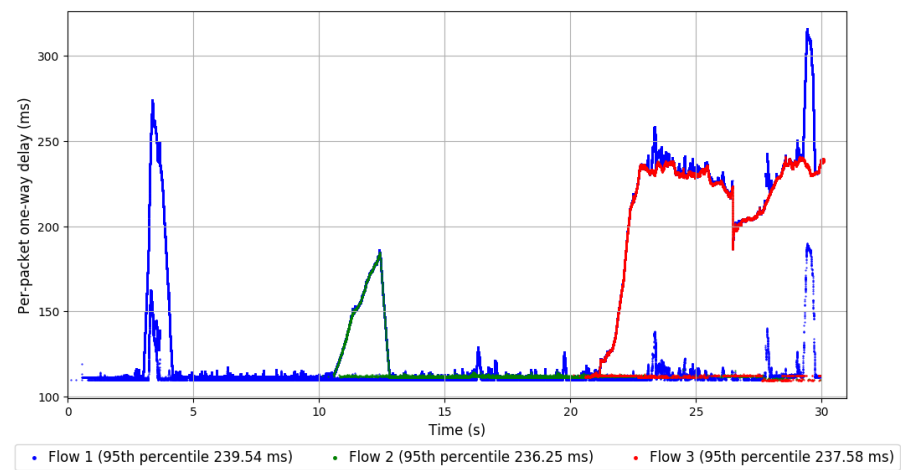
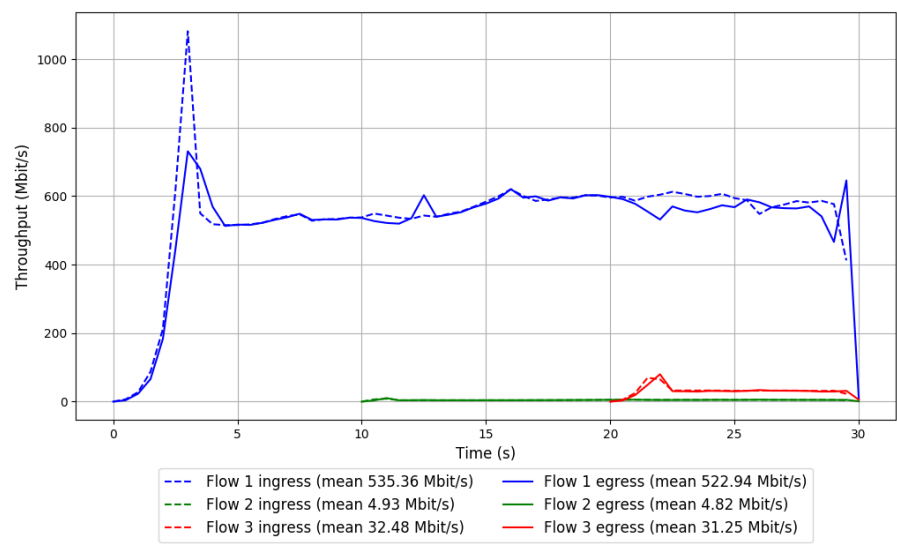
-- Flow 3:

Average throughput: 31.25 Mbit/s

95th percentile per-packet one-way delay: 237.580 ms

Loss rate: 2.56%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-03-06 22:57:51

End at: 2018-03-06 22:58:21

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 532.16 Mbit/s

95th percentile per-packet one-way delay: 239.108 ms

Loss rate: 1.54%

-- Flow 1:

Average throughput: 504.97 Mbit/s

95th percentile per-packet one-way delay: 239.194 ms

Loss rate: 1.56%

-- Flow 2:

Average throughput: 32.86 Mbit/s

95th percentile per-packet one-way delay: 238.085 ms

Loss rate: 1.09%

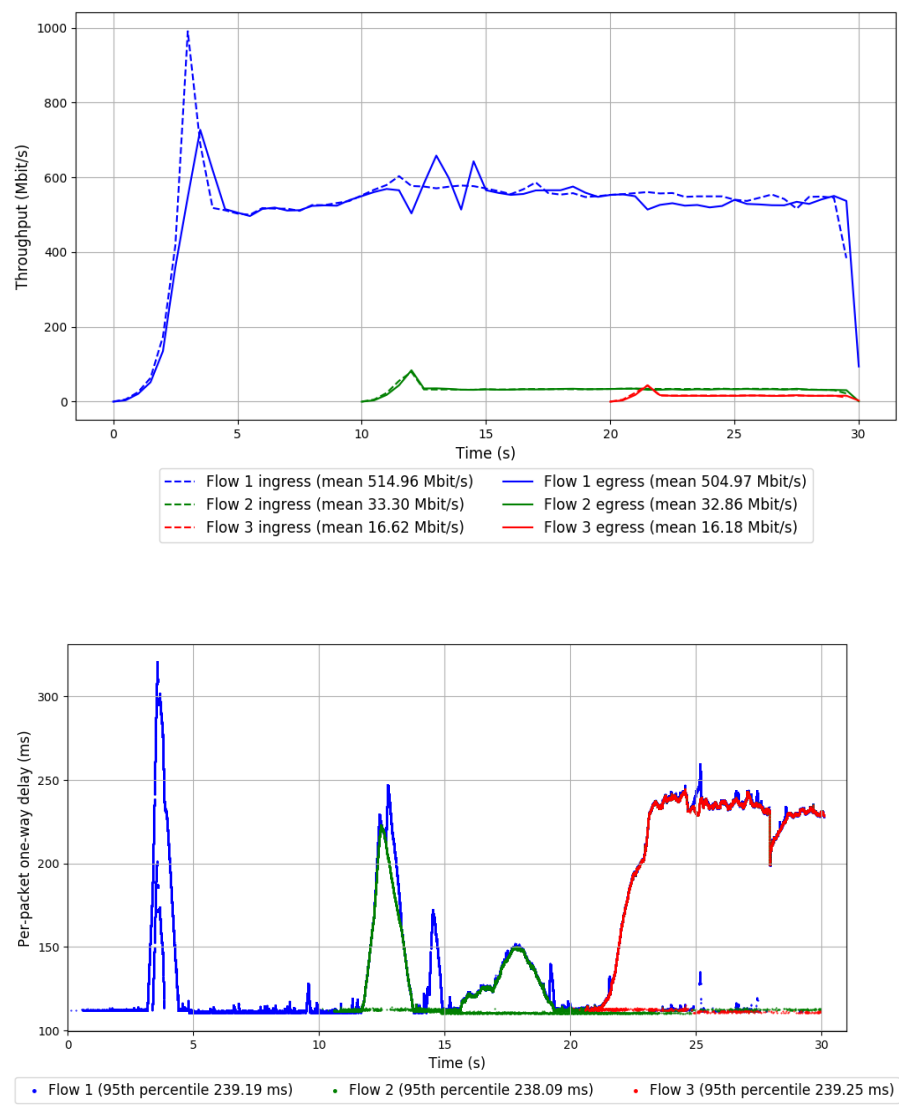
-- Flow 3:

Average throughput: 16.18 Mbit/s

95th percentile per-packet one-way delay: 239.245 ms

Loss rate: 1.47%

Run 9: Report of PCC — Data Link

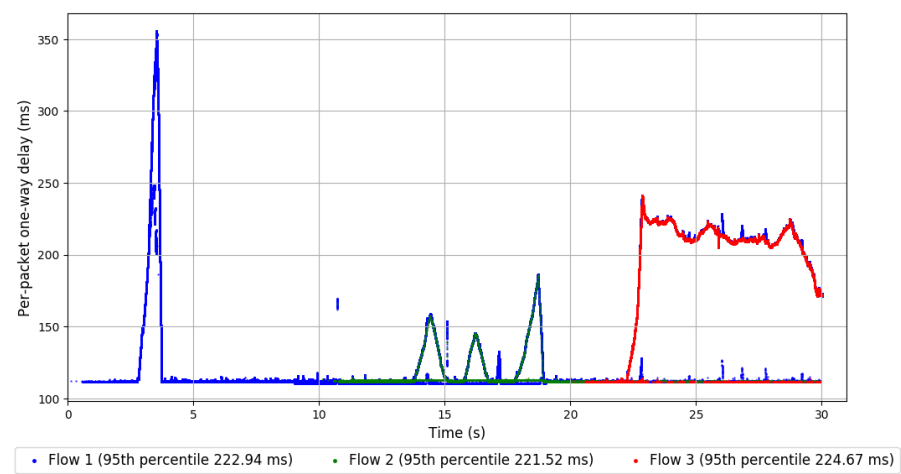
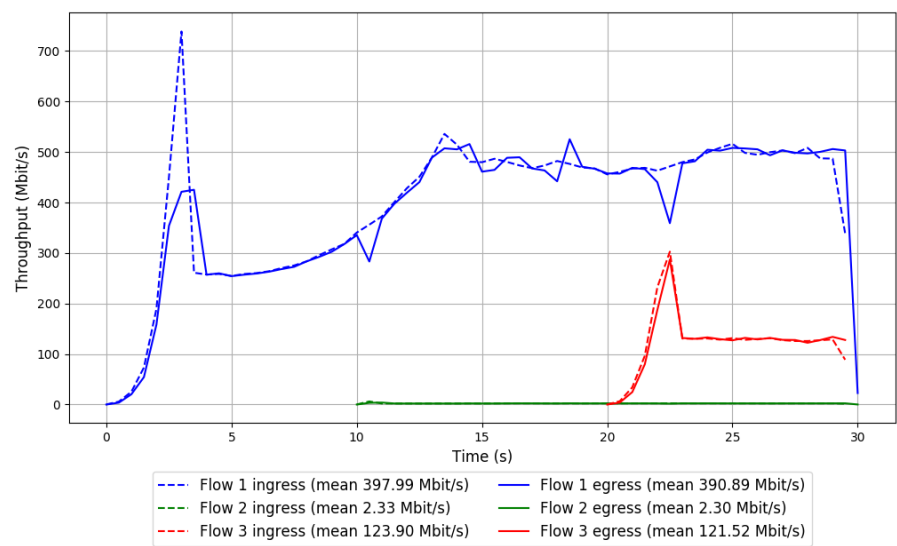


```
Run 10: Statistics of PCC

Start at: 2018-03-06 23:16:47
End at: 2018-03-06 23:17:17

# Below is generated by plot.py at 2018-03-07 01:47:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 432.44 Mbit/s
95th percentile per-packet one-way delay: 223.442 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 390.89 Mbit/s
95th percentile per-packet one-way delay: 222.940 ms
Loss rate: 1.59%
-- Flow 2:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 221.521 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 121.52 Mbit/s
95th percentile per-packet one-way delay: 224.669 ms
Loss rate: 1.73%
```

Run 10: Report of PCC — Data Link

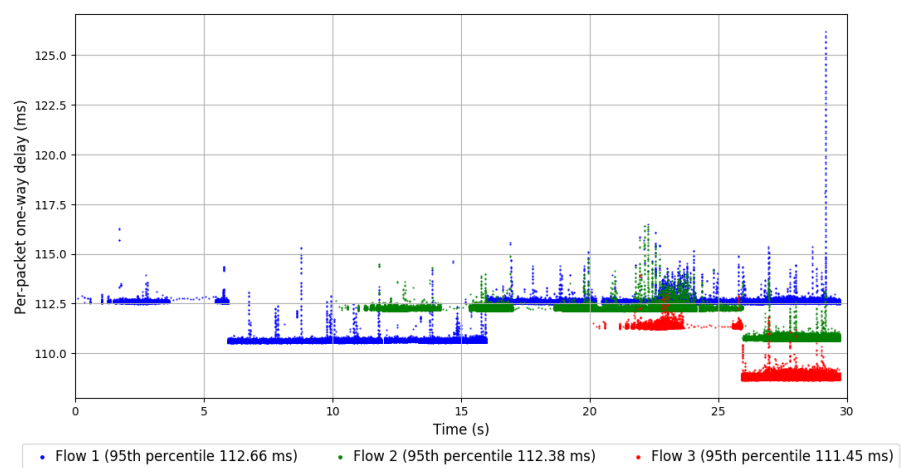
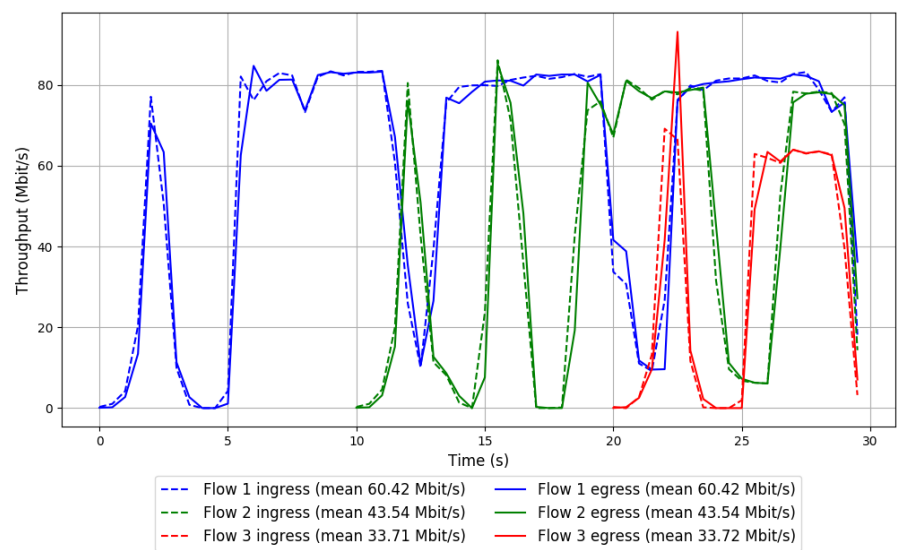


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-03-06 20:19:09
End at: 2018-03-06 20:19:39

# Below is generated by plot.py at 2018-03-07 01:47:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.18 Mbit/s
95th percentile per-packet one-way delay: 112.638 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.42 Mbit/s
95th percentile per-packet one-way delay: 112.659 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 43.54 Mbit/s
95th percentile per-packet one-way delay: 112.376 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 33.72 Mbit/s
95th percentile per-packet one-way delay: 111.450 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-03-06 20:37:58

End at: 2018-03-06 20:38:28

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.72 Mbit/s

95th percentile per-packet one-way delay: 112.334 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 60.02 Mbit/s

95th percentile per-packet one-way delay: 112.137 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.42 Mbit/s

95th percentile per-packet one-way delay: 111.241 ms

Loss rate: 0.00%

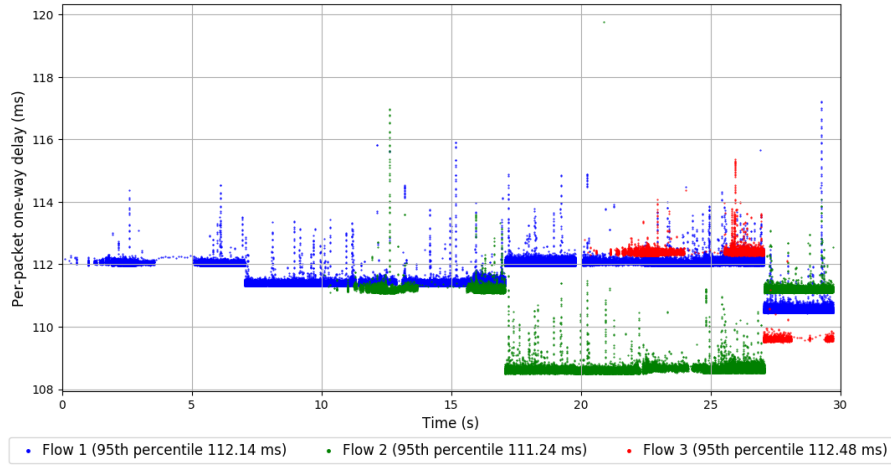
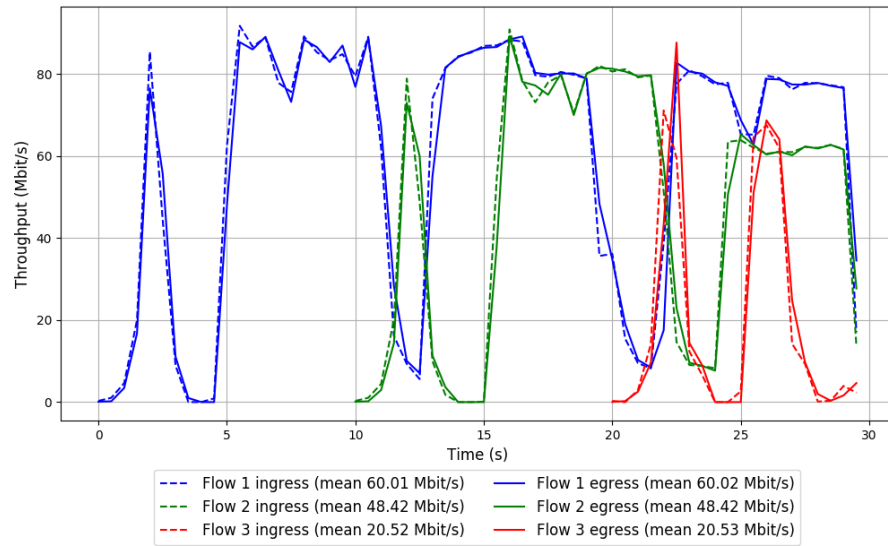
-- Flow 3:

Average throughput: 20.53 Mbit/s

95th percentile per-packet one-way delay: 112.484 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-03-06 20:57:04

End at: 2018-03-06 20:57:34

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.30 Mbit/s

95th percentile per-packet one-way delay: 112.090 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 55.71 Mbit/s

95th percentile per-packet one-way delay: 112.110 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 42.34 Mbit/s

95th percentile per-packet one-way delay: 109.724 ms

Loss rate: 0.00%

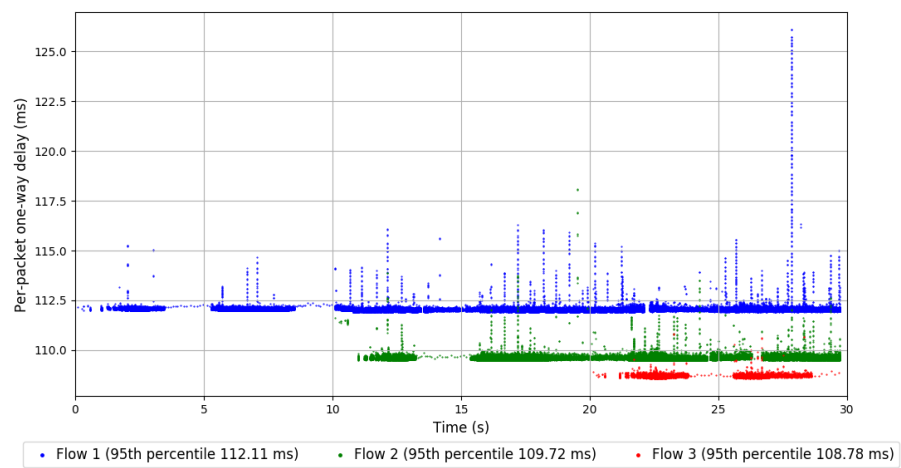
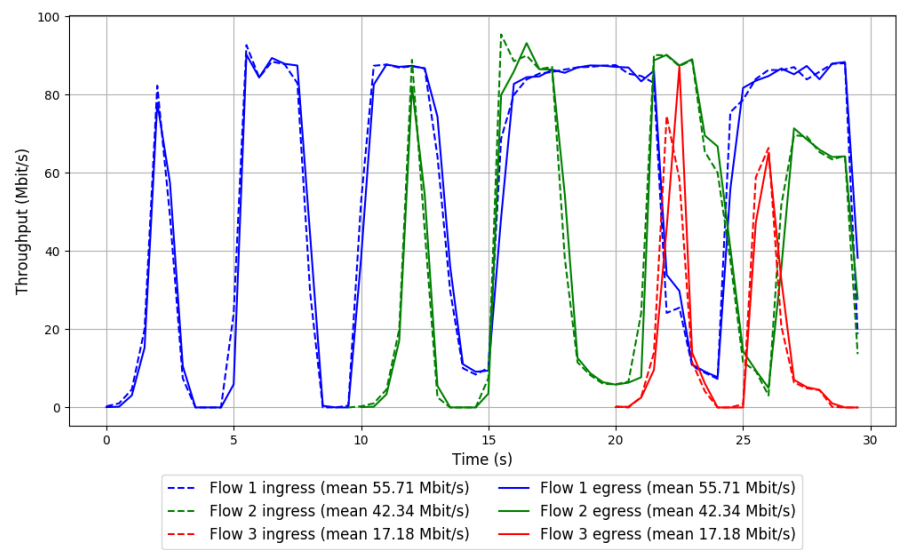
-- Flow 3:

Average throughput: 17.18 Mbit/s

95th percentile per-packet one-way delay: 108.778 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-03-06 21:16:27

End at: 2018-03-06 21:16:57

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.37 Mbit/s

95th percentile per-packet one-way delay: 112.103 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 51.11 Mbit/s

95th percentile per-packet one-way delay: 112.127 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 41.98 Mbit/s

95th percentile per-packet one-way delay: 110.315 ms

Loss rate: 0.00%

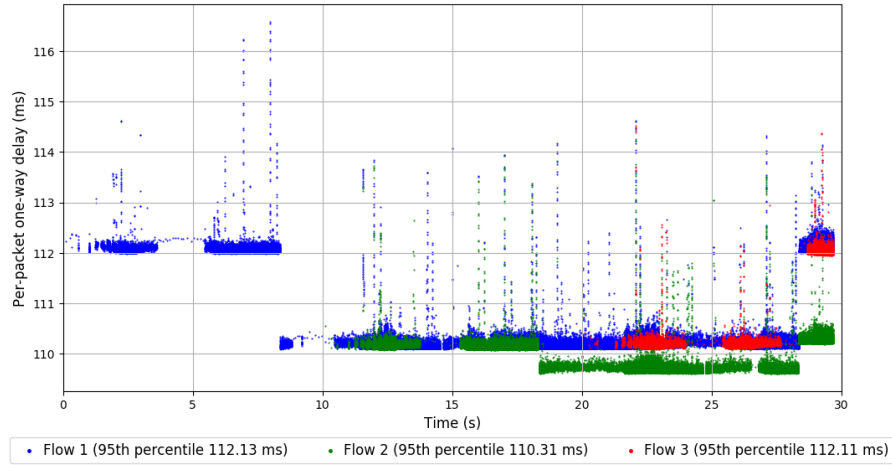
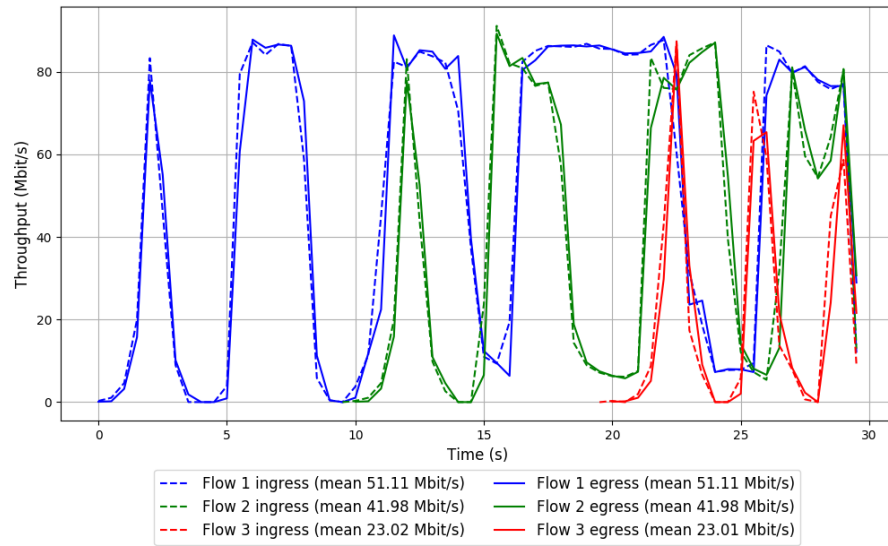
-- Flow 3:

Average throughput: 23.01 Mbit/s

95th percentile per-packet one-way delay: 112.108 ms

Loss rate: 0.04%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-03-06 21:35:40

End at: 2018-03-06 21:36:10

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.38 Mbit/s

95th percentile per-packet one-way delay: 111.295 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 43.54 Mbit/s

95th percentile per-packet one-way delay: 111.261 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 40.51 Mbit/s

95th percentile per-packet one-way delay: 111.292 ms

Loss rate: 0.01%

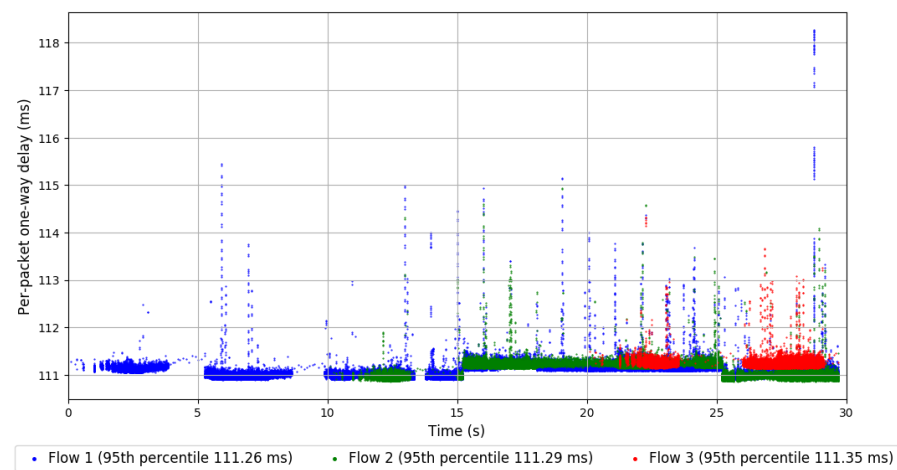
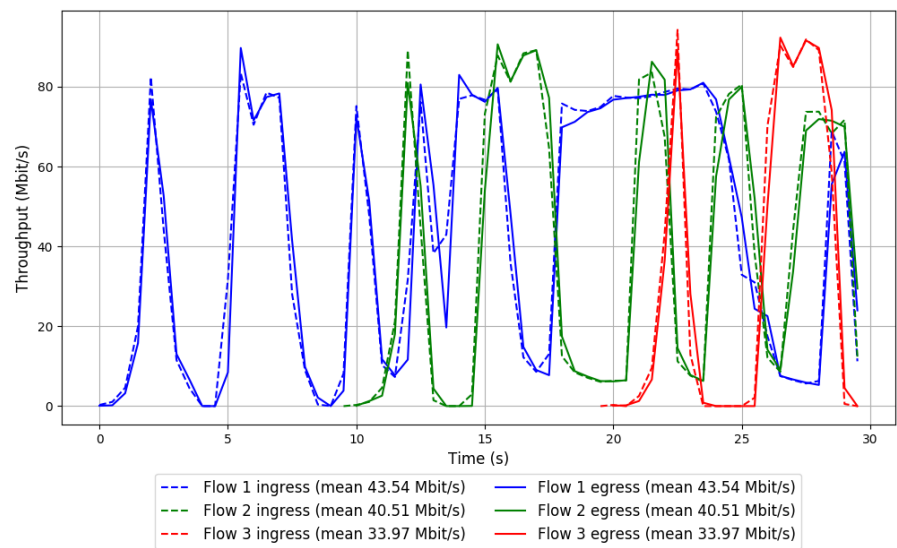
-- Flow 3:

Average throughput: 33.97 Mbit/s

95th percentile per-packet one-way delay: 111.351 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-03-06 21:54:52

End at: 2018-03-06 21:55:22

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.87 Mbit/s

95th percentile per-packet one-way delay: 112.241 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.02 Mbit/s

95th percentile per-packet one-way delay: 112.008 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.55 Mbit/s

95th percentile per-packet one-way delay: 112.297 ms

Loss rate: 0.01%

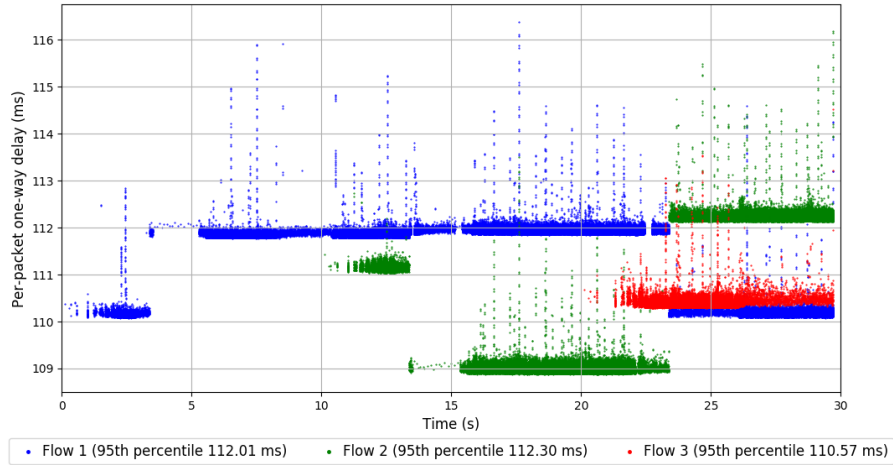
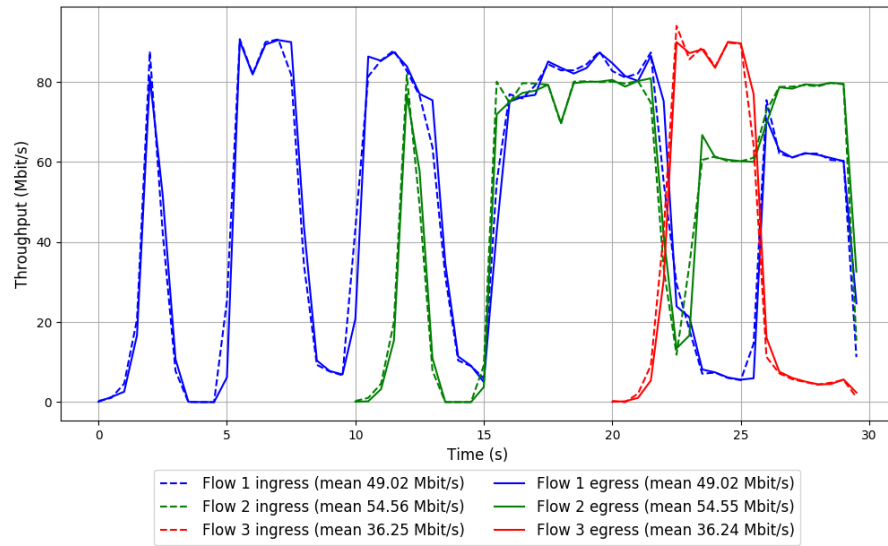
-- Flow 3:

Average throughput: 36.24 Mbit/s

95th percentile per-packet one-way delay: 110.572 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-03-06 22:14:36

End at: 2018-03-06 22:15:06

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.29 Mbit/s

95th percentile per-packet one-way delay: 112.443 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 51.57 Mbit/s

95th percentile per-packet one-way delay: 112.465 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 48.92 Mbit/s

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

Loss rate: 0.00%

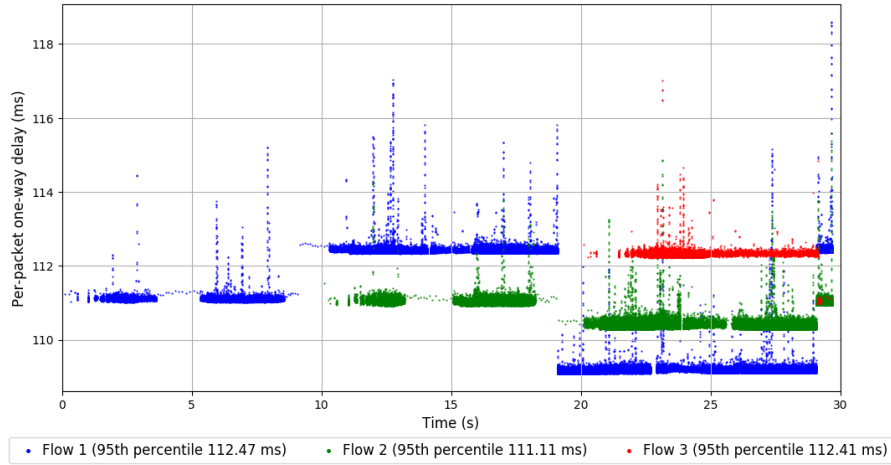
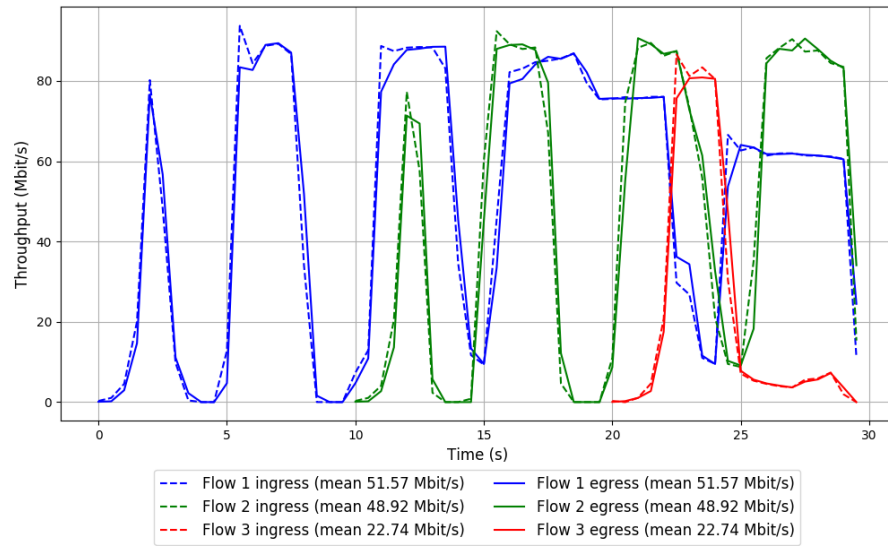
-- Flow 3:

Average throughput: 22.74 Mbit/s

95th percentile per-packet one-way delay: 112.413 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-03-06 22:33:49

End at: 2018-03-06 22:34:19

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.64 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 57.84 Mbit/s

95th percentile per-packet one-way delay: 112.481 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.22 Mbit/s

95th percentile per-packet one-way delay: 112.372 ms

Loss rate: 0.00%

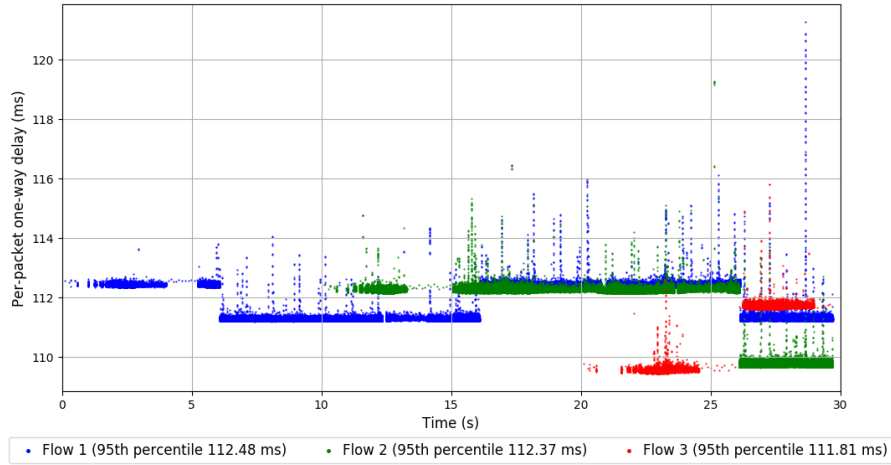
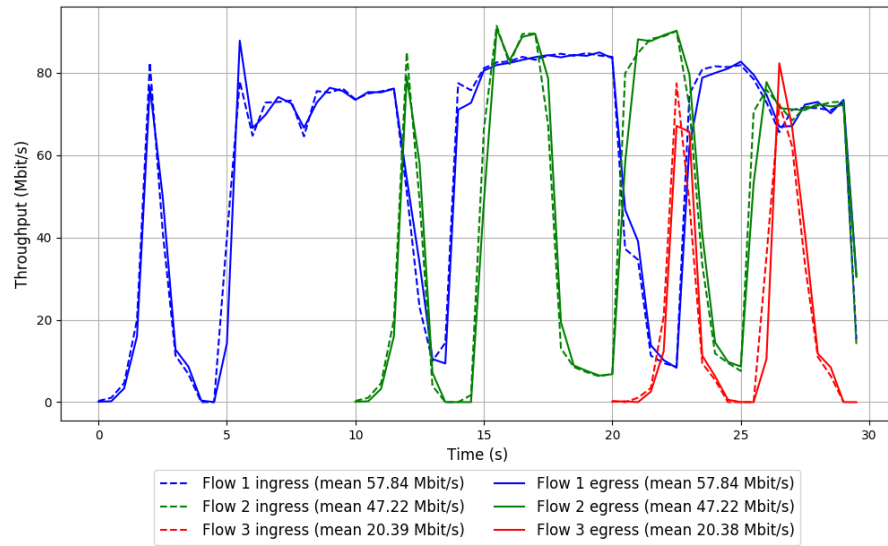
-- Flow 3:

Average throughput: 20.38 Mbit/s

95th percentile per-packet one-way delay: 111.811 ms

Loss rate: 0.01%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-03-06 22:53:18

End at: 2018-03-06 22:53:48

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.43 Mbit/s

95th percentile per-packet one-way delay: 112.316 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.33 Mbit/s

95th percentile per-packet one-way delay: 112.341 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 34.13 Mbit/s

95th percentile per-packet one-way delay: 111.754 ms

Loss rate: 0.00%

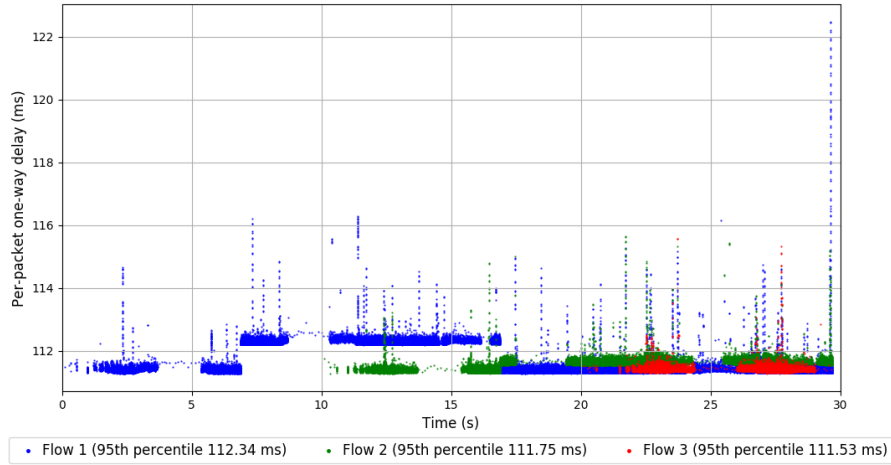
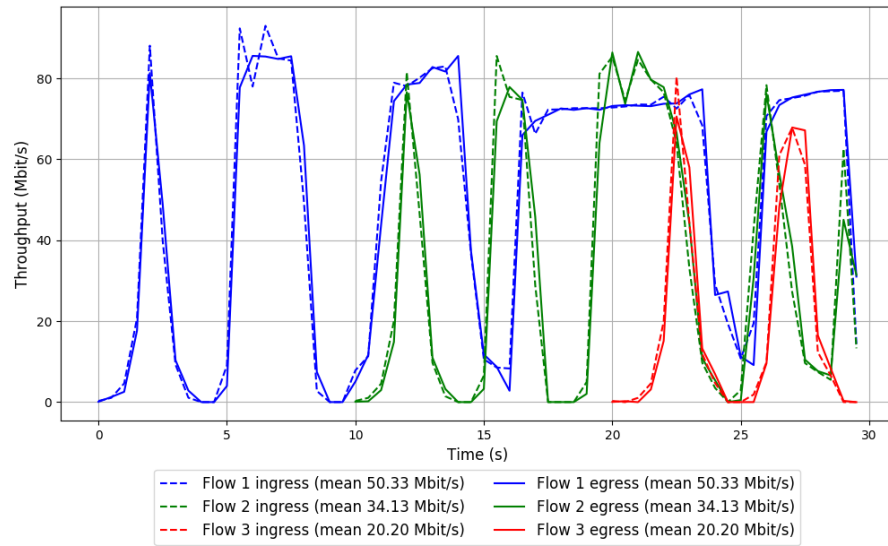
-- Flow 3:

Average throughput: 20.20 Mbit/s

95th percentile per-packet one-way delay: 111.532 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-03-06 23:12:12

End at: 2018-03-06 23:12:42

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.28 Mbit/s

95th percentile per-packet one-way delay: 112.501 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 50.33 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 46.62 Mbit/s

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

Loss rate: 0.00%

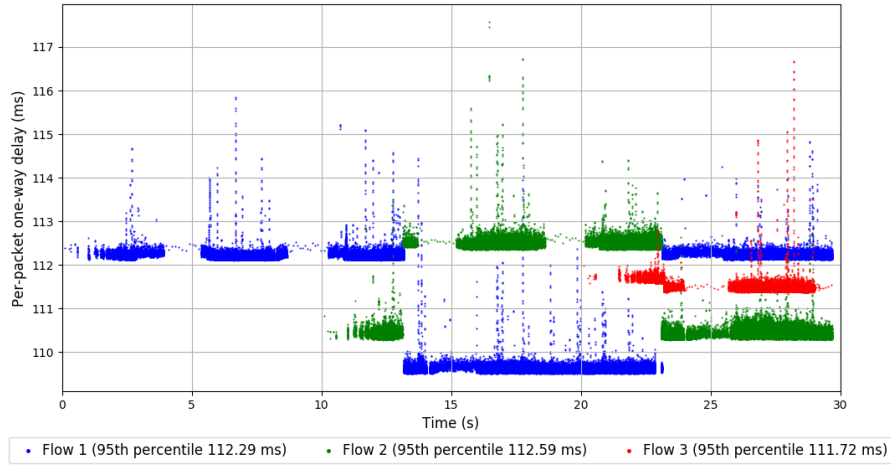
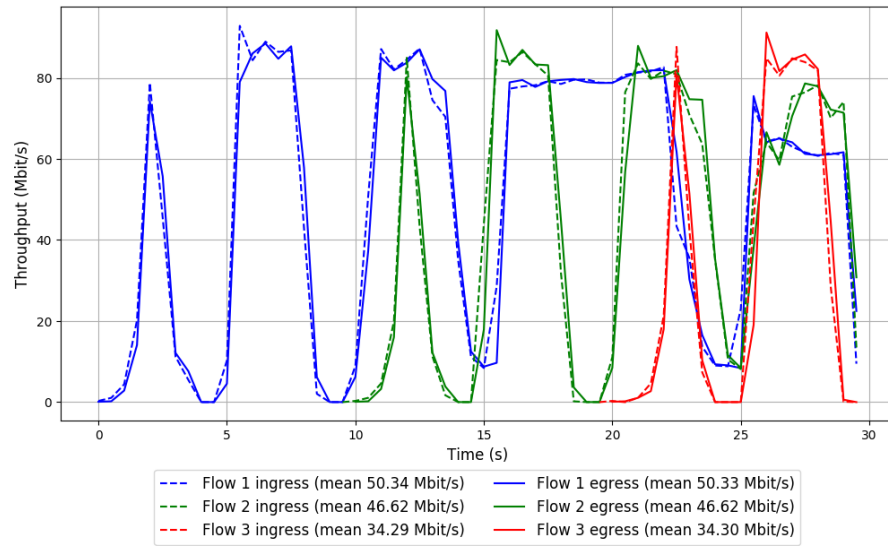
-- Flow 3:

Average throughput: 34.30 Mbit/s

95th percentile per-packet one-way delay: 111.717 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

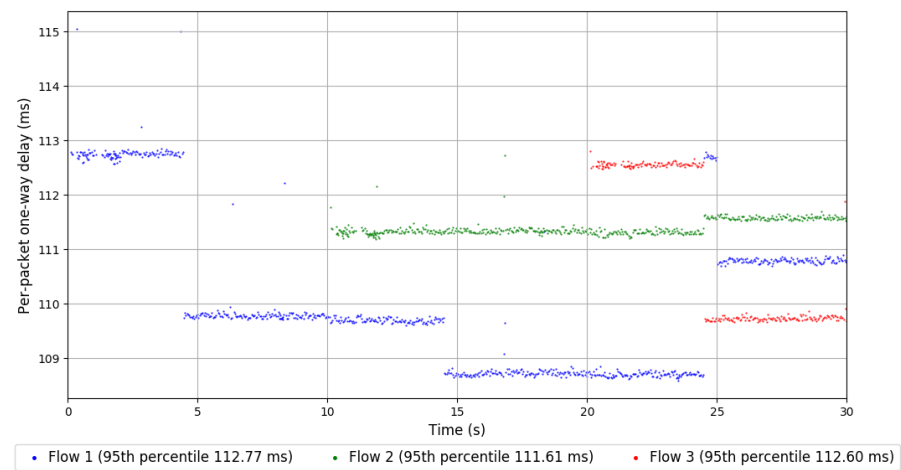
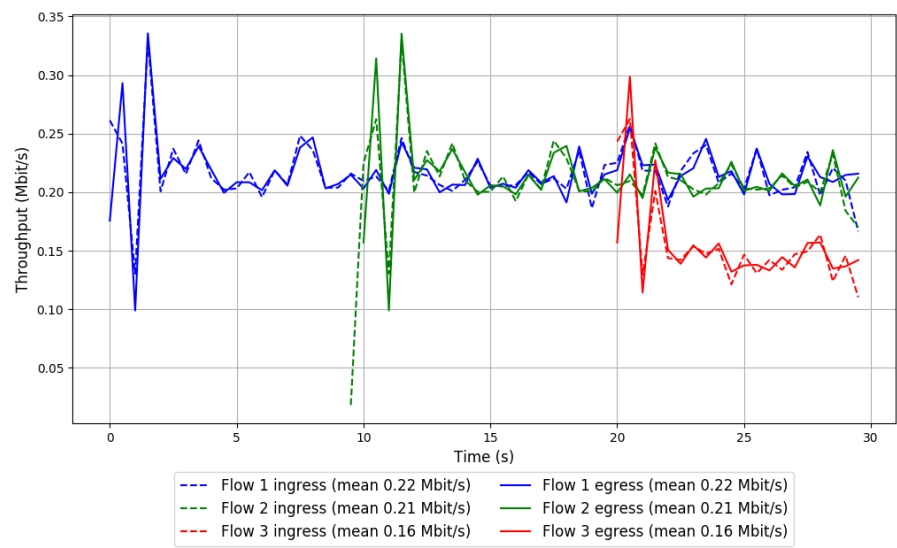


```
Run 1: Statistics of SCReAM

Start at: 2018-03-06 20:24:51
End at: 2018-03-06 20:25:21

# Below is generated by plot.py at 2018-03-07 01:47:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 112.740 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.774 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 111.612 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 112.604 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

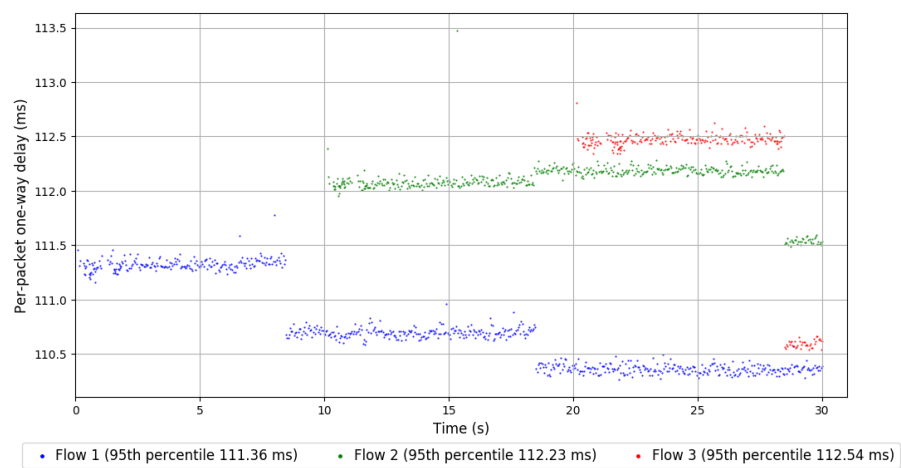
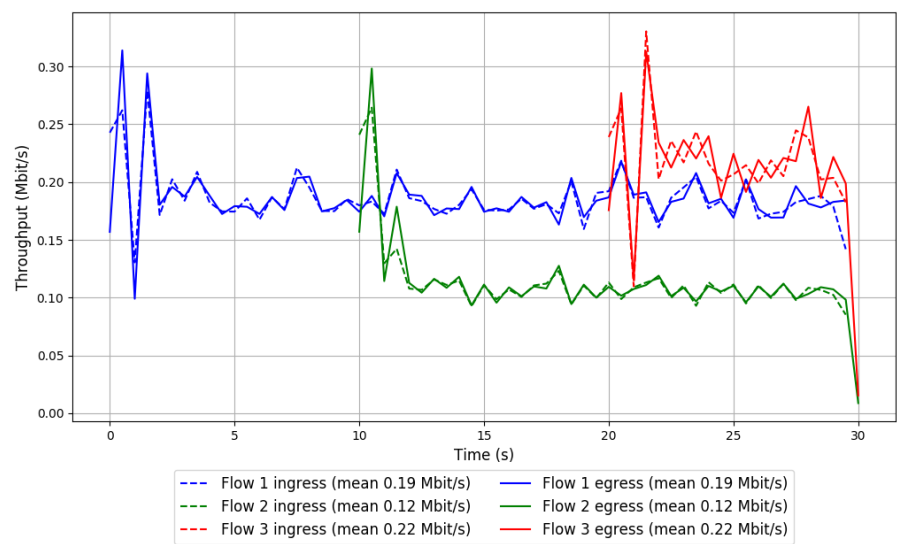


```
Run 2: Statistics of SReAM

Start at: 2018-03-06 20:43:37
End at: 2018-03-06 20:44:07

# Below is generated by plot.py at 2018-03-07 01:47:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 112.490 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 111.362 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 112.235 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.543 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-03-06 21:02:47

End at: 2018-03-06 21:03:17

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.090 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.667 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.193 ms

Loss rate: 0.00%

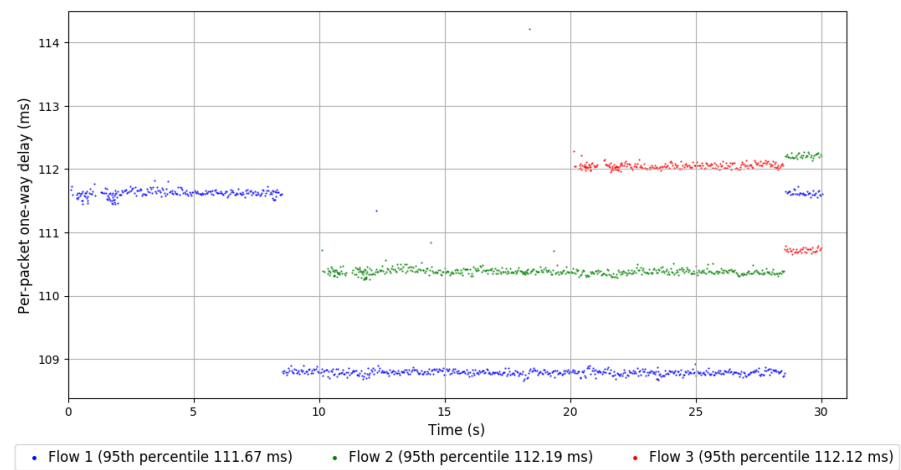
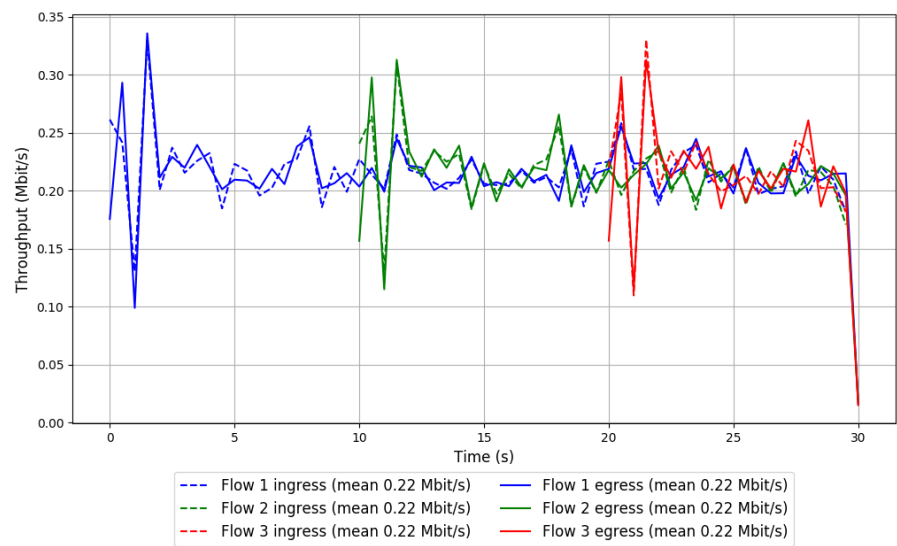
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.121 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

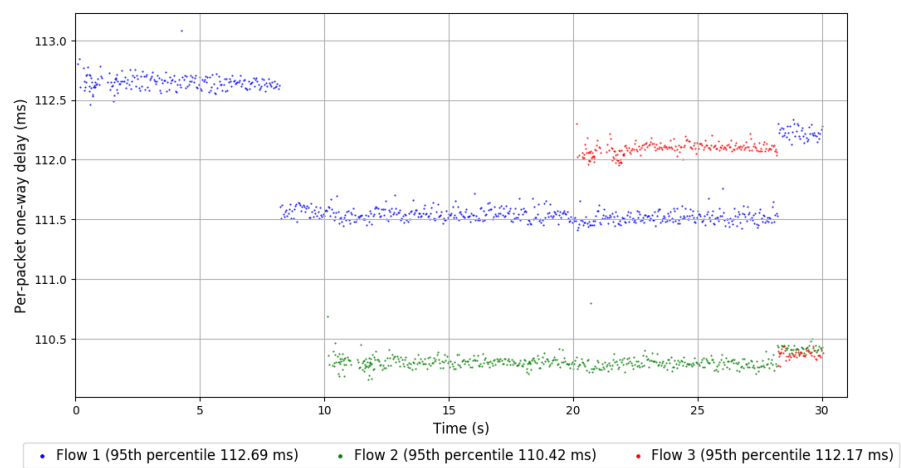
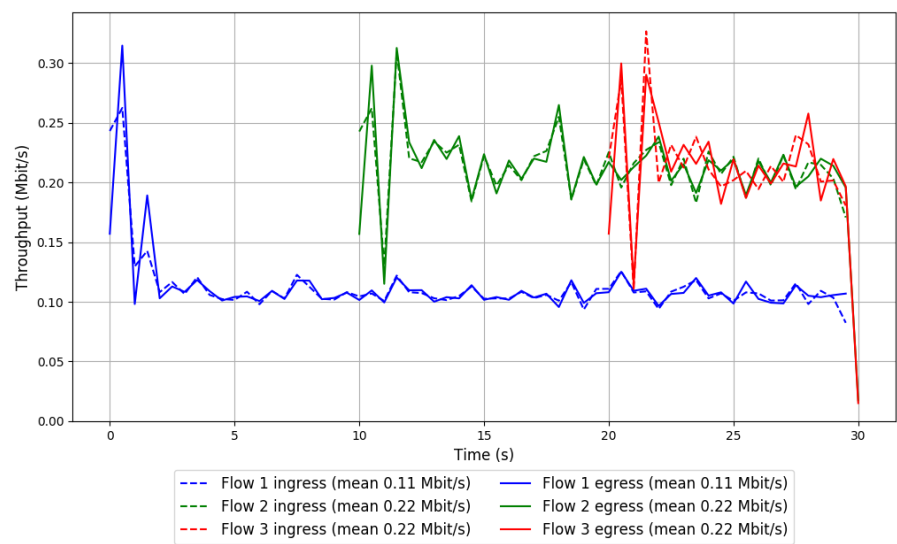


```
Run 4: Statistics of SCReAM

Start at: 2018-03-06 21:22:07
End at: 2018-03-06 21:22:37

# Below is generated by plot.py at 2018-03-07 01:47:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 112.666 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 112.695 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.417 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.165 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link

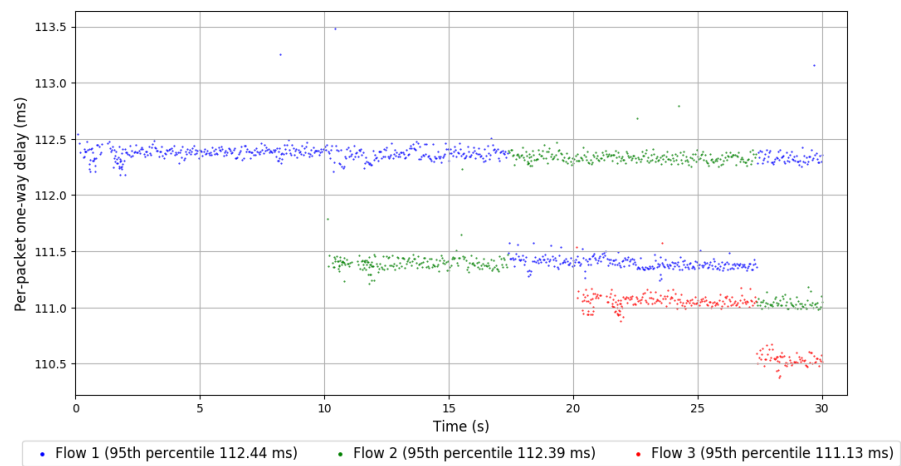
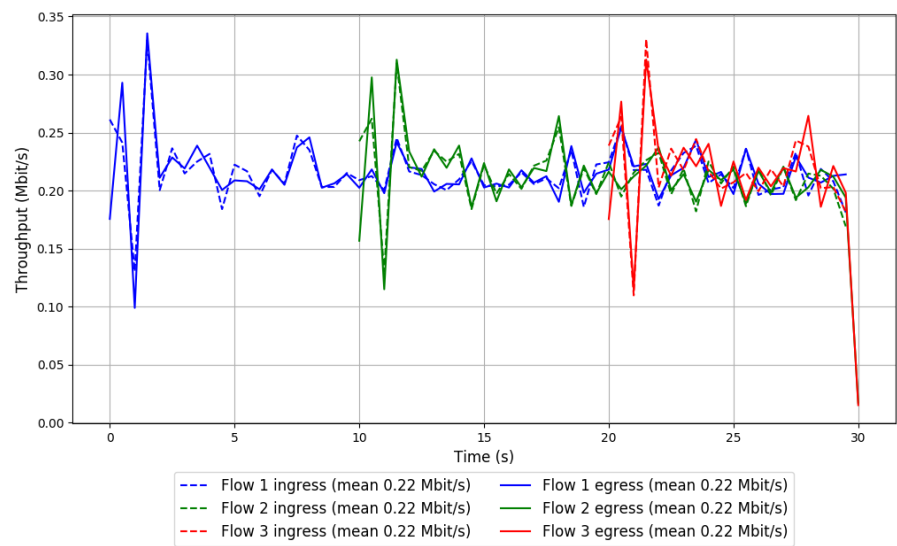


