

Pantheon Report

Generated at 2017-11-21 19:02:29 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

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

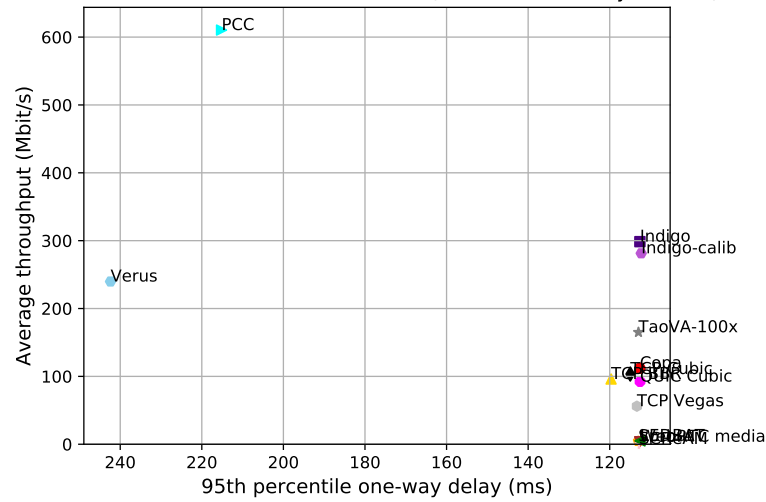
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

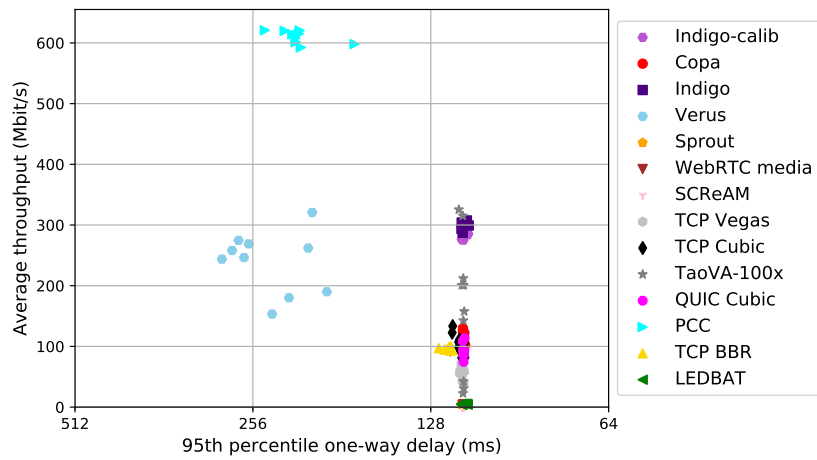
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
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-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeab30b267cde681
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/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	49.33	46.65	48.30	119.36	119.45	121.08	0.02	0.02	0.01
TCP Cubic	10	54.63	53.42	40.38	114.62	115.37	114.34	0.01	0.01	0.05
LEDBAT	10	2.65	2.68	1.49	112.59	112.59	112.47	0.18	0.14	0.29
PCC	10	519.58	120.47	32.64	215.57	211.53	211.70	2.39	1.83	2.39
QUIC Cubic	9	51.30	45.32	34.09	111.61	112.33	111.53	0.00	0.00	0.00
SCReAM	10	0.20	0.22	0.22	112.43	112.36	112.07	0.00	0.00	0.00
WebRTC media	10	2.04	1.25	0.42	112.49	111.83	112.25	0.00	0.00	0.10
Sprout	10	2.38	2.07	2.16	113.02	113.00	112.94	0.14	0.13	0.12
TaoVA-100x	10	82.47	90.52	87.02	112.80	112.85	113.00	0.00	0.00	0.00
TCP Vegas	10	29.27	22.56	35.56	112.77	113.67	114.32	0.01	0.01	0.03
Verus	10	154.82	104.61	50.89	220.71	221.33	204.45	1.79	1.85	2.09
Copa	10	60.57	62.44	39.84	112.32	112.60	112.54	0.00	0.00	0.01
Indigo	10	161.59	149.38	118.61	112.45	112.76	114.88	0.00	0.01	0.01
Indigo-calib	10	149.56	141.40	118.93	112.21	112.14	112.12	0.00	0.00	0.05

Run 1: Statistics of TCP BBR

Start at: 2017-11-21 15:04:13

End at: 2017-11-21 15:04:43

Below is generated by plot.py at 2017-11-21 18:12:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.84 Mbit/s

95th percentile per-packet one-way delay: 118.399 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 49.58 Mbit/s

95th percentile per-packet one-way delay: 117.577 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 41.61 Mbit/s

95th percentile per-packet one-way delay: 118.307 ms

Loss rate: 0.00%

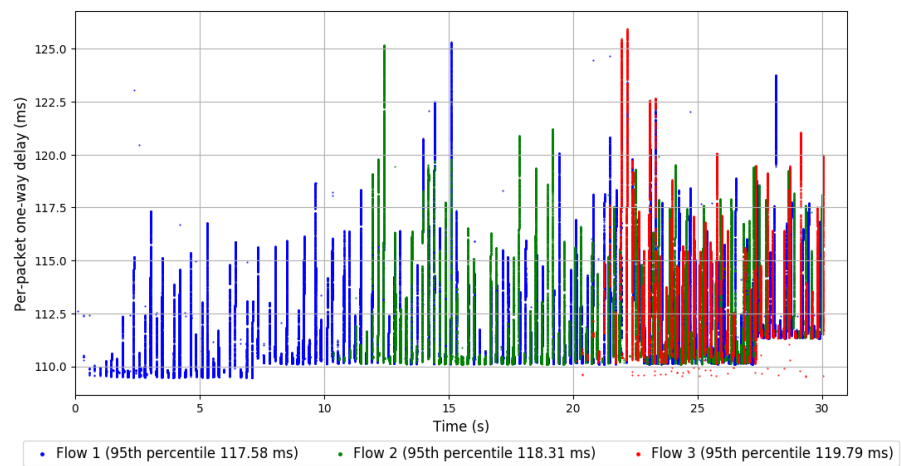
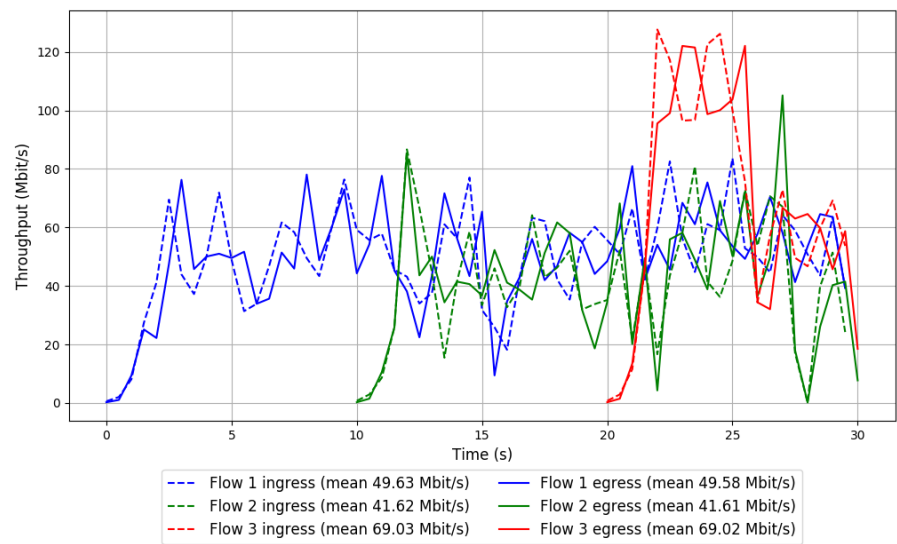
-- Flow 3:

Average throughput: 69.02 Mbit/s

95th percentile per-packet one-way delay: 119.794 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-21 15:17:24

End at: 2017-11-21 15:17:54

Below is generated by plot.py at 2017-11-21 18:12:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.40 Mbit/s

95th percentile per-packet one-way delay: 119.033 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 49.35 Mbit/s

95th percentile per-packet one-way delay: 119.626 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.14 Mbit/s

95th percentile per-packet one-way delay: 117.813 ms

Loss rate: 0.04%

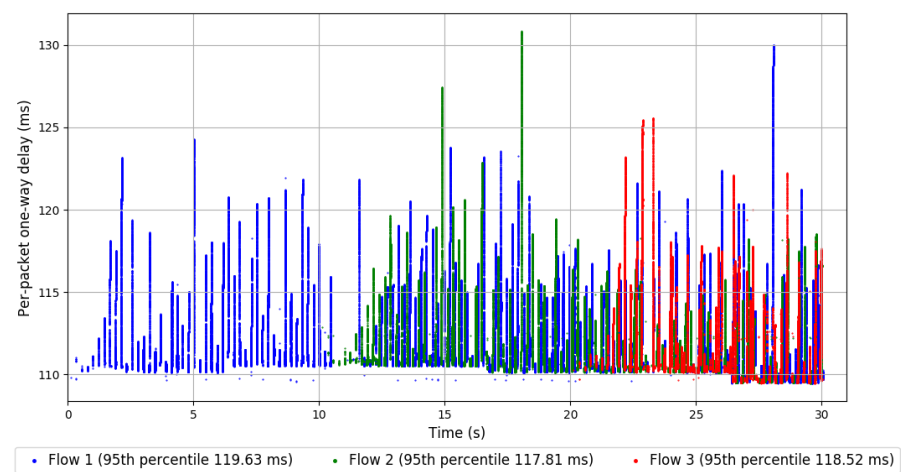
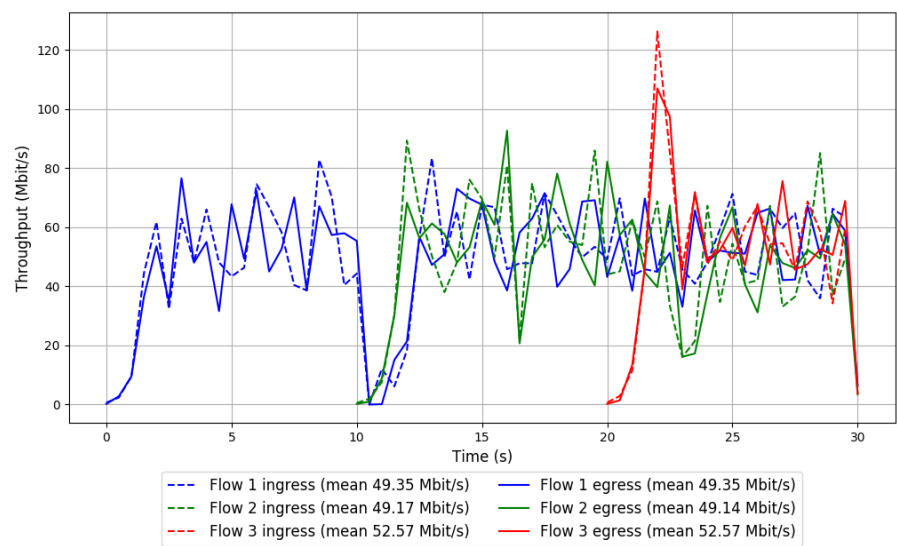
-- Flow 3:

Average throughput: 52.57 Mbit/s

95th percentile per-packet one-way delay: 118.522 ms

Loss rate: 0.01%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-21 15:30:59

End at: 2017-11-21 15:31:29

Below is generated by plot.py at 2017-11-21 18:12:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.86 Mbit/s

95th percentile per-packet one-way delay: 121.262 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 47.52 Mbit/s

95th percentile per-packet one-way delay: 121.174 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 49.37 Mbit/s

95th percentile per-packet one-way delay: 120.628 ms

Loss rate: 0.03%

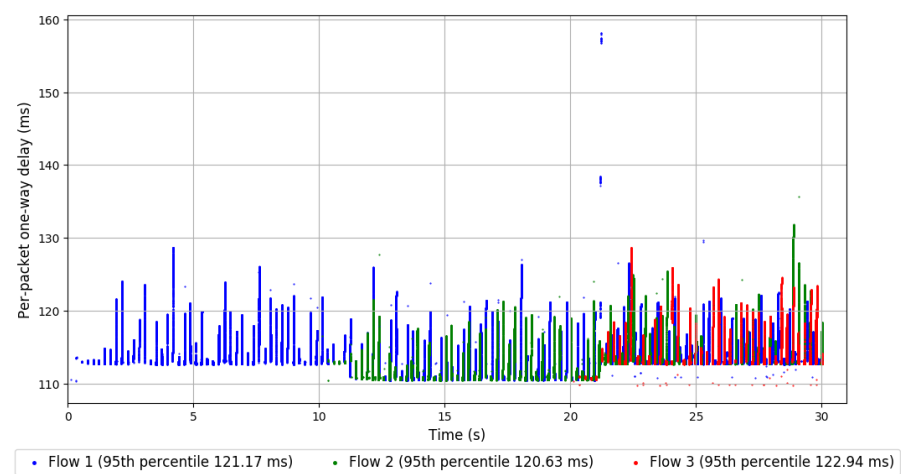
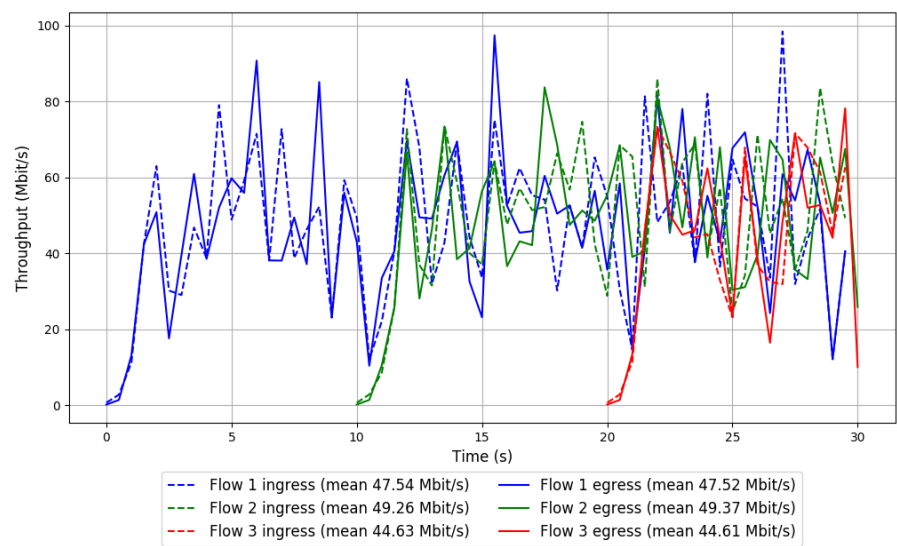
-- Flow 3:

Average throughput: 44.61 Mbit/s

95th percentile per-packet one-way delay: 122.937 ms

Loss rate: 0.02%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-21 15:44:38

End at: 2017-11-21 15:45:08

Below is generated by plot.py at 2017-11-21 18:12:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.63 Mbit/s

95th percentile per-packet one-way delay: 119.723 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 51.91 Mbit/s

95th percentile per-packet one-way delay: 118.978 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.71 Mbit/s

95th percentile per-packet one-way delay: 118.832 ms

Loss rate: 0.01%

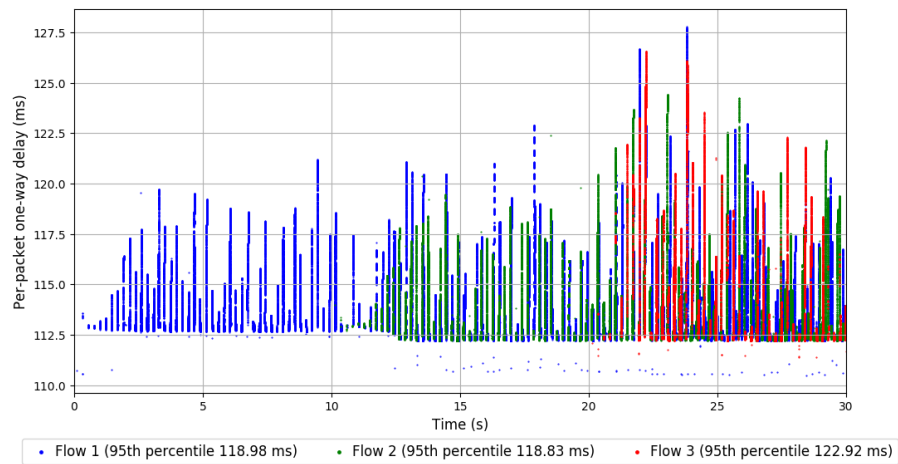
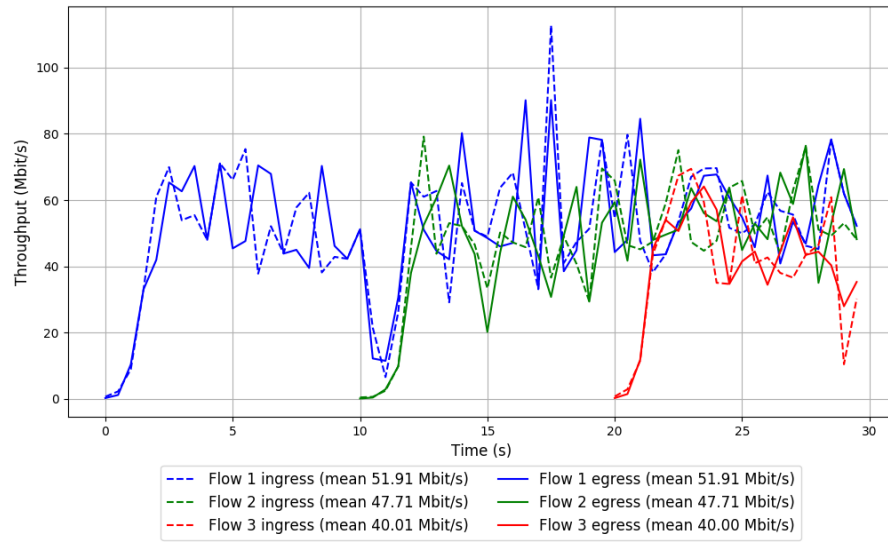
-- Flow 3:

Average throughput: 40.00 Mbit/s

95th percentile per-packet one-way delay: 122.925 ms

Loss rate: 0.01%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-21 15:57:56

End at: 2017-11-21 15:58:26

Below is generated by plot.py at 2017-11-21 18:12:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.68 Mbit/s

95th percentile per-packet one-way delay: 118.594 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 49.74 Mbit/s

95th percentile per-packet one-way delay: 118.843 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 45.54 Mbit/s

95th percentile per-packet one-way delay: 118.139 ms

Loss rate: 0.01%

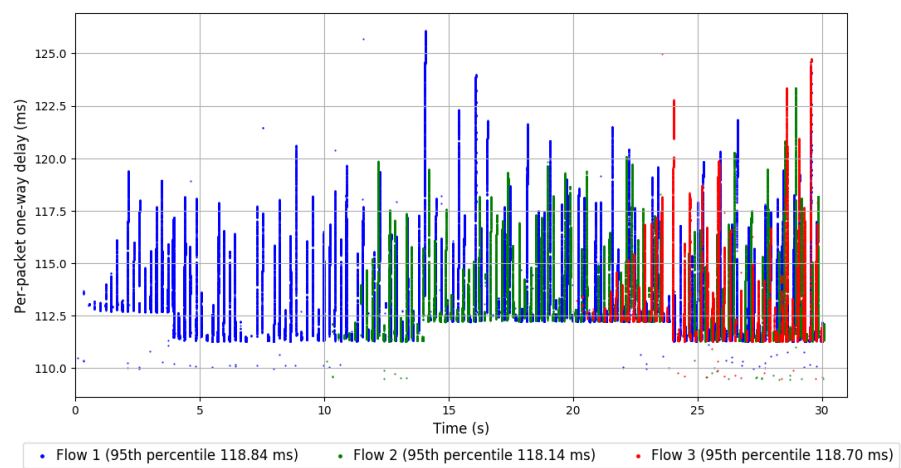
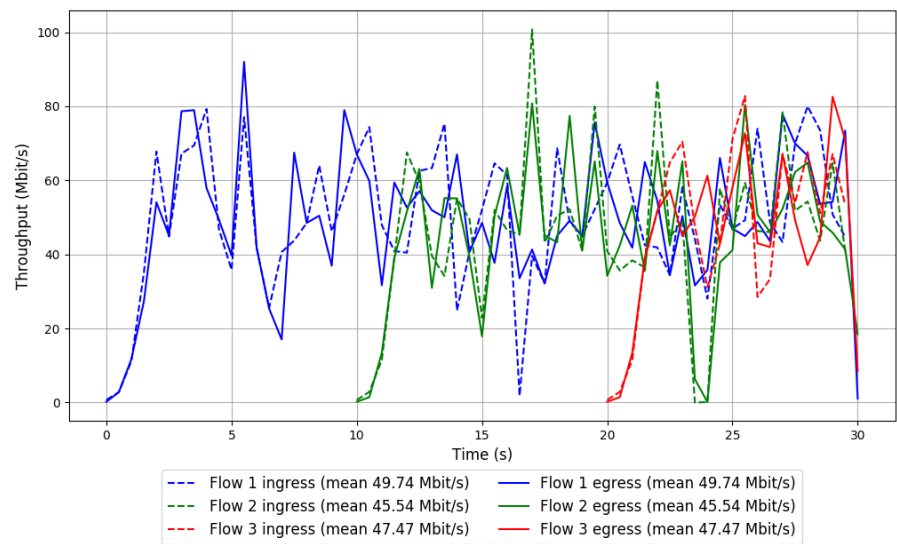
-- Flow 3:

Average throughput: 47.47 Mbit/s

95th percentile per-packet one-way delay: 118.702 ms

Loss rate: 0.02%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-21 16:11:51

End at: 2017-11-21 16:12:21

Below is generated by plot.py at 2017-11-21 18:12:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.97 Mbit/s

95th percentile per-packet one-way delay: 119.501 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 48.64 Mbit/s

95th percentile per-packet one-way delay: 119.844 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 48.69 Mbit/s

95th percentile per-packet one-way delay: 118.293 ms

Loss rate: 0.01%

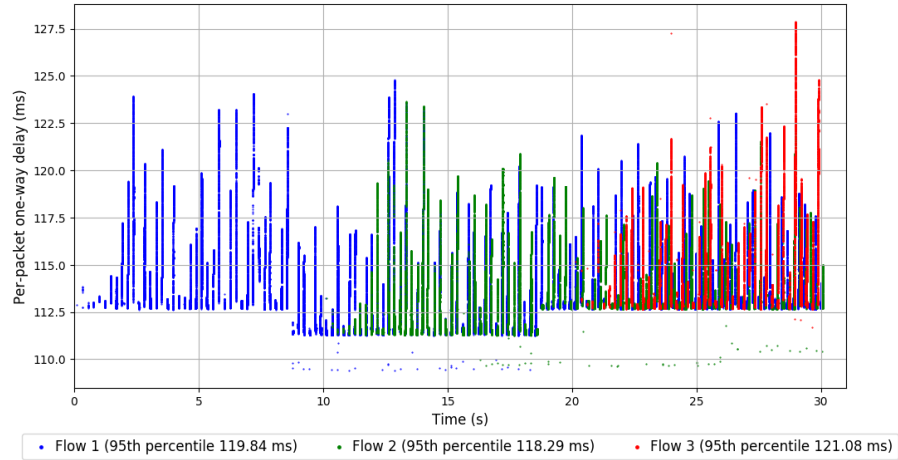
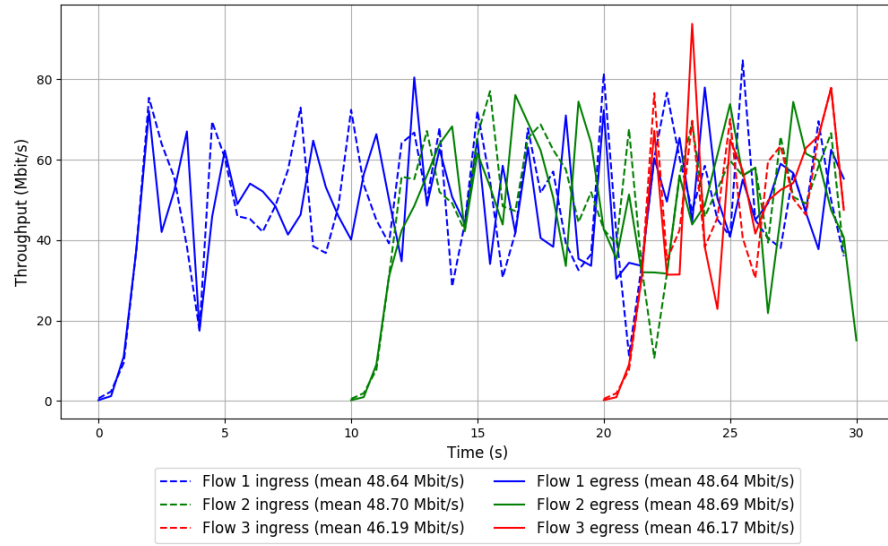
-- Flow 3:

Average throughput: 46.17 Mbit/s

95th percentile per-packet one-way delay: 121.081 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-21 16:25:35

End at: 2017-11-21 16:26:05

Below is generated by plot.py at 2017-11-21 18:12:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.48 Mbit/s

95th percentile per-packet one-way delay: 117.691 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 50.64 Mbit/s

95th percentile per-packet one-way delay: 117.671 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 42.78 Mbit/s

95th percentile per-packet one-way delay: 116.913 ms

Loss rate: 0.01%

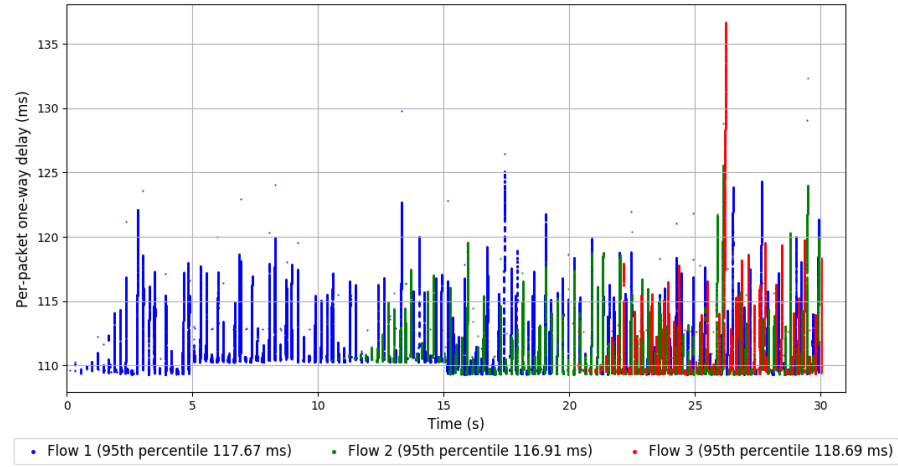
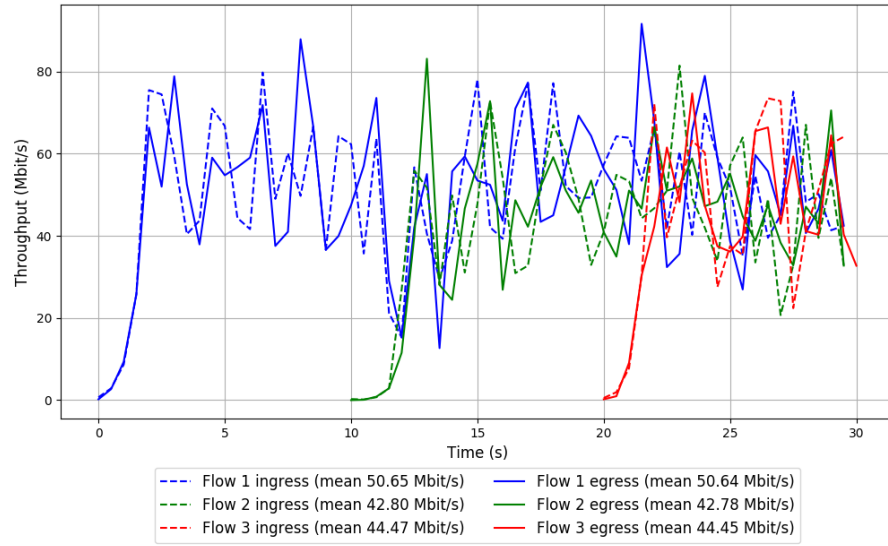
-- Flow 3:

Average throughput: 44.45 Mbit/s

95th percentile per-packet one-way delay: 118.685 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-21 16:38:45

End at: 2017-11-21 16:39:15

Below is generated by plot.py at 2017-11-21 18:12:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.42 Mbit/s

95th percentile per-packet one-way delay: 119.761 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 50.26 Mbit/s

95th percentile per-packet one-way delay: 118.831 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 45.49 Mbit/s

95th percentile per-packet one-way delay: 119.150 ms

Loss rate: 0.02%

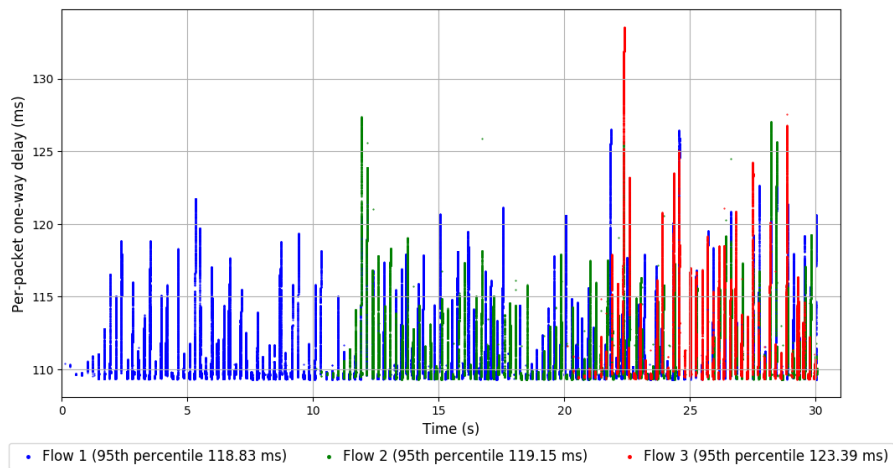
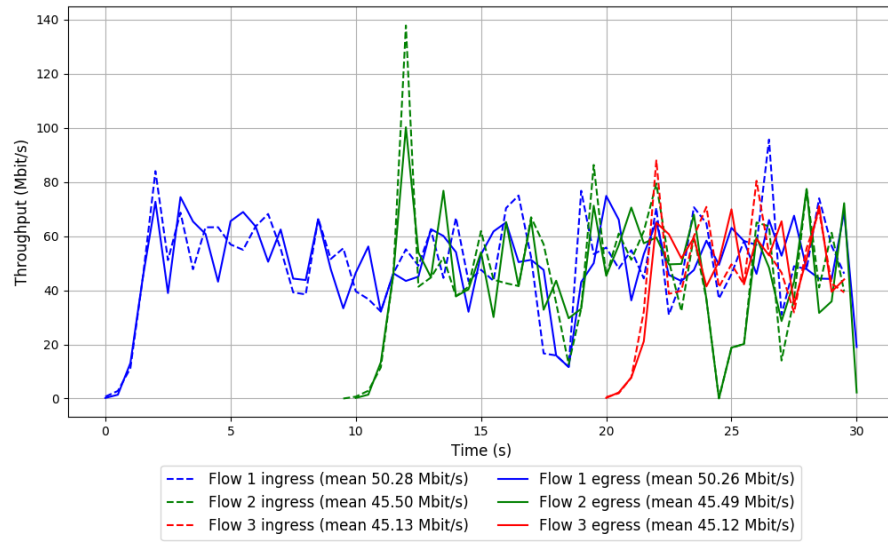
-- Flow 3:

Average throughput: 45.12 Mbit/s

95th percentile per-packet one-way delay: 123.389 ms

Loss rate: 0.03%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-21 16:52:22

End at: 2017-11-21 16:52:52

Below is generated by plot.py at 2017-11-21 18:13:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.07 Mbit/s

95th percentile per-packet one-way delay: 124.048 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 47.91 Mbit/s

95th percentile per-packet one-way delay: 122.613 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 49.93 Mbit/s

95th percentile per-packet one-way delay: 127.327 ms

Loss rate: 0.01%

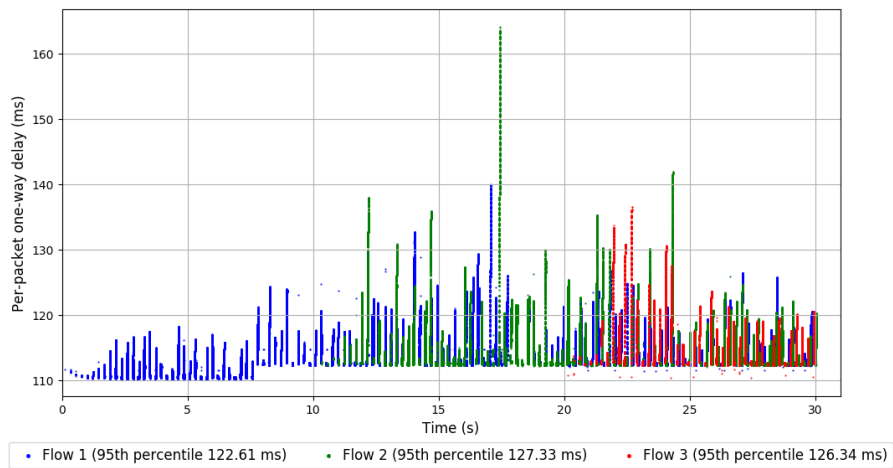
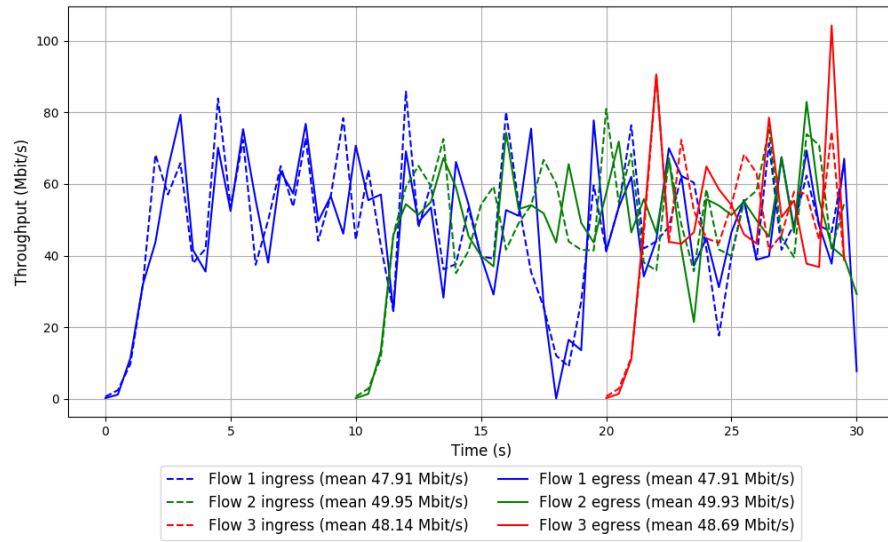
-- Flow 3:

Average throughput: 48.69 Mbit/s

95th percentile per-packet one-way delay: 126.339 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-21 17:05:55

End at: 2017-11-21 17:06:25

Below is generated by plot.py at 2017-11-21 18:13:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.14 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 47.73 Mbit/s

95th percentile per-packet one-way delay: 118.420 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 46.27 Mbit/s

95th percentile per-packet one-way delay: 119.095 ms

Loss rate: 0.01%

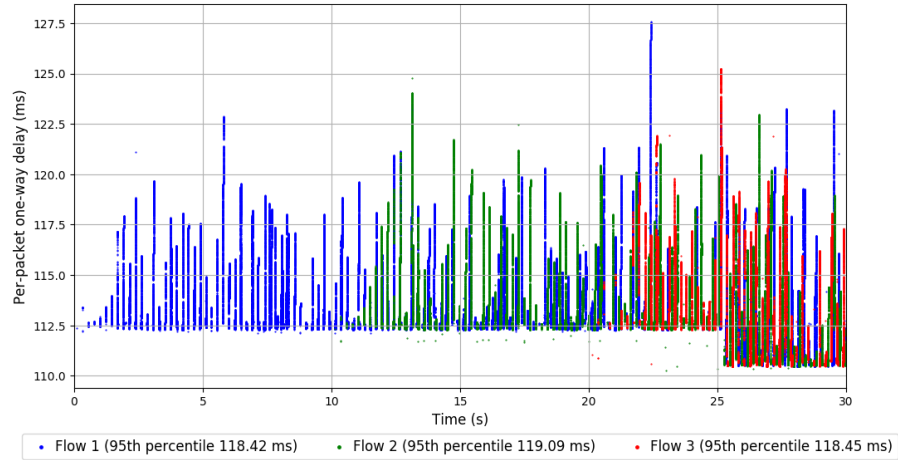
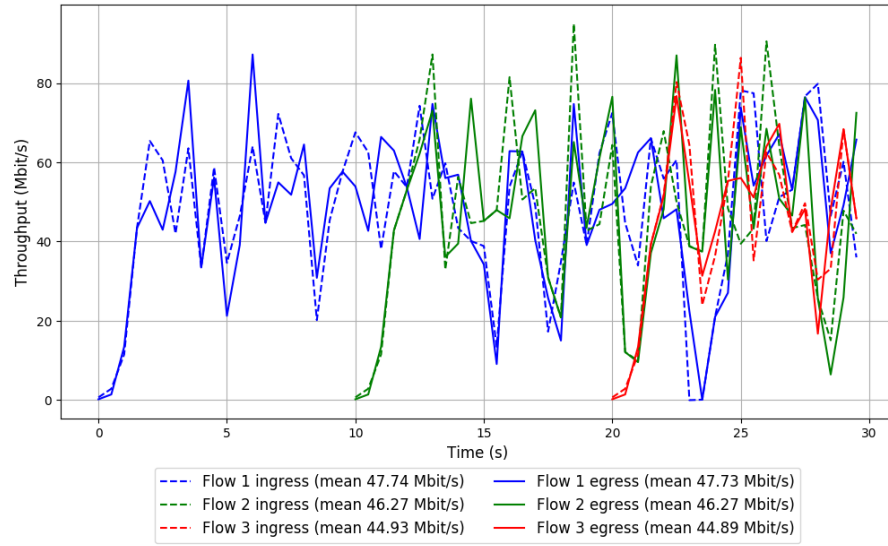
-- Flow 3:

Average throughput: 44.89 Mbit/s

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

Loss rate: 0.01%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-21 14:59:43

End at: 2017-11-21 15:00:13

Below is generated by plot.py at 2017-11-21 18:13:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.10 Mbit/s

95th percentile per-packet one-way delay: 113.499 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 37.67 Mbit/s

95th percentile per-packet one-way delay: 112.792 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 44.82 Mbit/s

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

Loss rate: 0.02%

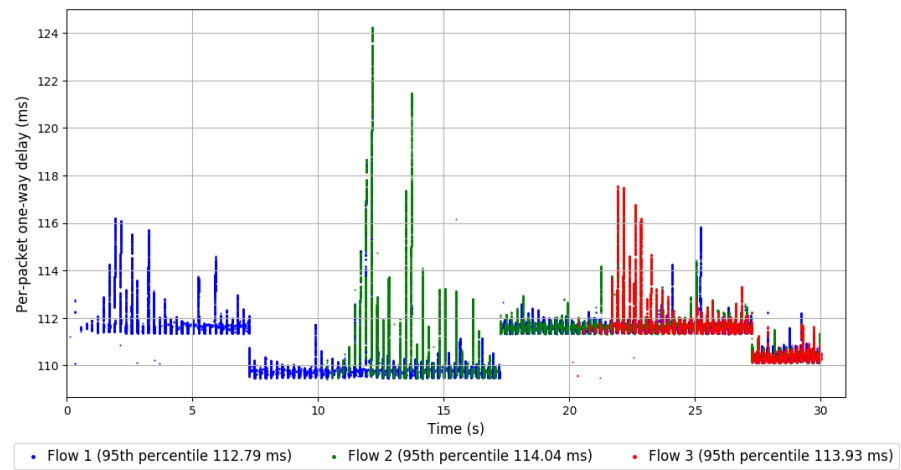
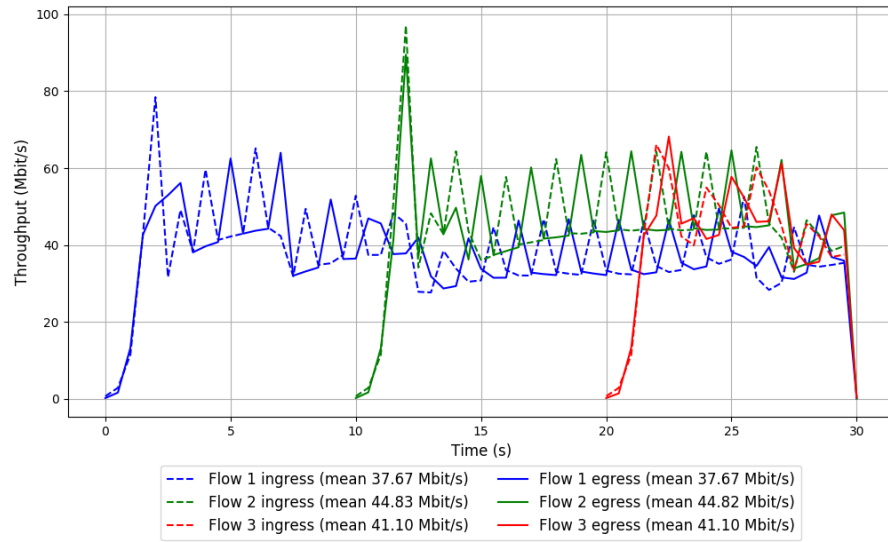
-- Flow 3:

Average throughput: 41.10 Mbit/s

95th percentile per-packet one-way delay: 113.926 ms

Loss rate: 0.01%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-21 15:12:52

End at: 2017-11-21 15:13:22

Below is generated by plot.py at 2017-11-21 18:14:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.19 Mbit/s

95th percentile per-packet one-way delay: 112.179 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 56.79 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 51.52 Mbit/s

95th percentile per-packet one-way delay: 111.315 ms

Loss rate: 0.02%

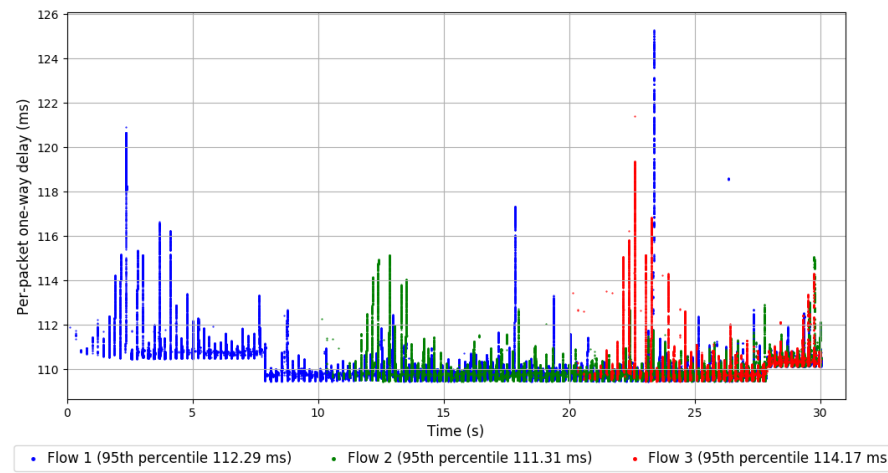
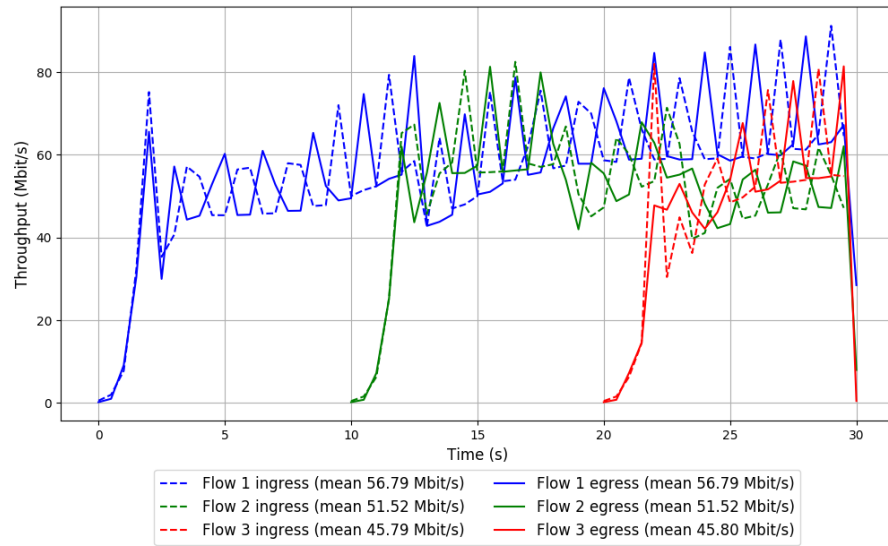
-- Flow 3:

Average throughput: 45.80 Mbit/s

95th percentile per-packet one-way delay: 114.175 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-21 15:26:26

End at: 2017-11-21 15:26:56

Below is generated by plot.py at 2017-11-21 18:14:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 133.41 Mbit/s

95th percentile per-packet one-way delay: 117.505 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.83 Mbit/s

95th percentile per-packet one-way delay: 116.044 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 74.16 Mbit/s

95th percentile per-packet one-way delay: 117.702 ms

Loss rate: 0.00%

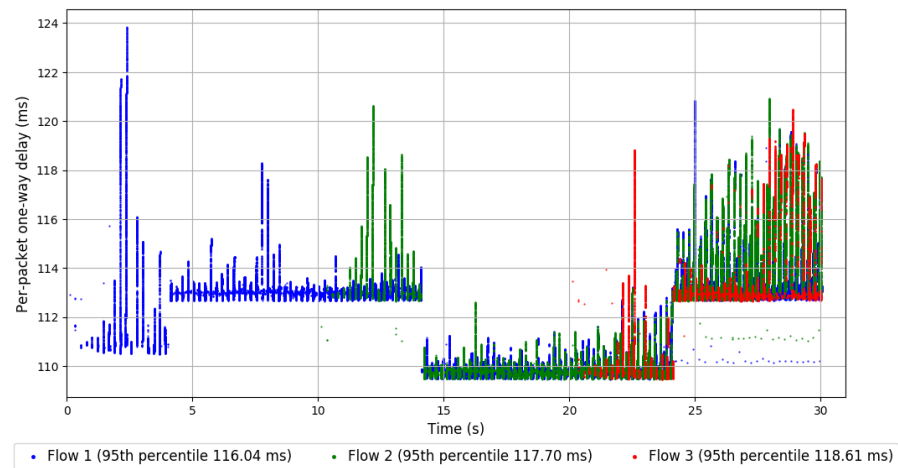
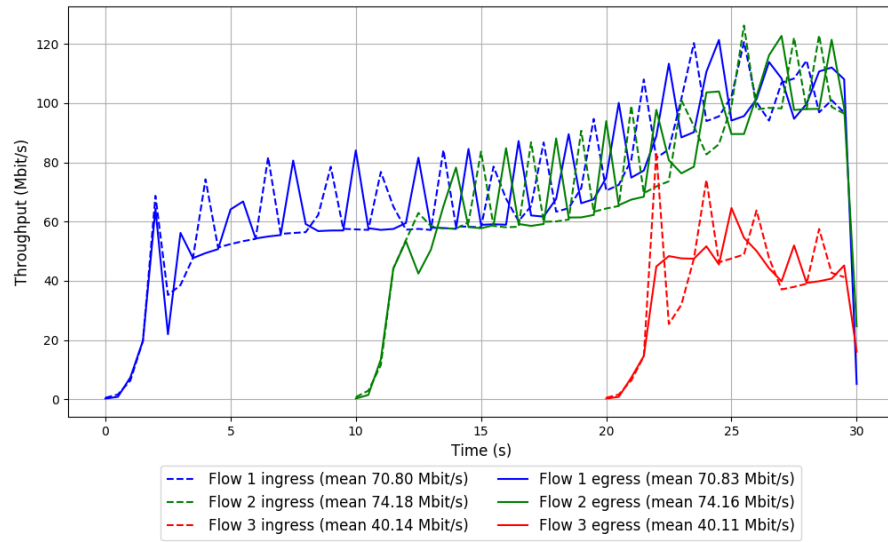
-- Flow 3:

Average throughput: 40.11 Mbit/s

95th percentile per-packet one-way delay: 118.605 ms

Loss rate: 0.03%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-11-21 15:40:06

End at: 2017-11-21 15:40:36

Below is generated by plot.py at 2017-11-21 18:14:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.22 Mbit/s

95th percentile per-packet one-way delay: 114.826 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.86 Mbit/s

95th percentile per-packet one-way delay: 113.976 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 61.72 Mbit/s

95th percentile per-packet one-way delay: 115.545 ms

Loss rate: 0.00%

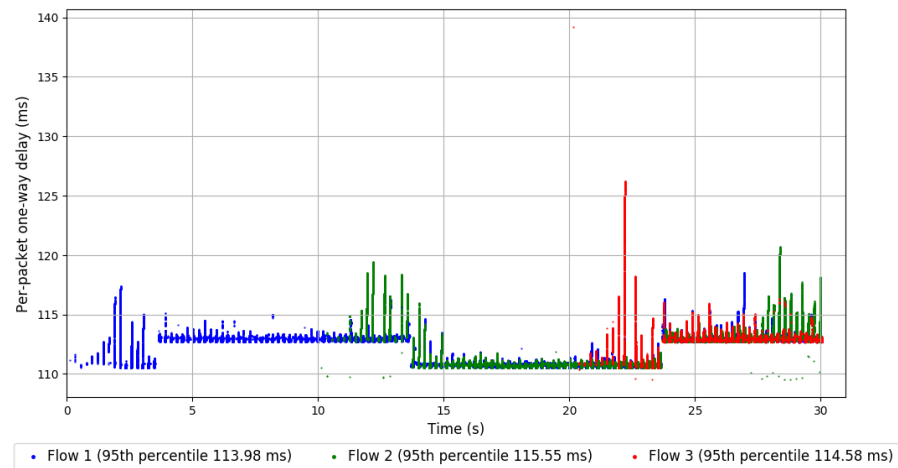
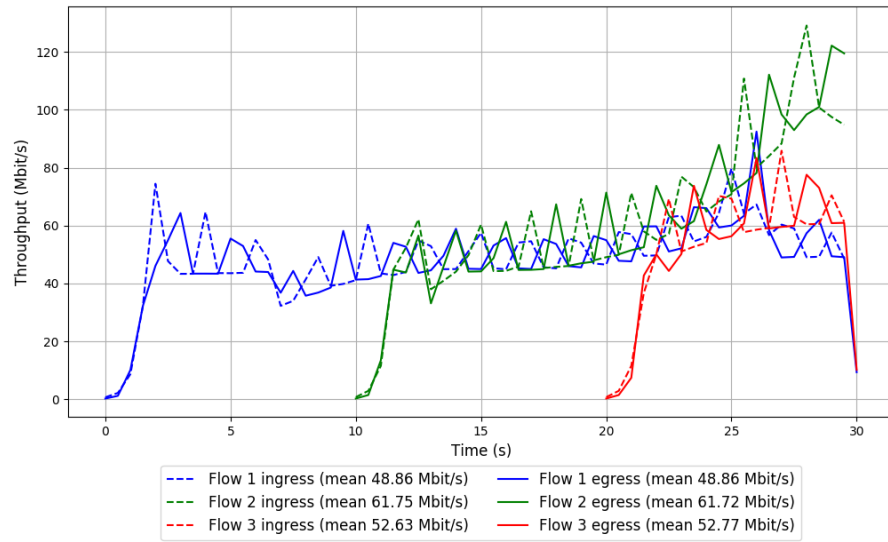
-- Flow 3:

Average throughput: 52.77 Mbit/s

95th percentile per-packet one-way delay: 114.585 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-21 15:53:23

End at: 2017-11-21 15:53:53

Below is generated by plot.py at 2017-11-21 18:14:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.90 Mbit/s

95th percentile per-packet one-way delay: 118.645 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 63.31 Mbit/s

95th percentile per-packet one-way delay: 118.877 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.40 Mbit/s

95th percentile per-packet one-way delay: 118.197 ms

Loss rate: 0.00%

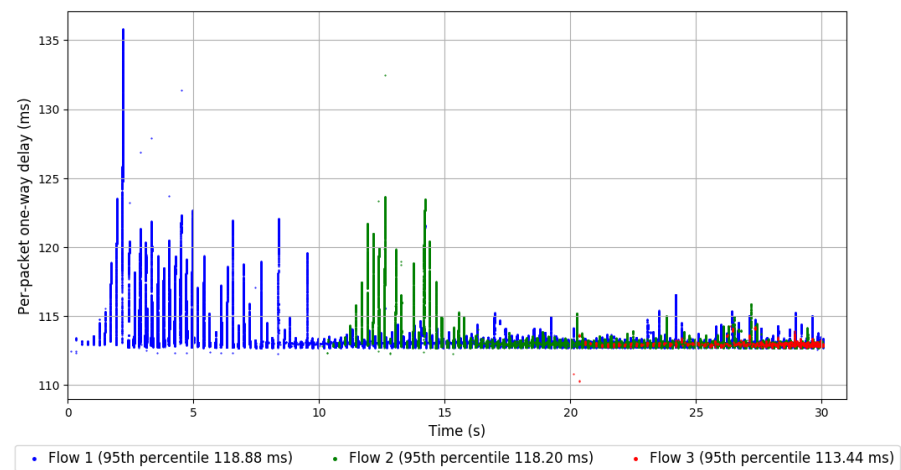
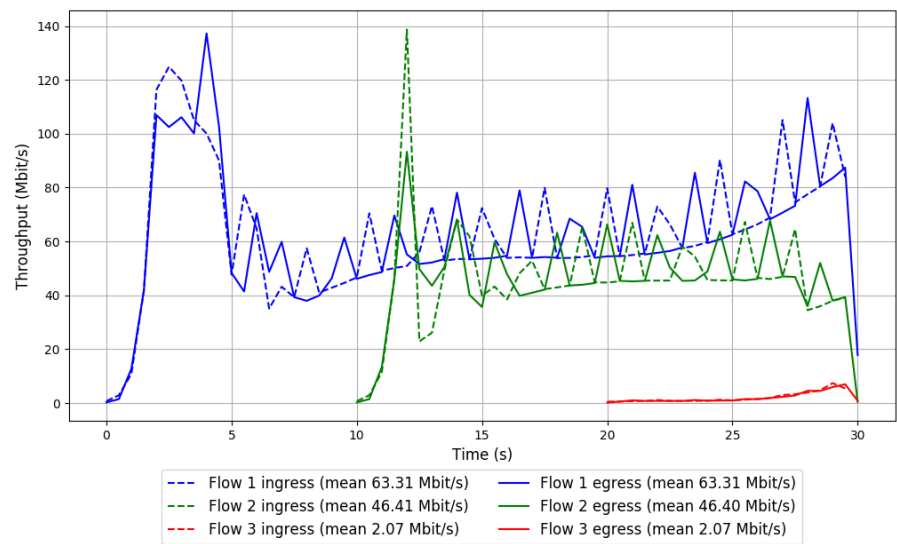
-- Flow 3:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 113.438 ms

Loss rate: 0.12%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-21 16:07:20

End at: 2017-11-21 16:07:50

Below is generated by plot.py at 2017-11-21 18:14:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.86 Mbit/s

95th percentile per-packet one-way delay: 114.933 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 53.85 Mbit/s

95th percentile per-packet one-way delay: 113.940 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 46.23 Mbit/s

95th percentile per-packet one-way delay: 117.000 ms

Loss rate: 0.03%

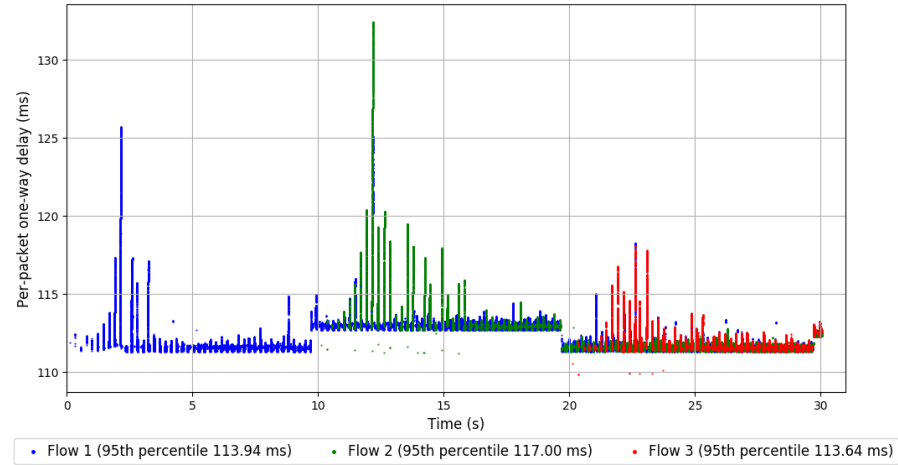
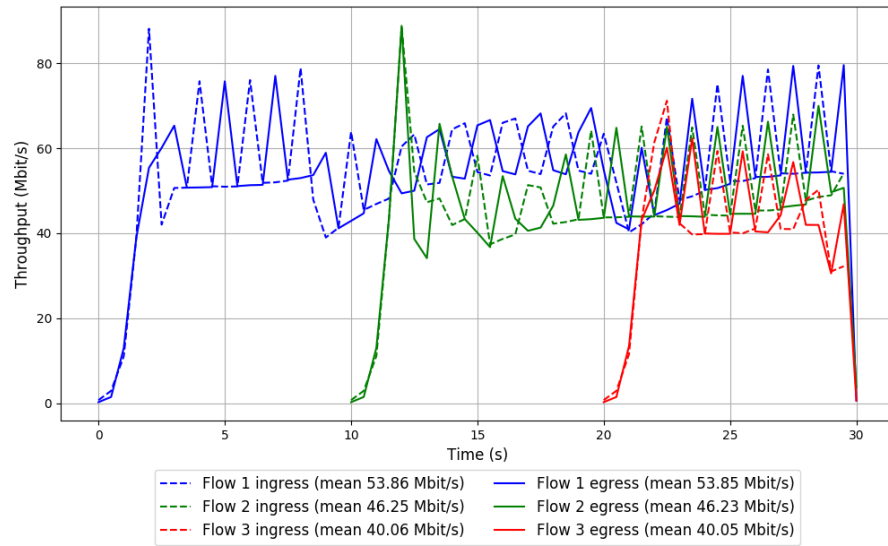
-- Flow 3:

Average throughput: 40.05 Mbit/s

95th percentile per-packet one-way delay: 113.637 ms

Loss rate: 0.01%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-21 16:21:04

End at: 2017-11-21 16:21:34

Below is generated by plot.py at 2017-11-21 18:15:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.14 Mbit/s

95th percentile per-packet one-way delay: 113.929 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 52.39 Mbit/s

95th percentile per-packet one-way delay: 113.364 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 42.59 Mbit/s

