

Pantheon Report

Generated at 2018-03-05 20:30:10 (UTC).

Tested in mahimahi: mm-delay 45 mm-link 114.68mbps.trace 114.68mbps.trace
--uplink-queue=droptail --uplink-queue-args=packets=450

Repeated the test of 17 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

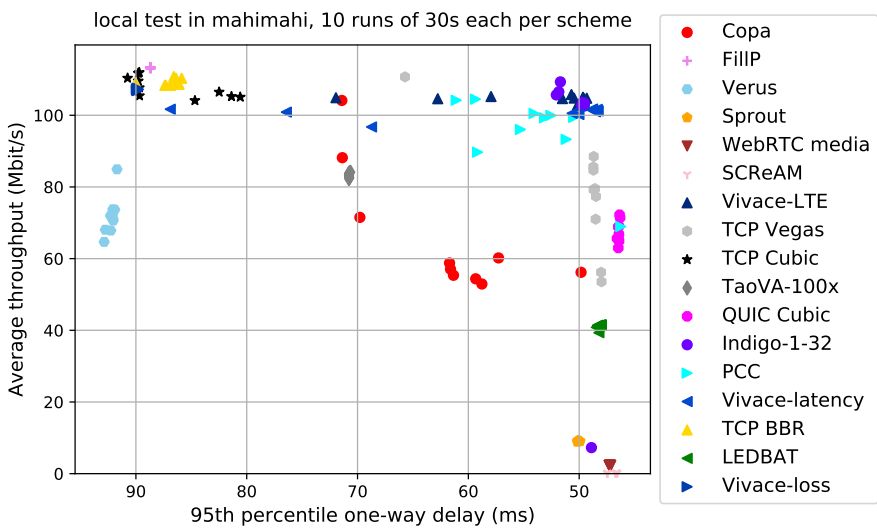
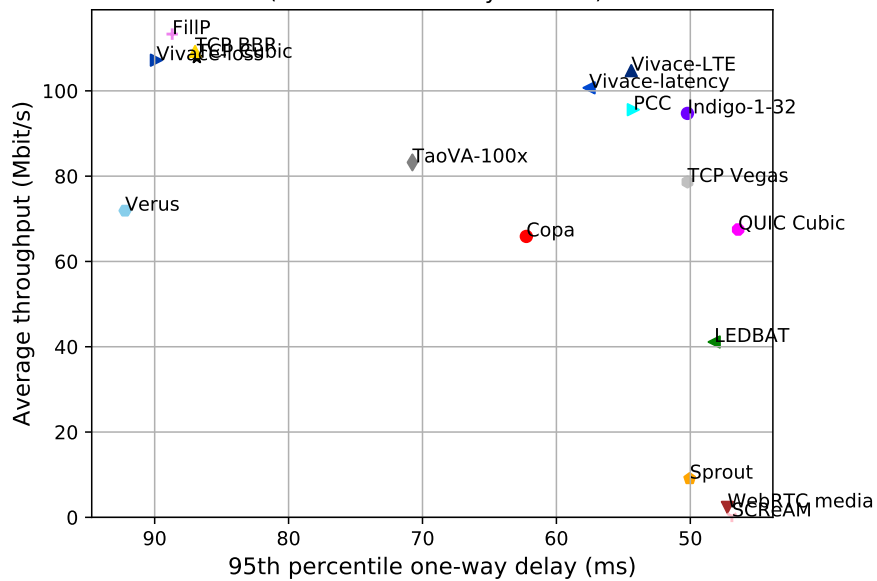
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

Git summary:

```
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
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
(mean of all runs by scheme)



scheme	# runs	mean avg tput (Mbit/s)	mean 95th-%ile delay (ms)	mean loss rate (%)
		flow 1	flow 1	flow 1
TCP BBR	10	109.25	86.98	1.50
TCP Cubic	10	107.77	86.85	0.45
LEDBAT	10	41.12	48.22	0.32
PCC	10	95.58	54.26	0.66
QUIC Cubic	9	67.49	46.43	0.17
SCReAM	10	0.22	46.89	0.16
WebRTC media	9	2.33	47.23	0.19
Sprout	10	9.08	50.05	0.22
TaoVA-100x	10	83.22	70.75	2.70
TCP Vegas	10	78.64	50.21	0.40
Verus	10	71.91	92.21	31.57
Copa	10	65.87	62.24	15.66
FillP	10	113.31	88.69	17.27
Indigo-1-32	10	94.72	50.22	0.22
Vivace-latency	10	100.72	57.56	0.86
Vivace-loss	10	107.19	89.87	1.92
Vivace-LTE	10	104.74	54.41	0.88

Run 1: Statistics of TCP BBR

Start at: 2018-03-05 17:44:51

End at: 2018-03-05 17:45:21

Below is generated by plot.py at 2018-03-05 19:47:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 110.82 Mbit/s (96.6% utilization)

95th percentile per-packet one-way delay: 86.577 ms

Loss rate: 1.64%

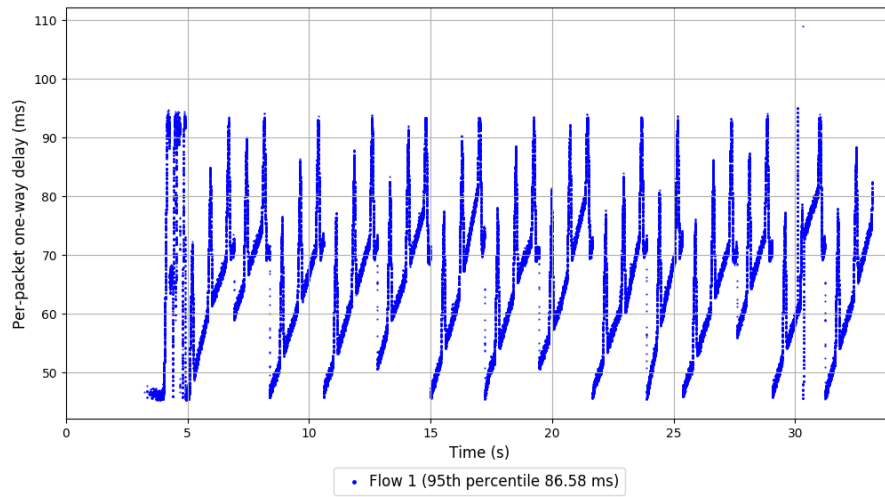
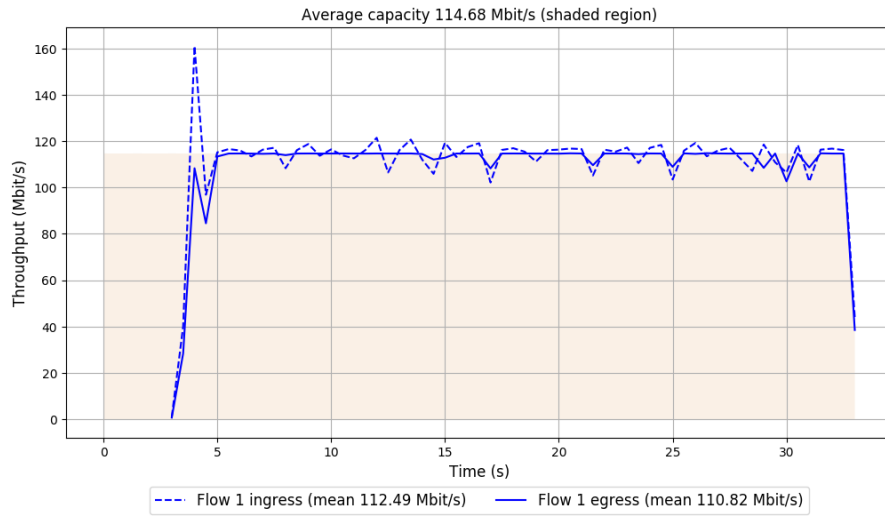
-- Flow 1:

Average throughput: 110.82 Mbit/s

95th percentile per-packet one-way delay: 86.577 ms

Loss rate: 1.64%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-03-05 17:56:40

End at: 2018-03-05 17:57:10

Below is generated by plot.py at 2018-03-05 19:47:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 108.62 Mbit/s (94.7% utilization)

95th percentile per-packet one-way delay: 86.100 ms

Loss rate: 1.46%

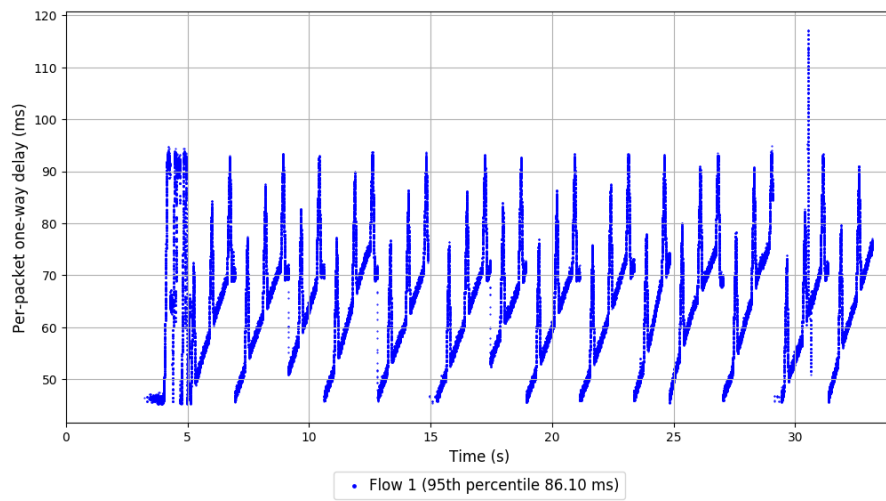
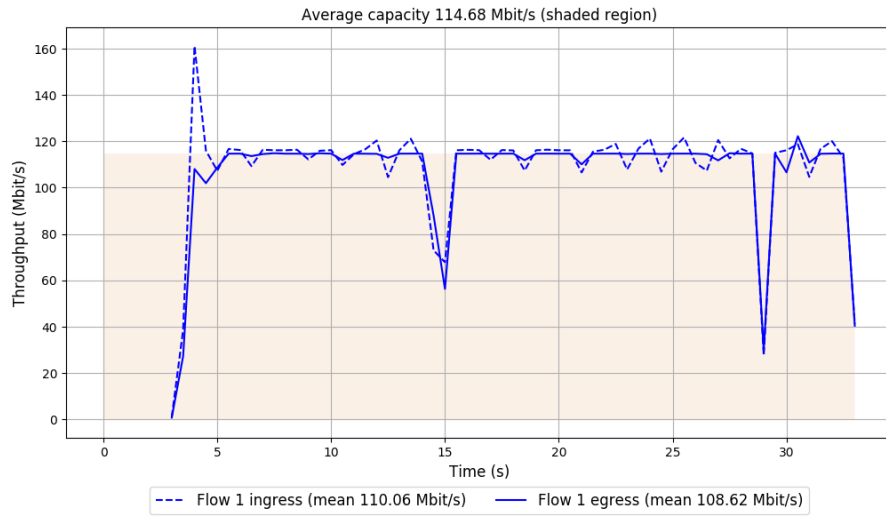
-- Flow 1:

Average throughput: 108.62 Mbit/s

95th percentile per-packet one-way delay: 86.100 ms

Loss rate: 1.46%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-03-05 18:08:32

End at: 2018-03-05 18:09:02

Below is generated by plot.py at 2018-03-05 19:47:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 108.38 Mbit/s (94.5% utilization)

95th percentile per-packet one-way delay: 87.311 ms

Loss rate: 1.42%

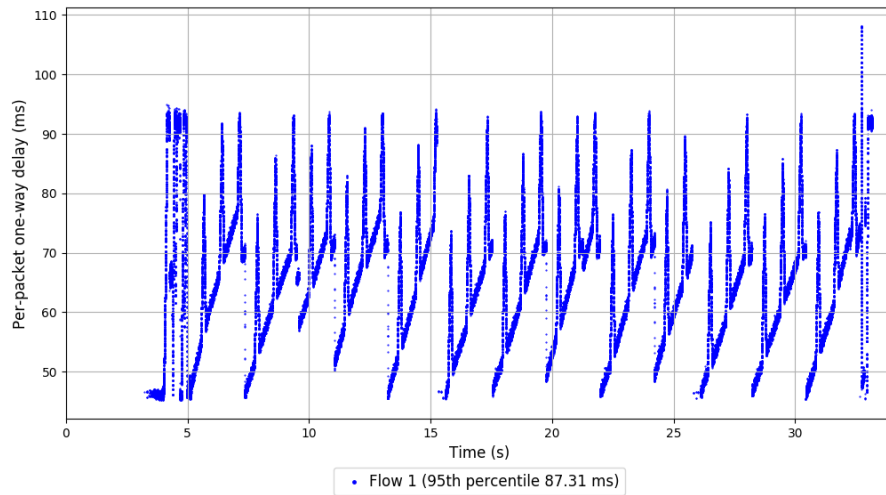
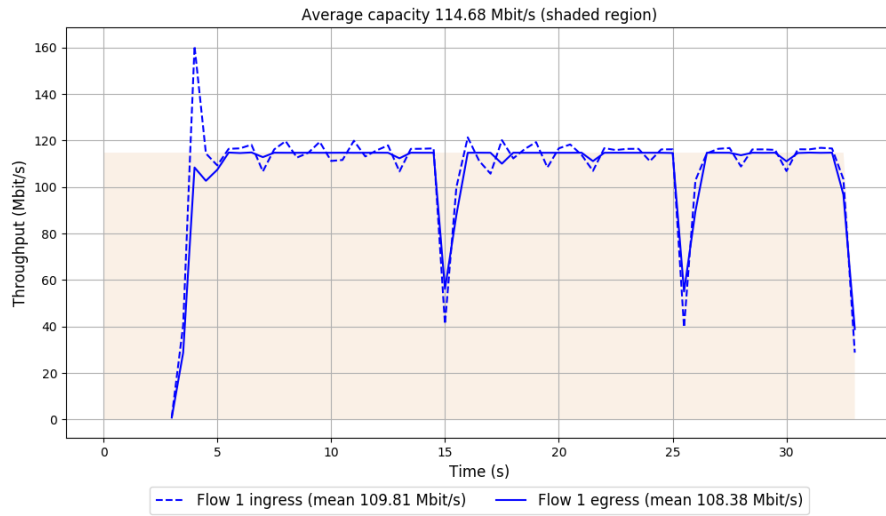
-- Flow 1:

Average throughput: 108.38 Mbit/s

95th percentile per-packet one-way delay: 87.311 ms

Loss rate: 1.42%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-03-05 18:20:35

End at: 2018-03-05 18:21:05

Below is generated by plot.py at 2018-03-05 19:47:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 108.39 Mbit/s (94.5% utilization)

95th percentile per-packet one-way delay: 87.386 ms

Loss rate: 1.54%

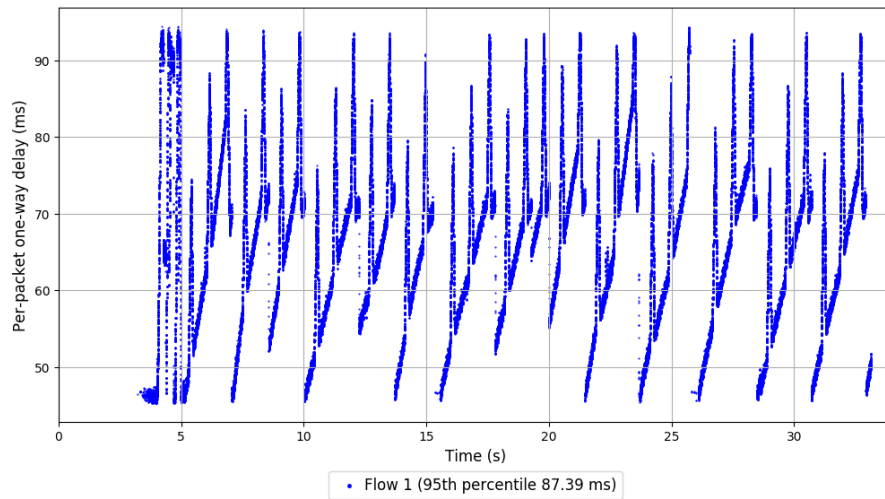
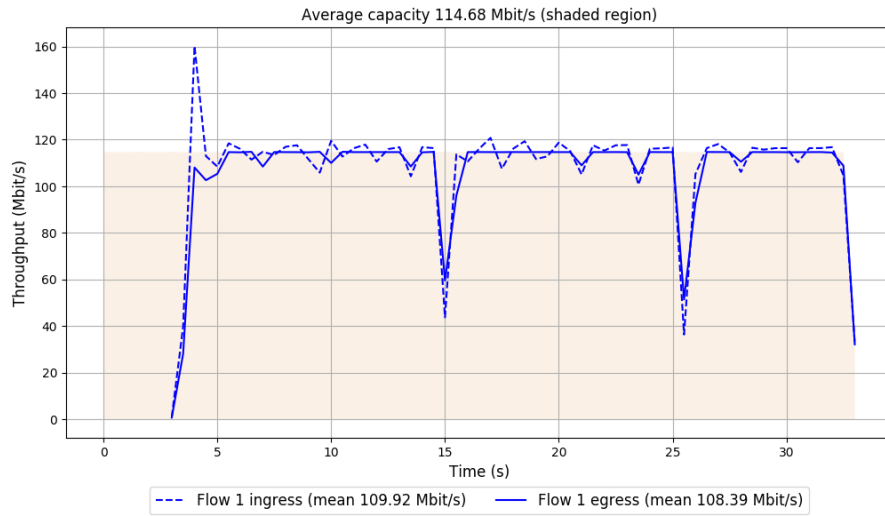
-- Flow 1:

Average throughput: 108.39 Mbit/s

95th percentile per-packet one-way delay: 87.386 ms

Loss rate: 1.54%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-03-05 18:32:28

End at: 2018-03-05 18:32:58

Below is generated by plot.py at 2018-03-05 19:47:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 108.36 Mbit/s (94.5% utilization)

95th percentile per-packet one-way delay: 86.882 ms

Loss rate: 1.56%

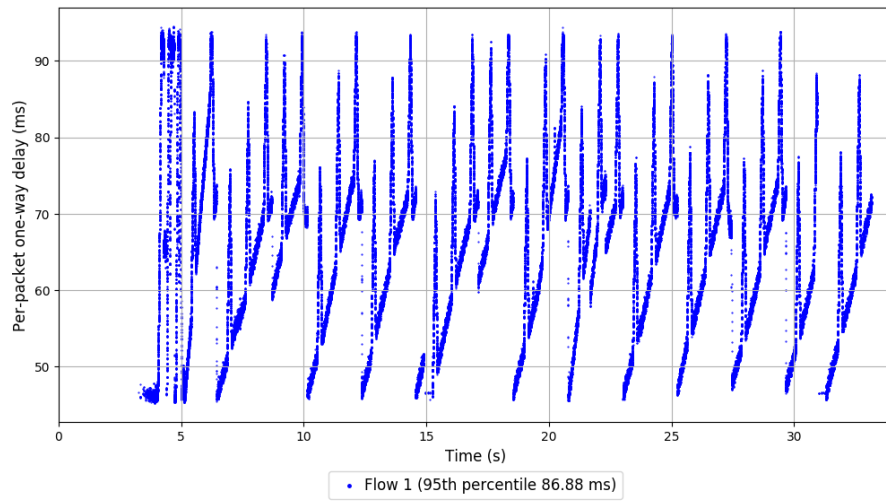
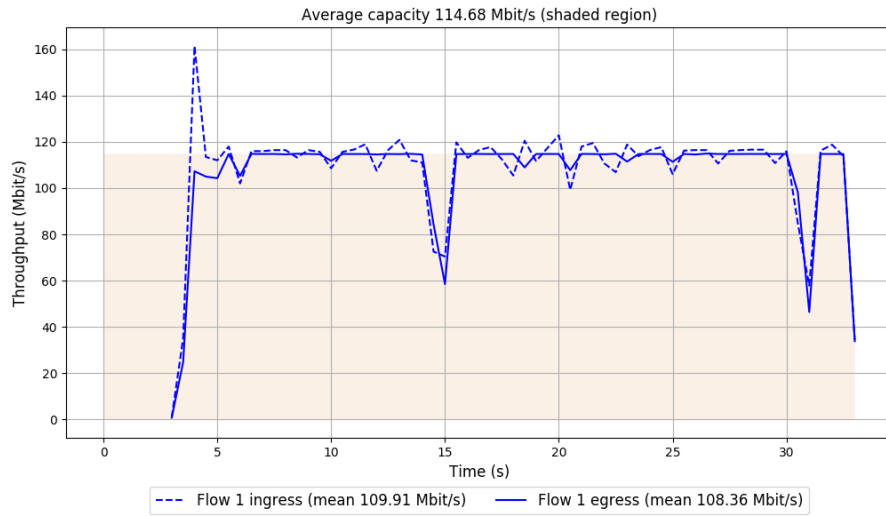
-- Flow 1:

Average throughput: 108.36 Mbit/s

95th percentile per-packet one-way delay: 86.882 ms

Loss rate: 1.56%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-03-05 18:44:21

End at: 2018-03-05 18:44:51

Below is generated by plot.py at 2018-03-05 19:47:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 110.32 Mbit/s (96.2% utilization)

95th percentile per-packet one-way delay: 85.870 ms

Loss rate: 1.21%

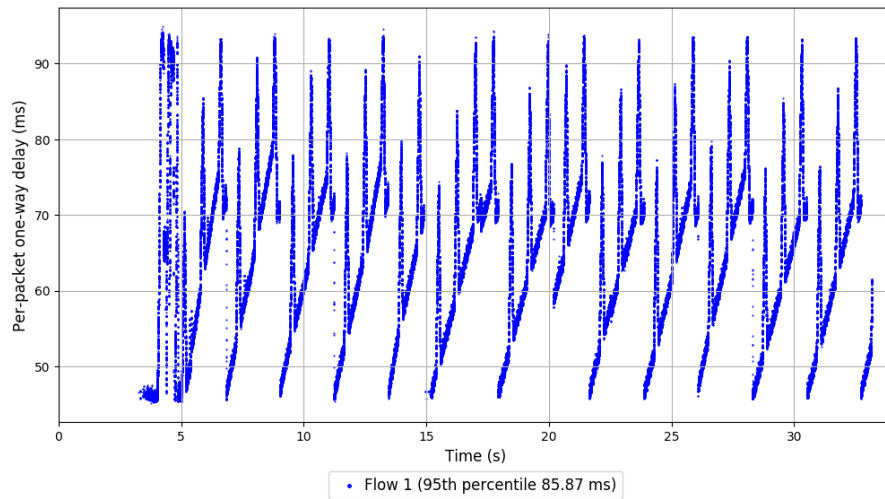
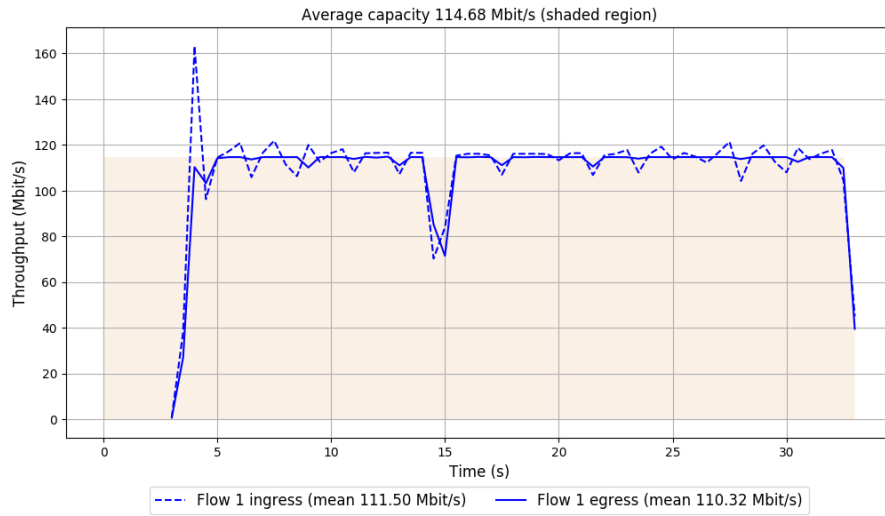
-- Flow 1:

Average throughput: 110.32 Mbit/s

95th percentile per-packet one-way delay: 85.870 ms

Loss rate: 1.21%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-03-05 18:56:15

End at: 2018-03-05 18:56:45

Below is generated by plot.py at 2018-03-05 19:47:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 110.33 Mbit/s (96.2% utilization)

95th percentile per-packet one-way delay: 86.385 ms

Loss rate: 1.23%

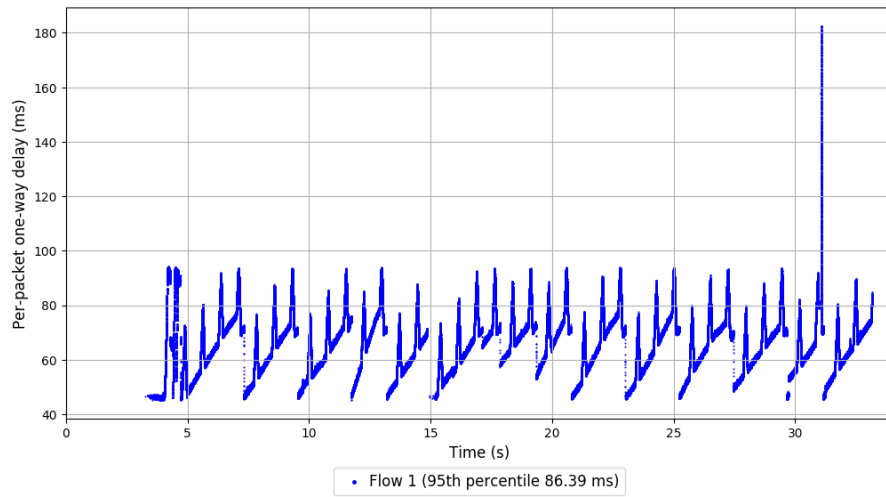
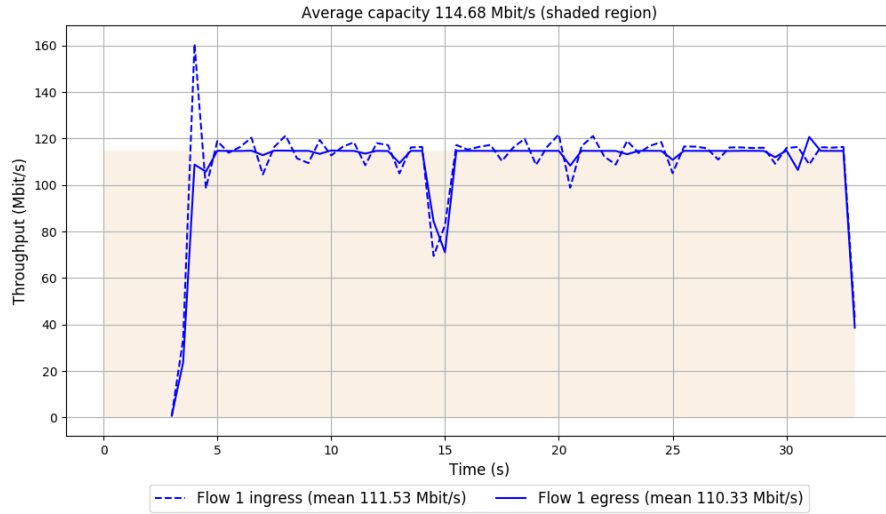
-- Flow 1:

Average throughput: 110.33 Mbit/s

95th percentile per-packet one-way delay: 86.385 ms

Loss rate: 1.23%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-03-05 19:08:08

End at: 2018-03-05 19:08:38

Below is generated by plot.py at 2018-03-05 19:47:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 109.06 Mbit/s (95.1% utilization)

95th percentile per-packet one-way delay: 90.012 ms

Loss rate: 1.68%

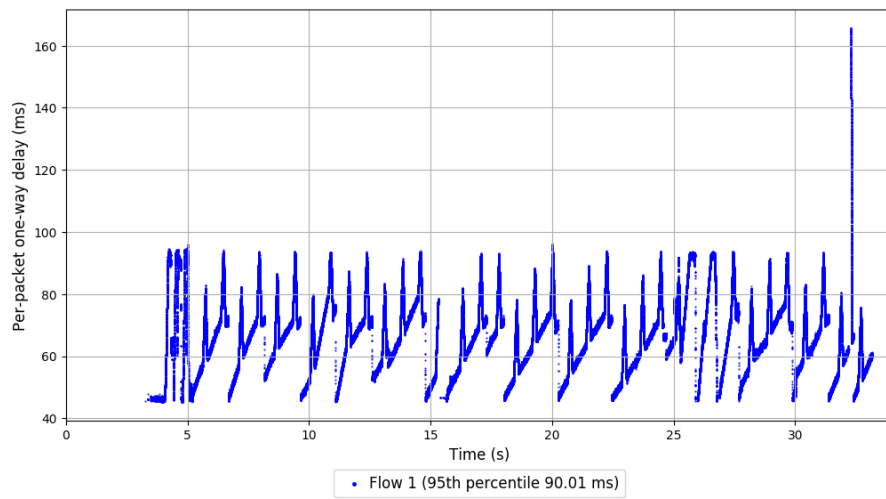
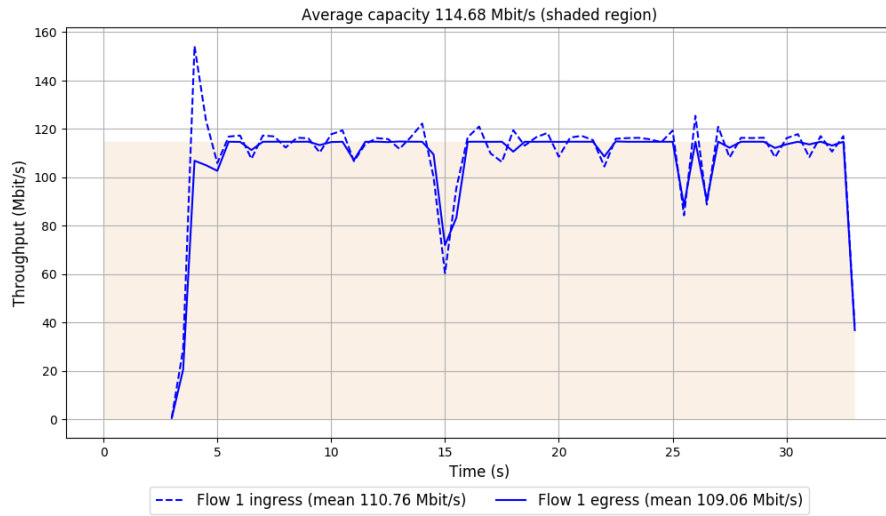
-- Flow 1:

Average throughput: 109.06 Mbit/s

95th percentile per-packet one-way delay: 90.012 ms

Loss rate: 1.68%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-03-05 19:20:16

End at: 2018-03-05 19:20:46

Below is generated by plot.py at 2018-03-05 19:49:42

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 109.31 Mbit/s (95.3% utilization)

95th percentile per-packet one-way delay: 86.513 ms

Loss rate: 1.70%

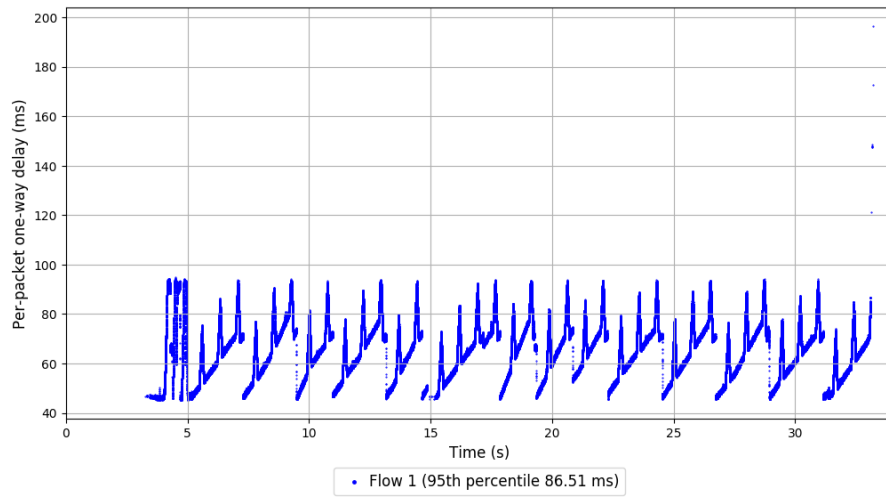
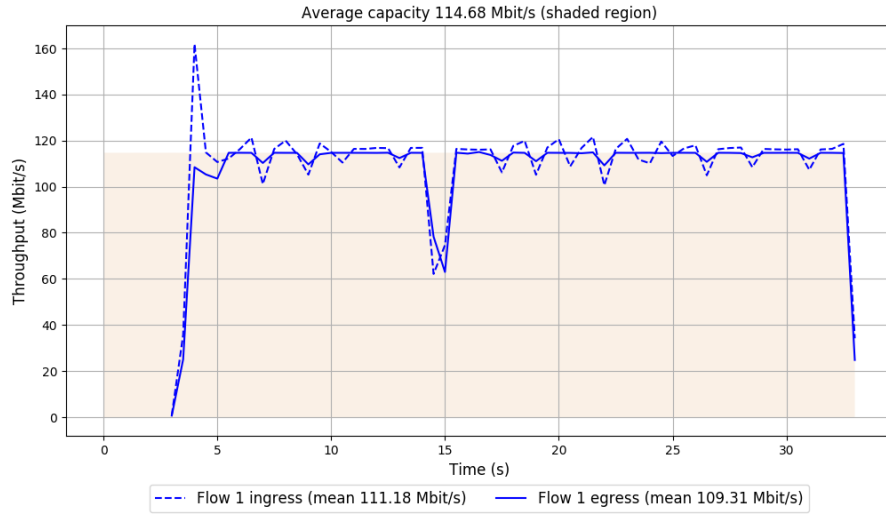
-- Flow 1:

Average throughput: 109.31 Mbit/s

95th percentile per-packet one-way delay: 86.513 ms

Loss rate: 1.70%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-03-05 19:32:12

End at: 2018-03-05 19:32:42

Below is generated by plot.py at 2018-03-05 19:49:42

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 108.87 Mbit/s (94.9% utilization)

95th percentile per-packet one-way delay: 86.774 ms

Loss rate: 1.56%

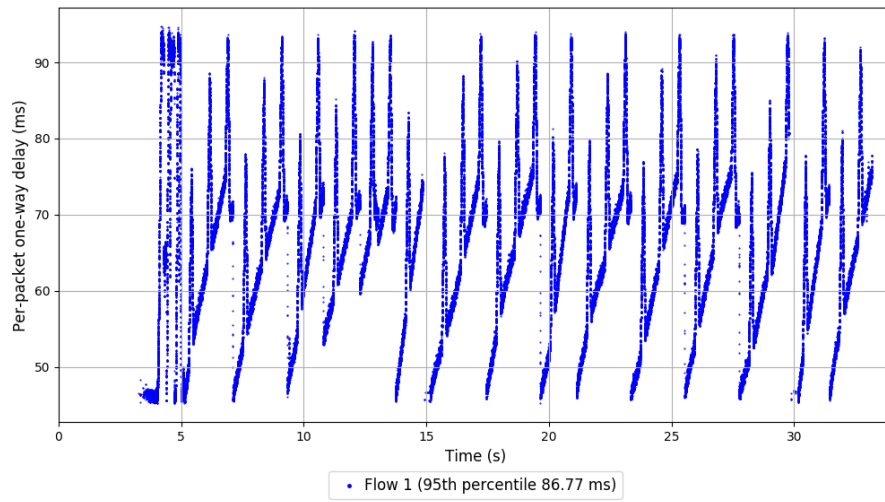
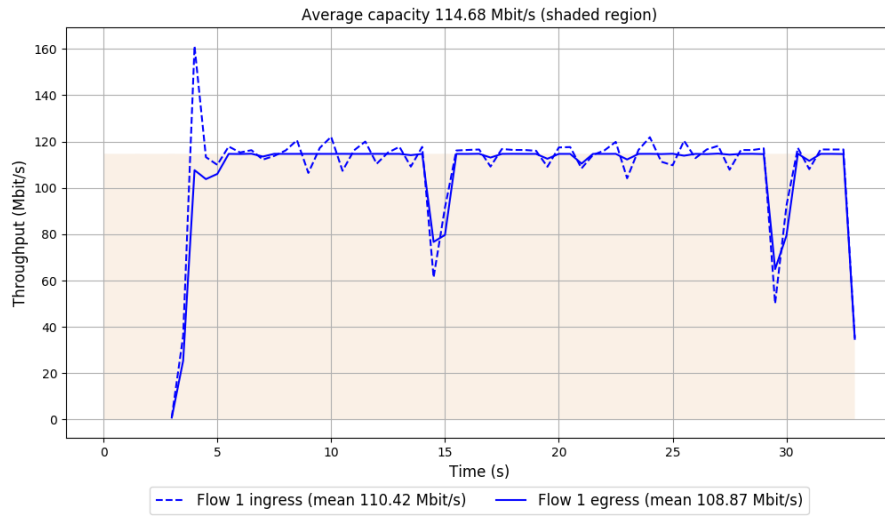
-- Flow 1:

Average throughput: 108.87 Mbit/s

95th percentile per-packet one-way delay: 86.774 ms

Loss rate: 1.56%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-03-05 17:48:48

End at: 2018-03-05 17:49:18

Below is generated by plot.py at 2018-03-05 19:49:42

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 105.08 Mbit/s (91.6% utilization)

95th percentile per-packet one-way delay: 80.584 ms

Loss rate: 0.67%

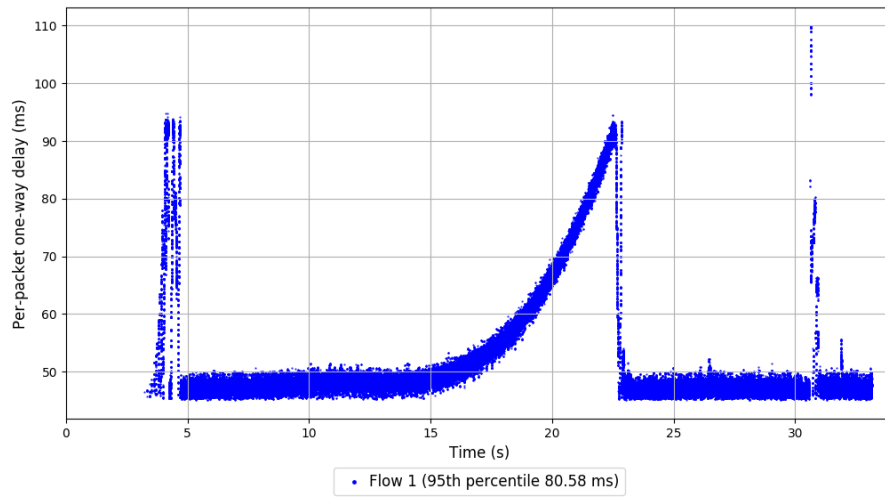
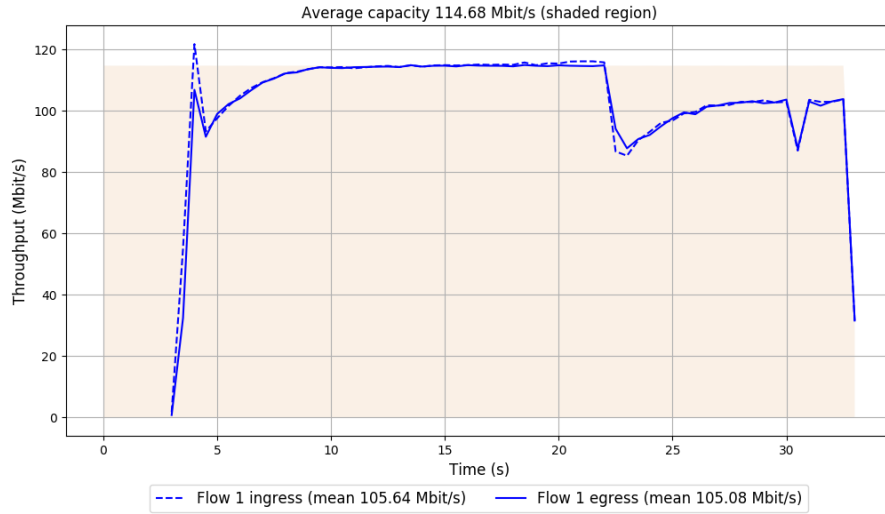
-- Flow 1:

Average throughput: 105.08 Mbit/s

95th percentile per-packet one-way delay: 80.584 ms

Loss rate: 0.67%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-03-05 18:00:38

End at: 2018-03-05 18:01:08

Below is generated by plot.py at 2018-03-05 19:49:42

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 105.45 Mbit/s (92.0% utilization)

95th percentile per-packet one-way delay: 89.680 ms

Loss rate: 0.34%

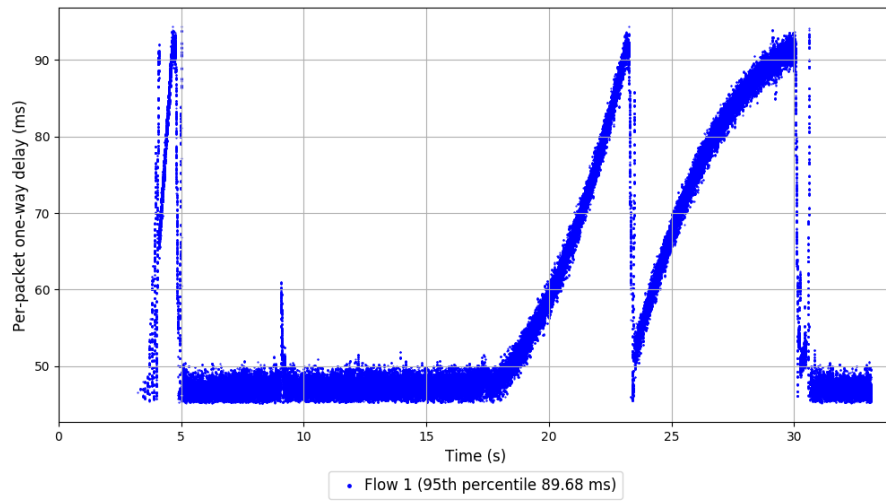
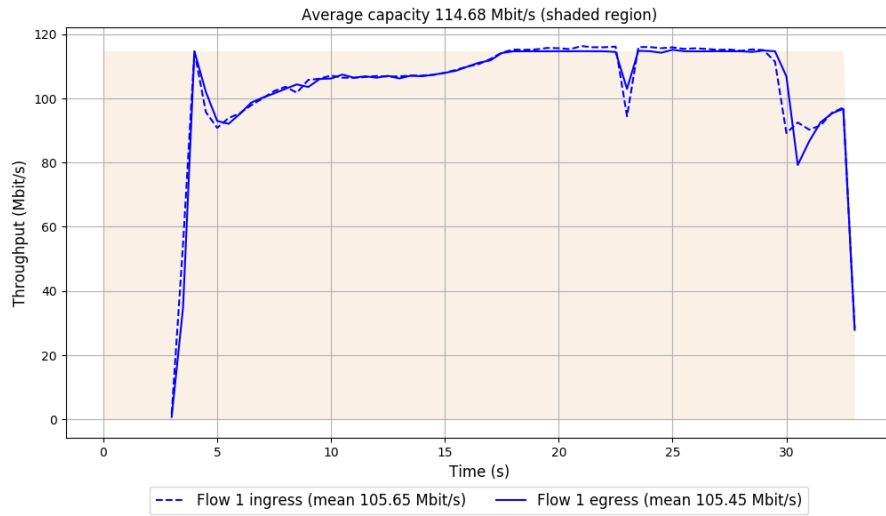
-- Flow 1:

Average throughput: 105.45 Mbit/s

95th percentile per-packet one-way delay: 89.680 ms

Loss rate: 0.34%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-03-05 18:12:39

End at: 2018-03-05 18:13:09

Below is generated by plot.py at 2018-03-05 19:49:42

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 106.49 Mbit/s (92.9% utilization)

95th percentile per-packet one-way delay: 82.488 ms

Loss rate: 0.36%

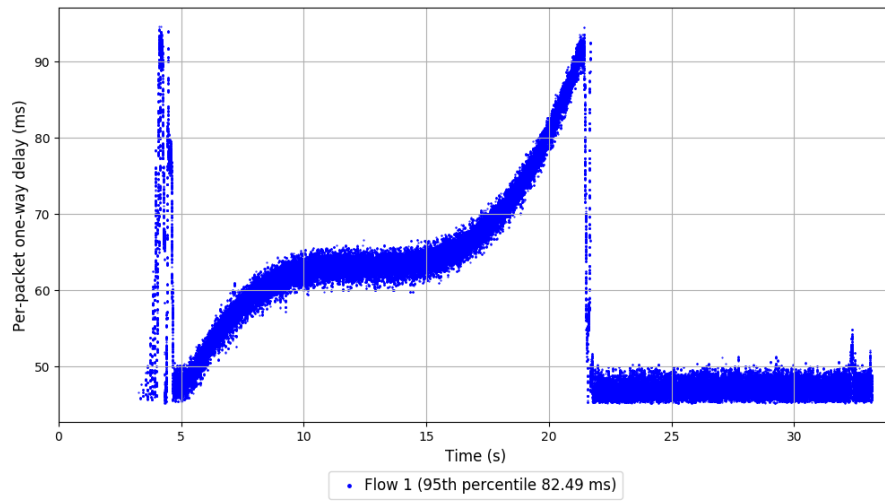
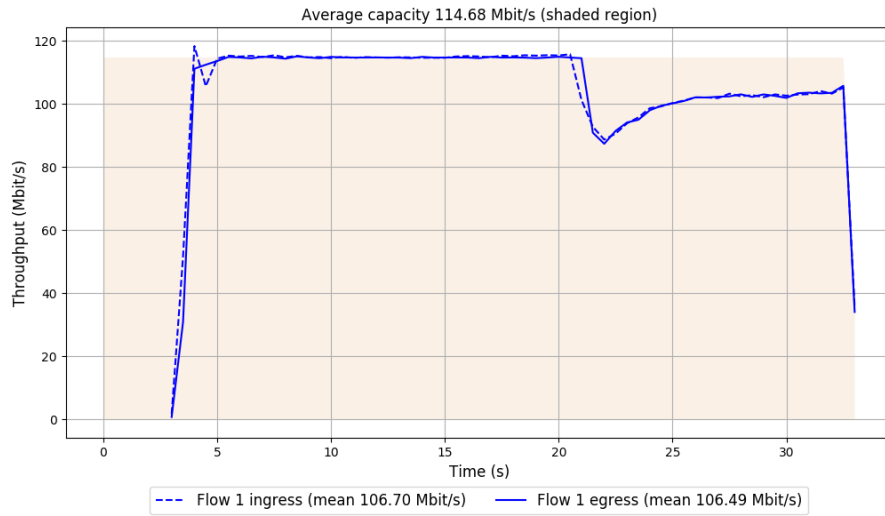
-- Flow 1:

Average throughput: 106.49 Mbit/s

95th percentile per-packet one-way delay: 82.488 ms

Loss rate: 0.36%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-03-05 18:24:34

End at: 2018-03-05 18:25:04

Below is generated by plot.py at 2018-03-05 19:49:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 111.93 Mbit/s (97.6% utilization)

95th percentile per-packet one-way delay: 89.697 ms

Loss rate: 0.42%

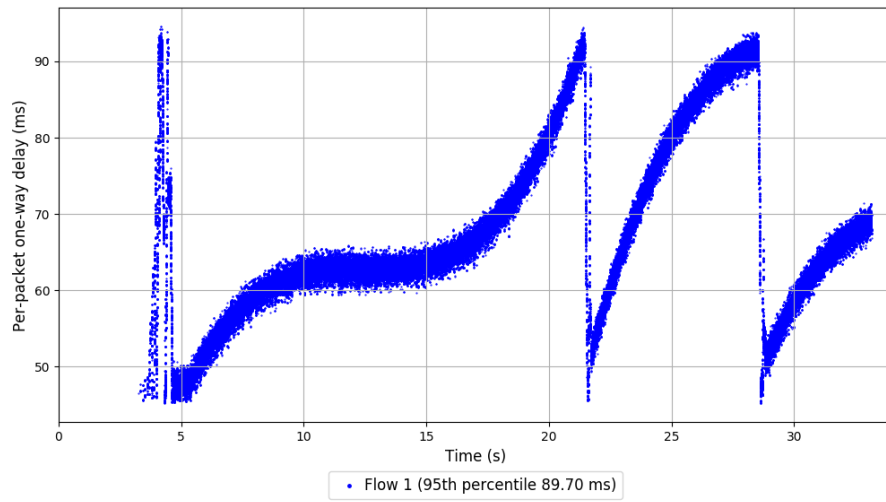
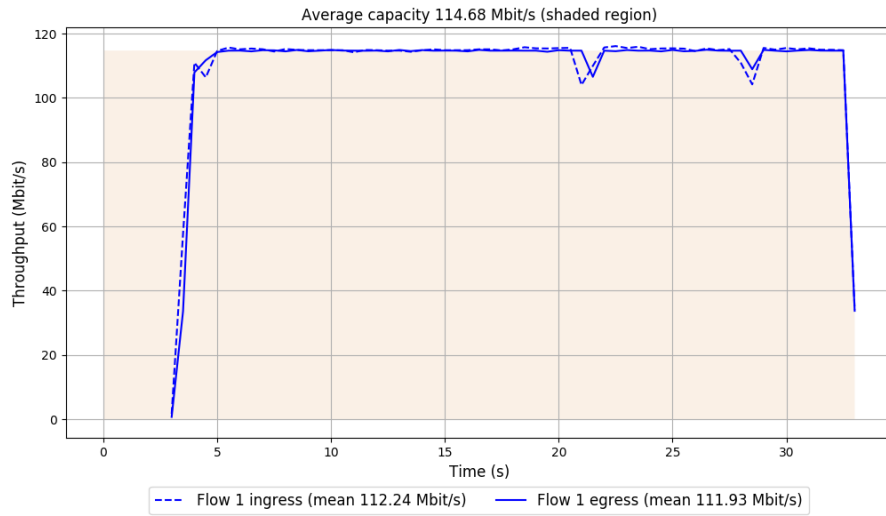
-- Flow 1:

Average throughput: 111.93 Mbit/s

95th percentile per-packet one-way delay: 89.697 ms

Loss rate: 0.42%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-03-05 18:36:28

End at: 2018-03-05 18:36:58

Below is generated by plot.py at 2018-03-05 19:49:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 105.25 Mbit/s (91.8% utilization)

95th percentile per-packet one-way delay: 81.376 ms

Loss rate: 0.70%

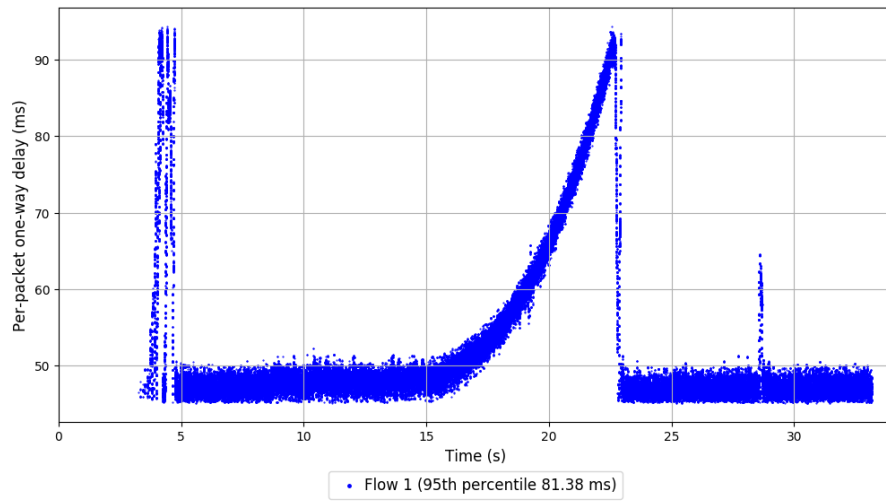
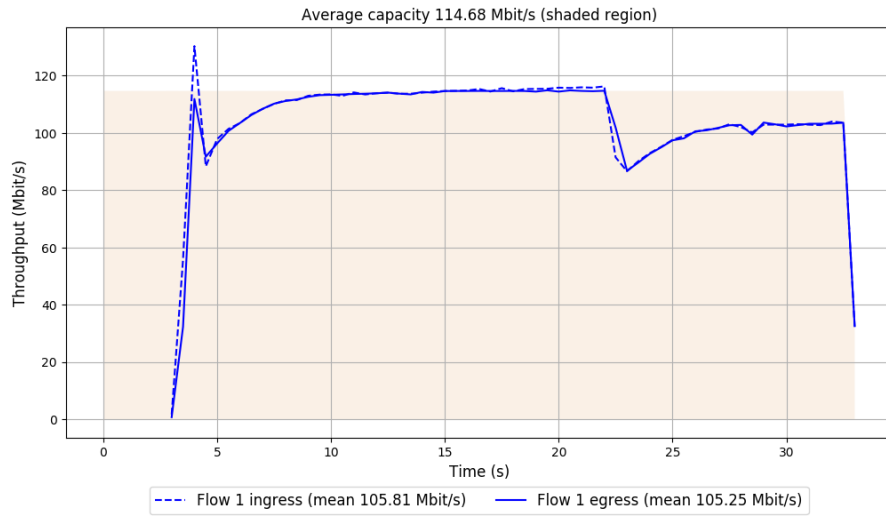
-- Flow 1:

Average throughput: 105.25 Mbit/s

95th percentile per-packet one-way delay: 81.376 ms

Loss rate: 0.70%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-03-05 18:48:20

End at: 2018-03-05 18:48:50

Below is generated by plot.py at 2018-03-05 19:49:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 111.75 Mbit/s (97.4% utilization)

95th percentile per-packet one-way delay: 89.783 ms

Loss rate: 0.23%

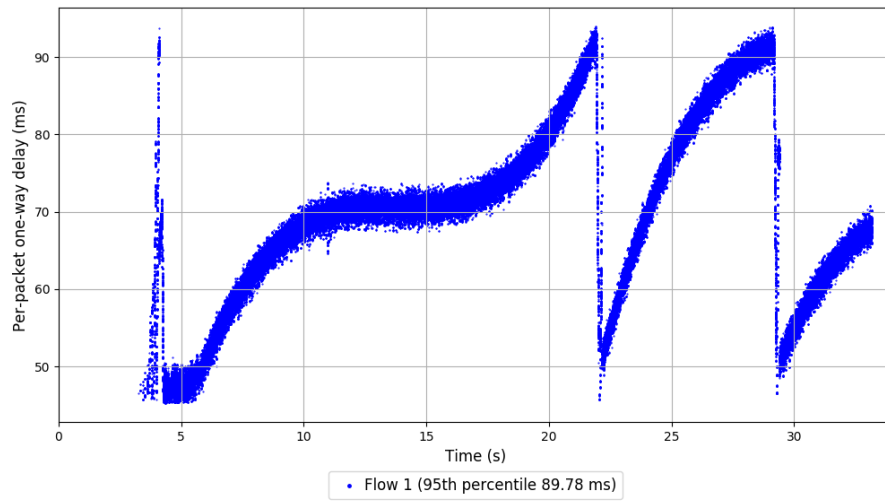
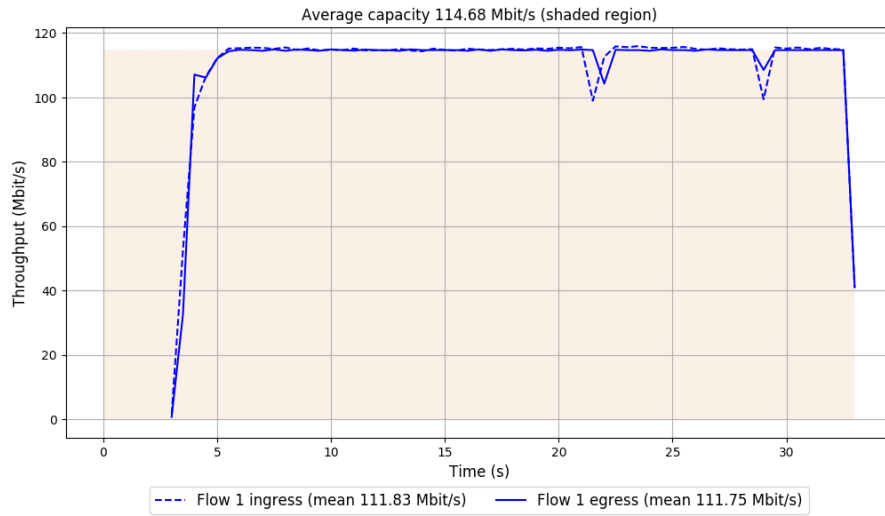
-- Flow 1:

Average throughput: 111.75 Mbit/s

95th percentile per-packet one-way delay: 89.783 ms

Loss rate: 0.23%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-03-05 19:00:14

End at: 2018-03-05 19:00:44

Below is generated by plot.py at 2018-03-05 19:51:58

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 104.11 Mbit/s (90.8% utilization)

95th percentile per-packet one-way delay: 84.675 ms

Loss rate: 0.27%

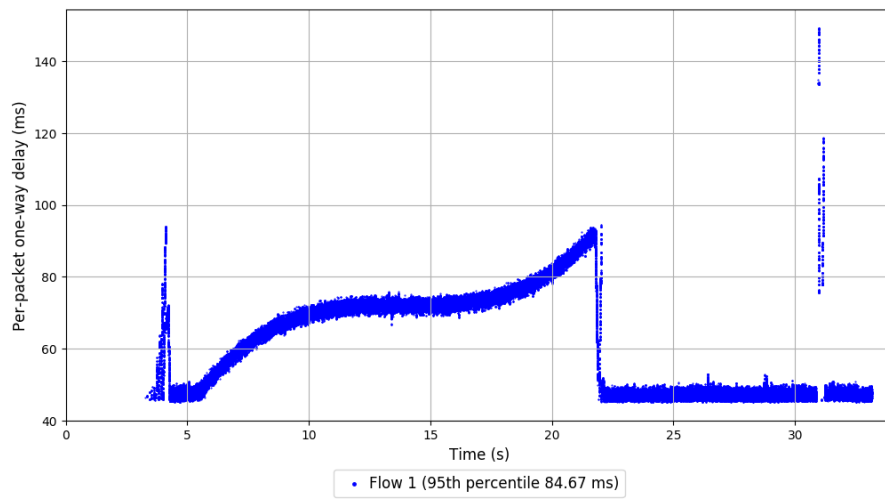
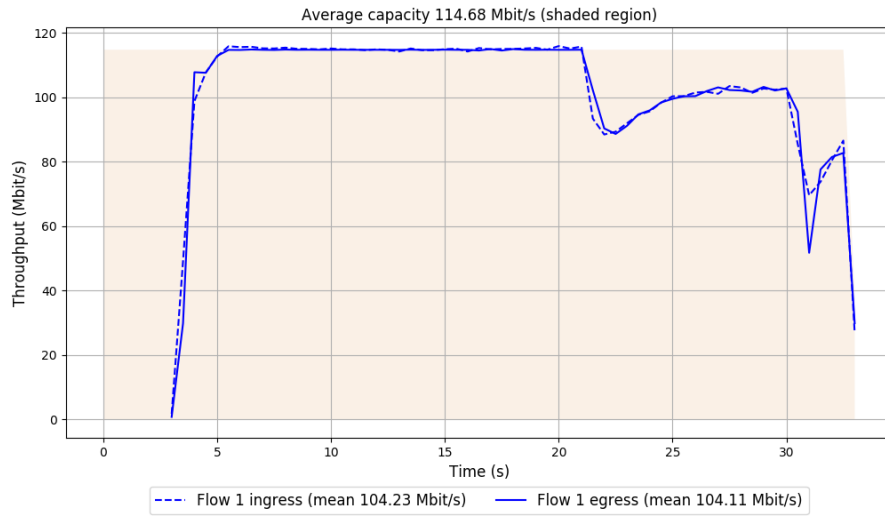
-- Flow 1:

Average throughput: 104.11 Mbit/s

95th percentile per-packet one-way delay: 84.675 ms

Loss rate: 0.27%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-03-05 19:12:21

End at: 2018-03-05 19:12:51

Below is generated by plot.py at 2018-03-05 19:52:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 109.59 Mbit/s (95.6% utilization)

95th percentile per-packet one-way delay: 89.783 ms

Loss rate: 0.54%

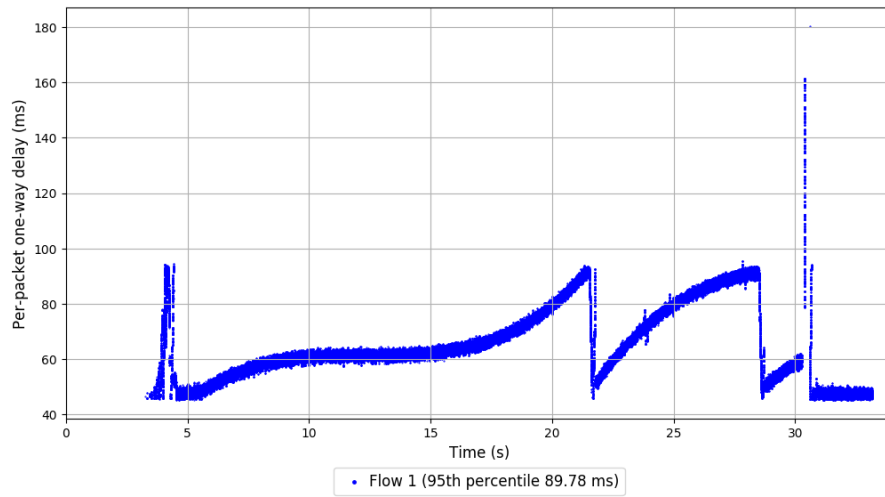
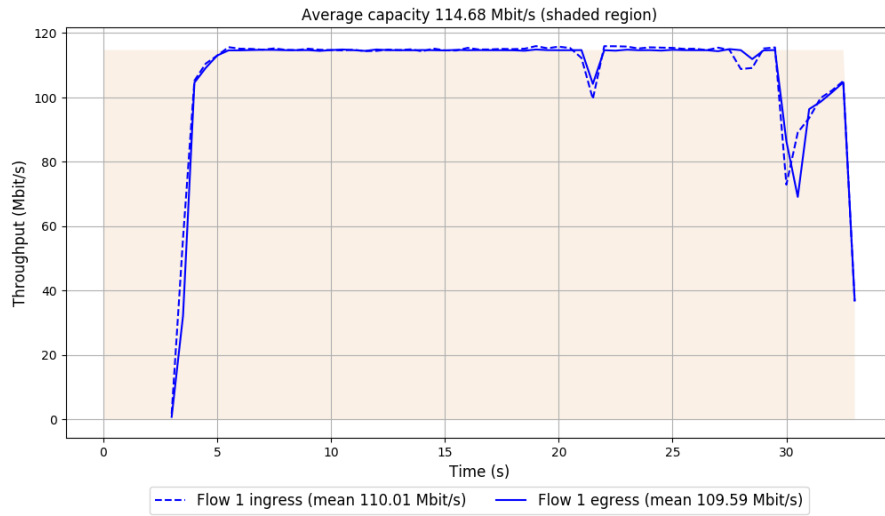
-- Flow 1:

Average throughput: 109.59 Mbit/s

95th percentile per-packet one-way delay: 89.783 ms

Loss rate: 0.54%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-03-05 19:24:16

End at: 2018-03-05 19:24:46

Below is generated by plot.py at 2018-03-05 19:52:06

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 110.37 Mbit/s (96.2% utilization)

95th percentile per-packet one-way delay: 90.752 ms

Loss rate: 0.69%

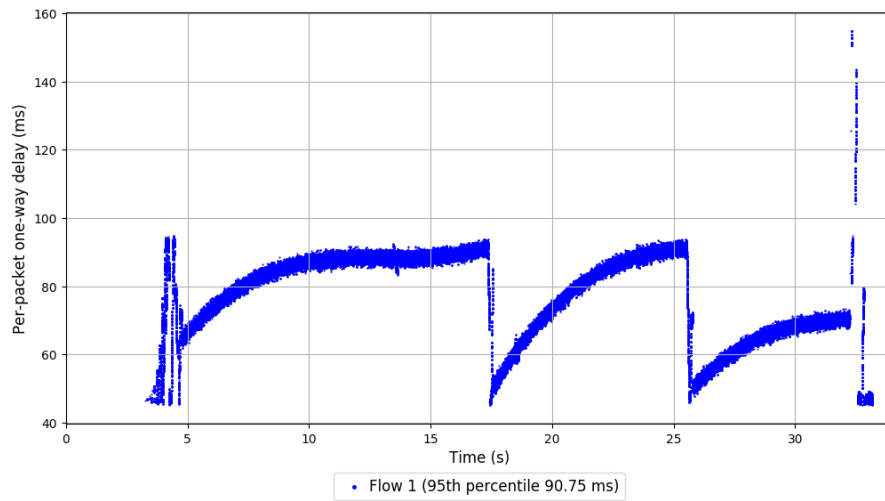
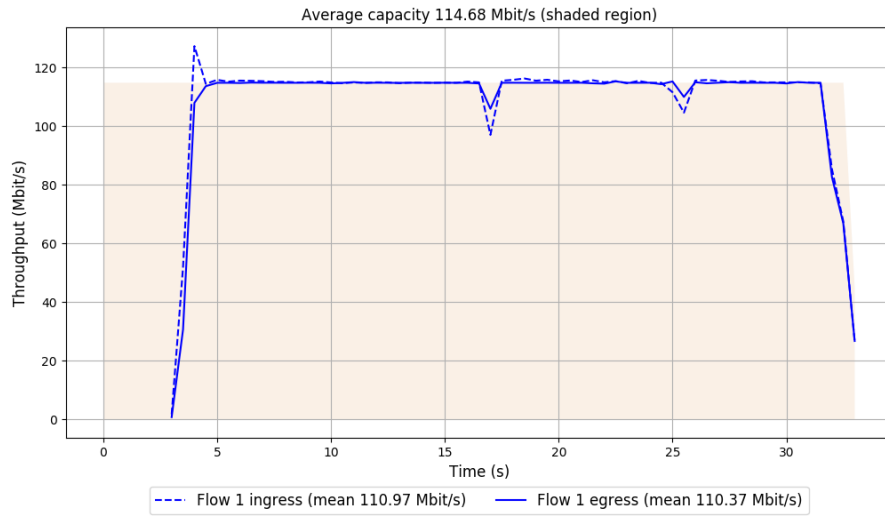
-- Flow 1:

Average throughput: 110.37 Mbit/s

95th percentile per-packet one-way delay: 90.752 ms

