

Pantheon Report

Generated at 2017-11-16 22:39:53 (UTC).

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

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.

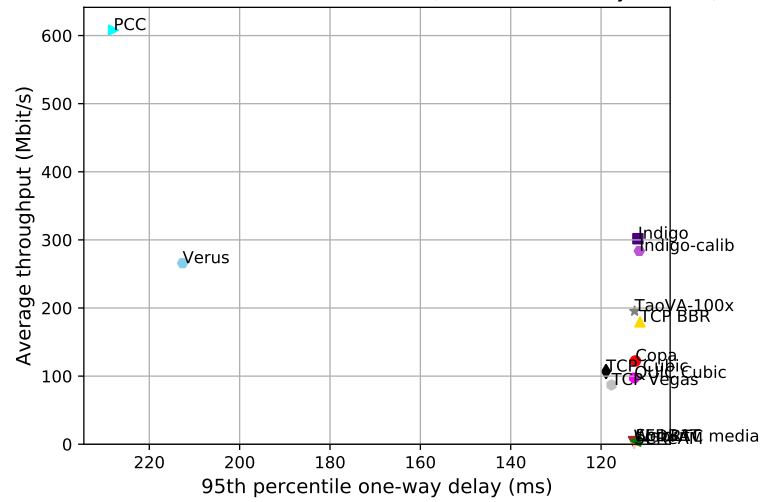
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

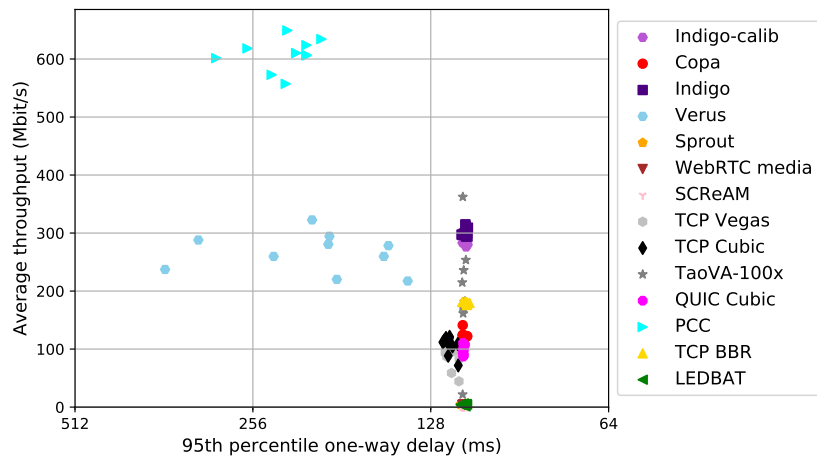
Git summary:

```
branch: indigos @ f54f2953f2a9765c9ffa988d13de5a9471790eb0
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
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 @ 03455460fd1a8ffbdad86fab936fdca204b80db
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 Tokyo Ethernet to GCE London Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	92.28	90.42	84.19	111.39	111.32	110.94	0.85	1.29	2.71
TCP Cubic	10	57.63	53.36	42.25	117.76	118.89	118.39	0.93	1.23	3.15
LEDBAT	10	3.26	2.65	1.58	587.62	112.40	112.19	1.16	2.03	3.89
PCC	10	527.84	108.48	25.90	230.99	211.35	210.84	3.77	2.54	4.03
QUIC Cubic	10	54.69	47.46	34.99	112.16	111.65	111.54	0.94	1.61	2.33
SCReAM	7	0.22	0.22	0.22	112.48	112.56	111.54	0.64	1.08	2.25
WebRTC media	8	2.16	1.30	0.44	112.15	111.93	112.02	0.96	1.41	4.05
Sprout	10	2.63	2.48	1.74	112.41	112.44	112.13	0.94	1.42	4.08
TaoVA-100x	10	112.21	88.33	96.80	112.46	112.48	113.12	0.67	1.12	2.93
TCP Vegas	10	39.69	47.44	48.80	115.79	116.93	117.55	1.15	1.03	2.23
Verus	10	177.81	98.07	72.31	189.79	209.67	195.51	3.01	4.55	4.51
Copa	10	70.97	62.03	42.00	112.30	112.52	111.81	0.62	1.22	4.66
Indigo	10	161.86	150.53	126.12	111.62	112.12	112.18	0.72	1.14	2.70
Indigo-calib	10	150.29	142.46	120.25	111.43	111.66	111.71	0.75	1.18	2.90

Run 1: Statistics of TCP BBR

Start at: 2017-11-16 17:20:56

End at: 2017-11-16 17:21:26

Below is generated by plot.py at 2017-11-16 21:48:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.09 Mbit/s

95th percentile per-packet one-way delay: 113.215 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 91.47 Mbit/s

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

Loss rate: 0.80%

-- Flow 2:

Average throughput: 94.76 Mbit/s

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

Loss rate: 1.23%

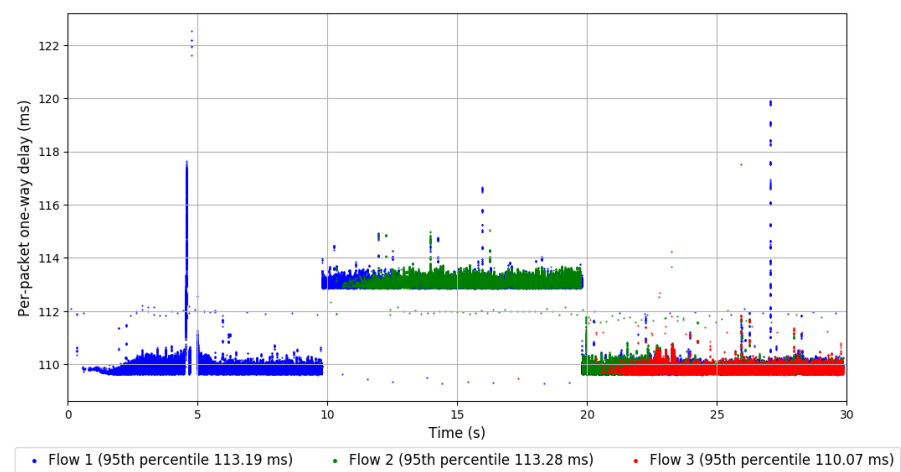
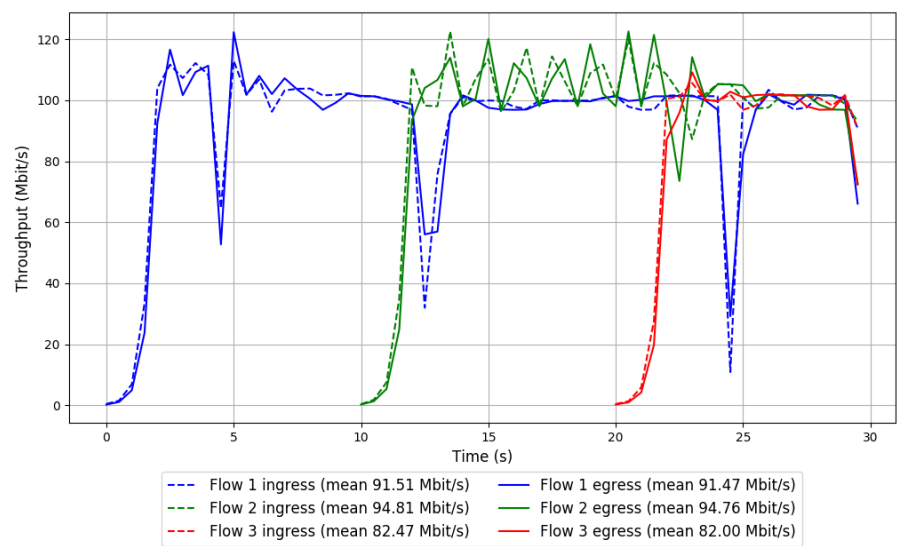
-- Flow 3:

Average throughput: 82.00 Mbit/s

95th percentile per-packet one-way delay: 110.068 ms

Loss rate: 2.70%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-16 17:34:24

End at: 2017-11-16 17:34:54

Below is generated by plot.py at 2017-11-16 21:48:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.73 Mbit/s

95th percentile per-packet one-way delay: 110.056 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 91.97 Mbit/s

95th percentile per-packet one-way delay: 110.038 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 89.96 Mbit/s

95th percentile per-packet one-way delay: 110.010 ms

Loss rate: 1.34%

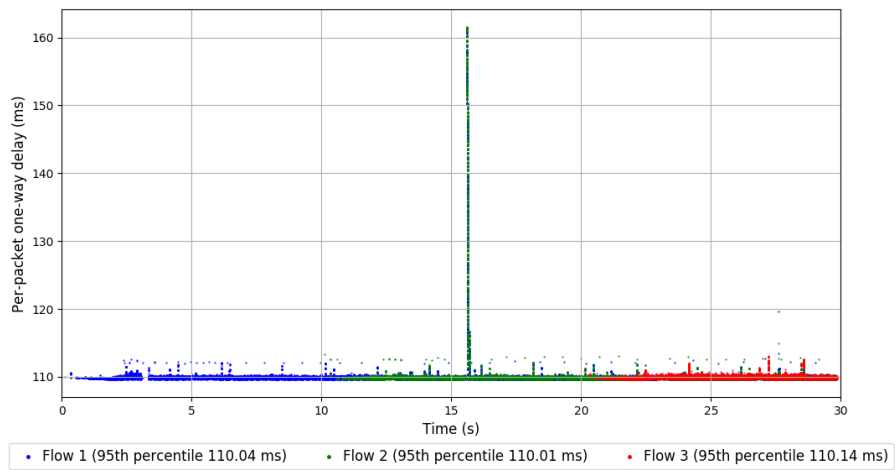
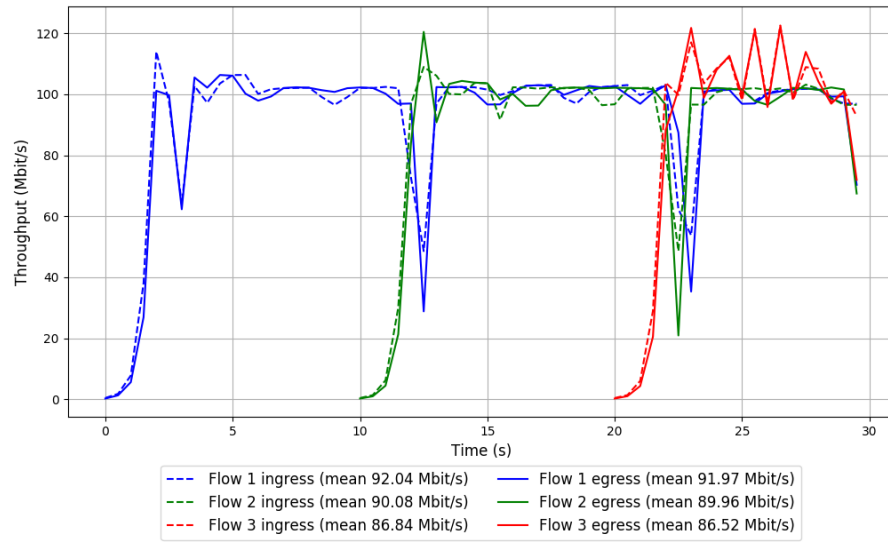
-- Flow 3:

Average throughput: 86.52 Mbit/s

95th percentile per-packet one-way delay: 110.136 ms

Loss rate: 2.62%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-16 17:48:03

End at: 2017-11-16 17:48:33

Below is generated by plot.py at 2017-11-16 21:48:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.97 Mbit/s

95th percentile per-packet one-way delay: 111.115 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 91.88 Mbit/s

95th percentile per-packet one-way delay: 111.131 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 91.97 Mbit/s

95th percentile per-packet one-way delay: 111.104 ms

Loss rate: 1.20%

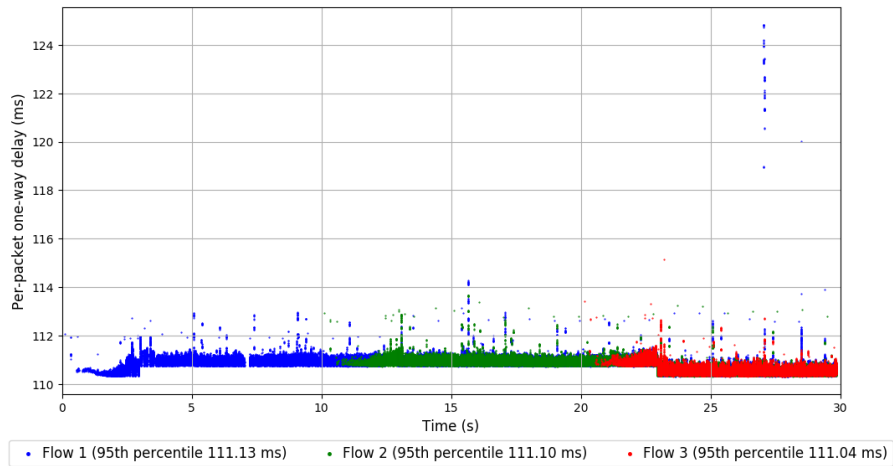
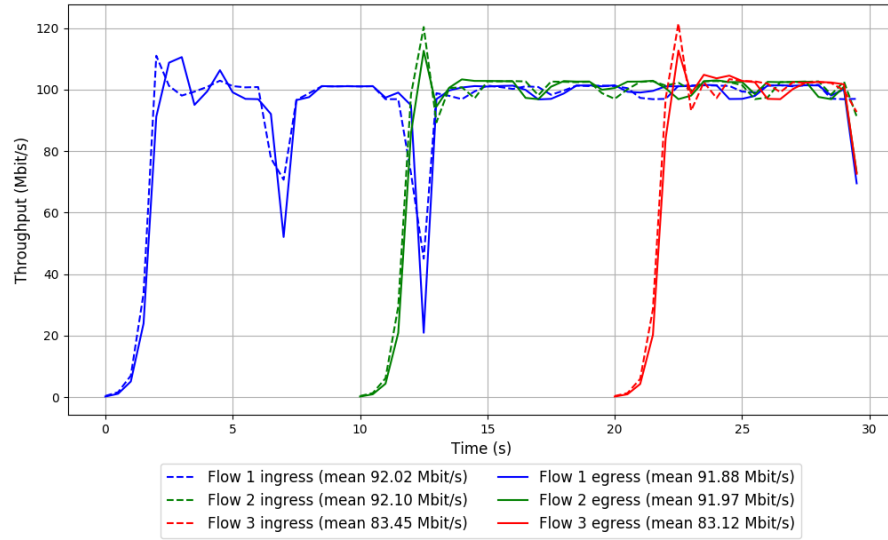
-- Flow 3:

Average throughput: 83.12 Mbit/s

95th percentile per-packet one-way delay: 111.036 ms

Loss rate: 2.67%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-16 18:01:44

End at: 2017-11-16 18:02:14

Below is generated by plot.py at 2017-11-16 21:48:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 180.84 Mbit/s

95th percentile per-packet one-way delay: 111.169 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 94.30 Mbit/s

95th percentile per-packet one-way delay: 111.260 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 89.42 Mbit/s

95th percentile per-packet one-way delay: 110.587 ms

Loss rate: 1.25%

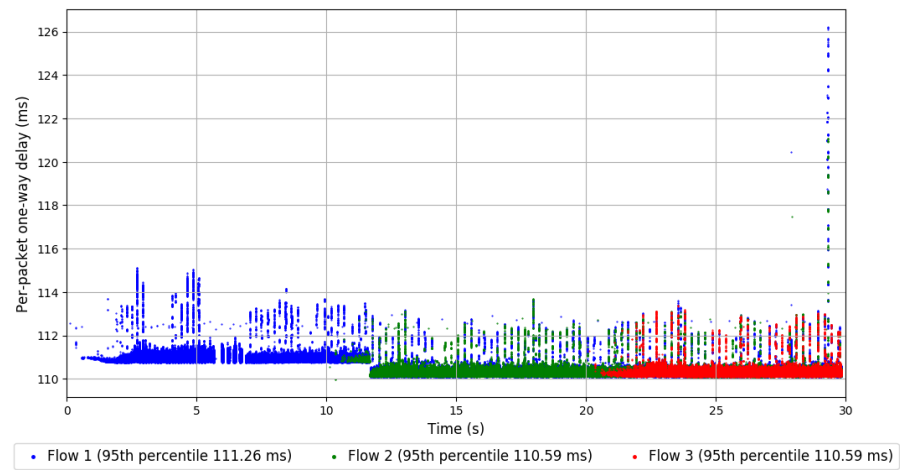
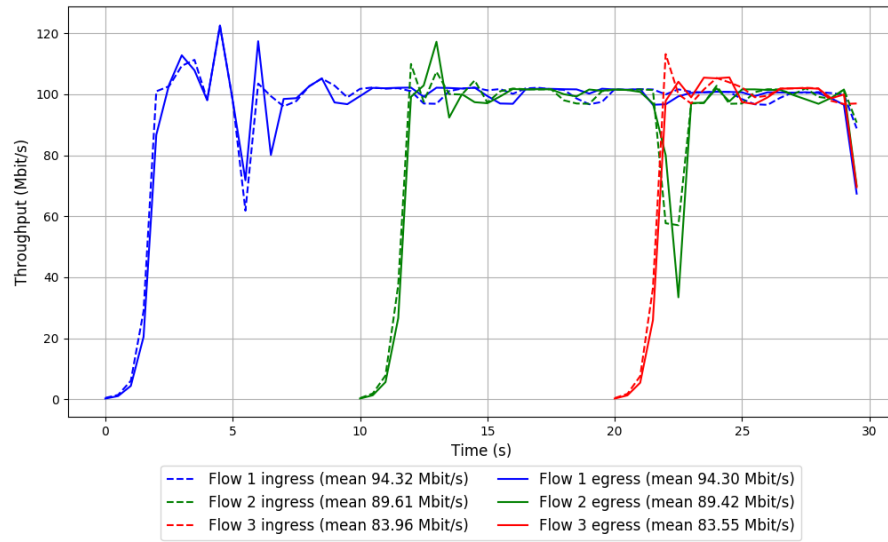
-- Flow 3:

Average throughput: 83.55 Mbit/s

95th percentile per-packet one-way delay: 110.587 ms

Loss rate: 2.91%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-16 18:15:17

End at: 2017-11-16 18:15:47

Below is generated by plot.py at 2017-11-16 21:48:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 175.99 Mbit/s

95th percentile per-packet one-way delay: 111.118 ms

Loss rate: 1.47%

-- Flow 1:

Average throughput: 90.41 Mbit/s

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

Loss rate: 1.00%

-- Flow 2:

Average throughput: 87.39 Mbit/s

95th percentile per-packet one-way delay: 111.098 ms

Loss rate: 1.64%

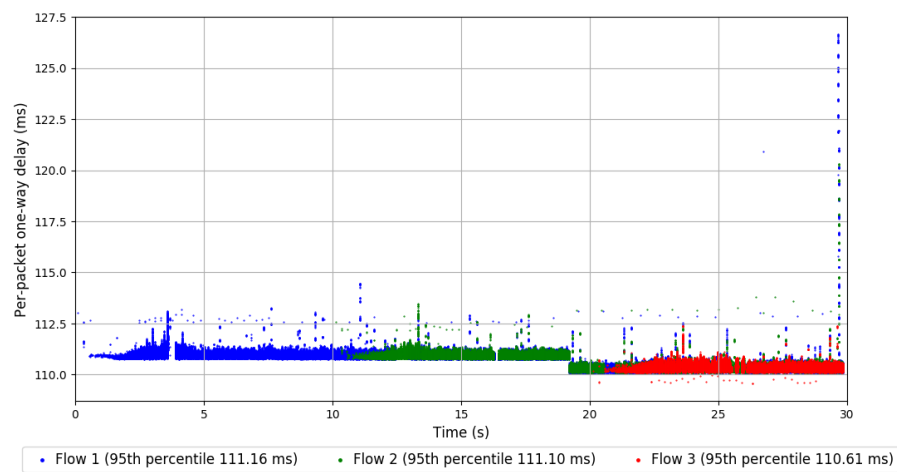
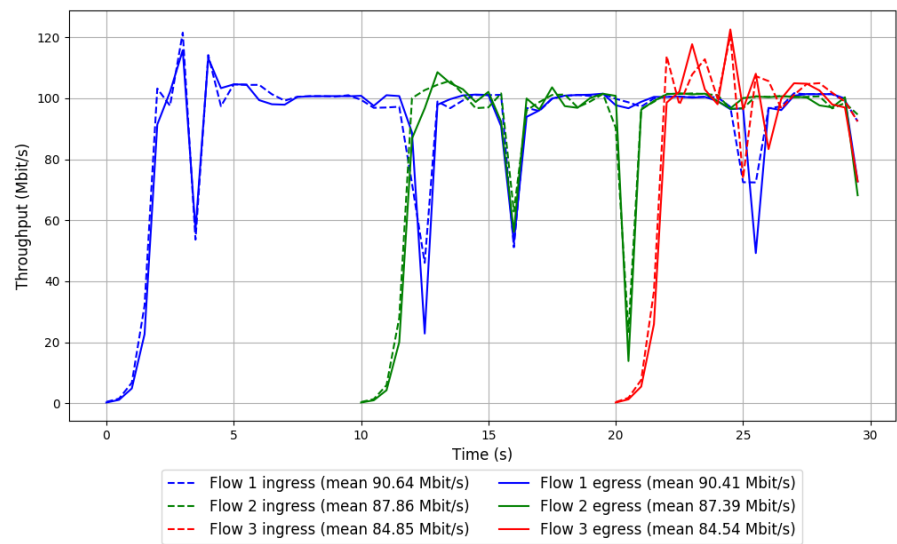
-- Flow 3:

Average throughput: 84.54 Mbit/s

95th percentile per-packet one-way delay: 110.606 ms

Loss rate: 2.62%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-16 18:28:58

End at: 2017-11-16 18:29:28

Below is generated by plot.py at 2017-11-16 21:48:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.79 Mbit/s

95th percentile per-packet one-way delay: 111.323 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 94.28 Mbit/s

95th percentile per-packet one-way delay: 111.364 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 88.41 Mbit/s

95th percentile per-packet one-way delay: 111.250 ms

Loss rate: 1.37%

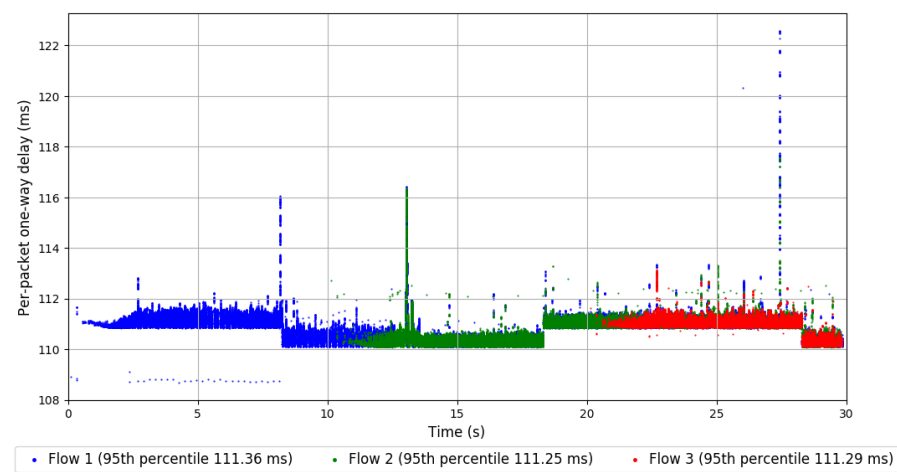
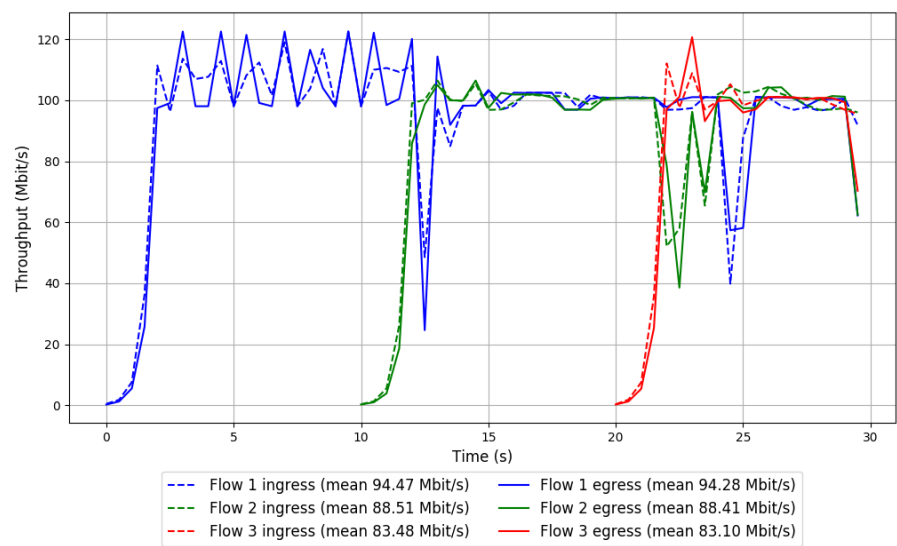
-- Flow 3:

Average throughput: 83.10 Mbit/s

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

Loss rate: 2.87%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-16 18:42:51

End at: 2017-11-16 18:43:21

Below is generated by plot.py at 2017-11-16 21:48:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 178.35 Mbit/s

95th percentile per-packet one-way delay: 111.133 ms

Loss rate: 1.34%

-- Flow 1:

Average throughput: 91.10 Mbit/s

95th percentile per-packet one-way delay: 111.154 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 91.99 Mbit/s

95th percentile per-packet one-way delay: 111.124 ms

Loss rate: 1.26%

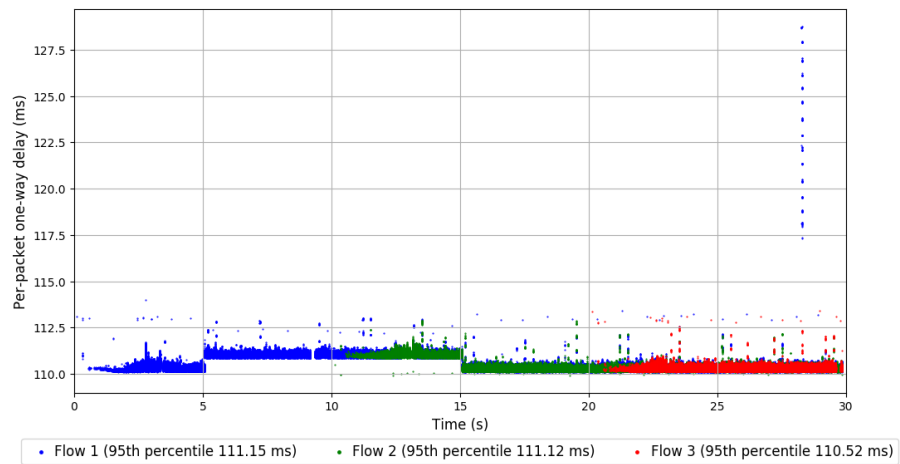
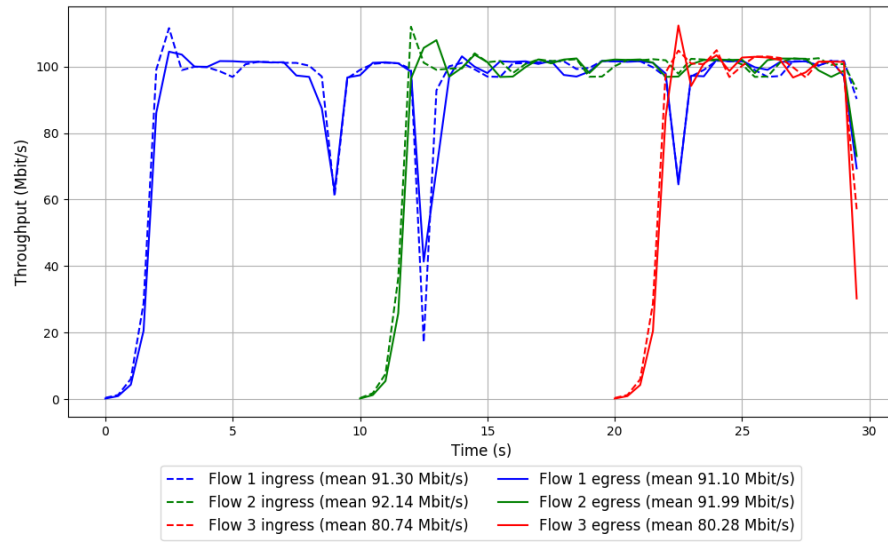
-- Flow 3:

Average throughput: 80.28 Mbit/s

95th percentile per-packet one-way delay: 110.521 ms

Loss rate: 2.81%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-16 18:56:27

End at: 2017-11-16 18:56:57

Below is generated by plot.py at 2017-11-16 21:48:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.27 Mbit/s

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

Loss rate: 1.24%

-- Flow 1:

Average throughput: 92.93 Mbit/s

95th percentile per-packet one-way delay: 111.682 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 90.02 Mbit/s

95th percentile per-packet one-way delay: 111.714 ms

Loss rate: 1.20%

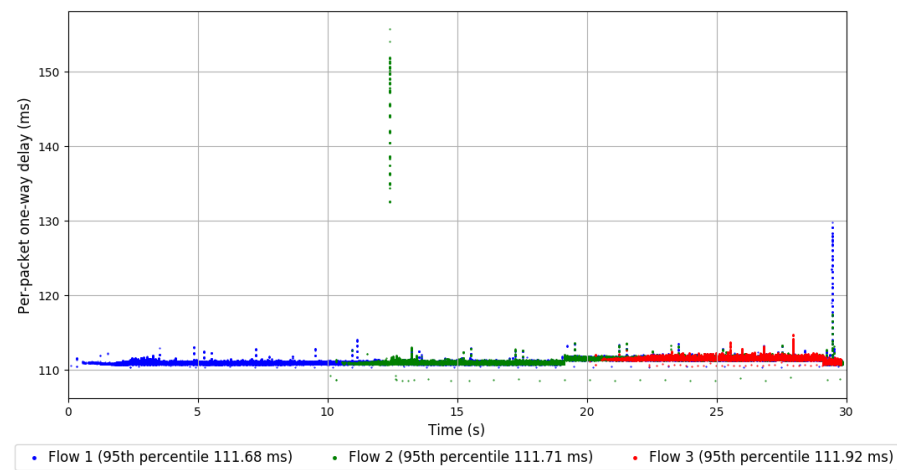
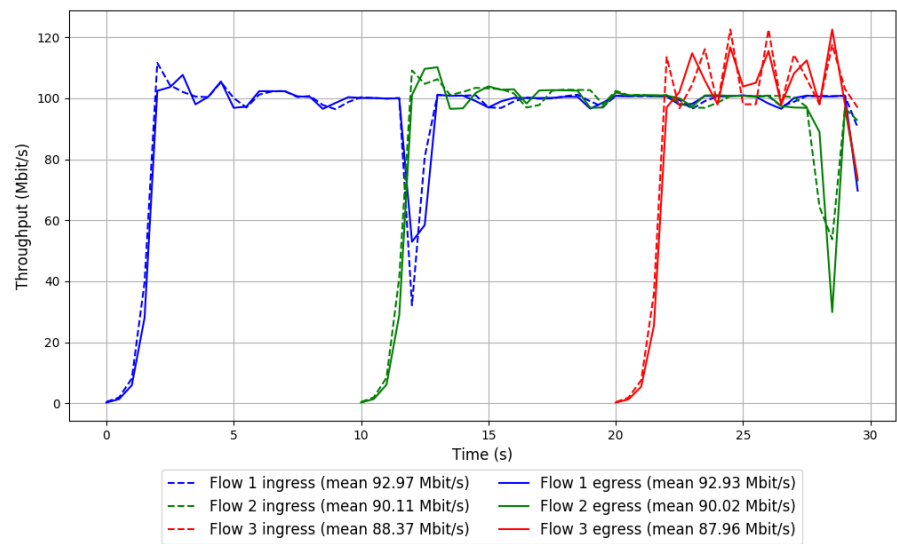
-- Flow 3:

Average throughput: 87.96 Mbit/s

95th percentile per-packet one-way delay: 111.916 ms

Loss rate: 2.74%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-16 19:10:17

End at: 2017-11-16 19:10:47

Below is generated by plot.py at 2017-11-16 21:51:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.71 Mbit/s

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

Loss rate: 1.22%

-- Flow 1:

Average throughput: 92.18 Mbit/s

95th percentile per-packet one-way delay: 111.732 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 92.10 Mbit/s

95th percentile per-packet one-way delay: 111.845 ms

Loss rate: 1.18%

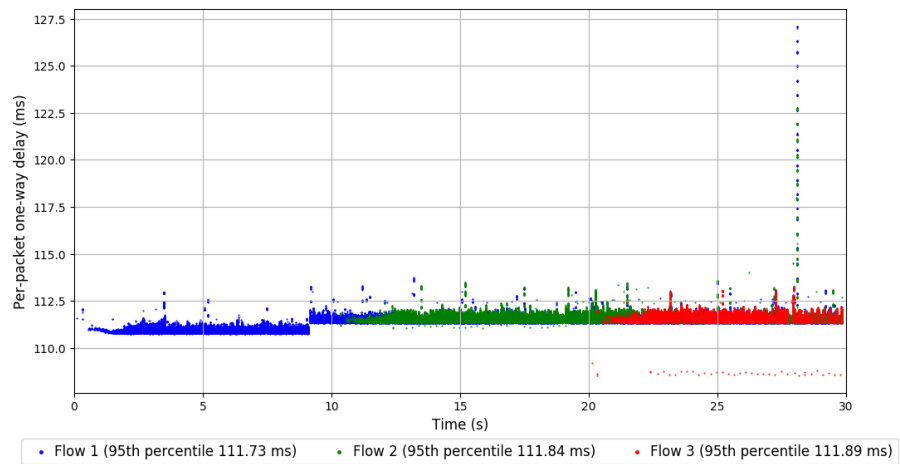
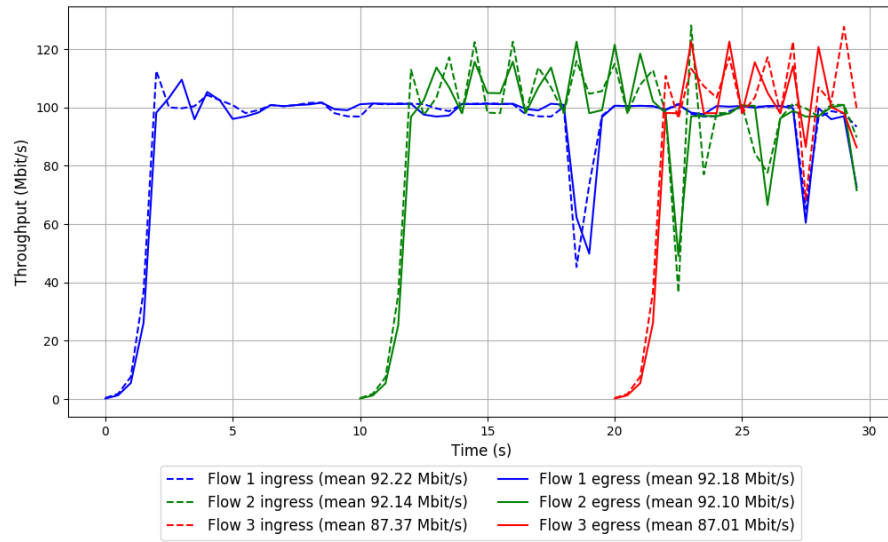
-- Flow 3:

Average throughput: 87.01 Mbit/s

95th percentile per-packet one-way delay: 111.891 ms

Loss rate: 2.62%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-16 19:23:57

End at: 2017-11-16 19:24:27

Below is generated by plot.py at 2017-11-16 21:51:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 178.22 Mbit/s

95th percentile per-packet one-way delay: 111.230 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 92.32 Mbit/s

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

Loss rate: 0.78%

-- Flow 2:

Average throughput: 88.22 Mbit/s

95th percentile per-packet one-way delay: 111.208 ms

Loss rate: 1.21%

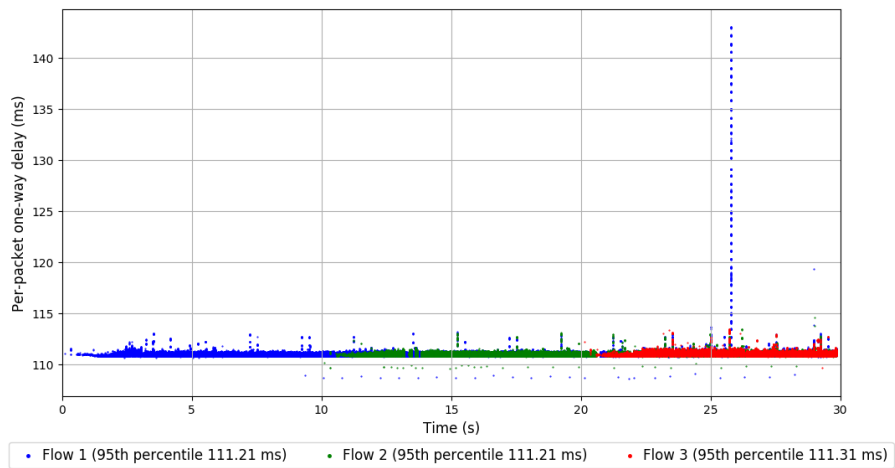
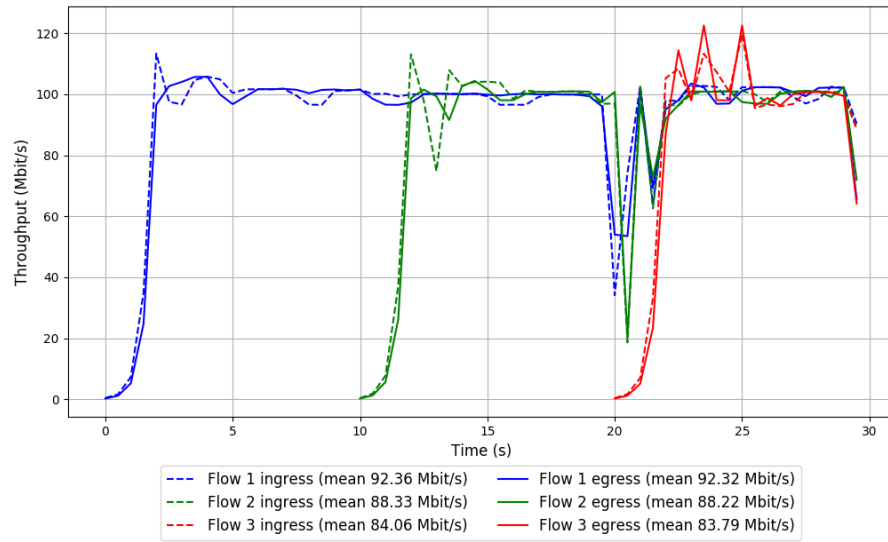
-- Flow 3:

Average throughput: 83.79 Mbit/s

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

Loss rate: 2.55%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-16 17:19:01

End at: 2017-11-16 17:19:31

Below is generated by plot.py at 2017-11-16 21:51:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.70 Mbit/s

95th percentile per-packet one-way delay: 121.476 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 63.45 Mbit/s

95th percentile per-packet one-way delay: 119.756 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 56.29 Mbit/s

95th percentile per-packet one-way delay: 124.043 ms

Loss rate: 1.02%

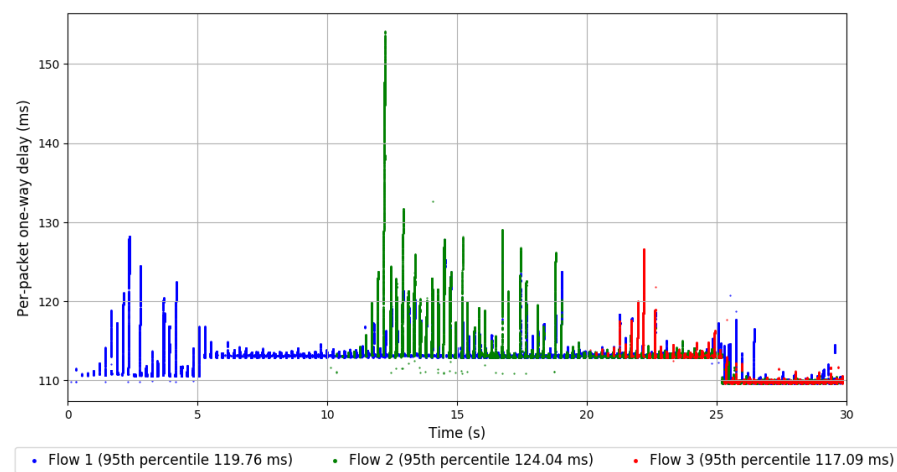
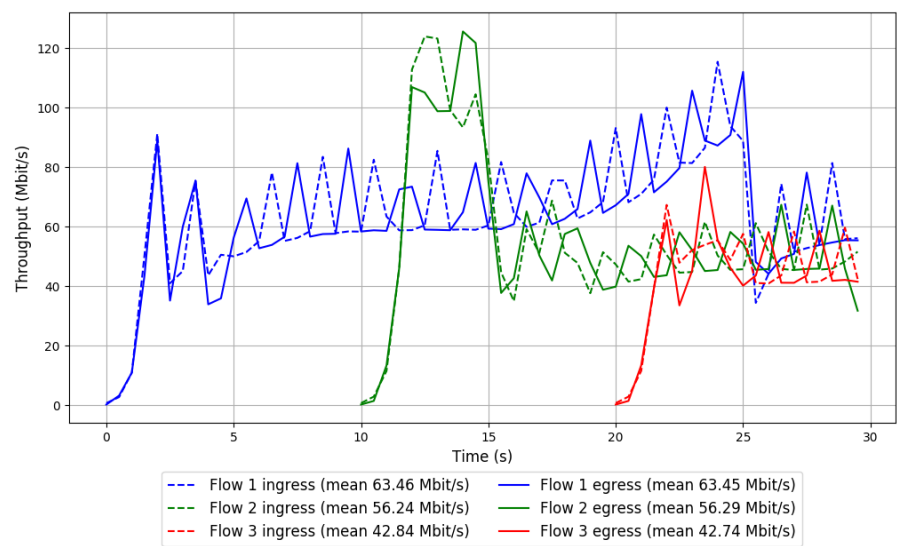
-- Flow 3:

Average throughput: 42.74 Mbit/s

95th percentile per-packet one-way delay: 117.089 ms

Loss rate: 2.50%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-16 17:32:30

End at: 2017-11-16 17:33:00

Below is generated by plot.py at 2017-11-16 21:51:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.92 Mbit/s

95th percentile per-packet one-way delay: 119.536 ms

Loss rate: 1.41%

-- Flow 1:

Average throughput: 61.59 Mbit/s

95th percentile per-packet one-way delay: 119.745 ms

Loss rate: 1.28%

-- Flow 2:

Average throughput: 47.70 Mbit/s

95th percentile per-packet one-way delay: 116.946 ms

Loss rate: 1.21%

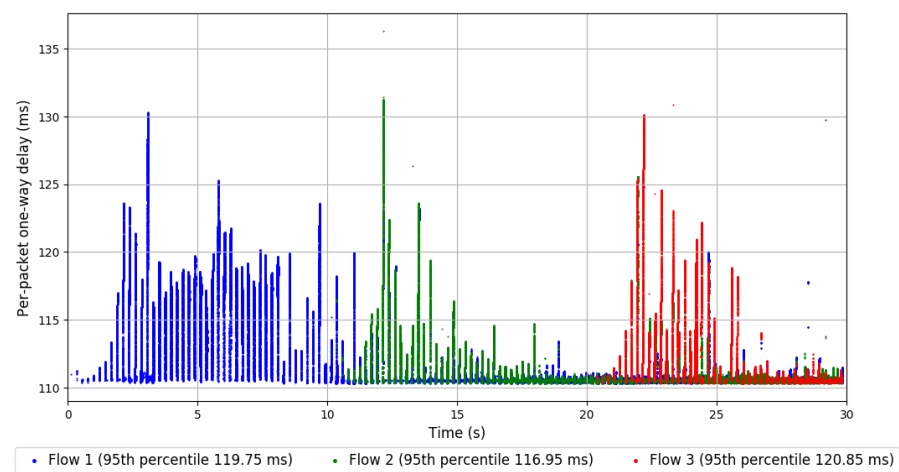
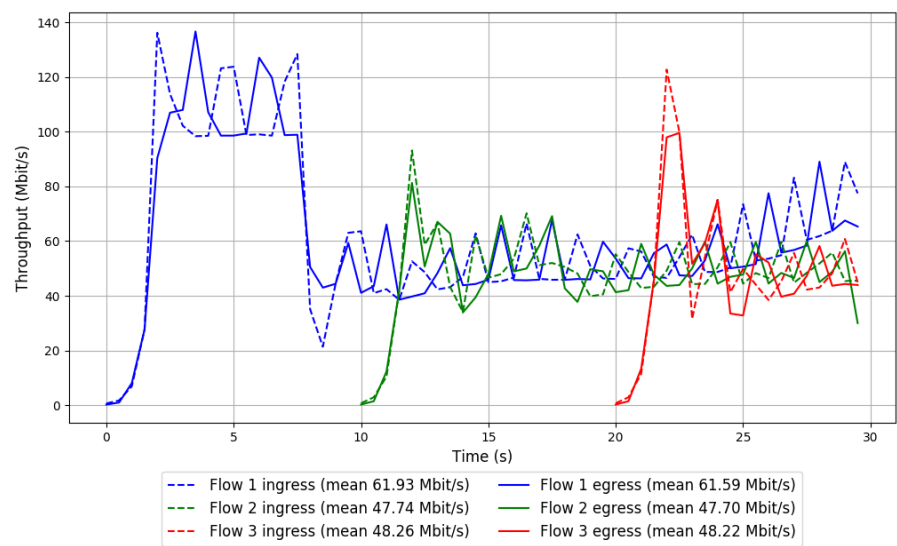
-- Flow 3:

Average throughput: 48.22 Mbit/s

95th percentile per-packet one-way delay: 120.853 ms

Loss rate: 2.34%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-16 17:46:09

End at: 2017-11-16 17:46:39

Below is generated by plot.py at 2017-11-16 21:51:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.14 Mbit/s

95th percentile per-packet one-way delay: 118.925 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 59.60 Mbit/s

95th percentile per-packet one-way delay: 118.569 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 56.92 Mbit/s

95th percentile per-packet one-way delay: 116.832 ms

Loss rate: 1.44%

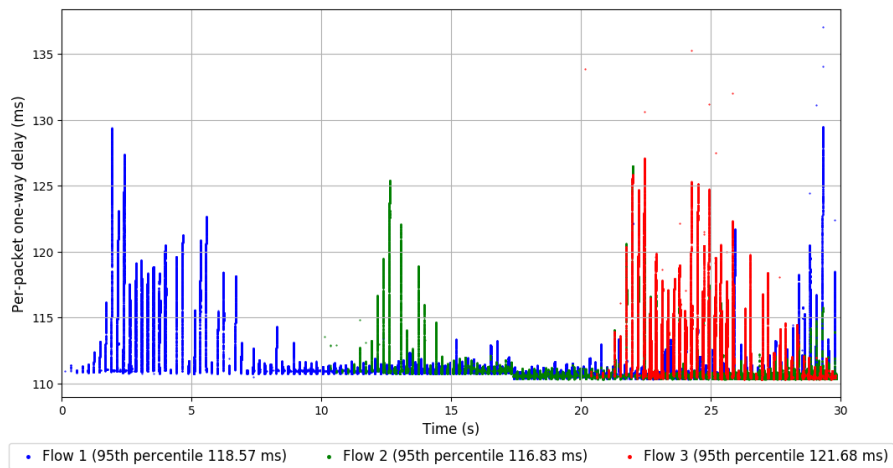
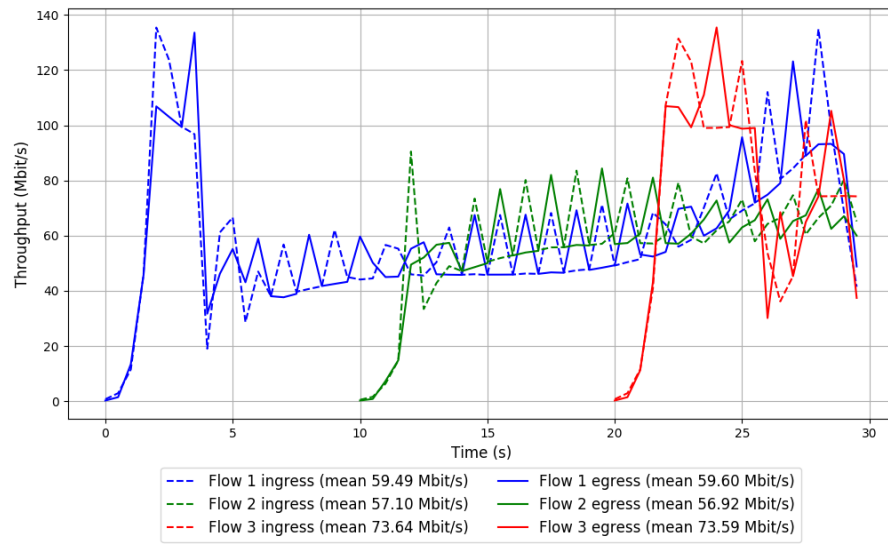
-- Flow 3:

Average throughput: 73.59 Mbit/s

95th percentile per-packet one-way delay: 121.677 ms

Loss rate: 2.55%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-11-16 17:59:52

End at: 2017-11-16 18:00:22

Below is generated by plot.py at 2017-11-16 21:51:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.46 Mbit/s

95th percentile per-packet one-way delay: 119.567 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 53.72 Mbit/s

95th percentile per-packet one-way delay: 119.447 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 51.64 Mbit/s

95th percentile per-packet one-way delay: 120.463 ms

Loss rate: 1.16%

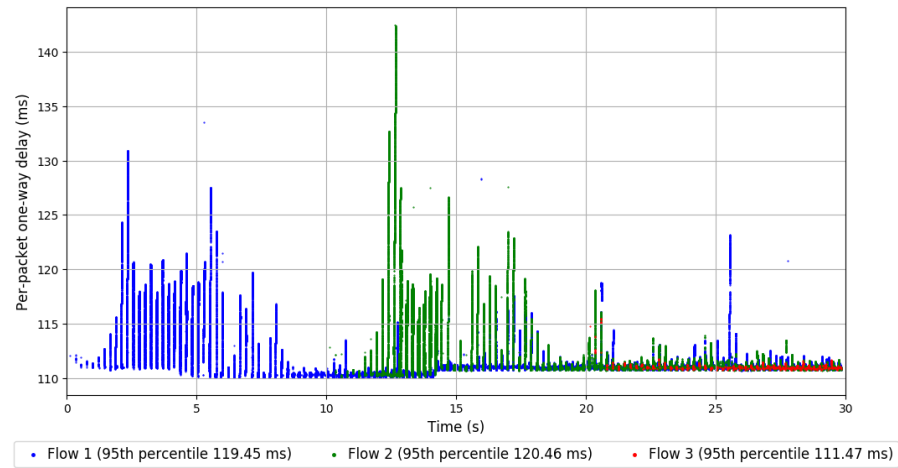
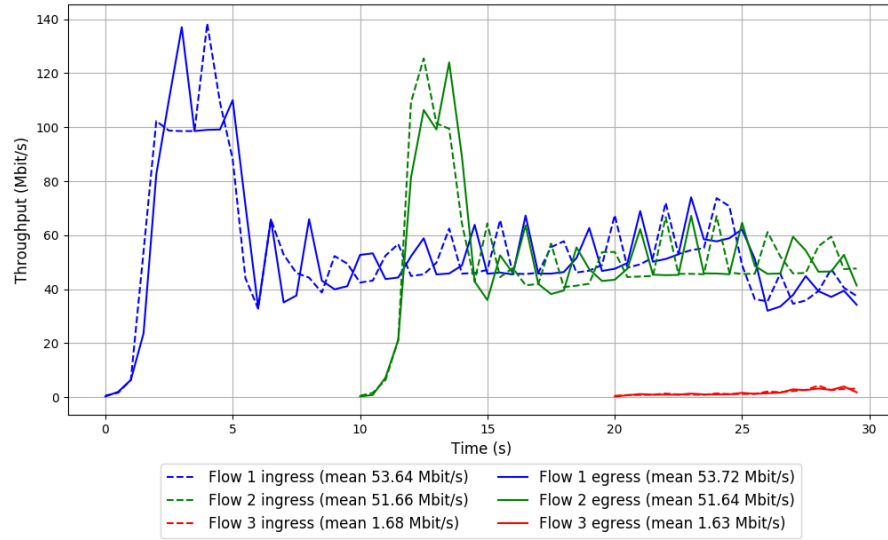
-- Flow 3:

Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 111.467 ms

Loss rate: 5.17%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-16 18:13:25

End at: 2017-11-16 18:13:55

Below is generated by plot.py at 2017-11-16 21:51:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.80 Mbit/s

95th percentile per-packet one-way delay: 114.977 ms

Loss rate: 1.32%

-- Flow 1:

Average throughput: 45.28 Mbit/s

95th percentile per-packet one-way delay: 115.086 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 38.76 Mbit/s

95th percentile per-packet one-way delay: 114.854 ms

Loss rate: 1.67%

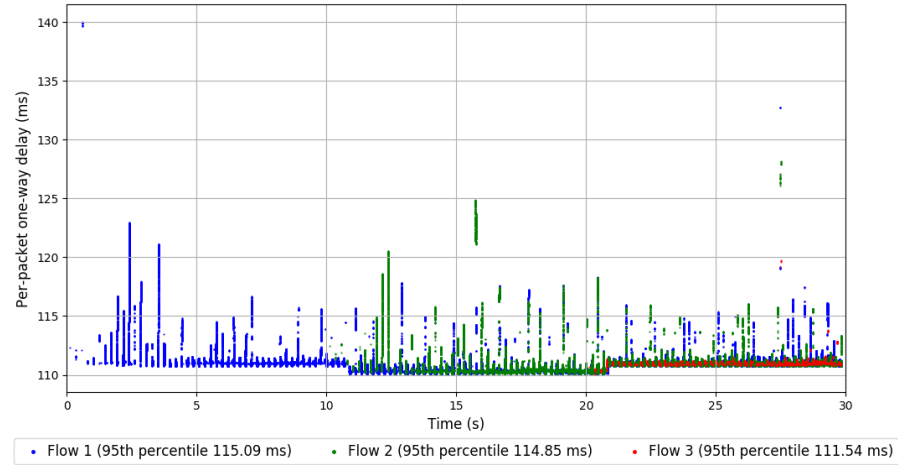
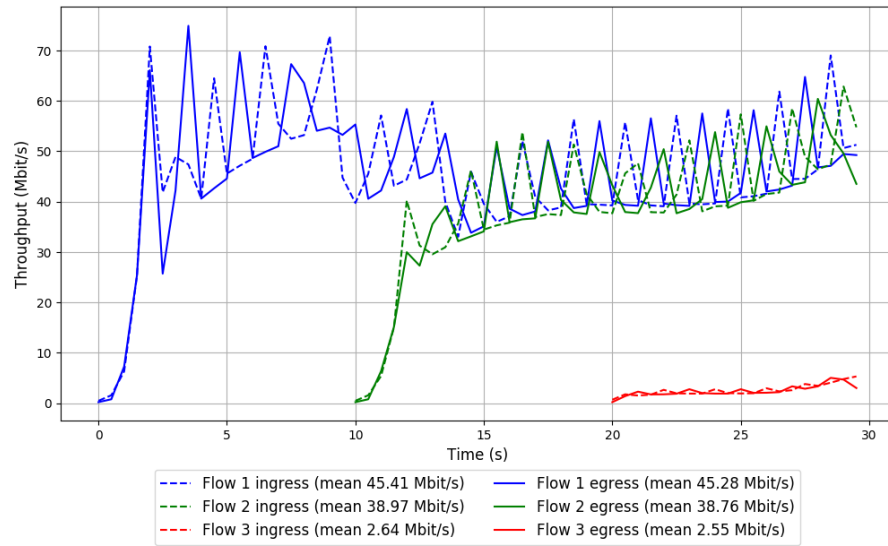
-- Flow 3:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 111.541 ms

Loss rate: 5.37%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-16 18:27:02

End at: 2017-11-16 18:27:32

Below is generated by plot.py at 2017-11-16 21:51:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.73 Mbit/s

95th percentile per-packet one-way delay: 122.068 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 57.52 Mbit/s

95th percentile per-packet one-way delay: 122.341 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 59.81 Mbit/s

95th percentile per-packet one-way delay: 121.199 ms

Loss rate: 1.12%

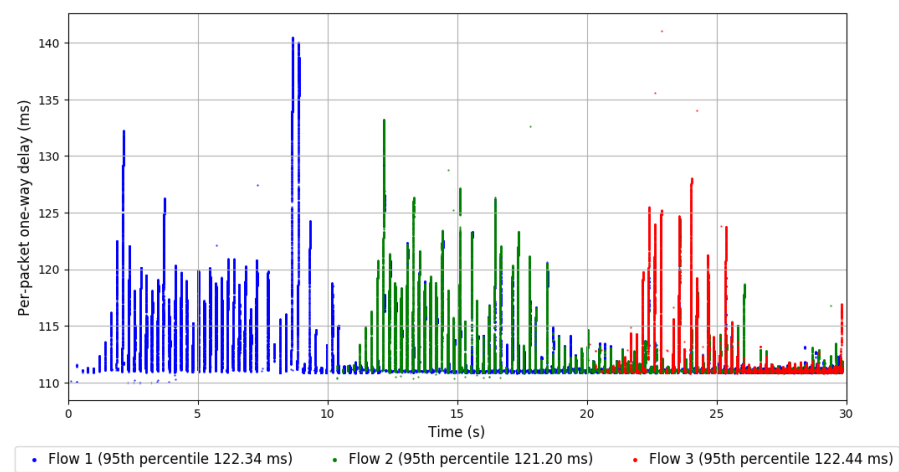
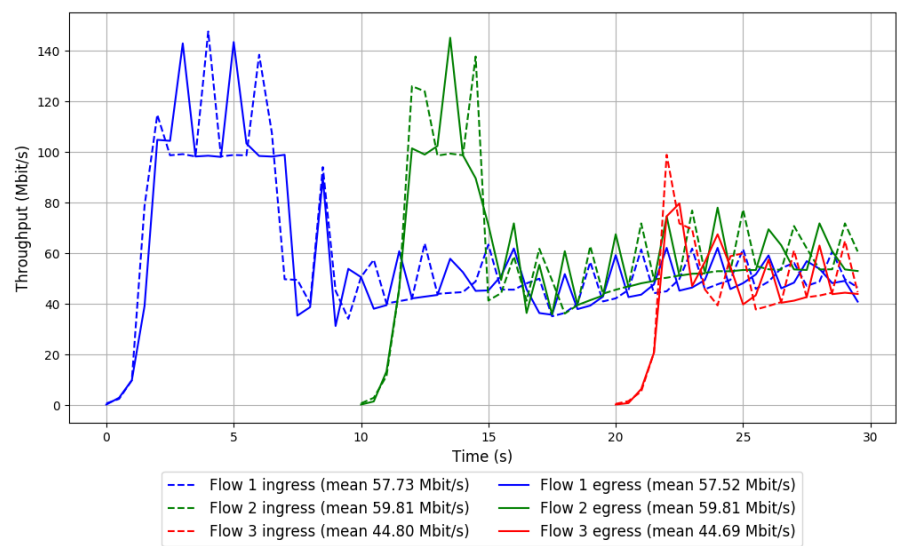
-- Flow 3:

Average throughput: 44.69 Mbit/s

95th percentile per-packet one-way delay: 122.437 ms

Loss rate: 2.50%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-16 18:40:56

End at: 2017-11-16 18:41:26

Below is generated by plot.py at 2017-11-16 21:51:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.75 Mbit/s

95th percentile per-packet one-way delay: 115.210 ms

Loss rate: 1.34%

-- Flow 1:

Average throughput: 62.75 Mbit/s

95th percentile per-packet one-way delay: 113.724 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 50.05 Mbit/s

95th percentile per-packet one-way delay: 115.817 ms

Loss rate: 1.29%

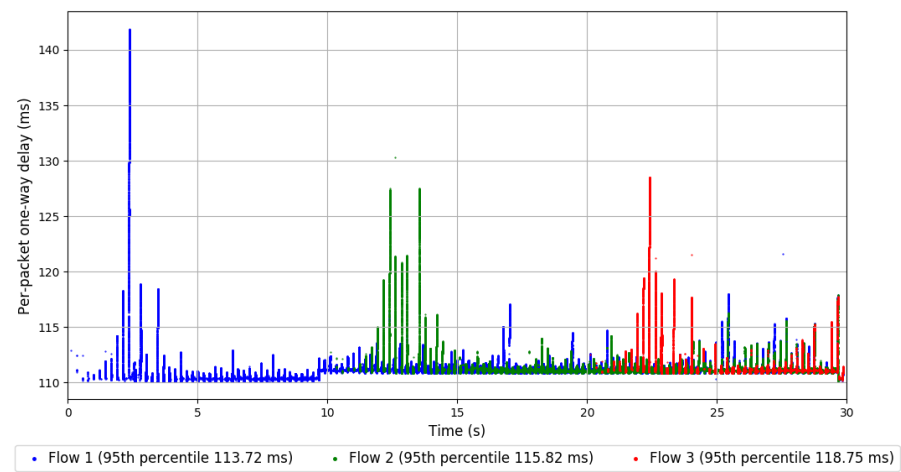
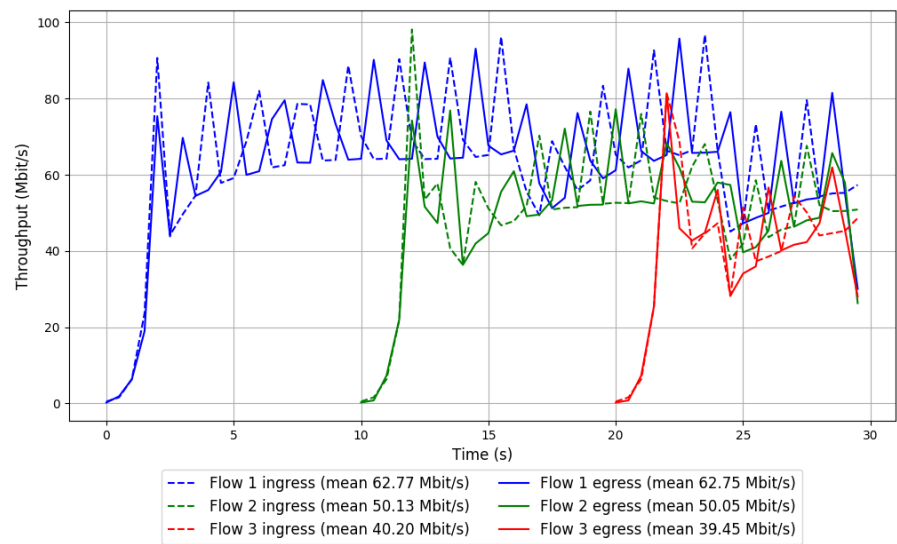
-- Flow 3:

Average throughput: 39.45 Mbit/s

95th percentile per-packet one-way delay: 118.748 ms

Loss rate: 4.08%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-16 18:54:33

End at: 2017-11-16 18:55:03

Below is generated by plot.py at 2017-11-16 21:51:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.77 Mbit/s

95th percentile per-packet one-way delay: 117.578 ms

Loss rate: 1.35%

-- Flow 1:

Average throughput: 47.33 Mbit/s

95th percentile per-packet one-way delay: 114.757 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 59.60 Mbit/s

95th percentile per-packet one-way delay: 118.558 ms

Loss rate: 1.39%

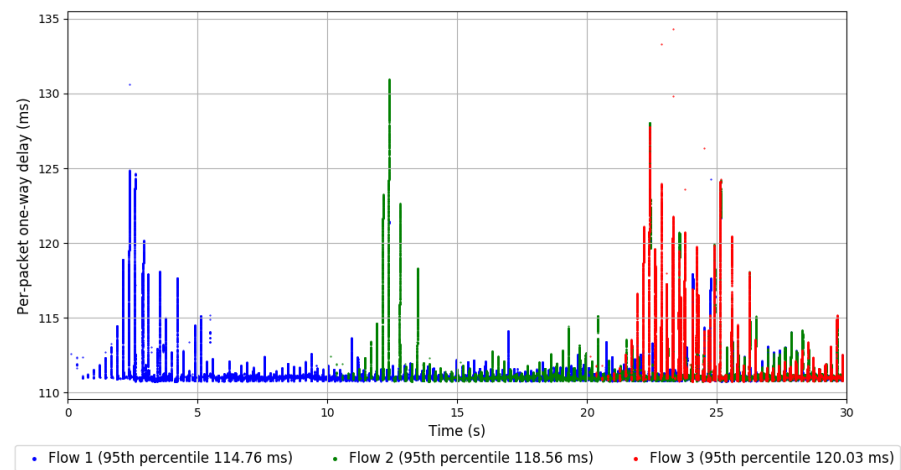
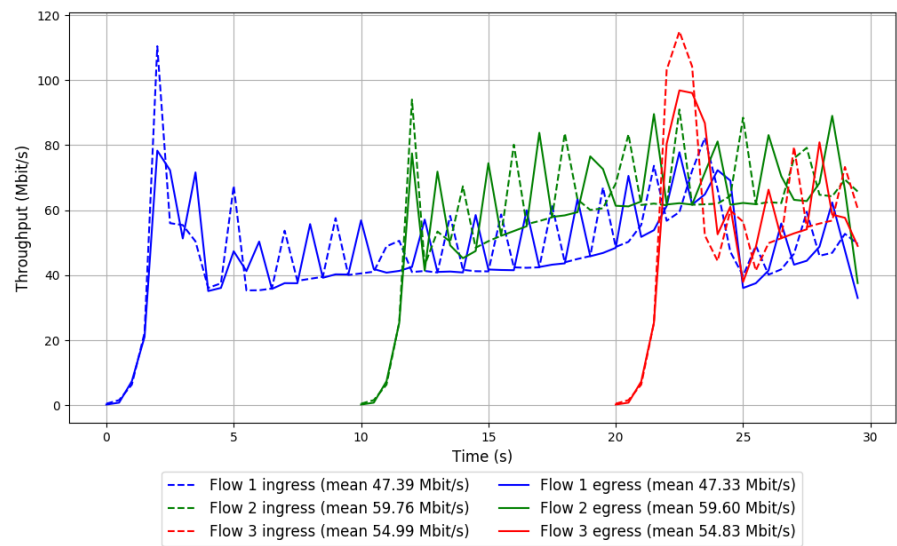
-- Flow 3:

Average throughput: 54.83 Mbit/s

95th percentile per-packet one-way delay: 120.031 ms

Loss rate: 2.53%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-16 19:08:21

End at: 2017-11-16 19:08:51

Below is generated by plot.py at 2017-11-16 21:52:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 119.19 Mbit/s

95th percentile per-packet one-way delay: 120.626 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 62.69 Mbit/s

95th percentile per-packet one-way delay: 120.710 ms

Loss rate: 1.43%

-- Flow 2:

Average throughput: 52.36 Mbit/s

95th percentile per-packet one-way delay: 118.237 ms

Loss rate: 1.15%

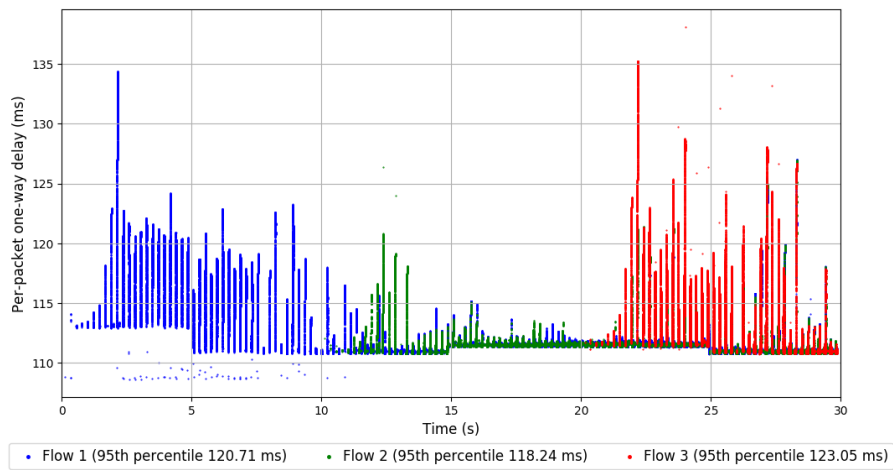
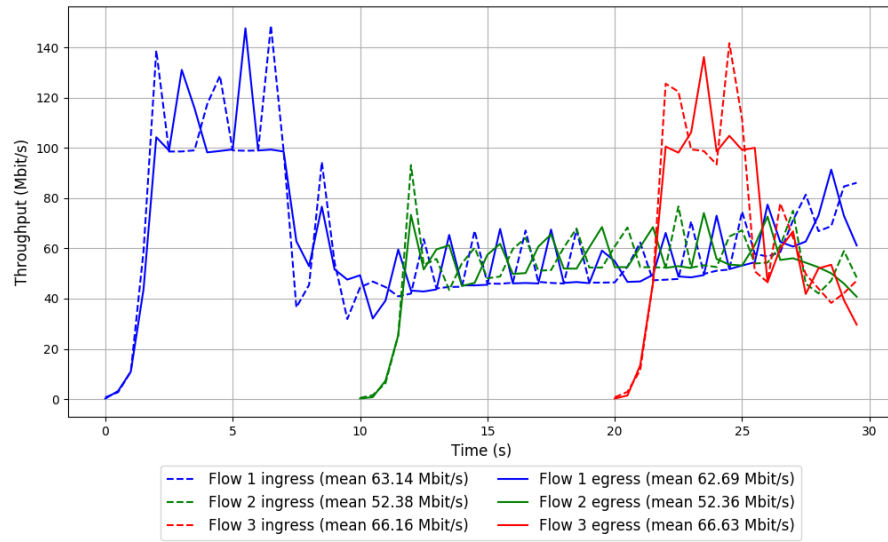
-- Flow 3:

Average throughput: 66.63 Mbit/s

95th percentile per-packet one-way delay: 123.045 ms

Loss rate: 1.55%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-16 19:21:58

End at: 2017-11-16 19:22:28

Below is generated by plot.py at 2017-11-16 21:52:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.19 Mbit/s

95th percentile per-packet one-way delay: 119.089 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 62.41 Mbit/s

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

Loss rate: 0.87%

-- Flow 2:

Average throughput: 60.51 Mbit/s

95th percentile per-packet one-way delay: 121.985 ms

Loss rate: 0.81%

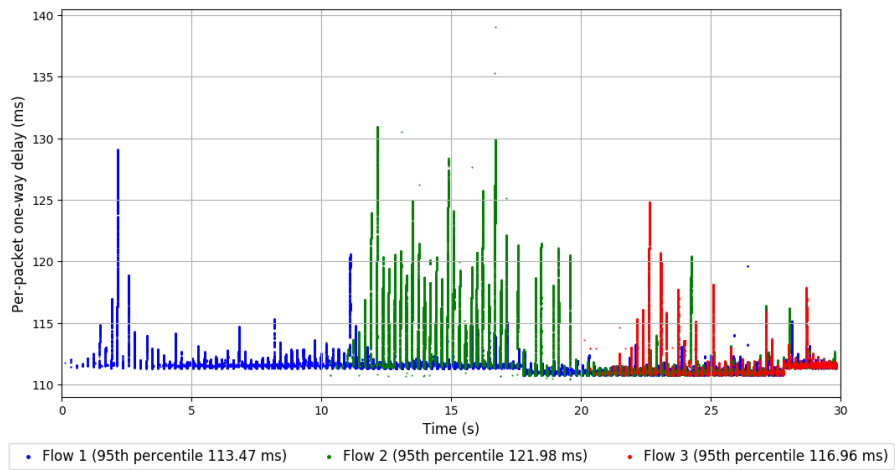
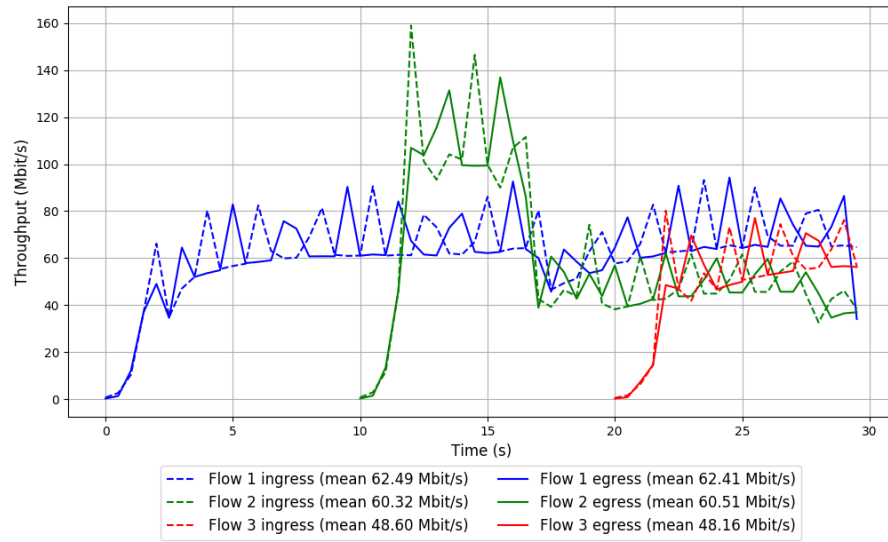
-- Flow 3:

Average throughput: 48.16 Mbit/s

95th percentile per-packet one-way delay: 116.964 ms

Loss rate: 2.91%

Run 10: Report of TCP Cubic — Data Link

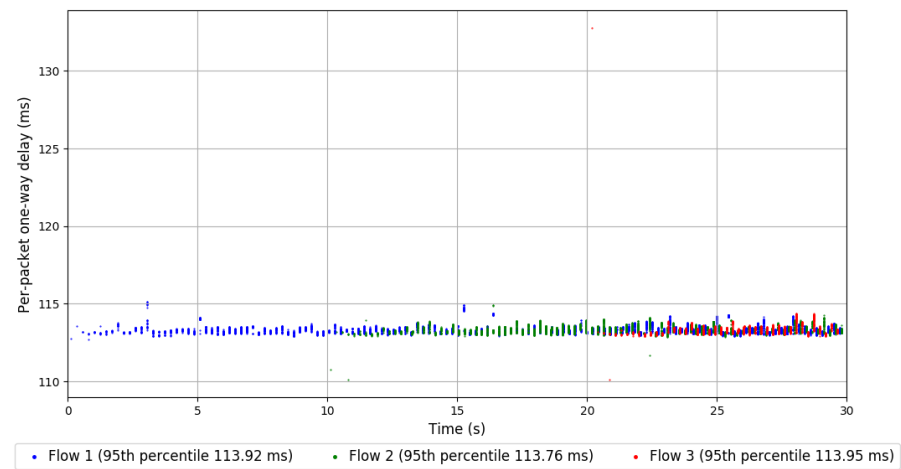
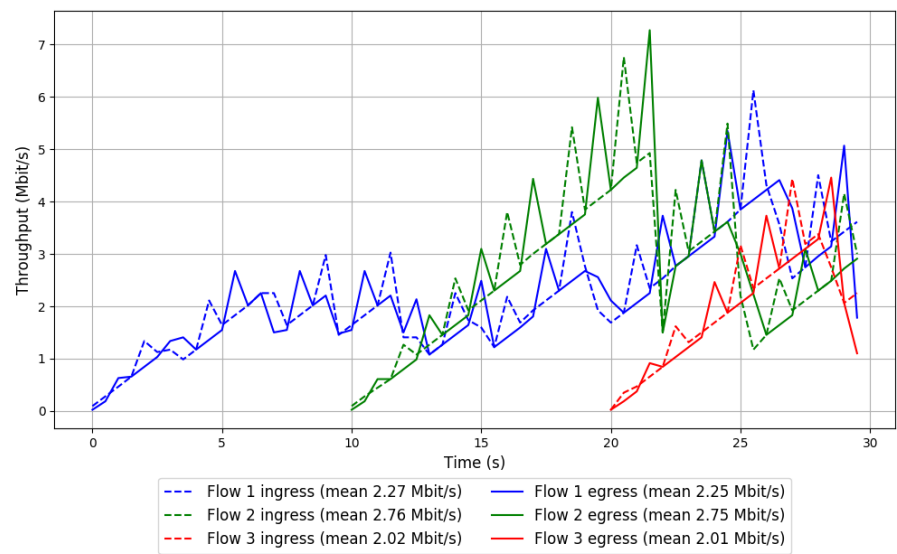


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-16 17:08:12
End at: 2017-11-16 17:08:42

# Below is generated by plot.py at 2017-11-16 21:52:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: 113.817 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 113.922 ms
Loss rate: 1.61%
-- Flow 2:
Average throughput: 2.75 Mbit/s
95th percentile per-packet one-way delay: 113.762 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 113.949 ms
Loss rate: 2.93%
```