95th percentile per-packet one-way delay: 114.451 ms

Loss rate: 0.01%

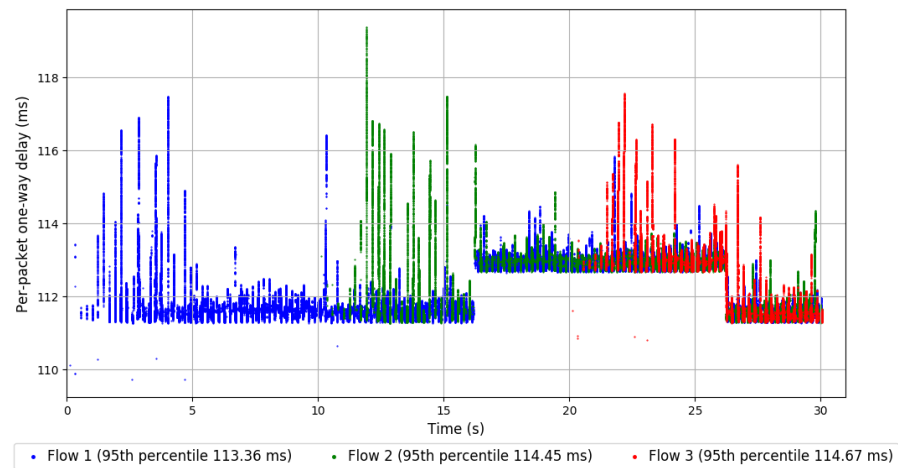
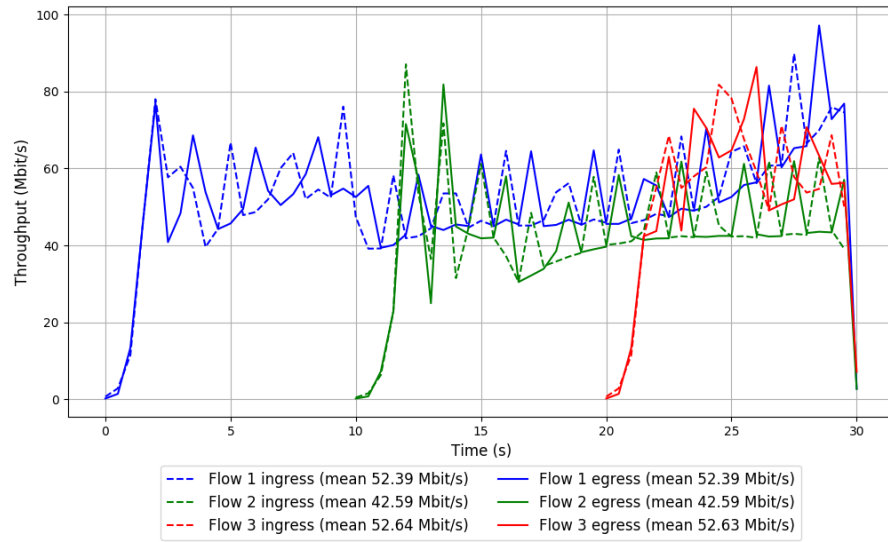
-- Flow 3:

Average throughput: 52.63 Mbit/s

95th percentile per-packet one-way delay: 114.665 ms

Loss rate: 0.02%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-21 16:34:17

End at: 2017-11-21 16:34:47

Below is generated by plot.py at 2017-11-21 18:15:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.00 Mbit/s

95th percentile per-packet one-way delay: 112.020 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 38.58 Mbit/s

95th percentile per-packet one-way delay: 112.004 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 64.31 Mbit/s

95th percentile per-packet one-way delay: 112.054 ms

Loss rate: 0.00%

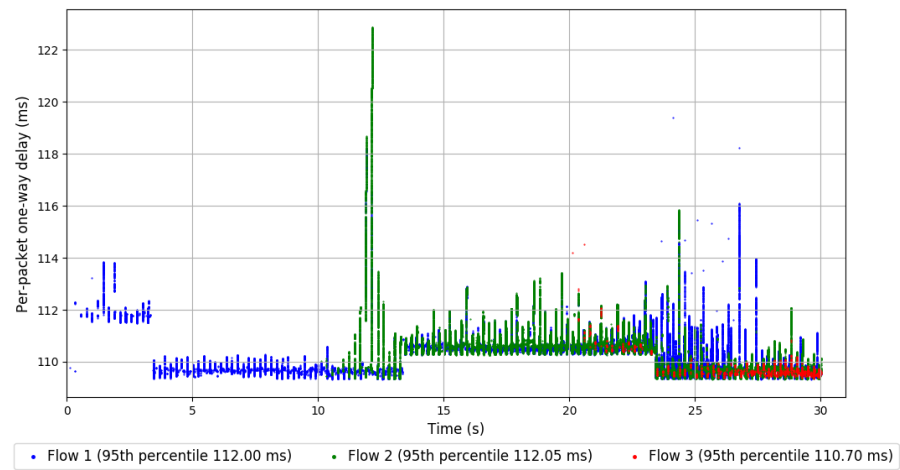
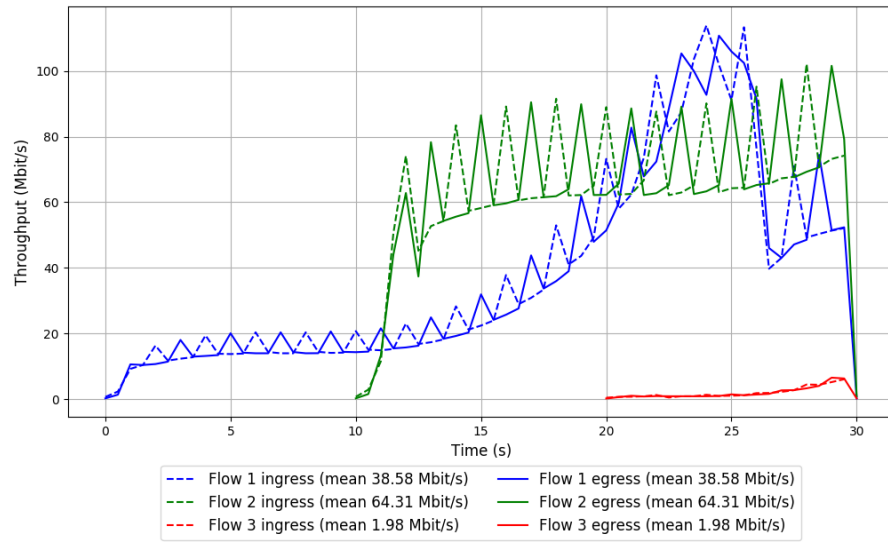
-- Flow 3:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 110.697 ms

Loss rate: 0.12%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-21 16:47:50

End at: 2017-11-21 16:48:20

Below is generated by plot.py at 2017-11-21 18:15:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.36 Mbit/s

95th percentile per-packet one-way delay: 114.391 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 62.82 Mbit/s

95th percentile per-packet one-way delay: 114.625 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.88 Mbit/s

95th percentile per-packet one-way delay: 115.701 ms

Loss rate: 0.01%

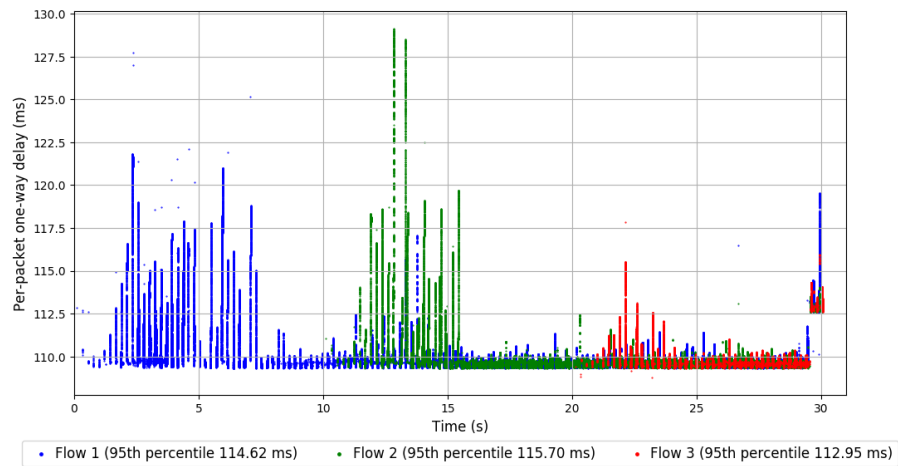
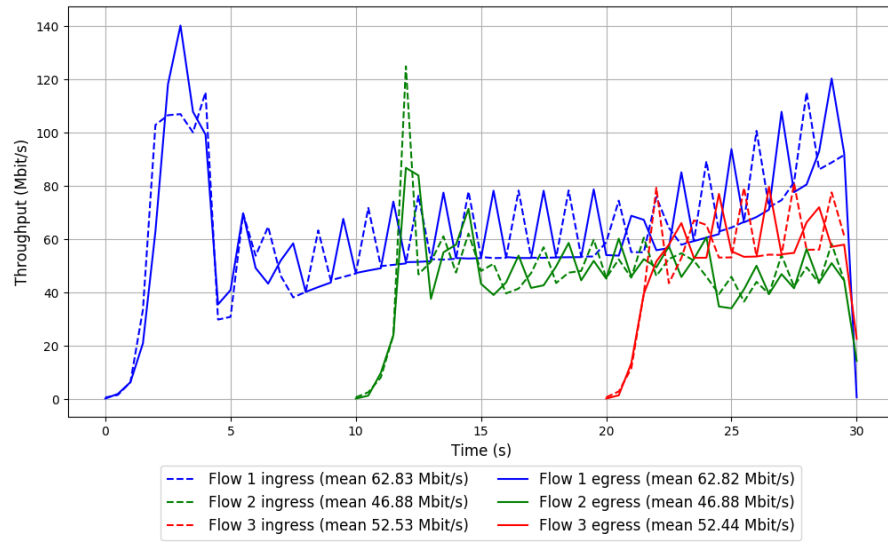
-- Flow 3:

Average throughput: 52.44 Mbit/s

95th percentile per-packet one-way delay: 112.948 ms

Loss rate: 0.15%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-21 17:01:21

End at: 2017-11-21 17:01:51

Below is generated by plot.py at 2017-11-21 18:16:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.64 Mbit/s

95th percentile per-packet one-way delay: 117.739 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.24 Mbit/s

95th percentile per-packet one-way delay: 118.289 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.62 Mbit/s

95th percentile per-packet one-way delay: 117.739 ms

Loss rate: 0.01%

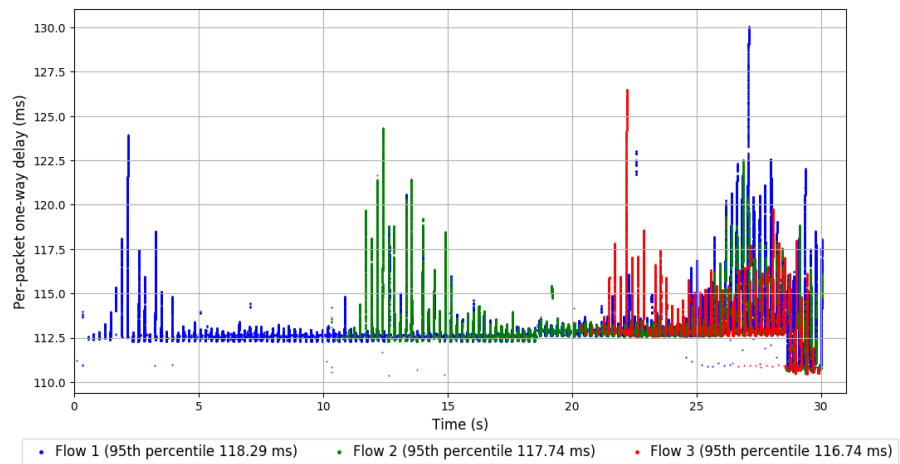
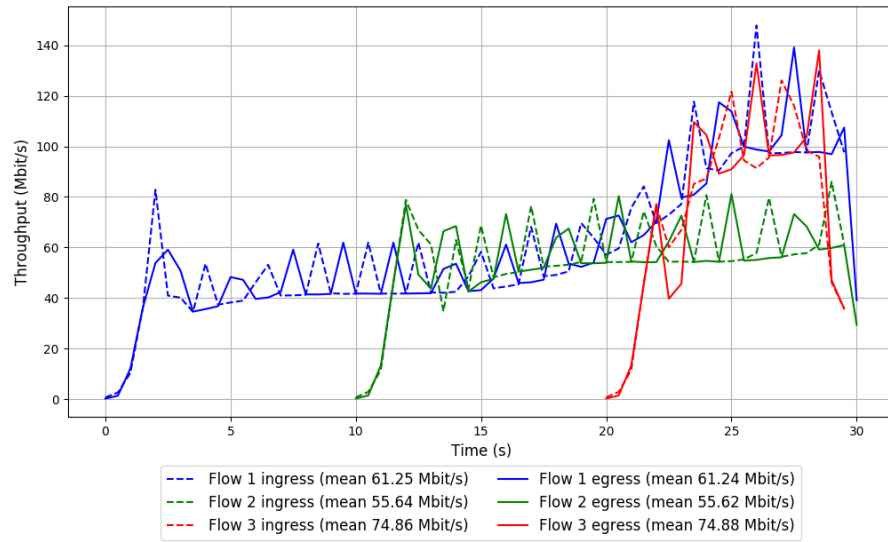
-- Flow 3:

Average throughput: 74.88 Mbit/s

95th percentile per-packet one-way delay: 116.741 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

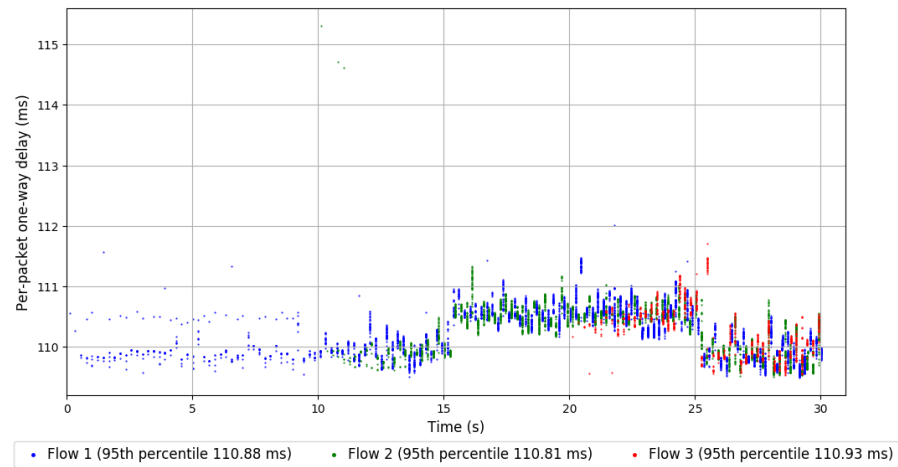
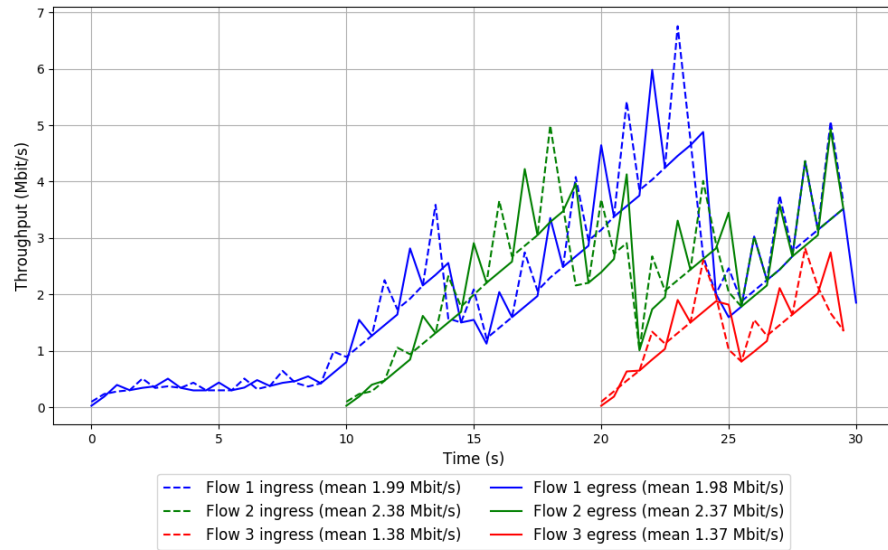


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-21 15:00:35
End at: 2017-11-21 15:01:05

# Below is generated by plot.py at 2017-11-21 18:16:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.00 Mbit/s
95th percentile per-packet one-way delay: 110.841 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 110.875 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 110.807 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 1.37 Mbit/s
95th percentile per-packet one-way delay: 110.927 ms
Loss rate: 0.87%
```


Run 1: Report of LEDBAT — Data Link

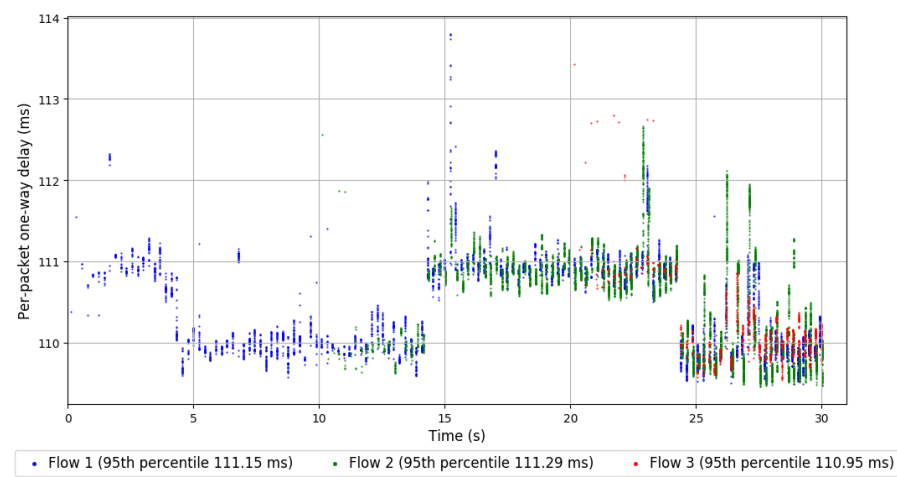
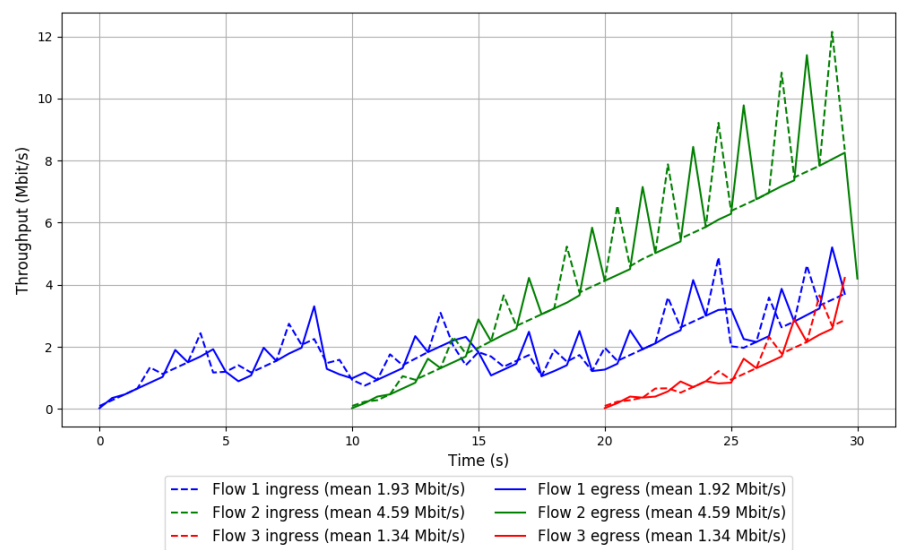


```
Run 2: Statistics of LEDBAT

Start at: 2017-11-21 15:13:46
End at: 2017-11-21 15:14:16

# Below is generated by plot.py at 2017-11-21 18:16:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.41 Mbit/s
95th percentile per-packet one-way delay: 111.231 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 111.154 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 4.59 Mbit/s
95th percentile per-packet one-way delay: 111.288 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 110.950 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-21 15:27:21

End at: 2017-11-21 15:27:51

Below is generated by plot.py at 2017-11-21 18:16:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.36 Mbit/s

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

Loss rate: 0.07%

-- Flow 1:

Average throughput: 3.67 Mbit/s

95th percentile per-packet one-way delay: 113.448 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 113.480 ms

Loss rate: 0.30%

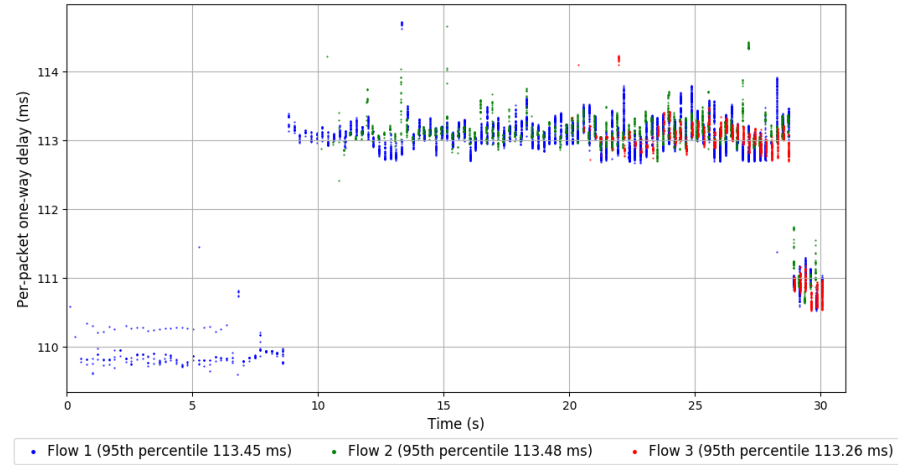
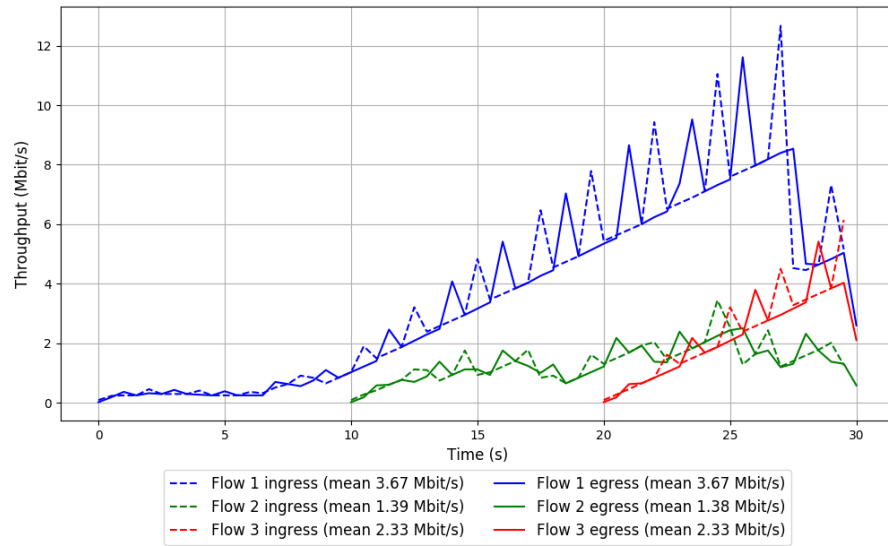
-- Flow 3:

Average throughput: 2.33 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-21 15:41:00

End at: 2017-11-21 15:41:30

Below is generated by plot.py at 2017-11-21 18:16:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.81 Mbit/s

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

Loss rate: 0.17%

-- Flow 1:

Average throughput: 2.75 Mbit/s

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

Loss rate: 0.10%

-- Flow 2:

Average throughput: 2.22 Mbit/s

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

Loss rate: 0.24%

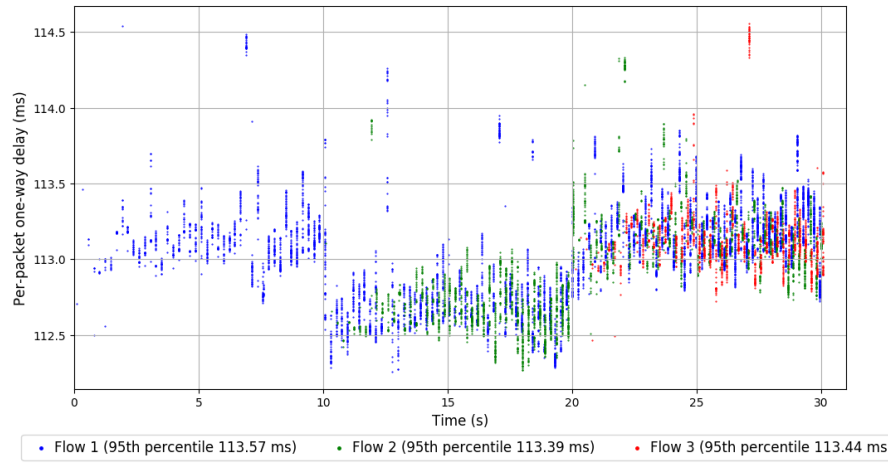
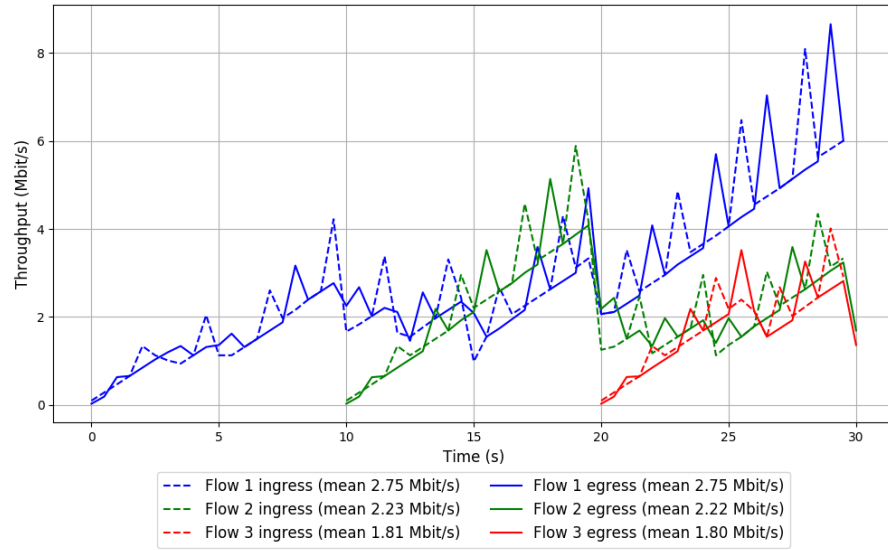
-- Flow 3:

Average throughput: 1.80 Mbit/s

95th percentile per-packet one-way delay: 113.440 ms

Loss rate: 0.33%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-21 15:54:16

End at: 2017-11-21 15:54:46

Below is generated by plot.py at 2017-11-21 18:16:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.52 Mbit/s

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

Loss rate: 0.10%

-- Flow 1:

Average throughput: 3.16 Mbit/s

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

Loss rate: 0.15%

-- Flow 2:

Average throughput: 1.67 Mbit/s

95th percentile per-packet one-way delay: 113.594 ms

Loss rate: 0.00%

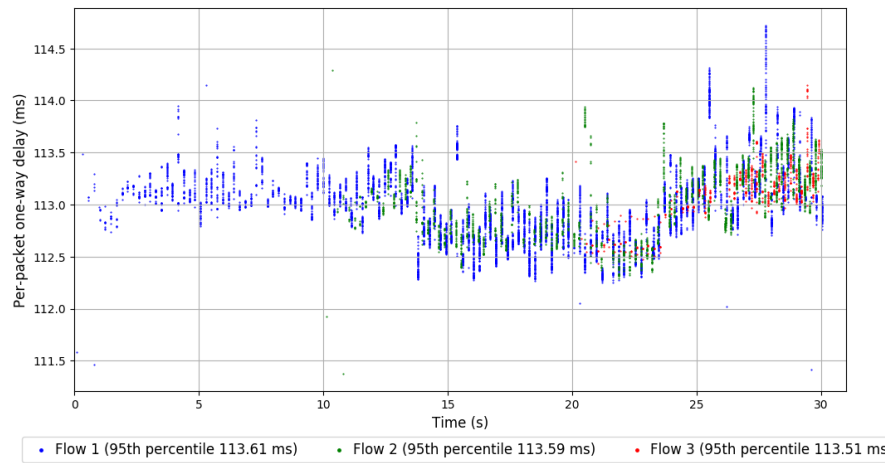
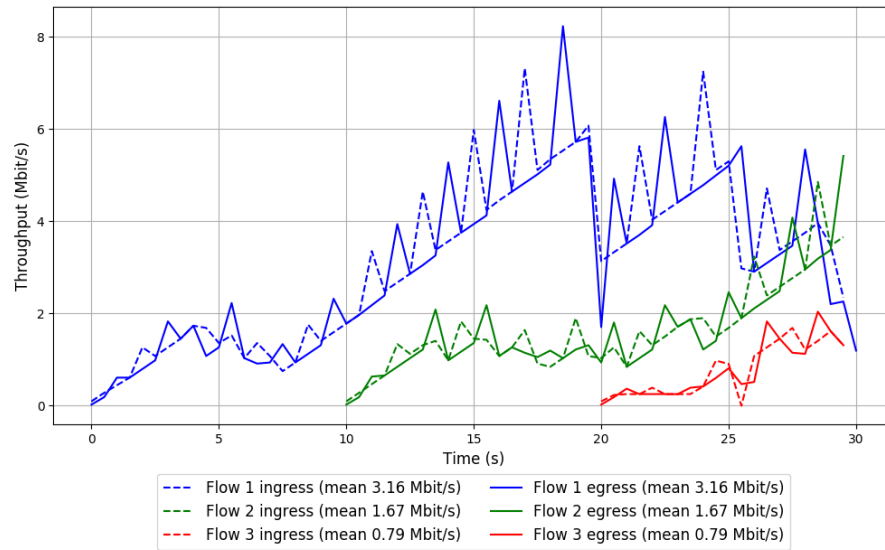
-- Flow 3:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 113.508 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-21 16:08:14

End at: 2017-11-21 16:08:44

Below is generated by plot.py at 2017-11-21 18:16:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.79 Mbit/s

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

Loss rate: 0.47%

-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 113.614 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 113.564 ms

Loss rate: 0.16%

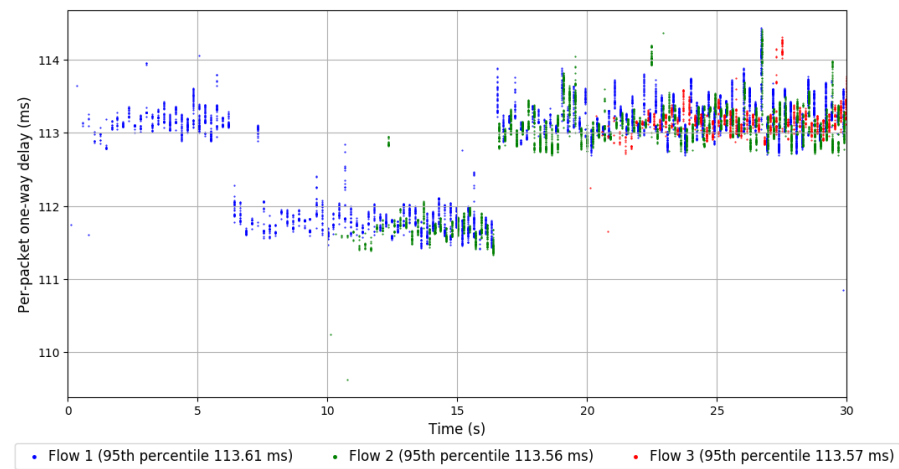
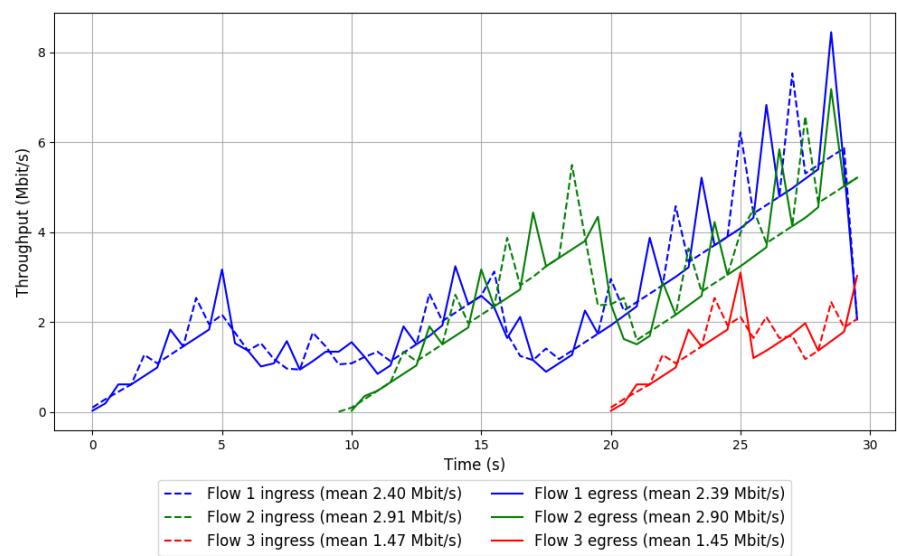
-- Flow 3:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 113.572 ms

Loss rate: 1.53%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-21 16:21:57

End at: 2017-11-21 16:22:27

Below is generated by plot.py at 2017-11-21 18:16:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.71 Mbit/s

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

Loss rate: 0.08%

-- Flow 1:

Average throughput: 3.12 Mbit/s

95th percentile per-packet one-way delay: 112.271 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 3.04 Mbit/s

95th percentile per-packet one-way delay: 112.394 ms

Loss rate: 0.00%

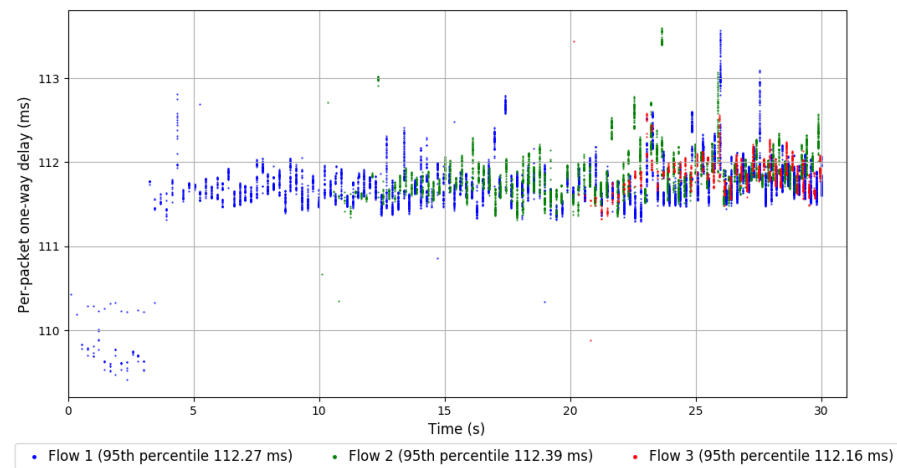
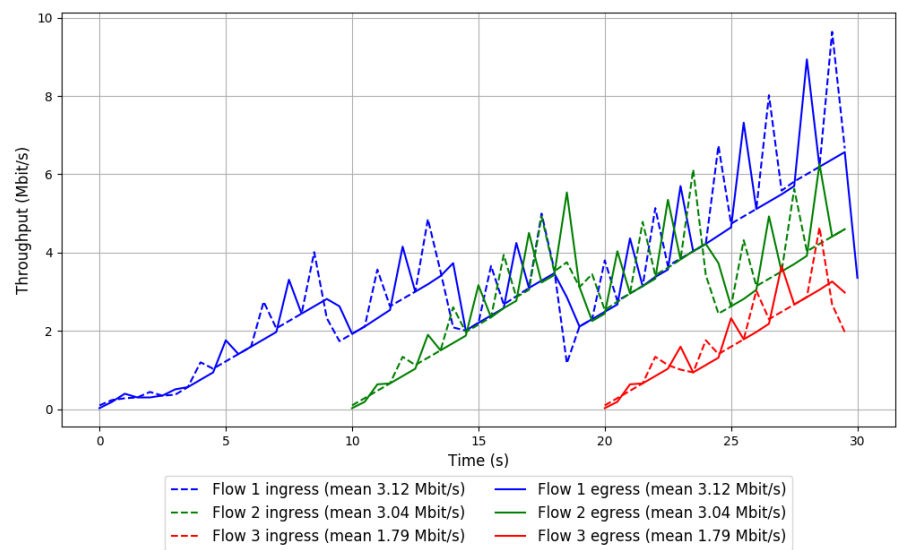
-- Flow 3:

Average throughput: 1.79 Mbit/s

95th percentile per-packet one-way delay: 112.157 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-21 16:35:09

End at: 2017-11-21 16:35:39

Below is generated by plot.py at 2017-11-21 18:16:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 110.974 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 3.17 Mbit/s

95th percentile per-packet one-way delay: 110.989 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 2.81 Mbit/s

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

Loss rate: 0.19%

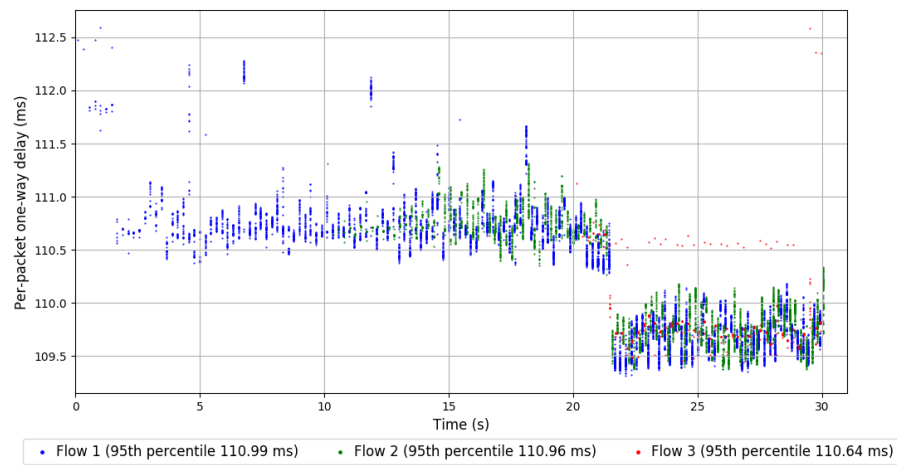
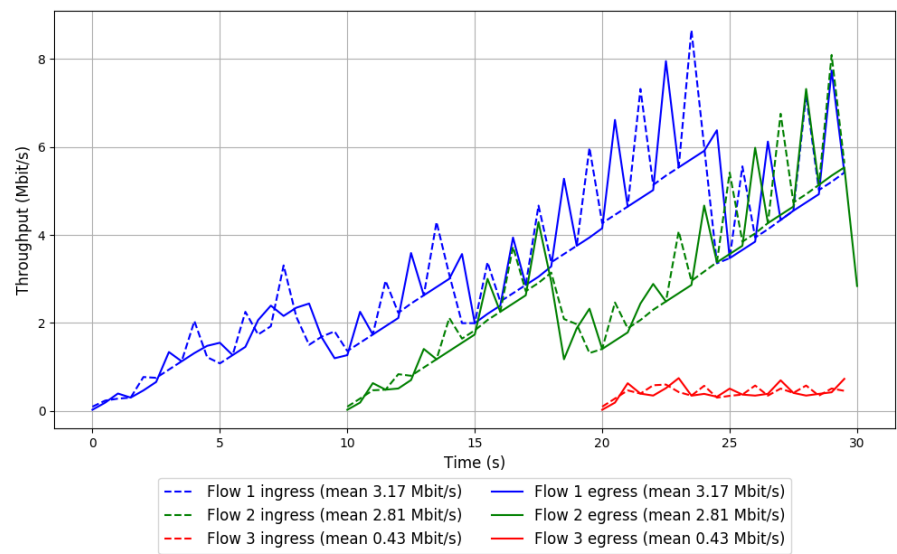
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 110.644 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-21 16:48:44

End at: 2017-11-21 16:49:14

Below is generated by plot.py at 2017-11-21 18:16:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.41 Mbit/s

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

Loss rate: 0.13%

-- Flow 1:

Average throughput: 2.88 Mbit/s

95th percentile per-packet one-way delay: 113.225 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 2.76 Mbit/s

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

Loss rate: 0.15%

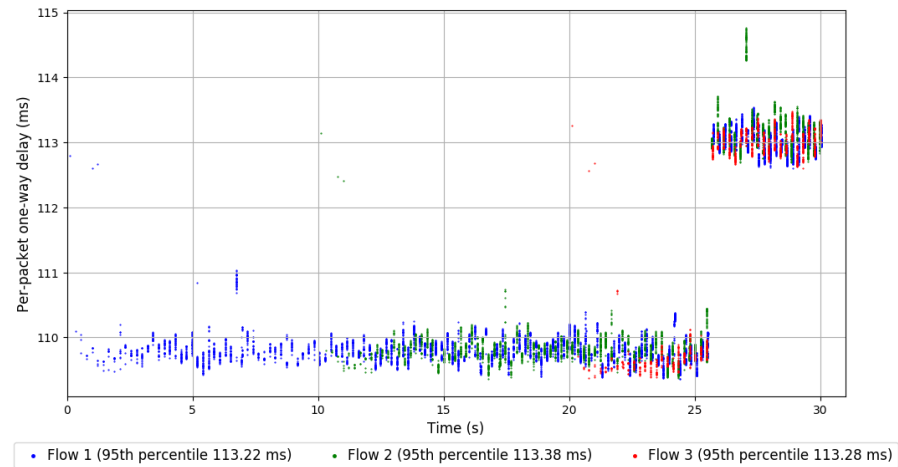
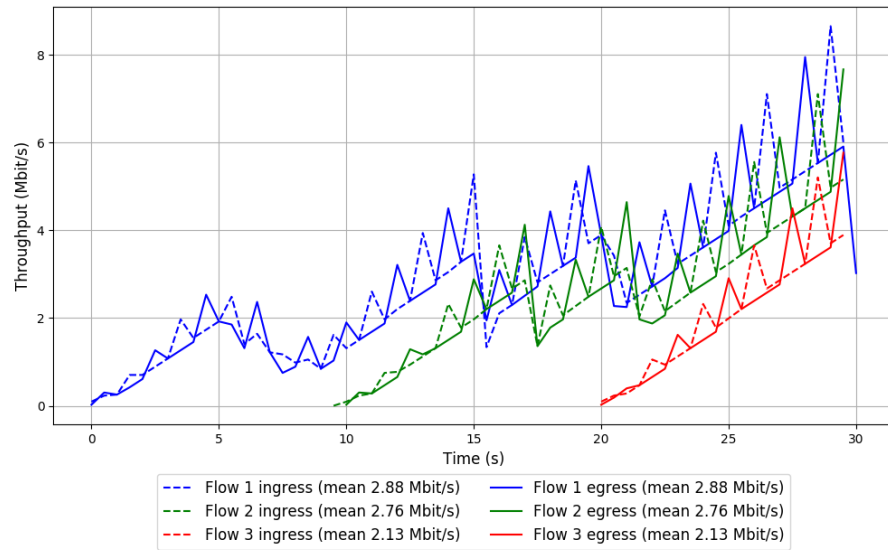
-- Flow 3:

Average throughput: 2.13 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-11-21 17:02:16

End at: 2017-11-21 17:02:46

Below is generated by plot.py at 2017-11-21 18:16:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 113.110 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 113.172 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.08 Mbit/s

95th percentile per-packet one-way delay: 113.085 ms

Loss rate: 0.10%

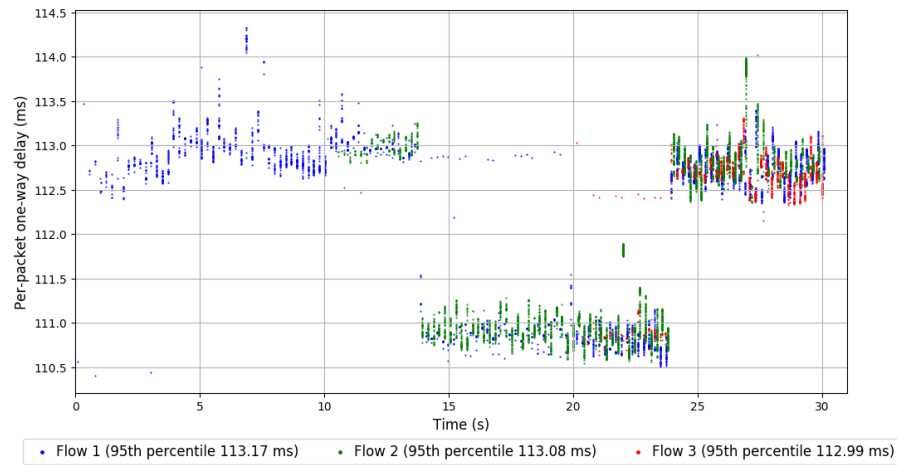
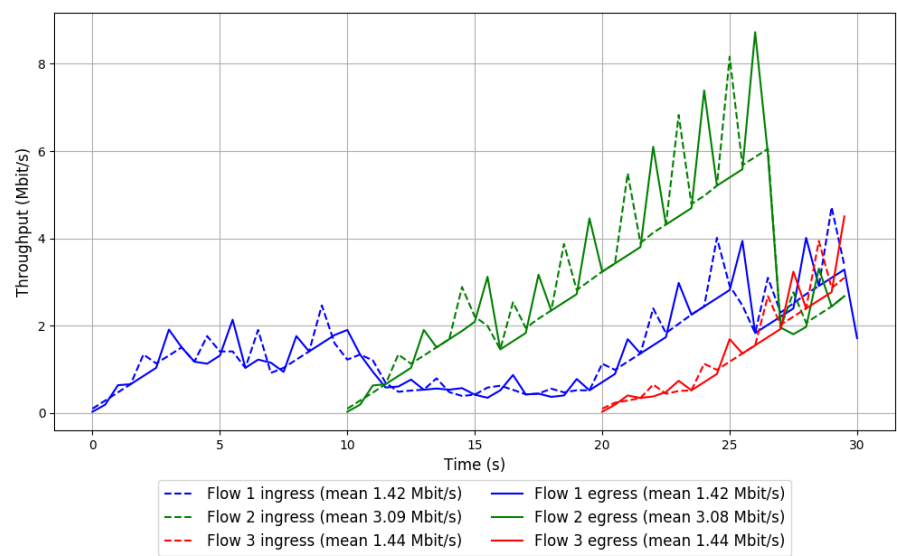
-- Flow 3:

Average throughput: 1.44 Mbit/s

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

Loss rate: 0.16%

Run 10: Report of LEDBAT — Data Link

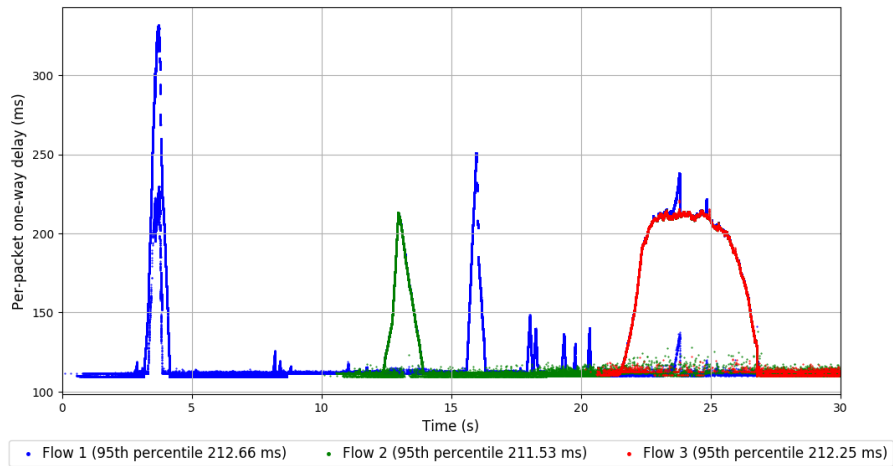
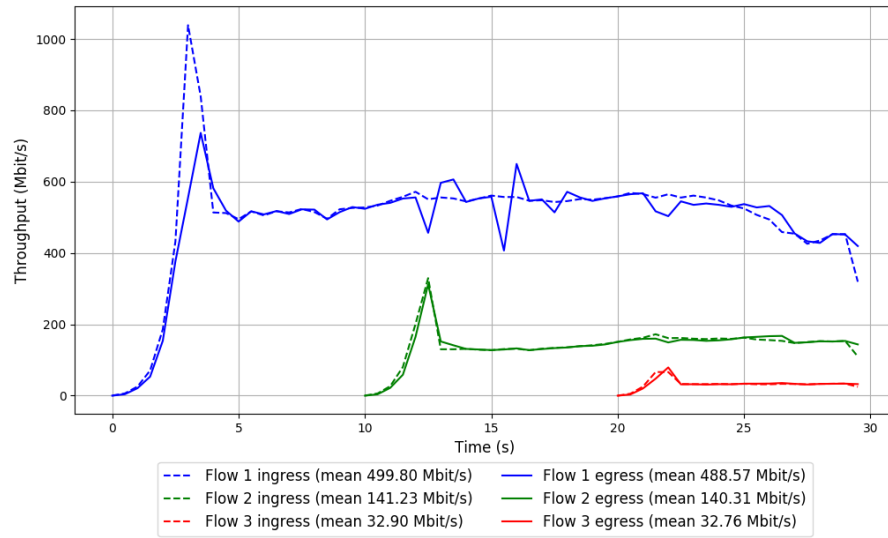


```
Run 1: Statistics of PCC

Start at: 2017-11-21 15:08:11
End at: 2017-11-21 15:08:41

# Below is generated by plot.py at 2017-11-21 18:25:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 592.57 Mbit/s
95th percentile per-packet one-way delay: 212.315 ms
Loss rate: 1.97%
-- Flow 1:
Average throughput: 488.57 Mbit/s
95th percentile per-packet one-way delay: 212.662 ms
Loss rate: 2.25%
-- Flow 2:
Average throughput: 140.31 Mbit/s
95th percentile per-packet one-way delay: 211.525 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 32.76 Mbit/s
95th percentile per-packet one-way delay: 212.251 ms
Loss rate: 0.47%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-21 15:21:35

End at: 2017-11-21 15:22:05

Below is generated by plot.py at 2017-11-21 18:25:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 612.63 Mbit/s

95th percentile per-packet one-way delay: 216.295 ms

Loss rate: 2.37%

-- Flow 1:

Average throughput: 527.89 Mbit/s

95th percentile per-packet one-way delay: 216.306 ms

Loss rate: 2.44%

-- Flow 2:

Average throughput: 125.40 Mbit/s

95th percentile per-packet one-way delay: 216.227 ms

Loss rate: 1.92%

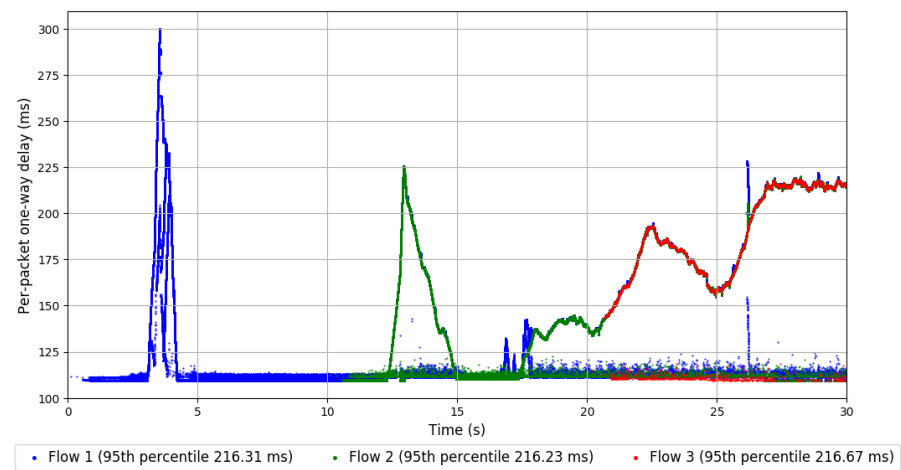
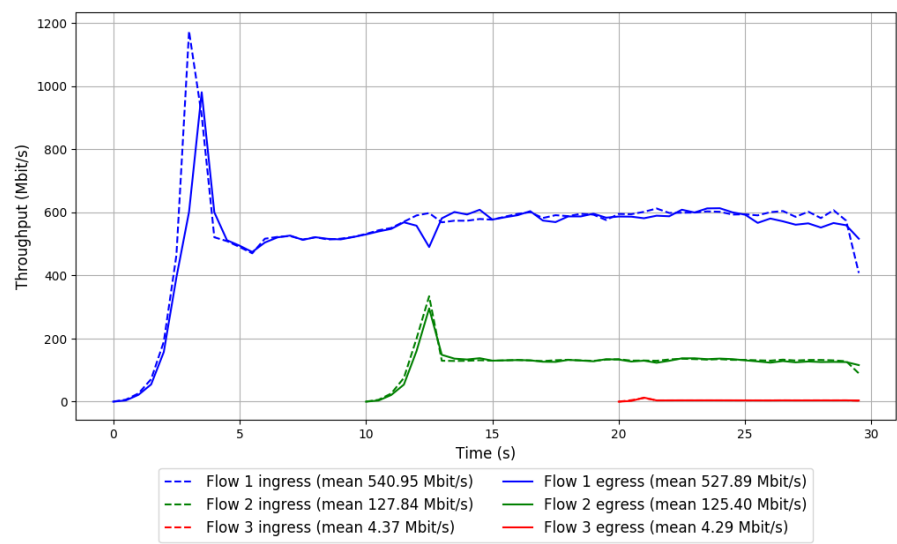
-- Flow 3:

Average throughput: 4.29 Mbit/s

95th percentile per-packet one-way delay: 216.672 ms

Loss rate: 1.91%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-21 15:35:06

End at: 2017-11-21 15:35:36

Below is generated by plot.py at 2017-11-21 18:25:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 620.45 Mbit/s

95th percentile per-packet one-way delay: 213.263 ms

Loss rate: 2.08%

-- Flow 1:

Average throughput: 559.56 Mbit/s

95th percentile per-packet one-way delay: 212.843 ms

Loss rate: 1.95%

-- Flow 2:

Average throughput: 33.45 Mbit/s

95th percentile per-packet one-way delay: 212.991 ms

Loss rate: 1.12%

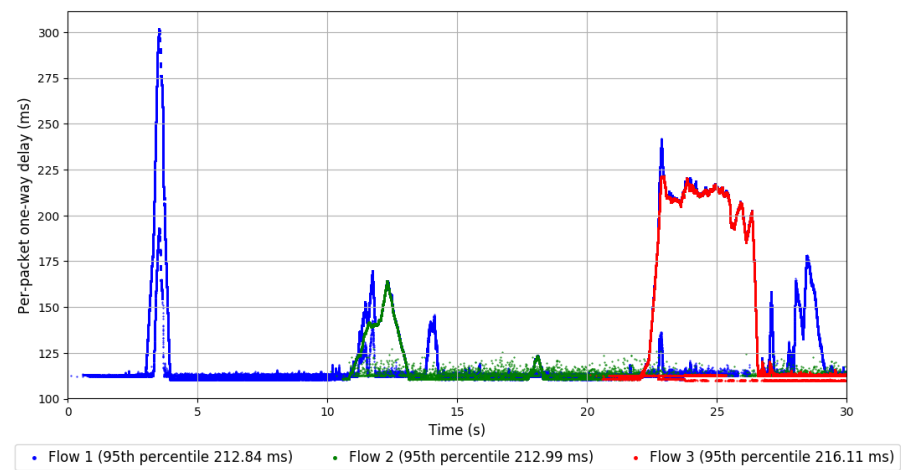
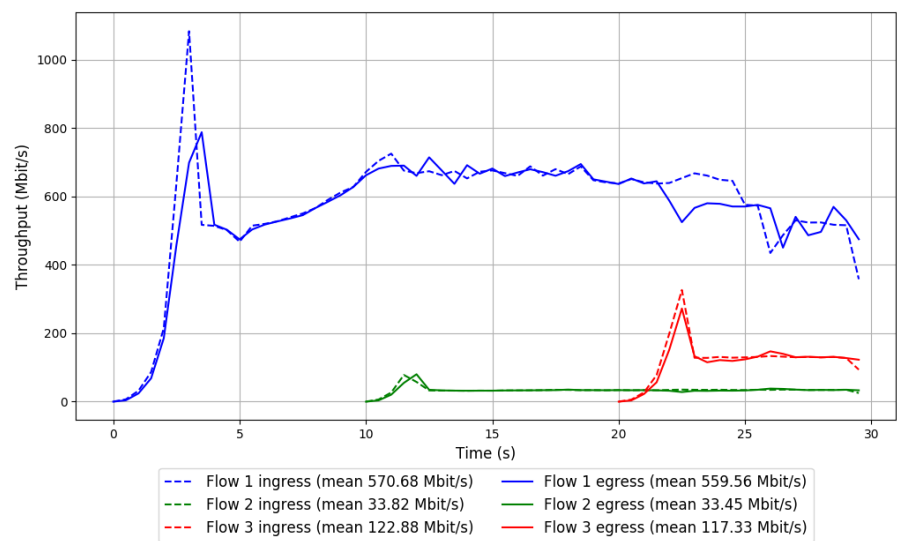
-- Flow 3:

Average throughput: 117.33 Mbit/s

95th percentile per-packet one-way delay: 216.109 ms

Loss rate: 4.52%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-21 15:48:45

End at: 2017-11-21 15:49:15

Below is generated by plot.py at 2017-11-21 18:25:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 615.30 Mbit/s

95th percentile per-packet one-way delay: 214.069 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 517.93 Mbit/s

95th percentile per-packet one-way delay: 214.402 ms

Loss rate: 1.62%

-- Flow 2:

Average throughput: 138.56 Mbit/s

95th percentile per-packet one-way delay: 213.443 ms

Loss rate: 1.66%

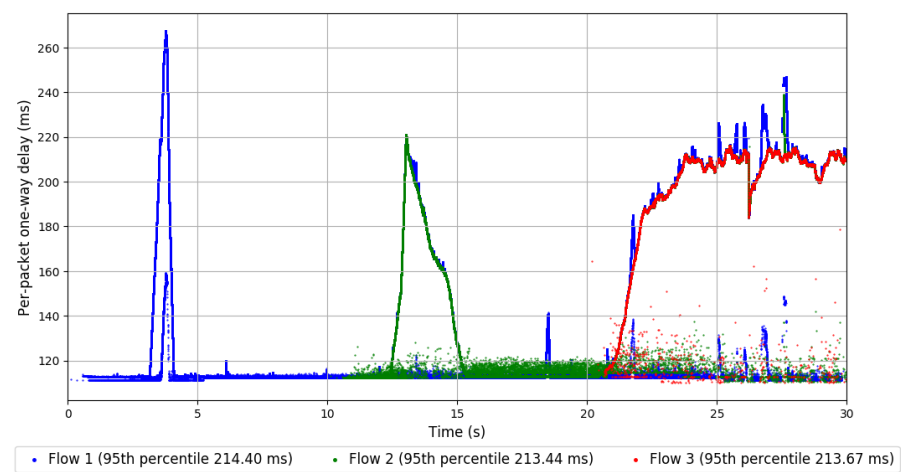
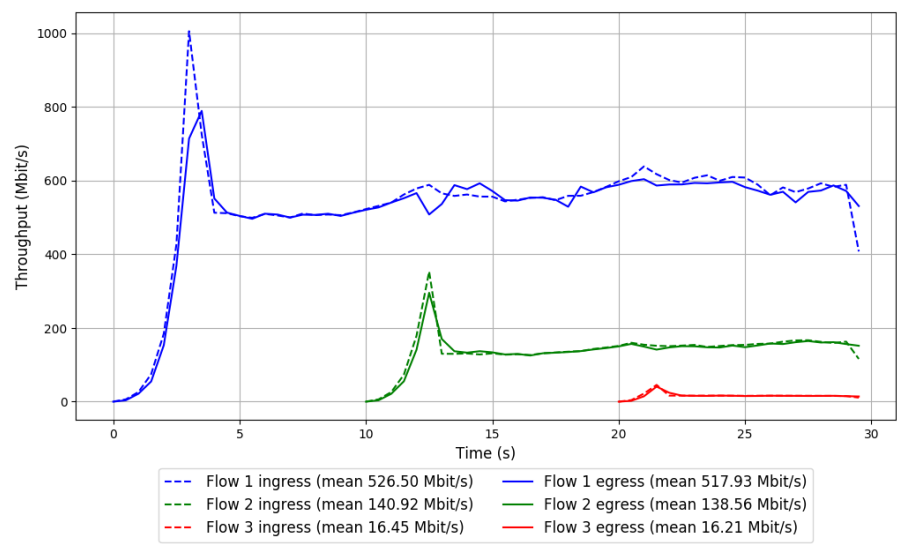
-- Flow 3:

Average throughput: 16.21 Mbit/s

95th percentile per-packet one-way delay: 213.666 ms

Loss rate: 2.00%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-21 16:02:06

End at: 2017-11-21 16:02:36

Below is generated by plot.py at 2017-11-21 18:26:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 608.23 Mbit/s

95th percentile per-packet one-way delay: 216.908 ms

Loss rate: 2.80%

-- Flow 1:

Average throughput: 440.78 Mbit/s

95th percentile per-packet one-way delay: 216.380 ms

Loss rate: 2.55%

-- Flow 2:

Average throughput: 218.04 Mbit/s

95th percentile per-packet one-way delay: 218.586 ms

Loss rate: 3.81%

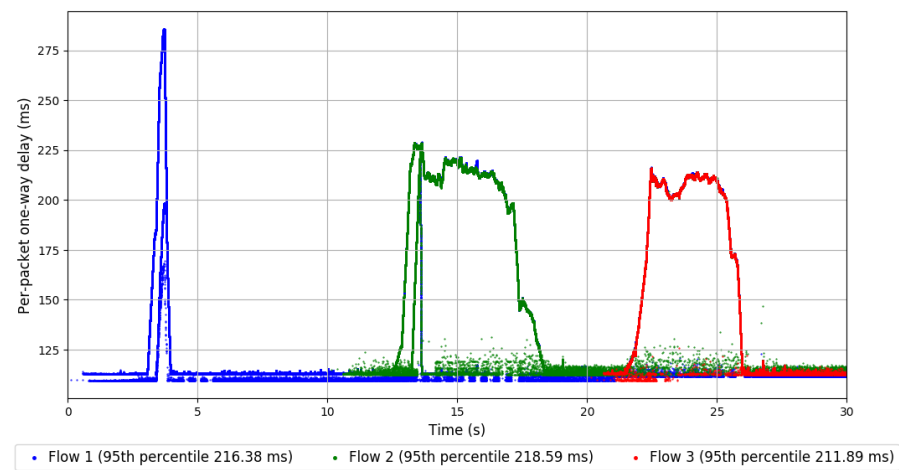
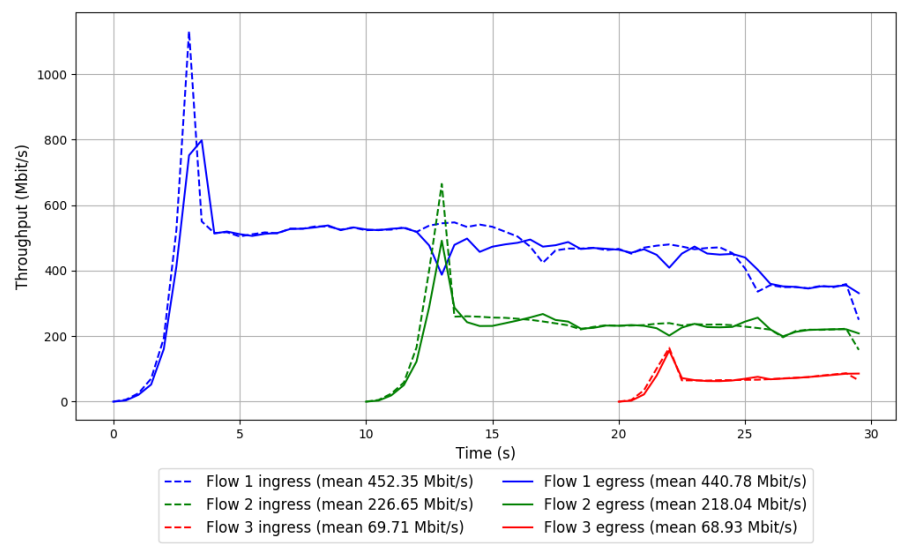
-- Flow 3:

Average throughput: 68.93 Mbit/s

95th percentile per-packet one-way delay: 211.889 ms

Loss rate: 1.10%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-21 16:15:53

End at: 2017-11-21 16:16:23

Below is generated by plot.py at 2017-11-21 18:26:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 614.34 Mbit/s

95th percentile per-packet one-way delay: 219.446 ms

Loss rate: 1.65%

-- Flow 1:

Average throughput: 586.58 Mbit/s

95th percentile per-packet one-way delay: 219.408 ms

Loss rate: 1.68%

-- Flow 2:

Average throughput: 33.42 Mbit/s

95th percentile per-packet one-way delay: 219.509 ms

Loss rate: 1.04%

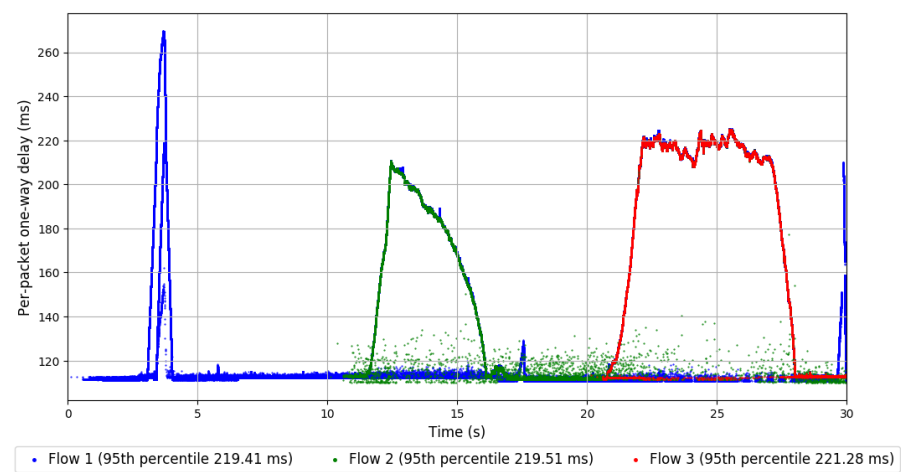
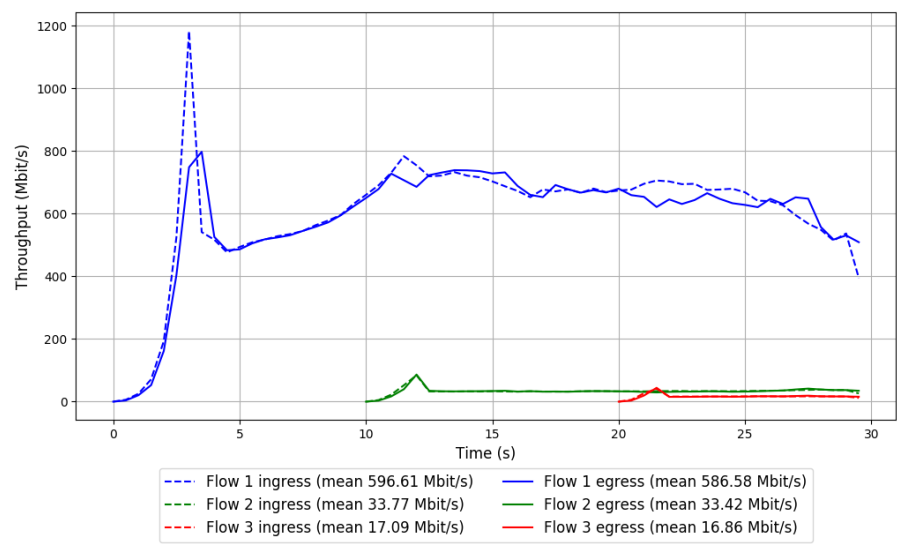
-- Flow 3:

Average throughput: 16.86 Mbit/s

95th percentile per-packet one-way delay: 221.279 ms

Loss rate: 1.33%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-21 16:29:35

End at: 2017-11-21 16:30:05

Below is generated by plot.py at 2017-11-21 18:27:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 620.85 Mbit/s

95th percentile per-packet one-way delay: 244.348 ms

Loss rate: 4.69%

-- Flow 1:

Average throughput: 536.64 Mbit/s

95th percentile per-packet one-way delay: 246.159 ms

Loss rate: 4.89%

-- Flow 2:

Average throughput: 125.66 Mbit/s

95th percentile per-packet one-way delay: 215.979 ms

Loss rate: 3.42%

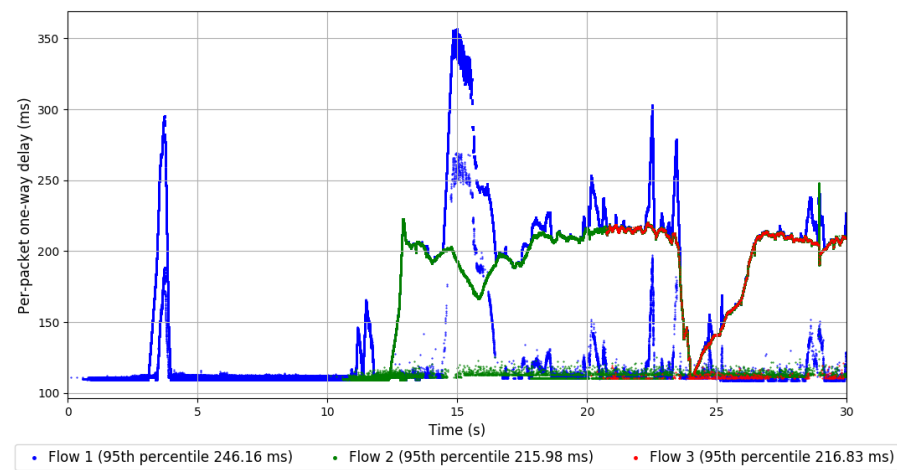
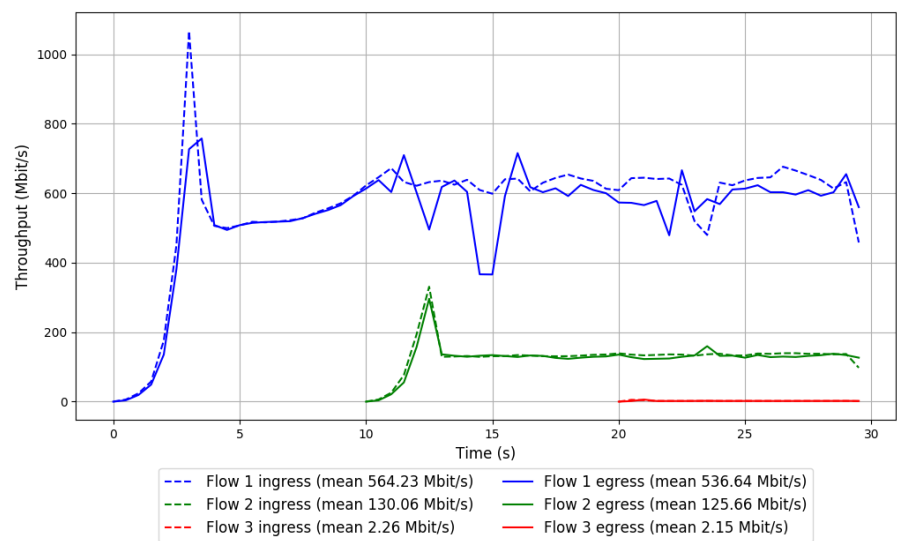
-- Flow 3:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 216.832 ms

Loss rate: 4.87%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-21 16:42:51

End at: 2017-11-21 16:43:21

Below is generated by plot.py at 2017-11-21 18:27:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 619.98 Mbit/s

95th percentile per-packet one-way delay: 226.146 ms

Loss rate: 2.96%

-- Flow 1:

Average throughput: 541.69 Mbit/s

95th percentile per-packet one-way delay: 227.621 ms

Loss rate: 2.99%

-- Flow 2:

Average throughput: 116.72 Mbit/s

95th percentile per-packet one-way delay: 223.927 ms

Loss rate: 2.79%

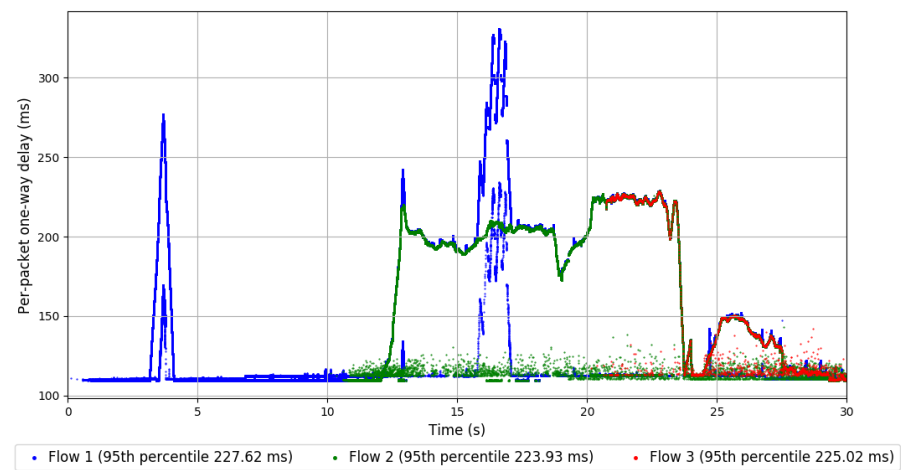
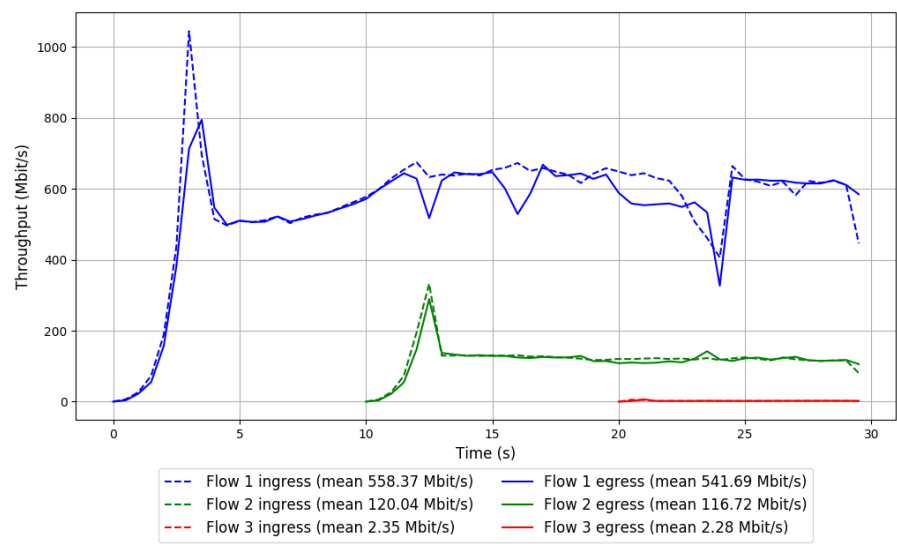
-- Flow 3:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 225.017 ms

Loss rate: 3.12%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-21 16:56:31

End at: 2017-11-21 16:57:01

Below is generated by plot.py at 2017-11-21 18:36:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 598.12 Mbit/s

95th percentile per-packet one-way delay: 172.237 ms

Loss rate: 1.40%

-- Flow 1:

Average throughput: 503.10 Mbit/s

95th percentile per-packet one-way delay: 173.147 ms

Loss rate: 1.60%

-- Flow 2:

Average throughput: 140.80 Mbit/s

95th percentile per-packet one-way delay: 167.821 ms

Loss rate: 0.36%

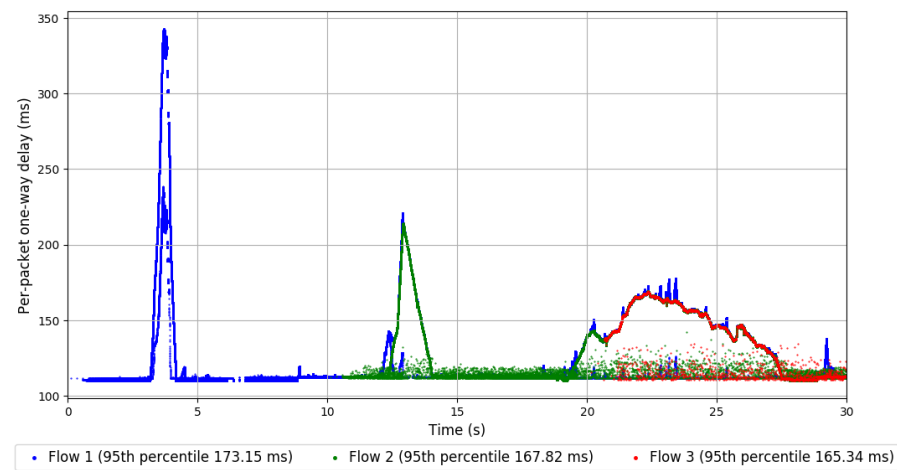
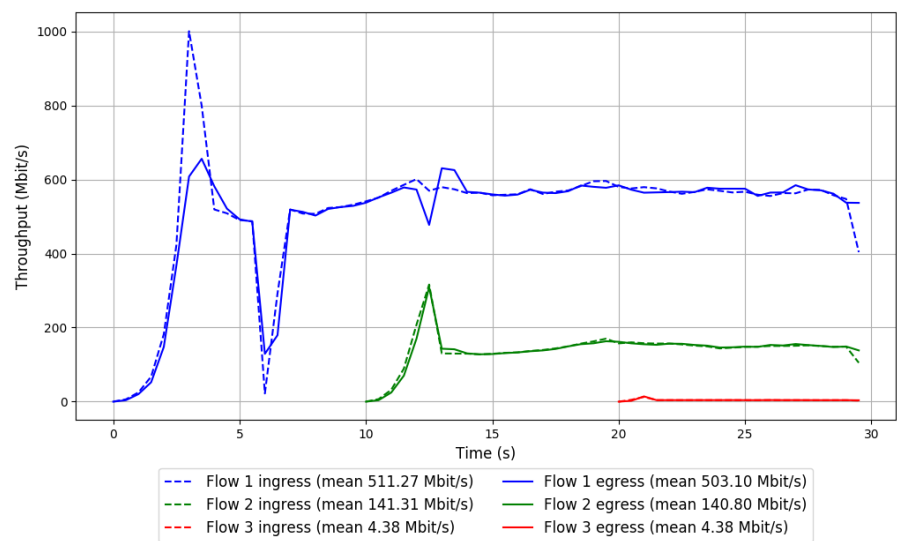
-- Flow 3:

Average throughput: 4.38 Mbit/s

95th percentile per-packet one-way delay: 165.337 ms

Loss rate: 0.03%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-11-21 17:09:59

End at: 2017-11-21 17:10:29

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 601.20 Mbit/s

95th percentile per-packet one-way delay: 216.582 ms

Loss rate: 1.97%

-- Flow 1:

Average throughput: 493.03 Mbit/s

95th percentile per-packet one-way delay: 216.814 ms

Loss rate: 1.94%

-- Flow 2:

Average throughput: 132.39 Mbit/s

95th percentile per-packet one-way delay: 215.303 ms

Loss rate: 1.53%

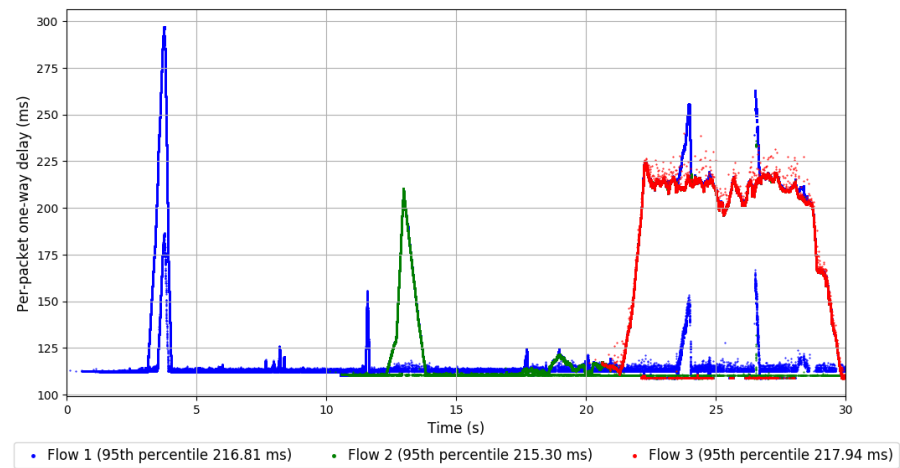
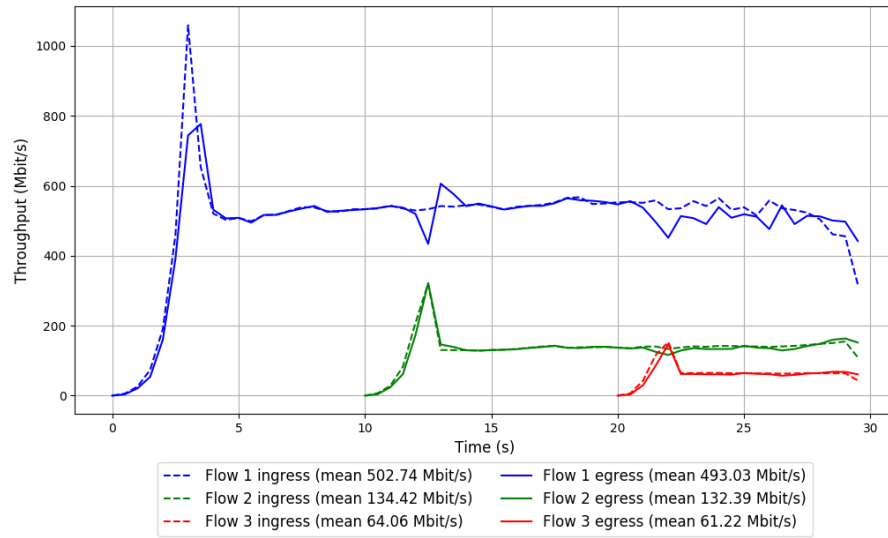
-- Flow 3:

Average throughput: 61.22 Mbit/s

95th percentile per-packet one-way delay: 217.942 ms

Loss rate: 4.50%

Run 10: Report of PCC — Data Link

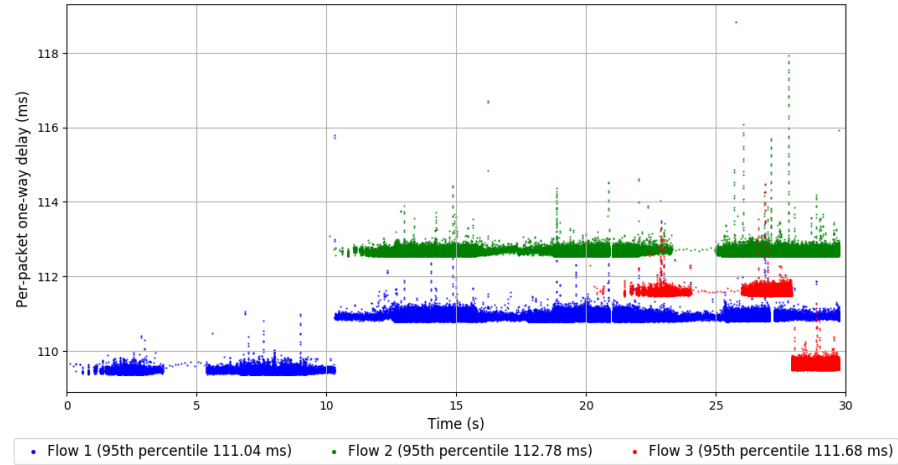
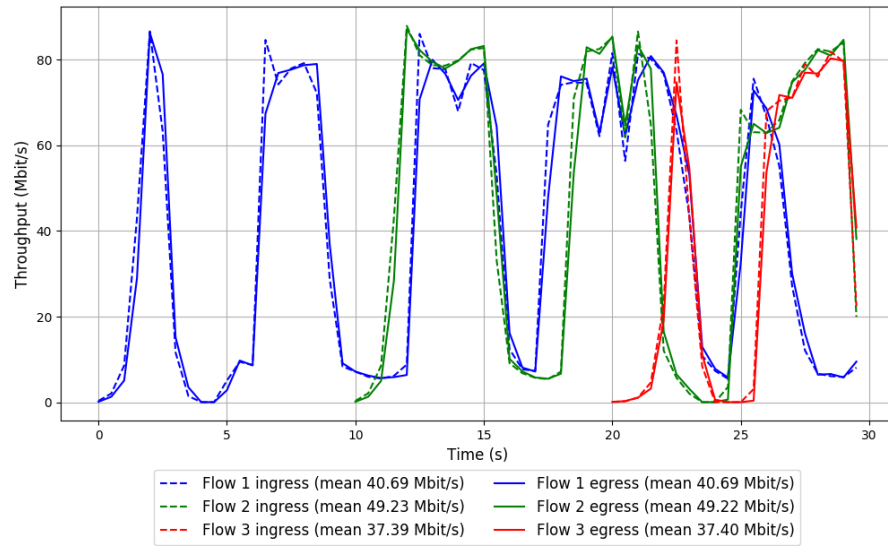


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-11-21 15:03:19
End at: 2017-11-21 15:03:49

# Below is generated by plot.py at 2017-11-21 18:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.37 Mbit/s
95th percentile per-packet one-way delay: 112.711 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 40.69 Mbit/s
95th percentile per-packet one-way delay: 111.039 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.22 Mbit/s
95th percentile per-packet one-way delay: 112.777 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 37.40 Mbit/s
95th percentile per-packet one-way delay: 111.681 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-11-21 15:16:30

End at: 2017-11-21 15:17:00

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.94 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 51.33 Mbit/s

95th percentile per-packet one-way delay: 112.682 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 34.89 Mbit/s

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

Loss rate: 0.00%

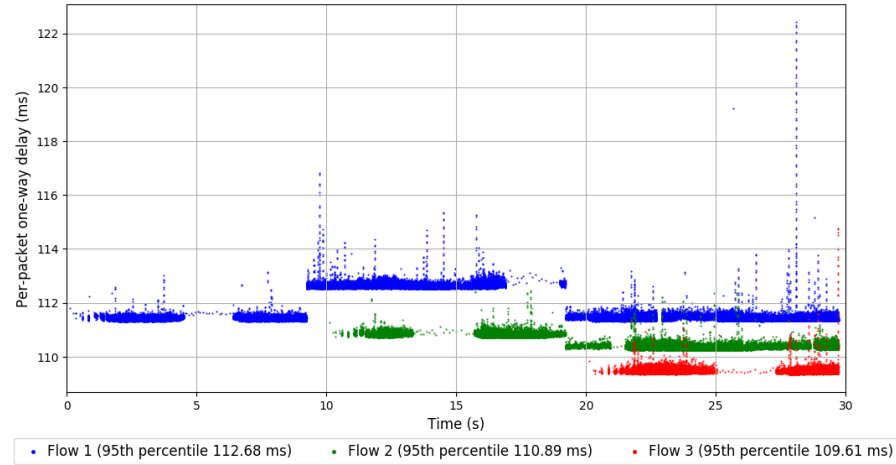
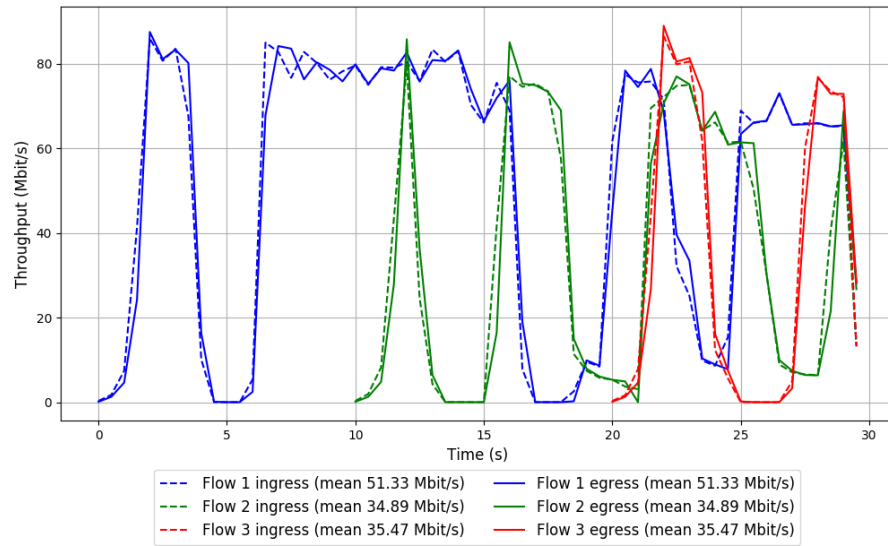
-- Flow 3:

Average throughput: 35.47 Mbit/s

95th percentile per-packet one-way delay: 109.614 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-21 15:30:05

End at: 2017-11-21 15:30:35

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.13 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.57 Mbit/s

95th percentile per-packet one-way delay: 111.761 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.57 Mbit/s

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

Loss rate: 0.00%

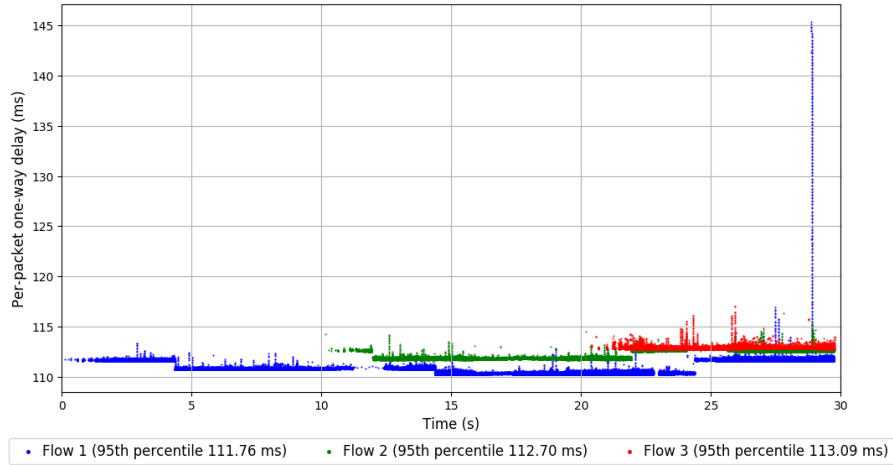
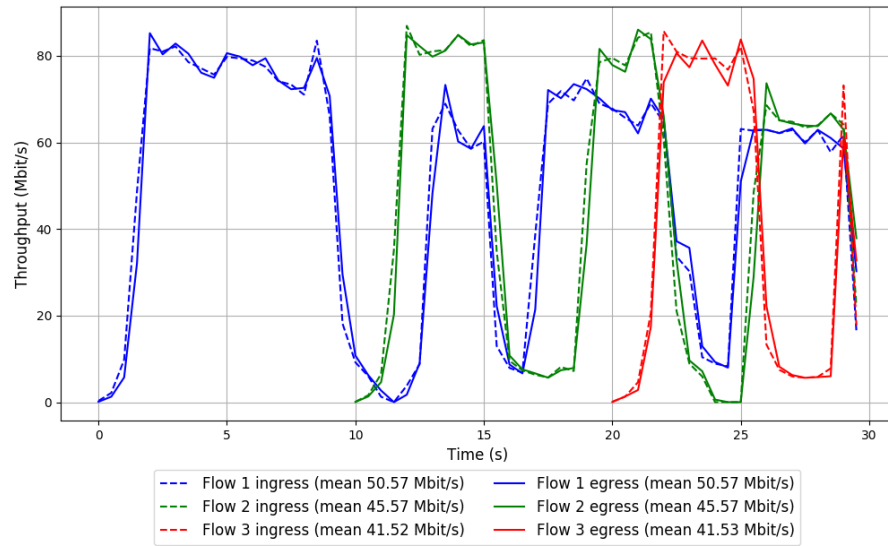
-- Flow 3:

Average throughput: 41.53 Mbit/s

95th percentile per-packet one-way delay: 113.092 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-21 15:43:44

End at: 2017-11-21 15:44:14

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.63 Mbit/s

95th percentile per-packet one-way delay: 112.503 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 33.72 Mbit/s

95th percentile per-packet one-way delay: 112.580 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.28 Mbit/s

95th percentile per-packet one-way delay: 112.435 ms

Loss rate: 0.00%

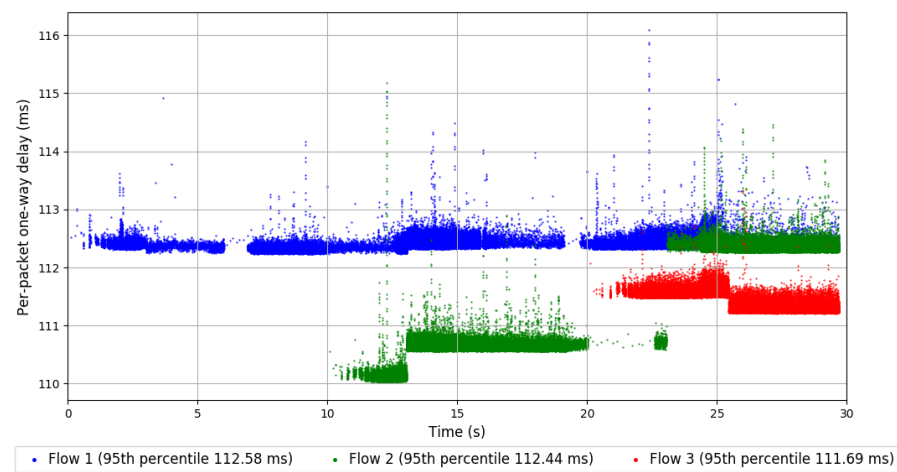
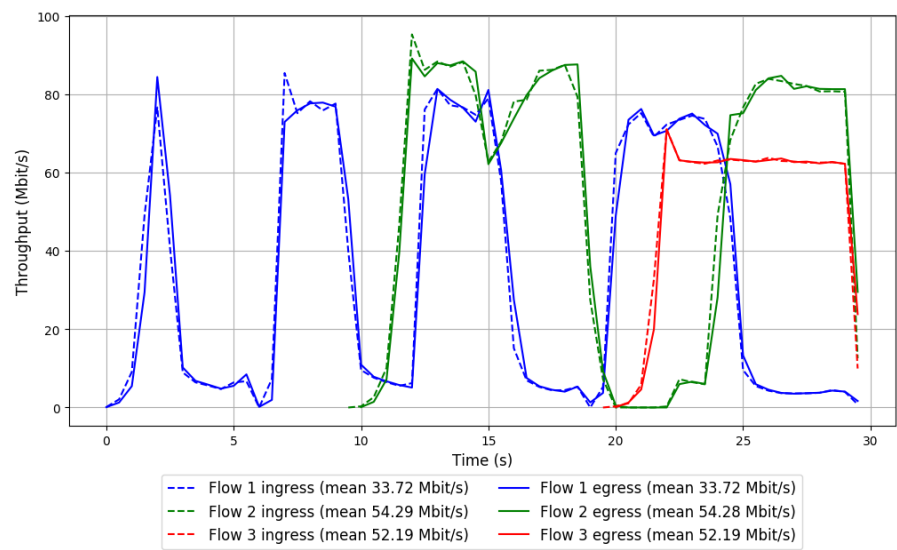
-- Flow 3:

Average throughput: 52.19 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-21 15:57:01

End at: 2017-11-21 15:57:31

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 113.53 Mbit/s

95th percentile per-packet one-way delay: 112.171 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 53.77 Mbit/s

95th percentile per-packet one-way delay: 112.226 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.95 Mbit/s

95th percentile per-packet one-way delay: 111.421 ms

Loss rate: 0.00%

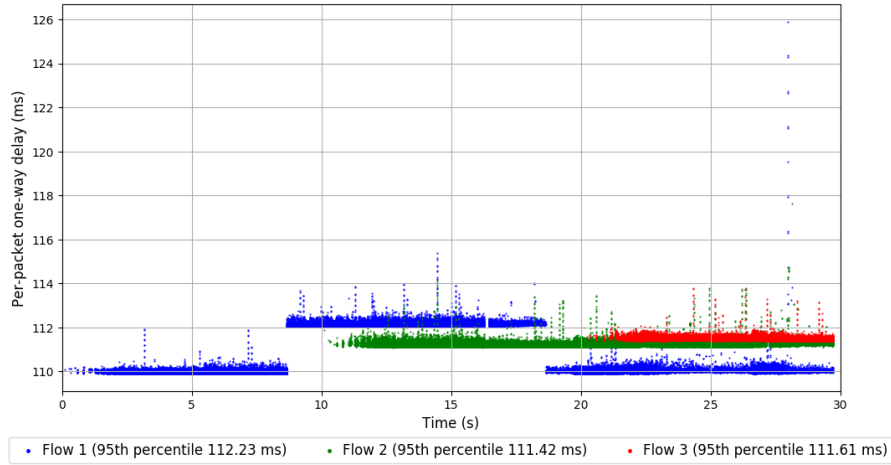
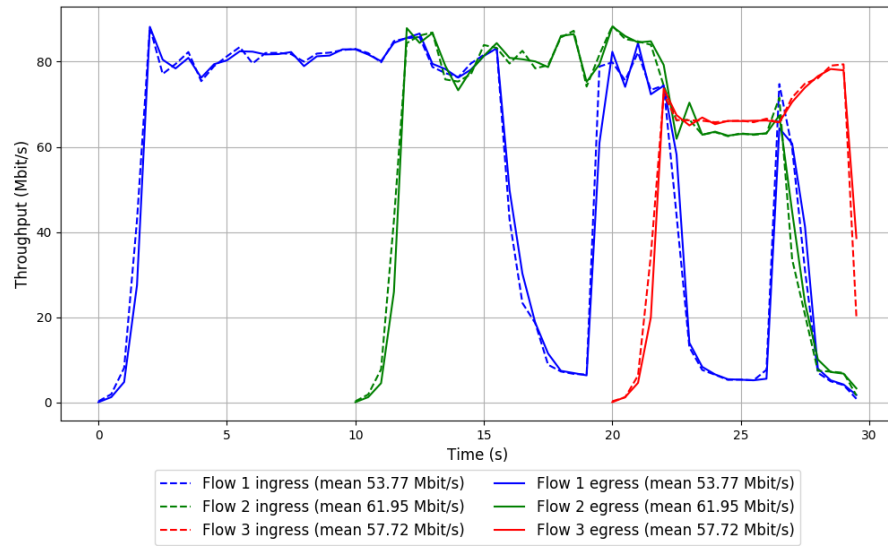
-- Flow 3:

Average throughput: 57.72 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-21 16:10:59

End at: 2017-11-21 16:11:29

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.54 Mbit/s

95th percentile per-packet one-way delay: 112.619 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 63.85 Mbit/s

95th percentile per-packet one-way delay: 110.707 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.70 Mbit/s

95th percentile per-packet one-way delay: 112.913 ms

Loss rate: 0.00%

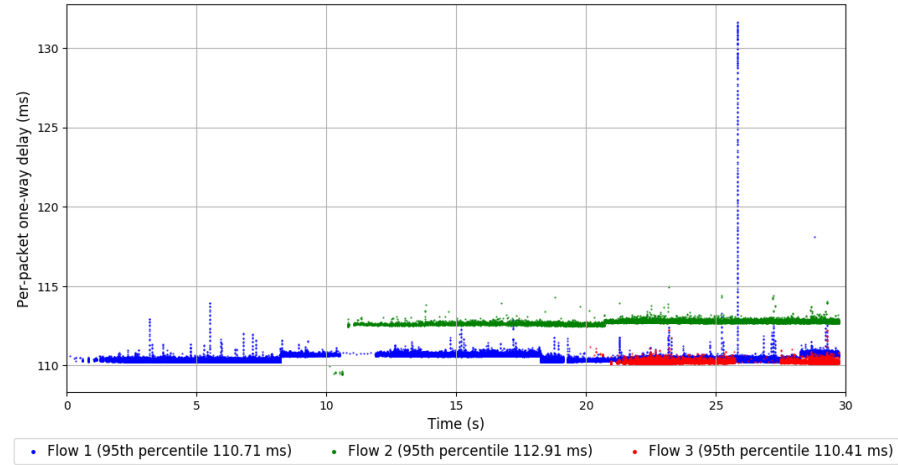
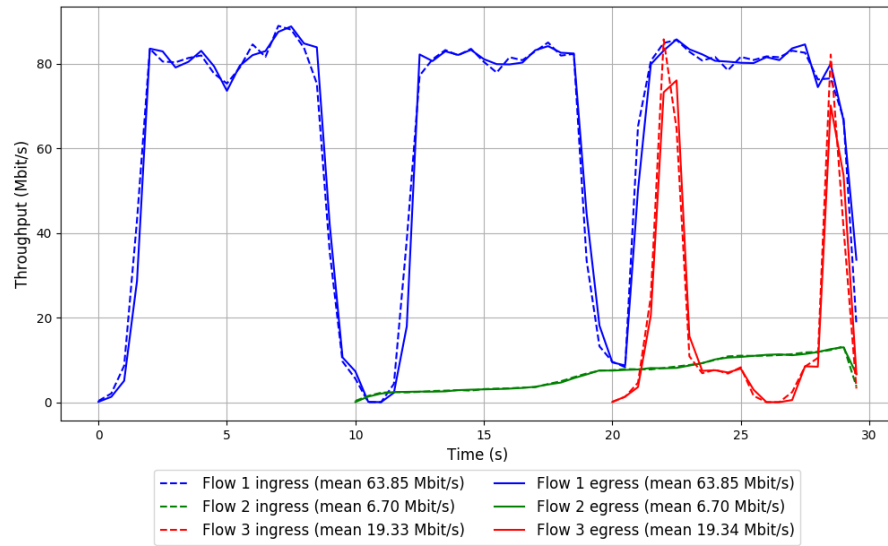
-- Flow 3:

Average throughput: 19.34 Mbit/s

95th percentile per-packet one-way delay: 110.410 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-21 16:24:42

End at: 2017-11-21 16:25:12

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.99 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 53.63 Mbit/s

95th percentile per-packet one-way delay: 109.546 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.66 Mbit/s

95th percentile per-packet one-way delay: 112.464 ms

Loss rate: 0.00%

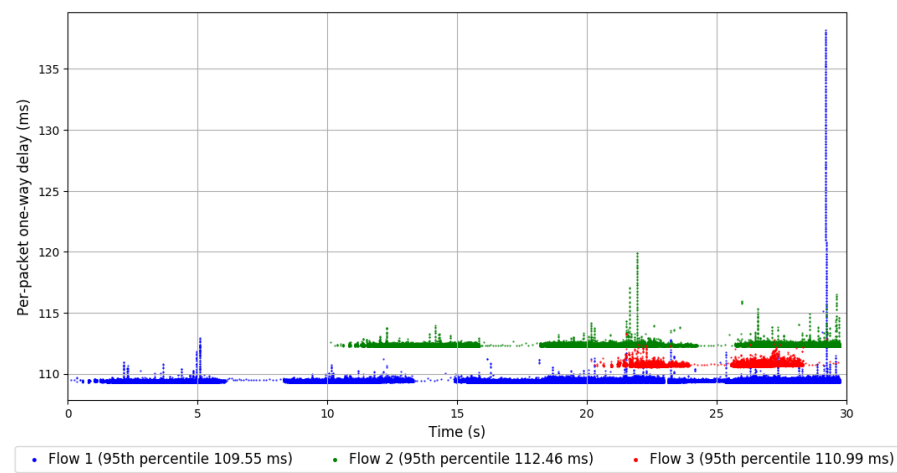
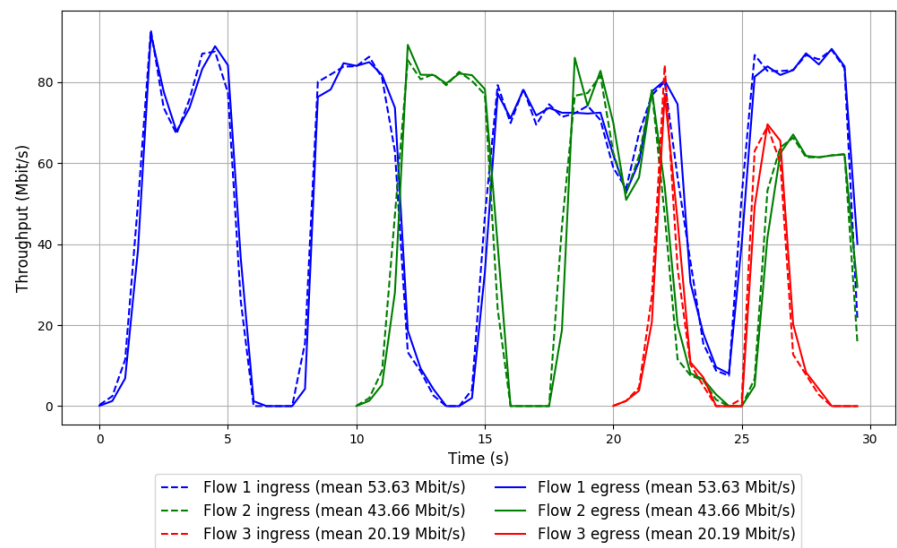
-- Flow 3:

Average throughput: 20.19 Mbit/s

95th percentile per-packet one-way delay: 110.988 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link

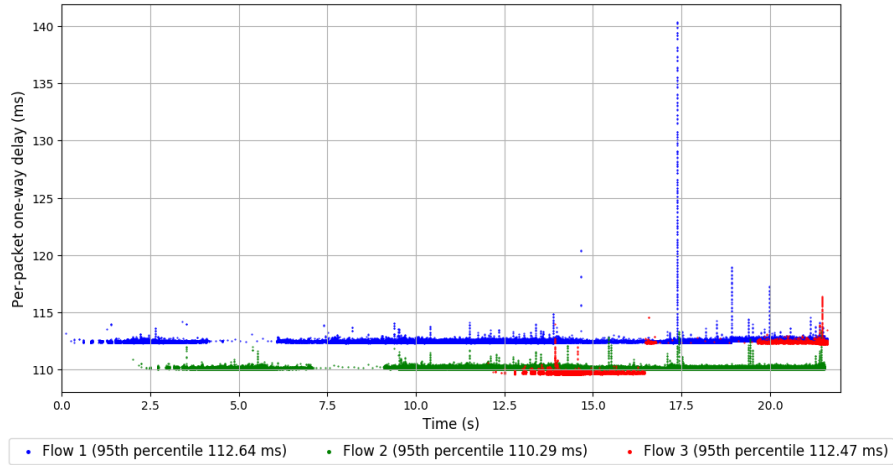
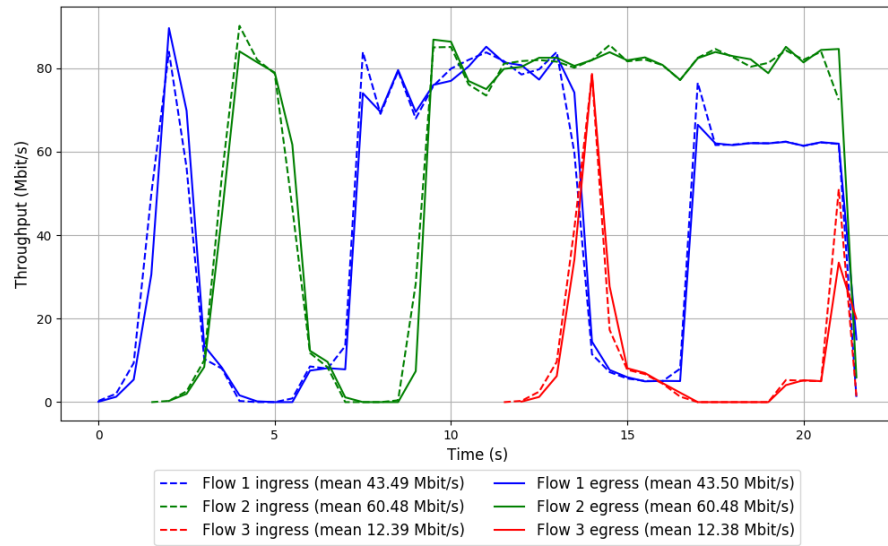


Run 8: Statistics of QUIC Cubic

Start at: 2017-11-21 16:37:53

End at: 2017-11-21 16:38:23

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-21 16:51:28

End at: 2017-11-21 16:51:58

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.98 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.99 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.41 Mbit/s

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

Loss rate: 0.00%

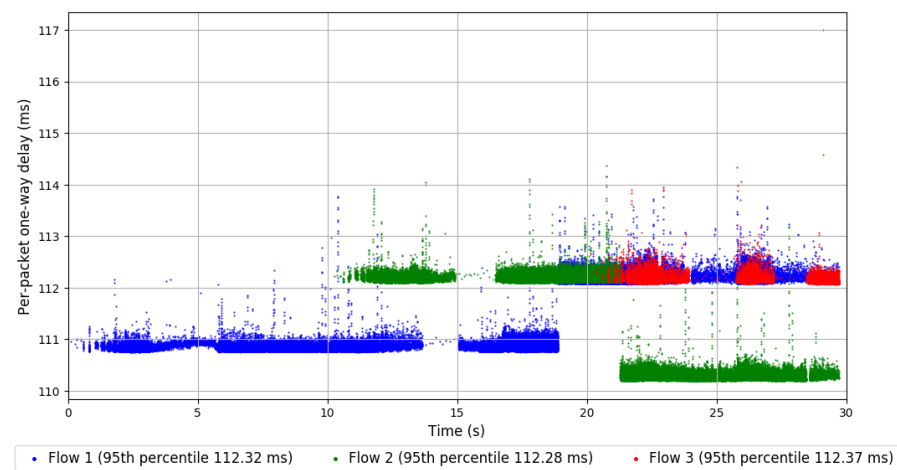
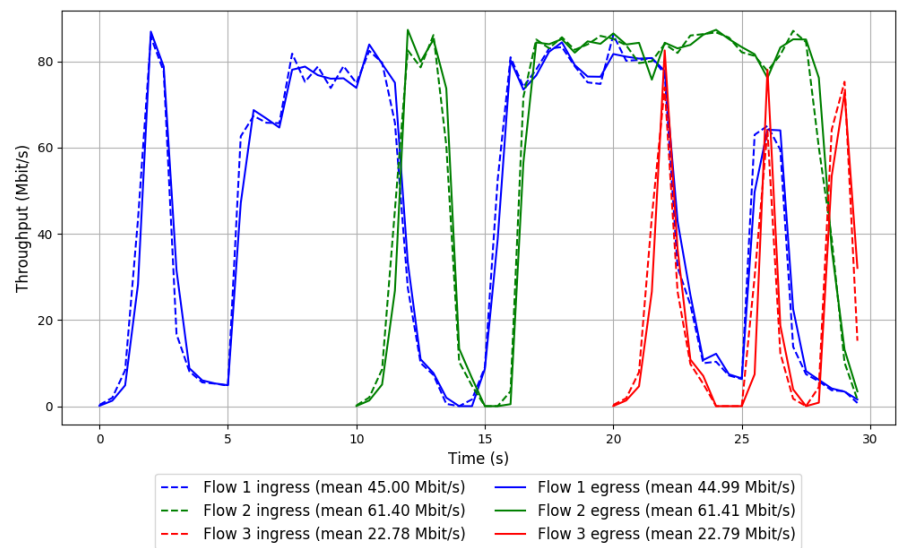
-- Flow 3:

Average throughput: 22.79 Mbit/s

95th percentile per-packet one-way delay: 112.366 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-11-21 17:05:00

End at: 2017-11-21 17:05:30

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.79 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 69.18 Mbit/s

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

Loss rate: 0.02%

-- Flow 2:

Average throughput: 50.20 Mbit/s

95th percentile per-packet one-way delay: 113.074 ms

Loss rate: 0.00%

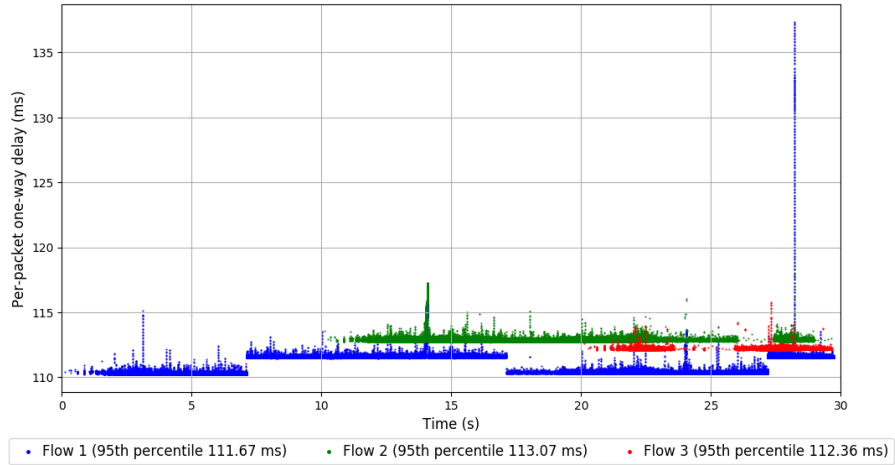
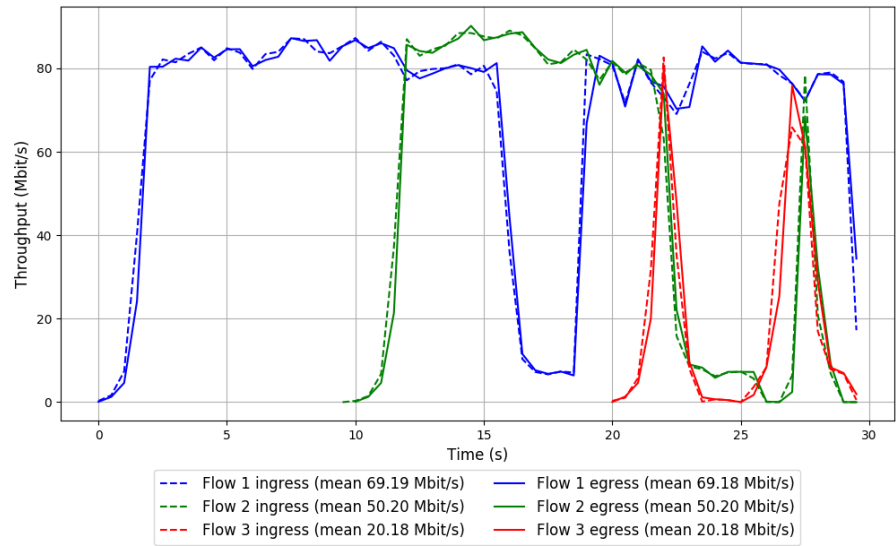
-- Flow 3:

Average throughput: 20.18 Mbit/s

95th percentile per-packet one-way delay: 112.358 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

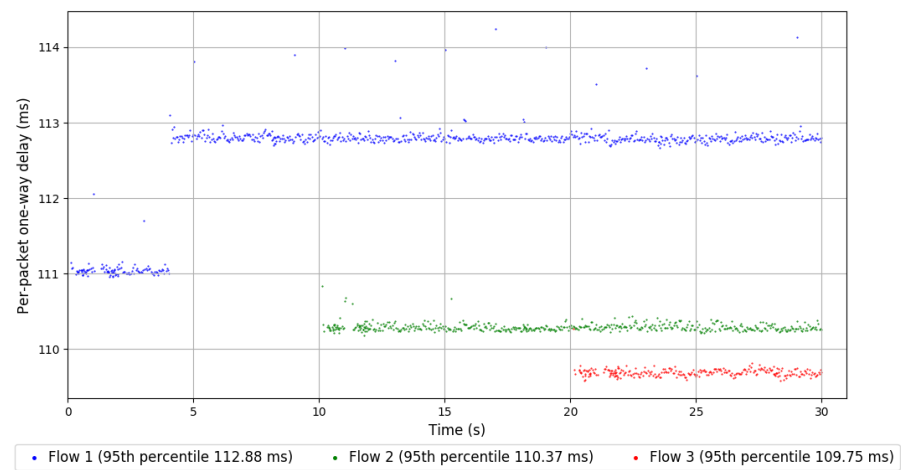
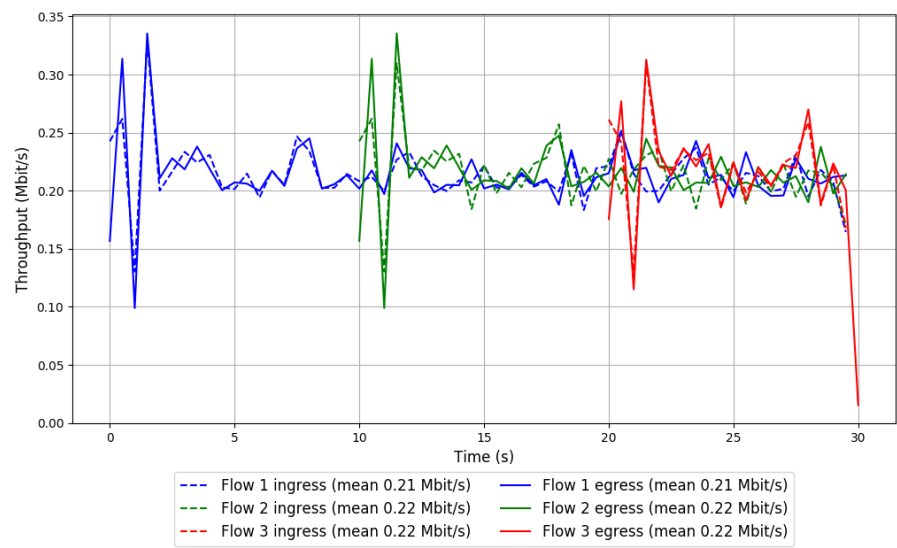


