

Pantheon Report

Generated at 2018-02-27 07:52:44 (UTC).

Tested in mahimahi: mm-delay 130 mm-link 3.04mbps-poisson.trace 3.04mbps-poisson.trace
--uplink-queue=droptail --uplink-queue-args=packets=426

Repeated the test of 17 congestion control schemes 10 times.

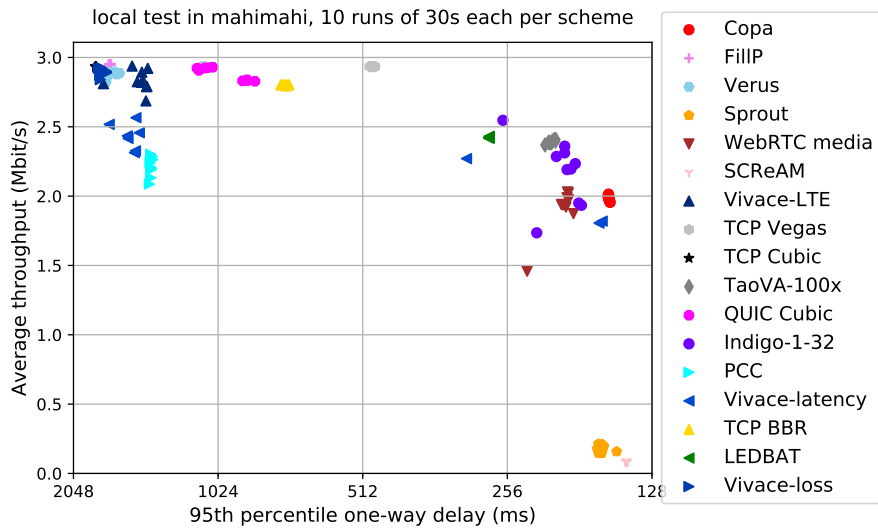
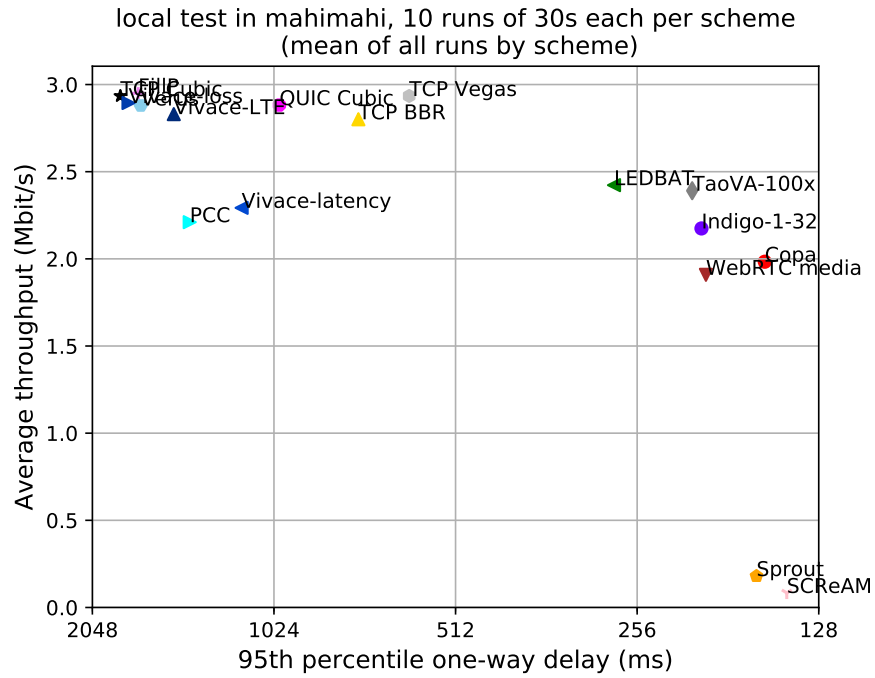
Each test lasted for 30 seconds running 1 flow.

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
```



scheme	# runs	mean avg tput (Mbit/s)	mean 95th-%ile delay (ms)	mean loss rate (%)
		flow 1	flow 1	flow 1
TCP BBR	10	2.80	741.86	1.52
TCP Cubic	10	2.93	1840.54	8.16
LEDBAT	10	2.42	279.66	1.04
PCC	10	2.21	1412.34	1.96
QUIC Cubic	9	2.88	1002.95	3.80
SCReAM	10	0.08	144.62	0.42
WebRTC media	10	1.91	196.90	0.52
Sprout	10	0.18	162.35	0.61
TaoVA-100x	10	2.39	207.50	0.56
TCP Vegas	10	2.93	611.13	1.42
Verus	10	2.88	1702.57	5.29
Copa	10	1.98	157.28	0.48
FillP	10	2.95	1719.60	92.02
Indigo-1-32	10	2.17	200.27	0.60
Vivace-latency	10	2.29	1158.68	2.31
Vivace-loss	10	2.89	1783.97	36.24
Vivace-LTE	10	2.83	1500.95	4.08

Run 1: Statistics of TCP BBR

Start at: 2018-02-27 06:16:45

End at: 2018-02-27 06:17:15

Below is generated by plot.py at 2018-02-27 07:49:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.80 Mbit/s (104.0% utilization)

95th percentile per-packet one-way delay: 741.721 ms

Loss rate: 1.54%

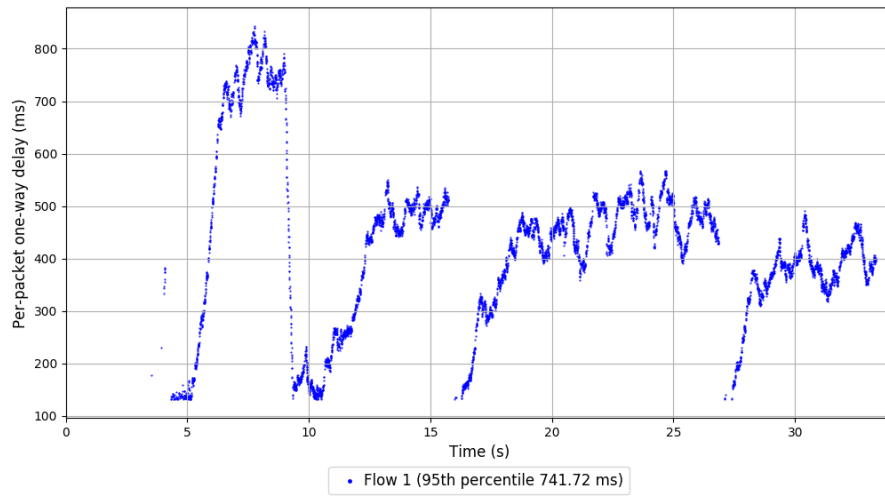
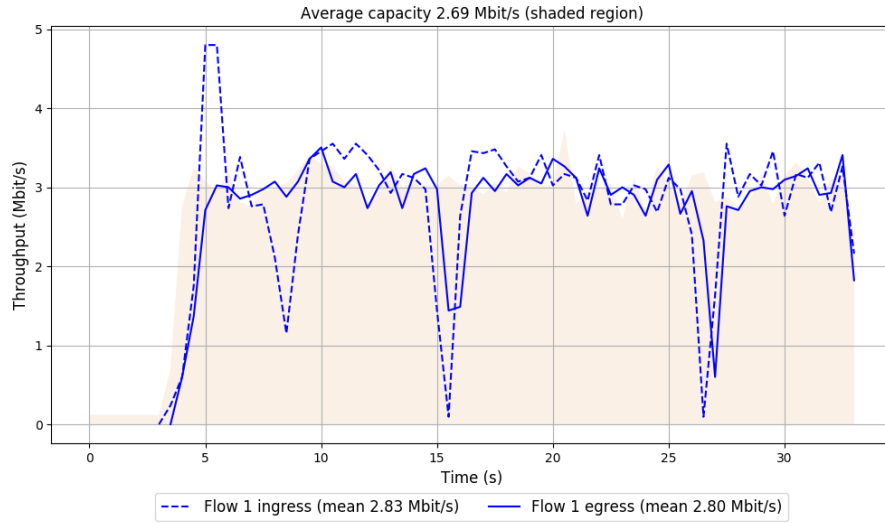
-- Flow 1:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 741.721 ms

Loss rate: 1.54%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-27 06:26:58

End at: 2018-02-27 06:27:28

Below is generated by plot.py at 2018-02-27 07:49:26

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.80 Mbit/s (104.0% utilization)

95th percentile per-packet one-way delay: 746.283 ms

Loss rate: 1.70%

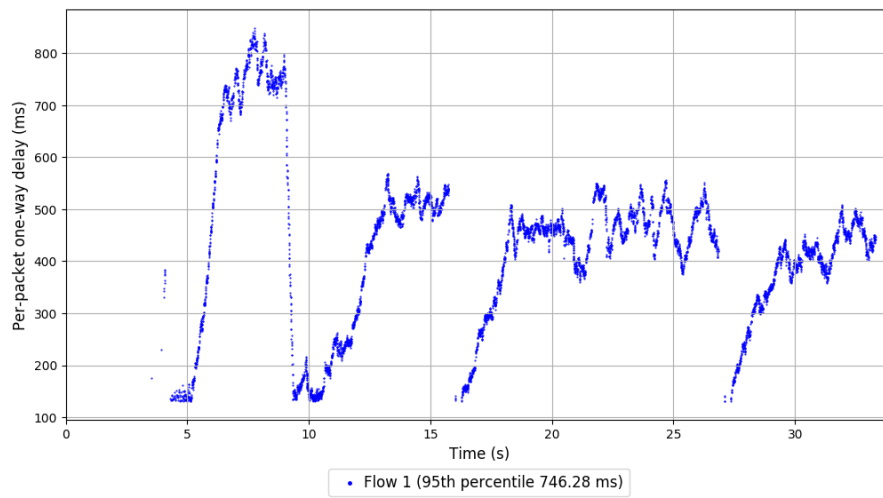
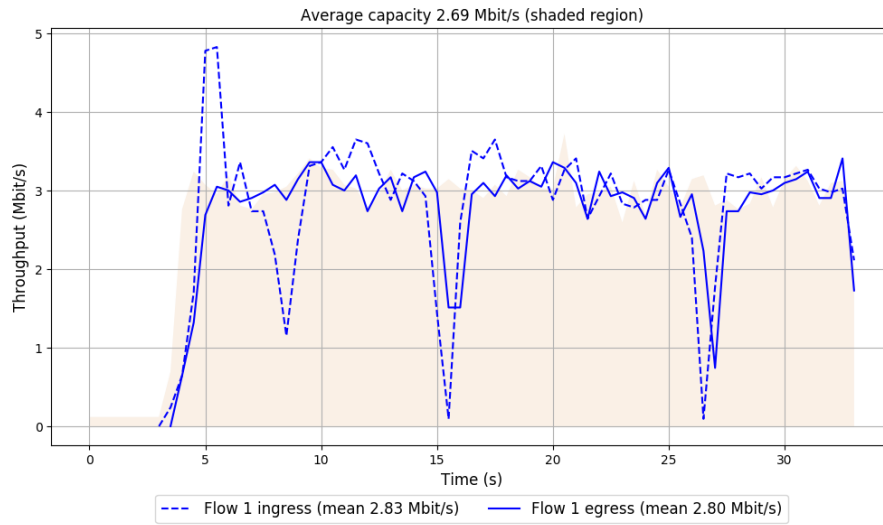
-- Flow 1:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 746.283 ms

Loss rate: 1.70%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-27 06:37:09

End at: 2018-02-27 06:37:39

Below is generated by plot.py at 2018-02-27 07:49:27

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.80 Mbit/s (104.2% utilization)

95th percentile per-packet one-way delay: 729.046 ms

Loss rate: 1.50%

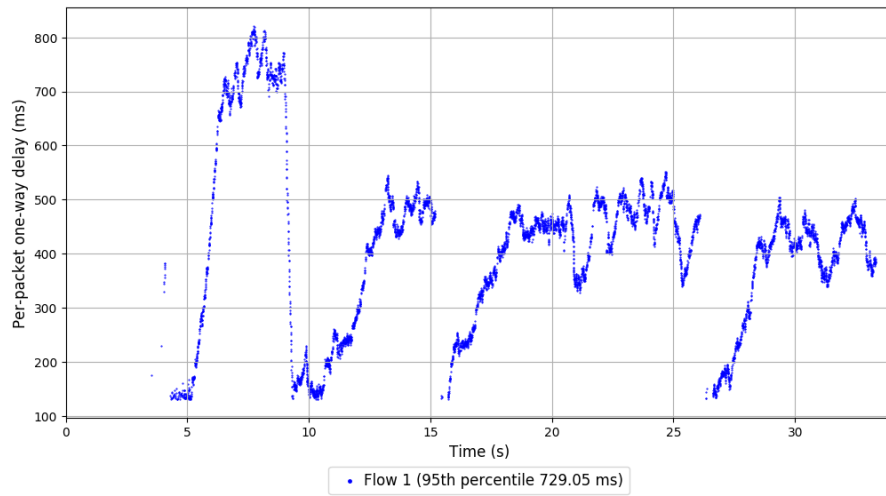
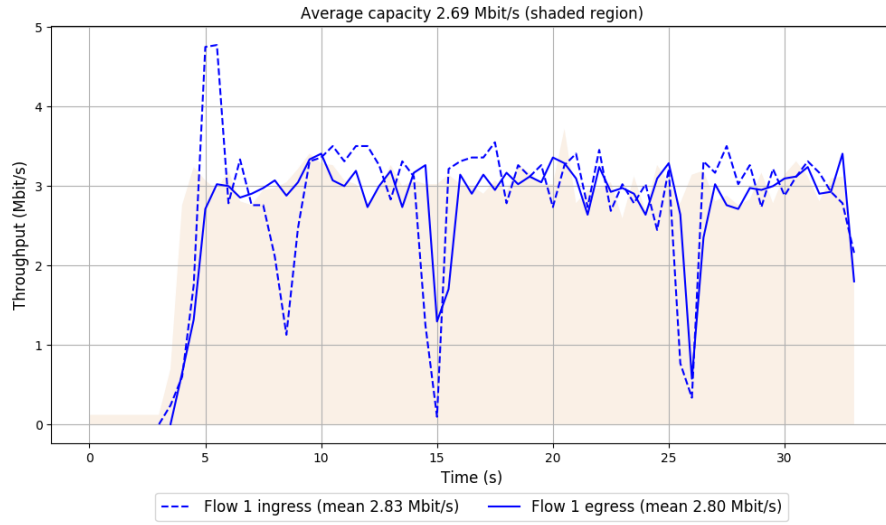
-- Flow 1:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 729.046 ms

Loss rate: 1.50%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-27 06:47:21

End at: 2018-02-27 06:47:51

Below is generated by plot.py at 2018-02-27 07:49:27

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.80 Mbit/s (104.1% utilization)

95th percentile per-packet one-way delay: 758.523 ms

Loss rate: 1.28%

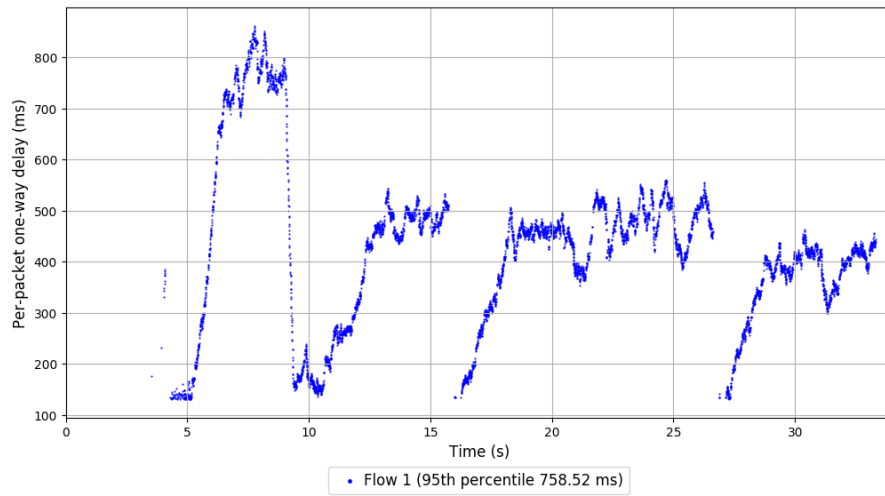
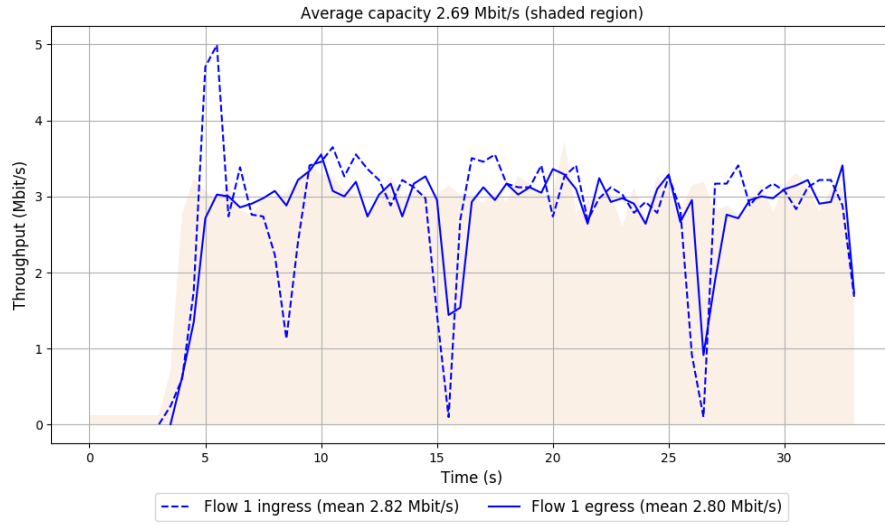
-- Flow 1:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 758.523 ms

Loss rate: 1.28%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-27 06:57:33

End at: 2018-02-27 06:58:03

Below is generated by plot.py at 2018-02-27 07:49:27

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.80 Mbit/s (104.1% utilization)

95th percentile per-packet one-way delay: 735.451 ms

Loss rate: 1.44%

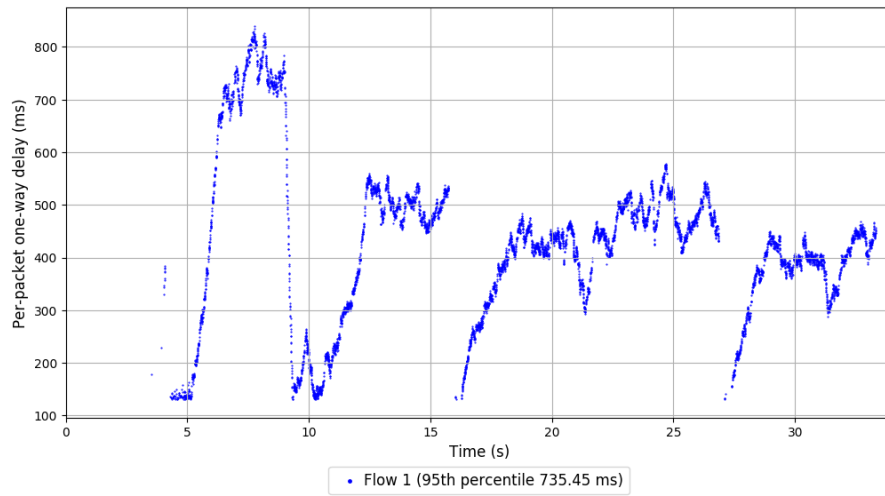
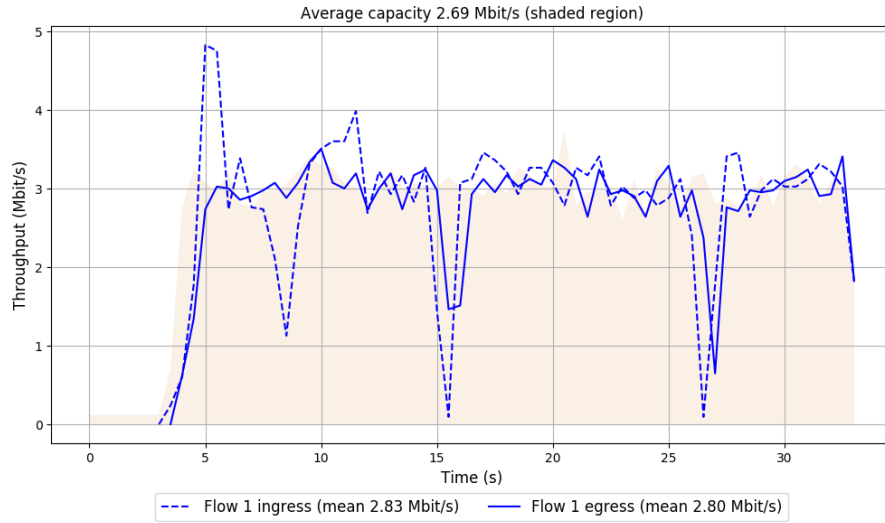
-- Flow 1:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 735.451 ms

Loss rate: 1.44%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-27 07:07:45

End at: 2018-02-27 07:08:15

Below is generated by plot.py at 2018-02-27 07:49:27

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.80 Mbit/s (103.9% utilization)

95th percentile per-packet one-way delay: 737.302 ms

Loss rate: 1.45%

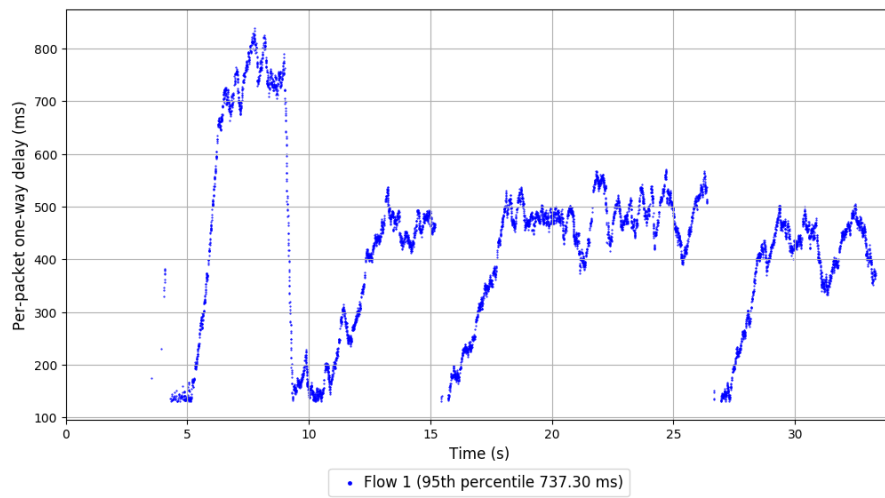
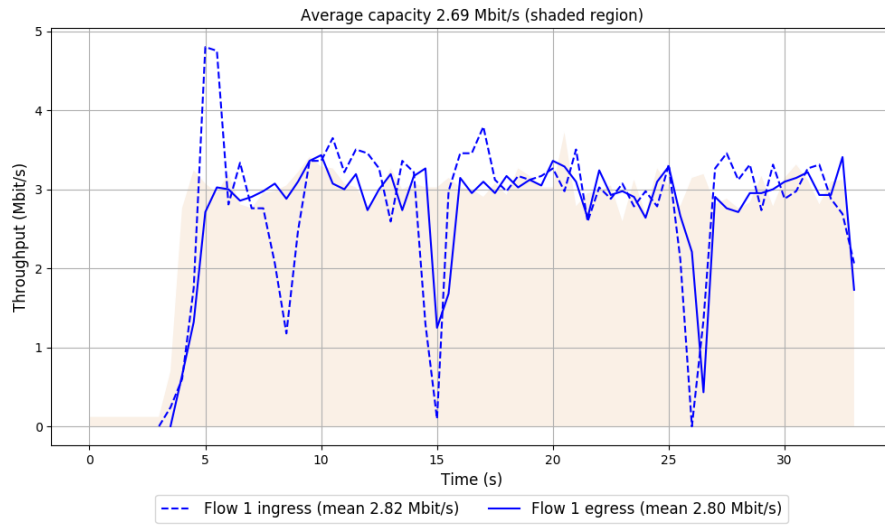
-- Flow 1:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 737.302 ms

Loss rate: 1.45%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-27 07:17:56

End at: 2018-02-27 07:18:26

Below is generated by plot.py at 2018-02-27 07:49:27

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.81 Mbit/s (104.2% utilization)

95th percentile per-packet one-way delay: 754.350 ms

Loss rate: 1.78%

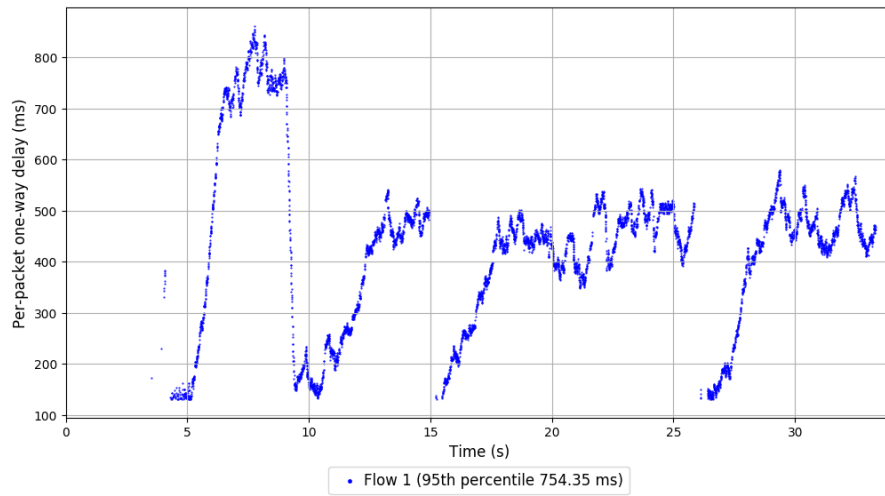
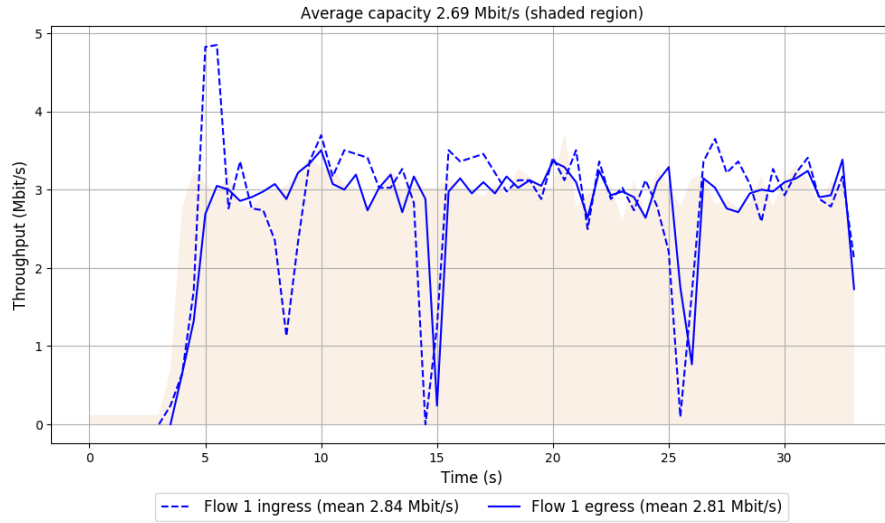
-- Flow 1:

Average throughput: 2.81 Mbit/s

95th percentile per-packet one-way delay: 754.350 ms

Loss rate: 1.78%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-27 07:28:08

End at: 2018-02-27 07:28:38

Below is generated by plot.py at 2018-02-27 07:49:27

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.80 Mbit/s (104.0% utilization)

95th percentile per-packet one-way delay: 735.349 ms

Loss rate: 1.42%

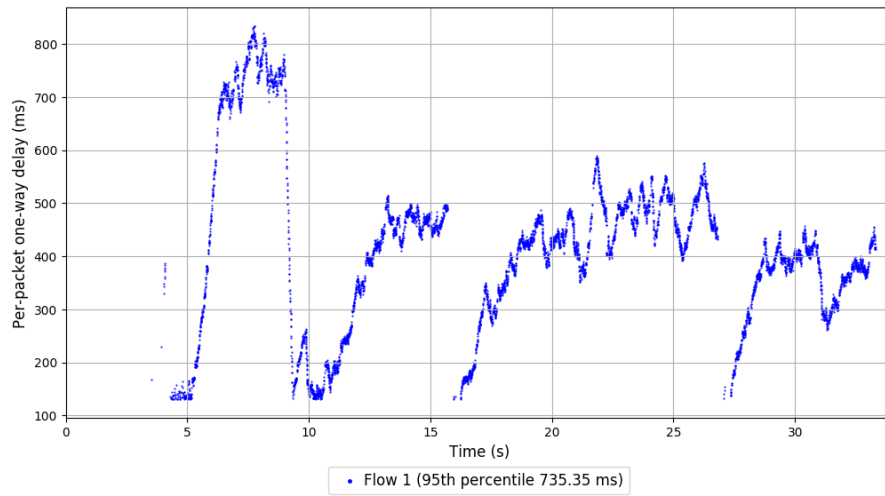
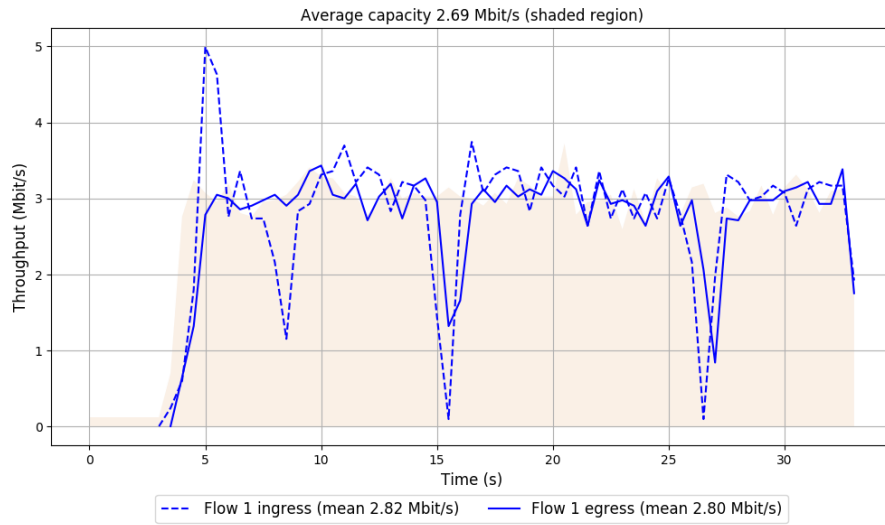
-- Flow 1:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 735.349 ms

Loss rate: 1.42%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-27 07:38:20

End at: 2018-02-27 07:38:50

Below is generated by plot.py at 2018-02-27 07:49:34

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.80 Mbit/s (104.0% utilization)

95th percentile per-packet one-way delay: 742.161 ms

Loss rate: 1.35%

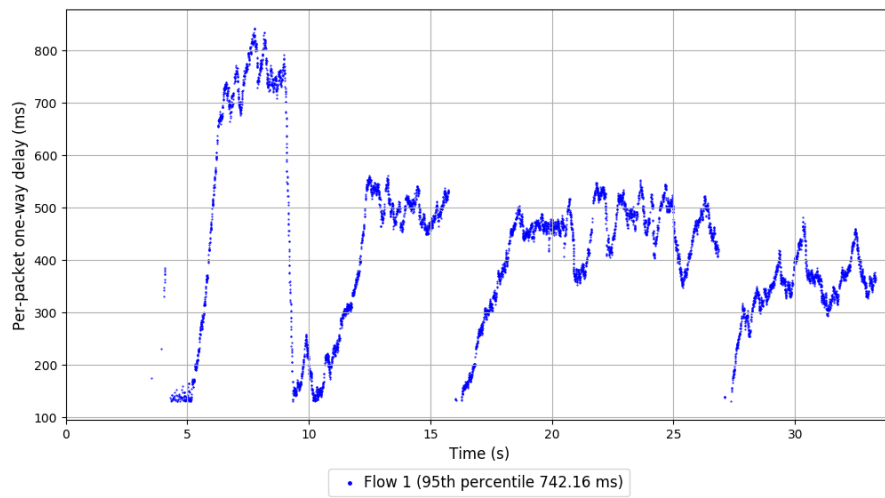
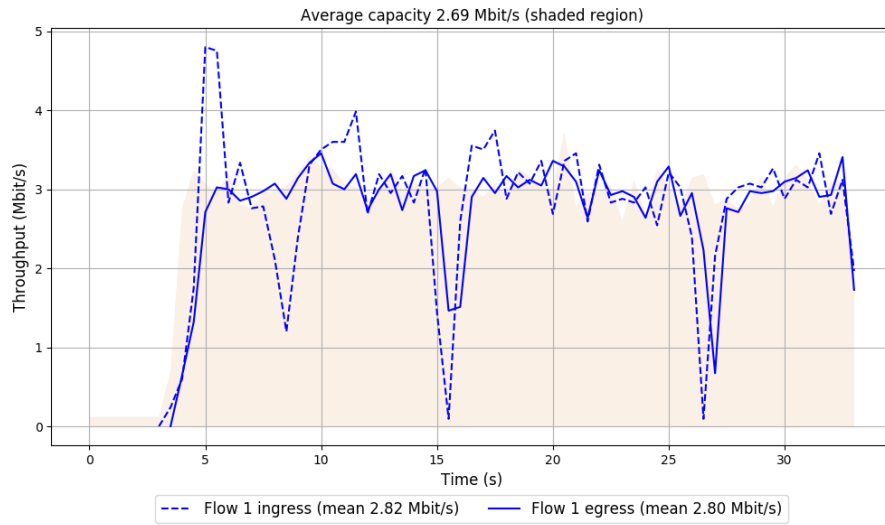
-- Flow 1:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 742.161 ms

Loss rate: 1.35%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-27 07:48:32

End at: 2018-02-27 07:49:02

Below is generated by plot.py at 2018-02-27 07:49:34

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.80 Mbit/s (103.8% utilization)

95th percentile per-packet one-way delay: 738.389 ms

Loss rate: 1.71%

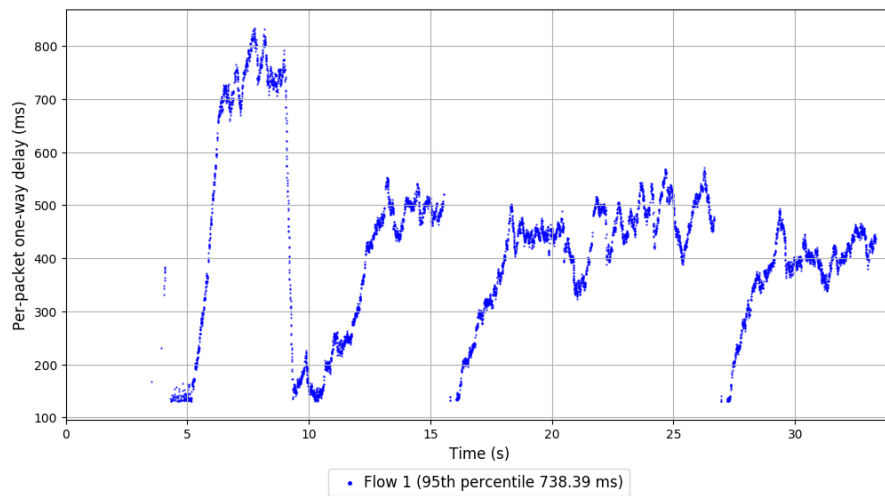
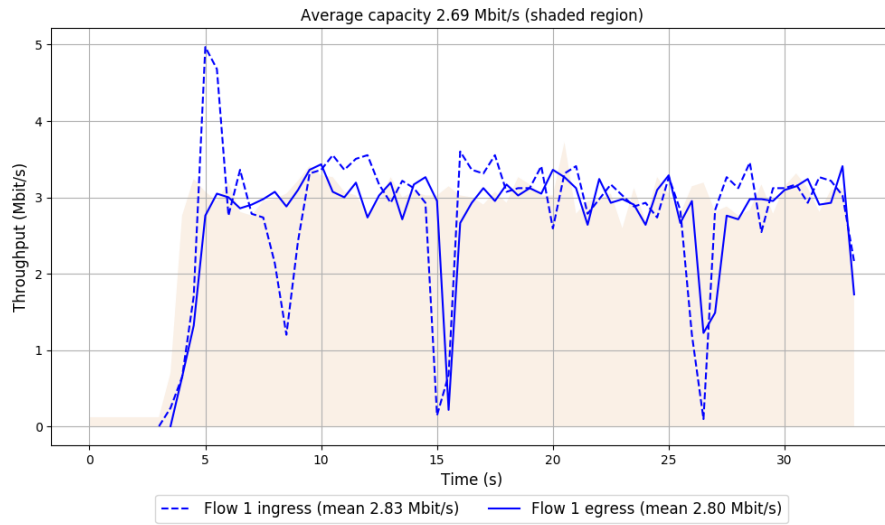
-- Flow 1:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 738.389 ms

Loss rate: 1.71%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-27 06:16:11

End at: 2018-02-27 06:16:41

Below is generated by plot.py at 2018-02-27 07:49:35

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 1839.749 ms

Loss rate: 8.21%

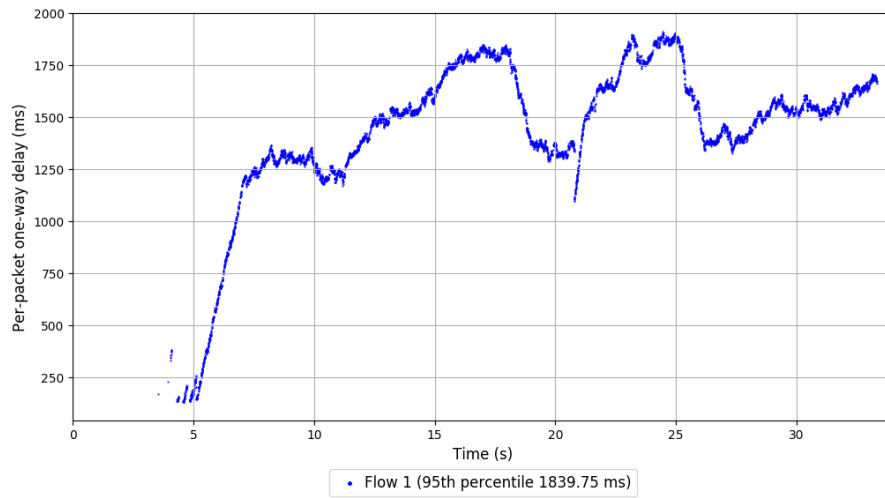
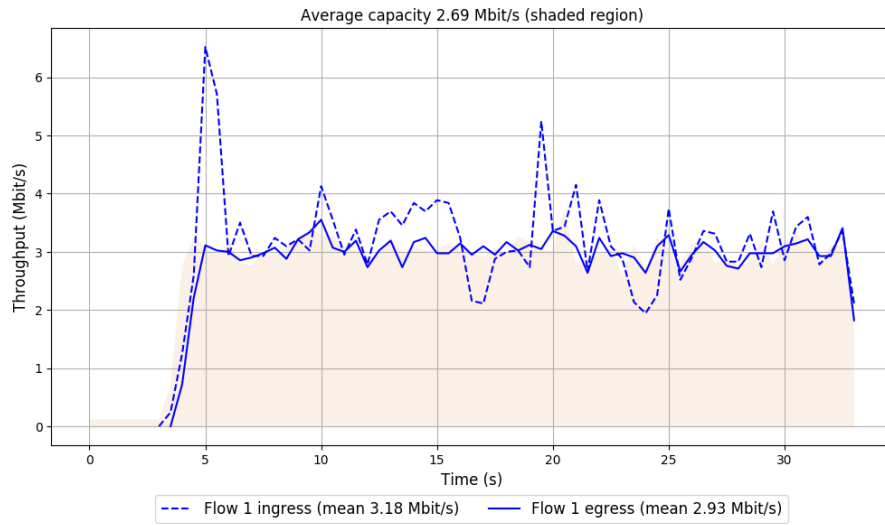
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1839.749 ms

Loss rate: 8.21%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-27 06:26:24

End at: 2018-02-27 06:26:54

Below is generated by plot.py at 2018-02-27 07:49:35

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 1839.969 ms

Loss rate: 8.12%

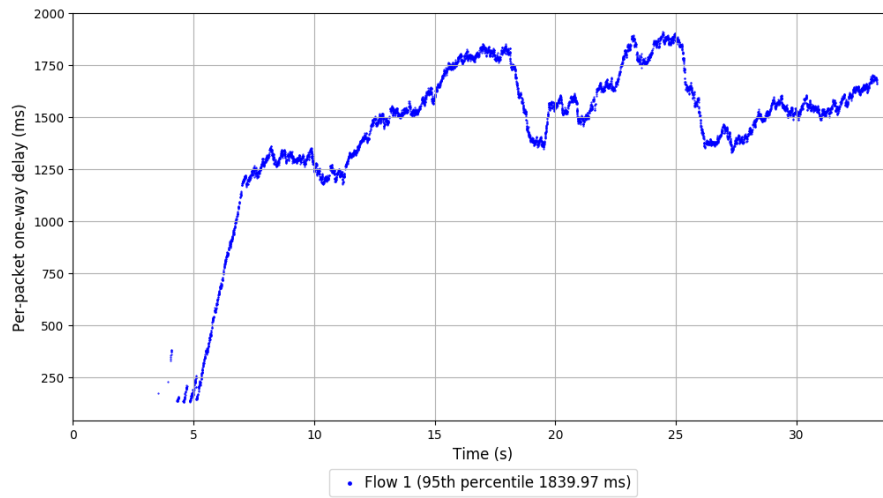
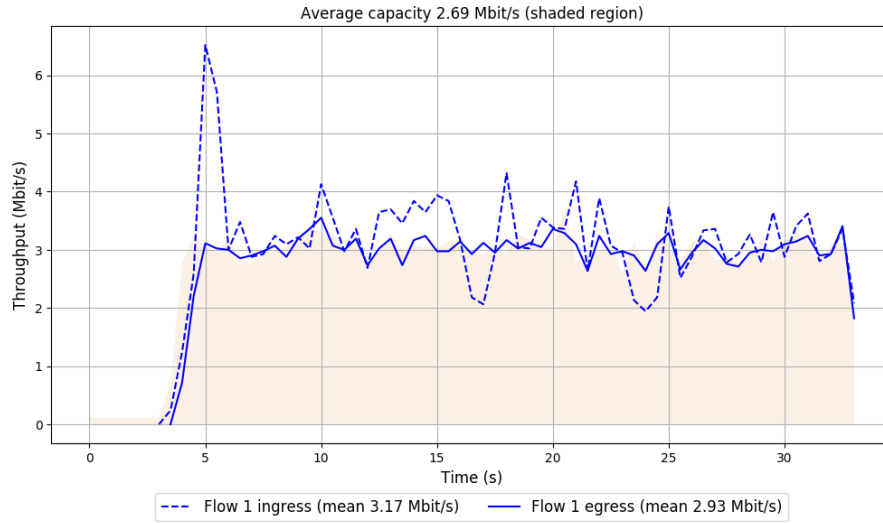
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1839.969 ms

Loss rate: 8.12%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-27 06:36:35

End at: 2018-02-27 06:37:05

Below is generated by plot.py at 2018-02-27 07:49:36

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 1839.009 ms

Loss rate: 8.04%

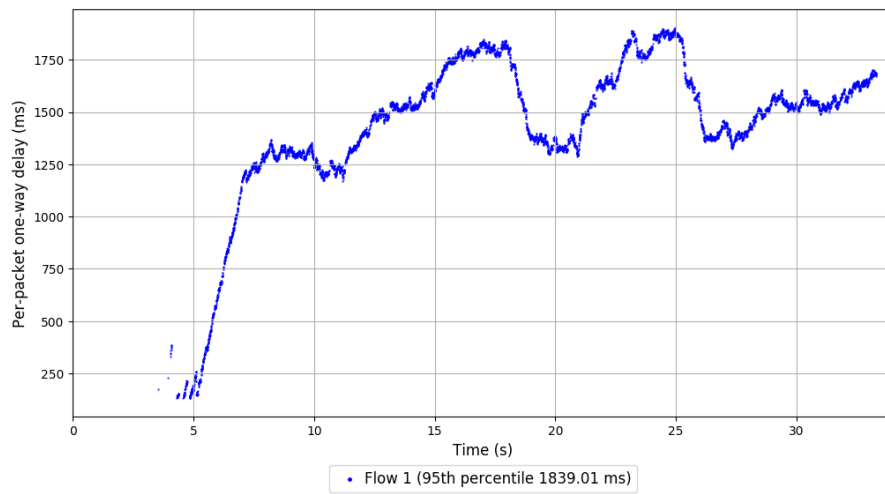
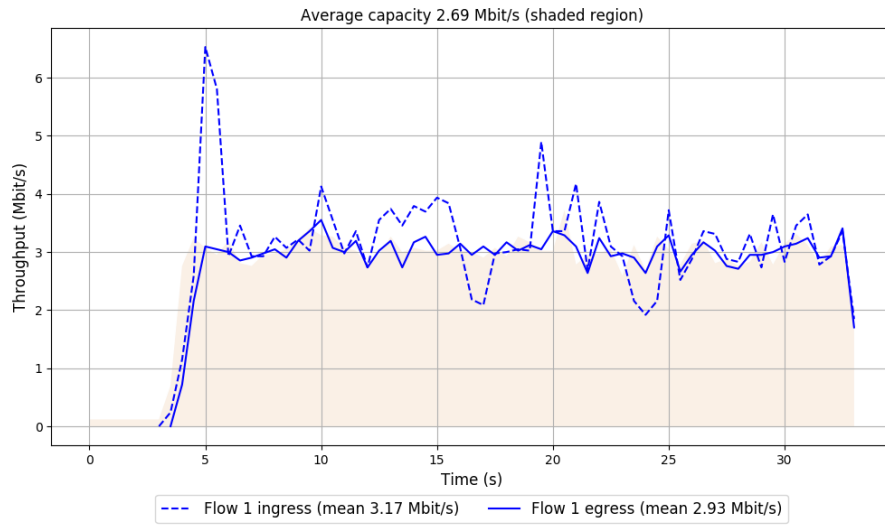
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1839.009 ms

Loss rate: 8.04%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-27 06:46:47

End at: 2018-02-27 06:47:17

Below is generated by plot.py at 2018-02-27 07:49:36

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 1840.023 ms

Loss rate: 8.19%

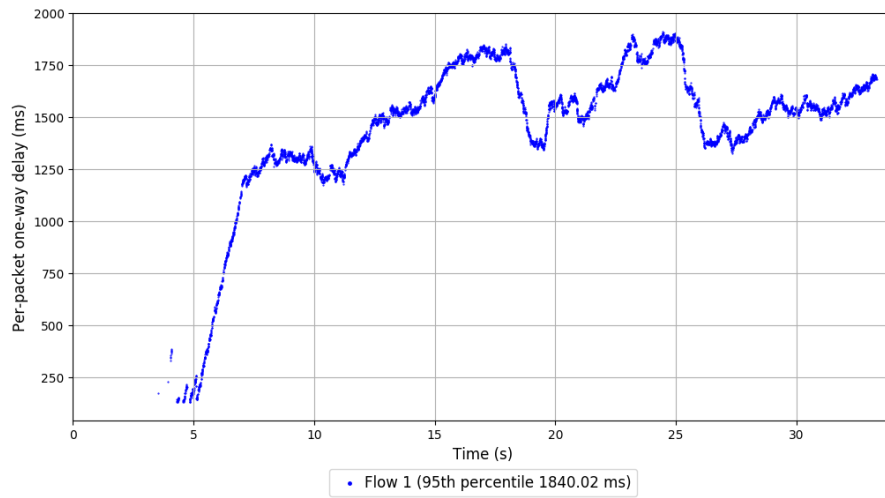
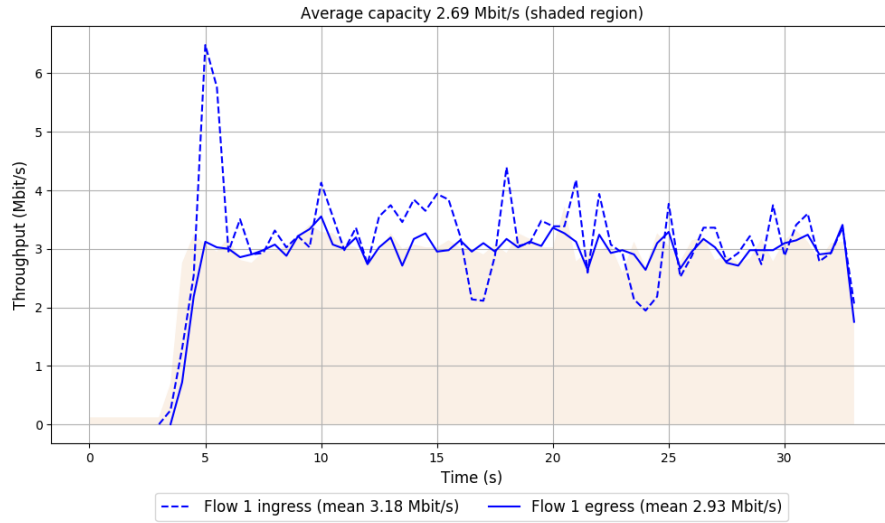
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1840.023 ms

Loss rate: 8.19%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-27 06:56:59

End at: 2018-02-27 06:57:29

Below is generated by plot.py at 2018-02-27 07:49:36

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 1837.873 ms

Loss rate: 8.17%

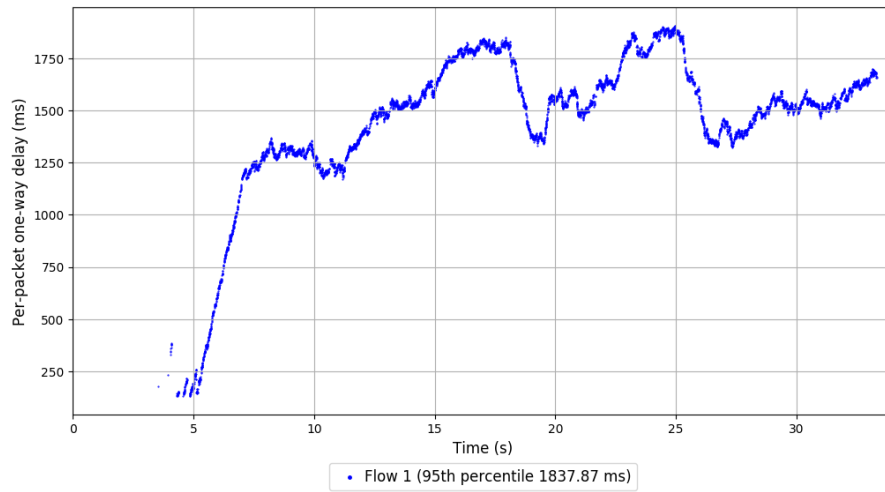
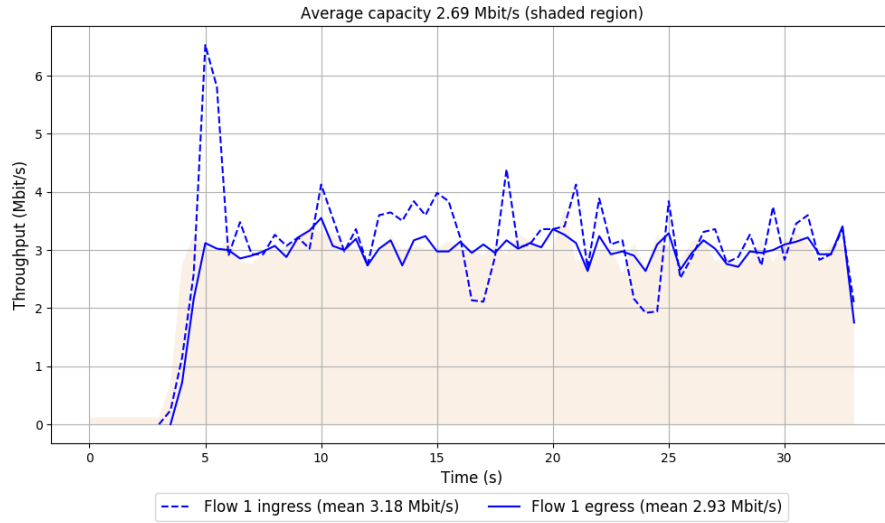
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1837.873 ms

Loss rate: 8.17%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-27 07:07:11

End at: 2018-02-27 07:07:41

Below is generated by plot.py at 2018-02-27 07:49:36

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 1842.203 ms

Loss rate: 8.13%

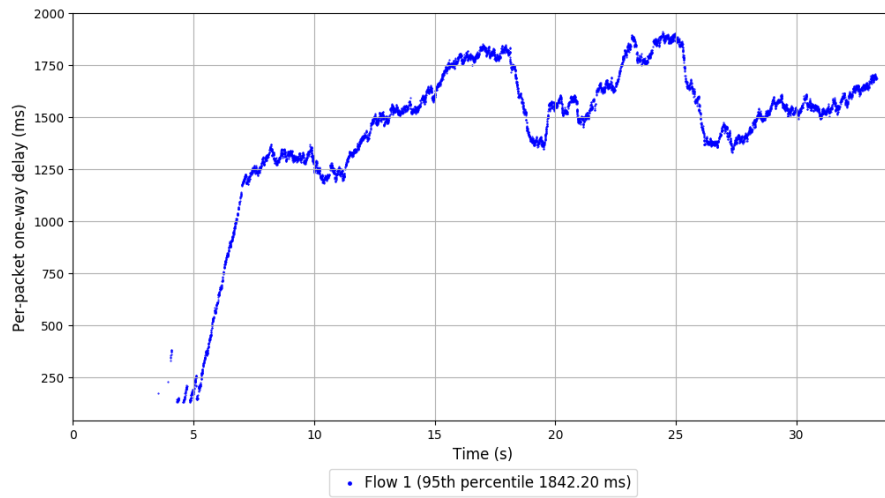
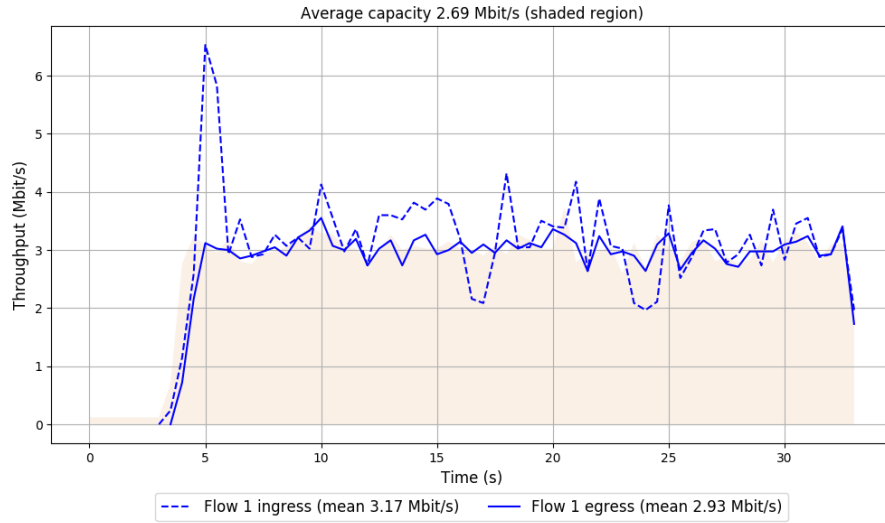
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1842.203 ms

Loss rate: 8.13%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-27 07:17:22

End at: 2018-02-27 07:17:52

Below is generated by plot.py at 2018-02-27 07:49:43

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 1841.598 ms

Loss rate: 8.19%

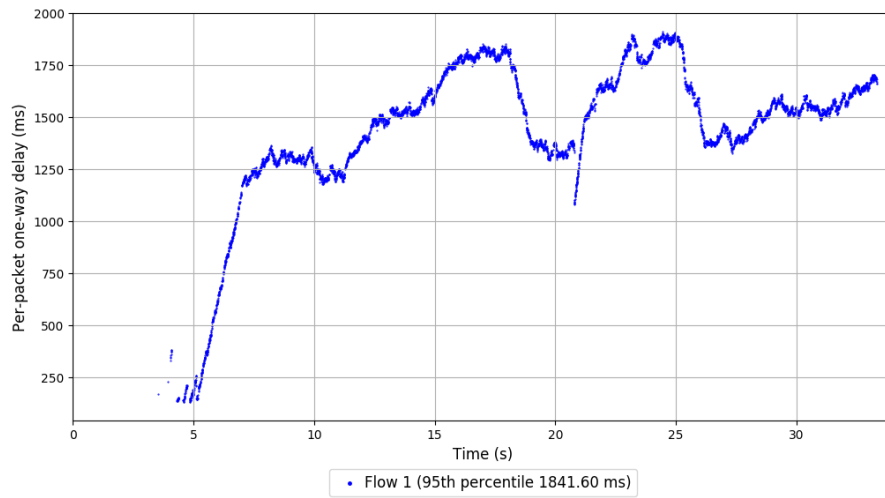
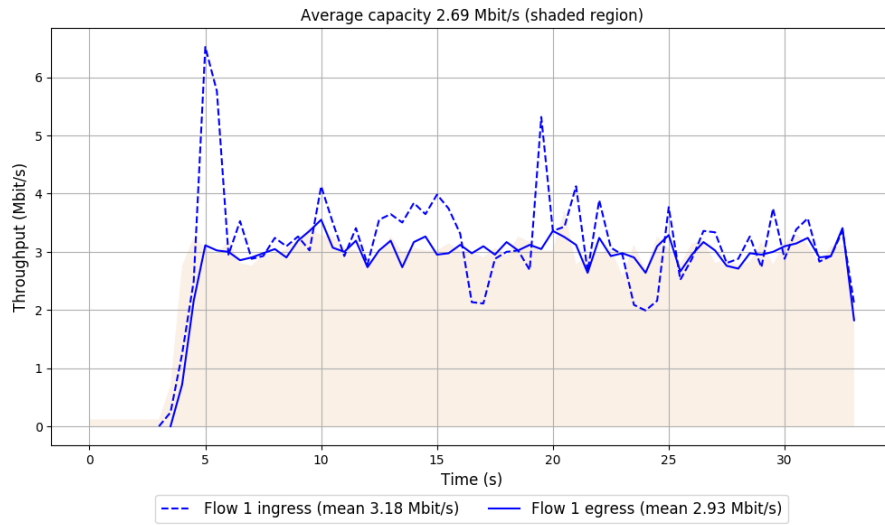
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1841.598 ms

Loss rate: 8.19%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-27 07:27:34

End at: 2018-02-27 07:28:04

Below is generated by plot.py at 2018-02-27 07:49:43

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 1842.113 ms

Loss rate: 8.13%

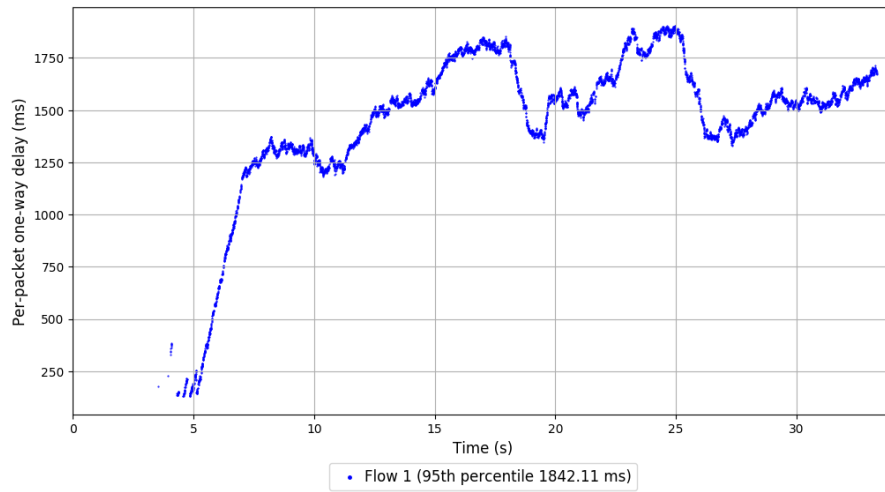
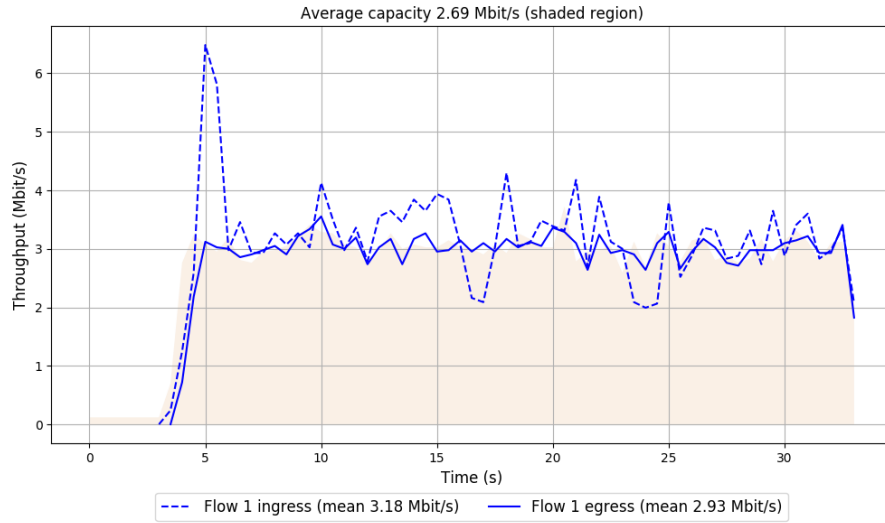
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1842.113 ms

Loss rate: 8.13%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-27 07:37:46

End at: 2018-02-27 07:38:16