Run 1: Report of LEDBAT — Data Link

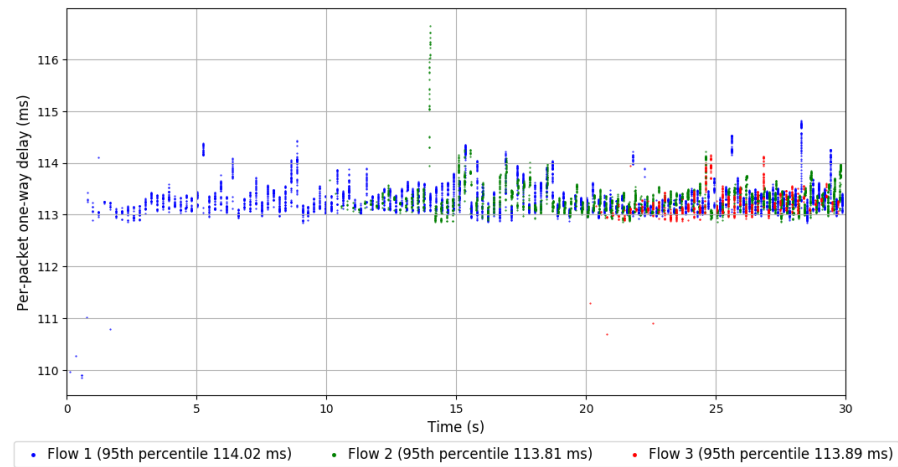
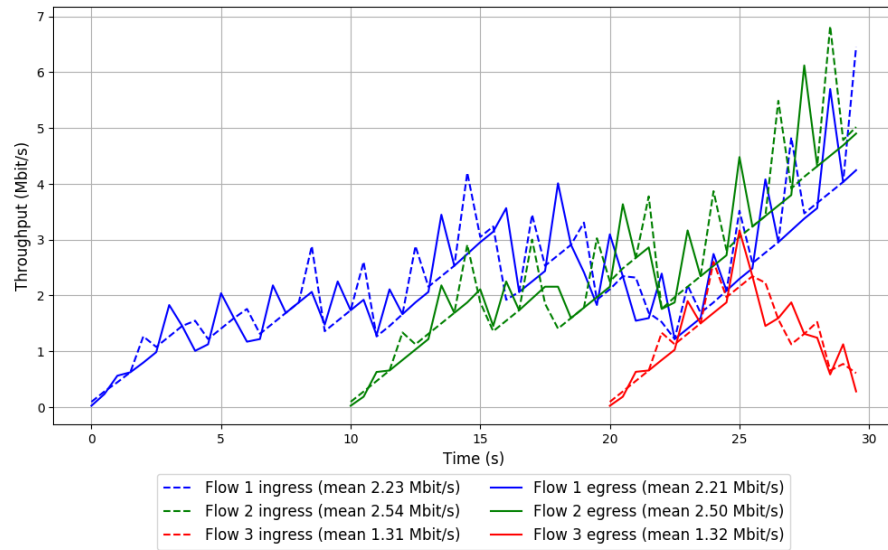


```
Run 2: Statistics of LEDBAT

Start at: 2017-11-16 17:21:55
End at: 2017-11-16 17:22:25

# Below is generated by plot.py at 2017-11-16 21:52:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.28 Mbit/s
95th percentile per-packet one-way delay: 113.916 ms
Loss rate: 1.95%
-- Flow 1:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 114.022 ms
Loss rate: 1.65%
-- Flow 2:
Average throughput: 2.50 Mbit/s
95th percentile per-packet one-way delay: 113.806 ms
Loss rate: 2.51%
-- Flow 3:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 113.890 ms
Loss rate: 1.28%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-16 17:35:22

End at: 2017-11-16 17:35:52

Below is generated by plot.py at 2017-11-16 21:52:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.44 Mbit/s

95th percentile per-packet one-way delay: 111.311 ms

Loss rate: 2.04%

-- Flow 1:

Average throughput: 3.02 Mbit/s

95th percentile per-packet one-way delay: 111.398 ms

Loss rate: 1.14%

-- Flow 2:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 111.265 ms

Loss rate: 2.53%

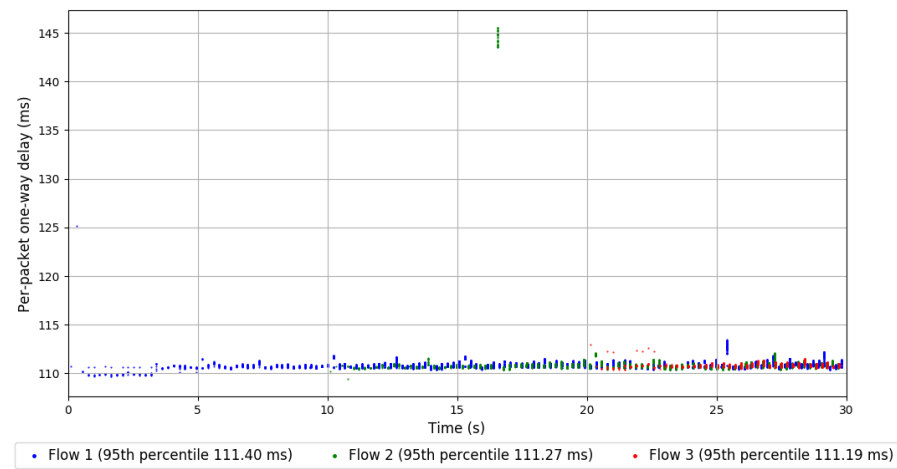
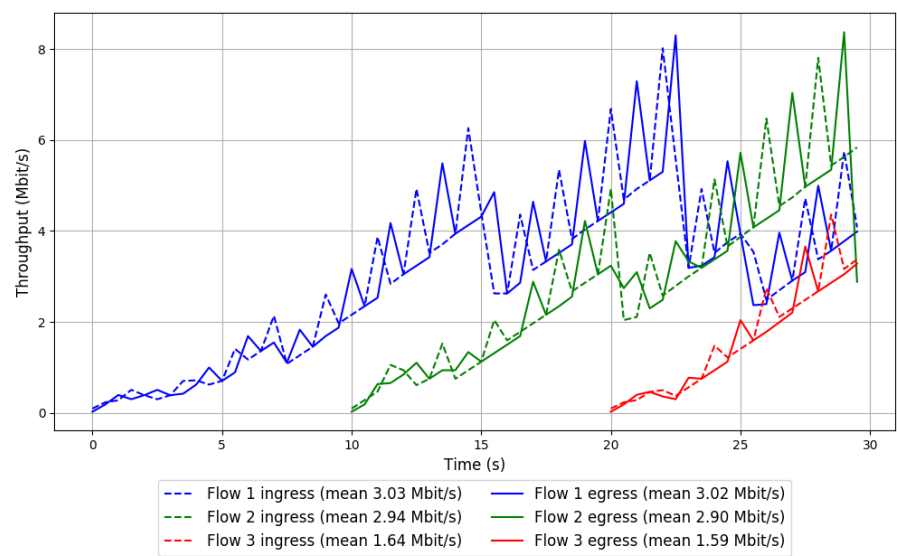
-- Flow 3:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 111.192 ms

Loss rate: 5.32%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-16 17:49:02

End at: 2017-11-16 17:49:32

Below is generated by plot.py at 2017-11-16 21:52:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.11 Mbit/s

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

Loss rate: 1.70%

-- Flow 1:

Average throughput: 2.78 Mbit/s

95th percentile per-packet one-way delay: 111.610 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 2.88 Mbit/s

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

Loss rate: 2.83%

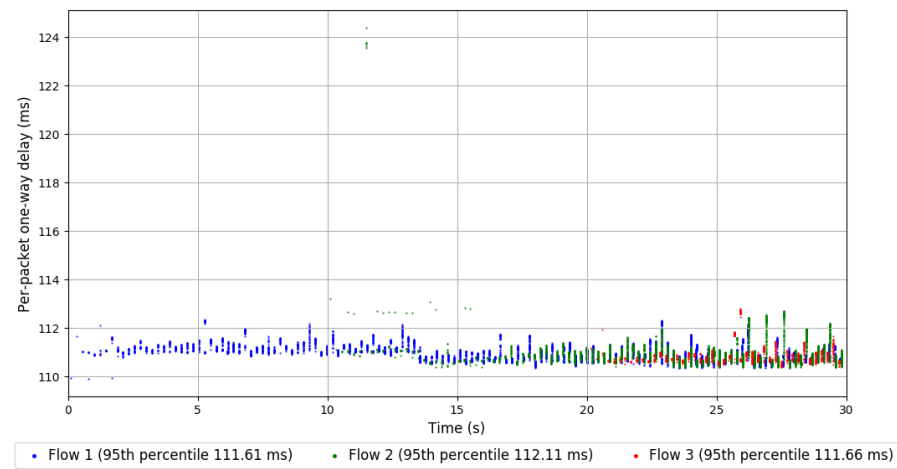
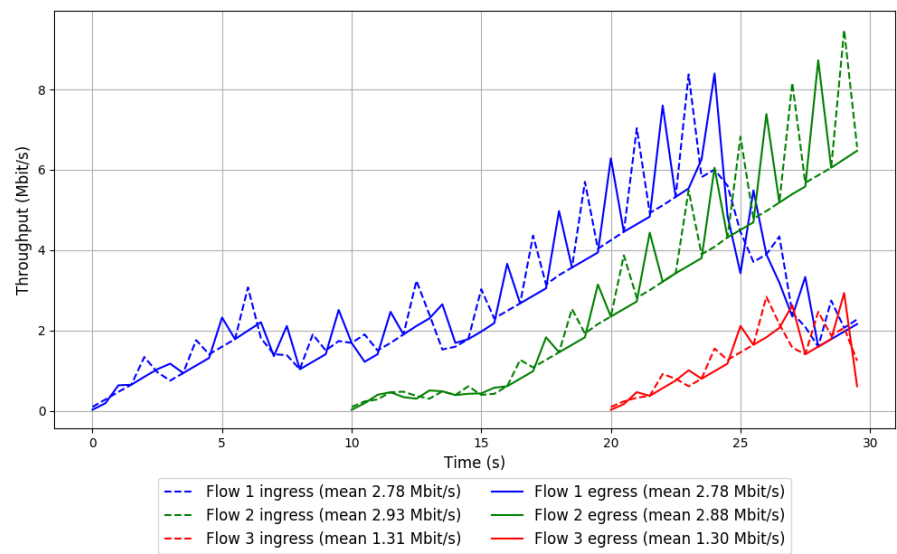
-- Flow 3:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 111.656 ms

Loss rate: 3.01%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-16 18:02:44

End at: 2017-11-16 18:03:14

Below is generated by plot.py at 2017-11-16 21:52:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.04 Mbit/s

95th percentile per-packet one-way delay: 113.750 ms

Loss rate: 1.90%

-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 113.242 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 114.213 ms

Loss rate: 2.05%

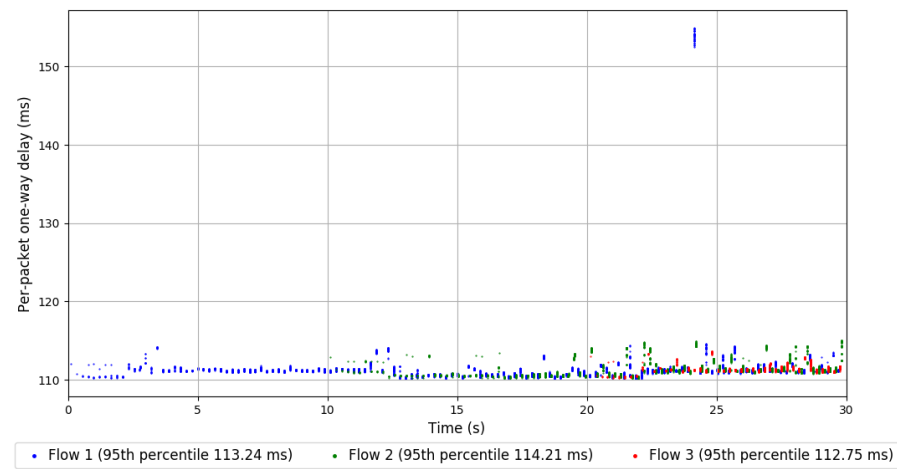
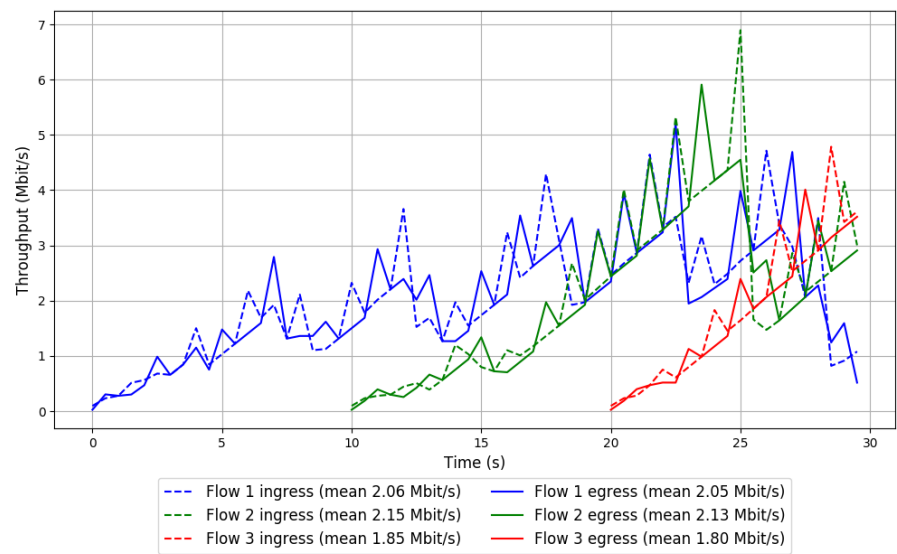
-- Flow 3:

Average throughput: 1.80 Mbit/s

95th percentile per-packet one-way delay: 112.745 ms

Loss rate: 5.01%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-16 18:16:15

End at: 2017-11-16 18:16:45

Below is generated by plot.py at 2017-11-16 21:52:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.38 Mbit/s

95th percentile per-packet one-way delay: 111.107 ms

Loss rate: 2.37%

-- Flow 1:

Average throughput: 1.35 Mbit/s

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

Loss rate: 0.84%

-- Flow 2:

Average throughput: 3.45 Mbit/s

95th percentile per-packet one-way delay: 111.138 ms

Loss rate: 2.54%

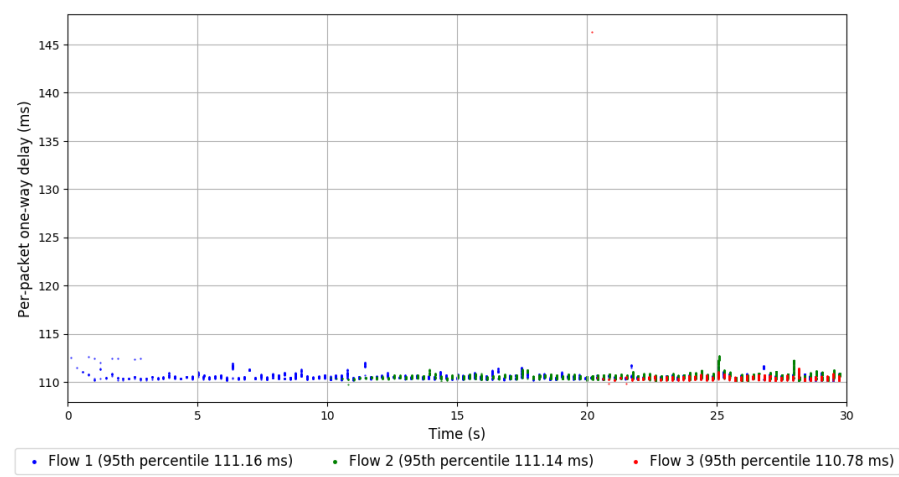
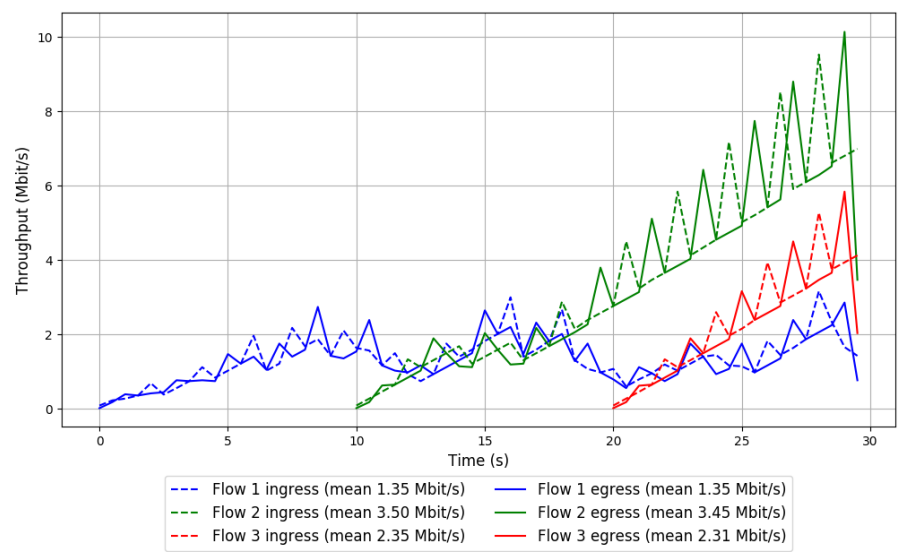
-- Flow 3:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 110.782 ms

Loss rate: 4.53%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-16 18:30:02

End at: 2017-11-16 18:30:32

Below is generated by plot.py at 2017-11-16 21:52:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 111.658 ms

Loss rate: 1.97%

-- Flow 1:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 111.566 ms

Loss rate: 1.84%

-- Flow 2:

Average throughput: 2.76 Mbit/s

95th percentile per-packet one-way delay: 111.850 ms

Loss rate: 1.48%

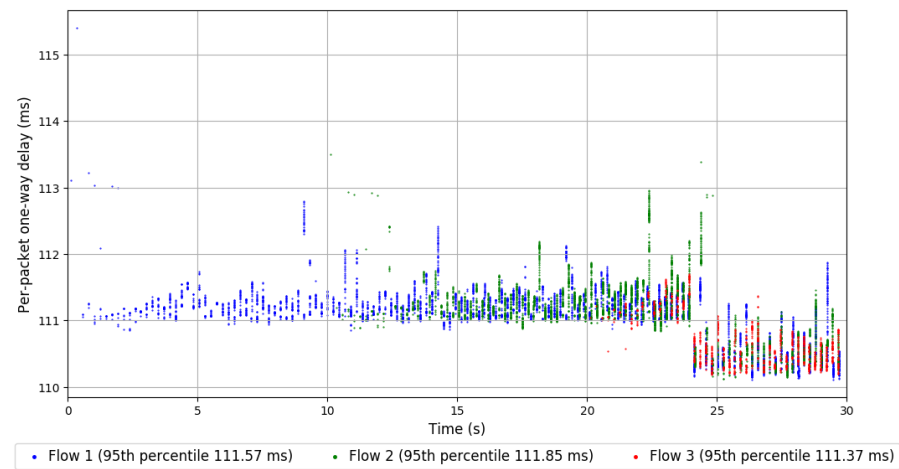
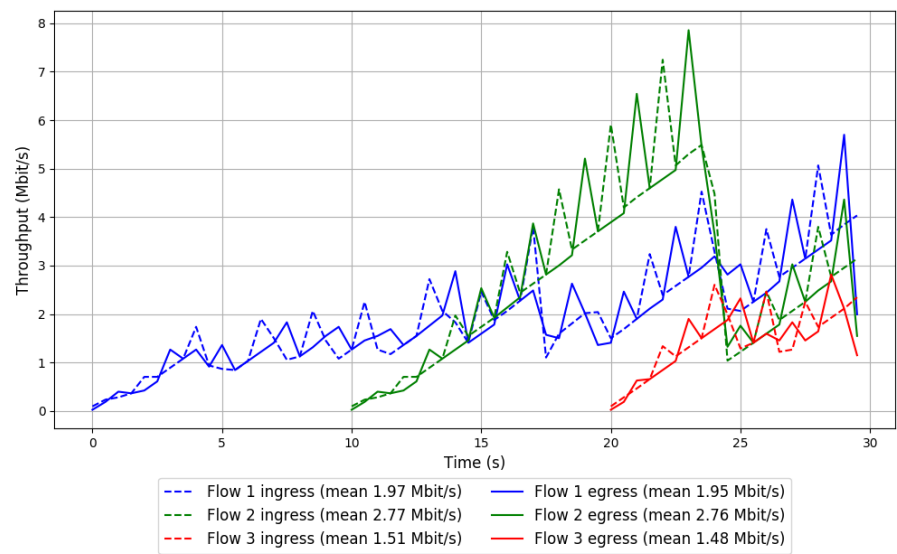
-- Flow 3:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 111.372 ms

Loss rate: 4.31%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-16 18:43:53

End at: 2017-11-16 18:44:23

Below is generated by plot.py at 2017-11-16 21:52:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 111.796 ms

Loss rate: 3.00%

-- Flow 1:

Average throughput: 10.26 Mbit/s

95th percentile per-packet one-way delay: 4864.849 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.80 Mbit/s

95th percentile per-packet one-way delay: 111.517 ms

Loss rate: 0.79%

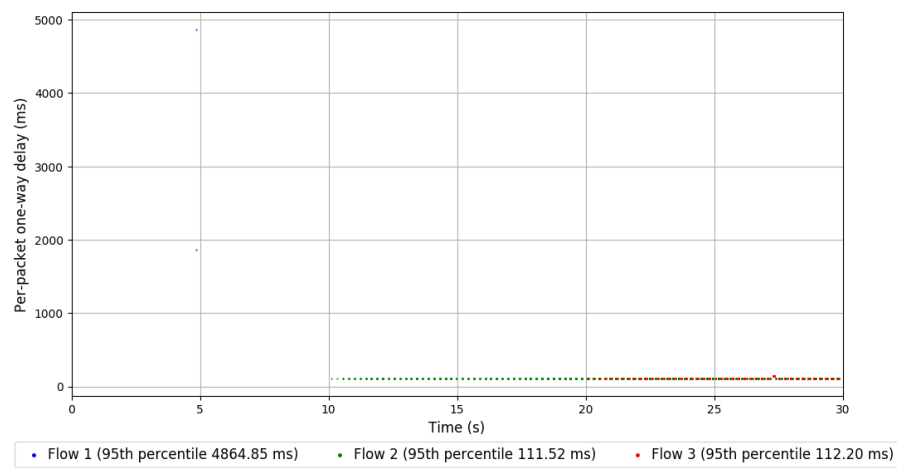
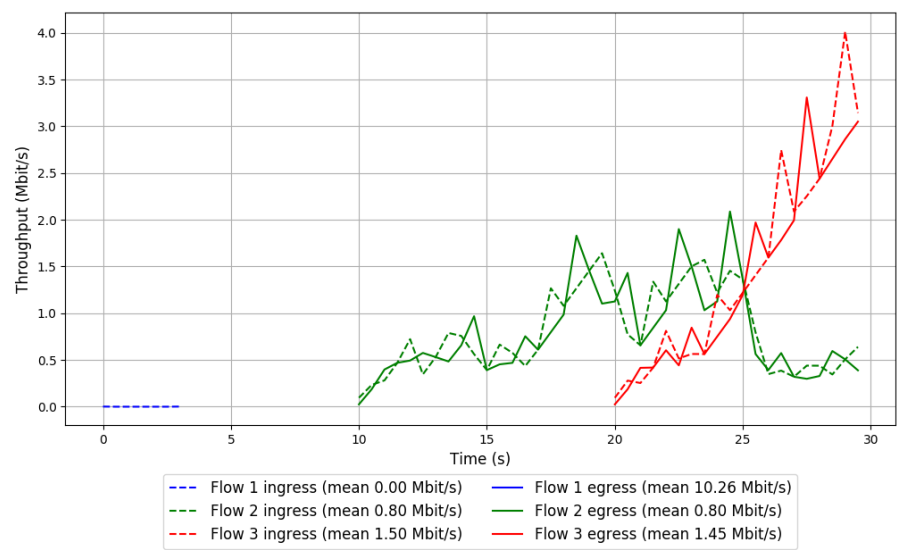
-- Flow 3:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 112.201 ms

Loss rate: 5.38%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-16 18:57:26

End at: 2017-11-16 18:57:56

Below is generated by plot.py at 2017-11-16 21:52:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.41 Mbit/s

95th percentile per-packet one-way delay: 112.525 ms

Loss rate: 2.01%

-- Flow 1:

Average throughput: 4.56 Mbit/s

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

Loss rate: 1.81%

-- Flow 2:

Average throughput: 2.62 Mbit/s

95th percentile per-packet one-way delay: 112.320 ms

Loss rate: 2.52%

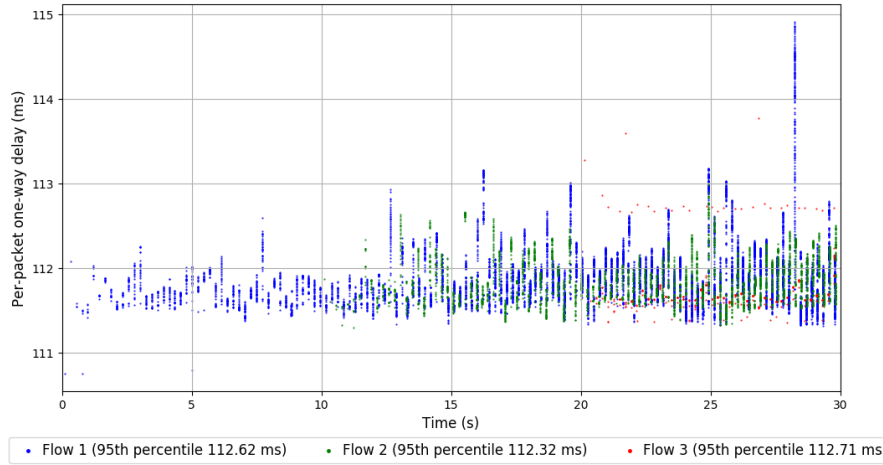
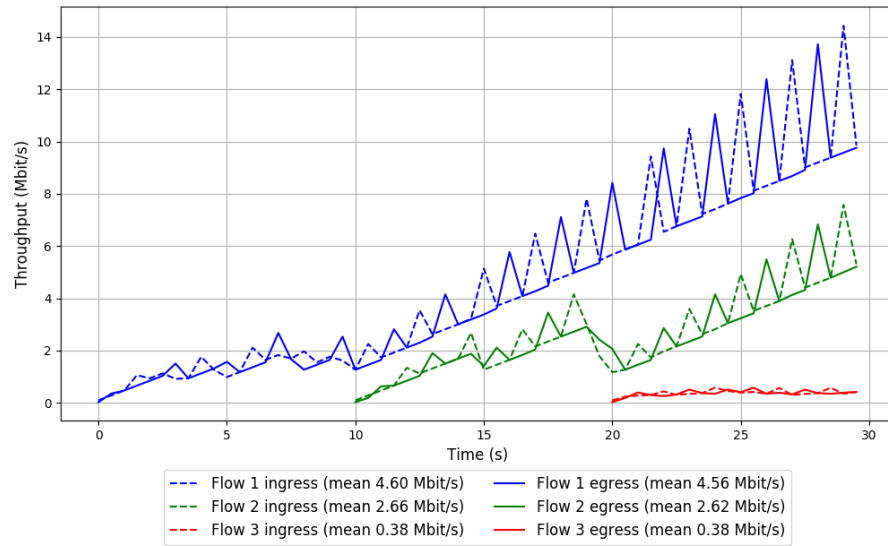
-- Flow 3:

Average throughput: 0.38 Mbit/s

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

Loss rate: 2.43%

Run 9: Report of LEDBAT — Data Link

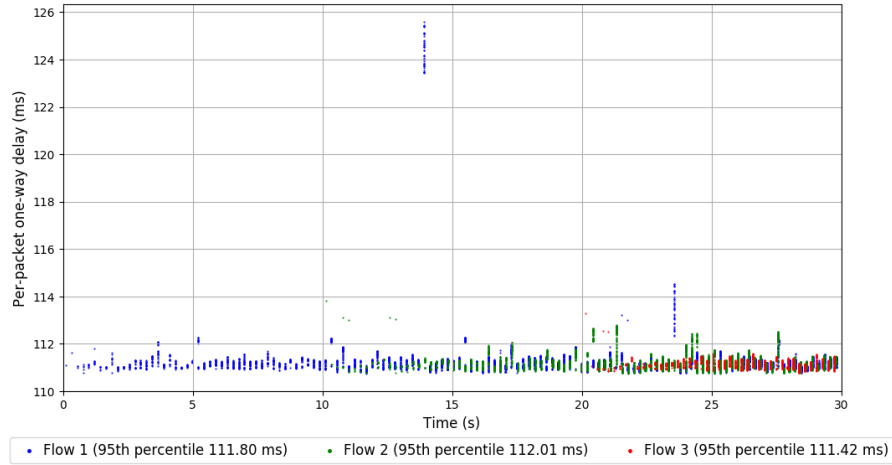
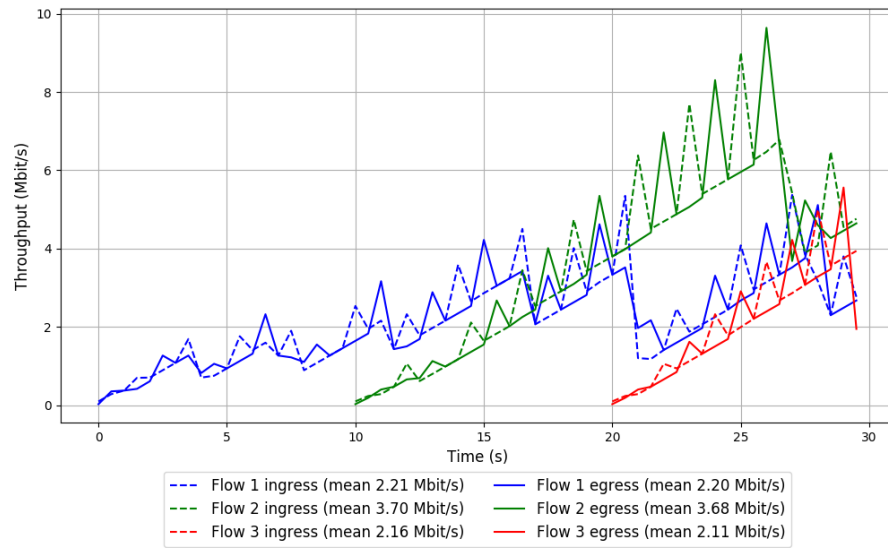


```
Run 10: Statistics of LEDBAT

Start at: 2017-11-16 19:11:16
End at: 2017-11-16 19:11:46

# Below is generated by plot.py at 2017-11-16 21:52:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.31 Mbit/s
95th percentile per-packet one-way delay: 111.809 ms
Loss rate: 1.83%
-- Flow 1:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 111.798 ms
Loss rate: 1.12%
-- Flow 2:
Average throughput: 3.68 Mbit/s
95th percentile per-packet one-way delay: 112.009 ms
Loss rate: 1.64%
-- Flow 3:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 111.416 ms
Loss rate: 4.71%
```

Run 10: Report of LEDBAT — Data Link

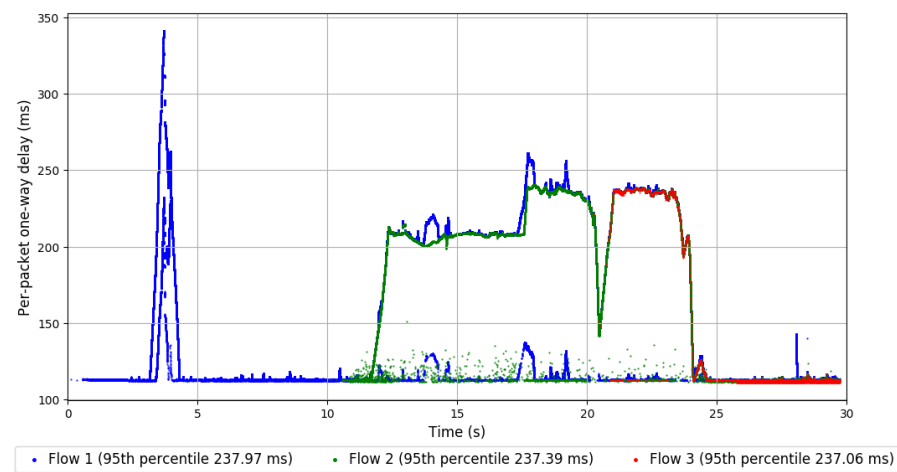
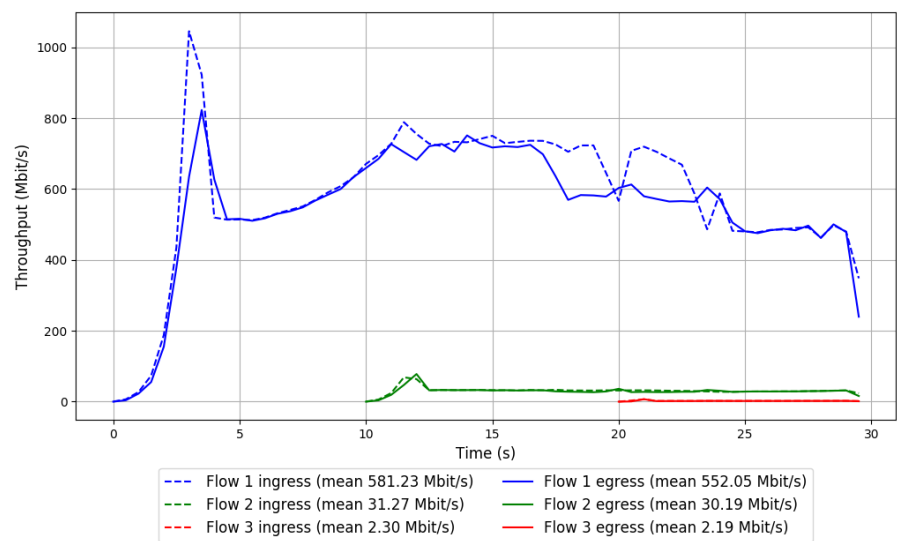


```
Run 1: Statistics of PCC

Start at: 2017-11-16 17:14:03
End at: 2017-11-16 17:14:33

# Below is generated by plot.py at 2017-11-16 22:01:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 572.75 Mbit/s
95th percentile per-packet one-way delay: 237.924 ms
Loss rate: 5.70%
-- Flow 1:
Average throughput: 552.05 Mbit/s
95th percentile per-packet one-way delay: 237.966 ms
Loss rate: 5.73%
-- Flow 2:
Average throughput: 30.19 Mbit/s
95th percentile per-packet one-way delay: 237.391 ms
Loss rate: 4.56%
-- Flow 3:
Average throughput: 2.19 Mbit/s
95th percentile per-packet one-way delay: 237.061 ms
Loss rate: 7.92%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-16 17:27:29

End at: 2017-11-16 17:27:59

Below is generated by plot.py at 2017-11-16 22:01:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 606.91 Mbit/s

95th percentile per-packet one-way delay: 207.622 ms

Loss rate: 2.91%

-- Flow 1:

Average throughput: 481.75 Mbit/s

95th percentile per-packet one-way delay: 208.974 ms

Loss rate: 2.93%

-- Flow 2:

Average throughput: 159.34 Mbit/s

95th percentile per-packet one-way delay: 206.804 ms

Loss rate: 2.47%

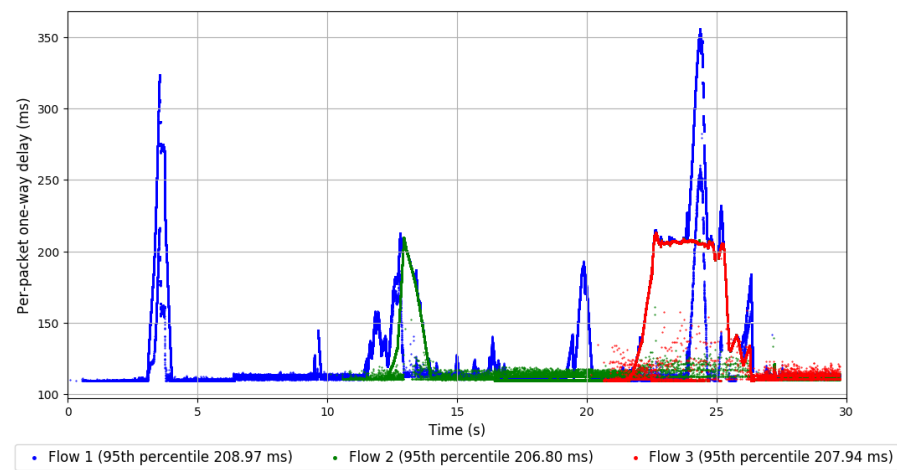
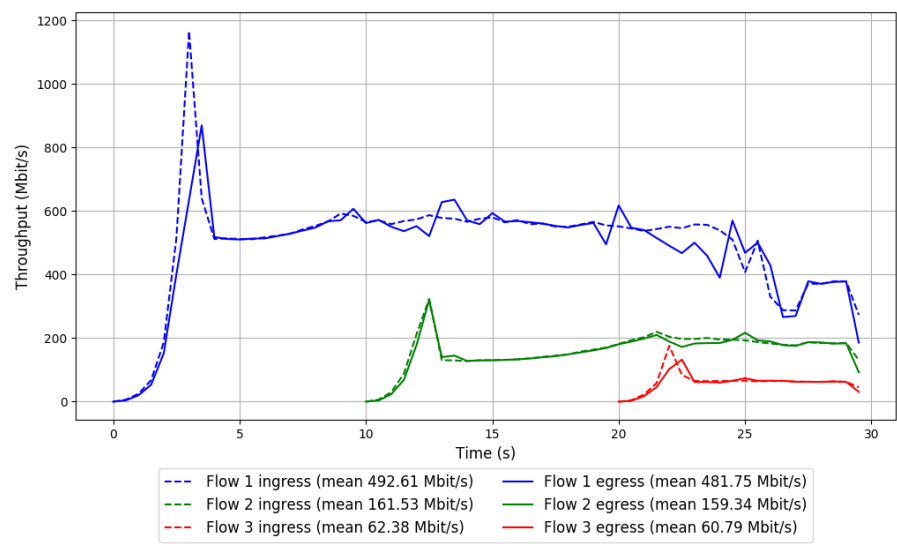
-- Flow 3:

Average throughput: 60.79 Mbit/s

95th percentile per-packet one-way delay: 207.945 ms

Loss rate: 4.79%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-16 17:41:09

End at: 2017-11-16 17:41:39

Below is generated by plot.py at 2017-11-16 22:01:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 618.39 Mbit/s

95th percentile per-packet one-way delay: 261.438 ms

Loss rate: 4.32%

-- Flow 1:

Average throughput: 526.46 Mbit/s

95th percentile per-packet one-way delay: 275.088 ms

Loss rate: 4.66%

-- Flow 2:

Average throughput: 122.90 Mbit/s

95th percentile per-packet one-way delay: 212.109 ms

Loss rate: 2.15%

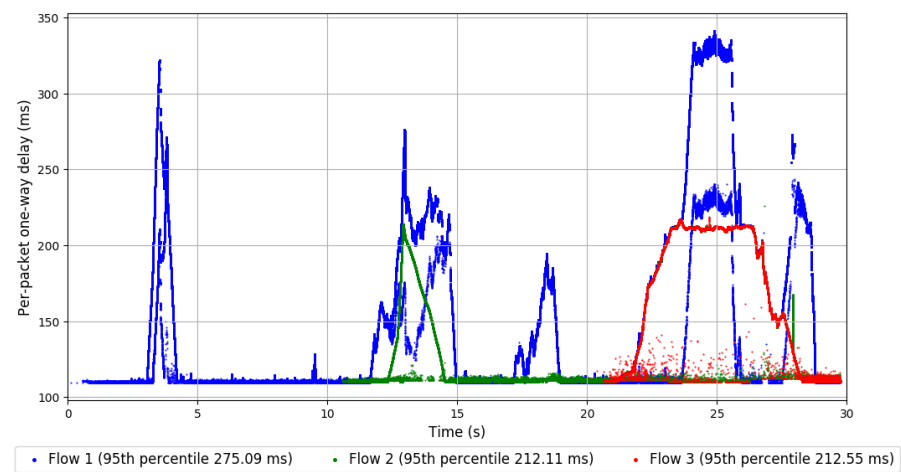
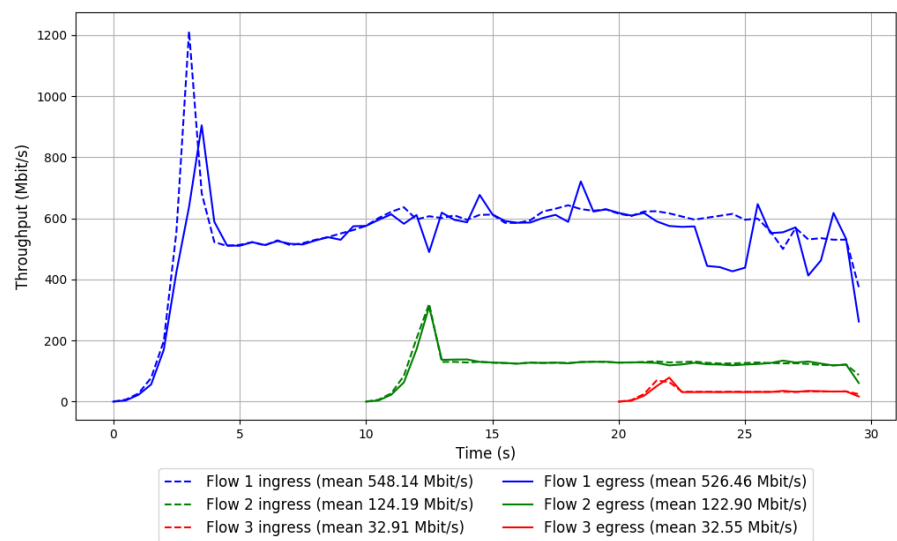
-- Flow 3:

Average throughput: 32.55 Mbit/s

95th percentile per-packet one-way delay: 212.550 ms

Loss rate: 3.37%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-16 17:54:52

End at: 2017-11-16 17:55:22

Below is generated by plot.py at 2017-11-16 22:02:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 649.24 Mbit/s

95th percentile per-packet one-way delay: 223.830 ms

Loss rate: 2.94%

-- Flow 1:

Average throughput: 568.20 Mbit/s

95th percentile per-packet one-way delay: 227.632 ms

Loss rate: 2.98%

-- Flow 2:

Average throughput: 120.27 Mbit/s

95th percentile per-packet one-way delay: 207.776 ms

Loss rate: 2.67%

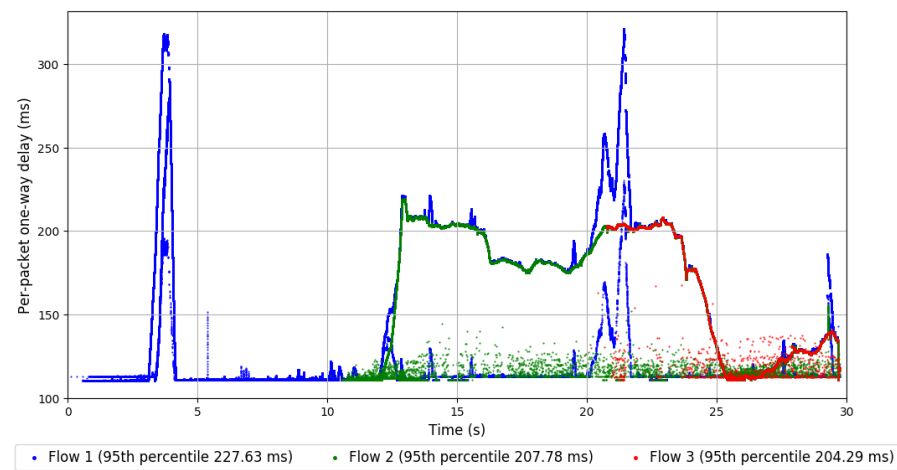
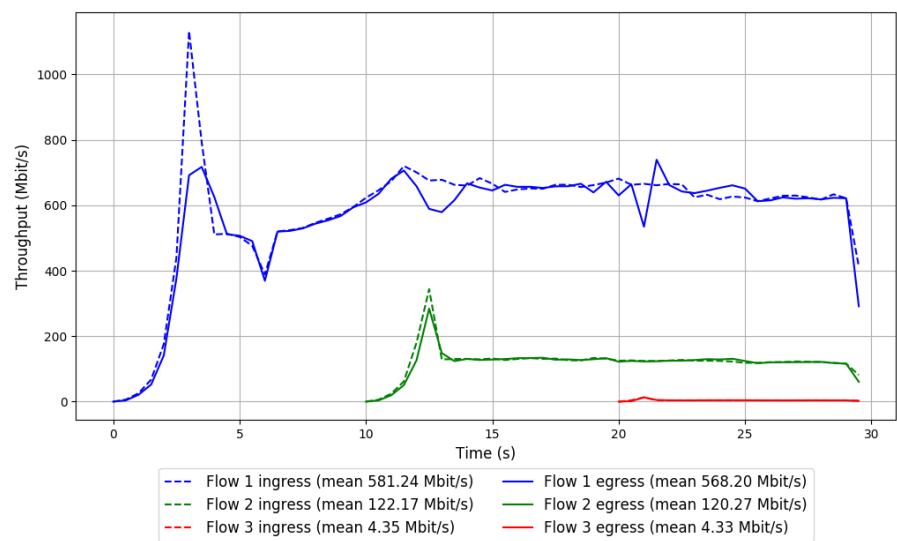
-- Flow 3:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 204.291 ms

Loss rate: 2.88%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-16 18:08:28

End at: 2017-11-16 18:08:58

Below is generated by plot.py at 2017-11-16 22:02:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 606.03 Mbit/s

95th percentile per-packet one-way delay: 207.724 ms

Loss rate: 2.17%

-- Flow 1:

Average throughput: 520.58 Mbit/s

95th percentile per-packet one-way delay: 207.936 ms

Loss rate: 2.19%

-- Flow 2:

Average throughput: 124.84 Mbit/s

95th percentile per-packet one-way delay: 206.752 ms

Loss rate: 2.06%

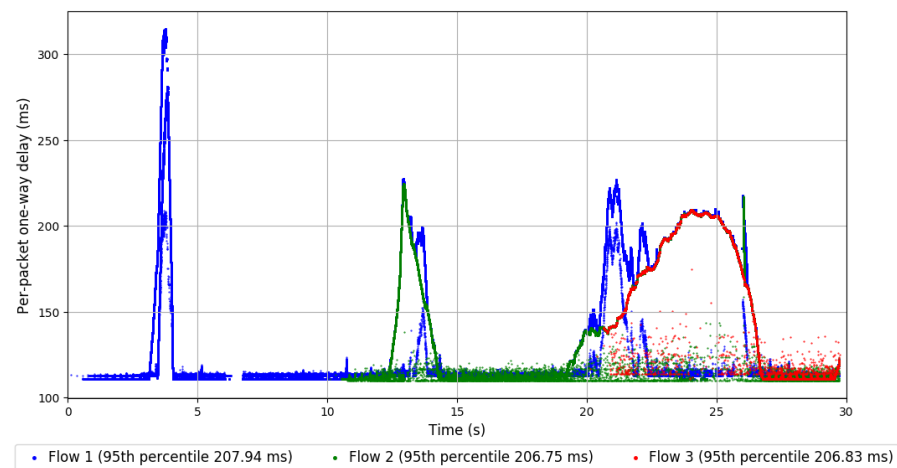
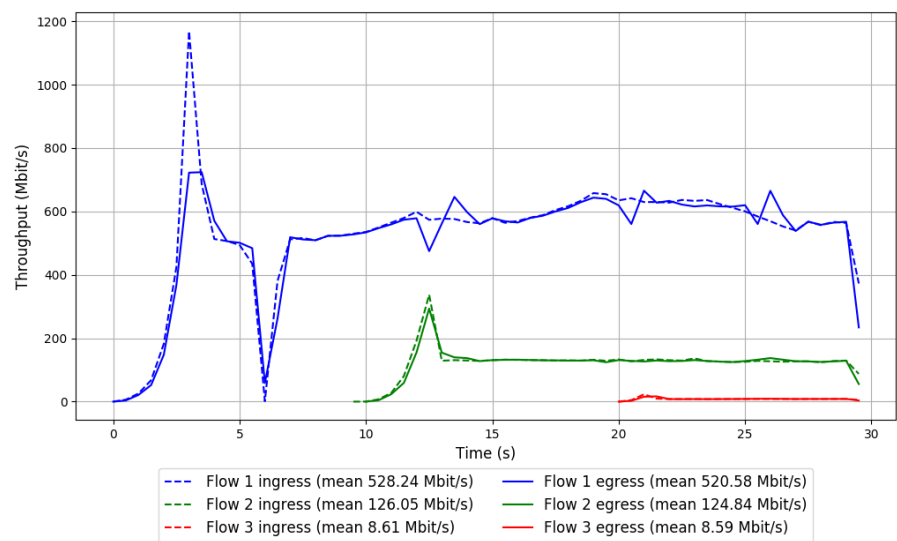
-- Flow 3:

Average throughput: 8.59 Mbit/s

95th percentile per-packet one-way delay: 206.828 ms

Loss rate: 2.41%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-16 18:22:03

End at: 2017-11-16 18:22:33

Below is generated by plot.py at 2017-11-16 22:02:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 601.44 Mbit/s

95th percentile per-packet one-way delay: 295.274 ms

Loss rate: 6.76%

-- Flow 1:

Average throughput: 517.50 Mbit/s

95th percentile per-packet one-way delay: 301.385 ms

Loss rate: 7.33%

-- Flow 2:

Average throughput: 67.60 Mbit/s

95th percentile per-packet one-way delay: 203.079 ms

Loss rate: 1.94%

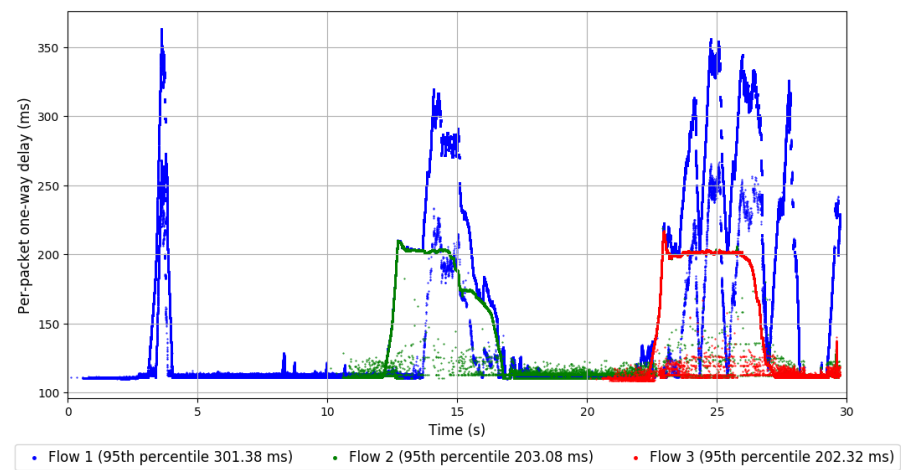
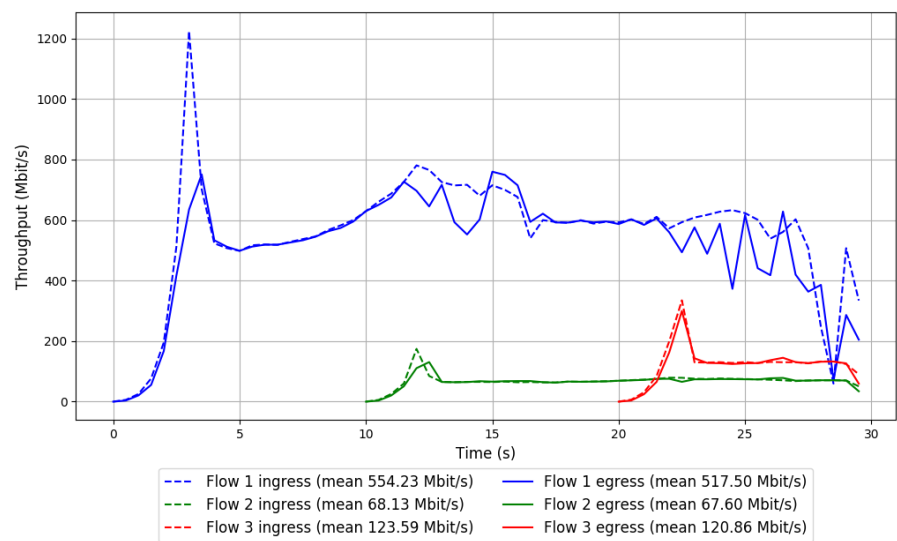
-- Flow 3:

Average throughput: 120.86 Mbit/s

95th percentile per-packet one-way delay: 202.323 ms

Loss rate: 4.42%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-16 18:35:56

End at: 2017-11-16 18:36:26

Below is generated by plot.py at 2017-11-16 22:03:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 623.79 Mbit/s

95th percentile per-packet one-way delay: 207.776 ms

Loss rate: 3.36%

-- Flow 1:

Average throughput: 519.12 Mbit/s

95th percentile per-packet one-way delay: 212.776 ms

Loss rate: 3.47%

-- Flow 2:

Average throughput: 156.01 Mbit/s

95th percentile per-packet one-way delay: 205.145 ms

Loss rate: 2.84%

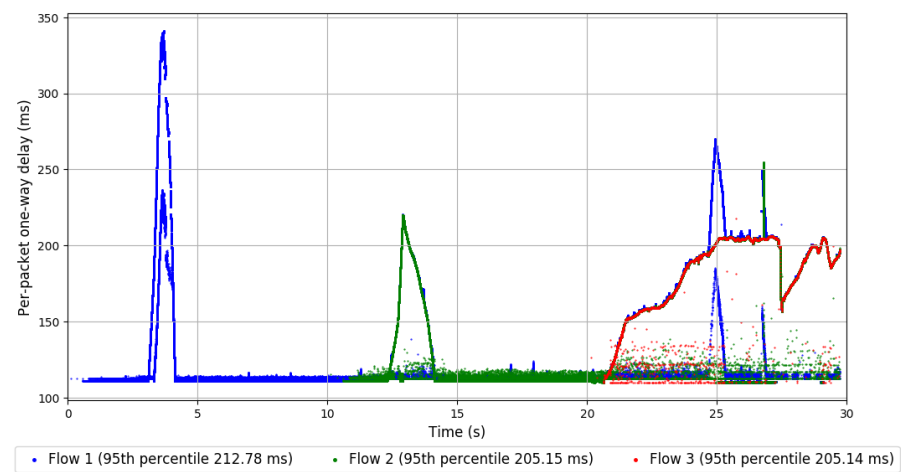
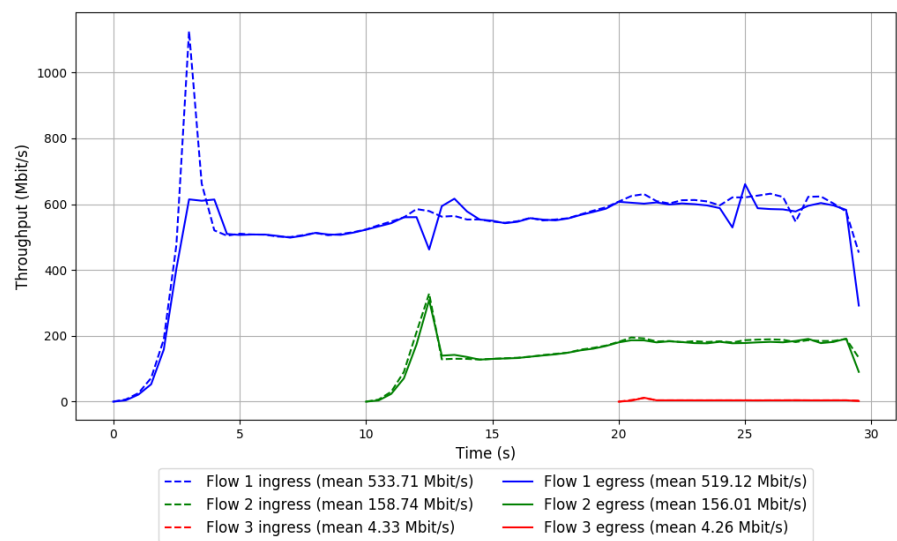
-- Flow 3:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 205.141 ms

Loss rate: 4.02%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-16 18:49:38

End at: 2017-11-16 18:50:08

Below is generated by plot.py at 2017-11-16 22:03:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 610.26 Mbit/s

95th percentile per-packet one-way delay: 216.294 ms

Loss rate: 2.97%

-- Flow 1:

Average throughput: 521.77 Mbit/s

95th percentile per-packet one-way delay: 216.243 ms

Loss rate: 2.97%

-- Flow 2:

Average throughput: 131.55 Mbit/s

95th percentile per-packet one-way delay: 216.500 ms

Loss rate: 3.01%

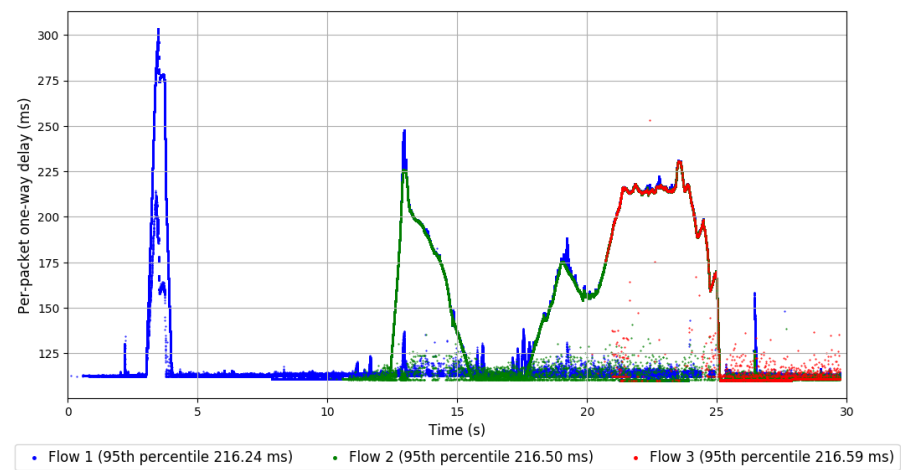
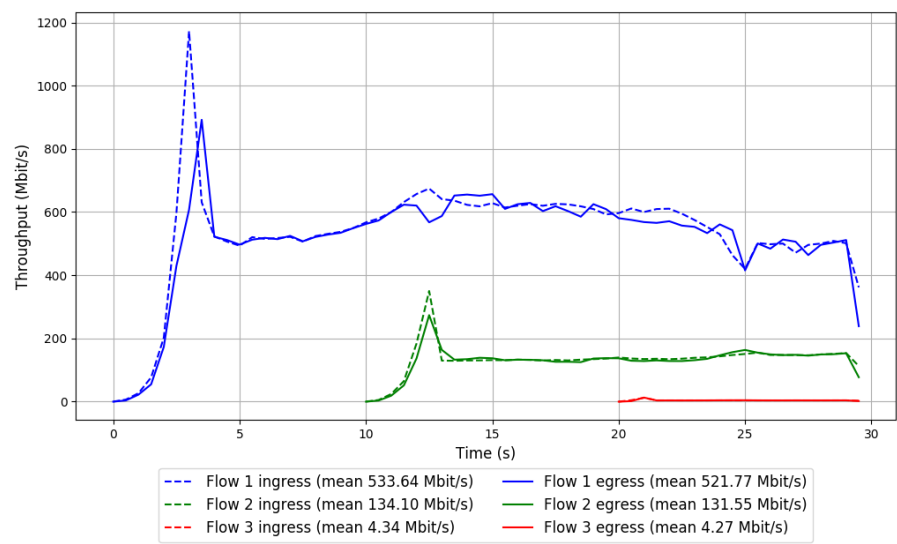
-- Flow 3:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 216.588 ms

Loss rate: 3.97%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-16 19:03:25

End at: 2017-11-16 19:03:55

Below is generated by plot.py at 2017-11-16 22:11:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 557.24 Mbit/s

95th percentile per-packet one-way delay: 225.244 ms

Loss rate: 2.87%

-- Flow 1:

Average throughput: 529.44 Mbit/s

95th percentile per-packet one-way delay: 225.220 ms

Loss rate: 2.89%

-- Flow 2:

Average throughput: 33.84 Mbit/s

95th percentile per-packet one-way delay: 225.151 ms

Loss rate: 2.00%

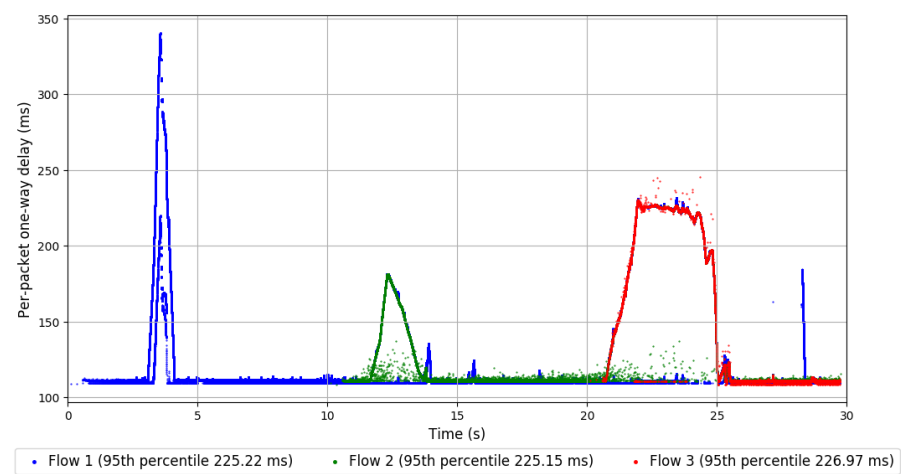
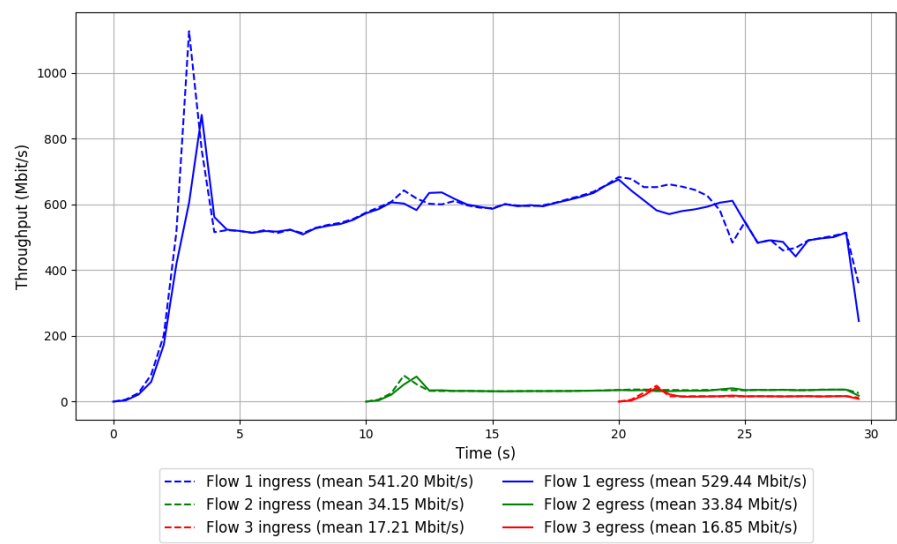
-- Flow 3:

Average throughput: 16.85 Mbit/s

95th percentile per-packet one-way delay: 226.972 ms

Loss rate: 4.29%

Run 9: Report of PCC — Data Link

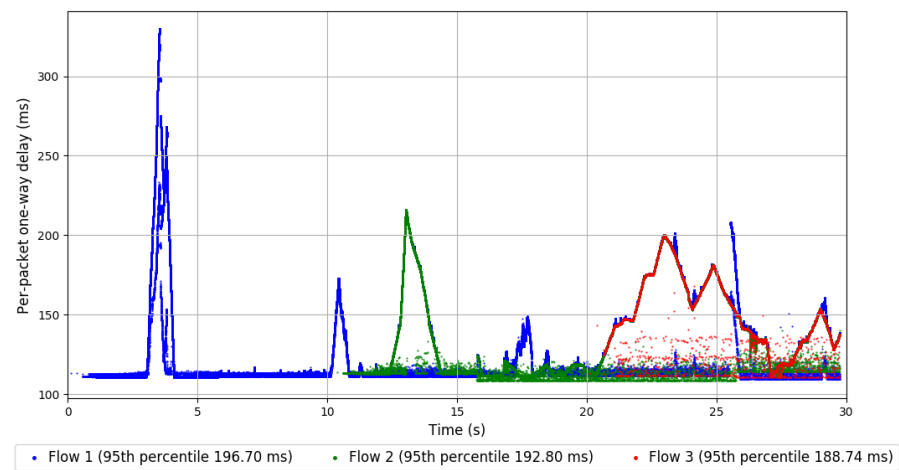
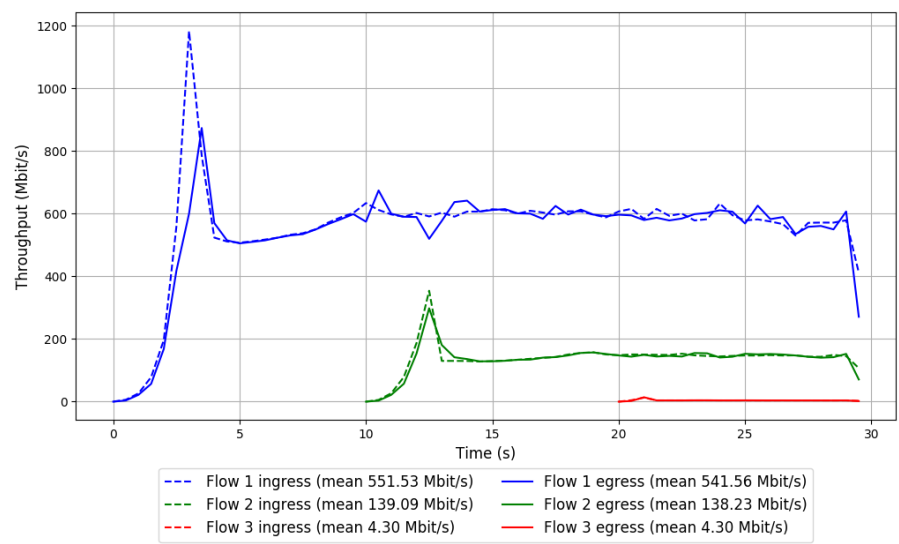


```
Run 10: Statistics of PCC

Start at: 2017-11-16 19:17:00
End at: 2017-11-16 19:17:30

# Below is generated by plot.py at 2017-11-16 22:13:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 634.31 Mbit/s
95th percentile per-packet one-way delay: 195.996 ms
Loss rate: 2.45%
-- Flow 1:
Average throughput: 541.56 Mbit/s
95th percentile per-packet one-way delay: 196.700 ms
Loss rate: 2.57%
-- Flow 2:
Average throughput: 138.23 Mbit/s
95th percentile per-packet one-way delay: 192.797 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 4.30 Mbit/s
95th percentile per-packet one-way delay: 188.740 ms
Loss rate: 2.26%
```

Run 10: Report of PCC — Data Link

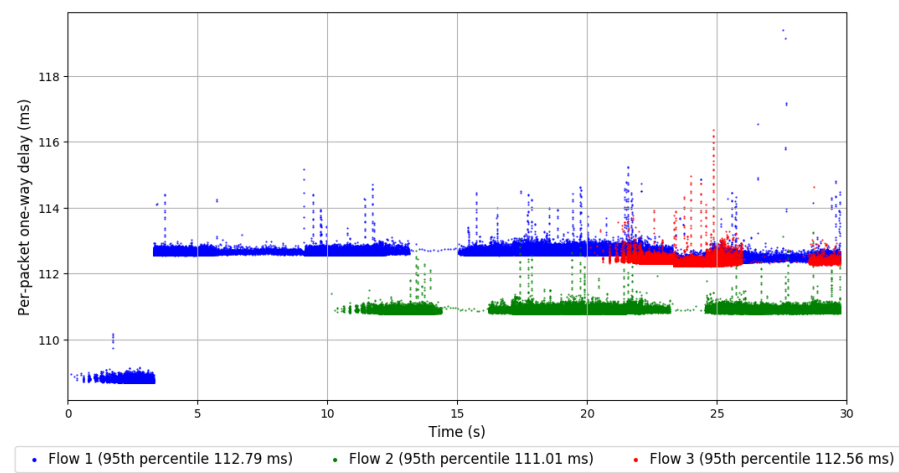
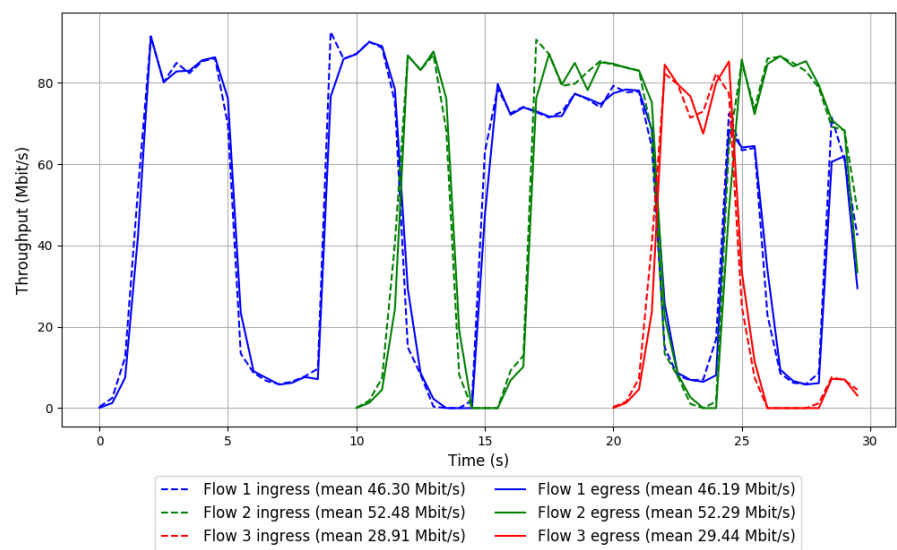


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-11-16 17:16:02
End at: 2017-11-16 17:16:32

# Below is generated by plot.py at 2017-11-16 22:13:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.33 Mbit/s
95th percentile per-packet one-way delay: 112.737 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 46.19 Mbit/s
95th percentile per-packet one-way delay: 112.788 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 52.29 Mbit/s
95th percentile per-packet one-way delay: 111.009 ms
Loss rate: 1.48%
-- Flow 3:
Average throughput: 29.44 Mbit/s
95th percentile per-packet one-way delay: 112.555 ms
Loss rate: 0.50%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-11-16 17:29:30

End at: 2017-11-16 17:30:00

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.67 Mbit/s

95th percentile per-packet one-way delay: 112.017 ms

Loss rate: 1.44%

-- Flow 1:

Average throughput: 60.70 Mbit/s

95th percentile per-packet one-way delay: 111.829 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 53.22 Mbit/s

95th percentile per-packet one-way delay: 112.075 ms

Loss rate: 1.84%

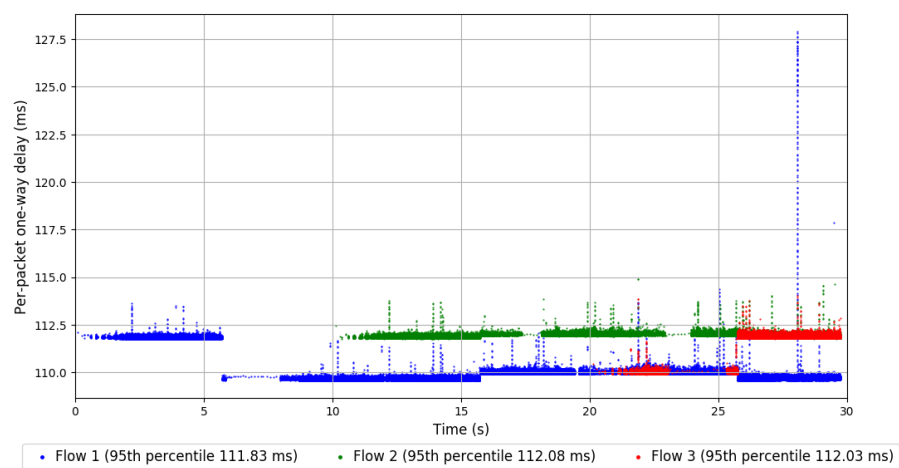
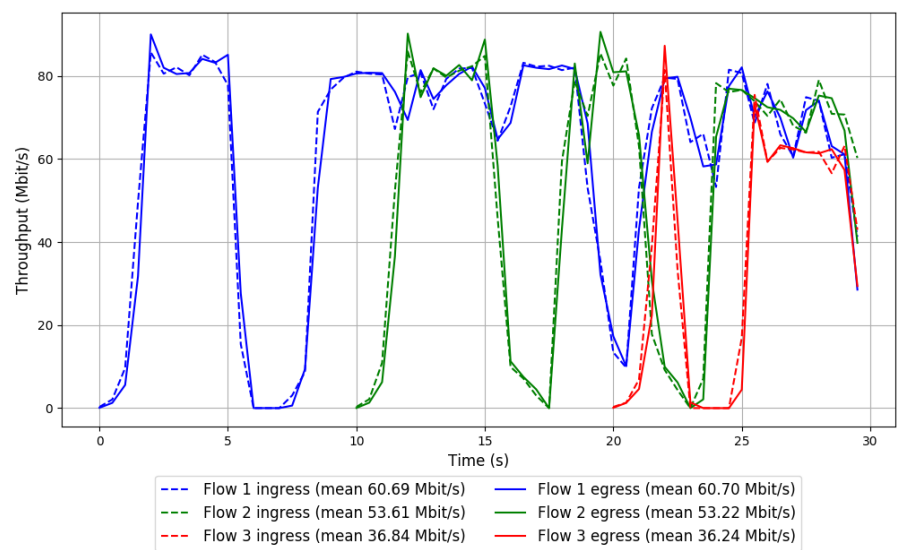
-- Flow 3:

Average throughput: 36.24 Mbit/s

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

Loss rate: 3.82%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-16 17:43:10

End at: 2017-11-16 17:43:40

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.78 Mbit/s

95th percentile per-packet one-way delay: 112.602 ms

Loss rate: 2.06%

-- Flow 1:

Average throughput: 54.50 Mbit/s

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

Loss rate: 0.99%

-- Flow 2:

Average throughput: 34.22 Mbit/s

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

Loss rate: 2.78%

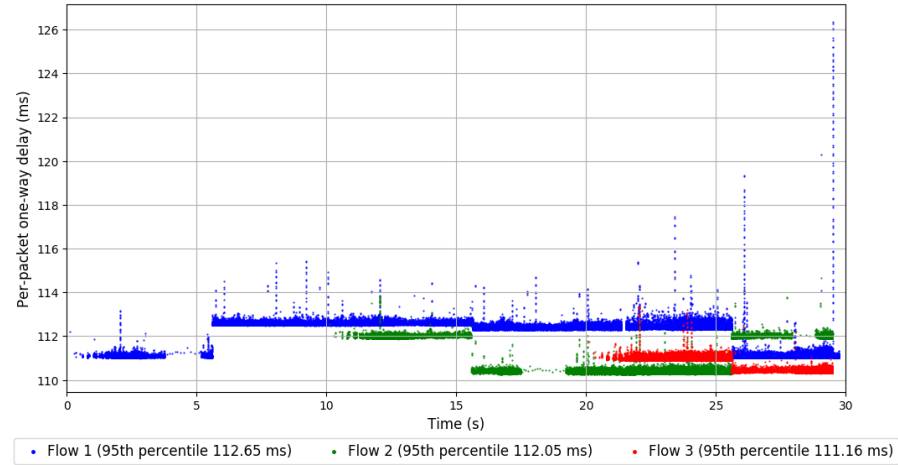
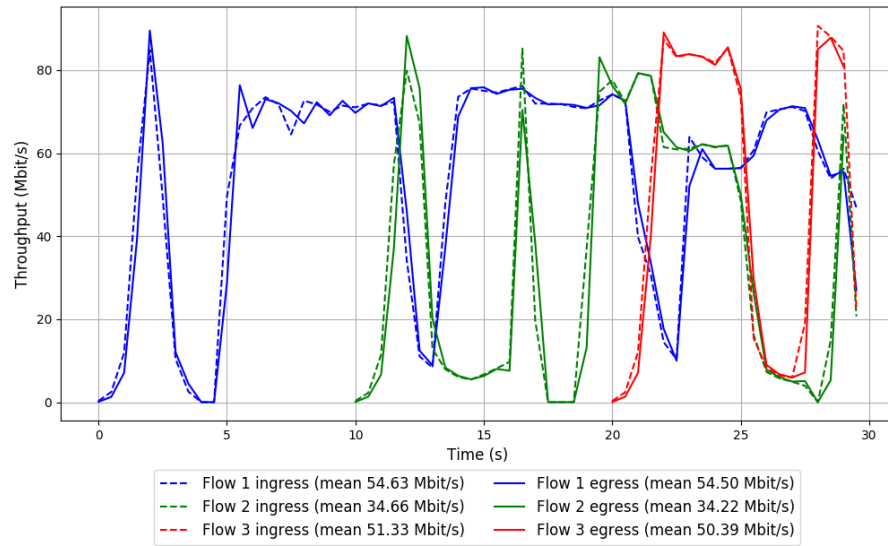
-- Flow 3:

Average throughput: 50.39 Mbit/s

95th percentile per-packet one-way delay: 111.159 ms

Loss rate: 4.60%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-16 17:56:54

End at: 2017-11-16 17:57:24

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.92 Mbit/s

95th percentile per-packet one-way delay: 112.749 ms

Loss rate: 1.38%

-- Flow 1:

Average throughput: 55.89 Mbit/s

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

Loss rate: 0.82%

-- Flow 2:

Average throughput: 48.32 Mbit/s

95th percentile per-packet one-way delay: 110.195 ms

Loss rate: 1.42%

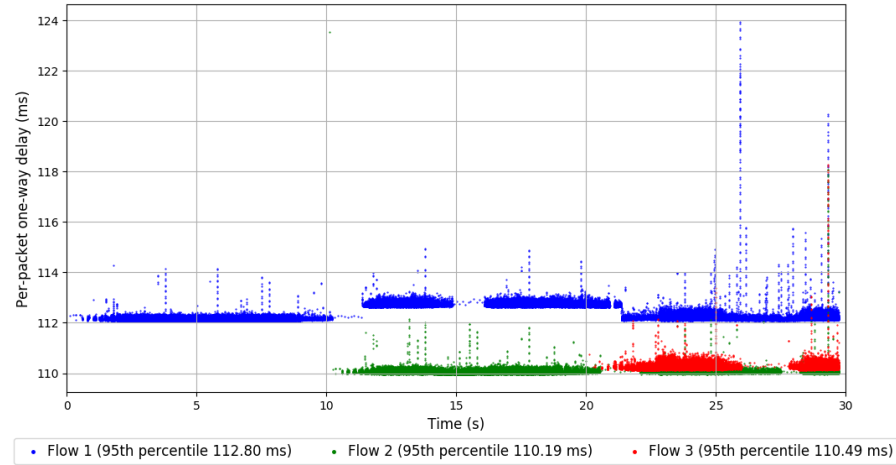
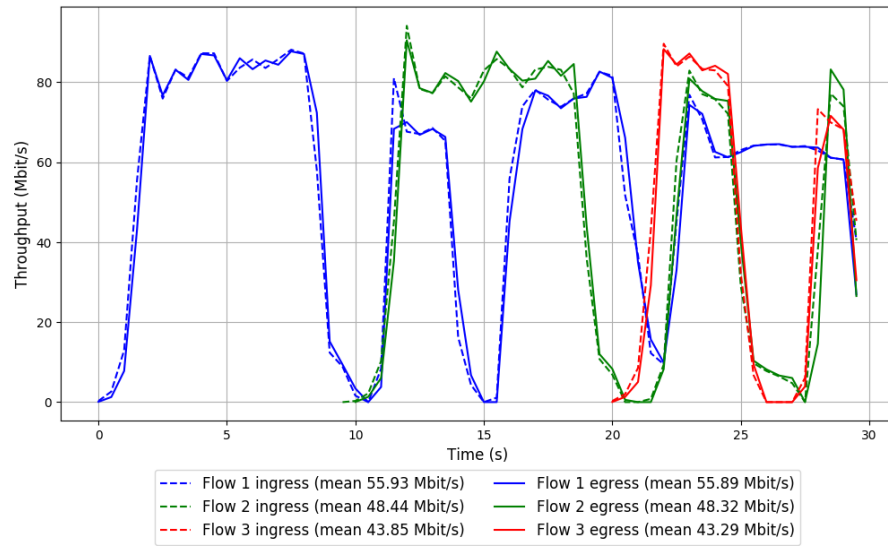
-- Flow 3:

Average throughput: 43.29 Mbit/s

95th percentile per-packet one-way delay: 110.486 ms

Loss rate: 3.50%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-16 18:10:28

End at: 2017-11-16 18:10:58

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 110.60 Mbit/s

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

Loss rate: 1.28%

-- Flow 1:

Average throughput: 58.80 Mbit/s

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

Loss rate: 0.85%

-- Flow 2:

Average throughput: 51.44 Mbit/s

95th percentile per-packet one-way delay: 110.766 ms

Loss rate: 1.33%

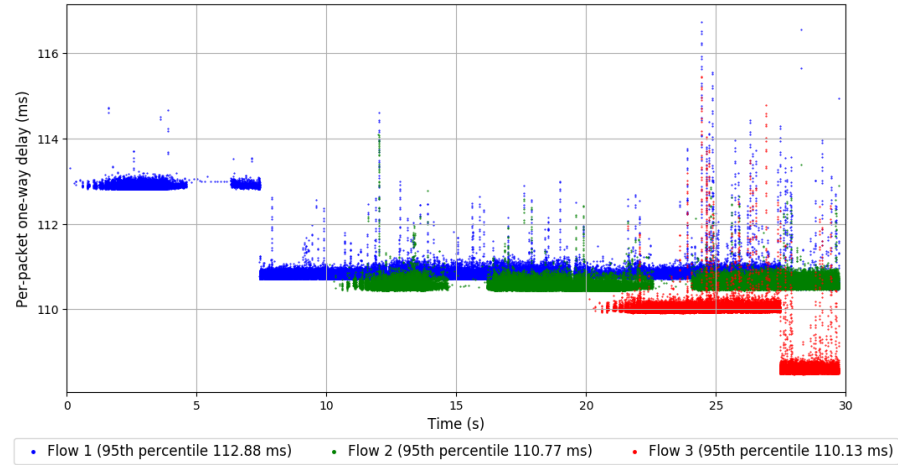
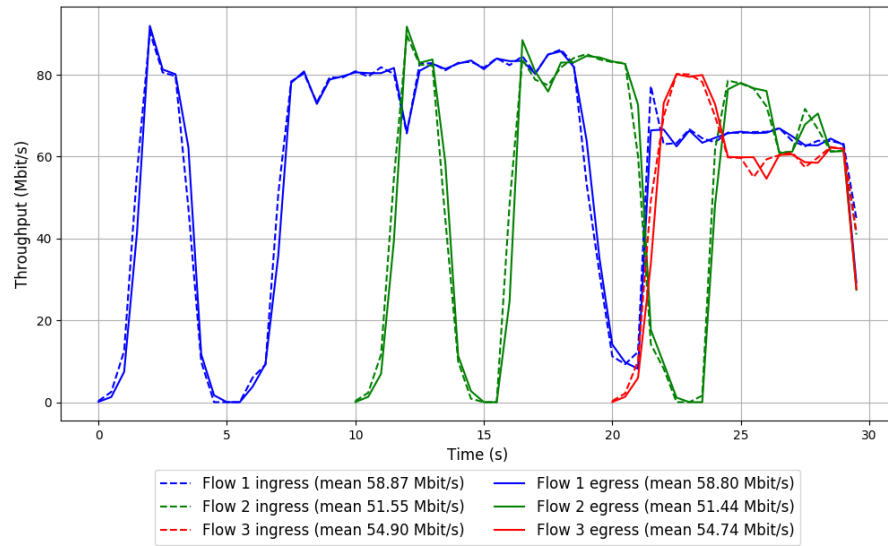
-- Flow 3:

Average throughput: 54.74 Mbit/s

95th percentile per-packet one-way delay: 110.131 ms

Loss rate: 2.55%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-16 18:24:04

End at: 2017-11-16 18:24:34

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.18 Mbit/s

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

Loss rate: 1.21%

-- Flow 1:

Average throughput: 54.69 Mbit/s

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

Loss rate: 1.11%

-- Flow 2:

Average throughput: 40.57 Mbit/s

95th percentile per-packet one-way delay: 110.119 ms

Loss rate: 1.67%

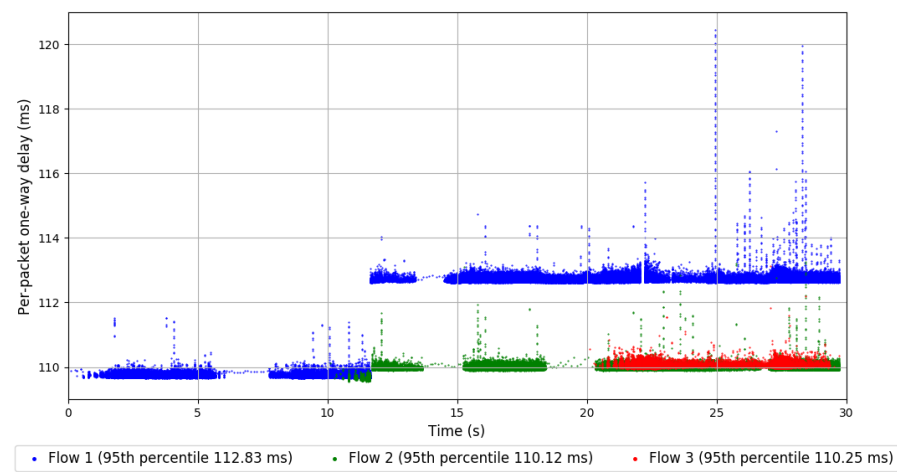
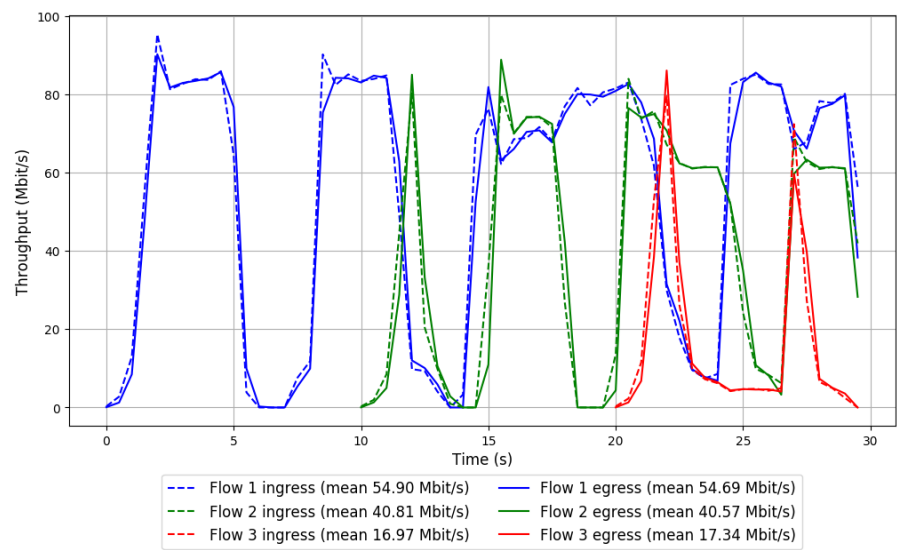
-- Flow 3:

Average throughput: 17.34 Mbit/s

95th percentile per-packet one-way delay: 110.248 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-16 18:37:57

End at: 2017-11-16 18:38:27

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.51 Mbit/s

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

Loss rate: 1.08%

-- Flow 1:

Average throughput: 57.92 Mbit/s

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

Loss rate: 0.86%

-- Flow 2:

Average throughput: 40.82 Mbit/s

95th percentile per-packet one-way delay: 112.266 ms

Loss rate: 1.99%

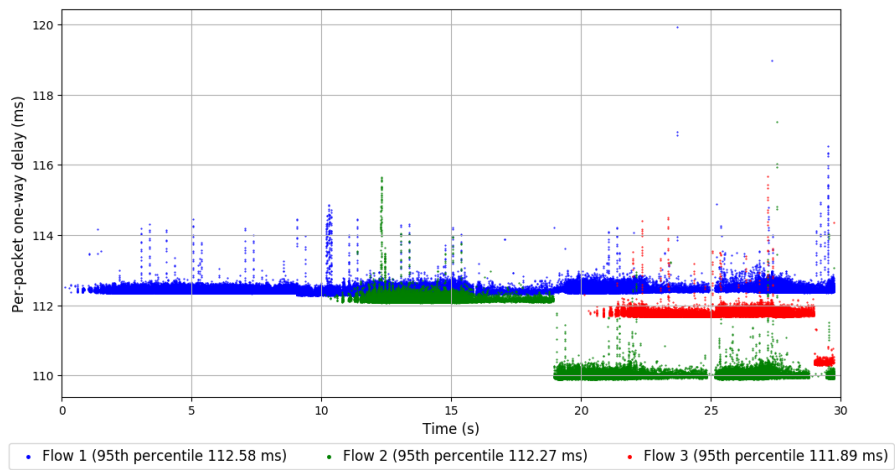
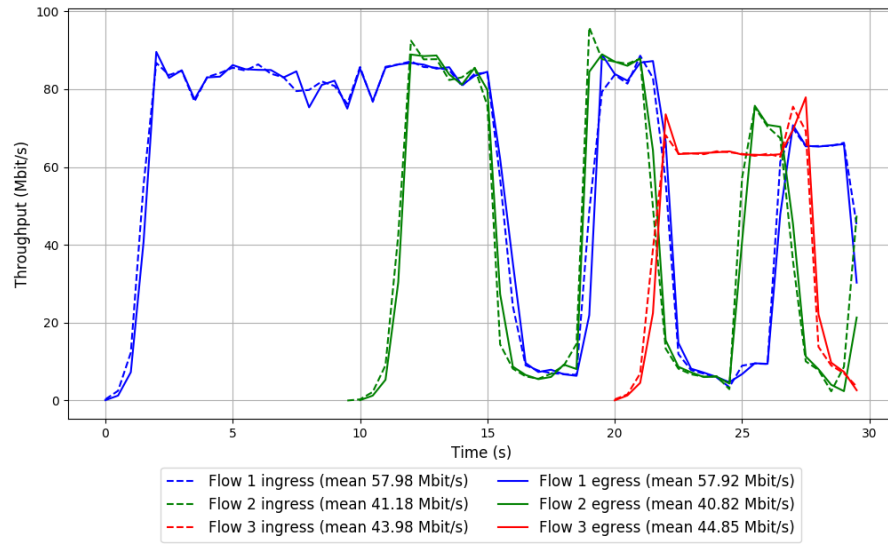
-- Flow 3:

Average throughput: 44.85 Mbit/s

95th percentile per-packet one-way delay: 111.886 ms

Loss rate: 0.27%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-16 18:51:38

End at: 2017-11-16 18:52:08

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.03 Mbit/s

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

Loss rate: 1.19%

-- Flow 1:

Average throughput: 58.49 Mbit/s

95th percentile per-packet one-way delay: 111.994 ms

Loss rate: 1.12%

-- Flow 2:

Average throughput: 48.92 Mbit/s

95th percentile per-packet one-way delay: 112.399 ms

Loss rate: 1.53%

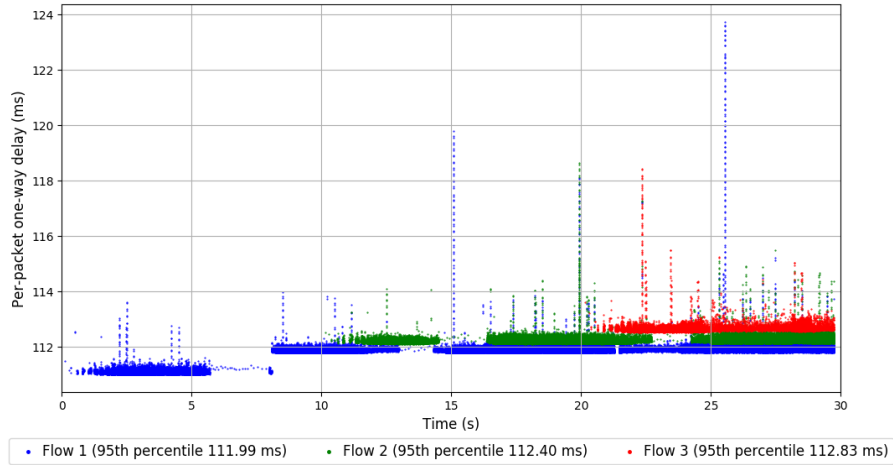
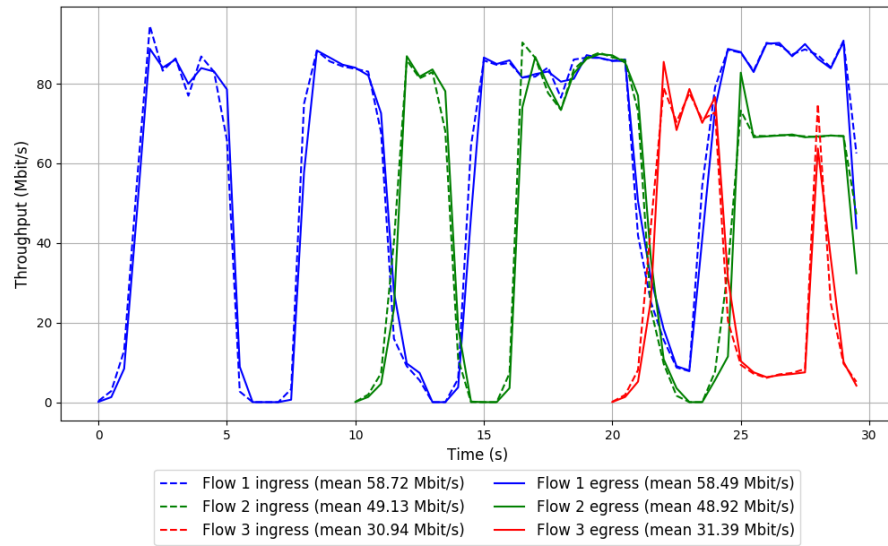
-- Flow 3:

Average throughput: 31.39 Mbit/s

95th percentile per-packet one-way delay: 112.829 ms

Loss rate: 0.49%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-16 19:05:23

End at: 2017-11-16 19:05:53

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.93 Mbit/s

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

Loss rate: 1.29%

-- Flow 1:

Average throughput: 46.48 Mbit/s

95th percentile per-packet one-way delay: 110.696 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 60.97 Mbit/s

95th percentile per-packet one-way delay: 113.073 ms

Loss rate: 0.46%

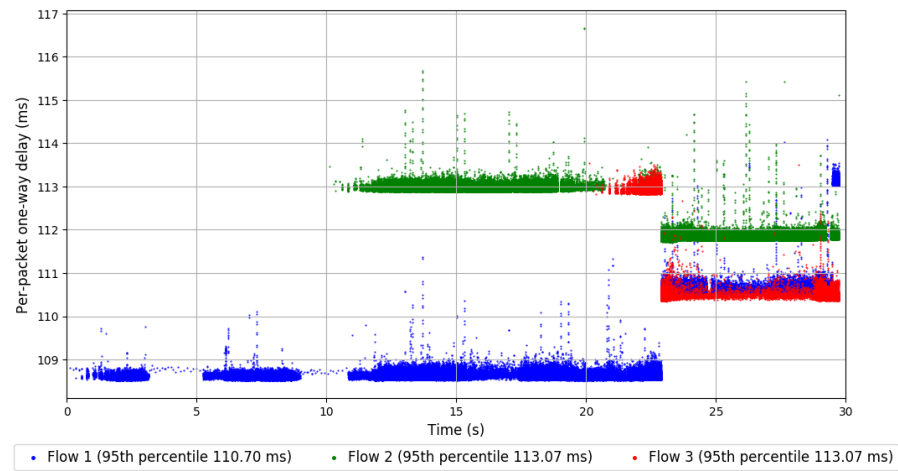
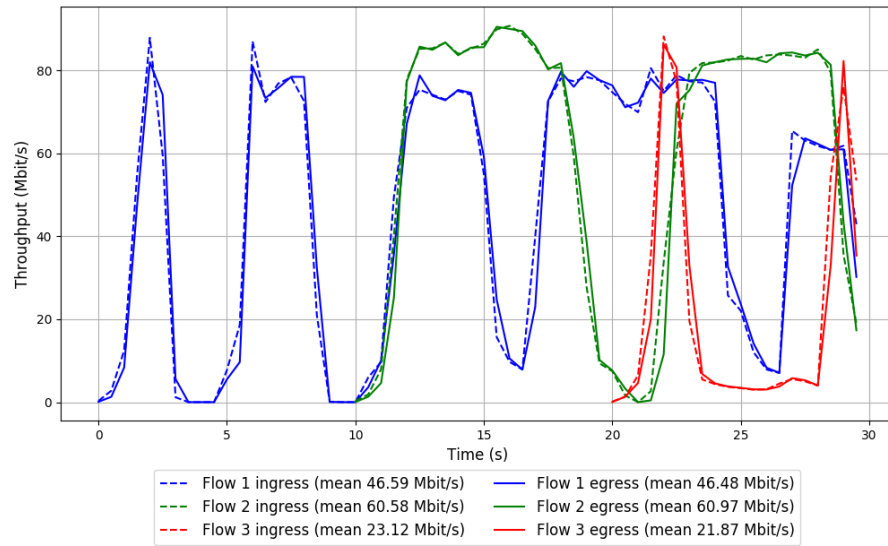
-- Flow 3:

Average throughput: 21.87 Mbit/s

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

Loss rate: 7.54%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-11-16 19:19:01

End at: 2017-11-16 19:19:31

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.77 Mbit/s

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

Loss rate: 1.10%

-- Flow 1:

Average throughput: 53.20 Mbit/s

95th percentile per-packet one-way delay: 110.577 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 43.79 Mbit/s

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

Loss rate: 1.65%

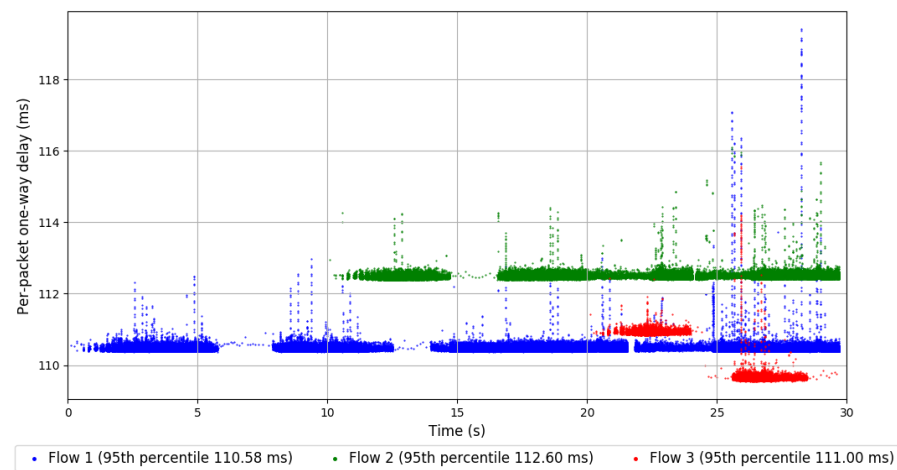
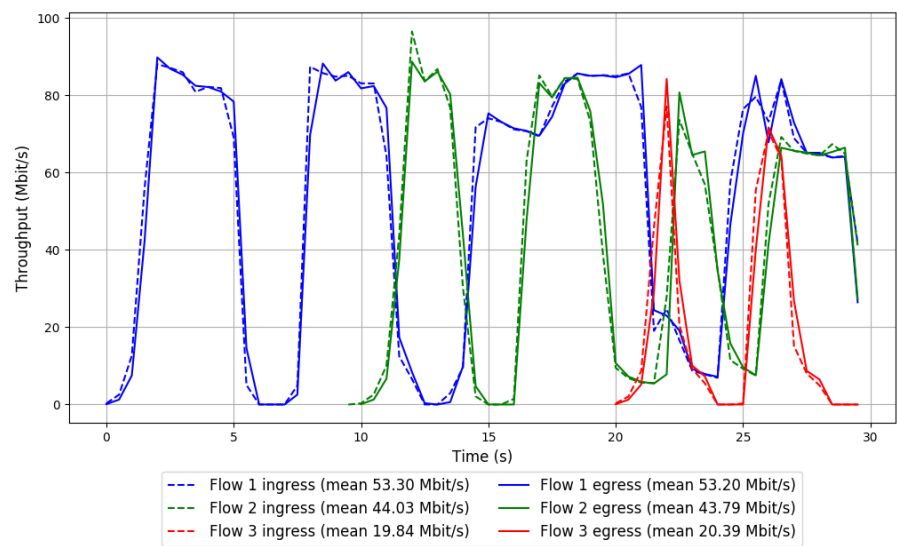
-- Flow 3:

Average throughput: 20.39 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

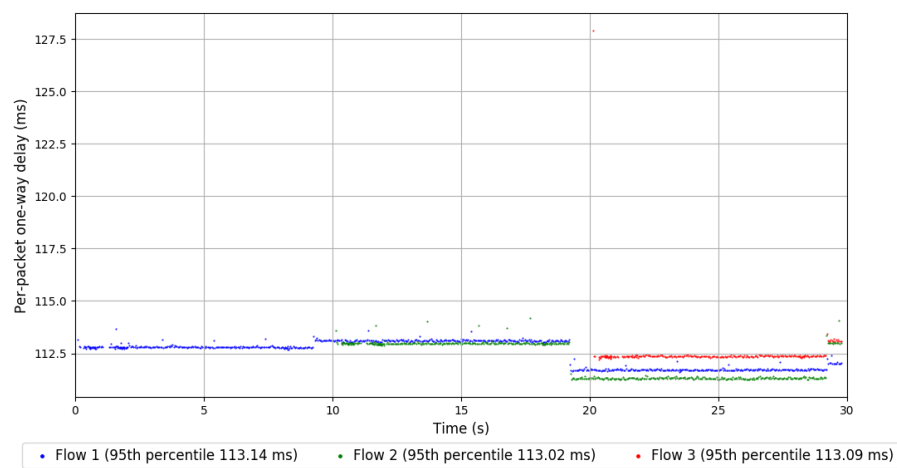
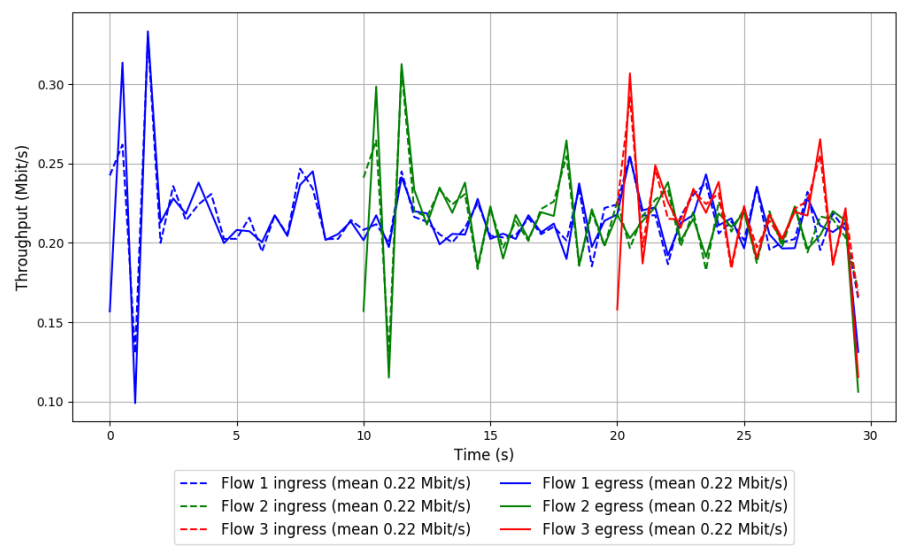


```
Run 1: Statistics of SCReAM

Start at: 2017-11-16 17:15:17
End at: 2017-11-16 17:15:47

# Below is generated by plot.py at 2017-11-16 22:13:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.133 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.145 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.017 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.089 ms
Loss rate: 2.25%
```