```
Run 1: Statistics of SCReAM

Start at: 2017-11-21 15:02:33
End at: 2017-11-21 15:03:03

# Below is generated by plot.py at 2017-11-21 18:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.847 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.884 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.368 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.748 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

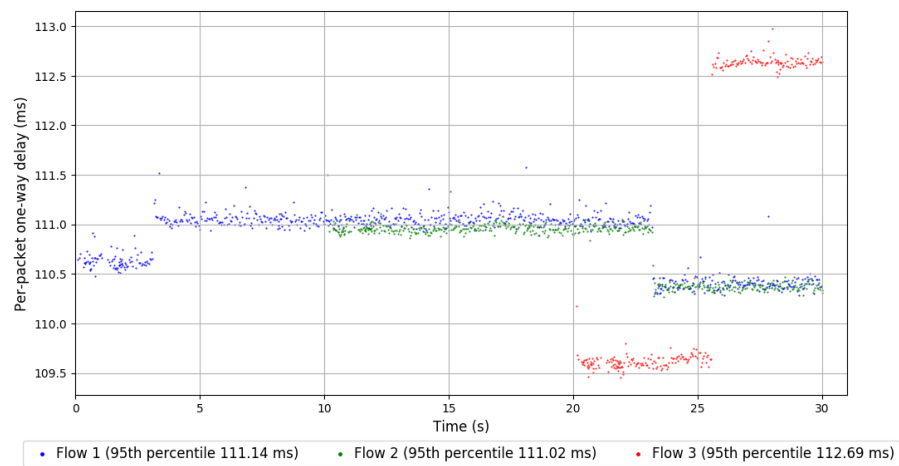
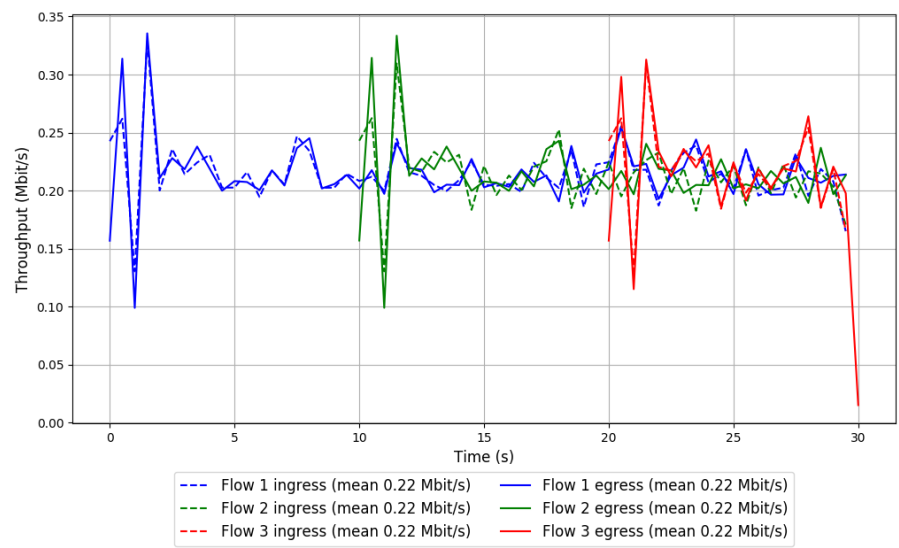


```
Run 2: Statistics of SCReAM

Start at: 2017-11-21 15:15:44
End at: 2017-11-21 15:16:14

# Below is generated by plot.py at 2017-11-21 18:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.621 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.135 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.018 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.686 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-11-21 15:29:19

End at: 2017-11-21 15:29:49

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 113.201 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 113.236 ms

Loss rate: 0.00%

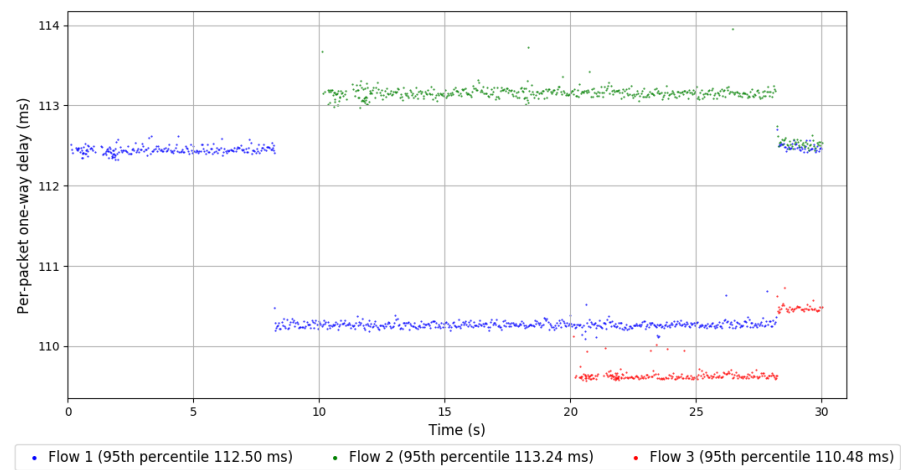
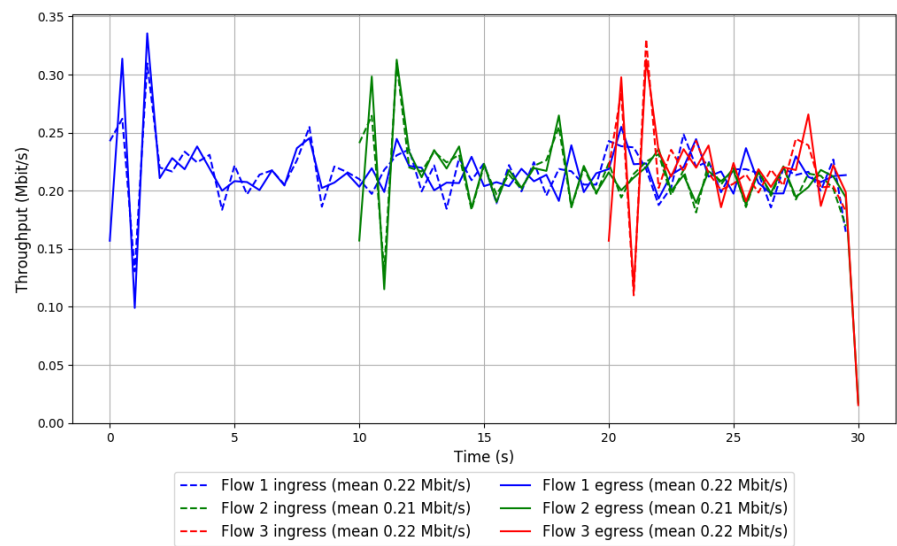
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.484 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

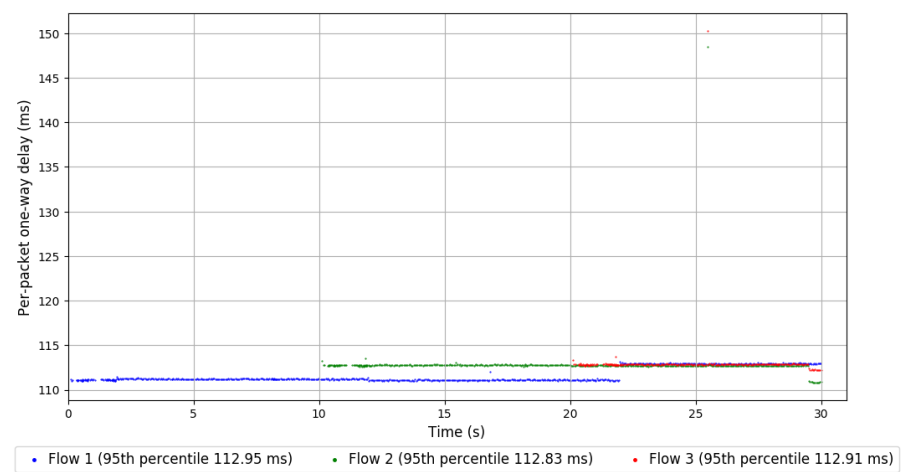
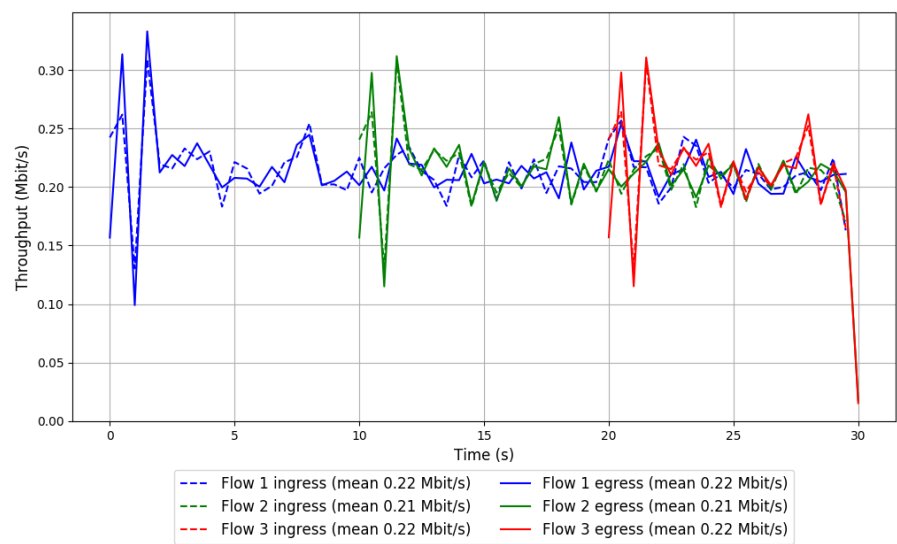


```
Run 4: Statistics of SCReAM

Start at: 2017-11-21 15:42:58
End at: 2017-11-21 15:43:28

# Below is generated by plot.py at 2017-11-21 18:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.937 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.952 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.826 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.907 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-11-21 15:56:15

End at: 2017-11-21 15:56:45

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.856 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.616 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.00%

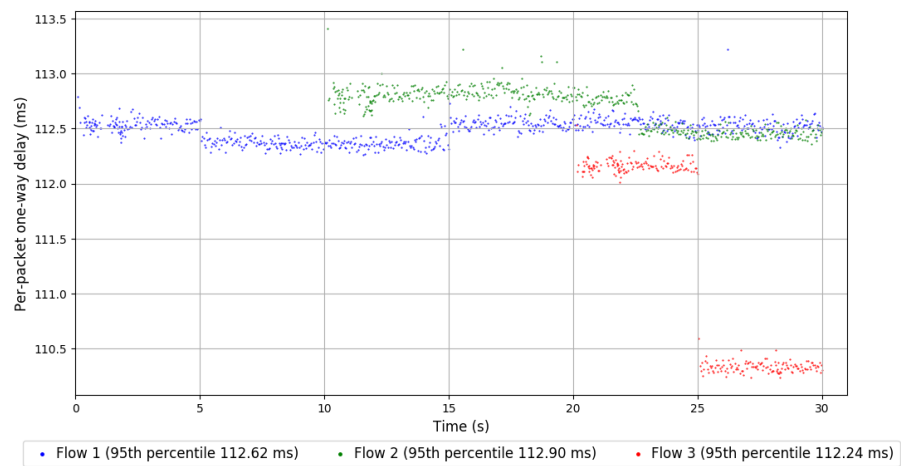
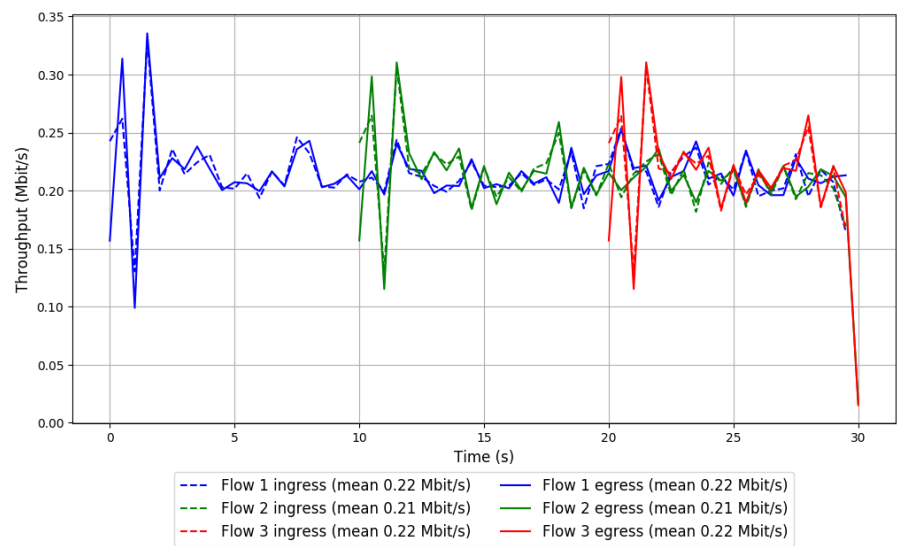
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

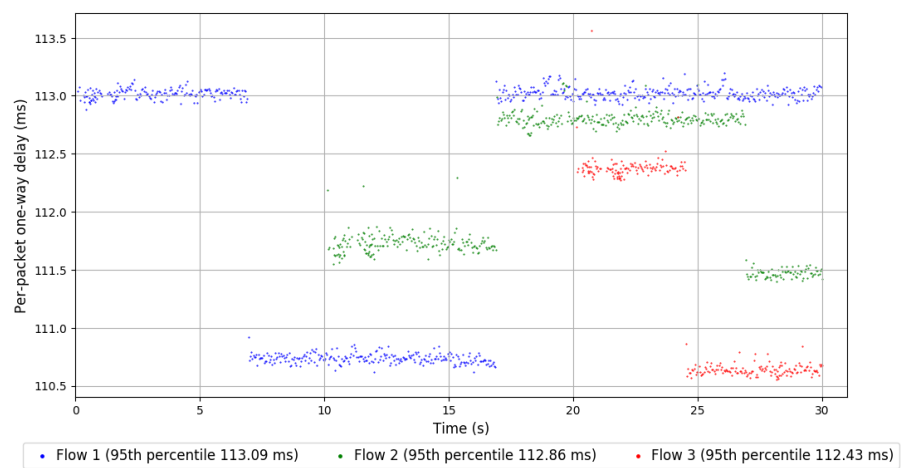
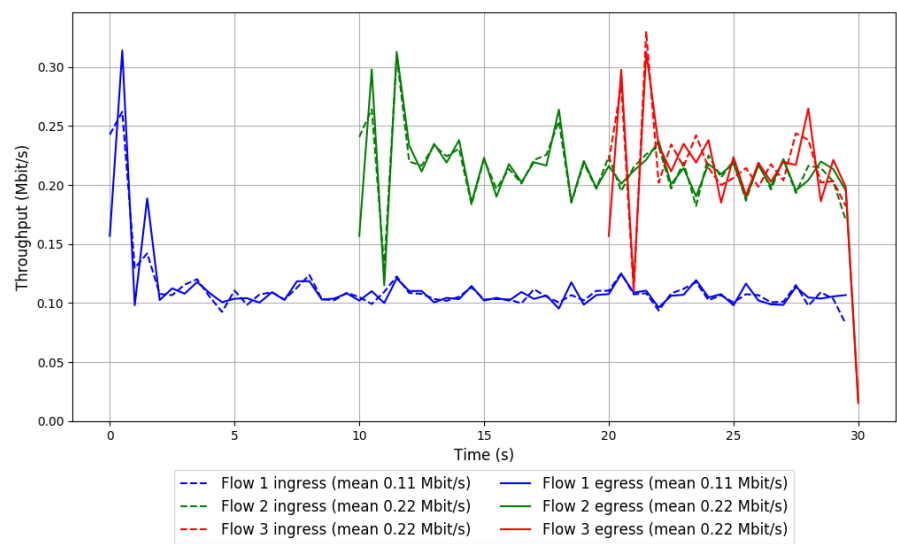


```
Run 6: Statistics of SCReAM

Start at: 2017-11-21 16:10:13
End at: 2017-11-21 16:10:43

# Below is generated by plot.py at 2017-11-21 18:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 113.060 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 113.086 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.862 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.428 ms
Loss rate: 0.00%
```

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-11-21 16:23:56

End at: 2017-11-21 16:24:26

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.33 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.11 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.586 ms

Loss rate: 0.00%

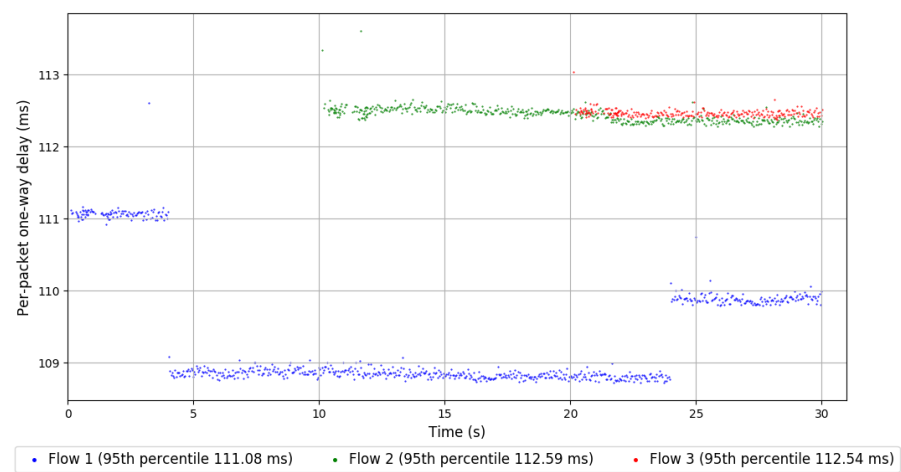
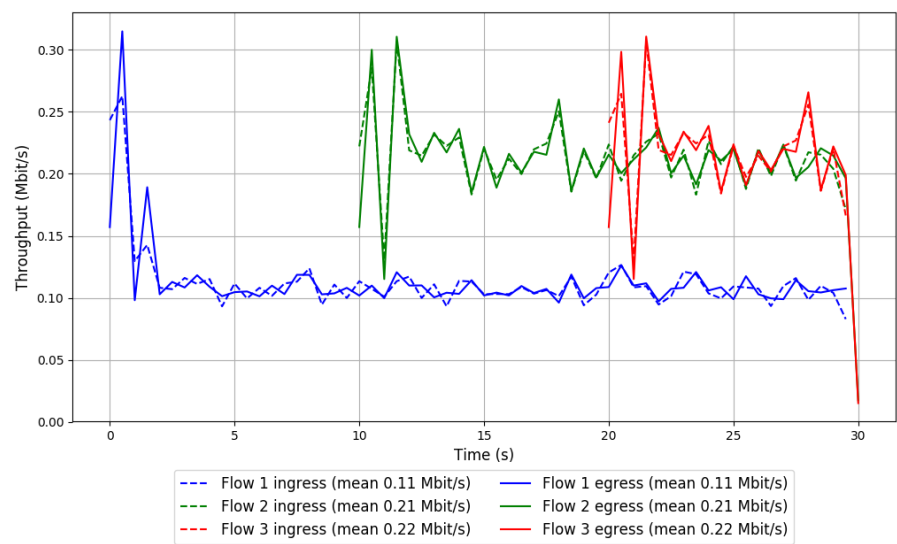
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2017-11-21 16:37:07

End at: 2017-11-21 16:37:37

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

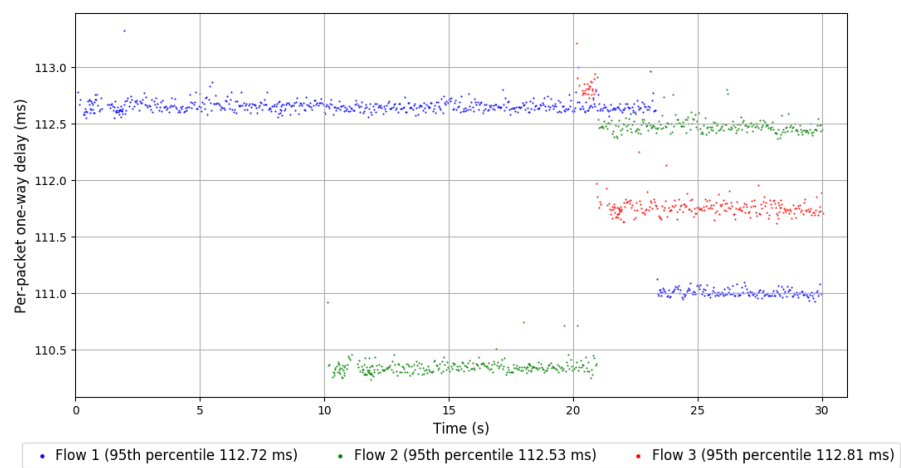
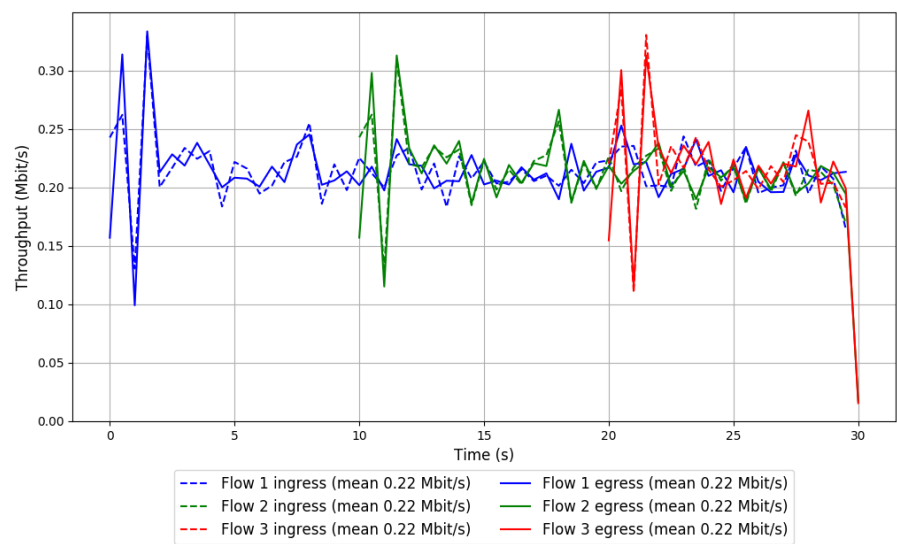
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.808 ms

Loss rate: 0.00%

Run 8: Report of SCReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2017-11-21 16:50:42

End at: 2017-11-21 16:51:12

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.619 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.929 ms

Loss rate: 0.00%

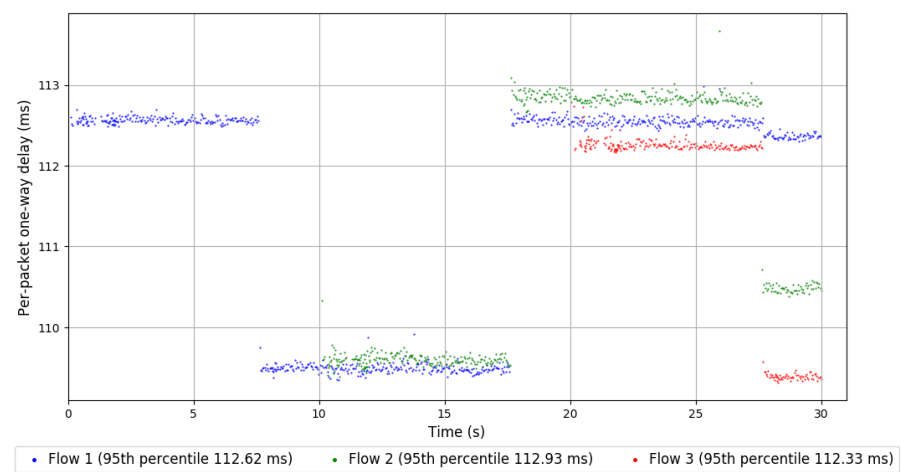
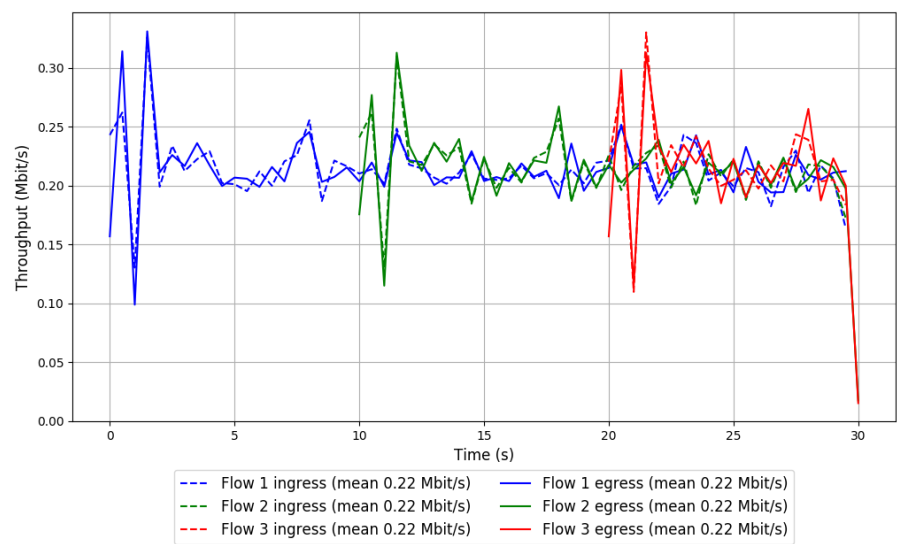
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