```
Run 5: Statistics of SReAM

Start at: 2018-03-06 21:41:18
End at: 2018-03-06 21:41:48

# Below is generated by plot.py at 2018-03-07 01:47:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.418 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.439 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.388 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.133 ms
Loss rate: 0.00%
```

Run 5: Report of SReAM — Data Link

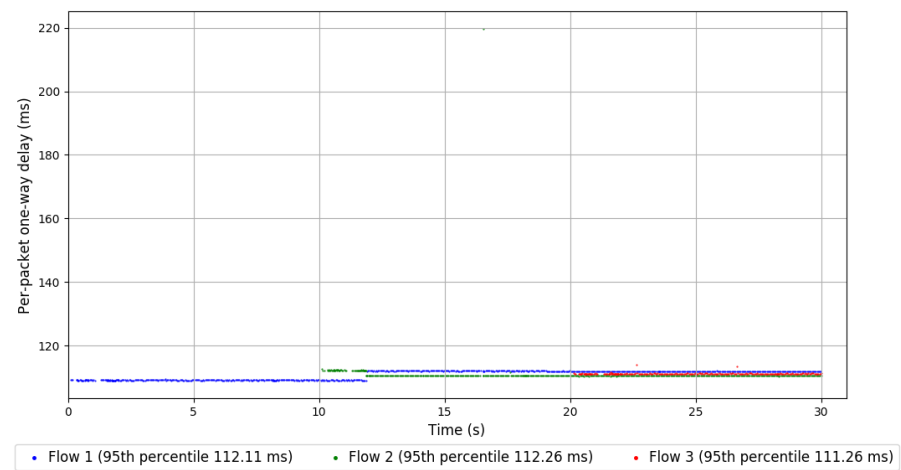
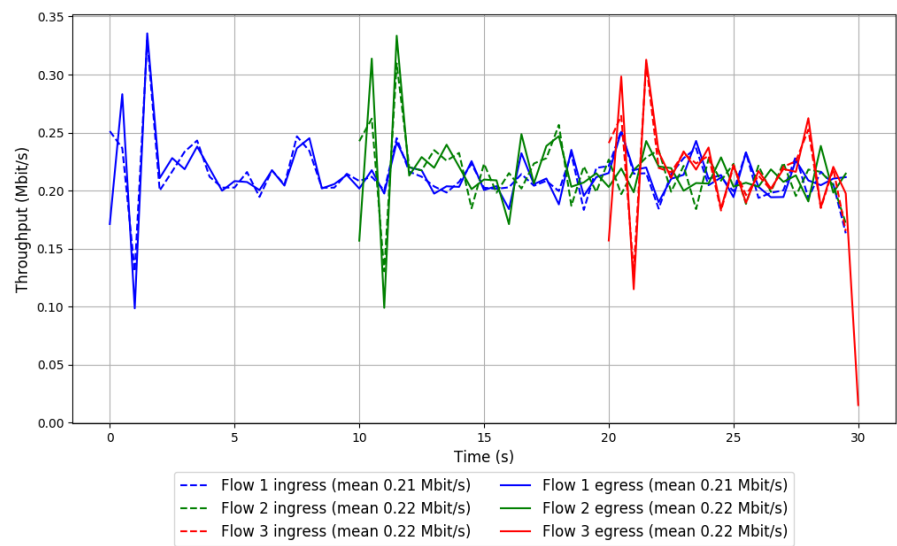


```
Run 6: Statistics of SCReAM

Start at: 2018-03-06 22:00:34
End at: 2018-03-06 22:01:04

# Below is generated by plot.py at 2018-03-07 01:47:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.131 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.109 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.259 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.261 ms
Loss rate: 0.00%
```

Run 6: Report of SReAM — Data Link

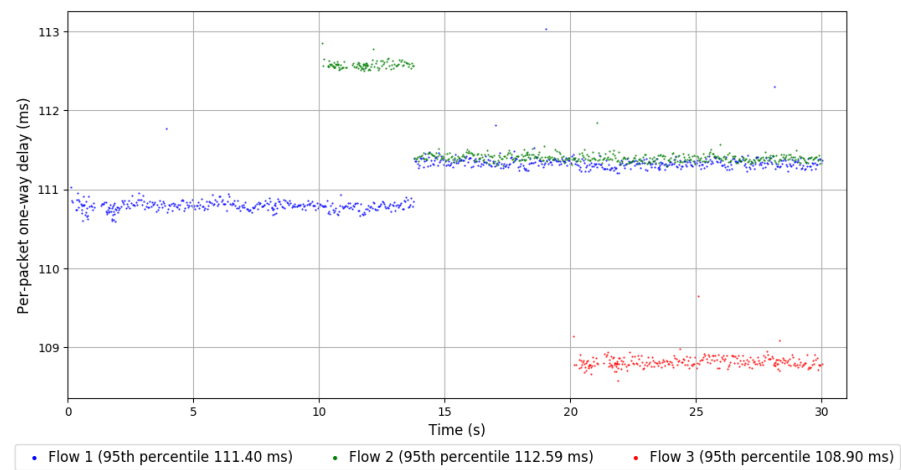
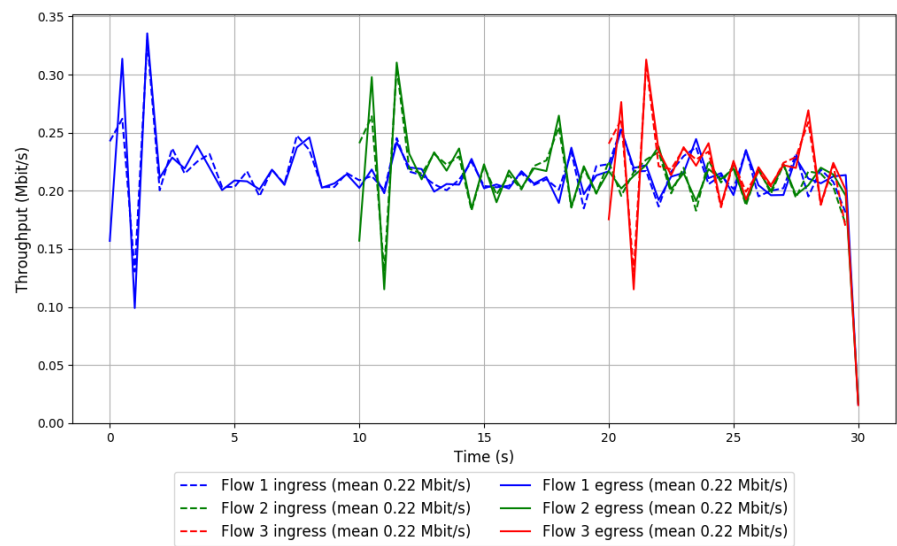


```
Run 7: Statistics of SCReAM

Start at: 2018-03-06 22:20:12
End at: 2018-03-06 22:20:42

# Below is generated by plot.py at 2018-03-07 01:47:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.552 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.396 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.592 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.904 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-03-06 22:39:36

End at: 2018-03-06 22:40:06

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.259 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.811 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.296 ms

Loss rate: 0.00%

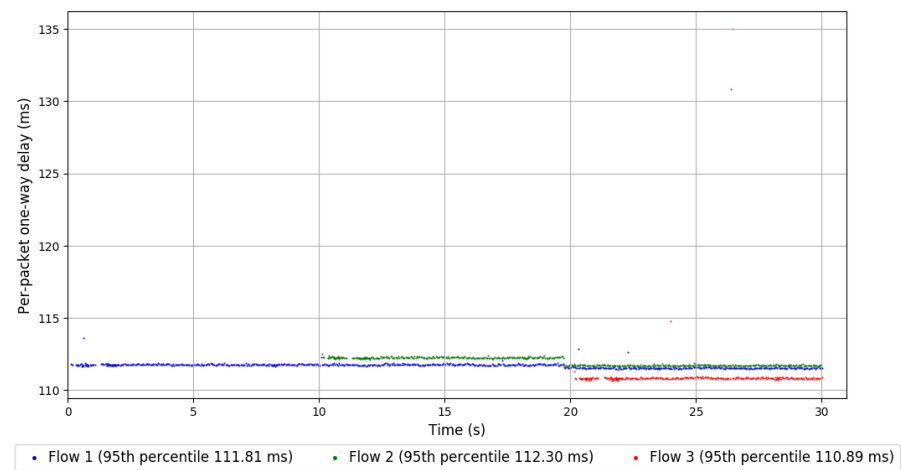
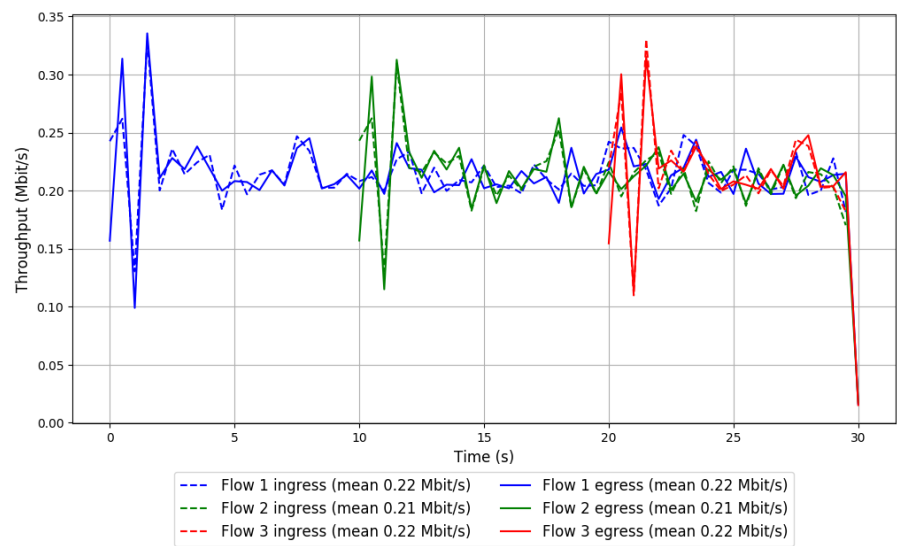
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.887 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-03-06 22:58:59

End at: 2018-03-06 22:59:29

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 111.804 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.095 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.802 ms

Loss rate: 0.00%

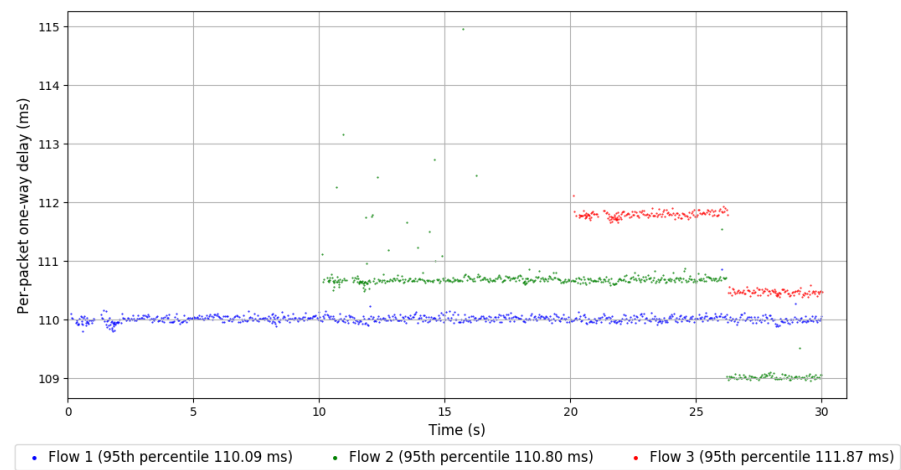
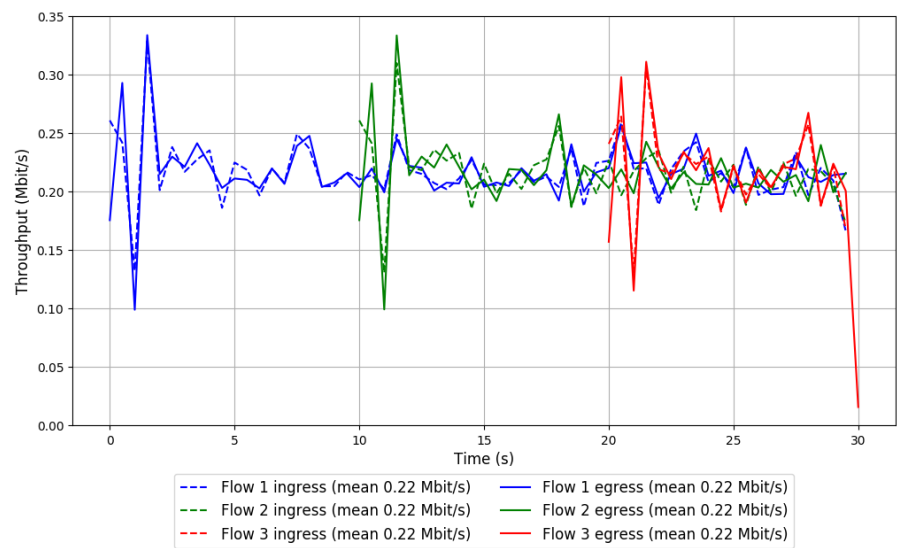
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.870 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

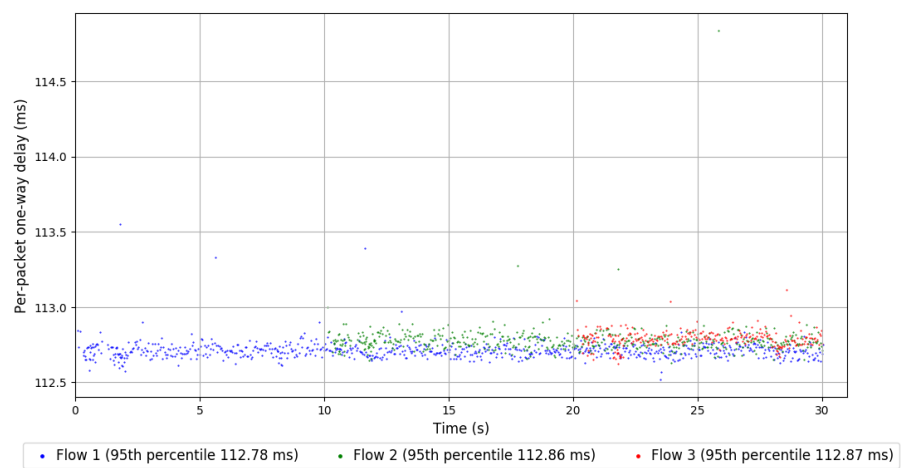
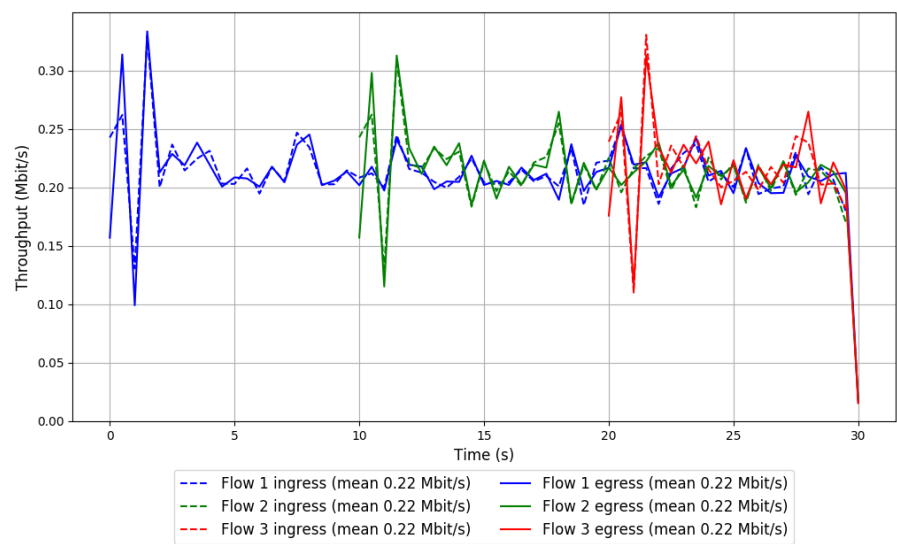


```
Run 10: Statistics of SReAM

Start at: 2018-03-06 23:17:51
End at: 2018-03-06 23:18:21

# Below is generated by plot.py at 2018-03-07 01:47:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.845 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.783 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.860 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.871 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

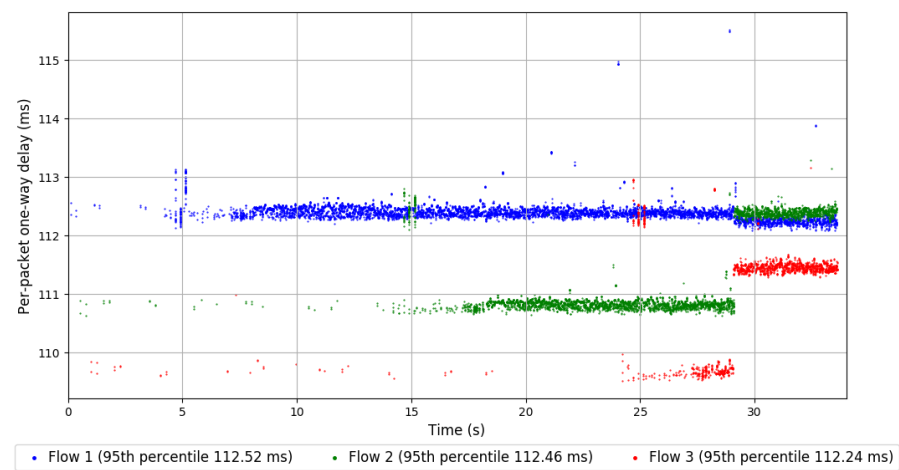
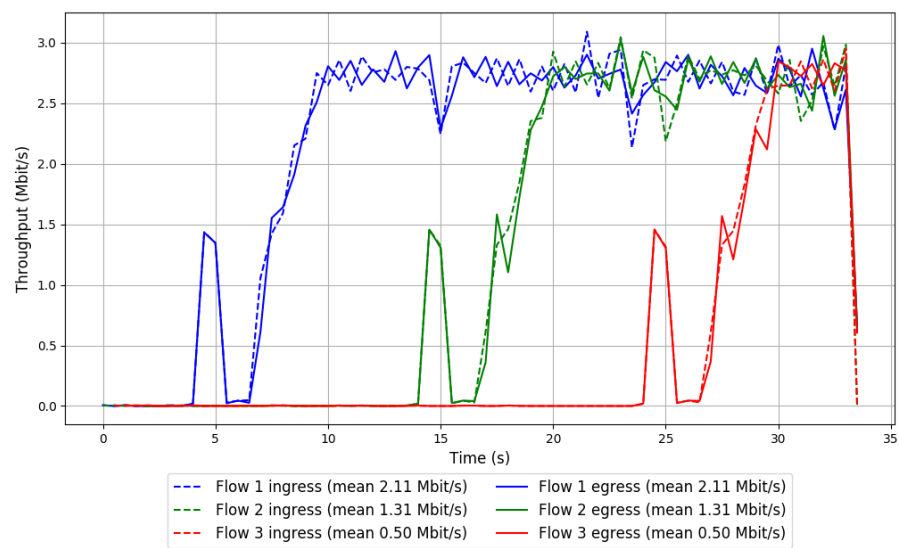


```
Run 1: Statistics of WebRTC media

Start at: 2018-03-06 20:17:30
End at: 2018-03-06 20:18:00

# Below is generated by plot.py at 2018-03-07 01:47:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.89 Mbit/s
95th percentile per-packet one-way delay: 112.503 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 112.522 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 112.462 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 112.244 ms
Loss rate: 0.06%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-03-06 20:36:20

End at: 2018-03-06 20:36:50

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.90 Mbit/s

95th percentile per-packet one-way delay: 110.722 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 110.388 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 110.776 ms

Loss rate: 0.00%

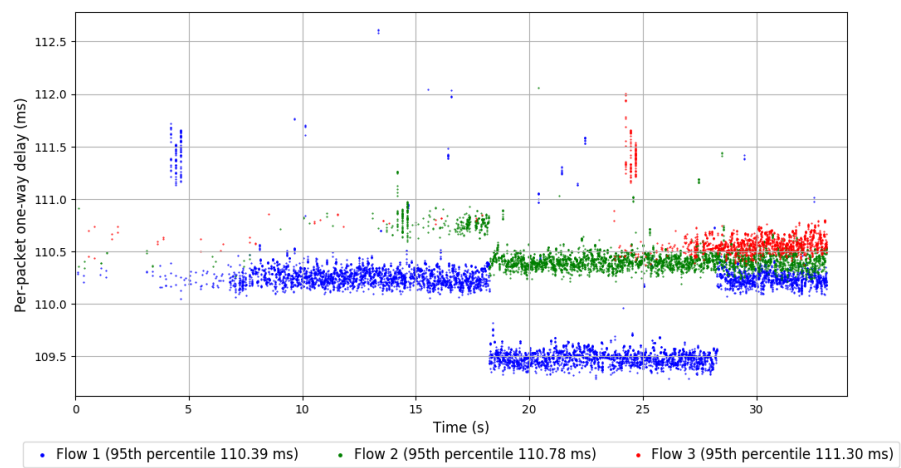
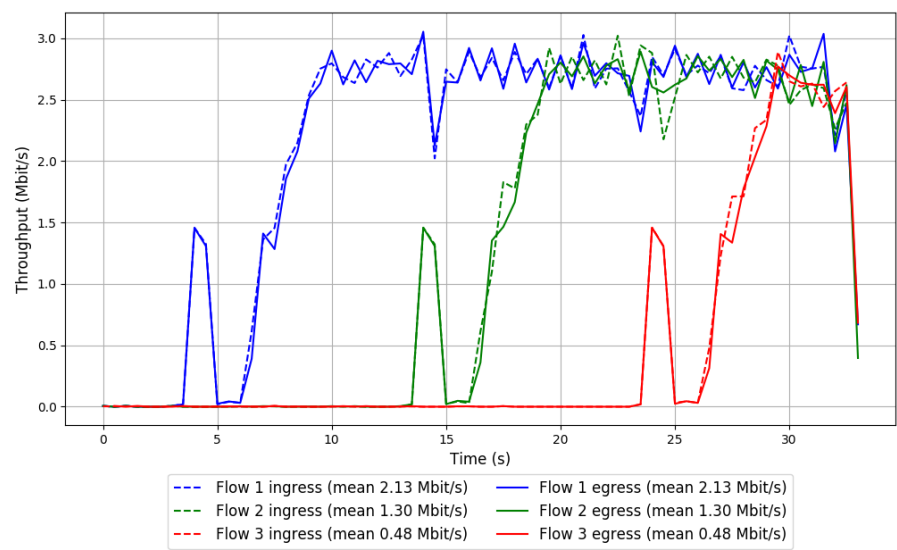
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 111.300 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-03-06 20:55:27

End at: 2018-03-06 20:55:57

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 112.124 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 112.155 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 111.688 ms

Loss rate: 0.00%

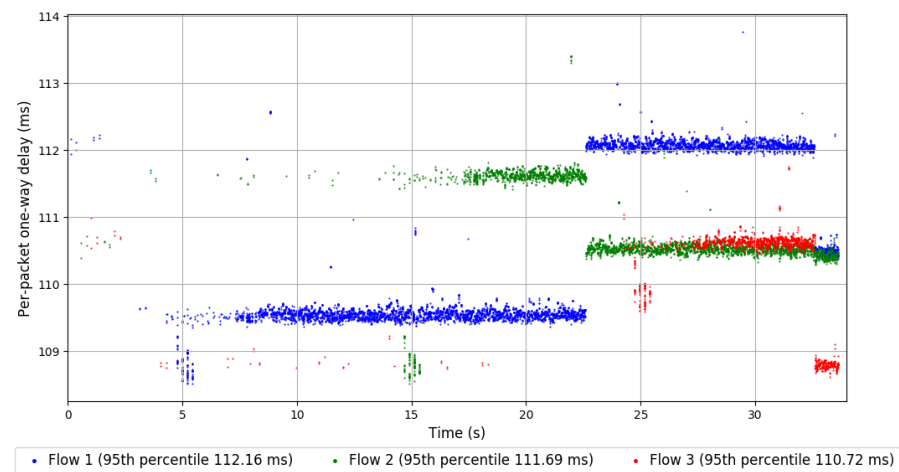
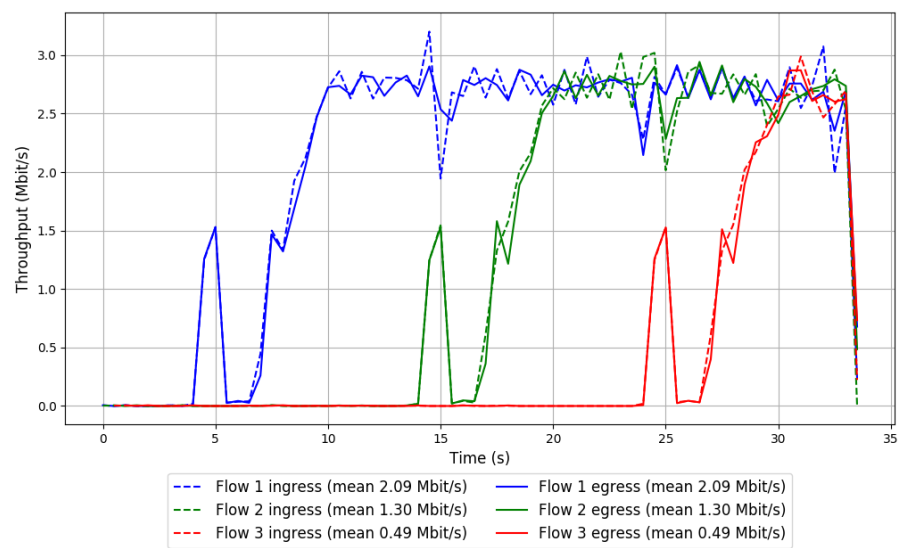
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 110.721 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-03-06 21:14:49

End at: 2018-03-06 21:15:19

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.85 Mbit/s

95th percentile per-packet one-way delay: 112.255 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 112.218 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 112.264 ms

Loss rate: 0.00%

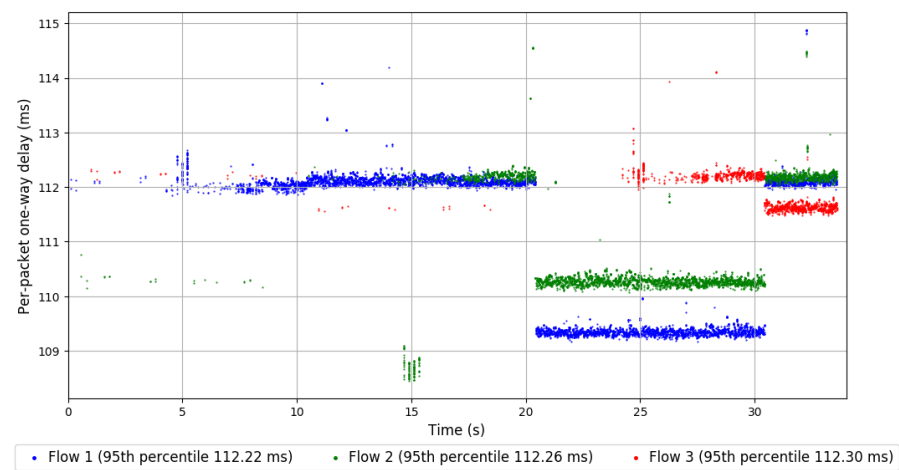
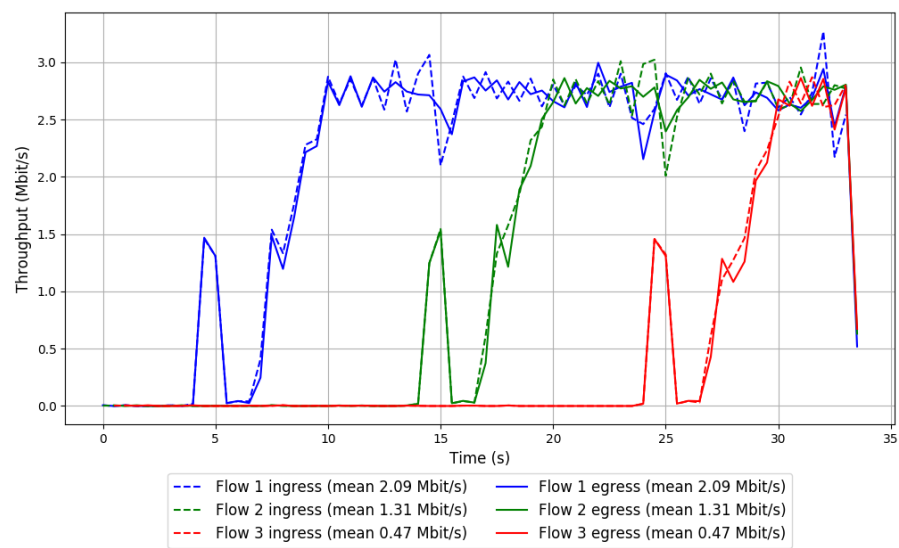
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 112.302 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-03-06 21:34:02

End at: 2018-03-06 21:34:32

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 112.193 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 112.166 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 112.217 ms

Loss rate: 0.02%

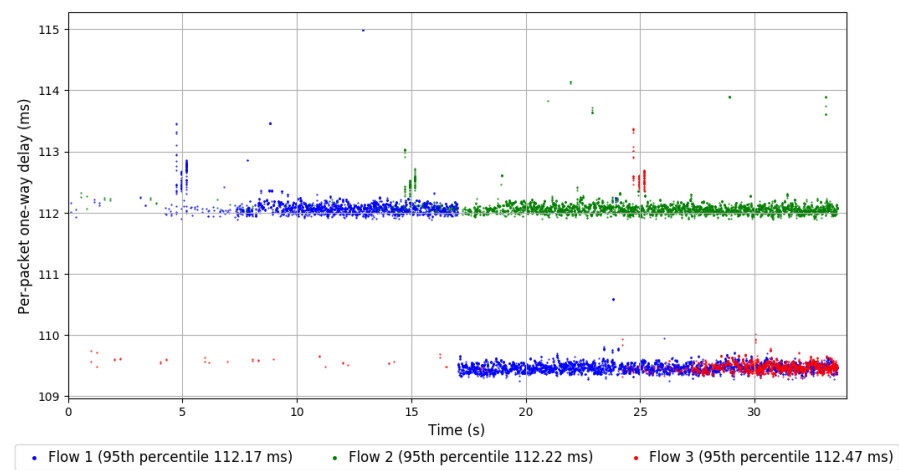
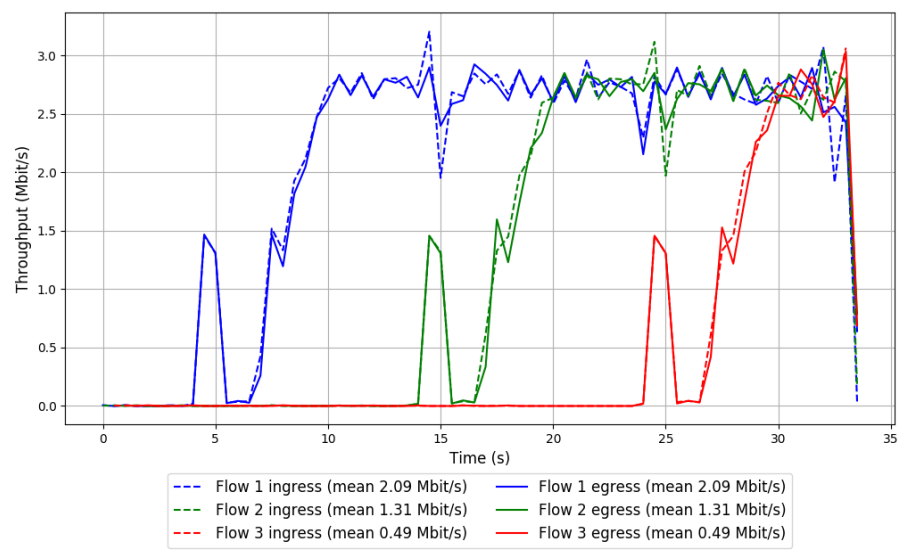
-- Flow 3:

Average throughput: 0.49 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-03-06 21:53:08

End at: 2018-03-06 21:53:38

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 112.118 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 111.460 ms

Loss rate: 0.02%

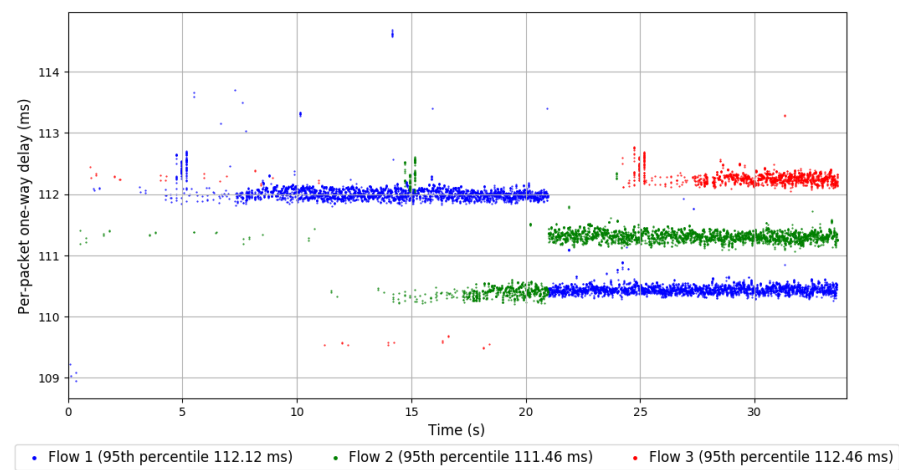
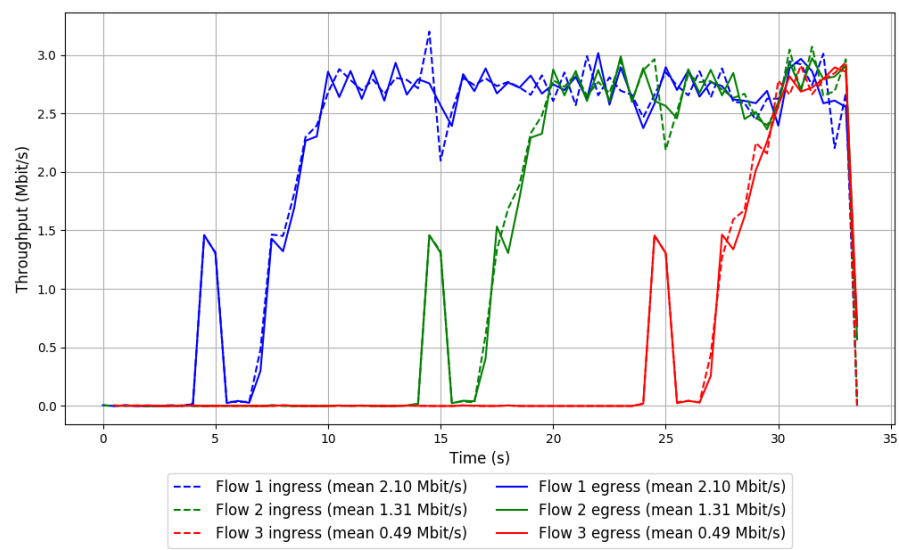
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 112.460 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-03-06 22:12:52

End at: 2018-03-06 22:13:23

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 112.255 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 112.263 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 110.882 ms

Loss rate: 0.00%

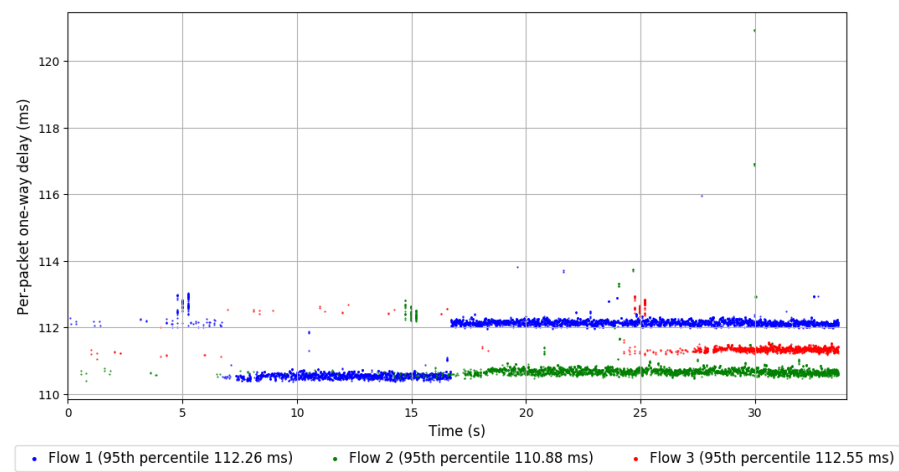
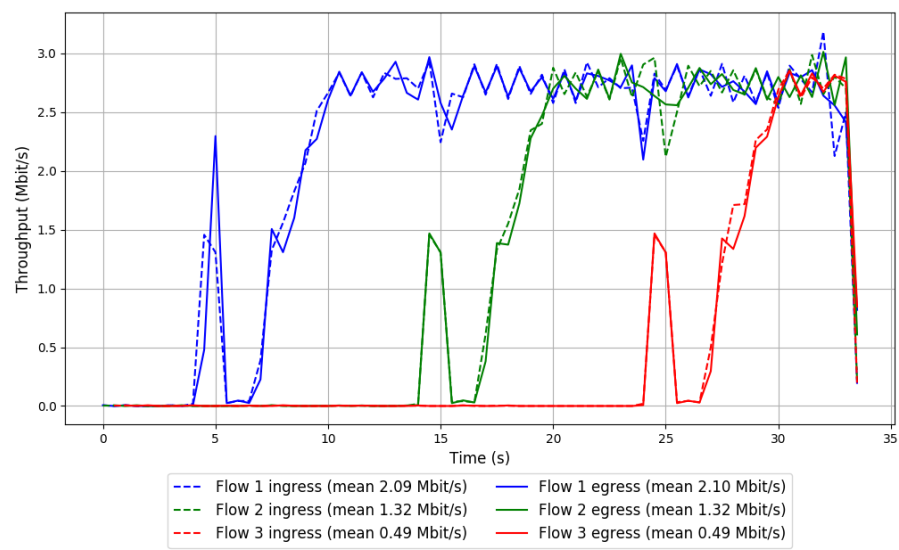
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 112.545 ms

Loss rate: 0.06%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-03-06 22:32:05

End at: 2018-03-06 22:32:35

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 112.248 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 111.793 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 112.304 ms

Loss rate: 0.00%

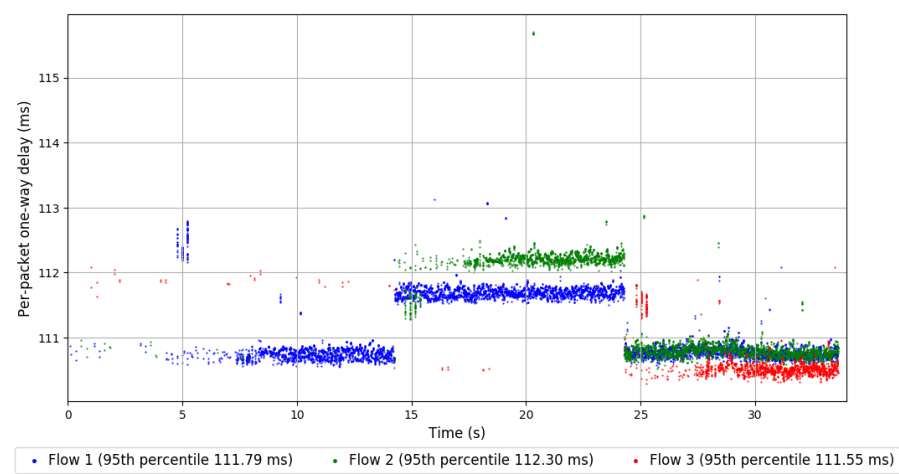
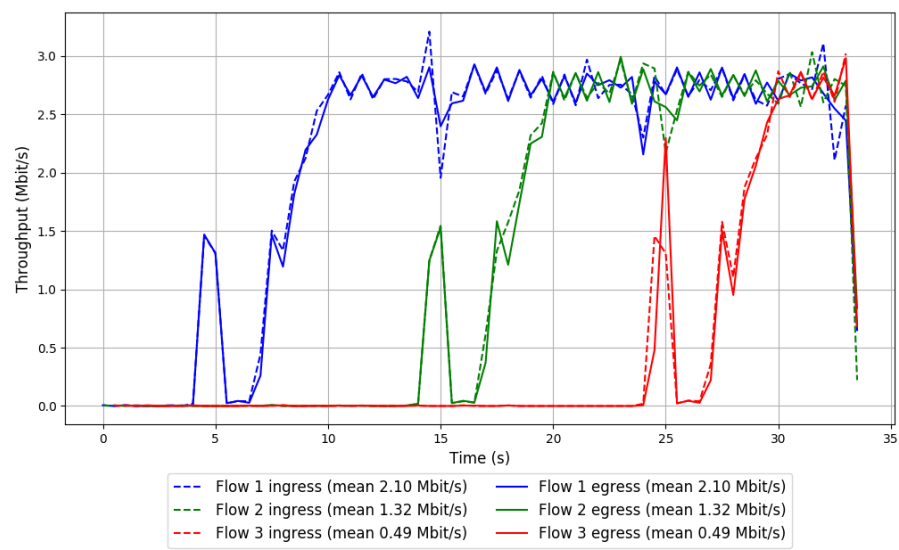
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 111.554 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-03-06 22:51:41

End at: 2018-03-06 22:52:11

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 112.477 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 112.513 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 111.857 ms

Loss rate: 0.00%

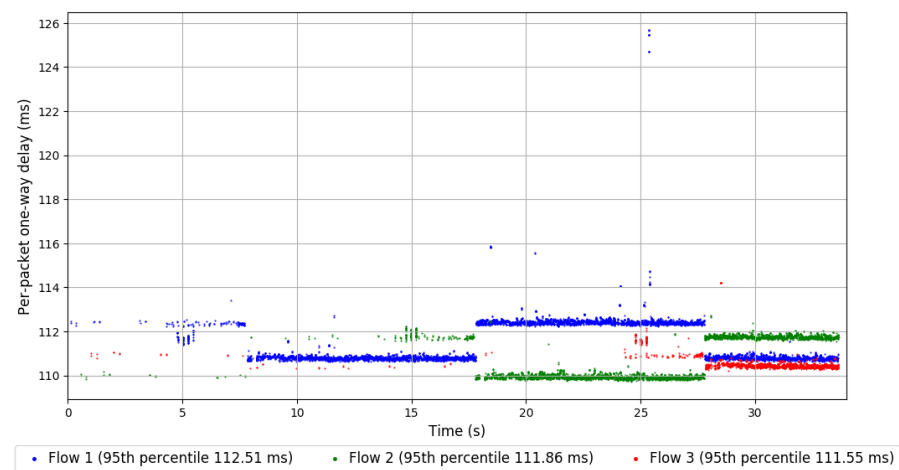
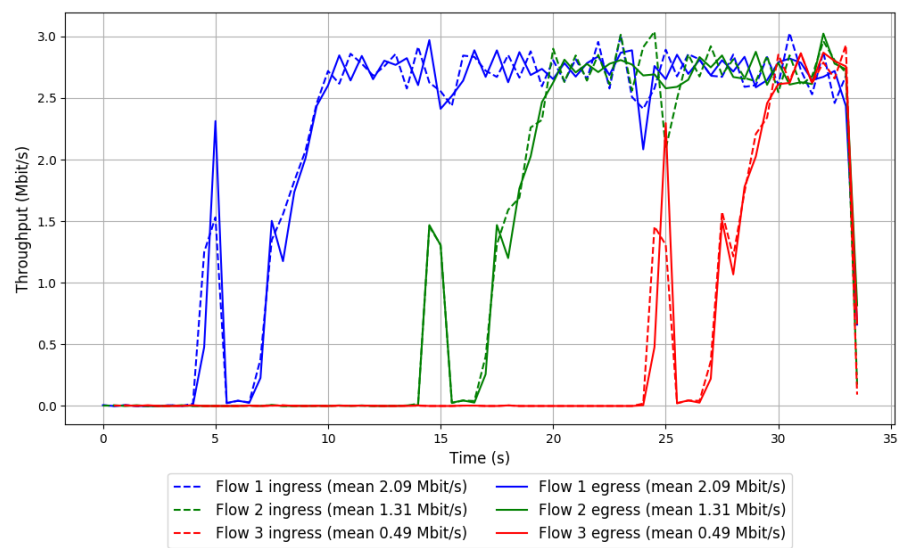
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 111.547 ms

Loss rate: 0.06%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-03-06 23:10:37

End at: 2018-03-06 23:11:07

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 113.027 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.10 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 111.913 ms

Loss rate: 0.02%

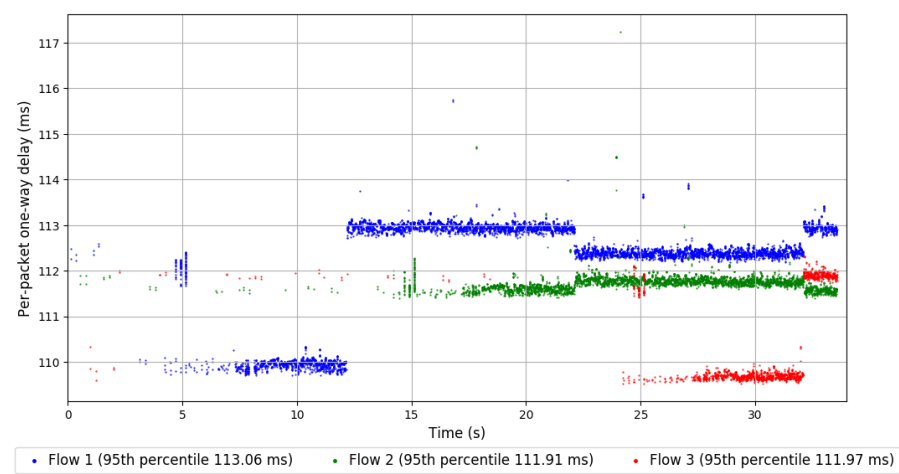
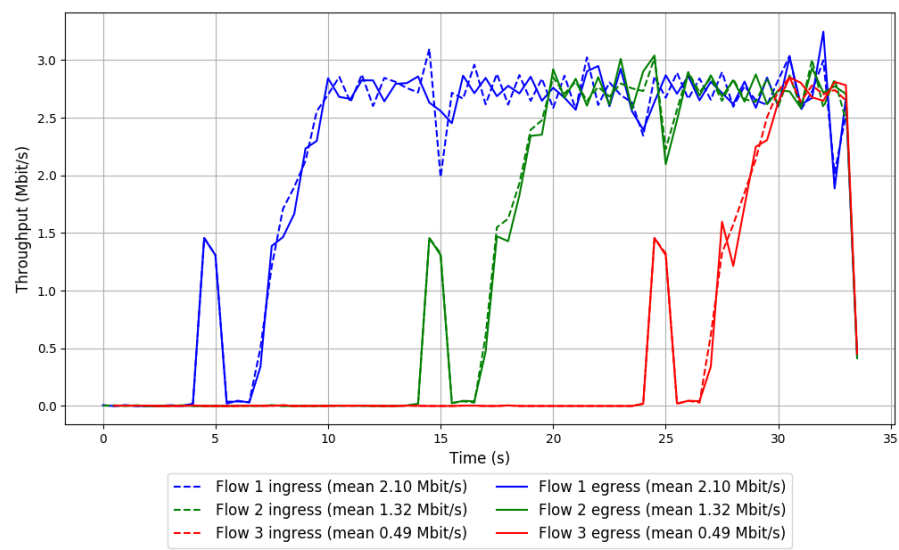
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 111.965 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