Below is generated by plot.py at 2018-02-27 07:49:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 1841.312 ms

Loss rate: 8.15%

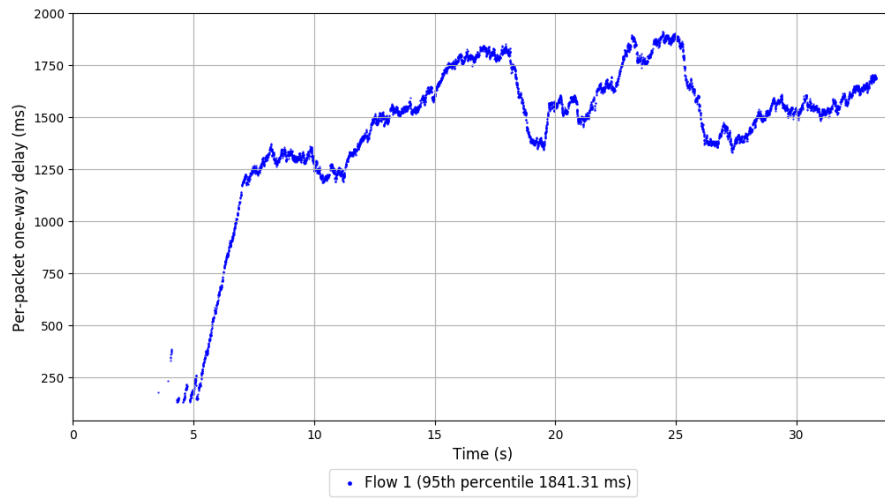
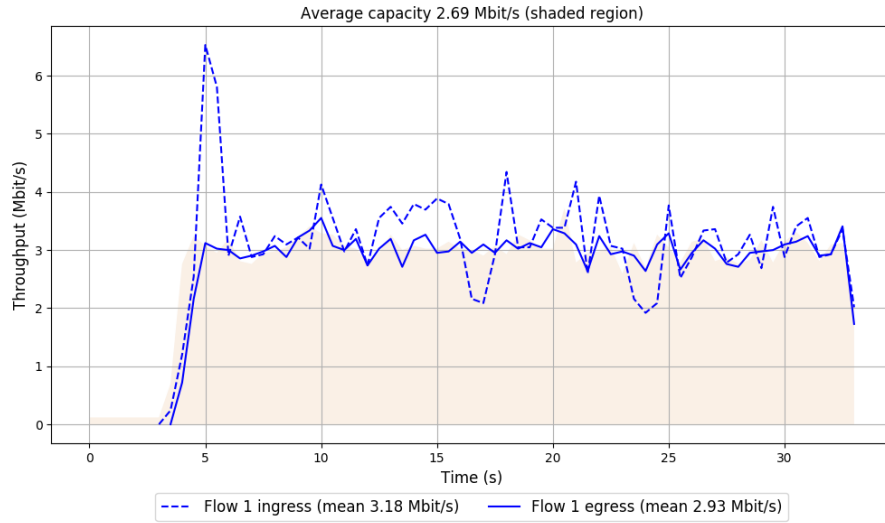
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1841.312 ms

Loss rate: 8.15%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-27 07:47:58

End at: 2018-02-27 07:48:28

Below is generated by plot.py at 2018-02-27 07:49:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 1841.575 ms

Loss rate: 8.24%

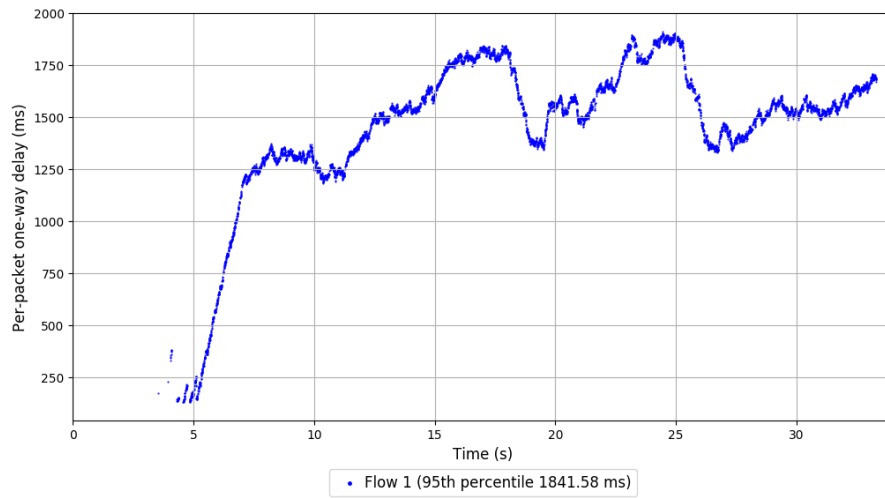
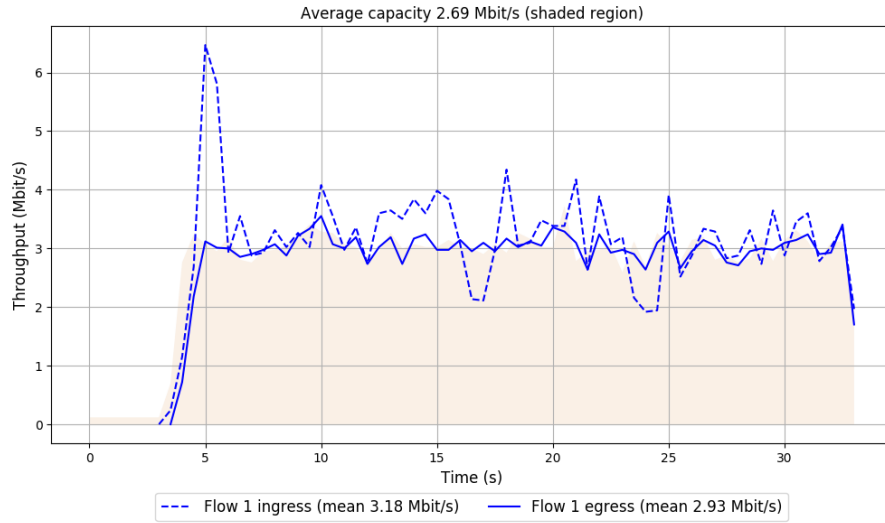
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1841.575 ms

Loss rate: 8.24%

Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of LEDBAT

Start at: 2018-02-27 06:07:42

End at: 2018-02-27 06:08:12

Below is generated by plot.py at 2018-02-27 07:49:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.42 Mbit/s (90.0% utilization)

95th percentile per-packet one-way delay: 279.662 ms

Loss rate: 1.03%

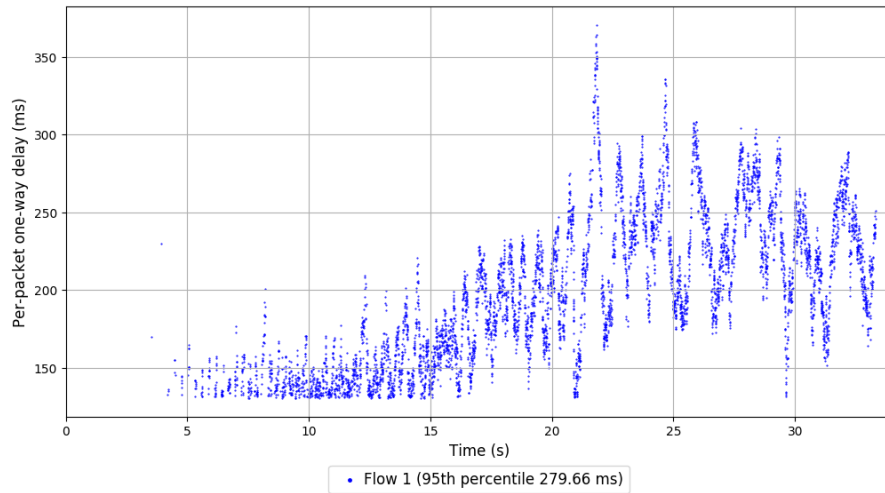
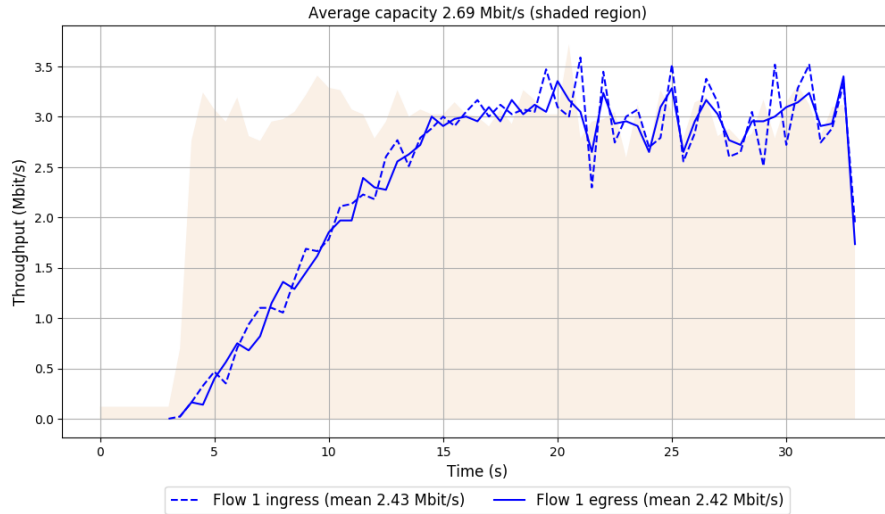
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 279.662 ms

Loss rate: 1.03%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-02-27 06:17:53

End at: 2018-02-27 06:18:23

Below is generated by plot.py at 2018-02-27 07:49:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.42 Mbit/s (89.9% utilization)

95th percentile per-packet one-way delay: 280.003 ms

Loss rate: 1.06%

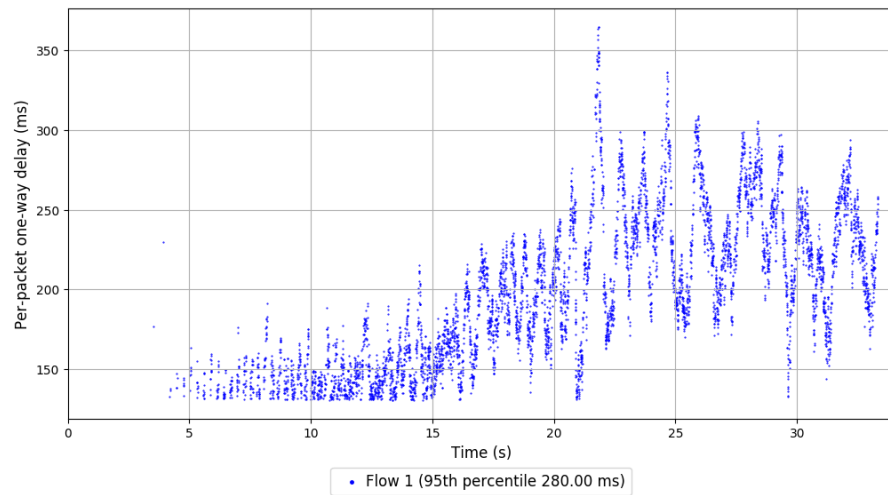
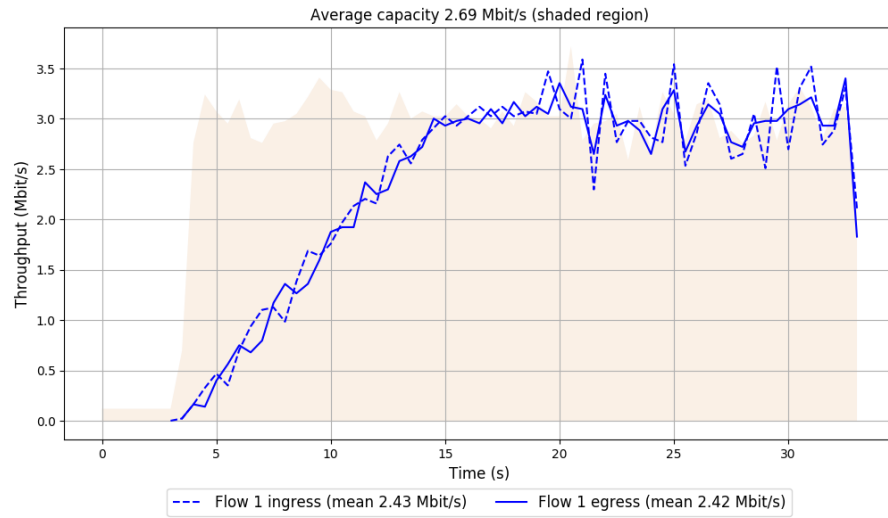
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 280.003 ms

Loss rate: 1.06%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-27 06:28:05

End at: 2018-02-27 06:28:35

Below is generated by plot.py at 2018-02-27 07:49:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.42 Mbit/s (90.0% utilization)

95th percentile per-packet one-way delay: 279.389 ms

Loss rate: 1.05%

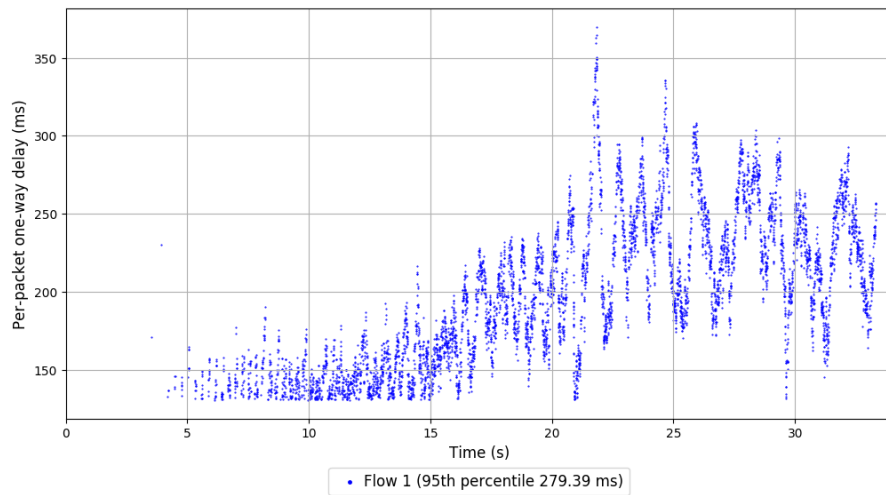
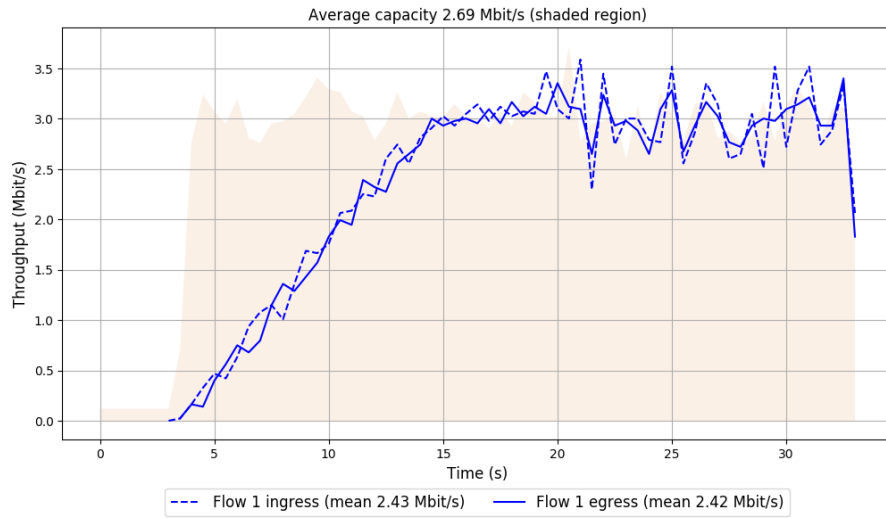
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 279.389 ms

Loss rate: 1.05%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-27 06:38:17

End at: 2018-02-27 06:38:47

Below is generated by plot.py at 2018-02-27 07:49:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.42 Mbit/s (90.0% utilization)

95th percentile per-packet one-way delay: 279.606 ms

Loss rate: 1.04%

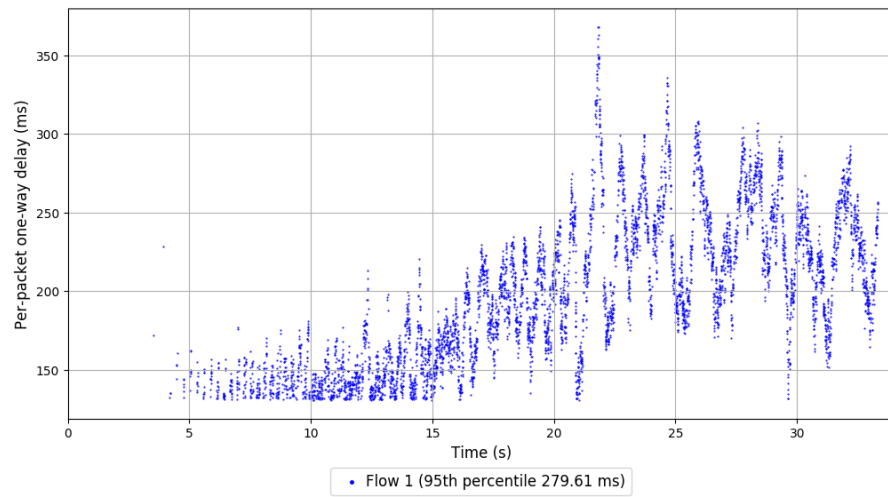
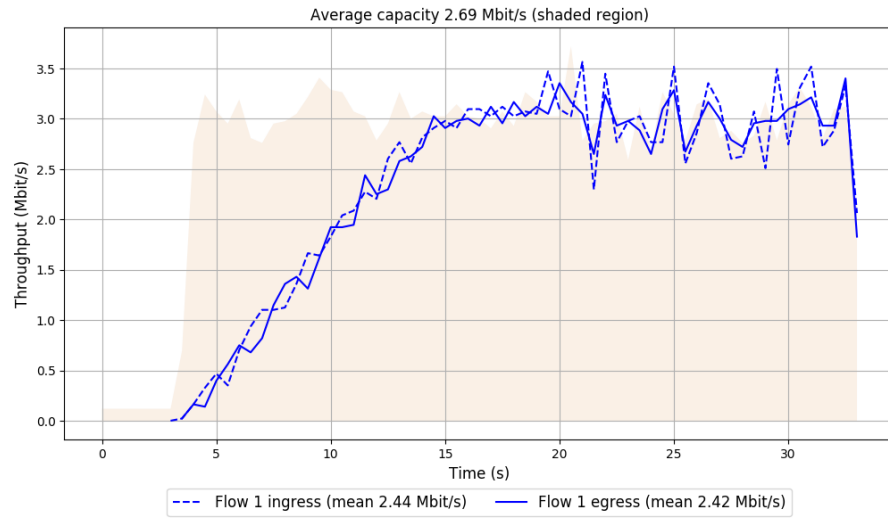
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 279.606 ms

Loss rate: 1.04%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-27 06:48:29

End at: 2018-02-27 06:48:59

Below is generated by plot.py at 2018-02-27 07:49:51

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.43 Mbit/s (90.1% utilization)

95th percentile per-packet one-way delay: 279.353 ms

Loss rate: 1.04%

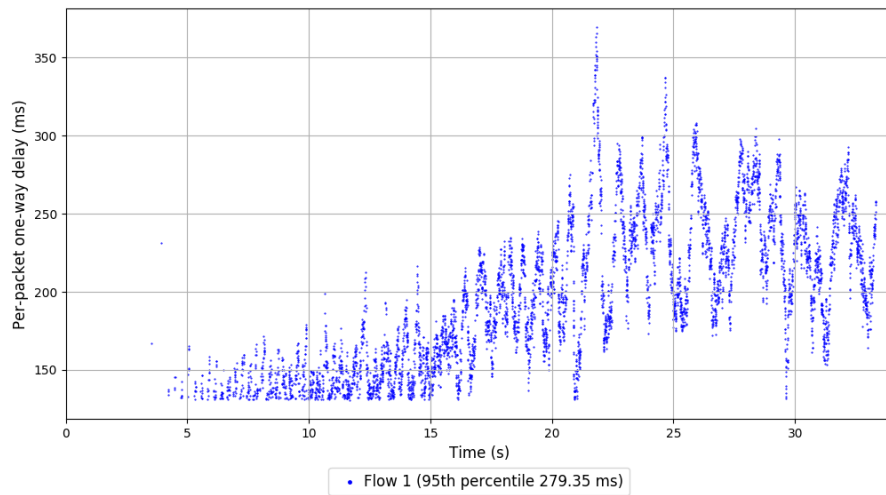
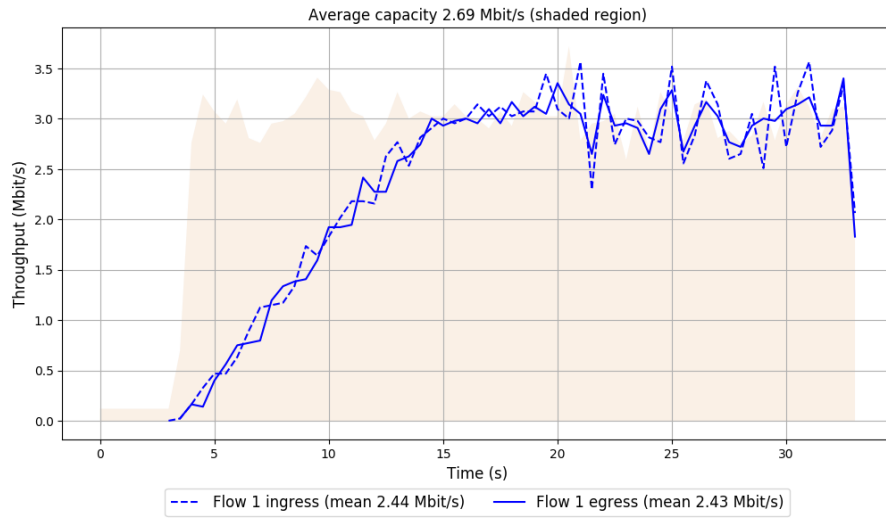
-- Flow 1:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 279.353 ms

Loss rate: 1.04%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-27 06:58:41

End at: 2018-02-27 06:59:11

Below is generated by plot.py at 2018-02-27 07:49:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.42 Mbit/s (89.9% utilization)

95th percentile per-packet one-way delay: 279.528 ms

Loss rate: 1.05%

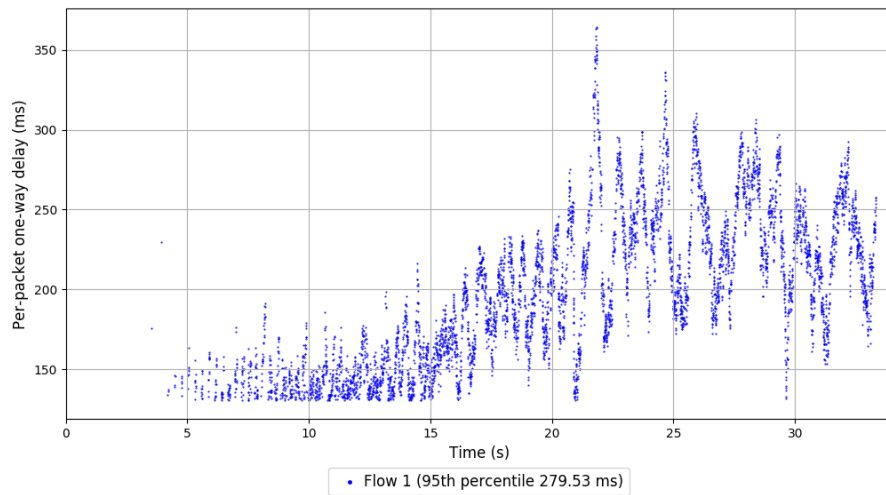
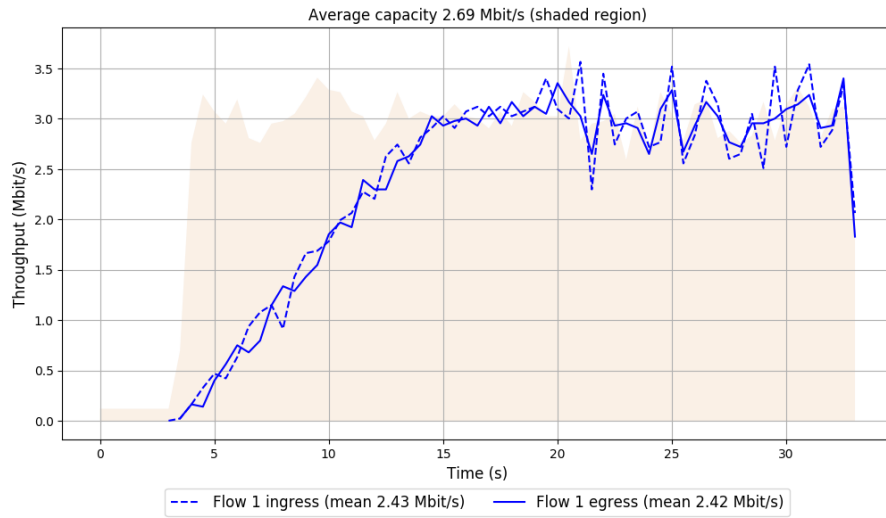
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 279.528 ms

Loss rate: 1.05%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-02-27 07:08:52

End at: 2018-02-27 07:09:23

Below is generated by plot.py at 2018-02-27 07:49:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.42 Mbit/s (90.0% utilization)

95th percentile per-packet one-way delay: 280.118 ms

Loss rate: 1.06%

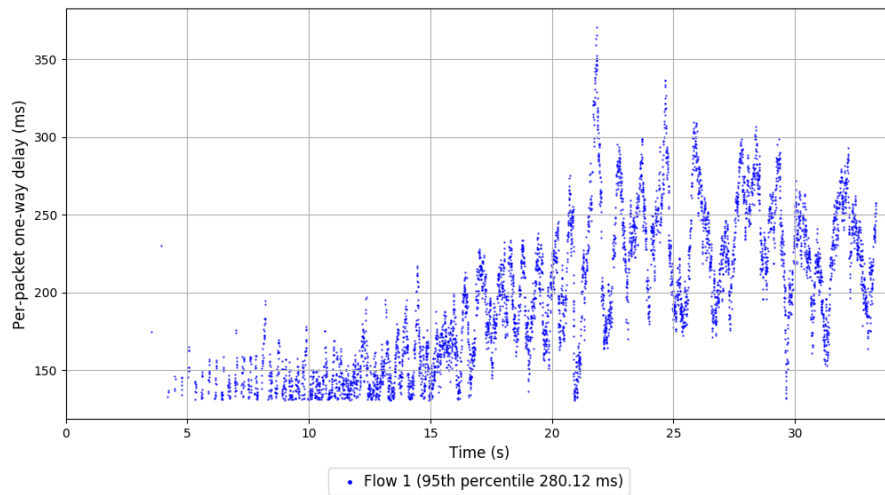
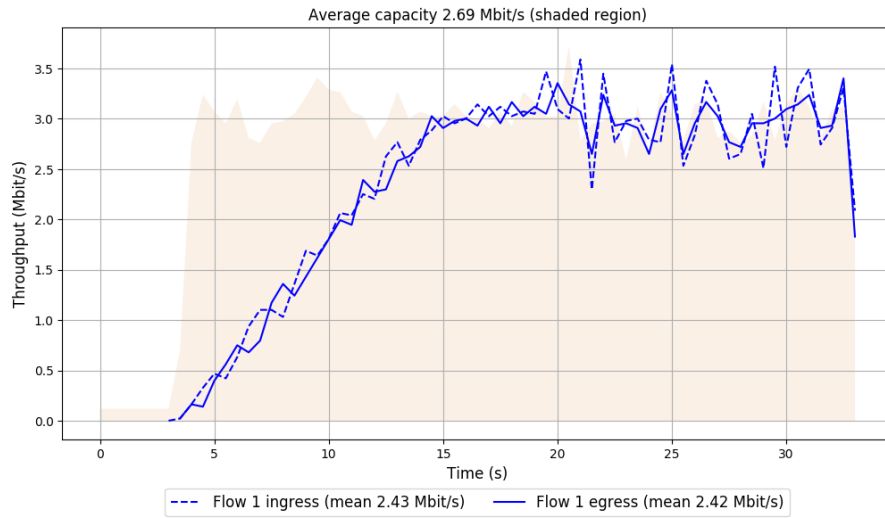
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 280.118 ms

Loss rate: 1.06%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-27 07:19:04

End at: 2018-02-27 07:19:34

Below is generated by plot.py at 2018-02-27 07:49:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.43 Mbit/s (90.3% utilization)

95th percentile per-packet one-way delay: 279.388 ms

Loss rate: 1.04%

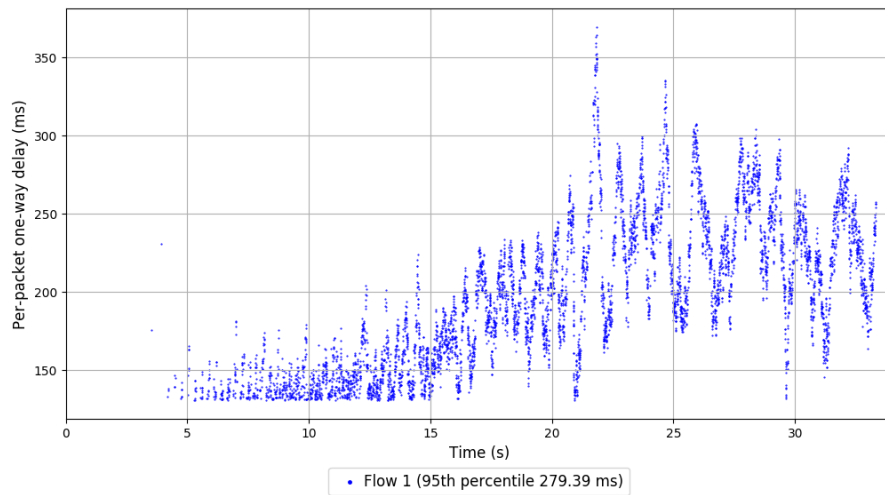
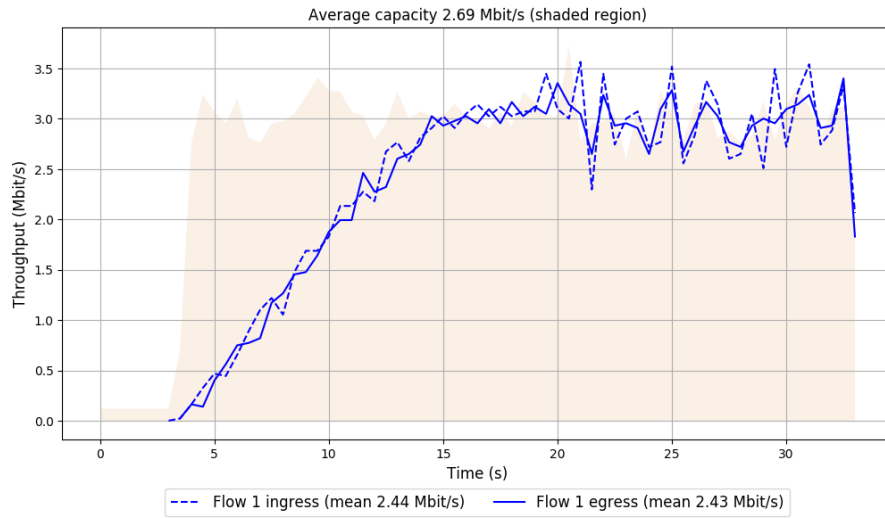
-- Flow 1:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 279.388 ms

Loss rate: 1.04%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-27 07:29:16

End at: 2018-02-27 07:29:46

Below is generated by plot.py at 2018-02-27 07:49:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.42 Mbit/s (89.9% utilization)

95th percentile per-packet one-way delay: 279.566 ms

Loss rate: 1.06%

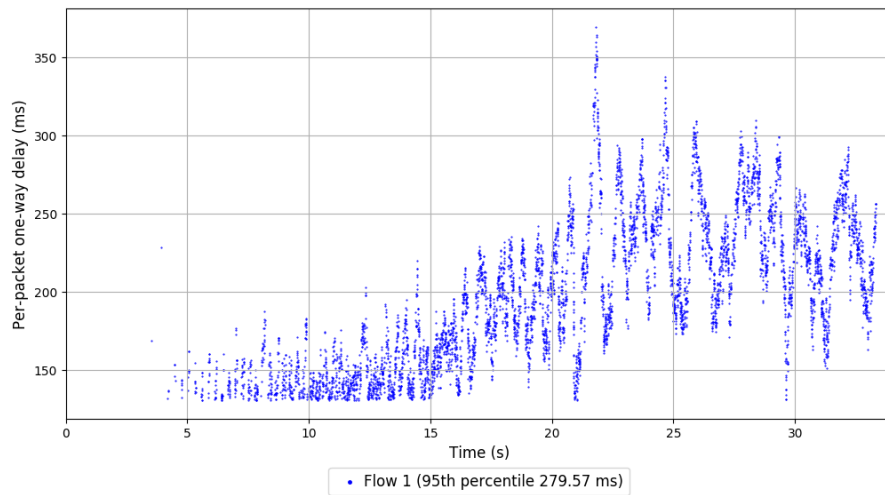
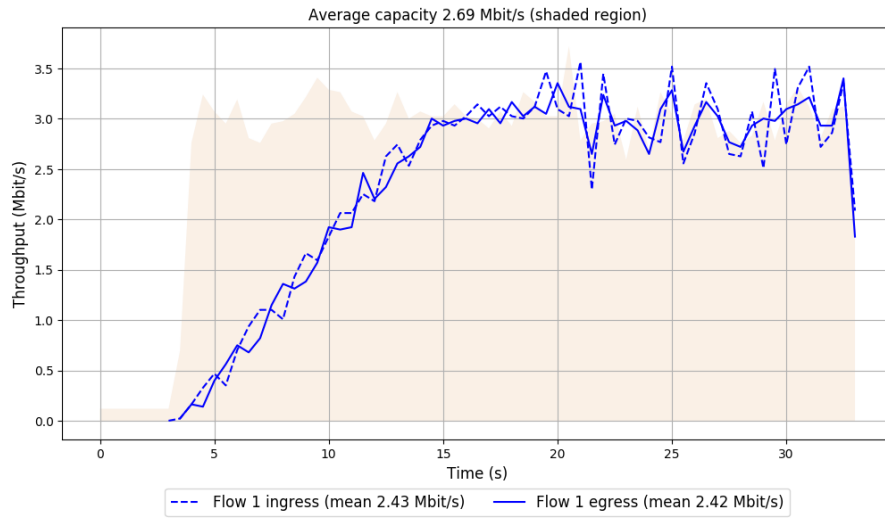
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 279.566 ms

Loss rate: 1.06%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-02-27 07:39:28

End at: 2018-02-27 07:39:58

Below is generated by plot.py at 2018-02-27 07:49:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.42 Mbit/s (89.8% utilization)

95th percentile per-packet one-way delay: 279.951 ms

Loss rate: 0.98%

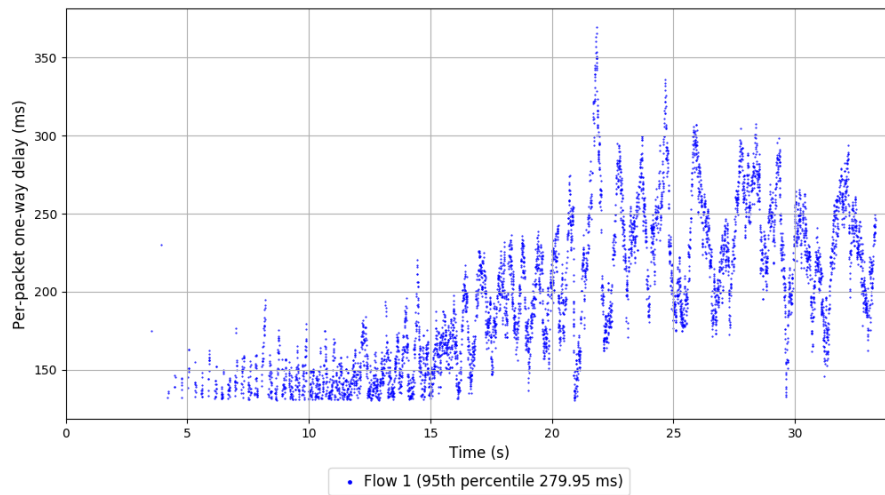
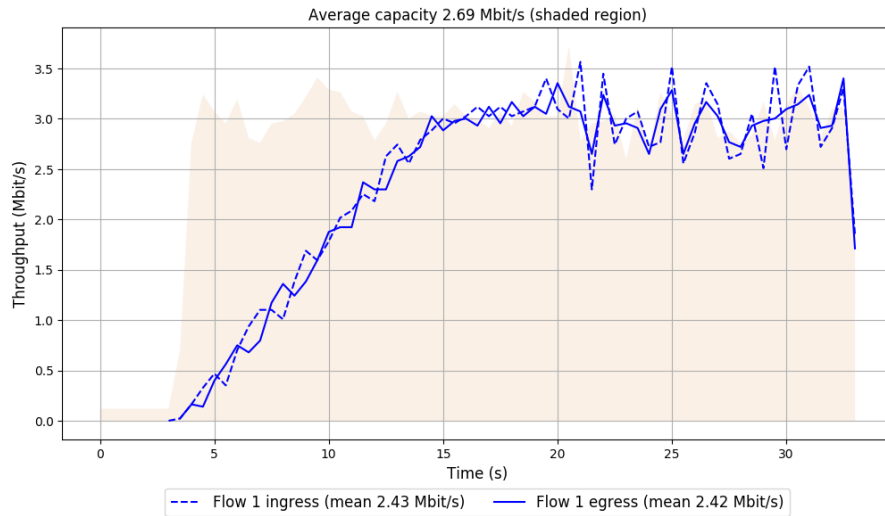
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 279.951 ms

Loss rate: 0.98%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC

Start at: 2018-02-27 06:12:13

End at: 2018-02-27 06:12:43

Below is generated by plot.py at 2018-02-27 07:49:55

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.09 Mbit/s (77.5% utilization)

95th percentile per-packet one-way delay: 1422.763 ms

Loss rate: 1.61%

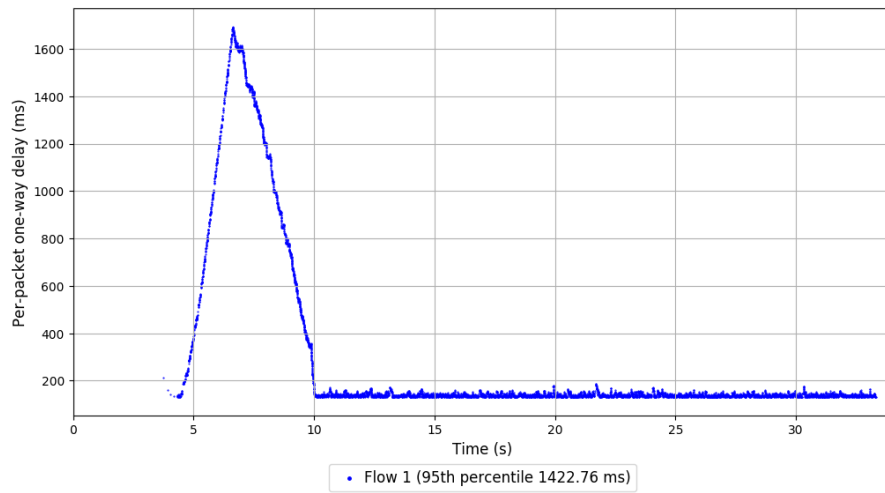
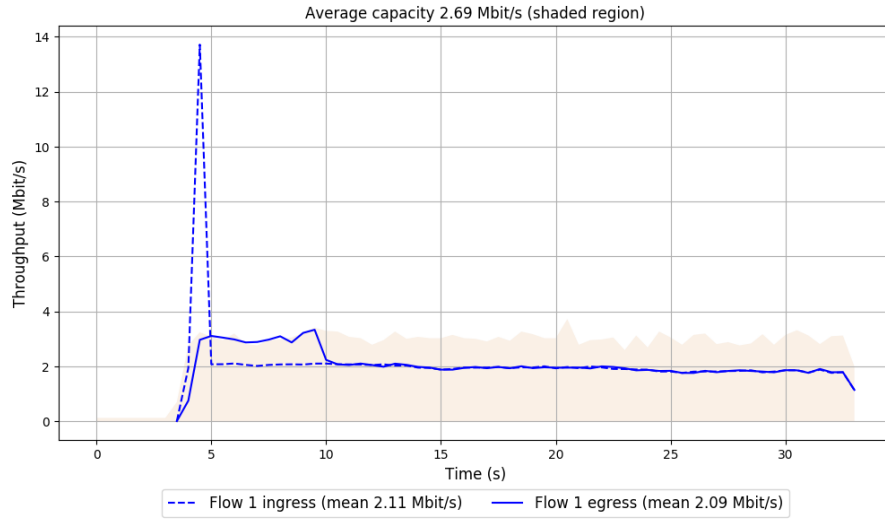
-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 1422.763 ms

Loss rate: 1.61%

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-02-27 06:22:25

End at: 2018-02-27 06:22:55

Below is generated by plot.py at 2018-02-27 07:49:55

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.19 Mbit/s (81.3% utilization)

95th percentile per-packet one-way delay: 1411.510 ms

Loss rate: 1.71%

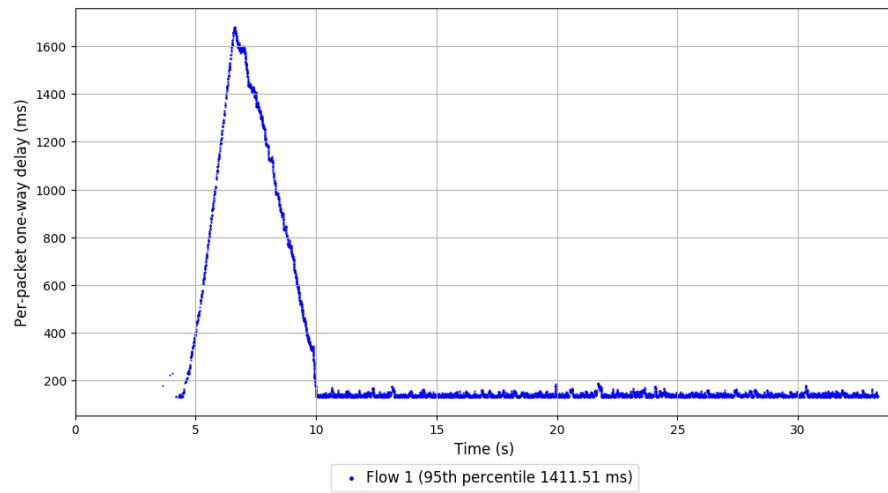
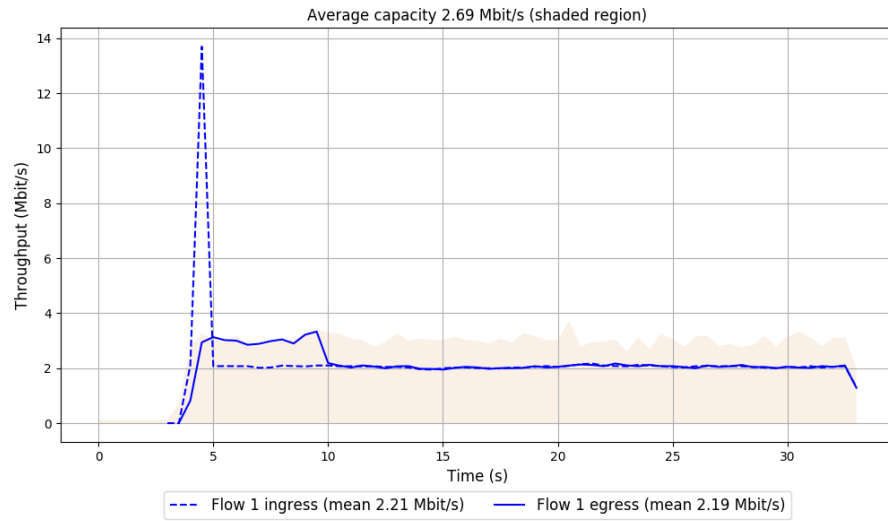
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 1411.510 ms

Loss rate: 1.71%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-27 06:32:37

End at: 2018-02-27 06:33:07

Below is generated by plot.py at 2018-02-27 07:50:00

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.13 Mbit/s (79.2% utilization)

95th percentile per-packet one-way delay: 1413.842 ms

Loss rate: 1.43%

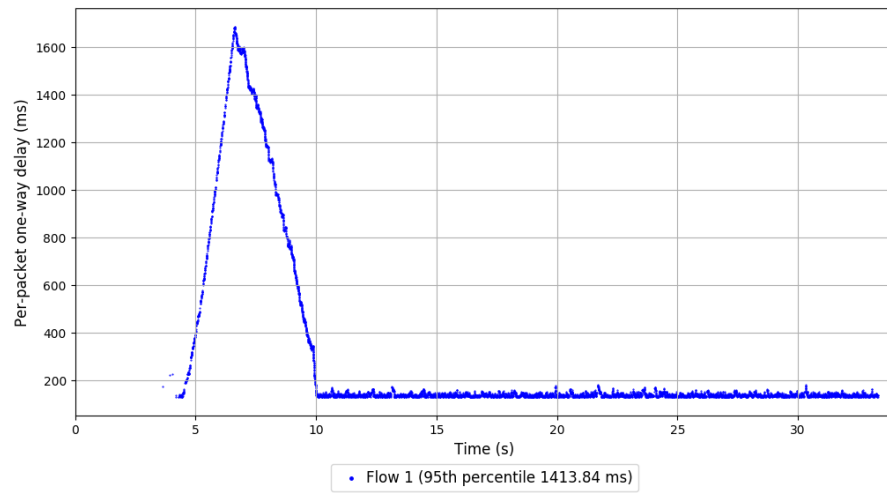
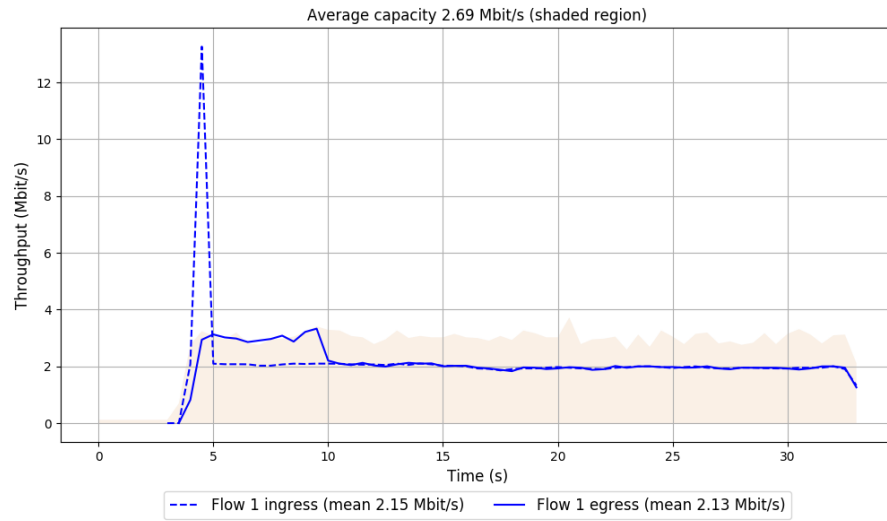
-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 1413.842 ms

Loss rate: 1.43%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-02-27 06:42:49

End at: 2018-02-27 06:43:19

Below is generated by plot.py at 2018-02-27 07:50:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.24 Mbit/s (83.2% utilization)

95th percentile per-packet one-way delay: 1419.236 ms

Loss rate: 2.26%

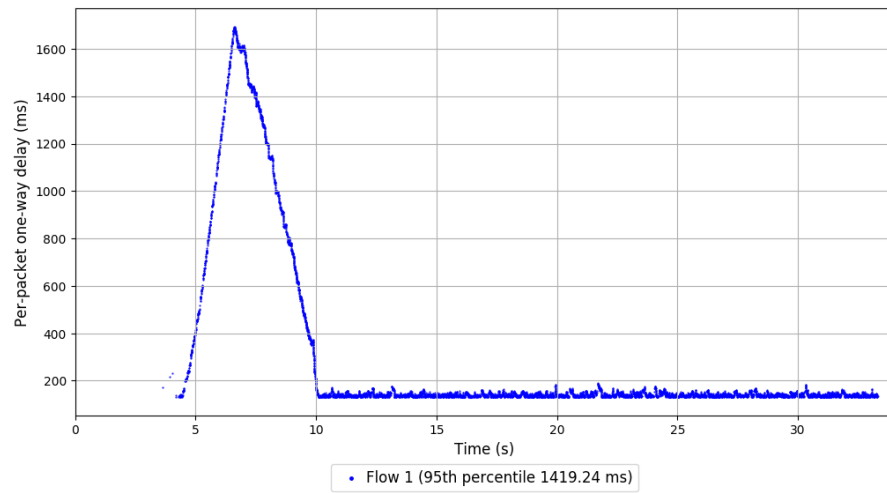
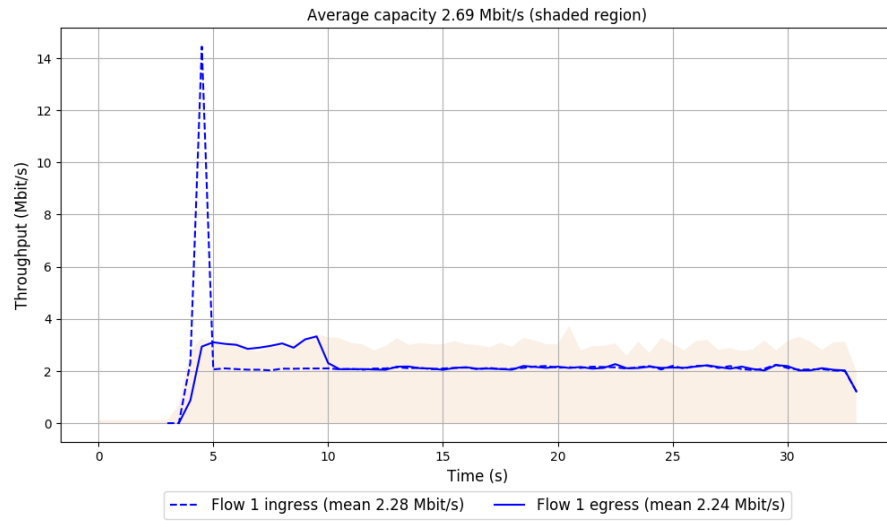
-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 1419.236 ms

Loss rate: 2.26%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-27 06:53:01

End at: 2018-02-27 06:53:31

Below is generated by plot.py at 2018-02-27 07:50:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.21 Mbit/s (81.9% utilization)

95th percentile per-packet one-way delay: 1413.318 ms

Loss rate: 2.85%

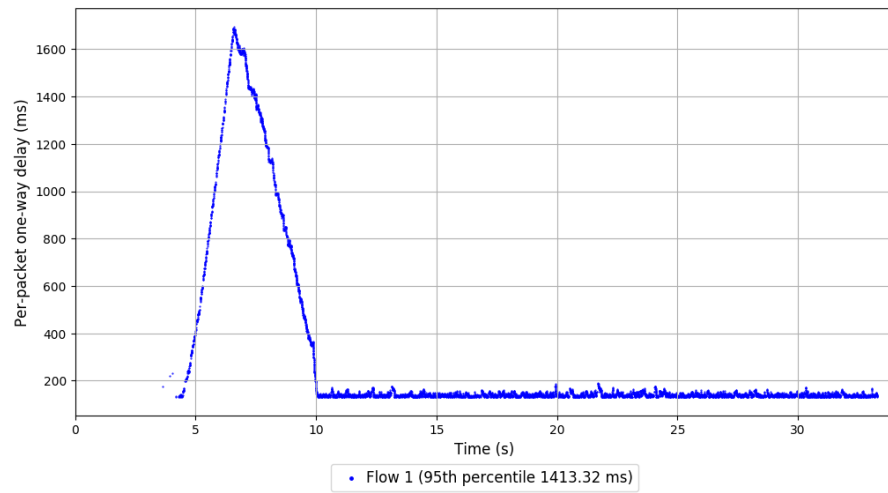
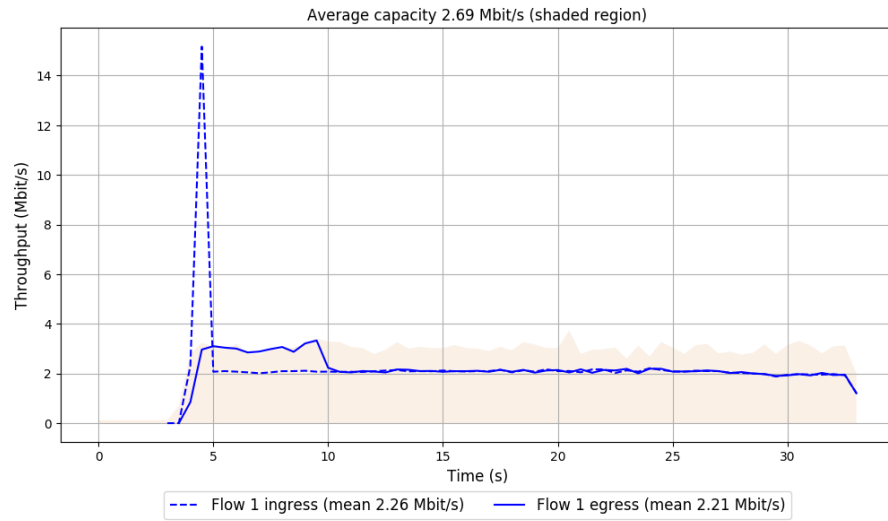
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 1413.318 ms

Loss rate: 2.85%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-27 07:03:12

End at: 2018-02-27 07:03:42

Below is generated by plot.py at 2018-02-27 07:50:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.26 Mbit/s (84.1% utilization)

95th percentile per-packet one-way delay: 1400.689 ms

Loss rate: 1.06%

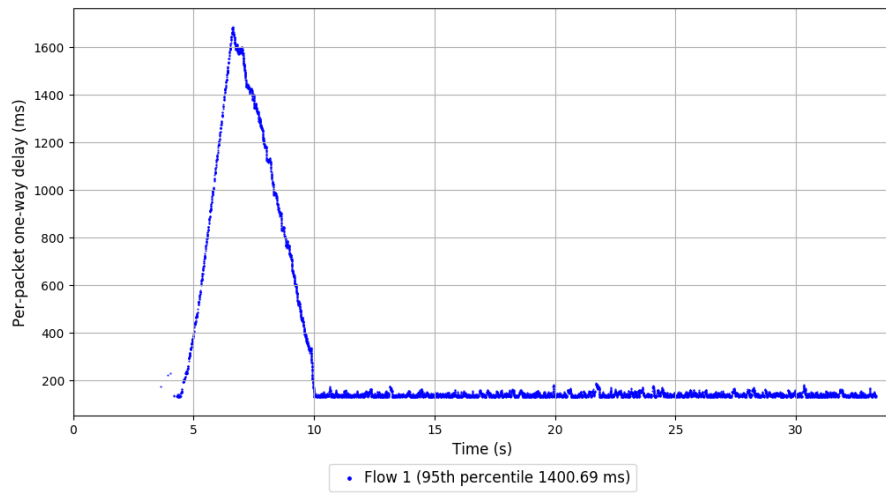
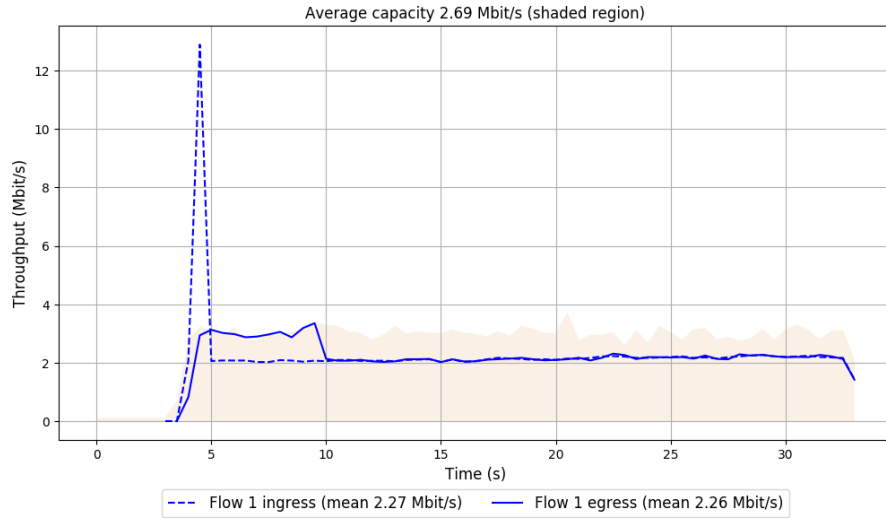
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 1400.689 ms

Loss rate: 1.06%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-02-27 07:13:24

End at: 2018-02-27 07:13:54

Below is generated by plot.py at 2018-02-27 07:50:04

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.30 Mbit/s (85.5% utilization)

95th percentile per-packet one-way delay: 1414.280 ms

Loss rate: 2.79%

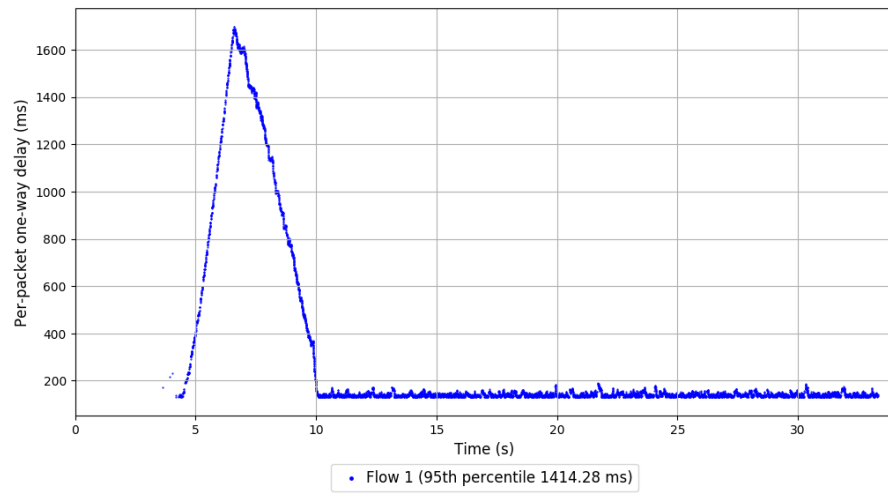
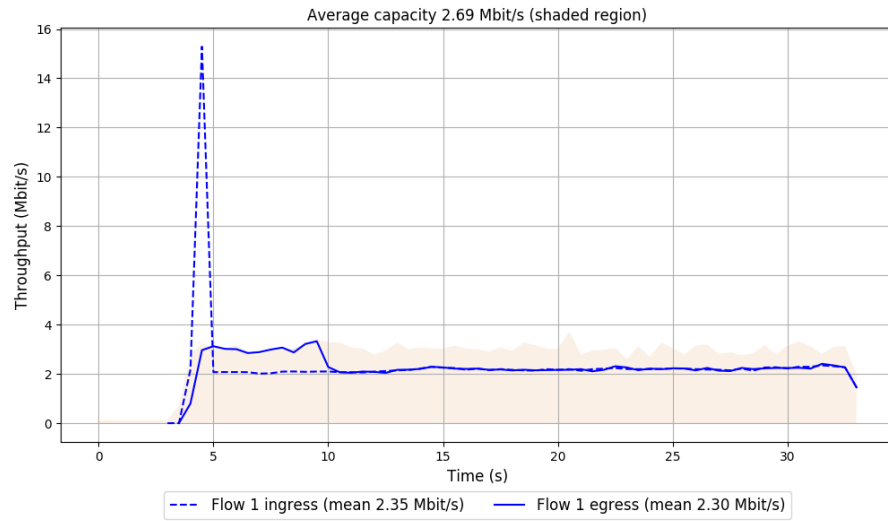
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 1414.280 ms

Loss rate: 2.79%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-27 07:23:36

End at: 2018-02-27 07:24:06

Below is generated by plot.py at 2018-02-27 07:50:04

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.20 Mbit/s (81.7% utilization)

95th percentile per-packet one-way delay: 1411.727 ms

Loss rate: 1.83%

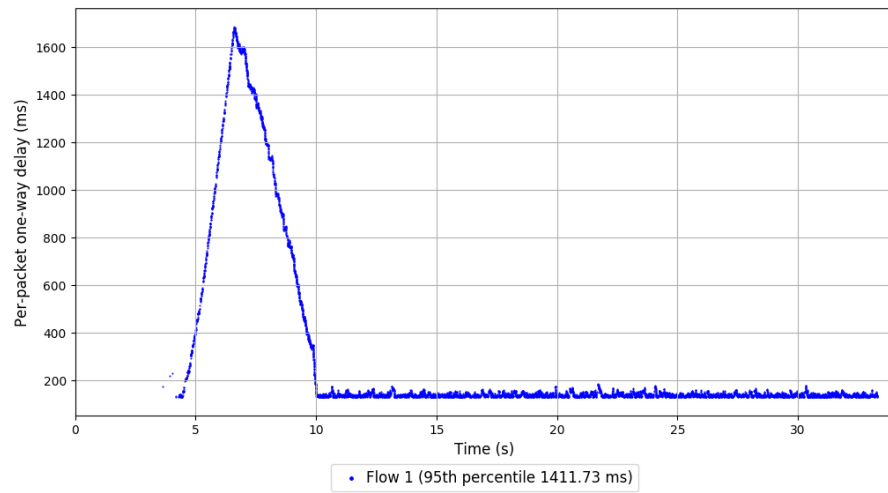
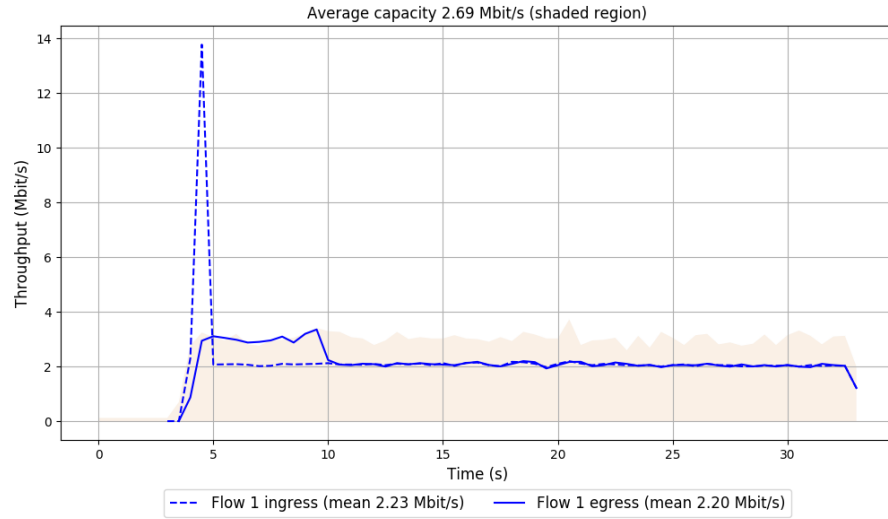
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 1411.727 ms

