

Pantheon Report

Generated at 2018-02-17 07:33:17 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

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

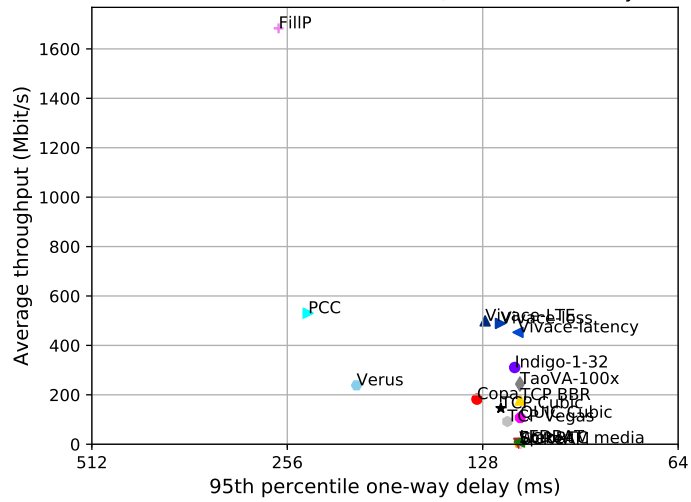
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

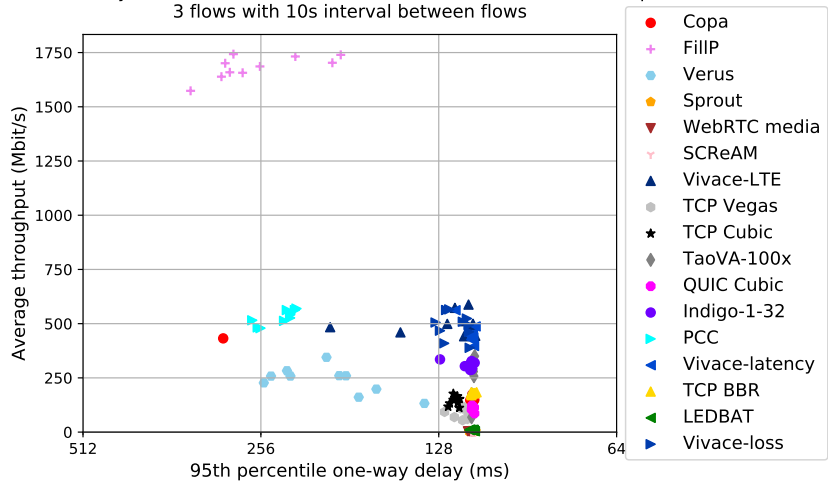
Git summary:

```
branch: master @ cccb2d77344969a7bac1df6edf6c0cfb6c77a6f8
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 8400b8926887fc4cf8c795a1d7ce2c8ac041ec72
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



test from GCE Tokyo Ethernet to GCE London 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	92.27	90.17	82.57	112.02	111.78	111.84	0.86	1.30	2.90
TCP Cubic	10	91.14	55.20	54.77	120.49	117.15	117.98	0.73	2.52	3.41
LEDBAT	10	5.76	3.97	1.93	112.40	112.29	111.66	1.78	2.54	4.95
PCC	10	497.49	34.10	31.40	237.68	237.59	234.02	3.37	3.44	5.14
QUIC Cubic	10	54.91	55.15	49.15	111.20	111.57	111.07	0.96	0.96	3.61
SCReAM	10	0.22	0.21	0.21	111.43	111.13	110.60	0.70	1.06	2.26
WebRTC media	10	2.07	1.30	0.48	112.05	111.92	111.88	0.88	1.69	3.70
Sprout	10	2.50	2.48	1.86	112.58	112.61	112.24	0.76	1.34	4.06
TaoVA-100x	10	143.30	122.08	71.32	111.88	112.28	112.31	0.62	0.71	2.58
TCP Vegas	10	46.86	52.05	32.95	115.84	116.77	116.49	0.72	1.05	2.90
Verus	10	154.41	98.50	58.35	201.20	204.20	181.94	1.32	2.61	2.43
Copa	10	117.28	64.19	69.39	130.36	124.66	124.21	4.56	2.56	4.11
FillP	10	878.53	836.47	768.21	236.19	259.88	226.91	3.51	4.30	5.56
Indigo-1-32	10	168.08	150.55	133.36	112.87	114.60	118.77	0.68	1.22	2.63
Vivace-latency	10	285.89	191.12	124.75	114.10	114.61	111.43	0.76	1.68	3.70
Vivace-loss	10	292.85	229.57	137.04	135.68	116.58	113.08	0.82	1.79	3.05
Vivace-LTE	10	299.88	226.90	151.91	127.53	127.14	152.80	1.09	1.44	3.44

Run 1: Statistics of TCP BBR

Start at: 2018-02-16 22:56:04

End at: 2018-02-16 22:56:34

Below is generated by plot.py at 2018-02-17 05:40:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 178.93 Mbit/s

95th percentile per-packet one-way delay: 112.381 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 92.68 Mbit/s

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

Loss rate: 0.87%

-- Flow 2:

Average throughput: 89.33 Mbit/s

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

Loss rate: 1.23%

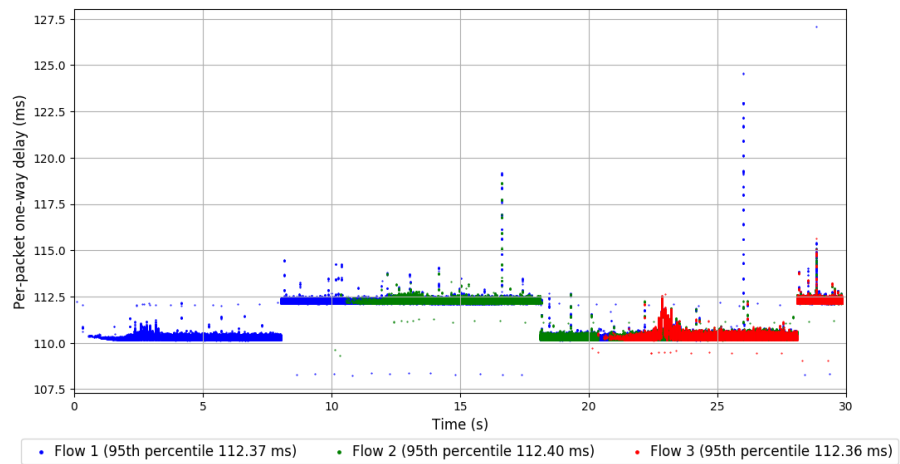
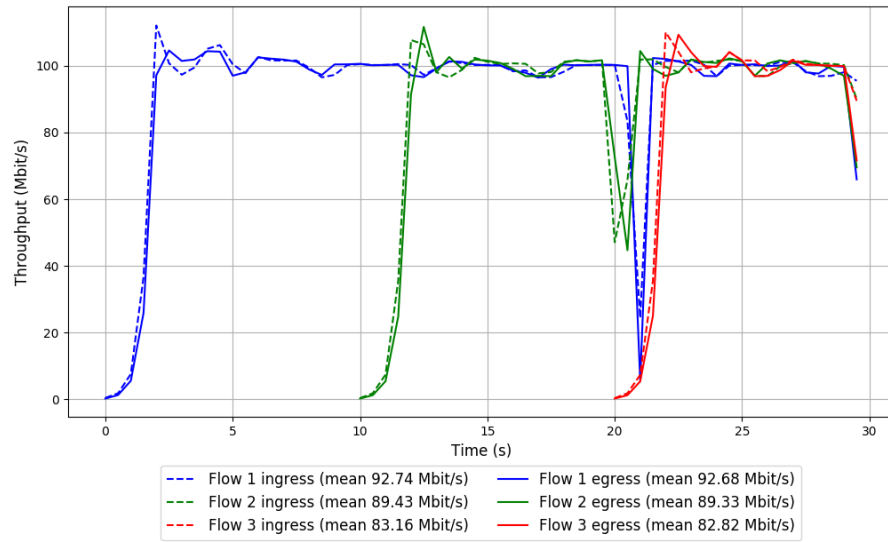
-- Flow 3:

Average throughput: 82.82 Mbit/s

95th percentile per-packet one-way delay: 112.355 ms

Loss rate: 2.63%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-16 23:16:25

End at: 2018-02-16 23:16:55

Below is generated by plot.py at 2018-02-17 05:40:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.00 Mbit/s

95th percentile per-packet one-way delay: 110.454 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 94.90 Mbit/s

95th percentile per-packet one-way delay: 110.354 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 92.43 Mbit/s

95th percentile per-packet one-way delay: 110.375 ms

Loss rate: 1.19%

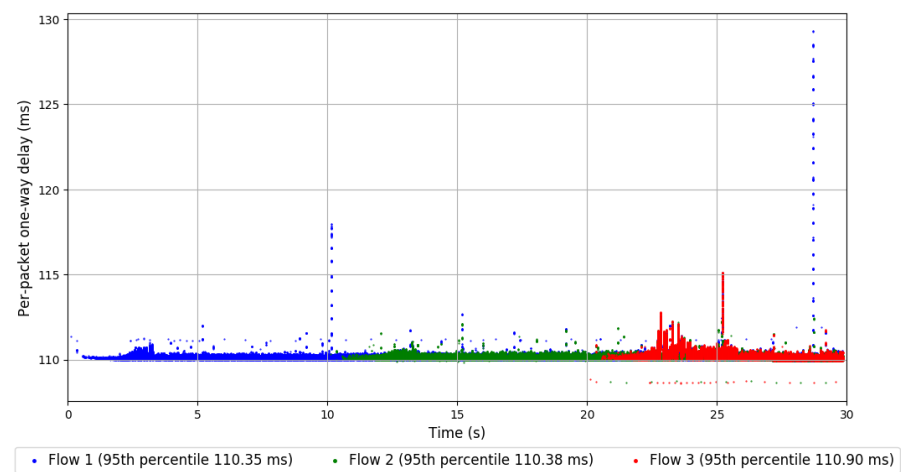
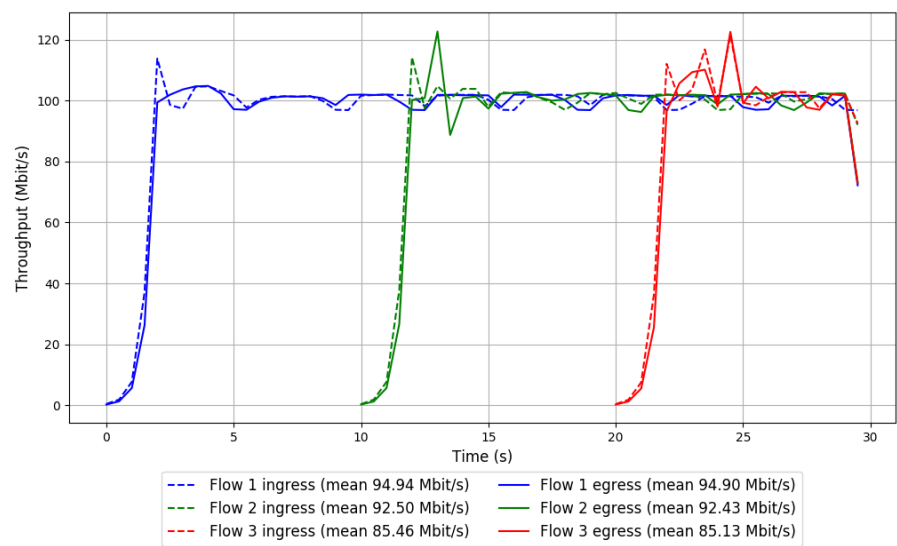
-- Flow 3:

Average throughput: 85.13 Mbit/s

95th percentile per-packet one-way delay: 110.904 ms

Loss rate: 2.61%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-16 23:36:17

End at: 2018-02-16 23:36:47

Below is generated by plot.py at 2018-02-17 05:40:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 178.93 Mbit/s

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

Loss rate: 1.26%

-- Flow 1:

Average throughput: 91.92 Mbit/s

95th percentile per-packet one-way delay: 112.696 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 90.13 Mbit/s

95th percentile per-packet one-way delay: 110.535 ms

Loss rate: 1.24%

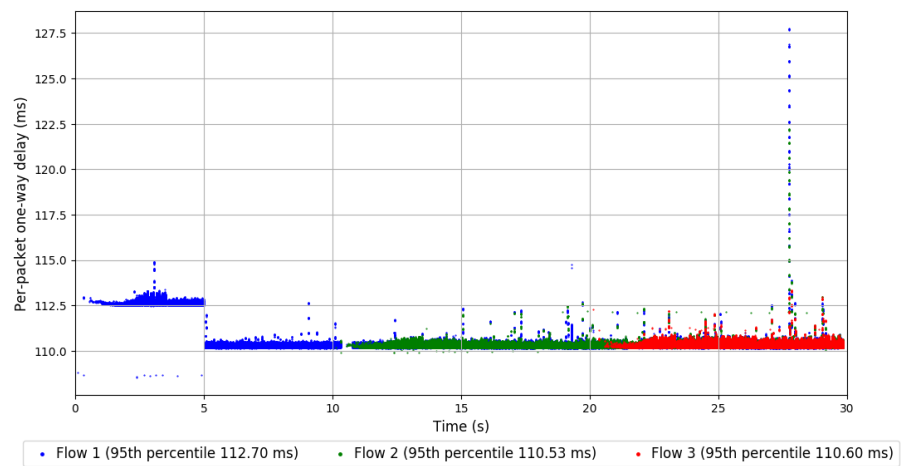
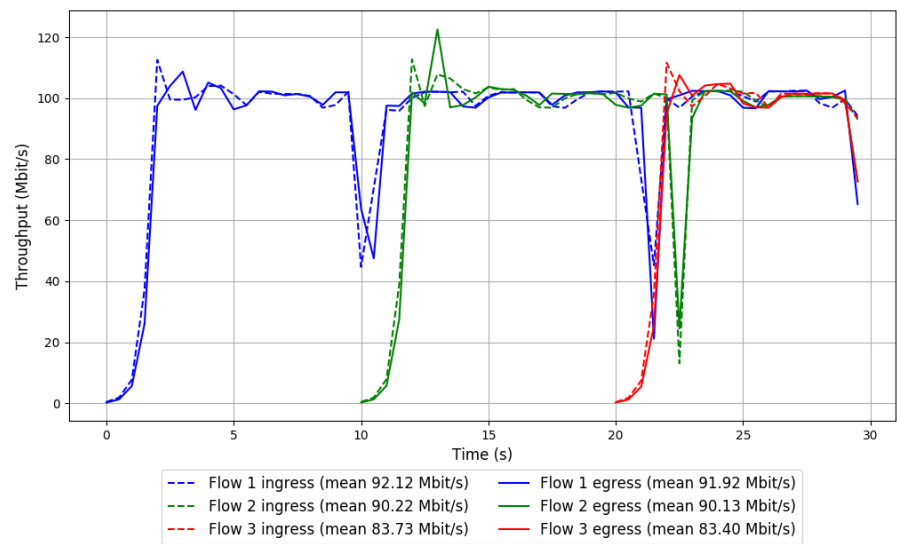
-- Flow 3:

Average throughput: 83.40 Mbit/s

95th percentile per-packet one-way delay: 110.600 ms

Loss rate: 2.71%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-16 23:56:01

End at: 2018-02-16 23:56:31

Below is generated by plot.py at 2018-02-17 05:40:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 176.33 Mbit/s

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

Loss rate: 1.26%

-- Flow 1:

Average throughput: 90.52 Mbit/s

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

Loss rate: 0.85%

-- Flow 2:

Average throughput: 88.53 Mbit/s

95th percentile per-packet one-way delay: 112.336 ms

Loss rate: 1.23%

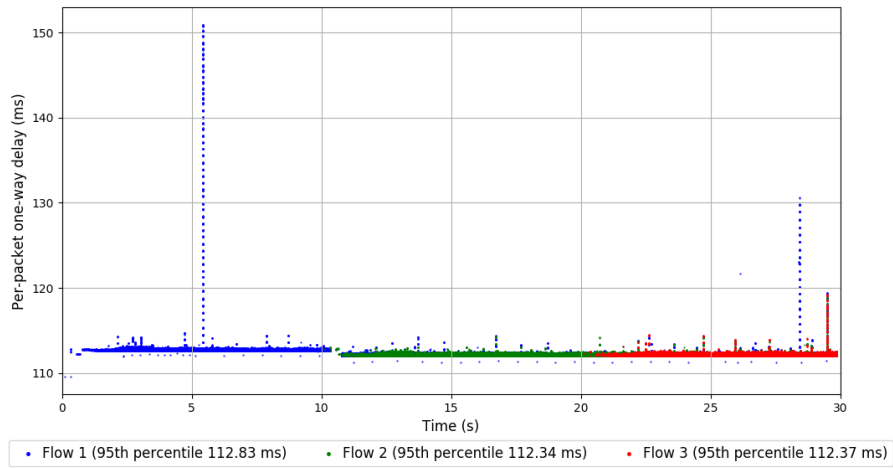
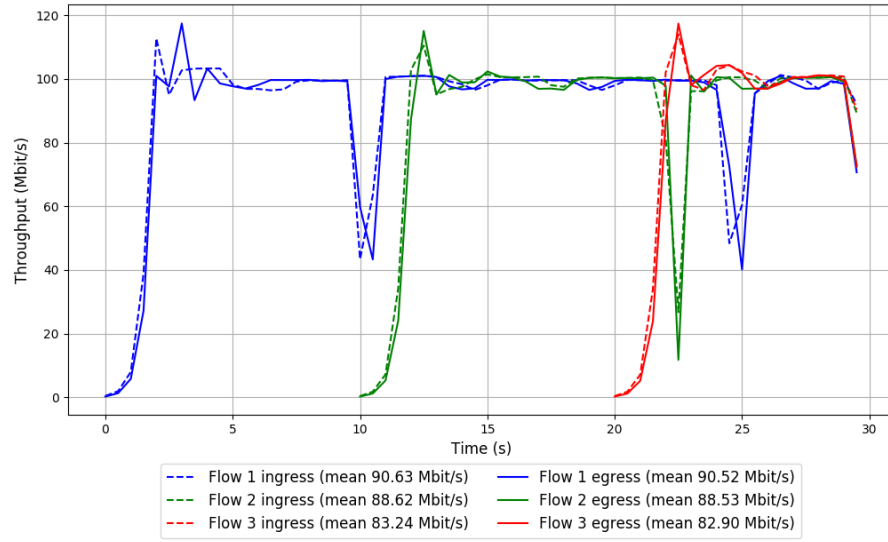
-- Flow 3:

Average throughput: 82.90 Mbit/s

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

Loss rate: 2.66%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-17 00:15:29

End at: 2018-02-17 00:15:59

Below is generated by plot.py at 2018-02-17 05:41:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 183.94 Mbit/s

95th percentile per-packet one-way delay: 112.723 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 93.11 Mbit/s

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

Loss rate: 0.79%

-- Flow 2:

Average throughput: 96.55 Mbit/s

95th percentile per-packet one-way delay: 112.698 ms

Loss rate: 1.26%

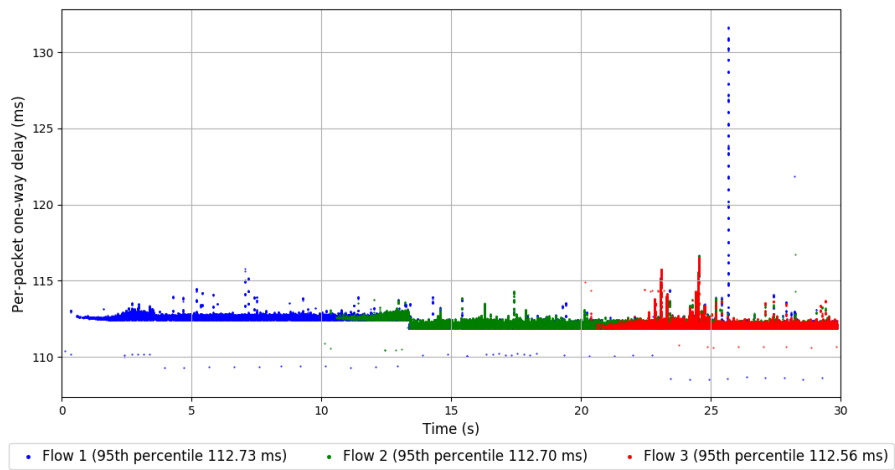
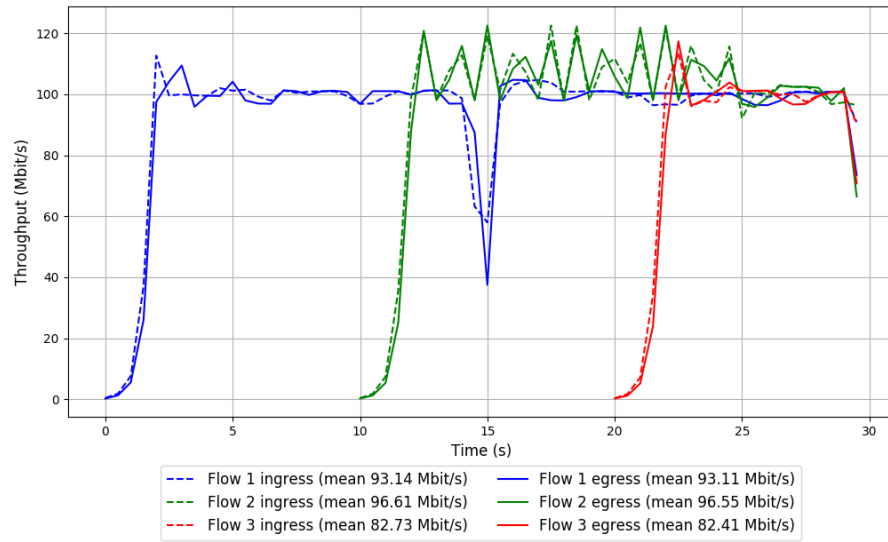
-- Flow 3:

Average throughput: 82.41 Mbit/s

95th percentile per-packet one-way delay: 112.558 ms

Loss rate: 2.66%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-17 00:34:40

End at: 2018-02-17 00:35:10

Below is generated by plot.py at 2018-02-17 05:41:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 170.27 Mbit/s

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

Loss rate: 1.91%

-- Flow 1:

Average throughput: 89.60 Mbit/s

95th percentile per-packet one-way delay: 112.577 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 84.59 Mbit/s

95th percentile per-packet one-way delay: 112.622 ms

Loss rate: 1.93%

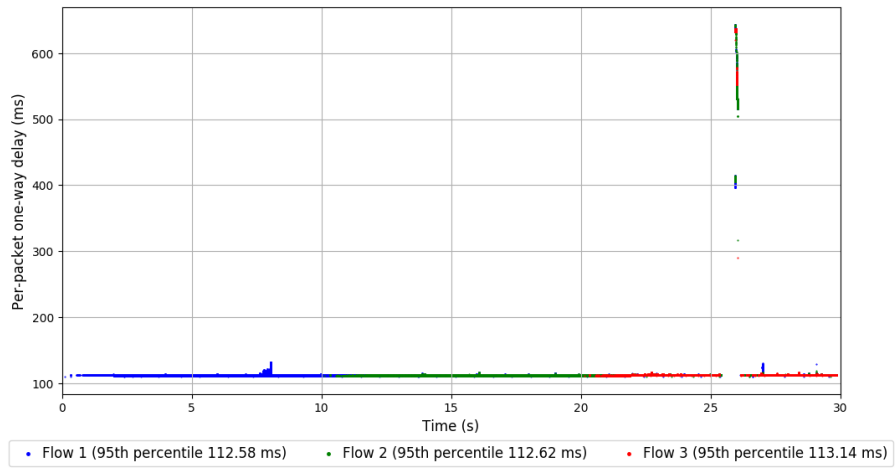
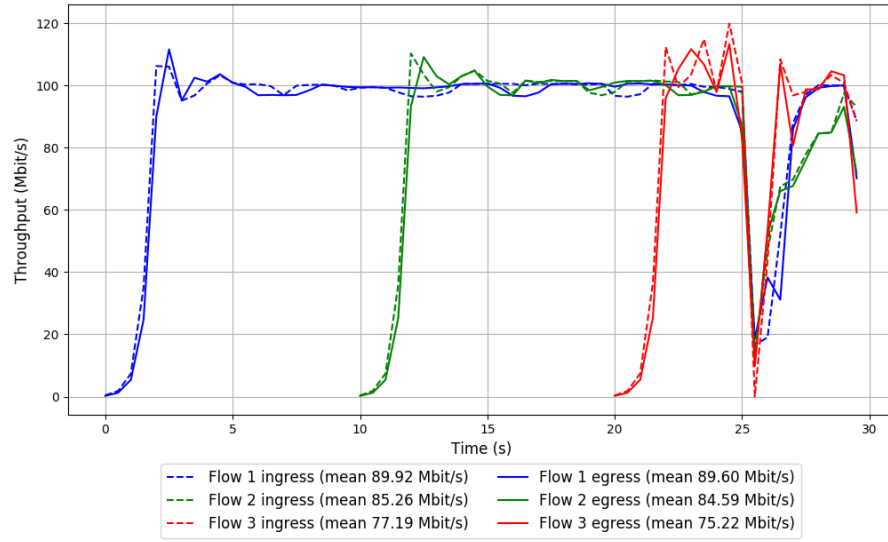
-- Flow 3:

Average throughput: 75.22 Mbit/s

95th percentile per-packet one-way delay: 113.137 ms

Loss rate: 4.75%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-17 00:53:57

End at: 2018-02-17 00:54:27

Below is generated by plot.py at 2018-02-17 05:41:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.64 Mbit/s

95th percentile per-packet one-way delay: 111.774 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 92.83 Mbit/s

95th percentile per-packet one-way delay: 111.783 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 90.30 Mbit/s

95th percentile per-packet one-way delay: 111.788 ms

Loss rate: 1.21%

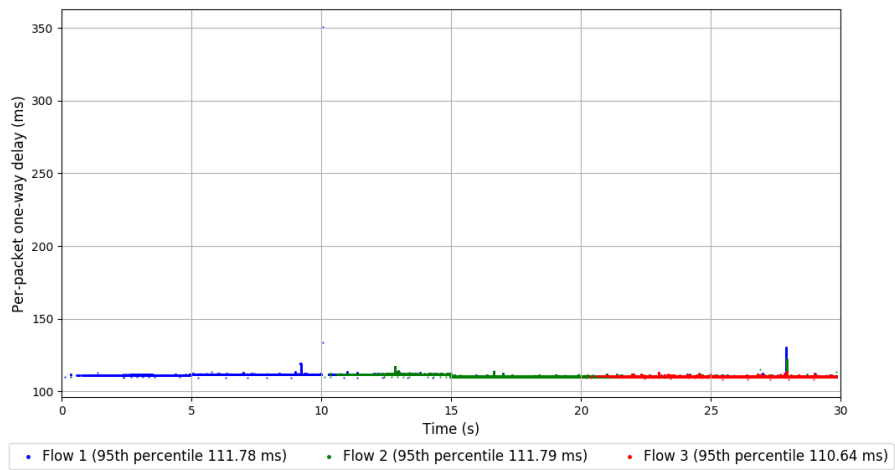
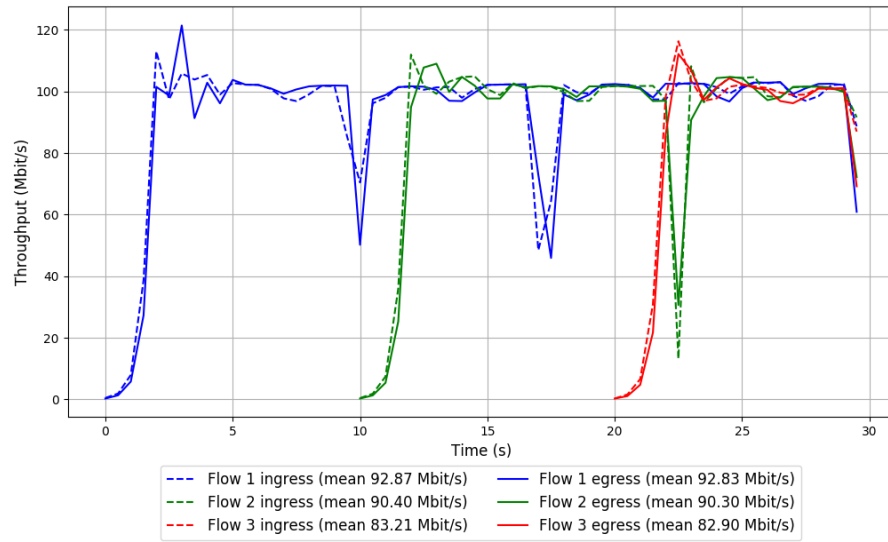
-- Flow 3:

Average throughput: 82.90 Mbit/s

95th percentile per-packet one-way delay: 110.639 ms

Loss rate: 2.60%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-17 01:13:33

End at: 2018-02-17 01:14:03

Below is generated by plot.py at 2018-02-17 05:41:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.57 Mbit/s

95th percentile per-packet one-way delay: 111.256 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 93.13 Mbit/s

95th percentile per-packet one-way delay: 111.215 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 89.41 Mbit/s

95th percentile per-packet one-way delay: 111.211 ms

Loss rate: 1.23%

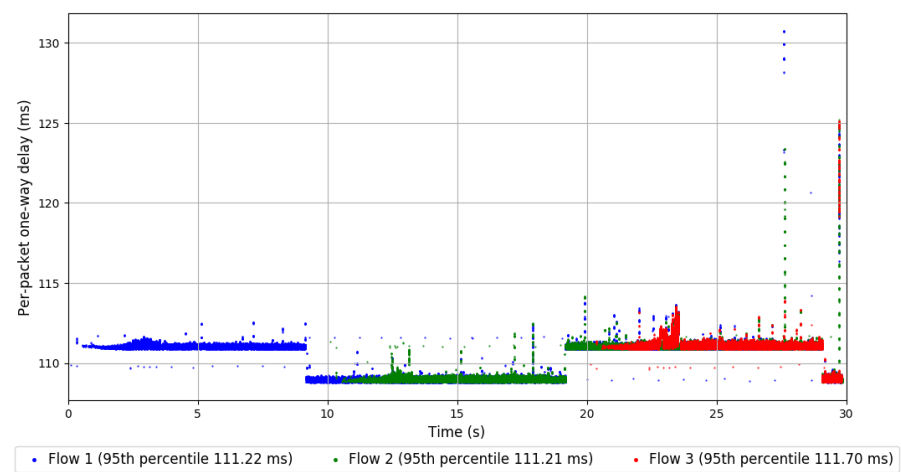
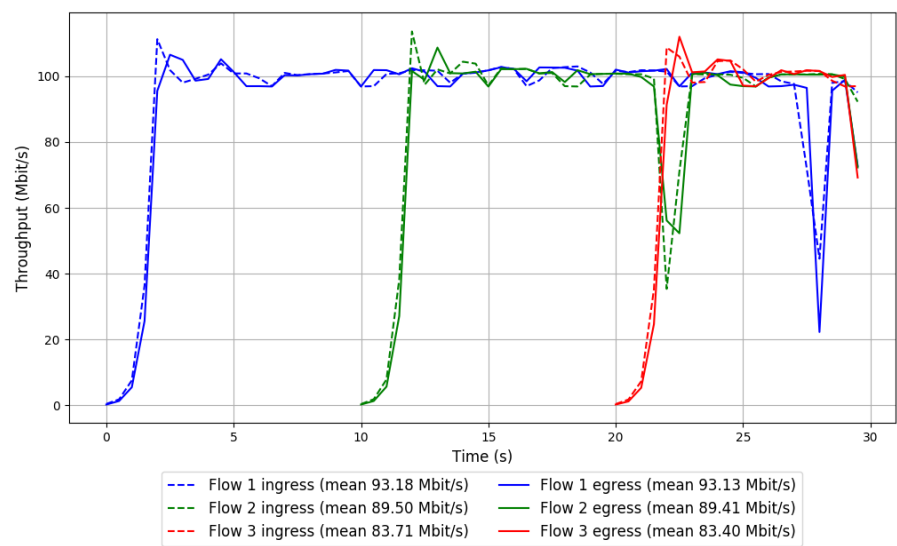
-- Flow 3:

Average throughput: 83.40 Mbit/s

95th percentile per-packet one-way delay: 111.705 ms

Loss rate: 2.91%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-17 01:33:10

End at: 2018-02-17 01:33:40

Below is generated by plot.py at 2018-02-17 05:43:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 180.07 Mbit/s

95th percentile per-packet one-way delay: 111.157 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 91.56 Mbit/s

95th percentile per-packet one-way delay: 111.157 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 92.48 Mbit/s

95th percentile per-packet one-way delay: 111.151 ms

Loss rate: 1.22%

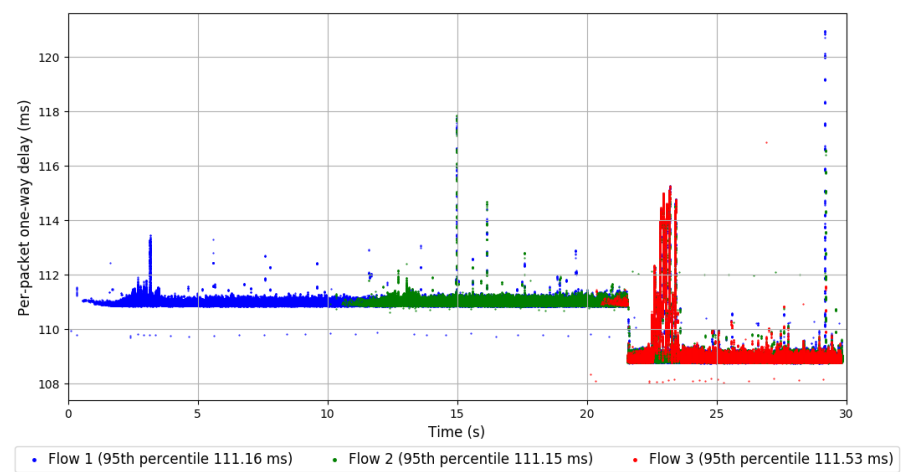
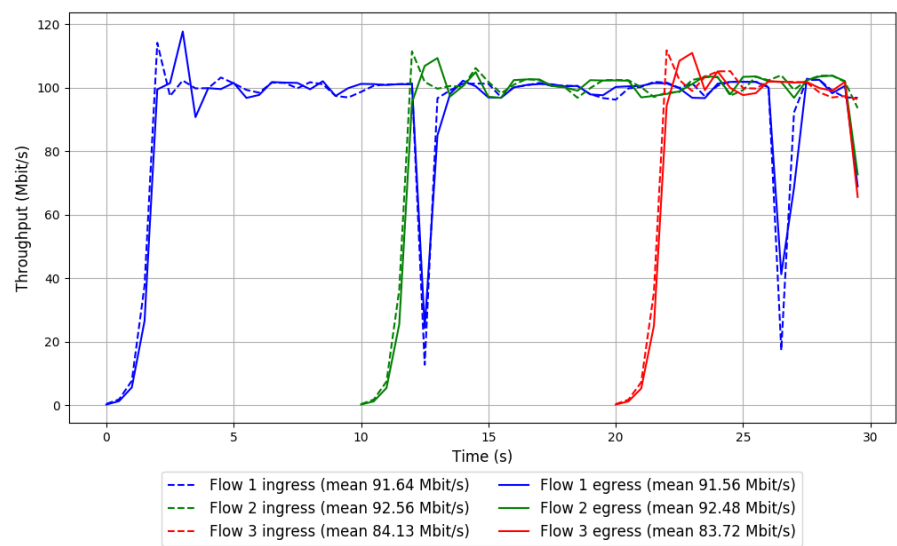
-- Flow 3:

Average throughput: 83.72 Mbit/s

95th percentile per-packet one-way delay: 111.531 ms

Loss rate: 2.91%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-17 01:52:48

End at: 2018-02-17 01:53:18

Below is generated by plot.py at 2018-02-17 05:43:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 178.20 Mbit/s

95th percentile per-packet one-way delay: 112.571 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 92.47 Mbit/s

95th percentile per-packet one-way delay: 112.474 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 87.98 Mbit/s

95th percentile per-packet one-way delay: 112.653 ms

Loss rate: 1.30%

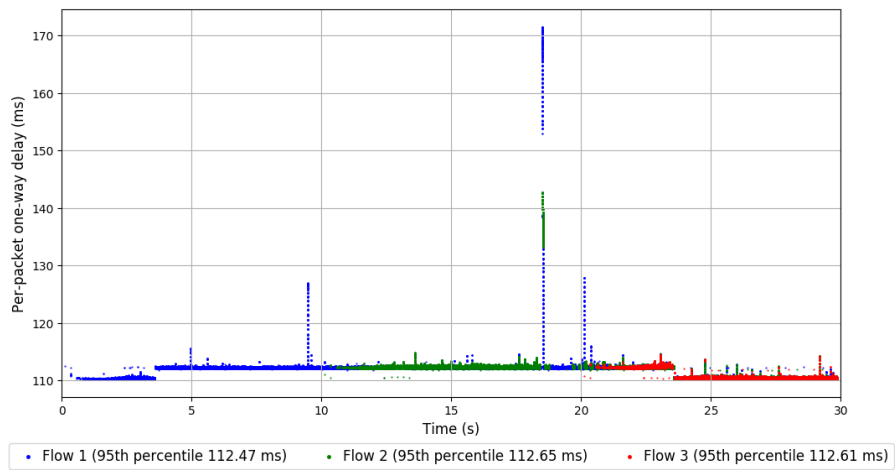
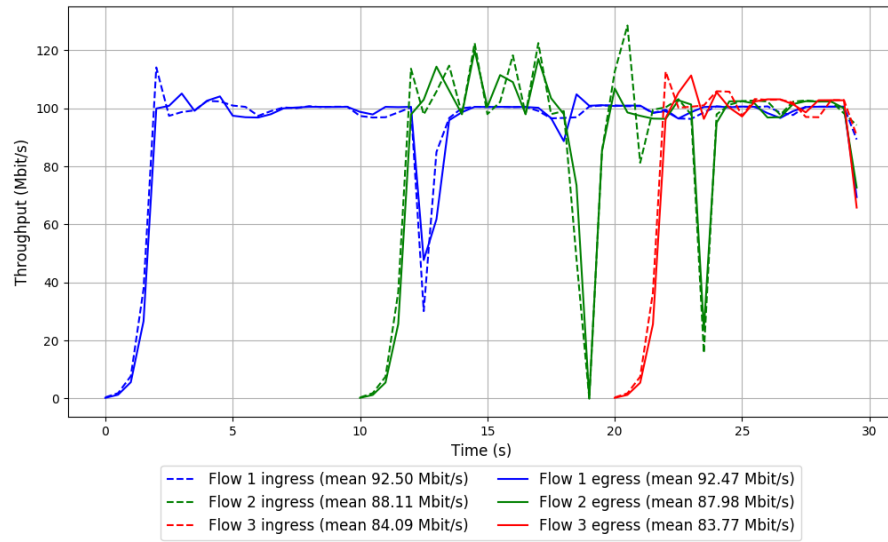
-- Flow 3:

Average throughput: 83.77 Mbit/s

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

Loss rate: 2.58%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-16 22:53:46

End at: 2018-02-16 22:54:16

Below is generated by plot.py at 2018-02-17 05:43:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 149.05 Mbit/s

95th percentile per-packet one-way delay: 120.972 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 103.68 Mbit/s

95th percentile per-packet one-way delay: 121.801 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 42.92 Mbit/s

95th percentile per-packet one-way delay: 116.811 ms

Loss rate: 1.66%

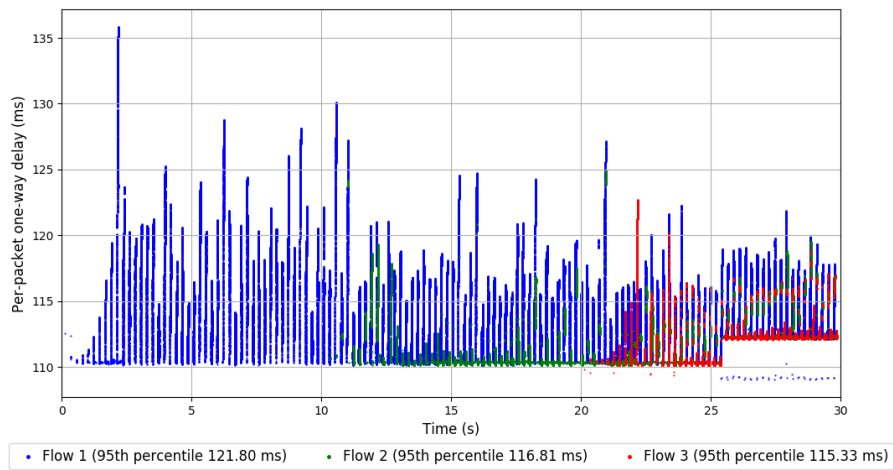
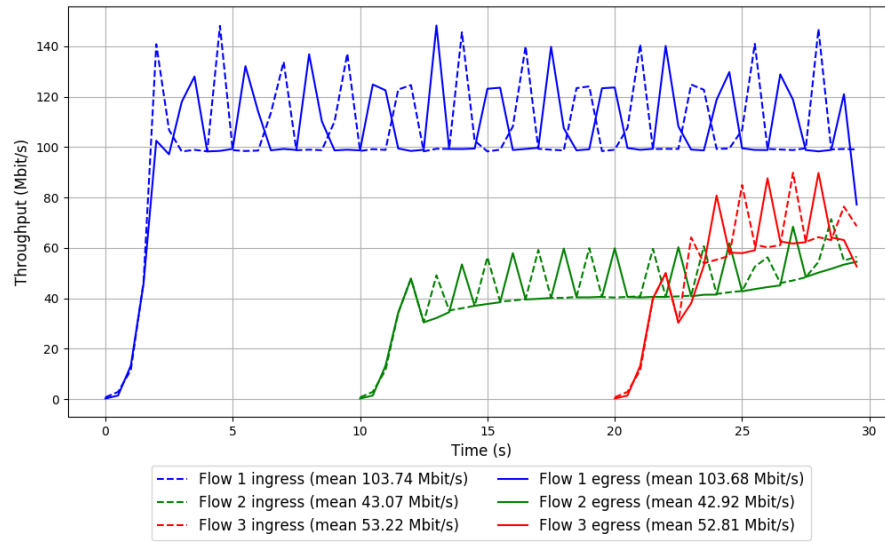
-- Flow 3:

Average throughput: 52.81 Mbit/s

95th percentile per-packet one-way delay: 115.326 ms

Loss rate: 2.98%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-16 23:14:04

End at: 2018-02-16 23:14:34

Below is generated by plot.py at 2018-02-17 05:43:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 159.84 Mbit/s

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

Loss rate: 1.24%

-- Flow 1:

Average throughput: 103.89 Mbit/s

95th percentile per-packet one-way delay: 120.515 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 51.44 Mbit/s

95th percentile per-packet one-way delay: 115.723 ms

Loss rate: 1.26%

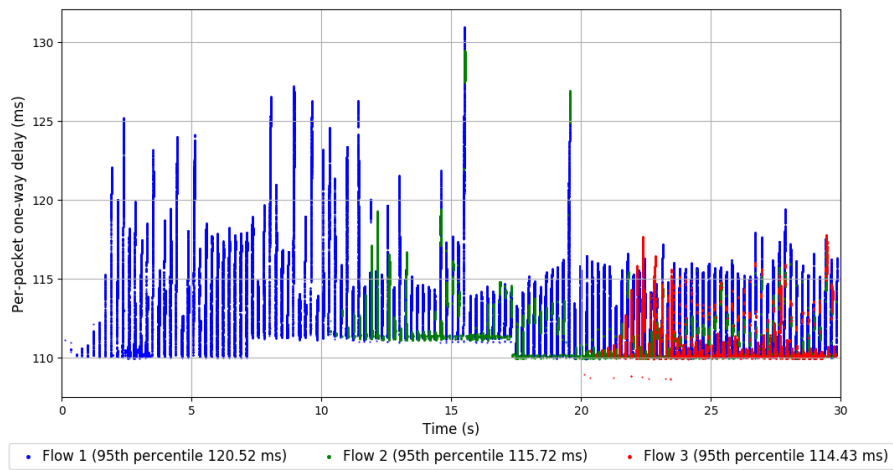
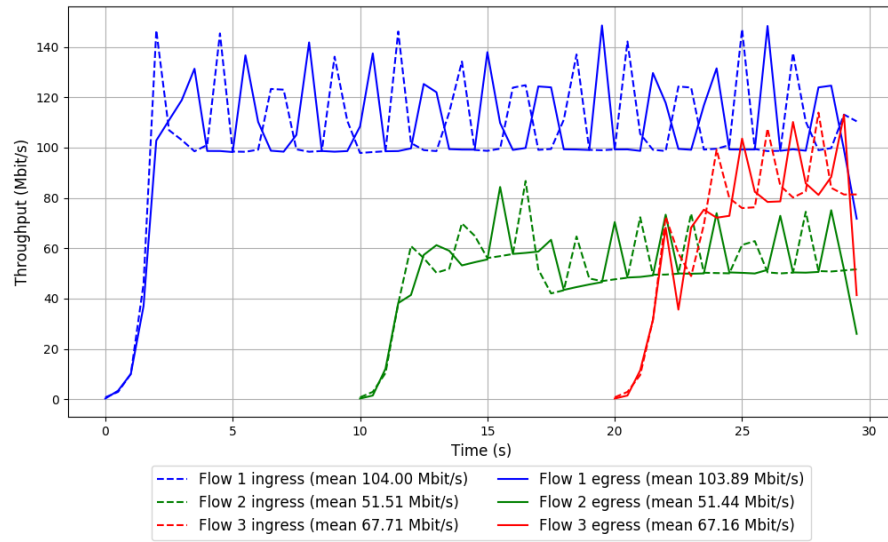
-- Flow 3:

Average throughput: 67.16 Mbit/s

95th percentile per-packet one-way delay: 114.430 ms

Loss rate: 3.03%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-16 23:34:01

End at: 2018-02-16 23:34:31

Below is generated by plot.py at 2018-02-17 05:43:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 136.72 Mbit/s

95th percentile per-packet one-way delay: 118.788 ms

Loss rate: 1.27%

-- Flow 1:

Average throughput: 70.15 Mbit/s

95th percentile per-packet one-way delay: 118.674 ms

Loss rate: 1.15%

-- Flow 2:

Average throughput: 99.97 Mbit/s

95th percentile per-packet one-way delay: 118.903 ms

Loss rate: 1.32%

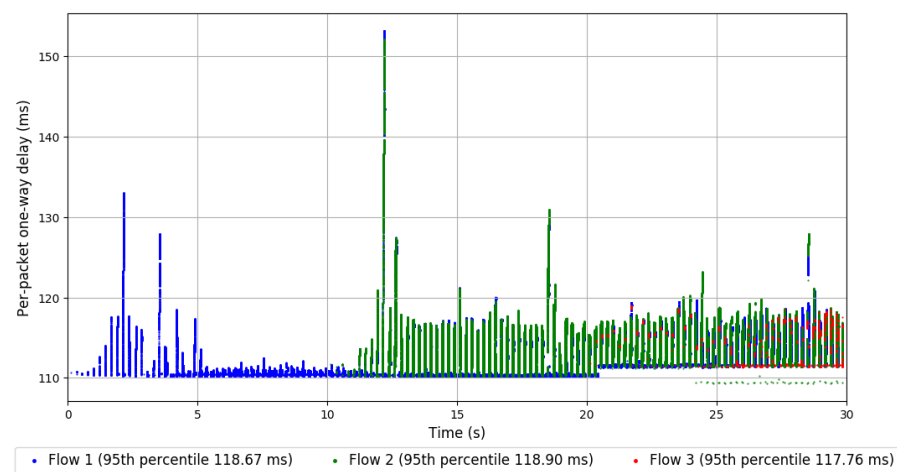
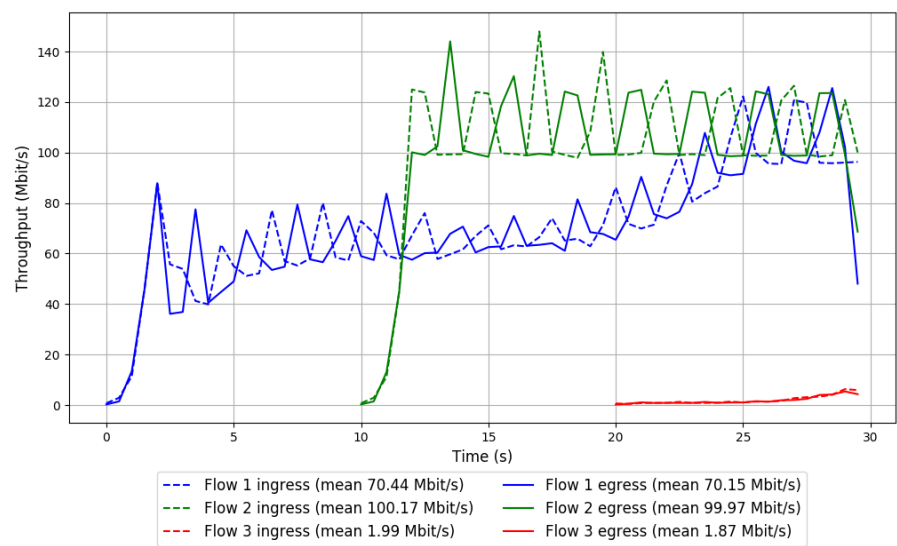
-- Flow 3:

Average throughput: 1.87 Mbit/s

95th percentile per-packet one-way delay: 117.758 ms

Loss rate: 8.14%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-16 23:53:49

End at: 2018-02-16 23:54:19

Below is generated by plot.py at 2018-02-17 05:43:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.39 Mbit/s

95th percentile per-packet one-way delay: 123.404 ms

Loss rate: 1.47%

-- Flow 1:

Average throughput: 87.03 Mbit/s

95th percentile per-packet one-way delay: 123.712 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 21.69 Mbit/s

95th percentile per-packet one-way delay: 115.359 ms

Loss rate: 5.05%

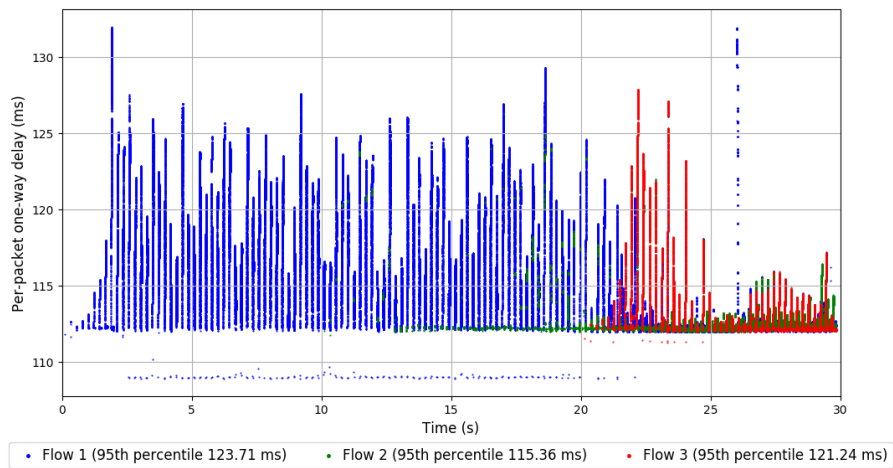
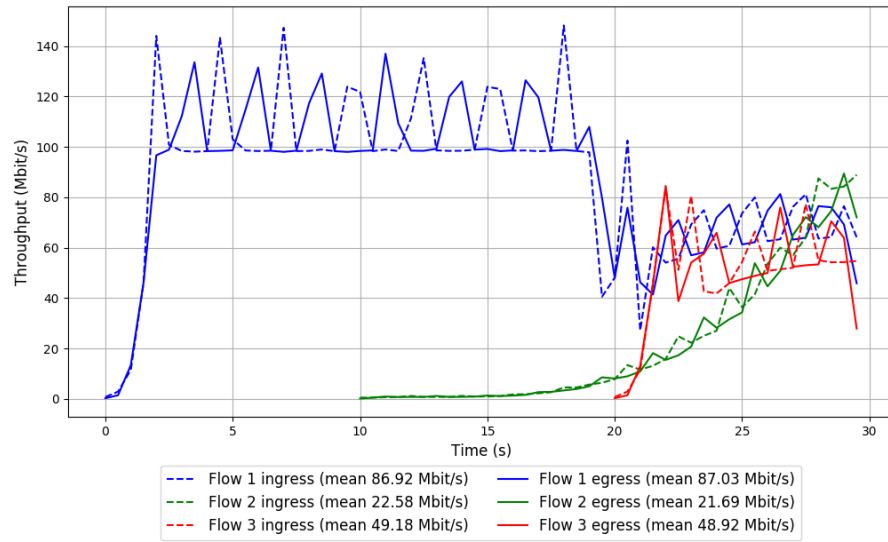
-- Flow 3:

Average throughput: 48.92 Mbit/s

95th percentile per-packet one-way delay: 121.238 ms

Loss rate: 2.79%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-17 00:13:12

End at: 2018-02-17 00:13:42

Below is generated by plot.py at 2018-02-17 05:43:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 176.91 Mbit/s

95th percentile per-packet one-way delay: 120.914 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 103.00 Mbit/s

95th percentile per-packet one-way delay: 122.093 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 83.85 Mbit/s

95th percentile per-packet one-way delay: 118.298 ms

Loss rate: 1.41%

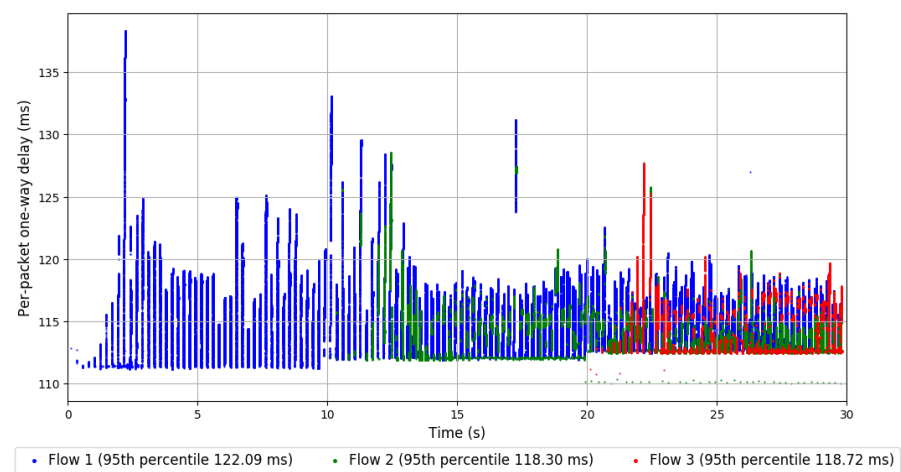
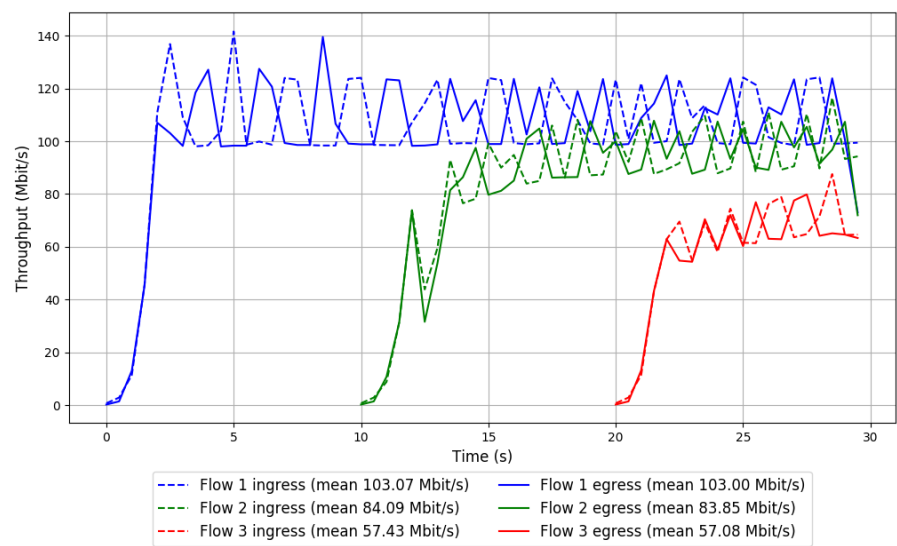
-- Flow 3:

Average throughput: 57.08 Mbit/s

95th percentile per-packet one-way delay: 118.716 ms

Loss rate: 2.83%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-17 00:32:17

End at: 2018-02-17 00:32:47

Below is generated by plot.py at 2018-02-17 05:43:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.87 Mbit/s

95th percentile per-packet one-way delay: 118.156 ms

Loss rate: 1.84%

-- Flow 1:

Average throughput: 68.69 Mbit/s

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

Loss rate: 0.75%

-- Flow 2:

Average throughput: 20.48 Mbit/s

95th percentile per-packet one-way delay: 116.320 ms

Loss rate: 5.15%

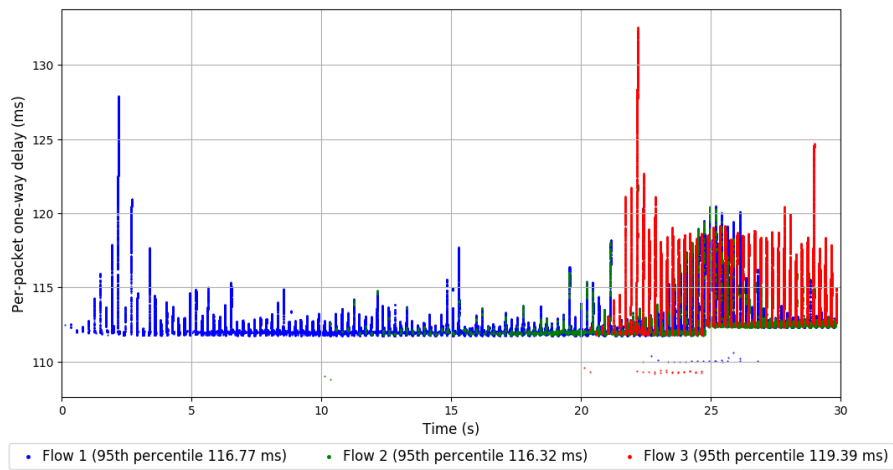
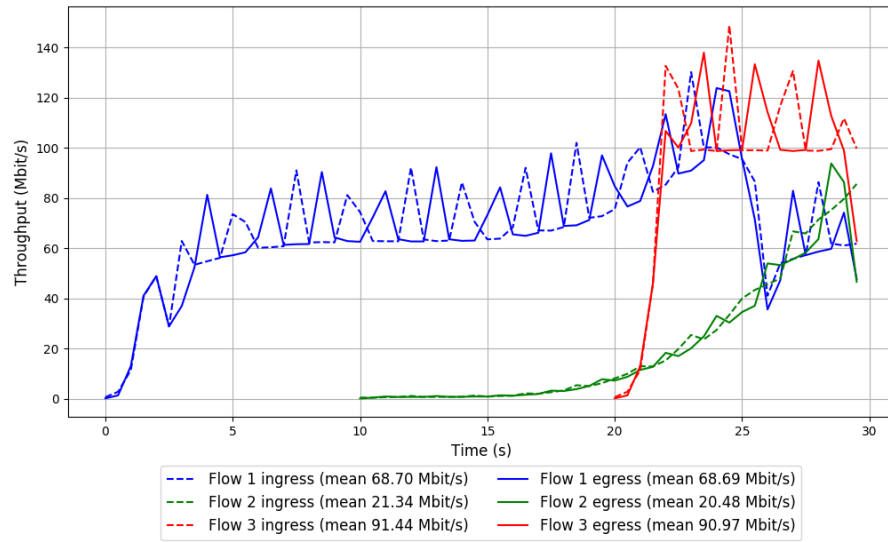
-- Flow 3:

Average throughput: 90.97 Mbit/s

95th percentile per-packet one-way delay: 119.392 ms

Loss rate: 2.73%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-17 00:51:41

End at: 2018-02-17 00:52:11

Below is generated by plot.py at 2018-02-17 05:45:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 152.34 Mbit/s

95th percentile per-packet one-way delay: 118.921 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 68.05 Mbit/s

95th percentile per-packet one-way delay: 119.433 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 101.04 Mbit/s

95th percentile per-packet one-way delay: 118.446 ms

Loss rate: 1.23%

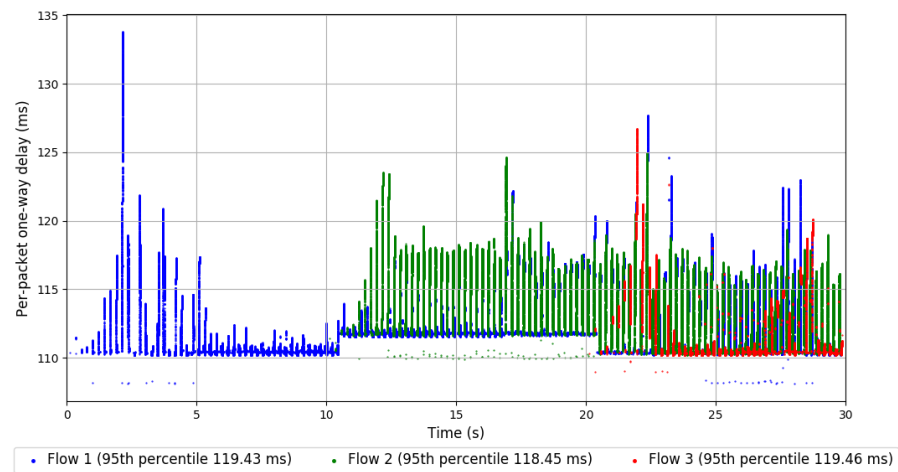
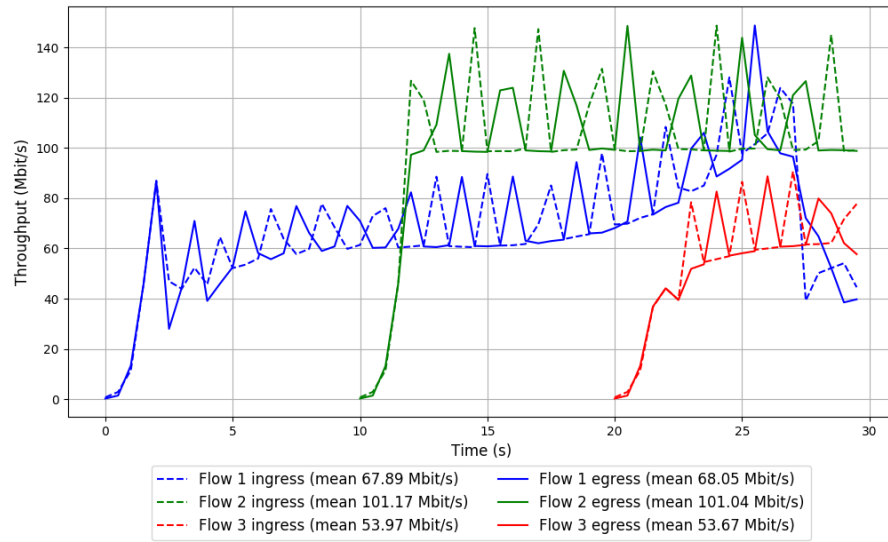
-- Flow 3:

Average throughput: 53.67 Mbit/s

95th percentile per-packet one-way delay: 119.456 ms

Loss rate: 2.78%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-17 01:11:15

End at: 2018-02-17 01:11:45

Below is generated by plot.py at 2018-02-17 05:45:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 164.83 Mbit/s

95th percentile per-packet one-way delay: 119.060 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 100.56 Mbit/s

95th percentile per-packet one-way delay: 120.571 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 59.98 Mbit/s

95th percentile per-packet one-way delay: 112.937 ms

Loss rate: 1.49%

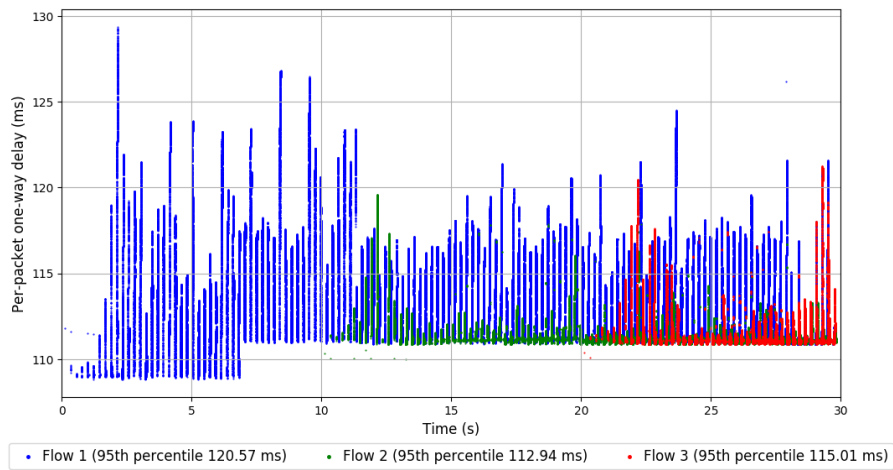
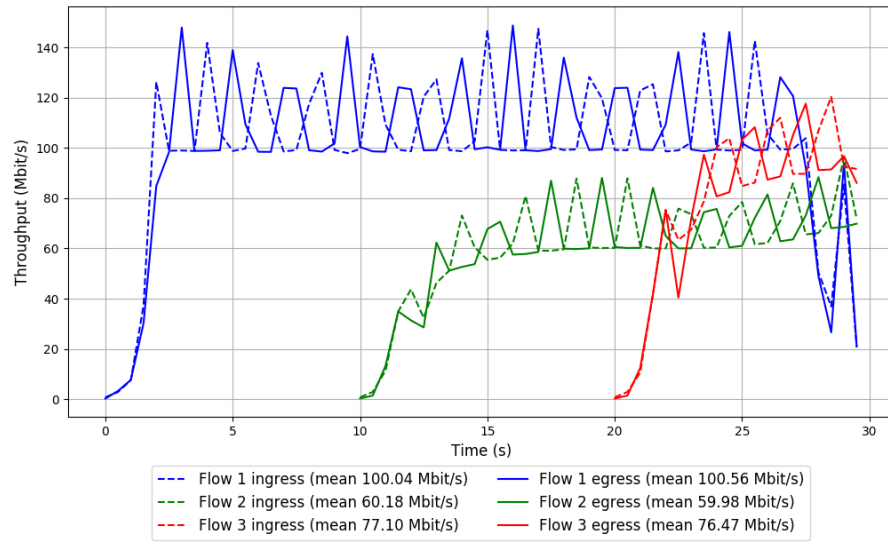
-- Flow 3:

Average throughput: 76.47 Mbit/s

95th percentile per-packet one-way delay: 115.007 ms

Loss rate: 3.03%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-17 01:30:54

End at: 2018-02-17 01:31:24

Below is generated by plot.py at 2018-02-17 05:45:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 152.74 Mbit/s

95th percentile per-packet one-way delay: 118.051 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 103.79 Mbit/s

95th percentile per-packet one-way delay: 118.757 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 49.29 Mbit/s

95th percentile per-packet one-way delay: 116.920 ms

Loss rate: 1.51%

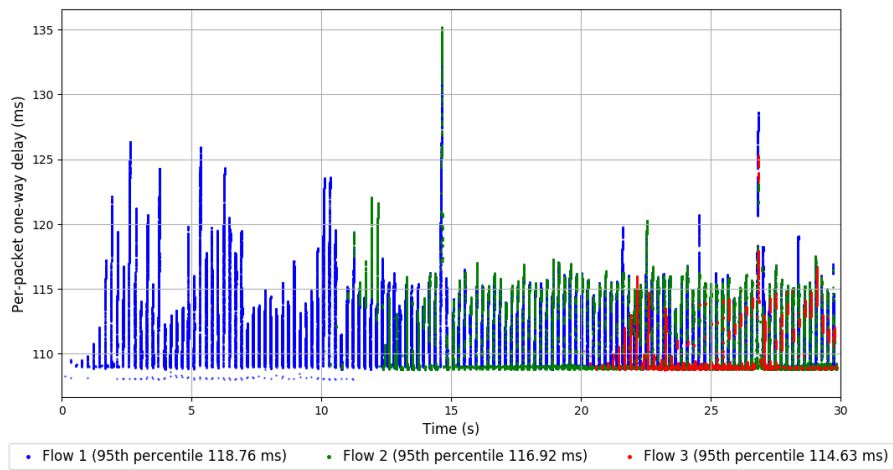
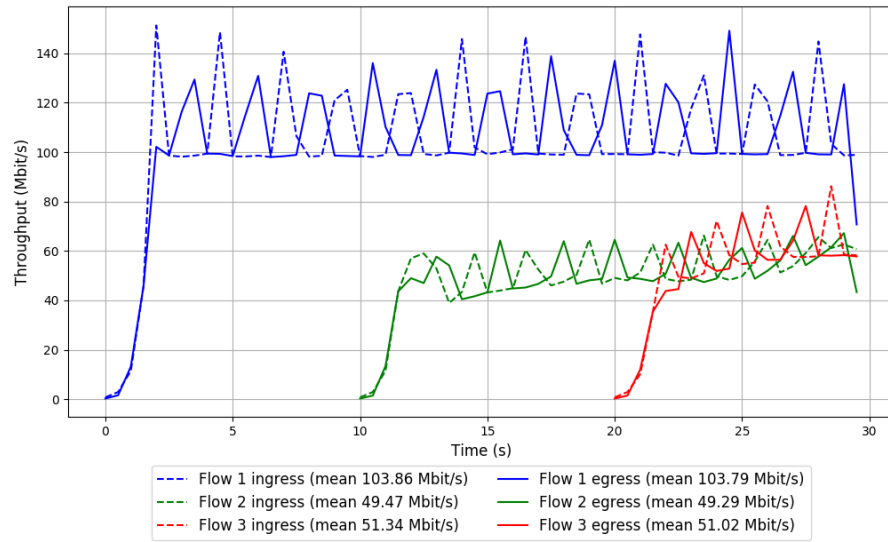
-- Flow 3:

Average throughput: 51.02 Mbit/s

95th percentile per-packet one-way delay: 114.627 ms

Loss rate: 2.86%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-17 01:50:33

End at: 2018-02-17 01:51:03

Below is generated by plot.py at 2018-02-17 05:45:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.10 Mbit/s

95th percentile per-packet one-way delay: 122.621 ms

Loss rate: 1.54%

-- Flow 1:

Average throughput: 102.59 Mbit/s

95th percentile per-packet one-way delay: 122.578 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 21.30 Mbit/s

95th percentile per-packet one-way delay: 121.764 ms

Loss rate: 5.13%

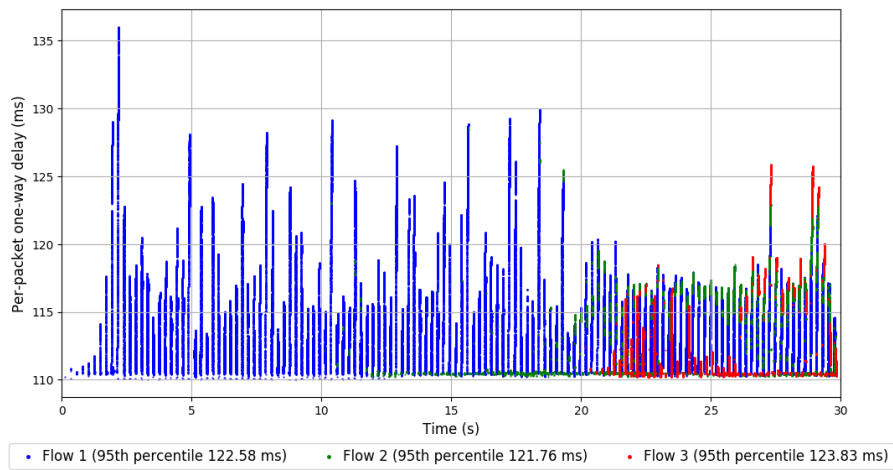
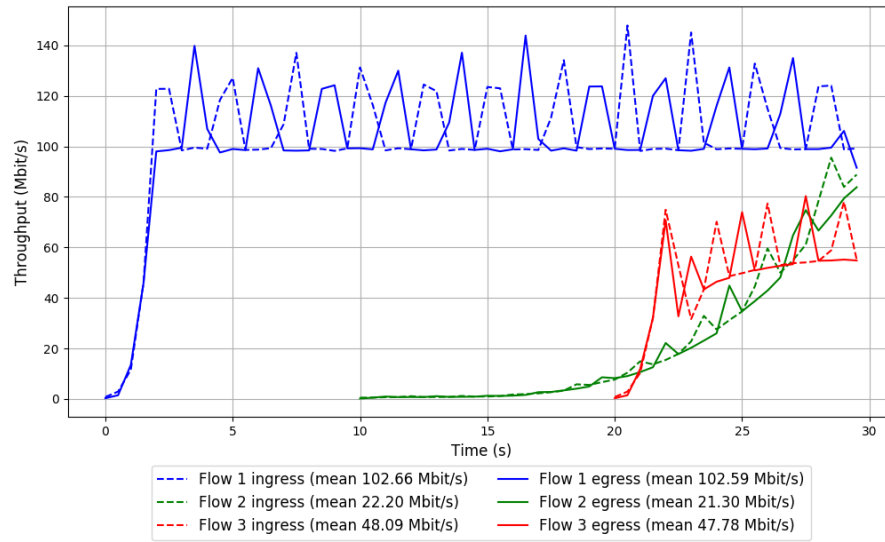
-- Flow 3:

Average throughput: 47.78 Mbit/s

95th percentile per-packet one-way delay: 123.833 ms

Loss rate: 2.89%

Run 10: Report of TCP Cubic — Data Link

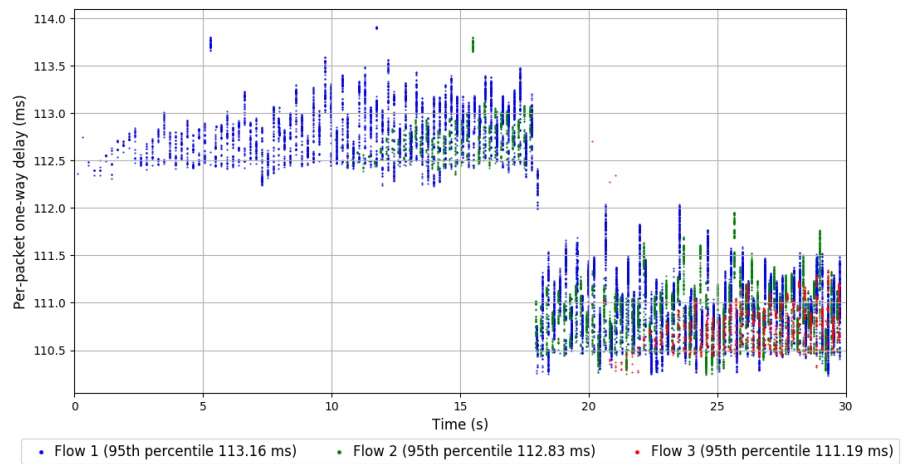
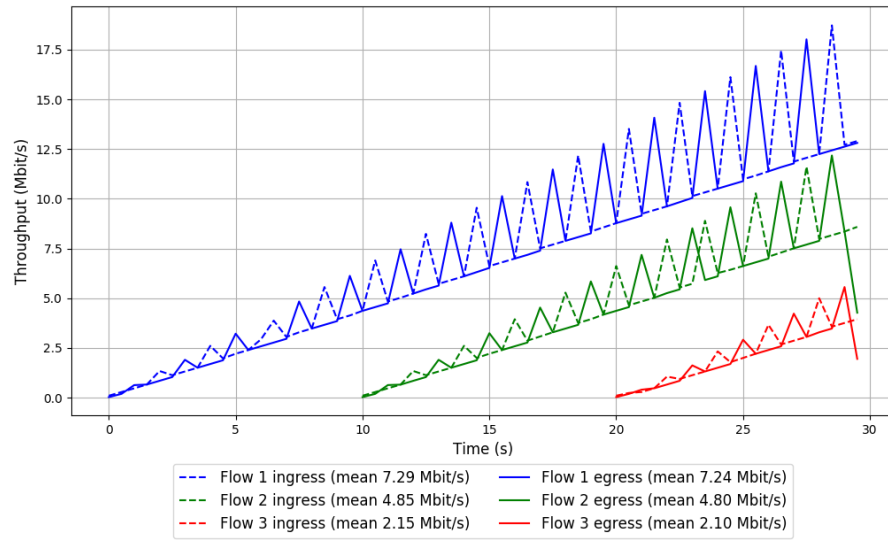


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-16 23:04:04
End at: 2018-02-16 23:04:34

# Below is generated by plot.py at 2018-02-17 05:45:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.08 Mbit/s
95th percentile per-packet one-way delay: 113.088 ms
Loss rate: 1.91%
-- Flow 1:
Average throughput: 7.24 Mbit/s
95th percentile per-packet one-way delay: 113.158 ms
Loss rate: 1.49%
-- Flow 2:
Average throughput: 4.80 Mbit/s
95th percentile per-packet one-way delay: 112.835 ms
Loss rate: 2.25%
-- Flow 3:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 111.192 ms
Loss rate: 4.71%
```