Loss rate: 0.69%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-03-05 19:36:11

End at: 2018-03-05 19:36:41

Below is generated by plot.py at 2018-03-05 19:52:06

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 107.69 Mbit/s (93.9% utilization)

95th percentile per-packet one-way delay: 89.690 ms

Loss rate: 0.30%

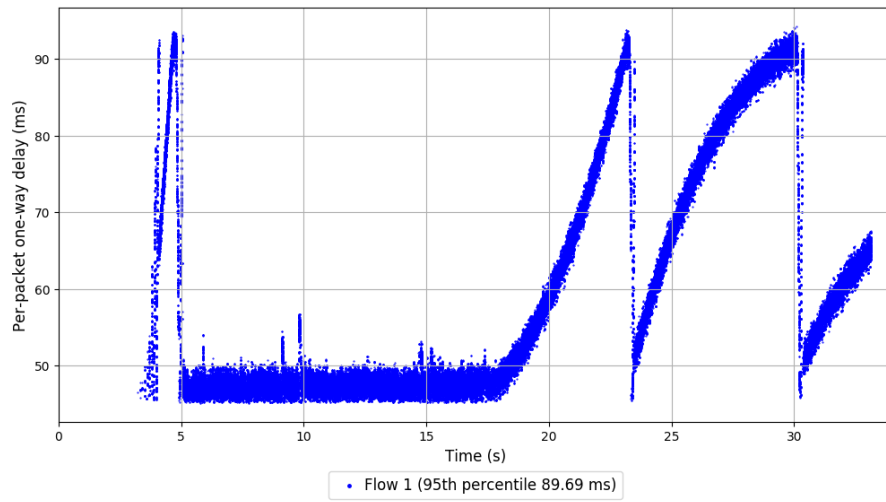
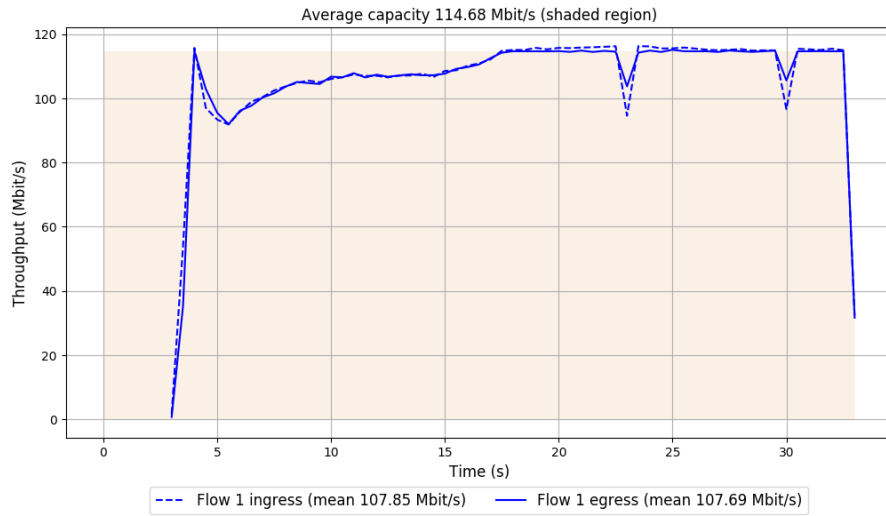
-- Flow 1:

Average throughput: 107.69 Mbit/s

95th percentile per-packet one-way delay: 89.690 ms

Loss rate: 0.30%

Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of LEDBAT

Start at: 2018-03-05 17:42:21

End at: 2018-03-05 17:42:51

Below is generated by plot.py at 2018-03-05 19:52:06

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 41.40 Mbit/s (36.1% utilization)

95th percentile per-packet one-way delay: 48.312 ms

Loss rate: 0.31%

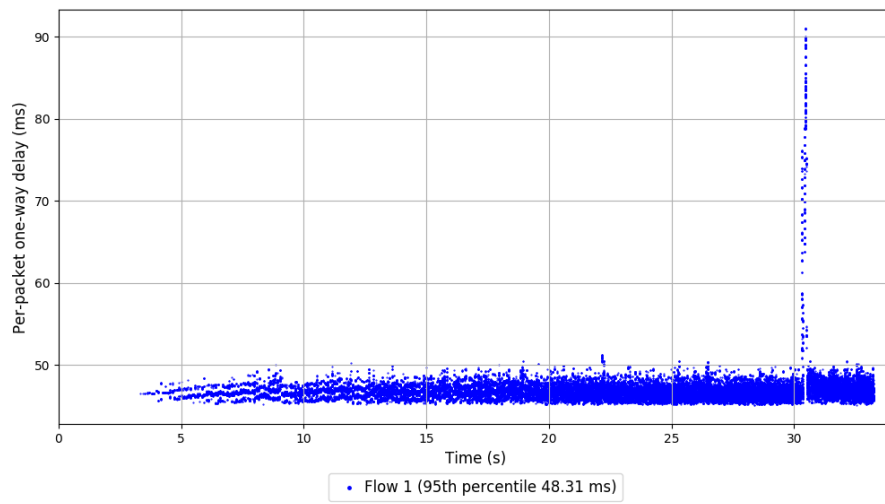
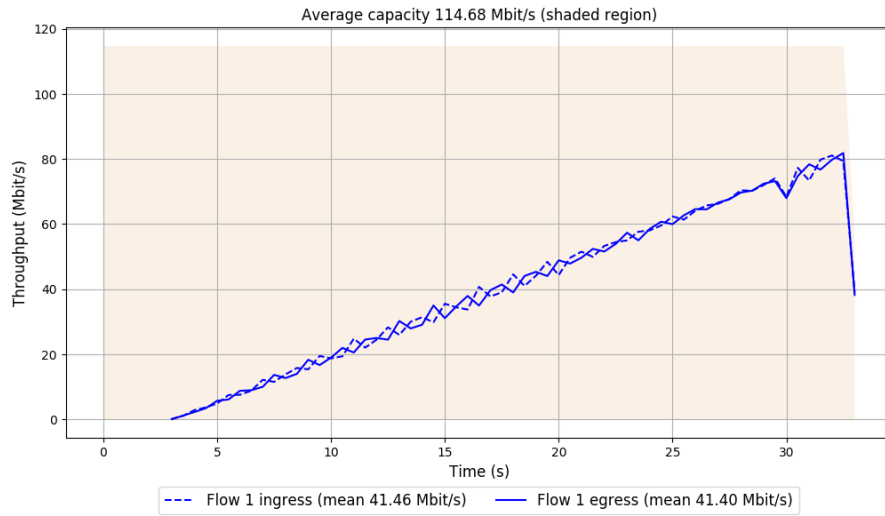
-- Flow 1:

Average throughput: 41.40 Mbit/s

95th percentile per-packet one-way delay: 48.312 ms

Loss rate: 0.31%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-03-05 17:54:01

End at: 2018-03-05 17:54:31

Below is generated by plot.py at 2018-03-05 19:52:06

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 41.55 Mbit/s (36.2% utilization)

95th percentile per-packet one-way delay: 48.076 ms

Loss rate: 0.28%

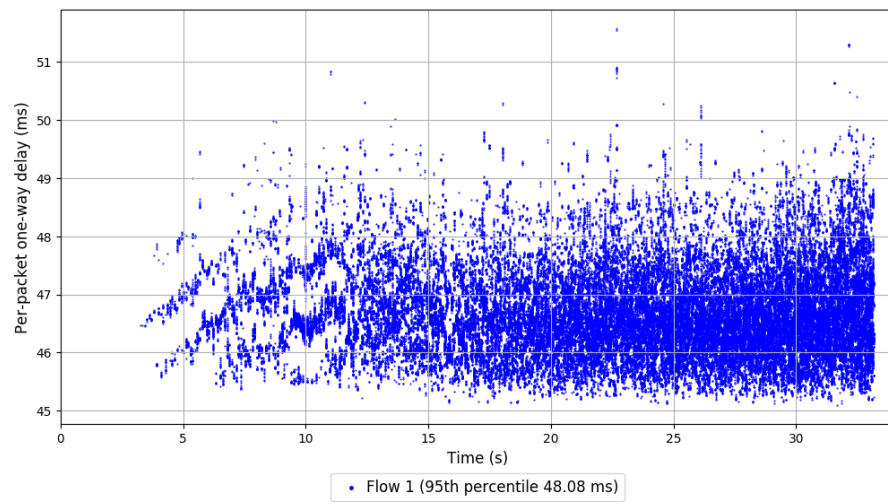
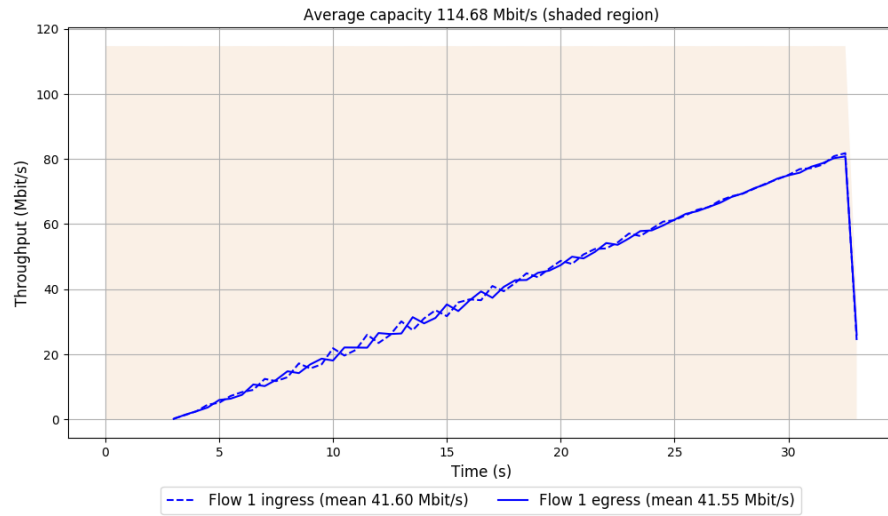
-- Flow 1:

Average throughput: 41.55 Mbit/s

95th percentile per-packet one-way delay: 48.076 ms

Loss rate: 0.28%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-03-05 18:05:52

End at: 2018-03-05 18:06:22

Below is generated by plot.py at 2018-03-05 19:52:06

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 41.31 Mbit/s (36.0% utilization)

95th percentile per-packet one-way delay: 48.221 ms

Loss rate: 0.35%

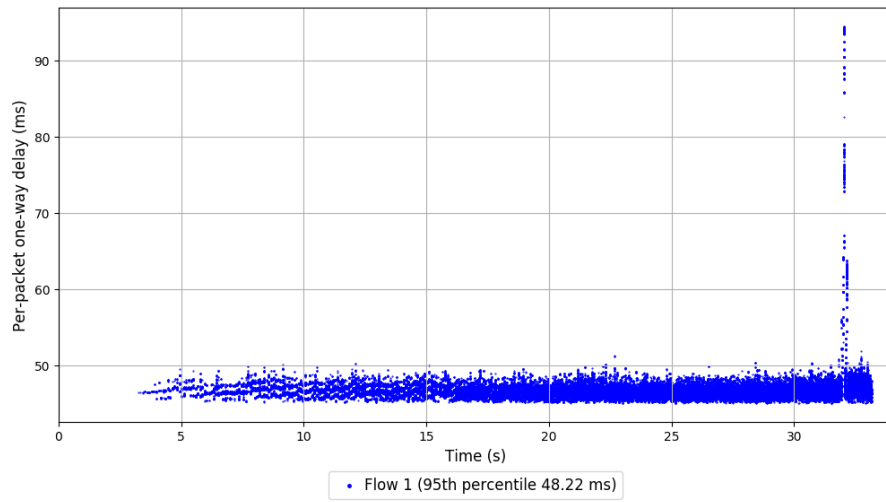
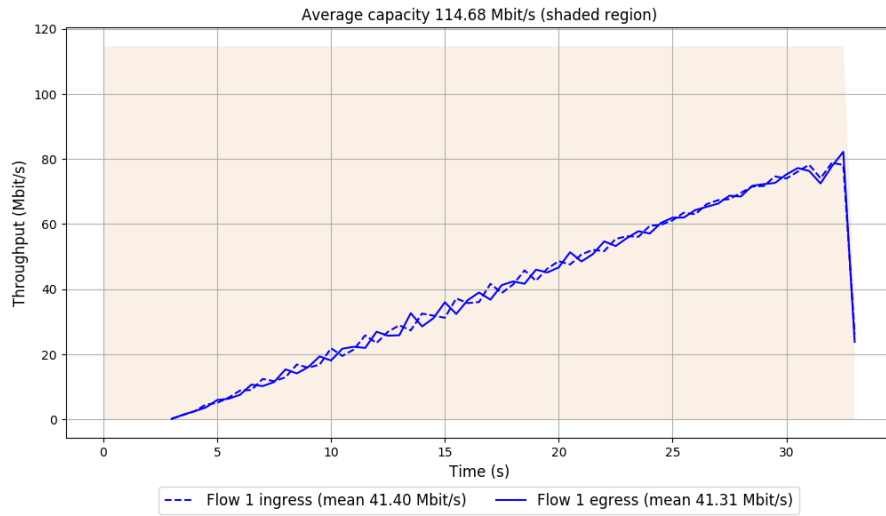
-- Flow 1:

Average throughput: 41.31 Mbit/s

95th percentile per-packet one-way delay: 48.221 ms

Loss rate: 0.35%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-03-05 18:17:55

End at: 2018-03-05 18:18:25

Below is generated by plot.py at 2018-03-05 19:52:06

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 41.47 Mbit/s (36.2% utilization)

95th percentile per-packet one-way delay: 48.082 ms

Loss rate: 0.30%

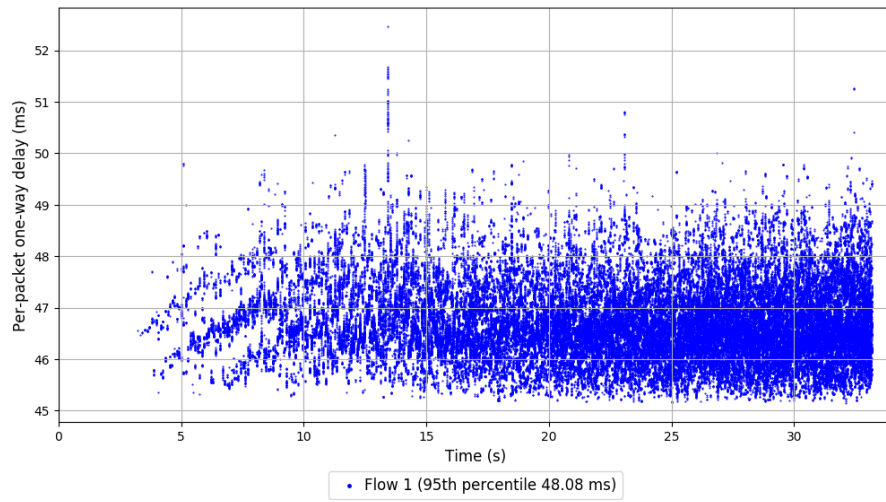
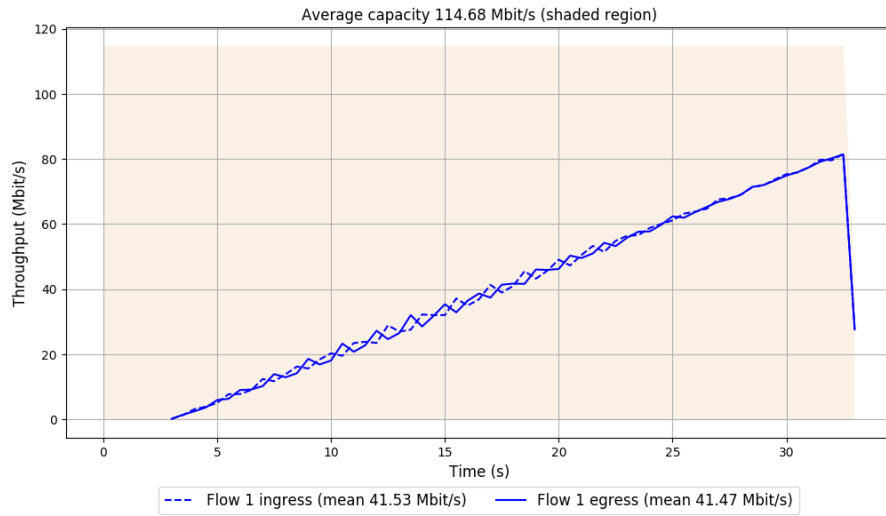
-- Flow 1:

Average throughput: 41.47 Mbit/s

95th percentile per-packet one-way delay: 48.082 ms

Loss rate: 0.30%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-03-05 18:29:48

End at: 2018-03-05 18:30:18

Below is generated by plot.py at 2018-03-05 19:52:29

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 40.83 Mbit/s (35.6% utilization)

95th percentile per-packet one-way delay: 48.455 ms

Loss rate: 0.38%

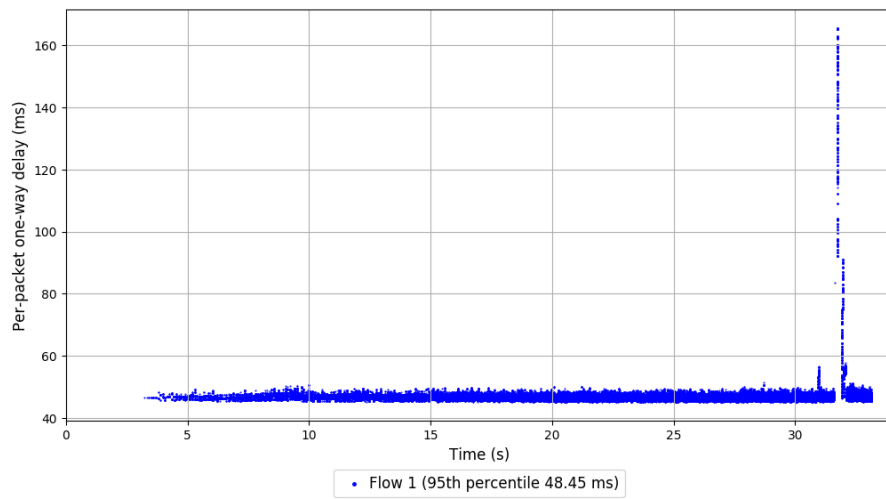
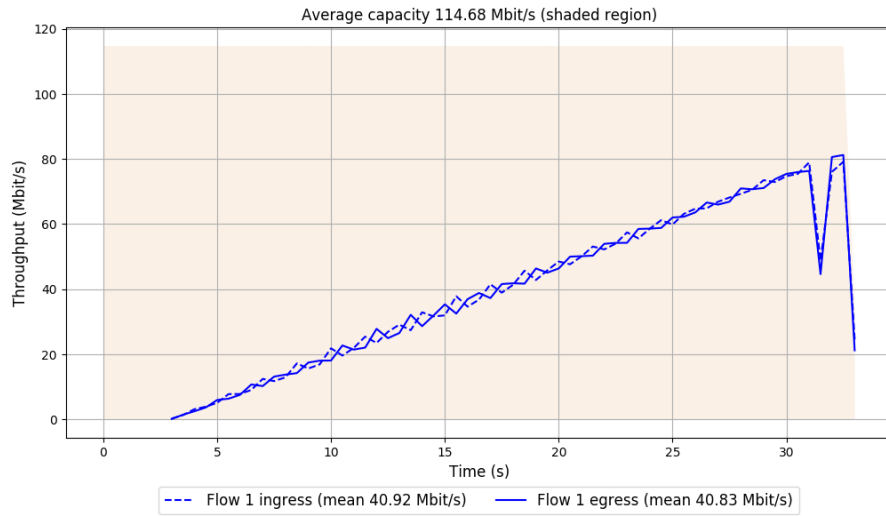
-- Flow 1:

Average throughput: 40.83 Mbit/s

95th percentile per-packet one-way delay: 48.455 ms

Loss rate: 0.38%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-03-05 18:41:42

End at: 2018-03-05 18:42:12

Below is generated by plot.py at 2018-03-05 19:52:30

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 41.36 Mbit/s (36.1% utilization)

95th percentile per-packet one-way delay: 48.342 ms

Loss rate: 0.34%

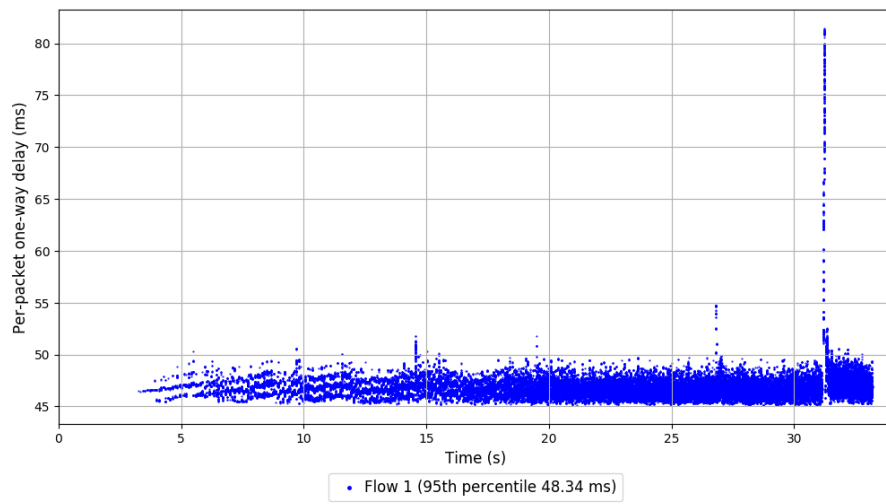
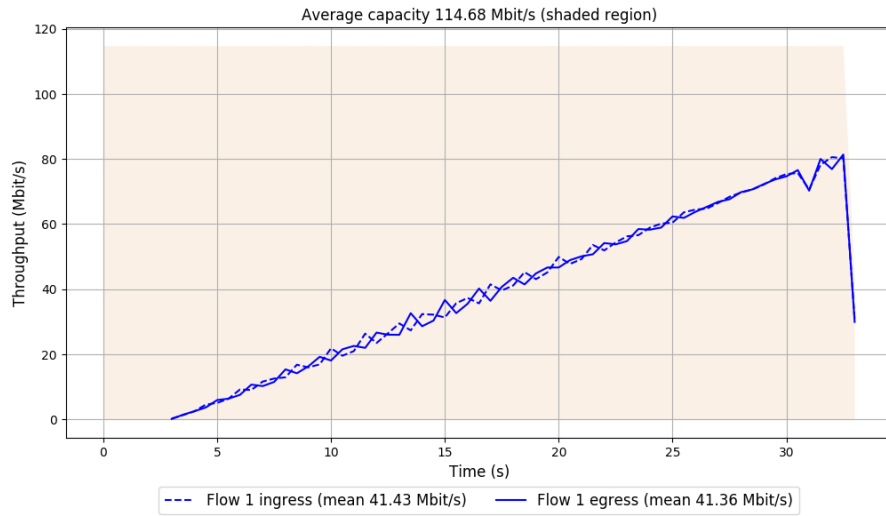
-- Flow 1:

Average throughput: 41.36 Mbit/s

95th percentile per-packet one-way delay: 48.342 ms

Loss rate: 0.34%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-03-05 18:53:35

End at: 2018-03-05 18:54:05

Below is generated by plot.py at 2018-03-05 19:52:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 41.50 Mbit/s (36.2% utilization)

95th percentile per-packet one-way delay: 47.999 ms

Loss rate: 0.33%

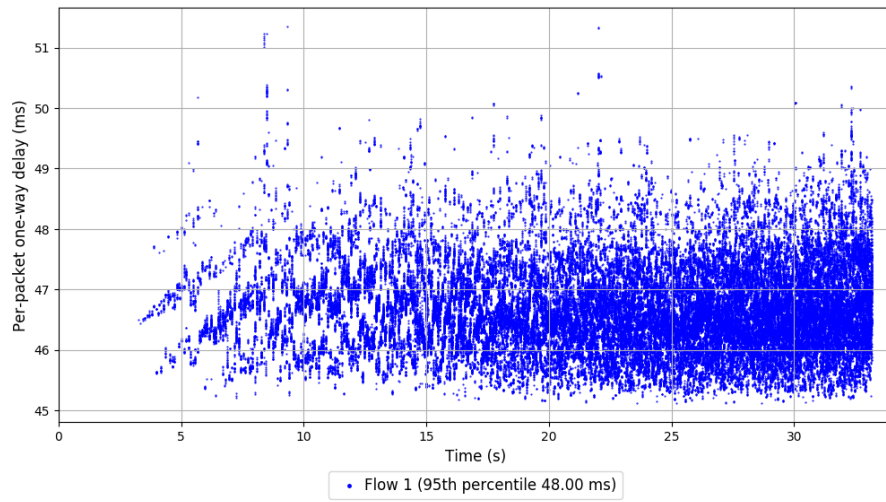
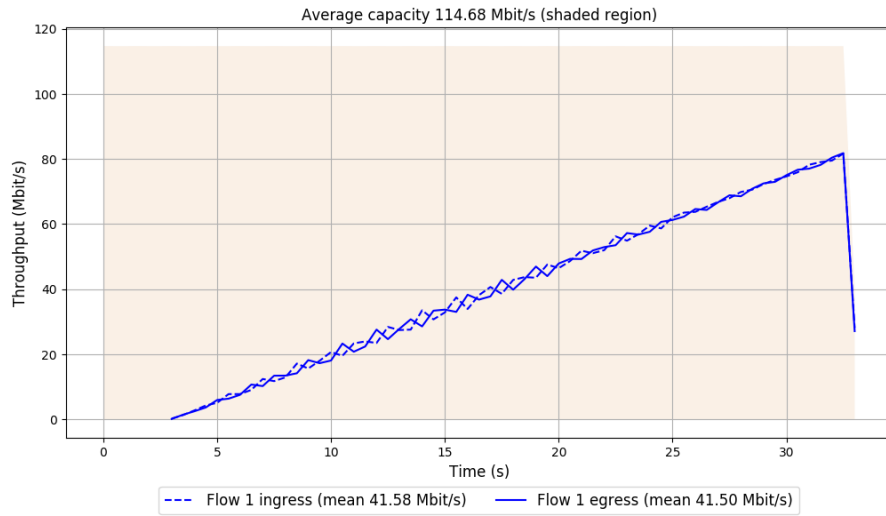
-- Flow 1:

Average throughput: 41.50 Mbit/s

95th percentile per-packet one-way delay: 47.999 ms

Loss rate: 0.33%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-03-05 19:05:27

End at: 2018-03-05 19:05:57

Below is generated by plot.py at 2018-03-05 19:52:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 41.24 Mbit/s (36.0% utilization)

95th percentile per-packet one-way delay: 48.139 ms

Loss rate: 0.29%

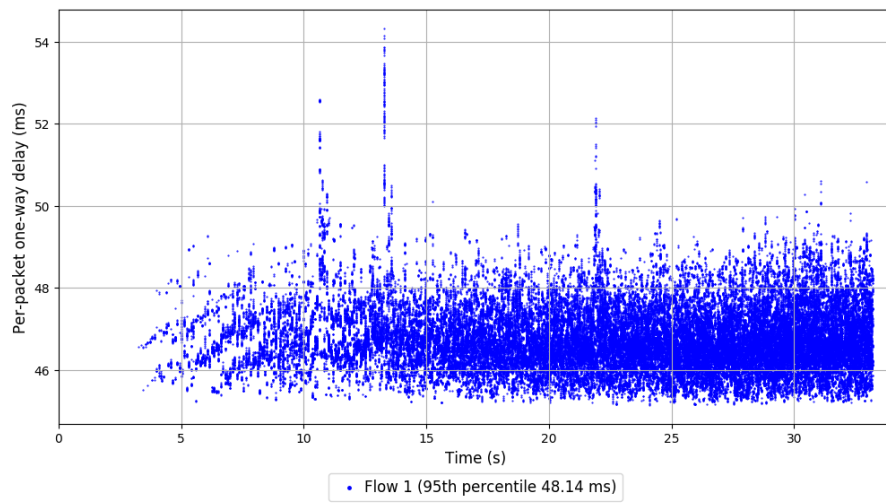
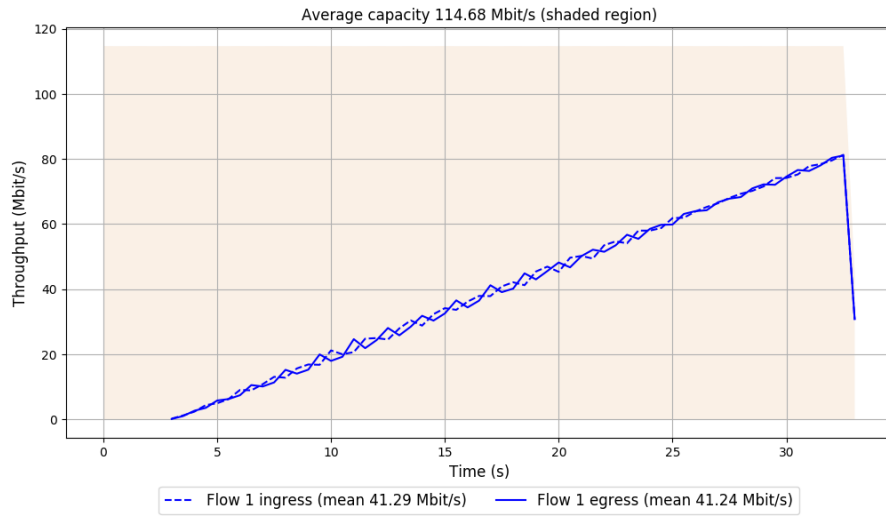
-- Flow 1:

Average throughput: 41.24 Mbit/s

95th percentile per-packet one-way delay: 48.139 ms

Loss rate: 0.29%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-03-05 19:17:37

End at: 2018-03-05 19:18:07

Below is generated by plot.py at 2018-03-05 19:53:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 39.34 Mbit/s (34.3% utilization)

95th percentile per-packet one-way delay: 48.222 ms

Loss rate: 0.18%

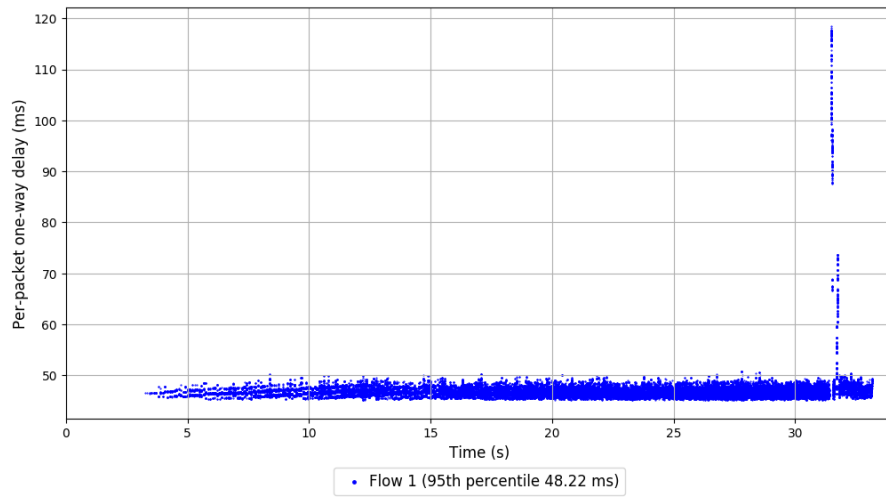
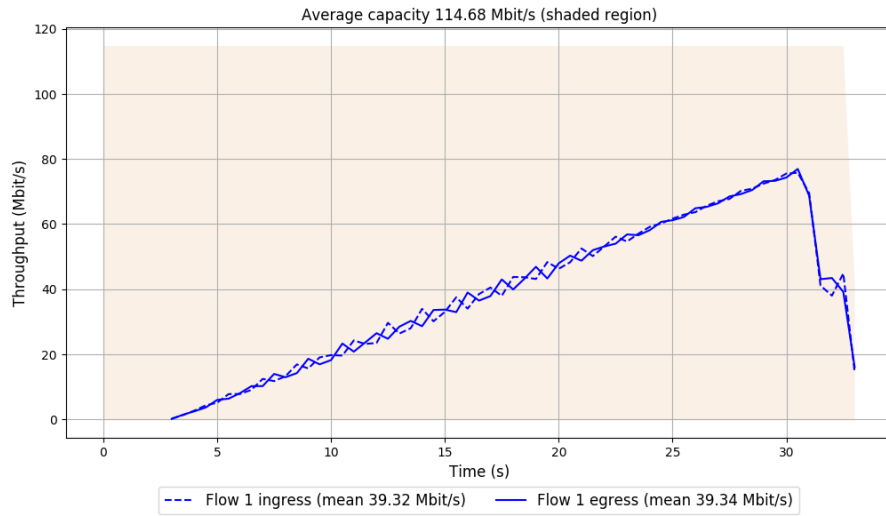
-- Flow 1:

Average throughput: 39.34 Mbit/s

95th percentile per-packet one-way delay: 48.222 ms

Loss rate: 0.18%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-03-05 19:29:33

End at: 2018-03-05 19:30:03

Below is generated by plot.py at 2018-03-05 19:53:20

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 41.21 Mbit/s (35.9% utilization)

95th percentile per-packet one-way delay: 48.331 ms

Loss rate: 0.47%

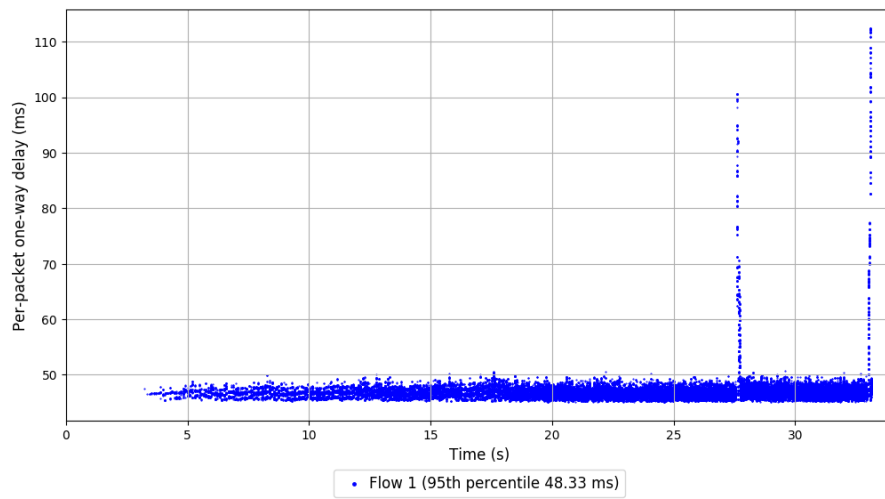
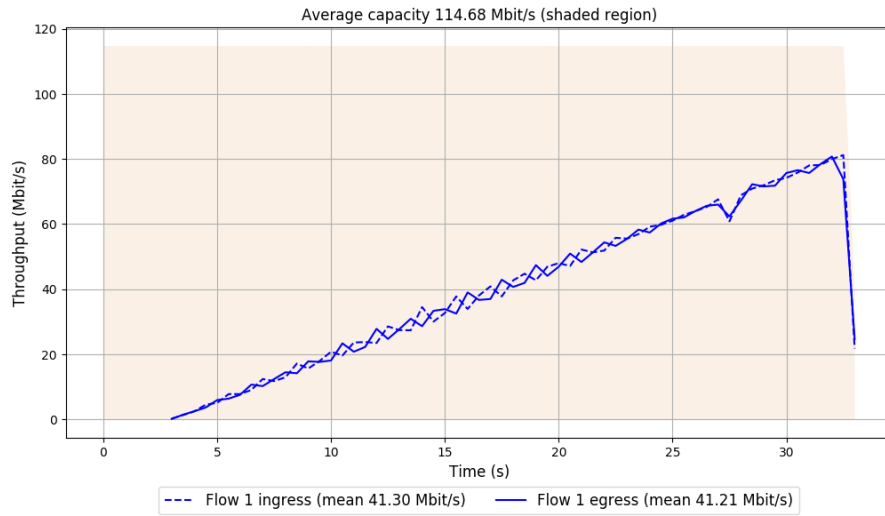
-- Flow 1:

Average throughput: 41.21 Mbit/s

95th percentile per-packet one-way delay: 48.331 ms

Loss rate: 0.47%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC

Start at: 2018-03-05 17:46:11

End at: 2018-03-05 17:46:41

Below is generated by plot.py at 2018-03-05 19:54:22

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 89.70 Mbit/s (78.2% utilization)

95th percentile per-packet one-way delay: 59.162 ms

Loss rate: 0.66%

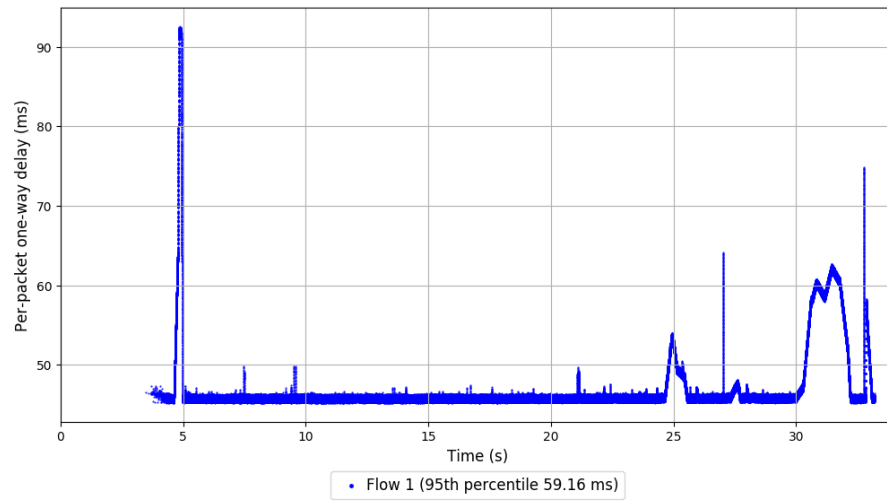
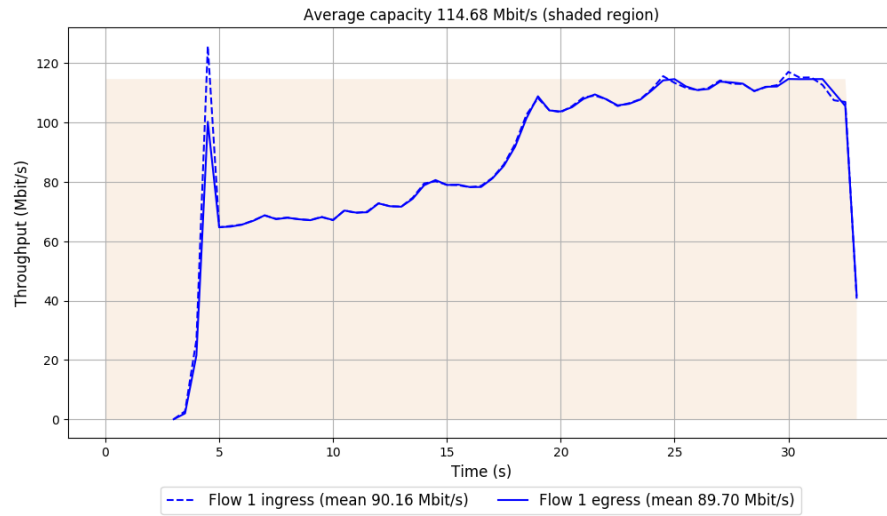
-- Flow 1:

Average throughput: 89.70 Mbit/s

95th percentile per-packet one-way delay: 59.162 ms

Loss rate: 0.66%

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-03-05 17:58:00

End at: 2018-03-05 17:58:30

Below is generated by plot.py at 2018-03-05 19:54:34

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 96.03 Mbit/s (83.7% utilization)

95th percentile per-packet one-way delay: 55.298 ms

Loss rate: 0.72%

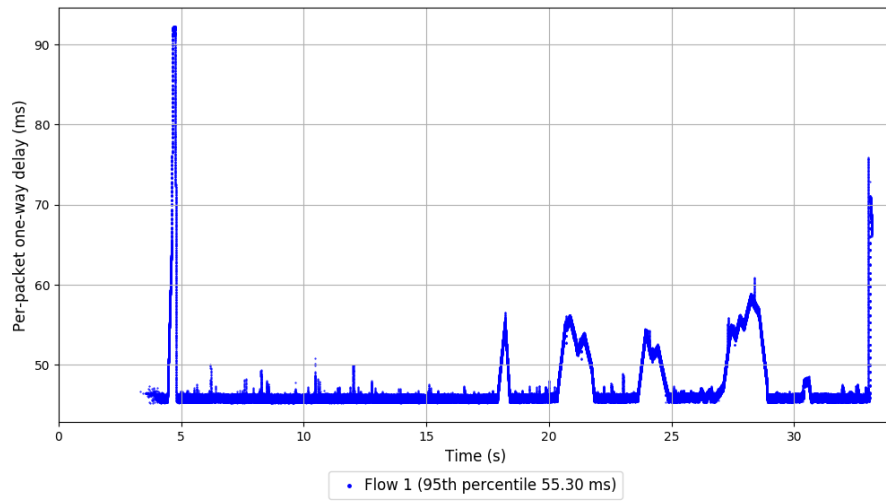
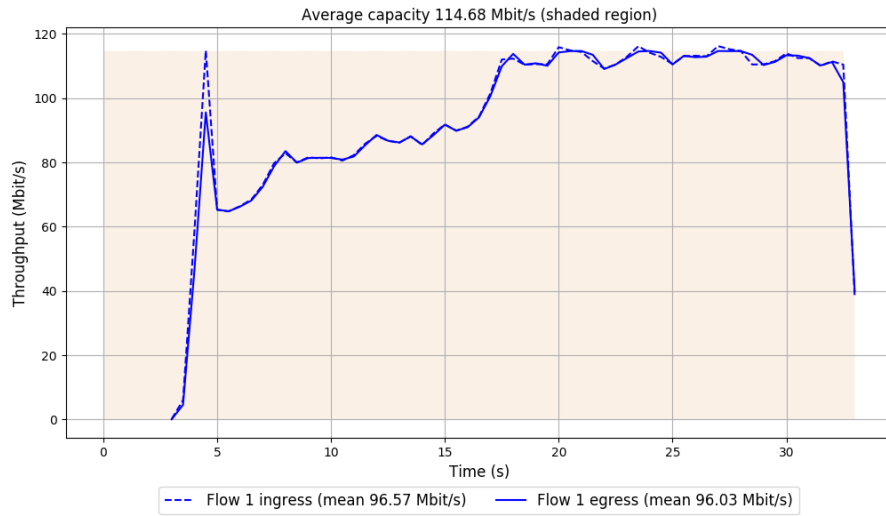
-- Flow 1:

Average throughput: 96.03 Mbit/s

95th percentile per-packet one-way delay: 55.298 ms

Loss rate: 0.72%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-03-05 18:10:03

End at: 2018-03-05 18:10:33

Below is generated by plot.py at 2018-03-05 19:54:34

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 68.95 Mbit/s (60.1% utilization)

95th percentile per-packet one-way delay: 46.244 ms

Loss rate: 0.85%

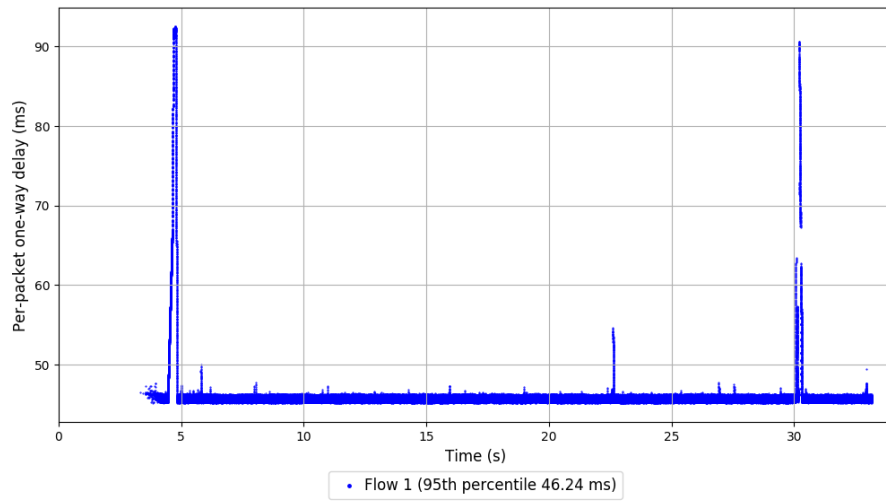
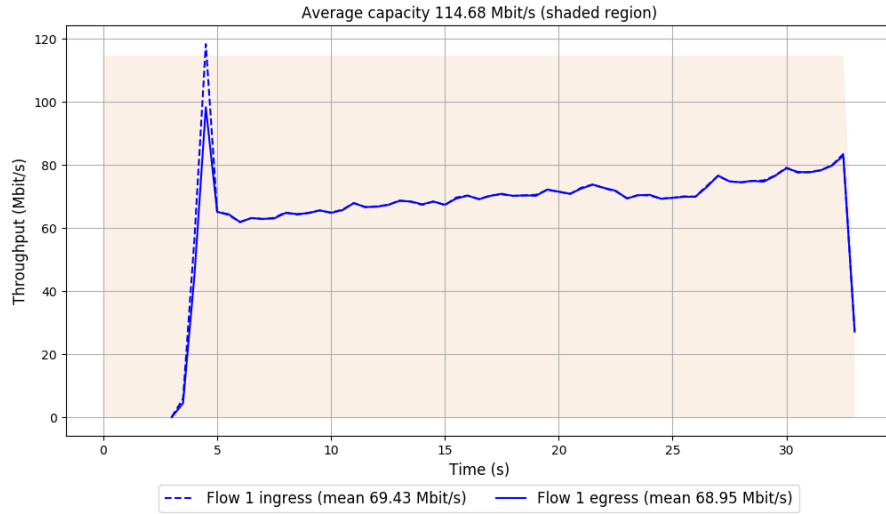
-- Flow 1:

Average throughput: 68.95 Mbit/s

95th percentile per-packet one-way delay: 46.244 ms

Loss rate: 0.85%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-03-05 18:21:56

End at: 2018-03-05 18:22:26

Below is generated by plot.py at 2018-03-05 19:54:49

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 99.42 Mbit/s (86.7% utilization)

95th percentile per-packet one-way delay: 50.491 ms

Loss rate: 0.61%

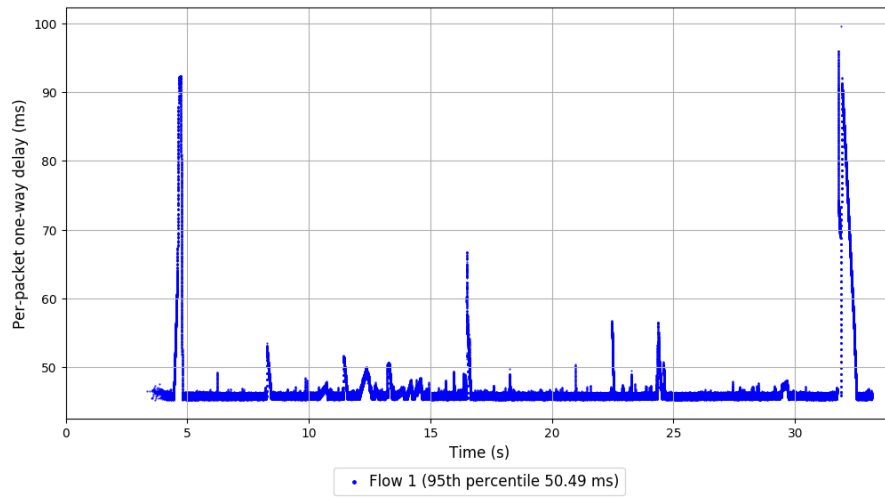
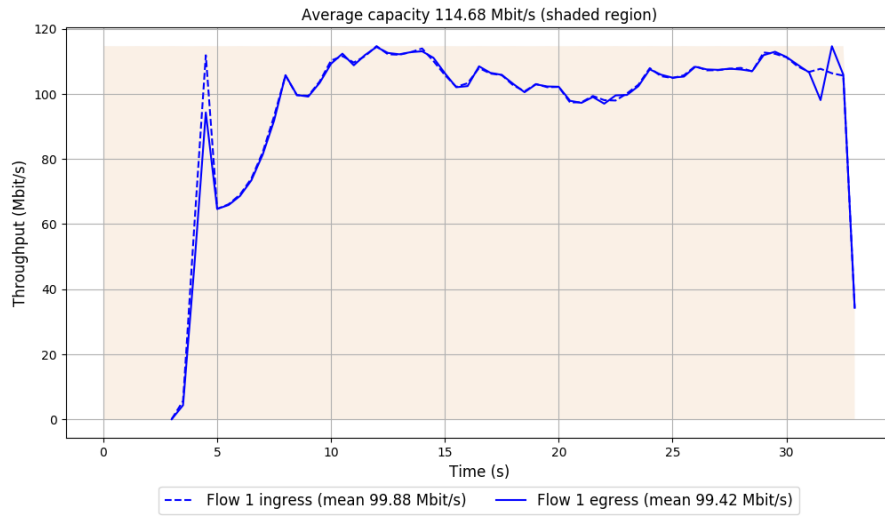
-- Flow 1:

Average throughput: 99.42 Mbit/s

95th percentile per-packet one-way delay: 50.491 ms

Loss rate: 0.61%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-03-05 18:33:49

End at: 2018-03-05 18:34:19

Below is generated by plot.py at 2018-03-05 19:54:49

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 93.28 Mbit/s (81.3% utilization)

95th percentile per-packet one-way delay: 51.171 ms

Loss rate: 0.67%

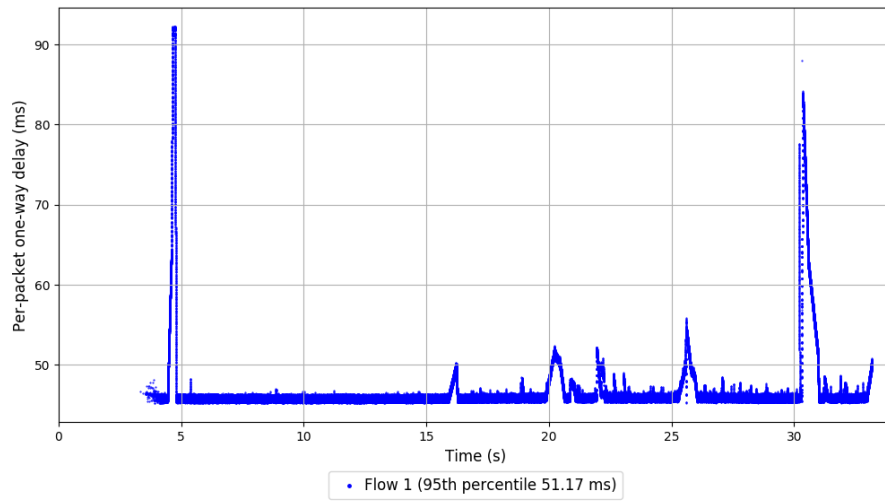
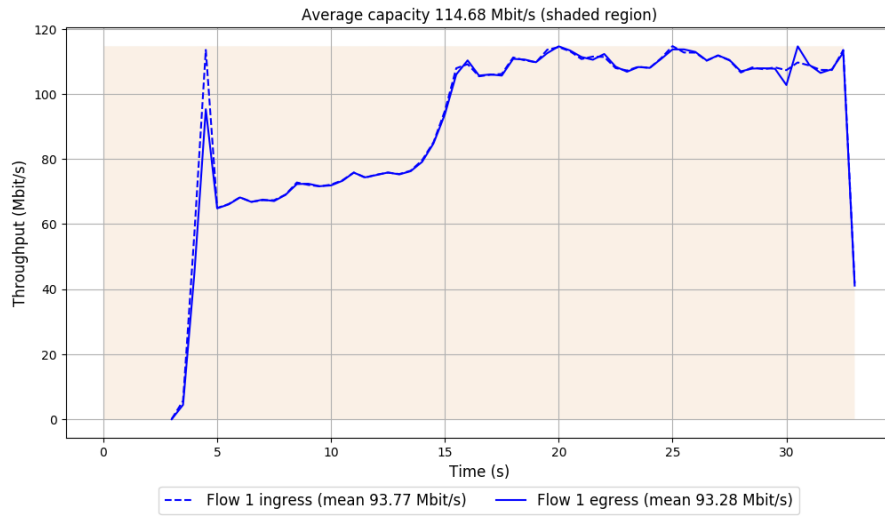
-- Flow 1:

Average throughput: 93.28 Mbit/s

95th percentile per-packet one-way delay: 51.171 ms

Loss rate: 0.67%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-03-05 18:45:41

End at: 2018-03-05 18:46:11

Below is generated by plot.py at 2018-03-05 19:54:55

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 100.50 Mbit/s (87.6% utilization)

95th percentile per-packet one-way delay: 54.067 ms

Loss rate: 0.58%

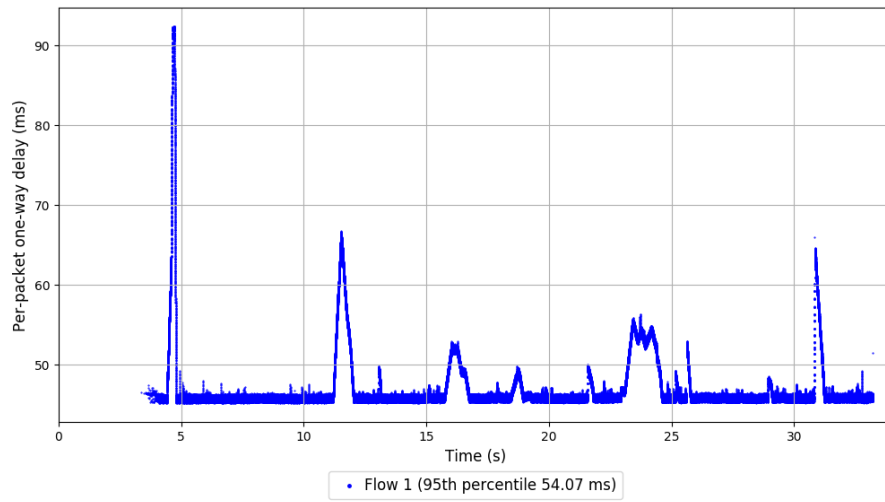
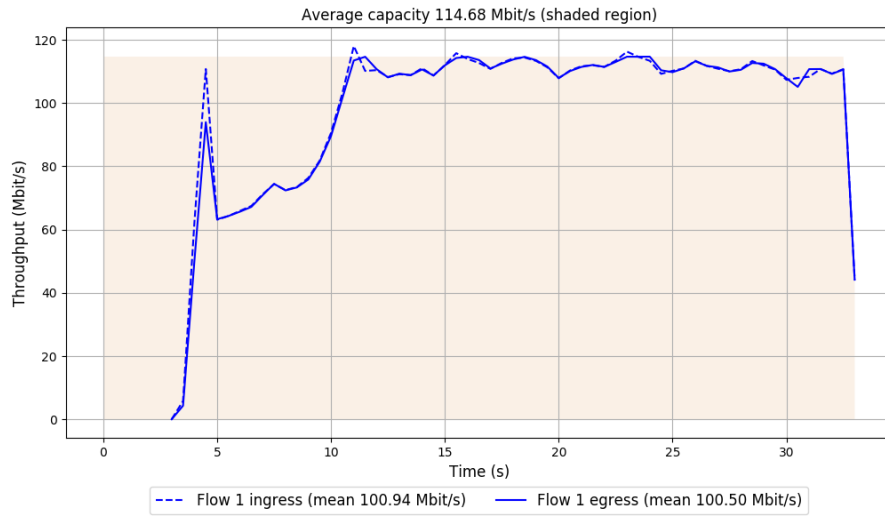
-- Flow 1:

Average throughput: 100.50 Mbit/s

95th percentile per-packet one-way delay: 54.067 ms

Loss rate: 0.58%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-03-05 18:57:35

End at: 2018-03-05 18:58:05

Below is generated by plot.py at 2018-03-05 19:55:42

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 99.30 Mbit/s (86.6% utilization)

95th percentile per-packet one-way delay: 53.124 ms

Loss rate: 0.60%

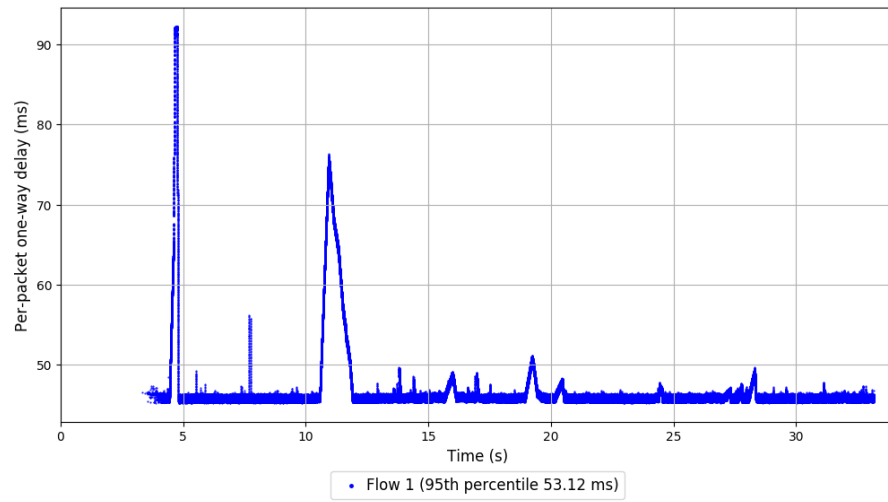
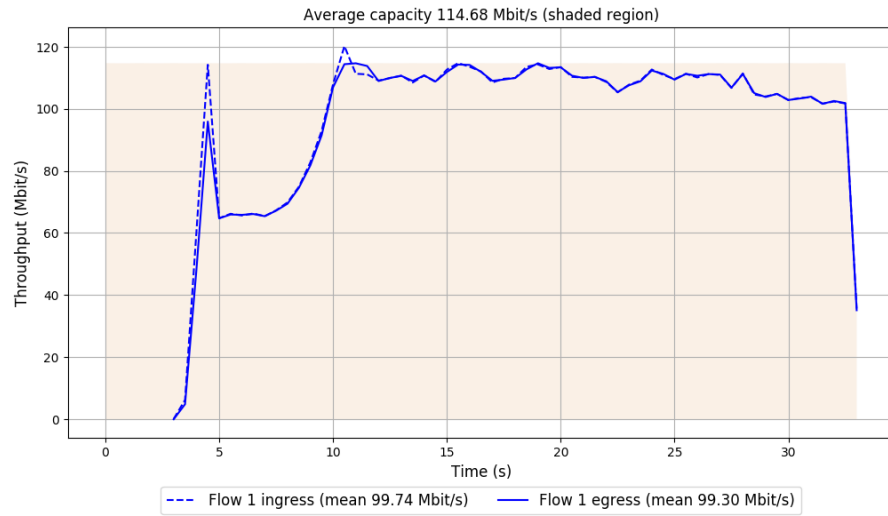
-- Flow 1:

Average throughput: 99.30 Mbit/s

95th percentile per-packet one-way delay: 53.124 ms

Loss rate: 0.60%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-03-05 19:09:43

End at: 2018-03-05 19:10:13

Below is generated by plot.py at 2018-03-05 19:55:49

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 104.19 Mbit/s (90.9% utilization)

95th percentile per-packet one-way delay: 61.097 ms

Loss rate: 0.71%

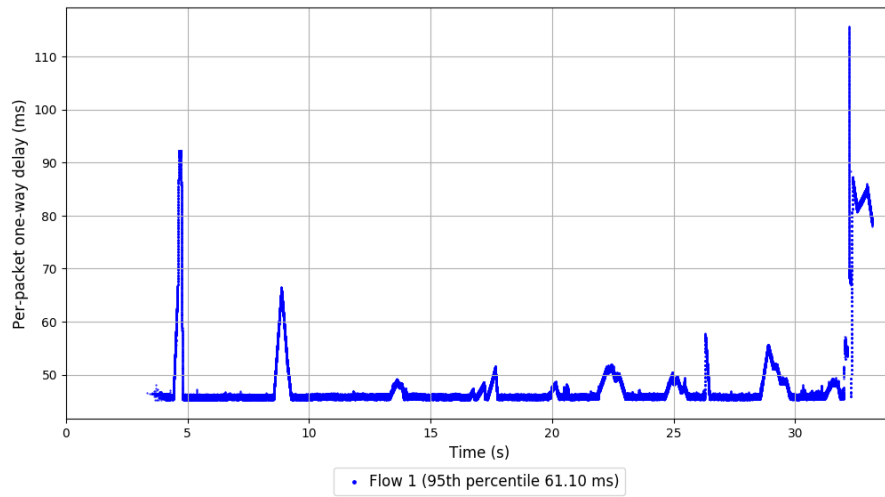
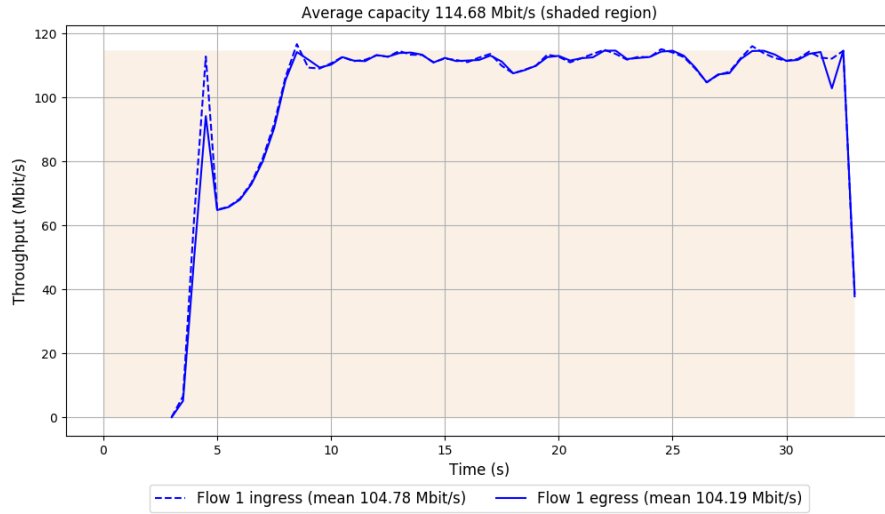
-- Flow 1:

Average throughput: 104.19 Mbit/s

95th percentile per-packet one-way delay: 61.097 ms

Loss rate: 0.71%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-03-05 19:21:38

End at: 2018-03-05 19:22:08

Below is generated by plot.py at 2018-03-05 19:56:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 99.96 Mbit/s (87.2% utilization)

95th percentile per-packet one-way delay: 52.552 ms

Loss rate: 0.60%

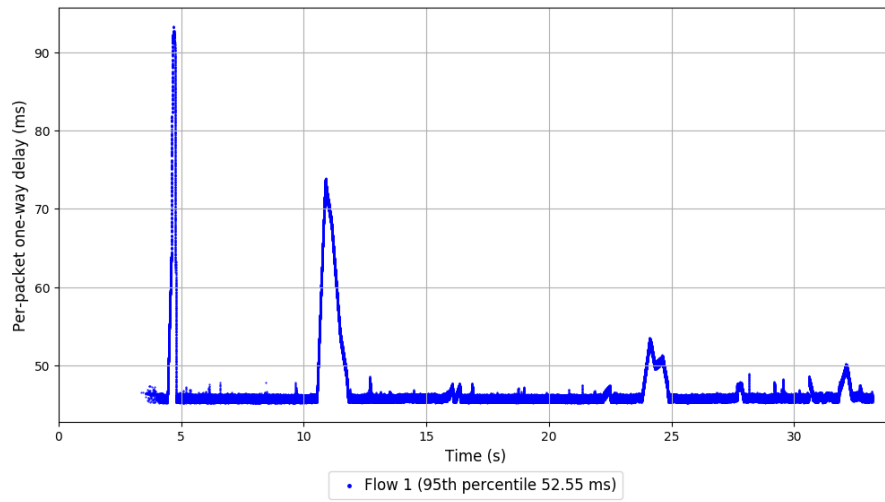
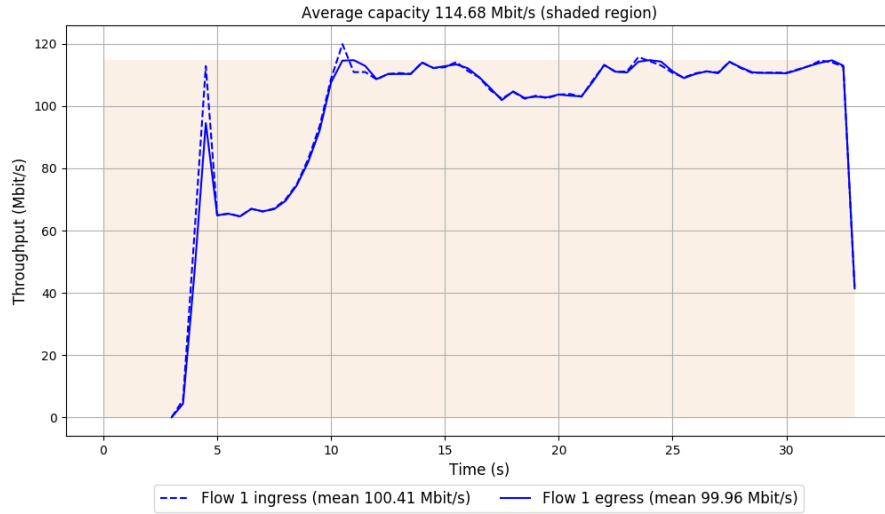
-- Flow 1:

Average throughput: 99.96 Mbit/s

95th percentile per-packet one-way delay: 52.552 ms

Loss rate: 0.60%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-03-05 19:33:33

End at: 2018-03-05 19:34:03

Below is generated by plot.py at 2018-03-05 19:56:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 104.49 Mbit/s (91.1% utilization)

95th percentile per-packet one-way delay: 59.358 ms

Loss rate: 0.58%

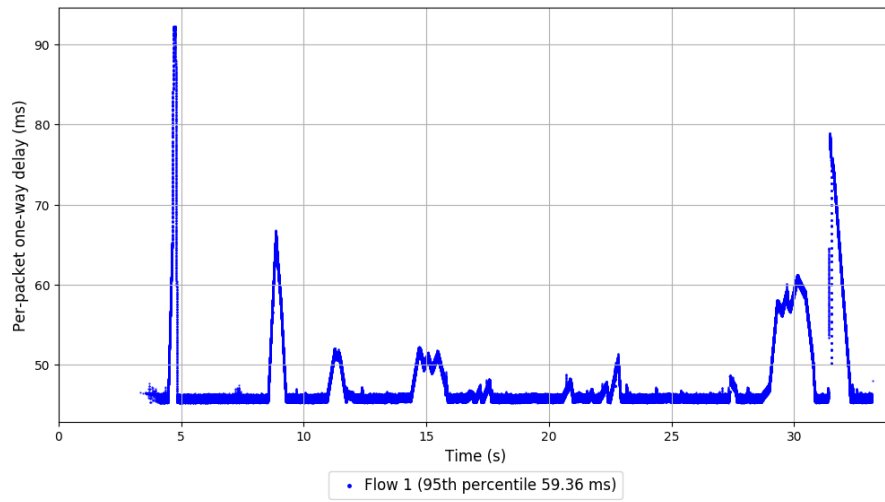
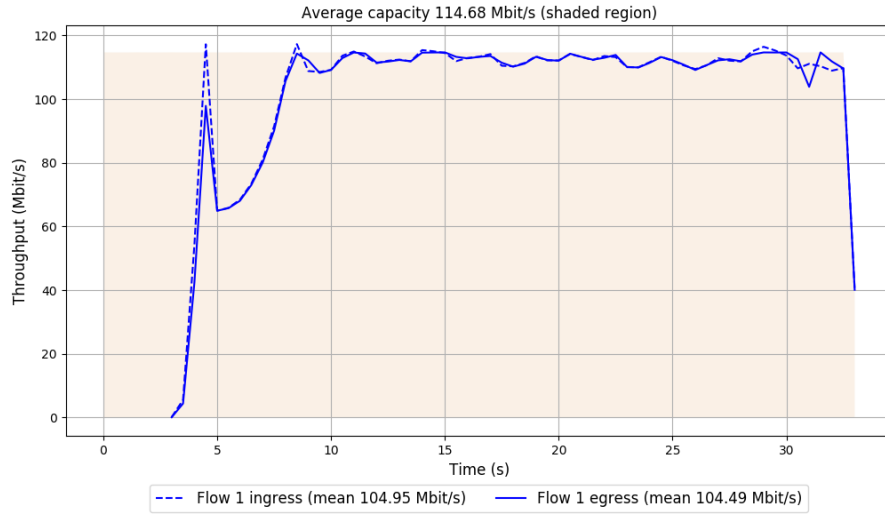
-- Flow 1:

Average throughput: 104.49 Mbit/s

95th percentile per-packet one-way delay: 59.358 ms

Loss rate: 0.58%

Run 10: Report of PCC — Data Link

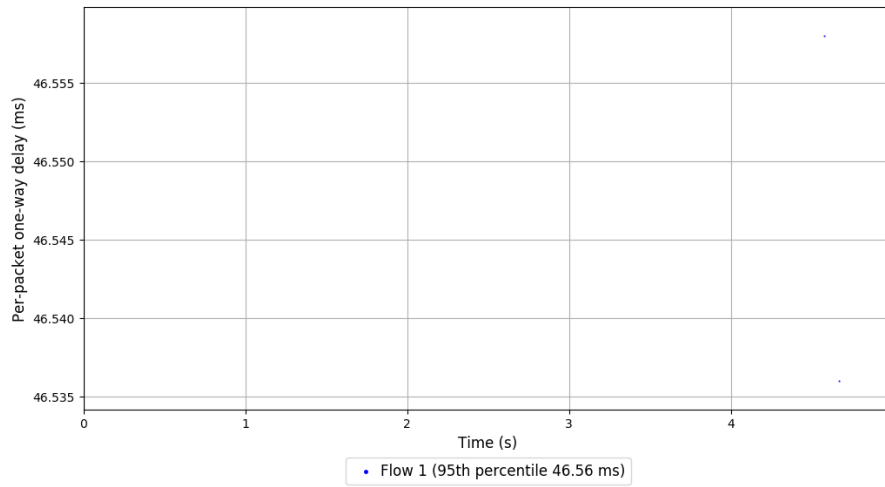
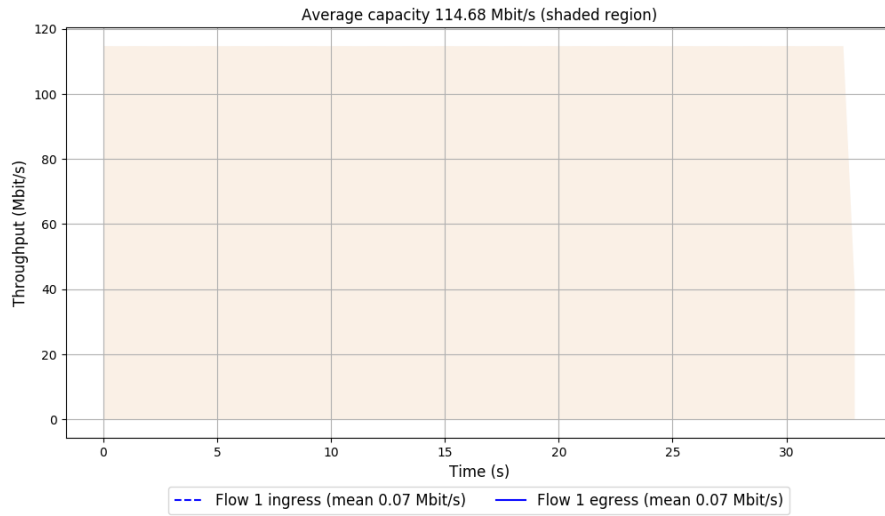


Run 1: Statistics of QUIC Cubic