Loss rate: 1.83%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-27 07:33:48

End at: 2018-02-27 07:34:18

Below is generated by plot.py at 2018-02-27 07:50:05

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.29 Mbit/s (84.9% utilization)

95th percentile per-packet one-way delay: 1403.663 ms

Loss rate: 2.01%

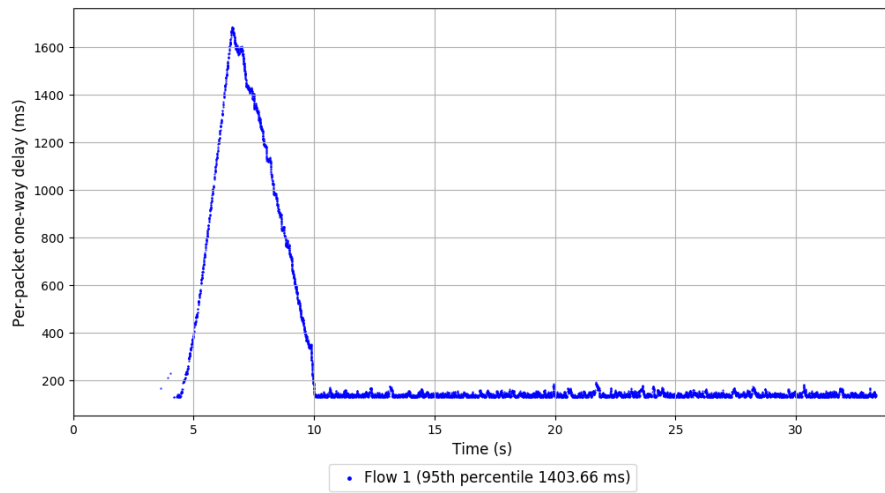
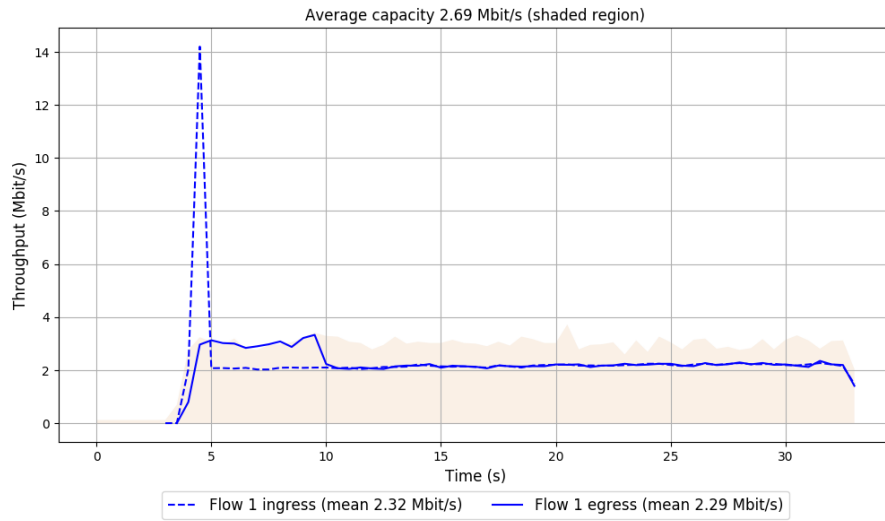
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 1403.663 ms

Loss rate: 2.01%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-02-27 07:44:00

End at: 2018-02-27 07:44:30

Below is generated by plot.py at 2018-02-27 07:50:05

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.20 Mbit/s (81.6% utilization)

95th percentile per-packet one-way delay: 1412.402 ms

Loss rate: 2.07%

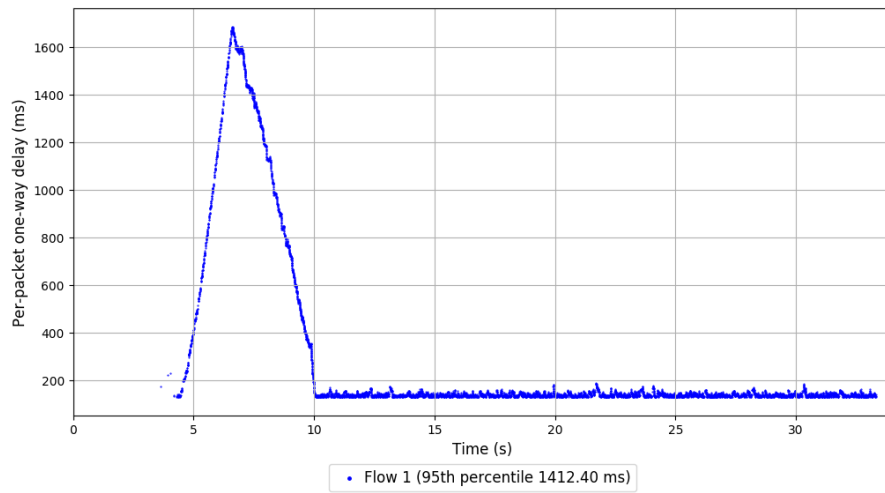
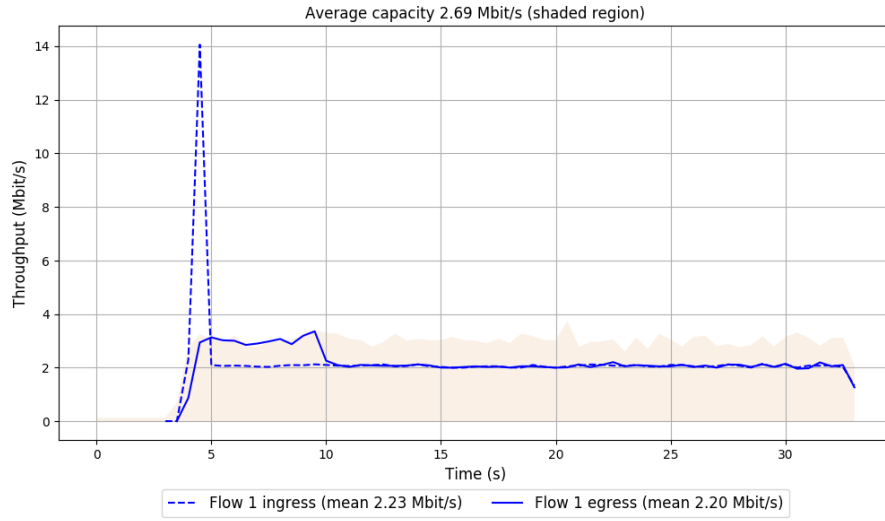
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 1412.402 ms

Loss rate: 2.07%

Run 10: Report of PCC — Data Link

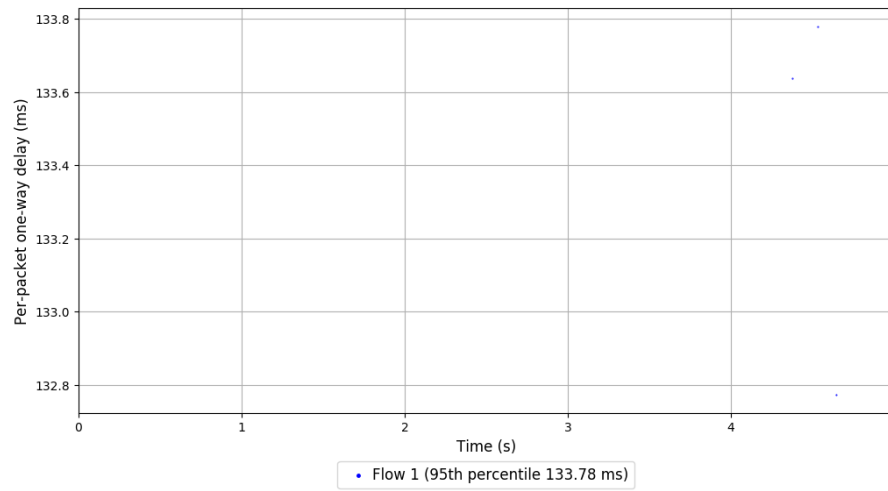
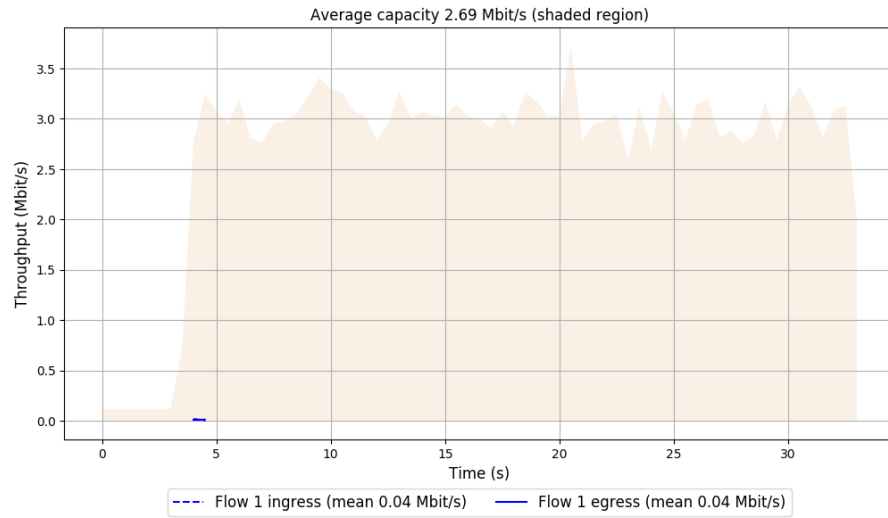


Run 1: Statistics of QUIC Cubic

Start at: 2018-02-27 06:08:49

End at: 2018-02-27 06:09:19

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-27 06:19:01

End at: 2018-02-27 06:19:31

Below is generated by plot.py at 2018-02-27 07:50:13

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.91 Mbit/s (108.0% utilization)

95th percentile per-packet one-way delay: 1122.435 ms

Loss rate: 4.21%

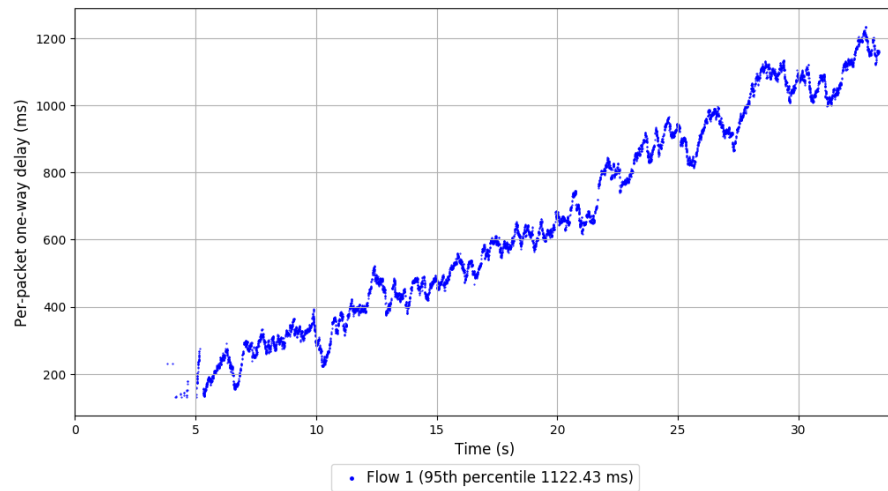
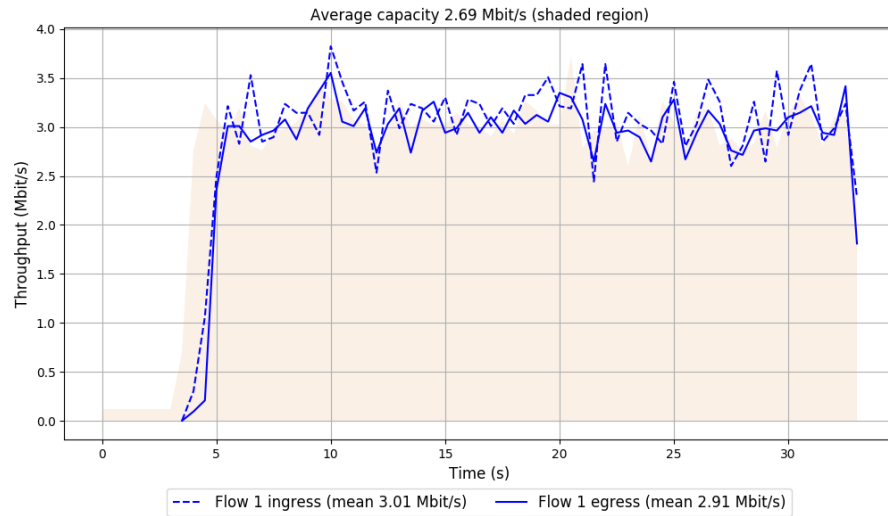
-- Flow 1:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 1122.435 ms

Loss rate: 4.21%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-27 06:29:13

End at: 2018-02-27 06:29:43

Below is generated by plot.py at 2018-02-27 07:50:13

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.83 Mbit/s (105.2% utilization)

95th percentile per-packet one-way delay: 910.874 ms

Loss rate: 3.59%

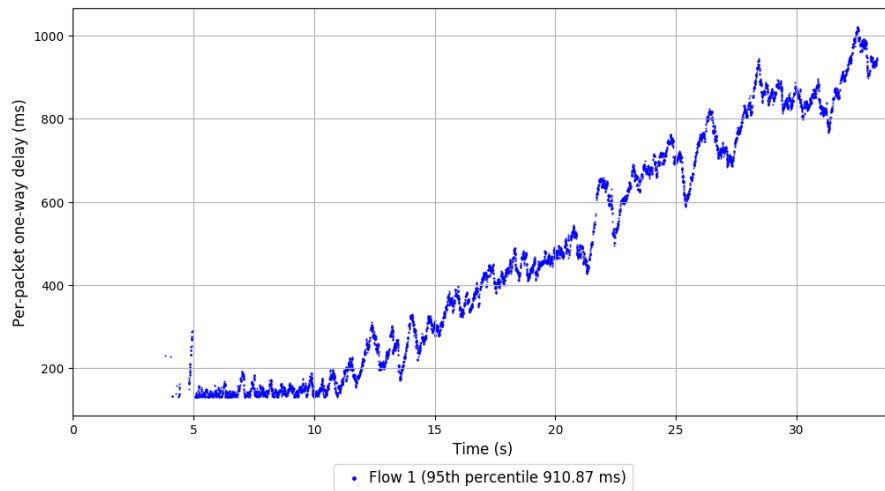
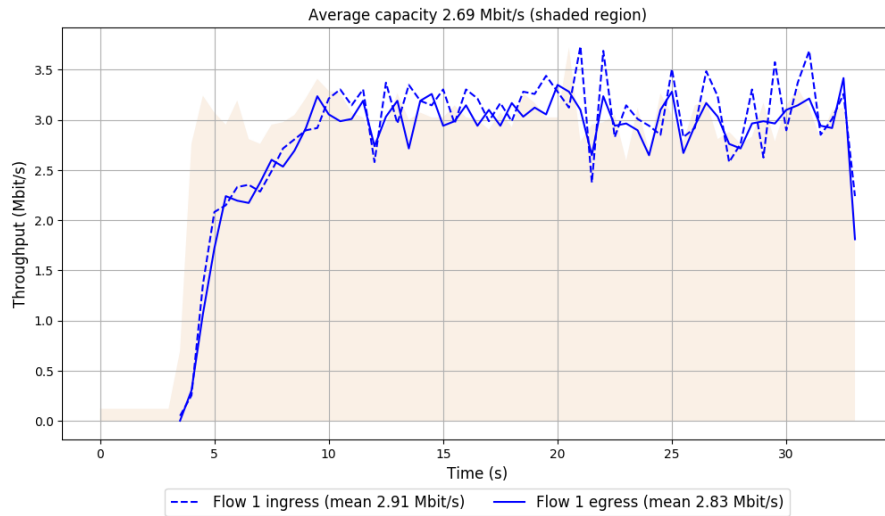
-- Flow 1:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 910.874 ms

Loss rate: 3.59%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-27 06:39:25

End at: 2018-02-27 06:39:55

Below is generated by plot.py at 2018-02-27 07:50:13

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.92 Mbit/s (108.6% utilization)

95th percentile per-packet one-way delay: 1093.823 ms

Loss rate: 4.11%

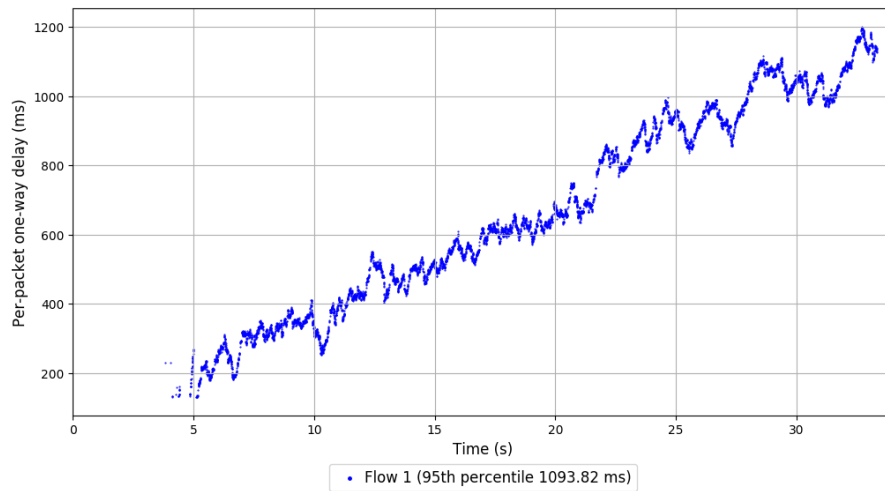
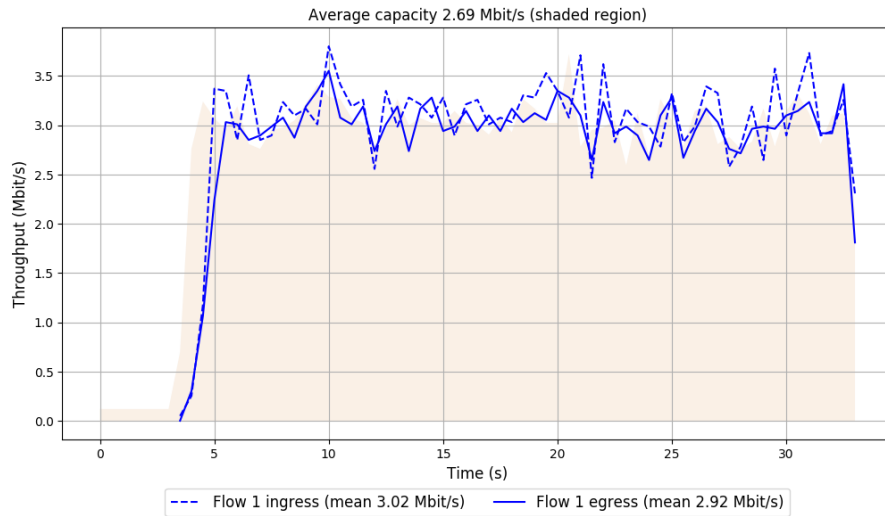
-- Flow 1:

Average throughput: 2.92 Mbit/s

95th percentile per-packet one-way delay: 1093.823 ms

Loss rate: 4.11%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-27 06:49:37

End at: 2018-02-27 06:50:07

Below is generated by plot.py at 2018-02-27 07:50:14

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.92 Mbit/s (108.6% utilization)

95th percentile per-packet one-way delay: 1133.052 ms

Loss rate: 4.15%

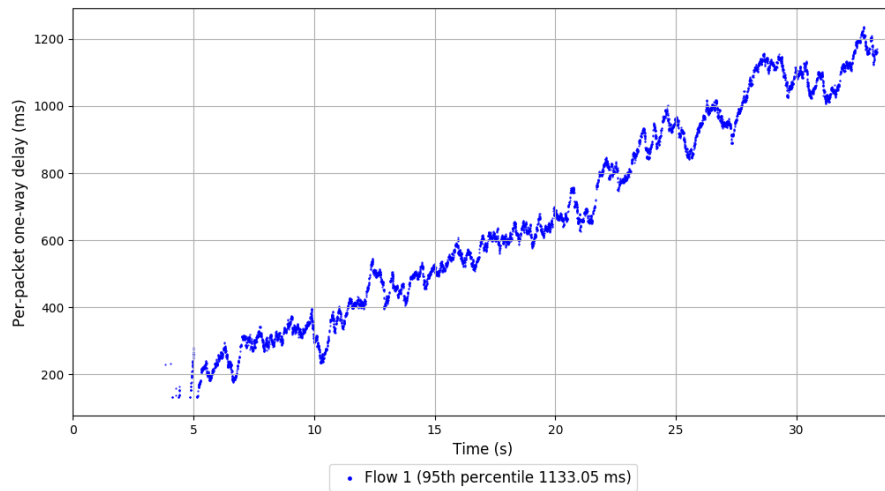
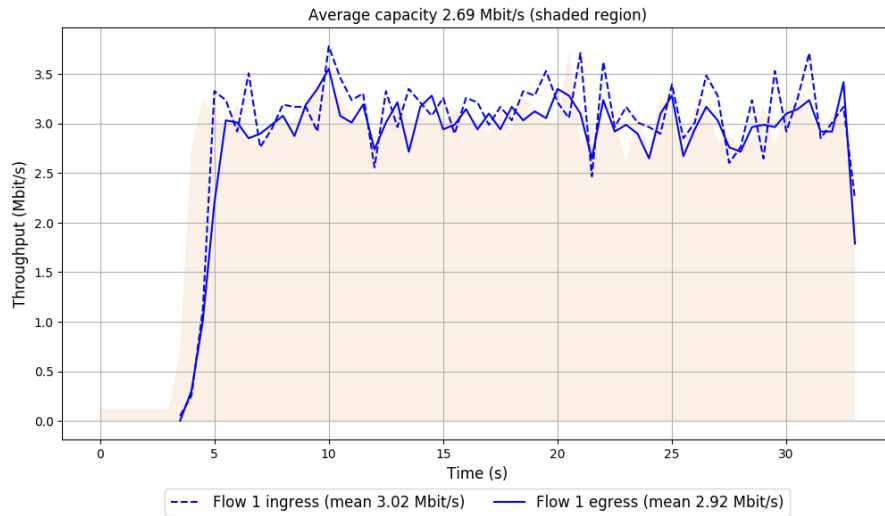
-- Flow 1:

Average throughput: 2.92 Mbit/s

95th percentile per-packet one-way delay: 1133.052 ms

Loss rate: 4.15%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-27 06:59:49

End at: 2018-02-27 07:00:19

Below is generated by plot.py at 2018-02-27 07:50:14

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.83 Mbit/s (105.2% utilization)

95th percentile per-packet one-way delay: 890.353 ms

Loss rate: 3.48%

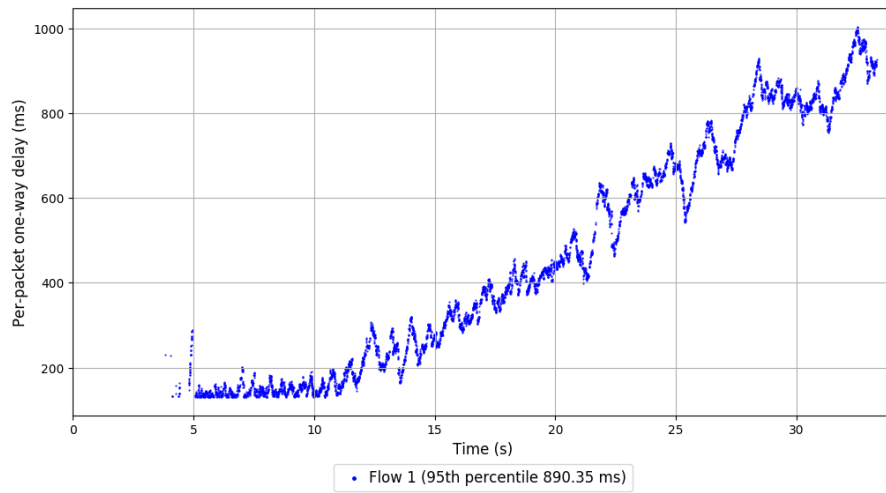
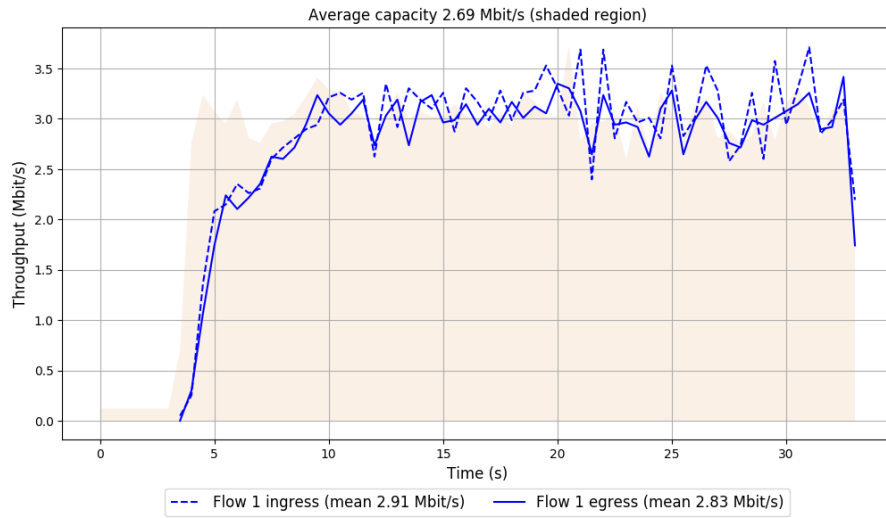
-- Flow 1:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 890.353 ms

Loss rate: 3.48%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-27 07:10:00

End at: 2018-02-27 07:10:30

Below is generated by plot.py at 2018-02-27 07:50:14

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (108.8% utilization)

95th percentile per-packet one-way delay: 1050.465 ms

Loss rate: 3.89%

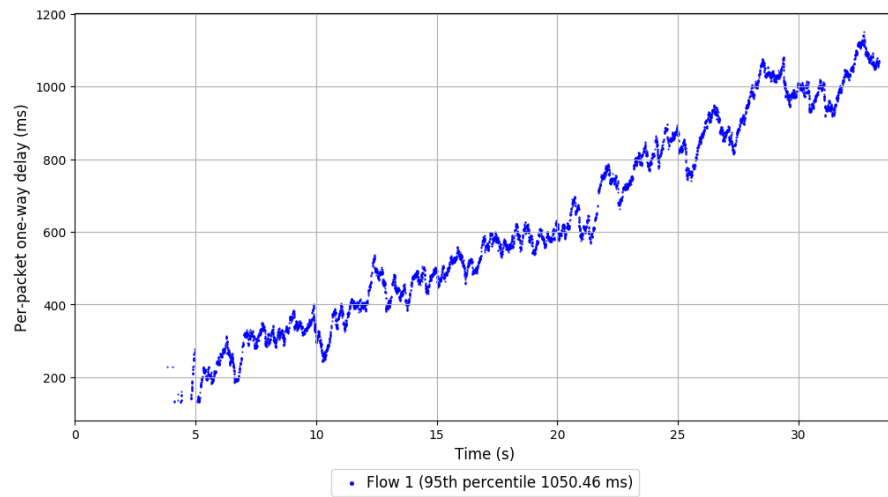
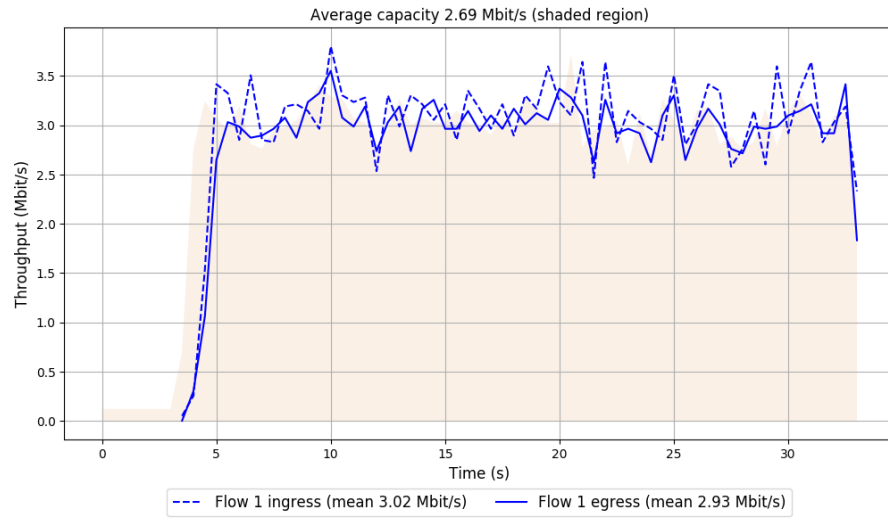
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1050.465 ms

Loss rate: 3.89%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-27 07:20:12

End at: 2018-02-27 07:20:42

Below is generated by plot.py at 2018-02-27 07:50:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.84 Mbit/s (105.4% utilization)

95th percentile per-packet one-way delay: 891.049 ms

Loss rate: 3.46%

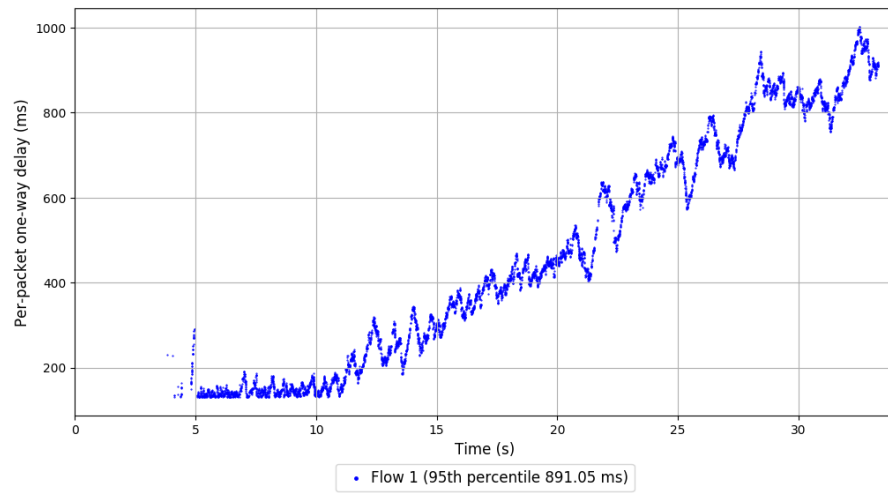
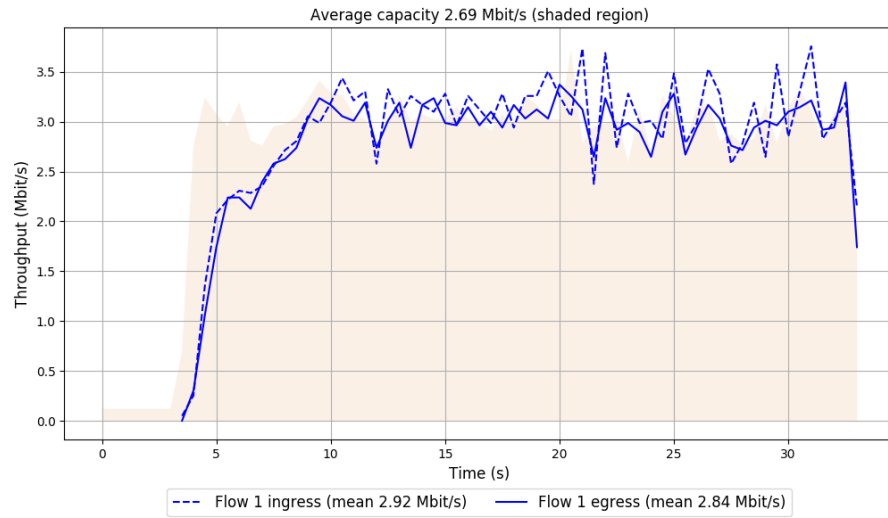
-- Flow 1:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 891.049 ms

Loss rate: 3.46%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-27 07:30:24

End at: 2018-02-27 07:30:54

Below is generated by plot.py at 2018-02-27 07:50:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (108.7% utilization)

95th percentile per-packet one-way delay: 1076.306 ms

Loss rate: 4.00%

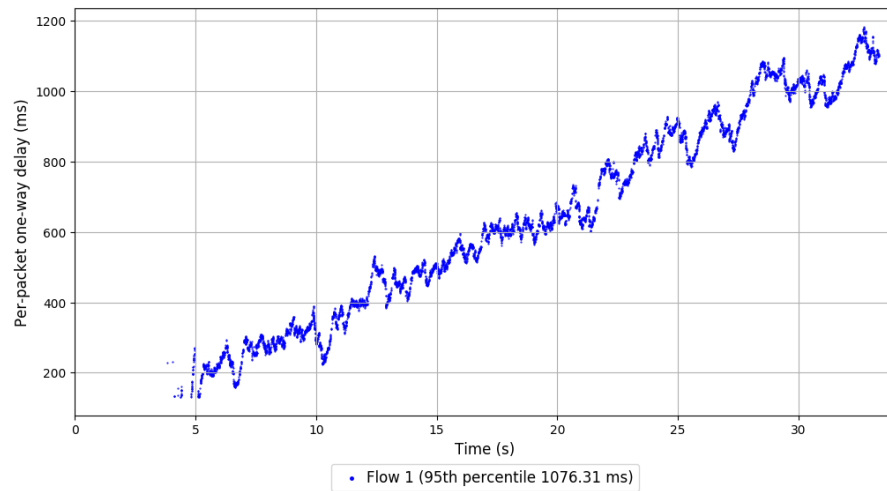
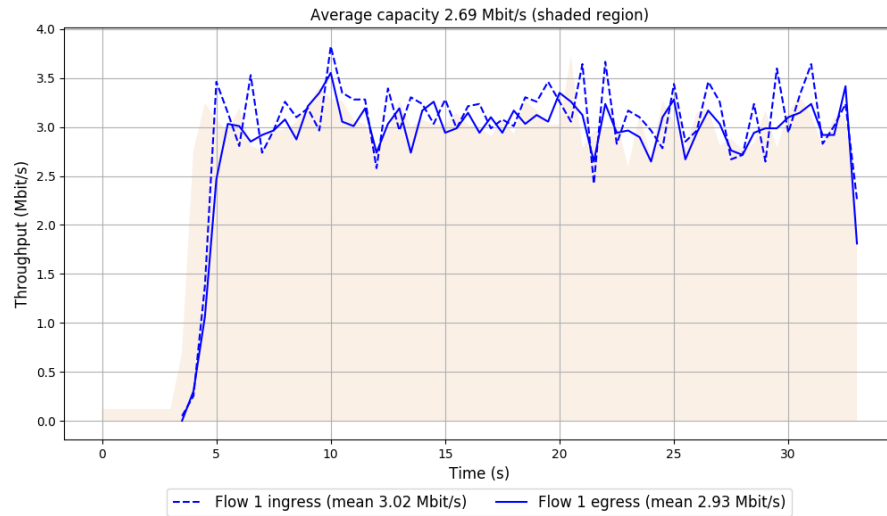
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1076.306 ms

Loss rate: 4.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-02-27 07:40:36

End at: 2018-02-27 07:41:06

Below is generated by plot.py at 2018-02-27 07:50:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.83 Mbit/s (105.1% utilization)

95th percentile per-packet one-way delay: 858.175 ms

Loss rate: 3.35%

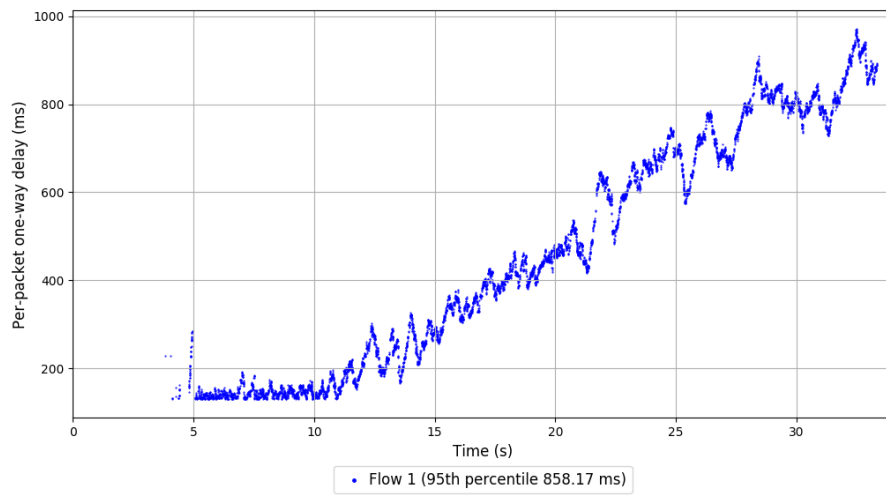
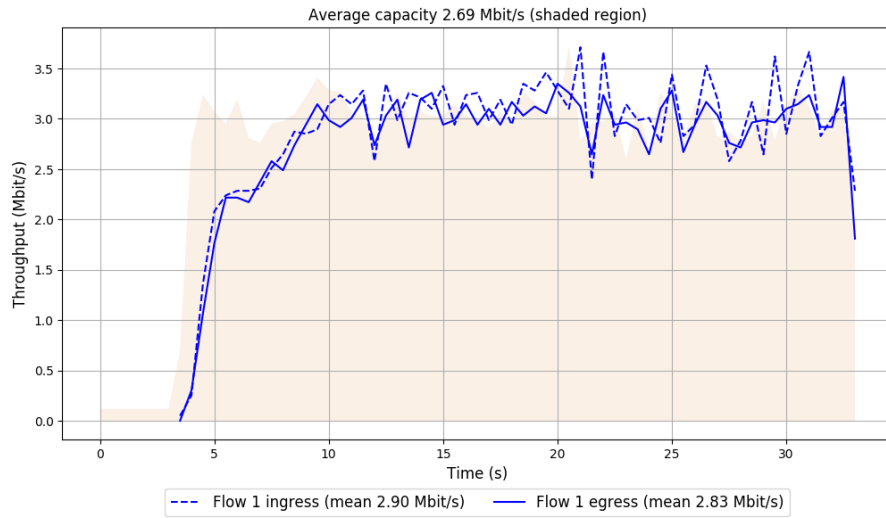
-- Flow 1:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 858.175 ms

Loss rate: 3.35%

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2018-02-27 06:15:03

End at: 2018-02-27 06:15:34

Below is generated by plot.py at 2018-02-27 07:50:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.09 Mbit/s (3.3% utilization)

95th percentile per-packet one-way delay: 144.699 ms

Loss rate: 0.50%

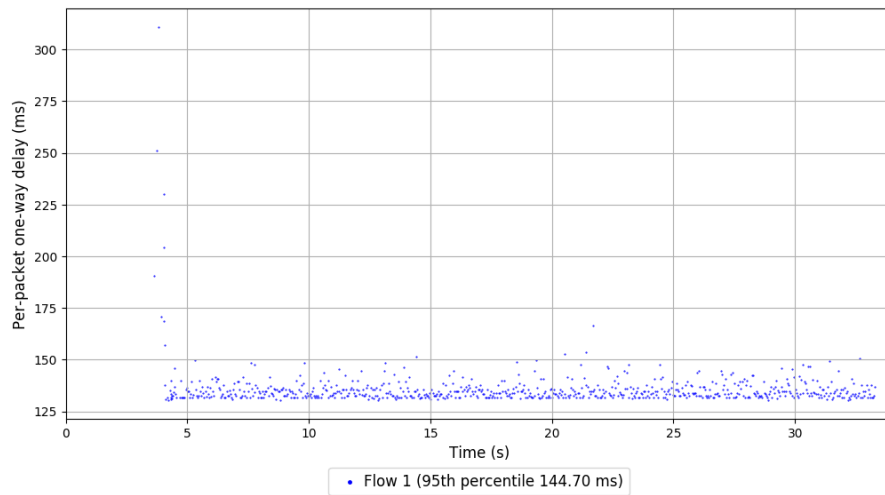
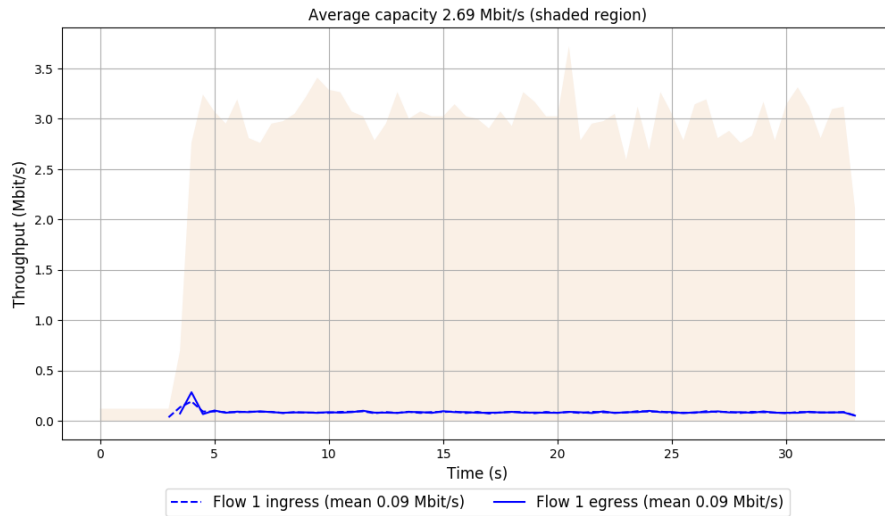
-- Flow 1:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 144.699 ms

Loss rate: 0.50%

Run 1: Report of SCReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2018-02-27 06:25:16

End at: 2018-02-27 06:25:46

Below is generated by plot.py at 2018-02-27 07:50:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.08 Mbit/s (3.1% utilization)

95th percentile per-packet one-way delay: 144.599 ms

Loss rate: 0.48%

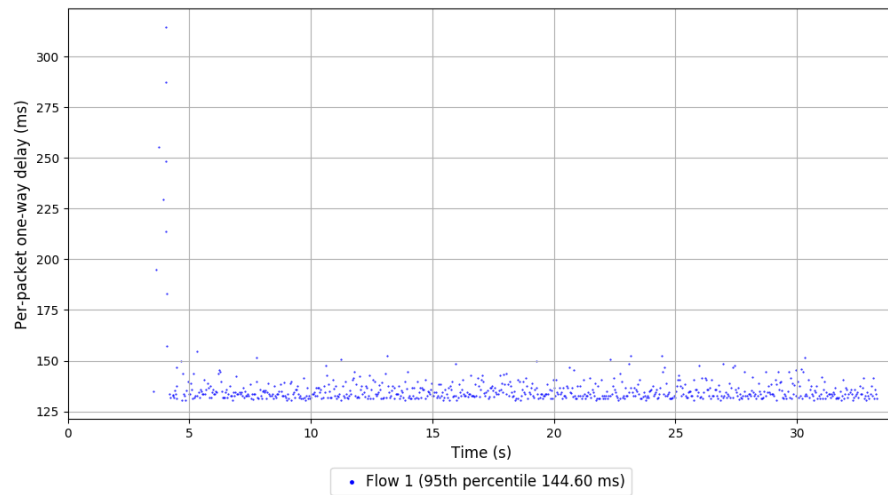
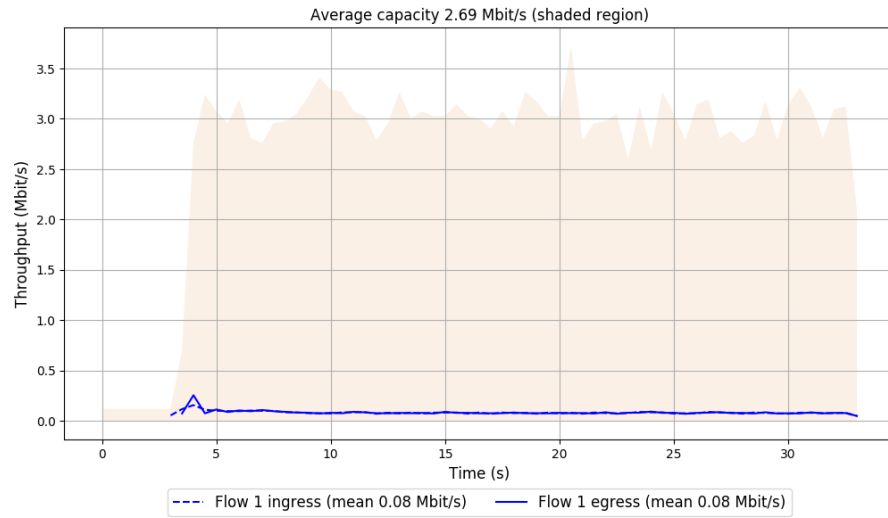
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 144.599 ms

Loss rate: 0.48%

Run 2: Report of SCReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-02-27 06:35:28

End at: 2018-02-27 06:35:58

Below is generated by plot.py at 2018-02-27 07:50:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.08 Mbit/s (3.1% utilization)

95th percentile per-packet one-way delay: 144.710 ms

Loss rate: 0.36%

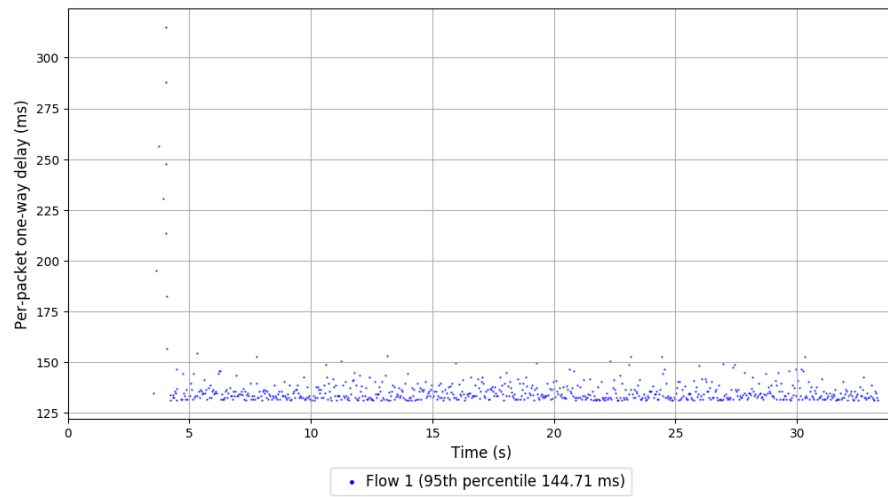
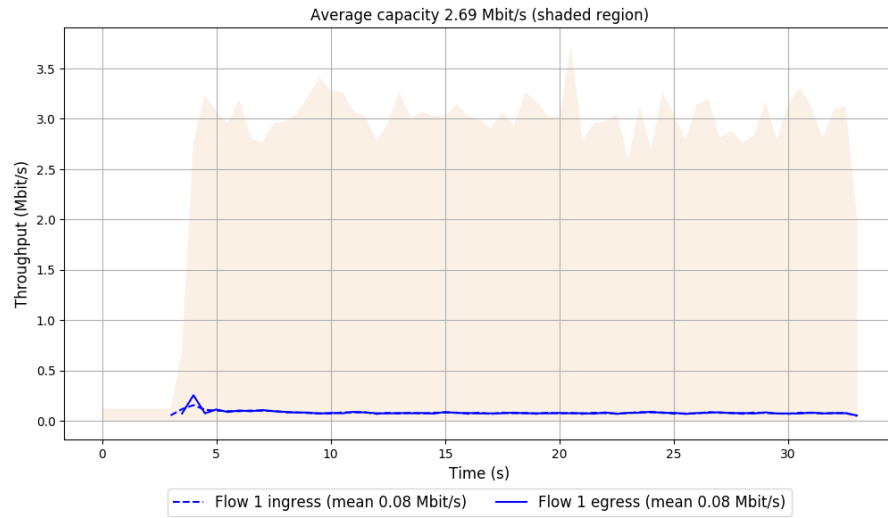
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 144.710 ms

Loss rate: 0.36%

Run 3: Report of SCReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-02-27 06:45:39

End at: 2018-02-27 06:46:09

Below is generated by plot.py at 2018-02-27 07:50:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.08 Mbit/s (3.1% utilization)

95th percentile per-packet one-way delay: 144.444 ms

Loss rate: 0.48%

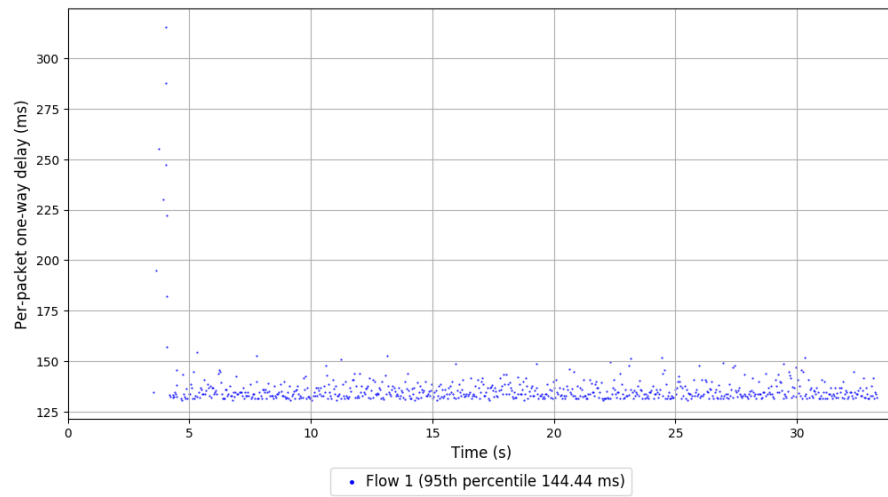
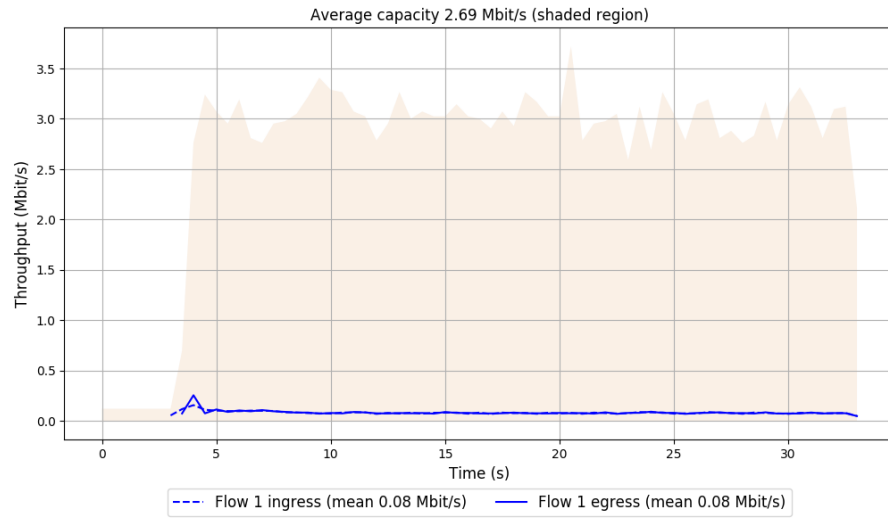
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 144.444 ms

Loss rate: 0.48%

Run 4: Report of SCReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-02-27 06:55:51

End at: 2018-02-27 06:56:21

Below is generated by plot.py at 2018-02-27 07:50:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.08 Mbit/s (3.1% utilization)

95th percentile per-packet one-way delay: 144.581 ms

Loss rate: 0.36%

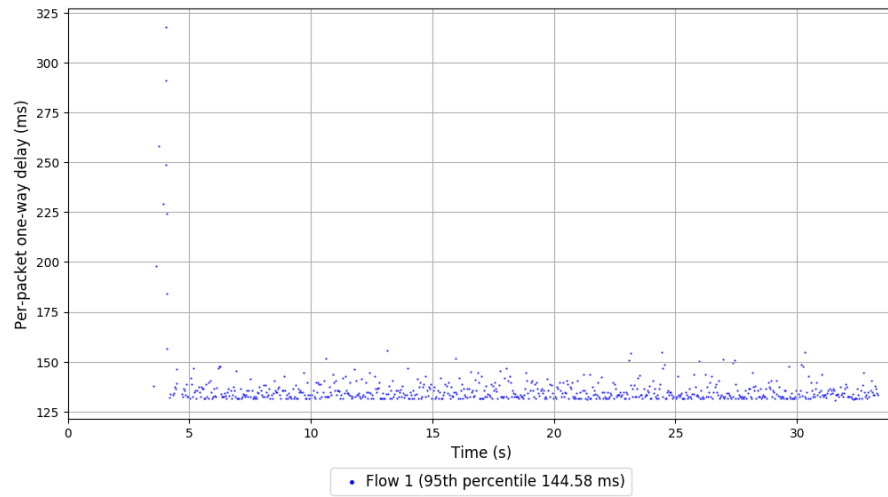
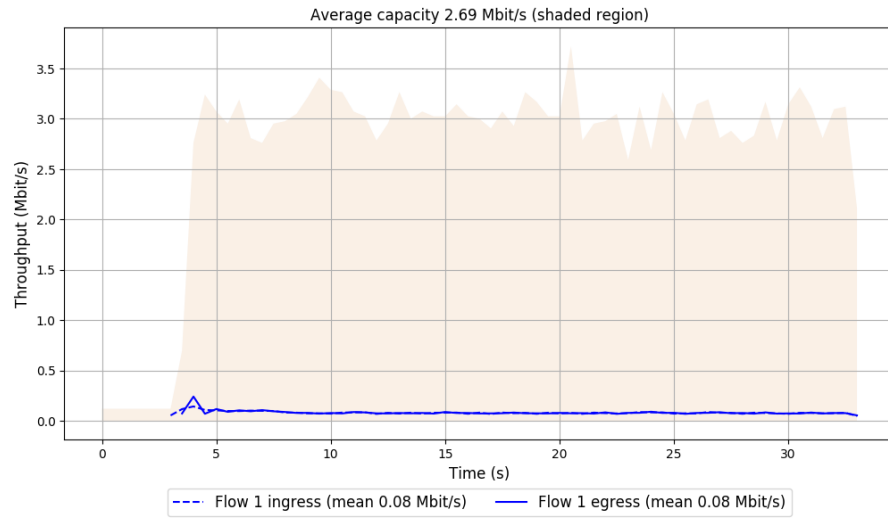
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 144.581 ms

Loss rate: 0.36%

Run 5: Report of SCReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-02-27 07:06:03

End at: 2018-02-27 07:06:33

Below is generated by plot.py at 2018-02-27 07:50:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.08 Mbit/s (3.0% utilization)

95th percentile per-packet one-way delay: 144.624 ms

Loss rate: 0.49%

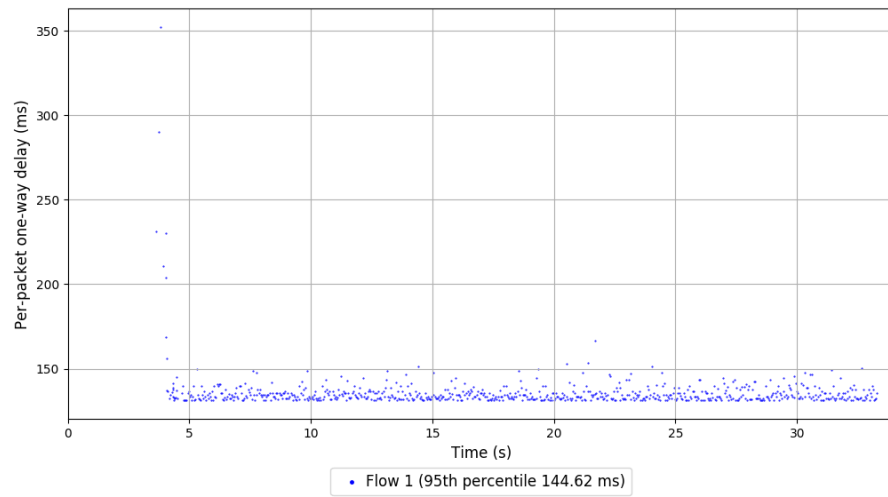
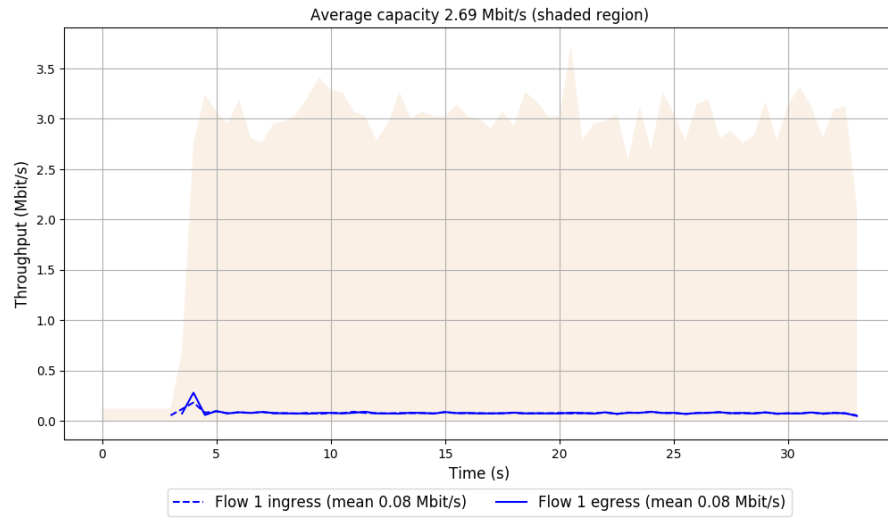
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 144.624 ms

Loss rate: 0.49%

Run 6: Report of SCReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-02-27 07:16:15

End at: 2018-02-27 07:16:45

Below is generated by plot.py at 2018-02-27 07:50:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.08 Mbit/s (3.1% utilization)

95th percentile per-packet one-way delay: 144.648 ms

Loss rate: 0.36%

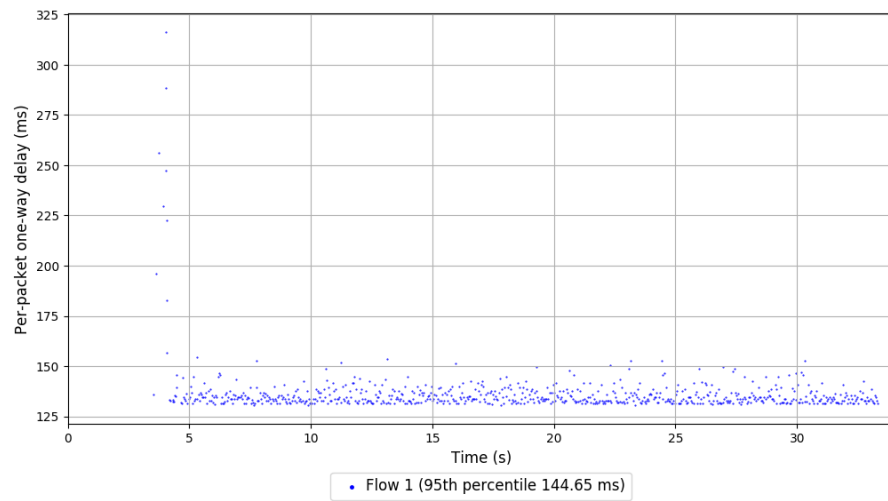
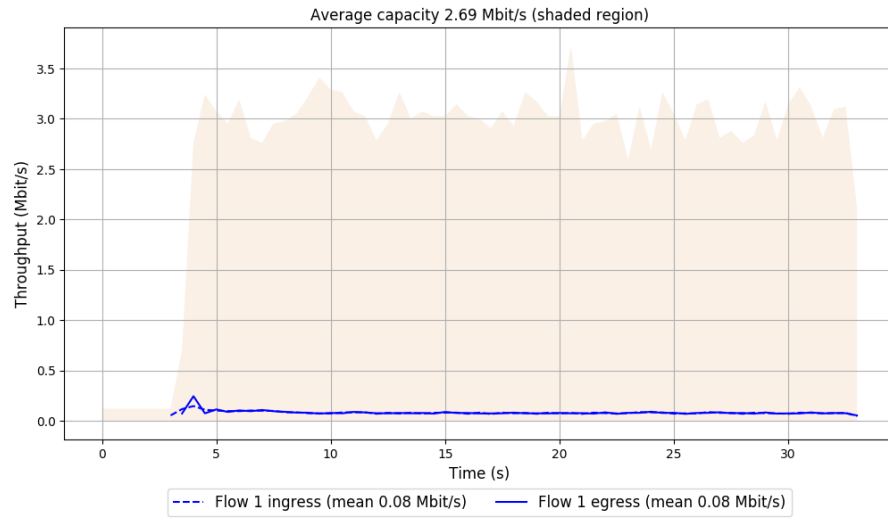
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 144.648 ms

Loss rate: 0.36%

Run 7: Report of SCReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-02-27 07:26:26

End at: 2018-02-27 07:26:56

Below is generated by plot.py at 2018-02-27 07:50:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.08 Mbit/s (3.1% utilization)