Run 1: Report of LEDBAT — Data Link

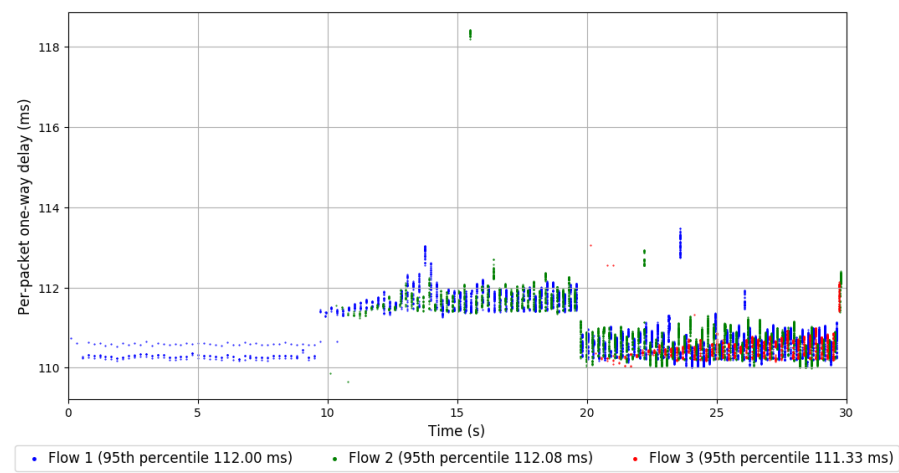
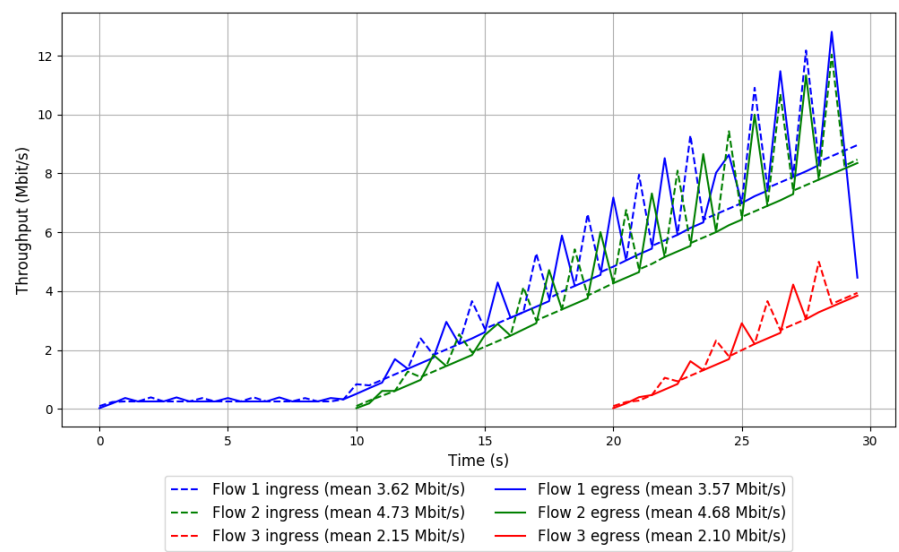


```
Run 2: Statistics of LEDBAT

Start at: 2018-02-16 23:23:52
End at: 2018-02-16 23:24:22

# Below is generated by plot.py at 2018-02-17 05:45:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.33 Mbit/s
95th percentile per-packet one-way delay: 112.022 ms
Loss rate: 2.42%
-- Flow 1:
Average throughput: 3.57 Mbit/s
95th percentile per-packet one-way delay: 112.003 ms
Loss rate: 2.09%
-- Flow 2:
Average throughput: 4.68 Mbit/s
95th percentile per-packet one-way delay: 112.083 ms
Loss rate: 2.27%
-- Flow 3:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 111.335 ms
Loss rate: 4.71%
```

Run 2: Report of LEDBAT — Data Link

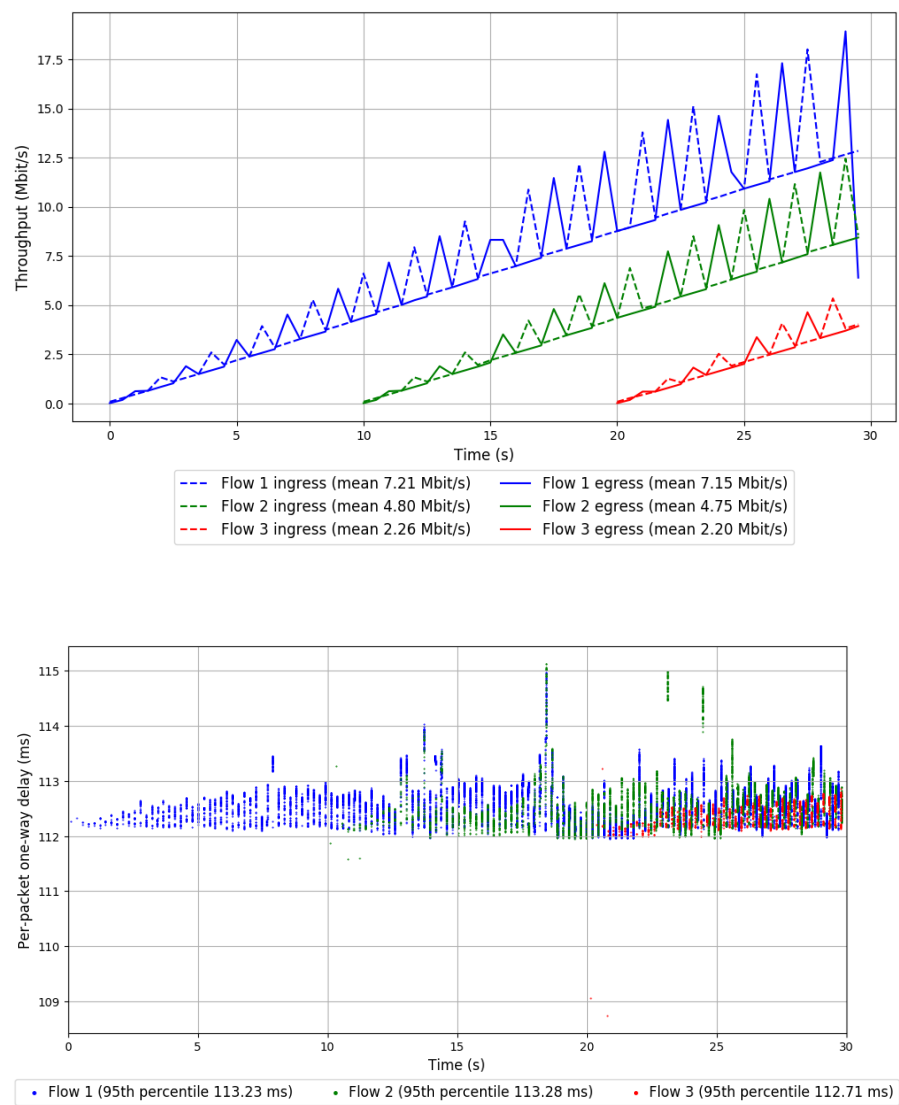


```
Run 3: Statistics of LEDBAT

Start at: 2018-02-16 23:43:51
End at: 2018-02-16 23:44:21

# Below is generated by plot.py at 2018-02-17 05:45:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.98 Mbit/s
95th percentile per-packet one-way delay: 113.225 ms
Loss rate: 1.92%
-- Flow 1:
Average throughput: 7.15 Mbit/s
95th percentile per-packet one-way delay: 113.234 ms
Loss rate: 1.50%
-- Flow 2:
Average throughput: 4.75 Mbit/s
95th percentile per-packet one-way delay: 113.275 ms
Loss rate: 2.25%
-- Flow 3:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 112.708 ms
Loss rate: 4.58%
```

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-17 00:03:35

End at: 2018-02-17 00:04:05

Below is generated by plot.py at 2018-02-17 05:45:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.63 Mbit/s

95th percentile per-packet one-way delay: 113.635 ms

Loss rate: 1.95%

-- Flow 1:

Average throughput: 6.90 Mbit/s

95th percentile per-packet one-way delay: 113.619 ms

Loss rate: 1.51%

-- Flow 2:

Average throughput: 4.54 Mbit/s

95th percentile per-packet one-way delay: 113.634 ms

Loss rate: 2.30%

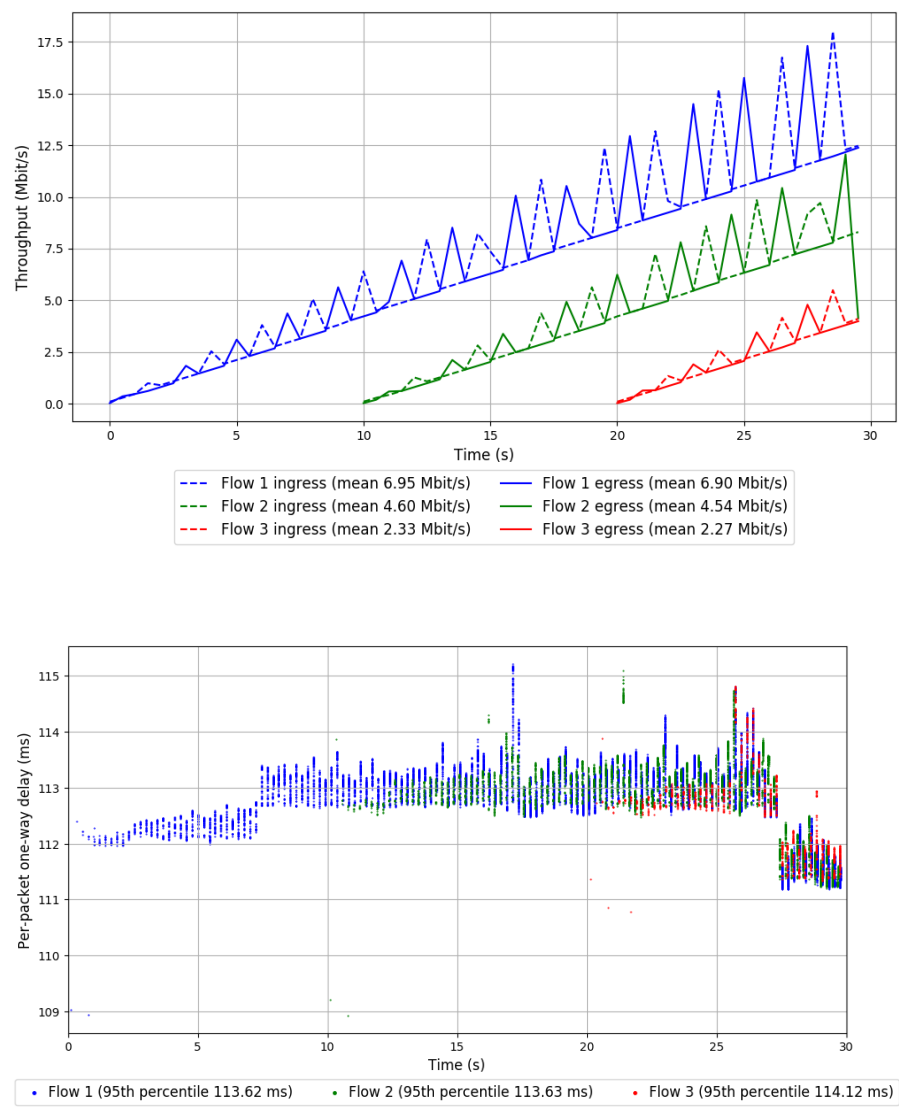
-- Flow 3:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 114.125 ms

Loss rate: 4.56%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-17 00:22:47

End at: 2018-02-17 00:23:17

Below is generated by plot.py at 2018-02-17 05:45:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.77 Mbit/s

95th percentile per-packet one-way delay: 113.383 ms

Loss rate: 2.02%

-- Flow 1:

Average throughput: 7.08 Mbit/s

95th percentile per-packet one-way delay: 113.492 ms

Loss rate: 1.50%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 113.243 ms

Loss rate: 3.79%

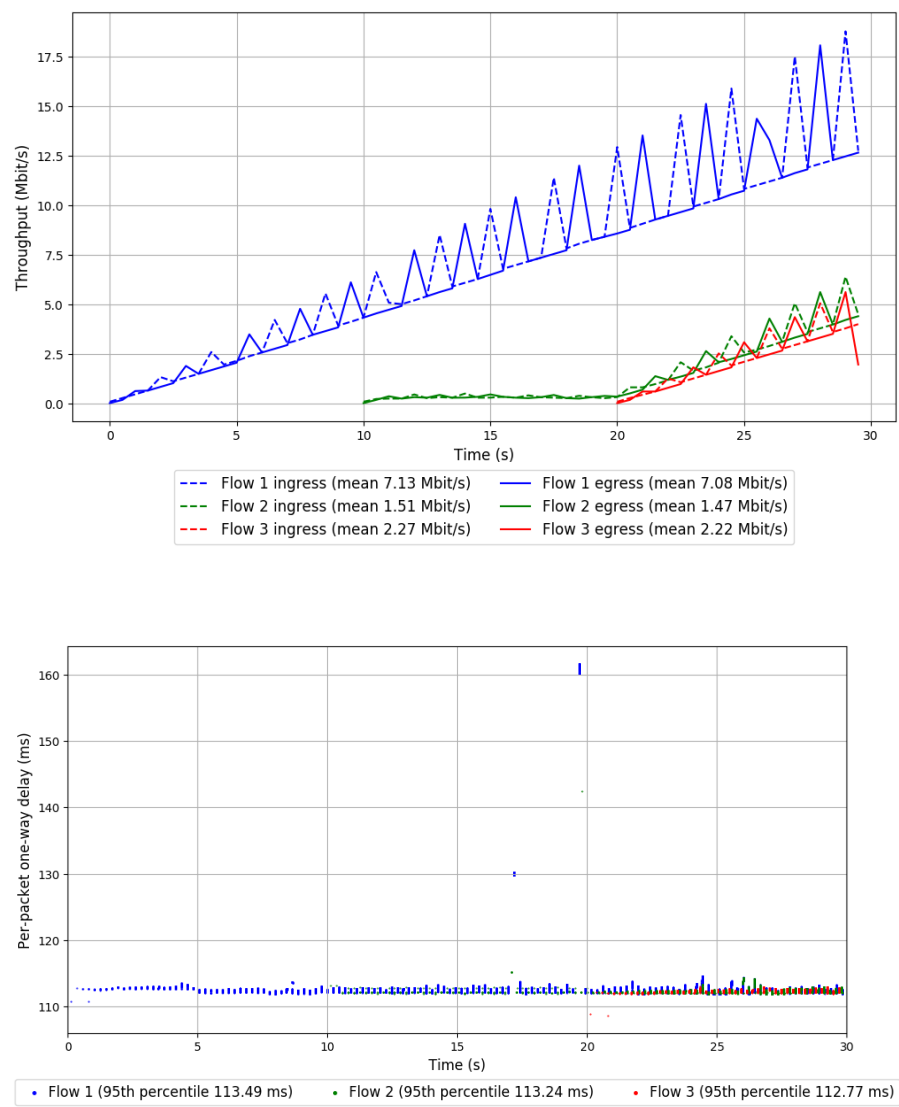
-- Flow 3:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 112.774 ms

Loss rate: 4.58%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-17 00:42:06

End at: 2018-02-17 00:42:36

Below is generated by plot.py at 2018-02-17 05:45:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.06 Mbit/s

95th percentile per-packet one-way delay: 112.105 ms

Loss rate: 1.92%

-- Flow 1:

Average throughput: 7.18 Mbit/s

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

Loss rate: 1.49%

-- Flow 2:

Average throughput: 4.76 Mbit/s

95th percentile per-packet one-way delay: 112.093 ms

Loss rate: 2.25%

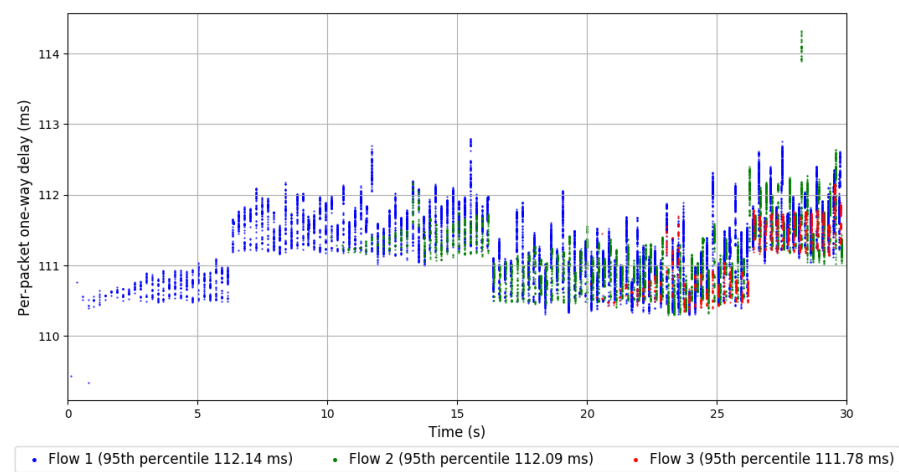
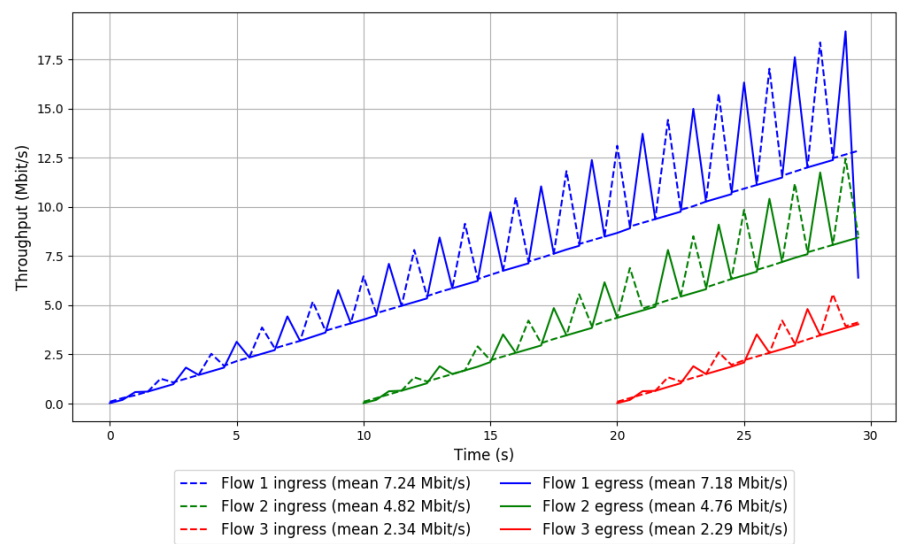
-- Flow 3:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 111.782 ms

Loss rate: 4.52%

Run 6: Report of LEDBAT — Data Link

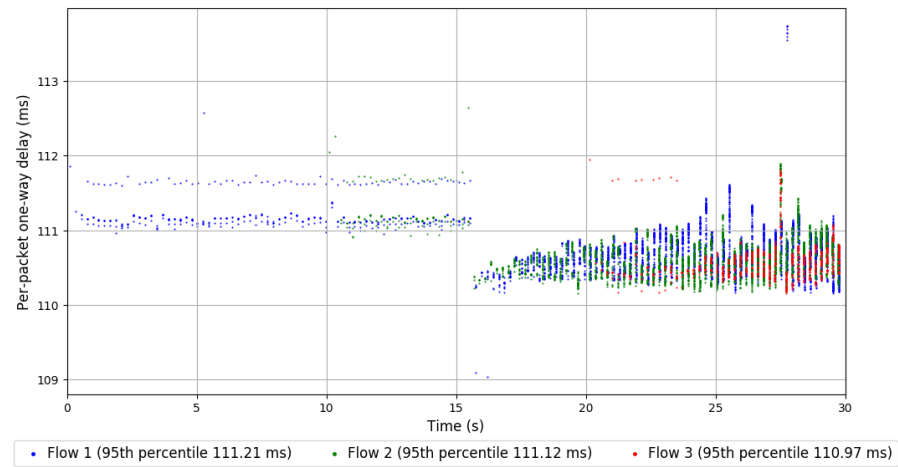
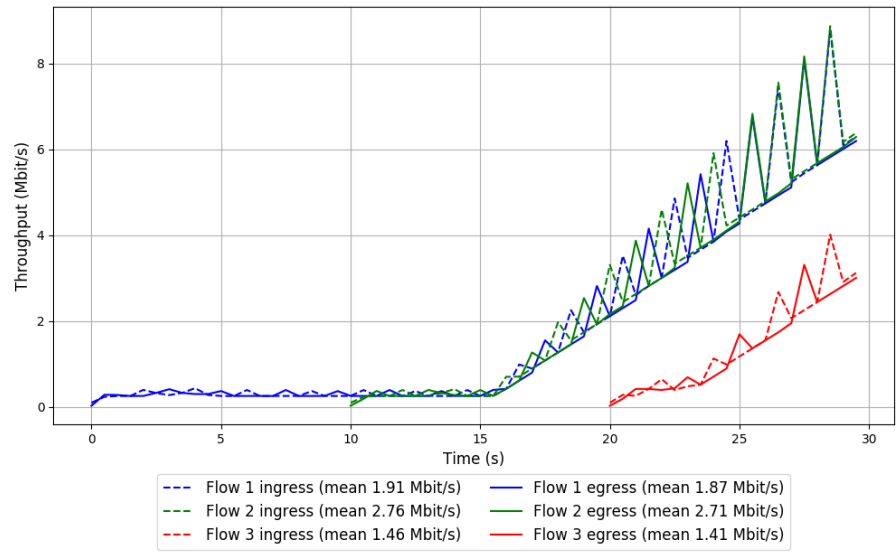


```
Run 7: Statistics of LEDBAT

Start at: 2018-02-17 01:01:26
End at: 2018-02-17 01:01:56

# Below is generated by plot.py at 2018-02-17 05:45:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.12 Mbit/s
95th percentile per-packet one-way delay: 111.175 ms
Loss rate: 3.16%
-- Flow 1:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 111.214 ms
Loss rate: 2.77%
-- Flow 2:
Average throughput: 2.71 Mbit/s
95th percentile per-packet one-way delay: 111.119 ms
Loss rate: 2.94%
-- Flow 3:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 110.975 ms
Loss rate: 5.55%
```

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-17 01:21:01

End at: 2018-02-17 01:21:31

Below is generated by plot.py at 2018-02-17 05:45:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.84 Mbit/s

95th percentile per-packet one-way delay: 111.767 ms

Loss rate: 1.87%

-- Flow 1:

Average throughput: 7.19 Mbit/s

95th percentile per-packet one-way delay: 111.826 ms

Loss rate: 1.50%

-- Flow 2:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 111.508 ms

Loss rate: 2.51%

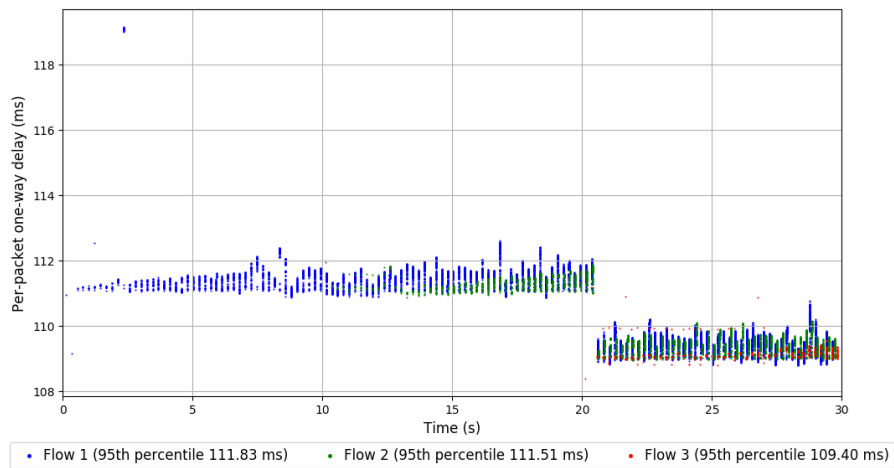
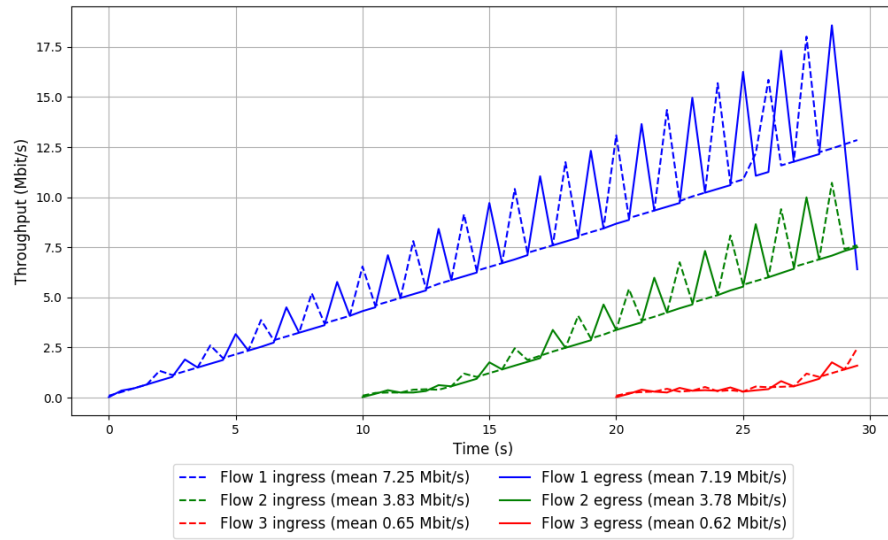
-- Flow 3:

Average throughput: 0.62 Mbit/s

95th percentile per-packet one-way delay: 109.402 ms

Loss rate: 6.68%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-17 01:40:38

End at: 2018-02-17 01:41:08

Below is generated by plot.py at 2018-02-17 05:45:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.30 Mbit/s

95th percentile per-packet one-way delay: 111.565 ms

Loss rate: 2.61%

-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 111.614 ms

Loss rate: 2.47%

-- Flow 2:

Average throughput: 4.77 Mbit/s

95th percentile per-packet one-way delay: 111.571 ms

Loss rate: 2.25%

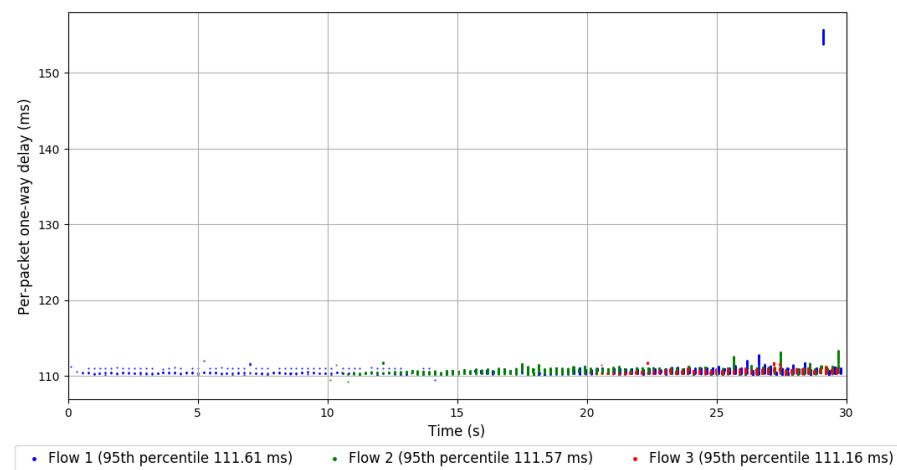
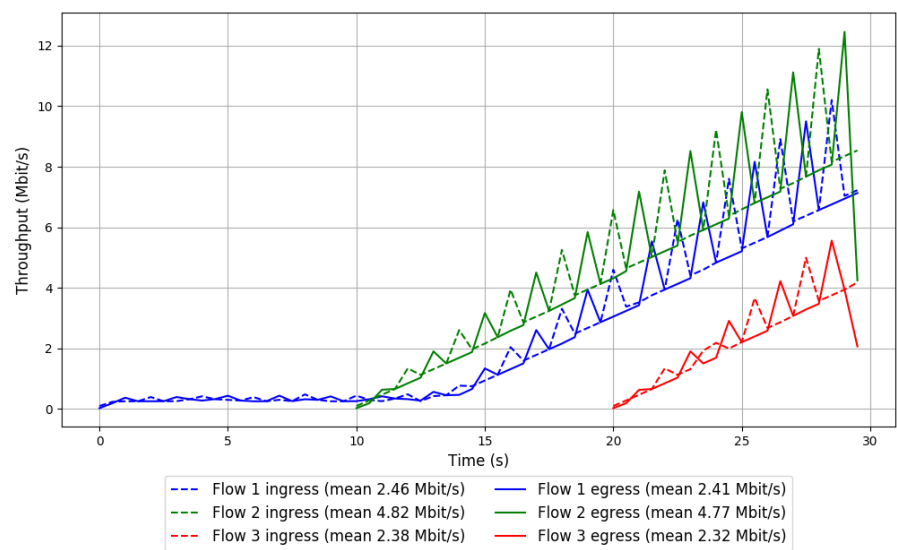
-- Flow 3:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 111.158 ms

Loss rate: 4.56%

Run 9: Report of LEDBAT — Data Link

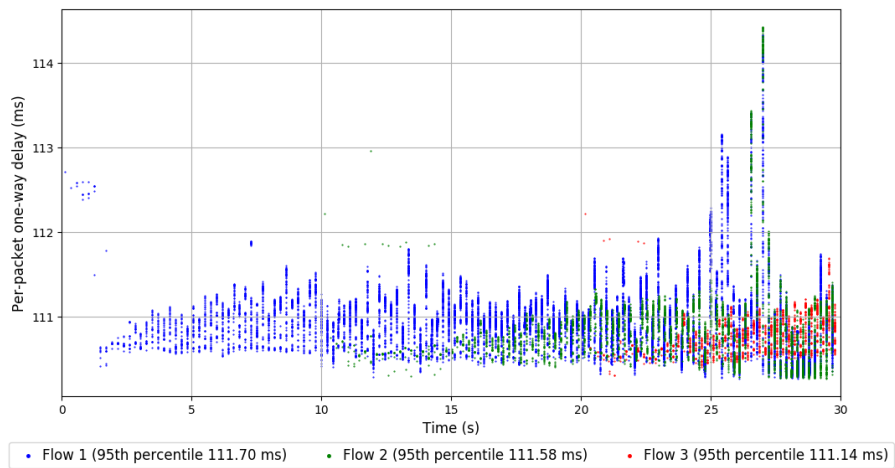
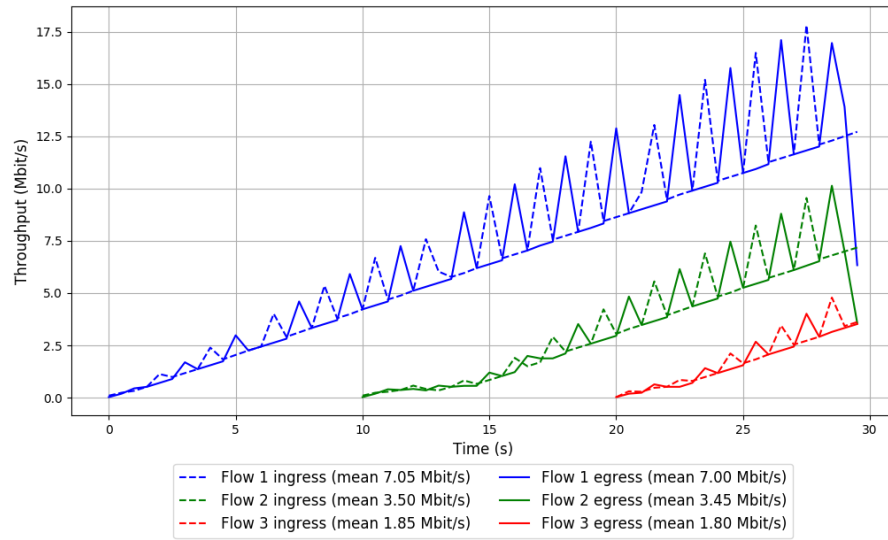


```
Run 10: Statistics of LEDBAT

Start at: 2018-02-17 02:00:11
End at: 2018-02-17 02:00:41

# Below is generated by plot.py at 2018-02-17 05:45:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.84 Mbit/s
95th percentile per-packet one-way delay: 111.663 ms
Loss rate: 1.99%
-- Flow 1:
Average throughput: 7.00 Mbit/s
95th percentile per-packet one-way delay: 111.700 ms
Loss rate: 1.52%
-- Flow 2:
Average throughput: 3.45 Mbit/s
95th percentile per-packet one-way delay: 111.585 ms
Loss rate: 2.61%
-- Flow 3:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 111.137 ms
Loss rate: 5.02%
```

Run 10: Report of LEDBAT — Data Link

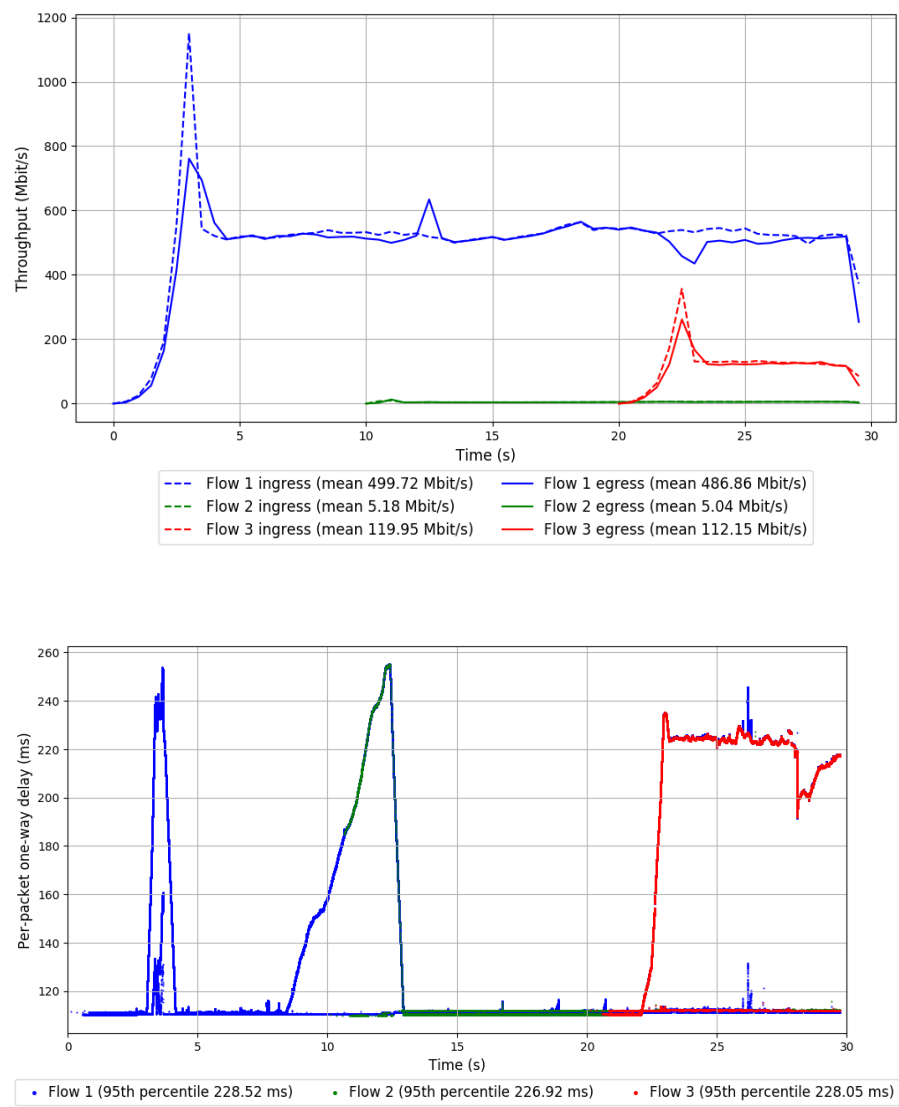


```
Run 1: Statistics of PCC

Start at: 2018-02-16 22:59:09
End at: 2018-02-16 22:59:39

# Below is generated by plot.py at 2018-02-17 05:52:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 526.58 Mbit/s
95th percentile per-packet one-way delay: 228.411 ms
Loss rate: 3.70%
-- Flow 1:
Average throughput: 486.86 Mbit/s
95th percentile per-packet one-way delay: 228.517 ms
Loss rate: 3.31%
-- Flow 2:
Average throughput: 5.04 Mbit/s
95th percentile per-packet one-way delay: 226.918 ms
Loss rate: 3.78%
-- Flow 3:
Average throughput: 112.15 Mbit/s
95th percentile per-packet one-way delay: 228.052 ms
Loss rate: 8.65%
```

Run 1: Report of PCC — Data Link

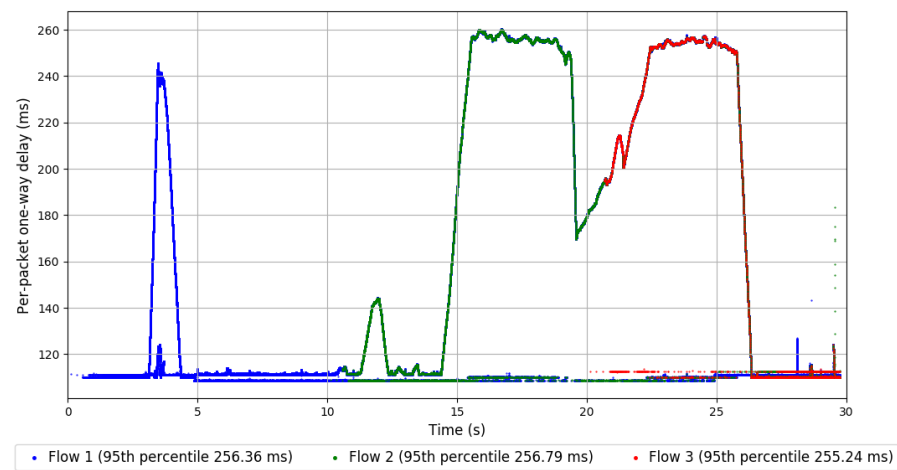
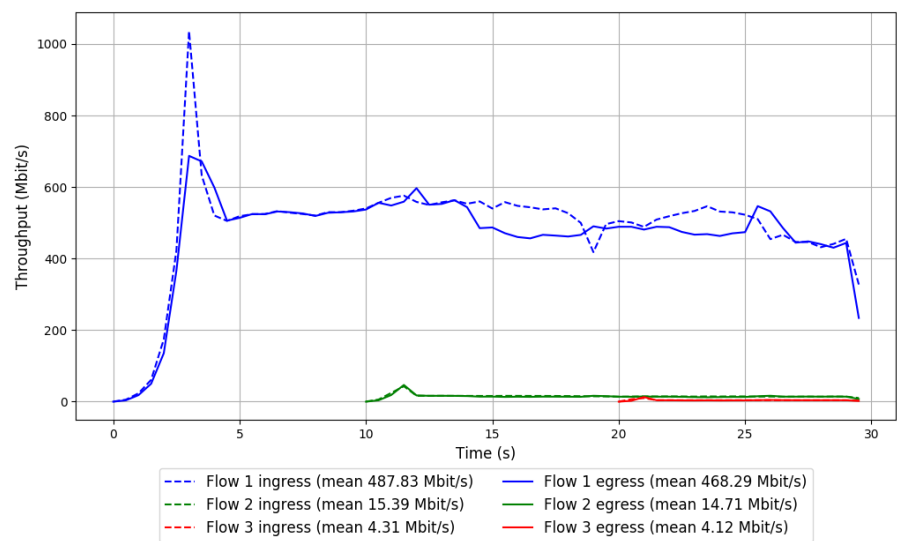


```
Run 2: Statistics of PCC

Start at: 2018-02-16 23:19:37
End at: 2018-02-16 23:20:07

# Below is generated by plot.py at 2018-02-17 05:52:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 479.33 Mbit/s
95th percentile per-packet one-way delay: 256.370 ms
Loss rate: 4.74%
-- Flow 1:
Average throughput: 468.29 Mbit/s
95th percentile per-packet one-way delay: 256.360 ms
Loss rate: 4.72%
-- Flow 2:
Average throughput: 14.71 Mbit/s
95th percentile per-packet one-way delay: 256.791 ms
Loss rate: 5.44%
-- Flow 3:
Average throughput: 4.12 Mbit/s
95th percentile per-packet one-way delay: 255.238 ms
Loss rate: 6.55%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-16 23:39:29

End at: 2018-02-16 23:39:59

Below is generated by plot.py at 2018-02-17 05:52:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 569.48 Mbit/s

95th percentile per-packet one-way delay: 222.806 ms

Loss rate: 2.32%

-- Flow 1:

Average throughput: 545.83 Mbit/s

95th percentile per-packet one-way delay: 222.814 ms

Loss rate: 2.32%

-- Flow 2:

Average throughput: 33.68 Mbit/s

95th percentile per-packet one-way delay: 222.645 ms

Loss rate: 2.00%

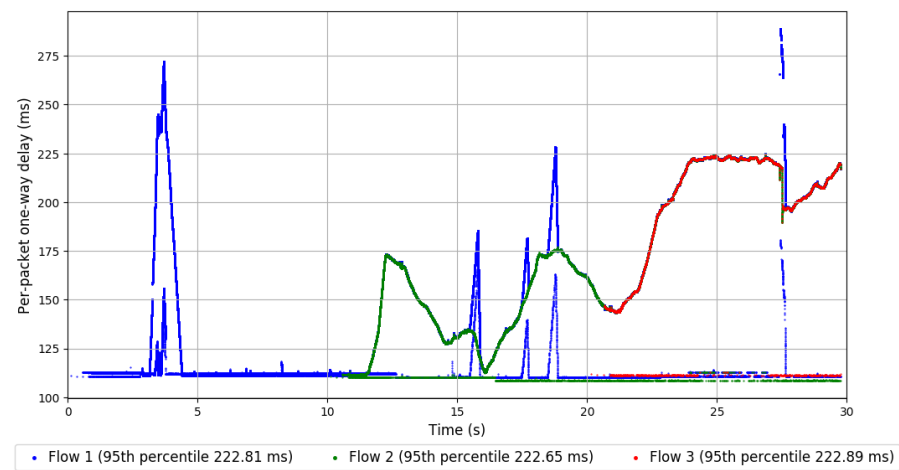
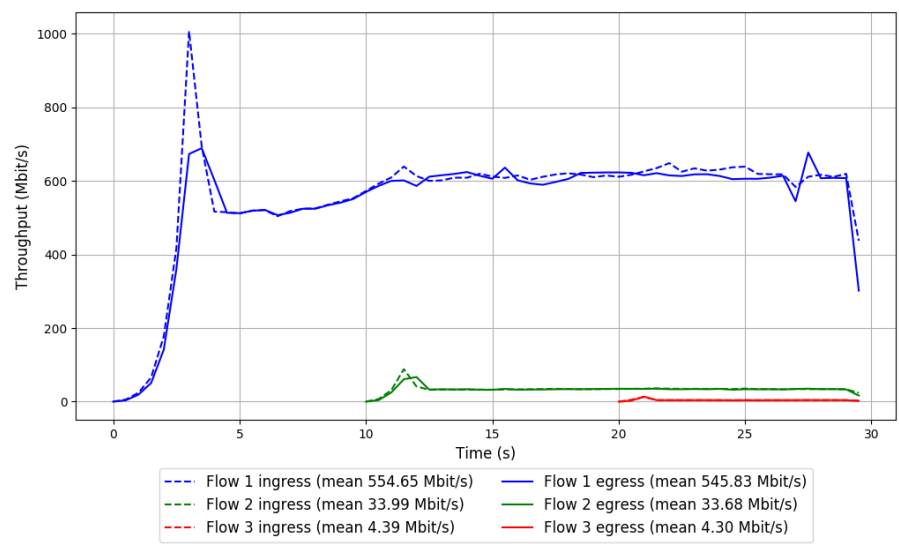
-- Flow 3:

Average throughput: 4.30 Mbit/s

95th percentile per-packet one-way delay: 222.890 ms

Loss rate: 4.24%

Run 3: Report of PCC — Data Link

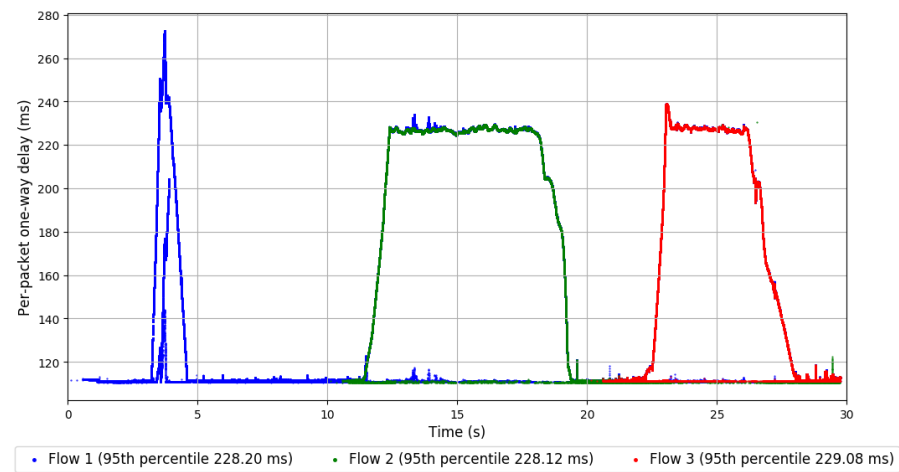
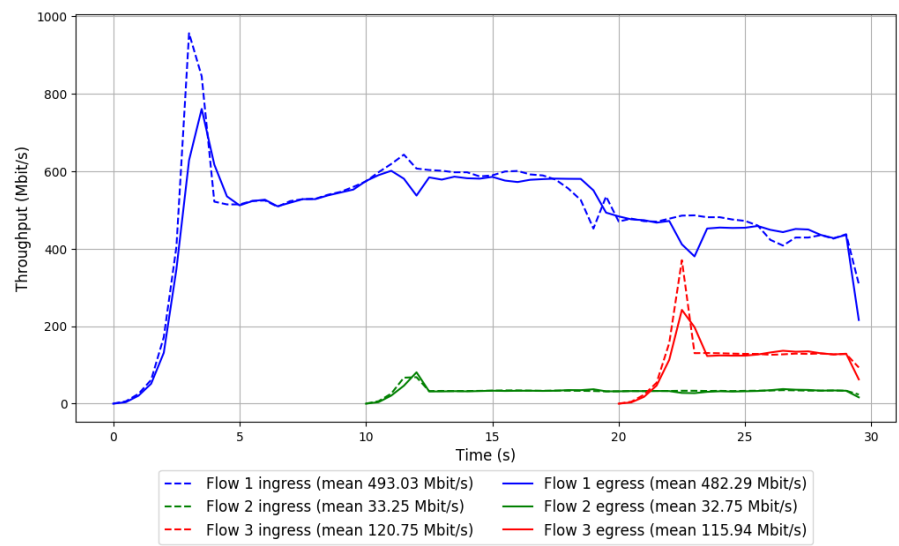


```
Run 4: Statistics of PCC

Start at: 2018-02-16 23:59:11
End at: 2018-02-16 23:59:41

# Below is generated by plot.py at 2018-02-17 05:52:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 541.58 Mbit/s
95th percentile per-packet one-way delay: 228.230 ms
Loss rate: 3.14%
-- Flow 1:
Average throughput: 482.29 Mbit/s
95th percentile per-packet one-way delay: 228.201 ms
Loss rate: 2.92%
-- Flow 2:
Average throughput: 32.75 Mbit/s
95th percentile per-packet one-way delay: 228.121 ms
Loss rate: 2.62%
-- Flow 3:
Average throughput: 115.94 Mbit/s
95th percentile per-packet one-way delay: 229.080 ms
Loss rate: 6.18%
```

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-17 00:18:28

End at: 2018-02-17 00:18:58

Below is generated by plot.py at 2018-02-17 05:53:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 562.36 Mbit/s

95th percentile per-packet one-way delay: 224.210 ms

Loss rate: 1.96%

-- Flow 1:

Average throughput: 520.09 Mbit/s

95th percentile per-packet one-way delay: 224.276 ms

Loss rate: 2.01%

-- Flow 2:

Average throughput: 62.66 Mbit/s

95th percentile per-packet one-way delay: 223.693 ms

Loss rate: 1.37%

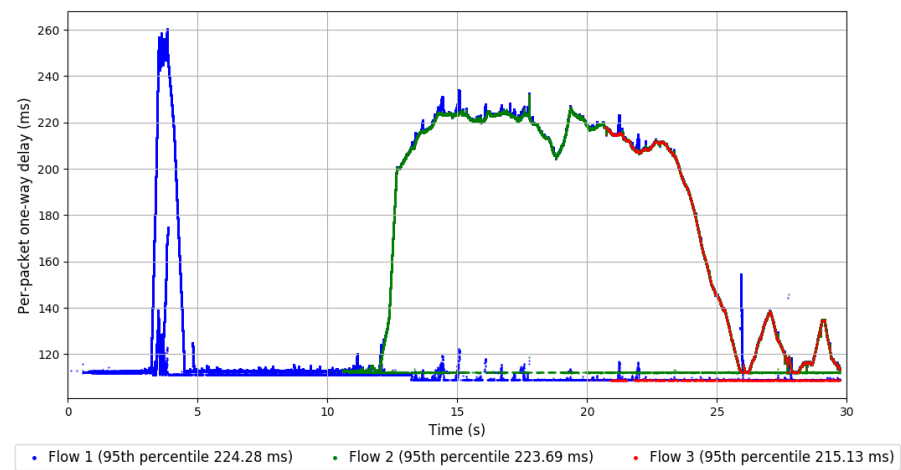
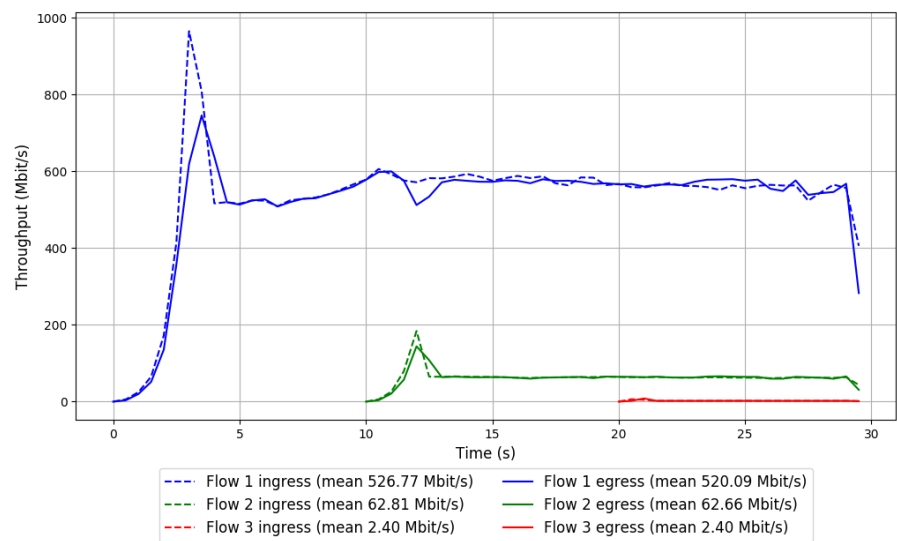
-- Flow 3:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 215.127 ms

Loss rate: 2.07%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-17 00:37:46

End at: 2018-02-17 00:38:16

Below is generated by plot.py at 2018-02-17 05:53:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 482.75 Mbit/s

95th percentile per-packet one-way delay: 259.143 ms

Loss rate: 4.82%

-- Flow 1:

Average throughput: 442.95 Mbit/s

95th percentile per-packet one-way delay: 259.072 ms

Loss rate: 4.80%

-- Flow 2:

Average throughput: 59.08 Mbit/s

95th percentile per-packet one-way delay: 259.991 ms

Loss rate: 5.01%

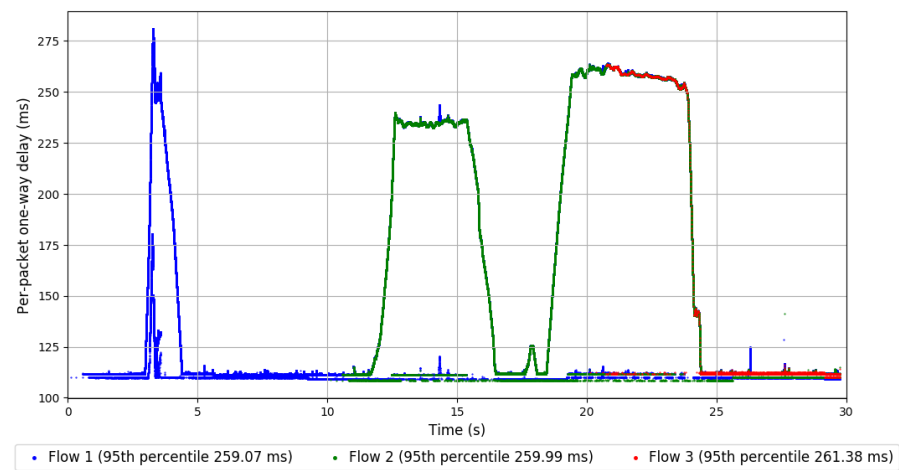
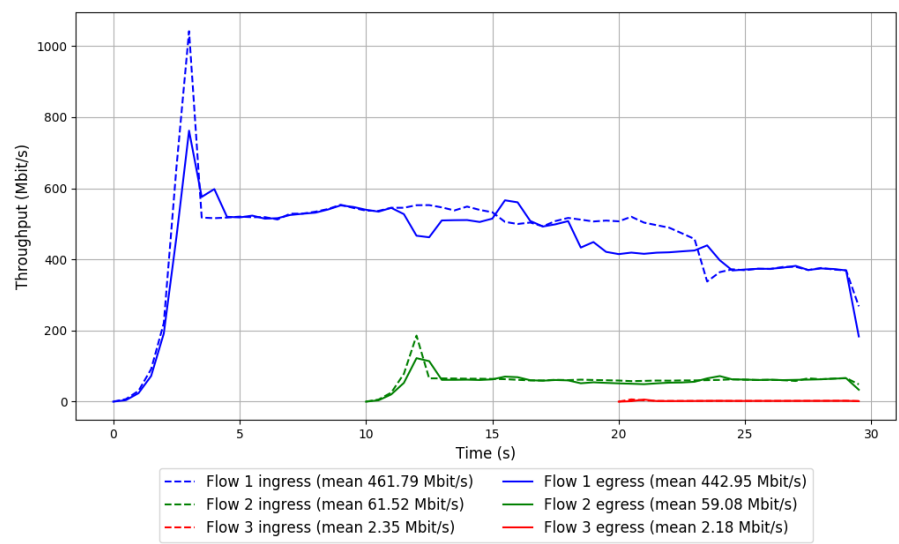
-- Flow 3:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 261.384 ms

Loss rate: 9.21%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

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

End at: 2018-02-17 00:57:34

Below is generated by plot.py at 2018-02-17 05:54:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 562.76 Mbit/s

95th percentile per-packet one-way delay: 231.342 ms

Loss rate: 2.04%

-- Flow 1:

Average throughput: 558.54 Mbit/s

95th percentile per-packet one-way delay: 231.342 ms

Loss rate: 2.04%

-- Flow 2:

Average throughput: 4.34 Mbit/s

95th percentile per-packet one-way delay: 230.932 ms

Loss rate: 1.74%

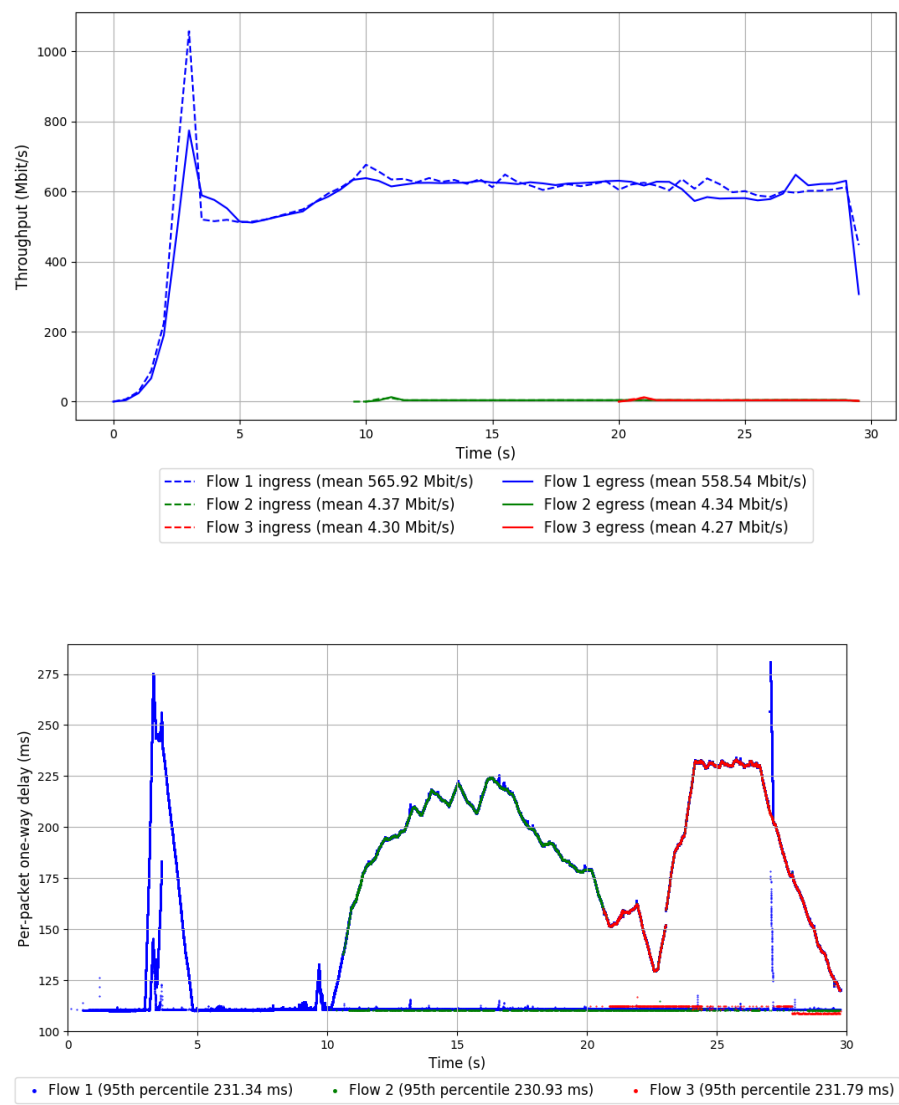
-- Flow 3:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 231.786 ms

Loss rate: 2.82%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-17 01:16:41

End at: 2018-02-17 01:17:11

Below is generated by plot.py at 2018-02-17 05:54:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 515.53 Mbit/s

95th percentile per-packet one-way delay: 264.722 ms

Loss rate: 7.98%

-- Flow 1:

Average throughput: 443.20 Mbit/s

95th percentile per-packet one-way delay: 264.267 ms

Loss rate: 7.78%

-- Flow 2:

Average throughput: 107.25 Mbit/s

95th percentile per-packet one-way delay: 265.745 ms

Loss rate: 9.20%

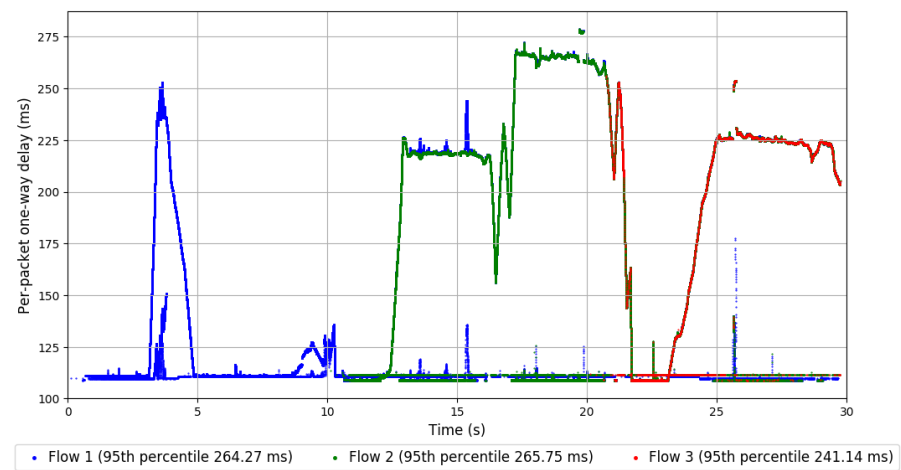
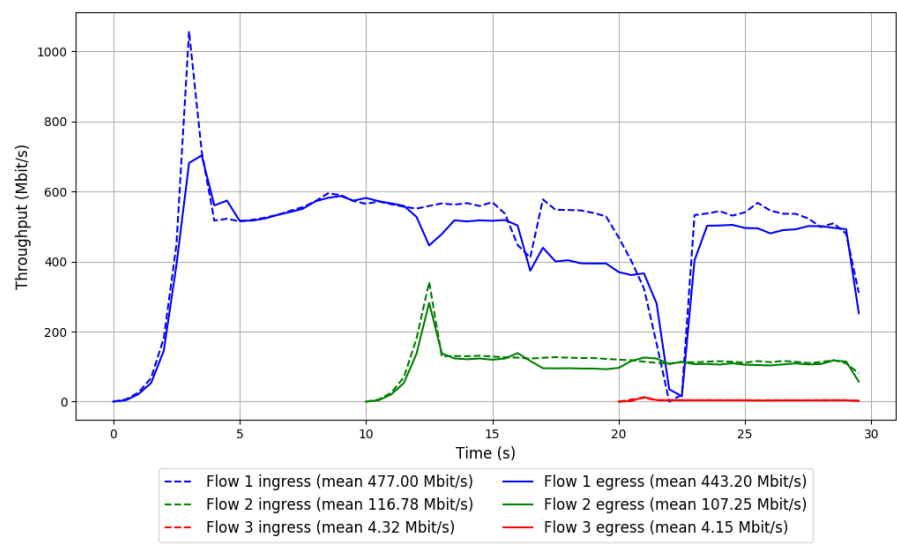
-- Flow 3:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 241.142 ms

Loss rate: 6.26%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-17 01:36:10

End at: 2018-02-17 01:36:40

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 549.06 Mbit/s

95th percentile per-packet one-way delay: 227.946 ms

Loss rate: 2.02%

-- Flow 1:

Average throughput: 527.80 Mbit/s

95th percentile per-packet one-way delay: 228.063 ms

Loss rate: 2.01%

-- Flow 2:

Average throughput: 16.76 Mbit/s

95th percentile per-packet one-way delay: 227.342 ms

Loss rate: 1.66%

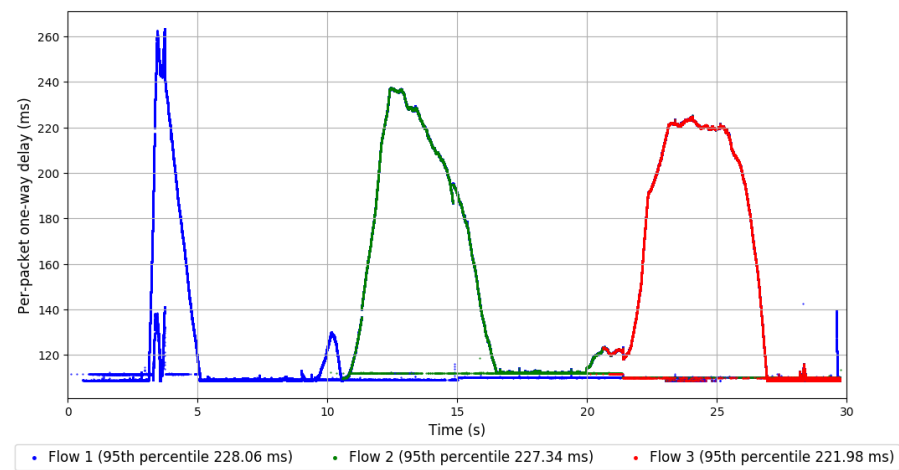
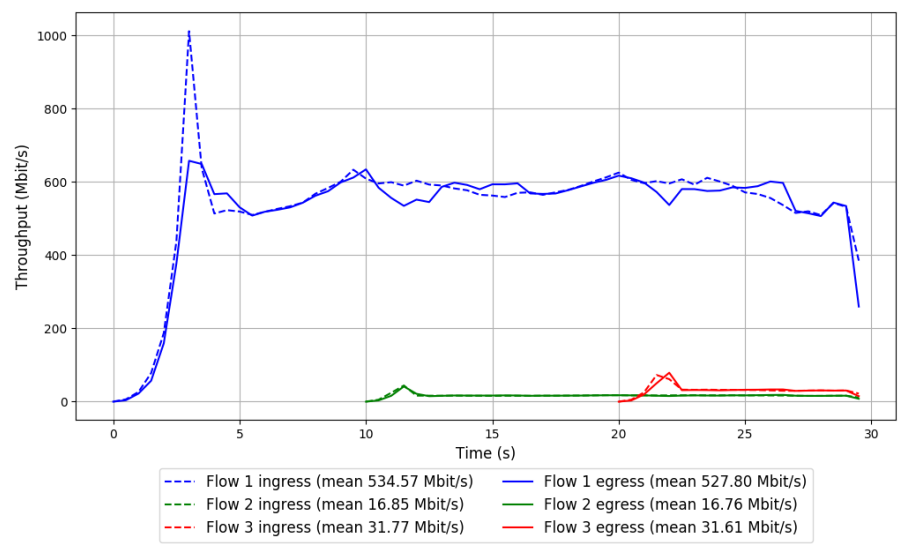
-- Flow 3:

Average throughput: 31.61 Mbit/s

95th percentile per-packet one-way delay: 221.976 ms

Loss rate: 2.77%

Run 9: Report of PCC — Data Link

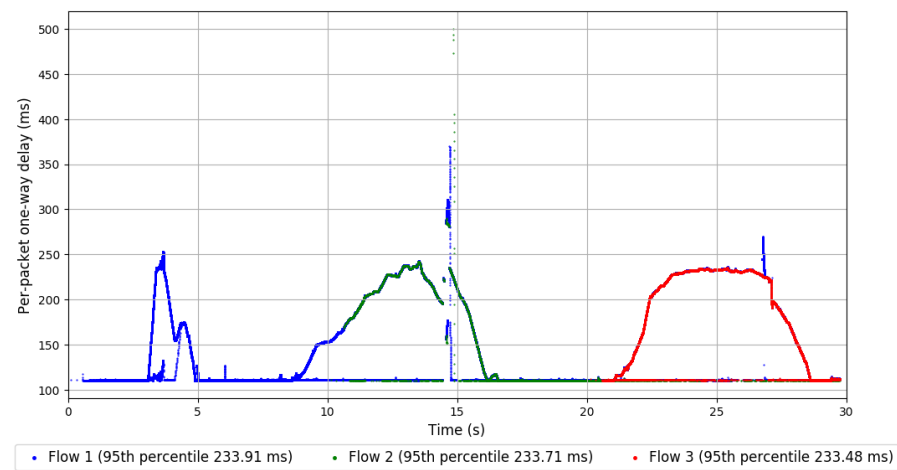
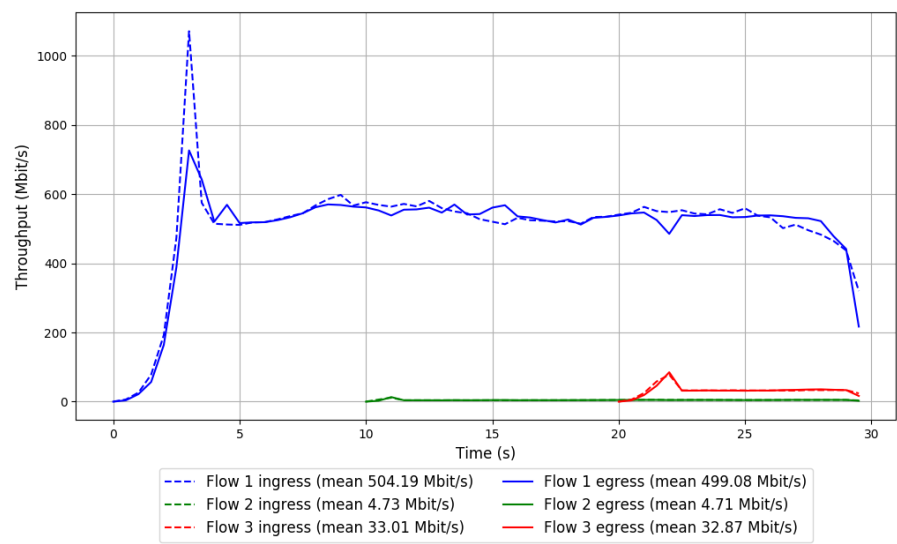


