

Pantheon Report

Generated at 2018-03-20 17:44:47 (UTC).

Tested in mahimahi: mm-delay 10 mm-link 108Mbps.trace 108Mbps.trace
--uplink-queue=droptail --uplink-queue-args=packets=1 --downlink-queue=droptail
--downlink-queue-args=packets=1

Repeated the test of 17 congestion control schemes 10 times.

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

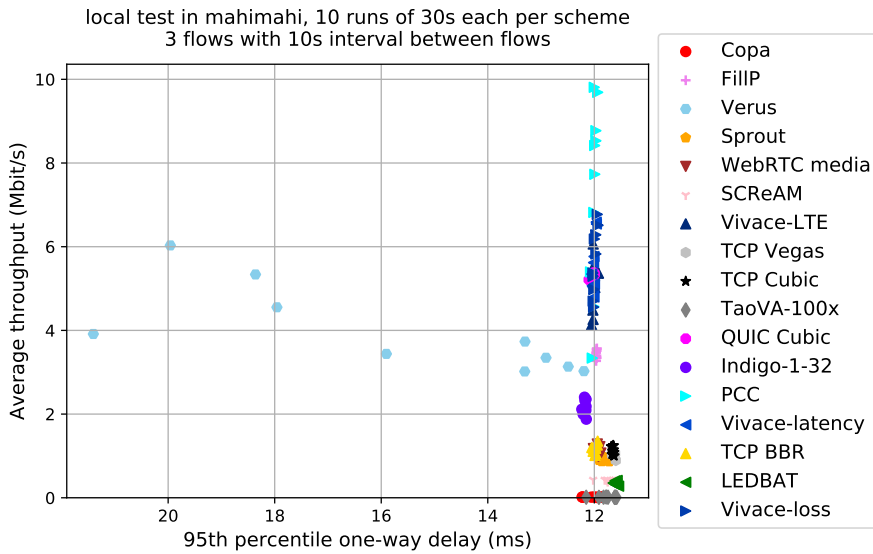
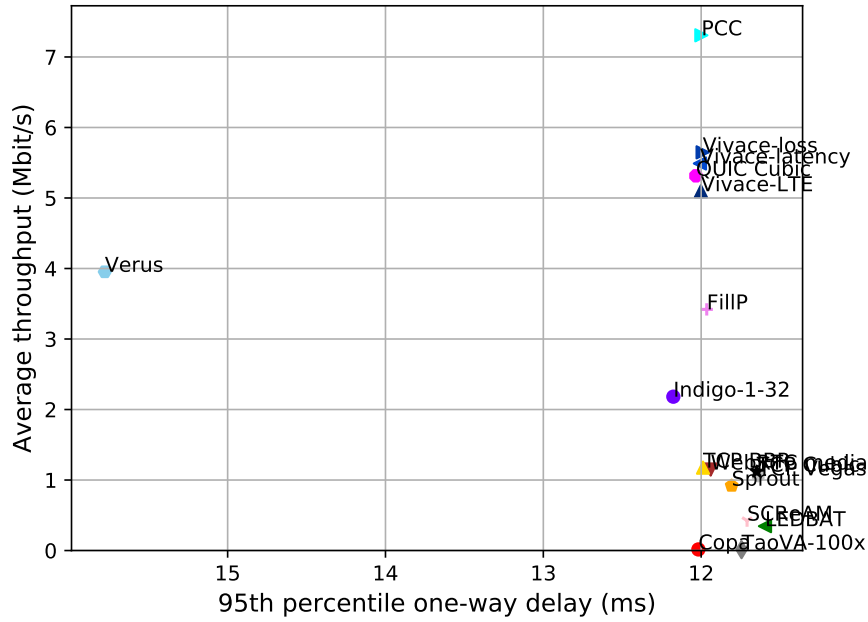
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

Git summary:

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

local test in mahimahi, 10 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



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	0.59	0.57	0.61	11.94	11.99	12.07	32.12	35.11	42.51
TCP Cubic	10	0.60	0.55	0.48	11.63	11.65	11.70	23.11	24.74	27.26
LEDBAT	10	0.17	0.18	0.17	11.59	11.60	11.61	47.89	48.38	43.11
PCC	10	6.27	1.13	0.92	11.97	12.17	12.15	9.51	33.93	39.18
QUIC Cubic	10	3.04	2.51	1.88	12.02	12.05	12.07	12.84	16.45	22.63
SCReAM	10	0.21	0.20	0.22	11.57	11.69	11.57	0.05	0.02	0.04
WebRTC media	10	0.62	0.37	0.16	11.90	11.97	12.06	38.54	38.64	47.58
Sprout	10	0.46	0.47	0.43	11.75	11.84	11.92	10.72	9.50	15.39
TaoVA-100x	10	0.01	0.01	0.01	11.63	11.68	11.61	55.05	53.15	53.44
TCP Vegas	10	0.56	0.54	0.45	11.61	11.64	11.70	23.20	24.29	32.10
Verus	10	2.49	2.15	0.21	14.83	16.40	13.81	98.17	97.78	75.81
Copa	10	0.01	0.01	0.01	11.92	12.00	11.93	94.01	94.04	94.16
FillP	10	1.70	1.66	1.87	11.96	11.97	11.96	79.32	84.31	91.58
Indigo-1-32	10	1.07	1.15	1.15	12.20	12.17	12.16	95.14	95.34	95.61
Vivace-latency	10	4.49	0.91	1.23	12.00	12.02	12.04	2.74	19.90	11.31
Vivace-loss	10	4.67	1.03	0.90	11.97	12.02	12.10	2.81	18.14	18.18
Vivace-LTE	10	4.12	0.85	1.26	11.97	12.09	12.08	2.83	18.16	10.88

Run 1: Statistics of TCP BBR

Start at: 2018-03-20 15:49:22

End at: 2018-03-20 15:49:52

Below is generated by plot.py at 2018-03-20 17:31:46

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.18 Mbit/s (1.1% utilization)

95th percentile per-packet one-way delay: 11.975 ms

Loss rate: 36.61%

-- Flow 1:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 11.917 ms

Loss rate: 31.72%

-- Flow 2:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 11.965 ms

Loss rate: 41.13%

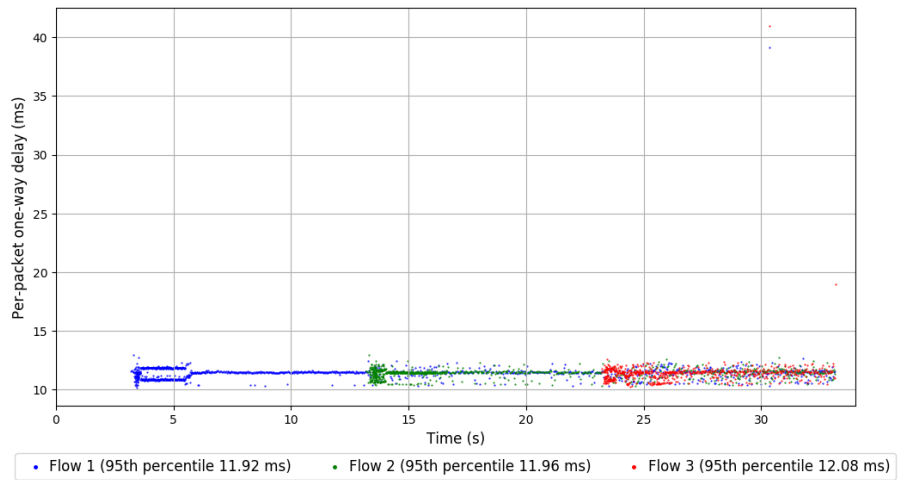
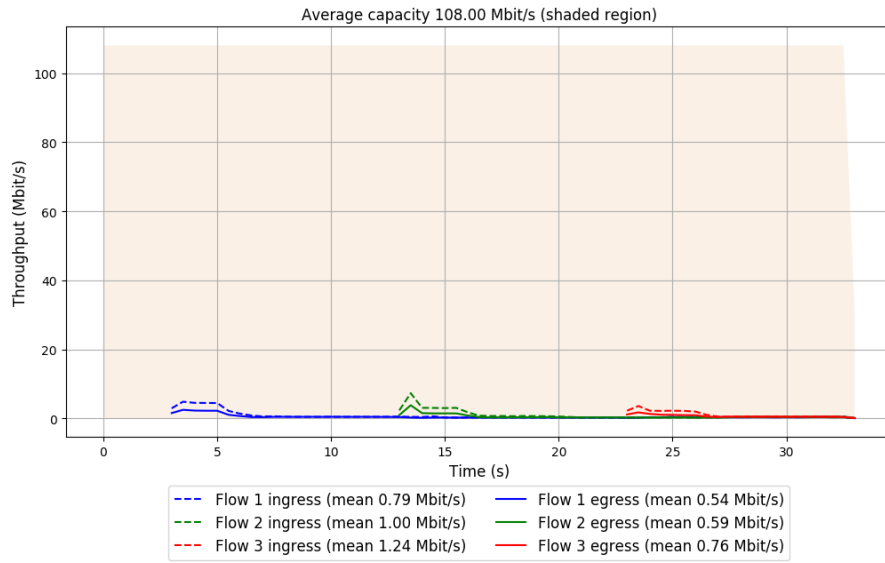
-- Flow 3:

Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 12.077 ms

Loss rate: 38.61%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-03-20 16:00:06

End at: 2018-03-20 16:00:36

Below is generated by plot.py at 2018-03-20 17:31:47

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.05 Mbit/s (1.0% utilization)

95th percentile per-packet one-way delay: 11.970 ms

Loss rate: 33.38%

-- Flow 1:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 11.889 ms

Loss rate: 25.47%

-- Flow 2:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 12.076 ms

Loss rate: 32.65%

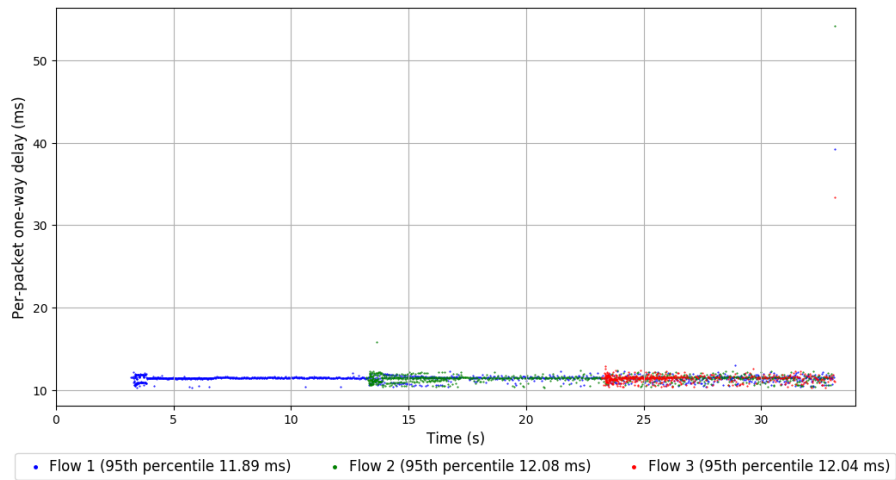
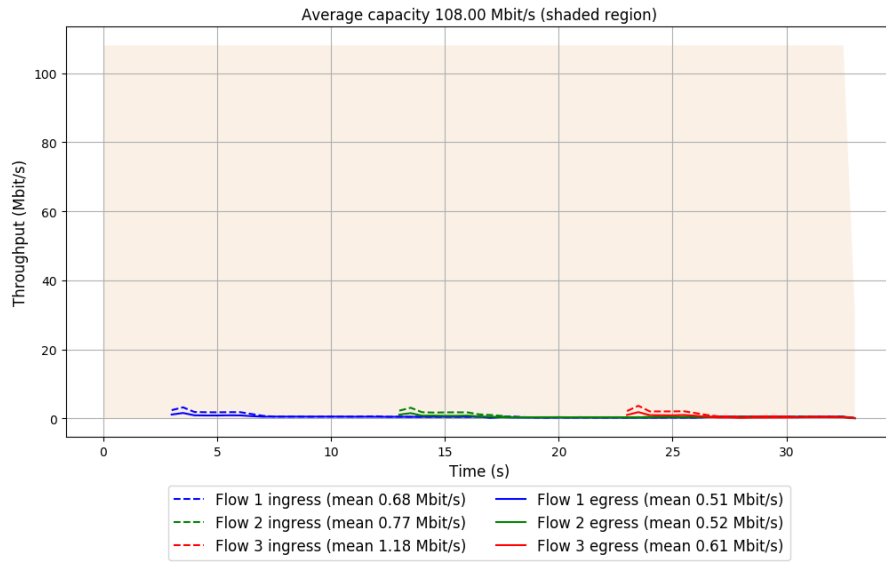
-- Flow 3:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 12.038 ms

Loss rate: 48.10%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-03-20 16:10:53

End at: 2018-03-20 16:11:23

Below is generated by plot.py at 2018-03-20 17:31:47

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.35 Mbit/s (1.3% utilization)

95th percentile per-packet one-way delay: 11.938 ms

Loss rate: 37.51%

-- Flow 1:

Average throughput: 0.71 Mbit/s

95th percentile per-packet one-way delay: 11.911 ms

Loss rate: 37.22%

-- Flow 2:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 11.948 ms

Loss rate: 36.93%

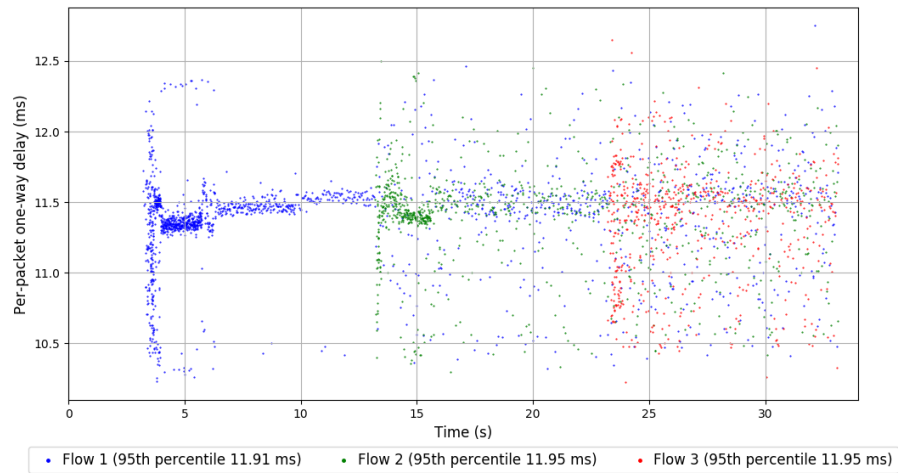
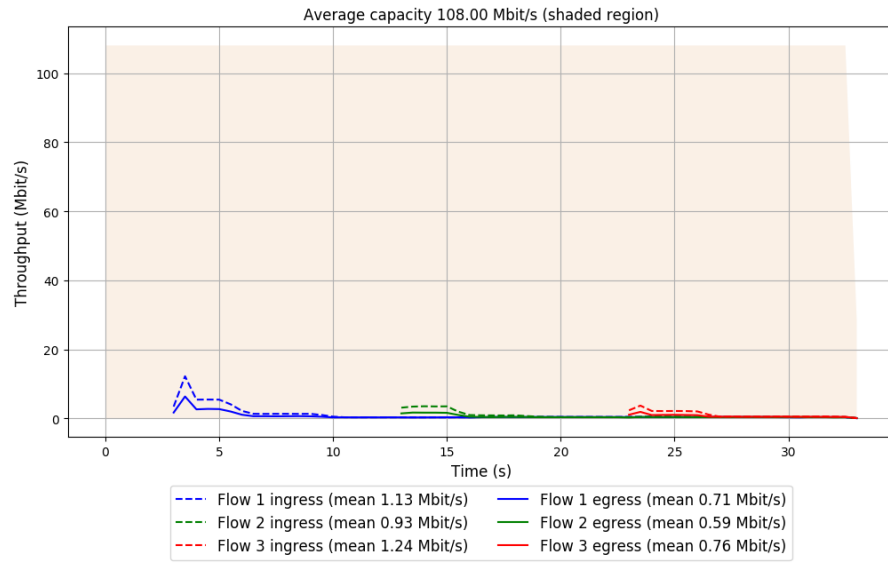
-- Flow 3:

Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 11.949 ms

Loss rate: 39.20%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-03-20 16:21:39

End at: 2018-03-20 16:22:09

Below is generated by plot.py at 2018-03-20 17:31:47

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.11 Mbit/s (1.0% utilization)

95th percentile per-packet one-way delay: 12.022 ms

Loss rate: 30.94%

-- Flow 1:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 11.894 ms

Loss rate: 25.05%

-- Flow 2:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 12.053 ms

Loss rate: 33.49%

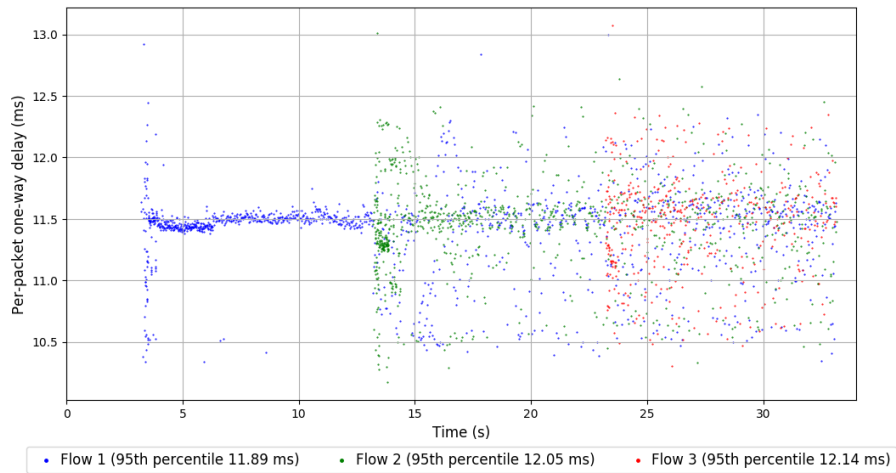
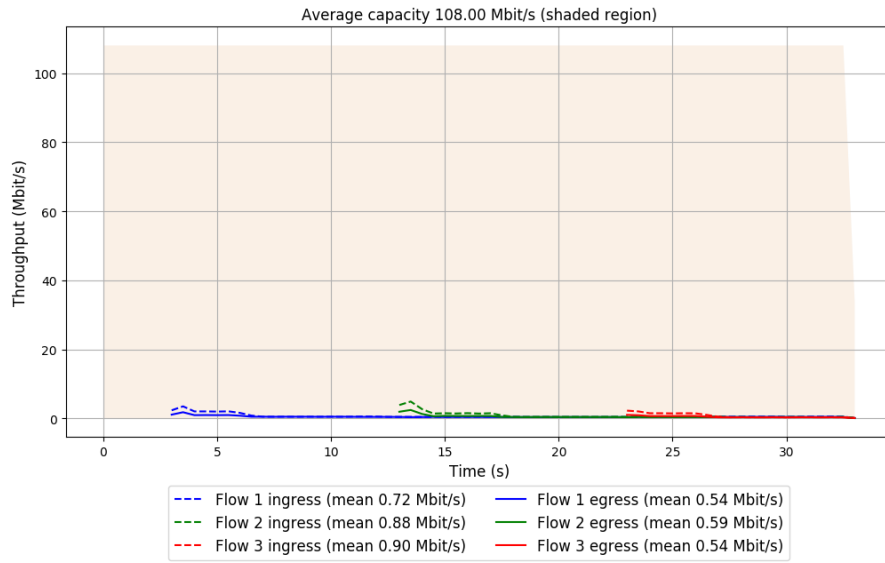
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 12.138 ms

Loss rate: 40.21%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-03-20 16:32:27

End at: 2018-03-20 16:32:57

Below is generated by plot.py at 2018-03-20 17:31:47

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.19 Mbit/s (1.1% utilization)

95th percentile per-packet one-way delay: 12.002 ms

Loss rate: 34.87%

-- Flow 1:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 11.932 ms

Loss rate: 31.95%

-- Flow 2:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 11.969 ms

Loss rate: 30.55%

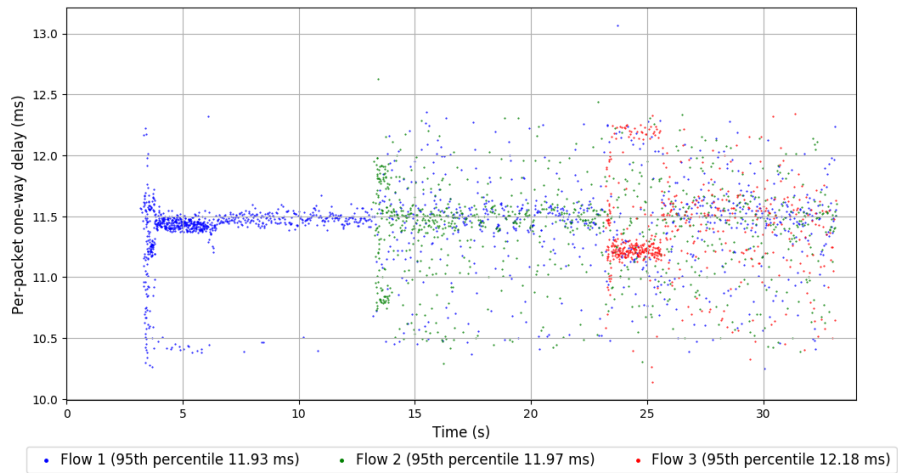
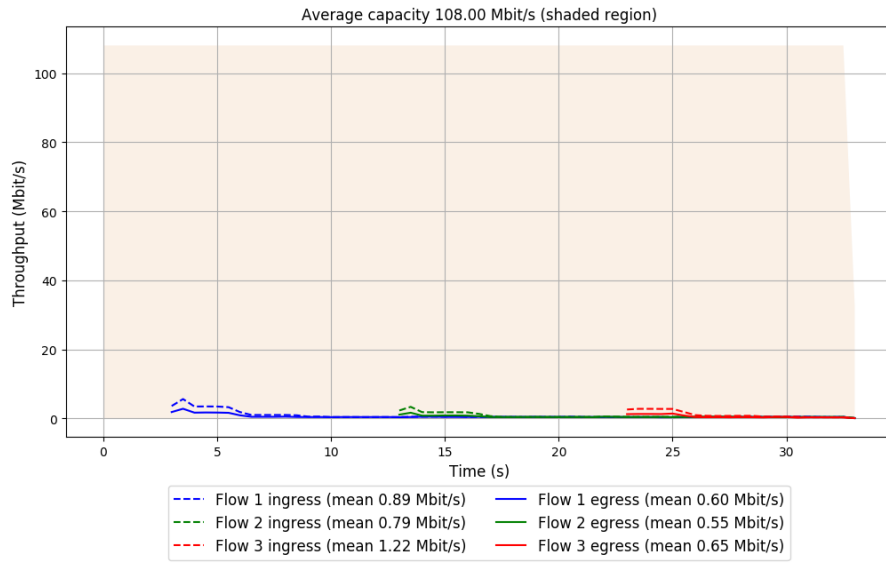
-- Flow 3:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 12.184 ms

Loss rate: 46.88%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-03-20 16:43:17

End at: 2018-03-20 16:43:47

Below is generated by plot.py at 2018-03-20 17:31:47

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.20 Mbit/s (1.1% utilization)

95th percentile per-packet one-way delay: 12.047 ms

Loss rate: 34.47%

-- Flow 1:

Average throughput: 0.68 Mbit/s

95th percentile per-packet one-way delay: 12.062 ms

Loss rate: 36.20%

-- Flow 2:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 11.918 ms

Loss rate: 29.43%

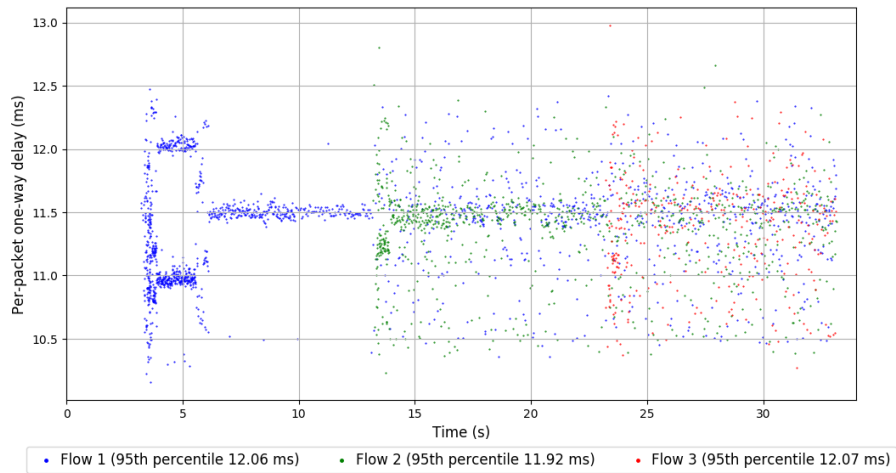
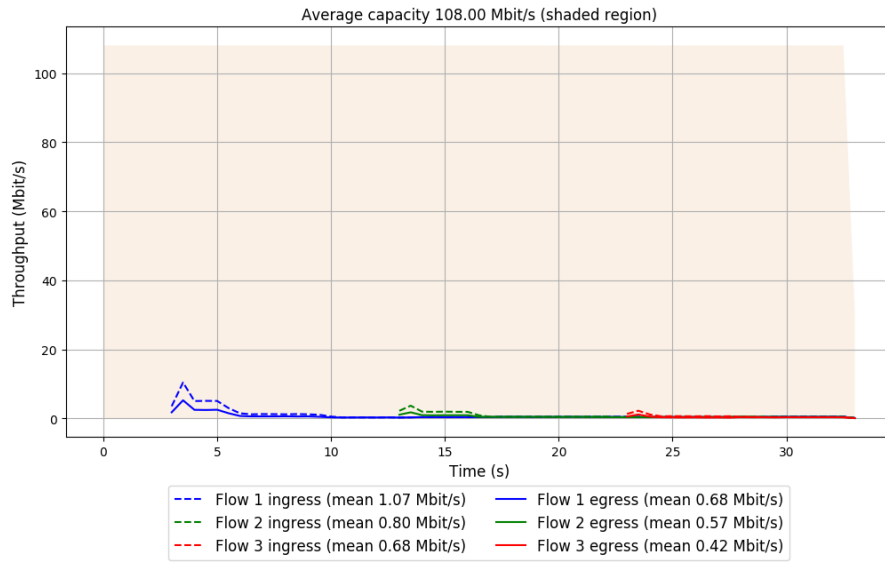
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 12.074 ms

Loss rate: 38.15%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-03-20 16:54:03

End at: 2018-03-20 16:54:33

Below is generated by plot.py at 2018-03-20 17:31:47

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.18 Mbit/s (1.1% utilization)

95th percentile per-packet one-way delay: 12.014 ms

Loss rate: 35.32%

-- Flow 1:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 11.995 ms

Loss rate: 34.03%

-- Flow 2:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 12.023 ms

Loss rate: 36.58%

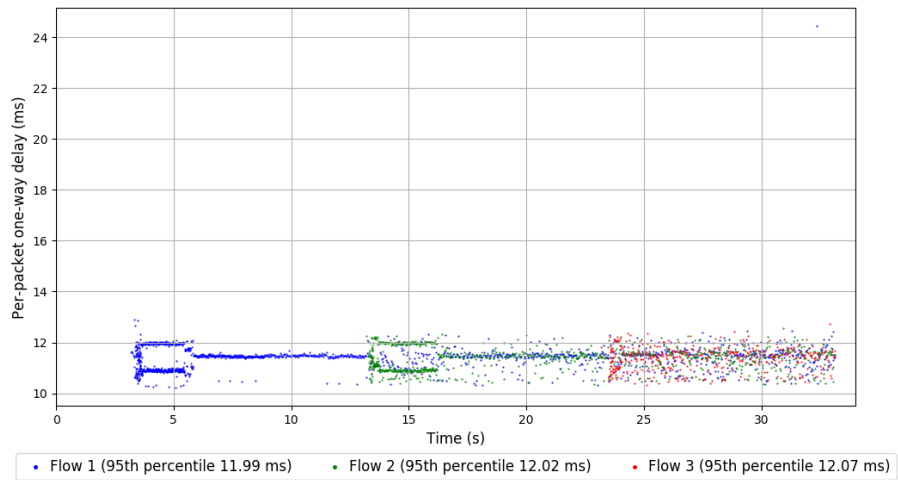
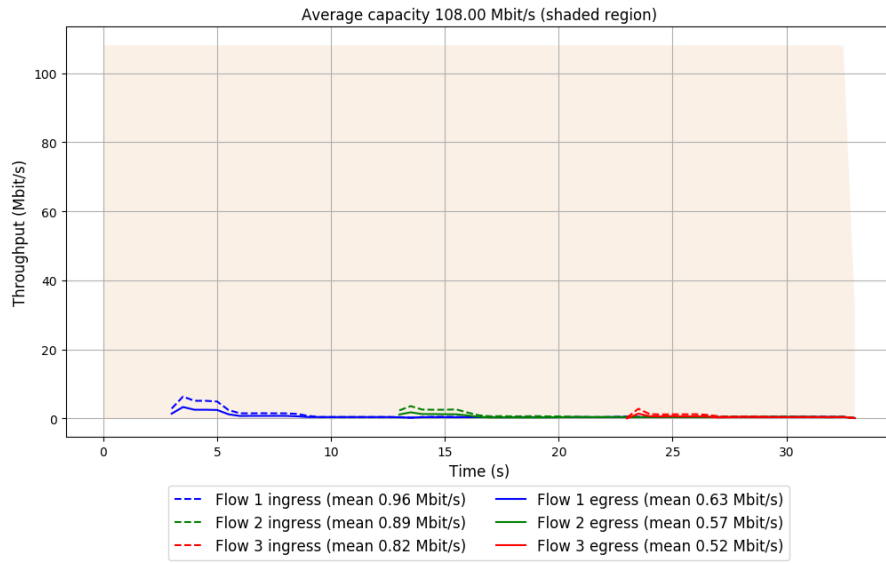
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 12.072 ms

Loss rate: 37.14%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-03-20 17:04:48

End at: 2018-03-20 17:05:18

Below is generated by plot.py at 2018-03-20 17:31:48

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.26 Mbit/s (1.2% utilization)

95th percentile per-packet one-way delay: 11.945 ms

Loss rate: 39.31%

-- Flow 1:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 11.921 ms

Loss rate: 37.64%

-- Flow 2:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 11.937 ms

Loss rate: 37.31%

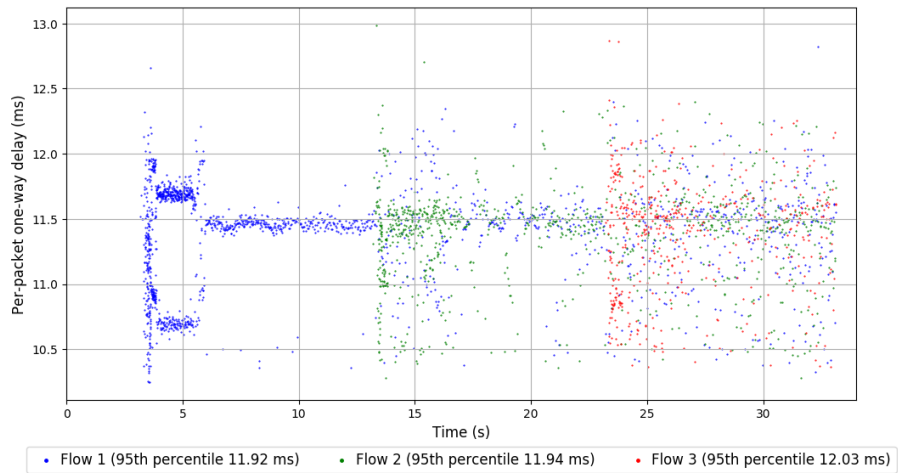
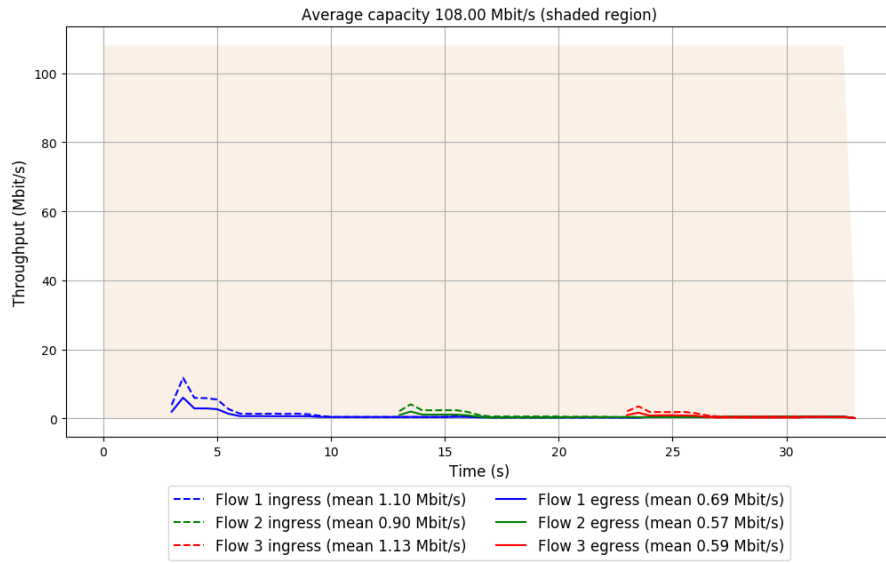
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 12.027 ms

Loss rate: 47.48%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-03-20 17:15:34

End at: 2018-03-20 17:16:04

Below is generated by plot.py at 2018-03-20 17:32:13

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.01 Mbit/s (0.9% utilization)

95th percentile per-packet one-way delay: 11.987 ms

Loss rate: 33.64%

-- Flow 1:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 11.926 ms

Loss rate: 30.17%

-- Flow 2:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 12.016 ms

Loss rate: 33.82%

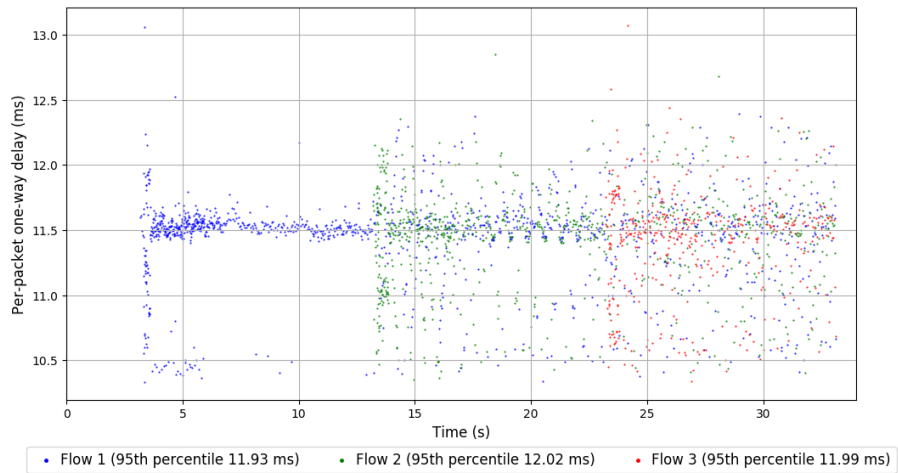
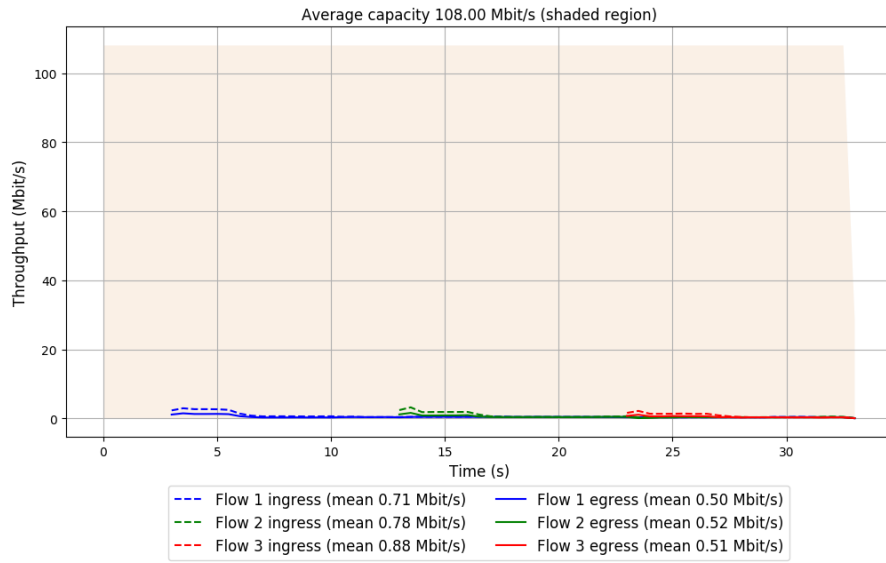
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 11.992 ms

Loss rate: 41.77%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-03-20 17:26:19

End at: 2018-03-20 17:26:49

Below is generated by plot.py at 2018-03-20 17:32:17

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.21 Mbit/s (1.1% utilization)

95th percentile per-packet one-way delay: 11.982 ms

Loss rate: 38.28%

-- Flow 1:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 11.961 ms

Loss rate: 31.78%

-- Flow 2:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 11.977 ms

Loss rate: 39.20%

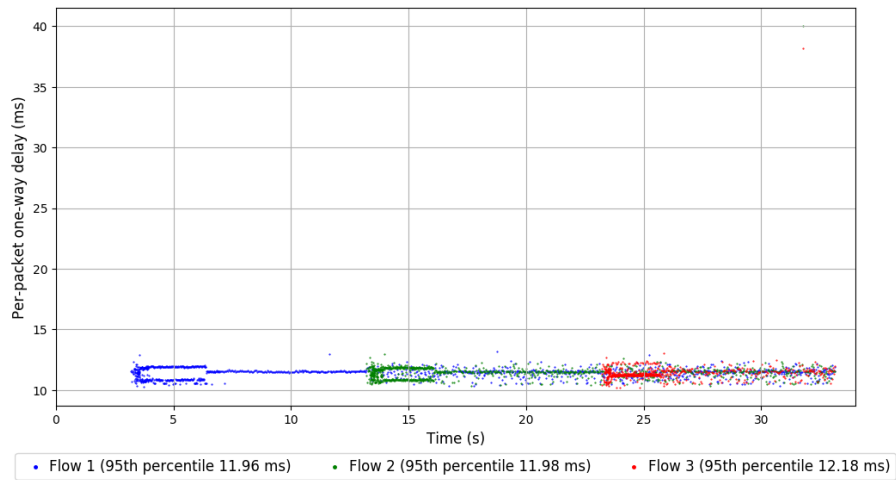
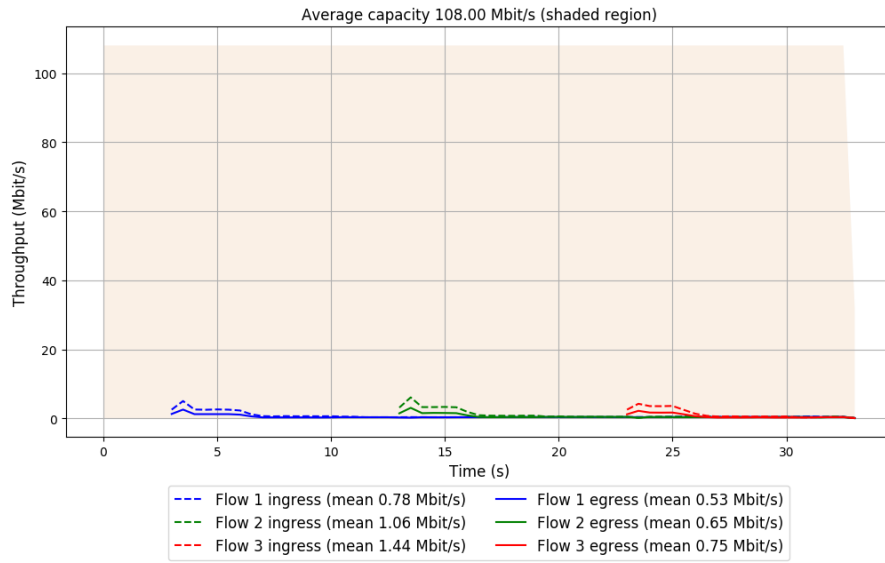
-- Flow 3:

Average throughput: 0.75 Mbit/s

95th percentile per-packet one-way delay: 12.176 ms

Loss rate: 47.56%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-03-20 15:50:32

End at: 2018-03-20 15:51:02

Below is generated by plot.py at 2018-03-20 17:32:17

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.25 Mbit/s (1.2% utilization)

95th percentile per-packet one-way delay: 11.640 ms

Loss rate: 22.25%

-- Flow 1:

Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 11.626 ms

Loss rate: 18.94%

-- Flow 2:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 11.653 ms

Loss rate: 26.41%

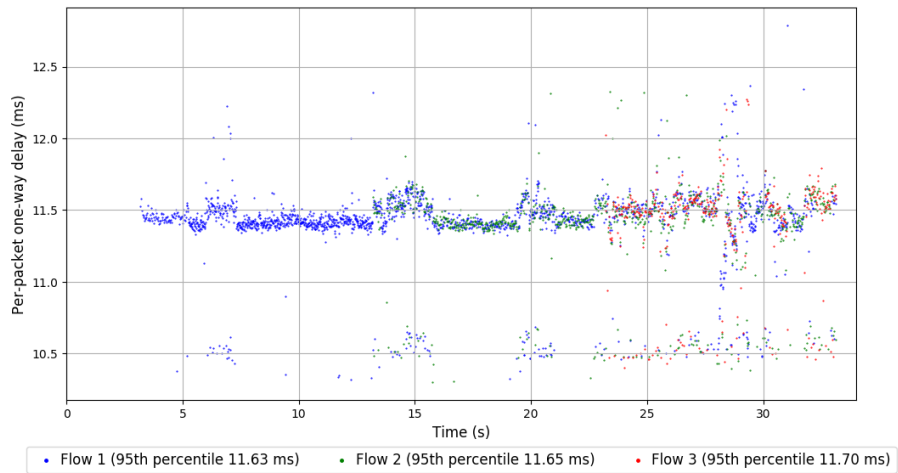
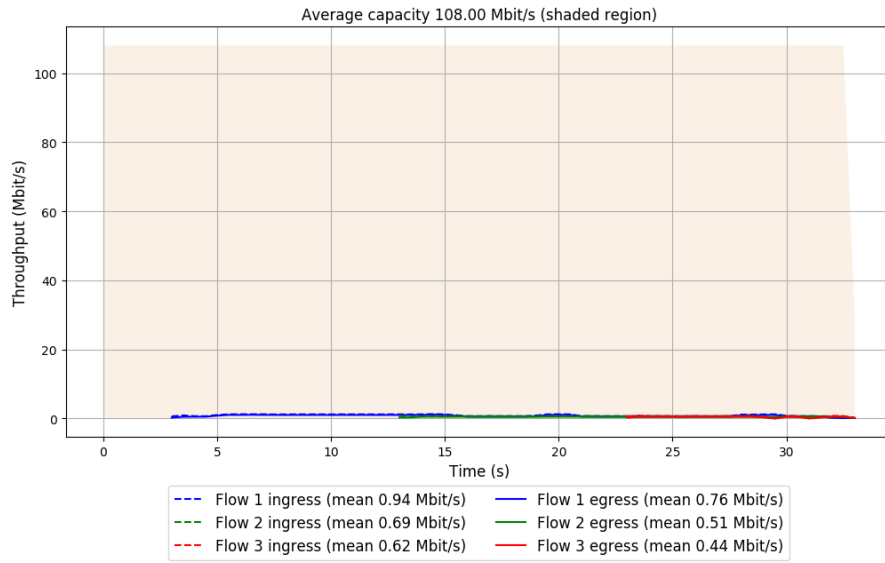
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 11.702 ms

Loss rate: 28.09%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-03-20 16:01:17

End at: 2018-03-20 16:01:47

Below is generated by plot.py at 2018-03-20 17:32:18

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.25 Mbit/s (1.2% utilization)

95th percentile per-packet one-way delay: 11.646 ms

Loss rate: 22.35%

-- Flow 1:

Average throughput: 0.73 Mbit/s

95th percentile per-packet one-way delay: 11.608 ms

Loss rate: 19.76%

-- Flow 2:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 11.657 ms

Loss rate: 25.37%

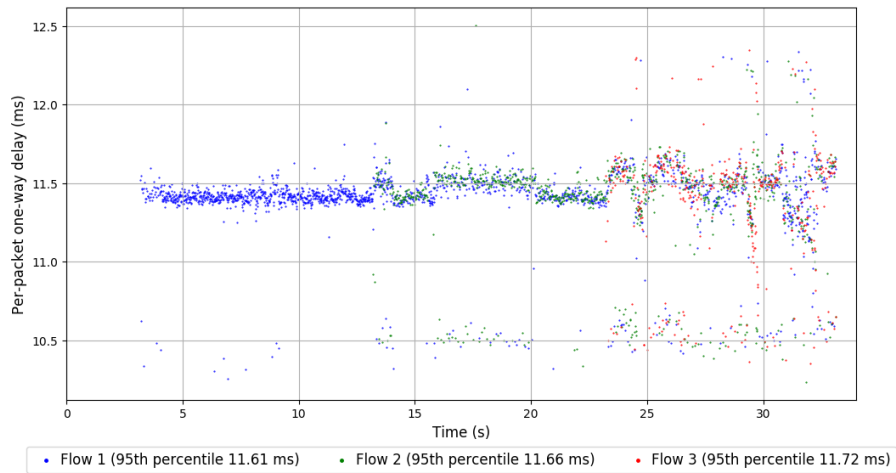
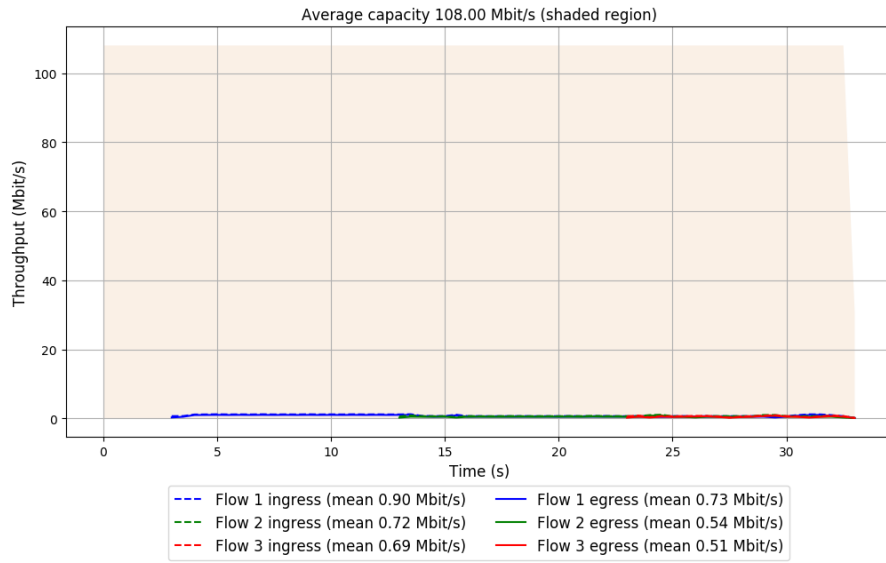
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 11.719 ms

Loss rate: 26.26%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-03-20 16:12:04

End at: 2018-03-20 16:12:34

Below is generated by plot.py at 2018-03-20 17:32:19

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.09 Mbit/s (1.0% utilization)

95th percentile per-packet one-way delay: 11.634 ms

Loss rate: 24.98%

-- Flow 1:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 11.624 ms

Loss rate: 26.09%

-- Flow 2:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 11.626 ms

Loss rate: 22.88%

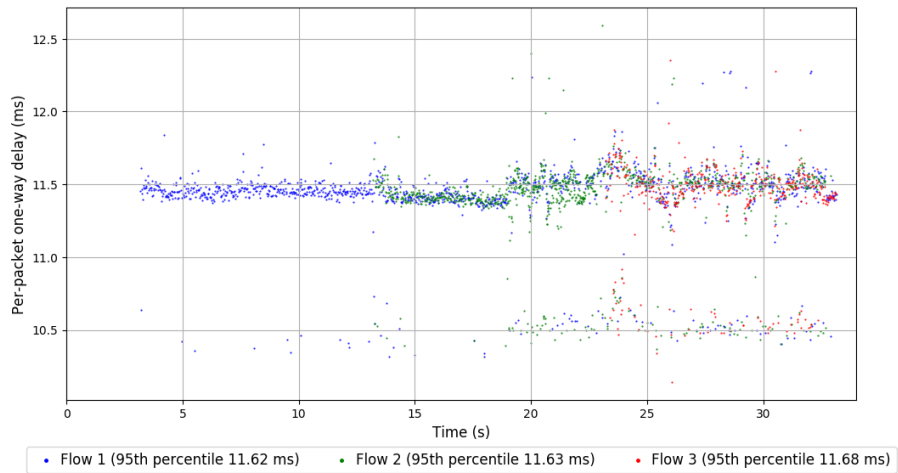
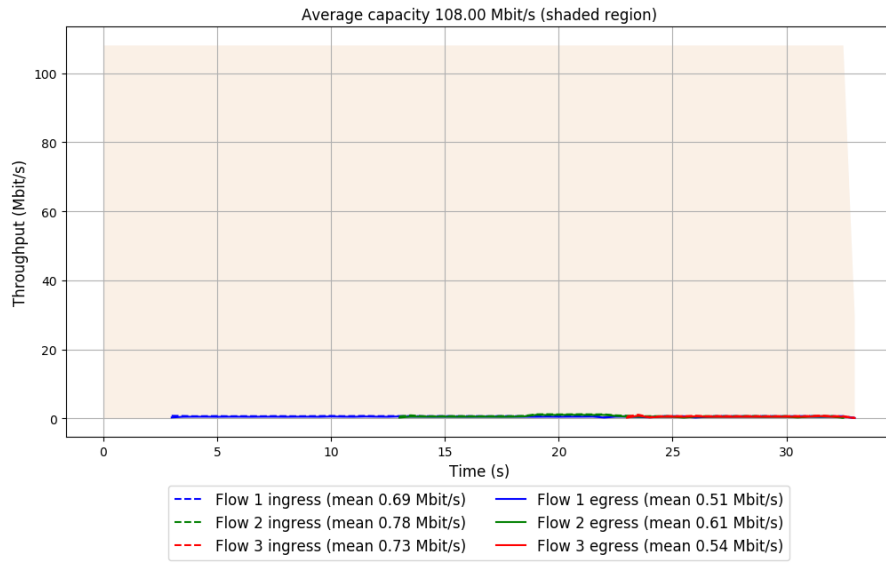
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 11.681 ms

Loss rate: 26.28%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-03-20 16:22:50

End at: 2018-03-20 16:23:20

Below is generated by plot.py at 2018-03-20 17:32:19

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.07 Mbit/s (1.0% utilization)

95th percentile per-packet one-way delay: 11.647 ms

Loss rate: 24.93%

-- Flow 1:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 11.642 ms

Loss rate: 24.62%

-- Flow 2:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 11.643 ms

Loss rate: 24.29%

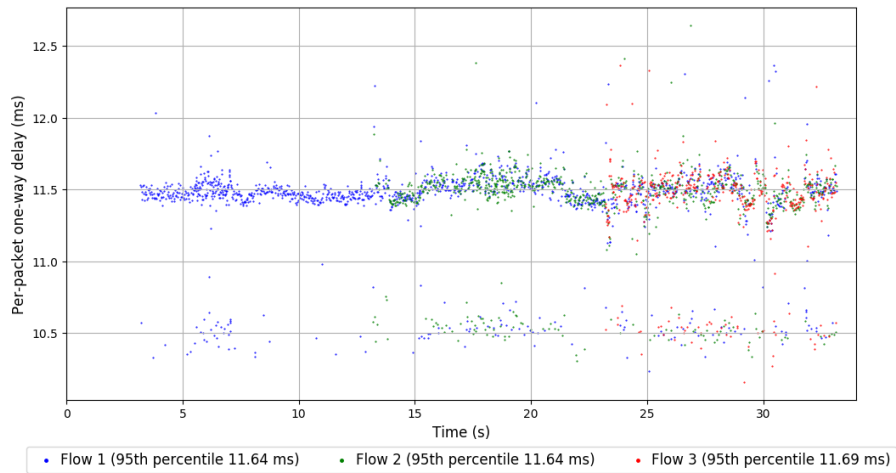
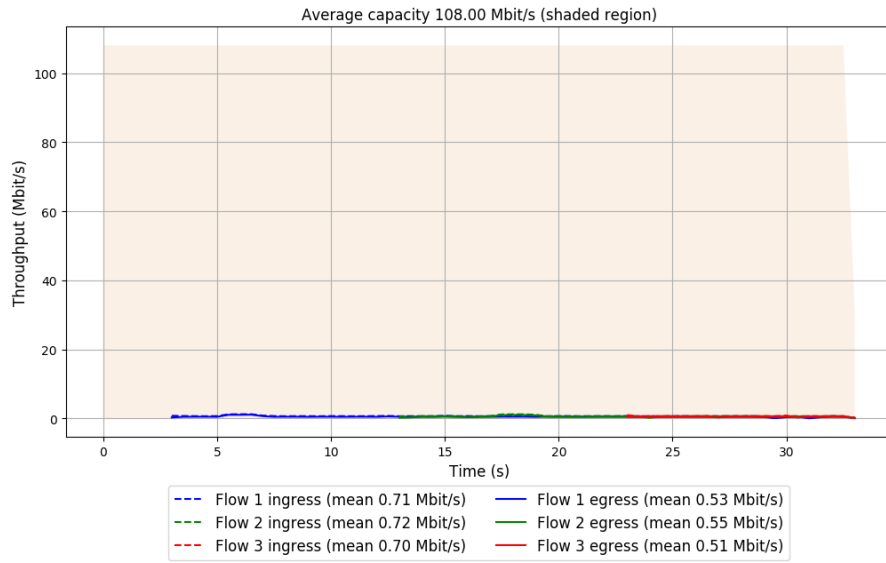
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 11.689 ms

Loss rate: 27.19%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-03-20 16:33:38

End at: 2018-03-20 16:34:08

Below is generated by plot.py at 2018-03-20 17:32:19

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.15 Mbit/s (1.1% utilization)

95th percentile per-packet one-way delay: 11.638 ms

Loss rate: 23.80%

-- Flow 1:

Average throughput: 0.62 Mbit/s

95th percentile per-packet one-way delay: 11.614 ms

Loss rate: 22.32%

-- Flow 2:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 11.641 ms

Loss rate: 24.40%

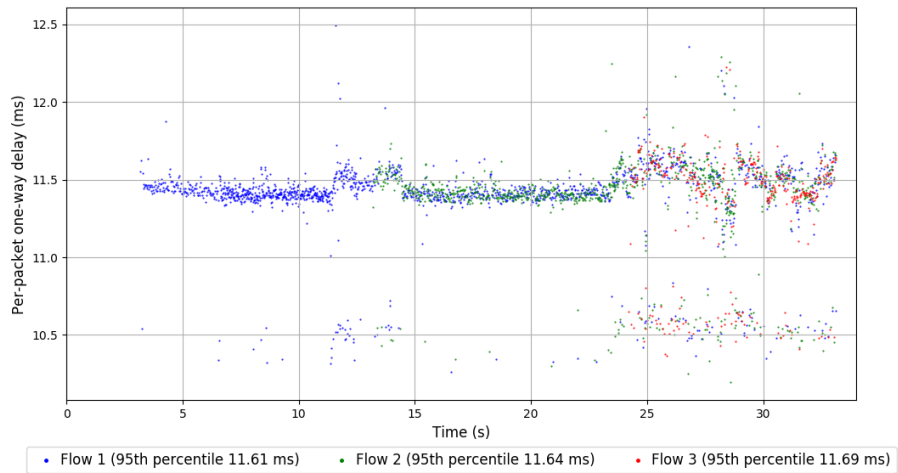
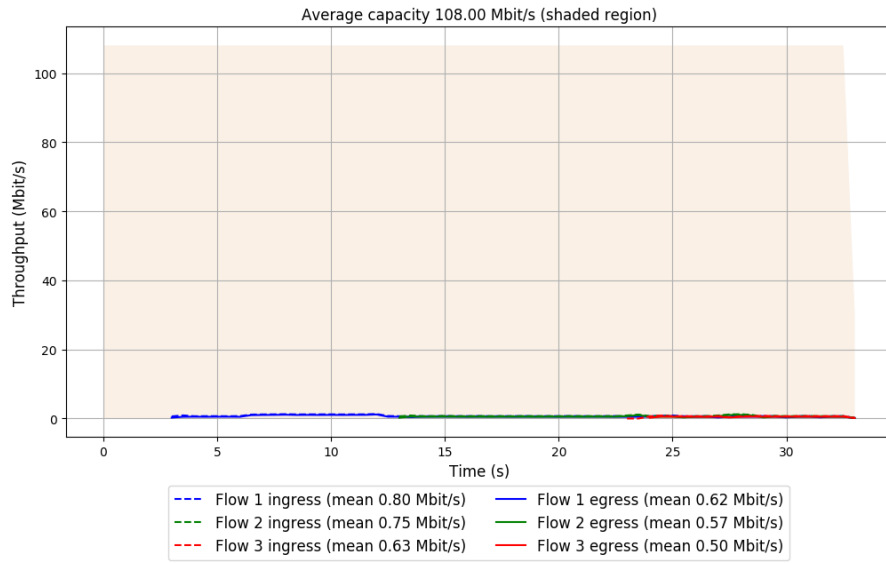
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 11.689 ms

Loss rate: 28.03%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-03-20 16:44:28

End at: 2018-03-20 16:44:58

Below is generated by plot.py at 2018-03-20 17:32:19

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.01 Mbit/s (0.9% utilization)

95th percentile per-packet one-way delay: 11.637 ms

Loss rate: 26.45%

-- Flow 1:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 11.618 ms

Loss rate: 26.03%

-- Flow 2:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 11.632 ms

Loss rate: 26.39%

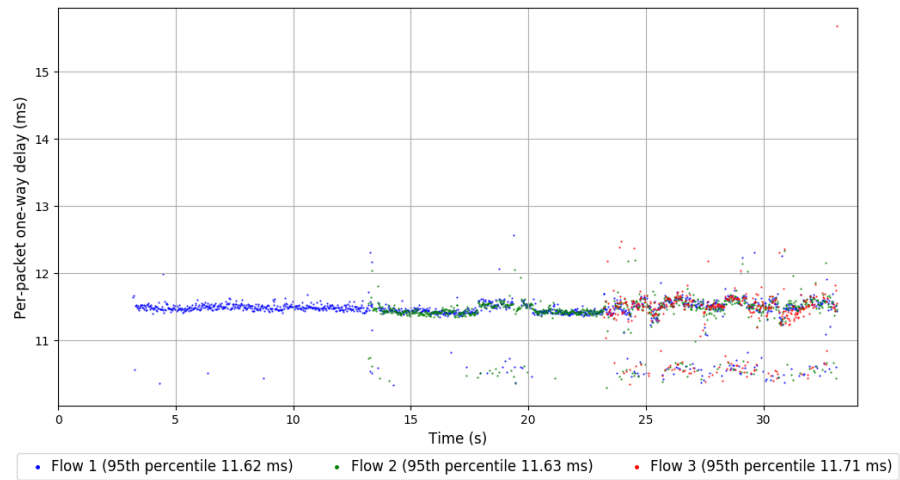
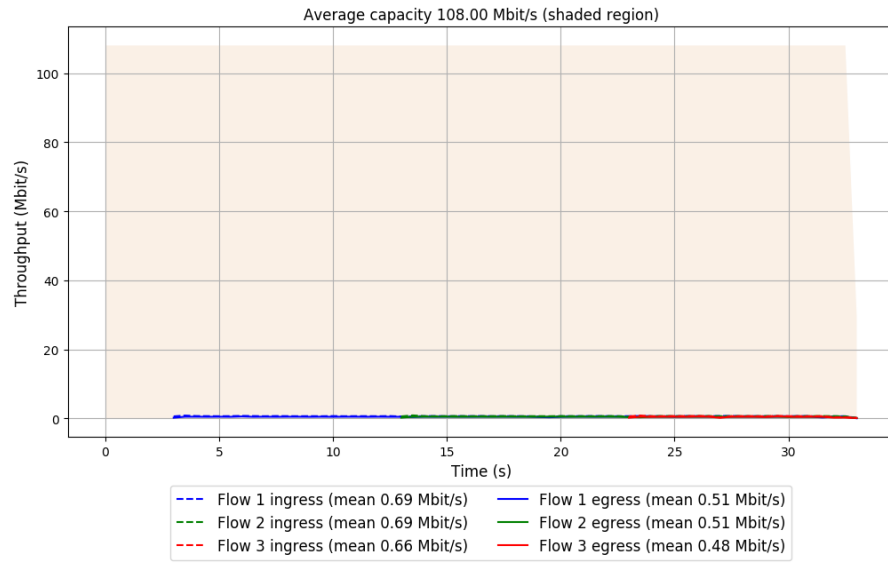
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 11.705 ms

Loss rate: 27.86%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-03-20 16:55:14

End at: 2018-03-20 16:55:44

Below is generated by plot.py at 2018-03-20 17:32:44

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.00 Mbit/s (0.9% utilization)

95th percentile per-packet one-way delay: 11.628 ms

Loss rate: 25.24%

-- Flow 1:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 11.592 ms

Loss rate: 25.99%

-- Flow 2:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 11.629 ms

Loss rate: 23.87%

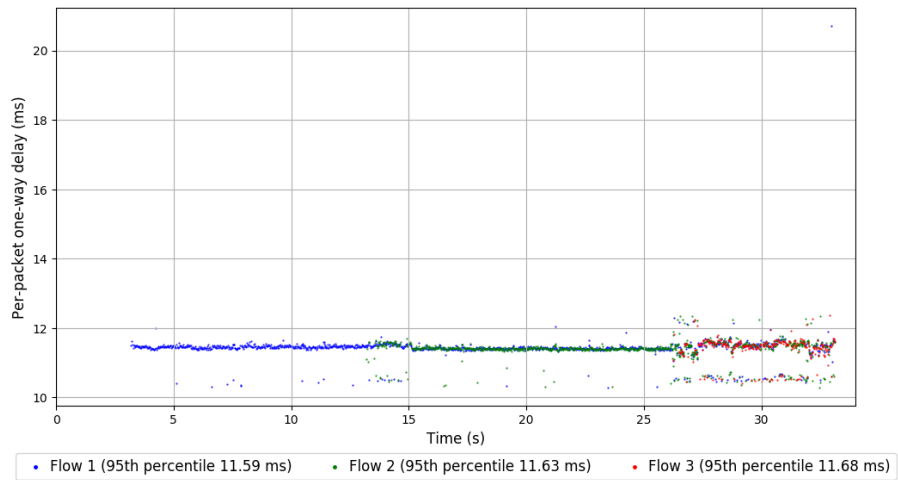
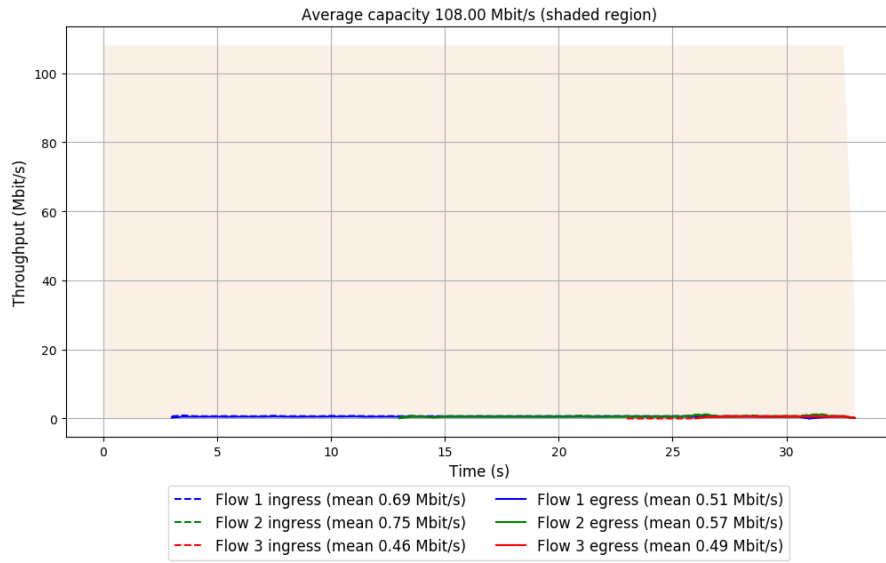
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 11.680 ms

Loss rate: 26.32%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-03-20 17:05:59

End at: 2018-03-20 17:06:29

Below is generated by plot.py at 2018-03-20 17:32:48

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.12 Mbit/s (1.0% utilization)

95th percentile per-packet one-way delay: 11.657 ms

Loss rate: 24.82%

-- Flow 1:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 11.644 ms

Loss rate: 23.65%

-- Flow 2:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 11.665 ms

Loss rate: 25.39%

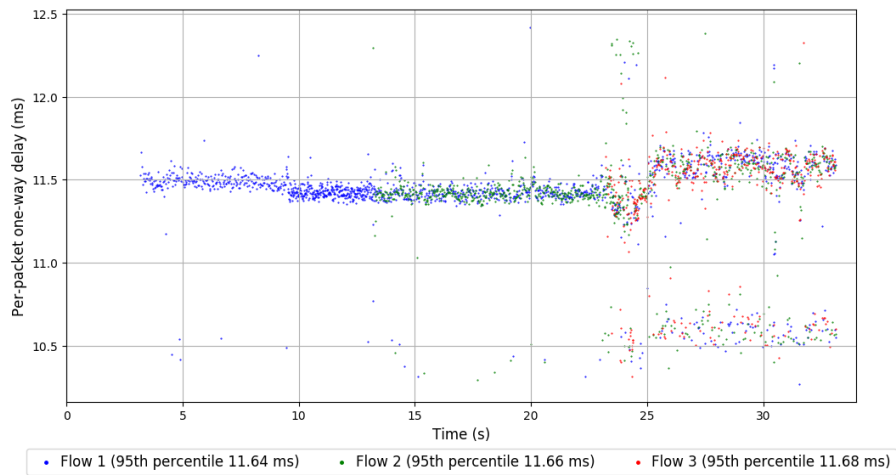
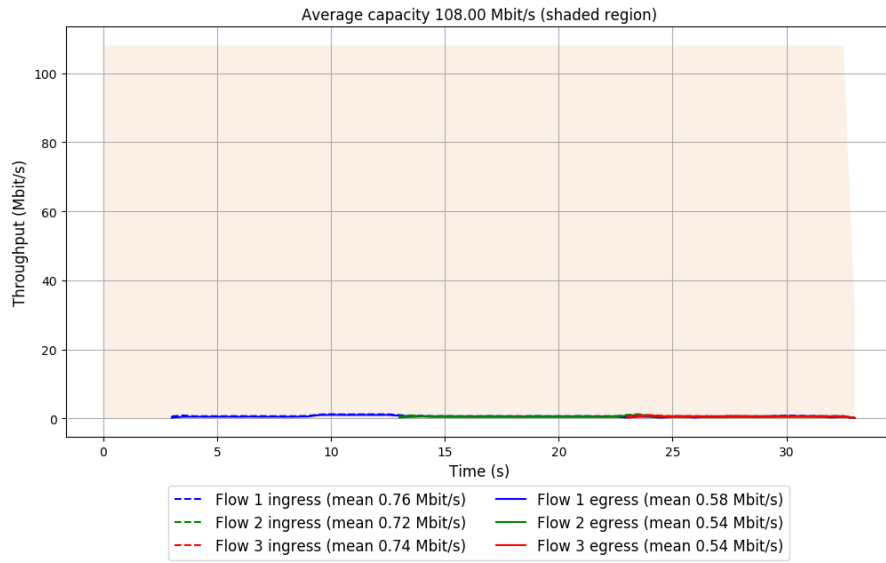
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 11.684 ms

Loss rate: 27.27%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-03-20 17:16:45

End at: 2018-03-20 17:17:15

Below is generated by plot.py at 2018-03-20 17:32:51

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.23 Mbit/s (1.1% utilization)

95th percentile per-packet one-way delay: 11.682 ms

Loss rate: 21.94%

-- Flow 1:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 11.651 ms

Loss rate: 20.53%

-- Flow 2:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 11.682 ms

Loss rate: 22.25%

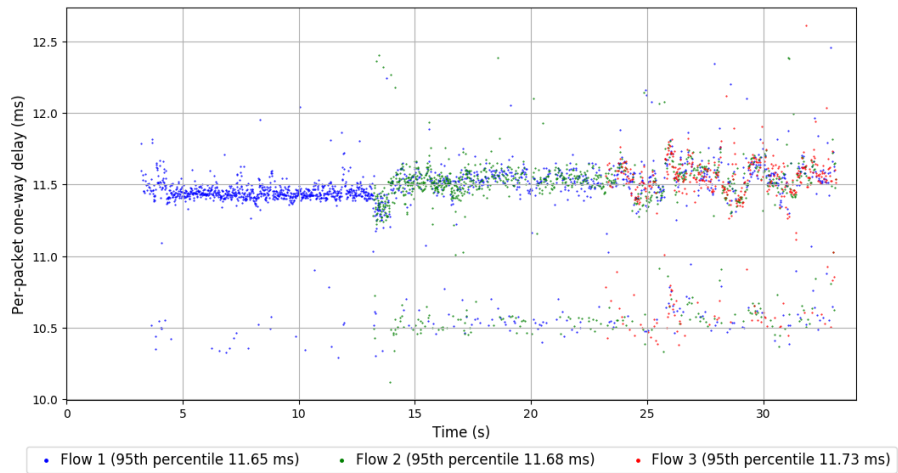
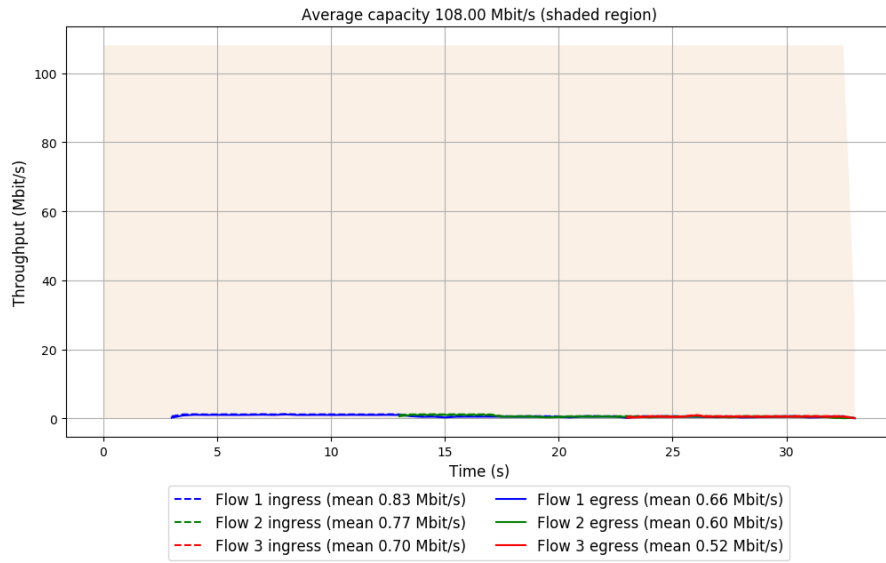
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 11.732 ms

Loss rate: 26.24%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-03-20 17:27:30

End at: 2018-03-20 17:28:00

Below is generated by plot.py at 2018-03-20 17:32:51

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.04 Mbit/s (1.0% utilization)

95th percentile per-packet one-way delay: 11.670 ms

Loss rate: 24.76%

-- Flow 1:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 11.651 ms

Loss rate: 23.13%

-- Flow 2:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 11.671 ms

Loss rate: 26.20%

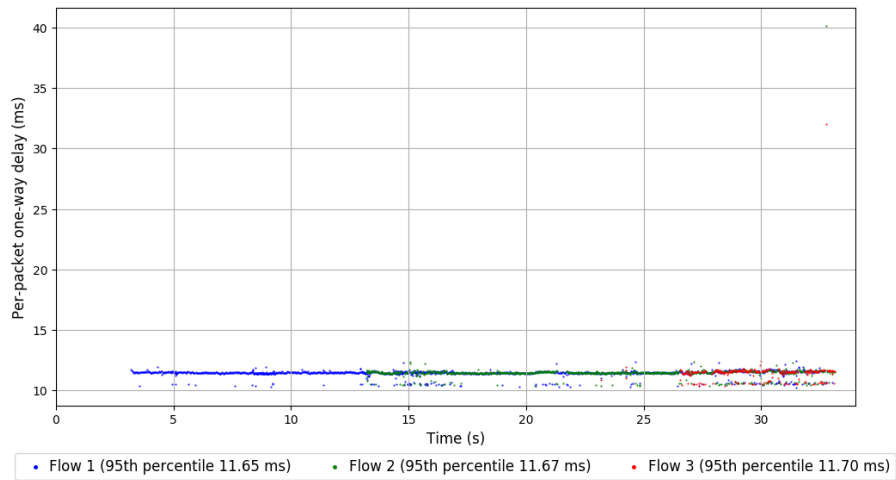
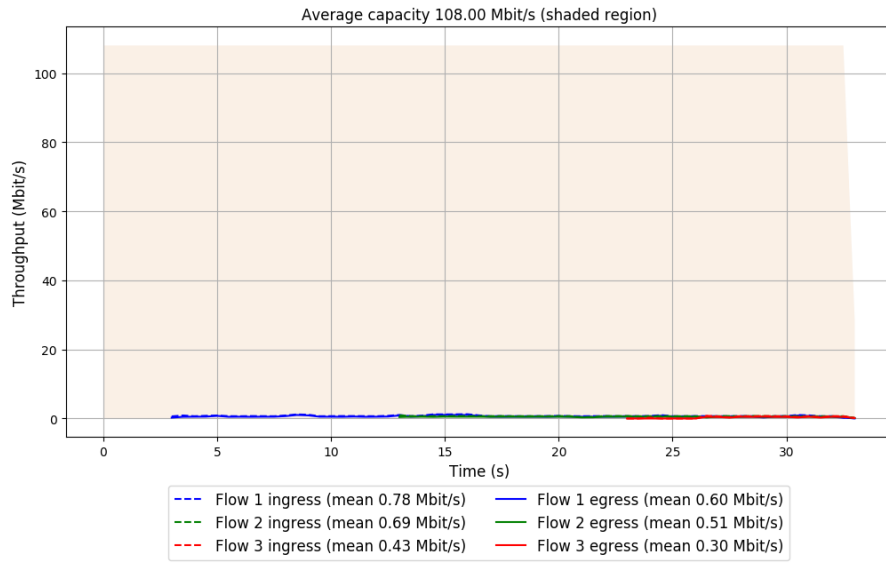
-- Flow 3:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 11.704 ms