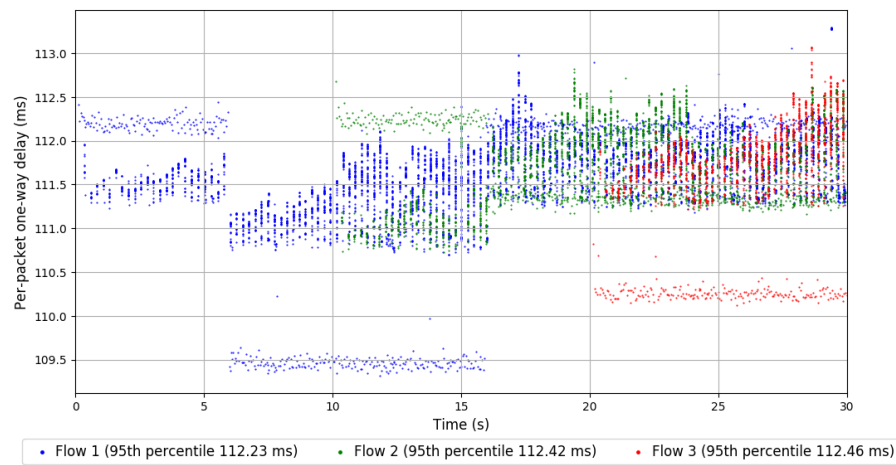
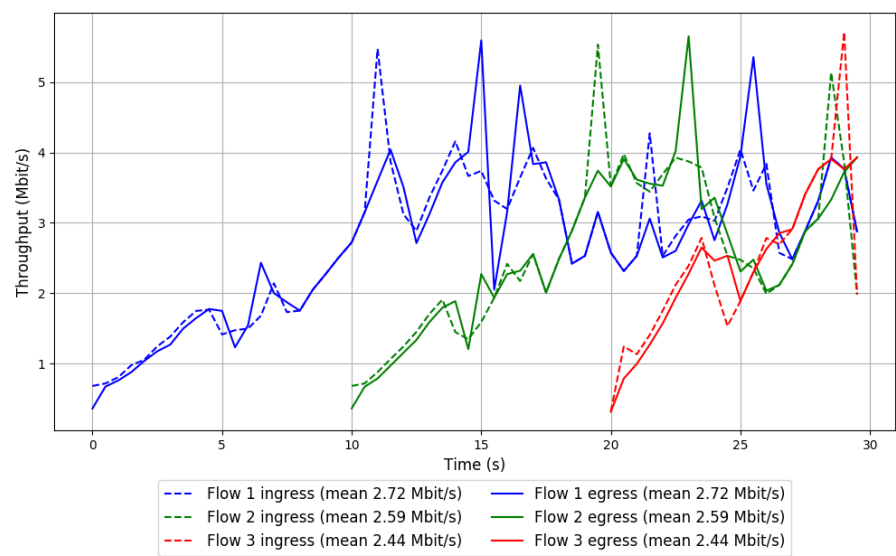


```
Run 1: Statistics of Sprout

Start at: 2018-03-06 20:31:40
End at: 2018-03-06 20:32:10

# Below is generated by plot.py at 2018-03-07 01:47:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.25 Mbit/s
95th percentile per-packet one-way delay: 112.342 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.72 Mbit/s
95th percentile per-packet one-way delay: 112.233 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.59 Mbit/s
95th percentile per-packet one-way delay: 112.419 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.44 Mbit/s
95th percentile per-packet one-way delay: 112.464 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-03-06 20:50:34

End at: 2018-03-06 20:51:04

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.98 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 112.363 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.06 Mbit/s

95th percentile per-packet one-way delay: 112.800 ms

Loss rate: 0.00%

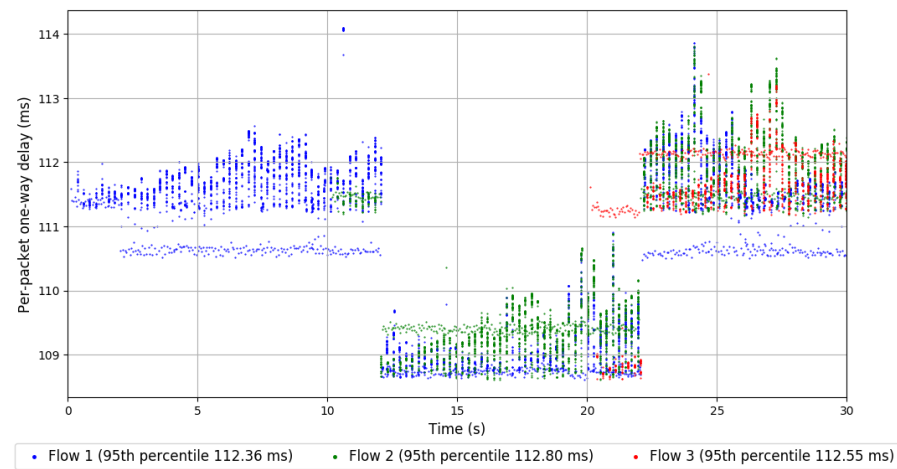
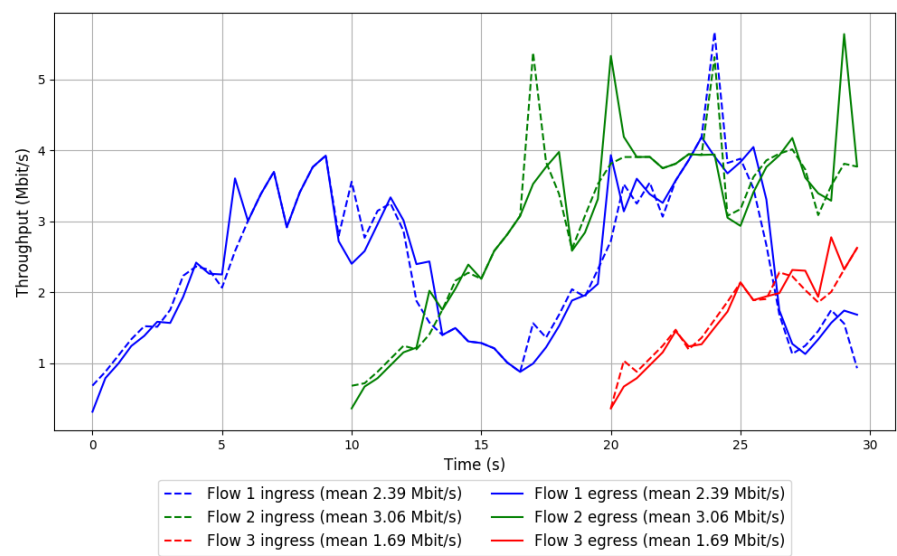
-- Flow 3:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 112.552 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-03-06 21:09:55

End at: 2018-03-06 21:10:25

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.19 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 112.991 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.53 Mbit/s

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

Loss rate: 0.00%

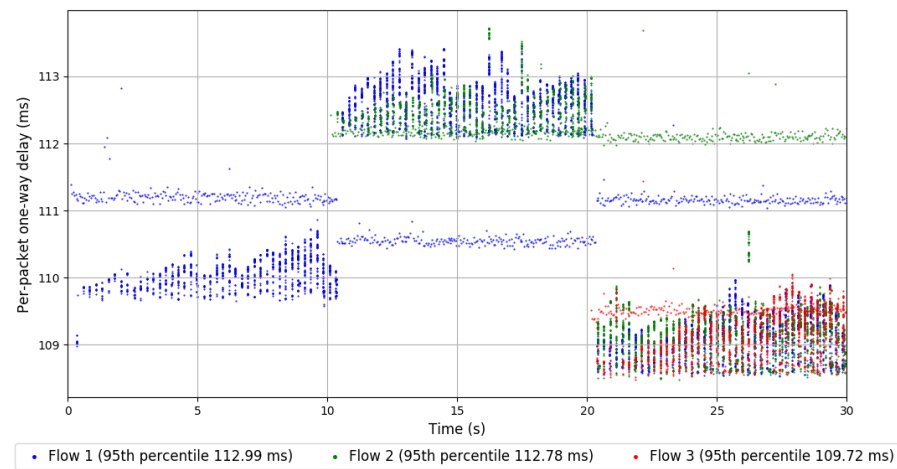
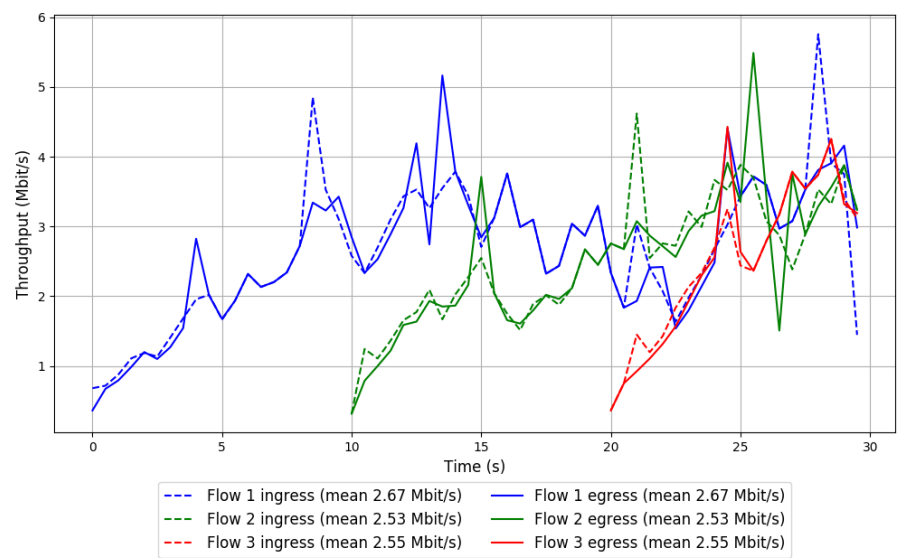
-- Flow 3:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 109.720 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-03-06 21:29:08

End at: 2018-03-06 21:29:38

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.08 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.01 Mbit/s

95th percentile per-packet one-way delay: 113.326 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 112.656 ms

Loss rate: 0.00%

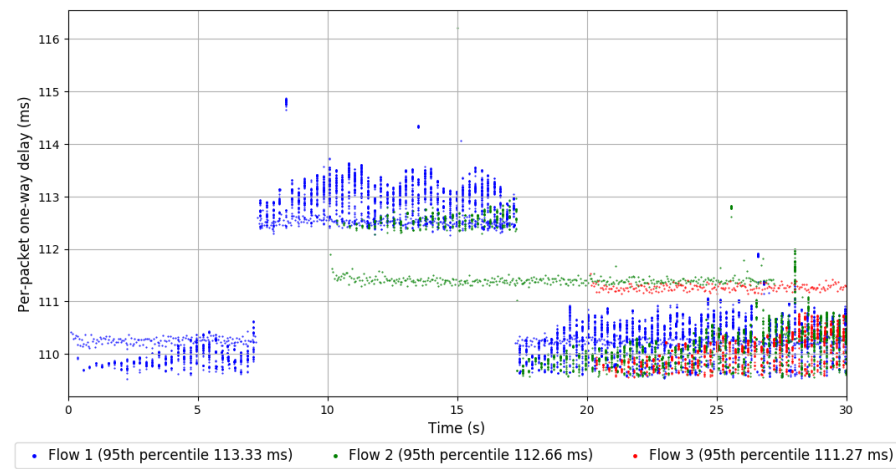
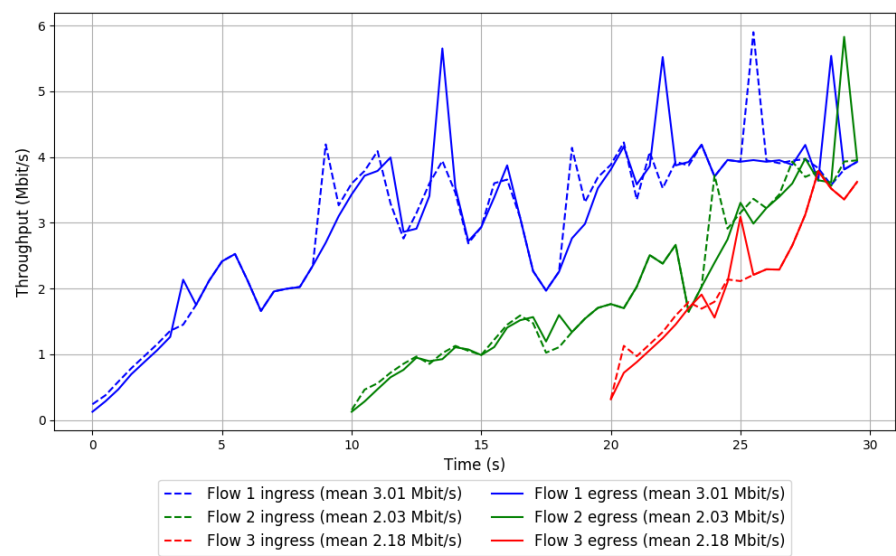
-- Flow 3:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 111.268 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-03-06 21:48:18

End at: 2018-03-06 21:48:48

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.80 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.42 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 113.024 ms

Loss rate: 0.00%

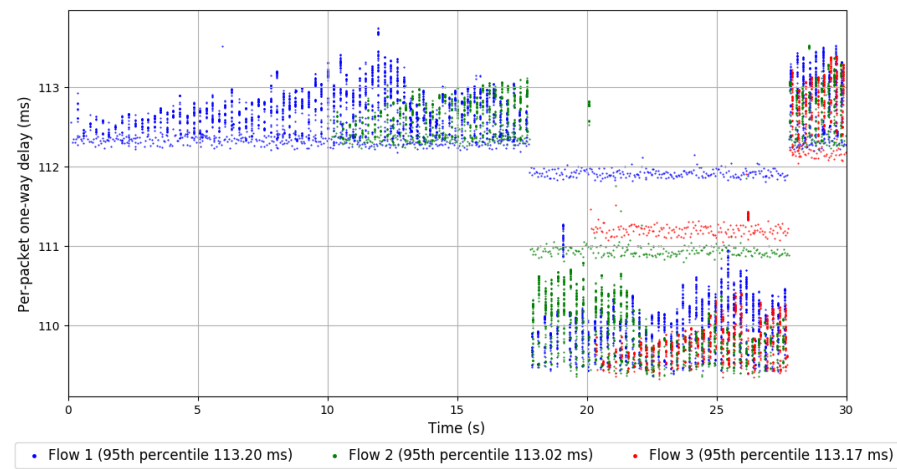
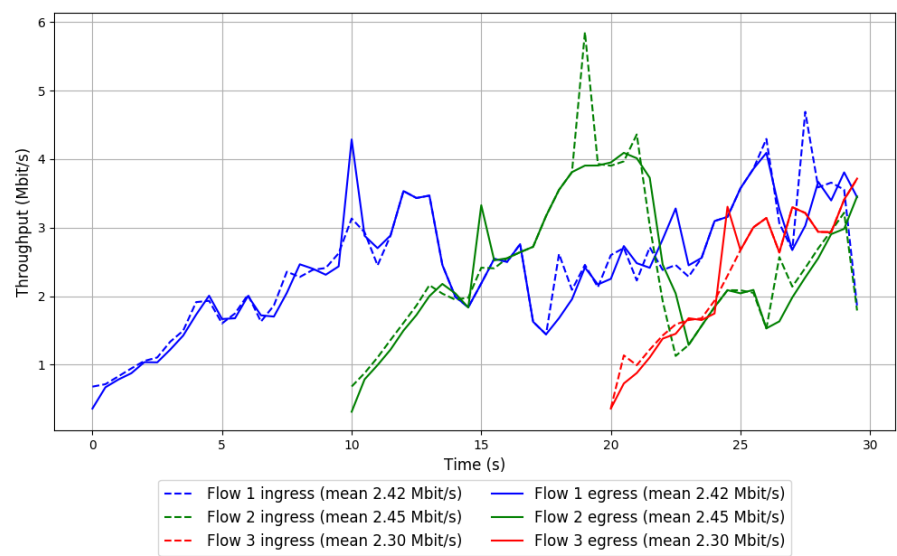
-- Flow 3:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 113.173 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-03-06 22:07:56

End at: 2018-03-06 22:08:26

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.12 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 113.342 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 113.289 ms

Loss rate: 0.00%

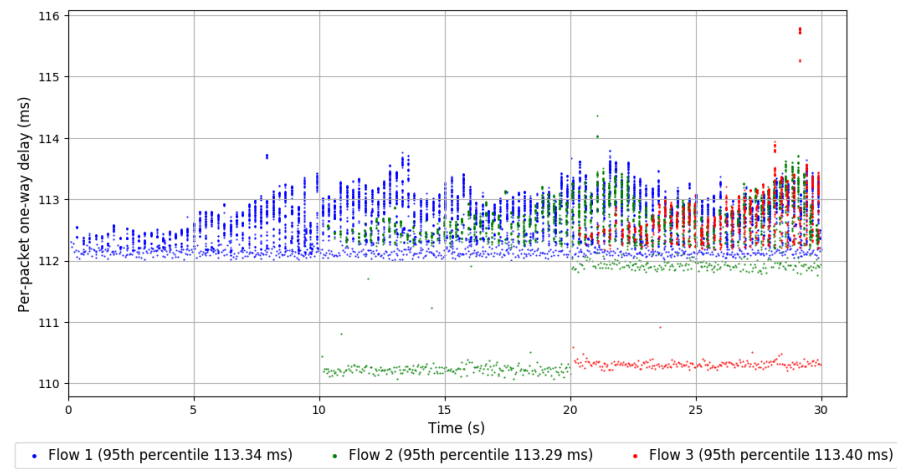
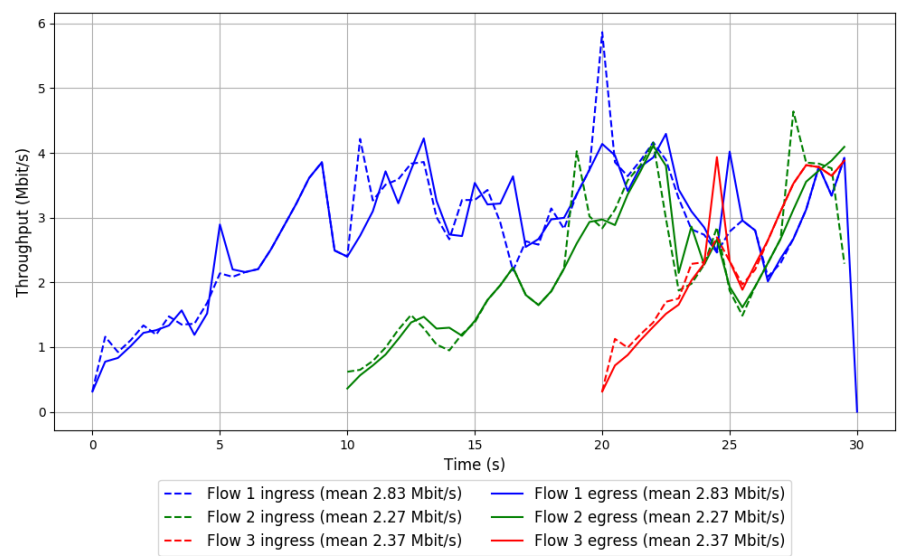
-- Flow 3:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 113.396 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-03-06 22:27:19

End at: 2018-03-06 22:27:50

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.28 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.91 Mbit/s

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

Loss rate: 0.00%

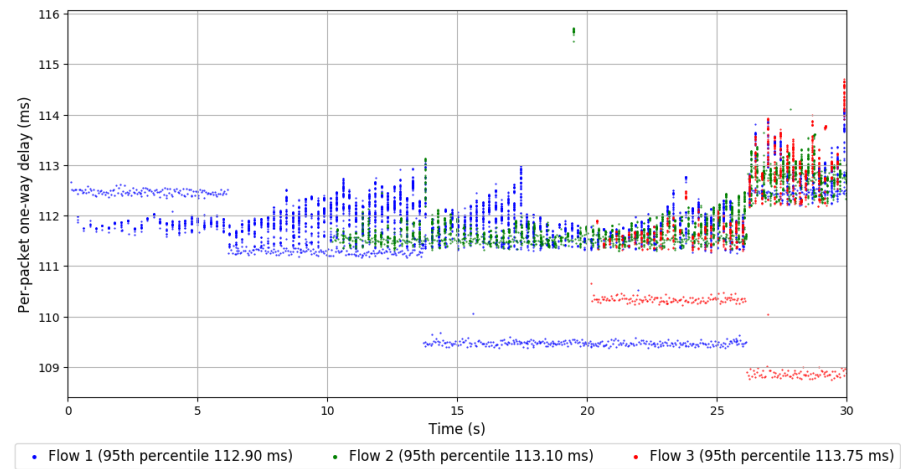
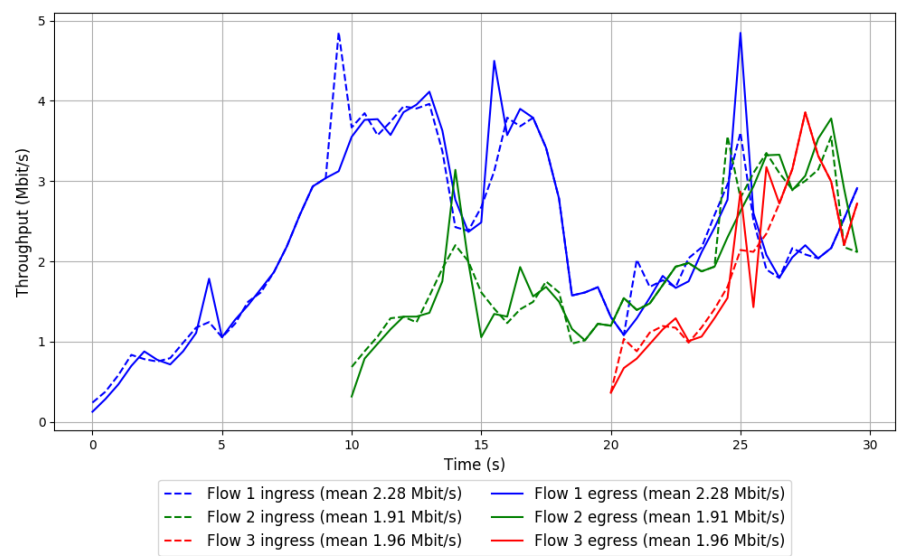
-- Flow 3:

Average throughput: 1.96 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-03-06 22:46:49

End at: 2018-03-06 22:47:19

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.06 Mbit/s

95th percentile per-packet one-way delay: 112.908 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.53 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.03 Mbit/s

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

Loss rate: 0.00%

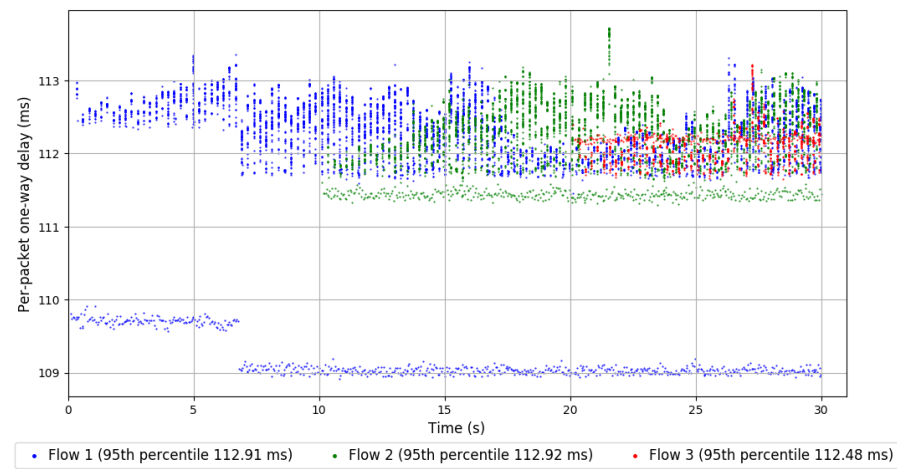
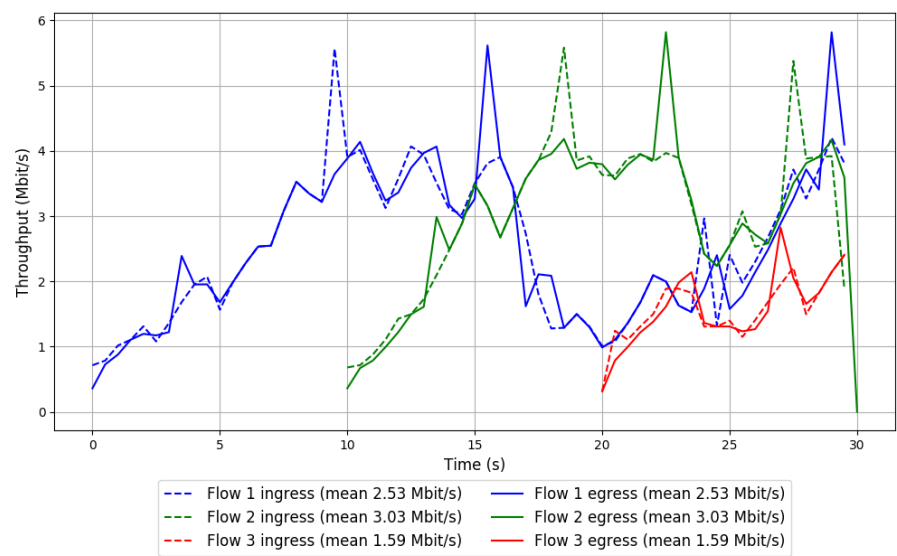
-- Flow 3:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 112.481 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-03-06 23:05:48

End at: 2018-03-06 23:06:18

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.72 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 113.411 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.59 Mbit/s

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

Loss rate: 0.00%

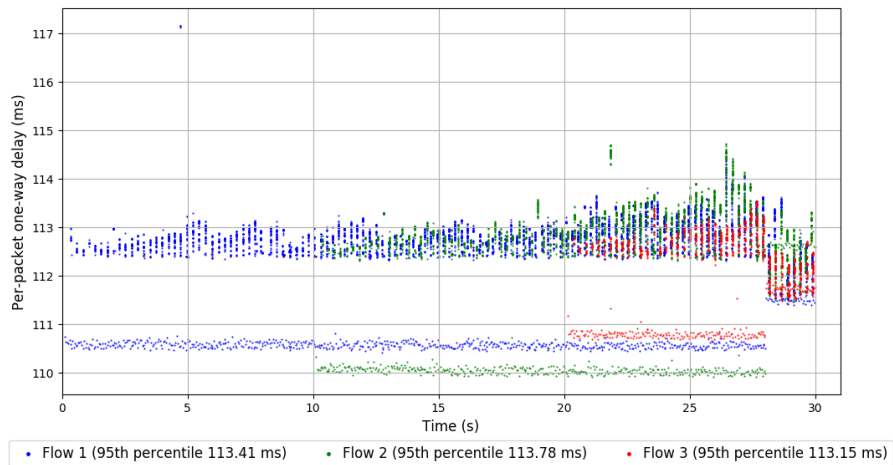
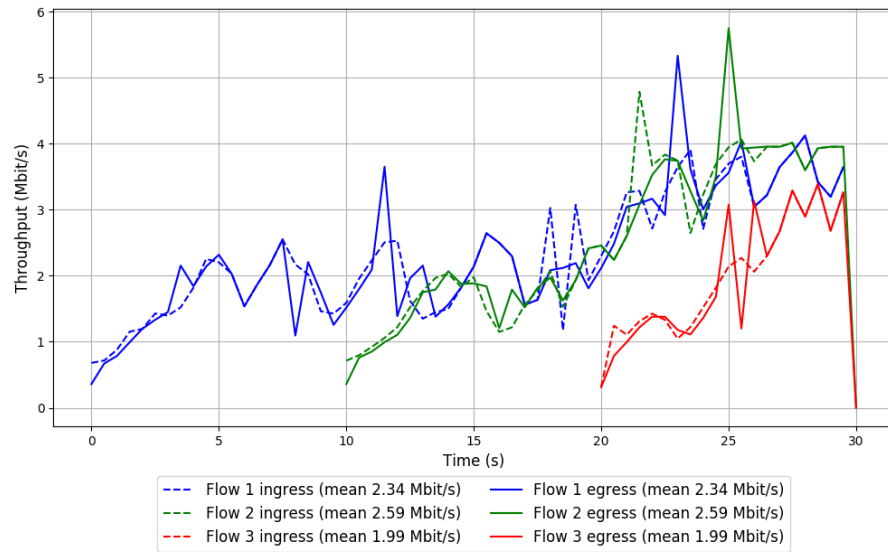
-- Flow 3:

Average throughput: 1.99 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-03-06 23:25:03

End at: 2018-03-06 23:25:33

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.61 Mbit/s

95th percentile per-packet one-way delay: 112.335 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 112.385 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 112.108 ms

Loss rate: 0.00%

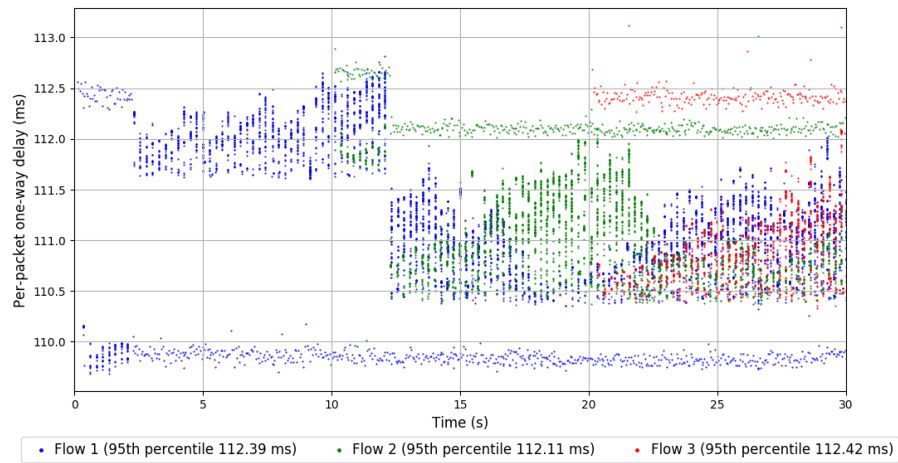
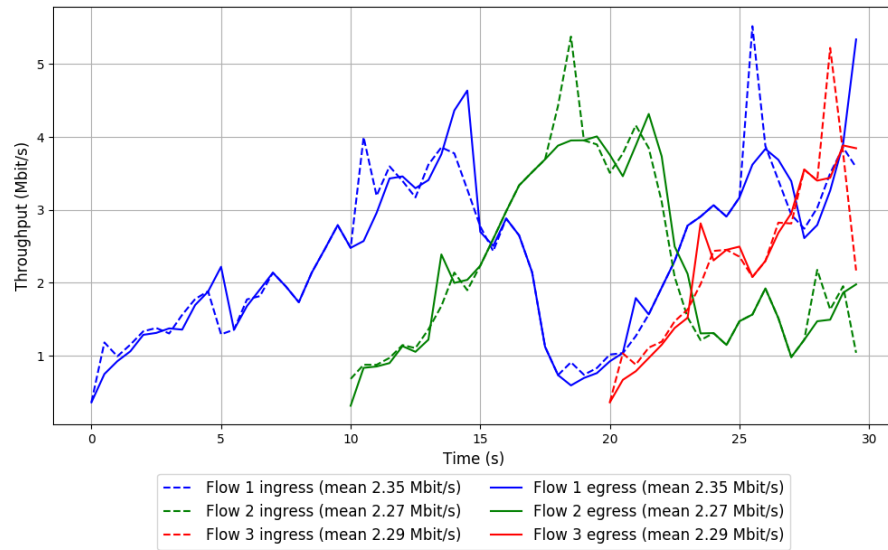
-- Flow 3:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 112.417 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

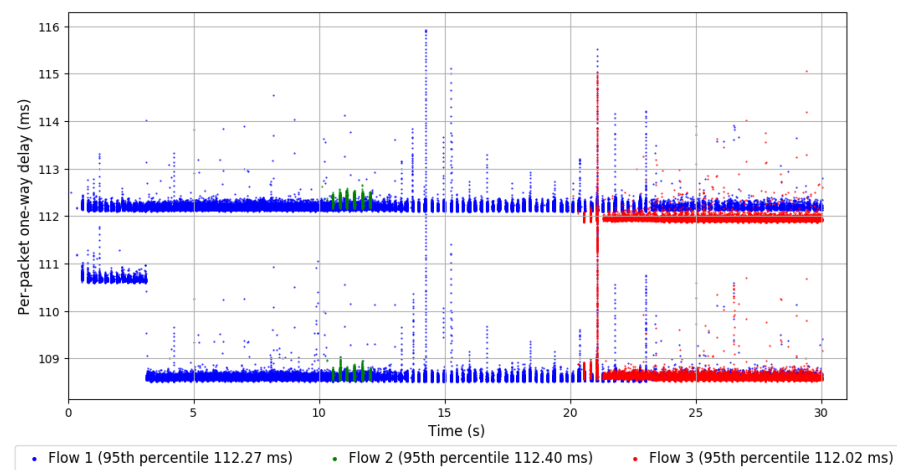
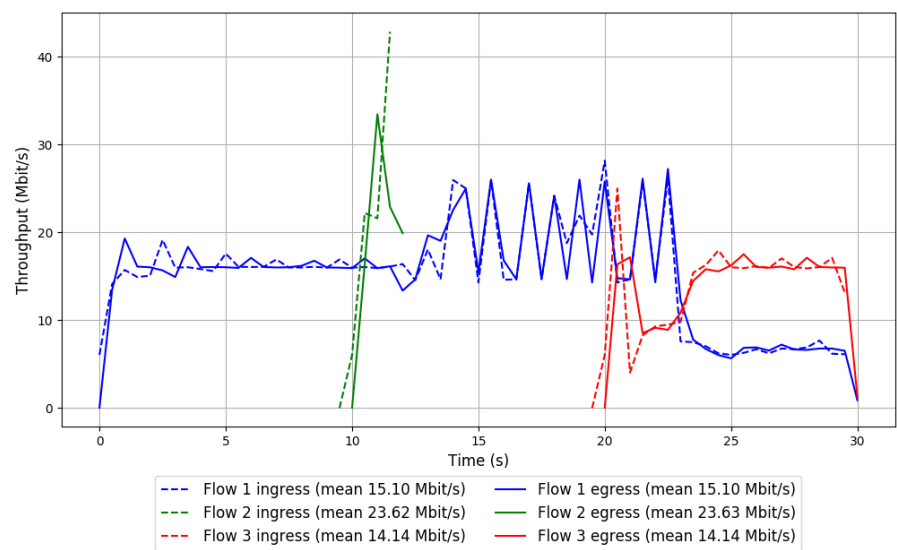


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-03-06 20:27:52
End at: 2018-03-06 20:28:22

# Below is generated by plot.py at 2018-03-07 01:47:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.34 Mbit/s
95th percentile per-packet one-way delay: 112.285 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 15.10 Mbit/s
95th percentile per-packet one-way delay: 112.273 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 23.63 Mbit/s
95th percentile per-packet one-way delay: 112.404 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 14.14 Mbit/s
95th percentile per-packet one-way delay: 112.022 ms
Loss rate: 0.00%
```


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

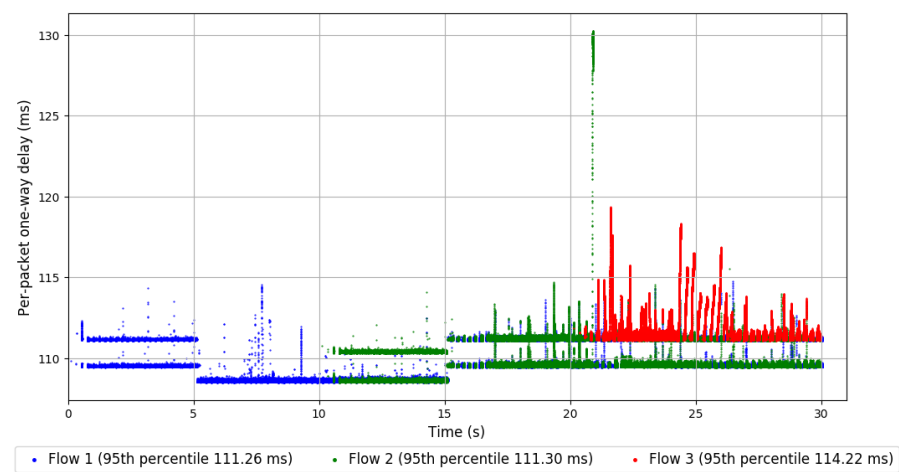
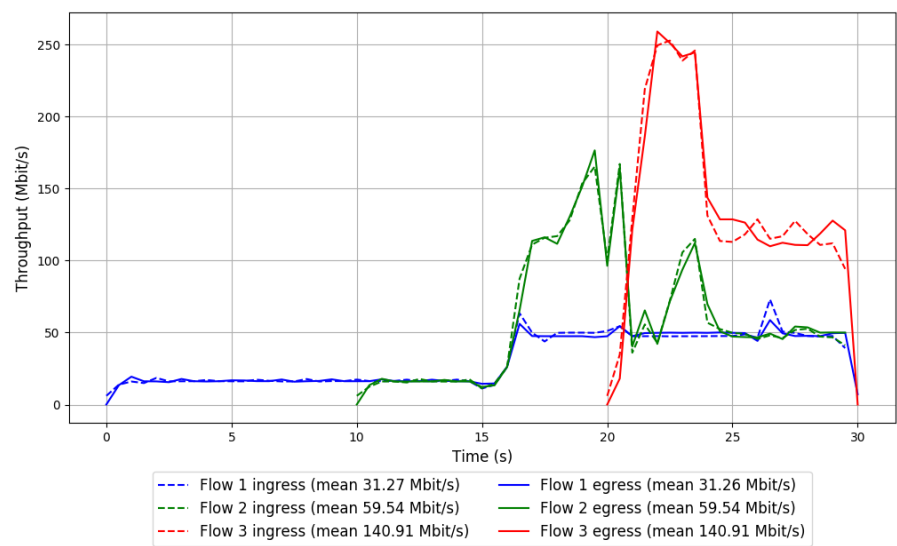


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-03-06 20:46:40
End at: 2018-03-06 20:47:11

# Below is generated by plot.py at 2018-03-07 01:47:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 117.01 Mbit/s
95th percentile per-packet one-way delay: 112.891 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 31.26 Mbit/s
95th percentile per-packet one-way delay: 111.257 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.54 Mbit/s
95th percentile per-packet one-way delay: 111.299 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 140.91 Mbit/s
95th percentile per-packet one-way delay: 114.222 ms
Loss rate: 0.00%
```

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

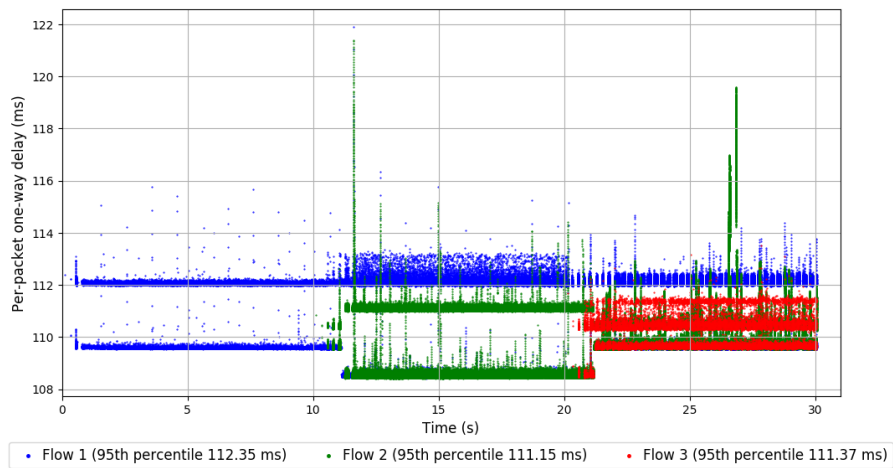
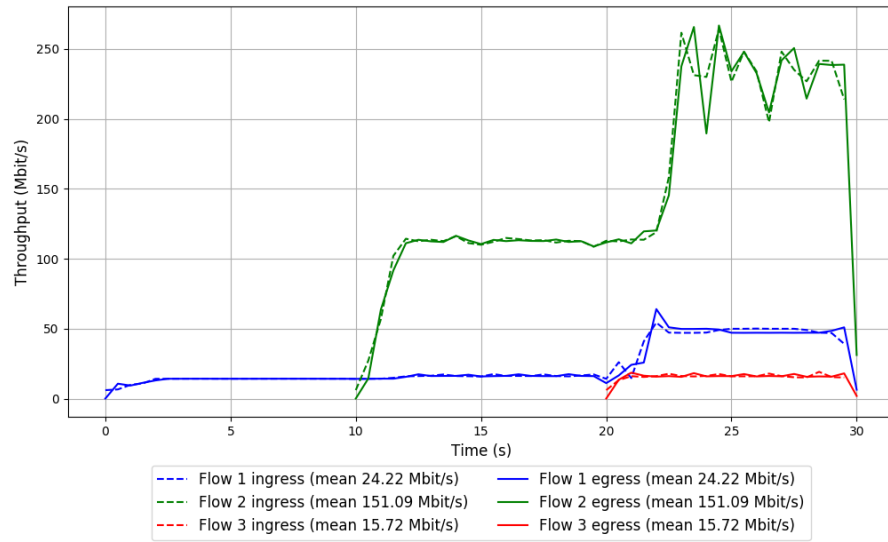


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-03-06 21:05:54
End at: 2018-03-06 21:06:24

# Below is generated by plot.py at 2018-03-07 01:47:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 130.04 Mbit/s
95th percentile per-packet one-way delay: 112.148 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.22 Mbit/s
95th percentile per-packet one-way delay: 112.348 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 151.09 Mbit/s
95th percentile per-packet one-way delay: 111.148 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.72 Mbit/s
95th percentile per-packet one-way delay: 111.372 ms
Loss rate: 0.00%
```

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

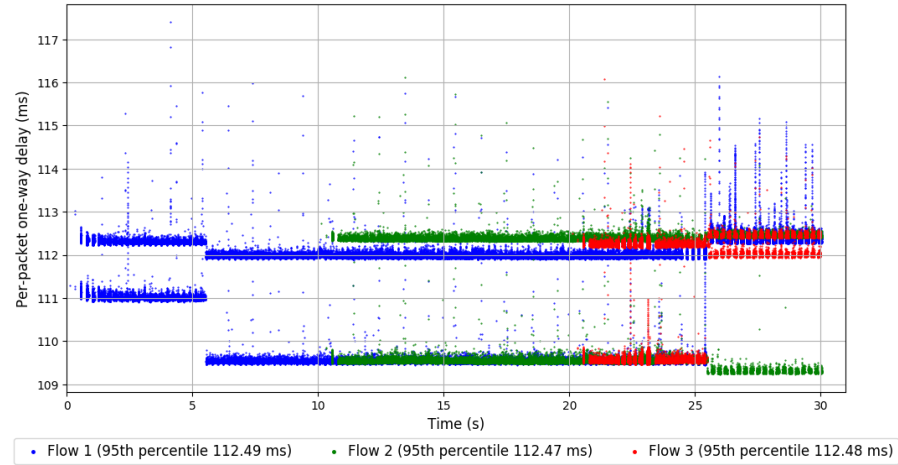
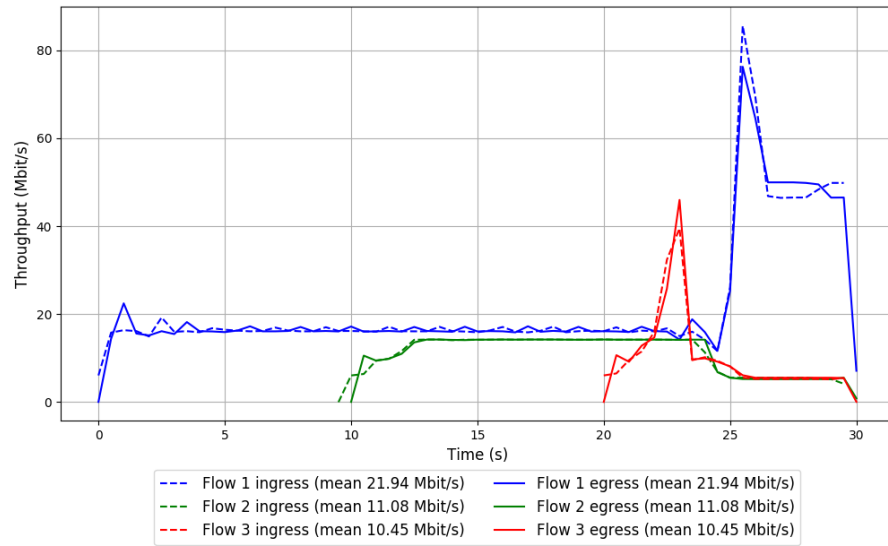


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-03-06 21:25:20
End at: 2018-03-06 21:25:50

# Below is generated by plot.py at 2018-03-07 01:47:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.75 Mbit/s
95th percentile per-packet one-way delay: 112.488 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 21.94 Mbit/s
95th percentile per-packet one-way delay: 112.494 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.08 Mbit/s
95th percentile per-packet one-way delay: 112.474 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 10.45 Mbit/s
95th percentile per-packet one-way delay: 112.479 ms
Loss rate: 0.00%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-03-06 21:44:17

End at: 2018-03-06 21:44:47

Below is generated by plot.py at 2018-03-07 01:47:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.99 Mbit/s

95th percentile per-packet one-way delay: 113.124 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 33.88 Mbit/s

95th percentile per-packet one-way delay: 112.388 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 77.03 Mbit/s

95th percentile per-packet one-way delay: 112.374 ms

Loss rate: 0.01%

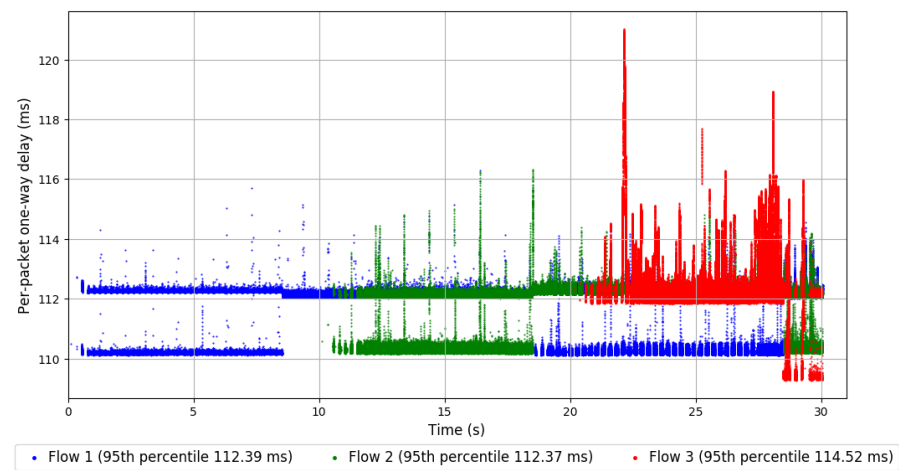
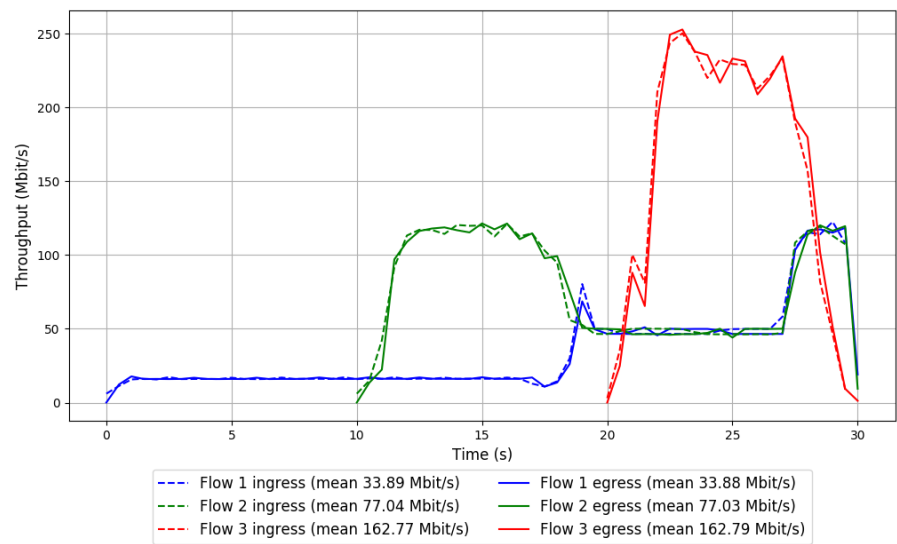
-- Flow 3:

Average throughput: 162.79 Mbit/s

95th percentile per-packet one-way delay: 114.515 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-03-06 22:03:46

End at: 2018-03-06 22:04:16

Below is generated by plot.py at 2018-03-07 01:49:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 216.12 Mbit/s

95th percentile per-packet one-way delay: 112.522 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 79.21 Mbit/s

95th percentile per-packet one-way delay: 112.597 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 101.05 Mbit/s

95th percentile per-packet one-way delay: 112.405 ms

Loss rate: 0.00%

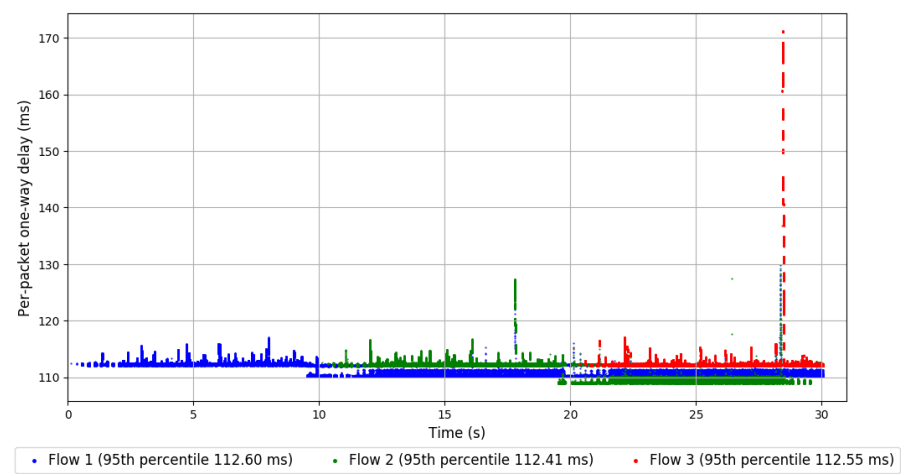
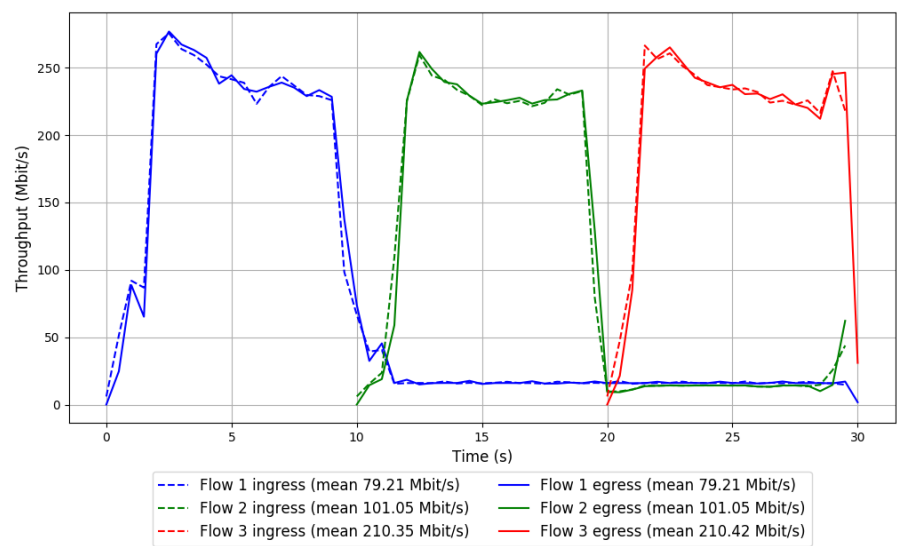
-- Flow 3:

Average throughput: 210.42 Mbit/s

95th percentile per-packet one-way delay: 112.546 ms

Loss rate: 0.01%

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

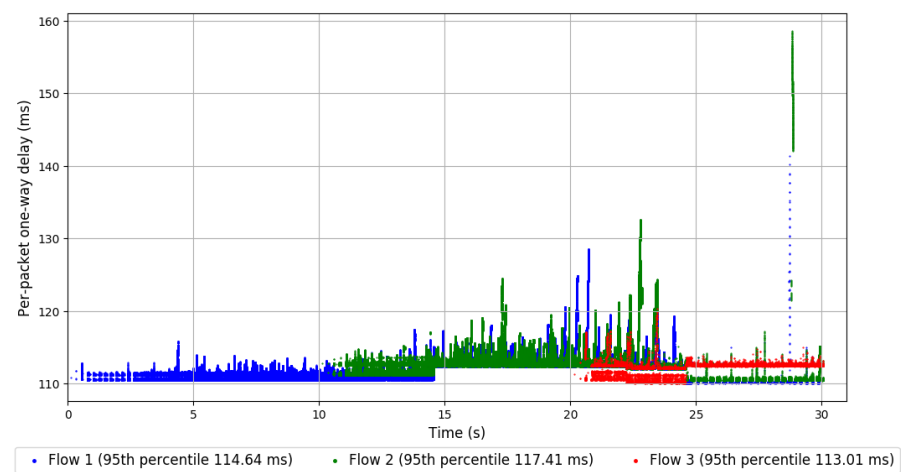
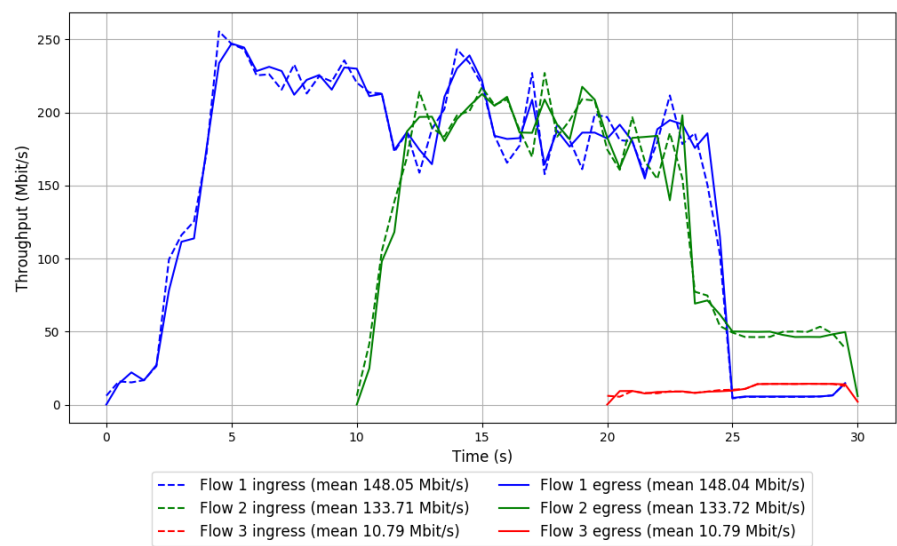


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-03-06 22:23:11
End at: 2018-03-06 22:23:41

# Below is generated by plot.py at 2018-03-07 01:50:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 239.75 Mbit/s
95th percentile per-packet one-way delay: 115.646 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 148.04 Mbit/s
95th percentile per-packet one-way delay: 114.638 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 133.72 Mbit/s
95th percentile per-packet one-way delay: 117.413 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.79 Mbit/s
95th percentile per-packet one-way delay: 113.008 ms
Loss rate: 0.00%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-03-06 22:42:45

End at: 2018-03-06 22:43:15

Below is generated by plot.py at 2018-03-07 01:50:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.59 Mbit/s

95th percentile per-packet one-way delay: 114.389 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 68.06 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 92.37 Mbit/s

95th percentile per-packet one-way delay: 114.248 ms

Loss rate: 0.00%

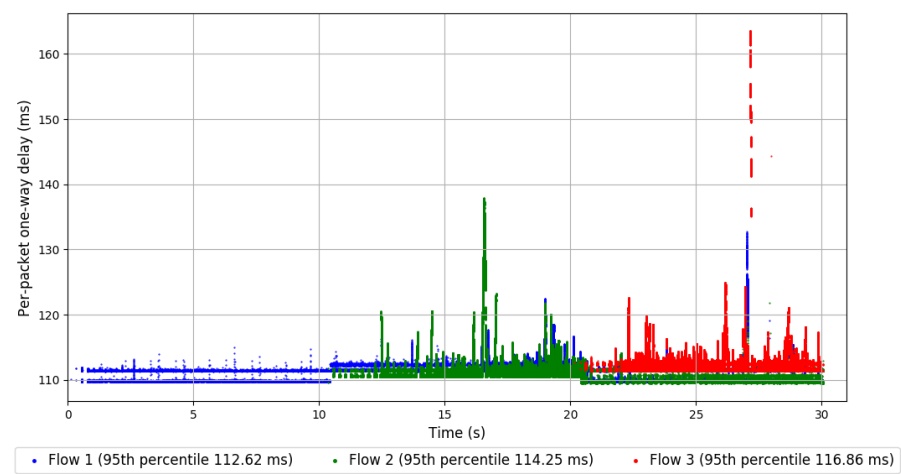
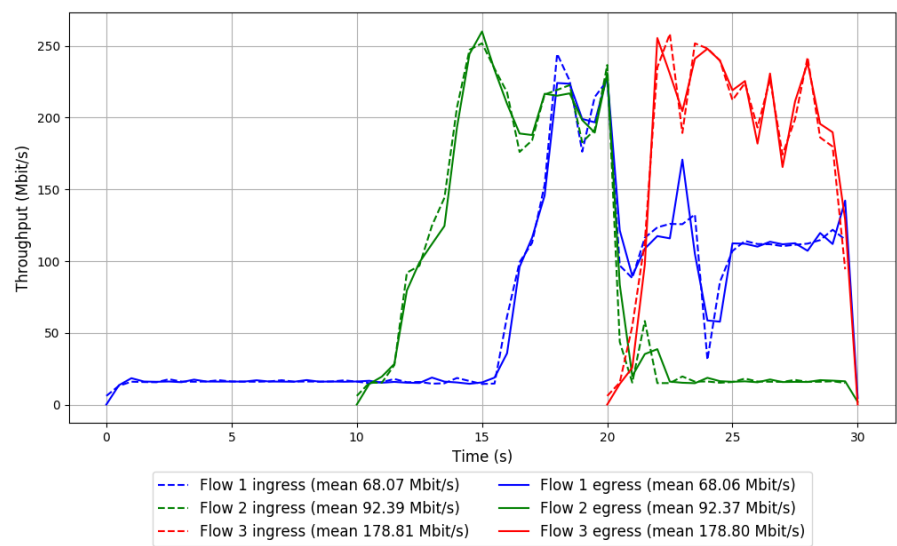
-- Flow 3:

Average throughput: 178.80 Mbit/s

95th percentile per-packet one-way delay: 116.862 ms

Loss rate: 0.01%

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

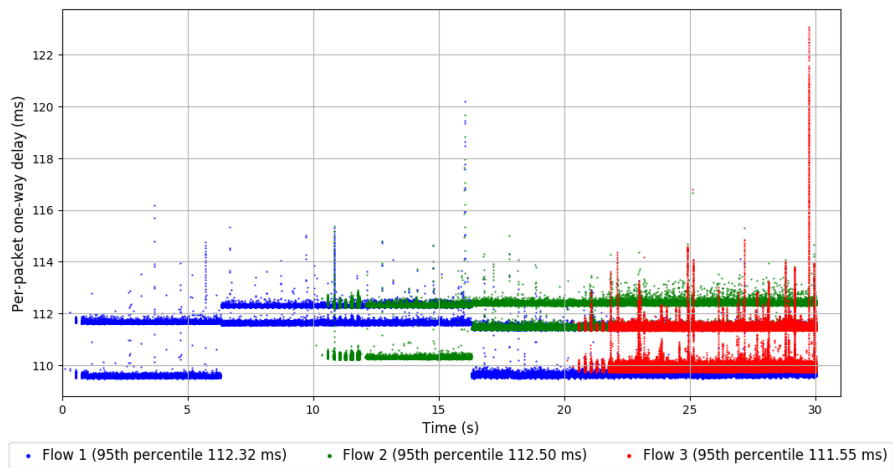
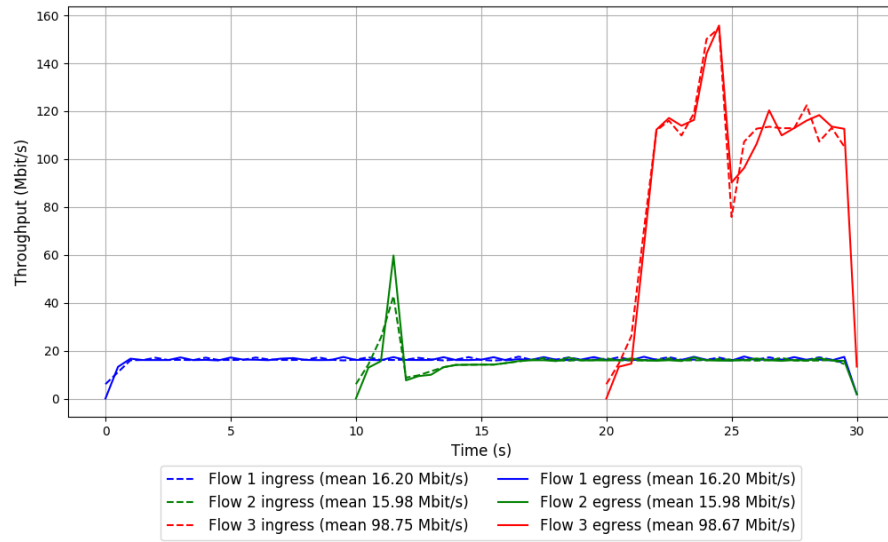


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-03-06 23:01:59
End at: 2018-03-06 23:02:29