```
Run 10: Statistics of PCC

Start at: 2018-02-17 01:55:52
End at: 2018-02-17 01:56:22

# Below is generated by plot.py at 2018-02-17 06:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 512.86 Mbit/s
95th percentile per-packet one-way delay: 233.877 ms
Loss rate: 1.76%
-- Flow 1:
Average throughput: 499.08 Mbit/s
95th percentile per-packet one-way delay: 233.911 ms
Loss rate: 1.75%
-- Flow 2:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: 233.709 ms
Loss rate: 1.56%
-- Flow 3:
Average throughput: 32.87 Mbit/s
95th percentile per-packet one-way delay: 233.481 ms
Loss rate: 2.65%
```

Run 10: Report of PCC — Data Link

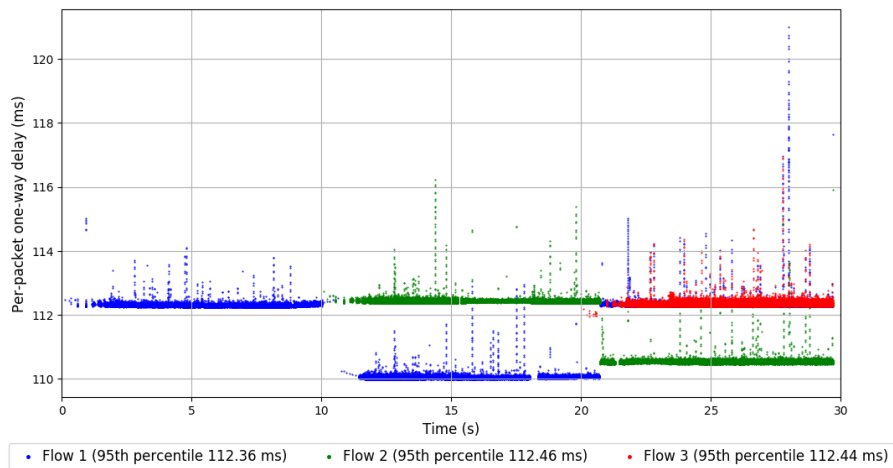
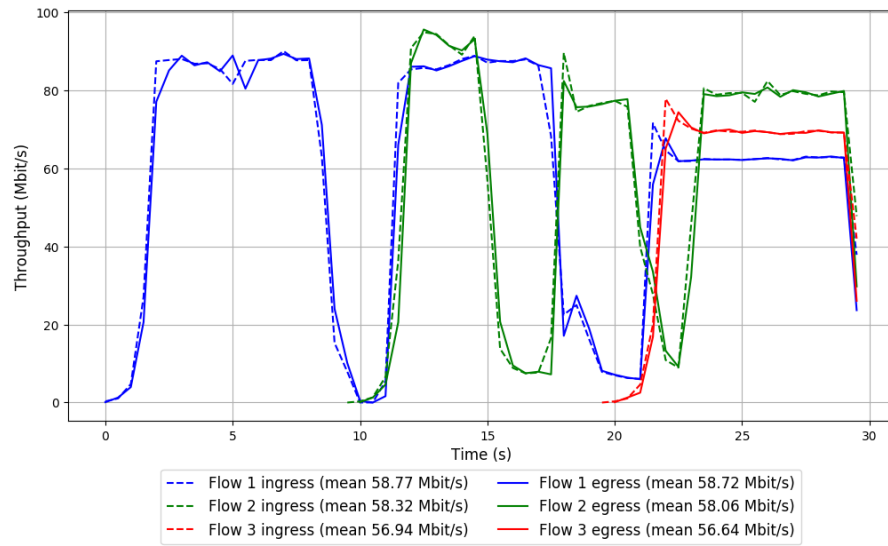


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-16 23:08:01
End at: 2018-02-16 23:08:31

# Below is generated by plot.py at 2018-02-17 06:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 115.64 Mbit/s
95th percentile per-packet one-way delay: 112.439 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 58.72 Mbit/s
95th percentile per-packet one-way delay: 112.362 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 58.06 Mbit/s
95th percentile per-packet one-way delay: 112.462 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 56.64 Mbit/s
95th percentile per-packet one-way delay: 112.443 ms
Loss rate: 2.82%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-16 23:27:55

End at: 2018-02-16 23:28:25

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.98 Mbit/s

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

Loss rate: 1.52%

-- Flow 1:

Average throughput: 57.55 Mbit/s

95th percentile per-packet one-way delay: 112.622 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 53.01 Mbit/s

95th percentile per-packet one-way delay: 111.206 ms

Loss rate: 1.66%

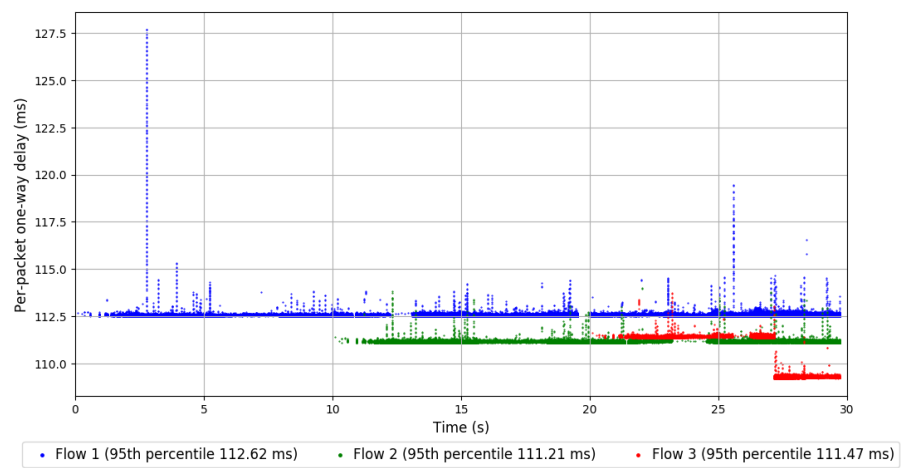
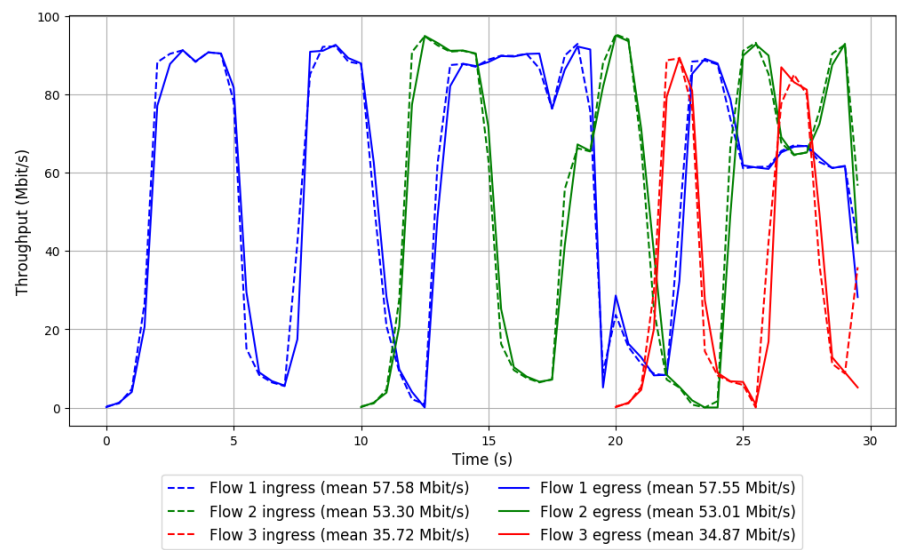
-- Flow 3:

Average throughput: 34.87 Mbit/s

95th percentile per-packet one-way delay: 111.474 ms

Loss rate: 4.62%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-16 23:47:45

End at: 2018-02-16 23:48:15

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 113.41 Mbit/s

95th percentile per-packet one-way delay: 111.526 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 52.82 Mbit/s

95th percentile per-packet one-way delay: 111.326 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 61.87 Mbit/s

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

Loss rate: 0.35%

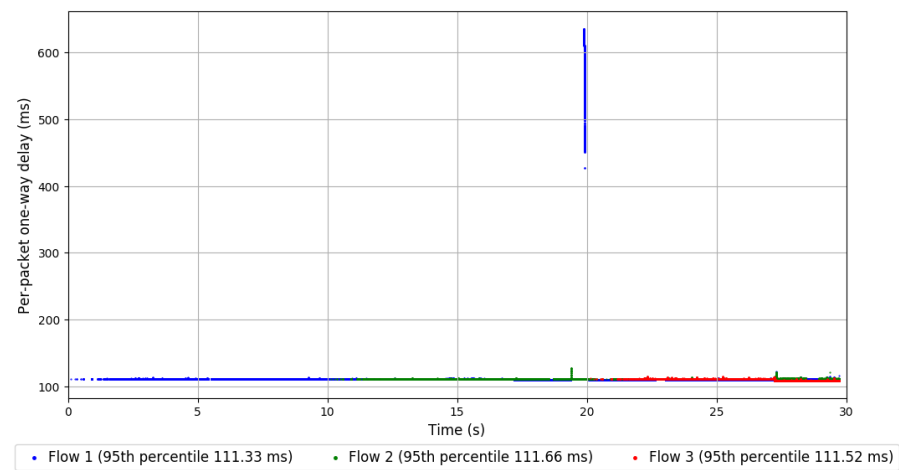
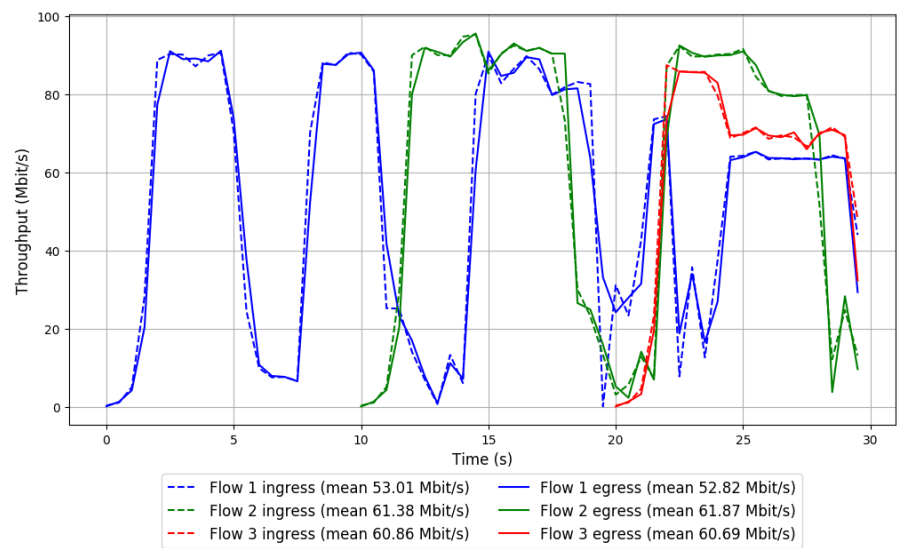
-- Flow 3:

Average throughput: 60.69 Mbit/s

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

Loss rate: 2.56%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-17 00:07:19

End at: 2018-02-17 00:07:49

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.24 Mbit/s

95th percentile per-packet one-way delay: 112.373 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 63.81 Mbit/s

95th percentile per-packet one-way delay: 110.842 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 61.39 Mbit/s

95th percentile per-packet one-way delay: 111.248 ms

Loss rate: 0.19%

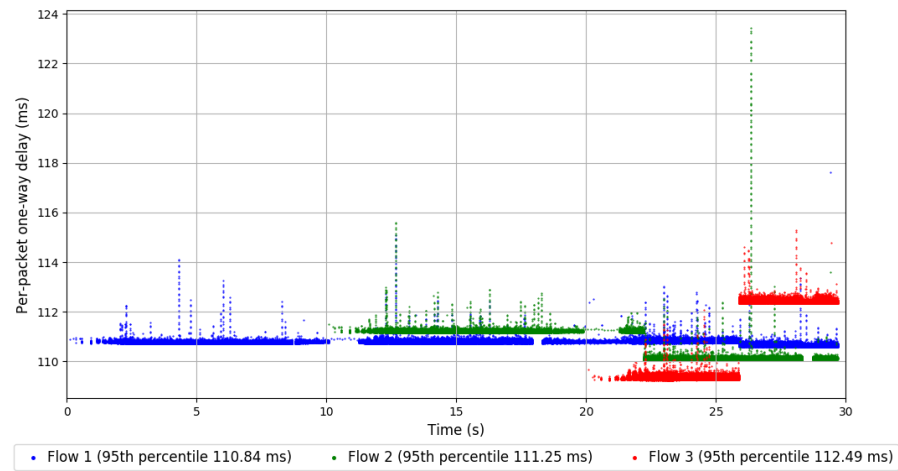
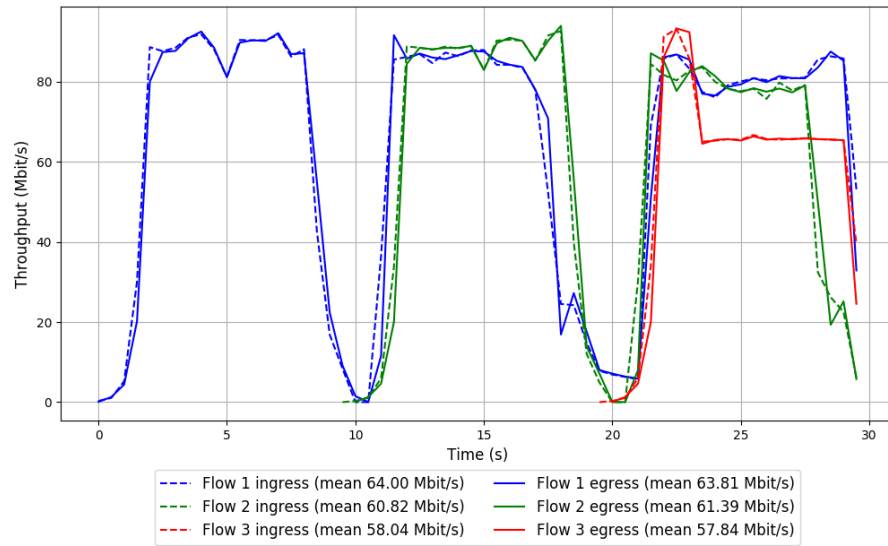
-- Flow 3:

Average throughput: 57.84 Mbit/s

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

Loss rate: 2.61%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-17 00:26:39

End at: 2018-02-17 00:27:09

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.12 Mbit/s

95th percentile per-packet one-way delay: 111.366 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 39.79 Mbit/s

95th percentile per-packet one-way delay: 110.548 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 57.10 Mbit/s

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

Loss rate: 1.28%

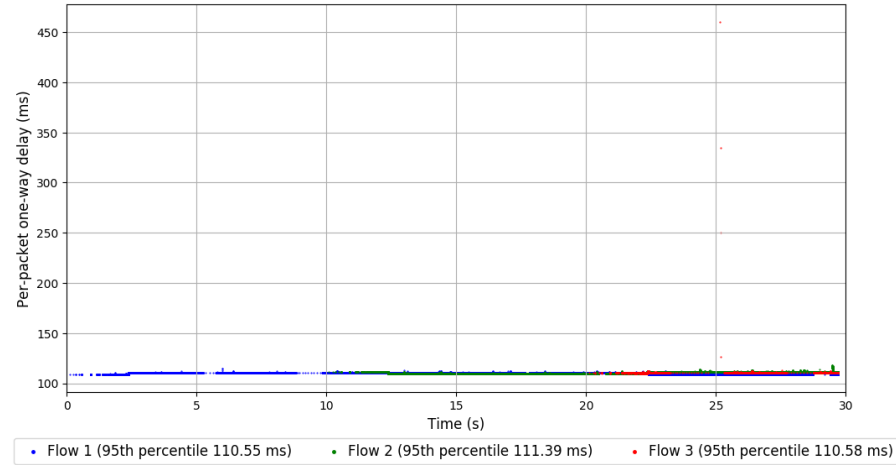
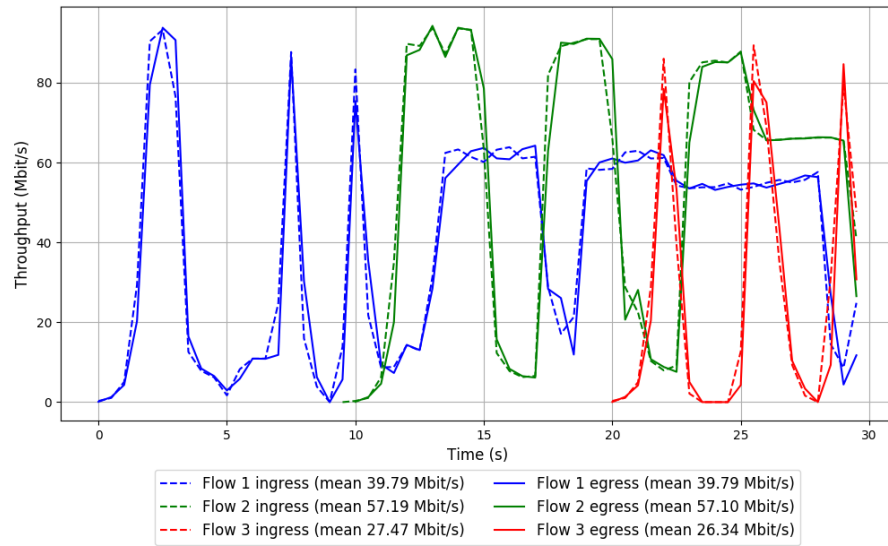
-- Flow 3:

Average throughput: 26.34 Mbit/s

95th percentile per-packet one-way delay: 110.579 ms

Loss rate: 6.27%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-17 00:45:59

End at: 2018-02-17 00:46:29

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 116.05 Mbit/s

95th percentile per-packet one-way delay: 112.373 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 53.78 Mbit/s

95th percentile per-packet one-way delay: 110.055 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 62.20 Mbit/s

95th percentile per-packet one-way delay: 112.409 ms

Loss rate: 0.98%

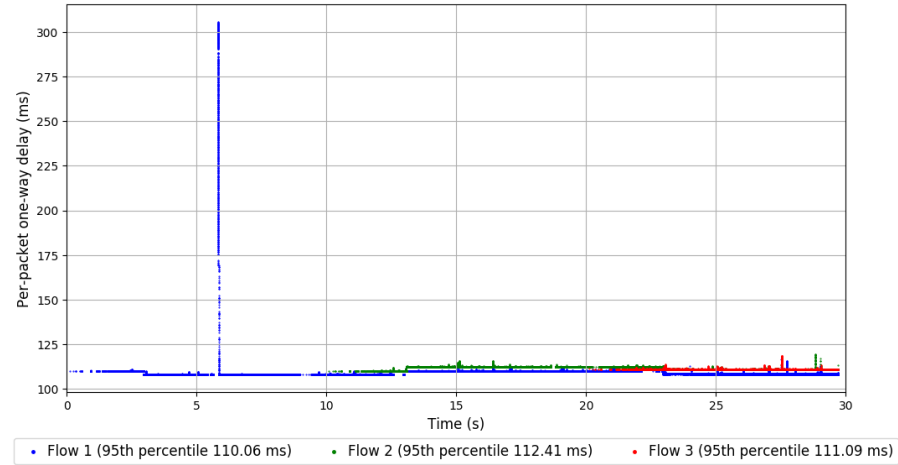
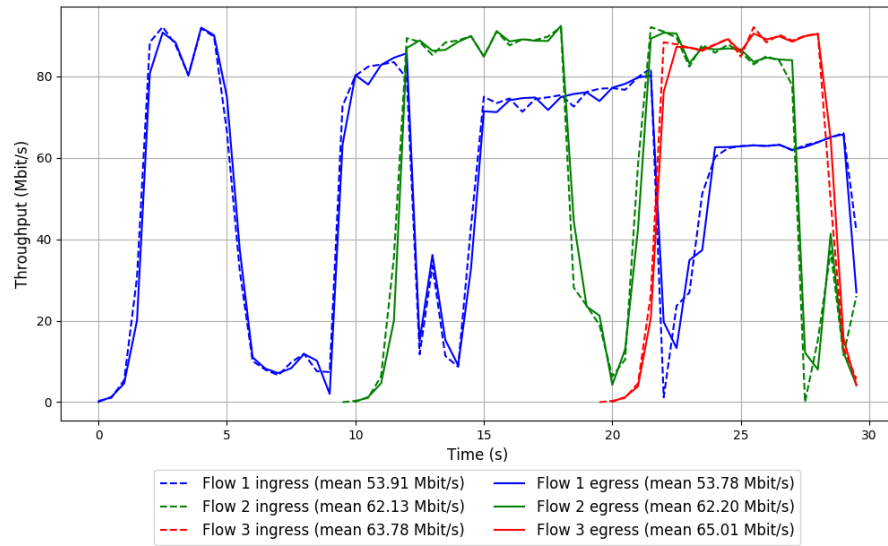
-- Flow 3:

Average throughput: 65.01 Mbit/s

95th percentile per-packet one-way delay: 111.087 ms

Loss rate: 0.31%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-17 01:05:17

End at: 2018-02-17 01:05:47

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.60 Mbit/s

95th percentile per-packet one-way delay: 111.970 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 55.80 Mbit/s

95th percentile per-packet one-way delay: 109.199 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 34.70 Mbit/s

95th percentile per-packet one-way delay: 112.024 ms

Loss rate: 0.73%

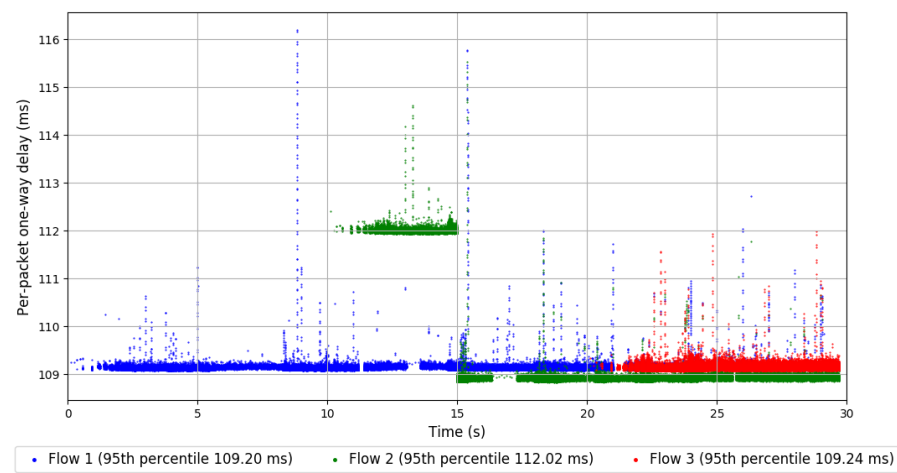
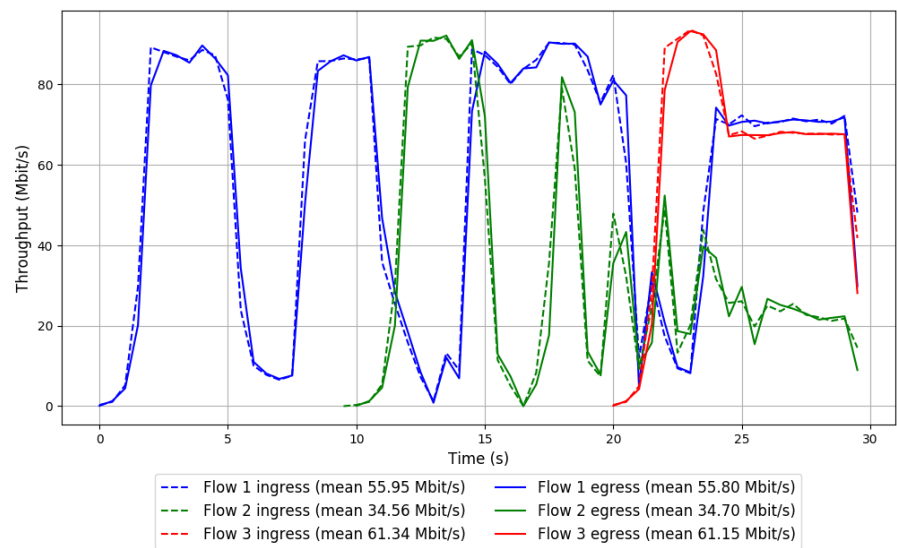
-- Flow 3:

Average throughput: 61.15 Mbit/s

95th percentile per-packet one-way delay: 109.242 ms

Loss rate: 2.37%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-17 01:24:57

End at: 2018-02-17 01:25:27

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.94 Mbit/s

95th percentile per-packet one-way delay: 111.979 ms

Loss rate: 1.32%

-- Flow 1:

Average throughput: 50.69 Mbit/s

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

Loss rate: 1.20%

-- Flow 2:

Average throughput: 60.99 Mbit/s

95th percentile per-packet one-way delay: 110.759 ms

Loss rate: 0.00%

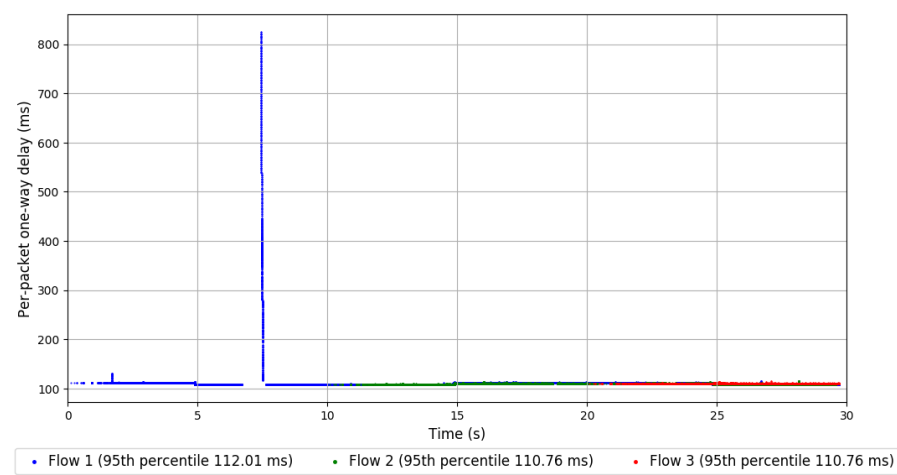
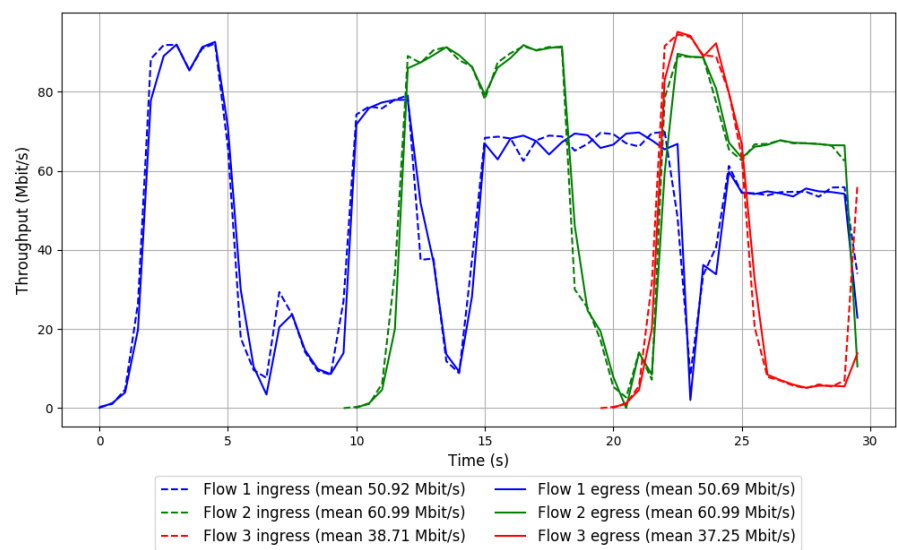
-- Flow 3:

Average throughput: 37.25 Mbit/s

95th percentile per-packet one-way delay: 110.760 ms

Loss rate: 5.94%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-17 01:44:34

End at: 2018-02-17 01:45:04

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.88 Mbit/s

95th percentile per-packet one-way delay: 111.896 ms

Loss rate: 1.44%

-- Flow 1:

Average throughput: 57.89 Mbit/s

95th percentile per-packet one-way delay: 111.917 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 52.10 Mbit/s

95th percentile per-packet one-way delay: 110.324 ms

Loss rate: 1.43%

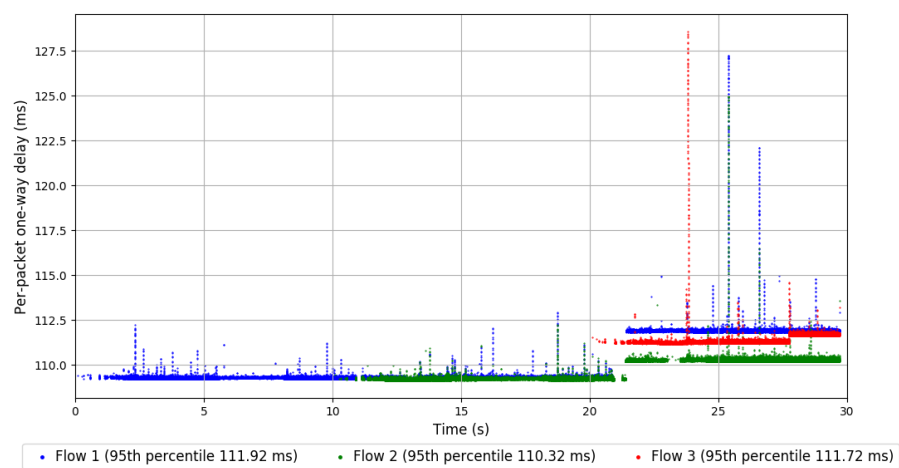
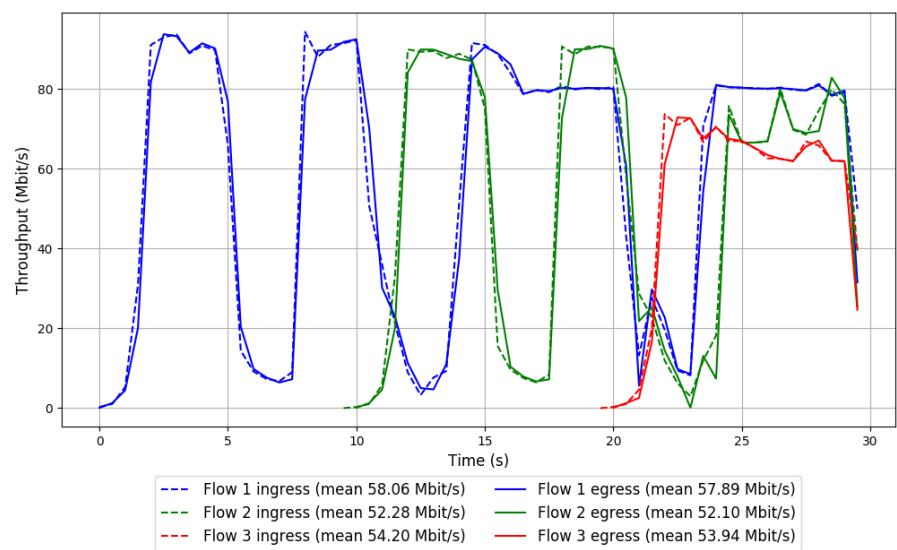
-- Flow 3:

Average throughput: 53.94 Mbit/s

95th percentile per-packet one-way delay: 111.718 ms

Loss rate: 2.73%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

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

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

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.96 Mbit/s

95th percentile per-packet one-way delay: 112.195 ms

Loss rate: 1.64%

-- Flow 1:

Average throughput: 58.26 Mbit/s

95th percentile per-packet one-way delay: 111.141 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 50.05 Mbit/s

95th percentile per-packet one-way delay: 112.233 ms

Loss rate: 1.43%

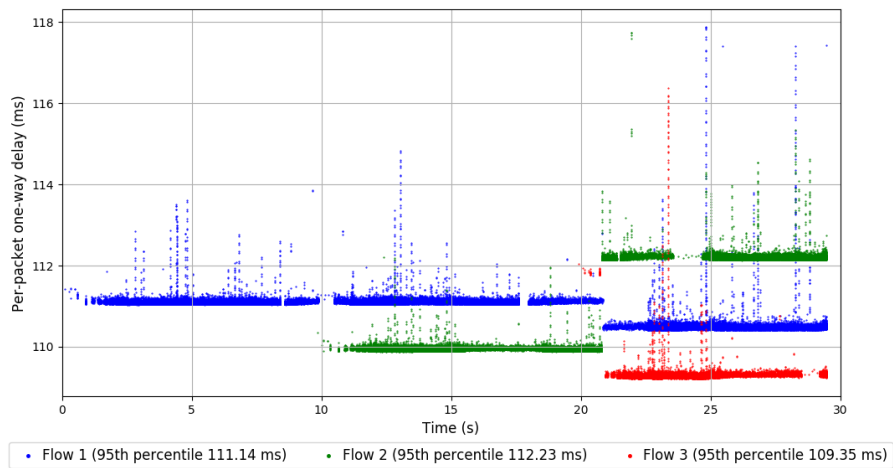
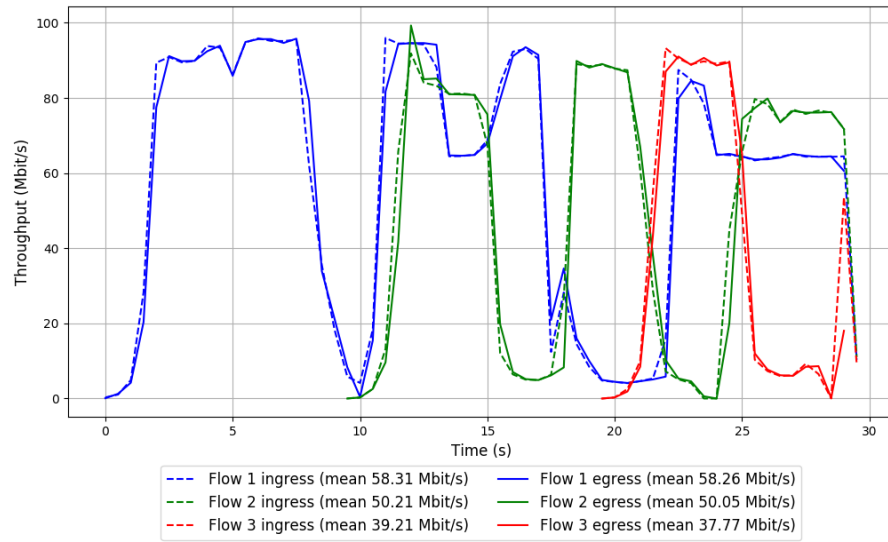
-- Flow 3:

Average throughput: 37.77 Mbit/s

95th percentile per-packet one-way delay: 109.351 ms

Loss rate: 5.84%

Run 10: Report of QUIC Cubic — Data Link

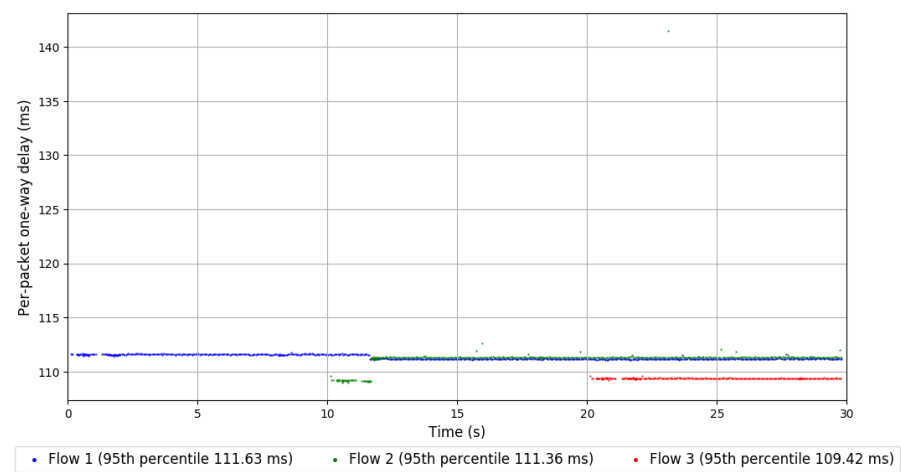
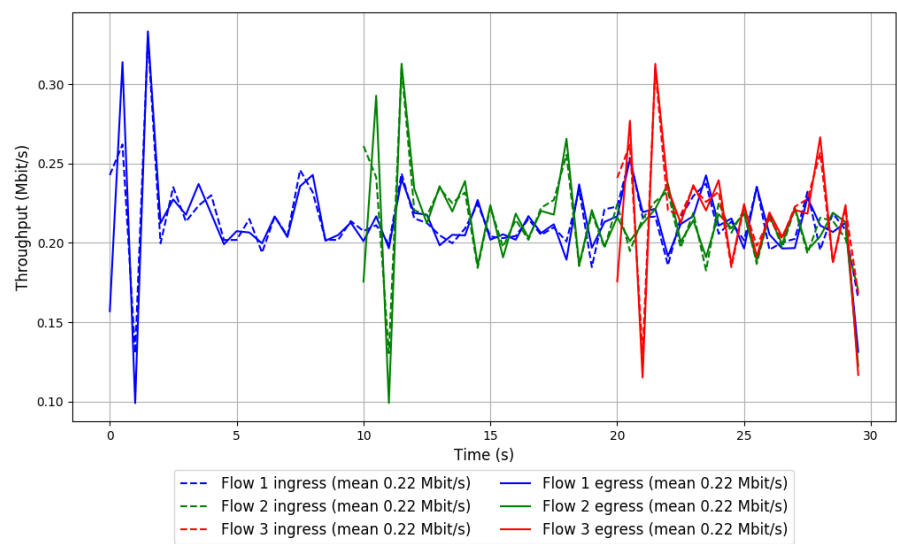


```
Run 1: Statistics of SReAM

Start at: 2018-02-16 22:57:00
End at: 2018-02-16 22:57:30

# Below is generated by plot.py at 2018-02-17 06:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 111.609 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.627 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.365 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.425 ms
Loss rate: 2.27%
```

Run 1: Report of SCRaM — Data Link

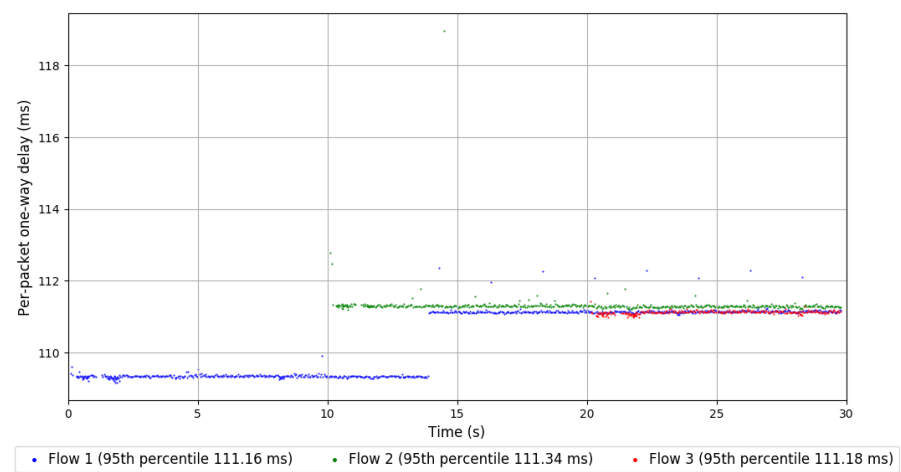
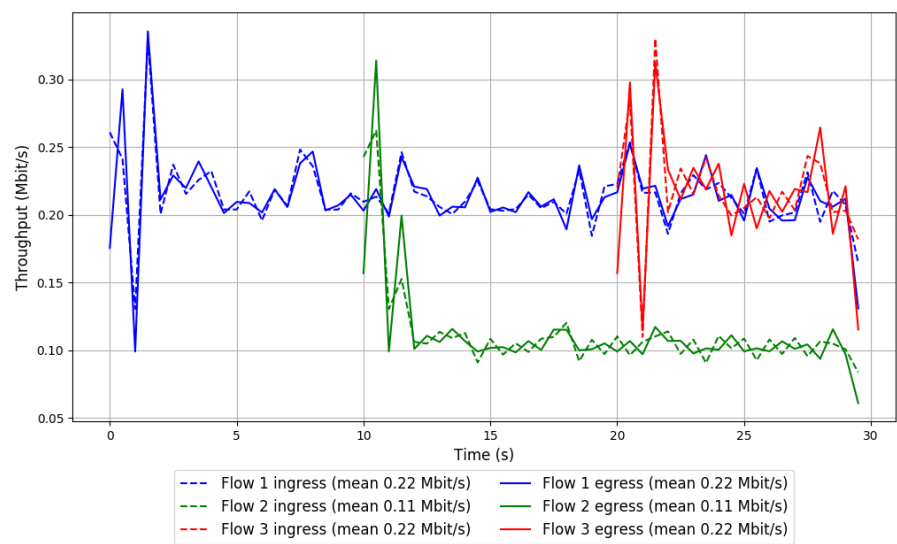


```
Run 2: Statistics of SReAM

Start at: 2018-02-16 23:17:22
End at: 2018-02-16 23:17:52

# Below is generated by plot.py at 2018-02-17 06:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 111.319 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.163 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 111.344 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.183 ms
Loss rate: 2.25%
```

Run 2: Report of SCSReAM — Data Link

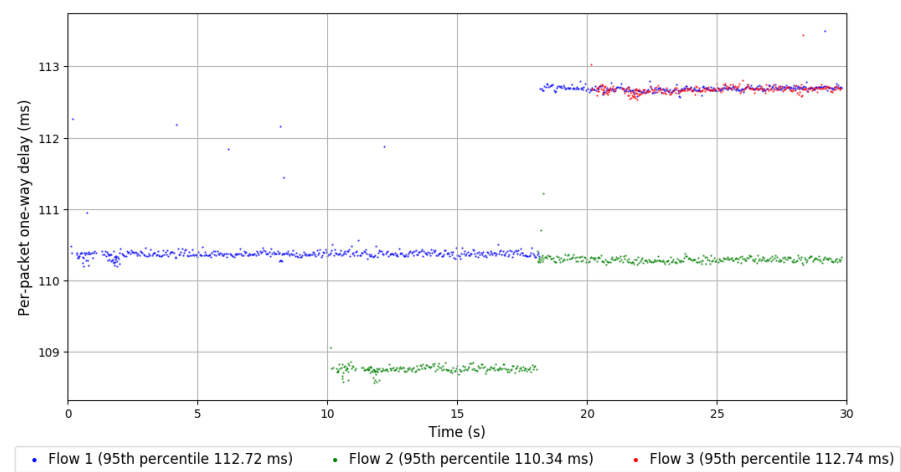
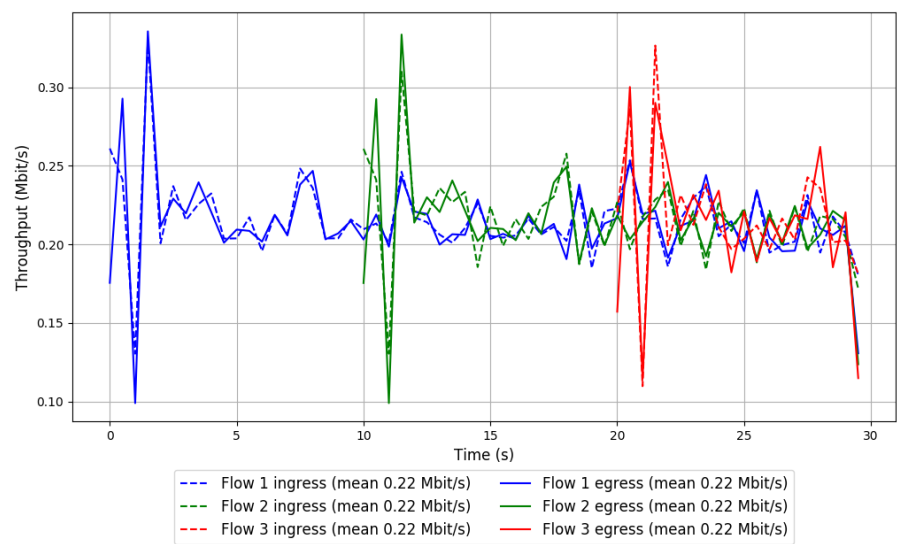


```
Run 3: Statistics of SCReAM

Start at: 2018-02-16 23:37:14
End at: 2018-02-16 23:37:44

# Below is generated by plot.py at 2018-02-17 06:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.718 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.722 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.339 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.743 ms
Loss rate: 2.26%
```


Run 3: Report of SCRaM — Data Link

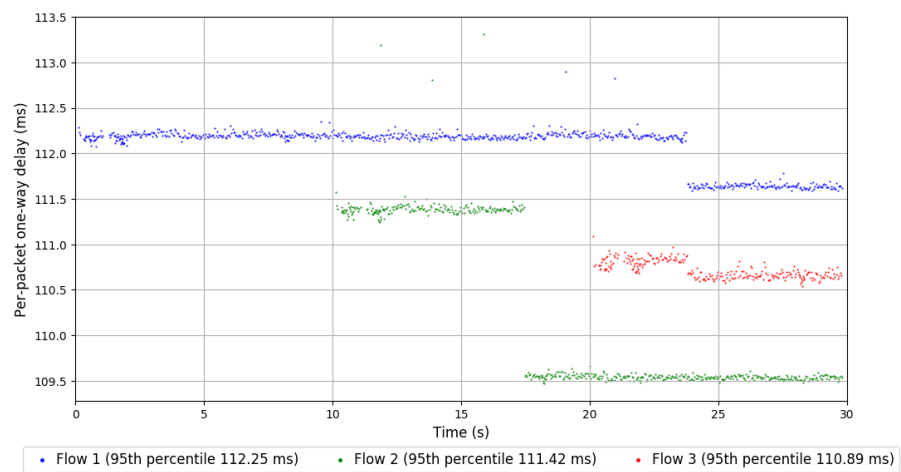
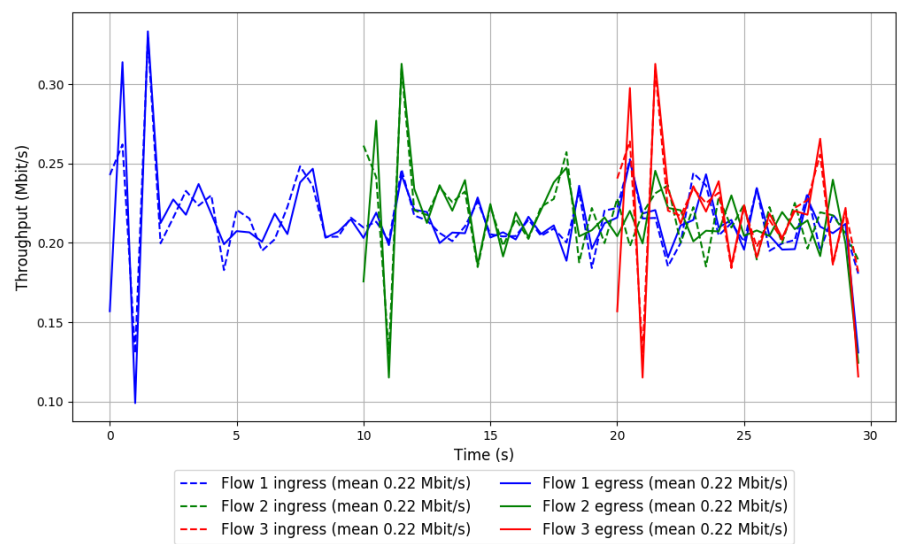


```
Run 4: Statistics of SReAM

Start at: 2018-02-16 23:56:58
End at: 2018-02-16 23:57:28

# Below is generated by plot.py at 2018-02-17 06:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.230 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.245 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.423 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.888 ms
Loss rate: 2.60%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-02-17 00:16:26

End at: 2018-02-17 00:16:56

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.40 Mbit/s

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

Loss rate: 1.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.688 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.659 ms

Loss rate: 1.06%

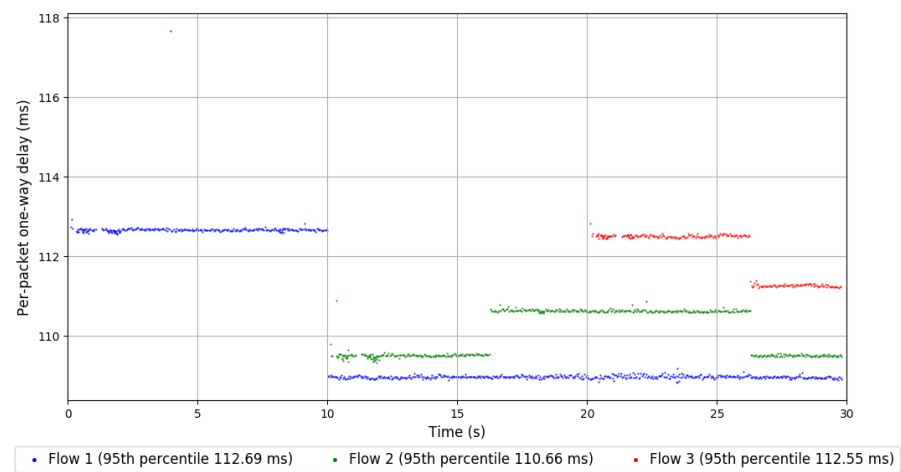
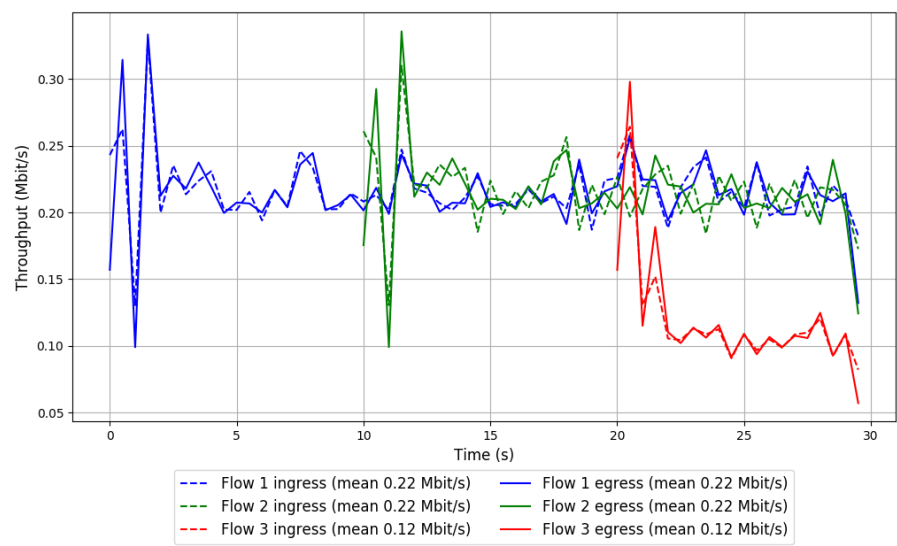
-- Flow 3:

Average throughput: 0.12 Mbit/s

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

Loss rate: 1.98%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-02-17 00:35:36

End at: 2018-02-17 00:36:06

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 111.194 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 109.294 ms

Loss rate: 1.05%

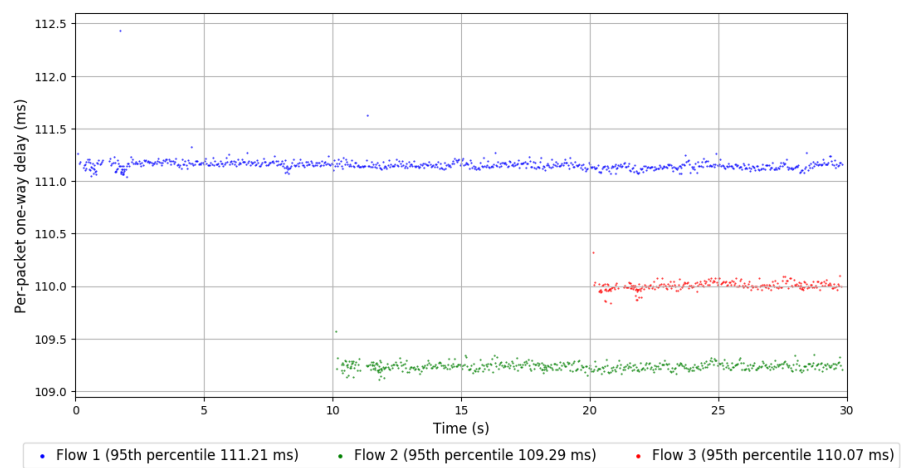
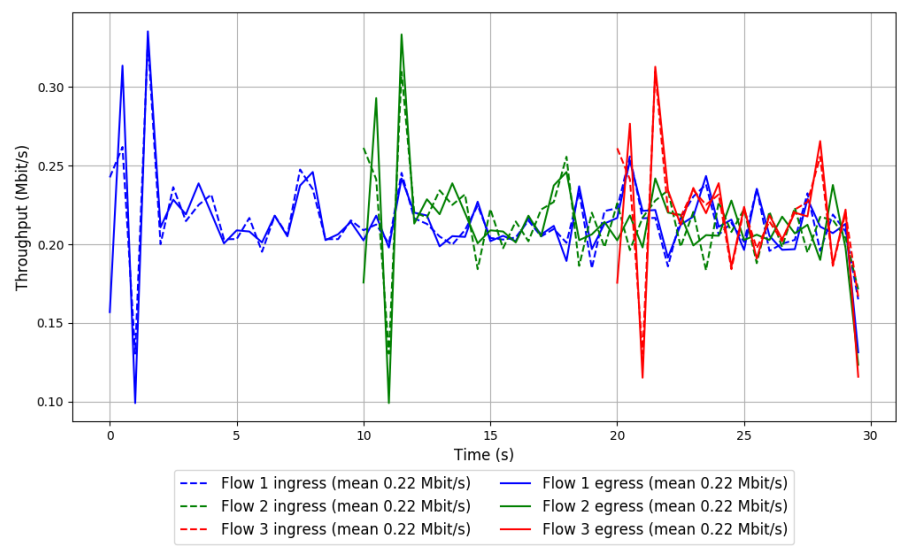
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.073 ms

Loss rate: 2.25%

Run 6: Report of SReAM — Data Link

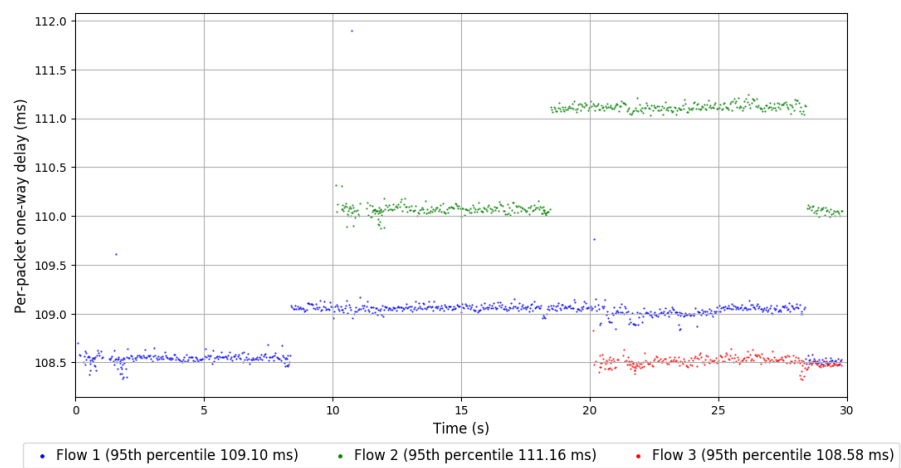
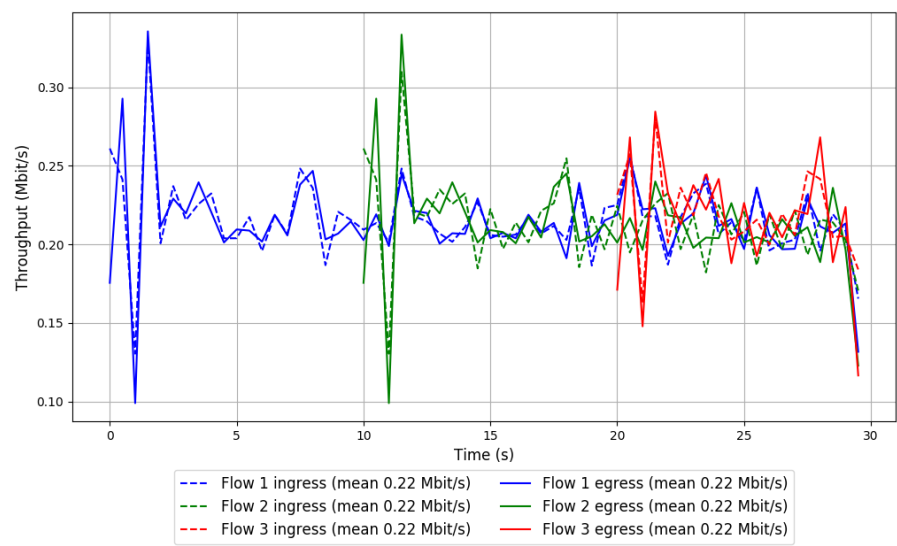


```
Run 7: Statistics of SReAM

Start at: 2018-02-17 00:54:53
End at: 2018-02-17 00:55:23

# Below is generated by plot.py at 2018-02-17 06:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 111.133 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.098 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.161 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 108.581 ms
Loss rate: 2.26%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-02-17 01:14:29

End at: 2018-02-17 01:14:59

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 111.673 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.166 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.692 ms

Loss rate: 1.06%

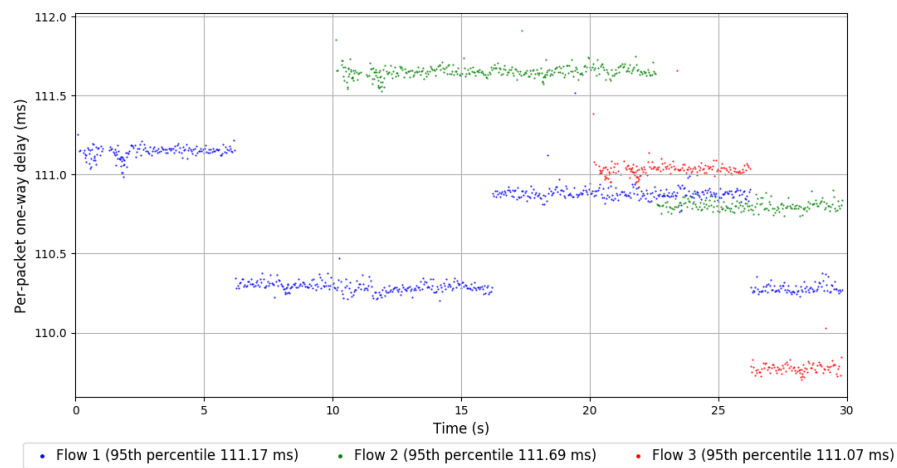
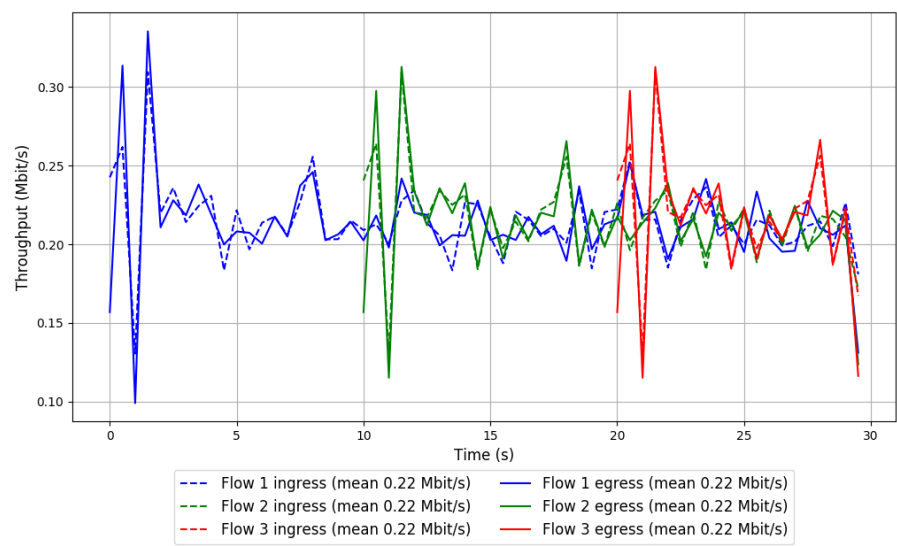
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.073 ms

Loss rate: 2.26%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-02-17 01:34:07

End at: 2018-02-17 01:34:37

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 111.687 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.108 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.725 ms

Loss rate: 1.06%

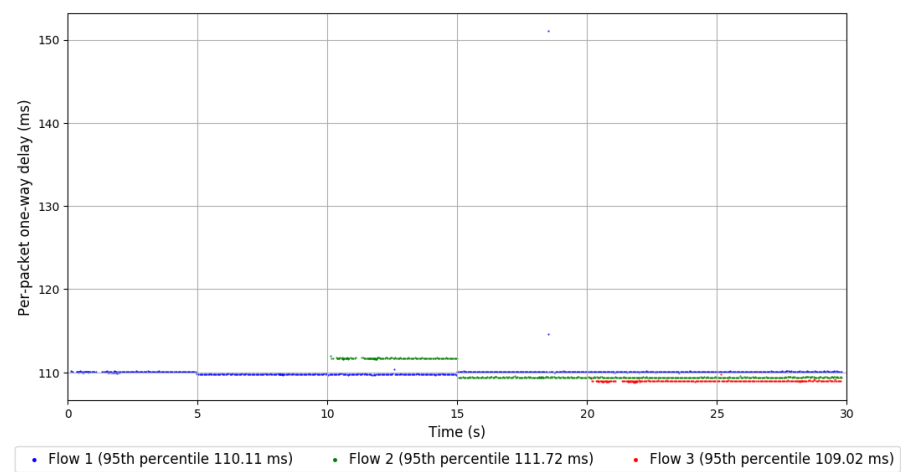
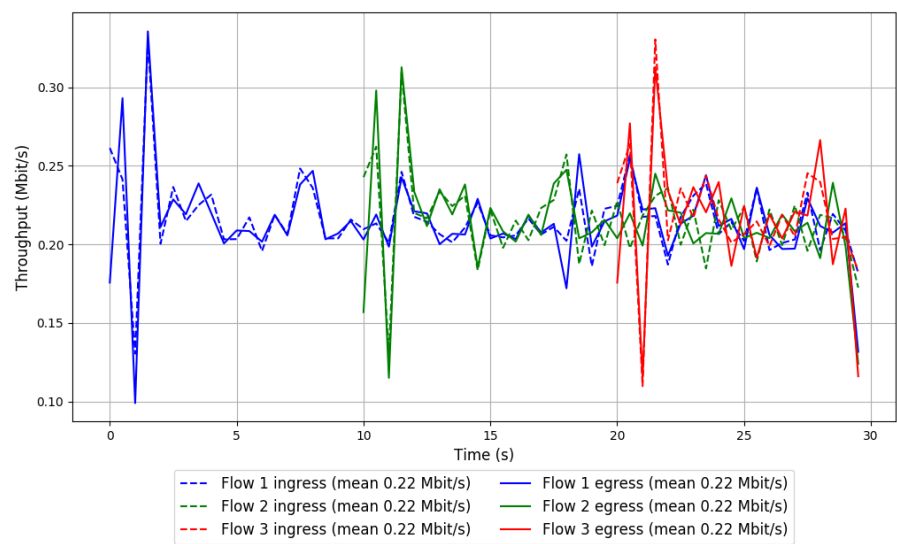
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 109.016 ms

Loss rate: 2.26%

Run 9: Report of SReAM — Data Link

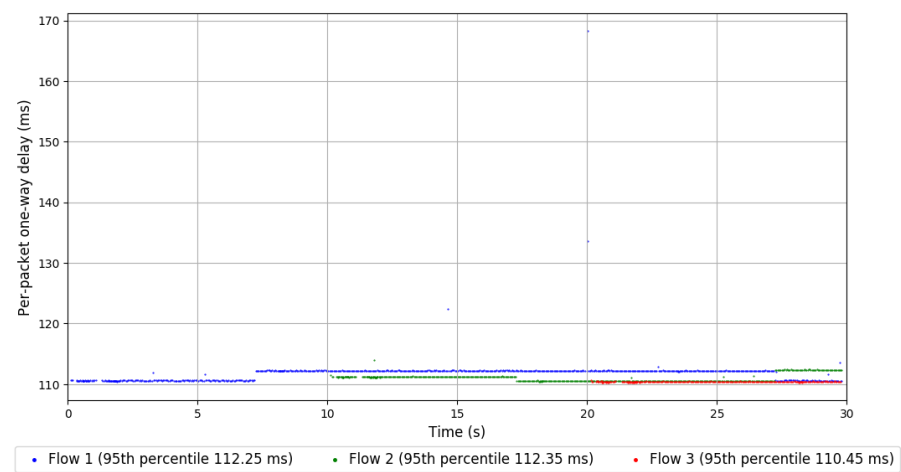
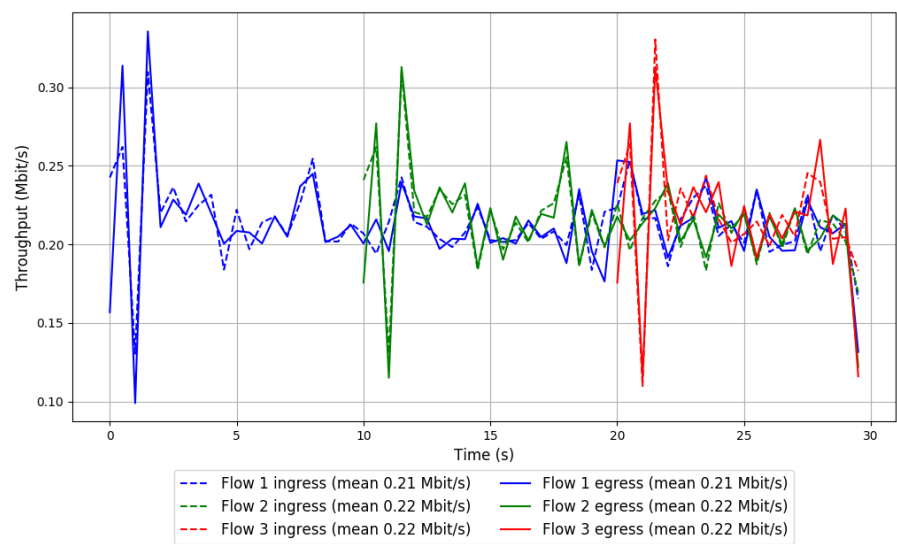


```
Run 10: Statistics of SReAM

Start at: 2018-02-17 01:53:45
End at: 2018-02-17 01:54:15

# Below is generated by plot.py at 2018-02-17 06:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.290 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.253 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.346 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.448 ms
Loss rate: 2.26%
```

Run 10: Report of SReAM — Data Link

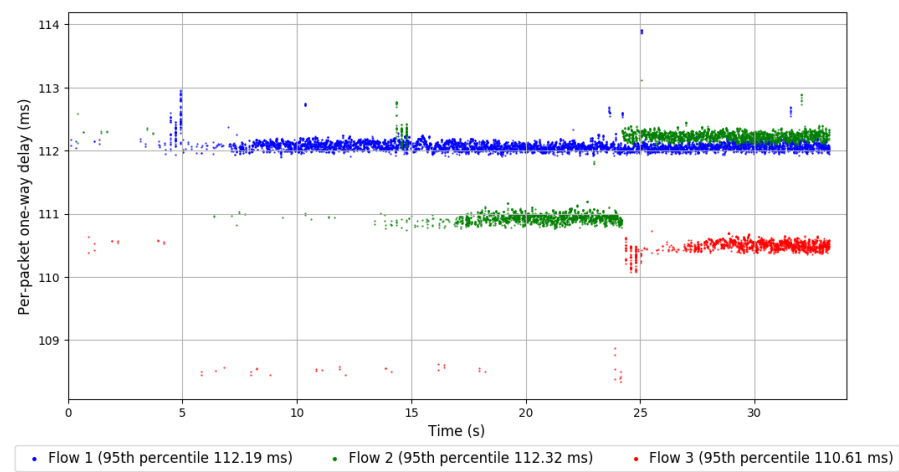
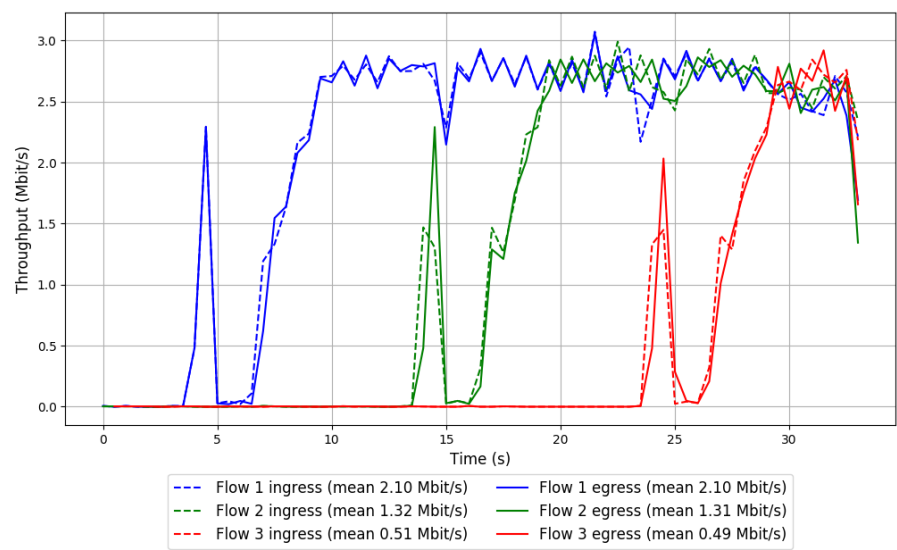


```
Run 1: Statistics of WebRTC media

Start at: 2018-02-16 22:51:41
End at: 2018-02-16 22:52:11

# Below is generated by plot.py at 2018-02-17 06:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 112.290 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 112.187 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 112.323 ms
Loss rate: 1.93%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 110.606 ms
Loss rate: 3.83%
```


Run 1: Report of WebRTC media — Data Link

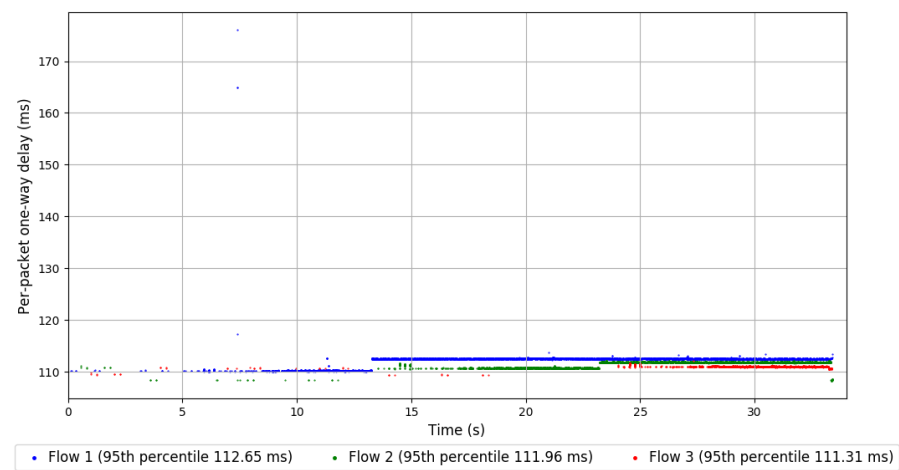
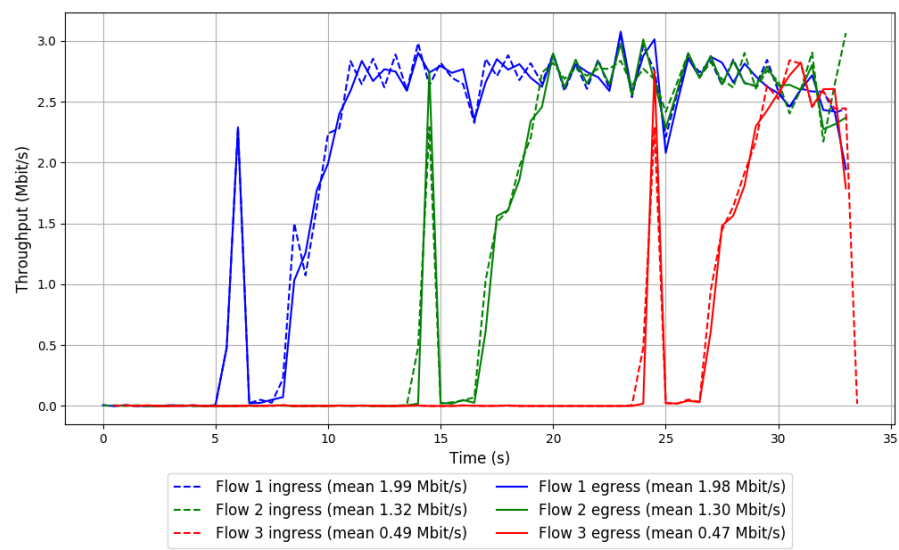


```
Run 2: Statistics of WebRTC media

Start at: 2018-02-16 23:12:02
End at: 2018-02-16 23:12:32

# Below is generated by plot.py at 2018-02-17 06:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.73 Mbit/s
95th percentile per-packet one-way delay: 112.627 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 112.651 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 111.962 ms
Loss rate: 1.67%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 111.311 ms
Loss rate: 3.58%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-16 23:31:53

End at: 2018-02-16 23:32:23

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.77 Mbit/s

95th percentile per-packet one-way delay: 113.436 ms

Loss rate: 1.52%

-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 111.537 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 112.713 ms

Loss rate: 1.69%

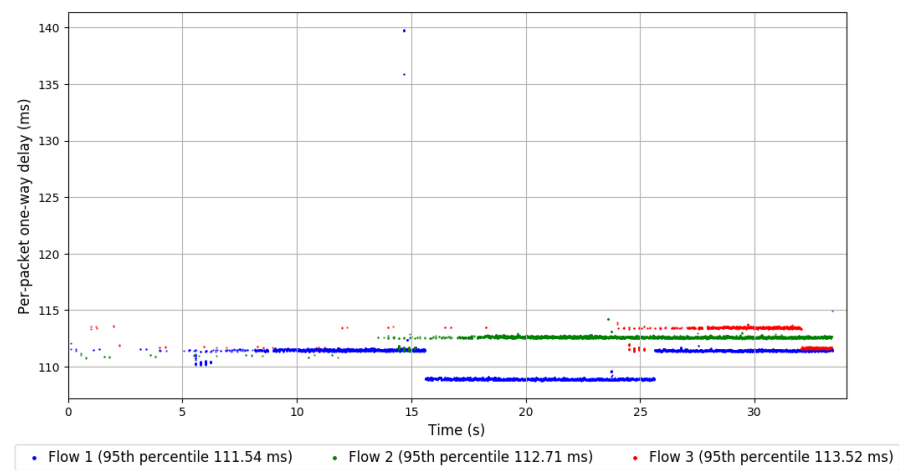
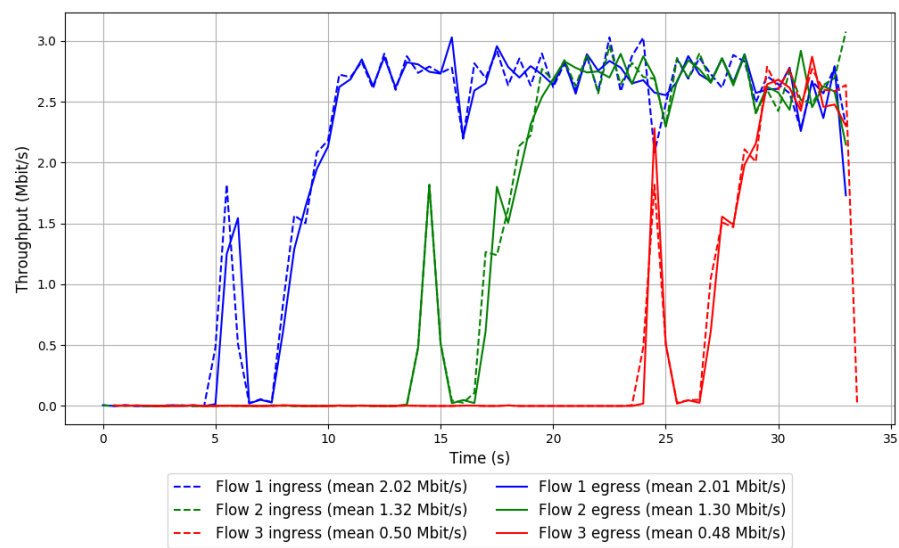
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 113.518 ms