Loss rate: 29.08%

Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of LEDBAT

Start at: 2018-03-20 15:43:24

End at: 2018-03-20 15:43:54

Below is generated by plot.py at 2018-03-20 17:32:51

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.35 Mbit/s (0.3% utilization)

95th percentile per-packet one-way delay: 11.585 ms

Loss rate: 47.77%

-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 11.568 ms

Loss rate: 48.46%

-- Flow 2:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 11.583 ms

Loss rate: 46.84%

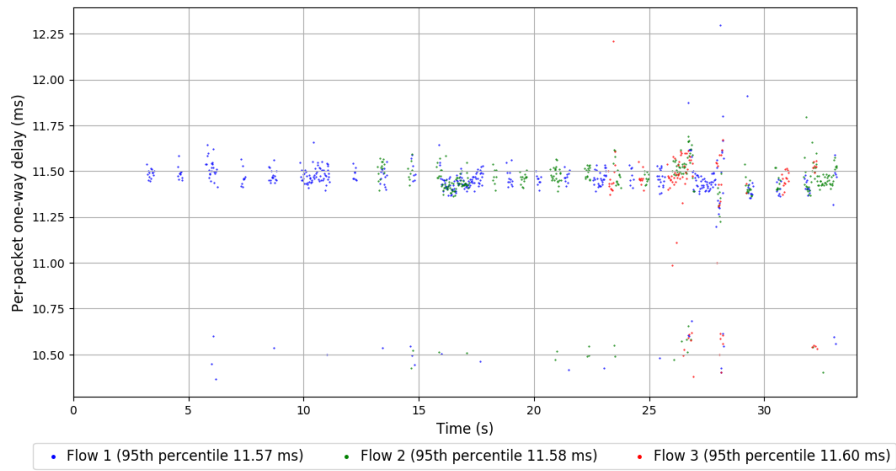
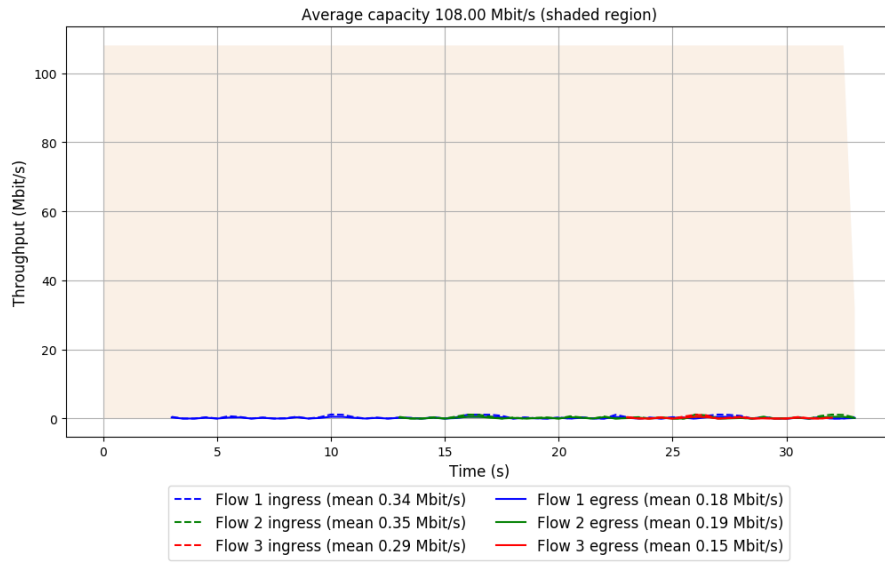
-- Flow 3:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 11.599 ms

Loss rate: 47.54%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-03-20 15:54:08

End at: 2018-03-20 15:54:38

Below is generated by plot.py at 2018-03-20 17:32:51

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.28 Mbit/s (0.3% utilization)

95th percentile per-packet one-way delay: 11.544 ms

Loss rate: 46.38%

-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 11.544 ms

Loss rate: 47.22%

-- Flow 2:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 11.545 ms

Loss rate: 44.81%

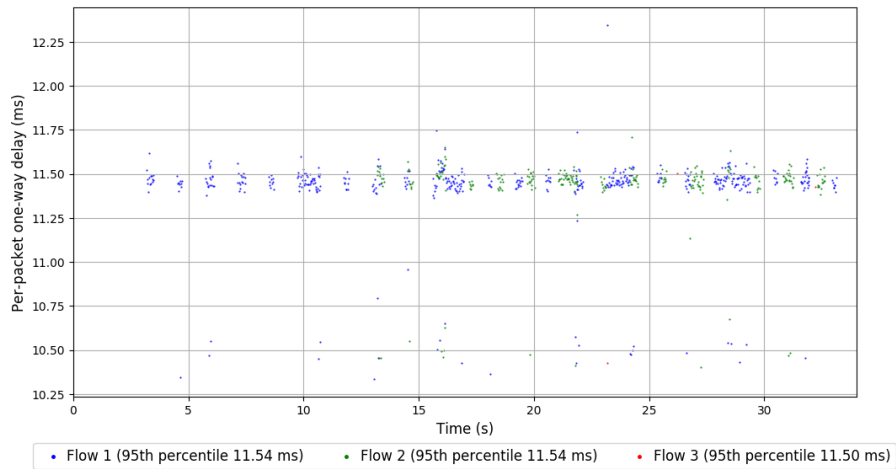
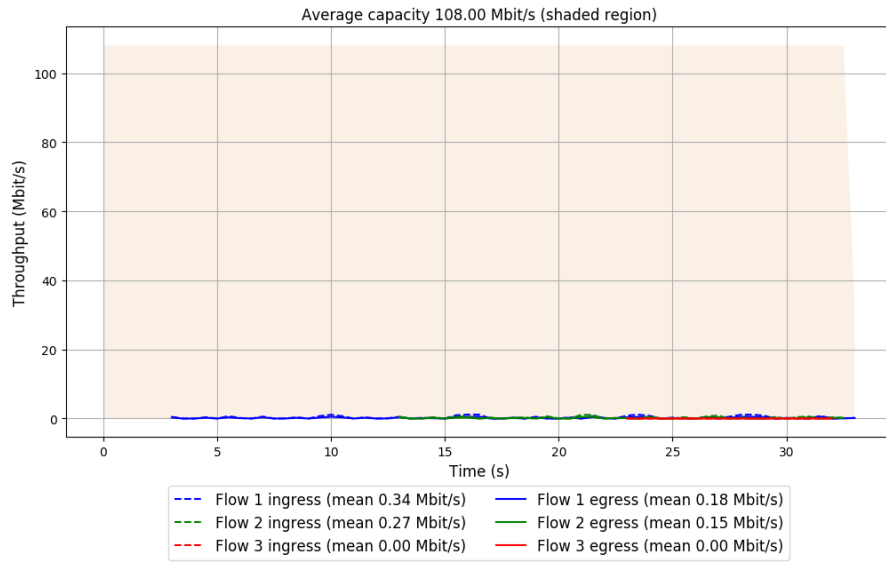
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.503 ms

Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-03-20 16:04:53

End at: 2018-03-20 16:05:23

Below is generated by plot.py at 2018-03-20 17:32:51

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.35 Mbit/s (0.3% utilization)

95th percentile per-packet one-way delay: 11.595 ms

Loss rate: 48.54%

-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 11.606 ms

Loss rate: 47.17%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.589 ms

Loss rate: 50.33%

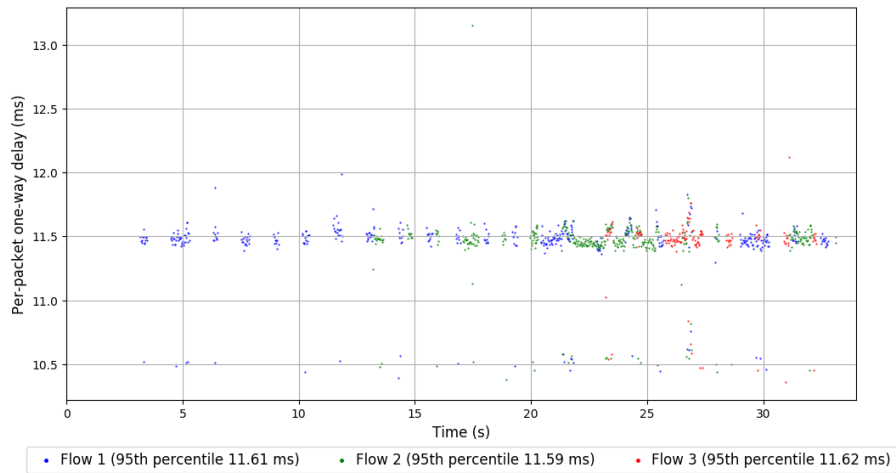
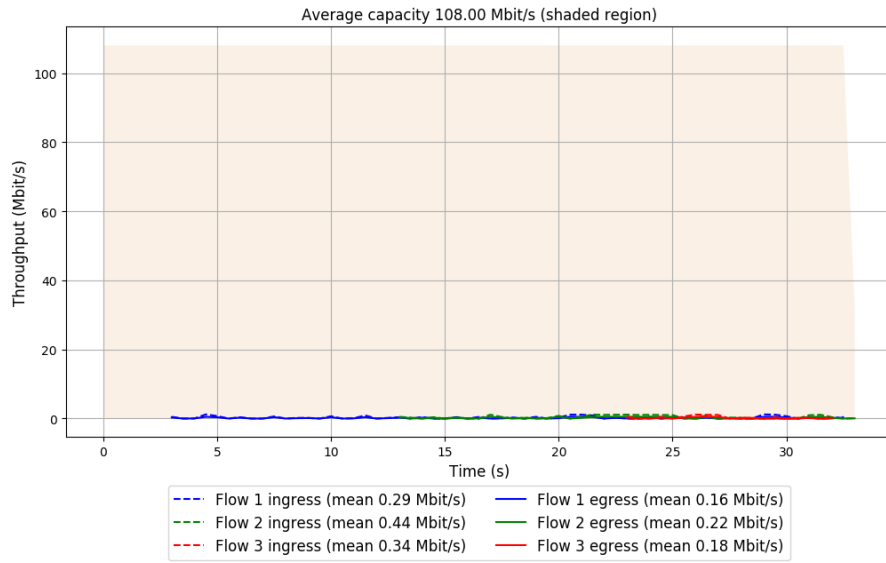
-- Flow 3:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 11.615 ms

Loss rate: 47.36%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-03-20 16:15:40

End at: 2018-03-20 16:16:10

Below is generated by plot.py at 2018-03-20 17:32:51

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.33 Mbit/s (0.3% utilization)

95th percentile per-packet one-way delay: 11.606 ms

Loss rate: 48.17%

-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 11.578 ms

Loss rate: 49.10%

-- Flow 2:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 11.625 ms

Loss rate: 48.77%

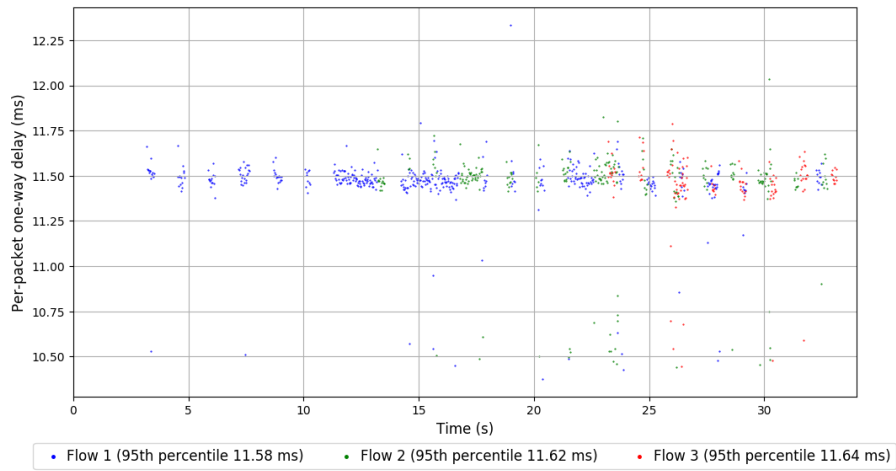
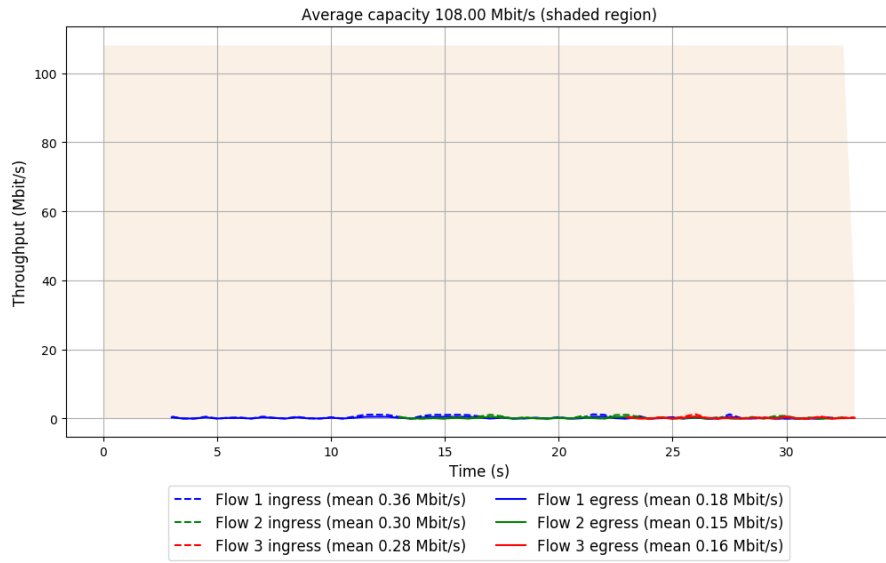
-- Flow 3:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 11.636 ms

Loss rate: 43.45%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-03-20 16:26:26

End at: 2018-03-20 16:26:56

Below is generated by plot.py at 2018-03-20 17:33:15

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.32 Mbit/s (0.3% utilization)

95th percentile per-packet one-way delay: 11.601 ms

Loss rate: 48.79%

-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 11.586 ms

Loss rate: 47.87%

-- Flow 2:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 11.618 ms

Loss rate: 47.34%

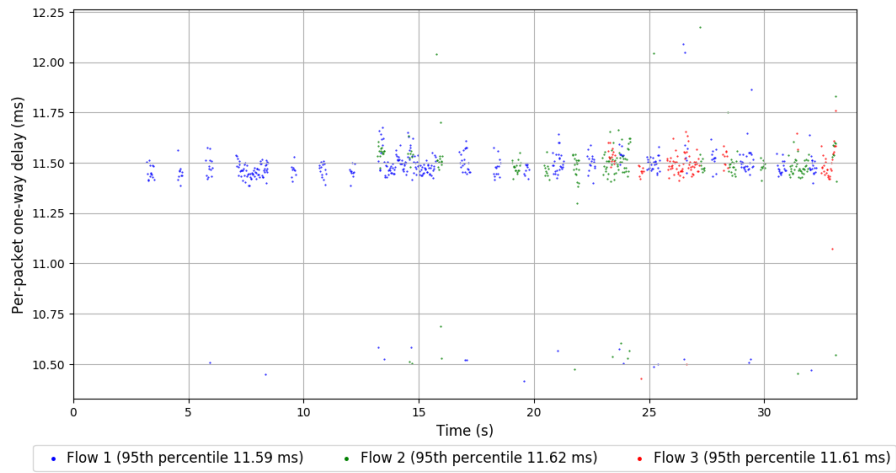
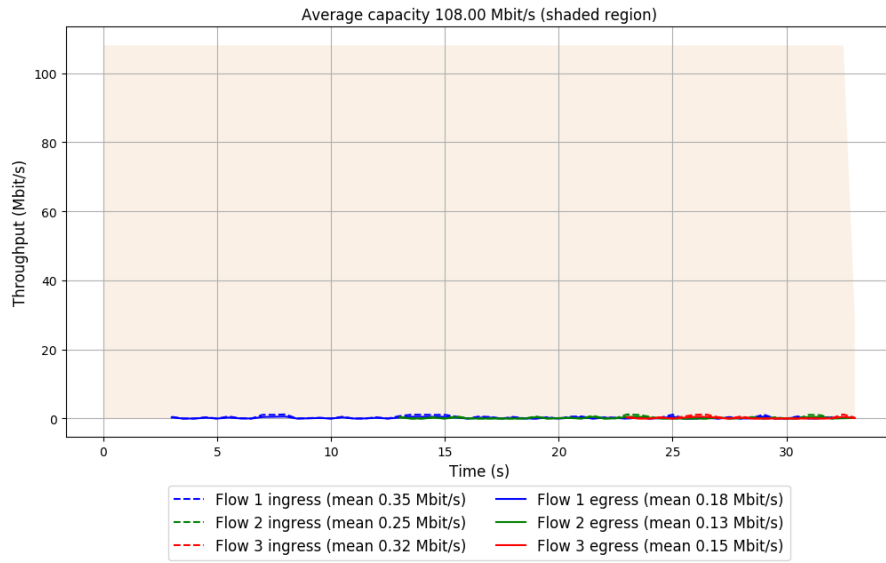
-- Flow 3:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 11.609 ms

Loss rate: 54.03%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-03-20 16:37:15

End at: 2018-03-20 16:37:45

Below is generated by plot.py at 2018-03-20 17:33:16

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.40 Mbit/s (0.4% utilization)

95th percentile per-packet one-way delay: 11.612 ms

Loss rate: 50.36%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.610 ms

Loss rate: 50.40%

-- Flow 2:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 11.607 ms

Loss rate: 51.02%

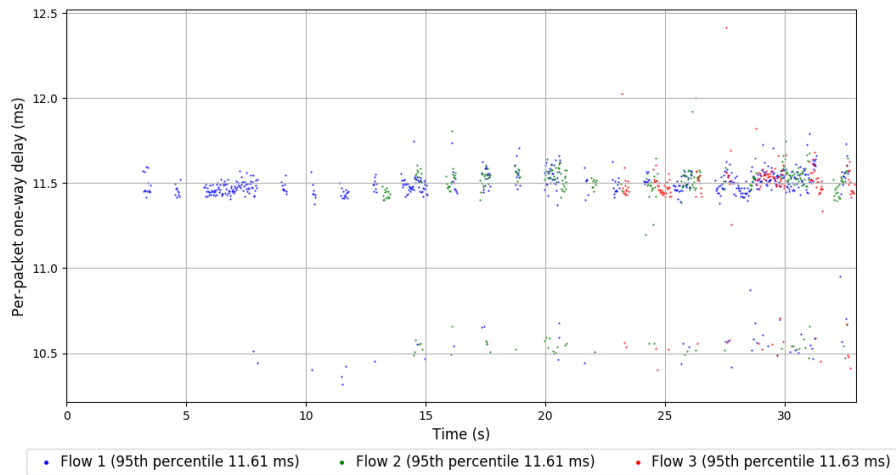
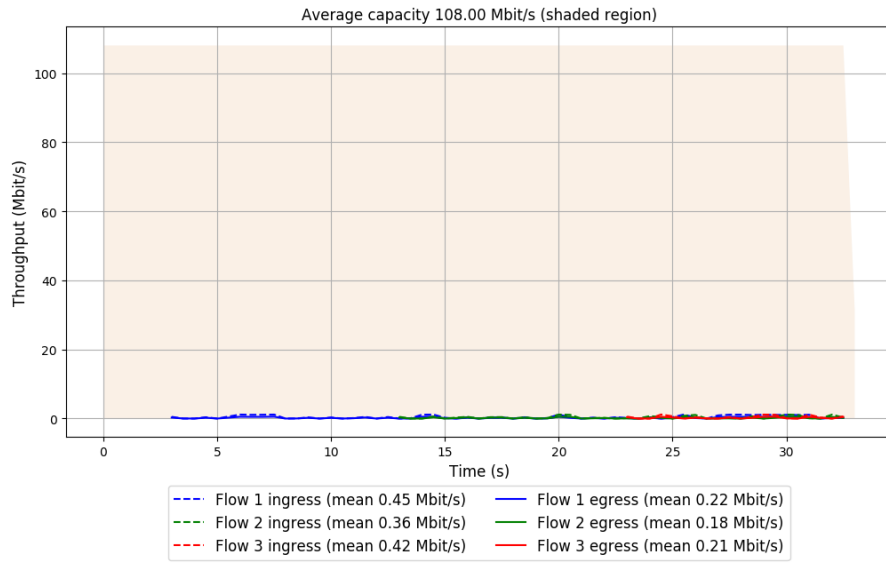
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.626 ms

Loss rate: 49.12%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-03-20 16:48:05

End at: 2018-03-20 16:48:35

Below is generated by plot.py at 2018-03-20 17:33:19

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.42 Mbit/s (0.4% utilization)

95th percentile per-packet one-way delay: 11.572 ms

Loss rate: 49.78%

-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 11.532 ms

Loss rate: 49.17%

-- Flow 2:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 11.593 ms

Loss rate: 49.40%

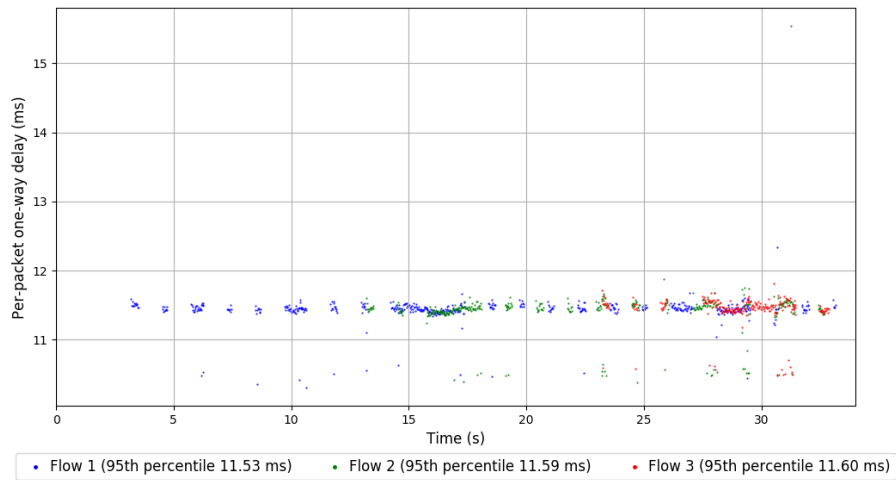
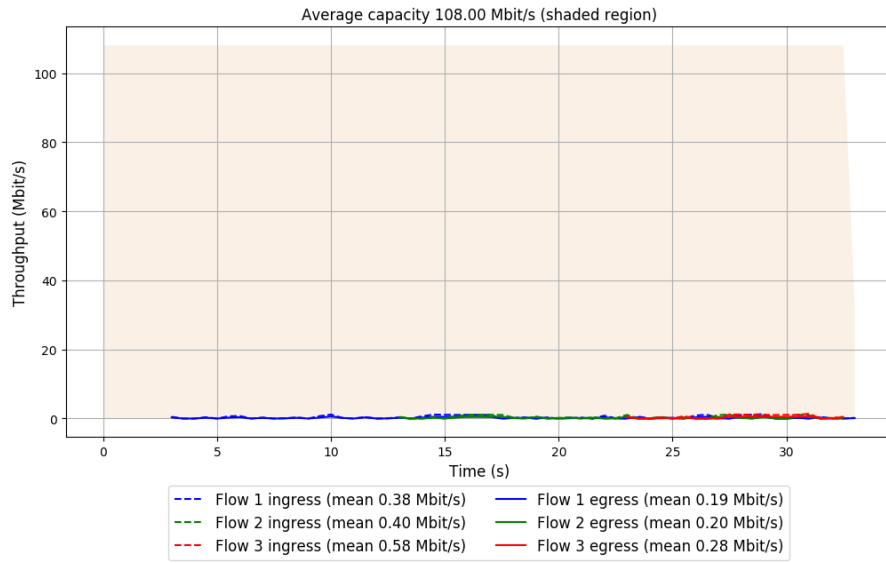
-- Flow 3:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 11.603 ms

Loss rate: 51.56%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-03-20 16:58:50

End at: 2018-03-20 16:59:20

Below is generated by plot.py at 2018-03-20 17:33:19

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.33 Mbit/s (0.3% utilization)

95th percentile per-packet one-way delay: 11.581 ms

Loss rate: 46.38%

-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 11.554 ms

Loss rate: 48.18%

-- Flow 2:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 11.590 ms

Loss rate: 44.09%

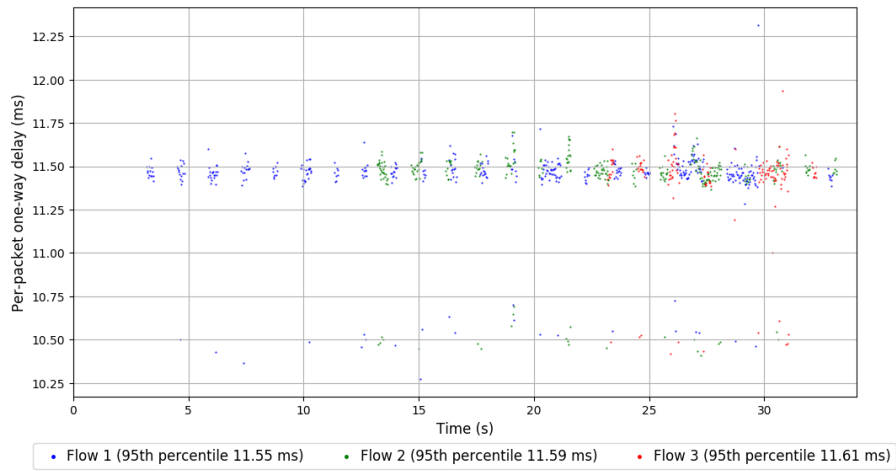
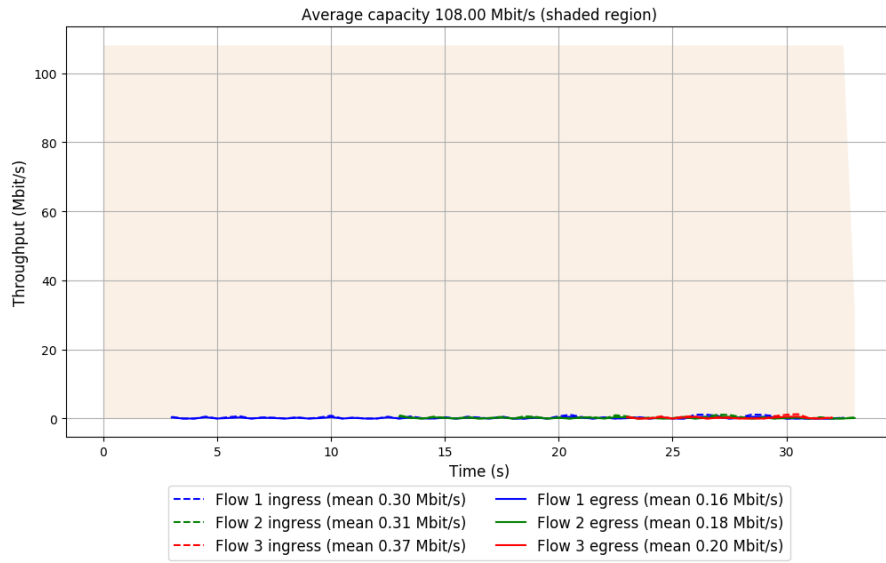
-- Flow 3:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 11.608 ms

Loss rate: 45.77%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-03-20 17:09:36

End at: 2018-03-20 17:10:06

Below is generated by plot.py at 2018-03-20 17:33:21

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.33 Mbit/s (0.3% utilization)

95th percentile per-packet one-way delay: 11.613 ms

Loss rate: 46.33%

-- Flow 1:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 11.612 ms

Loss rate: 44.50%

-- Flow 2:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 11.599 ms

Loss rate: 49.75%

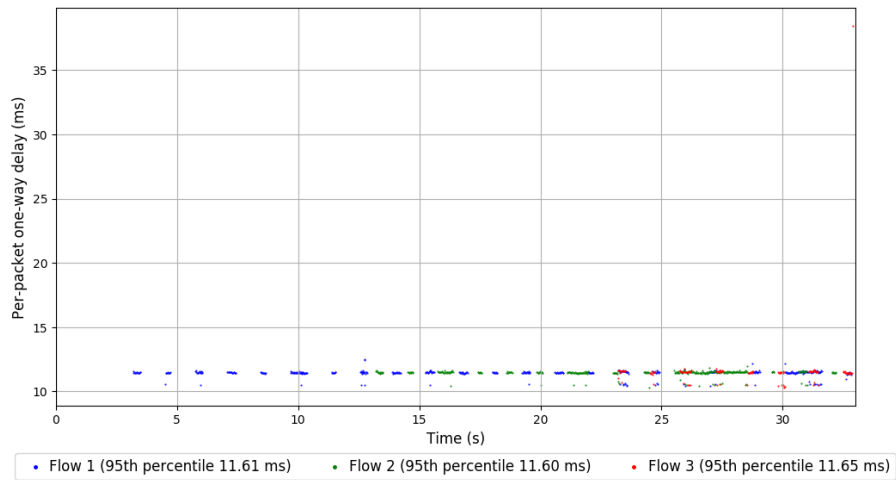
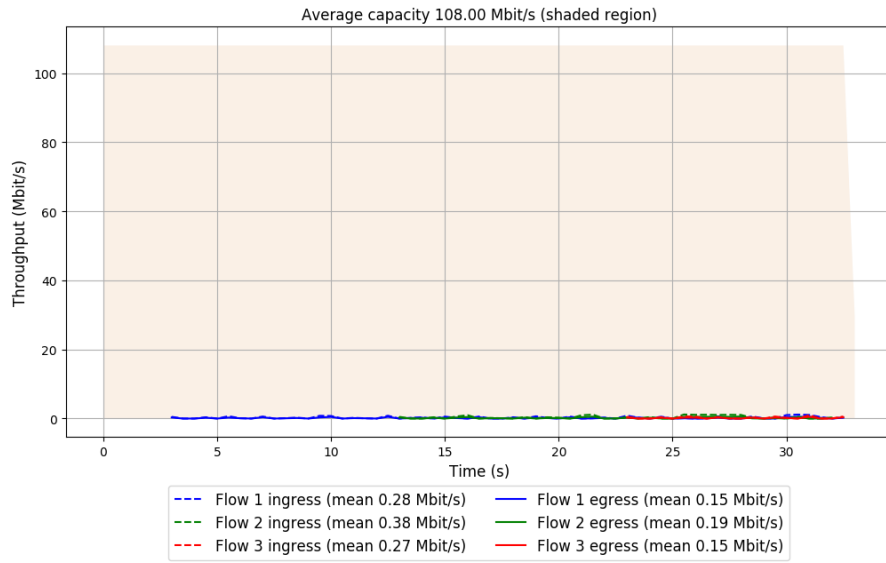
-- Flow 3:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 11.653 ms

Loss rate: 42.59%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-03-20 17:20:22

End at: 2018-03-20 17:20:52

Below is generated by plot.py at 2018-03-20 17:33:21

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.35 Mbit/s (0.3% utilization)

95th percentile per-packet one-way delay: 11.648 ms

Loss rate: 49.23%

-- Flow 1:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 11.677 ms

Loss rate: 46.78%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.622 ms

Loss rate: 51.48%

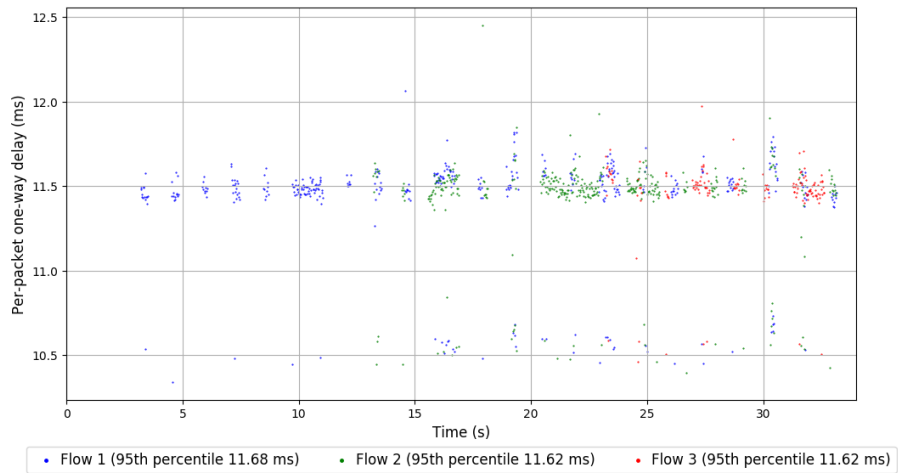
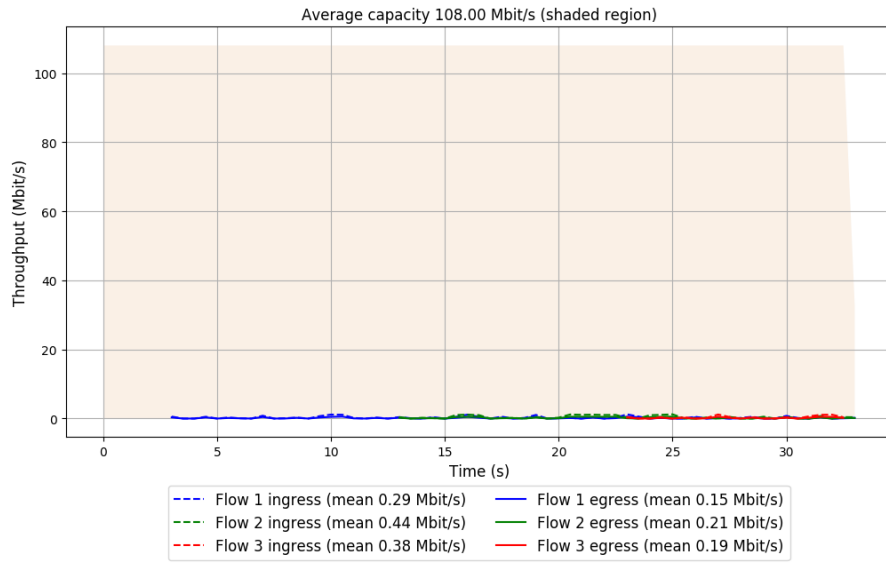
-- Flow 3:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 11.619 ms

Loss rate: 49.66%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC

Start at: 2018-03-20 15:51:08

End at: 2018-03-20 15:51:38

Below is generated by plot.py at 2018-03-20 17:33:25

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 3.34 Mbit/s (3.1% utilization)

95th percentile per-packet one-way delay: 12.039 ms

Loss rate: 14.60%

-- Flow 1:

Average throughput: 1.75 Mbit/s

95th percentile per-packet one-way delay: 12.034 ms

Loss rate: 11.84%

-- Flow 2:

Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 12.039 ms

Loss rate: 17.06%

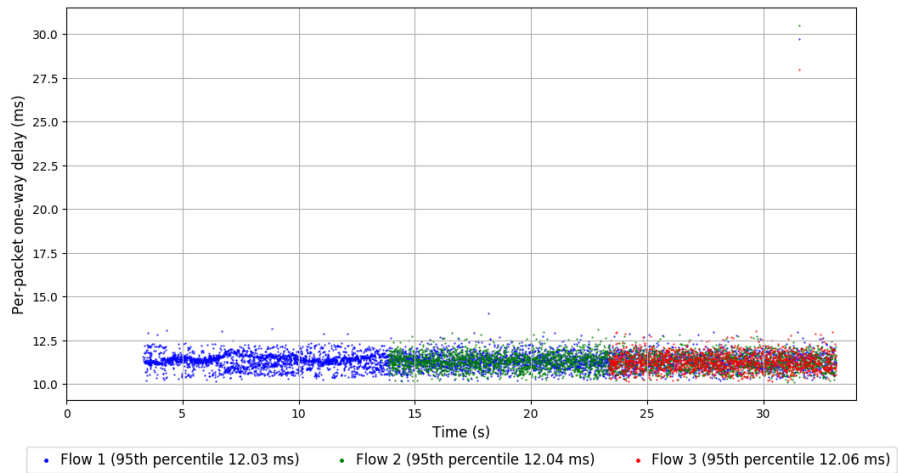
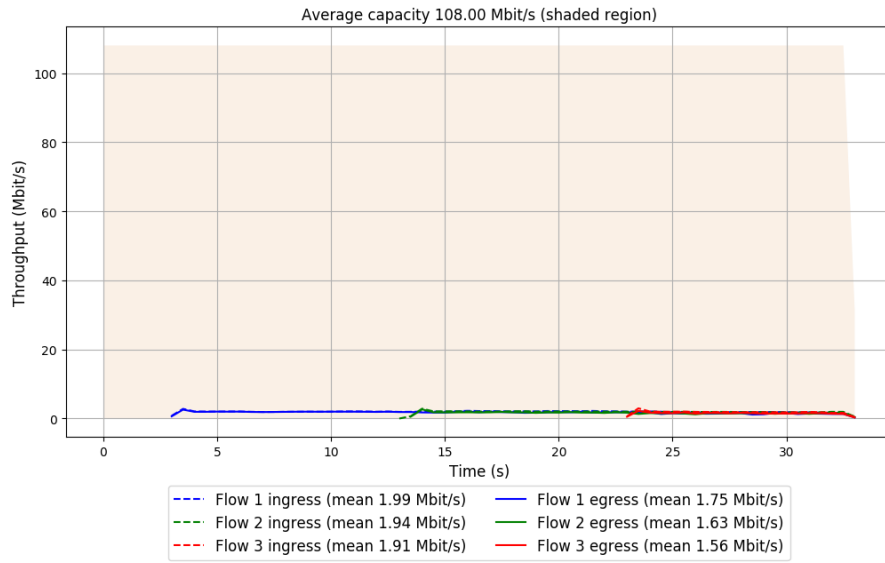
-- Flow 3:

Average throughput: 1.56 Mbit/s

95th percentile per-packet one-way delay: 12.062 ms

Loss rate: 18.27%

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-03-20 16:01:53

End at: 2018-03-20 16:02:23

Below is generated by plot.py at 2018-03-20 17:33:26

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 4.57 Mbit/s (4.2% utilization)

95th percentile per-packet one-way delay: 12.007 ms

Loss rate: 14.14%

-- Flow 1:

Average throughput: 3.06 Mbit/s

95th percentile per-packet one-way delay: 11.971 ms

Loss rate: 10.90%

-- Flow 2:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 12.080 ms

Loss rate: 18.71%

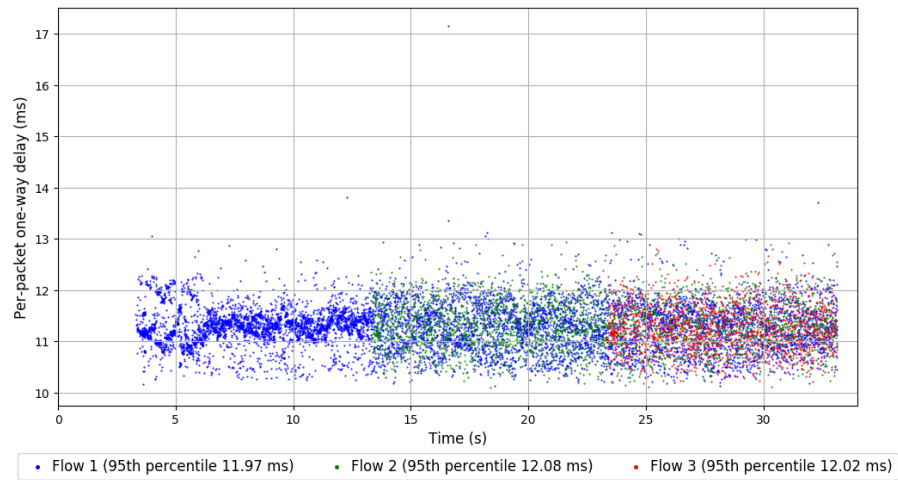
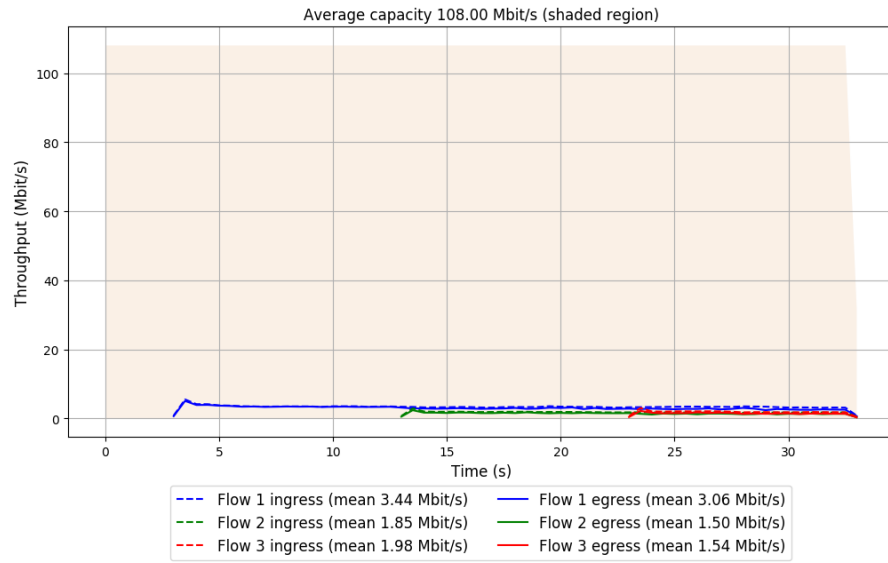
-- Flow 3:

Average throughput: 1.54 Mbit/s

95th percentile per-packet one-way delay: 12.022 ms

Loss rate: 22.60%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-03-20 16:12:39

End at: 2018-03-20 16:13:09

Below is generated by plot.py at 2018-03-20 17:33:53

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 6.82 Mbit/s (6.3% utilization)

95th percentile per-packet one-way delay: 12.009 ms

Loss rate: 11.45%

-- Flow 1:

Average throughput: 5.93 Mbit/s

95th percentile per-packet one-way delay: 11.992 ms

Loss rate: 8.04%

-- Flow 2:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 12.117 ms

Loss rate: 28.92%

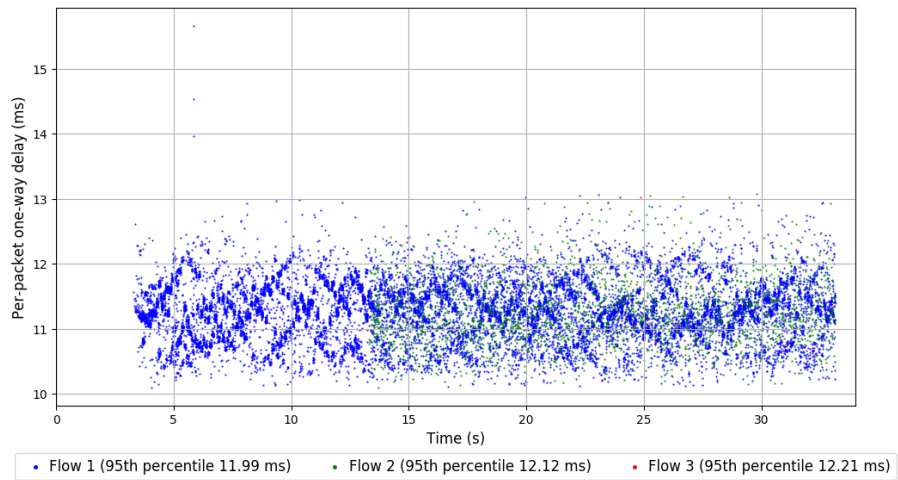
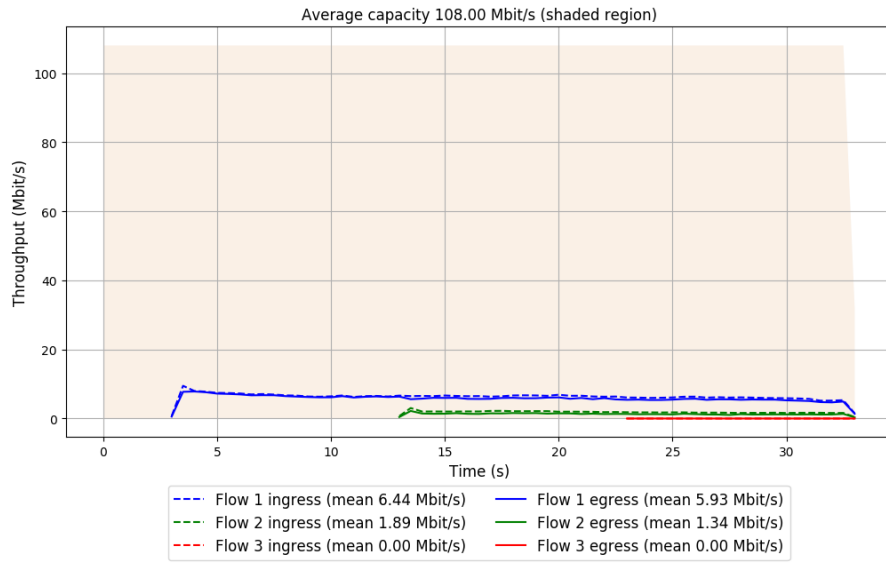
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.210 ms

Loss rate: 22.74%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-03-20 16:23:25

End at: 2018-03-20 16:23:55

Below is generated by plot.py at 2018-03-20 17:33:59

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 8.77 Mbit/s (8.1% utilization)

95th percentile per-packet one-way delay: 11.970 ms

Loss rate: 15.79%

-- Flow 1:

Average throughput: 7.61 Mbit/s

95th percentile per-packet one-way delay: 11.928 ms

Loss rate: 10.41%

-- Flow 2:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 12.208 ms

Loss rate: 38.62%

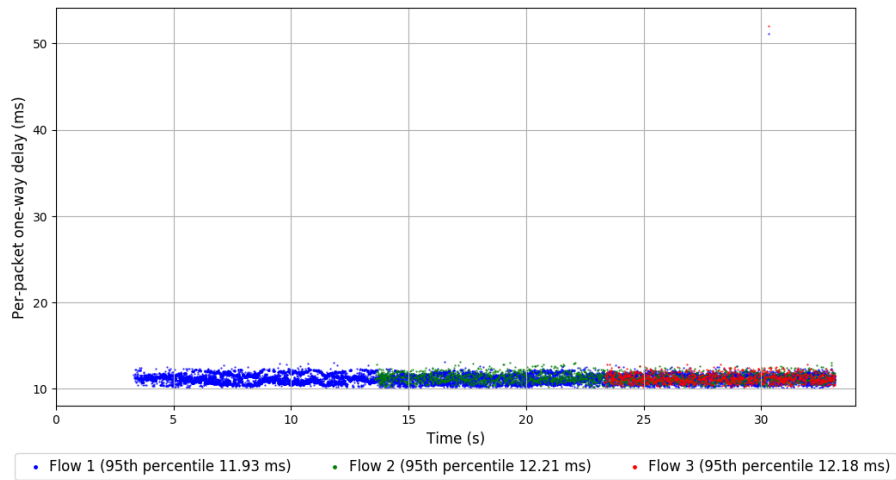
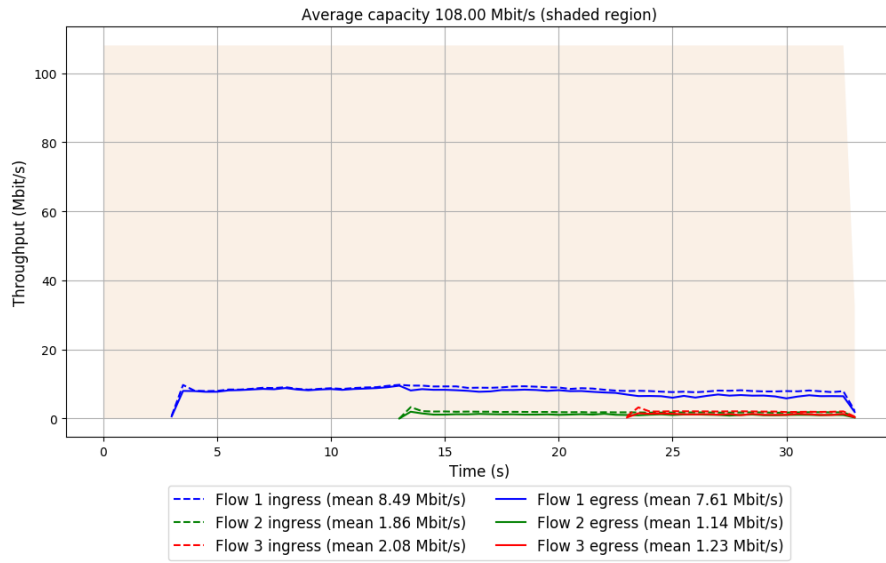
-- Flow 3:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 12.180 ms

Loss rate: 41.23%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-03-20 16:34:13

End at: 2018-03-20 16:34:43

Below is generated by plot.py at 2018-03-20 17:34:03

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 9.69 Mbit/s (9.0% utilization)

95th percentile per-packet one-way delay: 11.936 ms

Loss rate: 15.79%

-- Flow 1:

Average throughput: 8.68 Mbit/s

95th percentile per-packet one-way delay: 11.881 ms

Loss rate: 10.30%

-- Flow 2:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 12.261 ms

Loss rate: 44.05%

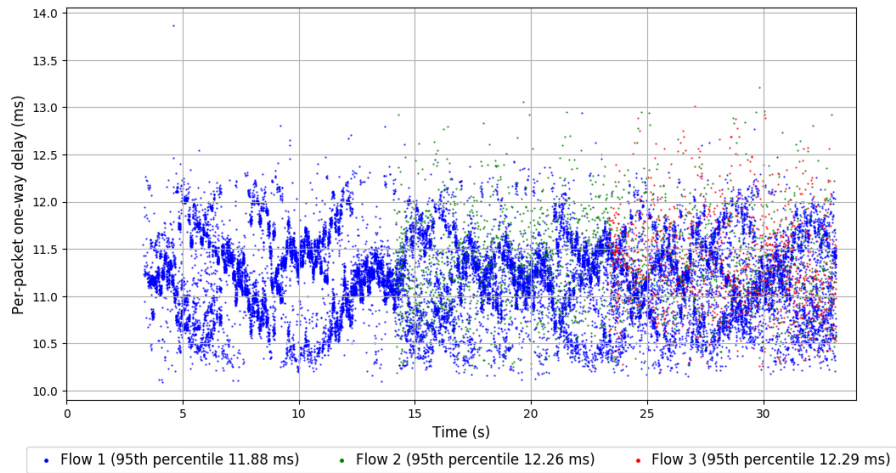
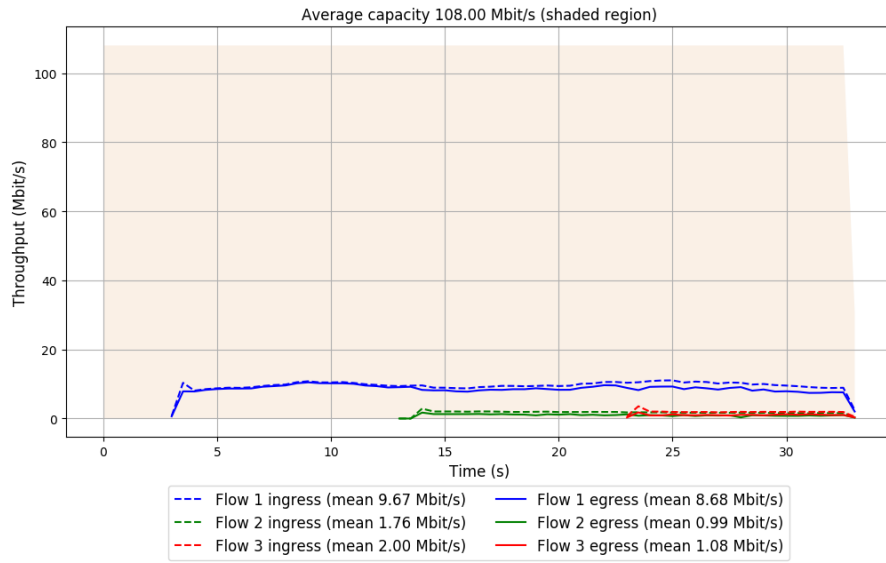
-- Flow 3:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 12.291 ms

Loss rate: 46.03%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-03-20 16:45:03

End at: 2018-03-20 16:45:33

Below is generated by plot.py at 2018-03-20 17:34:03

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 8.53 Mbit/s (7.9% utilization)

95th percentile per-packet one-way delay: 11.970 ms

Loss rate: 15.53%

-- Flow 1:

Average throughput: 7.46 Mbit/s

95th percentile per-packet one-way delay: 11.932 ms

Loss rate: 10.59%

-- Flow 2:

Average throughput: 1.10 Mbit/s

95th percentile per-packet one-way delay: 12.220 ms

Loss rate: 38.32%

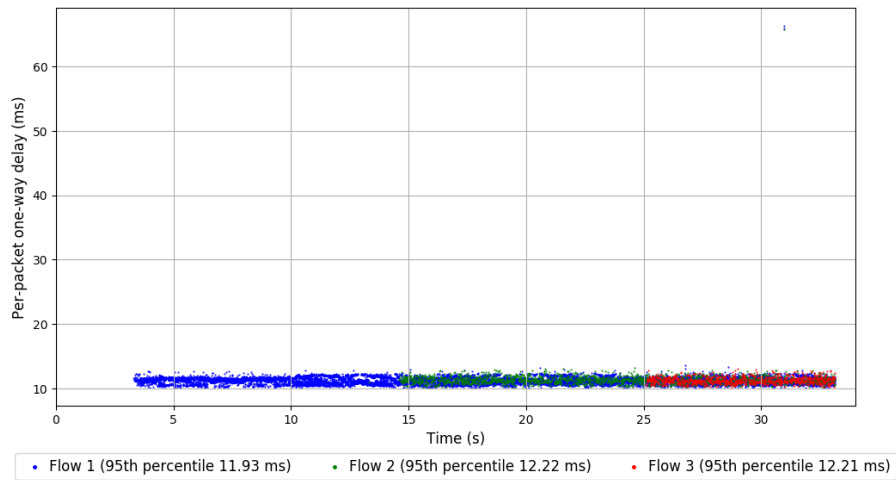
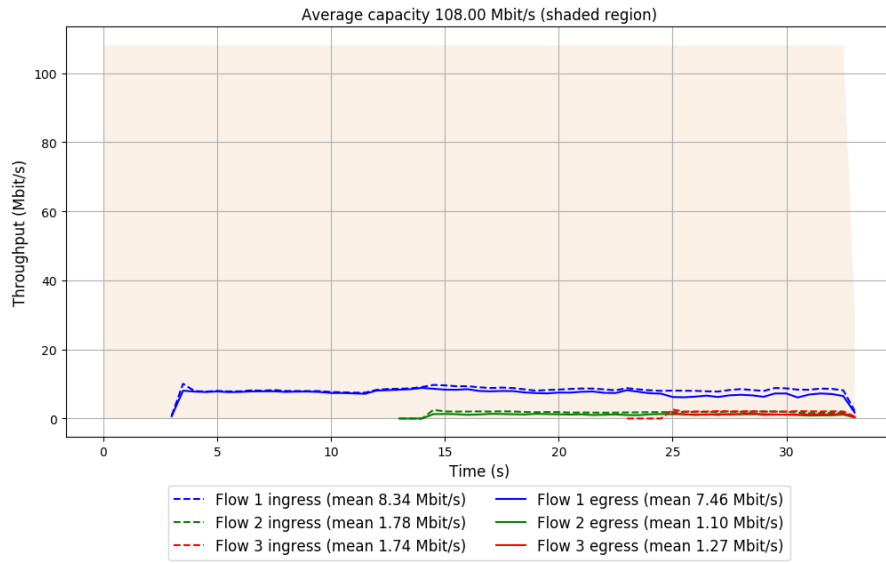
-- Flow 3:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 12.214 ms

Loss rate: 40.32%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-03-20 16:55:49

End at: 2018-03-20 16:56:19

Below is generated by plot.py at 2018-03-20 17:34:03

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 8.42 Mbit/s (7.8% utilization)

95th percentile per-packet one-way delay: 11.993 ms

Loss rate: 15.07%

-- Flow 1:

Average throughput: 7.23 Mbit/s

95th percentile per-packet one-way delay: 11.965 ms

Loss rate: 9.89%

-- Flow 2:

Average throughput: 1.15 Mbit/s

95th percentile per-packet one-way delay: 12.154 ms

Loss rate: 37.41%

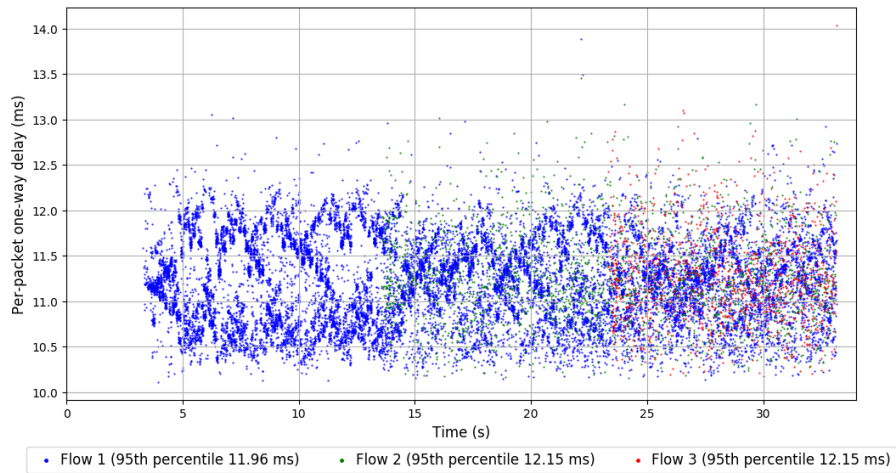
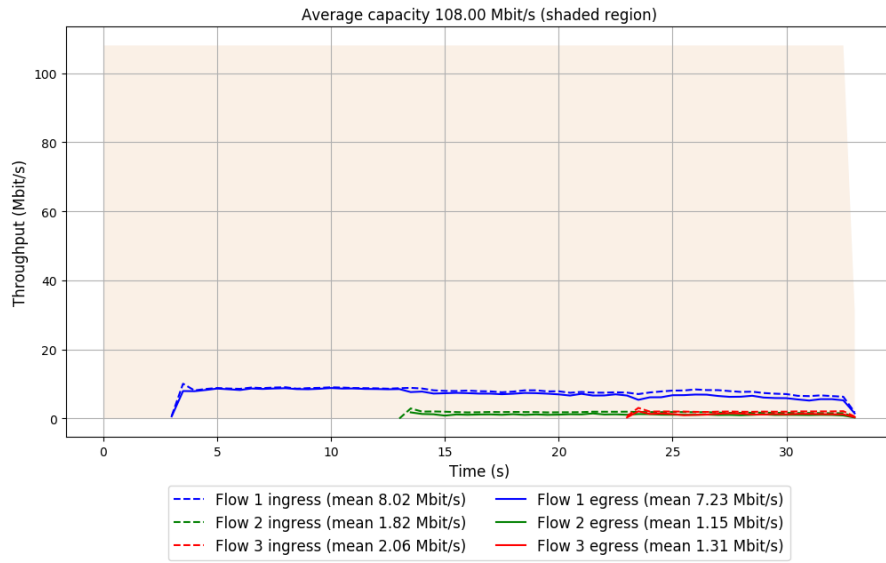
-- Flow 3:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 12.153 ms

Loss rate: 36.48%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-03-20 17:06:35

End at: 2018-03-20 17:07:05

Below is generated by plot.py at 2018-03-20 17:34:05

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 9.81 Mbit/s (9.1% utilization)

95th percentile per-packet one-way delay: 12.001 ms

Loss rate: 13.33%

-- Flow 1:

Average throughput: 8.99 Mbit/s

95th percentile per-packet one-way delay: 11.970 ms

Loss rate: 9.08%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 12.374 ms

Loss rate: 42.61%

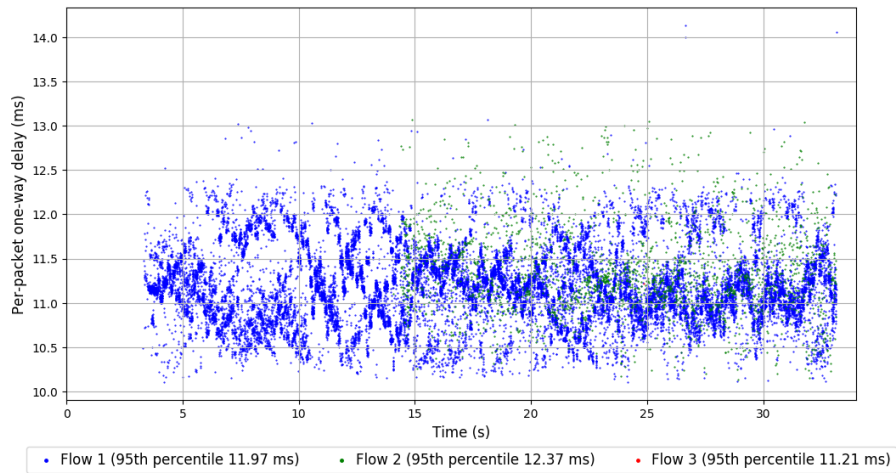
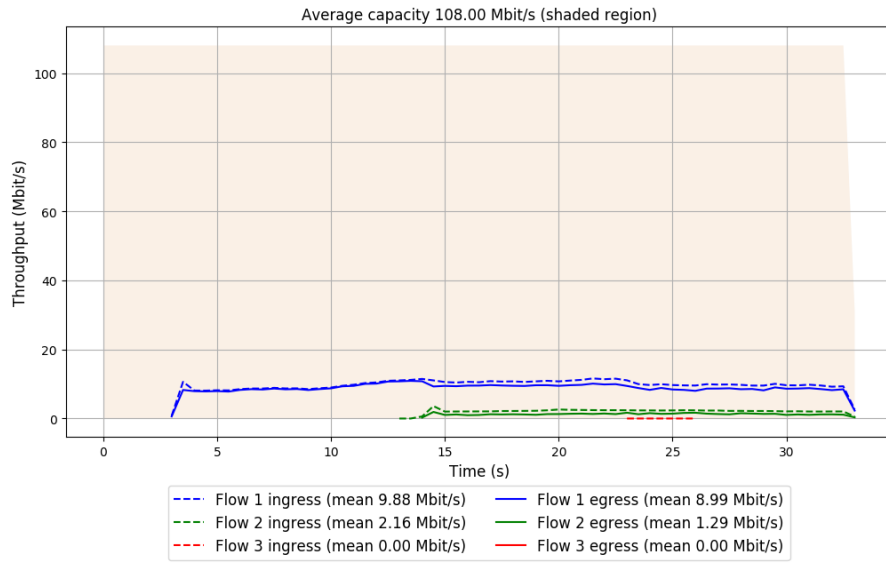
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.215 ms

Loss rate: 92.31%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-03-20 17:17:21

End at: 2018-03-20 17:17:51

Below is generated by plot.py at 2018-03-20 17:34:05

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.40 Mbit/s (5.0% utilization)

95th percentile per-packet one-way delay: 12.071 ms

Loss rate: 8.86%

-- Flow 1:

Average throughput: 4.99 Mbit/s

95th percentile per-packet one-way delay: 12.067 ms

Loss rate: 6.45%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.890 ms

Loss rate: 41.63%

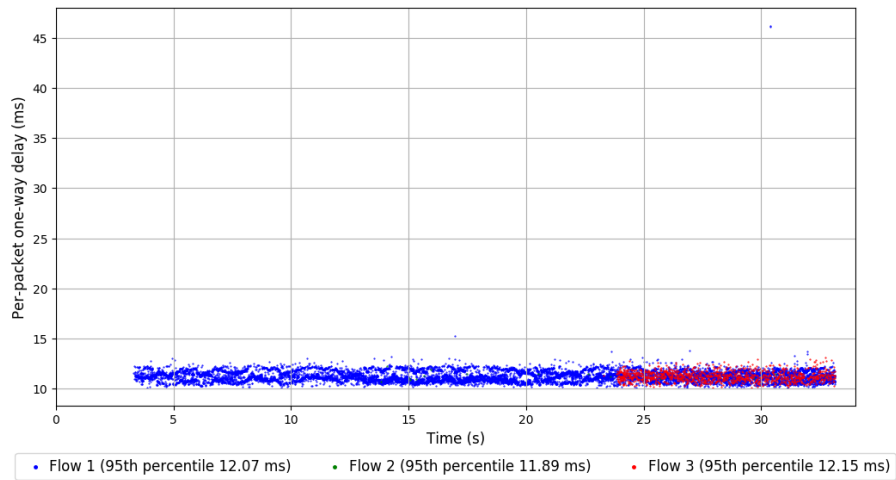
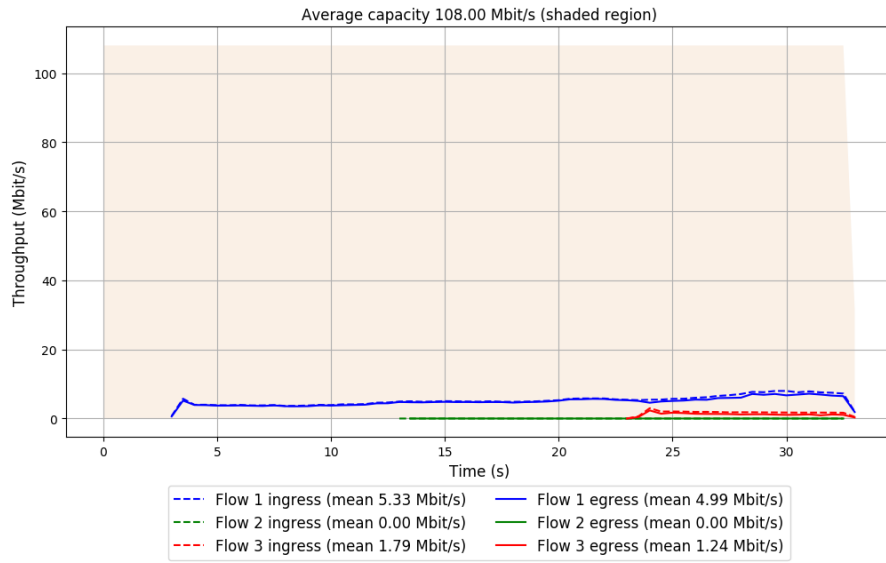
-- Flow 3:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 12.148 ms

Loss rate: 30.60%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-03-20 17:28:06

End at: 2018-03-20 17:28:36

Below is generated by plot.py at 2018-03-20 17:34:07

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 7.73 Mbit/s (7.2% utilization)

95th percentile per-packet one-way delay: 11.990 ms

Loss rate: 10.78%

-- Flow 1:

Average throughput: 6.96 Mbit/s

95th percentile per-packet one-way delay: 11.964 ms

Loss rate: 7.57%

-- Flow 2:

Average throughput: 1.16 Mbit/s

95th percentile per-packet one-way delay: 12.308 ms

Loss rate: 32.00%

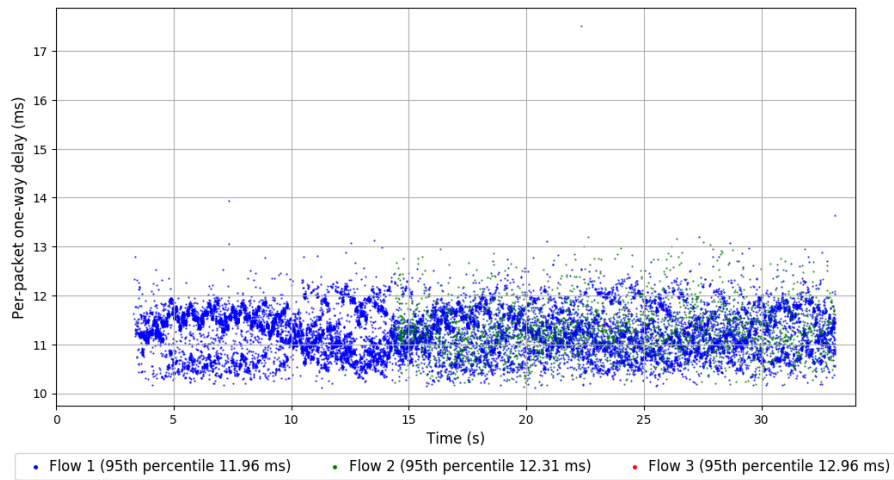
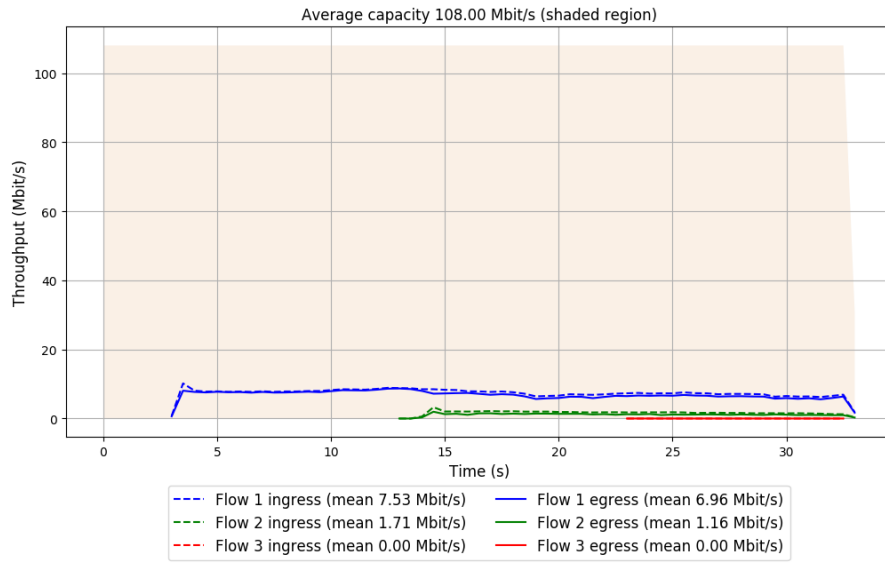
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.960 ms

Loss rate: 41.17%

Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-03-20 15:45:49

End at: 2018-03-20 15:46:19

Below is generated by plot.py at 2018-03-20 17:34:32

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.38 Mbit/s (5.0% utilization)

95th percentile per-packet one-way delay: 12.008 ms

Loss rate: 15.53%

-- Flow 1:

Average throughput: 3.10 Mbit/s

95th percentile per-packet one-way delay: 12.006 ms

Loss rate: 12.45%

-- Flow 2:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 12.003 ms

Loss rate: 17.42%

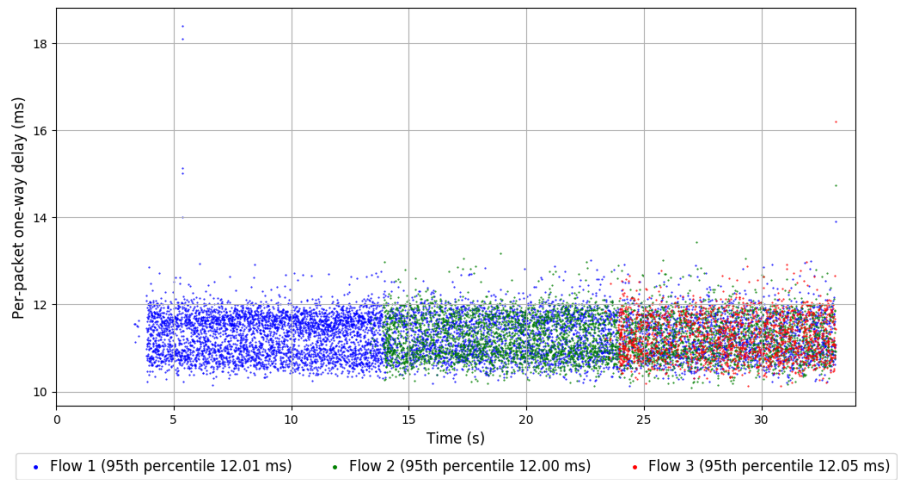
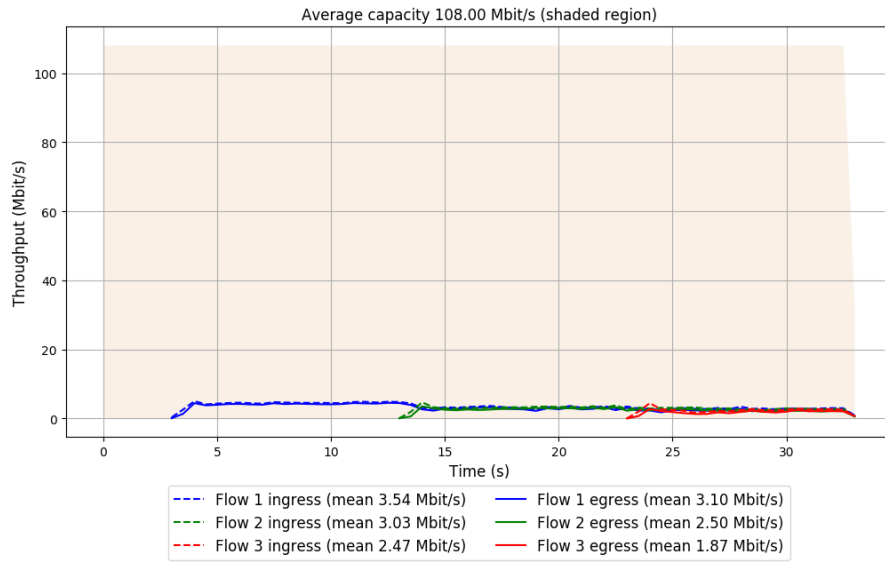
-- Flow 3:

Average throughput: 1.87 Mbit/s

95th percentile per-packet one-way delay: 12.048 ms

Loss rate: 24.26%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-03-20 15:56:33

End at: 2018-03-20 15:57:03

Below is generated by plot.py at 2018-03-20 17:34:37

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.35 Mbit/s (5.0% utilization)

95th percentile per-packet one-way delay: 12.020 ms

Loss rate: 15.08%

-- Flow 1:

Average throughput: 3.08 Mbit/s

95th percentile per-packet one-way delay: 12.003 ms

Loss rate: 12.66%

-- Flow 2:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 12.032 ms

Loss rate: 16.83%

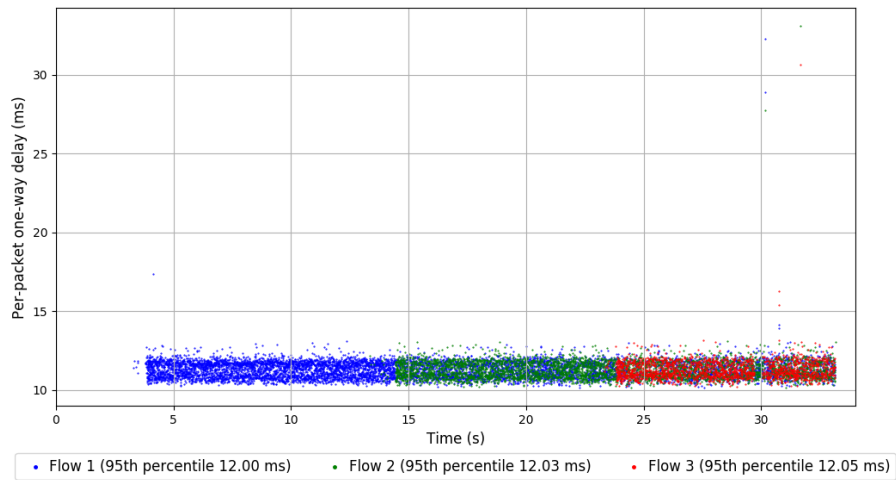
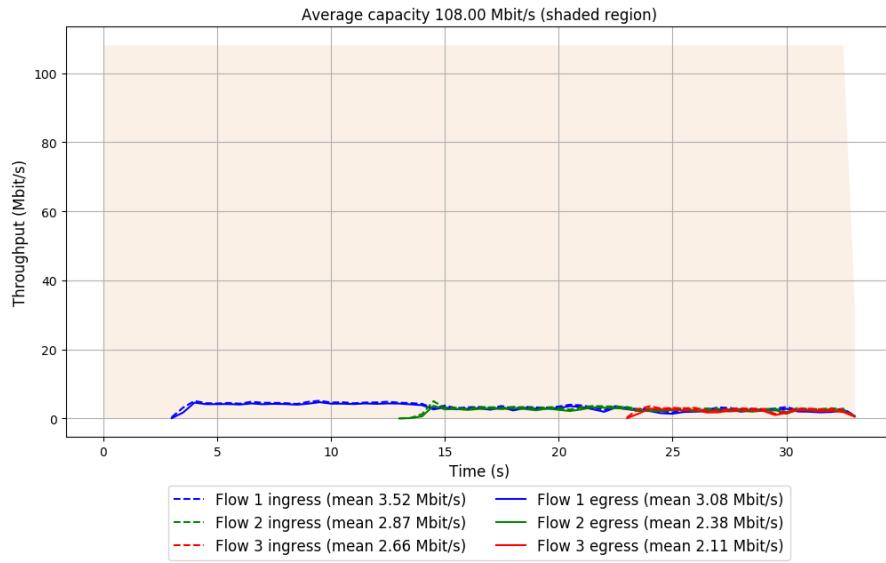
-- Flow 3:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 12.055 ms

Loss rate: 20.99%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-03-20 16:07:20

End at: 2018-03-20 16:07:50

Below is generated by plot.py at 2018-03-20 17:34:39

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.21 Mbit/s (4.8% utilization)

95th percentile per-packet one-way delay: 12.103 ms

Loss rate: 15.75%

-- Flow 1:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 12.084 ms

Loss rate: 13.15%

-- Flow 2:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 12.120 ms

Loss rate: 17.46%

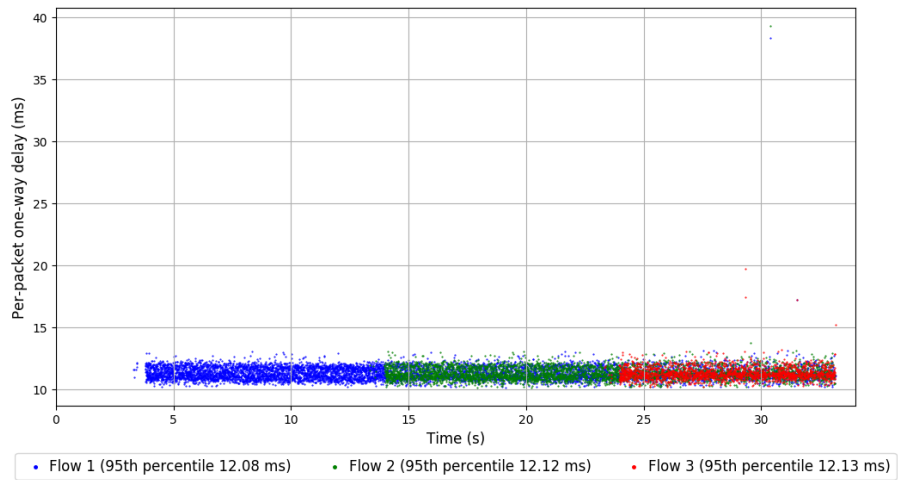
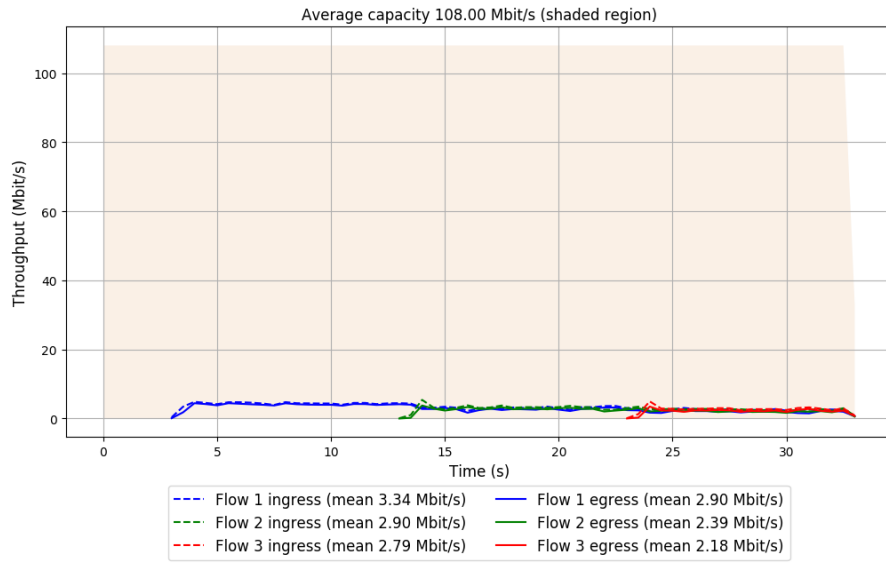
-- Flow 3:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 12.132 ms

Loss rate: 21.69%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-03-20 16:18:05

End at: 2018-03-20 16:18:35

Below is generated by plot.py at 2018-03-20 17:34:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.37 Mbit/s (5.0% utilization)

95th percentile per-packet one-way delay: 12.051 ms

Loss rate: 15.53%

-- Flow 1:

Average throughput: 3.00 Mbit/s

95th percentile per-packet one-way delay: 12.031 ms

Loss rate: 13.23%

-- Flow 2:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 12.063 ms

Loss rate: 16.06%

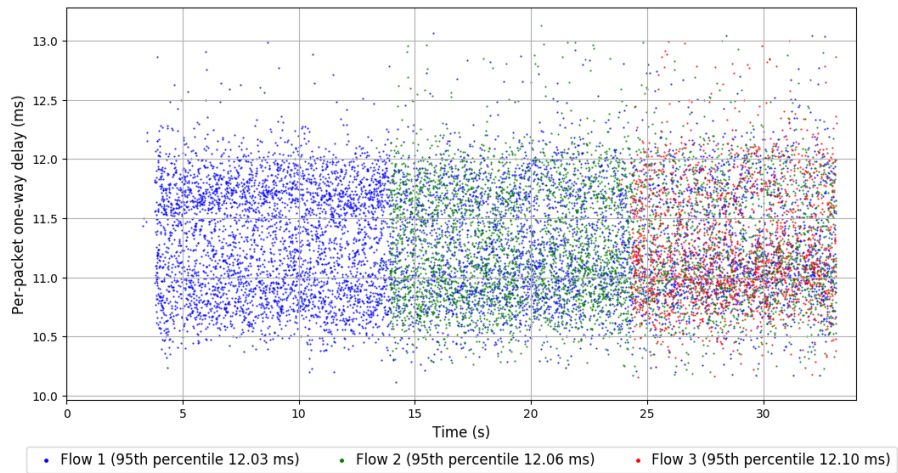
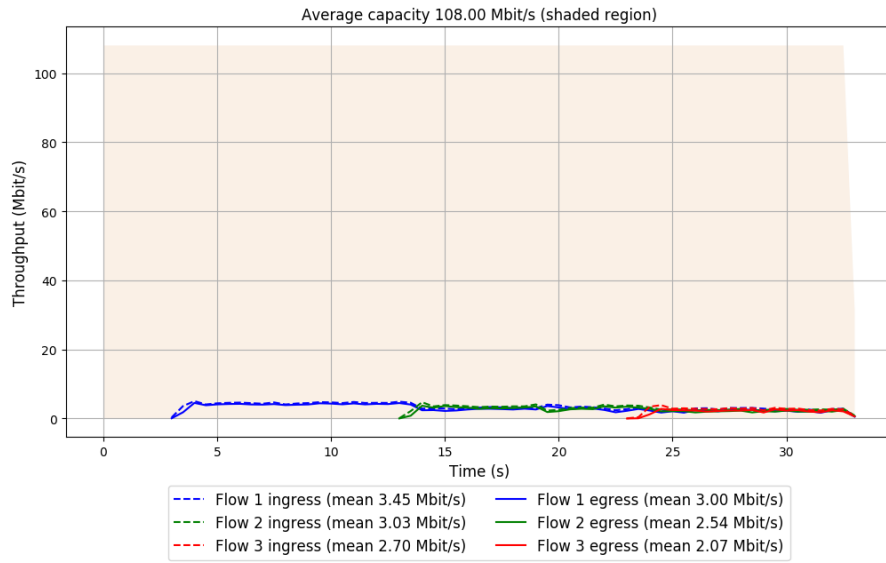
-- Flow 3:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 12.100 ms

Loss rate: 23.29%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-03-20 16:28:54

End at: 2018-03-20 16:29:24

Below is generated by plot.py at 2018-03-20 17:34:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.32 Mbit/s (4.9% utilization)

95th percentile per-packet one-way delay: 12.042 ms

Loss rate: 14.88%

-- Flow 1:

Average throughput: 3.05 Mbit/s

95th percentile per-packet one-way delay: 12.025 ms

Loss rate: 12.67%

-- Flow 2:

Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 12.048 ms

Loss rate: 16.41%

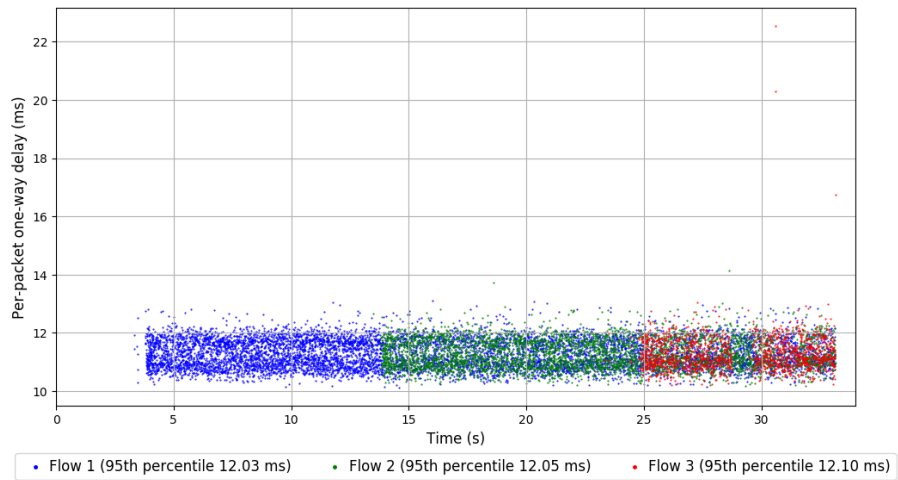
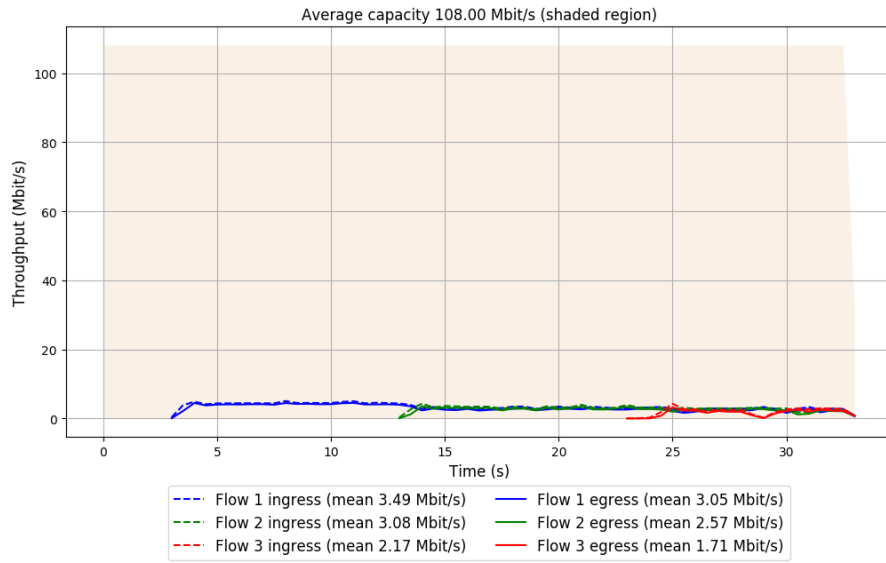
-- Flow 3:

Average throughput: 1.71 Mbit/s

95th percentile per-packet one-way delay: 12.104 ms

Loss rate: 21.24%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-03-20 16:39:44

End at: 2018-03-20 16:40:14

Below is generated by plot.py at 2018-03-20 17:34:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.22 Mbit/s (4.8% utilization)

95th percentile per-packet one-way delay: 12.027 ms

Loss rate: 14.14%

-- Flow 1:

Average throughput: 3.11 Mbit/s

95th percentile per-packet one-way delay: 12.003 ms

Loss rate: 12.42%

-- Flow 2:

Average throughput: 2.70 Mbit/s

95th percentile per-packet one-way delay: 12.052 ms

Loss rate: 14.67%

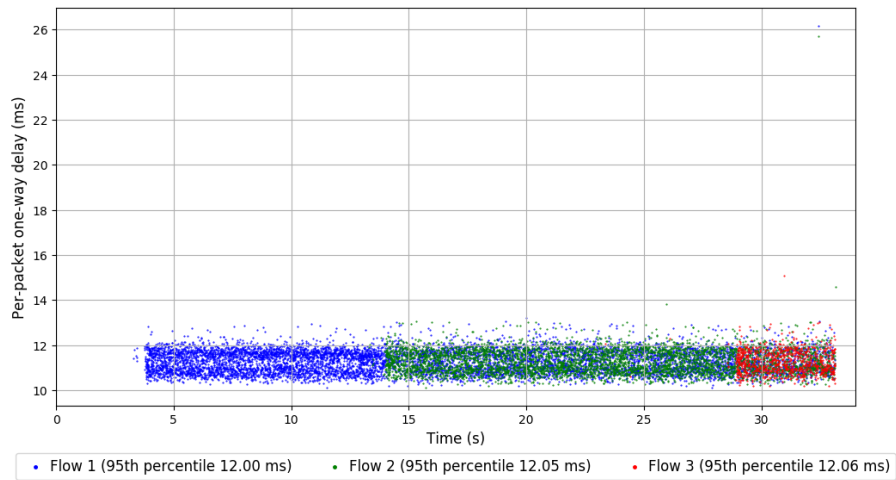
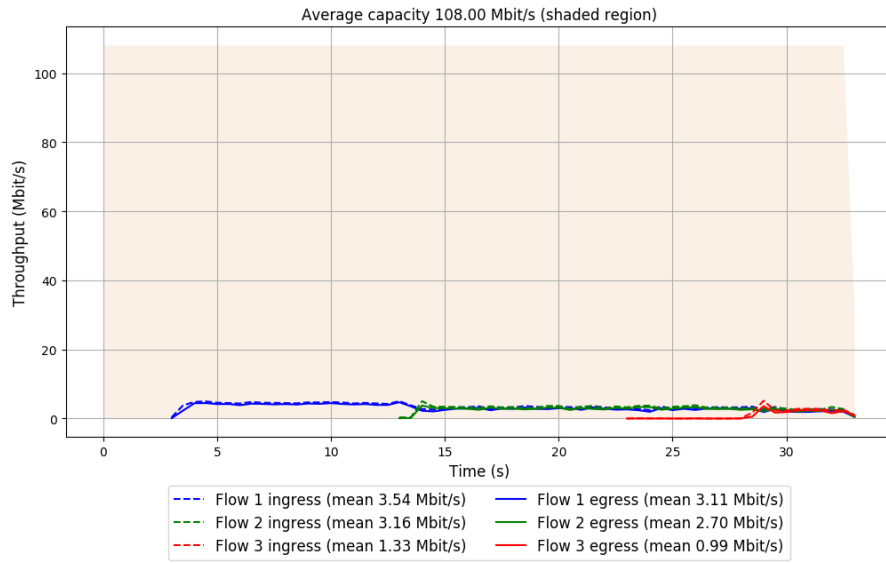
-- Flow 3:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 12.057 ms

Loss rate: 25.47%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-03-20 16:50:30

End at: 2018-03-20 16:51:00

Below is generated by plot.py at 2018-03-20 17:34:42

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.33 Mbit/s (4.9% utilization)

95th percentile per-packet one-way delay: 11.995 ms

Loss rate: 14.83%

-- Flow 1:

Average throughput: 3.07 Mbit/s

95th percentile per-packet one-way delay: 11.984 ms

Loss rate: 12.80%

-- Flow 2:

Average throughput: 2.46 Mbit/s

95th percentile per-packet one-way delay: 12.014 ms

Loss rate: 15.91%

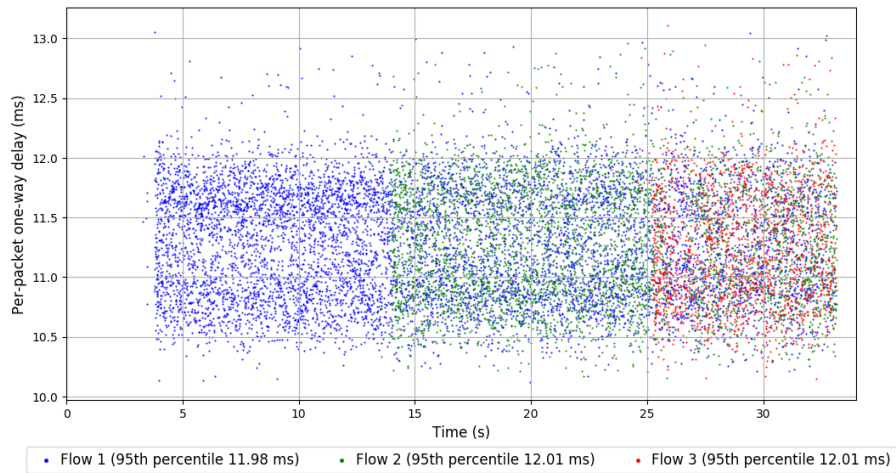
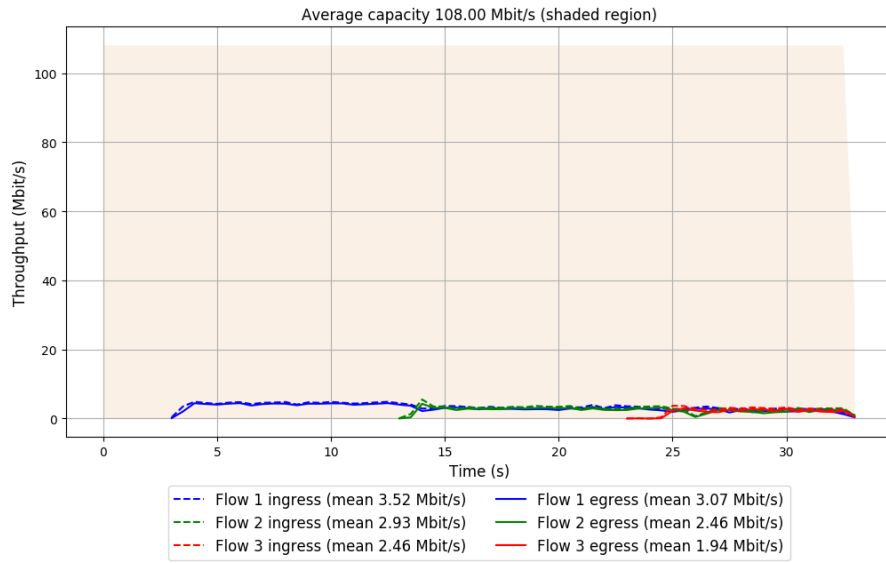
-- Flow 3:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 12.008 ms

Loss rate: 21.19%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-03-20 17:01:16

End at: 2018-03-20 17:01:46

Below is generated by plot.py at 2018-03-20 17:34:45

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.37 Mbit/s (5.0% utilization)

95th percentile per-packet one-way delay: 12.003 ms

Loss rate: 15.68%

-- Flow 1:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 11.986 ms

Loss rate: 13.08%

-- Flow 2:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 12.012 ms

Loss rate: 16.95%

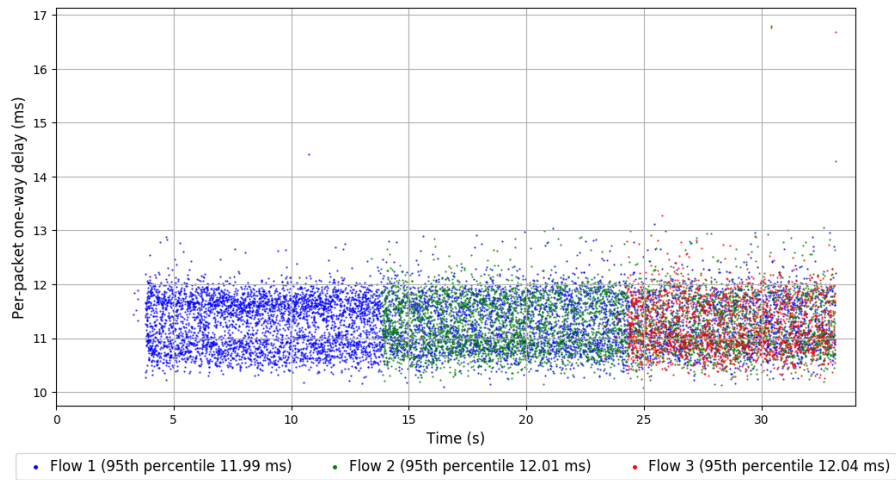
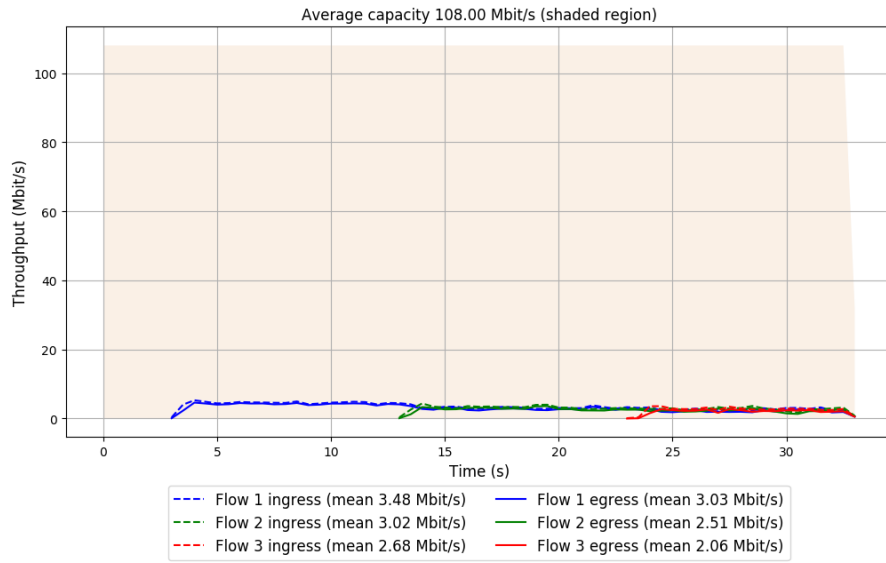
-- Flow 3:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 12.045 ms

Loss rate: 23.05%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-03-20 17:12:02

End at: 2018-03-20 17:12:32

Below is generated by plot.py at 2018-03-20 17:35:10

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.29 Mbit/s (4.9% utilization)

95th percentile per-packet one-way delay: 12.019 ms

Loss rate: 15.39%

-- Flow 1:

Average throughput: 3.10 Mbit/s

95th percentile per-packet one-way delay: 12.009 ms

Loss rate: 12.87%

-- Flow 2:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 12.034 ms

Loss rate: 17.05%

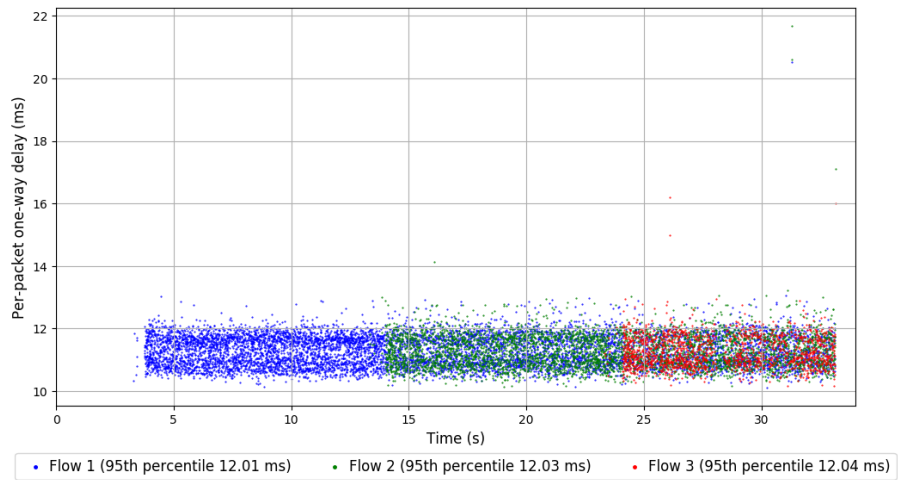
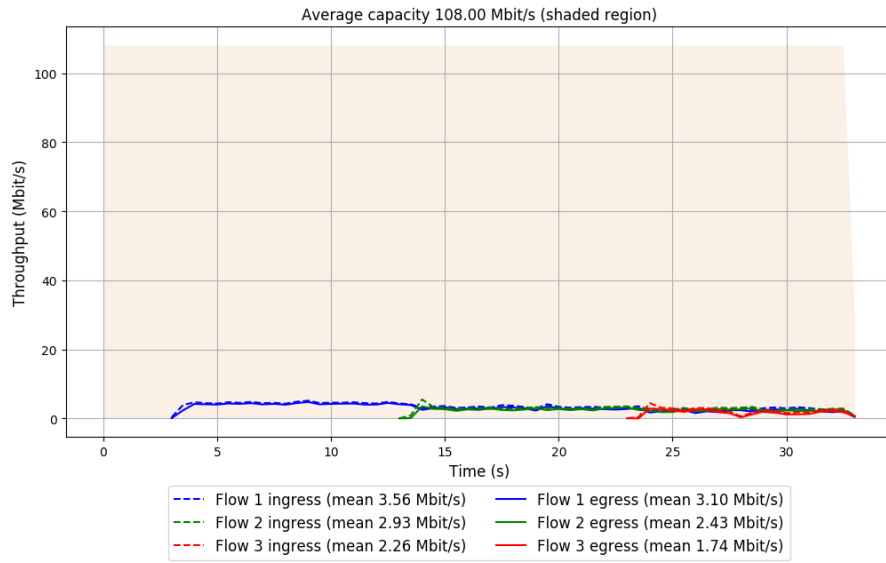
-- Flow 3:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 12.043 ms

Loss rate: 23.10%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-03-20 17:22:46

End at: 2018-03-20 17:23:16

Below is generated by plot.py at 2018-03-20 17:35:16

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.31 Mbit/s (4.9% utilization)

95th percentile per-packet one-way delay: 12.065 ms

Loss rate: 15.18%

-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 12.050 ms

Loss rate: 13.10%

-- Flow 2:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 12.100 ms

Loss rate: 15.75%

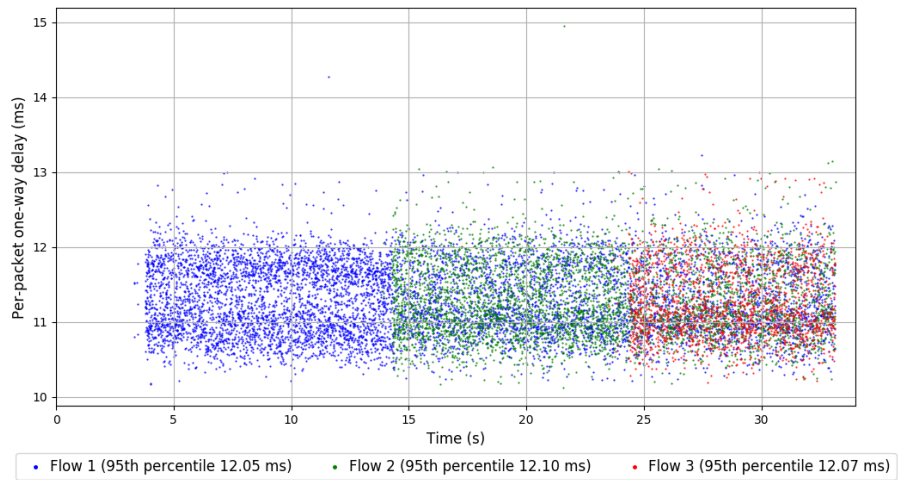
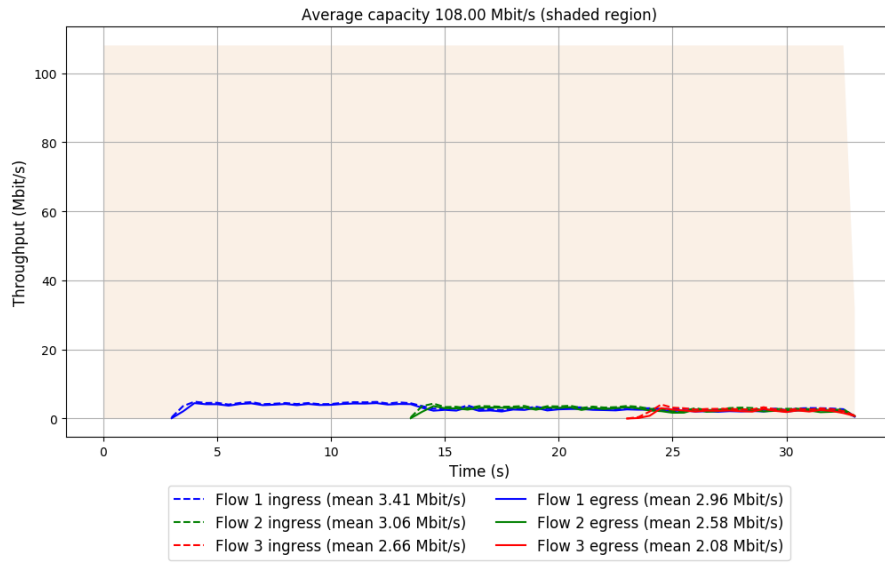
-- Flow 3:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 12.074 ms

Loss rate: 22.07%

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2018-03-20 15:46:24

End at: 2018-03-20 15:46:54

Below is generated by plot.py at 2018-03-20 17:35:16

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.43 Mbit/s (0.4% utilization)

95th percentile per-packet one-way delay: 12.022 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.540 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 12.059 ms

Loss rate: 0.00%

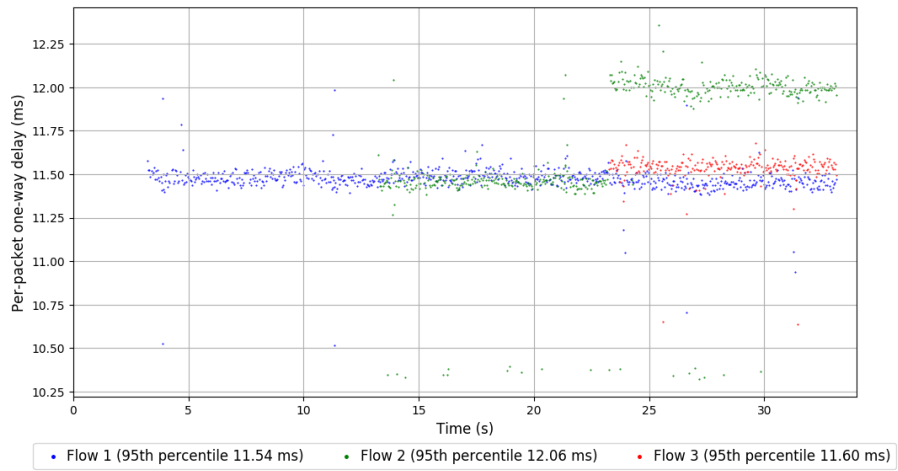
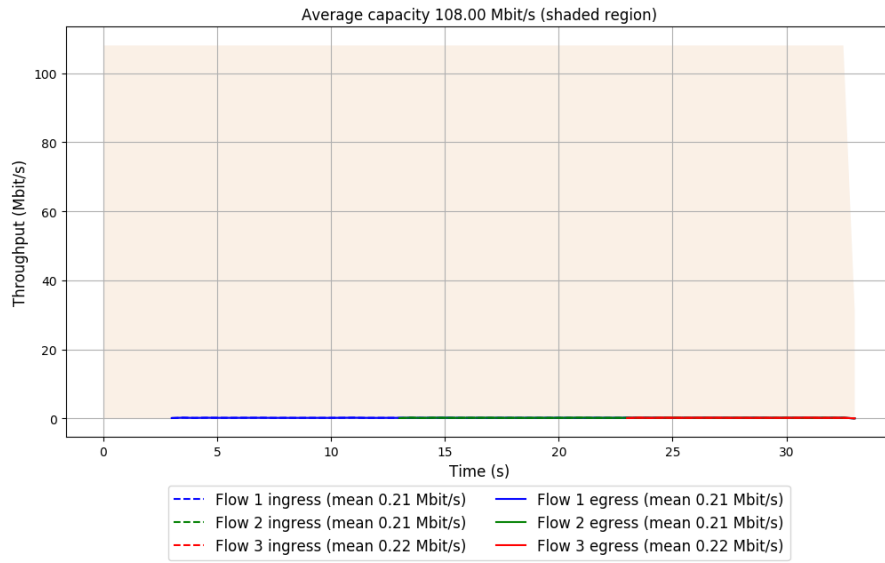
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.600 ms

Loss rate: 0.00%

Run 1: Report of SCReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2018-03-20 15:57:09

End at: 2018-03-20 15:57:39

Below is generated by plot.py at 2018-03-20 17:35:16

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.43 Mbit/s (0.4% utilization)

95th percentile per-packet one-way delay: 11.644 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.535 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.669 ms

Loss rate: 0.00%

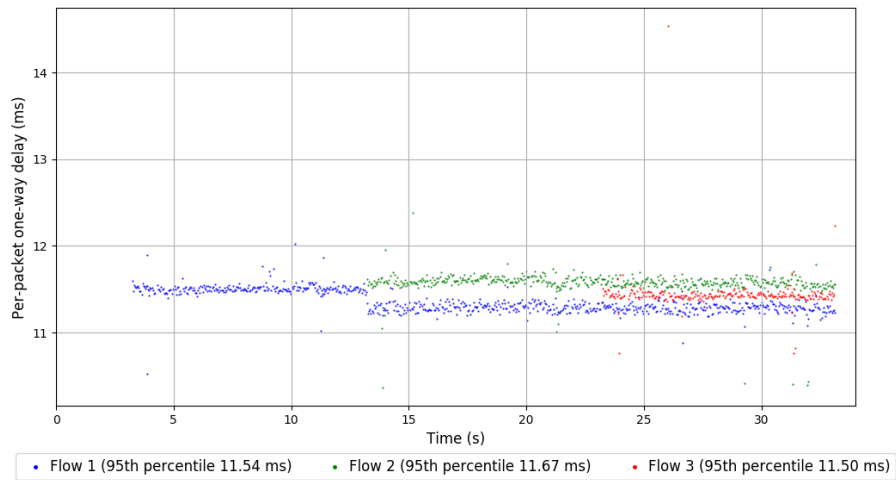
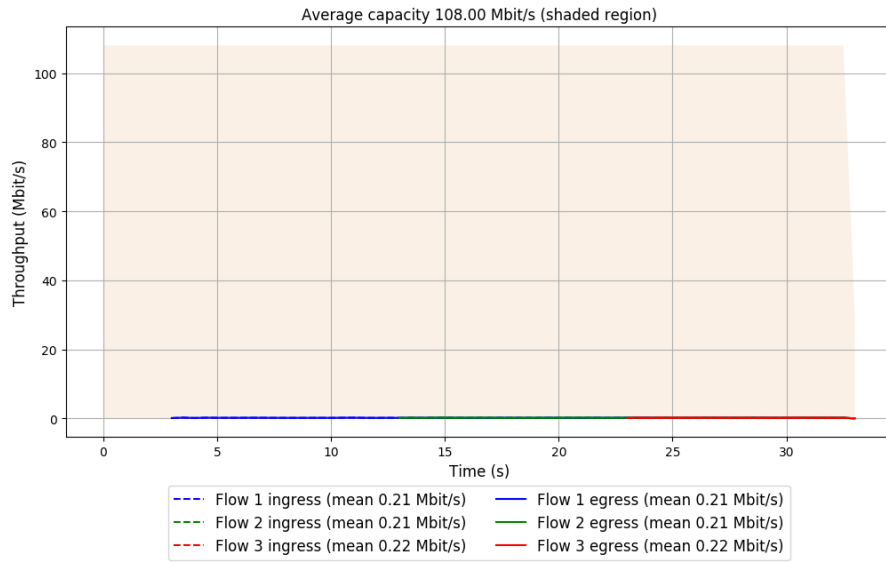
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.504 ms

Loss rate: 0.00%

Run 2: Report of SCReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-03-20 16:07:56

End at: 2018-03-20 16:08:26

Below is generated by plot.py at 2018-03-20 17:35:16

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.43 Mbit/s (0.4% utilization)

95th percentile per-packet one-way delay: 11.805 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.556 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.606 ms

Loss rate: 0.00%

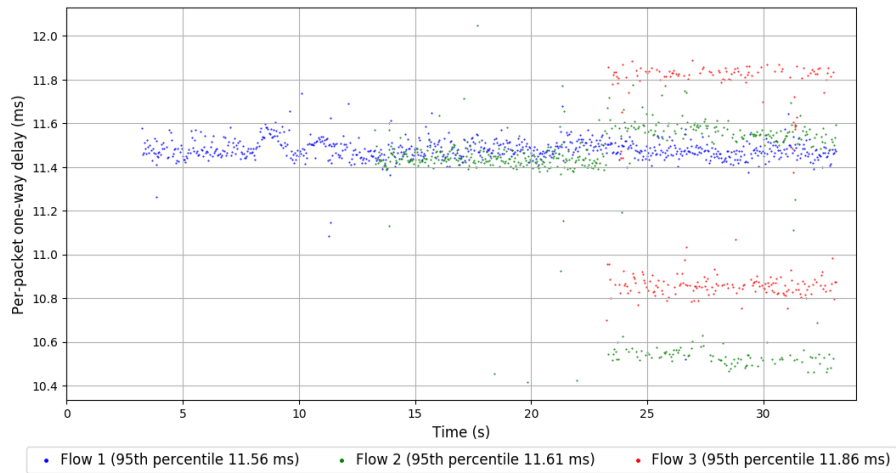
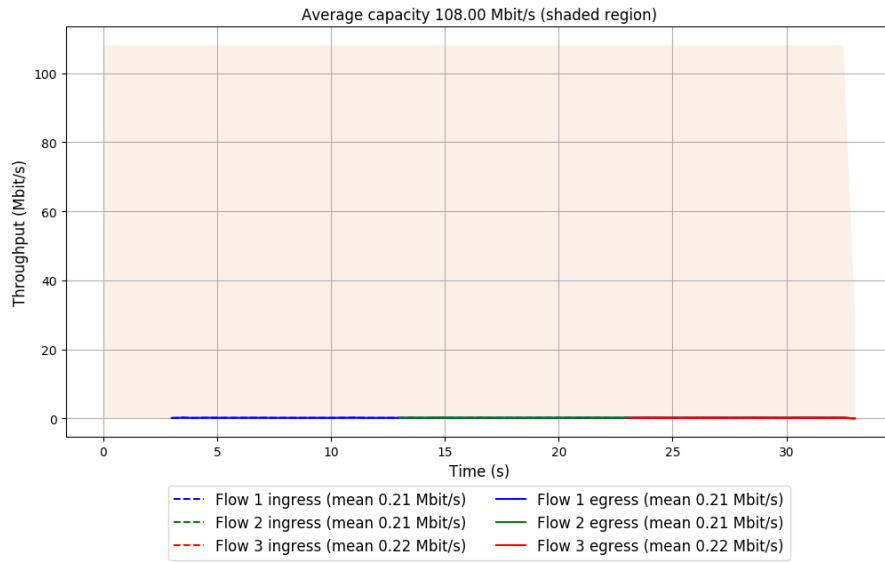
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.855 ms

Loss rate: 0.00%

Run 3: Report of SCReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-03-20 16:18:41

End at: 2018-03-20 16:19:11

Below is generated by plot.py at 2018-03-20 17:35:16

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.43 Mbit/s (0.4% utilization)

95th percentile per-packet one-way delay: 11.602 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.569 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.636 ms

Loss rate: 0.21%

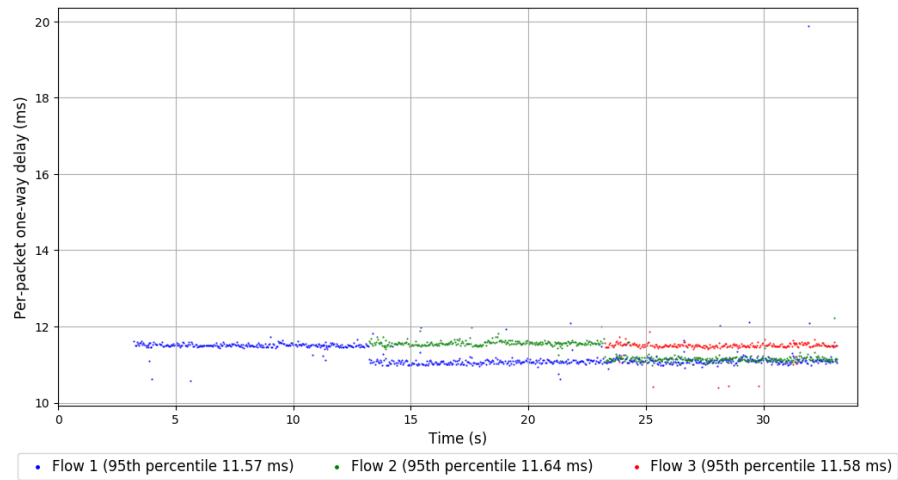
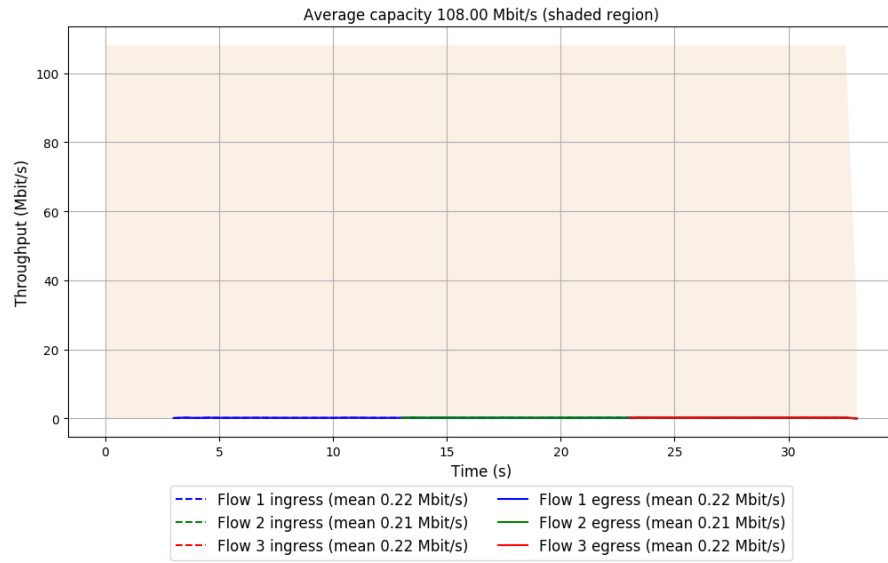
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.583 ms

Loss rate: 0.00%

Run 4: Report of SCReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-03-20 16:29:30

End at: 2018-03-20 16:30:00

Below is generated by plot.py at 2018-03-20 17:35:16

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.43 Mbit/s (0.4% utilization)

95th percentile per-packet one-way delay: 11.551 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.562 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.527 ms

Loss rate: 0.00%

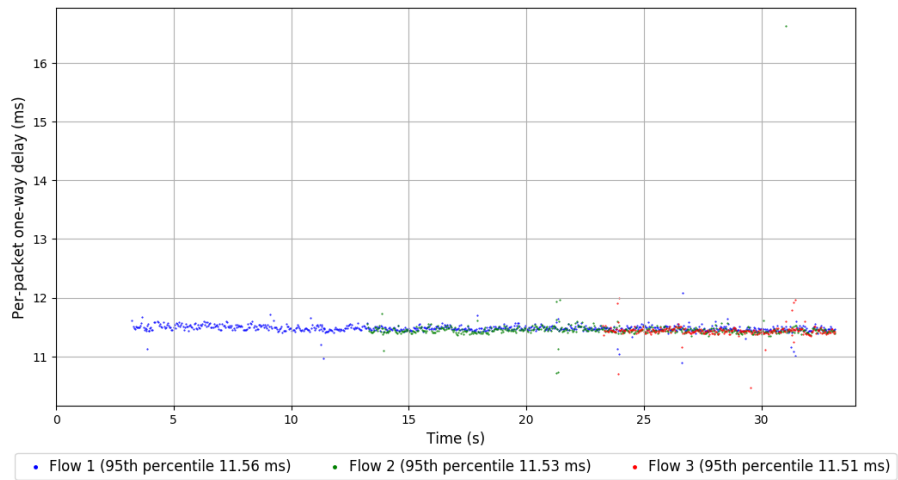
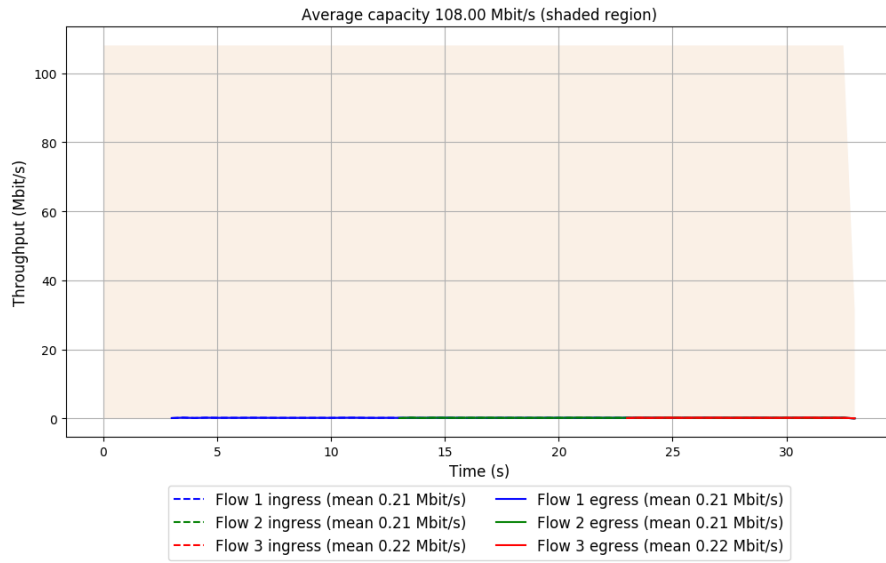
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.508 ms

Loss rate: 0.00%

Run 5: Report of SCReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-03-20 16:40:20

End at: 2018-03-20 16:40:50

Below is generated by plot.py at 2018-03-20 17:35:17

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.43 Mbit/s (0.4% utilization)

95th percentile per-packet one-way delay: 11.603 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.522 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.864 ms

Loss rate: 0.00%

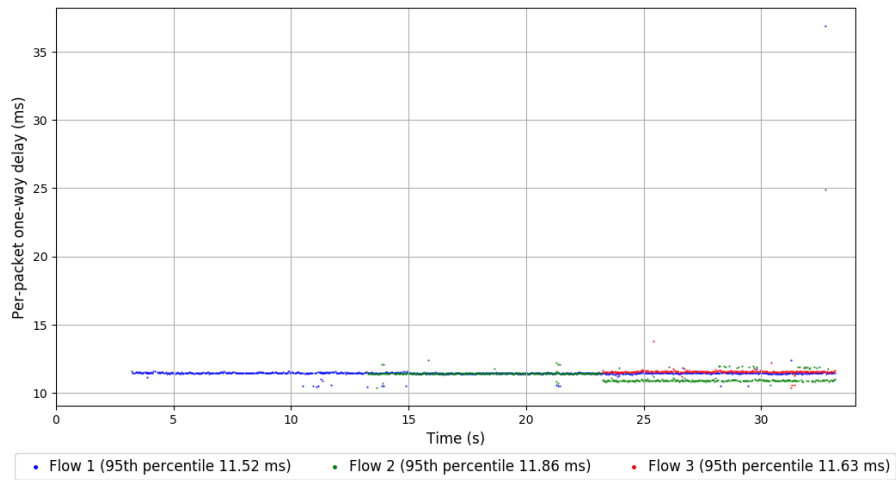
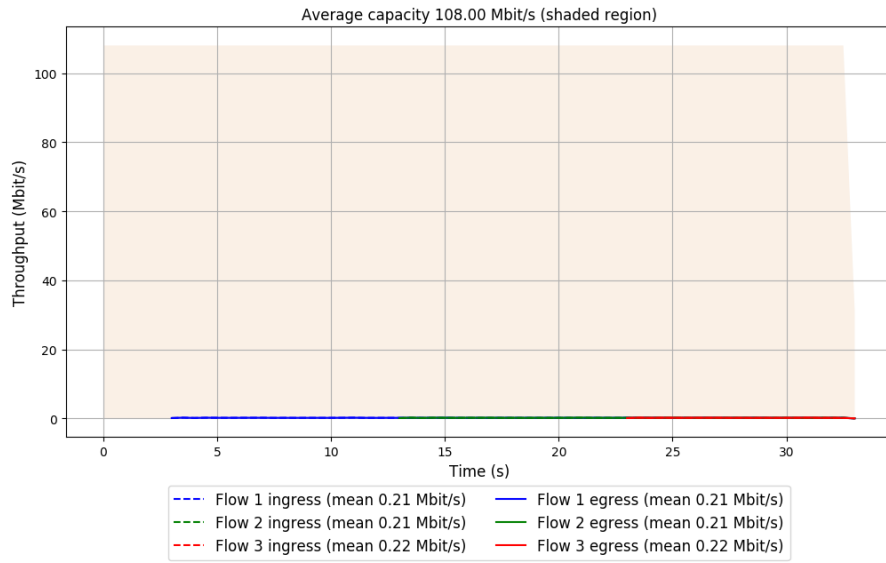
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.635 ms

Loss rate: 0.38%

Run 6: Report of SCReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-03-20 16:51:05

End at: 2018-03-20 16:51:35

Below is generated by plot.py at 2018-03-20 17:35:40

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.38 Mbit/s (0.4% utilization)

95th percentile per-packet one-way delay: 11.749 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.773 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 11.563 ms

Loss rate: 0.00%

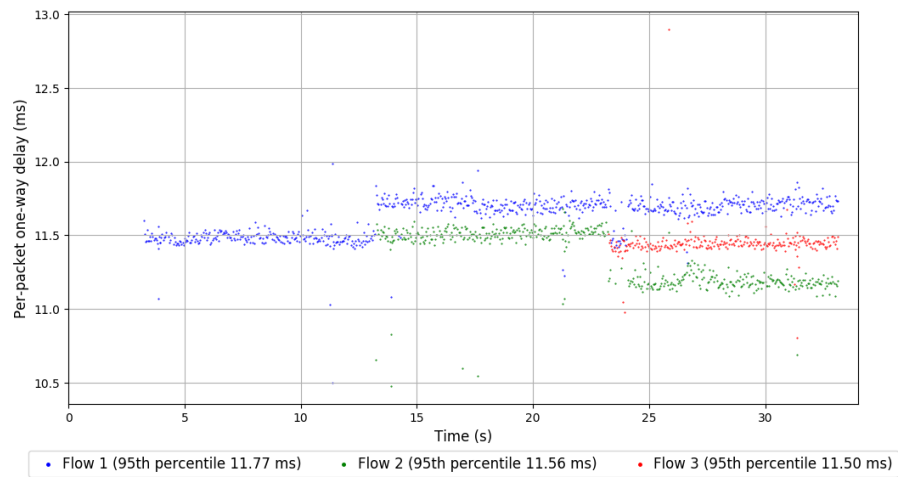
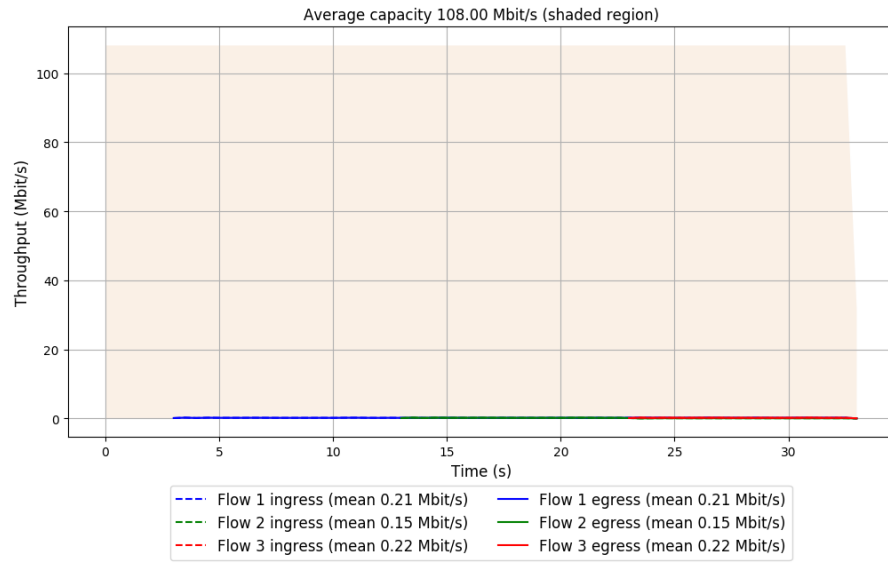
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.499 ms

Loss rate: 0.00%

Run 7: Report of SCReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-03-20 17:01:51

End at: 2018-03-20 17:02:21

Below is generated by plot.py at 2018-03-20 17:35:43

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.43 Mbit/s (0.4% utilization)

95th percentile per-packet one-way delay: 11.599 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.522 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.629 ms

Loss rate: 0.00%

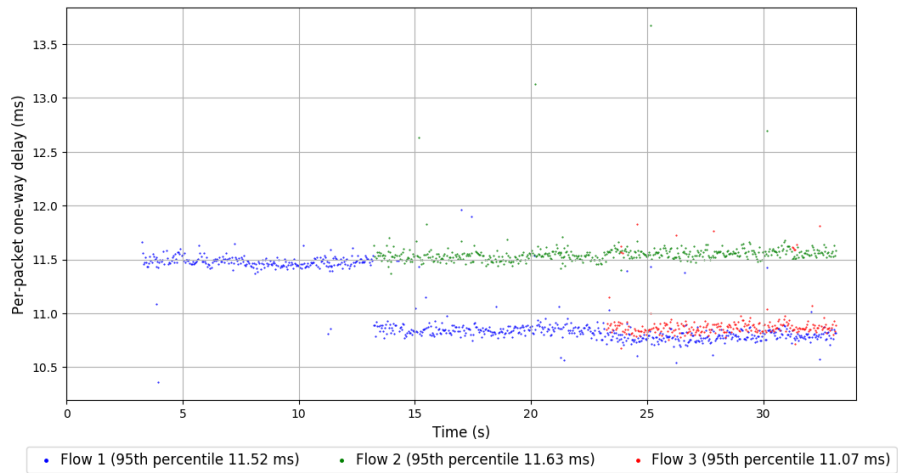
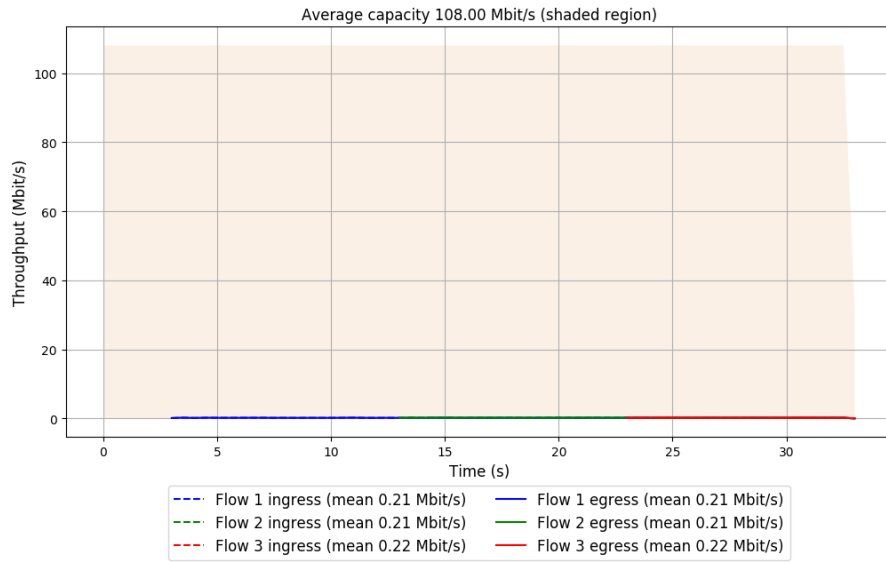
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.068 ms

Loss rate: 0.00%

Run 8: Report of SCReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-03-20 17:12:37

End at: 2018-03-20 17:13:07

Below is generated by plot.py at 2018-03-20 17:35:43

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.43 Mbit/s (0.4% utilization)

95th percentile per-packet one-way delay: 11.766 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.564 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.607 ms

Loss rate: 0.00%

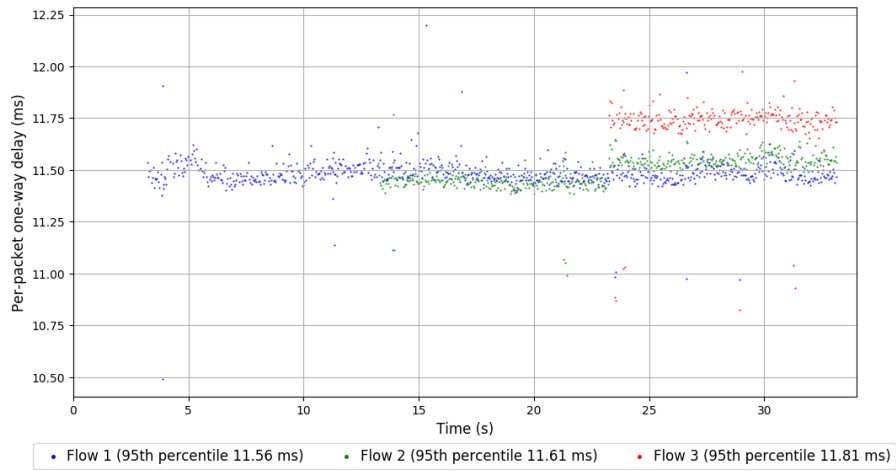
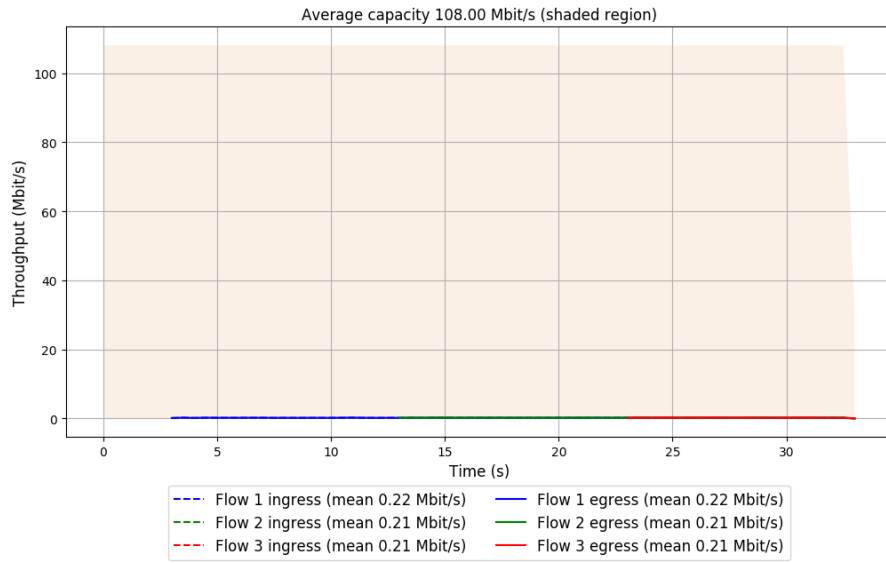
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.811 ms

Loss rate: 0.04%

Run 9: Report of SCReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-03-20 17:23:22

End at: 2018-03-20 17:23:52

Below is generated by plot.py at 2018-03-20 17:35:43

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.43 Mbit/s (0.4% utilization)

95th percentile per-packet one-way delay: 11.751 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.577 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.790 ms

Loss rate: 0.00%

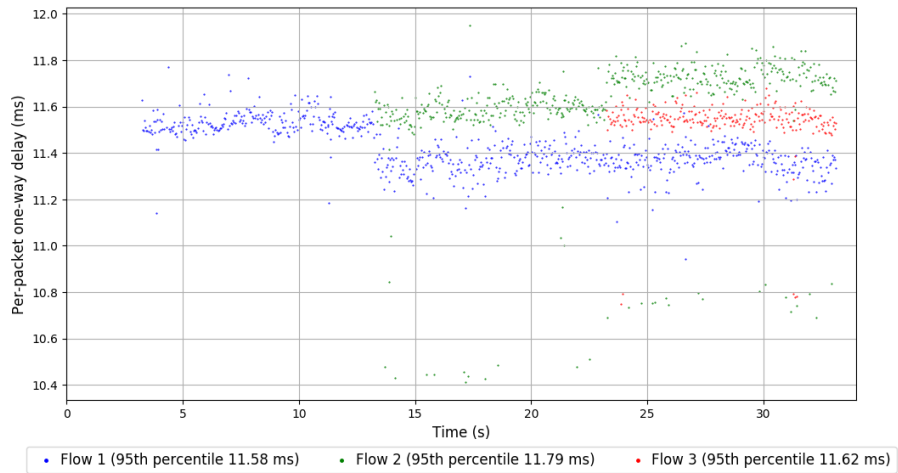
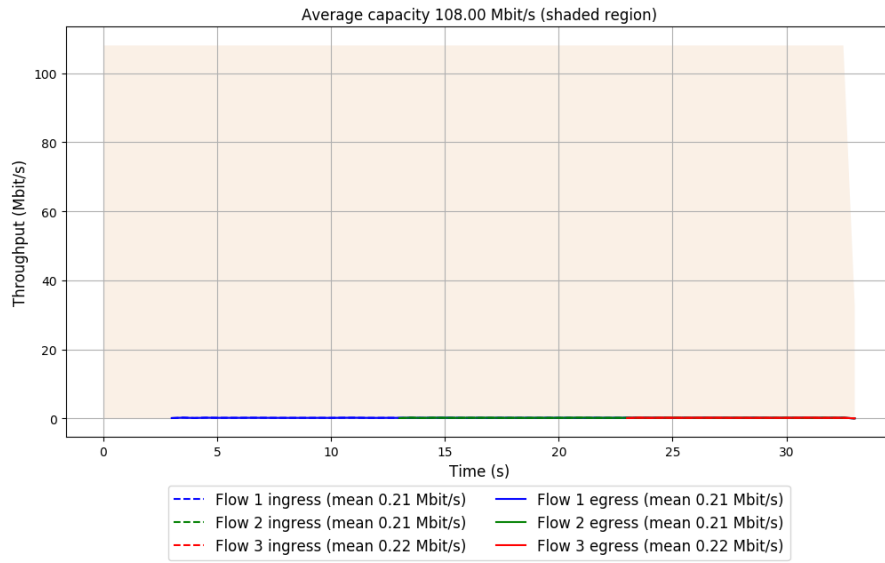
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.622 ms

Loss rate: 0.00%

Run 10: Report of SCReAM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-03-20 15:52:22

End at: 2018-03-20 15:52:52

Below is generated by plot.py at 2018-03-20 17:35:45

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.15 Mbit/s (1.1% utilization)

95th percentile per-packet one-way delay: 11.921 ms

Loss rate: 44.53%

-- Flow 1:

Average throughput: 0.62 Mbit/s

95th percentile per-packet one-way delay: 11.852 ms

Loss rate: 37.44%

-- Flow 2:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 11.995 ms

Loss rate: 47.35%

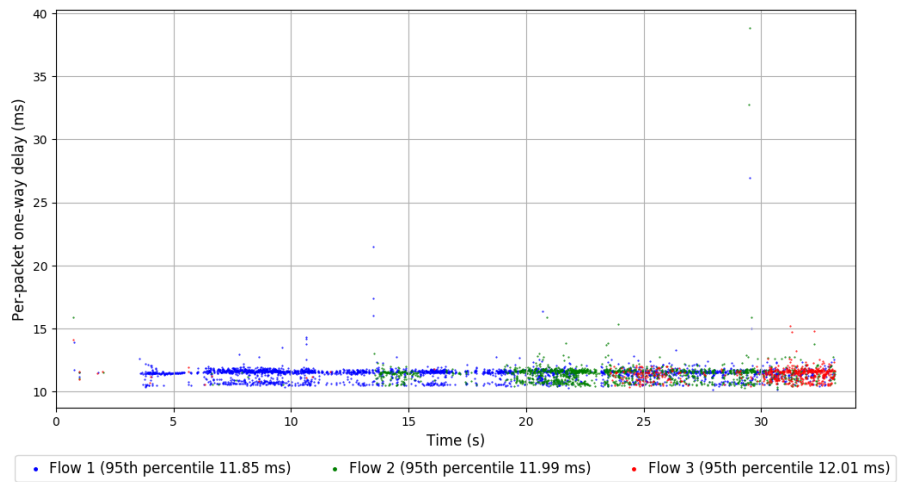
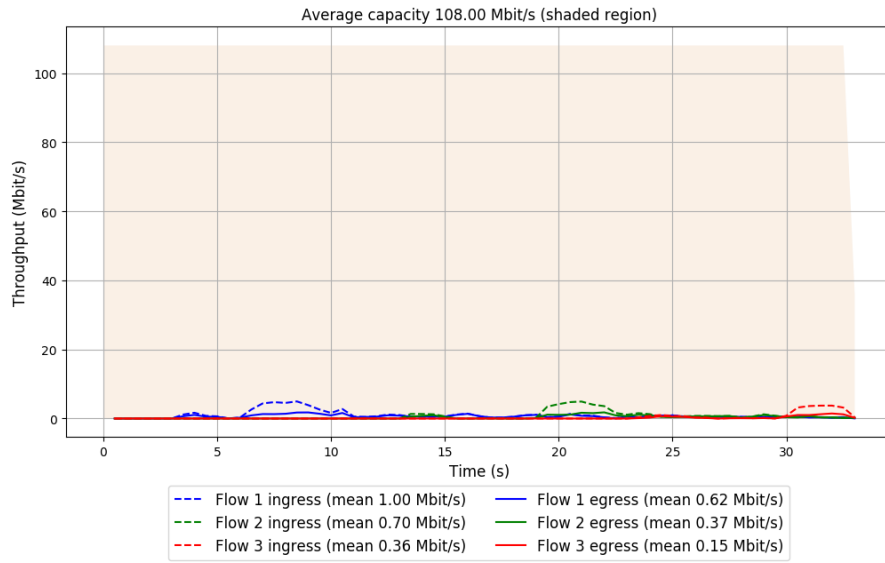
-- Flow 3:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 12.009 ms

Loss rate: 58.53%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-03-20 16:03:07

End at: 2018-03-20 16:03:37

Below is generated by plot.py at 2018-03-20 17:35:46

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.14 Mbit/s (1.1% utilization)

95th percentile per-packet one-way delay: 11.989 ms

Loss rate: 45.34%

-- Flow 1:

Average throughput: 0.68 Mbit/s

95th percentile per-packet one-way delay: 11.934 ms

Loss rate: 41.98%

-- Flow 2:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 12.029 ms

Loss rate: 19.16%

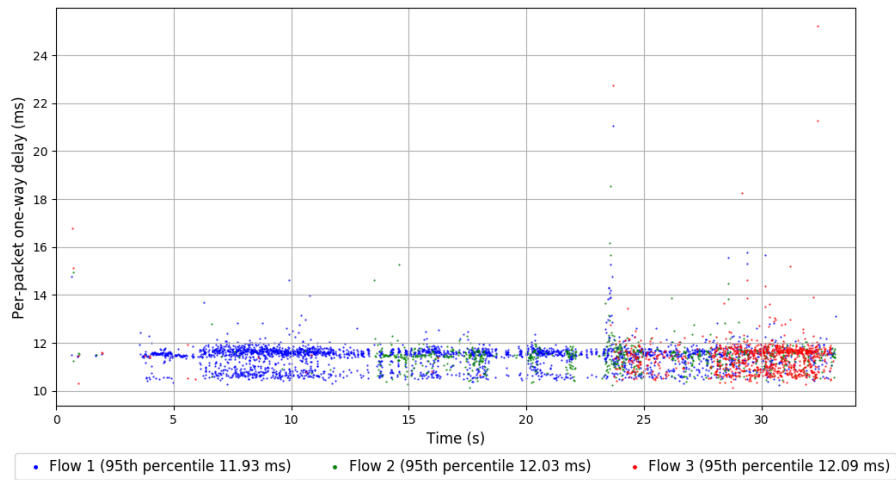
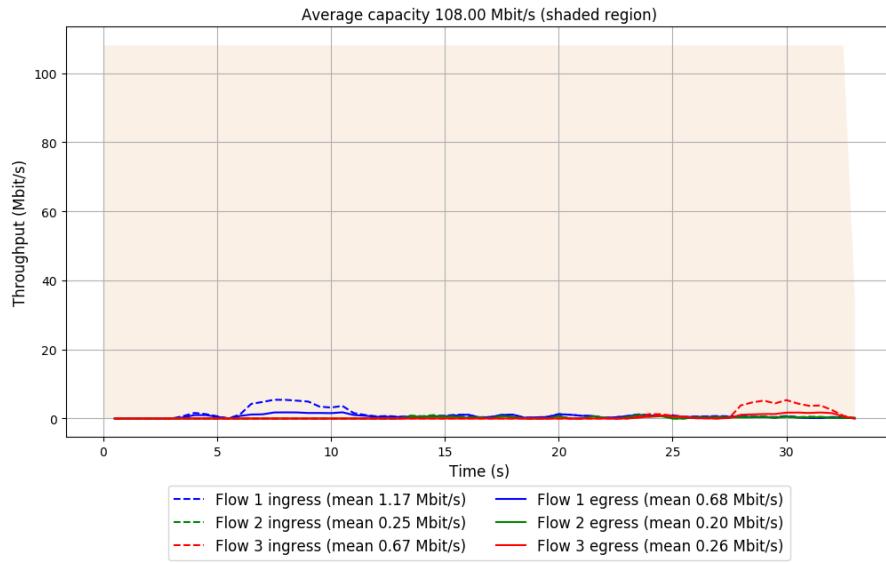
-- Flow 3:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 12.089 ms

Loss rate: 61.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-03-20 16:13:53

End at: 2018-03-20 16:14:23

Below is generated by plot.py at 2018-03-20 17:35:49

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.17 Mbit/s (1.1% utilization)

95th percentile per-packet one-way delay: 11.924 ms

Loss rate: 38.31%

-- Flow 1:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 11.865 ms

Loss rate: 31.51%

-- Flow 2:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 11.983 ms

Loss rate: 47.16%

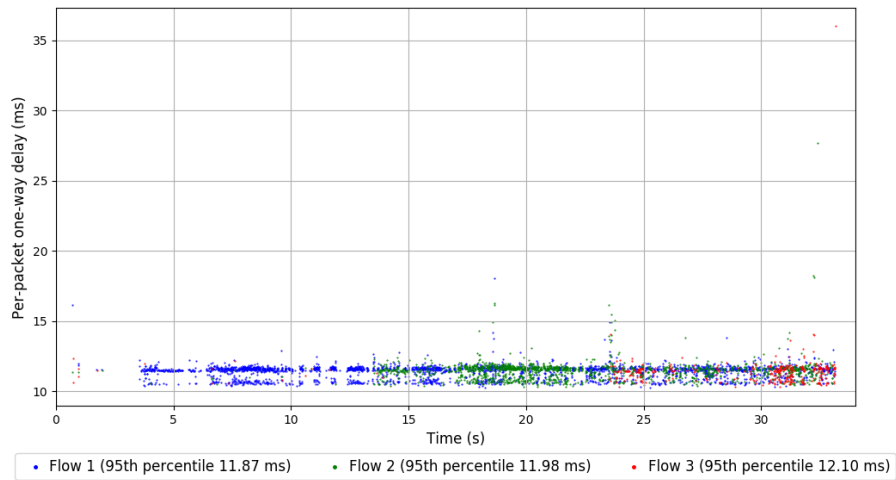
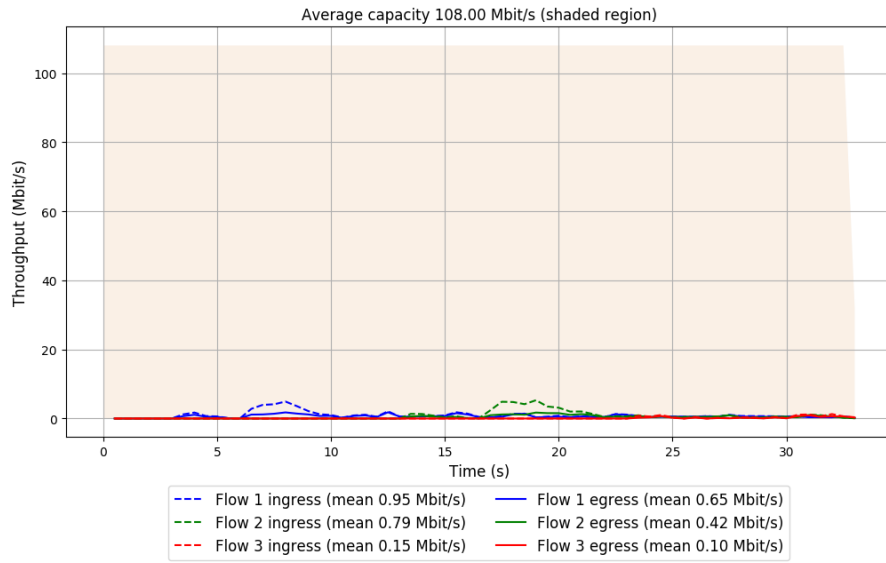
-- Flow 3:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 12.104 ms