# Below is generated by plot.py at 2018-03-07 01:50:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.57 Mbit/s
95th percentile per-packet one-way delay: 112.380 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 16.20 Mbit/s
95th percentile per-packet one-way delay: 112.317 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 15.98 Mbit/s
95th percentile per-packet one-way delay: 112.495 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 98.67 Mbit/s
95th percentile per-packet one-way delay: 111.549 ms
Loss rate: 0.07%
```


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

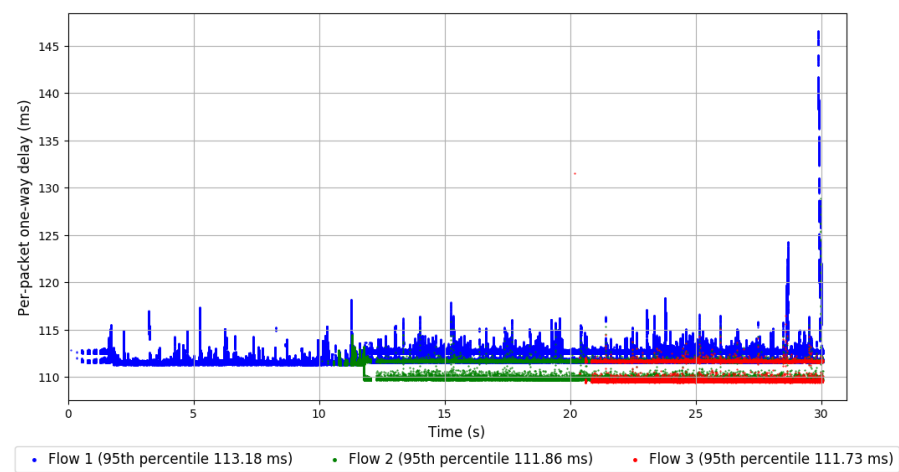
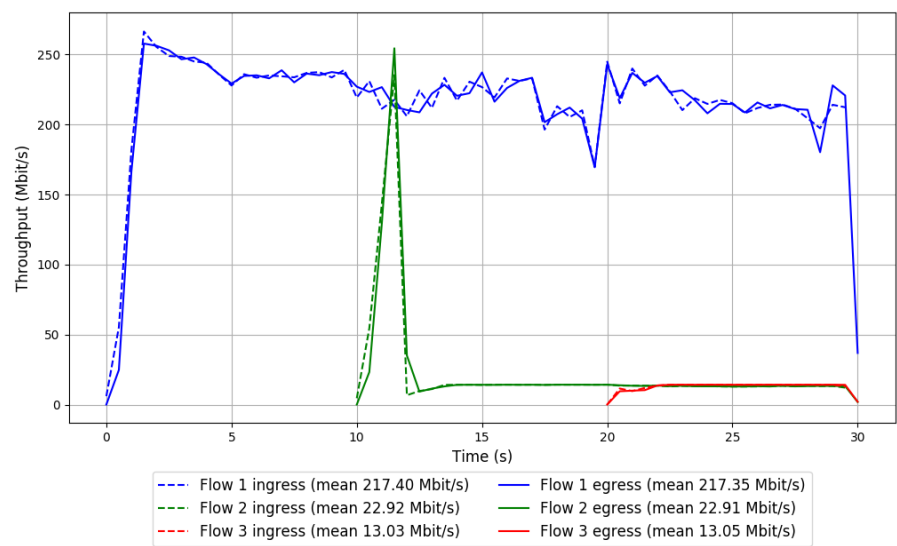


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-03-06 23:20:44
End at: 2018-03-06 23:21:14

# Below is generated by plot.py at 2018-03-07 01:53:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 236.92 Mbit/s
95th percentile per-packet one-way delay: 113.110 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 217.35 Mbit/s
95th percentile per-packet one-way delay: 113.183 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 22.91 Mbit/s
95th percentile per-packet one-way delay: 111.858 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 13.05 Mbit/s
95th percentile per-packet one-way delay: 111.729 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-03-06 20:18:17

End at: 2018-03-06 20:18:47

Below is generated by plot.py at 2018-03-07 01:53:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.12 Mbit/s

95th percentile per-packet one-way delay: 121.700 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 21.19 Mbit/s

95th percentile per-packet one-way delay: 115.494 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 98.89 Mbit/s

95th percentile per-packet one-way delay: 122.657 ms

Loss rate: 0.00%

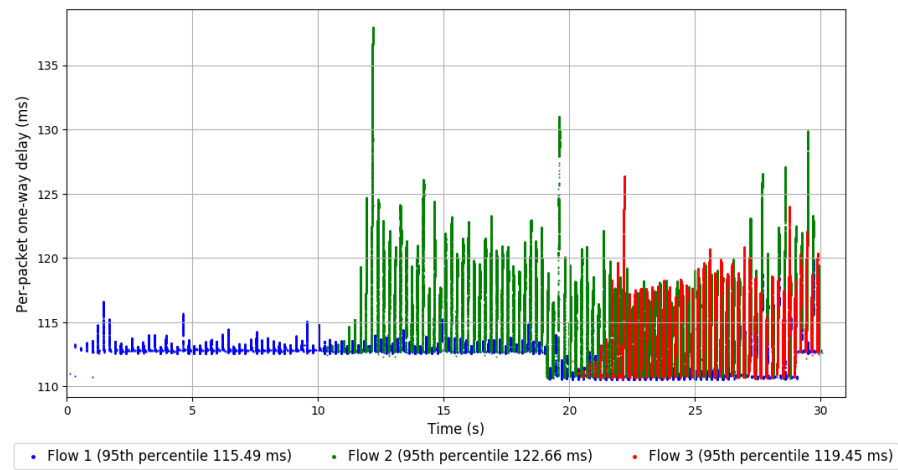
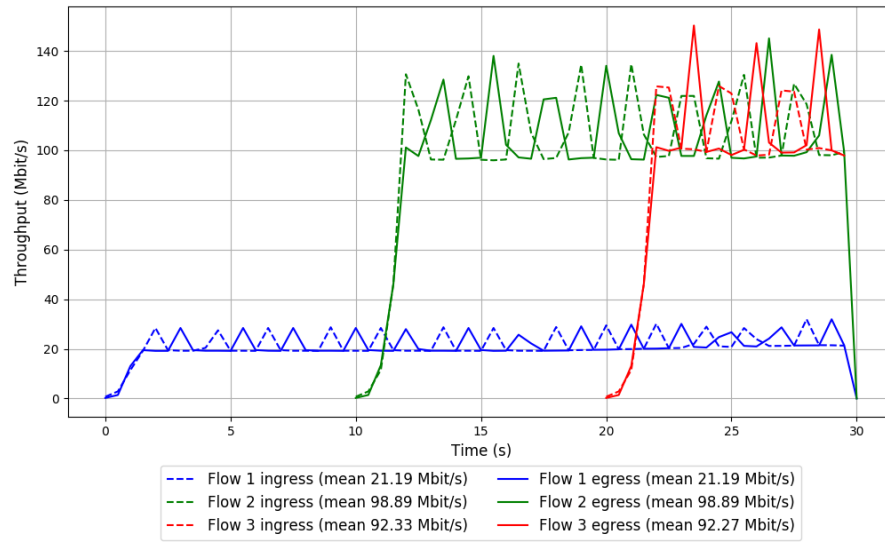
-- Flow 3:

Average throughput: 92.27 Mbit/s

95th percentile per-packet one-way delay: 119.452 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-03-06 20:37:07

End at: 2018-03-06 20:37:37

Below is generated by plot.py at 2018-03-07 01:53:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.24 Mbit/s

95th percentile per-packet one-way delay: 119.098 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 27.53 Mbit/s

95th percentile per-packet one-way delay: 115.071 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 96.98 Mbit/s

95th percentile per-packet one-way delay: 119.945 ms

Loss rate: 0.00%

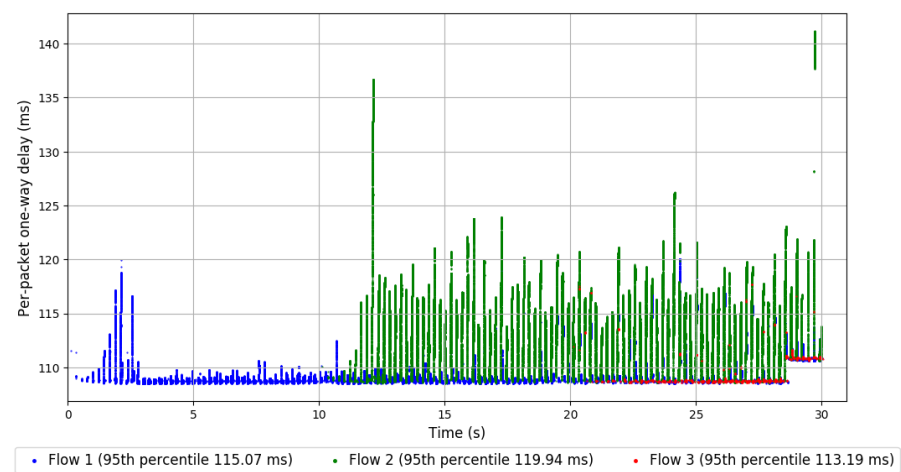
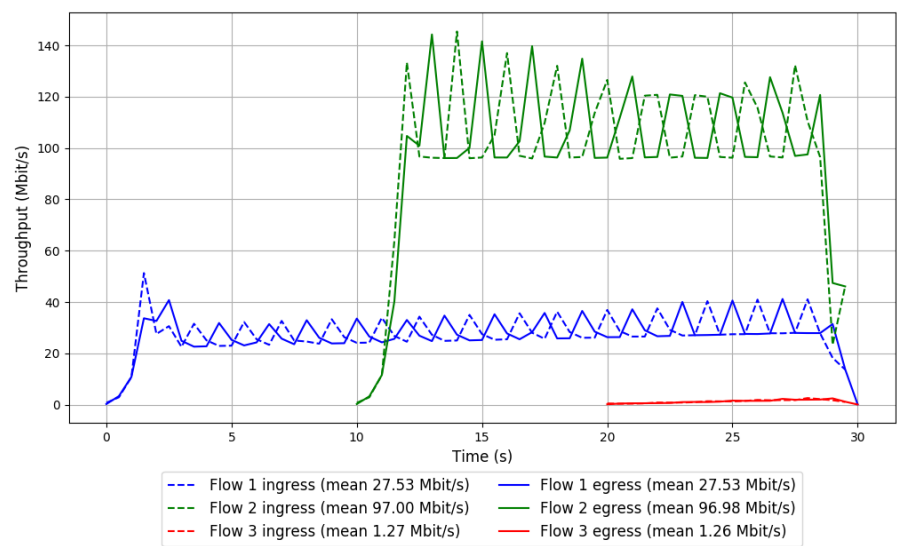
-- Flow 3:

Average throughput: 1.26 Mbit/s

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

Loss rate: 0.48%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-03-06 20:56:13

End at: 2018-03-06 20:56:43

Below is generated by plot.py at 2018-03-07 01:53:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.94 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 37.09 Mbit/s

95th percentile per-packet one-way delay: 113.072 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.41 Mbit/s

95th percentile per-packet one-way delay: 114.770 ms

Loss rate: 0.00%

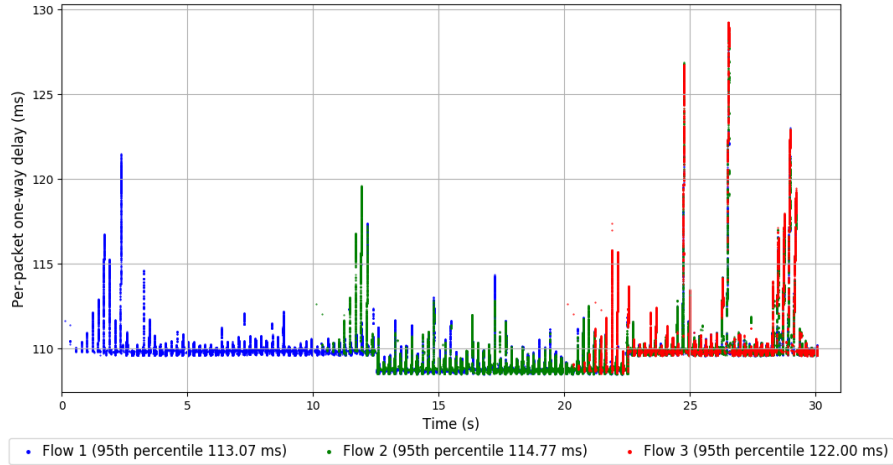
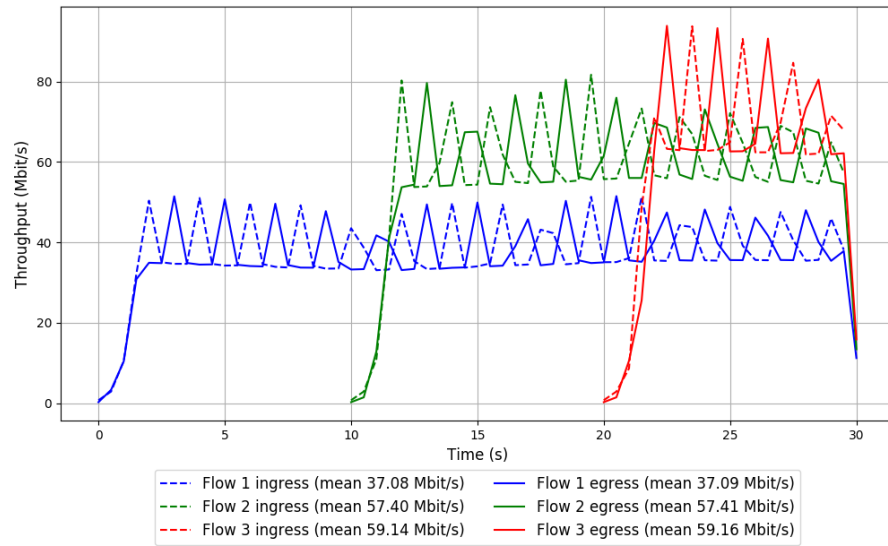
-- Flow 3:

Average throughput: 59.16 Mbit/s

95th percentile per-packet one-way delay: 121.997 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-03-06 21:15:35

End at: 2018-03-06 21:16:05

Below is generated by plot.py at 2018-03-07 01:53:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.57 Mbit/s

95th percentile per-packet one-way delay: 120.551 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 17.17 Mbit/s

95th percentile per-packet one-way delay: 119.543 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 98.24 Mbit/s

95th percentile per-packet one-way delay: 120.795 ms

Loss rate: 0.01%

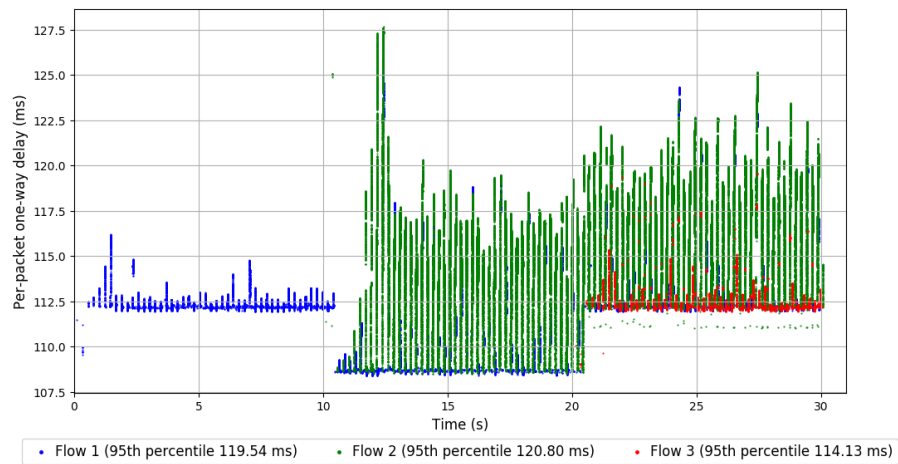
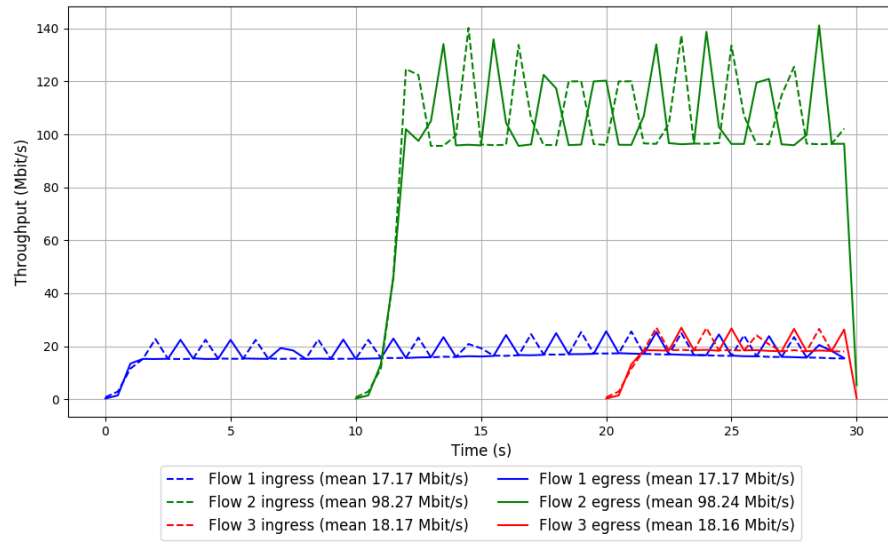
-- Flow 3:

Average throughput: 18.16 Mbit/s

95th percentile per-packet one-way delay: 114.131 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-03-06 21:34:49

End at: 2018-03-06 21:35:19

Below is generated by plot.py at 2018-03-07 01:53:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.43 Mbit/s

95th percentile per-packet one-way delay: 123.089 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 54.96 Mbit/s

95th percentile per-packet one-way delay: 123.359 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 118.723 ms

Loss rate: 0.05%

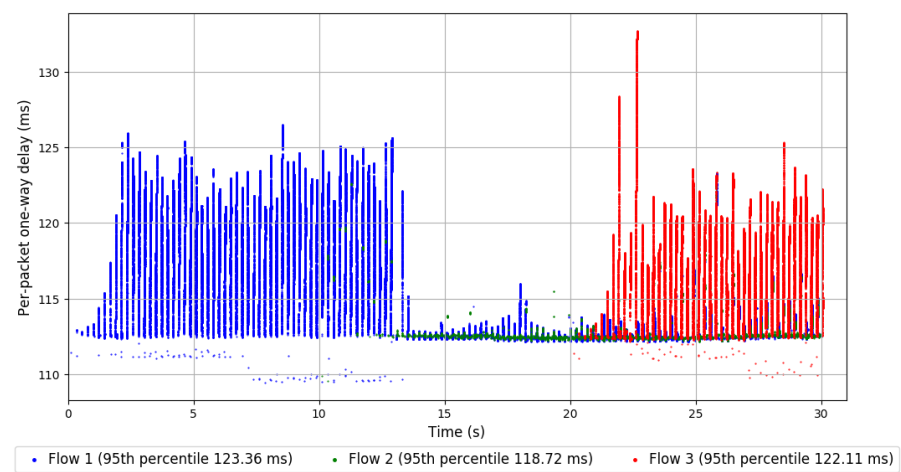
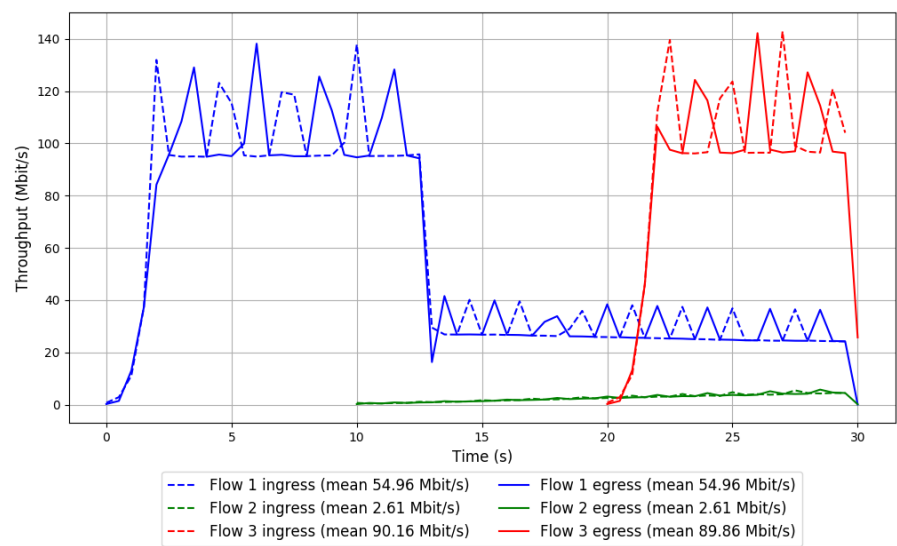
-- Flow 3:

Average throughput: 89.86 Mbit/s

95th percentile per-packet one-way delay: 122.114 ms

Loss rate: 0.33%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-03-06 21:53:55

End at: 2018-03-06 21:54:25

Below is generated by plot.py at 2018-03-07 01:53:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.39 Mbit/s

95th percentile per-packet one-way delay: 121.251 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 99.79 Mbit/s

95th percentile per-packet one-way delay: 121.614 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 85.86 Mbit/s

95th percentile per-packet one-way delay: 120.675 ms

Loss rate: 0.00%

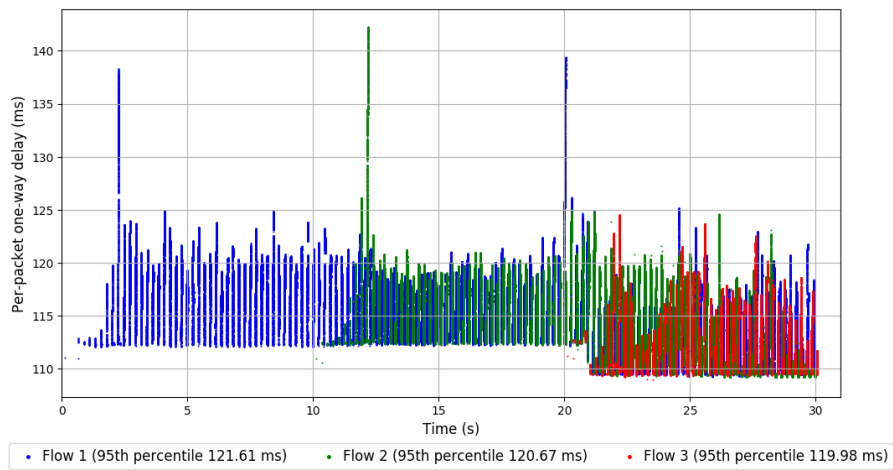
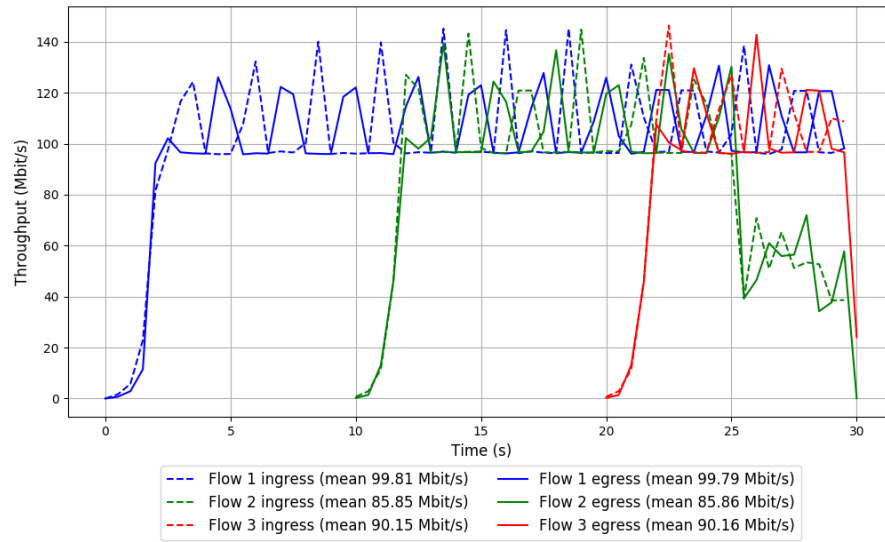
-- Flow 3:

Average throughput: 90.16 Mbit/s

95th percentile per-packet one-way delay: 119.982 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-03-06 22:13:39

End at: 2018-03-06 22:14:09

Below is generated by plot.py at 2018-03-07 01:53:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 175.90 Mbit/s

95th percentile per-packet one-way delay: 122.702 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 101.10 Mbit/s

95th percentile per-packet one-way delay: 123.073 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 97.86 Mbit/s

95th percentile per-packet one-way delay: 121.424 ms

Loss rate: 0.00%

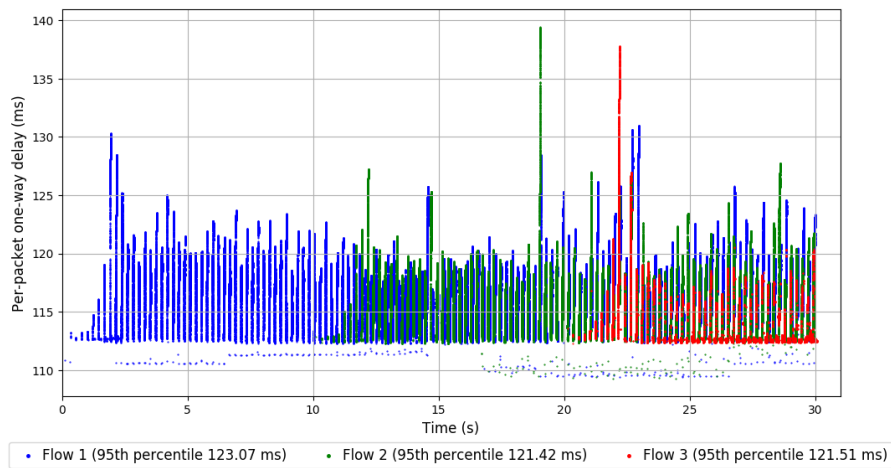
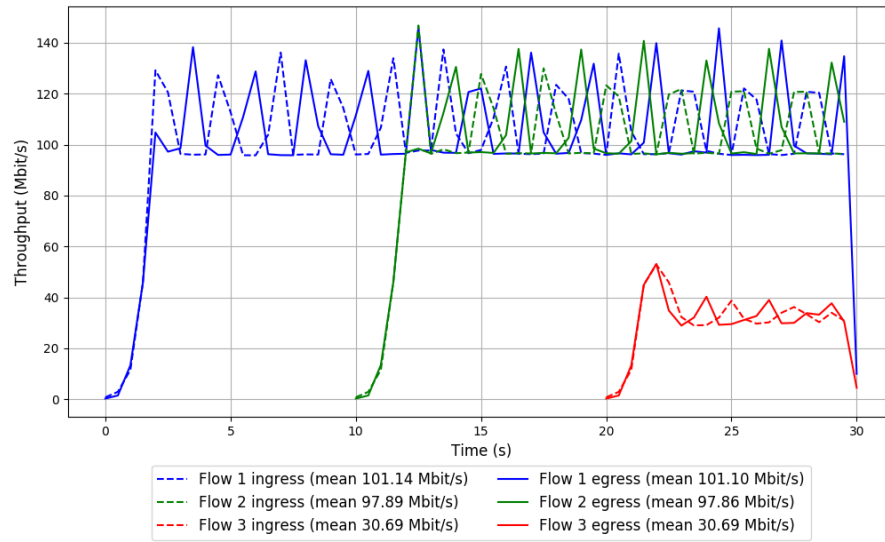
-- Flow 3:

Average throughput: 30.69 Mbit/s

95th percentile per-packet one-way delay: 121.507 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-03-06 22:32:52

End at: 2018-03-06 22:33:22

Below is generated by plot.py at 2018-03-07 01:53:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.27 Mbit/s

95th percentile per-packet one-way delay: 123.780 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 98.03 Mbit/s

95th percentile per-packet one-way delay: 124.010 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 91.53 Mbit/s

95th percentile per-packet one-way delay: 123.290 ms

Loss rate: 0.00%

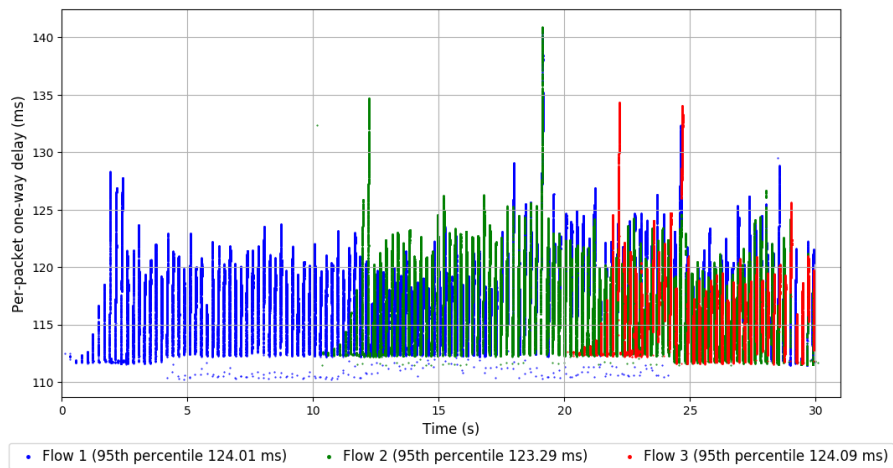
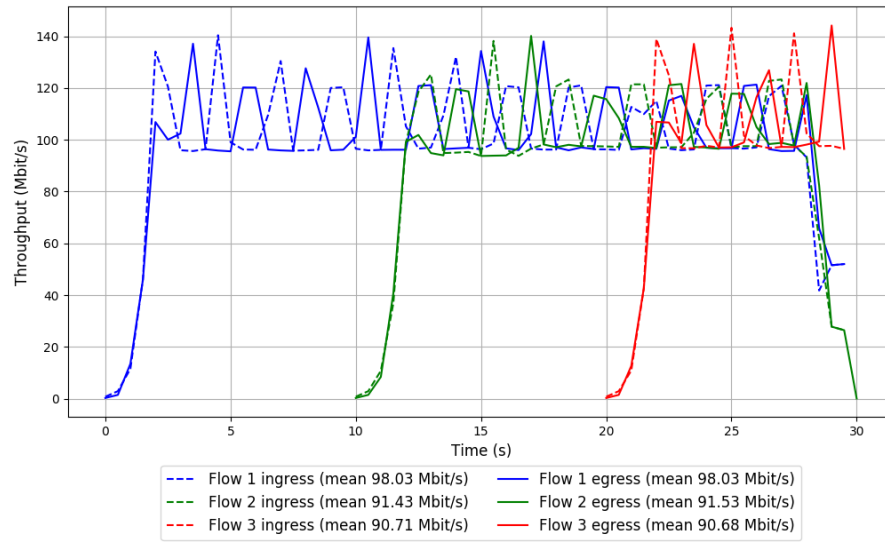
-- Flow 3:

Average throughput: 90.68 Mbit/s

95th percentile per-packet one-way delay: 124.094 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-03-06 22:52:28

End at: 2018-03-06 22:52:58

Below is generated by plot.py at 2018-03-07 01:53:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.78 Mbit/s

95th percentile per-packet one-way delay: 127.616 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 34.32 Mbit/s

95th percentile per-packet one-way delay: 128.748 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 10.96 Mbit/s

95th percentile per-packet one-way delay: 141.447 ms

Loss rate: 0.05%

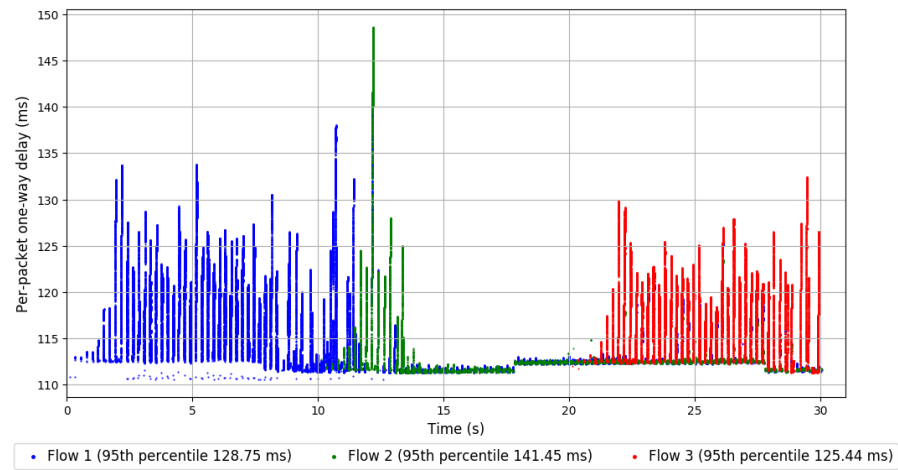
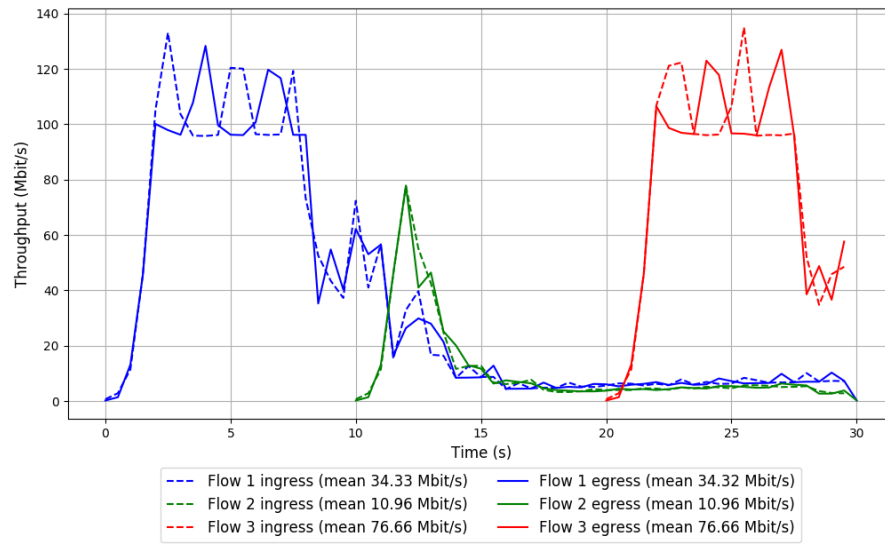
-- Flow 3:

Average throughput: 76.66 Mbit/s

95th percentile per-packet one-way delay: 125.437 ms

Loss rate: 0.01%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-03-06 23:11:24

End at: 2018-03-06 23:11:54

Below is generated by plot.py at 2018-03-07 01:53:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 41.73 Mbit/s

95th percentile per-packet one-way delay: 124.552 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 8.96 Mbit/s

95th percentile per-packet one-way delay: 128.085 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 5.21 Mbit/s

95th percentile per-packet one-way delay: 117.292 ms

Loss rate: 0.05%

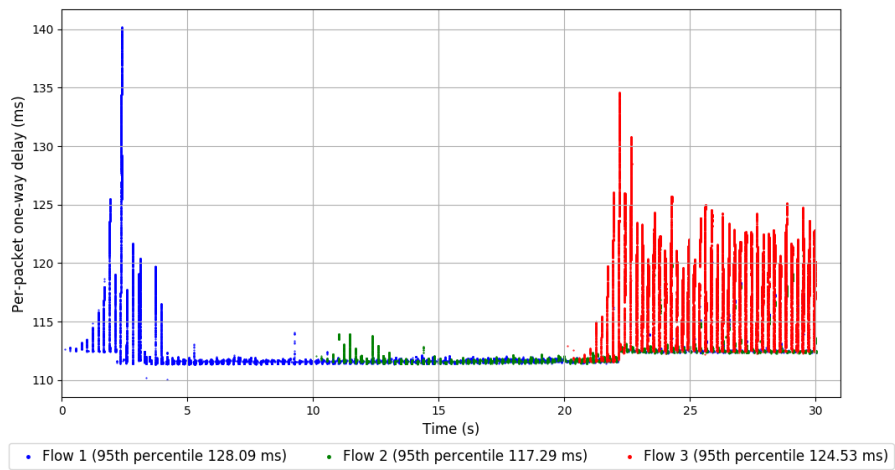
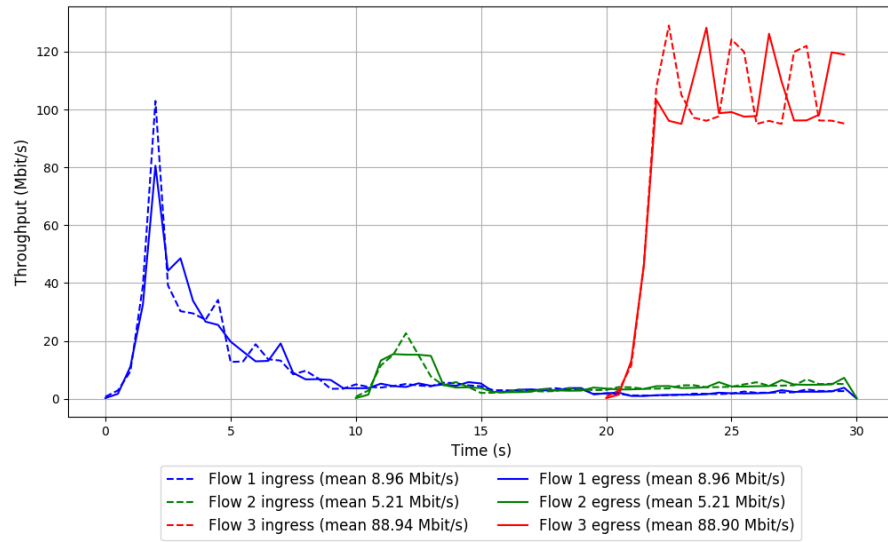
-- Flow 3:

Average throughput: 88.90 Mbit/s

95th percentile per-packet one-way delay: 124.532 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

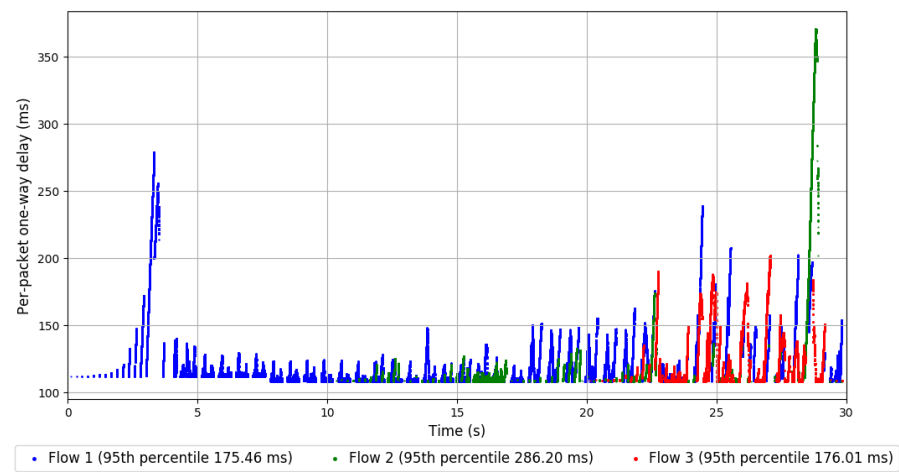
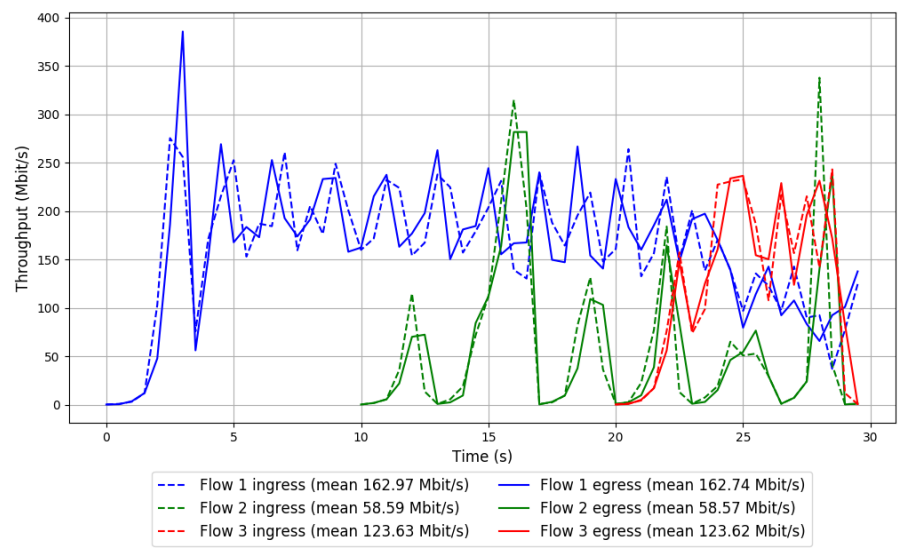


```
Run 1: Statistics of Verus

Start at: 2018-03-06 20:22:38
End at: 2018-03-06 20:23:08

# Below is generated by plot.py at 2018-03-07 01:53:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 241.79 Mbit/s
95th percentile per-packet one-way delay: 182.876 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 162.74 Mbit/s
95th percentile per-packet one-way delay: 175.455 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 58.57 Mbit/s
95th percentile per-packet one-way delay: 286.196 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 123.62 Mbit/s
95th percentile per-packet one-way delay: 176.009 ms
Loss rate: 0.00%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-03-06 20:41:26

End at: 2018-03-06 20:41:56

Below is generated by plot.py at 2018-03-07 01:53:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 213.66 Mbit/s

95th percentile per-packet one-way delay: 267.467 ms

Loss rate: 2.77%

-- Flow 1:

Average throughput: 124.31 Mbit/s

95th percentile per-packet one-way delay: 229.874 ms

Loss rate: 2.67%

-- Flow 2:

Average throughput: 58.84 Mbit/s

95th percentile per-packet one-way delay: 175.331 ms

Loss rate: 0.84%

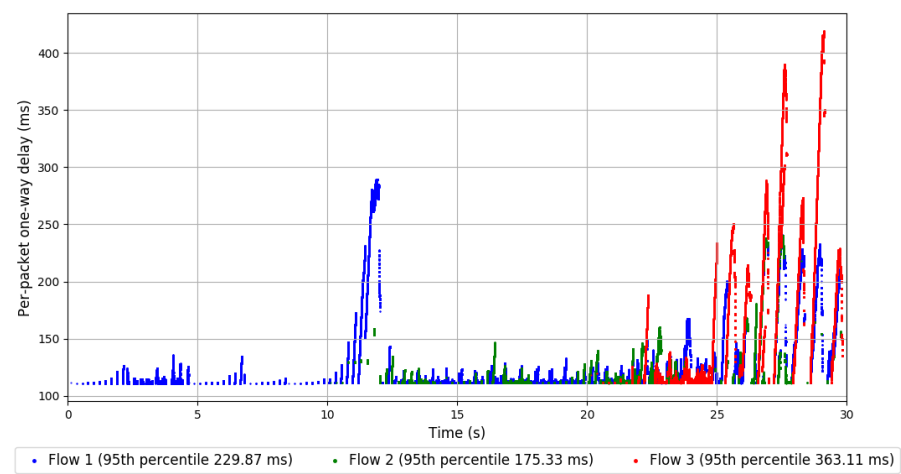
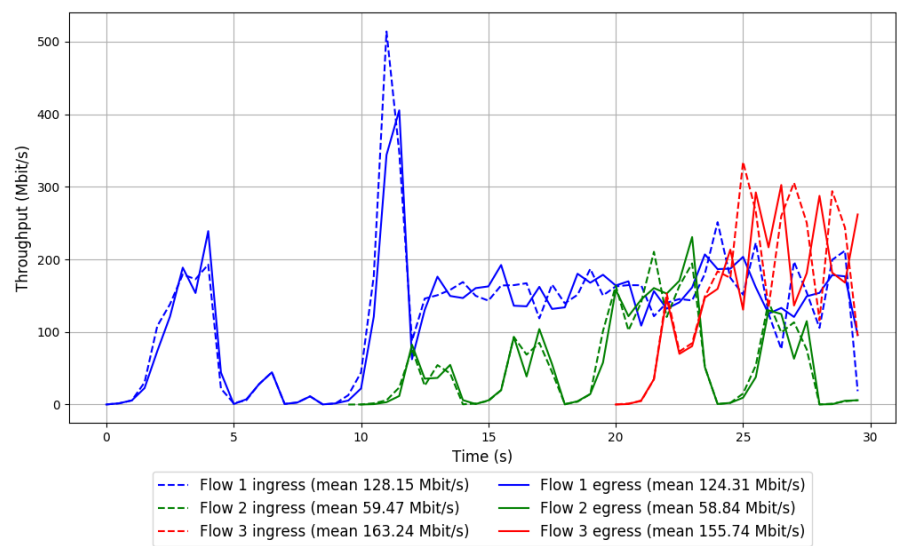
-- Flow 3:

Average throughput: 155.74 Mbit/s

95th percentile per-packet one-way delay: 363.114 ms

Loss rate: 4.43%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-03-06 21:00:36

End at: 2018-03-06 21:01:06

Below is generated by plot.py at 2018-03-07 01:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 216.32 Mbit/s

95th percentile per-packet one-way delay: 229.199 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 162.83 Mbit/s

95th percentile per-packet one-way delay: 184.901 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 68.03 Mbit/s

95th percentile per-packet one-way delay: 308.342 ms

Loss rate: 4.97%

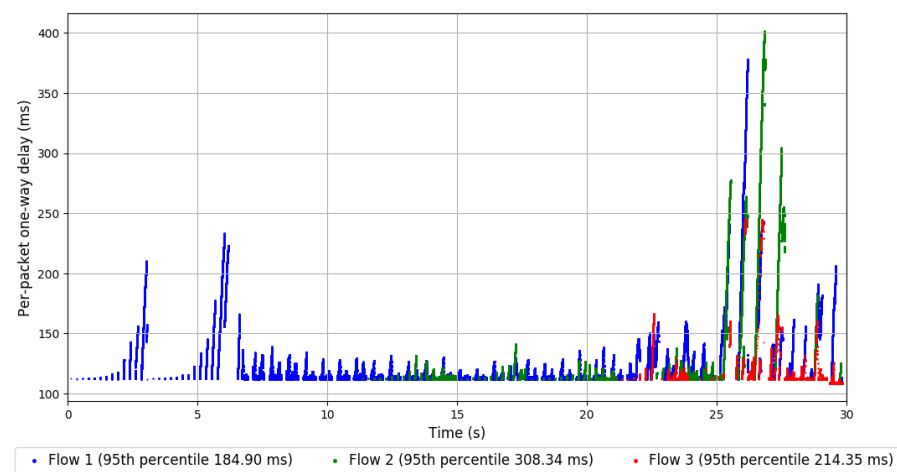
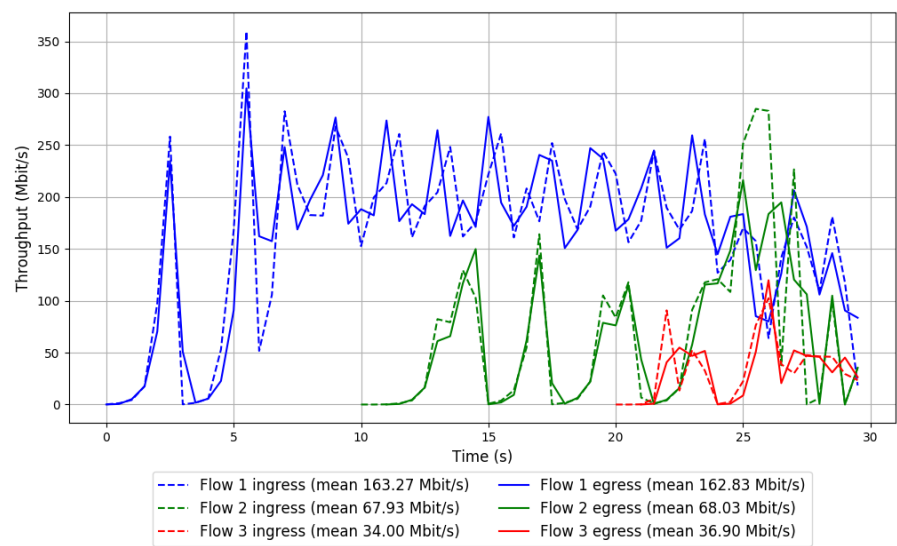
-- Flow 3:

Average throughput: 36.90 Mbit/s

95th percentile per-packet one-way delay: 214.351 ms

Loss rate: 2.65%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-03-06 21:19:55

End at: 2018-03-06 21:20:25

Below is generated by plot.py at 2018-03-07 01:54:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 242.99 Mbit/s

95th percentile per-packet one-way delay: 260.593 ms

Loss rate: 2.24%

-- Flow 1:

Average throughput: 134.84 Mbit/s

95th percentile per-packet one-way delay: 212.451 ms

Loss rate: 1.77%

-- Flow 2:

Average throughput: 73.18 Mbit/s

95th percentile per-packet one-way delay: 146.765 ms

Loss rate: 0.14%

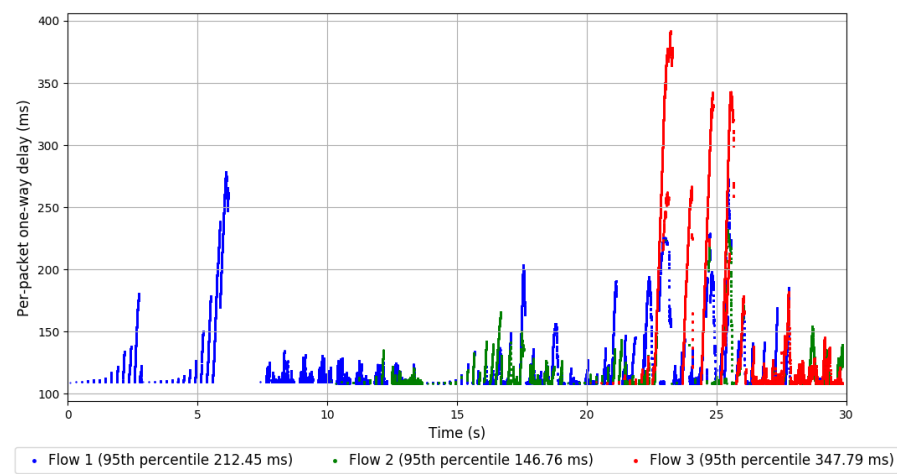
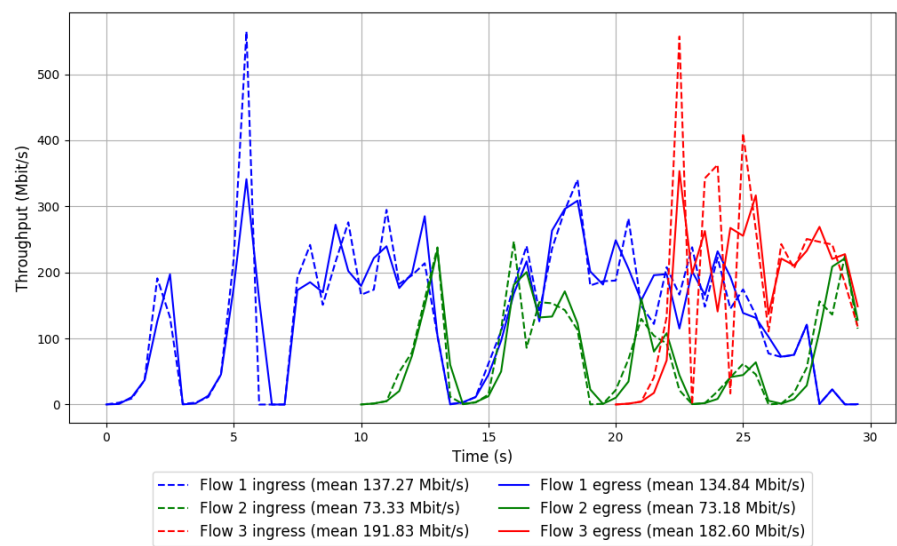
-- Flow 3:

Average throughput: 182.60 Mbit/s

95th percentile per-packet one-way delay: 347.789 ms

Loss rate: 4.89%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-03-06 21:39:08

End at: 2018-03-06 21:39:38

Below is generated by plot.py at 2018-03-07 01:55:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 233.75 Mbit/s

95th percentile per-packet one-way delay: 333.638 ms

Loss rate: 7.71%

-- Flow 1:

Average throughput: 185.16 Mbit/s

95th percentile per-packet one-way delay: 326.306 ms

Loss rate: 5.81%

-- Flow 2:

Average throughput: 38.38 Mbit/s

95th percentile per-packet one-way delay: 214.125 ms

Loss rate: 1.00%

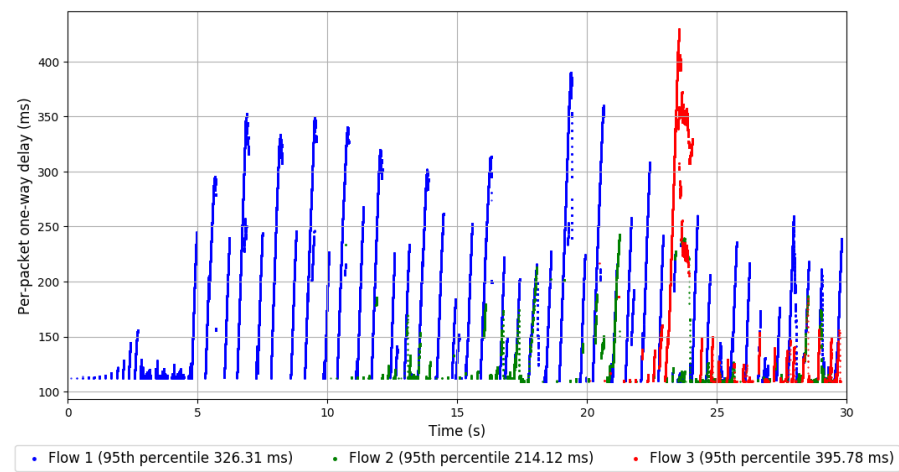
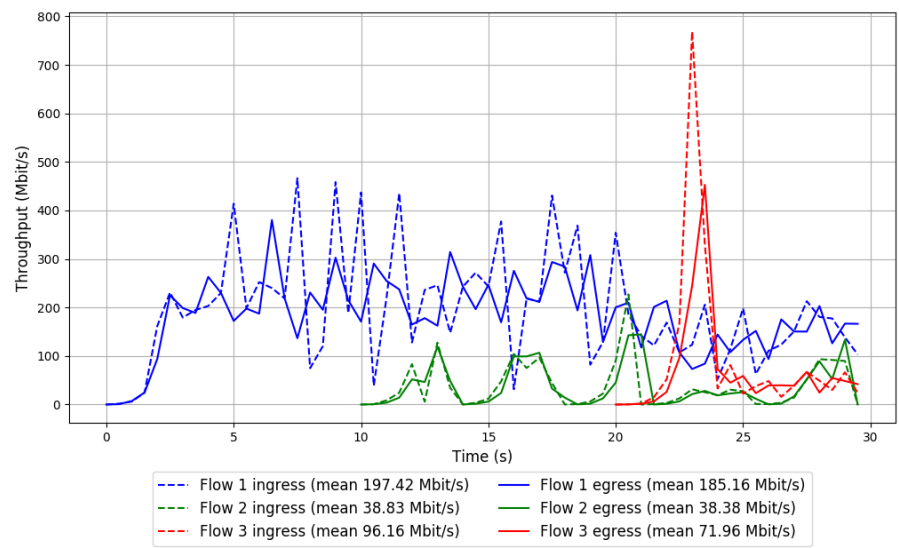
-- Flow 3:

Average throughput: 71.96 Mbit/s

95th percentile per-packet one-way delay: 395.777 ms

Loss rate: 25.16%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-03-06 21:58:20

End at: 2018-03-06 21:58:50

Below is generated by plot.py at 2018-03-07 01:55:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 246.94 Mbit/s

95th percentile per-packet one-way delay: 197.871 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 184.40 Mbit/s

95th percentile per-packet one-way delay: 177.389 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 62.54 Mbit/s