Loss rate: 3.53%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-16 23:51:46

End at: 2018-02-16 23:52:16

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 112.092 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 111.540 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 111.640 ms

Loss rate: 1.74%

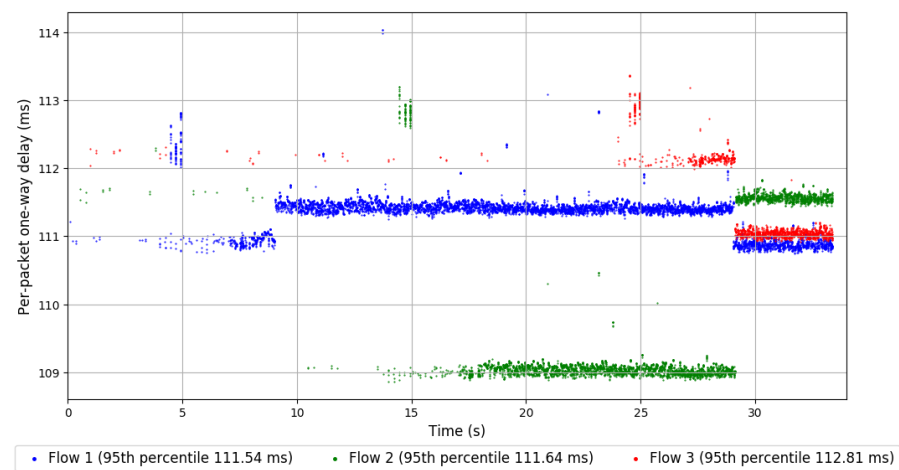
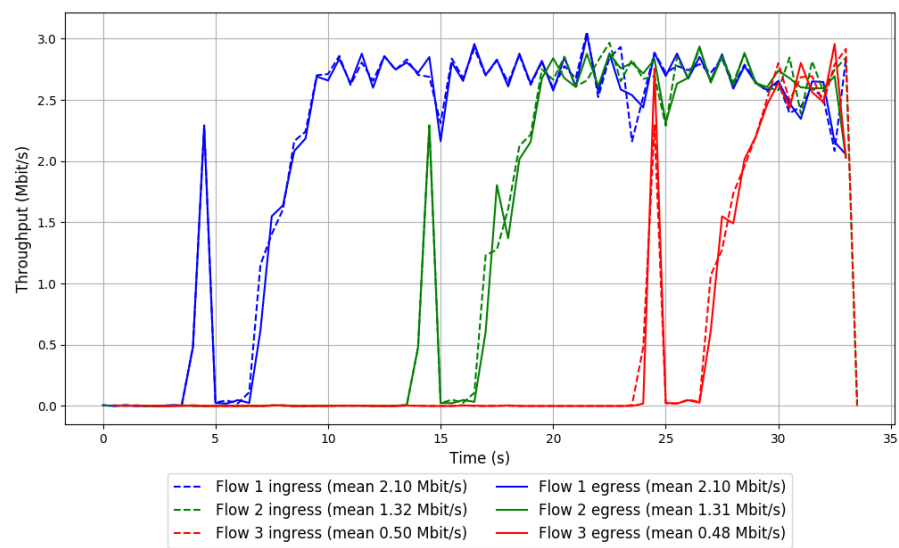
-- Flow 3:

Average throughput: 0.48 Mbit/s

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

Loss rate: 4.24%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-17 00:11:22

End at: 2018-02-17 00:11:52

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.86 Mbit/s

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

Loss rate: 1.52%

-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 112.564 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 110.851 ms

Loss rate: 1.88%

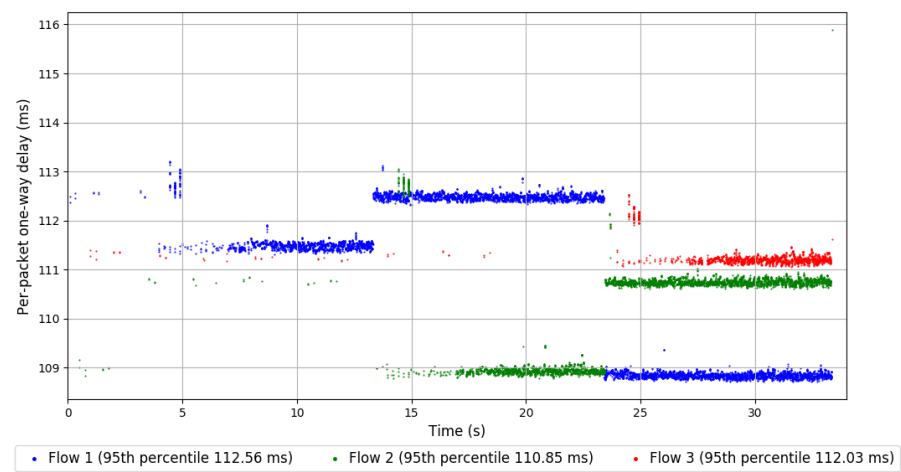
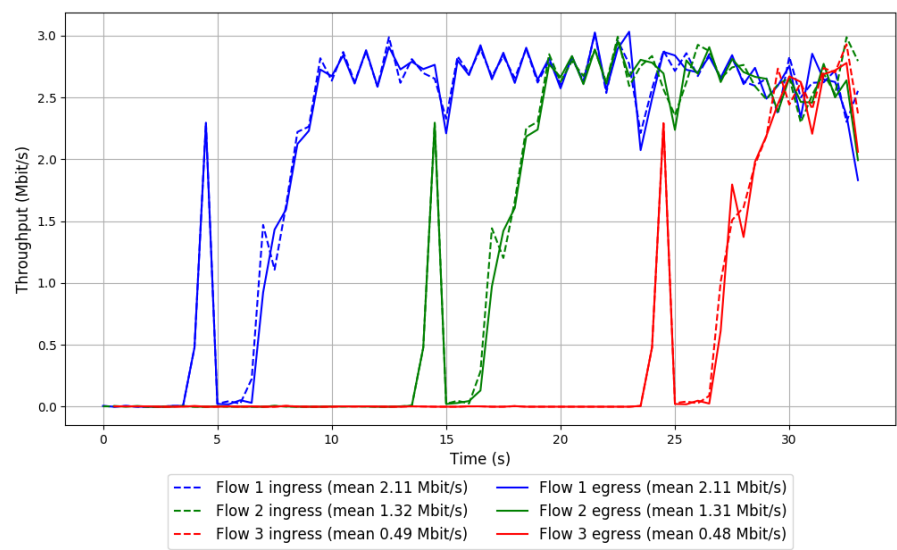
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 112.032 ms

Loss rate: 3.53%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-17 00:30:37

End at: 2018-02-17 00:31:07

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 112.752 ms

Loss rate: 1.56%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 112.776 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 111.310 ms

Loss rate: 1.74%

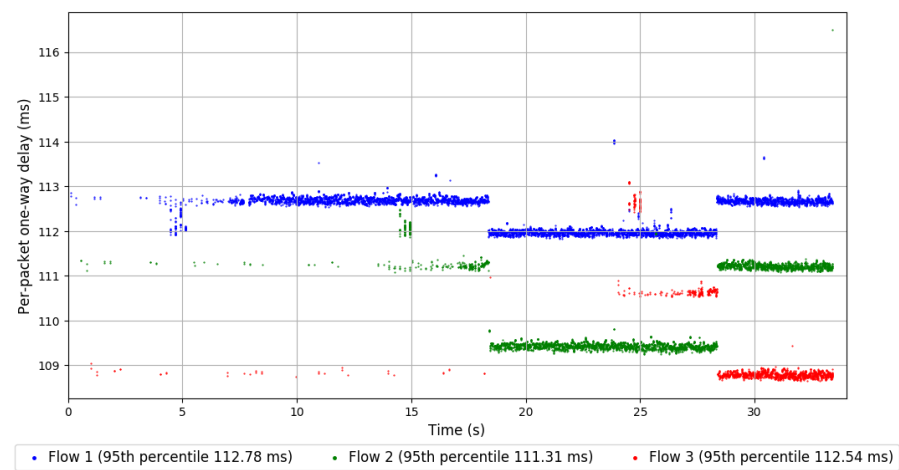
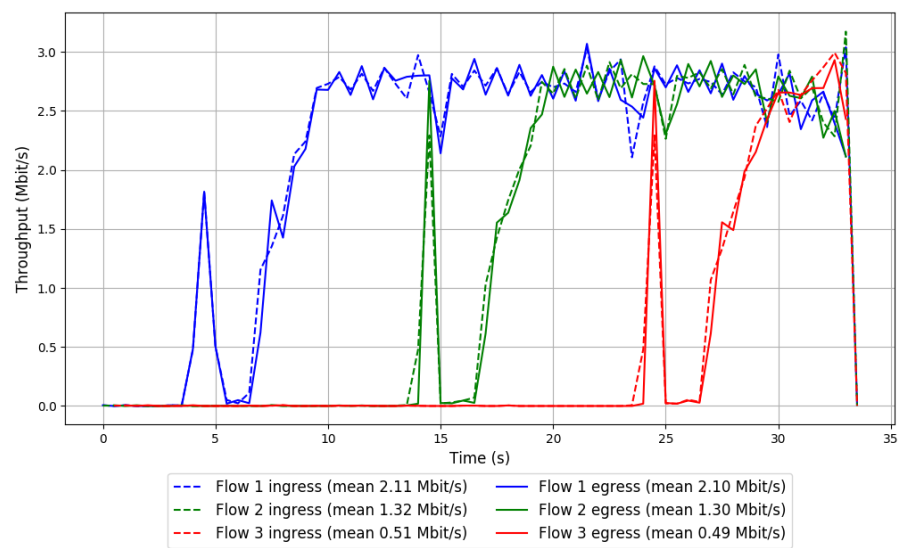
-- Flow 3:

Average throughput: 0.49 Mbit/s

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

Loss rate: 3.41%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-17 00:49:56

End at: 2018-02-17 00:50:26

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 112.395 ms

Loss rate: 1.42%

-- Flow 1:

Average throughput: 2.04 Mbit/s

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

Loss rate: 0.59%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 110.923 ms

Loss rate: 1.69%

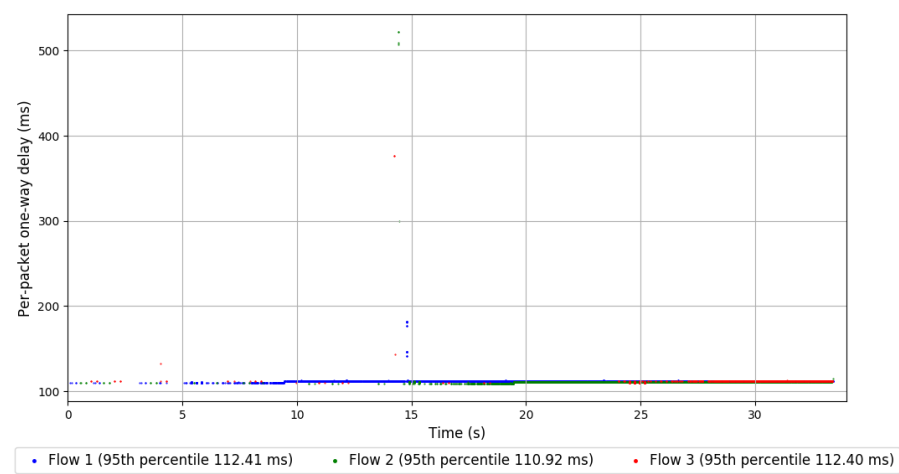
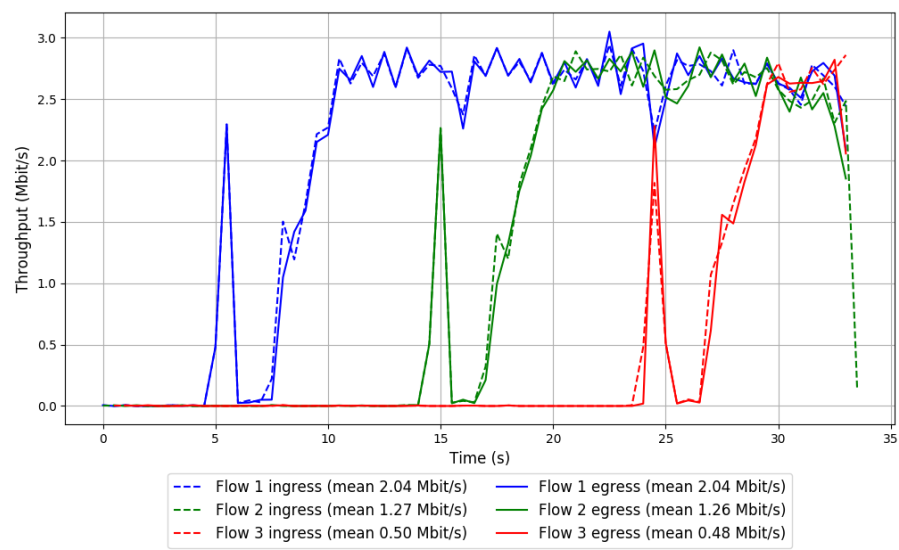
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 112.402 ms

Loss rate: 4.22%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-17 01:09:14

End at: 2018-02-17 01:09:44

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.80 Mbit/s

95th percentile per-packet one-way delay: 114.217 ms

Loss rate: 1.46%

-- Flow 1:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 110.996 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 114.265 ms

Loss rate: 1.62%

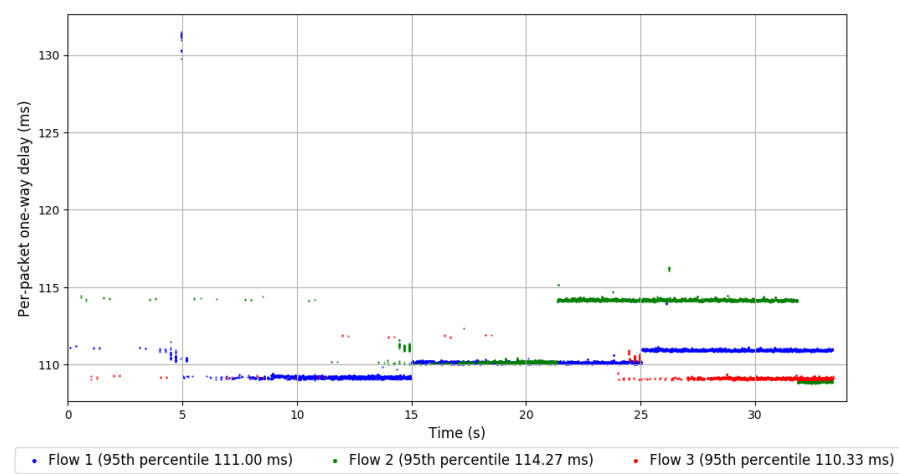
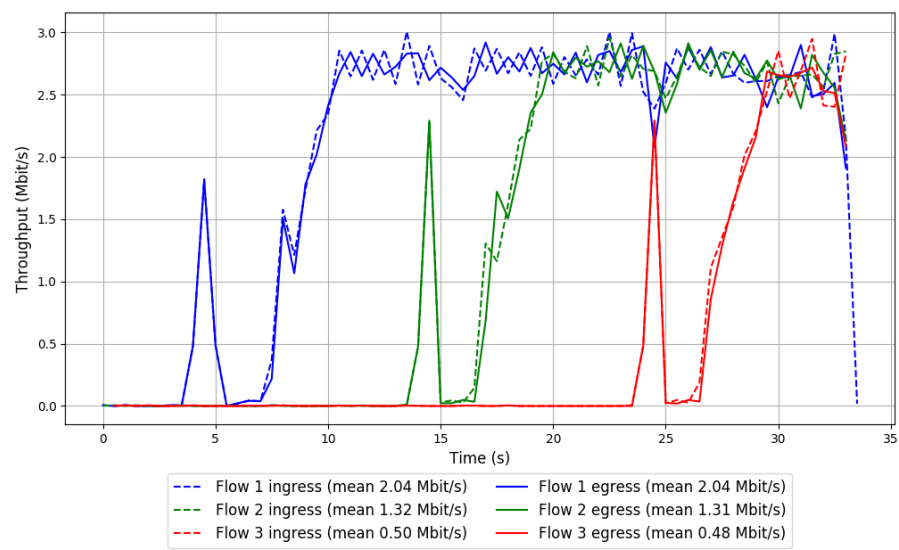
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 110.329 ms

Loss rate: 3.73%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-17 01:28:55

End at: 2018-02-17 01:29:25

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 111.817 ms

Loss rate: 1.38%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 111.837 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 111.731 ms

Loss rate: 1.25%

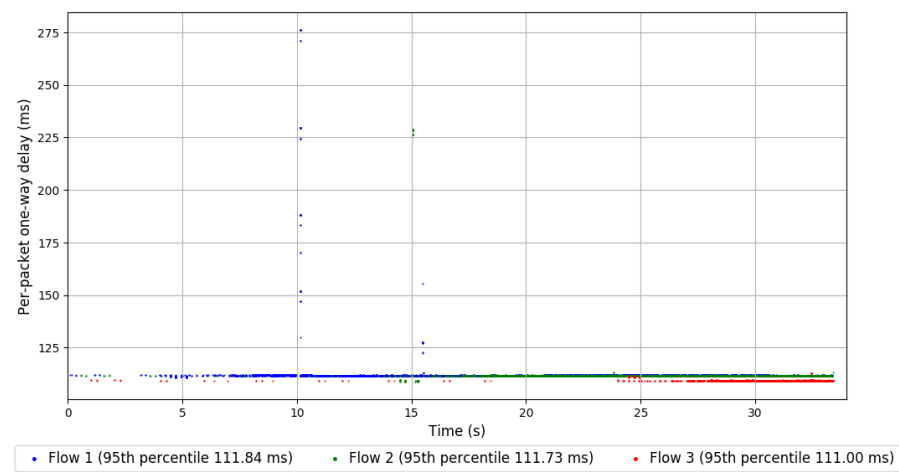
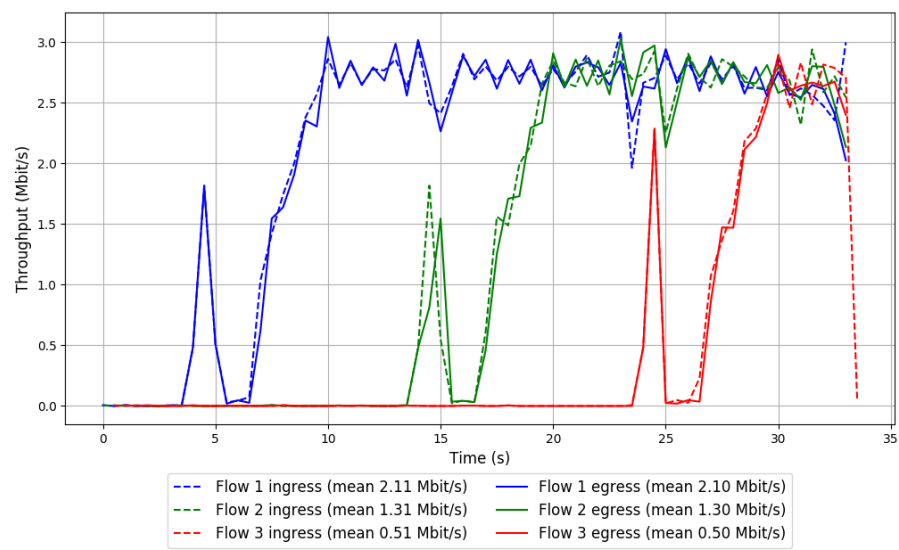
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 111.002 ms

Loss rate: 3.35%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-17 01:48:32

End at: 2018-02-17 01:49:02

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.85 Mbit/s

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

Loss rate: 1.53%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 111.979 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 111.437 ms

Loss rate: 1.65%

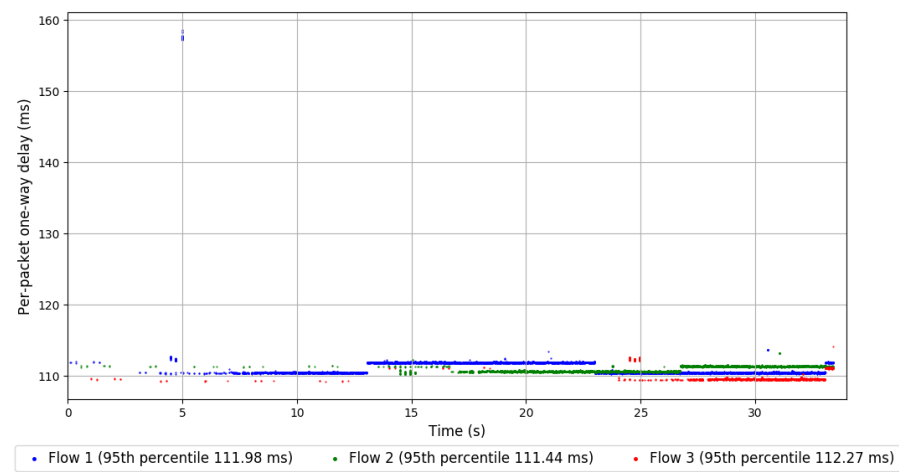
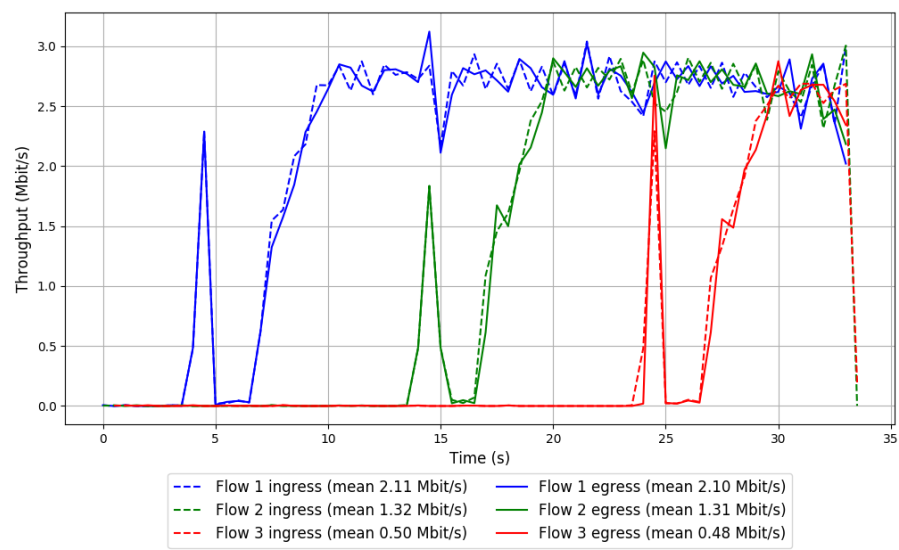
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 112.265 ms

Loss rate: 3.53%

Run 10: Report of WebRTC media — Data Link

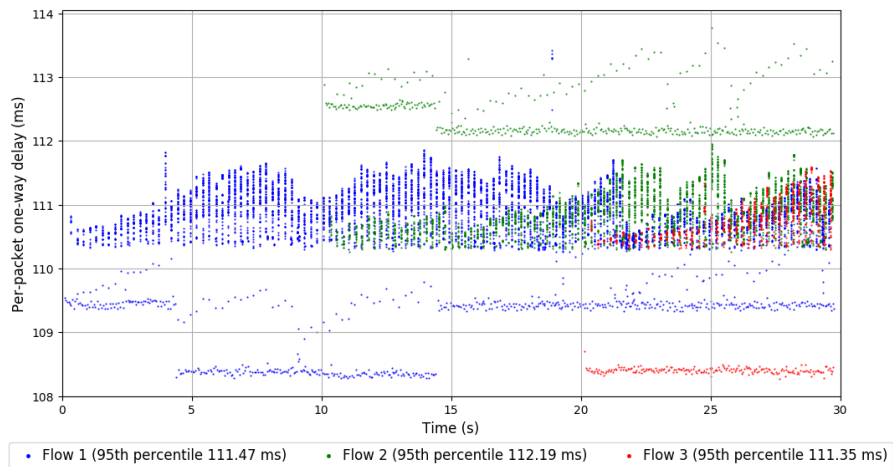
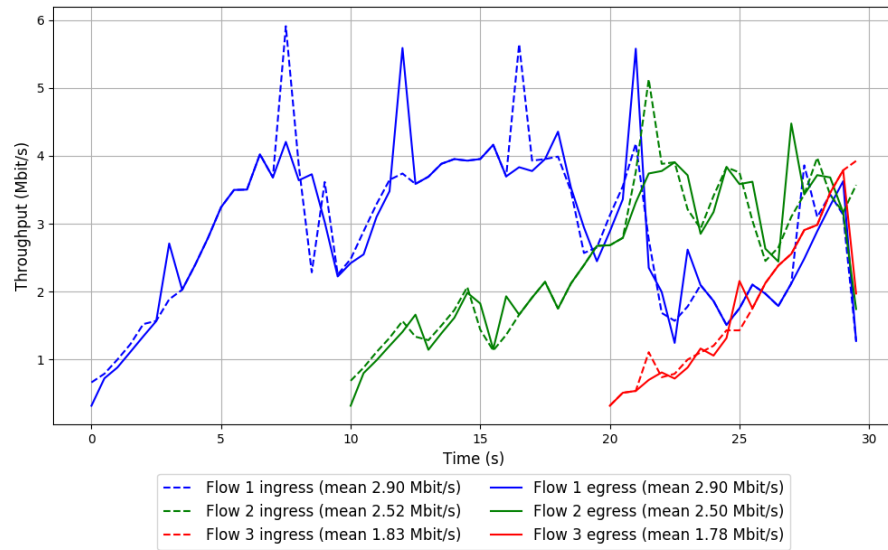


```
Run 1: Statistics of Sprout

Start at: 2018-02-16 23:00:17
End at: 2018-02-16 23:00:47

# Below is generated by plot.py at 2018-02-17 06:00:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.13 Mbit/s
95th percentile per-packet one-way delay: 111.576 ms
Loss rate: 1.63%
-- Flow 1:
Average throughput: 2.90 Mbit/s
95th percentile per-packet one-way delay: 111.475 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 2.50 Mbit/s
95th percentile per-packet one-way delay: 112.191 ms
Loss rate: 1.83%
-- Flow 3:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 111.350 ms
Loss rate: 5.44%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-16 23:20:43

End at: 2018-02-16 23:21:13

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.21 Mbit/s

95th percentile per-packet one-way delay: 112.331 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 112.238 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 3.14 Mbit/s

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

Loss rate: 0.01%

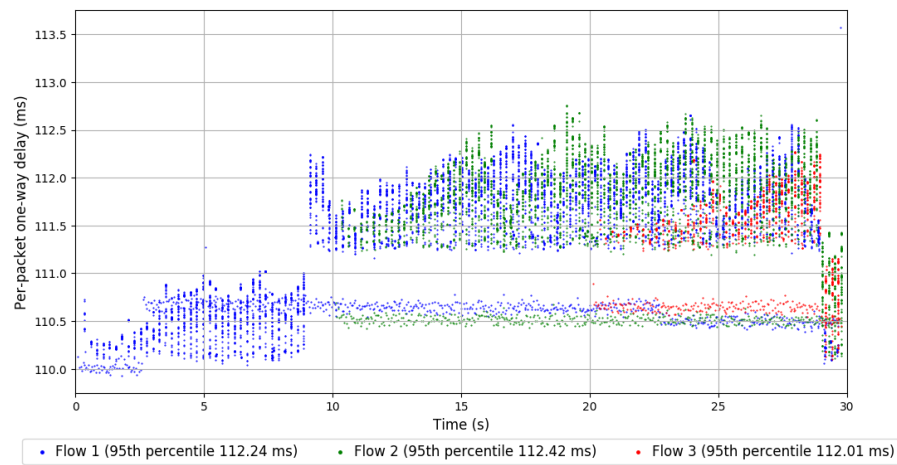
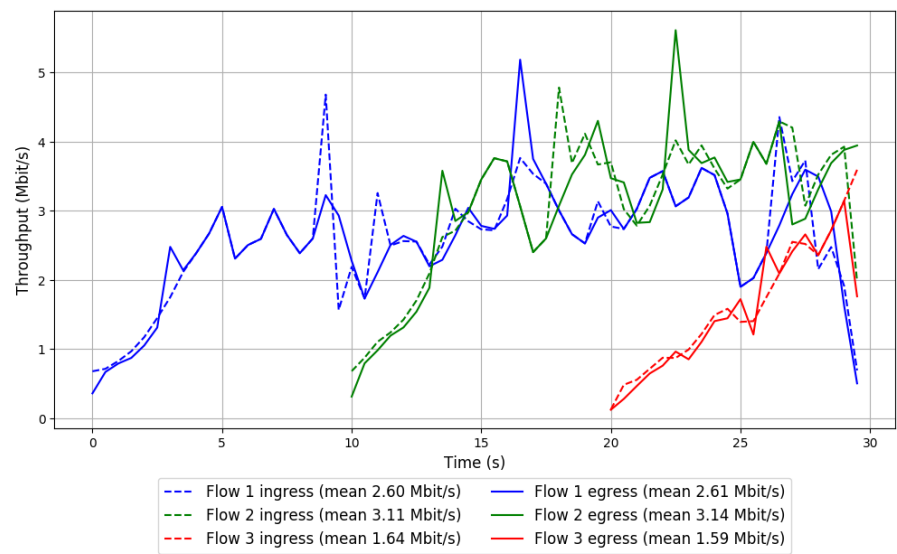
-- Flow 3:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 112.013 ms

Loss rate: 5.65%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-16 23:40:38

End at: 2018-02-16 23:41:08

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.19 Mbit/s

95th percentile per-packet one-way delay: 113.707 ms

Loss rate: 1.48%

-- Flow 1:

Average throughput: 2.94 Mbit/s

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

Loss rate: 0.99%

-- Flow 2:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 113.543 ms

Loss rate: 1.13%

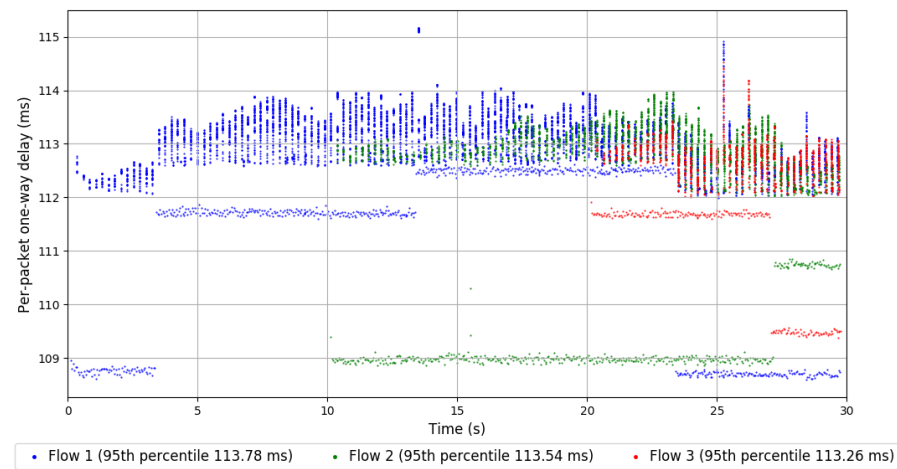
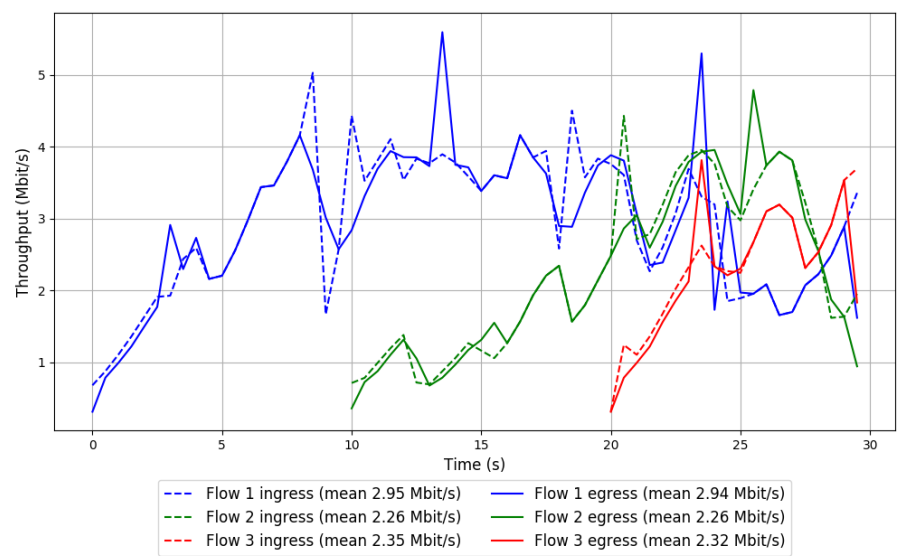
-- Flow 3:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 113.257 ms

Loss rate: 4.01%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-17 00:00:19

End at: 2018-02-17 00:00:49

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.11 Mbit/s

95th percentile per-packet one-way delay: 113.846 ms

Loss rate: 1.52%

-- Flow 1:

Average throughput: 3.07 Mbit/s

95th percentile per-packet one-way delay: 113.808 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 114.163 ms

Loss rate: 2.01%

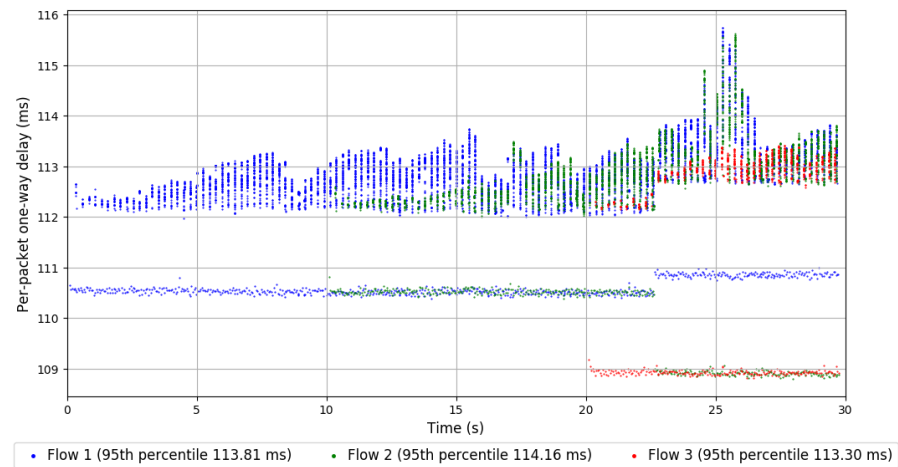
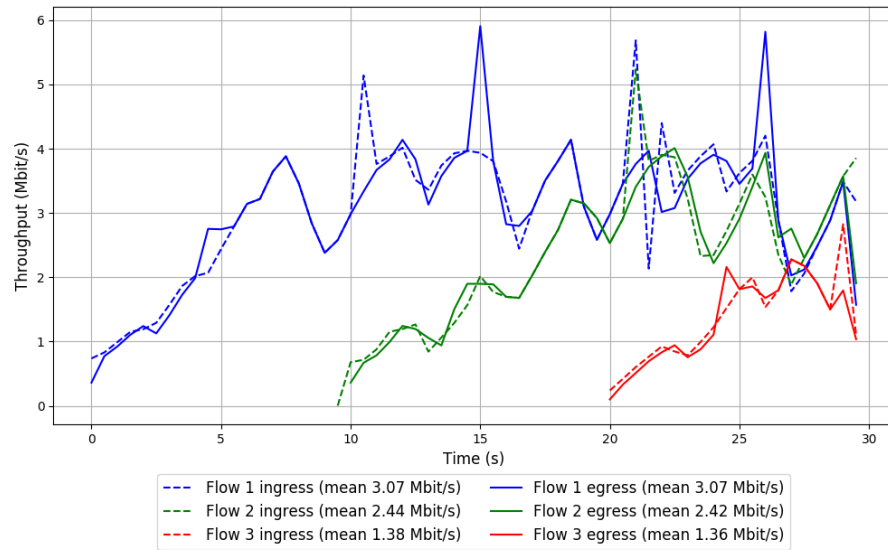
-- Flow 3:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 113.297 ms

Loss rate: 4.05%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-17 00:19:38

End at: 2018-02-17 00:20:08

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.83 Mbit/s

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

Loss rate: 1.11%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 113.252 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 113.798 ms

Loss rate: 1.43%

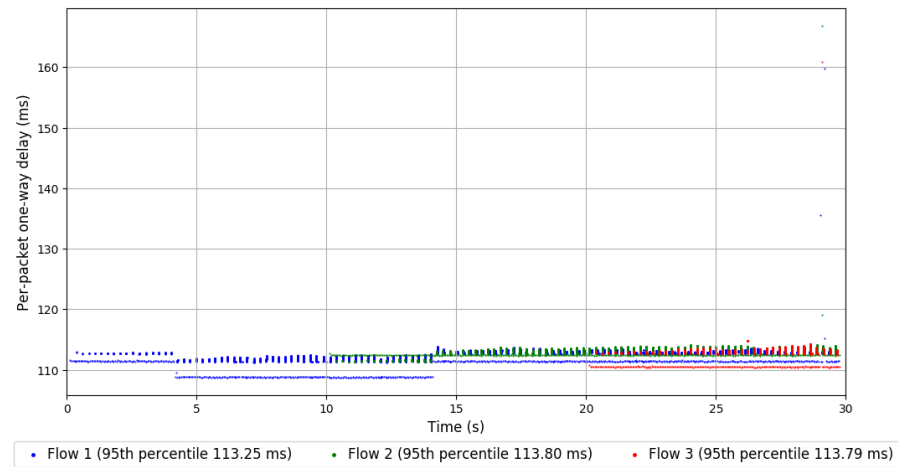
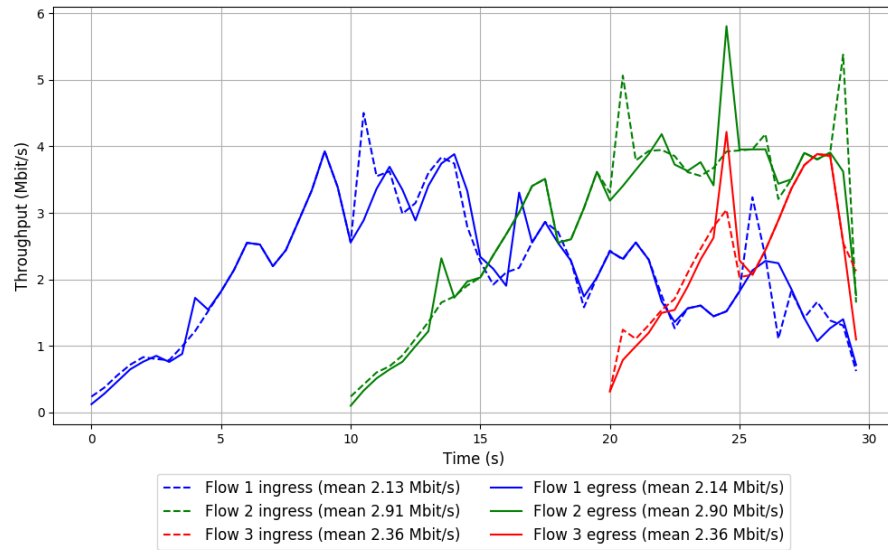
-- Flow 3:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 113.794 ms

Loss rate: 2.22%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-17 00:38:52

End at: 2018-02-17 00:39:22

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.54 Mbit/s

95th percentile per-packet one-way delay: 112.698 ms

Loss rate: 2.26%

-- Flow 1:

Average throughput: 1.92 Mbit/s

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

Loss rate: 1.38%

-- Flow 2:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 112.647 ms

Loss rate: 2.14%

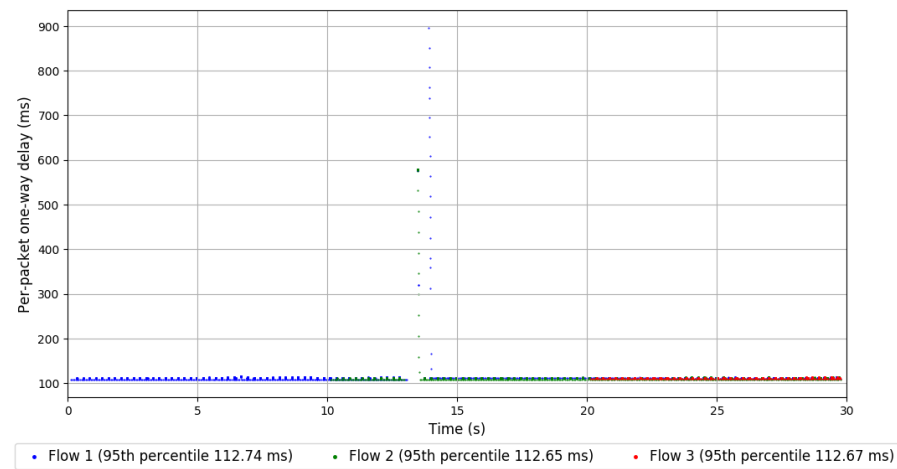
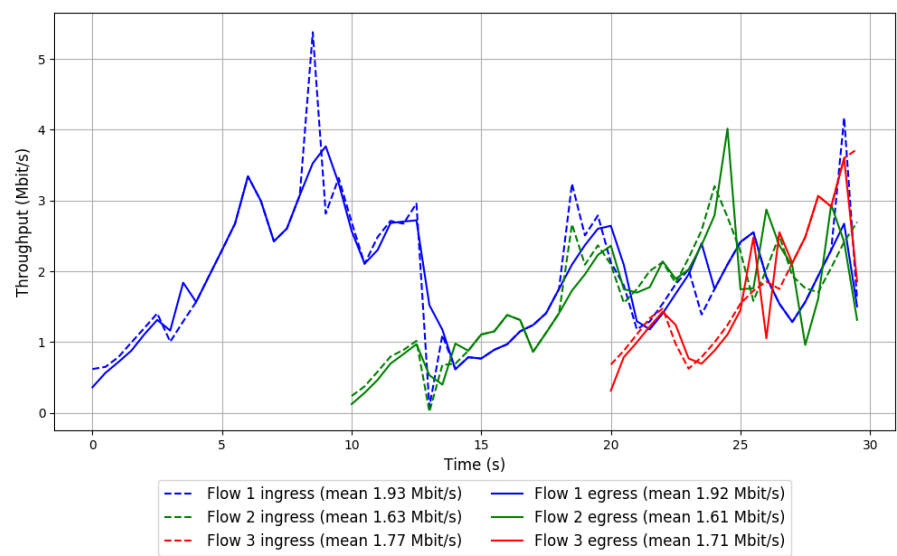
-- Flow 3:

Average throughput: 1.71 Mbit/s

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

Loss rate: 5.37%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-17 00:58:13

End at: 2018-02-17 00:58:43

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.68 Mbit/s

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

Loss rate: 1.27%

-- Flow 1:

Average throughput: 2.02 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 112.048 ms

Loss rate: 1.55%

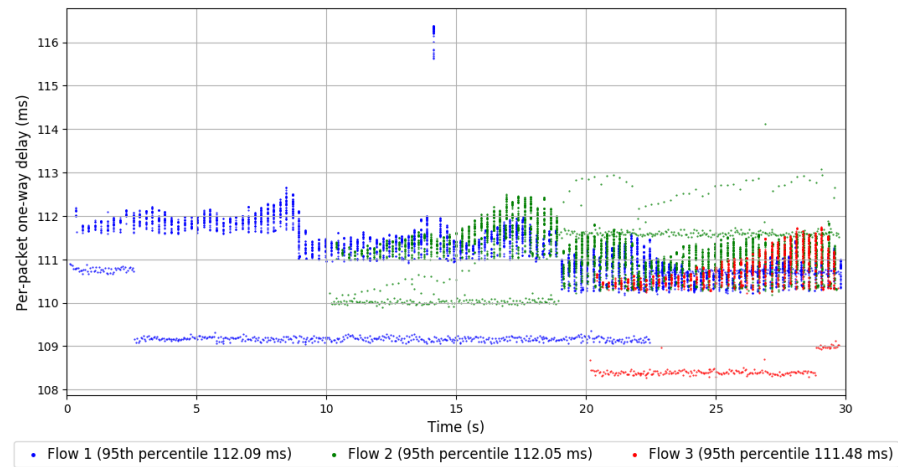
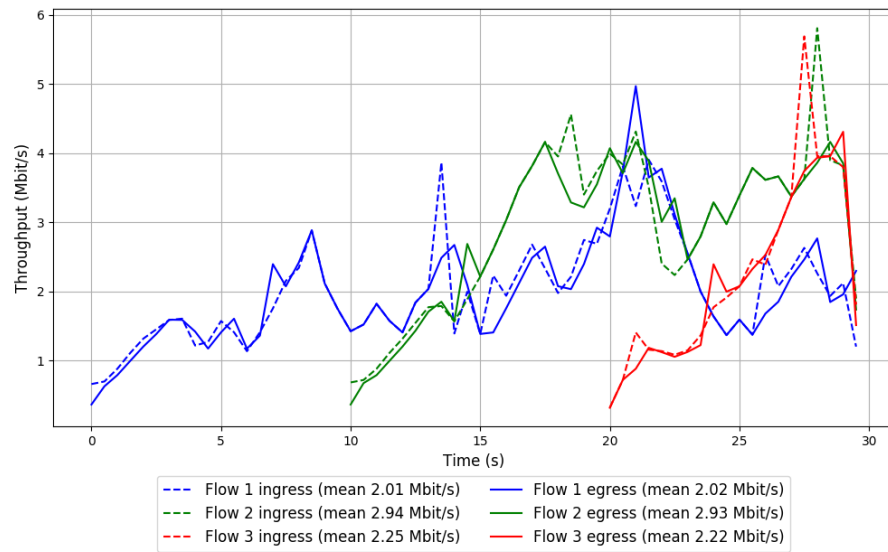
-- Flow 3:

Average throughput: 2.22 Mbit/s

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

Loss rate: 3.96%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-17 01:17:49

End at: 2018-02-17 01:18:19

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.70 Mbit/s

95th percentile per-packet one-way delay: 110.807 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 111.699 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 2.62 Mbit/s

95th percentile per-packet one-way delay: 110.481 ms

Loss rate: 1.13%

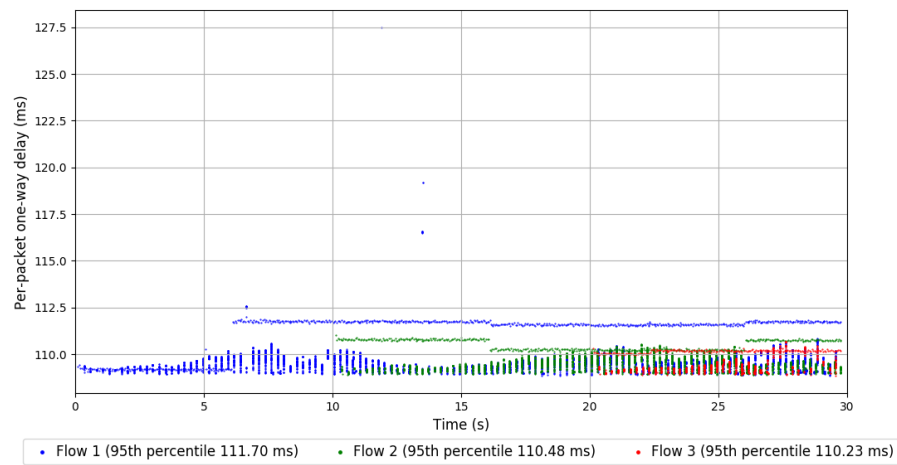
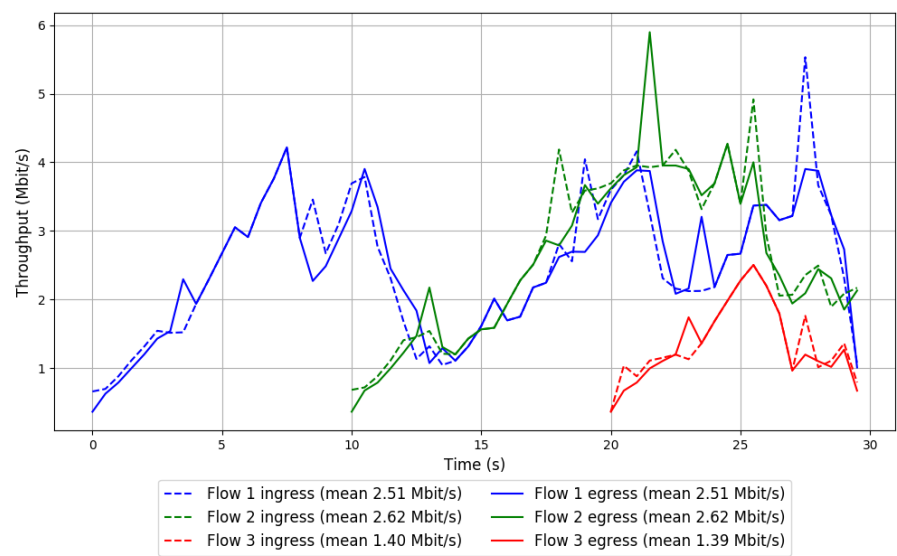
-- Flow 3:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 110.226 ms

Loss rate: 2.84%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-17 01:37:19

End at: 2018-02-17 01:37:49

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.32 Mbit/s

95th percentile per-packet one-way delay: 113.129 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 3.03 Mbit/s

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

Loss rate: 0.99%

-- Flow 2:

Average throughput: 2.61 Mbit/s

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

Loss rate: 0.58%

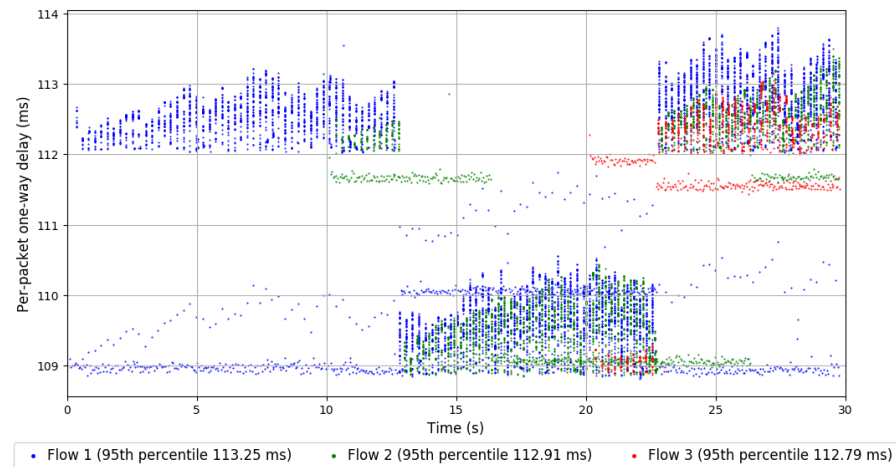
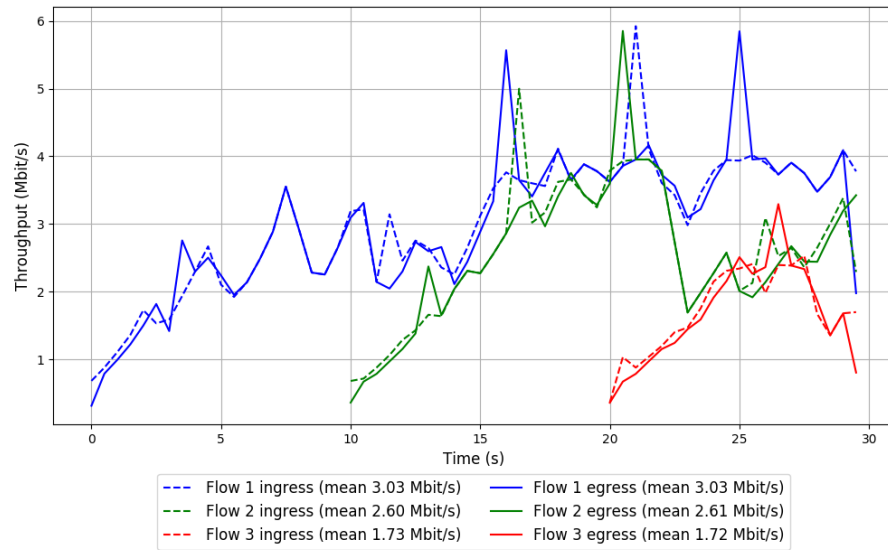
-- Flow 3:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 112.791 ms

Loss rate: 2.63%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-17 01:57:00

End at: 2018-02-17 01:57:30

Below is generated by plot.py at 2018-02-17 06:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 111.782 ms

Loss rate: 1.92%

-- Flow 1:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 111.511 ms

Loss rate: 1.17%

-- Flow 2:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 111.856 ms

Loss rate: 1.55%

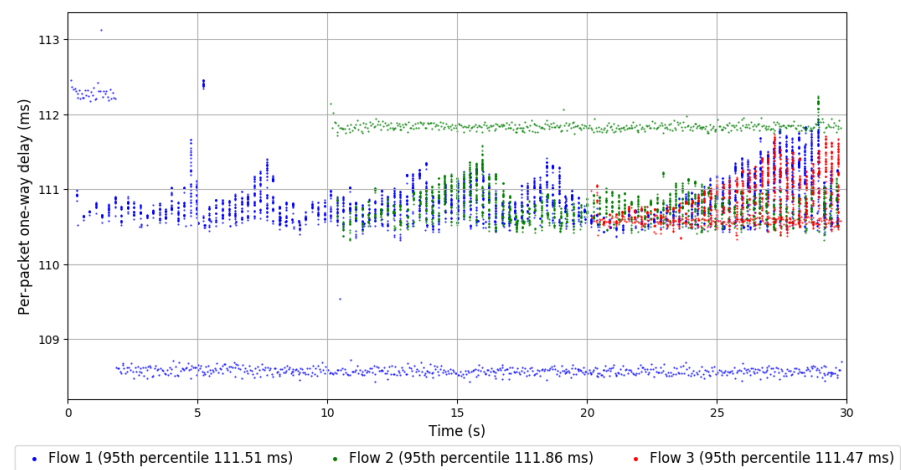
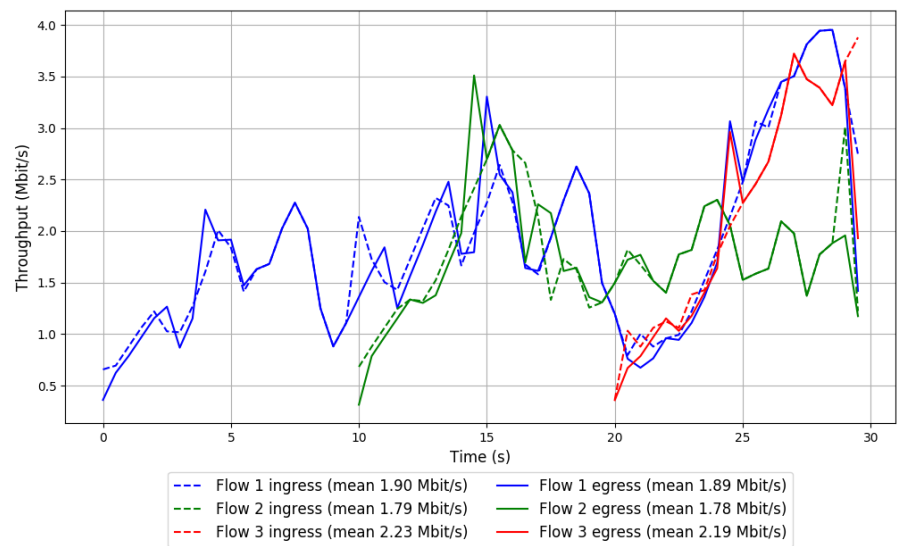
-- Flow 3:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 111.474 ms

Loss rate: 4.44%

Run 10: Report of Sprout — Data Link

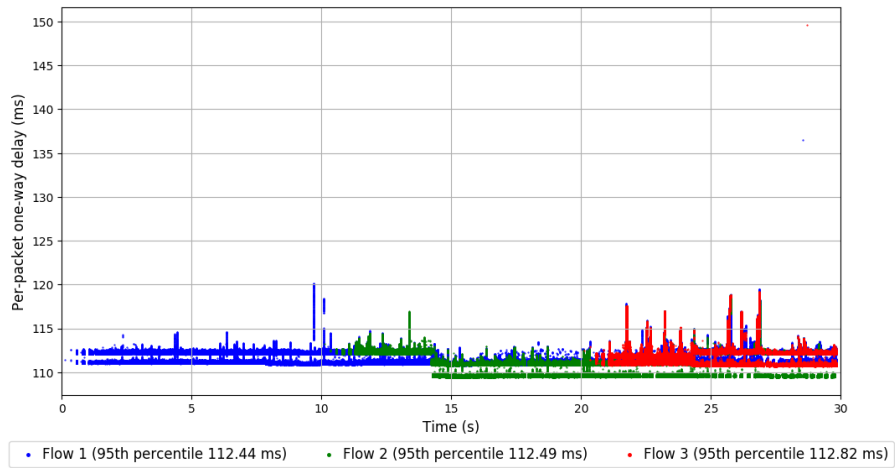
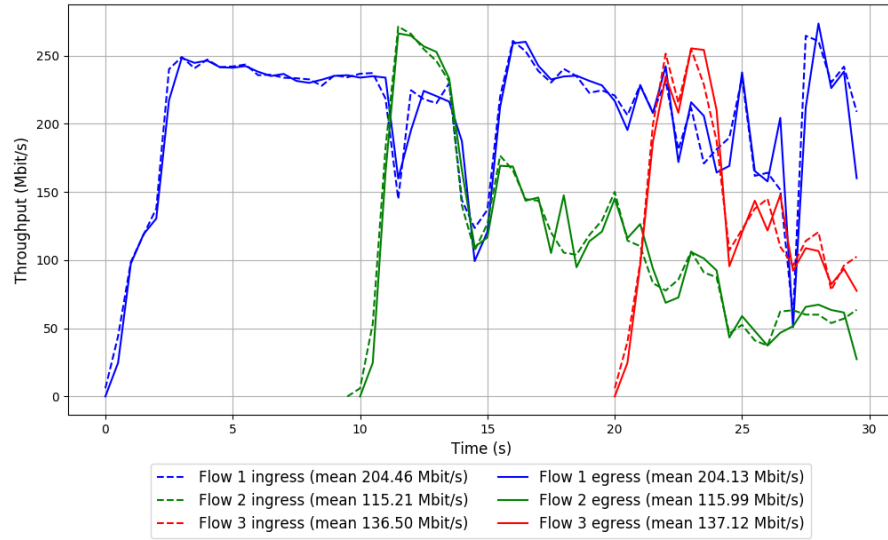


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-16 22:52:28
End at: 2018-02-16 22:52:58

# Below is generated by plot.py at 2018-02-17 06:06:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 325.60 Mbit/s
95th percentile per-packet one-way delay: 112.471 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 204.13 Mbit/s
95th percentile per-packet one-way delay: 112.442 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 115.99 Mbit/s
95th percentile per-packet one-way delay: 112.486 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 137.12 Mbit/s
95th percentile per-packet one-way delay: 112.818 ms
Loss rate: 1.87%
```


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

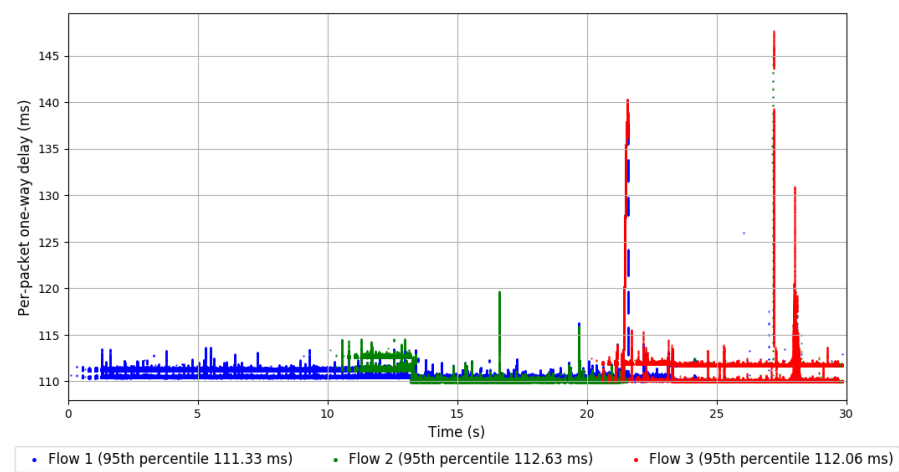
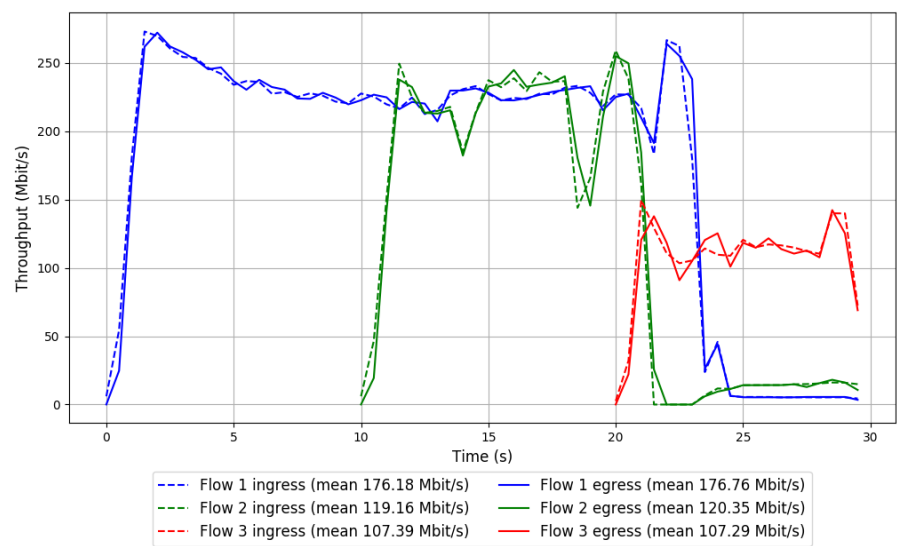


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-16 23:12:49
End at: 2018-02-16 23:13:19

# Below is generated by plot.py at 2018-02-17 06:06:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 291.51 Mbit/s
95th percentile per-packet one-way delay: 111.920 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 176.76 Mbit/s
95th percentile per-packet one-way delay: 111.331 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 120.35 Mbit/s
95th percentile per-packet one-way delay: 112.632 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 107.29 Mbit/s
95th percentile per-packet one-way delay: 112.061 ms
Loss rate: 2.23%
```

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

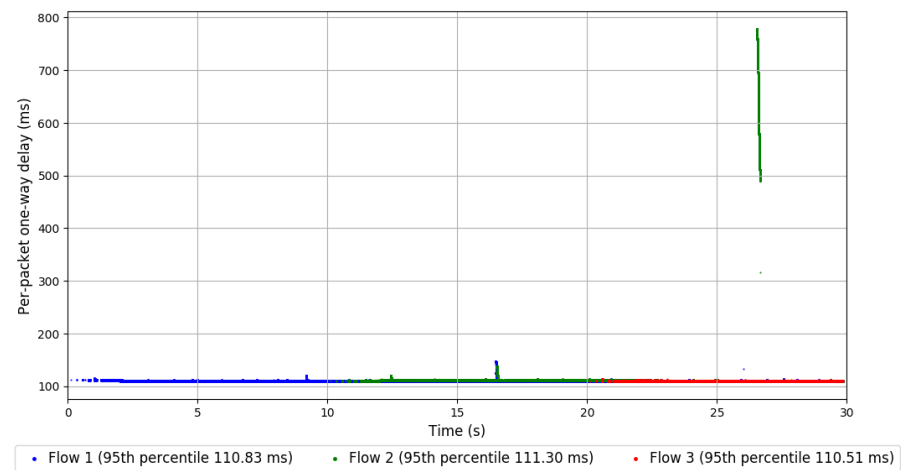
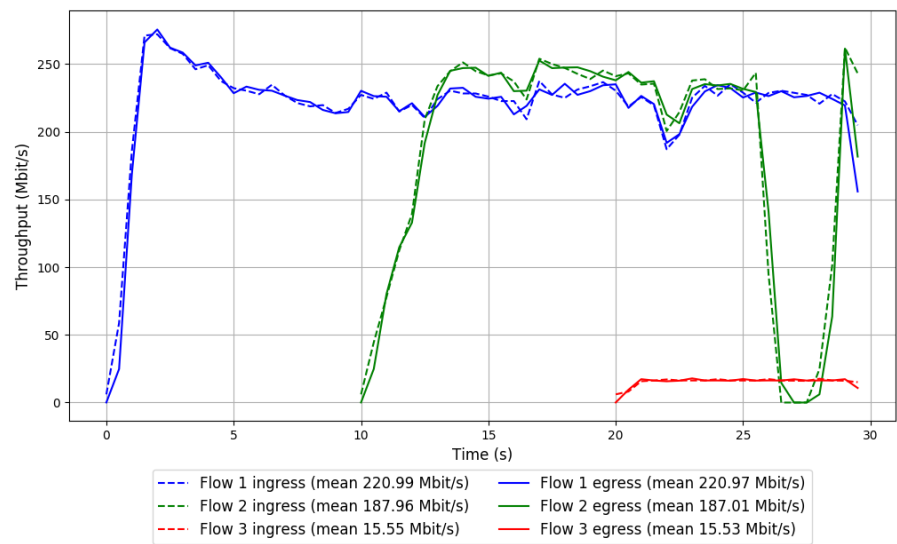


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-16 23:32:40
End at: 2018-02-16 23:33:10

# Below is generated by plot.py at 2018-02-17 06:07:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 350.11 Mbit/s
95th percentile per-packet one-way delay: 111.279 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 220.97 Mbit/s
95th percentile per-packet one-way delay: 110.833 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 187.01 Mbit/s
95th percentile per-packet one-way delay: 111.300 ms
Loss rate: 1.62%
-- Flow 3:
Average throughput: 15.53 Mbit/s
95th percentile per-packet one-way delay: 110.510 ms
Loss rate: 2.37%
```

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

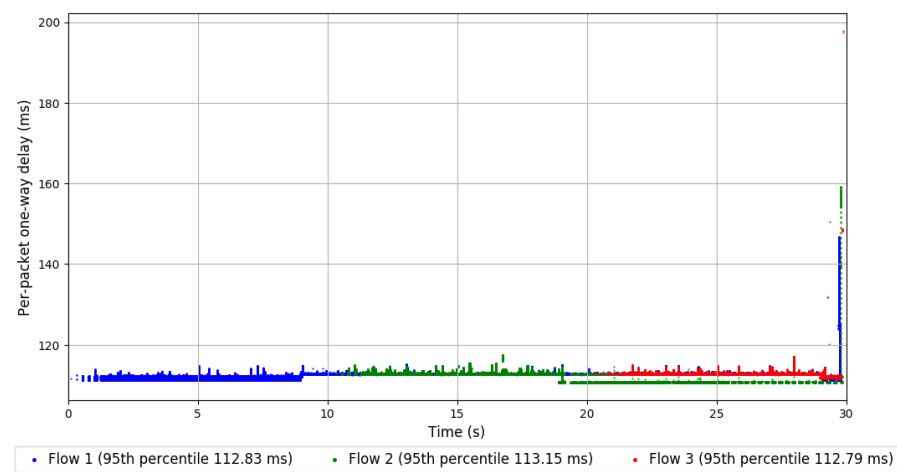
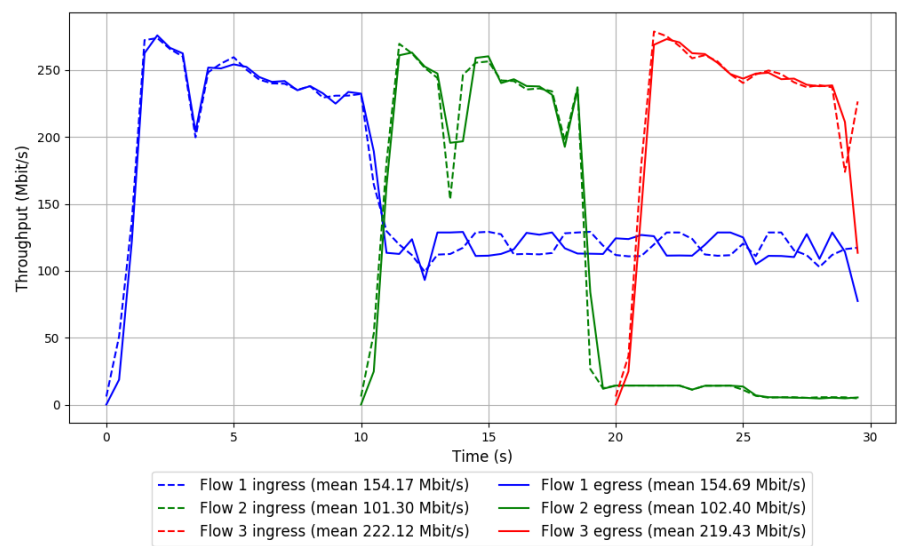


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-02-16 23:52:33
End at: 2018-02-16 23:53:03

# Below is generated by plot.py at 2018-02-17 06:07:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 293.81 Mbit/s
95th percentile per-packet one-way delay: 112.845 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 154.69 Mbit/s
95th percentile per-packet one-way delay: 112.835 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 102.40 Mbit/s
95th percentile per-packet one-way delay: 113.152 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 219.43 Mbit/s
95th percentile per-packet one-way delay: 112.786 ms
Loss rate: 2.94%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-17 00:12:09

End at: 2018-02-17 00:12:39

Below is generated by plot.py at 2018-02-17 06:07:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 175.09 Mbit/s

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

Loss rate: 0.08%

-- Flow 1:

Average throughput: 130.09 Mbit/s

95th percentile per-packet one-way delay: 112.551 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 119.42 Mbit/s

95th percentile per-packet one-way delay: 112.615 ms

Loss rate: 0.00%

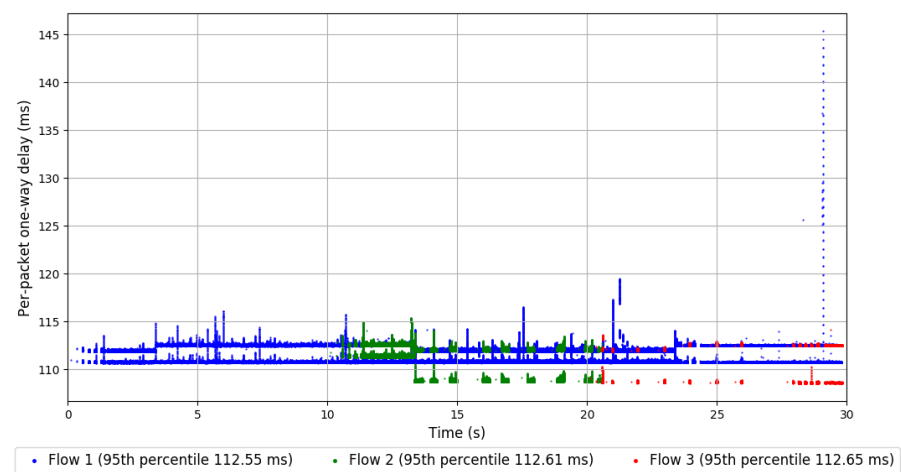
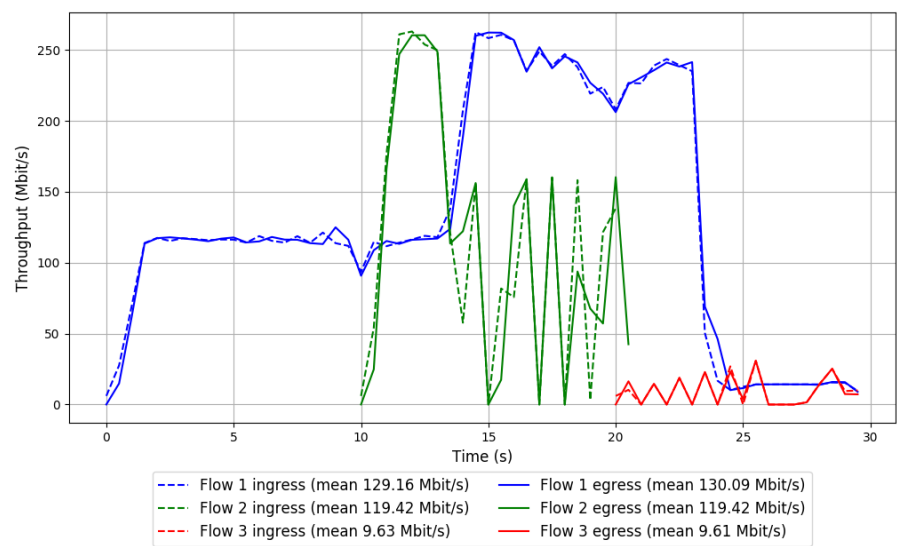
-- Flow 3:

Average throughput: 9.61 Mbit/s

95th percentile per-packet one-way delay: 112.649 ms

Loss rate: 2.53%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-17 00:31:24

End at: 2018-02-17 00:31:54

Below is generated by plot.py at 2018-02-17 06:07:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.47 Mbit/s

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

Loss rate: 0.50%

-- Flow 1:

Average throughput: 15.42 Mbit/s

95th percentile per-packet one-way delay: 111.881 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 73.89 Mbit/s