Loss rate: 35.20%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-03-20 16:24:39

End at: 2018-03-20 16:25:09

Below is generated by plot.py at 2018-03-20 17:35:50

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.22 Mbit/s (1.1% utilization)

95th percentile per-packet one-way delay: 11.896 ms

Loss rate: 46.21%

-- Flow 1:

Average throughput: 0.71 Mbit/s

95th percentile per-packet one-way delay: 11.869 ms

Loss rate: 44.58%

-- Flow 2:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 11.923 ms

Loss rate: 49.31%

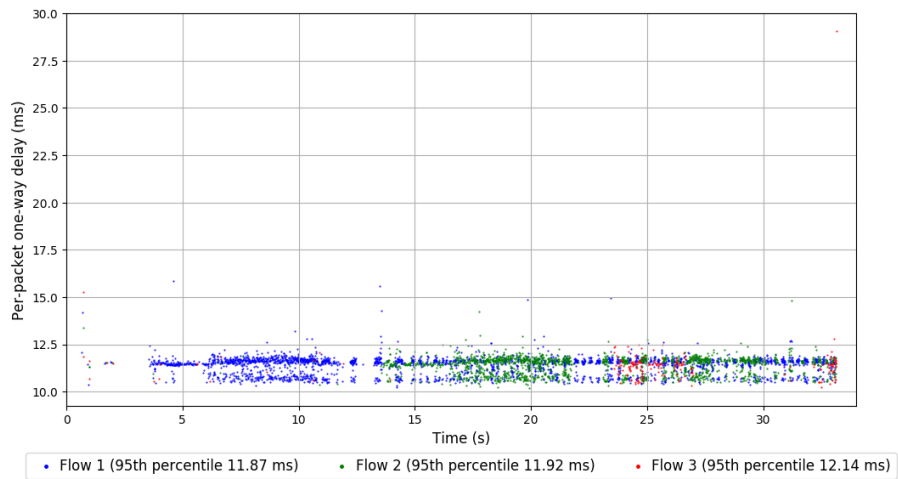
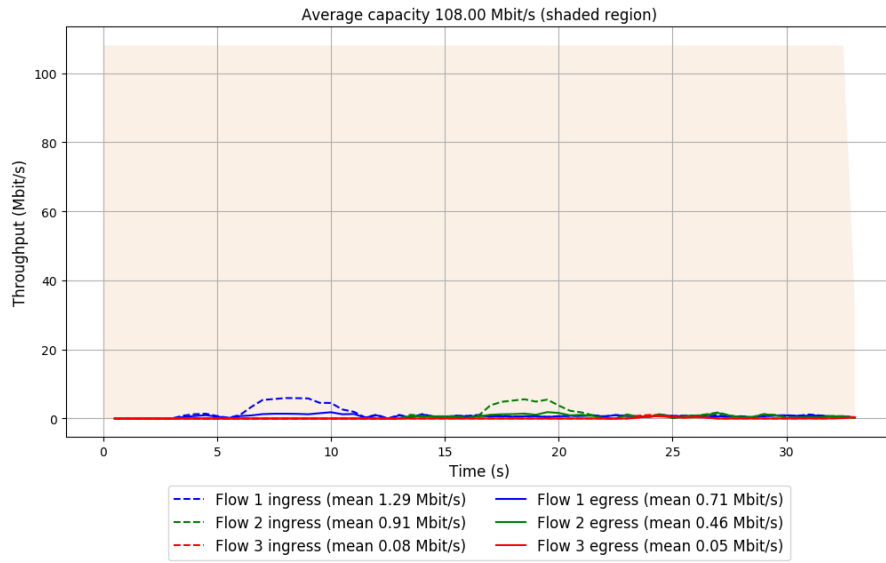
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 12.139 ms

Loss rate: 37.42%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-03-20 16:35:28

End at: 2018-03-20 16:35:58

Below is generated by plot.py at 2018-03-20 17:36:15

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.28 Mbit/s (1.2% utilization)

95th percentile per-packet one-way delay: 11.944 ms

Loss rate: 46.24%

-- Flow 1:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 11.920 ms

Loss rate: 46.00%

-- Flow 2:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 11.958 ms

Loss rate: 43.09%

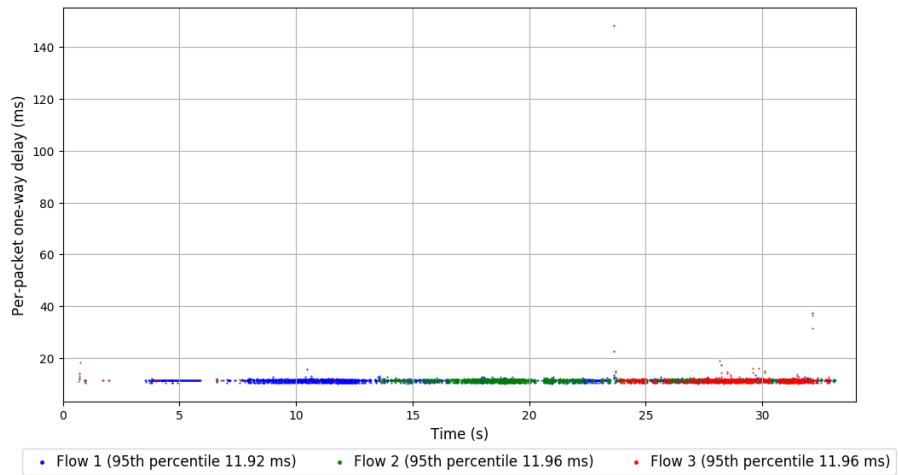
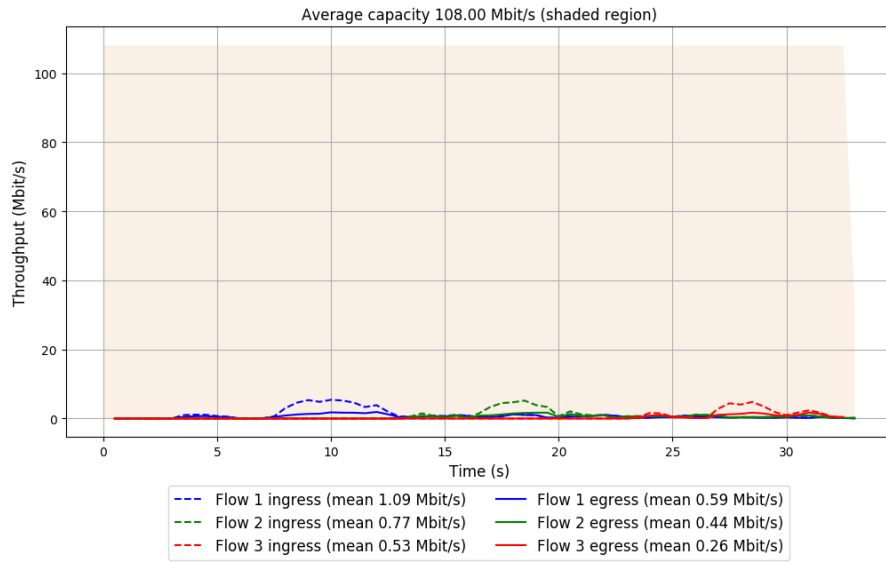
-- Flow 3:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 11.962 ms

Loss rate: 51.36%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-03-20 16:46:18

End at: 2018-03-20 16:46:48

Below is generated by plot.py at 2018-03-20 17:36:16

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.99 Mbit/s (0.9% utilization)

95th percentile per-packet one-way delay: 11.922 ms

Loss rate: 37.04%

-- Flow 1:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 11.880 ms

Loss rate: 33.33%

-- Flow 2:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 12.025 ms

Loss rate: 24.47%

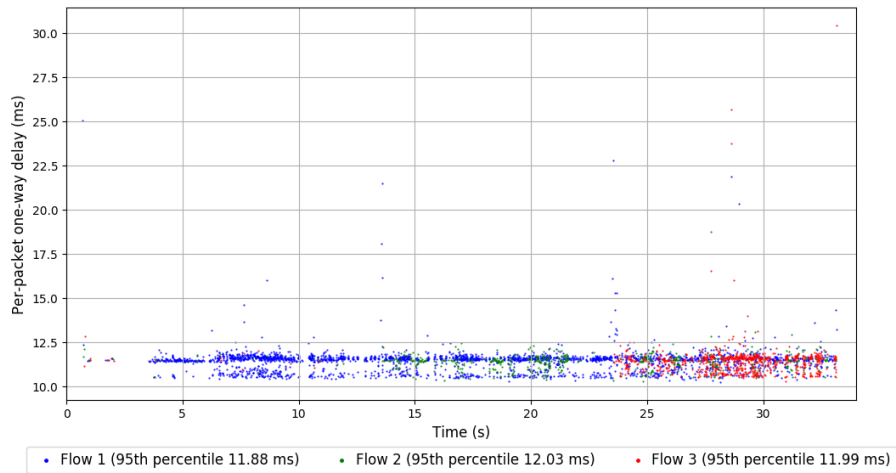
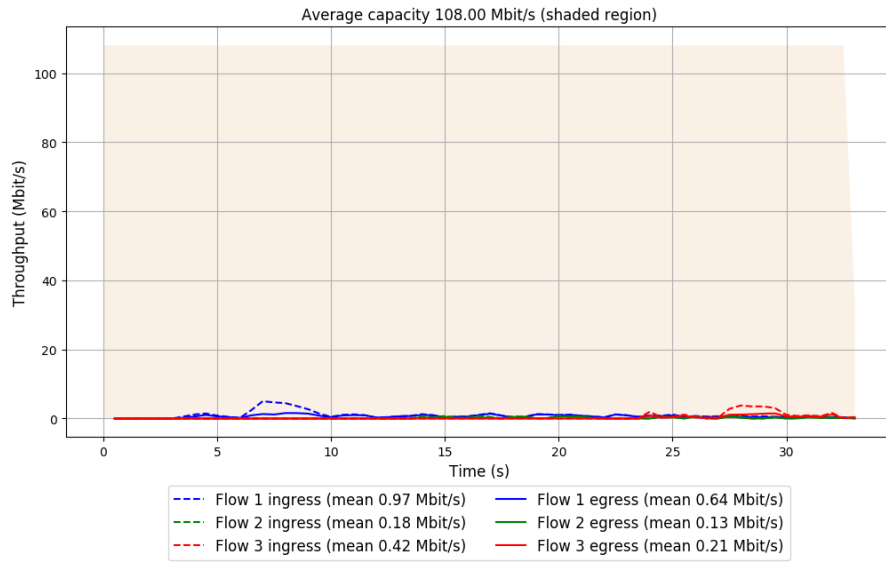
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.990 ms

Loss rate: 50.81%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-03-20 16:57:03

End at: 2018-03-20 16:57:33

Below is generated by plot.py at 2018-03-20 17:36:16

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.07 Mbit/s (1.0% utilization)

95th percentile per-packet one-way delay: 11.877 ms

Loss rate: 31.95%

-- Flow 1:

Average throughput: 0.62 Mbit/s

95th percentile per-packet one-way delay: 11.893 ms

Loss rate: 39.15%

-- Flow 2:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 11.834 ms

Loss rate: 15.49%

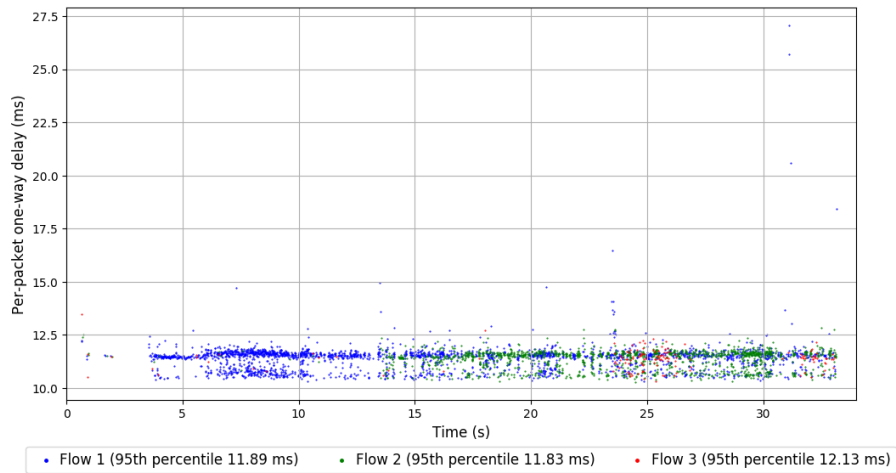
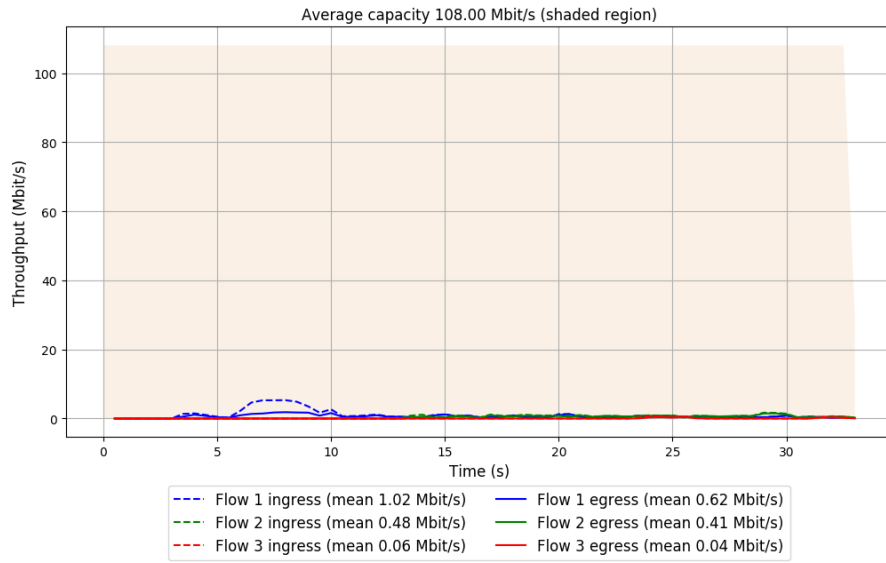
-- Flow 3:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 12.131 ms

Loss rate: 40.46%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-03-20 17:07:49

End at: 2018-03-20 17:08:19

Below is generated by plot.py at 2018-03-20 17:36:16

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.18 Mbit/s (1.1% utilization)

95th percentile per-packet one-way delay: 12.017 ms

Loss rate: 44.59%

-- Flow 1:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 11.968 ms

Loss rate: 34.40%

-- Flow 2:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 11.979 ms

Loss rate: 46.62%

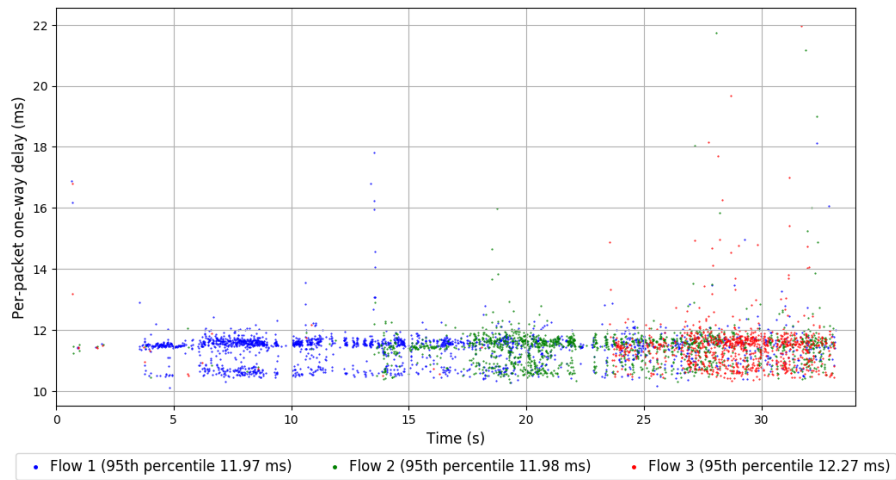
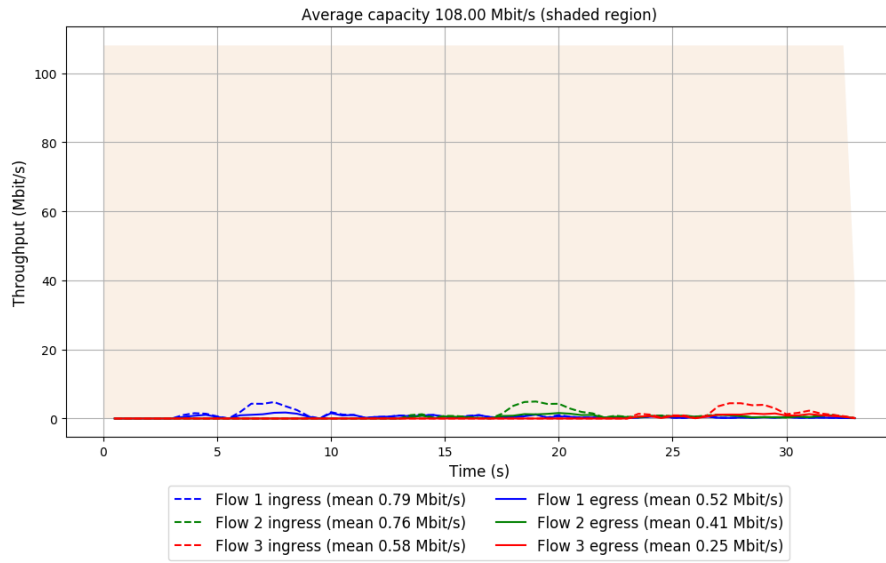
-- Flow 3:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 12.266 ms

Loss rate: 55.89%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-03-20 17:18:35

End at: 2018-03-20 17:19:05

Below is generated by plot.py at 2018-03-20 17:36:19

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.17 Mbit/s (1.1% utilization)

95th percentile per-packet one-way delay: 11.970 ms

Loss rate: 39.79%

-- Flow 1:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 11.920 ms

Loss rate: 38.55%

-- Flow 2:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 12.009 ms

Loss rate: 42.82%

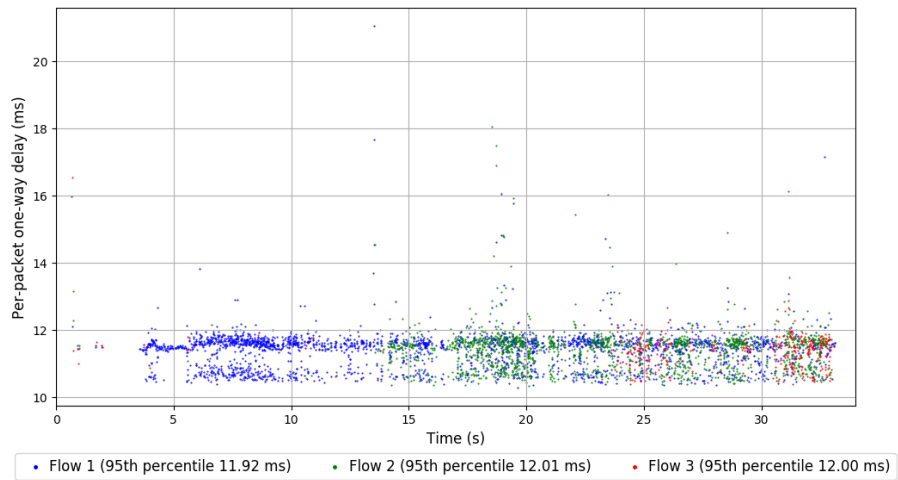
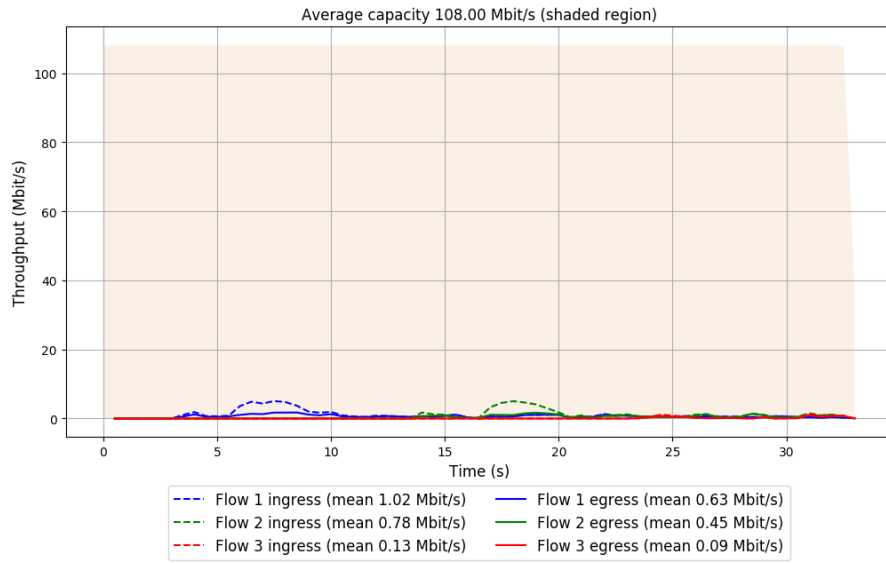
-- Flow 3:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 12.002 ms

Loss rate: 31.61%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-03-20 17:29:19

End at: 2018-03-20 17:29:49

Below is generated by plot.py at 2018-03-20 17:36:20

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.13 Mbit/s (1.0% utilization)

95th percentile per-packet one-way delay: 11.938 ms

Loss rate: 45.63%

-- Flow 1:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 11.915 ms

Loss rate: 38.47%

-- Flow 2:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 11.966 ms

Loss rate: 50.96%

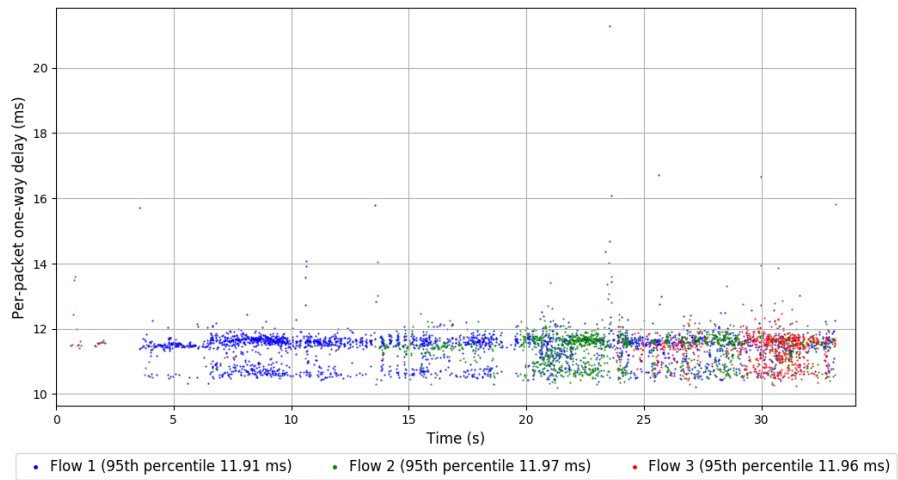
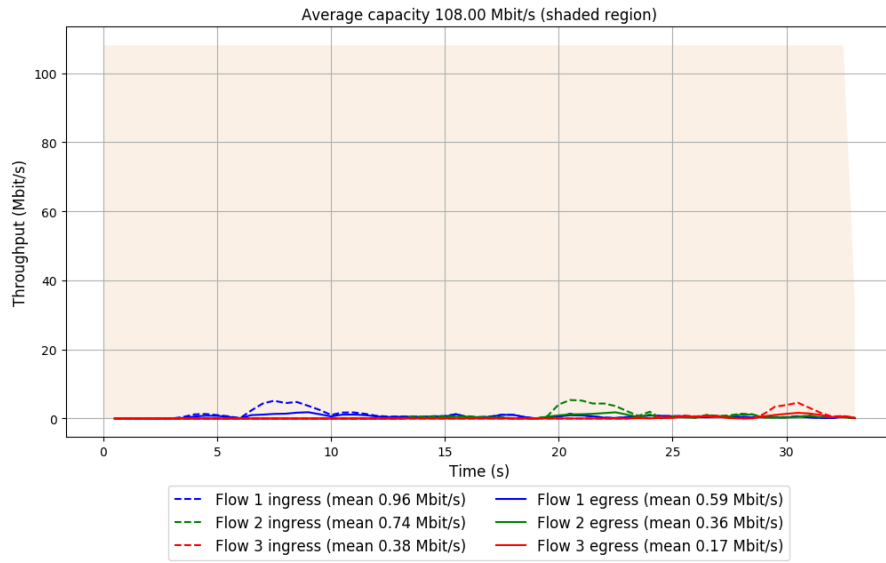
-- Flow 3:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 11.957 ms

Loss rate: 53.54%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-03-20 15:48:46

End at: 2018-03-20 15:49:16

Below is generated by plot.py at 2018-03-20 17:36:20

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.86 Mbit/s (0.8% utilization)

95th percentile per-packet one-way delay: 11.720 ms

Loss rate: 13.74%

-- Flow 1:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 11.661 ms

Loss rate: 14.35%

-- Flow 2:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 11.719 ms

Loss rate: 8.70%

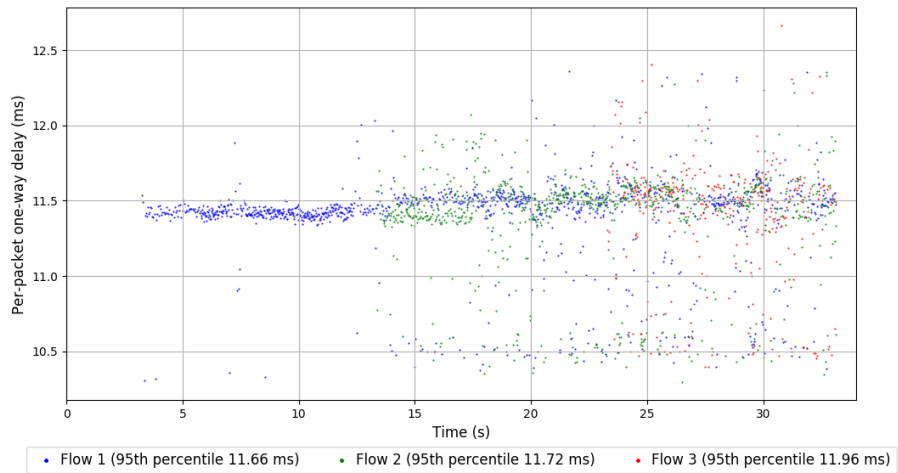
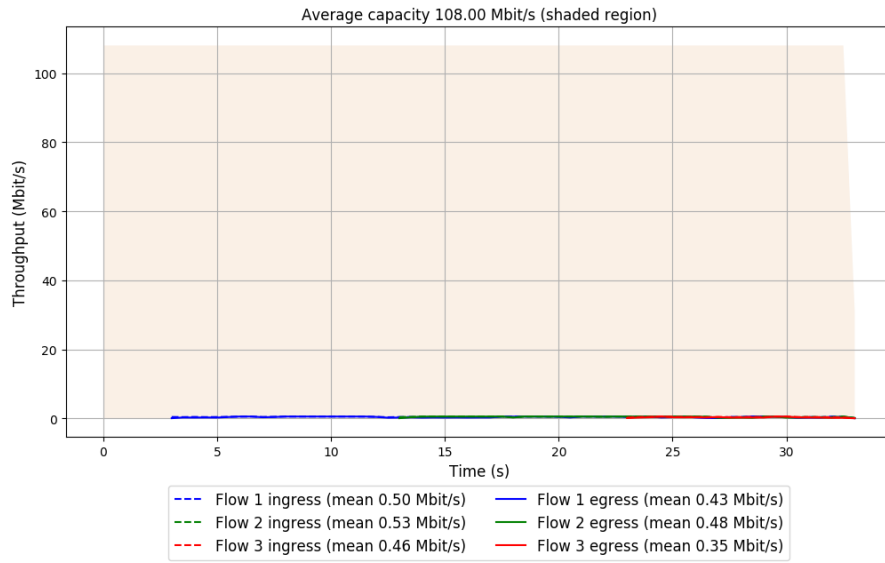
-- Flow 3:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 11.965 ms

Loss rate: 23.50%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-03-20 15:59:31

End at: 2018-03-20 16:00:01

Below is generated by plot.py at 2018-03-20 17:36:22

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.87 Mbit/s (0.8% utilization)

95th percentile per-packet one-way delay: 11.858 ms

Loss rate: 14.12%

-- Flow 1:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 11.819 ms

Loss rate: 16.12%

-- Flow 2:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 11.811 ms

Loss rate: 12.09%

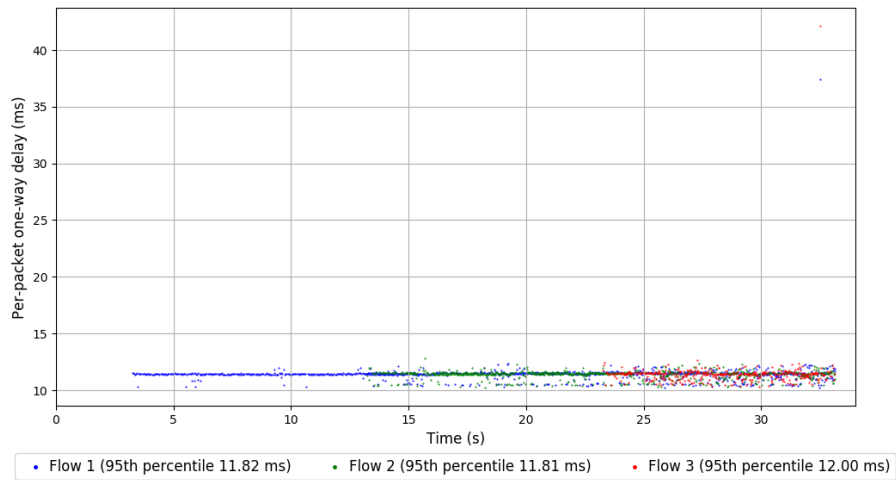
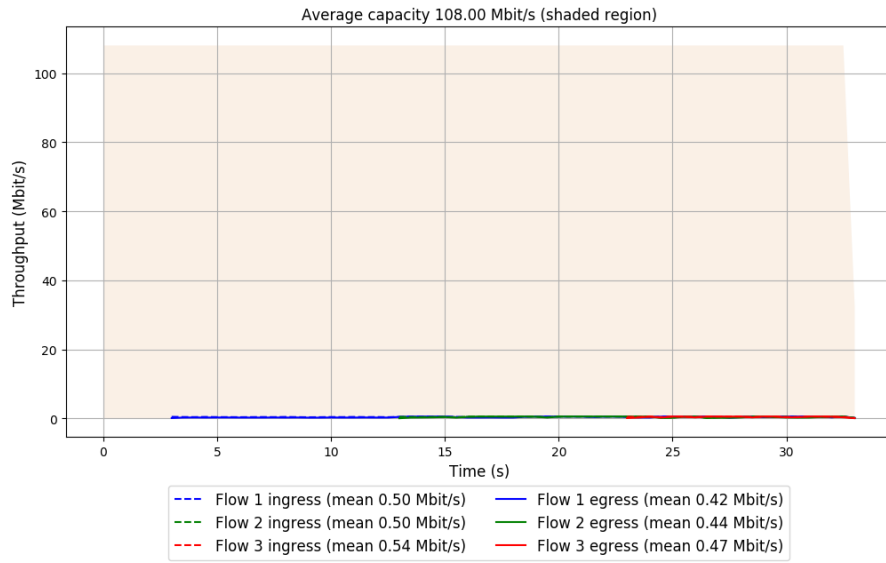
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 12.001 ms

Loss rate: 12.29%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-03-20 16:10:18

End at: 2018-03-20 16:10:48

Below is generated by plot.py at 2018-03-20 17:36:47

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.96 Mbit/s (0.9% utilization)

95th percentile per-packet one-way delay: 11.717 ms

Loss rate: 9.53%

-- Flow 1:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 11.665 ms

Loss rate: 10.13%

-- Flow 2:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 11.713 ms

Loss rate: 9.90%

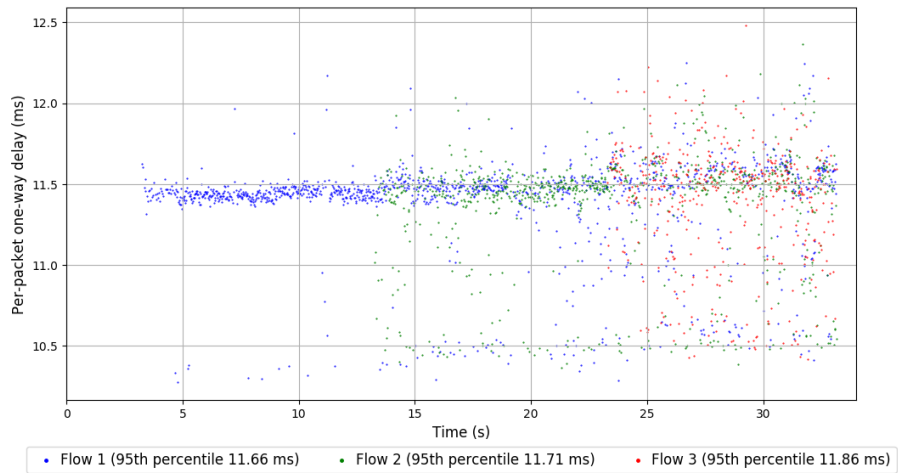
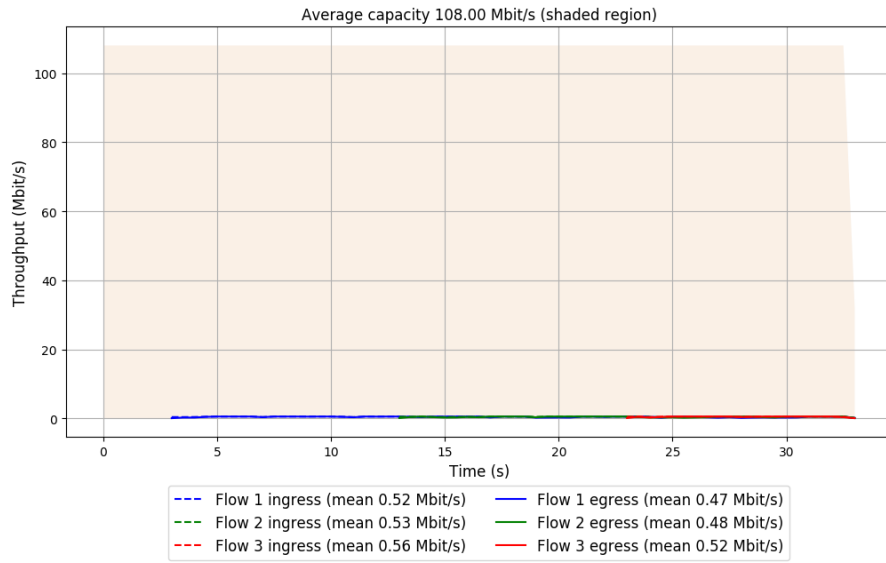
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 11.855 ms

Loss rate: 7.10%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-03-20 16:21:03

End at: 2018-03-20 16:21:33

Below is generated by plot.py at 2018-03-20 17:36:47

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.96 Mbit/s (0.9% utilization)

95th percentile per-packet one-way delay: 11.800 ms

Loss rate: 9.21%

-- Flow 1:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 11.679 ms

Loss rate: 9.79%

-- Flow 2:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 11.874 ms

Loss rate: 6.64%

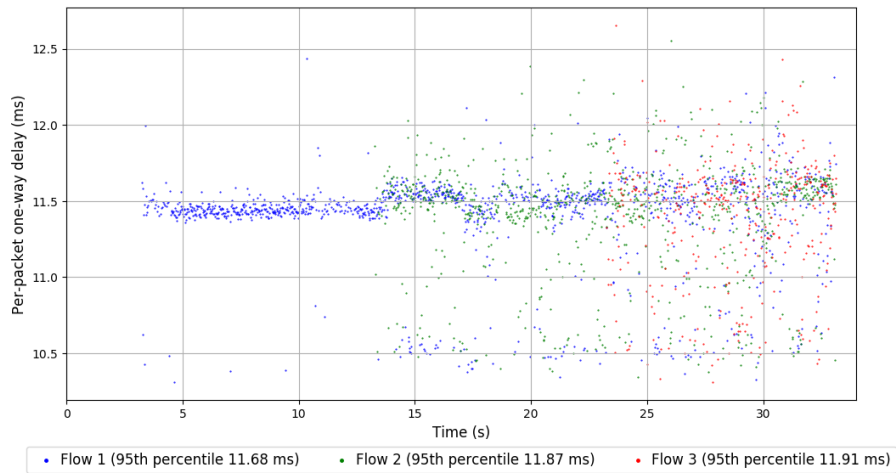
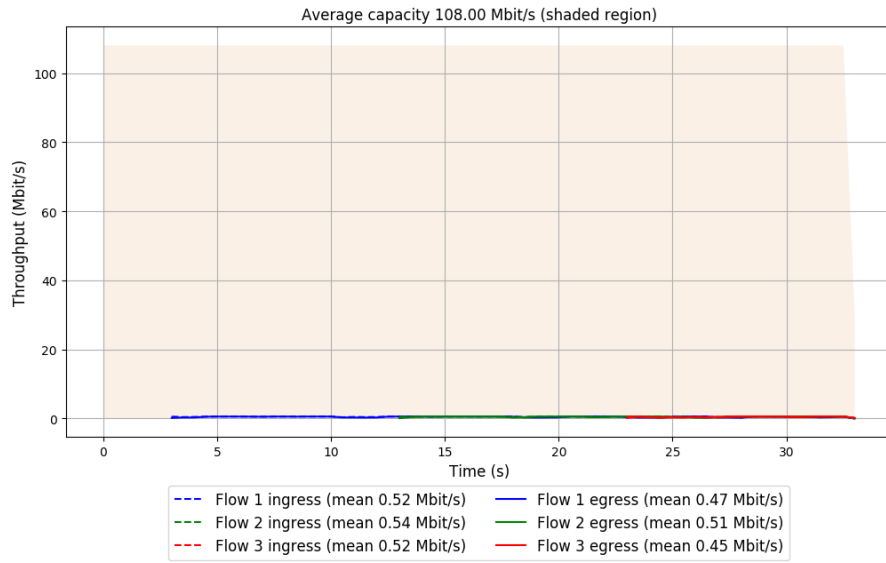
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 11.909 ms

Loss rate: 12.86%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-03-20 16:31:51

End at: 2018-03-20 16:32:21

Below is generated by plot.py at 2018-03-20 17:36:48

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.94 Mbit/s (0.9% utilization)

95th percentile per-packet one-way delay: 11.809 ms

Loss rate: 9.31%

-- Flow 1:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 11.678 ms

Loss rate: 6.24%

-- Flow 2:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 11.957 ms

Loss rate: 9.26%

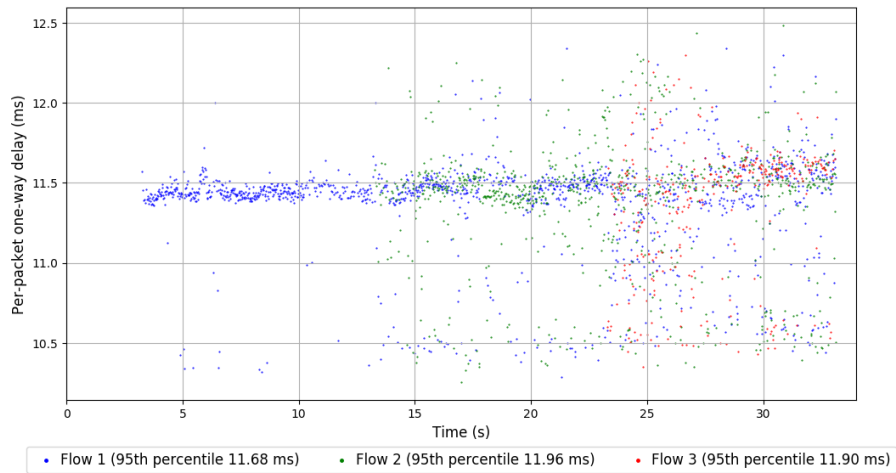
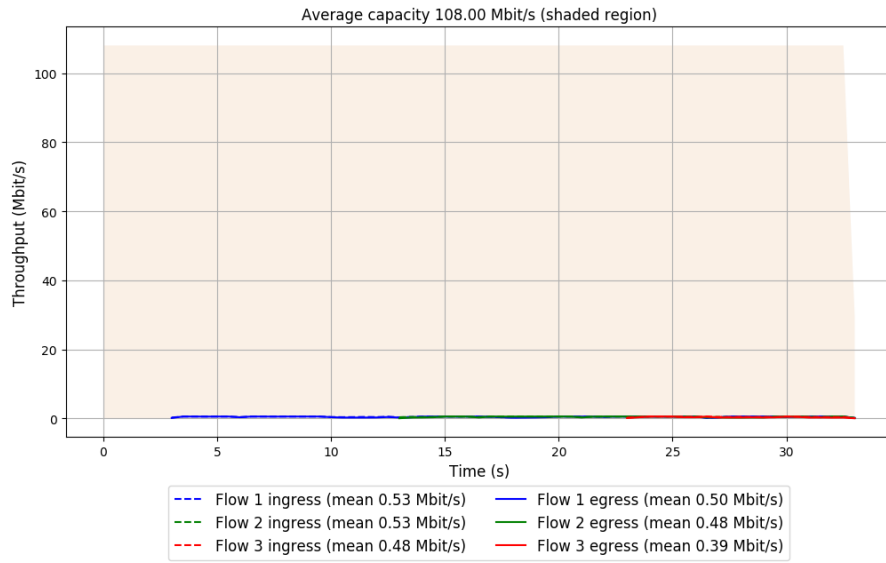
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 11.903 ms

Loss rate: 19.52%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-03-20 16:42:42

End at: 2018-03-20 16:43:12

Below is generated by plot.py at 2018-03-20 17:36:48

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.89 Mbit/s (0.8% utilization)

95th percentile per-packet one-way delay: 11.848 ms

Loss rate: 12.02%

-- Flow 1:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 11.778 ms

Loss rate: 12.55%

-- Flow 2:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 11.896 ms

Loss rate: 11.05%

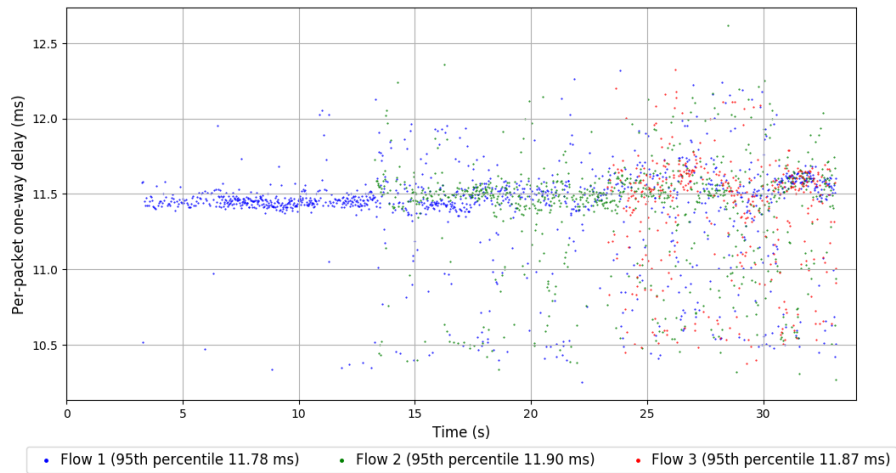
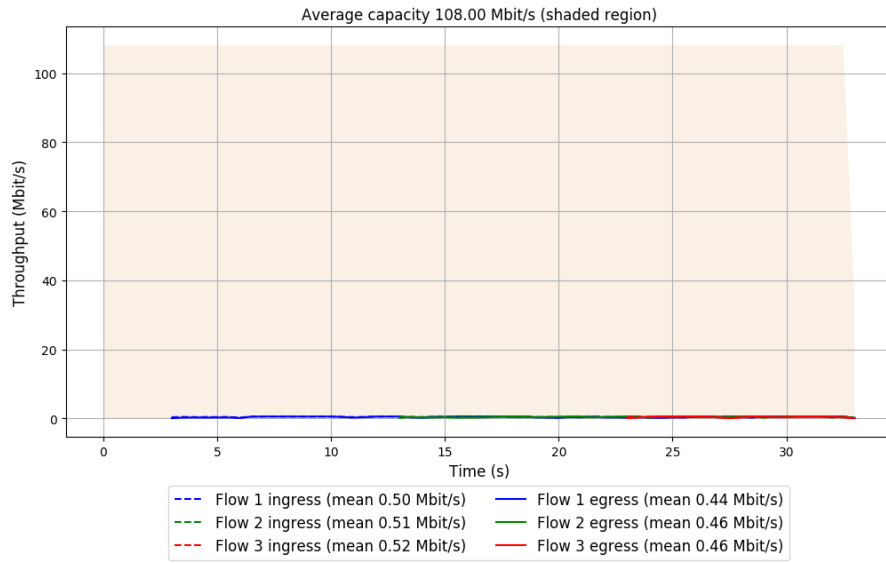
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 11.870 ms

Loss rate: 12.41%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-03-20 16:53:27

End at: 2018-03-20 16:53:57

Below is generated by plot.py at 2018-03-20 17:36:51

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.88 Mbit/s (0.8% utilization)

95th percentile per-packet one-way delay: 11.727 ms

Loss rate: 12.61%

-- Flow 1:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 11.649 ms

Loss rate: 10.56%

-- Flow 2:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 11.813 ms

Loss rate: 8.33%

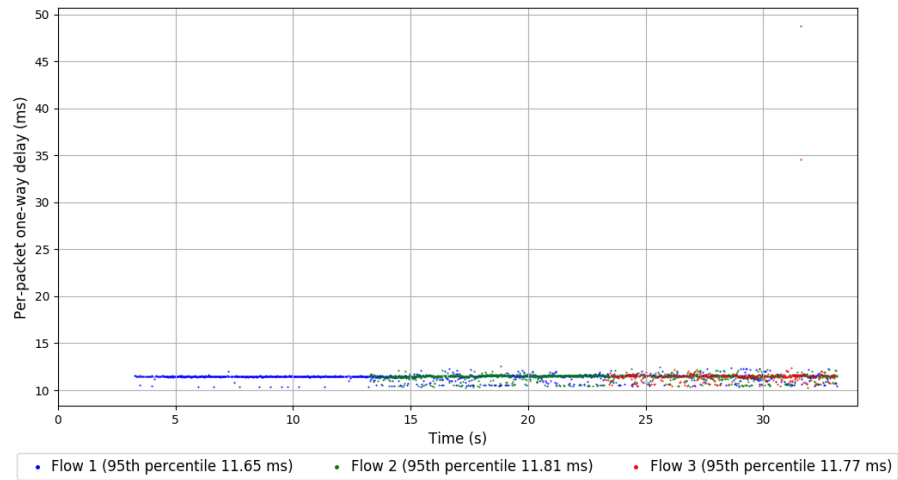
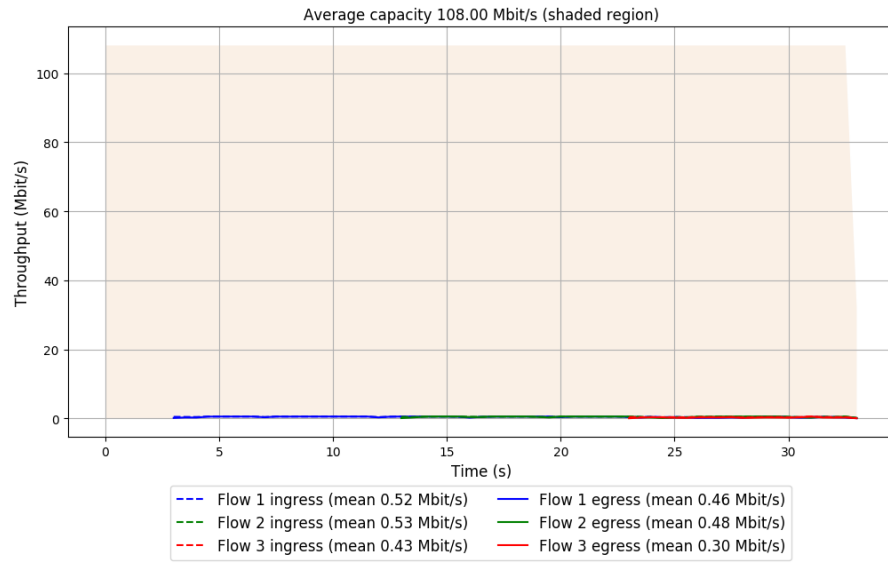
-- Flow 3:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 11.772 ms

Loss rate: 30.64%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-03-20 17:04:13

End at: 2018-03-20 17:04:43

Below is generated by plot.py at 2018-03-20 17:36:53

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.98 Mbit/s (0.9% utilization)

95th percentile per-packet one-way delay: 11.838 ms

Loss rate: 7.99%

-- Flow 1:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 11.833 ms

Loss rate: 6.09%

-- Flow 2:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 11.782 ms

Loss rate: 7.83%

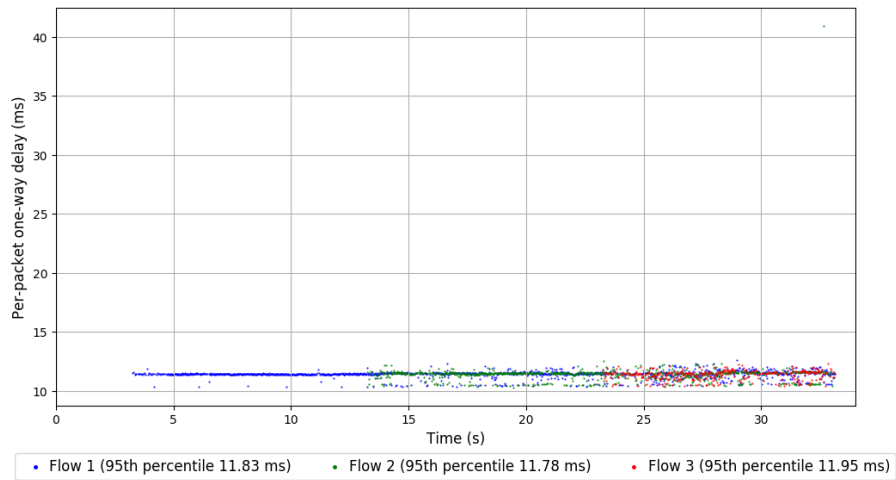
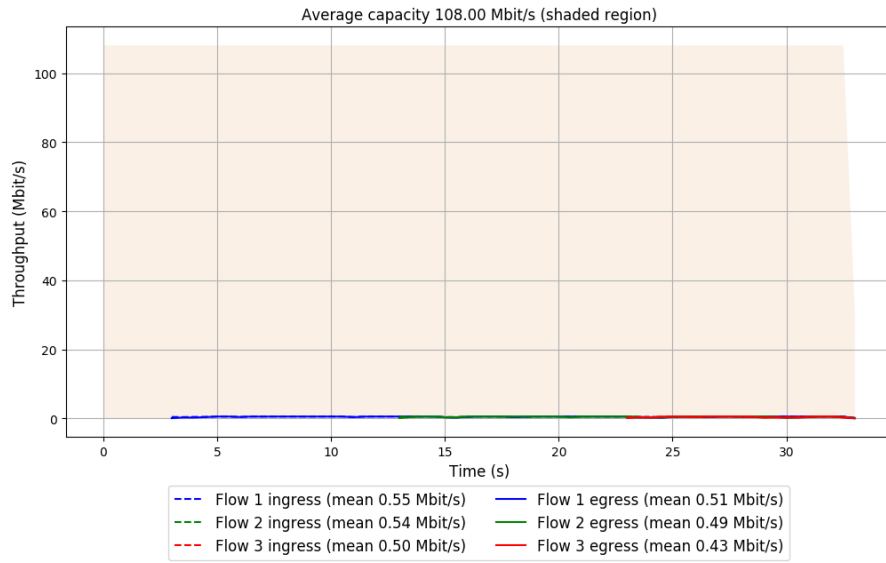
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 11.948 ms

Loss rate: 14.64%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-03-20 17:14:59

End at: 2018-03-20 17:15:29

Below is generated by plot.py at 2018-03-20 17:36:53

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.90 Mbit/s (0.8% utilization)

95th percentile per-packet one-way delay: 11.909 ms

Loss rate: 11.60%

-- Flow 1:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 11.852 ms

Loss rate: 10.01%

-- Flow 2:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 11.975 ms

Loss rate: 13.82%

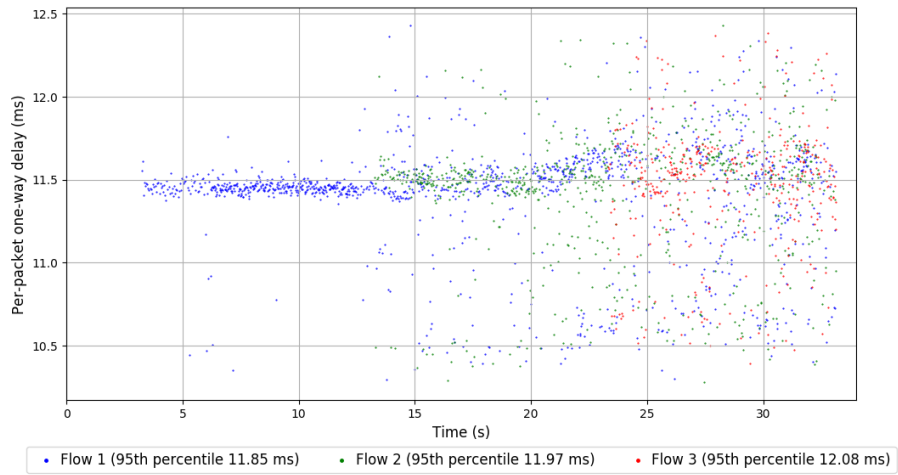
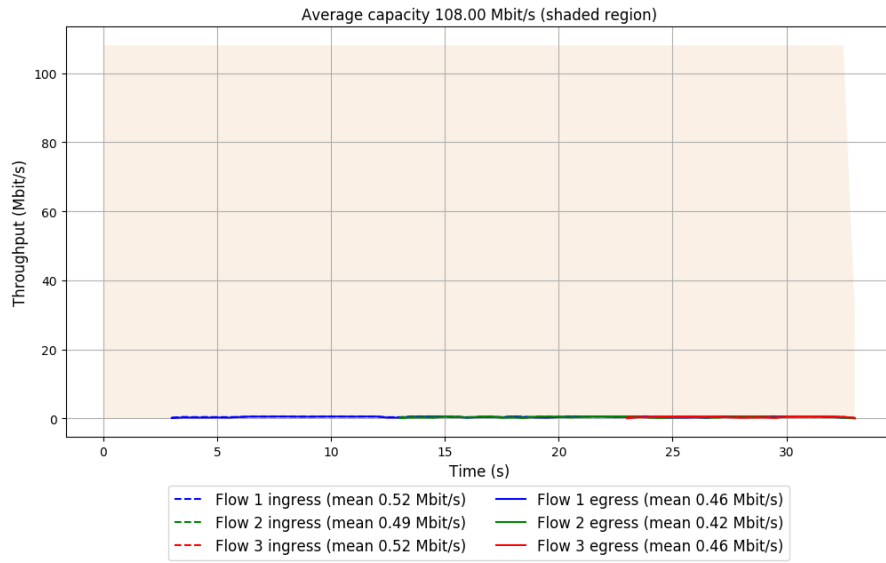
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 12.079 ms

Loss rate: 12.14%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-03-20 17:25:44

End at: 2018-03-20 17:26:14

Below is generated by plot.py at 2018-03-20 17:36:54

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.95 Mbit/s (0.9% utilization)

95th percentile per-packet one-way delay: 11.842 ms

Loss rate: 9.60%

-- Flow 1:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 11.864 ms

Loss rate: 11.41%

-- Flow 2:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 11.821 ms

Loss rate: 7.35%

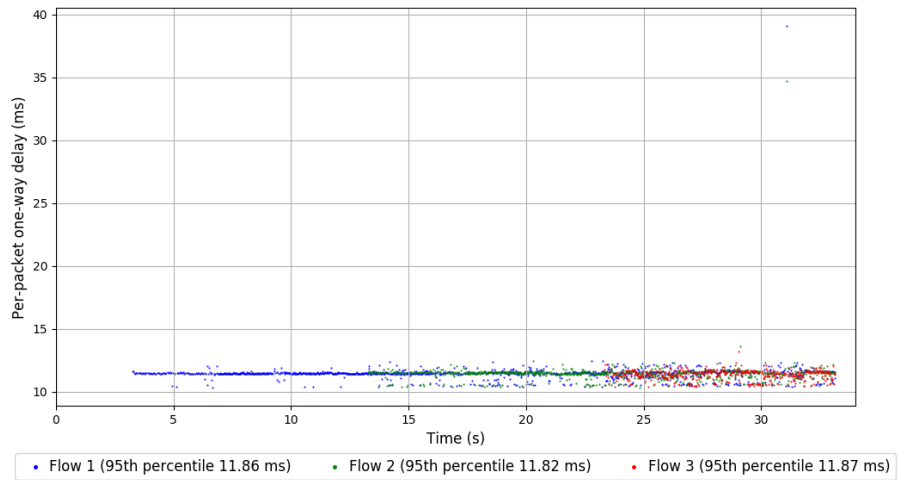
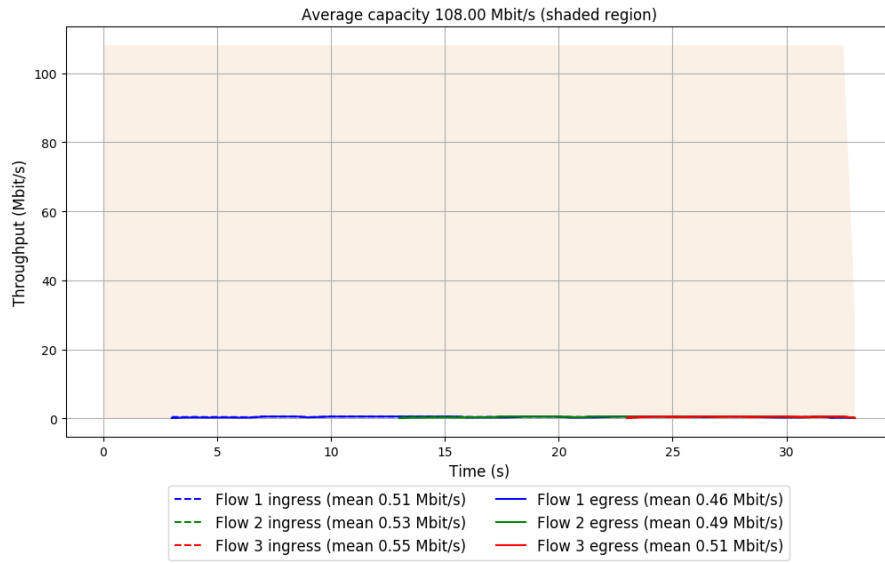
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 11.874 ms

Loss rate: 8.81%

Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-03-20 15:48:11

End at: 2018-03-20 15:48:41

Below is generated by plot.py at 2018-03-20 17:37:19

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.01 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 11.827 ms

Loss rate: 53.62%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.557 ms

Loss rate: 53.69%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.877 ms

Loss rate: 53.62%

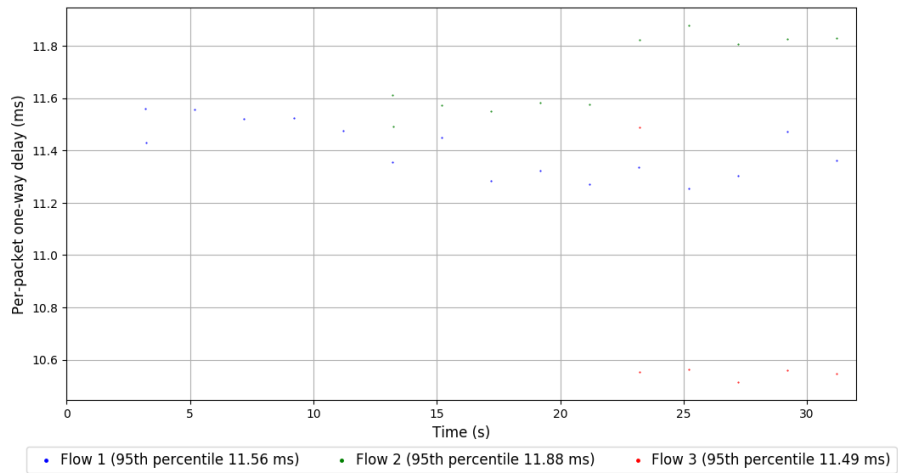
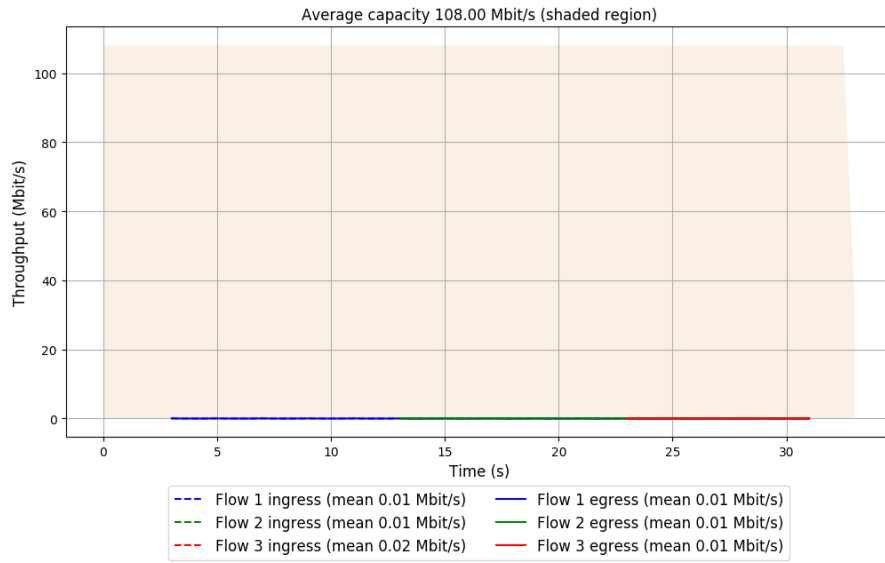
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.489 ms

Loss rate: 53.41%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-03-20 15:58:56

End at: 2018-03-20 15:59:26

Below is generated by plot.py at 2018-03-20 17:37:19

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.01 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 11.914 ms

Loss rate: 53.56%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.914 ms

Loss rate: 53.69%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.640 ms

Loss rate: 53.30%

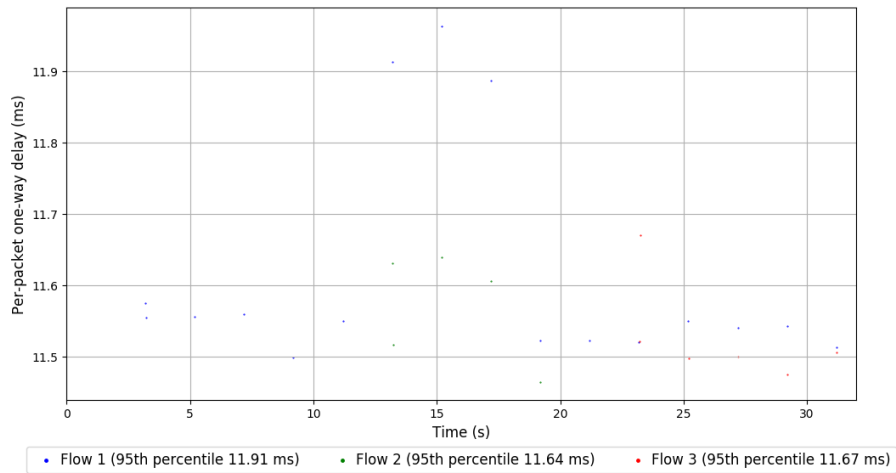
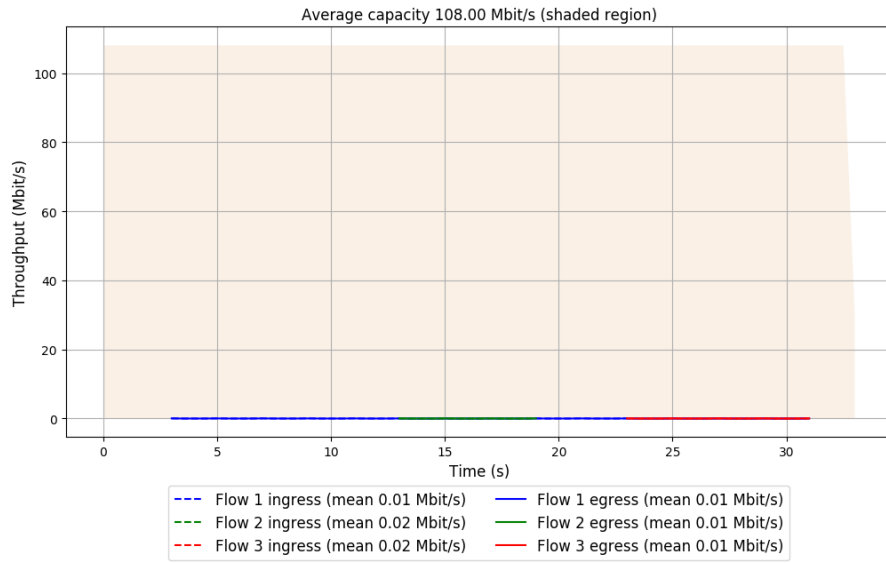
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.671 ms

Loss rate: 53.41%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-03-20 16:09:42

End at: 2018-03-20 16:10:12

Below is generated by plot.py at 2018-03-20 17:37:19

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.02 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 11.778 ms

Loss rate: 64.18%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.778 ms

Loss rate: 67.52%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.601 ms

Loss rate: 53.79%

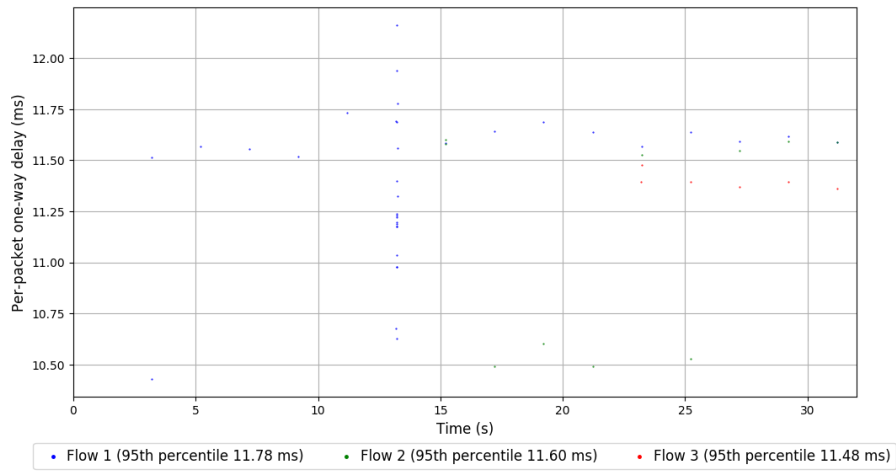
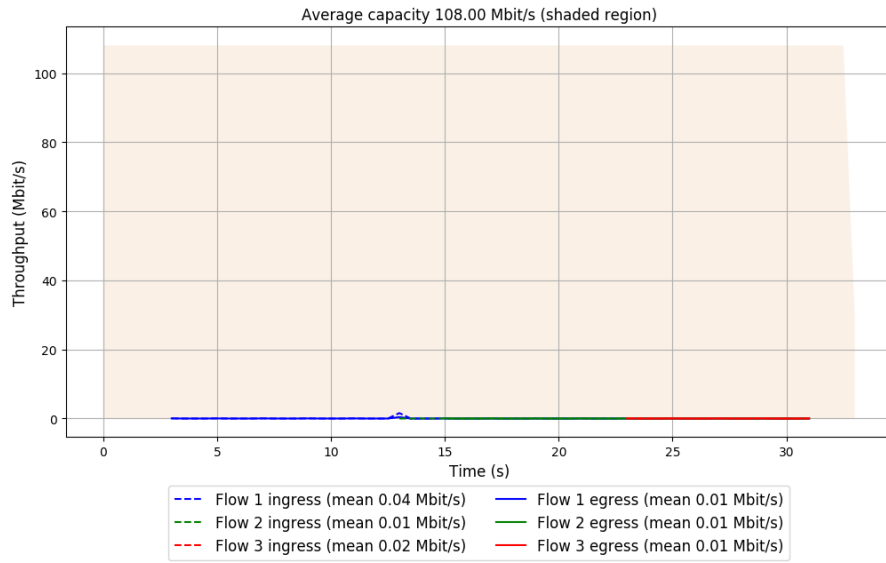
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.478 ms

Loss rate: 53.41%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-03-20 16:20:28

End at: 2018-03-20 16:20:58

Below is generated by plot.py at 2018-03-20 17:37:19

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.01 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 11.602 ms

Loss rate: 53.62%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.534 ms

Loss rate: 53.69%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.568 ms

Loss rate: 53.62%

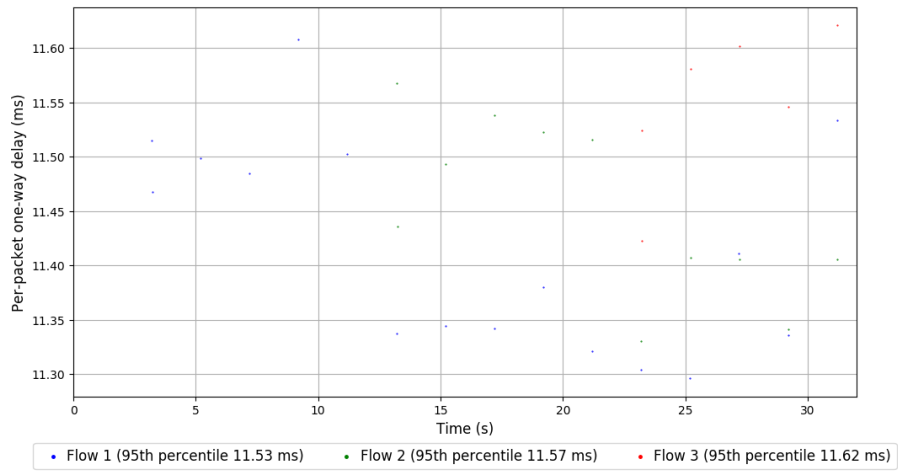
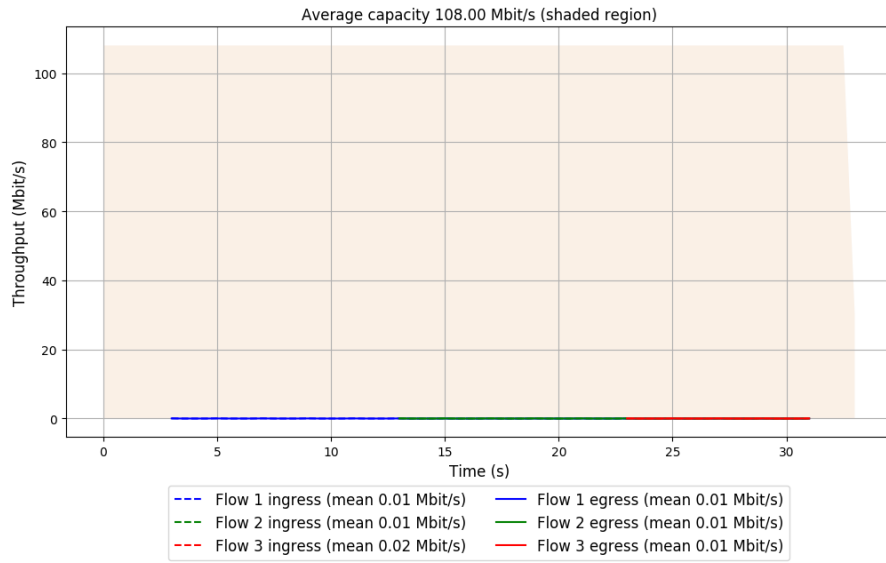
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.621 ms

Loss rate: 53.41%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-03-20 16:31:16

End at: 2018-03-20 16:31:46

Below is generated by plot.py at 2018-03-20 17:37:21

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.01 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 12.152 ms