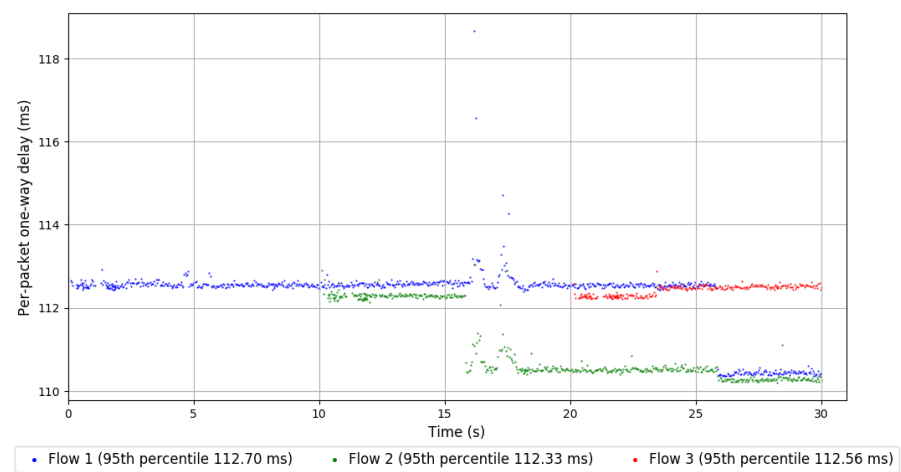
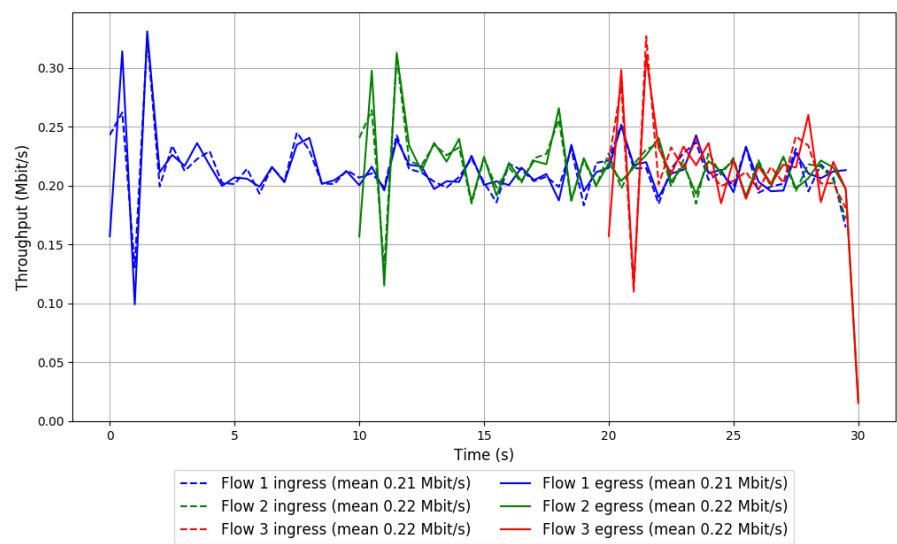


```
Run 10: Statistics of SReAM

Start at: 2017-11-21 17:04:14
End at: 2017-11-21 17:04:44

# Below is generated by plot.py at 2017-11-21 18:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.633 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.697 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.329 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.558 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

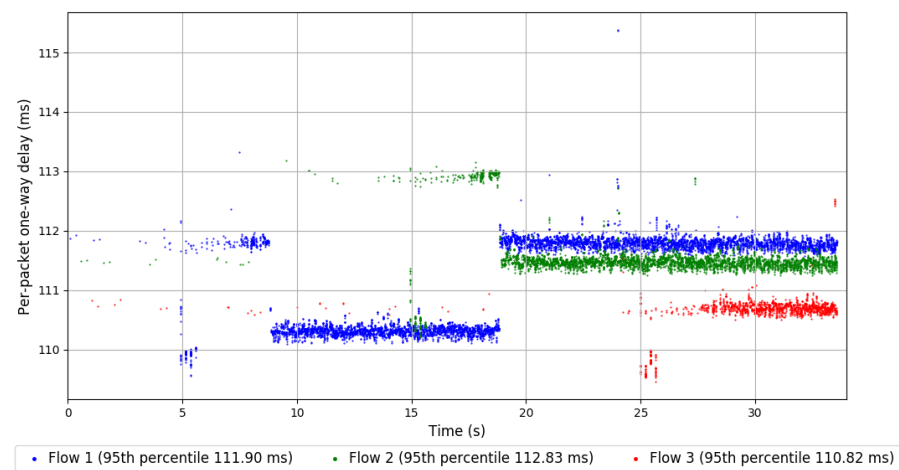
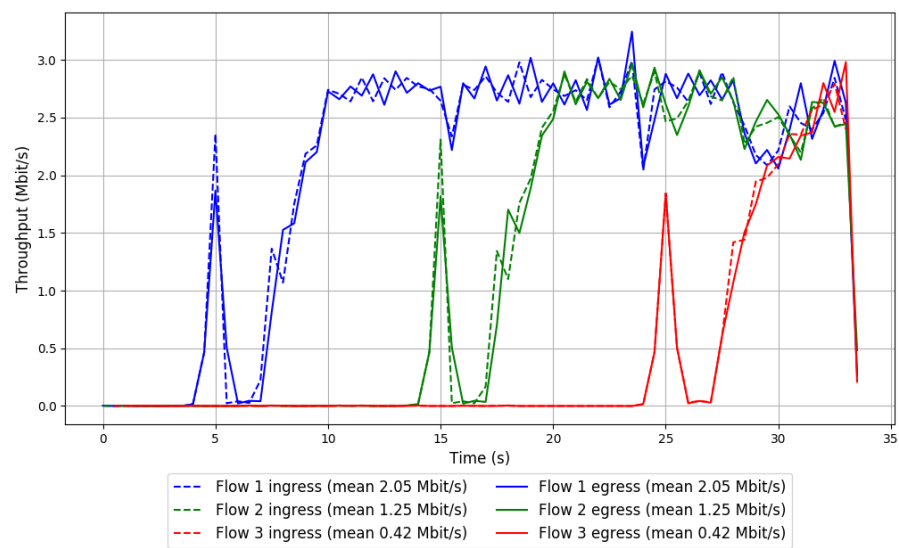


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-21 15:11:15
End at: 2017-11-21 15:11:45

# Below is generated by plot.py at 2017-11-21 18:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.68 Mbit/s
95th percentile per-packet one-way delay: 111.895 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 111.897 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 112.835 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 110.824 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-21 15:24:35

End at: 2017-11-21 15:25:05

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 112.594 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 112.616 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 109.769 ms

Loss rate: 0.00%

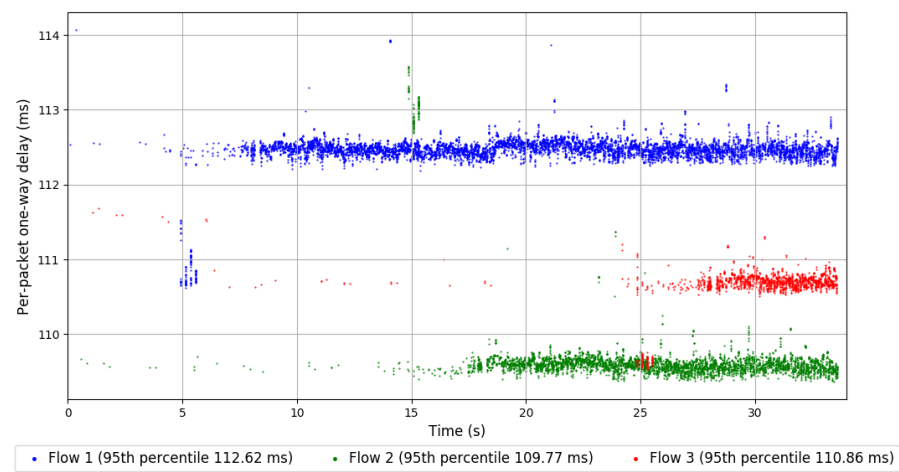
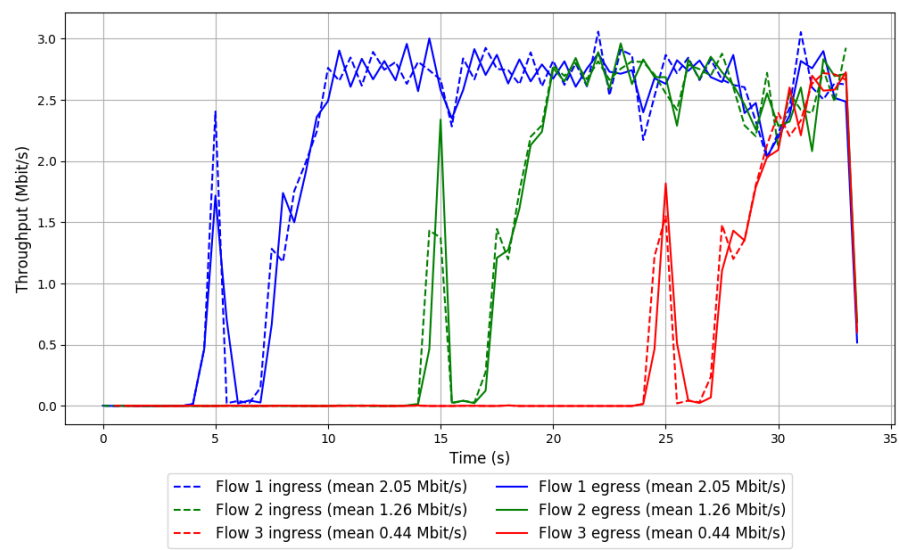
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 110.855 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-21 15:38:10

End at: 2017-11-21 15:38:40

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.71 Mbit/s

95th percentile per-packet one-way delay: 112.884 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.06 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

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

Loss rate: 0.00%

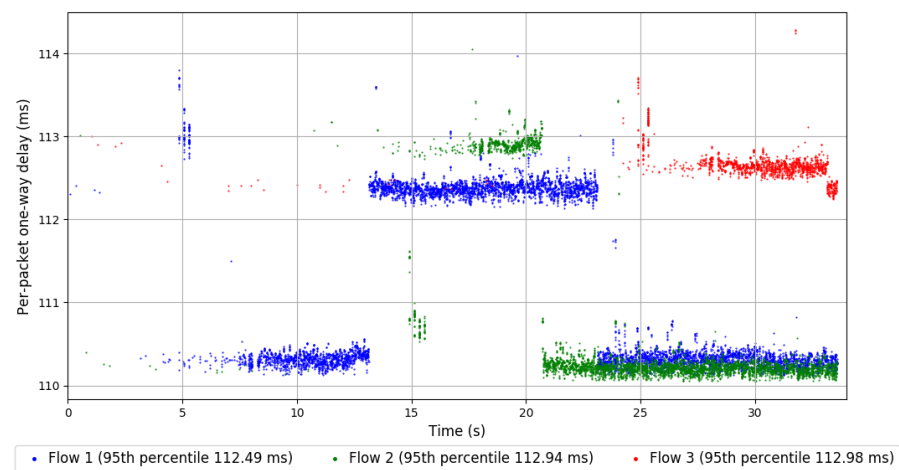
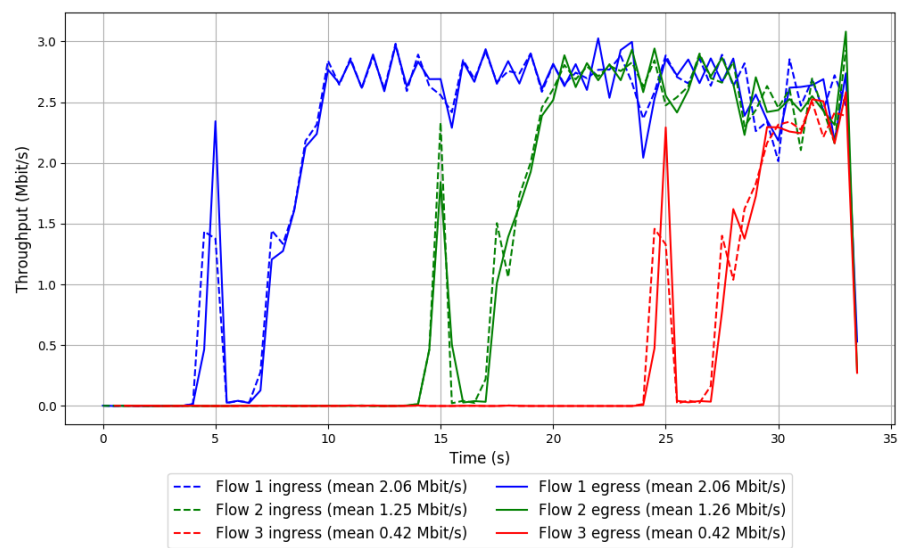
-- Flow 3:

Average throughput: 0.42 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-21 15:51:47

End at: 2017-11-21 15:52:17

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.68 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.05 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 113.000 ms

Loss rate: 0.00%

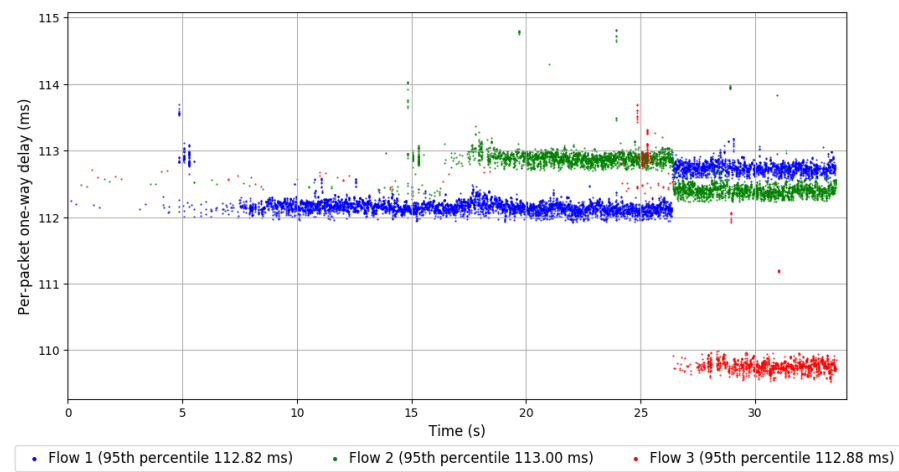
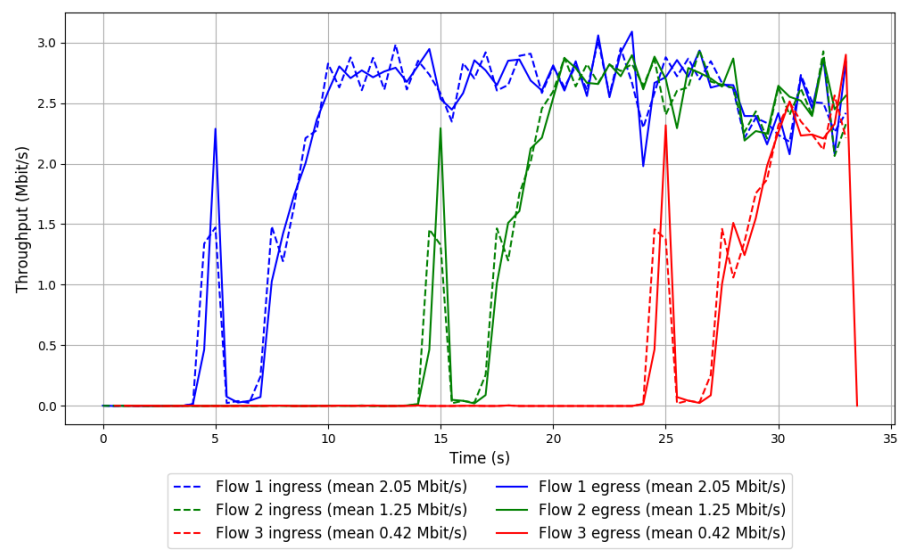
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 112.884 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-21 16:05:11

End at: 2017-11-21 16:05:41

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.71 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.04 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 110.912 ms

Loss rate: 0.00%

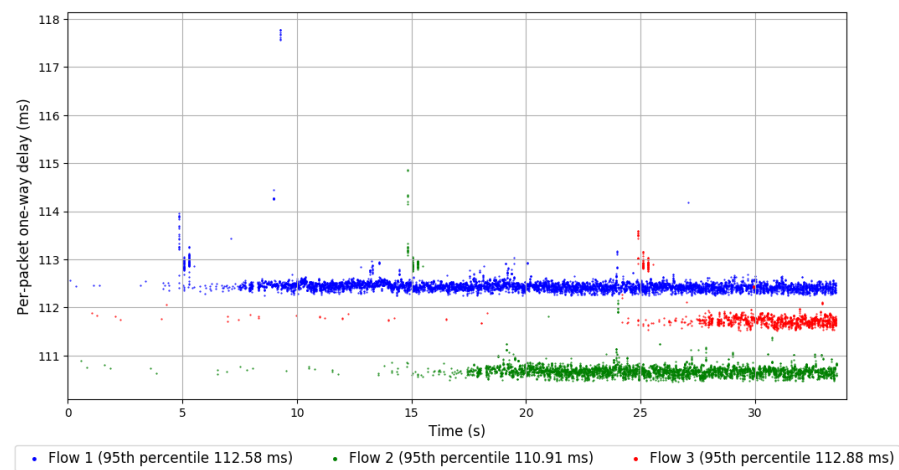
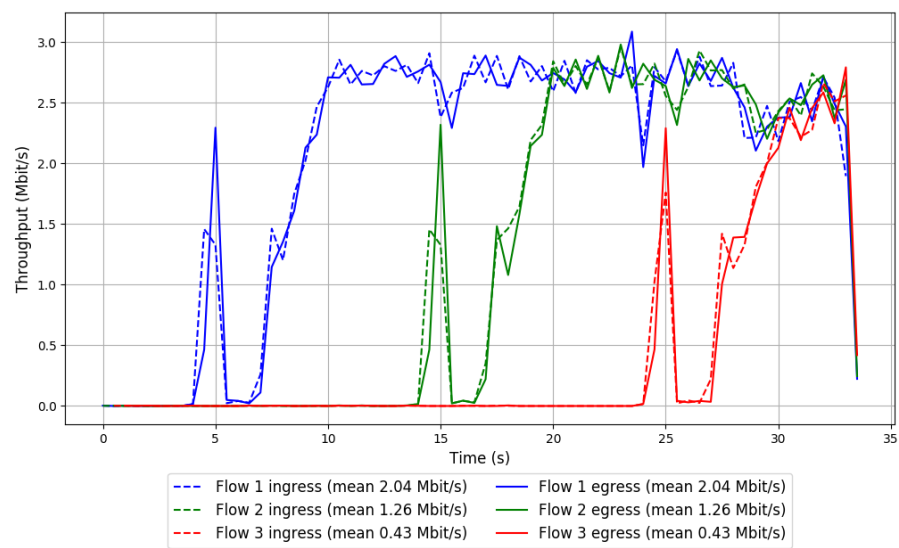
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.884 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-21 16:18:55

End at: 2017-11-21 16:19:25

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.69 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 112.530 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 112.995 ms

Loss rate: 0.00%

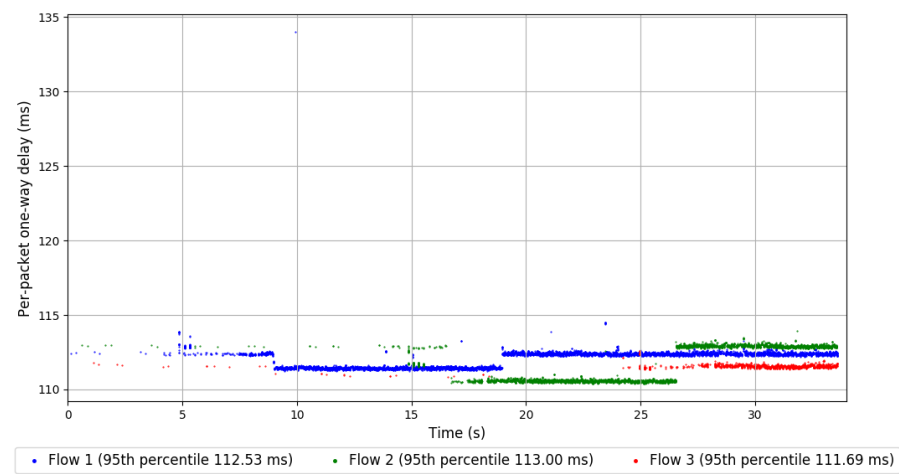
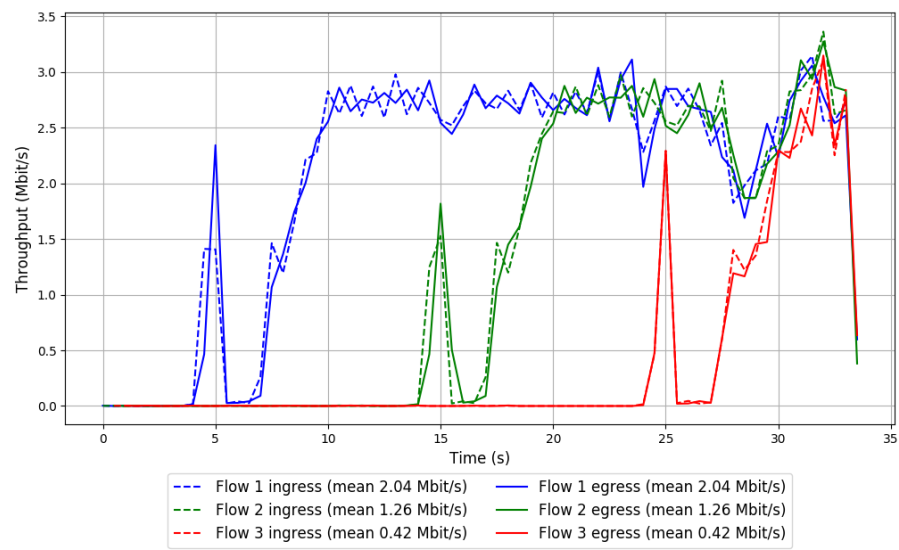
-- Flow 3:

Average throughput: 0.42 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-21 16:32:38

End at: 2017-11-21 16:33:08

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 112.709 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 111.786 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 111.048 ms

Loss rate: 0.00%

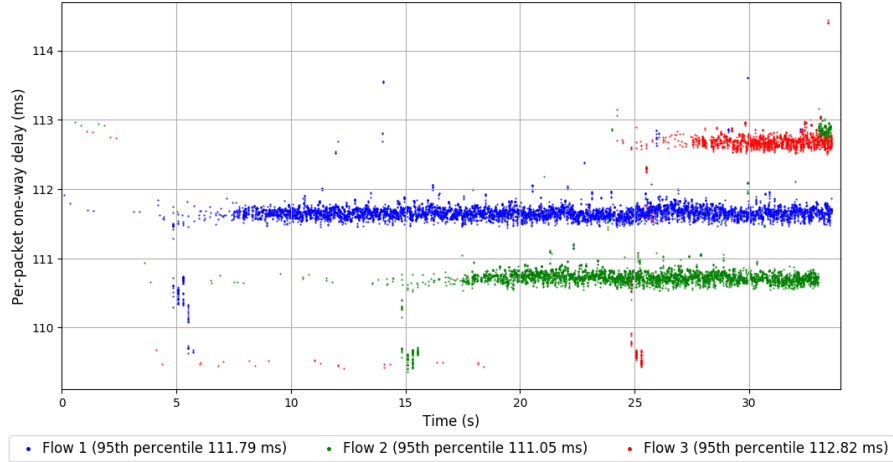
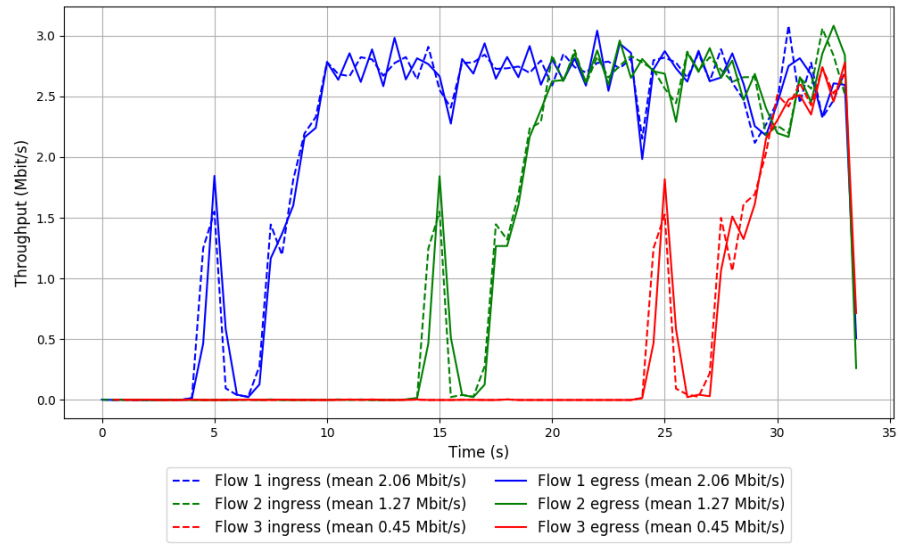
-- Flow 3:

Average throughput: 0.45 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-21 16:45:52

End at: 2017-11-21 16:46:22

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 112.914 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.06 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 112.581 ms

Loss rate: 0.00%

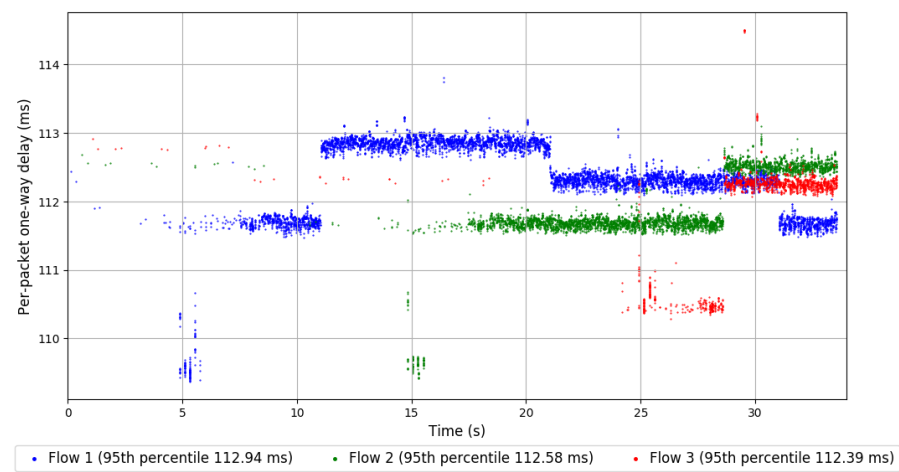
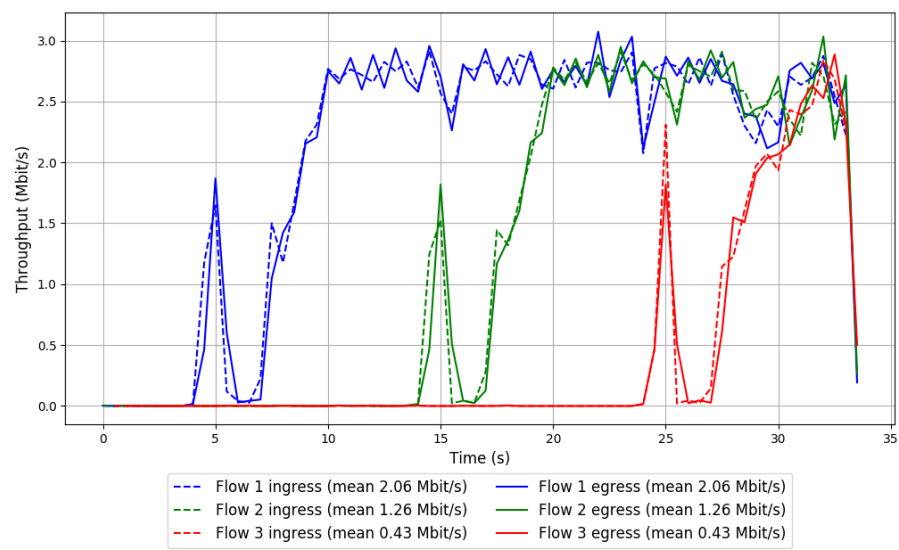
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.393 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-21 16:59:32

End at: 2017-11-21 17:00:02

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.55 Mbit/s

95th percentile per-packet one-way delay: 112.645 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 112.637 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.20 Mbit/s

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

Loss rate: 0.00%

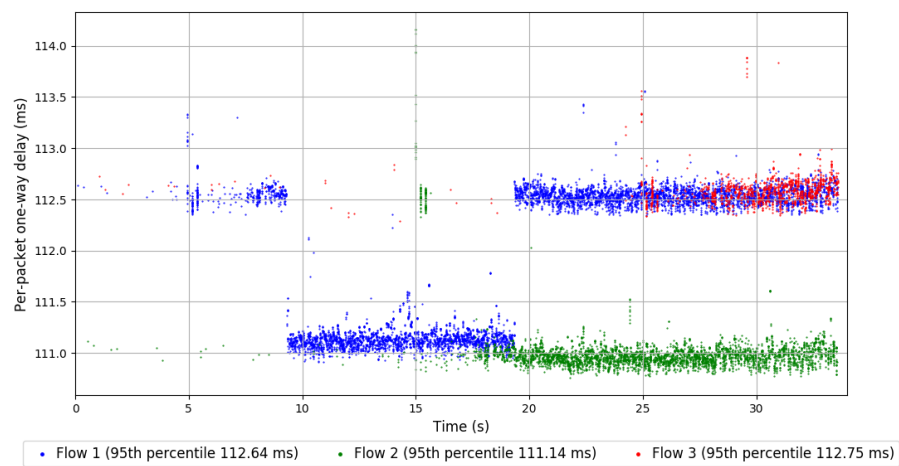
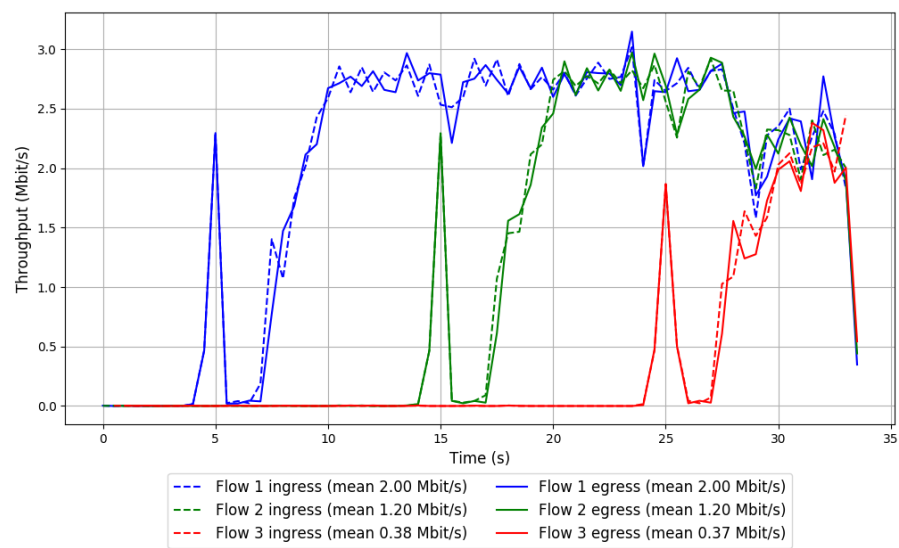
-- Flow 3:

Average throughput: 0.37 Mbit/s

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

Loss rate: 1.03%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-21 17:13:02

End at: 2017-11-21 17:13:32

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.70 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 112.578 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 111.074 ms

Loss rate: 0.00%

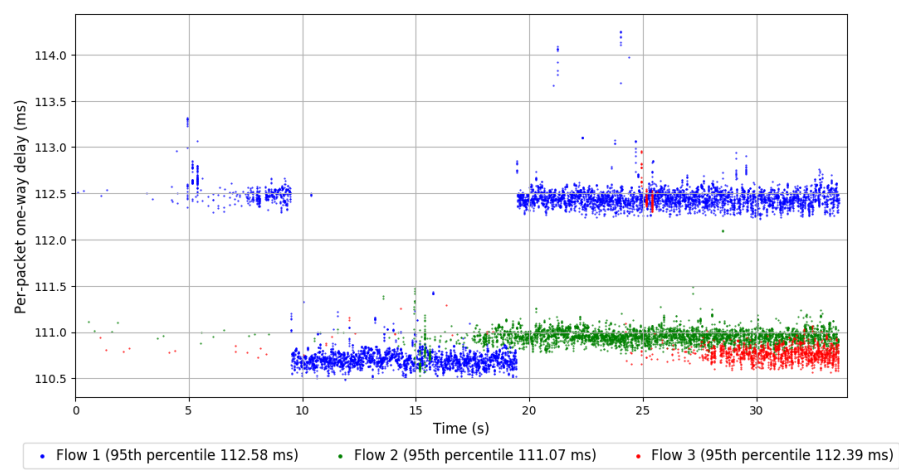
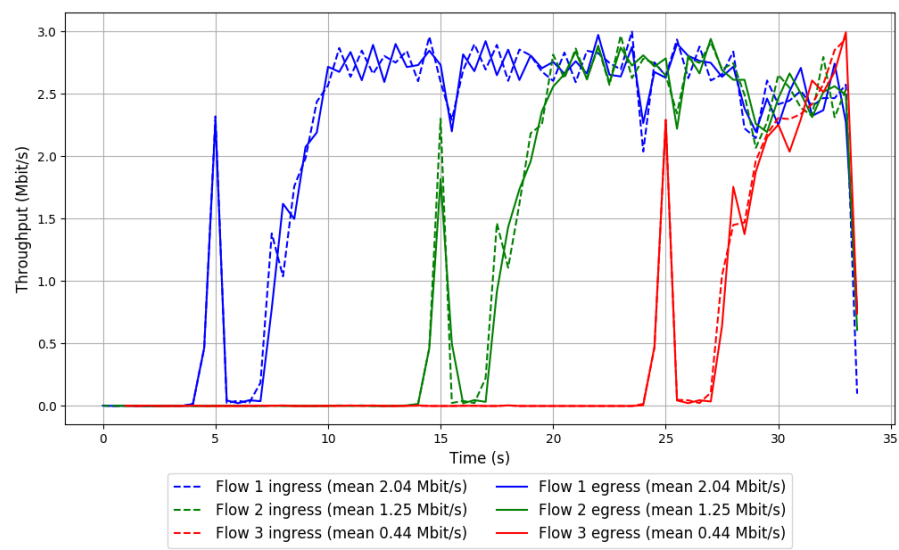
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 112.393 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-11-21 15:09:27

End at: 2017-11-21 15:09:57

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.19 Mbit/s

95th percentile per-packet one-way delay: 110.779 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 2.72 Mbit/s

95th percentile per-packet one-way delay: 110.501 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 2.69 Mbit/s

95th percentile per-packet one-way delay: 111.818 ms

Loss rate: 0.00%

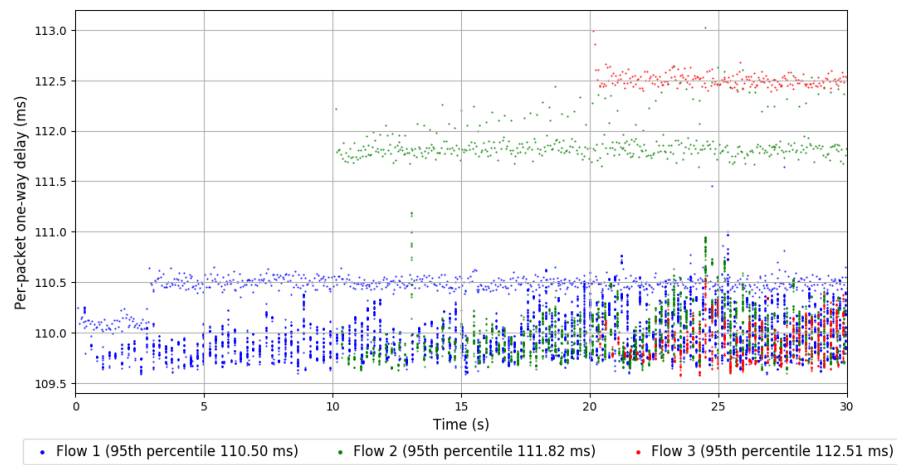
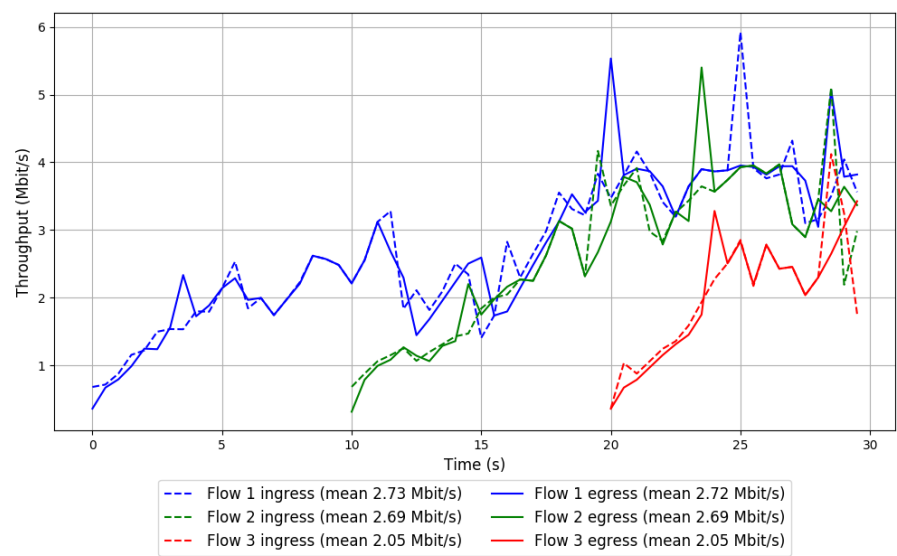
-- Flow 3:

Average throughput: 2.05 Mbit/s

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

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-11-21 15:22:51

End at: 2017-11-21 15:23:21

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.03 Mbit/s

95th percentile per-packet one-way delay: 113.530 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 2.52 Mbit/s

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

Loss rate: 0.05%

-- Flow 2:

Average throughput: 1.06 Mbit/s

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

Loss rate: 0.00%

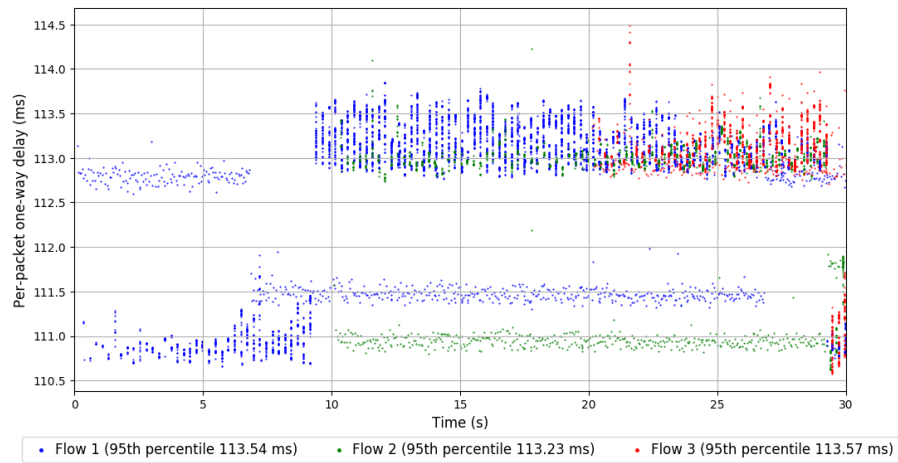
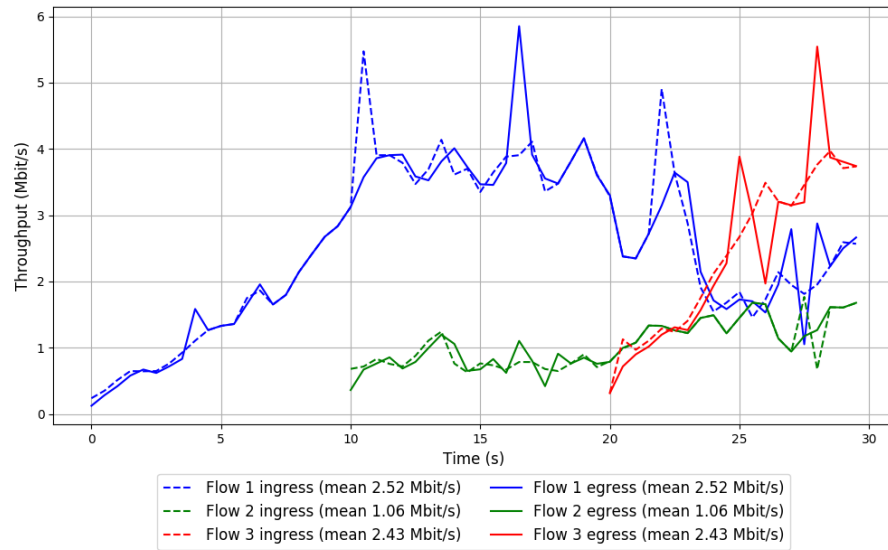
-- Flow 3:

Average throughput: 2.43 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-21 15:36:22

End at: 2017-11-21 15:36:52

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.44 Mbit/s

95th percentile per-packet one-way delay: 113.496 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 1.86 Mbit/s

95th percentile per-packet one-way delay: 113.493 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 113.510 ms

Loss rate: 0.11%

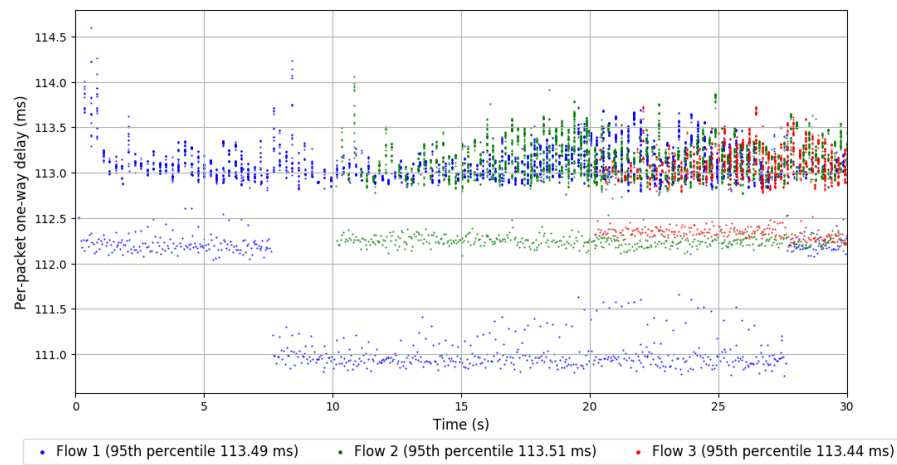
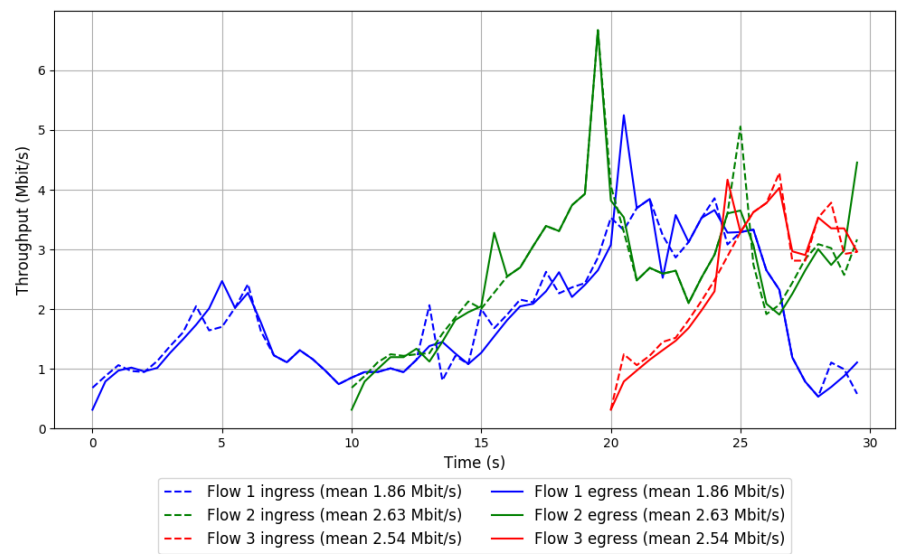
-- Flow 3:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 113.441 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-21 15:50:01

End at: 2017-11-21 15:50:31

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 113.449 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 113.416 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 113.403 ms

Loss rate: 0.00%

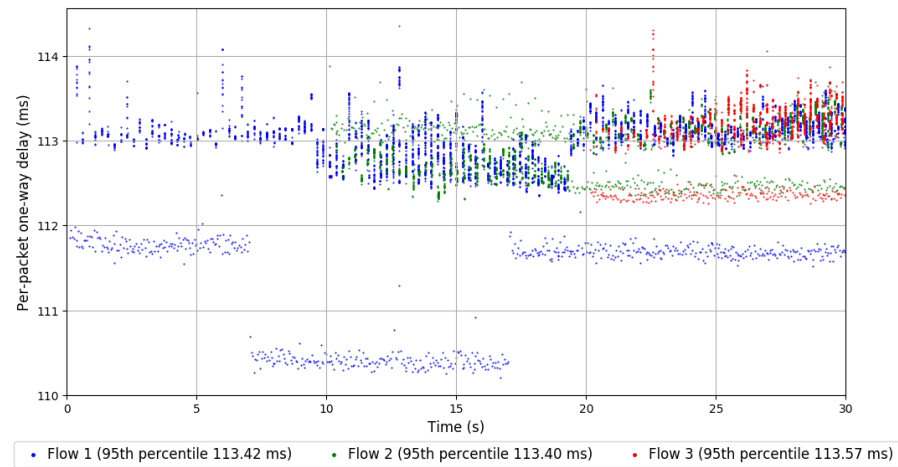
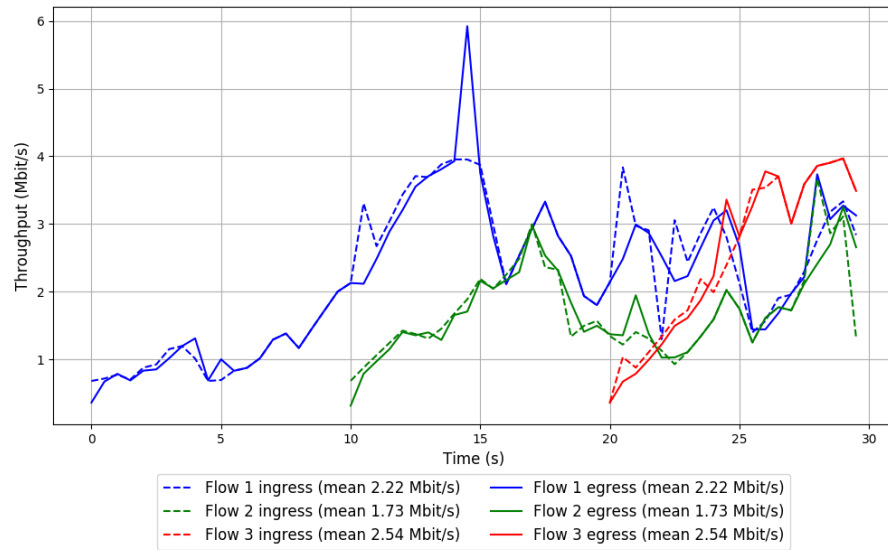
-- Flow 3:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 113.572 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-21 16:03:22

End at: 2017-11-21 16:03:52

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.05 Mbit/s

95th percentile per-packet one-way delay: 113.461 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 113.373 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 2.26 Mbit/s

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

Loss rate: 0.16%

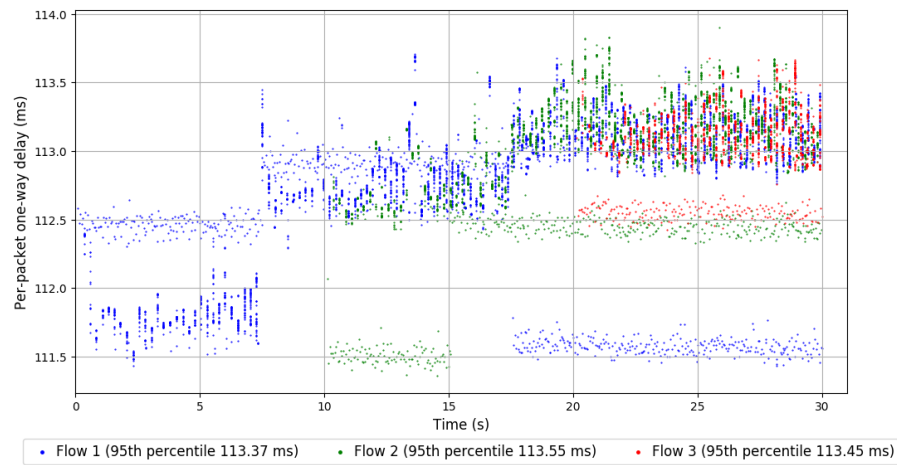
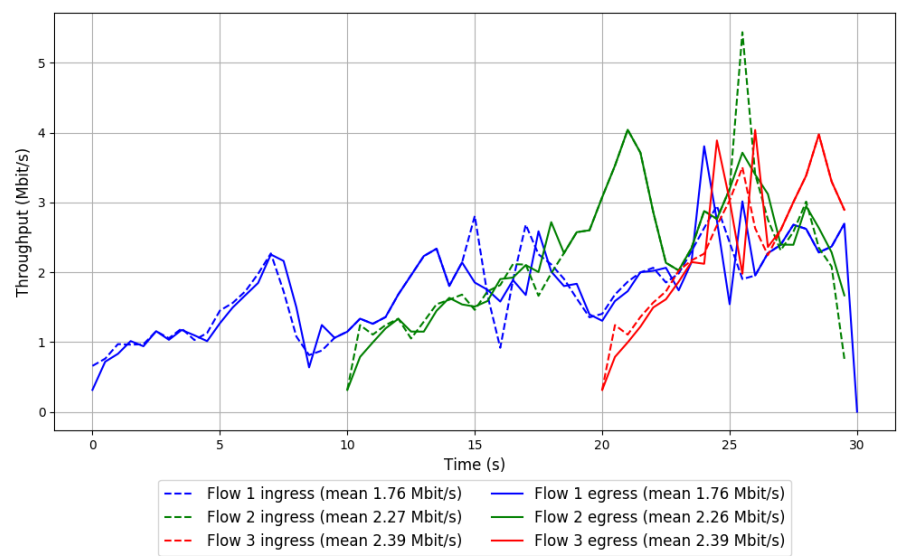
-- Flow 3:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 113.446 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-21 16:17:09

End at: 2017-11-21 16:17:39

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.61 Mbit/s

95th percentile per-packet one-way delay: 113.087 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 2.62 Mbit/s

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

Loss rate: 0.26%

-- Flow 2:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.427 ms

Loss rate: 0.17%

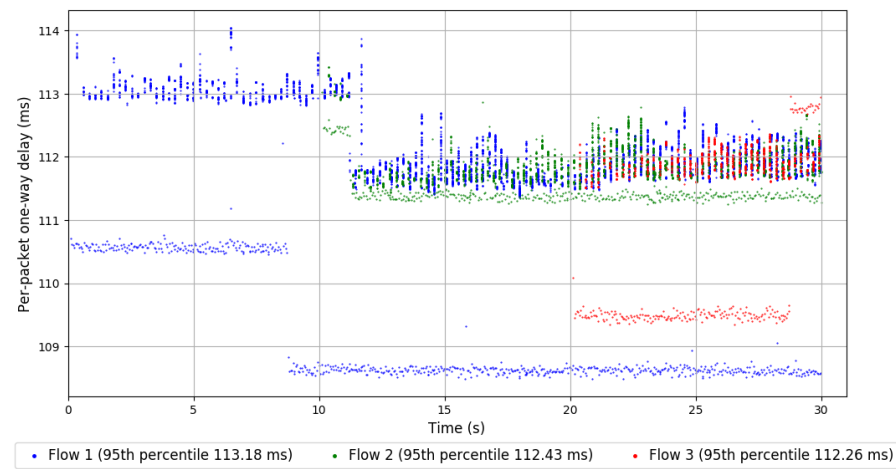
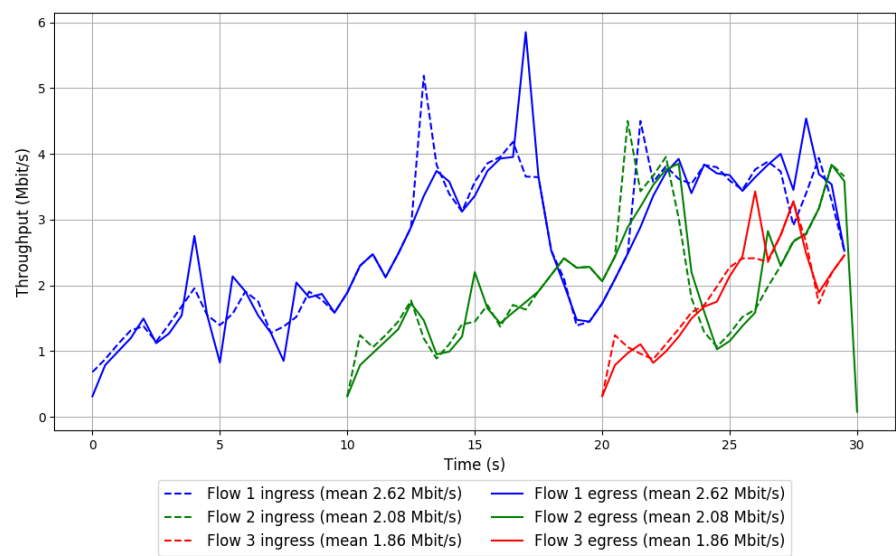
-- Flow 3:

Average throughput: 1.86 Mbit/s

95th percentile per-packet one-way delay: 112.256 ms

Loss rate: 0.26%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-21 16:30:51

End at: 2017-11-21 16:31:21

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.54 Mbit/s

95th percentile per-packet one-way delay: 112.299 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 3.01 Mbit/s

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

Loss rate: 0.03%

-- Flow 2:

Average throughput: 1.60 Mbit/s

95th percentile per-packet one-way delay: 112.317 ms

Loss rate: 0.48%

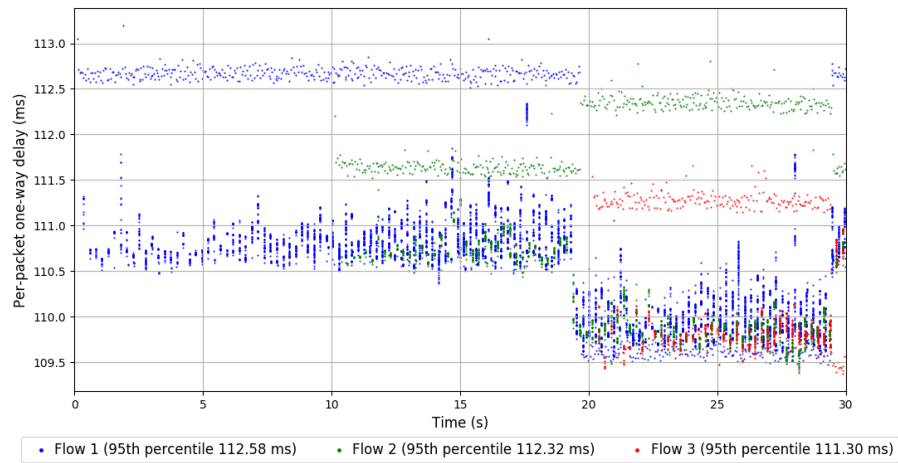
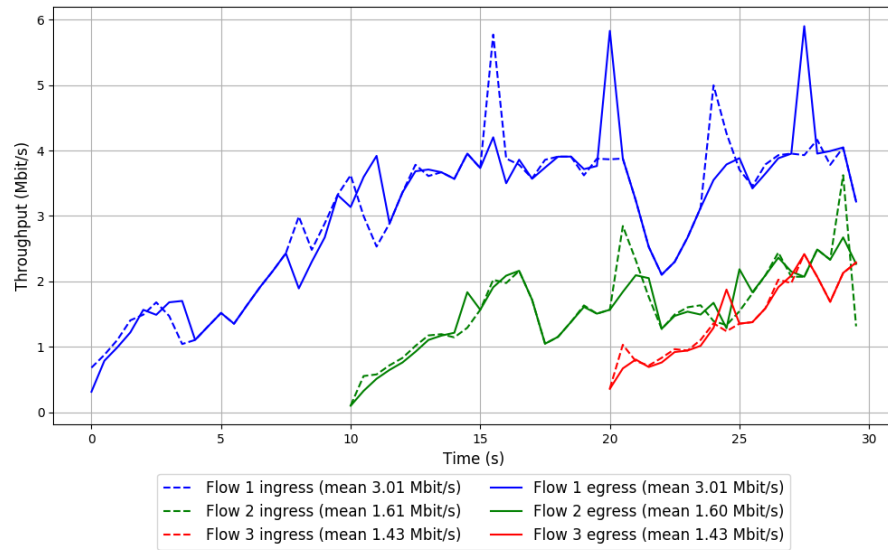
-- Flow 3:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 111.301 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-21 16:44:06

End at: 2017-11-21 16:44:36

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.26 Mbit/s

95th percentile per-packet one-way delay: 113.453 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 2.59 Mbit/s

95th percentile per-packet one-way delay: 113.532 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 2.76 Mbit/s

95th percentile per-packet one-way delay: 113.291 ms

Loss rate: 0.11%

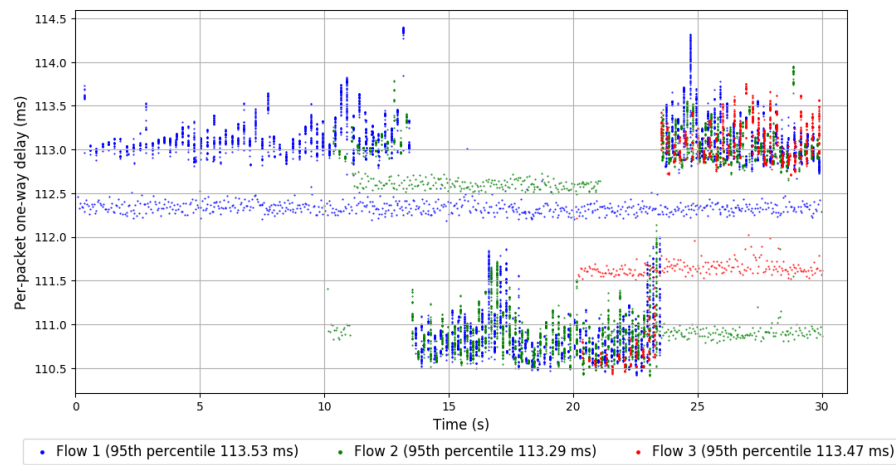
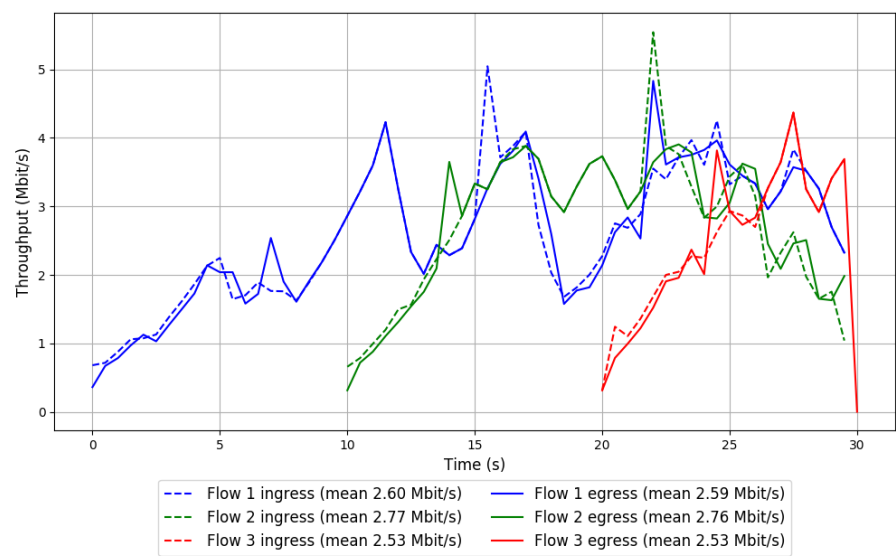
-- Flow 3:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 113.467 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-21 16:57:46

End at: 2017-11-21 16:58:16

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.77 Mbit/s

95th percentile per-packet one-way delay: 113.345 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 113.384 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 1.84 Mbit/s

95th percentile per-packet one-way delay: 113.358 ms

Loss rate: 0.00%

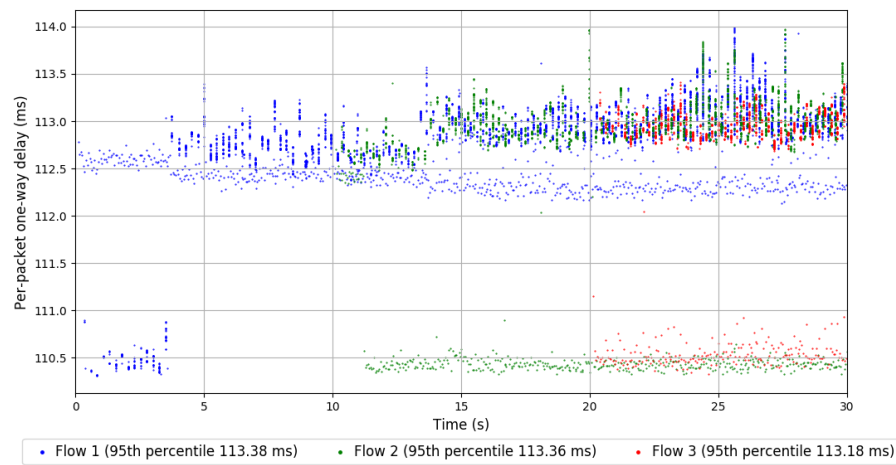
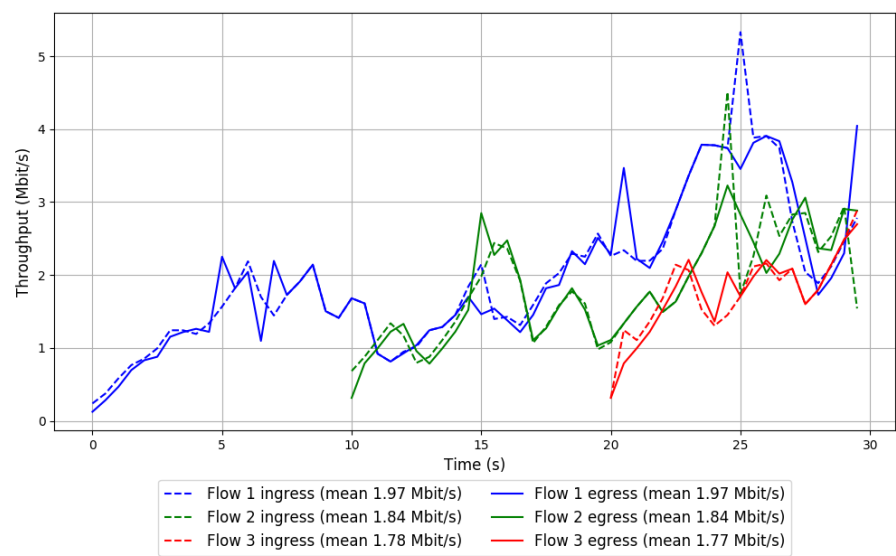
-- Flow 3:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 113.176 ms

Loss rate: 0.95%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-21 17:11:16

End at: 2017-11-21 17:11:46

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.63 Mbit/s

95th percentile per-packet one-way delay: 113.104 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 2.56 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.09 Mbit/s

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

Loss rate: 0.23%

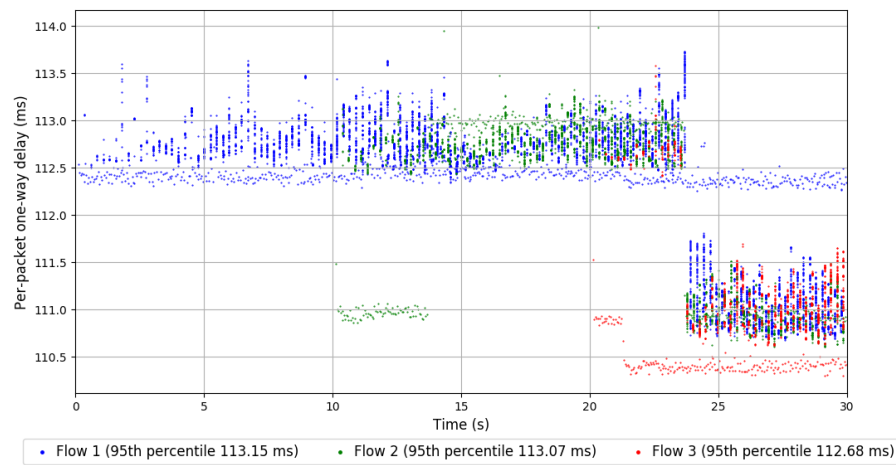
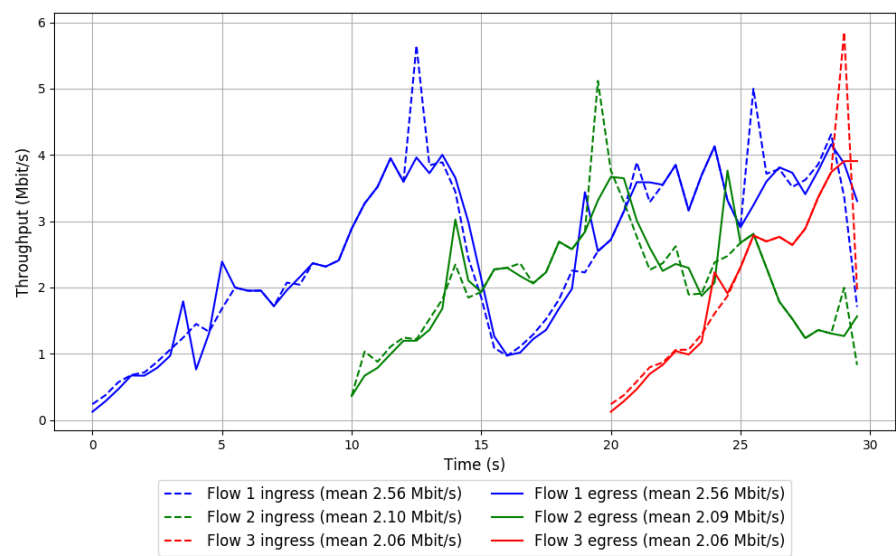
-- Flow 3:

Average throughput: 2.06 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

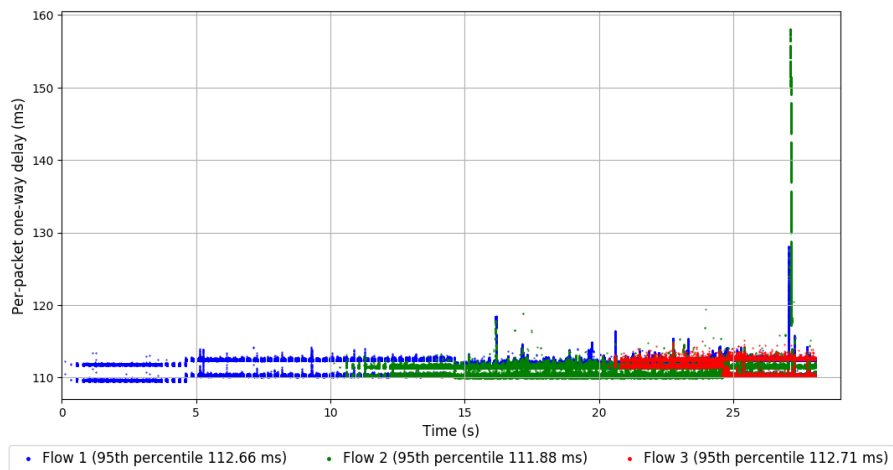
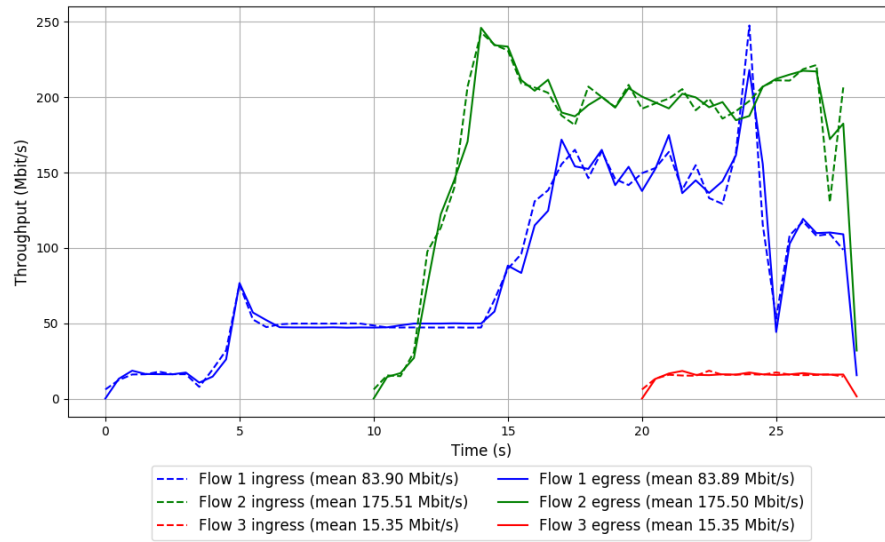


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-21 14:58:33
End at: 2017-11-21 14:59:03

# Below is generated by plot.py at 2017-11-21 18:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 200.85 Mbit/s
95th percentile per-packet one-way delay: 112.532 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 83.89 Mbit/s
95th percentile per-packet one-way delay: 112.657 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 175.50 Mbit/s
95th percentile per-packet one-way delay: 111.878 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.35 Mbit/s
95th percentile per-packet one-way delay: 112.713 ms
Loss rate: 0.00%
```


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

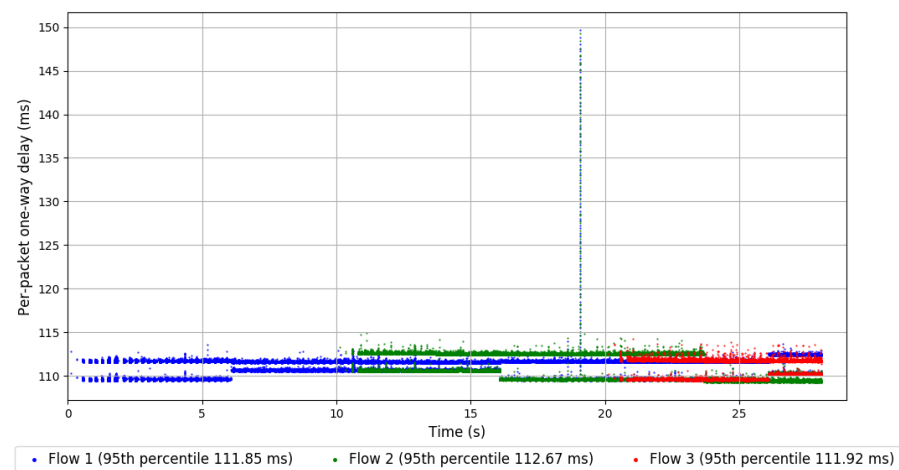
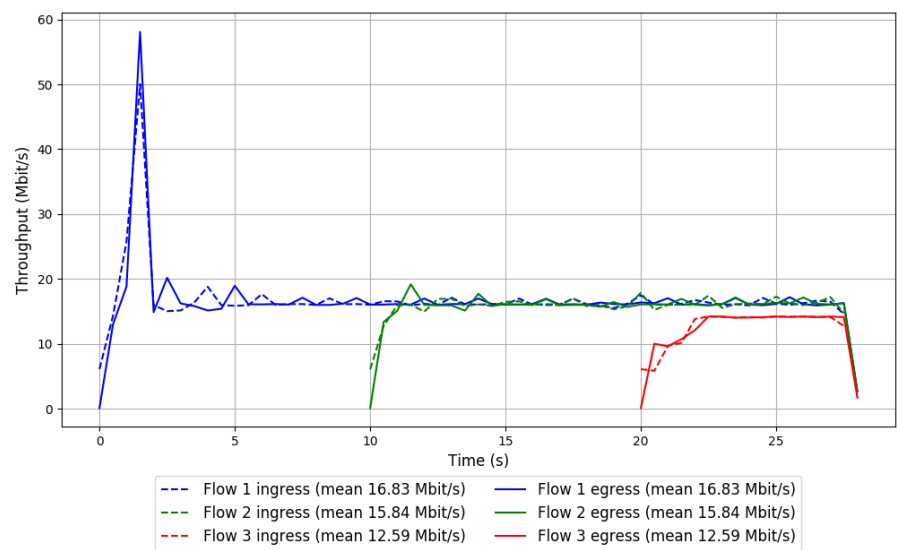


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-21 15:12:02
End at: 2017-11-21 15:12:32

# Below is generated by plot.py at 2017-11-21 18:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.57 Mbit/s
95th percentile per-packet one-way delay: 112.567 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 16.83 Mbit/s
95th percentile per-packet one-way delay: 111.850 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.84 Mbit/s
95th percentile per-packet one-way delay: 112.667 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 111.921 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-11-21 15:25:22

End at: 2017-11-21 15:25:52

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 157.66 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 102.85 Mbit/s

95th percentile per-packet one-way delay: 112.403 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 13.19 Mbit/s

95th percentile per-packet one-way delay: 112.354 ms

Loss rate: 0.00%

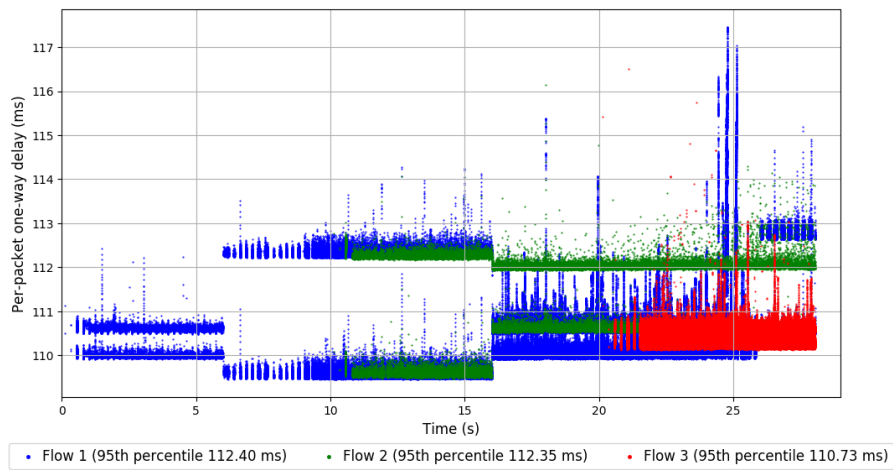
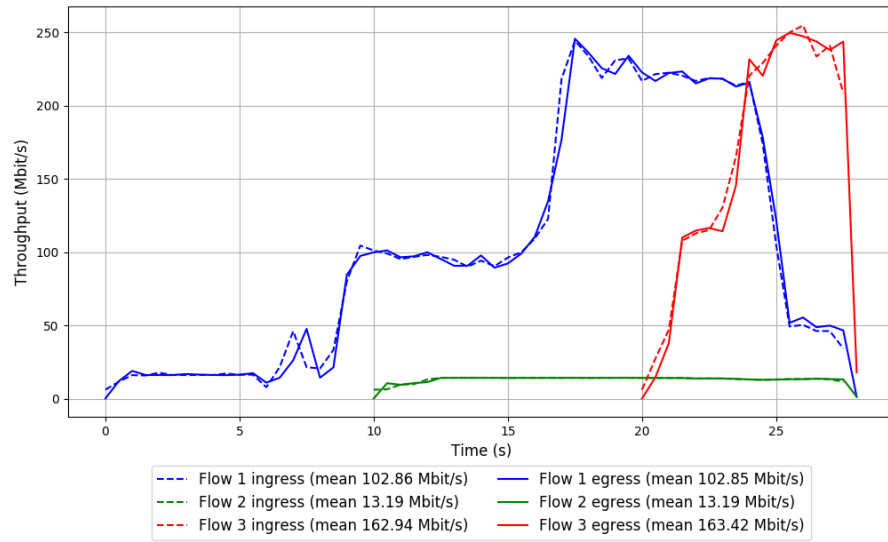
-- Flow 3:

Average throughput: 163.42 Mbit/s

95th percentile per-packet one-way delay: 110.735 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-11-21 15:38:58

End at: 2017-11-21 15:39:28

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 200.82 Mbit/s

95th percentile per-packet one-way delay: 113.417 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 133.50 Mbit/s

95th percentile per-packet one-way delay: 113.797 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 15.69 Mbit/s

95th percentile per-packet one-way delay: 112.920 ms

Loss rate: 0.00%

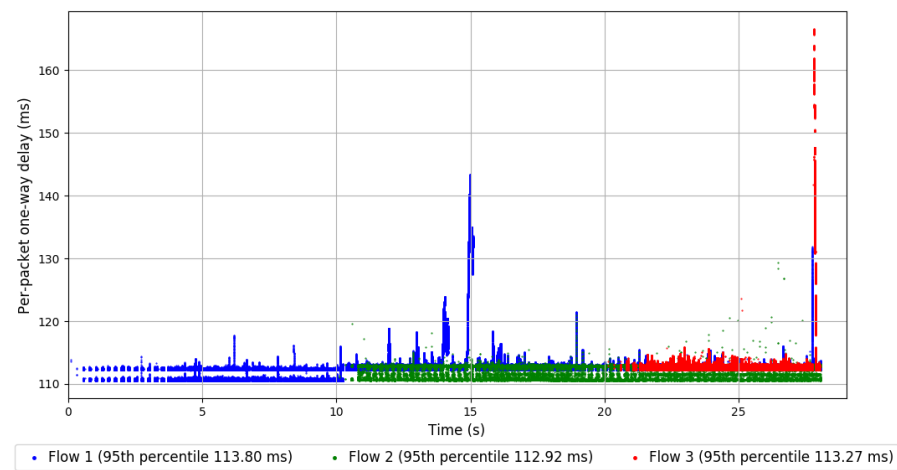
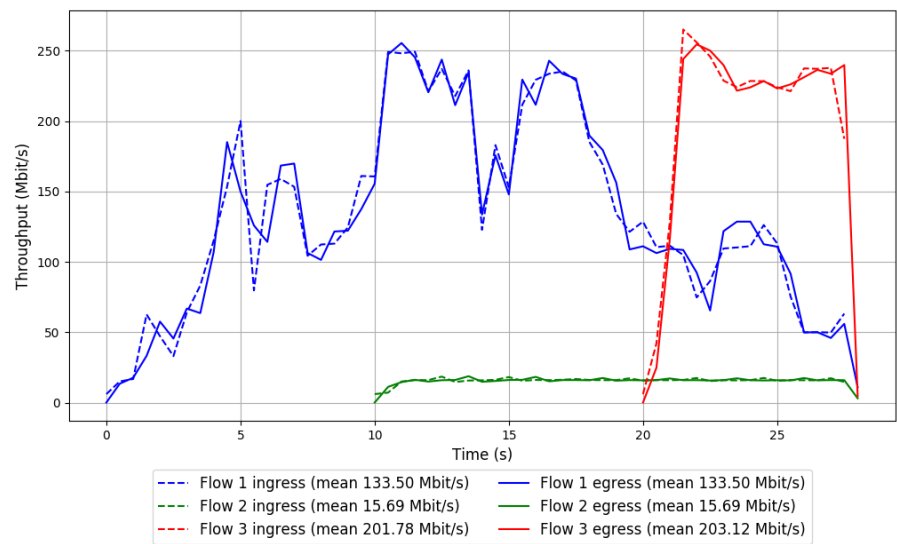
-- Flow 3:

Average throughput: 203.12 Mbit/s

95th percentile per-packet one-way delay: 113.268 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-21 15:52:34

End at: 2017-11-21 15:53:04

Below is generated by plot.py at 2017-11-21 18:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 22.70 Mbit/s

95th percentile per-packet one-way delay: 112.889 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 13.73 Mbit/s

95th percentile per-packet one-way delay: 112.900 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.44 Mbit/s

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

Loss rate: 0.00%

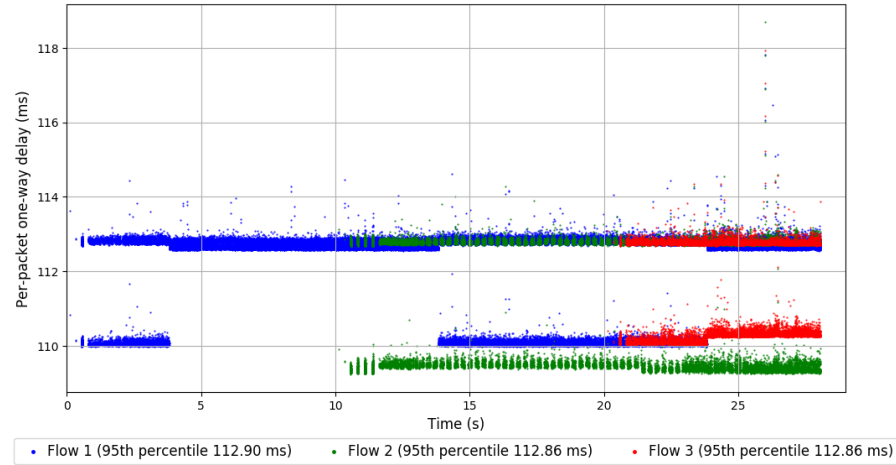
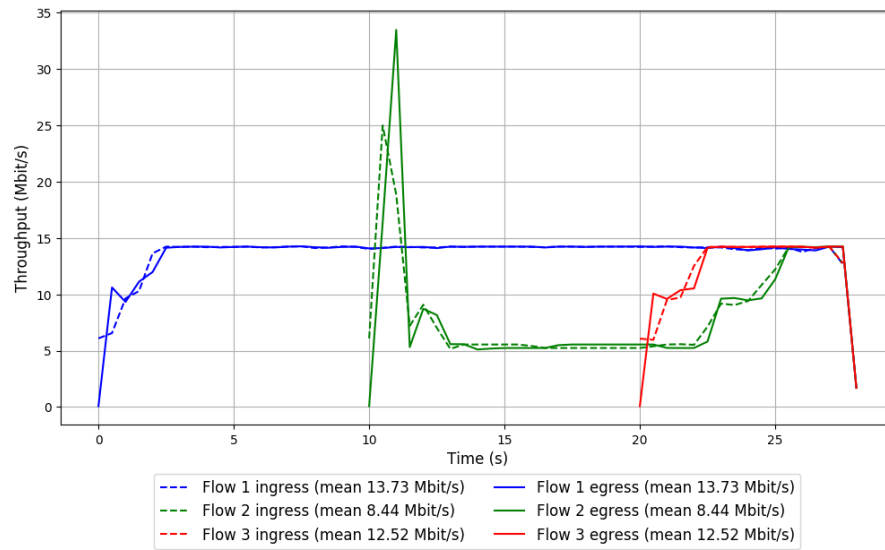
-- Flow 3:

Average throughput: 12.52 Mbit/s

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

Loss rate: 0.01%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-21 16:05:59

End at: 2017-11-21 16:06:29

Below is generated by plot.py at 2017-11-21 18:40:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.19 Mbit/s

95th percentile per-packet one-way delay: 112.951 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 156.07 Mbit/s

95th percentile per-packet one-way delay: 112.804 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 170.91 Mbit/s

95th percentile per-packet one-way delay: 113.136 ms

Loss rate: 0.00%

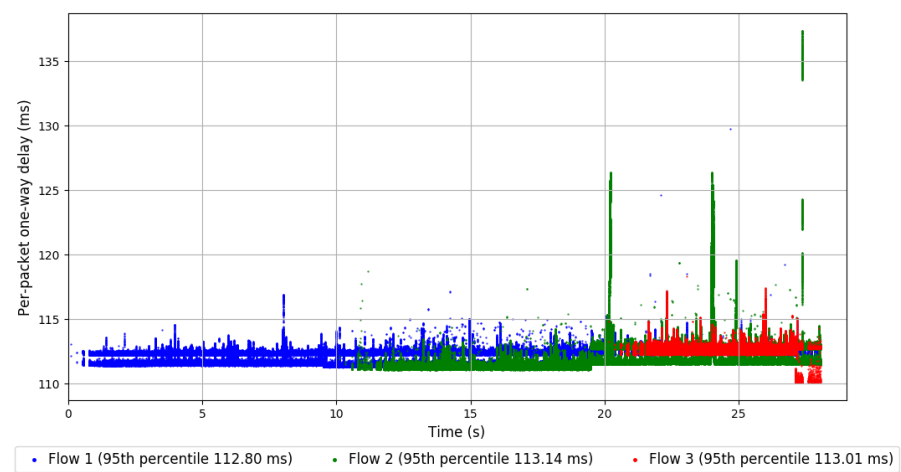
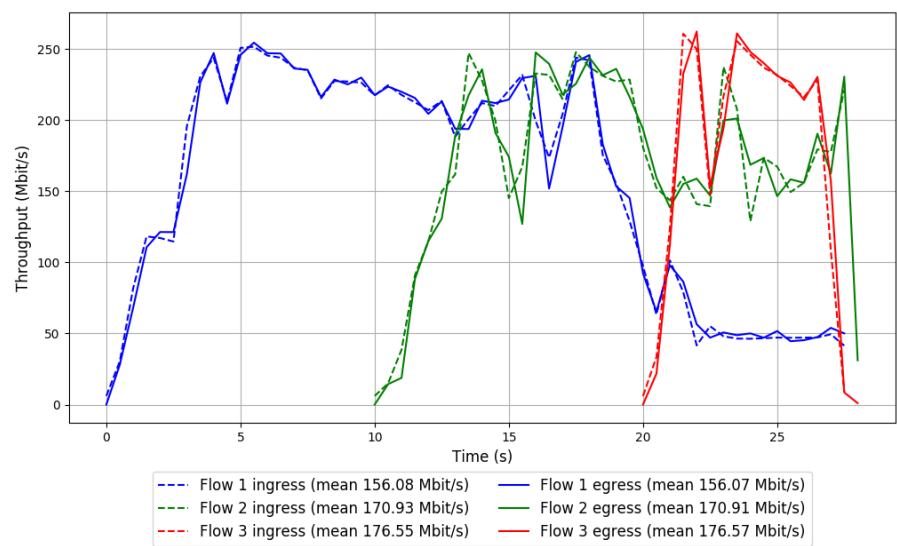
-- Flow 3:

Average throughput: 176.57 Mbit/s

95th percentile per-packet one-way delay: 113.010 ms

Loss rate: 0.00%

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

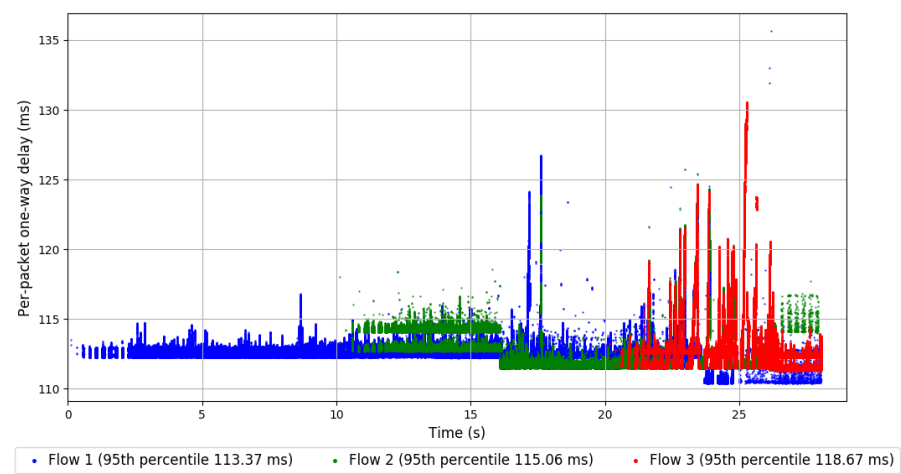
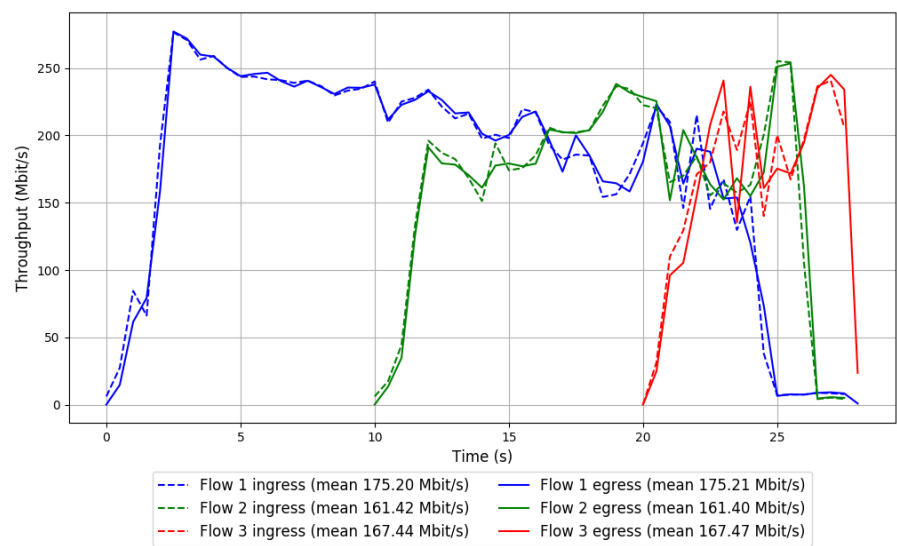


```
Run 7: Statistics of TaoVA-100x

Start at: 2017-11-21 16:19:42
End at: 2017-11-21 16:20:12

# Below is generated by plot.py at 2017-11-21 18:41:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 325.44 Mbit/s
95th percentile per-packet one-way delay: 114.727 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 175.21 Mbit/s
95th percentile per-packet one-way delay: 113.370 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 161.40 Mbit/s
95th percentile per-packet one-way delay: 115.060 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 167.47 Mbit/s
95th percentile per-packet one-way delay: 118.667 ms
Loss rate: 0.00%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-21 16:33:25

End at: 2017-11-21 16:33:55

Below is generated by plot.py at 2017-11-21 18:41:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 42.33 Mbit/s

95th percentile per-packet one-way delay: 112.639 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 15.62 Mbit/s

95th percentile per-packet one-way delay: 112.738 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 34.74 Mbit/s

95th percentile per-packet one-way delay: 112.361 ms

Loss rate: 0.00%

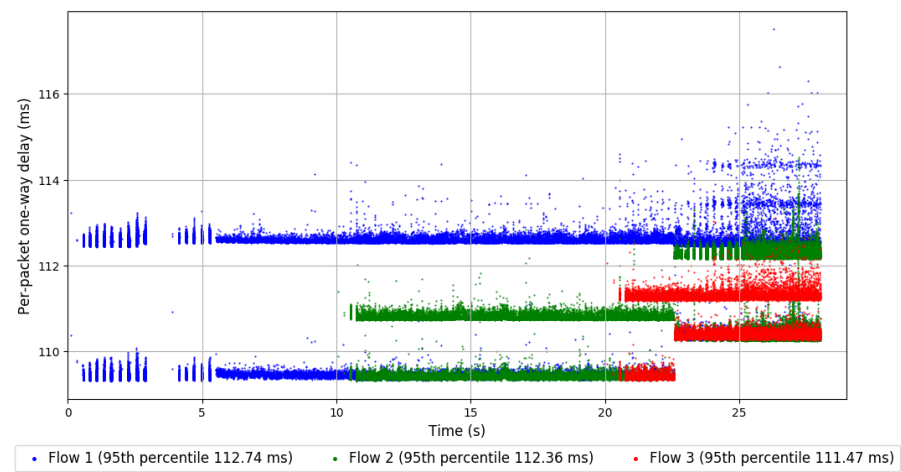
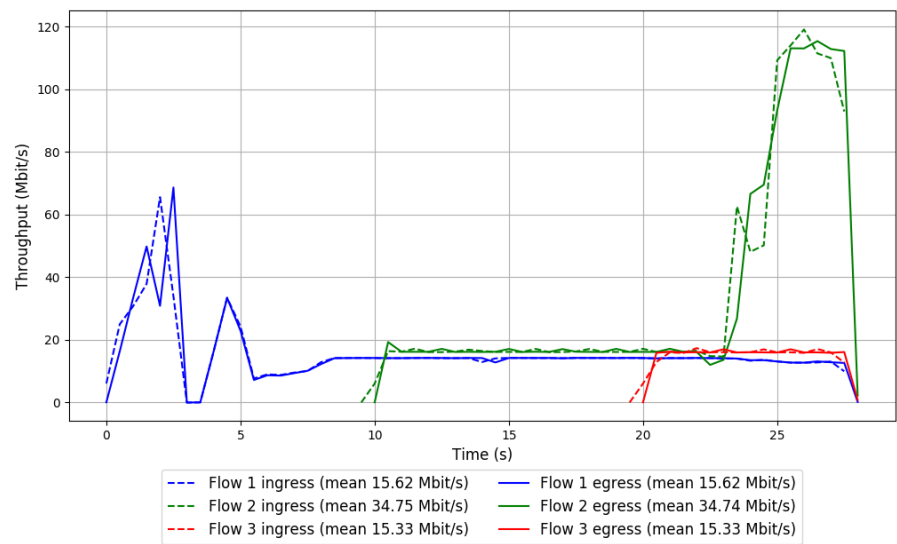
-- Flow 3:

Average throughput: 15.33 Mbit/s

95th percentile per-packet one-way delay: 111.470 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-11-21 16:46:40

End at: 2017-11-21 16:47:10

Below is generated by plot.py at 2017-11-21 18:41:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 212.02 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 100.65 Mbit/s

95th percentile per-packet one-way delay: 112.677 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 168.30 Mbit/s

95th percentile per-packet one-way delay: 112.780 ms

Loss rate: 0.00%

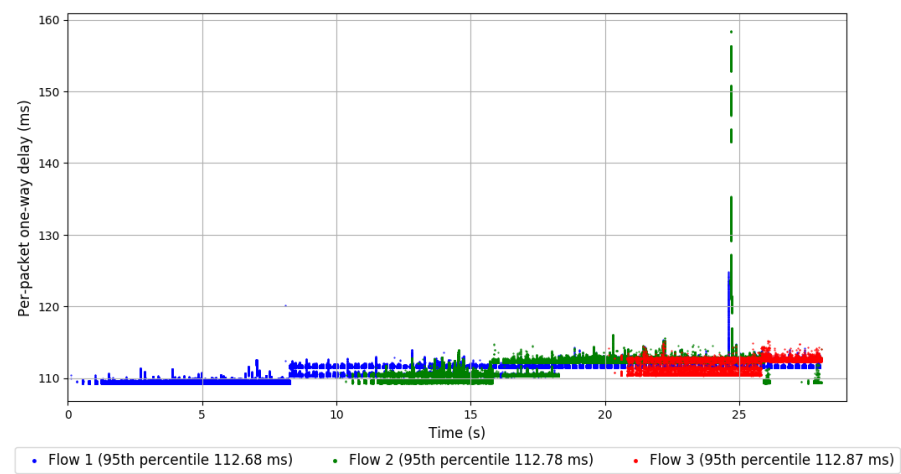
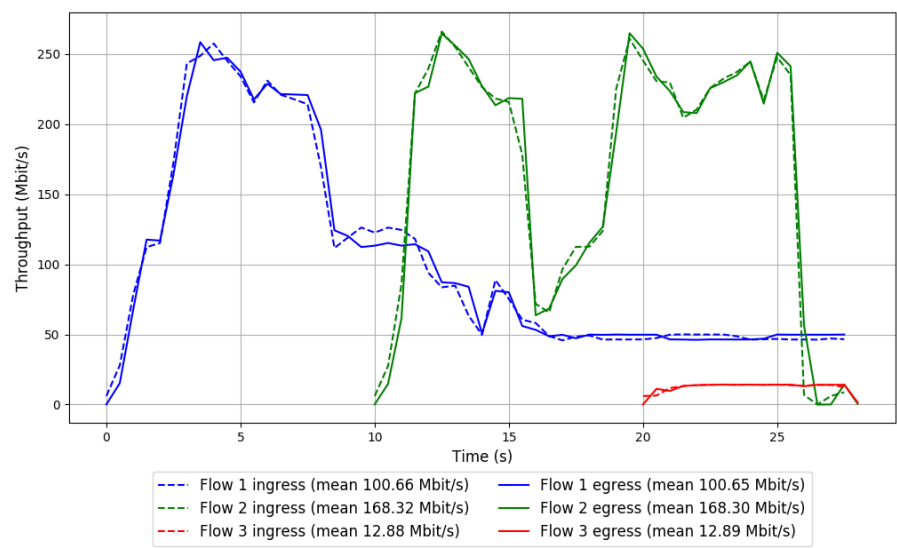
-- Flow 3:

Average throughput: 12.89 Mbit/s

95th percentile per-packet one-way delay: 112.866 ms

Loss rate: 0.01%

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

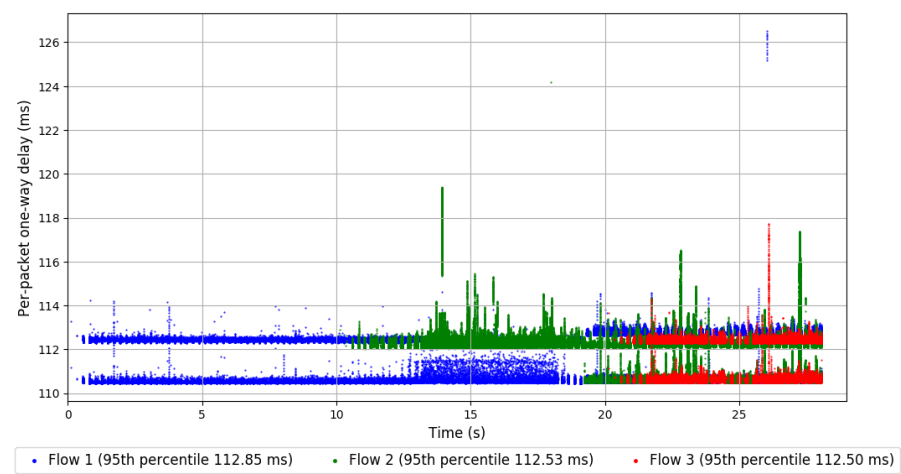
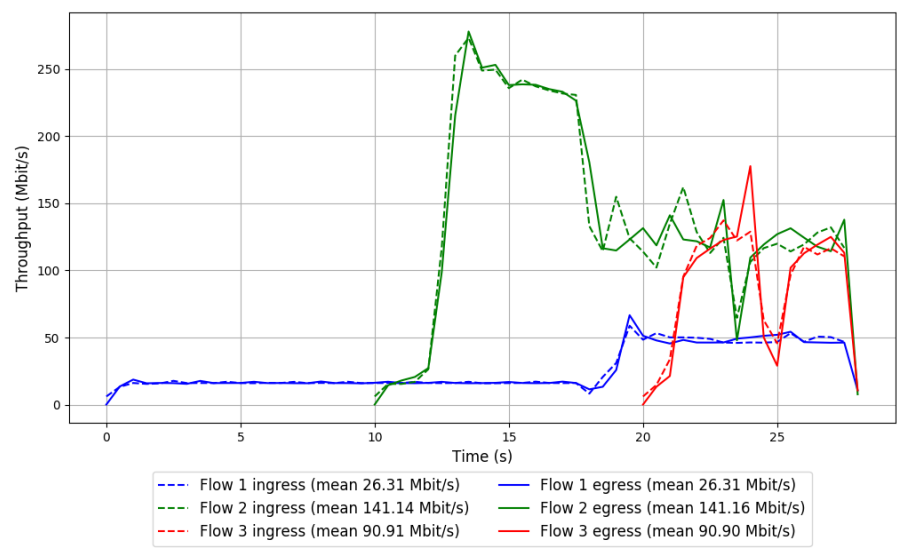


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-21 17:00:19
End at: 2017-11-21 17:00:49

# Below is generated by plot.py at 2017-11-21 18:41:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 142.65 Mbit/s
95th percentile per-packet one-way delay: 112.738 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 26.31 Mbit/s
95th percentile per-packet one-way delay: 112.850 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 141.16 Mbit/s
95th percentile per-packet one-way delay: 112.526 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 90.90 Mbit/s
95th percentile per-packet one-way delay: 112.495 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-21 15:05:07

End at: 2017-11-21 15:05:37

Below is generated by plot.py at 2017-11-21 18:41:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 58.50 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 40.74 Mbit/s

95th percentile per-packet one-way delay: 112.311 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 9.49 Mbit/s

95th percentile per-packet one-way delay: 111.963 ms

Loss rate: 0.02%

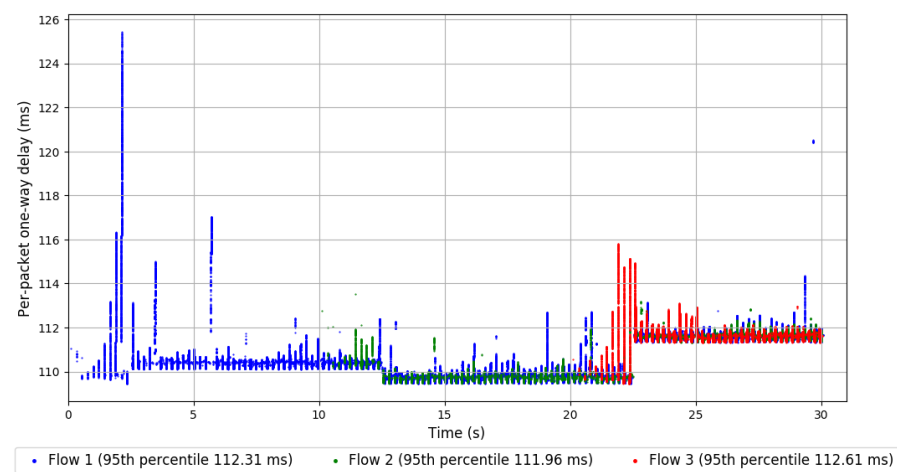
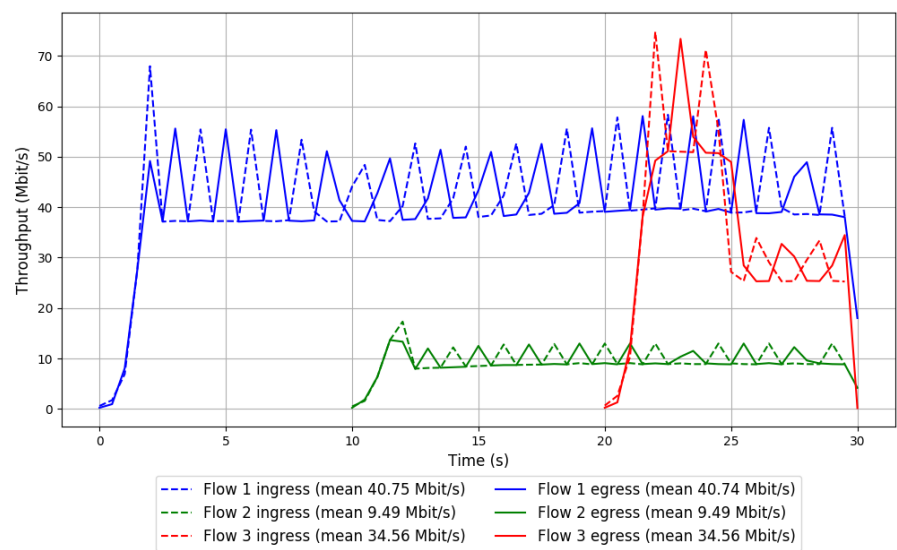
-- Flow 3:

Average throughput: 34.56 Mbit/s

95th percentile per-packet one-way delay: 112.611 ms

Loss rate: 0.01%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-21 15:18:18

End at: 2017-11-21 15:18:48

Below is generated by plot.py at 2017-11-21 18:41:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 55.39 Mbit/s

95th percentile per-packet one-way delay: 114.301 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 14.80 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.26 Mbit/s

95th percentile per-packet one-way delay: 116.328 ms

Loss rate: 0.00%

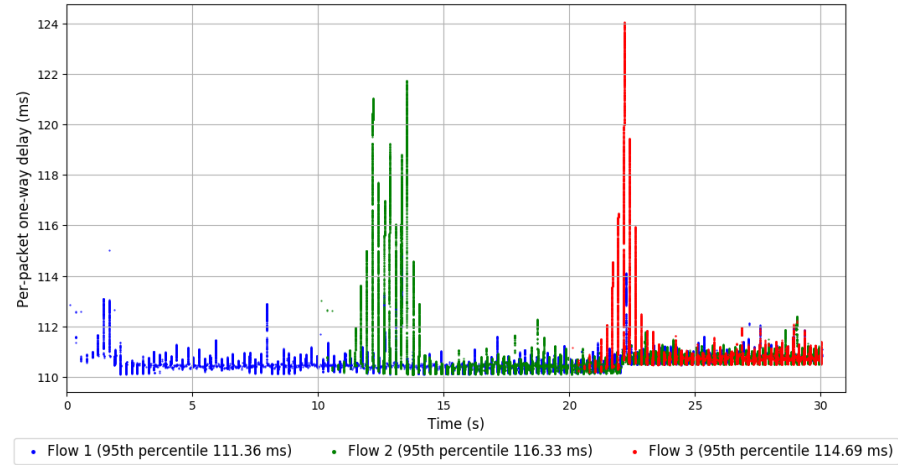
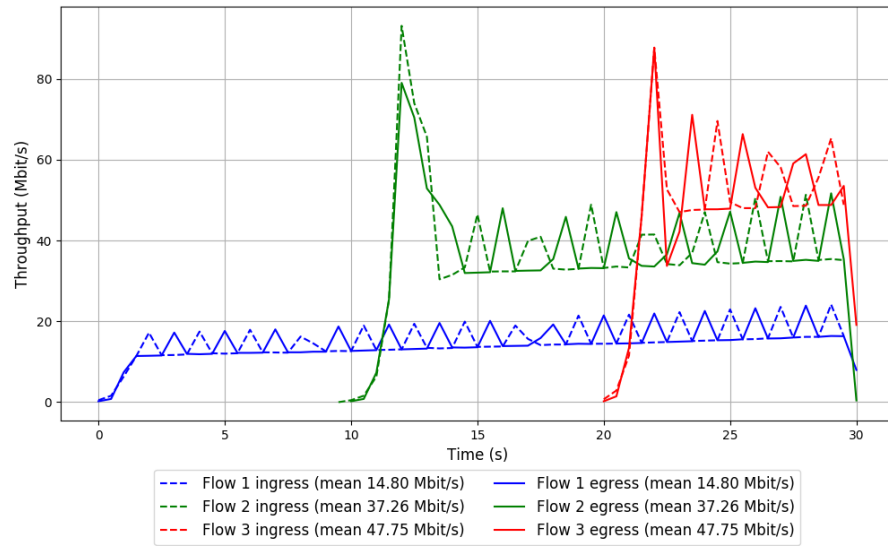
-- Flow 3:

Average throughput: 47.75 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-21 15:31:53

End at: 2017-11-21 15:32:23

Below is generated by plot.py at 2017-11-21 18:41:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.78 Mbit/s

95th percentile per-packet one-way delay: 114.180 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 27.48 Mbit/s

95th percentile per-packet one-way delay: 113.641 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 31.14 Mbit/s

95th percentile per-packet one-way delay: 114.498 ms

Loss rate: 0.00%

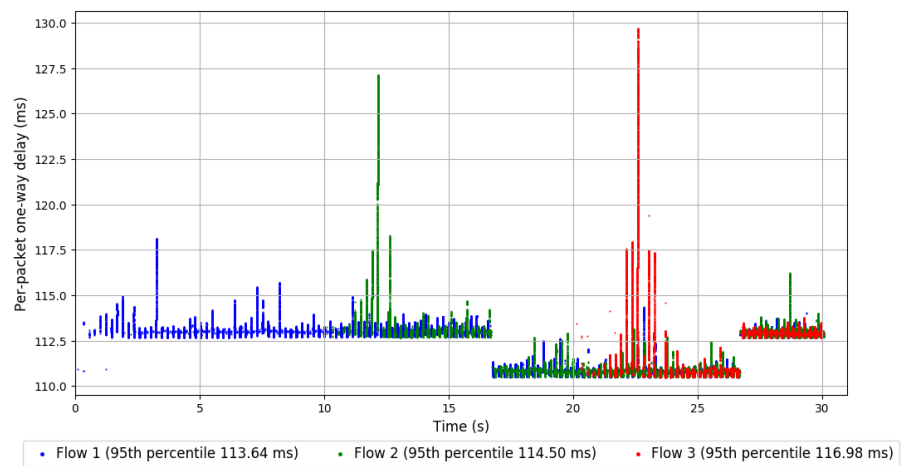
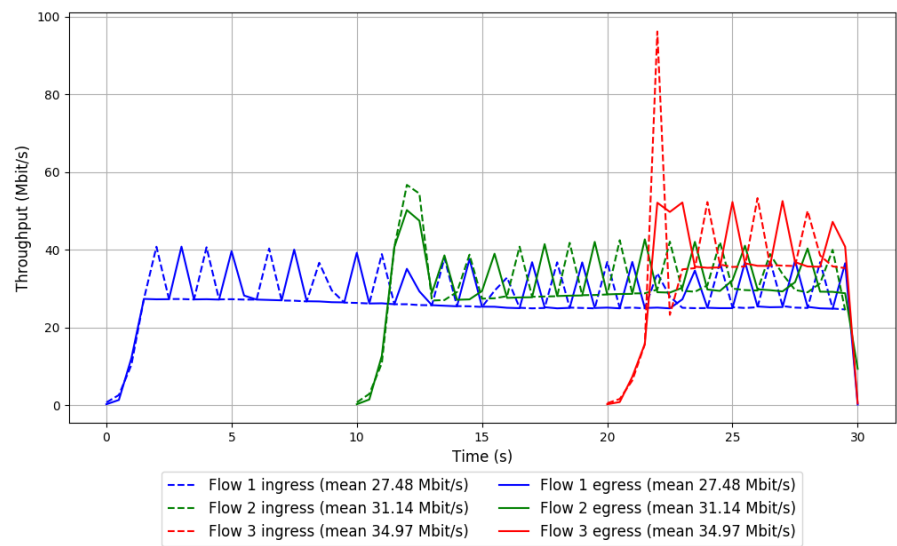
-- Flow 3:

Average throughput: 34.97 Mbit/s

95th percentile per-packet one-way delay: 116.983 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-21 15:45:32

End at: 2017-11-21 15:46:02

Below is generated by plot.py at 2017-11-21 18:41:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.05 Mbit/s

95th percentile per-packet one-way delay: 113.946 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 37.54 Mbit/s

95th percentile per-packet one-way delay: 113.828 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 16.52 Mbit/s

95th percentile per-packet one-way delay: 113.675 ms

Loss rate: 0.03%

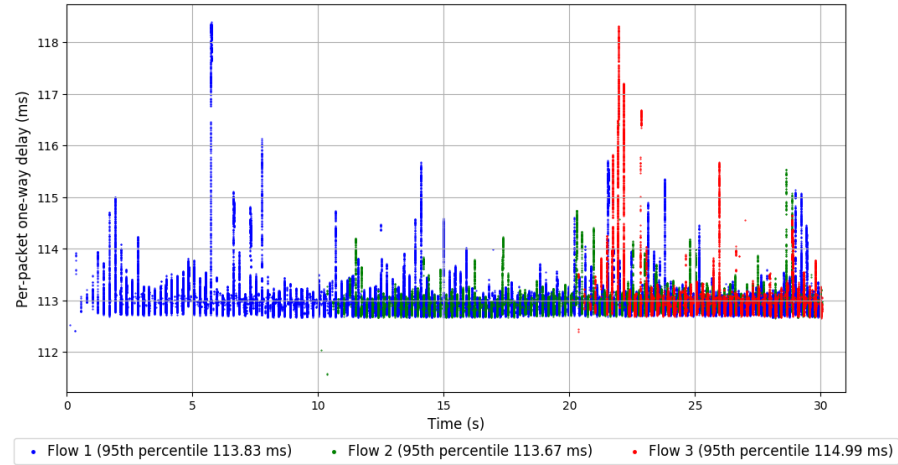
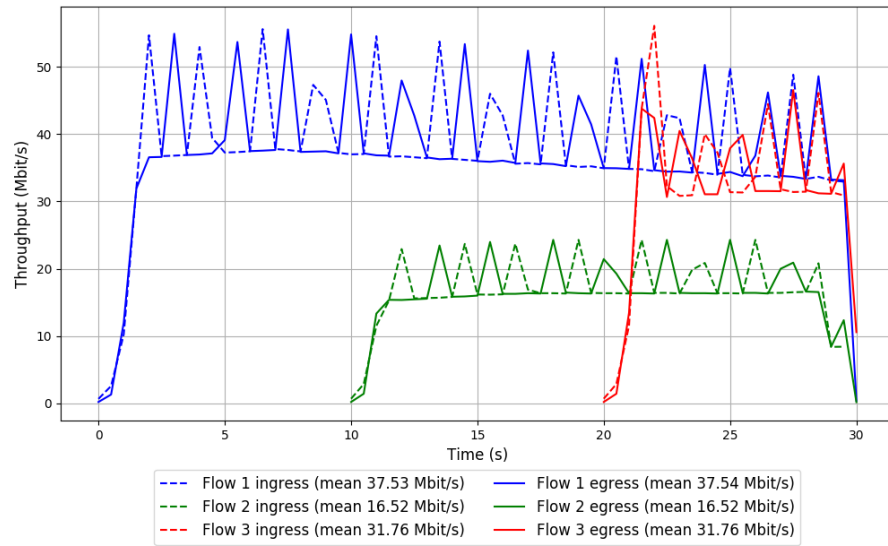
-- Flow 3:

Average throughput: 31.76 Mbit/s

95th percentile per-packet one-way delay: 114.994 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-21 15:58:51

End at: 2017-11-21 15:59:21

Below is generated by plot.py at 2017-11-21 18:41:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.91 Mbit/s

95th percentile per-packet one-way delay: 113.642 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 35.80 Mbit/s

95th percentile per-packet one-way delay: 113.577 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.34 Mbit/s

95th percentile per-packet one-way delay: 113.504 ms

Loss rate: 0.01%

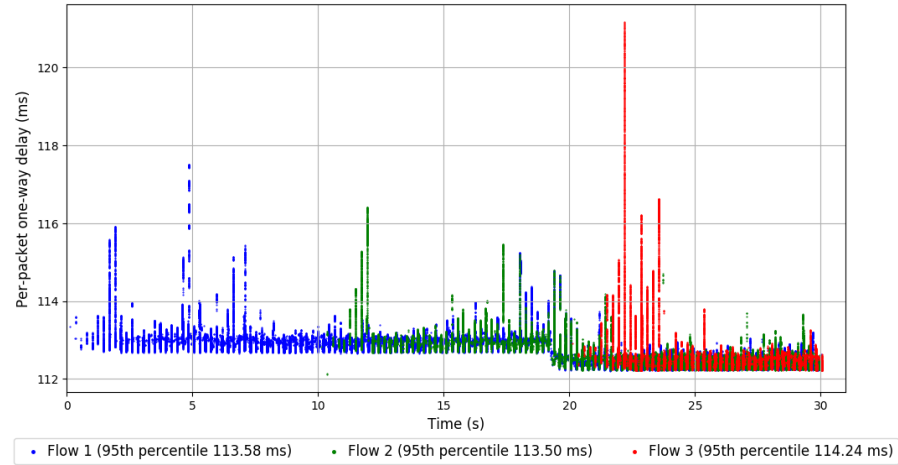
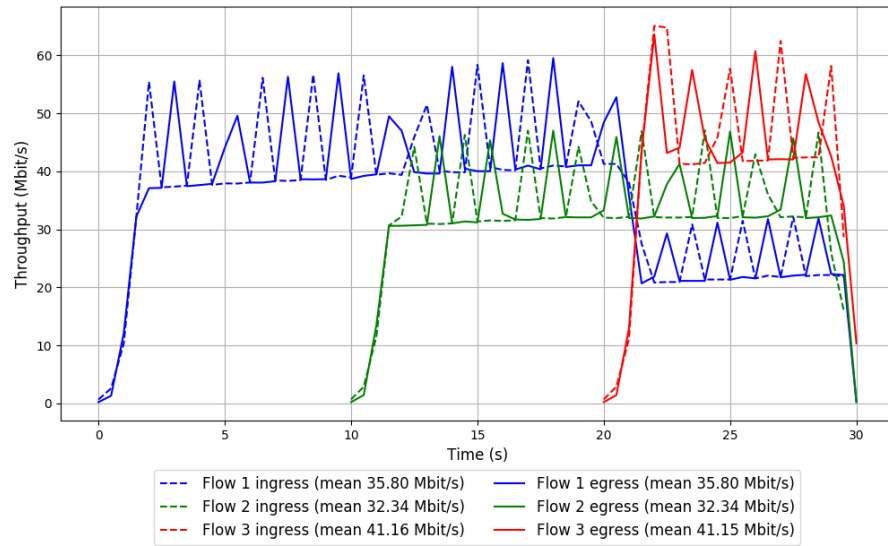
-- Flow 3:

Average throughput: 41.15 Mbit/s

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

Loss rate: 0.02%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-21 16:12:46

End at: 2017-11-21 16:13:16

Below is generated by plot.py at 2017-11-21 18:41:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.05 Mbit/s

95th percentile per-packet one-way delay: 113.317 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 39.04 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 15.54 Mbit/s

95th percentile per-packet one-way delay: 113.372 ms

Loss rate: 0.01%

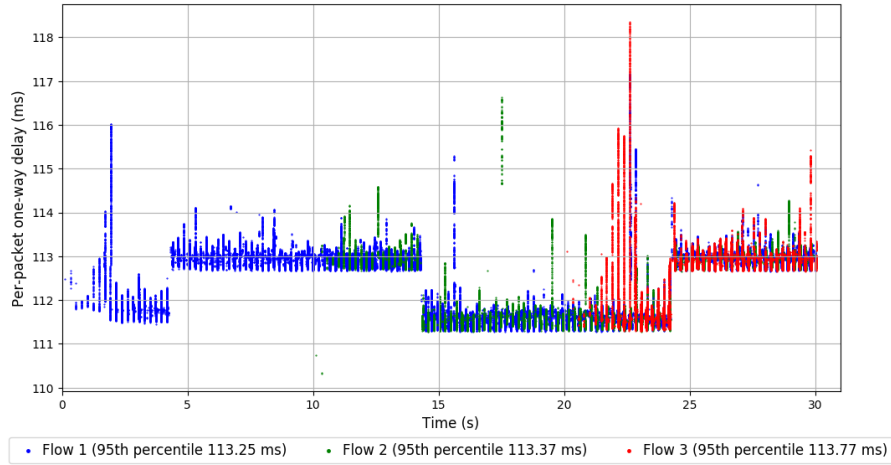
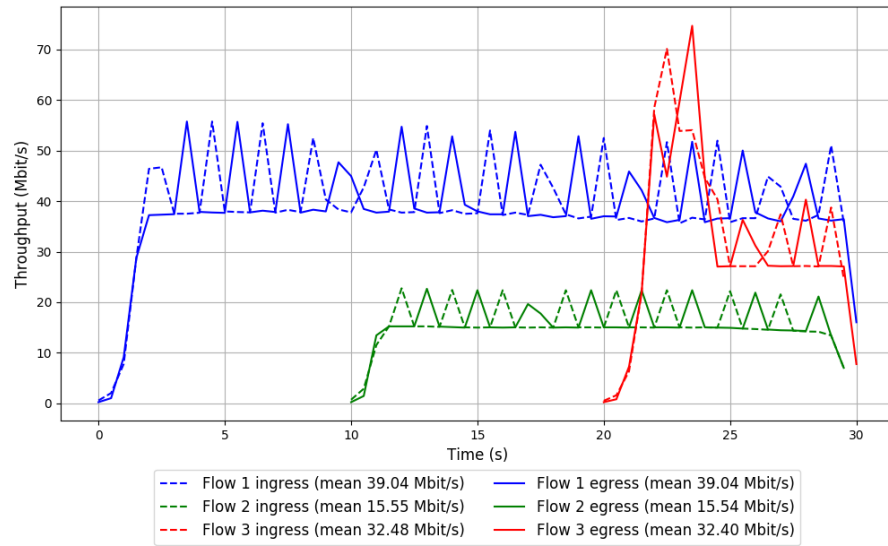
-- Flow 3:

Average throughput: 32.40 Mbit/s

95th percentile per-packet one-way delay: 113.774 ms

Loss rate: 0.25%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-21 16:26:29

End at: 2017-11-21 16:26:59

Below is generated by plot.py at 2017-11-21 18:41:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 38.35 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 9.41 Mbit/s

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

Loss rate: 0.03%

-- Flow 2:

Average throughput: 27.43 Mbit/s

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

Loss rate: 0.00%

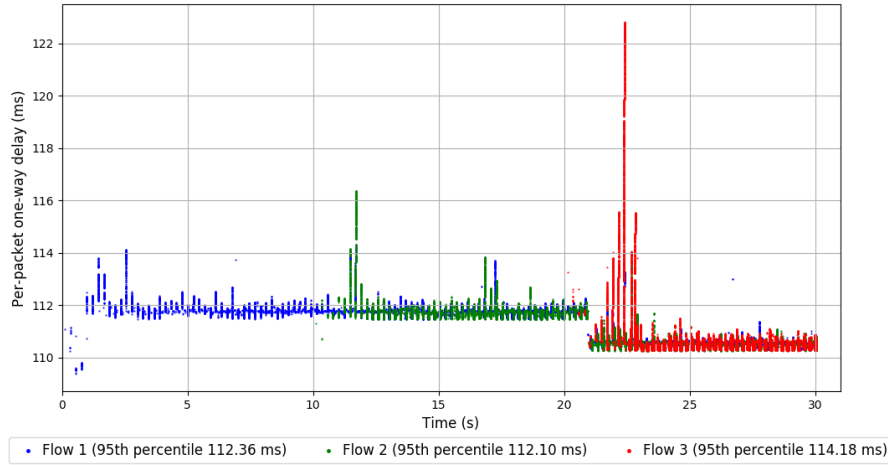
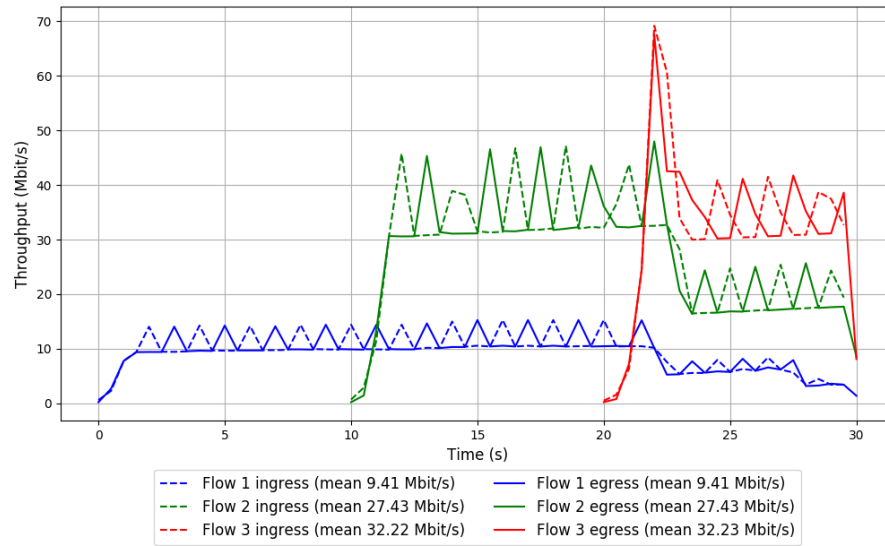
-- Flow 3:

Average throughput: 32.23 Mbit/s

95th percentile per-packet one-way delay: 114.177 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-21 16:39:40

End at: 2017-11-21 16:40:10

Below is generated by plot.py at 2017-11-21 18:41:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 42.33 Mbit/s

95th percentile per-packet one-way delay: 113.153 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 18.48 Mbit/s

95th percentile per-packet one-way delay: 111.477 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 20.19 Mbit/s

95th percentile per-packet one-way delay: 115.329 ms

Loss rate: 0.00%

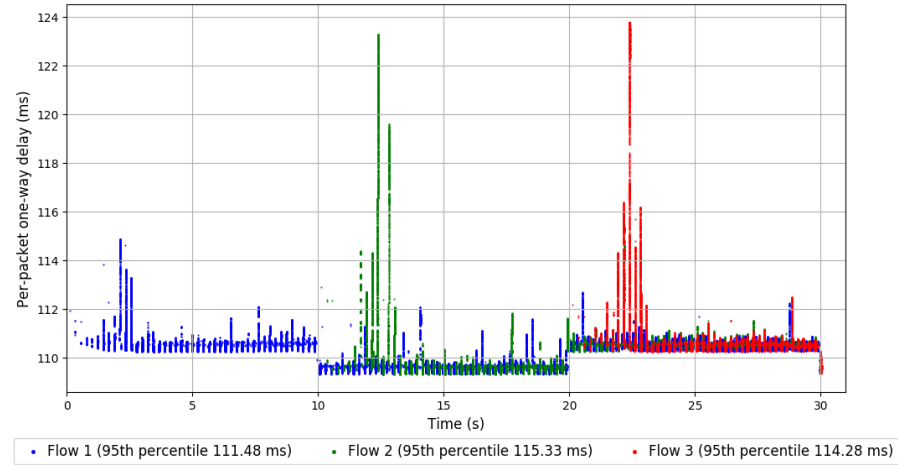
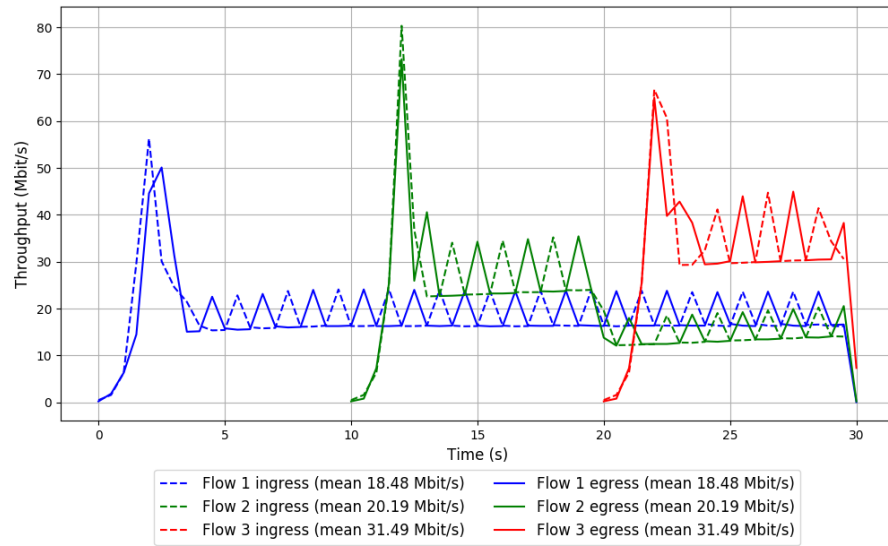
-- Flow 3:

Average throughput: 31.49 Mbit/s

95th percentile per-packet one-way delay: 114.281 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-21 16:53:17

End at: 2017-11-21 16:53:47

Below is generated by plot.py at 2017-11-21 18:41:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.78 Mbit/s

95th percentile per-packet one-way delay: 112.822 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 34.58 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.89 Mbit/s

95th percentile per-packet one-way delay: 112.371 ms

Loss rate: 0.01%

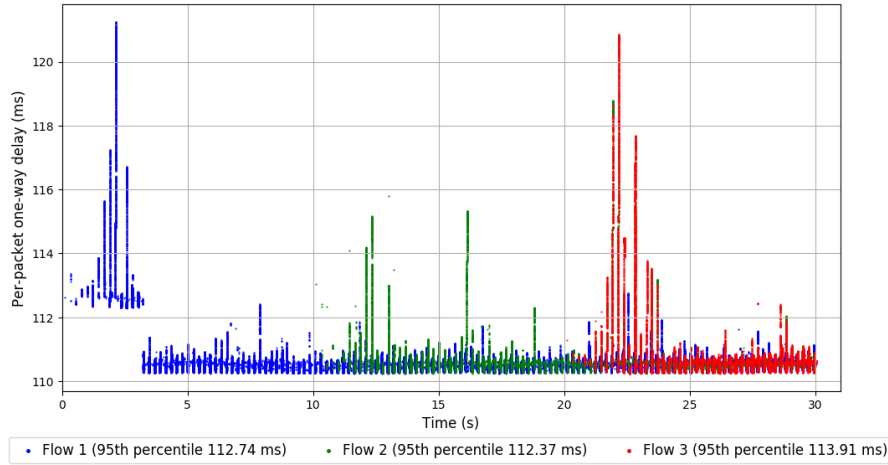
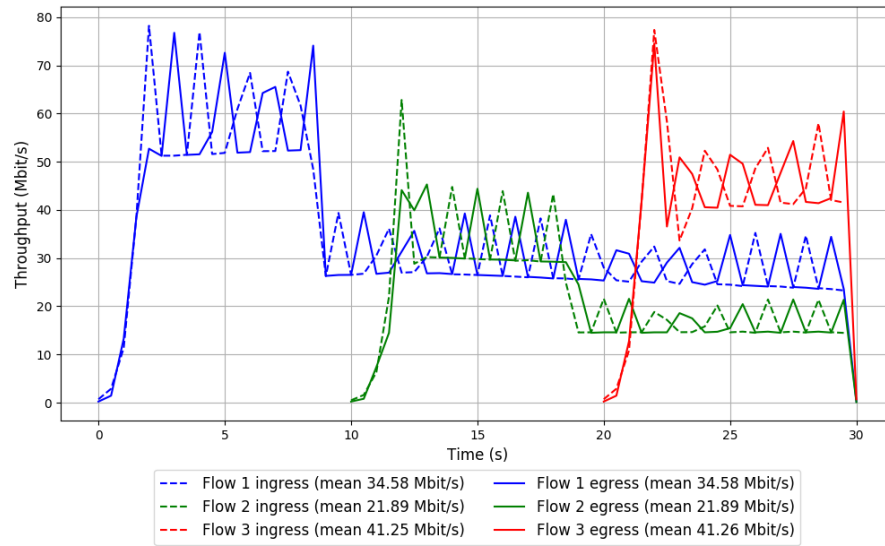
-- Flow 3:

Average throughput: 41.26 Mbit/s

95th percentile per-packet one-way delay: 113.908 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-21 17:06:49

End at: 2017-11-21 17:07:19

Below is generated by plot.py at 2017-11-21 18:41:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 53.24 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 34.81 Mbit/s

95th percentile per-packet one-way delay: 113.108 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 13.79 Mbit/s

95th percentile per-packet one-way delay: 113.520 ms

Loss rate: 0.00%

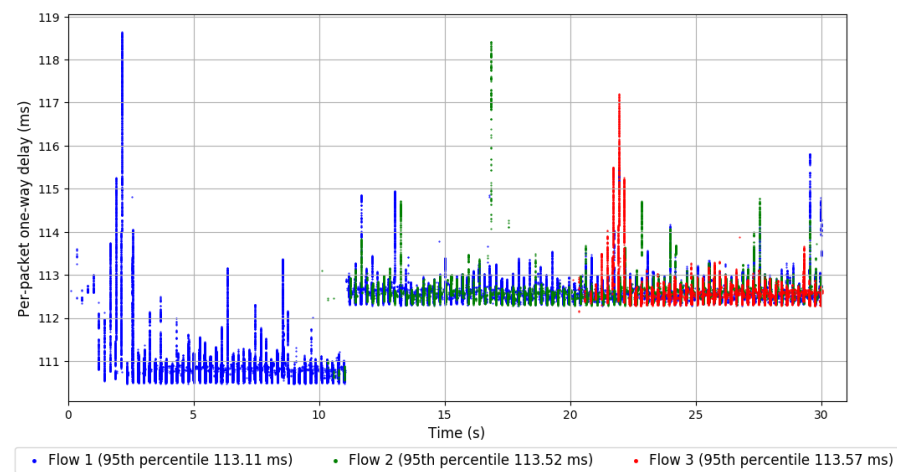
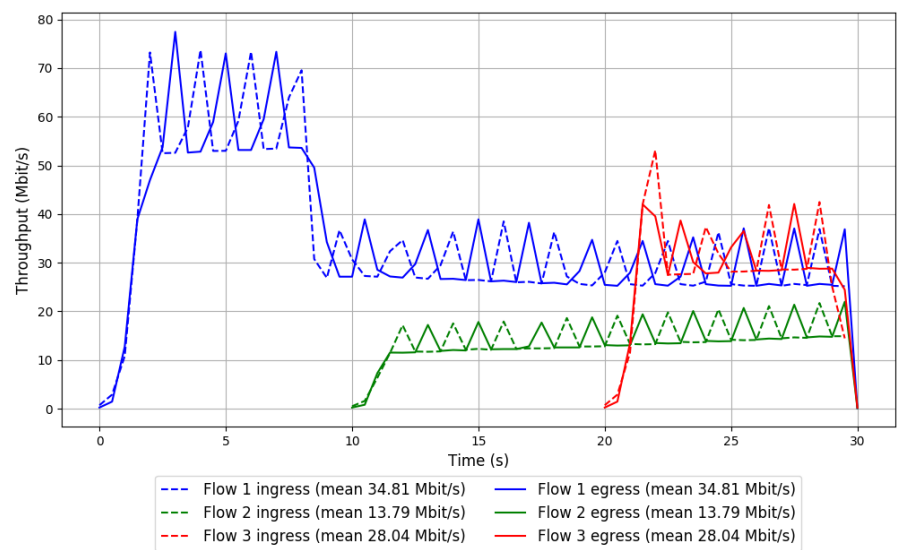
-- Flow 3:

Average throughput: 28.04 Mbit/s

95th percentile per-packet one-way delay: 113.572 ms

Loss rate: 0.01%

Run 10: Report of TCP Vegas — Data Link

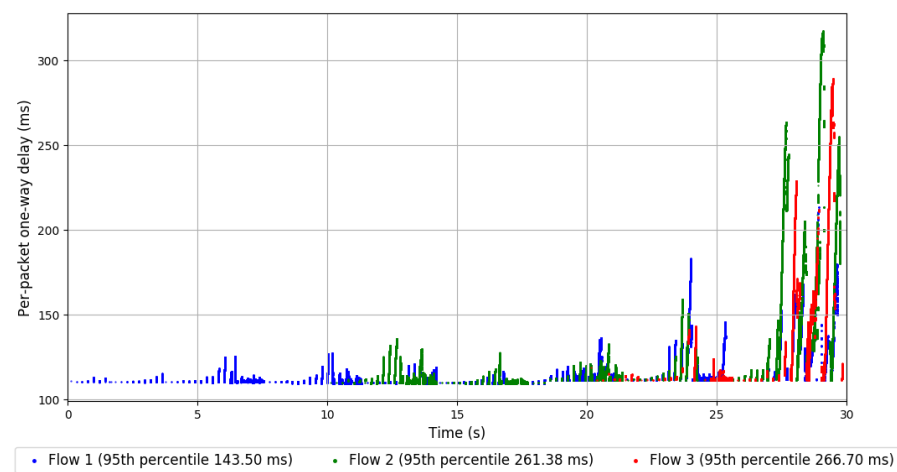
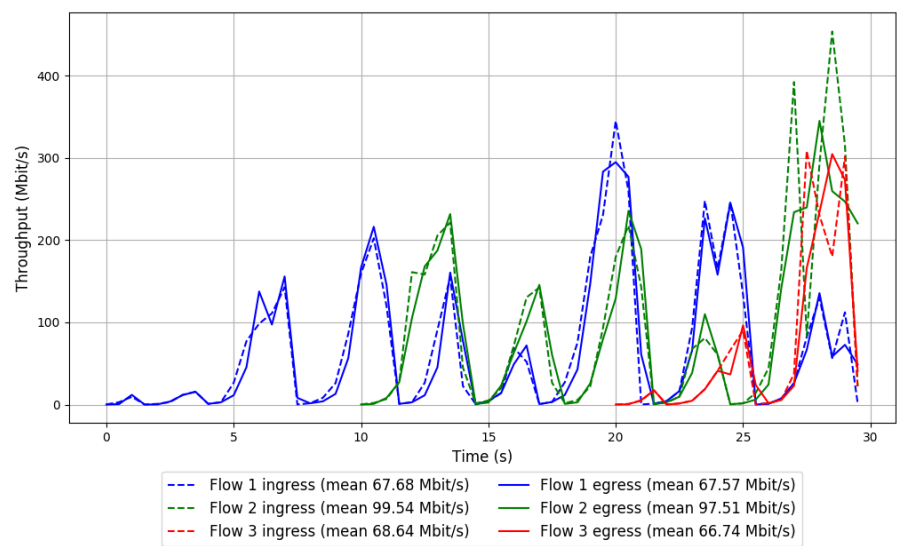


```
Run 1: Statistics of Verus

Start at: 2017-11-21 15:07:11
End at: 2017-11-21 15:07:41

# Below is generated by plot.py at 2017-11-21 18:41:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 153.29 Mbit/s
95th percentile per-packet one-way delay: 237.564 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 67.57 Mbit/s
95th percentile per-packet one-way delay: 143.499 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 97.51 Mbit/s
95th percentile per-packet one-way delay: 261.380 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 66.74 Mbit/s
95th percentile per-packet one-way delay: 266.702 ms
Loss rate: 2.83%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-21 15:20:21

End at: 2017-11-21 15:20:51

Below is generated by plot.py at 2017-11-21 18:44:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 320.61 Mbit/s

95th percentile per-packet one-way delay: 203.162 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 219.99 Mbit/s

95th percentile per-packet one-way delay: 190.987 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 137.04 Mbit/s

95th percentile per-packet one-way delay: 210.031 ms

Loss rate: 0.84%

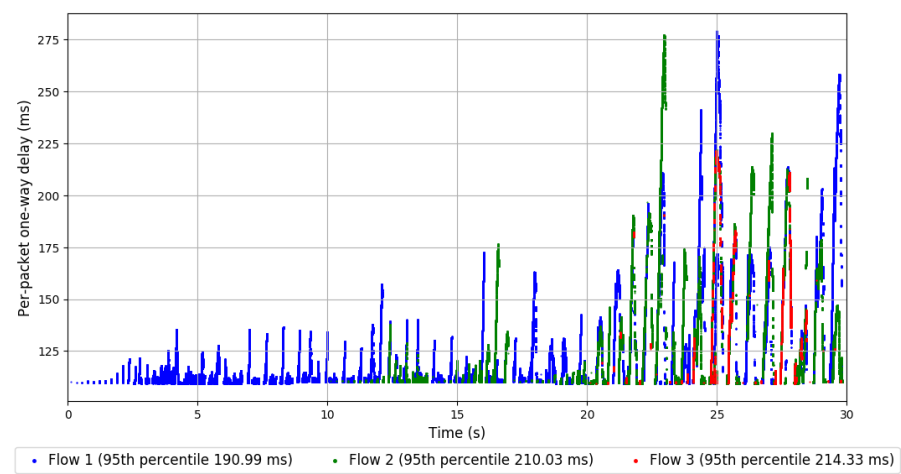
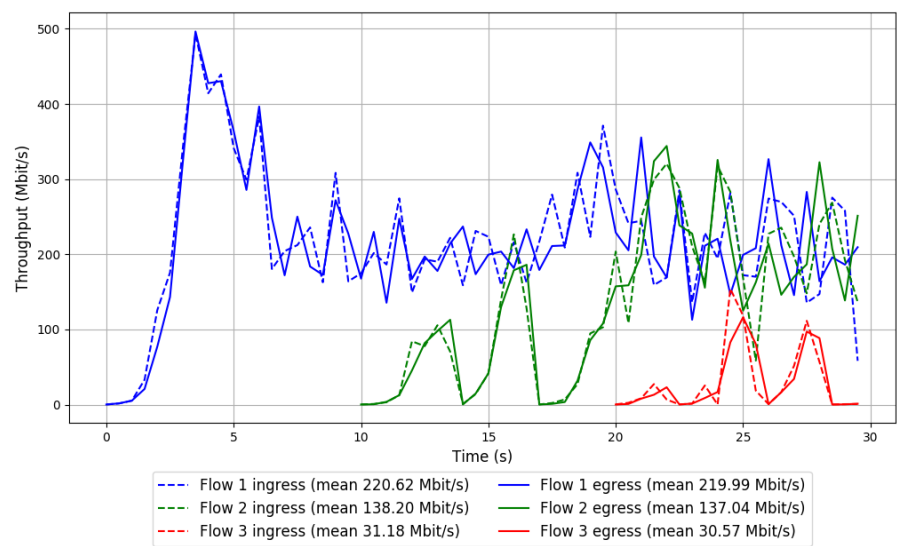
-- Flow 3:

Average throughput: 30.57 Mbit/s

95th percentile per-packet one-way delay: 214.327 ms

Loss rate: 1.92%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-21 15:33:57

End at: 2017-11-21 15:34:27

Below is generated by plot.py at 2017-11-21 18:44:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 258.00 Mbit/s

95th percentile per-packet one-way delay: 277.640 ms

Loss rate: 4.41%

-- Flow 1:

Average throughput: 196.52 Mbit/s

95th percentile per-packet one-way delay: 283.344 ms

Loss rate: 5.52%

-- Flow 2:

Average throughput: 59.87 Mbit/s

95th percentile per-packet one-way delay: 209.617 ms

Loss rate: 1.03%

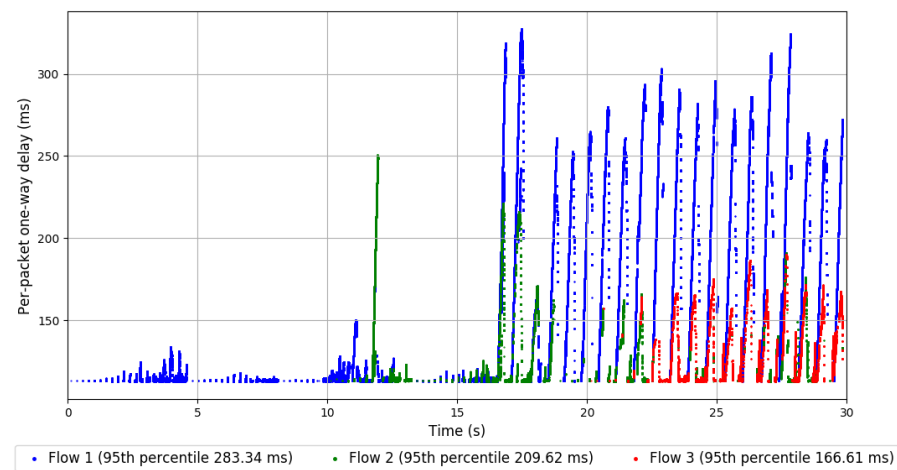
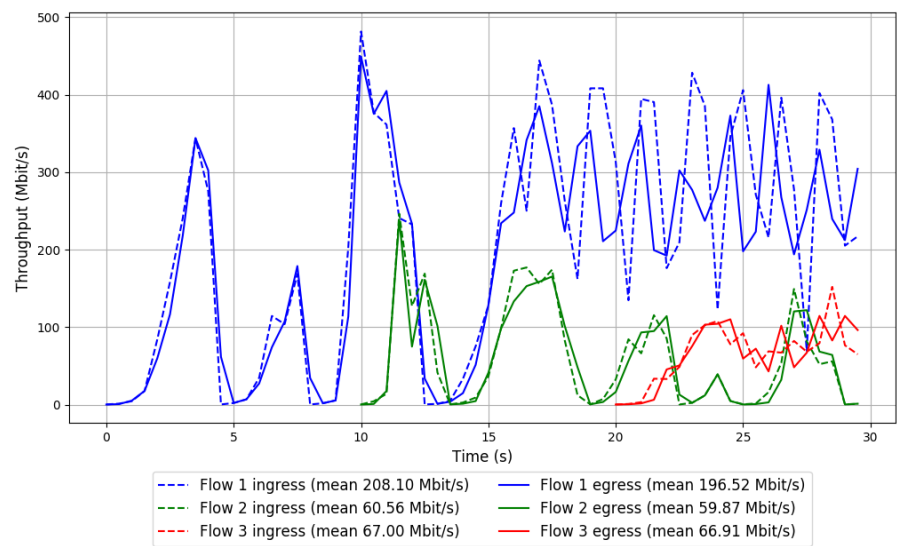
-- Flow 3:

Average throughput: 66.91 Mbit/s

95th percentile per-packet one-way delay: 166.613 ms

Loss rate: 0.00%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-21 15:47:35

End at: 2017-11-21 15:48:05

Below is generated by plot.py at 2017-11-21 18:44:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 262.03 Mbit/s

95th percentile per-packet one-way delay: 206.337 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 201.64 Mbit/s

95th percentile per-packet one-way delay: 215.802 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 63.00 Mbit/s

95th percentile per-packet one-way delay: 139.193 ms

Loss rate: 0.00%

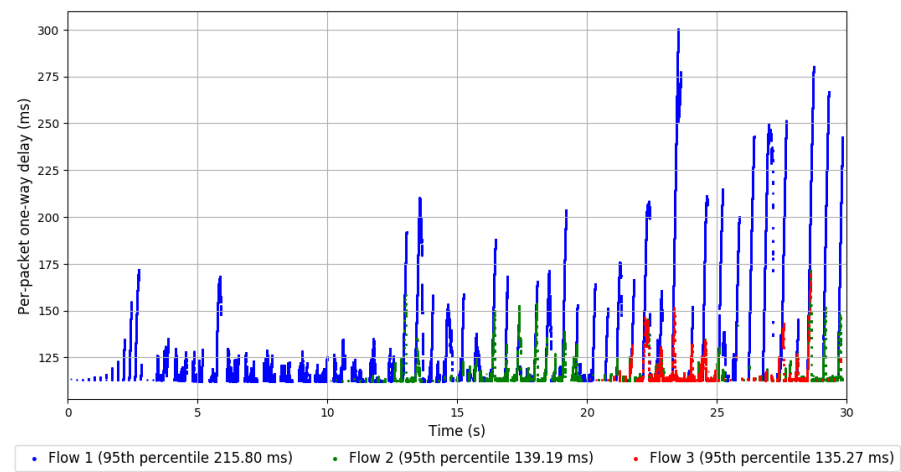
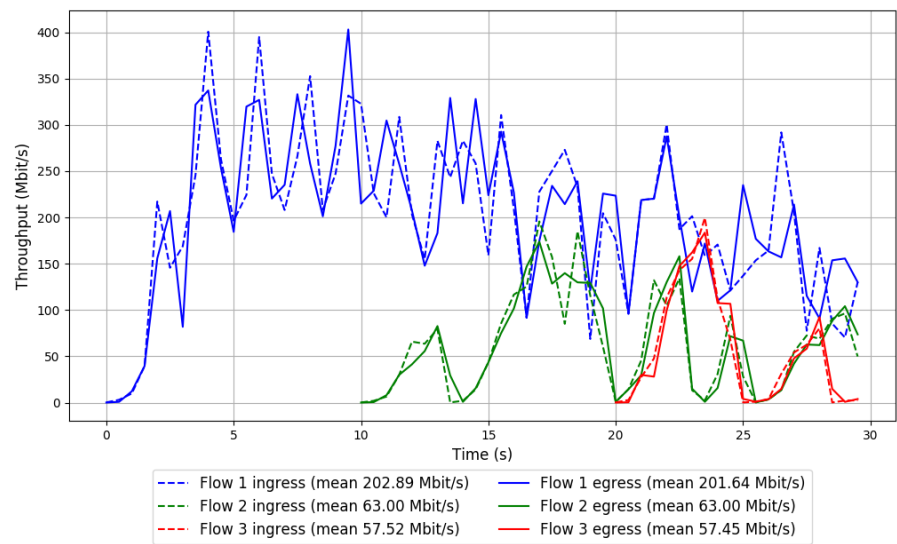
-- Flow 3:

Average throughput: 57.45 Mbit/s

95th percentile per-packet one-way delay: 135.268 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-11-21 16:00:56

End at: 2017-11-21 16:01:26

Below is generated by plot.py at 2017-11-21 18:44:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 274.75 Mbit/s

95th percentile per-packet one-way delay: 270.727 ms

Loss rate: 2.72%

-- Flow 1:

Average throughput: 196.29 Mbit/s

95th percentile per-packet one-way delay: 279.043 ms

Loss rate: 3.50%

-- Flow 2:

Average throughput: 113.56 Mbit/s

95th percentile per-packet one-way delay: 241.443 ms

Loss rate: 0.80%

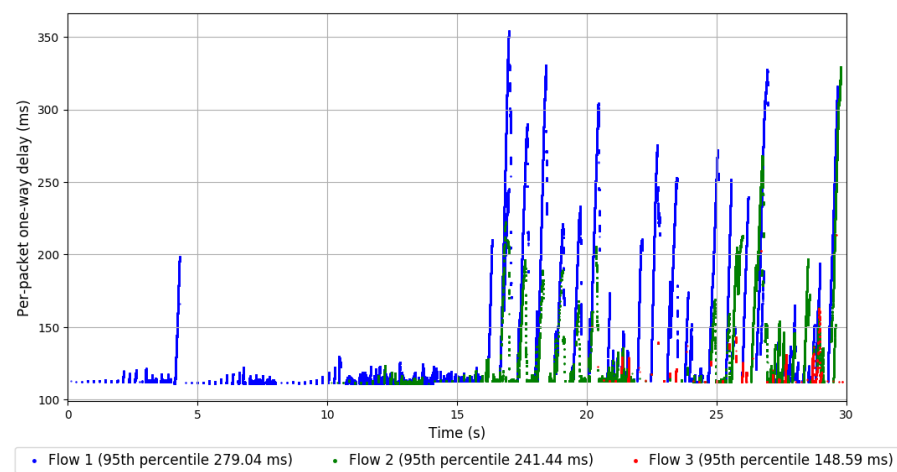
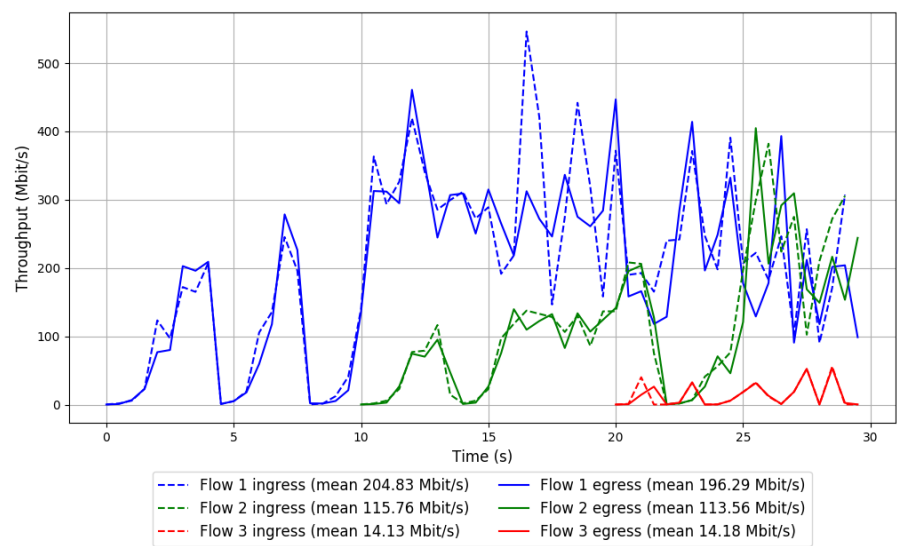
-- Flow 3:

Average throughput: 14.18 Mbit/s

95th percentile per-packet one-way delay: 148.592 ms

Loss rate: 0.01%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-21 16:14:49

End at: 2017-11-21 16:15:19

Below is generated by plot.py at 2017-11-21 18:44:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 180.18 Mbit/s

95th percentile per-packet one-way delay: 222.394 ms

Loss rate: 1.79%

-- Flow 1:

Average throughput: 99.25 Mbit/s

95th percentile per-packet one-way delay: 143.857 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 96.20 Mbit/s

95th percentile per-packet one-way delay: 264.991 ms

Loss rate: 5.12%

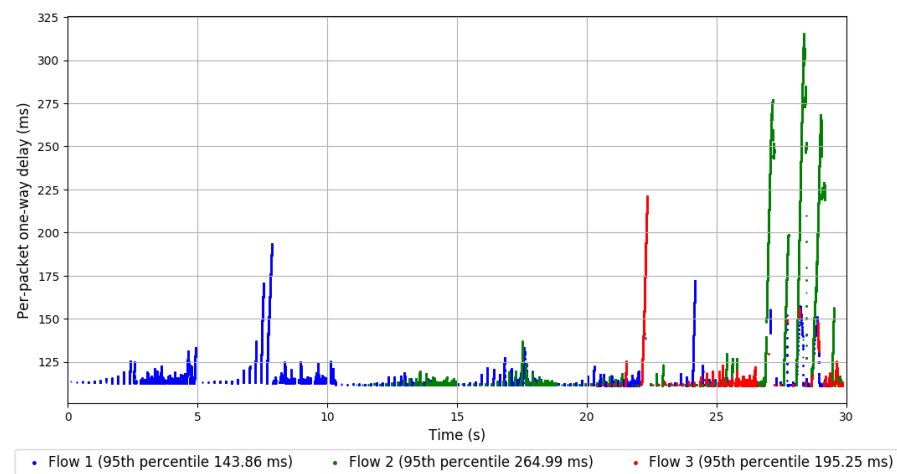
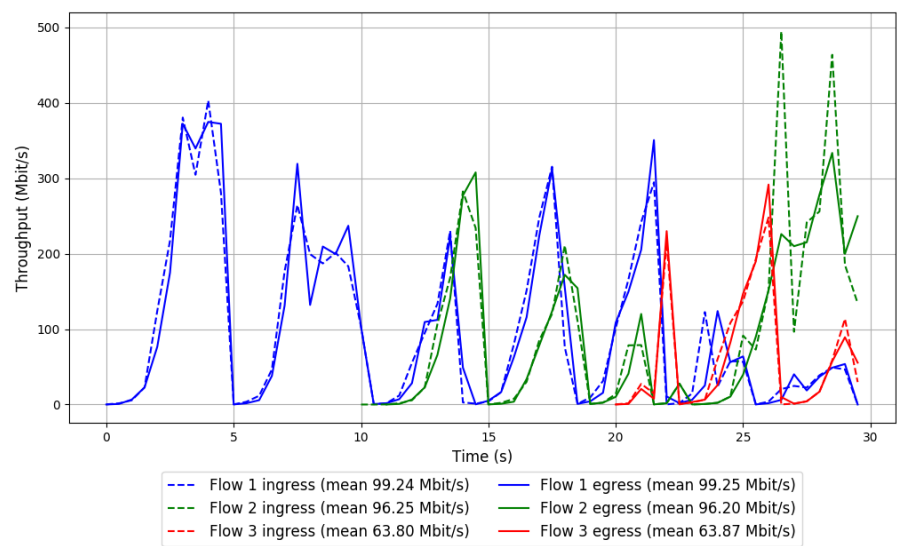
-- Flow 3:

Average throughput: 63.87 Mbit/s

95th percentile per-packet one-way delay: 195.245 ms

Loss rate: 0.02%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-21 16:28:32

End at: 2017-11-21 16:29:02

Below is generated by plot.py at 2017-11-21 18:44:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.08 Mbit/s

95th percentile per-packet one-way delay: 191.905 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 145.61 Mbit/s

95th percentile per-packet one-way delay: 186.831 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 48.48 Mbit/s

95th percentile per-packet one-way delay: 259.898 ms

Loss rate: 4.45%

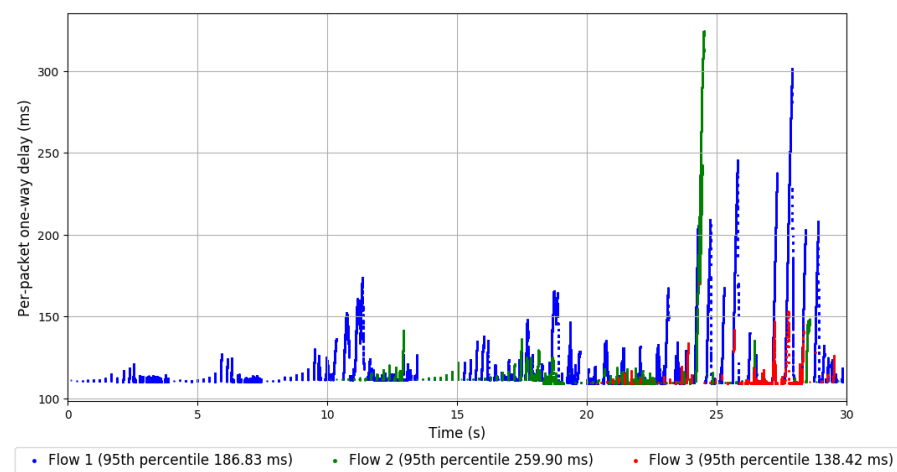
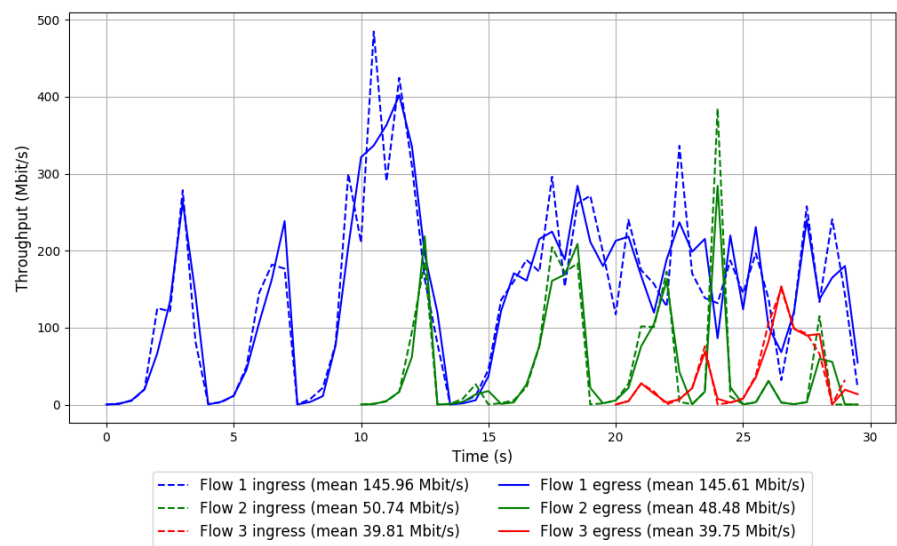
-- Flow 3:

Average throughput: 39.75 Mbit/s

95th percentile per-packet one-way delay: 138.419 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-21 16:41:42

End at: 2017-11-21 16:42:12

Below is generated by plot.py at 2017-11-21 18:46:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 243.80 Mbit/s

95th percentile per-packet one-way delay: 288.805 ms

Loss rate: 3.02%

-- Flow 1:

Average throughput: 133.57 Mbit/s

95th percentile per-packet one-way delay: 281.111 ms

Loss rate: 3.25%

-- Flow 2:

Average throughput: 108.84 Mbit/s

95th percentile per-packet one-way delay: 154.123 ms

Loss rate: 0.03%

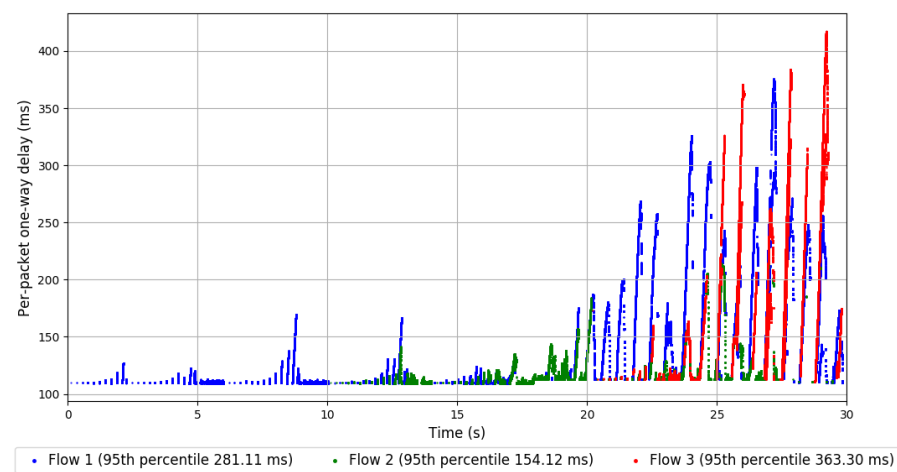
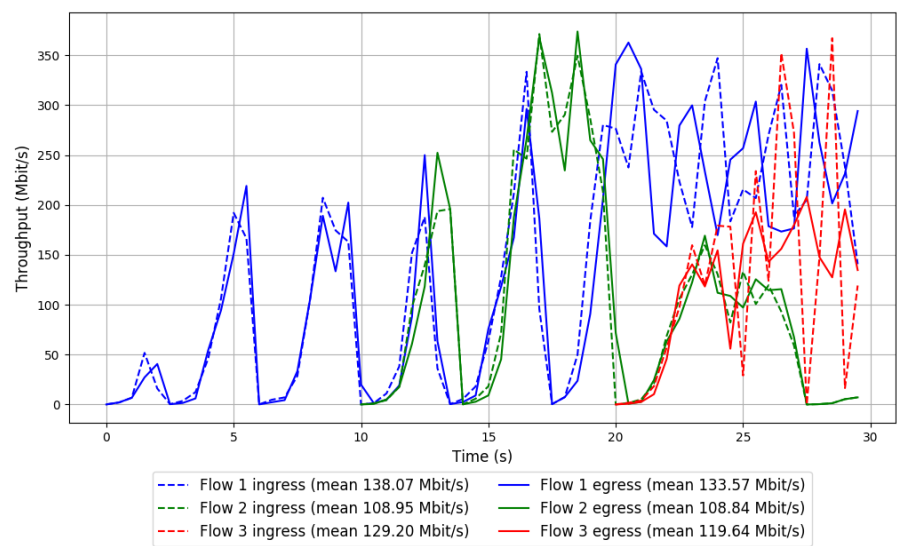
-- Flow 3:

Average throughput: 119.64 Mbit/s

95th percentile per-packet one-way delay: 363.303 ms

Loss rate: 7.39%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-21 16:55:21

End at: 2017-11-21 16:55:51

Below is generated by plot.py at 2017-11-21 18:46:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 268.93 Mbit/s

95th percentile per-packet one-way delay: 260.303 ms

Loss rate: 2.27%

-- Flow 1:

Average throughput: 162.70 Mbit/s

95th percentile per-packet one-way delay: 192.398 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 151.61 Mbit/s

95th percentile per-packet one-way delay: 296.051 ms

Loss rate: 4.31%

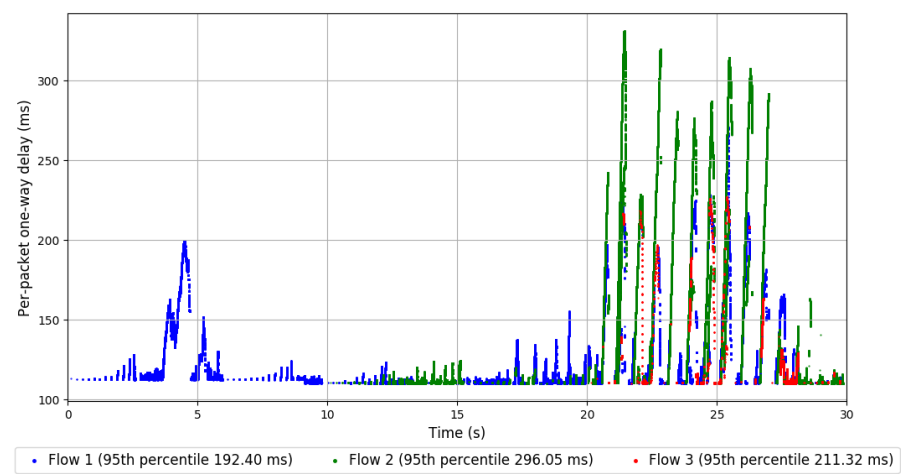
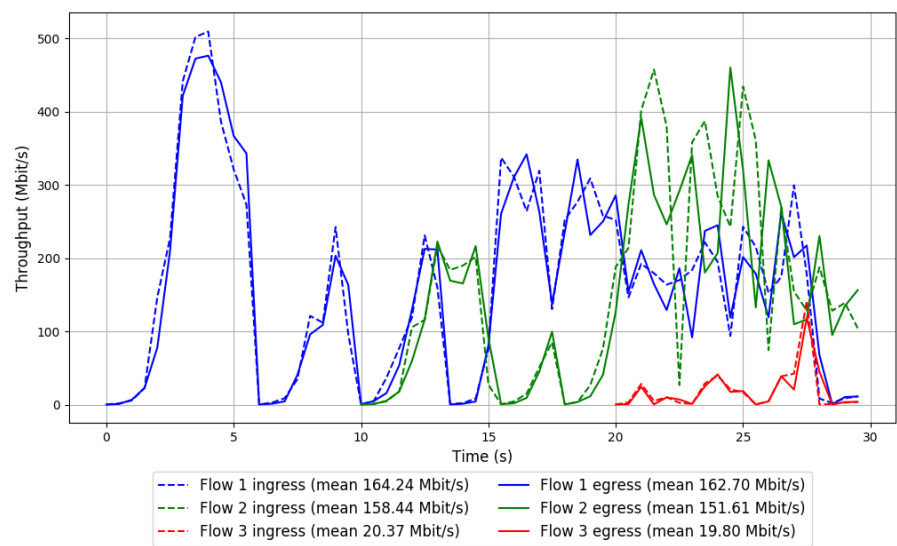
-- Flow 3:

Average throughput: 19.80 Mbit/s

95th percentile per-packet one-way delay: 211.321 ms

Loss rate: 2.79%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-21 17:08:51

End at: 2017-11-21 17:09:21

Below is generated by plot.py at 2017-11-21 18:47:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 246.38 Mbit/s

95th percentile per-packet one-way delay: 264.972 ms

Loss rate: 2.37%

-- Flow 1:

Average throughput: 125.10 Mbit/s

95th percentile per-packet one-way delay: 290.211 ms

Loss rate: 3.94%

-- Flow 2:

Average throughput: 169.95 Mbit/s

95th percentile per-packet one-way delay: 176.573 ms

Loss rate: 0.23%

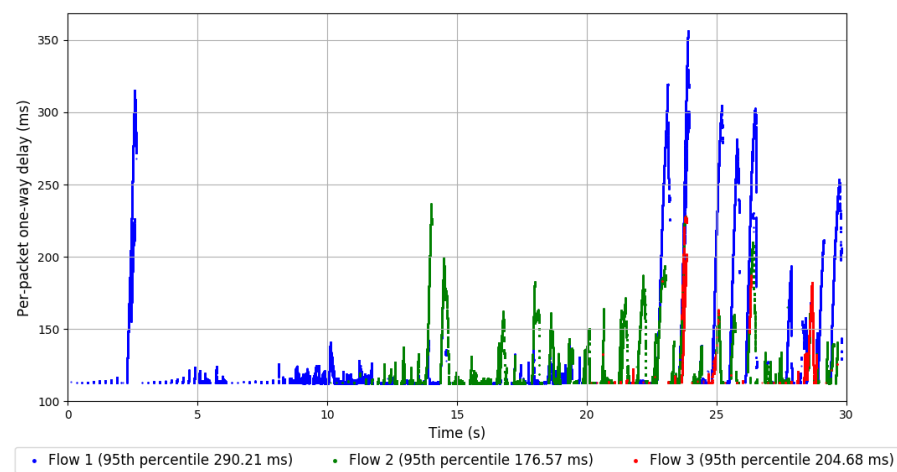
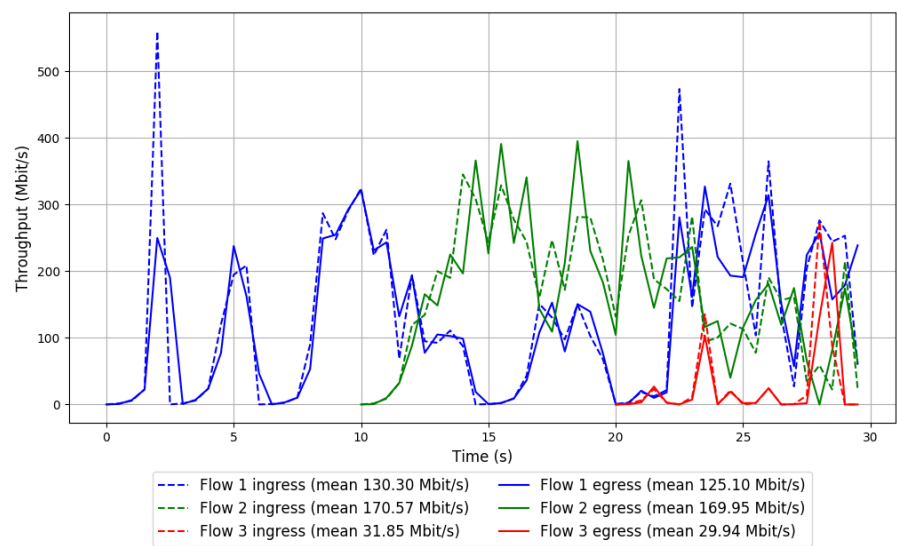
-- Flow 3:

Average throughput: 29.94 Mbit/s

95th percentile per-packet one-way delay: 204.678 ms

Loss rate: 5.90%

Run 10: Report of Verus — Data Link

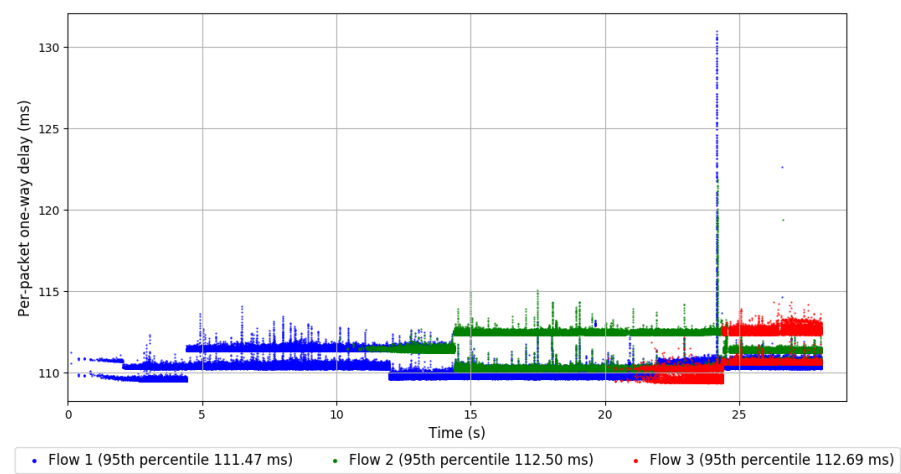
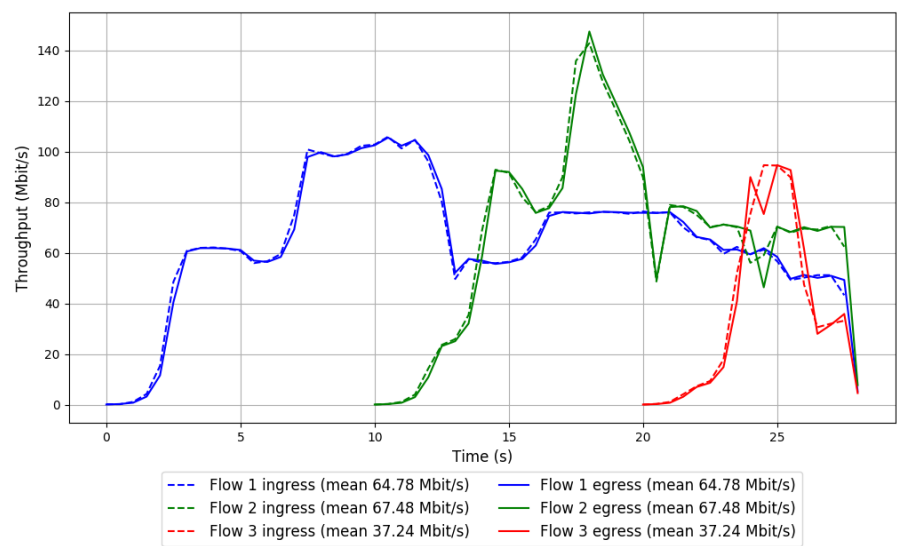


```
Run 1: Statistics of Copa

Start at: 2017-11-21 15:10:14
End at: 2017-11-21 15:10:44

# Below is generated by plot.py at 2017-11-21 18:47:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 118.63 Mbit/s
95th percentile per-packet one-way delay: 112.472 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.78 Mbit/s
95th percentile per-packet one-way delay: 111.465 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 67.48 Mbit/s
95th percentile per-packet one-way delay: 112.502 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 37.24 Mbit/s
95th percentile per-packet one-way delay: 112.693 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-21 15:23:37

End at: 2017-11-21 15:24:07

Below is generated by plot.py at 2017-11-21 18:47:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.08 Mbit/s

95th percentile per-packet one-way delay: 112.850 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 40.31 Mbit/s

95th percentile per-packet one-way delay: 112.918 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.63 Mbit/s

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

Loss rate: 0.00%

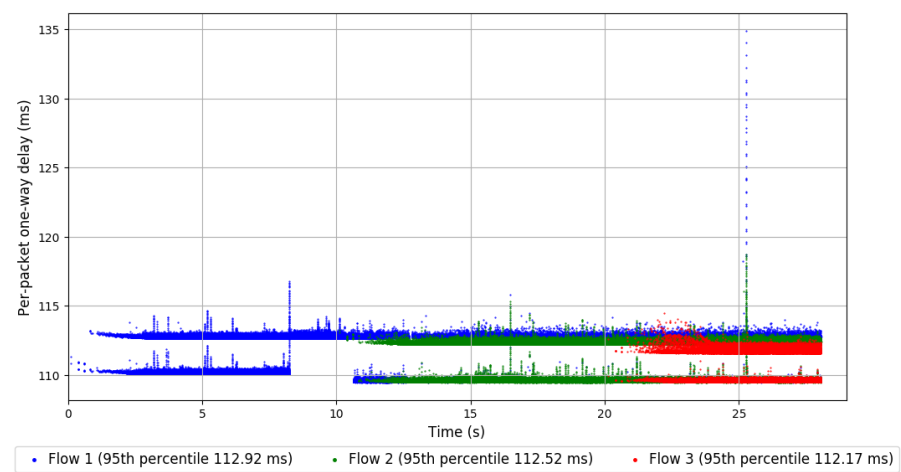
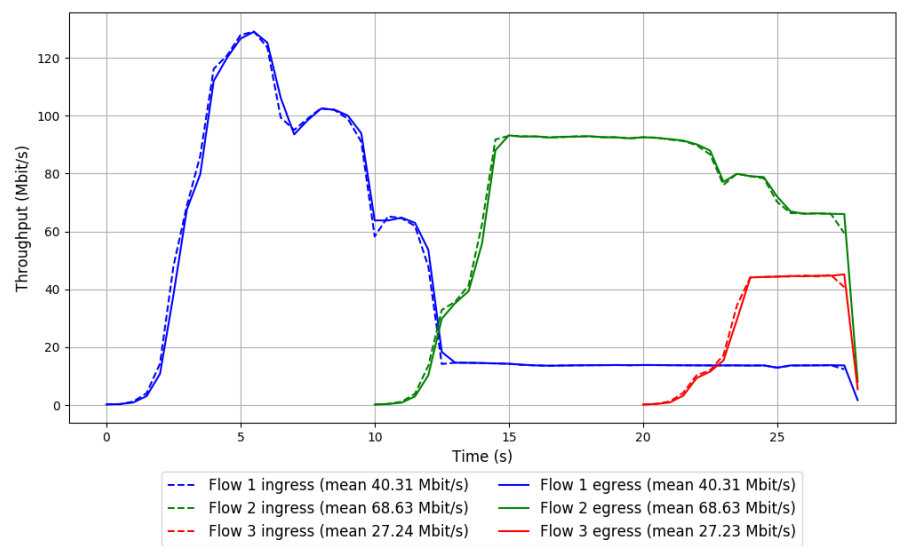
-- Flow 3:

Average throughput: 27.23 Mbit/s

95th percentile per-packet one-way delay: 112.171 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-21 15:37:09

End at: 2017-11-21 15:37:39

Below is generated by plot.py at 2017-11-21 18:48:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.85 Mbit/s

95th percentile per-packet one-way delay: 112.914 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 75.55 Mbit/s

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

Loss rate: 0.02%

-- Flow 2:

Average throughput: 61.55 Mbit/s

95th percentile per-packet one-way delay: 112.962 ms

Loss rate: 0.02%

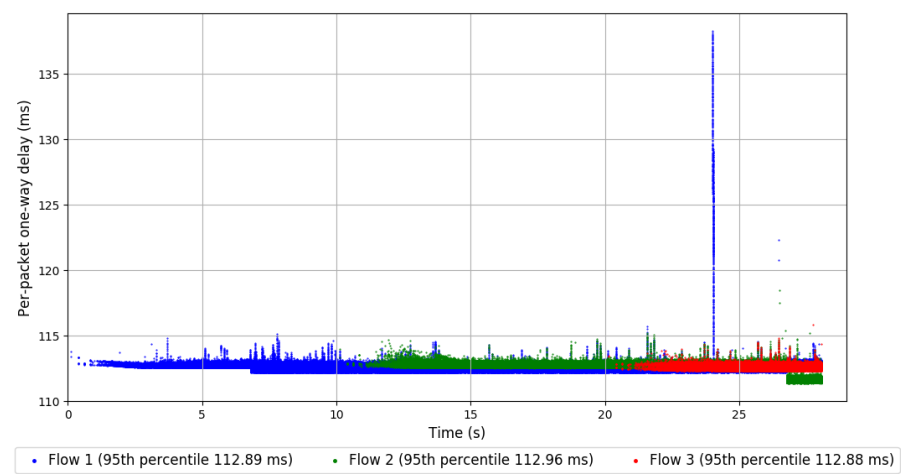
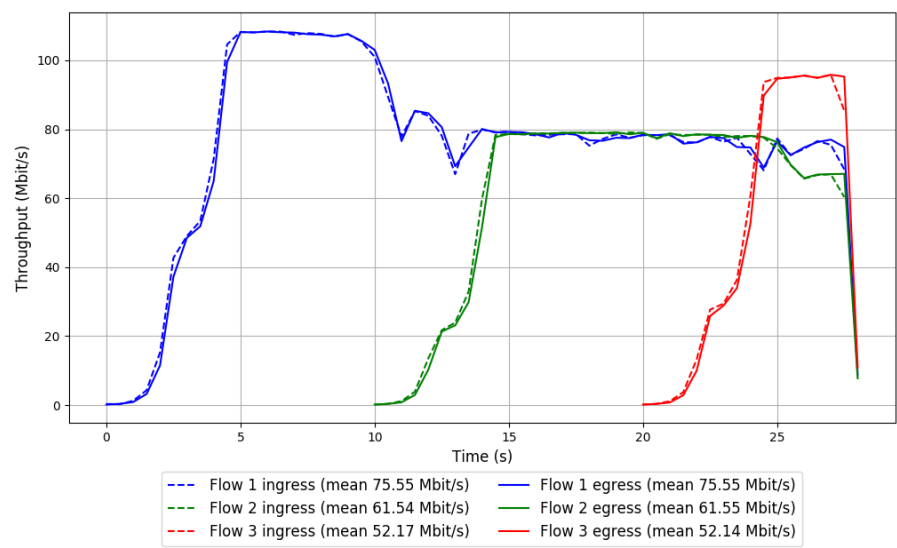
-- Flow 3:

Average throughput: 52.14 Mbit/s

95th percentile per-packet one-way delay: 112.879 ms

Loss rate: 0.10%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-21 15:50:47

End at: 2017-11-21 15:51:17

Below is generated by plot.py at 2017-11-21 18:48:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 110.90 Mbit/s

95th percentile per-packet one-way delay: 112.793 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.71 Mbit/s

95th percentile per-packet one-way delay: 112.446 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.19 Mbit/s

95th percentile per-packet one-way delay: 112.951 ms

Loss rate: 0.00%

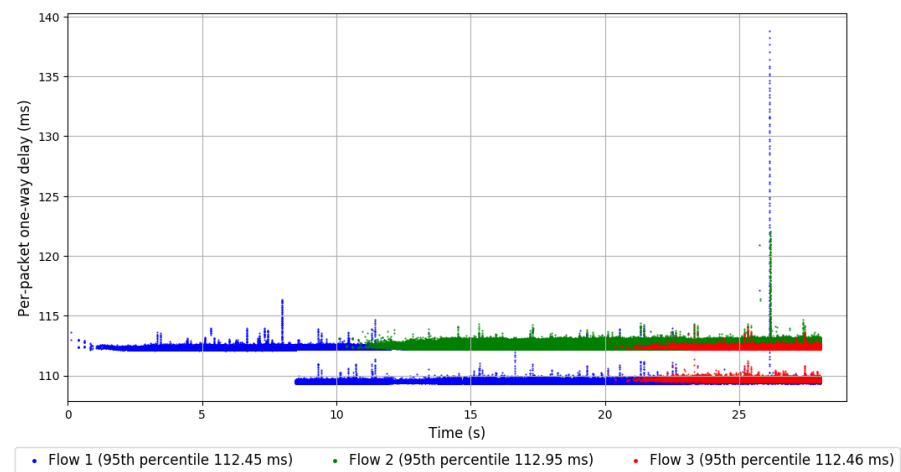
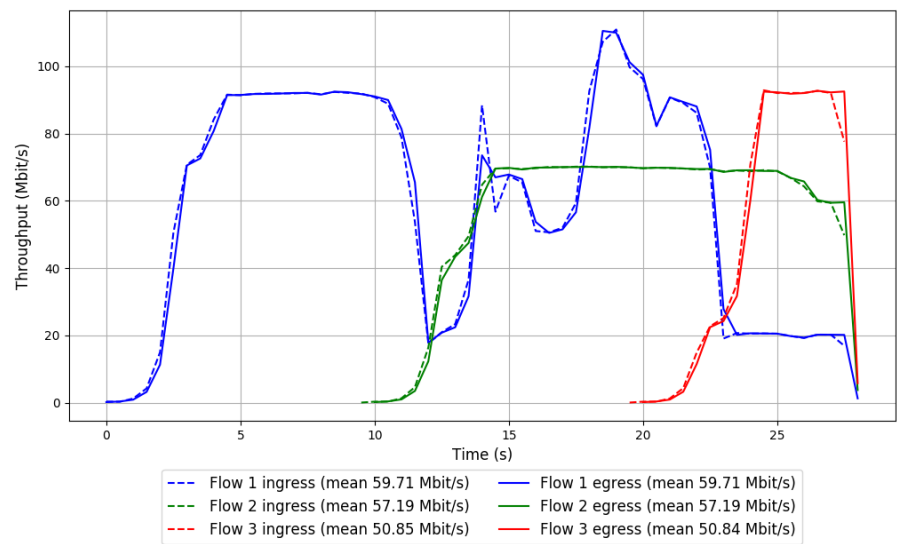
-- Flow 3:

Average throughput: 50.84 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-21 16:04:09

End at: 2017-11-21 16:04:39

Below is generated by plot.py at 2017-11-21 18:48:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.25 Mbit/s

95th percentile per-packet one-way delay: 112.917 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.19 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.77 Mbit/s

95th percentile per-packet one-way delay: 112.838 ms

Loss rate: 0.00%

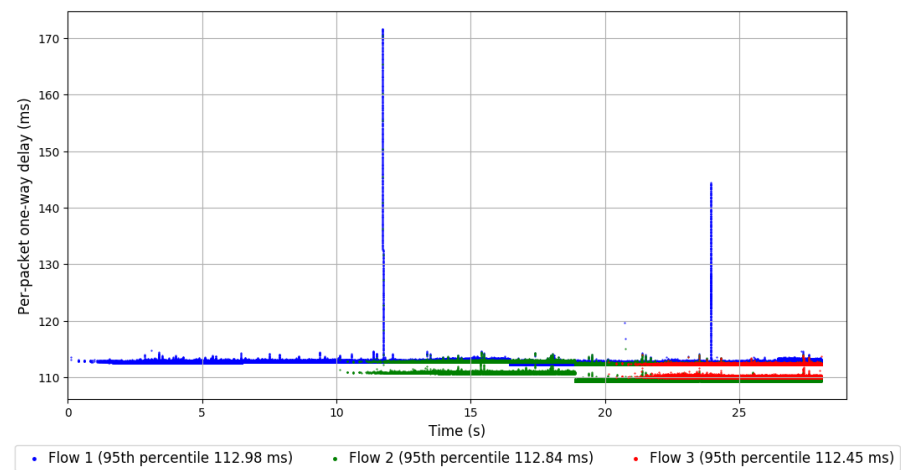
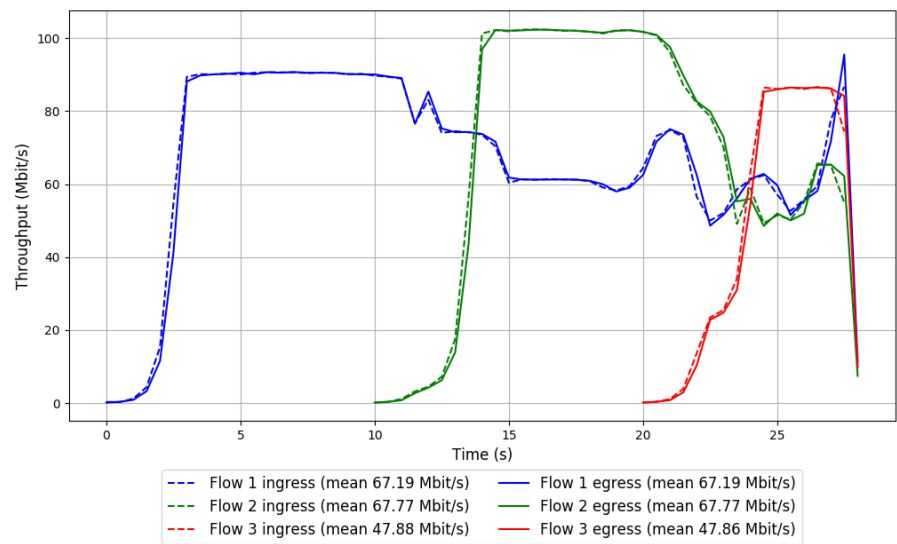
-- Flow 3:

Average throughput: 47.86 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-21 16:17:55

End at: 2017-11-21 16:18:25

Below is generated by plot.py at 2017-11-21 18:49:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.75 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 66.54 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 50.84 Mbit/s

95th percentile per-packet one-way delay: 112.924 ms

Loss rate: 0.01%

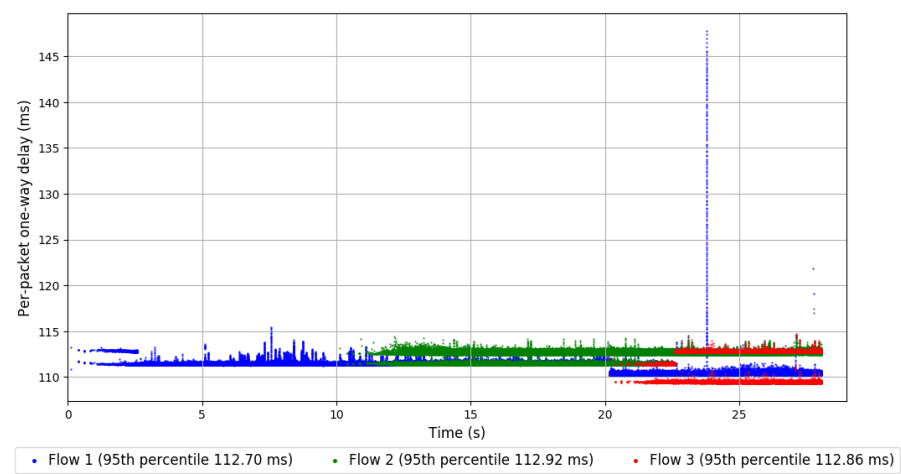
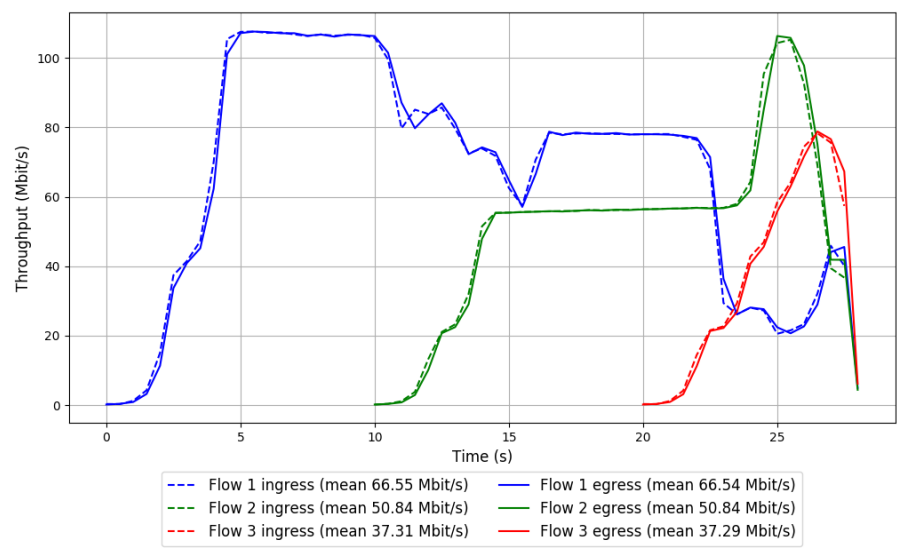
-- Flow 3:

Average throughput: 37.29 Mbit/s

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

Loss rate: 0.03%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-21 16:31:37

End at: 2017-11-21 16:32:07

Below is generated by plot.py at 2017-11-21 18:50:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.52 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 68.78 Mbit/s

95th percentile per-packet one-way delay: 111.819 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.94 Mbit/s

95th percentile per-packet one-way delay: 112.387 ms

Loss rate: 0.00%

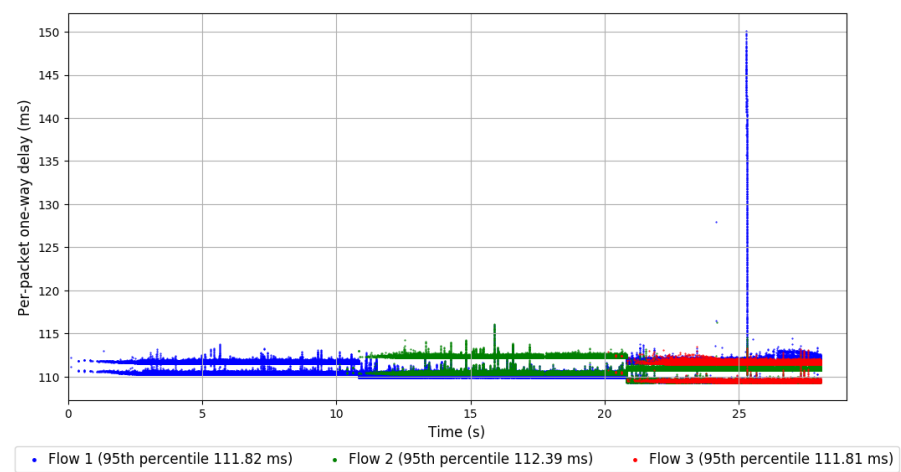
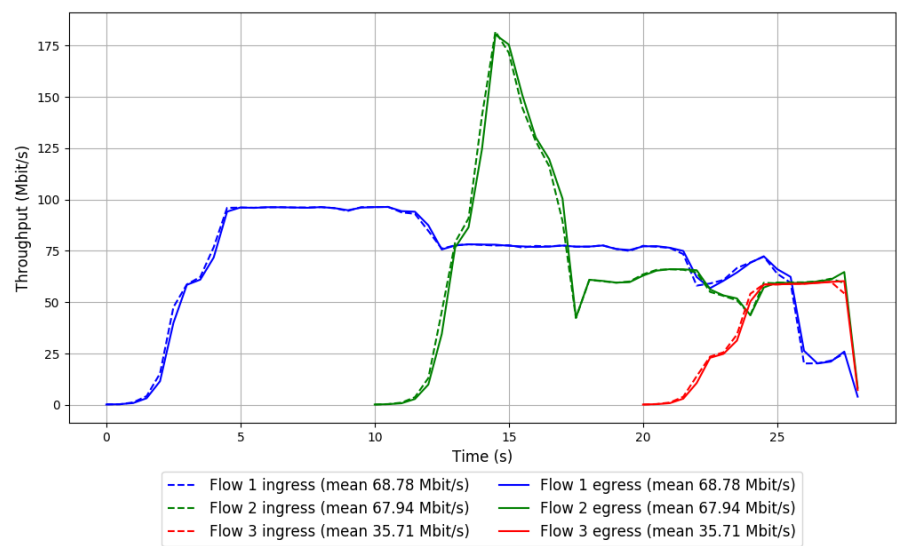
-- Flow 3:

Average throughput: 35.71 Mbit/s

95th percentile per-packet one-way delay: 111.812 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-21 16:44:53

End at: 2017-11-21 16:45:23

Below is generated by plot.py at 2017-11-21 18:50:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.36 Mbit/s

95th percentile per-packet one-way delay: 111.958 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.31 Mbit/s

95th percentile per-packet one-way delay: 110.901 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 62.04 Mbit/s

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

Loss rate: 0.00%

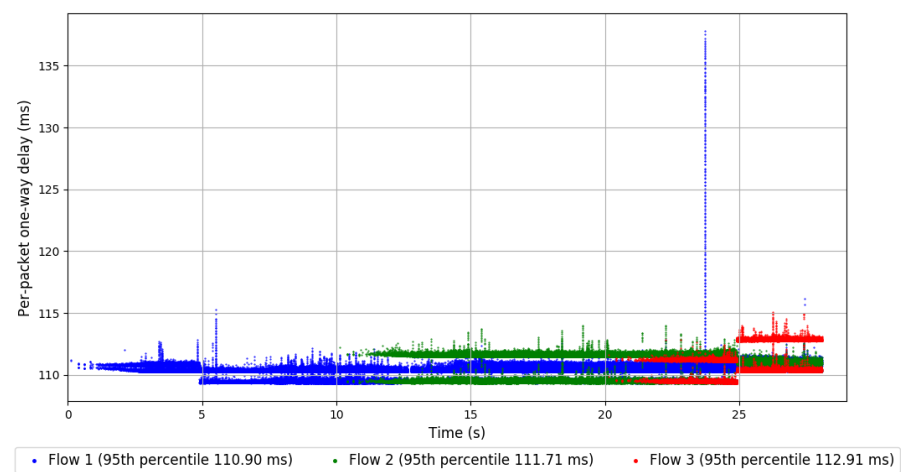
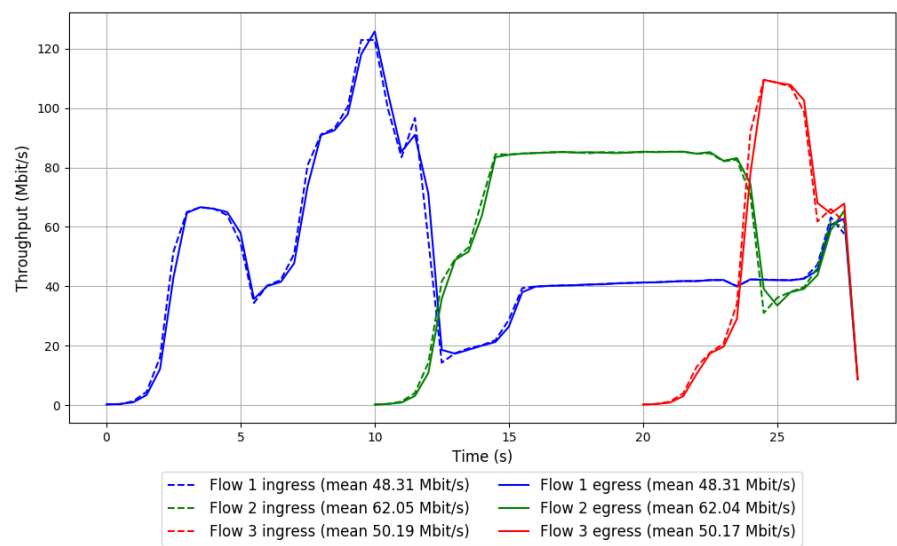
-- Flow 3:

Average throughput: 50.17 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-11-21 16:58:33

End at: 2017-11-21 16:59:03

Below is generated by plot.py at 2017-11-21 18:50:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.18 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 56.81 Mbit/s

95th percentile per-packet one-way delay: 112.536 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.45 Mbit/s

95th percentile per-packet one-way delay: 112.594 ms

Loss rate: 0.00%

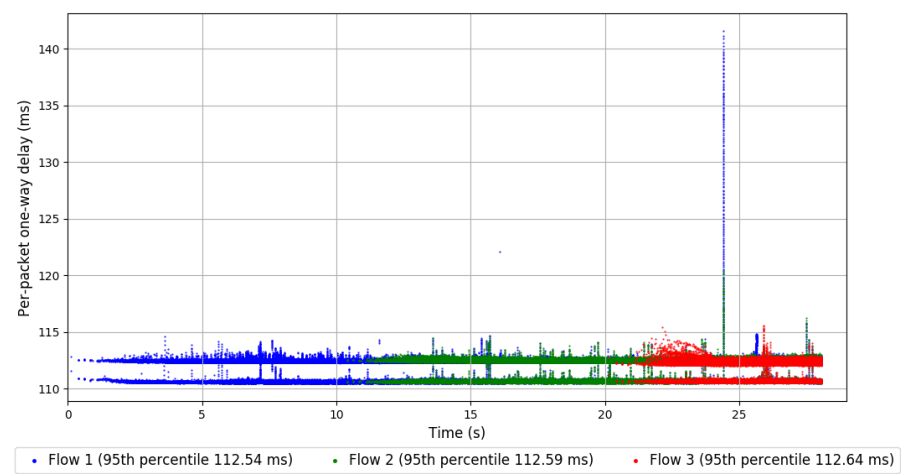
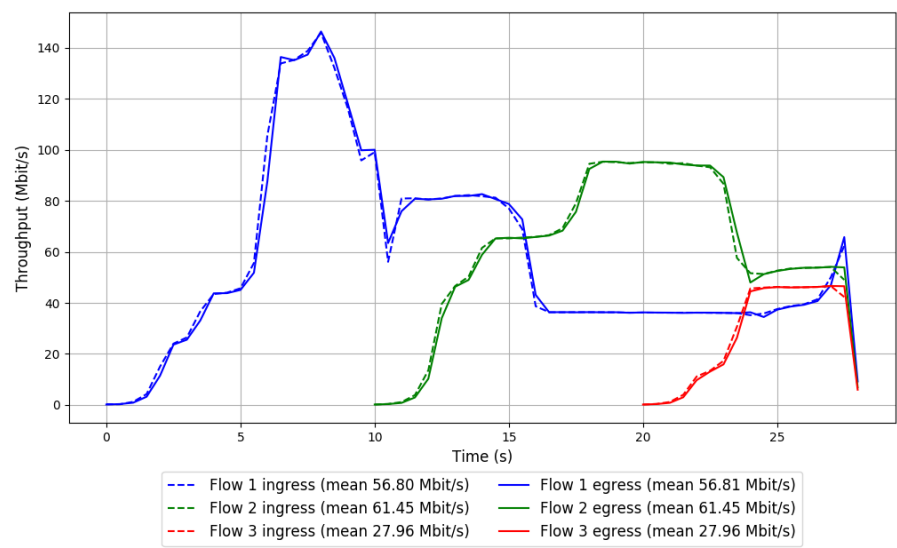
-- Flow 3:

Average throughput: 27.96 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-21 17:12:03

End at: 2017-11-21 17:12:33

Below is generated by plot.py at 2017-11-21 18:50:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 105.02 Mbit/s

95th percentile per-packet one-way delay: 112.580 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 57.71 Mbit/s

95th percentile per-packet one-way delay: 112.590 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 59.54 Mbit/s

95th percentile per-packet one-way delay: 112.580 ms

Loss rate: 0.00%

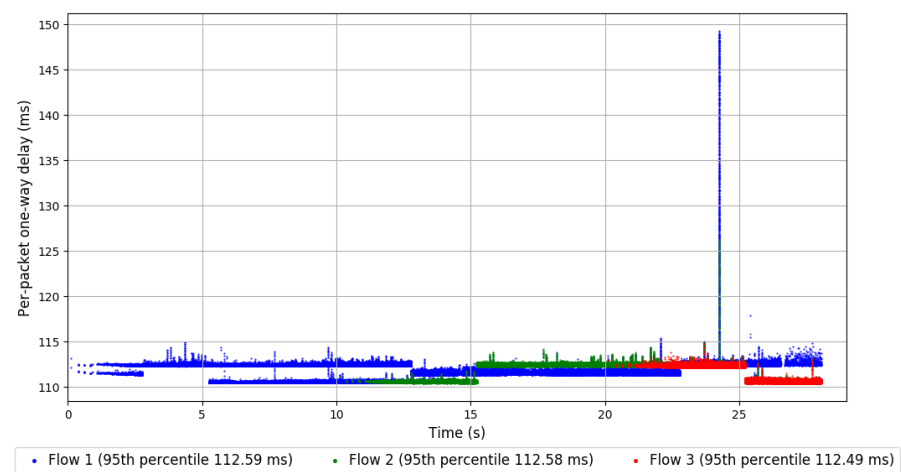
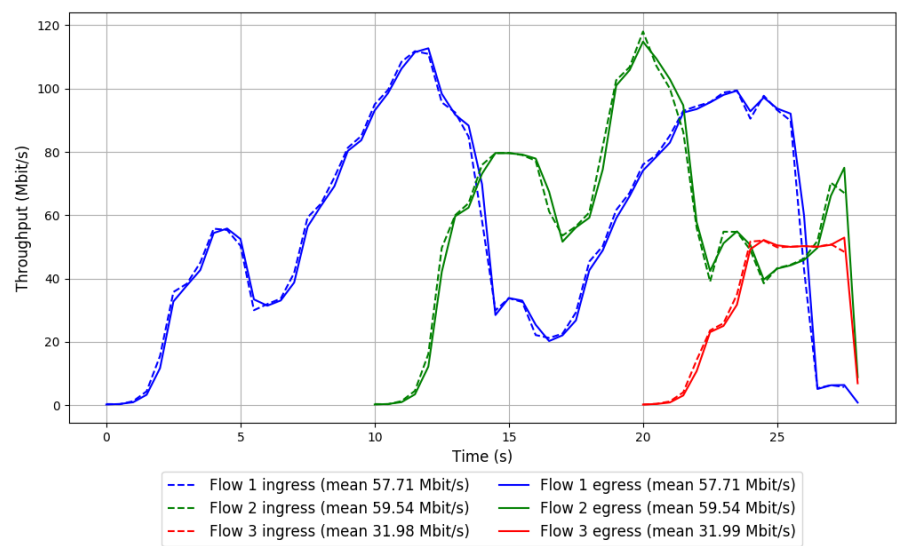
-- Flow 3:

Average throughput: 31.99 Mbit/s

95th percentile per-packet one-way delay: 112.492 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

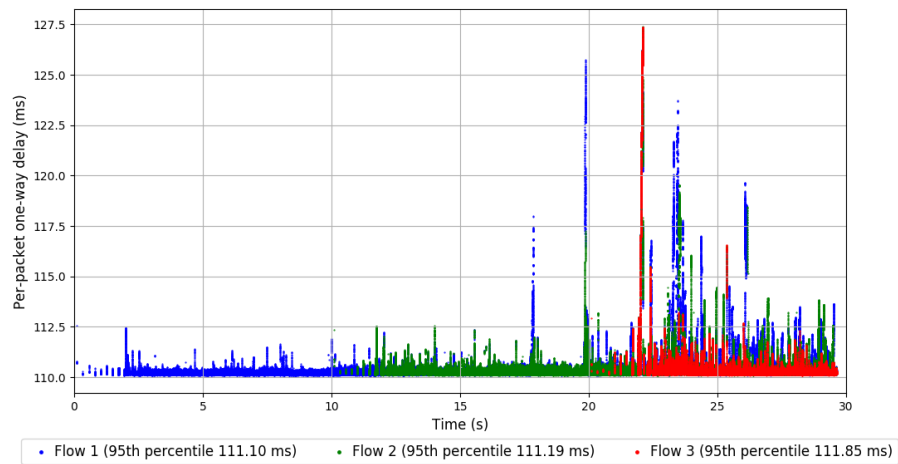
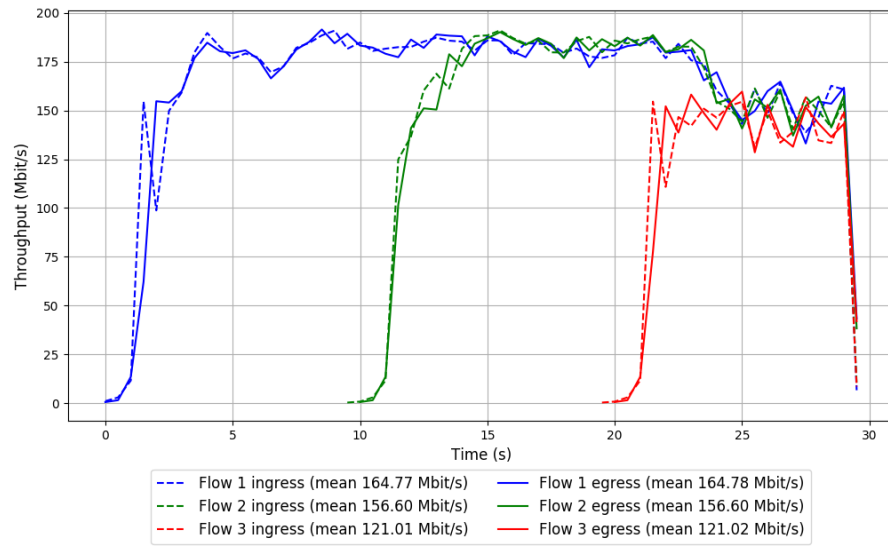


```
Run 1: Statistics of Indigo

Start at: 2017-11-21 15:05:58
End at: 2017-11-21 15:06:28

# Below is generated by plot.py at 2017-11-21 18:53:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 307.53 Mbit/s
95th percentile per-packet one-way delay: 111.206 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 164.78 Mbit/s
95th percentile per-packet one-way delay: 111.096 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 156.60 Mbit/s
95th percentile per-packet one-way delay: 111.193 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 121.02 Mbit/s
95th percentile per-packet one-way delay: 111.851 ms
Loss rate: 0.00%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-11-21 15:19:08

End at: 2017-11-21 15:19:38

Below is generated by plot.py at 2017-11-21 18:53:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 299.13 Mbit/s

95th percentile per-packet one-way delay: 110.396 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 162.70 Mbit/s

95th percentile per-packet one-way delay: 110.394 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 147.21 Mbit/s

95th percentile per-packet one-way delay: 110.444 ms

Loss rate: 0.00%

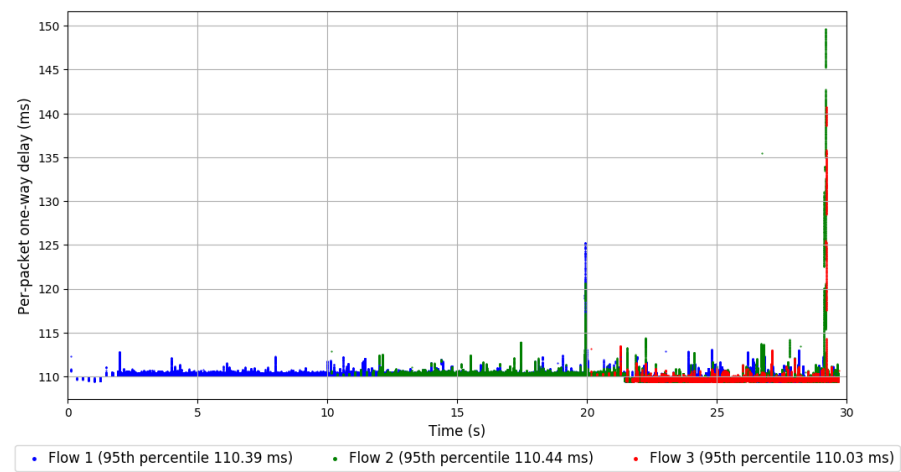
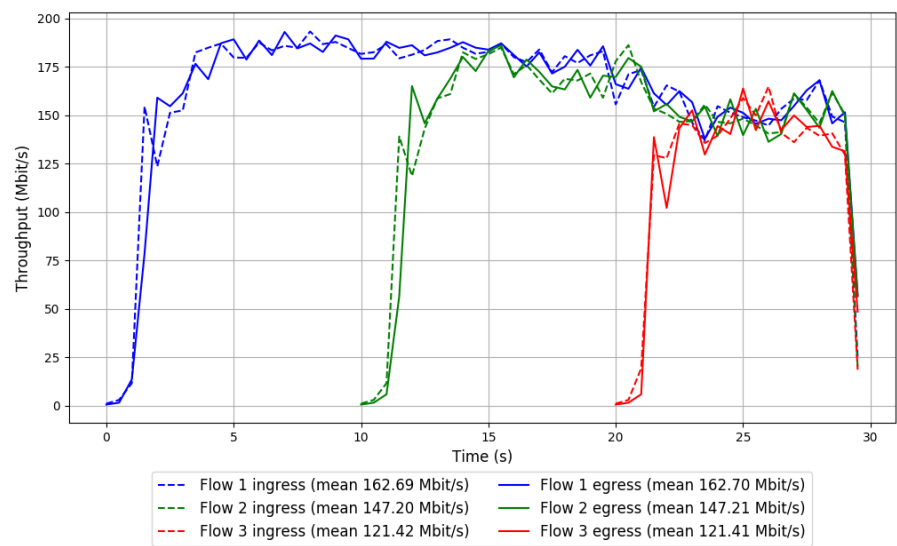
-- Flow 3:

Average throughput: 121.41 Mbit/s

95th percentile per-packet one-way delay: 110.027 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-21 15:32:44

End at: 2017-11-21 15:33:14

Below is generated by plot.py at 2017-11-21 18:54:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 304.03 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 163.82 Mbit/s