95th percentile per-packet one-way delay: 112.629 ms

Loss rate: 0.24%

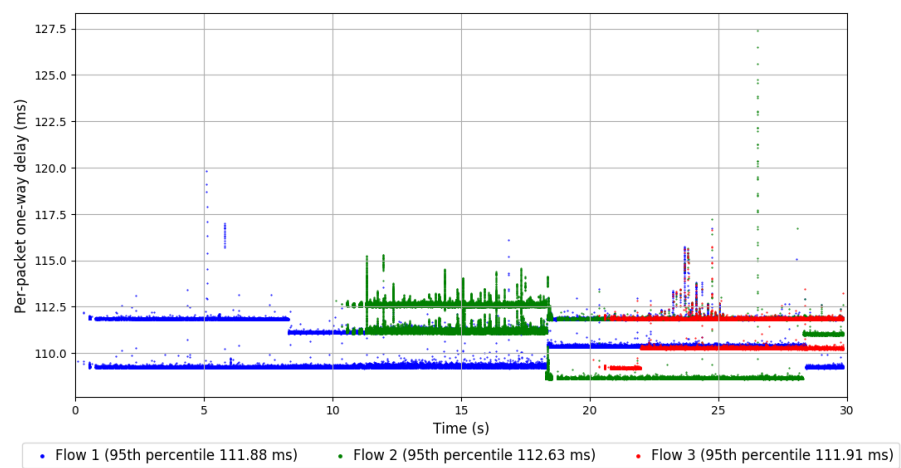
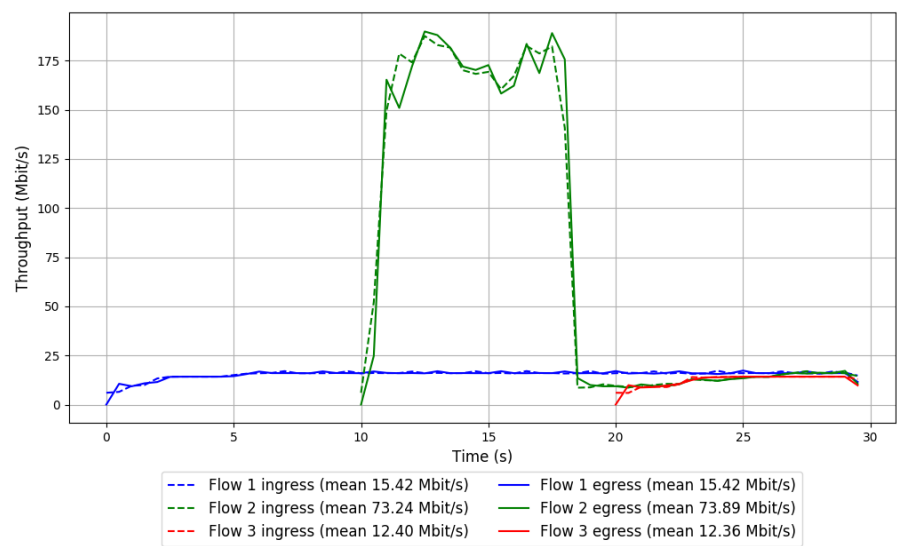
-- Flow 3:

Average throughput: 12.36 Mbit/s

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

Loss rate: 2.58%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-02-17 00:50:42

End at: 2018-02-17 00:51:12

Below is generated by plot.py at 2018-02-17 06:07:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 119.51 Mbit/s

95th percentile per-packet one-way delay: 112.355 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 88.58 Mbit/s

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

Loss rate: 0.62%

-- Flow 2:

Average throughput: 39.54 Mbit/s

95th percentile per-packet one-way delay: 112.252 ms

Loss rate: 0.47%

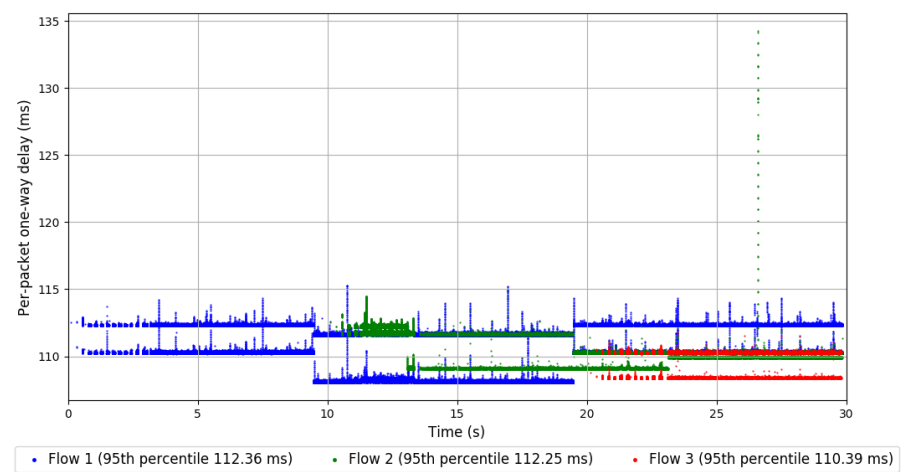
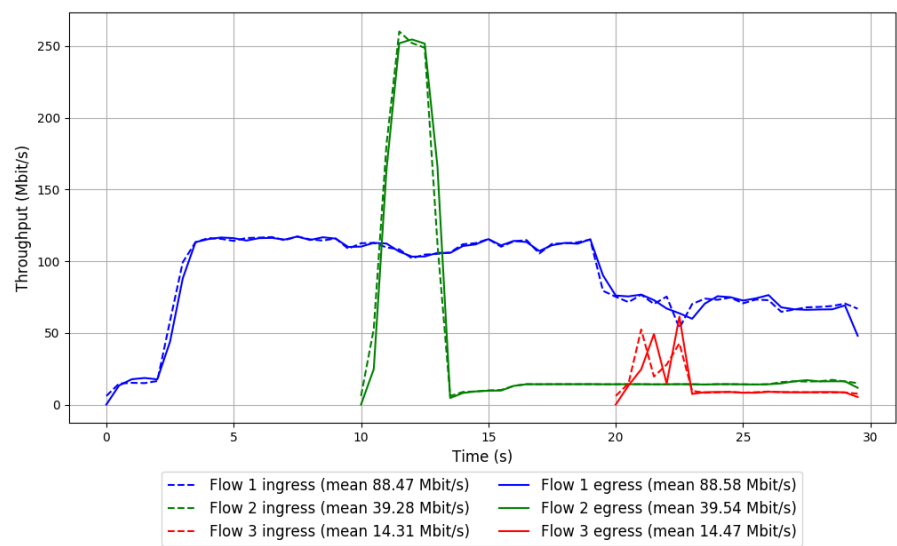
-- Flow 3:

Average throughput: 14.47 Mbit/s

95th percentile per-packet one-way delay: 110.389 ms

Loss rate: 1.43%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-17 01:10:01

End at: 2018-02-17 01:10:31

Below is generated by plot.py at 2018-02-17 06:09:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 279.44 Mbit/s

95th percentile per-packet one-way delay: 111.765 ms

Loss rate: 1.39%

-- Flow 1:

Average throughput: 192.07 Mbit/s

95th percentile per-packet one-way delay: 111.171 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 44.15 Mbit/s

95th percentile per-packet one-way delay: 111.690 ms

Loss rate: 1.06%

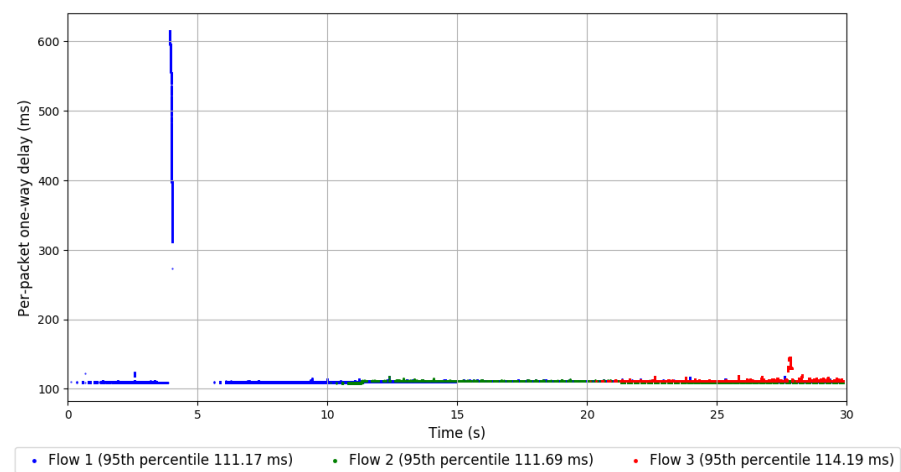
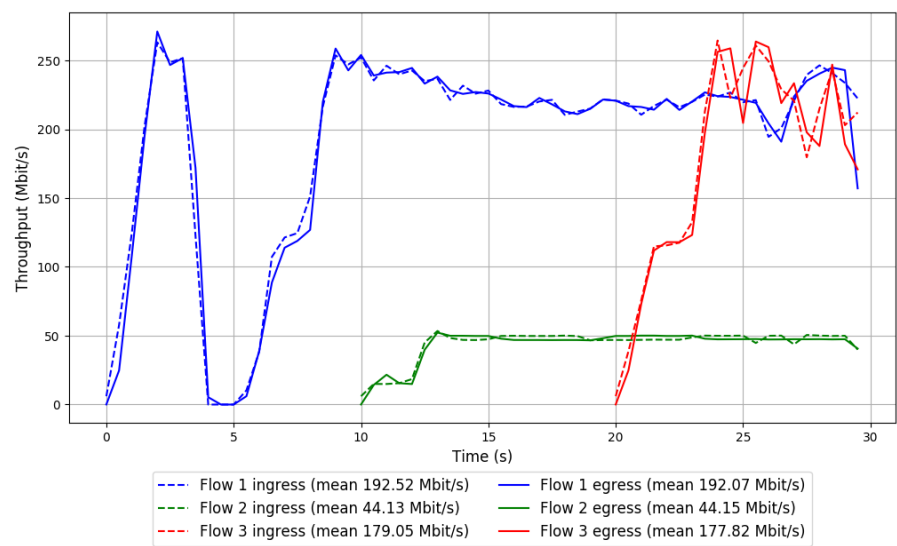
-- Flow 3:

Average throughput: 177.82 Mbit/s

95th percentile per-packet one-way delay: 114.190 ms

Loss rate: 2.93%

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

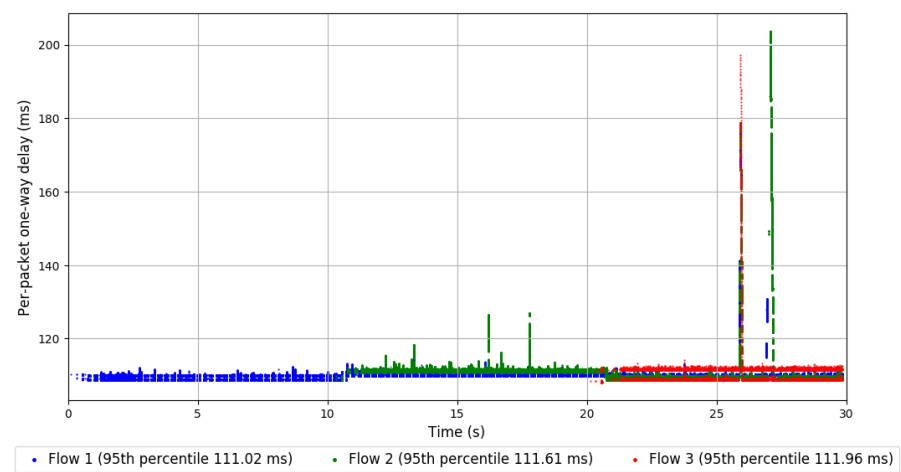
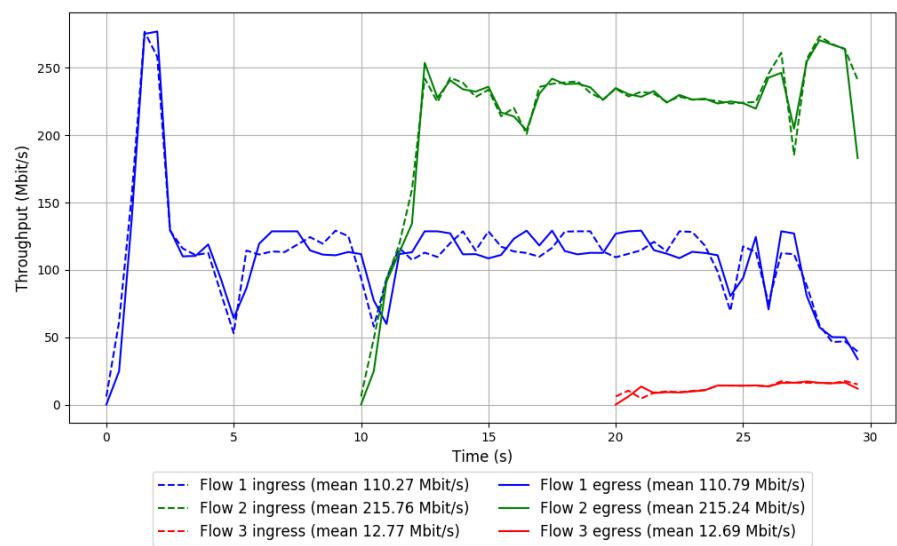


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-02-17 01:29:41
End at: 2018-02-17 01:30:11

# Below is generated by plot.py at 2018-02-17 06:09:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 257.70 Mbit/s
95th percentile per-packet one-way delay: 111.589 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 110.79 Mbit/s
95th percentile per-packet one-way delay: 111.015 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 215.24 Mbit/s
95th percentile per-packet one-way delay: 111.614 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 12.69 Mbit/s
95th percentile per-packet one-way delay: 111.956 ms
Loss rate: 2.87%
```


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

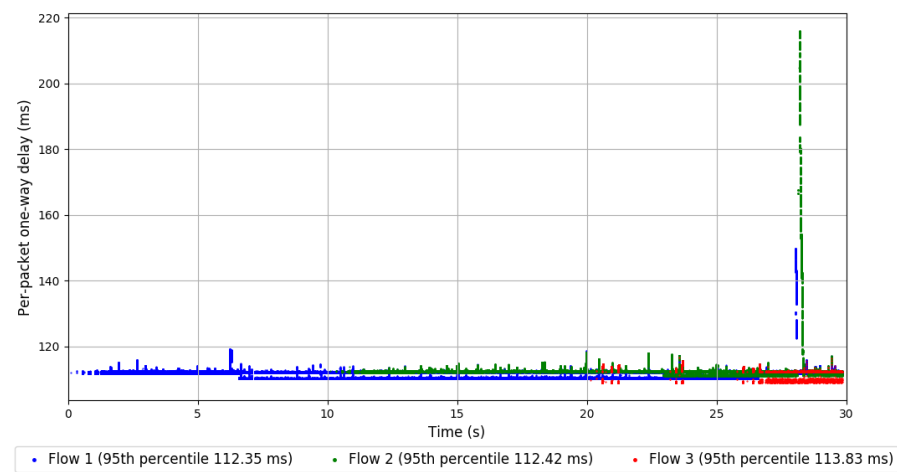
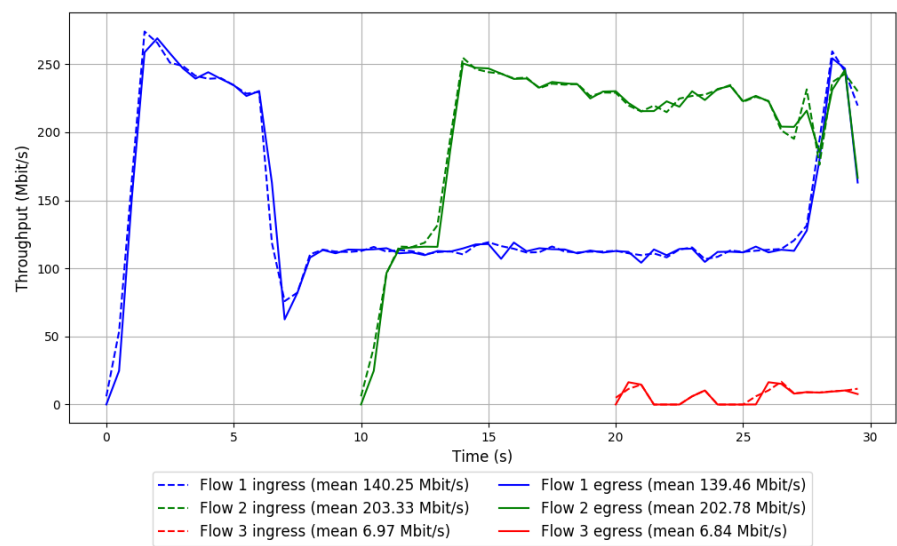


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-17 01:49:19
End at: 2018-02-17 01:49:49

# Below is generated by plot.py at 2018-02-17 06:10:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 276.21 Mbit/s
95th percentile per-packet one-way delay: 112.384 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 139.46 Mbit/s
95th percentile per-packet one-way delay: 112.346 ms
Loss rate: 1.31%
-- Flow 2:
Average throughput: 202.78 Mbit/s
95th percentile per-packet one-way delay: 112.422 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 6.84 Mbit/s
95th percentile per-packet one-way delay: 113.831 ms
Loss rate: 4.07%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-16 23:07:09

End at: 2018-02-16 23:07:39

Below is generated by plot.py at 2018-02-17 06:10:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.95 Mbit/s

95th percentile per-packet one-way delay: 125.124 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 78.80 Mbit/s

95th percentile per-packet one-way delay: 125.479 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 20.67 Mbit/s

95th percentile per-packet one-way delay: 122.513 ms

Loss rate: 1.30%

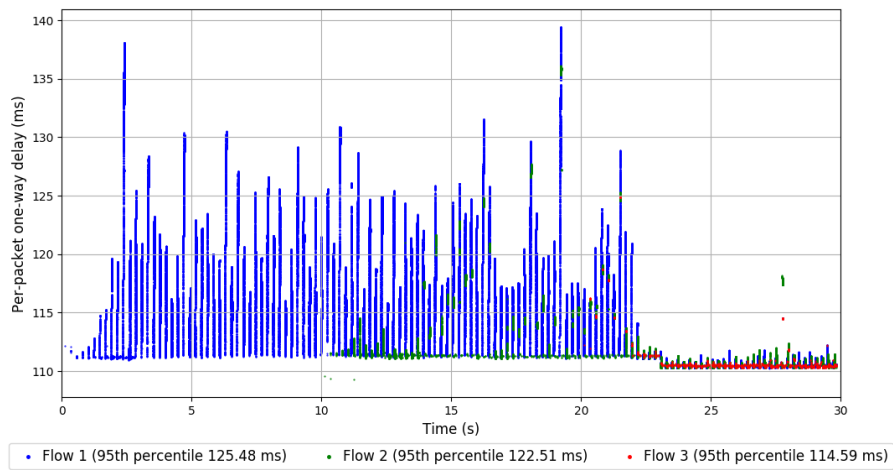
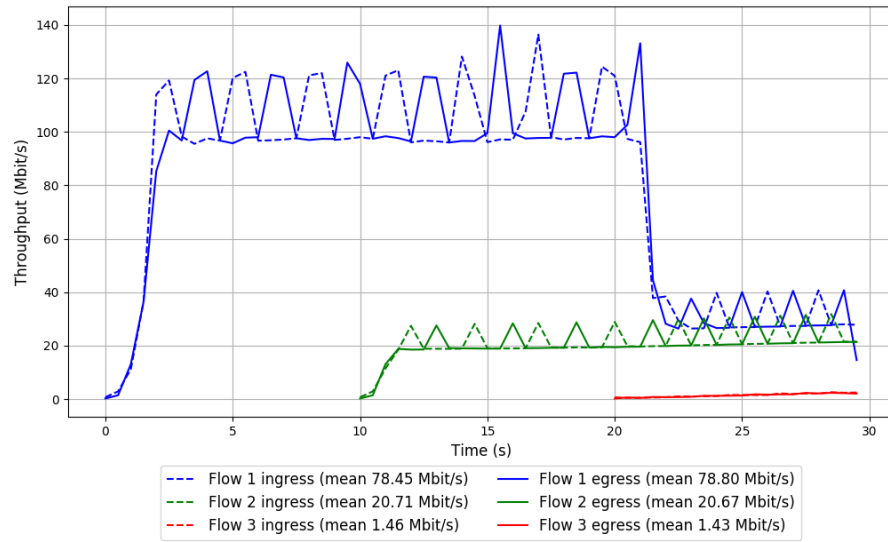
-- Flow 3:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 114.595 ms

Loss rate: 4.06%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-16 23:27:02

End at: 2018-02-16 23:27:32

Below is generated by plot.py at 2018-02-17 06:10:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.37 Mbit/s

95th percentile per-packet one-way delay: 116.593 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 43.57 Mbit/s

95th percentile per-packet one-way delay: 114.965 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 54.19 Mbit/s

95th percentile per-packet one-way delay: 117.034 ms

Loss rate: 1.25%

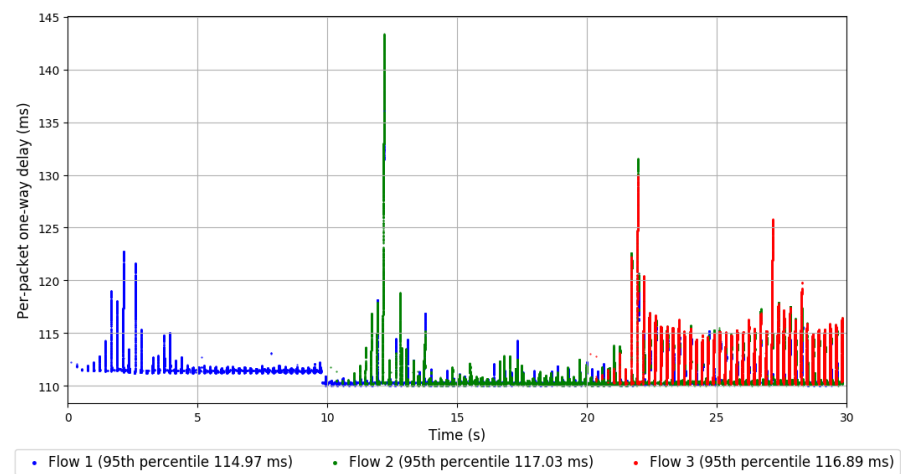
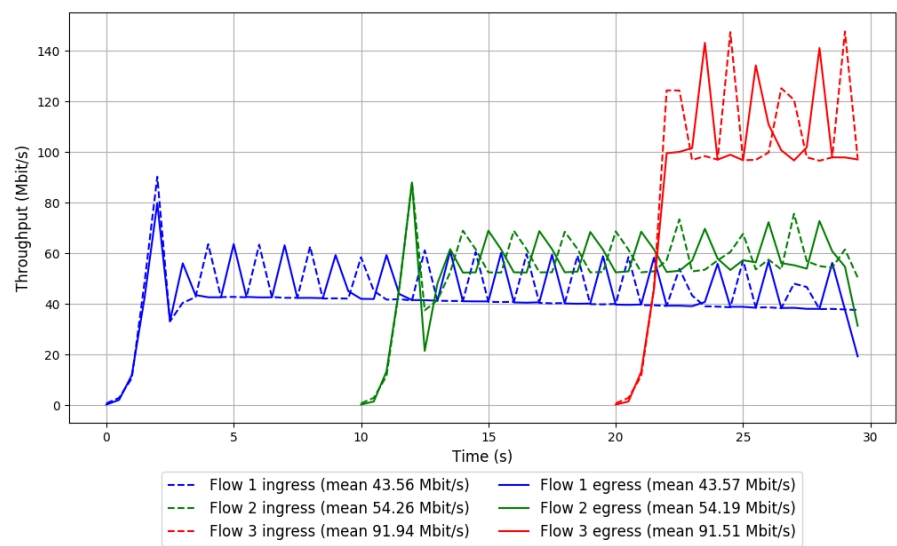
-- Flow 3:

Average throughput: 91.51 Mbit/s

95th percentile per-packet one-way delay: 116.895 ms

Loss rate: 2.74%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-16 23:46:53

End at: 2018-02-16 23:47:23

Below is generated by plot.py at 2018-02-17 06:10:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.02 Mbit/s

95th percentile per-packet one-way delay: 114.218 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 21.05 Mbit/s

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

Loss rate: 0.84%

-- Flow 2:

Average throughput: 80.58 Mbit/s

95th percentile per-packet one-way delay: 114.328 ms

Loss rate: 1.19%

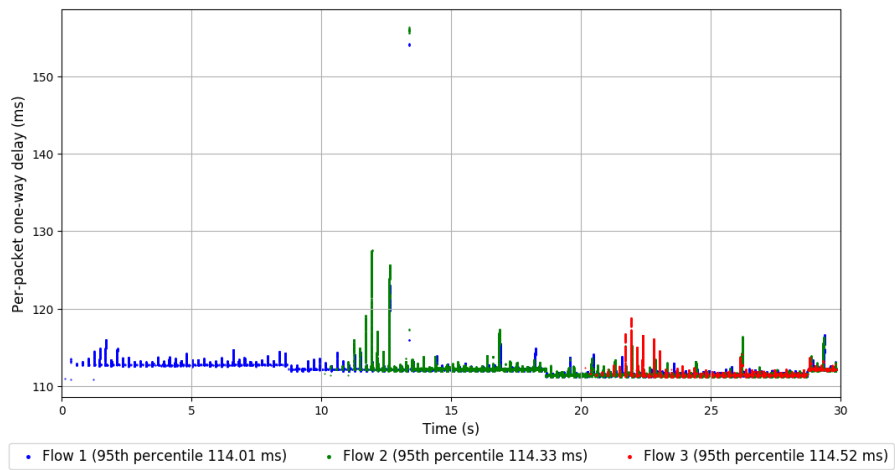
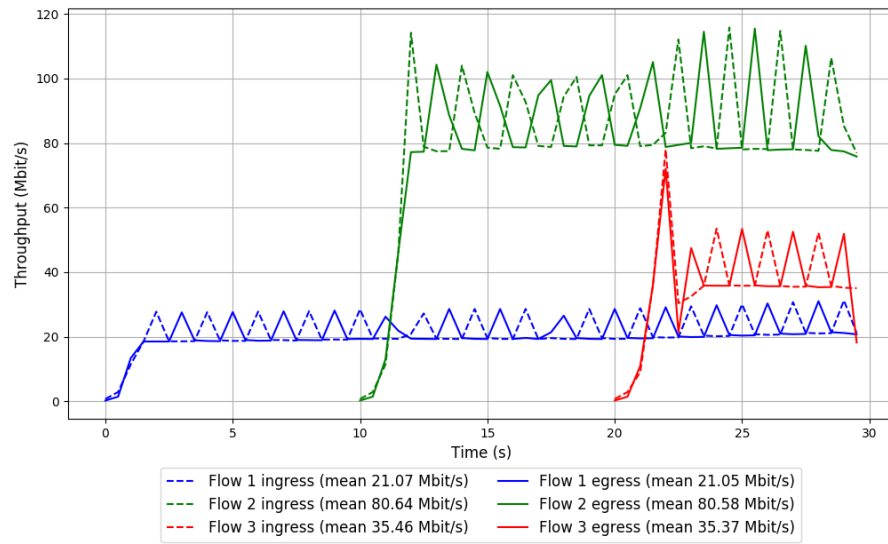
-- Flow 3:

Average throughput: 35.37 Mbit/s

95th percentile per-packet one-way delay: 114.521 ms

Loss rate: 2.48%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-17 00:06:29

End at: 2018-02-17 00:06:59

Below is generated by plot.py at 2018-02-17 06:10:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.97 Mbit/s

95th percentile per-packet one-way delay: 120.452 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 19.22 Mbit/s

95th percentile per-packet one-way delay: 113.878 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 61.64 Mbit/s

95th percentile per-packet one-way delay: 121.740 ms

Loss rate: 0.44%

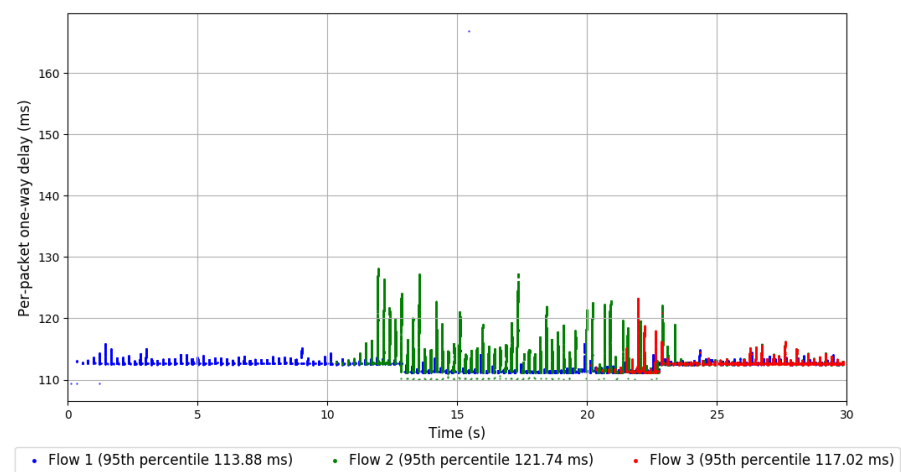
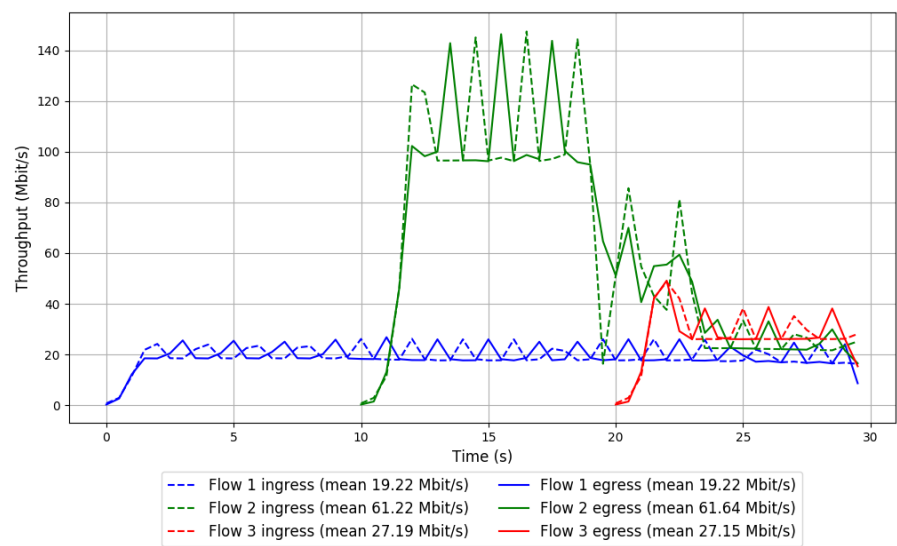
-- Flow 3:

Average throughput: 27.15 Mbit/s

95th percentile per-packet one-way delay: 117.017 ms

Loss rate: 2.41%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-17 00:25:50

End at: 2018-02-17 00:26:20

Below is generated by plot.py at 2018-02-17 06:10:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.31 Mbit/s

95th percentile per-packet one-way delay: 114.436 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 40.12 Mbit/s

95th percentile per-packet one-way delay: 114.318 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 21.70 Mbit/s

95th percentile per-packet one-way delay: 114.918 ms

Loss rate: 1.22%

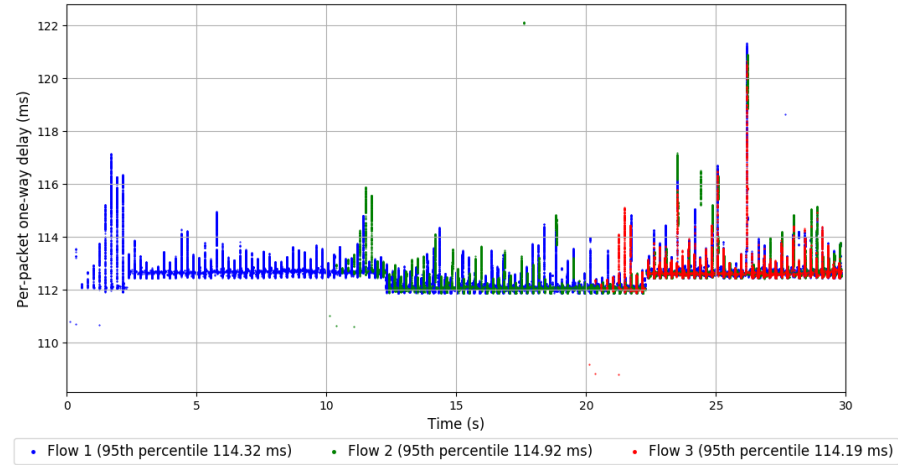
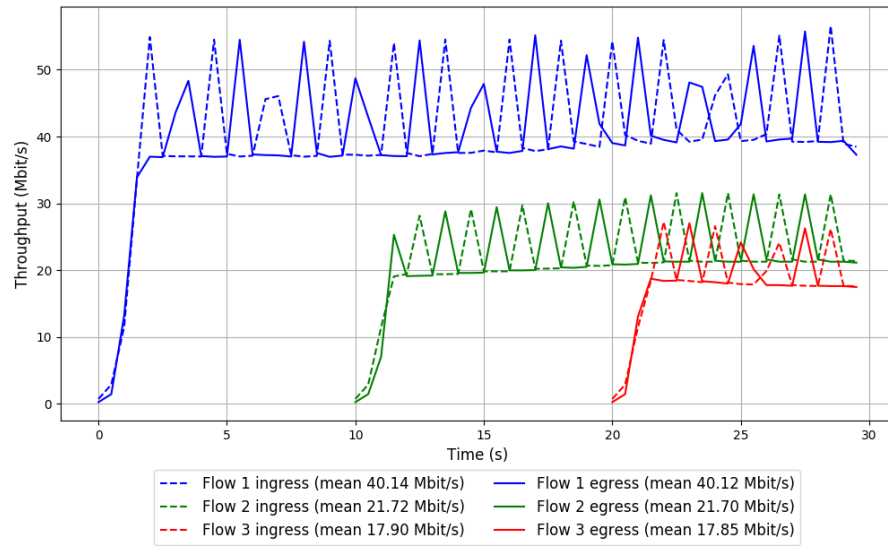
-- Flow 3:

Average throughput: 17.85 Mbit/s

95th percentile per-packet one-way delay: 114.194 ms

Loss rate: 2.48%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-17 00:45:09

End at: 2018-02-17 00:45:39

Below is generated by plot.py at 2018-02-17 06:10:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 54.72 Mbit/s

95th percentile per-packet one-way delay: 116.639 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 31.06 Mbit/s

95th percentile per-packet one-way delay: 116.615 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 19.98 Mbit/s

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

Loss rate: 1.23%

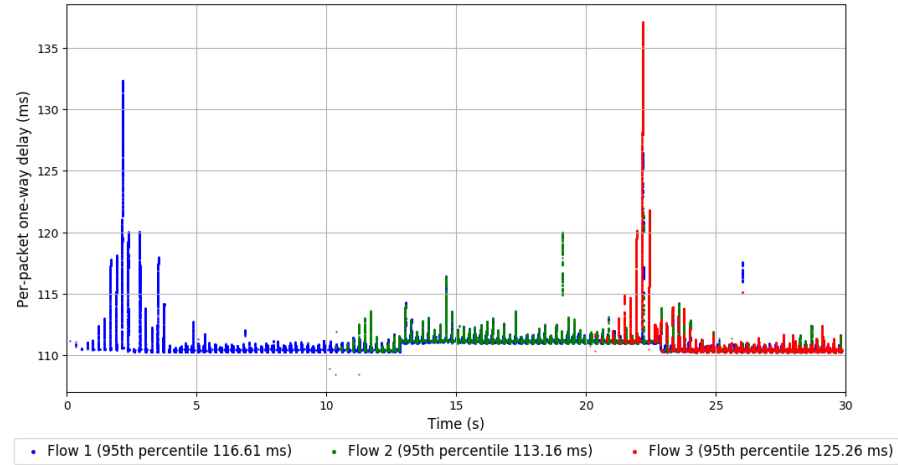
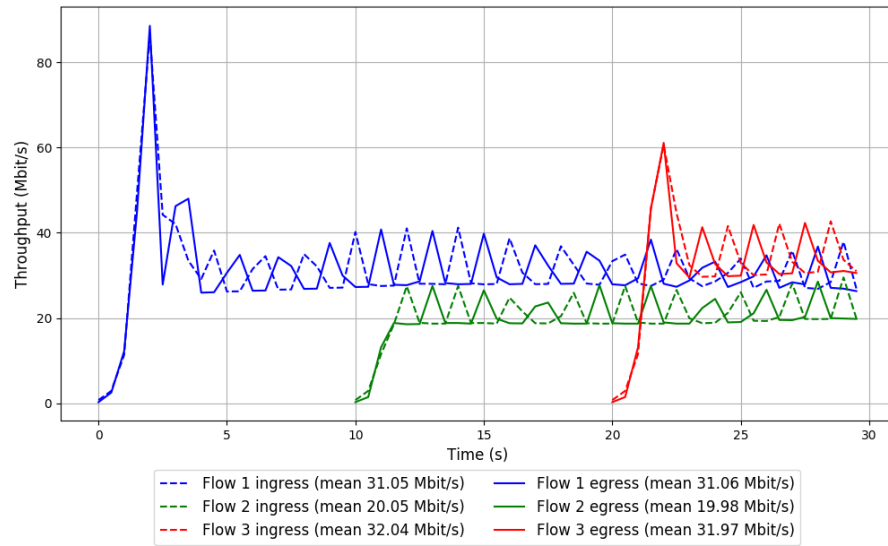
-- Flow 3:

Average throughput: 31.97 Mbit/s

95th percentile per-packet one-way delay: 125.262 ms

Loss rate: 2.43%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

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

End at: 2018-02-17 01:04:55

Below is generated by plot.py at 2018-02-17 06:10:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.10 Mbit/s

95th percentile per-packet one-way delay: 114.017 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 58.74 Mbit/s

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

Loss rate: 0.78%

-- Flow 2:

Average throughput: 42.19 Mbit/s

95th percentile per-packet one-way delay: 112.600 ms

Loss rate: 1.25%

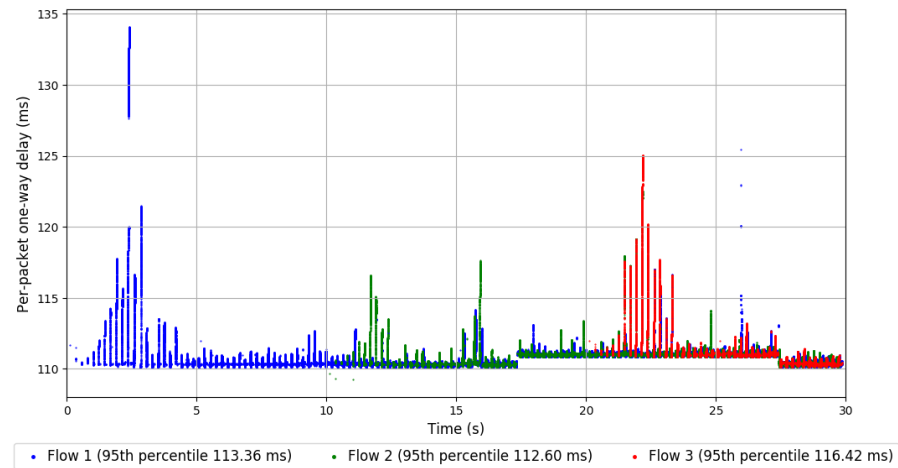
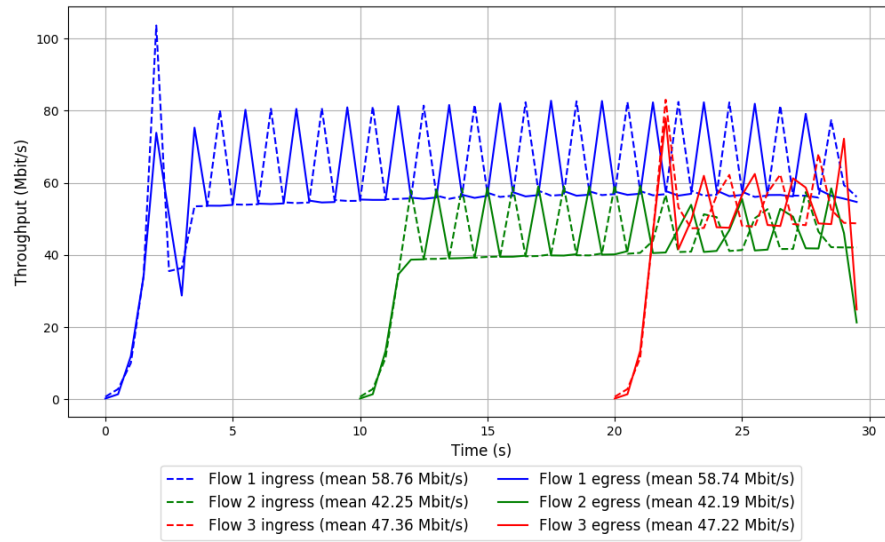
-- Flow 3:

Average throughput: 47.22 Mbit/s

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

Loss rate: 2.59%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-17 01:24:05

End at: 2018-02-17 01:24:35

Below is generated by plot.py at 2018-02-17 06:10:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.63 Mbit/s

95th percentile per-packet one-way delay: 117.643 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 42.40 Mbit/s

95th percentile per-packet one-way delay: 113.654 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 101.25 Mbit/s

95th percentile per-packet one-way delay: 118.267 ms

Loss rate: 1.22%

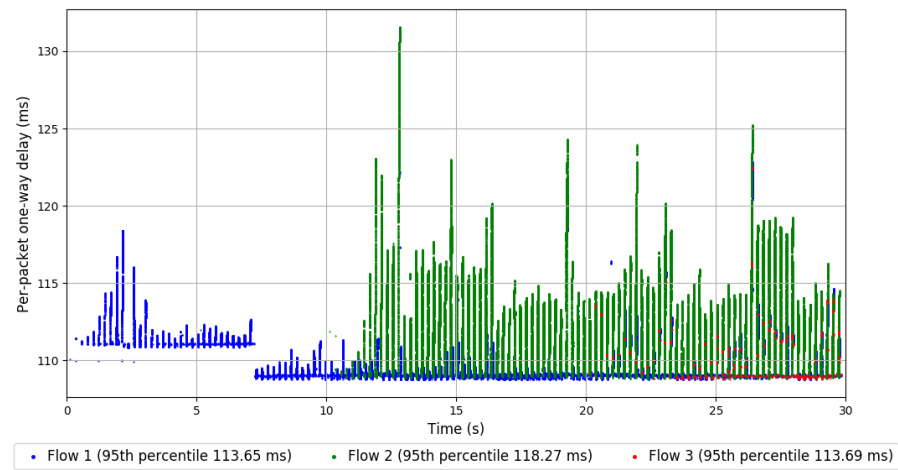
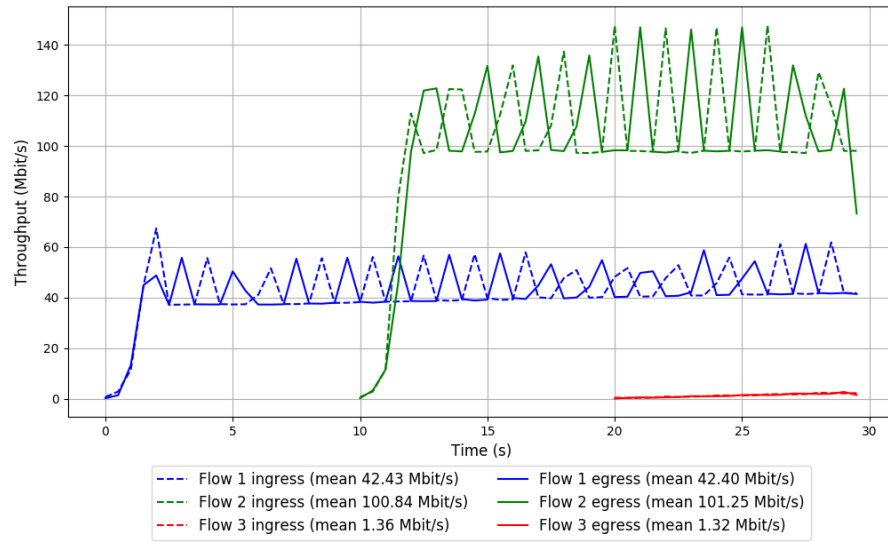
-- Flow 3:

Average throughput: 1.32 Mbit/s

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

Loss rate: 4.63%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-17 01:43:41

End at: 2018-02-17 01:44:11

Below is generated by plot.py at 2018-02-17 06:10:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.26 Mbit/s

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

Loss rate: 0.70%

-- Flow 1:

Average throughput: 48.16 Mbit/s

95th percentile per-packet one-way delay: 114.802 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 90.31 Mbit/s

95th percentile per-packet one-way delay: 117.160 ms

Loss rate: 0.29%

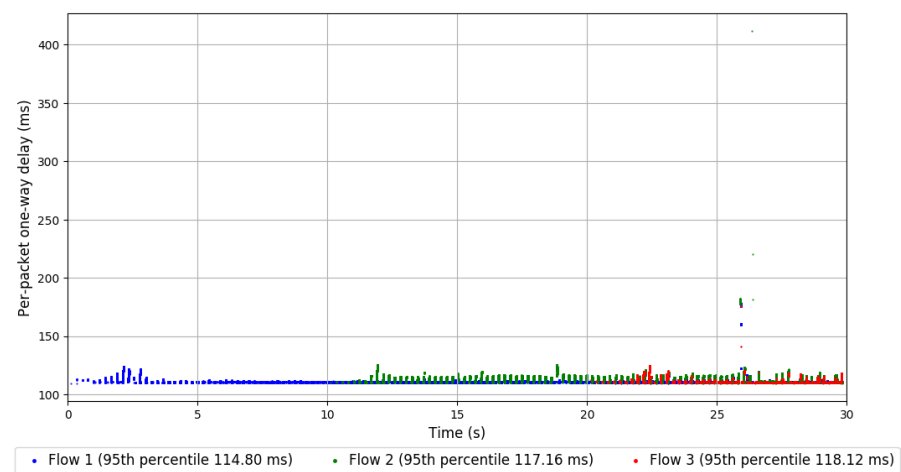
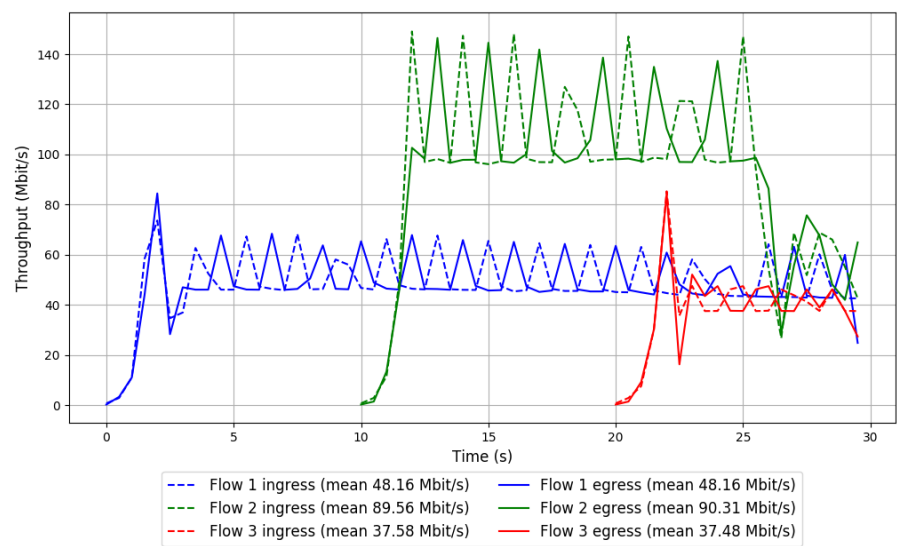
-- Flow 3:

Average throughput: 37.48 Mbit/s

95th percentile per-packet one-way delay: 118.119 ms

Loss rate: 2.52%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

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

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

Below is generated by plot.py at 2018-02-17 06:10:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 116.46 Mbit/s

95th percentile per-packet one-way delay: 116.761 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 85.49 Mbit/s

95th percentile per-packet one-way delay: 117.345 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 27.96 Mbit/s

95th percentile per-packet one-way delay: 115.987 ms

Loss rate: 1.11%

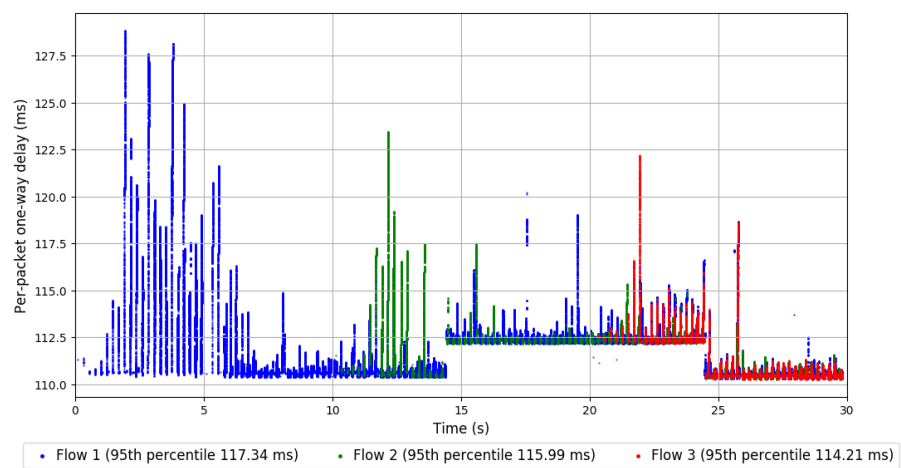
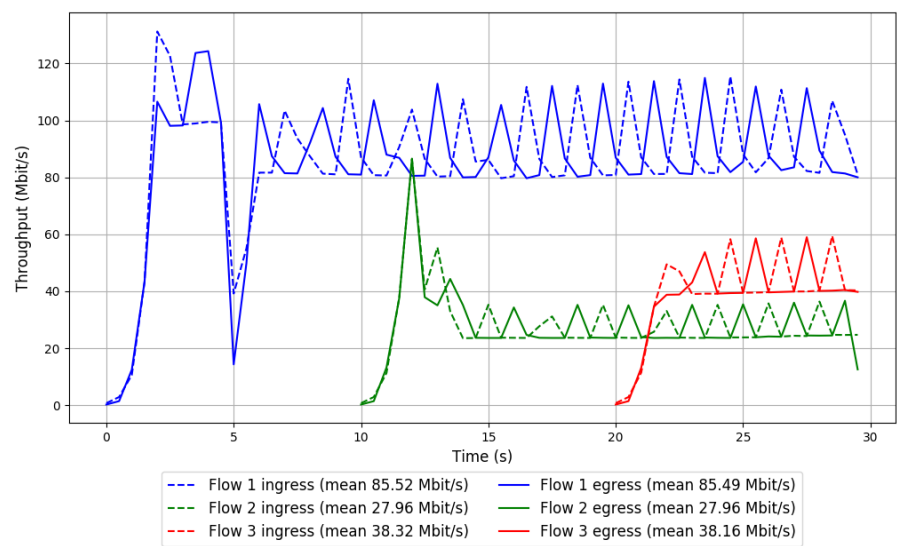
-- Flow 3:

Average throughput: 38.16 Mbit/s

95th percentile per-packet one-way delay: 114.209 ms

Loss rate: 2.65%

Run 10: Report of TCP Vegas — Data Link

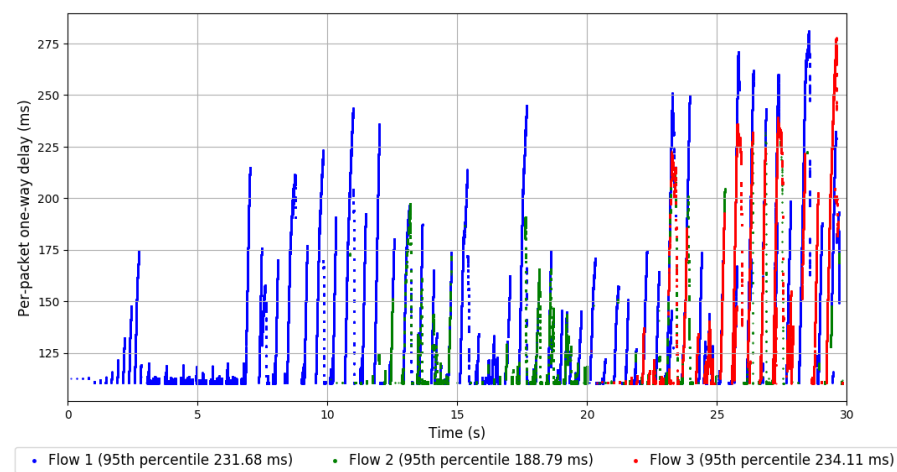
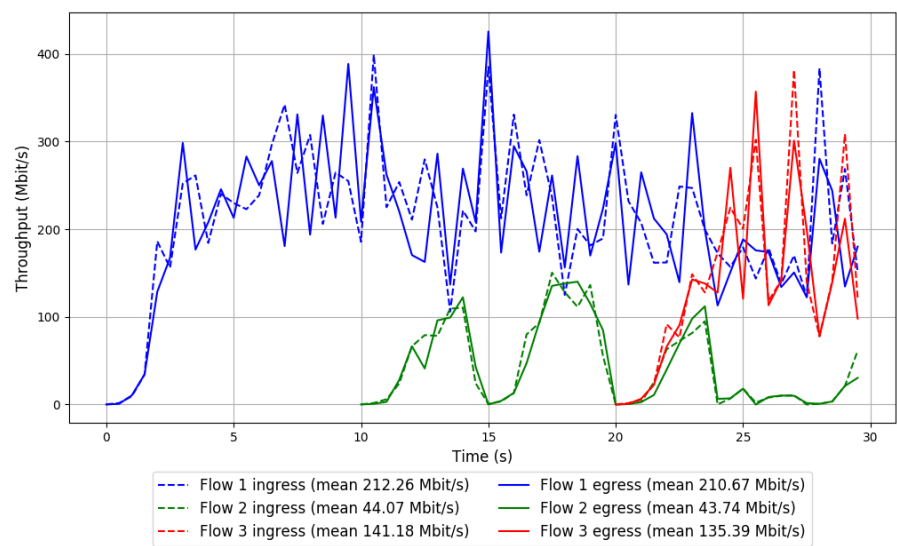


```
Run 1: Statistics of Verus

Start at: 2018-02-16 23:04:51
End at: 2018-02-16 23:05:21

# Below is generated by plot.py at 2018-02-17 06:12:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 282.94 Mbit/s
95th percentile per-packet one-way delay: 231.258 ms
Loss rate: 2.53%
-- Flow 1:
Average throughput: 210.67 Mbit/s
95th percentile per-packet one-way delay: 231.683 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 43.74 Mbit/s
95th percentile per-packet one-way delay: 188.788 ms
Loss rate: 1.84%
-- Flow 3:
Average throughput: 135.39 Mbit/s
95th percentile per-packet one-way delay: 234.106 ms
Loss rate: 6.41%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-16 23:24:39

End at: 2018-02-16 23:25:09

Below is generated by plot.py at 2018-02-17 06:14:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 344.88 Mbit/s

95th percentile per-packet one-way delay: 198.237 ms

Loss rate: 1.65%

-- Flow 1:

Average throughput: 216.21 Mbit/s

95th percentile per-packet one-way delay: 206.190 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 178.07 Mbit/s

95th percentile per-packet one-way delay: 185.731 ms

Loss rate: 2.34%

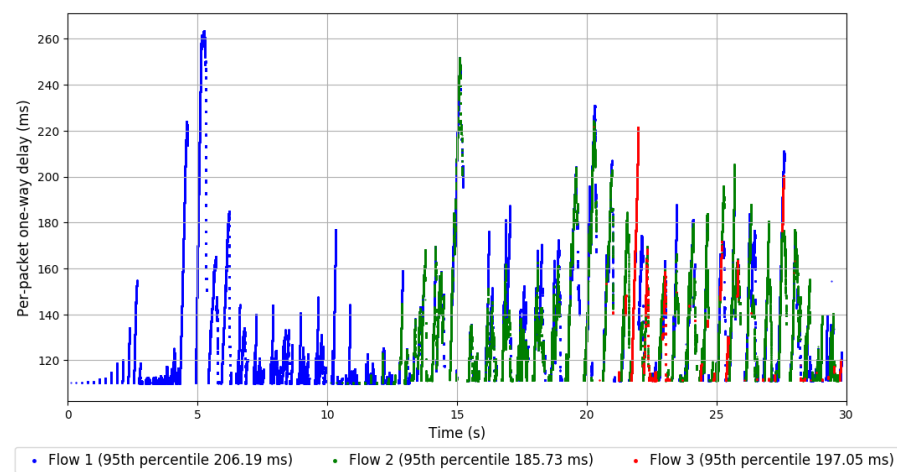
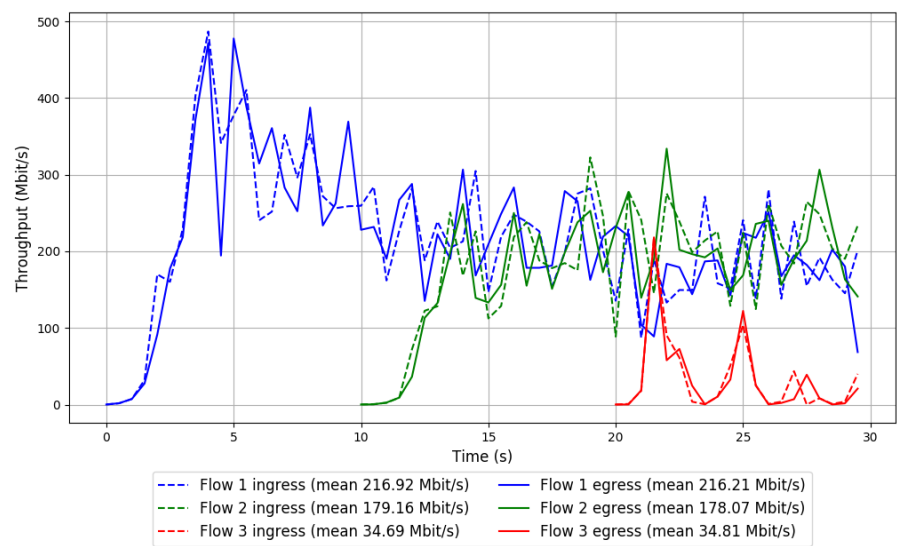
-- Flow 3:

Average throughput: 34.81 Mbit/s

95th percentile per-packet one-way delay: 197.054 ms

Loss rate: 3.24%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-16 23:44:38

End at: 2018-02-16 23:45:08

Below is generated by plot.py at 2018-02-17 06:14:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 259.63 Mbit/s

95th percentile per-packet one-way delay: 183.719 ms

Loss rate: 2.57%

-- Flow 1:

Average throughput: 200.62 Mbit/s

95th percentile per-packet one-way delay: 158.571 ms

Loss rate: 1.18%

-- Flow 2:

Average throughput: 54.36 Mbit/s

95th percentile per-packet one-way delay: 306.638 ms

Loss rate: 10.77%

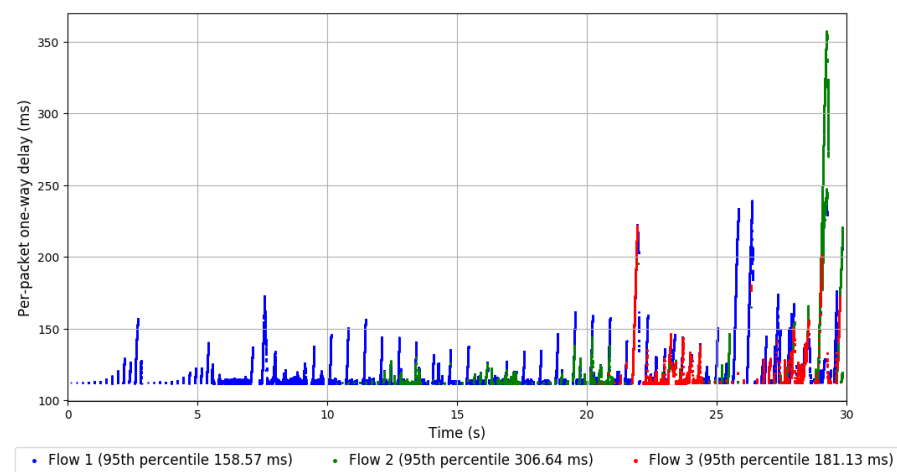
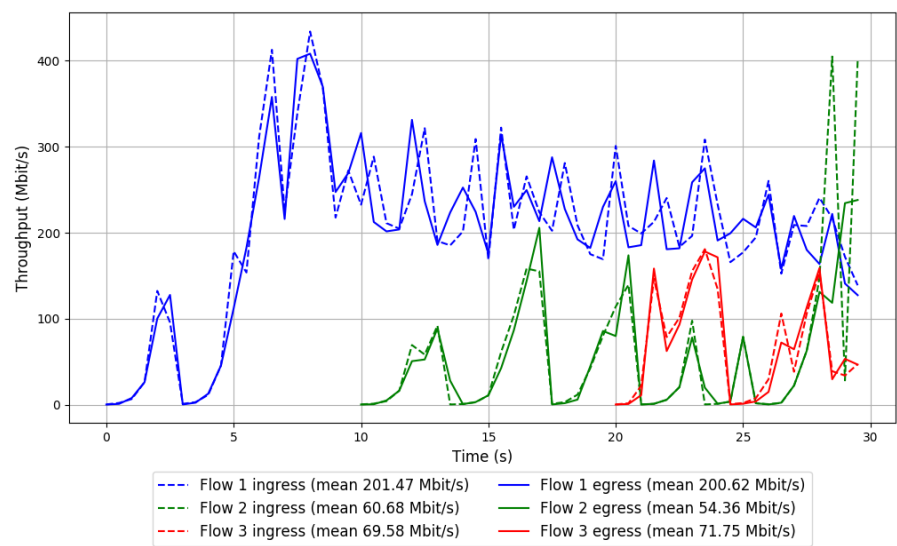
-- Flow 3:

Average throughput: 71.75 Mbit/s

95th percentile per-packet one-way delay: 181.130 ms

Loss rate: 0.42%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-17 00:04:22

End at: 2018-02-17 00:04:52

Below is generated by plot.py at 2018-02-17 06:14:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.33 Mbit/s

95th percentile per-packet one-way delay: 135.362 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 69.66 Mbit/s

95th percentile per-packet one-way delay: 185.422 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 69.36 Mbit/s

95th percentile per-packet one-way delay: 125.416 ms

Loss rate: 0.00%

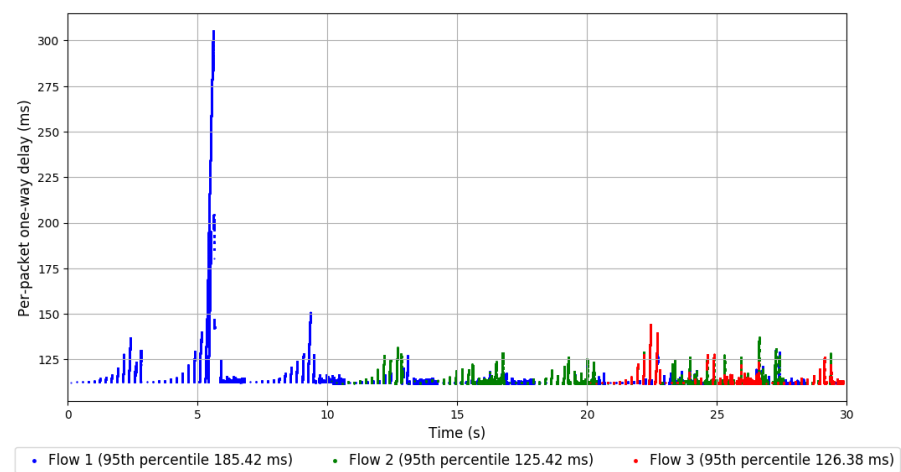
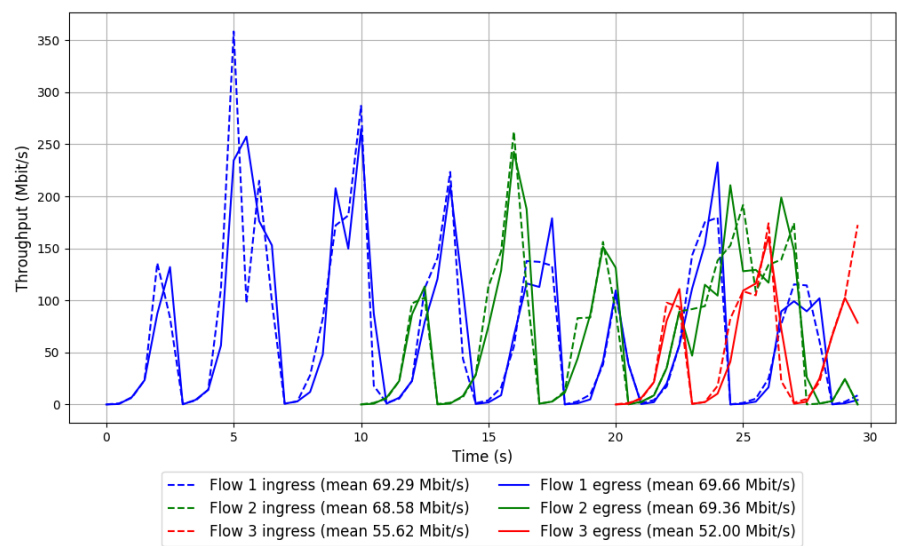
-- Flow 3:

Average throughput: 52.00 Mbit/s

95th percentile per-packet one-way delay: 126.378 ms

Loss rate: 8.62%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-17 00:23:34

End at: 2018-02-17 00:24:04

Below is generated by plot.py at 2018-02-17 06:14:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 227.11 Mbit/s

95th percentile per-packet one-way delay: 253.108 ms

Loss rate: 2.51%

-- Flow 1:

Average throughput: 115.76 Mbit/s

95th percentile per-packet one-way delay: 261.240 ms

Loss rate: 3.84%

-- Flow 2:

Average throughput: 153.55 Mbit/s

95th percentile per-packet one-way delay: 254.594 ms

Loss rate: 1.20%

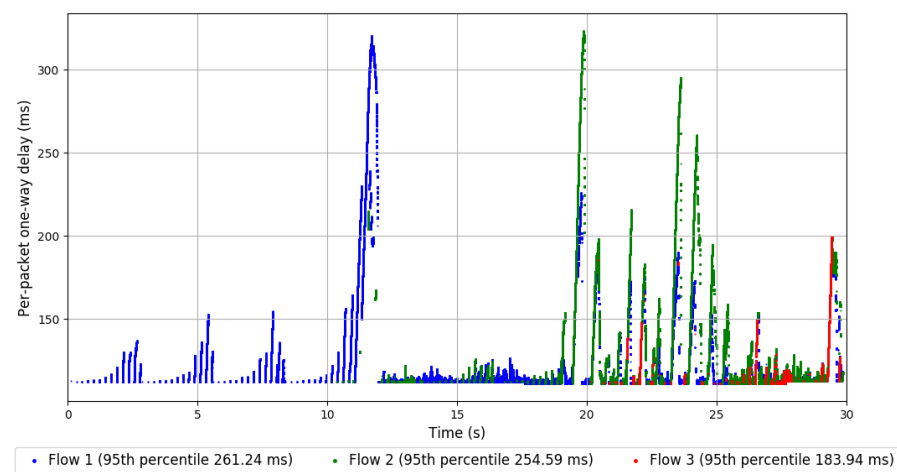
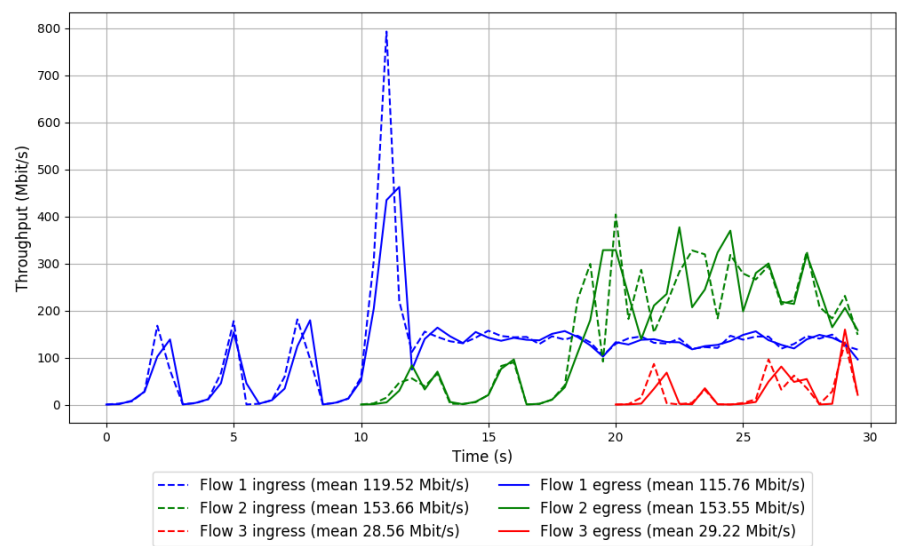
-- Flow 3:

Average throughput: 29.22 Mbit/s

95th percentile per-packet one-way delay: 183.943 ms

Loss rate: 0.01%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-17 00:42:53

End at: 2018-02-17 00:43:23

Below is generated by plot.py at 2018-02-17 06:14:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 258.18 Mbit/s

95th percentile per-packet one-way delay: 246.081 ms

Loss rate: 1.92%

-- Flow 1:

Average throughput: 180.05 Mbit/s

95th percentile per-packet one-way delay: 269.756 ms

Loss rate: 1.99%

-- Flow 2:

Average throughput: 80.59 Mbit/s

95th percentile per-packet one-way delay: 224.798 ms

Loss rate: 2.24%

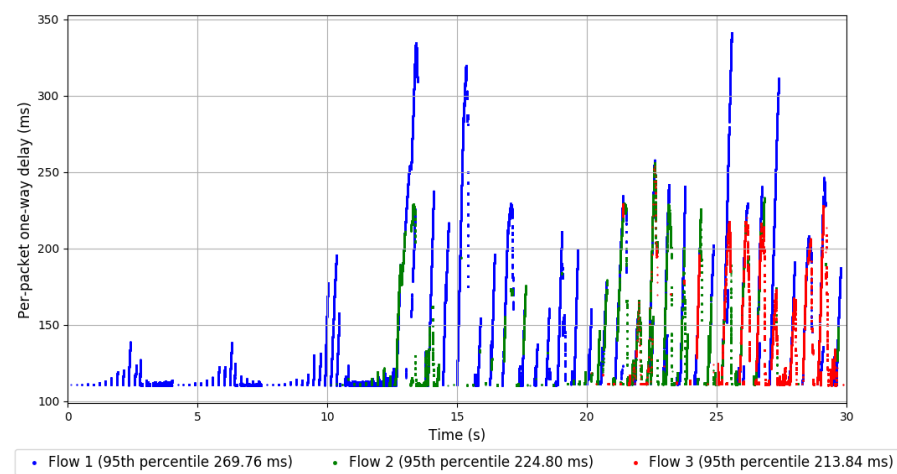
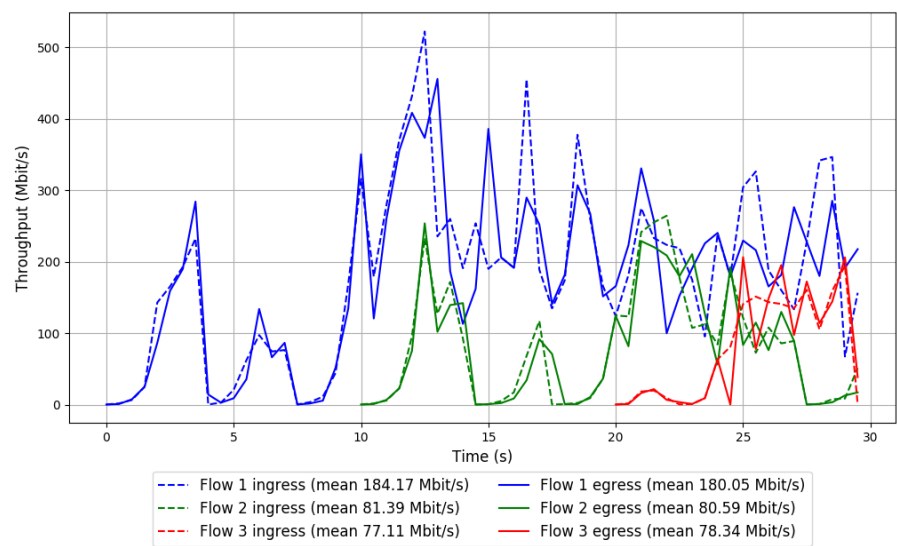
-- Flow 3:

Average throughput: 78.34 Mbit/s

95th percentile per-packet one-way delay: 213.838 ms

Loss rate: 0.78%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-17 01:02:13

End at: 2018-02-17 01:02:43

Below is generated by plot.py at 2018-02-17 06:14:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 198.18 Mbit/s

95th percentile per-packet one-way delay: 163.216 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 151.21 Mbit/s

95th percentile per-packet one-way delay: 170.897 ms

Loss rate: 1.17%

-- Flow 2:

Average throughput: 48.87 Mbit/s

95th percentile per-packet one-way delay: 143.420 ms

Loss rate: 1.01%

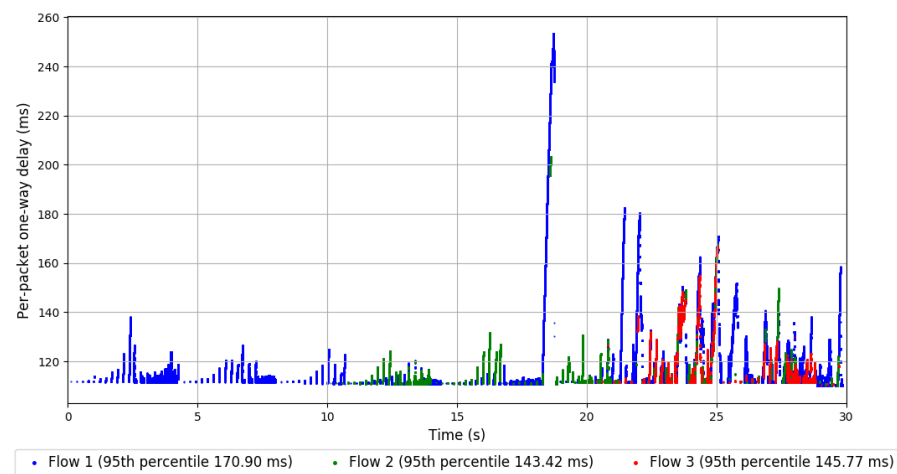
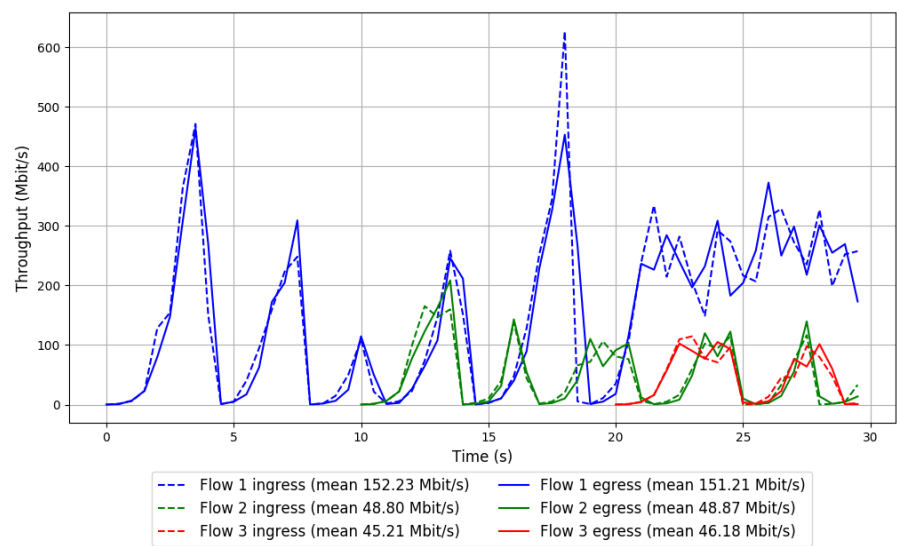
-- Flow 3:

Average throughput: 46.18 Mbit/s

95th percentile per-packet one-way delay: 145.768 ms

Loss rate: 0.19%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-17 01:21:48

End at: 2018-02-17 01:22:18

Below is generated by plot.py at 2018-02-17 06:15:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 258.47 Mbit/s

95th percentile per-packet one-way delay: 228.166 ms

Loss rate: 2.73%

-- Flow 1:

Average throughput: 127.47 Mbit/s

95th percentile per-packet one-way delay: 169.751 ms

Loss rate: 1.18%

-- Flow 2:

Average throughput: 181.19 Mbit/s

95th percentile per-packet one-way delay: 262.410 ms

Loss rate: 4.54%

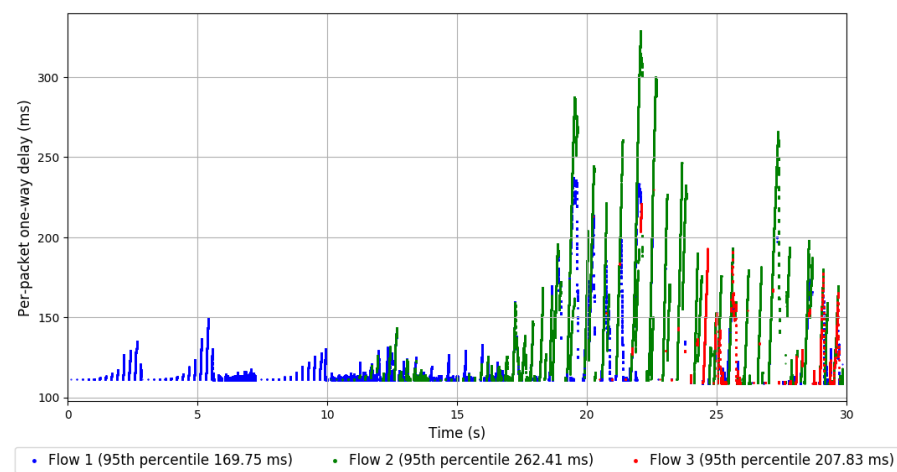
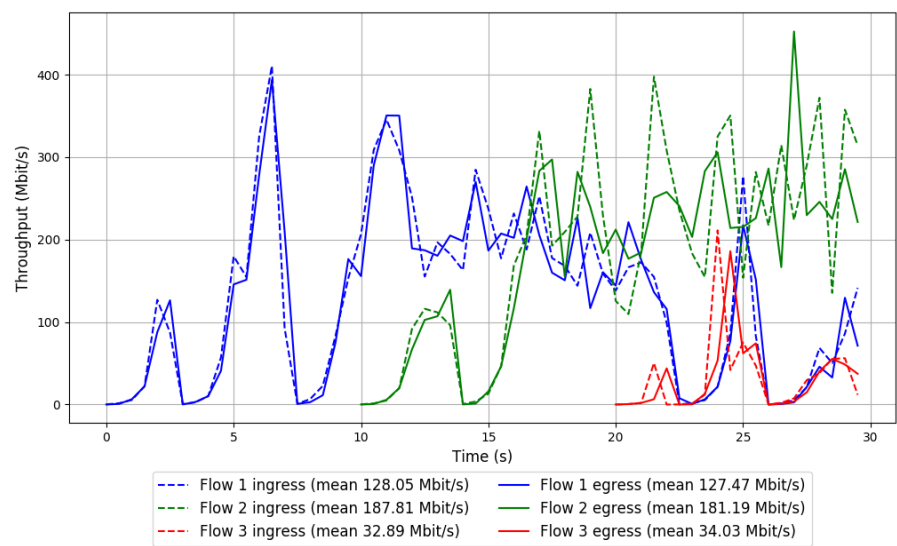
-- Flow 3:

Average throughput: 34.03 Mbit/s

95th percentile per-packet one-way delay: 207.826 ms

Loss rate: 0.01%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-17 01:41:24

End at: 2018-02-17 01:41:54

Below is generated by plot.py at 2018-02-17 06:15:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 260.18 Mbit/s

95th percentile per-packet one-way delay: 188.626 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 169.47 Mbit/s

95th percentile per-packet one-way delay: 165.830 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 121.31 Mbit/s

95th percentile per-packet one-way delay: 211.372 ms

Loss rate: 2.17%

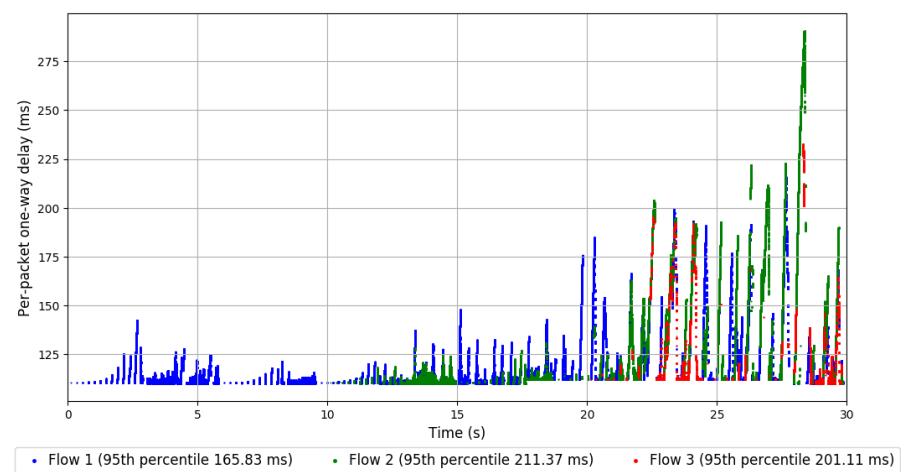
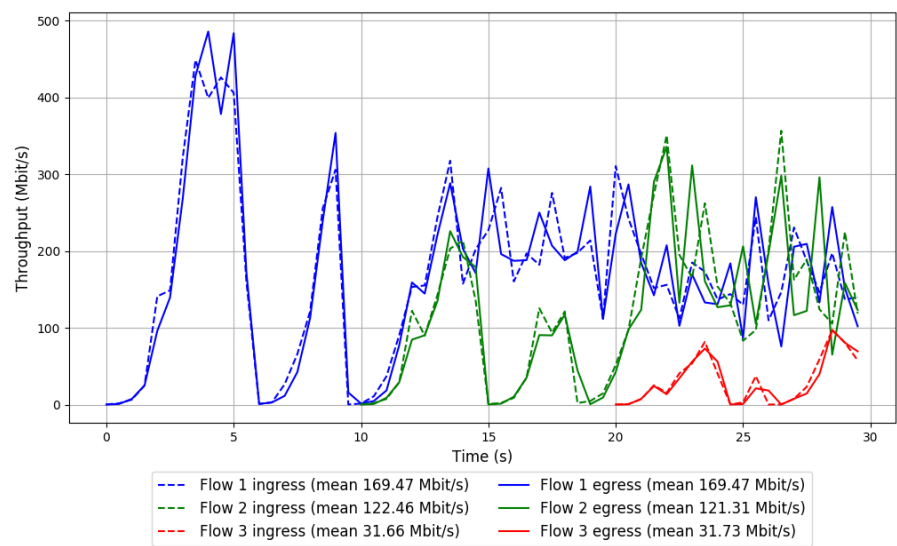
-- Flow 3:

Average throughput: 31.73 Mbit/s

95th percentile per-packet one-way delay: 201.112 ms

Loss rate: 2.52%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-17 02:00:58

End at: 2018-02-17 02:01:28

Below is generated by plot.py at 2018-02-17 06:15:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 160.96 Mbit/s

95th percentile per-packet one-way delay: 174.835 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 103.01 Mbit/s

95th percentile per-packet one-way delay: 192.612 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.00 Mbit/s

95th percentile per-packet one-way delay: 138.814 ms

Loss rate: 0.01%

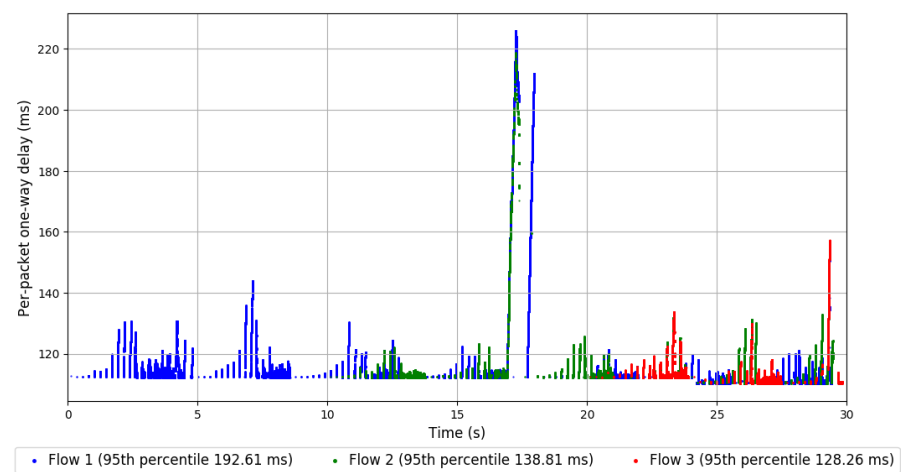
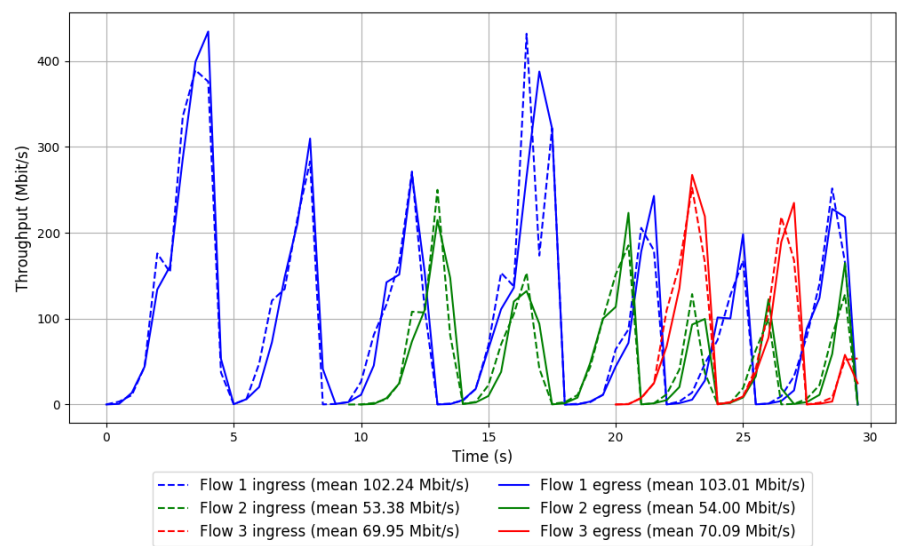
-- Flow 3:

Average throughput: 70.09 Mbit/s

95th percentile per-packet one-way delay: 128.261 ms

Loss rate: 2.07%

Run 10: Report of Verus — Data Link

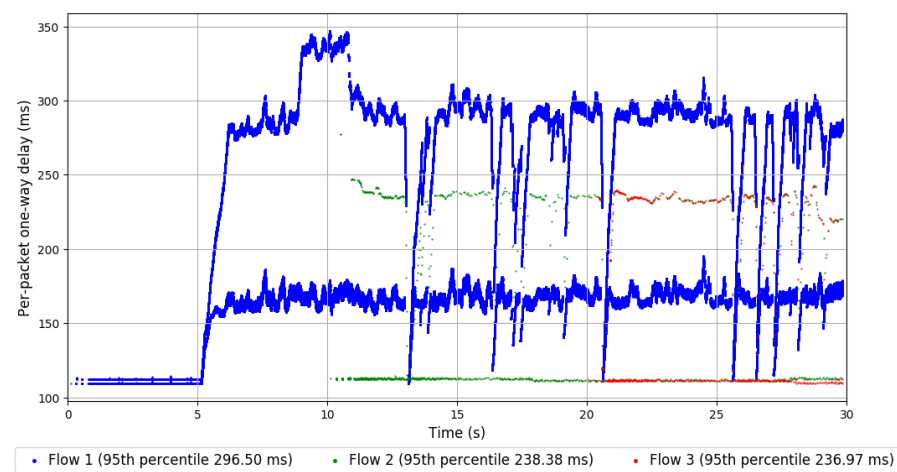
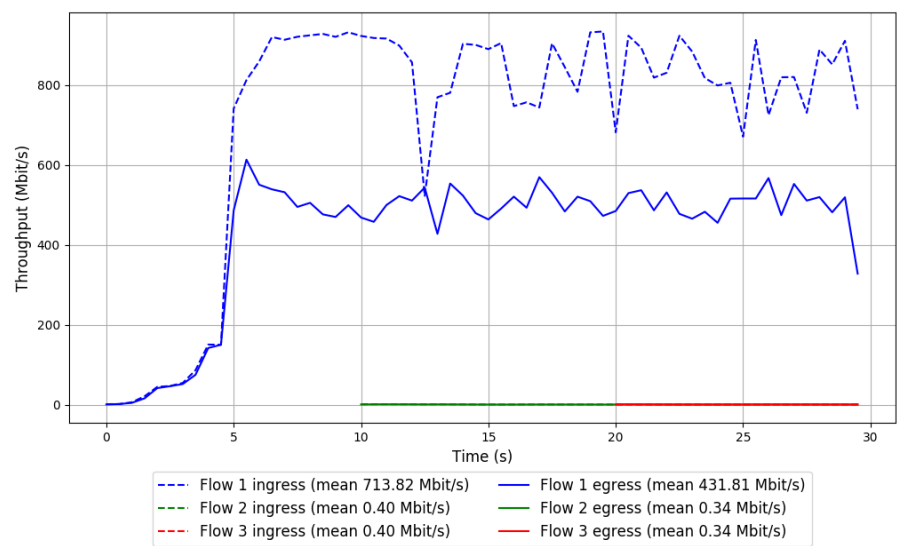


```
Run 1: Statistics of Copa

Start at: 2018-02-16 23:01:04
End at: 2018-02-16 23:01:34

# Below is generated by plot.py at 2018-02-17 06:26:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 432.15 Mbit/s
95th percentile per-packet one-way delay: 296.495 ms
Loss rate: 39.86%
-- Flow 1:
Average throughput: 431.81 Mbit/s
95th percentile per-packet one-way delay: 296.500 ms
Loss rate: 39.87%
-- Flow 2:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 238.383 ms
Loss rate: 14.56%
-- Flow 3:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 236.970 ms
Loss rate: 17.26%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-16 23:21:29

End at: 2018-02-16 23:21:59

Below is generated by plot.py at 2018-02-17 06:26:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 147.02 Mbit/s

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

Loss rate: 1.06%

-- Flow 1:

Average throughput: 73.84 Mbit/s

95th percentile per-packet one-way delay: 110.368 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 72.35 Mbit/s

95th percentile per-packet one-way delay: 110.557 ms

Loss rate: 1.12%

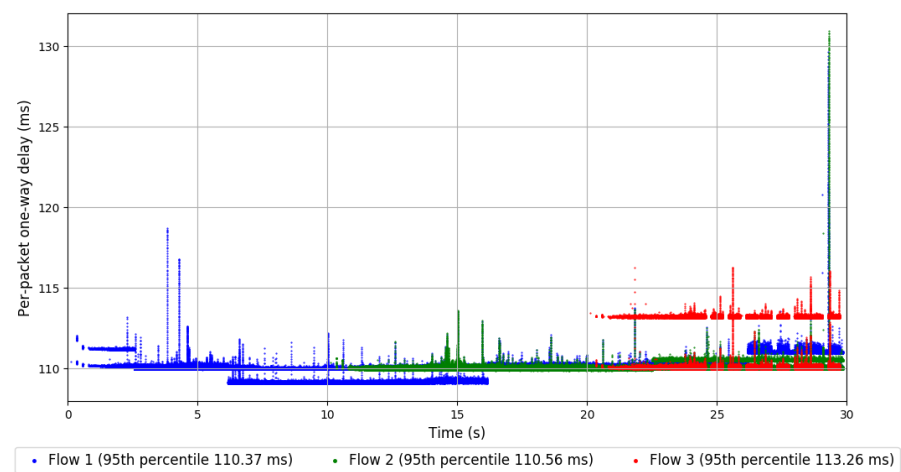
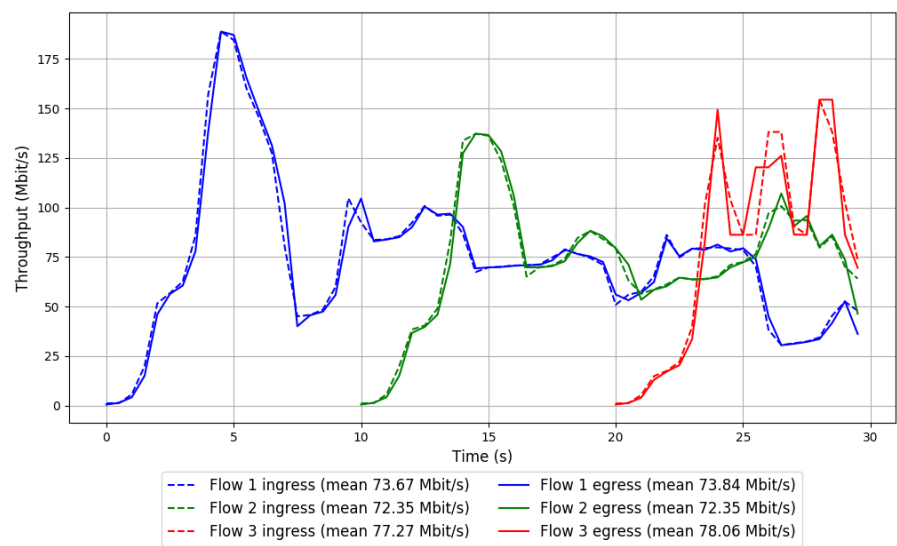
-- Flow 3:

Average throughput: 78.06 Mbit/s

95th percentile per-packet one-way delay: 113.262 ms

Loss rate: 2.47%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-16 23:41:25

End at: 2018-02-16 23:41:55

Below is generated by plot.py at 2018-02-17 06:26:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.23 Mbit/s

95th percentile per-packet one-way delay: 112.623 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 71.63 Mbit/s

95th percentile per-packet one-way delay: 112.627 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 71.31 Mbit/s

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

Loss rate: 0.52%

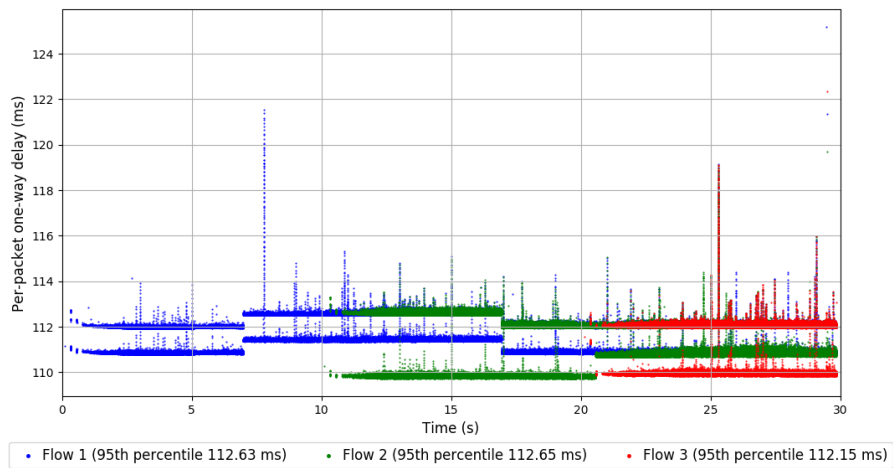
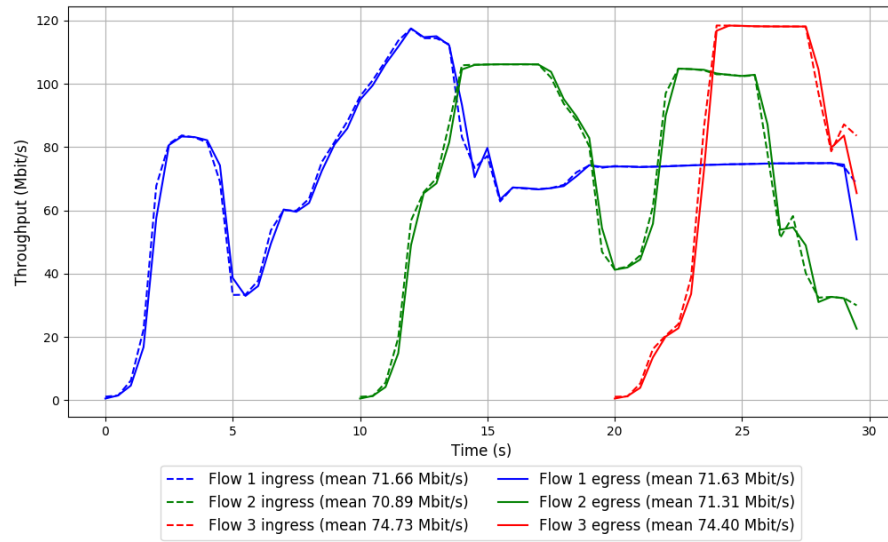
-- Flow 3:

Average throughput: 74.40 Mbit/s

95th percentile per-packet one-way delay: 112.150 ms

Loss rate: 2.65%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-17 00:01:06

End at: 2018-02-17 00:01:36

Below is generated by plot.py at 2018-02-17 06:26:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 155.43 Mbit/s

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

Loss rate: 0.98%

-- Flow 1:

Average throughput: 80.09 Mbit/s

95th percentile per-packet one-way delay: 112.700 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 72.91 Mbit/s

95th percentile per-packet one-way delay: 112.085 ms

Loss rate: 1.12%

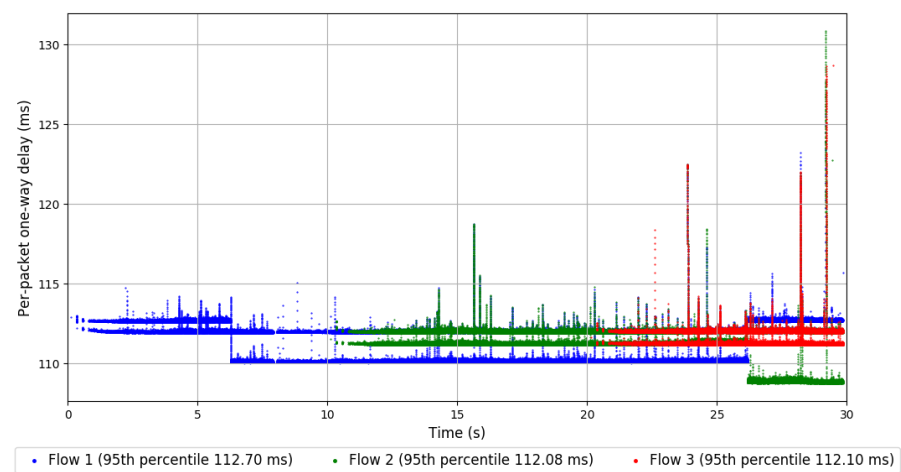
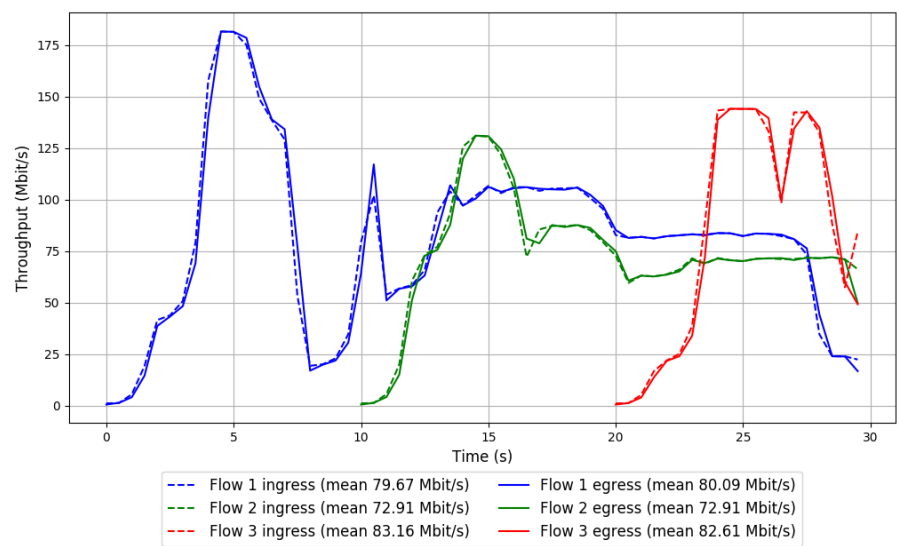
-- Flow 3:

Average throughput: 82.61 Mbit/s

95th percentile per-packet one-way delay: 112.101 ms

Loss rate: 2.90%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-17 00:20:24

End at: 2018-02-17 00:20:54

Below is generated by plot.py at 2018-02-17 06:26:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 152.66 Mbit/s

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

Loss rate: 1.26%

-- Flow 1:

Average throughput: 87.10 Mbit/s

95th percentile per-packet one-way delay: 112.036 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 63.71 Mbit/s

95th percentile per-packet one-way delay: 114.823 ms

Loss rate: 1.47%

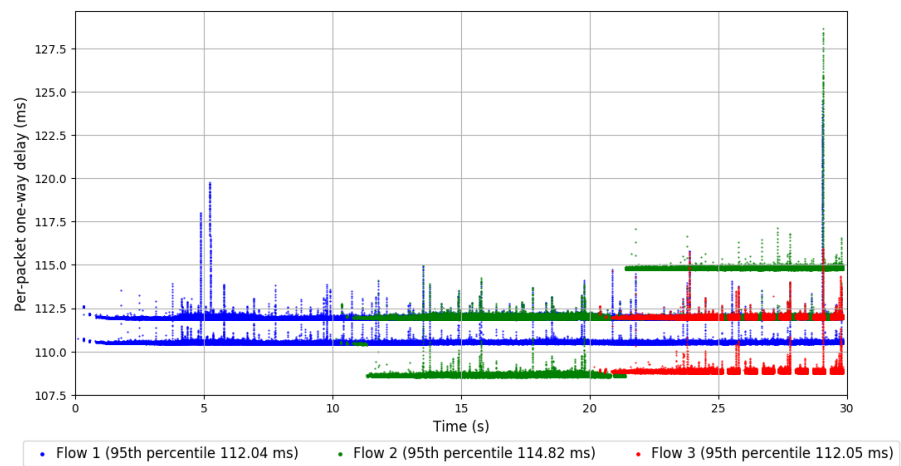
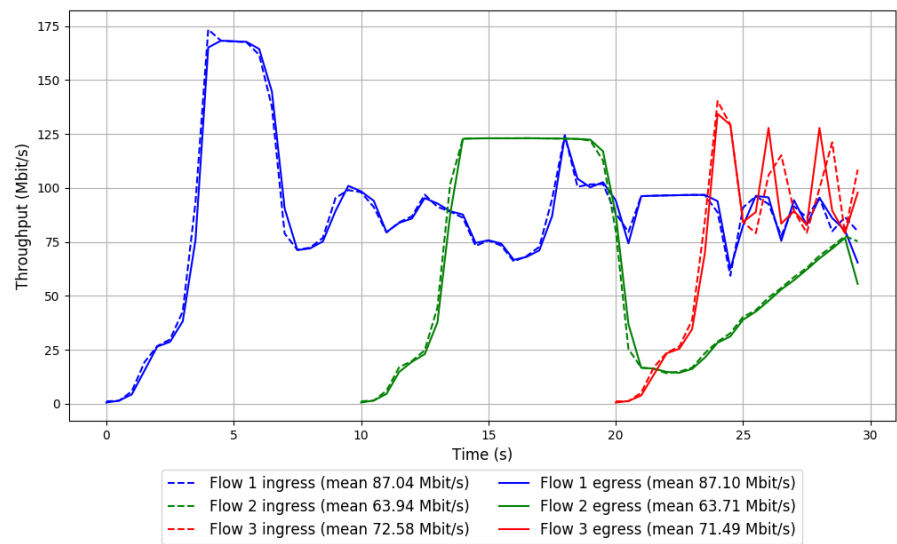
-- Flow 3:

Average throughput: 71.49 Mbit/s

95th percentile per-packet one-way delay: 112.047 ms

Loss rate: 2.97%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-17 00:39:39

End at: 2018-02-17 00:40:09

Below is generated by plot.py at 2018-02-17 06:26:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 149.96 Mbit/s

95th percentile per-packet one-way delay: 111.736 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 81.70 Mbit/s

95th percentile per-packet one-way delay: 111.757 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 67.90 Mbit/s

95th percentile per-packet one-way delay: 111.043 ms

Loss rate: 1.24%

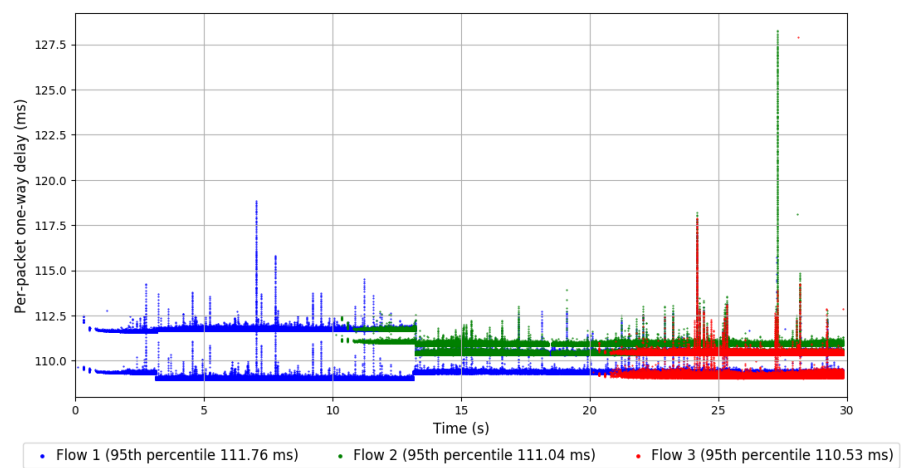
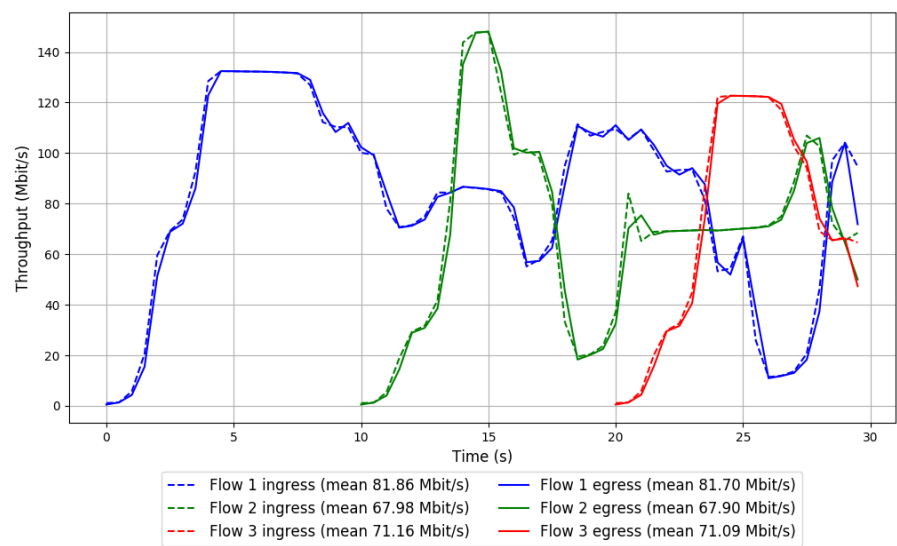
-- Flow 3:

Average throughput: 71.09 Mbit/s

95th percentile per-packet one-way delay: 110.531 ms

Loss rate: 2.27%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-17 00:58:59

End at: 2018-02-17 00:59:29

Below is generated by plot.py at 2018-02-17 06:26:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 170.73 Mbit/s

95th percentile per-packet one-way delay: 111.685 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 84.20 Mbit/s

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

Loss rate: 0.90%

-- Flow 2:

Average throughput: 96.75 Mbit/s

95th percentile per-packet one-way delay: 111.700 ms

Loss rate: 0.96%

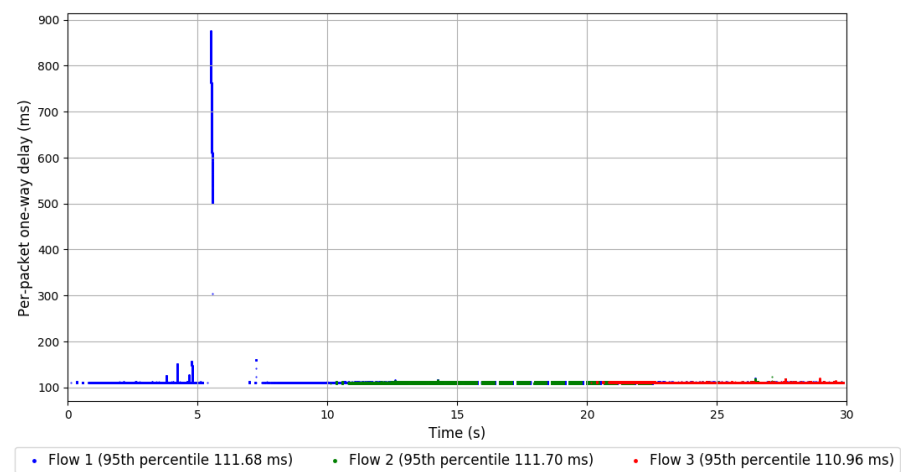
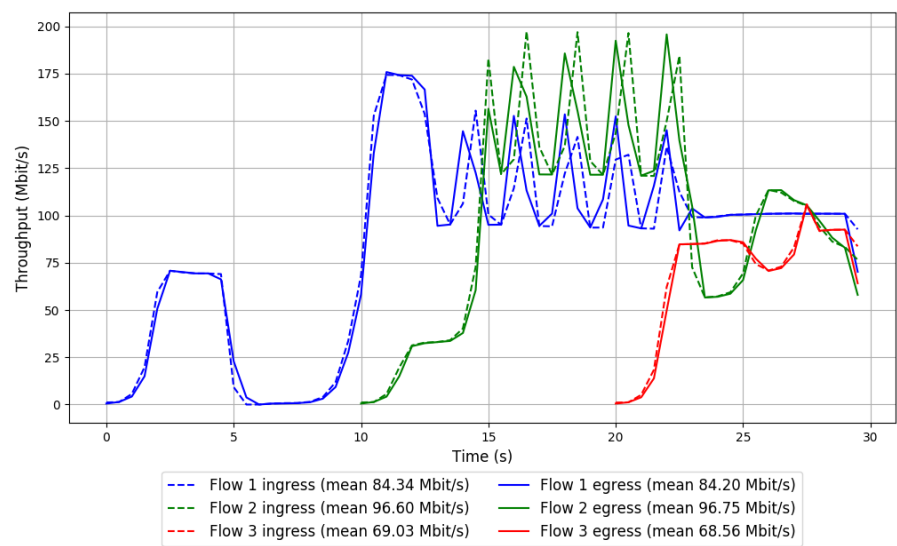
-- Flow 3:

Average throughput: 68.56 Mbit/s

95th percentile per-packet one-way delay: 110.962 ms

Loss rate: 2.92%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-17 01:18:36

End at: 2018-02-17 01:19:06

Below is generated by plot.py at 2018-02-17 06:26:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 148.68 Mbit/s

95th percentile per-packet one-way delay: 111.450 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 83.95 Mbit/s

95th percentile per-packet one-way delay: 111.479 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 65.63 Mbit/s

95th percentile per-packet one-way delay: 111.005 ms

Loss rate: 1.10%

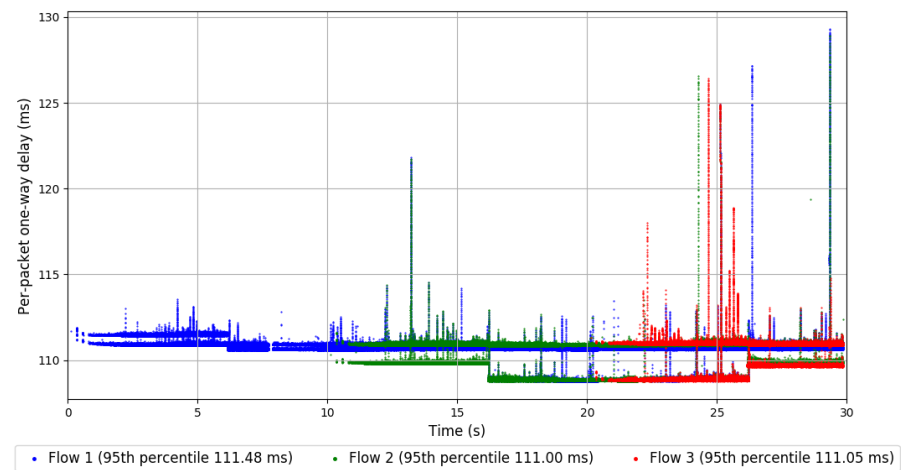
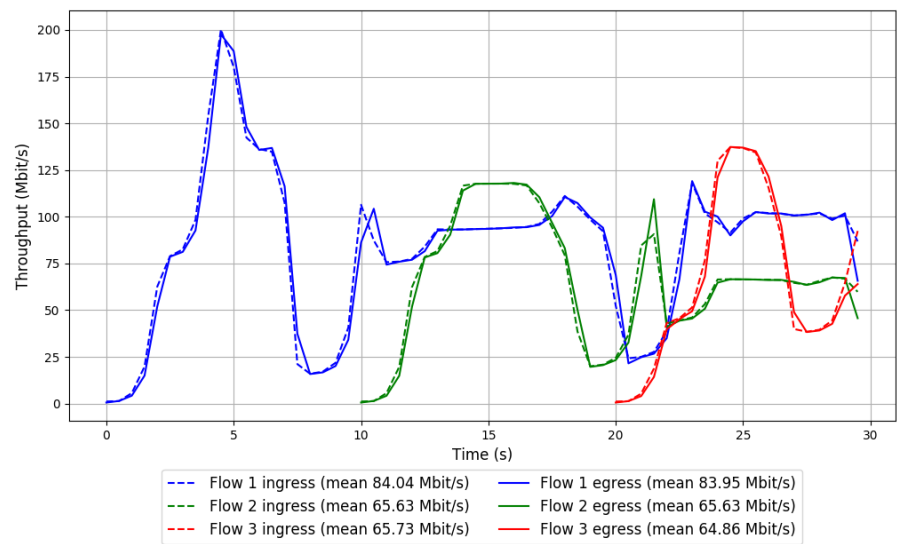
-- Flow 3:

Average throughput: 64.86 Mbit/s

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

Loss rate: 3.53%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-17 01:38:06

End at: 2018-02-17 01:38:36

Below is generated by plot.py at 2018-02-17 06:26:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.55 Mbit/s

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

Loss rate: 1.04%

-- Flow 1:

Average throughput: 72.41 Mbit/s

95th percentile per-packet one-way delay: 112.071 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 75.33 Mbit/s

95th percentile per-packet one-way delay: 112.043 ms

Loss rate: 1.34%

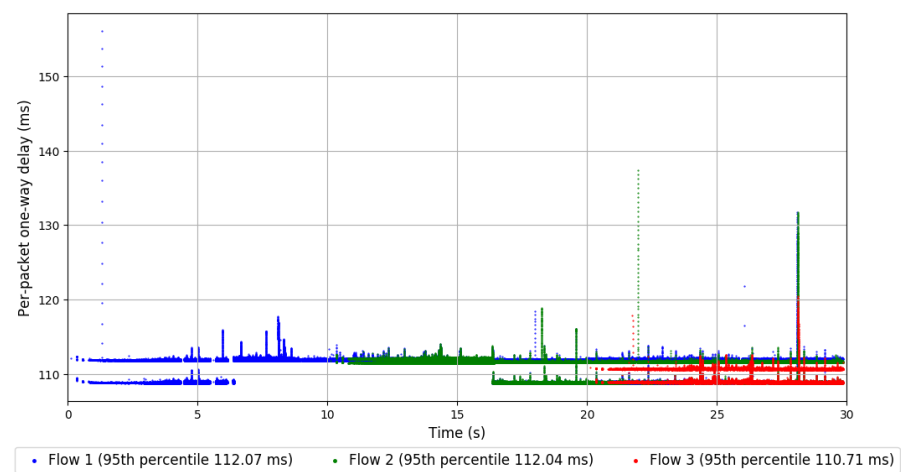
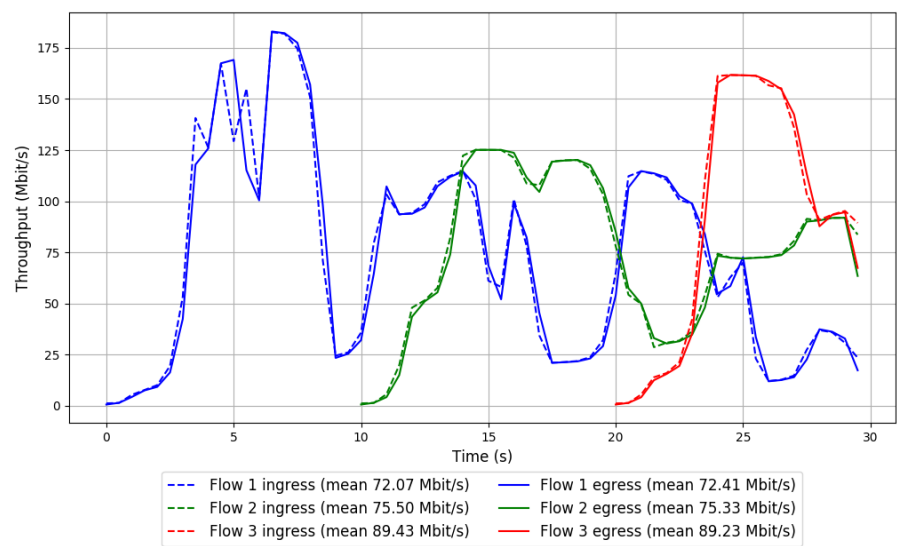
-- Flow 3:

Average throughput: 89.23 Mbit/s

95th percentile per-packet one-way delay: 110.710 ms

Loss rate: 2.42%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-17 01:57:46

End at: 2018-02-17 01:58:16

Below is generated by plot.py at 2018-02-17 06:26:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 173.44 Mbit/s

95th percentile per-packet one-way delay: 112.332 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 106.05 Mbit/s

95th percentile per-packet one-way delay: 112.343 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 55.68 Mbit/s

95th percentile per-packet one-way delay: 112.319 ms

Loss rate: 2.22%

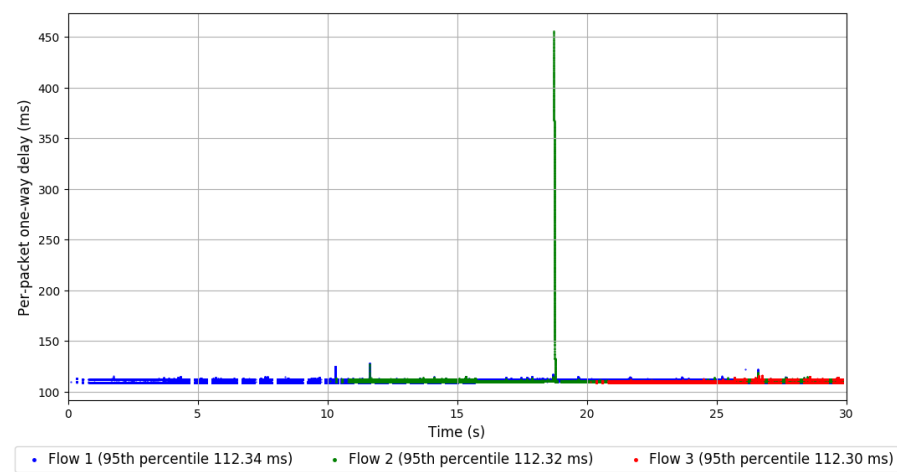
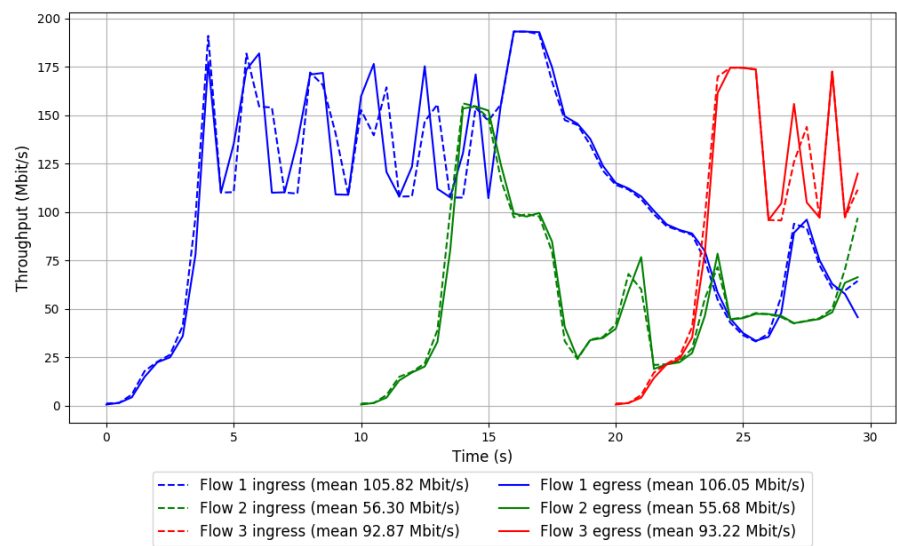
-- Flow 3:

Average throughput: 93.22 Mbit/s

95th percentile per-packet one-way delay: 112.303 ms

Loss rate: 1.67%

Run 10: Report of Copa — Data Link

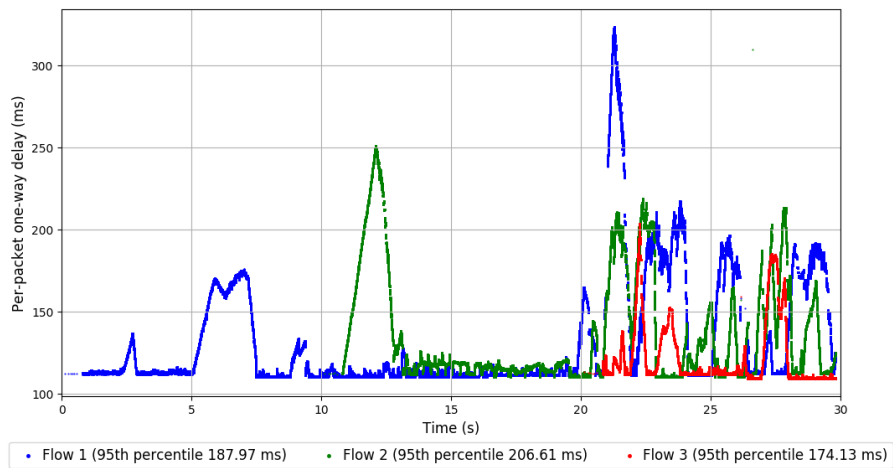
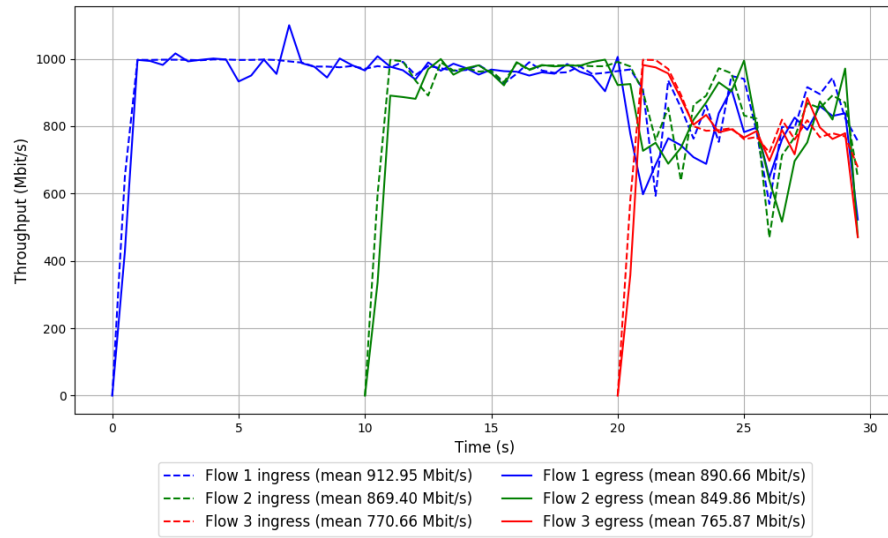


```
Run 1: Statistics of FillP

Start at: 2018-02-16 22:49:45
End at: 2018-02-16 22:50:15

# Below is generated by plot.py at 2018-02-17 06:45:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1702.93 Mbit/s
95th percentile per-packet one-way delay: 193.760 ms
Loss rate: 3.19%
-- Flow 1:
Average throughput: 890.66 Mbit/s
95th percentile per-packet one-way delay: 187.966 ms
Loss rate: 3.17%
-- Flow 2:
Average throughput: 849.86 Mbit/s
95th percentile per-packet one-way delay: 206.609 ms
Loss rate: 3.34%
-- Flow 3:
Average throughput: 765.87 Mbit/s
95th percentile per-packet one-way delay: 174.129 ms
Loss rate: 2.89%
```


Run 1: Report of FillP — Data Link

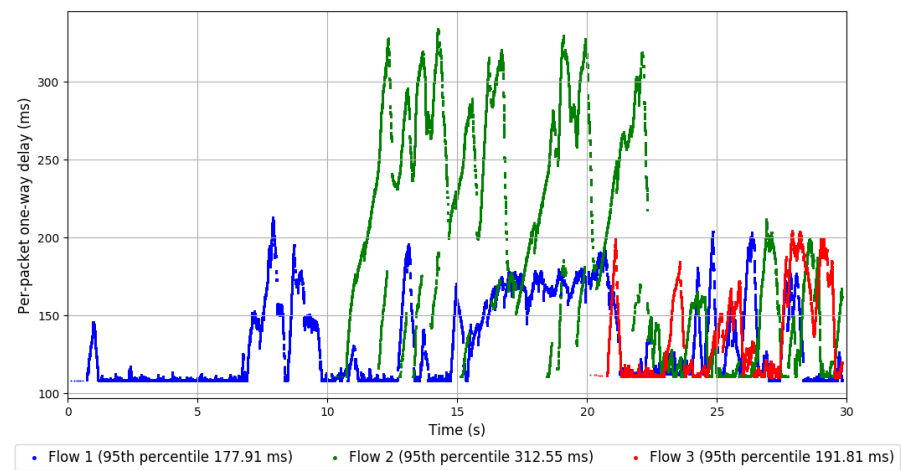
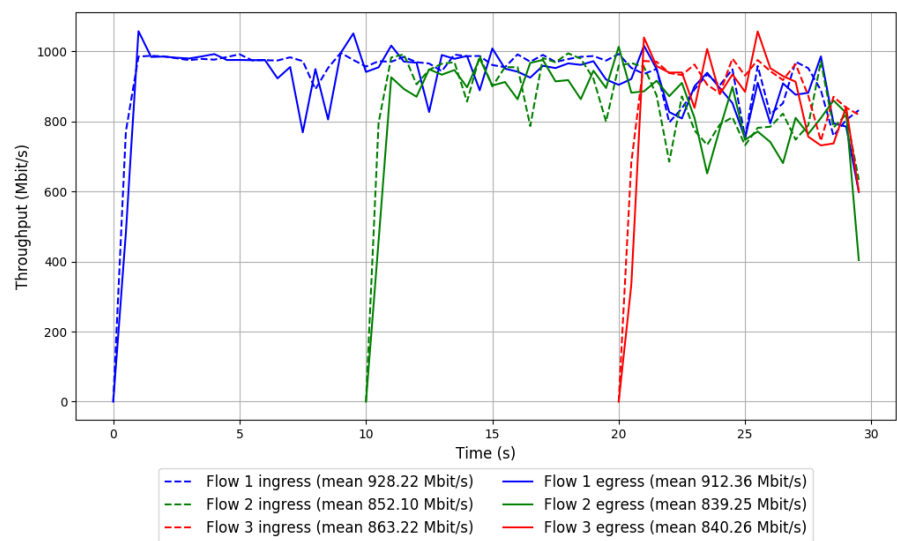


```
Run 2: Statistics of FillP

Start at: 2018-02-16 23:10:05
End at: 2018-02-16 23:10:35

# Below is generated by plot.py at 2018-02-17 06:47:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1742.80 Mbit/s
95th percentile per-packet one-way delay: 284.916 ms
Loss rate: 2.88%
-- Flow 1:
Average throughput: 912.36 Mbit/s
95th percentile per-packet one-way delay: 177.913 ms
Loss rate: 2.44%
-- Flow 2:
Average throughput: 839.25 Mbit/s
95th percentile per-packet one-way delay: 312.549 ms
Loss rate: 2.62%
-- Flow 3:
Average throughput: 840.26 Mbit/s
95th percentile per-packet one-way delay: 191.812 ms
Loss rate: 4.87%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-16 23:29:56

End at: 2018-02-16 23:30:26

Below is generated by plot.py at 2018-02-17 06:47:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 1739.45 Mbit/s

95th percentile per-packet one-way delay: 187.528 ms

Loss rate: 3.79%

-- Flow 1:

Average throughput: 923.50 Mbit/s

95th percentile per-packet one-way delay: 180.694 ms

Loss rate: 3.06%

-- Flow 2:

Average throughput: 860.18 Mbit/s

95th percentile per-packet one-way delay: 204.501 ms

Loss rate: 3.95%

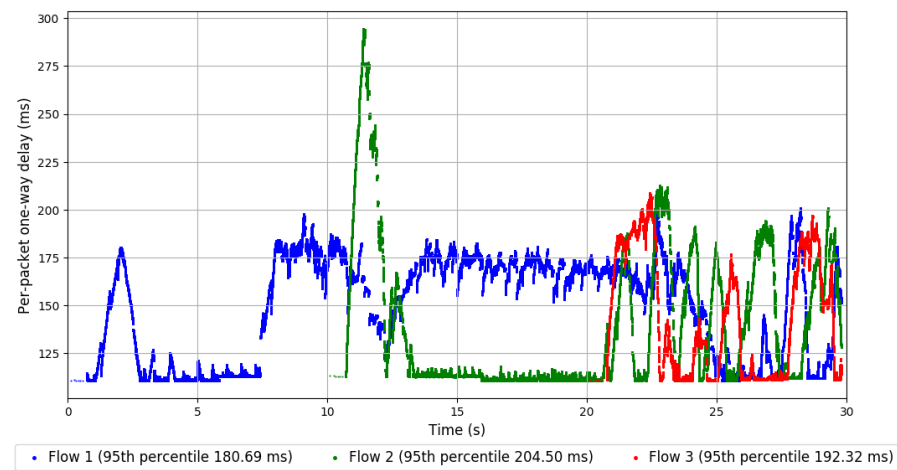
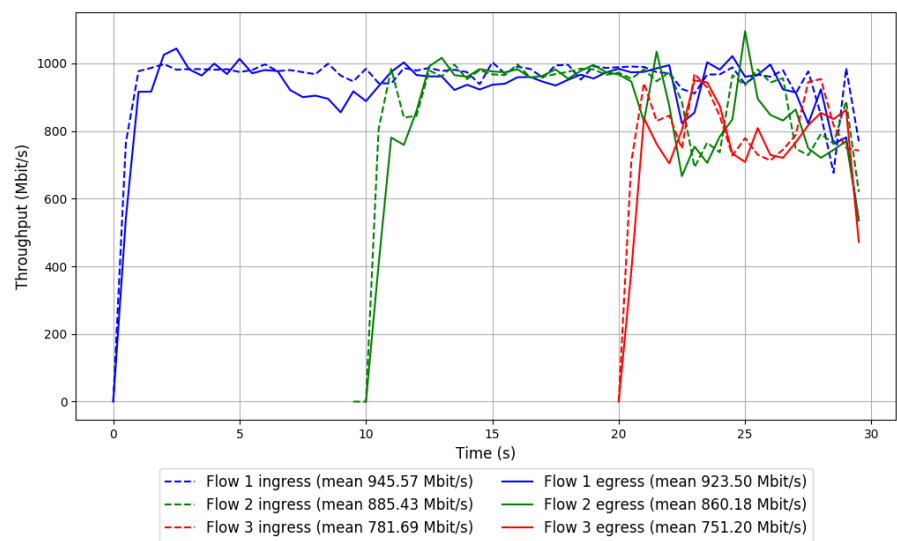
-- Flow 3:

Average throughput: 751.20 Mbit/s

95th percentile per-packet one-way delay: 192.323 ms

Loss rate: 6.06%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-16 23:49:49

End at: 2018-02-16 23:50:19

Below is generated by plot.py at 2018-02-17 06:47:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 1732.07 Mbit/s

95th percentile per-packet one-way delay: 223.839 ms

Loss rate: 3.50%

-- Flow 1:

Average throughput: 911.17 Mbit/s

95th percentile per-packet one-way delay: 178.294 ms

Loss rate: 2.23%

-- Flow 2:

Average throughput: 871.95 Mbit/s

95th percentile per-packet one-way delay: 242.704 ms

Loss rate: 4.31%

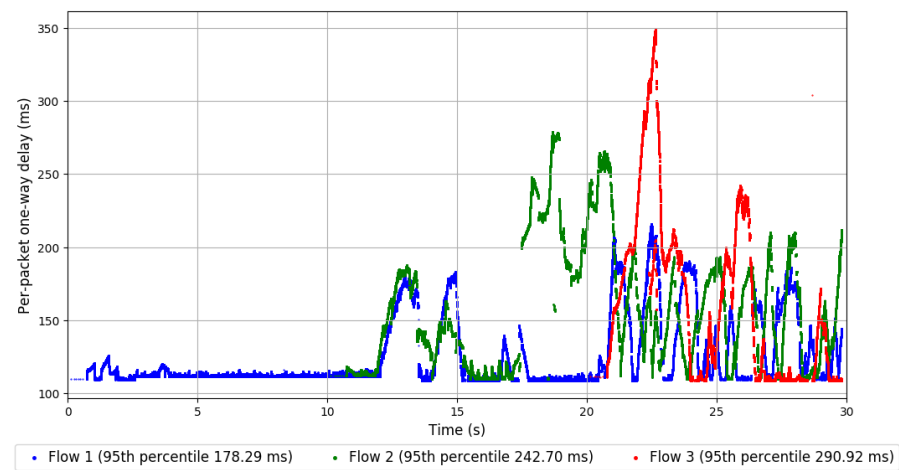
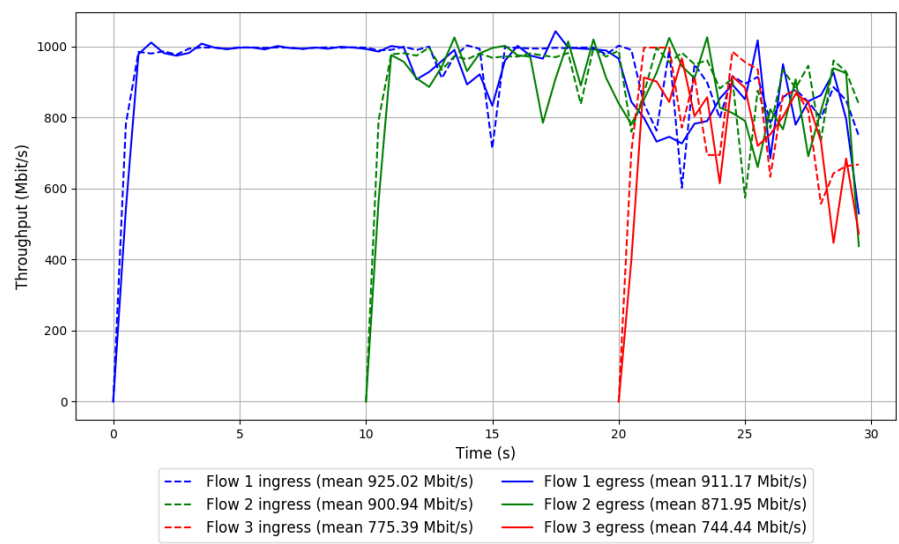
-- Flow 3:

Average throughput: 744.44 Mbit/s

95th percentile per-packet one-way delay: 290.920 ms

Loss rate: 6.16%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-17 00:09:26

End at: 2018-02-17 00:09:56

Below is generated by plot.py at 2018-02-17 06:48:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 1700.83 Mbit/s

95th percentile per-packet one-way delay: 294.196 ms

Loss rate: 3.61%

-- Flow 1:

Average throughput: 880.42 Mbit/s

95th percentile per-packet one-way delay: 296.981 ms

Loss rate: 1.84%

-- Flow 2:

Average throughput: 826.51 Mbit/s

95th percentile per-packet one-way delay: 299.875 ms

Loss rate: 5.79%

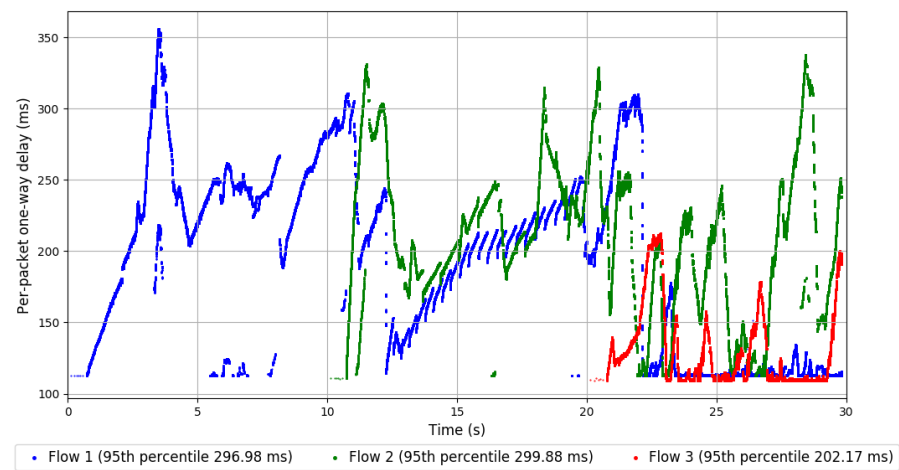
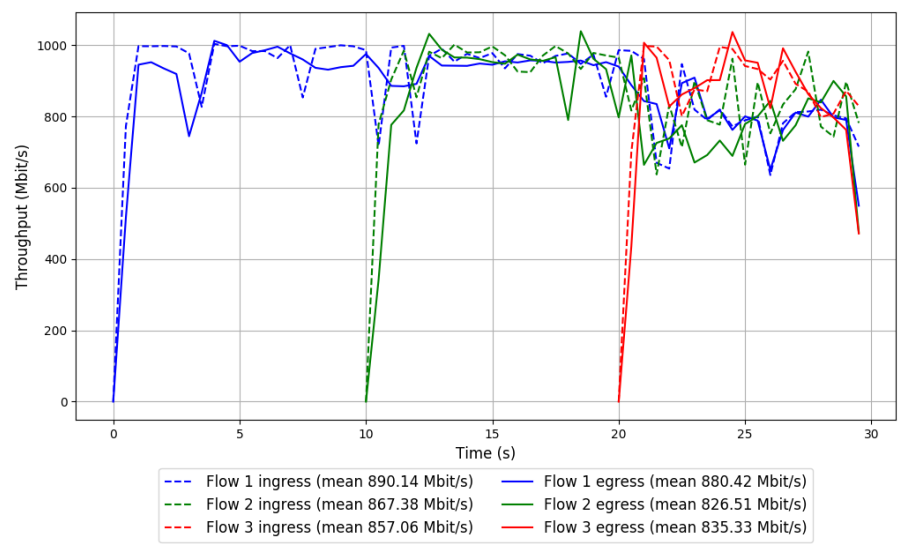
-- Flow 3:

Average throughput: 835.33 Mbit/s

95th percentile per-packet one-way delay: 202.172 ms

Loss rate: 4.74%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-17 00:28:43

End at: 2018-02-17 00:29:13

Below is generated by plot.py at 2018-02-17 06:48:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 1573.61 Mbit/s

95th percentile per-packet one-way delay: 336.673 ms

Loss rate: 4.85%

-- Flow 1:

Average throughput: 845.45 Mbit/s

95th percentile per-packet one-way delay: 345.490 ms

Loss rate: 3.73%

-- Flow 2:

Average throughput: 765.76 Mbit/s

95th percentile per-packet one-way delay: 324.068 ms

Loss rate: 4.58%

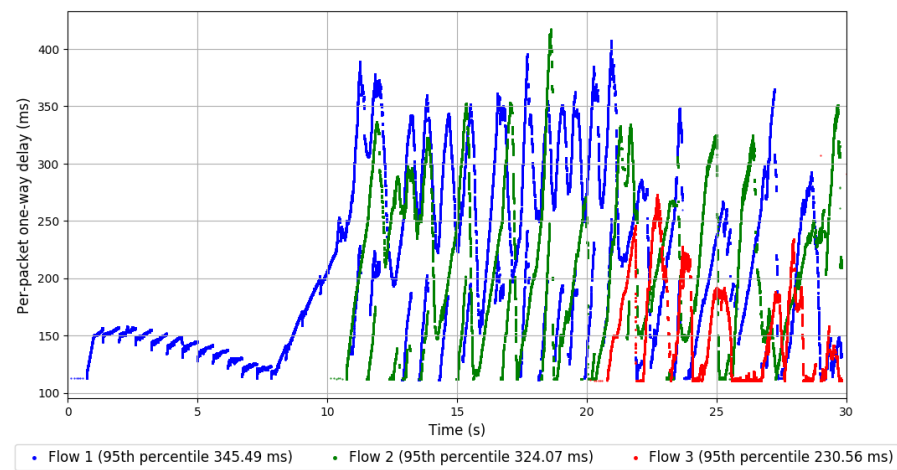
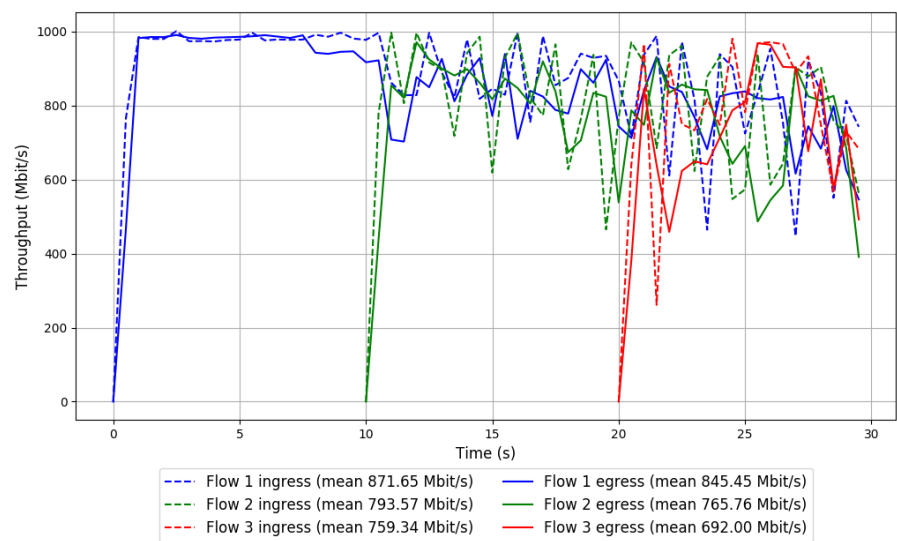
-- Flow 3:

Average throughput: 692.00 Mbit/s

95th percentile per-packet one-way delay: 230.563 ms

Loss rate: 9.27%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-17 00:48:01

End at: 2018-02-17 00:48:31

Below is generated by plot.py at 2018-02-17 06:50:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 1659.03 Mbit/s

95th percentile per-packet one-way delay: 288.949 ms

Loss rate: 5.51%

-- Flow 1:

Average throughput: 856.92 Mbit/s

95th percentile per-packet one-way delay: 196.501 ms

Loss rate: 4.99%

-- Flow 2:

Average throughput: 822.51 Mbit/s

95th percentile per-packet one-way delay: 334.531 ms

Loss rate: 6.11%

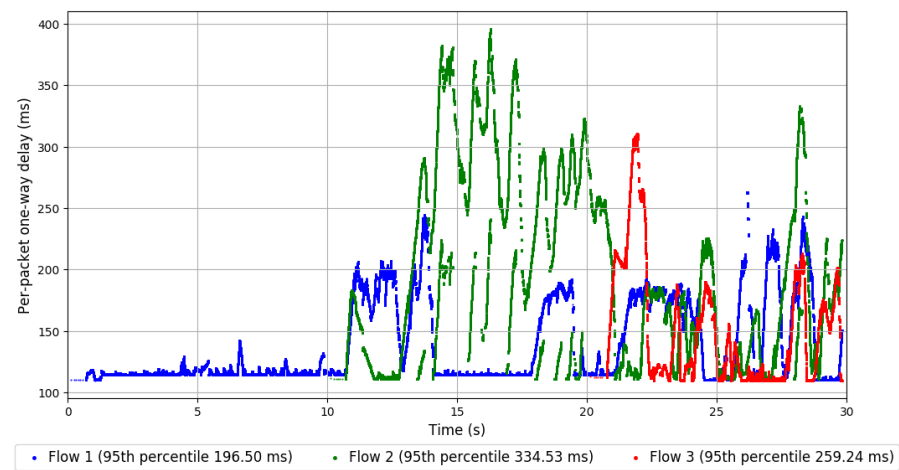
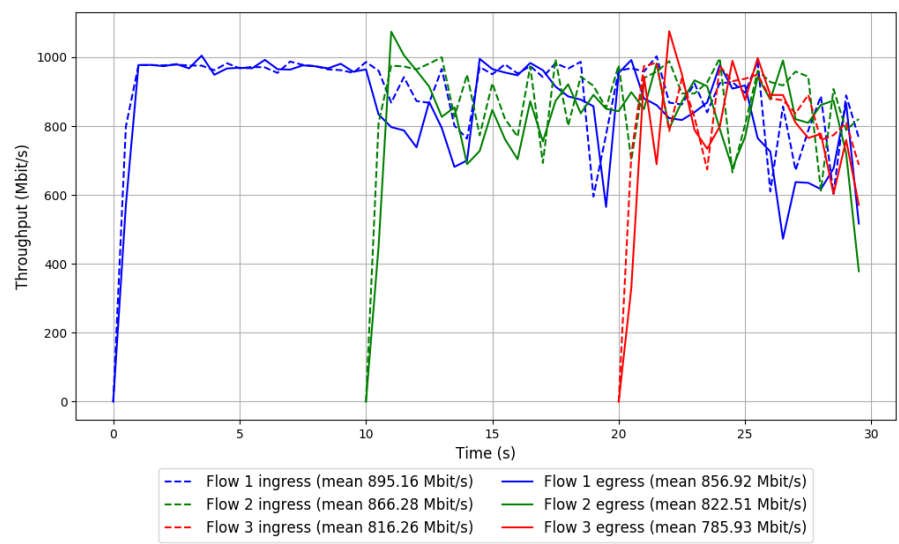
-- Flow 3:

Average throughput: 785.93 Mbit/s

95th percentile per-packet one-way delay: 259.243 ms

Loss rate: 5.93%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-17 01:07:19

End at: 2018-02-17 01:07:49

Below is generated by plot.py at 2018-02-17 06:59:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 1656.73 Mbit/s

95th percentile per-packet one-way delay: 274.873 ms

Loss rate: 5.28%

-- Flow 1:

Average throughput: 843.67 Mbit/s

95th percentile per-packet one-way delay: 300.861 ms

Loss rate: 5.99%

-- Flow 2:

Average throughput: 839.49 Mbit/s

95th percentile per-packet one-way delay: 195.734 ms

Loss rate: 4.33%

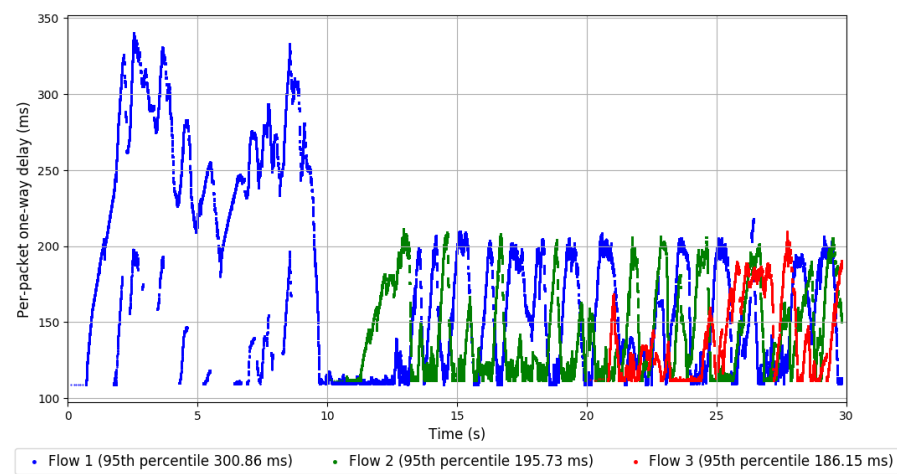
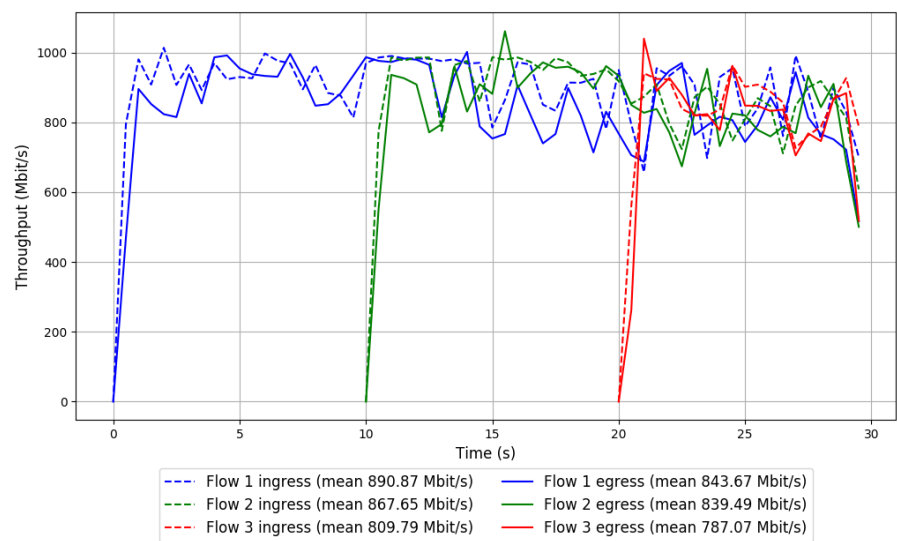
-- Flow 3:

Average throughput: 787.07 Mbit/s

95th percentile per-packet one-way delay: 186.154 ms

Loss rate: 4.99%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-17 01:27:00

End at: 2018-02-17 01:27:30

Below is generated by plot.py at 2018-02-17 07:15:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 1638.83 Mbit/s

95th percentile per-packet one-way delay: 298.537 ms

Loss rate: 5.76%

-- Flow 1:

Average throughput: 832.62 Mbit/s

95th percentile per-packet one-way delay: 310.116 ms

Loss rate: 5.40%

-- Flow 2:

Average throughput: 846.75 Mbit/s

95th percentile per-packet one-way delay: 205.764 ms

Loss rate: 6.25%

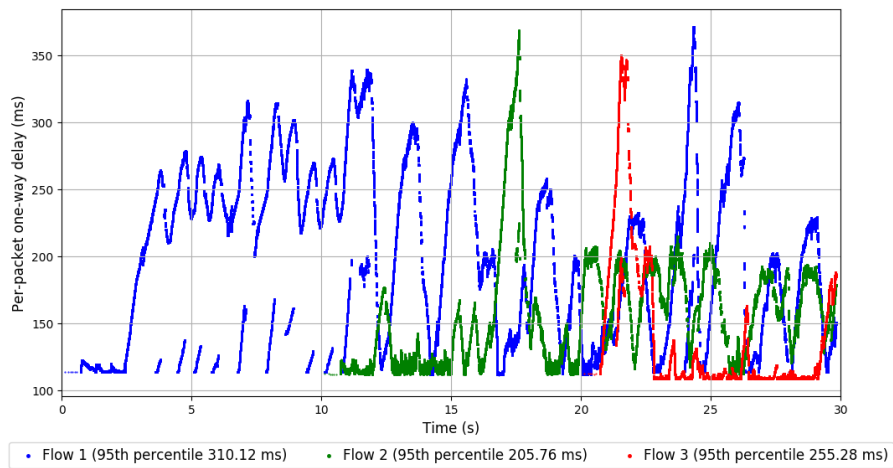
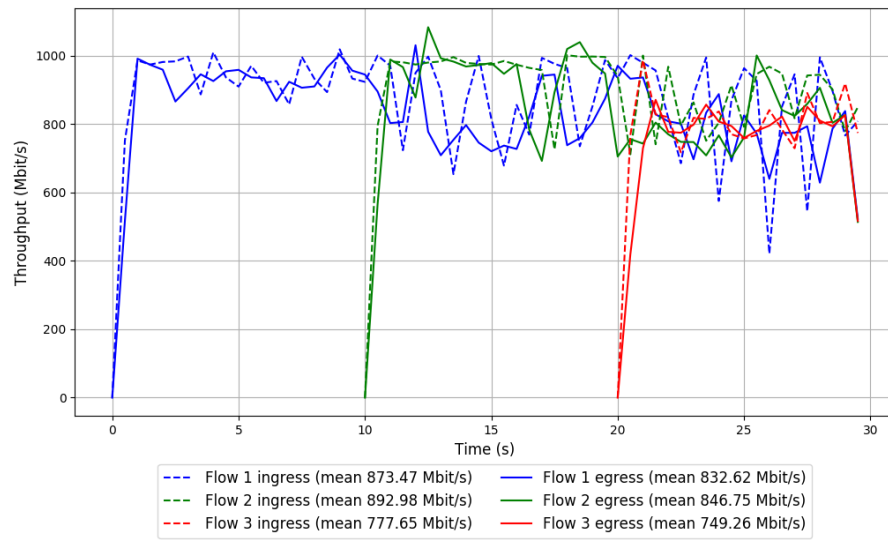
-- Flow 3:

Average throughput: 749.26 Mbit/s

95th percentile per-packet one-way delay: 255.275 ms

Loss rate: 5.85%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-02-17 01:46:37

End at: 2018-02-17 01:47:07

Below is generated by plot.py at 2018-02-17 07:16:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 1686.09 Mbit/s

95th percentile per-packet one-way delay: 256.958 ms

Loss rate: 2.46%

-- Flow 1:

Average throughput: 888.55 Mbit/s

95th percentile per-packet one-way delay: 187.075 ms

Loss rate: 2.27%

-- Flow 2:

Average throughput: 842.40 Mbit/s

95th percentile per-packet one-way delay: 272.440 ms

Loss rate: 1.71%

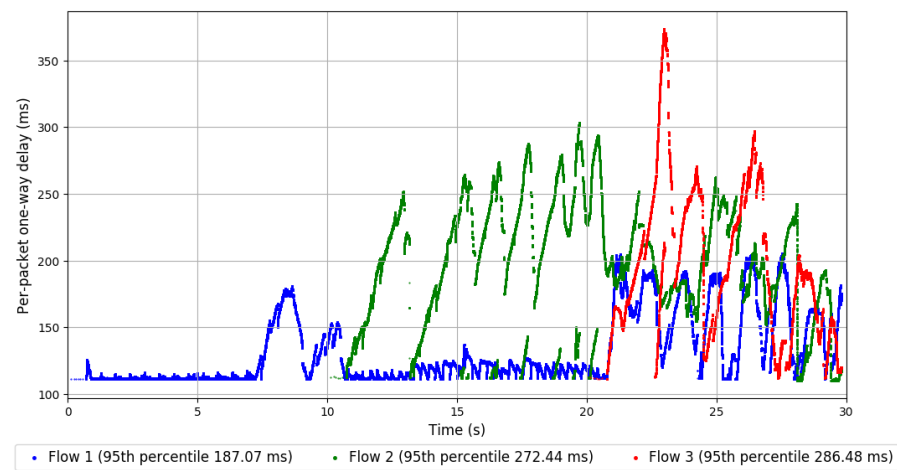
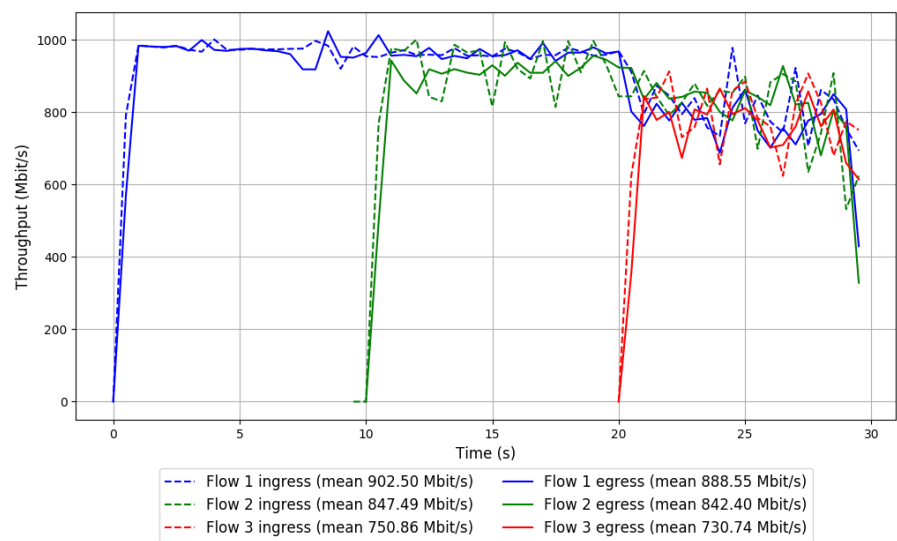
-- Flow 3:

Average throughput: 730.74 Mbit/s

95th percentile per-packet one-way delay: 286.483 ms

Loss rate: 4.86%

Run 10: Report of FillP — Data Link

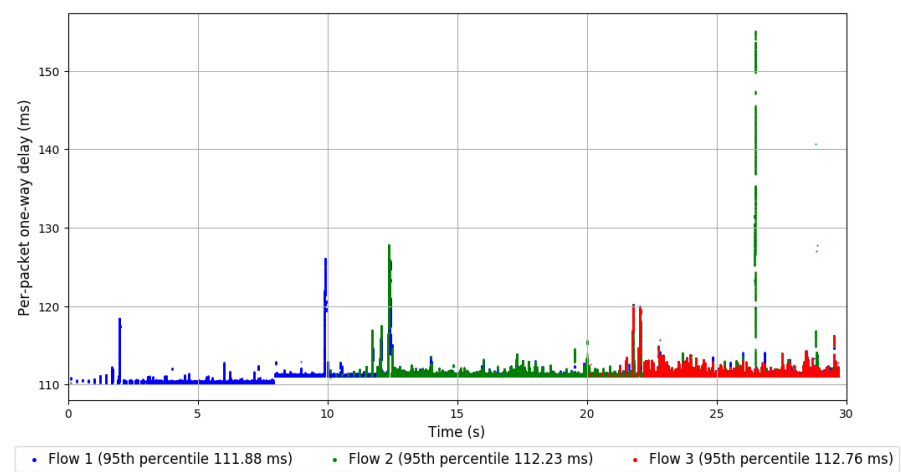
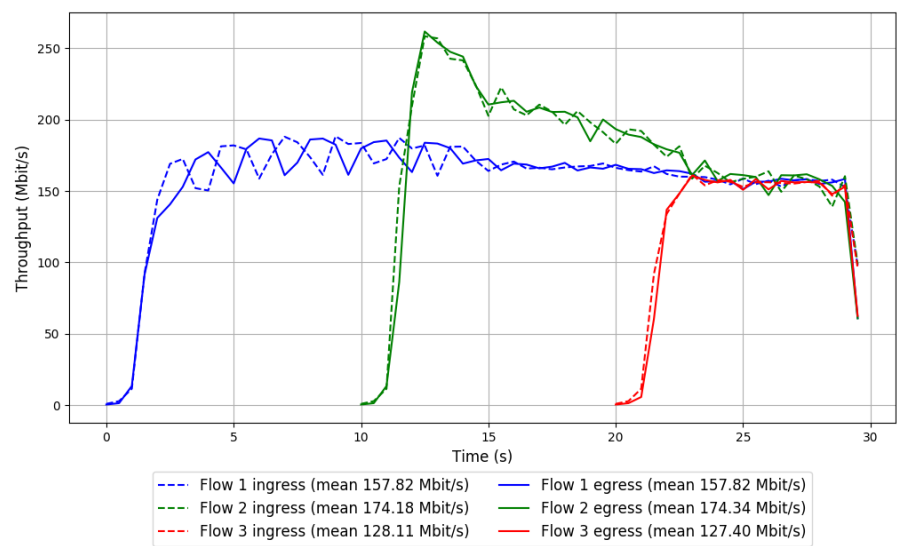


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-16 23:08:54
End at: 2018-02-16 23:09:24

# Below is generated by plot.py at 2018-02-17 07:16:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 314.26 Mbit/s
95th percentile per-packet one-way delay: 112.134 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 157.82 Mbit/s
95th percentile per-packet one-way delay: 111.881 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 174.34 Mbit/s
95th percentile per-packet one-way delay: 112.232 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 127.40 Mbit/s
95th percentile per-packet one-way delay: 112.759 ms
Loss rate: 2.82%
```

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

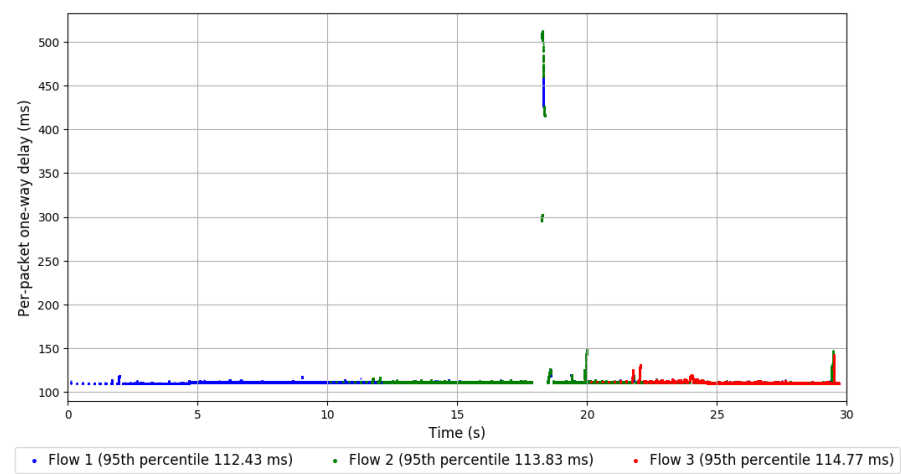
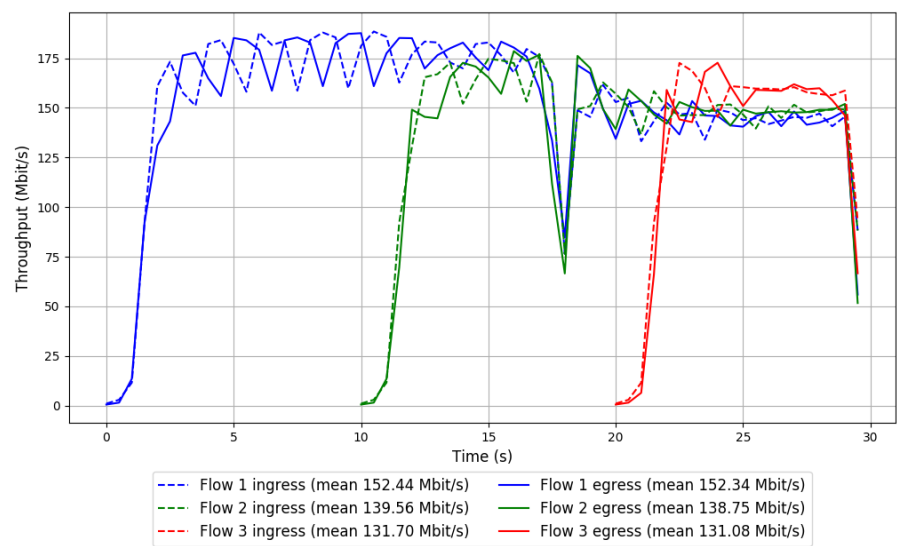


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-16 23:28:47
End at: 2018-02-16 23:29:17

# Below is generated by plot.py at 2018-02-17 07:16:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 286.31 Mbit/s
95th percentile per-packet one-way delay: 113.218 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 152.34 Mbit/s
95th percentile per-packet one-way delay: 112.426 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 138.75 Mbit/s
95th percentile per-packet one-way delay: 113.830 ms
Loss rate: 1.71%
-- Flow 3:
Average throughput: 131.08 Mbit/s
95th percentile per-packet one-way delay: 114.774 ms
Loss rate: 2.74%
```

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-16 23:48:38

End at: 2018-02-16 23:49:08

Below is generated by plot.py at 2018-02-17 07:16:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 318.93 Mbit/s

95th percentile per-packet one-way delay: 112.958 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 179.46 Mbit/s

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

Loss rate: 0.62%

-- Flow 2:

Average throughput: 143.56 Mbit/s

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

Loss rate: 1.22%

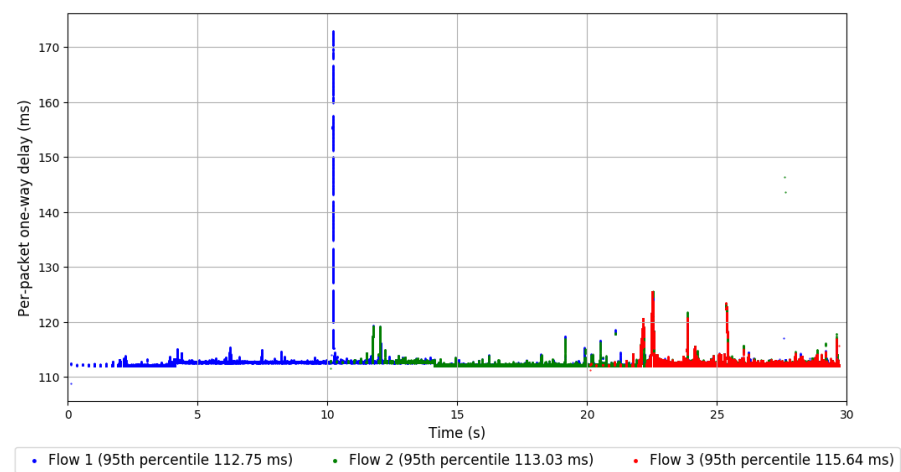
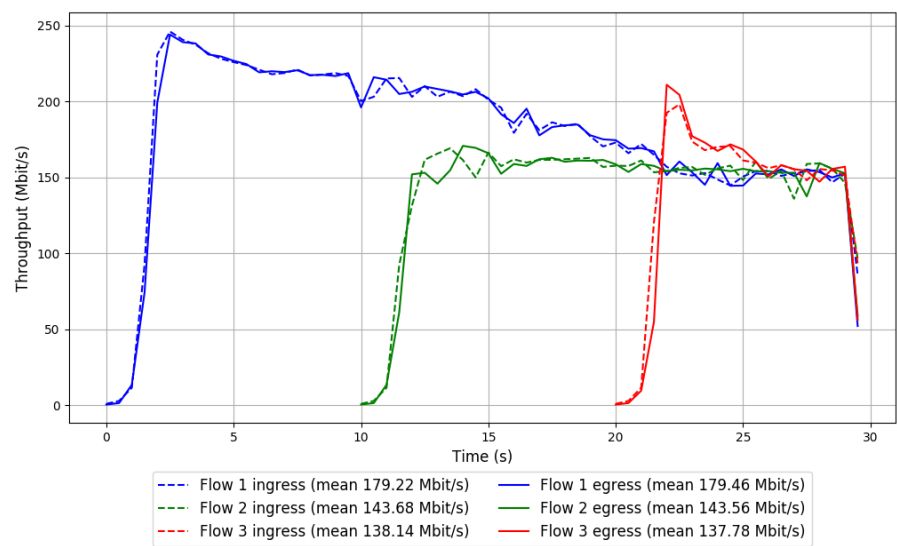
-- Flow 3:

Average throughput: 137.78 Mbit/s

95th percentile per-packet one-way delay: 115.643 ms

Loss rate: 2.51%

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



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-17 00:08:14

End at: 2018-02-17 00:08:44

Below is generated by plot.py at 2018-02-17 07:16:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 327.65 Mbit/s

95th percentile per-packet one-way delay: 112.616 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 175.20 Mbit/s

95th percentile per-packet one-way delay: 112.577 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 165.33 Mbit/s

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

Loss rate: 1.08%

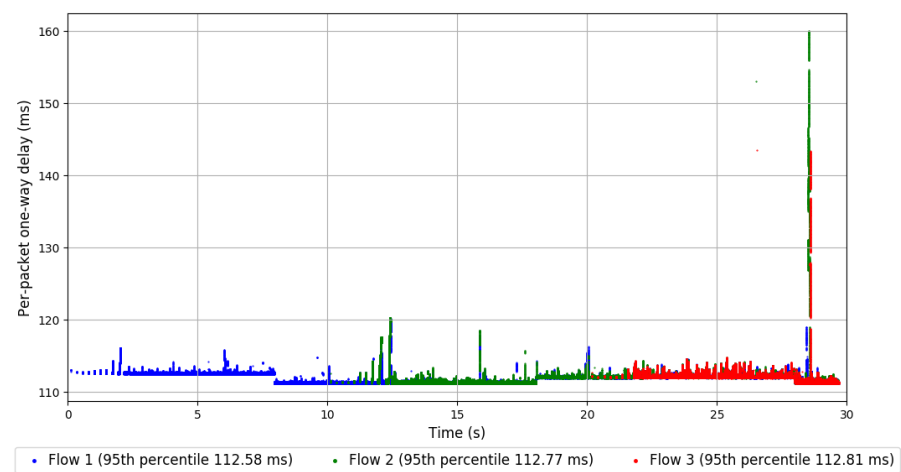
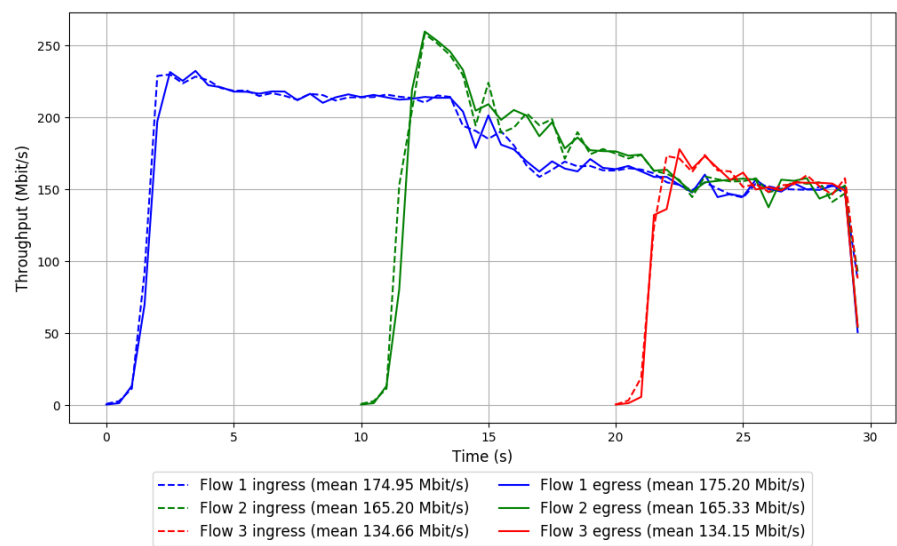
-- Flow 3:

Average throughput: 134.15 Mbit/s

95th percentile per-packet one-way delay: 112.809 ms

Loss rate: 2.66%

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



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-17 00:27:31

End at: 2018-02-17 00:28:01

Below is generated by plot.py at 2018-02-17 07:16:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 335.30 Mbit/s

95th percentile per-packet one-way delay: 127.377 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 186.57 Mbit/s

95th percentile per-packet one-way delay: 117.197 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 159.41 Mbit/s

95th percentile per-packet one-way delay: 129.270 ms

Loss rate: 1.15%

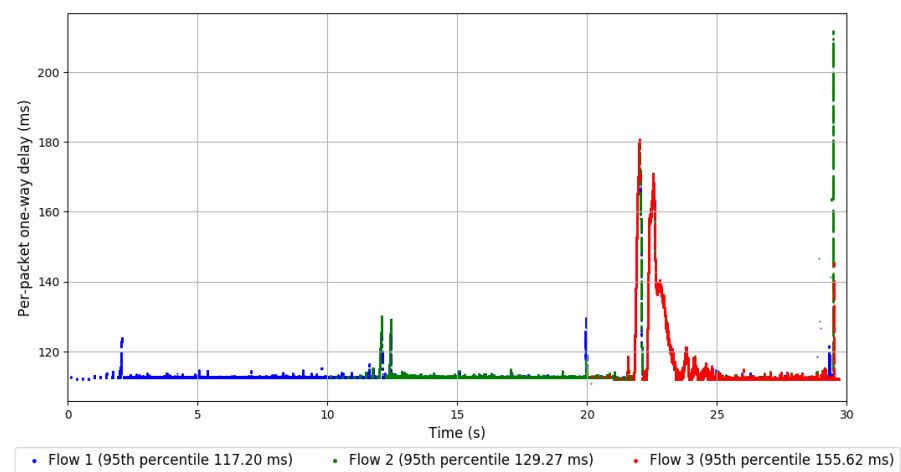
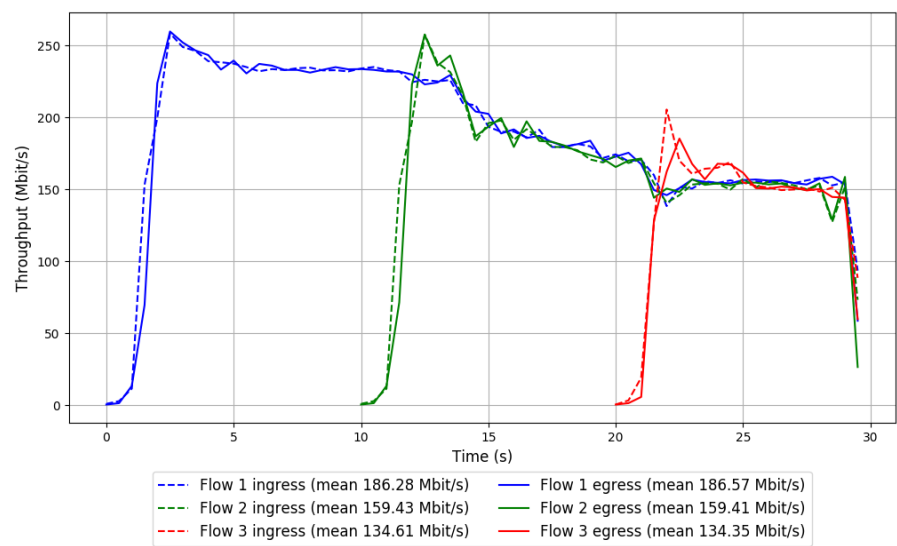
-- Flow 3:

Average throughput: 134.35 Mbit/s

95th percentile per-packet one-way delay: 155.625 ms

Loss rate: 2.52%

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



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-17 00:46:52

End at: 2018-02-17 00:47:22

Below is generated by plot.py at 2018-02-17 07:16:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 287.39 Mbit/s

95th percentile per-packet one-way delay: 112.666 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 149.24 Mbit/s

95th percentile per-packet one-way delay: 112.107 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 145.43 Mbit/s

95th percentile per-packet one-way delay: 112.789 ms

Loss rate: 1.15%

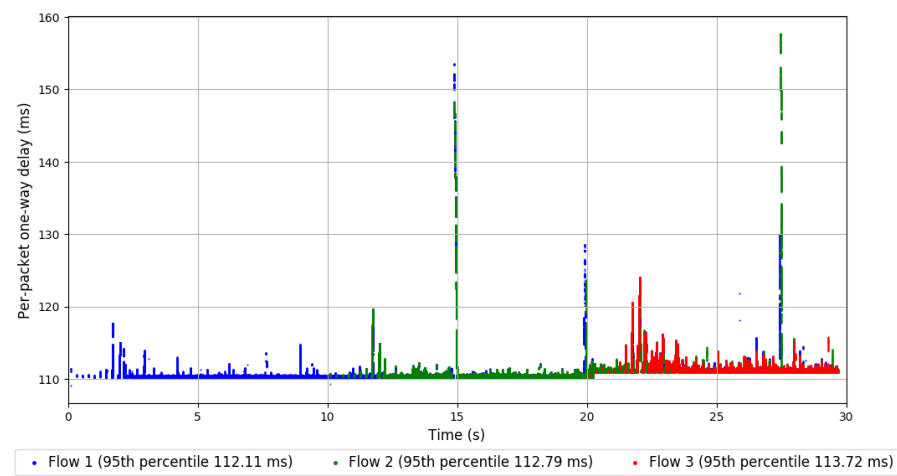
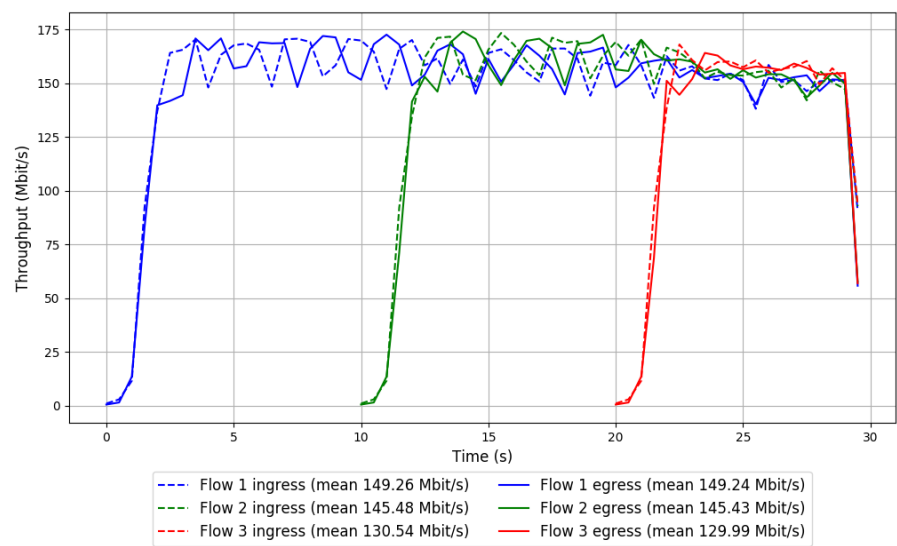
-- Flow 3:

Average throughput: 129.99 Mbit/s

95th percentile per-packet one-way delay: 113.725 ms

Loss rate: 2.68%

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



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-17 01:06:10

End at: 2018-02-17 01:06:40

Below is generated by plot.py at 2018-02-17 07:16:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 293.66 Mbit/s

95th percentile per-packet one-way delay: 112.425 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 150.37 Mbit/s

95th percentile per-packet one-way delay: 111.987 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 146.75 Mbit/s

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

Loss rate: 1.20%

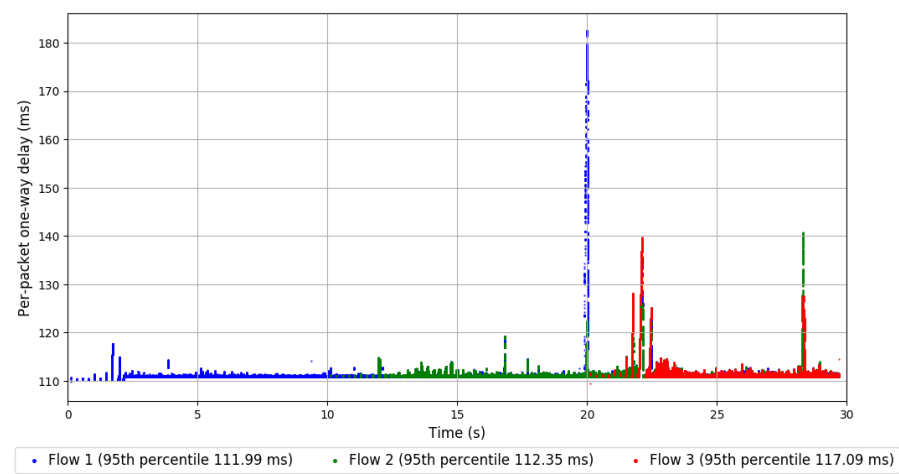
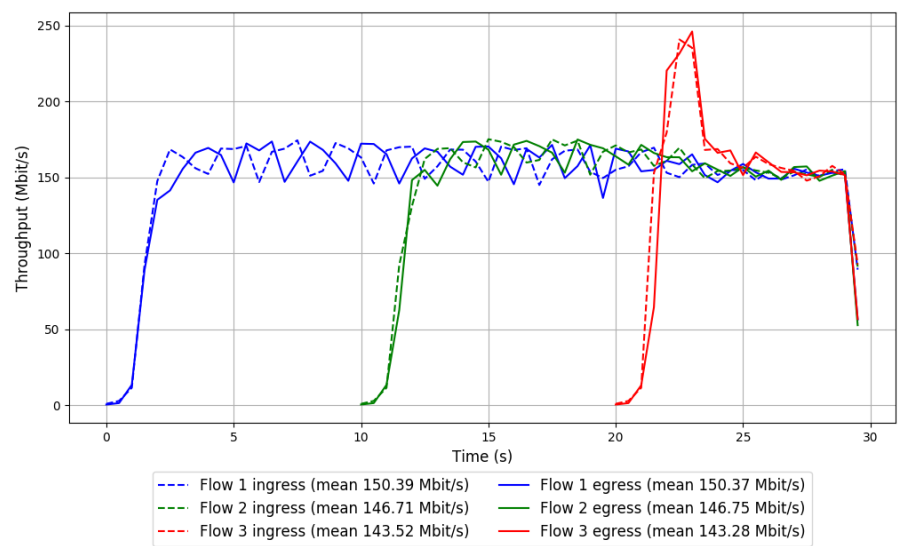
-- Flow 3:

Average throughput: 143.28 Mbit/s

95th percentile per-packet one-way delay: 117.095 ms

Loss rate: 2.50%

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



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-17 01:25:49

End at: 2018-02-17 01:26:19

Below is generated by plot.py at 2018-02-17 07:16:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 319.42 Mbit/s

95th percentile per-packet one-way delay: 111.286 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 185.75 Mbit/s

95th percentile per-packet one-way delay: 111.137 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 141.26 Mbit/s

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

Loss rate: 1.21%

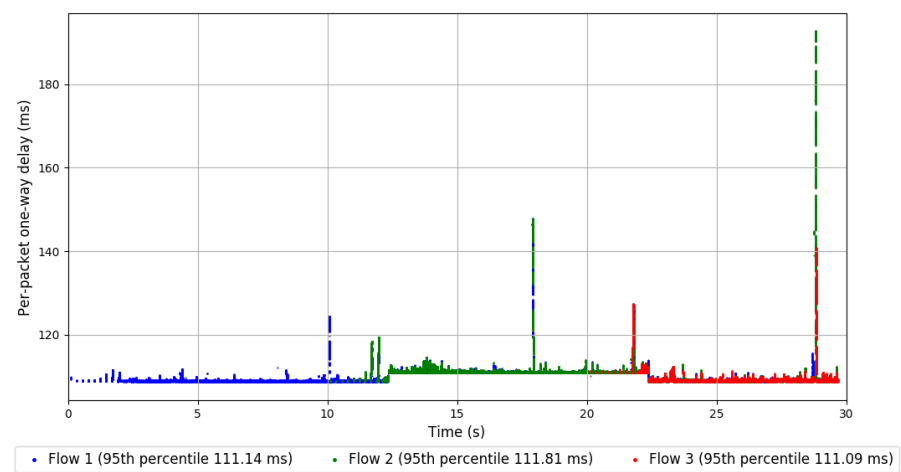
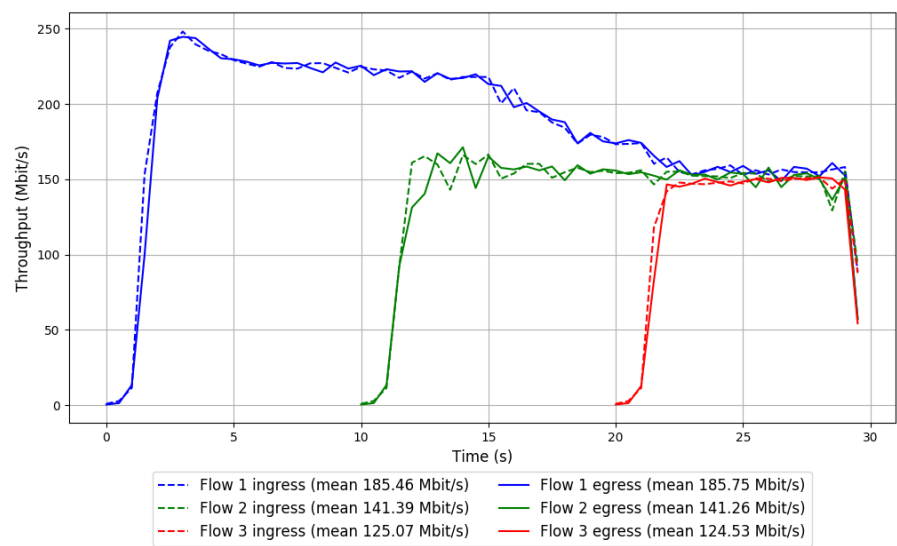
-- Flow 3:

Average throughput: 124.53 Mbit/s

95th percentile per-packet one-way delay: 111.089 ms

Loss rate: 2.71%

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



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-17 01:45:27

End at: 2018-02-17 01:45:57

Below is generated by plot.py at 2018-02-17 07:16:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 304.04 Mbit/s

95th percentile per-packet one-way delay: 115.631 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 159.59 Mbit/s

95th percentile per-packet one-way delay: 114.229 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 148.67 Mbit/s

95th percentile per-packet one-way delay: 115.227 ms

Loss rate: 1.20%

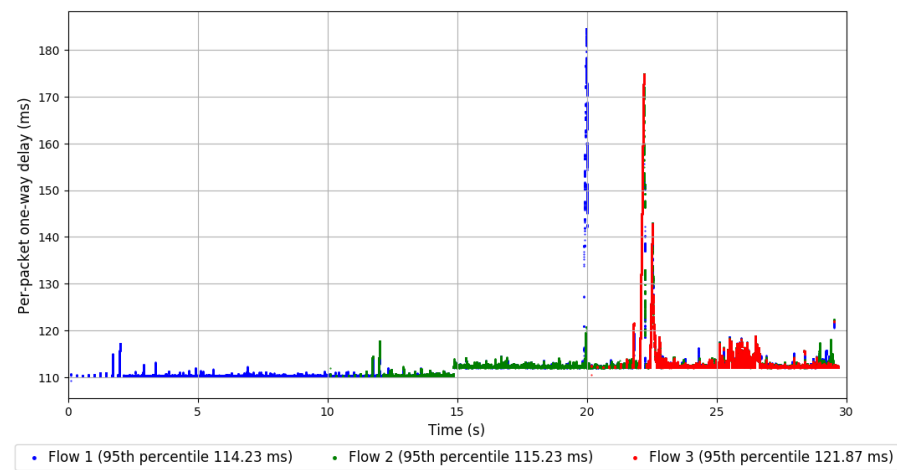
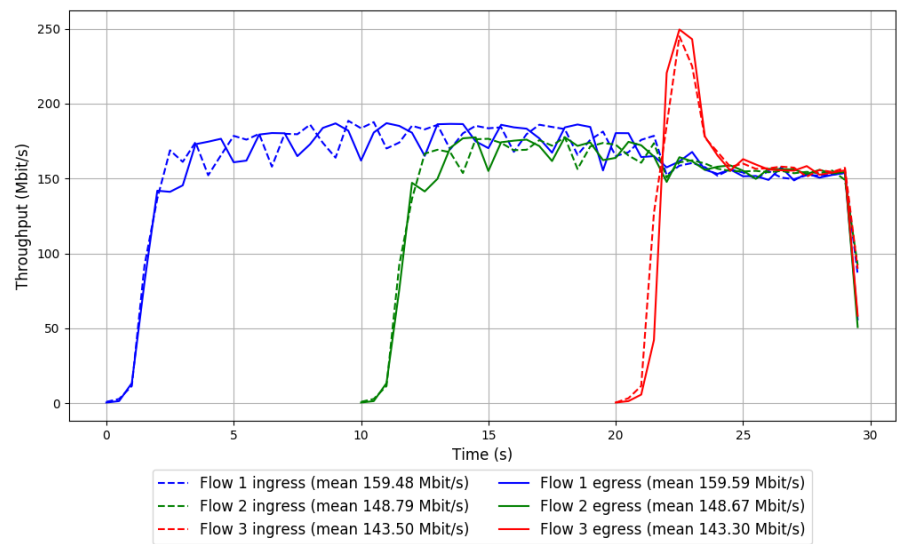
-- Flow 3:

Average throughput: 143.30 Mbit/s

95th percentile per-packet one-way delay: 121.871 ms

Loss rate: 2.42%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

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

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

Below is generated by plot.py at 2018-02-17 07:16:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 319.31 Mbit/s

95th percentile per-packet one-way delay: 112.458 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 184.45 Mbit/s

95th percentile per-packet one-way delay: 112.396 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 142.03 Mbit/s

95th percentile per-packet one-way delay: 112.663 ms

Loss rate: 1.21%

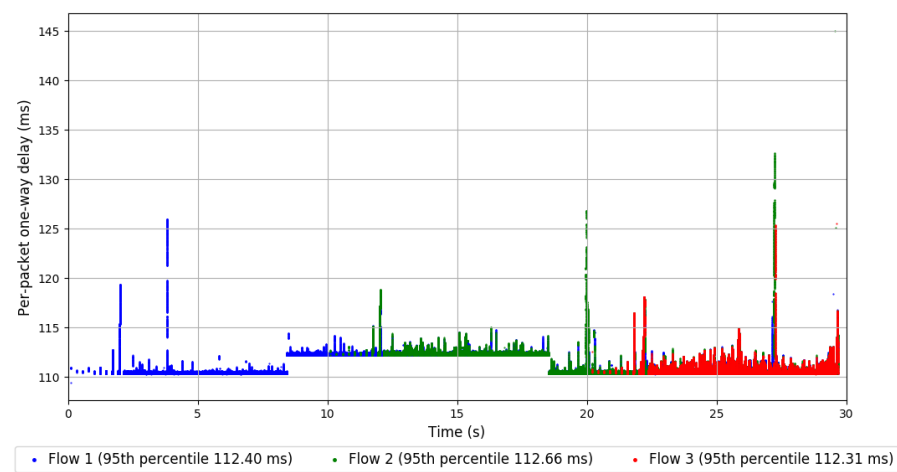
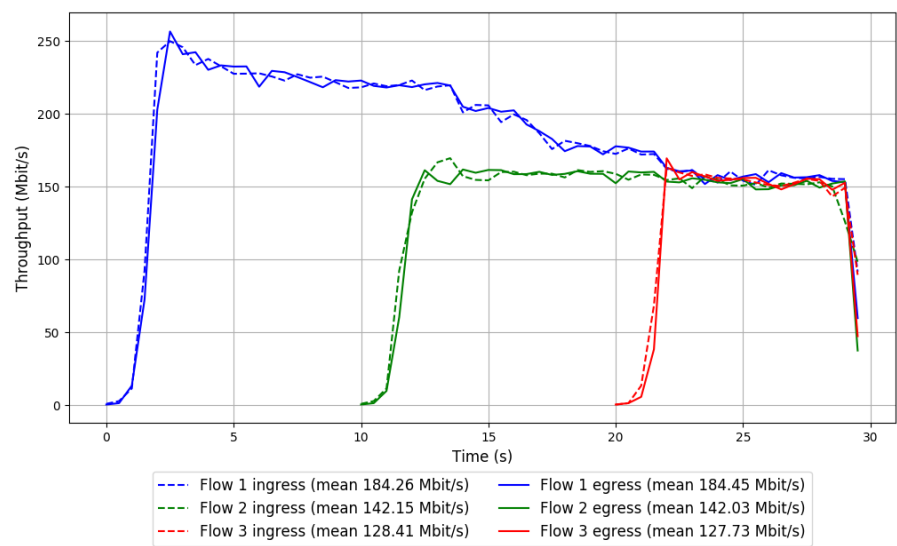
-- Flow 3:

Average throughput: 127.73 Mbit/s

95th percentile per-packet one-way delay: 112.313 ms

Loss rate: 2.77%

Run 10: Report of Indigo-1-32 — Data Link

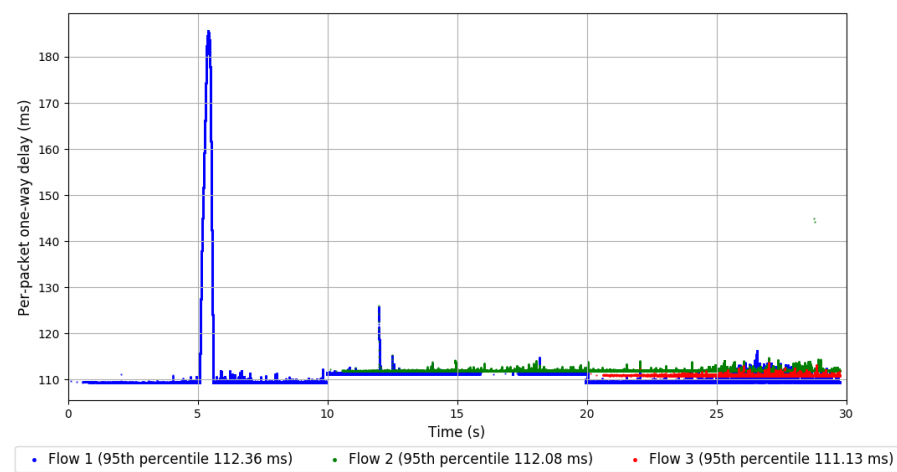
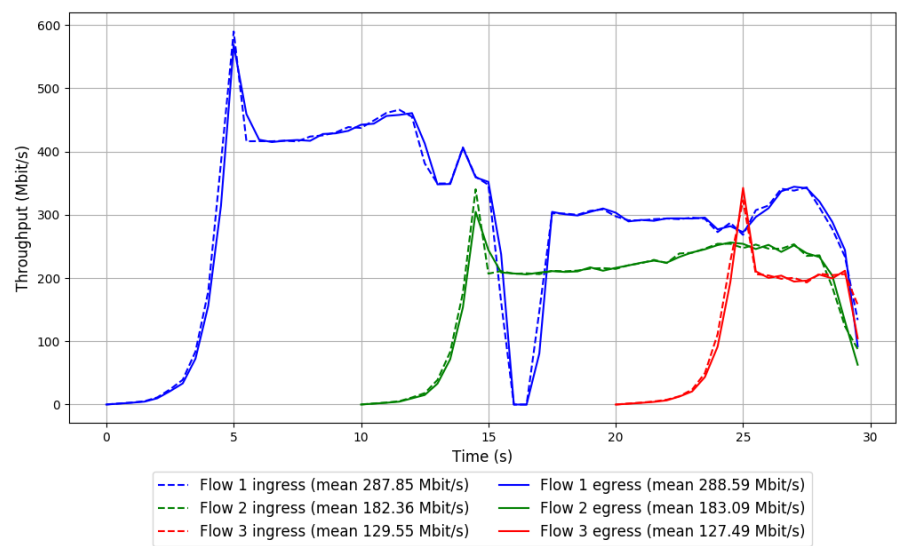


```
Run 1: Statistics of Vivace-latency

Start at: 2018-02-16 22:54:42
End at: 2018-02-16 22:55:12

# Below is generated by plot.py at 2018-02-17 07:16:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 451.07 Mbit/s
95th percentile per-packet one-way delay: 112.060 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 288.59 Mbit/s
95th percentile per-packet one-way delay: 112.362 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 183.09 Mbit/s
95th percentile per-packet one-way delay: 112.075 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 127.49 Mbit/s
95th percentile per-packet one-way delay: 111.129 ms
Loss rate: 3.83%
```


Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-16 23:15:00

End at: 2018-02-16 23:15:30

Below is generated by plot.py at 2018-02-17 07:16:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 487.37 Mbit/s

95th percentile per-packet one-way delay: 110.885 ms

Loss rate: 1.51%

-- Flow 1:

Average throughput: 318.32 Mbit/s

95th percentile per-packet one-way delay: 113.062 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 194.78 Mbit/s

95th percentile per-packet one-way delay: 110.805 ms

Loss rate: 1.78%

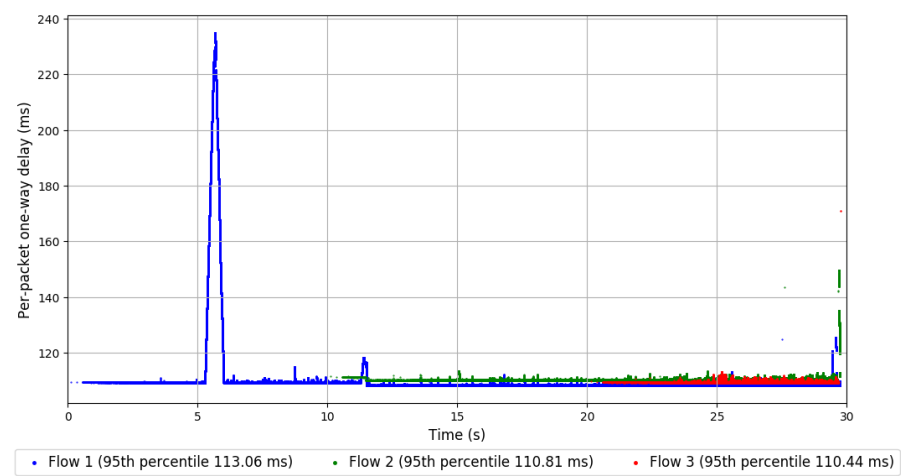
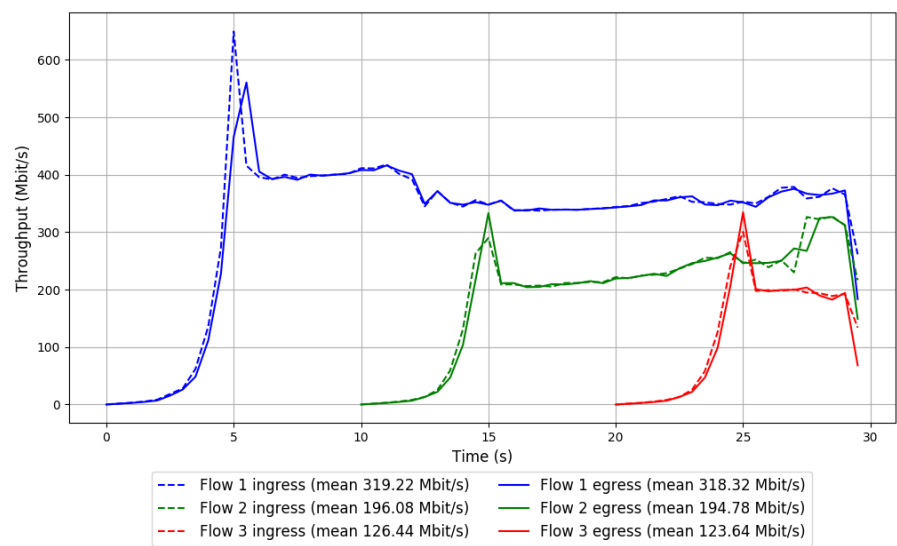
-- Flow 3:

Average throughput: 123.64 Mbit/s

95th percentile per-packet one-way delay: 110.441 ms

Loss rate: 4.41%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-16 23:34:55

End at: 2018-02-16 23:35:25

Below is generated by plot.py at 2018-02-17 07:16:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 446.82 Mbit/s

95th percentile per-packet one-way delay: 113.647 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 336.11 Mbit/s

95th percentile per-packet one-way delay: 119.799 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 106.58 Mbit/s

95th percentile per-packet one-way delay: 110.590 ms

Loss rate: 3.64%

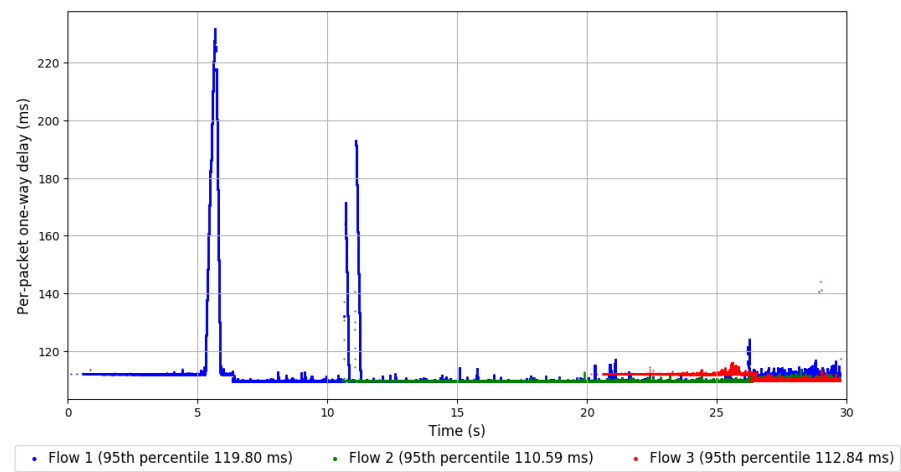
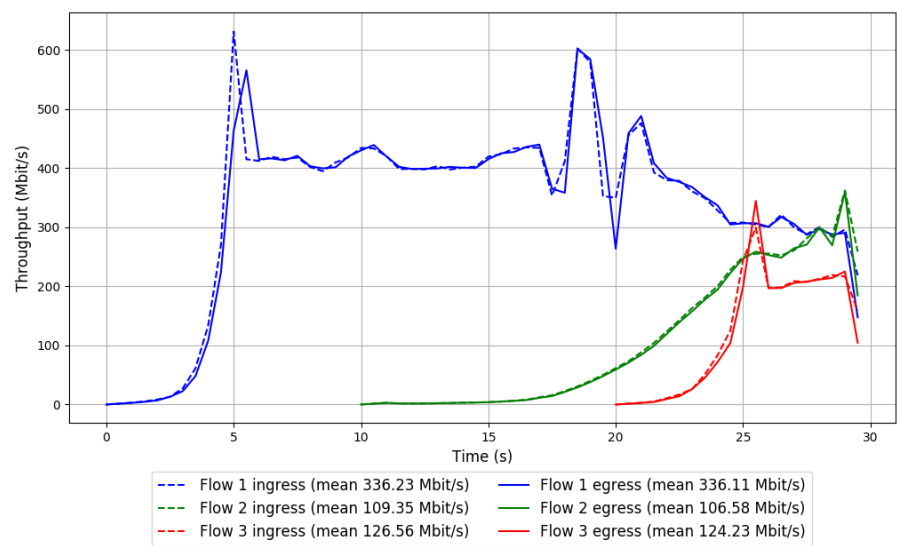
-- Flow 3:

Average throughput: 124.23 Mbit/s

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

Loss rate: 4.02%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-16 23:54:43

End at: 2018-02-16 23:55:13

Below is generated by plot.py at 2018-02-17 07:16:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 397.10 Mbit/s

95th percentile per-packet one-way delay: 111.563 ms

Loss rate: 1.38%

-- Flow 1:

Average throughput: 224.95 Mbit/s

95th percentile per-packet one-way delay: 111.049 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 198.97 Mbit/s

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

Loss rate: 1.95%

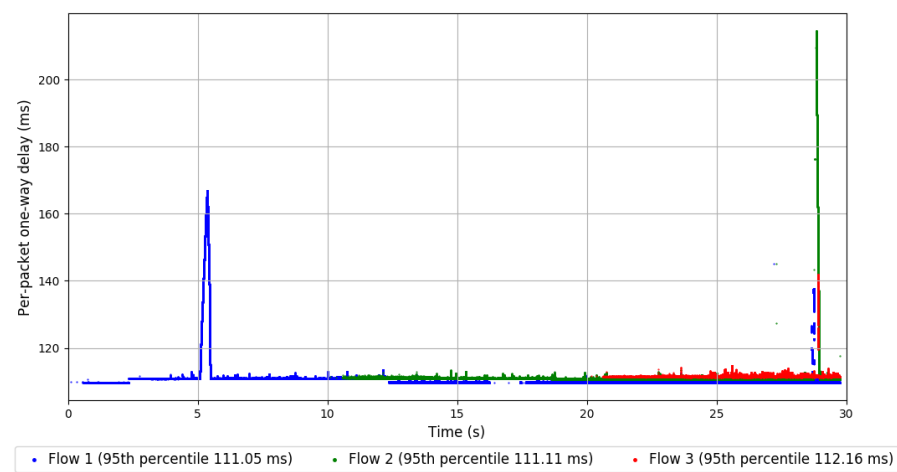
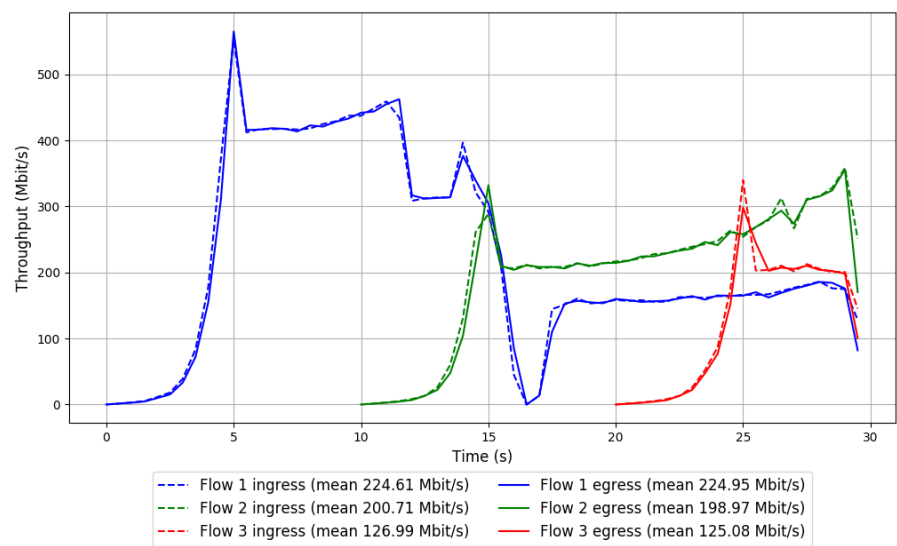
-- Flow 3:

Average throughput: 125.08 Mbit/s

95th percentile per-packet one-way delay: 112.162 ms

Loss rate: 3.76%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-17 00:14:08

End at: 2018-02-17 00:14:38

Below is generated by plot.py at 2018-02-17 07:16:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 426.59 Mbit/s

95th percentile per-packet one-way delay: 112.783 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 273.09 Mbit/s

95th percentile per-packet one-way delay: 117.681 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 184.71 Mbit/s

95th percentile per-packet one-way delay: 112.713 ms

Loss rate: 1.48%

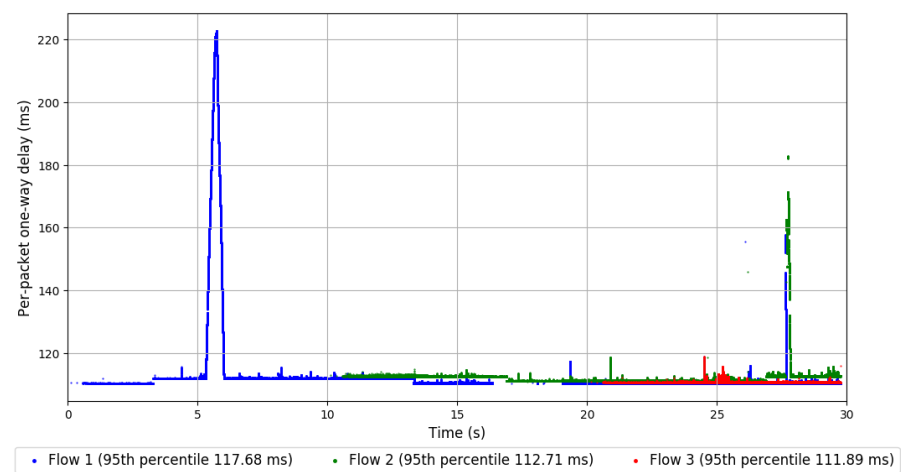
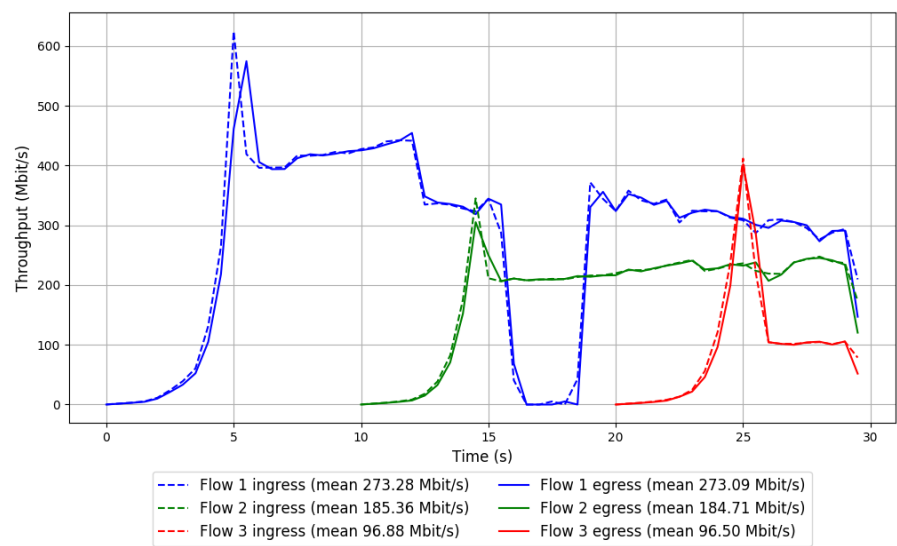
-- Flow 3:

Average throughput: 96.50 Mbit/s

95th percentile per-packet one-way delay: 111.895 ms

Loss rate: 2.61%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-17 00:33:10

End at: 2018-02-17 00:33:40

Below is generated by plot.py at 2018-02-17 07:16:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 562.05 Mbit/s

95th percentile per-packet one-way delay: 119.917 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 330.58 Mbit/s

95th percentile per-packet one-way delay: 114.355 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 284.40 Mbit/s

95th percentile per-packet one-way delay: 144.452 ms

Loss rate: 1.46%

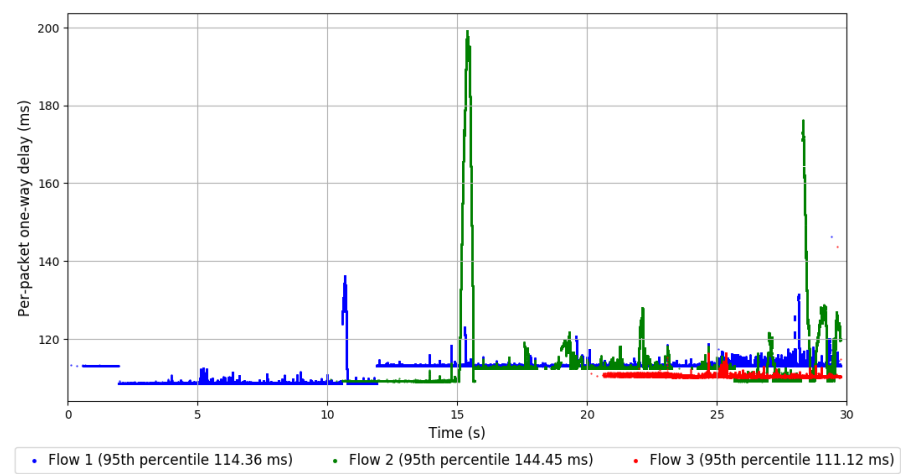
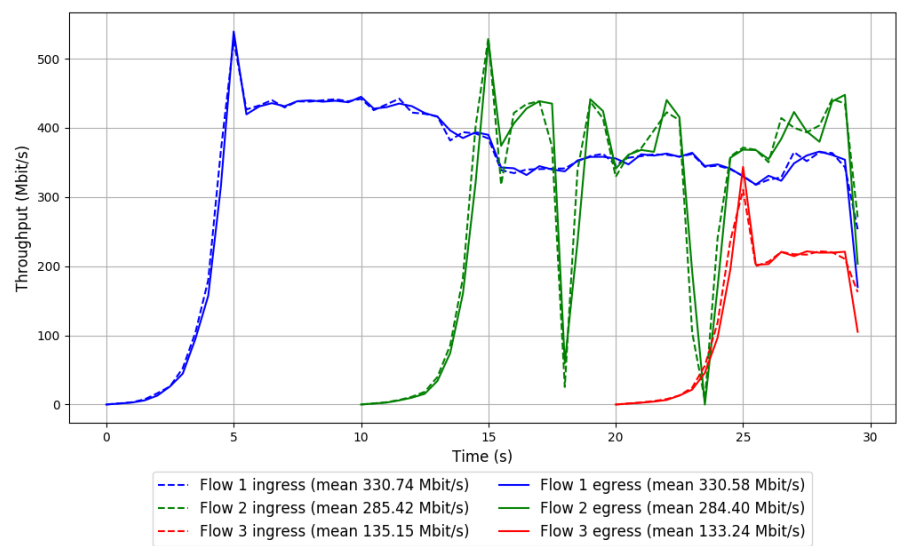
-- Flow 3:

Average throughput: 133.24 Mbit/s

95th percentile per-packet one-way delay: 111.116 ms

Loss rate: 3.60%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-17 00:52:37

End at: 2018-02-17 00:53:07

Below is generated by plot.py at 2018-02-17 07:16:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 432.12 Mbit/s

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

Loss rate: 1.56%

-- Flow 1:

Average throughput: 249.72 Mbit/s

95th percentile per-packet one-way delay: 115.201 ms

Loss rate: 1.13%

-- Flow 2:

Average throughput: 213.17 Mbit/s

95th percentile per-packet one-way delay: 110.627 ms

Loss rate: 1.63%

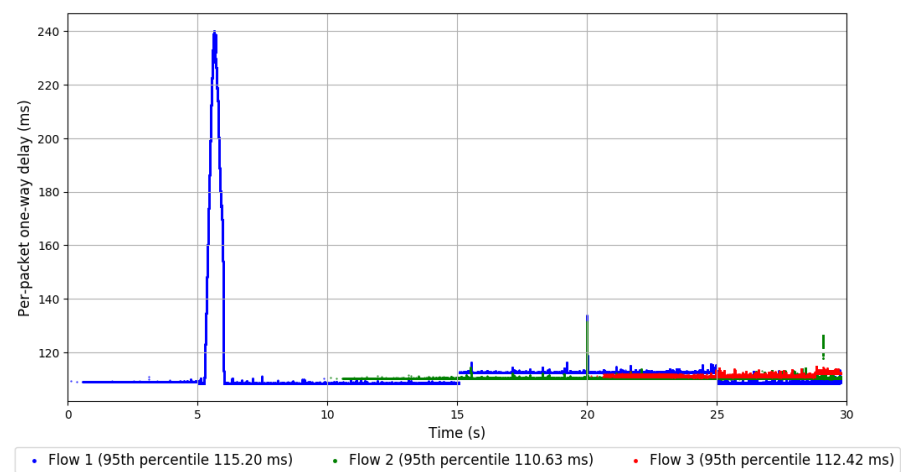
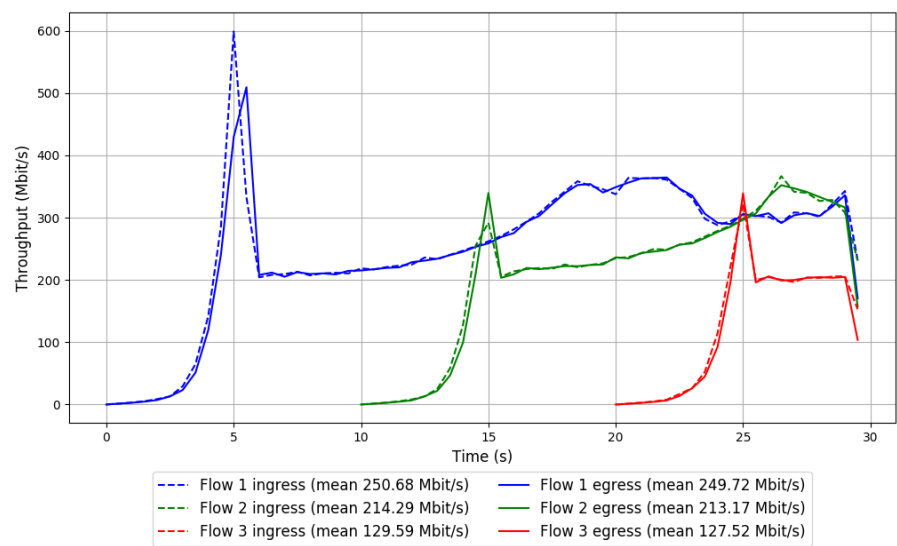
-- Flow 3:

Average throughput: 127.52 Mbit/s

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

Loss rate: 3.81%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-17 01:12:11

End at: 2018-02-17 01:12:41

Below is generated by plot.py at 2018-02-17 07:16:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 453.68 Mbit/s

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

Loss rate: 1.09%

-- Flow 1:

Average throughput: 287.08 Mbit/s

95th percentile per-packet one-way delay: 113.082 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 185.34 Mbit/s

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

Loss rate: 1.24%

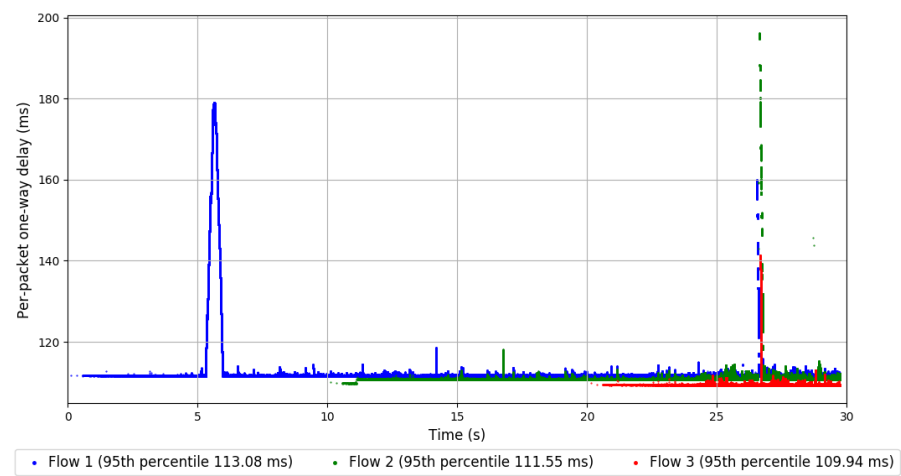
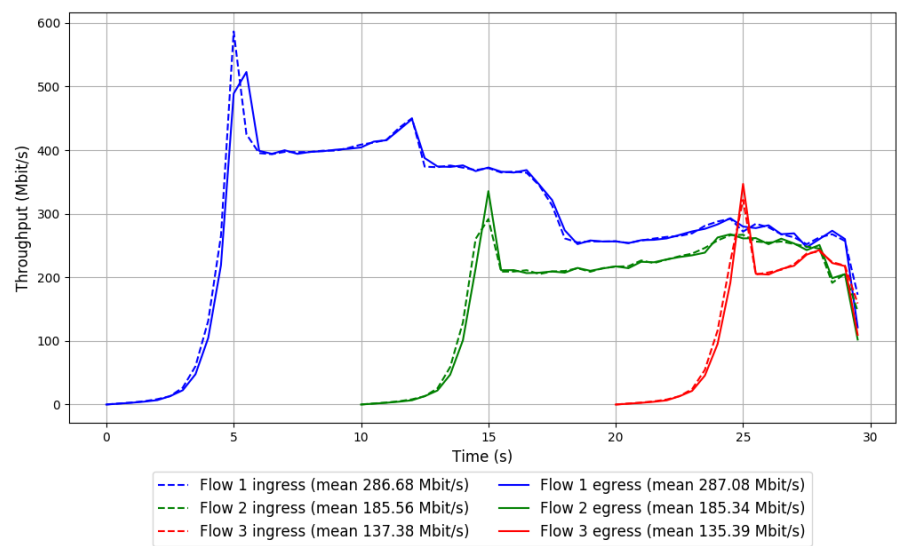
-- Flow 3:

Average throughput: 135.39 Mbit/s

95th percentile per-packet one-way delay: 109.945 ms

Loss rate: 3.69%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-17 01:31:50

End at: 2018-02-17 01:32:20

Below is generated by plot.py at 2018-02-17 07:16:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 435.49 Mbit/s

95th percentile per-packet one-way delay: 112.086 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 278.36 Mbit/s

95th percentile per-packet one-way delay: 111.940 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 174.47 Mbit/s