Loss rate: 53.62%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.561 ms

Loss rate: 53.69%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 12.174 ms

Loss rate: 53.62%

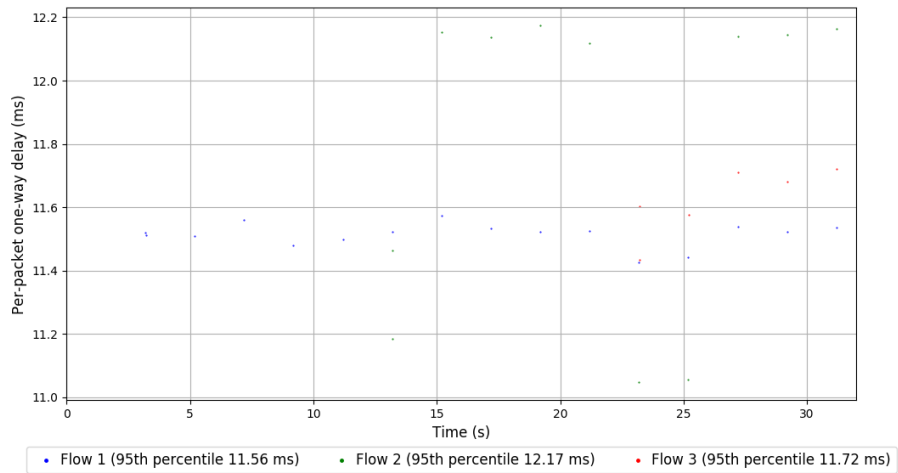
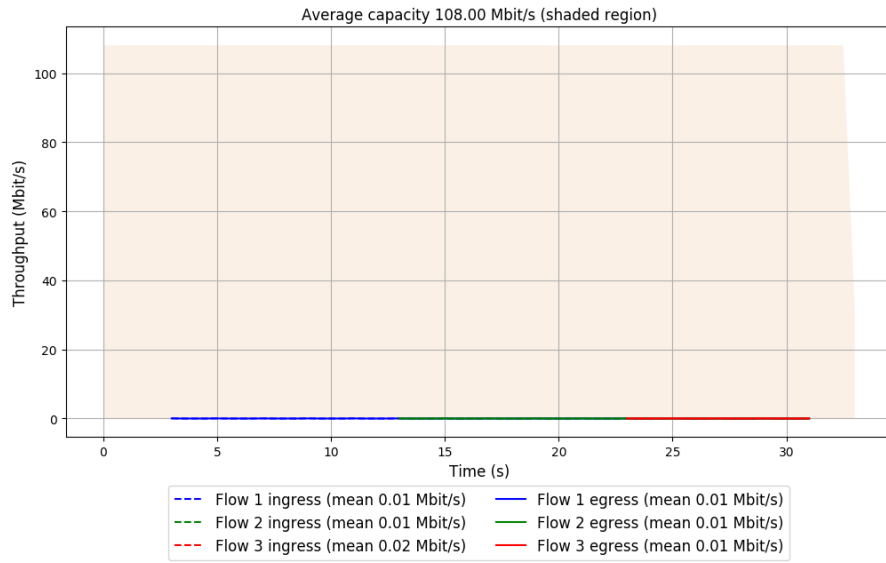
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.720 ms

Loss rate: 53.41%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-03-20 16:42:07

End at: 2018-03-20 16:42:37

Below is generated by plot.py at 2018-03-20 17:37:21

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.01 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 11.581 ms

Loss rate: 53.65%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.581 ms

Loss rate: 53.69%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.536 ms

Loss rate: 53.48%

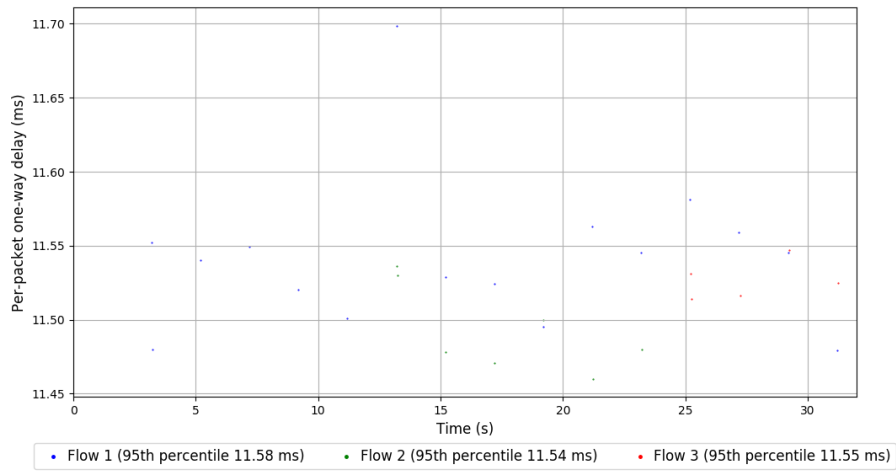
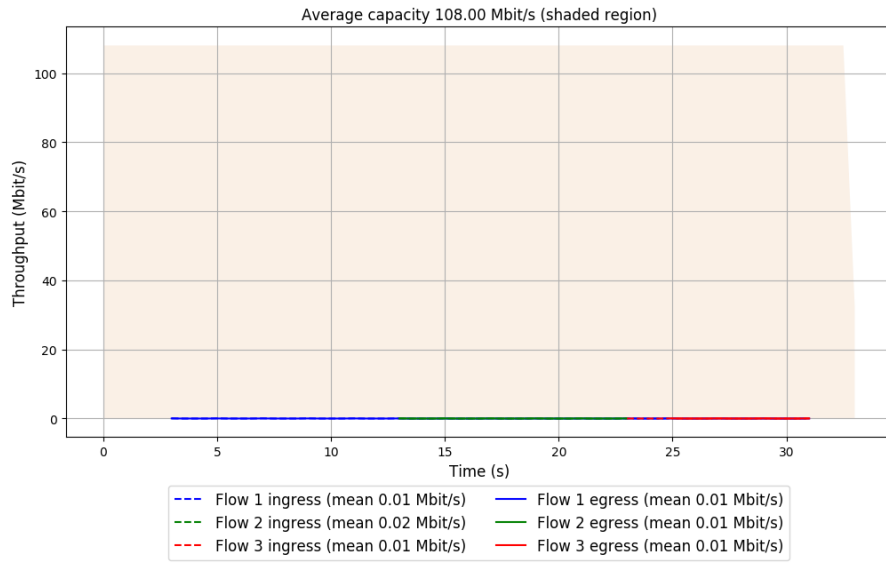
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.547 ms

Loss rate: 53.75%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-03-20 16:52:52

End at: 2018-03-20 16:53:22

Below is generated by plot.py at 2018-03-20 17:37:23

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.01 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 11.619 ms

Loss rate: 53.53%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.607 ms

Loss rate: 53.48%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.523 ms

Loss rate: 53.62%

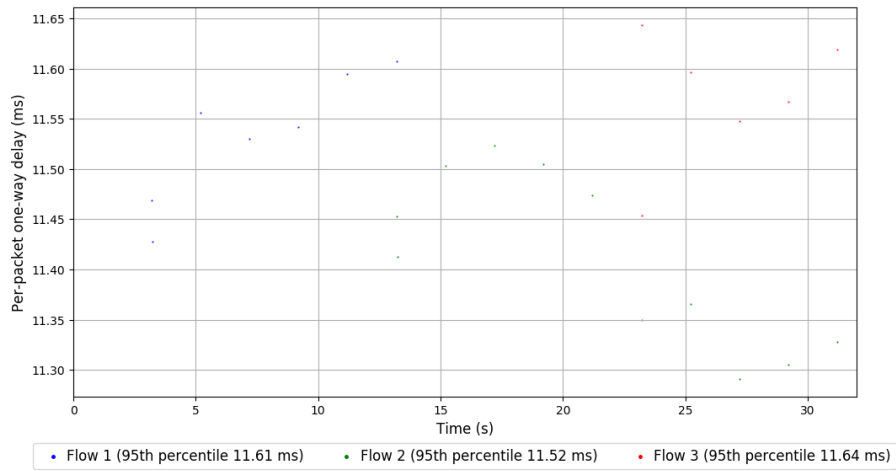
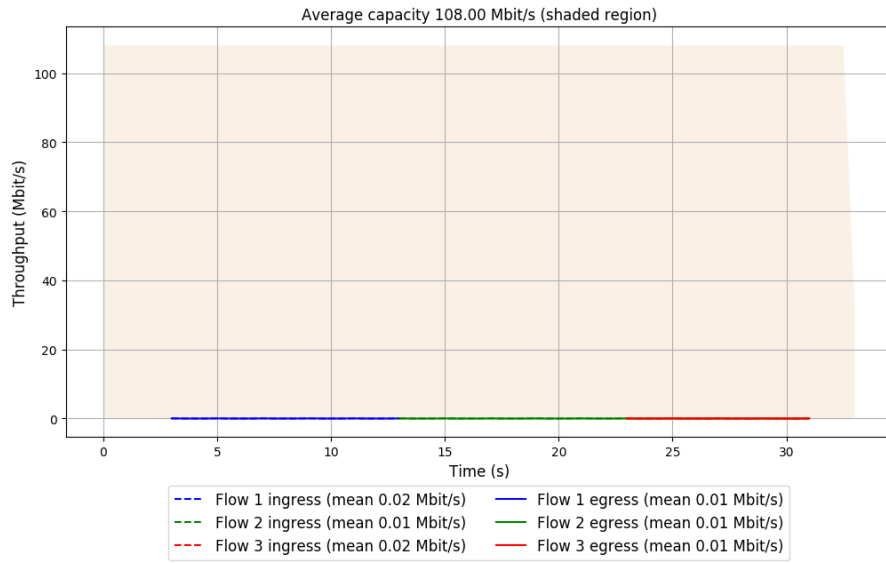
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.643 ms

Loss rate: 53.41%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-03-20 17:03:38

End at: 2018-03-20 17:04:08

Below is generated by plot.py at 2018-03-20 17:37:25

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.01 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 11.610 ms

Loss rate: 53.62%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.551 ms

Loss rate: 53.69%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.627 ms

Loss rate: 53.62%

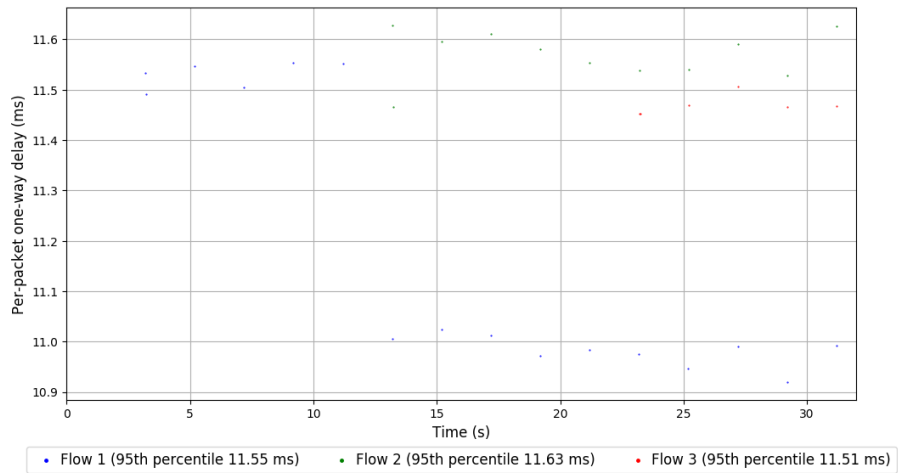
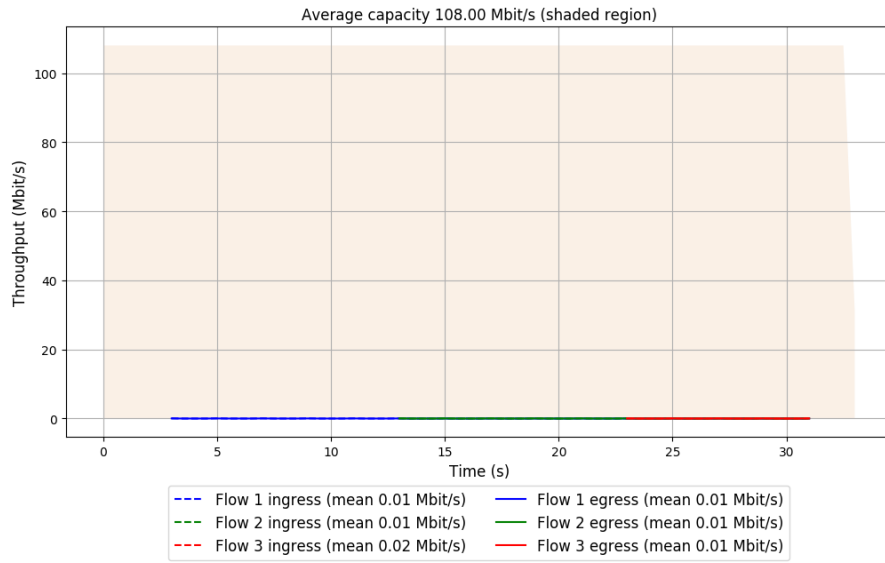
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.507 ms

Loss rate: 53.41%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-03-20 17:14:24

End at: 2018-03-20 17:14:54

Below is generated by plot.py at 2018-03-20 17:37:47

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.01 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 11.743 ms

Loss rate: 52.08%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.589 ms

Loss rate: 53.69%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.680 ms

Loss rate: 49.02%

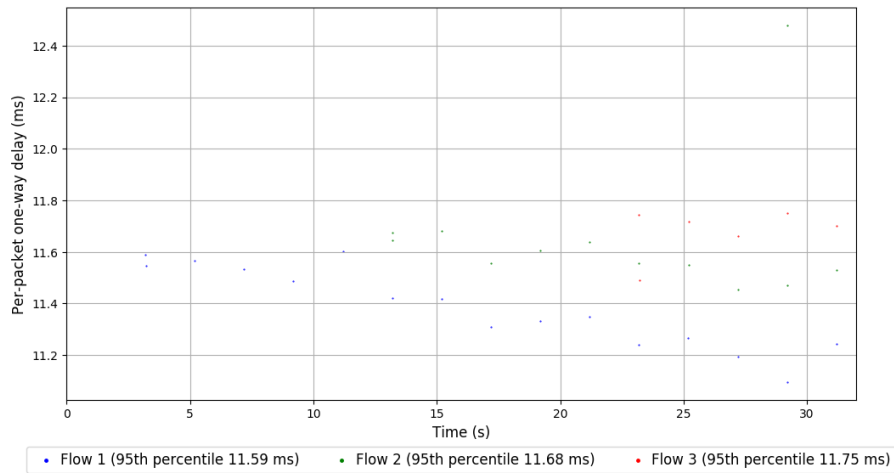
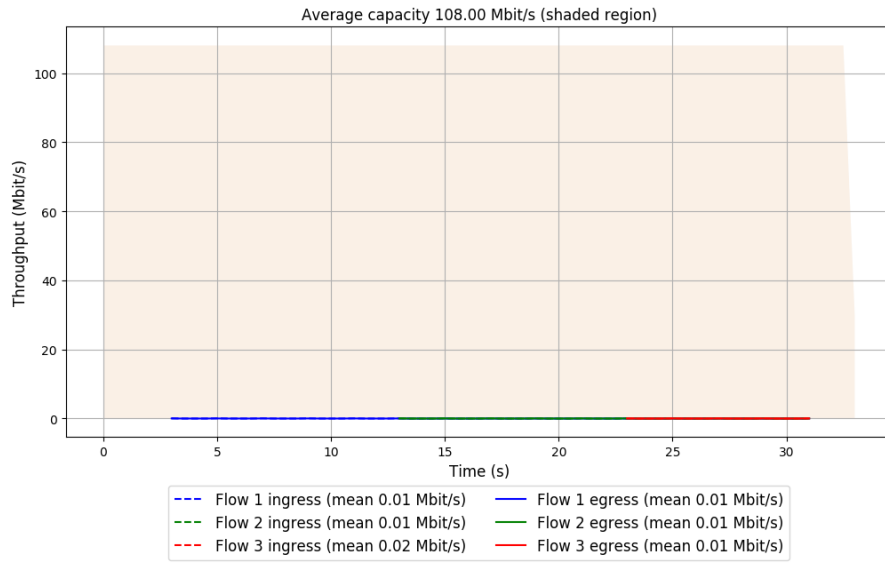
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.750 ms

Loss rate: 53.41%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-03-20 17:25:09

End at: 2018-03-20 17:25:39

Below is generated by plot.py at 2018-03-20 17:37:47

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.01 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 11.615 ms

Loss rate: 53.67%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.615 ms

Loss rate: 53.69%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.595 ms

Loss rate: 53.79%

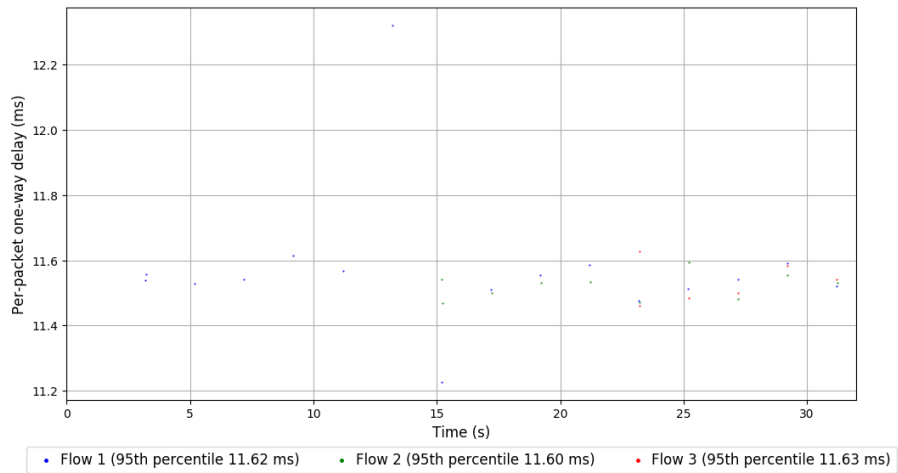
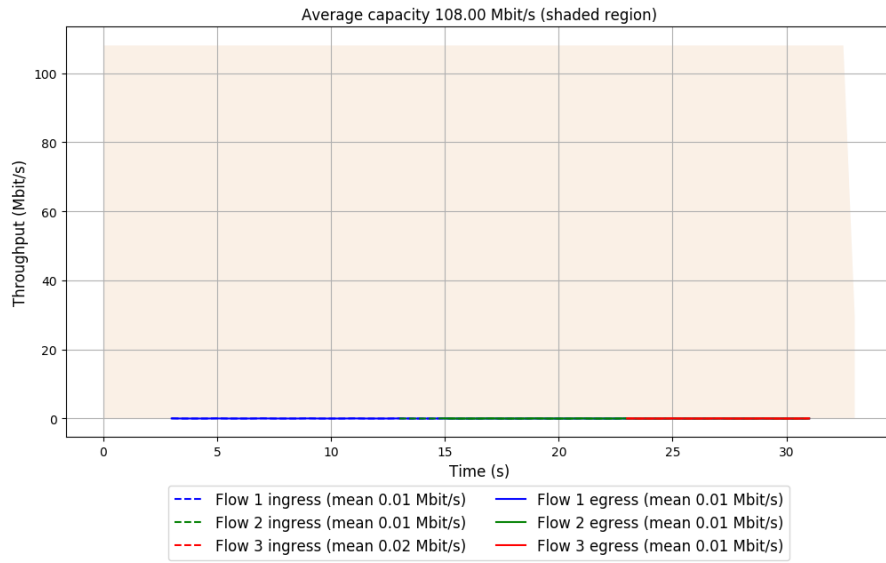
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.629 ms

Loss rate: 53.41%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-03-20 15:47:00

End at: 2018-03-20 15:47:30

Below is generated by plot.py at 2018-03-20 17:37:51

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.05 Mbit/s (1.0% utilization)

95th percentile per-packet one-way delay: 11.650 ms

Loss rate: 24.90%

-- Flow 1:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 11.628 ms

Loss rate: 24.90%

-- Flow 2:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 11.650 ms

Loss rate: 24.85%

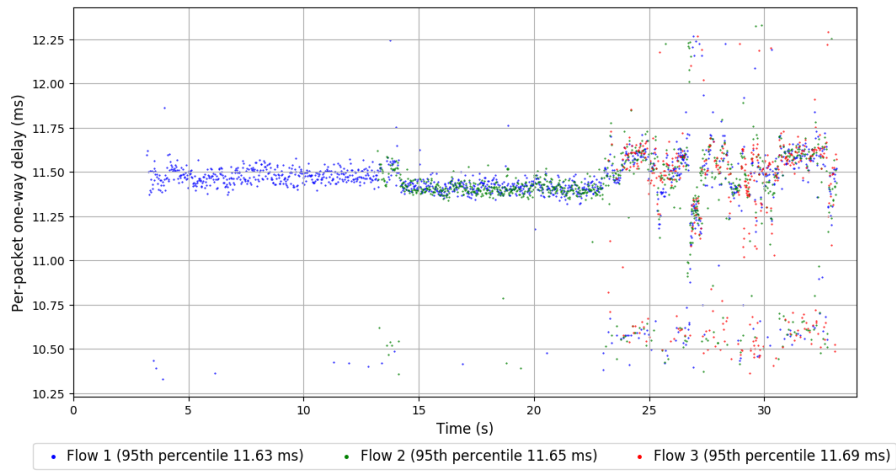
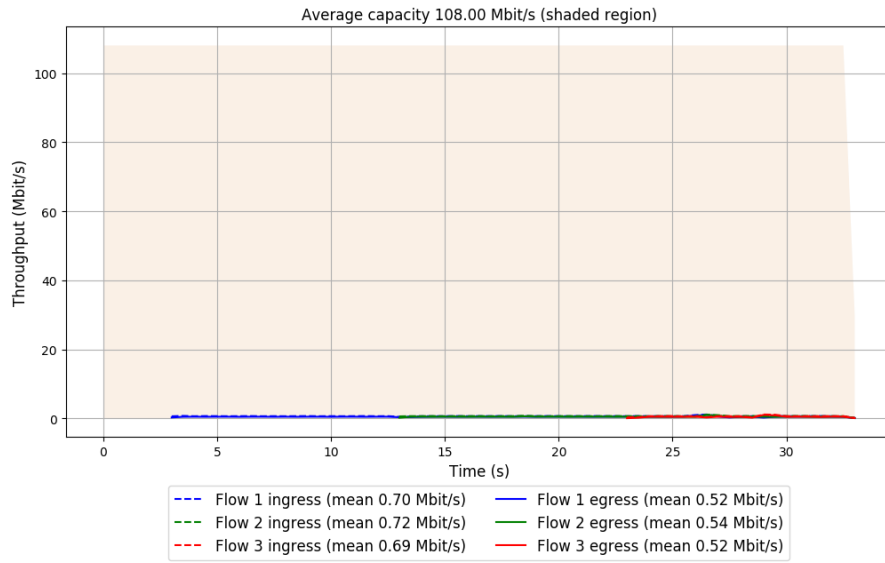
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 11.694 ms

Loss rate: 25.04%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-03-20 15:57:44

End at: 2018-03-20 15:58:14

Below is generated by plot.py at 2018-03-20 17:37:51

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.05 Mbit/s (1.0% utilization)

95th percentile per-packet one-way delay: 11.623 ms

Loss rate: 24.21%

-- Flow 1:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 11.599 ms

Loss rate: 23.83%

-- Flow 2:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 11.644 ms

Loss rate: 23.48%

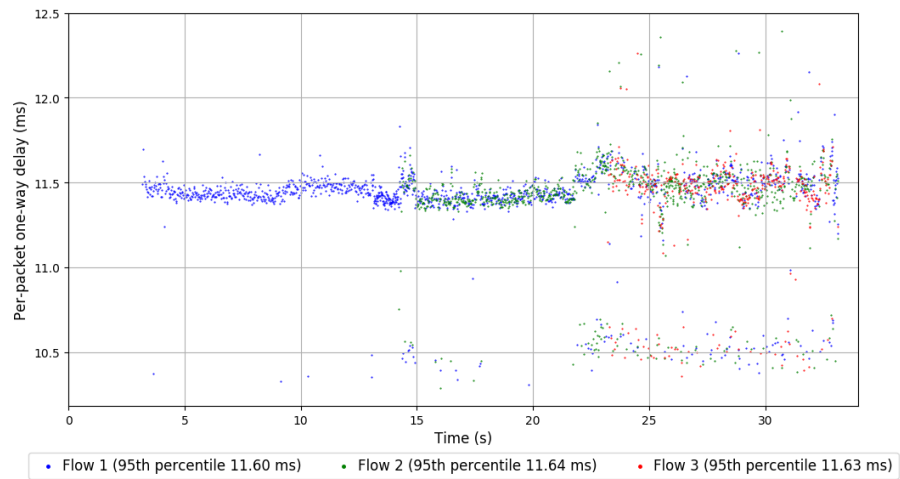
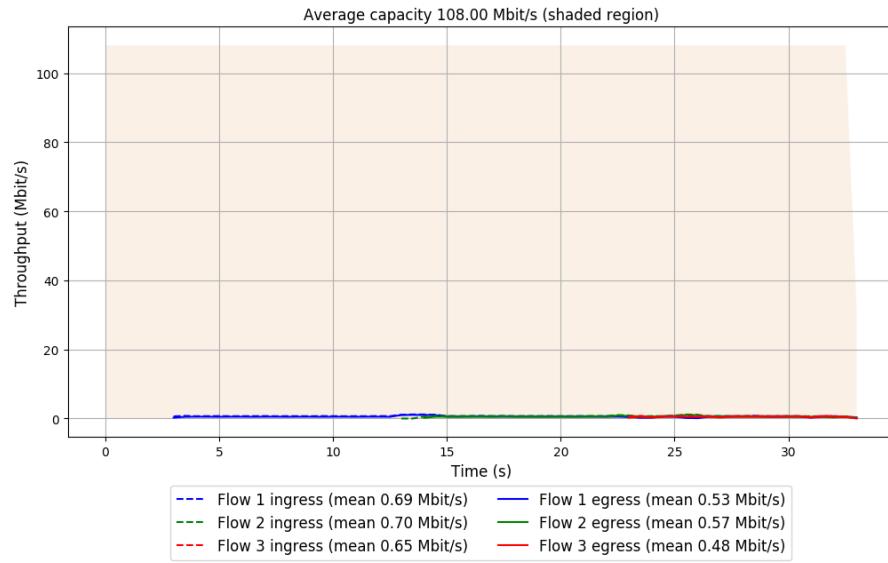
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 11.630 ms

Loss rate: 26.98%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-03-20 16:08:31

End at: 2018-03-20 16:09:01

Below is generated by plot.py at 2018-03-20 17:37:51

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.15 Mbit/s (1.1% utilization)

95th percentile per-packet one-way delay: 11.664 ms

Loss rate: 22.08%

-- Flow 1:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 11.643 ms

Loss rate: 20.61%

-- Flow 2:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 11.670 ms

Loss rate: 22.46%

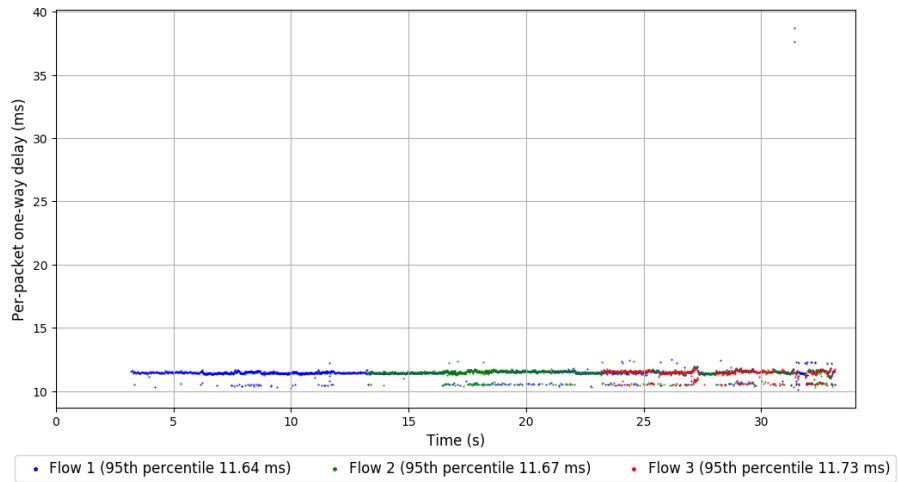
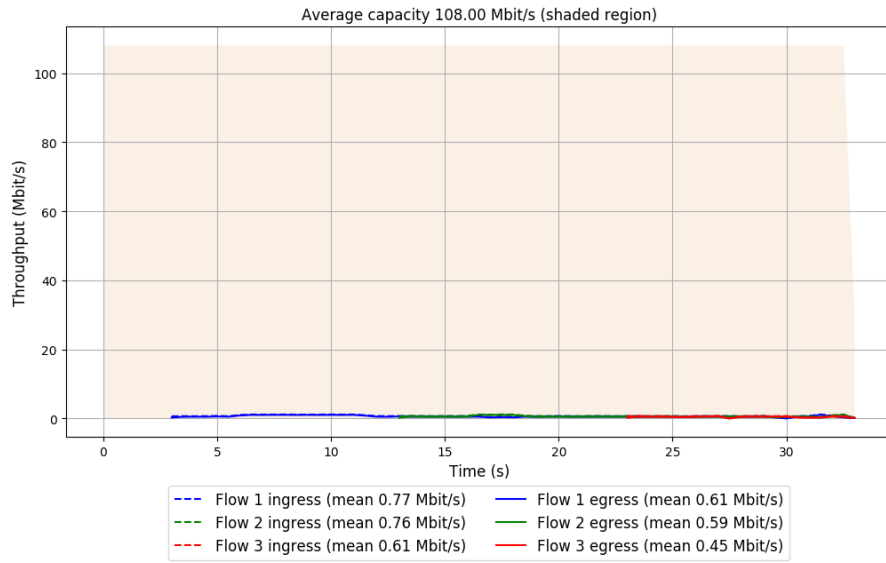
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 11.727 ms

Loss rate: 26.71%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-03-20 16:19:16

End at: 2018-03-20 16:19:46

Below is generated by plot.py at 2018-03-20 17:37:53

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.07 Mbit/s (1.0% utilization)

95th percentile per-packet one-way delay: 11.656 ms

Loss rate: 24.37%

-- Flow 1:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 11.625 ms

Loss rate: 22.70%

-- Flow 2:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 11.652 ms

Loss rate: 26.10%

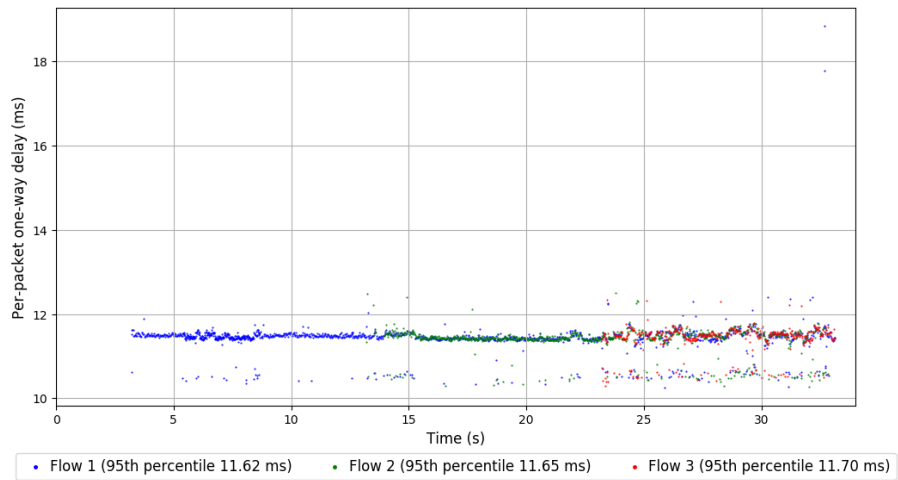
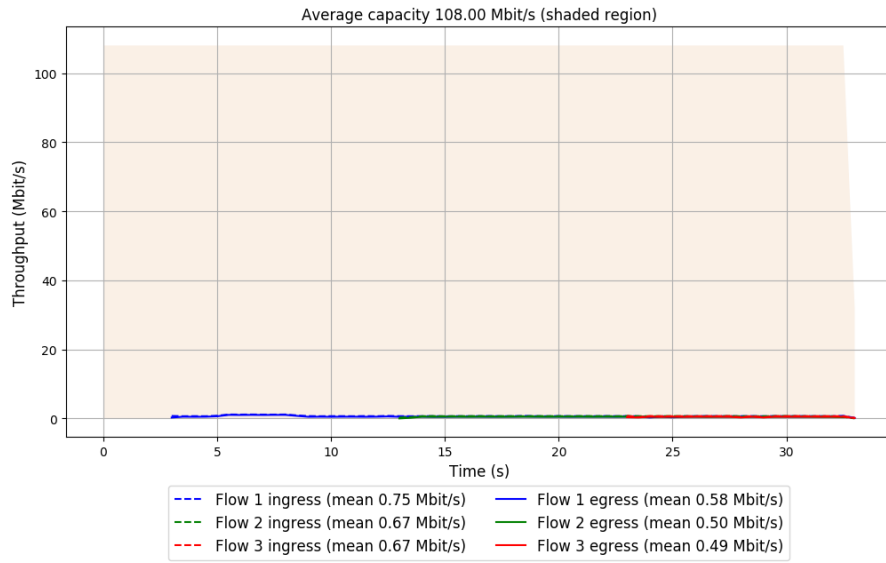
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 11.701 ms

Loss rate: 26.49%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-03-20 16:30:05

End at: 2018-03-20 16:30:35

Below is generated by plot.py at 2018-03-20 17:37:56

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.21 Mbit/s (1.1% utilization)

95th percentile per-packet one-way delay: 11.660 ms

Loss rate: 21.47%

-- Flow 1:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 11.639 ms

Loss rate: 19.85%

-- Flow 2:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 11.667 ms

Loss rate: 21.88%

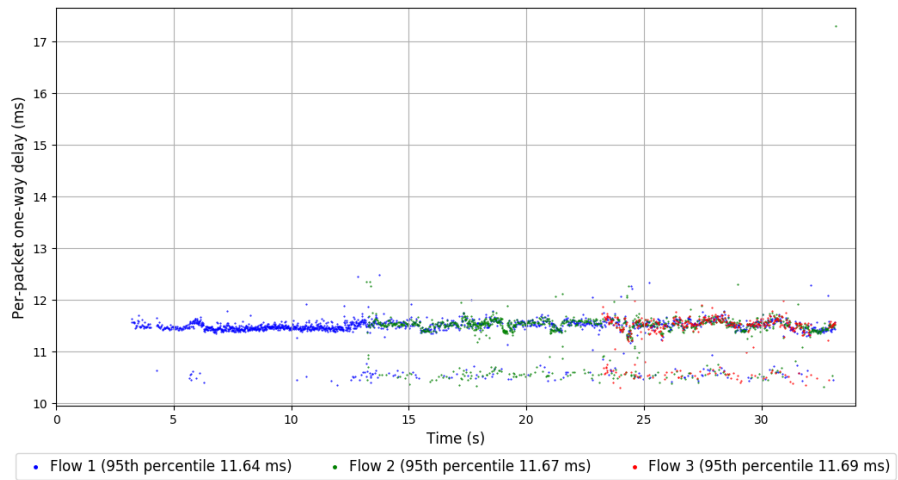
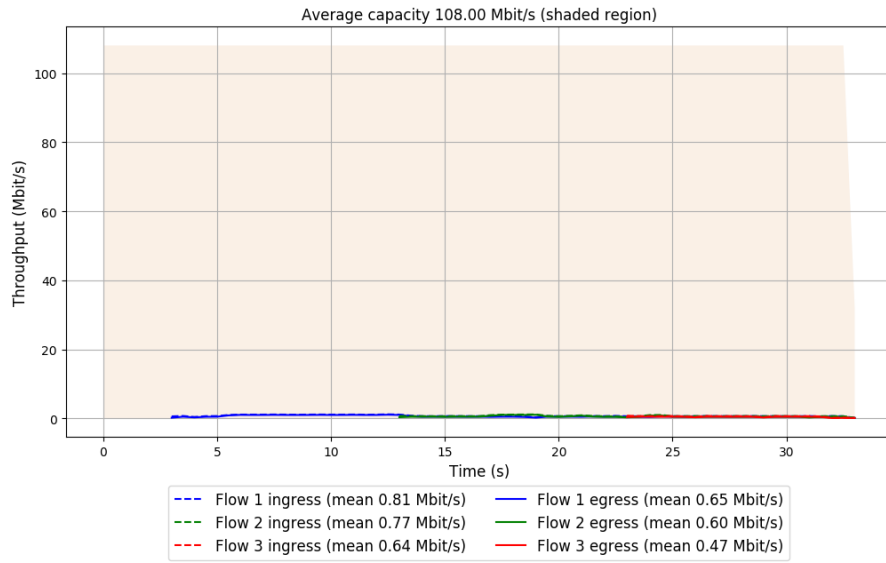
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 11.685 ms

Loss rate: 26.65%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-03-20 16:40:55

End at: 2018-03-20 16:41:25

Below is generated by plot.py at 2018-03-20 17:37:56

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.02 Mbit/s (0.9% utilization)

95th percentile per-packet one-way delay: 11.668 ms

Loss rate: 25.36%

-- Flow 1:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 11.627 ms

Loss rate: 25.48%

-- Flow 2:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 11.664 ms

Loss rate: 24.63%

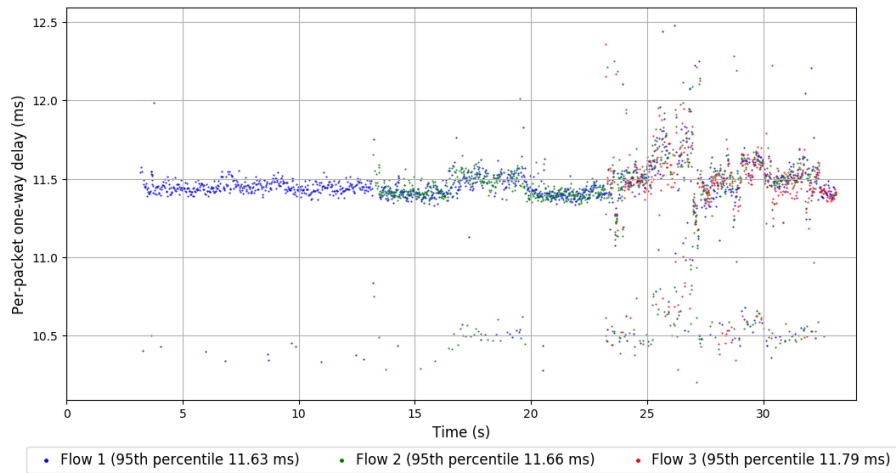
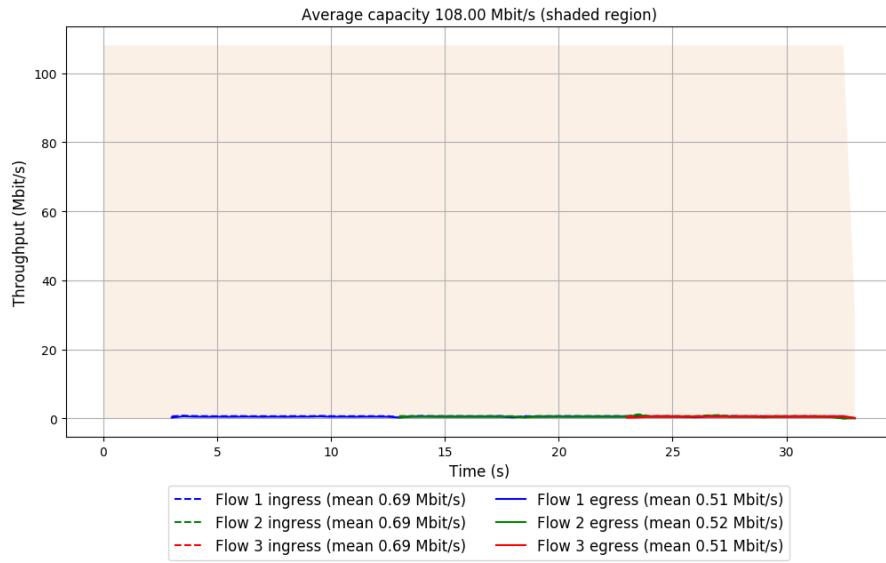
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 11.789 ms

Loss rate: 26.49%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-03-20 16:51:40

End at: 2018-03-20 16:52:10

Below is generated by plot.py at 2018-03-20 17:38:20

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.06 Mbit/s (1.0% utilization)

95th percentile per-packet one-way delay: 11.609 ms

Loss rate: 24.80%

-- Flow 1:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 11.590 ms

Loss rate: 24.55%

-- Flow 2:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 11.615 ms

Loss rate: 25.83%

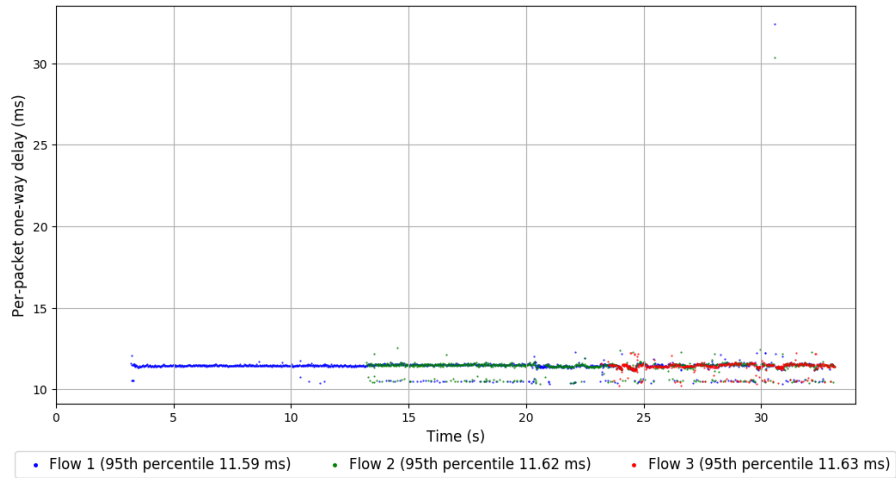
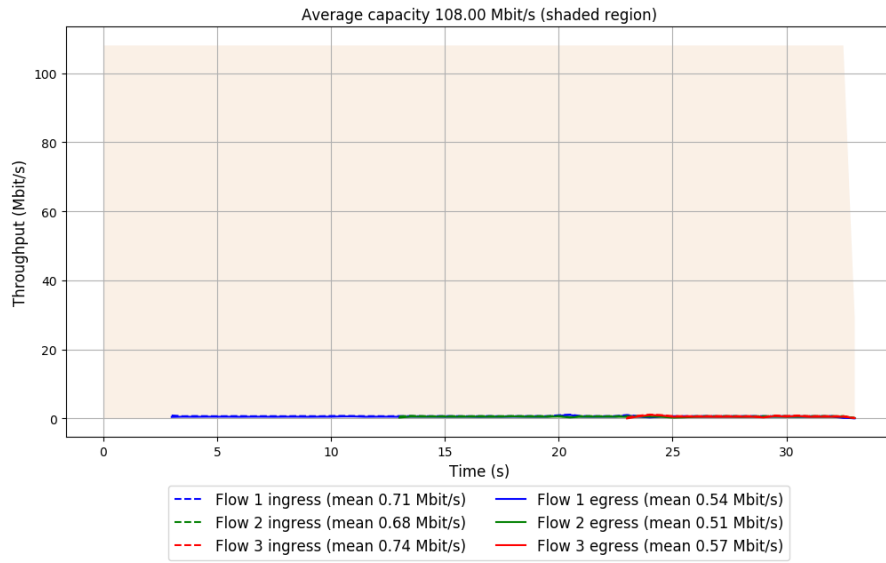
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 11.626 ms

Loss rate: 23.61%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-03-20 17:02:26

End at: 2018-03-20 17:02:56

Below is generated by plot.py at 2018-03-20 17:38:22

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.04 Mbit/s (1.0% utilization)

95th percentile per-packet one-way delay: 11.614 ms

Loss rate: 25.10%

-- Flow 1:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 11.603 ms

Loss rate: 24.34%

-- Flow 2:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 11.599 ms

Loss rate: 26.28%

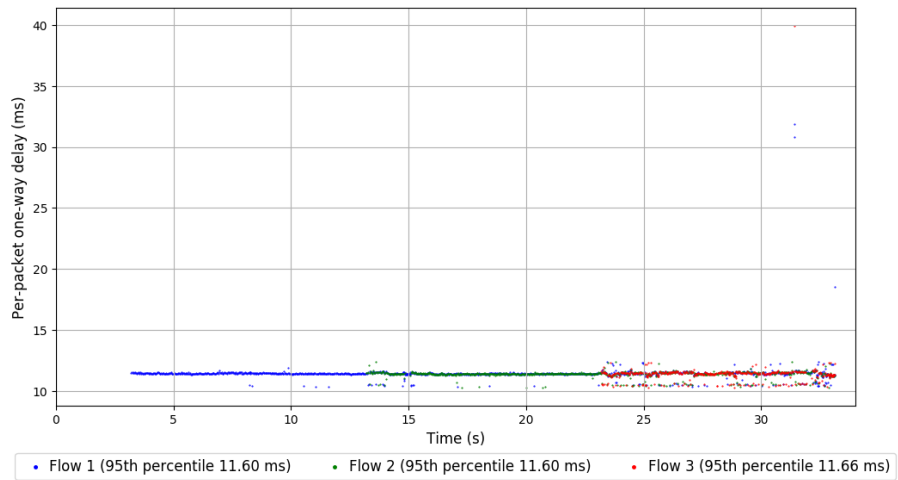
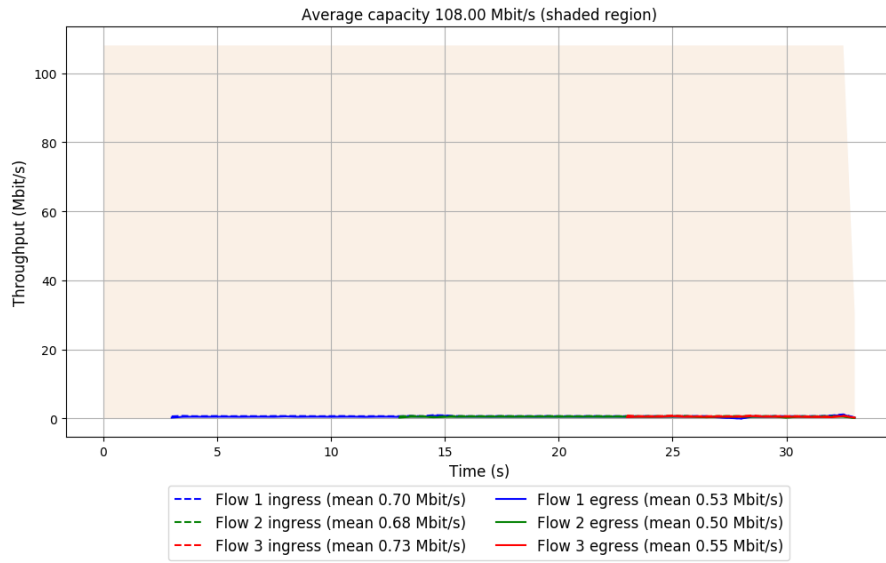
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 11.657 ms

Loss rate: 25.08%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-03-20 17:13:12

End at: 2018-03-20 17:13:42

Below is generated by plot.py at 2018-03-20 17:38:23

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.89 Mbit/s (0.8% utilization)

95th percentile per-packet one-way delay: 11.597 ms

Loss rate: 24.98%

-- Flow 1:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 11.579 ms

Loss rate: 25.14%

-- Flow 2:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 11.609 ms

Loss rate: 24.07%

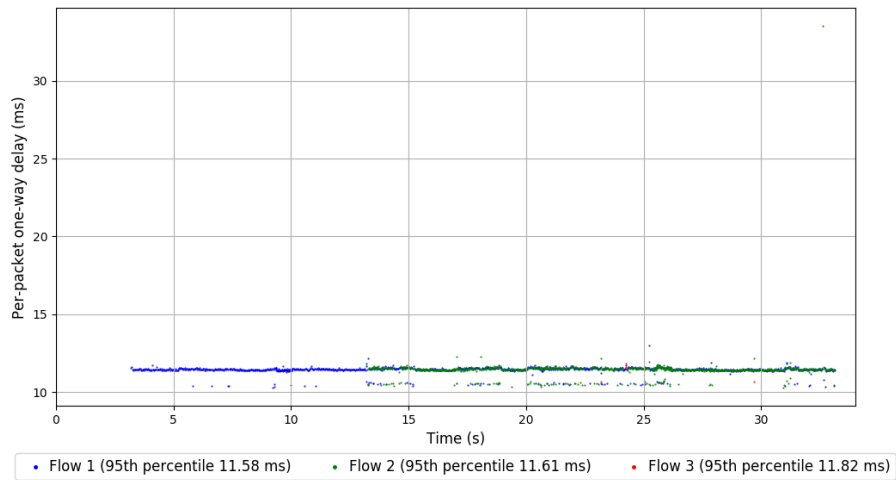
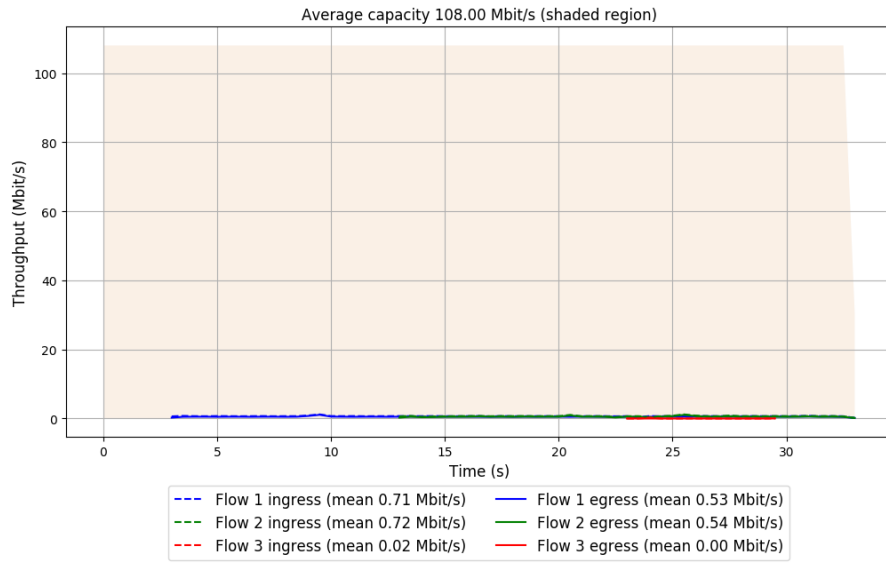
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.821 ms

Loss rate: 89.83%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-03-20 17:23:57

End at: 2018-03-20 17:24:27

Below is generated by plot.py at 2018-03-20 17:38:24

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.12 Mbit/s (1.0% utilization)

95th percentile per-packet one-way delay: 11.644 ms

Loss rate: 21.96%

-- Flow 1:

Average throughput: 0.62 Mbit/s

95th percentile per-packet one-way delay: 11.609 ms

Loss rate: 20.60%

-- Flow 2:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 11.669 ms

Loss rate: 23.33%

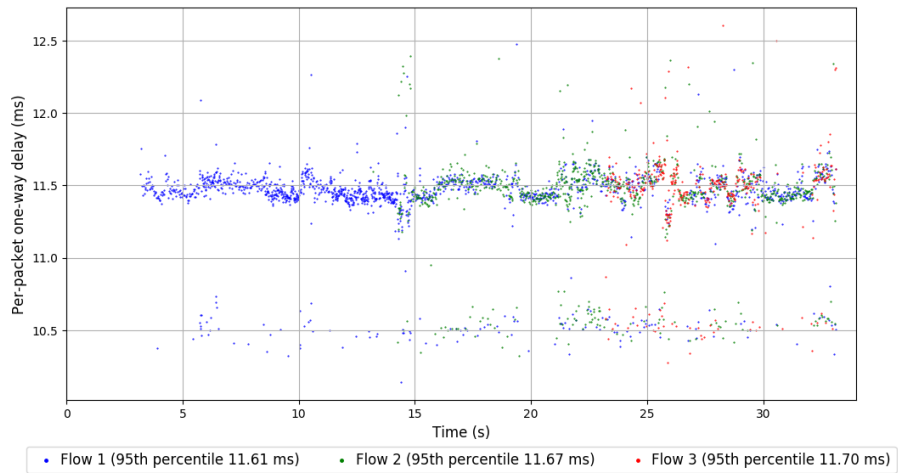
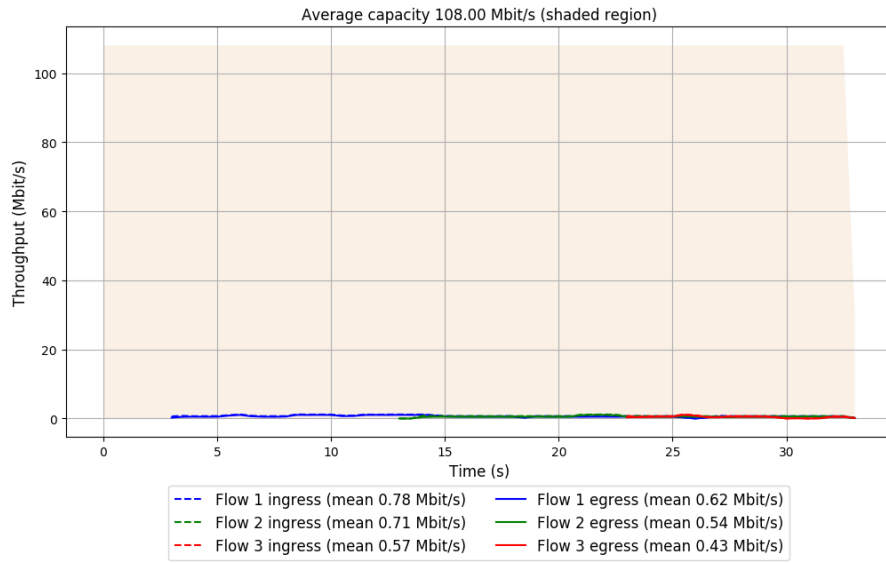
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 11.698 ms

Loss rate: 24.15%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-03-20 15:45:11

End at: 2018-03-20 15:45:41

Below is generated by plot.py at 2018-03-20 17:38:59

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 3.03 Mbit/s (2.8% utilization)

95th percentile per-packet one-way delay: 12.195 ms

Loss rate: 98.07%

-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 12.129 ms

Loss rate: 98.32%

-- Flow 2:

Average throughput: 0.97 Mbit/s

95th percentile per-packet one-way delay: 12.492 ms

Loss rate: 96.92%

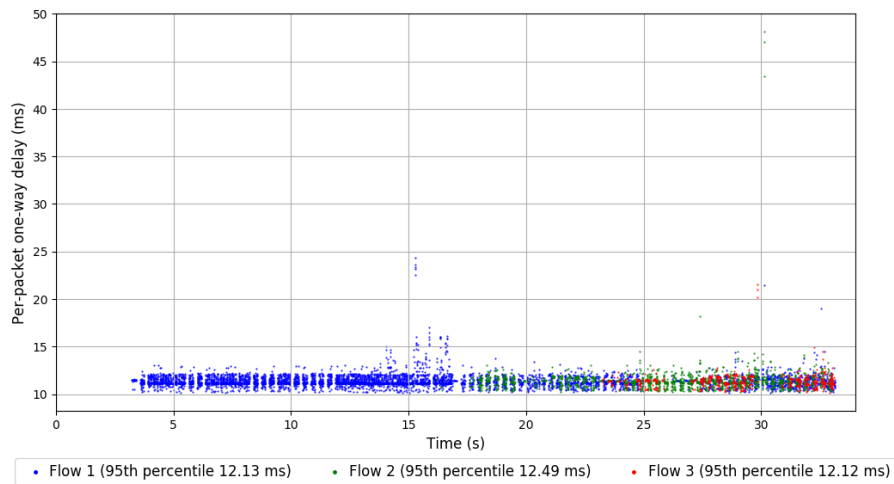
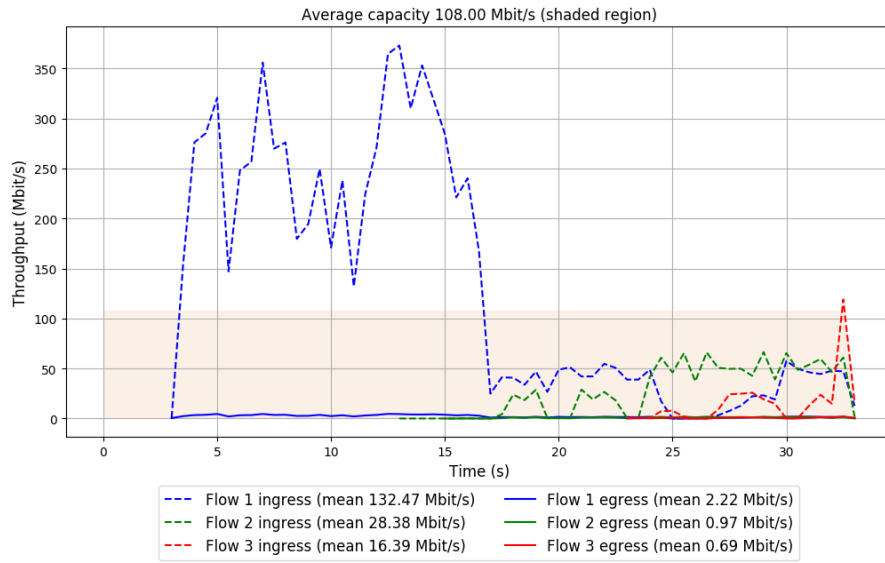
-- Flow 3:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 12.115 ms

Loss rate: 95.80%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-03-20 15:55:55

End at: 2018-03-20 15:56:25

Below is generated by plot.py at 2018-03-20 17:39:04

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 3.13 Mbit/s (2.9% utilization)

95th percentile per-packet one-way delay: 12.489 ms

Loss rate: 98.18%

-- Flow 1:

Average throughput: 2.76 Mbit/s

95th percentile per-packet one-way delay: 12.498 ms

Loss rate: 98.29%

-- Flow 2:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 11.990 ms

Loss rate: 96.43%

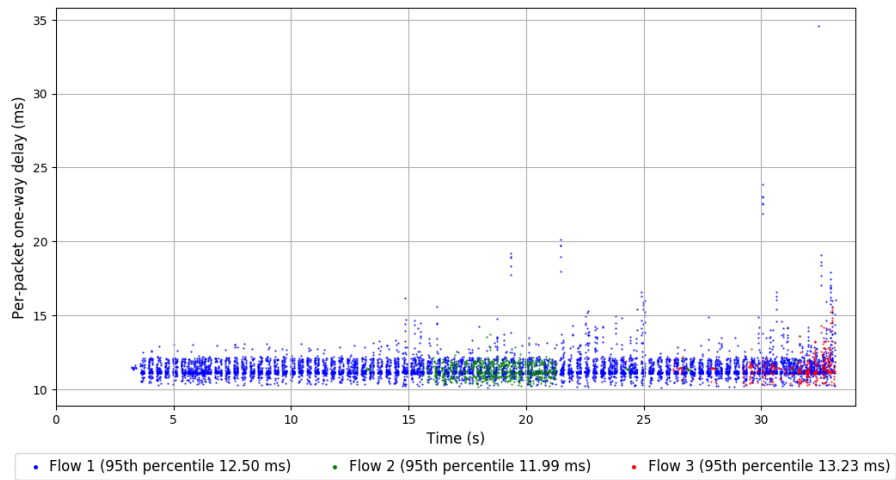
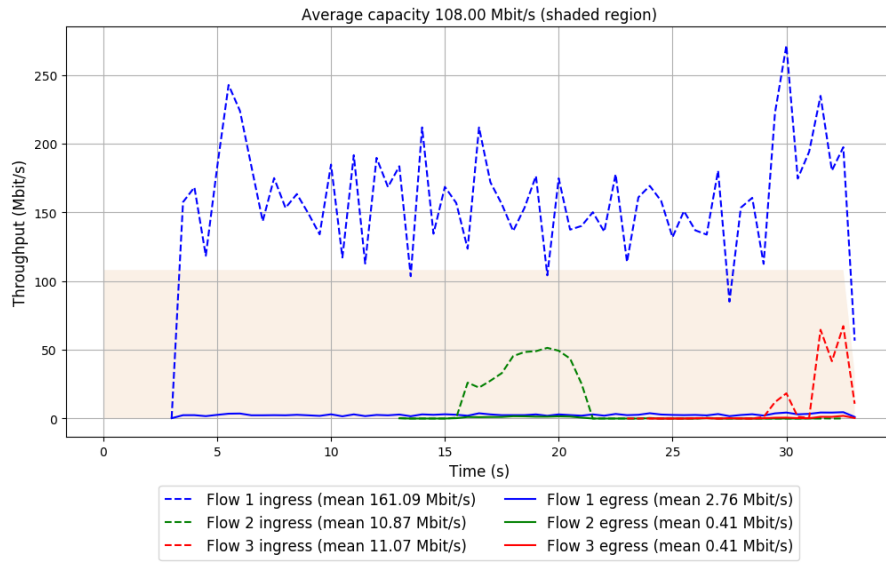
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 13.235 ms

Loss rate: 96.65%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-03-20 16:06:40

End at: 2018-03-20 16:07:10

Below is generated by plot.py at 2018-03-20 17:39:25

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 4.55 Mbit/s (4.2% utilization)

95th percentile per-packet one-way delay: 17.958 ms

Loss rate: 98.21%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 16.030 ms

Loss rate: 98.17%

-- Flow 2:

Average throughput: 3.54 Mbit/s

95th percentile per-packet one-way delay: 19.481 ms

Loss rate: 98.24%

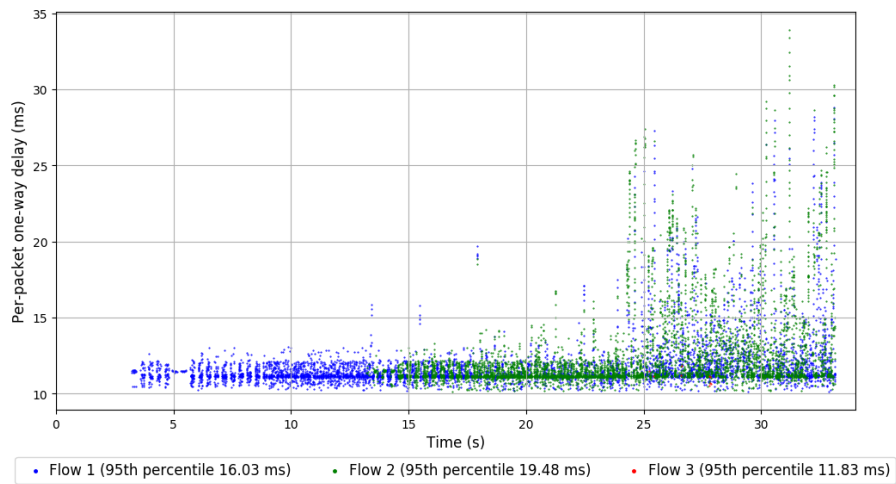
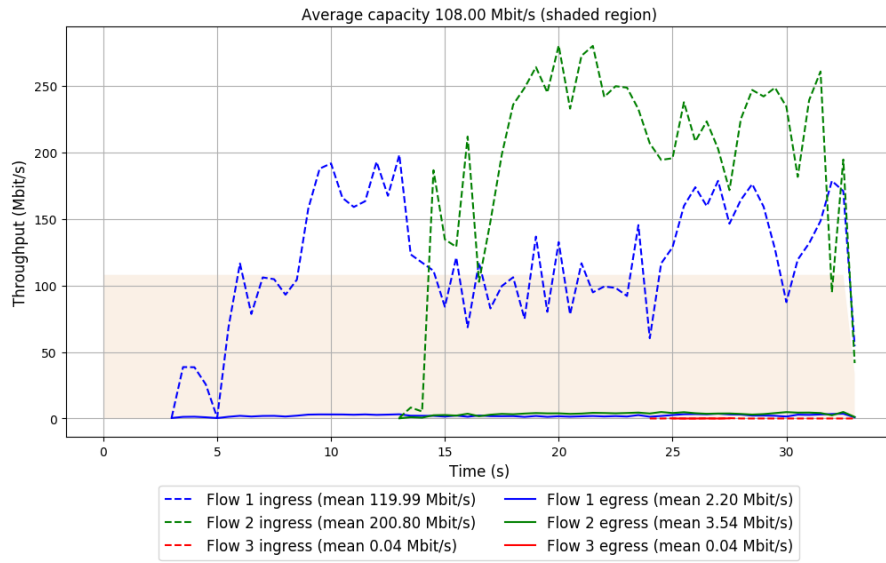
-- Flow 3:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 11.830 ms

Loss rate: 70.97%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-03-20 16:17:27

End at: 2018-03-20 16:17:57

Below is generated by plot.py at 2018-03-20 17:39:25

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 3.44 Mbit/s (3.2% utilization)

95th percentile per-packet one-way delay: 15.903 ms

Loss rate: 98.13%

-- Flow 1:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 14.120 ms

Loss rate: 98.11%

-- Flow 2:

Average throughput: 2.75 Mbit/s

95th percentile per-packet one-way delay: 17.293 ms

Loss rate: 98.17%

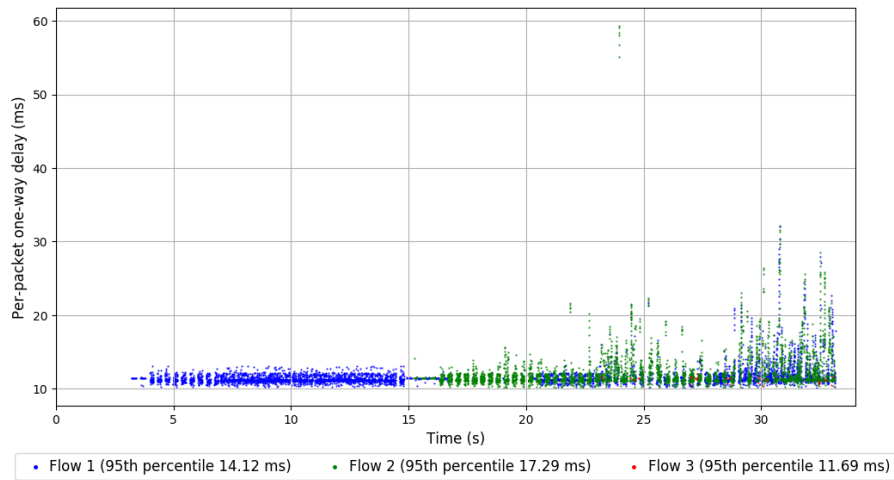
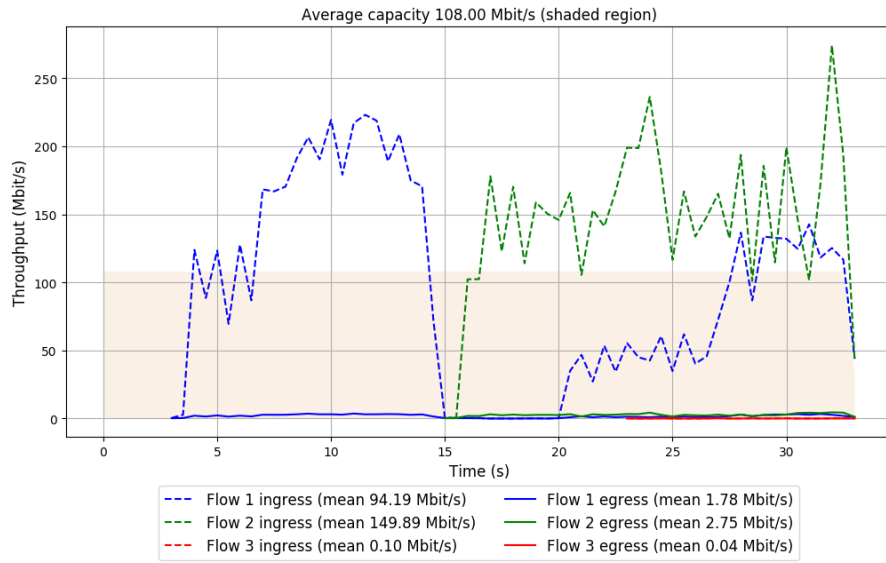
-- Flow 3:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 11.691 ms

Loss rate: 63.86%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-03-20 16:28:13

End at: 2018-03-20 16:28:43

Below is generated by plot.py at 2018-03-20 17:40:13

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.34 Mbit/s (4.9% utilization)

95th percentile per-packet one-way delay: 18.360 ms

Loss rate: 98.41%

-- Flow 1:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 18.209 ms

Loss rate: 98.50%

-- Flow 2:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 18.800 ms

Loss rate: 98.10%

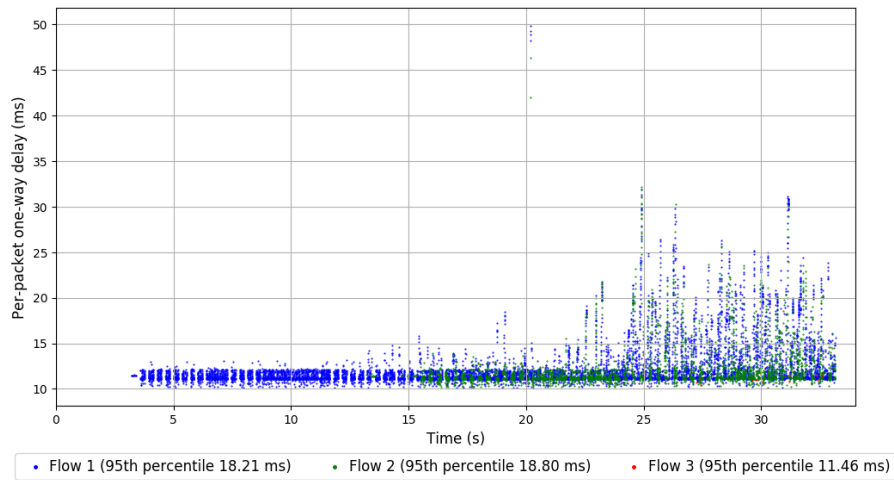
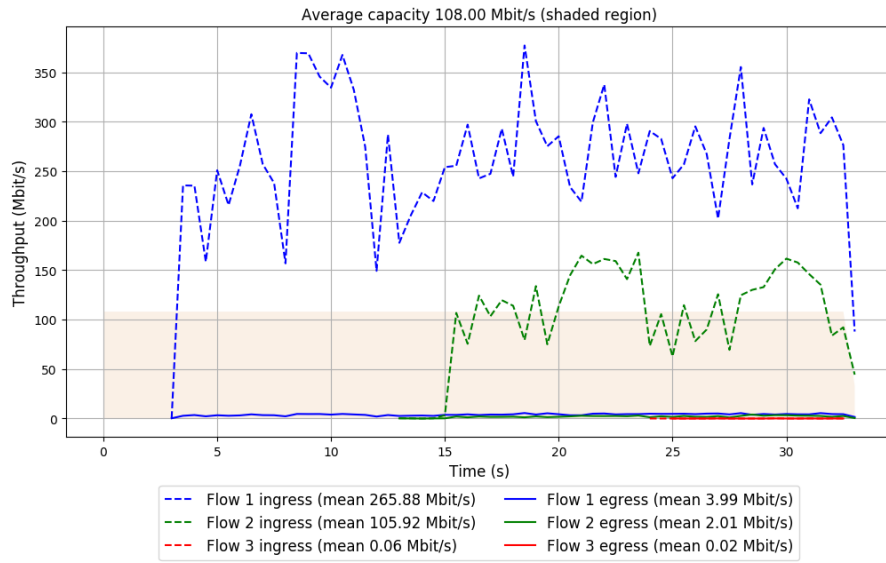
-- Flow 3:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 11.459 ms

Loss rate: 66.67%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-03-20 16:39:01

End at: 2018-03-20 16:39:31

Below is generated by plot.py at 2018-03-20 17:40:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 6.03 Mbit/s (5.6% utilization)

95th percentile per-packet one-way delay: 19.959 ms

Loss rate: 98.67%

-- Flow 1:

Average throughput: 3.57 Mbit/s

95th percentile per-packet one-way delay: 19.629 ms

Loss rate: 98.70%

-- Flow 2:

Average throughput: 3.69 Mbit/s

95th percentile per-packet one-way delay: 20.136 ms

Loss rate: 98.63%

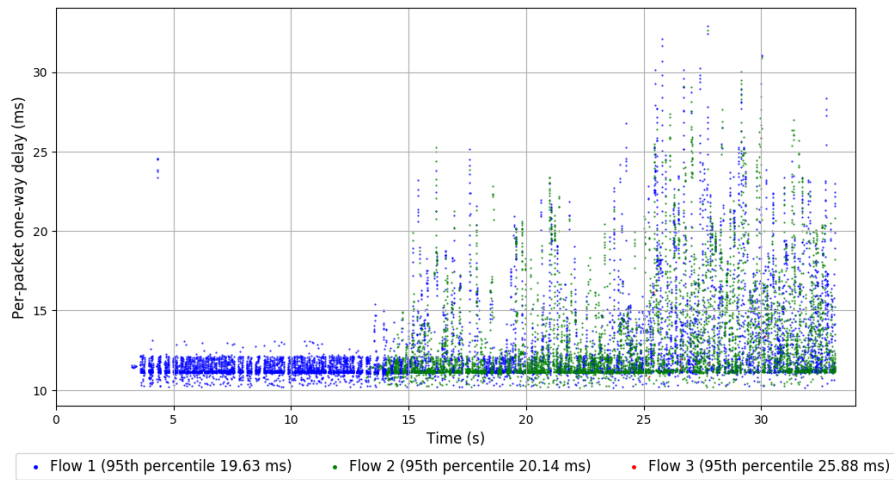
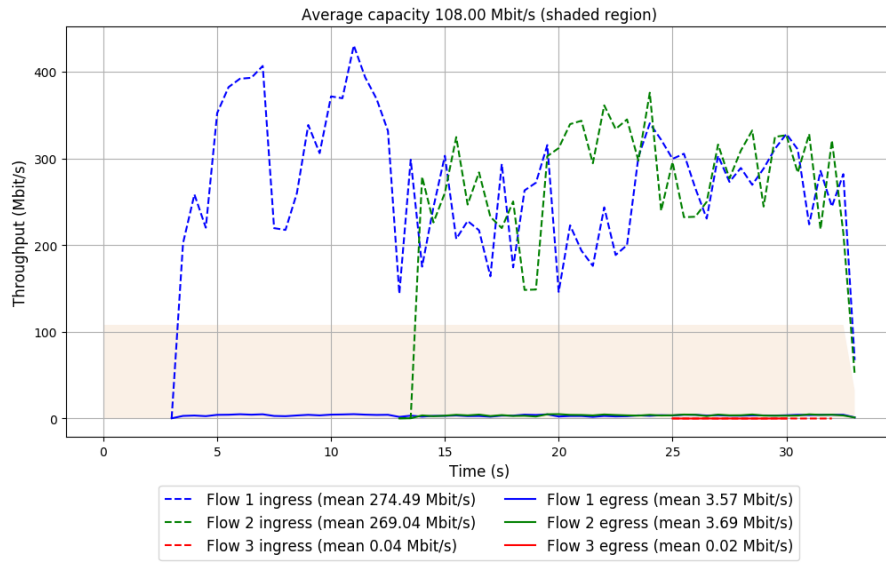
-- Flow 3:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 25.881 ms