95th percentile per-packet one-way delay: 145.470 ms

Loss rate: 0.48%

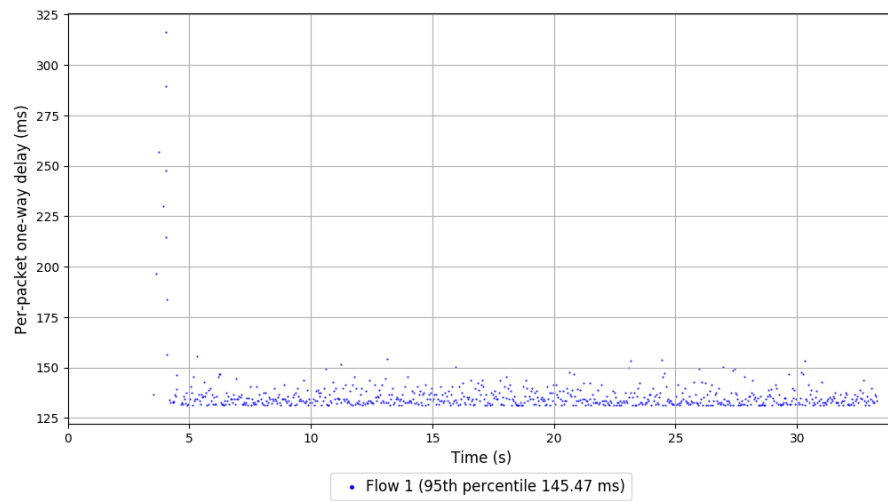
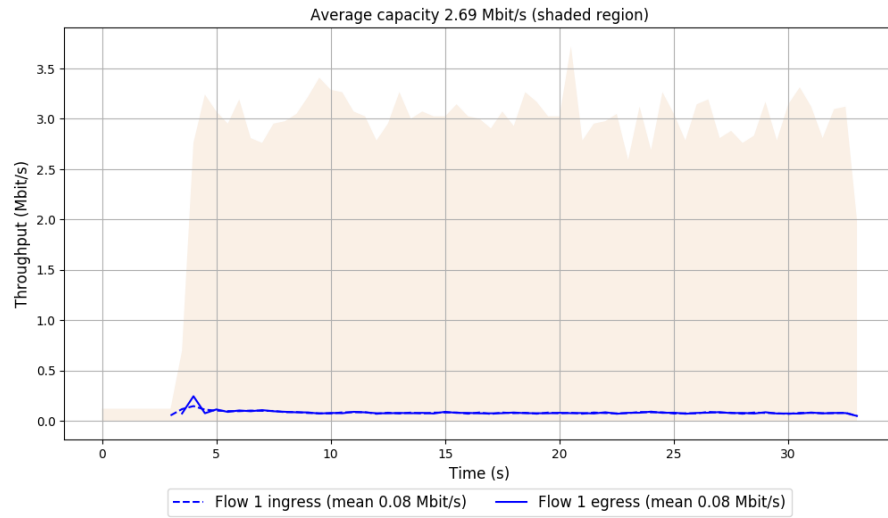
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 145.470 ms

Loss rate: 0.48%

Run 8: Report of SCReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-02-27 07:36:38

End at: 2018-02-27 07:37:08

Below is generated by plot.py at 2018-02-27 07:50:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.08 Mbit/s (3.0% utilization)

95th percentile per-packet one-way delay: 144.599 ms

Loss rate: 0.37%

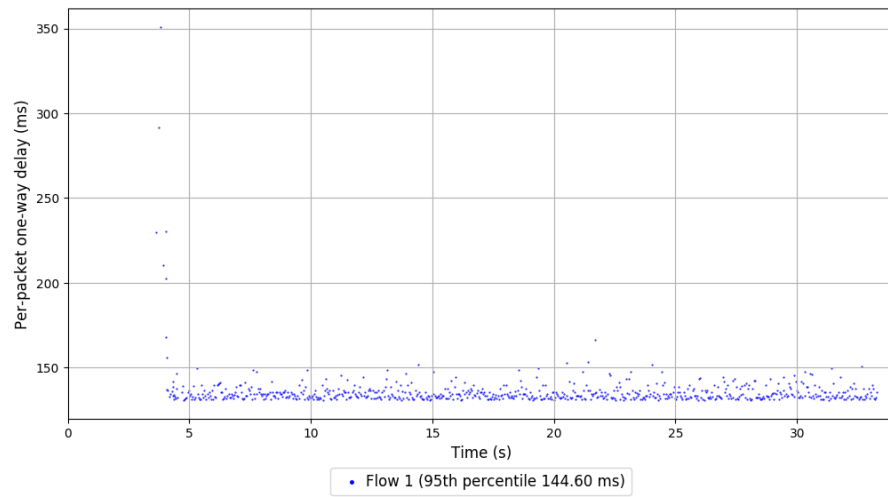
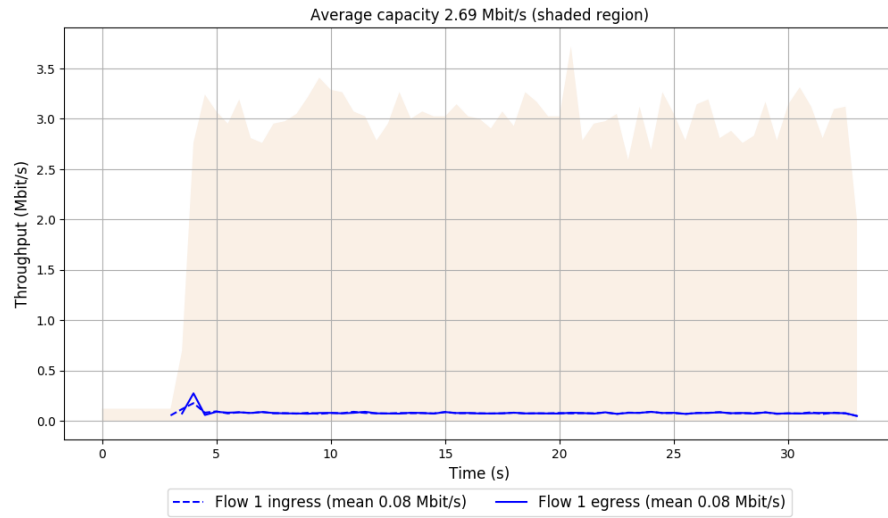
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 144.599 ms

Loss rate: 0.37%

Run 9: Report of SCReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-02-27 07:46:50

End at: 2018-02-27 07:47:20

Below is generated by plot.py at 2018-02-27 07:50:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.08 Mbit/s (3.1% utilization)

95th percentile per-packet one-way delay: 143.820 ms

Loss rate: 0.37%

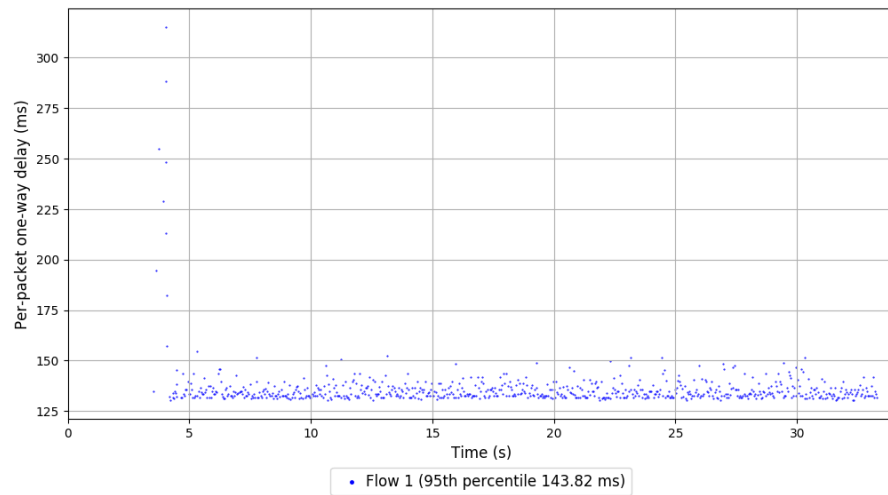
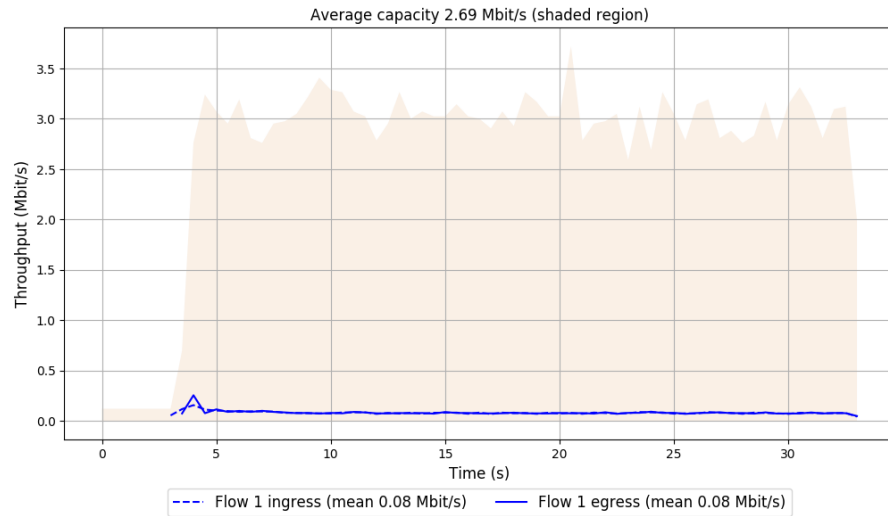
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 143.820 ms

Loss rate: 0.37%

Run 10: Report of SCReAM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-02-27 06:08:15

End at: 2018-02-27 06:08:45

Below is generated by plot.py at 2018-02-27 07:50:26

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.46 Mbit/s (54.2% utilization)

95th percentile per-packet one-way delay: 232.868 ms

Loss rate: 0.62%

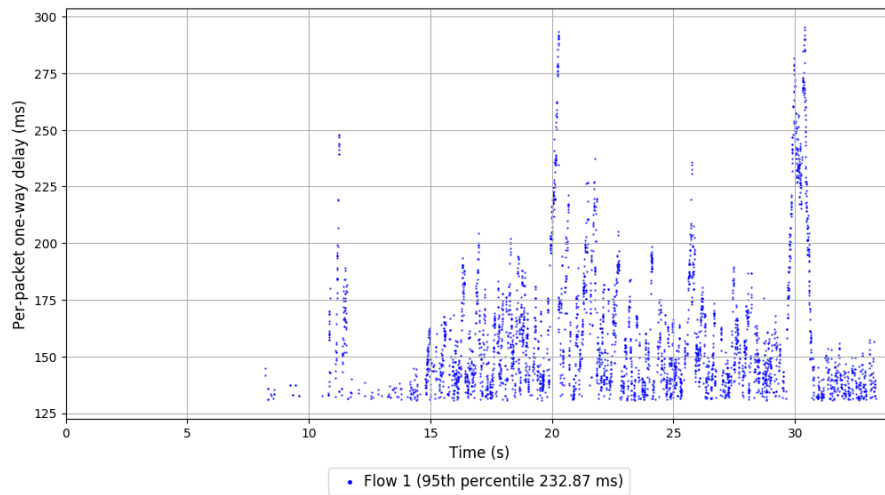
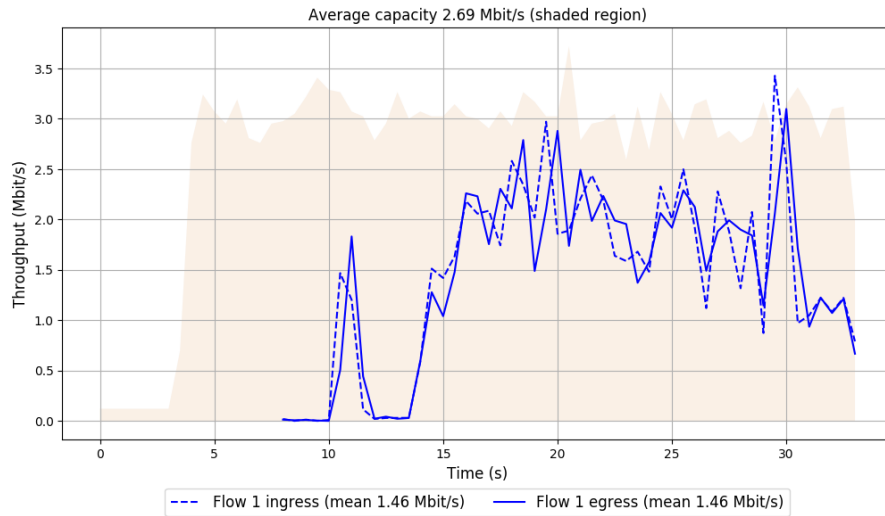
-- Flow 1:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 232.868 ms

Loss rate: 0.62%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-02-27 06:18:27

End at: 2018-02-27 06:18:57

Below is generated by plot.py at 2018-02-27 07:50:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.94 Mbit/s (72.0% utilization)

95th percentile per-packet one-way delay: 197.549 ms

Loss rate: 0.39%

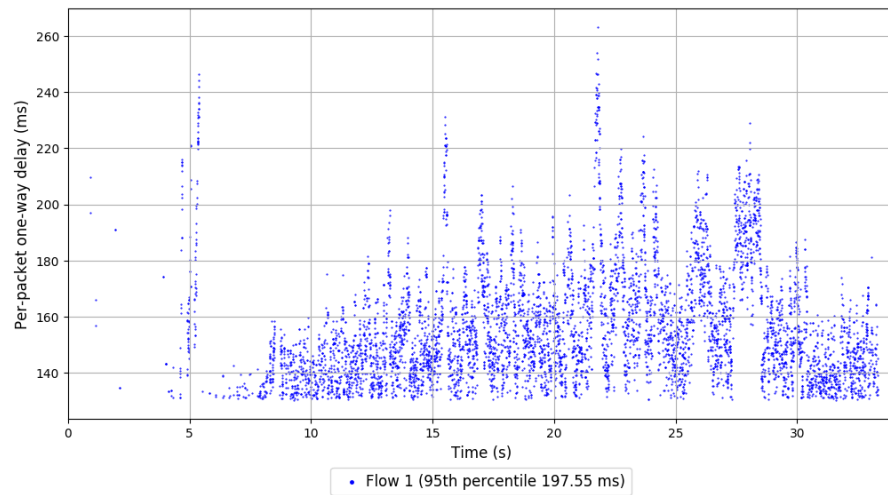
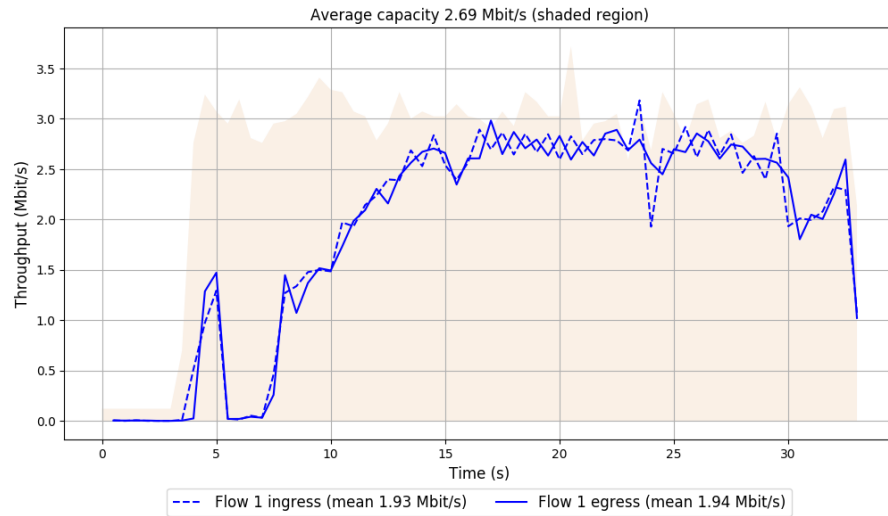
-- Flow 1:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 197.549 ms

Loss rate: 0.39%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-27 06:28:39

End at: 2018-02-27 06:29:09

Below is generated by plot.py at 2018-02-27 07:50:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.87 Mbit/s (69.6% utilization)

95th percentile per-packet one-way delay: 186.547 ms

Loss rate: 0.63%

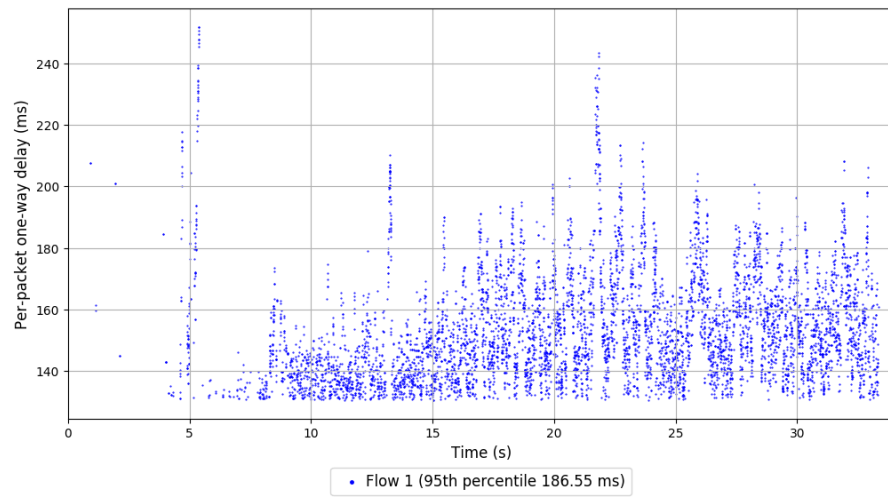
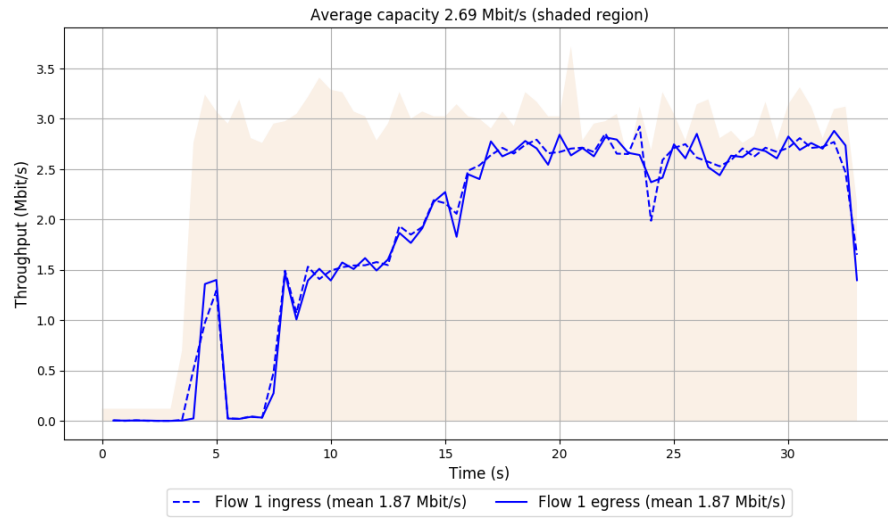
-- Flow 1:

Average throughput: 1.87 Mbit/s

95th percentile per-packet one-way delay: 186.547 ms

Loss rate: 0.63%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-27 06:38:51

End at: 2018-02-27 06:39:21

Below is generated by plot.py at 2018-02-27 07:50:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.94 Mbit/s (71.9% utilization)

95th percentile per-packet one-way delay: 196.133 ms

Loss rate: 0.39%

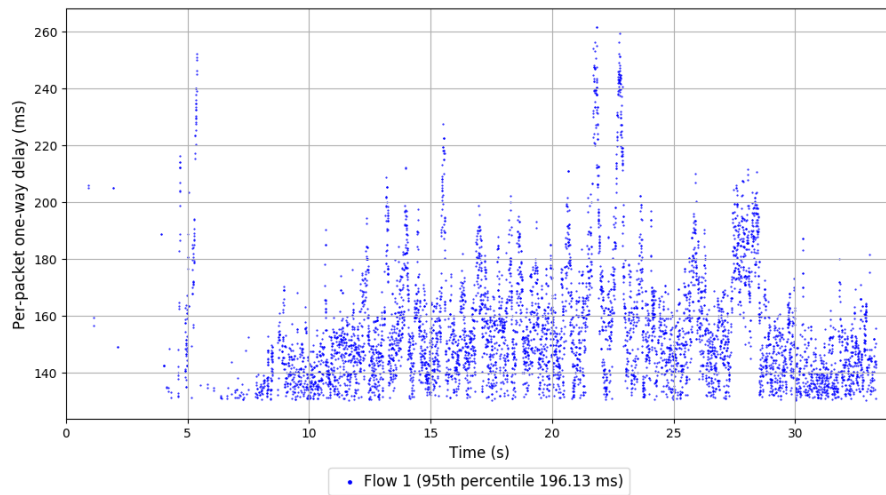
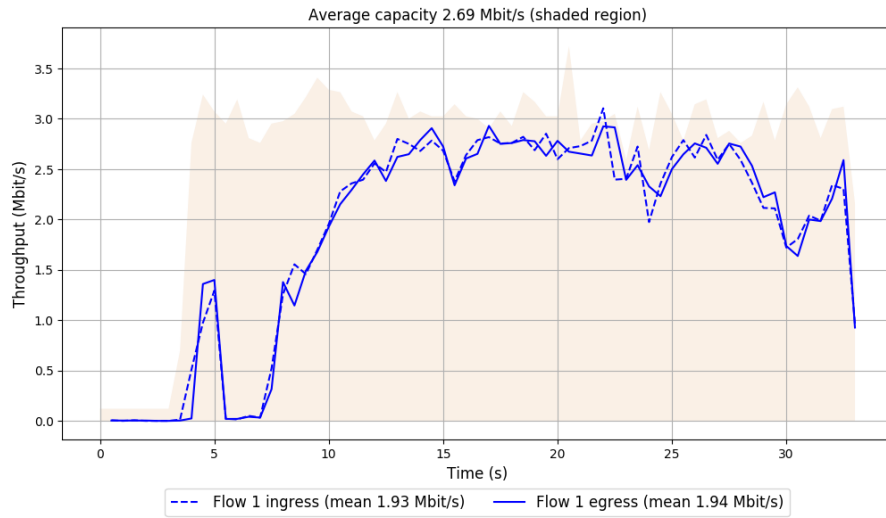
-- Flow 1:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 196.133 ms

Loss rate: 0.39%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-27 06:49:03

End at: 2018-02-27 06:49:33

Below is generated by plot.py at 2018-02-27 07:50:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.03 Mbit/s (75.4% utilization)

95th percentile per-packet one-way delay: 191.791 ms

Loss rate: 0.48%

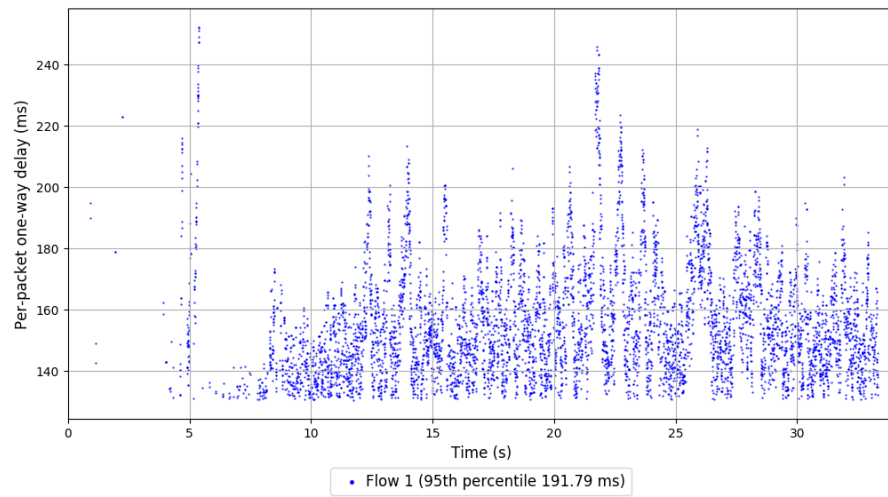
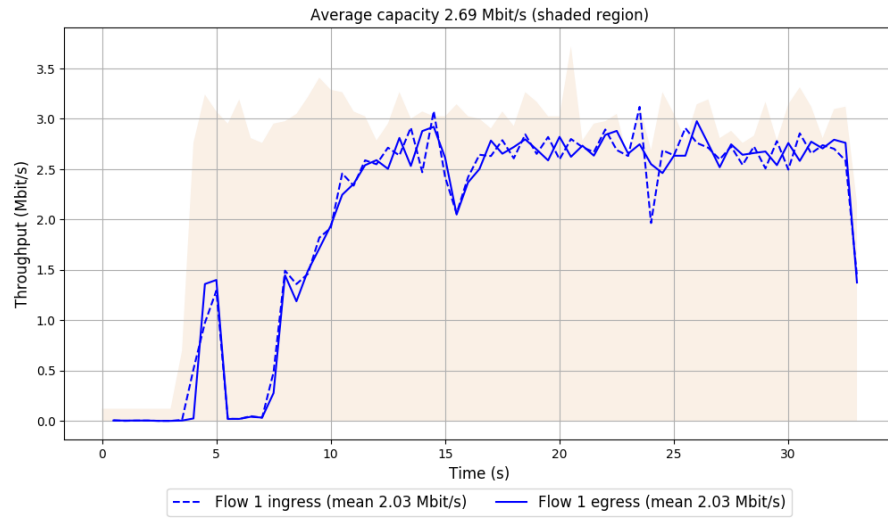
-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 191.791 ms

Loss rate: 0.48%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-27 06:59:15

End at: 2018-02-27 06:59:45

Below is generated by plot.py at 2018-02-27 07:50:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.99 Mbit/s (73.9% utilization)

95th percentile per-packet one-way delay: 192.287 ms

Loss rate: 0.54%

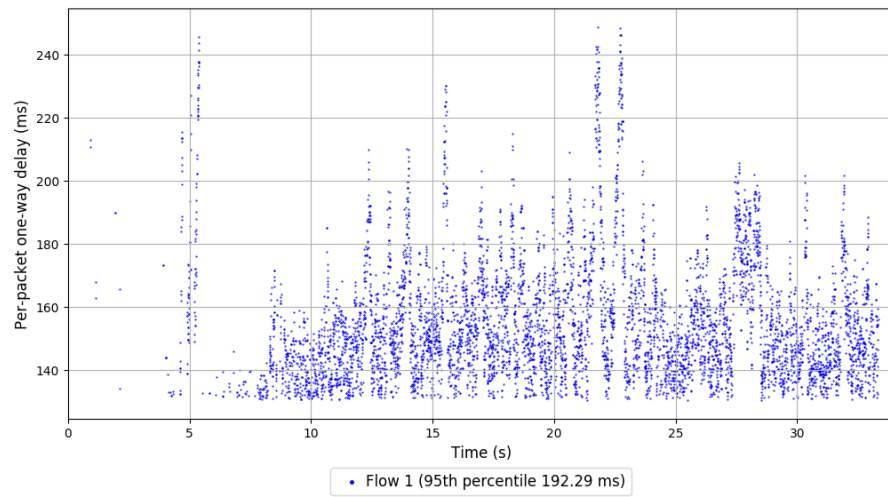
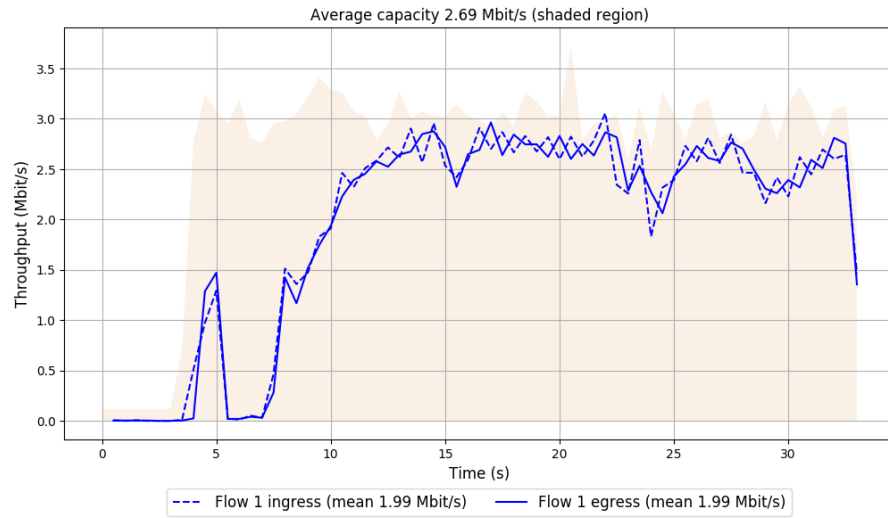
-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 192.287 ms

Loss rate: 0.54%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-27 07:09:26

End at: 2018-02-27 07:09:56

Below is generated by plot.py at 2018-02-27 07:50:34

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.94 Mbit/s (72.1% utilization)

95th percentile per-packet one-way delay: 196.369 ms

Loss rate: 0.55%

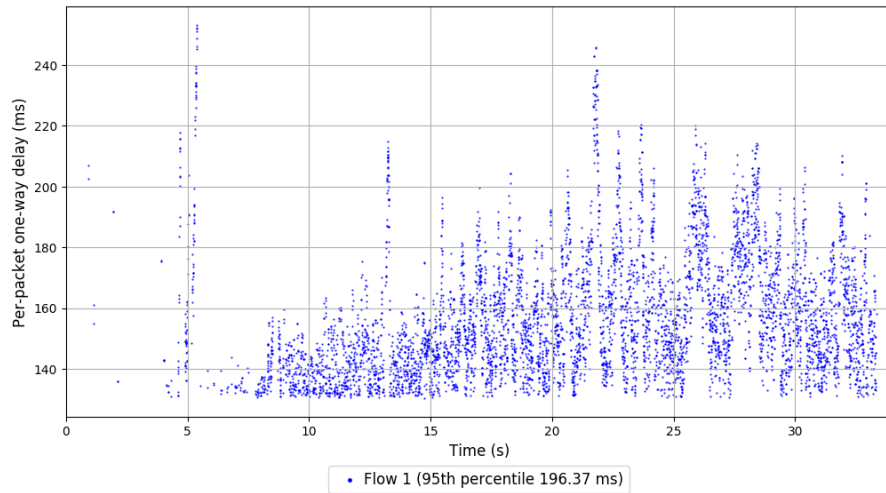
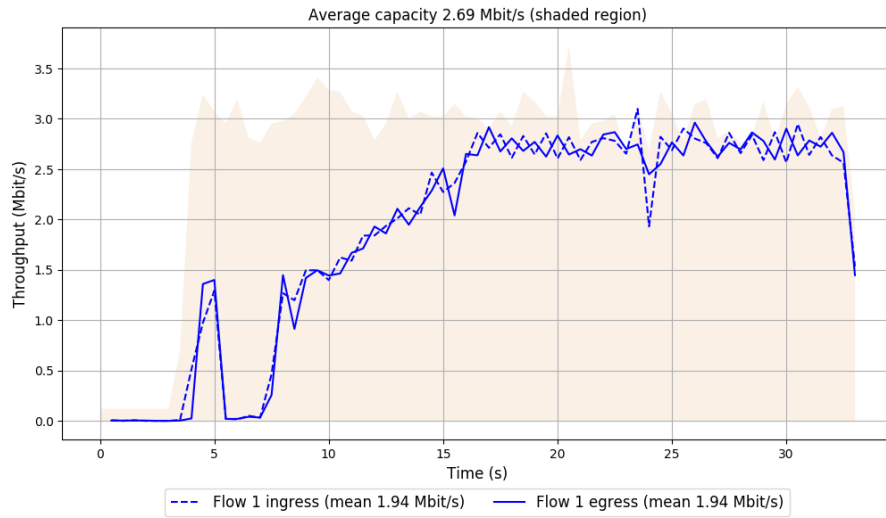
-- Flow 1:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 196.369 ms

Loss rate: 0.55%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-27 07:19:38

End at: 2018-02-27 07:20:08

Below is generated by plot.py at 2018-02-27 07:50:35

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.02 Mbit/s (75.1% utilization)

95th percentile per-packet one-way delay: 191.190 ms

Loss rate: 0.55%

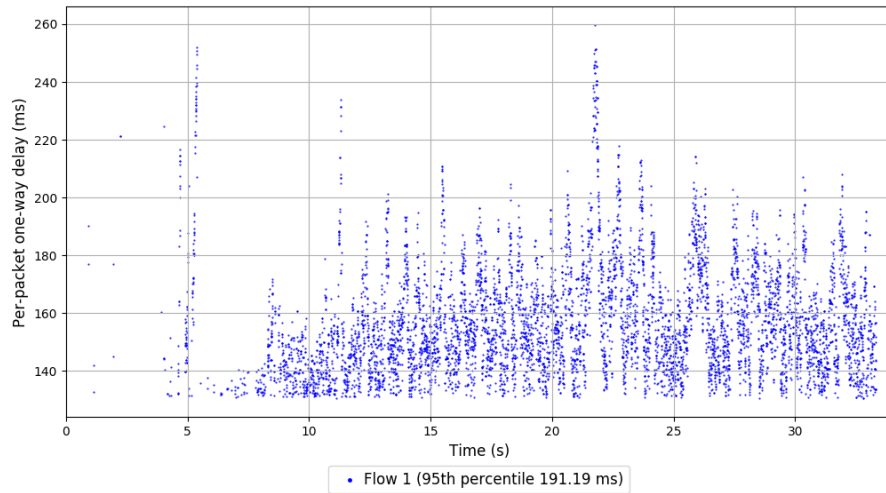
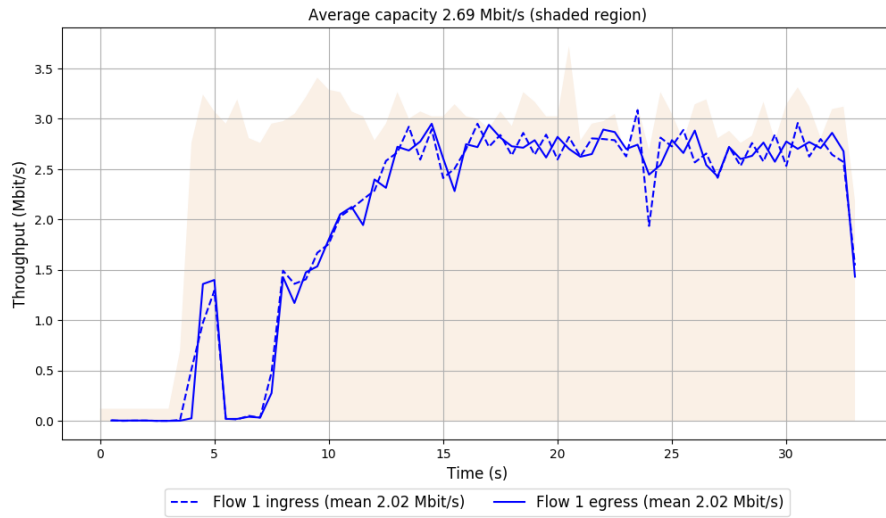
-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 191.190 ms

Loss rate: 0.55%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-27 07:29:50

End at: 2018-02-27 07:30:20

Below is generated by plot.py at 2018-02-27 07:50:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.92 Mbit/s (71.3% utilization)

95th percentile per-packet one-way delay: 193.318 ms

Loss rate: 0.47%

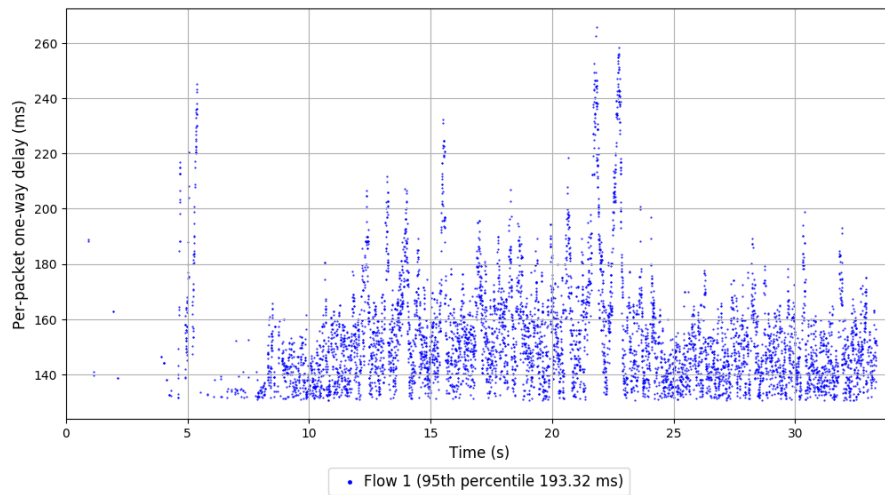
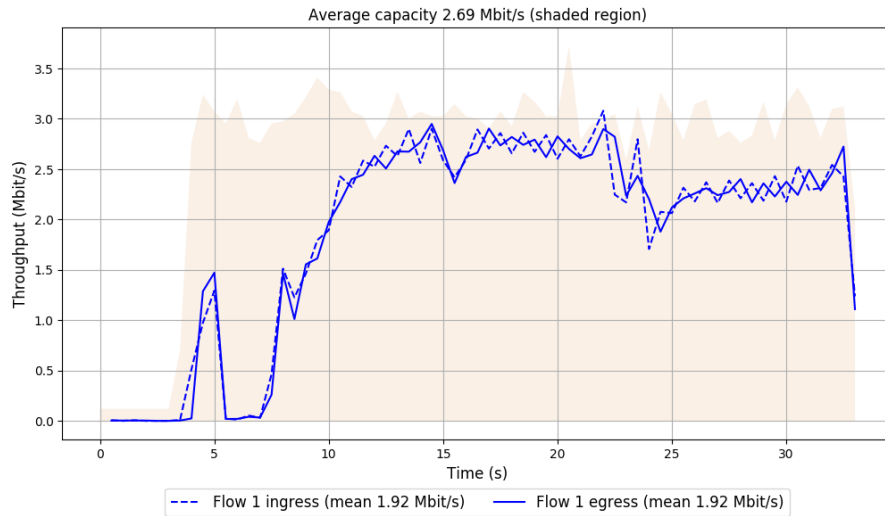
-- Flow 1:

Average throughput: 1.92 Mbit/s

95th percentile per-packet one-way delay: 193.318 ms

Loss rate: 0.47%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-27 07:40:02

End at: 2018-02-27 07:40:32

Below is generated by plot.py at 2018-02-27 07:50:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.97 Mbit/s (73.3% utilization)

95th percentile per-packet one-way delay: 190.944 ms

Loss rate: 0.54%

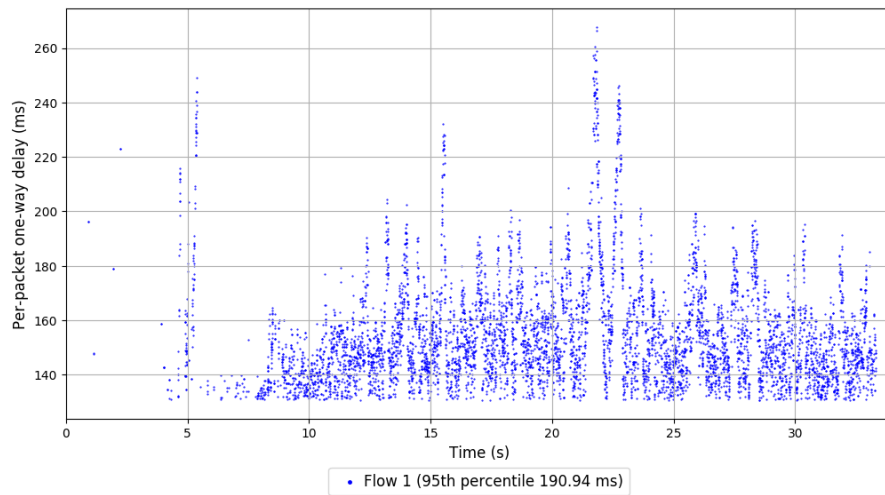
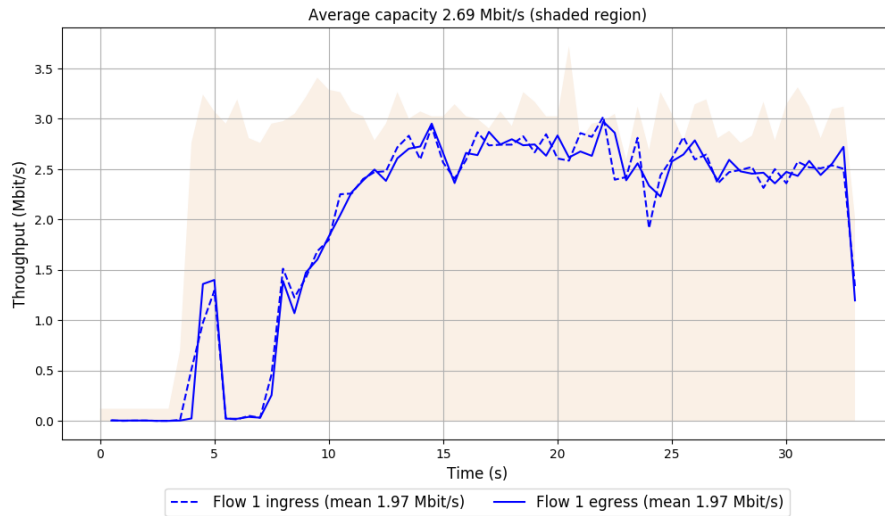
-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 190.944 ms

Loss rate: 0.54%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-02-27 06:10:31

End at: 2018-02-27 06:11:01

Below is generated by plot.py at 2018-02-27 07:50:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.21 Mbit/s (7.9% utilization)

95th percentile per-packet one-way delay: 165.482 ms

Loss rate: 0.17%

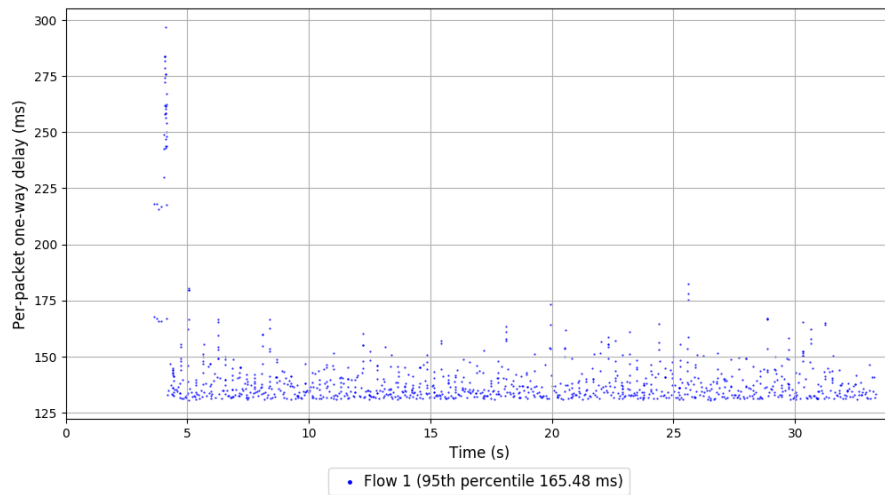
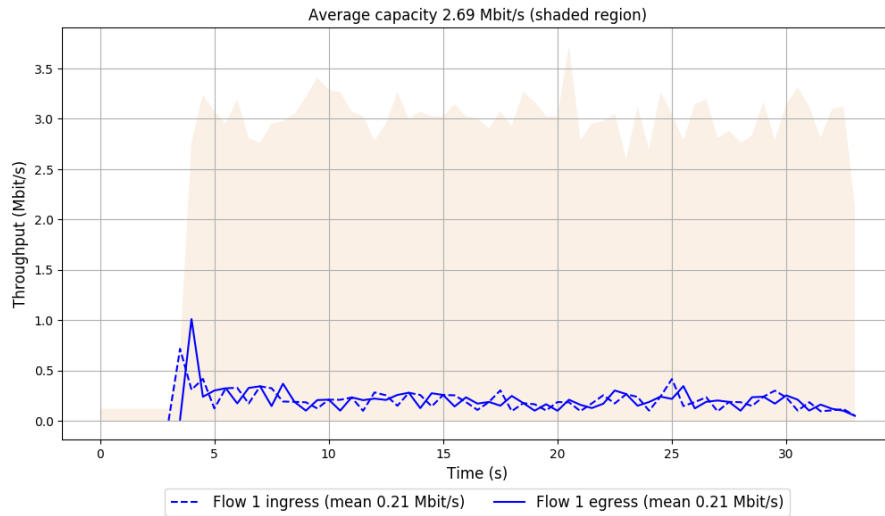
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 165.482 ms

Loss rate: 0.17%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-27 06:20:43

End at: 2018-02-27 06:21:13

Below is generated by plot.py at 2018-02-27 07:50:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.20 Mbit/s (7.3% utilization)

95th percentile per-packet one-way delay: 161.512 ms

Loss rate: 1.33%

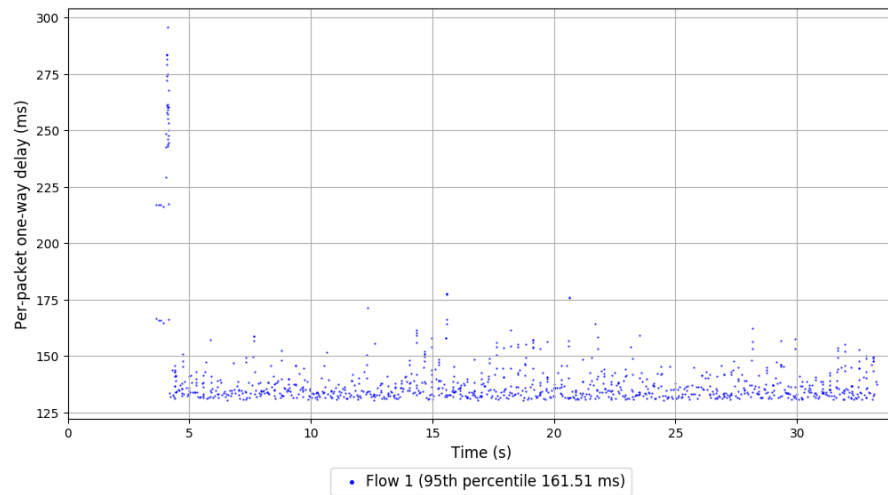
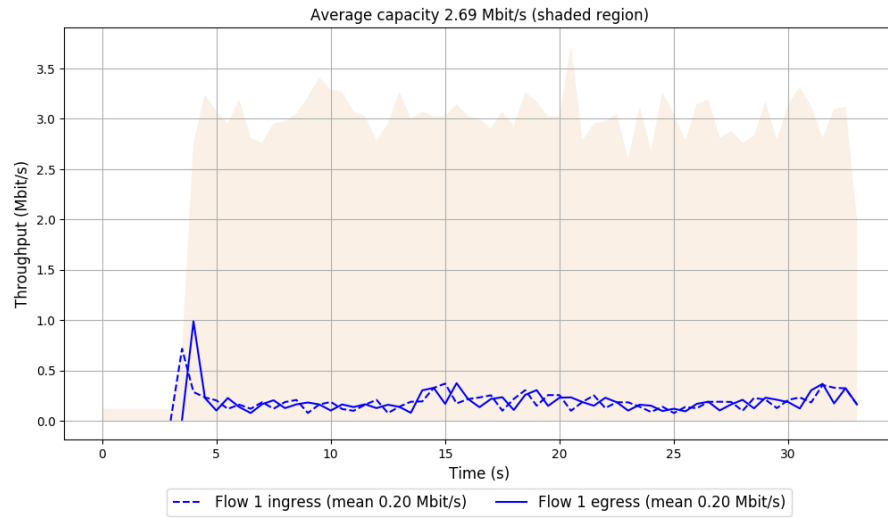
-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 161.512 ms

Loss rate: 1.33%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-27 06:30:55

End at: 2018-02-27 06:31:25

Below is generated by plot.py at 2018-02-27 07:50:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.19 Mbit/s (7.2% utilization)

95th percentile per-packet one-way delay: 161.238 ms

Loss rate: 0.44%

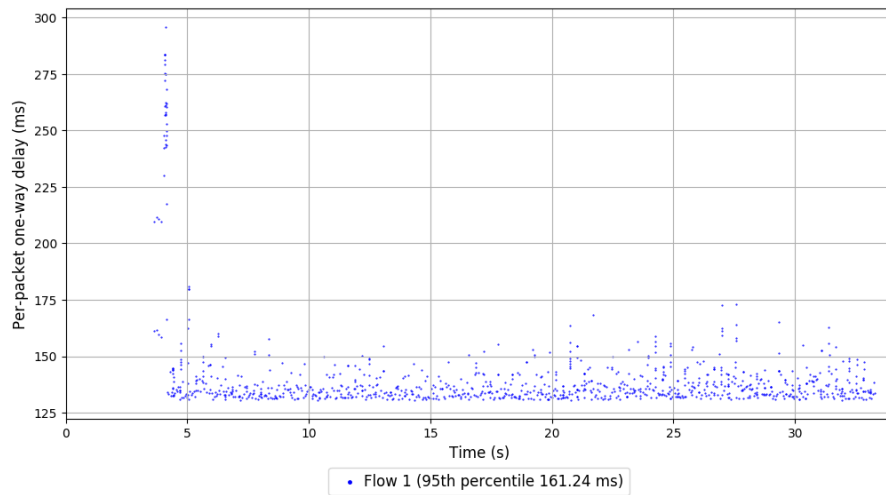
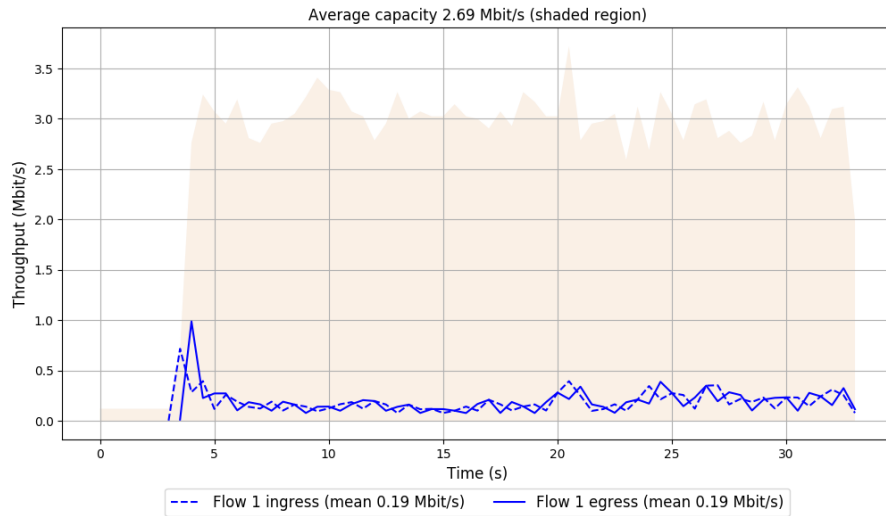
-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 161.238 ms

Loss rate: 0.44%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-27 06:41:07

End at: 2018-02-27 06:41:37

Below is generated by plot.py at 2018-02-27 07:50:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.18 Mbit/s (6.7% utilization)

95th percentile per-packet one-way delay: 163.985 ms

Loss rate: 0.29%

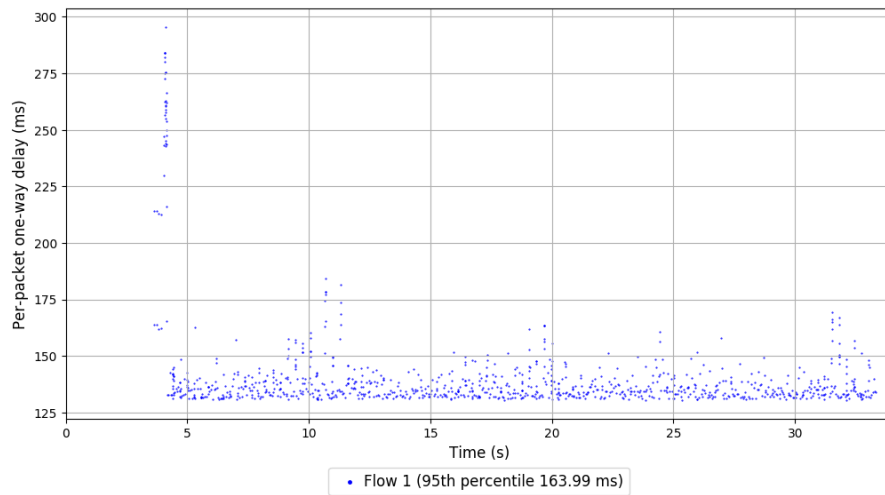
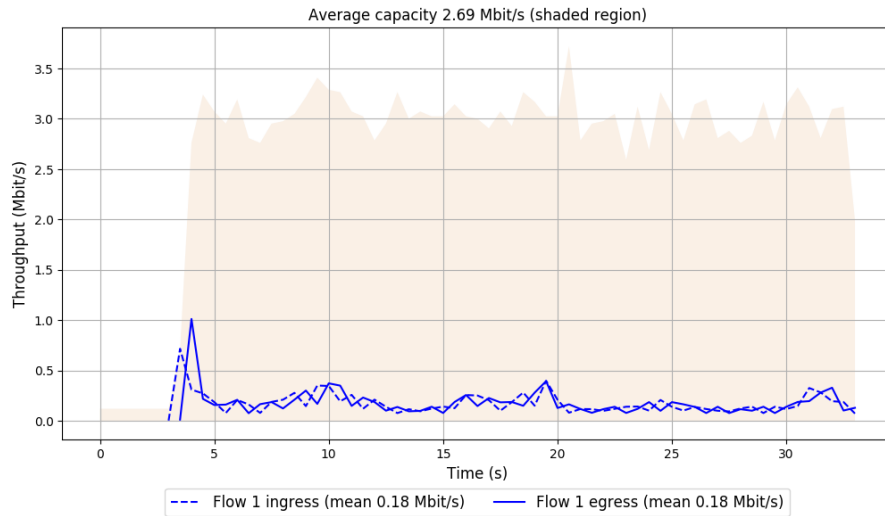
-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 163.985 ms

Loss rate: 0.29%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-27 06:51:19

End at: 2018-02-27 06:51:49

Below is generated by plot.py at 2018-02-27 07:50:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.16 Mbit/s (5.9% utilization)

95th percentile per-packet one-way delay: 151.646 ms

Loss rate: 0.95%

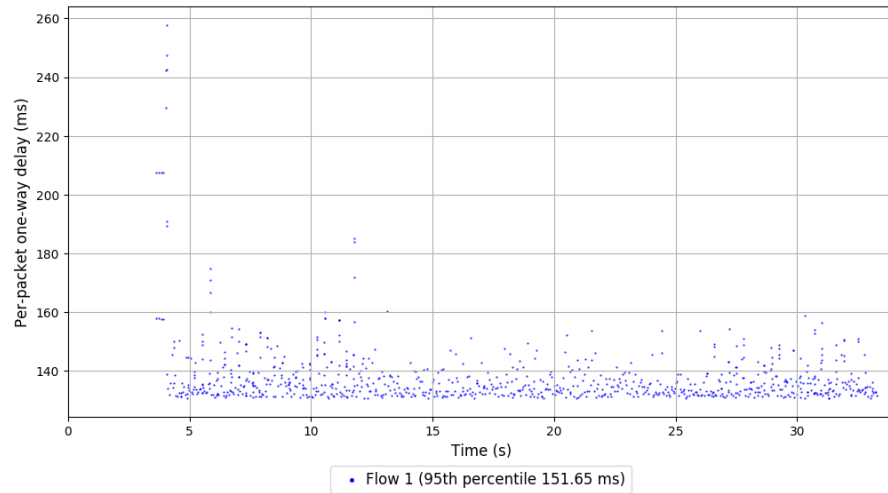
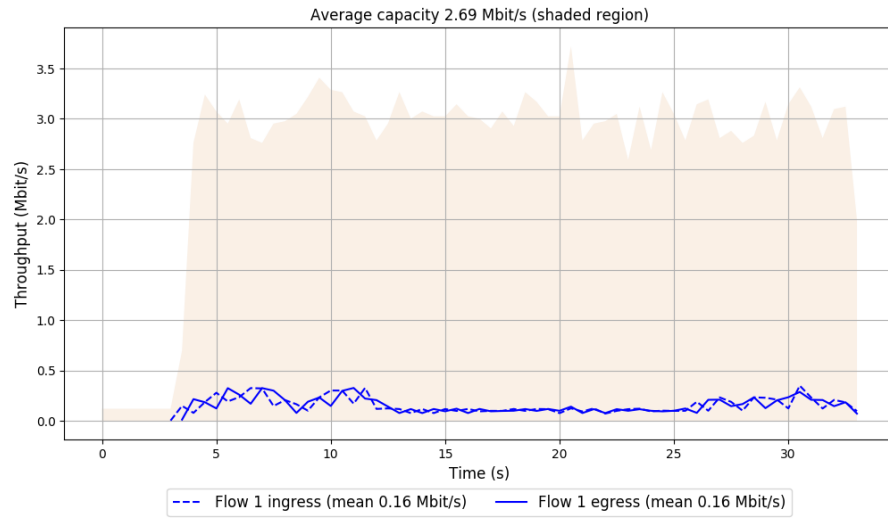
-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 151.646 ms

Loss rate: 0.95%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-27 07:01:31

End at: 2018-02-27 07:02:01

Below is generated by plot.py at 2018-02-27 07:50:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.18 Mbit/s (6.7% utilization)

95th percentile per-packet one-way delay: 162.369 ms

Loss rate: 0.03%

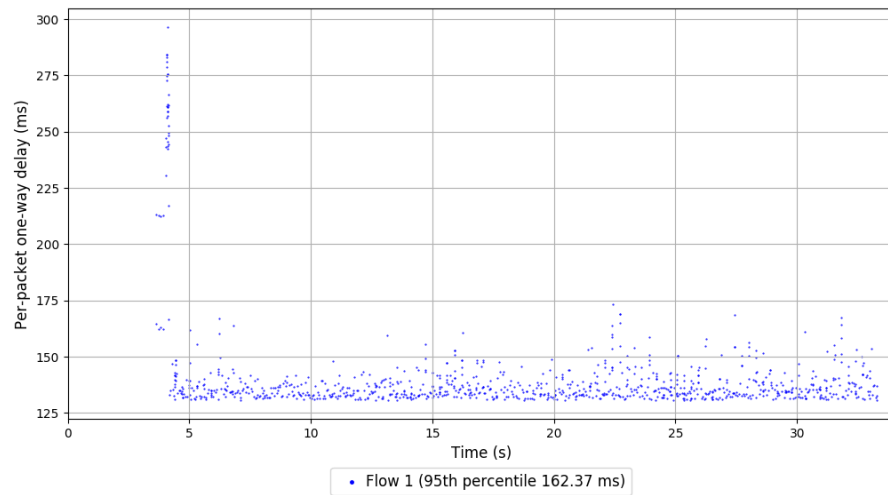
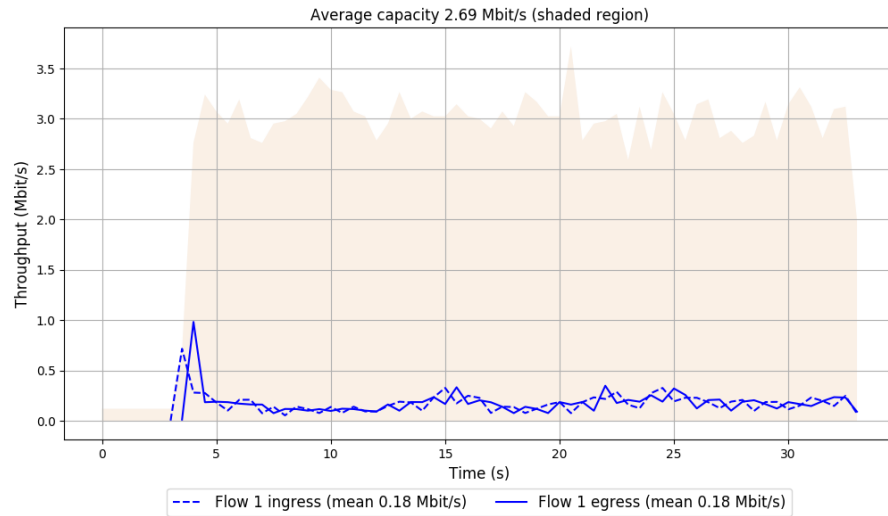
-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 162.369 ms

Loss rate: 0.03%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-27 07:11:42

End at: 2018-02-27 07:12:12

Below is generated by plot.py at 2018-02-27 07:50:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.18 Mbit/s (6.6% utilization)

95th percentile per-packet one-way delay: 166.518 ms

Loss rate: 0.43%

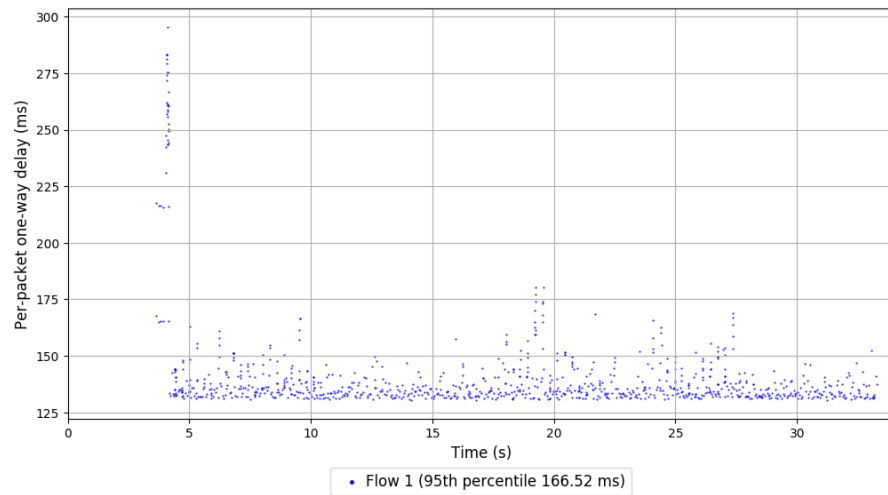