Start at: 2018-03-05 17:42:58

End at: 2018-03-05 17:43:28

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-03-05 17:54:38

End at: 2018-03-05 17:55:08

Below is generated by plot.py at 2018-03-05 19:56:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 69.07 Mbit/s (60.2% utilization)

95th percentile per-packet one-way delay: 46.415 ms

Loss rate: 0.18%

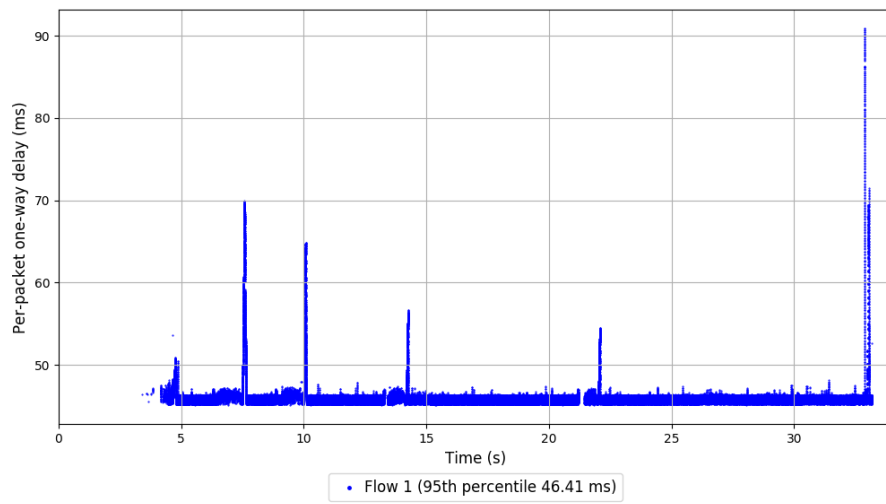
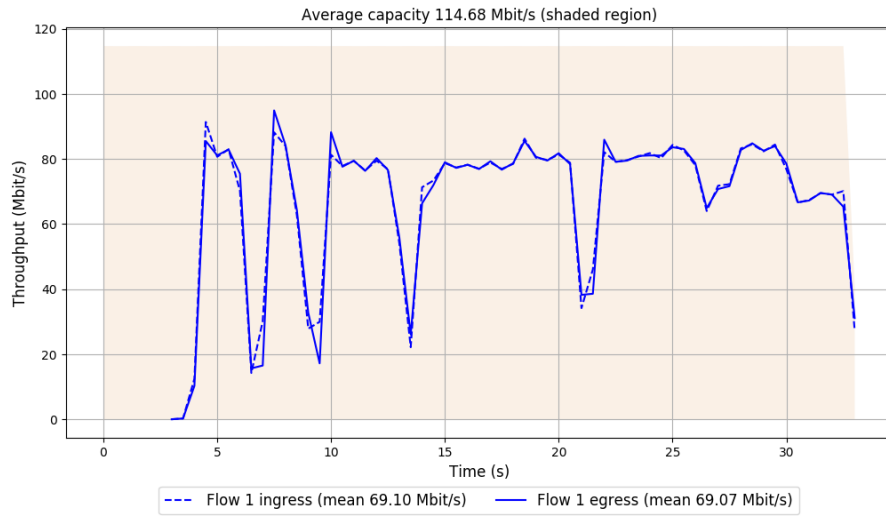
-- Flow 1:

Average throughput: 69.07 Mbit/s

95th percentile per-packet one-way delay: 46.415 ms

Loss rate: 0.18%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-03-05 18:06:29

End at: 2018-03-05 18:06:59

Below is generated by plot.py at 2018-03-05 19:56:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 71.40 Mbit/s (62.3% utilization)

95th percentile per-packet one-way delay: 46.303 ms

Loss rate: 0.17%

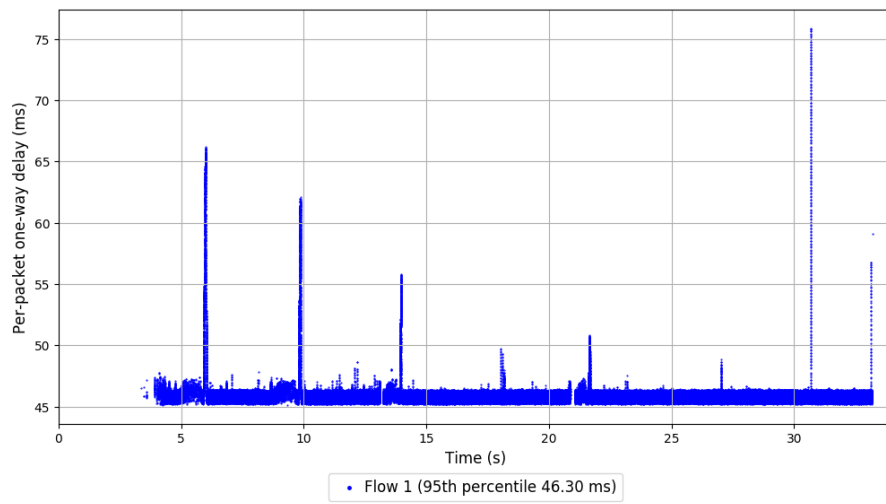
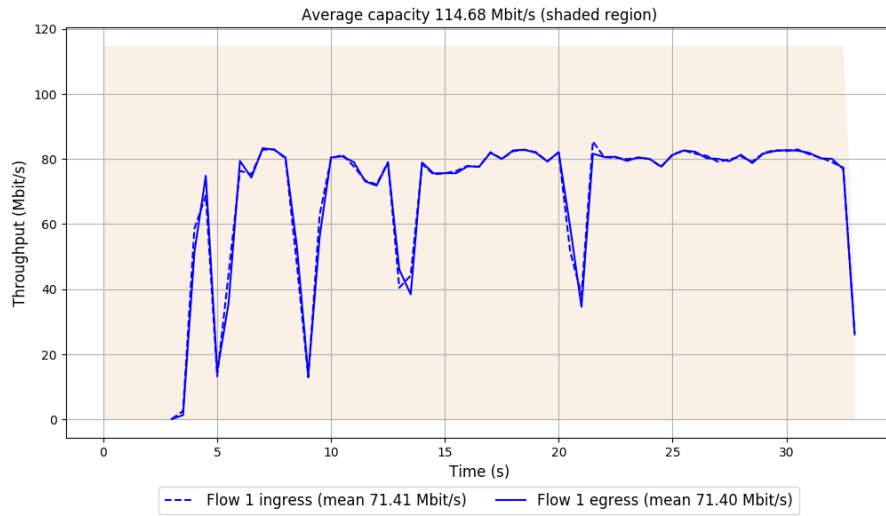
-- Flow 1:

Average throughput: 71.40 Mbit/s

95th percentile per-packet one-way delay: 46.303 ms

Loss rate: 0.17%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-03-05 18:18:33

End at: 2018-03-05 18:19:03

Below is generated by plot.py at 2018-03-05 19:56:58

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 72.25 Mbit/s (63.0% utilization)

95th percentile per-packet one-way delay: 46.355 ms

Loss rate: 0.03%

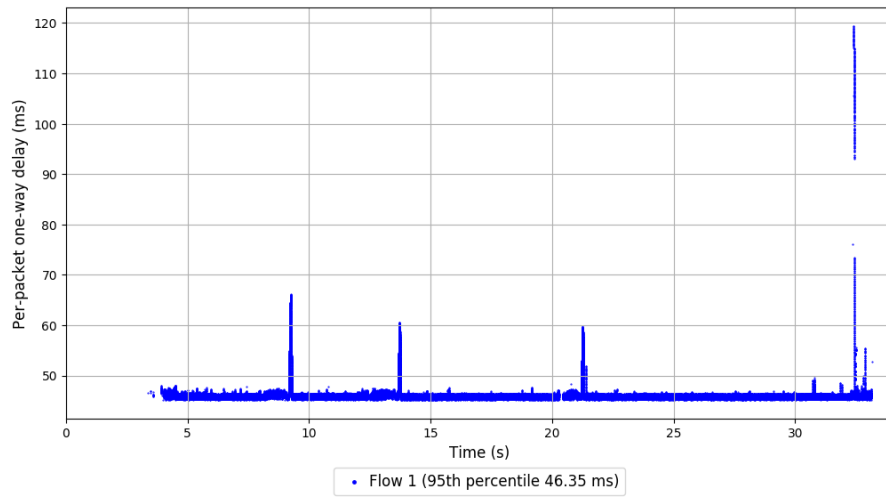
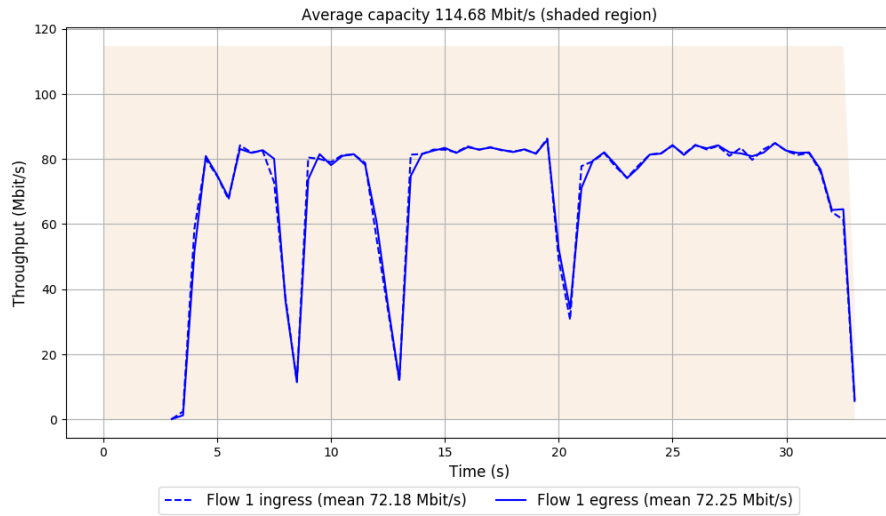
-- Flow 1:

Average throughput: 72.25 Mbit/s

95th percentile per-packet one-way delay: 46.355 ms

Loss rate: 0.03%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-03-05 18:30:26

End at: 2018-03-05 18:30:56

Below is generated by plot.py at 2018-03-05 19:57:06

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 65.45 Mbit/s (57.1% utilization)

95th percentile per-packet one-way delay: 46.443 ms

Loss rate: 0.23%

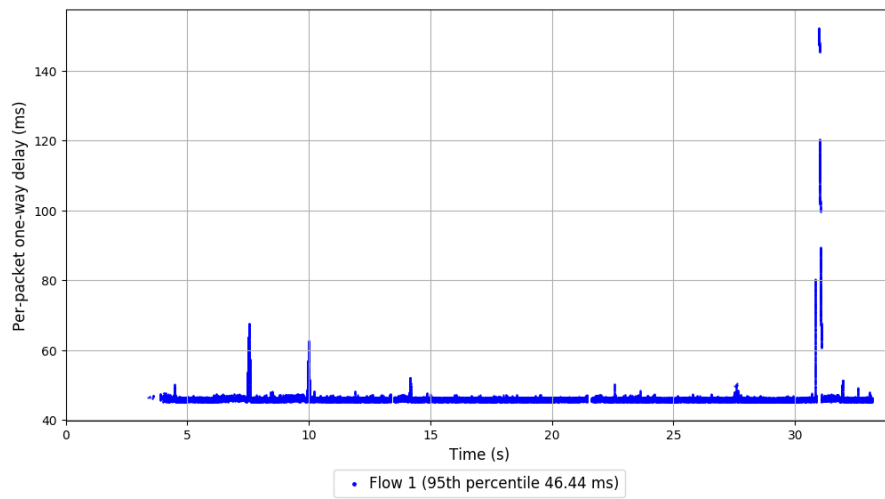
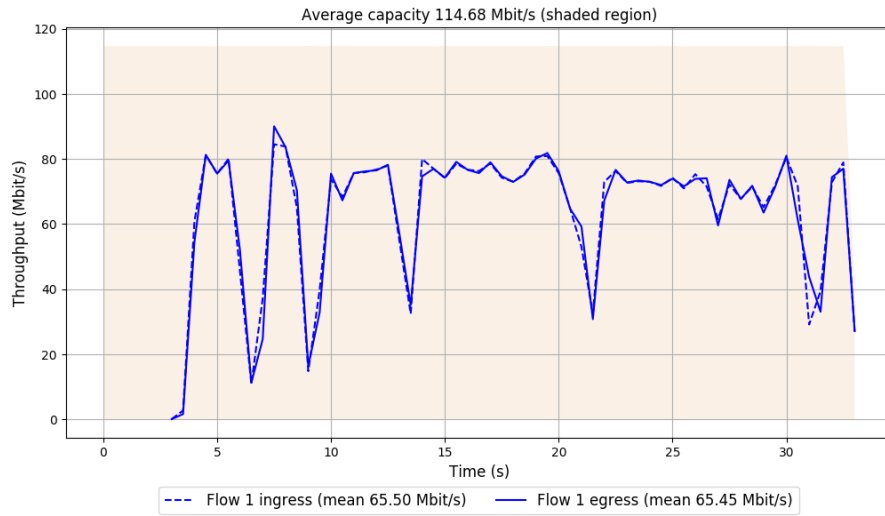
-- Flow 1:

Average throughput: 65.45 Mbit/s

95th percentile per-packet one-way delay: 46.443 ms

Loss rate: 0.23%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-03-05 18:42:19

End at: 2018-03-05 18:42:49

Below is generated by plot.py at 2018-03-05 19:57:40

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 68.85 Mbit/s (60.0% utilization)

95th percentile per-packet one-way delay: 46.466 ms

Loss rate: 0.18%

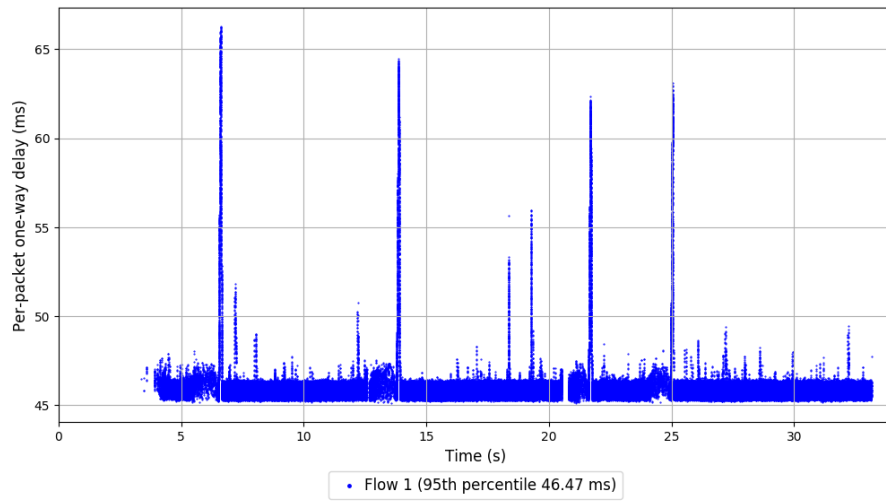
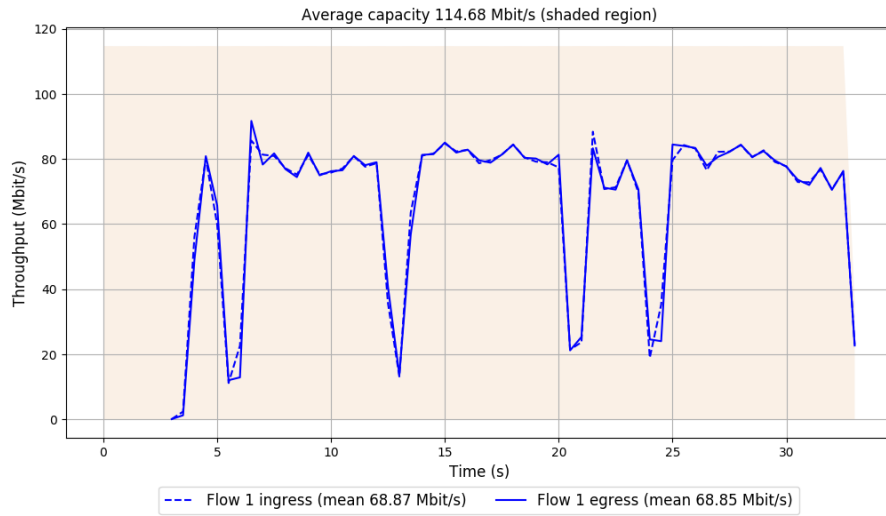
-- Flow 1:

Average throughput: 68.85 Mbit/s

95th percentile per-packet one-way delay: 46.466 ms

Loss rate: 0.18%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-03-05 18:54:12

End at: 2018-03-05 18:54:42

Below is generated by plot.py at 2018-03-05 19:57:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 65.62 Mbit/s (57.2% utilization)

95th percentile per-packet one-way delay: 46.589 ms

Loss rate: 0.16%

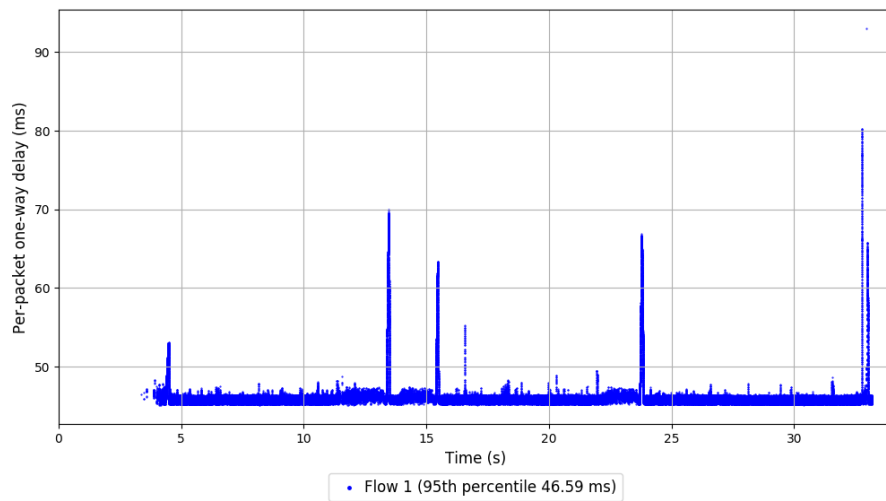
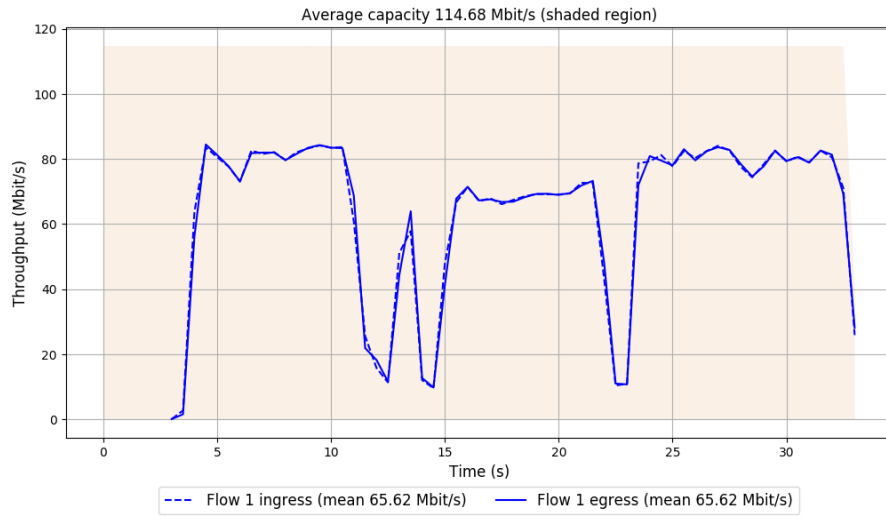
-- Flow 1:

Average throughput: 65.62 Mbit/s

95th percentile per-packet one-way delay: 46.589 ms

Loss rate: 0.16%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-03-05 19:06:05

End at: 2018-03-05 19:06:35

Below is generated by plot.py at 2018-03-05 19:58:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 66.86 Mbit/s (58.3% utilization)

95th percentile per-packet one-way delay: 46.414 ms

Loss rate: 0.19%

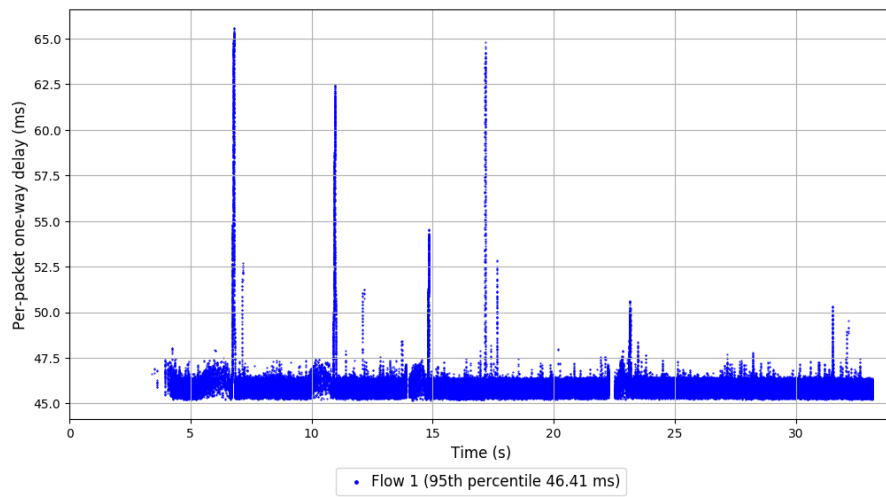
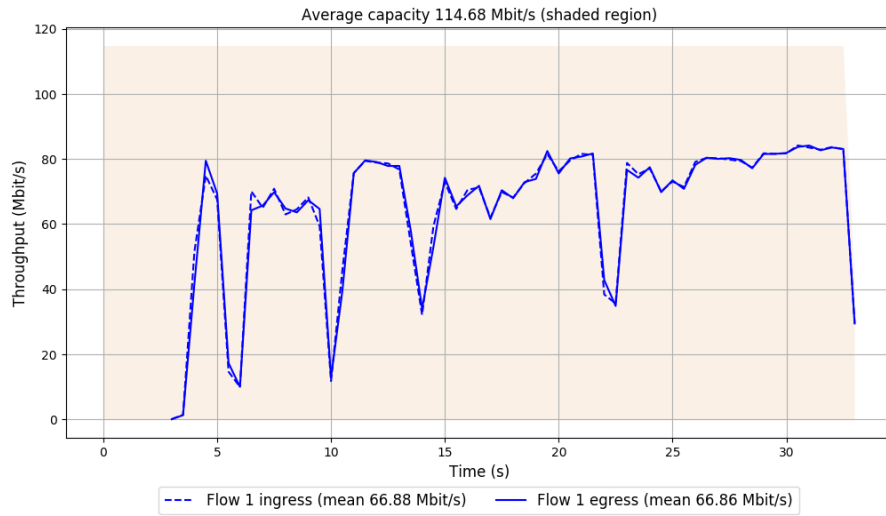
-- Flow 1:

Average throughput: 66.86 Mbit/s

95th percentile per-packet one-way delay: 46.414 ms

Loss rate: 0.19%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-03-05 19:18:14

End at: 2018-03-05 19:18:44

Below is generated by plot.py at 2018-03-05 19:58:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 62.99 Mbit/s (54.9% utilization)

95th percentile per-packet one-way delay: 46.468 ms

Loss rate: 0.19%

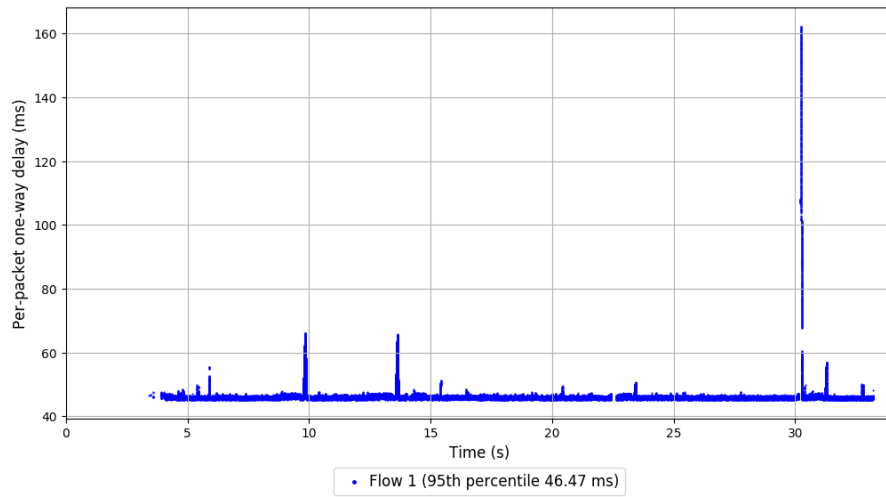
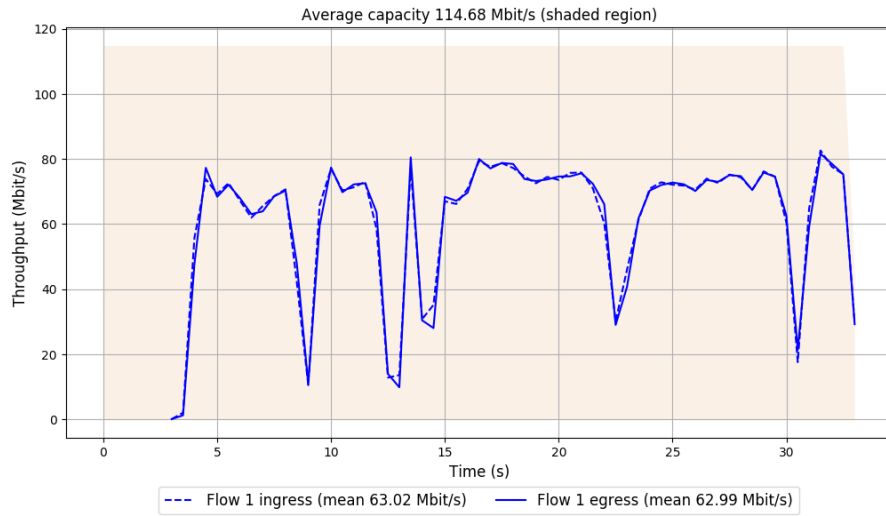
-- Flow 1:

Average throughput: 62.99 Mbit/s

95th percentile per-packet one-way delay: 46.468 ms

Loss rate: 0.19%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-03-05 19:30:10

End at: 2018-03-05 19:30:40

Below is generated by plot.py at 2018-03-05 19:58:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 64.90 Mbit/s (56.6% utilization)

95th percentile per-packet one-way delay: 46.401 ms

Loss rate: 0.18%

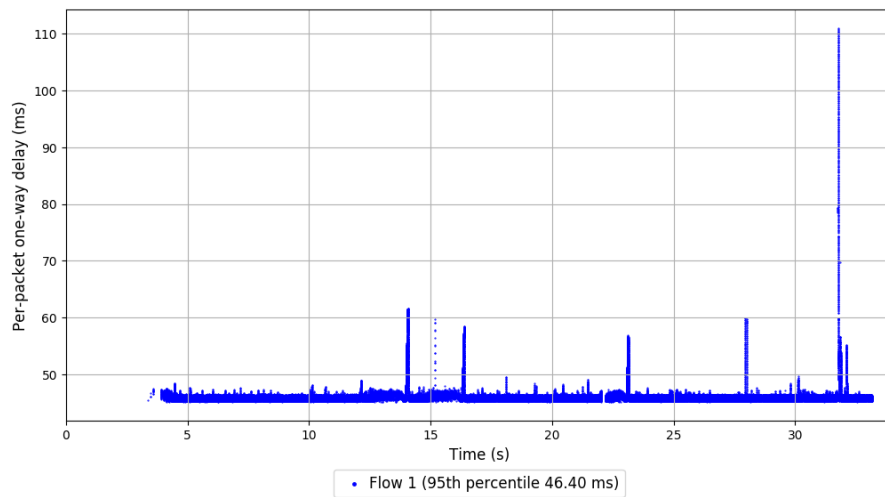
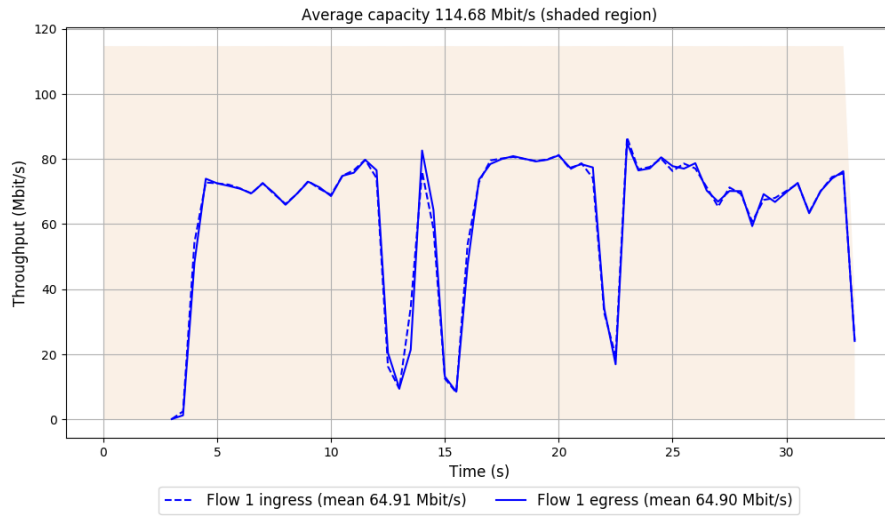
-- Flow 1:

Average throughput: 64.90 Mbit/s

95th percentile per-packet one-way delay: 46.401 ms

Loss rate: 0.18%

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2018-03-05 17:50:44

End at: 2018-03-05 17:51:14

Below is generated by plot.py at 2018-03-05 19:58:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 0.22 Mbit/s (0.2% utilization)

95th percentile per-packet one-way delay: 47.461 ms

Loss rate: 0.13%

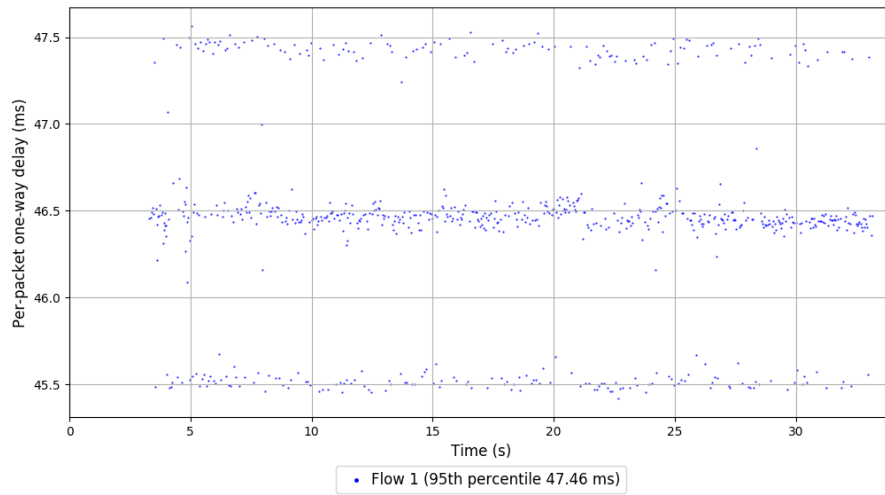
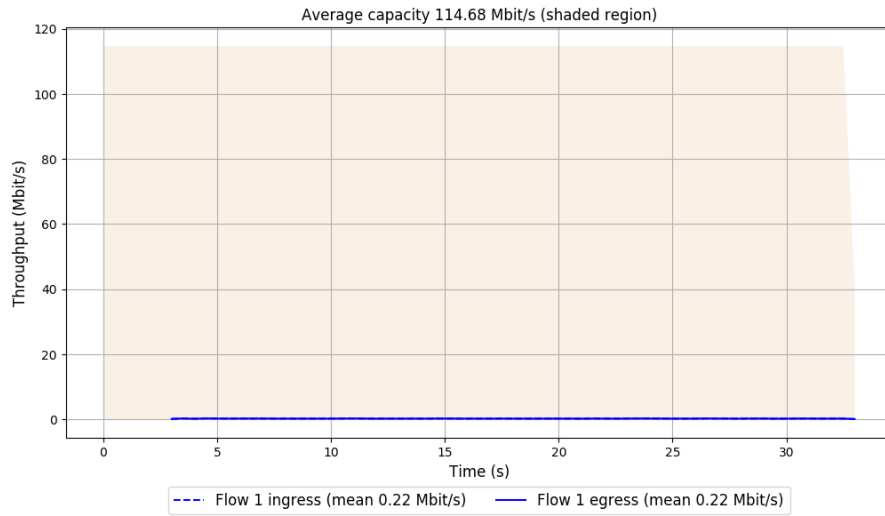
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 47.461 ms

Loss rate: 0.13%

Run 1: Report of SCReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2018-03-05 18:02:34

End at: 2018-03-05 18:03:04

Below is generated by plot.py at 2018-03-05 19:58:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 0.22 Mbit/s (0.2% utilization)

95th percentile per-packet one-way delay: 46.602 ms

Loss rate: 0.13%

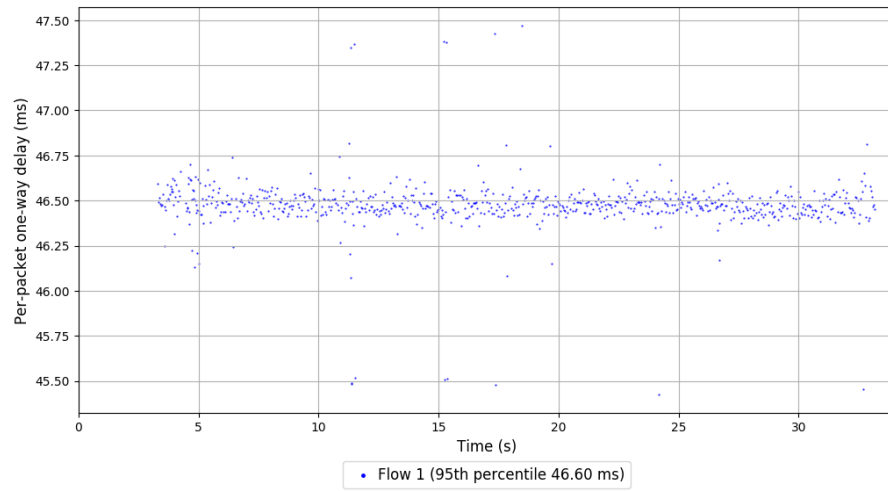
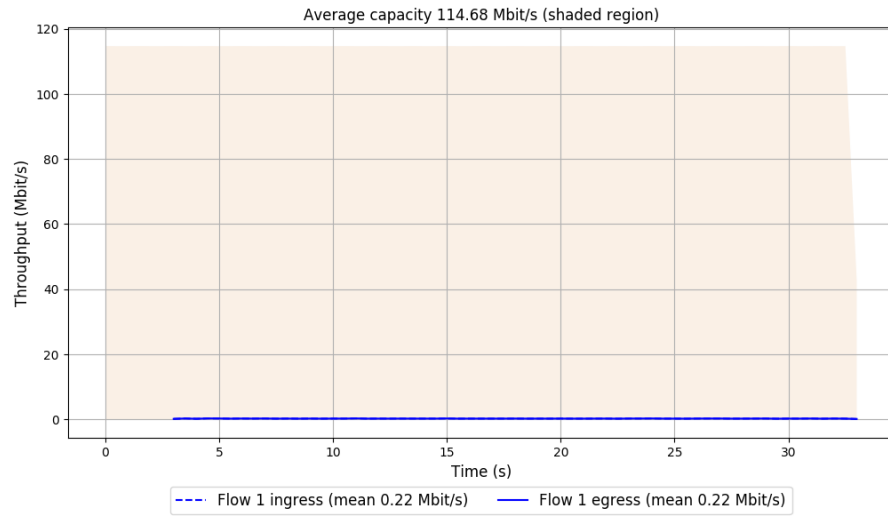
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 46.602 ms

Loss rate: 0.13%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-03-05 18:14:35

End at: 2018-03-05 18:15:05

Below is generated by plot.py at 2018-03-05 19:58:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 0.22 Mbit/s (0.2% utilization)

95th percentile per-packet one-way delay: 46.685 ms

Loss rate: 0.13%

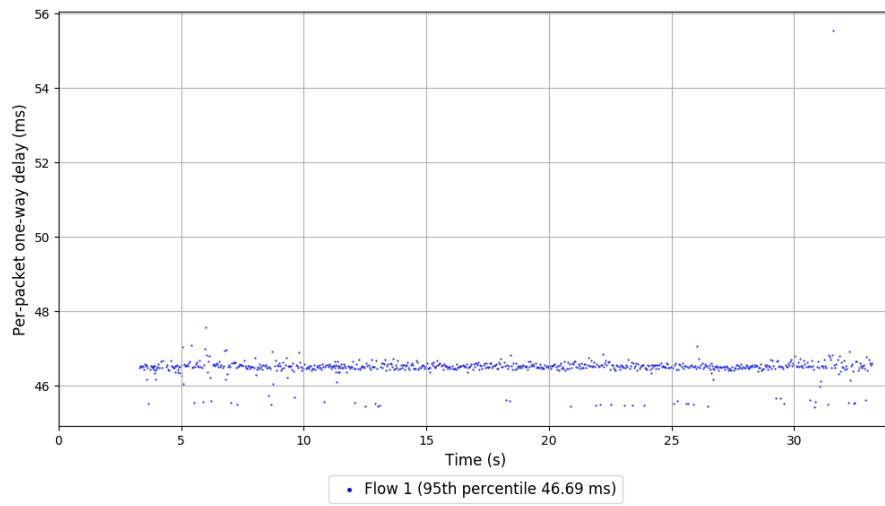
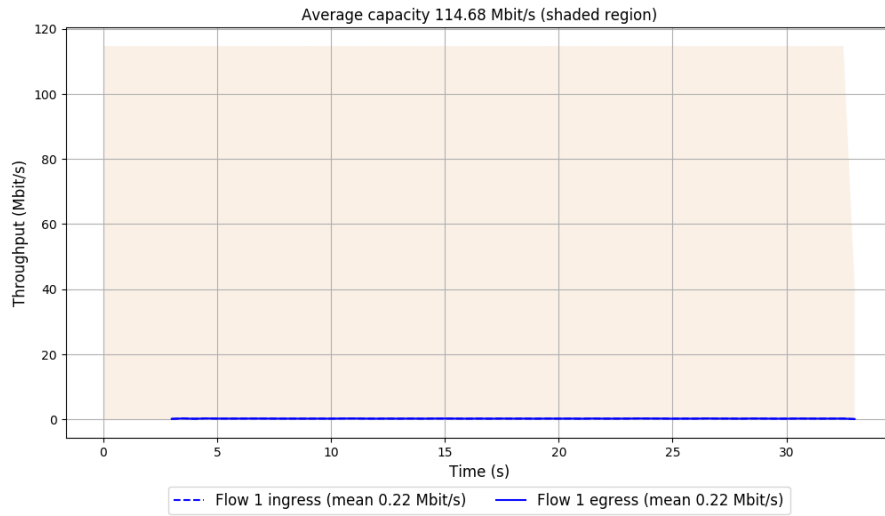
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 46.685 ms

Loss rate: 0.13%

Run 3: Report of SCReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-03-05 18:26:30

End at: 2018-03-05 18:27:00

Below is generated by plot.py at 2018-03-05 19:58:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 0.22 Mbit/s (0.2% utilization)

95th percentile per-packet one-way delay: 47.478 ms

Loss rate: 0.13%

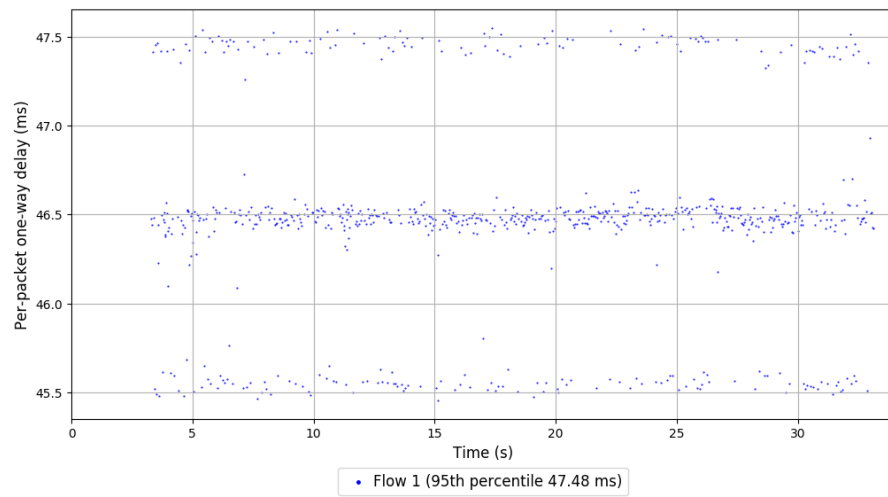
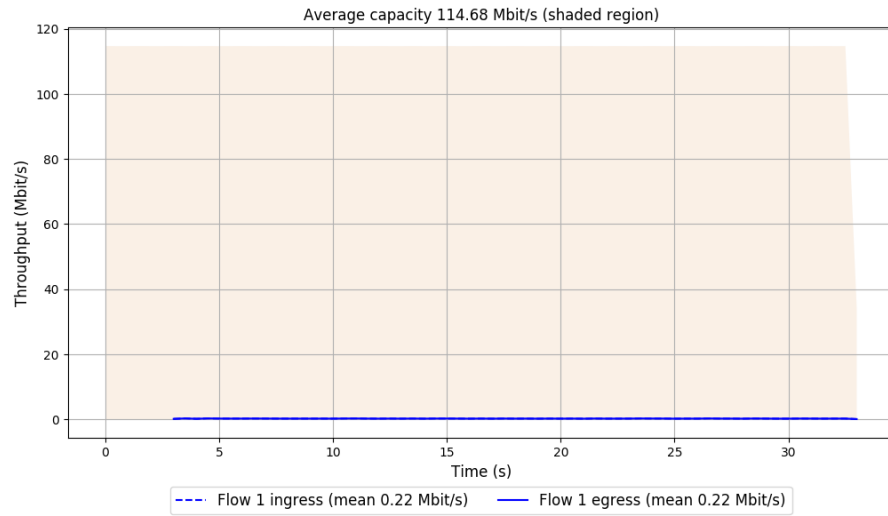
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 47.478 ms

Loss rate: 0.13%

Run 4: Report of SCReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-03-05 18:38:24

End at: 2018-03-05 18:38:54

Below is generated by plot.py at 2018-03-05 19:58:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 0.22 Mbit/s (0.2% utilization)

95th percentile per-packet one-way delay: 47.470 ms

Loss rate: 0.13%

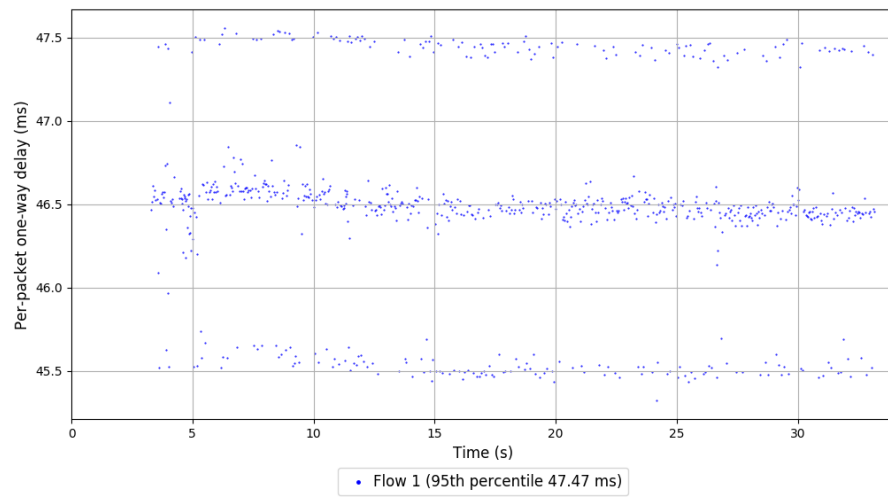
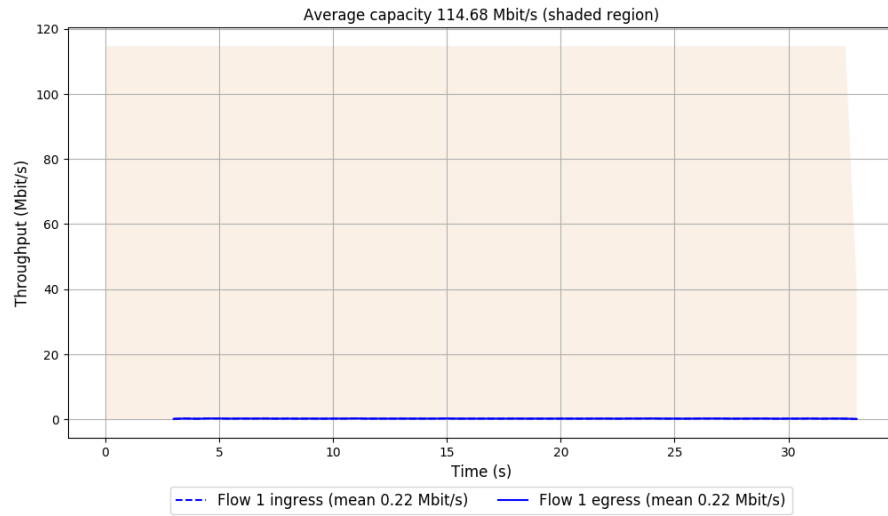
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 47.470 ms

Loss rate: 0.13%

Run 5: Report of SCReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-03-05 18:50:16

End at: 2018-03-05 18:50:46

Below is generated by plot.py at 2018-03-05 19:58:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 0.22 Mbit/s (0.2% utilization)

95th percentile per-packet one-way delay: 46.576 ms

Loss rate: 0.13%

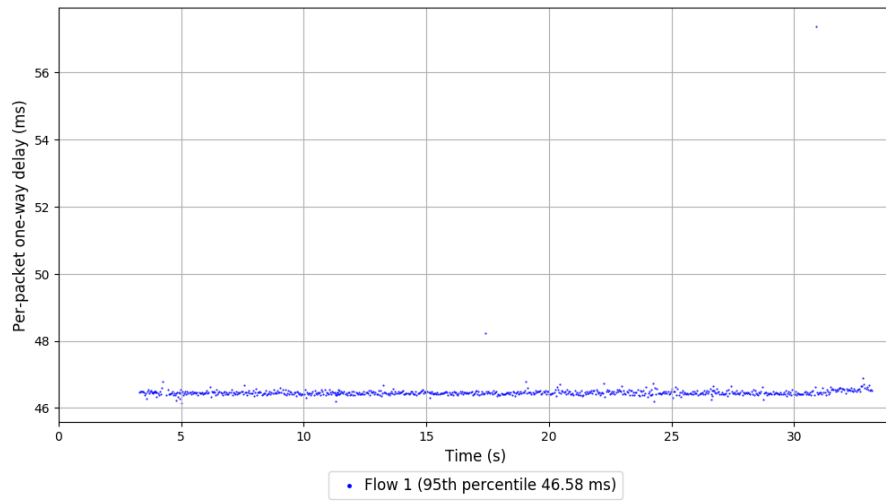
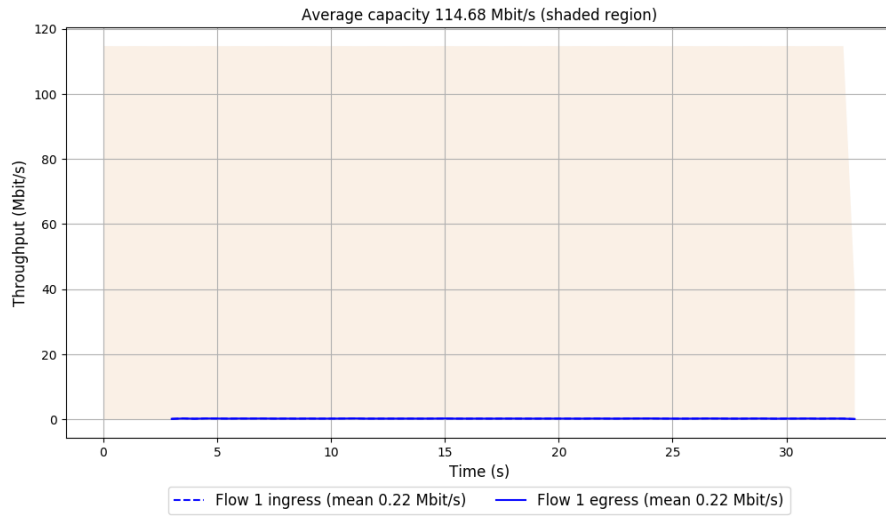
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 46.576 ms

Loss rate: 0.13%

Run 6: Report of SCReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-03-05 19:02:10

End at: 2018-03-05 19:02:40

Below is generated by plot.py at 2018-03-05 19:58:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 0.22 Mbit/s (0.2% utilization)

95th percentile per-packet one-way delay: 46.634 ms

Loss rate: 0.13%

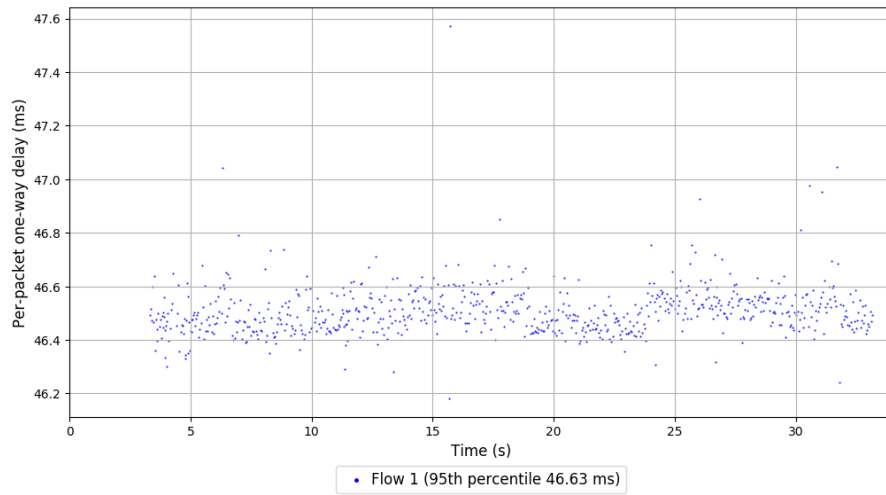
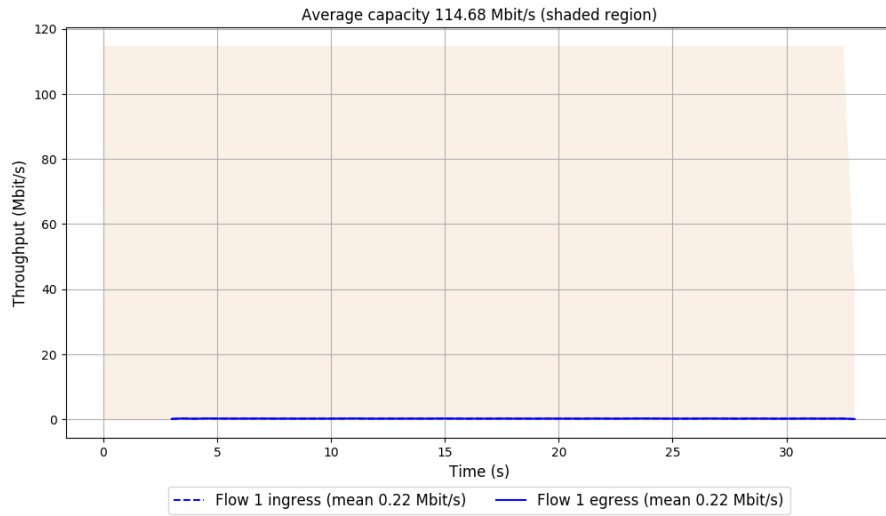
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 46.634 ms

Loss rate: 0.13%

Run 7: Report of SCReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-03-05 19:14:17

End at: 2018-03-05 19:14:47

Below is generated by plot.py at 2018-03-05 19:58:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 0.22 Mbit/s (0.2% utilization)

95th percentile per-packet one-way delay: 46.694 ms

Loss rate: 0.26%

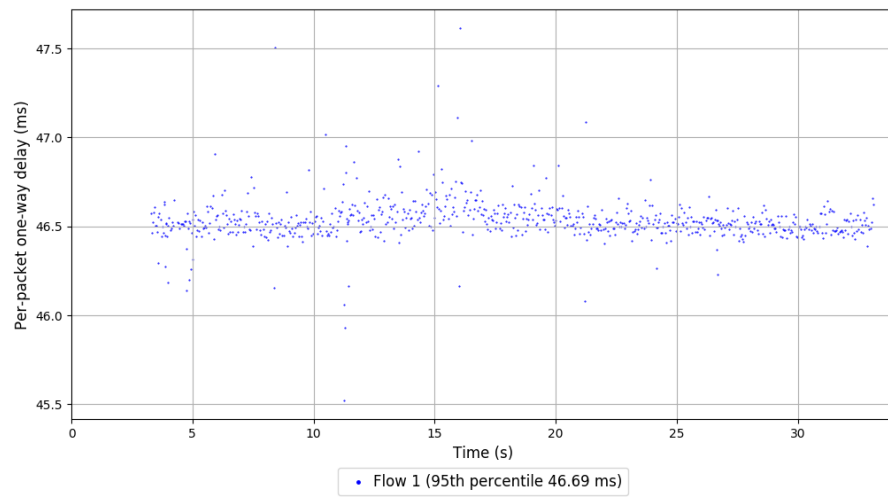
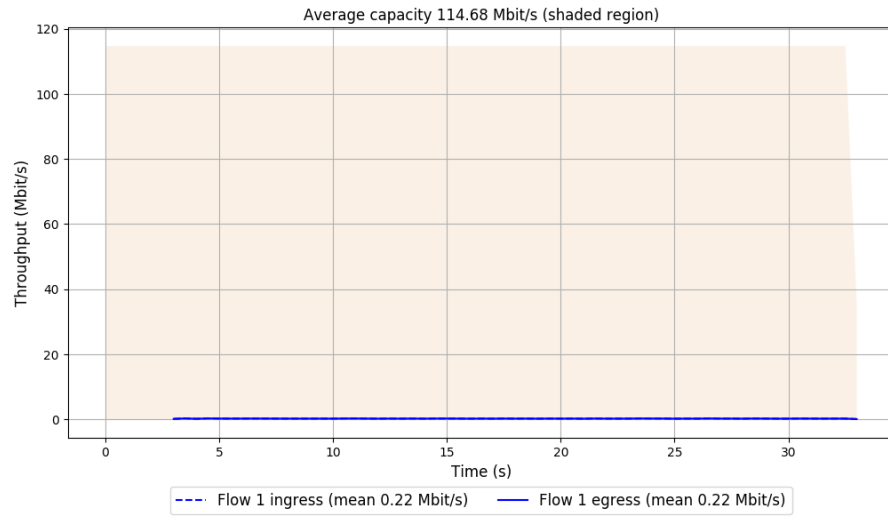
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 46.694 ms

Loss rate: 0.26%

Run 8: Report of SCReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-03-05 19:26:13

End at: 2018-03-05 19:26:43

Below is generated by plot.py at 2018-03-05 19:58:46

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 0.22 Mbit/s (0.2% utilization)

95th percentile per-packet one-way delay: 46.635 ms

Loss rate: 0.26%

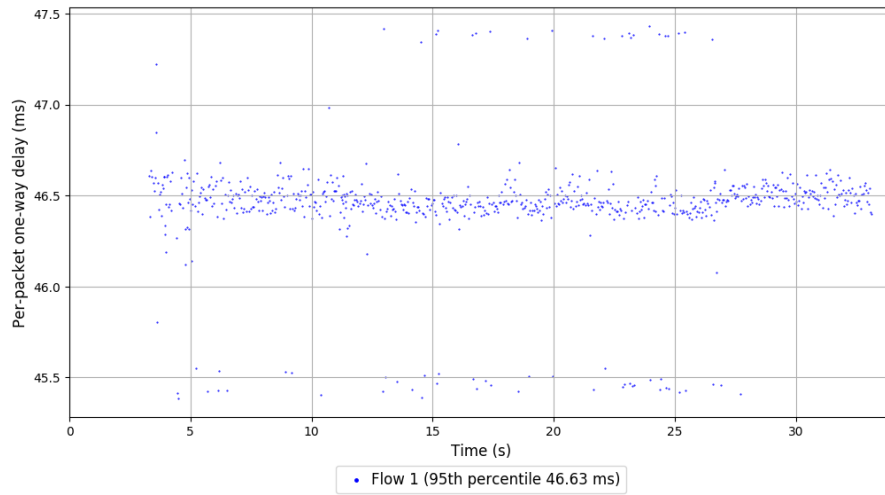
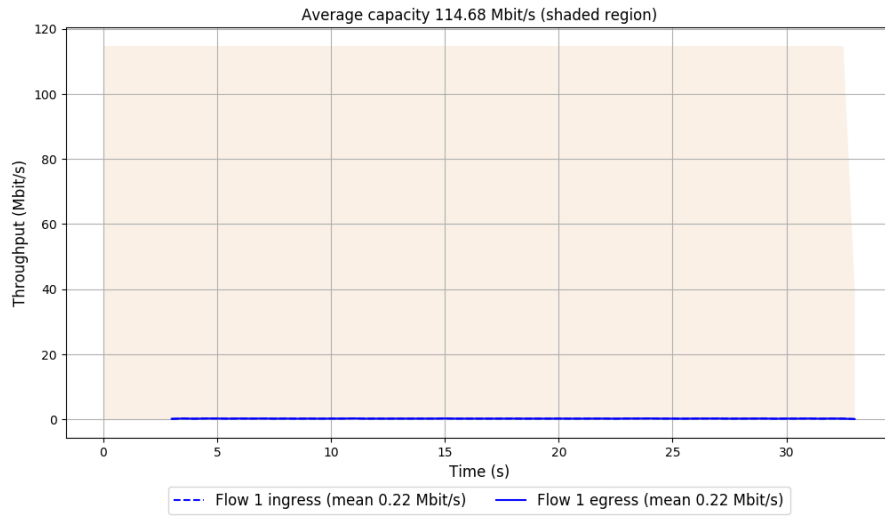
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 46.635 ms

Loss rate: 0.26%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-03-05 19:38:07

End at: 2018-03-05 19:38:37

Below is generated by plot.py at 2018-03-05 19:58:51

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 0.22 Mbit/s (0.2% utilization)

95th percentile per-packet one-way delay: 46.714 ms

Loss rate: 0.13%

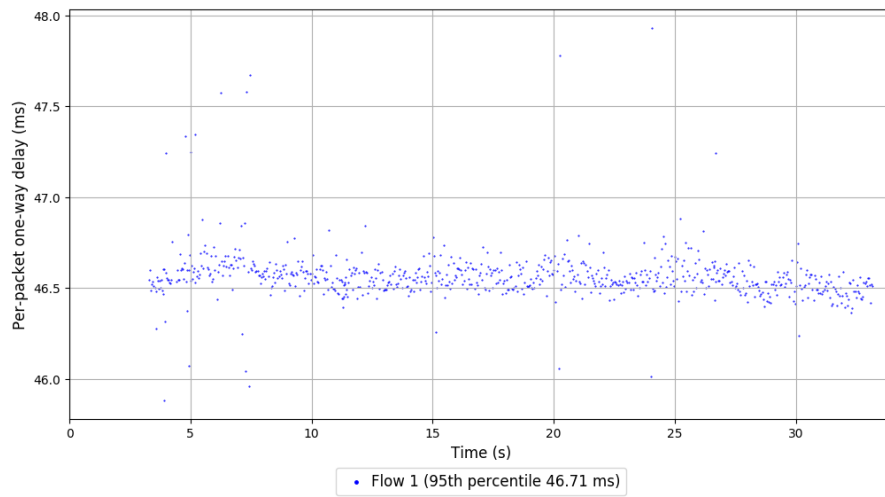
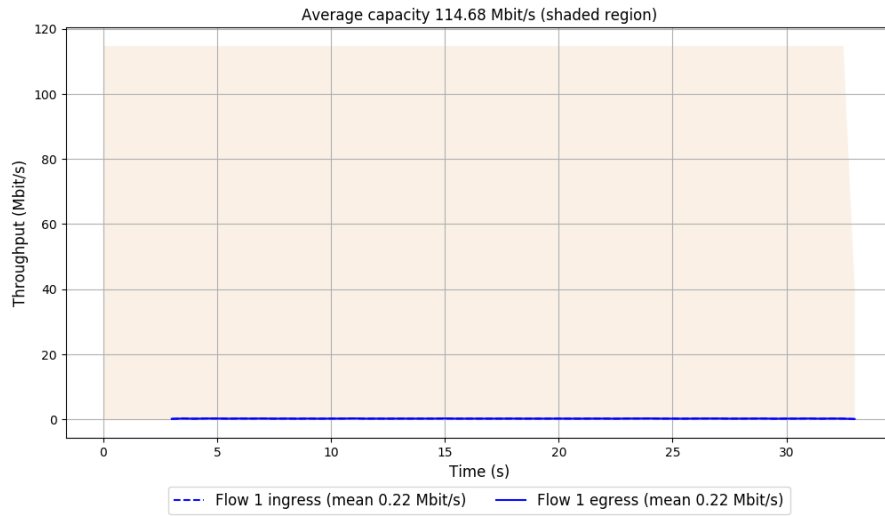
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 46.714 ms

Loss rate: 0.13%

Run 10: Report of SCReAM — Data Link

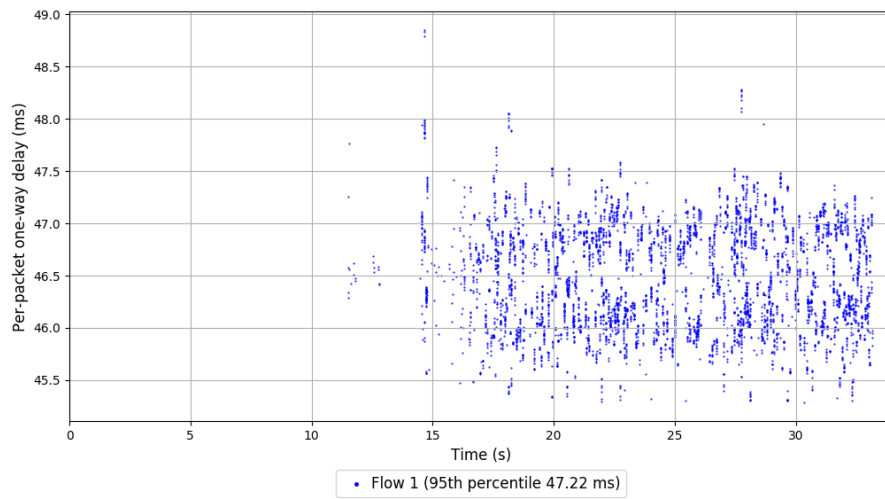
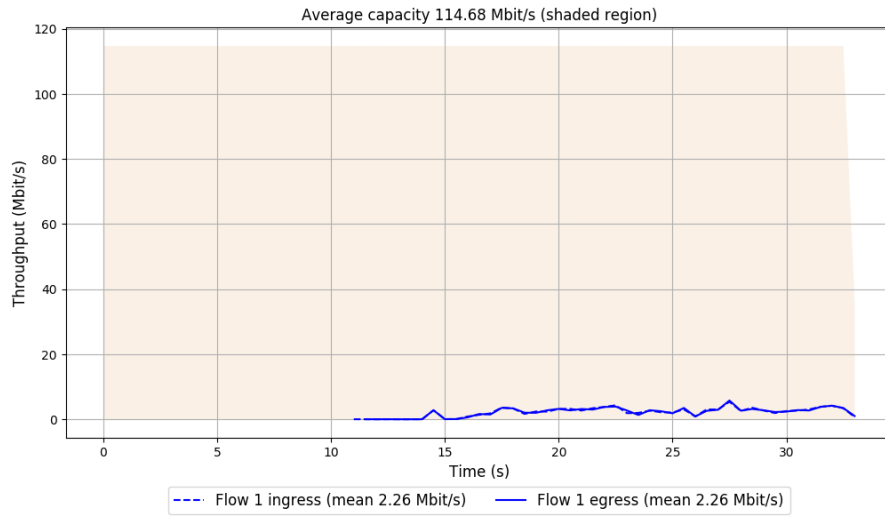


Run 1: Statistics of WebRTC media

Start at: 2018-03-05 17:46:49

End at: 2018-03-05 17:47:19

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-03-05 17:58:39

End at: 2018-03-05 17:59:09

Below is generated by plot.py at 2018-03-05 19:58:59

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 2.33 Mbit/s (2.0% utilization)

95th percentile per-packet one-way delay: 47.159 ms

Loss rate: 0.15%

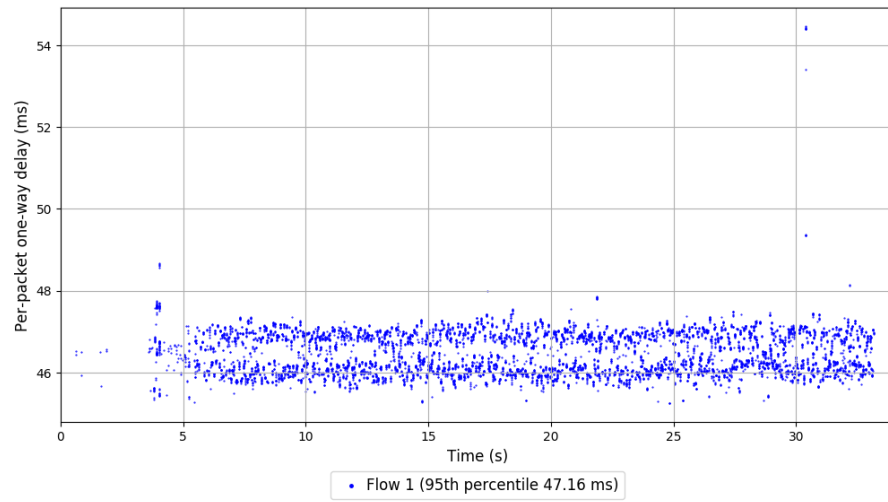
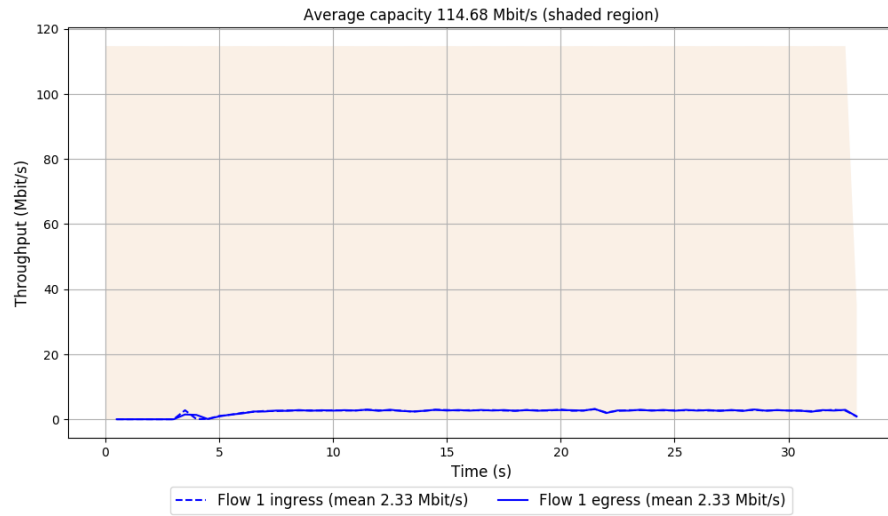
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 47.159 ms

Loss rate: 0.15%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-03-05 18:10:40

End at: 2018-03-05 18:11:10

Below is generated by plot.py at 2018-03-05 19:59:01

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 2.33 Mbit/s (2.0% utilization)

95th percentile per-packet one-way delay: 47.184 ms

Loss rate: 0.15%

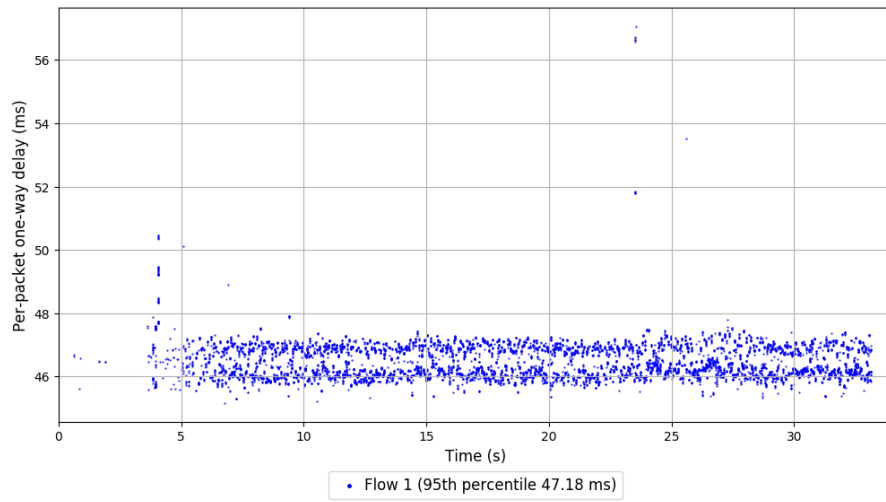
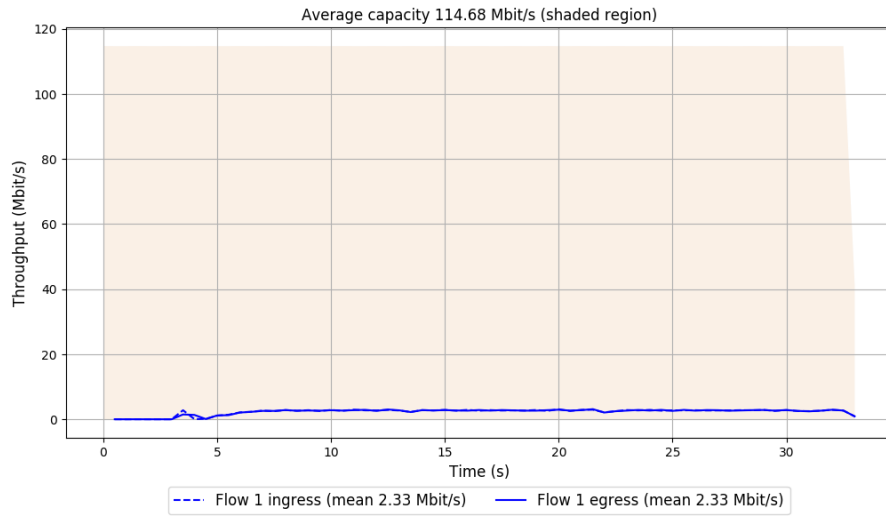
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 47.184 ms

Loss rate: 0.15%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-03-05 18:22:35

End at: 2018-03-05 18:23:05

Below is generated by plot.py at 2018-03-05 19:59:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 2.33 Mbit/s (2.0% utilization)