95th percentile per-packet one-way delay: 184.063 ms

Loss rate: 0.29%

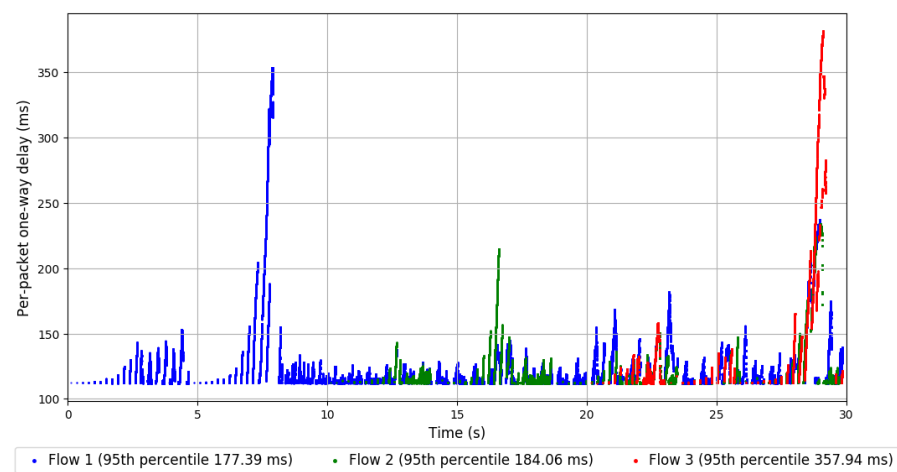
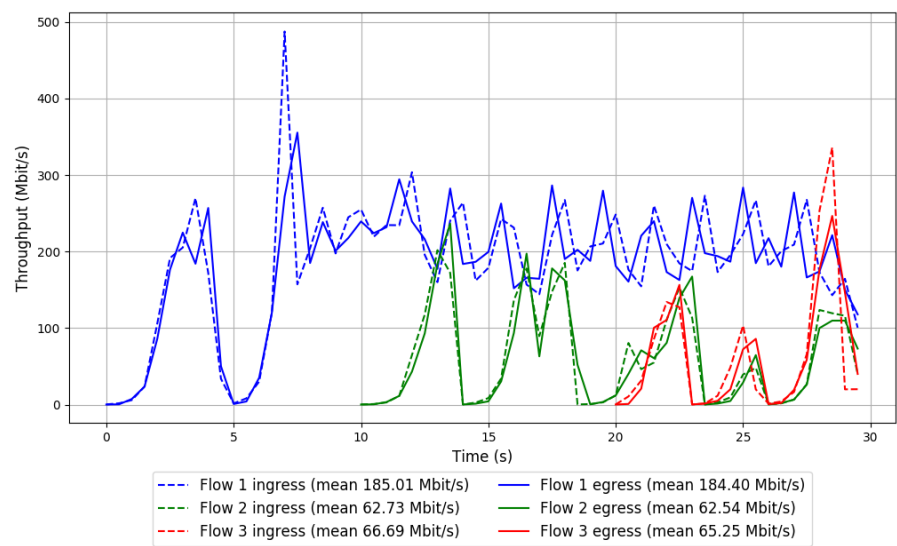
-- Flow 3:

Average throughput: 65.25 Mbit/s

95th percentile per-packet one-way delay: 357.945 ms

Loss rate: 2.08%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-03-06 22:18:06

End at: 2018-03-06 22:18:36

Below is generated by plot.py at 2018-03-07 01:55:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.48 Mbit/s

95th percentile per-packet one-way delay: 149.572 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.64 Mbit/s

95th percentile per-packet one-way delay: 159.992 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.26 Mbit/s

95th percentile per-packet one-way delay: 138.929 ms

Loss rate: 0.00%

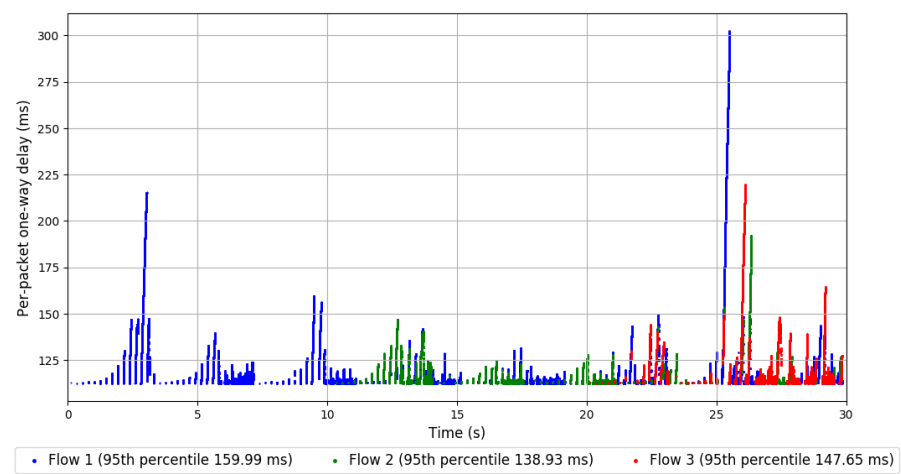
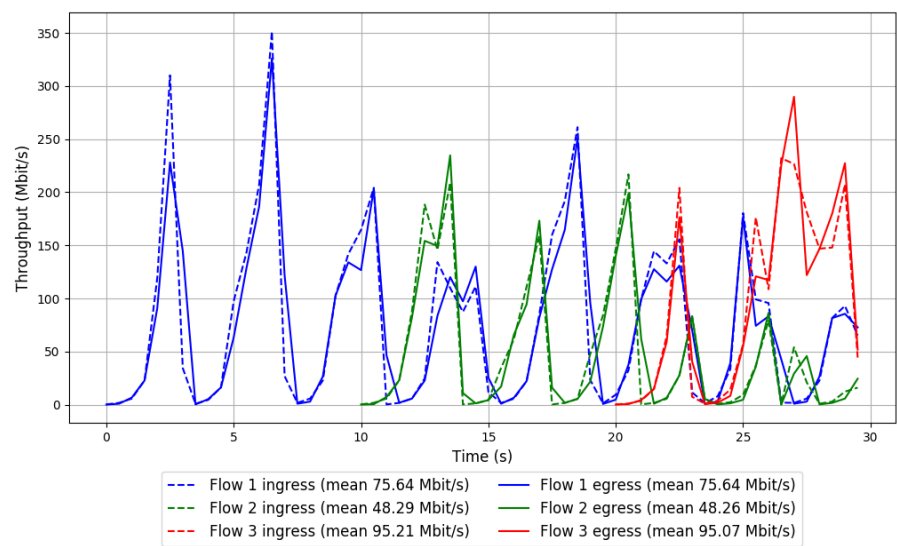
-- Flow 3:

Average throughput: 95.07 Mbit/s

95th percentile per-packet one-way delay: 147.646 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-03-06 22:37:21

End at: 2018-03-06 22:37:51

Below is generated by plot.py at 2018-03-07 01:57:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 264.53 Mbit/s

95th percentile per-packet one-way delay: 250.838 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 164.09 Mbit/s

95th percentile per-packet one-way delay: 223.373 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 136.89 Mbit/s

95th percentile per-packet one-way delay: 305.535 ms

Loss rate: 2.04%

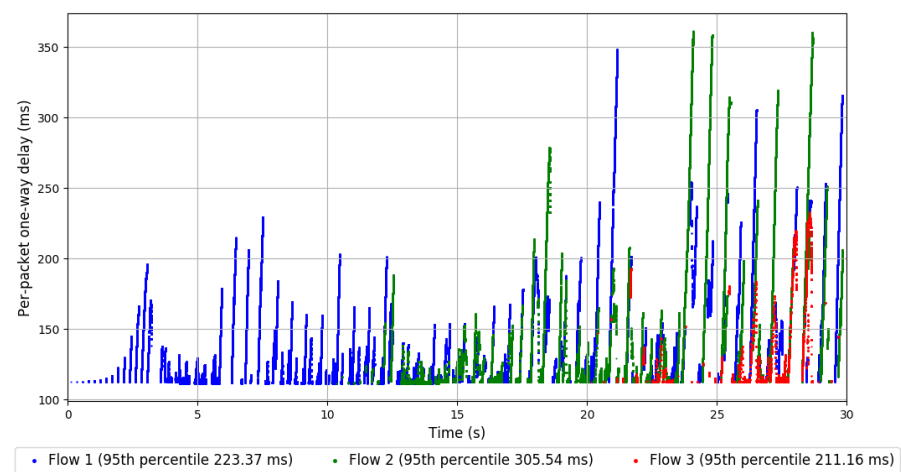
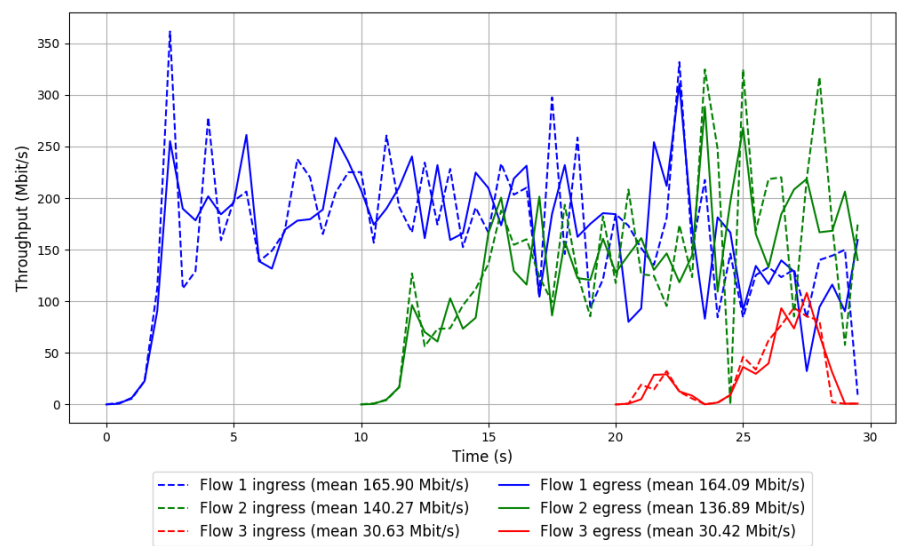
-- Flow 3:

Average throughput: 30.42 Mbit/s

95th percentile per-packet one-way delay: 211.160 ms

Loss rate: 0.36%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-03-06 22:56:51

End at: 2018-03-06 22:57:21

Below is generated by plot.py at 2018-03-07 01:57:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 174.08 Mbit/s

95th percentile per-packet one-way delay: 271.894 ms

Loss rate: 3.95%

-- Flow 1:

Average throughput: 107.82 Mbit/s

95th percentile per-packet one-way delay: 289.275 ms

Loss rate: 4.30%

-- Flow 2:

Average throughput: 80.74 Mbit/s

95th percentile per-packet one-way delay: 232.212 ms

Loss rate: 4.14%

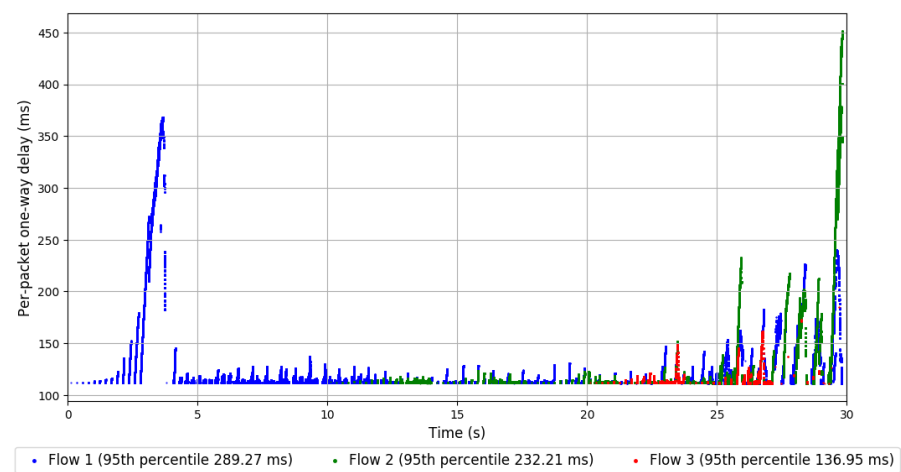
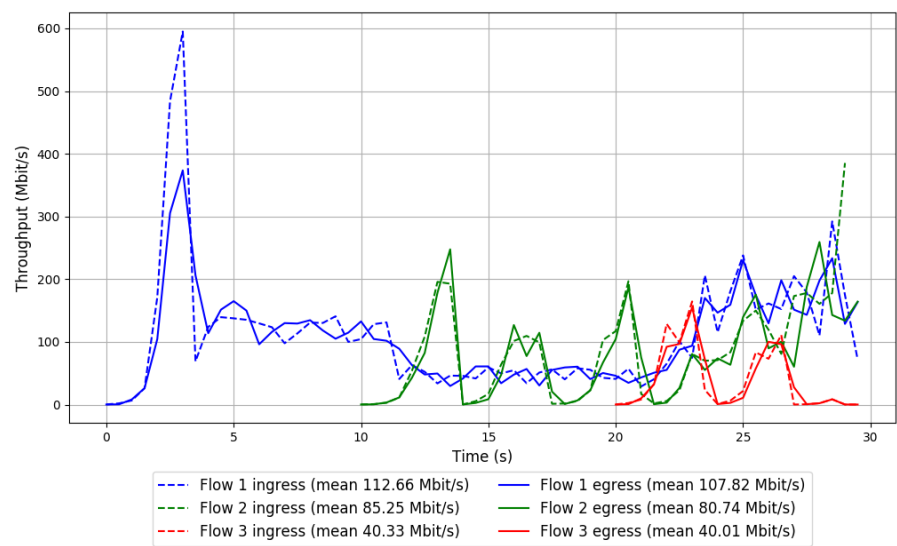
-- Flow 3:

Average throughput: 40.01 Mbit/s

95th percentile per-packet one-way delay: 136.947 ms

Loss rate: 0.03%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-03-06 23:15:41

End at: 2018-03-06 23:16:11

Below is generated by plot.py at 2018-03-07 01:57:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 238.86 Mbit/s

95th percentile per-packet one-way delay: 196.524 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 105.20 Mbit/s

95th percentile per-packet one-way delay: 191.274 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 168.11 Mbit/s

95th percentile per-packet one-way delay: 205.467 ms

Loss rate: 0.04%

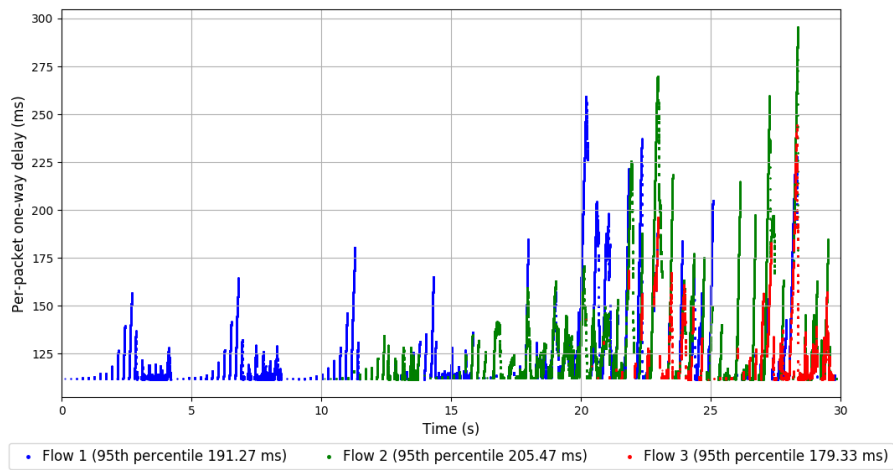
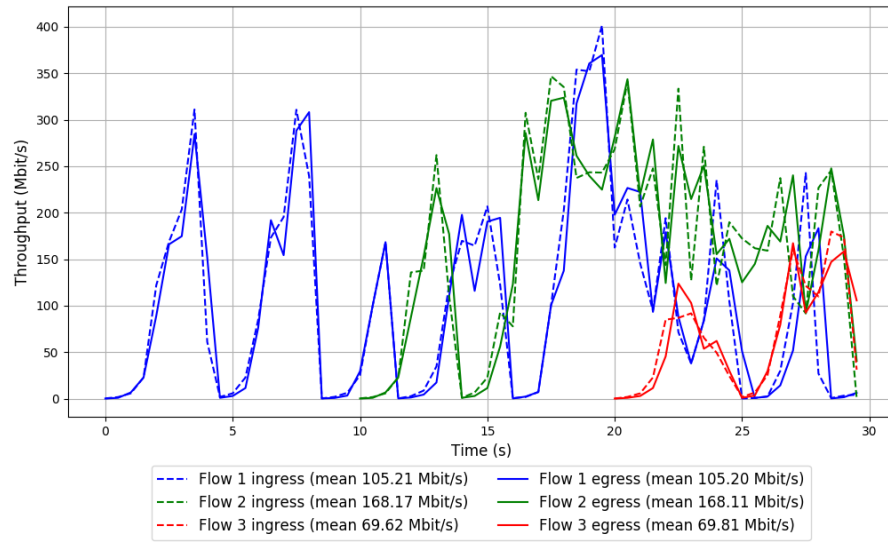
-- Flow 3:

Average throughput: 69.81 Mbit/s

95th percentile per-packet one-way delay: 179.328 ms

Loss rate: 0.03%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-03-06 20:29:53

End at: 2018-03-06 20:30:23

Below is generated by plot.py at 2018-03-07 01:57:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.06 Mbit/s

95th percentile per-packet one-way delay: 111.678 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 80.76 Mbit/s

95th percentile per-packet one-way delay: 111.355 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 53.67 Mbit/s

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

Loss rate: 0.02%

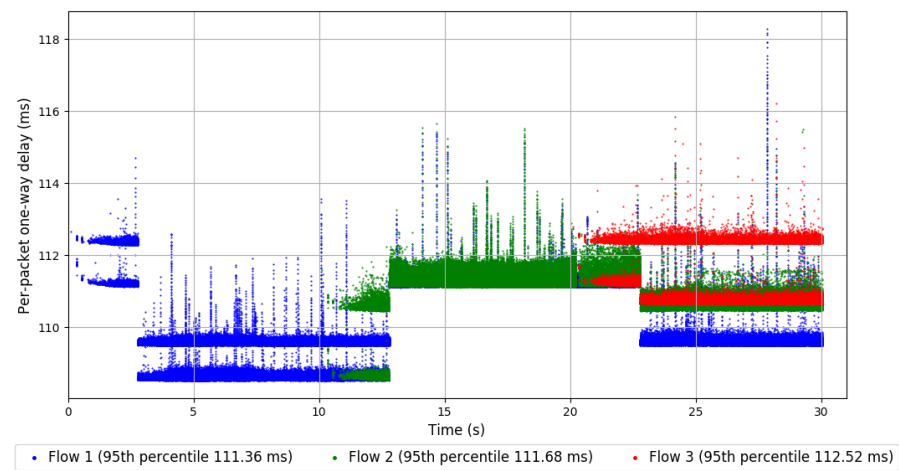
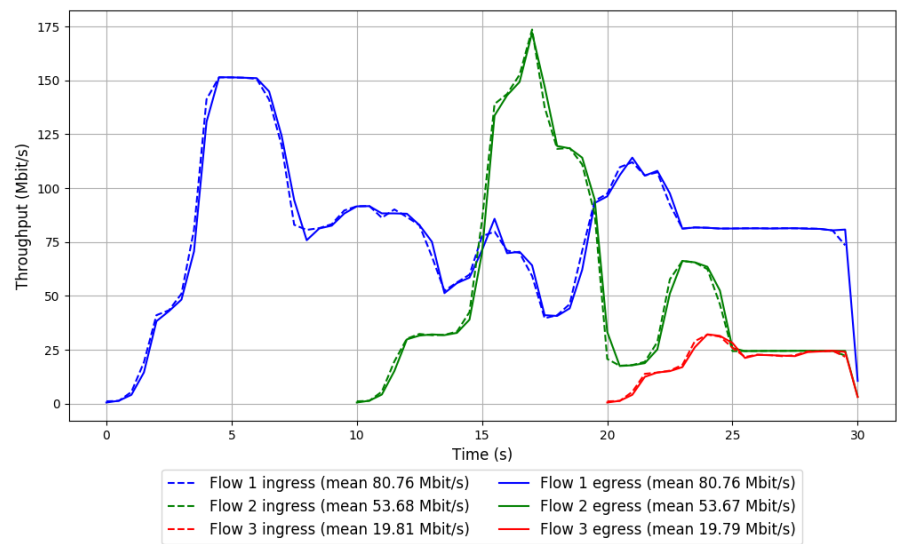
-- Flow 3:

Average throughput: 19.79 Mbit/s

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

Loss rate: 0.08%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-03-06 20:48:47

End at: 2018-03-06 20:49:17

Below is generated by plot.py at 2018-03-07 01:58:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.20 Mbit/s

95th percentile per-packet one-way delay: 111.182 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 43.67 Mbit/s

95th percentile per-packet one-way delay: 110.894 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 79.64 Mbit/s

95th percentile per-packet one-way delay: 111.085 ms

Loss rate: 0.06%

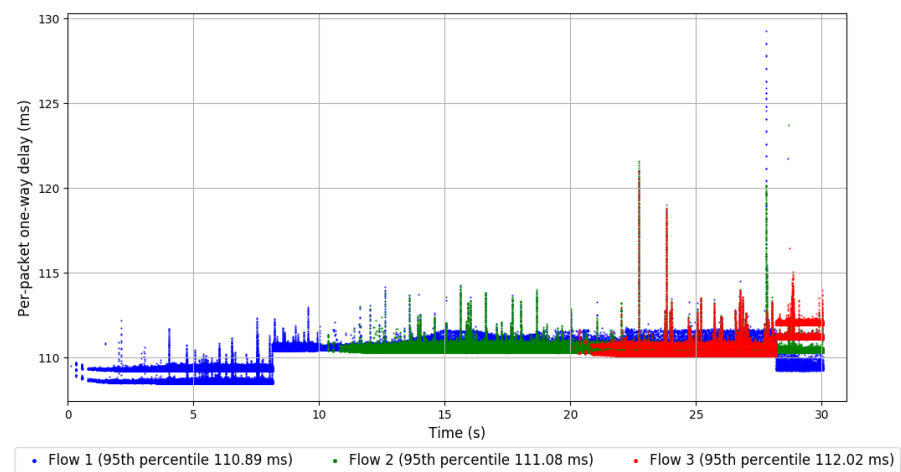
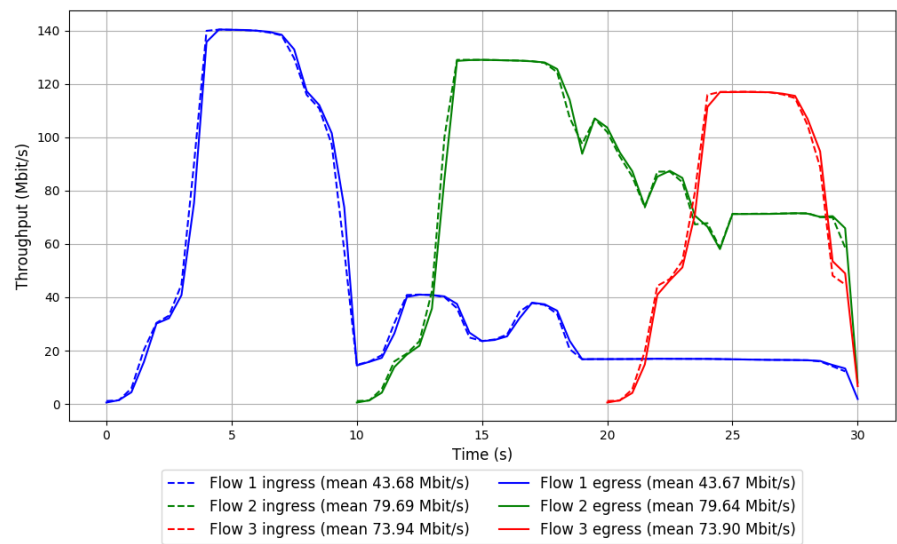
-- Flow 3:

Average throughput: 73.90 Mbit/s

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

Loss rate: 0.06%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-03-06 21:08:06

End at: 2018-03-06 21:08:36

Below is generated by plot.py at 2018-03-07 01:58:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.59 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 80.62 Mbit/s

95th percentile per-packet one-way delay: 112.068 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 59.30 Mbit/s

95th percentile per-packet one-way delay: 112.224 ms

Loss rate: 0.00%

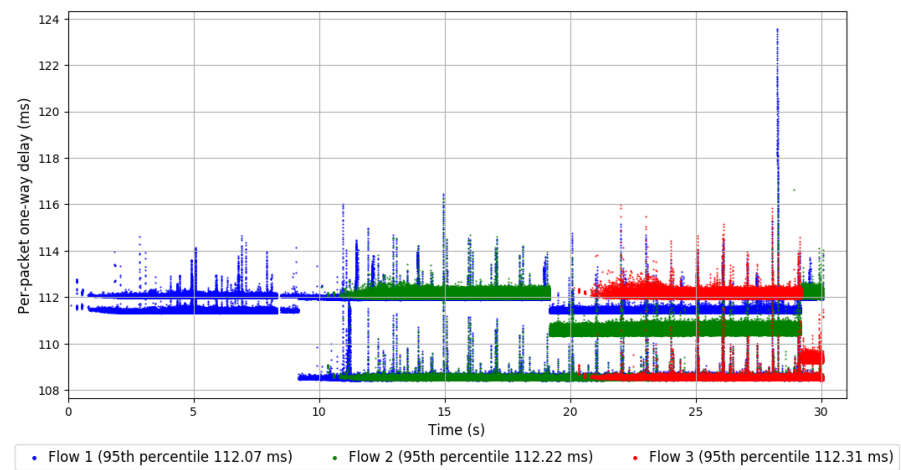
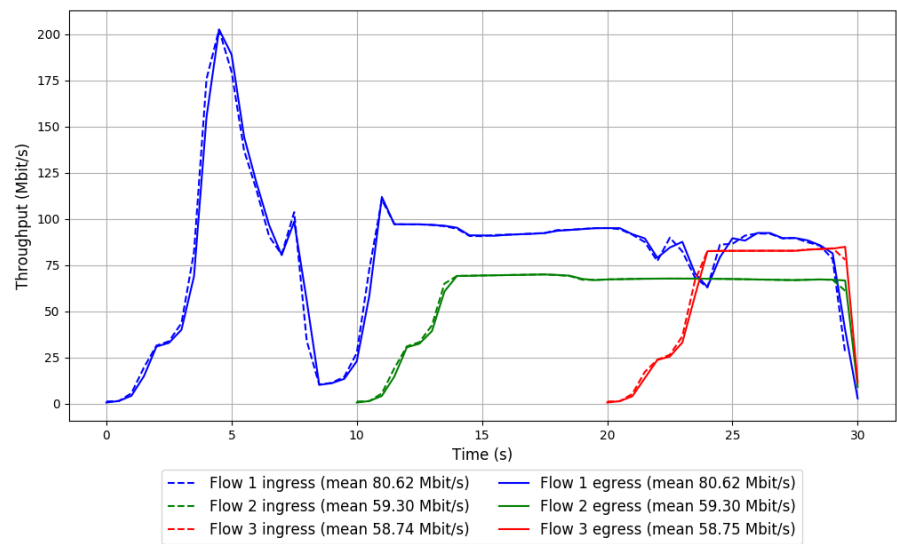
-- Flow 3:

Average throughput: 58.75 Mbit/s

95th percentile per-packet one-way delay: 112.307 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-03-06 21:27:19

End at: 2018-03-06 21:27:49

Below is generated by plot.py at 2018-03-07 01:59:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 147.76 Mbit/s

95th percentile per-packet one-way delay: 112.509 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 80.68 Mbit/s

95th percentile per-packet one-way delay: 112.499 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 66.02 Mbit/s

95th percentile per-packet one-way delay: 112.507 ms

Loss rate: 0.00%

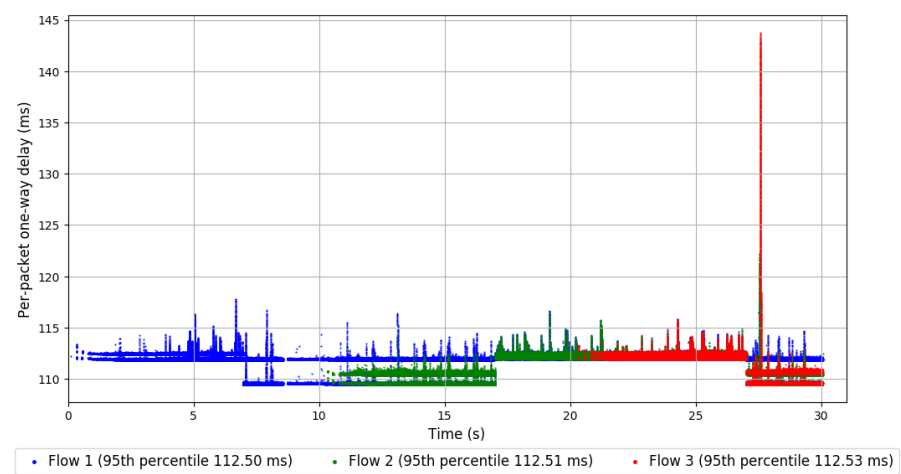
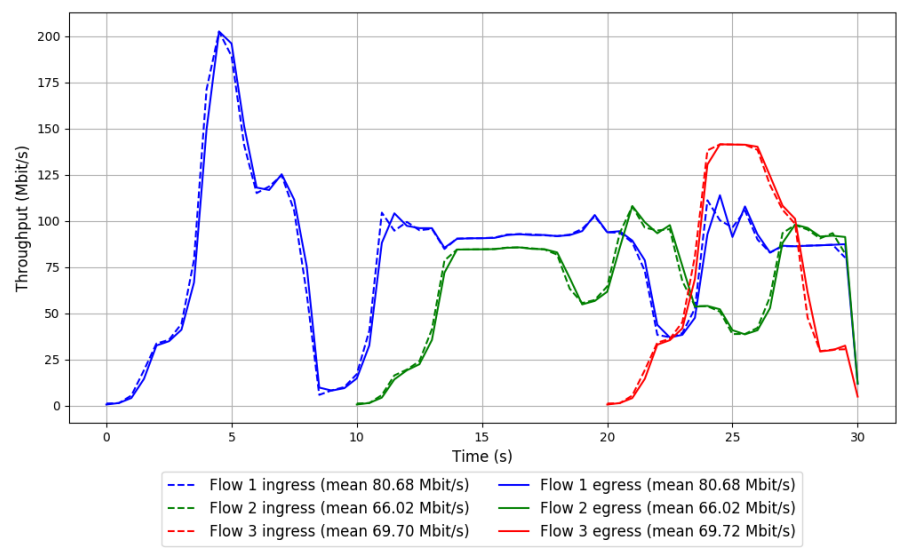
-- Flow 3:

Average throughput: 69.72 Mbit/s

95th percentile per-packet one-way delay: 112.534 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-03-06 21:46:27

End at: 2018-03-06 21:46:57

Below is generated by plot.py at 2018-03-07 02:00:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 157.24 Mbit/s

95th percentile per-packet one-way delay: 112.334 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 81.05 Mbit/s

95th percentile per-packet one-way delay: 112.352 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 75.72 Mbit/s

95th percentile per-packet one-way delay: 112.294 ms

Loss rate: 0.00%

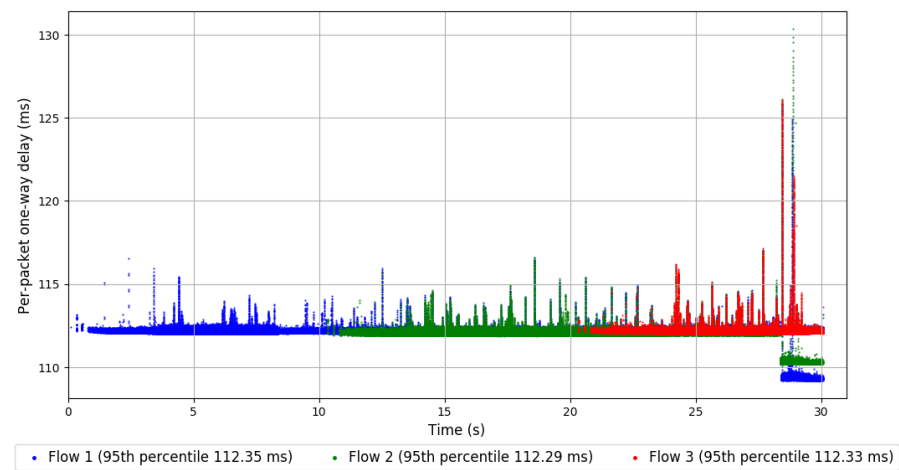
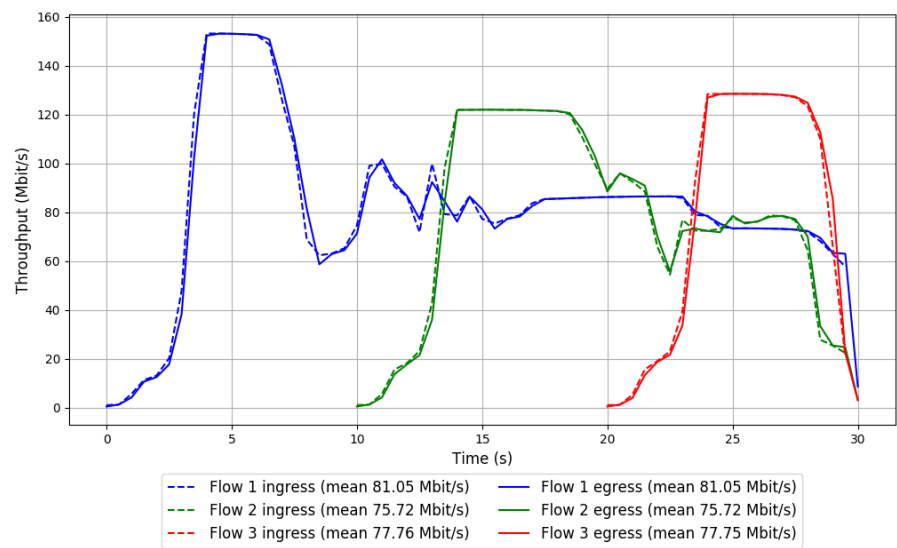
-- Flow 3:

Average throughput: 77.75 Mbit/s

95th percentile per-packet one-way delay: 112.325 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-03-06 22:06:05

End at: 2018-03-06 22:06:35

Below is generated by plot.py at 2018-03-07 02:01:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 154.37 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.41 Mbit/s

95th percentile per-packet one-way delay: 112.289 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 82.51 Mbit/s

95th percentile per-packet one-way delay: 112.304 ms

Loss rate: 0.00%

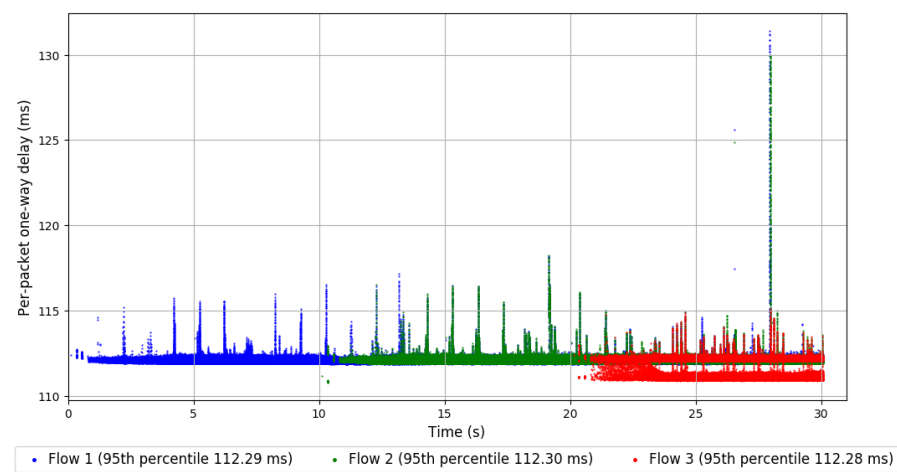
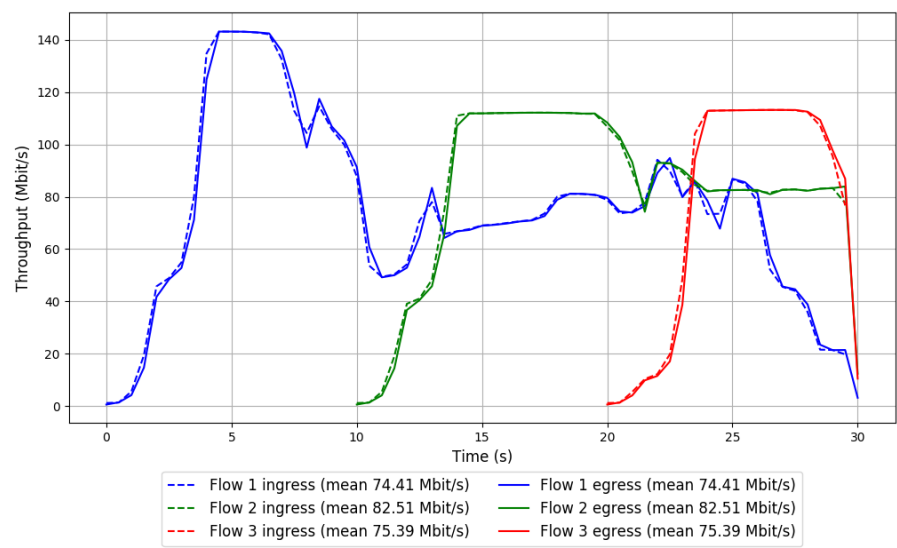
-- Flow 3:

Average throughput: 75.39 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-03-06 22:25:30

End at: 2018-03-06 22:26:00

Below is generated by plot.py at 2018-03-07 02:01:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.94 Mbit/s

95th percentile per-packet one-way delay: 112.246 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 80.66 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 77.51 Mbit/s

95th percentile per-packet one-way delay: 112.246 ms

Loss rate: 0.00%

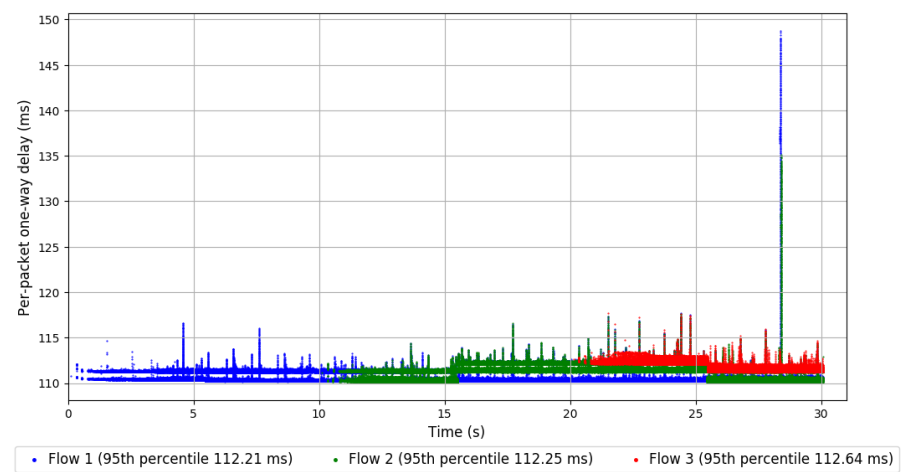
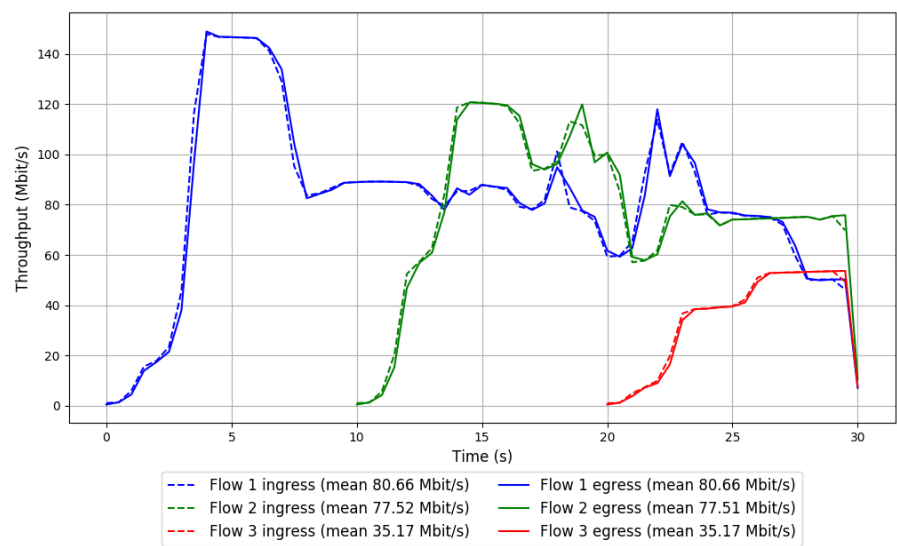
-- Flow 3:

Average throughput: 35.17 Mbit/s

95th percentile per-packet one-way delay: 112.640 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-03-06 22:45:00

End at: 2018-03-06 22:45:30

Below is generated by plot.py at 2018-03-07 02:01:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.09 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.21 Mbit/s

95th percentile per-packet one-way delay: 112.401 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 62.36 Mbit/s

95th percentile per-packet one-way delay: 112.476 ms

Loss rate: 0.00%

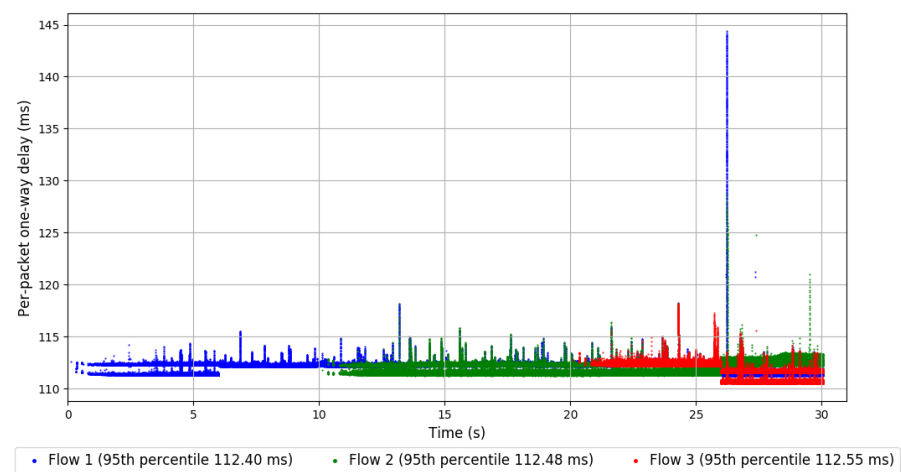
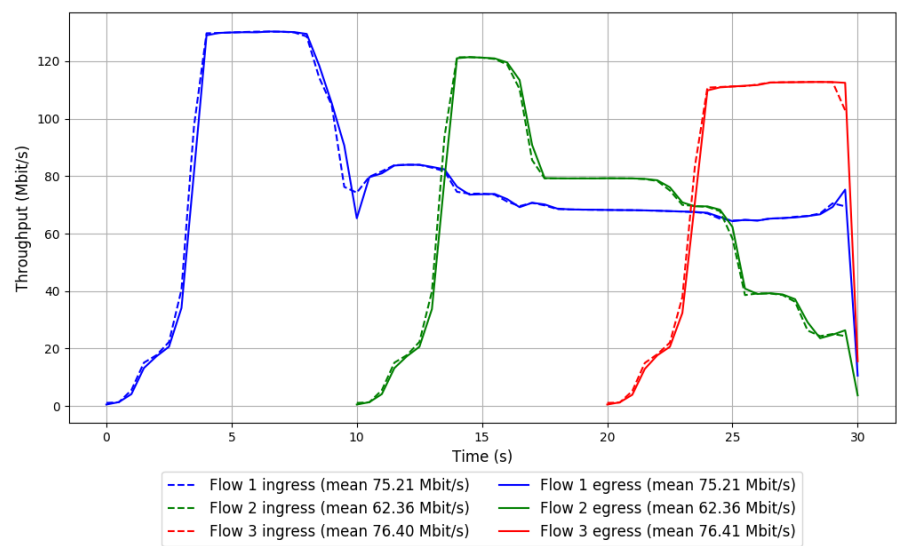
-- Flow 3:

Average throughput: 76.41 Mbit/s

95th percentile per-packet one-way delay: 112.552 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-03-06 23:04:00

End at: 2018-03-06 23:04:30

Below is generated by plot.py at 2018-03-07 02:01:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 133.87 Mbit/s

95th percentile per-packet one-way delay: 112.338 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 78.66 Mbit/s

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

Loss rate: 0.06%

-- Flow 2:

Average throughput: 43.27 Mbit/s

95th percentile per-packet one-way delay: 112.345 ms

Loss rate: 0.05%

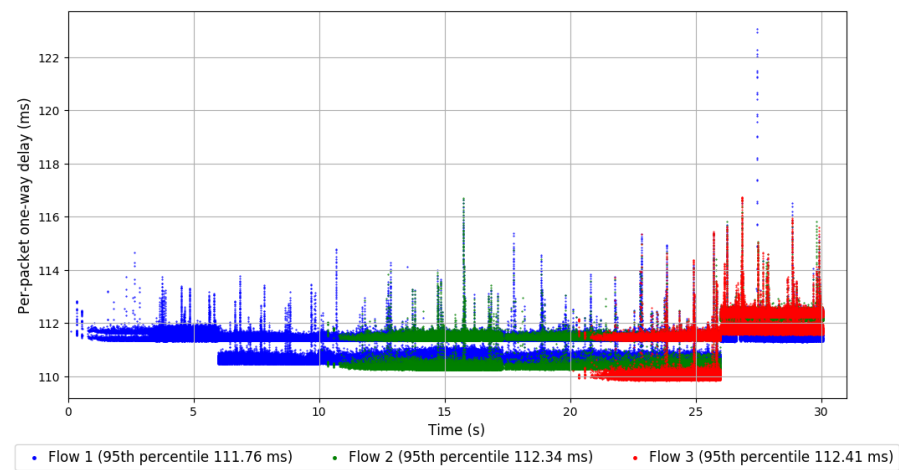
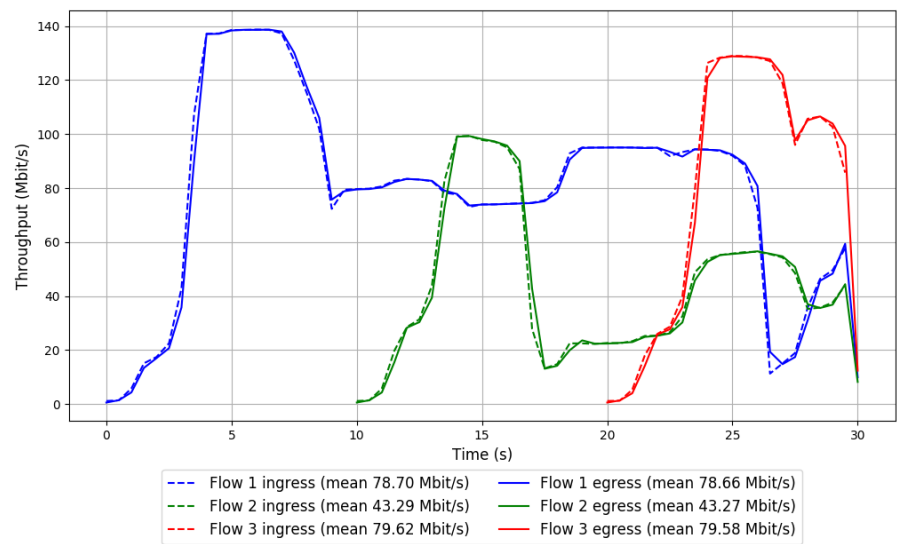
-- Flow 3:

Average throughput: 79.58 Mbit/s

95th percentile per-packet one-way delay: 112.411 ms

Loss rate: 0.05%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-03-06 23:23:04

End at: 2018-03-06 23:23:34

Below is generated by plot.py at 2018-03-07 02:05:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 259.92 Mbit/s

95th percentile per-packet one-way delay: 298.181 ms

Loss rate: 24.10%

-- Flow 1:

Average throughput: 65.36 Mbit/s

95th percentile per-packet one-way delay: 111.852 ms

Loss rate: 1.22%

-- Flow 2:

Average throughput: 154.19 Mbit/s

95th percentile per-packet one-way delay: 293.609 ms

Loss rate: 22.64%

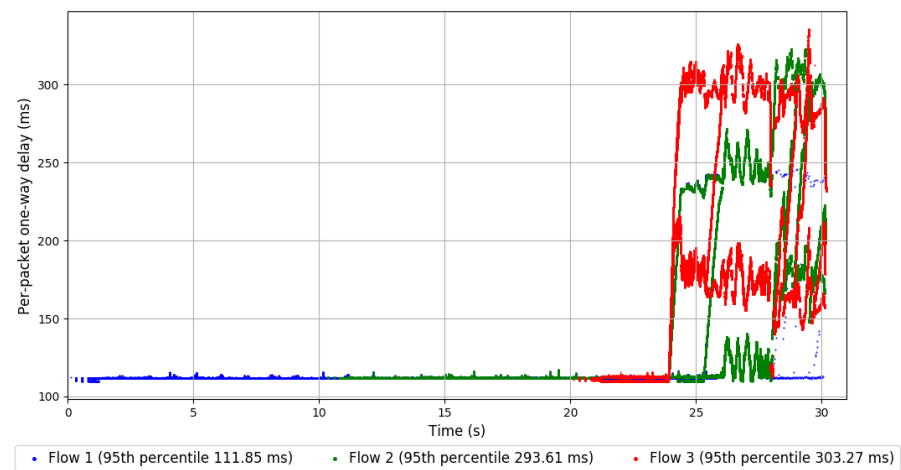
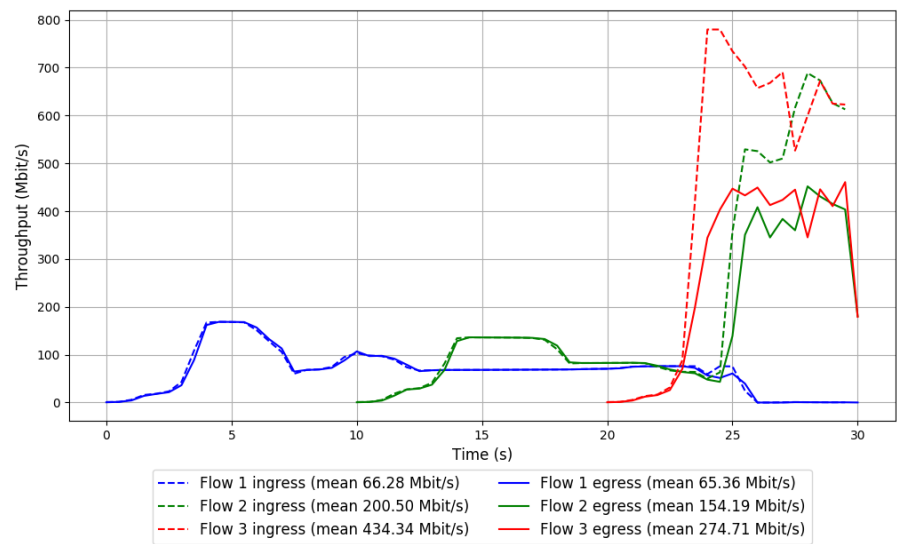
-- Flow 3:

Average throughput: 274.71 Mbit/s

95th percentile per-packet one-way delay: 303.275 ms

Loss rate: 35.98%

Run 10: Report of Copa — Data Link

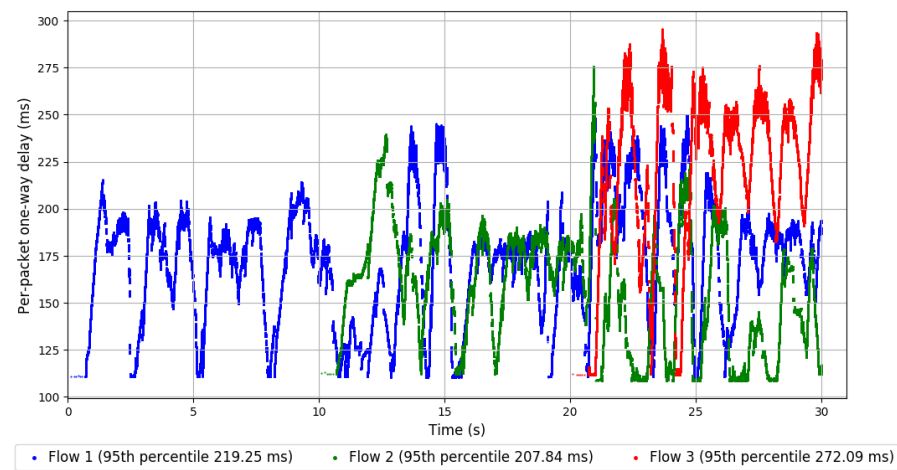
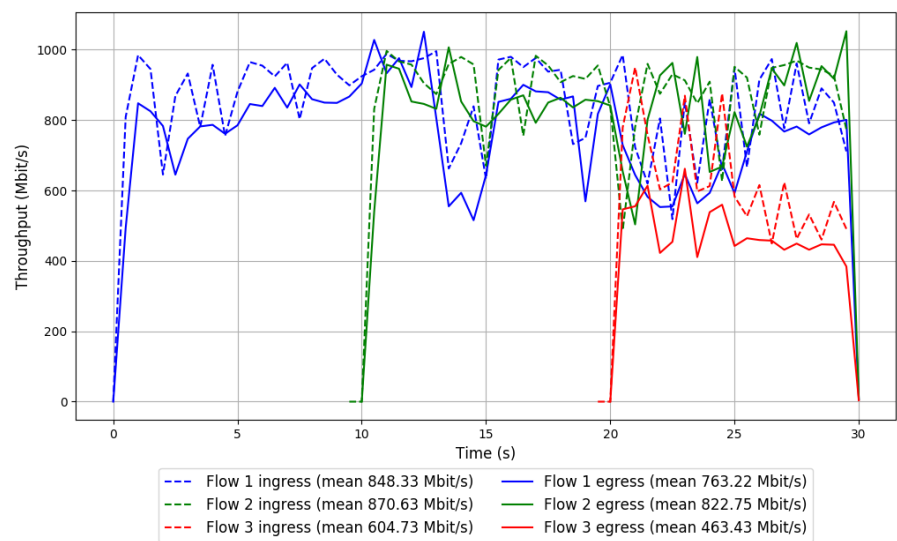


```
Run 1: Statistics of FillP

Start at: 2018-03-06 20:32:26
End at: 2018-03-06 20:32:56

# Below is generated by plot.py at 2018-03-07 02:23:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1464.87 Mbit/s
95th percentile per-packet one-way delay: 235.873 ms
Loss rate: 10.06%
-- Flow 1:
Average throughput: 763.22 Mbit/s
95th percentile per-packet one-way delay: 219.246 ms
Loss rate: 10.03%
-- Flow 2:
Average throughput: 822.75 Mbit/s
95th percentile per-packet one-way delay: 207.838 ms
Loss rate: 5.51%
-- Flow 3:
Average throughput: 463.43 Mbit/s
95th percentile per-packet one-way delay: 272.086 ms
Loss rate: 23.37%
```