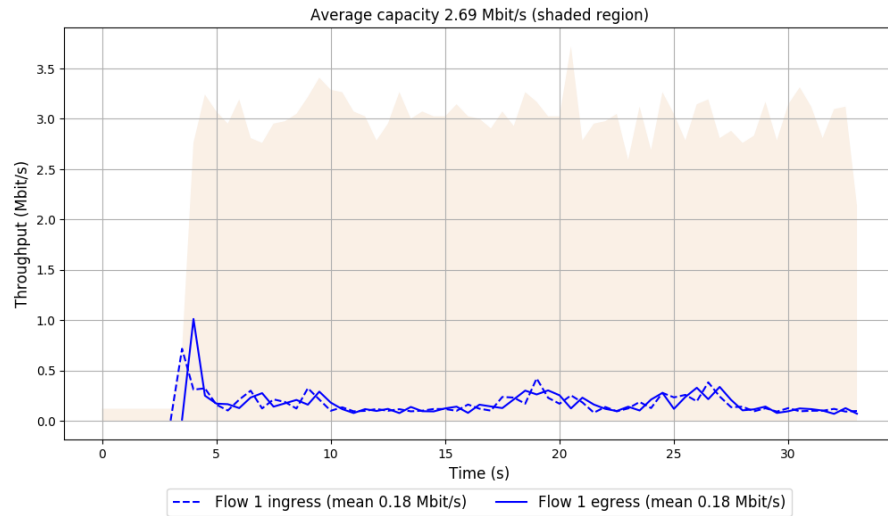
-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 166.518 ms

Loss rate: 0.43%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-27 07:21:54

End at: 2018-02-27 07:22:24

Below is generated by plot.py at 2018-02-27 07:50:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.15 Mbit/s (5.5% utilization)

95th percentile per-packet one-way delay: 165.416 ms

Loss rate: 0.31%

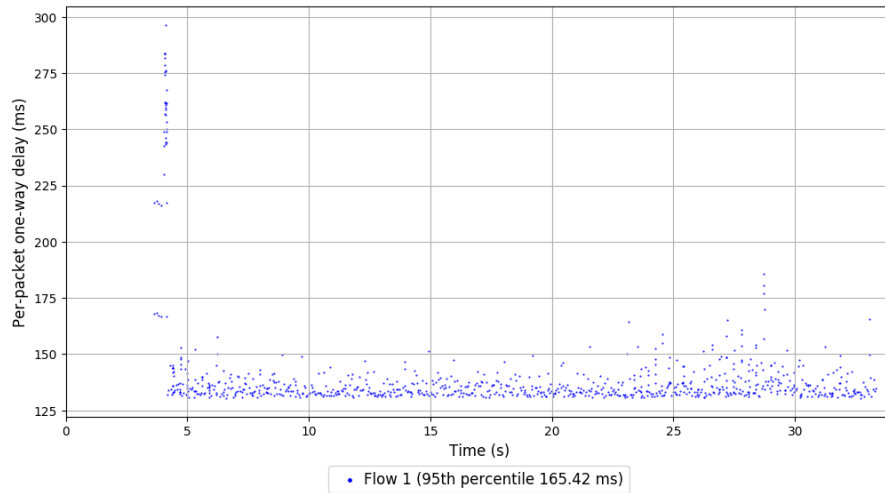
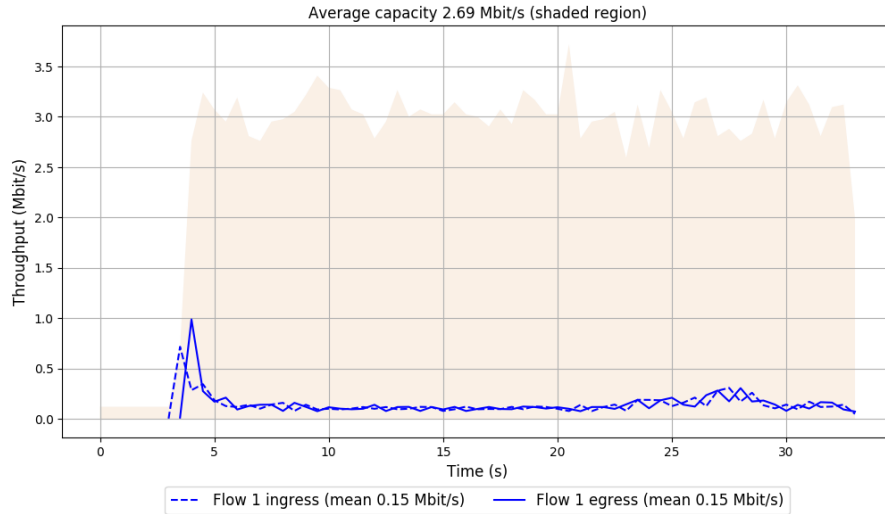
-- Flow 1:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 165.416 ms

Loss rate: 0.31%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-27 07:32:06

End at: 2018-02-27 07:32:36

Below is generated by plot.py at 2018-02-27 07:50:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.21 Mbit/s (7.8% utilization)

95th percentile per-packet one-way delay: 162.479 ms

Loss rate: 1.60%

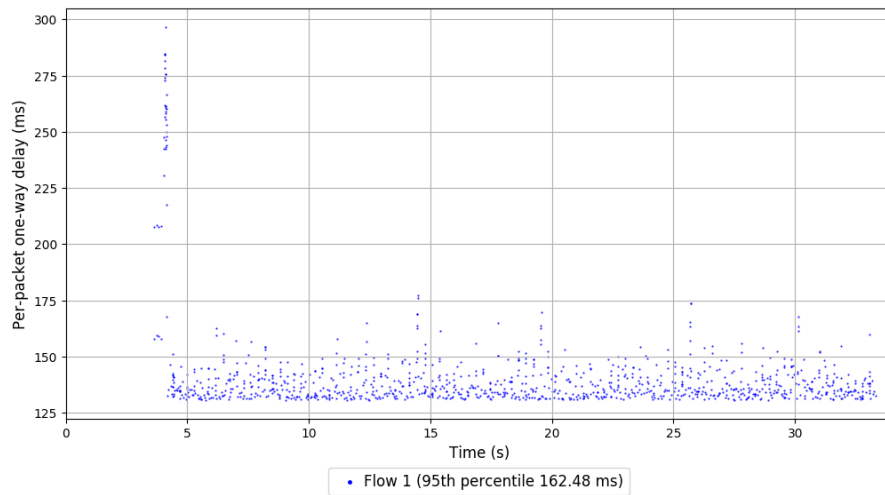
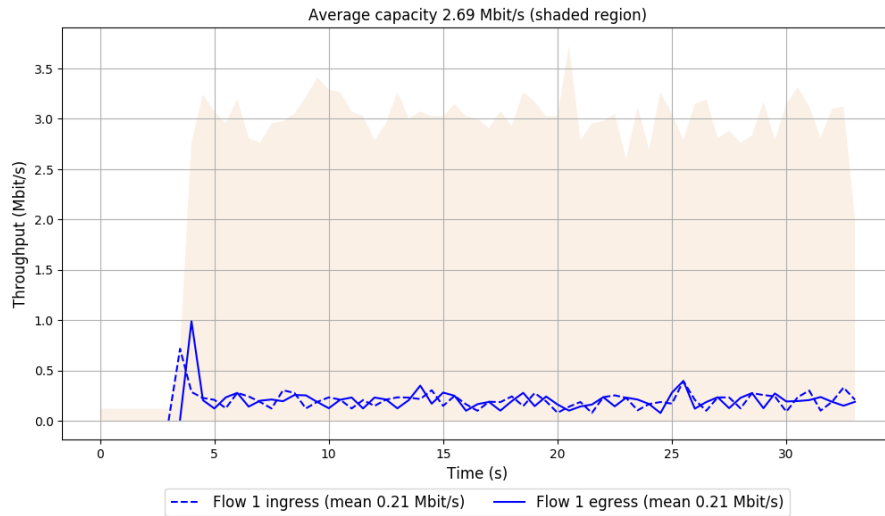
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 162.479 ms

Loss rate: 1.60%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-27 07:42:18

End at: 2018-02-27 07:42:48

Below is generated by plot.py at 2018-02-27 07:50:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.14 Mbit/s (5.4% utilization)

95th percentile per-packet one-way delay: 162.814 ms

Loss rate: 0.52%

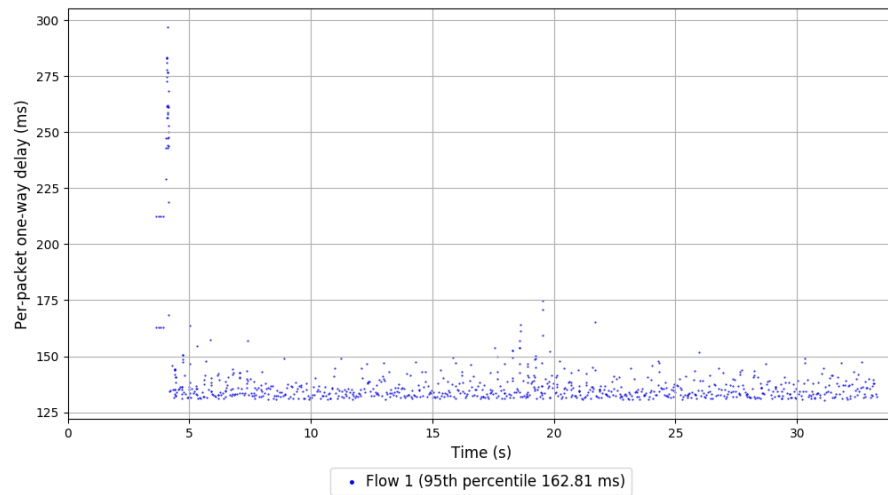
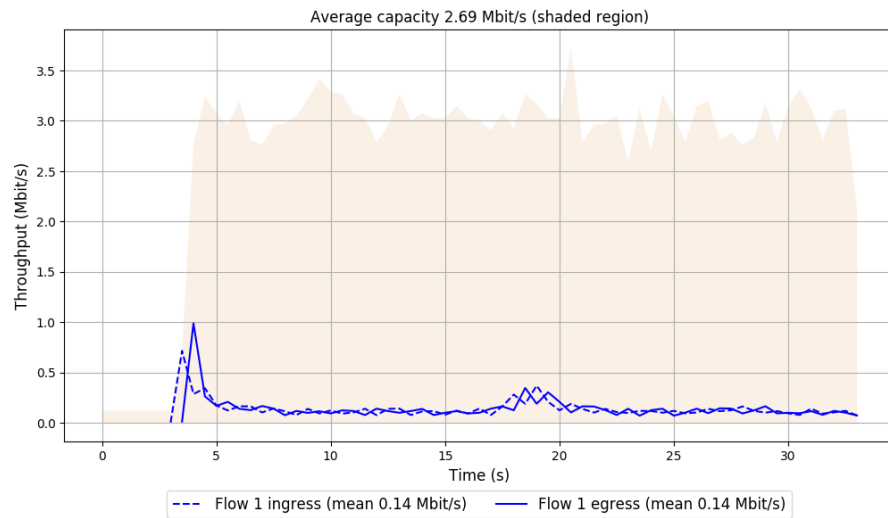
-- Flow 1:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 162.814 ms

Loss rate: 0.52%

Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-02-27 06:13:55

End at: 2018-02-27 06:14:25

Below is generated by plot.py at 2018-02-27 07:50:51

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.41 Mbit/s (89.4% utilization)

95th percentile per-packet one-way delay: 204.544 ms

Loss rate: 0.45%

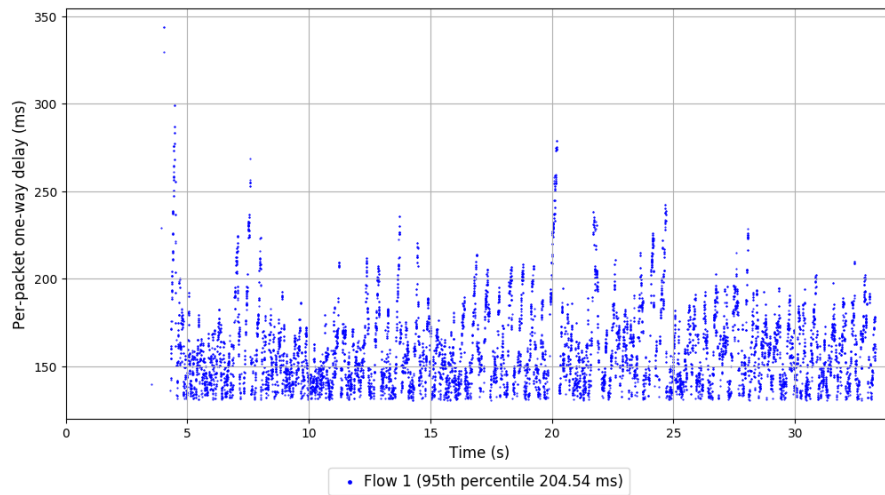
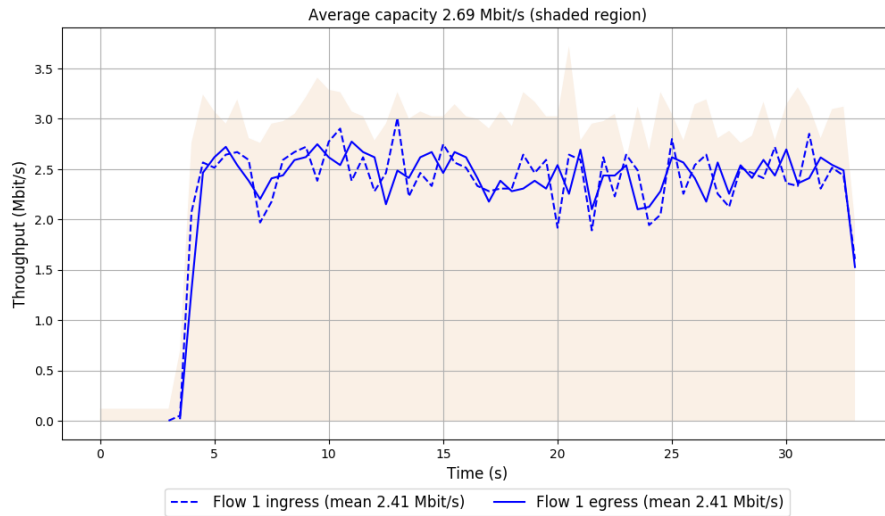
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 204.544 ms

Loss rate: 0.45%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-02-27 06:24:07

End at: 2018-02-27 06:24:37

Below is generated by plot.py at 2018-02-27 07:50:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.38 Mbit/s (88.6% utilization)

95th percentile per-packet one-way delay: 209.330 ms

Loss rate: 0.60%

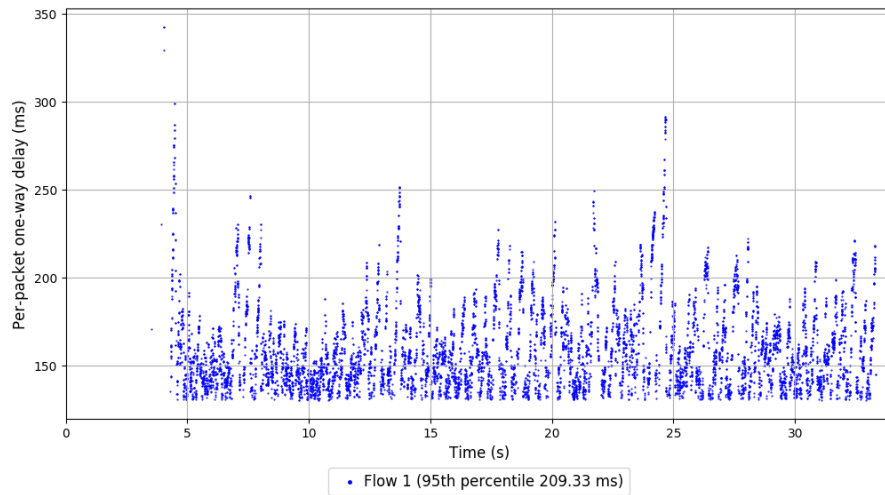
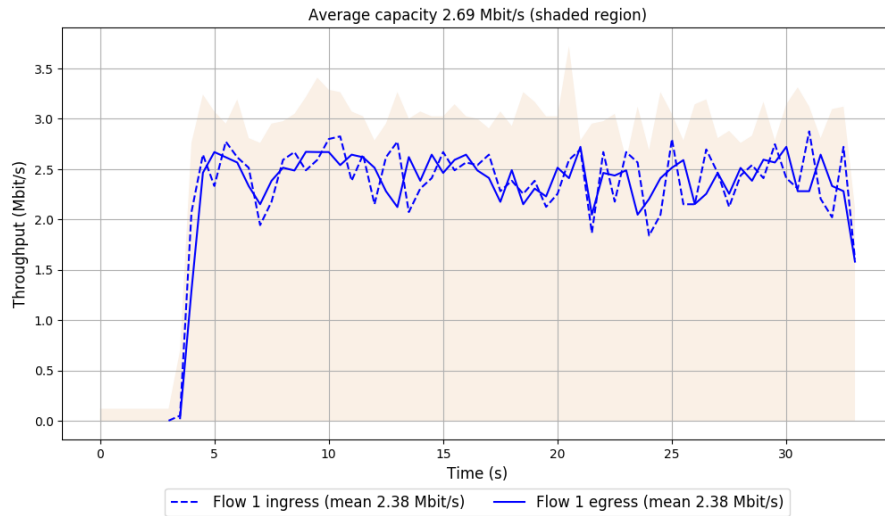
-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 209.330 ms

Loss rate: 0.60%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-02-27 06:34:19

End at: 2018-02-27 06:34:49

Below is generated by plot.py at 2018-02-27 07:50:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.41 Mbit/s (89.5% utilization)

95th percentile per-packet one-way delay: 203.093 ms

Loss rate: 0.66%

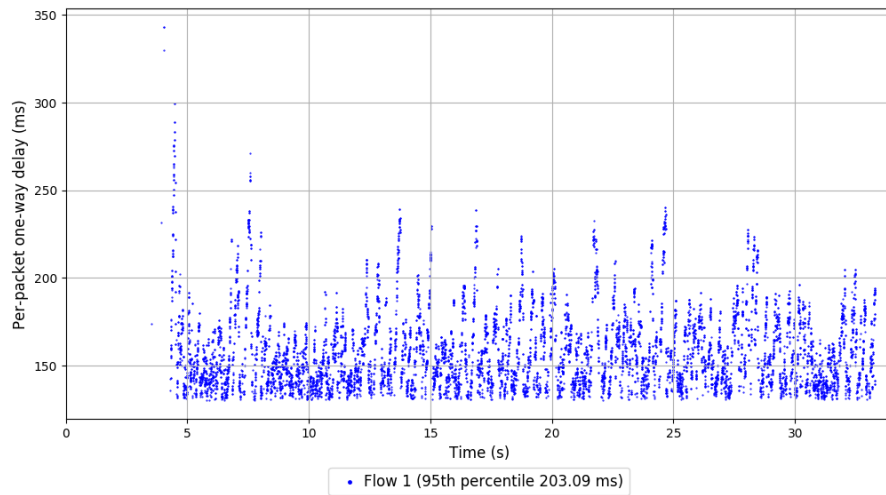
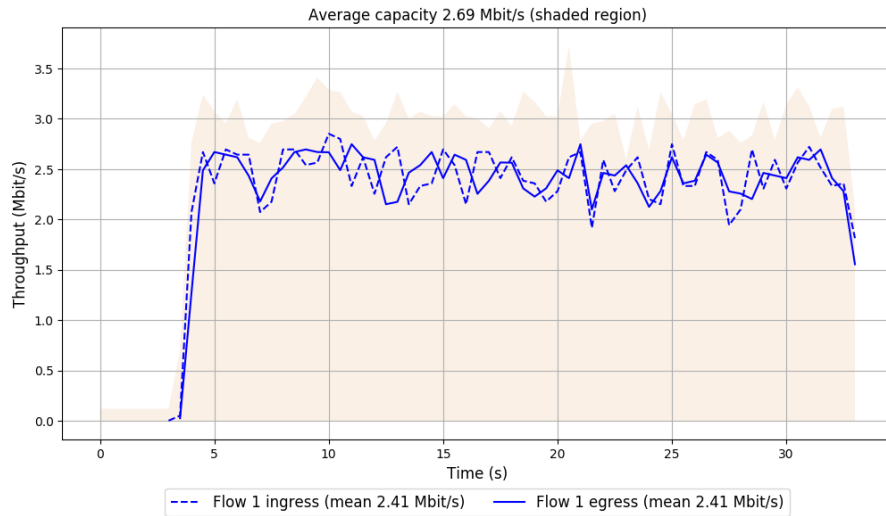
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 203.093 ms

Loss rate: 0.66%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-02-27 06:44:31

End at: 2018-02-27 06:45:01

Below is generated by plot.py at 2018-02-27 07:50:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.39 Mbit/s (88.7% utilization)

95th percentile per-packet one-way delay: 209.661 ms

Loss rate: 0.62%

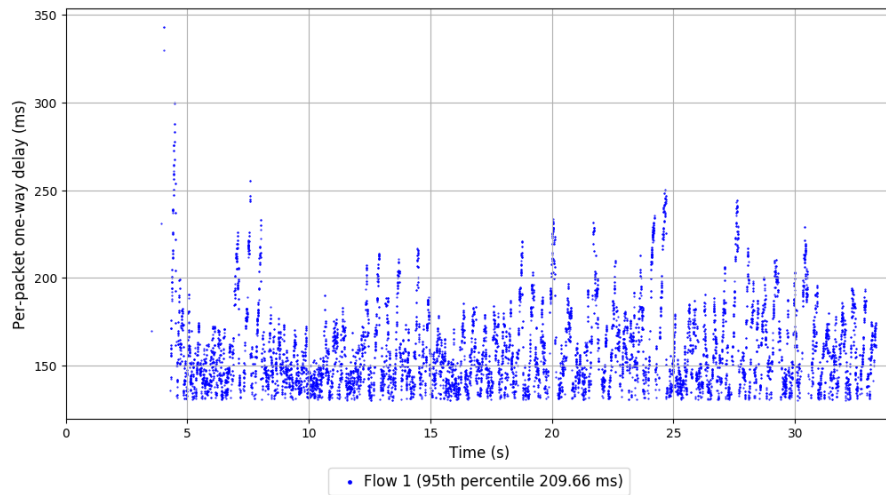
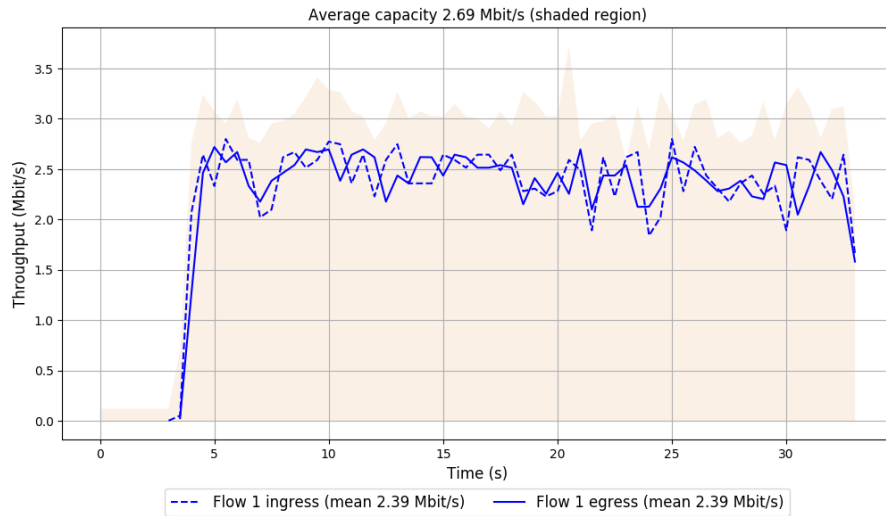
-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 209.661 ms

Loss rate: 0.62%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-27 06:54:43

End at: 2018-02-27 06:55:13

Below is generated by plot.py at 2018-02-27 07:50:55

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.40 Mbit/s (89.0% utilization)

95th percentile per-packet one-way delay: 203.261 ms

Loss rate: 0.52%

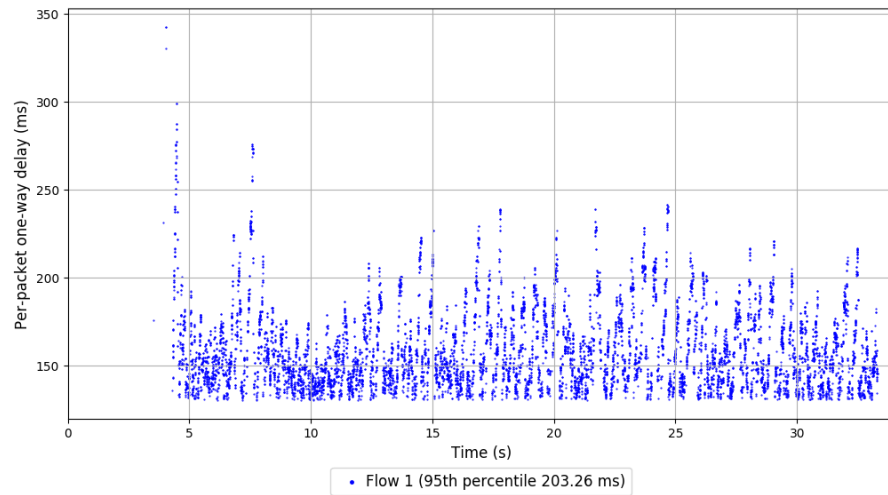
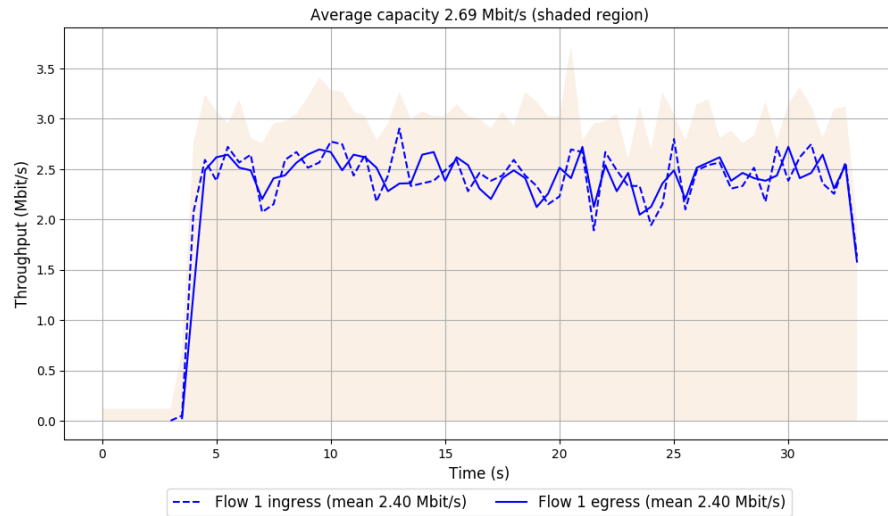
-- Flow 1:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 203.261 ms

Loss rate: 0.52%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-27 07:04:54

End at: 2018-02-27 07:05:24

Below is generated by plot.py at 2018-02-27 07:50:55

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.39 Mbit/s (88.6% utilization)

95th percentile per-packet one-way delay: 207.488 ms

Loss rate: 0.49%

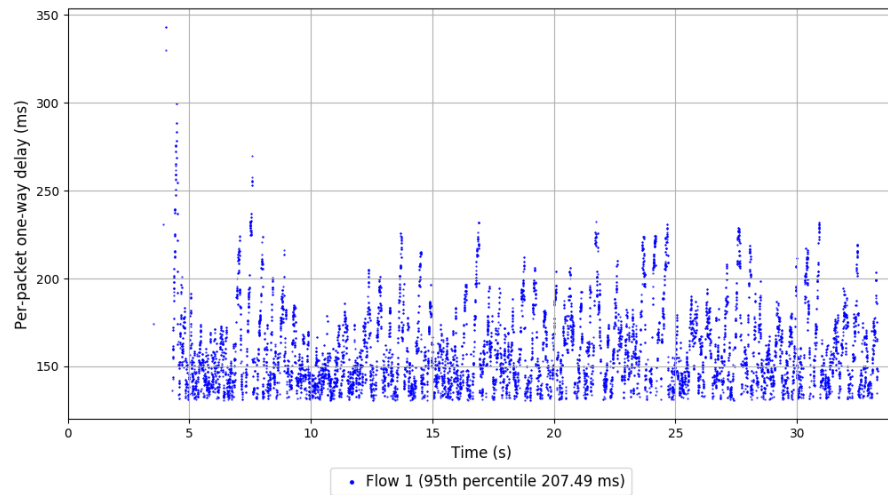
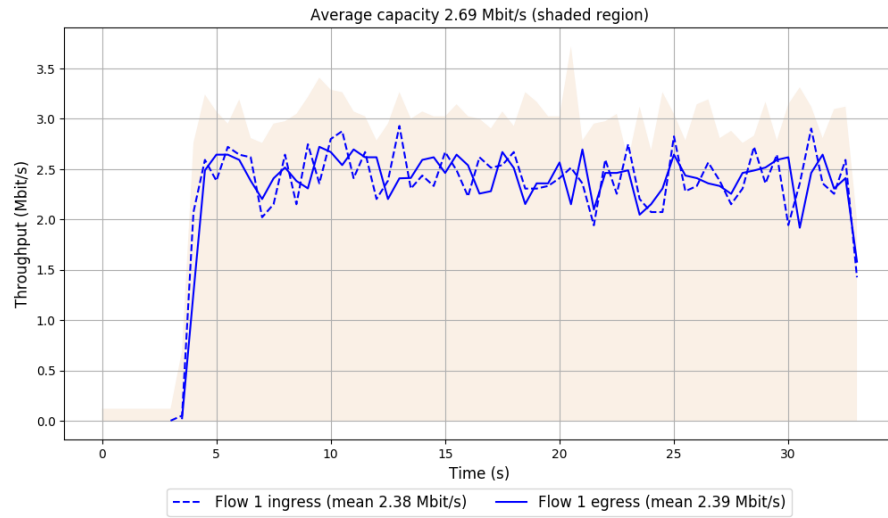
-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 207.488 ms

Loss rate: 0.49%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-02-27 07:15:06

End at: 2018-02-27 07:15:36

Below is generated by plot.py at 2018-02-27 07:50:55

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.38 Mbit/s (88.6% utilization)

95th percentile per-packet one-way delay: 207.551 ms

Loss rate: 0.47%

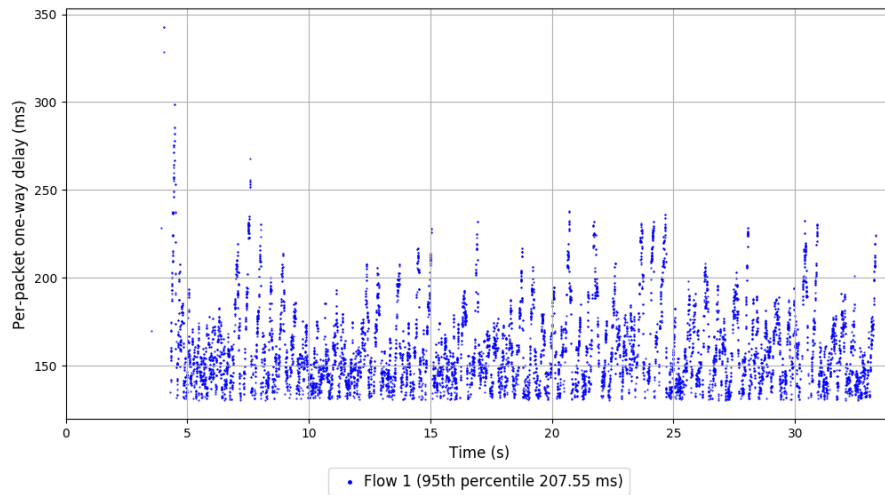
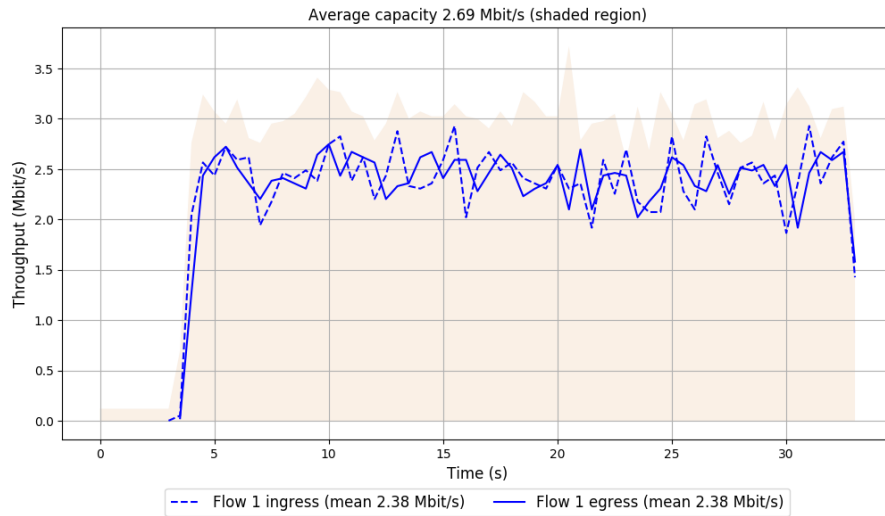
-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 207.551 ms

Loss rate: 0.47%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-27 07:25:18

End at: 2018-02-27 07:25:48

Below is generated by plot.py at 2018-02-27 07:50:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.40 Mbit/s (89.0% utilization)

95th percentile per-packet one-way delay: 206.242 ms

Loss rate: 0.51%

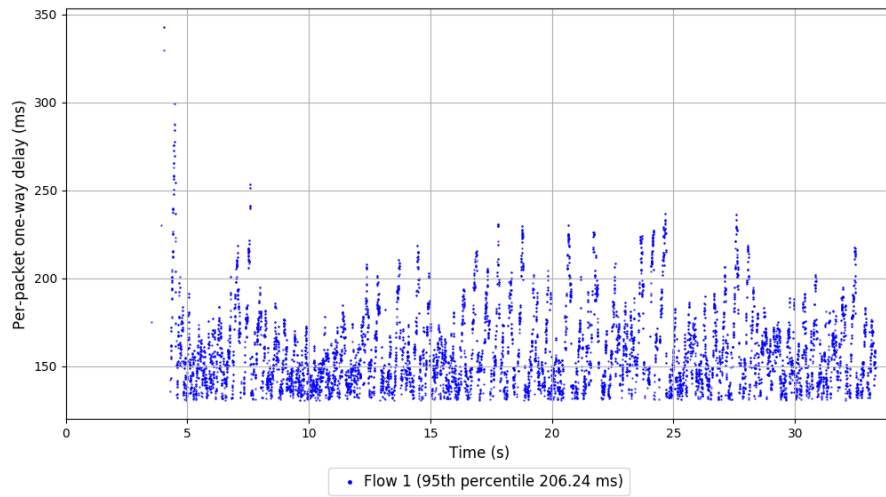
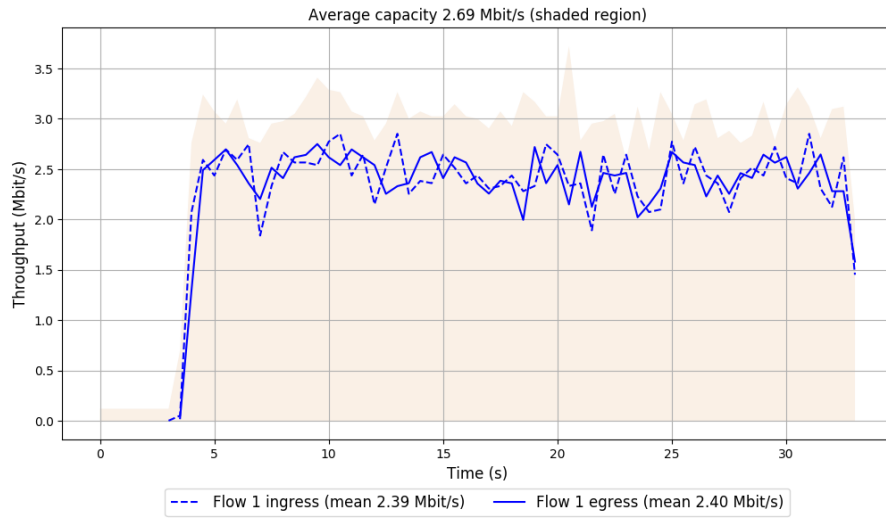
-- Flow 1:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 206.242 ms

Loss rate: 0.51%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-02-27 07:35:30

End at: 2018-02-27 07:36:00

Below is generated by plot.py at 2018-02-27 07:51:04

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.39 Mbit/s (88.7% utilization)

95th percentile per-packet one-way delay: 210.037 ms

Loss rate: 0.67%

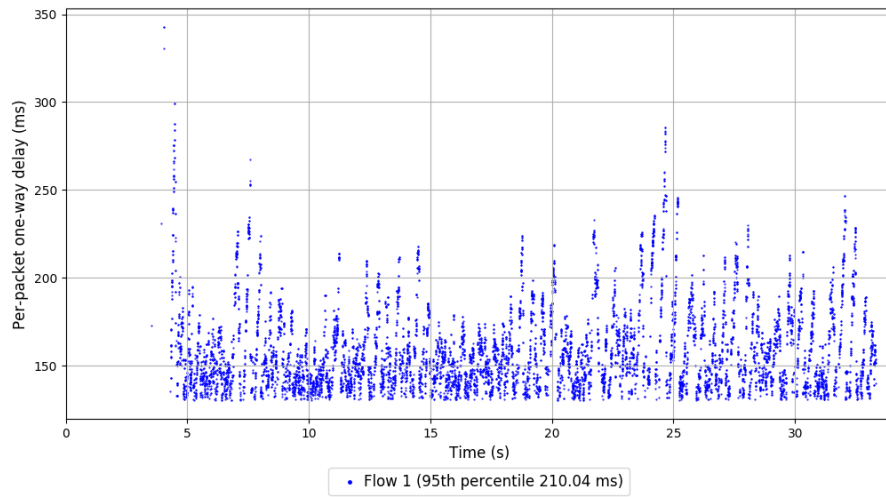
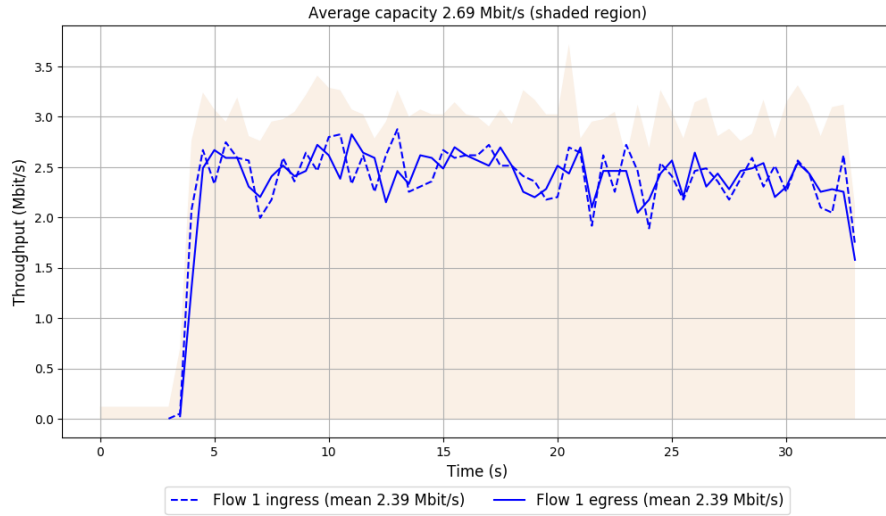
-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 210.037 ms

Loss rate: 0.67%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-02-27 07:45:42

End at: 2018-02-27 07:46:12

Below is generated by plot.py at 2018-02-27 07:51:05

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.37 Mbit/s (88.0% utilization)

95th percentile per-packet one-way delay: 213.756 ms

Loss rate: 0.57%

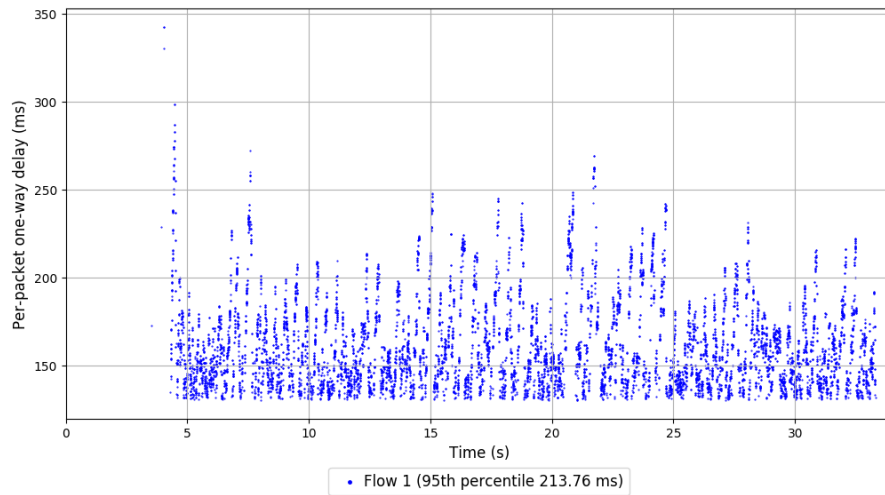
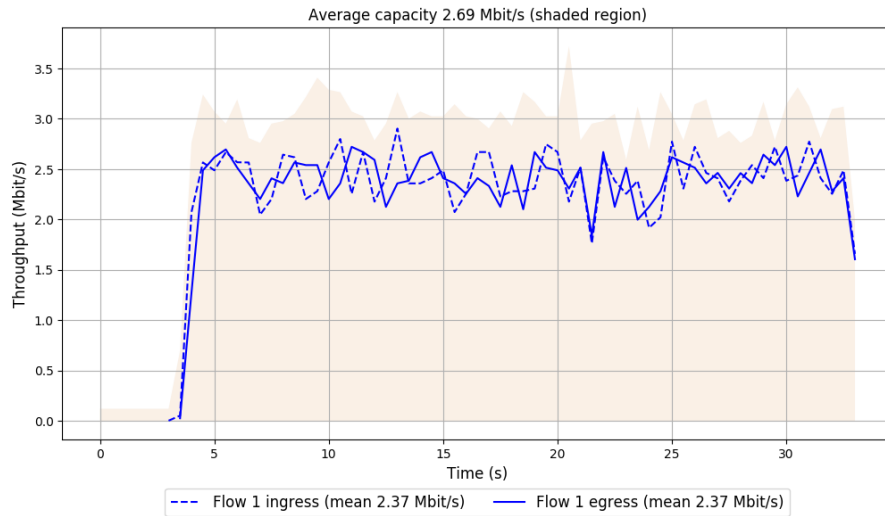
-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 213.756 ms

Loss rate: 0.57%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-27 06:11:05

End at: 2018-02-27 06:11:35

Below is generated by plot.py at 2018-02-27 07:51:05

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 490.905 ms

Loss rate: 0.98%

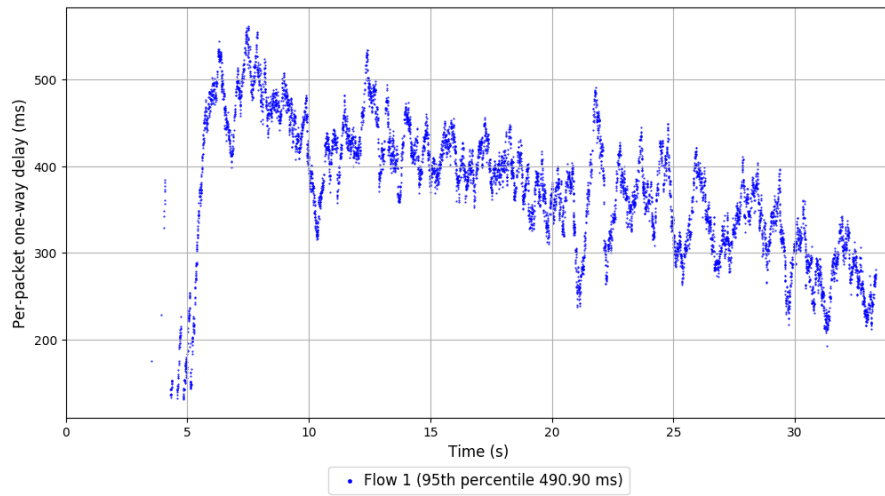
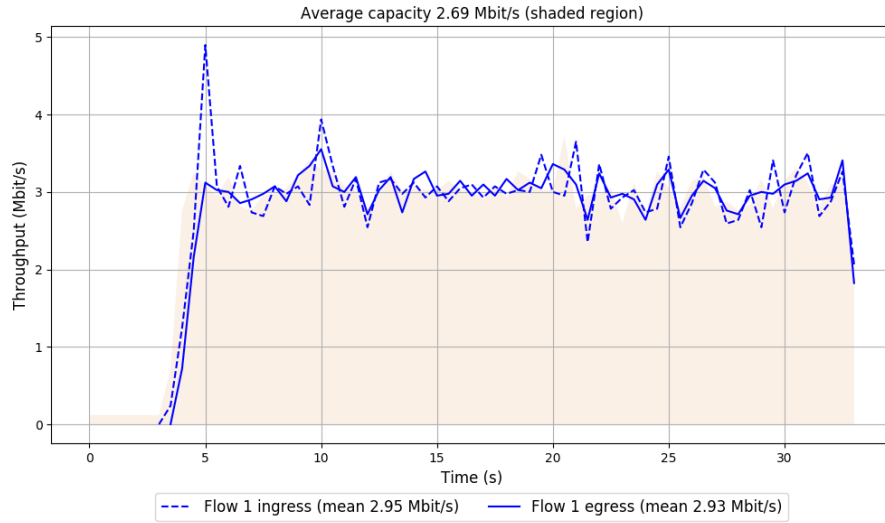
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 490.905 ms

Loss rate: 0.98%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-27 06:21:17

End at: 2018-02-27 06:21:47

Below is generated by plot.py at 2018-02-27 07:51:05

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 1093.013 ms

Loss rate: 3.22%

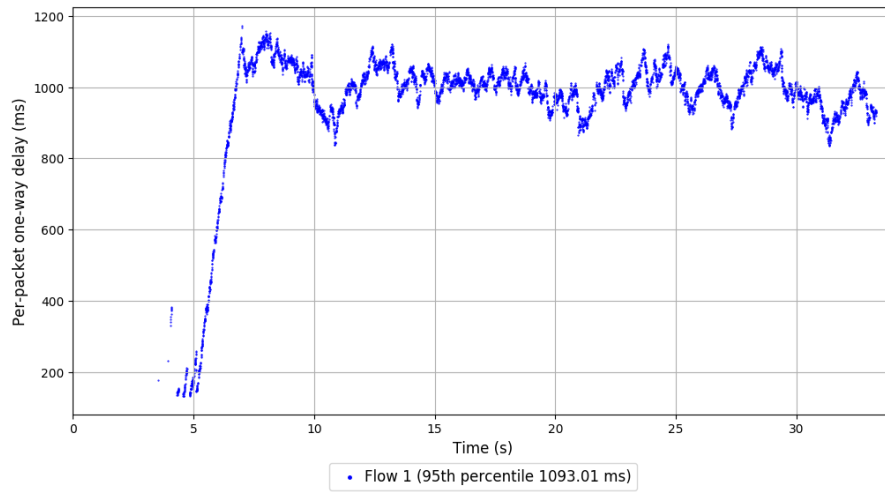
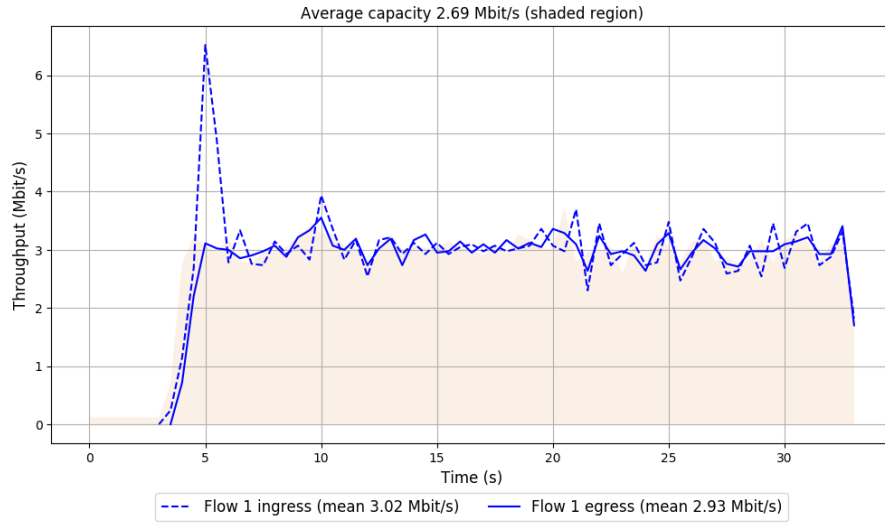
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1093.013 ms

Loss rate: 3.22%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-27 06:31:29

End at: 2018-02-27 06:31:59

Below is generated by plot.py at 2018-02-27 07:51:05

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 489.502 ms

Loss rate: 0.98%

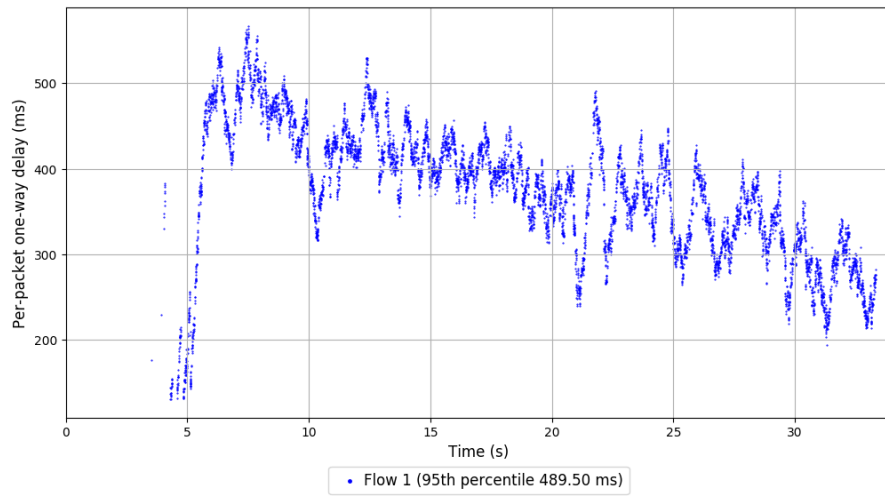
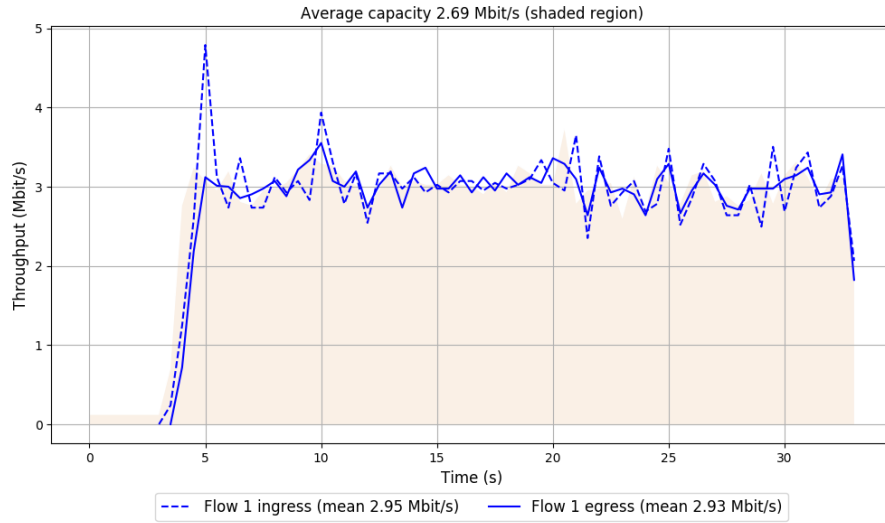
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 489.502 ms

Loss rate: 0.98%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-27 06:41:41

End at: 2018-02-27 06:42:11

Below is generated by plot.py at 2018-02-27 07:51:05

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 495.547 ms

Loss rate: 0.99%

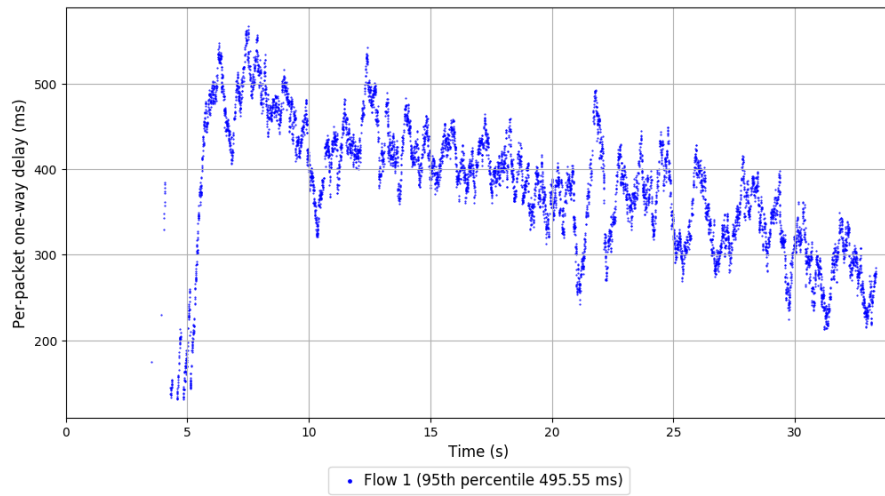
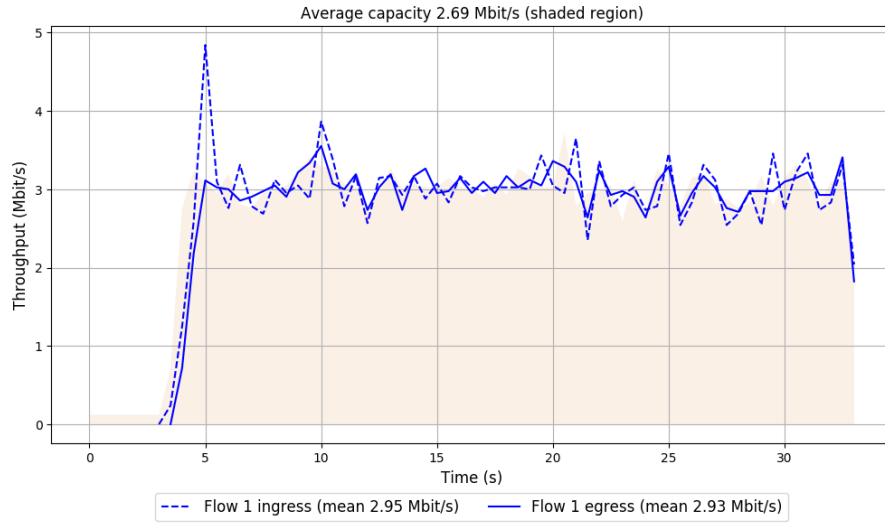
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 495.547 ms

Loss rate: 0.99%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-27 06:51:53

End at: 2018-02-27 06:52:23

Below is generated by plot.py at 2018-02-27 07:51:05

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 483.137 ms

Loss rate: 0.90%

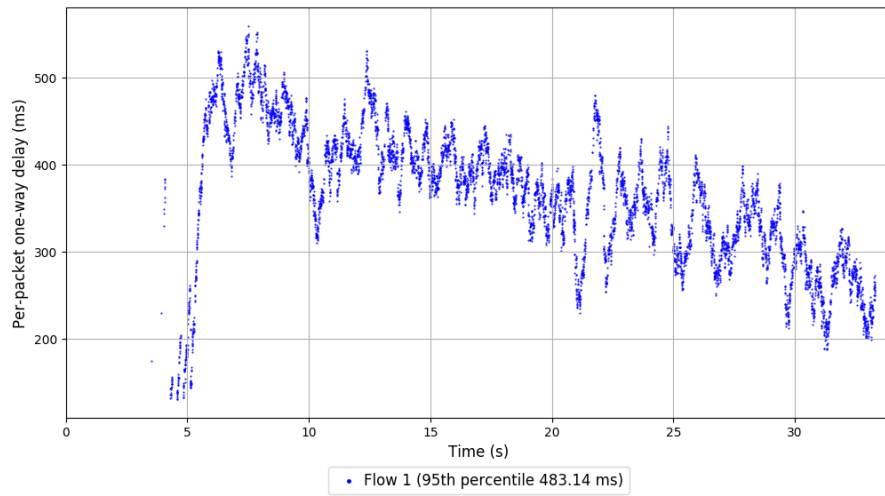
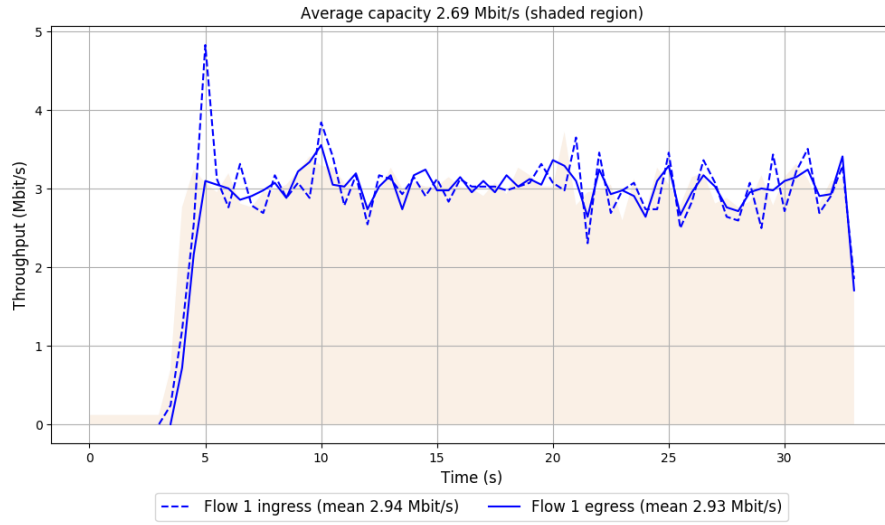
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 483.137 ms

Loss rate: 0.90%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-27 07:02:04

End at: 2018-02-27 07:02:34

Below is generated by plot.py at 2018-02-27 07:51:05

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 1111.146 ms

Loss rate: 3.36%

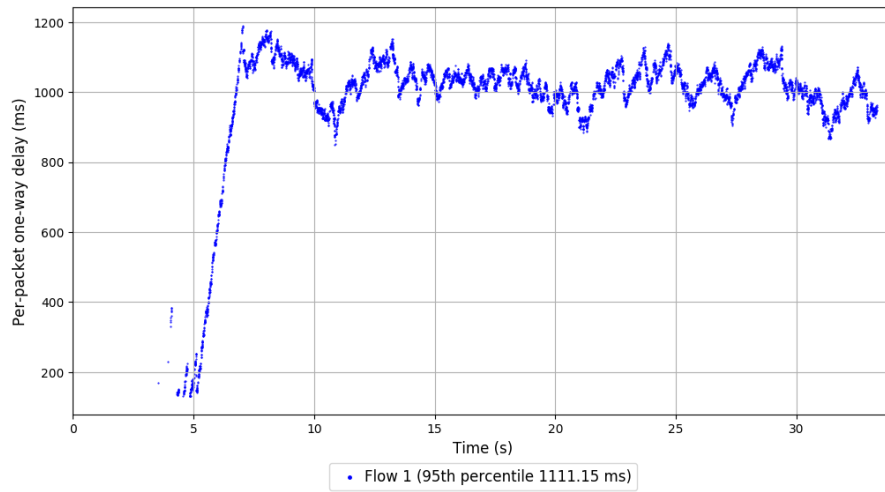
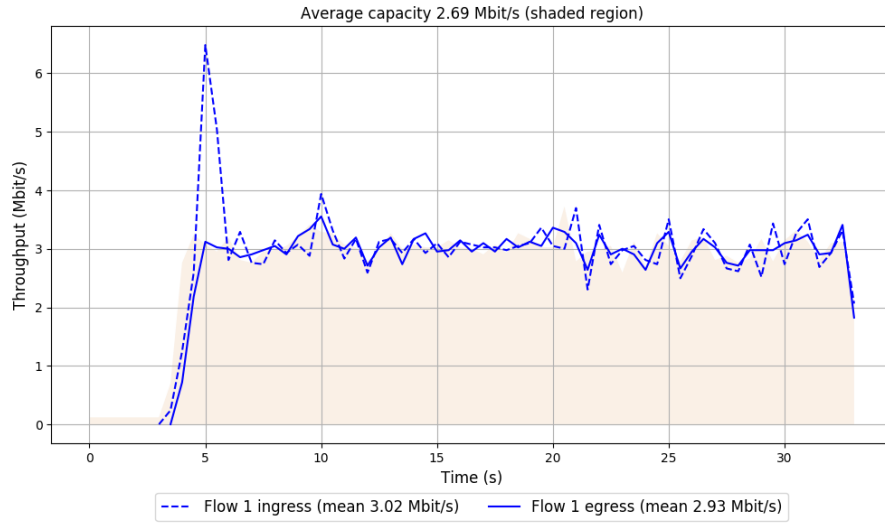
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1111.146 ms

Loss rate: 3.36%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-27 07:12:16

End at: 2018-02-27 07:12:46

Below is generated by plot.py at 2018-02-27 07:51:12

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 491.815 ms

Loss rate: 0.98%

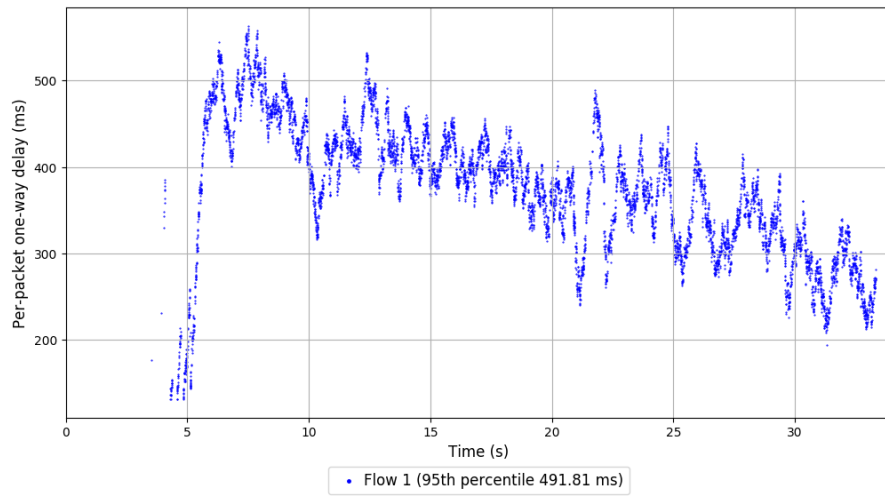
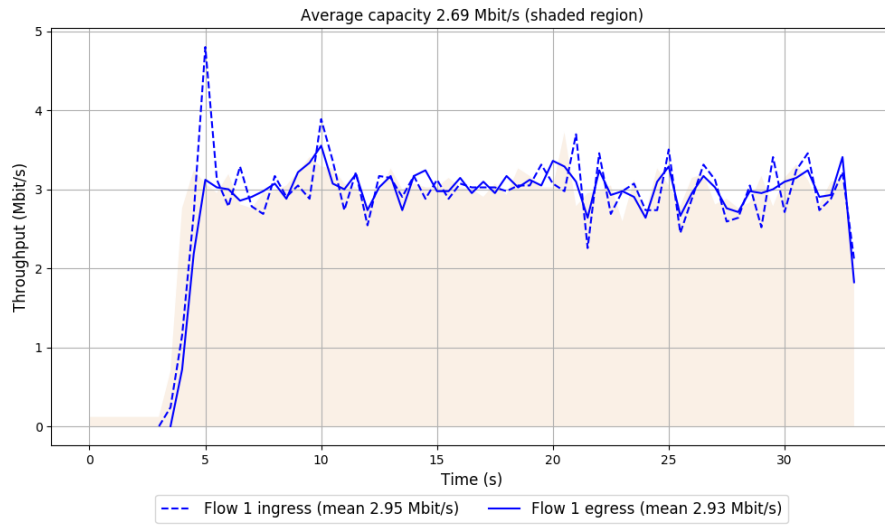
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 491.815 ms

Loss rate: 0.98%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-27 07:22:28

End at: 2018-02-27 07:22:58