Run 1: Report of SReAM — Data Link

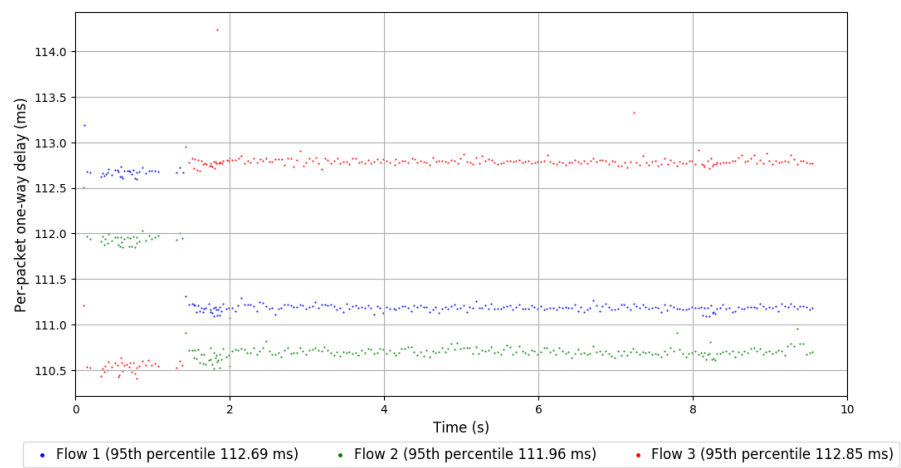
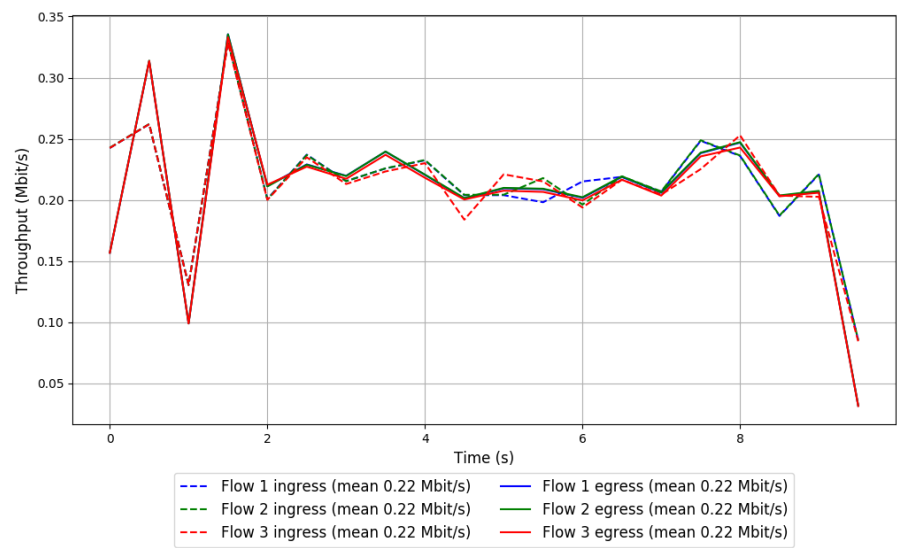


Run 2: Statistics of SReAM

Start at: 2017-11-16 17:28:44

End at: 2017-11-16 17:29:14

Run 2: Report of SReAM — Data Link

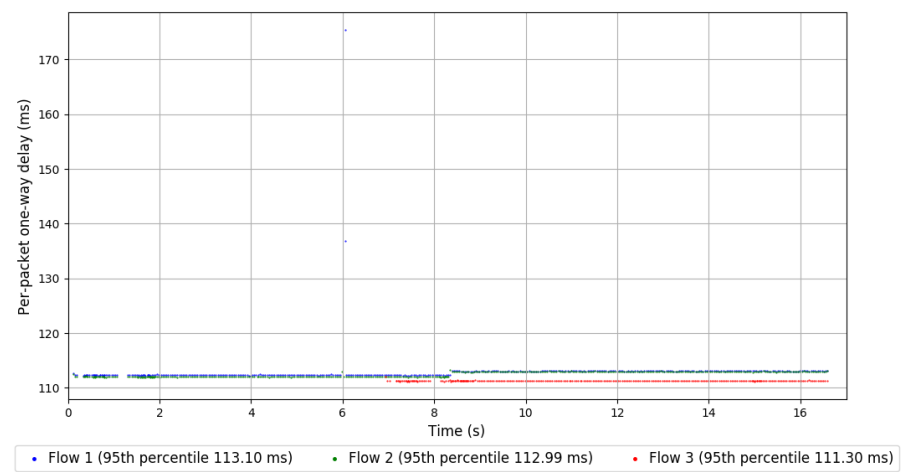
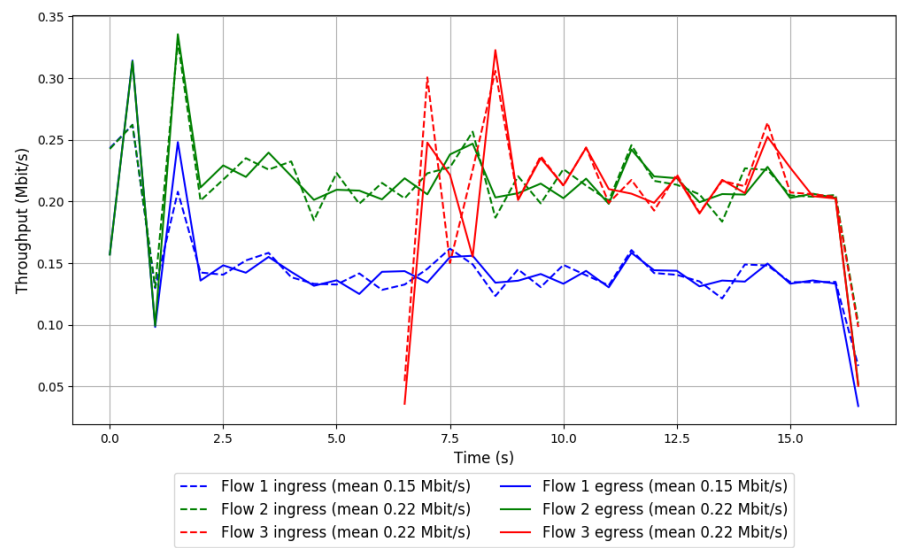


Run 3: Statistics of SReAM

Start at: 2017-11-16 17:42:24

End at: 2017-11-16 17:42:54

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-11-16 17:56:08

End at: 2017-11-16 17:56:38

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.254 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.269 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 1.05%

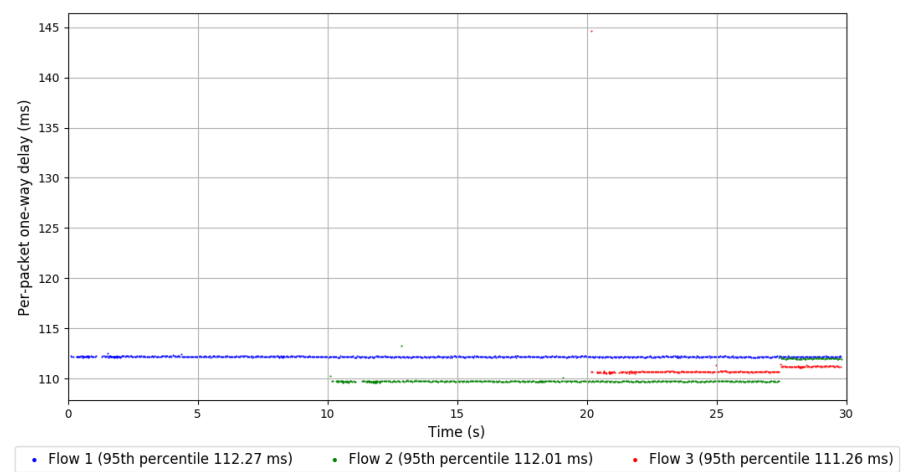
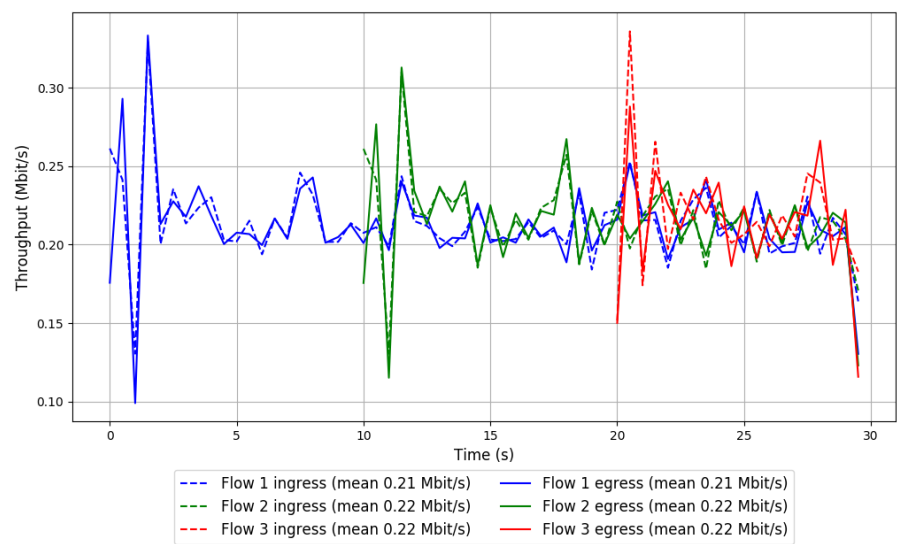
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.258 ms

Loss rate: 2.26%

Run 4: Report of SReAM — Data Link

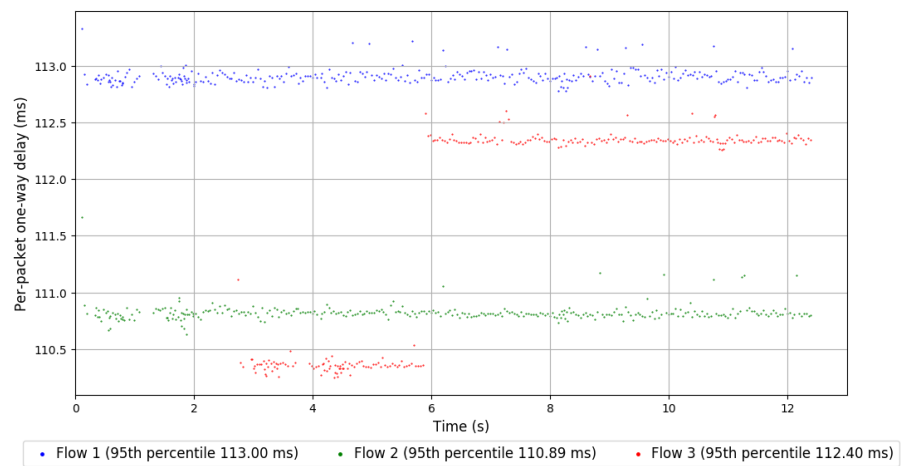
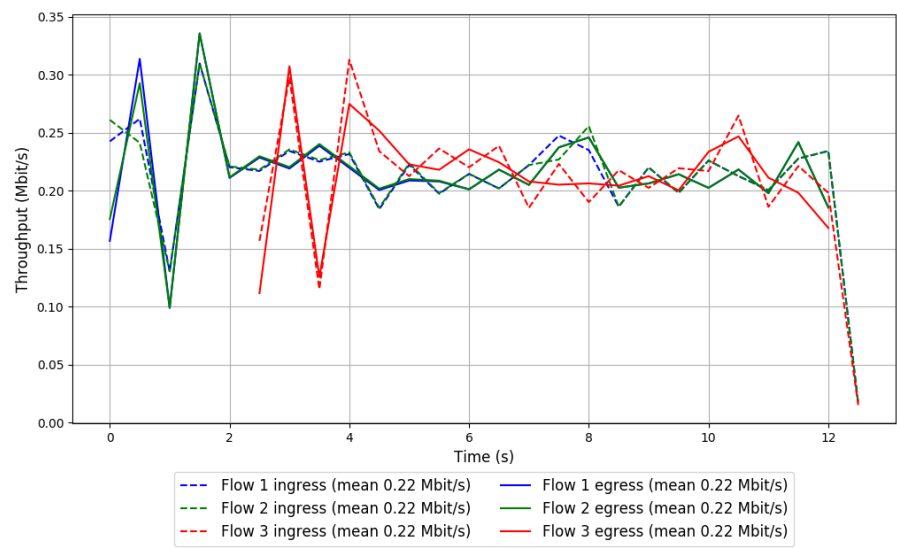


Run 5: Statistics of SReAM

Start at: 2017-11-16 18:09:43

End at: 2017-11-16 18:10:13

Run 5: Report of SCRaM — Data Link



Run 6: Statistics of SReAM

Start at: 2017-11-16 18:23:18

End at: 2017-11-16 18:23:48

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.520 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.422 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.549 ms

Loss rate: 1.06%

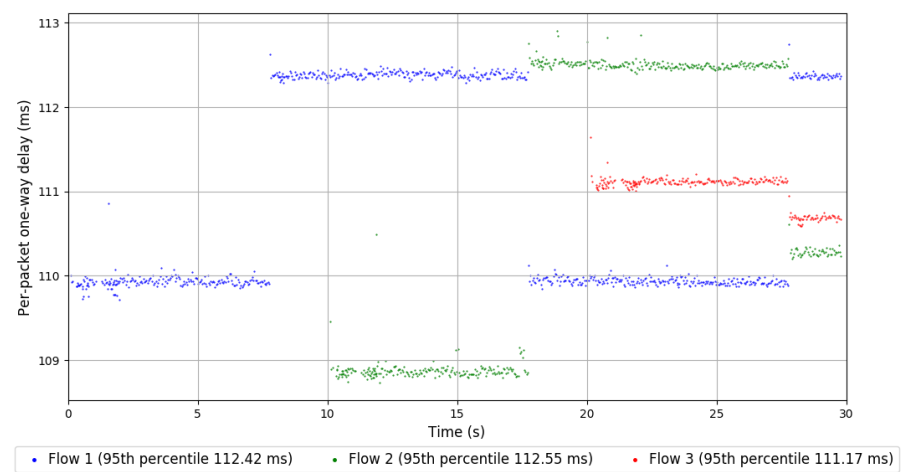
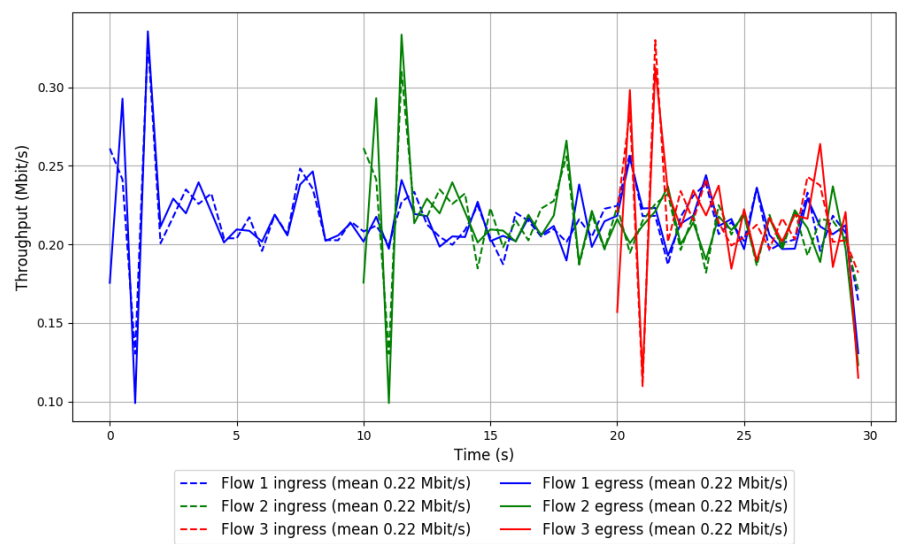
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 2.26%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SReAM

Start at: 2017-11-16 18:37:11

End at: 2017-11-16 18:37:41

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 113.924 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.963 ms

Loss rate: 1.04%

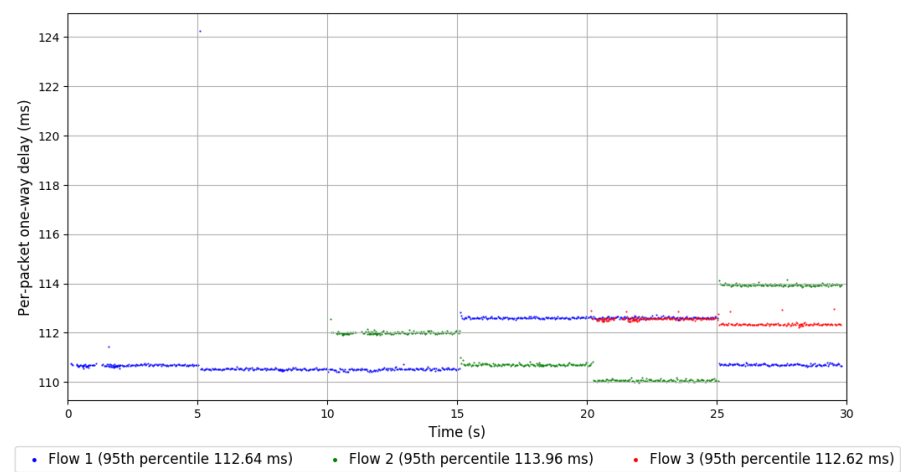
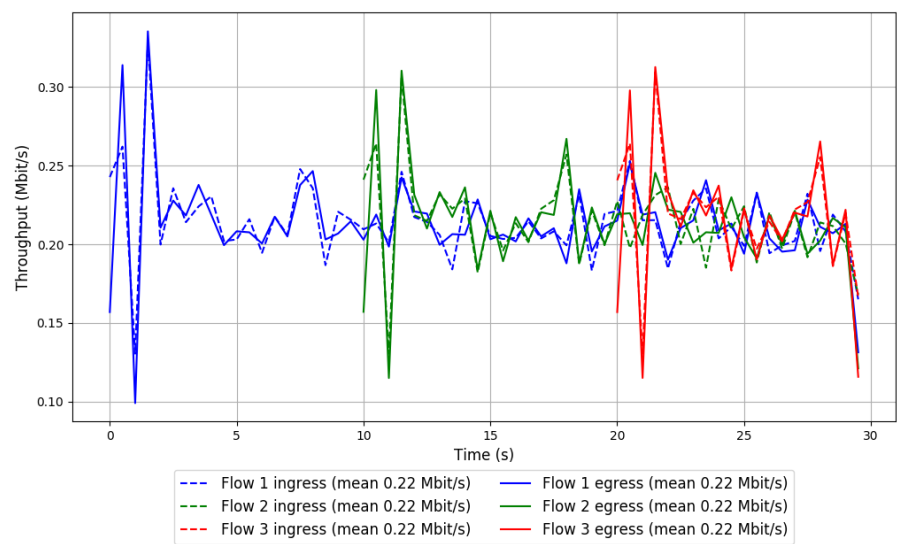
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.624 ms

Loss rate: 2.26%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2017-11-16 18:50:52

End at: 2017-11-16 18:51:22

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 1.05%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.029 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 0.21 Mbit/s

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

Loss rate: 1.07%

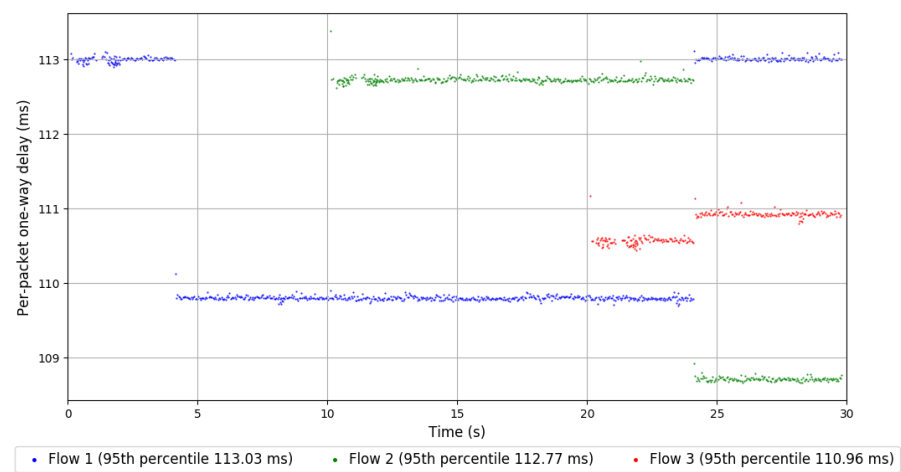
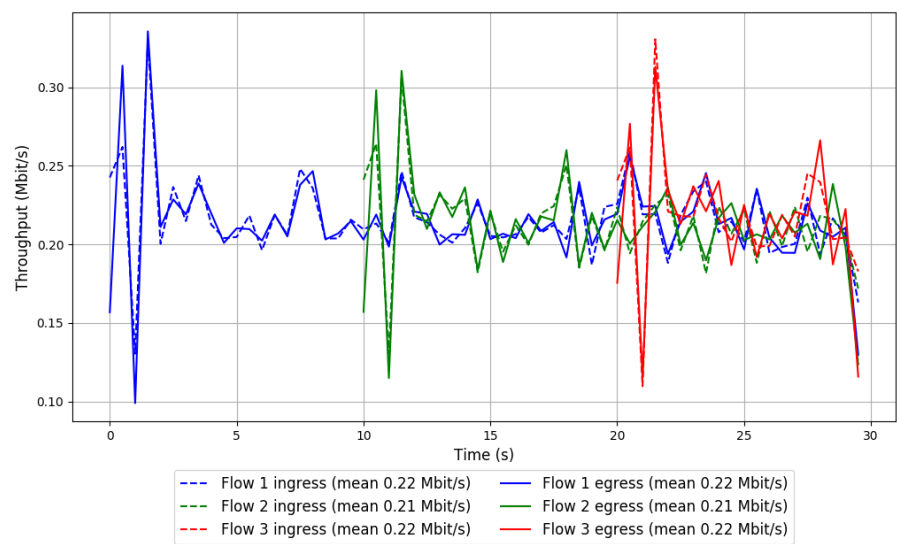
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.959 ms

Loss rate: 2.25%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-11-16 19:04:37

End at: 2017-11-16 19:05:07

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 111.021 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.042 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.778 ms

Loss rate: 1.06%

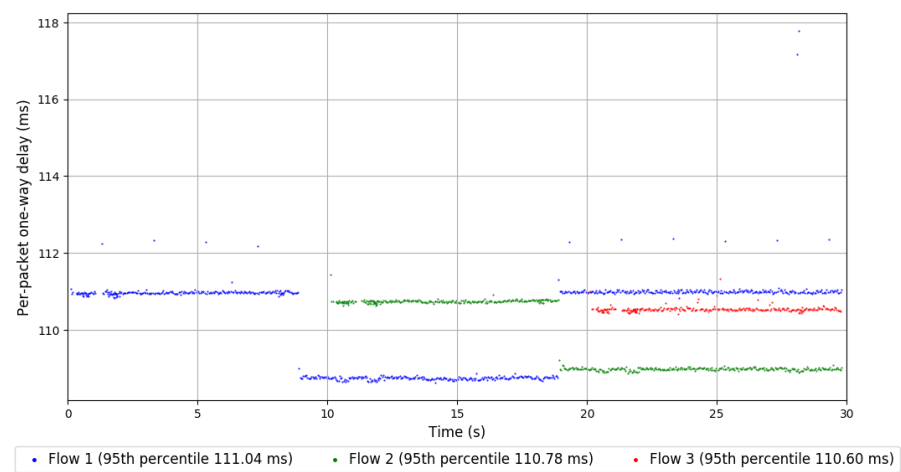
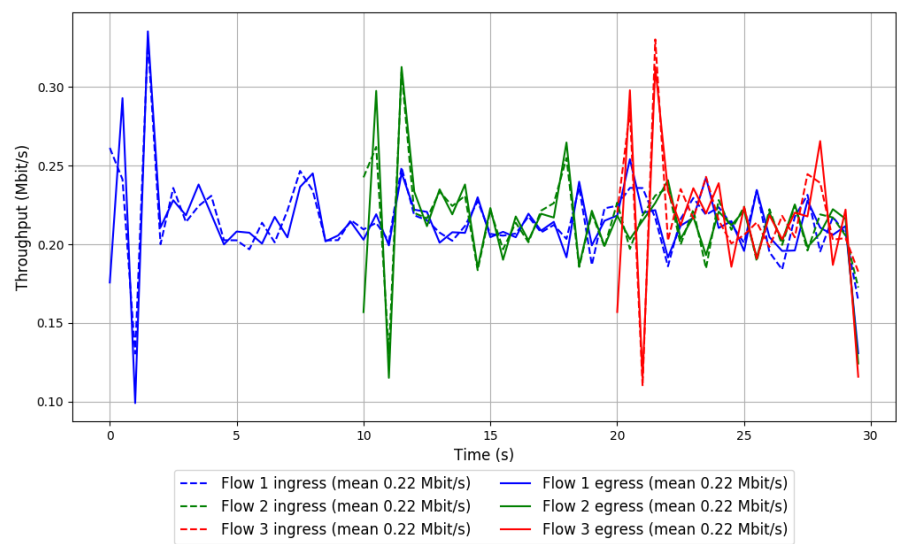
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.603 ms

Loss rate: 2.25%

Run 9: Report of SReAM — Data Link

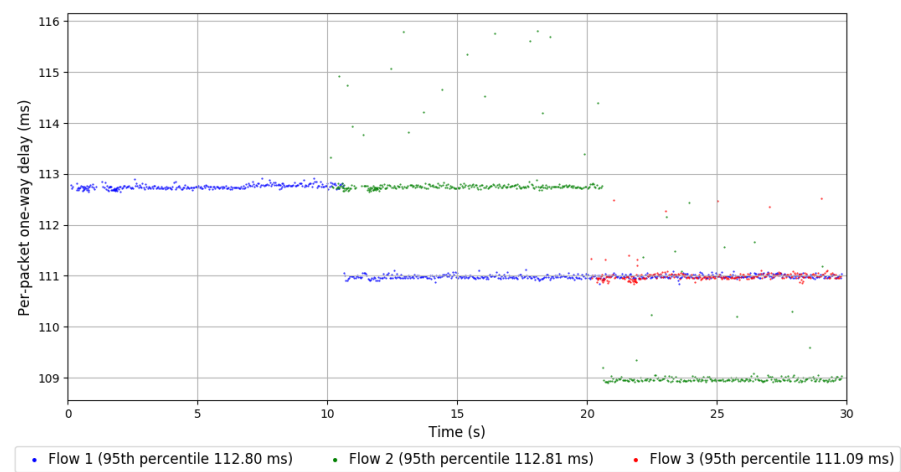
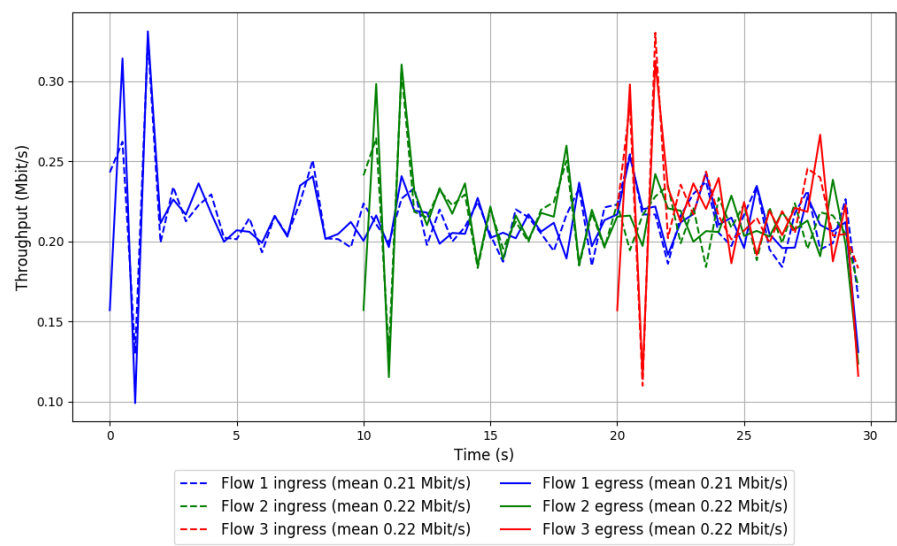


```
Run 10: Statistics of SReAM

Start at: 2017-11-16 19:18:15
End at: 2017-11-16 19:18:45

# Below is generated by plot.py at 2017-11-16 22:13:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.796 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.802 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.808 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.086 ms
Loss rate: 2.25%
```

Run 10: Report of SReAM — Data Link

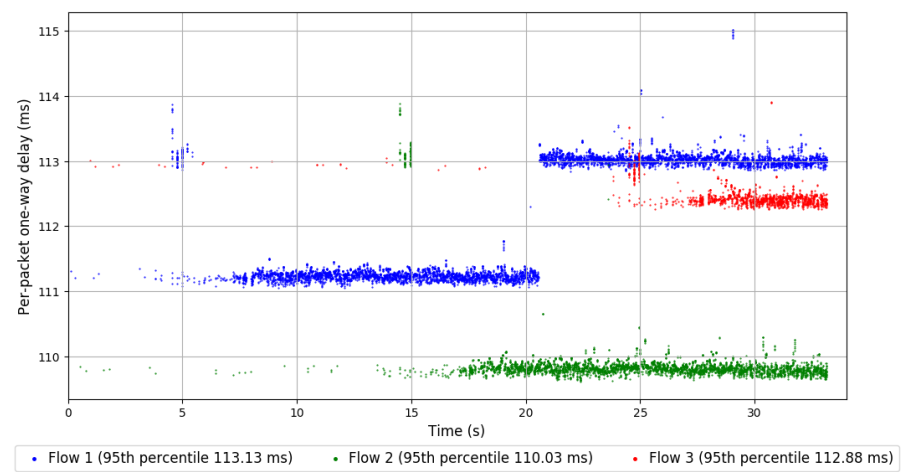
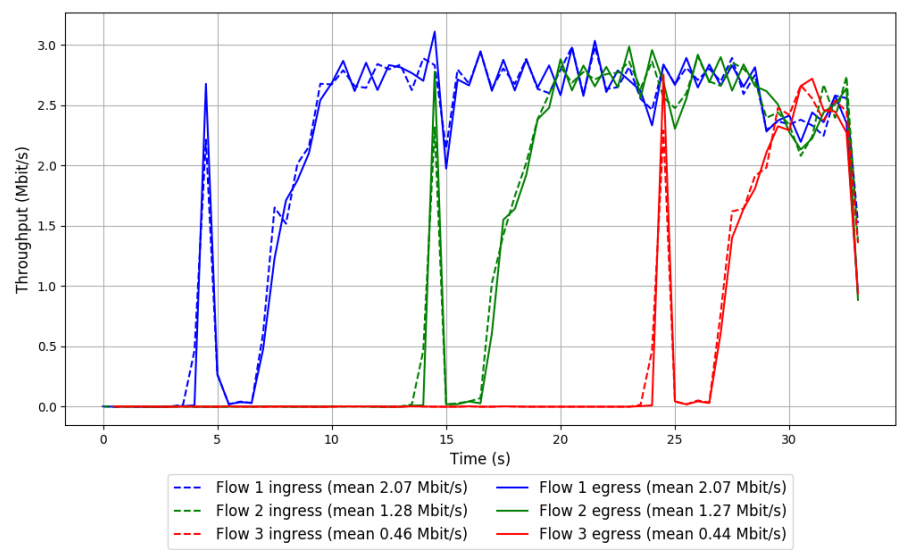


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-16 17:10:09
End at: 2017-11-16 17:10:39

# Below is generated by plot.py at 2017-11-16 22:13:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 113.088 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 113.126 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 110.032 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 112.884 ms
Loss rate: 3.70%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-16 17:23:31

End at: 2017-11-16 17:24:01

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.02 Mbit/s

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

Loss rate: 1.39%

-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 110.840 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 1.27 Mbit/s

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

Loss rate: 1.47%

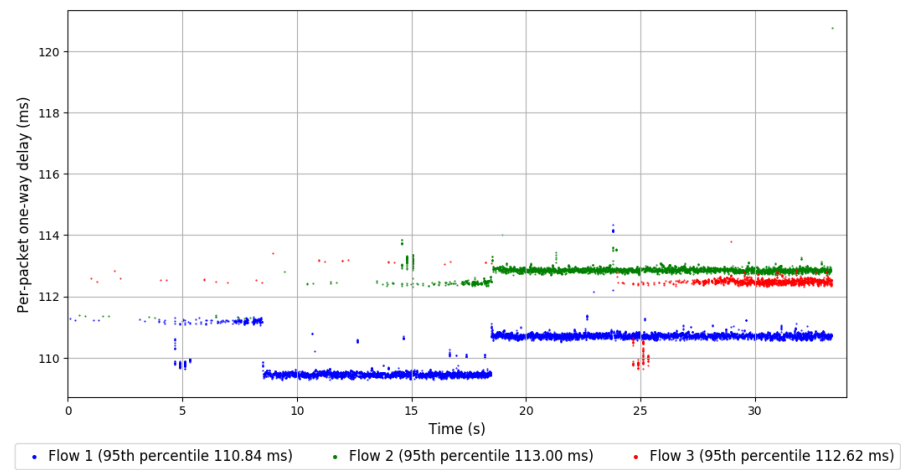
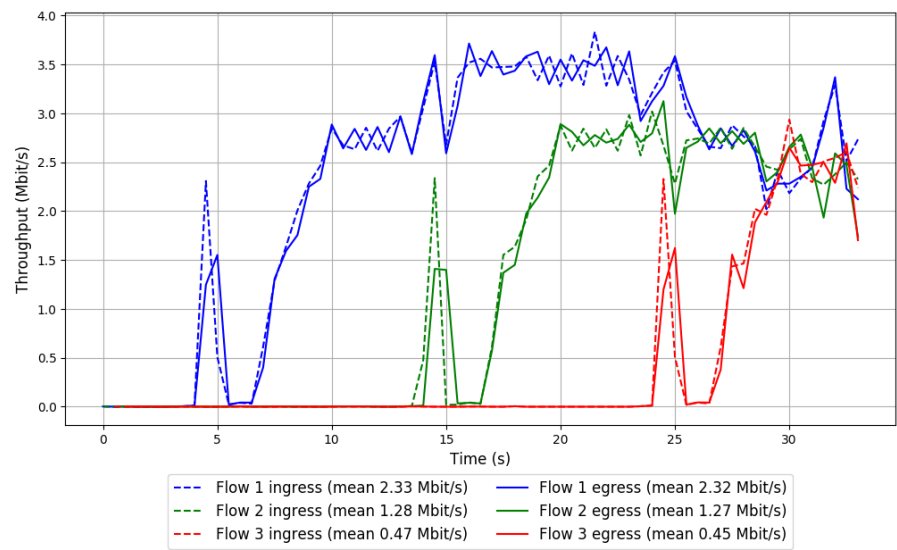
-- Flow 3:

Average throughput: 0.45 Mbit/s

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

Loss rate: 3.77%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-16 17:37:15

End at: 2017-11-16 17:37:45

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.10 Mbit/s

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

Loss rate: 1.48%

-- Flow 1:

Average throughput: 2.26 Mbit/s

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

Loss rate: 0.88%

-- Flow 2:

Average throughput: 1.37 Mbit/s

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

Loss rate: 1.47%

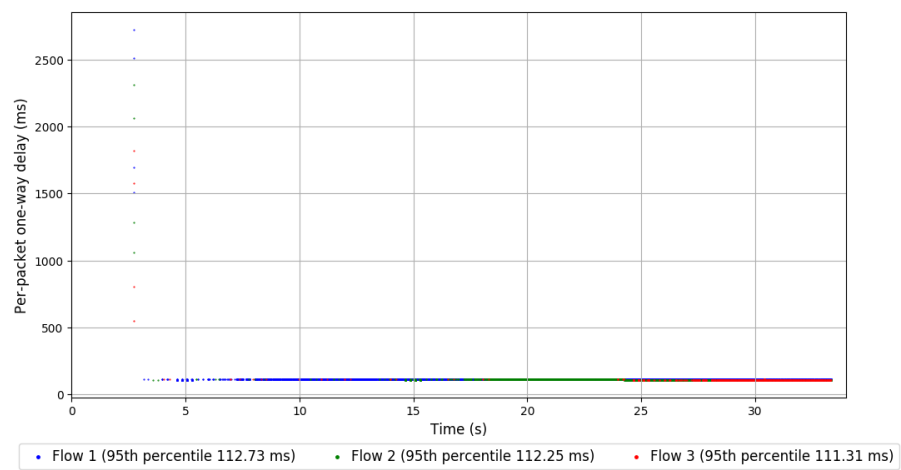
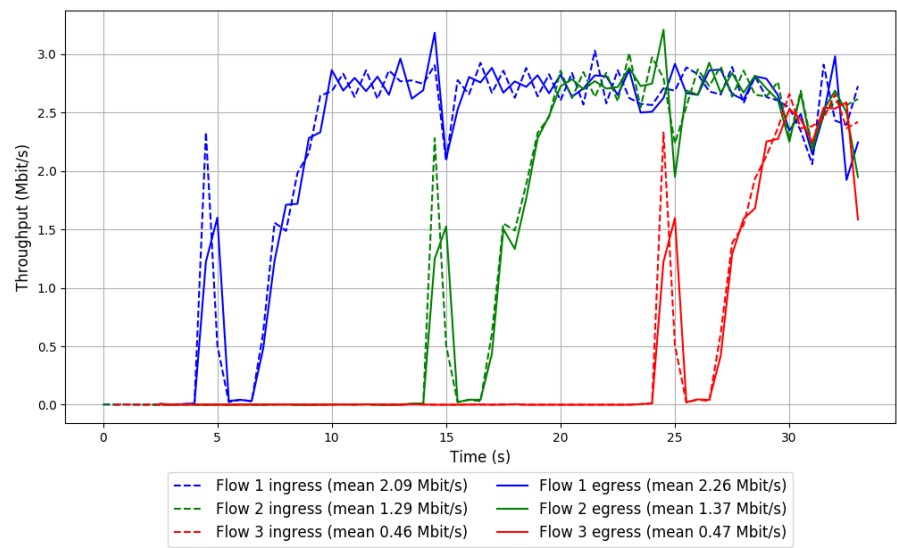
-- Flow 3:

Average throughput: 0.47 Mbit/s

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

Loss rate: 4.29%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-16 17:51:00

End at: 2017-11-16 17:51:30

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.77 Mbit/s

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

Loss rate: 1.41%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.159 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

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

Loss rate: 1.41%

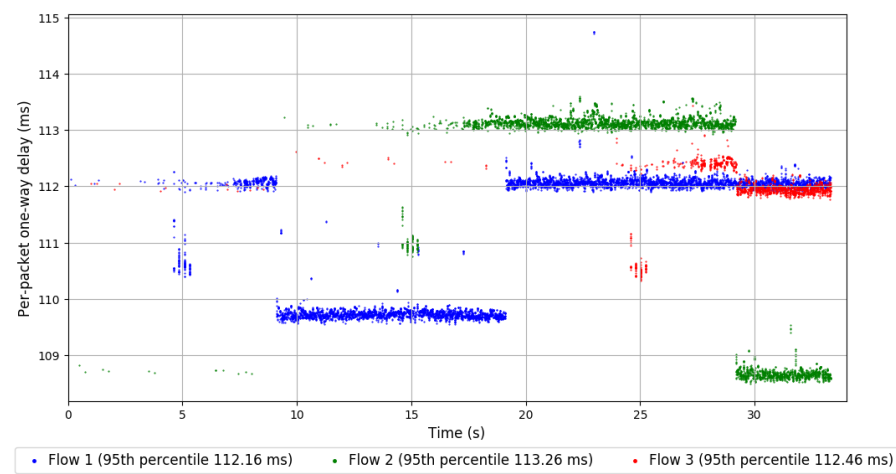
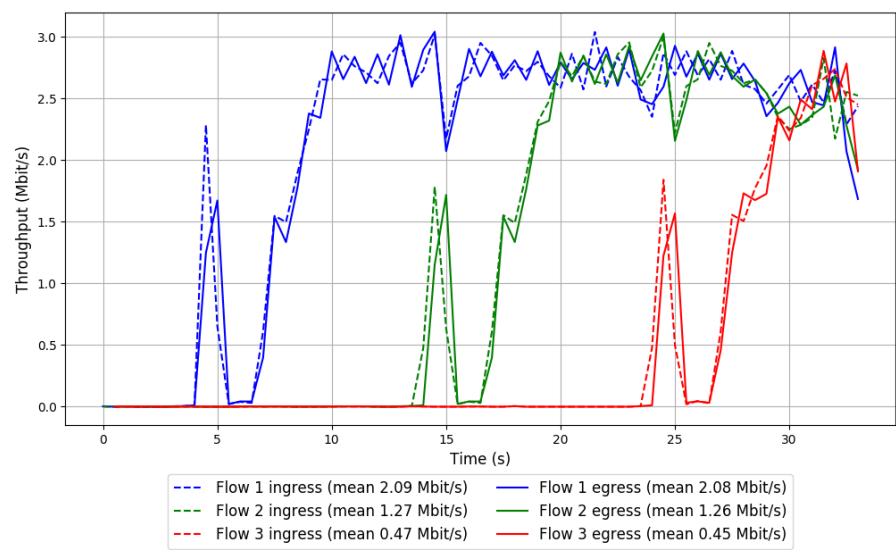
-- Flow 3:

Average throughput: 0.45 Mbit/s

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

Loss rate: 3.30%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-16 18:04:35

End at: 2017-11-16 18:05:05

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 112.466 ms

Loss rate: 1.59%

-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 112.456 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 112.500 ms

Loss rate: 1.55%

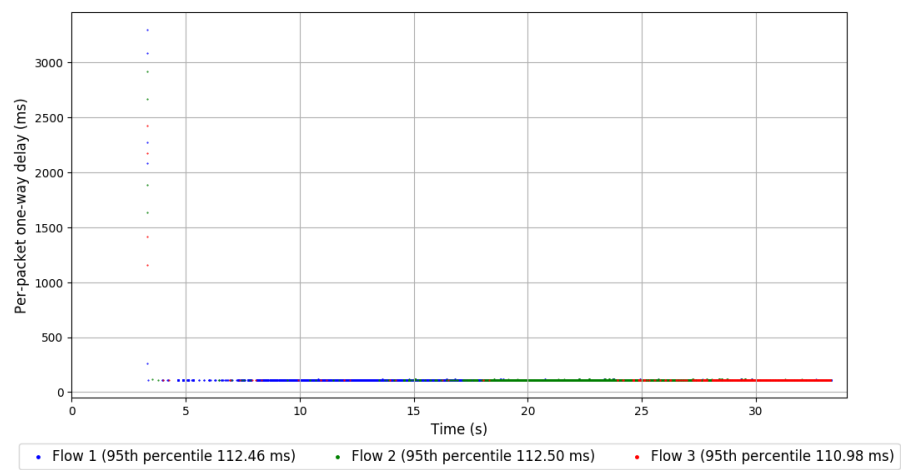
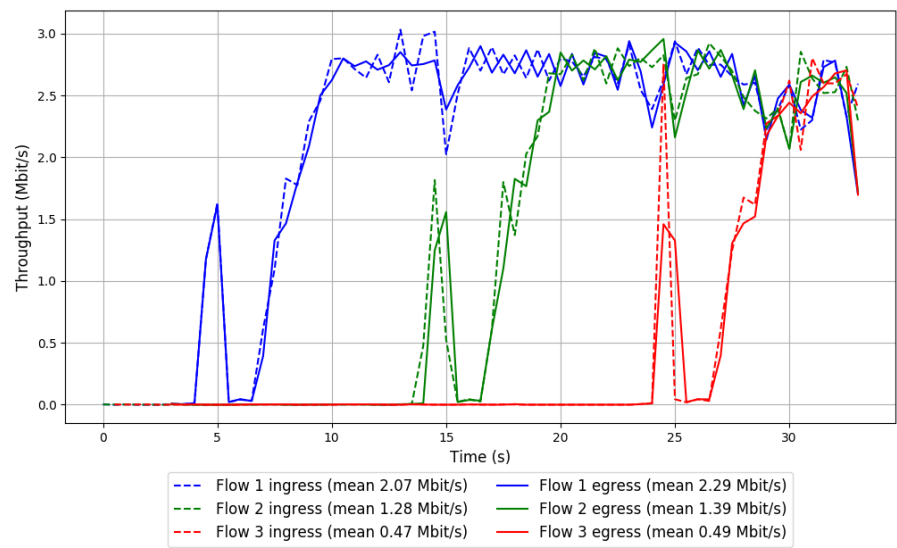
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 110.978 ms

Loss rate: 4.51%

Run 5: Report of WebRTC media — Data Link

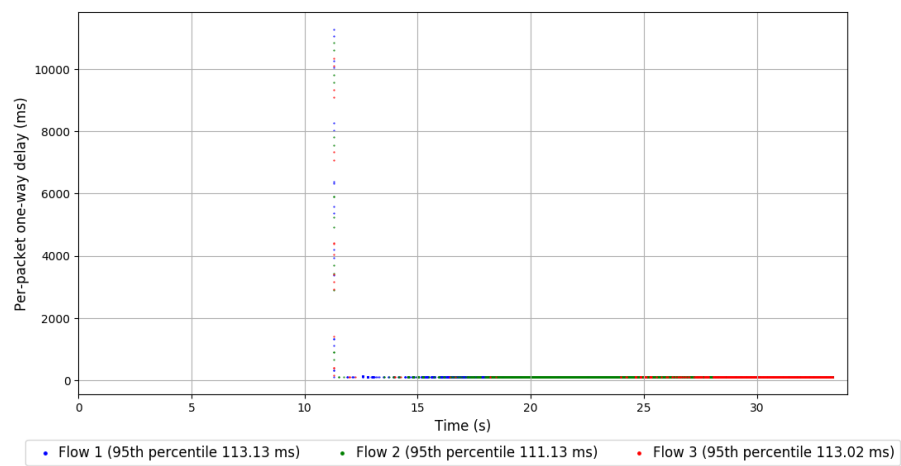
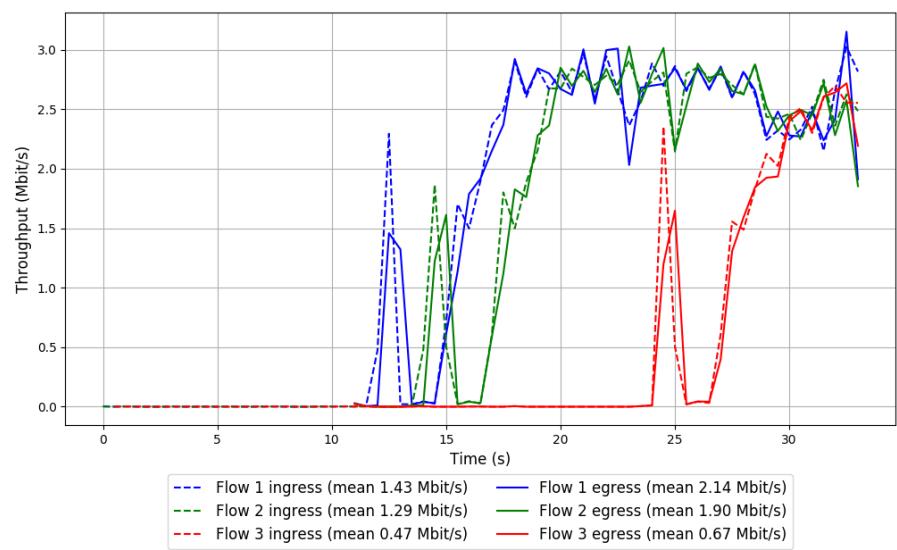


Run 6: Statistics of WebRTC media

Start at: 2017-11-16 18:18:06

End at: 2017-11-16 18:18:36

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-16 18:32:02

End at: 2017-11-16 18:32:32

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.76 Mbit/s

95th percentile per-packet one-way delay: 112.827 ms

Loss rate: 1.41%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 110.565 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 1.27 Mbit/s

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

Loss rate: 1.25%

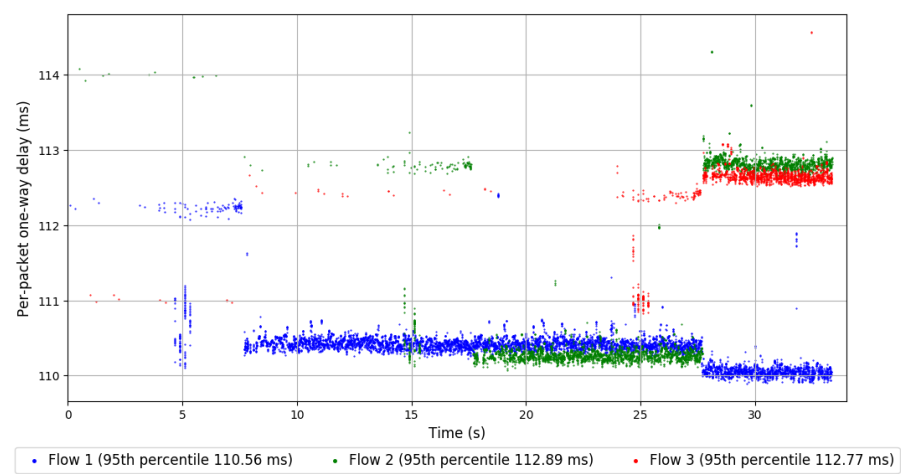
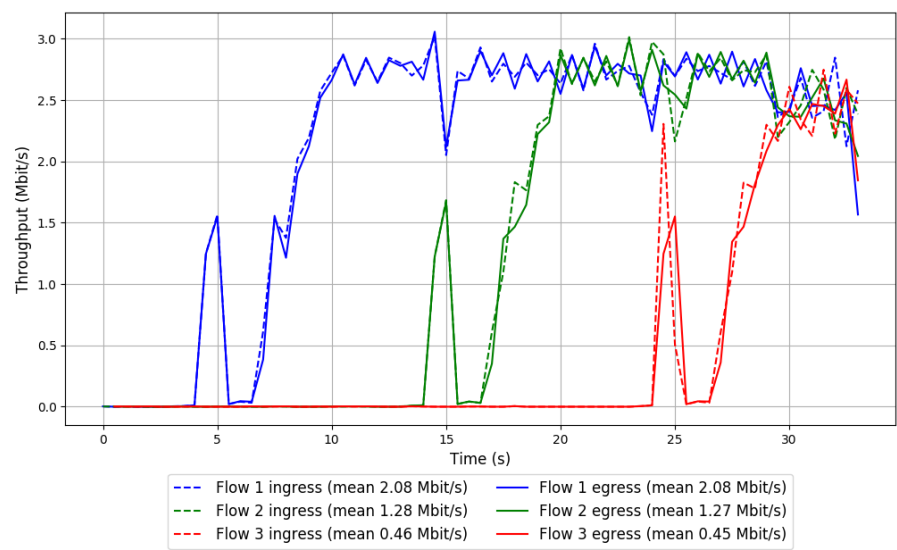
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 112.766 ms

Loss rate: 3.63%

Run 7: Report of WebRTC media — Data Link

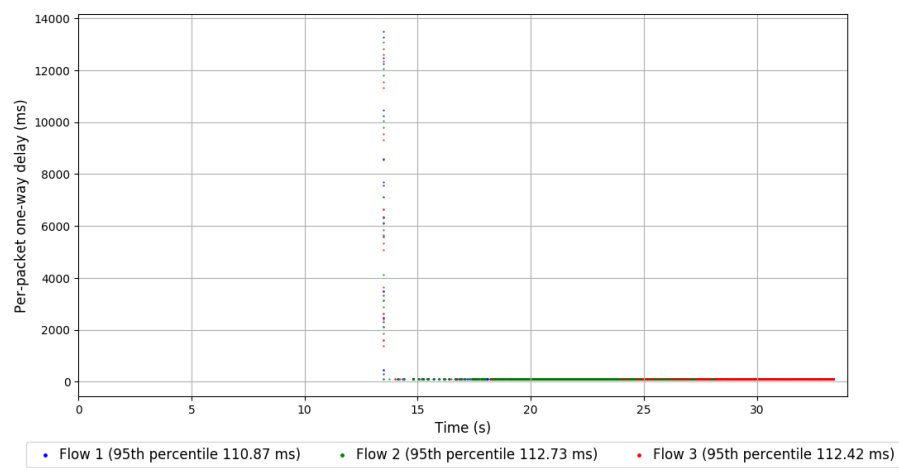
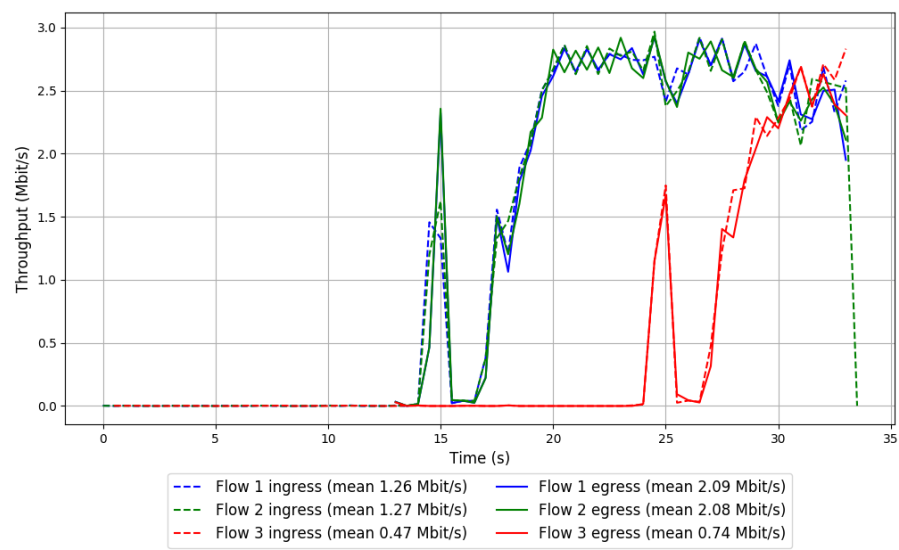


Run 8: Statistics of WebRTC media

Start at: 2017-11-16 18:45:47

End at: 2017-11-16 18:46:17

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-16 18:59:37

End at: 2017-11-16 19:00:07

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.66 Mbit/s

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

Loss rate: 1.53%

-- Flow 1:

Average throughput: 2.08 Mbit/s

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

Loss rate: 1.11%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 108.837 ms

Loss rate: 1.40%

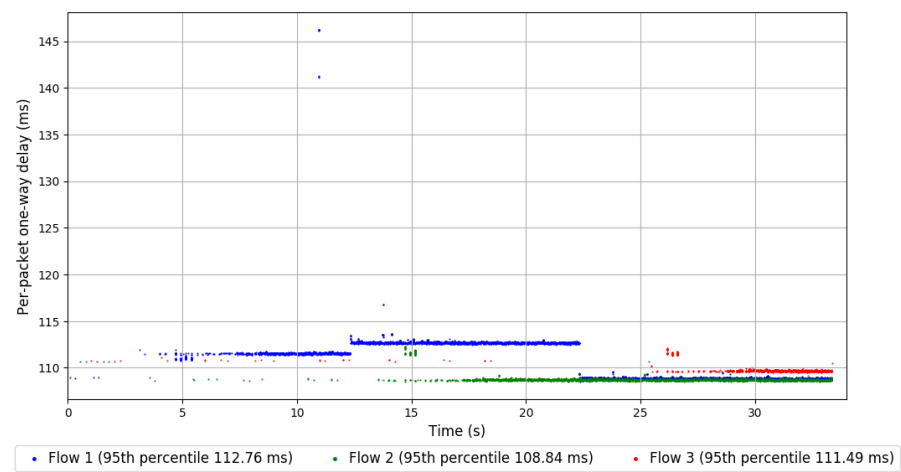
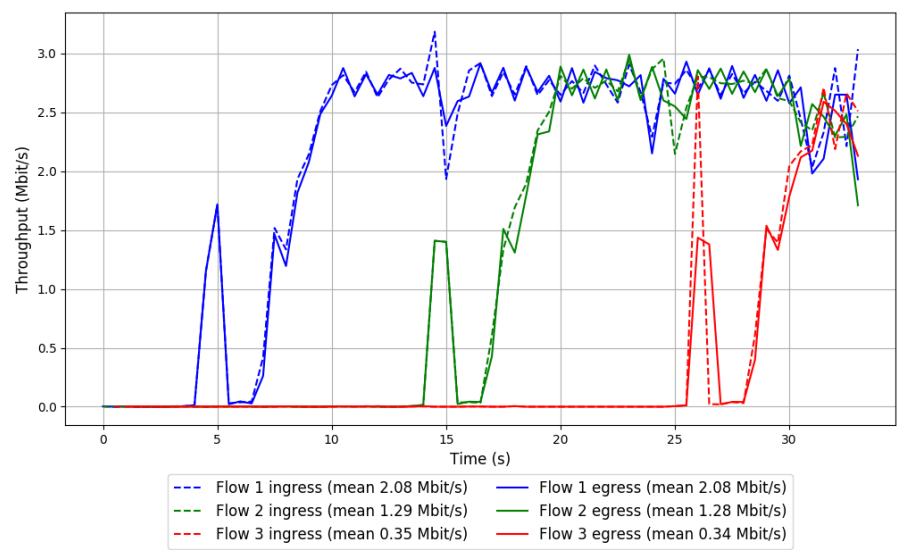
-- Flow 3:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 111.491 ms

Loss rate: 4.52%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-16 19:13:07

End at: 2017-11-16 19:13:37

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

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

Loss rate: 1.51%

-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 112.562 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 1.29 Mbit/s

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

Loss rate: 1.38%

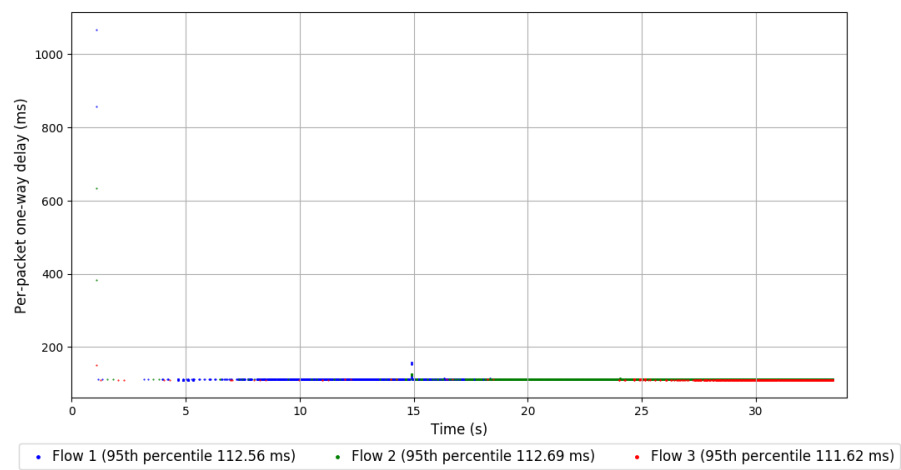
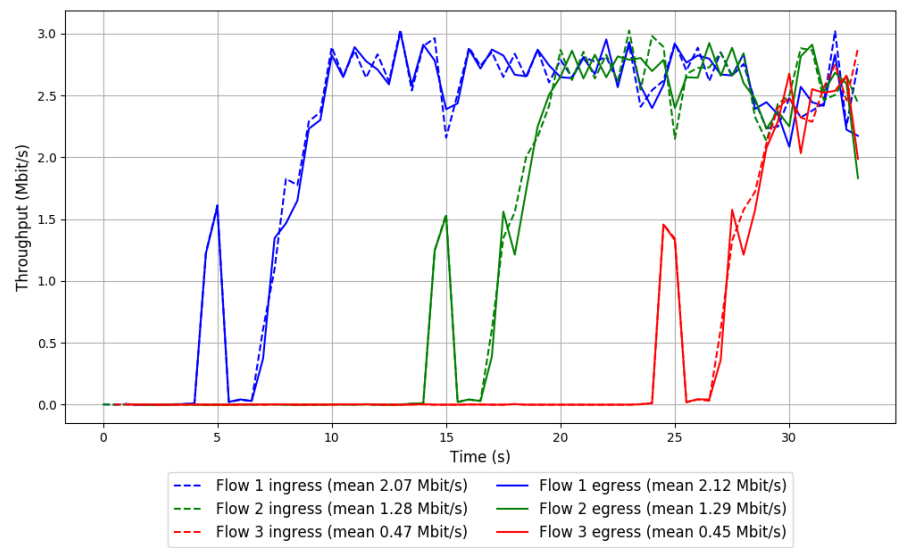
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 111.617 ms