Run 1: Report of FillP — Data Link

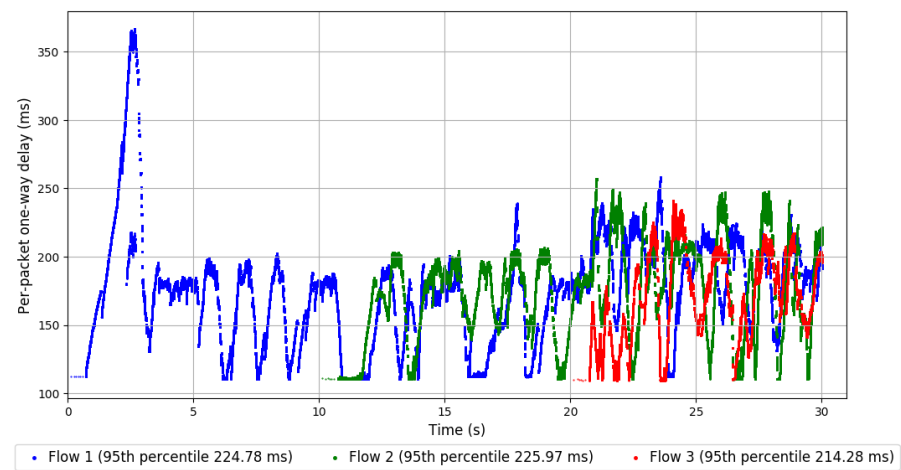
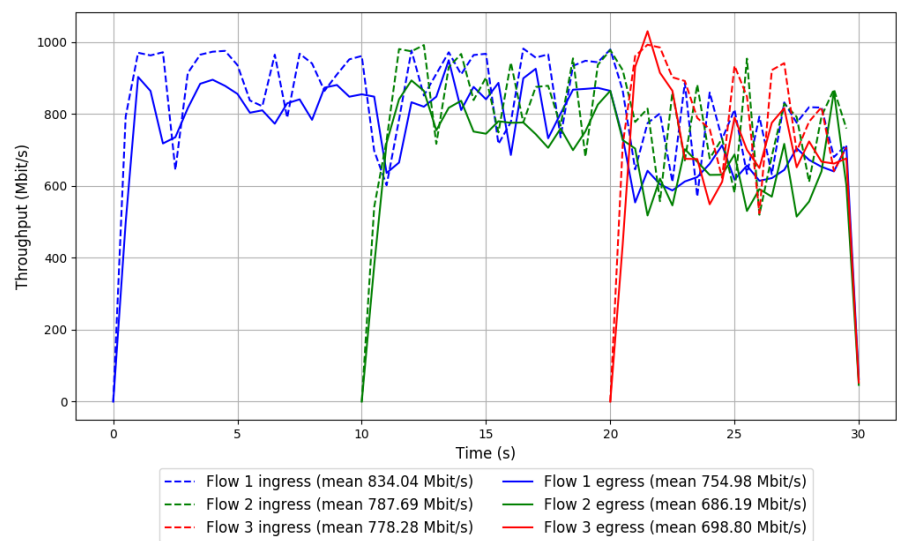


```
Run 2: Statistics of FillP

Start at: 2018-03-06 20:51:20
End at: 2018-03-06 20:51:50

# Below is generated by plot.py at 2018-03-07 02:23:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1443.06 Mbit/s
95th percentile per-packet one-way delay: 223.045 ms
Loss rate: 10.70%
-- Flow 1:
Average throughput: 754.98 Mbit/s
95th percentile per-packet one-way delay: 224.782 ms
Loss rate: 9.48%
-- Flow 2:
Average throughput: 686.19 Mbit/s
95th percentile per-packet one-way delay: 225.975 ms
Loss rate: 12.88%
-- Flow 3:
Average throughput: 698.80 Mbit/s
95th percentile per-packet one-way delay: 214.281 ms
Loss rate: 10.20%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-03-06 21:10:42

End at: 2018-03-06 21:11:12

Below is generated by plot.py at 2018-03-07 02:25:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 1438.90 Mbit/s

95th percentile per-packet one-way delay: 228.434 ms

Loss rate: 10.90%

-- Flow 1:

Average throughput: 790.60 Mbit/s

95th percentile per-packet one-way delay: 200.888 ms

Loss rate: 8.15%

-- Flow 2:

Average throughput: 666.02 Mbit/s

95th percentile per-packet one-way delay: 246.082 ms

Loss rate: 13.16%

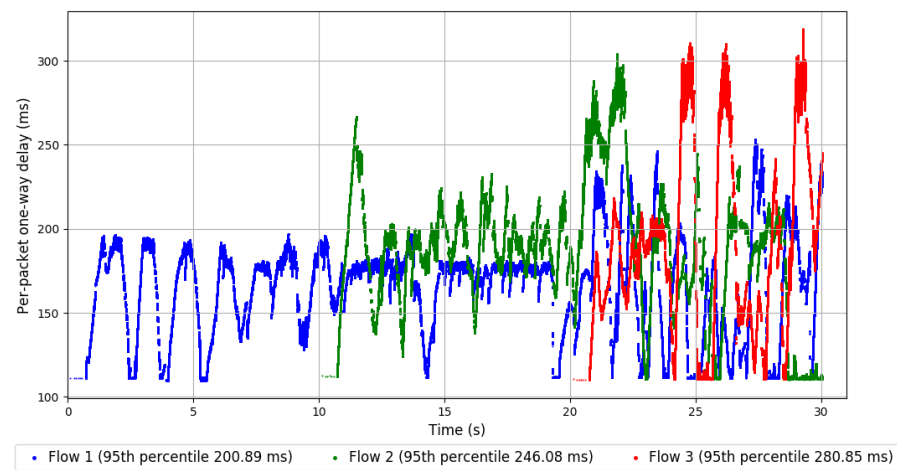
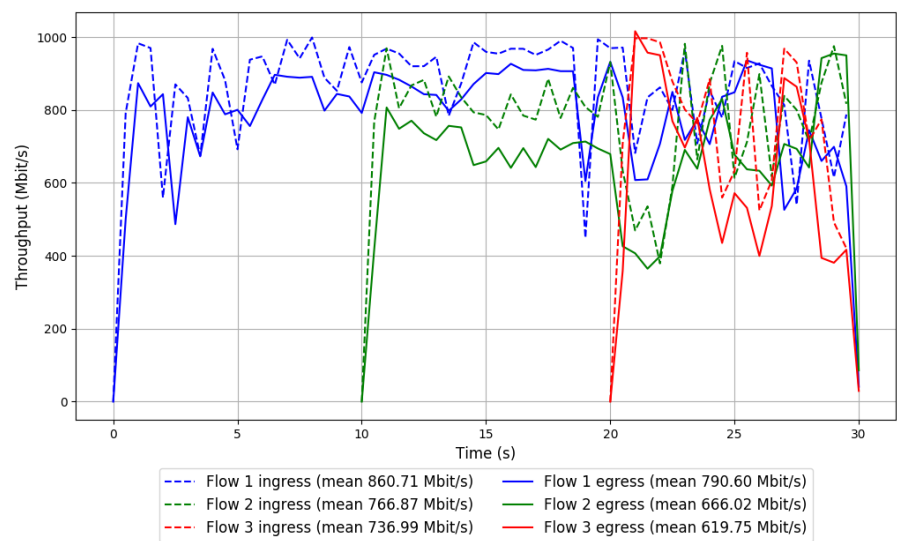
-- Flow 3:

Average throughput: 619.75 Mbit/s

95th percentile per-packet one-way delay: 280.845 ms

Loss rate: 15.90%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-03-06 21:29:55

End at: 2018-03-06 21:30:25

Below is generated by plot.py at 2018-03-07 02:25:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 1415.65 Mbit/s

95th percentile per-packet one-way delay: 220.047 ms

Loss rate: 12.00%

-- Flow 1:

Average throughput: 722.54 Mbit/s

95th percentile per-packet one-way delay: 223.520 ms

Loss rate: 11.32%

-- Flow 2:

Average throughput: 731.10 Mbit/s

95th percentile per-packet one-way delay: 218.953 ms

Loss rate: 11.58%

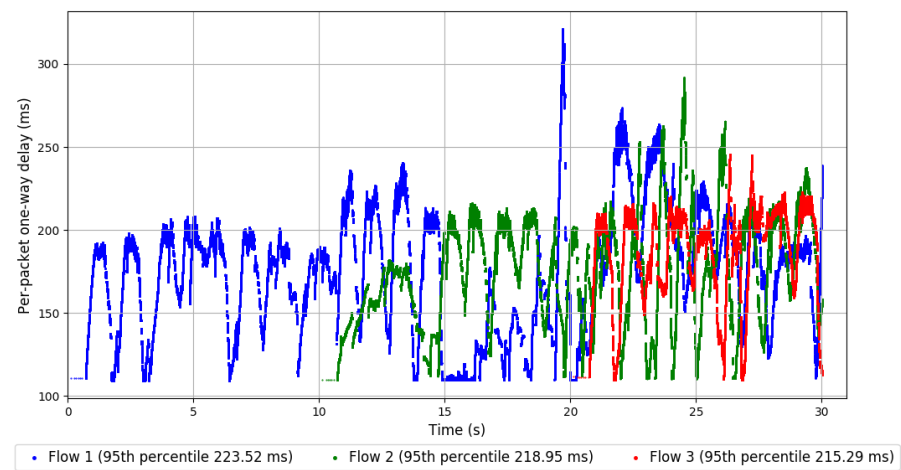
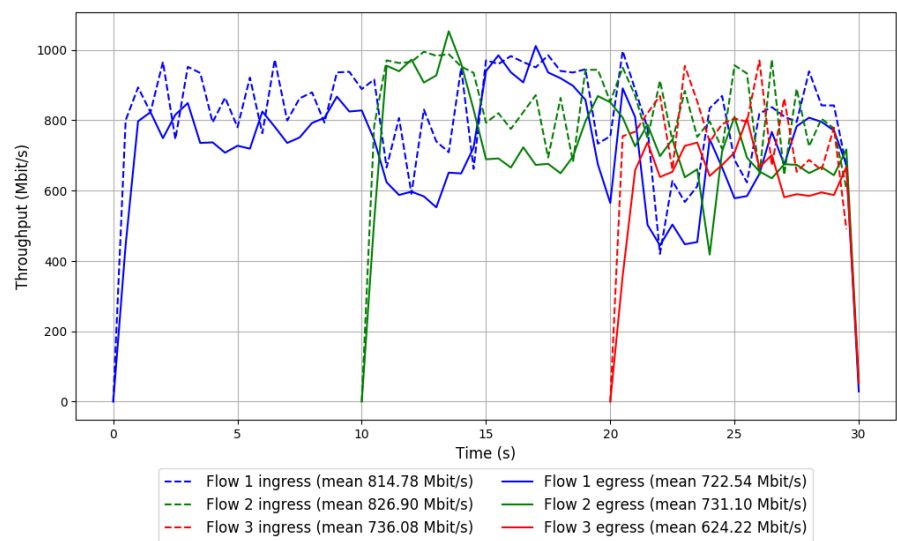
-- Flow 3:

Average throughput: 624.22 Mbit/s

95th percentile per-packet one-way delay: 215.286 ms

Loss rate: 15.21%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-03-06 21:49:04

End at: 2018-03-06 21:49:34

Below is generated by plot.py at 2018-03-07 02:25:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 1310.84 Mbit/s

95th percentile per-packet one-way delay: 363.461 ms

Loss rate: 12.40%

-- Flow 1:

Average throughput: 676.00 Mbit/s

95th percentile per-packet one-way delay: 361.728 ms

Loss rate: 12.10%

-- Flow 2:

Average throughput: 583.20 Mbit/s

95th percentile per-packet one-way delay: 382.139 ms

Loss rate: 16.21%

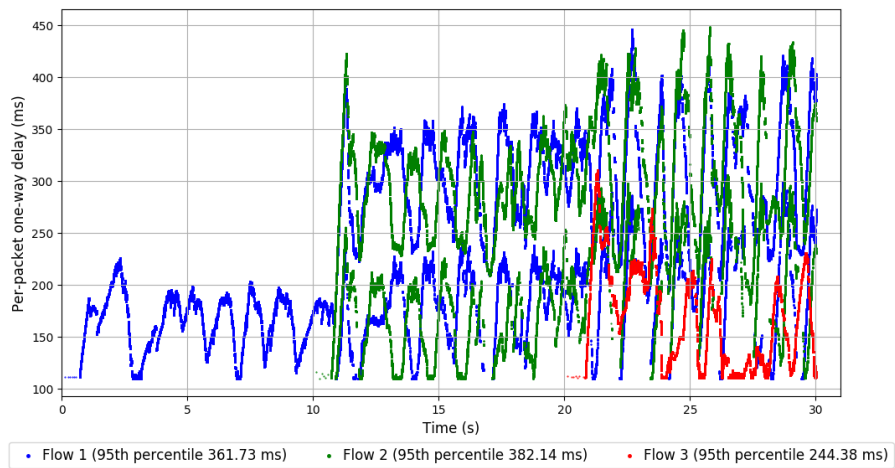
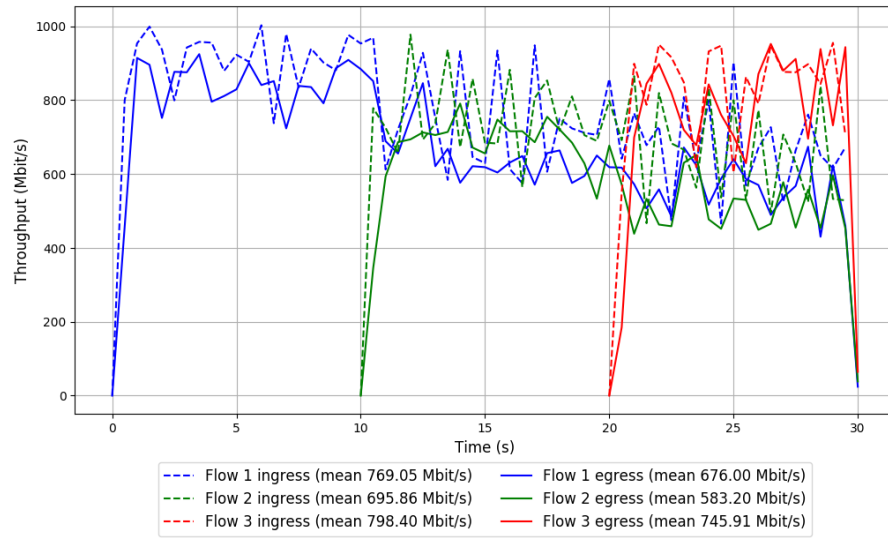
-- Flow 3:

Average throughput: 745.91 Mbit/s

95th percentile per-packet one-way delay: 244.376 ms

Loss rate: 6.59%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-03-06 22:08:42

End at: 2018-03-06 22:09:12

Below is generated by plot.py at 2018-03-07 02:26:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 1461.05 Mbit/s

95th percentile per-packet one-way delay: 240.605 ms

Loss rate: 10.28%

-- Flow 1:

Average throughput: 703.36 Mbit/s

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

Loss rate: 12.45%

-- Flow 2:

Average throughput: 809.54 Mbit/s

95th percentile per-packet one-way delay: 211.155 ms

Loss rate: 5.79%

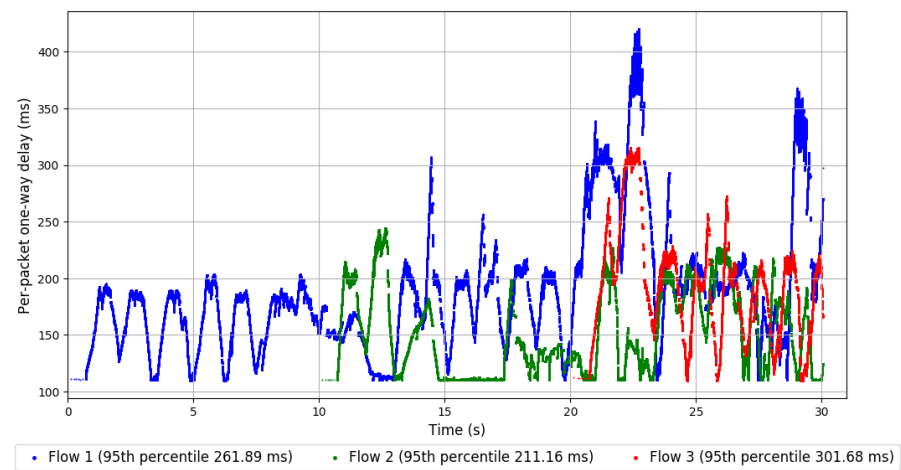
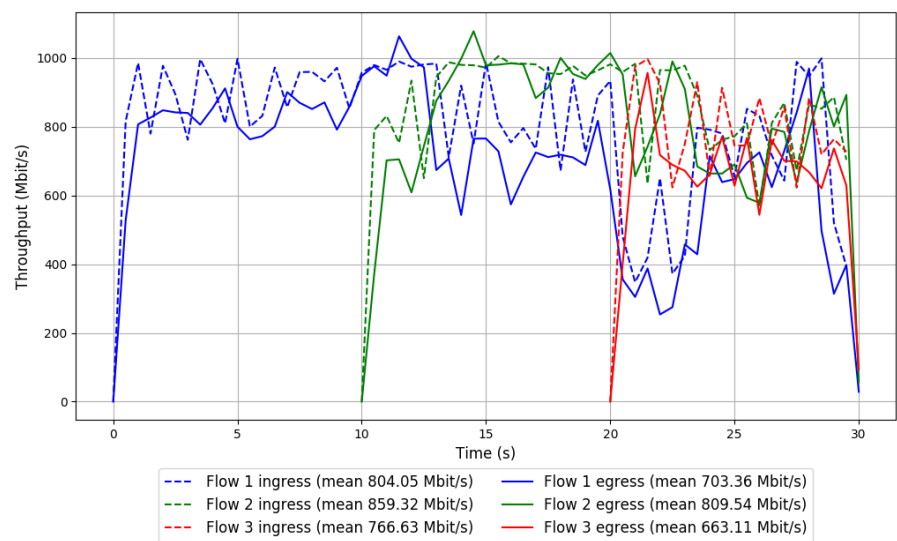
-- Flow 3:

Average throughput: 663.11 Mbit/s

95th percentile per-packet one-way delay: 301.675 ms

Loss rate: 13.53%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-03-06 22:28:06

End at: 2018-03-06 22:28:36

Below is generated by plot.py at 2018-03-07 02:26:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 1417.32 Mbit/s

95th percentile per-packet one-way delay: 223.076 ms

Loss rate: 11.08%

-- Flow 1:

Average throughput: 748.26 Mbit/s

95th percentile per-packet one-way delay: 217.443 ms

Loss rate: 9.05%

-- Flow 2:

Average throughput: 688.40 Mbit/s

95th percentile per-packet one-way delay: 223.699 ms

Loss rate: 12.81%

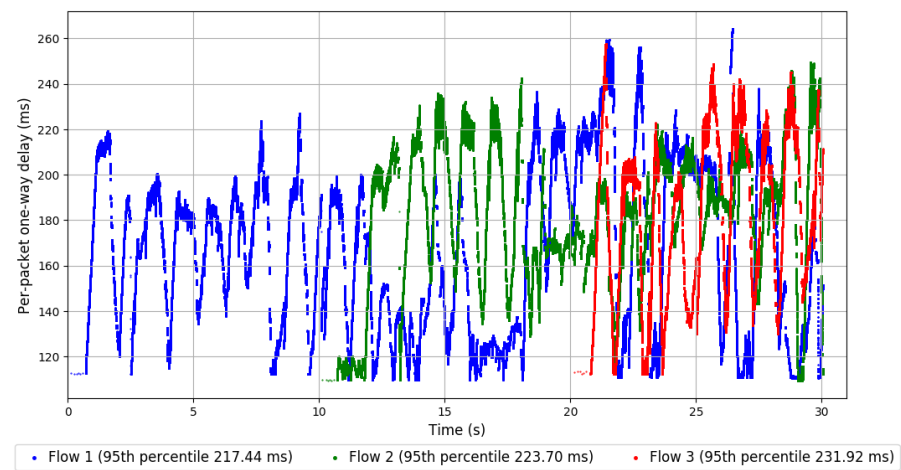
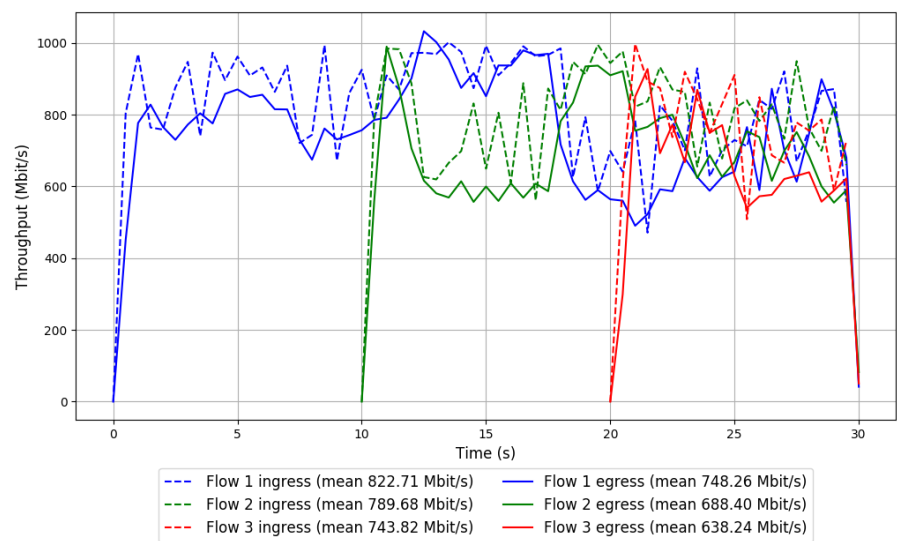
-- Flow 3:

Average throughput: 638.24 Mbit/s

95th percentile per-packet one-way delay: 231.922 ms

Loss rate: 14.20%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-03-06 22:47:35

End at: 2018-03-06 22:48:05

Below is generated by plot.py at 2018-03-07 02:31:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 1335.45 Mbit/s

95th percentile per-packet one-way delay: 350.198 ms

Loss rate: 10.82%

-- Flow 1:

Average throughput: 633.74 Mbit/s

95th percentile per-packet one-way delay: 361.124 ms

Loss rate: 13.85%

-- Flow 2:

Average throughput: 726.93 Mbit/s

95th percentile per-packet one-way delay: 326.864 ms

Loss rate: 6.68%

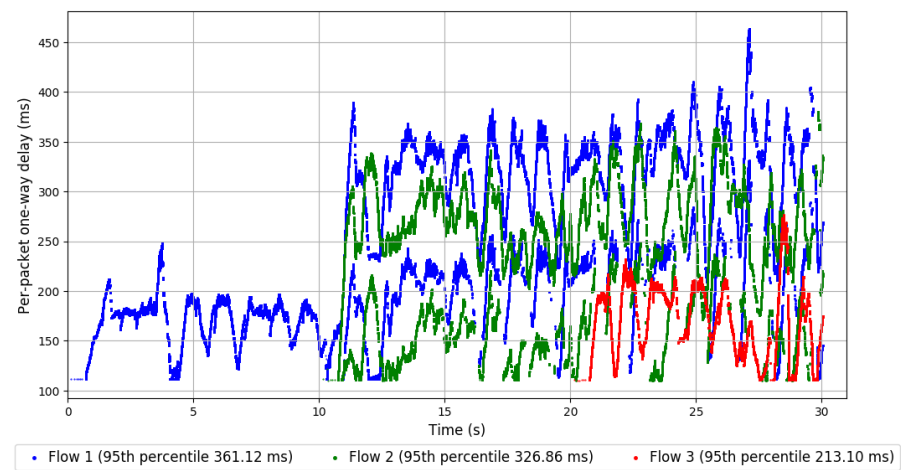
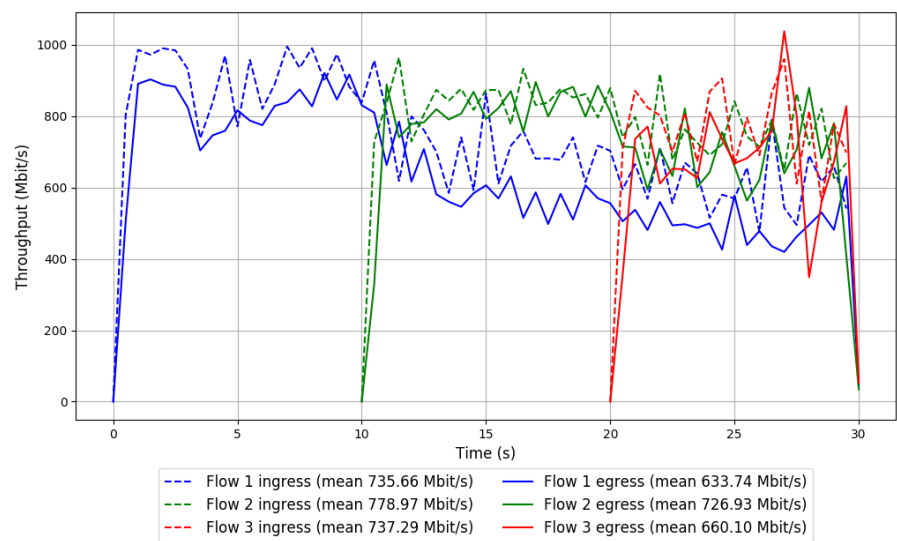
-- Flow 3:

Average throughput: 660.10 Mbit/s

95th percentile per-packet one-way delay: 213.105 ms

Loss rate: 10.46%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-03-06 23:06:34

End at: 2018-03-06 23:07:04

Below is generated by plot.py at 2018-03-07 02:50:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 1453.92 Mbit/s

95th percentile per-packet one-way delay: 223.164 ms

Loss rate: 12.01%

-- Flow 1:

Average throughput: 768.36 Mbit/s

95th percentile per-packet one-way delay: 218.814 ms

Loss rate: 10.02%

-- Flow 2:

Average throughput: 692.79 Mbit/s

95th percentile per-packet one-way delay: 240.381 ms

Loss rate: 14.63%

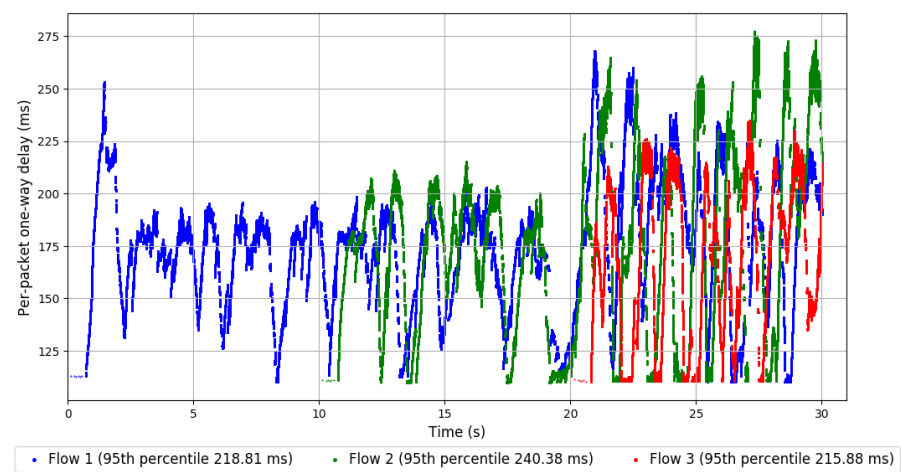
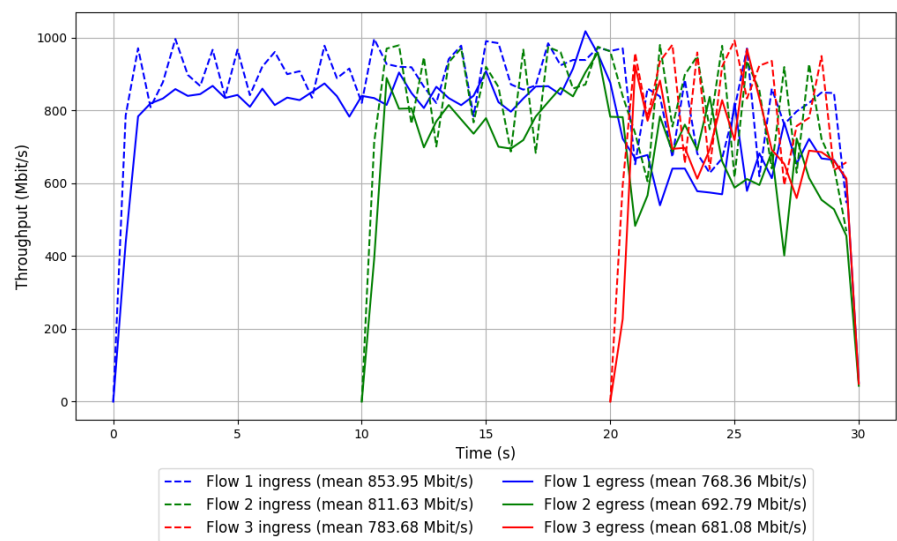
-- Flow 3:

Average throughput: 681.08 Mbit/s

95th percentile per-packet one-way delay: 215.880 ms

Loss rate: 13.09%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-03-06 23:25:50

End at: 2018-03-06 23:26:20

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 1537.23 Mbit/s

95th percentile per-packet one-way delay: 219.402 ms

Loss rate: 9.57%

-- Flow 1:

Average throughput: 827.98 Mbit/s

95th percentile per-packet one-way delay: 221.203 ms

Loss rate: 6.97%

-- Flow 2:

Average throughput: 750.00 Mbit/s

95th percentile per-packet one-way delay: 225.510 ms

Loss rate: 11.75%

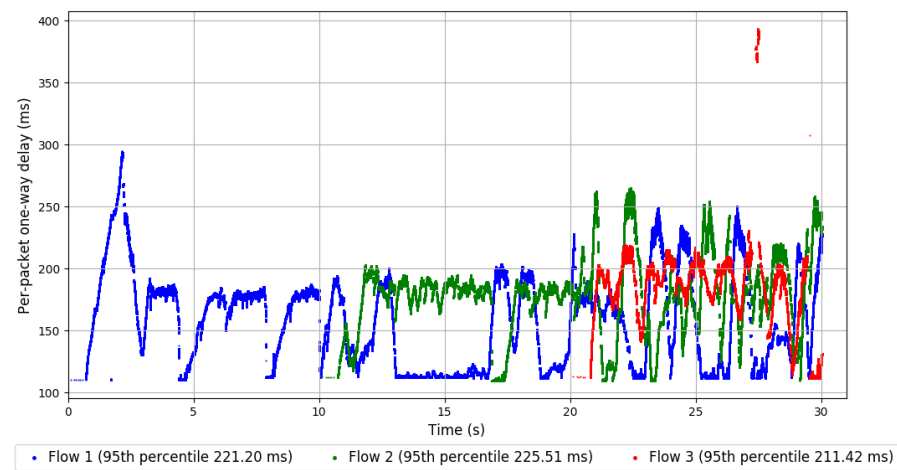
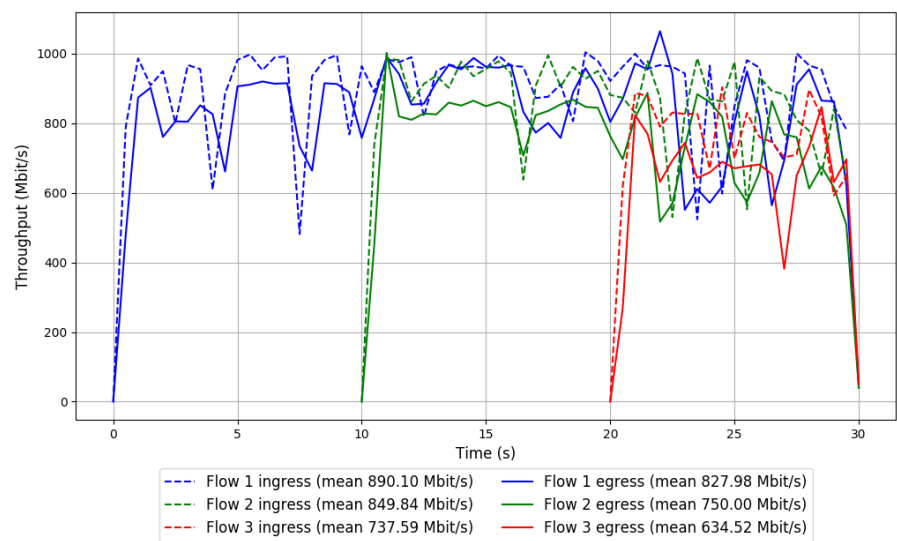
-- Flow 3:

Average throughput: 634.52 Mbit/s

95th percentile per-packet one-way delay: 211.416 ms

Loss rate: 13.97%

Run 10: Report of FillP — Data Link

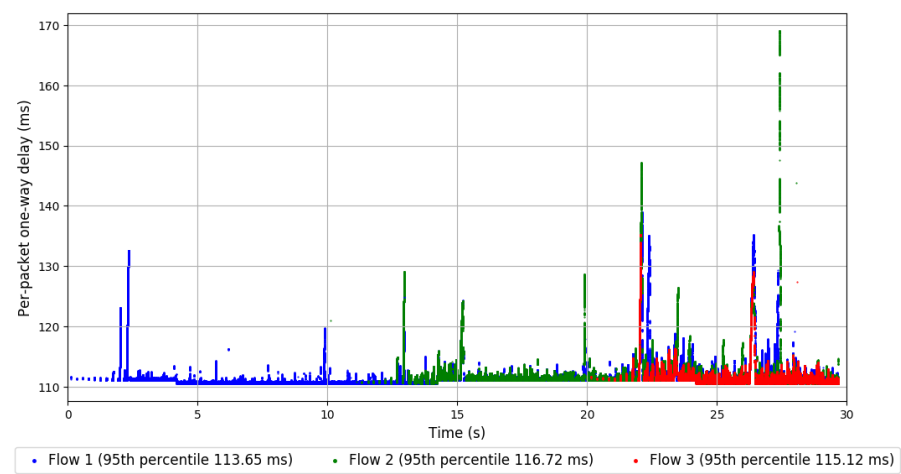
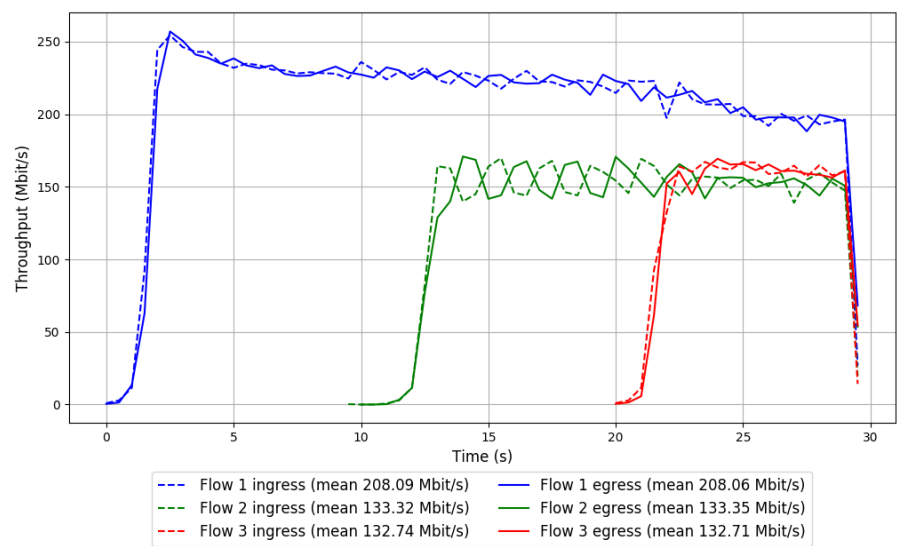


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-03-06 20:28:41
End at: 2018-03-06 20:29:11

# Below is generated by plot.py at 2018-03-07 02:52:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 339.04 Mbit/s
95th percentile per-packet one-way delay: 114.497 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 208.06 Mbit/s
95th percentile per-packet one-way delay: 113.648 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 133.35 Mbit/s
95th percentile per-packet one-way delay: 116.715 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 132.71 Mbit/s
95th percentile per-packet one-way delay: 115.117 ms
Loss rate: 0.03%
```

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



Run 2: Statistics of Indigo-1-32

Start at: 2018-03-06 20:47:39

End at: 2018-03-06 20:48:09

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 286.47 Mbit/s

95th percentile per-packet one-way delay: 113.787 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 149.12 Mbit/s

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

Loss rate: 0.04%

-- Flow 2:

Average throughput: 142.45 Mbit/s

95th percentile per-packet one-way delay: 114.331 ms

Loss rate: 0.03%

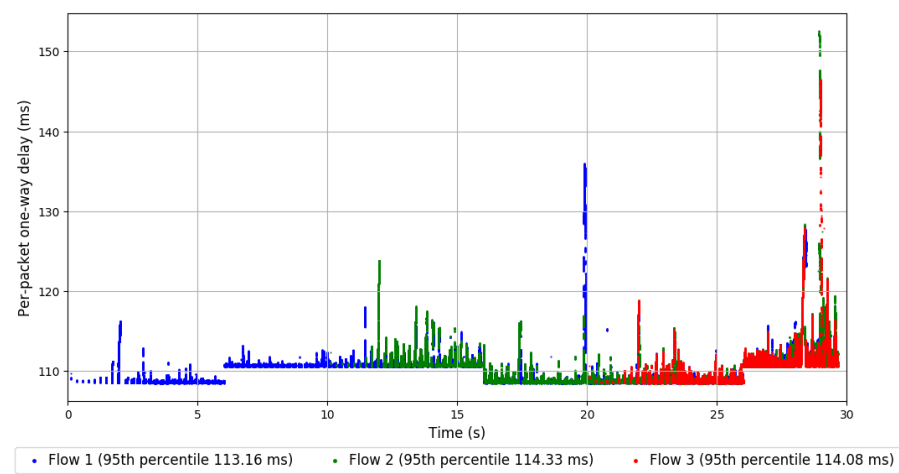
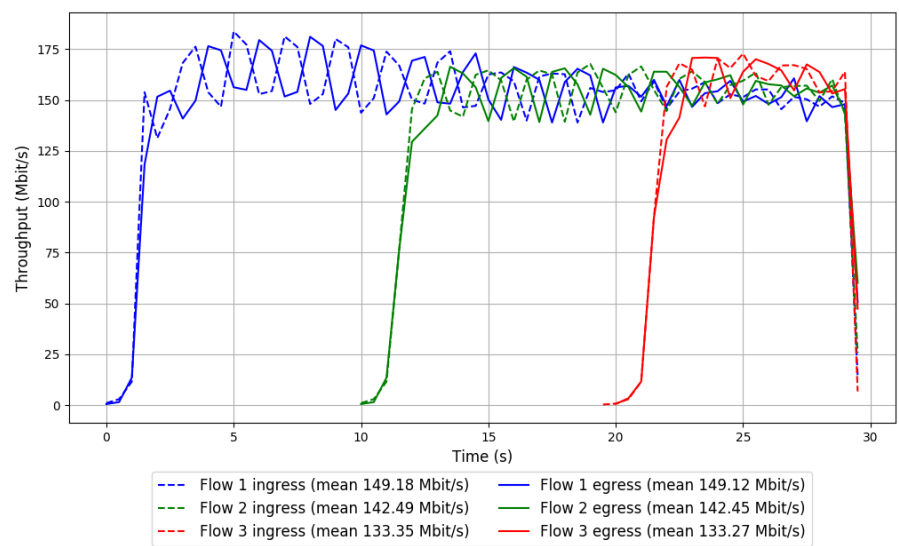
-- Flow 3:

Average throughput: 133.27 Mbit/s

95th percentile per-packet one-way delay: 114.082 ms

Loss rate: 0.04%

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-03-06 21:06:55

End at: 2018-03-06 21:07:25

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.73 Mbit/s

95th percentile per-packet one-way delay: 113.390 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 200.24 Mbit/s

95th percentile per-packet one-way delay: 112.966 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 141.24 Mbit/s

95th percentile per-packet one-way delay: 113.965 ms

Loss rate: 0.00%

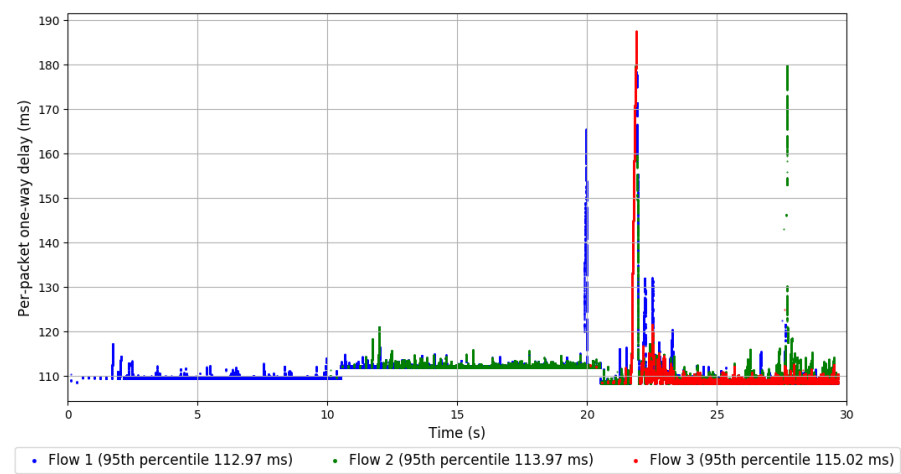
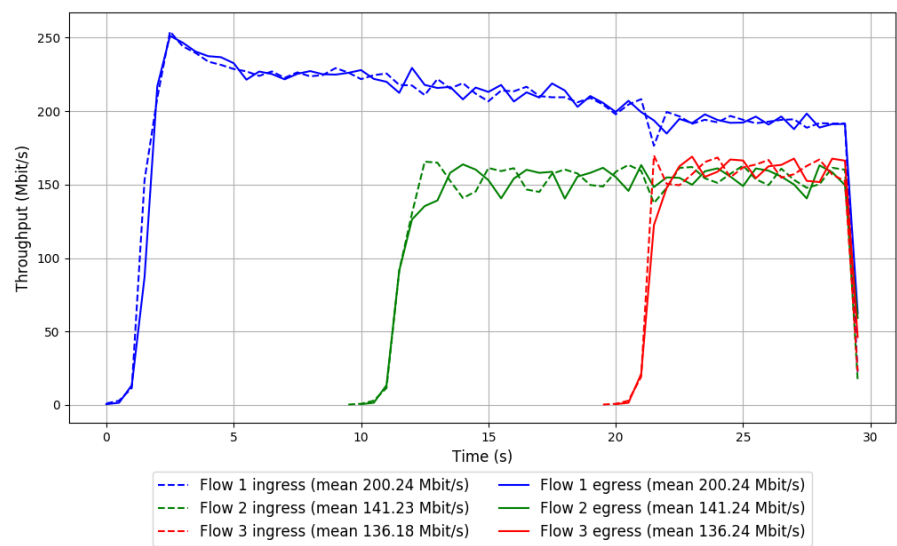
-- Flow 3:

Average throughput: 136.24 Mbit/s

95th percentile per-packet one-way delay: 115.018 ms

Loss rate: 0.00%

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



Run 4: Statistics of Indigo-1-32

Start at: 2018-03-06 21:26:10

End at: 2018-03-06 21:26:40

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 289.03 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 153.14 Mbit/s

95th percentile per-packet one-way delay: 114.092 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 141.40 Mbit/s

95th percentile per-packet one-way delay: 114.981 ms

Loss rate: 0.00%

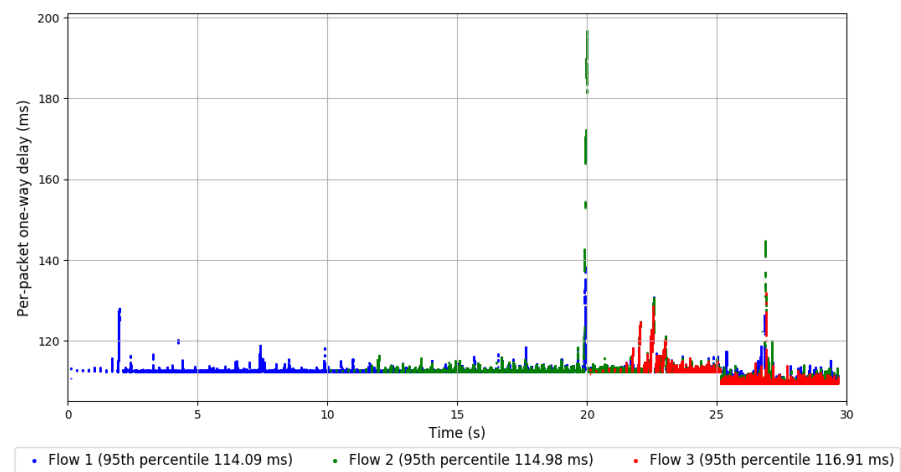
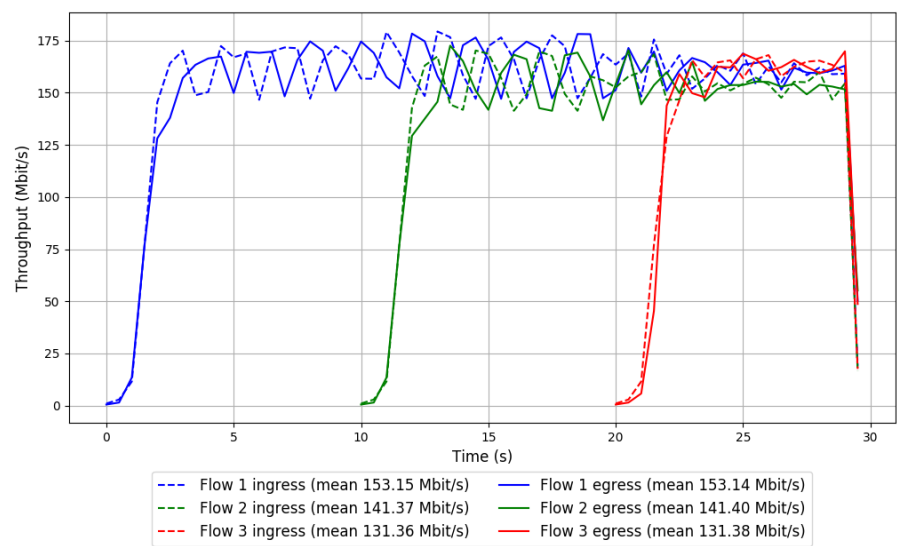
-- Flow 3:

Average throughput: 131.38 Mbit/s

95th percentile per-packet one-way delay: 116.905 ms

Loss rate: 0.00%

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



Run 5: Statistics of Indigo-1-32

Start at: 2018-03-06 21:45:18

End at: 2018-03-06 21:45:48

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 298.91 Mbit/s

95th percentile per-packet one-way delay: 113.701 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 162.16 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 140.18 Mbit/s

95th percentile per-packet one-way delay: 114.213 ms

Loss rate: 0.00%

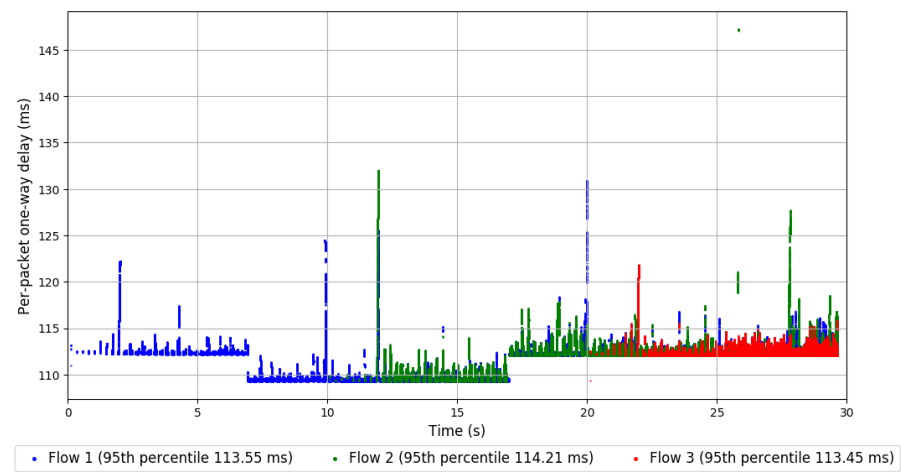
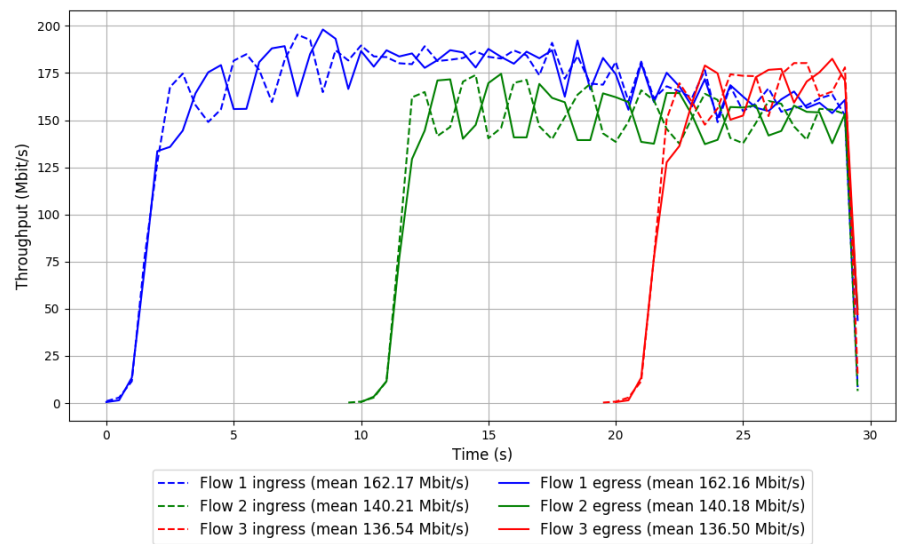
-- Flow 3:

Average throughput: 136.50 Mbit/s

95th percentile per-packet one-way delay: 113.451 ms

Loss rate: 0.01%

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



Run 6: Statistics of Indigo-1-32

Start at: 2018-03-06 22:04:56

End at: 2018-03-06 22:05:26

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 306.98 Mbit/s

95th percentile per-packet one-way delay: 116.522 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 152.06 Mbit/s

95th percentile per-packet one-way delay: 116.459 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 141.41 Mbit/s

95th percentile per-packet one-way delay: 116.557 ms

Loss rate: 0.00%

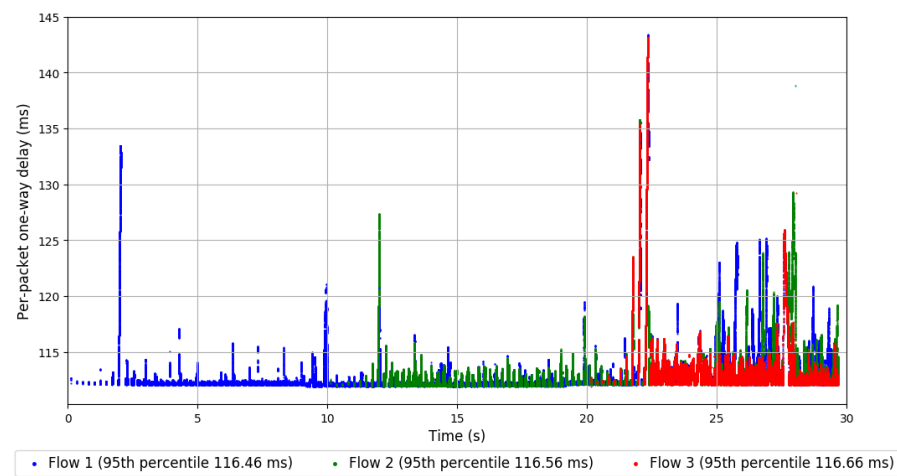
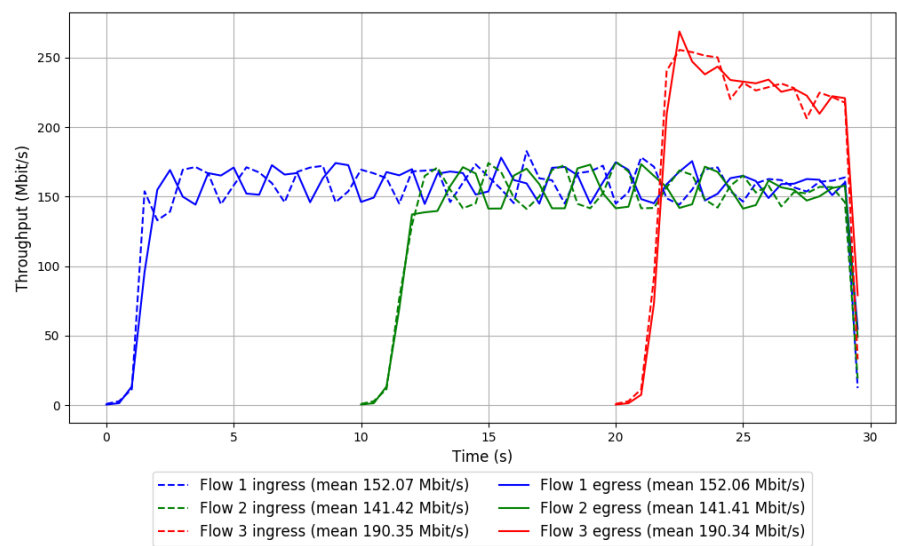
-- Flow 3:

Average throughput: 190.34 Mbit/s

95th percentile per-packet one-way delay: 116.656 ms

Loss rate: 0.00%

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



Run 7: Statistics of Indigo-1-32

Start at: 2018-03-06 22:24:22

End at: 2018-03-06 22:24:52

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 277.12 Mbit/s

95th percentile per-packet one-way delay: 114.684 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 142.48 Mbit/s

95th percentile per-packet one-way delay: 113.973 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 141.70 Mbit/s

95th percentile per-packet one-way delay: 114.923 ms

Loss rate: 0.00%

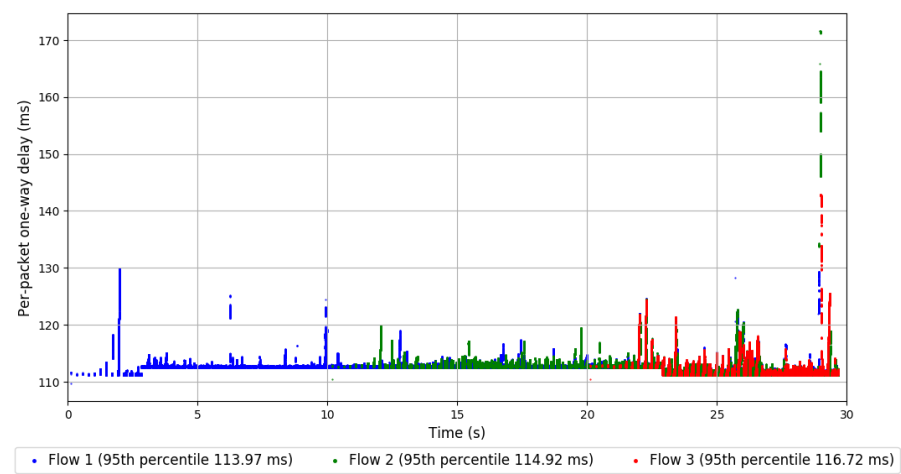
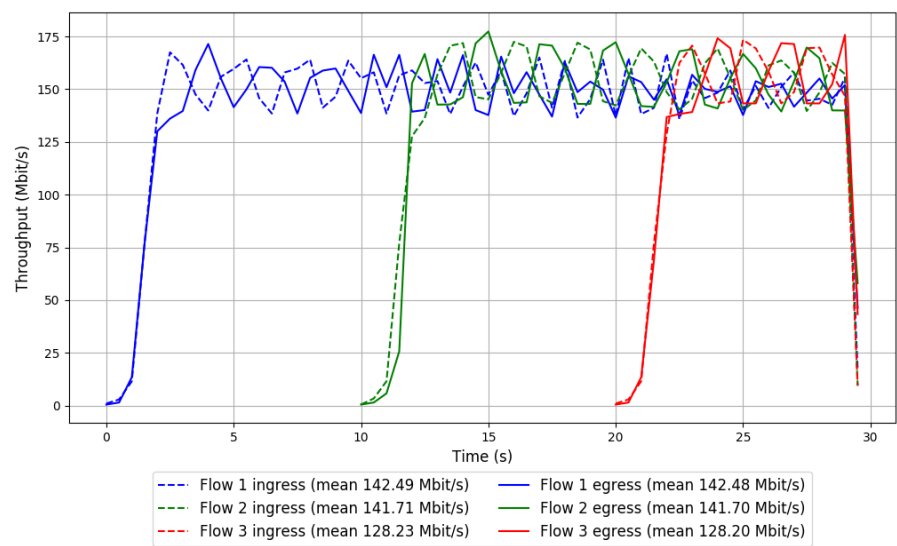
-- Flow 3:

Average throughput: 128.20 Mbit/s

95th percentile per-packet one-way delay: 116.716 ms

Loss rate: 0.00%

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



Run 8: Statistics of Indigo-1-32

Start at: 2018-03-06 22:43:52

End at: 2018-03-06 22:44:22

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 280.78 Mbit/s

95th percentile per-packet one-way delay: 115.338 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 145.93 Mbit/s

95th percentile per-packet one-way delay: 114.888 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 138.30 Mbit/s

95th percentile per-packet one-way delay: 115.781 ms

Loss rate: 0.00%

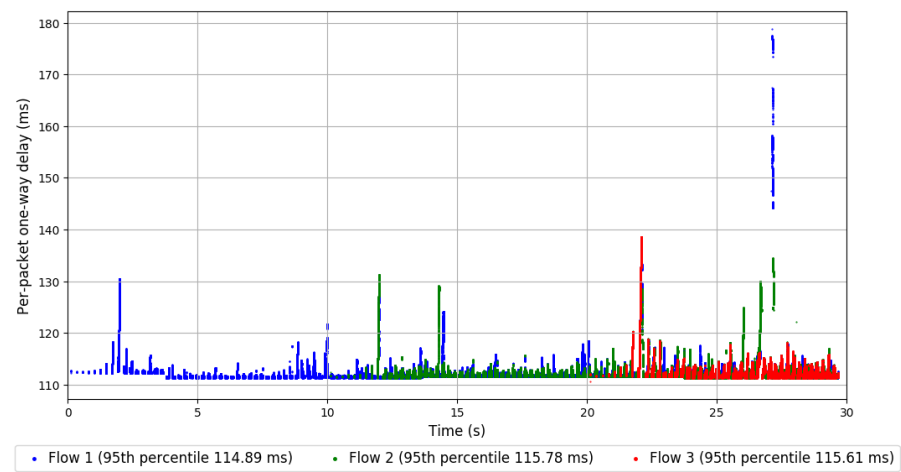
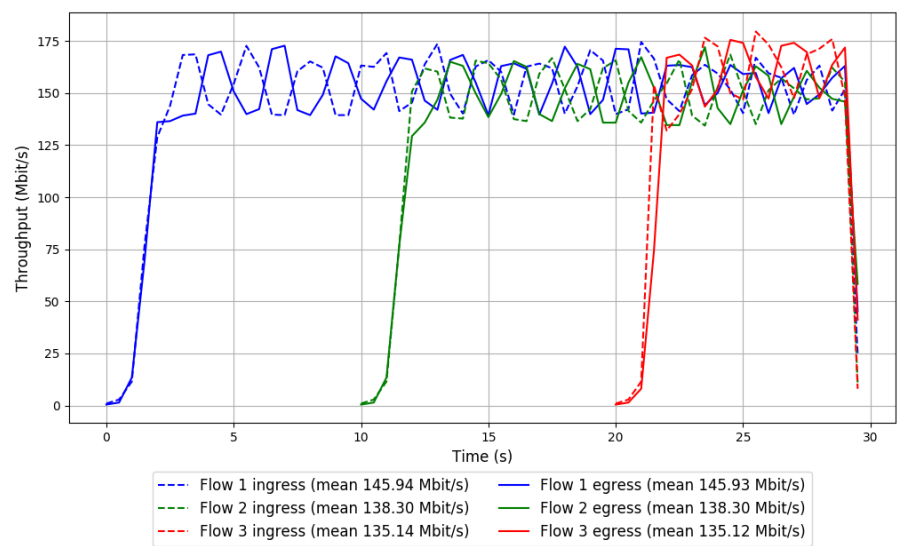
-- Flow 3:

Average throughput: 135.12 Mbit/s

95th percentile per-packet one-way delay: 115.613 ms

Loss rate: 0.02%

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



Run 9: Statistics of Indigo-1-32

Start at: 2018-03-06 23:02:51

End at: 2018-03-06 23:03:22

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 284.09 Mbit/s

95th percentile per-packet one-way delay: 115.553 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 148.44 Mbit/s

95th percentile per-packet one-way delay: 114.608 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 140.39 Mbit/s

95th percentile per-packet one-way delay: 116.348 ms

Loss rate: 0.01%

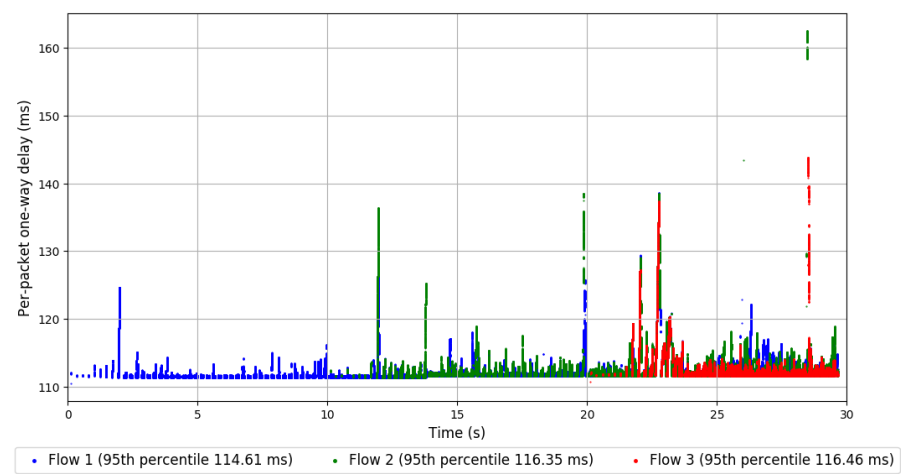
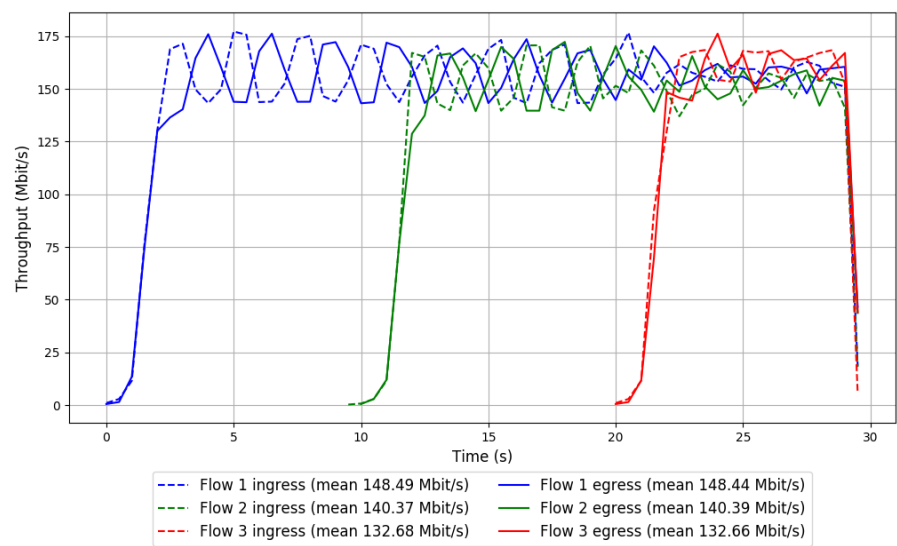
-- Flow 3:

Average throughput: 132.66 Mbit/s

95th percentile per-packet one-way delay: 116.462 ms

Loss rate: 0.00%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-03-06 23:21:55

End at: 2018-03-06 23:22:25

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 299.18 Mbit/s

95th percentile per-packet one-way delay: 126.663 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 151.48 Mbit/s

95th percentile per-packet one-way delay: 115.822 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 139.10 Mbit/s

95th percentile per-packet one-way delay: 119.984 ms

Loss rate: 0.04%

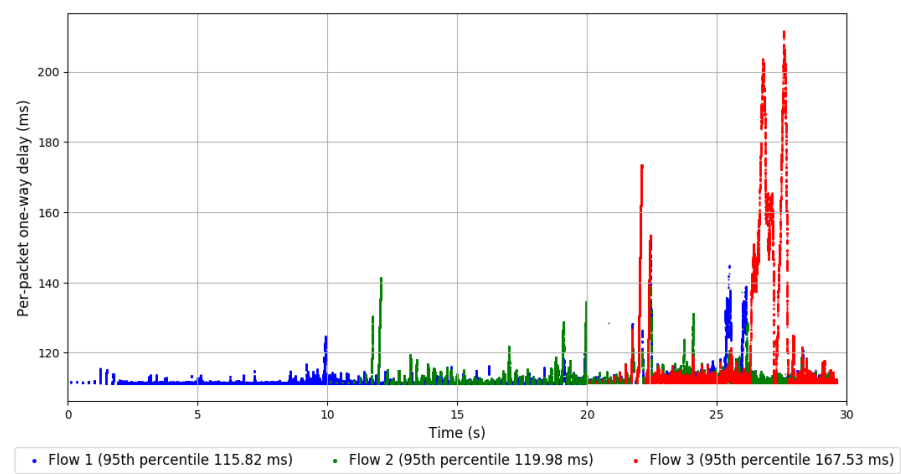
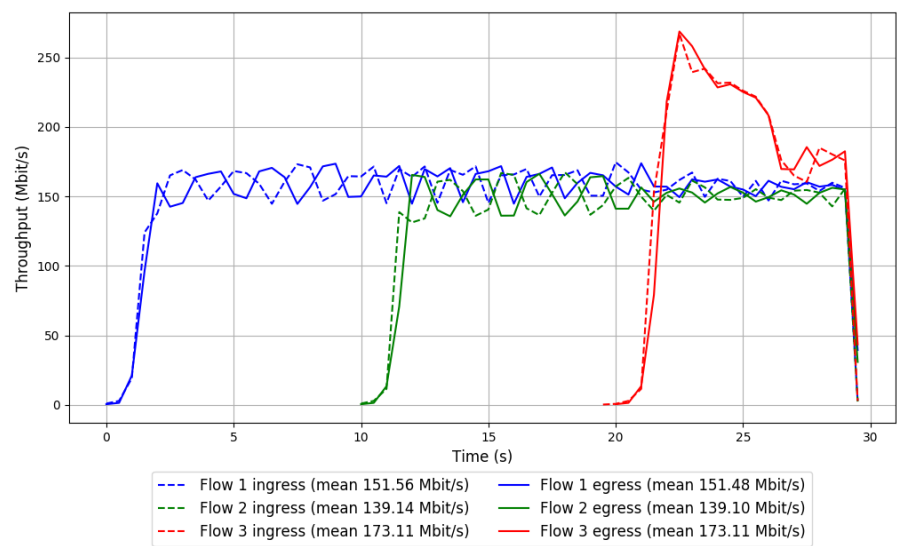
-- Flow 3:

Average throughput: 173.11 Mbit/s

95th percentile per-packet one-way delay: 167.525 ms

Loss rate: 0.00%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-03-06 20:15:11

End at: 2018-03-06 20:15:41

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 474.00 Mbit/s

95th percentile per-packet one-way delay: 240.285 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 282.81 Mbit/s

95th percentile per-packet one-way delay: 216.899 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 190.45 Mbit/s

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

Loss rate: 0.08%

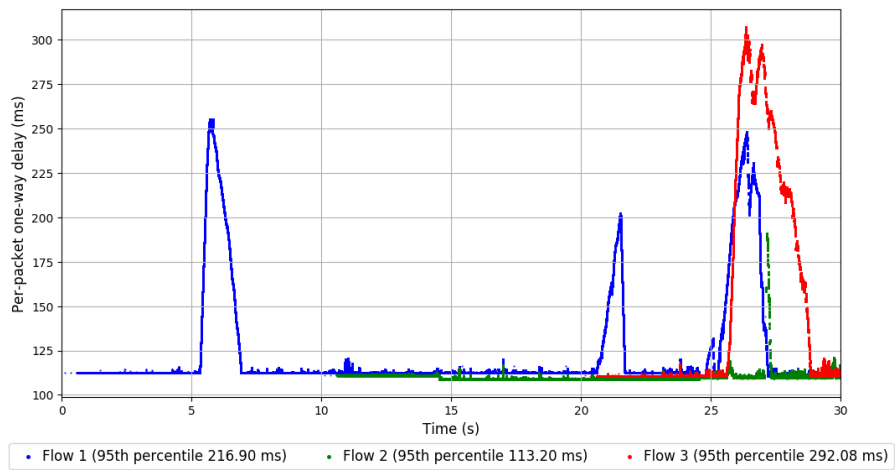
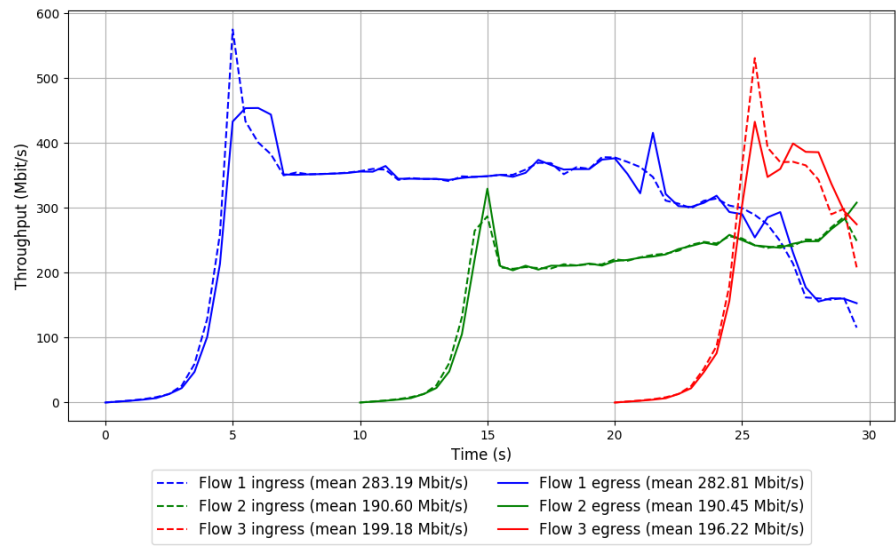
-- Flow 3:

Average throughput: 196.22 Mbit/s

95th percentile per-packet one-way delay: 292.078 ms

Loss rate: 1.49%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-03-06 20:34:15

End at: 2018-03-06 20:34:45

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 358.59 Mbit/s

95th percentile per-packet one-way delay: 116.434 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 211.08 Mbit/s

95th percentile per-packet one-way delay: 115.285 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 183.94 Mbit/s

95th percentile per-packet one-way delay: 174.216 ms

Loss rate: 0.00%

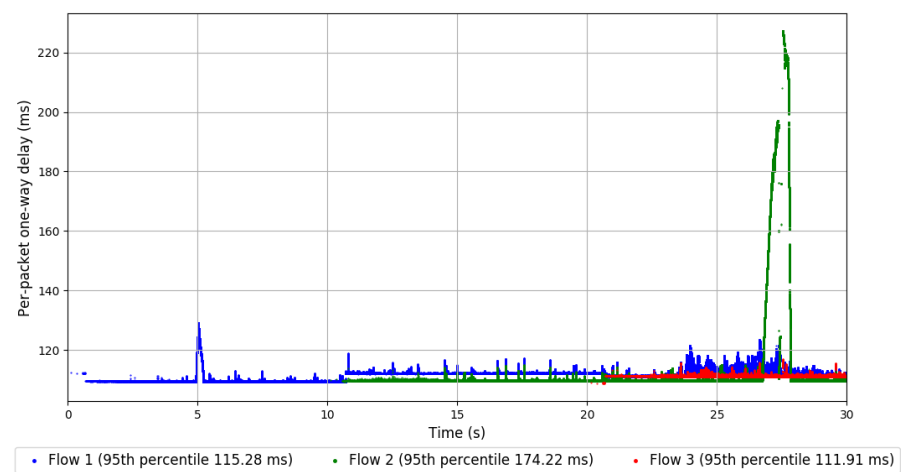
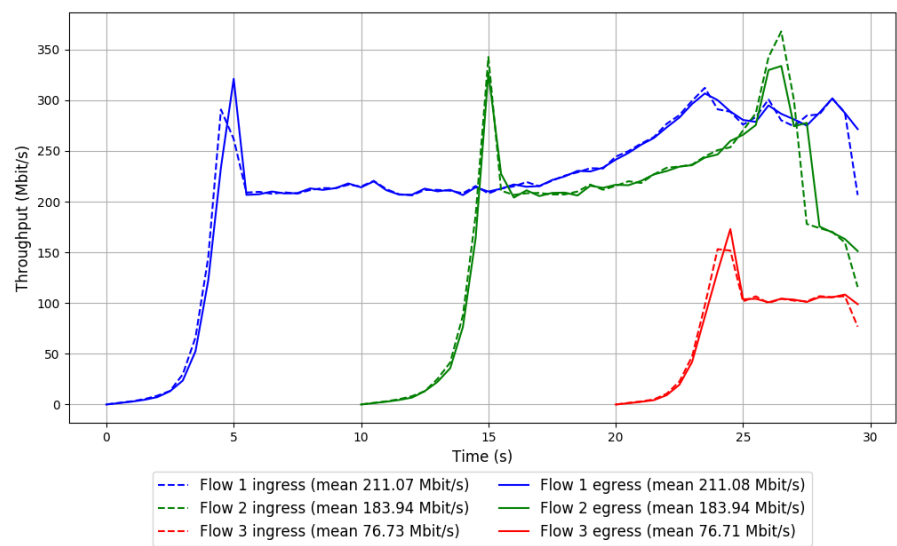
-- Flow 3:

Average throughput: 76.71 Mbit/s

95th percentile per-packet one-way delay: 111.913 ms

Loss rate: 0.00%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-03-06 20:53:09

End at: 2018-03-06 20:53:39

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 438.29 Mbit/s

95th percentile per-packet one-way delay: 114.150 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 285.28 Mbit/s

95th percentile per-packet one-way delay: 119.212 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 194.20 Mbit/s

95th percentile per-packet one-way delay: 111.224 ms

Loss rate: 0.00%

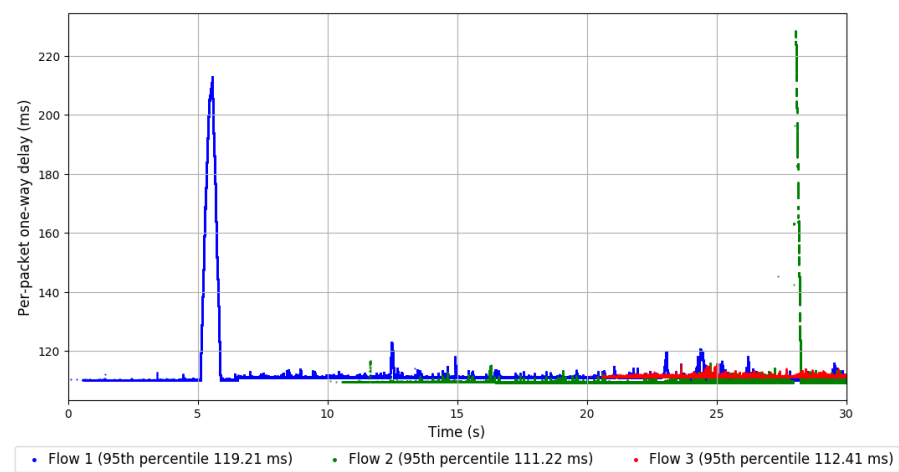
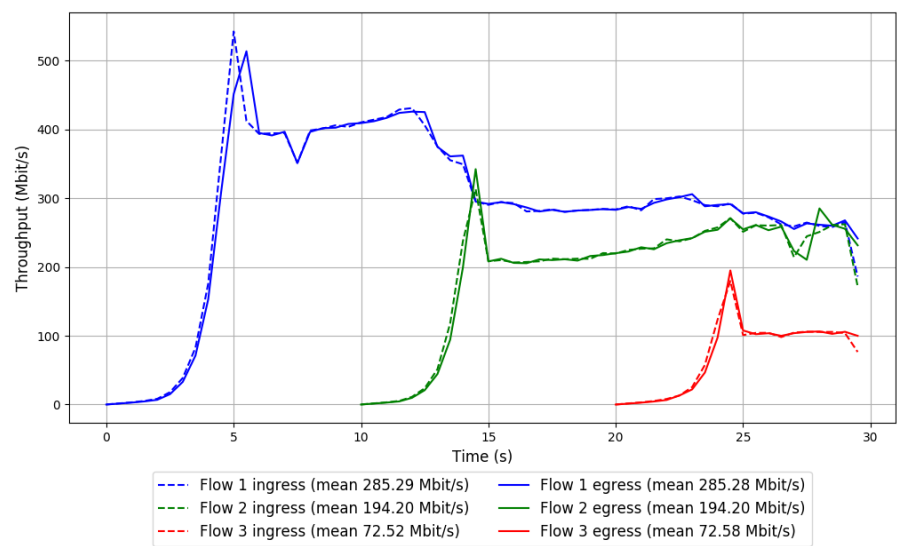
-- Flow 3:

Average throughput: 72.58 Mbit/s

95th percentile per-packet one-way delay: 112.407 ms

Loss rate: 0.00%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-03-06 21:12:30

End at: 2018-03-06 21:13:00

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 461.65 Mbit/s

95th percentile per-packet one-way delay: 141.630 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 289.34 Mbit/s

95th percentile per-packet one-way delay: 155.905 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 197.23 Mbit/s

95th percentile per-packet one-way delay: 114.256 ms

Loss rate: 0.00%

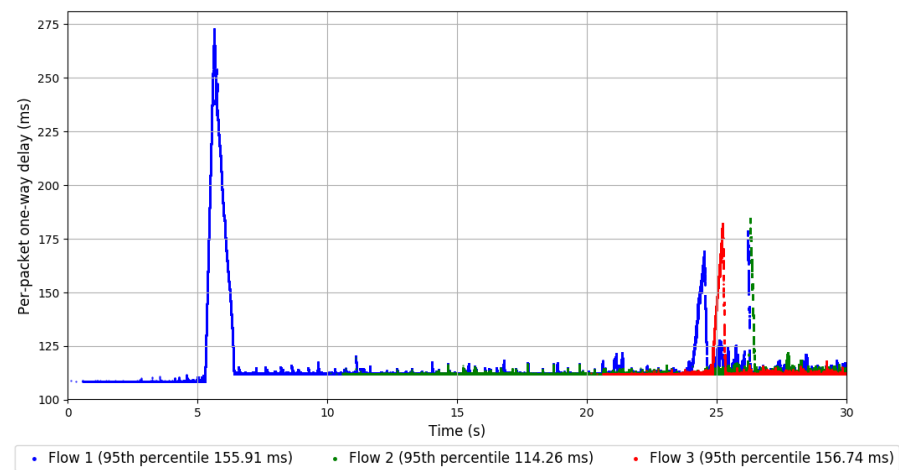
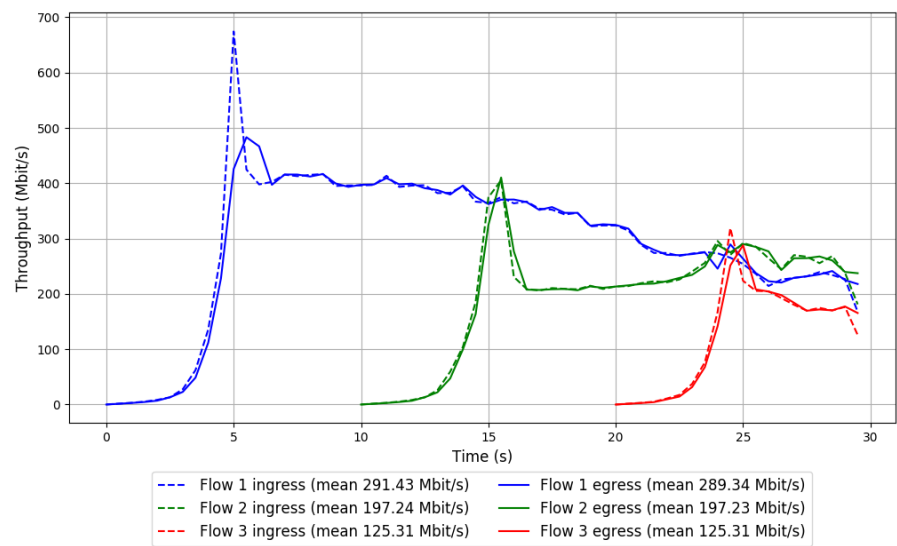
-- Flow 3:

Average throughput: 125.31 Mbit/s

95th percentile per-packet one-way delay: 156.737 ms

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-03-06 21:31:43

End at: 2018-03-06 21:32:13

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 477.93 Mbit/s

95th percentile per-packet one-way delay: 146.887 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 286.45 Mbit/s

95th percentile per-packet one-way delay: 124.996 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 217.47 Mbit/s

95th percentile per-packet one-way delay: 190.337 ms

Loss rate: 1.02%

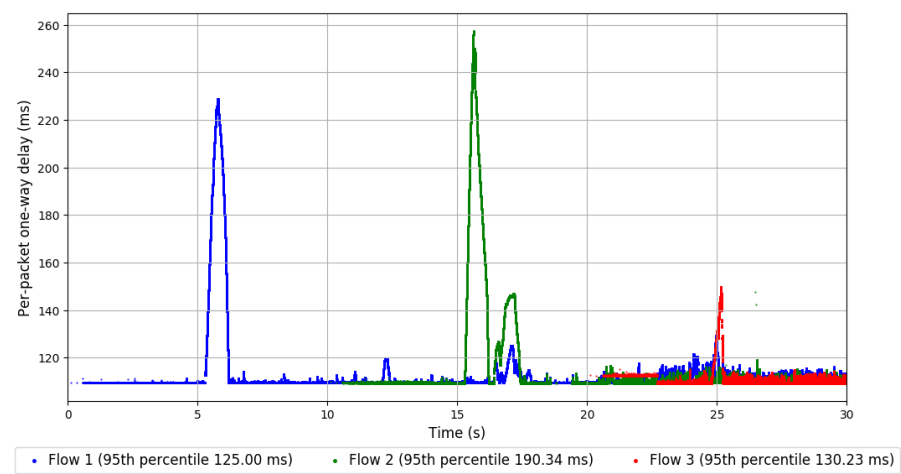
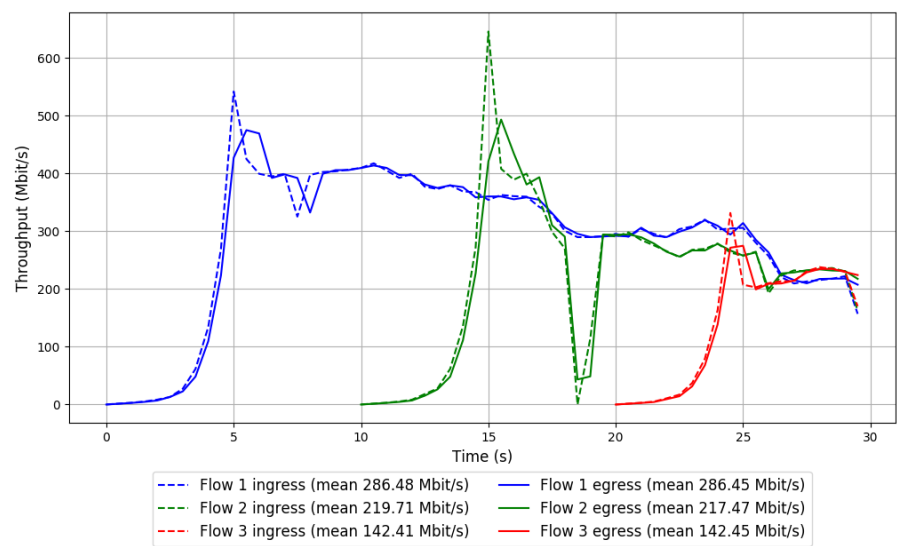
-- Flow 3:

Average throughput: 142.45 Mbit/s

95th percentile per-packet one-way delay: 130.227 ms

Loss rate: 0.00%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-03-06 21:50:53

End at: 2018-03-06 21:51:23

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 387.90 Mbit/s

95th percentile per-packet one-way delay: 187.116 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 163.34 Mbit/s

95th percentile per-packet one-way delay: 116.813 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 260.84 Mbit/s

95th percentile per-packet one-way delay: 253.690 ms

Loss rate: 0.54%

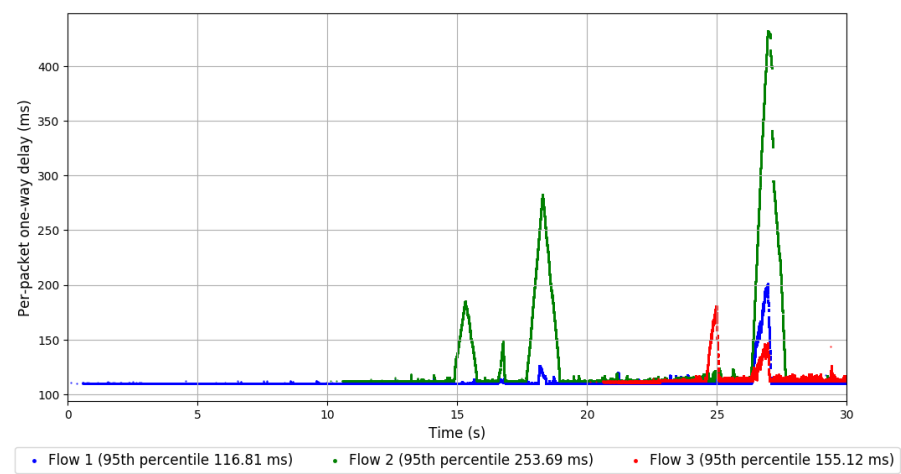
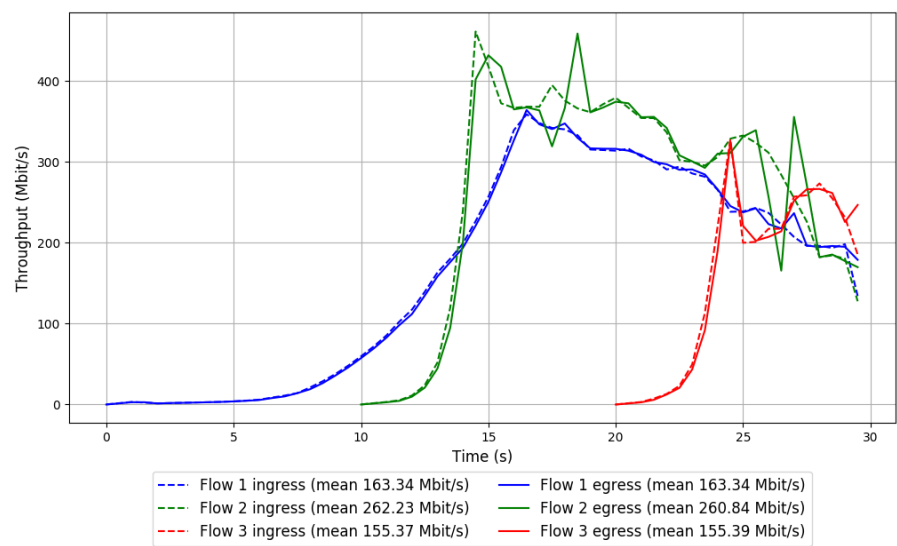
-- Flow 3:

Average throughput: 155.39 Mbit/s

95th percentile per-packet one-way delay: 155.117 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-03-06 22:10:31

End at: 2018-03-06 22:11:01

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 493.58 Mbit/s

95th percentile per-packet one-way delay: 141.931 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 324.55 Mbit/s

95th percentile per-packet one-way delay: 147.666 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 187.02 Mbit/s

95th percentile per-packet one-way delay: 122.934 ms

Loss rate: 0.00%

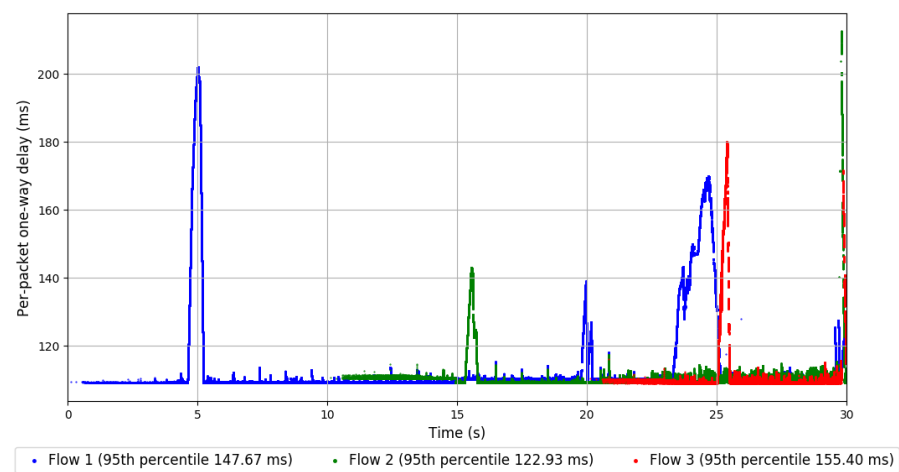
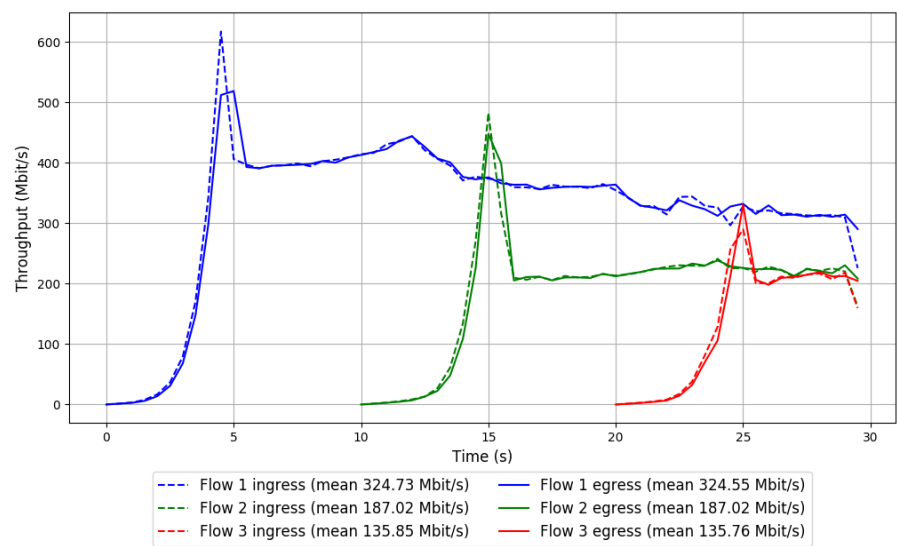
-- Flow 3:

Average throughput: 135.76 Mbit/s

95th percentile per-packet one-way delay: 155.396 ms

Loss rate: 0.06%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-03-06 22:29:54

End at: 2018-03-06 22:30:24

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 388.93 Mbit/s

95th percentile per-packet one-way delay: 159.341 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 283.32 Mbit/s

95th percentile per-packet one-way delay: 162.183 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 120.49 Mbit/s

95th percentile per-packet one-way delay: 143.749 ms

Loss rate: 0.01%

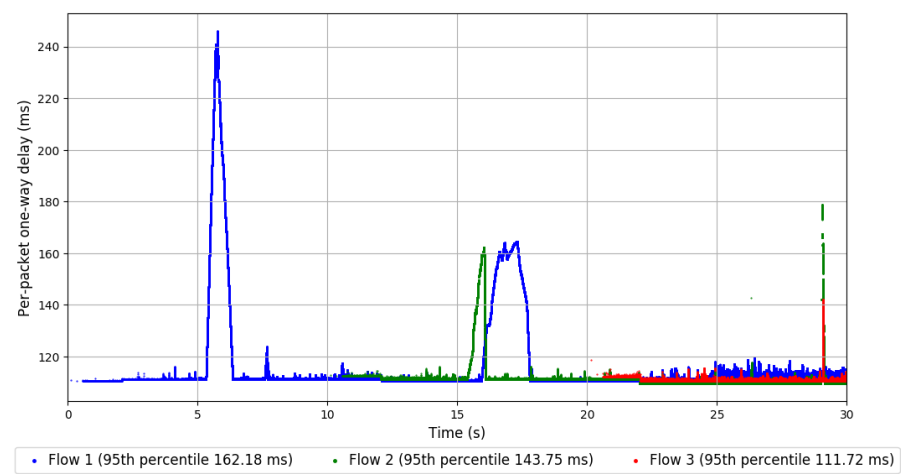
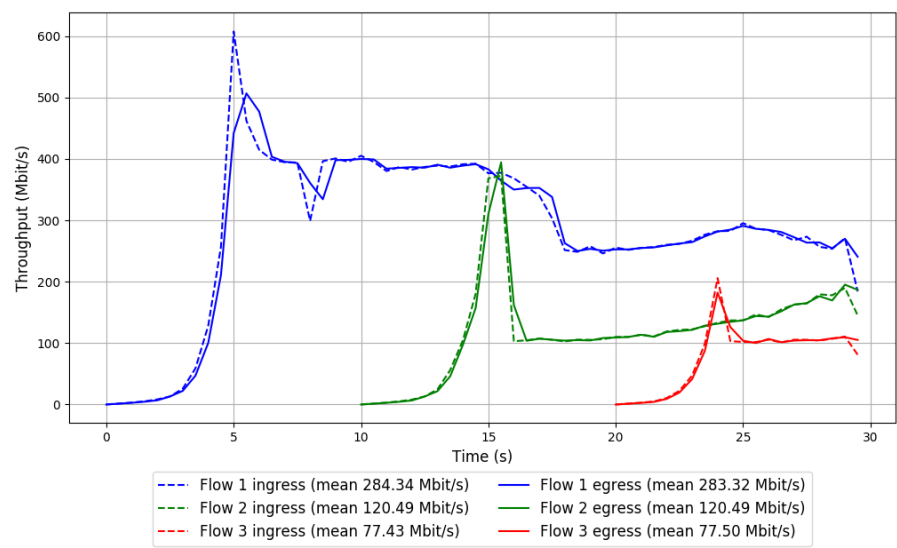
-- Flow 3:

Average throughput: 77.50 Mbit/s

95th percentile per-packet one-way delay: 111.718 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-03-06 22:49:26

End at: 2018-03-06 22:49:56

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 427.75 Mbit/s

95th percentile per-packet one-way delay: 139.205 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 262.06 Mbit/s

95th percentile per-packet one-way delay: 158.278 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 184.25 Mbit/s

95th percentile per-packet one-way delay: 115.928 ms

Loss rate: 0.00%

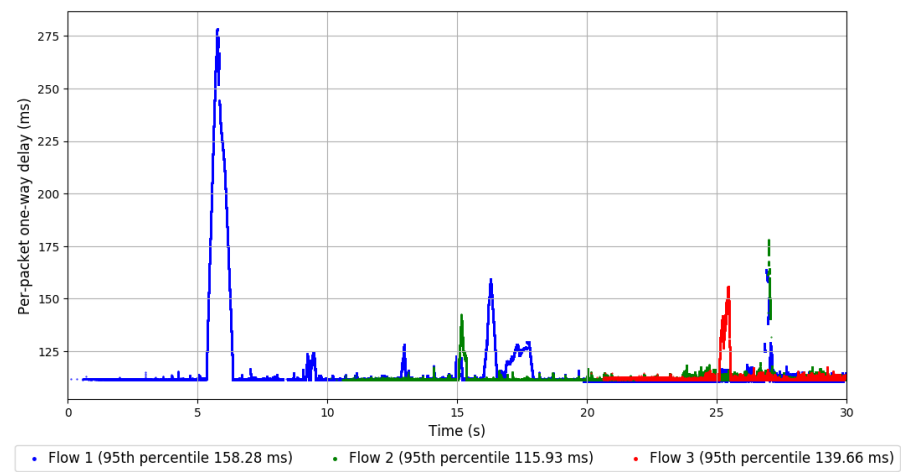
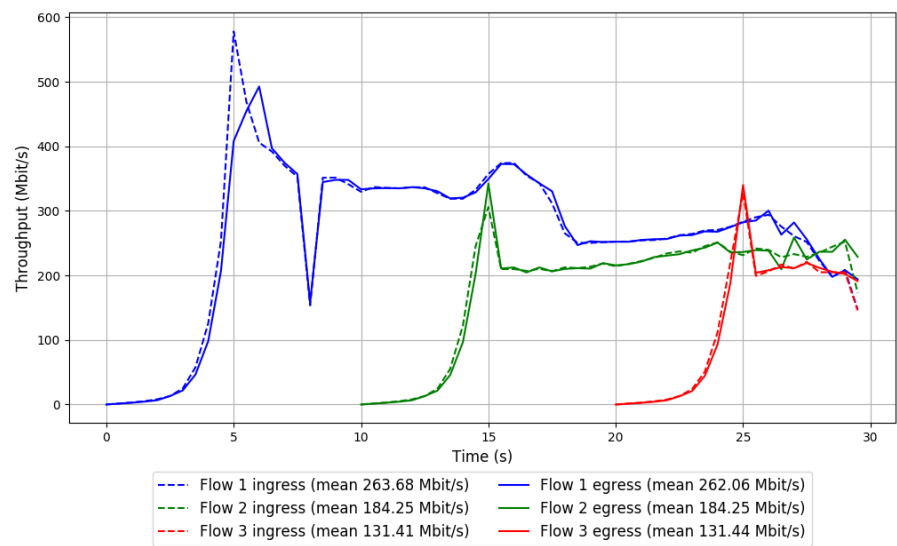
-- Flow 3:

Average throughput: 131.44 Mbit/s

95th percentile per-packet one-way delay: 139.663 ms

Loss rate: 0.00%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-03-06 23:08:24

End at: 2018-03-06 23:08:54

Below is generated by plot.py at 2018-03-07 02:52:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 461.11 Mbit/s

95th percentile per-packet one-way delay: 142.148 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 303.55 Mbit/s

95th percentile per-packet one-way delay: 143.779 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 167.84 Mbit/s

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

Loss rate: 0.00%

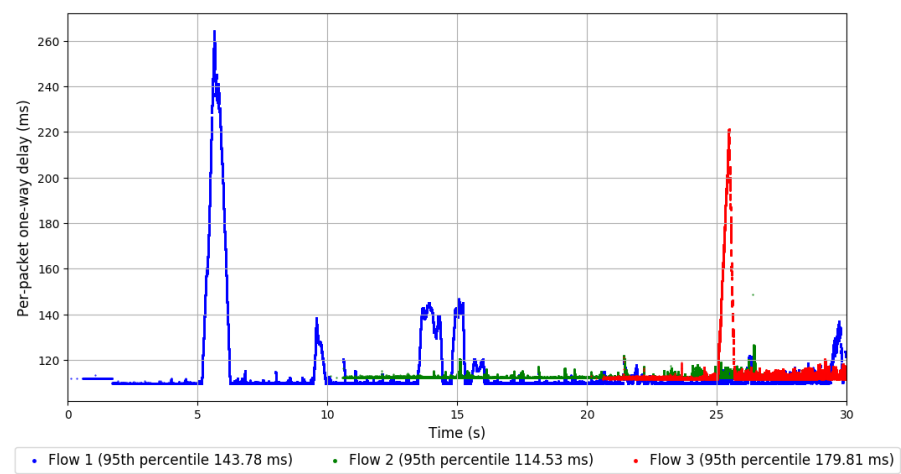
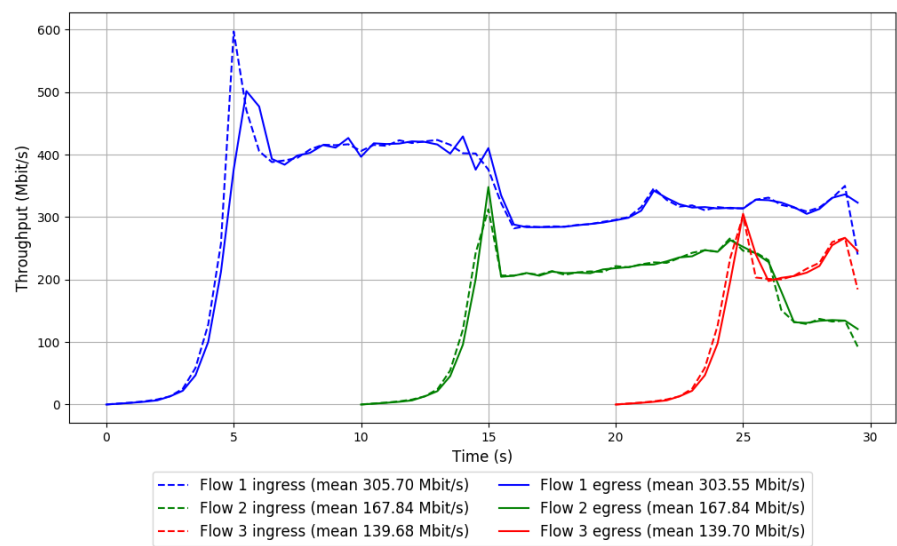
-- Flow 3:

Average throughput: 139.70 Mbit/s

95th percentile per-packet one-way delay: 179.814 ms

Loss rate: 0.00%

Run 10: Report of Vivace-latency — Data Link

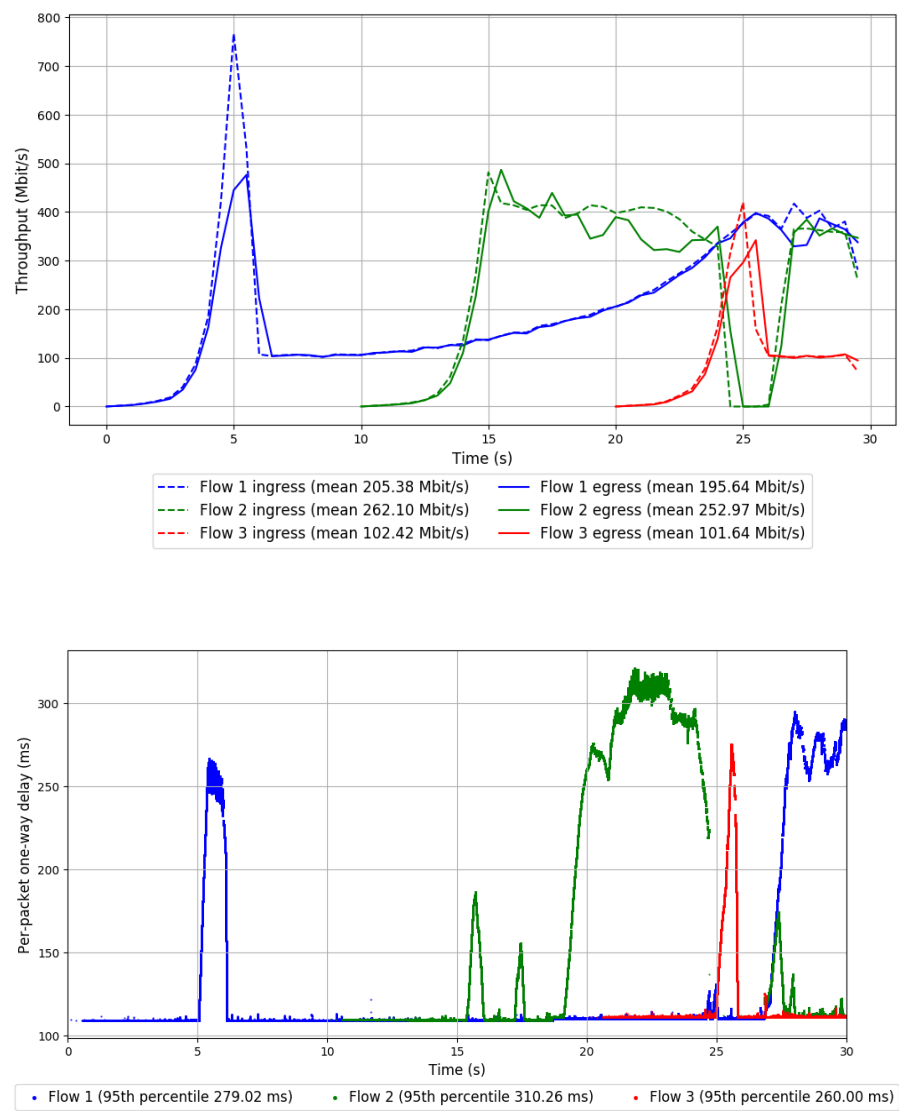


```
Run 1: Statistics of Vivace-loss

Start at: 2018-03-06 20:25:37
End at: 2018-03-06 20:26:07

# Below is generated by plot.py at 2018-03-07 02:52:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 397.24 Mbit/s
95th percentile per-packet one-way delay: 296.515 ms
Loss rate: 3.88%
-- Flow 1:
Average throughput: 195.64 Mbit/s
95th percentile per-packet one-way delay: 279.016 ms
Loss rate: 4.74%
-- Flow 2:
Average throughput: 252.97 Mbit/s
95th percentile per-packet one-way delay: 310.258 ms
Loss rate: 3.48%
-- Flow 3:
Average throughput: 101.64 Mbit/s
95th percentile per-packet one-way delay: 259.998 ms
Loss rate: 0.76%
```

Run 1: Report of Vivace-loss — Data Link

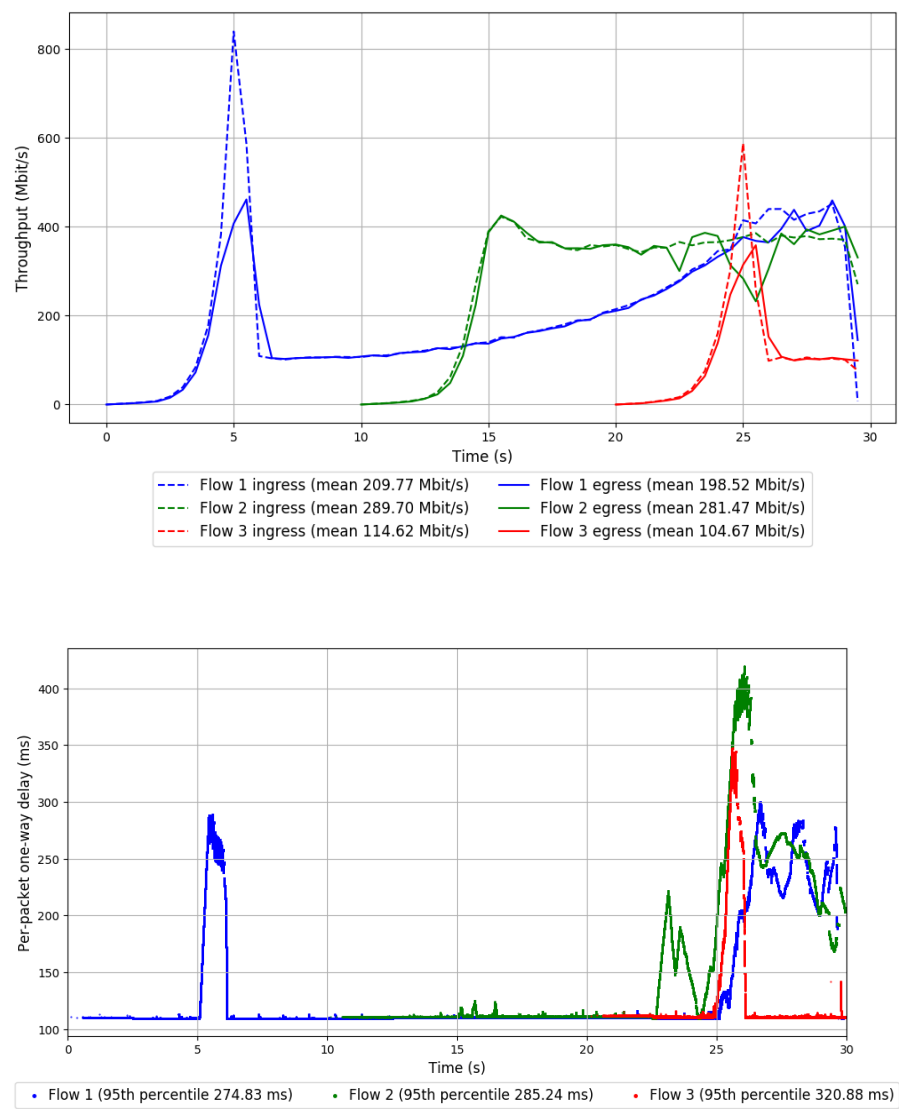


```
Run 2: Statistics of Vivace-loss

Start at: 2018-03-06 20:44:23
End at: 2018-03-06 20:44:53

# Below is generated by plot.py at 2018-03-07 02:52:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 419.40 Mbit/s
95th percentile per-packet one-way delay: 278.417 ms
Loss rate: 4.55%
-- Flow 1:
Average throughput: 198.52 Mbit/s
95th percentile per-packet one-way delay: 274.827 ms
Loss rate: 5.37%
-- Flow 2:
Average throughput: 281.47 Mbit/s
95th percentile per-packet one-way delay: 285.236 ms
Loss rate: 2.84%
-- Flow 3:
Average throughput: 104.67 Mbit/s
95th percentile per-packet one-way delay: 320.883 ms
Loss rate: 8.70%
```

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-03-06 21:03:33

End at: 2018-03-06 21:04:03

Below is generated by plot.py at 2018-03-07 02:55:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 474.61 Mbit/s

95th percentile per-packet one-way delay: 289.807 ms

Loss rate: 2.03%

-- Flow 1:

Average throughput: 252.59 Mbit/s

95th percentile per-packet one-way delay: 211.465 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 279.36 Mbit/s

95th percentile per-packet one-way delay: 295.060 ms

Loss rate: 2.95%

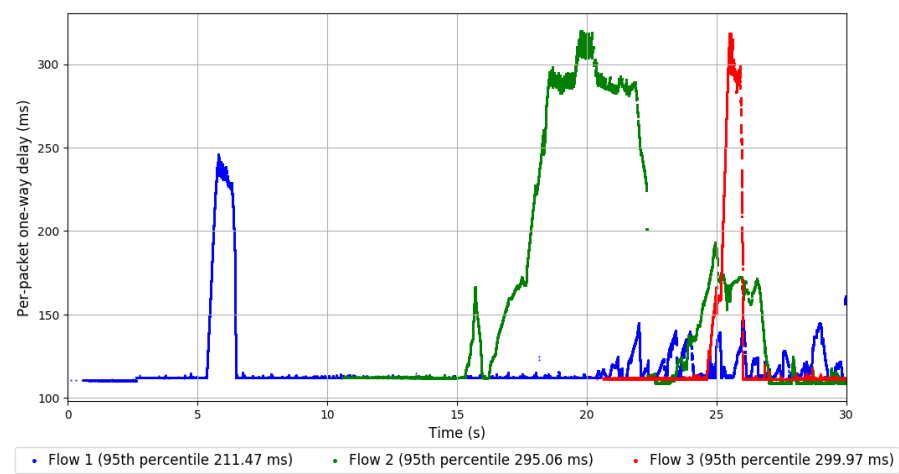
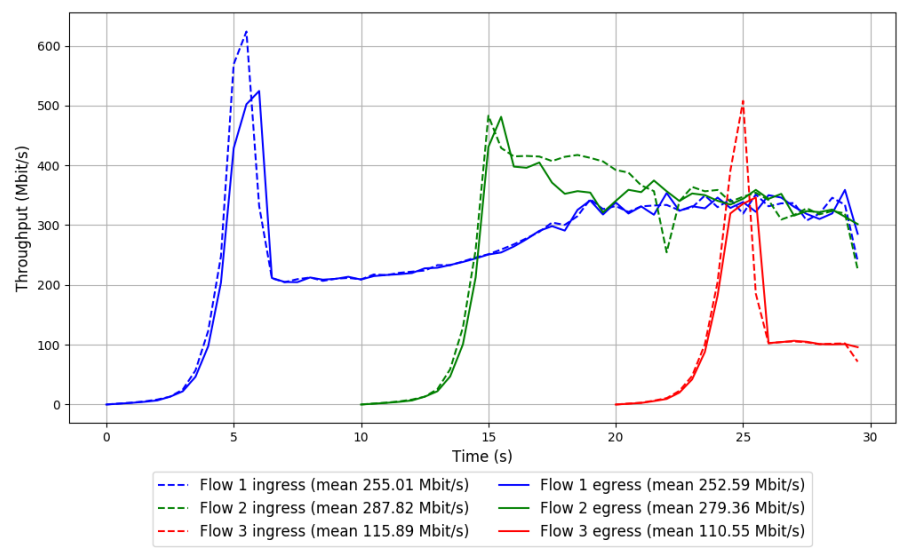
-- Flow 3:

Average throughput: 110.55 Mbit/s

95th percentile per-packet one-way delay: 299.974 ms

Loss rate: 4.62%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-03-06 21:22:53

End at: 2018-03-06 21:23:23

Below is generated by plot.py at 2018-03-07 02:58:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 554.66 Mbit/s

95th percentile per-packet one-way delay: 308.853 ms

Loss rate: 3.65%

-- Flow 1:

Average throughput: 321.03 Mbit/s

95th percentile per-packet one-way delay: 295.061 ms

Loss rate: 2.46%

-- Flow 2:

Average throughput: 277.04 Mbit/s

95th percentile per-packet one-way delay: 333.813 ms

Loss rate: 5.88%

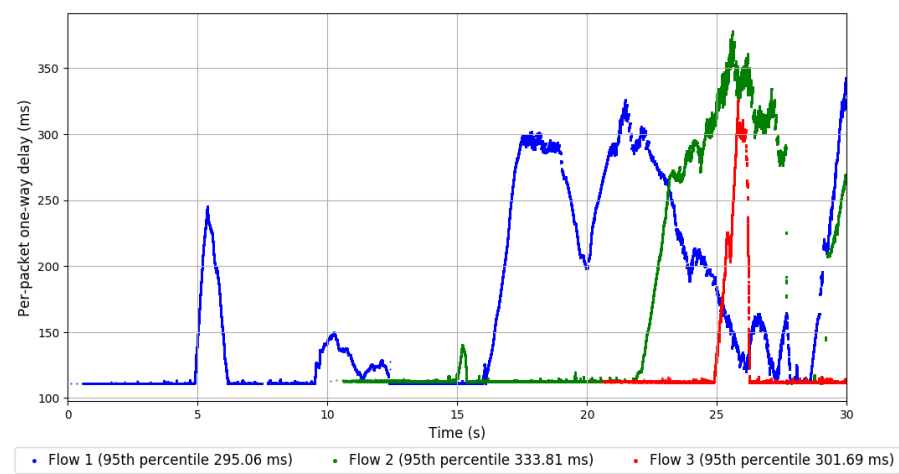
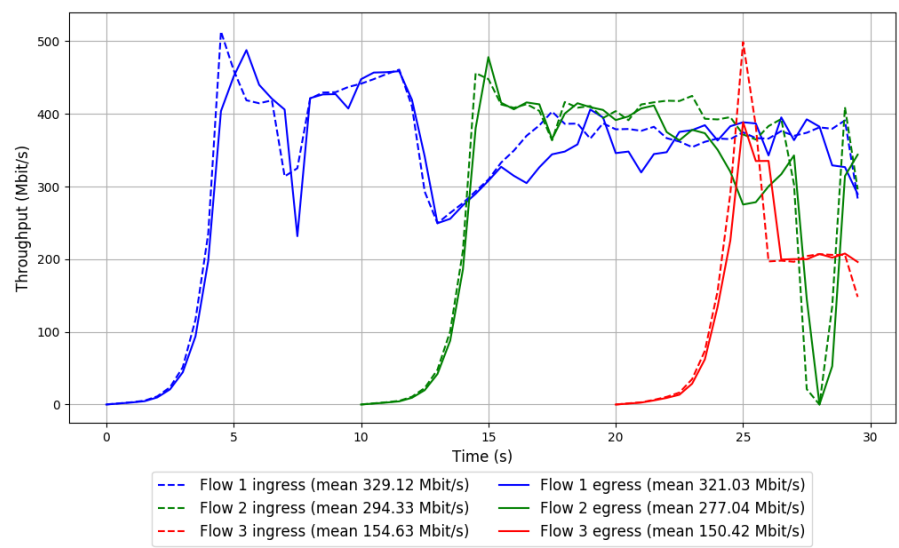
-- Flow 3:

Average throughput: 150.42 Mbit/s

95th percentile per-packet one-way delay: 301.693 ms

Loss rate: 2.74%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-03-06 21:42:04

End at: 2018-03-06 21:42:34

Below is generated by plot.py at 2018-03-07 02:58:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 368.64 Mbit/s

95th percentile per-packet one-way delay: 289.393 ms

Loss rate: 6.00%

-- Flow 1:

Average throughput: 193.03 Mbit/s

95th percentile per-packet one-way delay: 297.438 ms

Loss rate: 8.19%

-- Flow 2:

Average throughput: 206.70 Mbit/s

95th percentile per-packet one-way delay: 134.172 ms

Loss rate: 0.01%

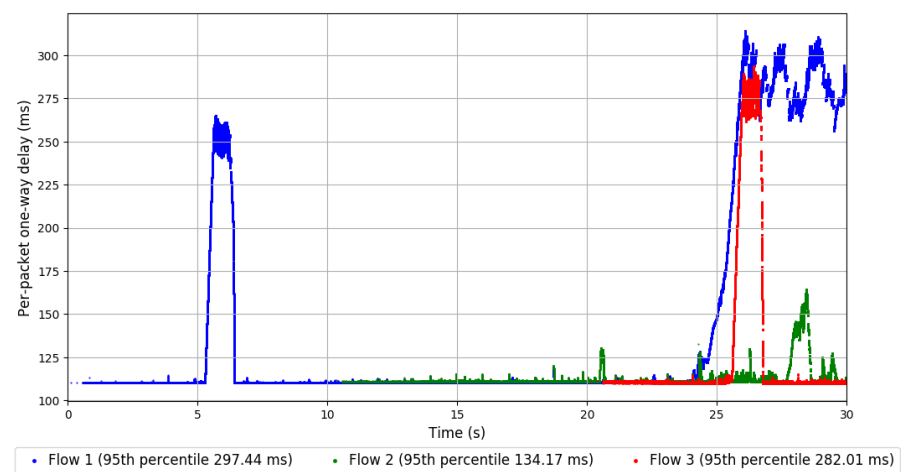
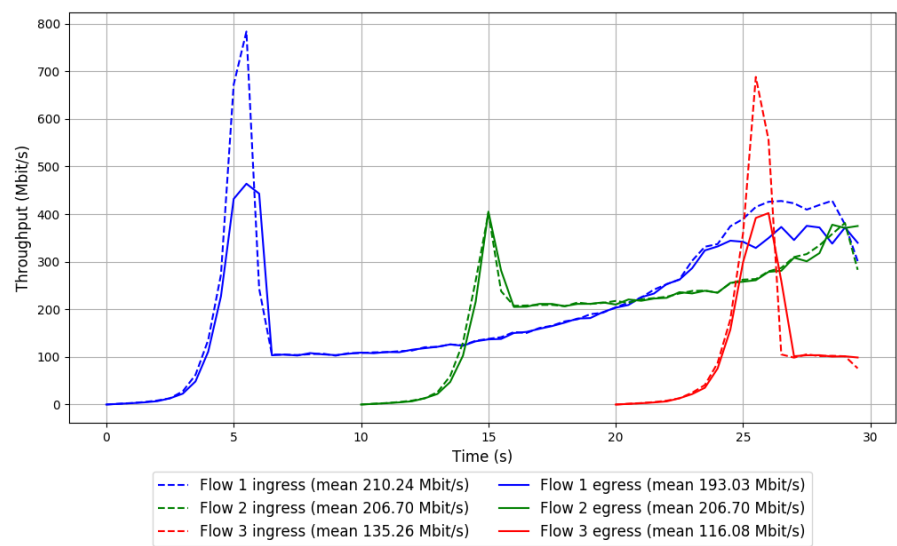
-- Flow 3:

Average throughput: 116.08 Mbit/s

95th percentile per-packet one-way delay: 282.011 ms

Loss rate: 14.18%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-03-06 22:01:20

End at: 2018-03-06 22:01:50

Below is generated by plot.py at 2018-03-07 03:00:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 557.82 Mbit/s

95th percentile per-packet one-way delay: 294.666 ms

Loss rate: 3.59%

-- Flow 1:

Average throughput: 325.93 Mbit/s

95th percentile per-packet one-way delay: 263.016 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 277.10 Mbit/s

95th percentile per-packet one-way delay: 346.591 ms

Loss rate: 8.57%

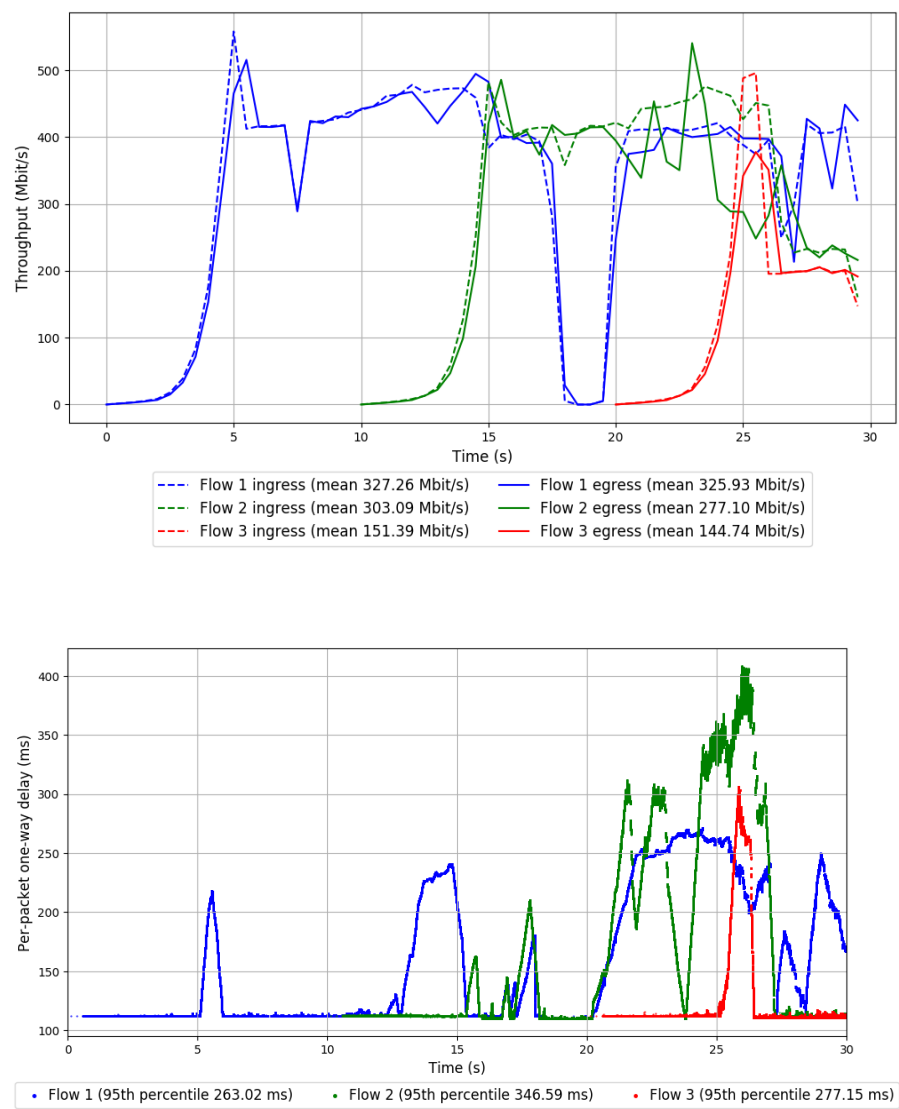
-- Flow 3:

Average throughput: 144.74 Mbit/s

95th percentile per-packet one-way delay: 277.150 ms

Loss rate: 4.41%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-03-06 22:20:58

End at: 2018-03-06 22:21:28

Below is generated by plot.py at 2018-03-07 03:00:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 361.77 Mbit/s

95th percentile per-packet one-way delay: 268.461 ms

Loss rate: 6.55%

-- Flow 1:

Average throughput: 191.35 Mbit/s

95th percentile per-packet one-way delay: 257.713 ms

Loss rate: 6.31%

-- Flow 2:

Average throughput: 209.64 Mbit/s

95th percentile per-packet one-way delay: 246.423 ms

Loss rate: 1.93%

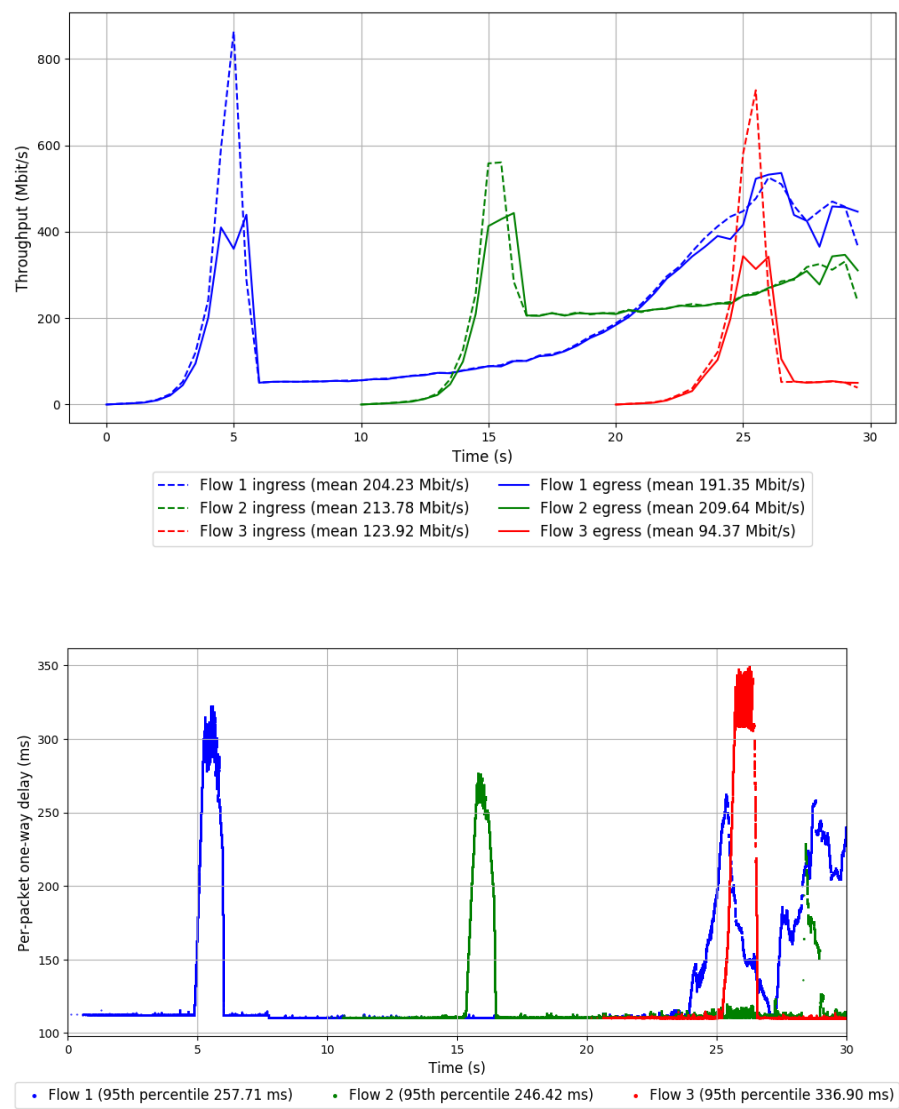
-- Flow 3:

Average throughput: 94.37 Mbit/s

95th percentile per-packet one-way delay: 336.904 ms

Loss rate: 23.85%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-03-06 22:40:22

End at: 2018-03-06 22:40:52

Below is generated by plot.py at 2018-03-07 03:00:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 510.69 Mbit/s

95th percentile per-packet one-way delay: 248.280 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 357.24 Mbit/s

95th percentile per-packet one-way delay: 232.588 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 172.53 Mbit/s

95th percentile per-packet one-way delay: 115.505 ms

Loss rate: 0.00%

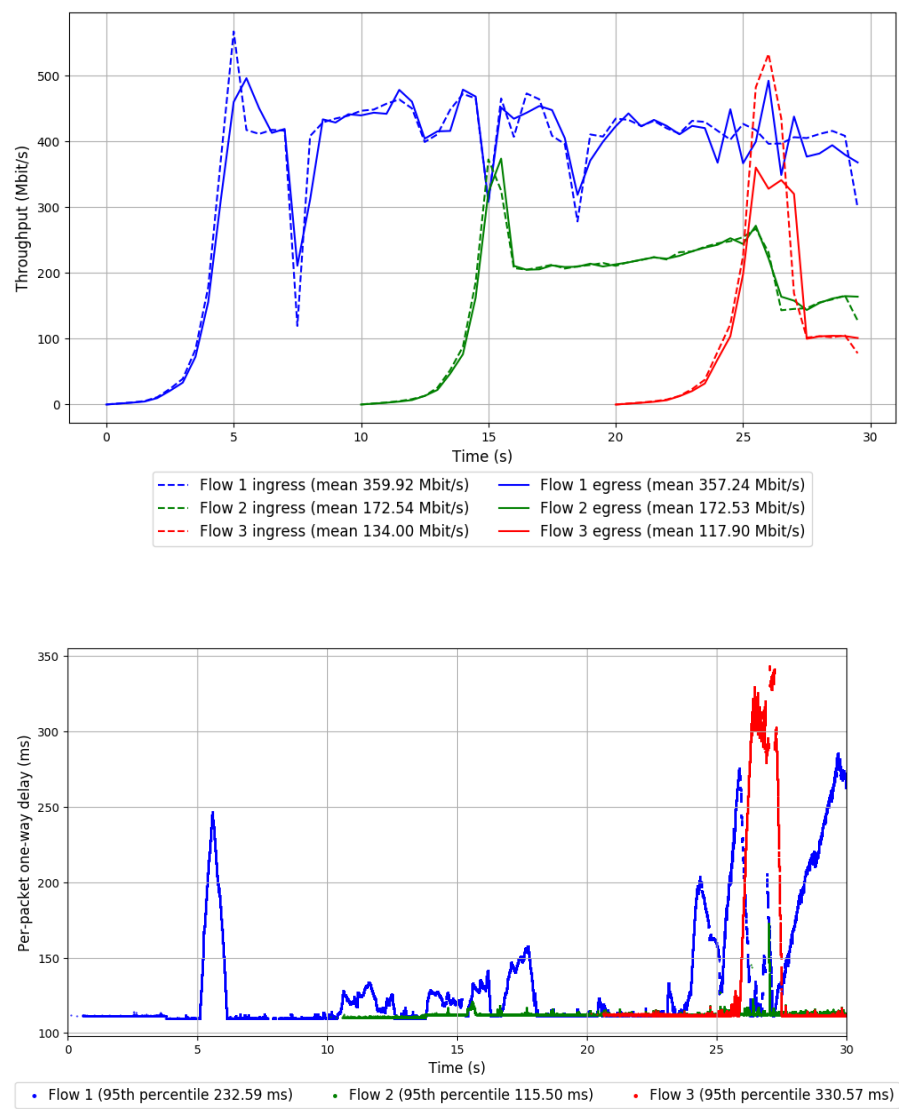
-- Flow 3:

Average throughput: 117.90 Mbit/s

95th percentile per-packet one-way delay: 330.574 ms

Loss rate: 12.03%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-03-06 22:59:45

End at: 2018-03-06 23:00:15

Below is generated by plot.py at 2018-03-07 03:00:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 402.53 Mbit/s

95th percentile per-packet one-way delay: 304.487 ms

Loss rate: 3.19%

-- Flow 1:

Average throughput: 147.82 Mbit/s

95th percentile per-packet one-way delay: 297.138 ms

Loss rate: 2.75%

-- Flow 2:

Average throughput: 308.39 Mbit/s

95th percentile per-packet one-way delay: 308.099 ms

Loss rate: 3.57%

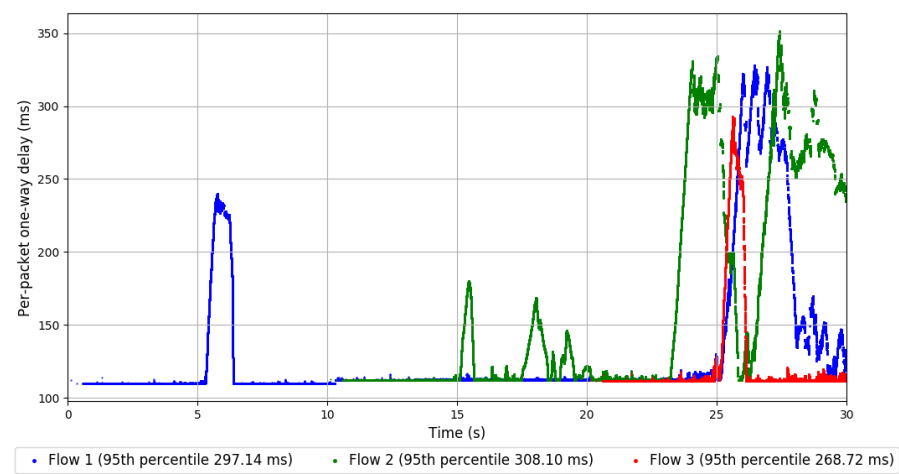
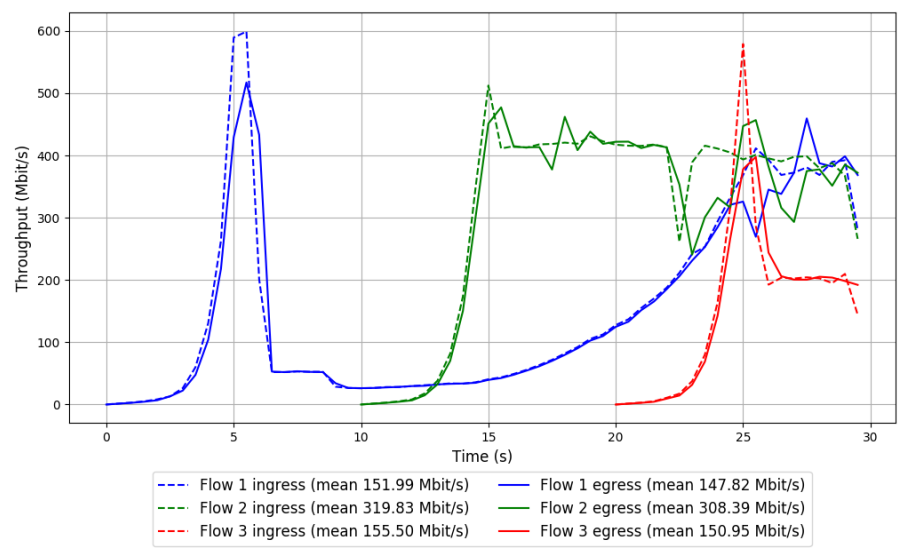
-- Flow 3:

Average throughput: 150.95 Mbit/s

95th percentile per-packet one-way delay: 268.719 ms

Loss rate: 2.93%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-03-06 23:18:37

End at: 2018-03-06 23:19:07

Below is generated by plot.py at 2018-03-07 03:00:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 317.37 Mbit/s

95th percentile per-packet one-way delay: 272.909 ms

Loss rate: 4.71%

-- Flow 1:

Average throughput: 202.97 Mbit/s

95th percentile per-packet one-way delay: 264.607 ms

Loss rate: 3.71%

-- Flow 2:

Average throughput: 120.39 Mbit/s

95th percentile per-packet one-way delay: 280.845 ms

Loss rate: 4.05%

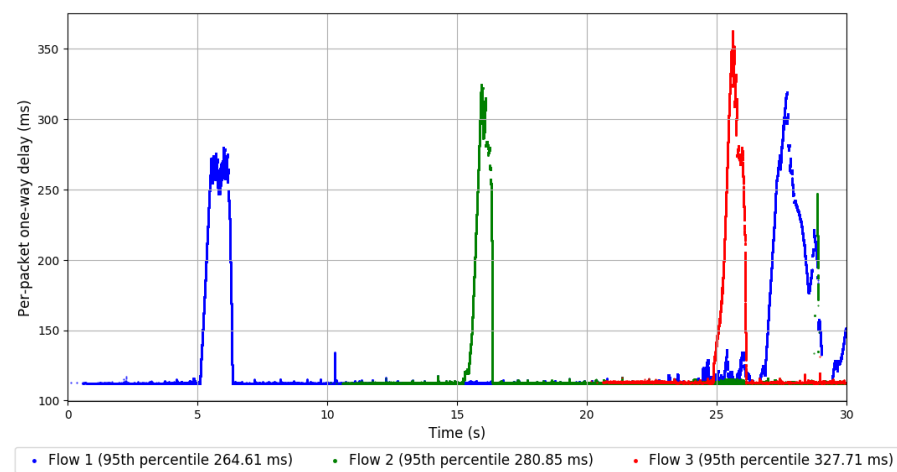
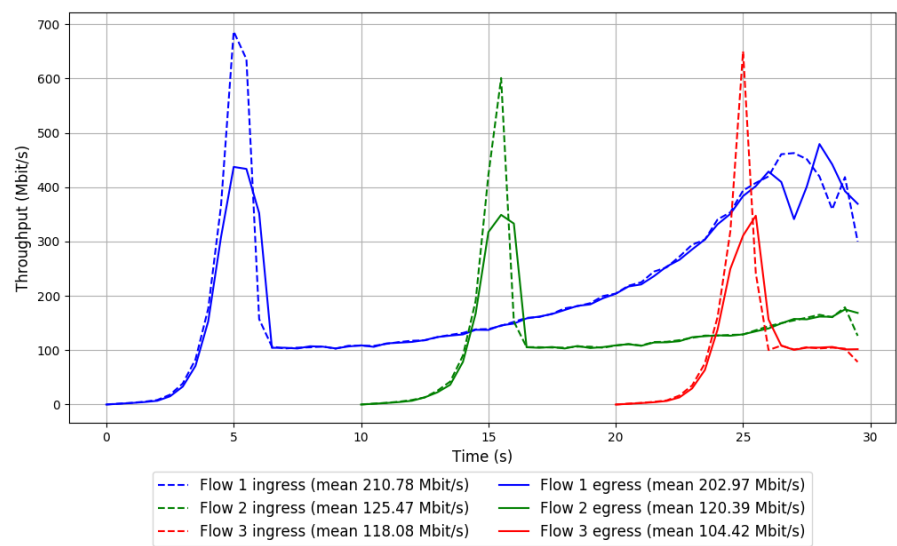
-- Flow 3:

Average throughput: 104.42 Mbit/s

95th percentile per-packet one-way delay: 327.713 ms

Loss rate: 11.58%

Run 10: Report of Vivace-loss — Data Link

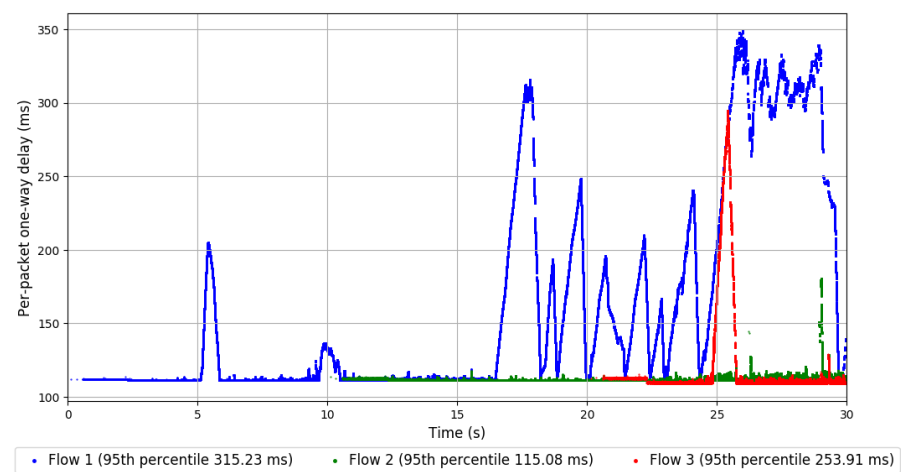
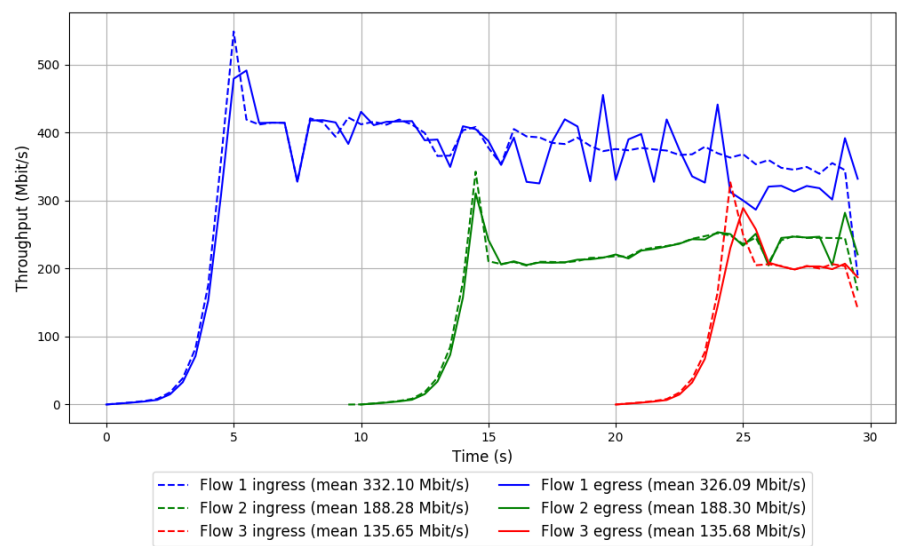


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-03-06 20:21:13
End at: 2018-03-06 20:21:43

# Below is generated by plot.py at 2018-03-07 03:04:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 495.96 Mbit/s
95th percentile per-packet one-way delay: 308.834 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 326.09 Mbit/s
95th percentile per-packet one-way delay: 315.228 ms
Loss rate: 1.81%
-- Flow 2:
Average throughput: 188.30 Mbit/s
95th percentile per-packet one-way delay: 115.085 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 135.68 Mbit/s
95th percentile per-packet one-way delay: 253.913 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-03-06 20:40:01

End at: 2018-03-06 20:40:31

Below is generated by plot.py at 2018-03-07 03:04:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 491.18 Mbit/s

95th percentile per-packet one-way delay: 239.912 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 316.85 Mbit/s

95th percentile per-packet one-way delay: 223.240 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 196.20 Mbit/s

95th percentile per-packet one-way delay: 301.016 ms

Loss rate: 1.76%

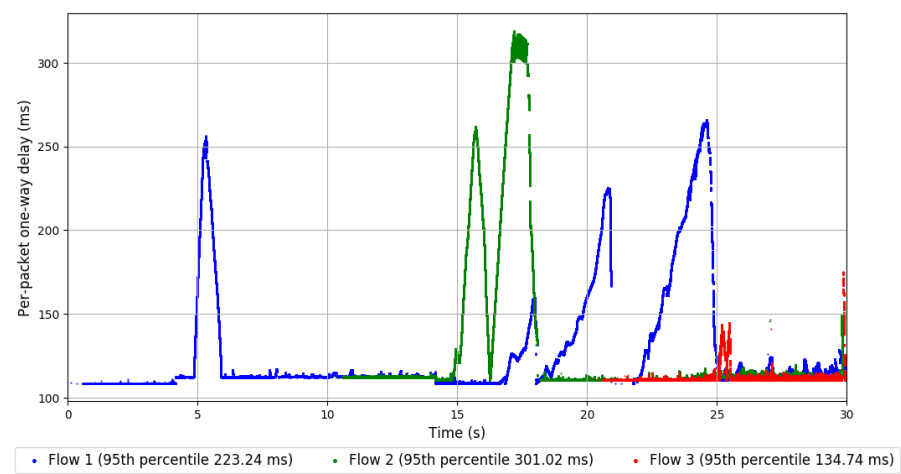
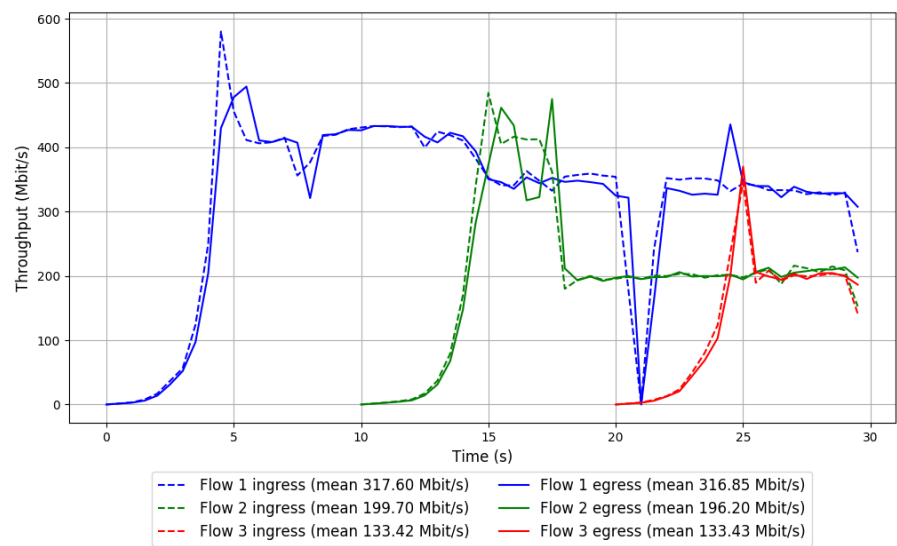
-- Flow 3:

Average throughput: 133.43 Mbit/s

95th percentile per-packet one-way delay: 134.738 ms

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-03-06 20:59:07

End at: 2018-03-06 20:59:37

Below is generated by plot.py at 2018-03-07 03:06:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 551.53 Mbit/s

95th percentile per-packet one-way delay: 310.248 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 285.17 Mbit/s

95th percentile per-packet one-way delay: 310.684 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 284.88 Mbit/s

95th percentile per-packet one-way delay: 323.003 ms

Loss rate: 2.67%

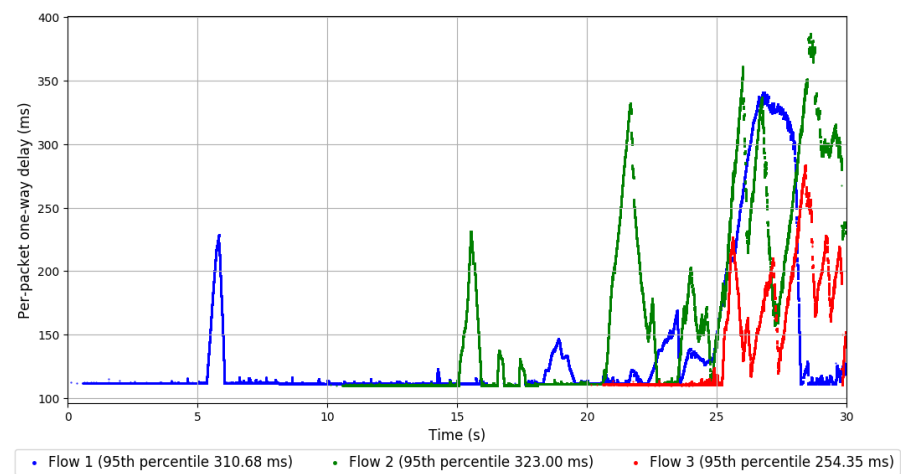
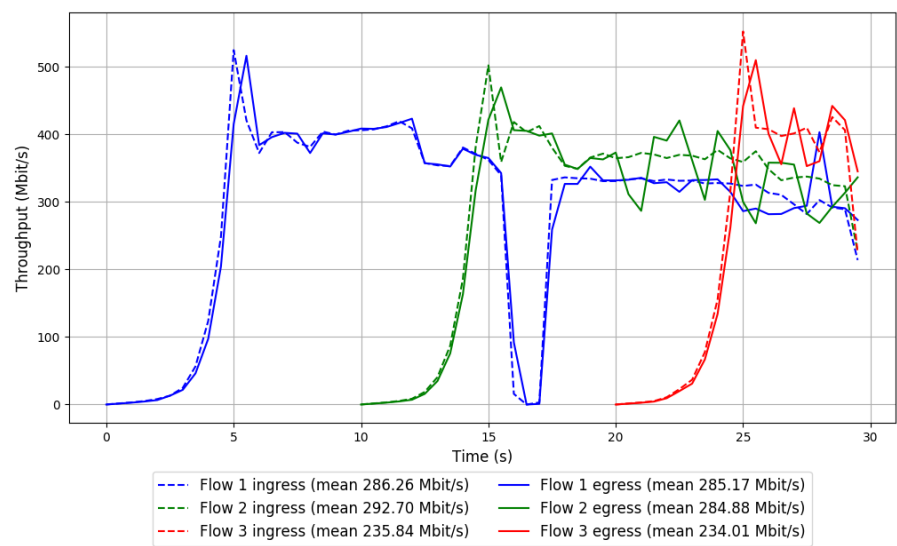
-- Flow 3:

Average throughput: 234.01 Mbit/s

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

Loss rate: 0.80%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-03-06 21:18:30

End at: 2018-03-06 21:19:00

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 509.24 Mbit/s

95th percentile per-packet one-way delay: 268.464 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 324.83 Mbit/s

95th percentile per-packet one-way delay: 263.855 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 205.64 Mbit/s

95th percentile per-packet one-way delay: 265.856 ms

Loss rate: 0.64%

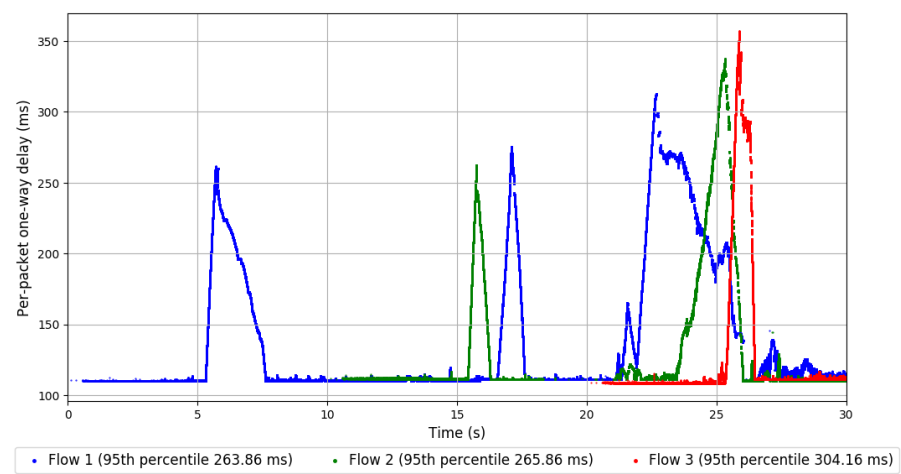
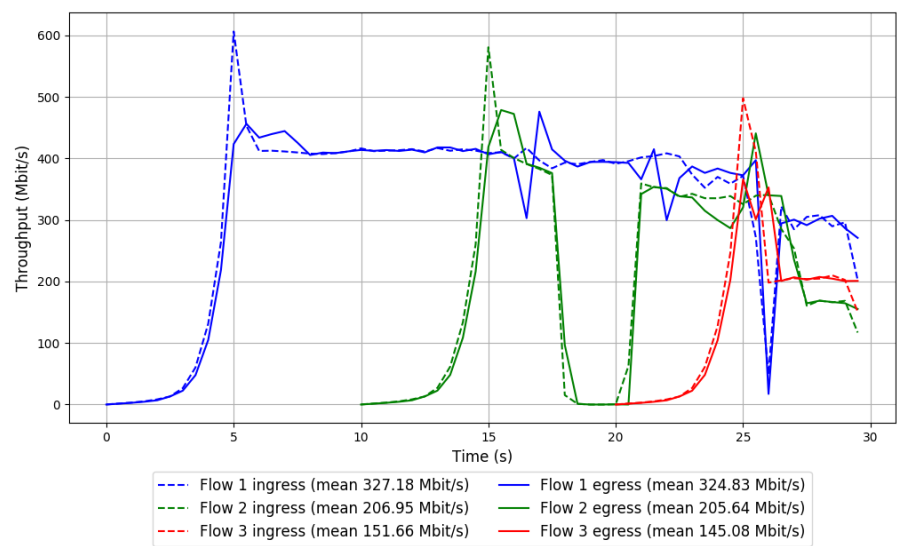
-- Flow 3:

Average throughput: 145.08 Mbit/s

95th percentile per-packet one-way delay: 304.159 ms

Loss rate: 4.32%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-03-06 21:37:43

End at: 2018-03-06 21:38:13

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 499.67 Mbit/s

95th percentile per-packet one-way delay: 126.646 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 293.45 Mbit/s

95th percentile per-packet one-way delay: 128.470 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 243.37 Mbit/s

95th percentile per-packet one-way delay: 122.304 ms

Loss rate: 0.31%

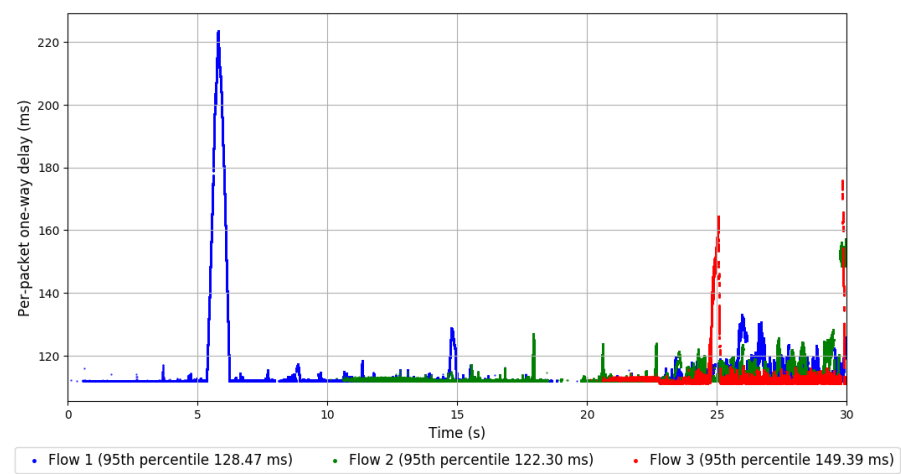
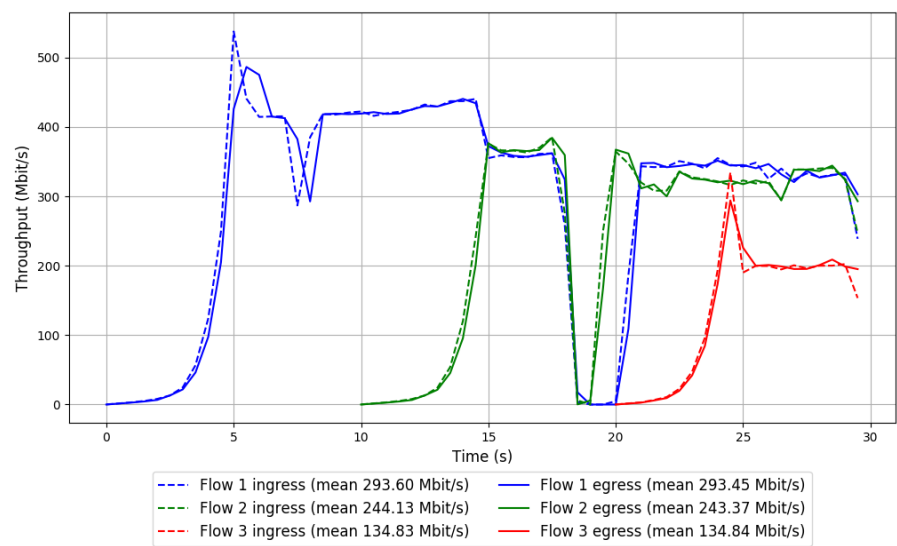
-- Flow 3:

Average throughput: 134.84 Mbit/s

95th percentile per-packet one-way delay: 149.393 ms

Loss rate: 0.00%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-03-06 21:56:56

End at: 2018-03-06 21:57:26

Below is generated by plot.py at 2018-03-07 03:07:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 491.15 Mbit/s

95th percentile per-packet one-way delay: 217.413 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 244.89 Mbit/s

95th percentile per-packet one-way delay: 146.130 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 306.59 Mbit/s

95th percentile per-packet one-way delay: 228.164 ms

Loss rate: 0.91%

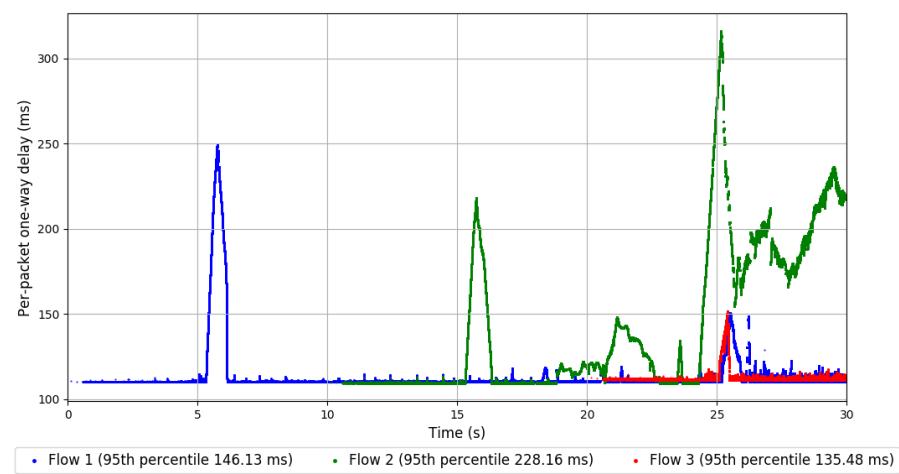
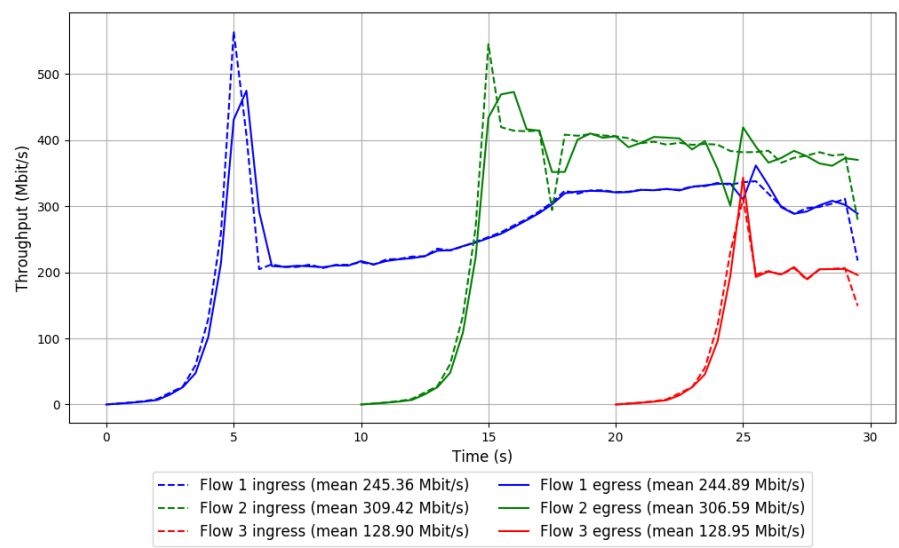
-- Flow 3:

Average throughput: 128.95 Mbit/s

95th percentile per-packet one-way delay: 135.477 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-03-06 22:16:39

End at: 2018-03-06 22:17:09

Below is generated by plot.py at 2018-03-07 03:07:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 519.76 Mbit/s

95th percentile per-packet one-way delay: 259.212 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 352.02 Mbit/s

95th percentile per-packet one-way delay: 268.011 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 186.65 Mbit/s

95th percentile per-packet one-way delay: 115.202 ms

Loss rate: 0.00%

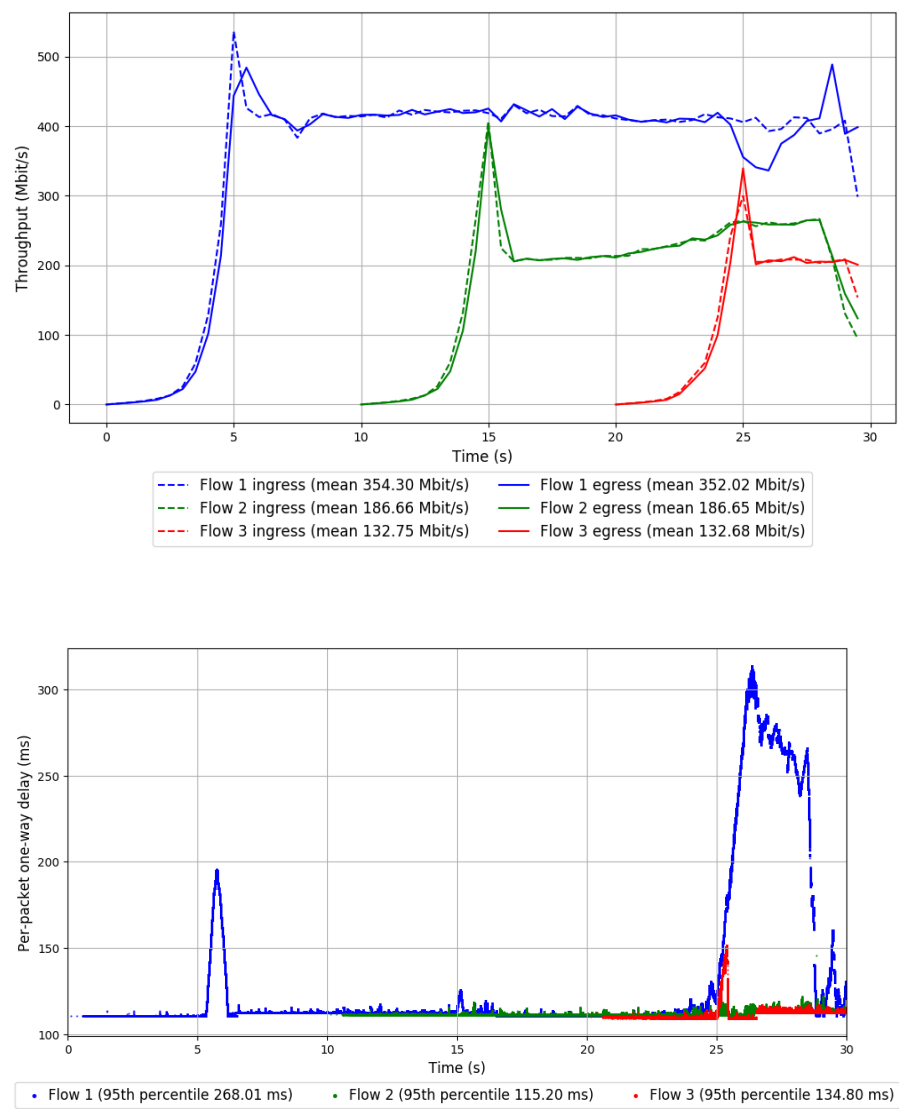
-- Flow 3:

Average throughput: 132.68 Mbit/s

95th percentile per-packet one-way delay: 134.801 ms

Loss rate: 0.03%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-03-06 22:35:52

End at: 2018-03-06 22:36:22

Below is generated by plot.py at 2018-03-07 03:08:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 547.10 Mbit/s

95th percentile per-packet one-way delay: 261.990 ms

Loss rate: 2.36%

-- Flow 1:

Average throughput: 324.95 Mbit/s

95th percentile per-packet one-way delay: 280.070 ms

Loss rate: 1.81%

-- Flow 2:

Average throughput: 290.21 Mbit/s

95th percentile per-packet one-way delay: 234.824 ms

Loss rate: 1.38%

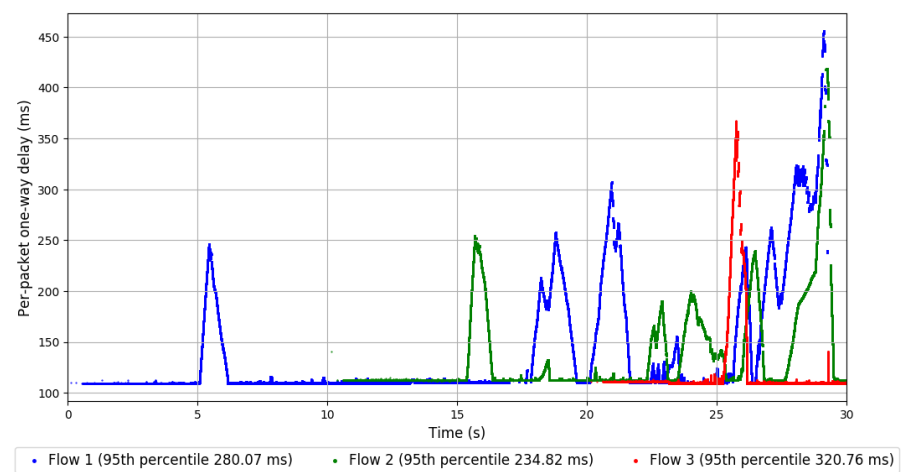
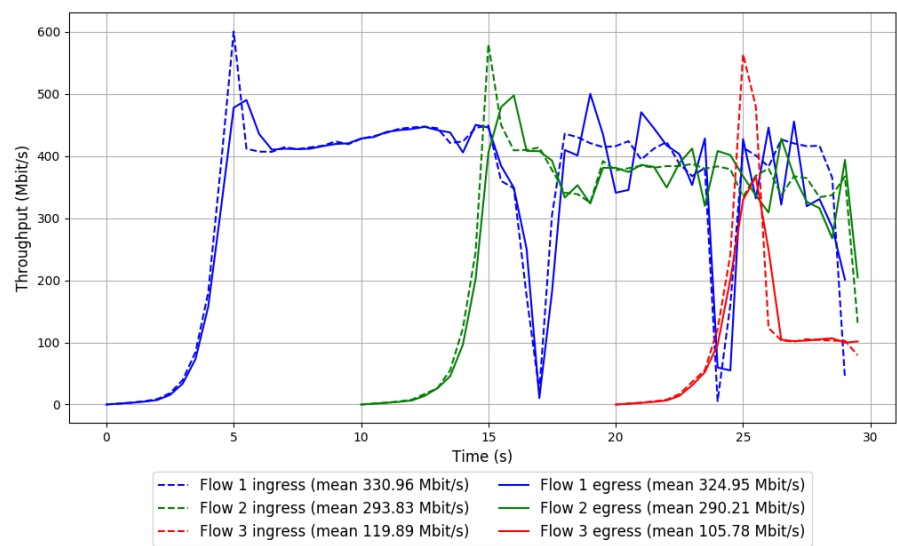
-- Flow 3:

Average throughput: 105.78 Mbit/s

95th percentile per-packet one-way delay: 320.758 ms

Loss rate: 11.78%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-03-06 22:55:21

End at: 2018-03-06 22:55:51

Below is generated by plot.py at 2018-03-07 03:09:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 556.19 Mbit/s

95th percentile per-packet one-way delay: 306.064 ms

Loss rate: 1.91%

-- Flow 1:

Average throughput: 316.81 Mbit/s

95th percentile per-packet one-way delay: 311.108 ms

Loss rate: 1.93%

-- Flow 2:

Average throughput: 296.09 Mbit/s

95th percentile per-packet one-way delay: 302.403 ms

Loss rate: 2.29%

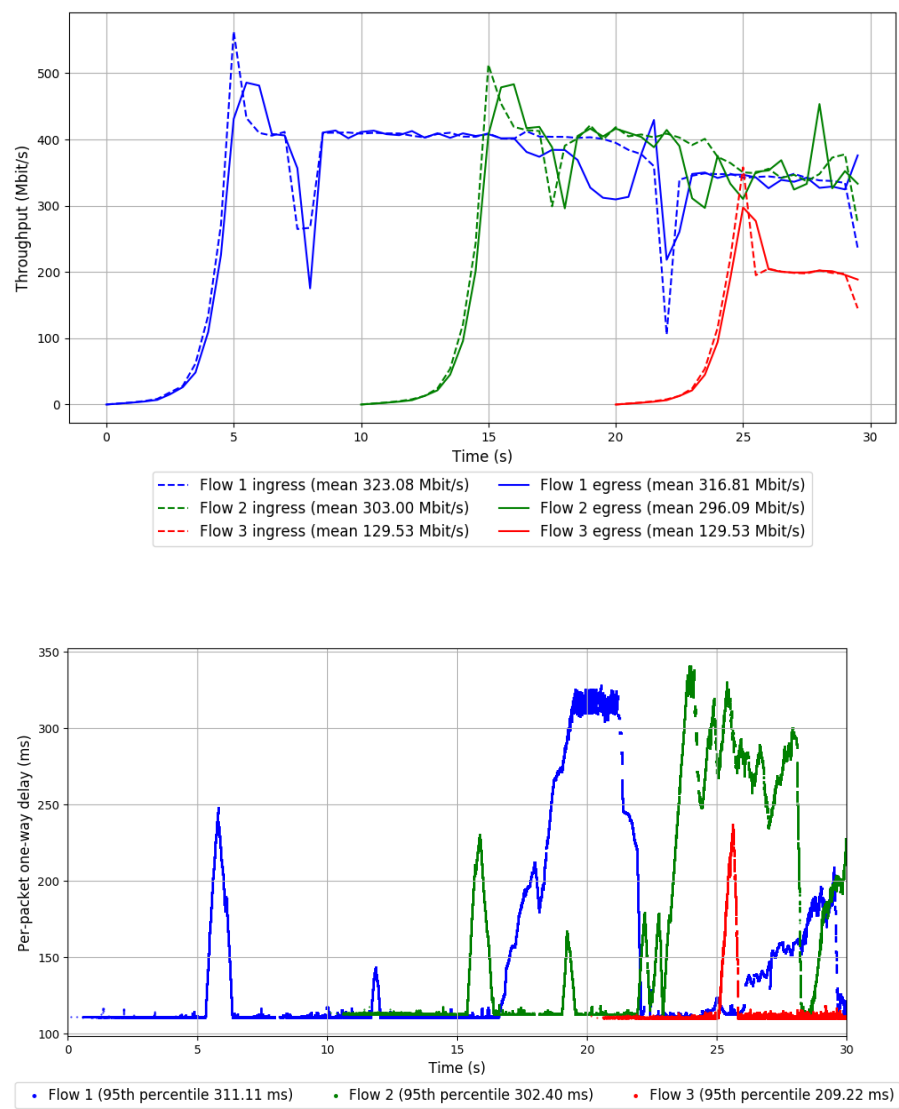
-- Flow 3:

Average throughput: 129.53 Mbit/s

95th percentile per-packet one-way delay: 209.216 ms

Loss rate: 0.01%

Run 9: Report of Vivace-LTE — Data Link



```
Run 10: Statistics of Vivace-LTE

Start at: 2018-03-06 23:14:17
End at: 2018-03-06 23:14:47

# Below is generated by plot.py at 2018-03-07 03:09:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 494.02 Mbit/s
95th percentile per-packet one-way delay: 281.965 ms
Loss rate: 2.30%
-- Flow 1:
Average throughput: 316.35 Mbit/s
95th percentile per-packet one-way delay: 302.310 ms
Loss rate: 3.21%
-- Flow 2:
Average throughput: 202.09 Mbit/s
95th percentile per-packet one-way delay: 212.188 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 132.12 Mbit/s
95th percentile per-packet one-way delay: 157.149 ms
Loss rate: 0.00%
```

Run 10: Report of Vivace-LTE — Data Link