Below is generated by plot.py at 2018-02-27 07:51:12

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 482.281 ms

Loss rate: 0.95%

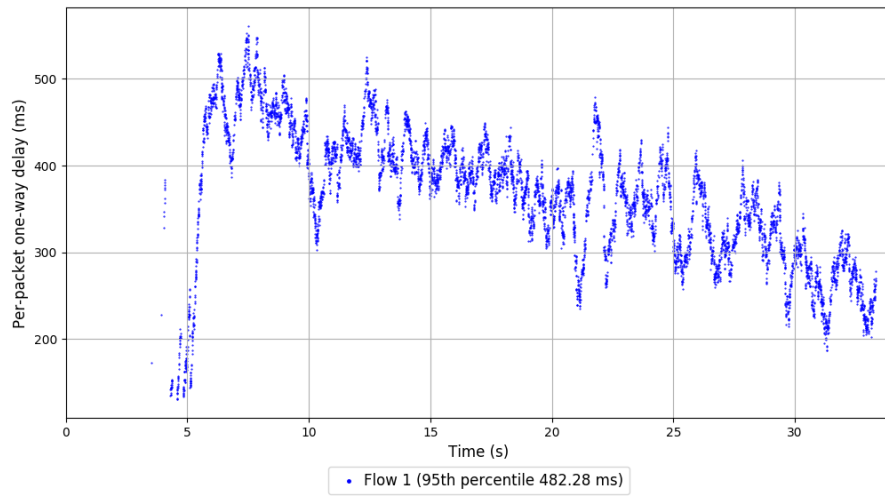
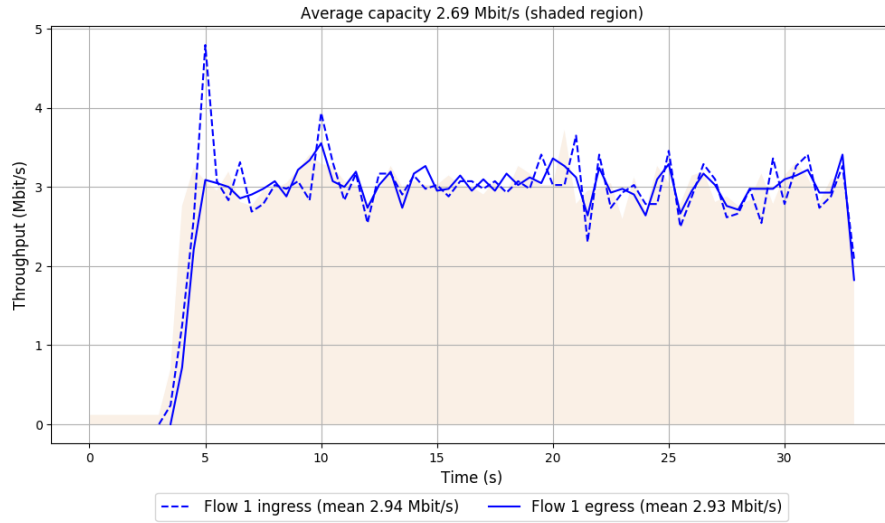
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 482.281 ms

Loss rate: 0.95%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-27 07:32:40

End at: 2018-02-27 07:33:10

Below is generated by plot.py at 2018-02-27 07:51:12

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 486.547 ms

Loss rate: 0.91%

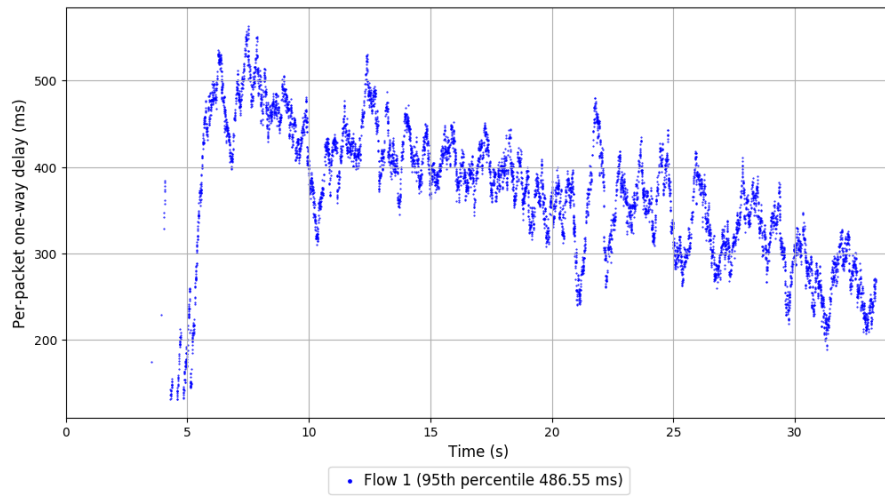
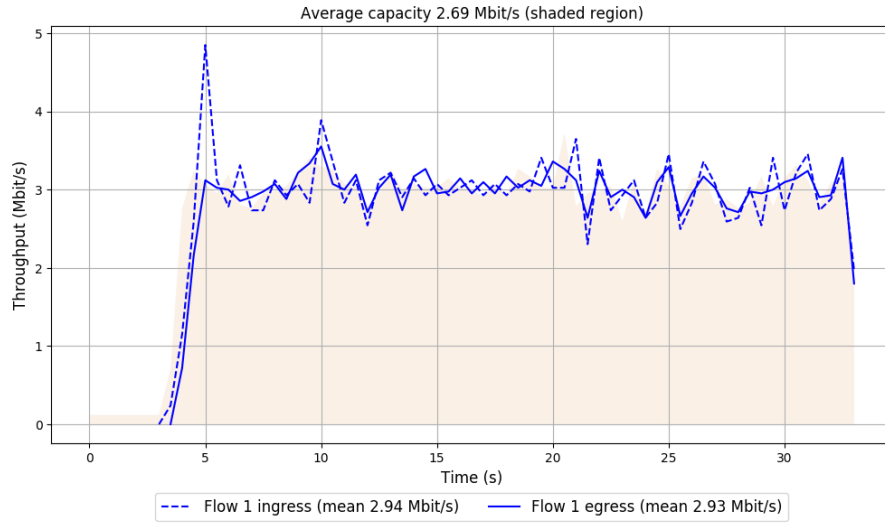
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 486.547 ms

Loss rate: 0.91%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-27 07:42:52

End at: 2018-02-27 07:43:22

Below is generated by plot.py at 2018-02-27 07:51:13

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.93 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 487.414 ms

Loss rate: 0.95%

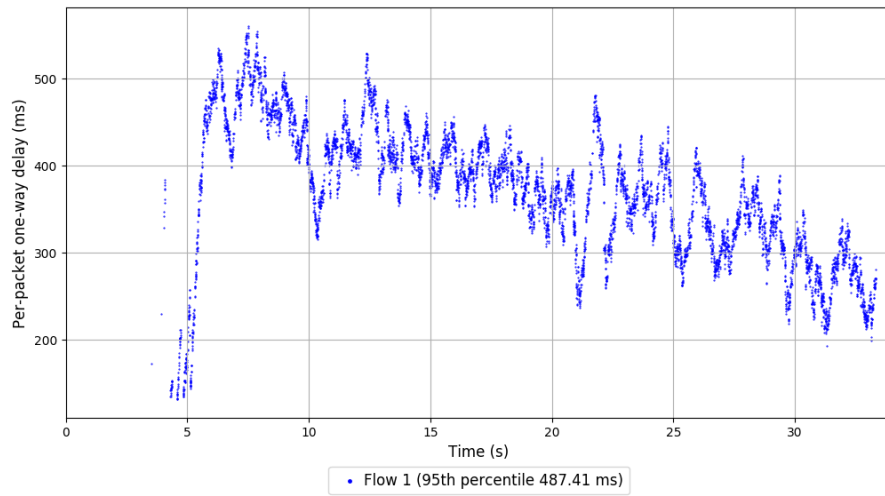
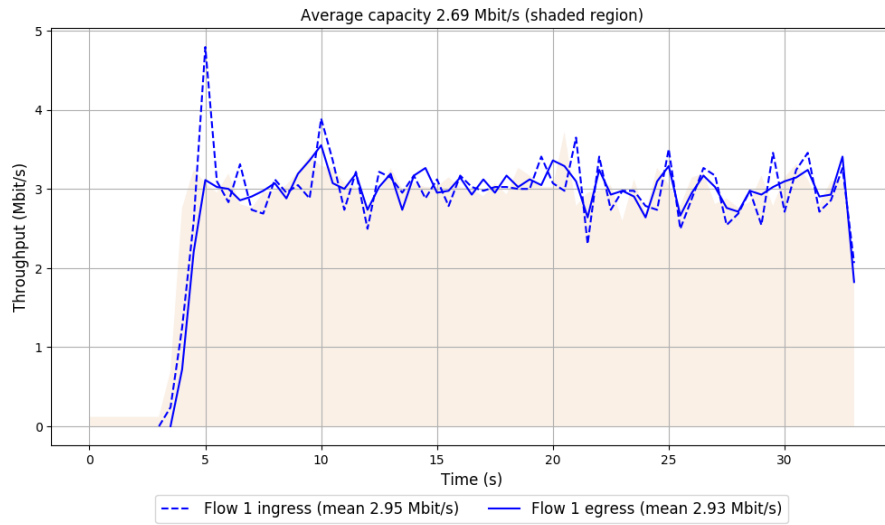
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 487.414 ms

Loss rate: 0.95%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-02-27 06:15:37

End at: 2018-02-27 06:16:07

Below is generated by plot.py at 2018-02-27 07:51:13

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.87 Mbit/s (106.7% utilization)

95th percentile per-packet one-way delay: 1732.654 ms

Loss rate: 3.91%

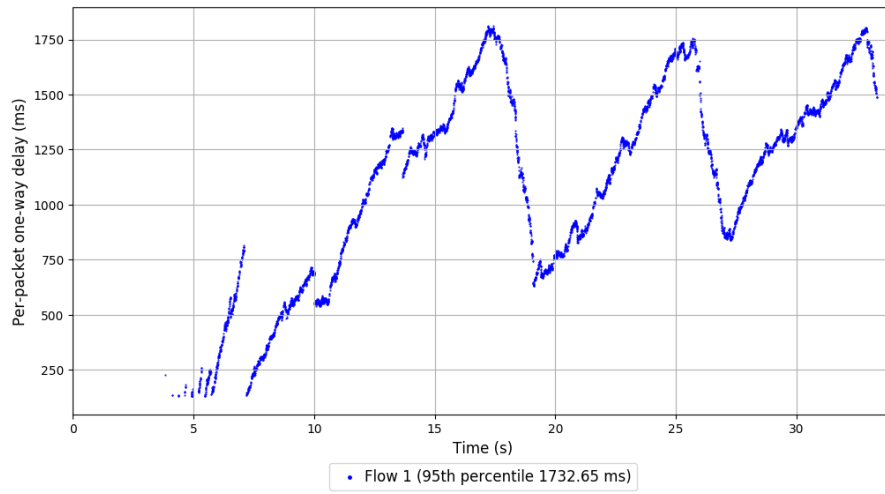
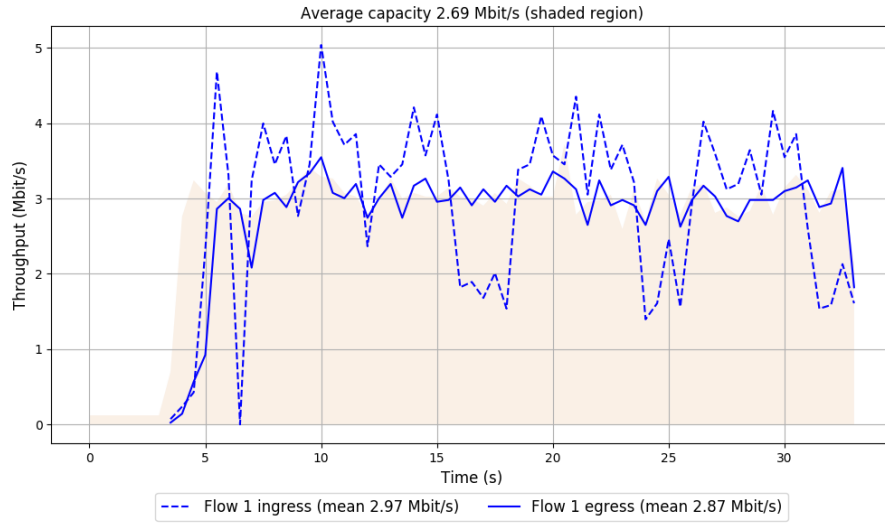
-- Flow 1:

Average throughput: 2.87 Mbit/s

95th percentile per-packet one-way delay: 1732.654 ms

Loss rate: 3.91%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-27 06:25:50

End at: 2018-02-27 06:26:20

Below is generated by plot.py at 2018-02-27 07:51:14

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.89 Mbit/s (107.3% utilization)

95th percentile per-packet one-way delay: 1640.872 ms

Loss rate: 4.89%

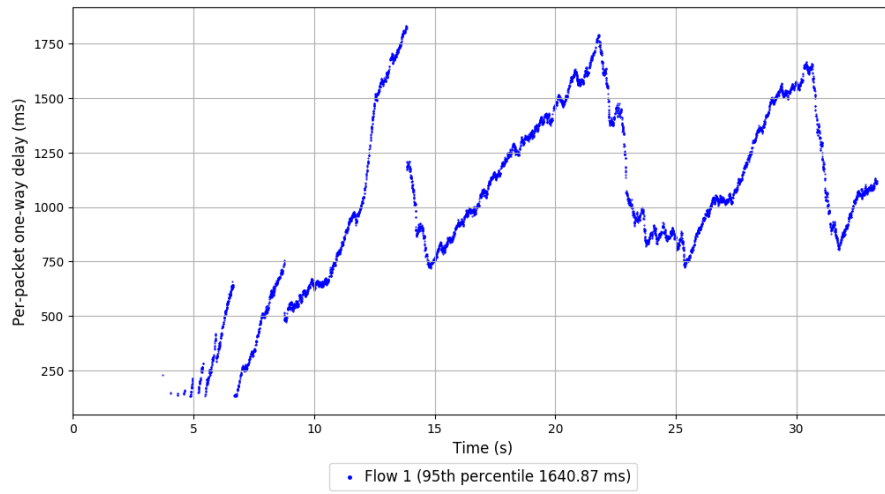
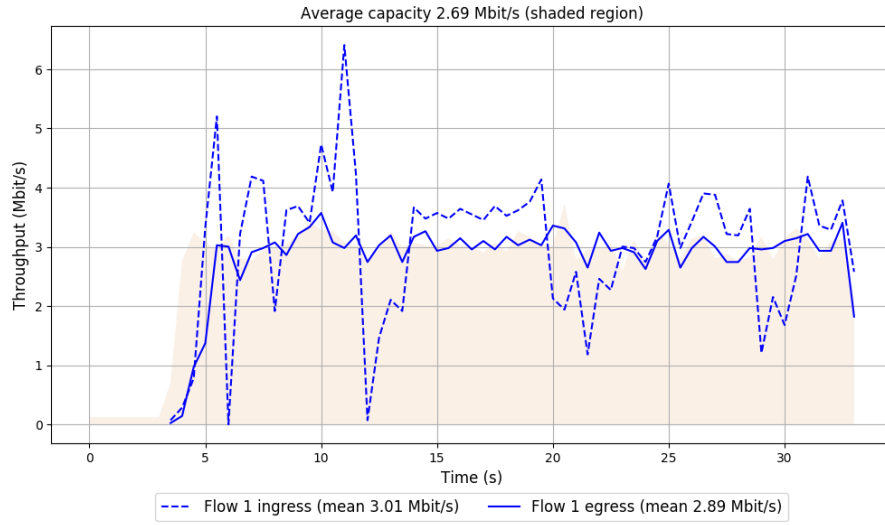
-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 1640.872 ms

Loss rate: 4.89%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-27 06:36:01

End at: 2018-02-27 06:36:31

Below is generated by plot.py at 2018-02-27 07:51:14

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.82 Mbit/s (104.9% utilization)

95th percentile per-packet one-way delay: 1751.762 ms

Loss rate: 16.22%

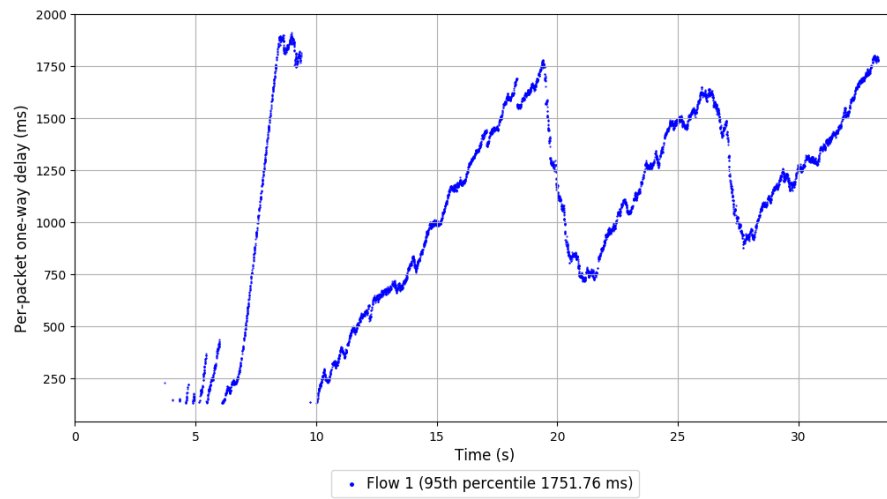
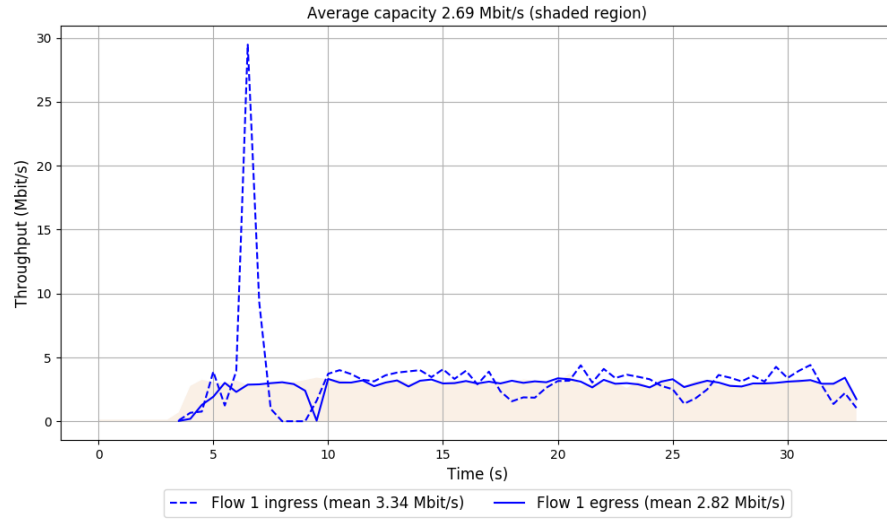
-- Flow 1:

Average throughput: 2.82 Mbit/s

95th percentile per-packet one-way delay: 1751.762 ms

Loss rate: 16.22%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-27 06:46:13

End at: 2018-02-27 06:46:43

Below is generated by plot.py at 2018-02-27 07:51:14

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.88 Mbit/s (106.9% utilization)

95th percentile per-packet one-way delay: 1661.902 ms

Loss rate: 4.80%

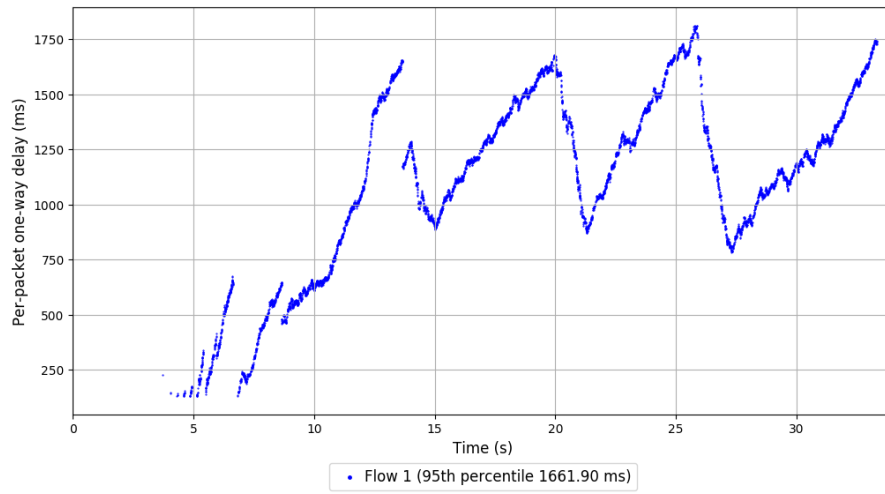
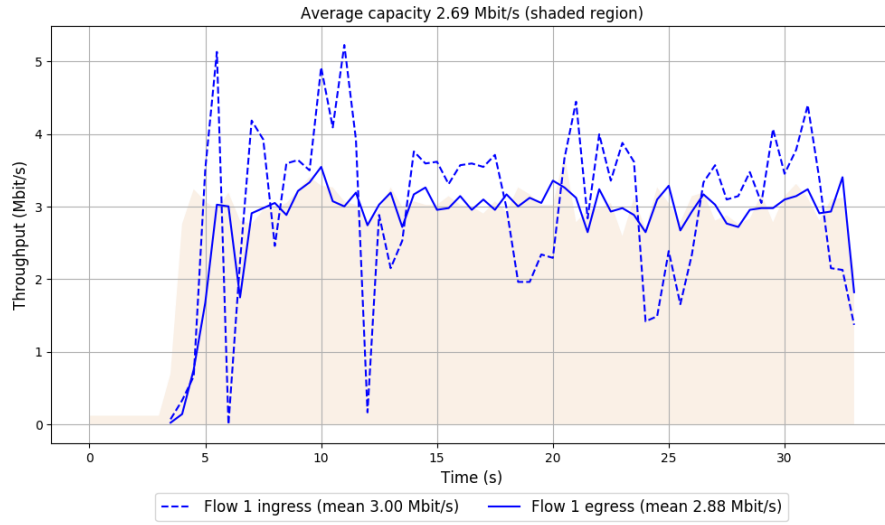
-- Flow 1:

Average throughput: 2.88 Mbit/s

95th percentile per-packet one-way delay: 1661.902 ms

Loss rate: 4.80%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-27 06:56:25

End at: 2018-02-27 06:56:55

Below is generated by plot.py at 2018-02-27 07:51:20

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.88 Mbit/s (107.0% utilization)

95th percentile per-packet one-way delay: 1730.764 ms

Loss rate: 3.50%

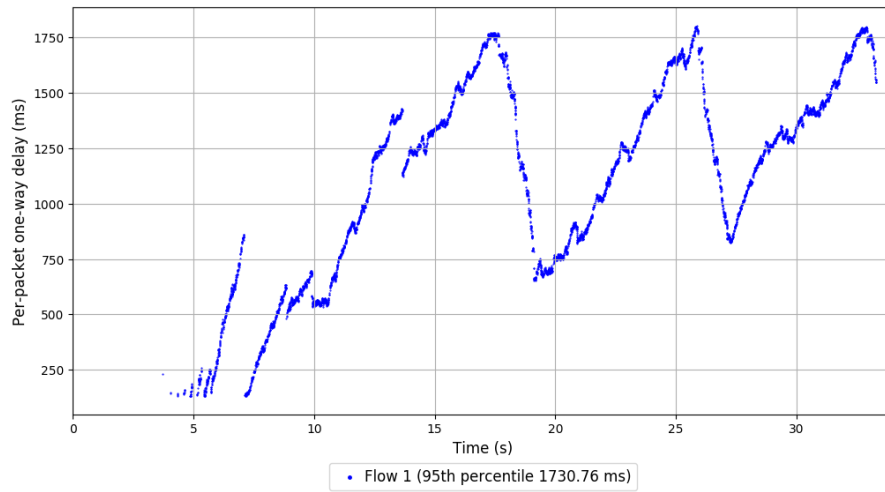
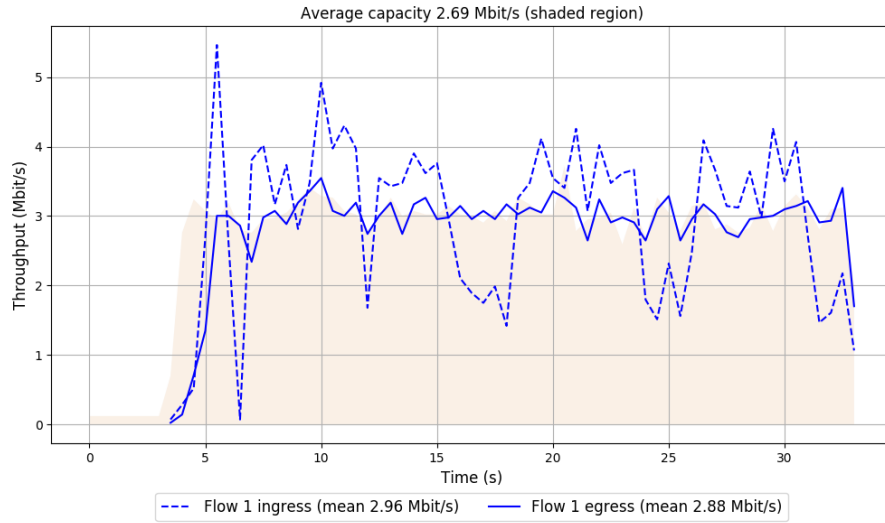
-- Flow 1:

Average throughput: 2.88 Mbit/s

95th percentile per-packet one-way delay: 1730.764 ms

Loss rate: 3.50%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-27 07:06:37

End at: 2018-02-27 07:07:07

Below is generated by plot.py at 2018-02-27 07:51:21

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.88 Mbit/s (107.1% utilization)

95th percentile per-packet one-way delay: 1729.310 ms

Loss rate: 3.84%

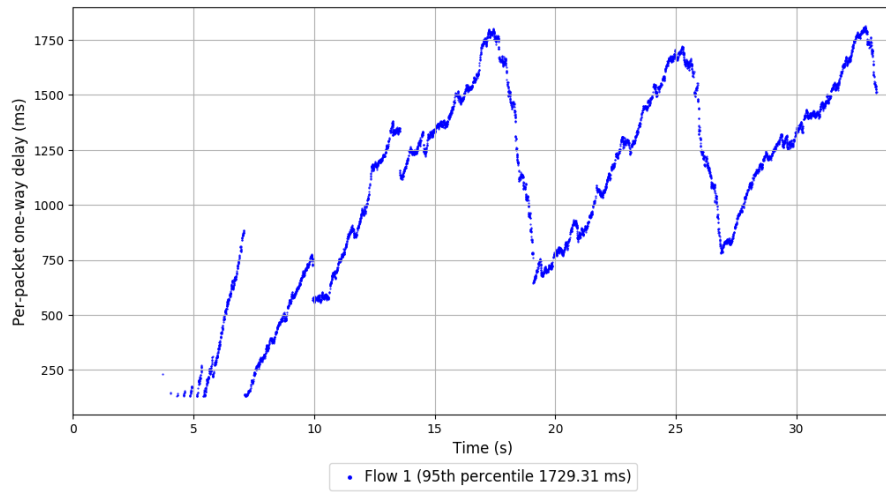
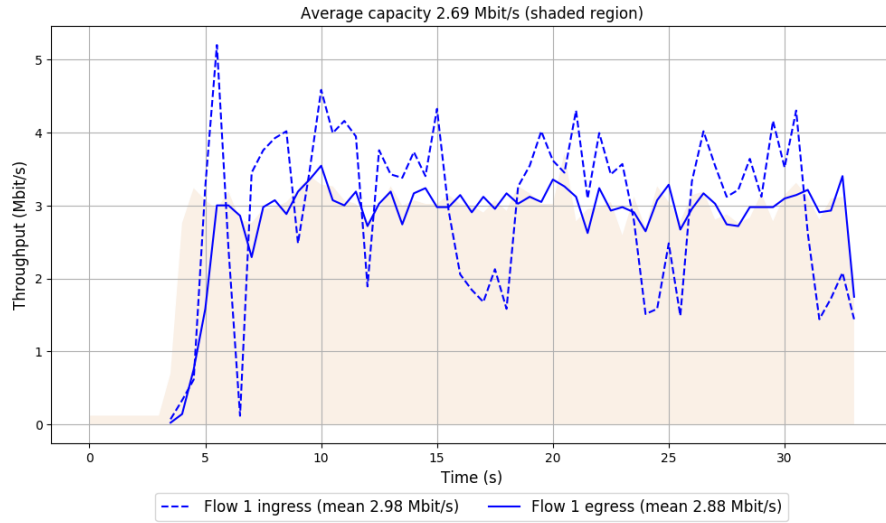
-- Flow 1:

Average throughput: 2.88 Mbit/s

95th percentile per-packet one-way delay: 1729.310 ms

Loss rate: 3.84%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-27 07:16:48

End at: 2018-02-27 07:17:18

Below is generated by plot.py at 2018-02-27 07:51:22

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.89 Mbit/s (107.4% utilization)

95th percentile per-packet one-way delay: 1726.818 ms

Loss rate: 3.53%

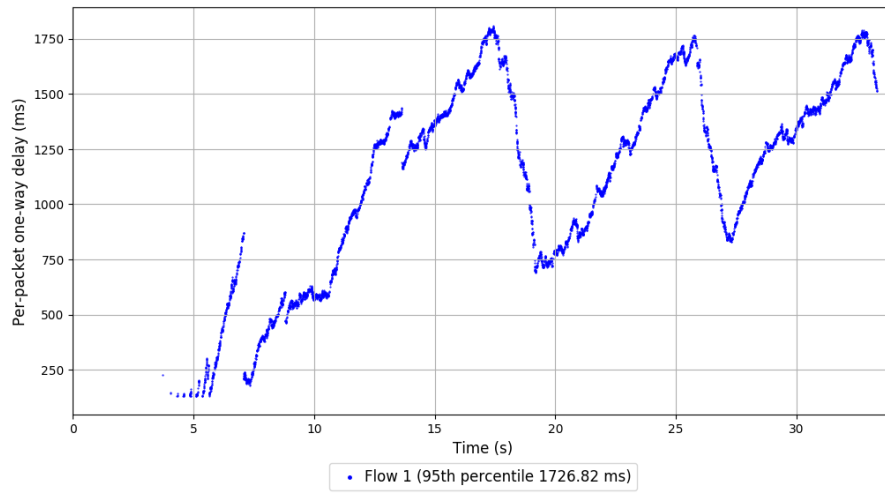
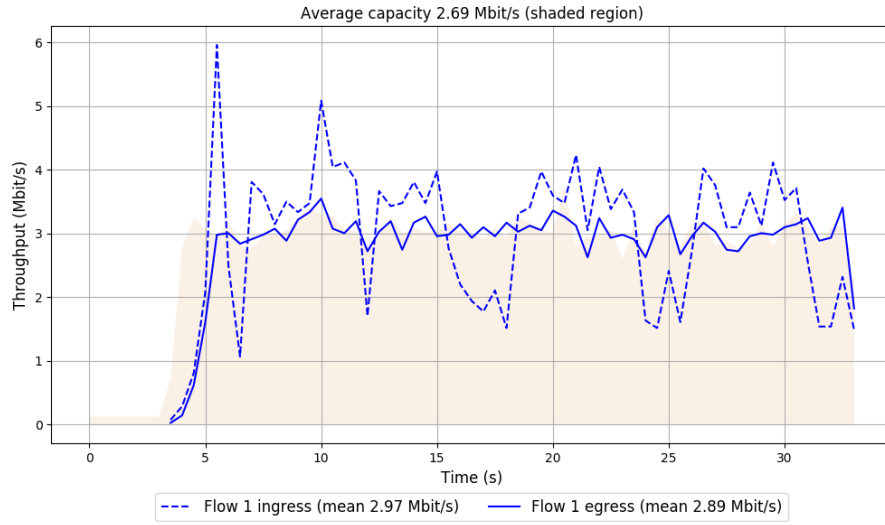
-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 1726.818 ms

Loss rate: 3.53%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-27 07:27:00

End at: 2018-02-27 07:27:30

Below is generated by plot.py at 2018-02-27 07:51:22

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.89 Mbit/s (107.5% utilization)

95th percentile per-packet one-way delay: 1690.590 ms

Loss rate: 3.79%

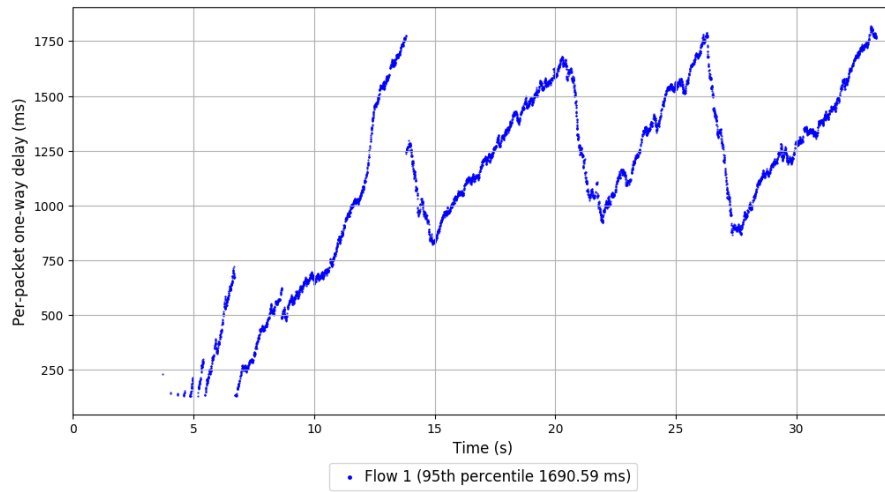
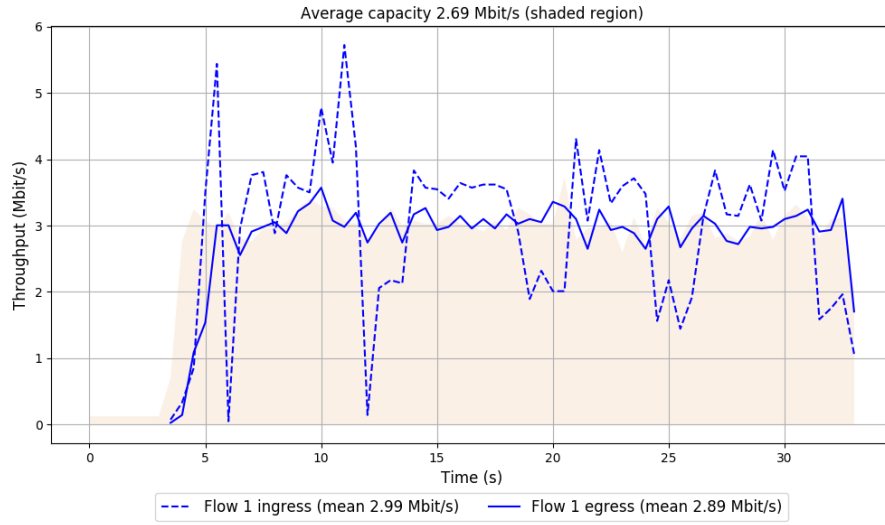
-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 1690.590 ms

Loss rate: 3.79%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-27 07:37:12

End at: 2018-02-27 07:37:42

Below is generated by plot.py at 2018-02-27 07:51:23

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.90 Mbit/s (107.7% utilization)

95th percentile per-packet one-way delay: 1684.267 ms

Loss rate: 3.61%

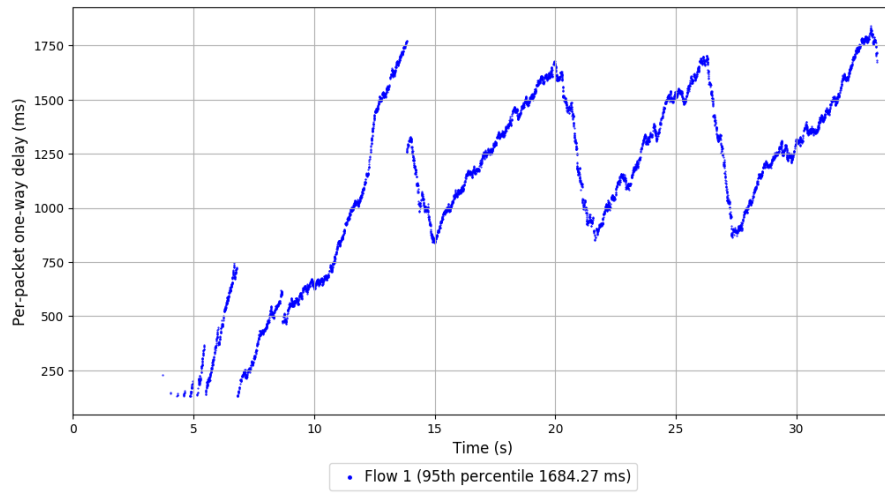
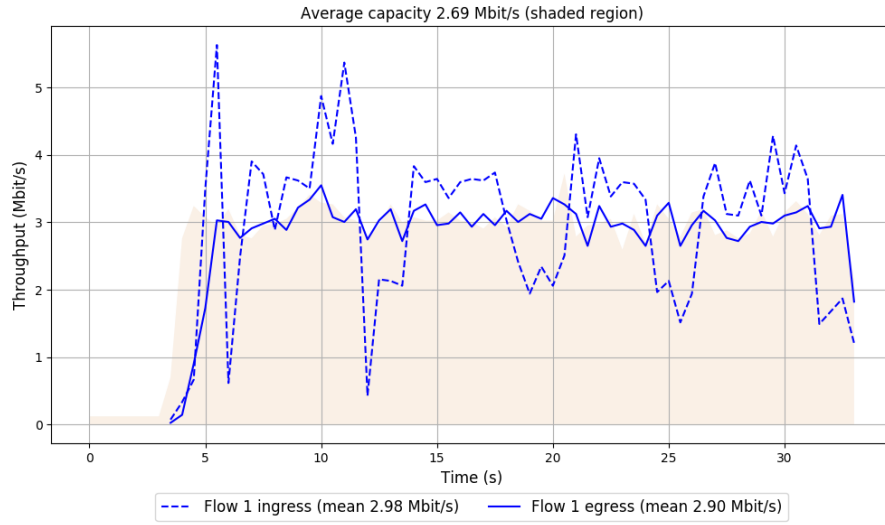
-- Flow 1:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 1684.267 ms

Loss rate: 3.61%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-27 07:47:24

End at: 2018-02-27 07:47:54

Below is generated by plot.py at 2018-02-27 07:51:23

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.89 Mbit/s (107.2% utilization)

95th percentile per-packet one-way delay: 1676.742 ms

Loss rate: 4.78%

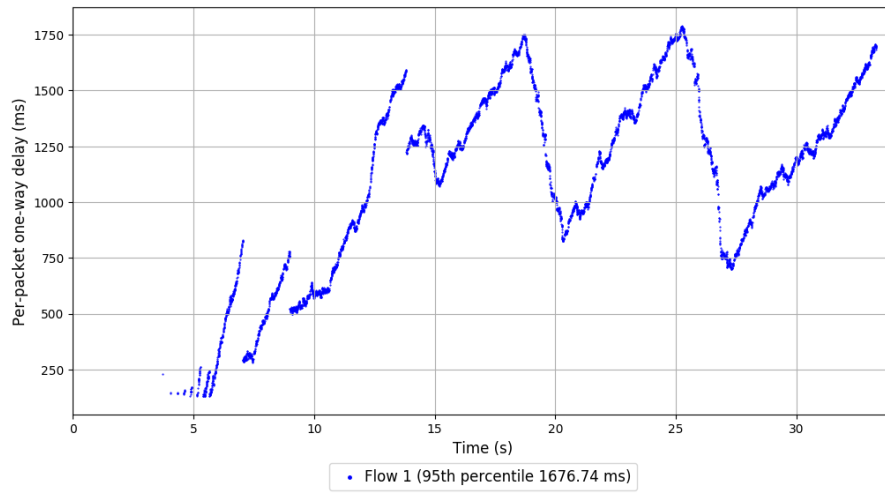
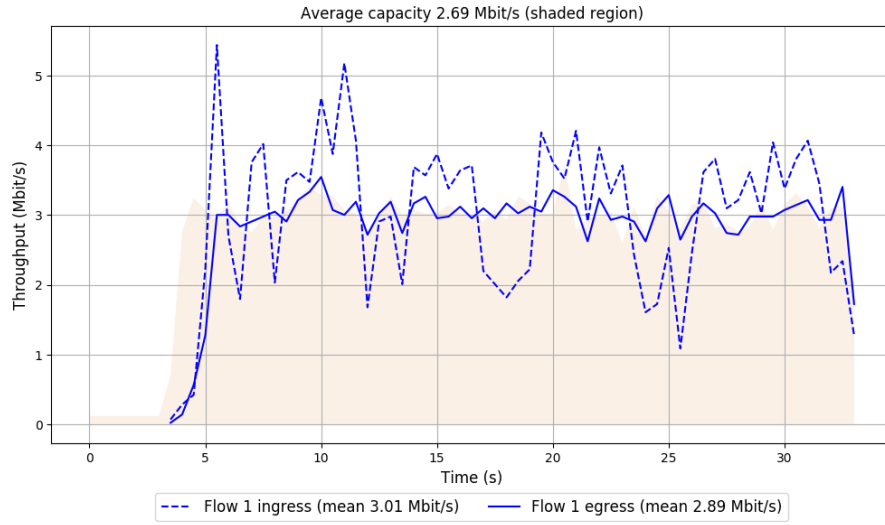
-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 1676.742 ms

Loss rate: 4.78%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-02-27 06:11:39

End at: 2018-02-27 06:12:09

Below is generated by plot.py at 2018-02-27 07:51:24

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.00 Mbit/s (74.2% utilization)

95th percentile per-packet one-way delay: 157.823 ms

Loss rate: 0.46%

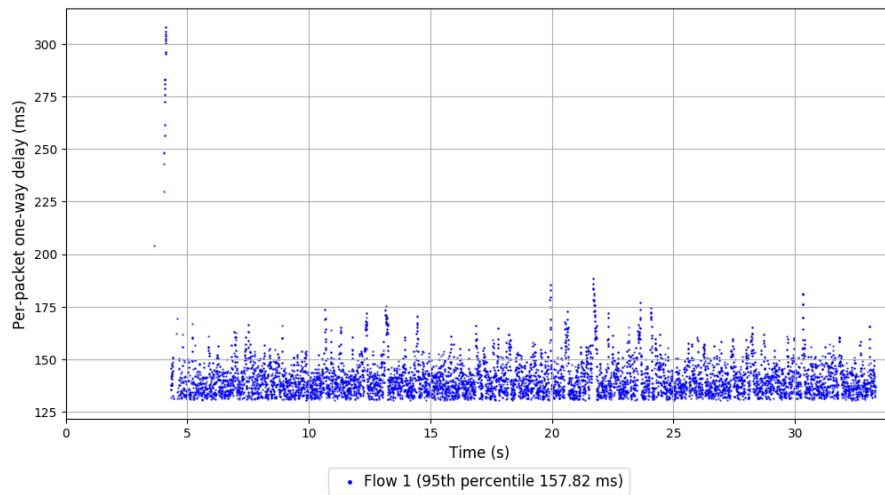
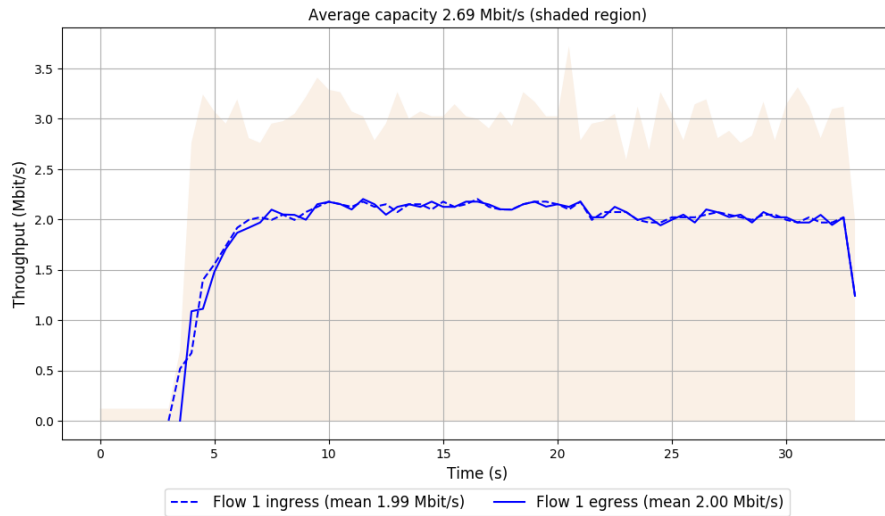
-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 157.823 ms

Loss rate: 0.46%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-27 06:21:51

End at: 2018-02-27 06:22:21

Below is generated by plot.py at 2018-02-27 07:51:24

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.98 Mbit/s (73.5% utilization)

95th percentile per-packet one-way delay: 157.076 ms

Loss rate: 0.48%

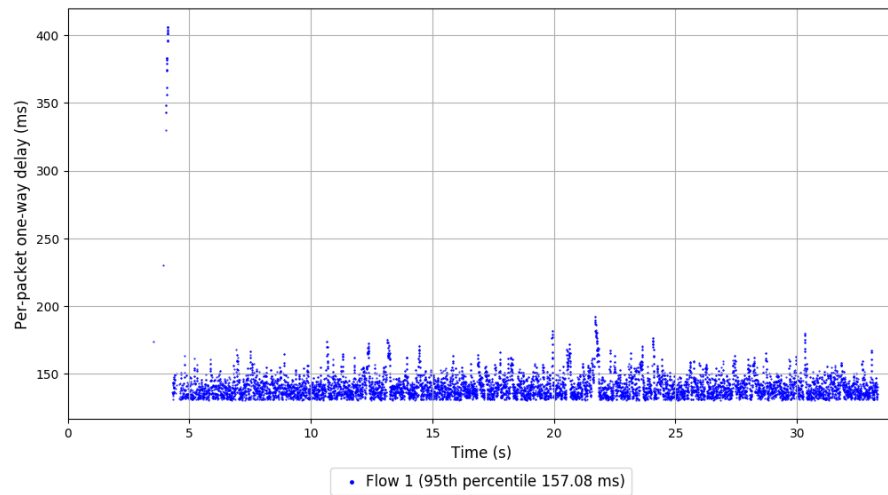
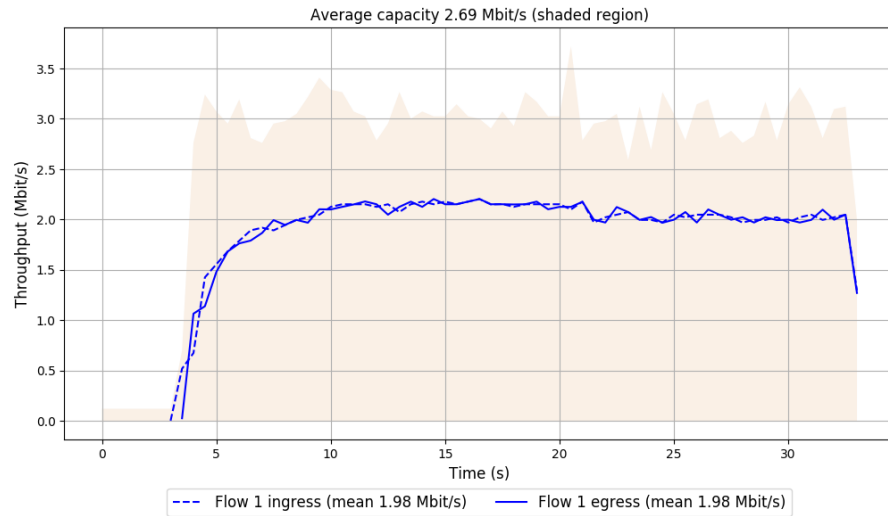
-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 157.076 ms

Loss rate: 0.48%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-27 06:32:03

End at: 2018-02-27 06:32:33

Below is generated by plot.py at 2018-02-27 07:51:30

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.96 Mbit/s (72.8% utilization)

95th percentile per-packet one-way delay: 156.564 ms

Loss rate: 0.49%

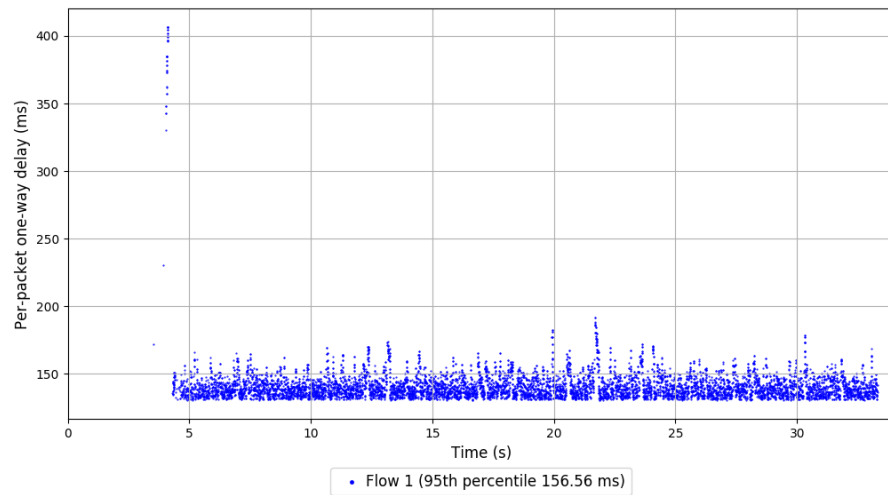
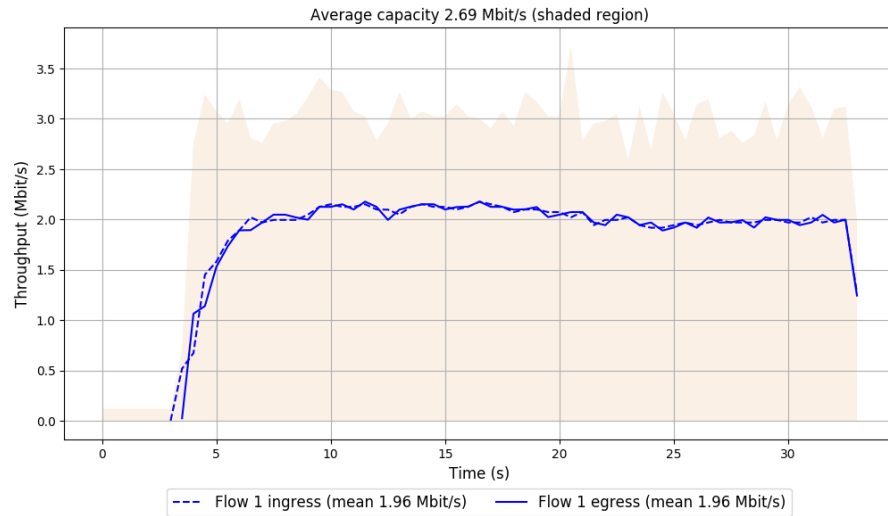
-- Flow 1:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 156.564 ms

Loss rate: 0.49%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-27 06:42:15

End at: 2018-02-27 06:42:45

Below is generated by plot.py at 2018-02-27 07:51:30

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.98 Mbit/s (73.5% utilization)

95th percentile per-packet one-way delay: 157.287 ms

Loss rate: 0.50%

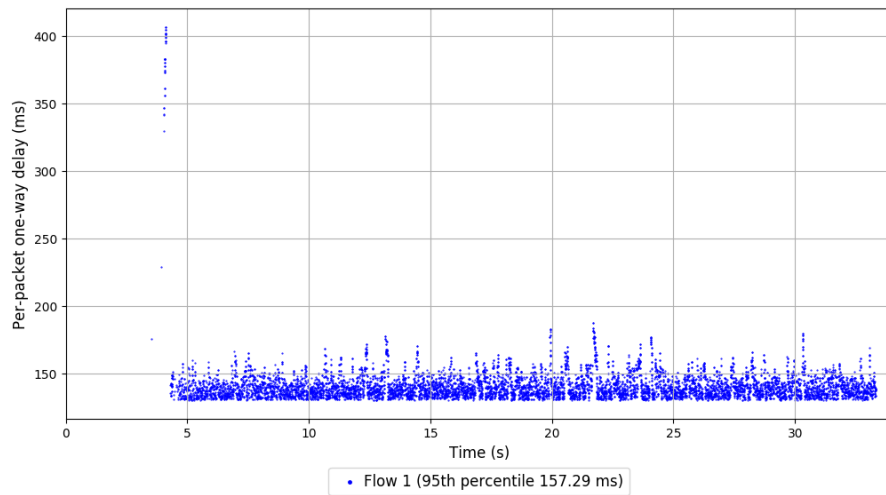
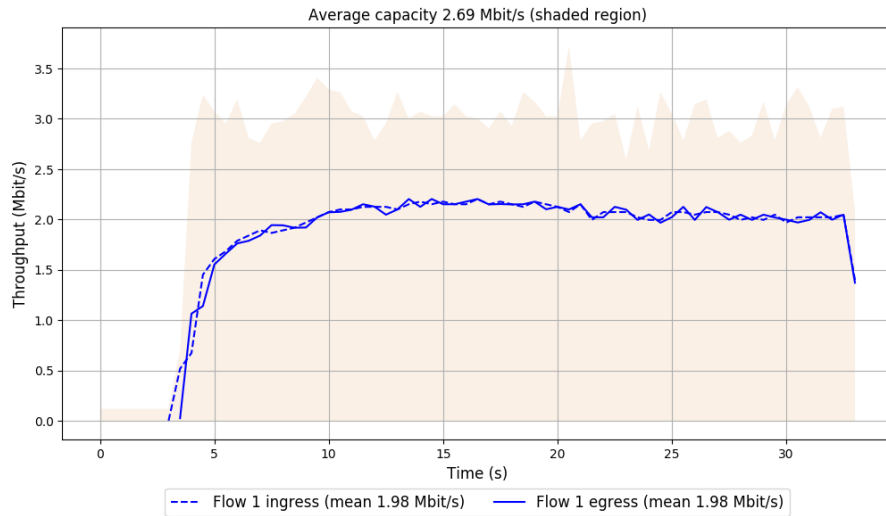
-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 157.287 ms

Loss rate: 0.50%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-27 06:52:27

End at: 2018-02-27 06:52:57

Below is generated by plot.py at 2018-02-27 07:51:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.98 Mbit/s (73.5% utilization)

95th percentile per-packet one-way delay: 157.086 ms

Loss rate: 0.50%

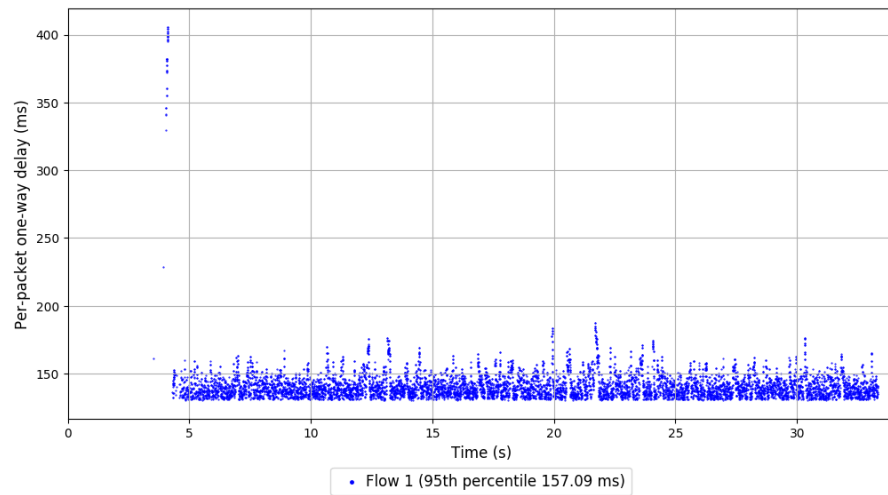
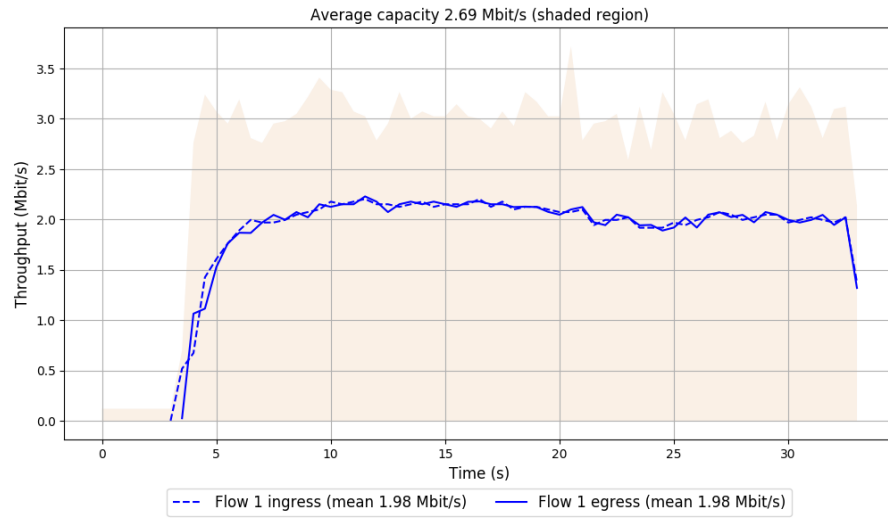
-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 157.086 ms

Loss rate: 0.50%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-27 07:02:38

End at: 2018-02-27 07:03:08

Below is generated by plot.py at 2018-02-27 07:51:32

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.97 Mbit/s (73.1% utilization)

95th percentile per-packet one-way delay: 157.242 ms

Loss rate: 0.48%

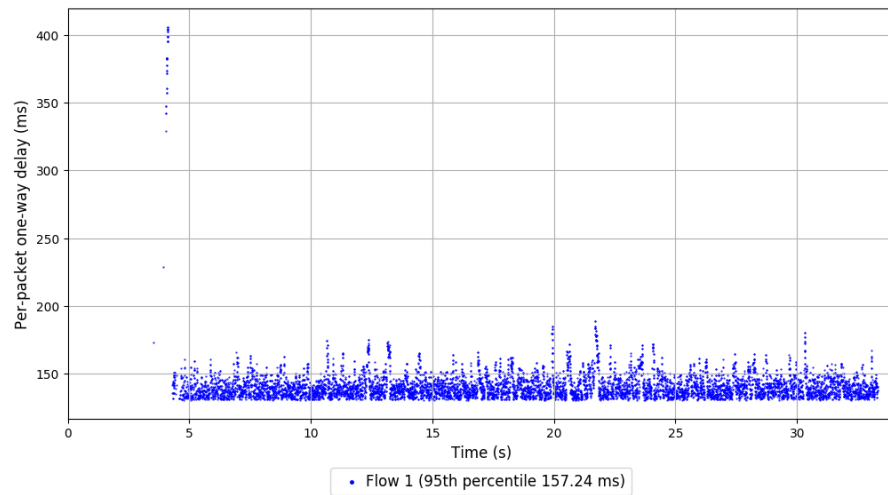
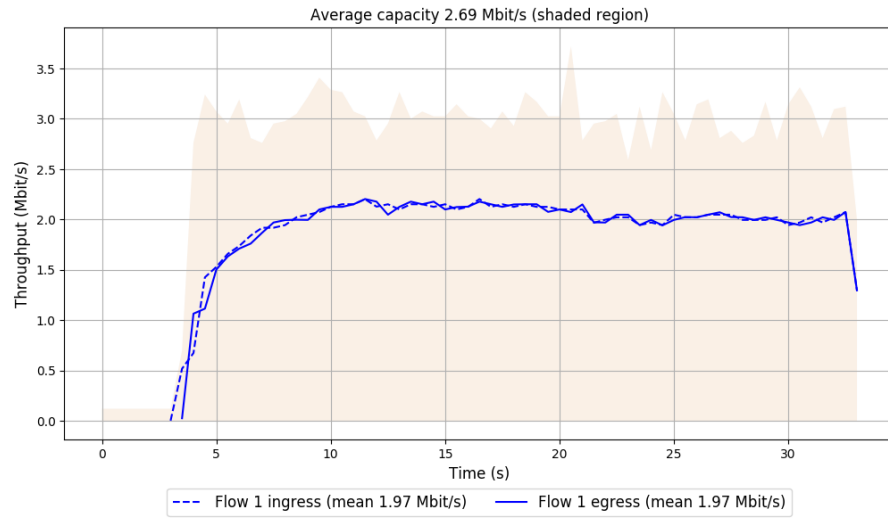
-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 157.242 ms

Loss rate: 0.48%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-27 07:12:50

End at: 2018-02-27 07:13:20

Below is generated by plot.py at 2018-02-27 07:51:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.01 Mbit/s (74.8% utilization)

95th percentile per-packet one-way delay: 157.635 ms

Loss rate: 0.49%