95th percentile per-packet one-way delay: 111.905 ms

Loss rate: 1.39%

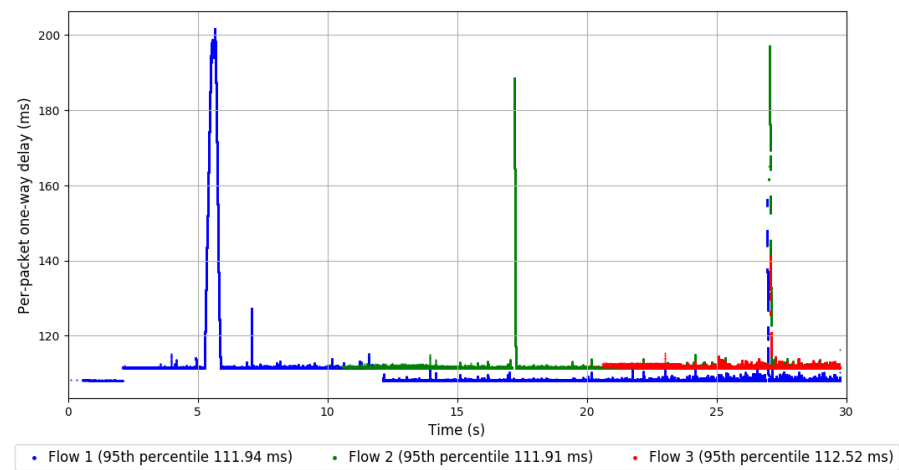
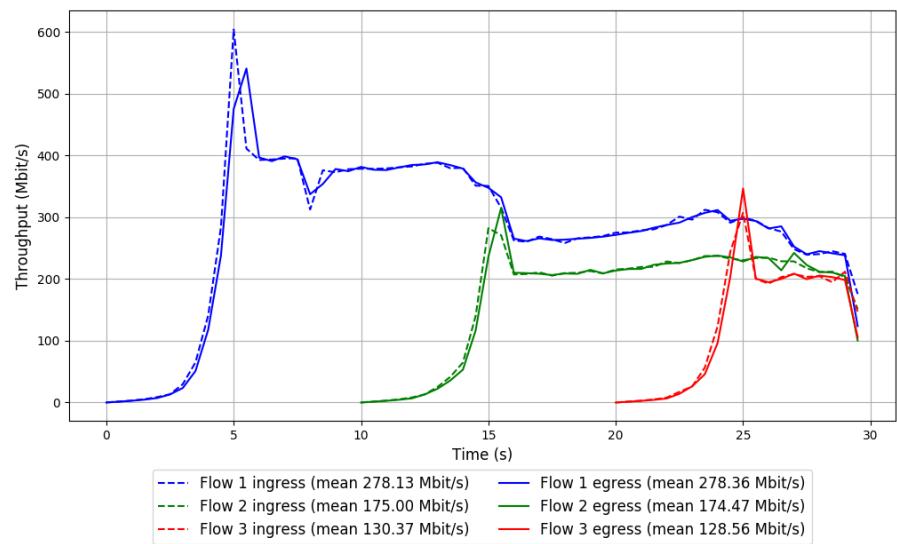
-- Flow 3:

Average throughput: 128.56 Mbit/s

95th percentile per-packet one-way delay: 112.517 ms

Loss rate: 3.63%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-17 01:51:27

End at: 2018-02-17 01:51:57

Below is generated by plot.py at 2018-02-17 07:16:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 435.75 Mbit/s

95th percentile per-packet one-way delay: 111.905 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 272.09 Mbit/s

95th percentile per-packet one-way delay: 112.475 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 185.74 Mbit/s

95th percentile per-packet one-way delay: 110.264 ms

Loss rate: 1.48%

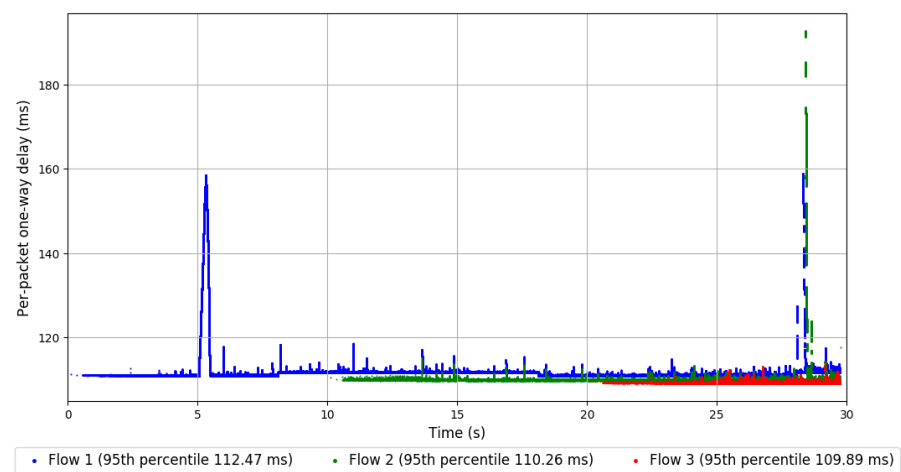
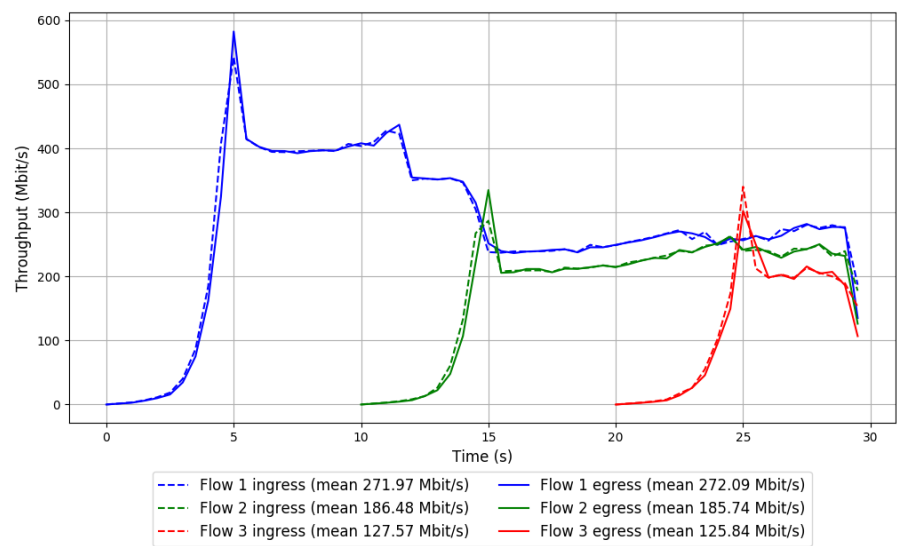
-- Flow 3:

Average throughput: 125.84 Mbit/s

95th percentile per-packet one-way delay: 109.886 ms

Loss rate: 3.59%

Run 10: Report of Vivace-latency — Data Link

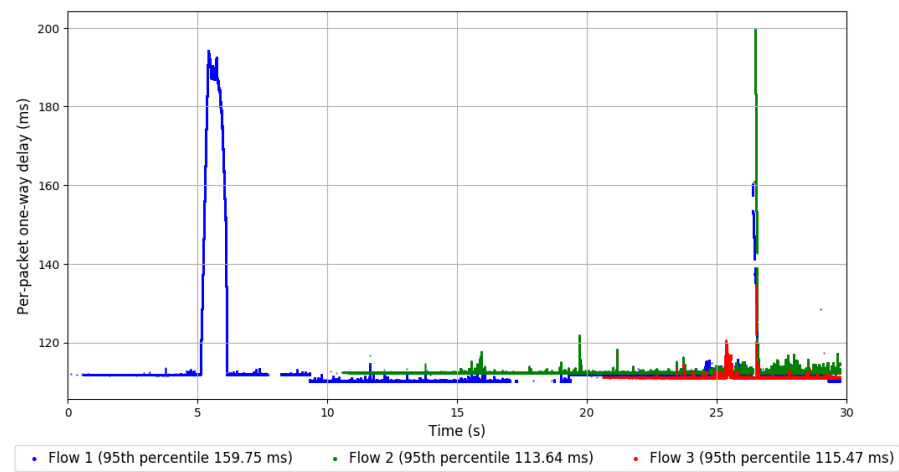
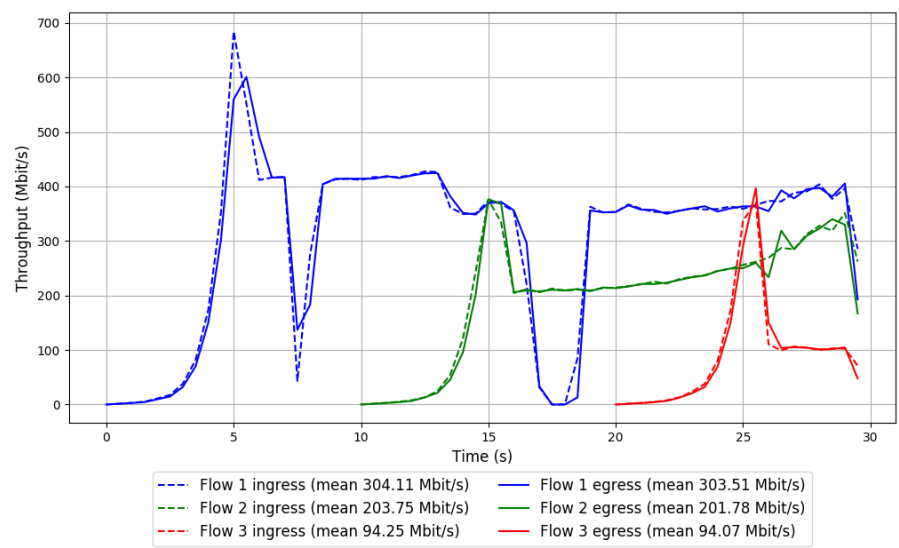


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-16 22:57:46
End at: 2018-02-16 22:58:16

# Below is generated by plot.py at 2018-02-17 07:16:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 467.61 Mbit/s
95th percentile per-packet one-way delay: 127.383 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 303.51 Mbit/s
95th percentile per-packet one-way delay: 159.753 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 201.78 Mbit/s
95th percentile per-packet one-way delay: 113.637 ms
Loss rate: 2.09%
-- Flow 3:
Average throughput: 94.07 Mbit/s
95th percentile per-packet one-way delay: 115.468 ms
Loss rate: 2.47%
```

Run 1: Report of Vivace-loss — Data Link

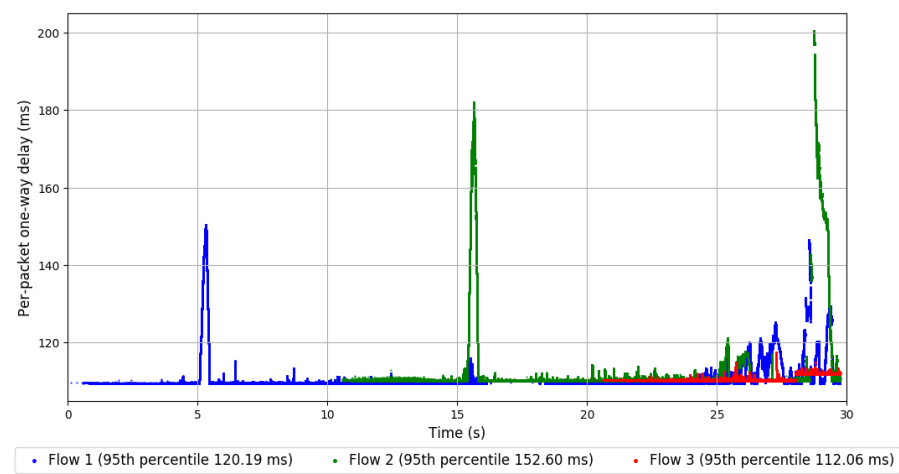
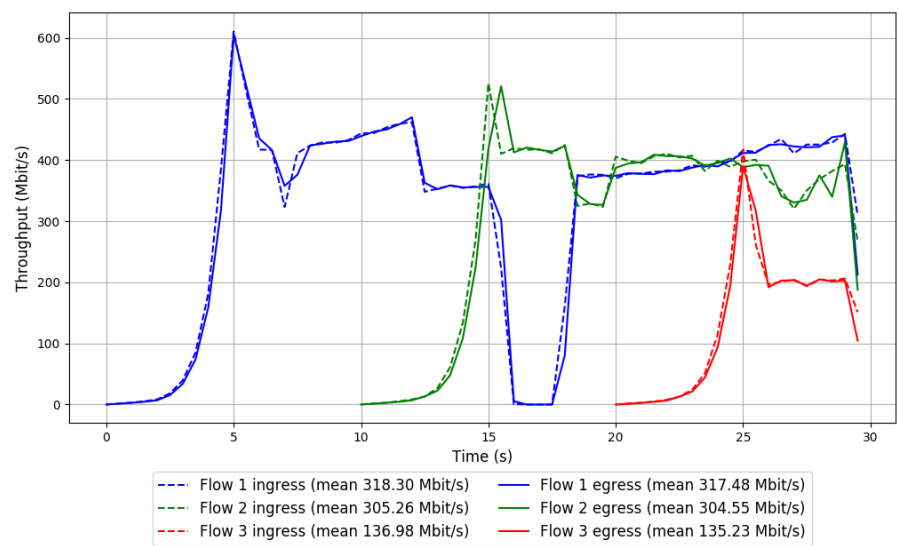


```
Run 2: Statistics of Vivace-loss

Start at: 2018-02-16 23:18:07
End at: 2018-02-16 23:18:37

# Below is generated by plot.py at 2018-02-17 07:20:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 562.94 Mbit/s
95th percentile per-packet one-way delay: 124.377 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 317.48 Mbit/s
95th percentile per-packet one-way delay: 120.193 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 304.55 Mbit/s
95th percentile per-packet one-way delay: 152.597 ms
Loss rate: 1.35%
-- Flow 3:
Average throughput: 135.23 Mbit/s
95th percentile per-packet one-way delay: 112.055 ms
Loss rate: 3.52%
```

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-16 23:38:00

End at: 2018-02-16 23:38:30

Below is generated by plot.py at 2018-02-17 07:20:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 565.88 Mbit/s

95th percentile per-packet one-way delay: 122.868 ms

Loss rate: 1.47%

-- Flow 1:

Average throughput: 323.59 Mbit/s

95th percentile per-packet one-way delay: 126.953 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 300.41 Mbit/s

95th percentile per-packet one-way delay: 115.922 ms

Loss rate: 1.57%

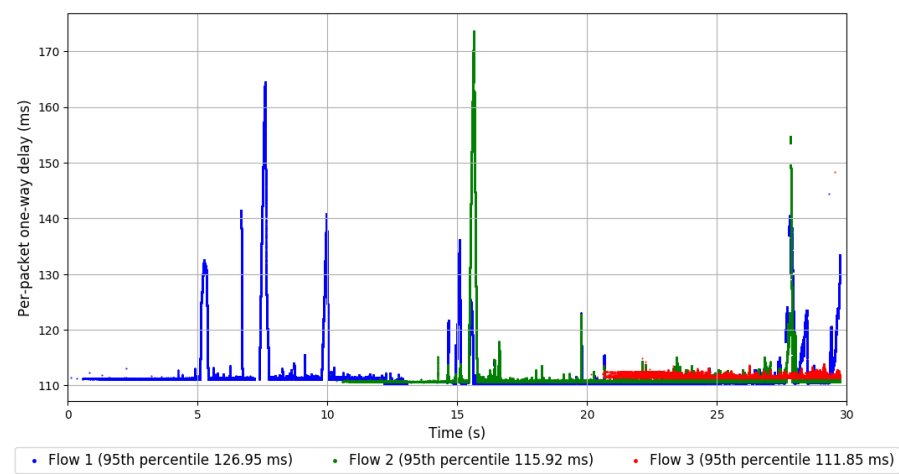
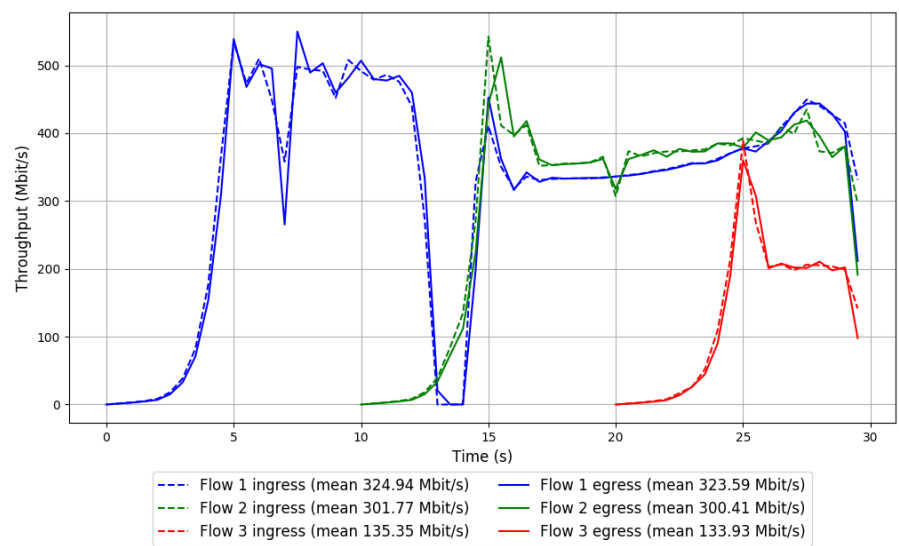
-- Flow 3:

Average throughput: 133.93 Mbit/s

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

Loss rate: 3.32%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-16 23:57:44

End at: 2018-02-16 23:58:14

Below is generated by plot.py at 2018-02-17 07:20:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 523.64 Mbit/s

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

Loss rate: 1.09%

-- Flow 1:

Average throughput: 293.38 Mbit/s

95th percentile per-packet one-way delay: 121.335 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 301.34 Mbit/s

95th percentile per-packet one-way delay: 112.359 ms

Loss rate: 1.09%

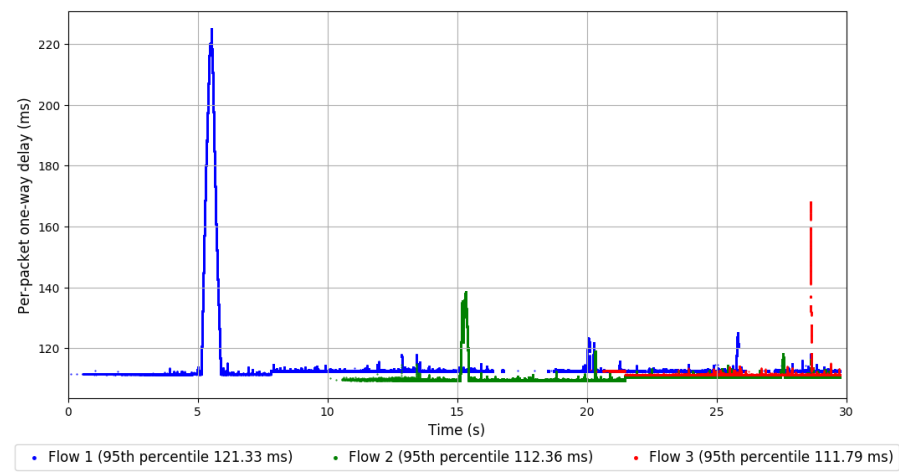
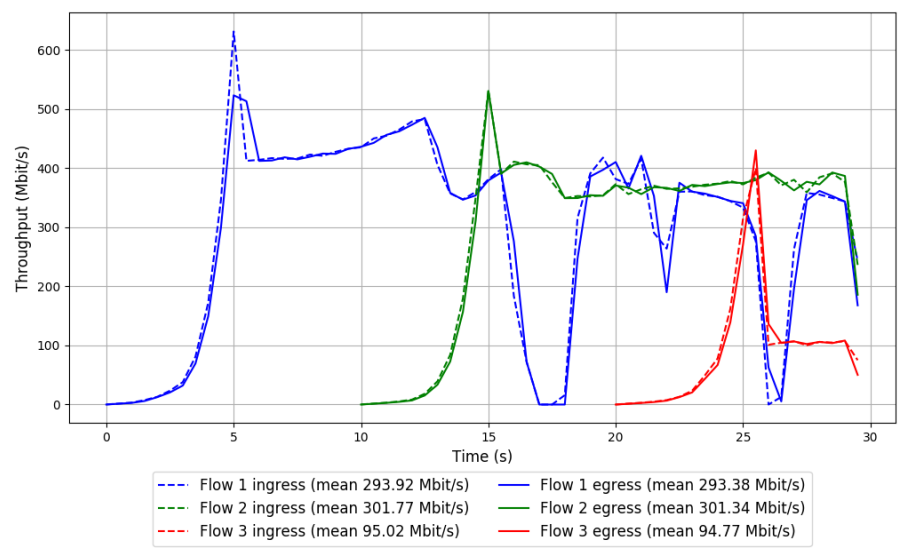
-- Flow 3:

Average throughput: 94.77 Mbit/s

95th percentile per-packet one-way delay: 111.788 ms

Loss rate: 2.55%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

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

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

Below is generated by plot.py at 2018-02-17 07:20:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 388.70 Mbit/s

95th percentile per-packet one-way delay: 113.446 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 224.42 Mbit/s

95th percentile per-packet one-way delay: 172.895 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 177.85 Mbit/s

95th percentile per-packet one-way delay: 112.258 ms

Loss rate: 0.81%

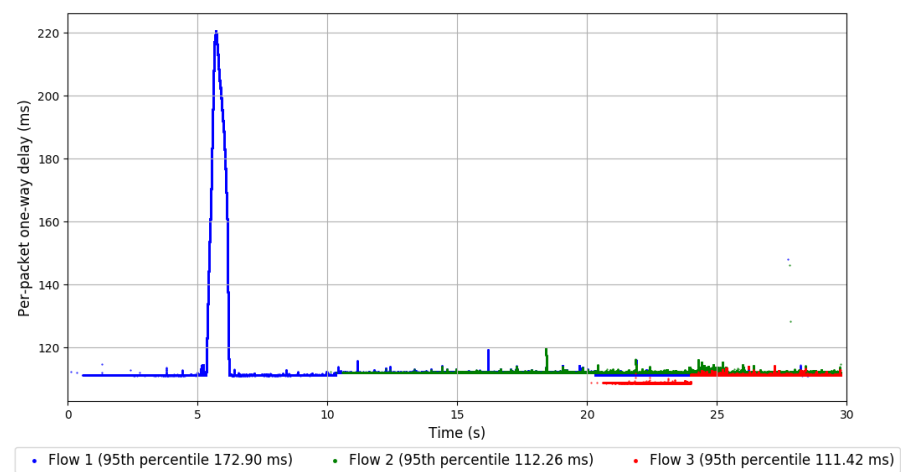
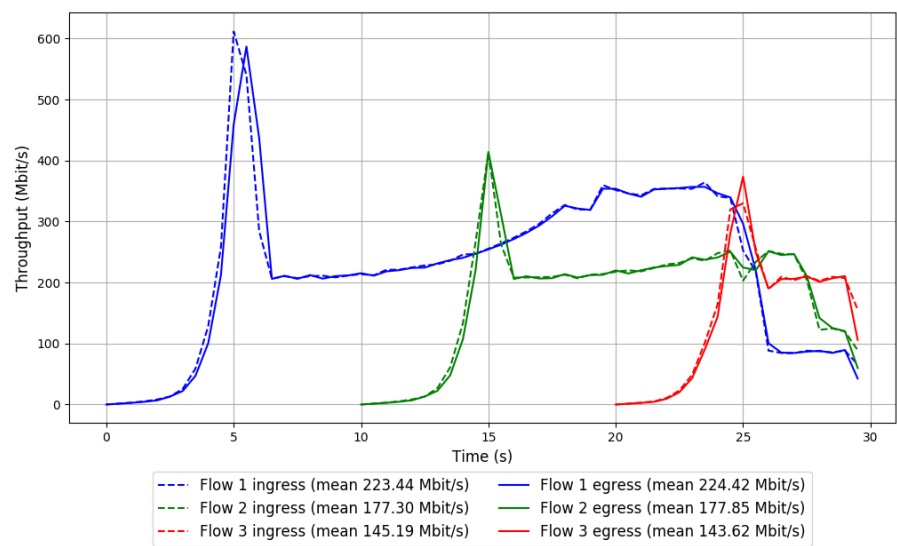
-- Flow 3:

Average throughput: 143.62 Mbit/s

95th percentile per-packet one-way delay: 111.425 ms

Loss rate: 3.33%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-17 00:36:22

End at: 2018-02-17 00:36:52

Below is generated by plot.py at 2018-02-17 07:21:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 494.15 Mbit/s

95th percentile per-packet one-way delay: 113.927 ms

Loss rate: 1.43%

-- Flow 1:

Average throughput: 283.76 Mbit/s

95th percentile per-packet one-way delay: 113.431 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 247.71 Mbit/s

95th percentile per-packet one-way delay: 114.297 ms

Loss rate: 1.81%

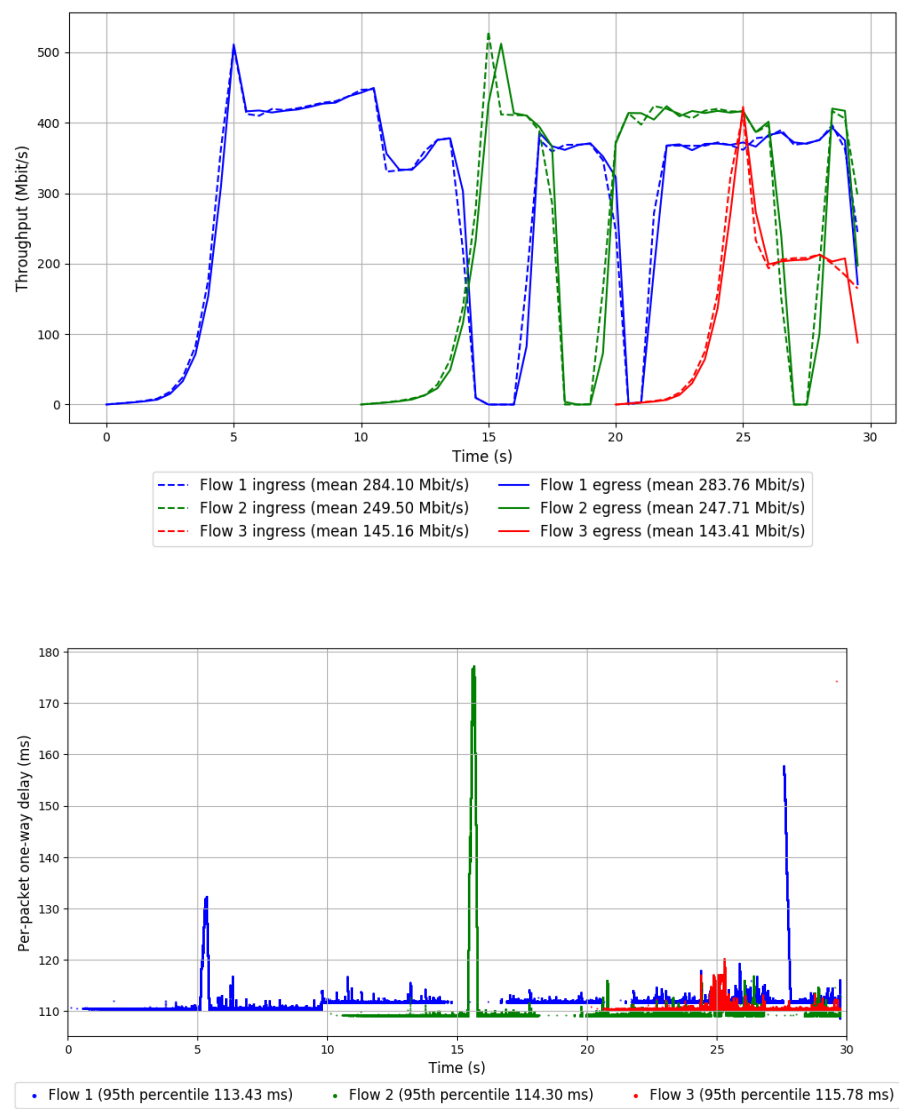
-- Flow 3:

Average throughput: 143.41 Mbit/s

95th percentile per-packet one-way delay: 115.784 ms

Loss rate: 3.46%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-17 00:55:39

End at: 2018-02-17 00:56:09

Below is generated by plot.py at 2018-02-17 07:23:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 505.32 Mbit/s

95th percentile per-packet one-way delay: 129.586 ms

Loss rate: 1.39%

-- Flow 1:

Average throughput: 292.74 Mbit/s

95th percentile per-packet one-way delay: 158.845 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 247.83 Mbit/s

95th percentile per-packet one-way delay: 110.436 ms

Loss rate: 1.49%

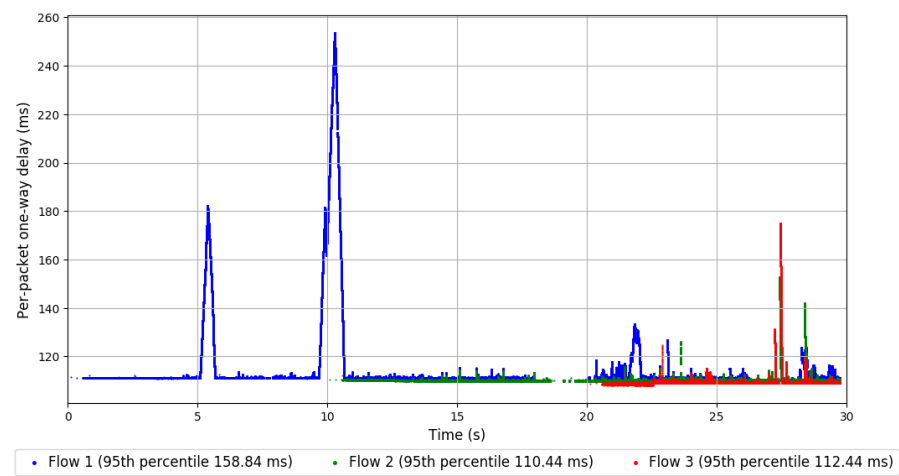
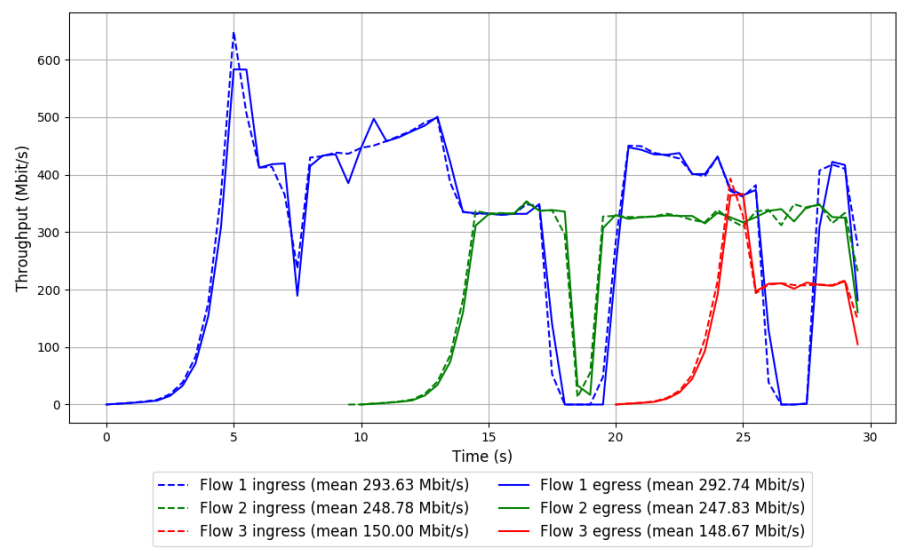
-- Flow 3:

Average throughput: 148.67 Mbit/s

95th percentile per-packet one-way delay: 112.439 ms

Loss rate: 3.10%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-17 01:15:15

End at: 2018-02-17 01:15:45

Below is generated by plot.py at 2018-02-17 07:23:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 509.00 Mbit/s

95th percentile per-packet one-way delay: 116.530 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 282.36 Mbit/s

95th percentile per-packet one-way delay: 132.610 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 266.11 Mbit/s

95th percentile per-packet one-way delay: 110.085 ms

Loss rate: 1.42%

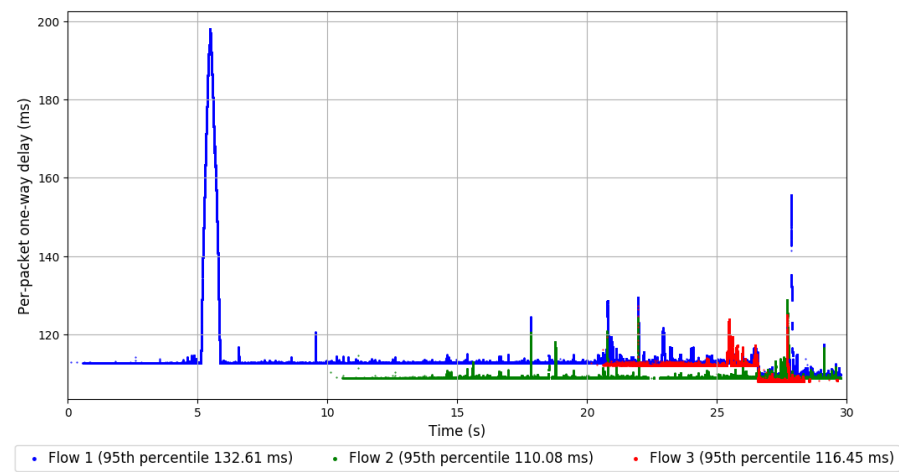
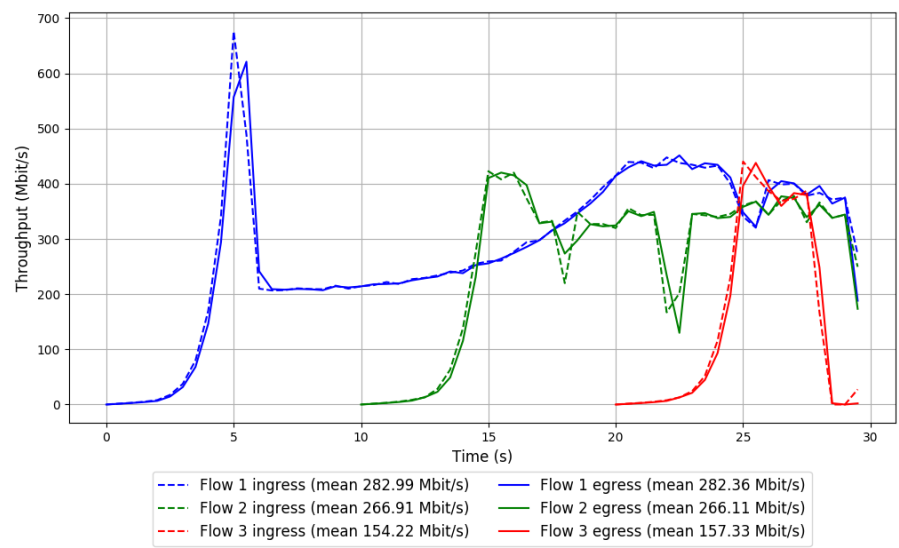
-- Flow 3:

Average throughput: 157.33 Mbit/s

95th percentile per-packet one-way delay: 116.454 ms

Loss rate: 0.84%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-17 01:34:53

End at: 2018-02-17 01:35:23

Below is generated by plot.py at 2018-02-17 07:24:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 409.29 Mbit/s

95th percentile per-packet one-way delay: 125.301 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 309.96 Mbit/s

95th percentile per-packet one-way delay: 131.826 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 66.35 Mbit/s

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

Loss rate: 5.01%

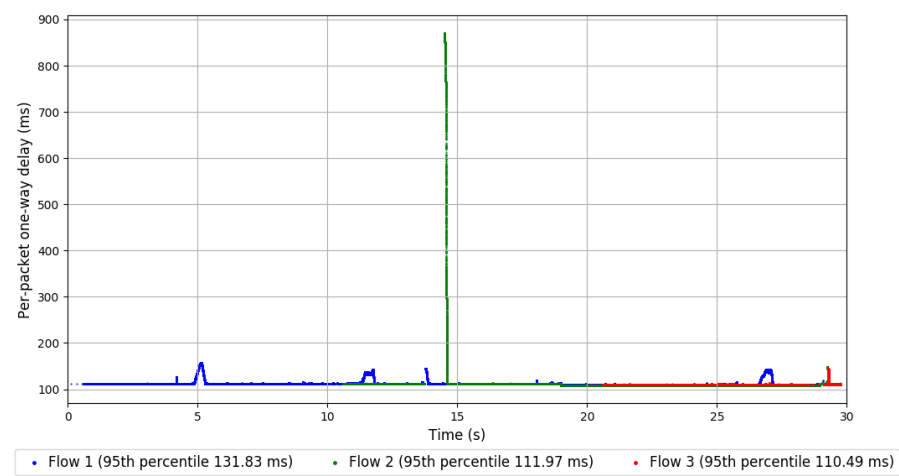
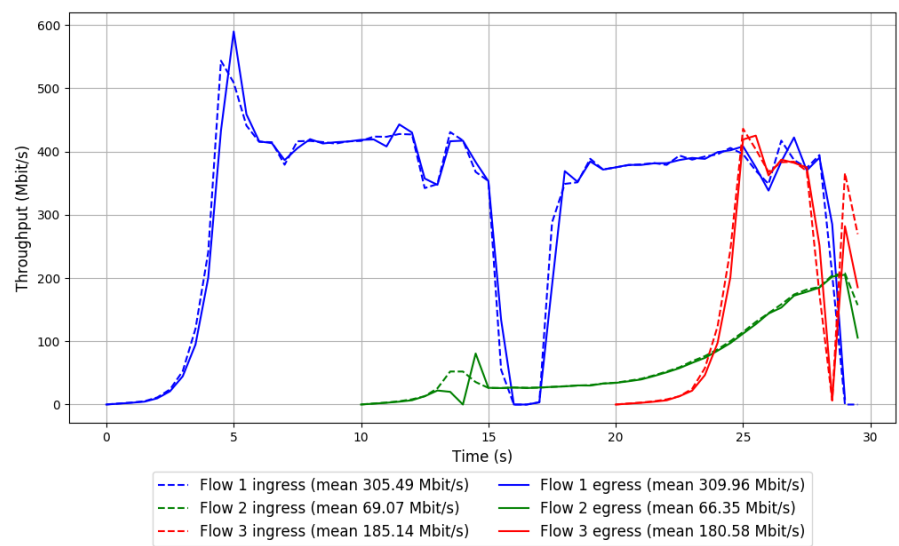
-- Flow 3:

Average throughput: 180.58 Mbit/s

95th percentile per-packet one-way delay: 110.494 ms

Loss rate: 4.62%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-17 01:54:30

End at: 2018-02-17 01:55:00

Below is generated by plot.py at 2018-02-17 07:26:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 462.73 Mbit/s

95th percentile per-packet one-way delay: 113.735 ms

Loss rate: 1.27%

-- Flow 1:

Average throughput: 297.26 Mbit/s

95th percentile per-packet one-way delay: 118.951 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 181.81 Mbit/s

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

Loss rate: 1.24%

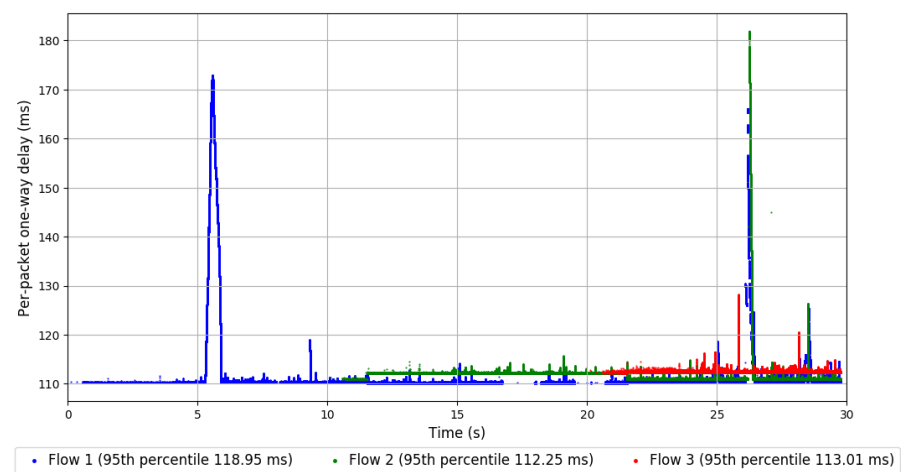
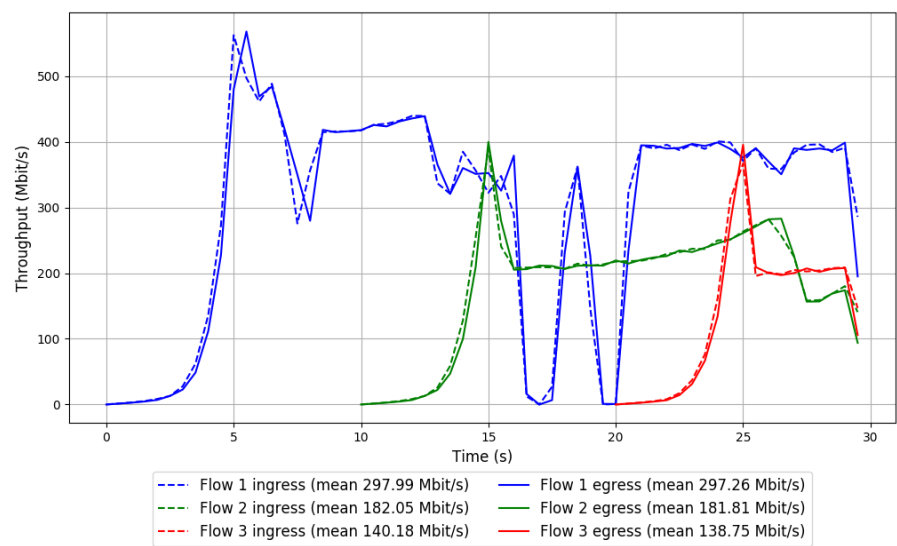
-- Flow 3:

Average throughput: 138.75 Mbit/s

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

Loss rate: 3.25%

Run 10: Report of Vivace-loss — Data Link

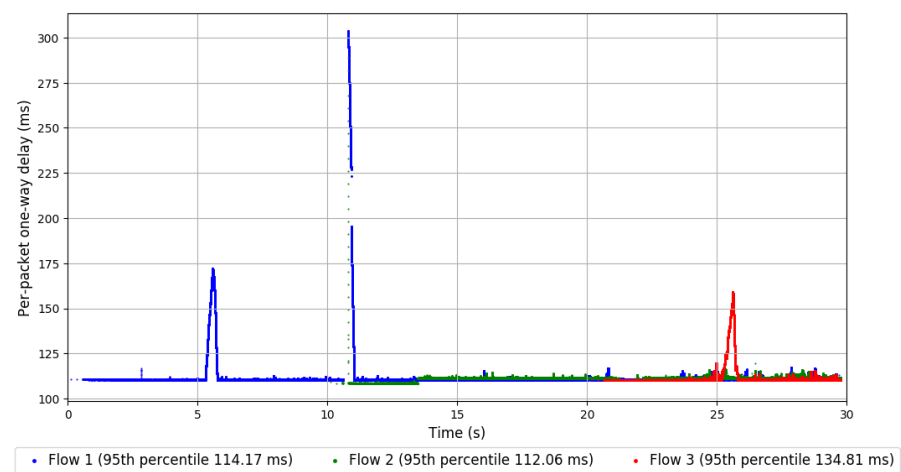
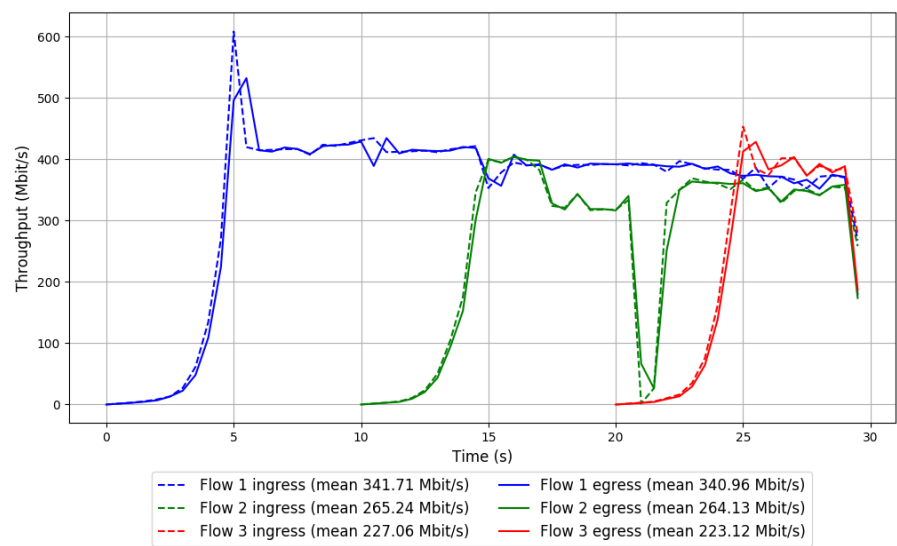


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-16 23:02:32
End at: 2018-02-16 23:03:02

# Below is generated by plot.py at 2018-02-17 07:29:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 588.02 Mbit/s
95th percentile per-packet one-way delay: 113.978 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 340.96 Mbit/s
95th percentile per-packet one-way delay: 114.170 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 264.13 Mbit/s
95th percentile per-packet one-way delay: 112.057 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 223.12 Mbit/s
95th percentile per-packet one-way delay: 134.811 ms
Loss rate: 3.98%
```


Run 1: Report of Vivace-LTE — Data Link

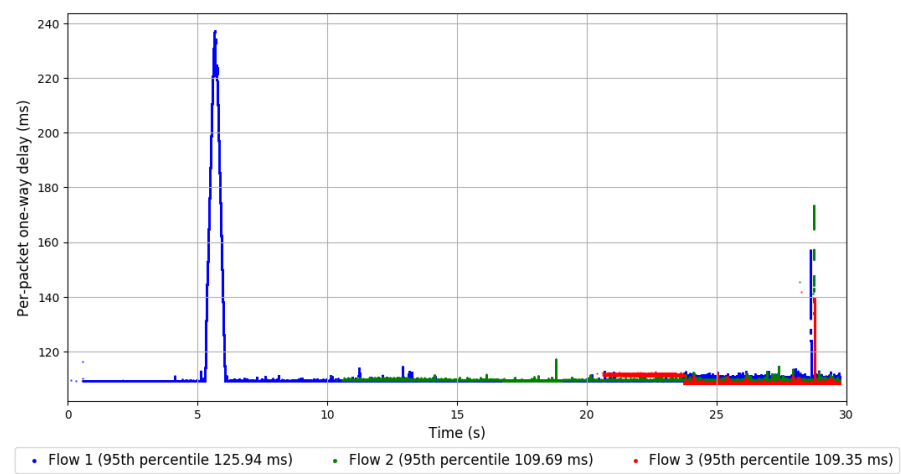
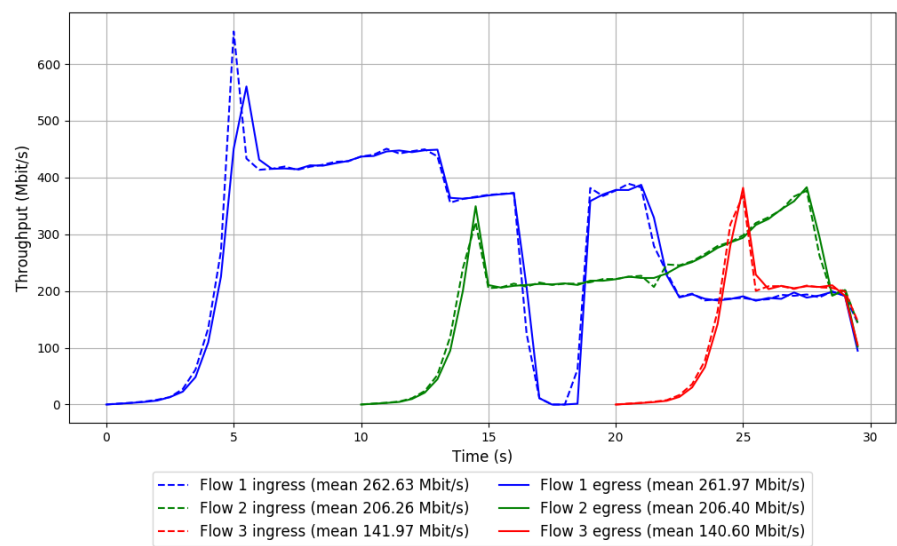


```
Run 2: Statistics of Vivace-LTE

Start at: 2018-02-16 23:22:32
End at: 2018-02-16 23:23:02

# Below is generated by plot.py at 2018-02-17 07:29:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 444.17 Mbit/s
95th percentile per-packet one-way delay: 111.032 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 261.97 Mbit/s
95th percentile per-packet one-way delay: 125.939 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 206.40 Mbit/s
95th percentile per-packet one-way delay: 109.694 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 140.60 Mbit/s
95th percentile per-packet one-way delay: 109.349 ms
Loss rate: 3.22%
```

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-16 23:42:27

End at: 2018-02-16 23:42:57

Below is generated by plot.py at 2018-02-17 07:29:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 492.21 Mbit/s

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

Loss rate: 1.35%

-- Flow 1:

Average throughput: 315.68 Mbit/s

95th percentile per-packet one-way delay: 112.236 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 197.99 Mbit/s

95th percentile per-packet one-way delay: 109.806 ms

Loss rate: 1.68%

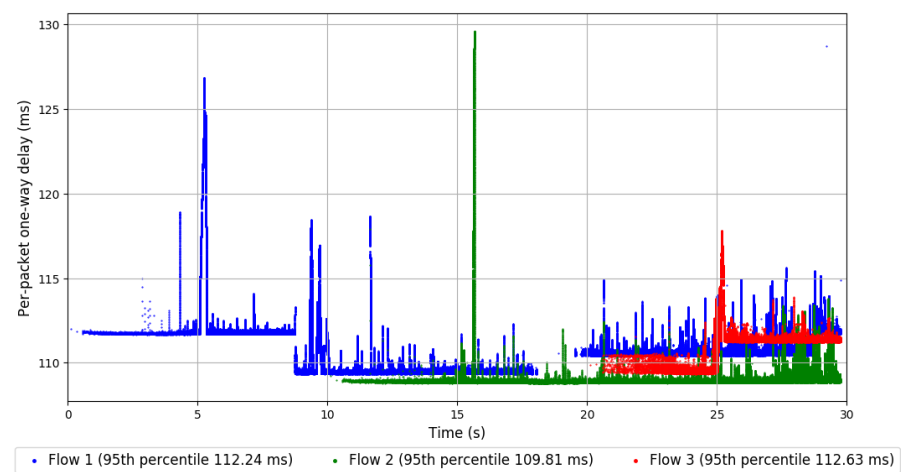
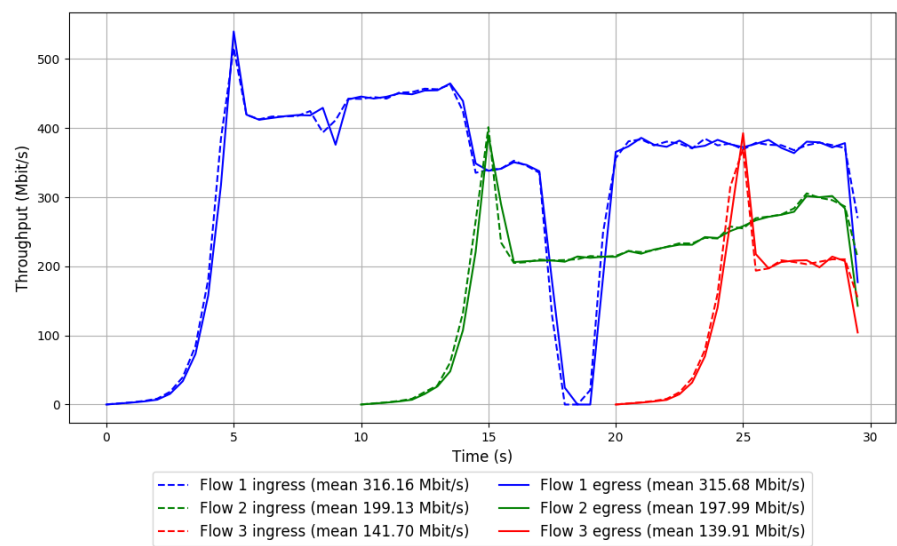
-- Flow 3:

Average throughput: 139.91 Mbit/s

95th percentile per-packet one-way delay: 112.633 ms

Loss rate: 3.50%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-17 00:02:09

End at: 2018-02-17 00:02:39

Below is generated by plot.py at 2018-02-17 07:30:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 511.40 Mbit/s

95th percentile per-packet one-way delay: 115.926 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 330.98 Mbit/s

95th percentile per-packet one-way delay: 113.603 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 189.82 Mbit/s

95th percentile per-packet one-way delay: 115.541 ms

Loss rate: 1.62%

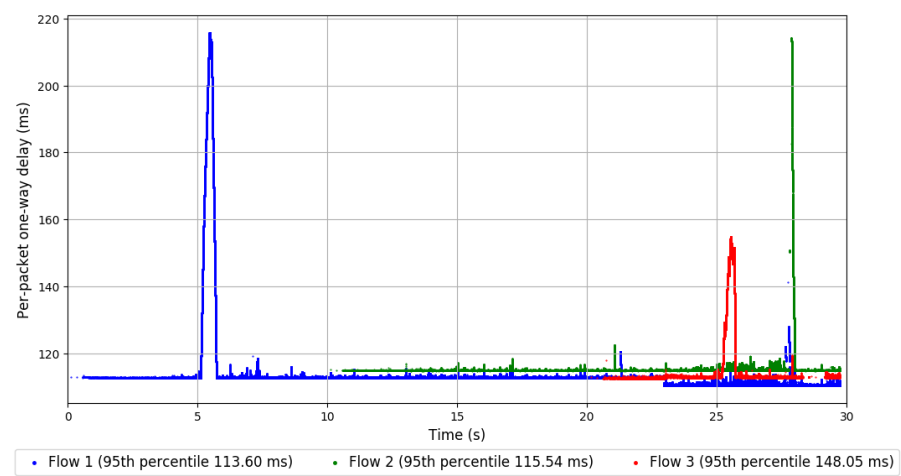
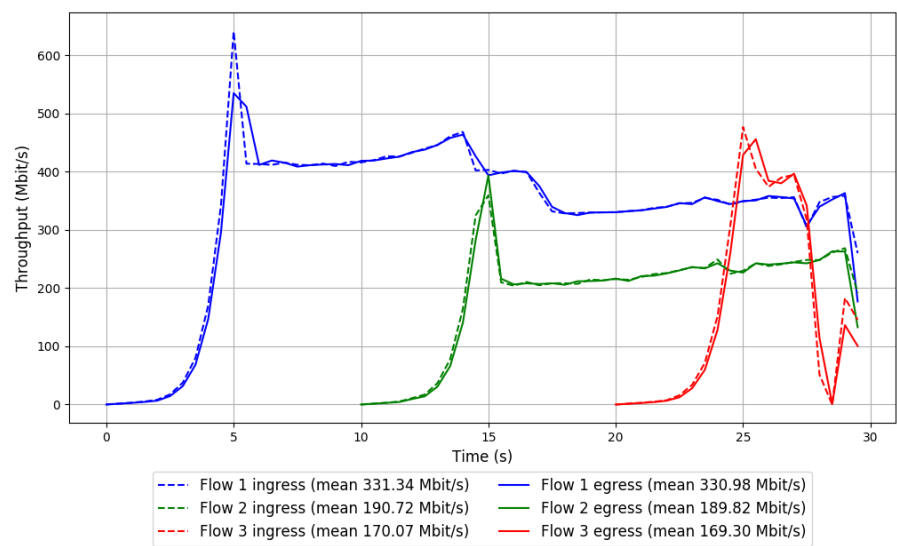
-- Flow 3:

Average throughput: 169.30 Mbit/s

95th percentile per-packet one-way delay: 148.048 ms

Loss rate: 2.74%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-17 00:21:26

End at: 2018-02-17 00:21:56

Below is generated by plot.py at 2018-02-17 07:31:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 441.97 Mbit/s

95th percentile per-packet one-way delay: 115.968 ms

Loss rate: 1.66%

-- Flow 1:

Average throughput: 261.98 Mbit/s

95th percentile per-packet one-way delay: 116.878 ms

Loss rate: 1.10%

-- Flow 2:

Average throughput: 210.33 Mbit/s

95th percentile per-packet one-way delay: 110.791 ms

Loss rate: 2.19%

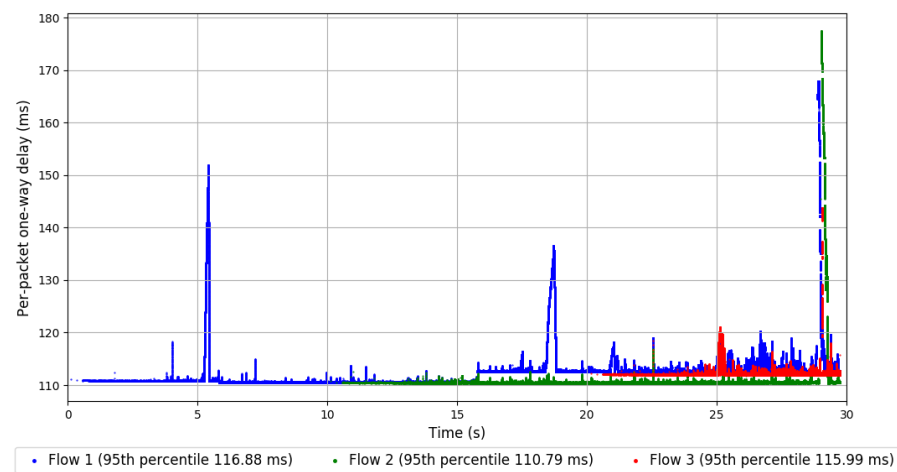
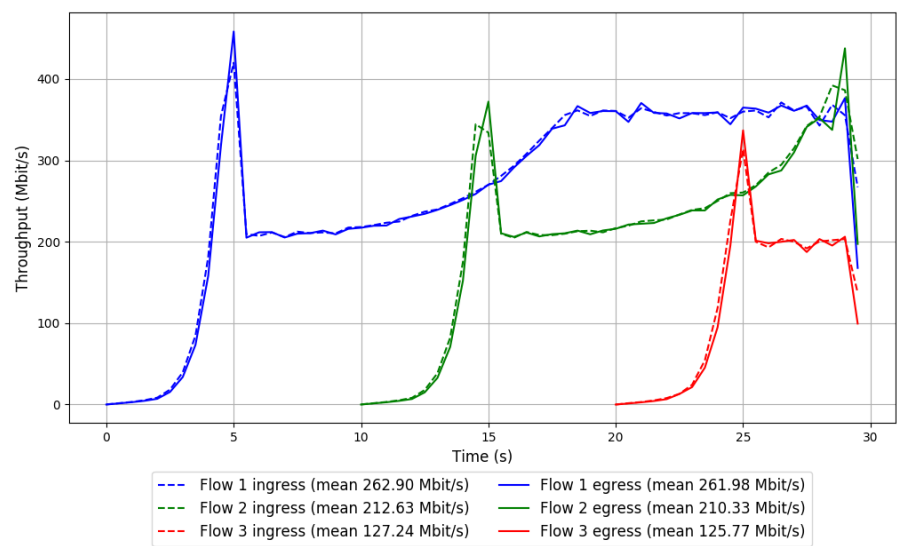
-- Flow 3:

Average throughput: 125.77 Mbit/s

95th percentile per-packet one-way delay: 115.993 ms

Loss rate: 3.38%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-17 00:40:41

End at: 2018-02-17 00:41:11

Below is generated by plot.py at 2018-02-17 07:31:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 499.05 Mbit/s

95th percentile per-packet one-way delay: 123.809 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 326.04 Mbit/s

95th percentile per-packet one-way delay: 121.928 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 197.94 Mbit/s

95th percentile per-packet one-way delay: 111.129 ms

Loss rate: 1.31%

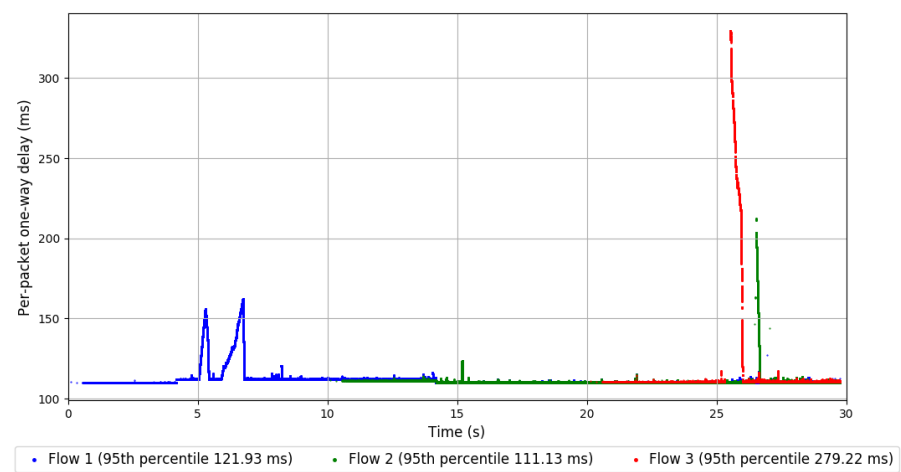
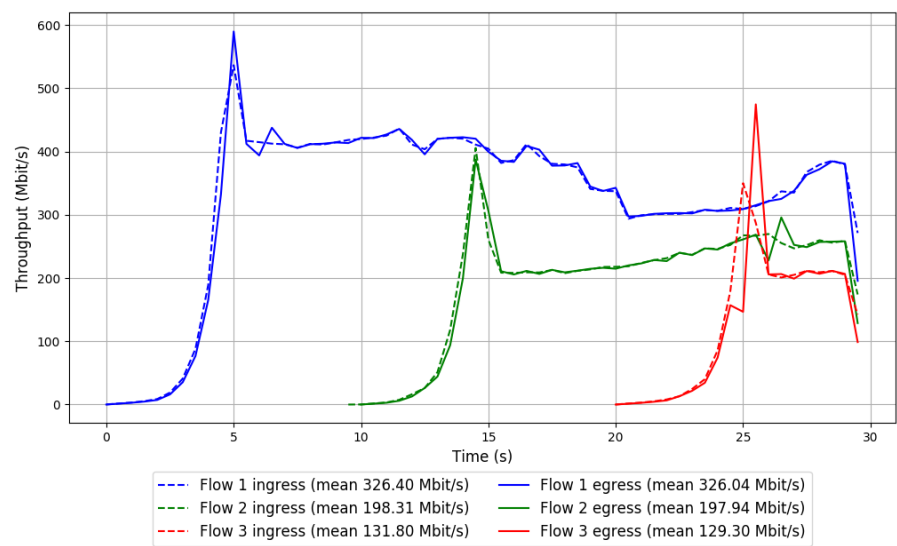
-- Flow 3:

Average throughput: 129.30 Mbit/s

95th percentile per-packet one-way delay: 279.218 ms

Loss rate: 4.11%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

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

End at: 2018-02-17 01:00:31

Below is generated by plot.py at 2018-02-17 07:32:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 499.60 Mbit/s

95th percentile per-packet one-way delay: 112.011 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 335.06 Mbit/s

95th percentile per-packet one-way delay: 111.786 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 183.74 Mbit/s

95th percentile per-packet one-way delay: 112.211 ms

Loss rate: 1.49%

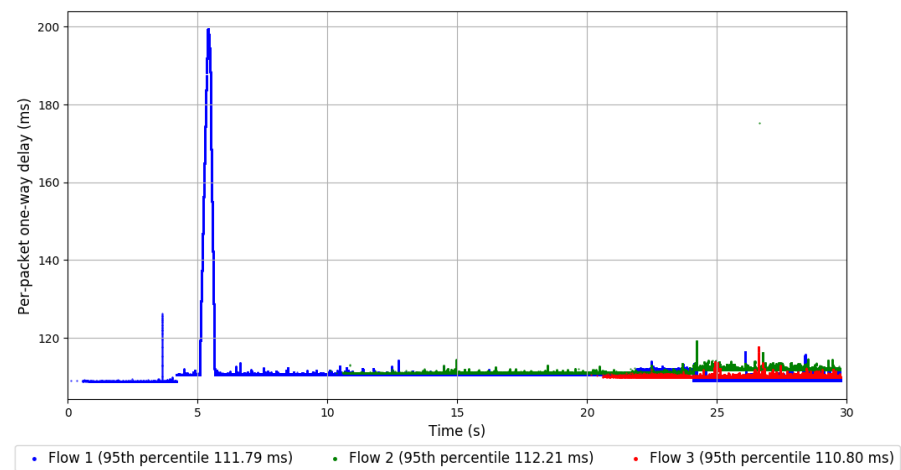
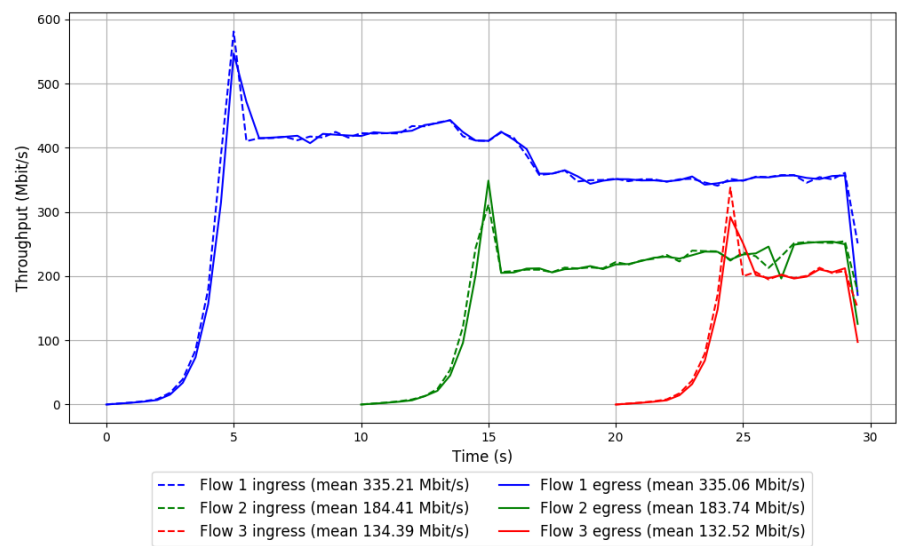
-- Flow 3:

Average throughput: 132.52 Mbit/s

95th percentile per-packet one-way delay: 110.800 ms

Loss rate: 3.62%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-17 01:19:38

End at: 2018-02-17 01:20:08

Below is generated by plot.py at 2018-02-17 07:32:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 483.79 Mbit/s

95th percentile per-packet one-way delay: 195.425 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 295.83 Mbit/s

95th percentile per-packet one-way delay: 168.360 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 239.62 Mbit/s

95th percentile per-packet one-way delay: 205.743 ms

Loss rate: 0.46%

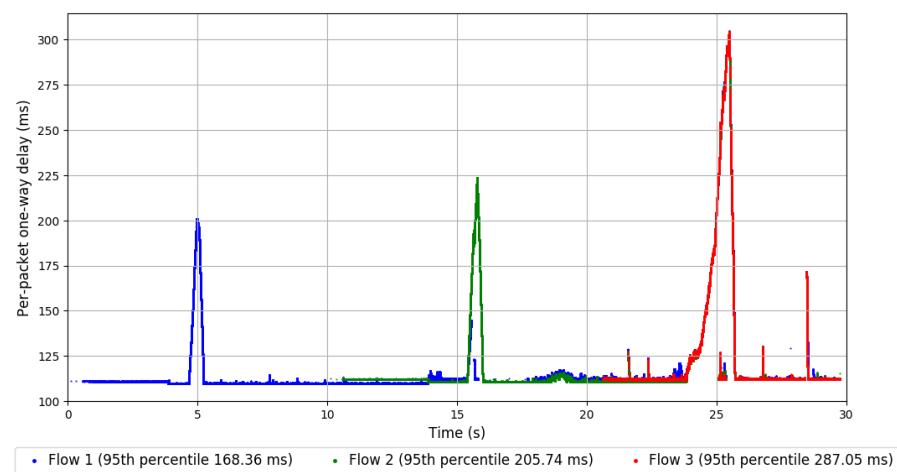
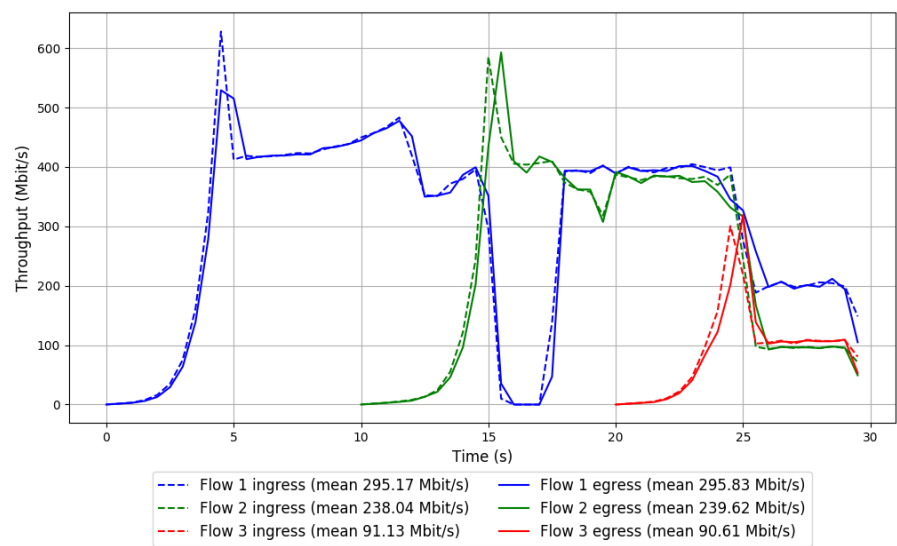
-- Flow 3:

Average throughput: 90.61 Mbit/s

95th percentile per-packet one-way delay: 287.047 ms

Loss rate: 2.85%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-17 01:39:08

End at: 2018-02-17 01:39:38

Below is generated by plot.py at 2018-02-17 07:33:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 572.96 Mbit/s

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

Loss rate: 1.48%

-- Flow 1:

Average throughput: 318.70 Mbit/s

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

Loss rate: 0.89%

-- Flow 2:

Average throughput: 275.04 Mbit/s

95th percentile per-packet one-way delay: 147.656 ms

Loss rate: 1.64%

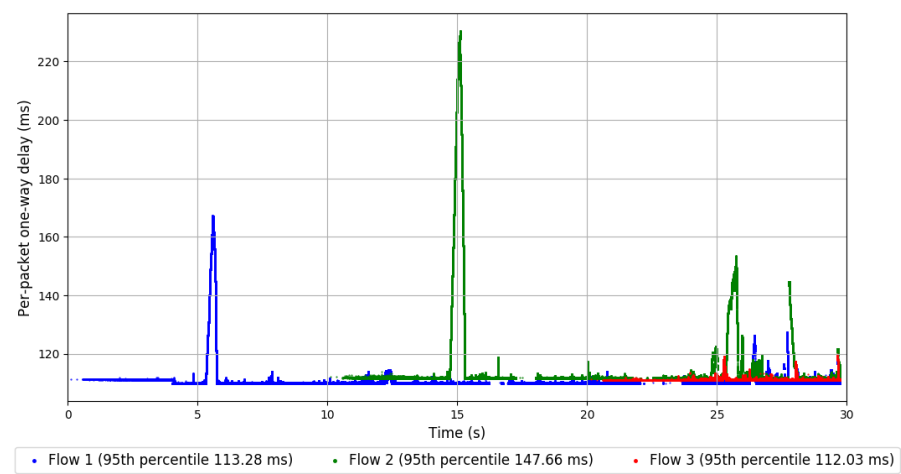
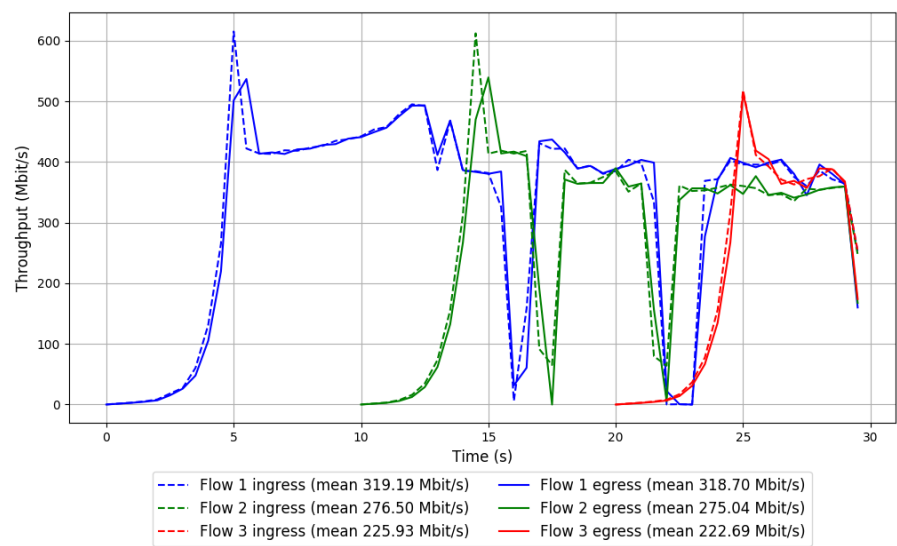
-- Flow 3:

Average throughput: 222.69 Mbit/s

95th percentile per-packet one-way delay: 112.030 ms

Loss rate: 3.65%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-02-17 01:58:48

End at: 2018-02-17 01:59:18

Below is generated by plot.py at 2018-02-17 07:33:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 459.93 Mbit/s

95th percentile per-packet one-way delay: 148.612 ms

Loss rate: 2.34%

-- Flow 1:

Average throughput: 211.56 Mbit/s

95th percentile per-packet one-way delay: 177.169 ms

Loss rate: 3.02%

-- Flow 2:

Average throughput: 304.04 Mbit/s

95th percentile per-packet one-way delay: 136.733 ms

Loss rate: 1.38%

-- Flow 3:

Average throughput: 145.26 Mbit/s

95th percentile per-packet one-way delay: 118.044 ms

Loss rate: 3.37%

Run 10: Report of Vivace-LTE — Data Link