95th percentile per-packet one-way delay: 47.210 ms

Loss rate: 0.15%

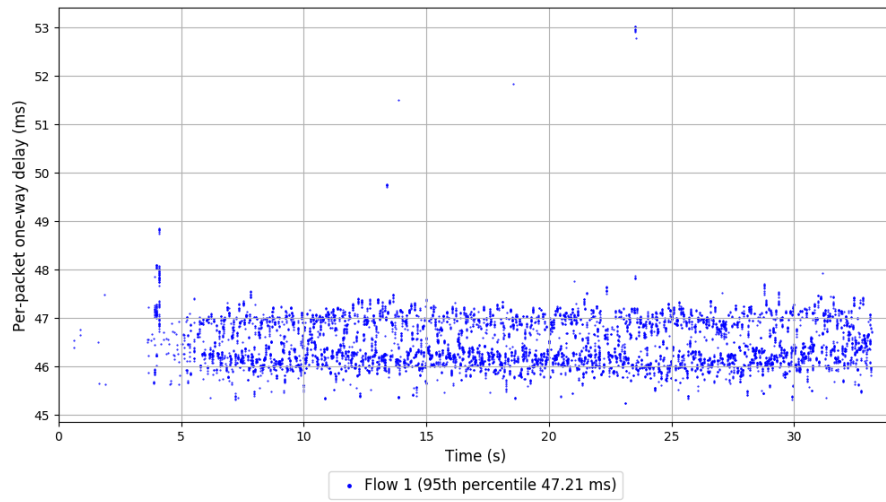
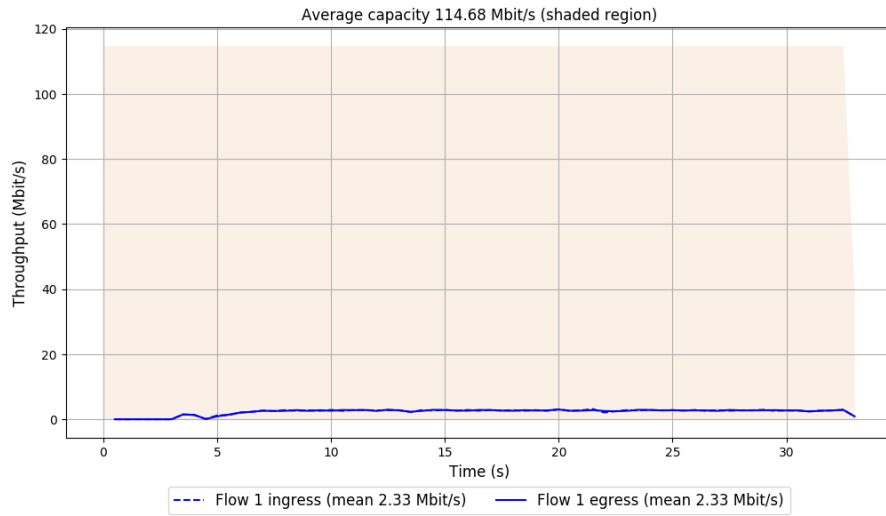
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 47.210 ms

Loss rate: 0.15%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-03-05 18:34:28

End at: 2018-03-05 18:34:58

Below is generated by plot.py at 2018-03-05 19:59:04

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 2.33 Mbit/s (2.0% utilization)

95th percentile per-packet one-way delay: 47.158 ms

Loss rate: 0.25%

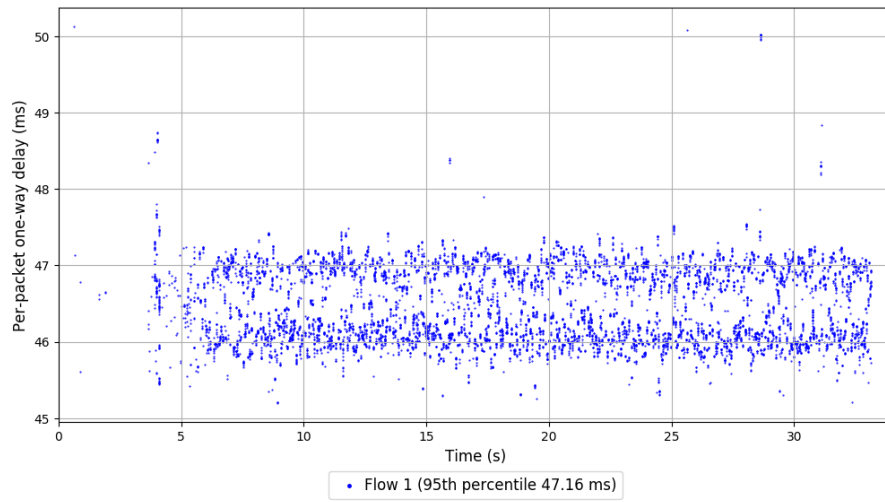
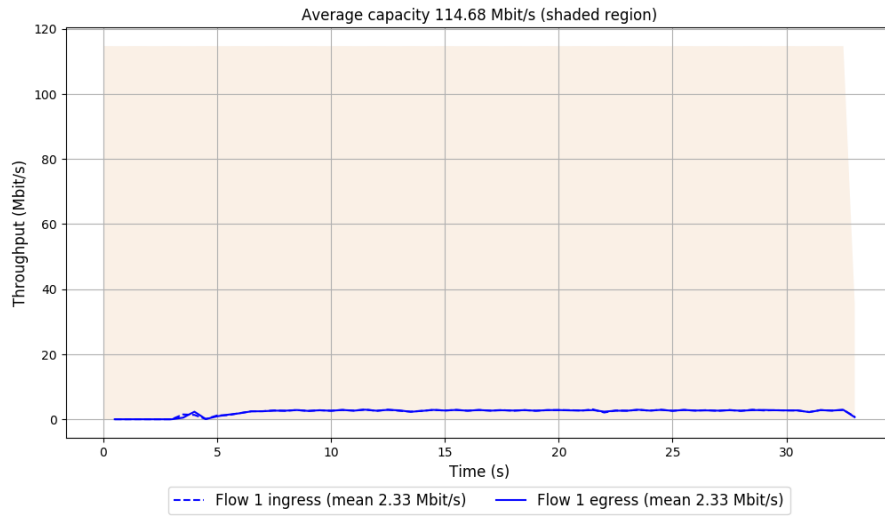
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 47.158 ms

Loss rate: 0.25%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-03-05 18:46:20

End at: 2018-03-05 18:46:50

Below is generated by plot.py at 2018-03-05 19:59:06

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 2.33 Mbit/s (2.0% utilization)

95th percentile per-packet one-way delay: 47.275 ms

Loss rate: 0.14%

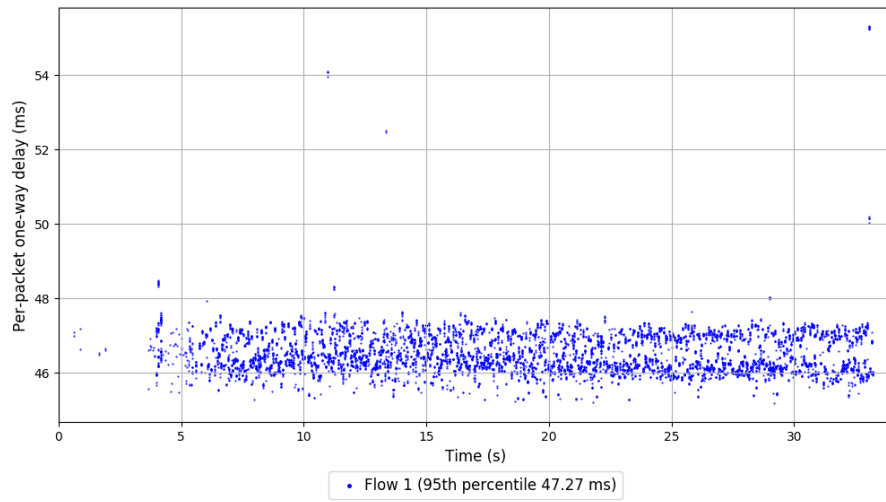
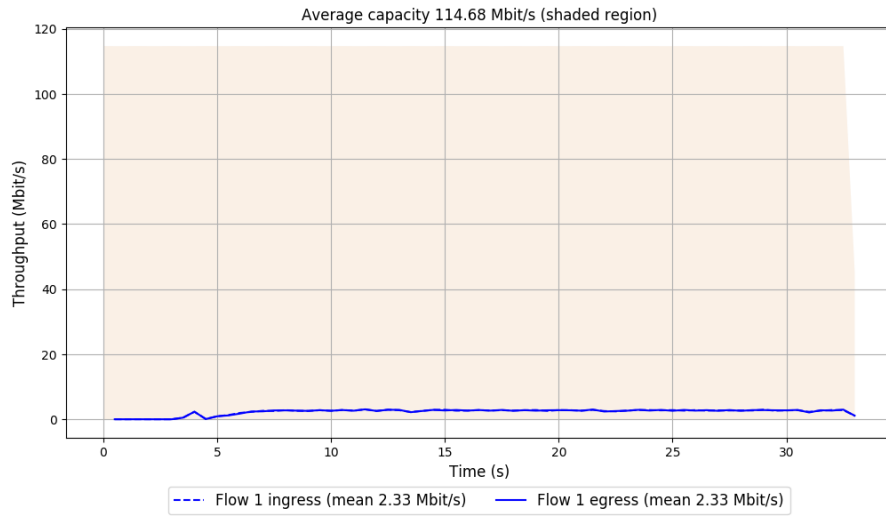
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 47.275 ms

Loss rate: 0.14%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-03-05 18:58:14

End at: 2018-03-05 18:58:44

Below is generated by plot.py at 2018-03-05 19:59:21

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 2.34 Mbit/s (2.0% utilization)

95th percentile per-packet one-way delay: 47.267 ms

Loss rate: 0.25%

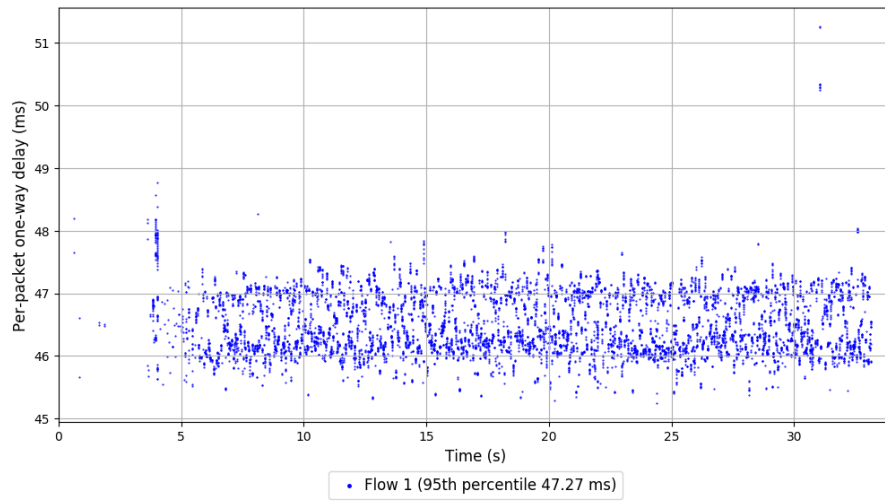
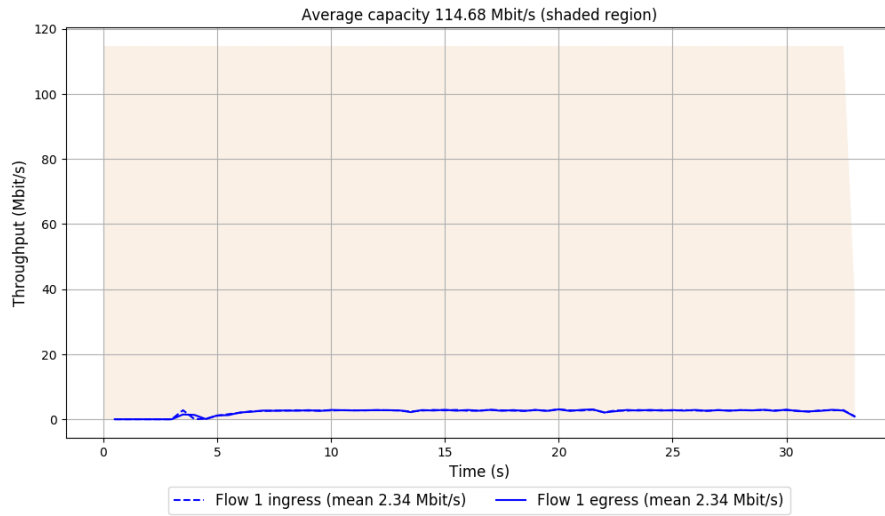
-- Flow 1:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 47.267 ms

Loss rate: 0.25%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-03-05 19:10:21

End at: 2018-03-05 19:10:51

Below is generated by plot.py at 2018-03-05 19:59:27

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 2.34 Mbit/s (2.0% utilization)

95th percentile per-packet one-way delay: 47.292 ms

Loss rate: 0.24%

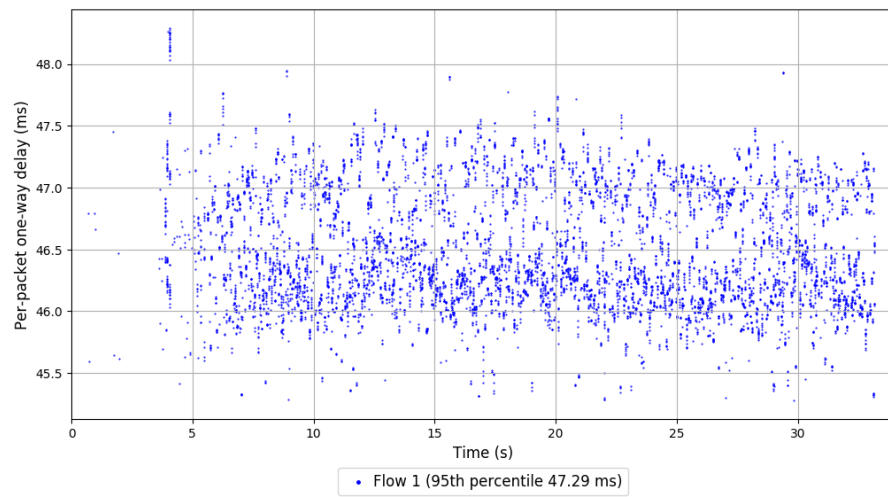
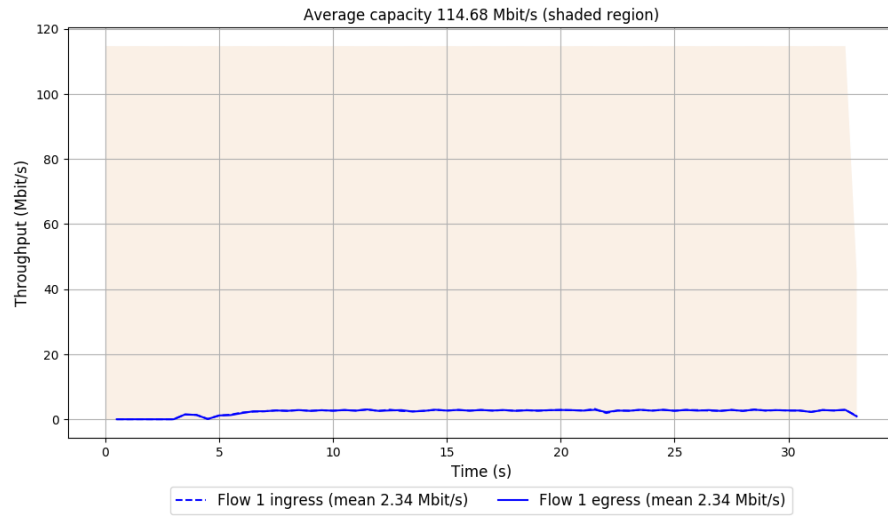
-- Flow 1:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 47.292 ms

Loss rate: 0.24%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-03-05 19:22:16

End at: 2018-03-05 19:22:46

Below is generated by plot.py at 2018-03-05 19:59:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 2.33 Mbit/s (2.0% utilization)

95th percentile per-packet one-way delay: 47.291 ms

Loss rate: 0.15%

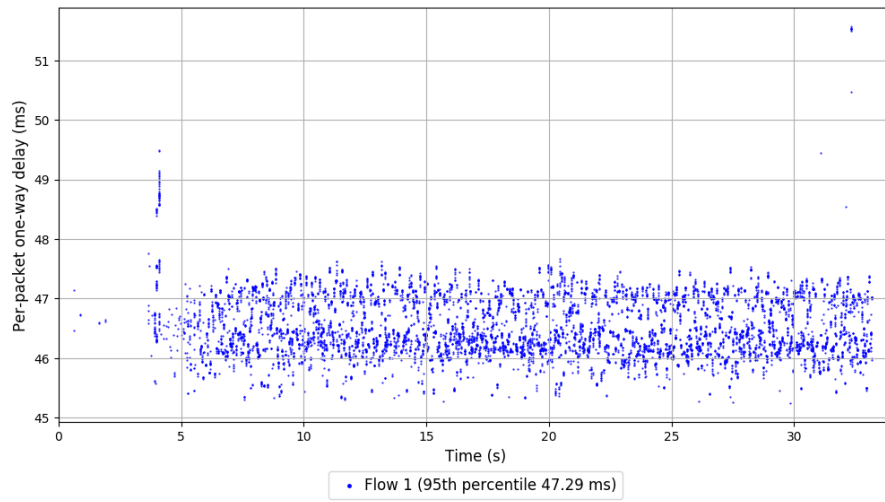
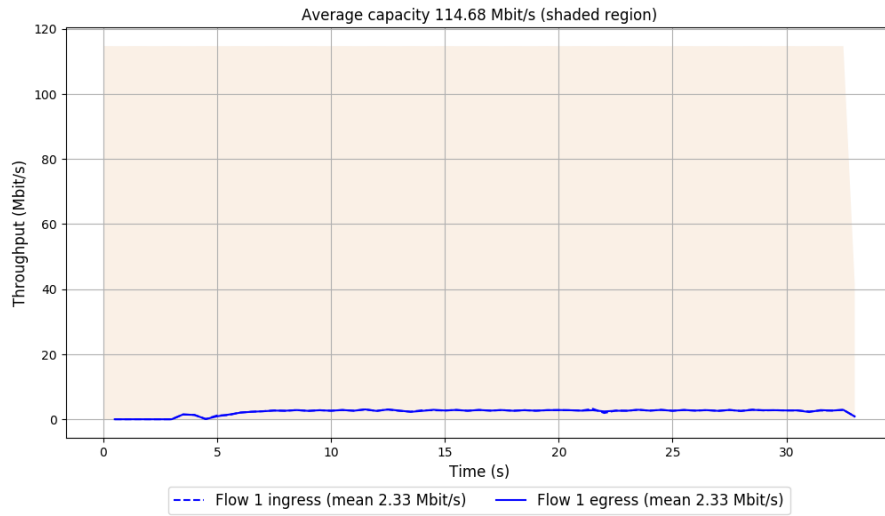
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 47.291 ms

Loss rate: 0.15%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-03-05 19:34:12

End at: 2018-03-05 19:34:42

Below is generated by plot.py at 2018-03-05 19:59:35

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 2.33 Mbit/s (2.0% utilization)

95th percentile per-packet one-way delay: 47.238 ms

Loss rate: 0.24%

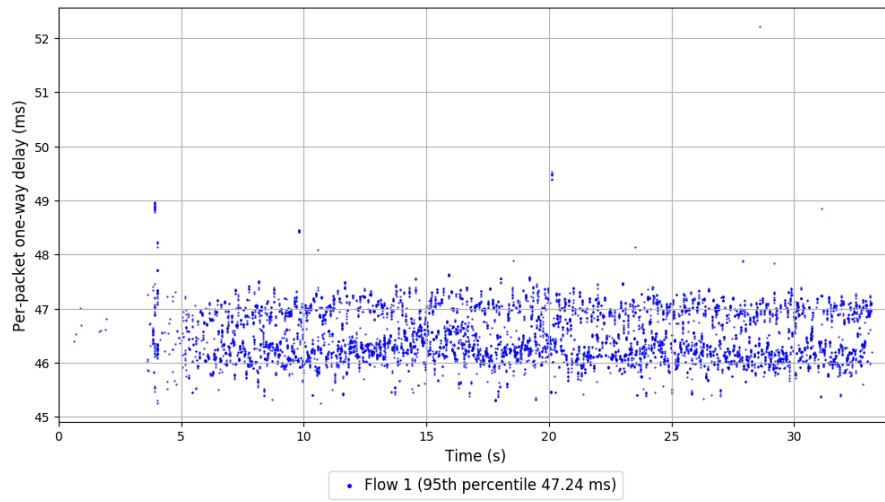
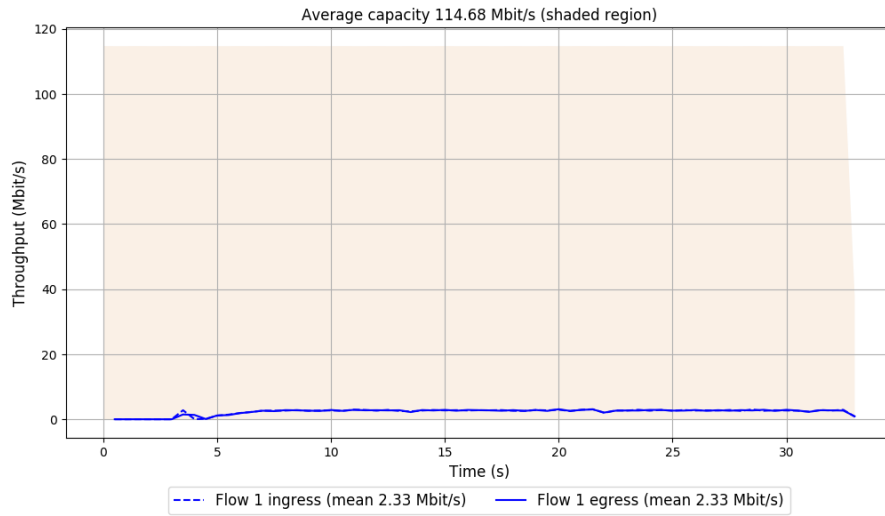
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 47.238 ms

Loss rate: 0.24%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-03-05 17:49:29

End at: 2018-03-05 17:49:59

Below is generated by plot.py at 2018-03-05 19:59:43

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 9.11 Mbit/s (7.9% utilization)

95th percentile per-packet one-way delay: 49.990 ms

Loss rate: 0.31%

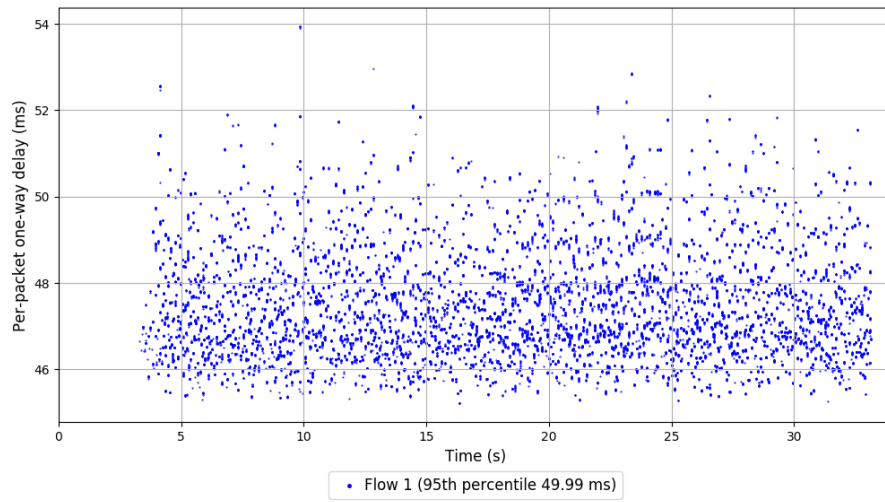
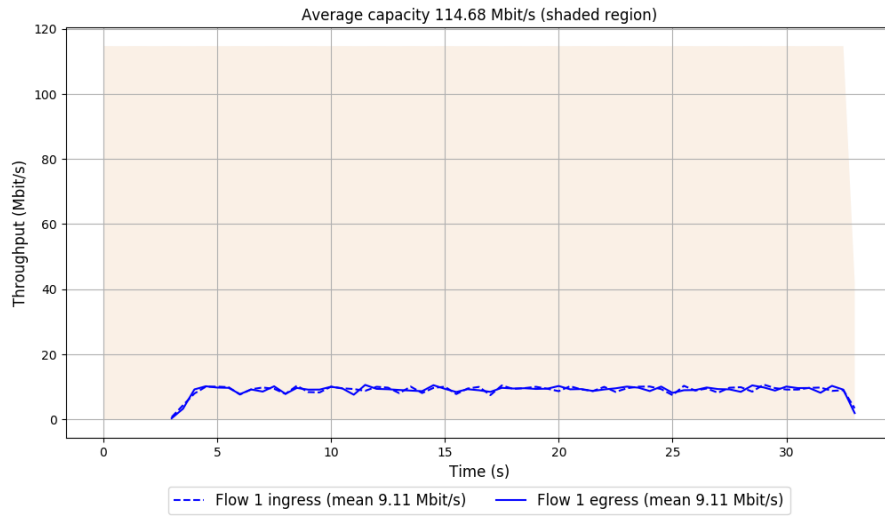
-- Flow 1:

Average throughput: 9.11 Mbit/s

95th percentile per-packet one-way delay: 49.990 ms

Loss rate: 0.31%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-03-05 18:01:18

End at: 2018-03-05 18:01:48

Below is generated by plot.py at 2018-03-05 19:59:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 8.84 Mbit/s (7.7% utilization)

95th percentile per-packet one-way delay: 50.164 ms

Loss rate: 0.28%

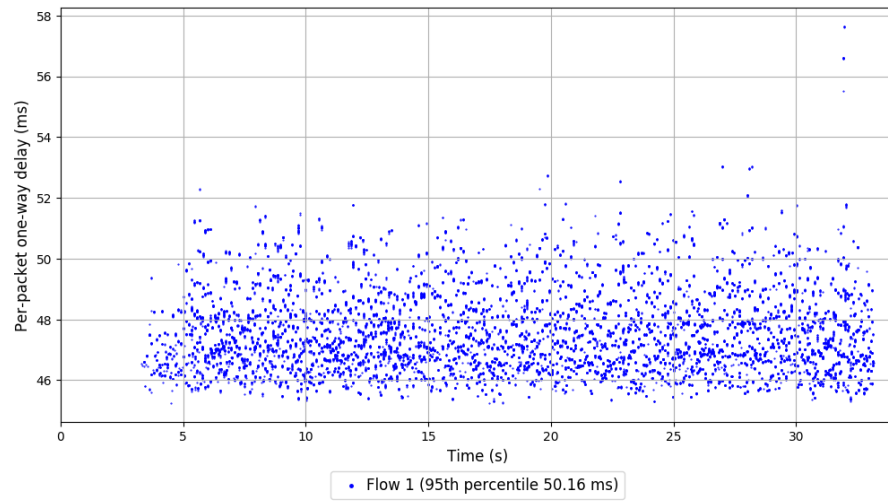
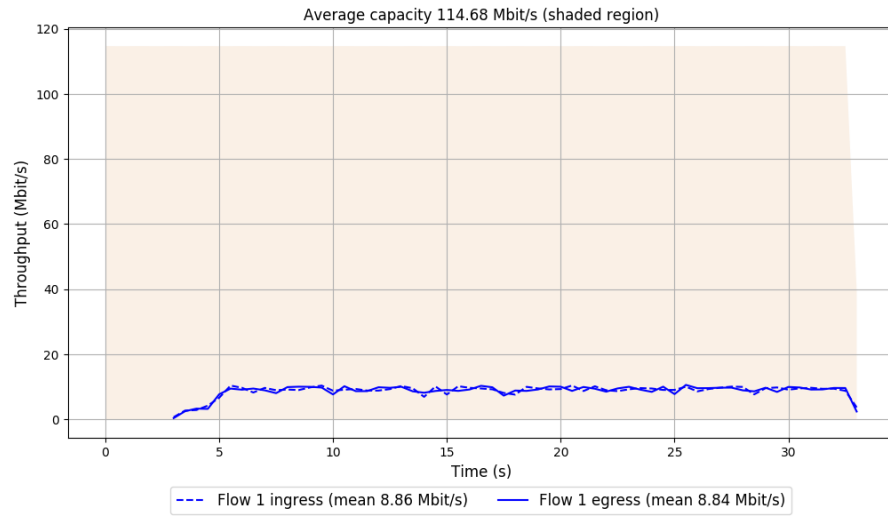
-- Flow 1:

Average throughput: 8.84 Mbit/s

95th percentile per-packet one-way delay: 50.164 ms

Loss rate: 0.28%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-03-05 18:13:20

End at: 2018-03-05 18:13:50

Below is generated by plot.py at 2018-03-05 19:59:46

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 9.21 Mbit/s (8.0% utilization)

95th percentile per-packet one-way delay: 50.041 ms

Loss rate: 0.27%

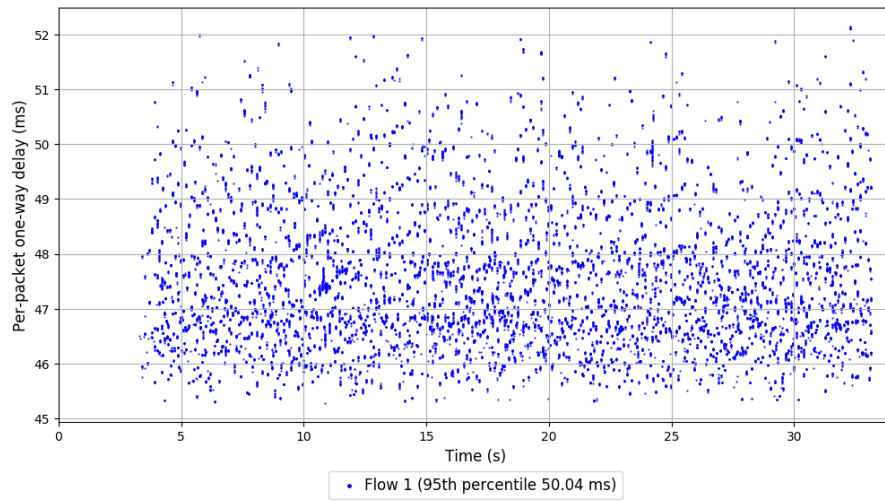
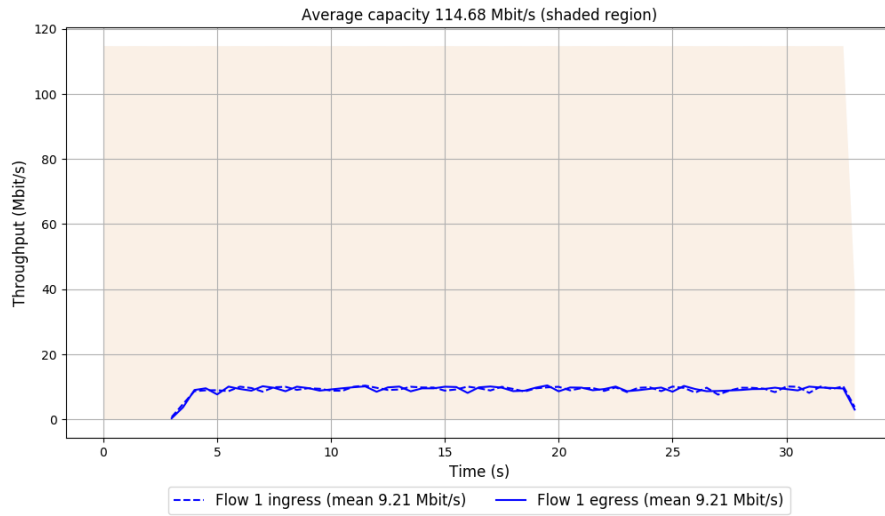
-- Flow 1:

Average throughput: 9.21 Mbit/s

95th percentile per-packet one-way delay: 50.041 ms

Loss rate: 0.27%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-03-05 18:25:15

End at: 2018-03-05 18:25:45

Below is generated by plot.py at 2018-03-05 19:59:47

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 9.22 Mbit/s (8.0% utilization)

95th percentile per-packet one-way delay: 50.139 ms

Loss rate: 0.05%

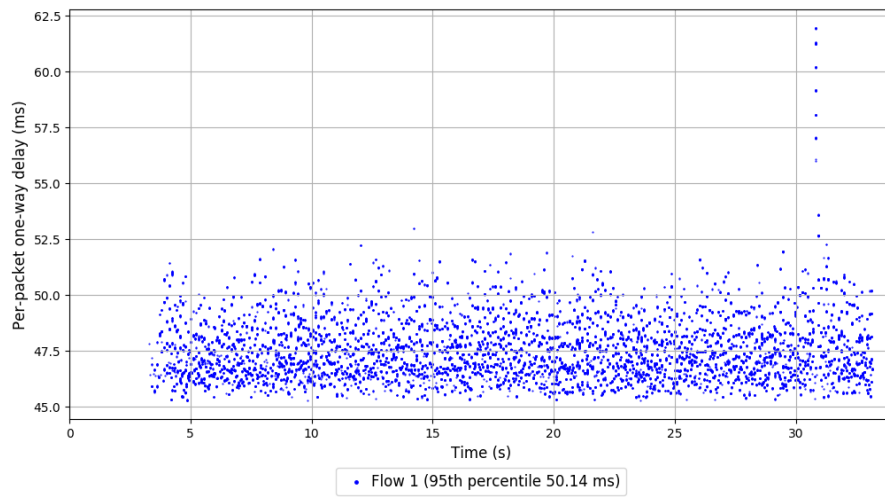
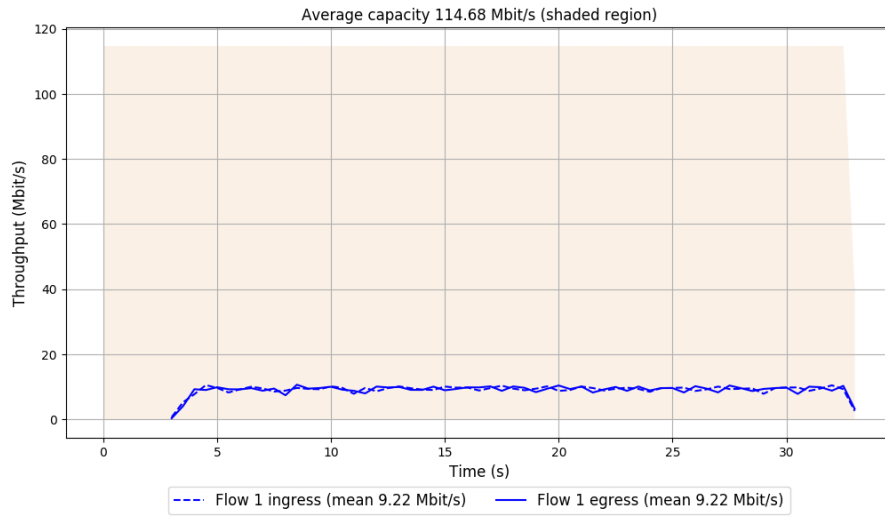
-- Flow 1:

Average throughput: 9.22 Mbit/s

95th percentile per-packet one-way delay: 50.139 ms

Loss rate: 0.05%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-03-05 18:37:08

End at: 2018-03-05 18:37:38

Below is generated by plot.py at 2018-03-05 20:00:04

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 9.08 Mbit/s (7.9% utilization)

95th percentile per-packet one-way delay: 49.951 ms

Loss rate: 0.11%

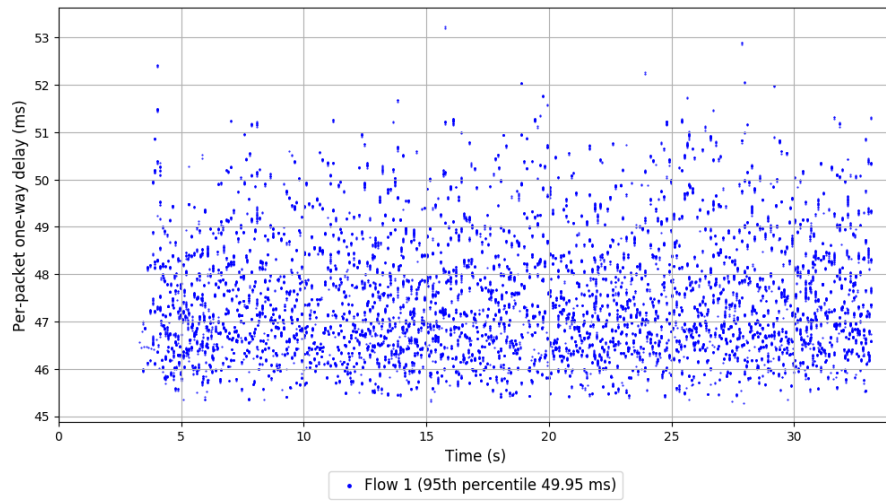
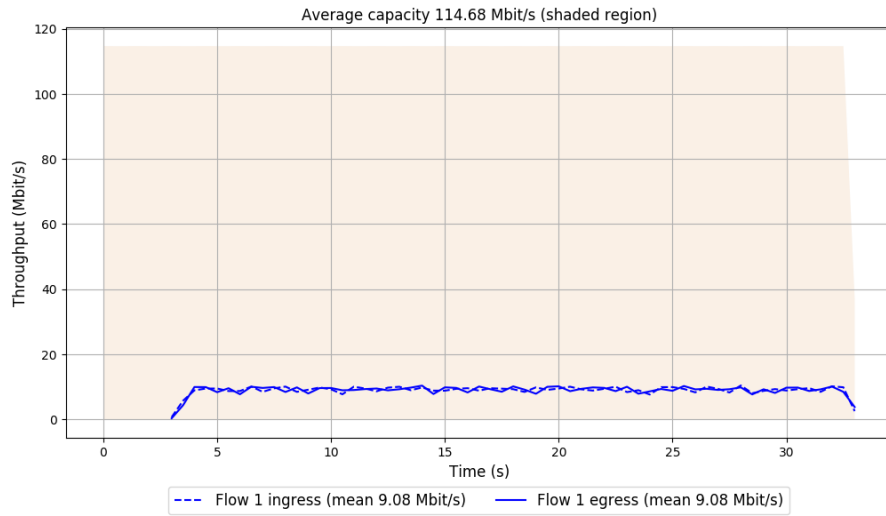
-- Flow 1:

Average throughput: 9.08 Mbit/s

95th percentile per-packet one-way delay: 49.951 ms

Loss rate: 0.11%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-03-05 18:49:00

End at: 2018-03-05 18:49:30

Below is generated by plot.py at 2018-03-05 20:00:11

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 9.05 Mbit/s (7.9% utilization)

95th percentile per-packet one-way delay: 49.914 ms

Loss rate: 0.35%

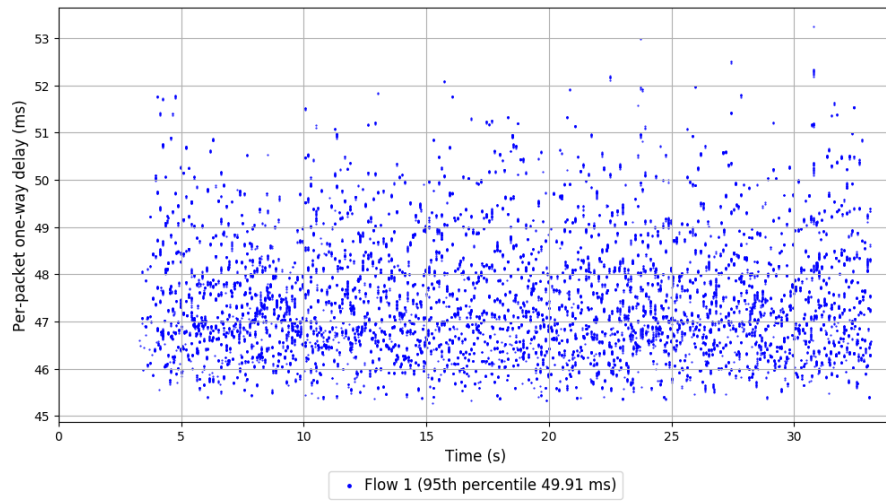
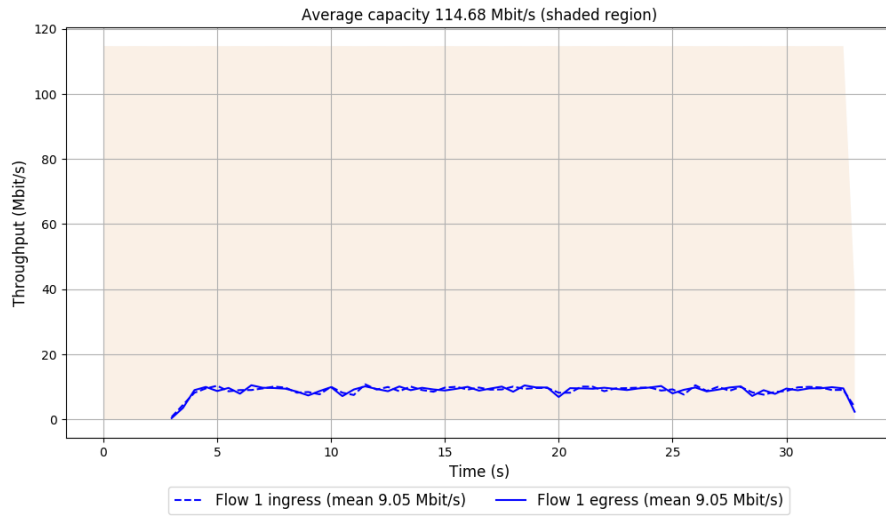
-- Flow 1:

Average throughput: 9.05 Mbit/s

95th percentile per-packet one-way delay: 49.914 ms

Loss rate: 0.35%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-03-05 19:00:54

End at: 2018-03-05 19:01:24

Below is generated by plot.py at 2018-03-05 20:00:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 9.01 Mbit/s (7.9% utilization)

95th percentile per-packet one-way delay: 50.011 ms

Loss rate: 0.23%

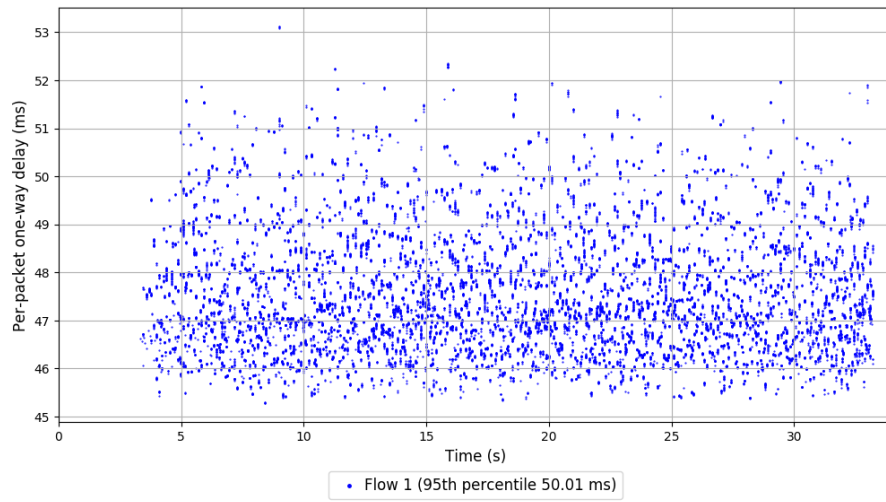
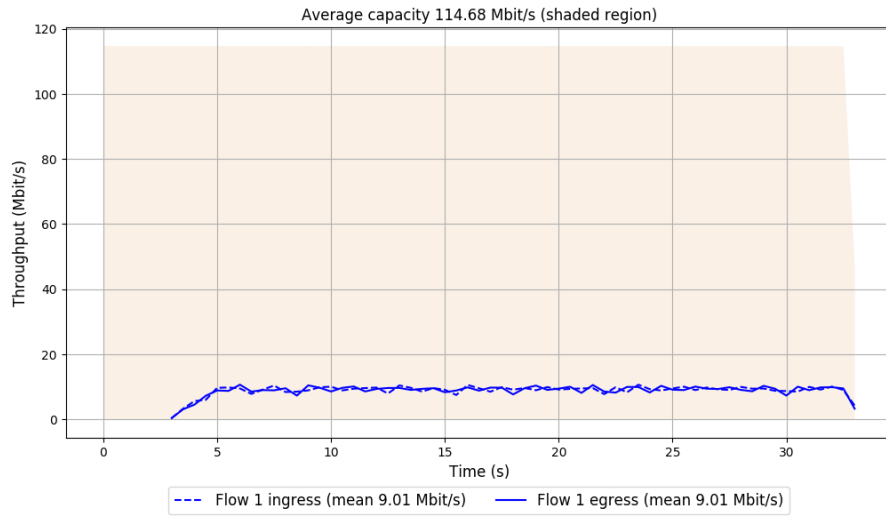
-- Flow 1:

Average throughput: 9.01 Mbit/s

95th percentile per-packet one-way delay: 50.011 ms

Loss rate: 0.23%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-03-05 19:13:01

End at: 2018-03-05 19:13:31

Below is generated by plot.py at 2018-03-05 20:00:20

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 9.06 Mbit/s (7.9% utilization)

95th percentile per-packet one-way delay: 50.068 ms

Loss rate: 0.36%

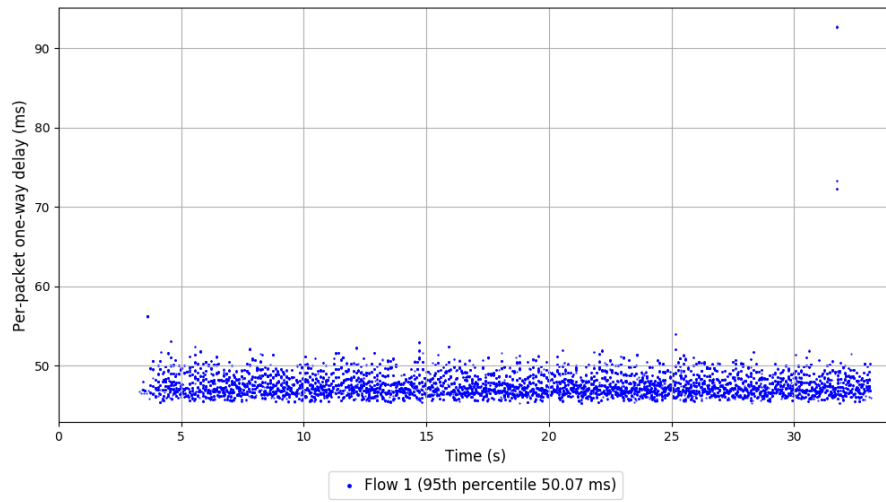
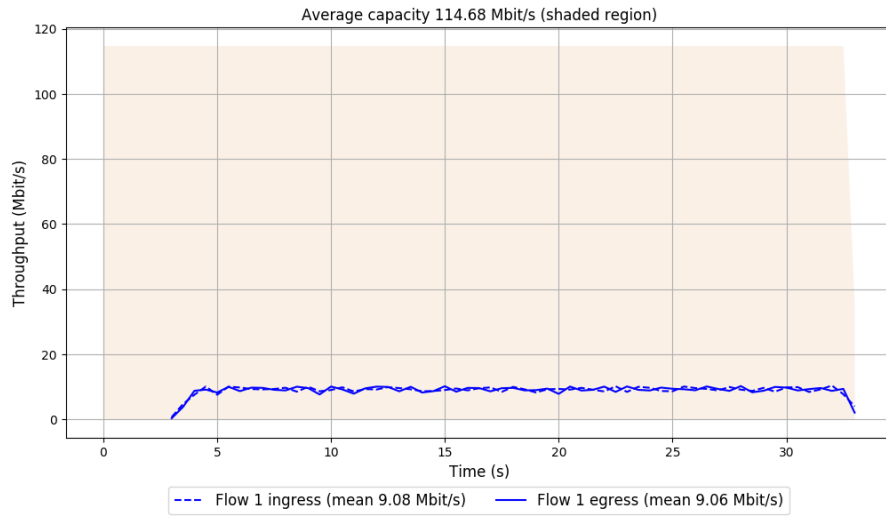
-- Flow 1:

Average throughput: 9.06 Mbit/s

95th percentile per-packet one-way delay: 50.068 ms

Loss rate: 0.36%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-03-05 19:24:57

End at: 2018-03-05 19:25:27

Below is generated by plot.py at 2018-03-05 20:00:27

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 9.14 Mbit/s (8.0% utilization)

95th percentile per-packet one-way delay: 50.068 ms

Loss rate: 0.26%

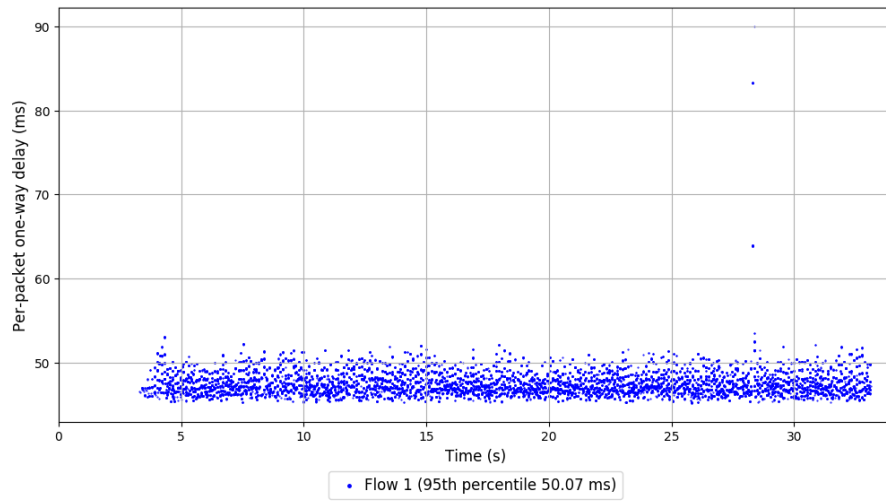
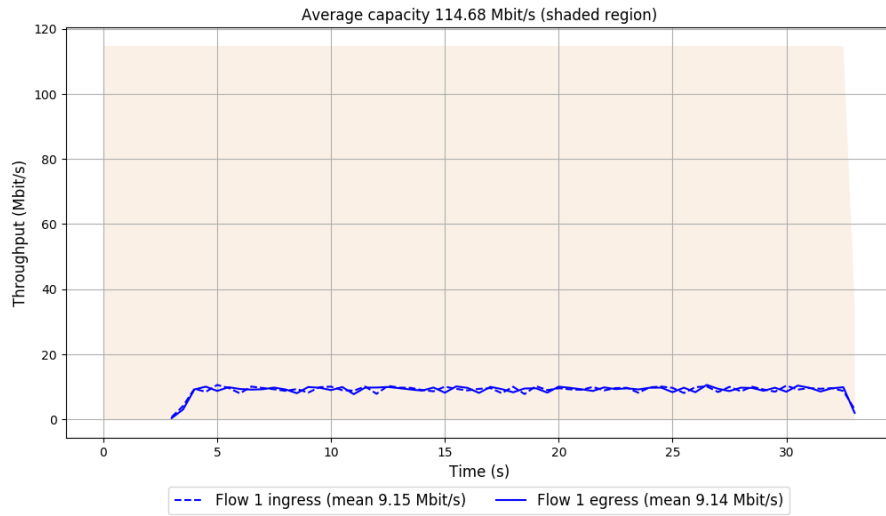
-- Flow 1:

Average throughput: 9.14 Mbit/s

95th percentile per-packet one-way delay: 50.068 ms

Loss rate: 0.26%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-03-05 19:36:51

End at: 2018-03-05 19:37:21

Below is generated by plot.py at 2018-03-05 20:00:29

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 9.10 Mbit/s (7.9% utilization)

95th percentile per-packet one-way delay: 50.125 ms

Loss rate: 0.00%

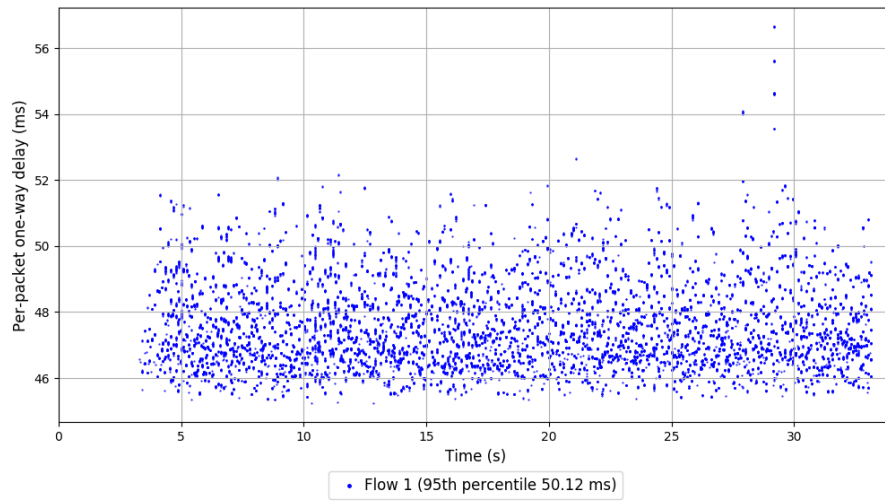
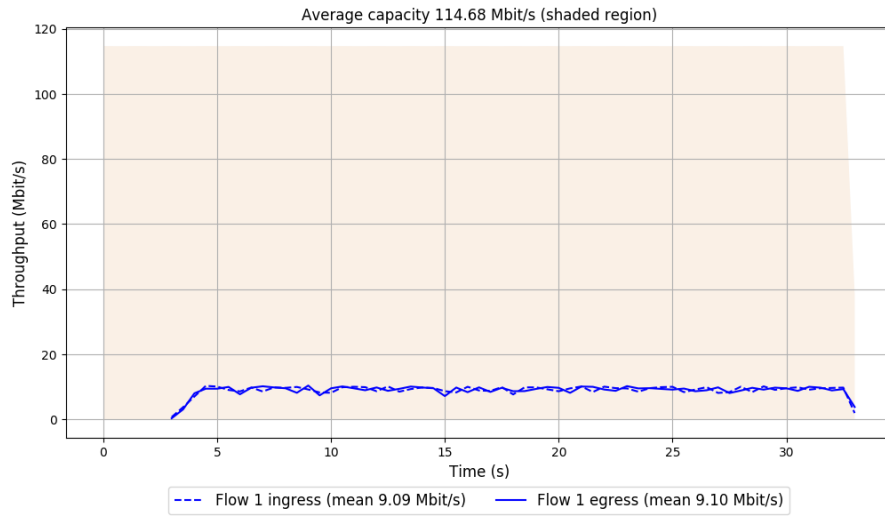
-- Flow 1:

Average throughput: 9.10 Mbit/s

95th percentile per-packet one-way delay: 50.125 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-03-05 17:47:24

End at: 2018-03-05 17:47:55

Below is generated by plot.py at 2018-03-05 20:03:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 83.73 Mbit/s (73.0% utilization)

95th percentile per-packet one-way delay: 70.784 ms

Loss rate: 2.84%

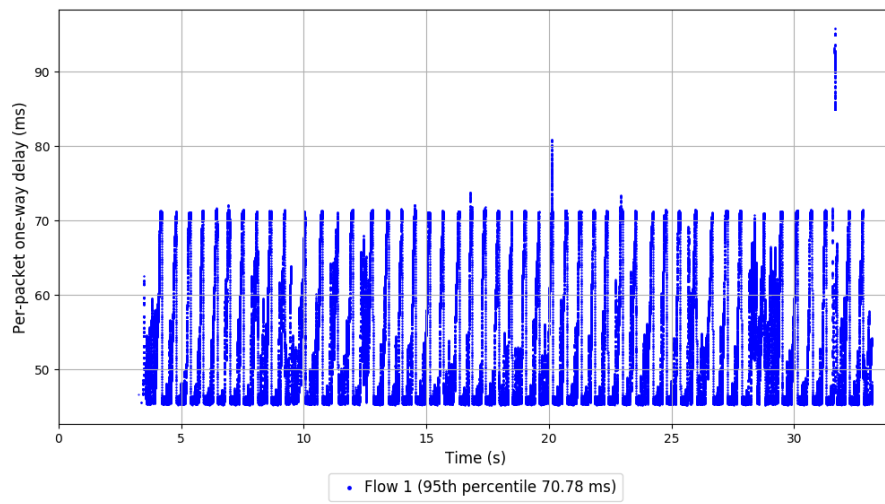
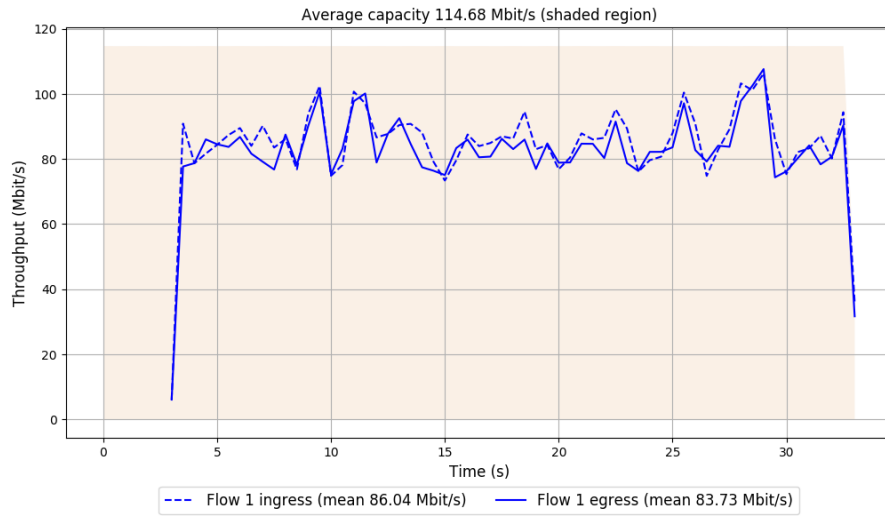
-- Flow 1:

Average throughput: 83.73 Mbit/s

95th percentile per-packet one-way delay: 70.784 ms

Loss rate: 2.84%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-03-05 17:59:14

End at: 2018-03-05 17:59:44

Below is generated by plot.py at 2018-03-05 20:03:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 82.65 Mbit/s (72.1% utilization)

95th percentile per-packet one-way delay: 70.735 ms

Loss rate: 2.85%

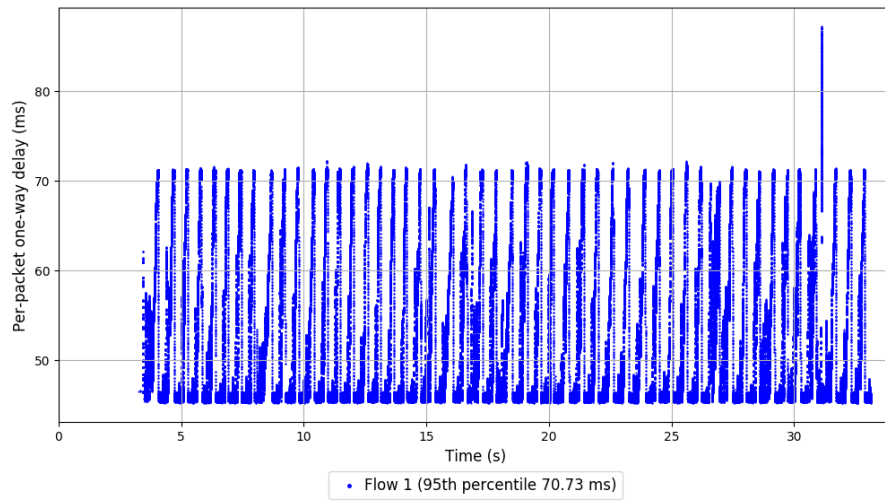
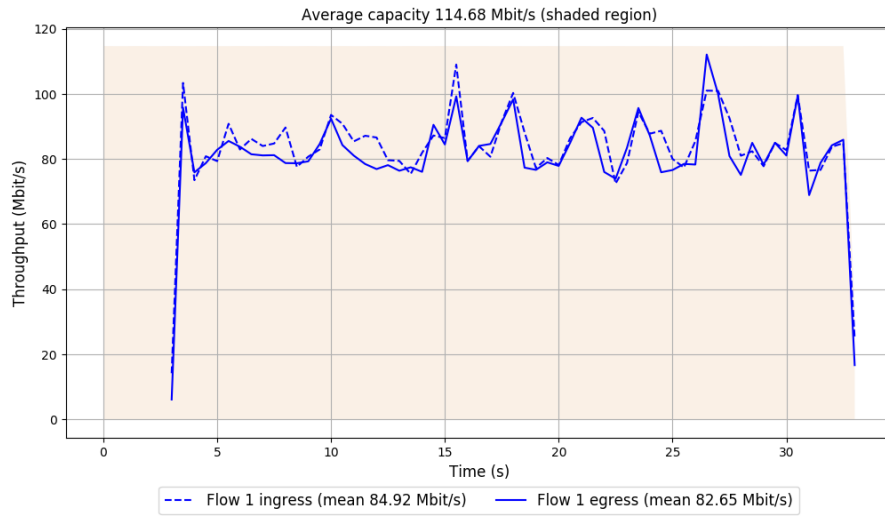
-- Flow 1:

Average throughput: 82.65 Mbit/s

95th percentile per-packet one-way delay: 70.735 ms

Loss rate: 2.85%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-03-05 18:11:15

End at: 2018-03-05 18:11:45

Below is generated by plot.py at 2018-03-05 20:03:37

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 83.10 Mbit/s (72.5% utilization)

95th percentile per-packet one-way delay: 70.805 ms

Loss rate: 2.92%

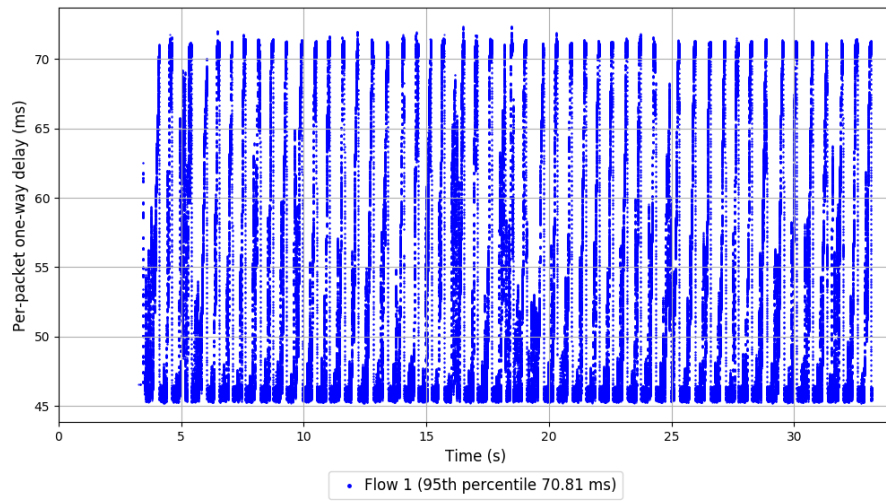
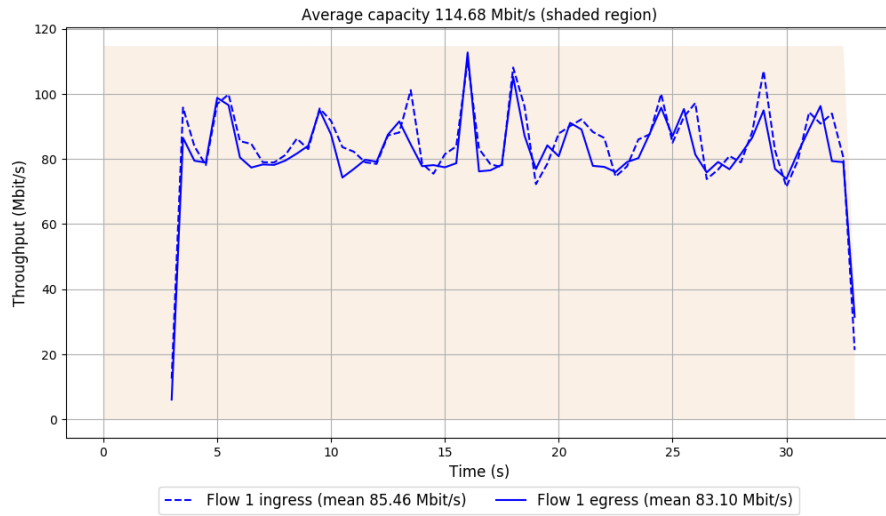
-- Flow 1:

Average throughput: 83.10 Mbit/s

95th percentile per-packet one-way delay: 70.805 ms

Loss rate: 2.92%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-03-05 18:23:10

End at: 2018-03-05 18:23:40

Below is generated by plot.py at 2018-03-05 20:03:43

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 82.31 Mbit/s (71.8% utilization)

95th percentile per-packet one-way delay: 70.778 ms

Loss rate: 2.78%

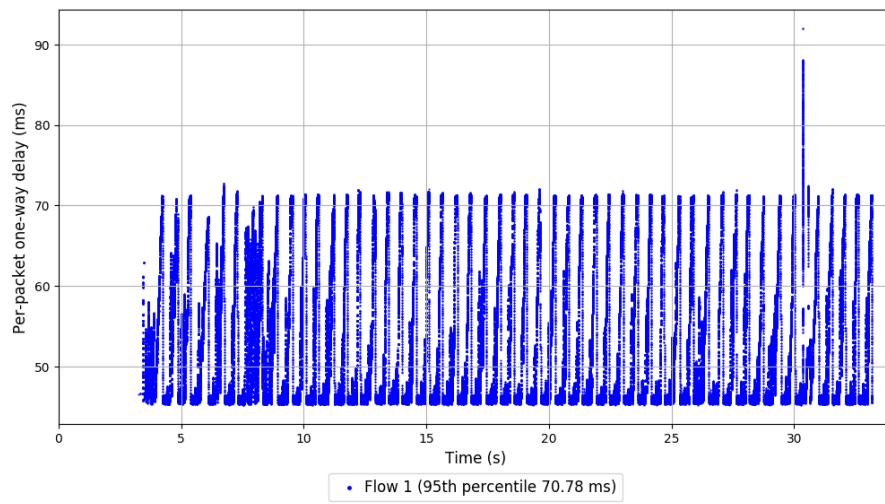
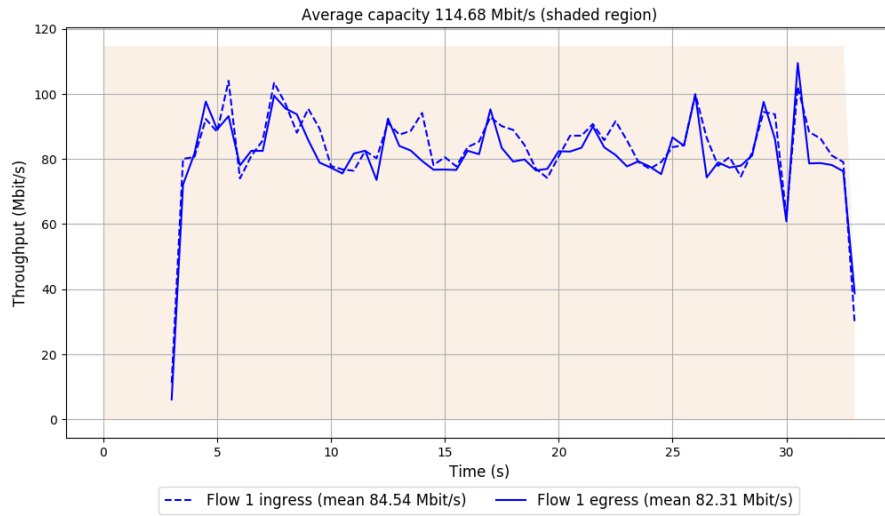
-- Flow 1:

Average throughput: 82.31 Mbit/s

95th percentile per-packet one-way delay: 70.778 ms

Loss rate: 2.78%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-03-05 18:35:03

End at: 2018-03-05 18:35:33

Below is generated by plot.py at 2018-03-05 20:03:49

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 84.12 Mbit/s (73.3% utilization)

95th percentile per-packet one-way delay: 70.637 ms

Loss rate: 1.98%

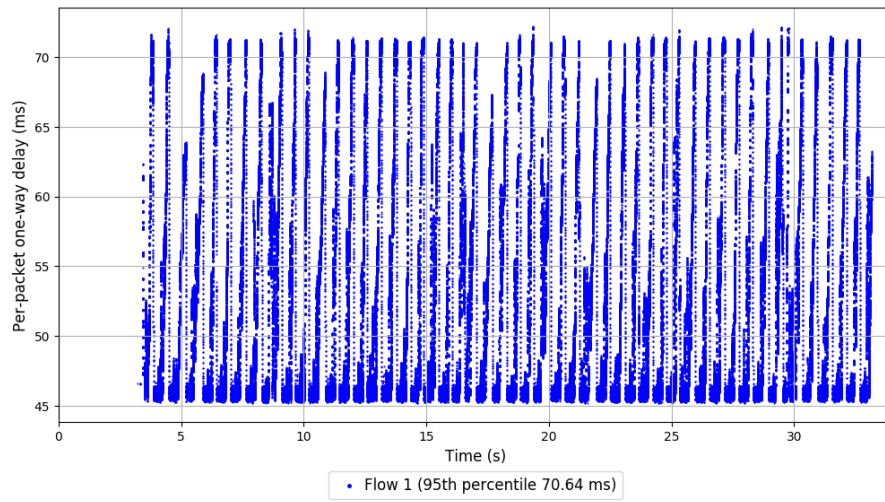
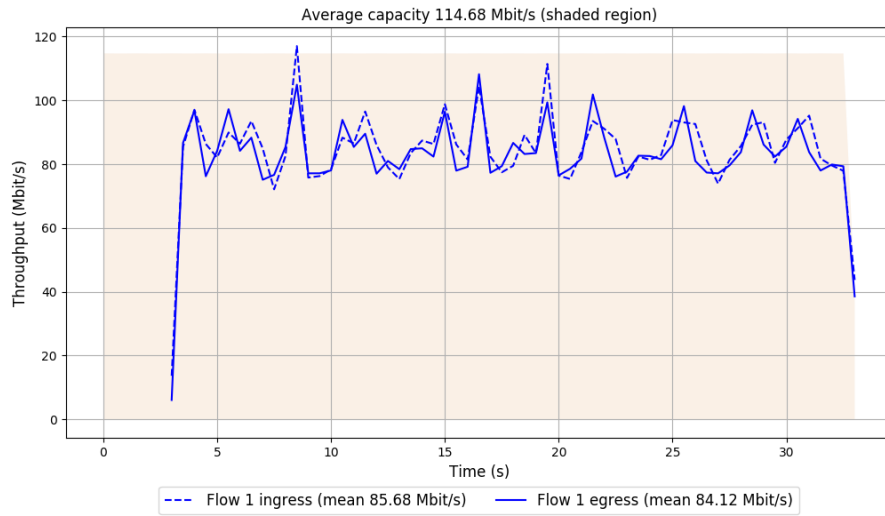
-- Flow 1:

Average throughput: 84.12 Mbit/s

95th percentile per-packet one-way delay: 70.637 ms

Loss rate: 1.98%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-03-05 18:46:56

End at: 2018-03-05 18:47:26

Below is generated by plot.py at 2018-03-05 20:03:51