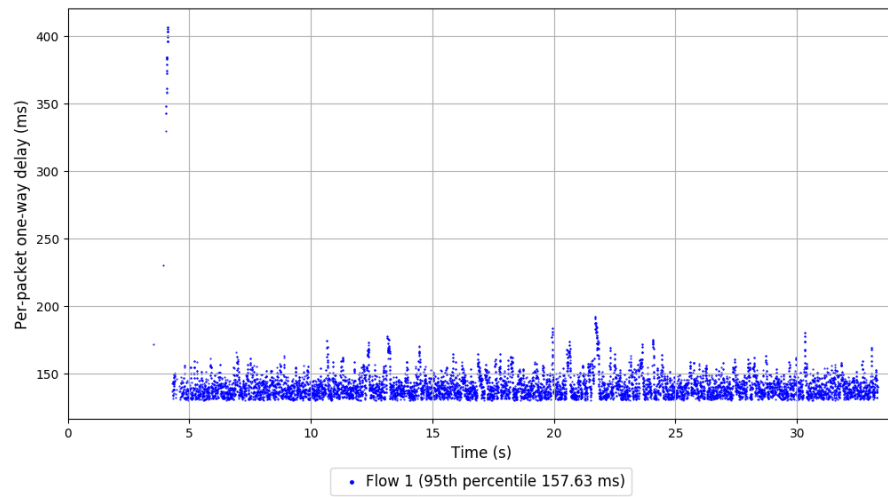
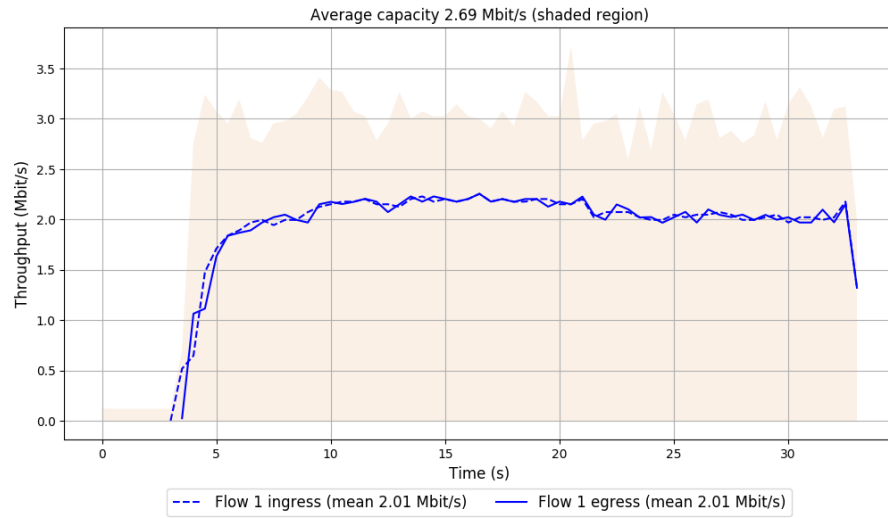
-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 157.635 ms

Loss rate: 0.49%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-27 07:23:02

End at: 2018-02-27 07:23:32

Below is generated by plot.py at 2018-02-27 07:51:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.99 Mbit/s (74.1% utilization)

95th percentile per-packet one-way delay: 157.920 ms

Loss rate: 0.48%

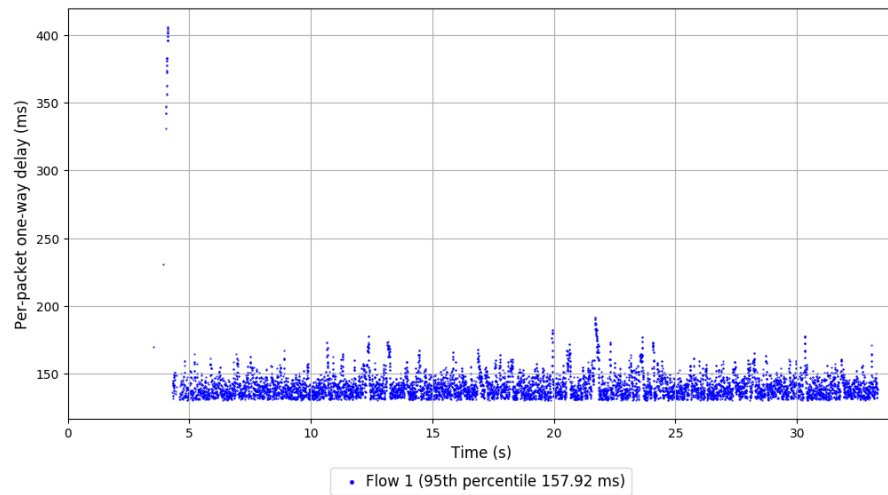
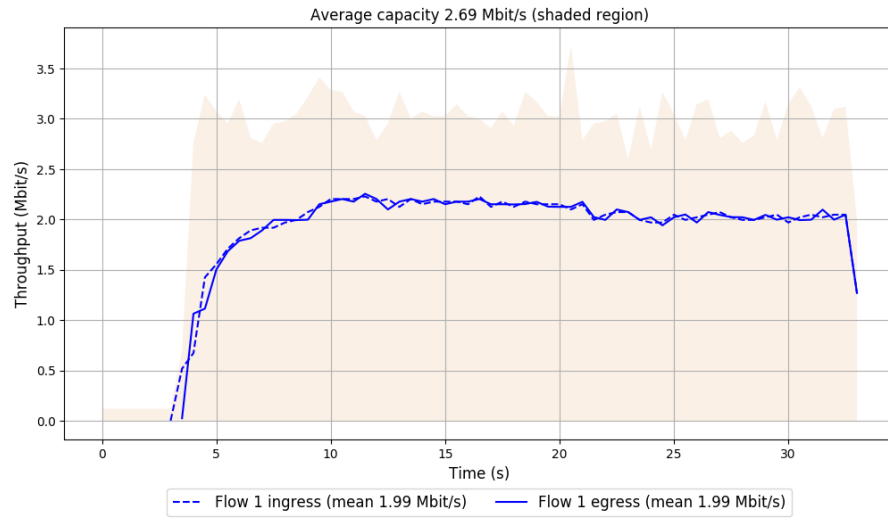
-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 157.920 ms

Loss rate: 0.48%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-27 07:33:14

End at: 2018-02-27 07:33:44

Below is generated by plot.py at 2018-02-27 07:51:34

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.95 Mbit/s (72.6% utilization)

95th percentile per-packet one-way delay: 156.456 ms

Loss rate: 0.49%

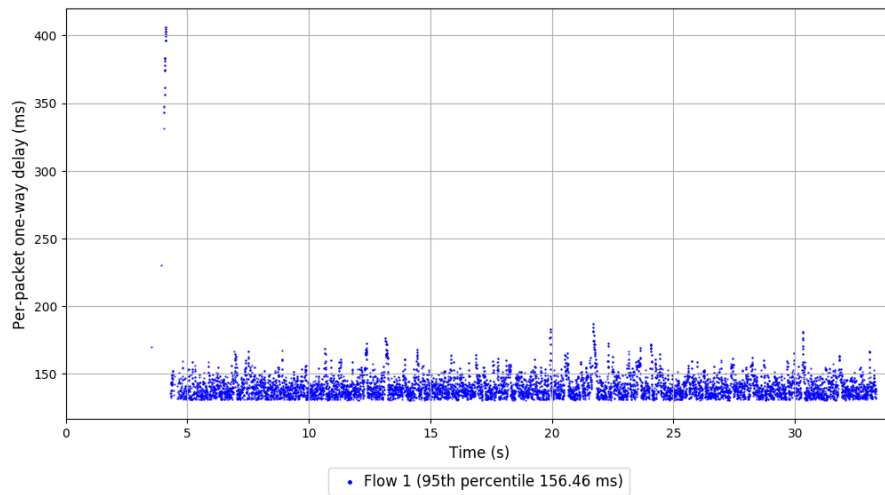
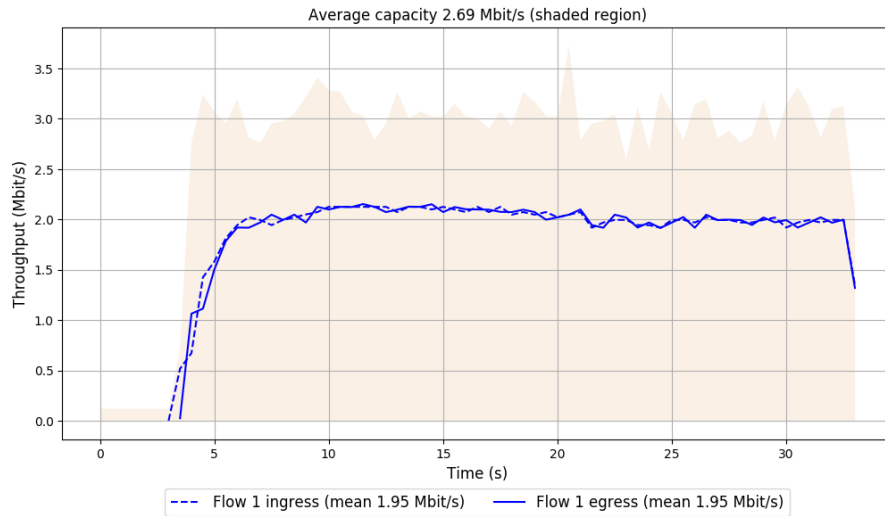
-- Flow 1:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 156.456 ms

Loss rate: 0.49%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-27 07:43:26

End at: 2018-02-27 07:43:56

Below is generated by plot.py at 2018-02-27 07:51:34

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.01 Mbit/s (74.6% utilization)

95th percentile per-packet one-way delay: 157.741 ms

Loss rate: 0.47%

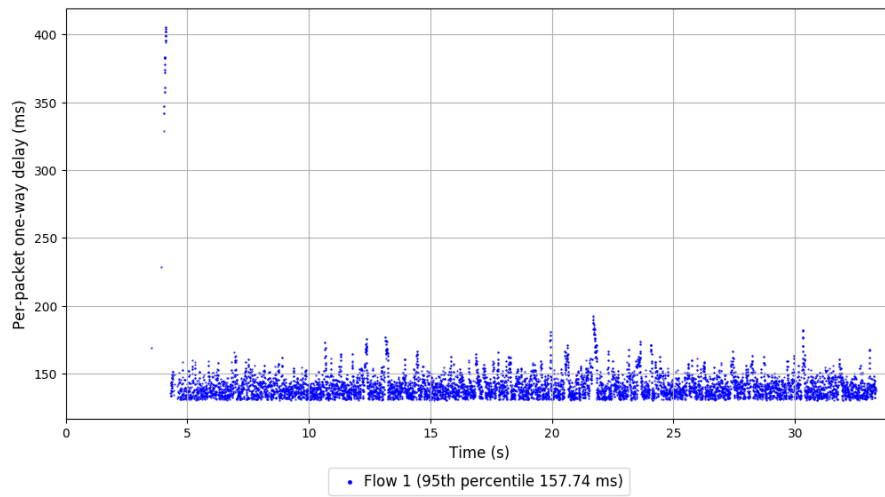
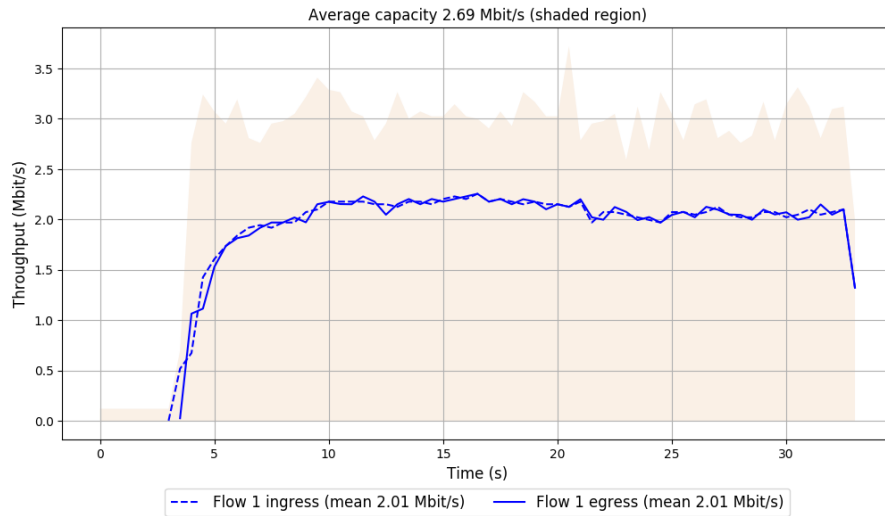
-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 157.741 ms

Loss rate: 0.47%

Run 10: Report of Copa — Data Link



Run 1: Statistics of FillP

Start at: 2018-02-27 06:14:29

End at: 2018-02-27 06:14:59

Below is generated by plot.py at 2018-02-27 07:51:47

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.95 Mbit/s (109.6% utilization)

95th percentile per-packet one-way delay: 1712.641 ms

Loss rate: 92.19%

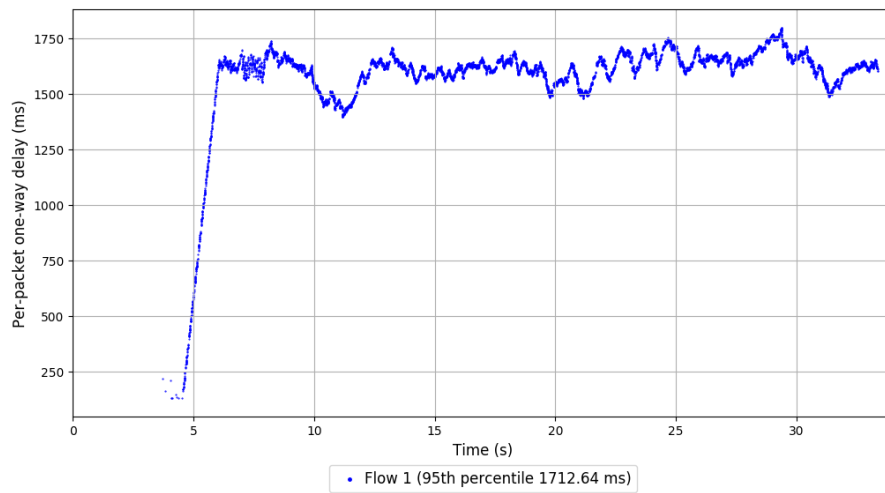
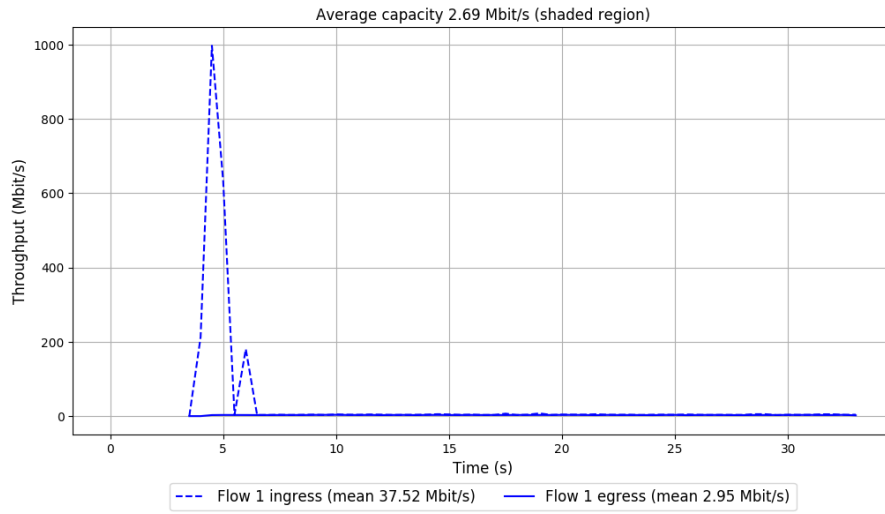
-- Flow 1:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 1712.641 ms

Loss rate: 92.19%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-02-27 06:24:41

End at: 2018-02-27 06:25:11

Below is generated by plot.py at 2018-02-27 07:51:47

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.95 Mbit/s (109.5% utilization)

95th percentile per-packet one-way delay: 1714.979 ms

Loss rate: 92.03%

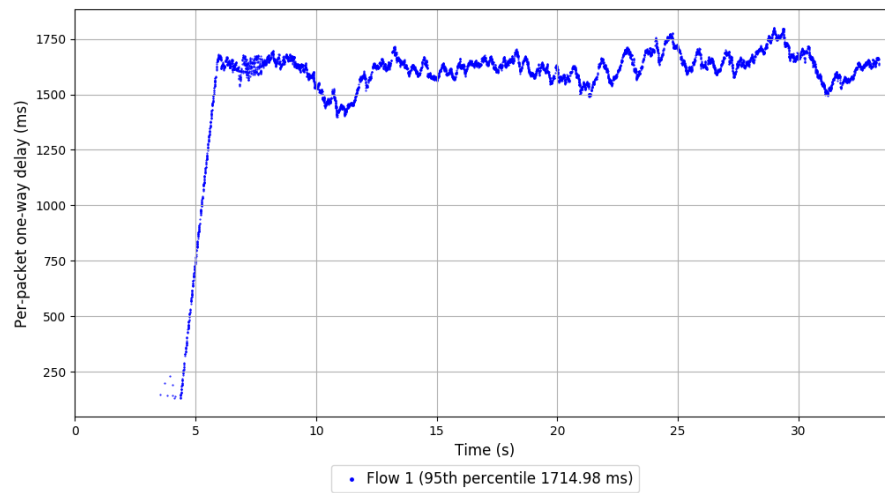
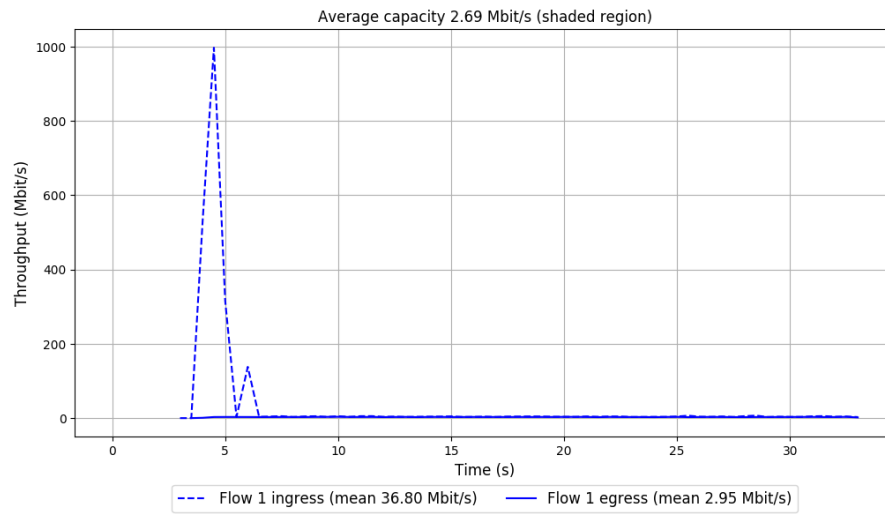
-- Flow 1:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 1714.979 ms

Loss rate: 92.03%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-27 06:34:53

End at: 2018-02-27 06:35:23

Below is generated by plot.py at 2018-02-27 07:51:49

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.95 Mbit/s (109.6% utilization)

95th percentile per-packet one-way delay: 1727.784 ms

Loss rate: 92.10%

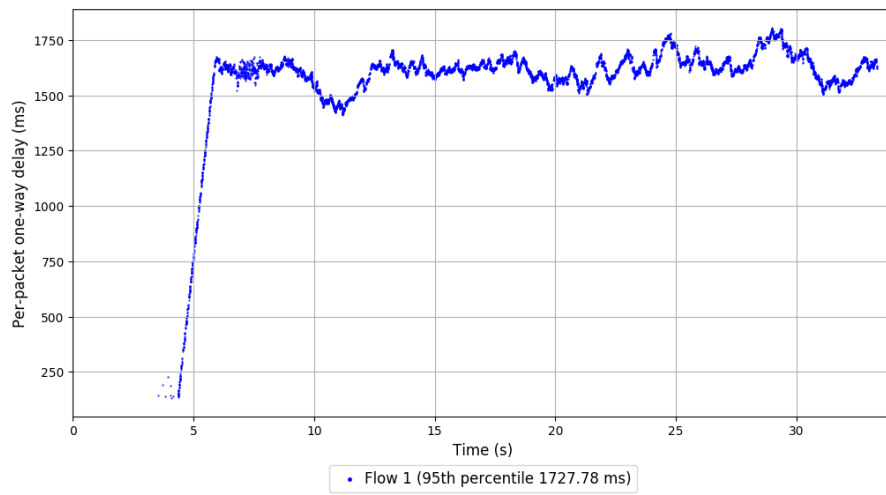
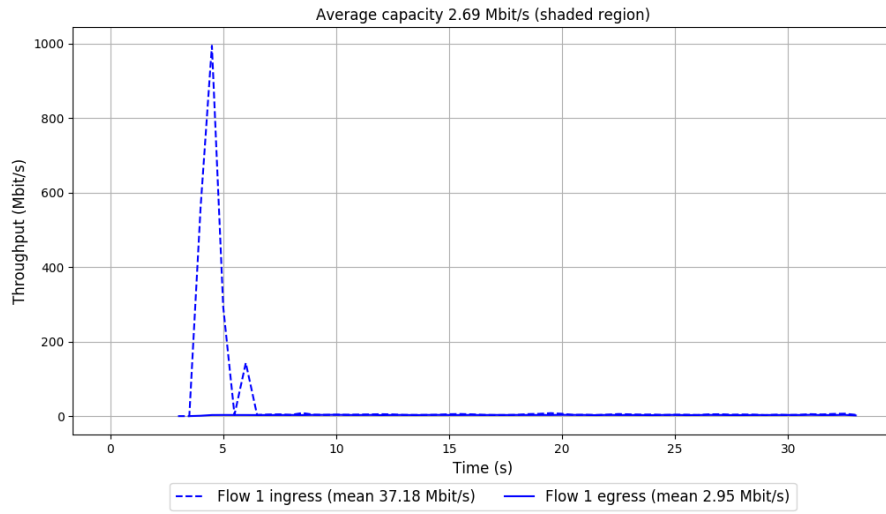
-- Flow 1:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 1727.784 ms

Loss rate: 92.10%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-27 06:45:05

End at: 2018-02-27 06:45:35

Below is generated by plot.py at 2018-02-27 07:51:49

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.95 Mbit/s (109.6% utilization)

95th percentile per-packet one-way delay: 1710.890 ms

Loss rate: 91.83%

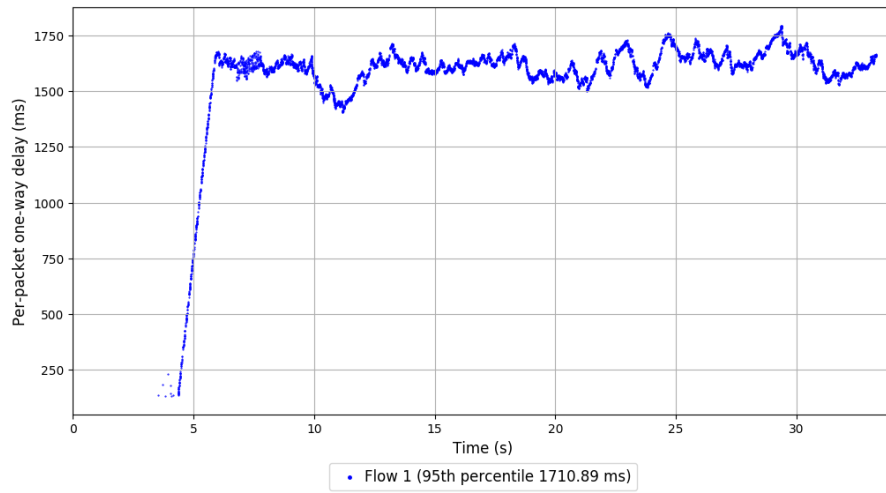
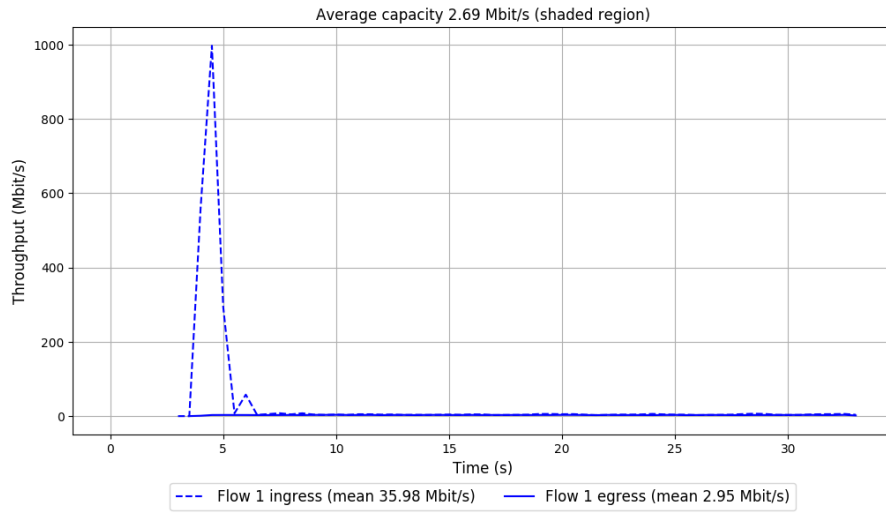
-- Flow 1:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 1710.890 ms

Loss rate: 91.83%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-27 06:55:17

End at: 2018-02-27 06:55:47

Below is generated by plot.py at 2018-02-27 07:51:50

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.95 Mbit/s (109.6% utilization)

95th percentile per-packet one-way delay: 1727.884 ms

Loss rate: 91.93%

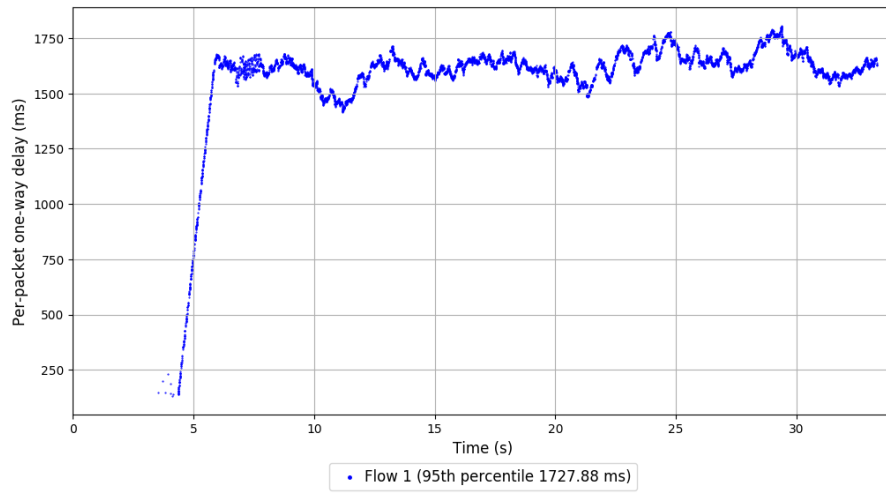
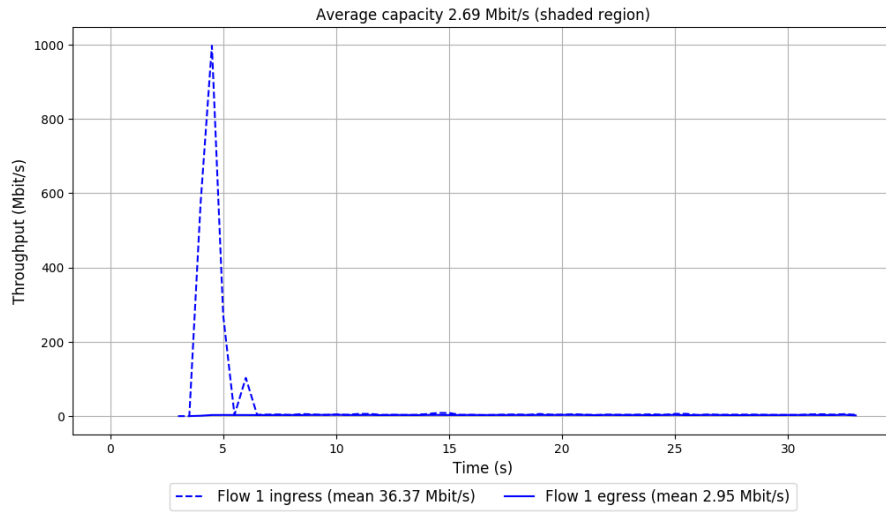
-- Flow 1:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 1727.884 ms

Loss rate: 91.93%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-27 07:05:28

End at: 2018-02-27 07:05:58

Below is generated by plot.py at 2018-02-27 07:51:50

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.95 Mbit/s (109.5% utilization)

95th percentile per-packet one-way delay: 1717.819 ms

Loss rate: 91.93%

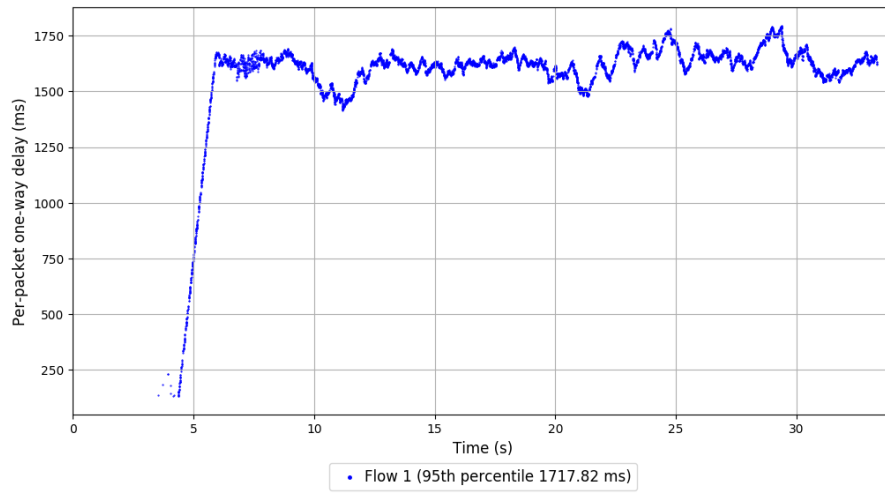
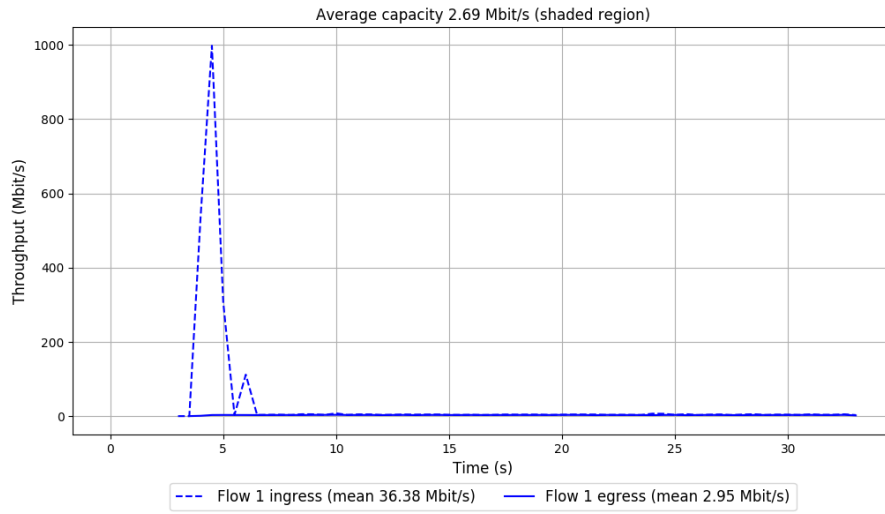
-- Flow 1:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 1717.819 ms

Loss rate: 91.93%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-27 07:15:40

End at: 2018-02-27 07:16:10

Below is generated by plot.py at 2018-02-27 07:51:51

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.95 Mbit/s (109.5% utilization)

95th percentile per-packet one-way delay: 1725.082 ms

Loss rate: 92.11%

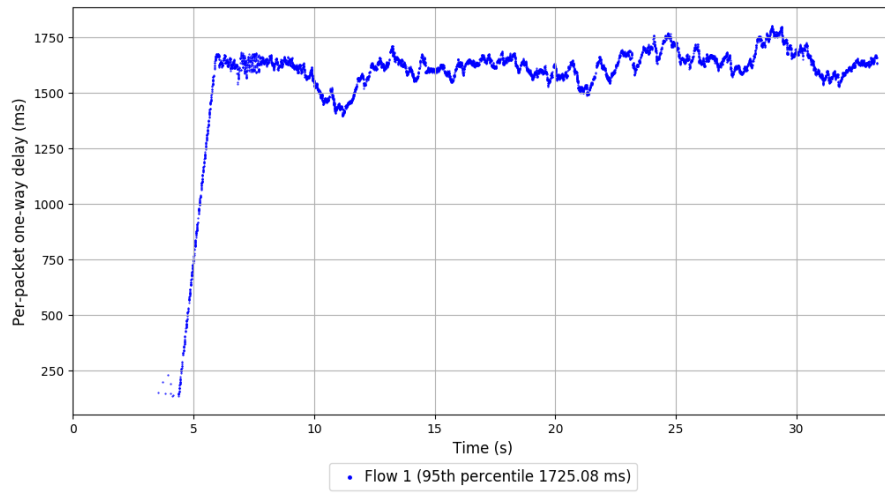
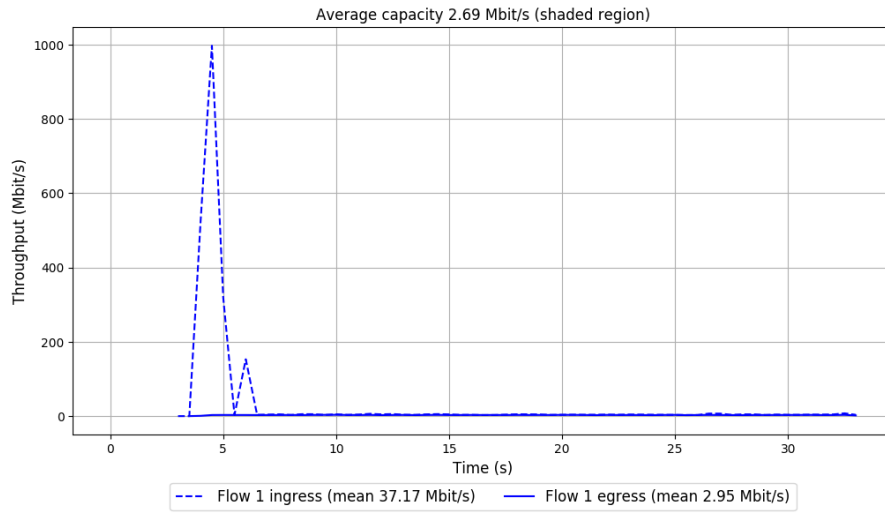
-- Flow 1:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 1725.082 ms

Loss rate: 92.11%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-27 07:25:52

End at: 2018-02-27 07:26:22

Below is generated by plot.py at 2018-02-27 07:51:51

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.95 Mbit/s (109.6% utilization)

95th percentile per-packet one-way delay: 1719.965 ms

Loss rate: 91.98%

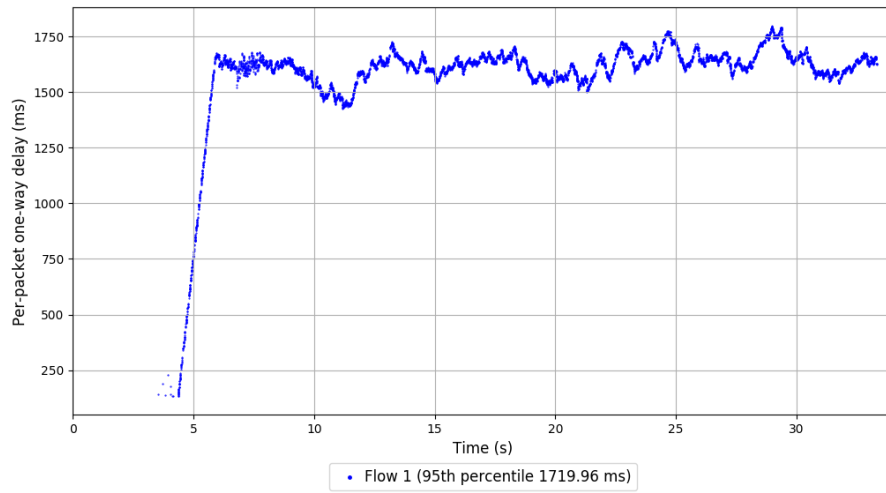
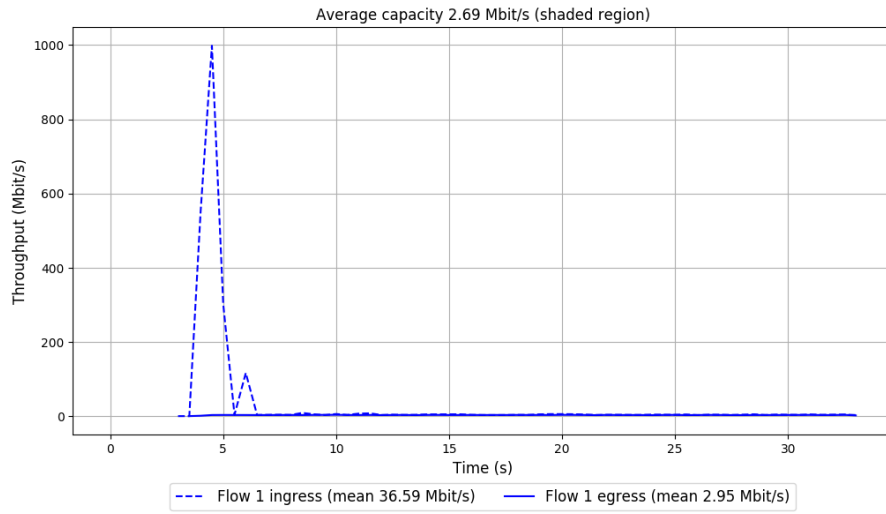
-- Flow 1:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 1719.965 ms

Loss rate: 91.98%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-27 07:36:04

End at: 2018-02-27 07:36:34

Below is generated by plot.py at 2018-02-27 07:52:17

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.95 Mbit/s (109.6% utilization)

95th percentile per-packet one-way delay: 1711.693 ms

Loss rate: 91.97%

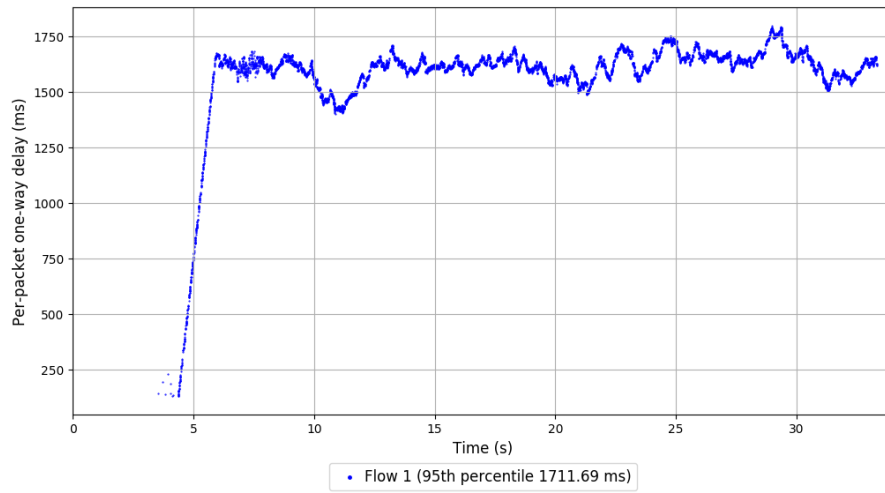
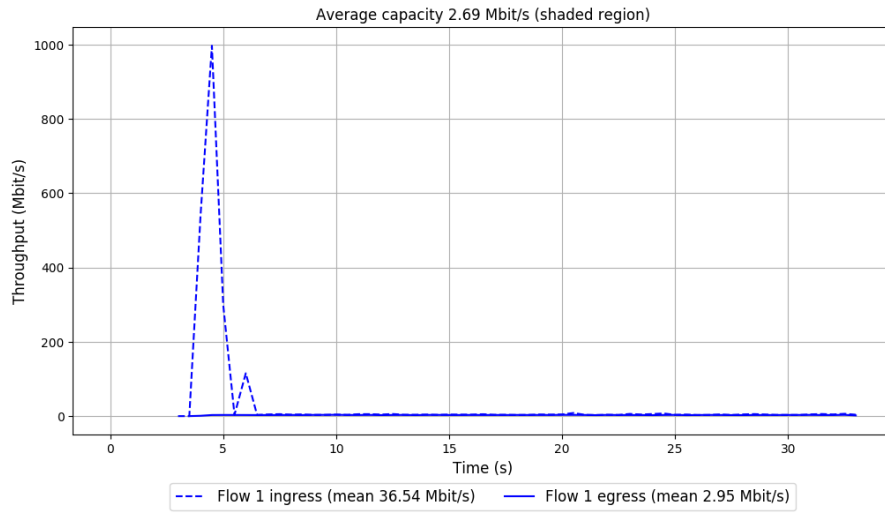
-- Flow 1:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 1711.693 ms

Loss rate: 91.97%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-02-27 07:46:16

End at: 2018-02-27 07:46:46

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.95 Mbit/s (109.5% utilization)

95th percentile per-packet one-way delay: 1727.265 ms

Loss rate: 92.09%

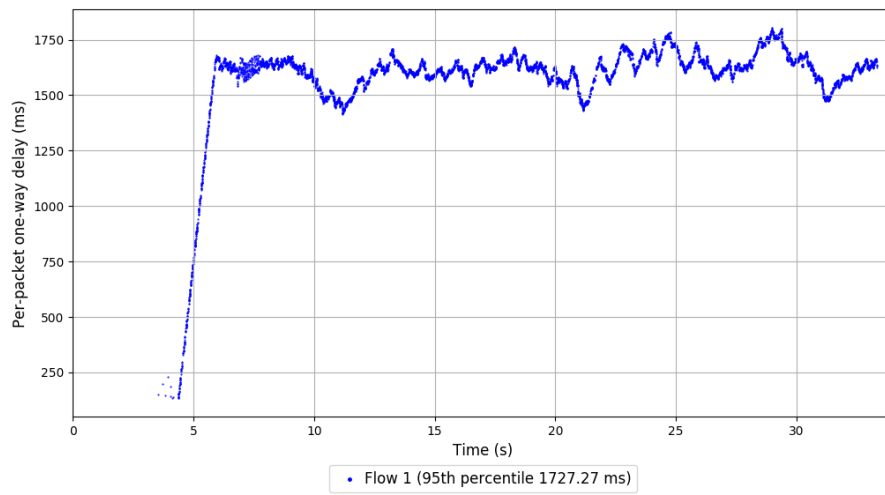
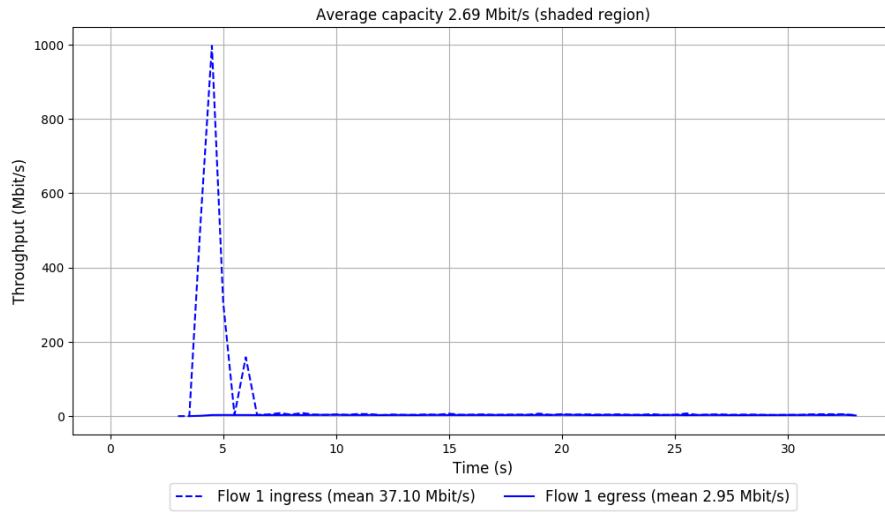
-- Flow 1:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 1727.265 ms

Loss rate: 92.09%

Run 10: Report of FillP — Data Link



Run 1: Statistics of Indigo-1-32

Start at: 2018-02-27 06:09:57

End at: 2018-02-27 06:10:27

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.36 Mbit/s (87.7% utilization)

95th percentile per-packet one-way delay: 194.477 ms

Loss rate: 0.43%

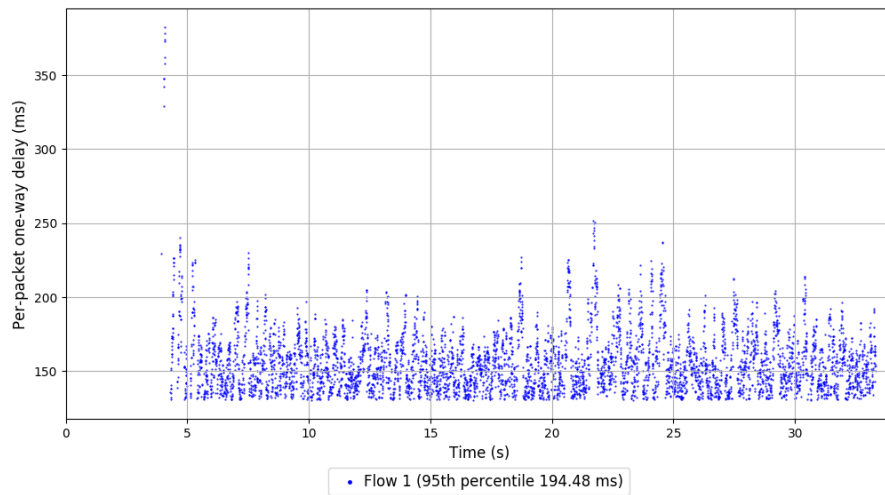
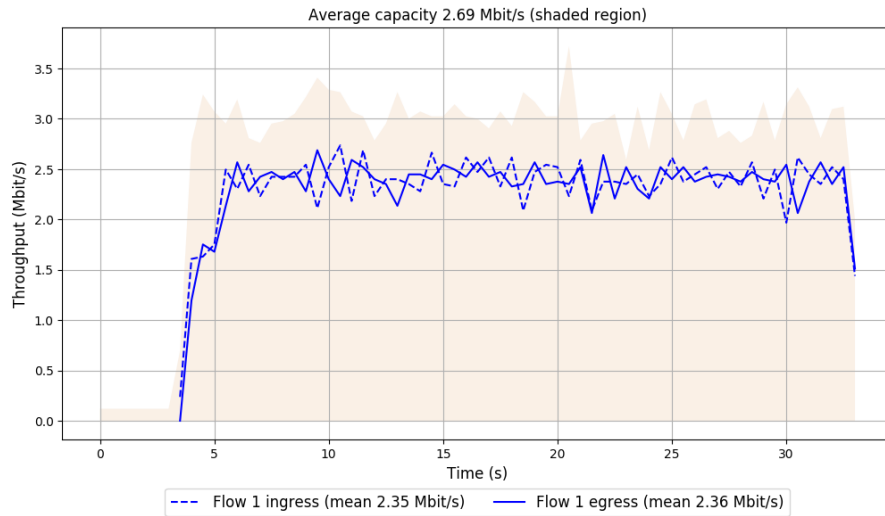
-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 194.477 ms

Loss rate: 0.43%

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



Run 2: Statistics of Indigo-1-32

Start at: 2018-02-27 06:20:09

End at: 2018-02-27 06:20:39

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.95 Mbit/s (72.4% utilization)

95th percentile per-packet one-way delay: 181.858 ms

Loss rate: 0.58%

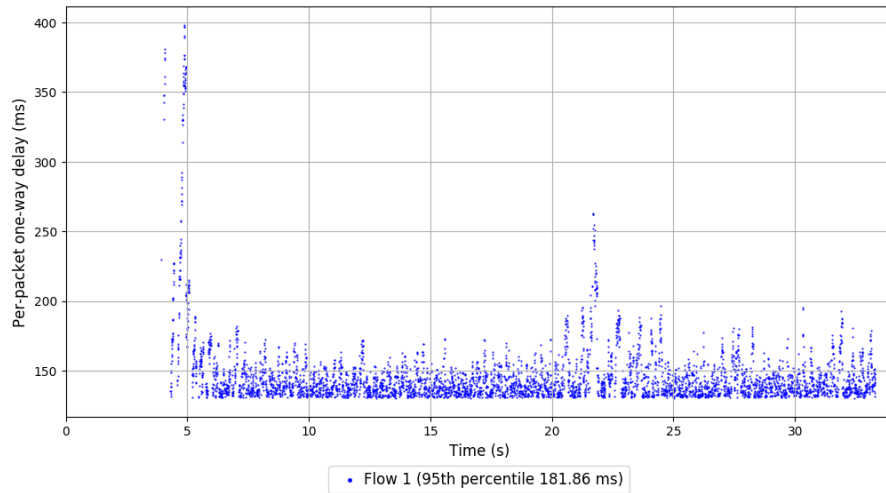
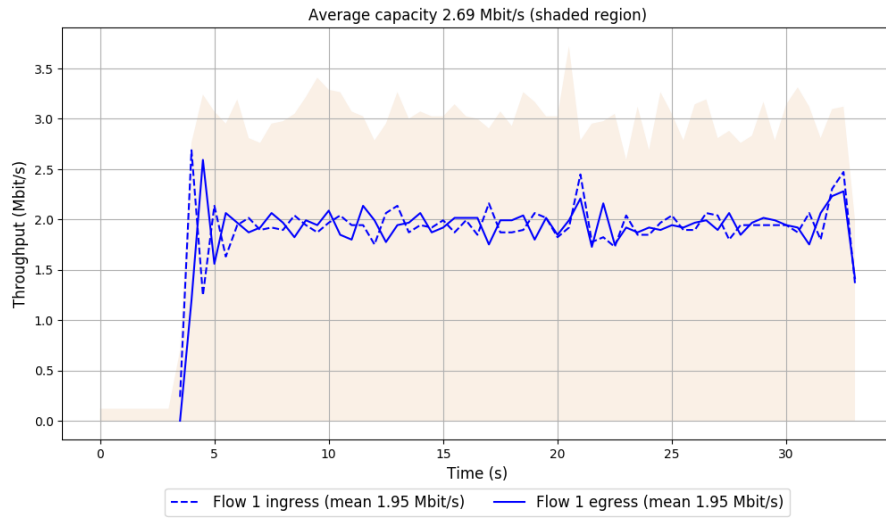
-- Flow 1:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 181.858 ms

Loss rate: 0.58%

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-27 06:30:21

End at: 2018-02-27 06:30:51

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.19 Mbit/s (81.4% utilization)

95th percentile per-packet one-way delay: 192.335 ms

Loss rate: 0.63%

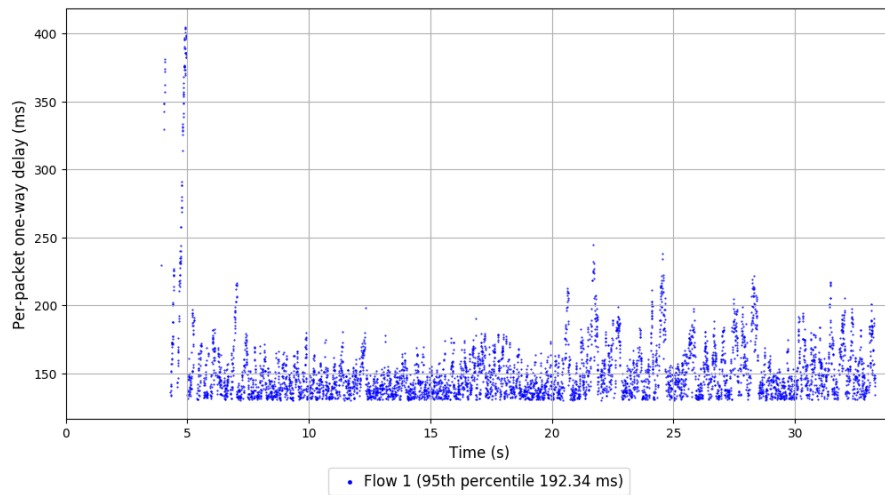
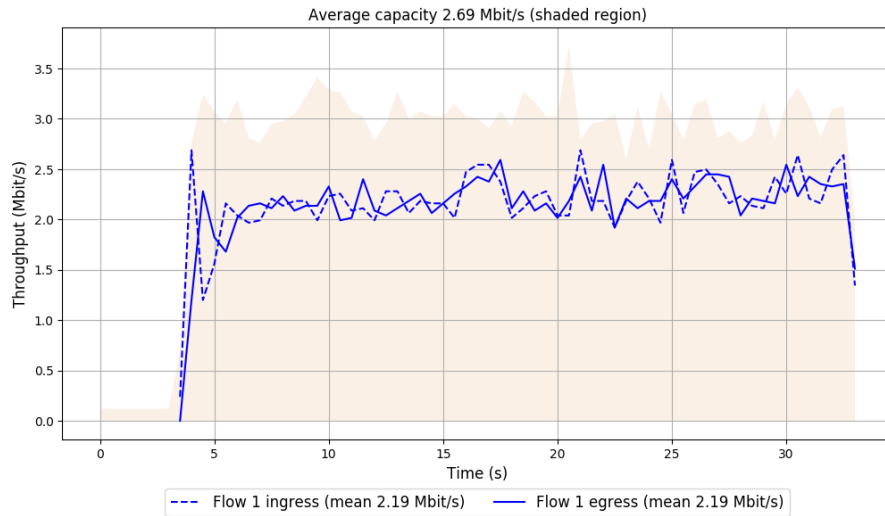
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 192.335 ms

Loss rate: 0.63%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-27 06:40:33

End at: 2018-02-27 06:41:03

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.23 Mbit/s (83.0% utilization)

95th percentile per-packet one-way delay: 184.876 ms

Loss rate: 0.58%

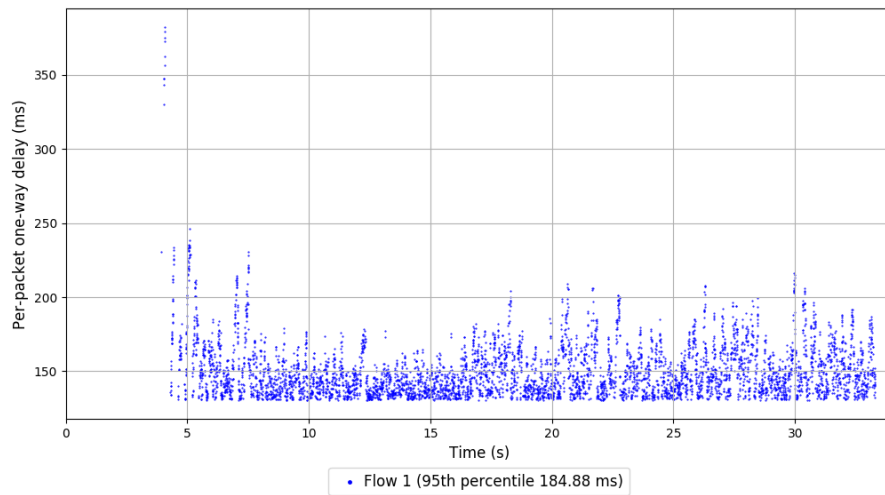
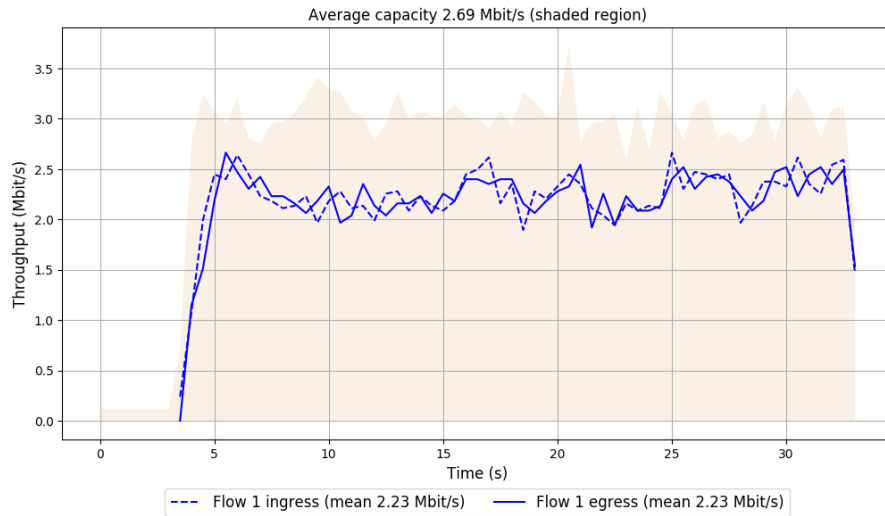
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 184.876 ms

Loss rate: 0.58%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-27 06:50:45

End at: 2018-02-27 06:51:15

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.20 Mbit/s (81.6% utilization)

95th percentile per-packet one-way delay: 188.724 ms

Loss rate: 0.76%

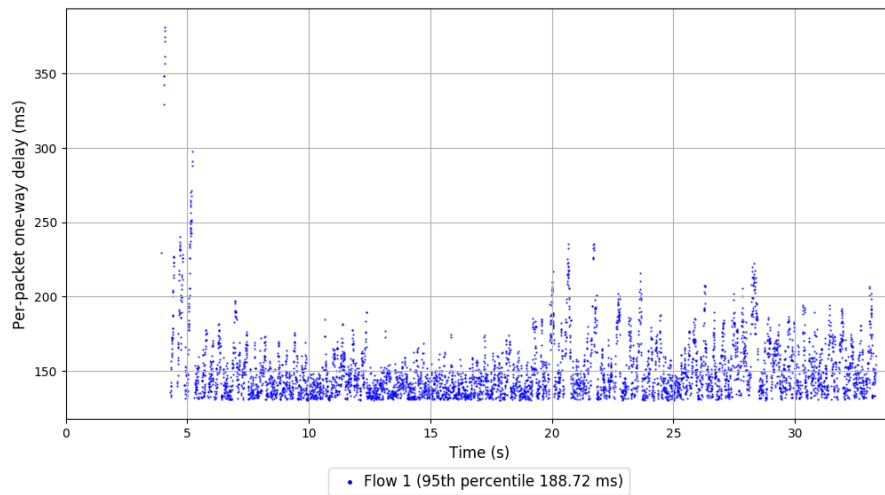
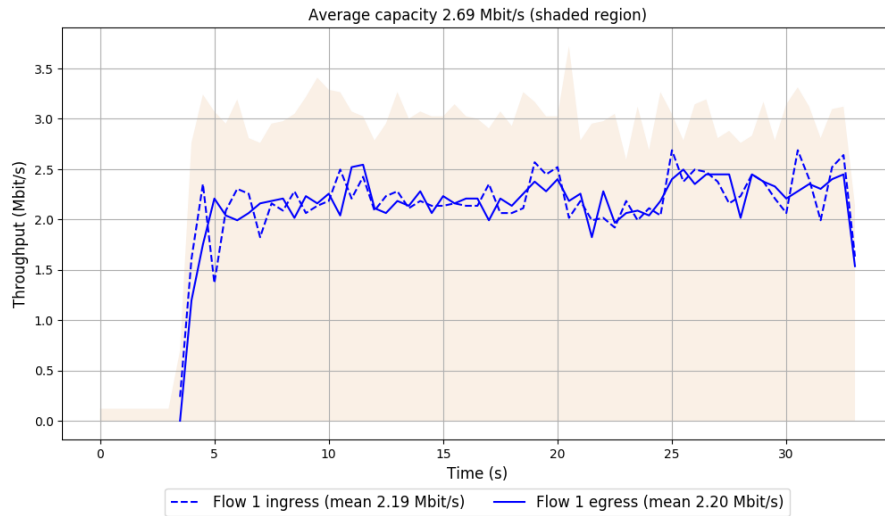
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 188.724 ms

Loss rate: 0.76%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-27 07:00:57

End at: 2018-02-27 07:01:27

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.55 Mbit/s (94.6% utilization)

95th percentile per-packet one-way delay: 261.452 ms

Loss rate: 0.42%

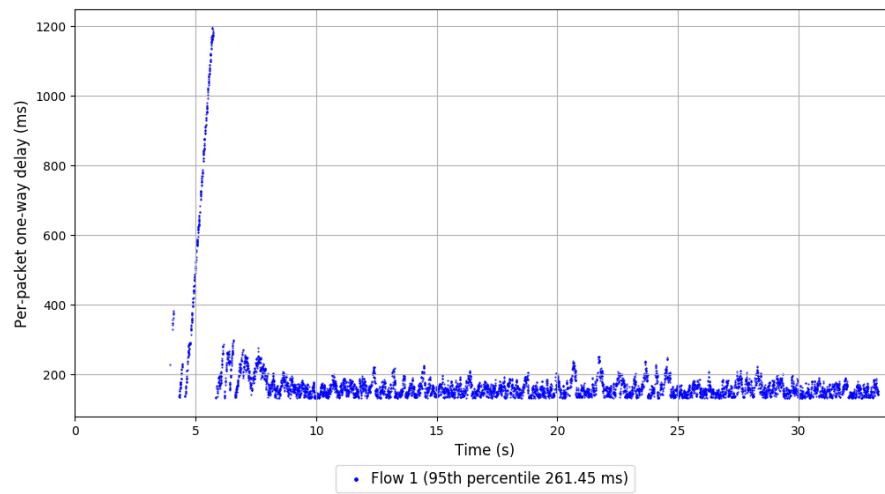
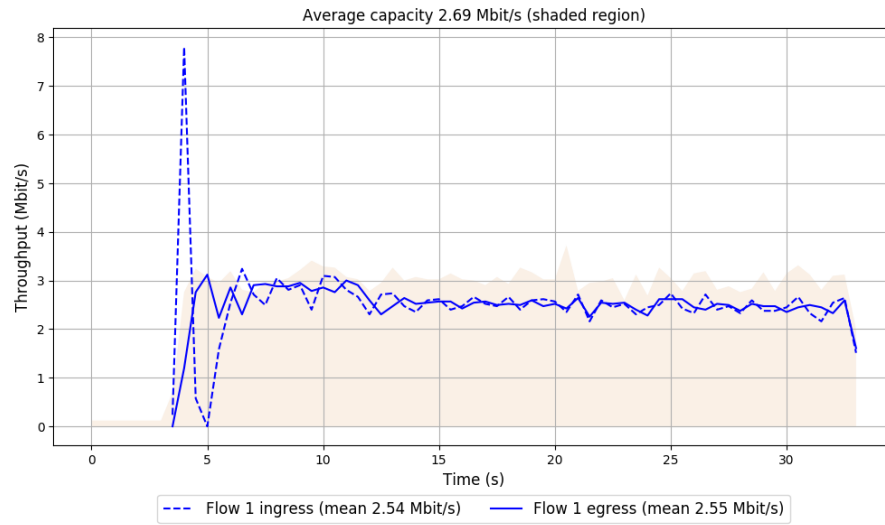
-- Flow 1:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 261.452 ms

Loss rate: 0.42%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-27 07:11:08

End at: 2018-02-27 07:11:38

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.29 Mbit/s (84.9% utilization)