Loss rate: 74.07%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-03-20 16:49:51

End at: 2018-03-20 16:50:21

Below is generated by plot.py at 2018-03-20 17:40:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 3.35 Mbit/s (3.1% utilization)

95th percentile per-packet one-way delay: 12.907 ms

Loss rate: 98.06%

-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 12.903 ms

Loss rate: 98.19%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 12.948 ms

Loss rate: 97.64%

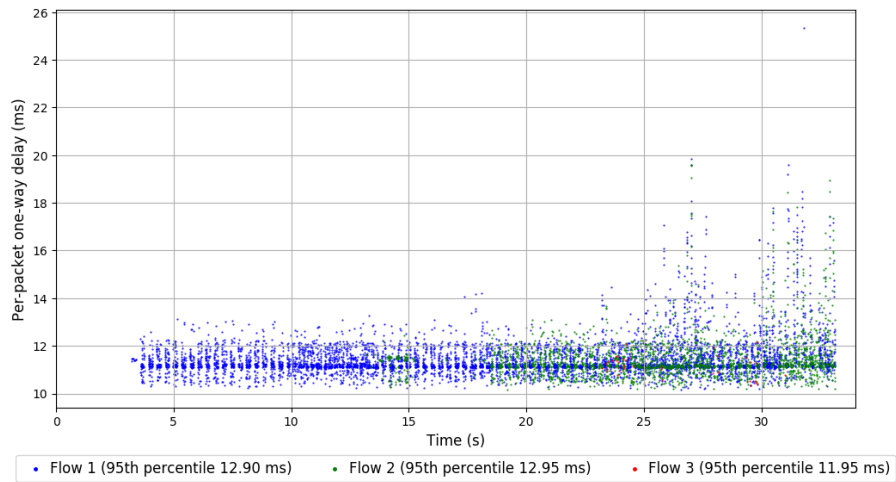
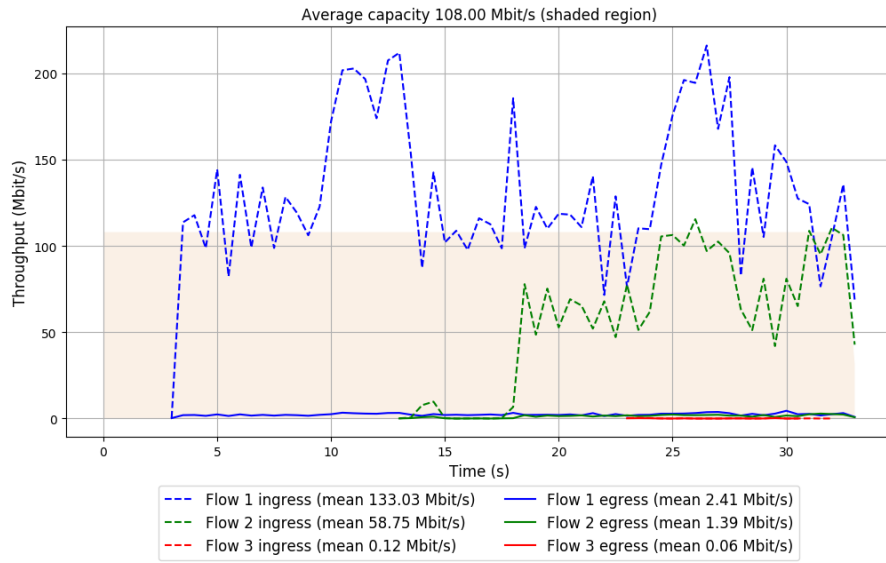
-- Flow 3:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 11.950 ms

Loss rate: 60.22%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-03-20 17:00:36

End at: 2018-03-20 17:01:06

Below is generated by plot.py at 2018-03-20 17:40:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 3.73 Mbit/s (3.5% utilization)

95th percentile per-packet one-way delay: 13.301 ms

Loss rate: 98.07%

-- Flow 1:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 13.475 ms

Loss rate: 98.19%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 12.948 ms

Loss rate: 97.51%

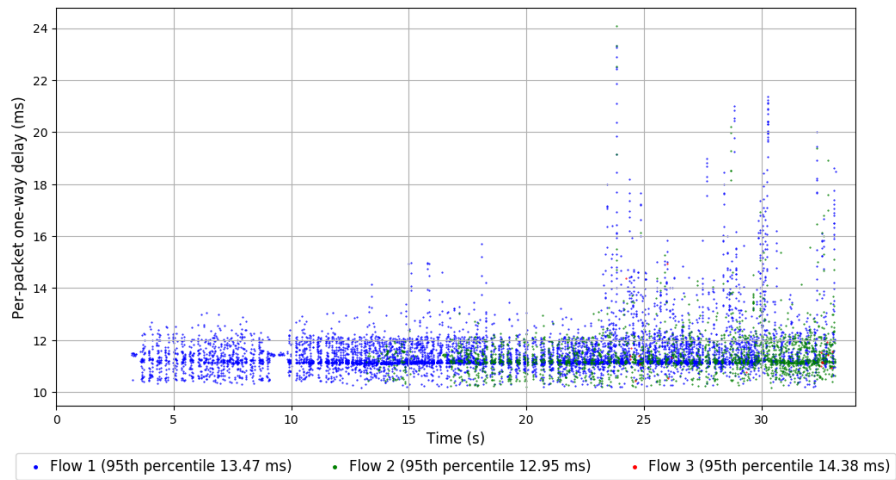
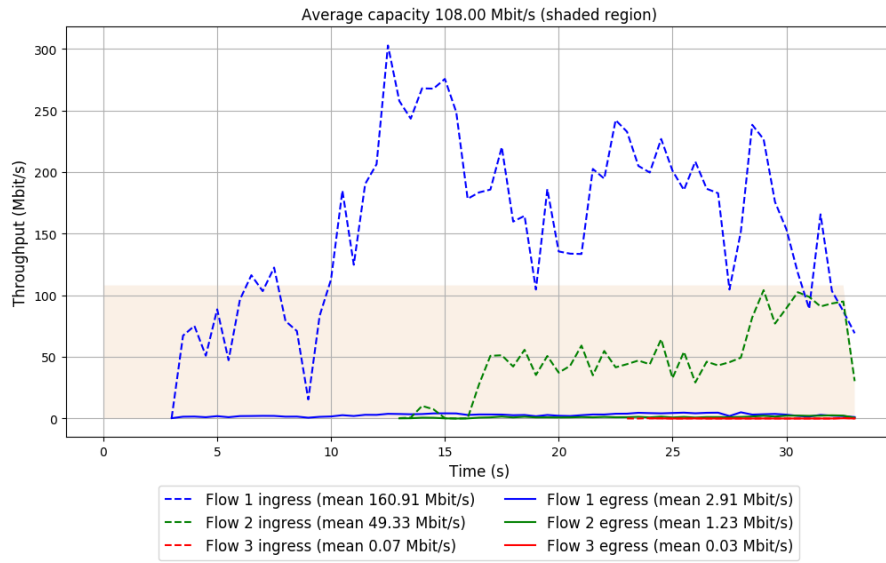
-- Flow 3:

Average throughput: 0.03 Mbit/s

95th percentile per-packet one-way delay: 14.382 ms

Loss rate: 64.29%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-03-20 17:11:23

End at: 2018-03-20 17:11:53

Below is generated by plot.py at 2018-03-20 17:40:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 3.91 Mbit/s (3.6% utilization)

95th percentile per-packet one-way delay: 21.404 ms

Loss rate: 97.94%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 17.112 ms

Loss rate: 97.89%

-- Flow 2:

Average throughput: 2.73 Mbit/s

95th percentile per-packet one-way delay: 23.524 ms

Loss rate: 98.01%

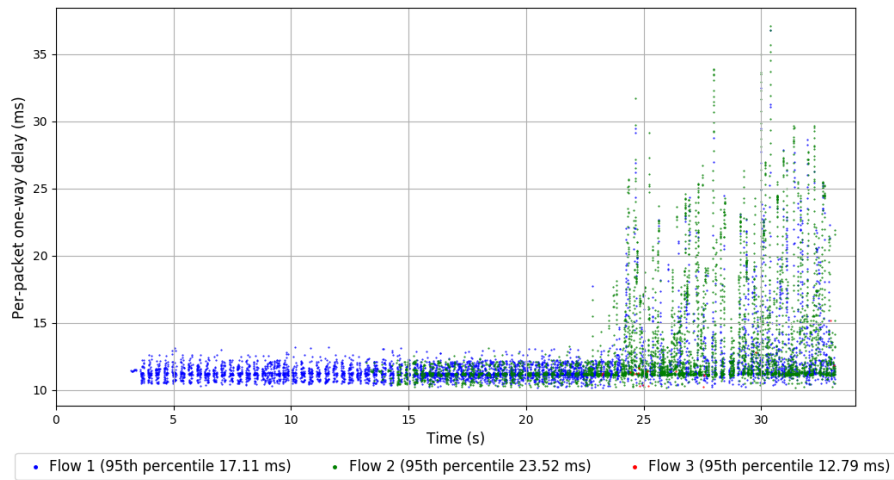
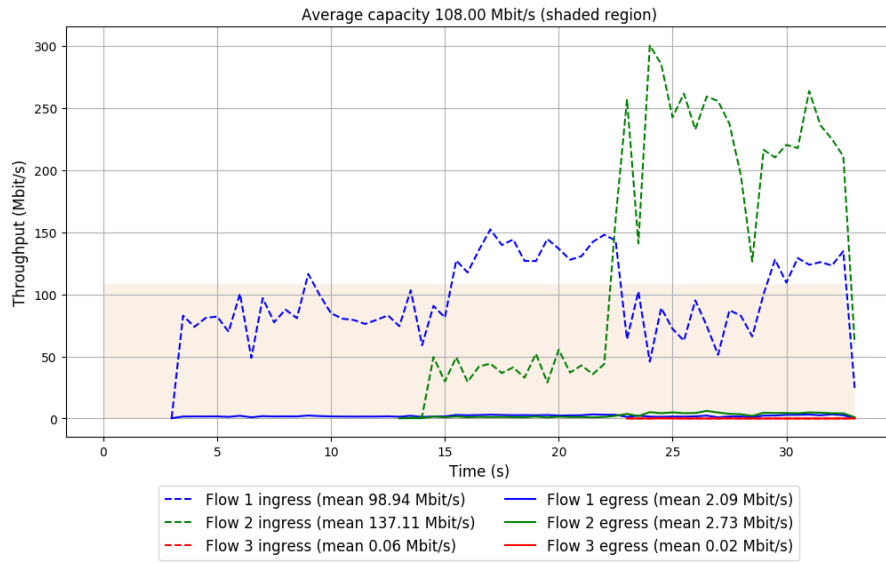
-- Flow 3:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 12.795 ms

Loss rate: 68.52%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-03-20 17:22:08

End at: 2018-03-20 17:22:38

Below is generated by plot.py at 2018-03-20 17:40:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 3.02 Mbit/s (2.8% utilization)

95th percentile per-packet one-way delay: 13.306 ms

Loss rate: 97.87%

-- Flow 1:

Average throughput: 0.93 Mbit/s

95th percentile per-packet one-way delay: 12.158 ms

Loss rate: 97.39%

-- Flow 2:

Average throughput: 2.82 Mbit/s

95th percentile per-packet one-way delay: 14.383 ms

Loss rate: 98.11%

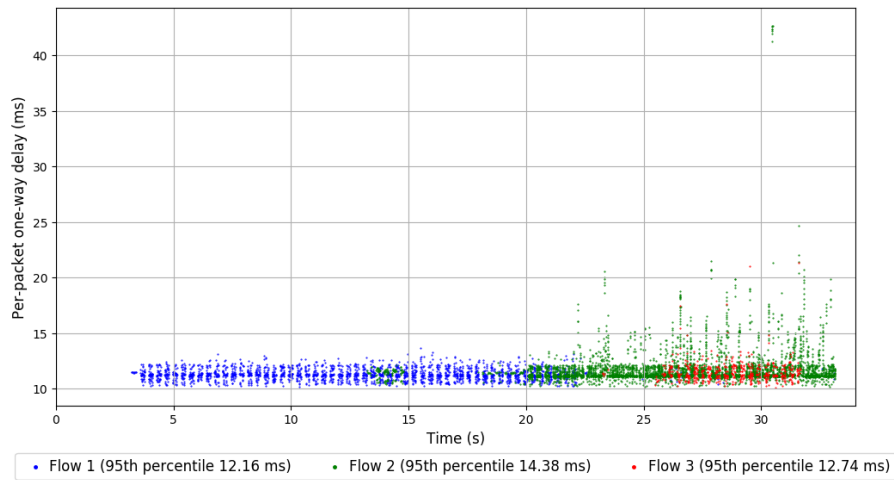
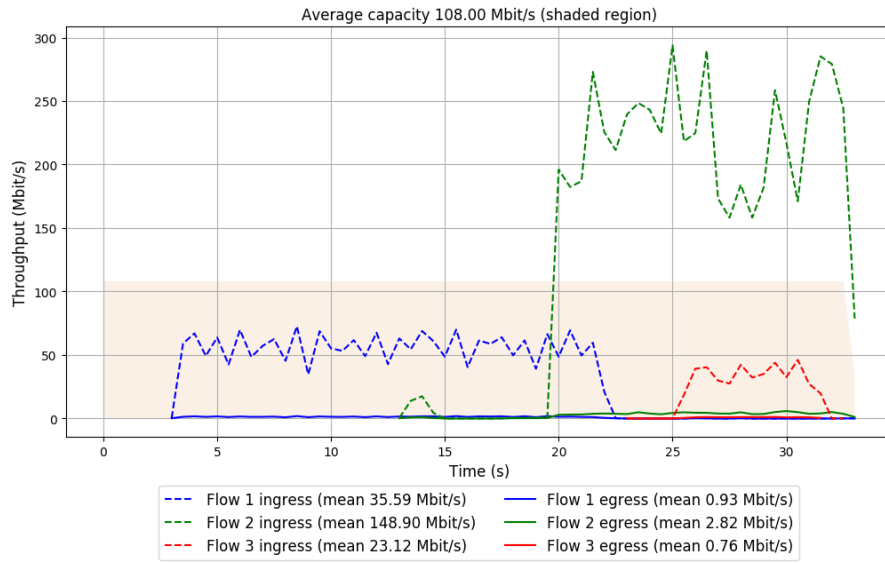
-- Flow 3:

Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 12.742 ms

Loss rate: 97.06%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-03-20 15:52:57

End at: 2018-03-20 15:53:27

Below is generated by plot.py at 2018-03-20 17:40:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.02 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 11.858 ms

Loss rate: 92.47%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.723 ms

Loss rate: 92.43%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.692 ms

Loss rate: 92.46%

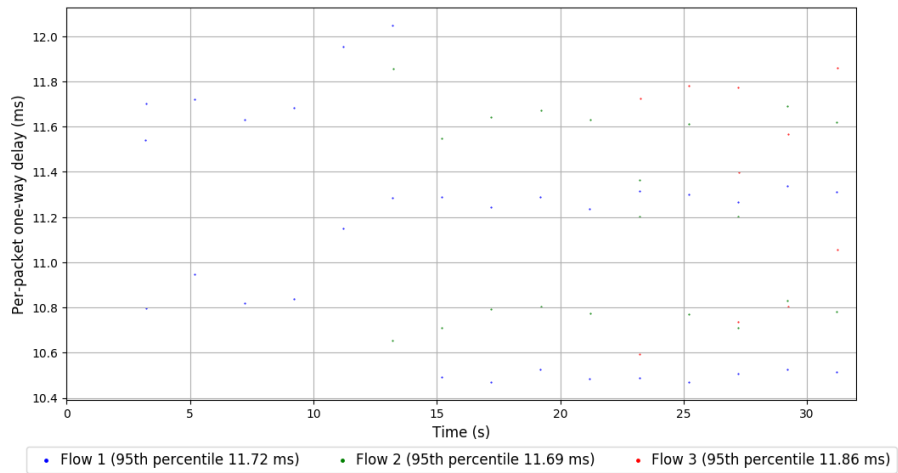
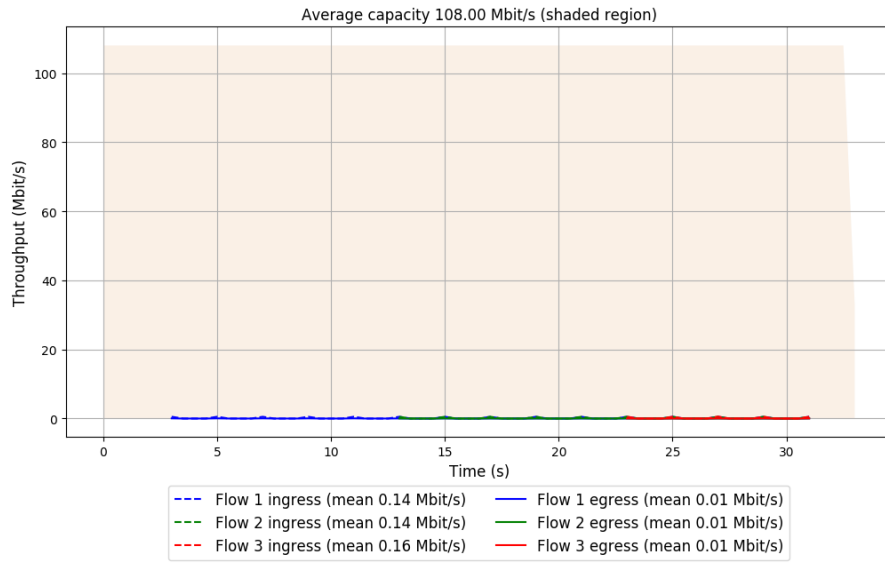
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.861 ms

Loss rate: 92.61%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-03-20 16:03:42

End at: 2018-03-20 16:04:12

Below is generated by plot.py at 2018-03-20 17:40:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.01 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 11.960 ms

Loss rate: 94.87%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.905 ms

Loss rate: 95.36%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.971 ms

Loss rate: 93.92%

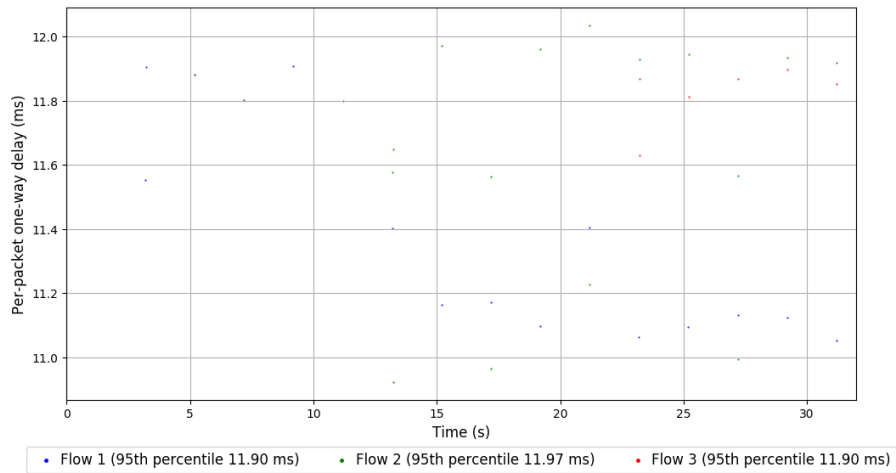
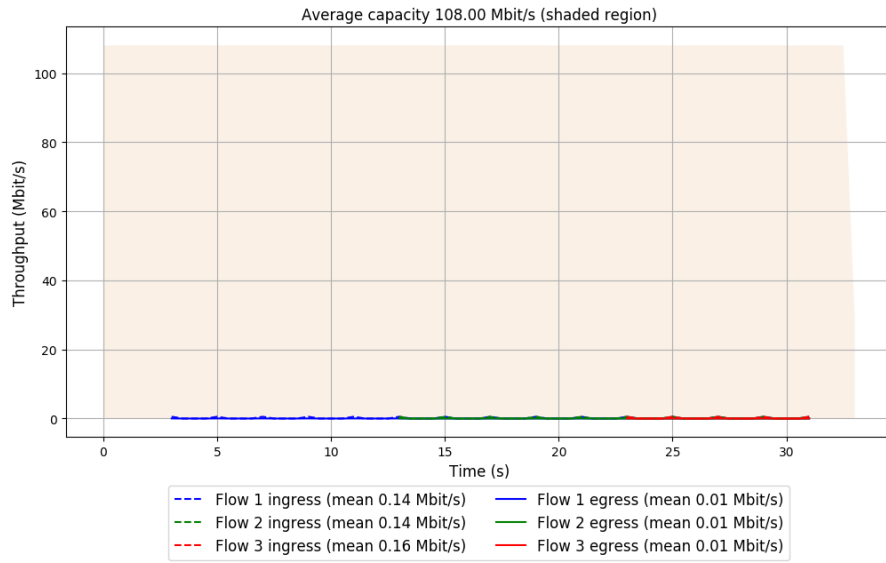
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.897 ms

Loss rate: 95.31%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-03-20 16:14:29

End at: 2018-03-20 16:14:59

Below is generated by plot.py at 2018-03-20 17:40:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.02 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 12.224 ms

Loss rate: 93.76%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.866 ms

Loss rate: 92.53%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 12.347 ms

Loss rate: 95.35%

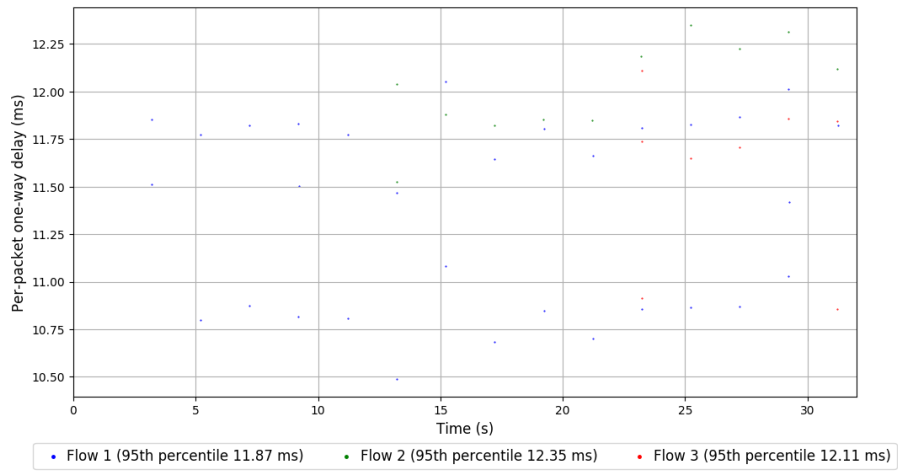
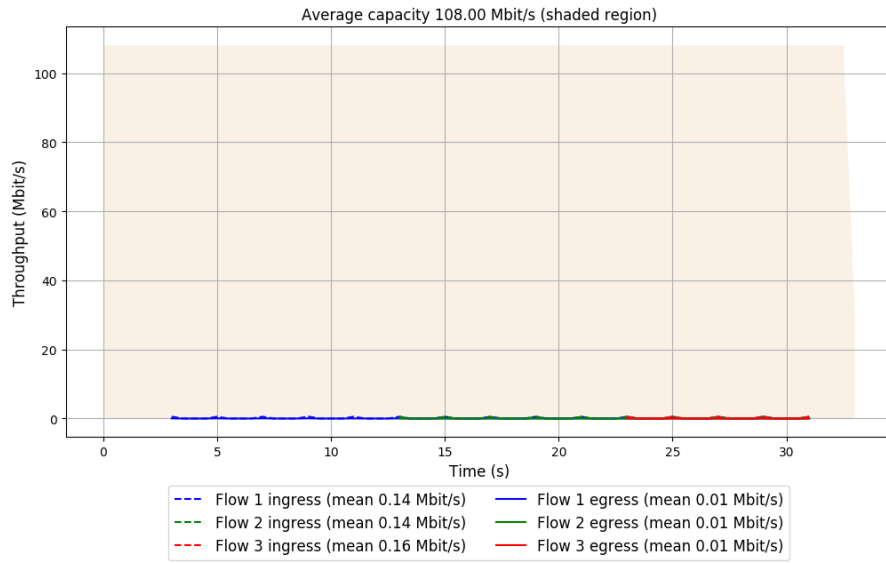
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 12.109 ms

Loss rate: 94.31%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-03-20 16:25:15

End at: 2018-03-20 16:25:45

Below is generated by plot.py at 2018-03-20 17:40:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.01 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 11.951 ms

Loss rate: 95.32%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.898 ms

Loss rate: 95.19%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.951 ms

Loss rate: 95.35%

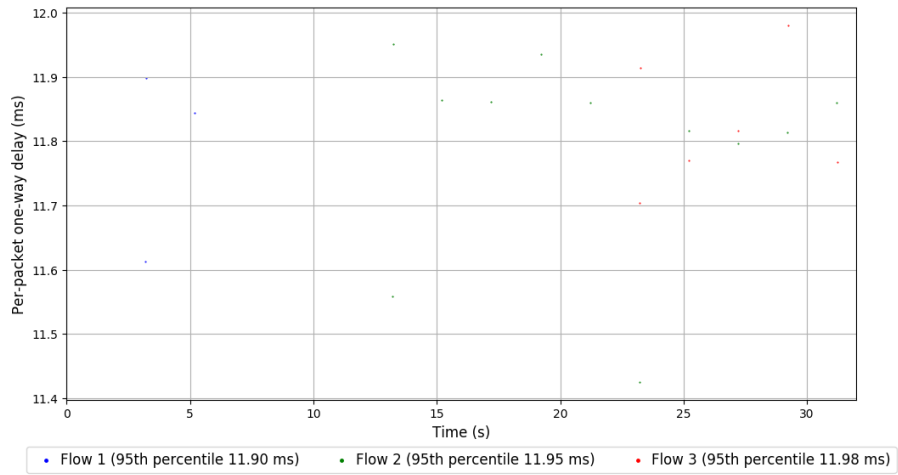
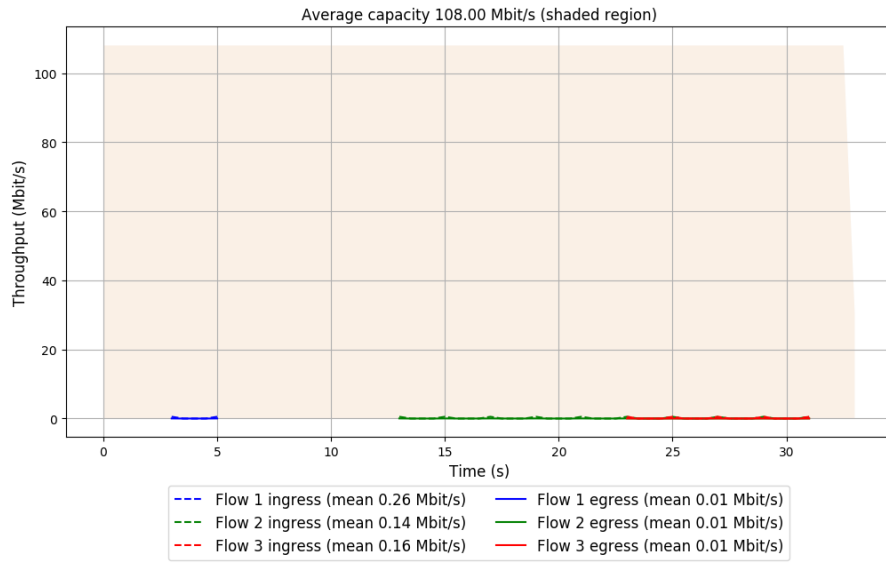
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.980 ms

Loss rate: 95.31%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-03-20 16:36:03

End at: 2018-03-20 16:36:33

Below is generated by plot.py at 2018-03-20 17:40:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.02 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 12.229 ms

Loss rate: 93.70%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 12.262 ms

Loss rate: 94.72%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.924 ms

Loss rate: 92.85%

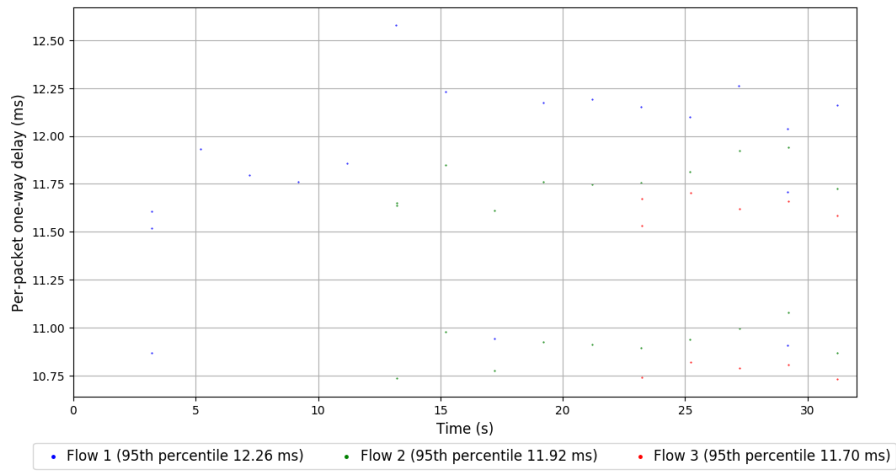
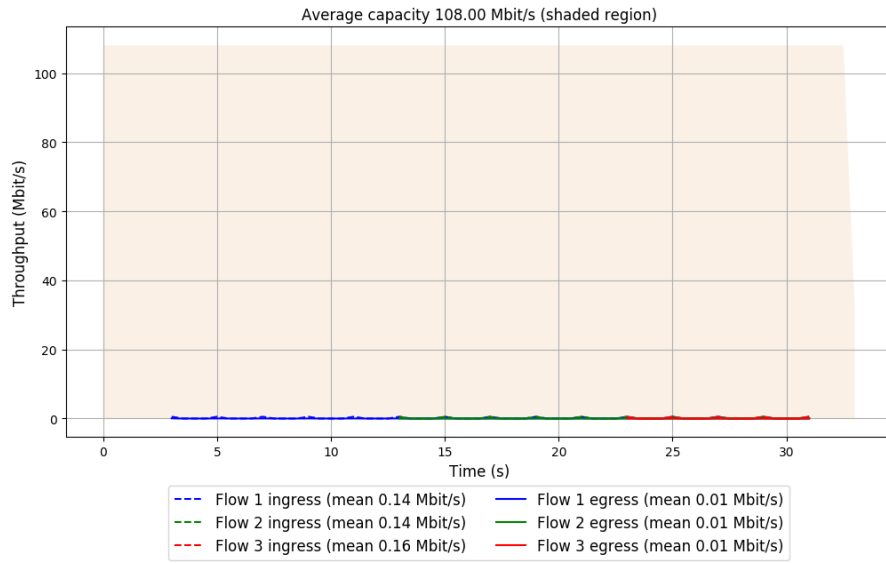
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.703 ms

Loss rate: 92.39%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-03-20 16:46:53

End at: 2018-03-20 16:47:23

Below is generated by plot.py at 2018-03-20 17:40:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.01 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 12.058 ms

Loss rate: 94.67%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 12.058 ms

Loss rate: 95.36%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.964 ms

Loss rate: 94.33%

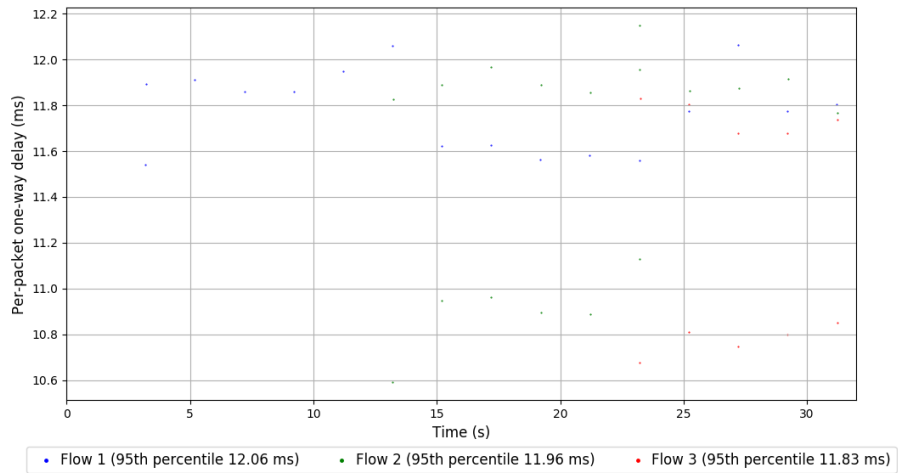
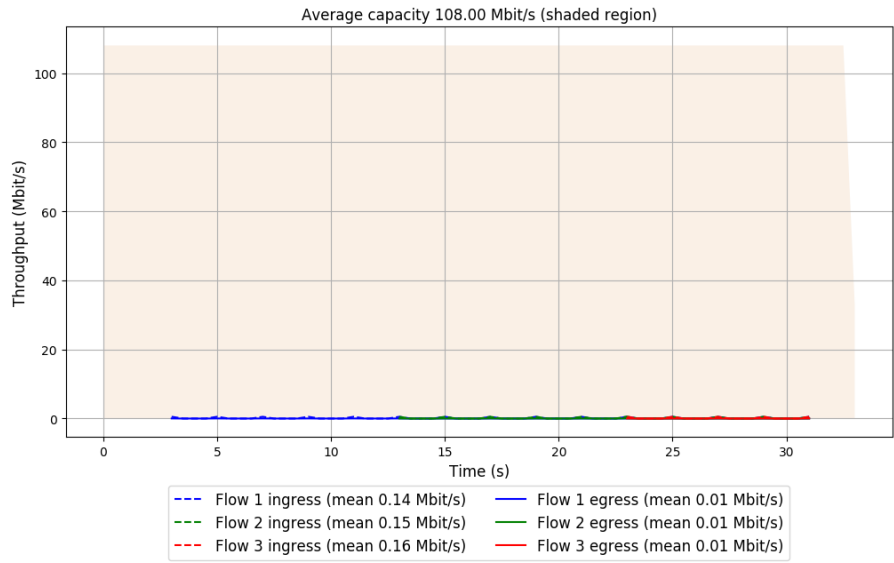
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.830 ms

Loss rate: 93.31%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-03-20 16:57:38

End at: 2018-03-20 16:58:08

Below is generated by plot.py at 2018-03-20 17:40:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.01 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 11.813 ms

Loss rate: 94.76%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.777 ms

Loss rate: 92.74%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.540 ms

Loss rate: 96.65%

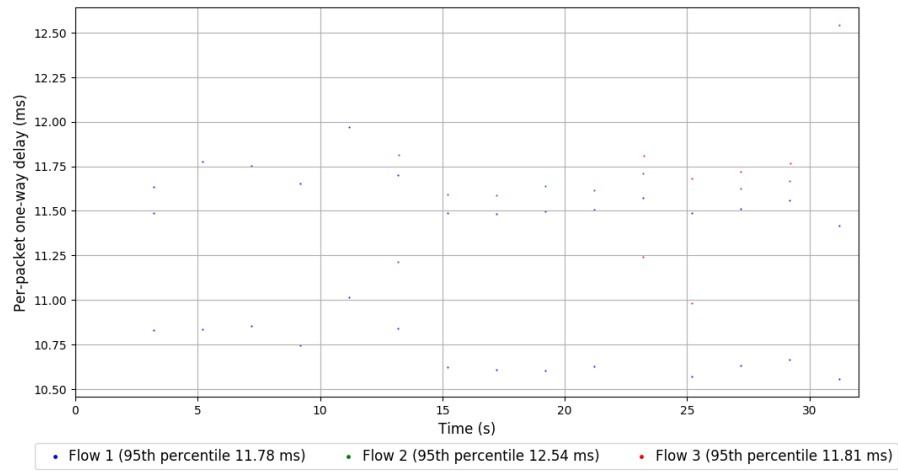
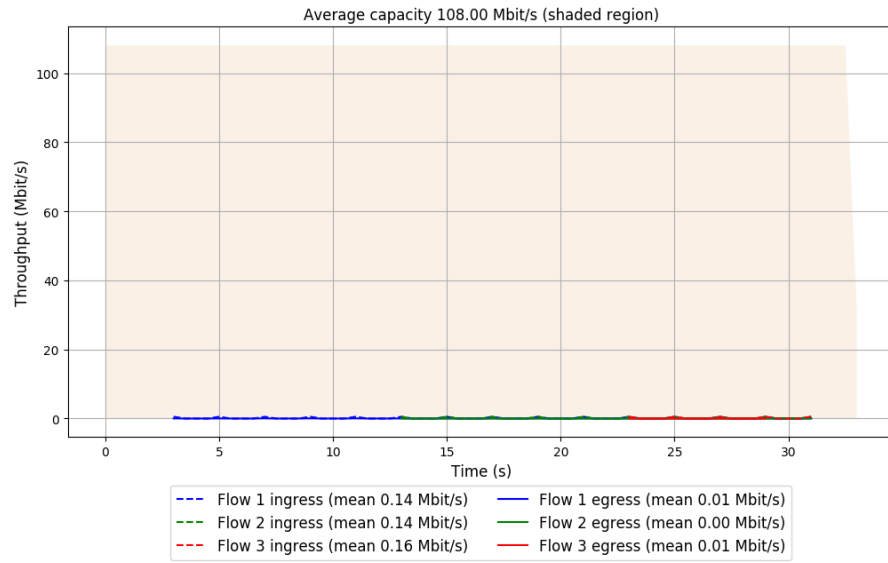
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.811 ms

Loss rate: 97.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-03-20 17:08:25

End at: 2018-03-20 17:08:55

Below is generated by plot.py at 2018-03-20 17:40:44

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.02 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 12.010 ms

Loss rate: 93.05%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.645 ms

Loss rate: 92.43%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.709 ms

Loss rate: 92.88%

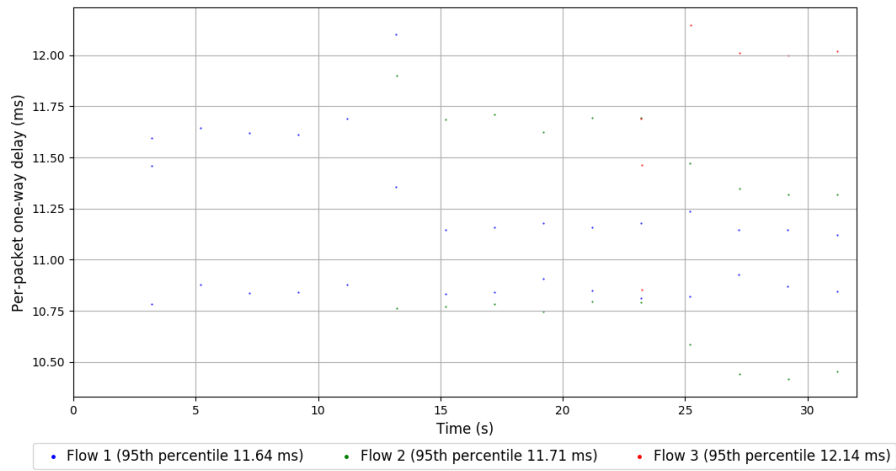
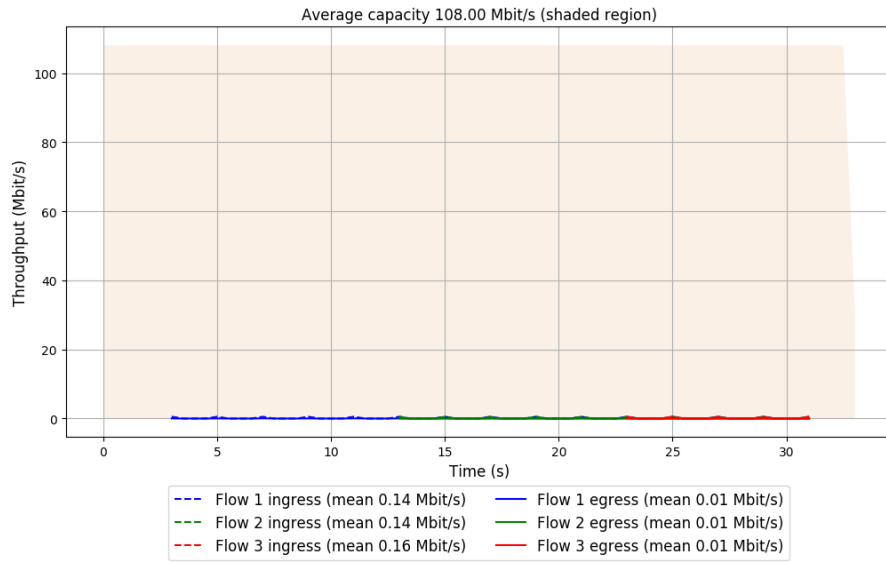
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 12.145 ms

Loss rate: 95.23%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-03-20 17:19:10

End at: 2018-03-20 17:19:40

Below is generated by plot.py at 2018-03-20 17:40:46

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.01 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 11.859 ms

Loss rate: 93.19%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.808 ms

Loss rate: 93.94%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 12.030 ms

Loss rate: 93.35%

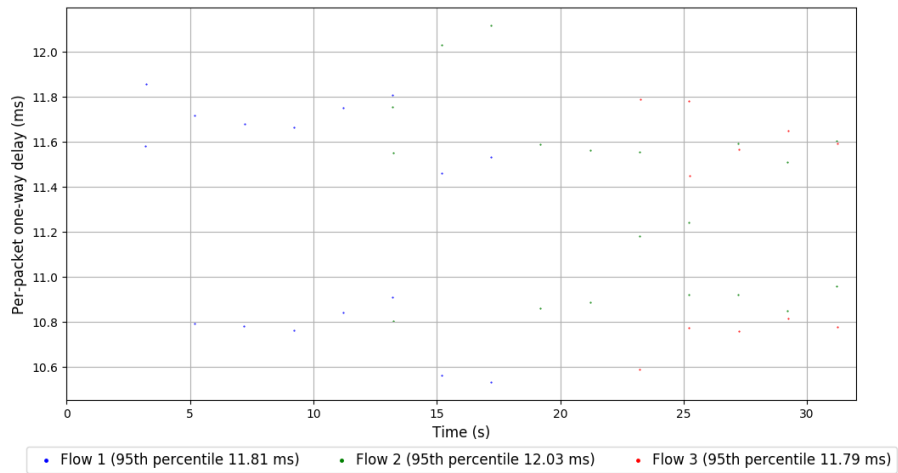
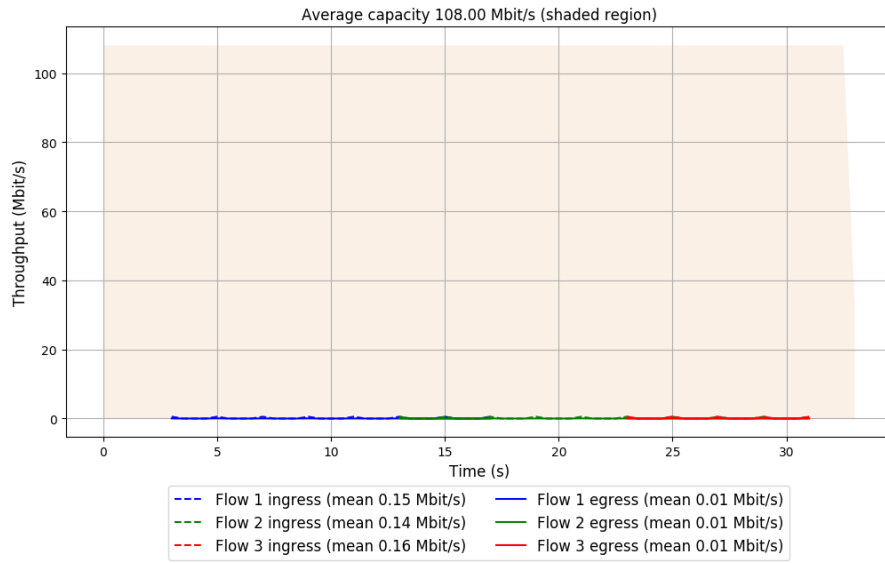
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.791 ms

Loss rate: 91.71%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-03-20 17:29:55

End at: 2018-03-20 17:30:25

Below is generated by plot.py at 2018-03-20 17:40:48

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 0.02 Mbit/s (0.0% utilization)

95th percentile per-packet one-way delay: 12.215 ms

Loss rate: 94.50%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 12.277 ms

Loss rate: 95.36%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 11.847 ms

Loss rate: 93.27%

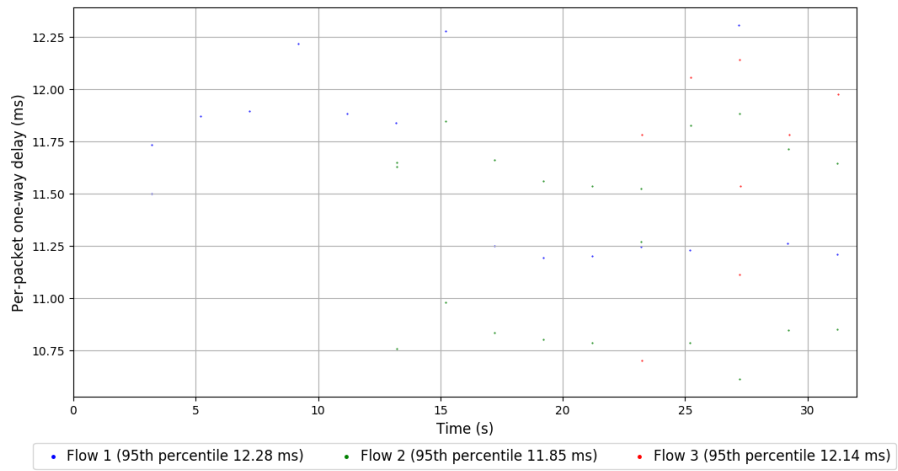
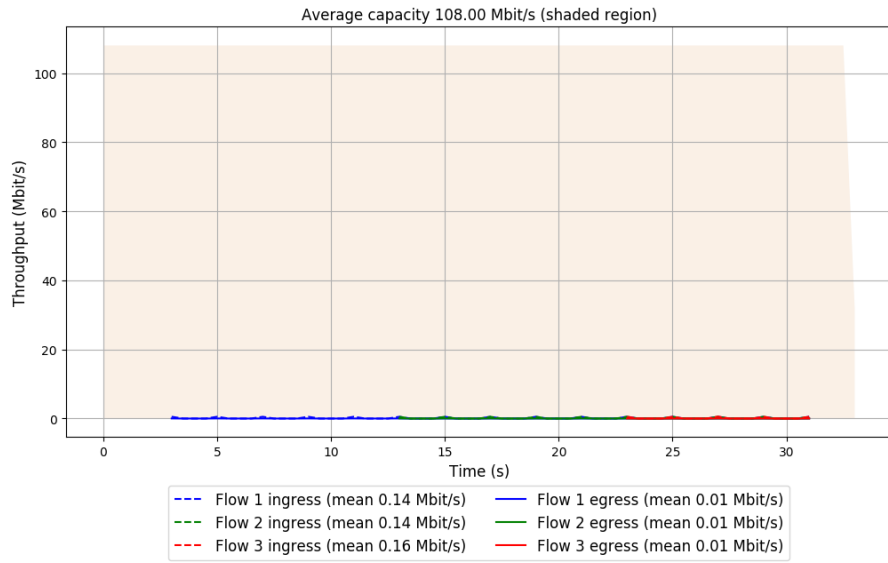
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 12.139 ms

Loss rate: 94.42%

Run 10: Report of Copa — Data Link



Run 1: Statistics of FillP

Start at: 2018-03-20 15:47:35

End at: 2018-03-20 15:48:05

Below is generated by plot.py at 2018-03-20 17:40:56

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 3.40 Mbit/s (3.1% utilization)

95th percentile per-packet one-way delay: 11.961 ms

Loss rate: 88.52%

-- Flow 1:

Average throughput: 1.75 Mbit/s

95th percentile per-packet one-way delay: 11.962 ms

Loss rate: 88.04%

-- Flow 2:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 11.959 ms

Loss rate: 82.12%

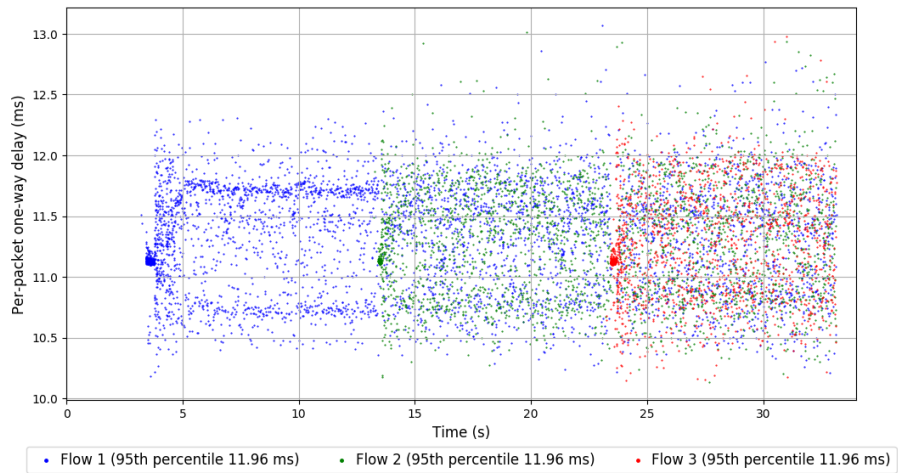
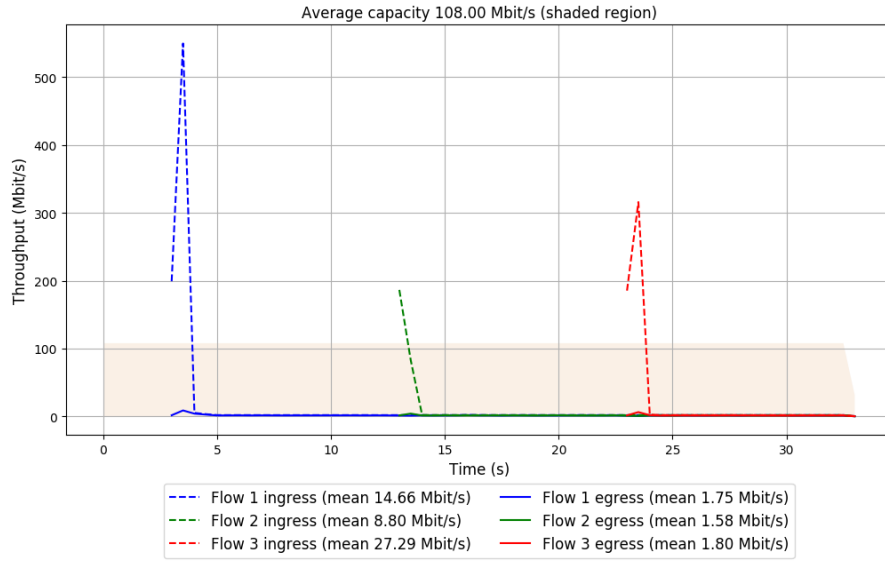
-- Flow 3:

Average throughput: 1.80 Mbit/s

95th percentile per-packet one-way delay: 11.956 ms

Loss rate: 93.43%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-03-20 15:58:20

End at: 2018-03-20 15:58:50

Below is generated by plot.py at 2018-03-20 17:41:01

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 3.56 Mbit/s (3.3% utilization)

95th percentile per-packet one-way delay: 11.958 ms

Loss rate: 89.66%

-- Flow 1:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 11.958 ms

Loss rate: 77.69%

-- Flow 2:

Average throughput: 1.80 Mbit/s

95th percentile per-packet one-way delay: 11.961 ms

Loss rate: 92.30%

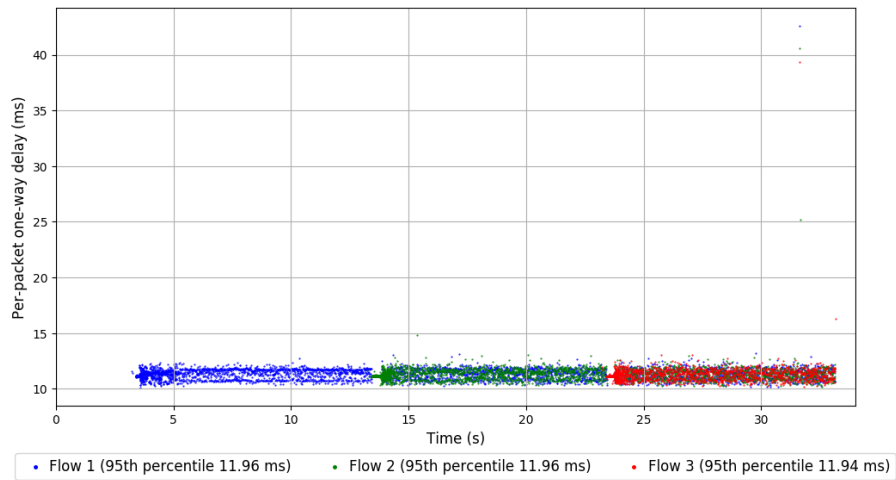
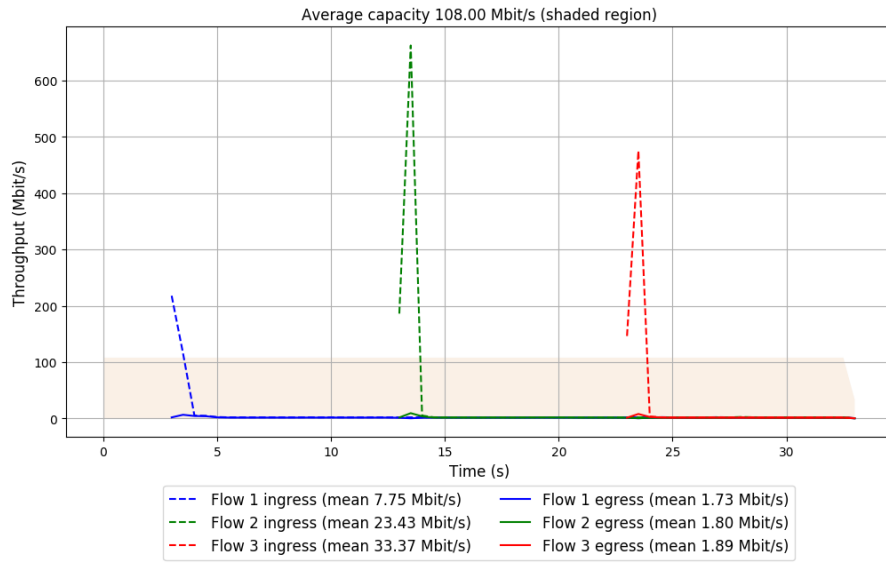
-- Flow 3:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 11.940 ms

Loss rate: 94.33%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-03-20 16:09:07

End at: 2018-03-20 16:09:37

Below is generated by plot.py at 2018-03-20 17:41:10

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 3.34 Mbit/s (3.1% utilization)

95th percentile per-packet one-way delay: 11.980 ms

Loss rate: 84.73%

-- Flow 1:

Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 11.976 ms

Loss rate: 70.78%

-- Flow 2:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 11.959 ms

Loss rate: 91.15%

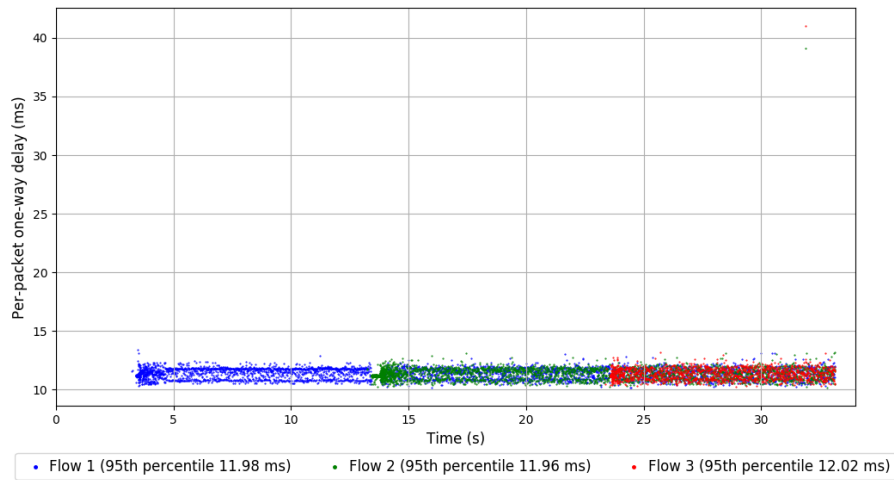
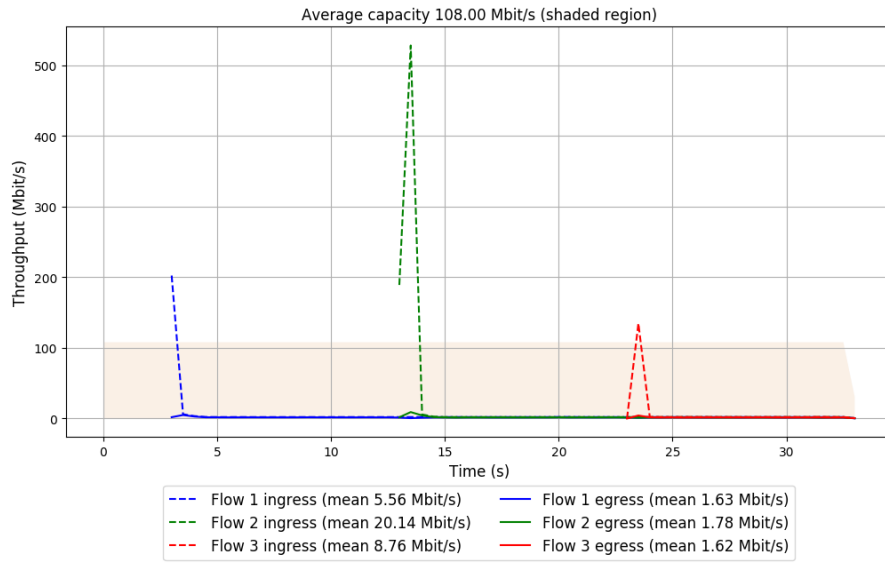
-- Flow 3:

Average throughput: 1.62 Mbit/s

95th percentile per-packet one-way delay: 12.018 ms

Loss rate: 81.85%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-03-20 16:19:52

End at: 2018-03-20 16:20:22

Below is generated by plot.py at 2018-03-20 17:41:25

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 3.47 Mbit/s (3.2% utilization)

95th percentile per-packet one-way delay: 11.967 ms

Loss rate: 91.63%

-- Flow 1:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 11.969 ms

Loss rate: 74.80%

-- Flow 2:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 11.978 ms

Loss rate: 77.84%

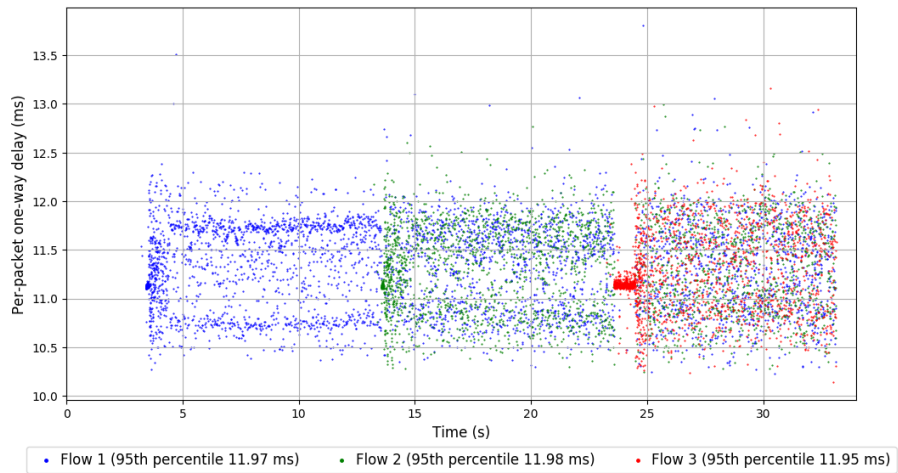
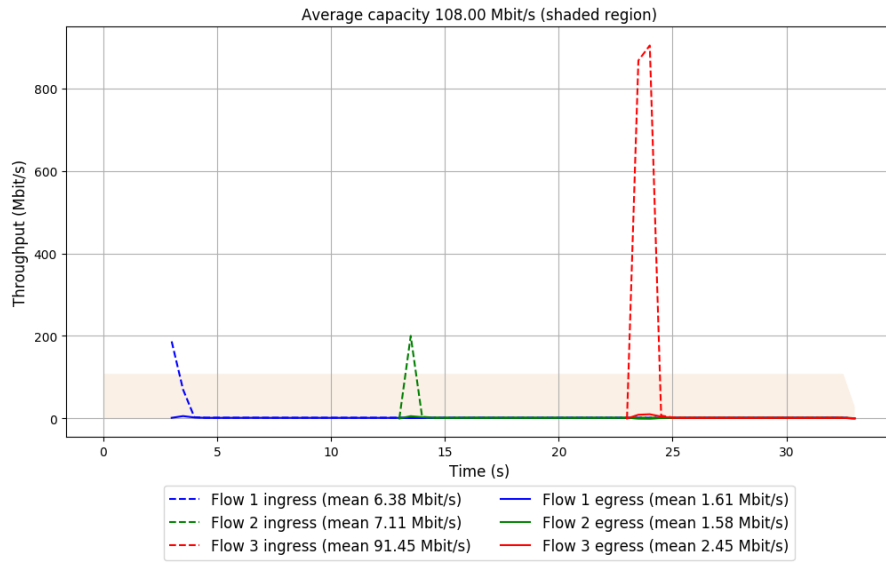
-- Flow 3:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 11.954 ms

Loss rate: 97.32%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-03-20 16:30:40

End at: 2018-03-20 16:31:10

Below is generated by plot.py at 2018-03-20 17:41:25

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 3.27 Mbit/s (3.0% utilization)

95th percentile per-packet one-way delay: 11.966 ms

Loss rate: 83.68%

-- Flow 1:

Average throughput: 1.60 Mbit/s

95th percentile per-packet one-way delay: 11.962 ms

Loss rate: 75.34%

-- Flow 2:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 11.969 ms

Loss rate: 76.53%

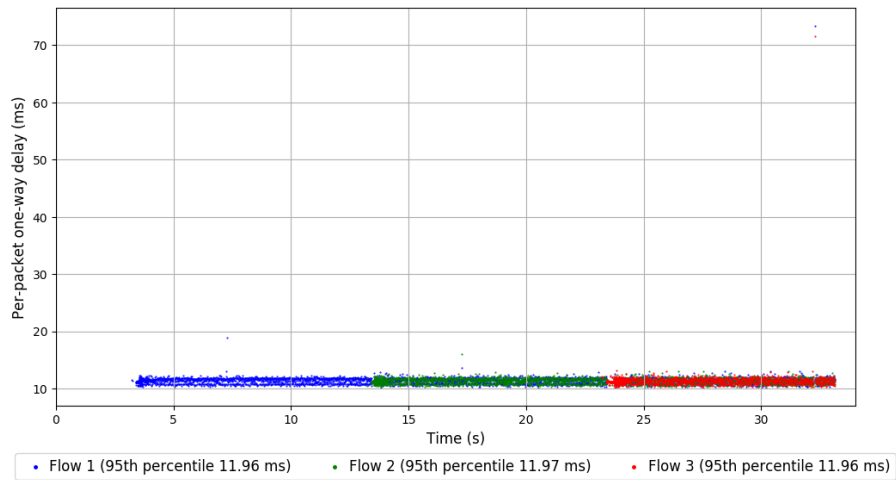
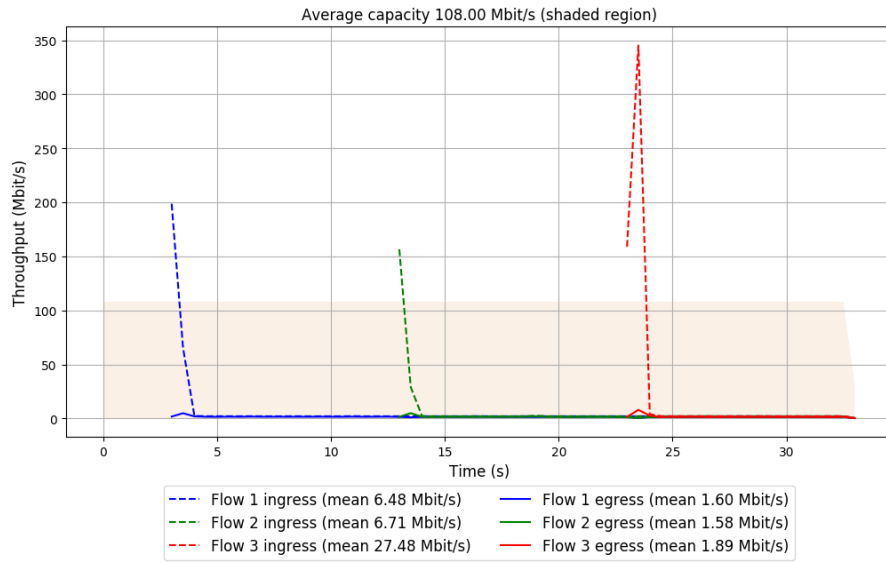
-- Flow 3:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 11.959 ms

Loss rate: 93.13%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-03-20 16:41:30

End at: 2018-03-20 16:42:00

Below is generated by plot.py at 2018-03-20 17:41:26

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 3.51 Mbit/s (3.3% utilization)

95th percentile per-packet one-way delay: 11.956 ms

Loss rate: 89.17%

-- Flow 1:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 11.962 ms

Loss rate: 83.29%

-- Flow 2:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 11.964 ms

Loss rate: 77.47%

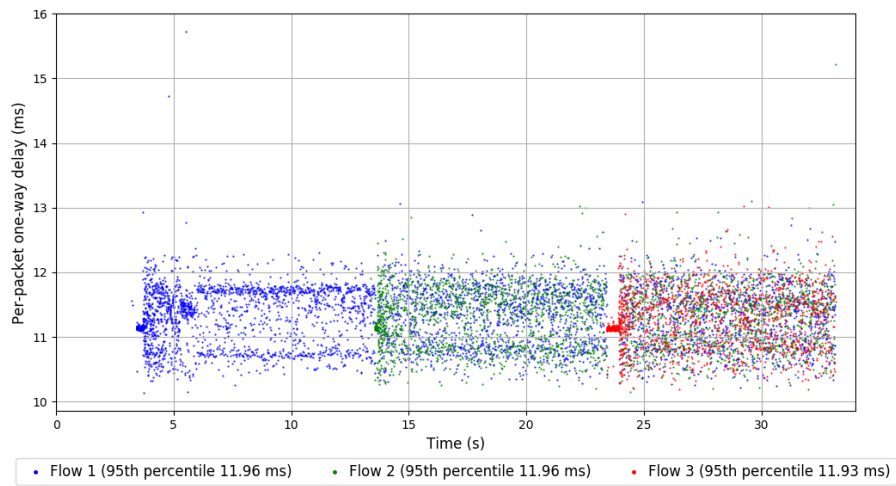
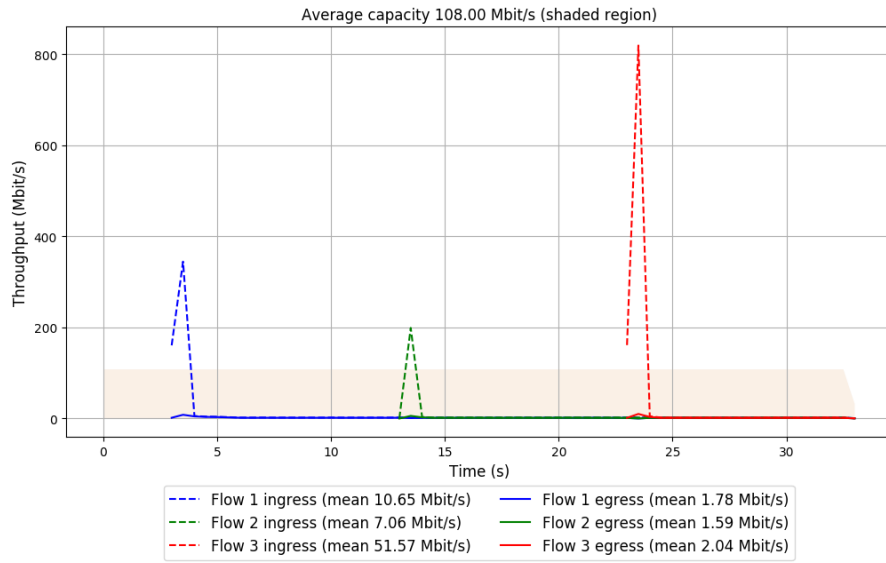
-- Flow 3:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 11.926 ms

Loss rate: 96.05%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-03-20 16:52:16

End at: 2018-03-20 16:52:46

Below is generated by plot.py at 2018-03-20 17:41:31

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 3.57 Mbit/s (3.3% utilization)

95th percentile per-packet one-way delay: 11.952 ms

Loss rate: 91.26%

-- Flow 1:

Average throughput: 1.86 Mbit/s

95th percentile per-packet one-way delay: 11.942 ms

Loss rate: 91.15%

-- Flow 2:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 11.964 ms

Loss rate: 91.09%

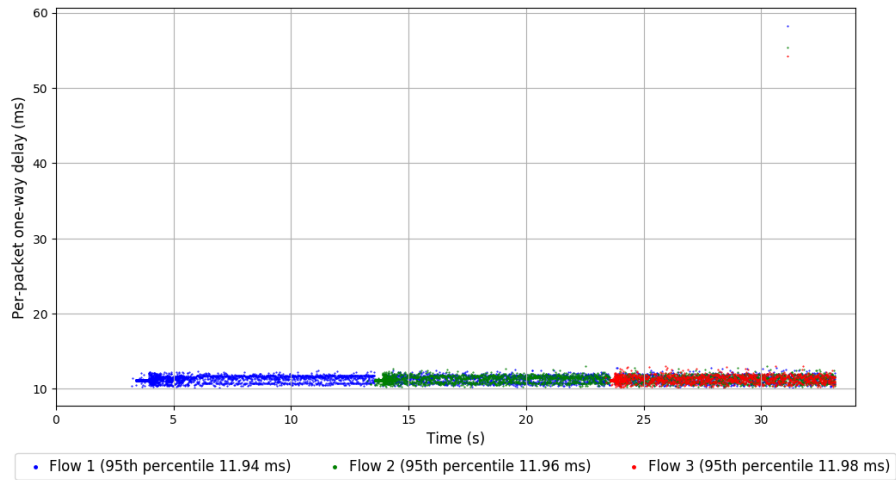
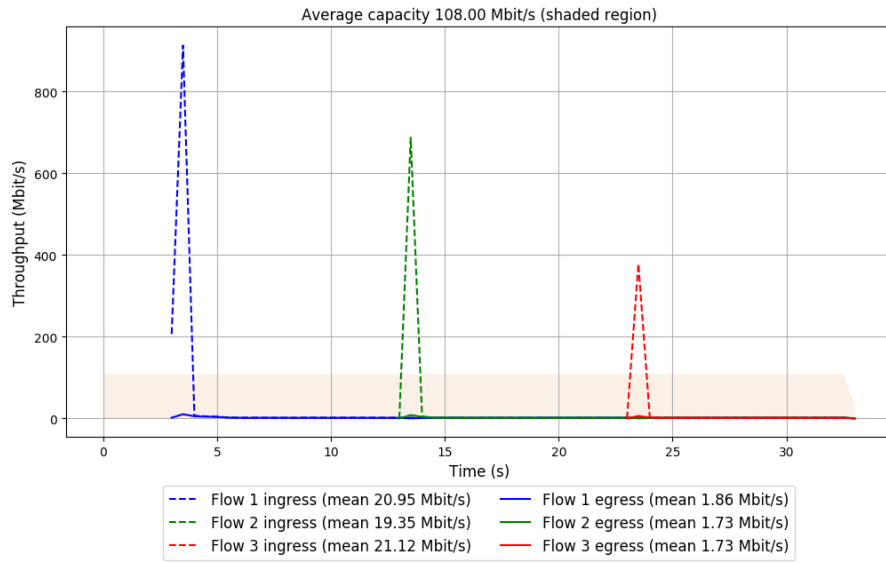
-- Flow 3:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 11.979 ms

Loss rate: 91.93%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-03-20 17:03:02

End at: 2018-03-20 17:03:32

Below is generated by plot.py at 2018-03-20 17:41:31

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 3.35 Mbit/s (3.1% utilization)

95th percentile per-packet one-way delay: 11.956 ms

Loss rate: 87.85%

-- Flow 1:

Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 11.973 ms

Loss rate: 63.68%

-- Flow 2:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 11.938 ms

Loss rate: 86.07%

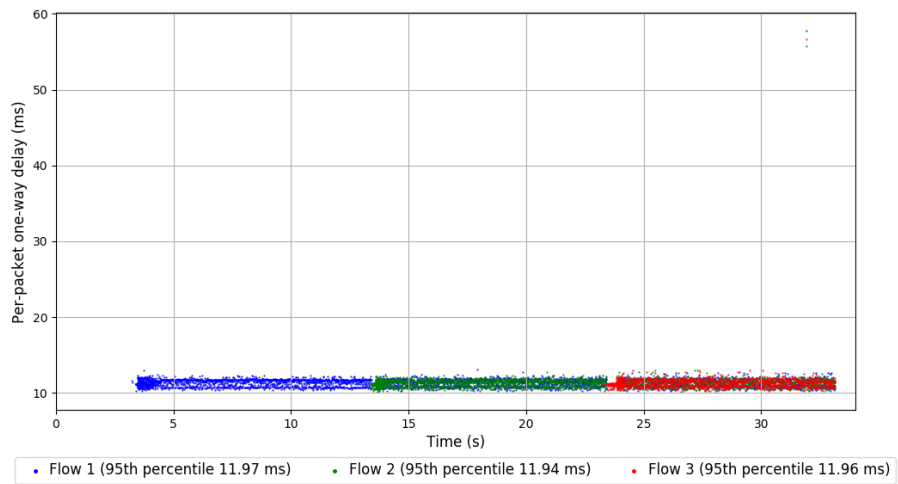
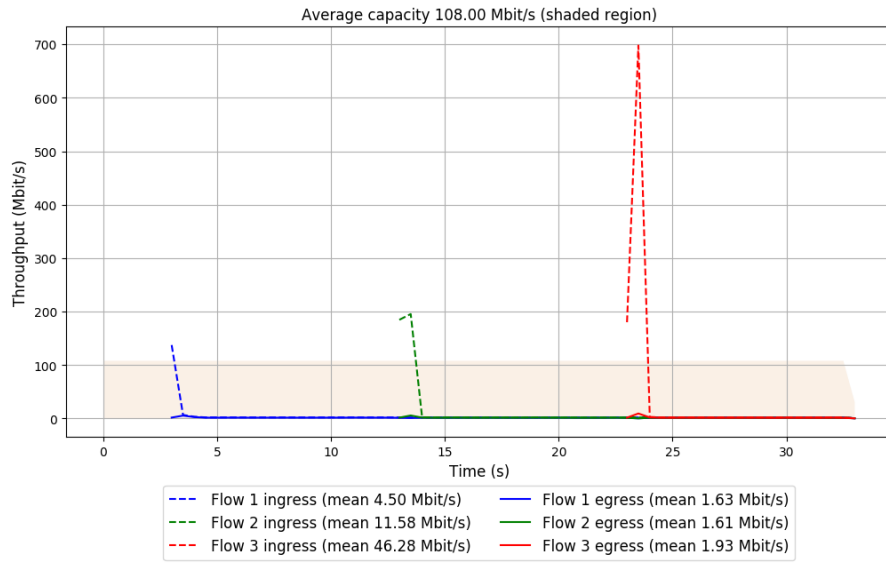
-- Flow 3:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 11.957 ms

Loss rate: 95.84%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-03-20 17:13:48

End at: 2018-03-20 17:14:18

Below is generated by plot.py at 2018-03-20 17:41:37

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 3.34 Mbit/s (3.1% utilization)

95th percentile per-packet one-way delay: 11.966 ms

Loss rate: 83.96%

-- Flow 1:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 11.965 ms

Loss rate: 83.72%

-- Flow 2:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 11.969 ms

Loss rate: 85.17%

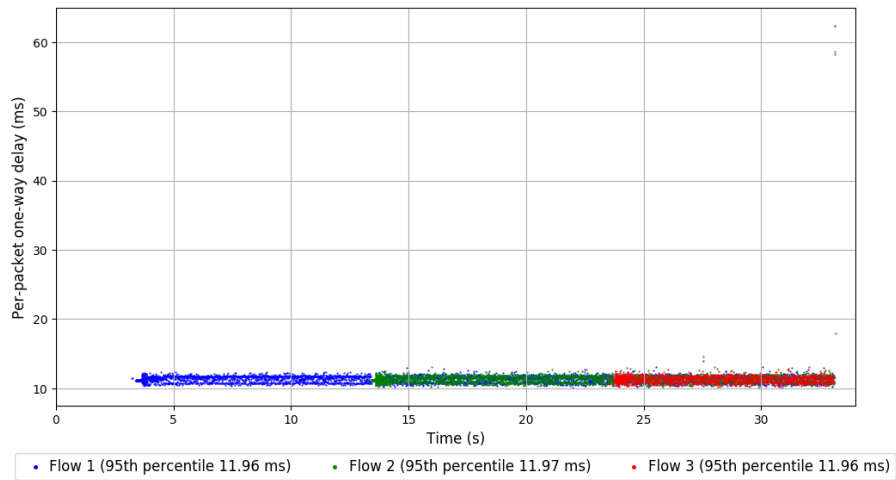
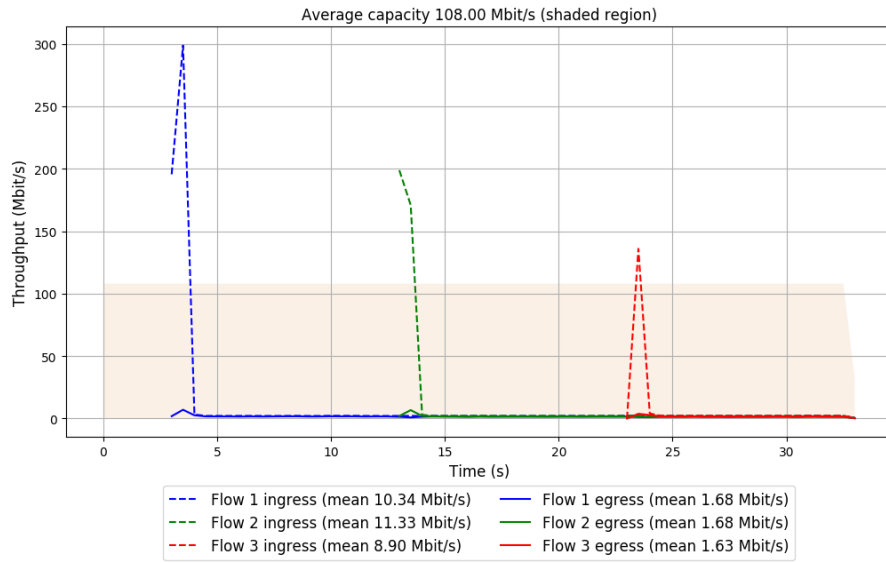
-- Flow 3:

Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 11.955 ms

Loss rate: 81.71%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-03-20 17:24:33

End at: 2018-03-20 17:25:03

Below is generated by plot.py at 2018-03-20 17:41:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 3.40 Mbit/s (3.1% utilization)

95th percentile per-packet one-way delay: 11.984 ms

Loss rate: 85.72%

-- Flow 1:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 11.976 ms

Loss rate: 84.73%

-- Flow 2:

Average throughput: 1.62 Mbit/s

95th percentile per-packet one-way delay: 12.003 ms

Loss rate: 83.39%

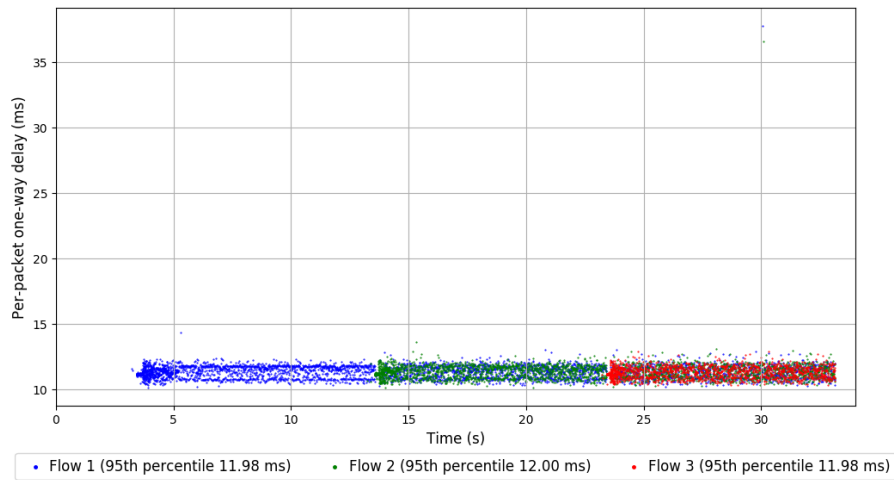
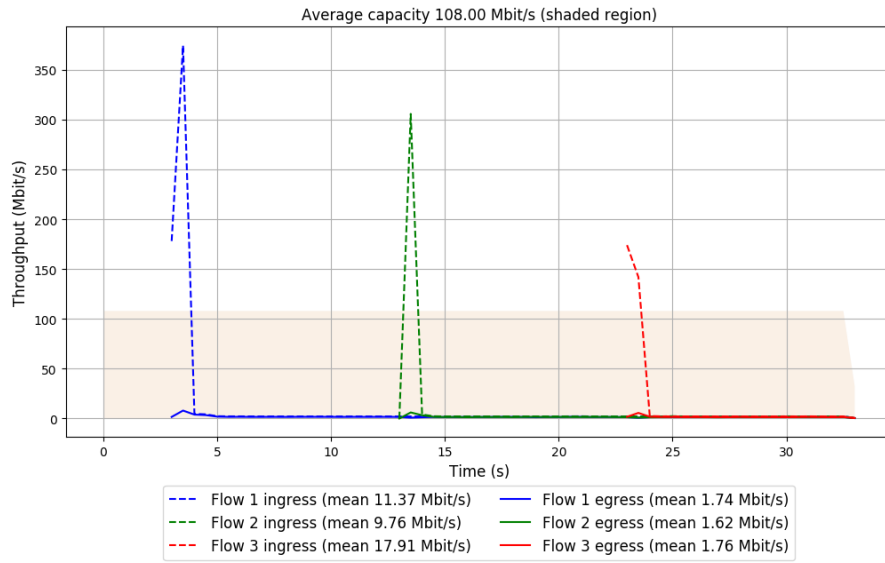
-- Flow 3:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 11.980 ms

Loss rate: 90.16%

Run 10: Report of FillP — Data Link



Run 1: Statistics of Indigo-1-32

Start at: 2018-03-20 15:42:48

End at: 2018-03-20 15:43:18

Below is generated by plot.py at 2018-03-20 17:41:54

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 2.09 Mbit/s (1.9% utilization)

95th percentile per-packet one-way delay: 12.159 ms

Loss rate: 95.41%

-- Flow 1:

Average throughput: 1.16 Mbit/s

95th percentile per-packet one-way delay: 12.155 ms

Loss rate: 95.37%

-- Flow 2:

Average throughput: 0.88 Mbit/s

95th percentile per-packet one-way delay: 12.158 ms

Loss rate: 95.41%

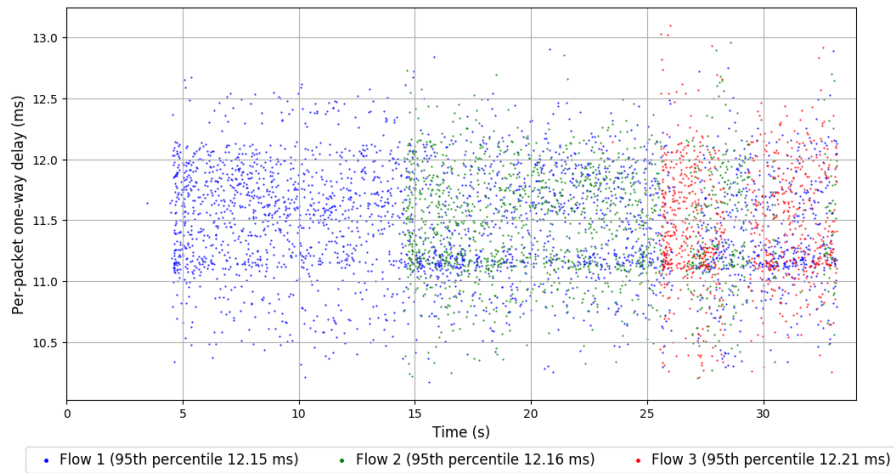
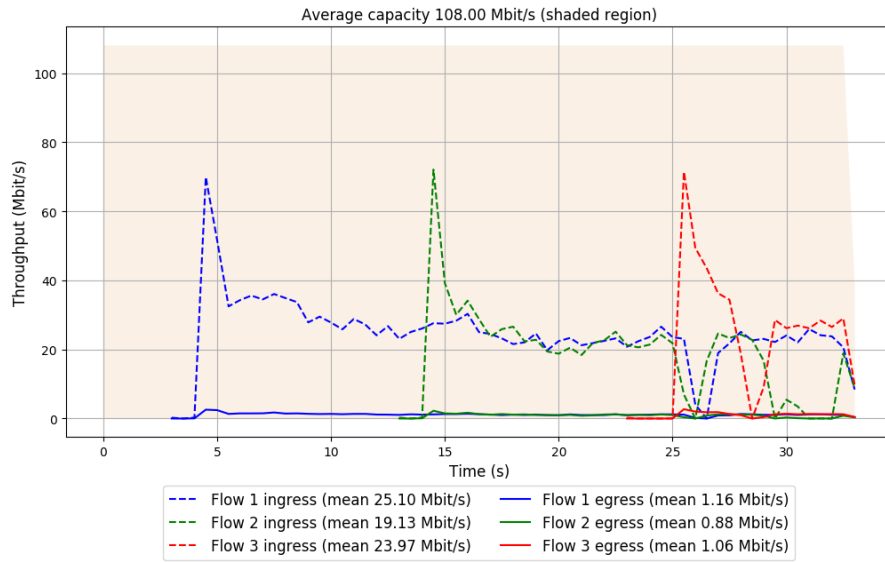
-- Flow 3:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 12.207 ms

Loss rate: 95.58%

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



Run 2: Statistics of Indigo-1-32

Start at: 2018-03-20 15:53:32

End at: 2018-03-20 15:54:02

Below is generated by plot.py at 2018-03-20 17:42:02

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 1.88 Mbit/s (1.7% utilization)

95th percentile per-packet one-way delay: 12.151 ms

Loss rate: 94.87%

-- Flow 1:

Average throughput: 0.96 Mbit/s

95th percentile per-packet one-way delay: 12.143 ms

Loss rate: 94.33%

-- Flow 2:

Average throughput: 0.86 Mbit/s

95th percentile per-packet one-way delay: 12.200 ms

Loss rate: 95.29%

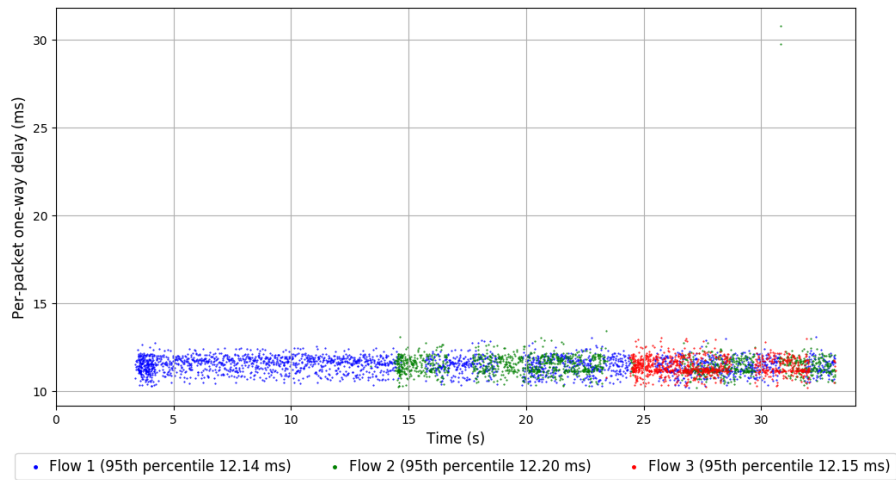
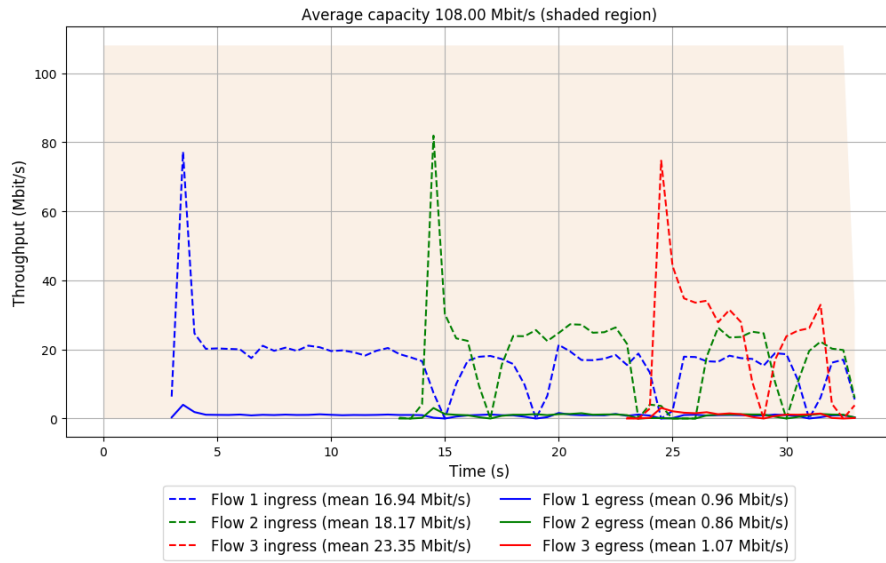
-- Flow 3:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 12.153 ms

Loss rate: 95.42%

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-03-20 16:04:17

End at: 2018-03-20 16:04:47

Below is generated by plot.py at 2018-03-20 17:42:10

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 2.18 Mbit/s (2.0% utilization)

95th percentile per-packet one-way delay: 12.156 ms

Loss rate: 95.37%

-- Flow 1:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 12.171 ms

Loss rate: 95.12%

-- Flow 2:

Average throughput: 1.04 Mbit/s

95th percentile per-packet one-way delay: 12.151 ms

Loss rate: 95.55%

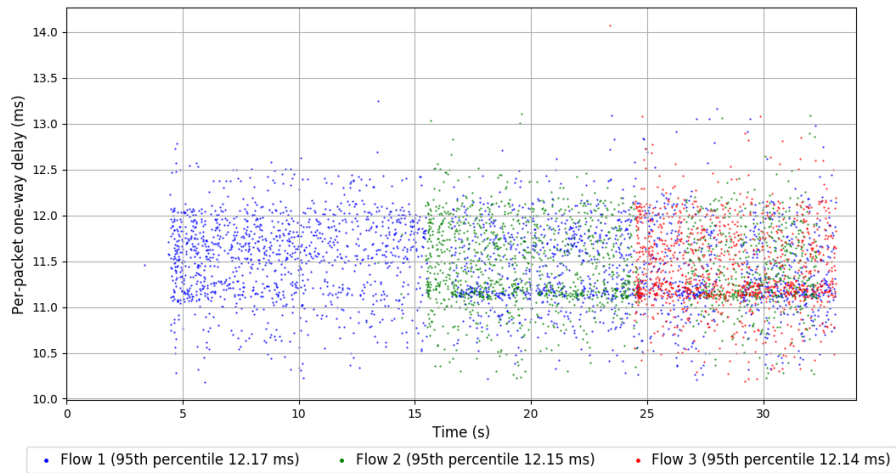
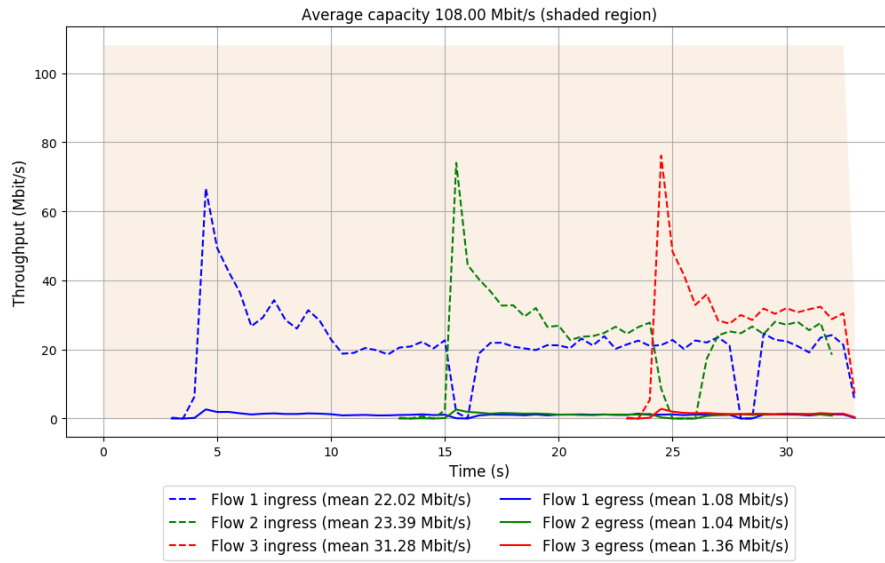
-- Flow 3:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 12.143 ms

Loss rate: 95.64%

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



Run 4: Statistics of Indigo-1-32

Start at: 2018-03-20 16:15:04

End at: 2018-03-20 16:15:34

Below is generated by plot.py at 2018-03-20 17:42:12

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 2.40 Mbit/s (2.2% utilization)

95th percentile per-packet one-way delay: 12.184 ms

Loss rate: 95.20%

-- Flow 1:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 12.190 ms

Loss rate: 95.14%

-- Flow 2:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 12.179 ms

Loss rate: 95.16%

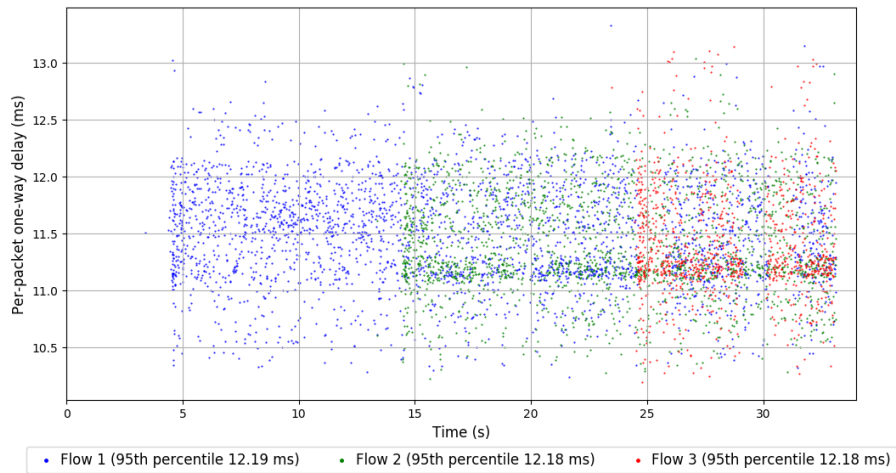
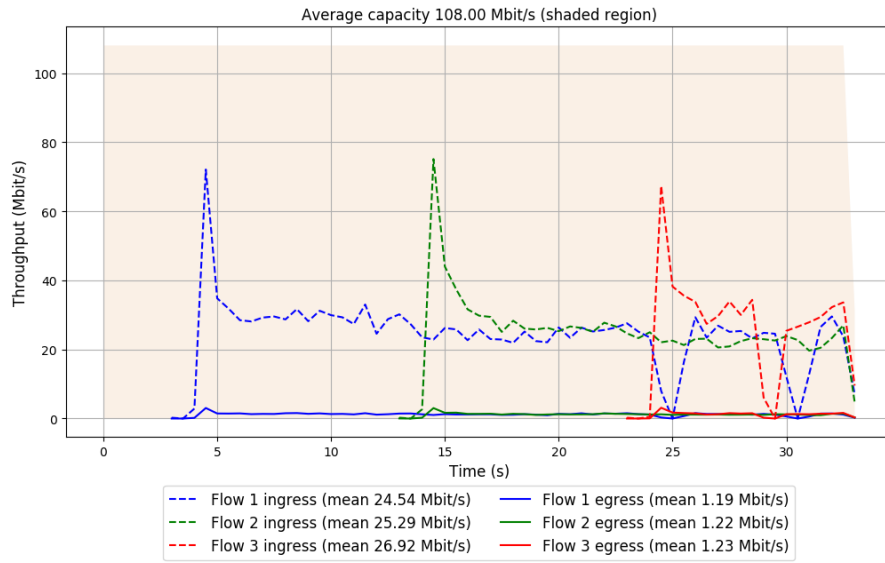
-- Flow 3:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 12.182 ms

Loss rate: 95.45%

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



Run 5: Statistics of Indigo-1-32

Start at: 2018-03-20 16:25:50

End at: 2018-03-20 16:26:20

Below is generated by plot.py at 2018-03-20 17:42:12

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 2.00 Mbit/s (1.8% utilization)

95th percentile per-packet one-way delay: 12.210 ms

Loss rate: 95.13%

-- Flow 1:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 12.229 ms

Loss rate: 94.98%

-- Flow 2:

Average throughput: 1.18 Mbit/s

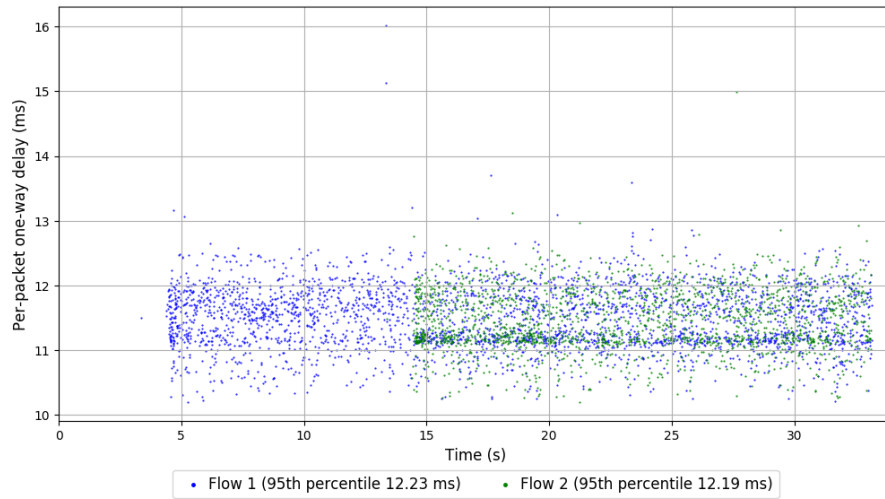
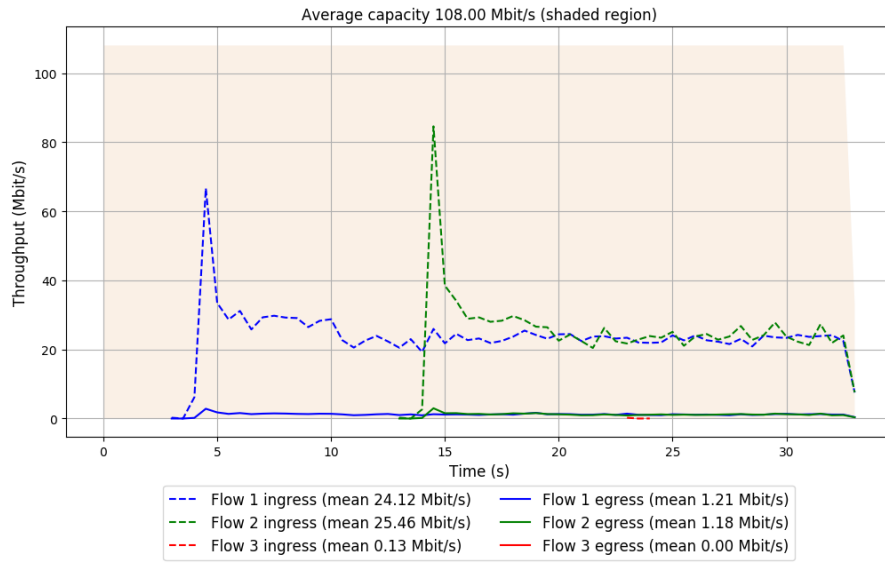
95th percentile per-packet one-way delay: 12.193 ms

Loss rate: 95.35%

-- Flow 3:

Average throughput: 0.00 Mbit/s

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



Run 6: Statistics of Indigo-1-32

Start at: 2018-03-20 16:36:38

End at: 2018-03-20 16:37:08

Below is generated by plot.py at 2018-03-20 17:42:15

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 2.13 Mbit/s (2.0% utilization)

95th percentile per-packet one-way delay: 12.170 ms

Loss rate: 95.21%

-- Flow 1:

Average throughput: 0.86 Mbit/s

95th percentile per-packet one-way delay: 12.174 ms

Loss rate: 95.18%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 12.166 ms

Loss rate: 95.17%

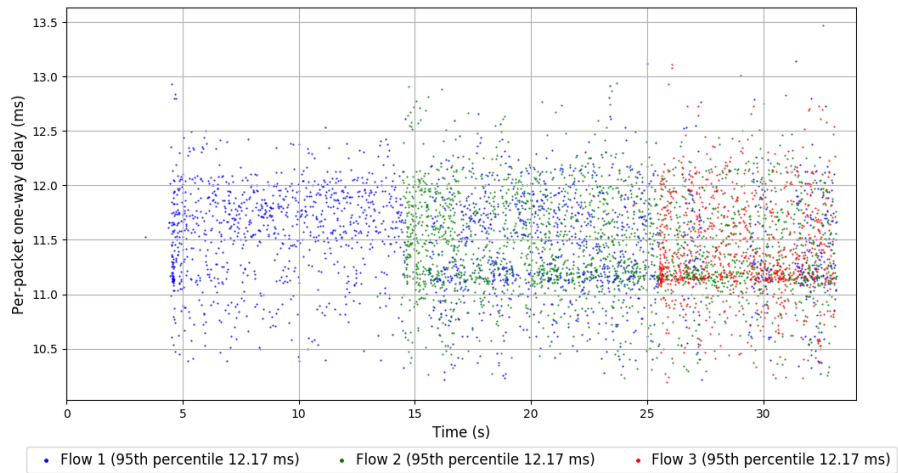
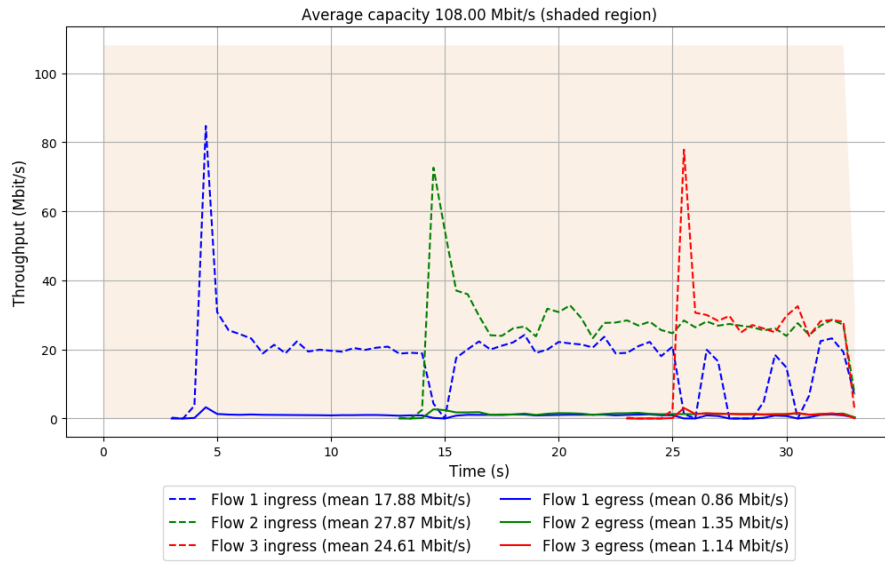
-- Flow 3:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 12.167 ms

Loss rate: 95.37%

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



Run 7: Statistics of Indigo-1-32

Start at: 2018-03-20 16:47:29

End at: 2018-03-20 16:47:59

Below is generated by plot.py at 2018-03-20 17:42:22

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 2.32 Mbit/s (2.1% utilization)

95th percentile per-packet one-way delay: 12.176 ms

Loss rate: 95.39%

-- Flow 1:

Average throughput: 1.16 Mbit/s

95th percentile per-packet one-way delay: 12.235 ms

Loss rate: 95.33%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 12.146 ms

Loss rate: 95.31%

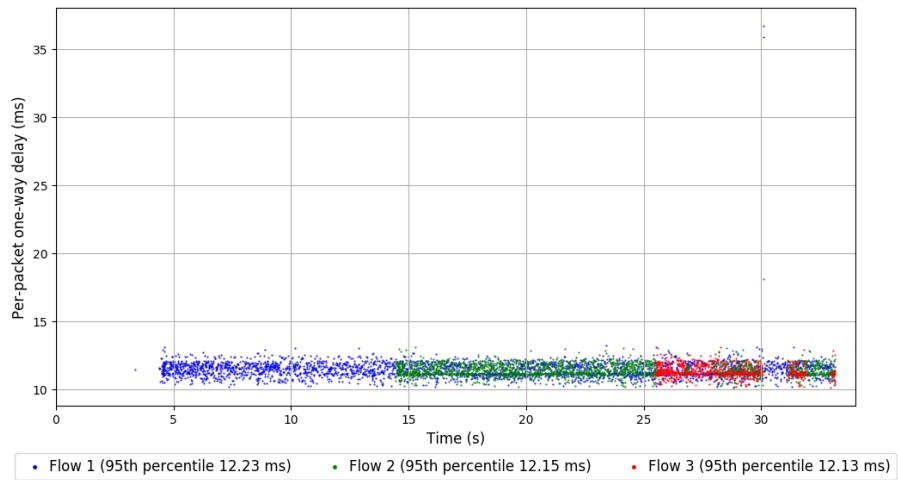
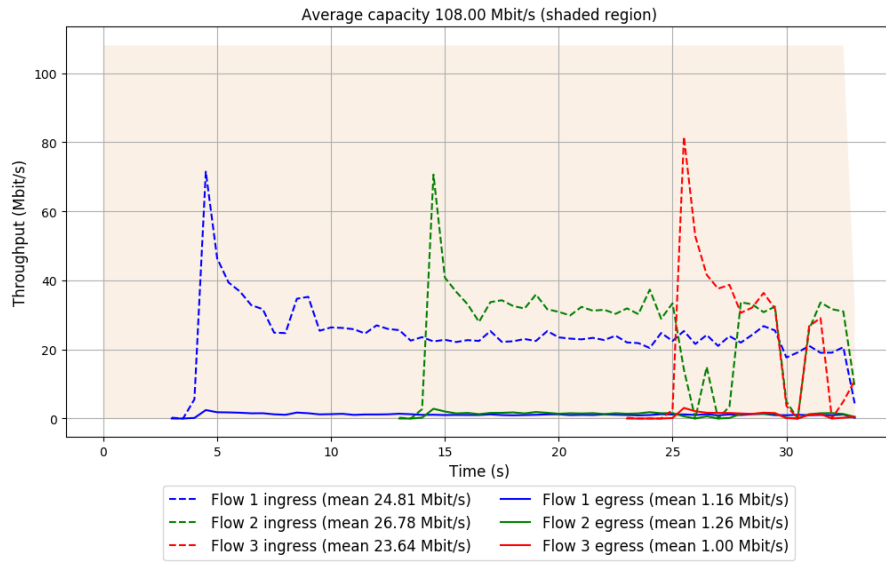
-- Flow 3:

Average throughput: 1.00 Mbit/s

95th percentile per-packet one-way delay: 12.128 ms

Loss rate: 95.76%

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



Run 8: Statistics of Indigo-1-32

Start at: 2018-03-20 16:58:14

End at: 2018-03-20 16:58:44

Below is generated by plot.py at 2018-03-20 17:42:26

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 2.35 Mbit/s (2.2% utilization)

95th percentile per-packet one-way delay: 12.156 ms

Loss rate: 95.48%

-- Flow 1:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 12.181 ms

Loss rate: 94.96%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 12.175 ms

Loss rate: 95.58%

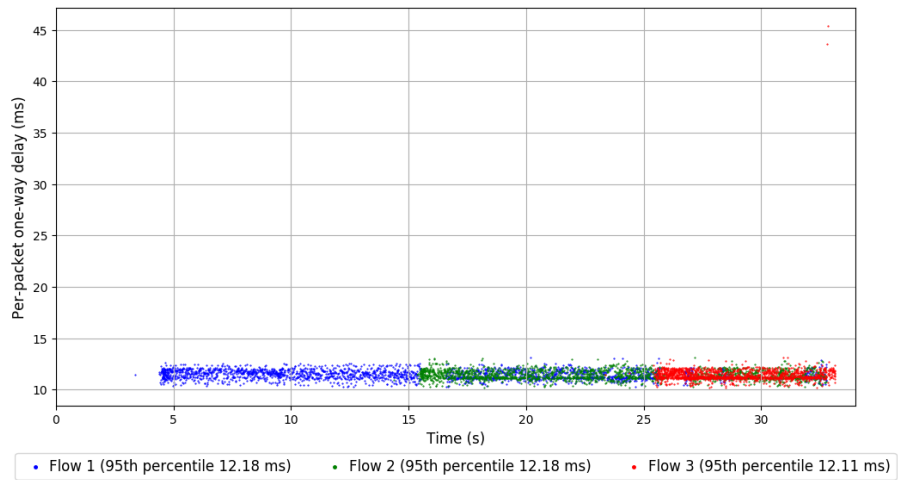
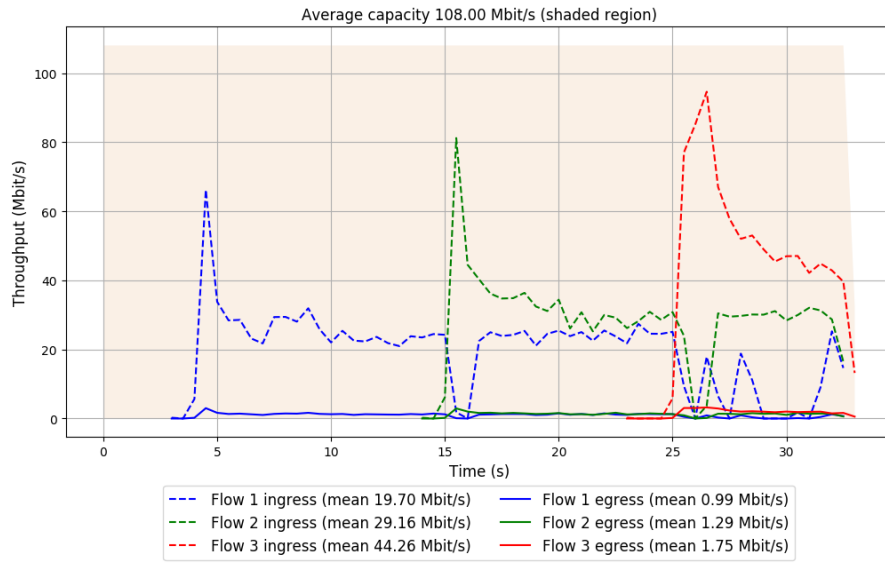
-- Flow 3:

Average throughput: 1.75 Mbit/s

95th percentile per-packet one-way delay: 12.111 ms

Loss rate: 96.04%

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



Run 9: Statistics of Indigo-1-32

Start at: 2018-03-20 17:09:00

End at: 2018-03-20 17:09:30

Below is generated by plot.py at 2018-03-20 17:42:38

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 2.11 Mbit/s (2.0% utilization)

95th percentile per-packet one-way delay: 12.235 ms

Loss rate: 95.57%

-- Flow 1:

Average throughput: 1.05 Mbit/s

95th percentile per-packet one-way delay: 12.285 ms

Loss rate: 95.74%

-- Flow 2:

Average throughput: 1.01 Mbit/s

95th percentile per-packet one-way delay: 12.145 ms

Loss rate: 95.28%

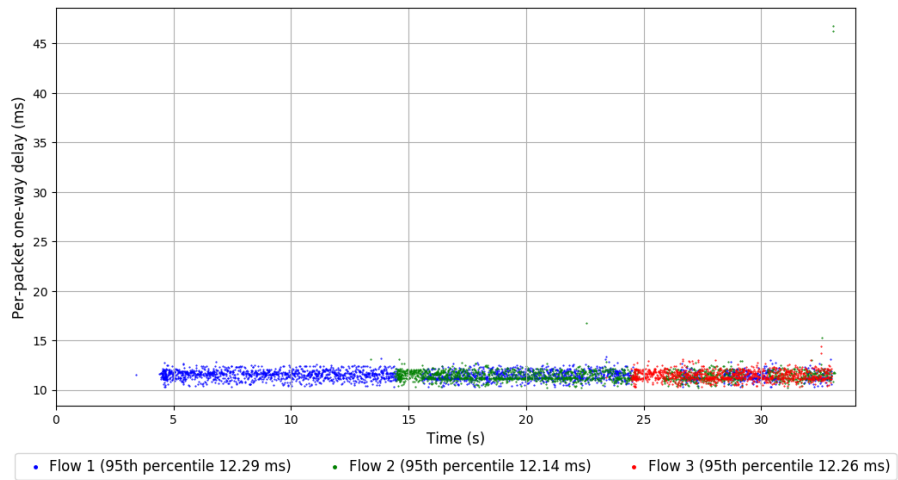
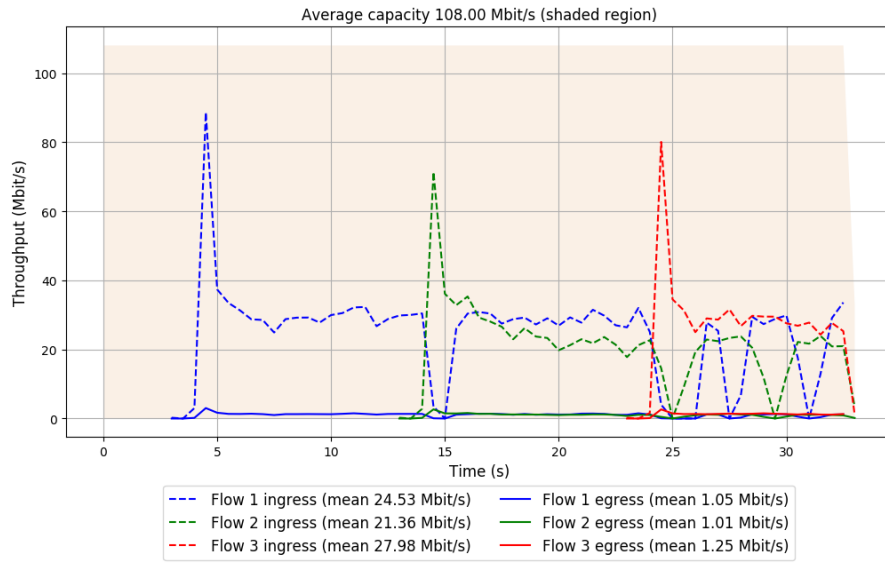
-- Flow 3:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 12.257 ms

Loss rate: 95.55%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-03-20 17:19:46

End at: 2018-03-20 17:20:16

Below is generated by plot.py at 2018-03-20 17:42:51

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 2.35 Mbit/s (2.2% utilization)

95th percentile per-packet one-way delay: 12.166 ms

Loss rate: 95.35%

-- Flow 1:

Average throughput: 1.05 Mbit/s

95th percentile per-packet one-way delay: 12.189 ms

Loss rate: 95.23%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 12.156 ms

Loss rate: 95.35%

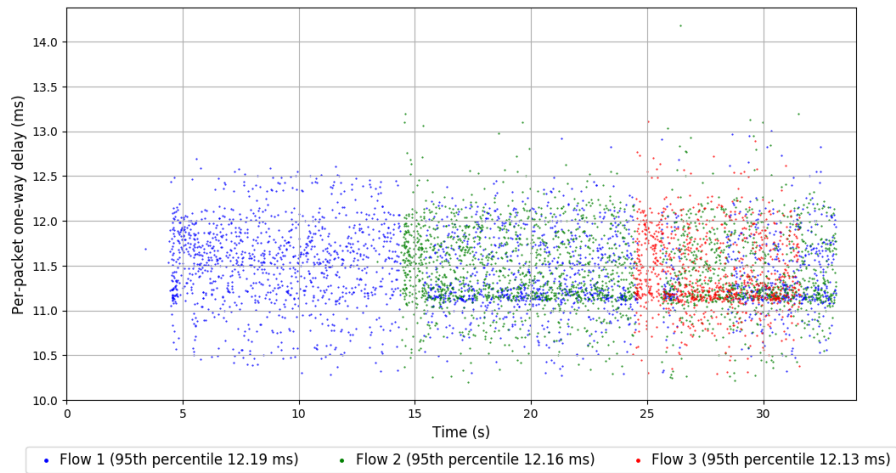
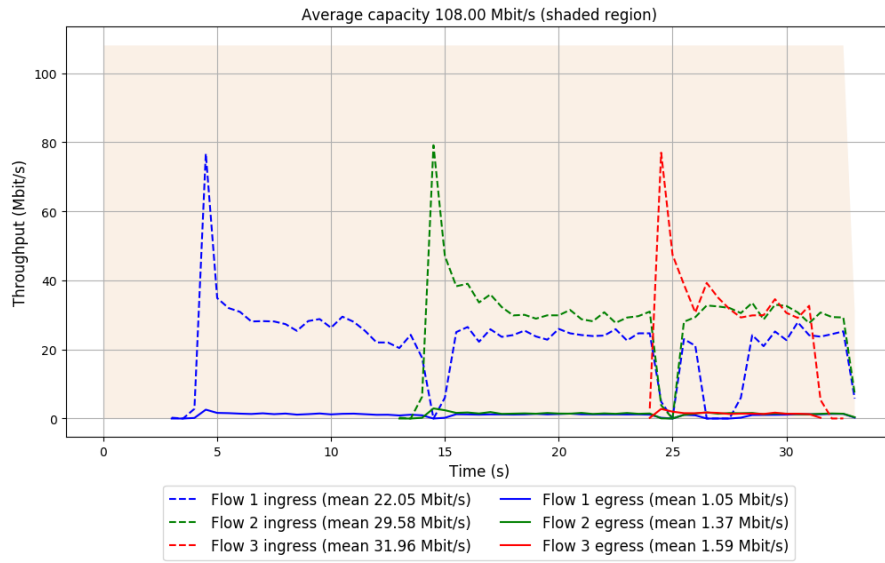
-- Flow 3:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 12.131 ms

Loss rate: 95.64%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-03-20 15:43:59

End at: 2018-03-20 15:44:29

Below is generated by plot.py at 2018-03-20 17:42:51

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 6.54 Mbit/s (6.1% utilization)

95th percentile per-packet one-way delay: 11.962 ms

Loss rate: 1.87%

-- Flow 1:

Average throughput: 5.74 Mbit/s

95th percentile per-packet one-way delay: 11.957 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.140 ms

Loss rate: 28.20%

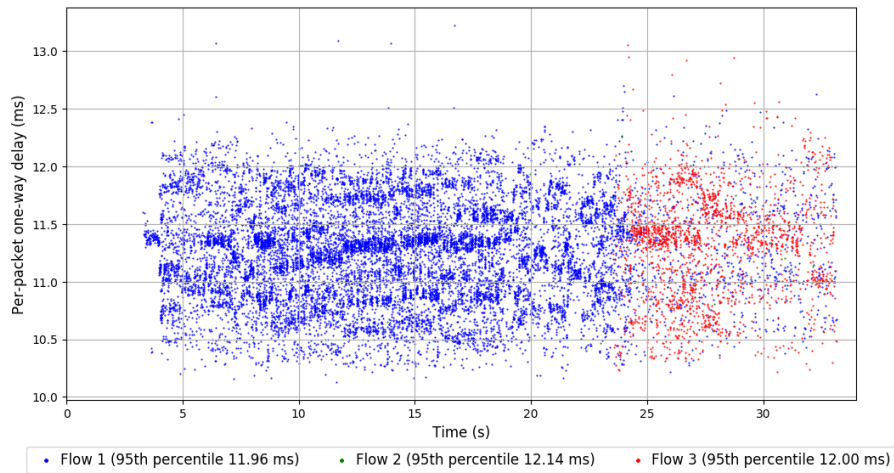
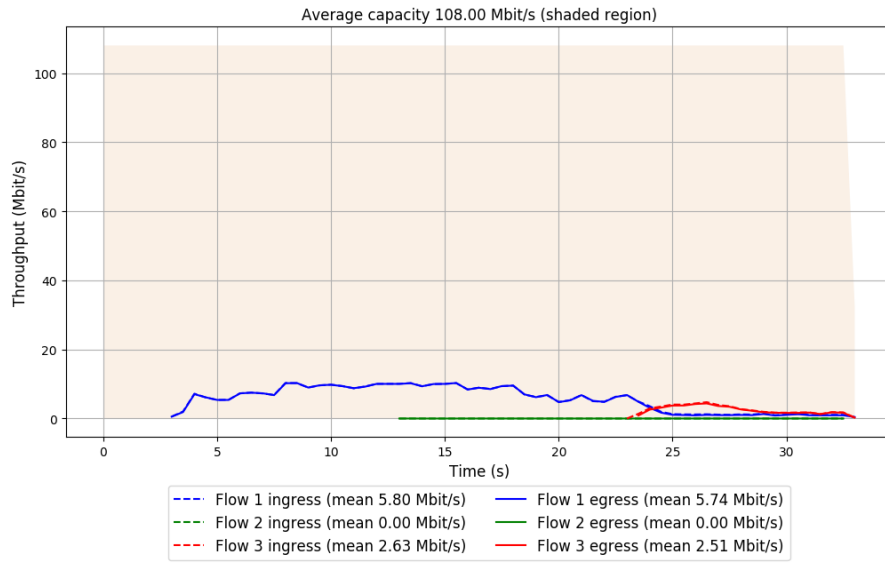
-- Flow 3:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 11.996 ms

Loss rate: 6.92%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-03-20 15:54:44

End at: 2018-03-20 15:55:14

Below is generated by plot.py at 2018-03-20 17:42:51

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.77 Mbit/s (5.3% utilization)

95th percentile per-packet one-way delay: 12.007 ms

Loss rate: 7.15%

-- Flow 1:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 12.022 ms

Loss rate: 5.38%

-- Flow 2:

Average throughput: 3.34 Mbit/s

95th percentile per-packet one-way delay: 11.982 ms

Loss rate: 8.44%

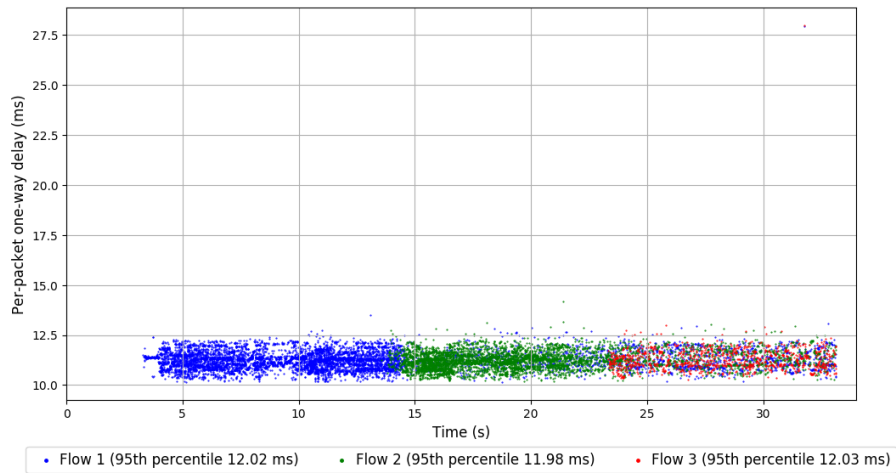
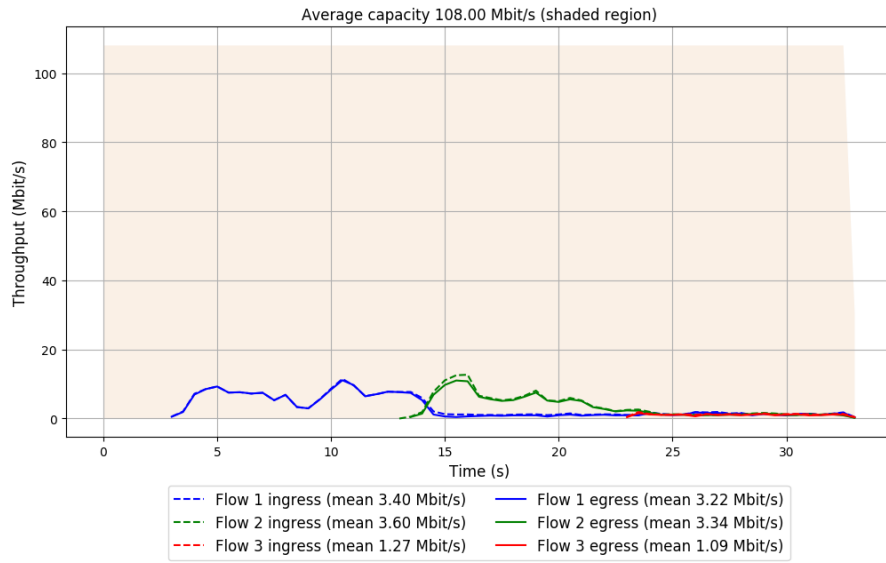
-- Flow 3:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 12.032 ms

Loss rate: 14.14%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-03-20 16:05:29

End at: 2018-03-20 16:05:59

Below is generated by plot.py at 2018-03-20 17:42:51

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.06 Mbit/s (4.7% utilization)

95th percentile per-packet one-way delay: 12.040 ms

Loss rate: 6.44%

-- Flow 1:

Average throughput: 4.01 Mbit/s

95th percentile per-packet one-way delay: 12.022 ms

Loss rate: 3.64%

-- Flow 2:

Average throughput: 1.03 Mbit/s

95th percentile per-packet one-way delay: 12.111 ms

Loss rate: 18.00%

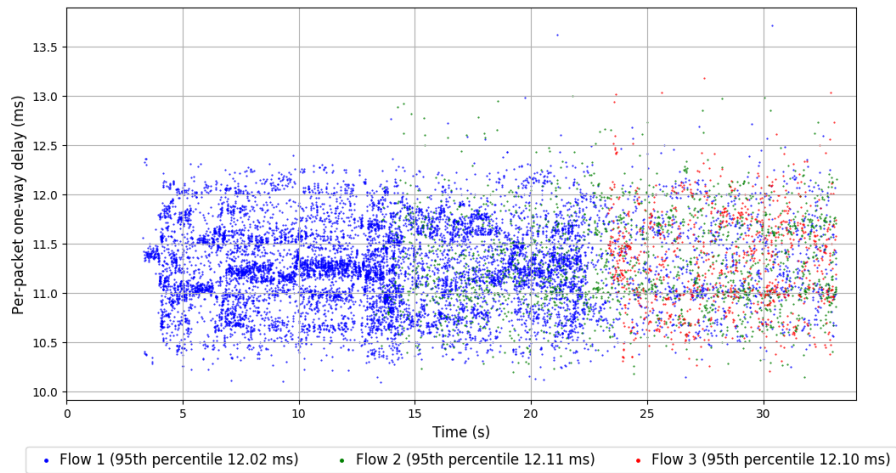
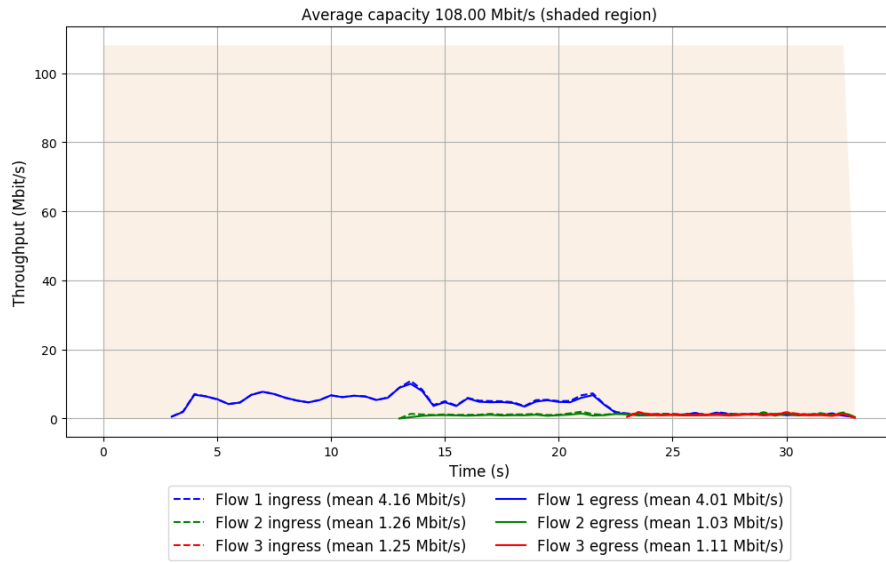
-- Flow 3:

Average throughput: 1.11 Mbit/s

95th percentile per-packet one-way delay: 12.099 ms

Loss rate: 11.25%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-03-20 16:16:15

End at: 2018-03-20 16:16:45

Below is generated by plot.py at 2018-03-20 17:42:52

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.04 Mbit/s (4.7% utilization)

95th percentile per-packet one-way delay: 12.012 ms

Loss rate: 1.74%

-- Flow 1:

Average throughput: 4.69 Mbit/s

95th percentile per-packet one-way delay: 12.004 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.537 ms

Loss rate: 35.24%

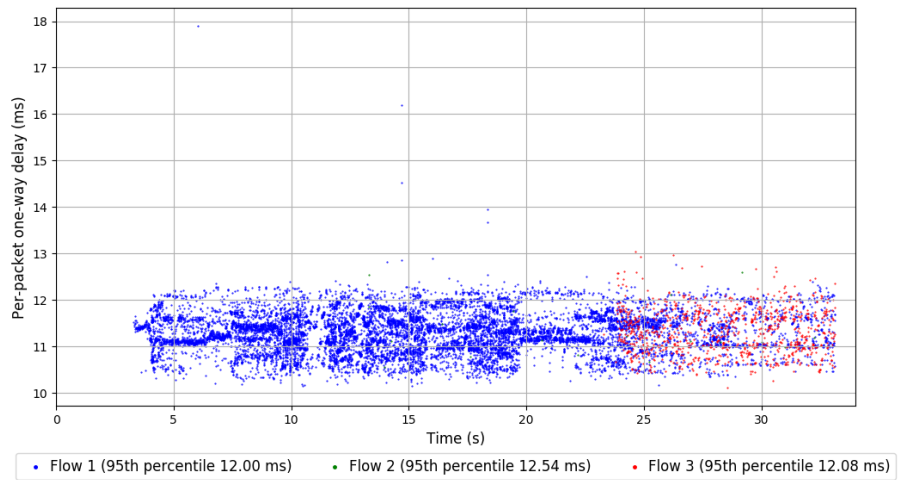
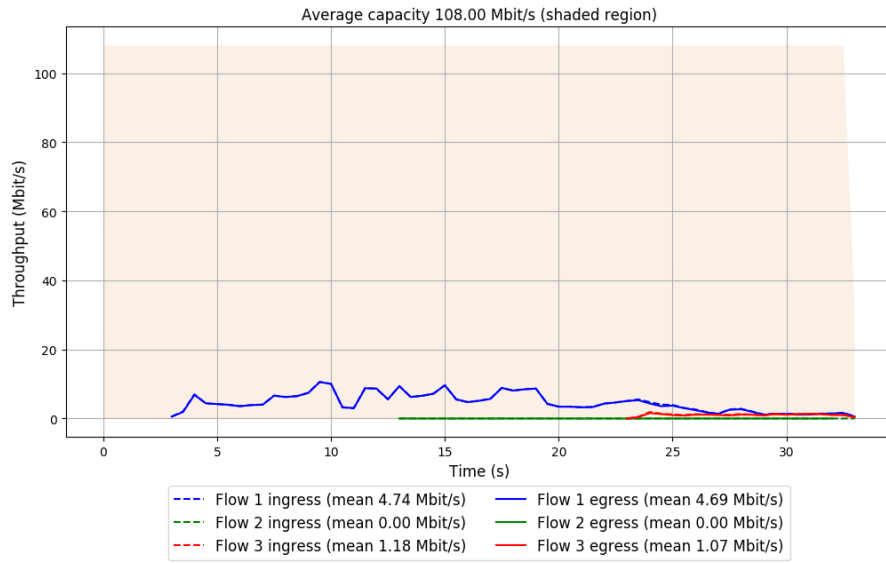
-- Flow 3:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 12.077 ms

Loss rate: 8.82%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-03-20 16:27:01

End at: 2018-03-20 16:27:31

Below is generated by plot.py at 2018-03-20 17:43:00

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 6.59 Mbit/s (6.1% utilization)

95th percentile per-packet one-way delay: 11.966 ms

Loss rate: 4.14%

-- Flow 1:

Average throughput: 6.31 Mbit/s

95th percentile per-packet one-way delay: 11.956 ms

Loss rate: 2.86%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.897 ms

Loss rate: 29.20%

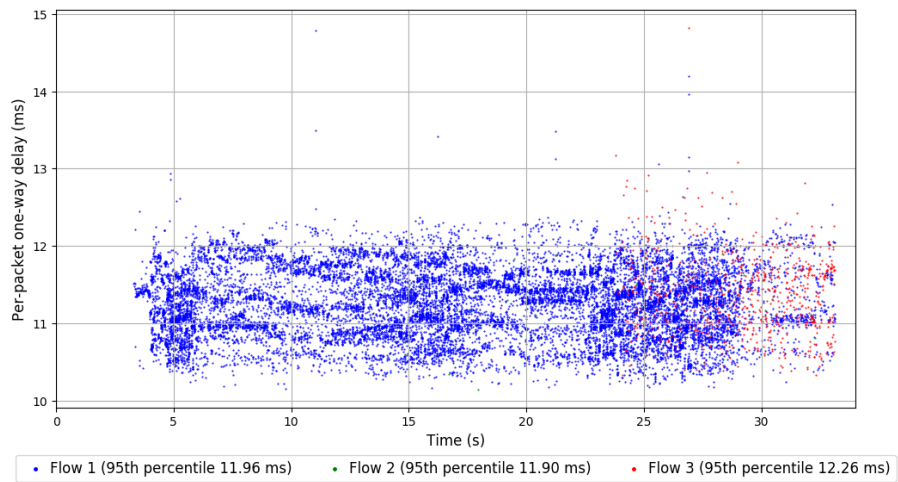
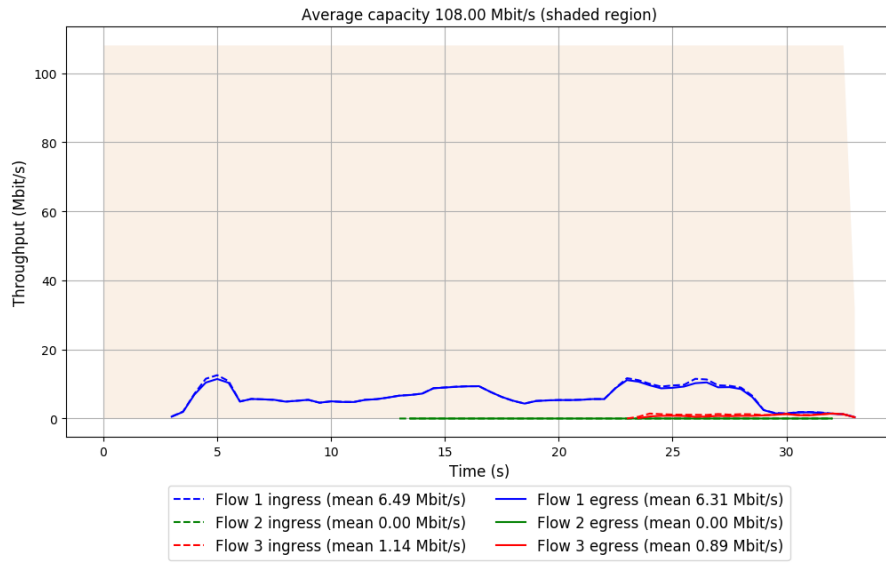
-- Flow 3:

Average throughput: 0.89 Mbit/s

95th percentile per-packet one-way delay: 12.262 ms

Loss rate: 26.17%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-03-20 16:37:50

End at: 2018-03-20 16:38:20

Below is generated by plot.py at 2018-03-20 17:43:04

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.10 Mbit/s (4.7% utilization)

95th percentile per-packet one-way delay: 11.998 ms

Loss rate: 4.38%

-- Flow 1:

Average throughput: 3.36 Mbit/s

95th percentile per-packet one-way delay: 11.994 ms

Loss rate: 3.48%

-- Flow 2:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 12.003 ms

Loss rate: 6.07%

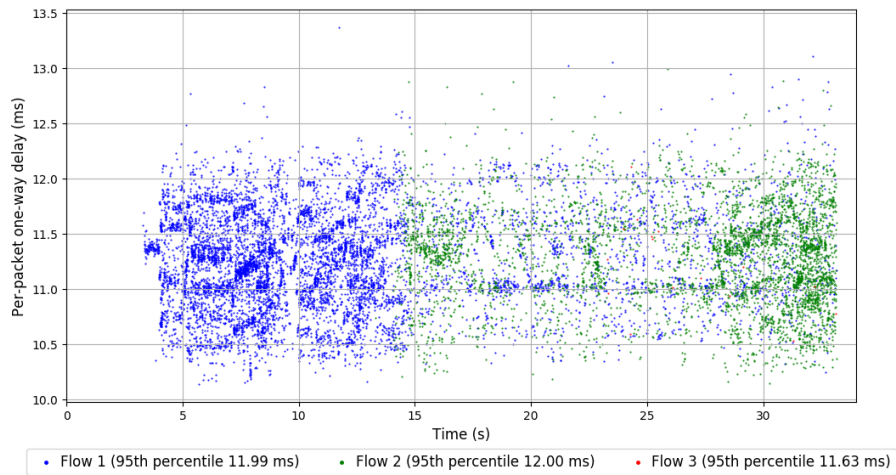
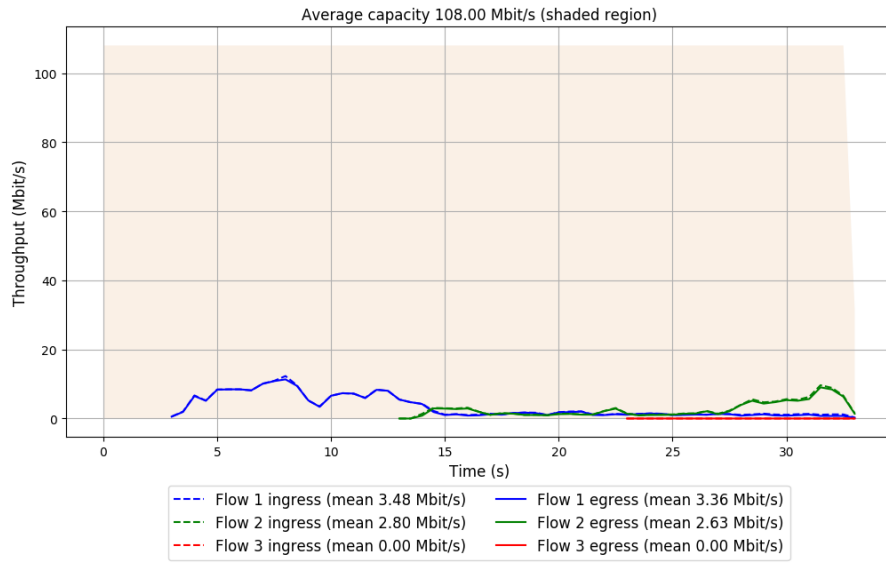
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.633 ms

Loss rate: 6.01%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-03-20 16:48:40

End at: 2018-03-20 16:49:10

Below is generated by plot.py at 2018-03-20 17:43:16

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.62 Mbit/s (5.2% utilization)

95th percentile per-packet one-way delay: 12.015 ms

Loss rate: 2.75%

-- Flow 1:

Average throughput: 5.22 Mbit/s

95th percentile per-packet one-way delay: 12.007 ms

Loss rate: 1.97%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.679 ms

Loss rate: 21.10%

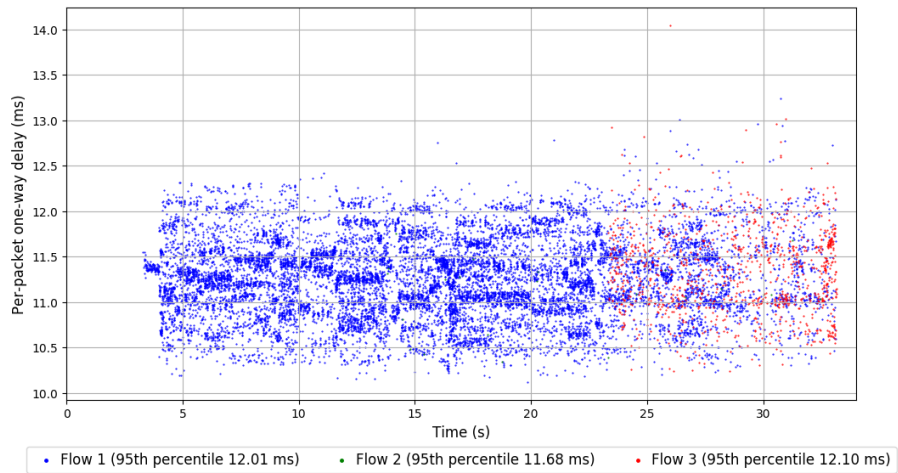
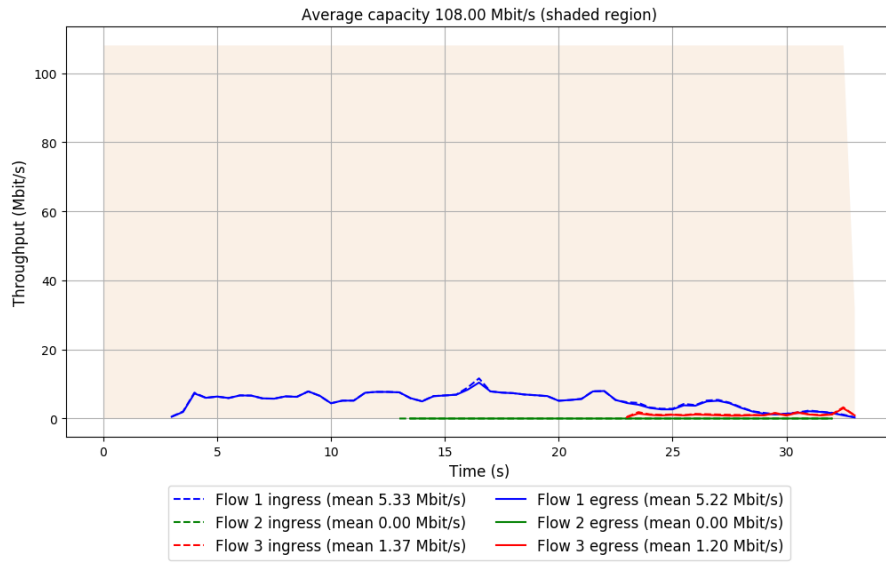
-- Flow 3:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 12.095 ms

Loss rate: 11.95%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-03-20 16:59:25

End at: 2018-03-20 16:59:55

Below is generated by plot.py at 2018-03-20 17:43:25

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 4.80 Mbit/s (4.4% utilization)

95th percentile per-packet one-way delay: 12.007 ms

Loss rate: 5.91%

-- Flow 1:

Average throughput: 3.67 Mbit/s

95th percentile per-packet one-way delay: 11.988 ms

Loss rate: 3.78%

-- Flow 2:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 12.076 ms

Loss rate: 13.61%

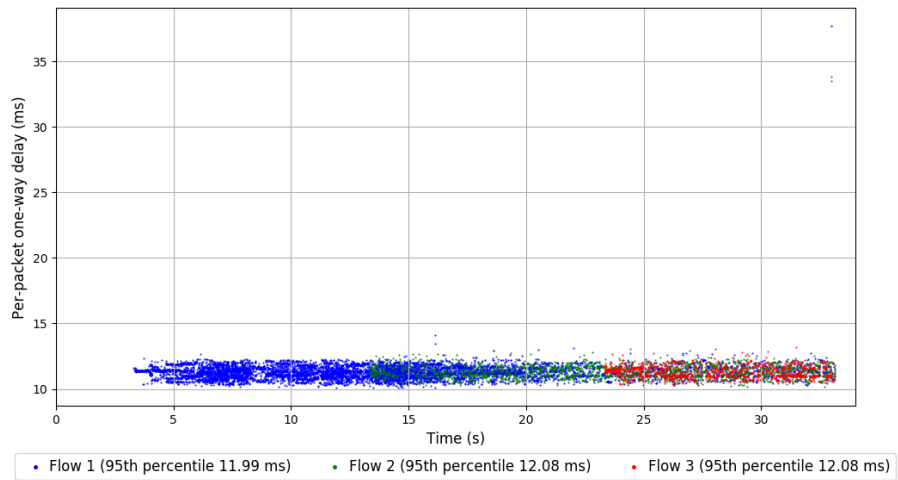
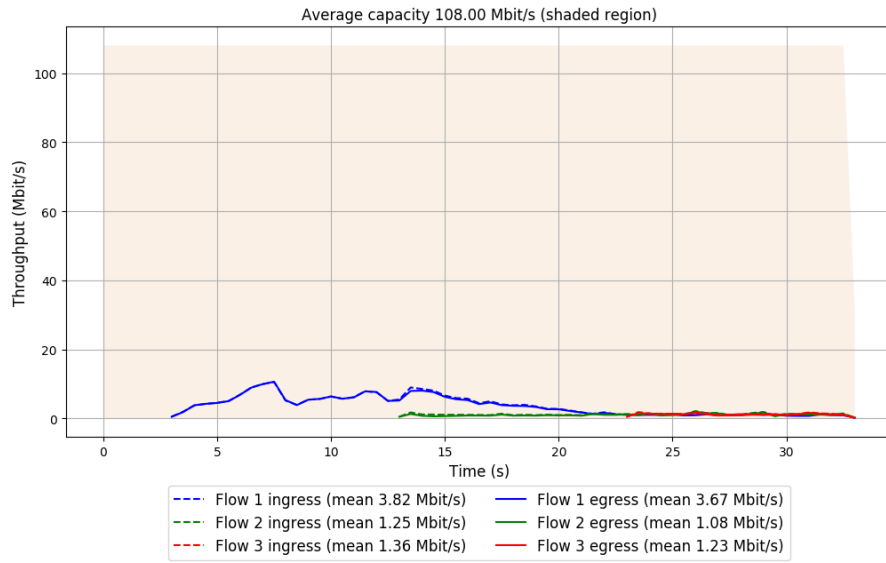
-- Flow 3:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 12.078 ms

Loss rate: 9.71%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-03-20 17:10:12

End at: 2018-03-20 17:10:42

Below is generated by plot.py at 2018-03-20 17:43:25

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.02 Mbit/s (4.7% utilization)

95th percentile per-packet one-way delay: 12.024 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 4.65 Mbit/s

95th percentile per-packet one-way delay: 12.019 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.684 ms