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 84.00 Mbit/s (73.2% utilization)

95th percentile per-packet one-way delay: 70.724 ms

Loss rate: 2.60%

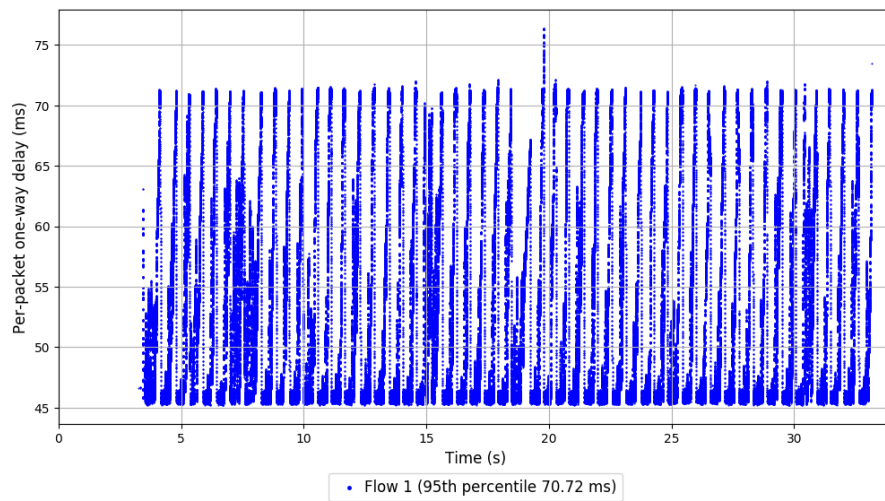
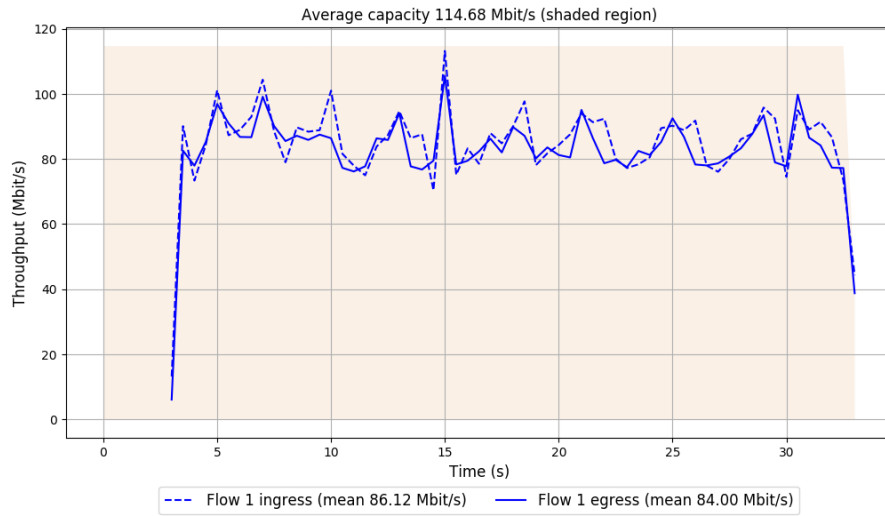
-- Flow 1:

Average throughput: 84.00 Mbit/s

95th percentile per-packet one-way delay: 70.724 ms

Loss rate: 2.60%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-03-05 18:58:49

End at: 2018-03-05 18:59:19

Below is generated by plot.py at 2018-03-05 20:03:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 82.88 Mbit/s (72.3% utilization)

95th percentile per-packet one-way delay: 70.778 ms

Loss rate: 2.90%

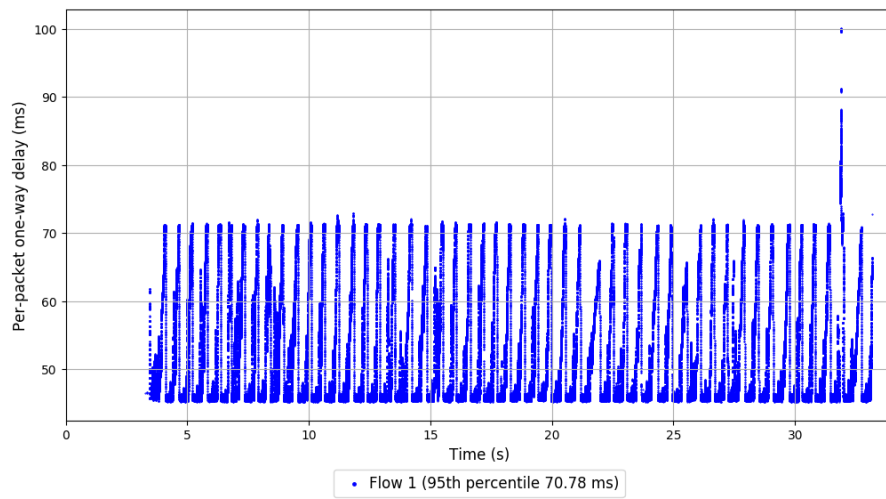
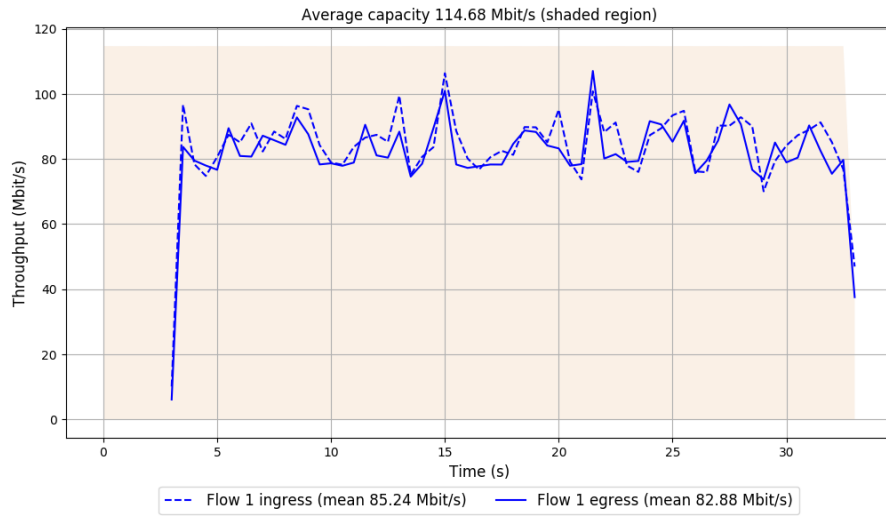
-- Flow 1:

Average throughput: 82.88 Mbit/s

95th percentile per-packet one-way delay: 70.778 ms

Loss rate: 2.90%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-03-05 19:10:57

End at: 2018-03-05 19:11:27

Below is generated by plot.py at 2018-03-05 20:03:57

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 83.61 Mbit/s (72.9% utilization)

95th percentile per-packet one-way delay: 70.789 ms

Loss rate: 2.56%

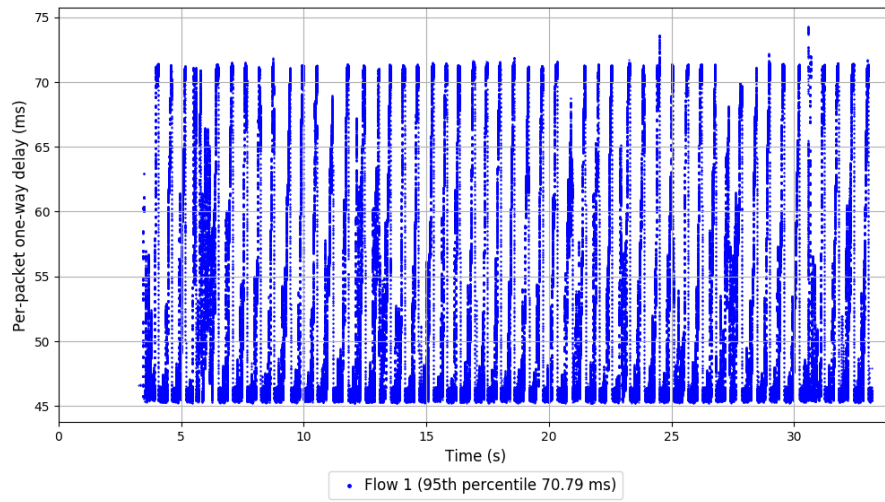
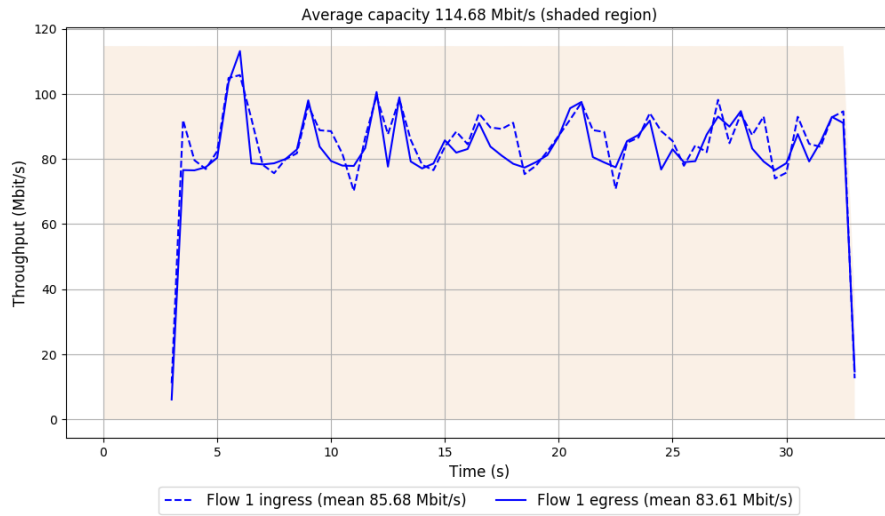
-- Flow 1:

Average throughput: 83.61 Mbit/s

95th percentile per-packet one-way delay: 70.789 ms

Loss rate: 2.56%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-03-05 19:22:52

End at: 2018-03-05 19:23:22

Below is generated by plot.py at 2018-03-05 20:06:26

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 82.63 Mbit/s (72.0% utilization)

95th percentile per-packet one-way delay: 70.731 ms

Loss rate: 2.82%

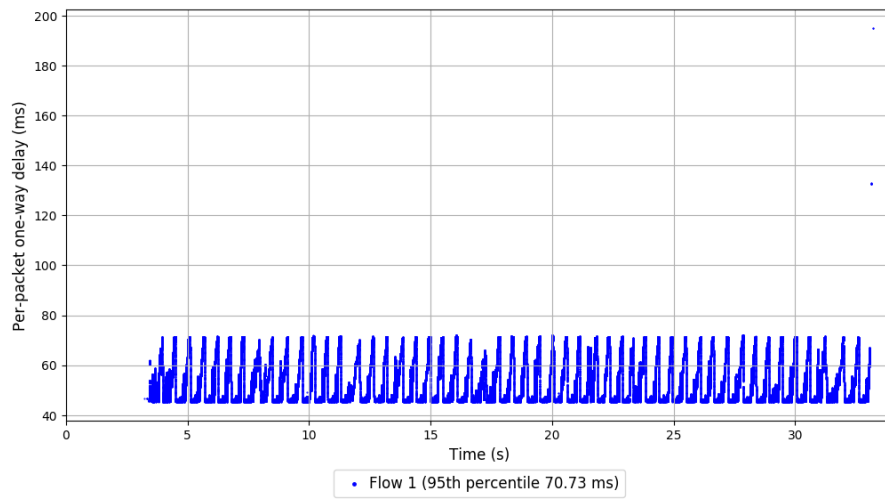
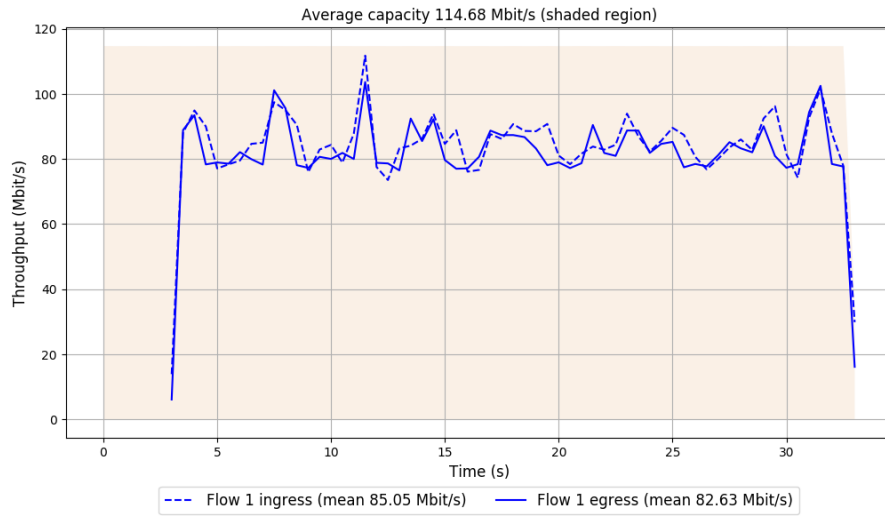
-- Flow 1:

Average throughput: 82.63 Mbit/s

95th percentile per-packet one-way delay: 70.731 ms

Loss rate: 2.82%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-03-05 19:34:47

End at: 2018-03-05 19:35:17

Below is generated by plot.py at 2018-03-05 20:06:29

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 83.18 Mbit/s (72.5% utilization)

95th percentile per-packet one-way delay: 70.782 ms

Loss rate: 2.71%

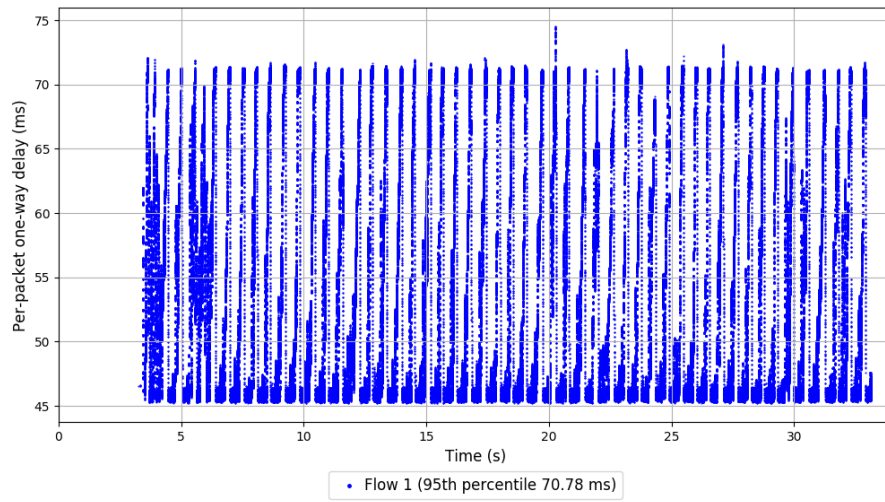
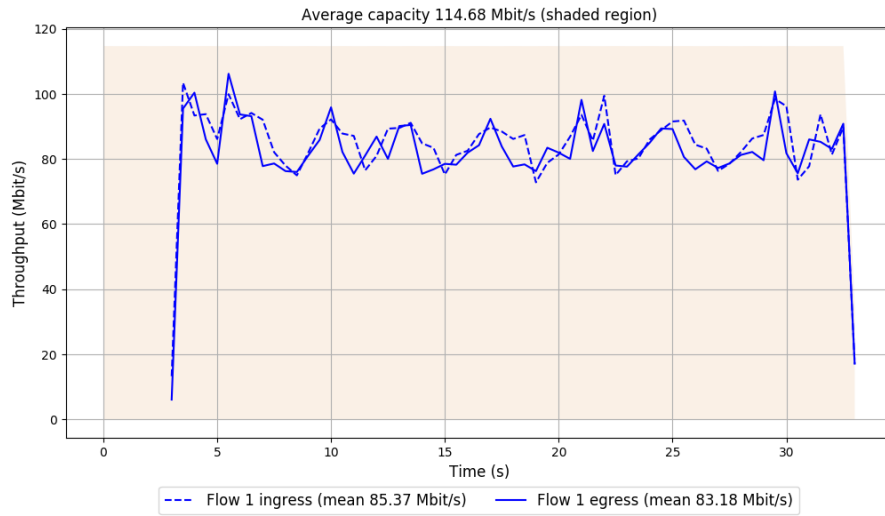
-- Flow 1:

Average throughput: 83.18 Mbit/s

95th percentile per-packet one-way delay: 70.782 ms

Loss rate: 2.71%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-03-05 17:52:01

End at: 2018-03-05 17:52:31

Below is generated by plot.py at 2018-03-05 20:06:29

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 79.54 Mbit/s (69.4% utilization)

95th percentile per-packet one-way delay: 48.575 ms

Loss rate: 0.66%

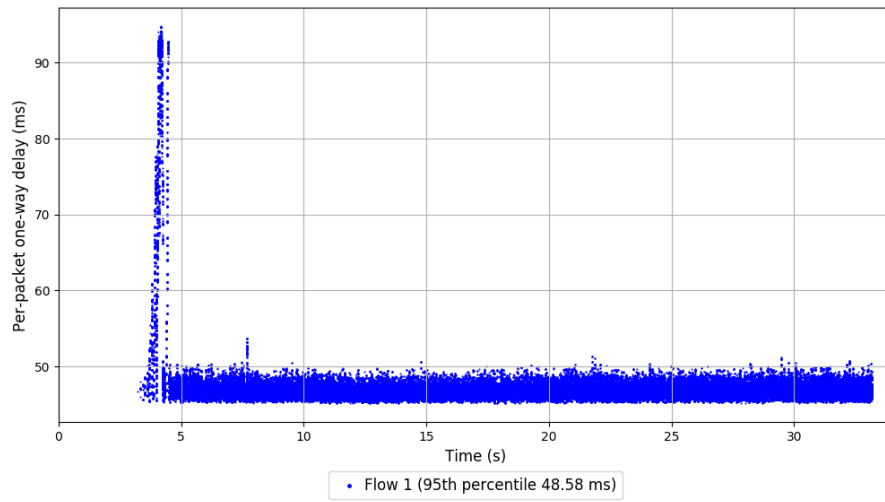
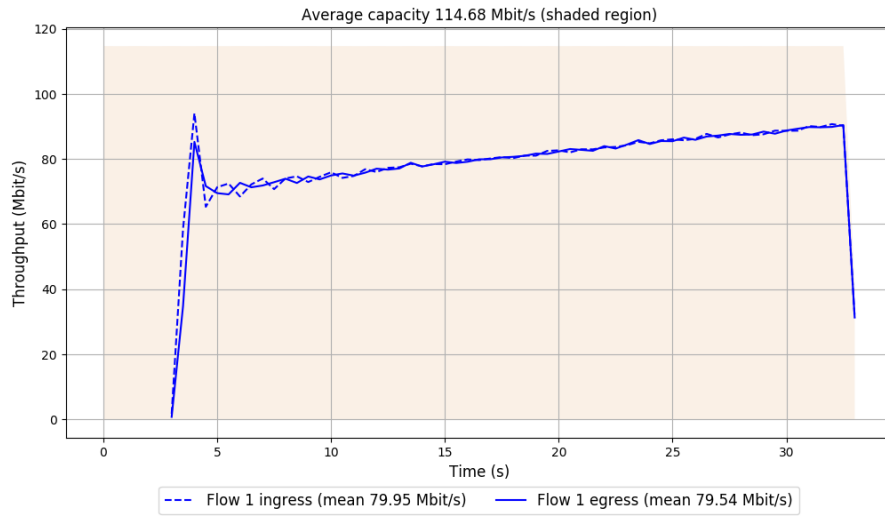
-- Flow 1:

Average throughput: 79.54 Mbit/s

95th percentile per-packet one-way delay: 48.575 ms

Loss rate: 0.66%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-03-05 18:03:51

End at: 2018-03-05 18:04:21

Below is generated by plot.py at 2018-03-05 20:06:29

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 77.34 Mbit/s (67.4% utilization)

95th percentile per-packet one-way delay: 48.485 ms

Loss rate: 0.66%

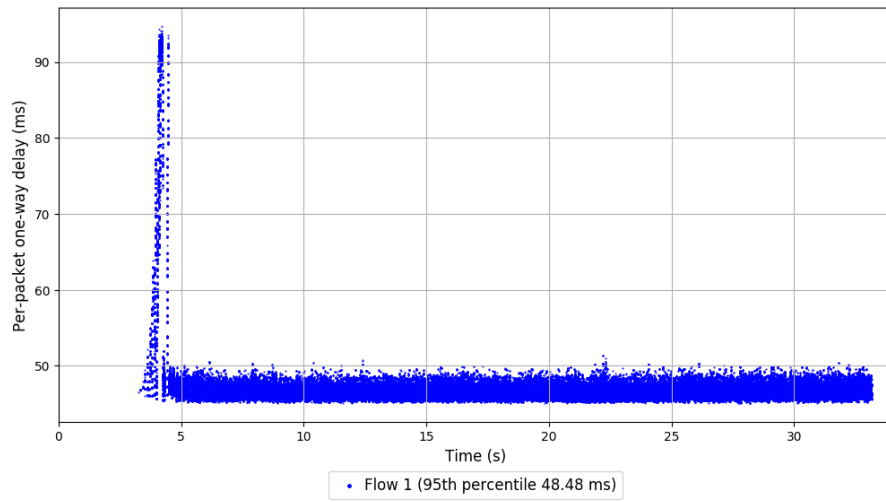
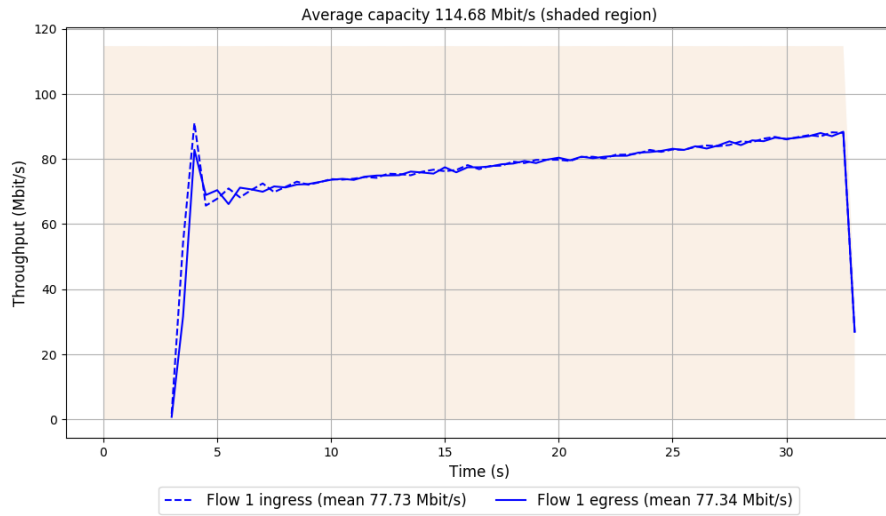
-- Flow 1:

Average throughput: 77.34 Mbit/s

95th percentile per-packet one-way delay: 48.485 ms

Loss rate: 0.66%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-03-05 18:15:53

End at: 2018-03-05 18:16:23

Below is generated by plot.py at 2018-03-05 20:06:29

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 85.59 Mbit/s (74.6% utilization)

95th percentile per-packet one-way delay: 48.721 ms

Loss rate: 0.23%

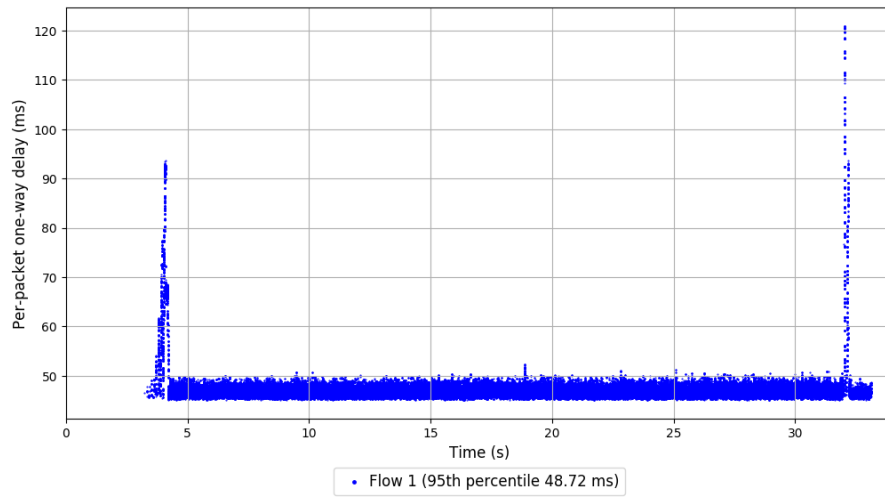
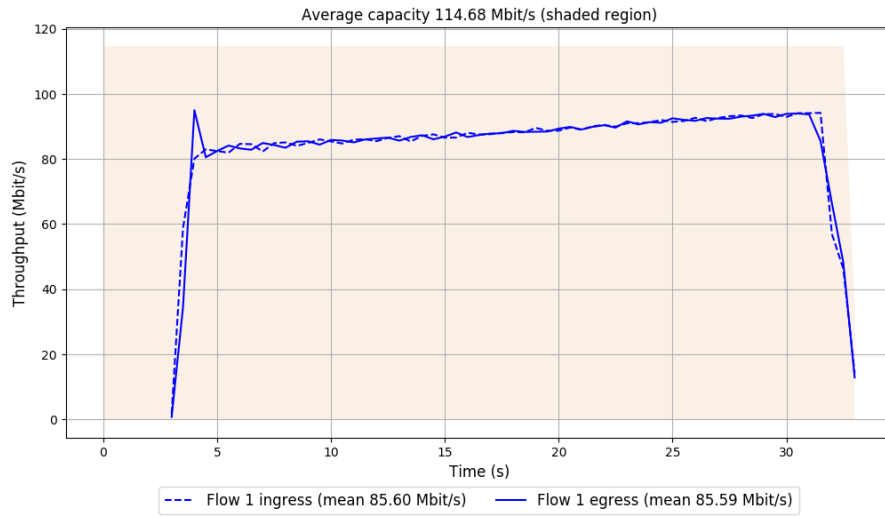
-- Flow 1:

Average throughput: 85.59 Mbit/s

95th percentile per-packet one-way delay: 48.721 ms

Loss rate: 0.23%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-03-05 18:27:48

End at: 2018-03-05 18:28:18

Below is generated by plot.py at 2018-03-05 20:06:29

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 79.27 Mbit/s (69.1% utilization)

95th percentile per-packet one-way delay: 48.701 ms

Loss rate: 0.59%

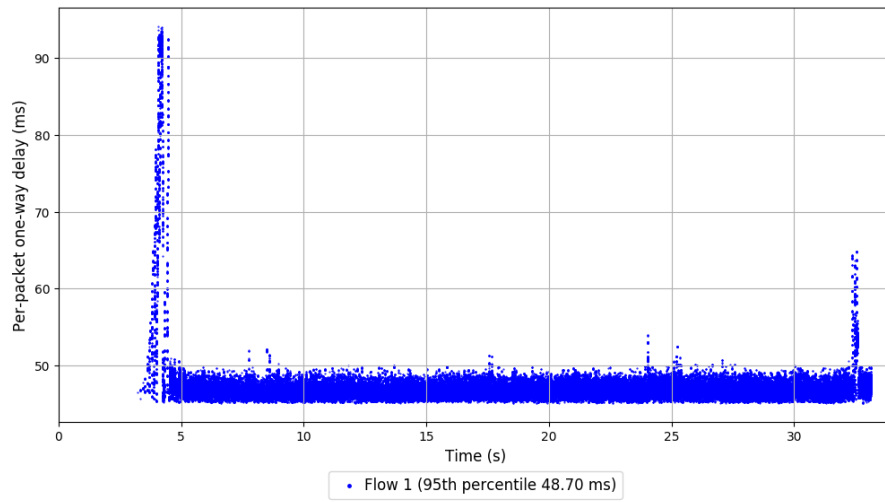
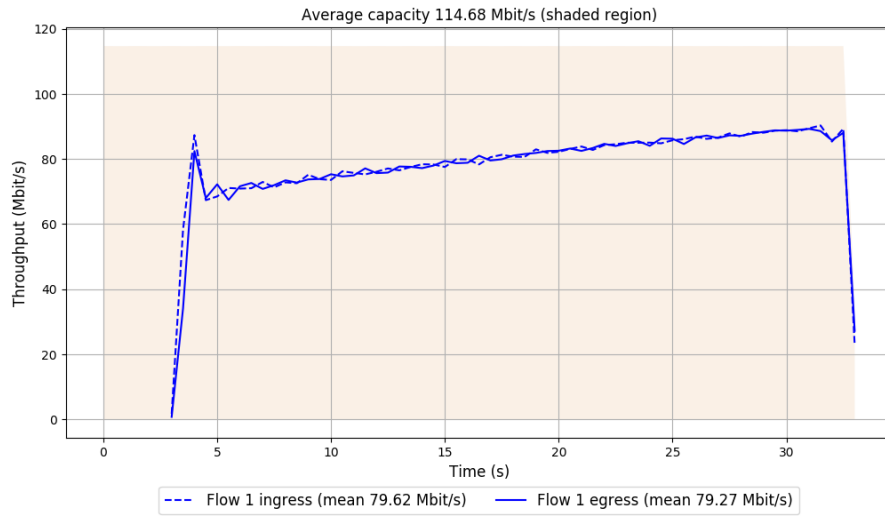
-- Flow 1:

Average throughput: 79.27 Mbit/s

95th percentile per-packet one-way delay: 48.701 ms

Loss rate: 0.59%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-03-05 18:39:41

End at: 2018-03-05 18:40:11

Below is generated by plot.py at 2018-03-05 20:06:29

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 71.00 Mbit/s (61.9% utilization)

95th percentile per-packet one-way delay: 48.515 ms

Loss rate: 0.72%

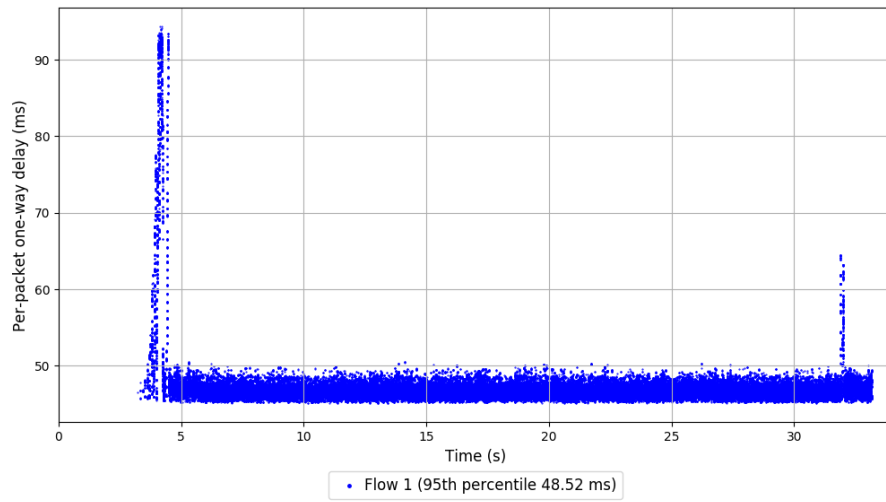
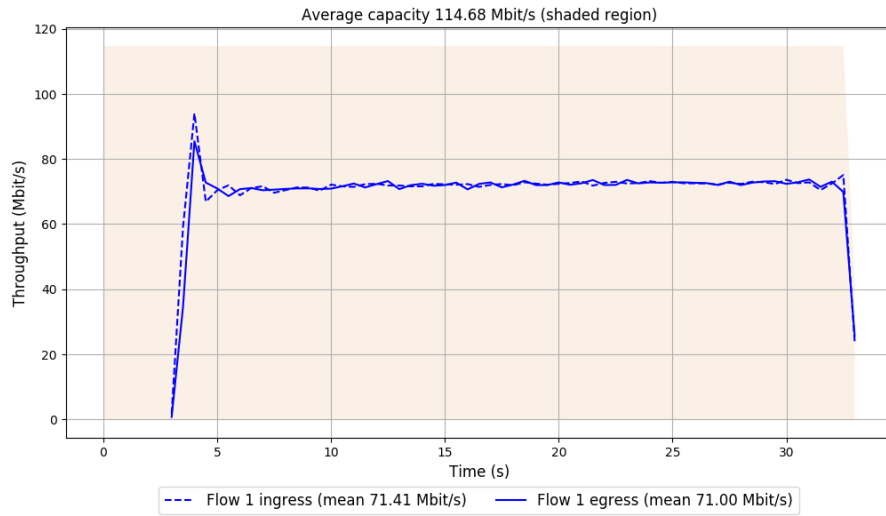
-- Flow 1:

Average throughput: 71.00 Mbit/s

95th percentile per-packet one-way delay: 48.515 ms

Loss rate: 0.72%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-03-05 18:51:33

End at: 2018-03-05 18:52:03

Below is generated by plot.py at 2018-03-05 20:06:29

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 88.50 Mbit/s (77.2% utilization)

95th percentile per-packet one-way delay: 48.688 ms

Loss rate: 0.25%

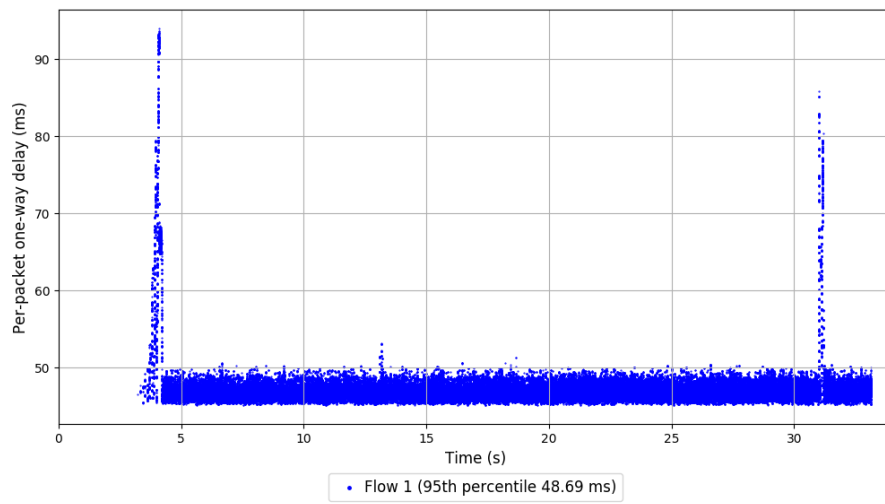
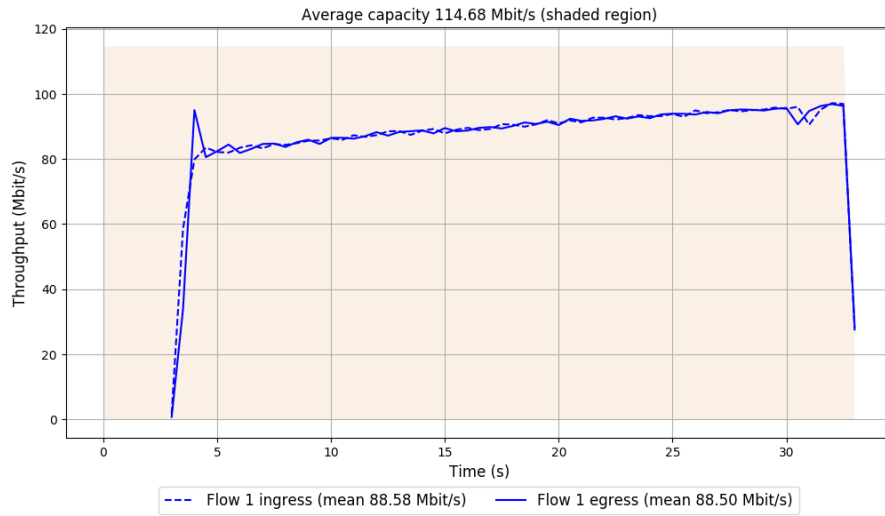
-- Flow 1:

Average throughput: 88.50 Mbit/s

95th percentile per-packet one-way delay: 48.688 ms

Loss rate: 0.25%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-03-05 19:03:28

End at: 2018-03-05 19:03:58

Below is generated by plot.py at 2018-03-05 20:07:13

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 56.20 Mbit/s (49.0% utilization)

95th percentile per-packet one-way delay: 48.024 ms

Loss rate: 0.17%

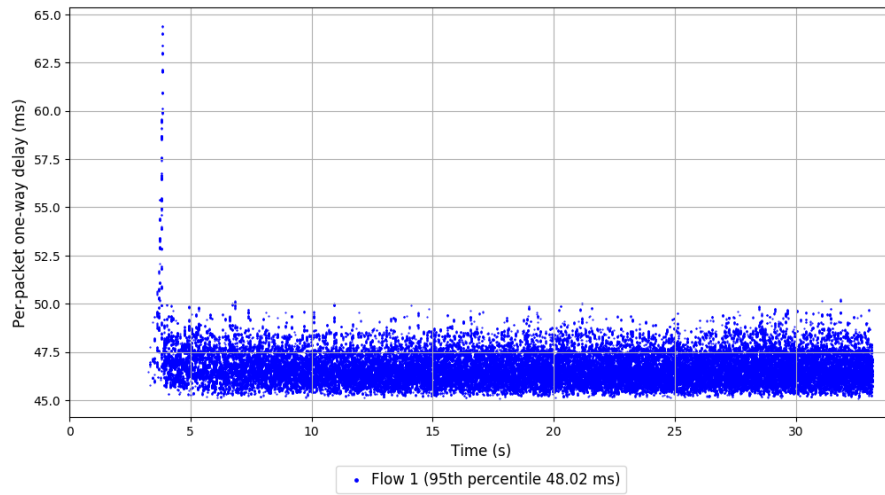
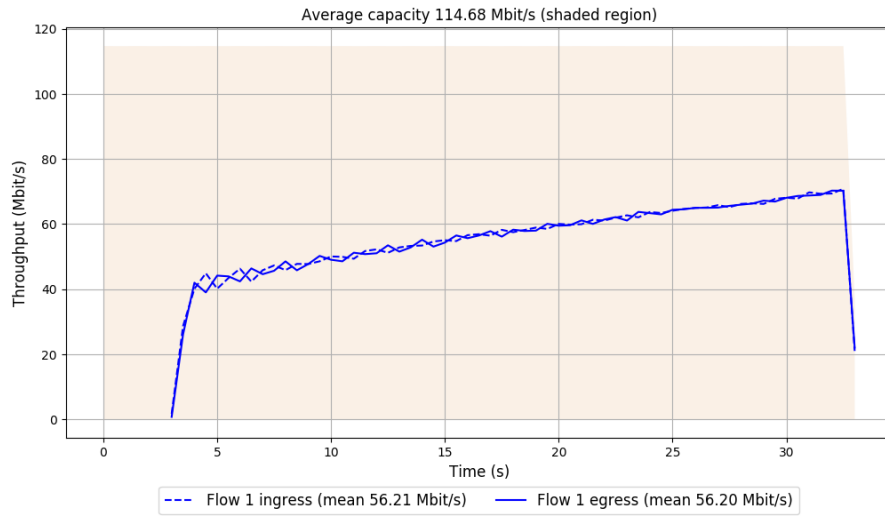
-- Flow 1:

Average throughput: 56.20 Mbit/s

95th percentile per-packet one-way delay: 48.024 ms

Loss rate: 0.17%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-03-05 19:15:34

End at: 2018-03-05 19:16:04

Below is generated by plot.py at 2018-03-05 20:08:20

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 110.72 Mbit/s (96.5% utilization)

95th percentile per-packet one-way delay: 65.717 ms

Loss rate: 0.45%

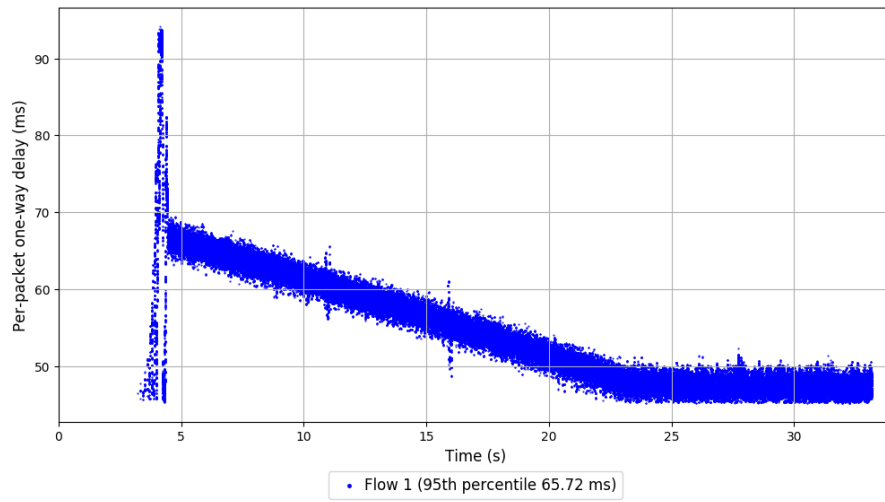
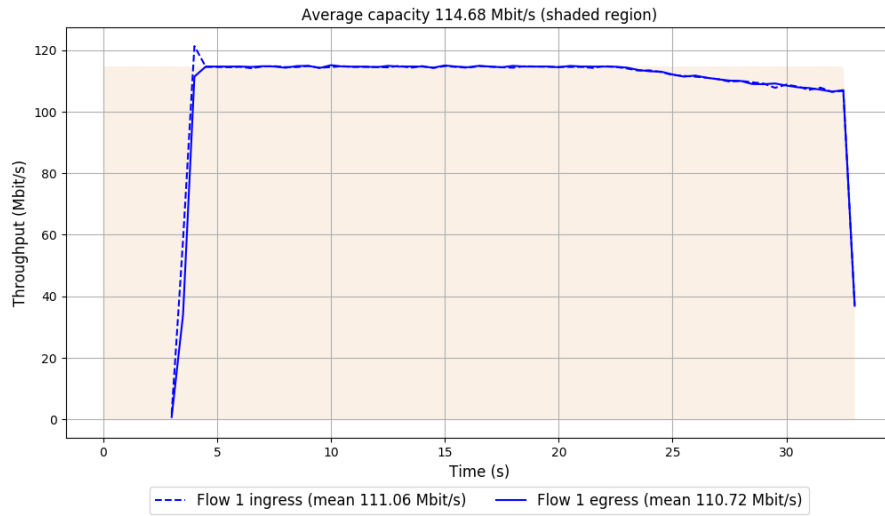
-- Flow 1:

Average throughput: 110.72 Mbit/s

95th percentile per-packet one-way delay: 65.717 ms

Loss rate: 0.45%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-03-05 19:27:30

End at: 2018-03-05 19:28:00

Below is generated by plot.py at 2018-03-05 20:08:20

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 84.68 Mbit/s (73.8% utilization)

95th percentile per-packet one-way delay: 48.713 ms

Loss rate: 0.16%

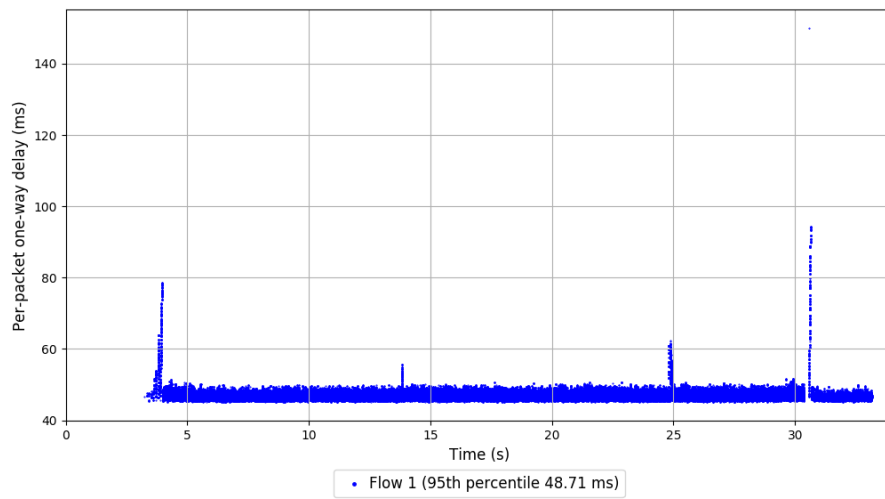
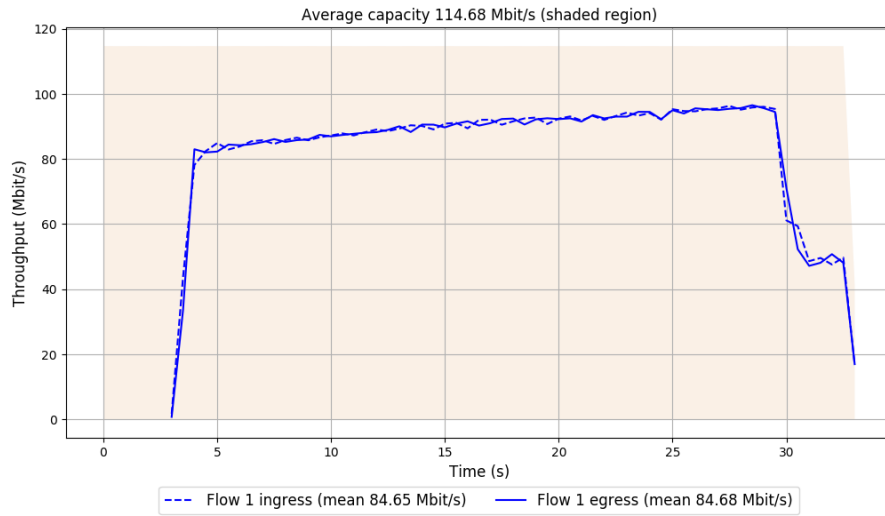
-- Flow 1:

Average throughput: 84.68 Mbit/s

95th percentile per-packet one-way delay: 48.713 ms

Loss rate: 0.16%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-03-05 19:39:25

End at: 2018-03-05 19:39:55

Below is generated by plot.py at 2018-03-05 20:08:20

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 53.55 Mbit/s (46.7% utilization)

95th percentile per-packet one-way delay: 47.983 ms

Loss rate: 0.12%

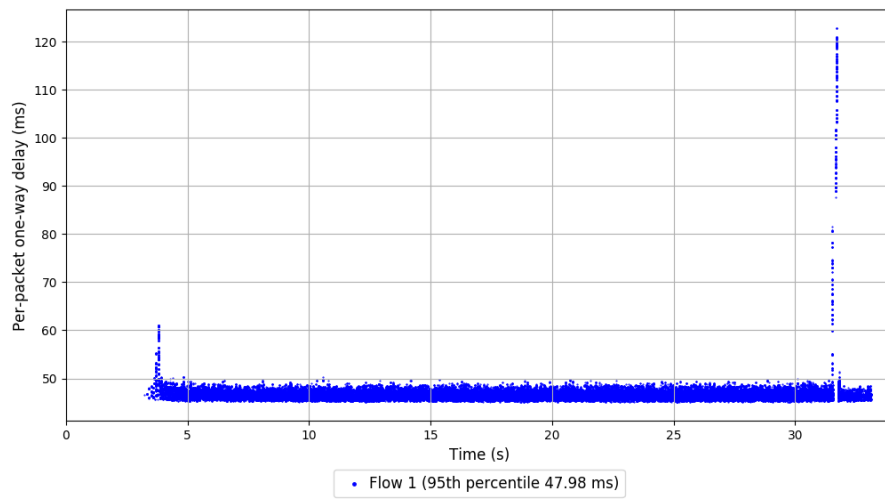
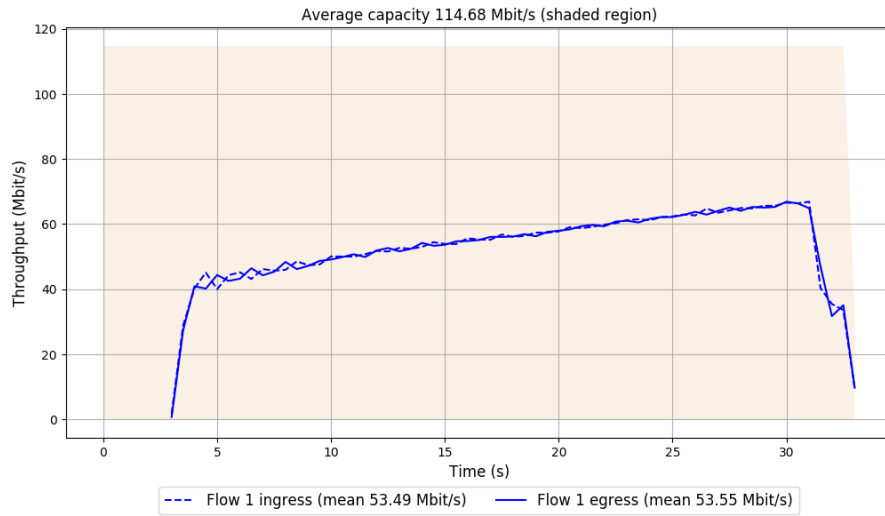
-- Flow 1:

Average throughput: 53.55 Mbit/s

95th percentile per-packet one-way delay: 47.983 ms

Loss rate: 0.12%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-03-05 17:53:21

End at: 2018-03-05 17:53:51

Below is generated by plot.py at 2018-03-05 20:08:20

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 67.85 Mbit/s (59.2% utilization)

95th percentile per-packet one-way delay: 92.262 ms

Loss rate: 34.10%

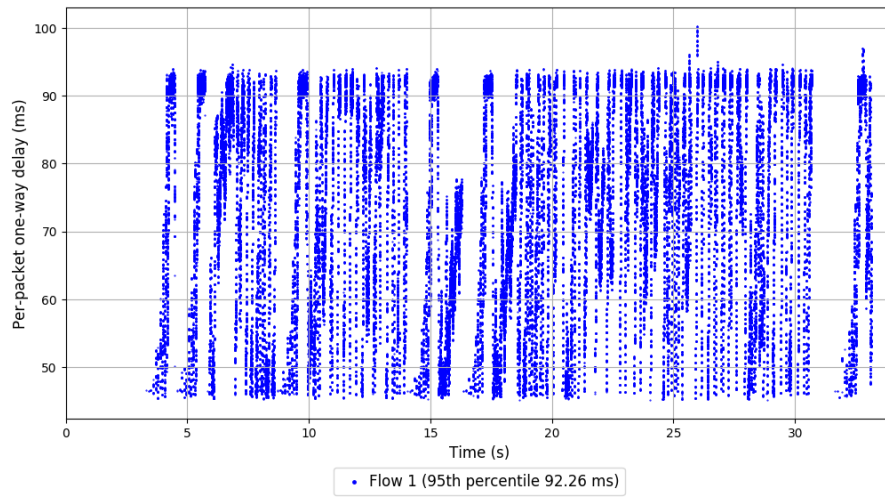
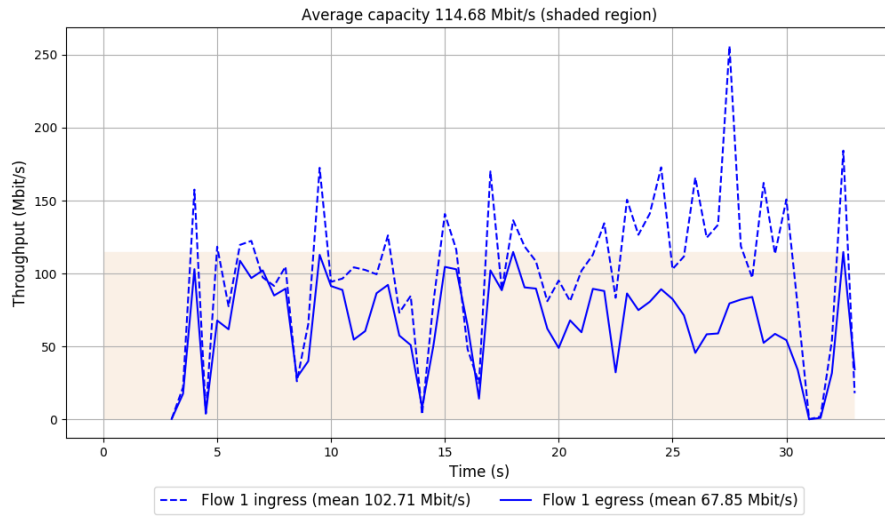
-- Flow 1:

Average throughput: 67.85 Mbit/s

95th percentile per-packet one-way delay: 92.262 ms

Loss rate: 34.10%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-03-05 18:05:12

End at: 2018-03-05 18:05:42

Below is generated by plot.py at 2018-03-05 20:08:21

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 73.76 Mbit/s (64.3% utilization)

95th percentile per-packet one-way delay: 92.084 ms

Loss rate: 22.73%

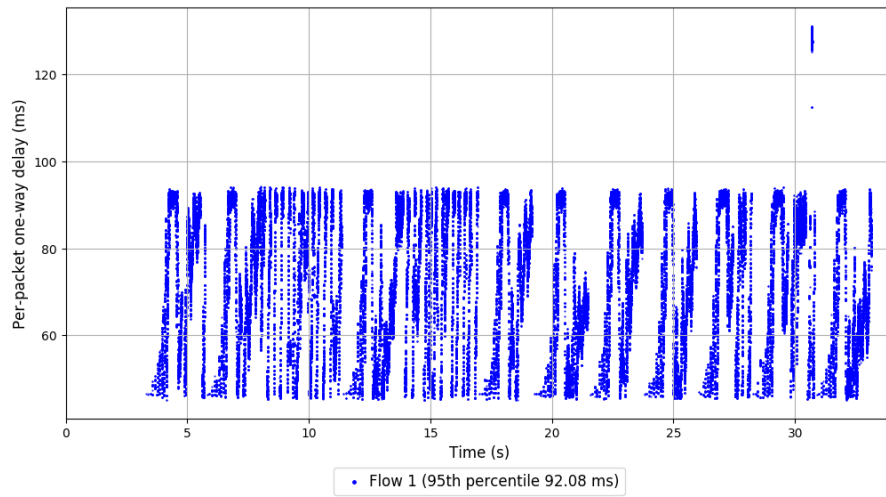
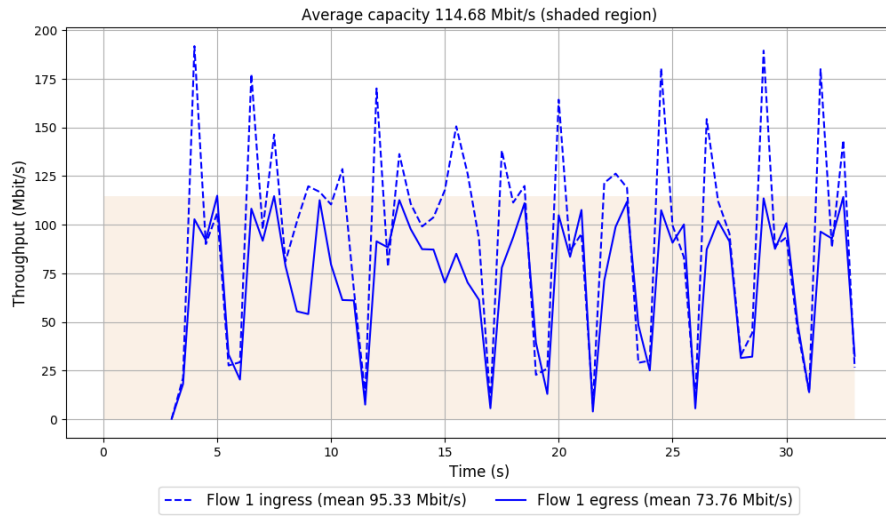
-- Flow 1:

Average throughput: 73.76 Mbit/s

95th percentile per-packet one-way delay: 92.084 ms

Loss rate: 22.73%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-03-05 18:17:14

End at: 2018-03-05 18:17:44

Below is generated by plot.py at 2018-03-05 20:08:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 64.67 Mbit/s (56.4% utilization)

95th percentile per-packet one-way delay: 92.868 ms

Loss rate: 63.94%

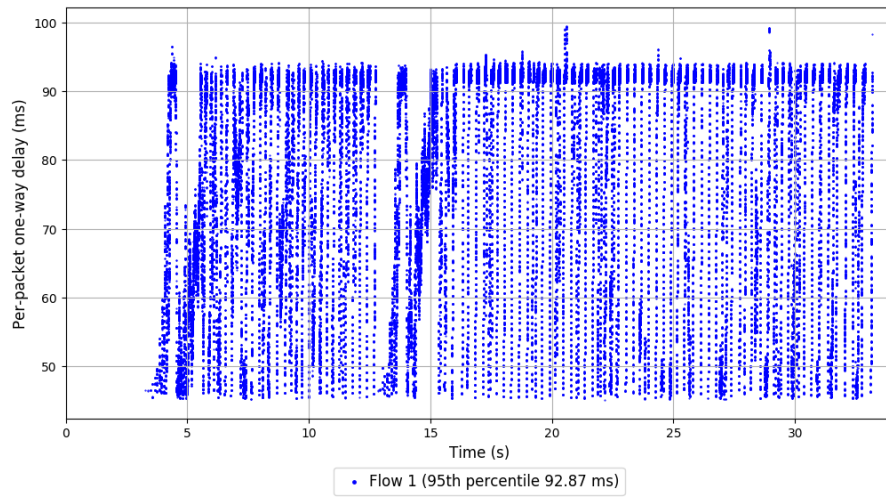
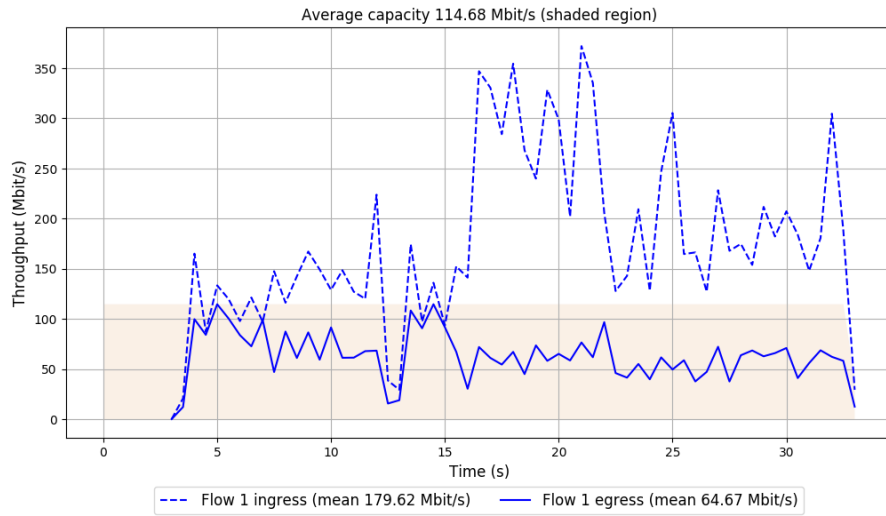
-- Flow 1:

Average throughput: 64.67 Mbit/s

95th percentile per-packet one-way delay: 92.868 ms

Loss rate: 63.94%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-03-05 18:29:08

End at: 2018-03-05 18:29:38

Below is generated by plot.py at 2018-03-05 20:08:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 73.67 Mbit/s (64.2% utilization)

95th percentile per-packet one-way delay: 91.905 ms

Loss rate: 18.66%

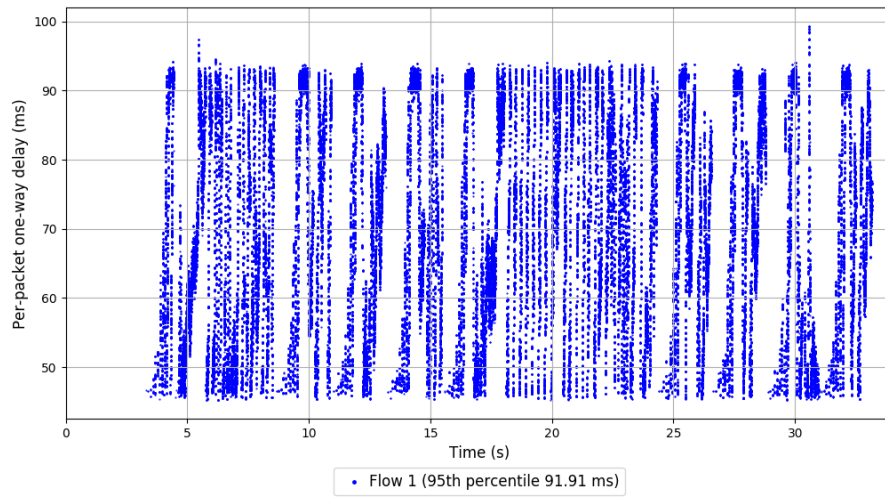
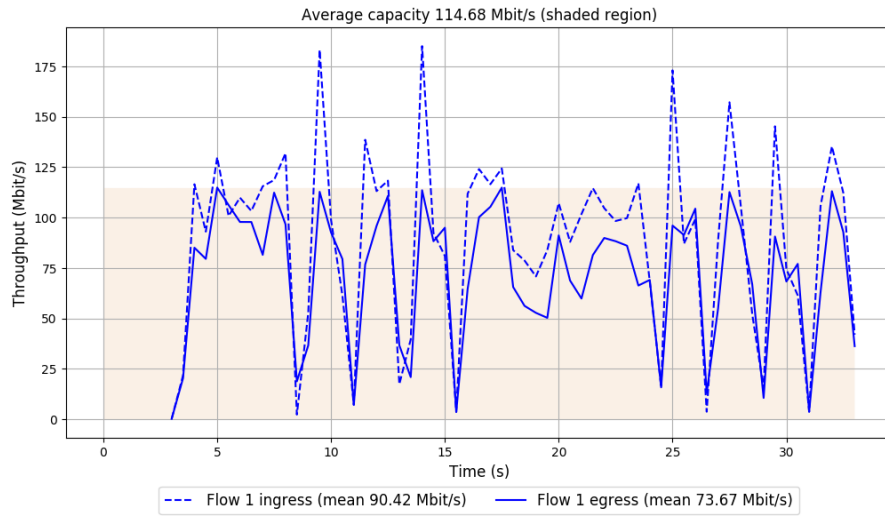
-- Flow 1:

Average throughput: 73.67 Mbit/s

95th percentile per-packet one-way delay: 91.905 ms

Loss rate: 18.66%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-03-05 18:41:02

End at: 2018-03-05 18:41:32

Below is generated by plot.py at 2018-03-05 20:09:22

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 72.31 Mbit/s (63.1% utilization)

95th percentile per-packet one-way delay: 92.123 ms

Loss rate: 26.06%

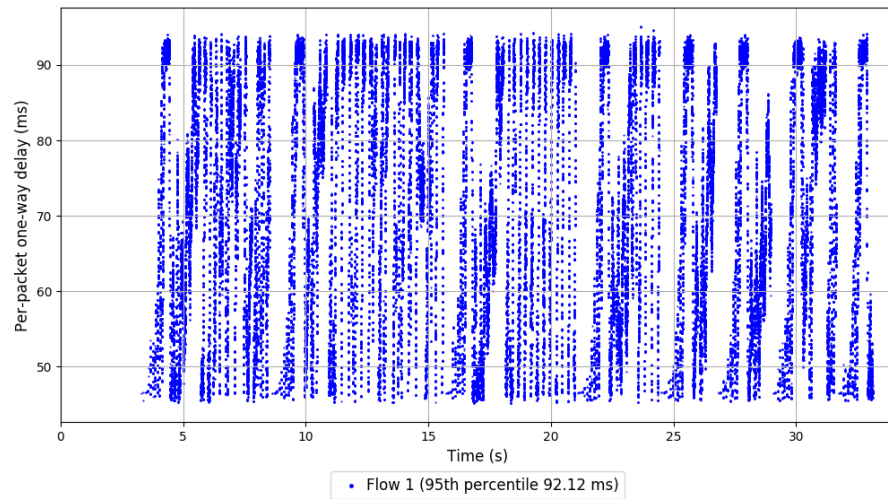
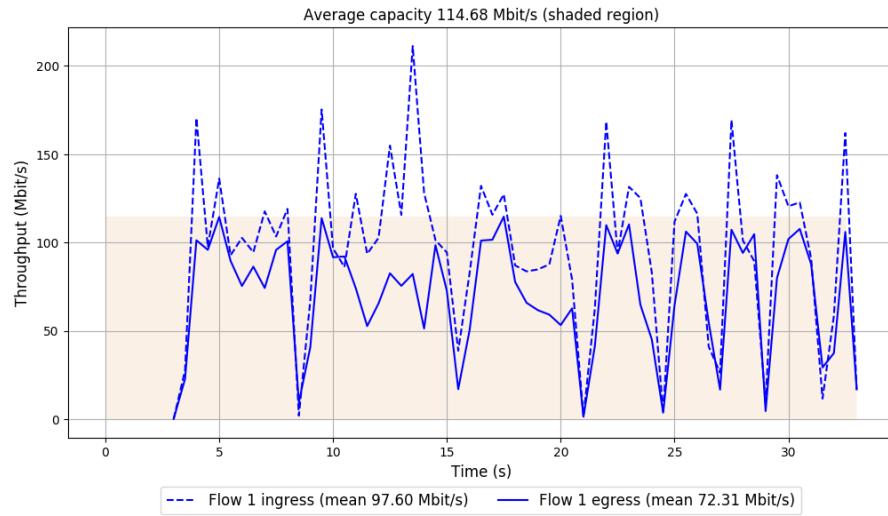
-- Flow 1:

Average throughput: 72.31 Mbit/s

95th percentile per-packet one-way delay: 92.123 ms

Loss rate: 26.06%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-03-05 18:52:55

End at: 2018-03-05 18:53:25

Below is generated by plot.py at 2018-03-05 20:09:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 70.63 Mbit/s (61.6% utilization)

95th percentile per-packet one-way delay: 92.048 ms

Loss rate: 22.47%

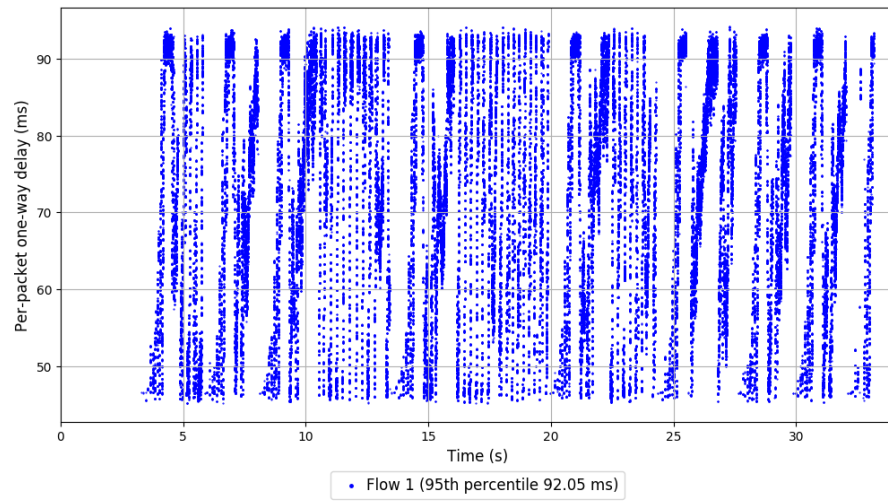
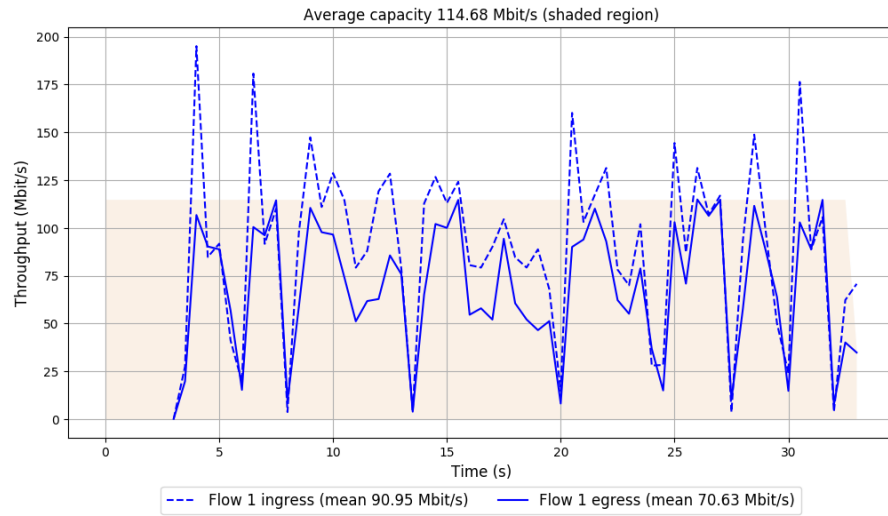
-- Flow 1:

Average throughput: 70.63 Mbit/s

95th percentile per-packet one-way delay: 92.048 ms

Loss rate: 22.47%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-03-05 19:04:47

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

Below is generated by plot.py at 2018-03-05 20:09:52

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 71.26 Mbit/s (62.1% utilization)

95th percentile per-packet one-way delay: 92.068 ms