Loss rate: 4.70%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-11-16 17:10:55

End at: 2017-11-16 17:11:25

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 113.948 ms

Loss rate: 1.35%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 114.140 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 2.12 Mbit/s

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

Loss rate: 1.51%

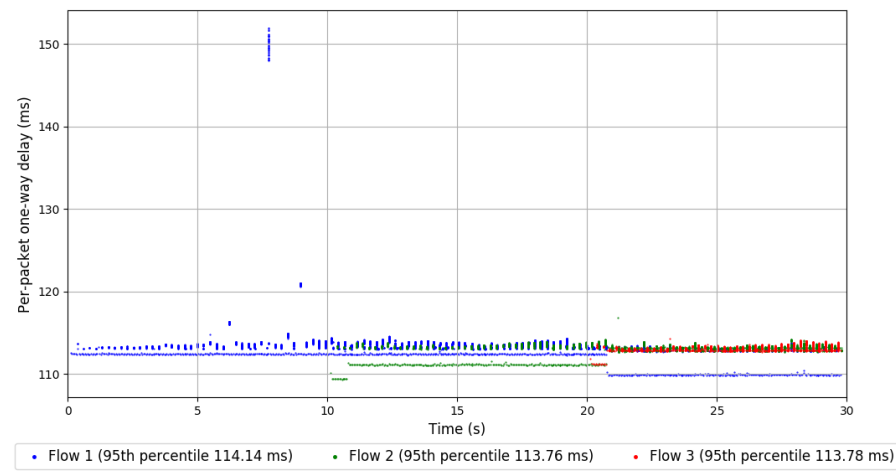
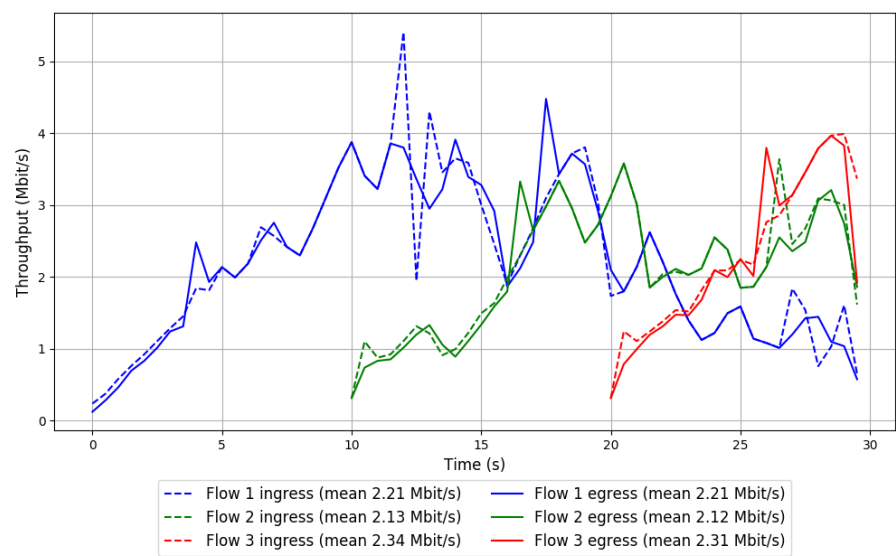
-- Flow 3:

Average throughput: 2.31 Mbit/s

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

Loss rate: 3.50%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-11-16 17:24:17

End at: 2017-11-16 17:24:47

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 113.910 ms

Loss rate: 1.47%

-- Flow 1:

Average throughput: 1.80 Mbit/s

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

Loss rate: 0.92%

-- Flow 2:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 114.034 ms

Loss rate: 0.96%

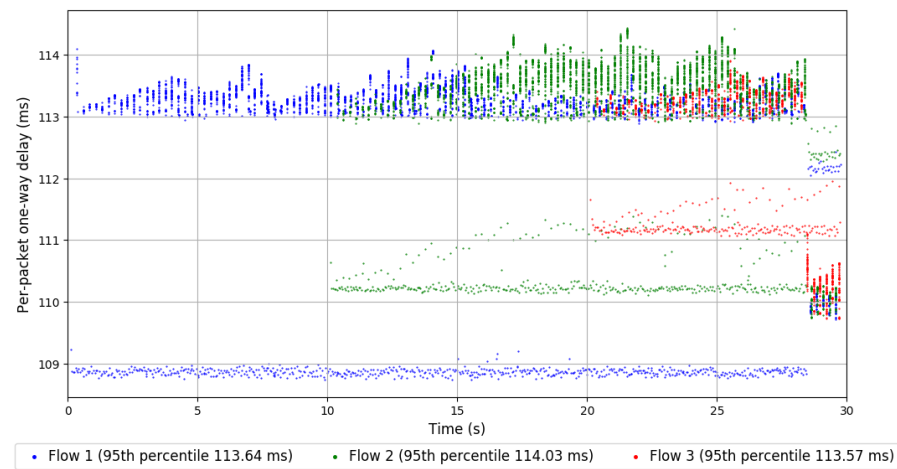
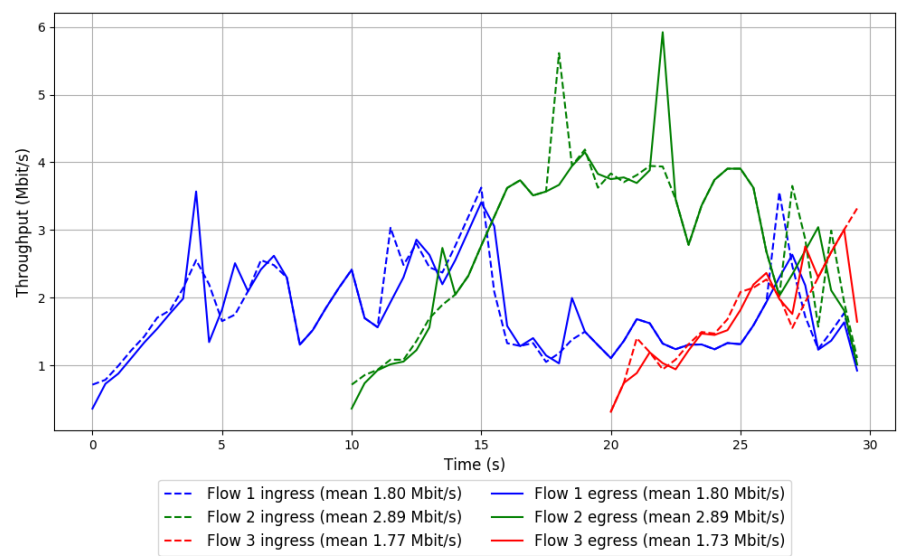
-- Flow 3:

Average throughput: 1.73 Mbit/s

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

Loss rate: 4.80%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-16 17:38:02

End at: 2017-11-16 17:38:32

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.68 Mbit/s

95th percentile per-packet one-way delay: 111.641 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 2.81 Mbit/s

95th percentile per-packet one-way delay: 111.558 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 1.71 Mbit/s

95th percentile per-packet one-way delay: 114.119 ms

Loss rate: 0.22%

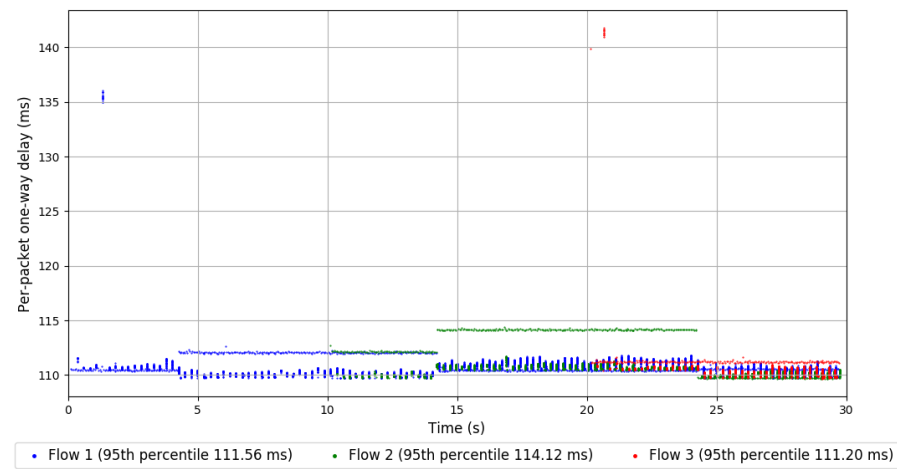
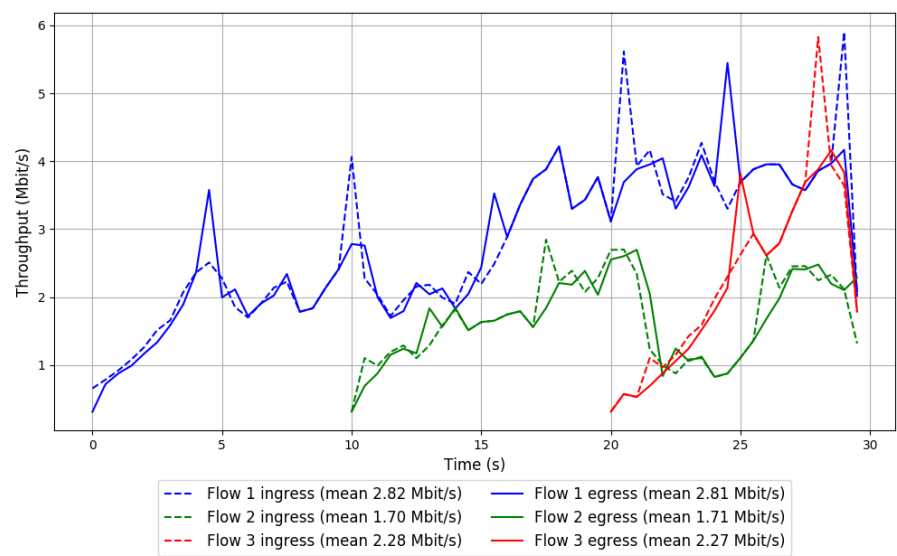
-- Flow 3:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 111.201 ms

Loss rate: 3.39%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-16 17:51:47

End at: 2017-11-16 17:52:17

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.10 Mbit/s

95th percentile per-packet one-way delay: 111.888 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 111.457 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 111.889 ms

Loss rate: 1.18%

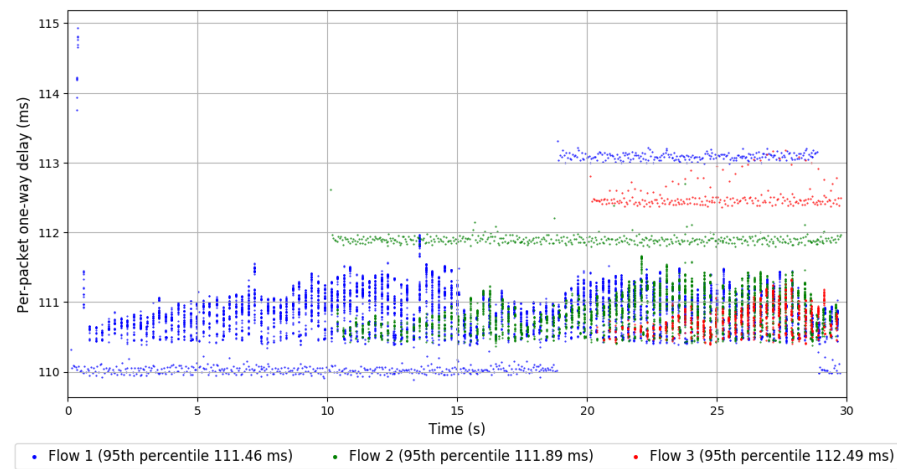
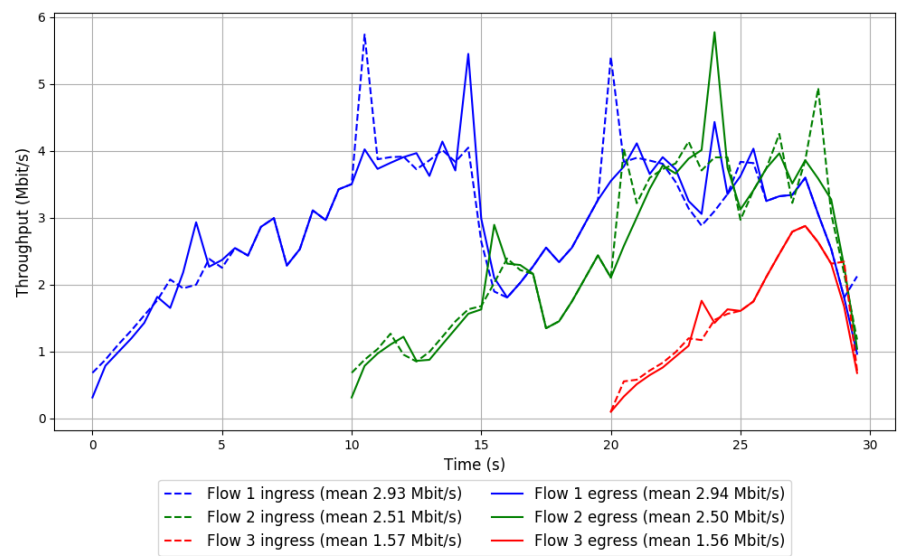
-- Flow 3:

Average throughput: 1.56 Mbit/s

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

Loss rate: 2.31%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-16 18:05:22

End at: 2017-11-16 18:05:52

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 112.875 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 2.79 Mbit/s

95th percentile per-packet one-way delay: 113.029 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 112.766 ms

Loss rate: 2.16%

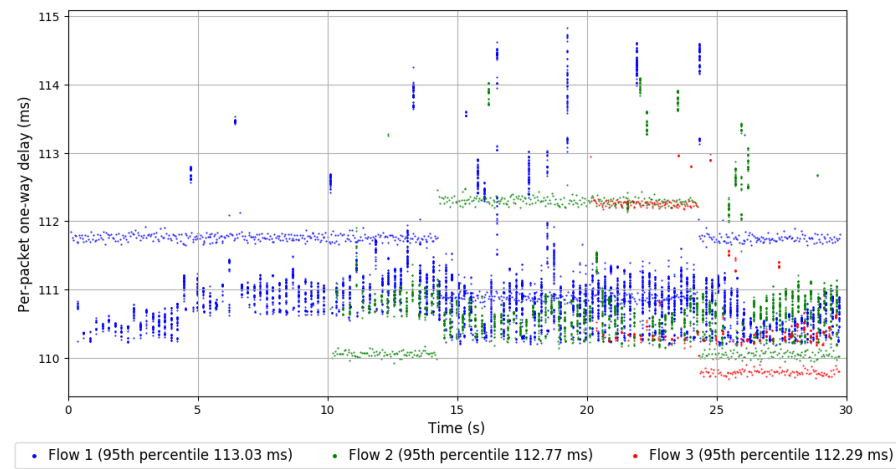
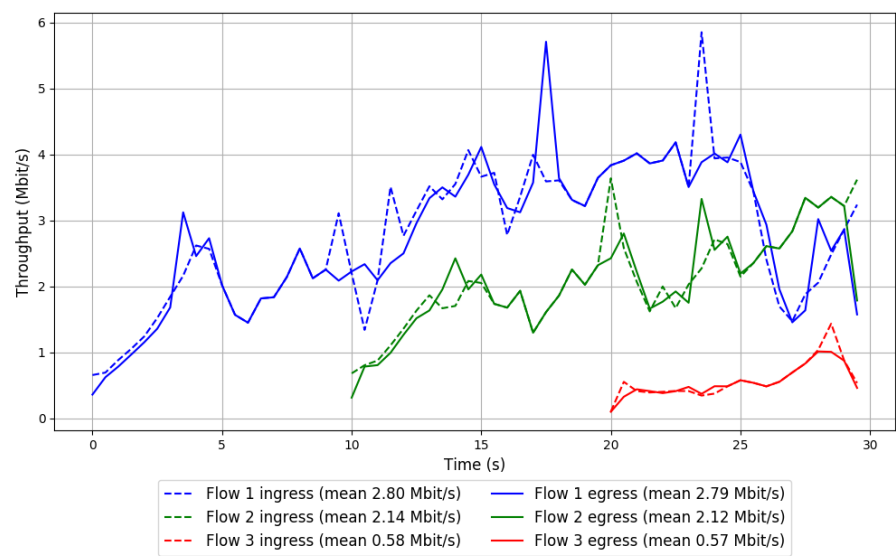
-- Flow 3:

Average throughput: 0.57 Mbit/s

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

Loss rate: 4.63%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-16 18:18:53

End at: 2017-11-16 18:19:23

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.69 Mbit/s

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

Loss rate: 2.62%

-- Flow 1:

Average throughput: 2.70 Mbit/s

95th percentile per-packet one-way delay: 111.927 ms

Loss rate: 1.82%

-- Flow 2:

Average throughput: 2.61 Mbit/s

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

Loss rate: 2.83%

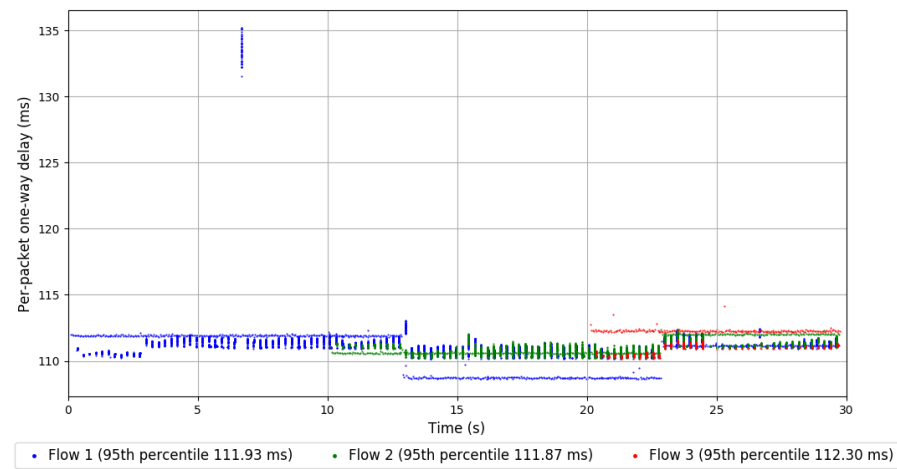
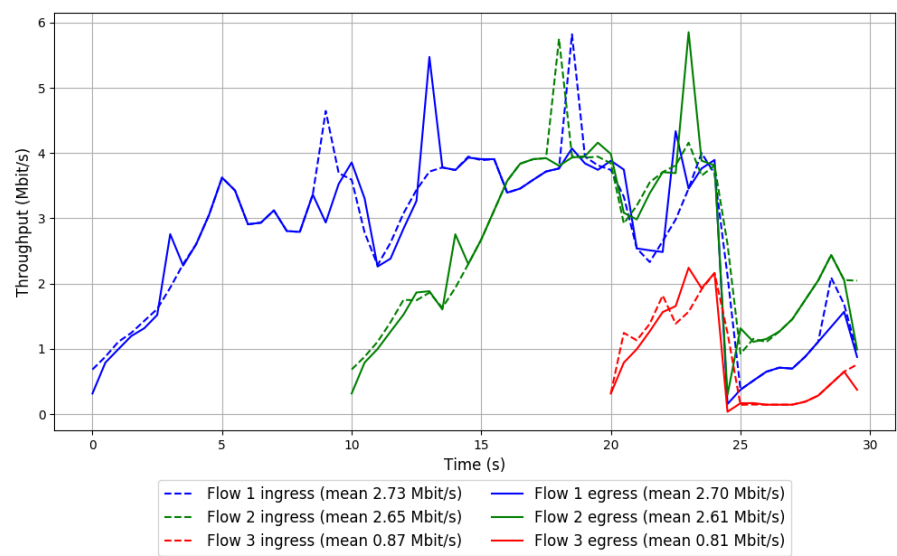
-- Flow 3:

Average throughput: 0.81 Mbit/s

95th percentile per-packet one-way delay: 112.295 ms

Loss rate: 9.03%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-16 18:32:48

End at: 2017-11-16 18:33:18

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.76 Mbit/s

95th percentile per-packet one-way delay: 112.122 ms

Loss rate: 1.32%

-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 112.242 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 2.75 Mbit/s

95th percentile per-packet one-way delay: 111.160 ms

Loss rate: 1.63%

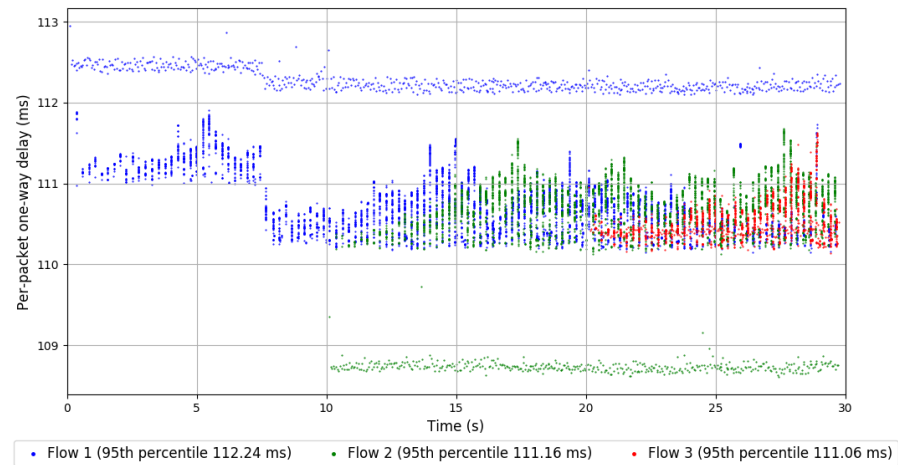
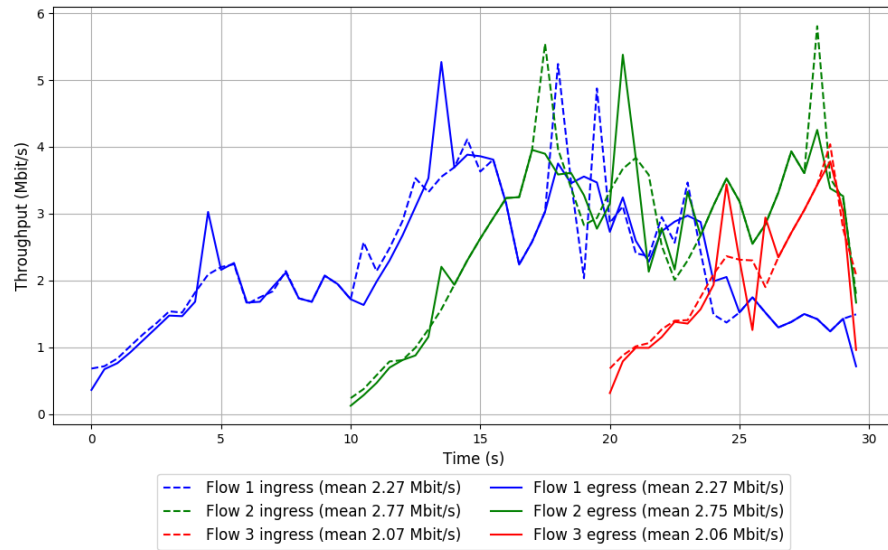
-- Flow 3:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 111.064 ms

Loss rate: 2.76%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-16 18:46:34

End at: 2017-11-16 18:47:04

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.58 Mbit/s

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

Loss rate: 1.60%

-- Flow 1:

Average throughput: 3.16 Mbit/s

95th percentile per-packet one-way delay: 111.321 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 111.184 ms

Loss rate: 1.46%

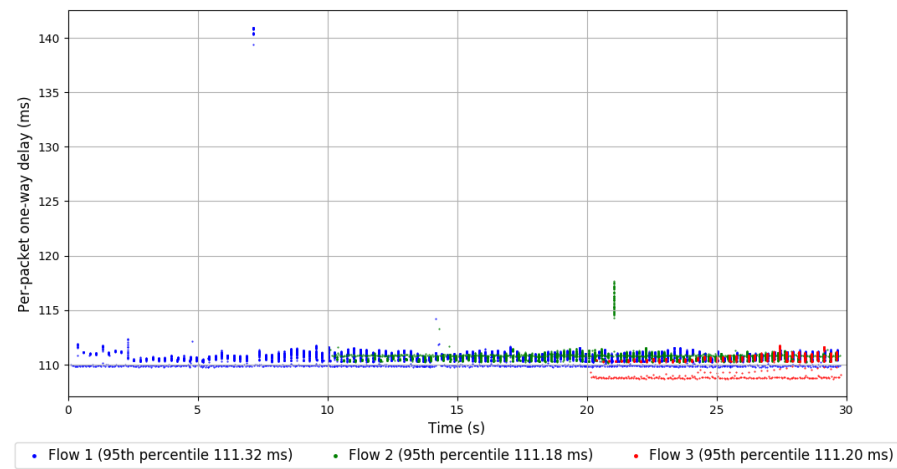
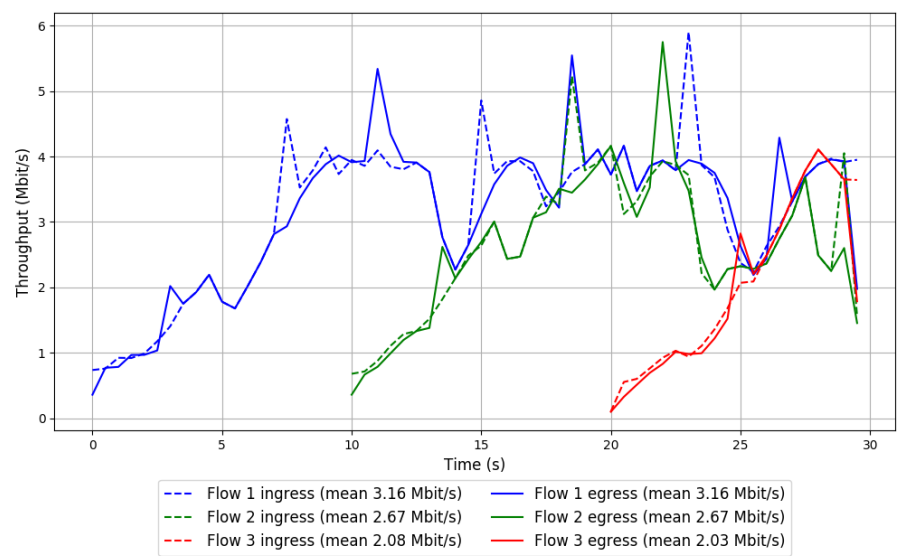
-- Flow 3:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 111.200 ms

Loss rate: 4.52%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-16 19:00:24

End at: 2017-11-16 19:00:54

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.91 Mbit/s

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

Loss rate: 1.37%

-- Flow 1:

Average throughput: 3.13 Mbit/s

95th percentile per-packet one-way delay: 111.886 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 2.94 Mbit/s

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

Loss rate: 1.38%

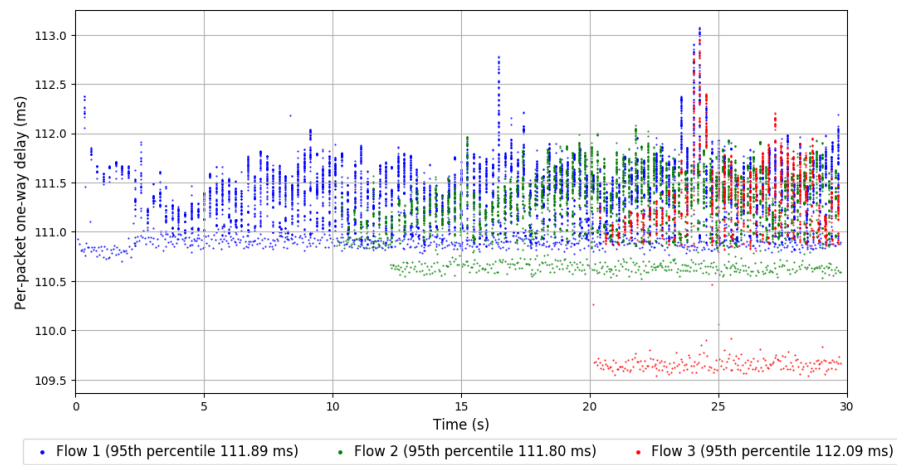
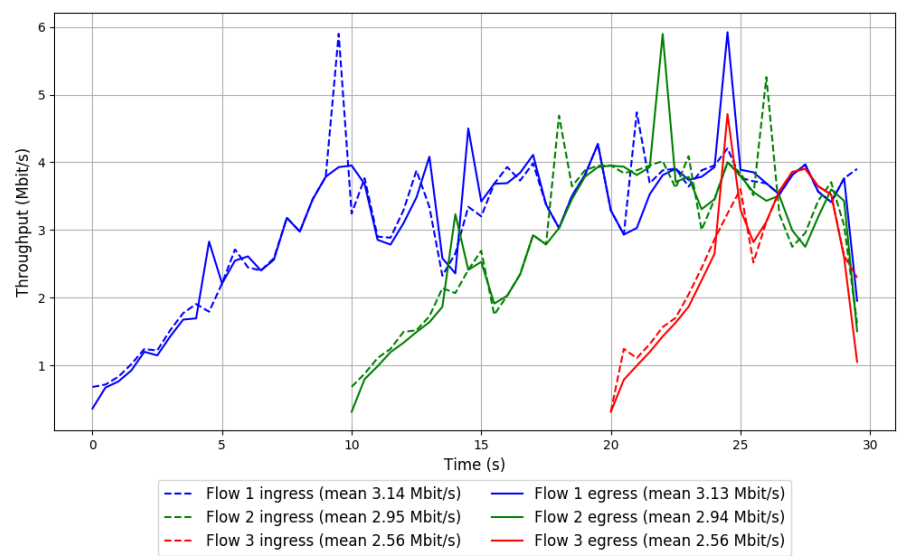
-- Flow 3:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 112.086 ms

Loss rate: 2.51%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-16 19:13:54

End at: 2017-11-16 19:14:24

Below is generated by plot.py at 2017-11-16 22:13:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.72 Mbit/s

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

Loss rate: 1.09%

-- Flow 1:

Average throughput: 2.54 Mbit/s

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

Loss rate: 0.76%

-- Flow 2:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 111.785 ms

Loss rate: 0.91%

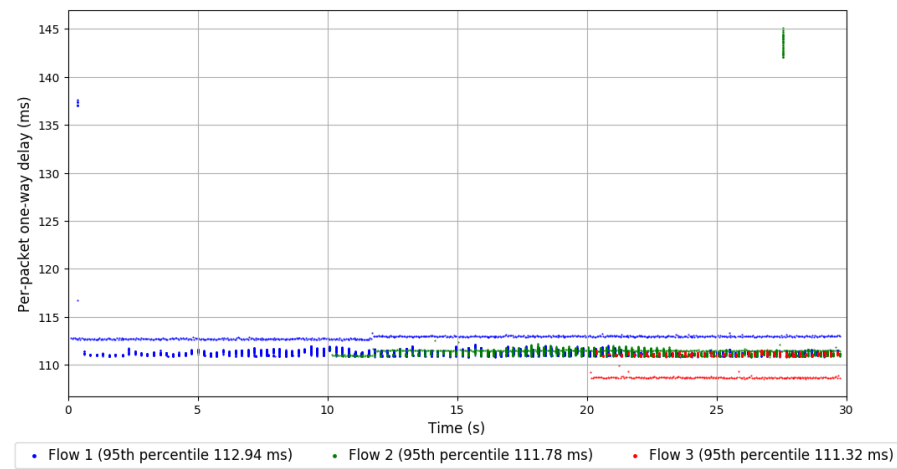
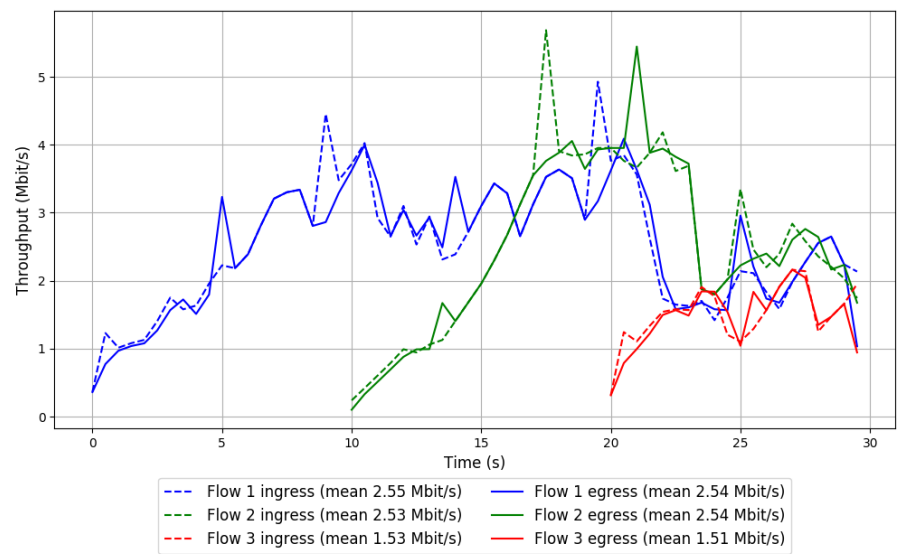
-- Flow 3:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 111.324 ms

Loss rate: 3.36%

Run 10: Report of Sprout — Data Link

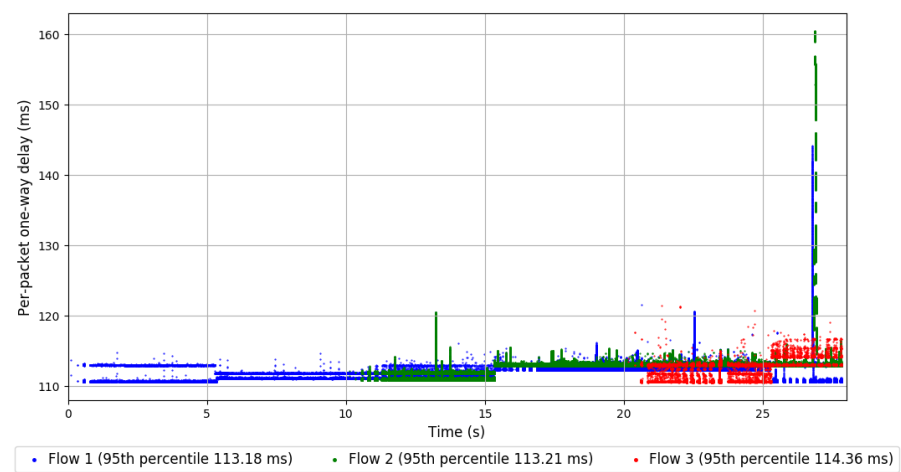
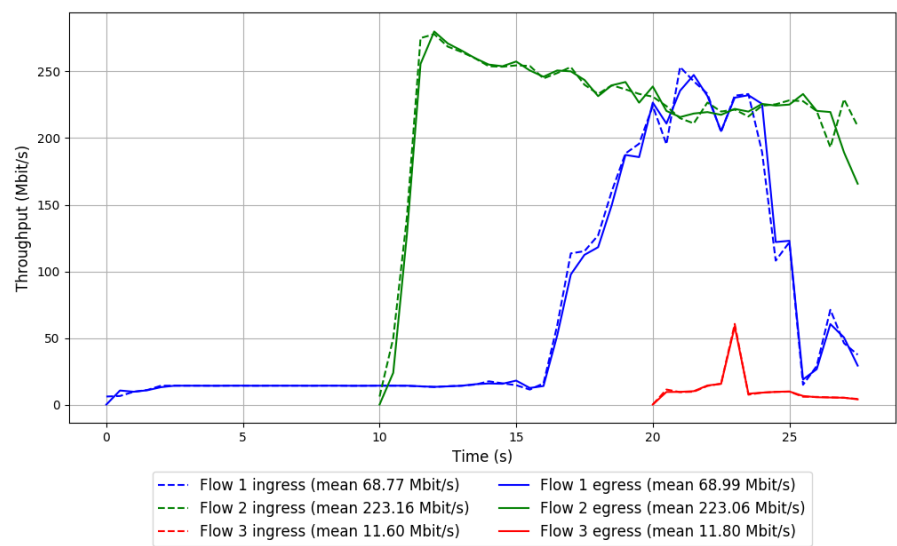


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-16 17:08:59
End at: 2017-11-16 17:09:29

# Below is generated by plot.py at 2017-11-16 22:13:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 214.82 Mbit/s
95th percentile per-packet one-way delay: 113.212 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 68.99 Mbit/s
95th percentile per-packet one-way delay: 113.179 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 223.06 Mbit/s
95th percentile per-packet one-way delay: 113.213 ms
Loss rate: 1.30%
-- Flow 3:
Average throughput: 11.80 Mbit/s
95th percentile per-packet one-way delay: 114.360 ms
Loss rate: 1.16%
```


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

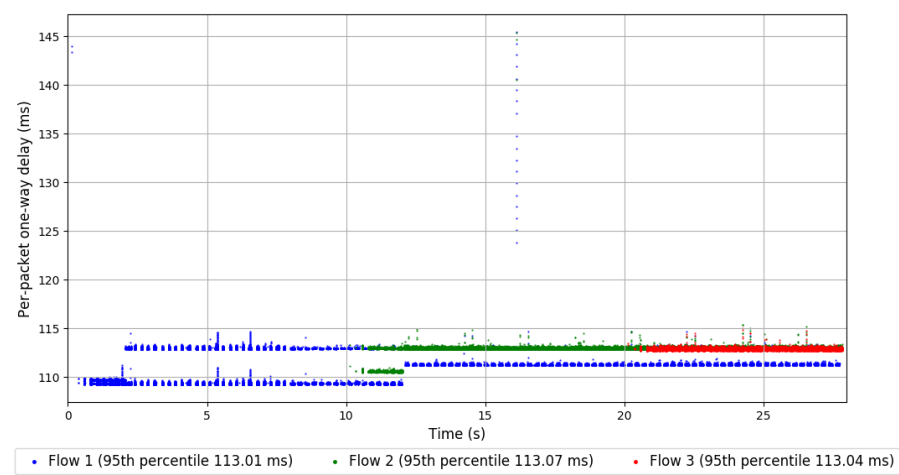
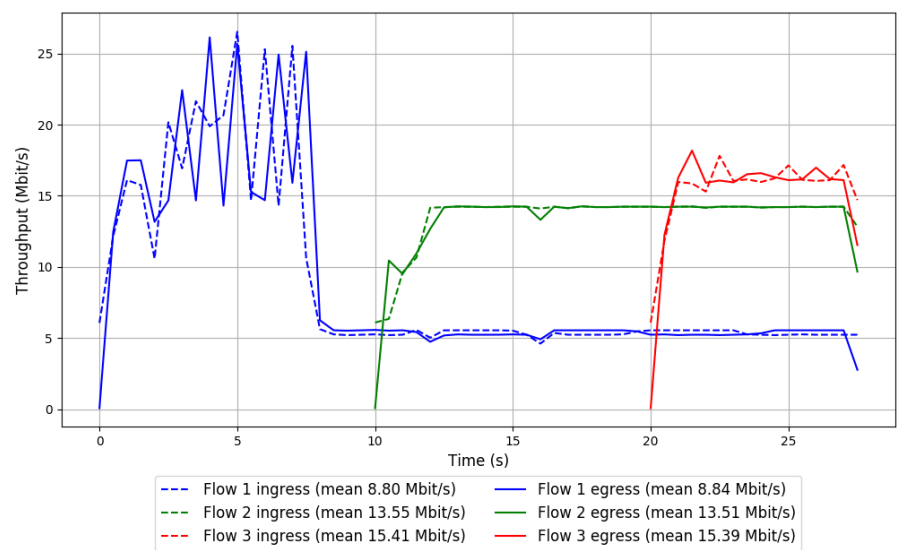


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-16 17:22:42
End at: 2017-11-16 17:23:12

# Below is generated by plot.py at 2017-11-16 22:13:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.73 Mbit/s
95th percentile per-packet one-way delay: 113.049 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 8.84 Mbit/s
95th percentile per-packet one-way delay: 113.011 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 13.51 Mbit/s
95th percentile per-packet one-way delay: 113.074 ms
Loss rate: 1.47%
-- Flow 3:
Average throughput: 15.39 Mbit/s
95th percentile per-packet one-way delay: 113.038 ms
Loss rate: 3.01%
```

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

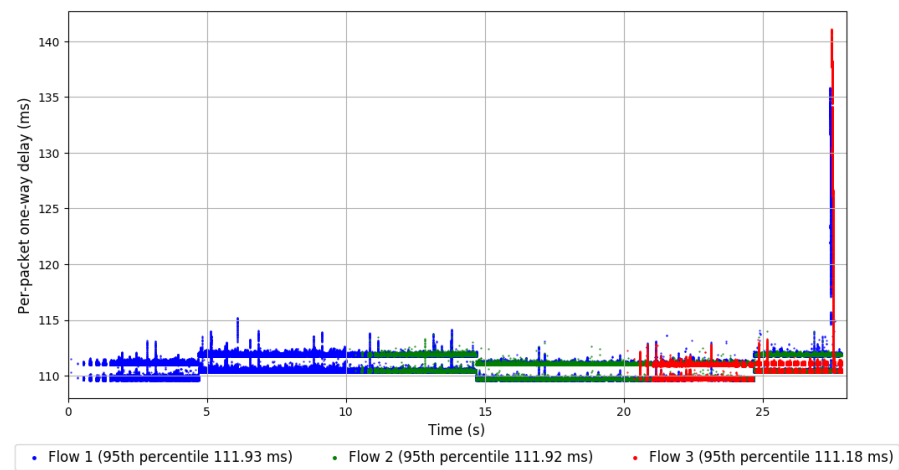
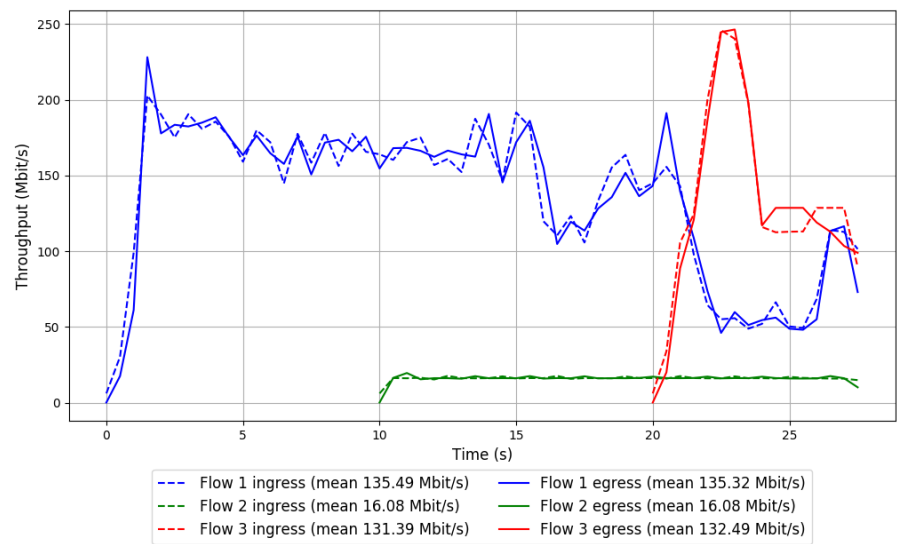


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-11-16 17:36:09
End at: 2017-11-16 17:36:39

# Below is generated by plot.py at 2017-11-16 22:13:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 182.41 Mbit/s
95th percentile per-packet one-way delay: 111.919 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 135.32 Mbit/s
95th percentile per-packet one-way delay: 111.928 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 16.08 Mbit/s
95th percentile per-packet one-way delay: 111.924 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 132.49 Mbit/s
95th percentile per-packet one-way delay: 111.179 ms
Loss rate: 1.98%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-11-16 17:49:49

End at: 2017-11-16 17:50:19

Below is generated by plot.py at 2017-11-16 22:13:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 235.98 Mbit/s

95th percentile per-packet one-way delay: 112.574 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 185.21 Mbit/s

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

Loss rate: 0.78%

-- Flow 2:

Average throughput: 13.39 Mbit/s

95th percentile per-packet one-way delay: 113.094 ms

Loss rate: 1.52%

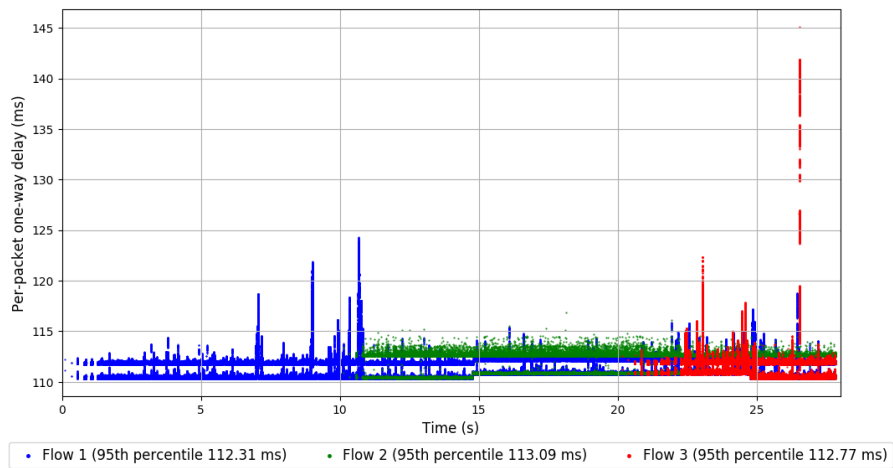
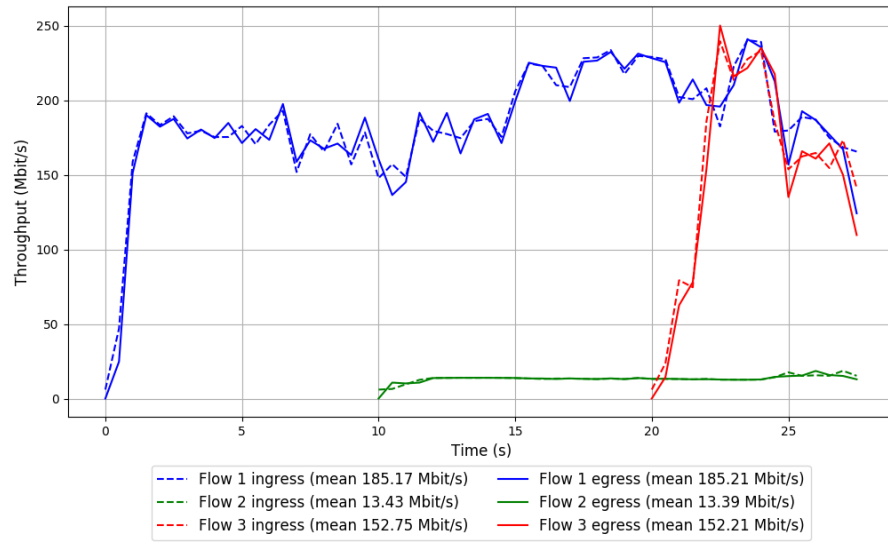
-- Flow 3:

Average throughput: 152.21 Mbit/s

95th percentile per-packet one-way delay: 112.769 ms

Loss rate: 3.18%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-16 18:03:30

End at: 2017-11-16 18:04:00

Below is generated by plot.py at 2017-11-16 22:13:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 168.42 Mbit/s

95th percentile per-packet one-way delay: 112.356 ms

Loss rate: 1.47%

-- Flow 1:

Average throughput: 89.93 Mbit/s

95th percentile per-packet one-way delay: 112.408 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 65.02 Mbit/s

95th percentile per-packet one-way delay: 111.441 ms

Loss rate: 1.07%

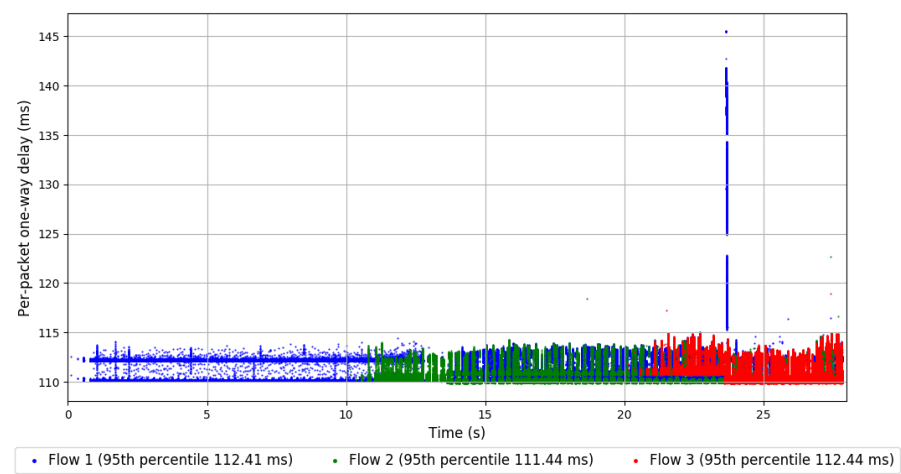
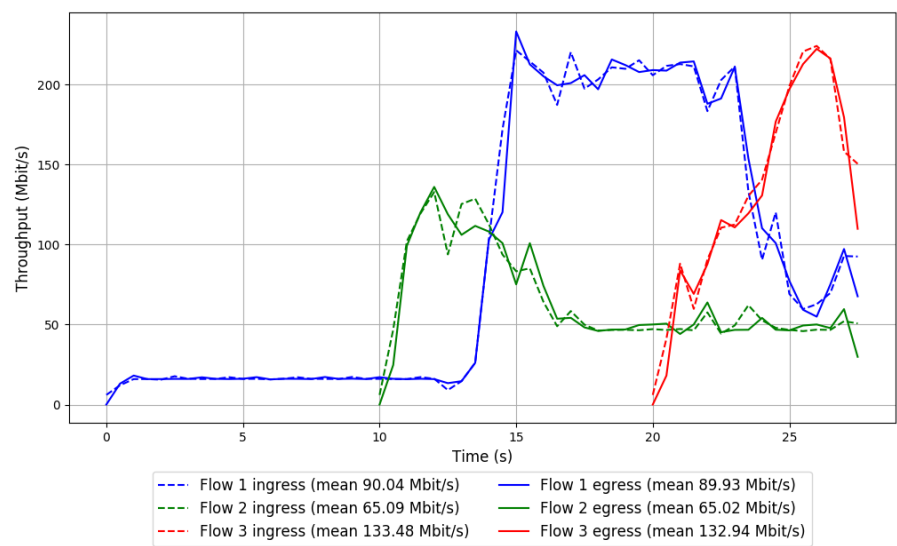
-- Flow 3:

Average throughput: 132.94 Mbit/s

95th percentile per-packet one-way delay: 112.444 ms

Loss rate: 3.22%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-16 18:17:02

End at: 2017-11-16 18:17:32

Below is generated by plot.py at 2017-11-16 22:13:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 161.61 Mbit/s

95th percentile per-packet one-way delay: 112.818 ms

Loss rate: 1.56%

-- Flow 1:

Average throughput: 118.94 Mbit/s

95th percentile per-packet one-way delay: 112.823 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 13.19 Mbit/s

95th percentile per-packet one-way delay: 112.812 ms

Loss rate: 1.22%

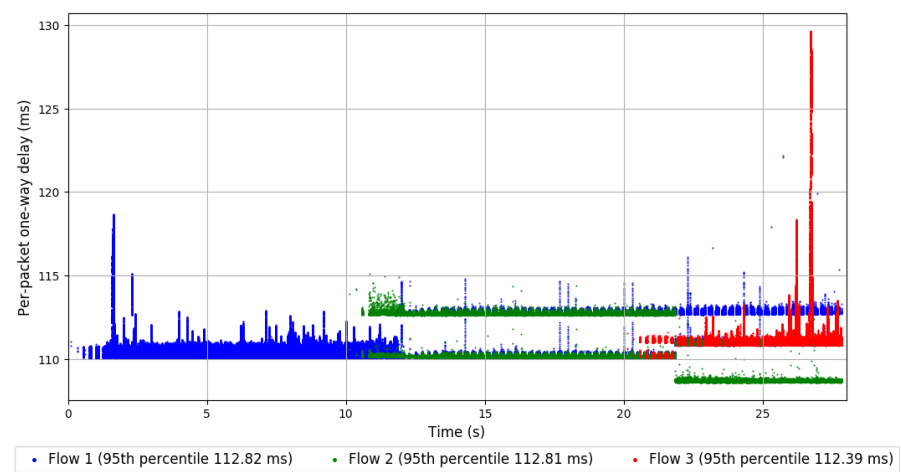
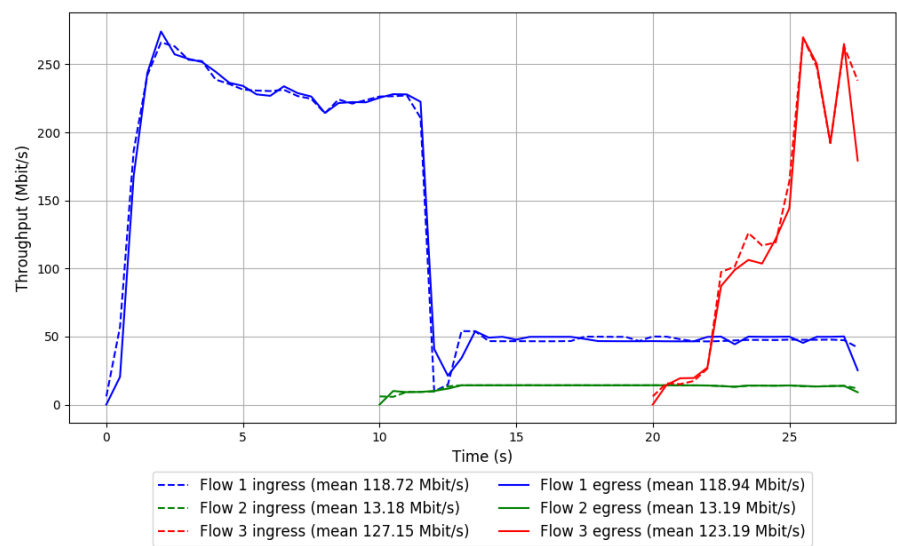
-- Flow 3:

Average throughput: 123.19 Mbit/s

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

Loss rate: 5.84%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-11-16 18:30:49

End at: 2017-11-16 18:31:19

Below is generated by plot.py at 2017-11-16 22:14:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 253.68 Mbit/s

95th percentile per-packet one-way delay: 111.621 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 220.55 Mbit/s

95th percentile per-packet one-way delay: 111.000 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 13.41 Mbit/s

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

Loss rate: 1.31%

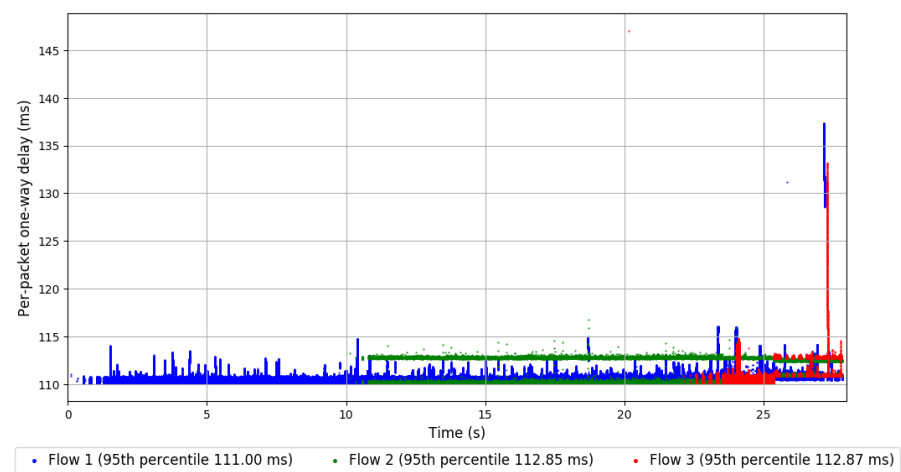
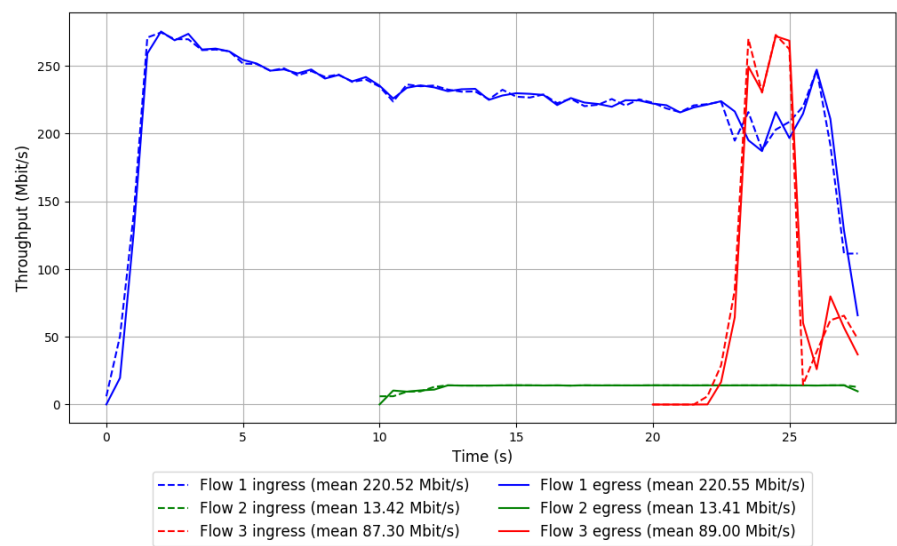
-- Flow 3:

Average throughput: 89.00 Mbit/s

95th percentile per-packet one-way delay: 112.874 ms

Loss rate: 1.66%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-16 18:44:39

End at: 2017-11-16 18:45:09

Below is generated by plot.py at 2017-11-16 22:16:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.43 Mbit/s

95th percentile per-packet one-way delay: 112.290 ms

Loss rate: 1.52%

-- Flow 1:

Average throughput: 30.57 Mbit/s

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

Loss rate: 1.09%

-- Flow 2:

Average throughput: 168.15 Mbit/s

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

Loss rate: 0.60%

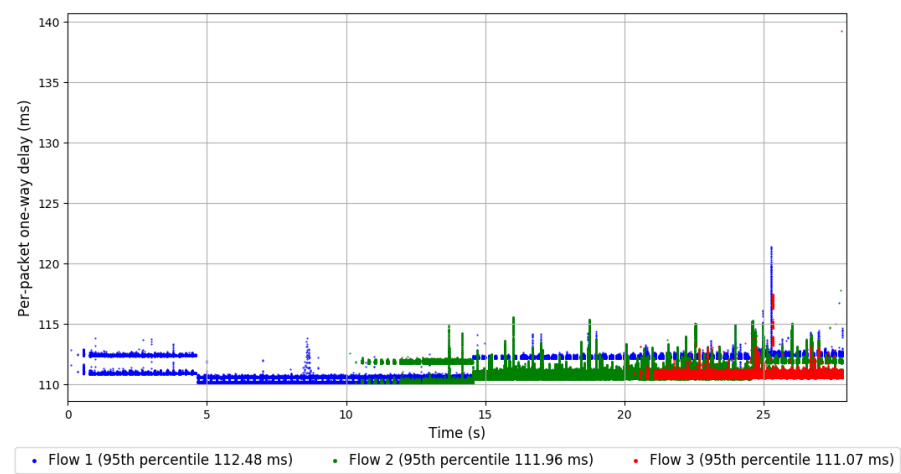
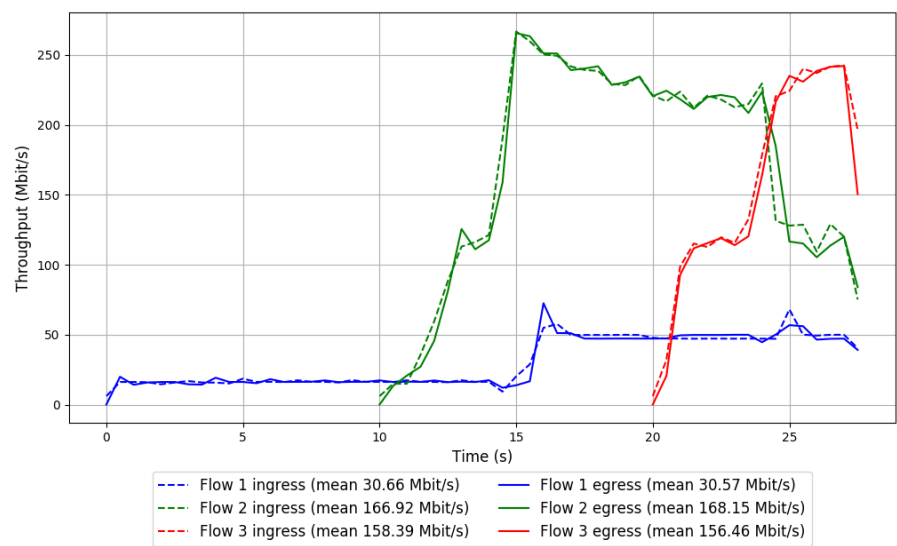
-- Flow 3:

Average throughput: 156.46 Mbit/s

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

Loss rate: 4.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-11-16 18:58:13

End at: 2017-11-16 18:58:43

Below is generated by plot.py at 2017-11-16 22:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 362.47 Mbit/s

95th percentile per-packet one-way delay: 112.969 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 213.33 Mbit/s

95th percentile per-packet one-way delay: 112.253 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 168.72 Mbit/s

95th percentile per-packet one-way delay: 111.864 ms

Loss rate: 1.18%

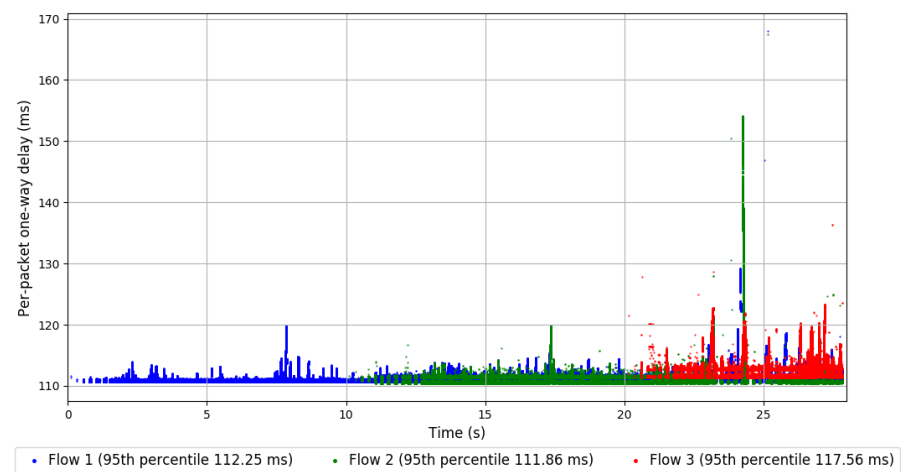
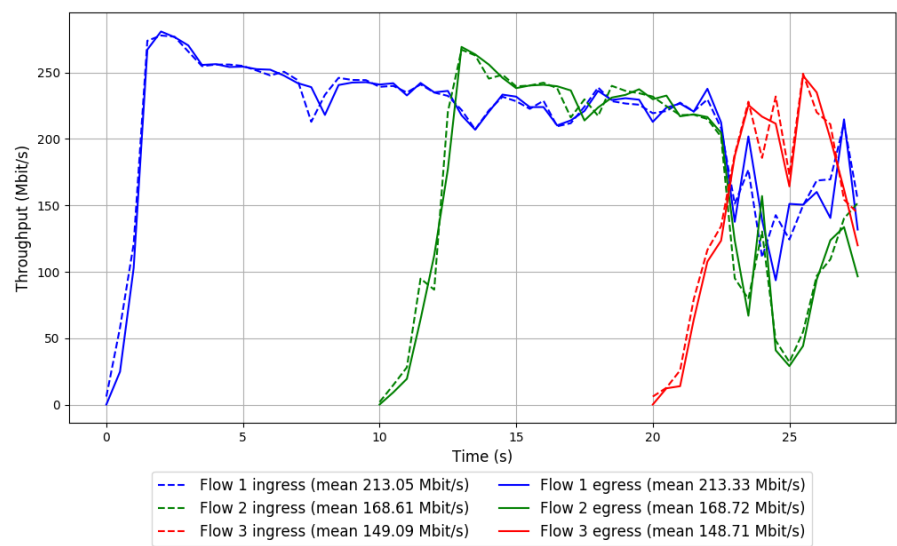
-- Flow 3:

Average throughput: 148.71 Mbit/s

95th percentile per-packet one-way delay: 117.558 ms

Loss rate: 2.93%

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

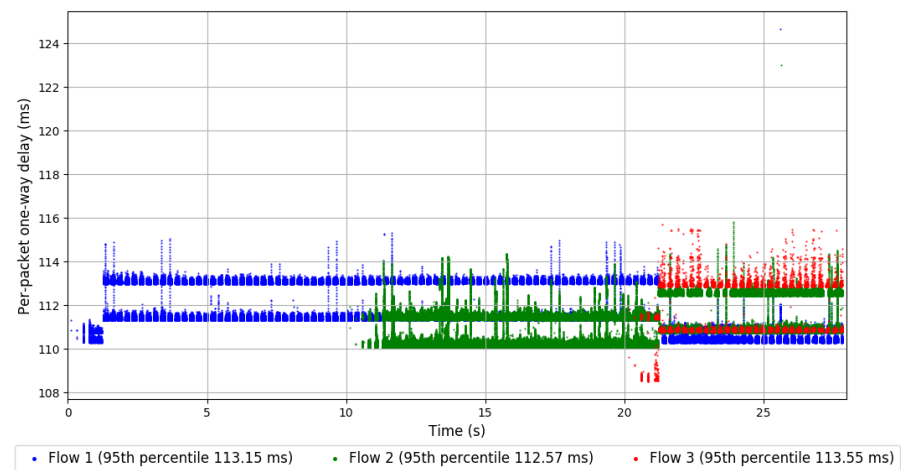
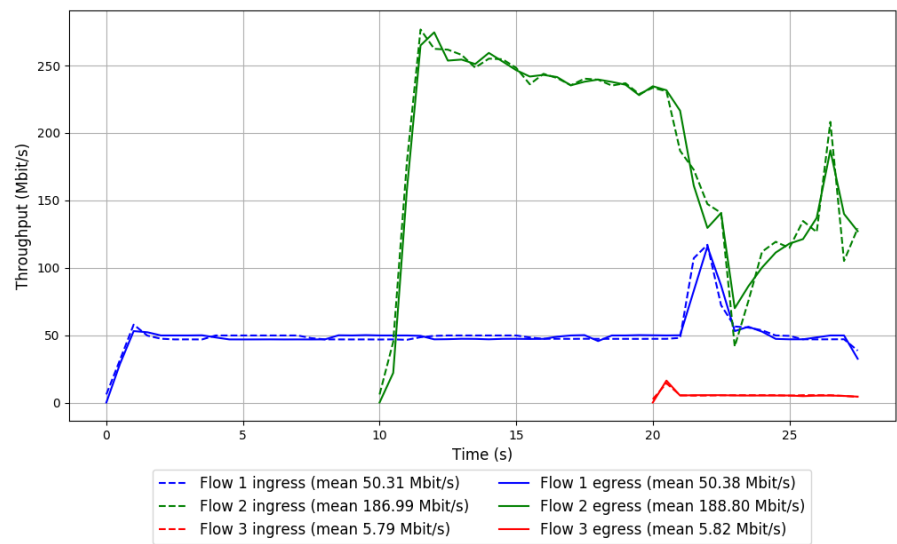


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-16 19:12:03
End at: 2017-11-16 19:12:33

# Below is generated by plot.py at 2017-11-16 22:22:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 172.63 Mbit/s
95th percentile per-packet one-way delay: 113.070 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 50.38 Mbit/s
95th percentile per-packet one-way delay: 113.154 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 188.80 Mbit/s
95th percentile per-packet one-way delay: 112.567 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 5.82 Mbit/s
95th percentile per-packet one-way delay: 113.554 ms
Loss rate: 2.30%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-16 17:18:07

End at: 2017-11-16 17:18:37

Below is generated by plot.py at 2017-11-16 22:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.68 Mbit/s

95th percentile per-packet one-way delay: 120.239 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 78.08 Mbit/s

95th percentile per-packet one-way delay: 119.751 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 47.66 Mbit/s

95th percentile per-packet one-way delay: 121.738 ms

Loss rate: 0.50%

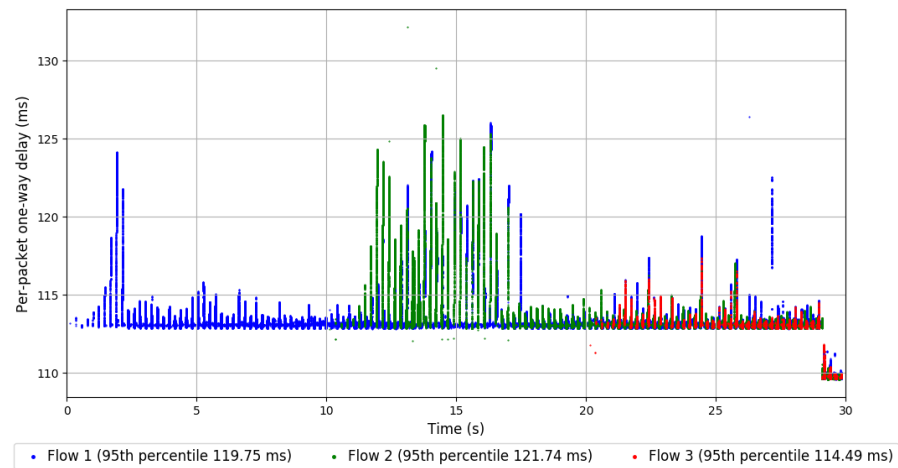
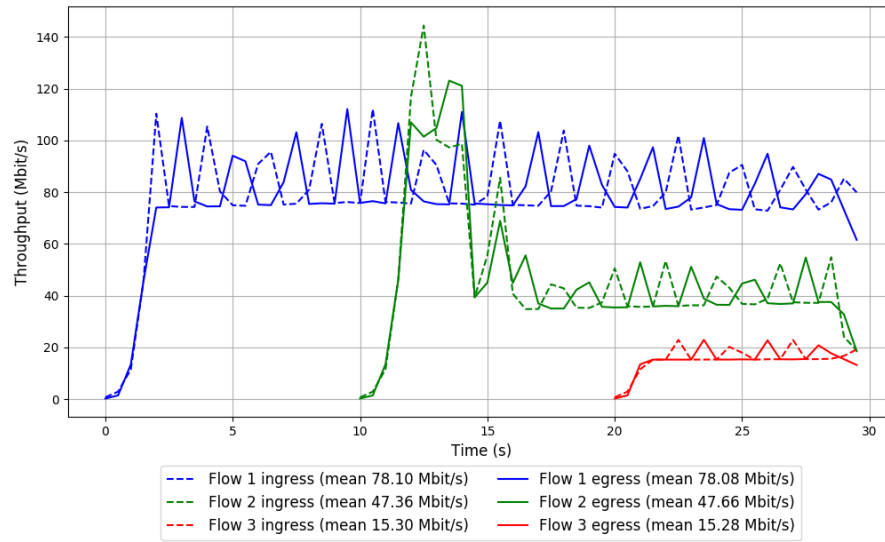
-- Flow 3:

Average throughput: 15.28 Mbit/s

95th percentile per-packet one-way delay: 114.490 ms

Loss rate: 2.43%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-16 17:31:37

End at: 2017-11-16 17:32:07

Below is generated by plot.py at 2017-11-16 22:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.43 Mbit/s

95th percentile per-packet one-way delay: 116.859 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 51.67 Mbit/s

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

Loss rate: 0.74%

-- Flow 2:

Average throughput: 41.55 Mbit/s

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

Loss rate: 1.22%

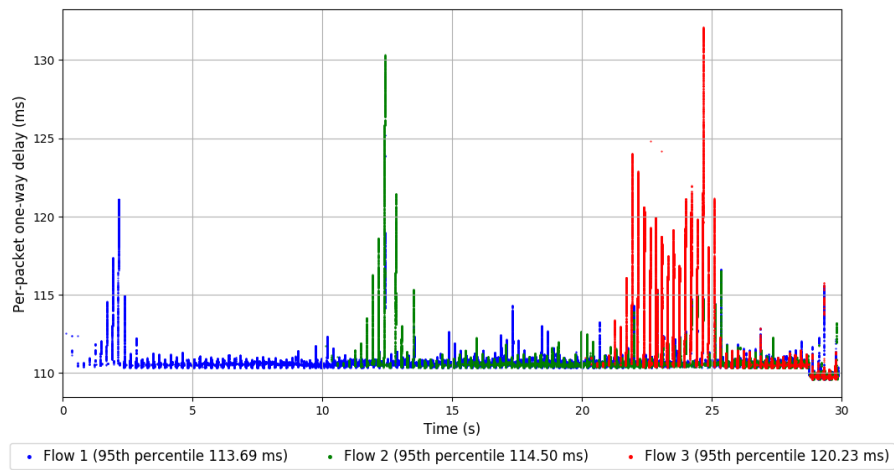
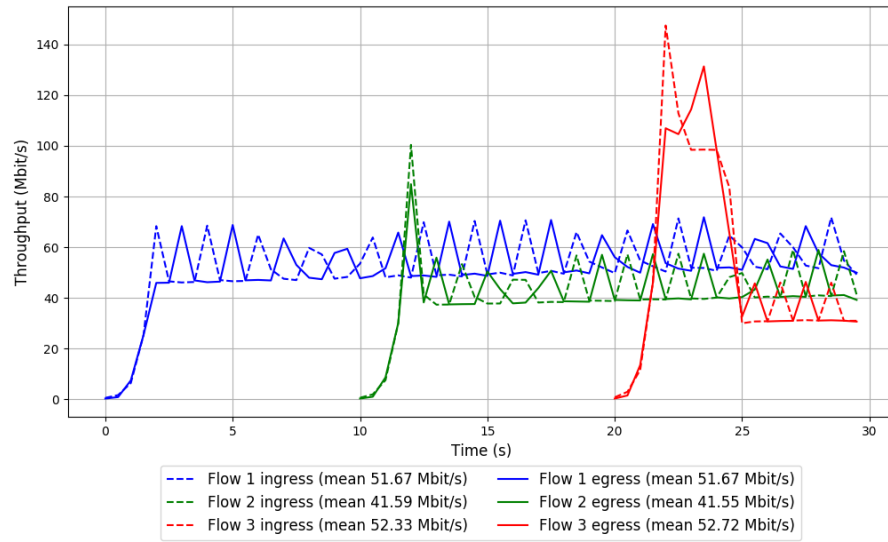
-- Flow 3:

Average throughput: 52.72 Mbit/s

95th percentile per-packet one-way delay: 120.234 ms

Loss rate: 1.52%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-16 17:45:16

End at: 2017-11-16 17:45:46

Below is generated by plot.py at 2017-11-16 22:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.72 Mbit/s

95th percentile per-packet one-way delay: 120.958 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 50.98 Mbit/s

95th percentile per-packet one-way delay: 118.539 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 62.31 Mbit/s

95th percentile per-packet one-way delay: 123.520 ms

Loss rate: 0.51%

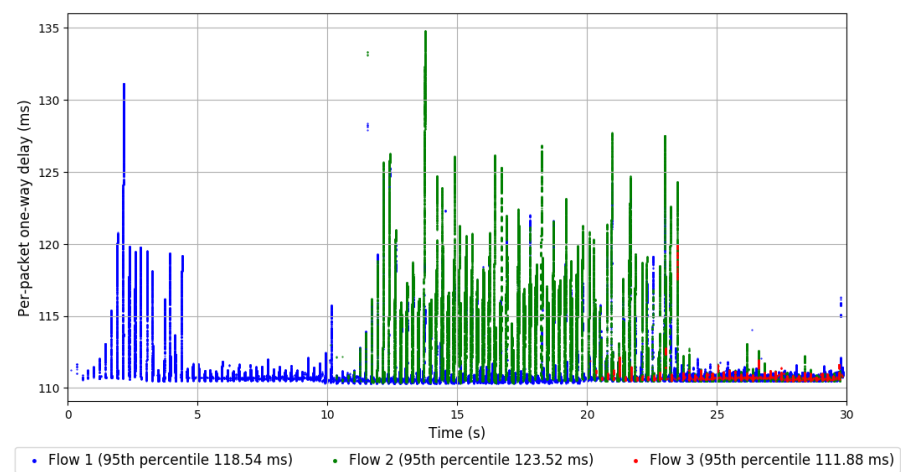
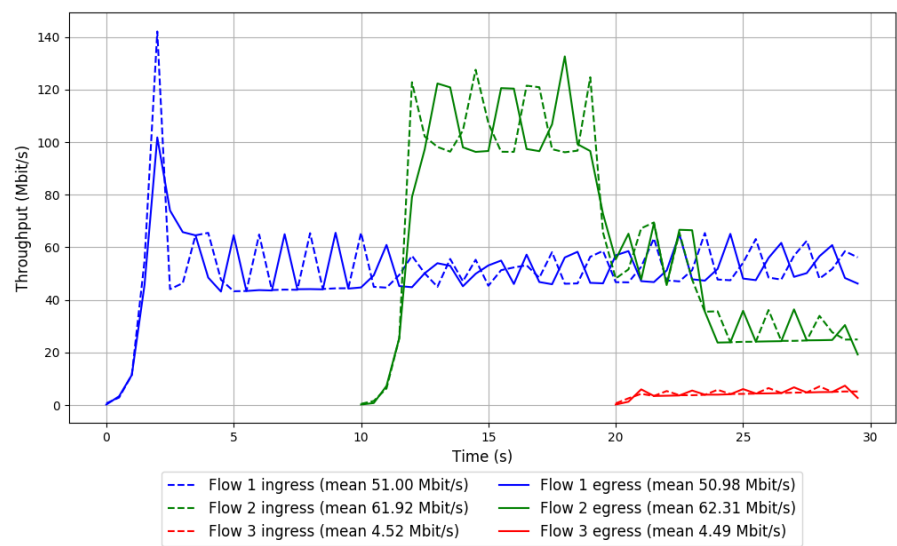
-- Flow 3:

Average throughput: 4.49 Mbit/s

95th percentile per-packet one-way delay: 111.880 ms

Loss rate: 2.92%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-16 17:59:00

End at: 2017-11-16 17:59:30

Below is generated by plot.py at 2017-11-16 22:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.75 Mbit/s

95th percentile per-packet one-way delay: 114.563 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 29.95 Mbit/s

95th percentile per-packet one-way delay: 117.790 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 49.28 Mbit/s

95th percentile per-packet one-way delay: 112.034 ms

Loss rate: 1.26%

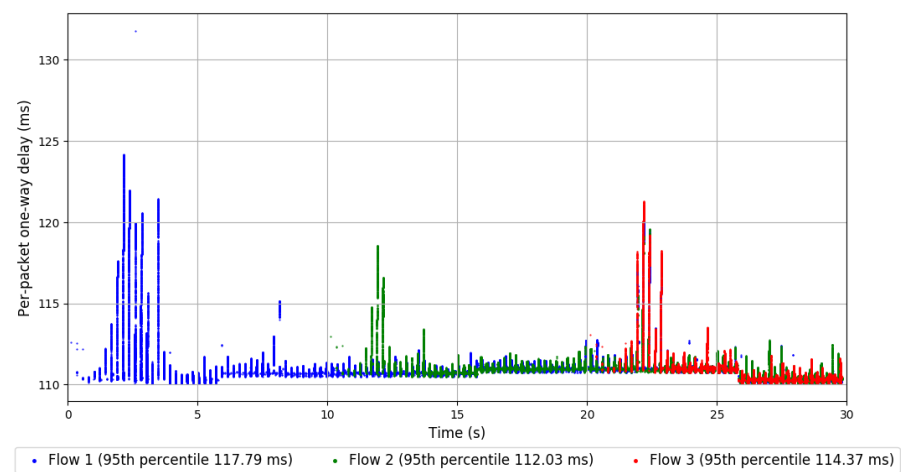
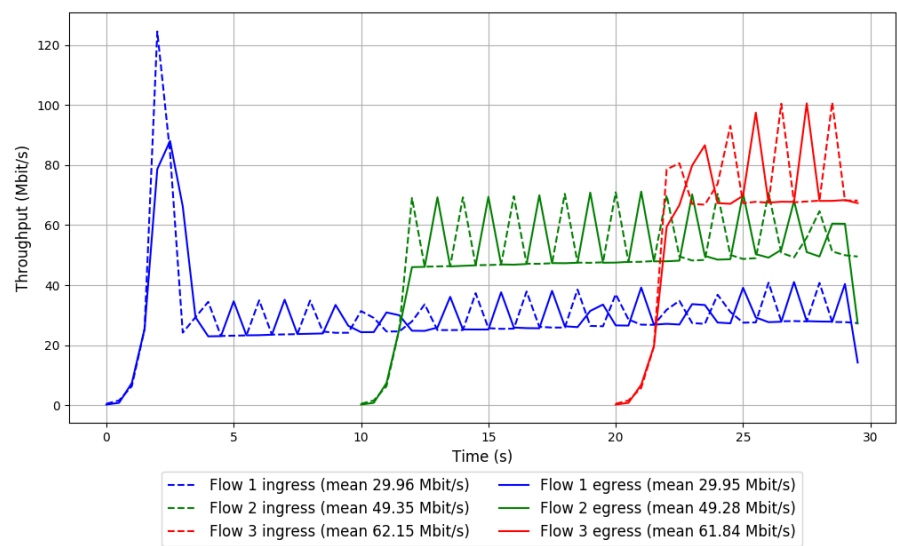
-- Flow 3:

Average throughput: 61.84 Mbit/s

95th percentile per-packet one-way delay: 114.368 ms

Loss rate: 2.77%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-16 18:12:34

End at: 2017-11-16 18:13:04

Below is generated by plot.py at 2017-11-16 22:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 58.86 Mbit/s

95th percentile per-packet one-way delay: 118.035 ms

Loss rate: 1.78%

-- Flow 1:

Average throughput: 22.07 Mbit/s

95th percentile per-packet one-way delay: 114.754 ms

Loss rate: 2.46%

-- Flow 2:

Average throughput: 31.45 Mbit/s

95th percentile per-packet one-way delay: 114.142 ms

Loss rate: 1.15%

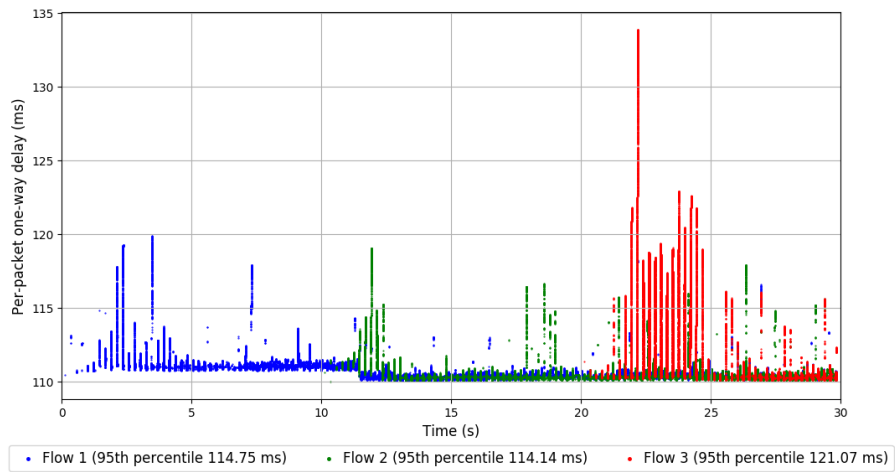
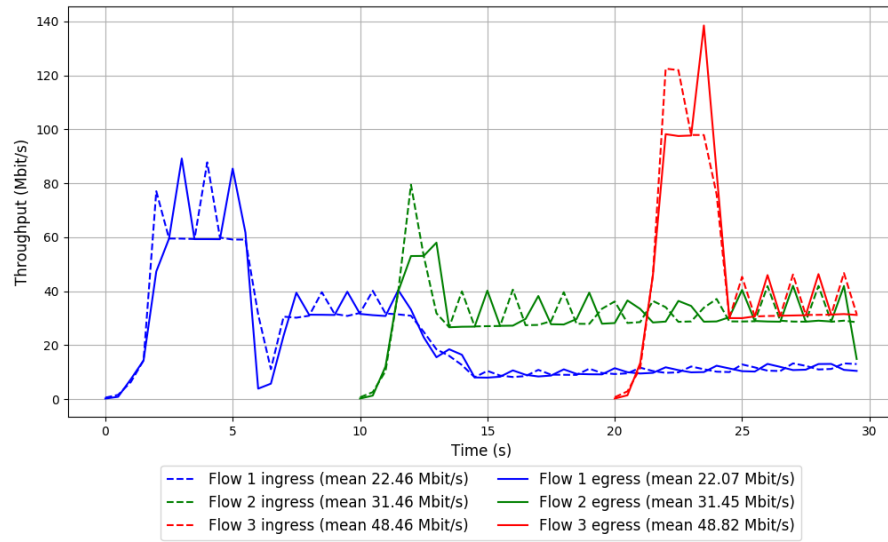
-- Flow 3:

Average throughput: 48.82 Mbit/s

95th percentile per-packet one-way delay: 121.068 ms

Loss rate: 1.65%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-16 18:26:09

End at: 2017-11-16 18:26:39

Below is generated by plot.py at 2017-11-16 22:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.17 Mbit/s

95th percentile per-packet one-way delay: 112.744 ms

Loss rate: 1.42%

-- Flow 1:

Average throughput: 34.40 Mbit/s

95th percentile per-packet one-way delay: 111.972 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 59.28 Mbit/s

95th percentile per-packet one-way delay: 112.442 ms

Loss rate: 1.21%

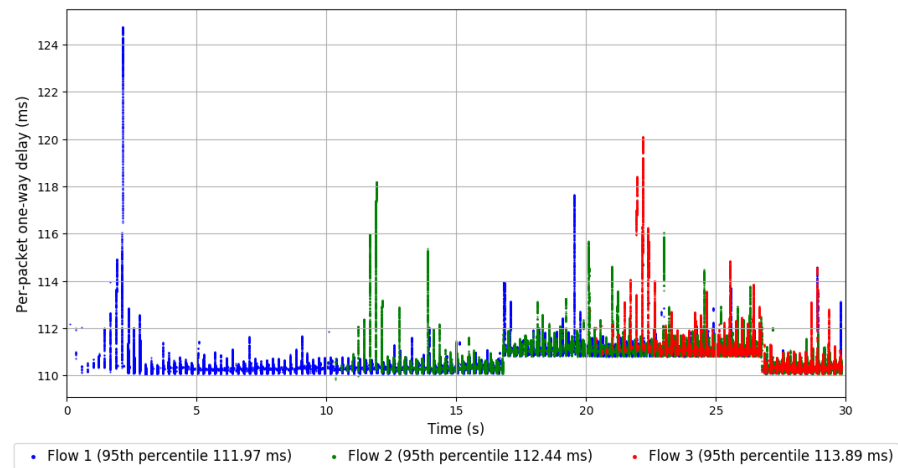
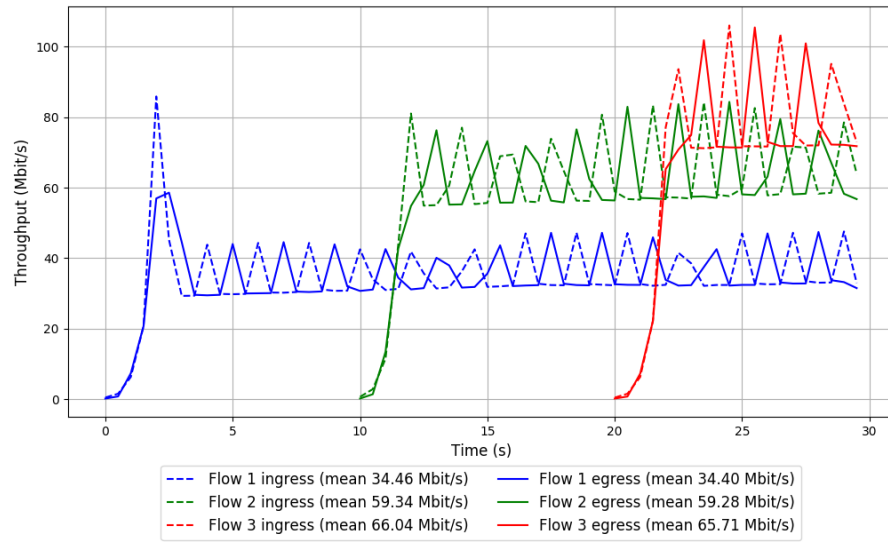
-- Flow 3:

Average throughput: 65.71 Mbit/s

95th percentile per-packet one-way delay: 113.888 ms

Loss rate: 2.76%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-16 18:40:03

End at: 2017-11-16 18:40:33

Below is generated by plot.py at 2017-11-16 22:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.65 Mbit/s

95th percentile per-packet one-way delay: 117.850 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 54.71 Mbit/s

95th percentile per-packet one-way delay: 112.596 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 27.90 Mbit/s

95th percentile per-packet one-way delay: 116.138 ms

Loss rate: 0.77%

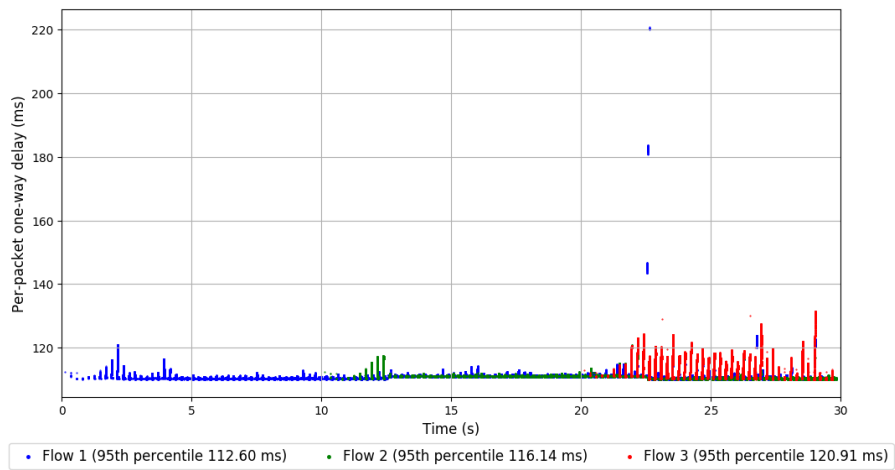
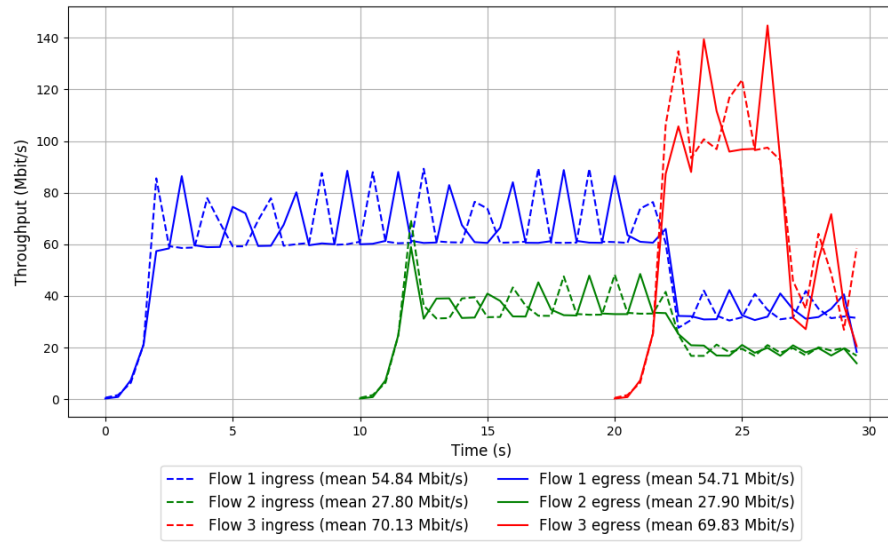
-- Flow 3:

Average throughput: 69.83 Mbit/s

95th percentile per-packet one-way delay: 120.912 ms

Loss rate: 2.77%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-16 18:53:43

End at: 2017-11-16 18:54:13

Below is generated by plot.py at 2017-11-16 22:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 44.38 Mbit/s

95th percentile per-packet one-way delay: 114.680 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 12.96 Mbit/s

95th percentile per-packet one-way delay: 111.764 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 36.46 Mbit/s

95th percentile per-packet one-way delay: 117.762 ms

Loss rate: 1.15%

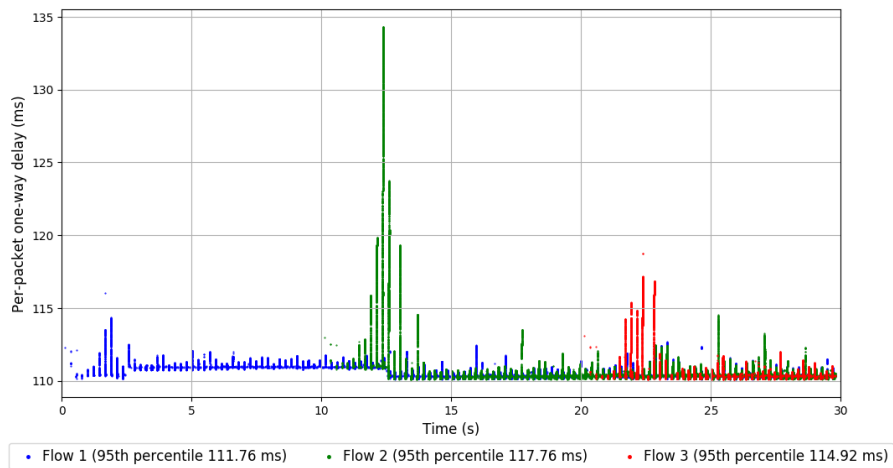
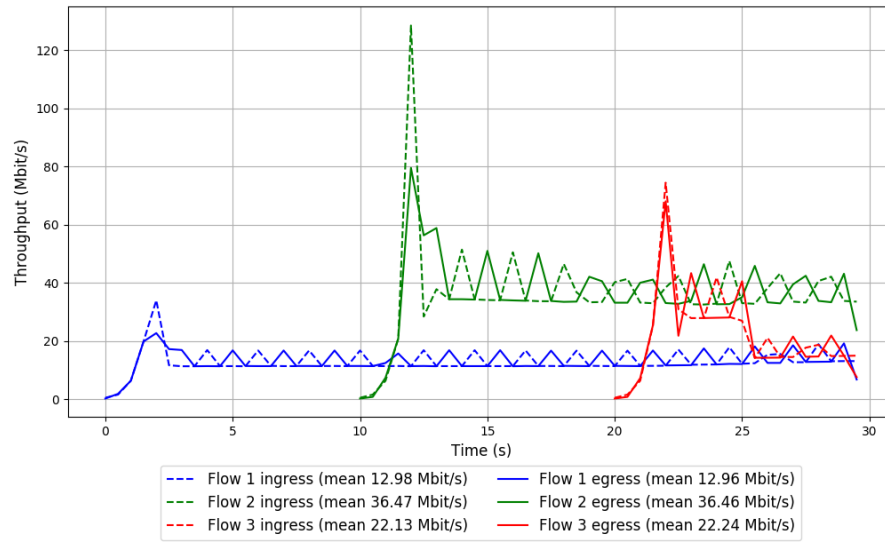
-- Flow 3:

Average throughput: 22.24 Mbit/s

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

Loss rate: 1.78%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-16 19:07:28

End at: 2017-11-16 19:07:58

Below is generated by plot.py at 2017-11-16 22:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.65 Mbit/s

95th percentile per-packet one-way delay: 120.744 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 29.85 Mbit/s

95th percentile per-packet one-way delay: 117.512 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 76.78 Mbit/s

95th percentile per-packet one-way delay: 120.743 ms

Loss rate: 1.27%

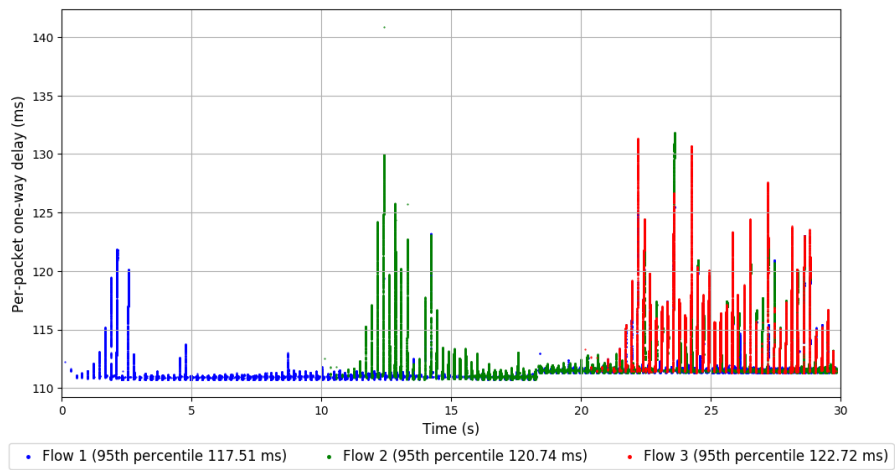
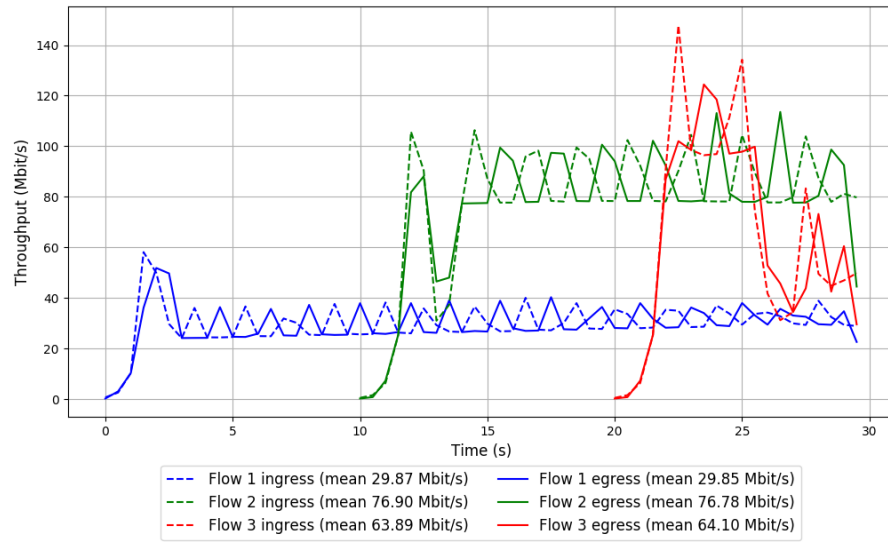
-- Flow 3:

Average throughput: 64.10 Mbit/s

95th percentile per-packet one-way delay: 122.721 ms

Loss rate: 1.97%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-16 19:21:06

End at: 2017-11-16 19:21:36

Below is generated by plot.py at 2017-11-16 22:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.77 Mbit/s

95th percentile per-packet one-way delay: 120.207 ms

Loss rate: 1.87%

-- Flow 1:

Average throughput: 32.23 Mbit/s

95th percentile per-packet one-way delay: 119.516 ms

Loss rate: 2.51%

-- Flow 2:

Average throughput: 41.69 Mbit/s

95th percentile per-packet one-way delay: 116.281 ms

Loss rate: 1.25%

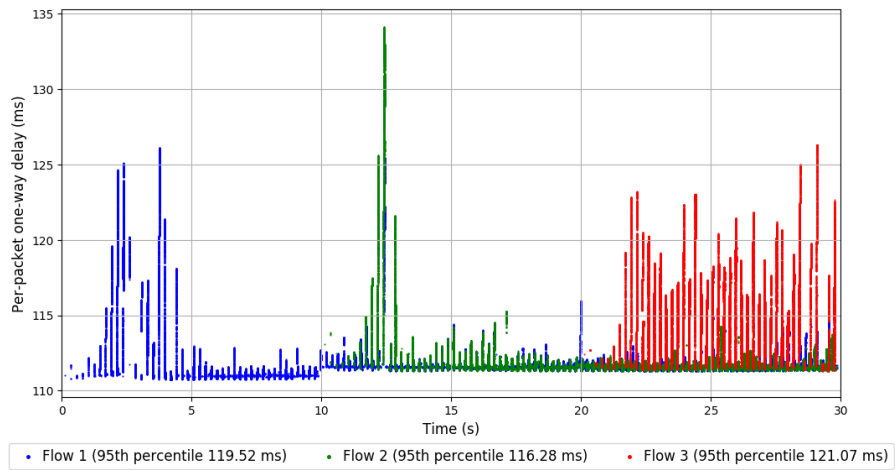
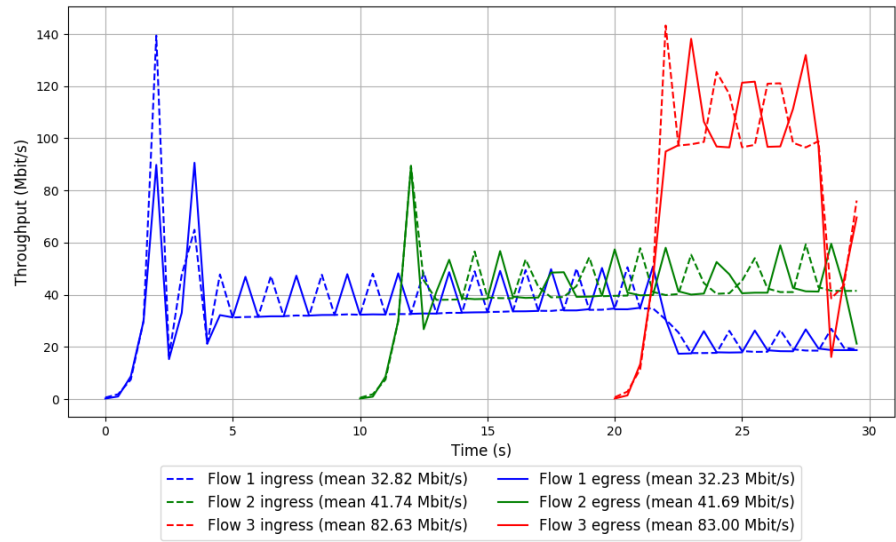
-- Flow 3:

Average throughput: 83.00 Mbit/s

95th percentile per-packet one-way delay: 121.067 ms

Loss rate: 1.75%

Run 10: Report of TCP Vegas — Data Link

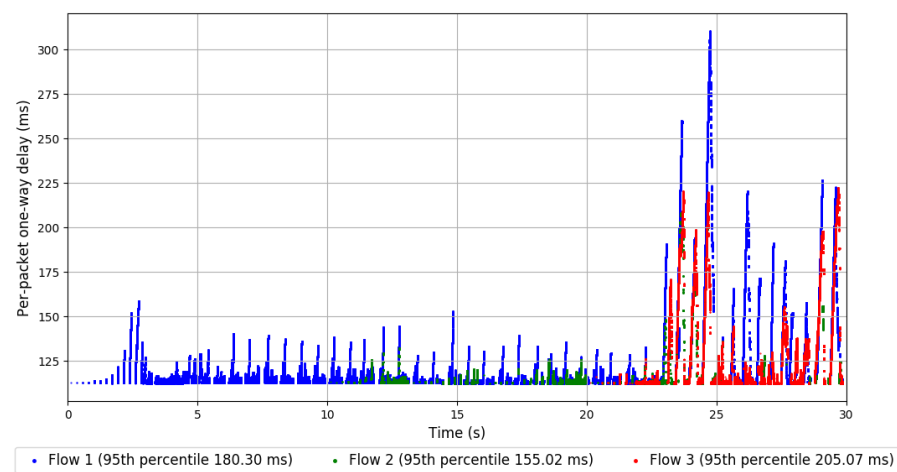
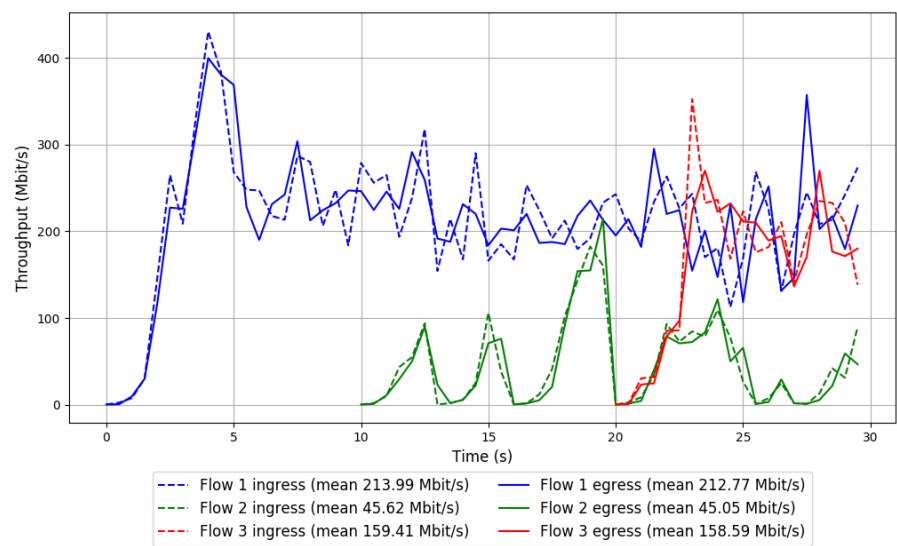


```
Run 1: Statistics of Verus

Start at: 2017-11-16 17:11:41
End at: 2017-11-16 17:12:11

# Below is generated by plot.py at 2017-11-16 22:22:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 294.48 Mbit/s
95th percentile per-packet one-way delay: 189.949 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 212.77 Mbit/s
95th percentile per-packet one-way delay: 180.301 ms
Loss rate: 1.31%
-- Flow 2:
Average throughput: 45.05 Mbit/s
95th percentile per-packet one-way delay: 155.022 ms
Loss rate: 2.39%
-- Flow 3:
Average throughput: 158.59 Mbit/s
95th percentile per-packet one-way delay: 205.075 ms
Loss rate: 2.76%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-16 17:25:04

End at: 2017-11-16 17:25:34

Below is generated by plot.py at 2017-11-16 22:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 322.69 Mbit/s

95th percentile per-packet one-way delay: 203.274 ms

Loss rate: 1.93%

-- Flow 1:

Average throughput: 192.37 Mbit/s

95th percentile per-packet one-way delay: 224.253 ms

Loss rate: 2.61%

-- Flow 2:

Average throughput: 179.47 Mbit/s

95th percentile per-packet one-way delay: 169.395 ms

Loss rate: 1.01%

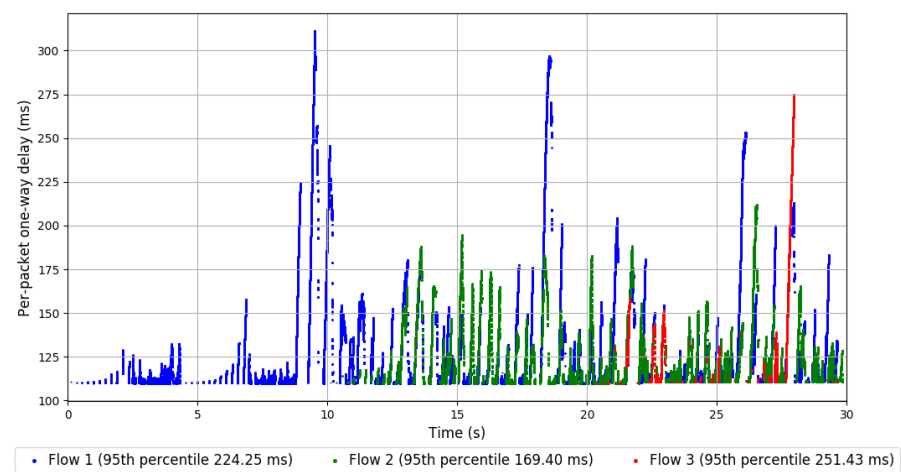
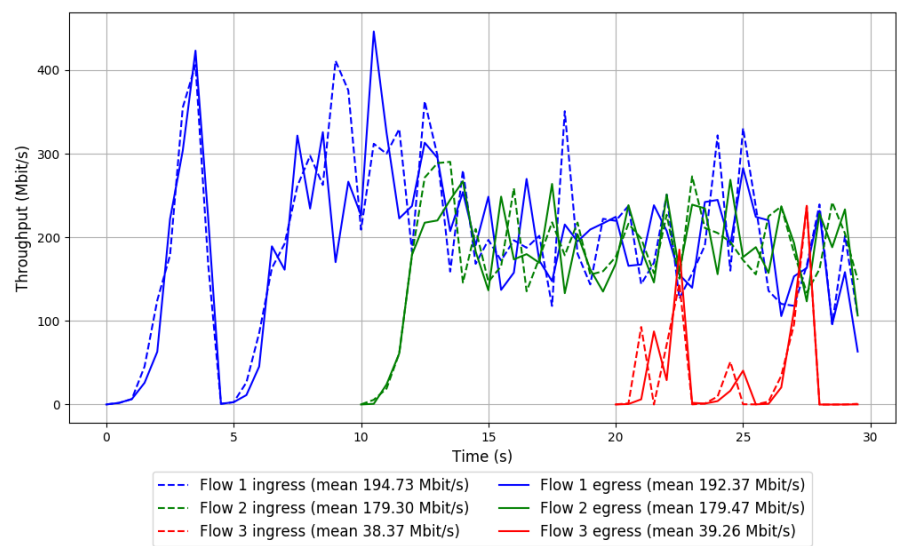
-- Flow 3:

Average throughput: 39.26 Mbit/s

95th percentile per-packet one-way delay: 251.433 ms

Loss rate: 0.10%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-16 17:38:48

End at: 2017-11-16 17:39:18

Below is generated by plot.py at 2017-11-16 22:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 280.63 Mbit/s

95th percentile per-packet one-way delay: 190.792 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 214.58 Mbit/s

95th percentile per-packet one-way delay: 200.271 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 73.73 Mbit/s

95th percentile per-packet one-way delay: 161.212 ms

Loss rate: 0.03%

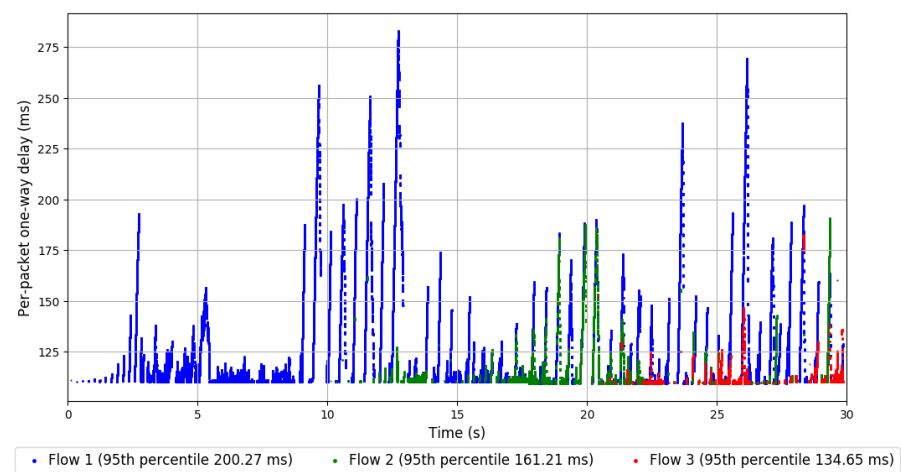
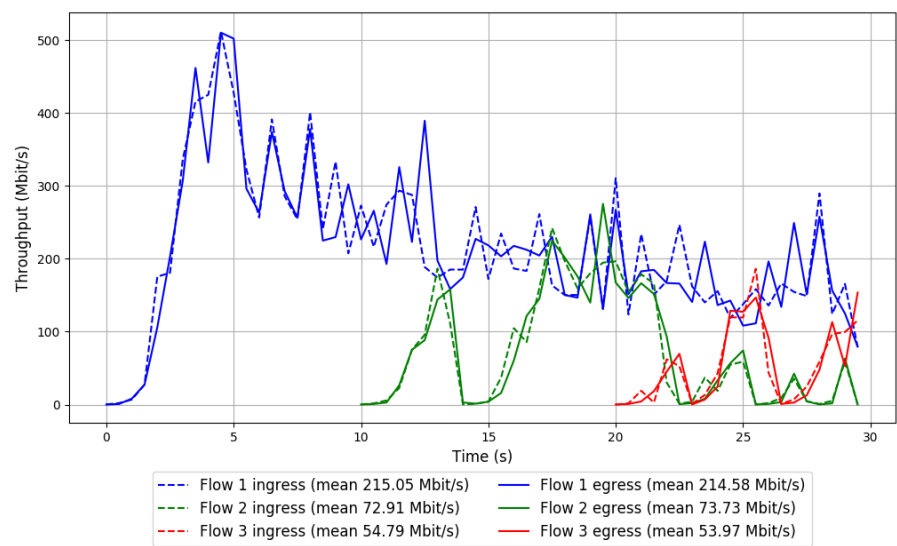
-- Flow 3:

Average throughput: 53.97 Mbit/s

95th percentile per-packet one-way delay: 134.654 ms

Loss rate: 1.85%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-16 17:52:33

End at: 2017-11-16 17:53:03

Below is generated by plot.py at 2017-11-16 22:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 259.81 Mbit/s

95th percentile per-packet one-way delay: 153.683 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 205.79 Mbit/s

95th percentile per-packet one-way delay: 158.377 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 39.91 Mbit/s

95th percentile per-packet one-way delay: 126.717 ms

Loss rate: 0.01%

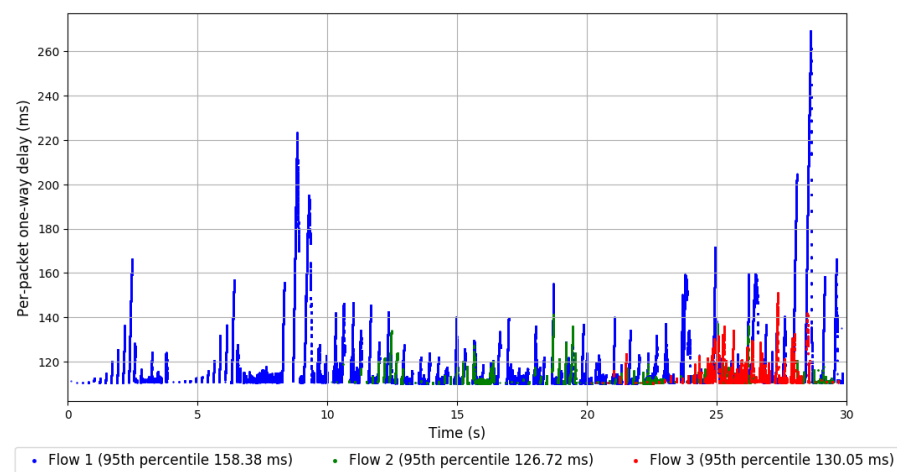
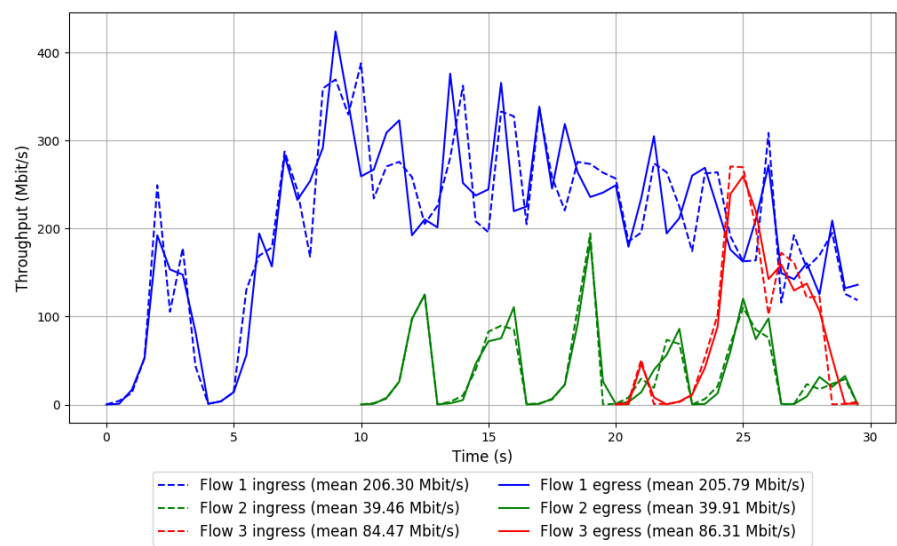
-- Flow 3:

Average throughput: 86.31 Mbit/s

95th percentile per-packet one-way delay: 130.053 ms

Loss rate: 0.15%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-11-16 18:06:08

End at: 2017-11-16 18:06:38

Below is generated by plot.py at 2017-11-16 22:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 237.24 Mbit/s

95th percentile per-packet one-way delay: 360.446 ms

Loss rate: 16.27%

-- Flow 1:

Average throughput: 129.60 Mbit/s

95th percentile per-packet one-way delay: 171.831 ms

Loss rate: 1.85%

-- Flow 2:

Average throughput: 154.35 Mbit/s

95th percentile per-packet one-way delay: 377.363 ms

Loss rate: 29.26%

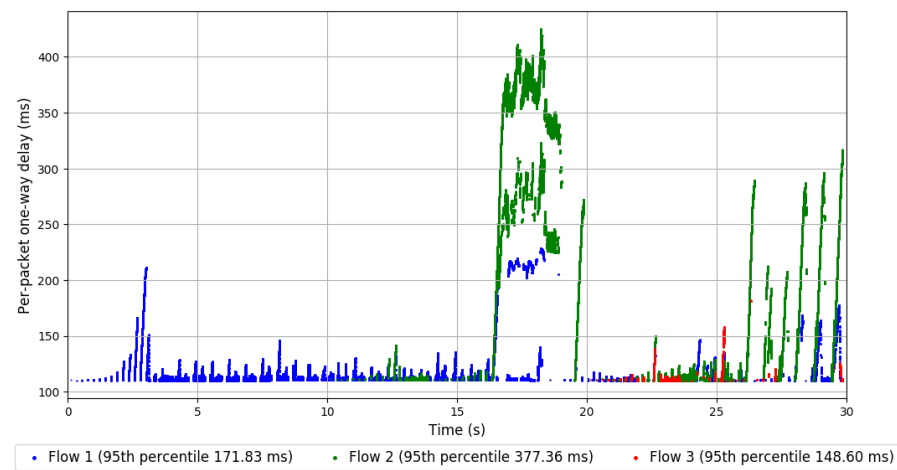
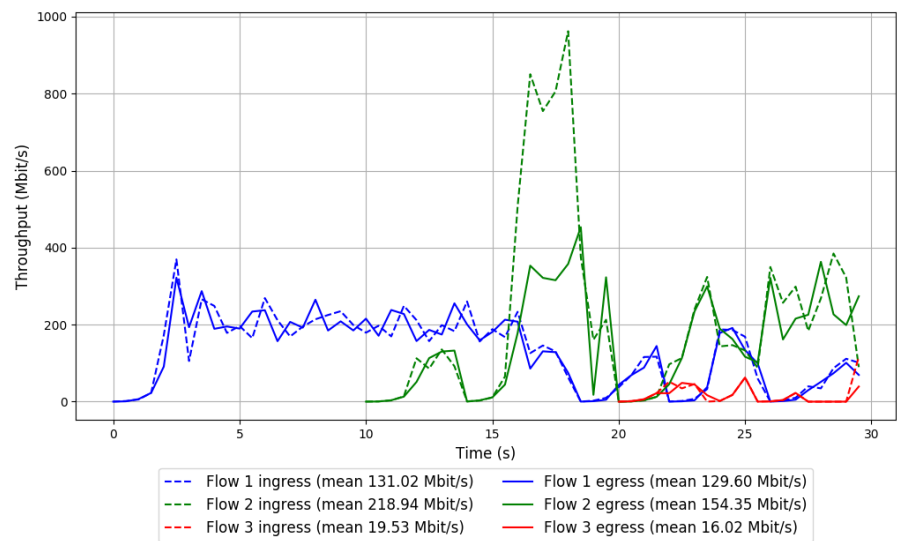
-- Flow 3:

Average throughput: 16.02 Mbit/s

95th percentile per-packet one-way delay: 148.601 ms

Loss rate: 19.92%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-16 18:19:39

End at: 2017-11-16 18:20:09

Below is generated by plot.py at 2017-11-16 22:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 288.03 Mbit/s

95th percentile per-packet one-way delay: 316.584 ms

Loss rate: 13.62%

-- Flow 1:

Average throughput: 156.10 Mbit/s

95th percentile per-packet one-way delay: 325.400 ms

Loss rate: 18.84%

-- Flow 2:

Average throughput: 172.25 Mbit/s

95th percentile per-packet one-way delay: 304.824 ms

Loss rate: 6.30%

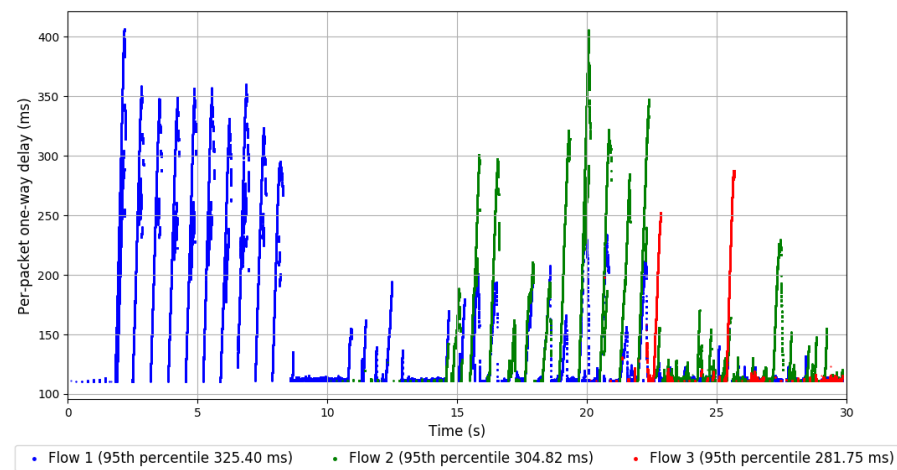
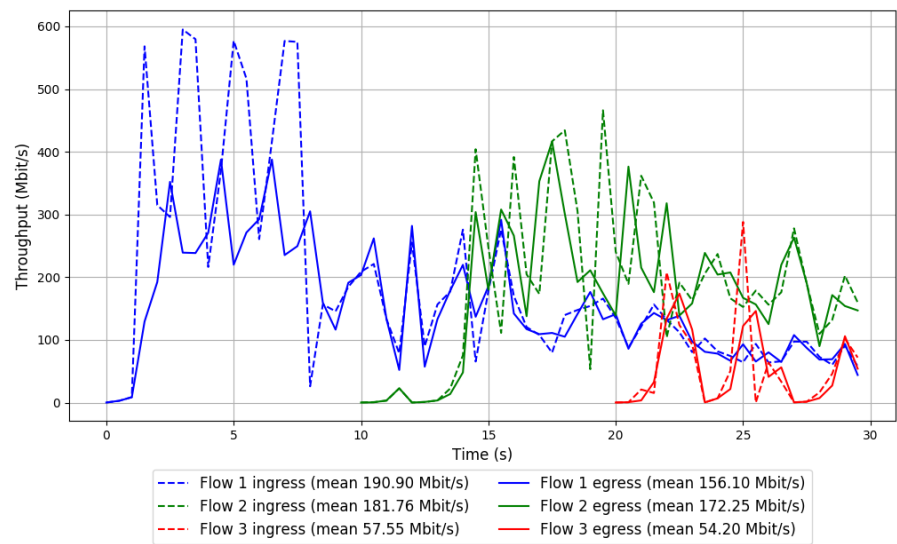
-- Flow 3:

Average throughput: 54.20 Mbit/s

95th percentile per-packet one-way delay: 281.749 ms

Loss rate: 7.91%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-16 18:33:35

End at: 2017-11-16 18:34:05

Below is generated by plot.py at 2017-11-16 22:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 278.30 Mbit/s

95th percentile per-packet one-way delay: 150.942 ms

Loss rate: 2.19%

-- Flow 1:

Average throughput: 196.78 Mbit/s

95th percentile per-packet one-way delay: 135.077 ms

Loss rate: 1.27%

-- Flow 2:

Average throughput: 70.25 Mbit/s

95th percentile per-packet one-way delay: 275.556 ms

Loss rate: 4.49%

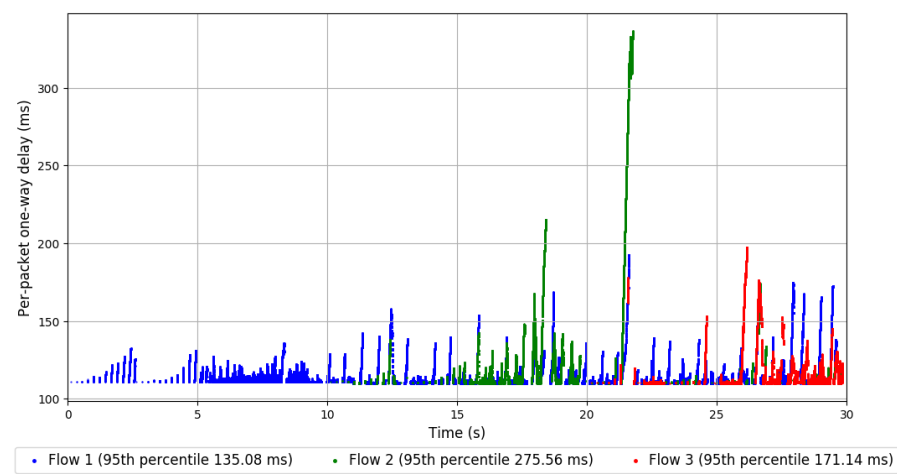
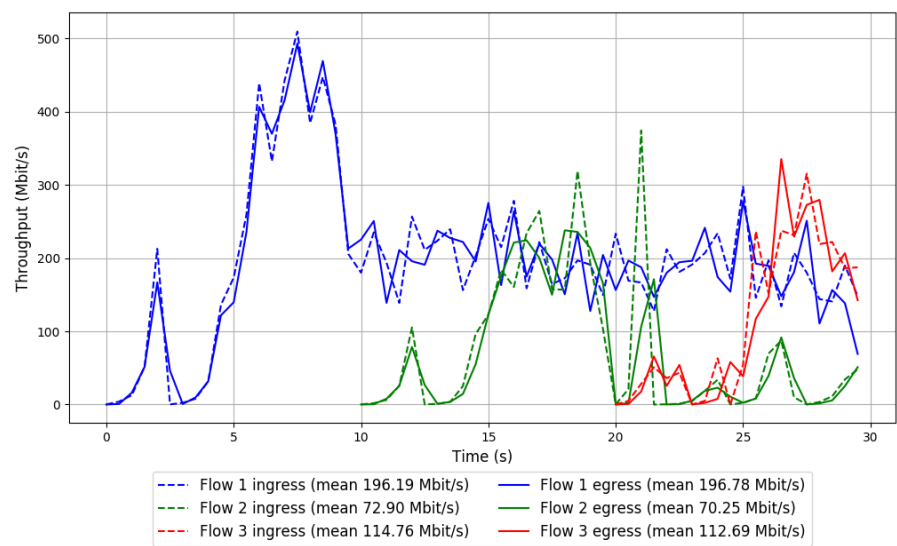
-- Flow 3:

Average throughput: 112.69 Mbit/s

95th percentile per-packet one-way delay: 171.144 ms

Loss rate: 4.01%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-16 18:47:20

End at: 2017-11-16 18:47:50

Below is generated by plot.py at 2017-11-16 22:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 220.14 Mbit/s

95th percentile per-packet one-way delay: 184.565 ms

Loss rate: 1.33%

-- Flow 1:

Average throughput: 105.52 Mbit/s

95th percentile per-packet one-way delay: 134.469 ms

Loss rate: 1.28%

-- Flow 2:

Average throughput: 147.80 Mbit/s

95th percentile per-packet one-way delay: 215.191 ms

Loss rate: 0.43%

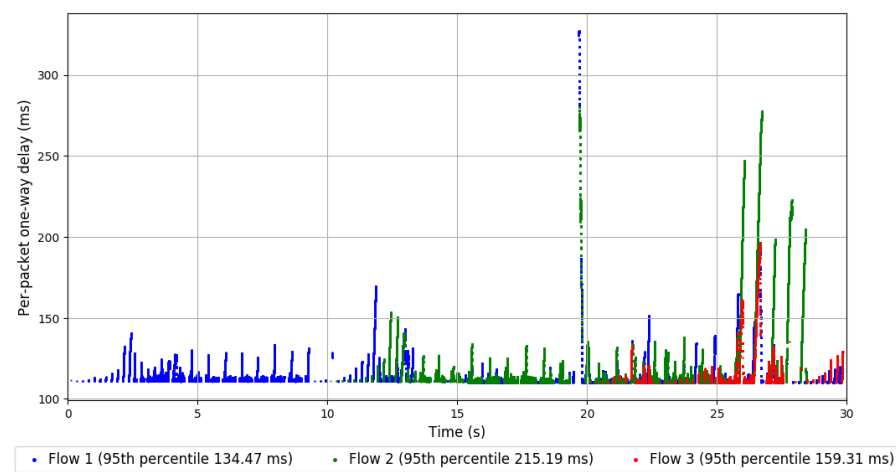
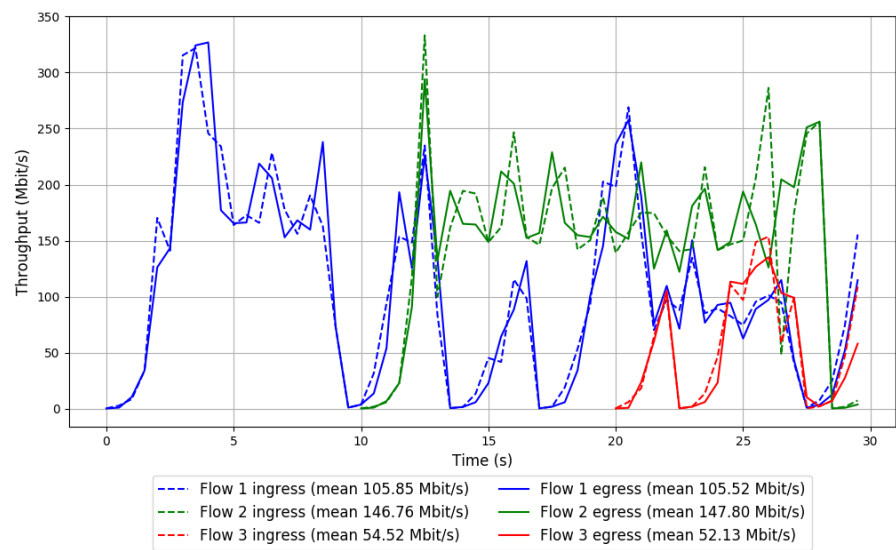
-- Flow 3:

Average throughput: 52.13 Mbit/s

95th percentile per-packet one-way delay: 159.312 ms

Loss rate: 6.52%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-16 19:01:10

End at: 2017-11-16 19:01:40

Below is generated by plot.py at 2017-11-16 22:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 217.36 Mbit/s

95th percentile per-packet one-way delay: 140.021 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 160.91 Mbit/s

95th percentile per-packet one-way delay: 137.273 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 47.66 Mbit/s

95th percentile per-packet one-way delay: 148.265 ms

Loss rate: 0.01%

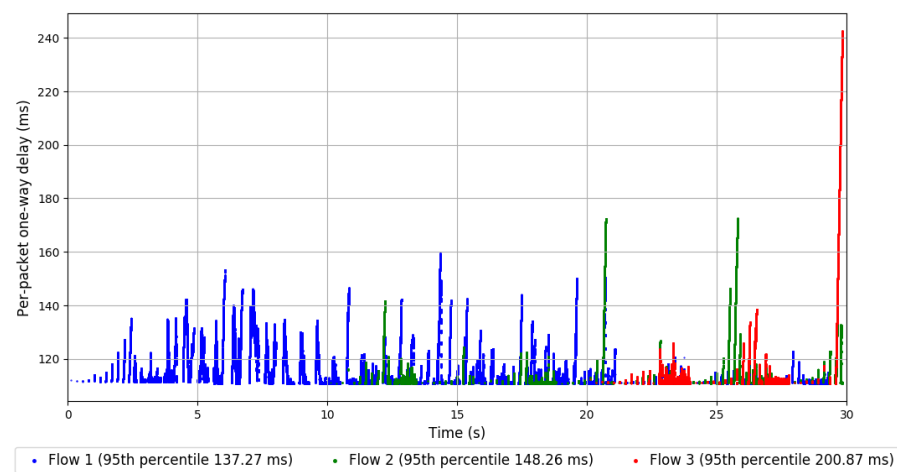
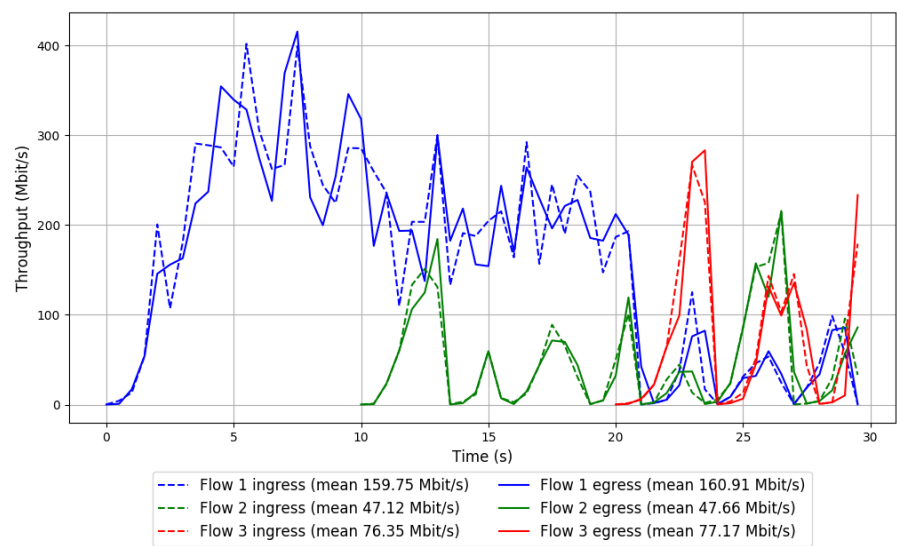
-- Flow 3:

Average throughput: 77.17 Mbit/s

95th percentile per-packet one-way delay: 200.869 ms

Loss rate: 0.40%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-16 19:14:41

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

Below is generated by plot.py at 2017-11-16 22:25:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 259.74 Mbit/s

95th percentile per-packet one-way delay: 236.080 ms

Loss rate: 1.87%

-- Flow 1:

Average throughput: 203.73 Mbit/s

95th percentile per-packet one-way delay: 230.649 ms

Loss rate: 1.96%

-- Flow 2:

Average throughput: 50.19 Mbit/s

95th percentile per-packet one-way delay: 163.110 ms

Loss rate: 1.60%

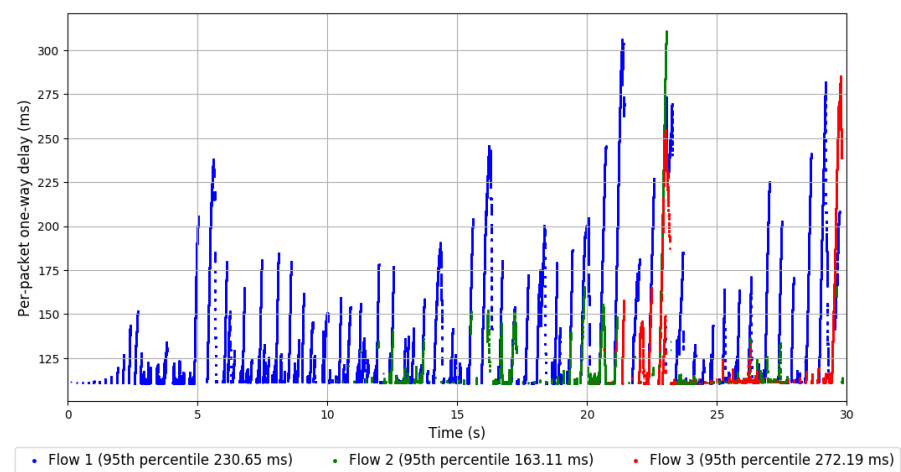
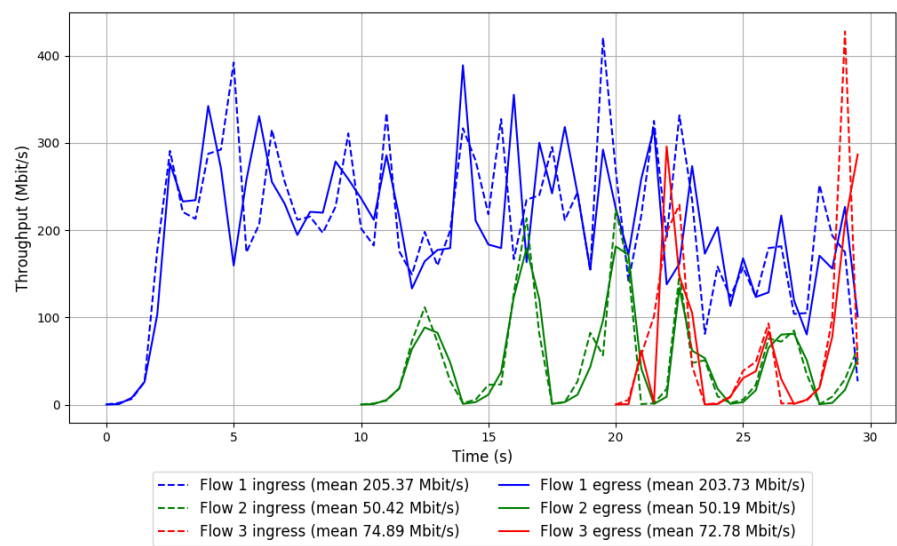
-- Flow 3:

Average throughput: 72.78 Mbit/s

95th percentile per-packet one-way delay: 272.195 ms

Loss rate: 1.51%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-11-16 17:19:54

End at: 2017-11-16 17:20:24

Below is generated by plot.py at 2017-11-16 22:25:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.76 Mbit/s

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

Loss rate: 1.04%

-- Flow 1:

Average throughput: 77.94 Mbit/s

95th percentile per-packet one-way delay: 113.006 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 61.02 Mbit/s

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

Loss rate: 1.18%

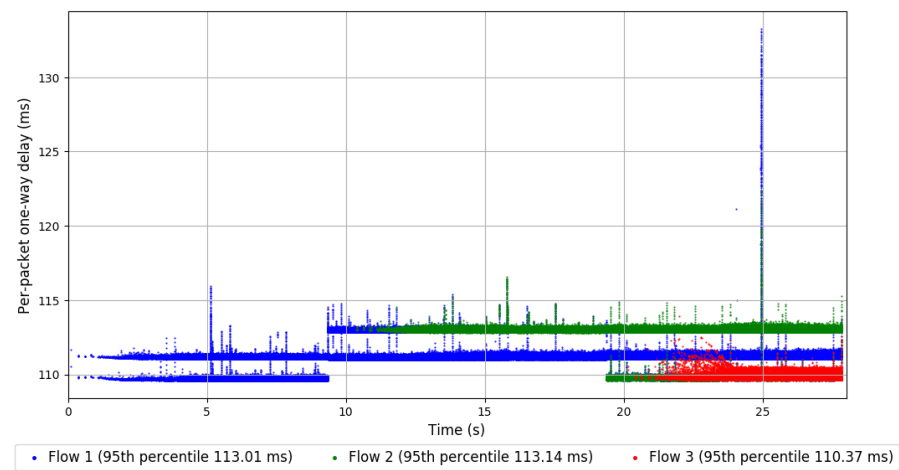
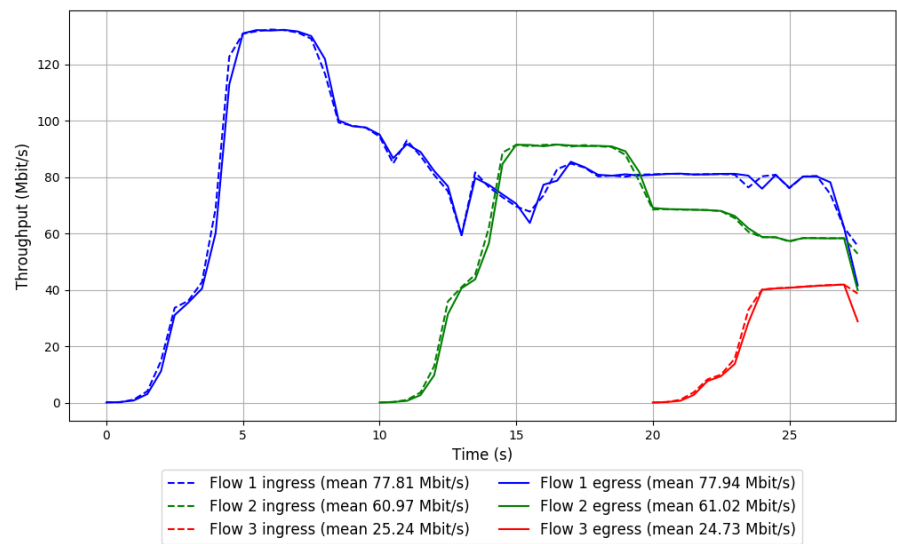
-- Flow 3:

Average throughput: 24.73 Mbit/s

95th percentile per-packet one-way delay: 110.371 ms

Loss rate: 4.76%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-16 17:33:23

End at: 2017-11-16 17:33:53

Below is generated by plot.py at 2017-11-16 22:25:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.38 Mbit/s

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

Loss rate: 1.24%

-- Flow 1:

Average throughput: 70.08 Mbit/s

95th percentile per-packet one-way delay: 112.383 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 63.23 Mbit/s

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

Loss rate: 1.25%

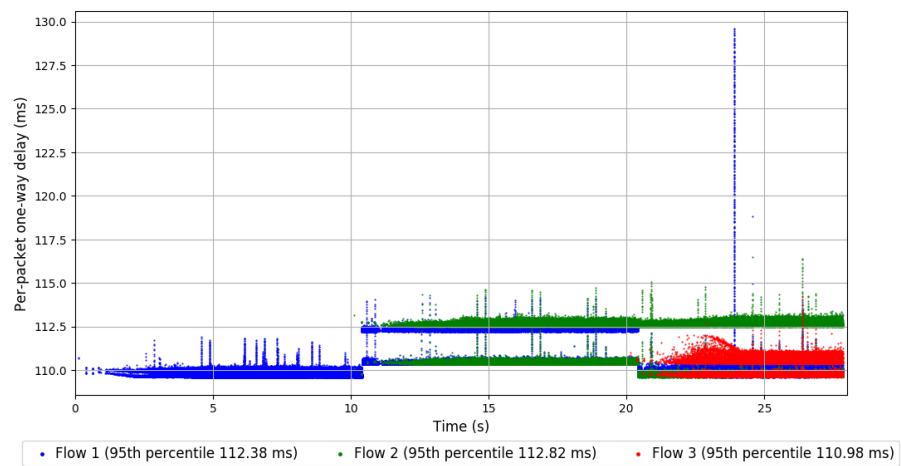
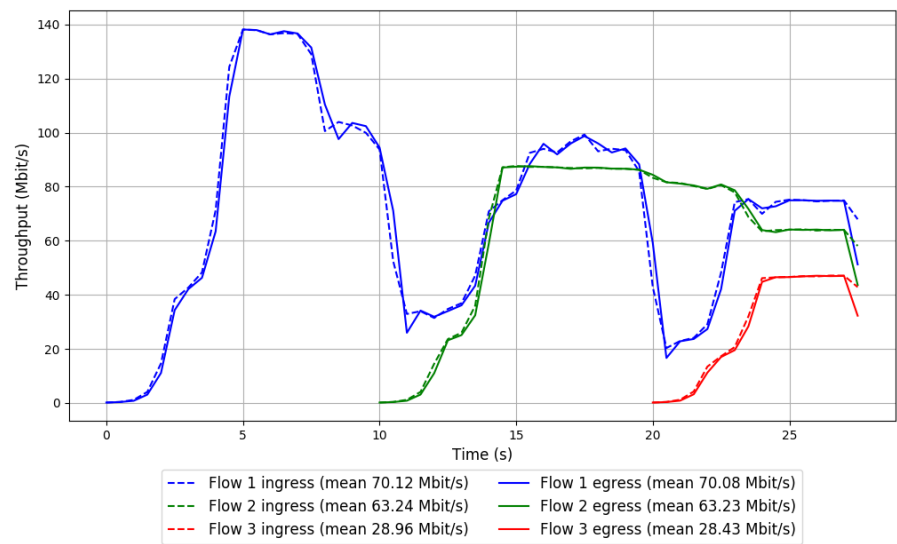
-- Flow 3:

Average throughput: 28.43 Mbit/s

95th percentile per-packet one-way delay: 110.984 ms

Loss rate: 4.55%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-16 17:47:03

End at: 2017-11-16 17:47:33

Below is generated by plot.py at 2017-11-16 22:25:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 115.15 Mbit/s

95th percentile per-packet one-way delay: 112.957 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 59.81 Mbit/s

95th percentile per-packet one-way delay: 112.478 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 62.60 Mbit/s

95th percentile per-packet one-way delay: 113.004 ms

Loss rate: 0.95%

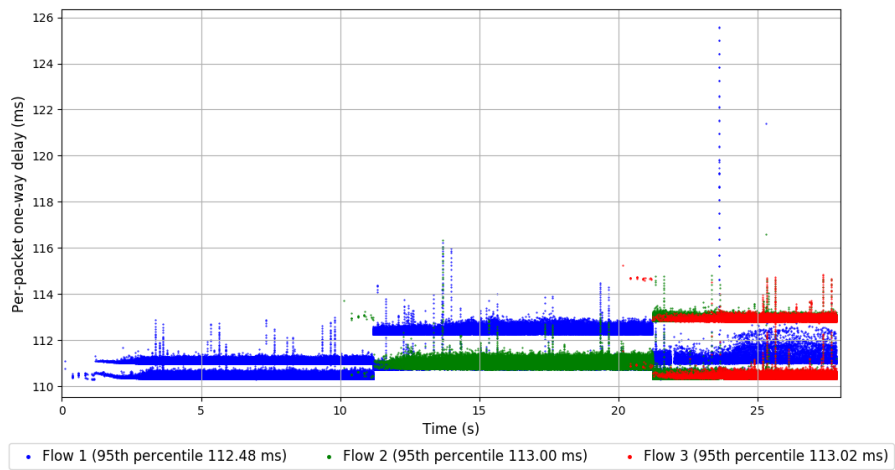
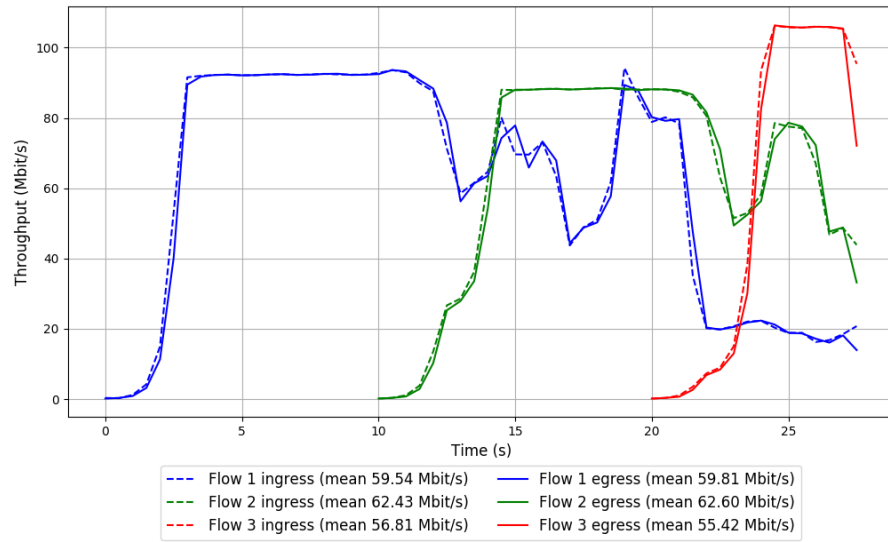
-- Flow 3:

Average throughput: 55.42 Mbit/s

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

Loss rate: 5.18%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-16 18:00:44

End at: 2017-11-16 18:01:14

Below is generated by plot.py at 2017-11-16 22:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 113.20 Mbit/s

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

Loss rate: 1.52%

-- Flow 1:

Average throughput: 59.44 Mbit/s

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

Loss rate: 0.94%

-- Flow 2:

Average throughput: 64.89 Mbit/s

95th percentile per-packet one-way delay: 110.917 ms

Loss rate: 1.30%

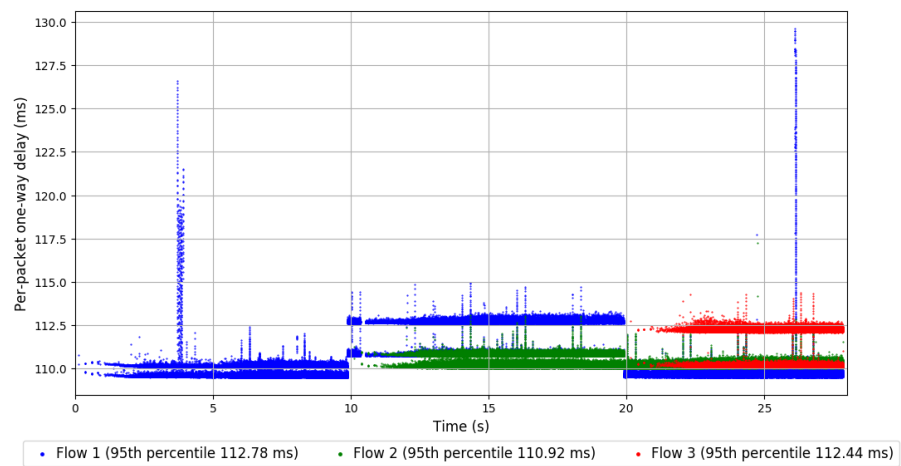
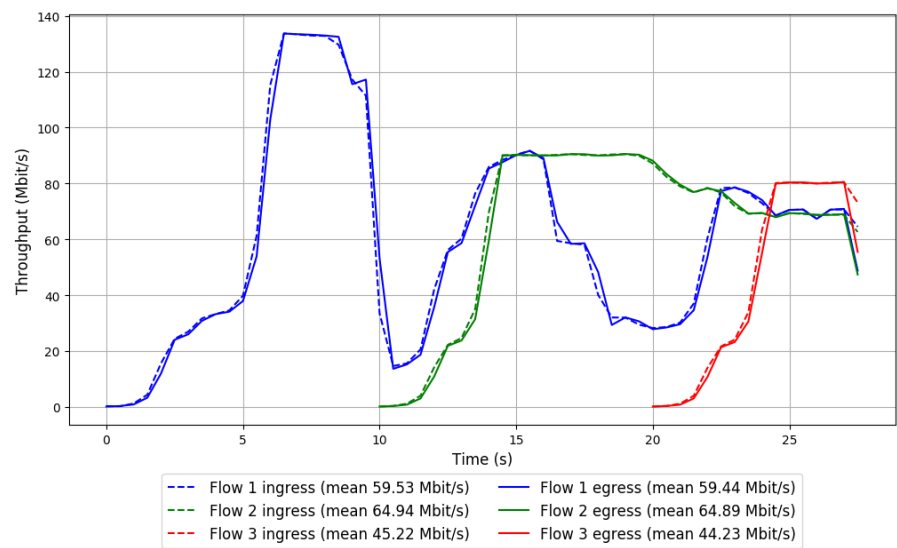
-- Flow 3:

Average throughput: 44.23 Mbit/s

95th percentile per-packet one-way delay: 112.444 ms

Loss rate: 4.92%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-16 18:14:16

End at: 2017-11-16 18:14:46

Below is generated by plot.py at 2017-11-16 22:26:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.06 Mbit/s

95th percentile per-packet one-way delay: 111.016 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 78.81 Mbit/s

95th percentile per-packet one-way delay: 110.953 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 57.77 Mbit/s

95th percentile per-packet one-way delay: 110.957 ms

Loss rate: 1.26%

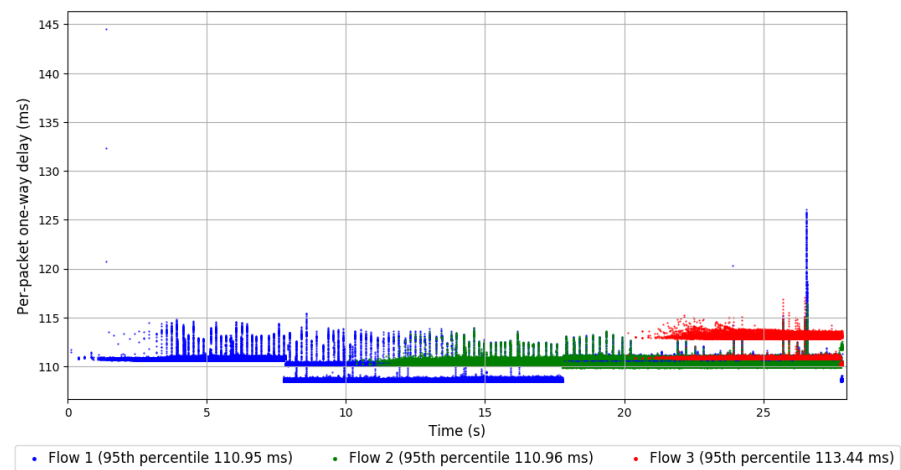
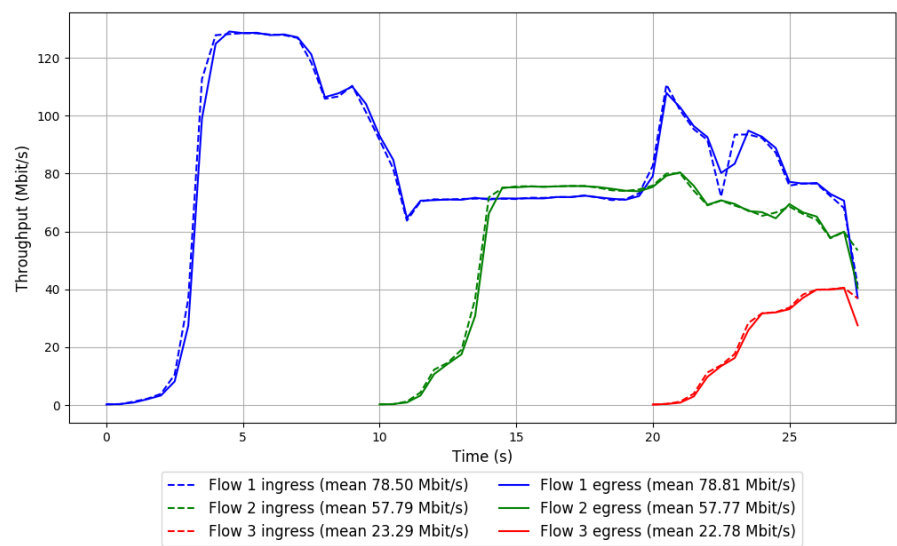
-- Flow 3:

Average throughput: 22.78 Mbit/s

95th percentile per-packet one-way delay: 113.435 ms

Loss rate: 4.96%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-16 18:27:55

End at: 2017-11-16 18:28:25

Below is generated by plot.py at 2017-11-16 22:28:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.22 Mbit/s

95th percentile per-packet one-way delay: 112.144 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 65.92 Mbit/s

95th percentile per-packet one-way delay: 112.034 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 70.00 Mbit/s

95th percentile per-packet one-way delay: 112.234 ms

Loss rate: 1.31%

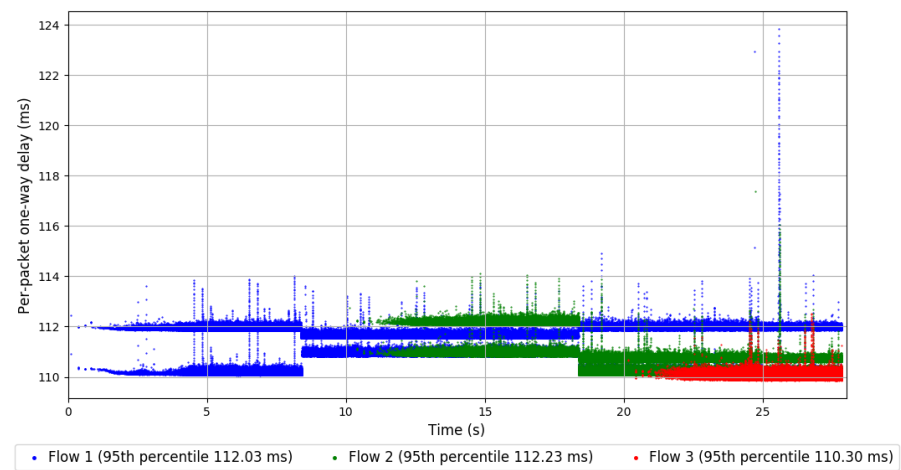
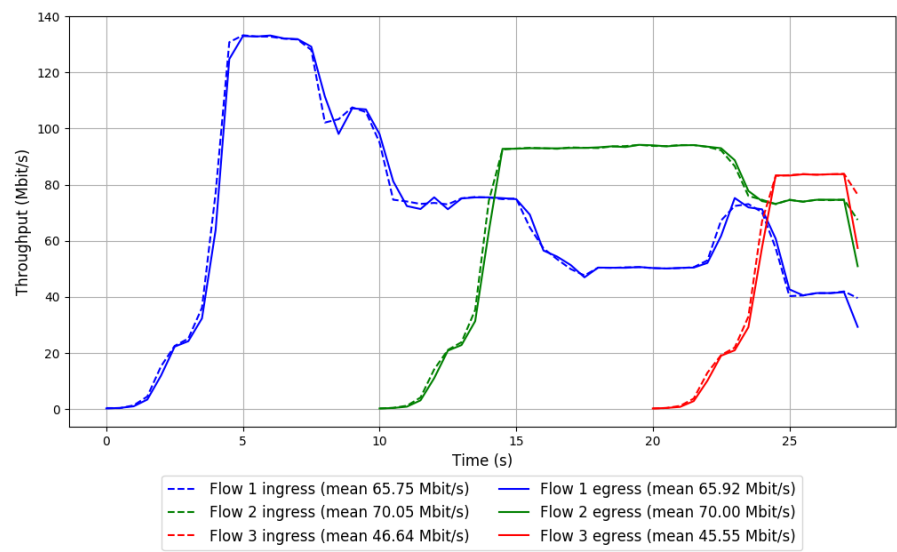
-- Flow 3:

Average throughput: 45.55 Mbit/s

95th percentile per-packet one-way delay: 110.303 ms

Loss rate: 5.10%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-16 18:41:50

End at: 2017-11-16 18:42:20

Below is generated by plot.py at 2017-11-16 22:28:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.42 Mbit/s

95th percentile per-packet one-way delay: 111.195 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 70.65 Mbit/s

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

Loss rate: 0.31%

-- Flow 2:

Average throughput: 54.39 Mbit/s

95th percentile per-packet one-way delay: 114.571 ms

Loss rate: 0.81%

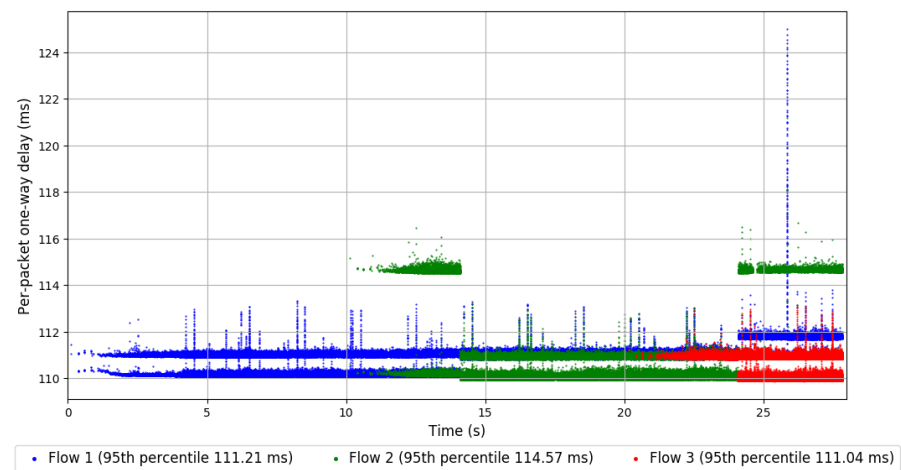
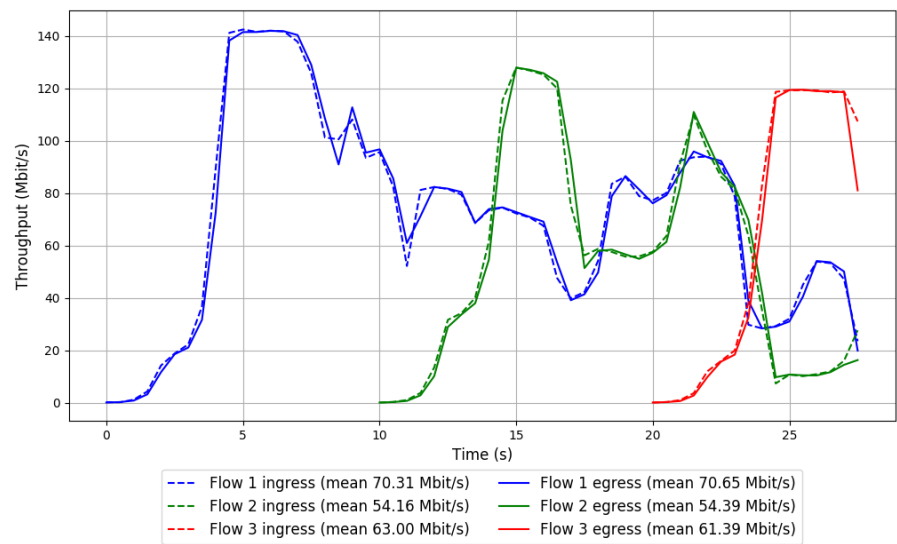
-- Flow 3:

Average throughput: 61.39 Mbit/s

95th percentile per-packet one-way delay: 111.044 ms

Loss rate: 5.29%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-16 18:55:26

End at: 2017-11-16 18:55:56

Below is generated by plot.py at 2017-11-16 22:28:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.54 Mbit/s

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

Loss rate: 1.20%

-- Flow 1:

Average throughput: 74.22 Mbit/s

95th percentile per-packet one-way delay: 112.225 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 56.10 Mbit/s

95th percentile per-packet one-way delay: 112.555 ms

Loss rate: 1.58%

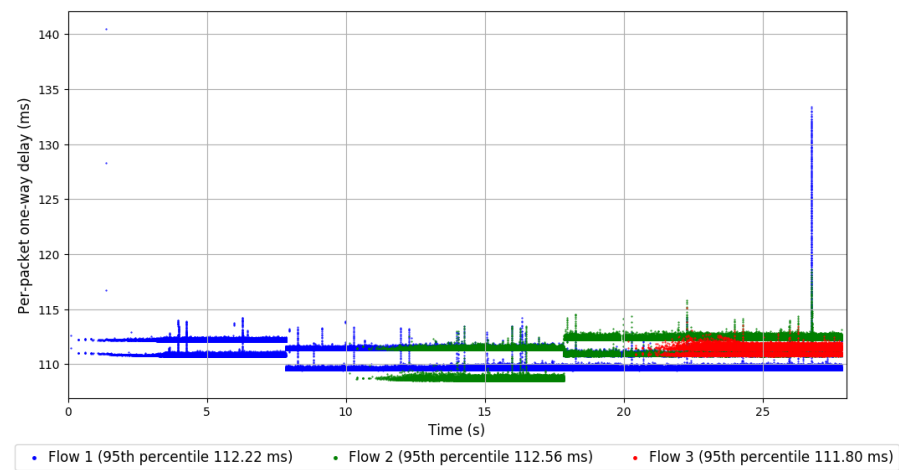
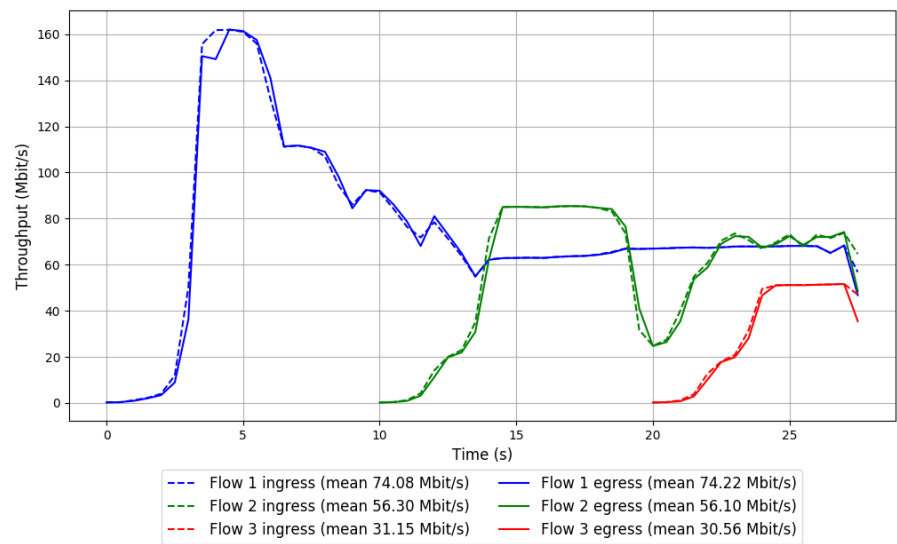
-- Flow 3:

Average throughput: 30.56 Mbit/s

95th percentile per-packet one-way delay: 111.796 ms

Loss rate: 4.66%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-11-16 19:09:15

End at: 2017-11-16 19:09:45

Below is generated by plot.py at 2017-11-16 22:28:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.63 Mbit/s

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

Loss rate: 1.32%

-- Flow 1:

Average throughput: 74.85 Mbit/s

95th percentile per-packet one-way delay: 112.963 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 59.74 Mbit/s

95th percentile per-packet one-way delay: 113.011 ms

Loss rate: 1.17%

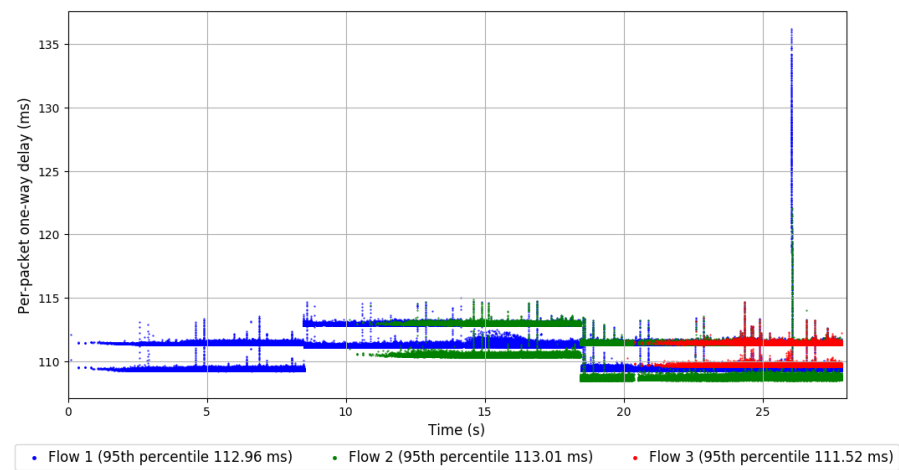
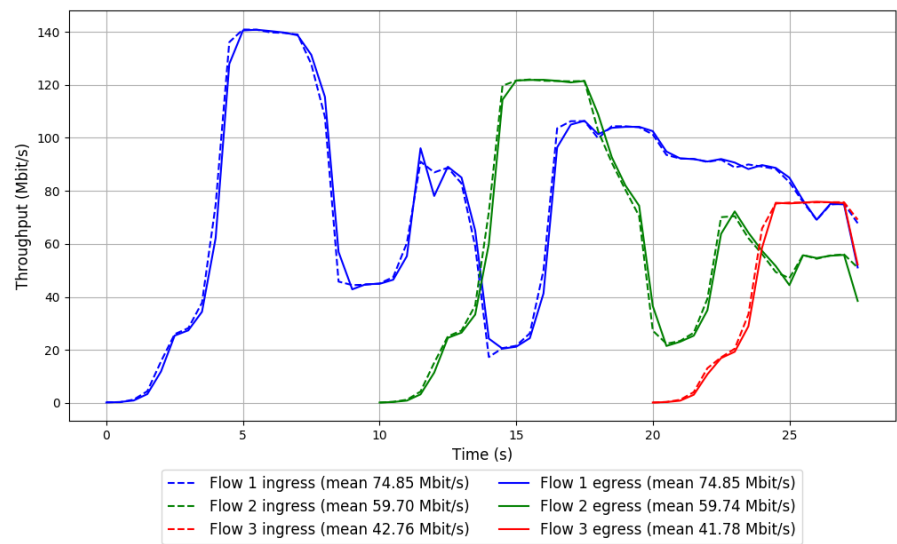
-- Flow 3:

Average throughput: 41.78 Mbit/s

95th percentile per-packet one-way delay: 111.519 ms

Loss rate: 5.01%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-16 19:22:53

End at: 2017-11-16 19:23:23

Below is generated by plot.py at 2017-11-16 22:29:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 141.21 Mbit/s

95th percentile per-packet one-way delay: 113.001 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 78.01 Mbit/s

95th percentile per-packet one-way delay: 112.987 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 70.54 Mbit/s

95th percentile per-packet one-way delay: 111.953 ms

Loss rate: 1.42%

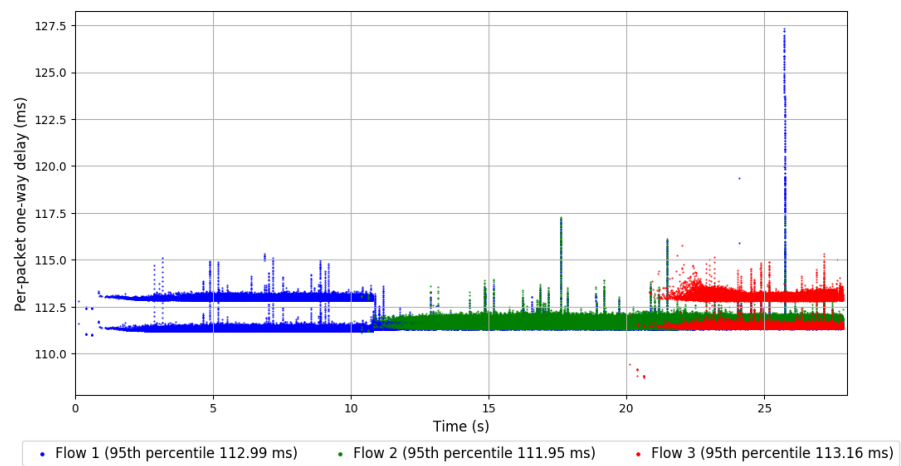
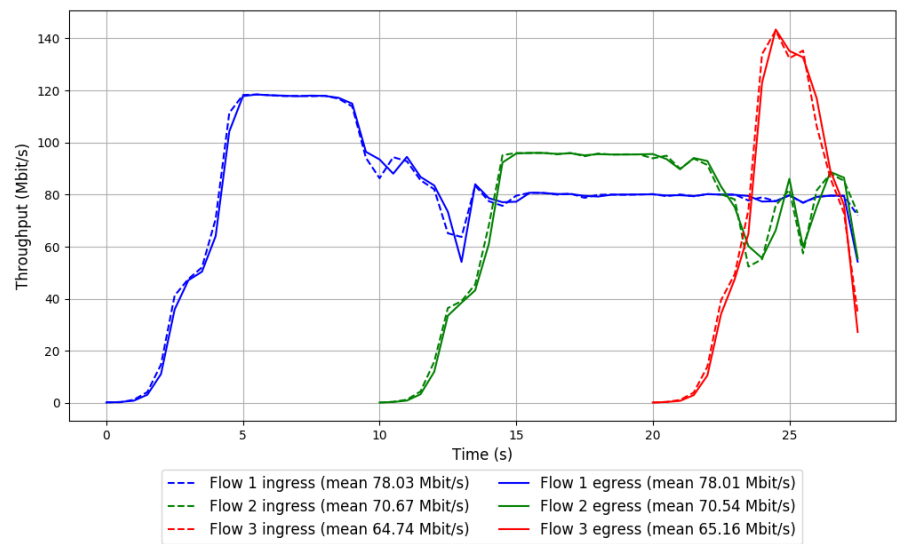
-- Flow 3:

Average throughput: 65.16 Mbit/s

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

Loss rate: 2.15%

Run 10: Report of Copa — Data Link

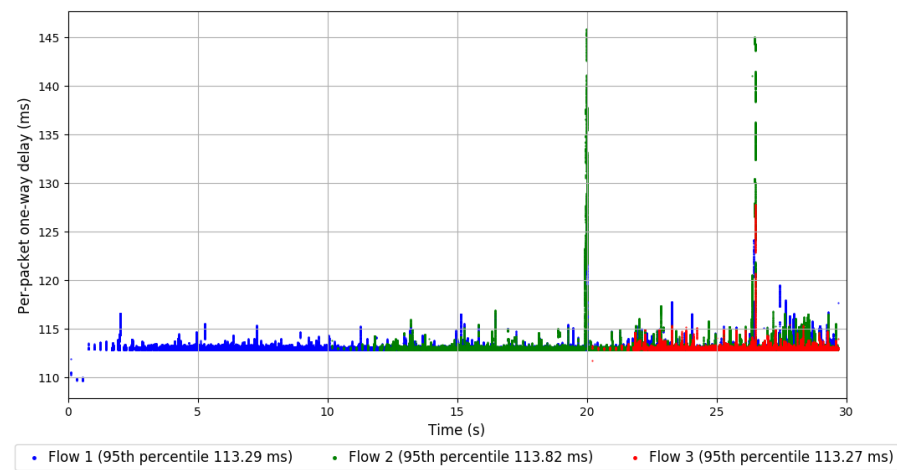
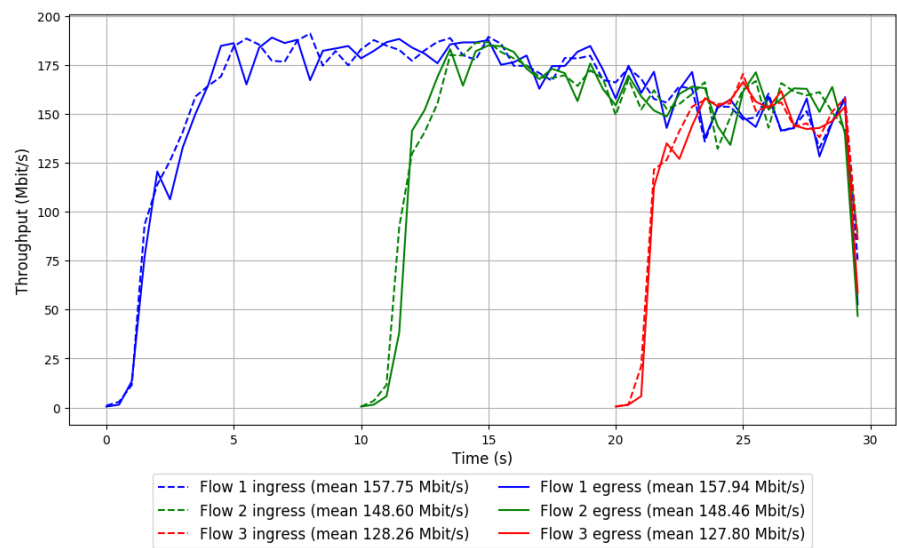


```
Run 1: Statistics of Indigo

Start at: 2017-11-16 17:16:55
End at: 2017-11-16 17:17:25

# Below is generated by plot.py at 2017-11-16 22:30:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 296.76 Mbit/s
95th percentile per-packet one-way delay: 113.384 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 157.94 Mbit/s
95th percentile per-packet one-way delay: 113.291 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 148.46 Mbit/s
95th percentile per-packet one-way delay: 113.822 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 127.80 Mbit/s
95th percentile per-packet one-way delay: 113.268 ms
Loss rate: 2.66%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-11-16 17:30:25

End at: 2017-11-16 17:30:55

Below is generated by plot.py at 2017-11-16 22:30:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 294.12 Mbit/s

95th percentile per-packet one-way delay: 110.919 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 156.61 Mbit/s

95th percentile per-packet one-way delay: 110.723 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 146.75 Mbit/s

95th percentile per-packet one-way delay: 111.042 ms

Loss rate: 1.14%

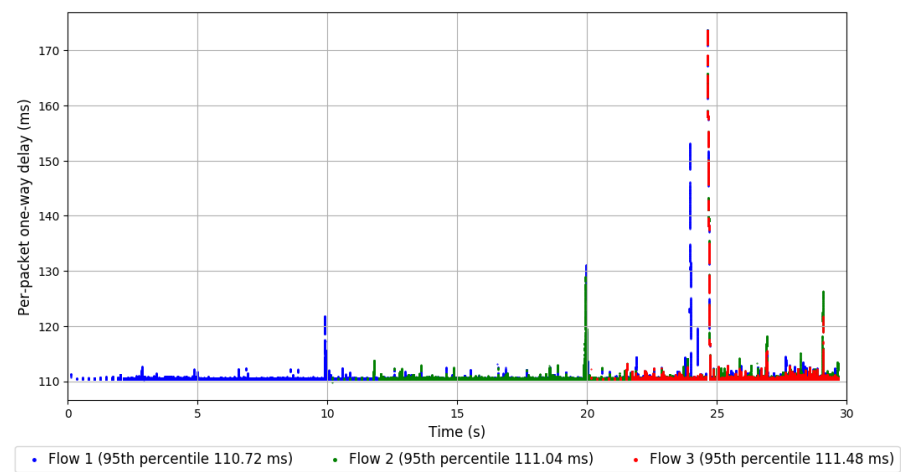
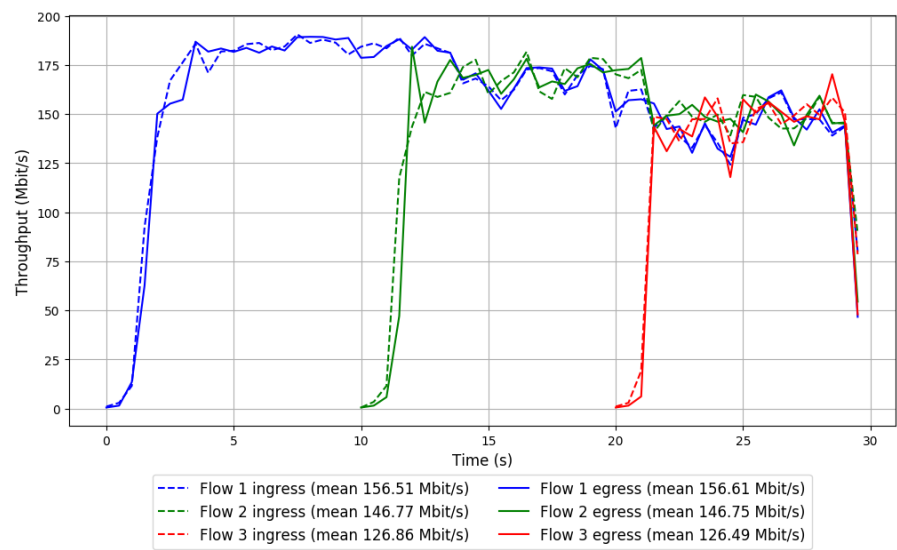
-- Flow 3:

Average throughput: 126.49 Mbit/s

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

Loss rate: 2.54%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-16 17:44:03

End at: 2017-11-16 17:44:33

Below is generated by plot.py at 2017-11-16 22:31:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 312.82 Mbit/s

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

Loss rate: 1.09%

-- Flow 1:

Average throughput: 167.47 Mbit/s

95th percentile per-packet one-way delay: 111.259 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 157.40 Mbit/s

95th percentile per-packet one-way delay: 112.240 ms

Loss rate: 1.11%

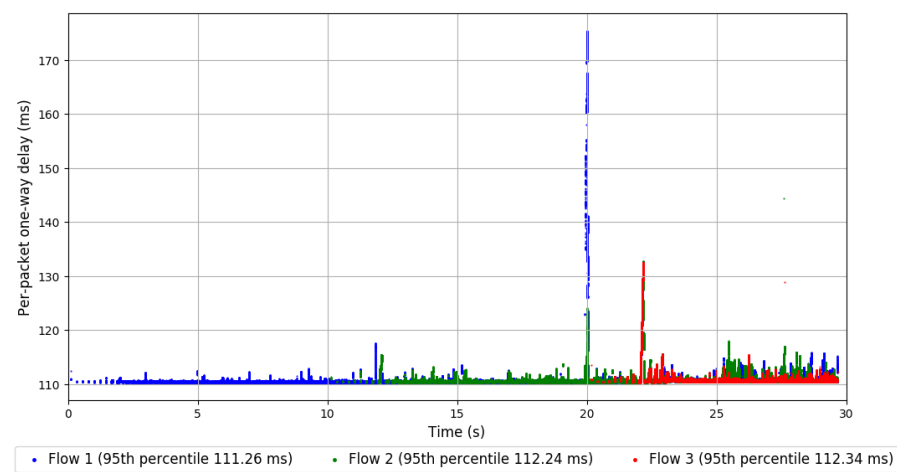
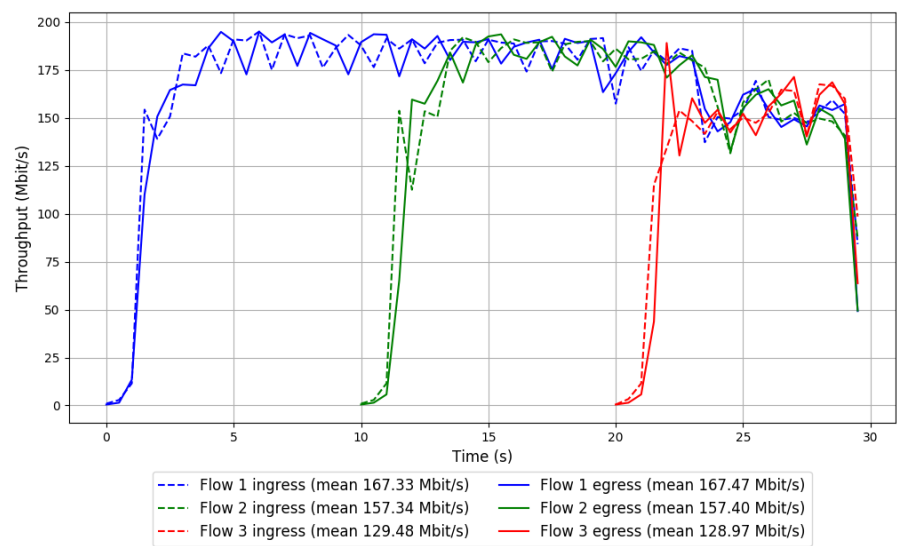
-- Flow 3:

Average throughput: 128.97 Mbit/s

95th percentile per-packet one-way delay: 112.339 ms

Loss rate: 2.69%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-16 17:57:48

End at: 2017-11-16 17:58:18

Below is generated by plot.py at 2017-11-16 22:33:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 298.11 Mbit/s

95th percentile per-packet one-way delay: 111.111 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 160.00 Mbit/s

95th percentile per-packet one-way delay: 111.114 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 147.39 Mbit/s

95th percentile per-packet one-way delay: 111.144 ms

Loss rate: 1.20%

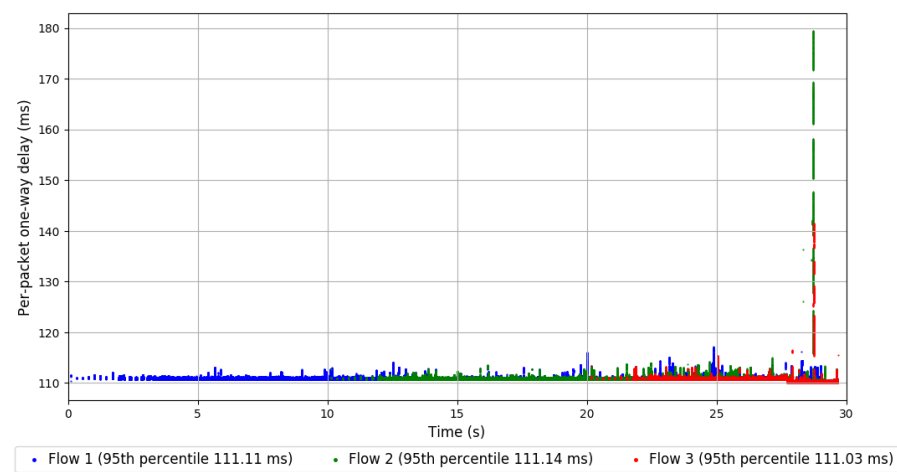
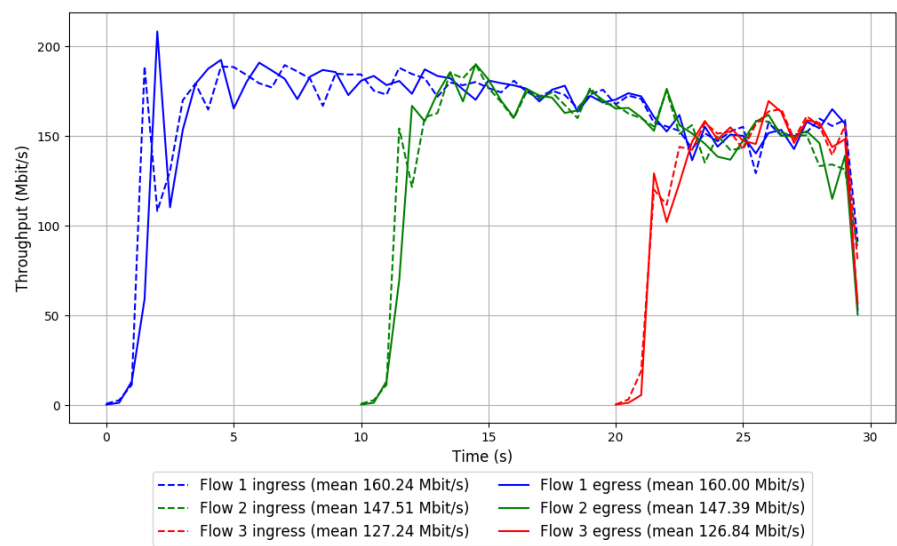
-- Flow 3:

Average throughput: 126.84 Mbit/s

95th percentile per-packet one-way delay: 111.027 ms

Loss rate: 2.54%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-16 18:11:22

End at: 2017-11-16 18:11:52

Below is generated by plot.py at 2017-11-16 22:33:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 299.12 Mbit/s

95th percentile per-packet one-way delay: 112.587 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 160.24 Mbit/s

95th percentile per-packet one-way delay: 111.827 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 148.94 Mbit/s

95th percentile per-packet one-way delay: 112.829 ms

Loss rate: 1.25%

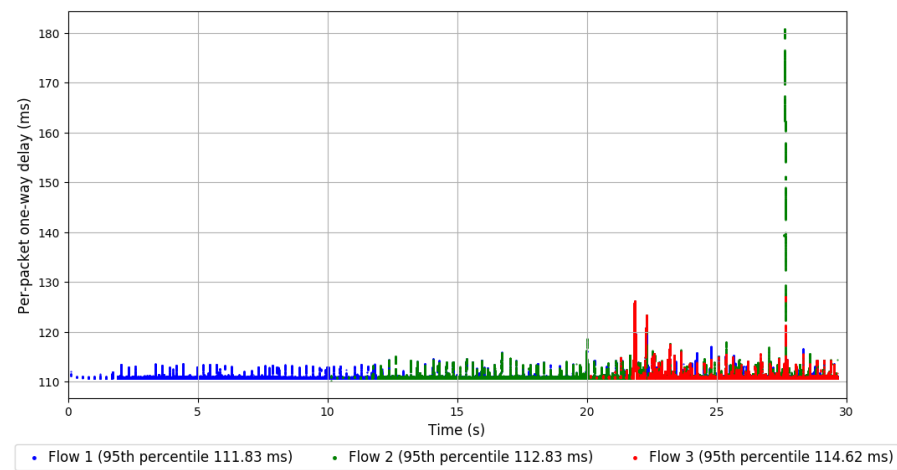
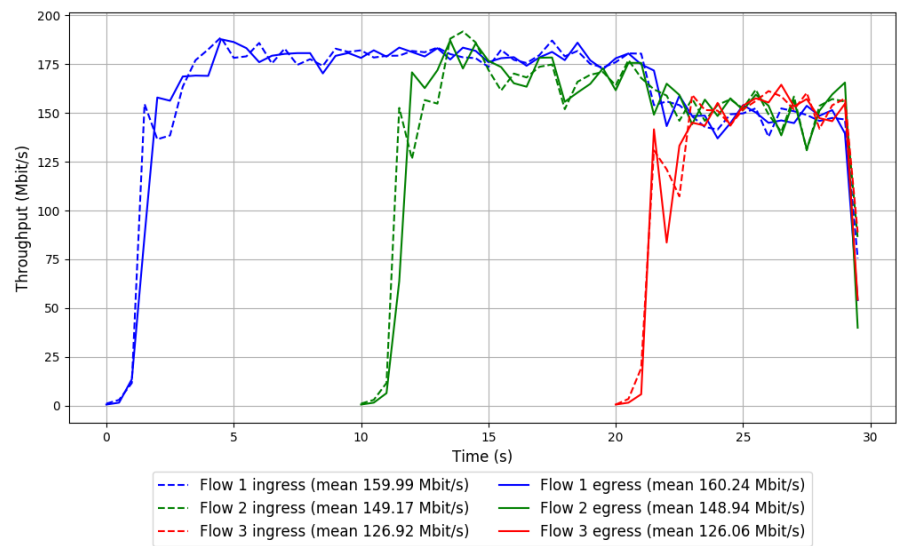
-- Flow 3:

Average throughput: 126.06 Mbit/s

95th percentile per-packet one-way delay: 114.622 ms

Loss rate: 2.95%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-16 18:24:56

End at: 2017-11-16 18:25:26

Below is generated by plot.py at 2017-11-16 22:33:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 309.32 Mbit/s

95th percentile per-packet one-way delay: 110.732 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 166.18 Mbit/s

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

Loss rate: 0.67%

-- Flow 2:

Average throughput: 156.01 Mbit/s

95th percentile per-packet one-way delay: 110.854 ms

Loss rate: 0.96%

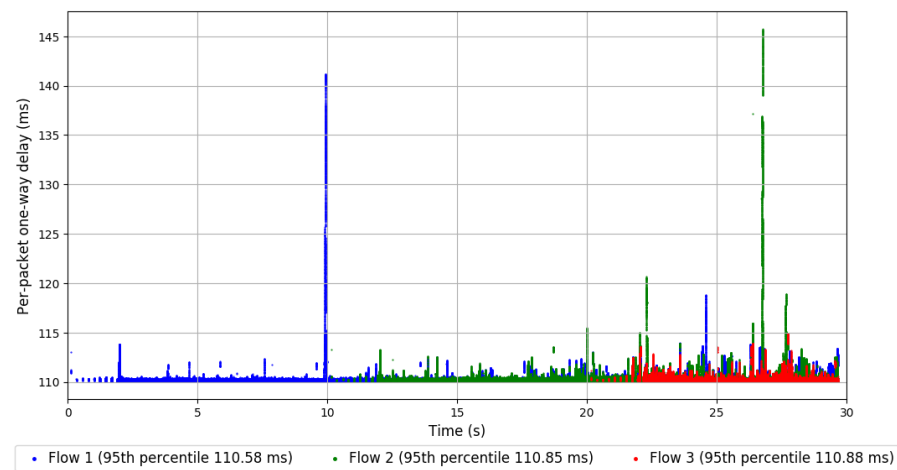
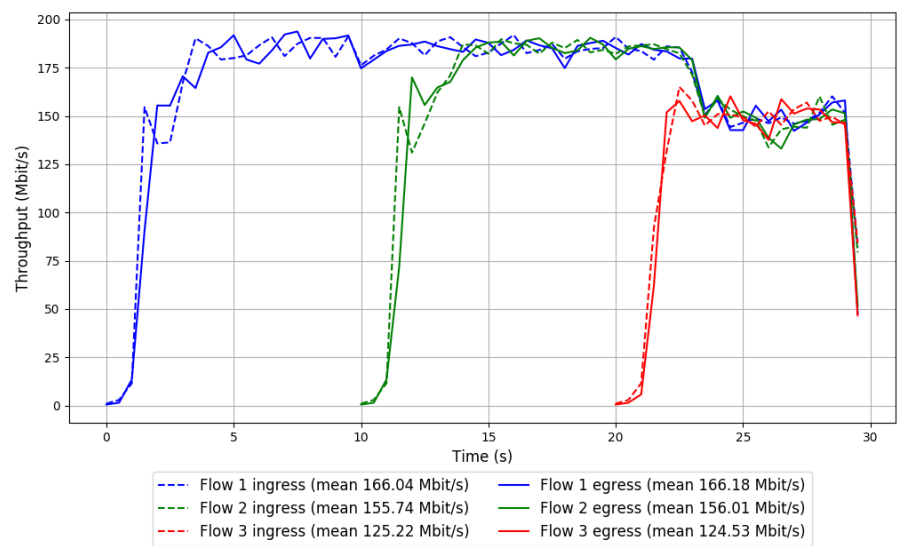
-- Flow 3:

Average throughput: 124.53 Mbit/s

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

Loss rate: 2.82%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-16 18:38:50

End at: 2017-11-16 18:39:20

Below is generated by plot.py at 2017-11-16 22:34:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.06 Mbit/s

95th percentile per-packet one-way delay: 111.842 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 167.75 Mbit/s

95th percentile per-packet one-way delay: 111.715 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 160.21 Mbit/s

95th percentile per-packet one-way delay: 111.906 ms

Loss rate: 0.92%

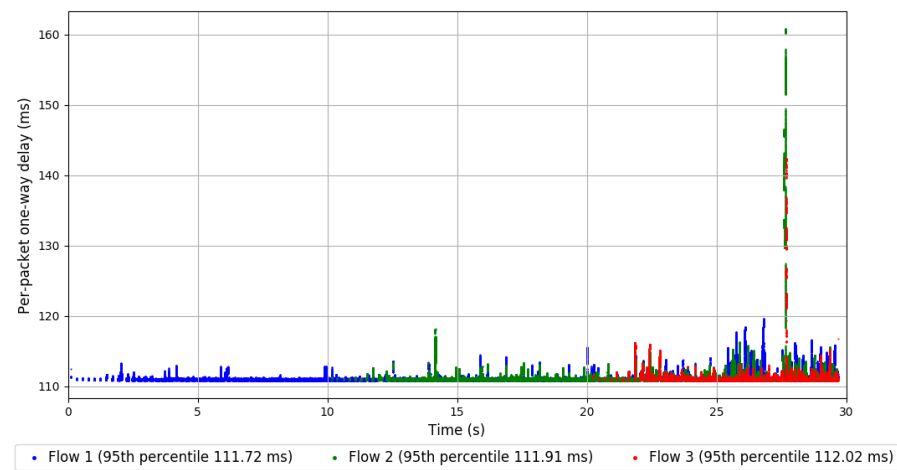
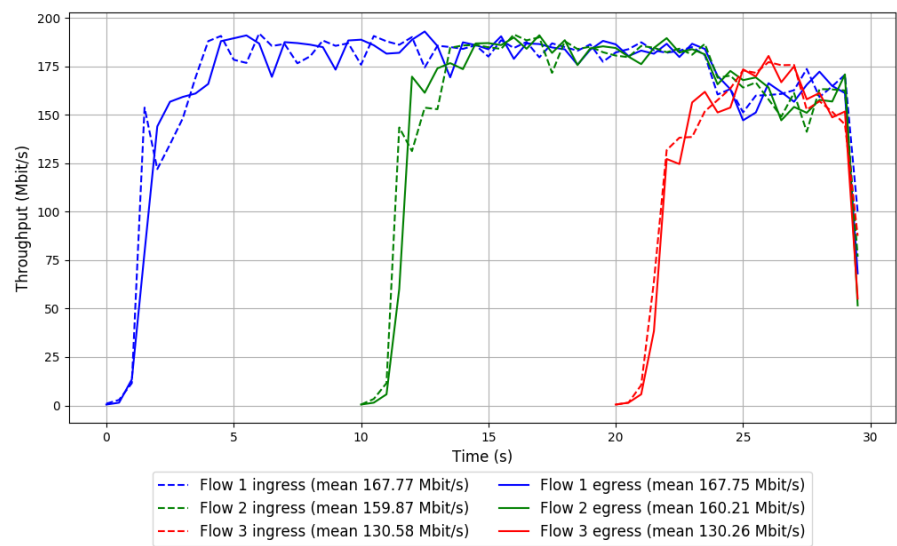
-- Flow 3:

Average throughput: 130.26 Mbit/s

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

Loss rate: 2.52%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-16 18:52:31

End at: 2017-11-16 18:53:01

Below is generated by plot.py at 2017-11-16 22:34:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 300.75 Mbit/s

95th percentile per-packet one-way delay: 111.113 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 161.01 Mbit/s

95th percentile per-packet one-way delay: 111.009 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 149.88 Mbit/s

95th percentile per-packet one-way delay: 111.226 ms

Loss rate: 1.07%

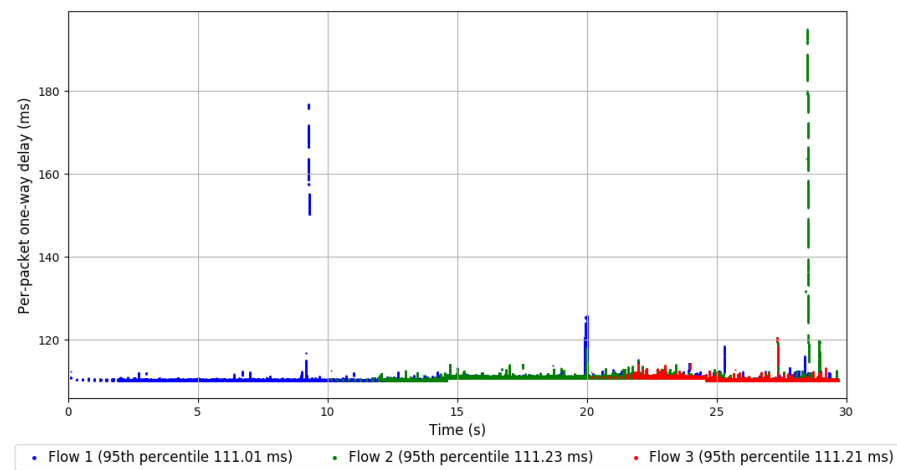
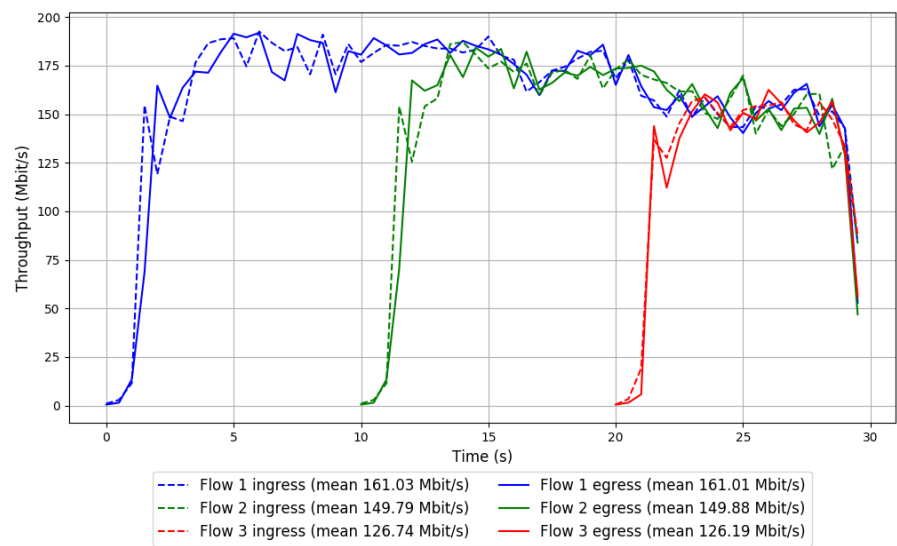
-- Flow 3:

Average throughput: 126.19 Mbit/s

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

Loss rate: 2.72%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-16 19:06:16

End at: 2017-11-16 19:06:46

Below is generated by plot.py at 2017-11-16 22:35:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 293.89 Mbit/s

95th percentile per-packet one-way delay: 111.608 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 159.79 Mbit/s

95th percentile per-packet one-way delay: 111.556 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 141.89 Mbit/s

95th percentile per-packet one-way delay: 111.872 ms

Loss rate: 1.27%

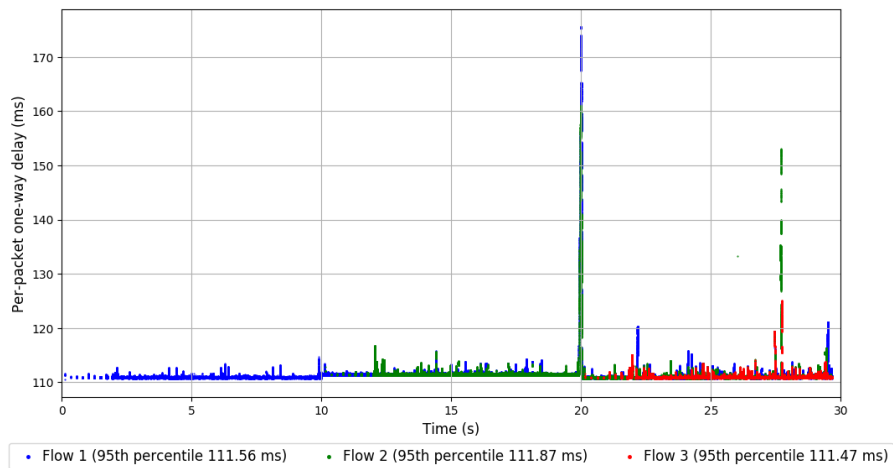
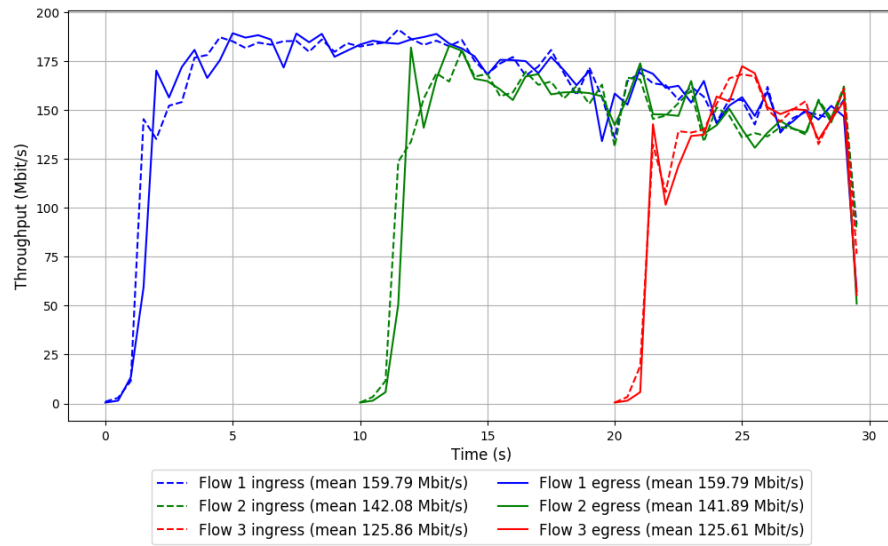
-- Flow 3:

Average throughput: 125.61 Mbit/s

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

Loss rate: 2.50%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-16 19:19:54

End at: 2017-11-16 19:20:24

Below is generated by plot.py at 2017-11-16 22:35:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 297.52 Mbit/s

95th percentile per-packet one-way delay: 113.482 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 161.62 Mbit/s

95th percentile per-packet one-way delay: 113.146 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 148.40 Mbit/s

95th percentile per-packet one-way delay: 114.219 ms

Loss rate: 1.22%

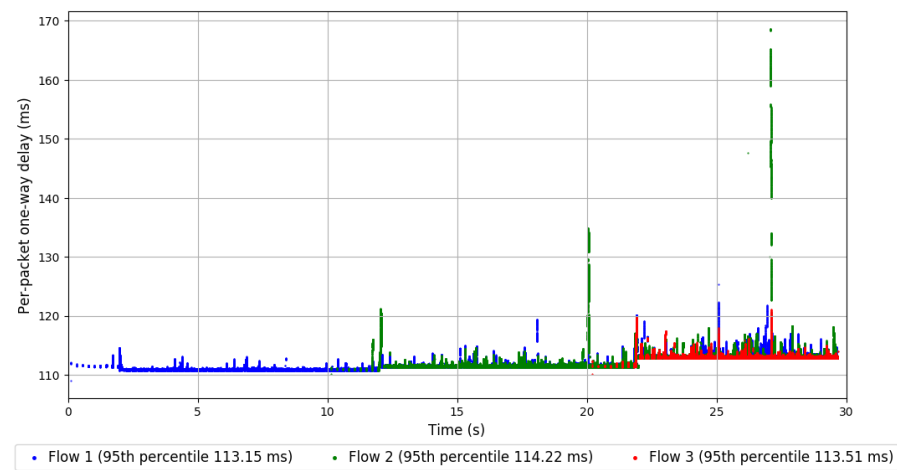
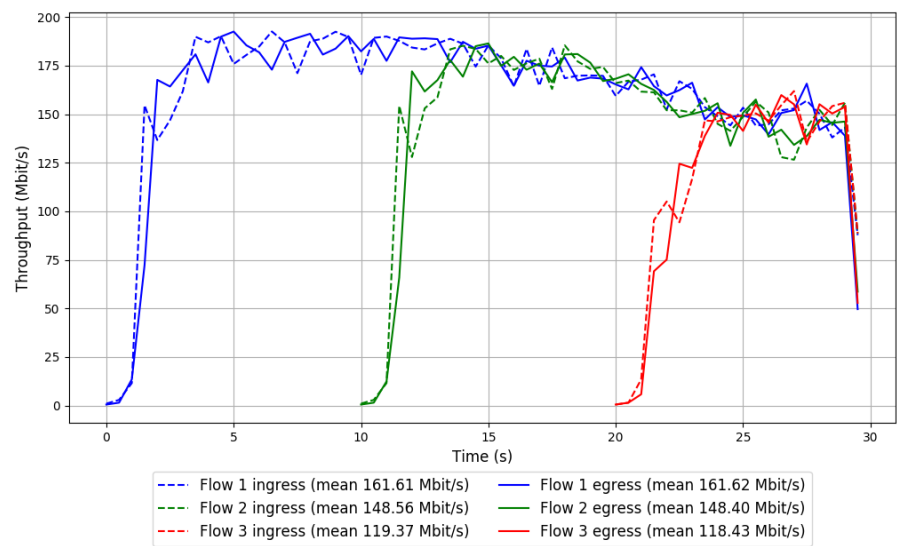
-- Flow 3:

Average throughput: 118.43 Mbit/s

95th percentile per-packet one-way delay: 113.512 ms

Loss rate: 3.06%

Run 10: Report of Indigo — Data Link

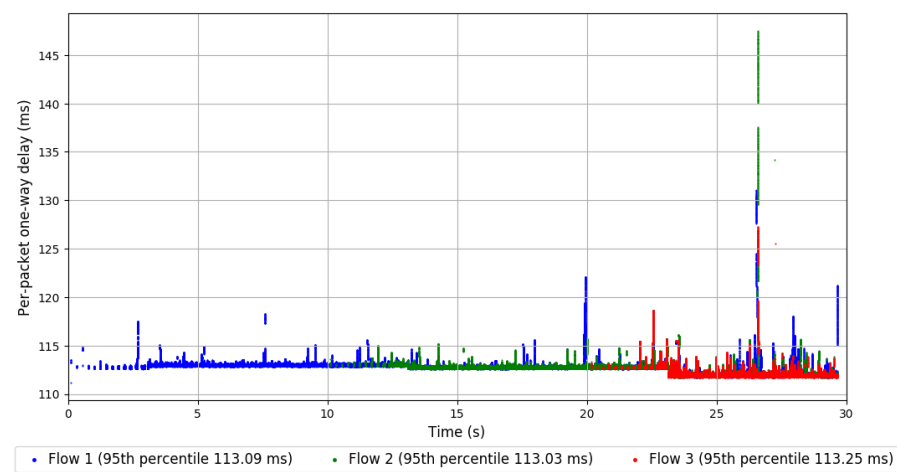
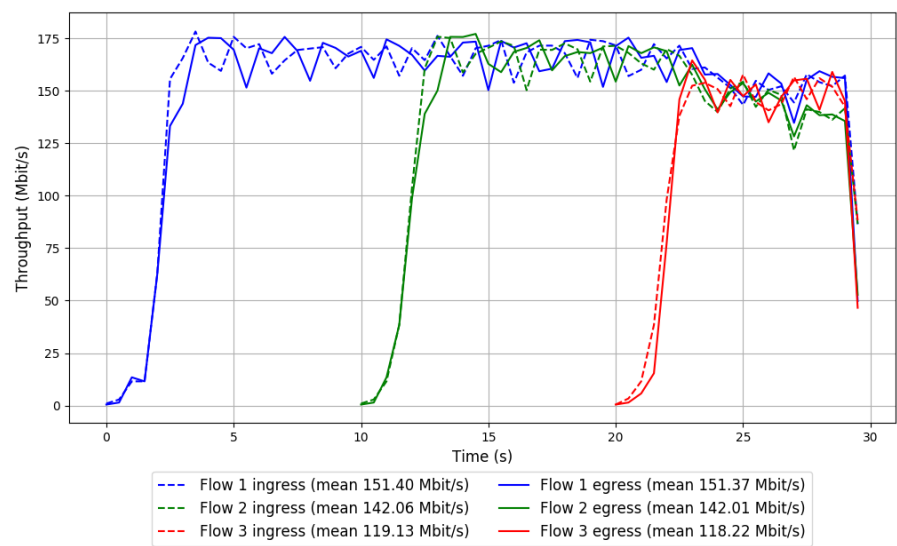


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-16 17:12:53
End at: 2017-11-16 17:13:23

# Below is generated by plot.py at 2017-11-16 22:36:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 283.29 Mbit/s
95th percentile per-packet one-way delay: 113.075 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 151.37 Mbit/s
95th percentile per-packet one-way delay: 113.086 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 142.01 Mbit/s
95th percentile per-packet one-way delay: 113.027 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 118.22 Mbit/s
95th percentile per-packet one-way delay: 113.248 ms
Loss rate: 3.09%
```

Run 1: Report of Indigo-calib — Data Link

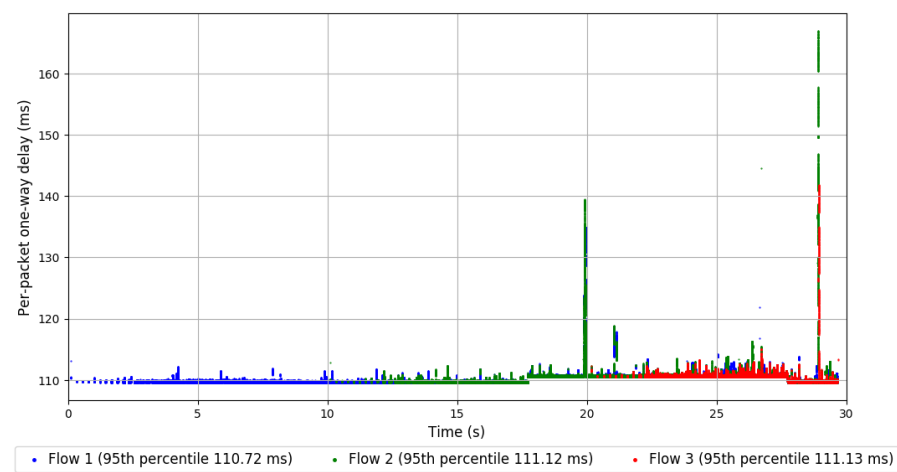
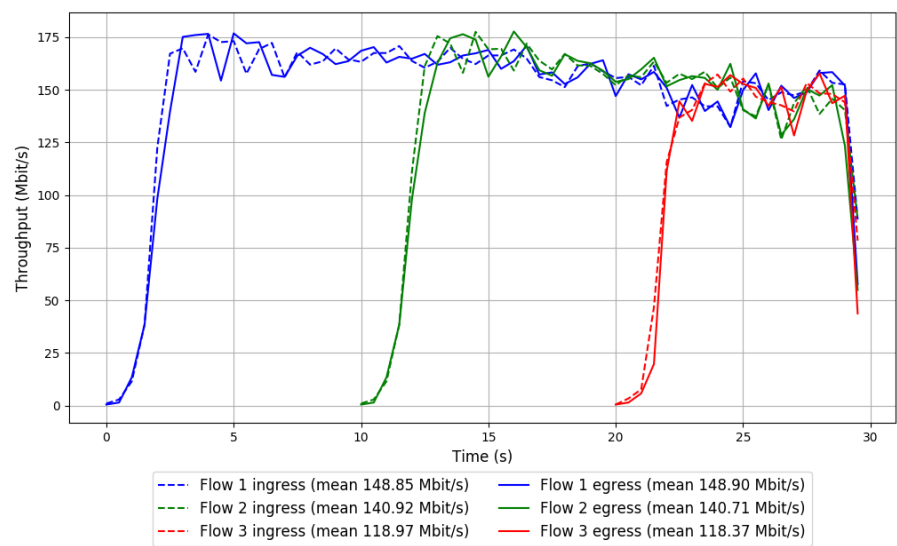


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-16 17:26:18
End at: 2017-11-16 17:26:48

# Below is generated by plot.py at 2017-11-16 22:37:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 279.96 Mbit/s
95th percentile per-packet one-way delay: 110.873 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 148.90 Mbit/s
95th percentile per-packet one-way delay: 110.718 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 140.71 Mbit/s
95th percentile per-packet one-way delay: 111.118 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 118.37 Mbit/s
95th percentile per-packet one-way delay: 111.127 ms
Loss rate: 2.76%
```

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-11-16 17:39:58

End at: 2017-11-16 17:40:28

Below is generated by plot.py at 2017-11-16 22:38:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 286.59 Mbit/s

95th percentile per-packet one-way delay: 111.164 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 151.51 Mbit/s

95th percentile per-packet one-way delay: 110.972 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 145.31 Mbit/s

95th percentile per-packet one-way delay: 111.225 ms

Loss rate: 1.32%

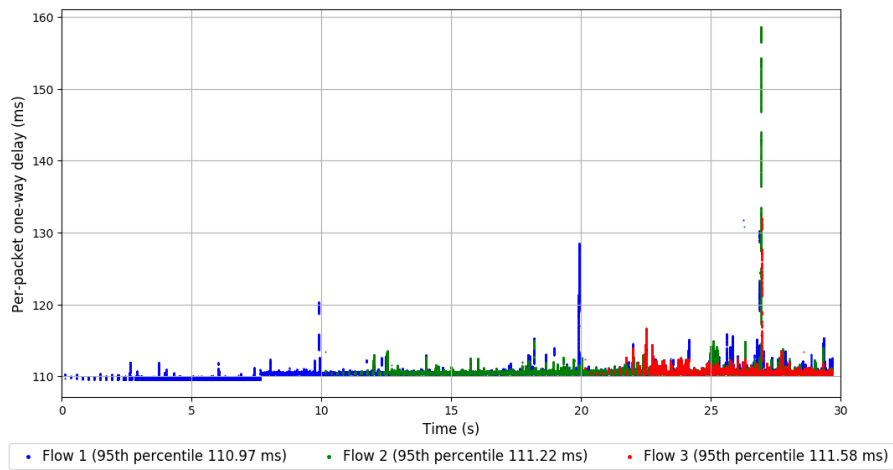
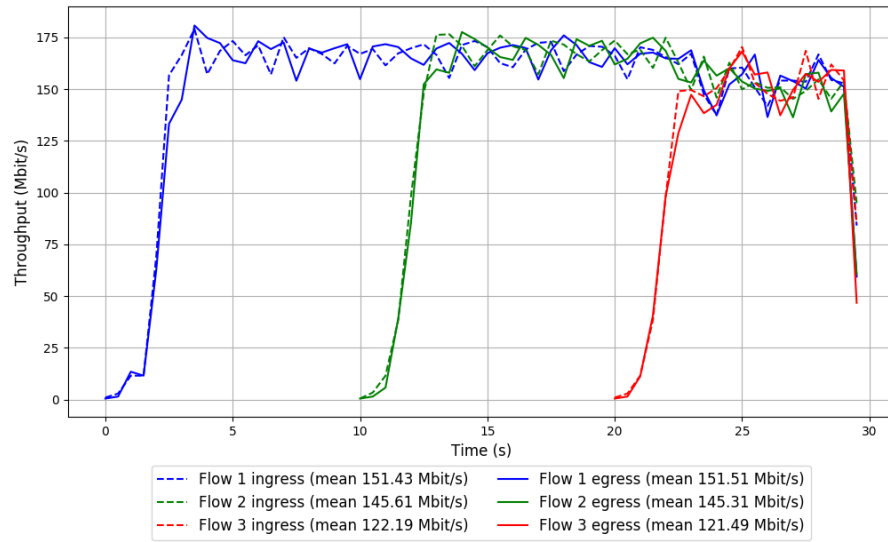
-- Flow 3:

Average throughput: 121.49 Mbit/s

95th percentile per-packet one-way delay: 111.582 ms

Loss rate: 2.86%

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-11-16 17:53:41

End at: 2017-11-16 17:54:11

Below is generated by plot.py at 2017-11-16 22:38:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 285.76 Mbit/s

95th percentile per-packet one-way delay: 111.098 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 152.21 Mbit/s

95th percentile per-packet one-way delay: 111.069 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 143.76 Mbit/s

95th percentile per-packet one-way delay: 111.104 ms

Loss rate: 1.14%

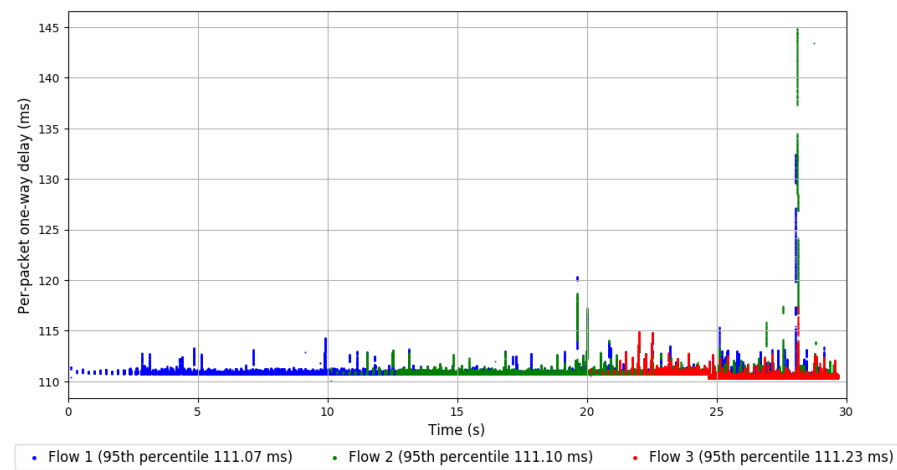
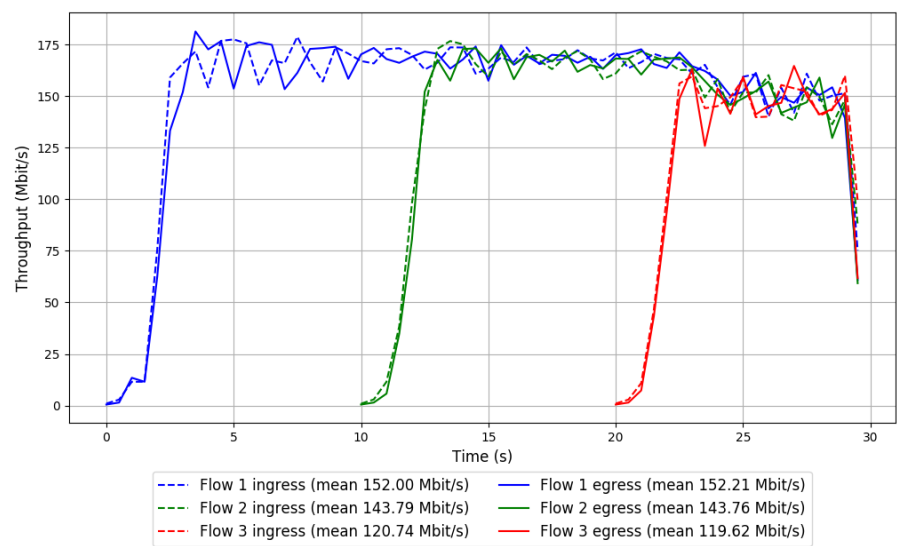
-- Flow 3:

Average throughput: 119.62 Mbit/s

95th percentile per-packet one-way delay: 111.226 ms

Loss rate: 3.18%

Run 4: Report of Indigo-calib — Data Link

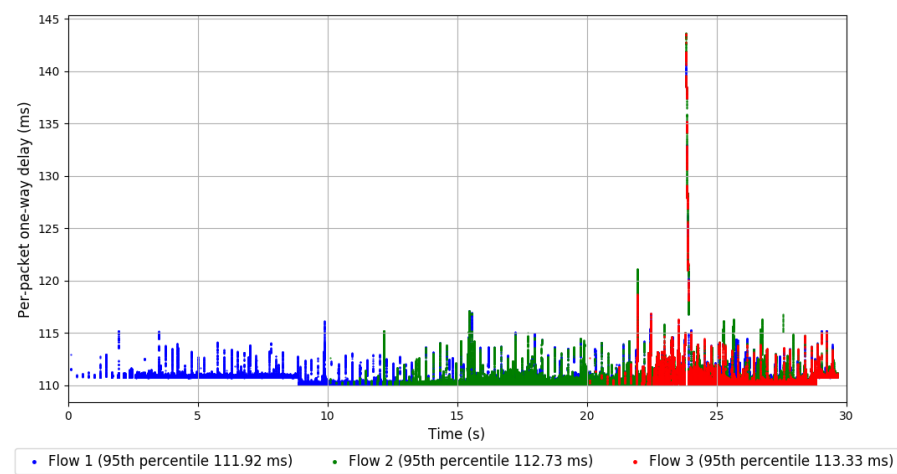
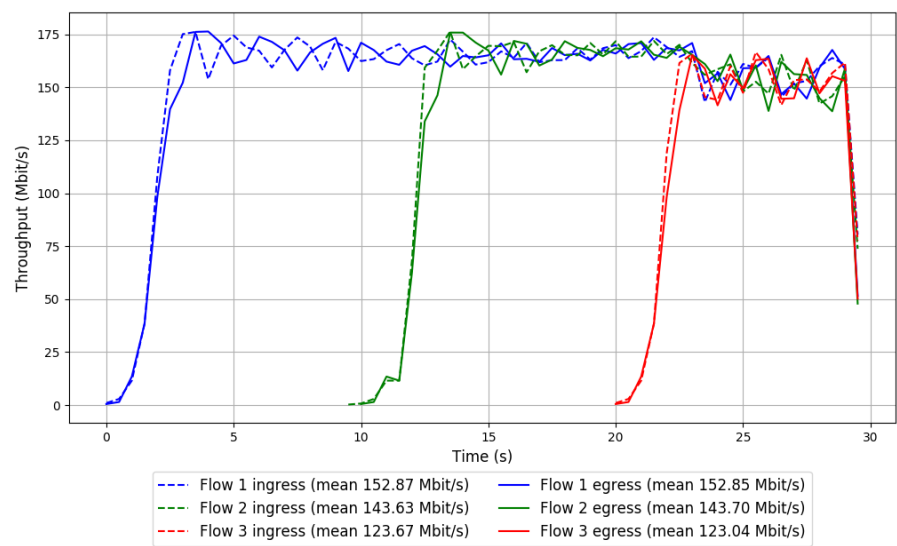


```
Run 5: Statistics of Indigo-calib

Start at: 2017-11-16 18:07:17
End at: 2017-11-16 18:07:47

# Below is generated by plot.py at 2017-11-16 22:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 287.68 Mbit/s
95th percentile per-packet one-way delay: 112.395 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 152.85 Mbit/s
95th percentile per-packet one-way delay: 111.922 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 143.70 Mbit/s
95th percentile per-packet one-way delay: 112.726 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 123.04 Mbit/s
95th percentile per-packet one-way delay: 113.329 ms
Loss rate: 2.78%
```

Run 5: Report of Indigo-calib — Data Link

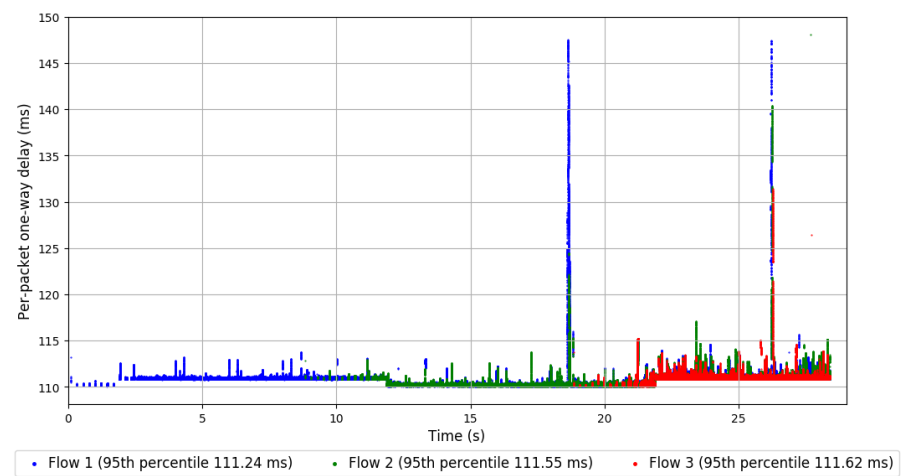
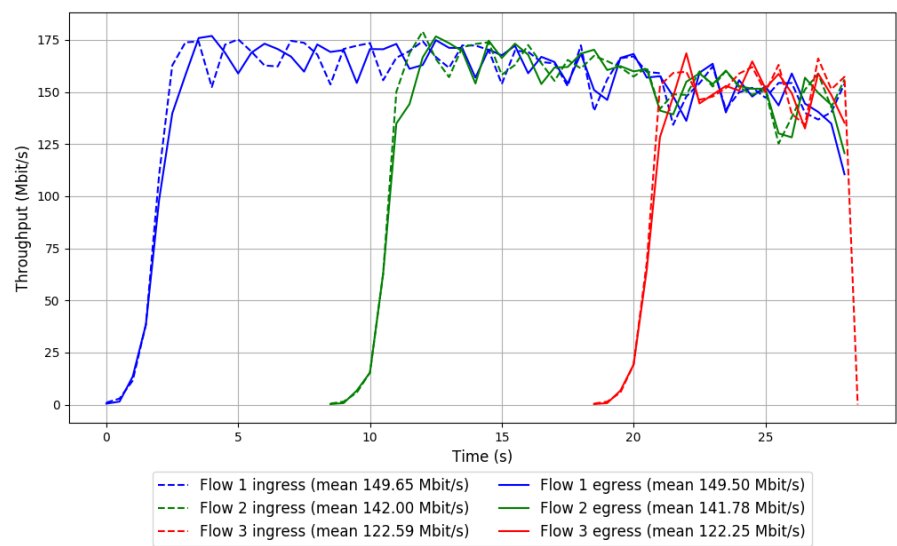


```
Run 6: Statistics of Indigo-calib

Start at: 2017-11-16 18:20:53
End at: 2017-11-16 18:21:23

# Below is generated by plot.py at 2017-11-16 22:39:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 288.74 Mbit/s
95th percentile per-packet one-way delay: 111.391 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 149.50 Mbit/s
95th percentile per-packet one-way delay: 111.238 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 141.78 Mbit/s
95th percentile per-packet one-way delay: 111.552 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 122.25 Mbit/s
95th percentile per-packet one-way delay: 111.617 ms
Loss rate: 2.60%
```

Run 6: Report of Indigo-calib — Data Link

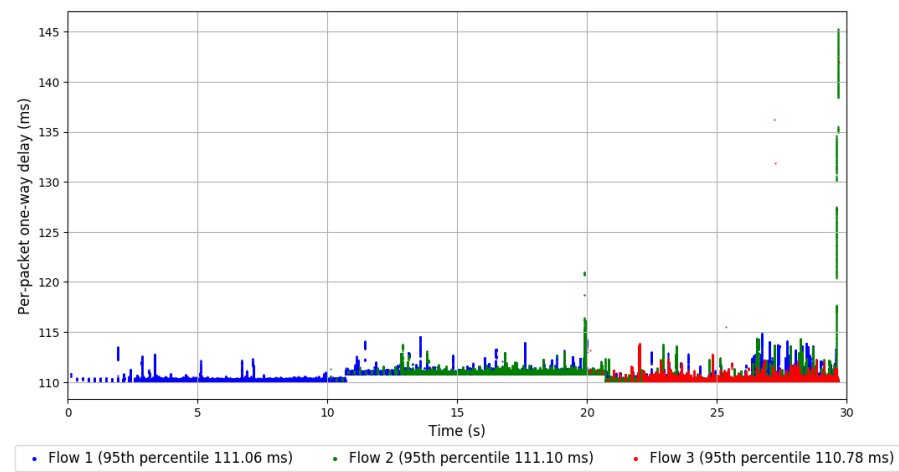
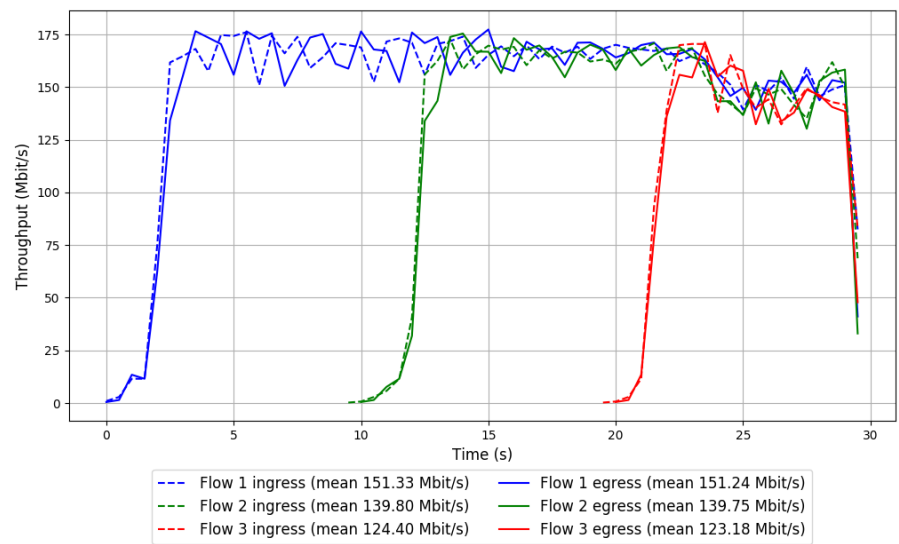


```
Run 7: Statistics of Indigo-calib

Start at: 2017-11-16 18:34:45
End at: 2017-11-16 18:35:15

# Below is generated by plot.py at 2017-11-16 22:39:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 283.36 Mbit/s
95th percentile per-packet one-way delay: 111.066 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 151.24 Mbit/s
95th percentile per-packet one-way delay: 111.064 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 139.75 Mbit/s
95th percentile per-packet one-way delay: 111.103 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 123.18 Mbit/s
95th percentile per-packet one-way delay: 110.783 ms
Loss rate: 2.94%
```


Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-16 18:48:27

End at: 2017-11-16 18:48:57

Below is generated by plot.py at 2017-11-16 22:39:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 285.68 Mbit/s

95th percentile per-packet one-way delay: 111.092 ms

Loss rate: 1.27%

-- Flow 1:

Average throughput: 151.17 Mbit/s

95th percentile per-packet one-way delay: 111.032 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 145.40 Mbit/s

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

Loss rate: 1.32%

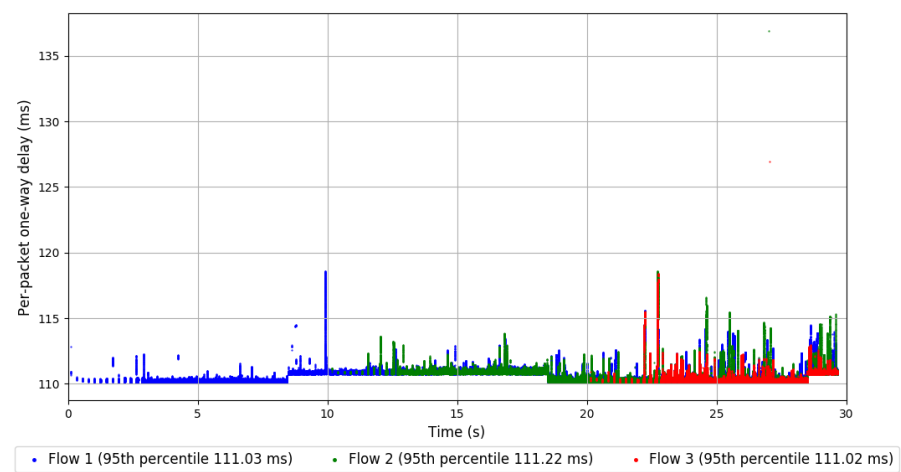
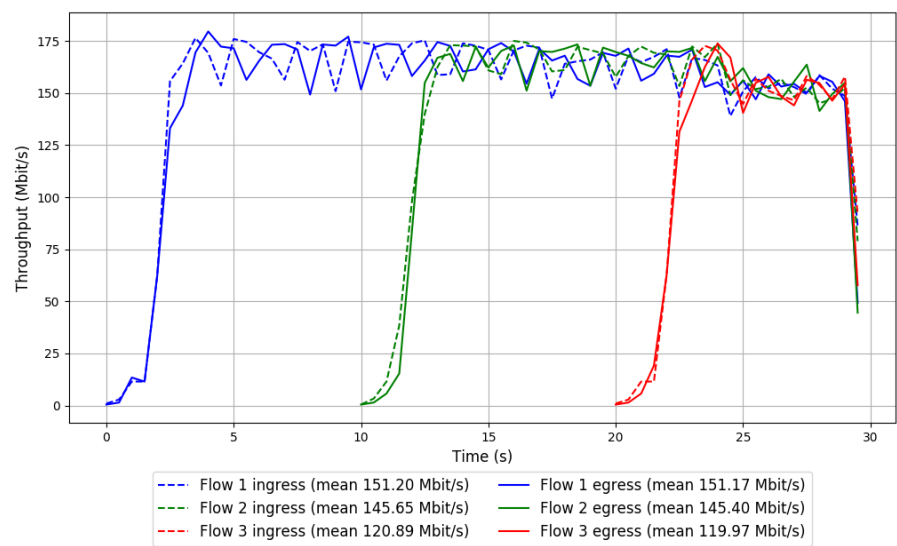
-- Flow 3:

Average throughput: 119.97 Mbit/s

95th percentile per-packet one-way delay: 111.021 ms

Loss rate: 3.05%

Run 8: Report of Indigo-calib — Data Link

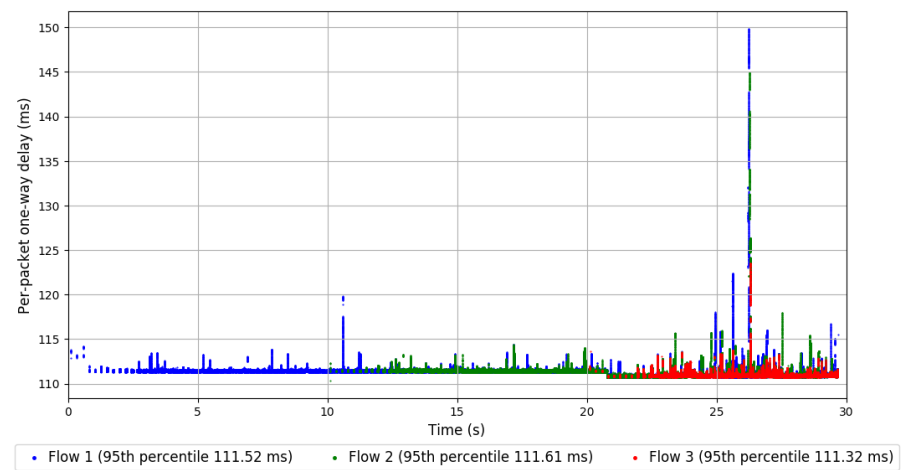
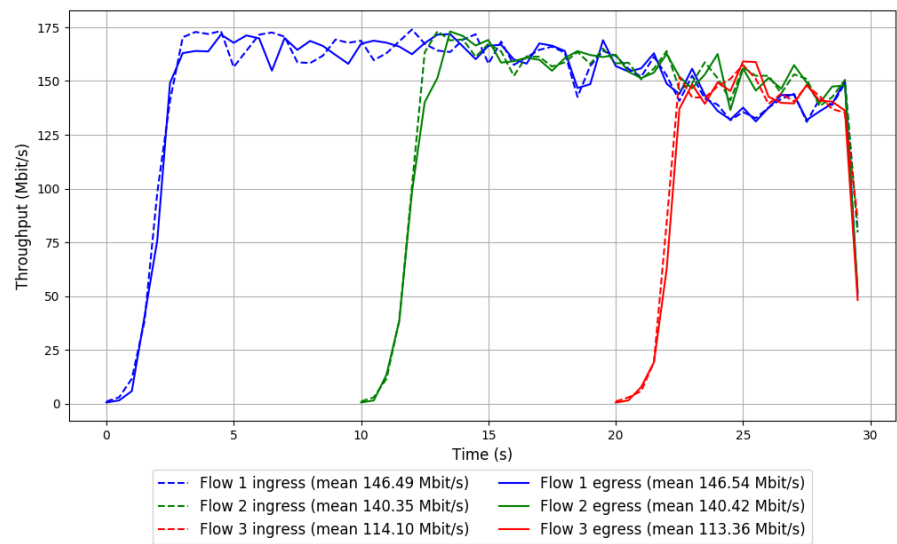


```
Run 9: Statistics of Indigo-calib

Start at: 2017-11-16 19:02:15
End at: 2017-11-16 19:02:45

# Below is generated by plot.py at 2017-11-16 22:39:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 276.06 Mbit/s
95th percentile per-packet one-way delay: 111.530 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 146.54 Mbit/s
95th percentile per-packet one-way delay: 111.515 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 140.42 Mbit/s
95th percentile per-packet one-way delay: 111.607 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 113.36 Mbit/s
95th percentile per-packet one-way delay: 111.321 ms
Loss rate: 2.91%
```

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-16 19:15:49

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

Below is generated by plot.py at 2017-11-16 22:39:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 280.96 Mbit/s

95th percentile per-packet one-way delay: 111.778 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 147.61 Mbit/s

95th percentile per-packet one-way delay: 111.670 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 141.76 Mbit/s

95th percentile per-packet one-way delay: 111.915 ms

Loss rate: 0.99%

-- Flow 3:

Average throughput: 122.96 Mbit/s

95th percentile per-packet one-way delay: 111.858 ms

Loss rate: 2.86%

Run 10: Report of Indigo-calib — Data Link