95th percentile per-packet one-way delay: 113.198 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 150.99 Mbit/s

95th percentile per-packet one-way delay: 113.689 ms

Loss rate: 0.01%

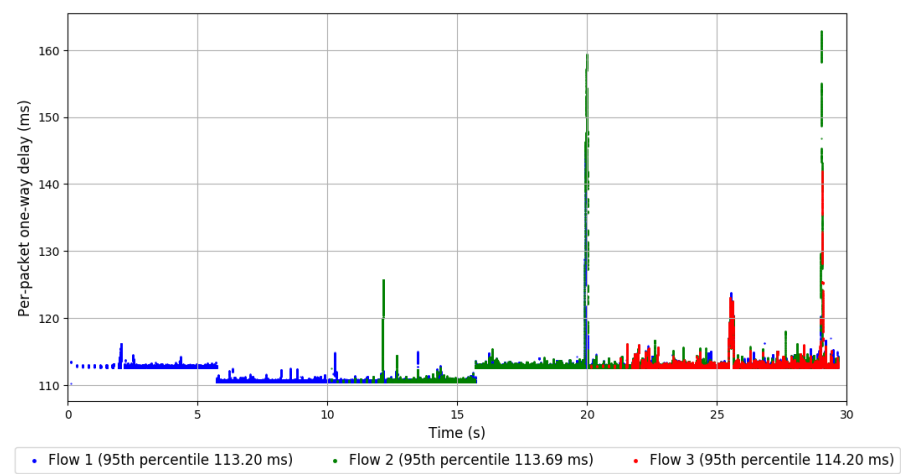
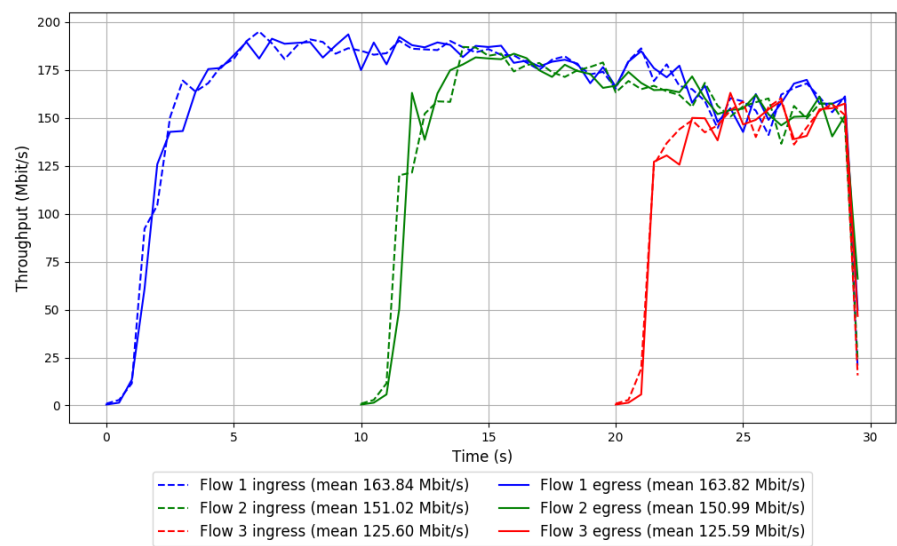
-- Flow 3:

Average throughput: 125.59 Mbit/s

95th percentile per-packet one-way delay: 114.198 ms

Loss rate: 0.01%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-21 15:46:23

End at: 2017-11-21 15:46:53

Below is generated by plot.py at 2017-11-21 18:55:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 293.50 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 160.65 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 140.34 Mbit/s

95th percentile per-packet one-way delay: 113.770 ms

Loss rate: 0.00%

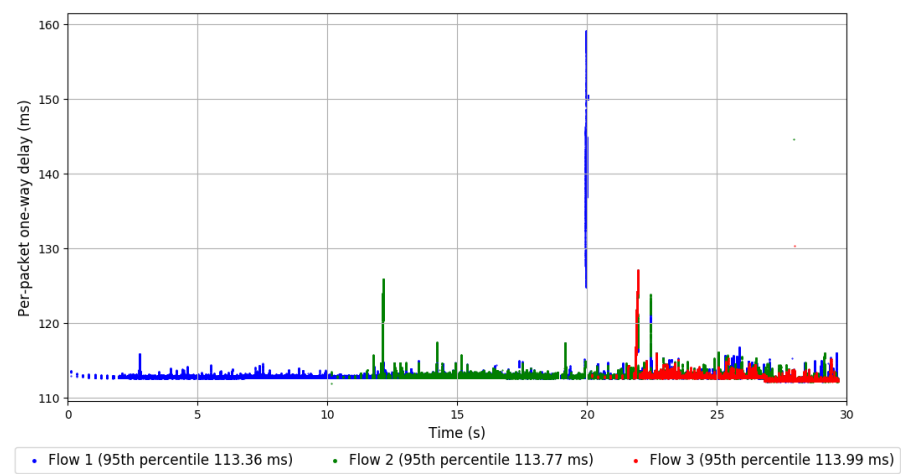
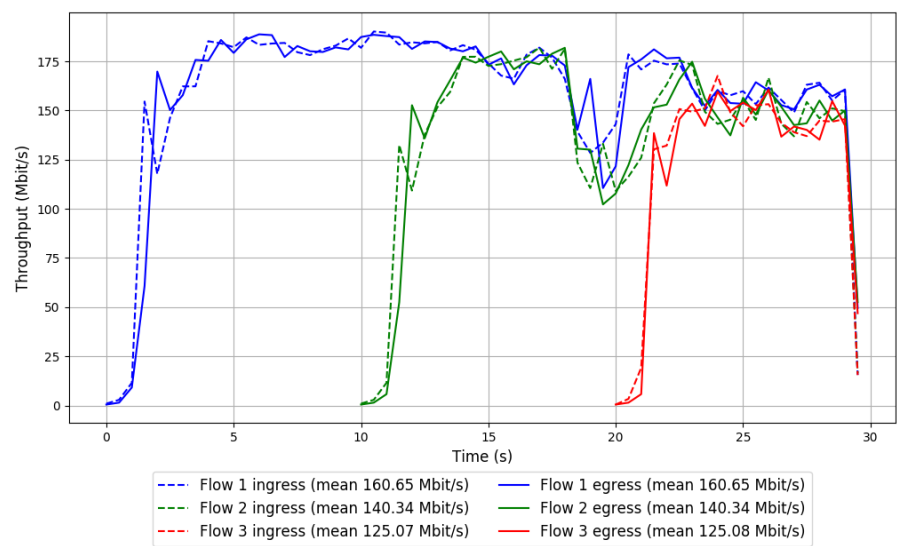
-- Flow 3:

Average throughput: 125.08 Mbit/s

95th percentile per-packet one-way delay: 113.990 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-21 15:59:42

End at: 2017-11-21 16:00:12

Below is generated by plot.py at 2017-11-21 18:55:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 295.65 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 160.11 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 143.13 Mbit/s

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

Loss rate: 0.00%

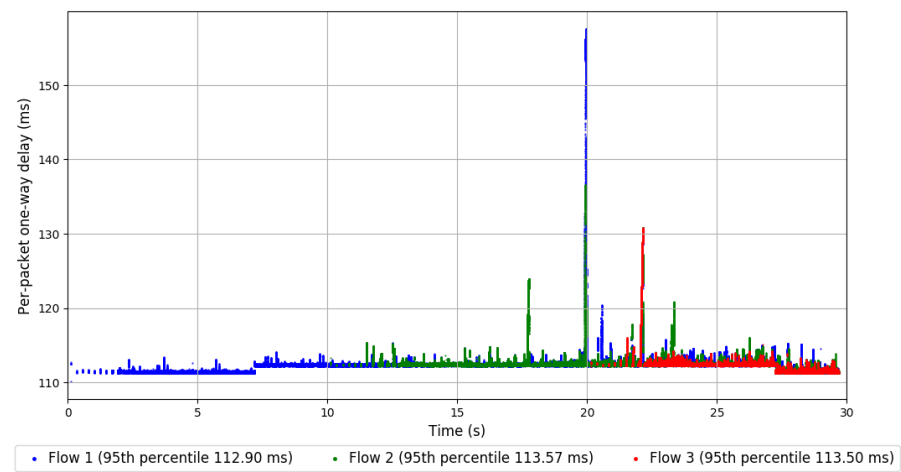
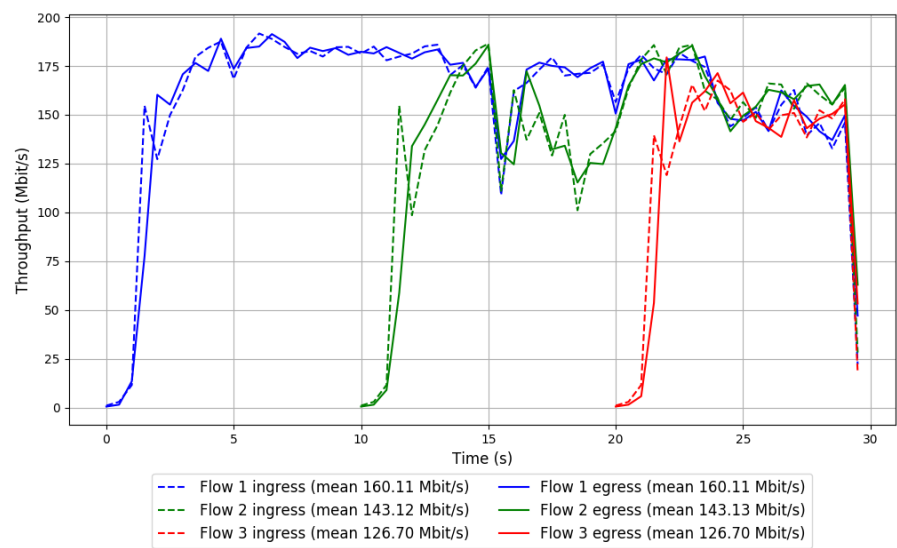
-- Flow 3:

Average throughput: 126.70 Mbit/s

95th percentile per-packet one-way delay: 113.495 ms

Loss rate: 0.01%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-21 16:13:36

End at: 2017-11-21 16:14:06

Below is generated by plot.py at 2017-11-21 18:55:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 294.68 Mbit/s

95th percentile per-packet one-way delay: 113.167 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 162.06 Mbit/s

95th percentile per-packet one-way delay: 112.929 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 156.38 Mbit/s

95th percentile per-packet one-way delay: 113.286 ms

Loss rate: 0.00%

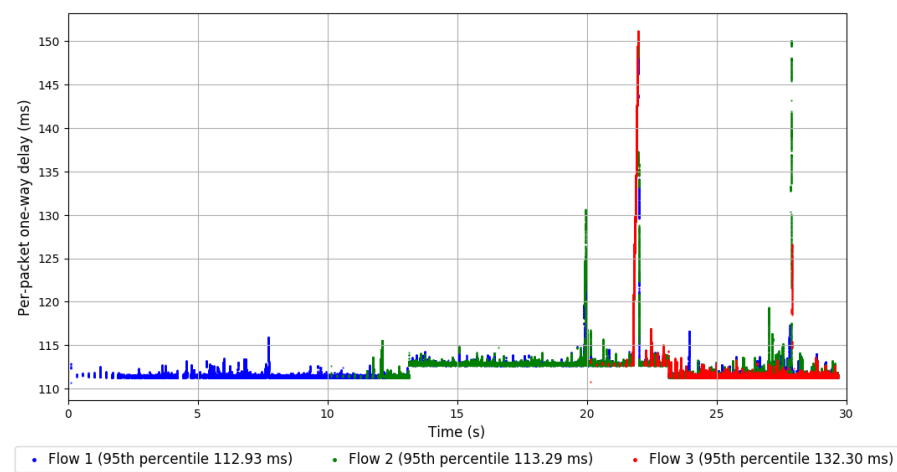
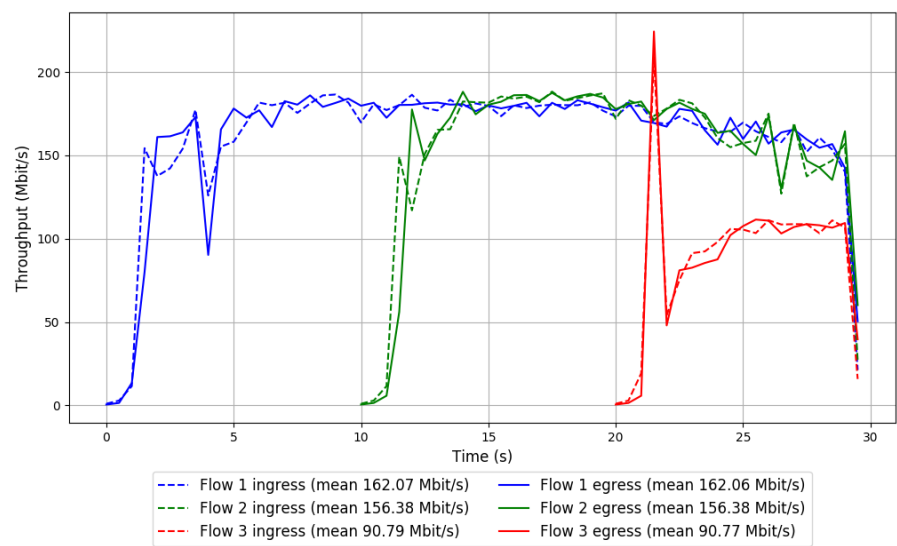
-- Flow 3:

Average throughput: 90.77 Mbit/s

95th percentile per-packet one-way delay: 132.299 ms

Loss rate: 0.01%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-21 16:27:18

End at: 2017-11-21 16:27:48

Below is generated by plot.py at 2017-11-21 18:56:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.98 Mbit/s

95th percentile per-packet one-way delay: 112.131 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 161.88 Mbit/s

95th percentile per-packet one-way delay: 111.932 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 150.49 Mbit/s

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

Loss rate: 0.00%

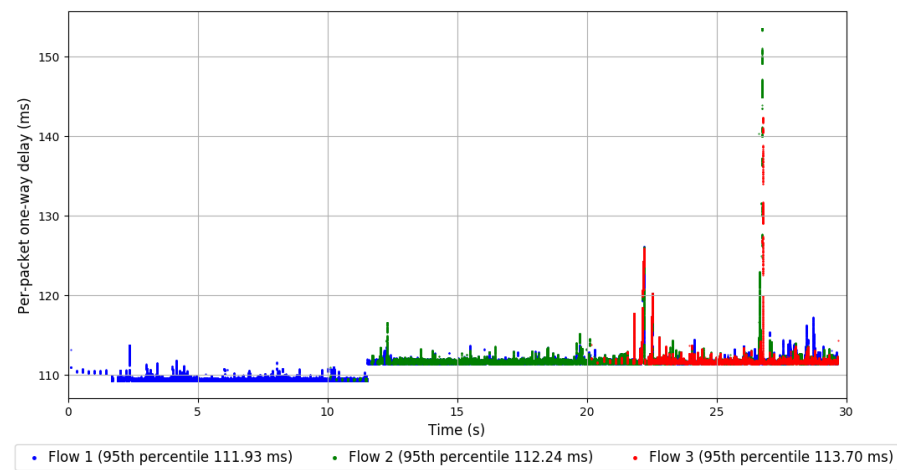
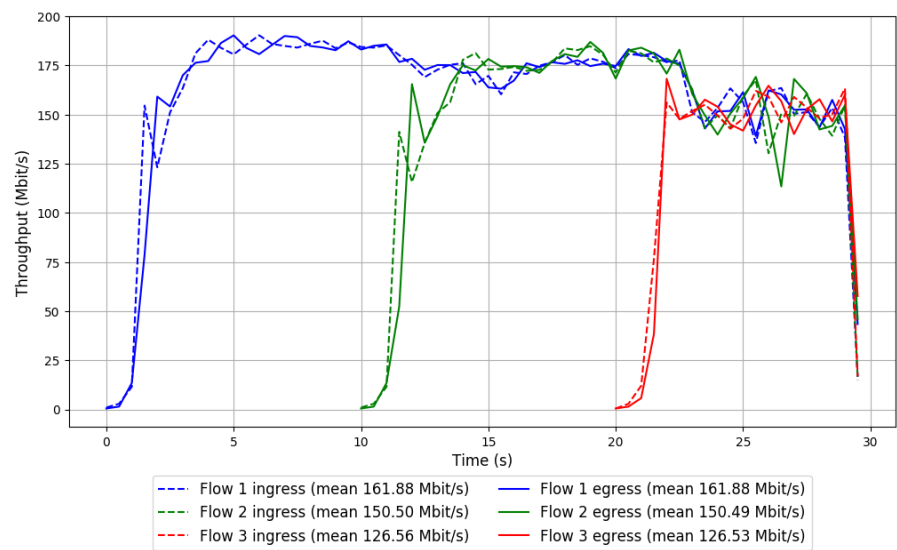
-- Flow 3:

Average throughput: 126.53 Mbit/s

95th percentile per-packet one-way delay: 113.705 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-21 16:40:29

End at: 2017-11-21 16:40:59

Below is generated by plot.py at 2017-11-21 18:56:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 298.38 Mbit/s

95th percentile per-packet one-way delay: 112.968 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 158.29 Mbit/s

95th percentile per-packet one-way delay: 112.861 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 150.20 Mbit/s

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

Loss rate: 0.00%

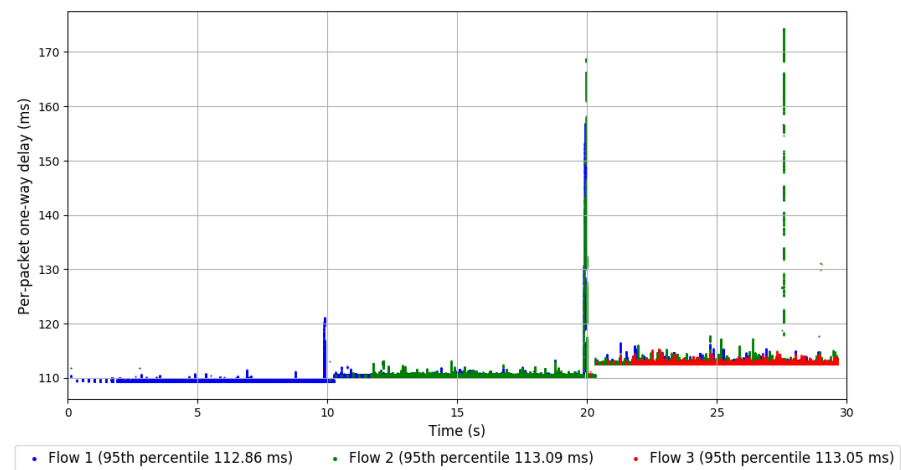
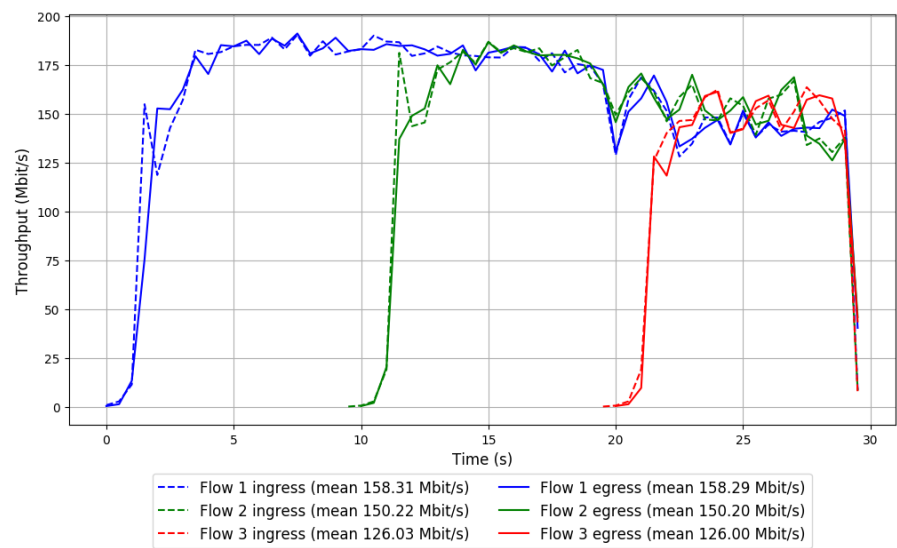
-- Flow 3:

Average throughput: 126.00 Mbit/s

95th percentile per-packet one-way delay: 113.051 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-21 16:54:07

End at: 2017-11-21 16:54:37

Below is generated by plot.py at 2017-11-21 18:58:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 303.40 Mbit/s

95th percentile per-packet one-way delay: 113.013 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 163.73 Mbit/s

95th percentile per-packet one-way delay: 112.907 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 149.69 Mbit/s

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

Loss rate: 0.05%

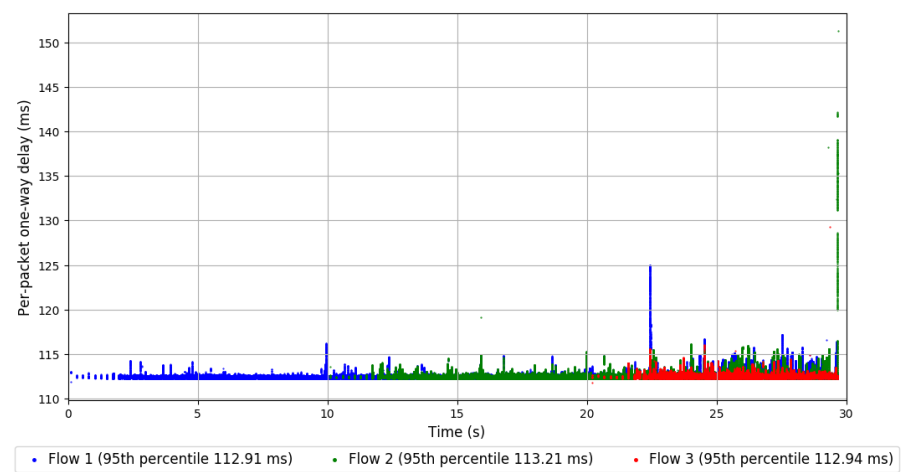
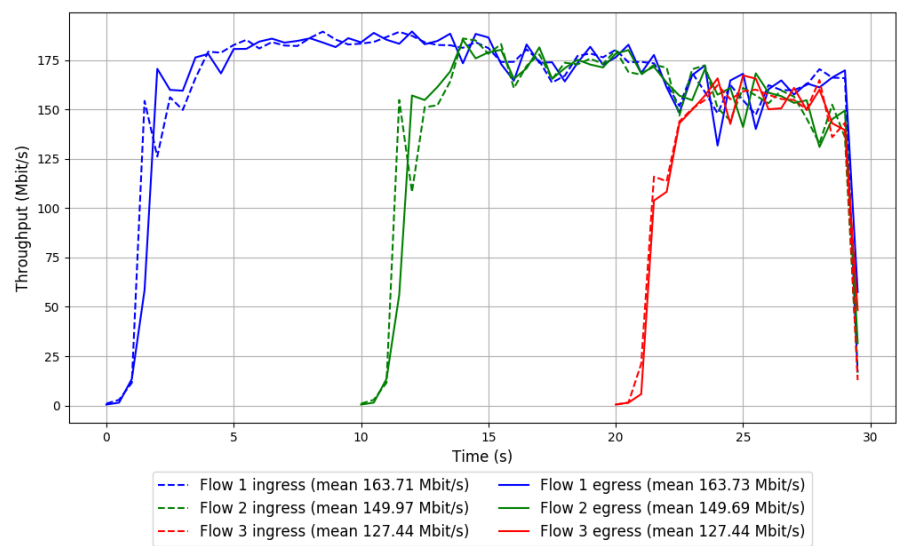
-- Flow 3:

Average throughput: 127.44 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-21 17:07:39

End at: 2017-11-21 17:08:09

Below is generated by plot.py at 2017-11-21 18:58:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 287.20 Mbit/s

95th percentile per-packet one-way delay: 112.990 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 157.87 Mbit/s

95th percentile per-packet one-way delay: 112.877 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 148.80 Mbit/s

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

Loss rate: 0.01%

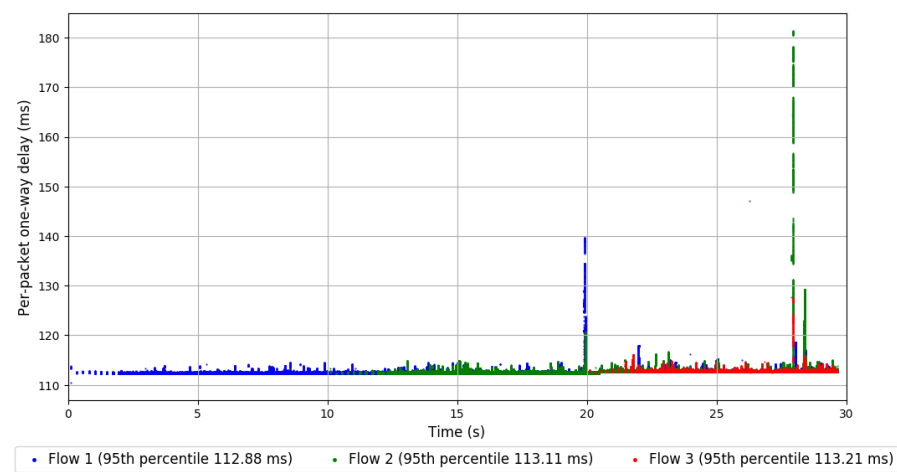
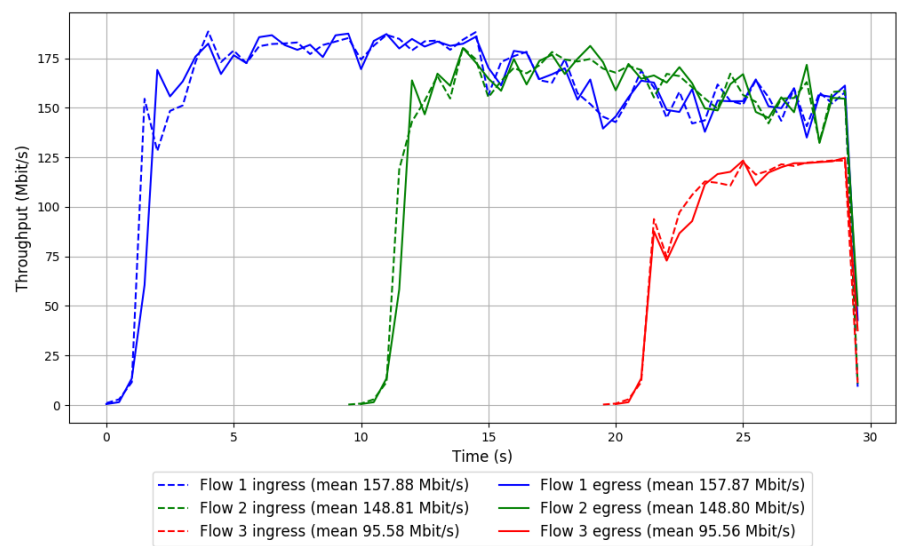
-- Flow 3:

Average throughput: 95.56 Mbit/s

95th percentile per-packet one-way delay: 113.206 ms

Loss rate: 0.04%

Run 10: Report of Indigo — Data Link

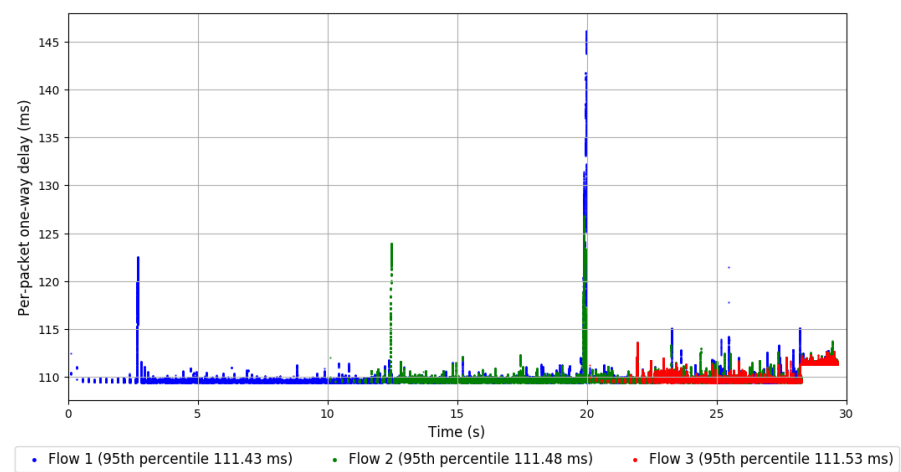
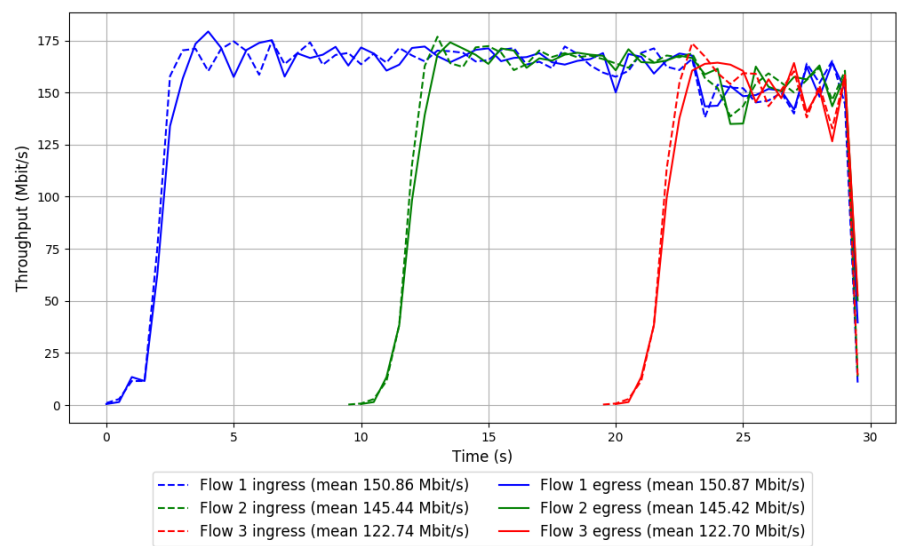


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-21 15:01:21
End at: 2017-11-21 15:01:51

# Below is generated by plot.py at 2017-11-21 18:59:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 286.81 Mbit/s
95th percentile per-packet one-way delay: 111.474 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 150.87 Mbit/s
95th percentile per-packet one-way delay: 111.430 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 145.42 Mbit/s
95th percentile per-packet one-way delay: 111.481 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 122.70 Mbit/s
95th percentile per-packet one-way delay: 111.535 ms
Loss rate: 0.02%
```

Run 1: Report of Indigo-calib — Data Link

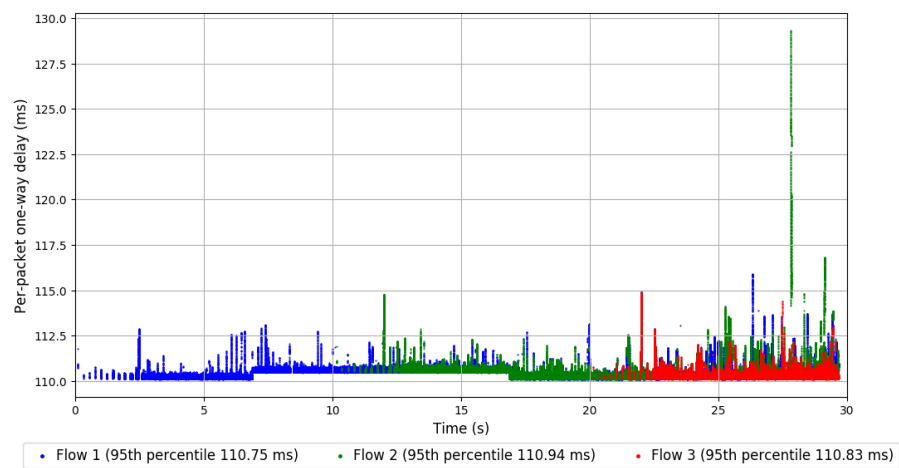
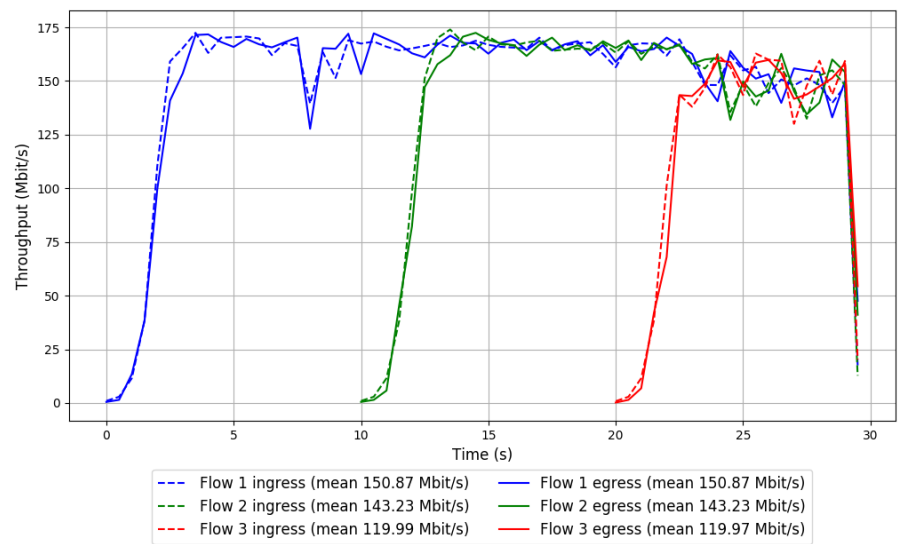


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-21 15:14:33
End at: 2017-11-21 15:15:03

# Below is generated by plot.py at 2017-11-21 19:00:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 284.14 Mbit/s
95th percentile per-packet one-way delay: 110.820 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 150.87 Mbit/s
95th percentile per-packet one-way delay: 110.755 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 143.23 Mbit/s
95th percentile per-packet one-way delay: 110.940 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 119.97 Mbit/s
95th percentile per-packet one-way delay: 110.831 ms
Loss rate: 0.01%
```

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-11-21 15:28:08

End at: 2017-11-21 15:28:38

Below is generated by plot.py at 2017-11-21 19:00:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 276.08 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 148.51 Mbit/s

95th percentile per-packet one-way delay: 113.248 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 138.48 Mbit/s

95th percentile per-packet one-way delay: 113.540 ms

Loss rate: 0.00%

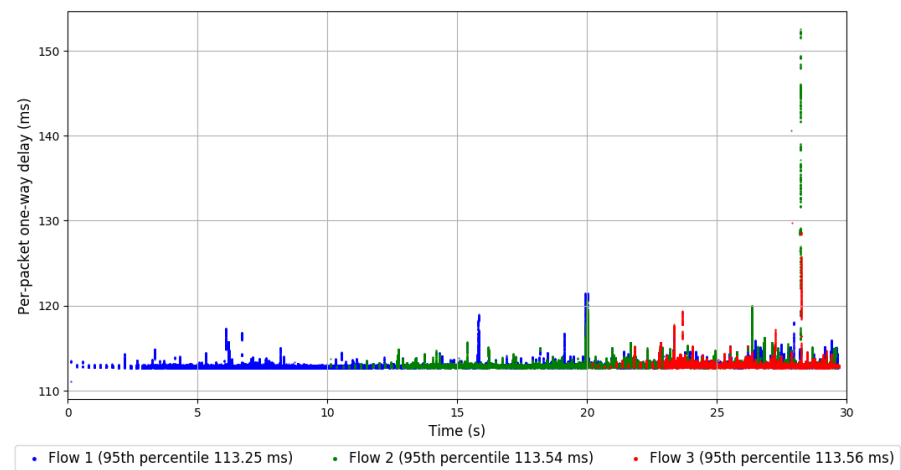
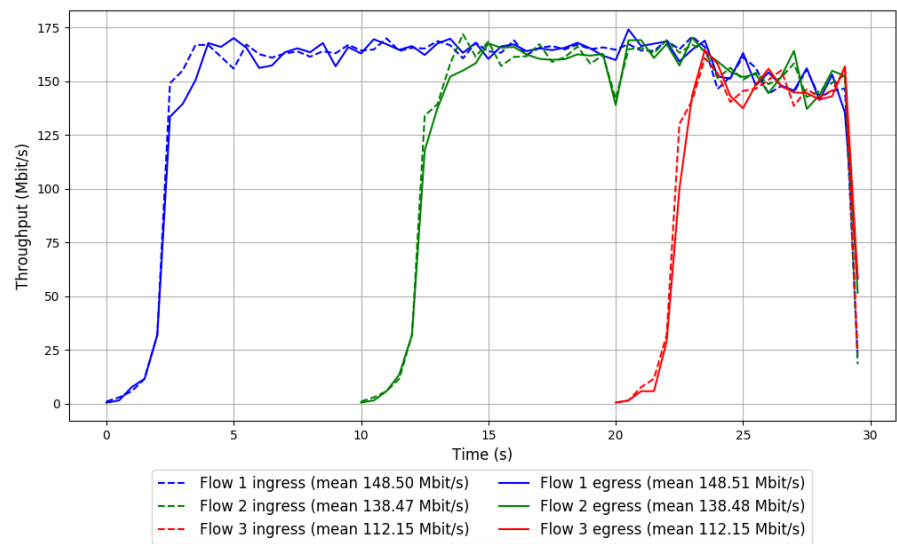
-- Flow 3:

Average throughput: 112.15 Mbit/s

95th percentile per-packet one-way delay: 113.562 ms

Loss rate: 0.00%

Run 3: Report of Indigo-calib — Data Link

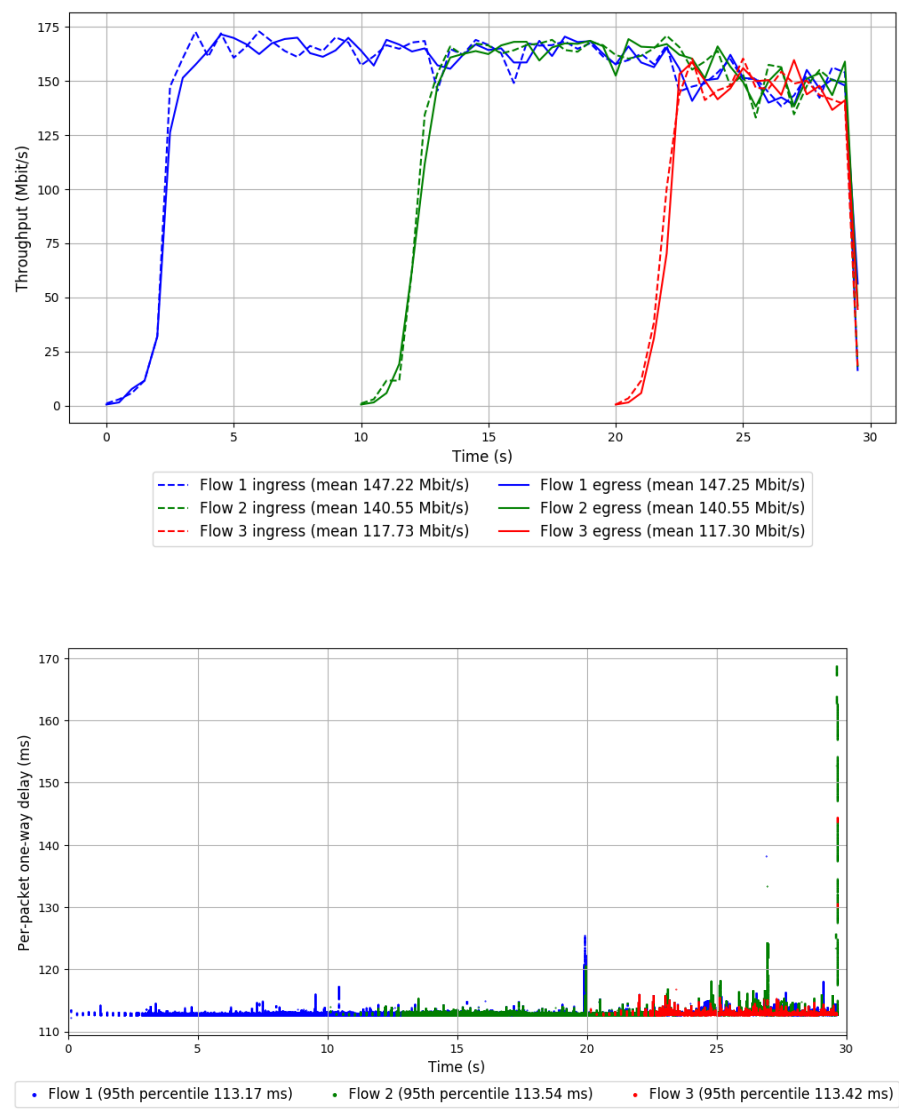


```
Run 4: Statistics of Indigo-calib

Start at: 2017-11-21 15:41:47
End at: 2017-11-21 15:42:17

# Below is generated by plot.py at 2017-11-21 19:00:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 277.96 Mbit/s
95th percentile per-packet one-way delay: 113.307 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 147.25 Mbit/s
95th percentile per-packet one-way delay: 113.175 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 140.55 Mbit/s
95th percentile per-packet one-way delay: 113.543 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 117.30 Mbit/s
95th percentile per-packet one-way delay: 113.423 ms
Loss rate: 0.39%
```

Run 4: Report of Indigo-calib — Data Link

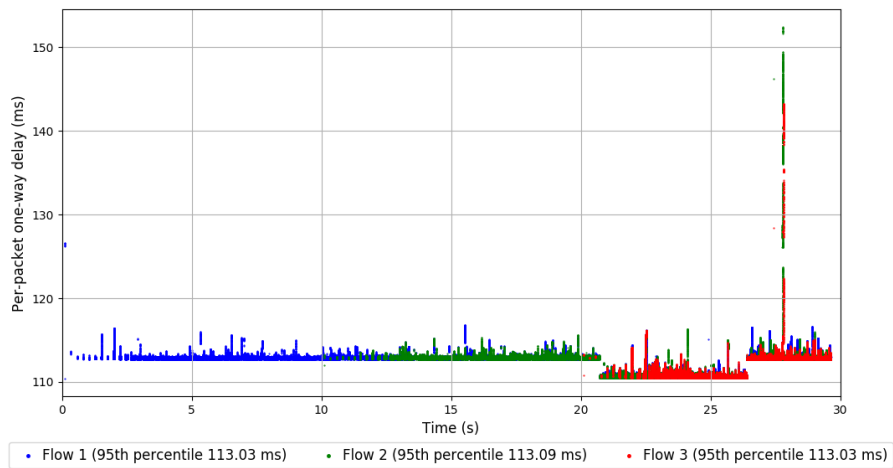
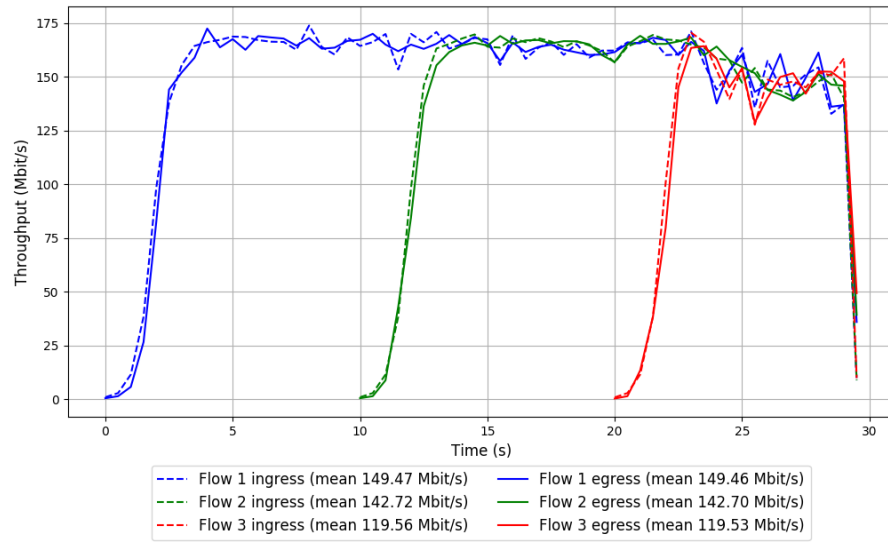


```
Run 5: Statistics of Indigo-calib

Start at: 2017-11-21 15:55:03
End at: 2017-11-21 15:55:33

# Below is generated by plot.py at 2017-11-21 19:01:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 282.37 Mbit/s
95th percentile per-packet one-way delay: 113.048 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 149.46 Mbit/s
95th percentile per-packet one-way delay: 113.029 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 142.70 Mbit/s
95th percentile per-packet one-way delay: 113.087 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 119.53 Mbit/s
95th percentile per-packet one-way delay: 113.029 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-calib — Data Link

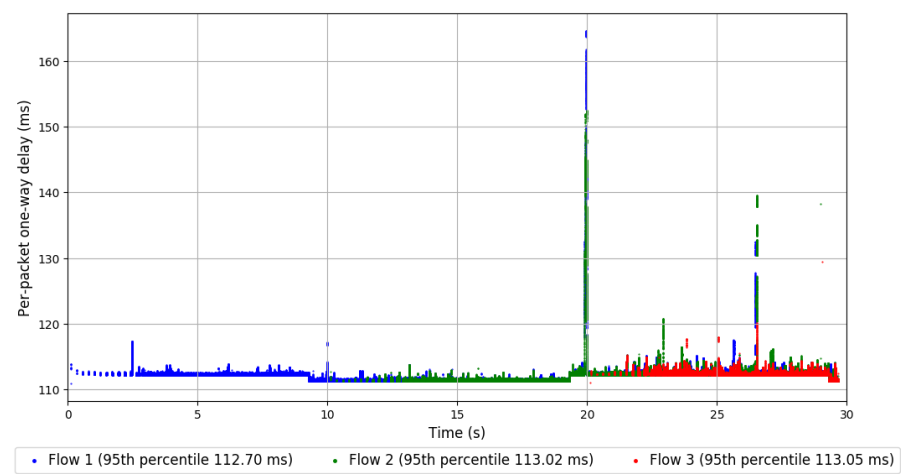
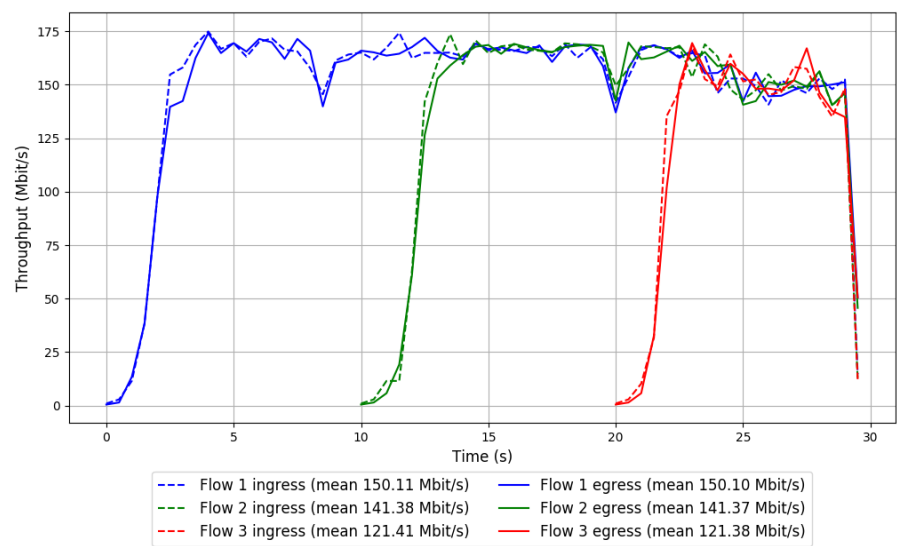


```
Run 6: Statistics of Indigo-calib

Start at: 2017-11-21 16:09:00
End at: 2017-11-21 16:09:30

# Below is generated by plot.py at 2017-11-21 19:01:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 282.68 Mbit/s
95th percentile per-packet one-way delay: 112.864 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 150.10 Mbit/s
95th percentile per-packet one-way delay: 112.705 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 141.37 Mbit/s
95th percentile per-packet one-way delay: 113.022 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 121.38 Mbit/s
95th percentile per-packet one-way delay: 113.049 ms
Loss rate: 0.04%
```

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-11-21 16:22:44

End at: 2017-11-21 16:23:14

Below is generated by plot.py at 2017-11-21 19:02:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 285.78 Mbit/s

95th percentile per-packet one-way delay: 111.860 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 151.59 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 143.42 Mbit/s

95th percentile per-packet one-way delay: 111.924 ms

Loss rate: 0.00%

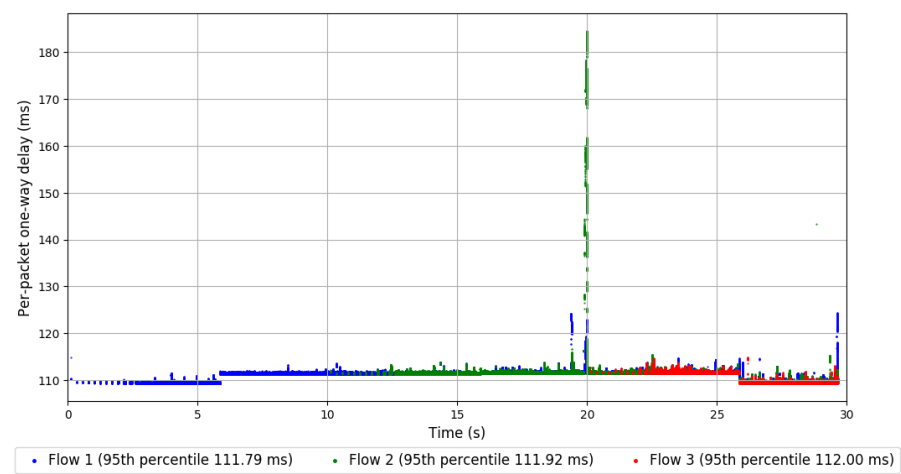
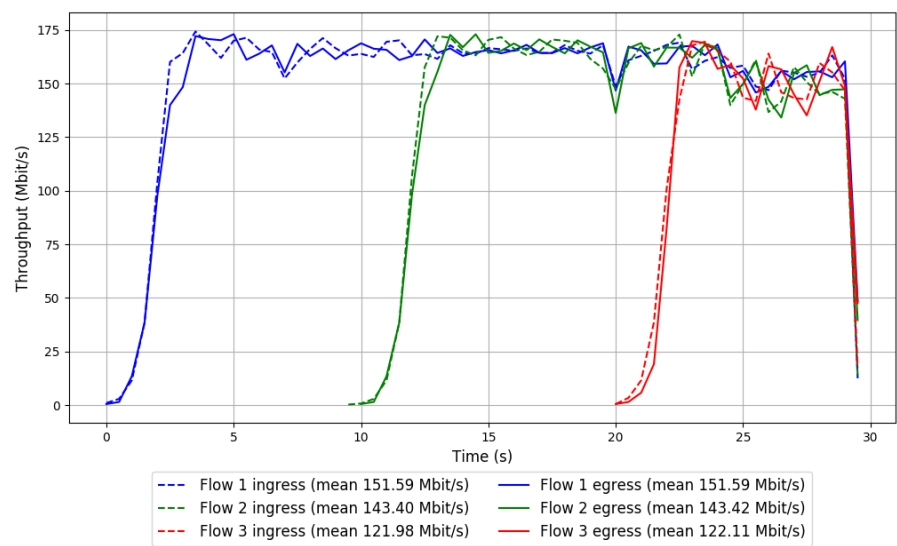
-- Flow 3:

Average throughput: 122.11 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-21 16:35:55

End at: 2017-11-21 16:36:25

Below is generated by plot.py at 2017-11-21 19:02:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 285.67 Mbit/s

95th percentile per-packet one-way delay: 110.650 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 151.40 Mbit/s

95th percentile per-packet one-way delay: 110.552 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 142.96 Mbit/s

95th percentile per-packet one-way delay: 110.744 ms

Loss rate: 0.00%

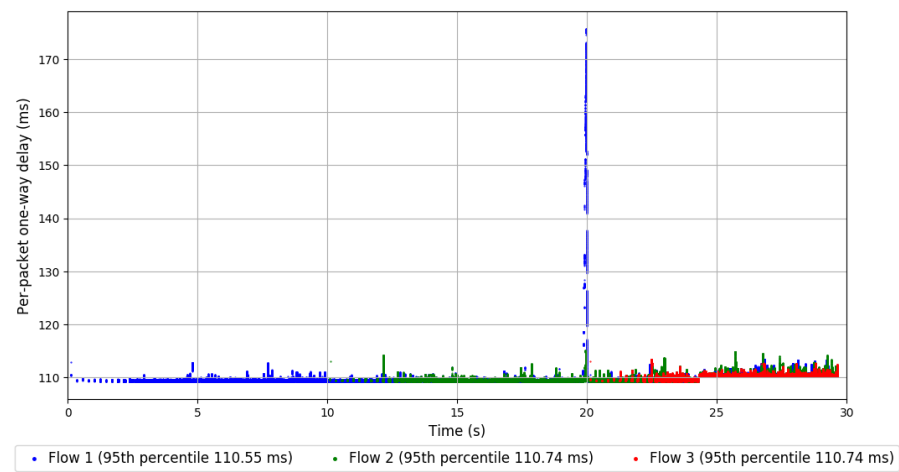
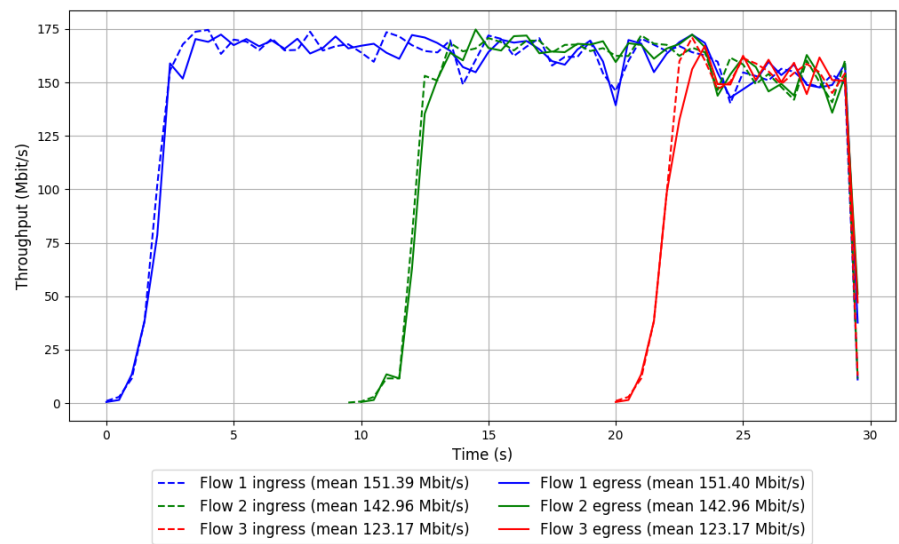
-- Flow 3:

Average throughput: 123.17 Mbit/s

95th percentile per-packet one-way delay: 110.737 ms

Loss rate: 0.00%

Run 8: Report of Indigo-calib — Data Link

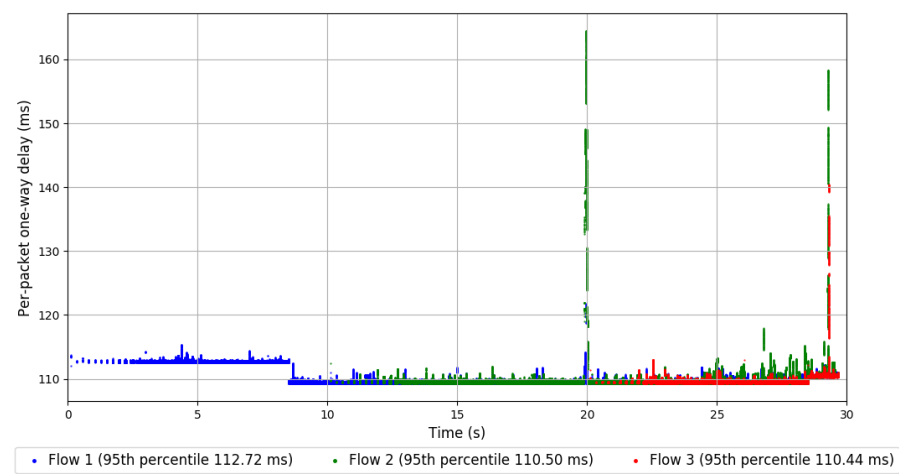
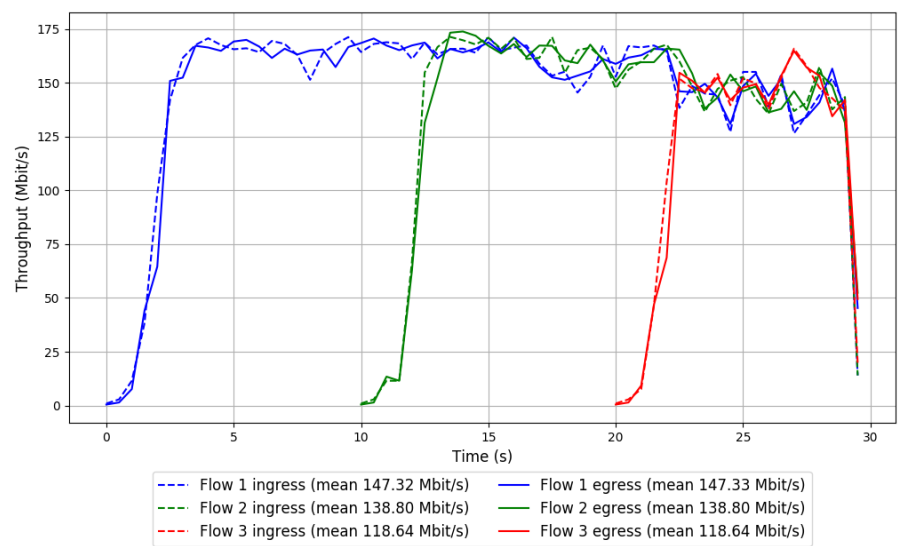


```
Run 9: Statistics of Indigo-calib

Start at: 2017-11-21 16:49:31
End at: 2017-11-21 16:50:01

# Below is generated by plot.py at 2017-11-21 19:02:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 277.36 Mbit/s
95th percentile per-packet one-way delay: 112.695 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 147.33 Mbit/s
95th percentile per-packet one-way delay: 112.719 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 138.80 Mbit/s
95th percentile per-packet one-way delay: 110.500 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 118.64 Mbit/s
95th percentile per-packet one-way delay: 110.436 ms
Loss rate: 0.00%
```

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-21 17:03:03

End at: 2017-11-21 17:03:33

Below is generated by plot.py at 2017-11-21 19:02:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 275.03 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 148.22 Mbit/s

95th percentile per-packet one-way delay: 112.735 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 137.03 Mbit/s

95th percentile per-packet one-way delay: 112.624 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 112.33 Mbit/s

95th percentile per-packet one-way delay: 112.544 ms

Loss rate: 0.01%

Run 10: Report of Indigo-calib — Data Link