Loss rate: 19.39%

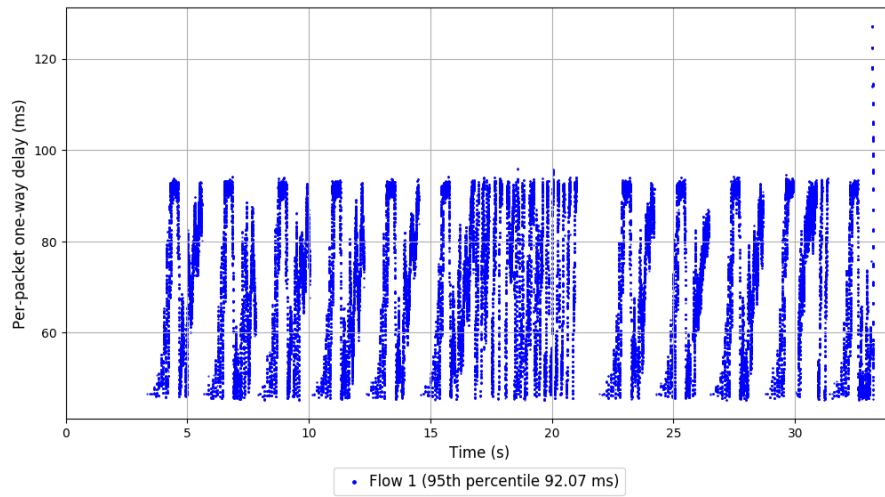
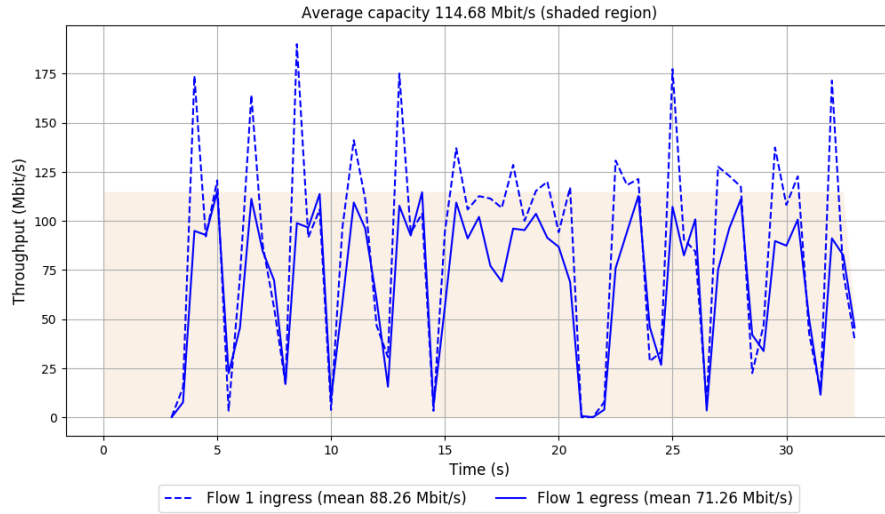
-- Flow 1:

Average throughput: 71.26 Mbit/s

95th percentile per-packet one-way delay: 92.068 ms

Loss rate: 19.39%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-03-05 19:16:56

End at: 2018-03-05 19:17:26

Below is generated by plot.py at 2018-03-05 20:10:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 68.06 Mbit/s (59.3% utilization)

95th percentile per-packet one-way delay: 92.765 ms

Loss rate: 59.23%

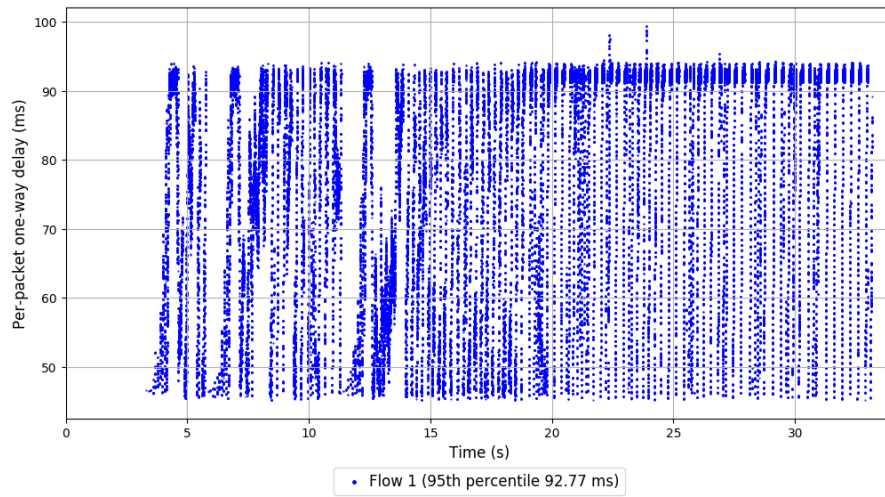
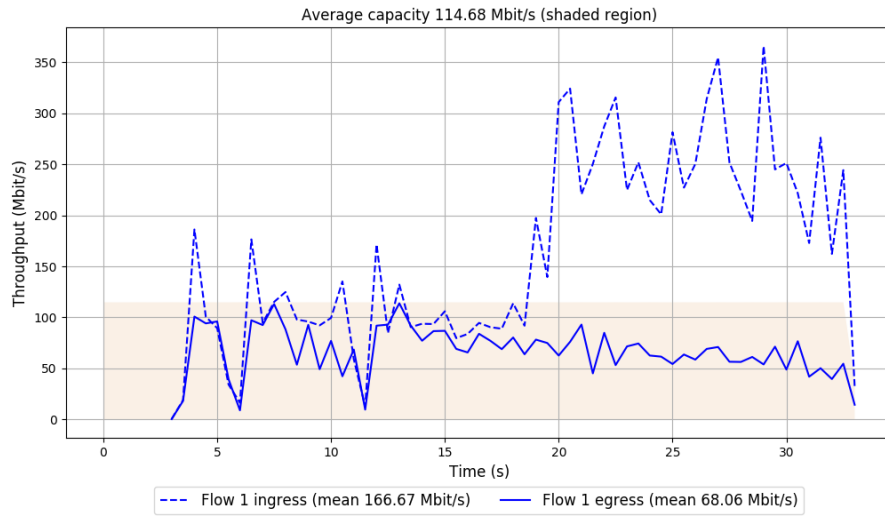
-- Flow 1:

Average throughput: 68.06 Mbit/s

95th percentile per-packet one-way delay: 92.765 ms

Loss rate: 59.23%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-03-05 19:28:52

End at: 2018-03-05 19:29:22

Below is generated by plot.py at 2018-03-05 20:10:34

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 84.93 Mbit/s (74.1% utilization)

95th percentile per-packet one-way delay: 91.705 ms

Loss rate: 13.62%

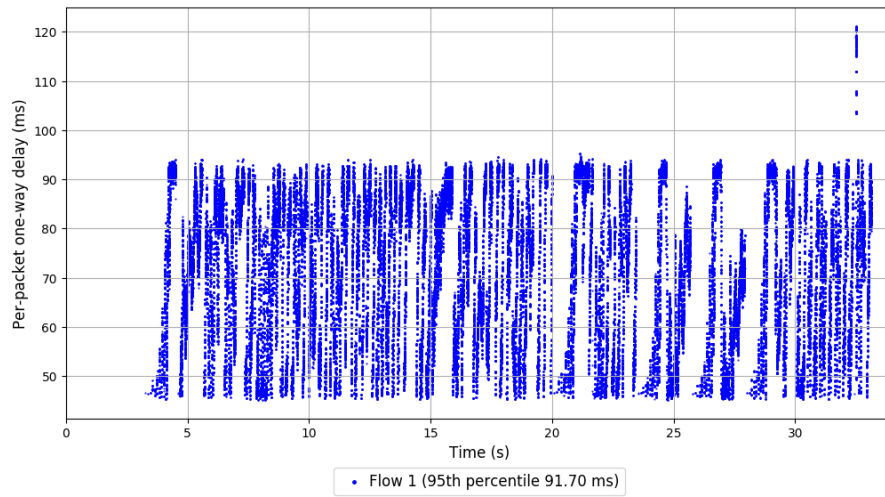
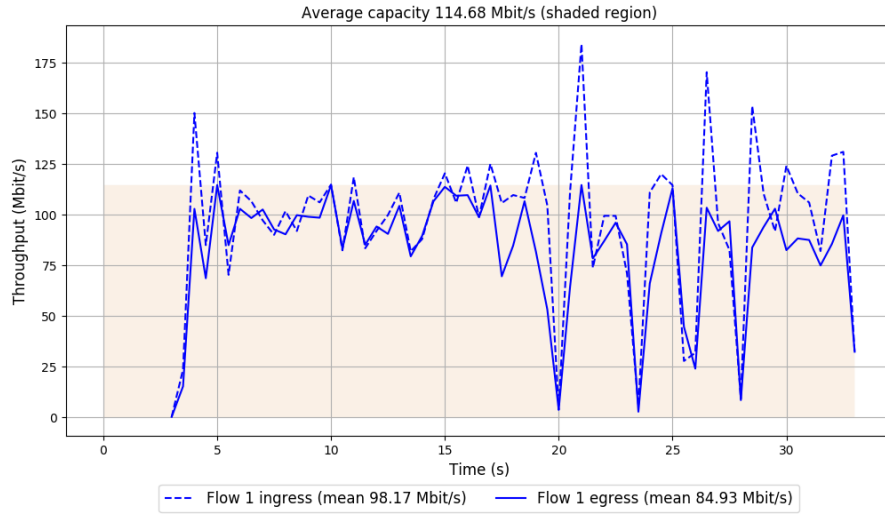
-- Flow 1:

Average throughput: 84.93 Mbit/s

95th percentile per-packet one-way delay: 91.705 ms

Loss rate: 13.62%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-03-05 19:40:43

End at: 2018-03-05 19:41:13

Below is generated by plot.py at 2018-03-05 20:10:34

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 71.98 Mbit/s (62.8% utilization)

95th percentile per-packet one-way delay: 92.295 ms

Loss rate: 35.52%

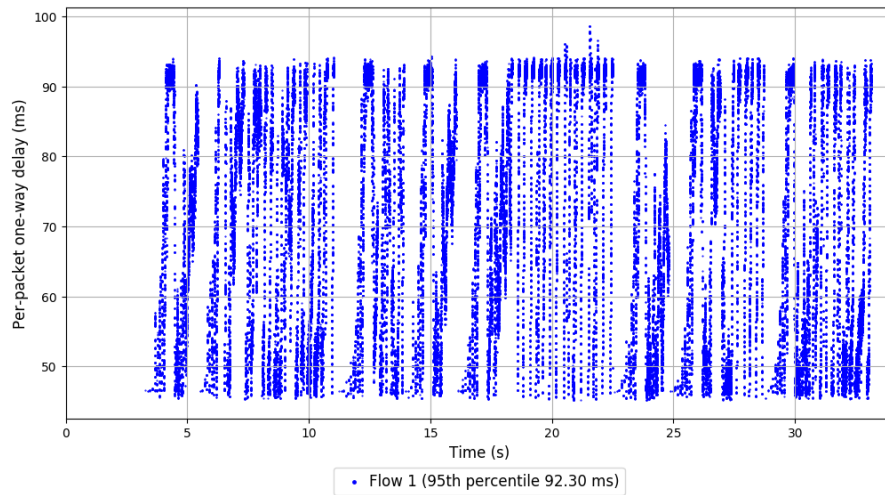
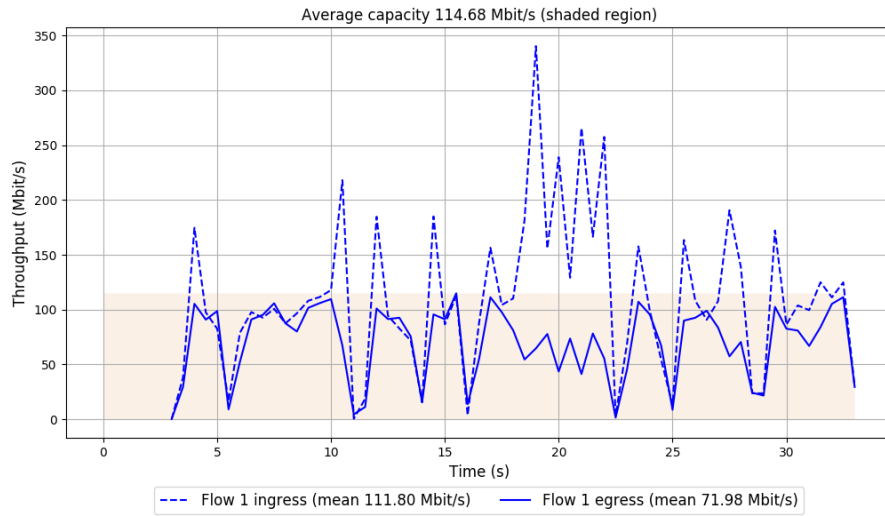
-- Flow 1:

Average throughput: 71.98 Mbit/s

95th percentile per-packet one-way delay: 92.295 ms

Loss rate: 35.52%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-03-05 17:45:31

End at: 2018-03-05 17:46:01

Below is generated by plot.py at 2018-03-05 20:10:59

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 54.37 Mbit/s (47.4% utilization)

95th percentile per-packet one-way delay: 59.337 ms

Loss rate: 0.29%

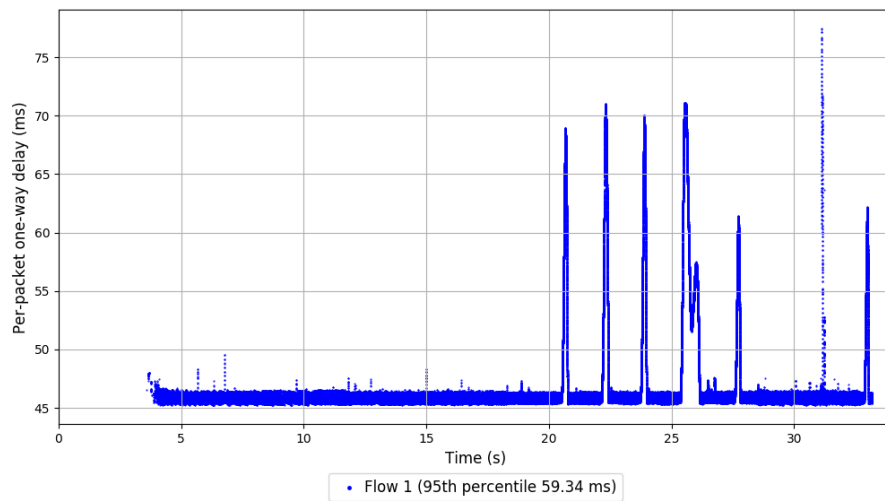
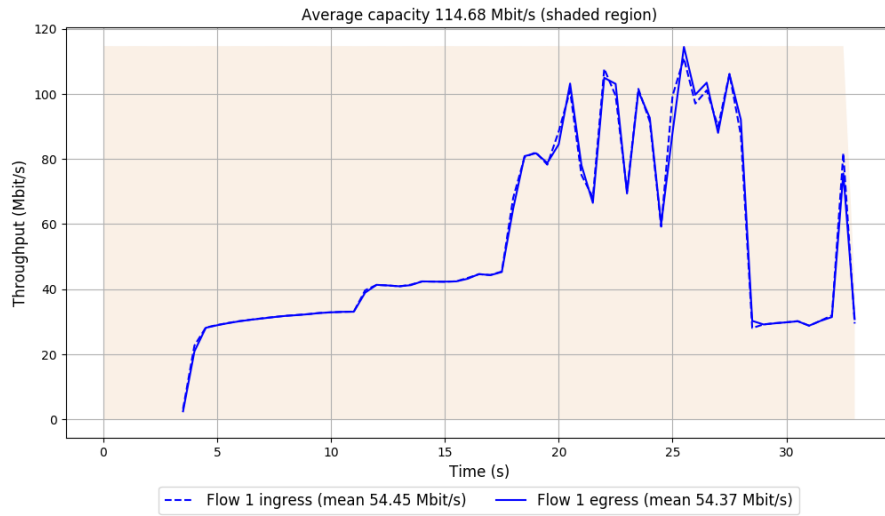
-- Flow 1:

Average throughput: 54.37 Mbit/s

95th percentile per-packet one-way delay: 59.337 ms

Loss rate: 0.29%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-03-05 17:57:20

End at: 2018-03-05 17:57:50

Below is generated by plot.py at 2018-03-05 20:11:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 56.19 Mbit/s (49.0% utilization)

95th percentile per-packet one-way delay: 49.830 ms

Loss rate: 0.09%

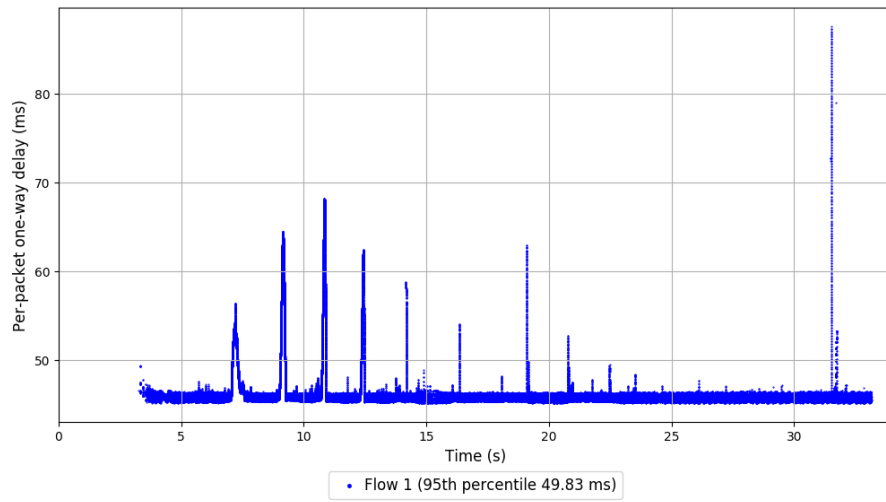
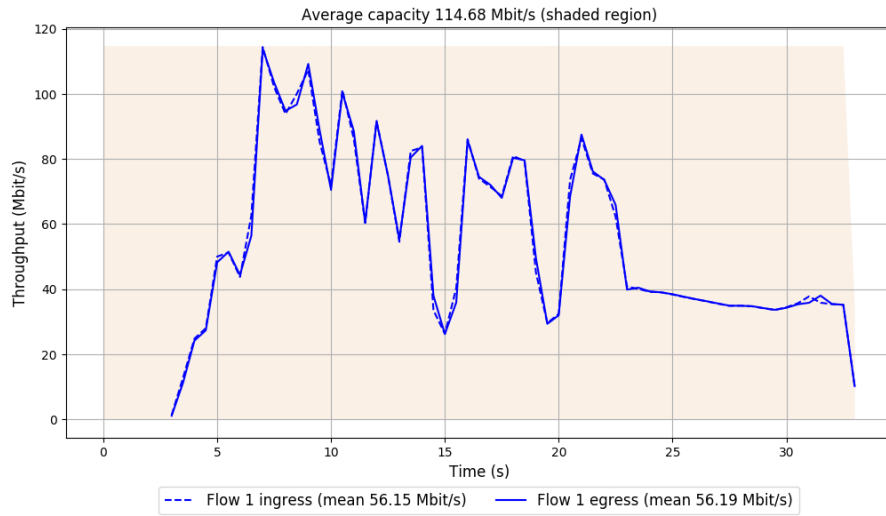
-- Flow 1:

Average throughput: 56.19 Mbit/s

95th percentile per-packet one-way delay: 49.830 ms

Loss rate: 0.09%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-03-05 18:09:12

End at: 2018-03-05 18:09:42

Below is generated by plot.py at 2018-03-05 20:15:32

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 88.17 Mbit/s (76.9% utilization)

95th percentile per-packet one-way delay: 71.372 ms

Loss rate: 77.25%

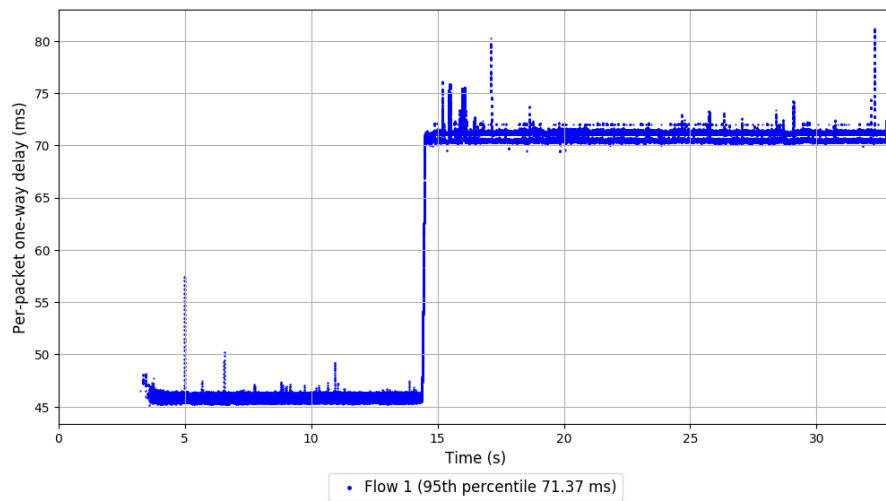
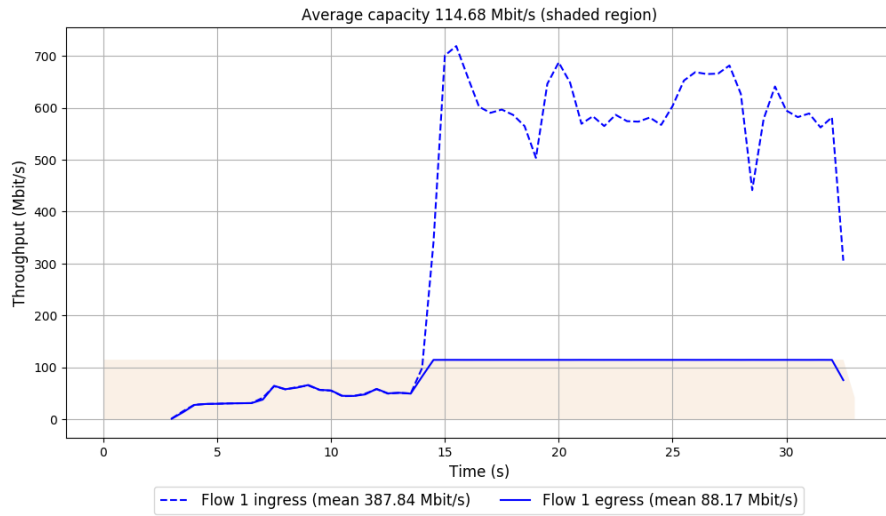
-- Flow 1:

Average throughput: 88.17 Mbit/s

95th percentile per-packet one-way delay: 71.372 ms

Loss rate: 77.25%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-03-05 18:21:16

End at: 2018-03-05 18:21:46

Below is generated by plot.py at 2018-03-05 20:15:32

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 60.20 Mbit/s (52.5% utilization)

95th percentile per-packet one-way delay: 57.277 ms

Loss rate: 0.23%

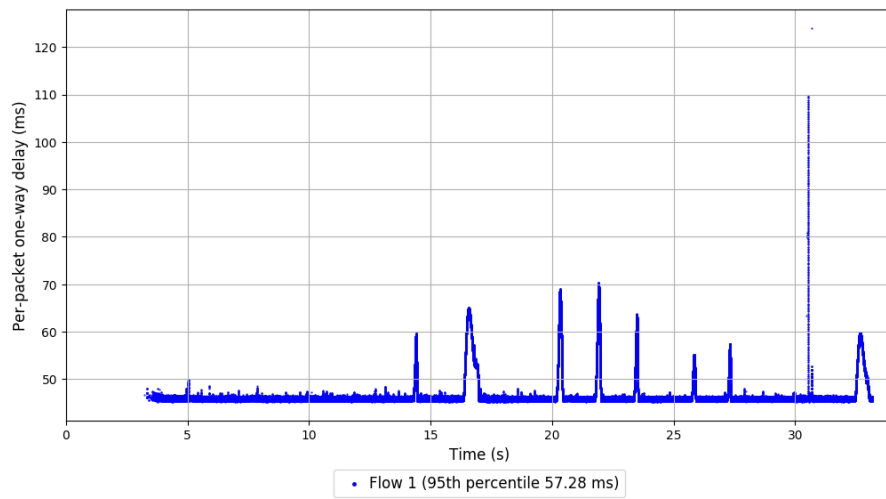
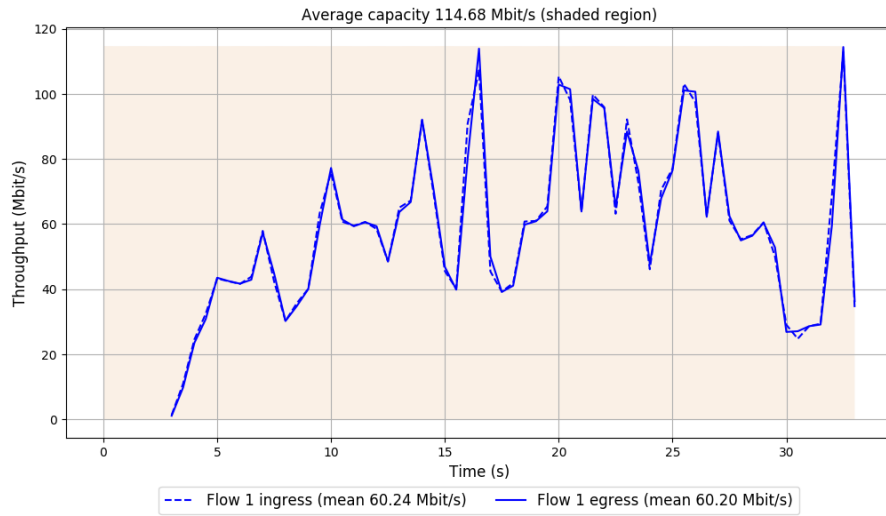
-- Flow 1:

Average throughput: 60.20 Mbit/s

95th percentile per-packet one-way delay: 57.277 ms

Loss rate: 0.23%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-03-05 18:33:08

End at: 2018-03-05 18:33:38

Below is generated by plot.py at 2018-03-05 20:15:32

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 71.51 Mbit/s (62.4% utilization)

95th percentile per-packet one-way delay: 69.788 ms

Loss rate: 0.30%

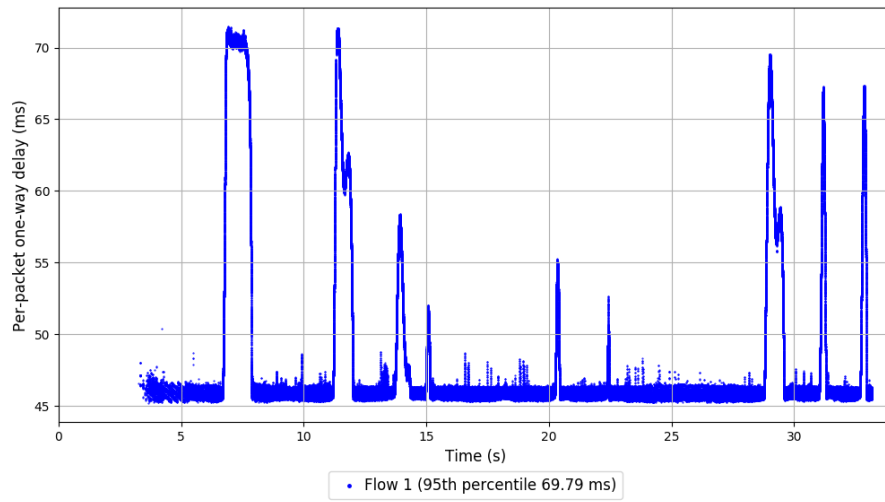
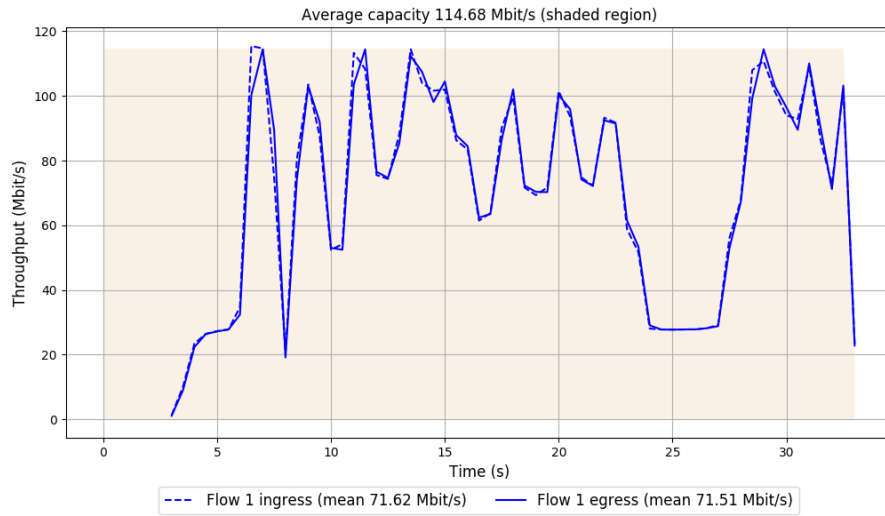
-- Flow 1:

Average throughput: 71.51 Mbit/s

95th percentile per-packet one-way delay: 69.788 ms

Loss rate: 0.30%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-03-05 18:45:01

End at: 2018-03-05 18:45:31

Below is generated by plot.py at 2018-03-05 20:15:32

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 52.92 Mbit/s (46.1% utilization)

95th percentile per-packet one-way delay: 58.777 ms

Loss rate: 0.24%

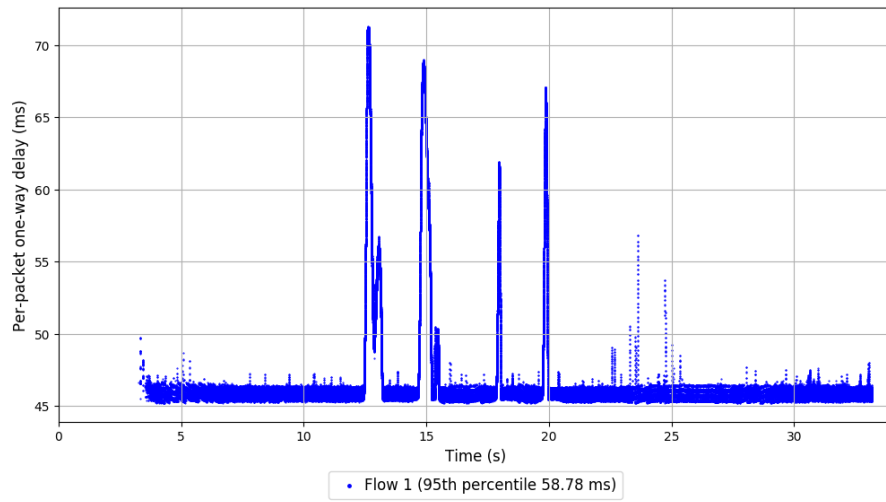
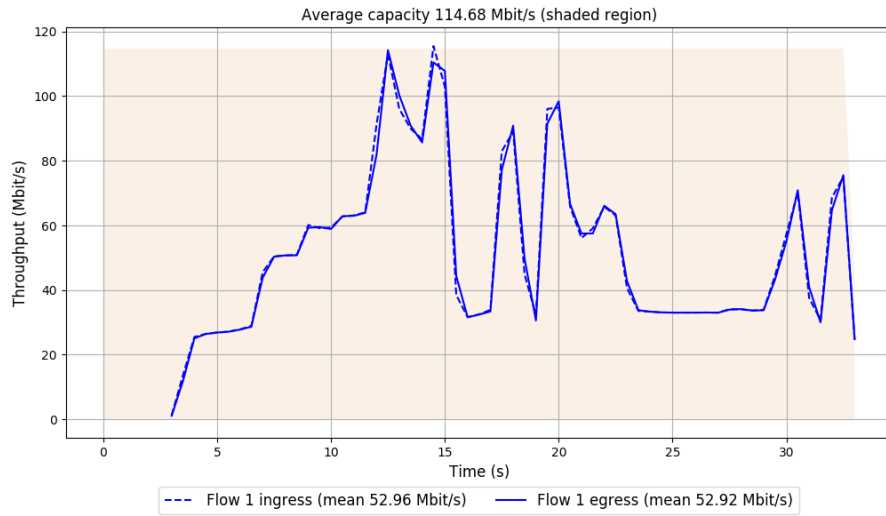
-- Flow 1:

Average throughput: 52.92 Mbit/s

95th percentile per-packet one-way delay: 58.777 ms

Loss rate: 0.24%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-03-05 18:56:55

End at: 2018-03-05 18:57:25

Below is generated by plot.py at 2018-03-05 20:15:32

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 57.07 Mbit/s (49.8% utilization)

95th percentile per-packet one-way delay: 61.612 ms

Loss rate: 0.14%

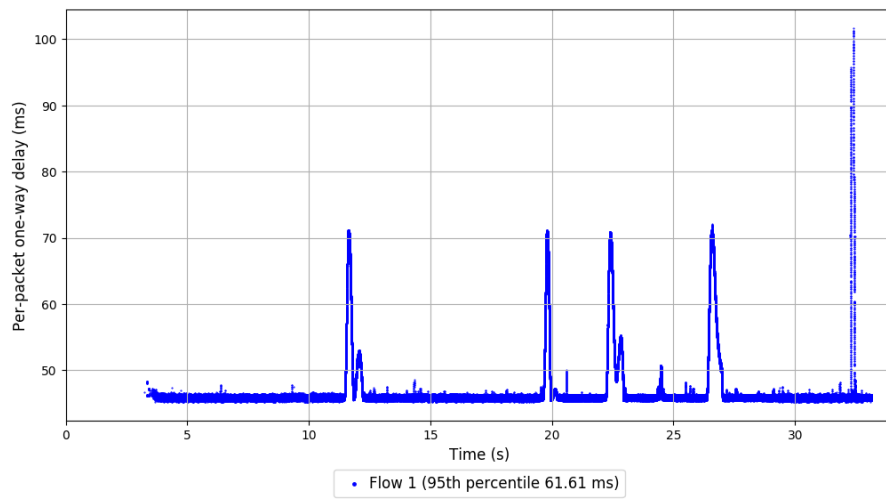
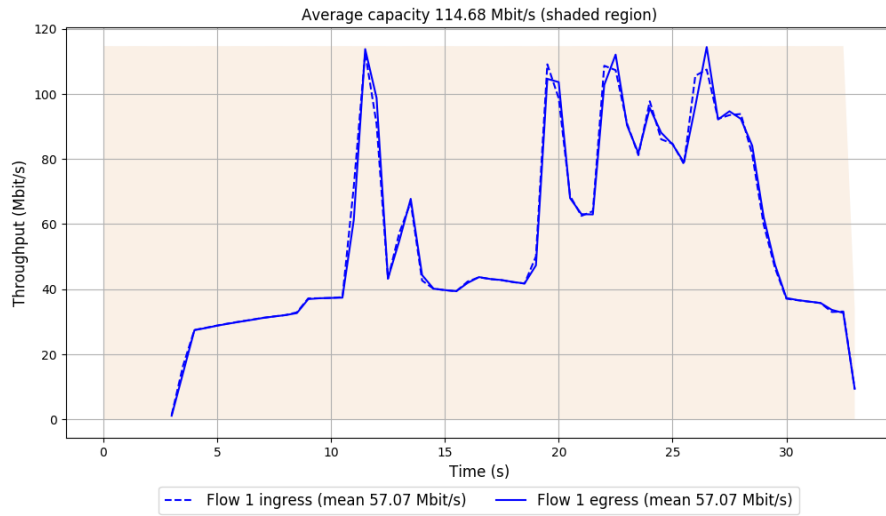
-- Flow 1:

Average throughput: 57.07 Mbit/s

95th percentile per-packet one-way delay: 61.612 ms

Loss rate: 0.14%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-03-05 19:08:48

End at: 2018-03-05 19:09:18

Below is generated by plot.py at 2018-03-05 20:17:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 104.14 Mbit/s (90.8% utilization)

95th percentile per-packet one-way delay: 71.417 ms

Loss rate: 77.55%

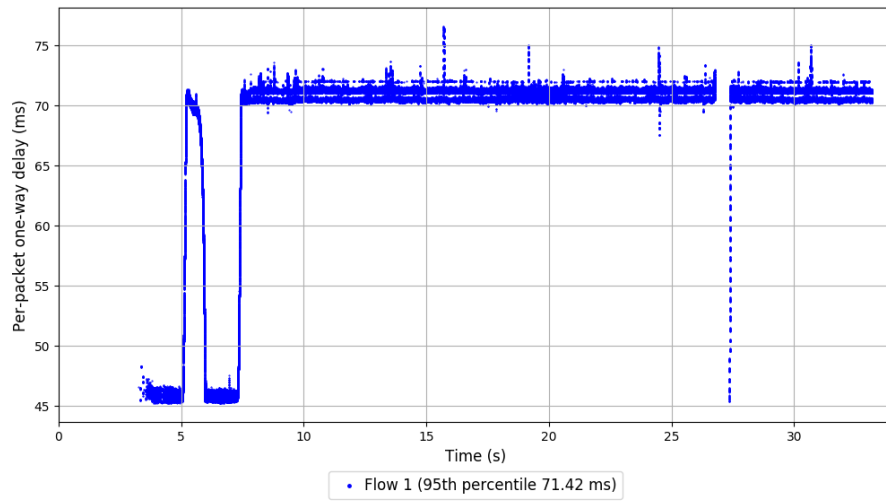
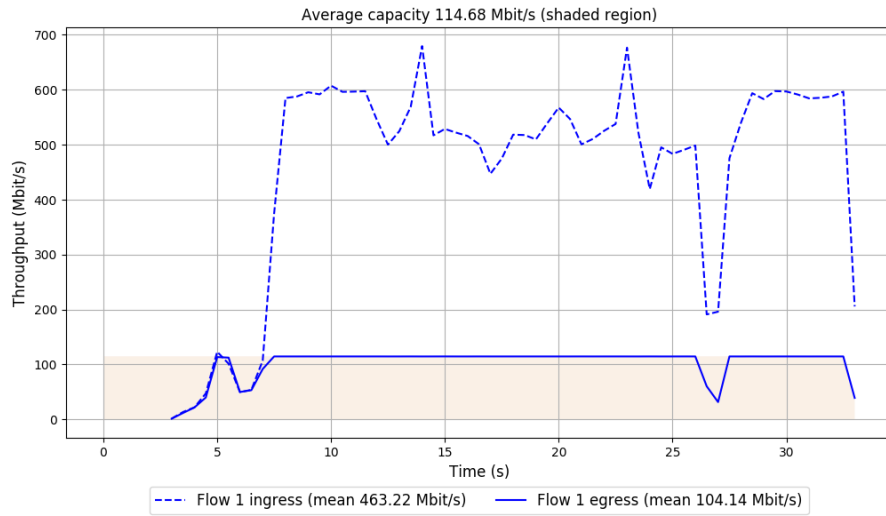
-- Flow 1:

Average throughput: 104.14 Mbit/s

95th percentile per-packet one-way delay: 71.417 ms

Loss rate: 77.55%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-03-05 19:20:57

End at: 2018-03-05 19:21:27

Below is generated by plot.py at 2018-03-05 20:17:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 58.78 Mbit/s (51.3% utilization)

95th percentile per-packet one-way delay: 61.697 ms

Loss rate: 0.30%

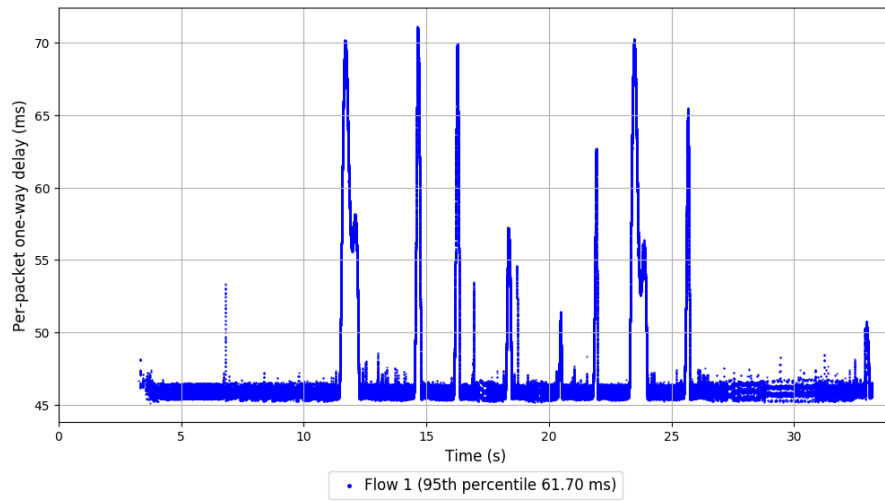
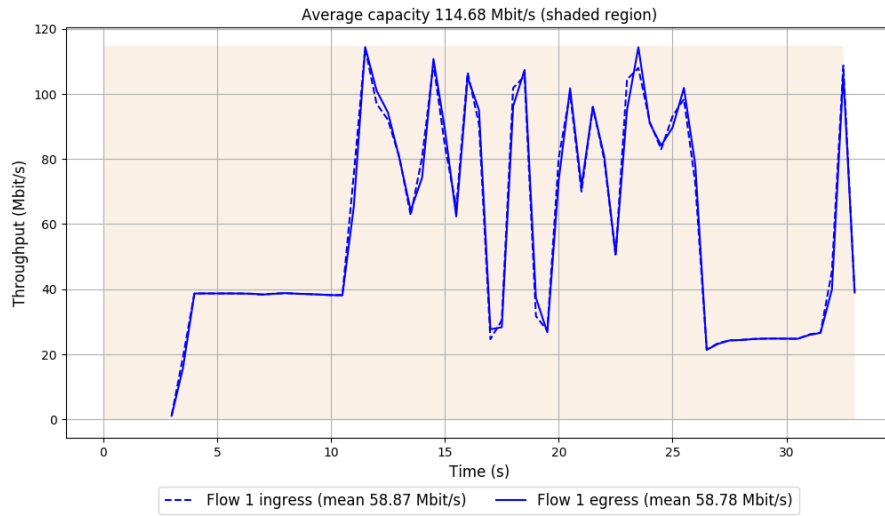
-- Flow 1:

Average throughput: 58.78 Mbit/s

95th percentile per-packet one-way delay: 61.697 ms

Loss rate: 0.30%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-03-05 19:32:53

End at: 2018-03-05 19:33:23

Below is generated by plot.py at 2018-03-05 20:17:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 55.35 Mbit/s (48.3% utilization)

95th percentile per-packet one-way delay: 61.343 ms

Loss rate: 0.25%

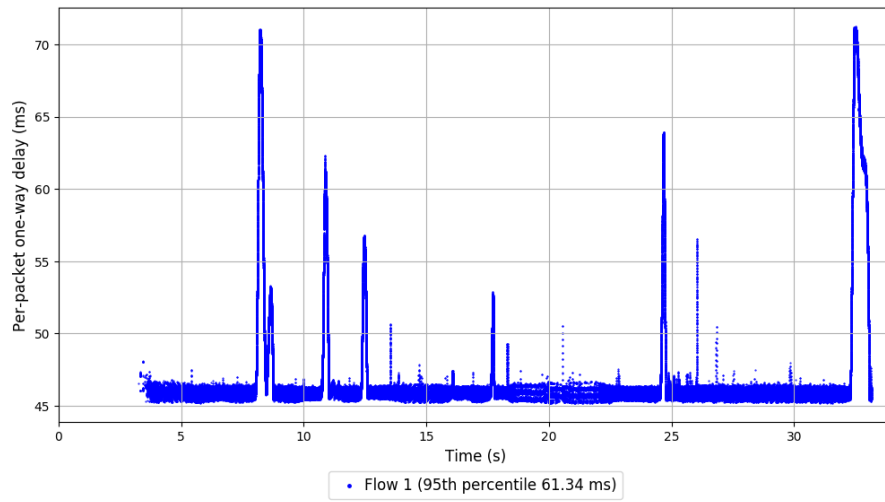
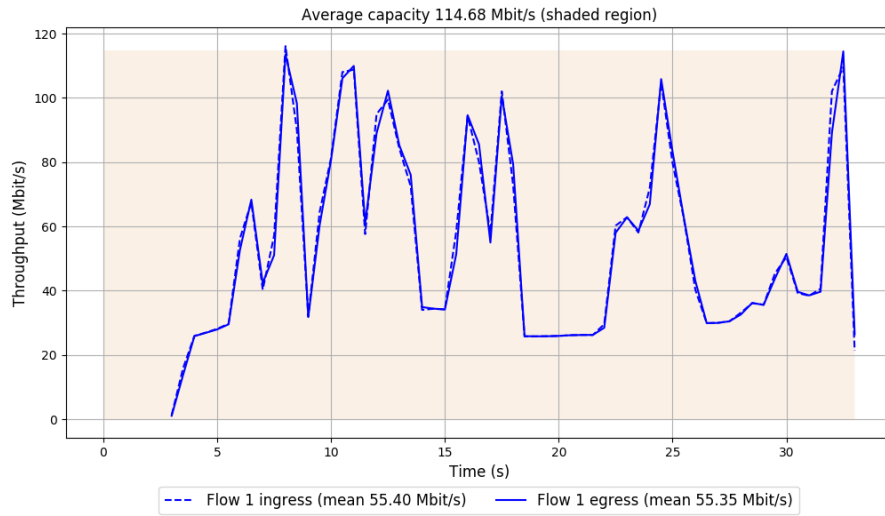
-- Flow 1:

Average throughput: 55.35 Mbit/s

95th percentile per-packet one-way delay: 61.343 ms

Loss rate: 0.25%

Run 10: Report of Copa — Data Link



Run 1: Statistics of FillP

Start at: 2018-03-05 17:50:04

End at: 2018-03-05 17:50:34

Below is generated by plot.py at 2018-03-05 20:17:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 112.95 Mbit/s (98.5% utilization)

95th percentile per-packet one-way delay: 88.682 ms

Loss rate: 17.63%

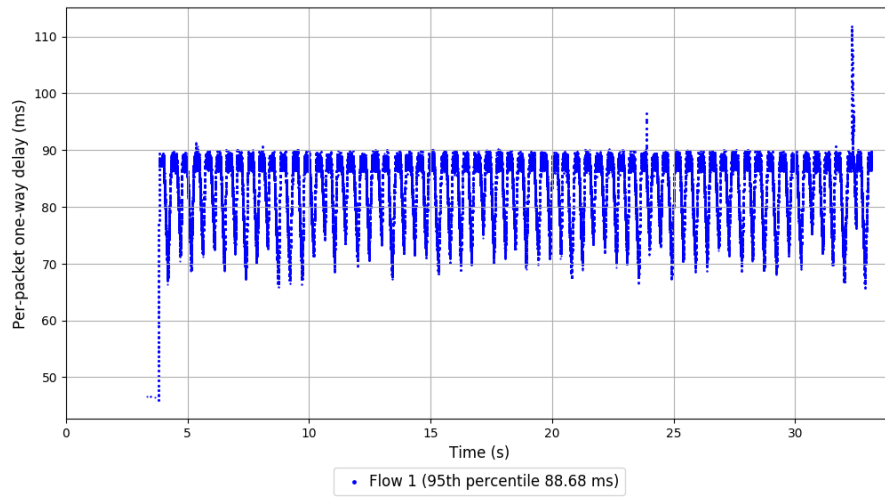
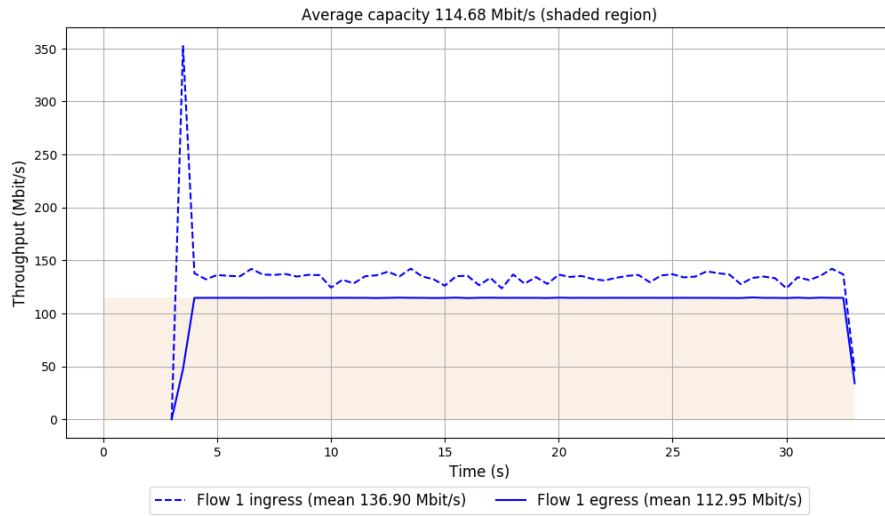
-- Flow 1:

Average throughput: 112.95 Mbit/s

95th percentile per-packet one-way delay: 88.682 ms

Loss rate: 17.63%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-03-05 18:01:54

End at: 2018-03-05 18:02:24

Below is generated by plot.py at 2018-03-05 20:17:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 113.43 Mbit/s (98.9% utilization)

95th percentile per-packet one-way delay: 88.701 ms

Loss rate: 17.46%

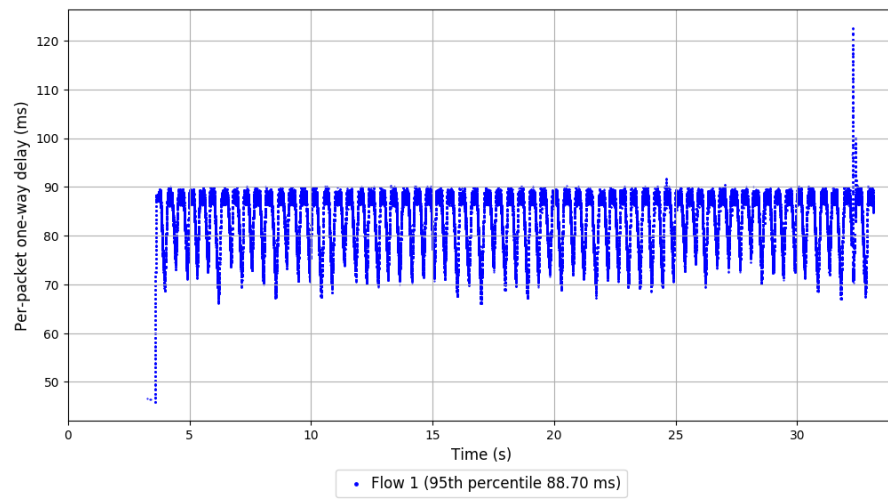
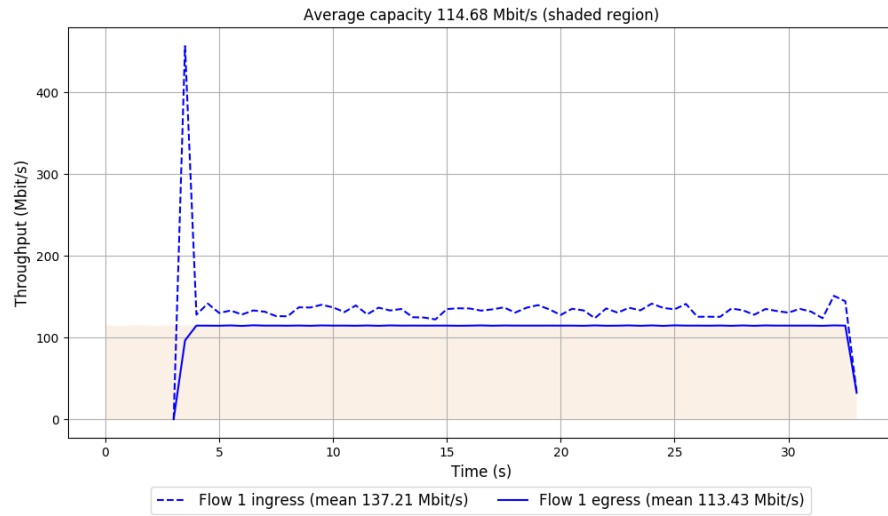
-- Flow 1:

Average throughput: 113.43 Mbit/s

95th percentile per-packet one-way delay: 88.701 ms

Loss rate: 17.46%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-03-05 18:13:55

End at: 2018-03-05 18:14:25

Below is generated by plot.py at 2018-03-05 20:17:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 113.39 Mbit/s (98.9% utilization)

95th percentile per-packet one-way delay: 88.684 ms

Loss rate: 17.39%

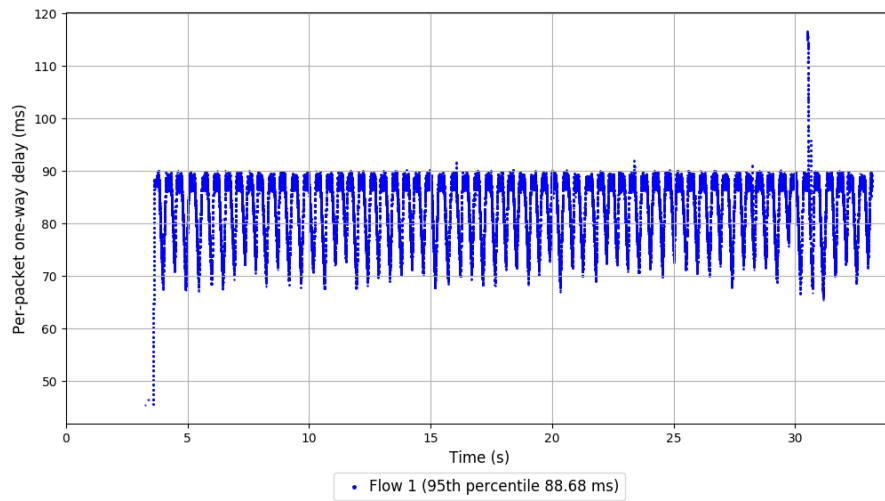
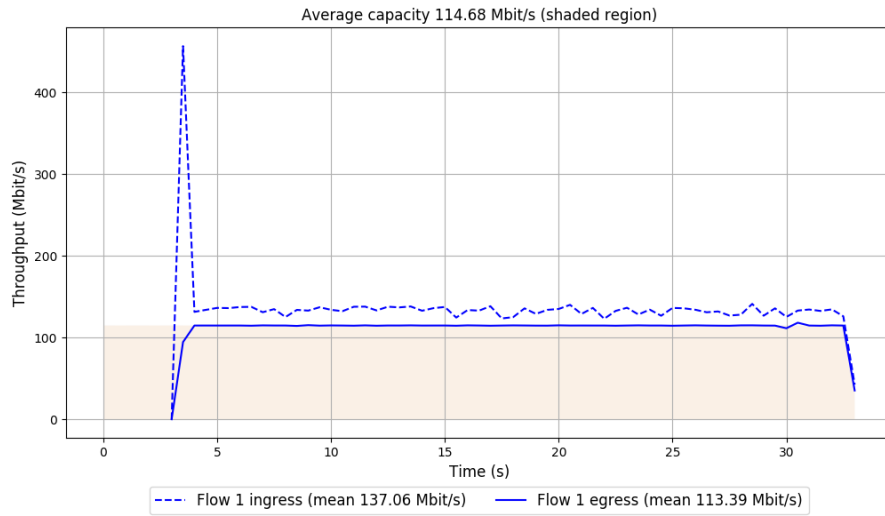
-- Flow 1:

Average throughput: 113.39 Mbit/s

95th percentile per-packet one-way delay: 88.684 ms

Loss rate: 17.39%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-03-05 18:25:50

End at: 2018-03-05 18:26:20

Below is generated by plot.py at 2018-03-05 20:17:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 113.32 Mbit/s (98.8% utilization)

95th percentile per-packet one-way delay: 88.673 ms

Loss rate: 16.97%

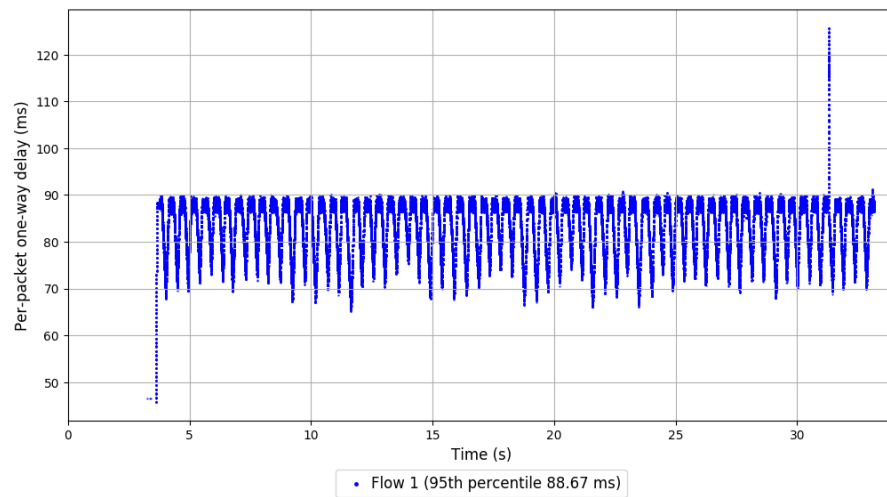
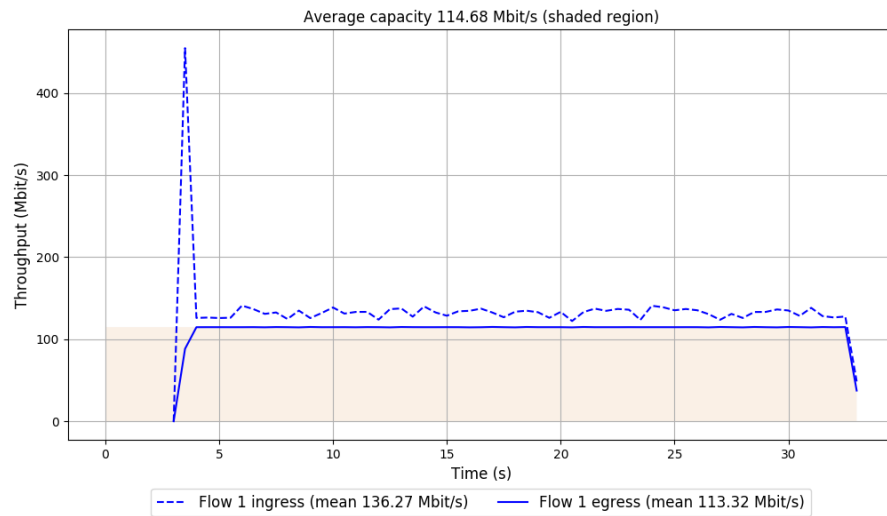
-- Flow 1:

Average throughput: 113.32 Mbit/s

95th percentile per-packet one-way delay: 88.673 ms

Loss rate: 16.97%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-03-05 18:37:43

End at: 2018-03-05 18:38:13

Below is generated by plot.py at 2018-03-05 20:17:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 113.29 Mbit/s (98.8% utilization)

95th percentile per-packet one-way delay: 88.708 ms

Loss rate: 17.37%

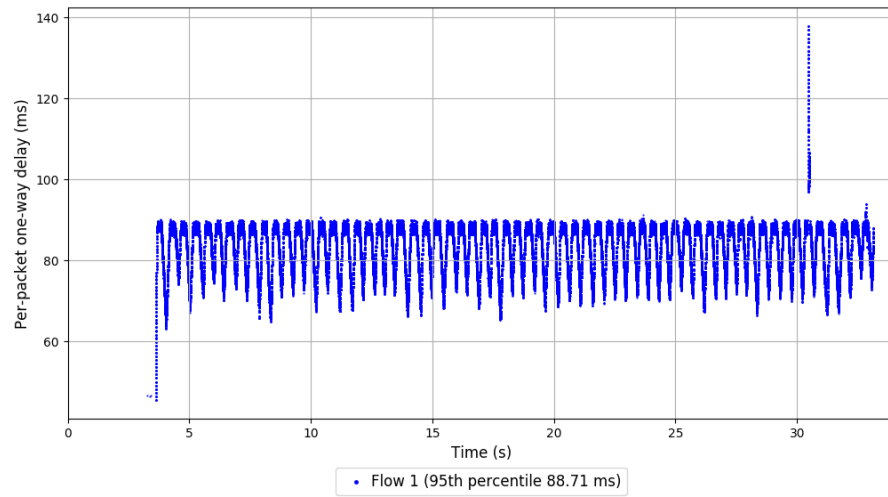
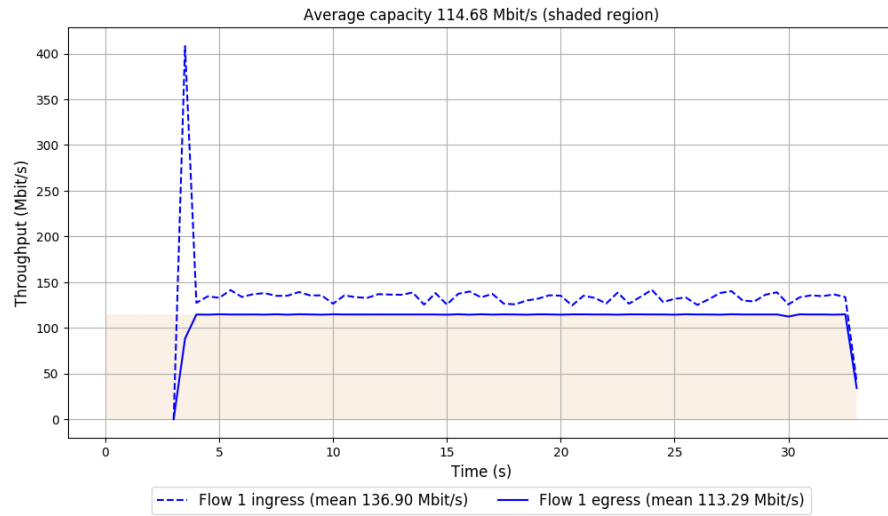
-- Flow 1:

Average throughput: 113.29 Mbit/s

95th percentile per-packet one-way delay: 88.708 ms

Loss rate: 17.37%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-03-05 18:49:36

End at: 2018-03-05 18:50:06

Below is generated by plot.py at 2018-03-05 20:17:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 113.31 Mbit/s (98.8% utilization)

95th percentile per-packet one-way delay: 88.688 ms

Loss rate: 17.76%

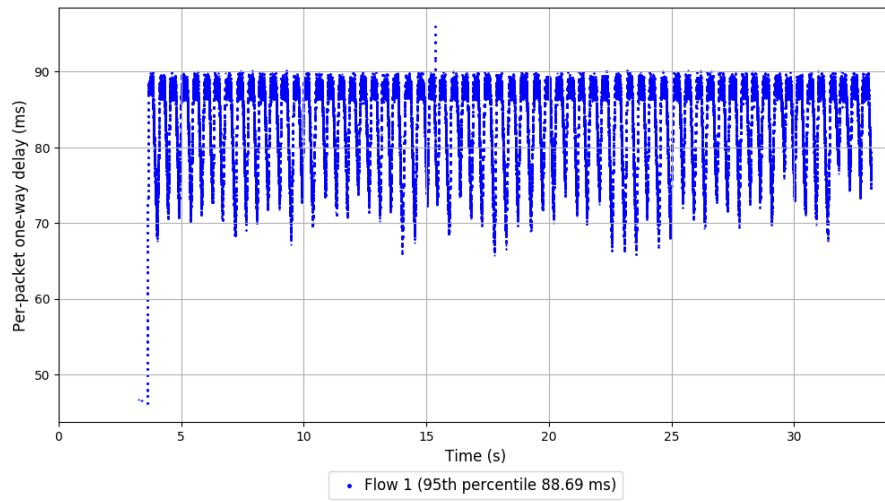
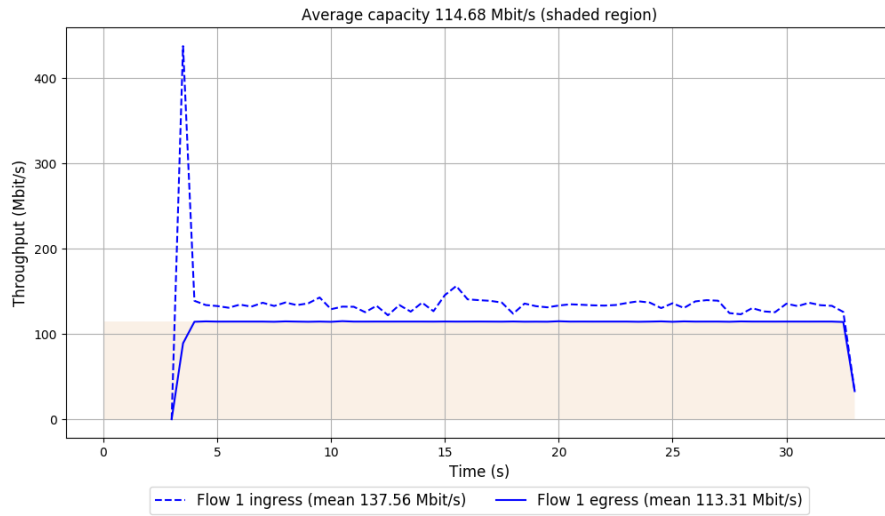
-- Flow 1:

Average throughput: 113.31 Mbit/s

95th percentile per-packet one-way delay: 88.688 ms

Loss rate: 17.76%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-03-05 19:01:30

End at: 2018-03-05 19:02:00

Below is generated by plot.py at 2018-03-05 20:18:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 113.33 Mbit/s (98.8% utilization)

95th percentile per-packet one-way delay: 88.695 ms

Loss rate: 17.42%

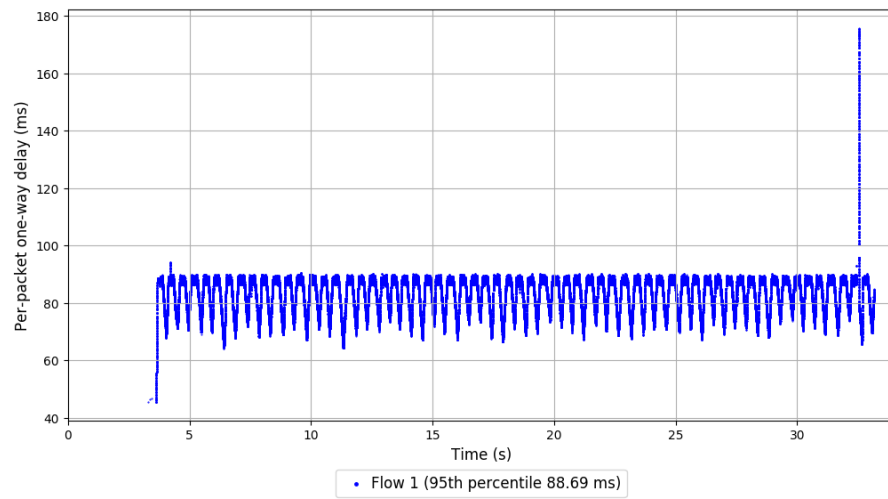
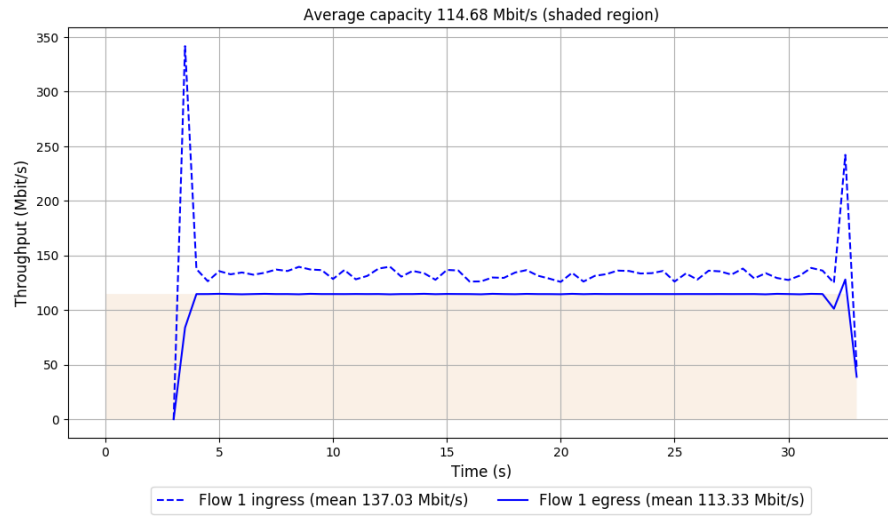
-- Flow 1:

Average throughput: 113.33 Mbit/s

95th percentile per-packet one-way delay: 88.695 ms

Loss rate: 17.42%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-03-05 19:13:37

End at: 2018-03-05 19:14:07

Below is generated by plot.py at 2018-03-05 20:18:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 113.42 Mbit/s (98.9% utilization)

95th percentile per-packet one-way delay: 88.711 ms

Loss rate: 17.06%

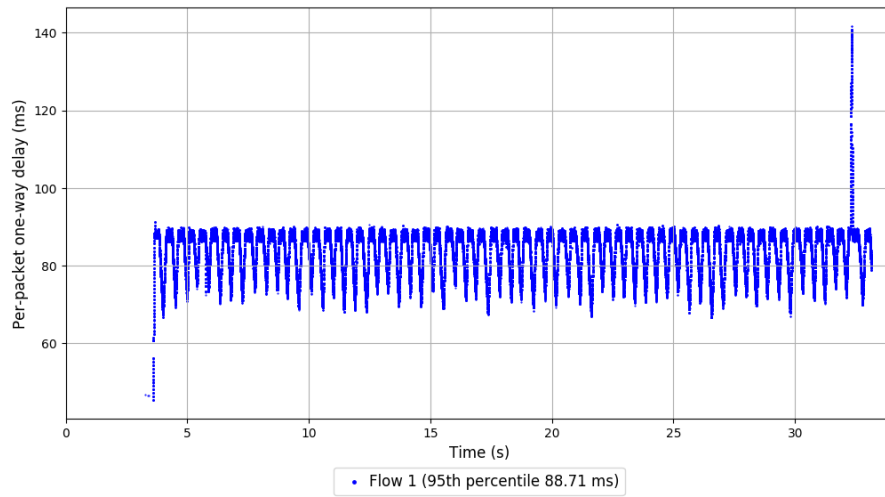
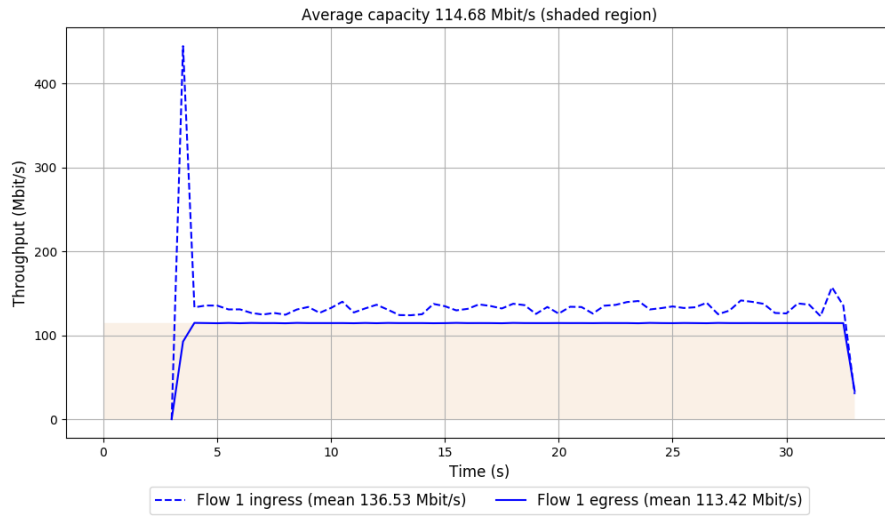
-- Flow 1:

Average throughput: 113.42 Mbit/s

95th percentile per-packet one-way delay: 88.711 ms

Loss rate: 17.06%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-03-05 19:25:32

End at: 2018-03-05 19:26:02

Below is generated by plot.py at 2018-03-05 20:18:55

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 113.35 Mbit/s (98.8% utilization)

95th percentile per-packet one-way delay: 88.672 ms

Loss rate: 16.67%

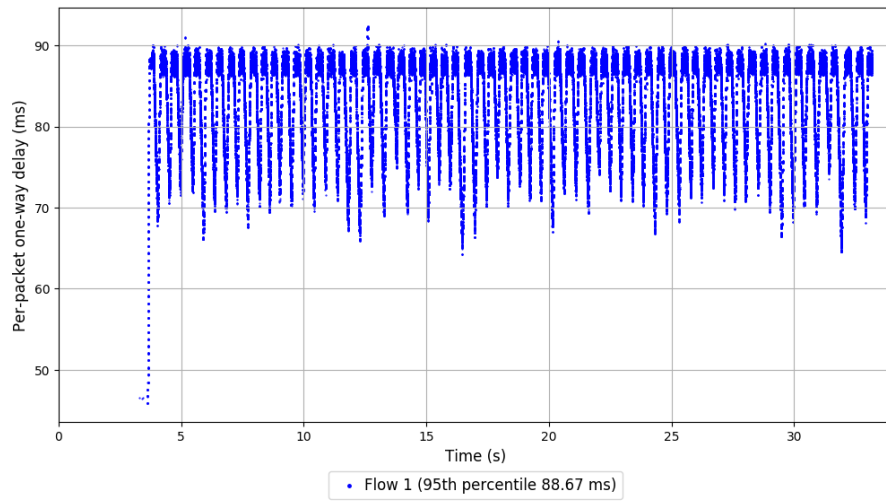
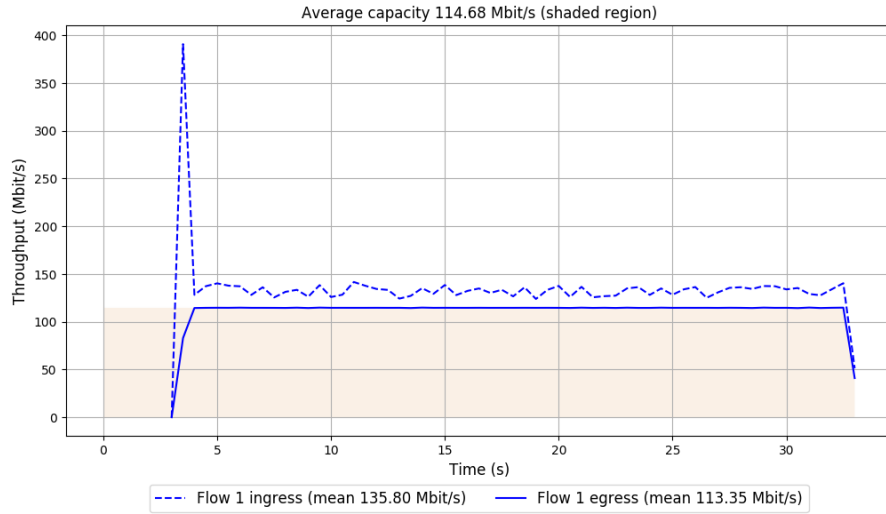
-- Flow 1:

Average throughput: 113.35 Mbit/s

95th percentile per-packet one-way delay: 88.672 ms

Loss rate: 16.67%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-03-05 19:37:27

End at: 2018-03-05 19:37:57

Below is generated by plot.py at 2018-03-05 20:18:58

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 113.29 Mbit/s (98.8% utilization)

95th percentile per-packet one-way delay: 88.687 ms

Loss rate: 16.99%

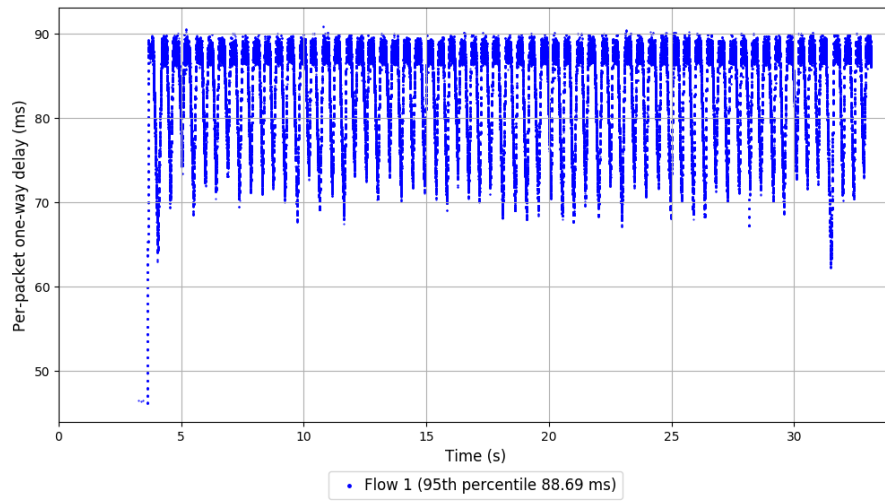
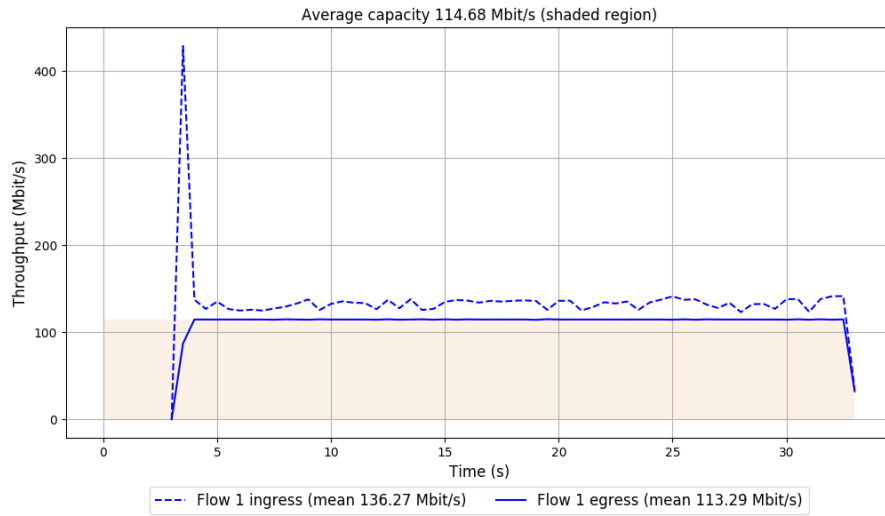
-- Flow 1:

Average throughput: 113.29 Mbit/s

95th percentile per-packet one-way delay: 88.687 ms

Loss rate: 16.99%

Run 10: Report of FillP — Data Link



Run 1: Statistics of Indigo-1-32

Start at: 2018-03-05 17:44:15

End at: 2018-03-05 17:44:45

Below is generated by plot.py at 2018-03-05 20:18:58

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 7.27 Mbit/s (6.3% utilization)

95th percentile per-packet one-way delay: 48.893 ms

Loss rate: 0.67%

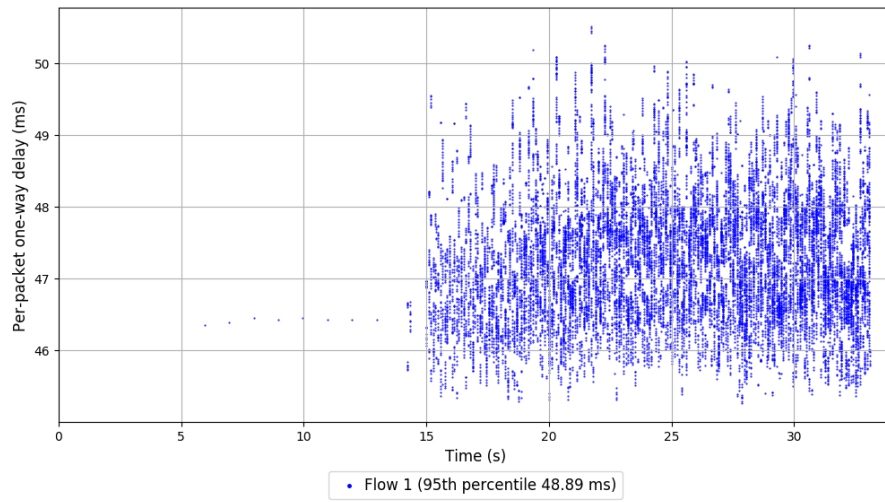
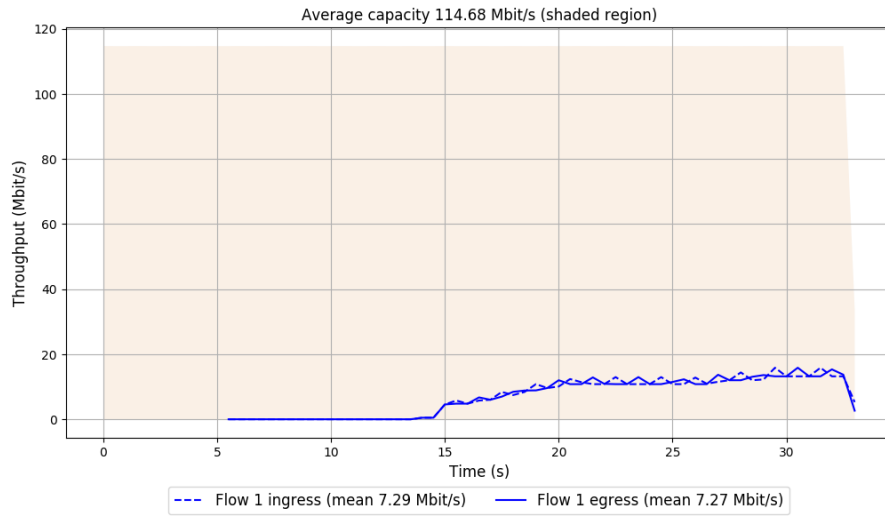
-- Flow 1:

Average throughput: 7.27 Mbit/s

95th percentile per-packet one-way delay: 48.893 ms

Loss rate: 0.67%

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



Run 2: Statistics of Indigo-1-32

Start at: 2018-03-05 17:55:58

End at: 2018-03-05 17:56:28

Below is generated by plot.py at 2018-03-05 20:19:09

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 109.32 Mbit/s (95.3% utilization)

95th percentile per-packet one-way delay: 51.694 ms

Loss rate: 0.20%

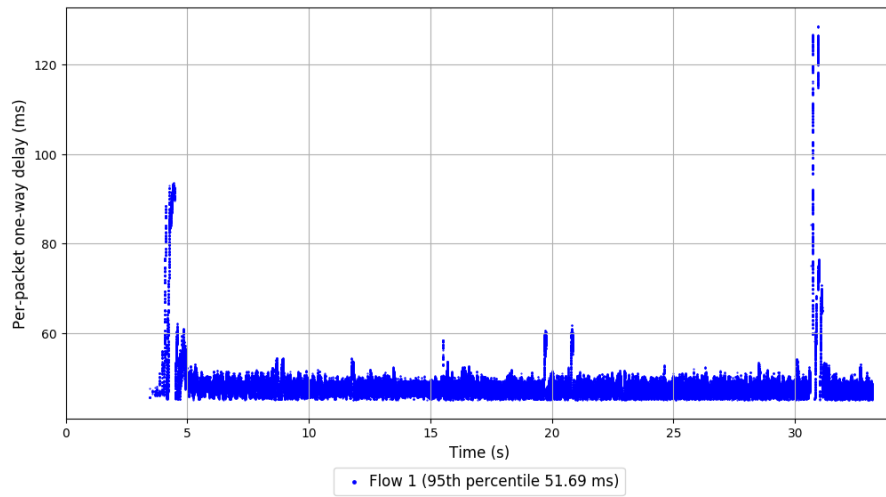
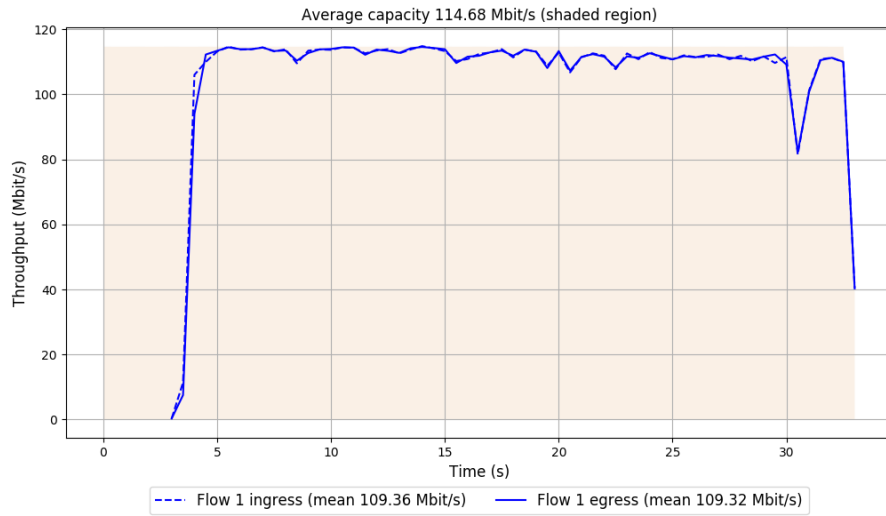
-- Flow 1:

Average throughput: 109.32 Mbit/s

95th percentile per-packet one-way delay: 51.694 ms

Loss rate: 0.20%

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-03-05 18:07:50

End at: 2018-03-05 18:08:20

Below is generated by plot.py at 2018-03-05 20:19:12

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 102.75 Mbit/s (89.6% utilization)

95th percentile per-packet one-way delay: 49.777 ms

Loss rate: 0.12%

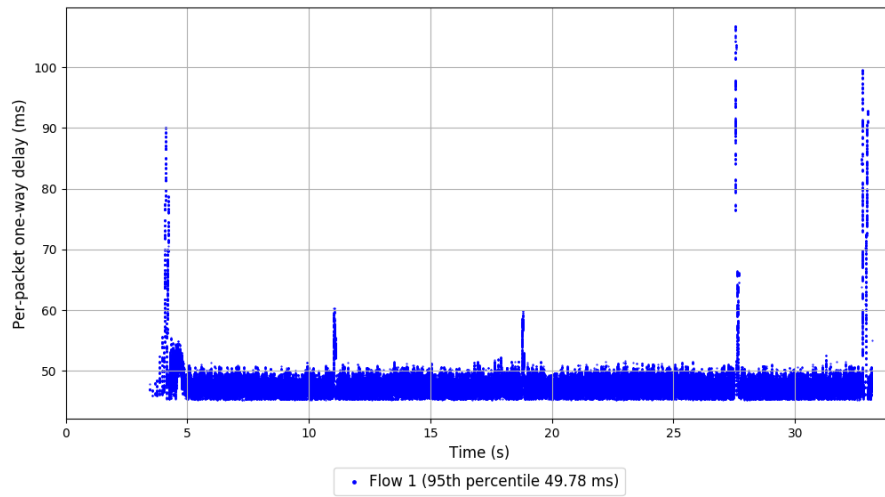
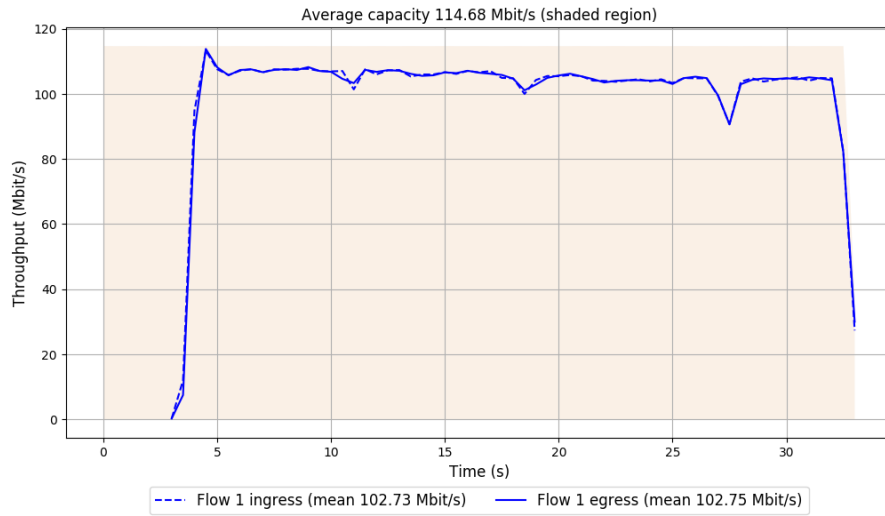
-- Flow 1:

Average throughput: 102.75 Mbit/s

95th percentile per-packet one-way delay: 49.777 ms

Loss rate: 0.12%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-03-05 18:19:53

End at: 2018-03-05 18:20:23

Below is generated by plot.py at 2018-03-05 20:19:14

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 103.55 Mbit/s (90.3% utilization)

95th percentile per-packet one-way delay: 49.695 ms

Loss rate: 0.14%

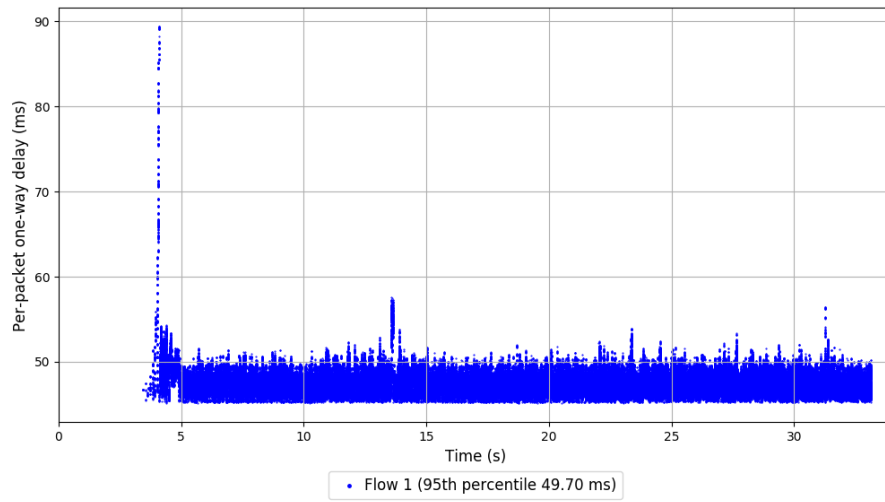
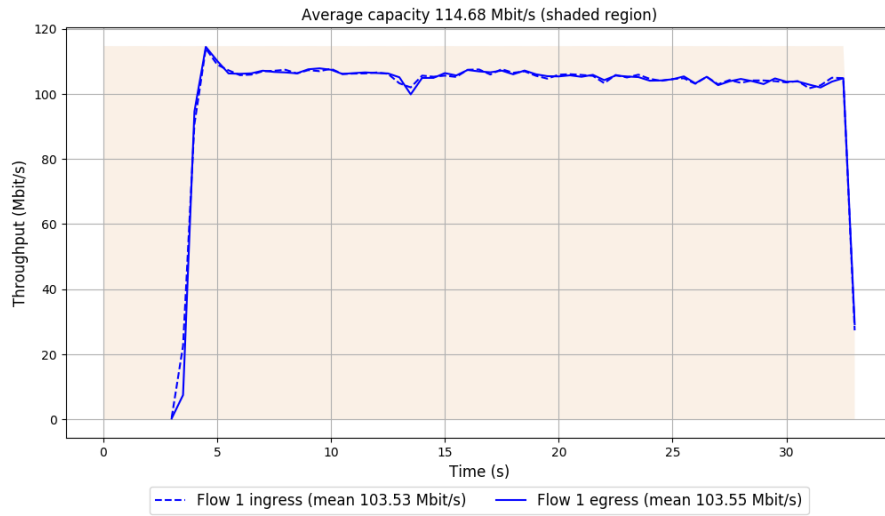
-- Flow 1:

Average throughput: 103.55 Mbit/s

95th percentile per-packet one-way delay: 49.695 ms

Loss rate: 0.14%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-03-05 18:31:46

End at: 2018-03-05 18:32:16

Below is generated by plot.py at 2018-03-05 20:20:09

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 103.17 Mbit/s (90.0% utilization)

95th percentile per-packet one-way delay: 49.541 ms

Loss rate: 0.15%

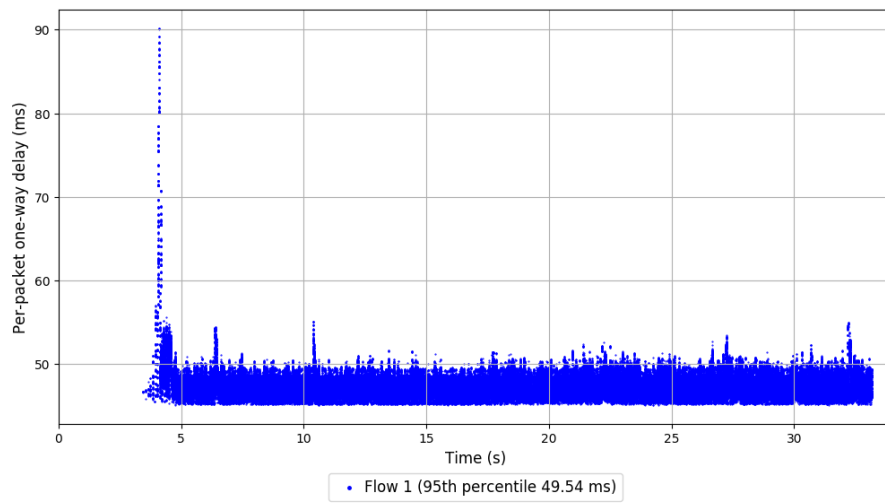
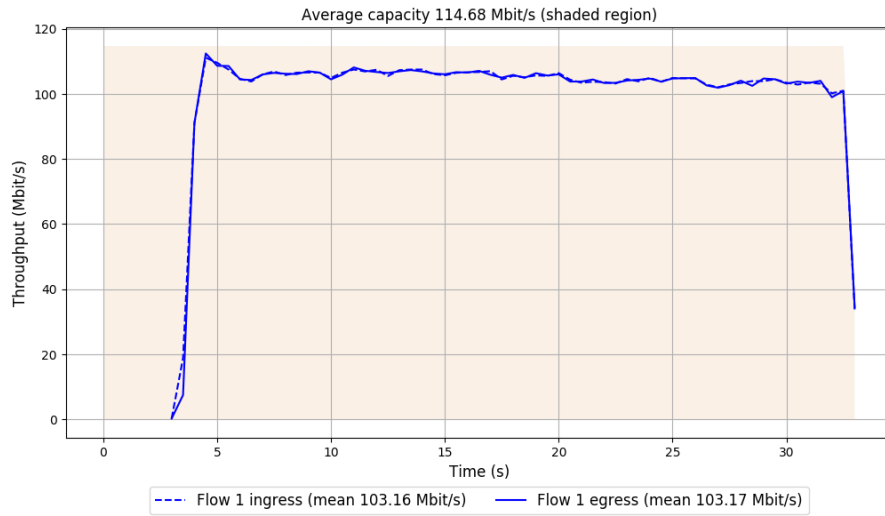
-- Flow 1:

Average throughput: 103.17 Mbit/s

95th percentile per-packet one-way delay: 49.541 ms

Loss rate: 0.15%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-03-05 18:43:39

End at: 2018-03-05 18:44:09

Below is generated by plot.py at 2018-03-05 20:20:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 103.38 Mbit/s (90.1% utilization)

95th percentile per-packet one-way delay: 49.539 ms

Loss rate: 0.17%

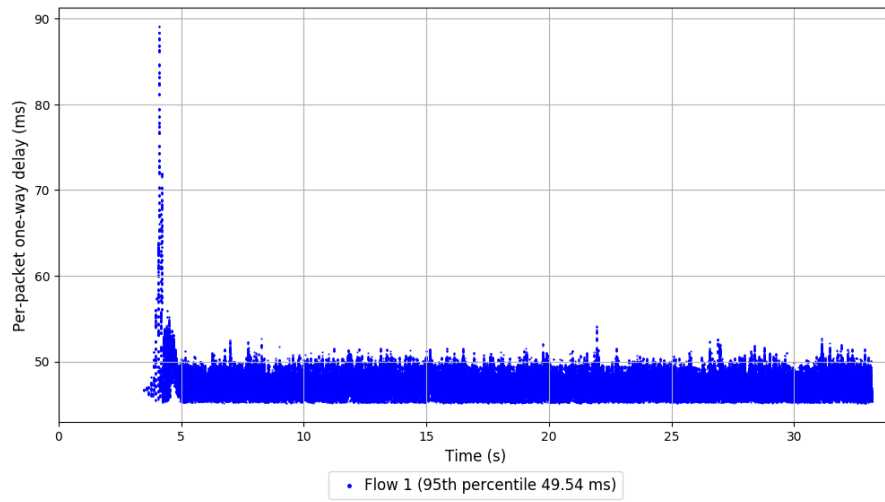
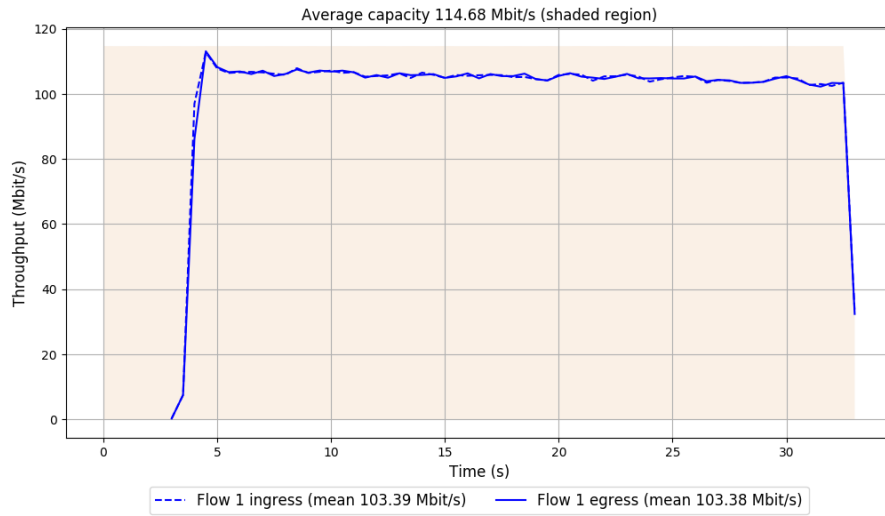
-- Flow 1:

Average throughput: 103.38 Mbit/s

95th percentile per-packet one-way delay: 49.539 ms

Loss rate: 0.17%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-03-05 18:55:33

End at: 2018-03-05 18:56:03

Below is generated by plot.py at 2018-03-05 20:20:55

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 106.55 Mbit/s (92.9% utilization)

95th percentile per-packet one-way delay: 51.835 ms

Loss rate: 0.17%

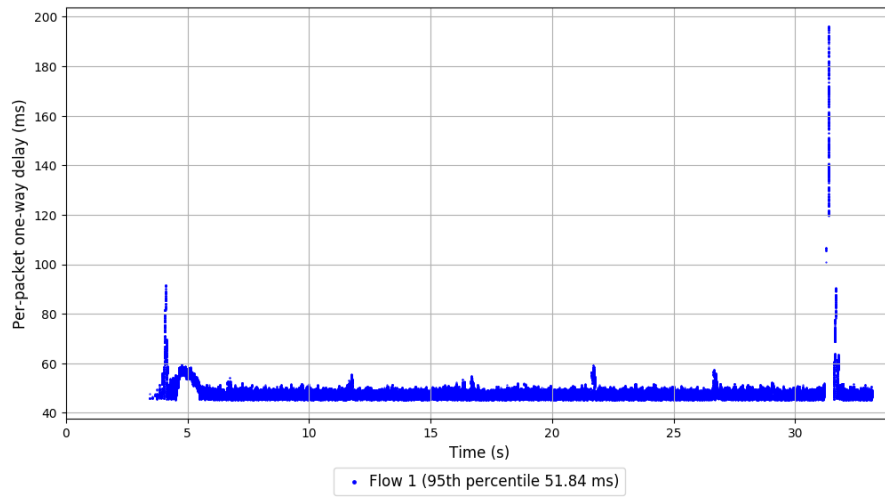
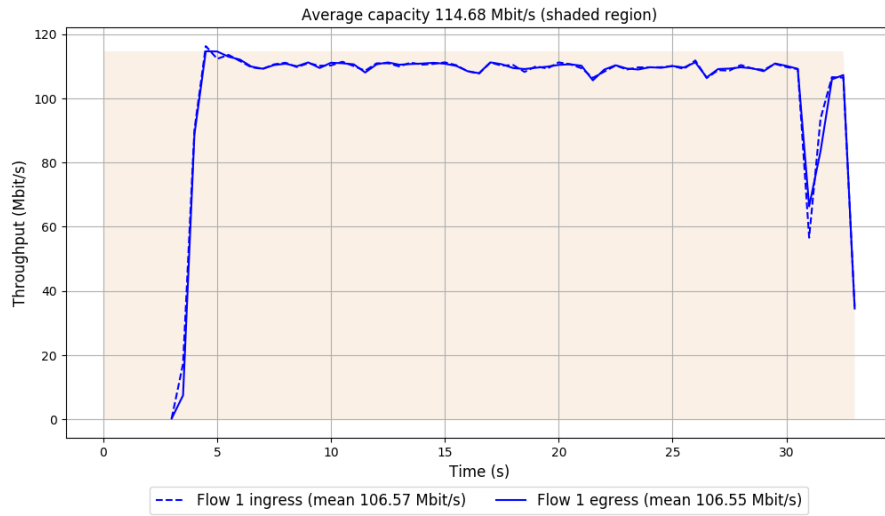
-- Flow 1:

Average throughput: 106.55 Mbit/s

95th percentile per-packet one-way delay: 51.835 ms

Loss rate: 0.17%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-03-05 19:07:26

End at: 2018-03-05 19:07:56

Below is generated by plot.py at 2018-03-05 20:21:23

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 105.68 Mbit/s (92.1% utilization)

95th percentile per-packet one-way delay: 52.063 ms

Loss rate: 0.26%

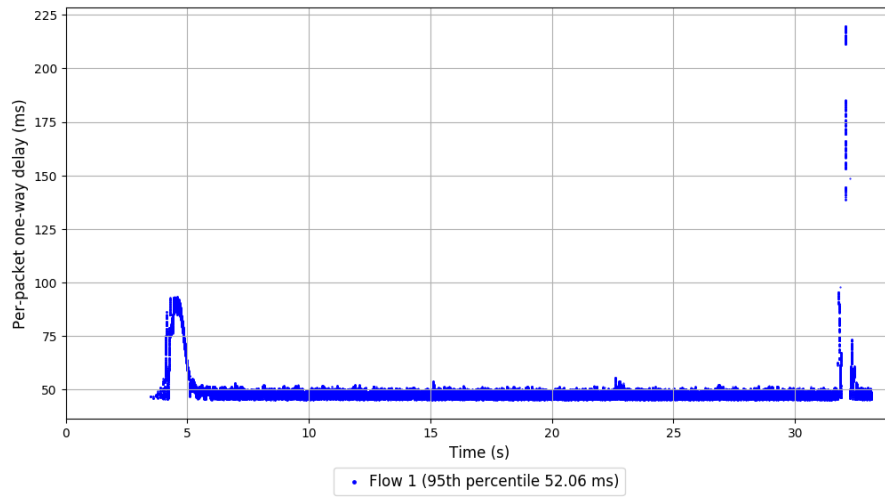
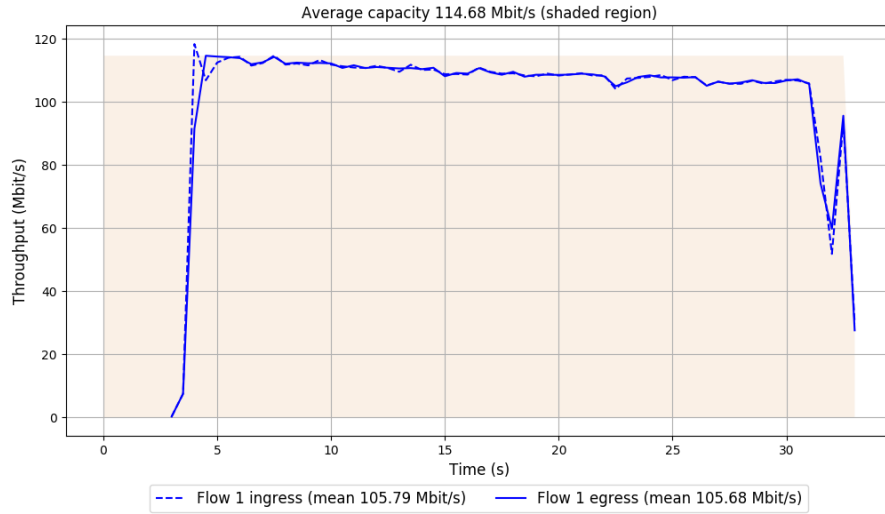
-- Flow 1:

Average throughput: 105.68 Mbit/s

95th percentile per-packet one-way delay: 52.063 ms

Loss rate: 0.26%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-03-05 19:19:35

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

Below is generated by plot.py at 2018-03-05 20:21:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 102.56 Mbit/s (89.4% utilization)

95th percentile per-packet one-way delay: 49.554 ms

Loss rate: 0.16%

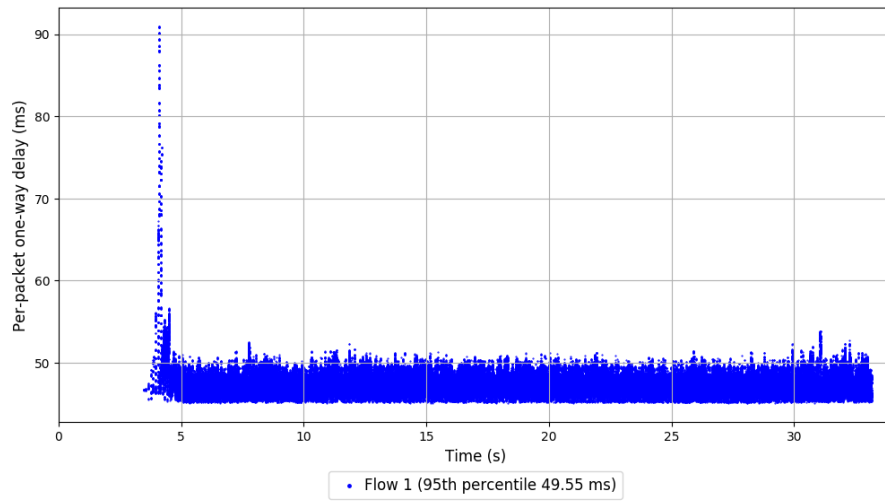
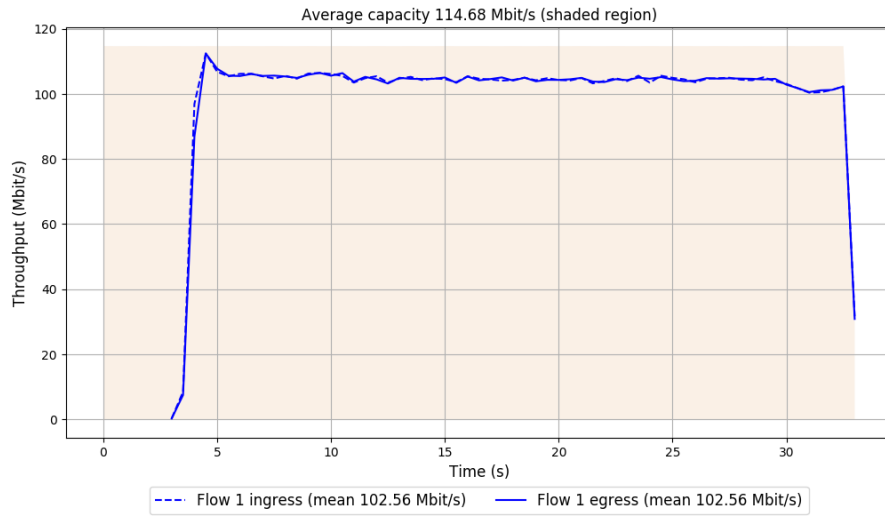
-- Flow 1:

Average throughput: 102.56 Mbit/s

95th percentile per-packet one-way delay: 49.554 ms

Loss rate: 0.16%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-03-05 19:31:31

End at: 2018-03-05 19:32:01

Below is generated by plot.py at 2018-03-05 20:21:35

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 102.93 Mbit/s (89.8% utilization)

95th percentile per-packet one-way delay: 49.563 ms

Loss rate: 0.17%

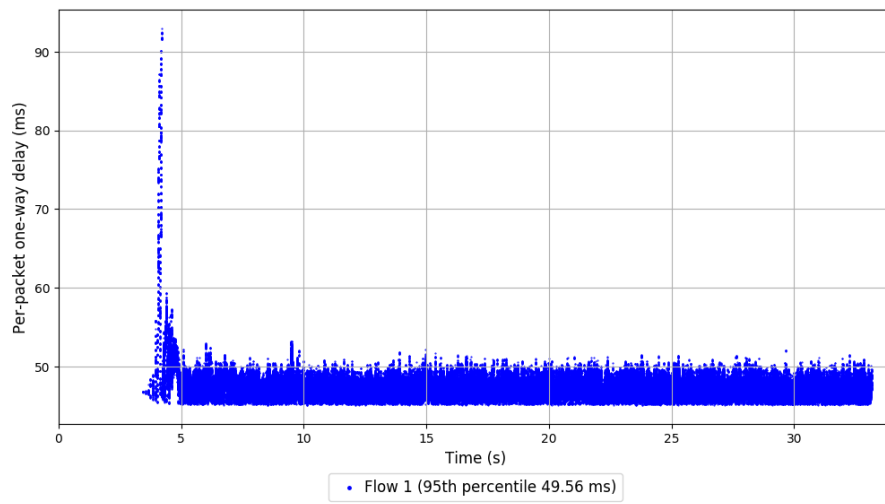
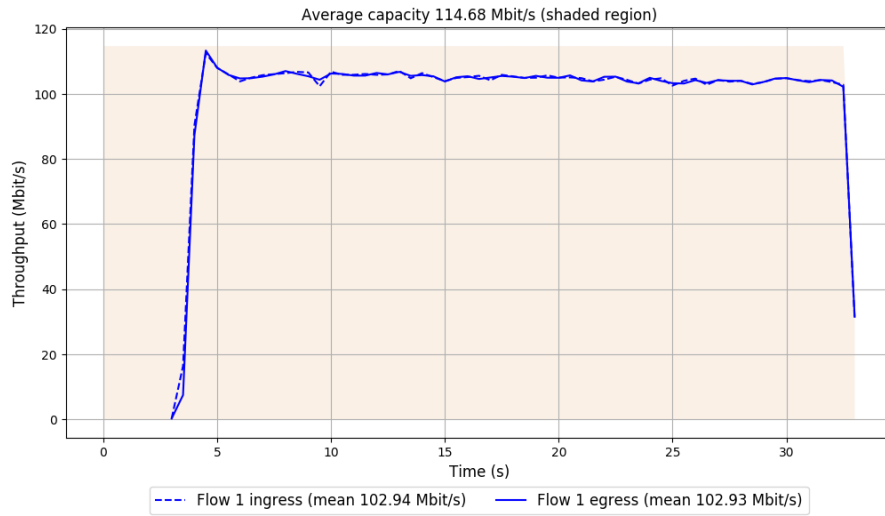
-- Flow 1:

Average throughput: 102.93 Mbit/s

95th percentile per-packet one-way delay: 49.563 ms

Loss rate: 0.17%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-03-05 17:48:07

End at: 2018-03-05 17:48:37

Below is generated by plot.py at 2018-03-05 20:21:42

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 101.69 Mbit/s (88.7% utilization)

95th percentile per-packet one-way delay: 86.903 ms

Loss rate: 0.94%

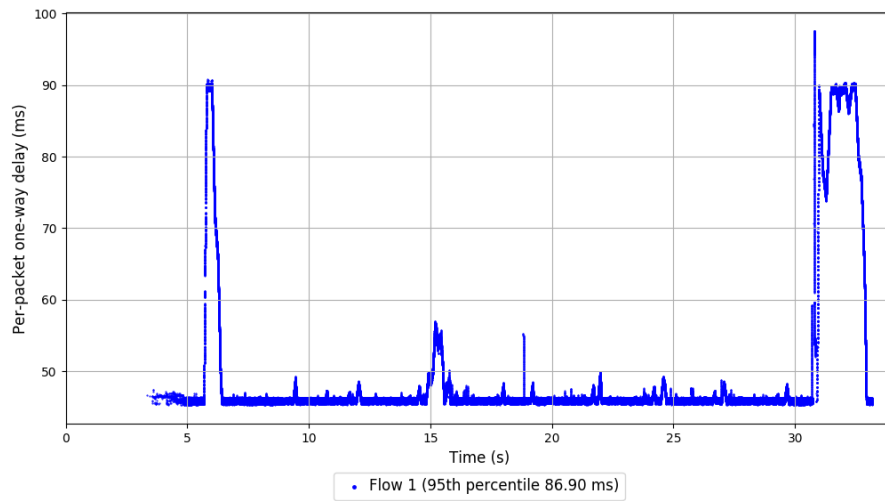
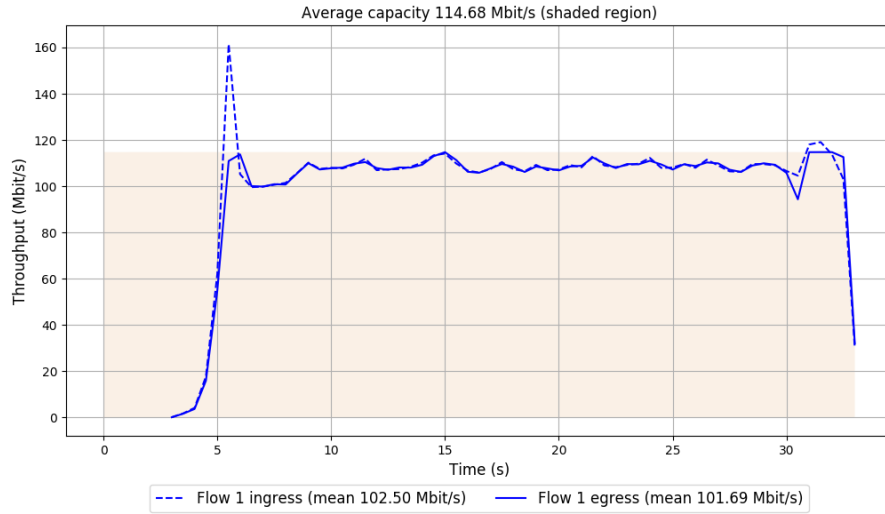
-- Flow 1:

Average throughput: 101.69 Mbit/s

95th percentile per-packet one-way delay: 86.903 ms

Loss rate: 0.94%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-03-05 17:59:56

End at: 2018-03-05 18:00:26

Below is generated by plot.py at 2018-03-05 20:21:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 100.88 Mbit/s (88.0% utilization)

95th percentile per-packet one-way delay: 76.427 ms

Loss rate: 0.88%

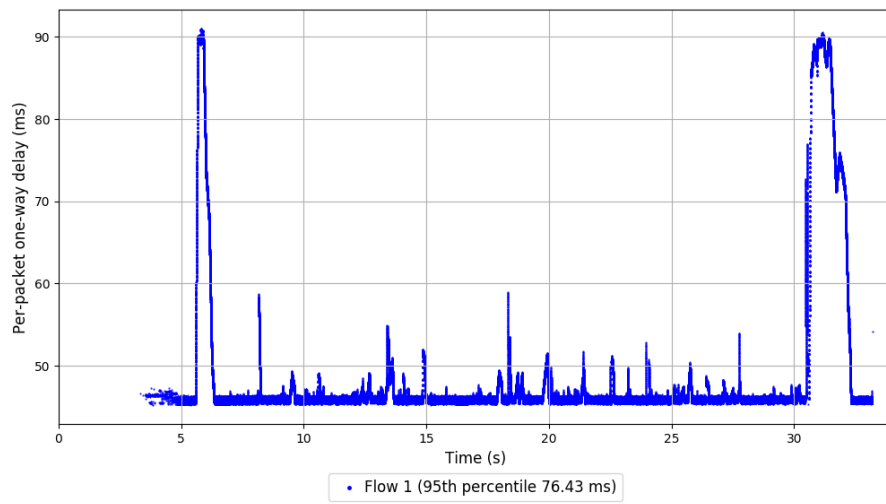
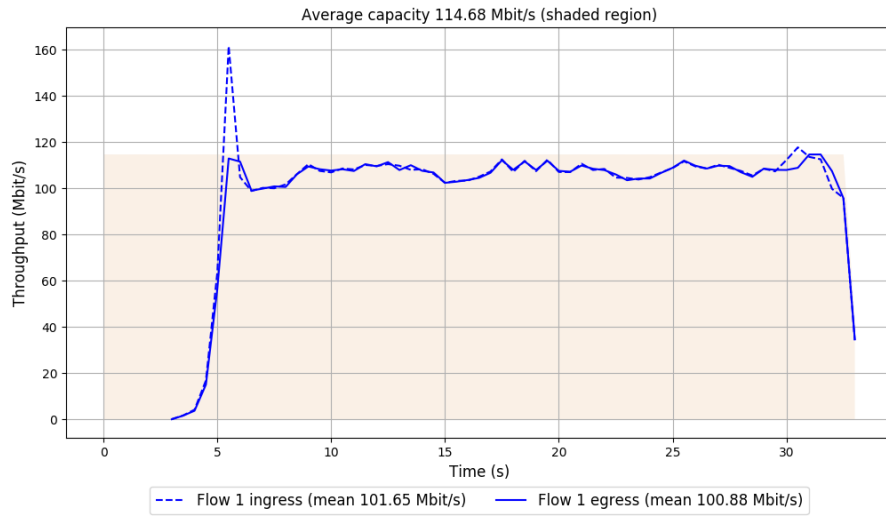
-- Flow 1:

Average throughput: 100.88 Mbit/s

95th percentile per-packet one-way delay: 76.427 ms

Loss rate: 0.88%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-03-05 18:11:58

End at: 2018-03-05 18:12:28

Below is generated by plot.py at 2018-03-05 20:22:42

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 101.65 Mbit/s (88.6% utilization)

95th percentile per-packet one-way delay: 48.370 ms

Loss rate: 0.85%

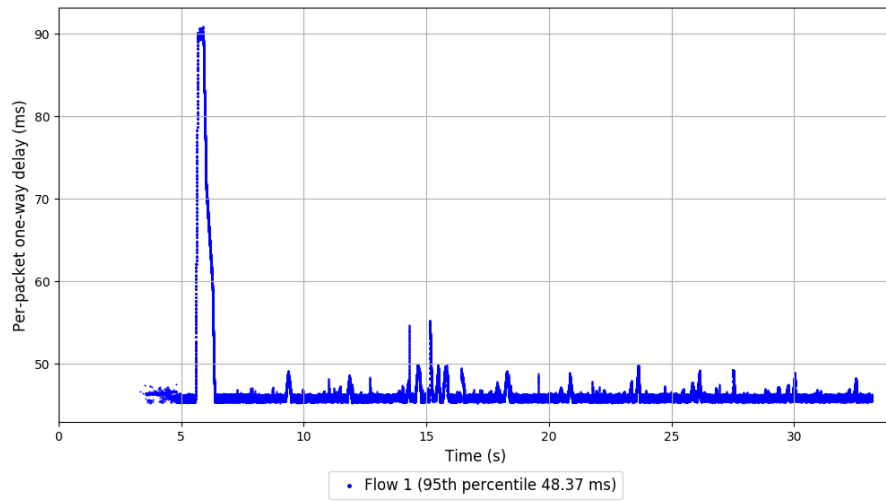
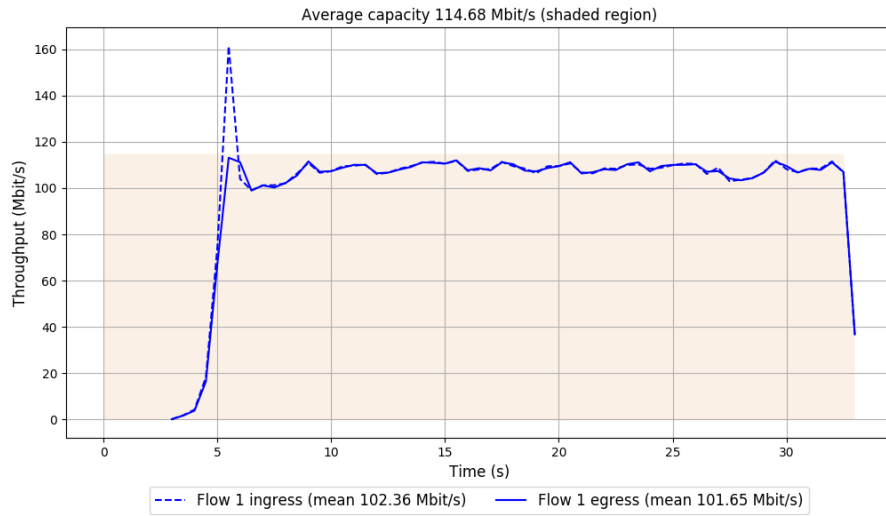
-- Flow 1:

Average throughput: 101.65 Mbit/s

95th percentile per-packet one-way delay: 48.370 ms

Loss rate: 0.85%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-03-05 18:23:53

End at: 2018-03-05 18:24:23

Below is generated by plot.py at 2018-03-05 20:23:07

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 100.98 Mbit/s (88.0% utilization)

95th percentile per-packet one-way delay: 48.529 ms

Loss rate: 0.86%

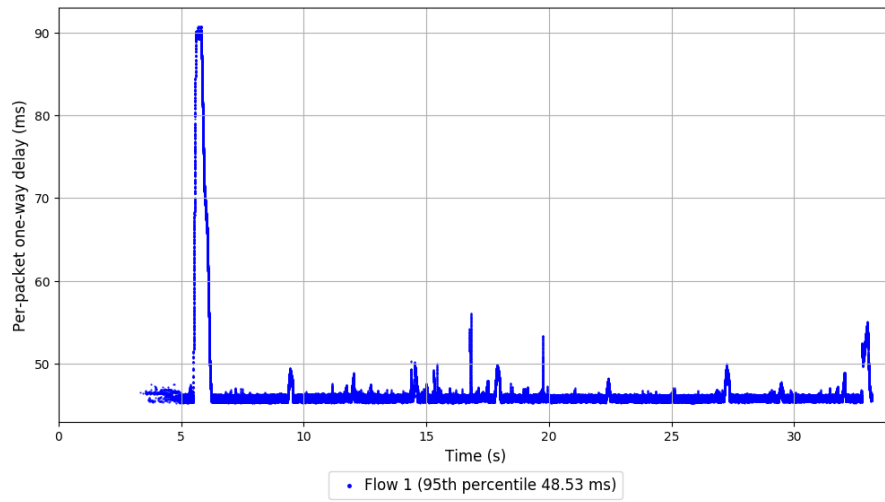
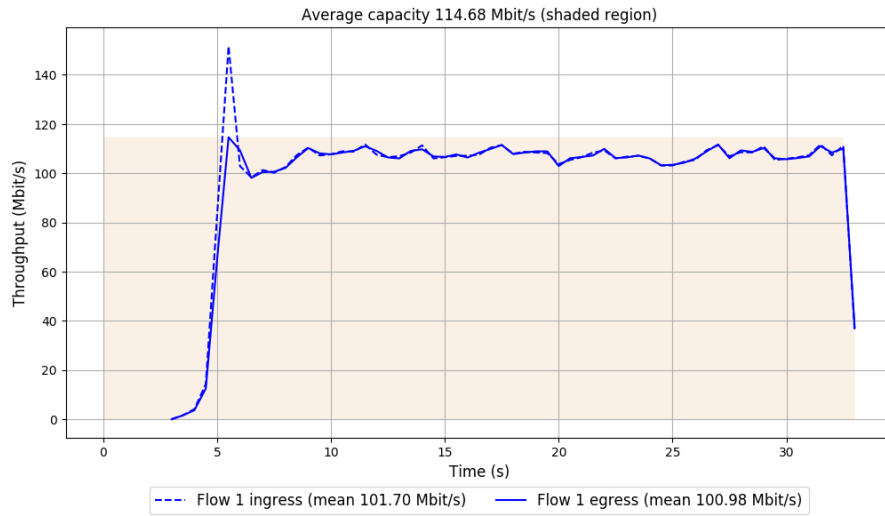
-- Flow 1:

Average throughput: 100.98 Mbit/s

95th percentile per-packet one-way delay: 48.529 ms

Loss rate: 0.86%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-03-05 18:35:46

End at: 2018-03-05 18:36:16

Below is generated by plot.py at 2018-03-05 20:23:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 100.21 Mbit/s (87.4% utilization)

95th percentile per-packet one-way delay: 50.025 ms

Loss rate: 0.86%

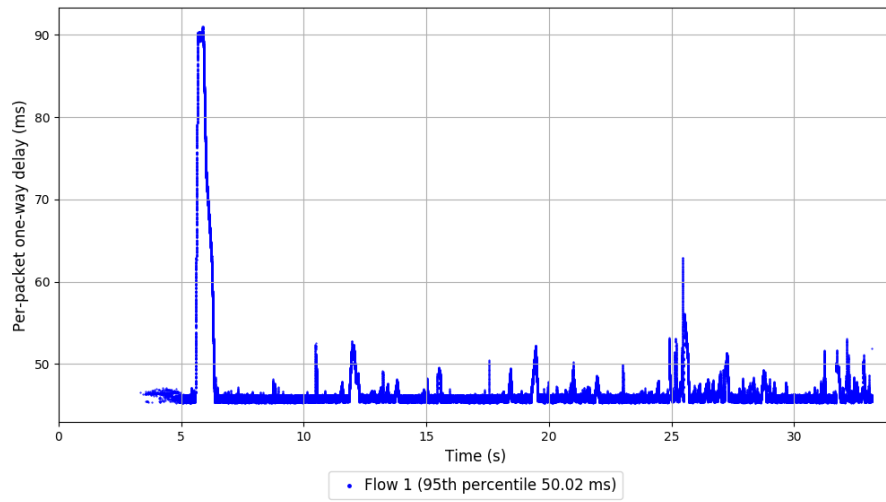
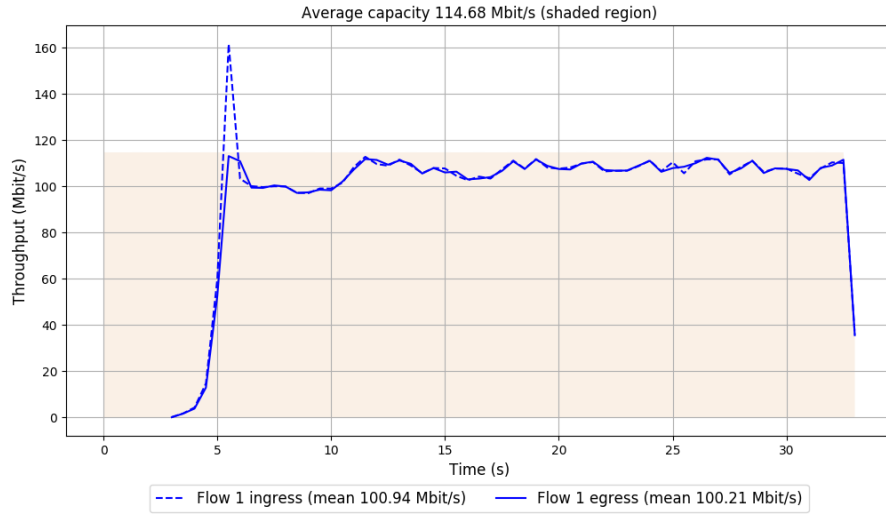
-- Flow 1:

Average throughput: 100.21 Mbit/s

95th percentile per-packet one-way delay: 50.025 ms

Loss rate: 0.86%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-03-05 18:47:39

End at: 2018-03-05 18:48:09

Below is generated by plot.py at 2018-03-05 20:23:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 100.53 Mbit/s (87.7% utilization)

95th percentile per-packet one-way delay: 50.643 ms

Loss rate: 0.80%

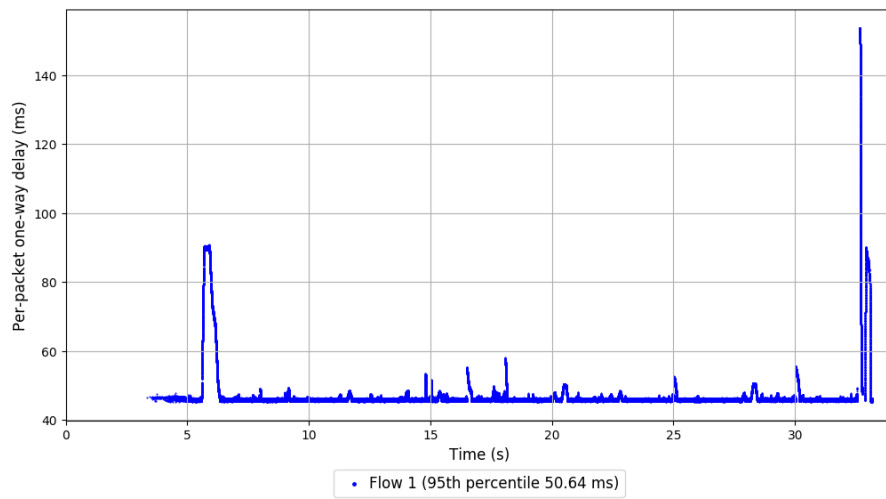
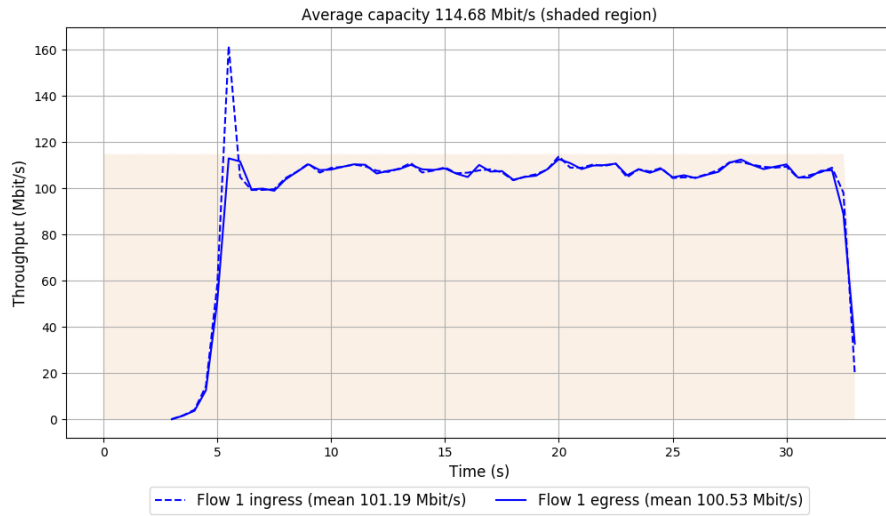
-- Flow 1:

Average throughput: 100.53 Mbit/s

95th percentile per-packet one-way delay: 50.643 ms

Loss rate: 0.80%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-03-05 18:59:32

End at: 2018-03-05 19:00:02

Below is generated by plot.py at 2018-03-05 20:23:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 96.74 Mbit/s (84.4% utilization)

95th percentile per-packet one-way delay: 68.740 ms

Loss rate: 0.91%

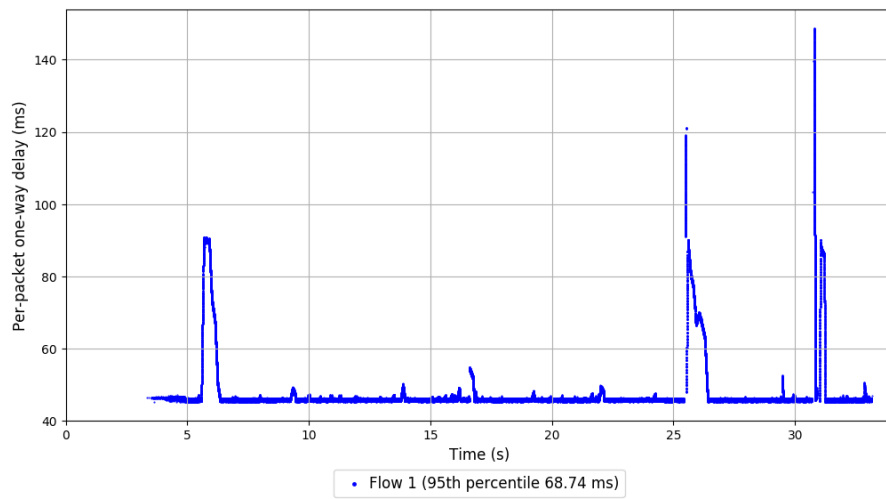
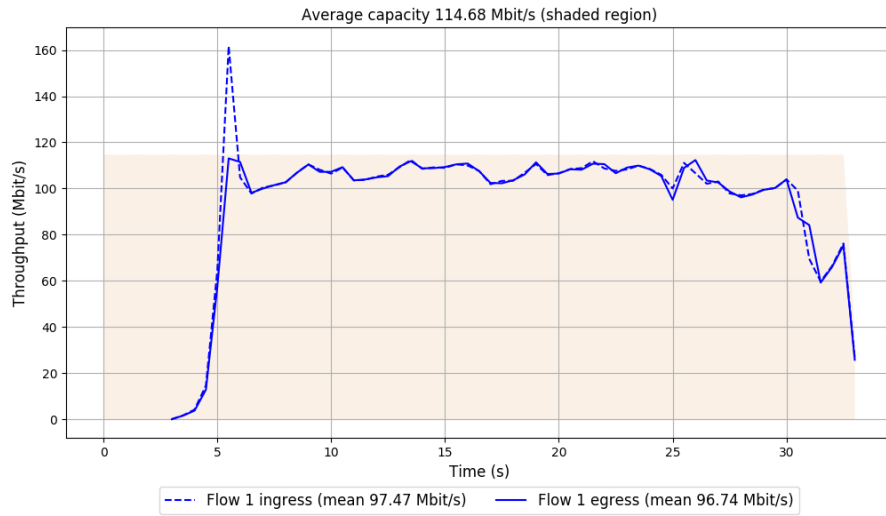
-- Flow 1:

Average throughput: 96.74 Mbit/s

95th percentile per-packet one-way delay: 68.740 ms

Loss rate: 0.91%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-03-05 19:11:39

End at: 2018-03-05 19:12:09

Below is generated by plot.py at 2018-03-05 20:24:05

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 101.21 Mbit/s (88.3% utilization)

95th percentile per-packet one-way delay: 48.285 ms

Loss rate: 0.85%

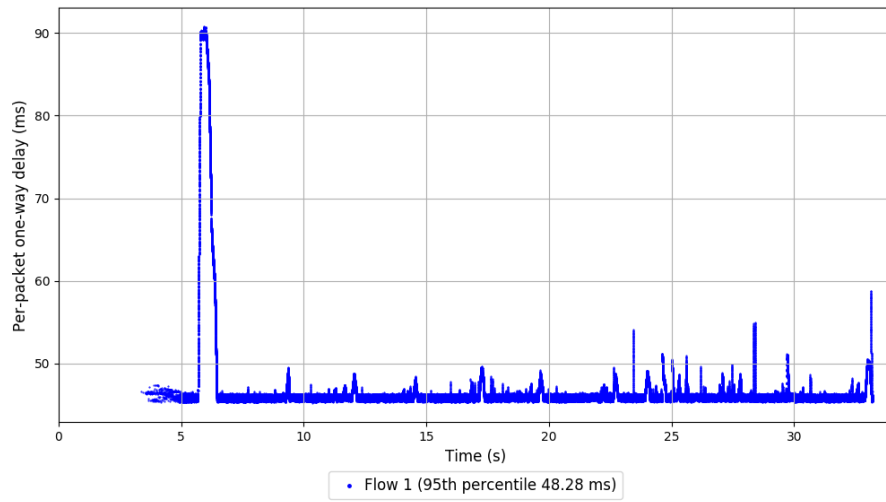
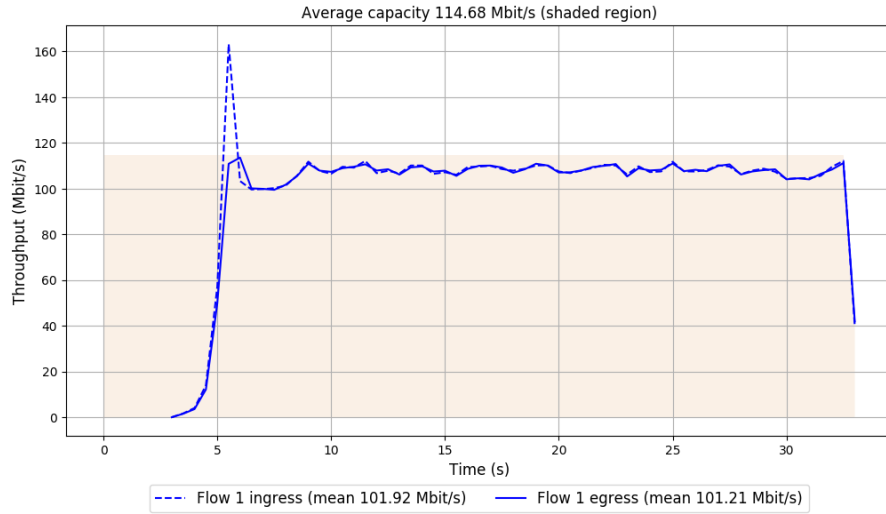
-- Flow 1:

Average throughput: 101.21 Mbit/s

95th percentile per-packet one-way delay: 48.285 ms

Loss rate: 0.85%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-03-05 19:23:34

End at: 2018-03-05 19:24:04

Below is generated by plot.py at 2018-03-05 20:24:13

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 101.52 Mbit/s (88.5% utilization)

95th percentile per-packet one-way delay: 48.892 ms

Loss rate: 0.84%

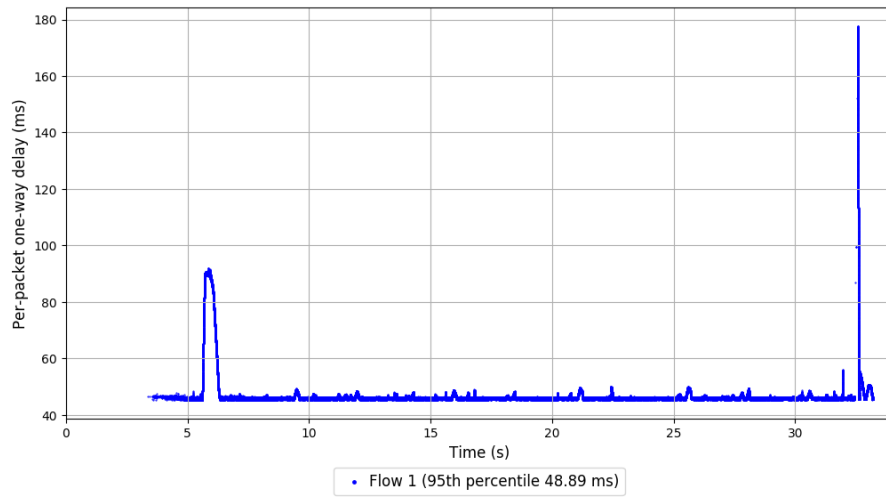
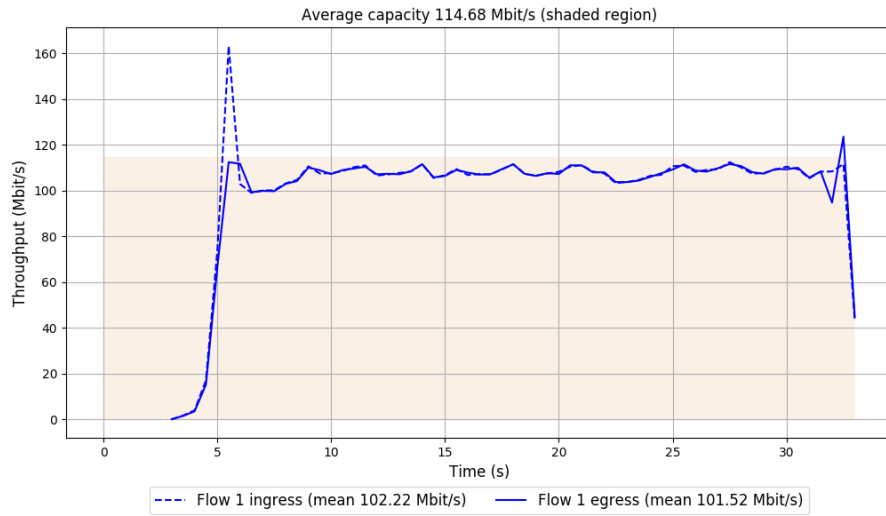
-- Flow 1:

Average throughput: 101.52 Mbit/s