Loss rate: 26.07%

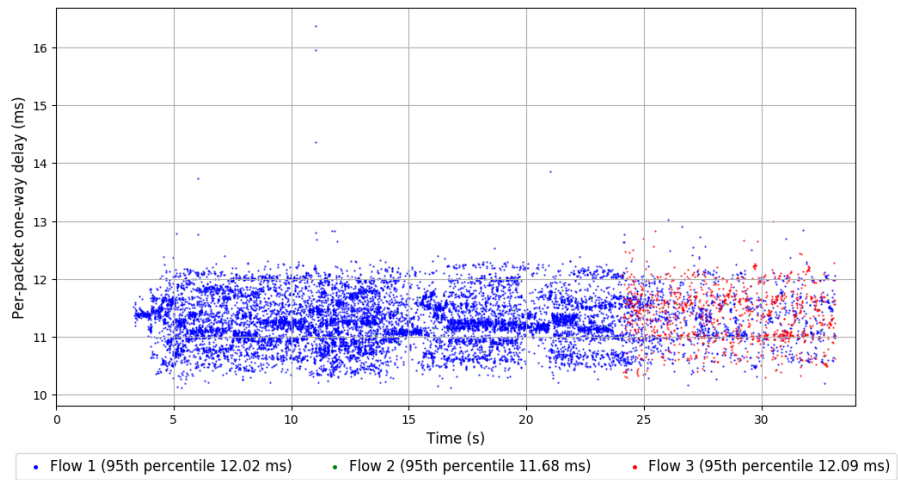
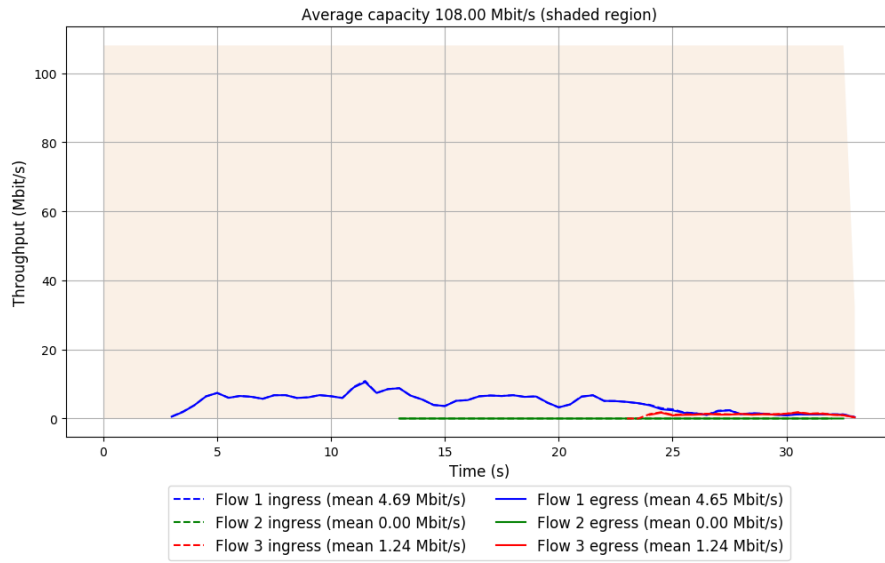
-- Flow 3:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 12.093 ms

Loss rate: 7.72%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-03-20 17:20:57

End at: 2018-03-20 17:21:27

Below is generated by plot.py at 2018-03-20 17:43:28

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.35 Mbit/s (4.9% utilization)

95th percentile per-packet one-way delay: 12.049 ms

Loss rate: 5.45%

-- Flow 1:

Average throughput: 4.02 Mbit/s

95th percentile per-packet one-way delay: 12.039 ms

Loss rate: 3.16%

-- Flow 2:

Average throughput: 1.05 Mbit/s

95th percentile per-packet one-way delay: 12.114 ms

Loss rate: 13.06%

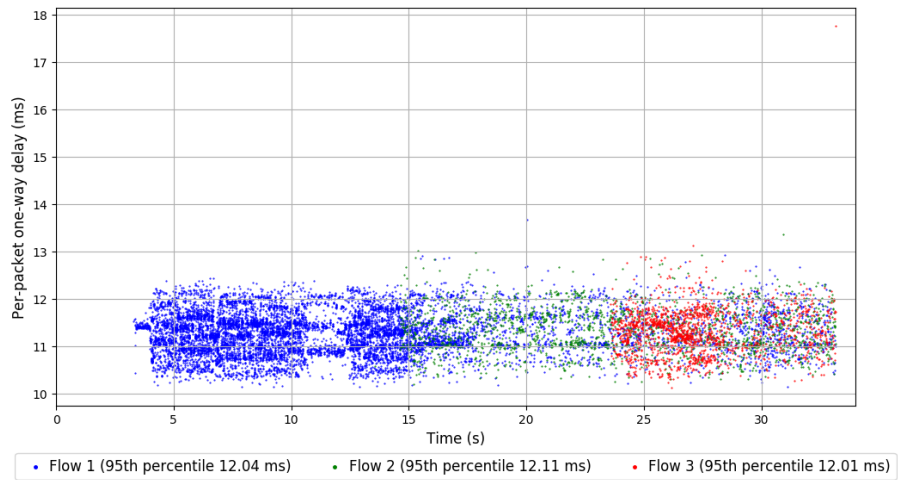
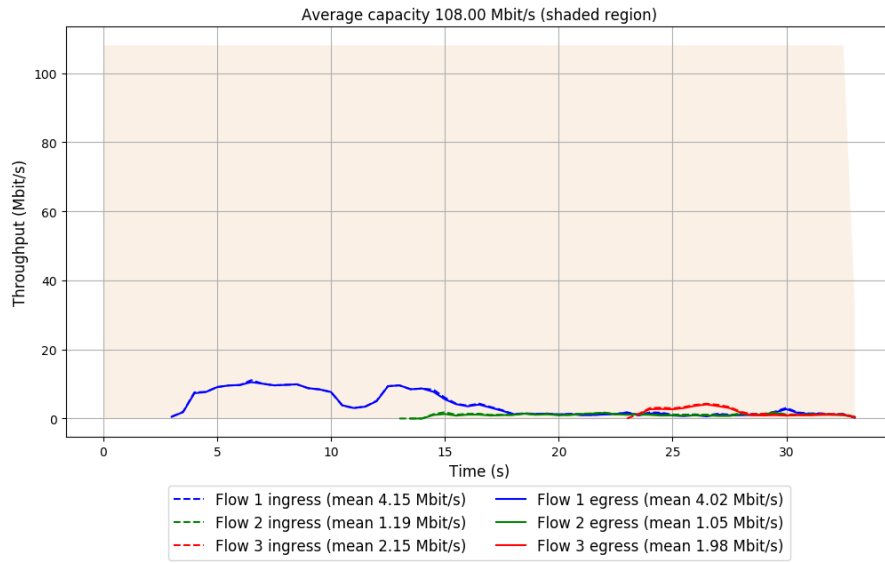
-- Flow 3:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 12.009 ms

Loss rate: 10.41%

Run 10: Report of Vivace-latency — Data Link



Run 1: Statistics of Vivace-loss

Start at: 2018-03-20 15:44:35

End at: 2018-03-20 15:45:05

Below is generated by plot.py at 2018-03-20 17:43:30

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 6.51 Mbit/s (6.0% utilization)

95th percentile per-packet one-way delay: 11.929 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 11.929 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.726 ms

Loss rate: 26.35%

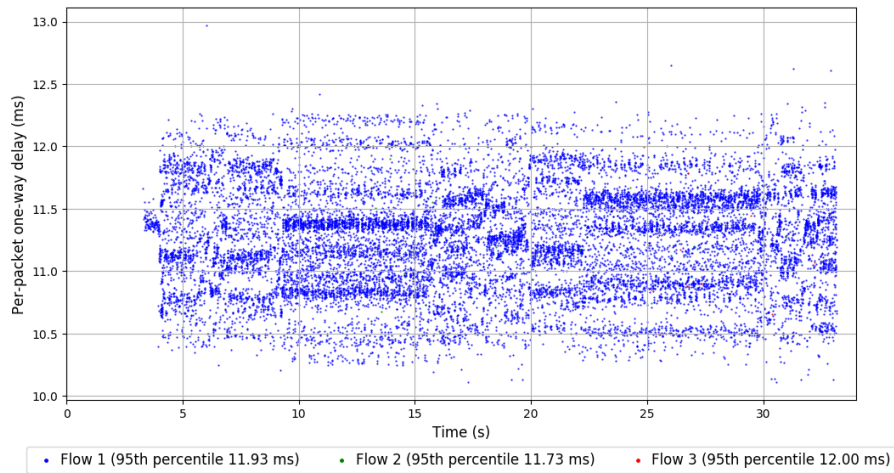
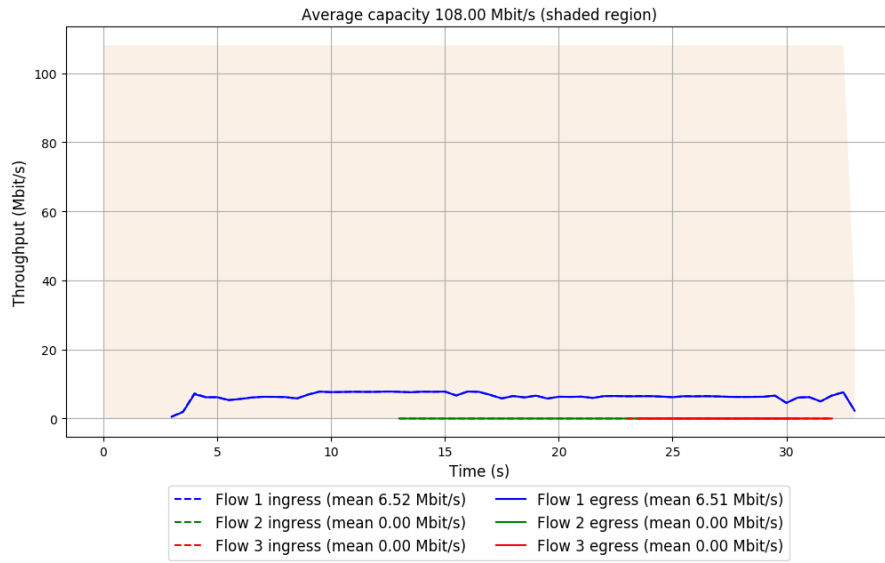
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.996 ms

Loss rate: 47.65%

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-03-20 15:55:19

End at: 2018-03-20 15:55:49

Below is generated by plot.py at 2018-03-20 17:43:30

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 4.56 Mbit/s (4.2% utilization)

95th percentile per-packet one-way delay: 12.013 ms

Loss rate: 4.50%

-- Flow 1:

Average throughput: 3.29 Mbit/s

95th percentile per-packet one-way delay: 11.965 ms

Loss rate: 2.72%

-- Flow 2:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 12.089 ms

Loss rate: 9.25%

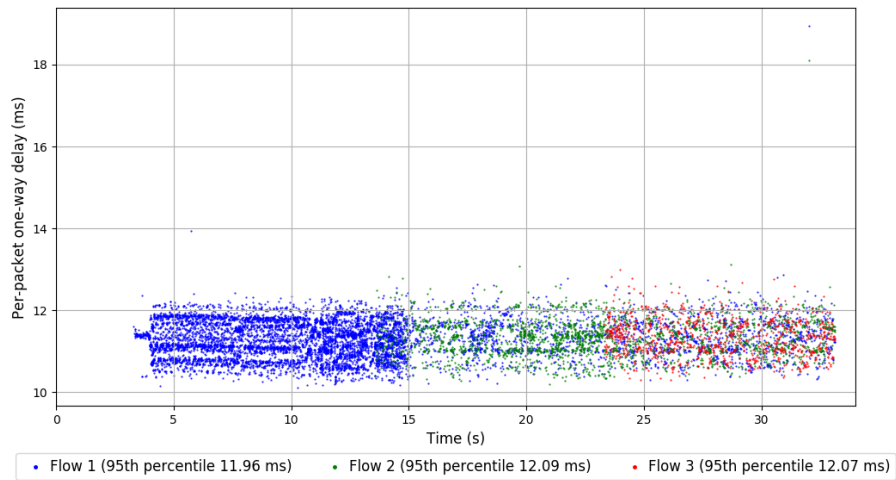
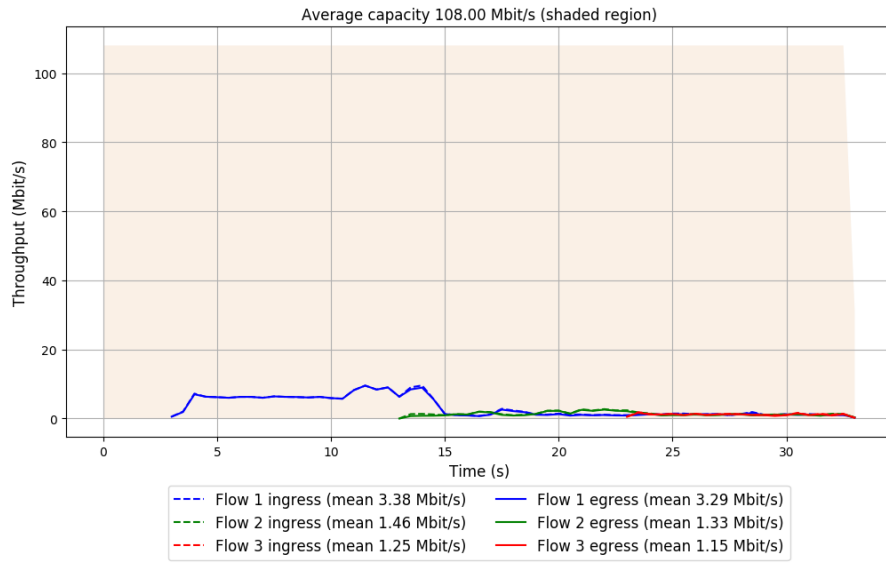
-- Flow 3:

Average throughput: 1.15 Mbit/s

95th percentile per-packet one-way delay: 12.067 ms

Loss rate: 7.91%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-03-20 16:06:04

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

Below is generated by plot.py at 2018-03-20 17:43:37

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 4.70 Mbit/s (4.4% utilization)

95th percentile per-packet one-way delay: 12.021 ms

Loss rate: 4.57%

-- Flow 1:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 12.005 ms

Loss rate: 3.07%

-- Flow 2:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 12.071 ms

Loss rate: 11.68%

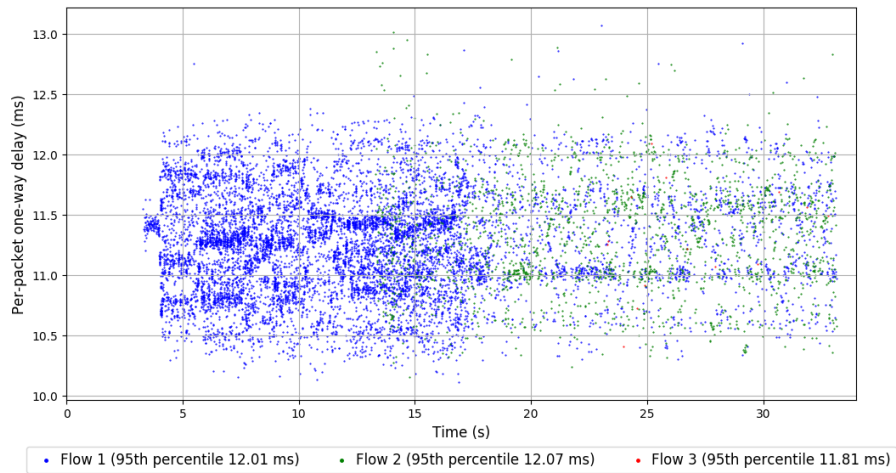
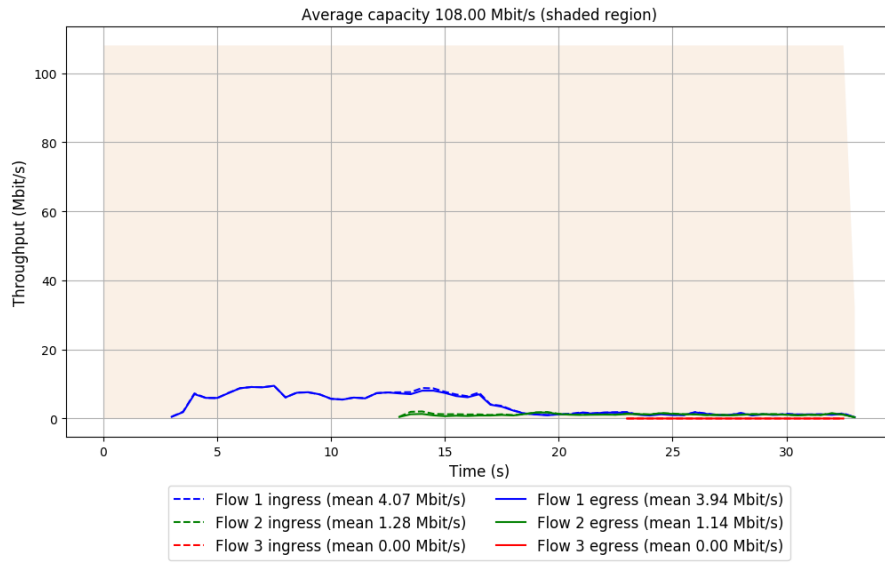
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.812 ms

Loss rate: 18.20%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-03-20 16:16:51

End at: 2018-03-20 16:17:21

Below is generated by plot.py at 2018-03-20 17:43:42

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 6.18 Mbit/s (5.7% utilization)

95th percentile per-packet one-way delay: 11.999 ms

Loss rate: 6.39%

-- Flow 1:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 11.982 ms

Loss rate: 3.43%

-- Flow 2:

Average throughput: 0.93 Mbit/s

95th percentile per-packet one-way delay: 12.093 ms

Loss rate: 22.17%

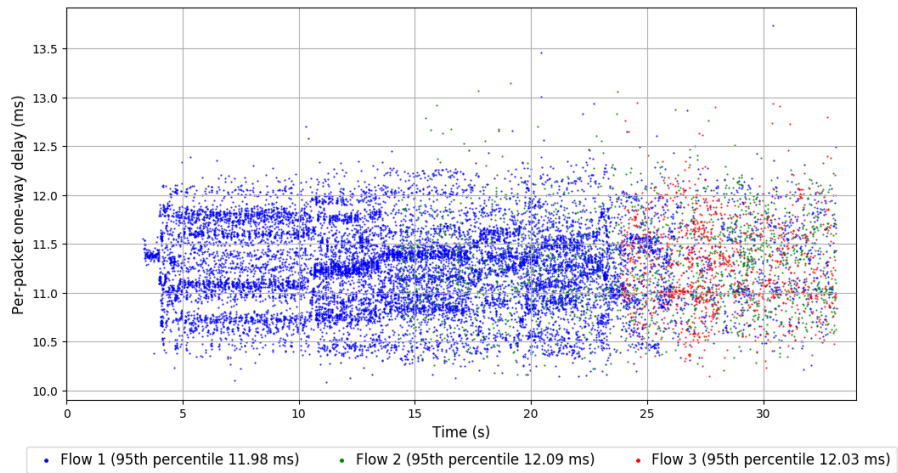
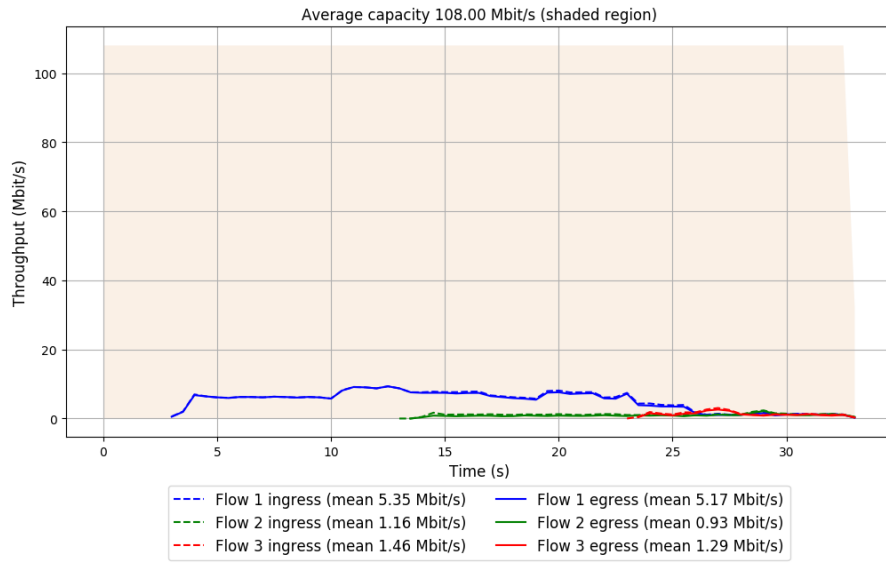
-- Flow 3:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 12.030 ms

Loss rate: 13.90%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-03-20 16:27:37

End at: 2018-03-20 16:28:07

Below is generated by plot.py at 2018-03-20 17:43:54

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 6.77 Mbit/s (6.3% utilization)

95th percentile per-packet one-way delay: 11.944 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 6.77 Mbit/s

95th percentile per-packet one-way delay: 11.944 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.707 ms

Loss rate: 29.55%

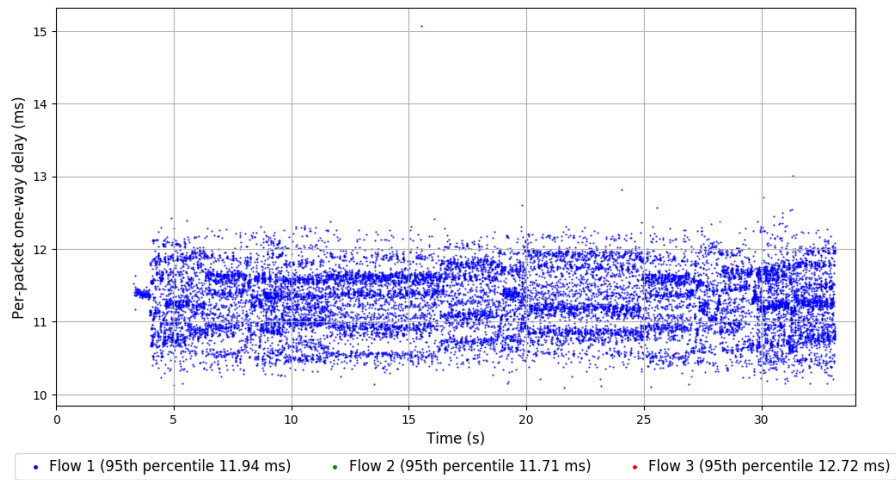
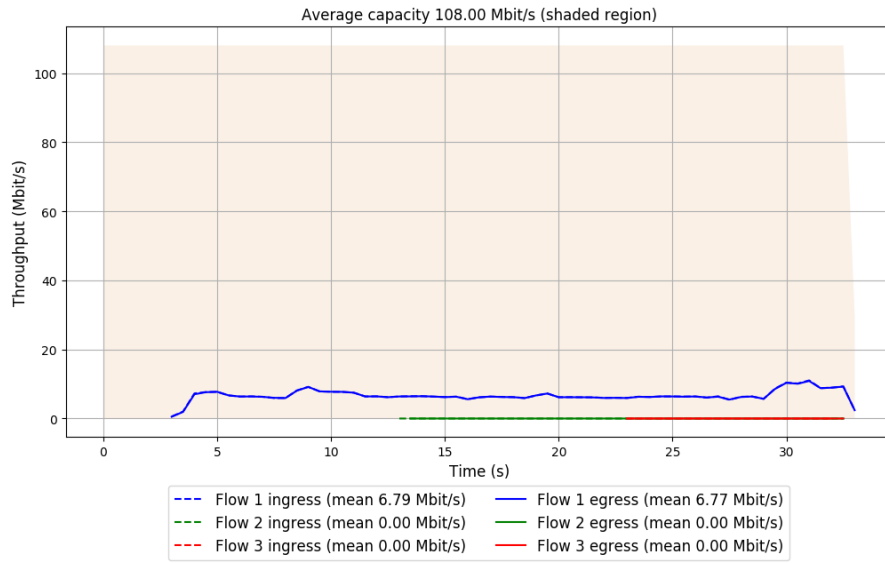
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.716 ms

Loss rate: 31.01%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-03-20 16:38:25

End at: 2018-03-20 16:38:55

Below is generated by plot.py at 2018-03-20 17:44:04

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.83 Mbit/s (5.4% utilization)

95th percentile per-packet one-way delay: 11.970 ms

Loss rate: 6.15%

-- Flow 1:

Average throughput: 4.84 Mbit/s

95th percentile per-packet one-way delay: 11.923 ms

Loss rate: 3.60%

-- Flow 2:

Average throughput: 0.92 Mbit/s

95th percentile per-packet one-way delay: 12.151 ms

Loss rate: 19.75%

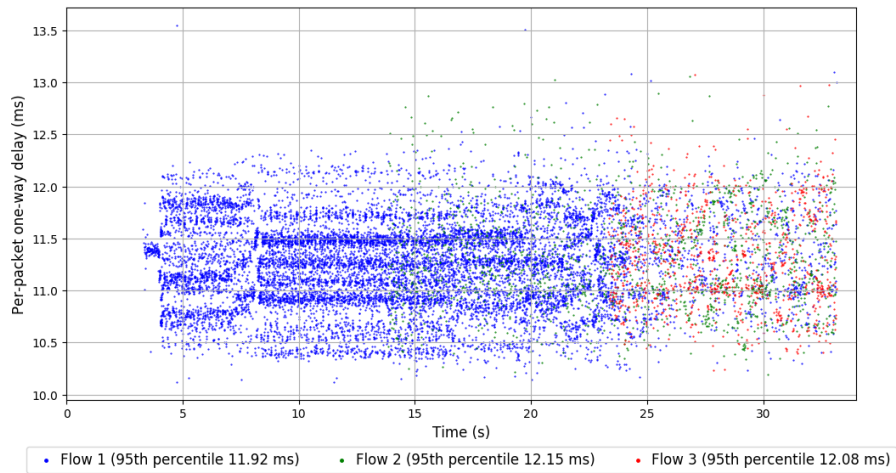
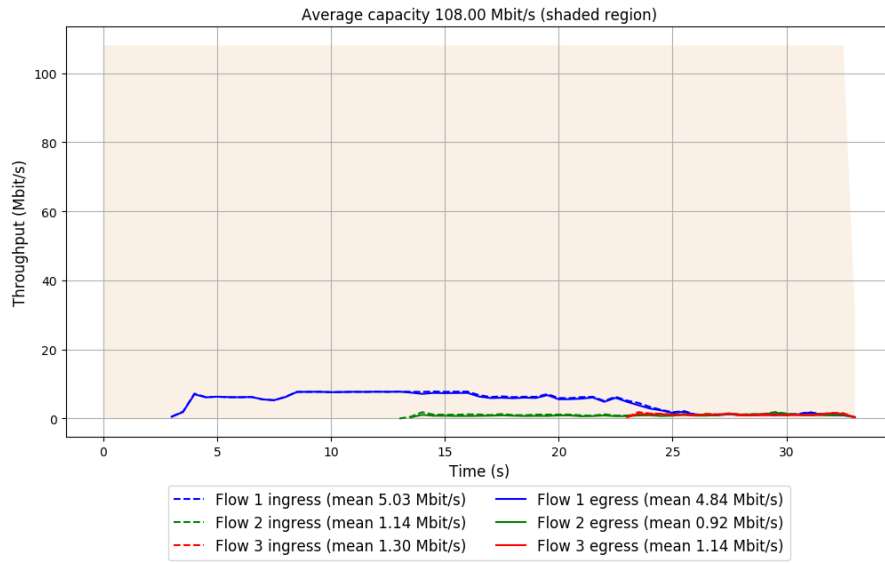
-- Flow 3:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 12.084 ms

Loss rate: 12.05%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-03-20 16:49:16

End at: 2018-03-20 16:49:46

Below is generated by plot.py at 2018-03-20 17:44:04

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.29 Mbit/s (4.9% utilization)

95th percentile per-packet one-way delay: 12.023 ms

Loss rate: 6.10%

-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 12.017 ms

Loss rate: 4.87%

-- Flow 2:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 12.021 ms

Loss rate: 6.09%

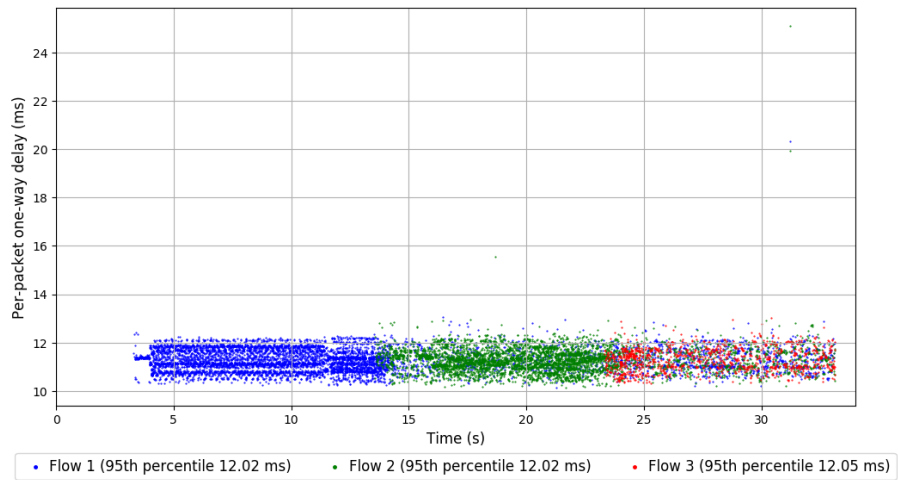
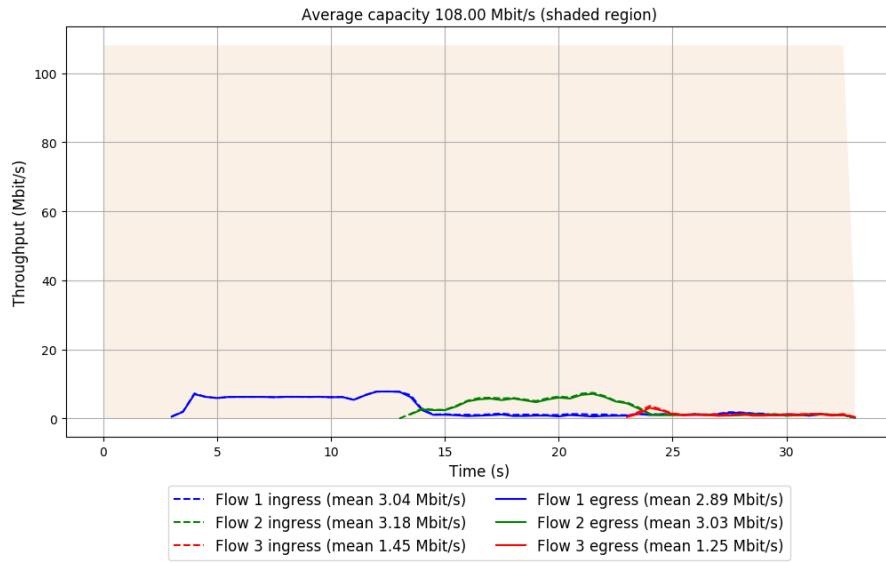
-- Flow 3:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 12.050 ms

Loss rate: 14.03%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-03-20 17:00:01

End at: 2018-03-20 17:00:31

Below is generated by plot.py at 2018-03-20 17:44:07

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 6.29 Mbit/s (5.8% utilization)

95th percentile per-packet one-way delay: 11.972 ms

Loss rate: 5.80%

-- Flow 1:

Average throughput: 5.30 Mbit/s

95th percentile per-packet one-way delay: 11.949 ms

Loss rate: 3.22%

-- Flow 2:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 12.167 ms

Loss rate: 20.91%

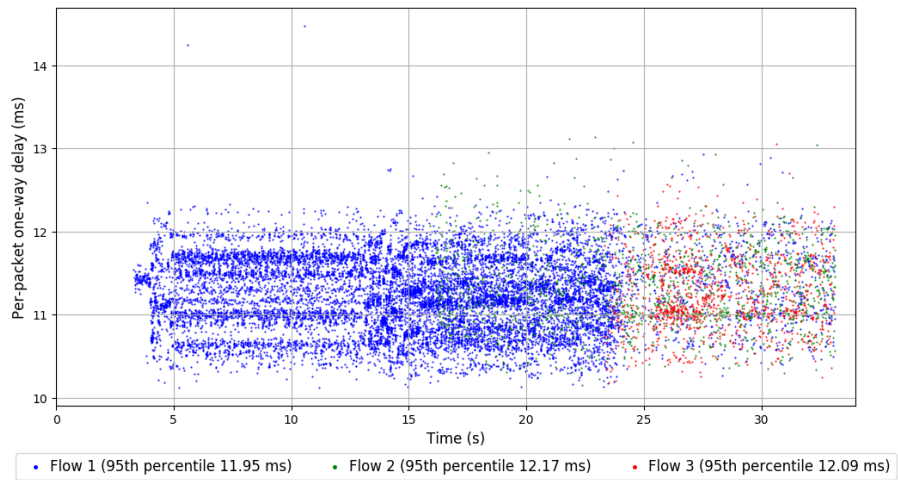
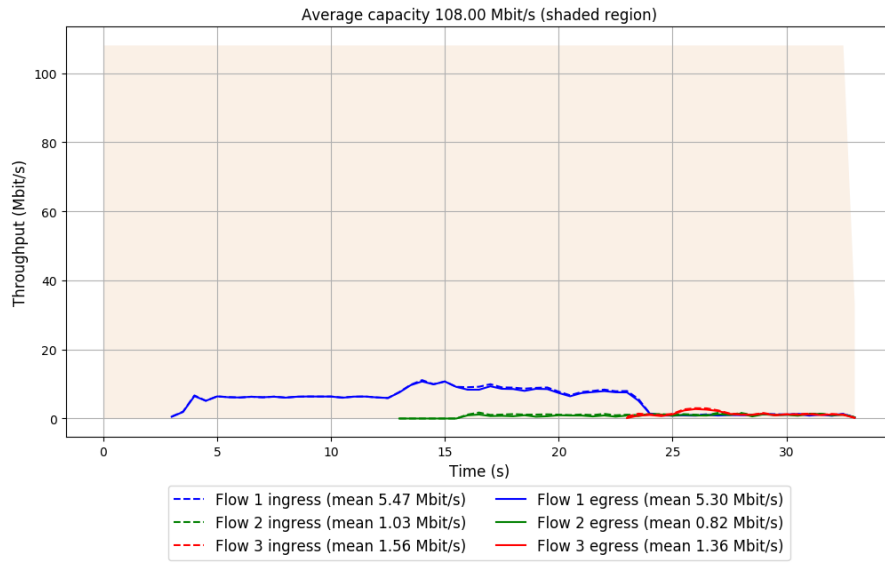
-- Flow 3:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 12.085 ms

Loss rate: 13.16%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-03-20 17:10:47

End at: 2018-03-20 17:11:17

Below is generated by plot.py at 2018-03-20 17:44:07

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 4.98 Mbit/s (4.6% utilization)

95th percentile per-packet one-way delay: 12.009 ms

Loss rate: 6.29%

-- Flow 1:

Average throughput: 3.74 Mbit/s

95th percentile per-packet one-way delay: 11.990 ms

Loss rate: 3.29%

-- Flow 2:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 12.073 ms

Loss rate: 15.47%

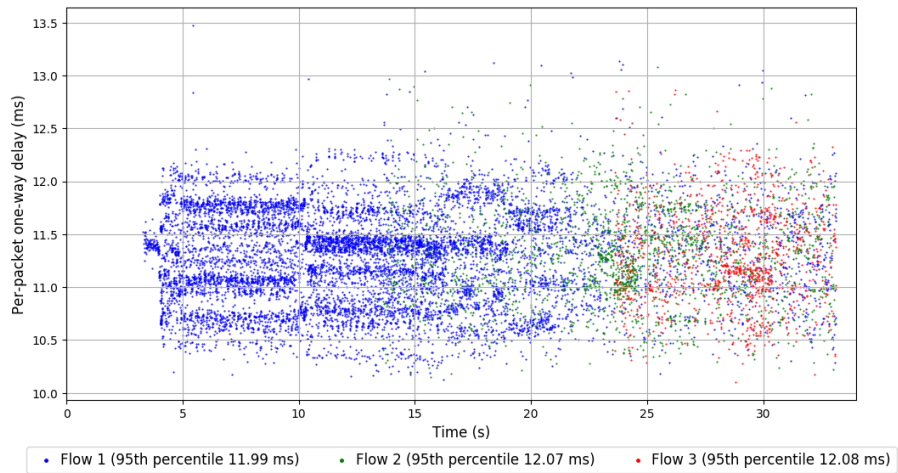
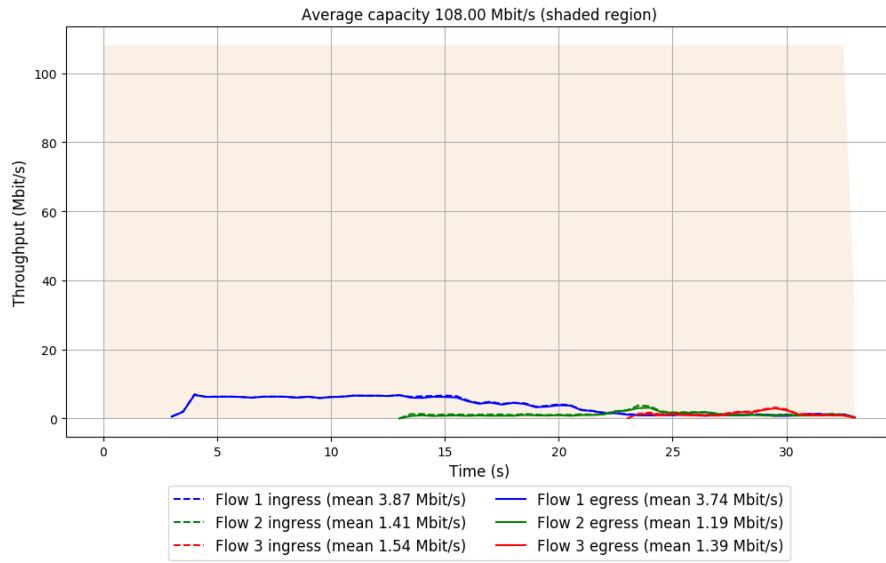
-- Flow 3:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 12.084 ms

Loss rate: 12.21%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-03-20 17:21:33

End at: 2018-03-20 17:22:03

Below is generated by plot.py at 2018-03-20 17:44:08

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.37 Mbit/s (5.0% utilization)

95th percentile per-packet one-way delay: 12.026 ms

Loss rate: 6.47%

-- Flow 1:

Average throughput: 4.28 Mbit/s

95th percentile per-packet one-way delay: 12.000 ms

Loss rate: 3.46%

-- Flow 2:

Average throughput: 0.92 Mbit/s

95th percentile per-packet one-way delay: 12.117 ms

Loss rate: 20.18%

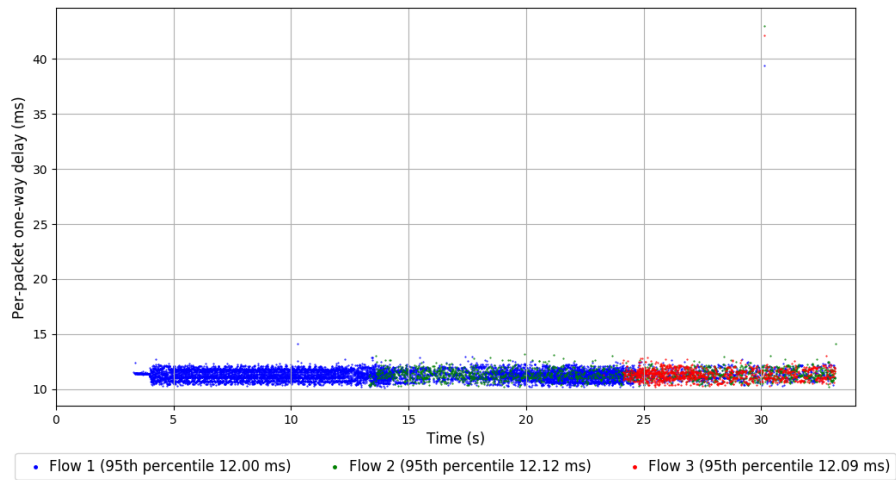
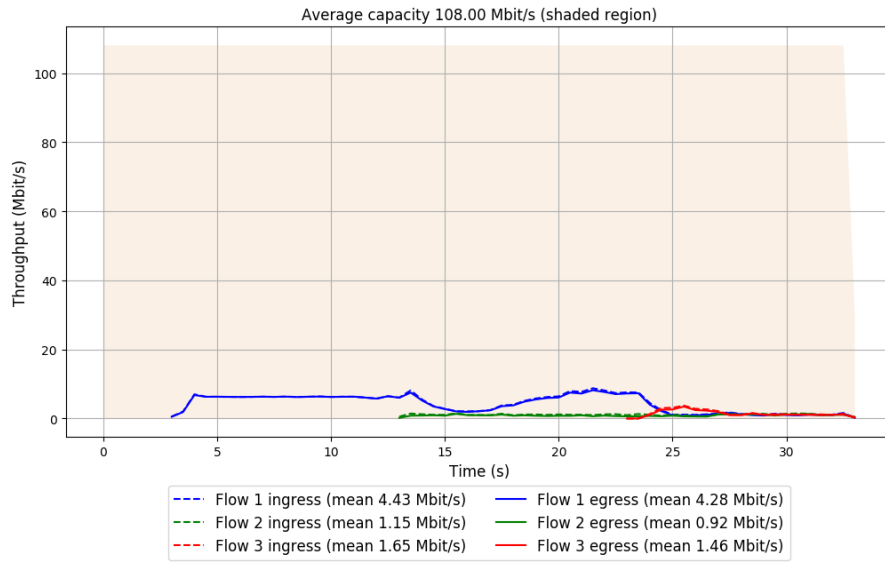
-- Flow 3:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 12.092 ms

Loss rate: 11.67%

Run 10: Report of Vivace-loss — Data Link



Run 1: Statistics of Vivace-LTE

Start at: 2018-03-20 15:49:57

End at: 2018-03-20 15:50:27

Below is generated by plot.py at 2018-03-20 17:44:15

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.32 Mbit/s (4.9% utilization)

95th percentile per-packet one-way delay: 12.017 ms

Loss rate: 5.49%

-- Flow 1:

Average throughput: 4.32 Mbit/s

95th percentile per-packet one-way delay: 12.000 ms

Loss rate: 3.01%

-- Flow 2:

Average throughput: 0.90 Mbit/s

95th percentile per-packet one-way delay: 12.143 ms

Loss rate: 16.02%

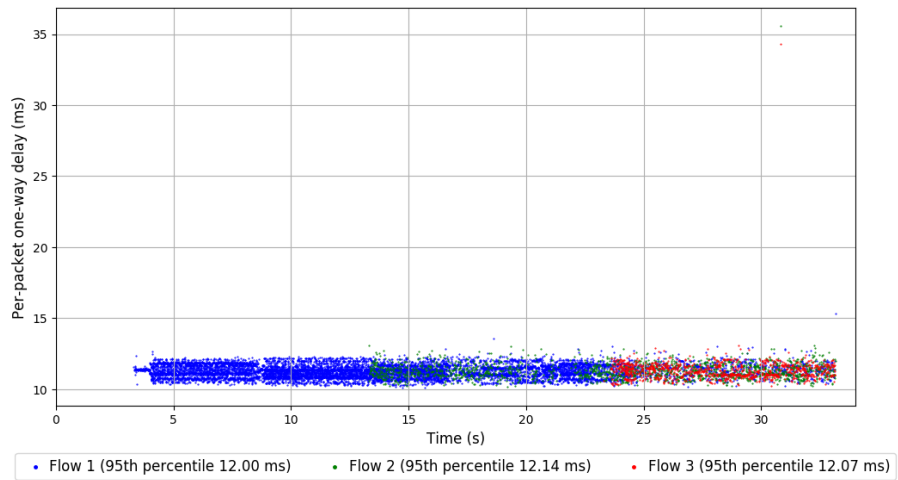
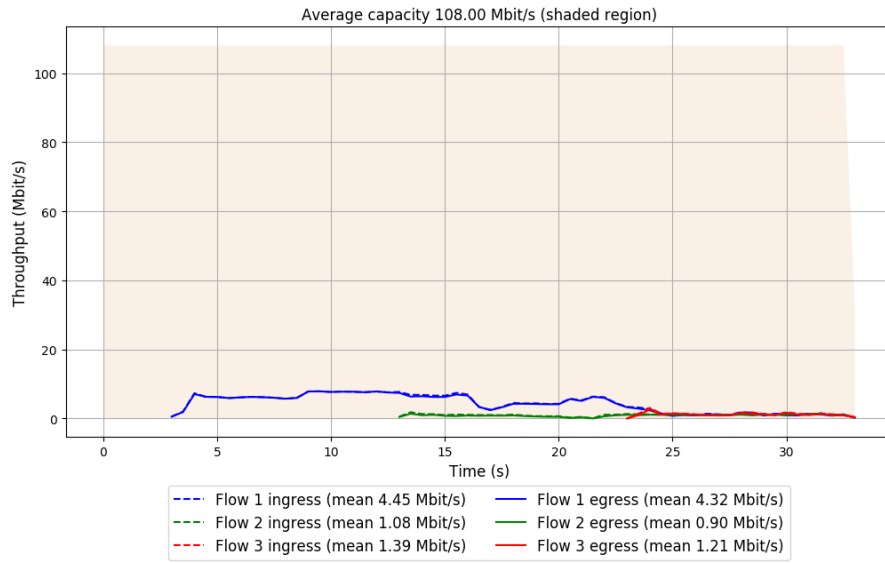
-- Flow 3:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 12.070 ms

Loss rate: 13.11%

Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-03-20 16:00:42

End at: 2018-03-20 16:01:12

Below is generated by plot.py at 2018-03-20 17:44:19

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 4.49 Mbit/s (4.2% utilization)

95th percentile per-packet one-way delay: 12.027 ms

Loss rate: 4.90%

-- Flow 1:

Average throughput: 3.57 Mbit/s

95th percentile per-packet one-way delay: 11.991 ms

Loss rate: 3.46%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 12.109 ms

Loss rate: 10.15%

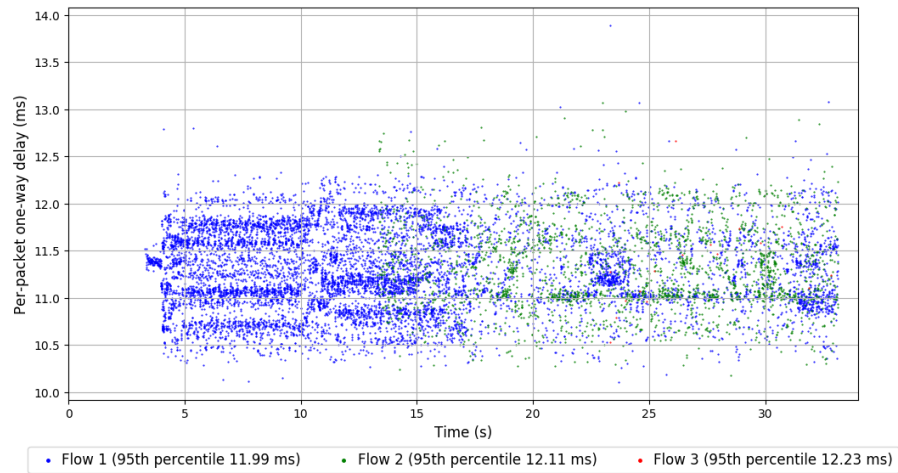
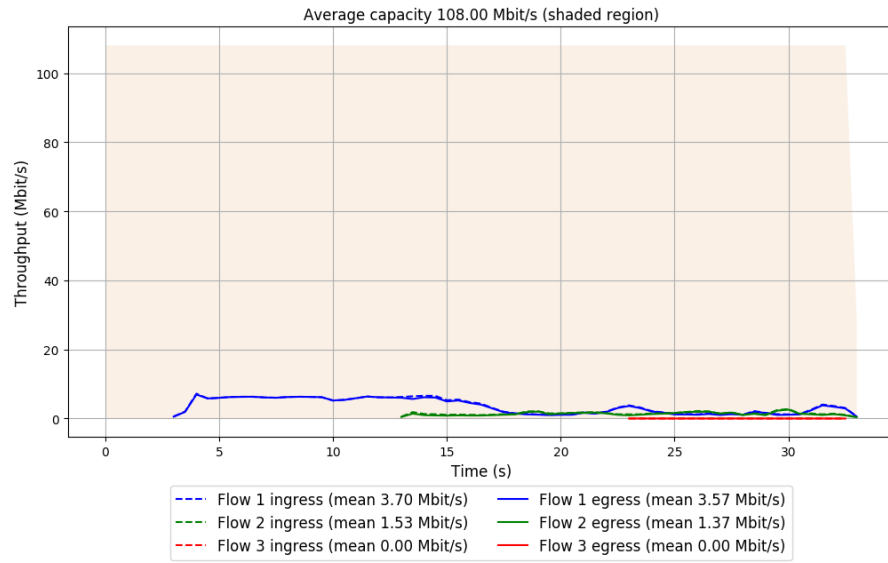
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.226 ms

Loss rate: 5.68%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-03-20 16:11:28

End at: 2018-03-20 16:11:58

Below is generated by plot.py at 2018-03-20 17:44:33

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.43 Mbit/s (5.0% utilization)

95th percentile per-packet one-way delay: 11.970 ms

Loss rate: 6.74%

-- Flow 1:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 11.932 ms

Loss rate: 3.82%

-- Flow 2:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 12.144 ms

Loss rate: 20.24%

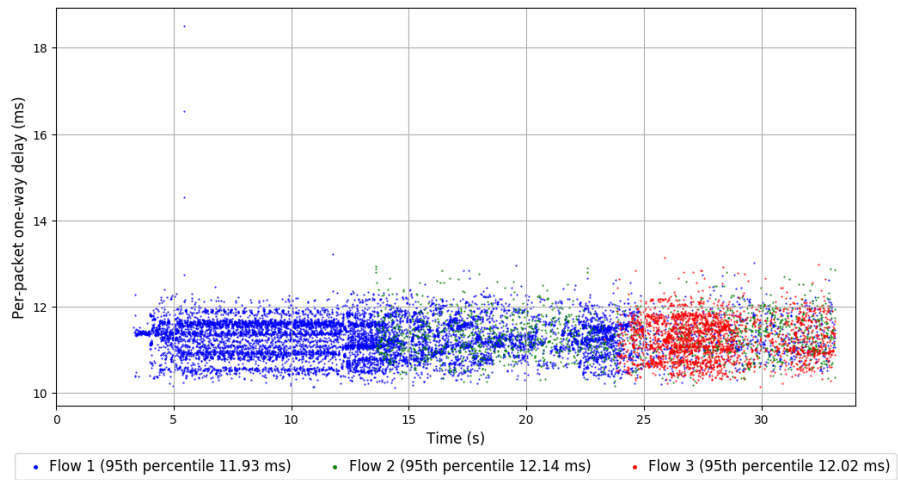
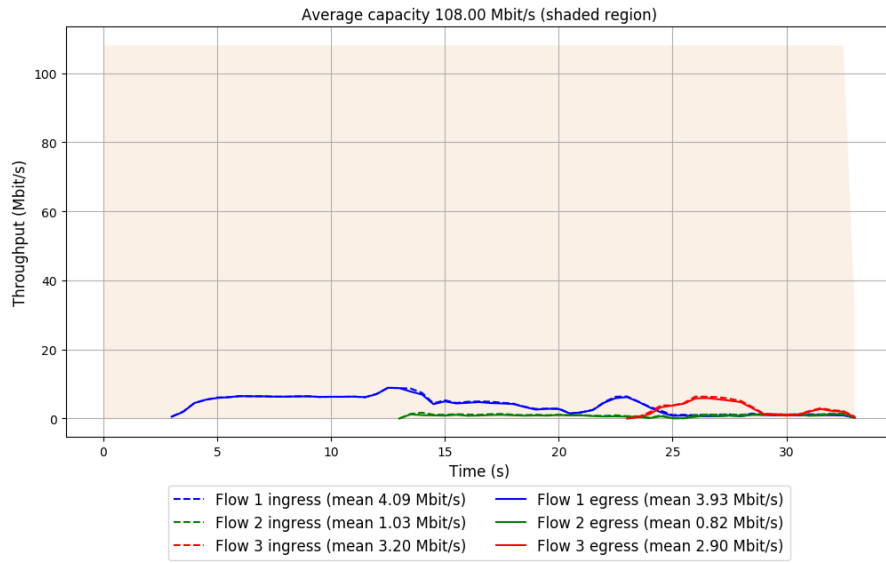
-- Flow 3:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 12.021 ms

Loss rate: 9.25%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-03-20 16:22:14

End at: 2018-03-20 16:22:44

Below is generated by plot.py at 2018-03-20 17:44:40

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.57 Mbit/s (5.2% utilization)

95th percentile per-packet one-way delay: 12.000 ms

Loss rate: 2.23%

-- Flow 1:

Average throughput: 5.22 Mbit/s

95th percentile per-packet one-way delay: 11.986 ms

Loss rate: 1.51%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.940 ms

Loss rate: 29.06%

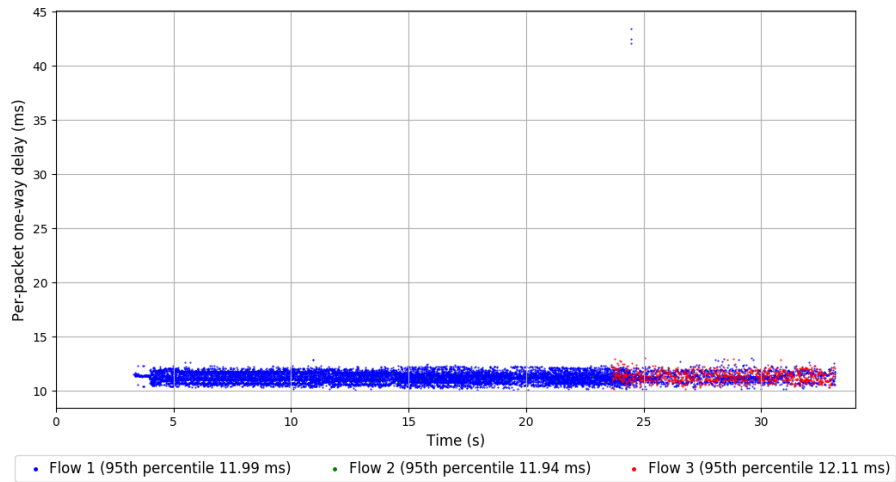
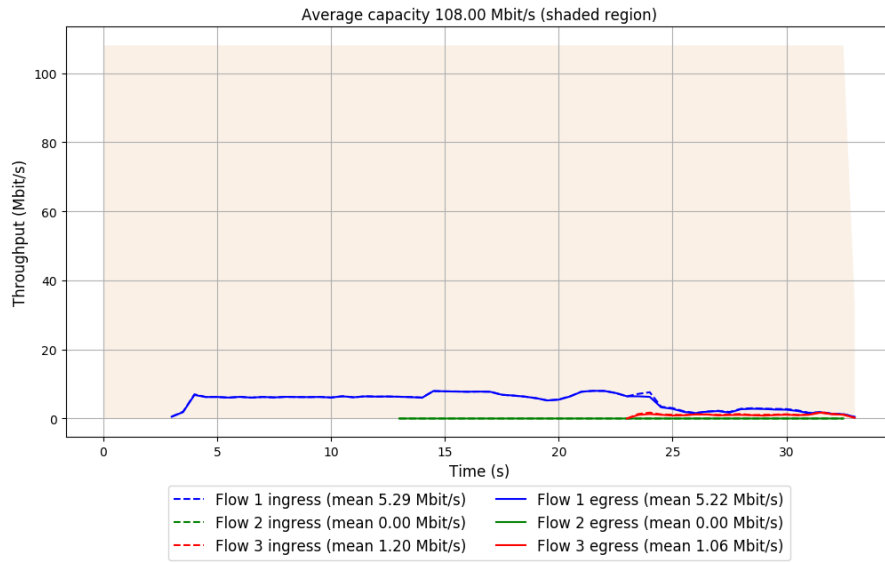
-- Flow 3:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 12.112 ms

Loss rate: 11.86%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-03-20 16:33:02

End at: 2018-03-20 16:33:32

Below is generated by plot.py at 2018-03-20 17:44:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.30 Mbit/s (4.9% utilization)

95th percentile per-packet one-way delay: 11.996 ms

Loss rate: 5.48%

-- Flow 1:

Average throughput: 4.30 Mbit/s

95th percentile per-packet one-way delay: 11.970 ms

Loss rate: 2.72%

-- Flow 2:

Average throughput: 0.89 Mbit/s

95th percentile per-packet one-way delay: 12.063 ms

Loss rate: 19.20%

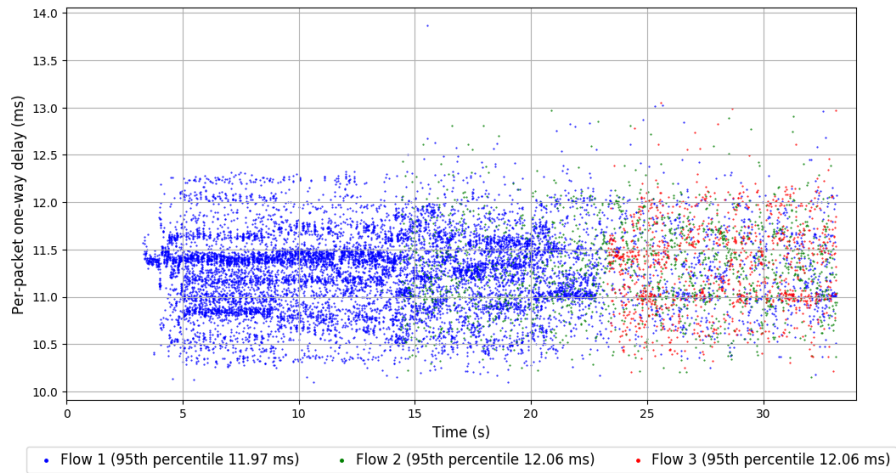
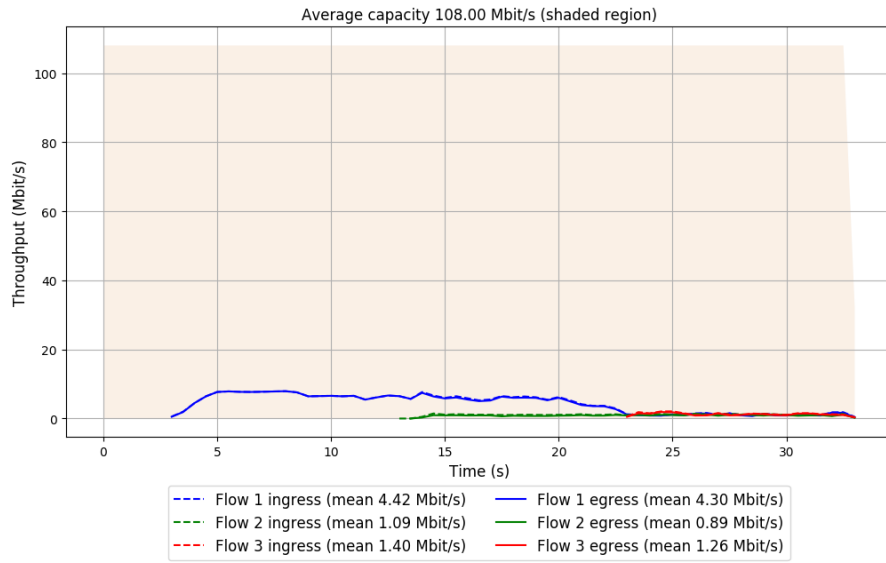
-- Flow 3:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 12.057 ms

Loss rate: 10.32%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-03-20 16:43:53

End at: 2018-03-20 16:44:23

Below is generated by plot.py at 2018-03-20 17:44:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 4.26 Mbit/s (3.9% utilization)

95th percentile per-packet one-way delay: 12.023 ms

Loss rate: 5.30%

-- Flow 1:

Average throughput: 3.11 Mbit/s

95th percentile per-packet one-way delay: 11.991 ms

Loss rate: 3.36%

-- Flow 2:

Average throughput: 1.18 Mbit/s

95th percentile per-packet one-way delay: 12.111 ms

Loss rate: 10.30%

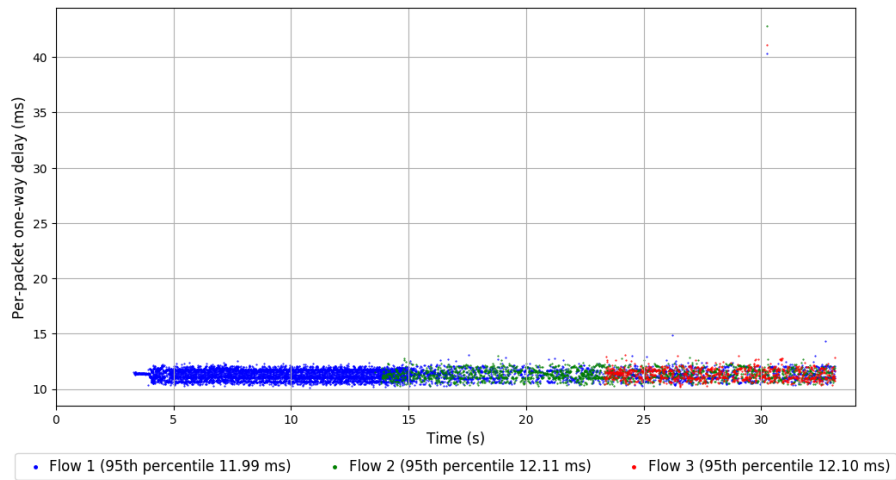
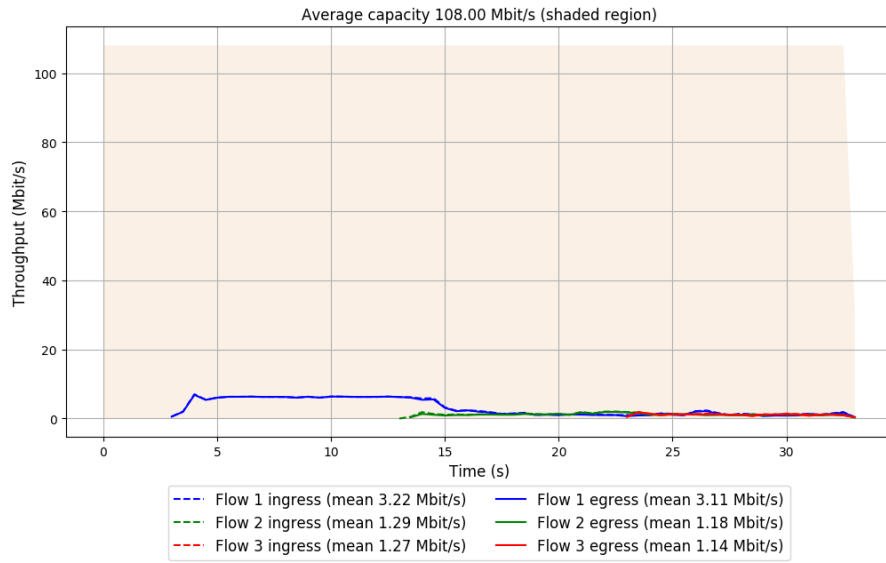
-- Flow 3:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 12.103 ms

Loss rate: 9.93%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-03-20 16:54:38

End at: 2018-03-20 16:55:08

Below is generated by plot.py at 2018-03-20 17:44:42

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 6.06 Mbit/s (5.6% utilization)

95th percentile per-packet one-way delay: 12.021 ms

Loss rate: 5.17%

-- Flow 1:

Average throughput: 5.08 Mbit/s

95th percentile per-packet one-way delay: 12.008 ms

Loss rate: 2.73%

-- Flow 2:

Average throughput: 1.02 Mbit/s

95th percentile per-packet one-way delay: 12.107 ms

Loss rate: 18.16%

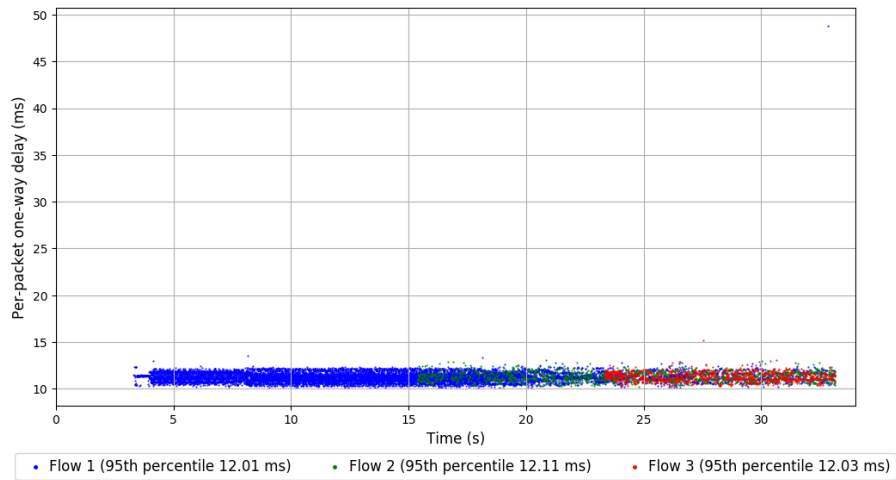
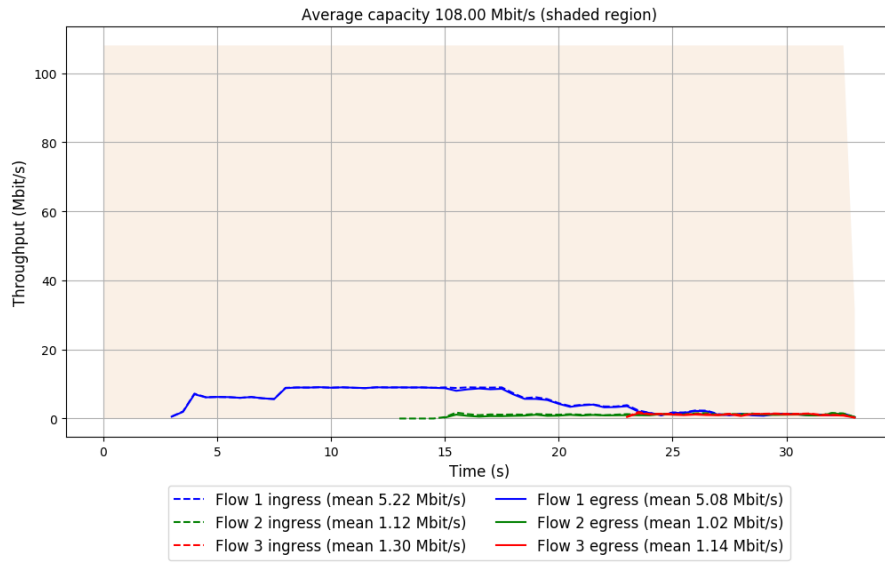
-- Flow 3:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 12.030 ms

Loss rate: 12.44%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-03-20 17:05:24

End at: 2018-03-20 17:05:54

Below is generated by plot.py at 2018-03-20 17:44:43

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.02 Mbit/s (4.7% utilization)

95th percentile per-packet one-way delay: 11.990 ms

Loss rate: 5.90%

-- Flow 1:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 11.962 ms

Loss rate: 2.90%

-- Flow 2:

Average throughput: 1.01 Mbit/s

95th percentile per-packet one-way delay: 12.062 ms

Loss rate: 15.75%

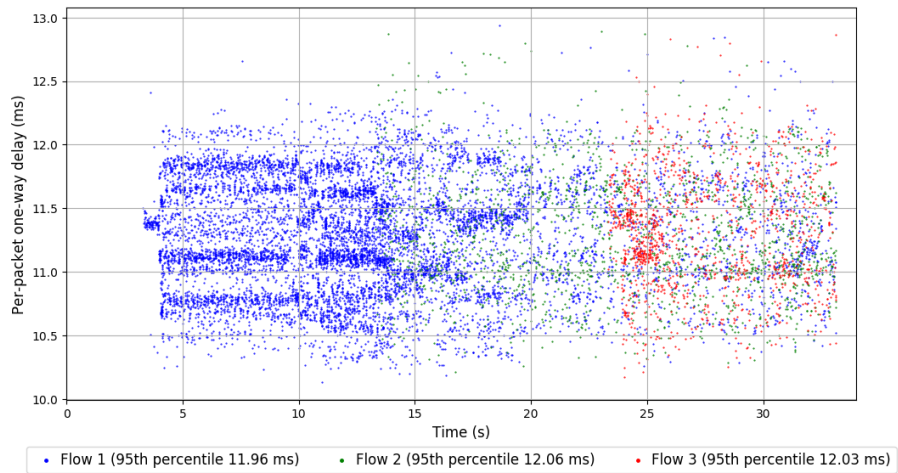
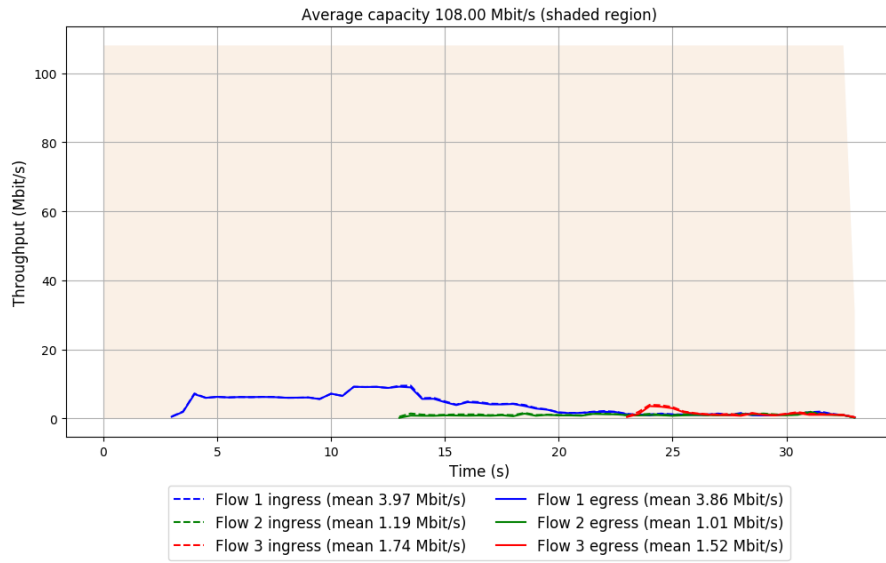
-- Flow 3:

Average throughput: 1.52 Mbit/s

95th percentile per-packet one-way delay: 12.030 ms

Loss rate: 13.04%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-03-20 17:16:10

End at: 2018-03-20 17:16:40

Below is generated by plot.py at 2018-03-20 17:44:44

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 5.37 Mbit/s (5.0% utilization)

95th percentile per-packet one-way delay: 11.922 ms

Loss rate: 2.01%

-- Flow 1:

Average throughput: 4.94 Mbit/s

95th percentile per-packet one-way delay: 11.884 ms

Loss rate: 1.30%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.099 ms

Loss rate: 33.53%

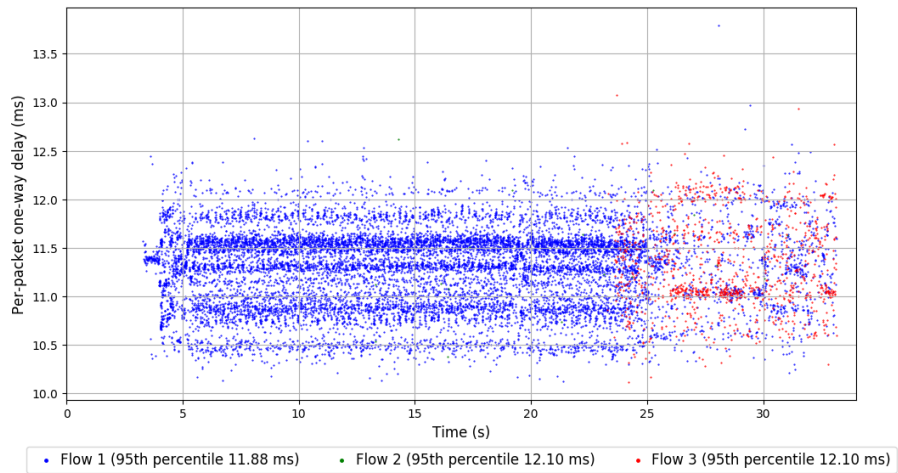
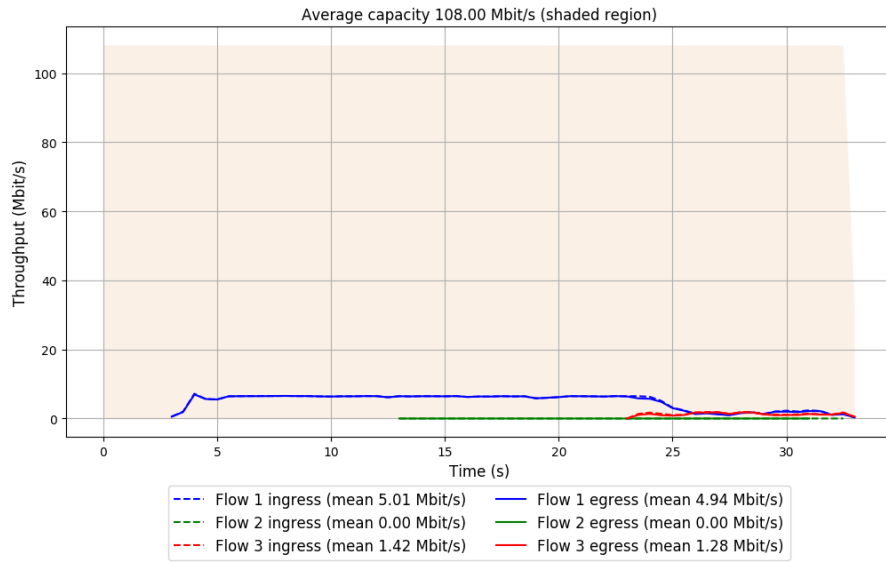
-- Flow 3:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 12.101 ms

Loss rate: 9.58%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-03-20 17:26:55

End at: 2018-03-20 17:27:25

Below is generated by plot.py at 2018-03-20 17:44:45

Datalink statistics

-- Total of 3 flows:

Average capacity: 108.00 Mbit/s

Average throughput: 4.13 Mbit/s (3.8% utilization)

95th percentile per-packet one-way delay: 12.051 ms

Loss rate: 5.69%

-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 12.025 ms

Loss rate: 3.44%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 12.087 ms

Loss rate: 9.23%

-- Flow 3:

Average throughput: 1.13 Mbit/s

95th percentile per-packet one-way delay: 12.075 ms

Loss rate: 13.56%

Run 10: Report of Vivace-LTE — Data Link