95th percentile per-packet one-way delay: 48.892 ms

Loss rate: 0.84%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-03-05 19:35:30

End at: 2018-03-05 19:36:00

Below is generated by plot.py at 2018-03-05 20:24:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 101.74 Mbit/s (88.7% utilization)

95th percentile per-packet one-way delay: 48.788 ms

Loss rate: 0.85%

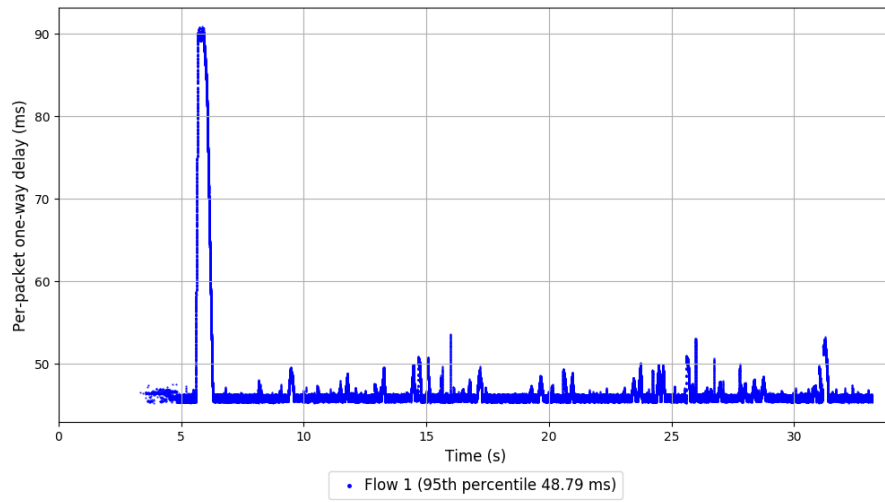
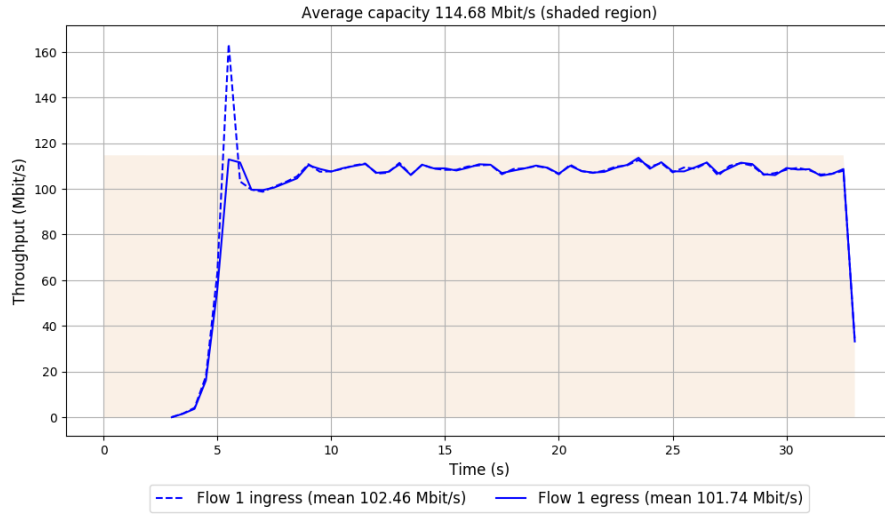
-- Flow 1:

Average throughput: 101.74 Mbit/s

95th percentile per-packet one-way delay: 48.788 ms

Loss rate: 0.85%

Run 10: Report of Vivace-latency — Data Link



Run 1: Statistics of Vivace-loss

Start at: 2018-03-05 17:51:19

End at: 2018-03-05 17:51:49

Below is generated by plot.py at 2018-03-05 20:25:26

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 107.21 Mbit/s (93.5% utilization)

95th percentile per-packet one-way delay: 89.837 ms

Loss rate: 1.90%

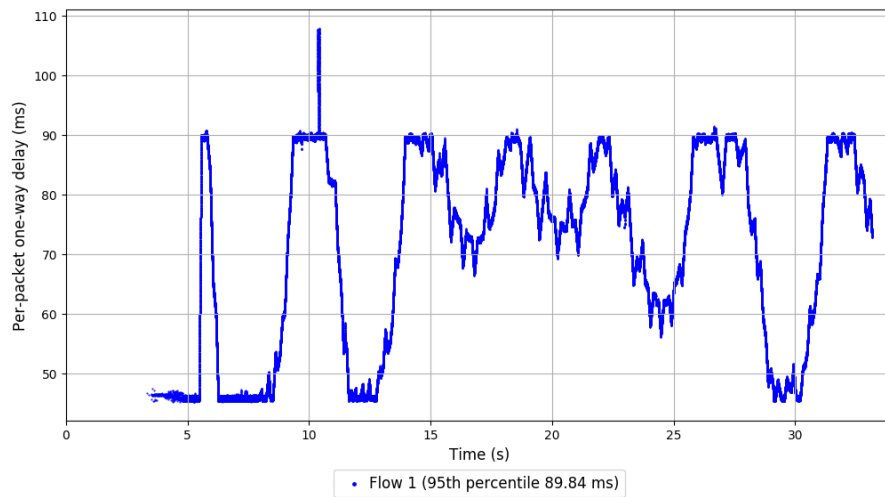
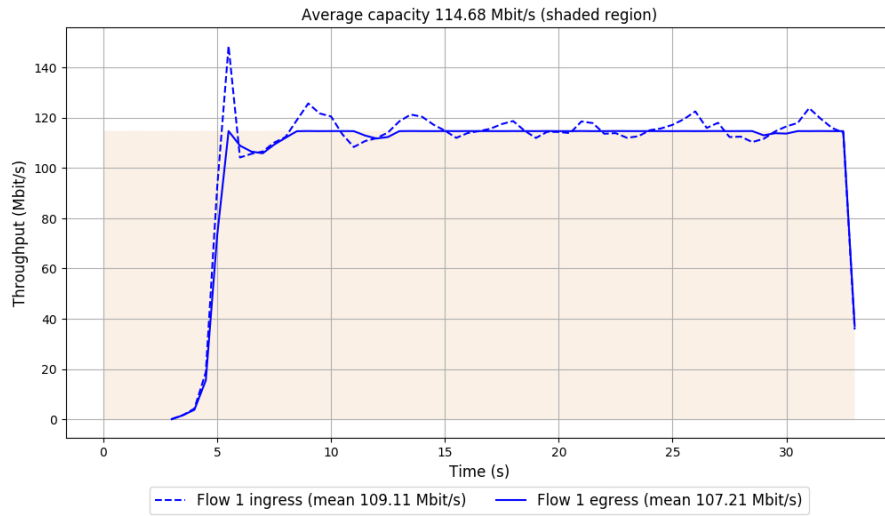
-- Flow 1:

Average throughput: 107.21 Mbit/s

95th percentile per-packet one-way delay: 89.837 ms

Loss rate: 1.90%

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-03-05 18:03:09

End at: 2018-03-05 18:03:39

Below is generated by plot.py at 2018-03-05 20:25:46

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 107.08 Mbit/s (93.4% utilization)

95th percentile per-packet one-way delay: 89.892 ms

Loss rate: 2.09%

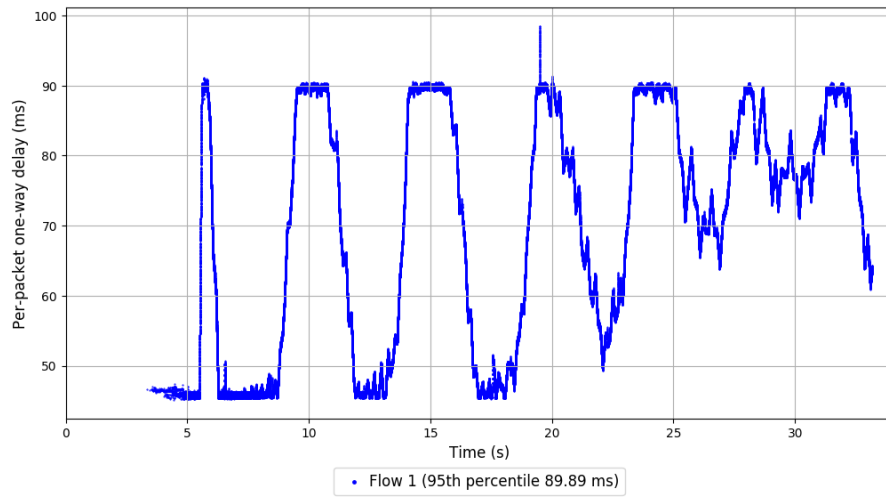
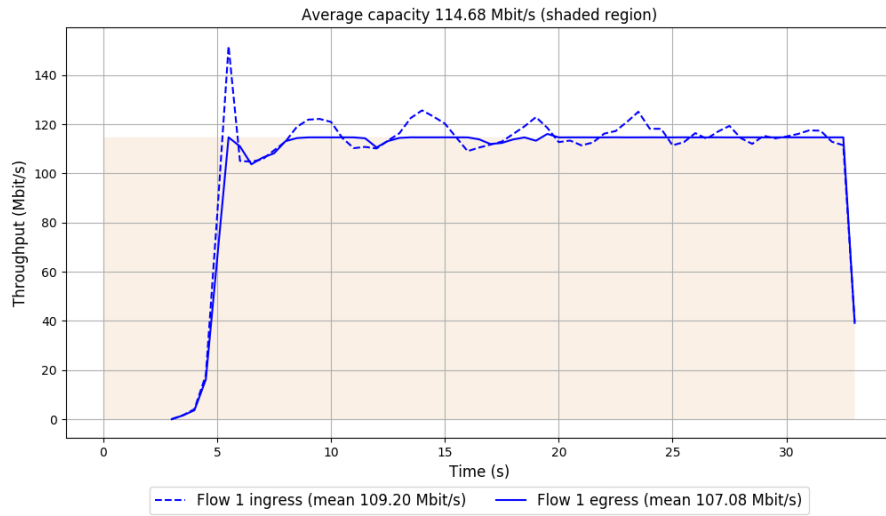
-- Flow 1:

Average throughput: 107.08 Mbit/s

95th percentile per-packet one-way delay: 89.892 ms

Loss rate: 2.09%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-03-05 18:15:11

End at: 2018-03-05 18:15:41

Below is generated by plot.py at 2018-03-05 20:26:09

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 107.06 Mbit/s (93.4% utilization)

95th percentile per-packet one-way delay: 89.828 ms

Loss rate: 1.67%

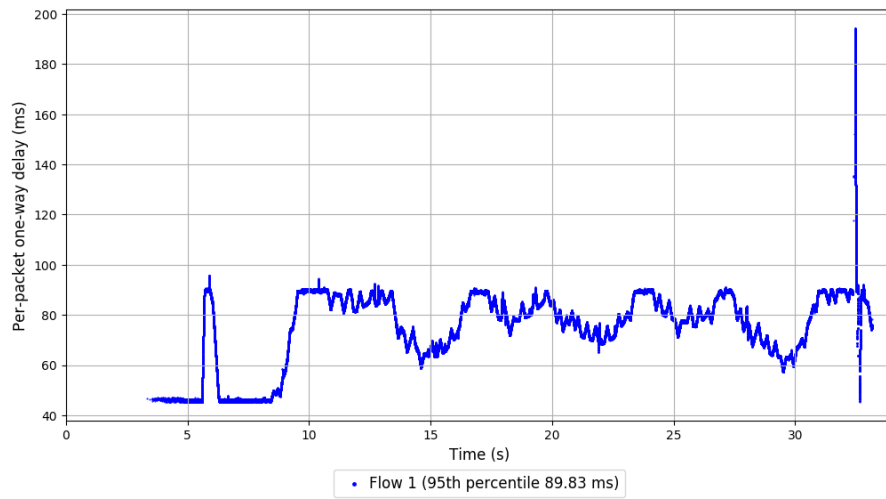
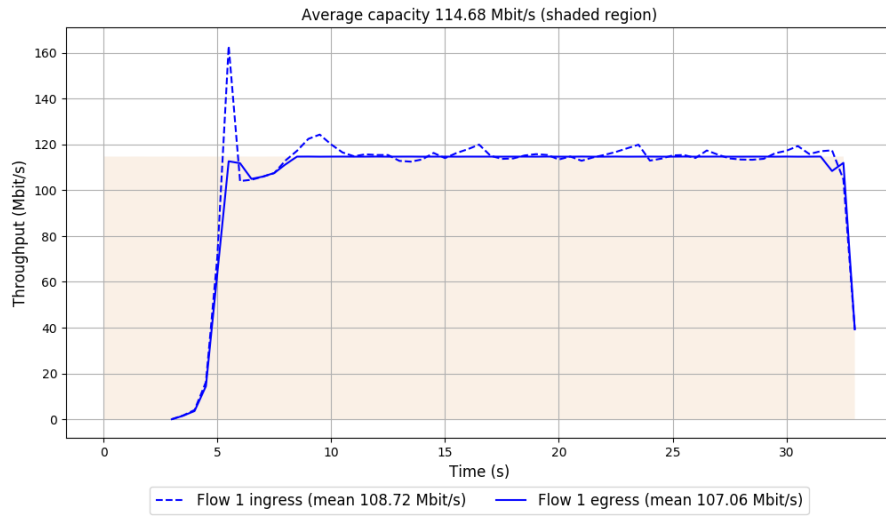
-- Flow 1:

Average throughput: 107.06 Mbit/s

95th percentile per-packet one-way delay: 89.828 ms

Loss rate: 1.67%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-03-05 18:27:06

End at: 2018-03-05 18:27:36

Below is generated by plot.py at 2018-03-05 20:26:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 107.39 Mbit/s (93.6% utilization)

95th percentile per-packet one-way delay: 89.942 ms

Loss rate: 1.88%

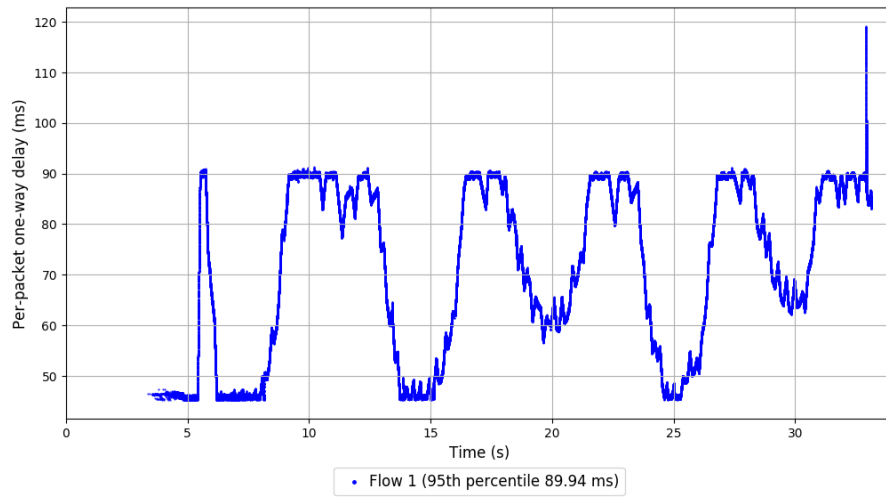
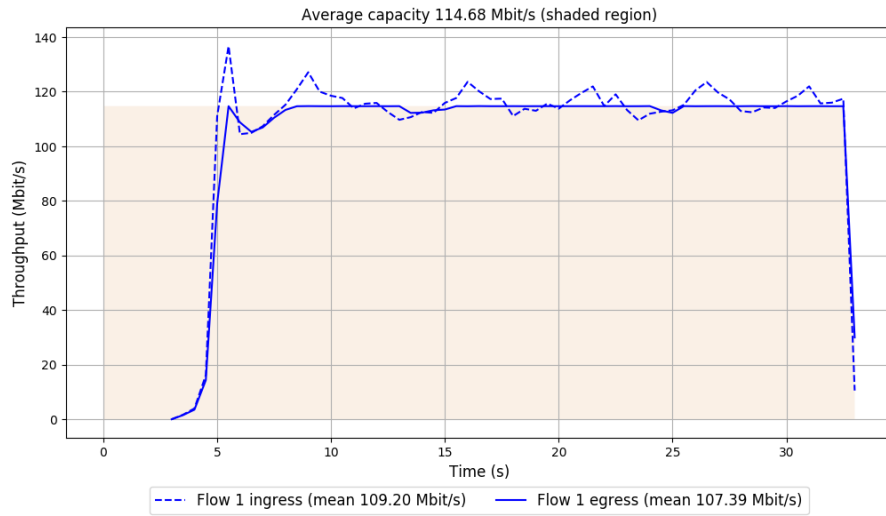
-- Flow 1:

Average throughput: 107.39 Mbit/s

95th percentile per-packet one-way delay: 89.942 ms

Loss rate: 1.88%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-03-05 18:38:59

End at: 2018-03-05 18:39:29

Below is generated by plot.py at 2018-03-05 20:26:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 107.32 Mbit/s (93.6% utilization)

95th percentile per-packet one-way delay: 89.836 ms

Loss rate: 1.89%

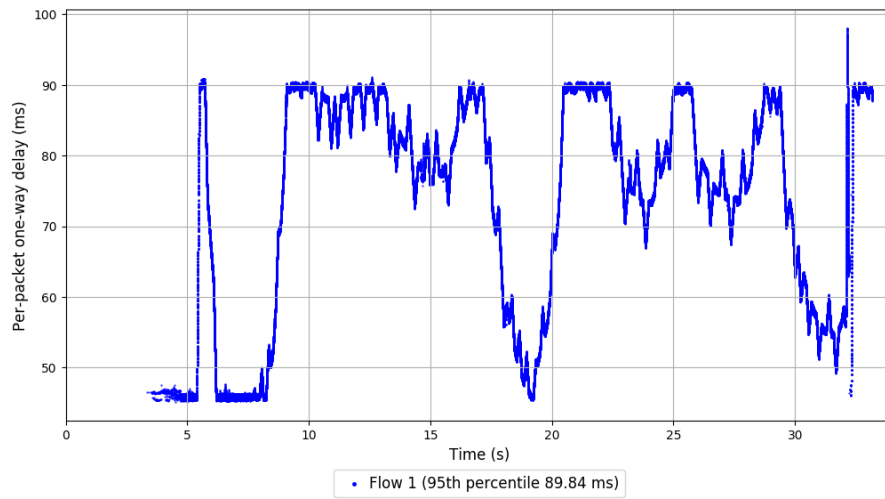
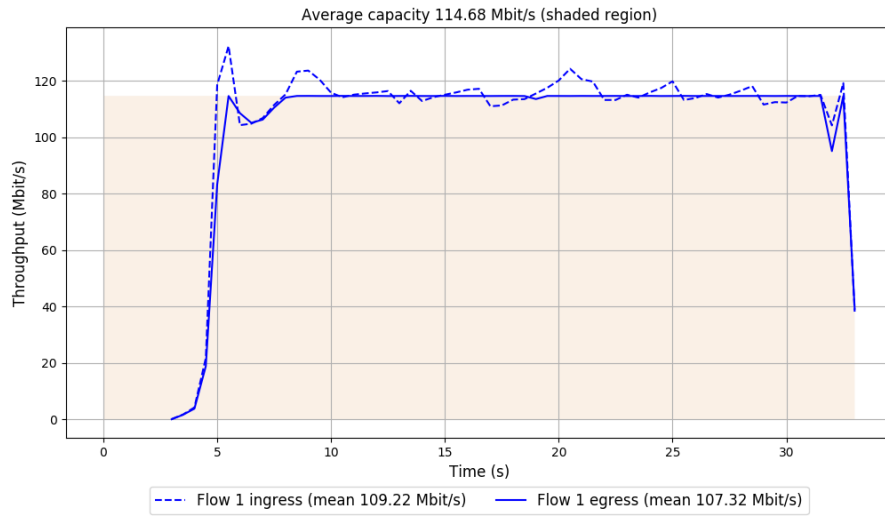
-- Flow 1:

Average throughput: 107.32 Mbit/s

95th percentile per-packet one-way delay: 89.836 ms

Loss rate: 1.89%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-03-05 18:50:51

End at: 2018-03-05 18:51:21

Below is generated by plot.py at 2018-03-05 20:26:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 106.88 Mbit/s (93.2% utilization)

95th percentile per-packet one-way delay: 89.893 ms

Loss rate: 1.87%

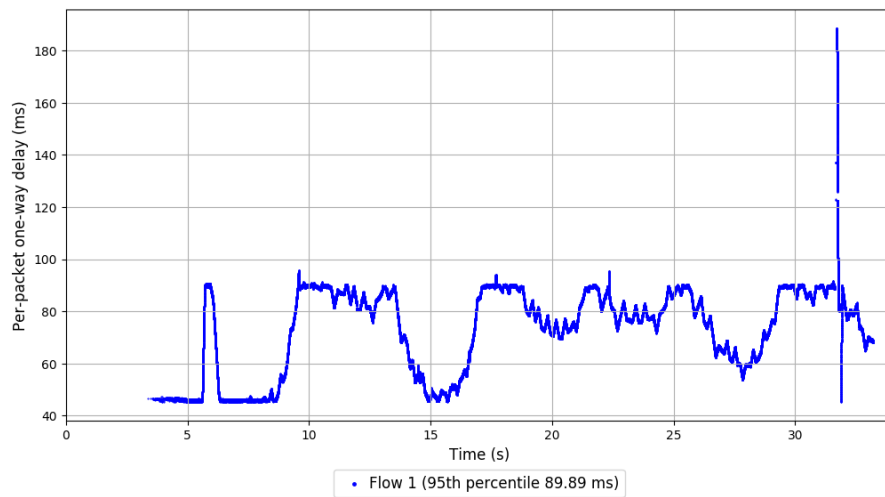
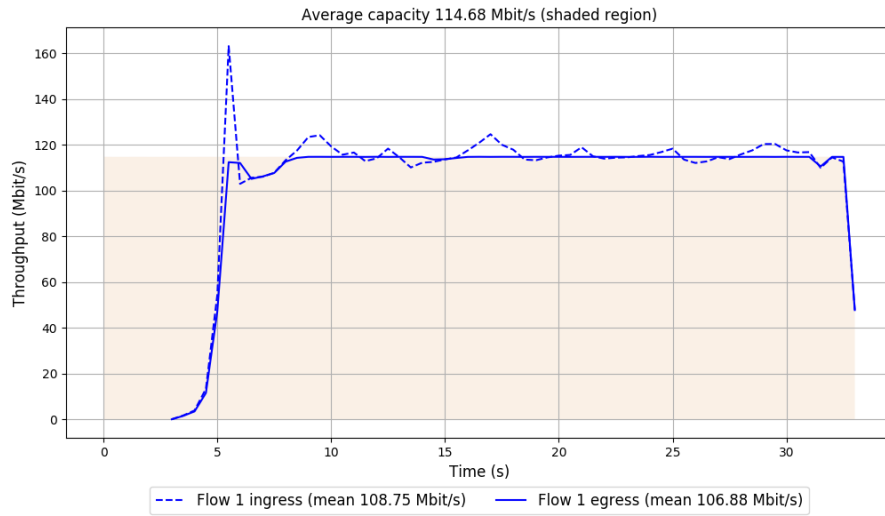
-- Flow 1:

Average throughput: 106.88 Mbit/s

95th percentile per-packet one-way delay: 89.893 ms

Loss rate: 1.87%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-03-05 19:02:46

End at: 2018-03-05 19:03:16

Below is generated by plot.py at 2018-03-05 20:26:51

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 107.23 Mbit/s (93.5% utilization)

95th percentile per-packet one-way delay: 89.779 ms

Loss rate: 1.65%

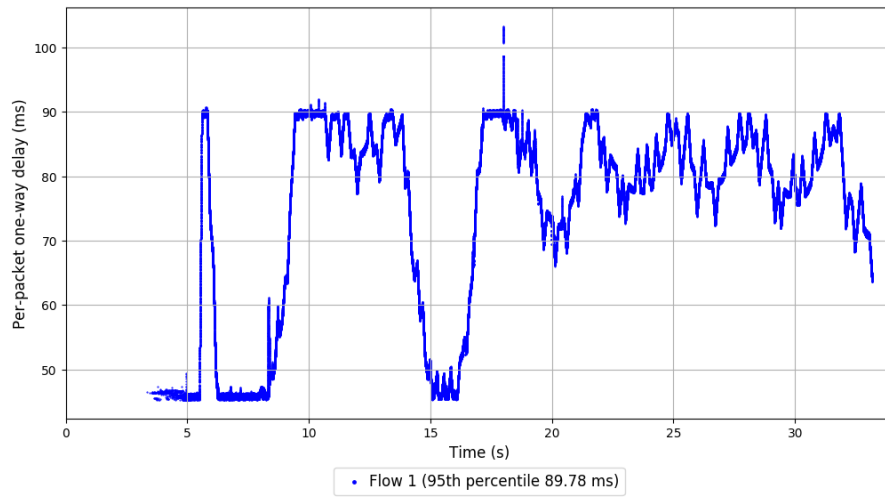
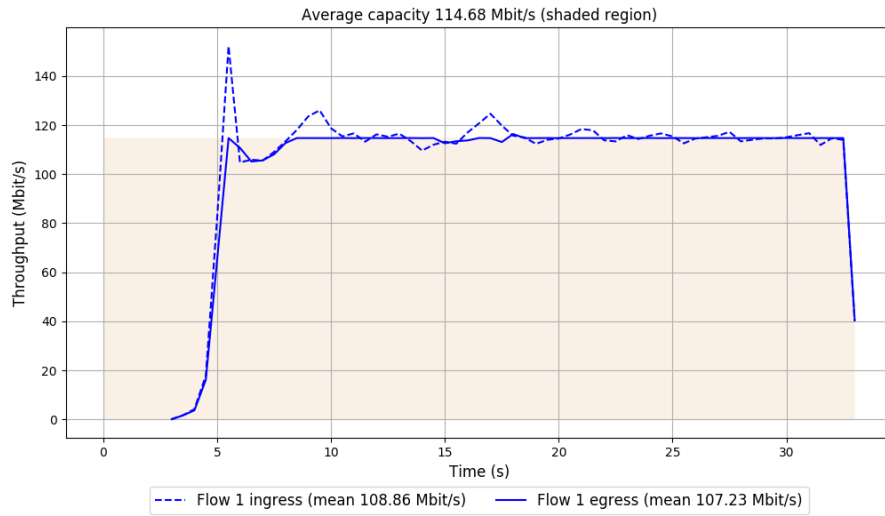
-- Flow 1:

Average throughput: 107.23 Mbit/s

95th percentile per-packet one-way delay: 89.779 ms

Loss rate: 1.65%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-03-05 19:14:52

End at: 2018-03-05 19:15:22

Below is generated by plot.py at 2018-03-05 20:26:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 107.01 Mbit/s (93.3% utilization)

95th percentile per-packet one-way delay: 89.900 ms

Loss rate: 2.21%

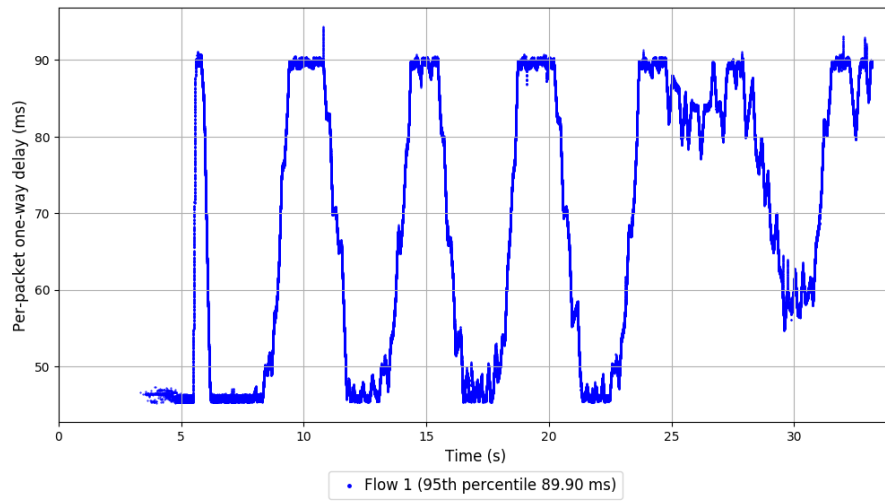
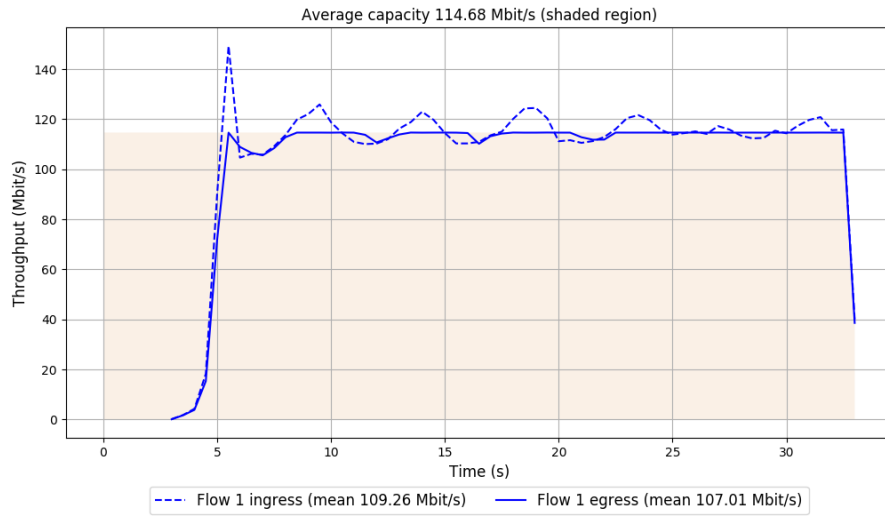
-- Flow 1:

Average throughput: 107.01 Mbit/s

95th percentile per-packet one-way delay: 89.900 ms

Loss rate: 2.21%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-03-05 19:26:48

End at: 2018-03-05 19:27:18

Below is generated by plot.py at 2018-03-05 20:28:06

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 107.18 Mbit/s (93.5% utilization)

95th percentile per-packet one-way delay: 89.958 ms

Loss rate: 2.17%

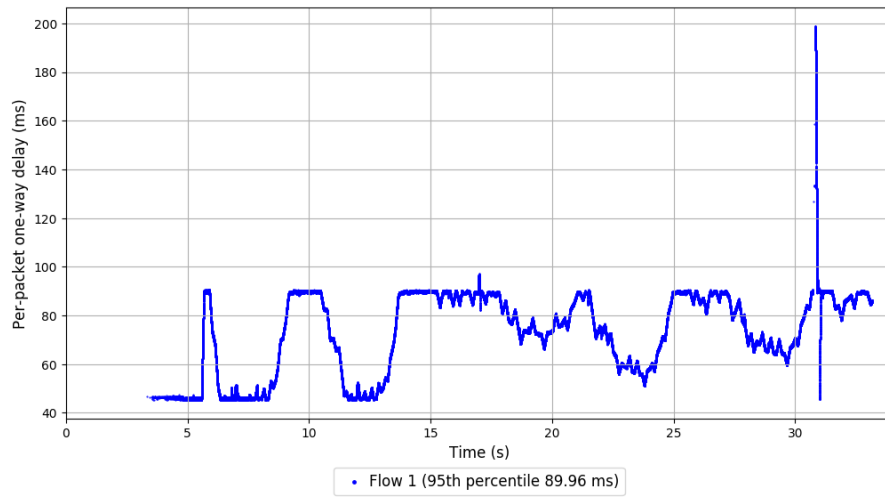
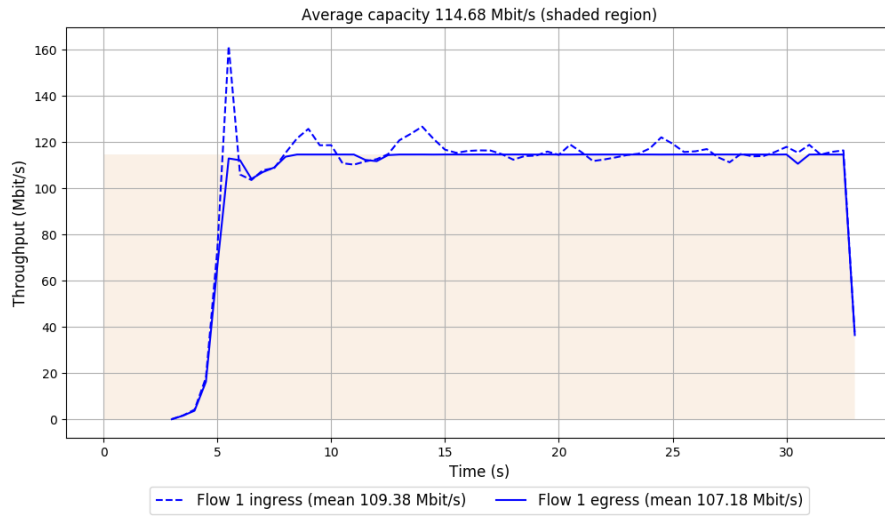
-- Flow 1:

Average throughput: 107.18 Mbit/s

95th percentile per-packet one-way delay: 89.958 ms

Loss rate: 2.17%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-03-05 19:38:42

End at: 2018-03-05 19:39:12

Below is generated by plot.py at 2018-03-05 20:28:29

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 107.54 Mbit/s (93.8% utilization)

95th percentile per-packet one-way delay: 89.841 ms

Loss rate: 1.85%

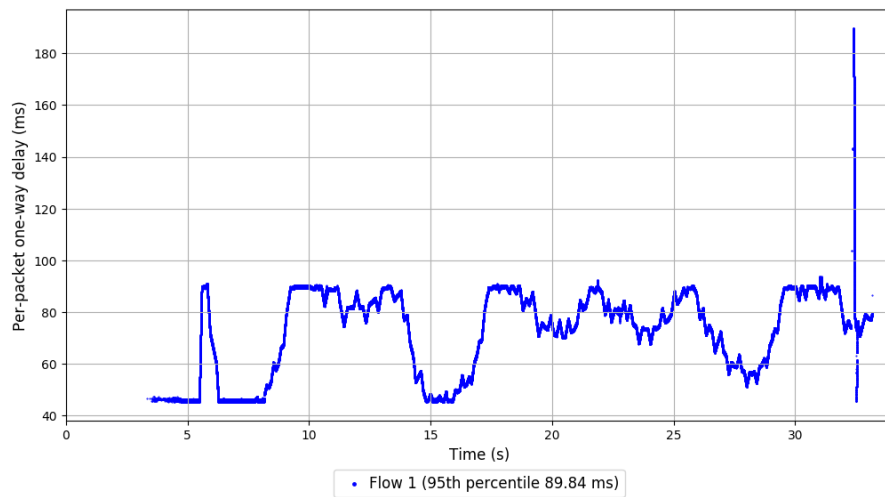
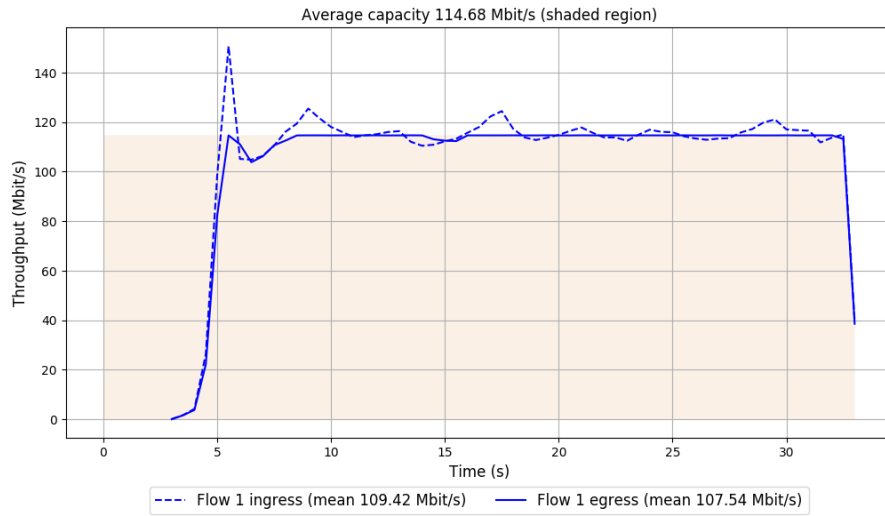
-- Flow 1:

Average throughput: 107.54 Mbit/s

95th percentile per-packet one-way delay: 89.841 ms

Loss rate: 1.85%

Run 10: Report of Vivace-loss — Data Link



Run 1: Statistics of Vivace-LTE

Start at: 2018-03-05 17:43:33

End at: 2018-03-05 17:44:03

Below is generated by plot.py at 2018-03-05 20:28:46

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 104.91 Mbit/s (91.5% utilization)

95th percentile per-packet one-way delay: 71.951 ms

Loss rate: 0.87%

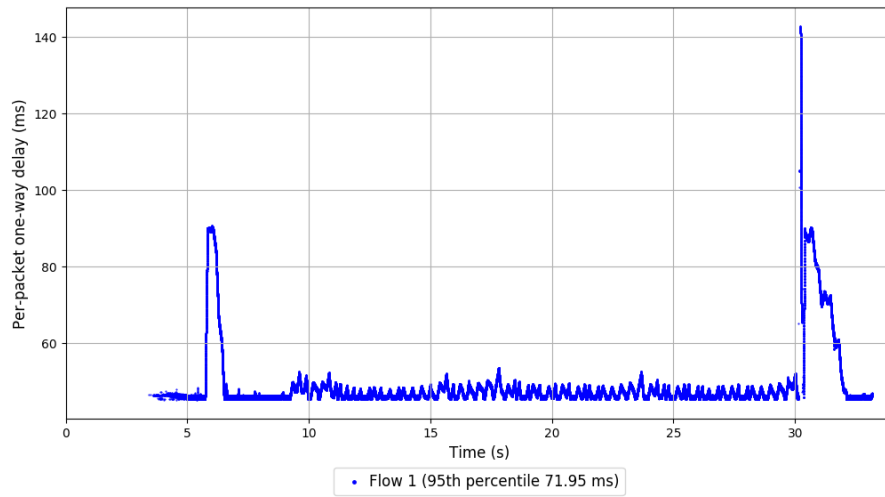
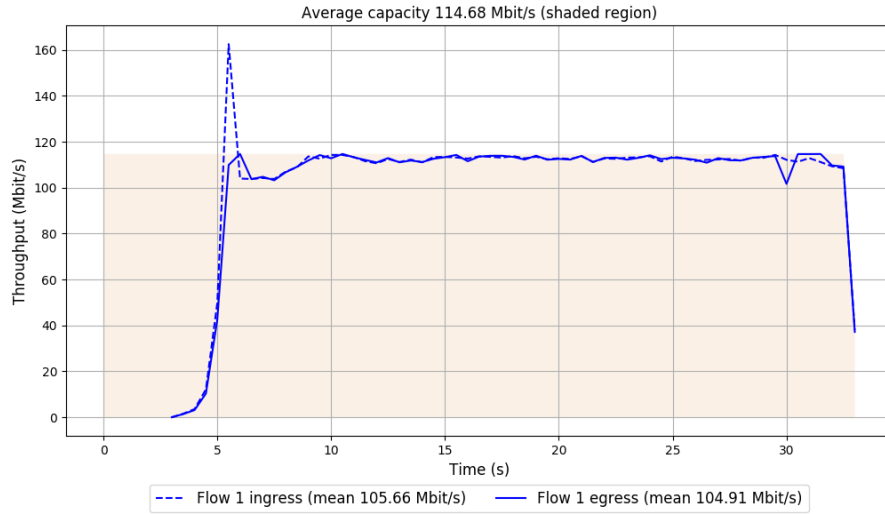
-- Flow 1:

Average throughput: 104.91 Mbit/s

95th percentile per-packet one-way delay: 71.951 ms

Loss rate: 0.87%

Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-03-05 17:55:16

End at: 2018-03-05 17:55:46

Below is generated by plot.py at 2018-03-05 20:29:07

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 104.62 Mbit/s (91.2% utilization)

95th percentile per-packet one-way delay: 62.763 ms

Loss rate: 0.84%

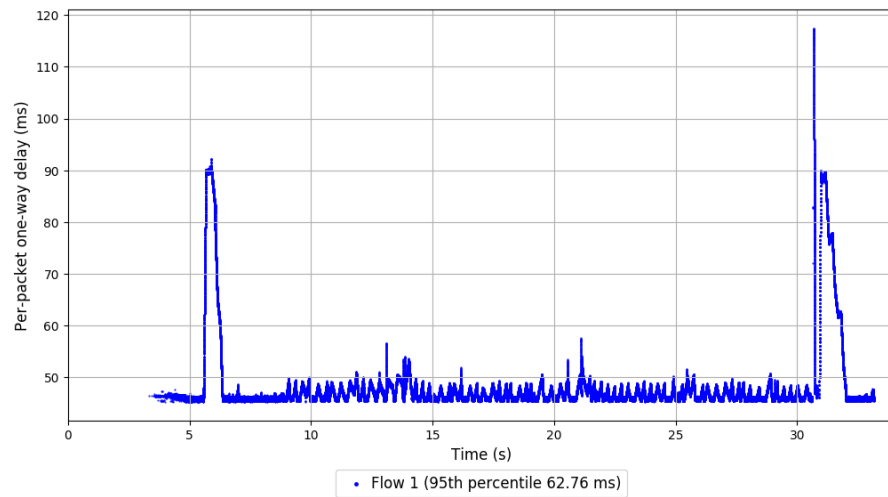
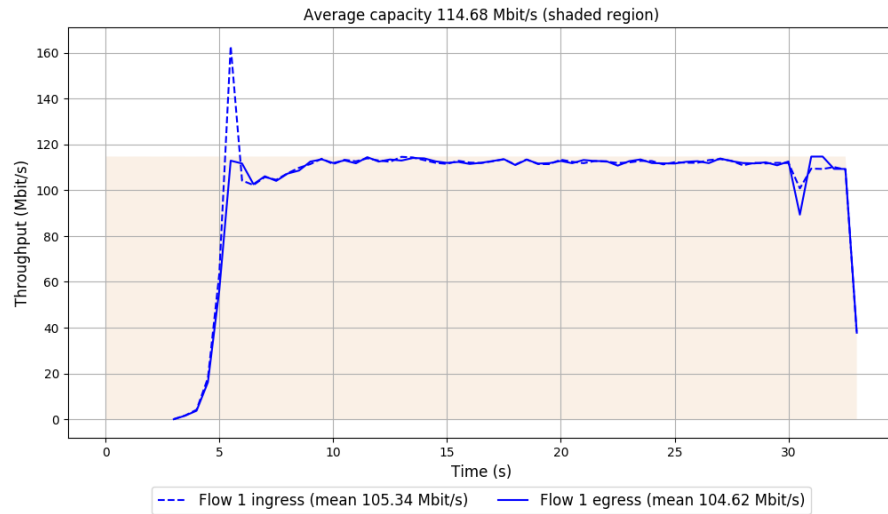
-- Flow 1:

Average throughput: 104.62 Mbit/s

95th percentile per-packet one-way delay: 62.763 ms

Loss rate: 0.84%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-03-05 18:07:08

End at: 2018-03-05 18:07:38

Below is generated by plot.py at 2018-03-05 20:29:10

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 104.77 Mbit/s (91.4% utilization)

95th percentile per-packet one-way delay: 49.319 ms

Loss rate: 0.98%

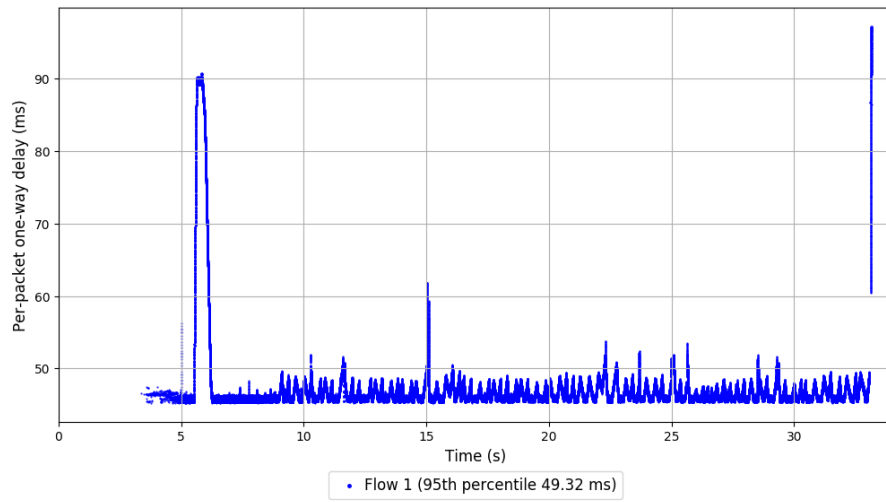
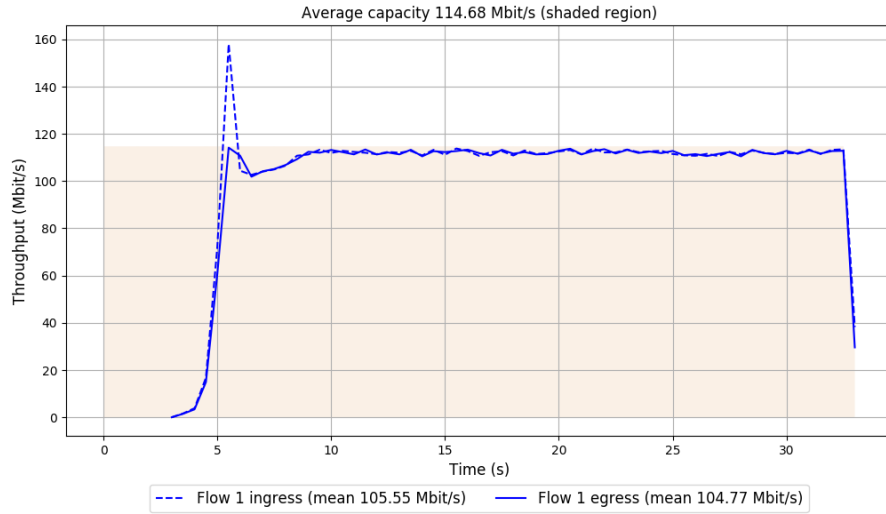
-- Flow 1:

Average throughput: 104.77 Mbit/s

95th percentile per-packet one-way delay: 49.319 ms

Loss rate: 0.98%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-03-05 18:19:12

End at: 2018-03-05 18:19:42

Below is generated by plot.py at 2018-03-05 20:29:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 105.05 Mbit/s (91.6% utilization)

95th percentile per-packet one-way delay: 49.660 ms

Loss rate: 0.84%

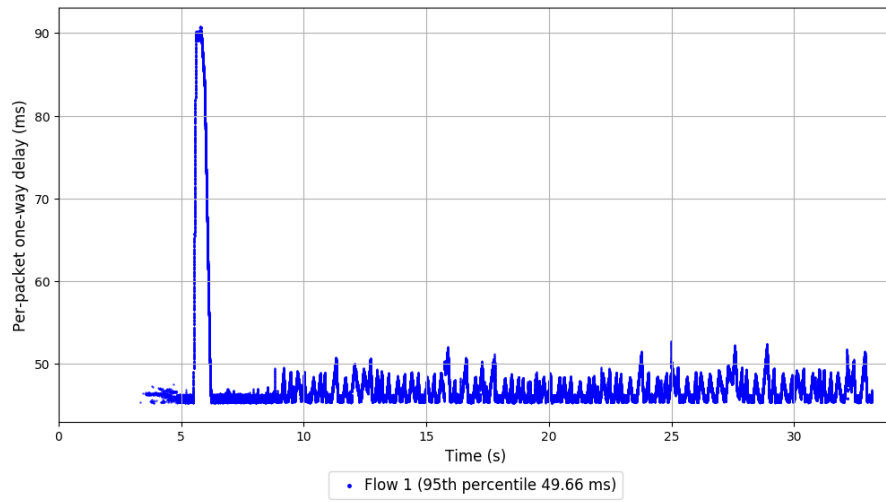
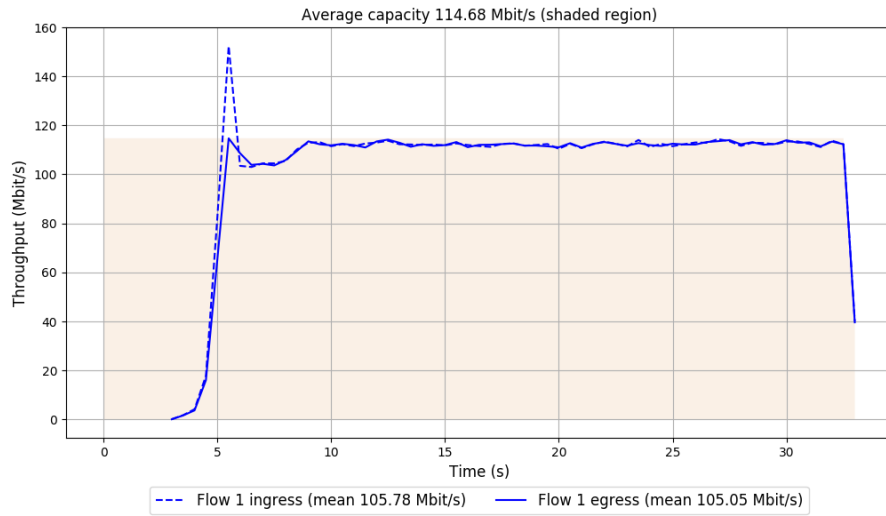
-- Flow 1:

Average throughput: 105.05 Mbit/s

95th percentile per-packet one-way delay: 49.660 ms

Loss rate: 0.84%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-03-05 18:31:04

End at: 2018-03-05 18:31:34

Below is generated by plot.py at 2018-03-05 20:29:24

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 105.79 Mbit/s (92.2% utilization)

95th percentile per-packet one-way delay: 50.699 ms

Loss rate: 0.83%

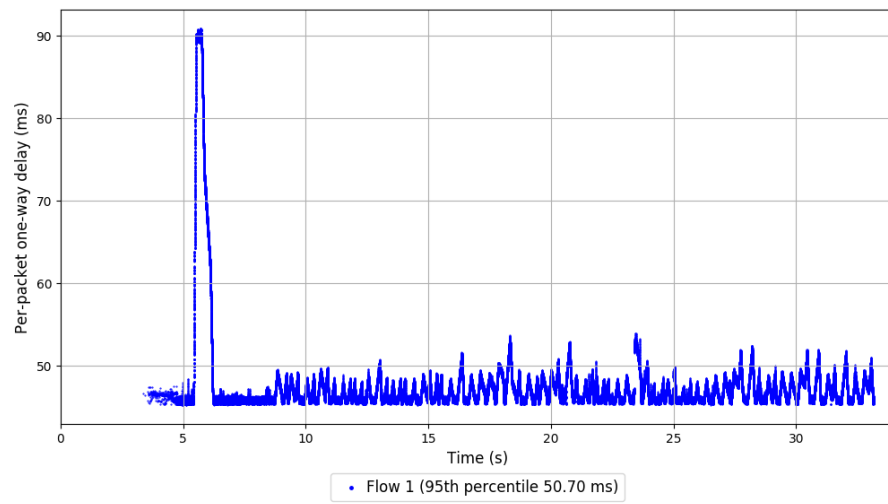
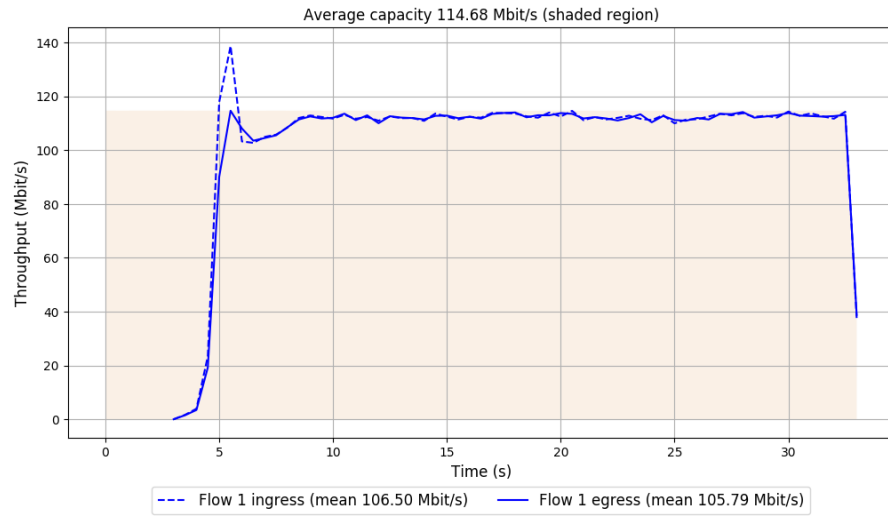
-- Flow 1:

Average throughput: 105.79 Mbit/s

95th percentile per-packet one-way delay: 50.699 ms

Loss rate: 0.83%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-03-05 18:42:58

End at: 2018-03-05 18:43:28

Below is generated by plot.py at 2018-03-05 20:29:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 104.78 Mbit/s (91.4% utilization)

95th percentile per-packet one-way delay: 49.605 ms

Loss rate: 0.94%

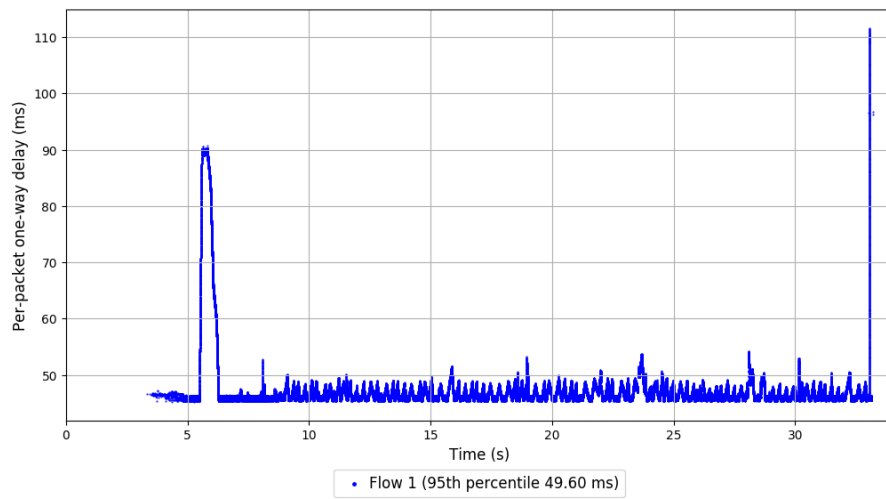
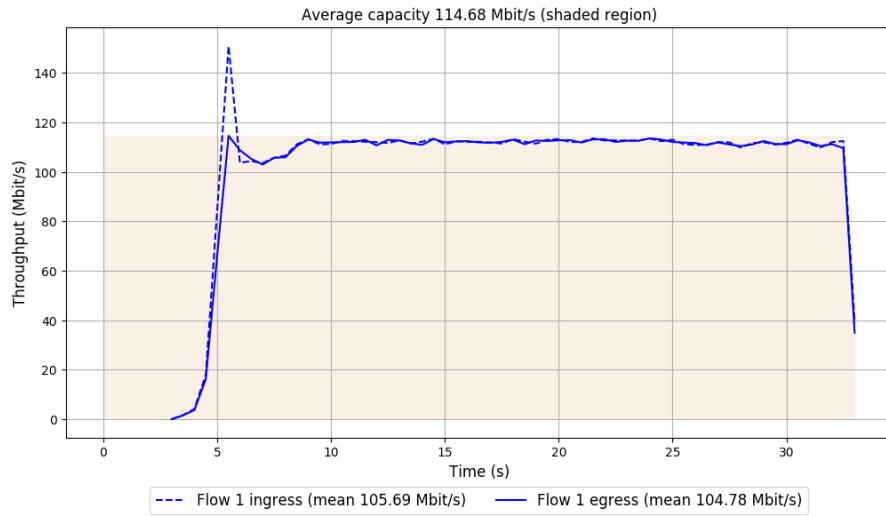
-- Flow 1:

Average throughput: 104.78 Mbit/s

95th percentile per-packet one-way delay: 49.605 ms

Loss rate: 0.94%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-03-05 18:54:51

End at: 2018-03-05 18:55:21

Below is generated by plot.py at 2018-03-05 20:29:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 104.66 Mbit/s (91.3% utilization)

95th percentile per-packet one-way delay: 51.510 ms

Loss rate: 1.08%

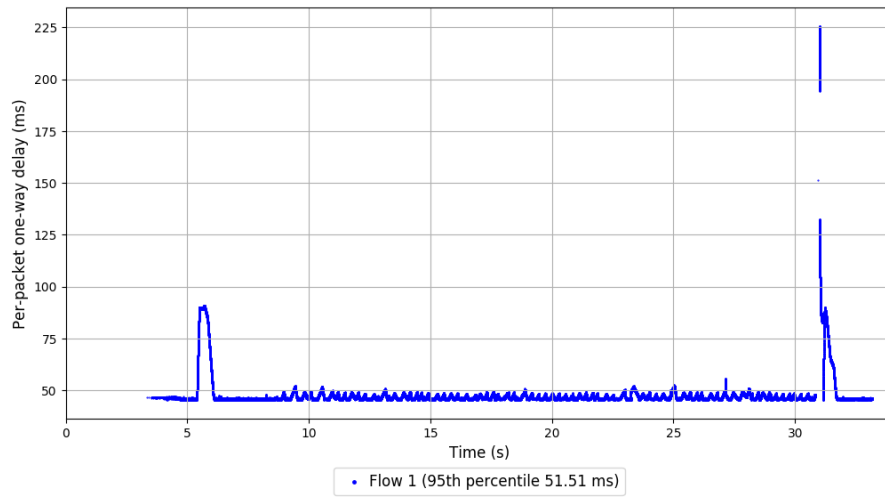
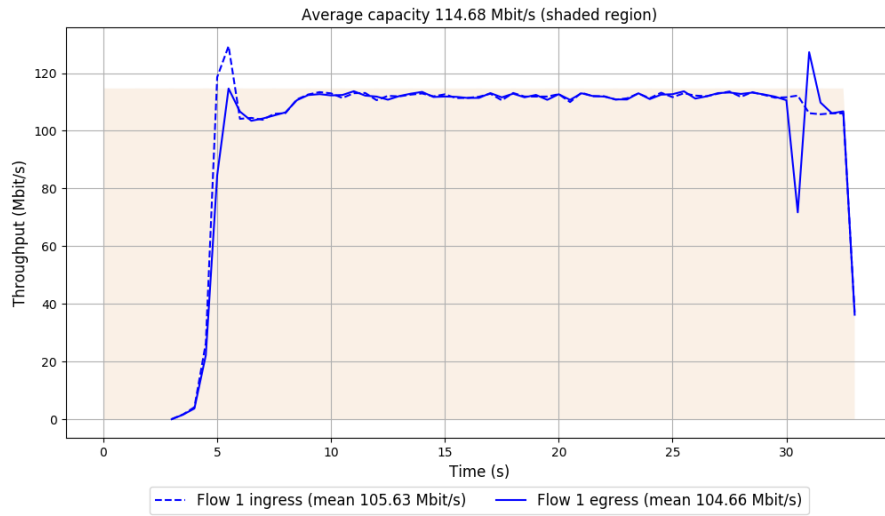
-- Flow 1:

Average throughput: 104.66 Mbit/s

95th percentile per-packet one-way delay: 51.510 ms

Loss rate: 1.08%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-03-05 19:06:44

End at: 2018-03-05 19:07:14

Below is generated by plot.py at 2018-03-05 20:30:01

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 102.81 Mbit/s (89.6% utilization)

95th percentile per-packet one-way delay: 50.158 ms

Loss rate: 0.77%

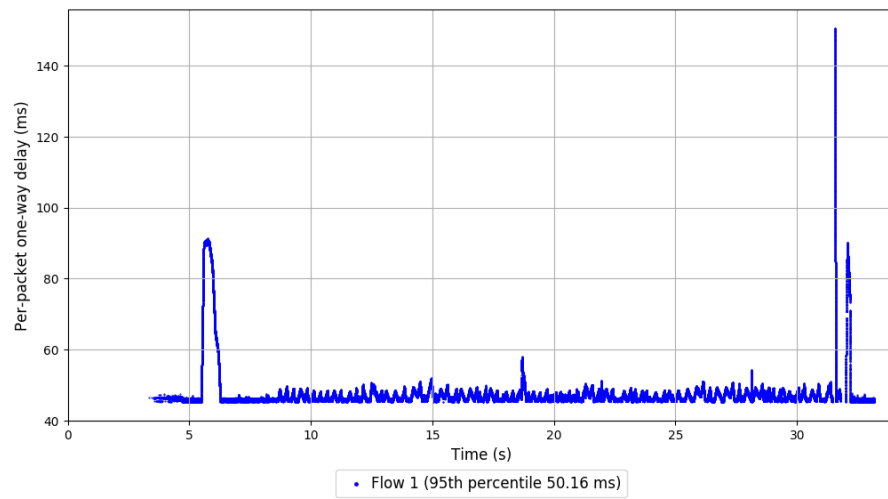
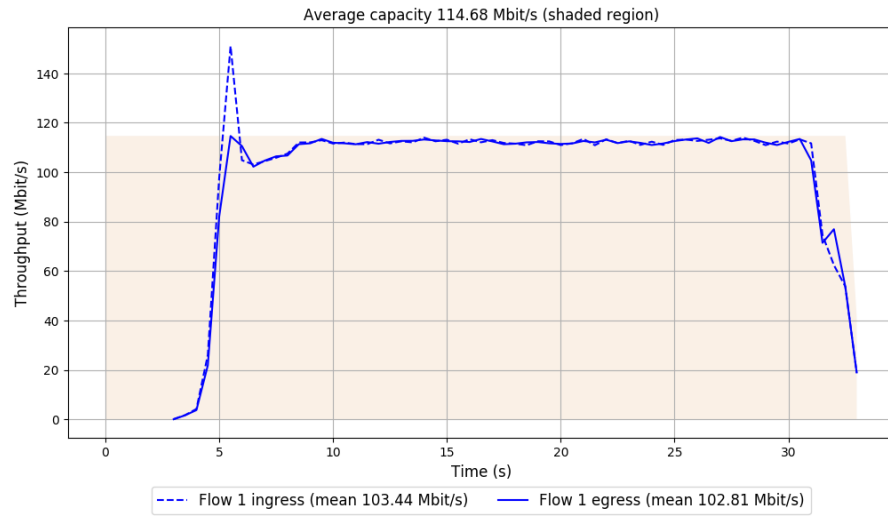
-- Flow 1:

Average throughput: 102.81 Mbit/s

95th percentile per-packet one-way delay: 50.158 ms

Loss rate: 0.77%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-03-05 19:18:53

End at: 2018-03-05 19:19:23

Below is generated by plot.py at 2018-03-05 20:30:07

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 104.80 Mbit/s (91.4% utilization)

95th percentile per-packet one-way delay: 50.459 ms

Loss rate: 0.84%

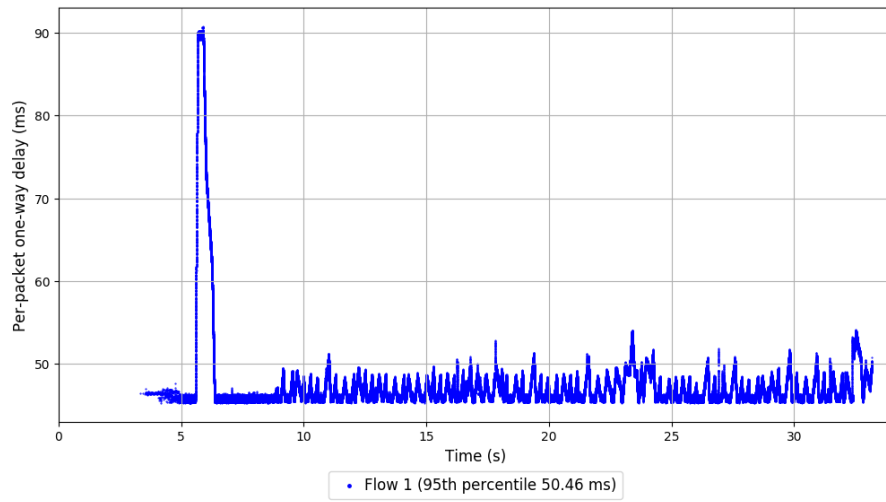
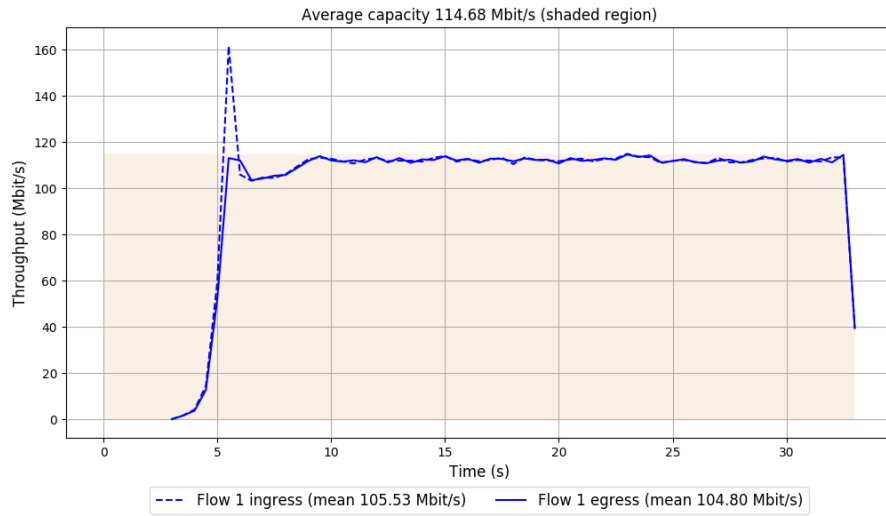
-- Flow 1:

Average throughput: 104.80 Mbit/s

95th percentile per-packet one-way delay: 50.459 ms

Loss rate: 0.84%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-03-05 19:30:49

End at: 2018-03-05 19:31:19

Below is generated by plot.py at 2018-03-05 20:30:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 114.68 Mbit/s

Average throughput: 105.23 Mbit/s (91.8% utilization)

95th percentile per-packet one-way delay: 57.954 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 105.23 Mbit/s

95th percentile per-packet one-way delay: 57.954 ms

Loss rate: 0.83%

Run 10: Report of Vivace-LTE — Data Link