95th percentile per-packet one-way delay: 202.440 ms

Loss rate: 0.68%

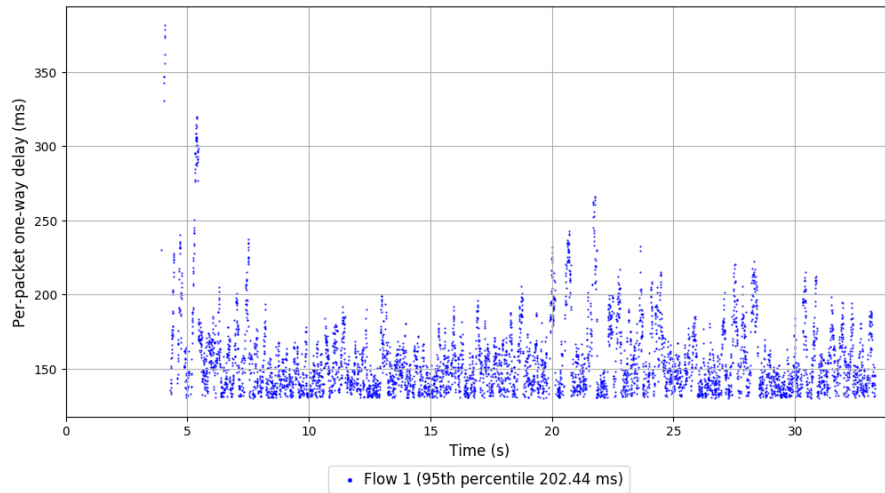
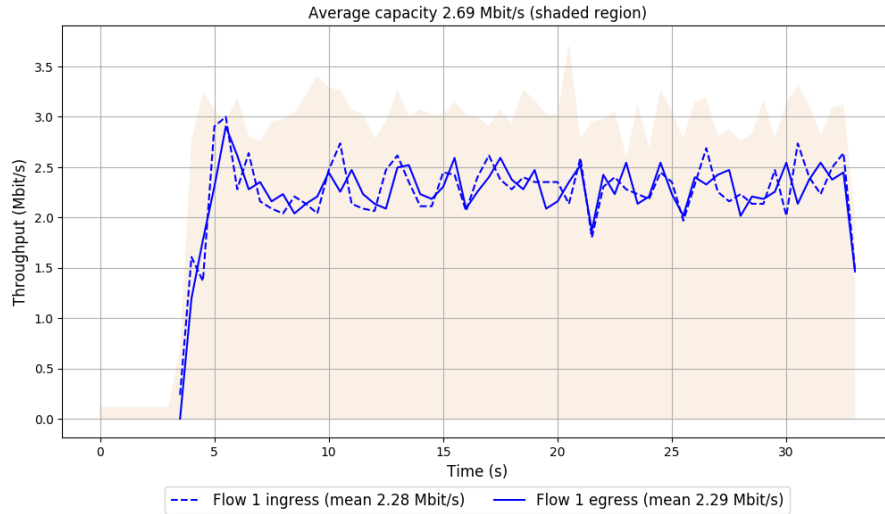
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 202.440 ms

Loss rate: 0.68%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-27 07:21:20

End at: 2018-02-27 07:21:50

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.74 Mbit/s (64.5% utilization)

95th percentile per-packet one-way delay: 222.387 ms

Loss rate: 0.61%

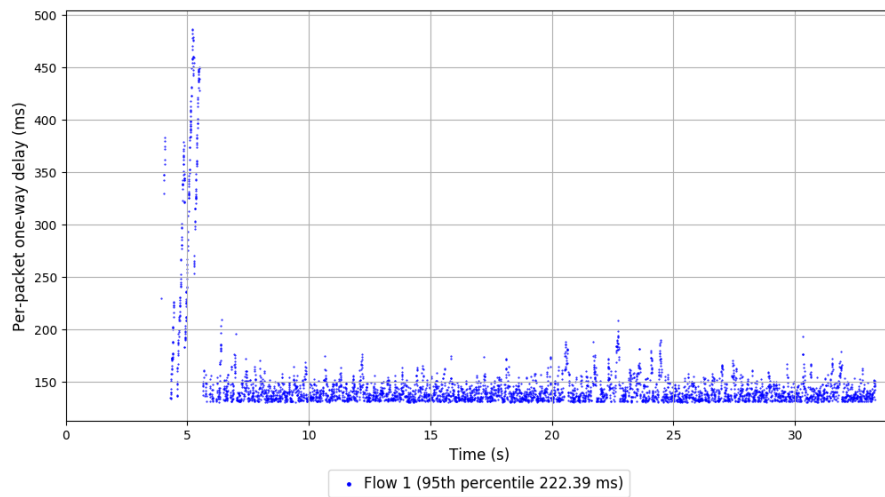
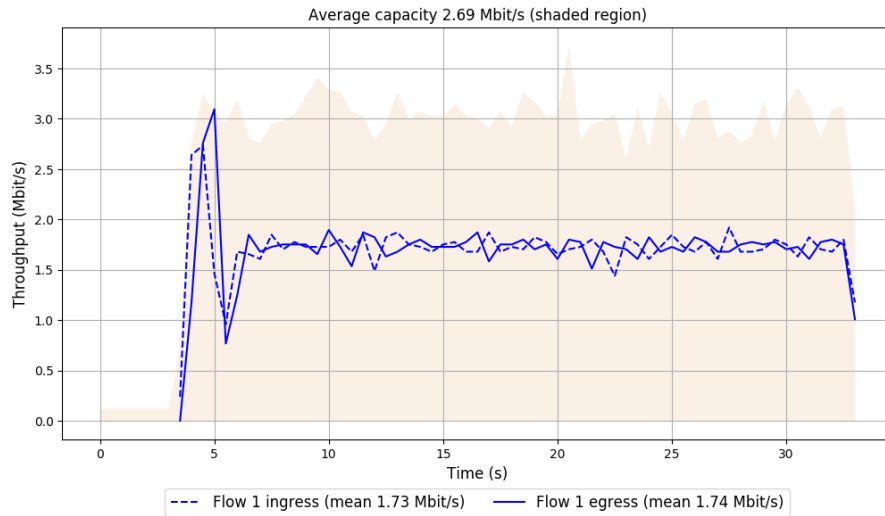
-- Flow 1:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 222.387 ms

Loss rate: 0.61%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-27 07:31:32

End at: 2018-02-27 07:32:02

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.93 Mbit/s (71.8% utilization)

95th percentile per-packet one-way delay: 179.531 ms

Loss rate: 0.57%

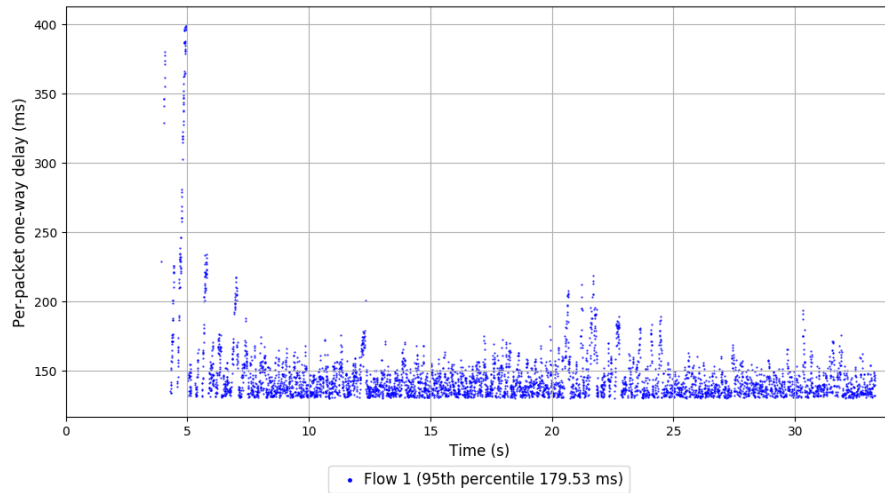
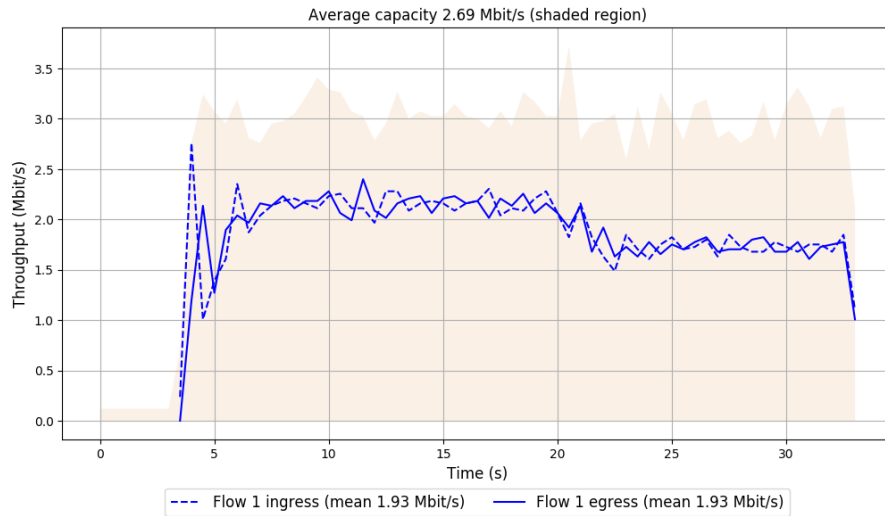
-- Flow 1:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 179.531 ms

Loss rate: 0.57%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-27 07:41:44

End at: 2018-02-27 07:42:14

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.31 Mbit/s (85.9% utilization)

95th percentile per-packet one-way delay: 194.611 ms

Loss rate: 0.70%

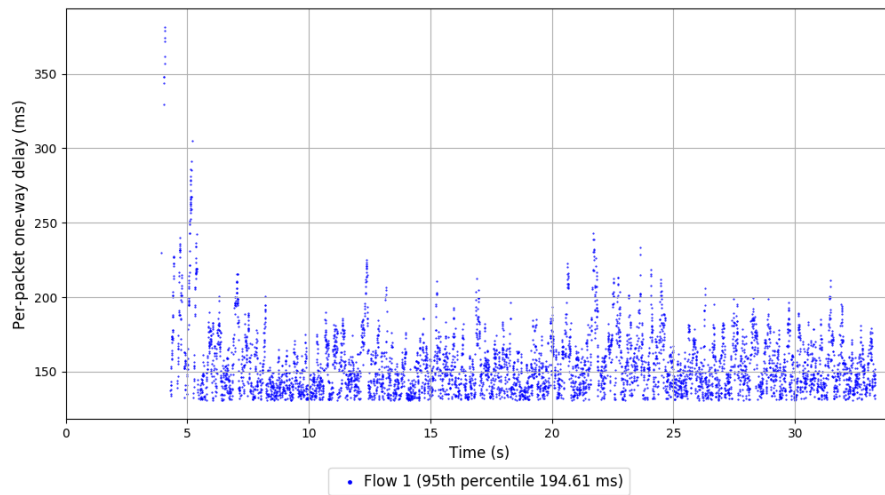
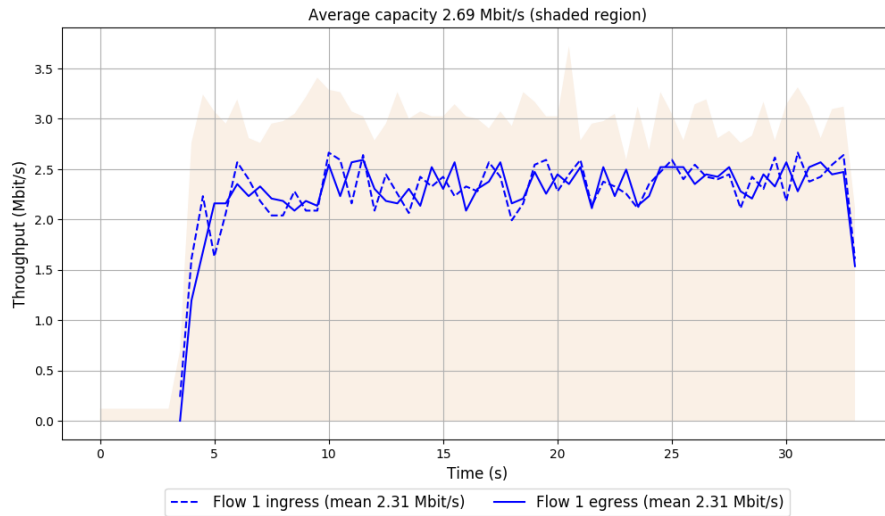
-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 194.611 ms

Loss rate: 0.70%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-02-27 06:12:47

End at: 2018-02-27 06:13:17

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.52 Mbit/s (93.5% utilization)

95th percentile per-packet one-way delay: 1725.913 ms

Loss rate: 4.53%

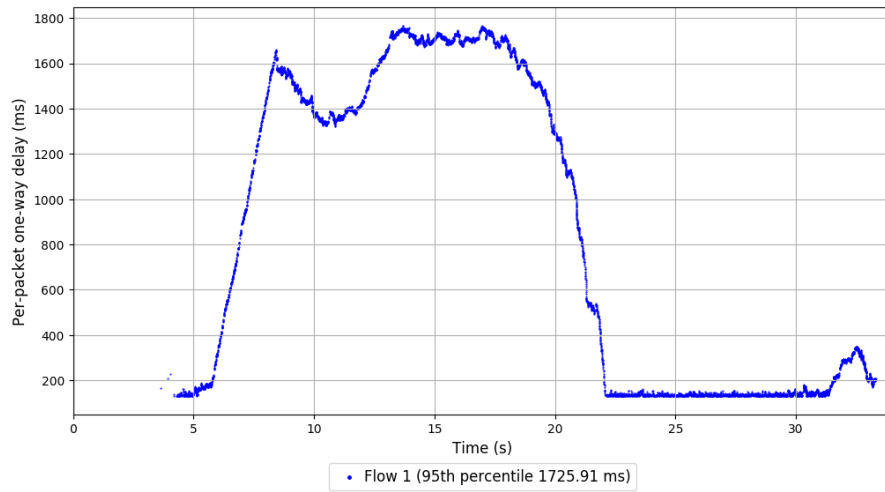
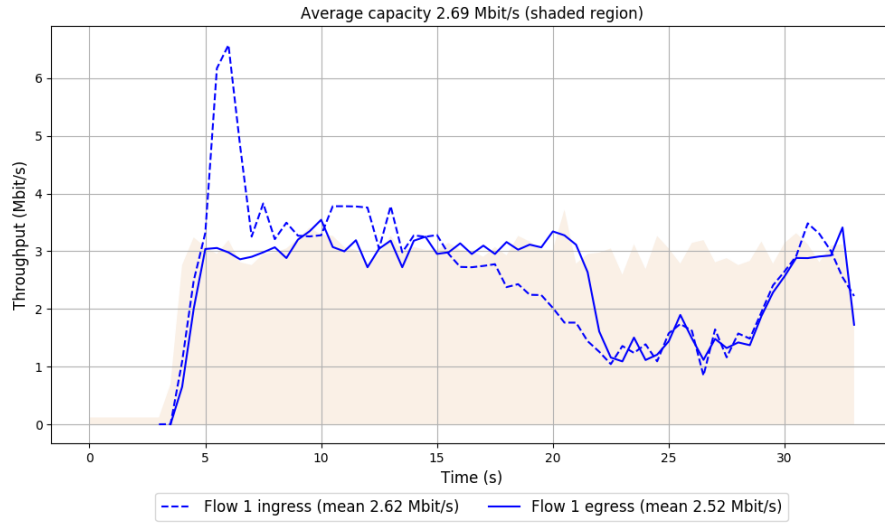
-- Flow 1:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 1725.913 ms

Loss rate: 4.53%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-27 06:22:59

End at: 2018-02-27 06:23:29

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.81 Mbit/s (67.1% utilization)

95th percentile per-packet one-way delay: 165.024 ms

Loss rate: 0.71%

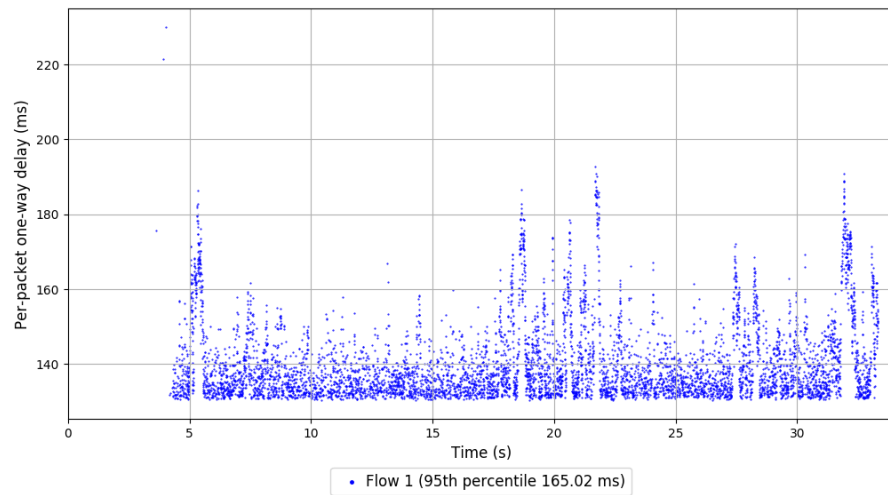
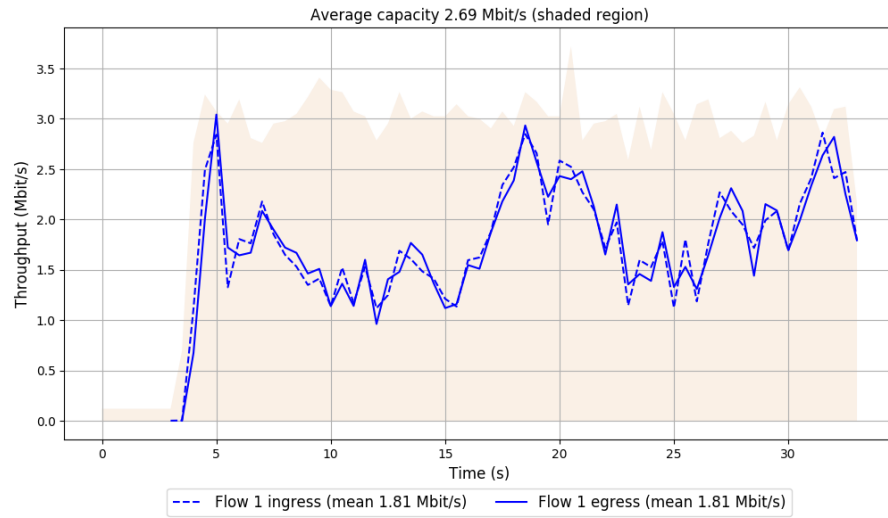
-- Flow 1:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 165.024 ms

Loss rate: 0.71%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-27 06:33:11

End at: 2018-02-27 06:33:41

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.57 Mbit/s (95.3% utilization)

95th percentile per-packet one-way delay: 1518.158 ms

Loss rate: 1.81%

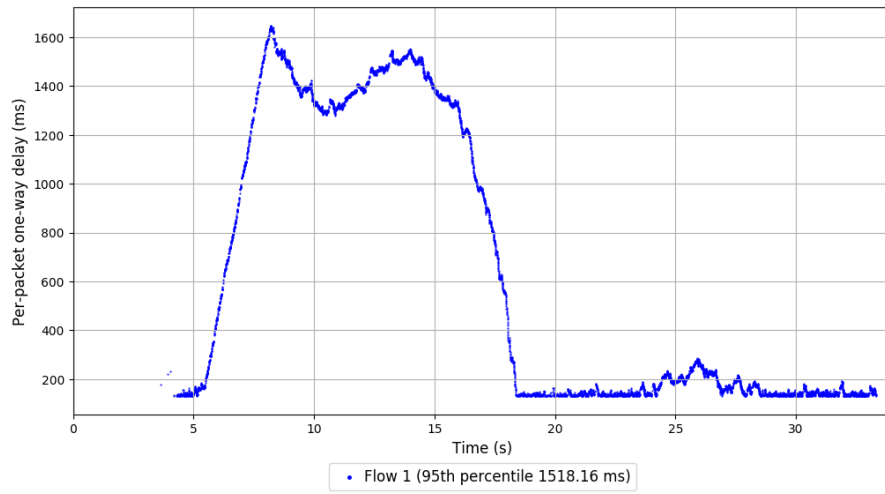
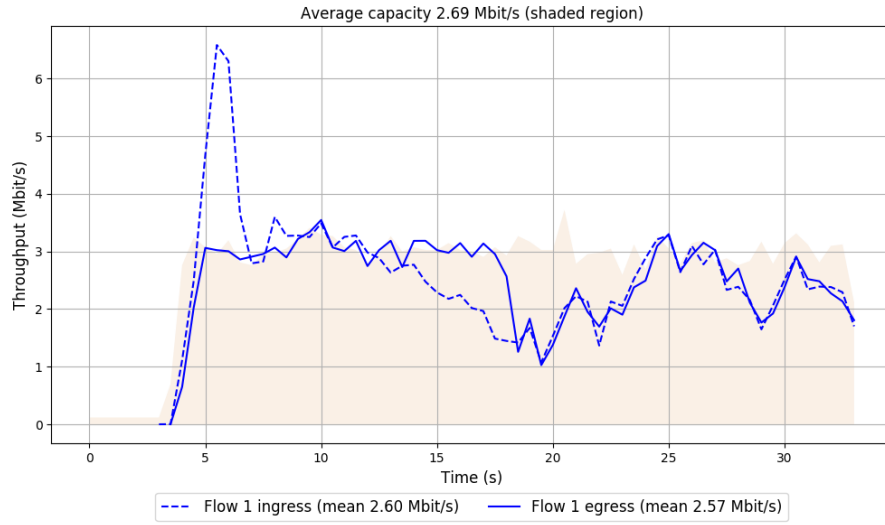
-- Flow 1:

Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 1518.158 ms

Loss rate: 1.81%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-27 06:43:23

End at: 2018-02-27 06:43:53

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.43 Mbit/s (90.4% utilization)

95th percentile per-packet one-way delay: 1582.147 ms

Loss rate: 4.37%

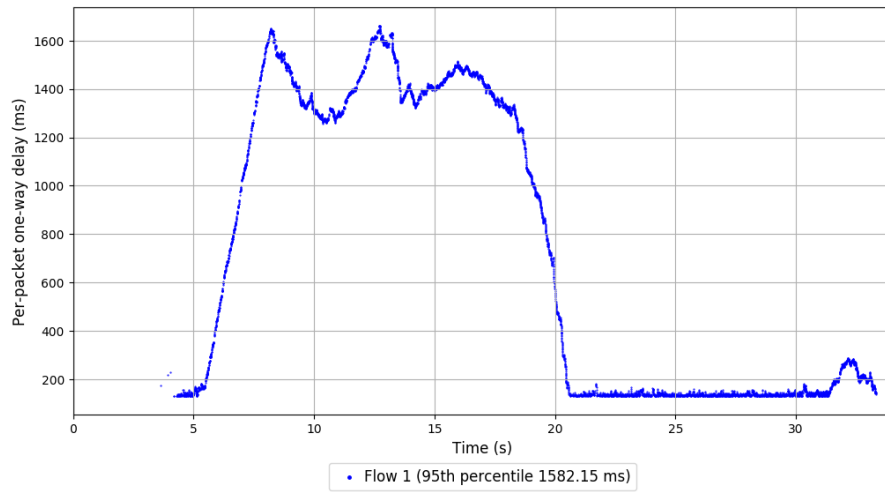
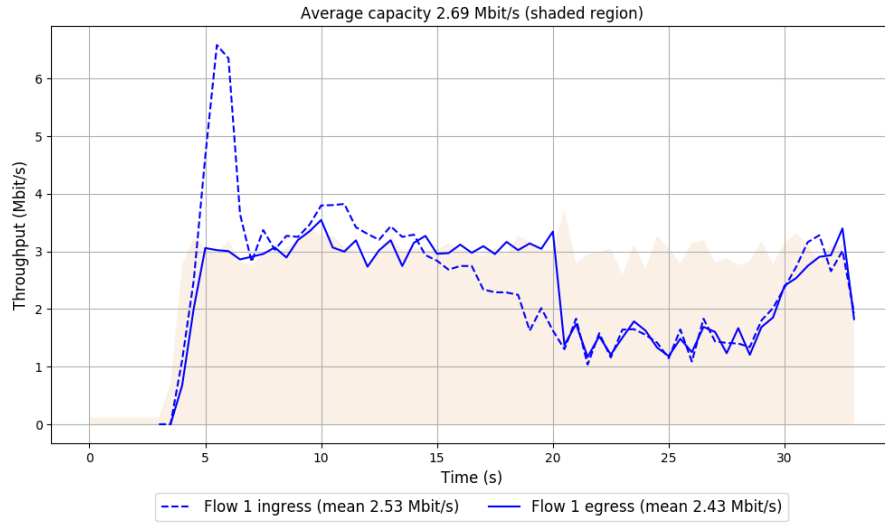
-- Flow 1:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 1582.147 ms

Loss rate: 4.37%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-27 06:53:35

End at: 2018-02-27 06:54:05

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.46 Mbit/s (91.3% utilization)

95th percentile per-packet one-way delay: 1493.665 ms

Loss rate: 1.73%

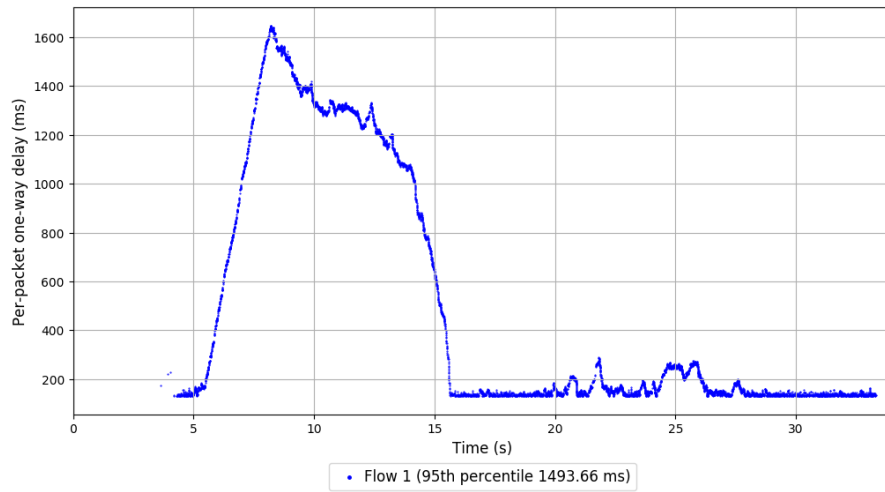
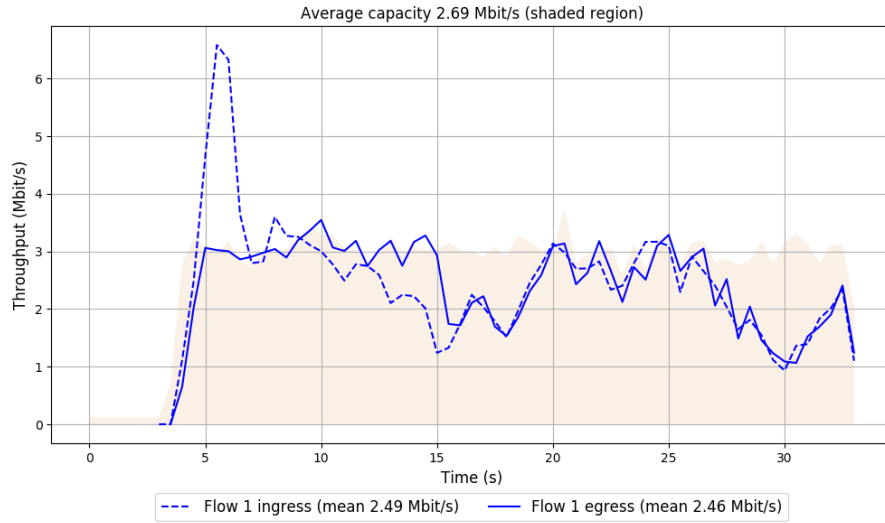
-- Flow 1:

Average throughput: 2.46 Mbit/s

95th percentile per-packet one-way delay: 1493.665 ms

Loss rate: 1.73%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-27 07:03:46

End at: 2018-02-27 07:04:16

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.33 Mbit/s (86.4% utilization)

95th percentile per-packet one-way delay: 1521.694 ms

Loss rate: 3.25%

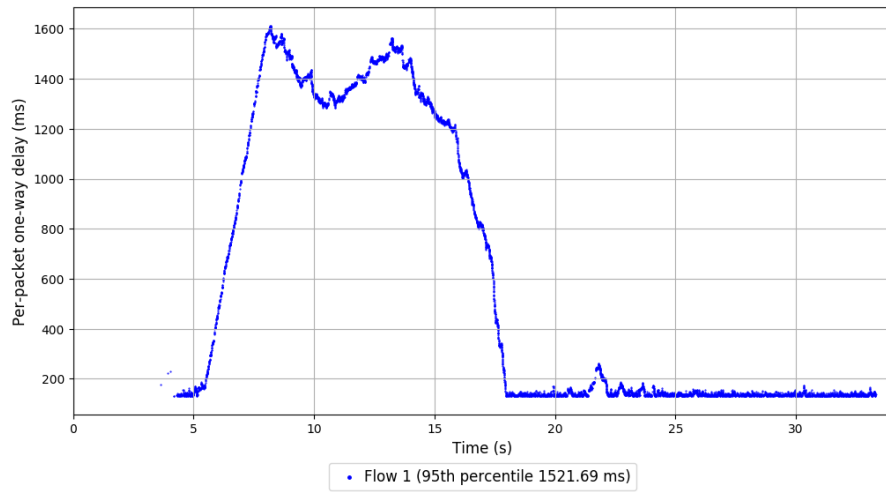
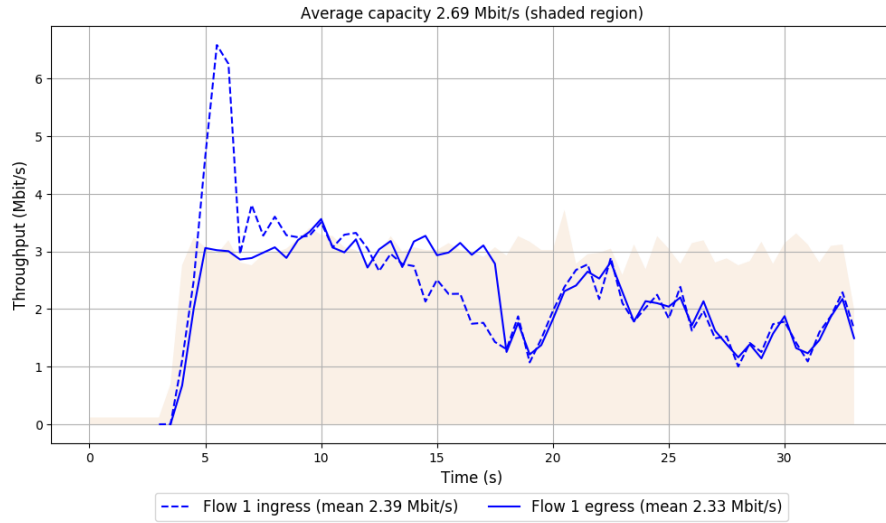
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 1521.694 ms

Loss rate: 3.25%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-27 07:13:58

End at: 2018-02-27 07:14:28

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.82 Mbit/s (67.6% utilization)

95th percentile per-packet one-way delay: 162.533 ms

Loss rate: 0.35%

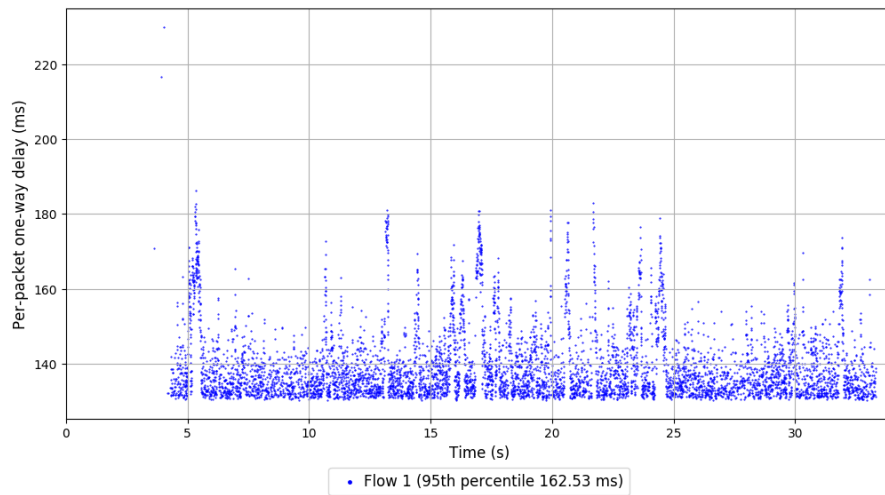
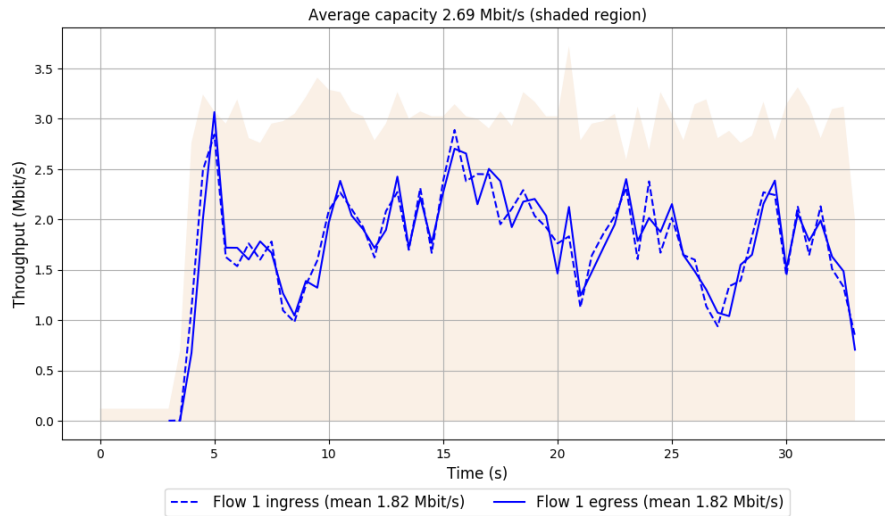
-- Flow 1:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 162.533 ms

Loss rate: 0.35%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-27 07:24:10

End at: 2018-02-27 07:24:40

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.42 Mbit/s (89.7% utilization)

95th percentile per-packet one-way delay: 1576.991 ms

Loss rate: 4.11%

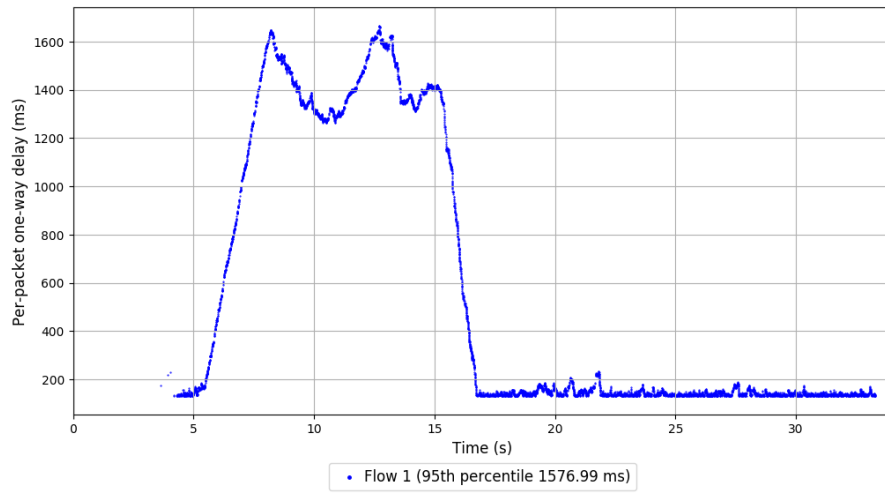
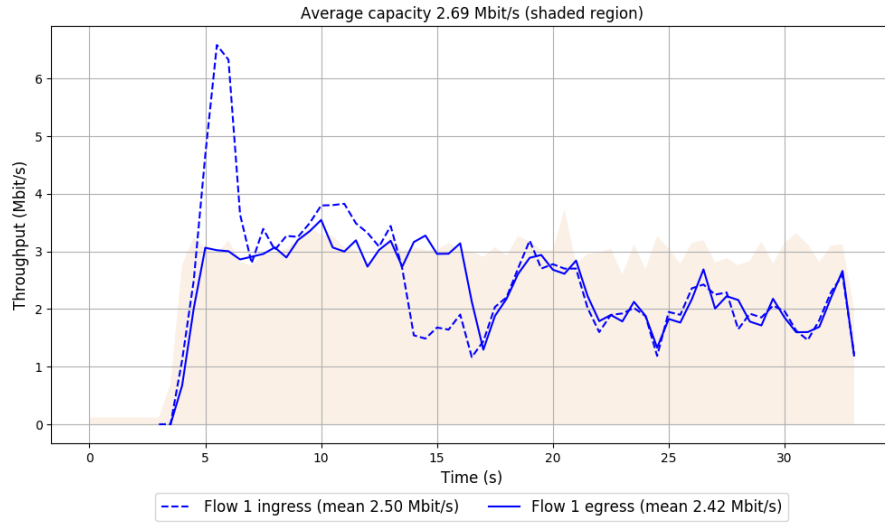
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 1576.991 ms

Loss rate: 4.11%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-27 07:34:22

End at: 2018-02-27 07:34:52

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.27 Mbit/s (84.3% utilization)

95th percentile per-packet one-way delay: 311.412 ms

Loss rate: 0.36%

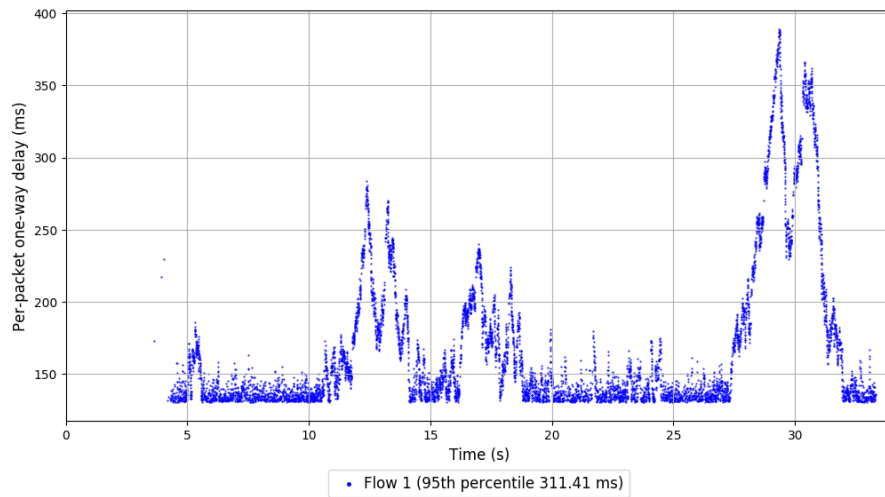
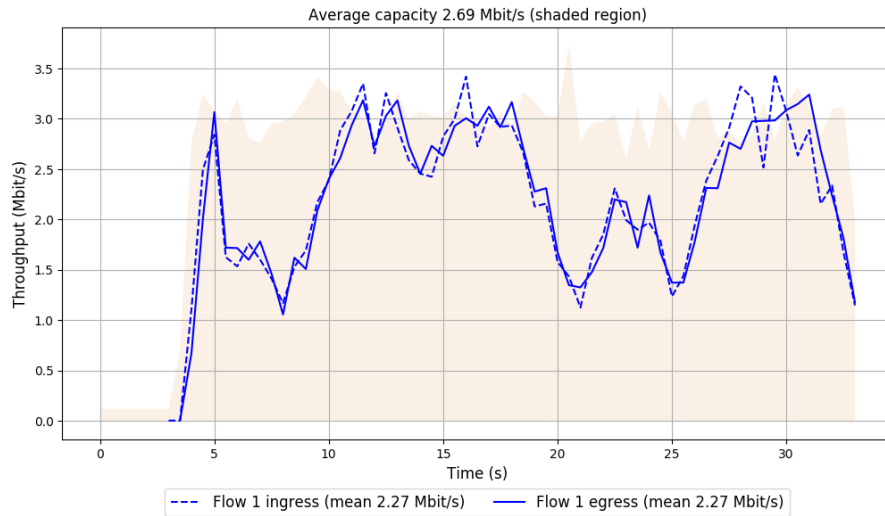
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 311.412 ms

Loss rate: 0.36%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-27 07:44:34

End at: 2018-02-27 07:45:04

Below is generated by plot.py at 2018-02-27 07:52:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.31 Mbit/s (85.9% utilization)

95th percentile per-packet one-way delay: 1529.273 ms

Loss rate: 1.85%

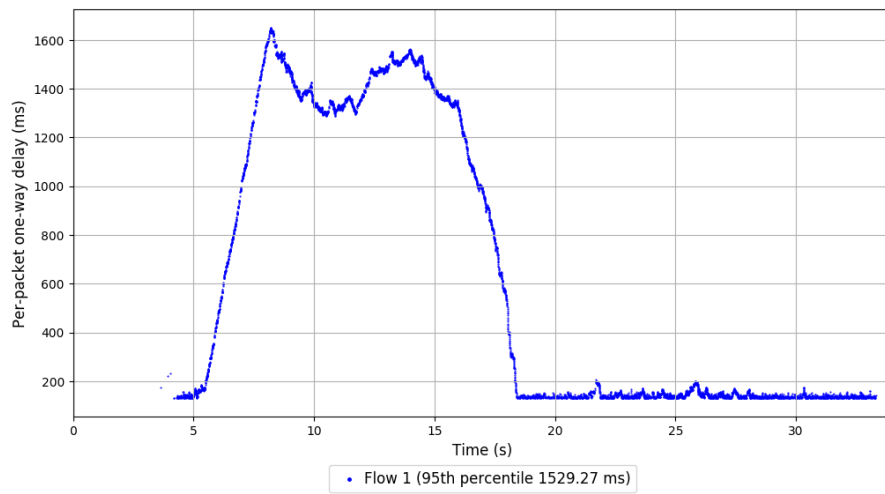
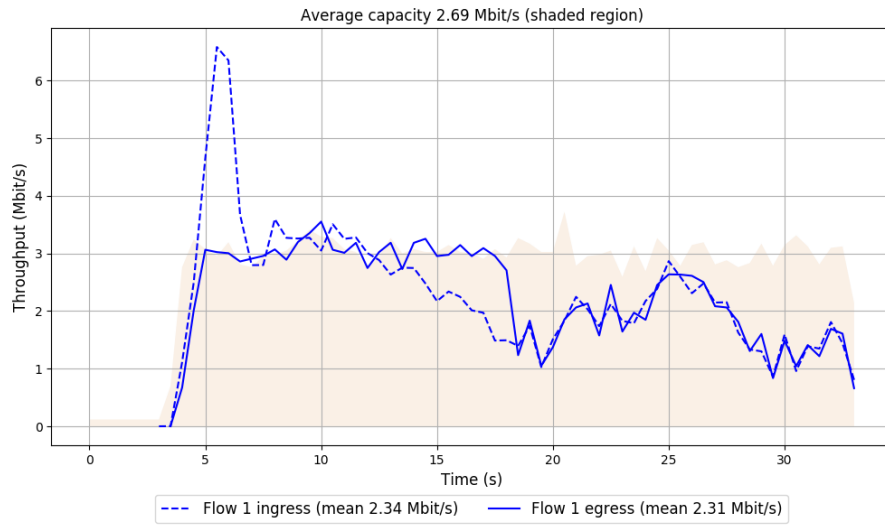
-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 1529.273 ms

Loss rate: 1.85%

Run 10: Report of Vivace-latency — Data Link



Run 1: Statistics of Vivace-loss

Start at: 2018-02-27 06:09:23

End at: 2018-02-27 06:09:53

Below is generated by plot.py at 2018-02-27 07:52:20

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.84 Mbit/s (105.5% utilization)

95th percentile per-packet one-way delay: 1801.028 ms

Loss rate: 40.07%

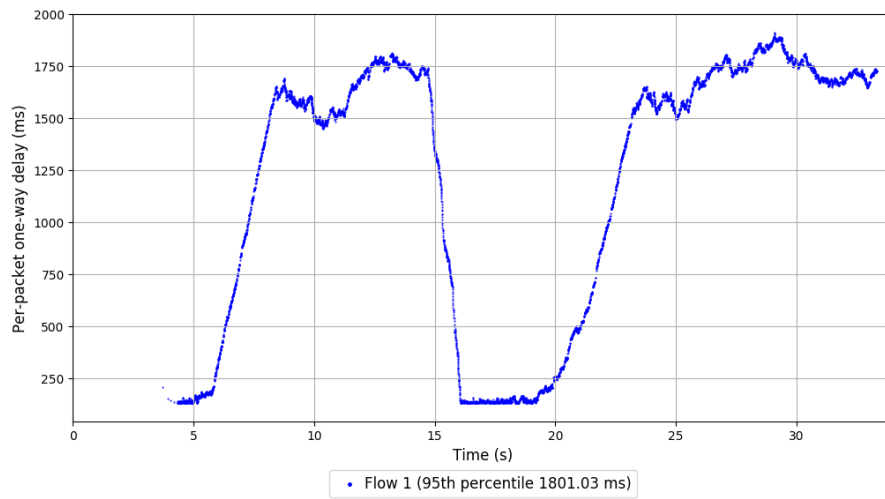
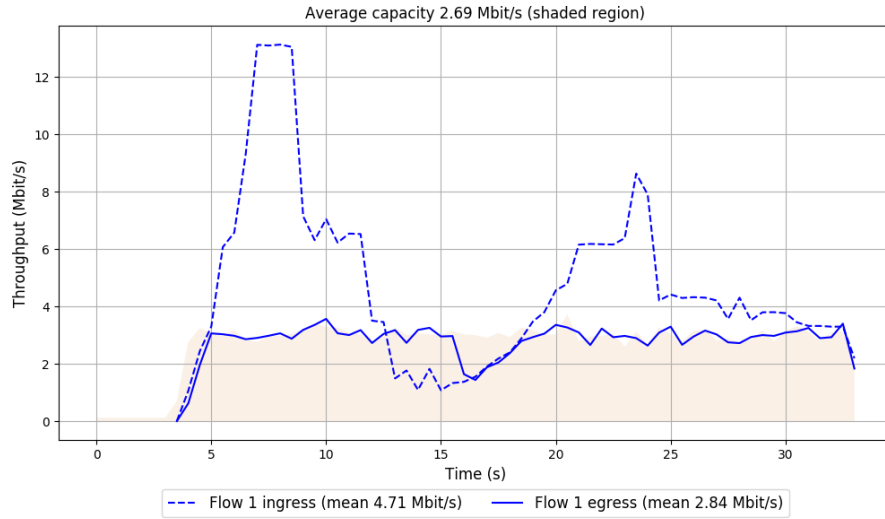
-- Flow 1:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 1801.028 ms

Loss rate: 40.07%

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-02-27 06:19:35

End at: 2018-02-27 06:20:05

Below is generated by plot.py at 2018-02-27 07:52:21

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.90 Mbit/s (107.6% utilization)

95th percentile per-packet one-way delay: 1754.307 ms

Loss rate: 34.90%

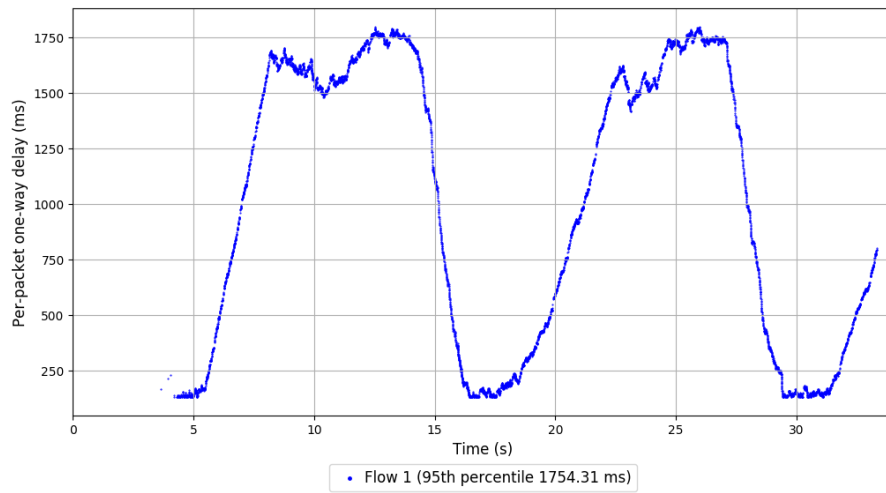
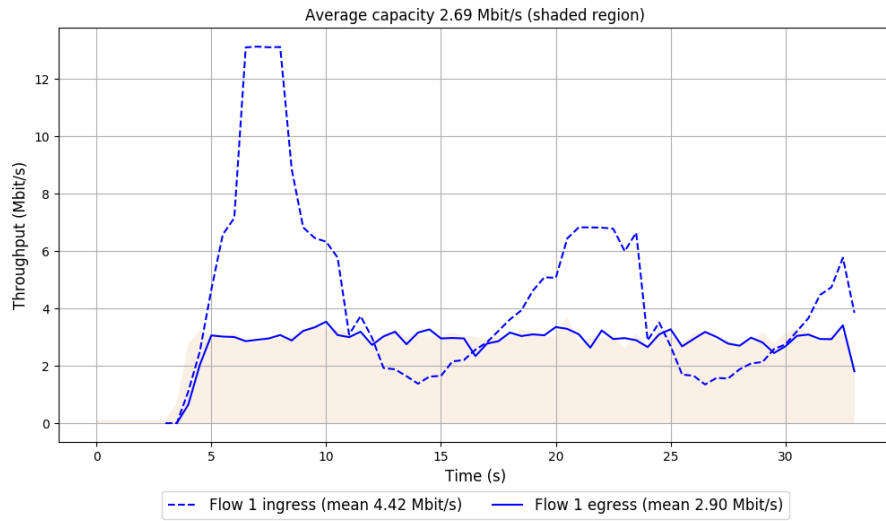
-- Flow 1:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 1754.307 ms

Loss rate: 34.90%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-27 06:29:47

End at: 2018-02-27 06:30:17

Below is generated by plot.py at 2018-02-27 07:52:22

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.92 Mbit/s (108.7% utilization)

95th percentile per-packet one-way delay: 1787.691 ms

Loss rate: 34.64%

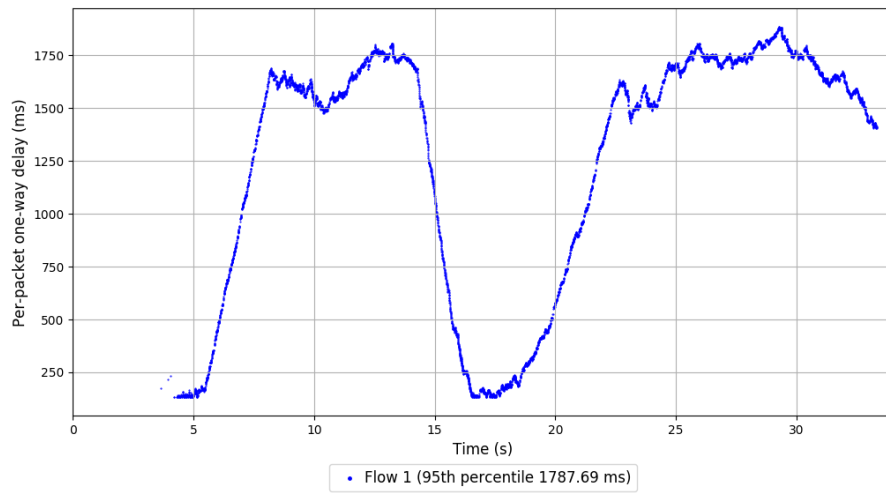
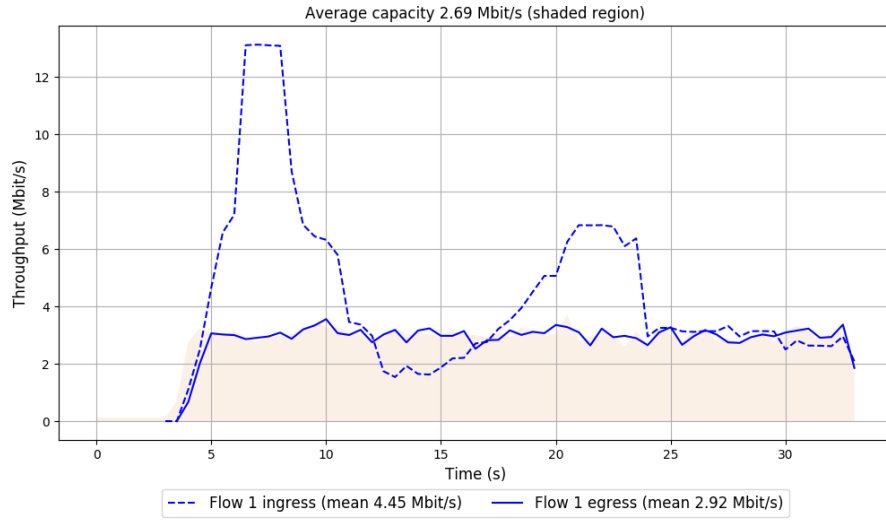
-- Flow 1:

Average throughput: 2.92 Mbit/s

95th percentile per-packet one-way delay: 1787.691 ms

Loss rate: 34.64%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-27 06:39:59

End at: 2018-02-27 06:40:29

Below is generated by plot.py at 2018-02-27 07:52:24

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.92 Mbit/s (108.5% utilization)

95th percentile per-packet one-way delay: 1818.433 ms

Loss rate: 35.98%

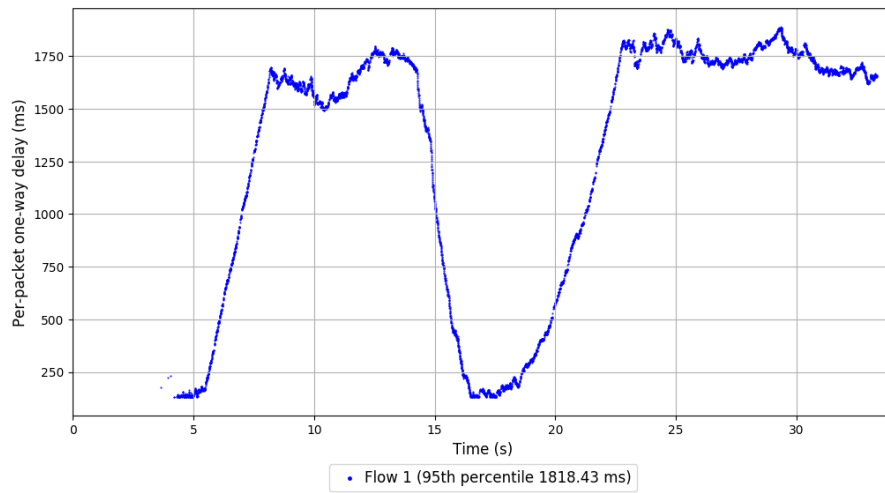
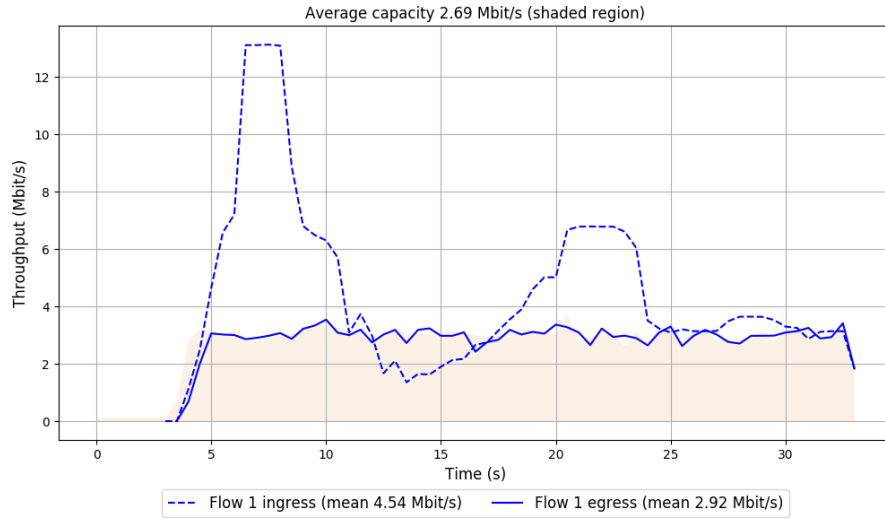
-- Flow 1:

Average throughput: 2.92 Mbit/s

95th percentile per-packet one-way delay: 1818.433 ms

Loss rate: 35.98%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-27 06:50:11

End at: 2018-02-27 06:50:41

Below is generated by plot.py at 2018-02-27 07:52:26

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.87 Mbit/s (106.7% utilization)

95th percentile per-packet one-way delay: 1794.928 ms

Loss rate: 34.41%

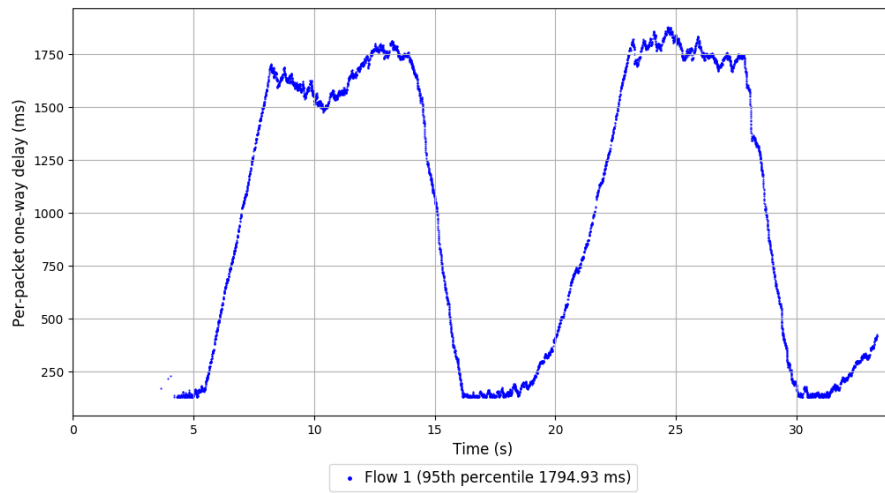
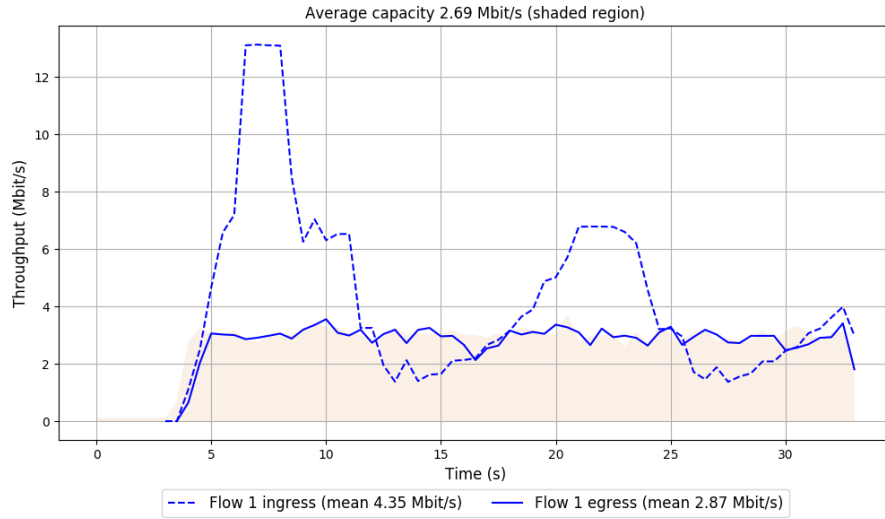
-- Flow 1:

Average throughput: 2.87 Mbit/s

95th percentile per-packet one-way delay: 1794.928 ms

Loss rate: 34.41%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-27 07:00:23

End at: 2018-02-27 07:00:53

Below is generated by plot.py at 2018-02-27 07:52:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.89 Mbit/s (107.3% utilization)

95th percentile per-packet one-way delay: 1746.039 ms

Loss rate: 34.01%

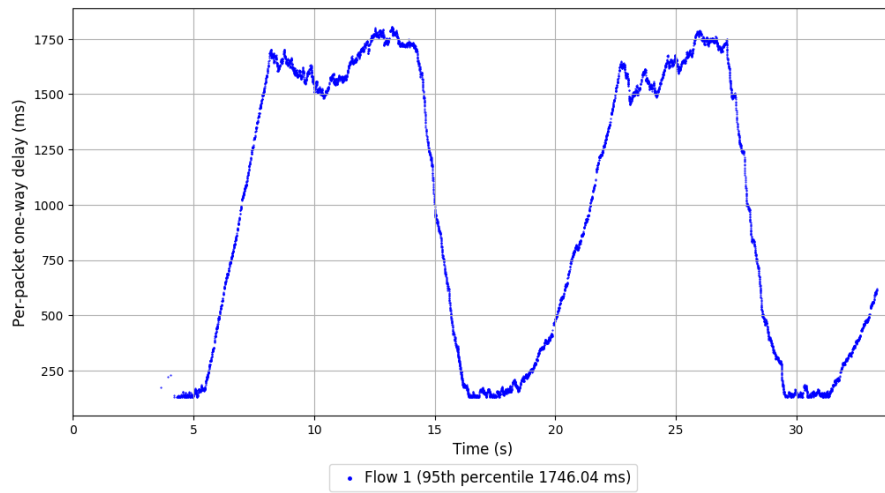
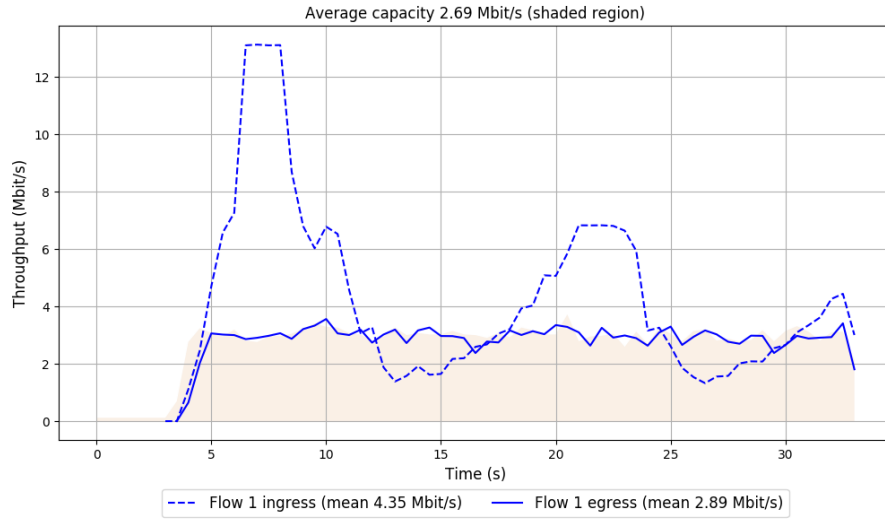
-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 1746.039 ms

Loss rate: 34.01%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-27 07:10:34

End at: 2018-02-27 07:11:04

Below is generated by plot.py at 2018-02-27 07:52:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.90 Mbit/s (107.7% utilization)

95th percentile per-packet one-way delay: 1749.301 ms

Loss rate: 35.98%

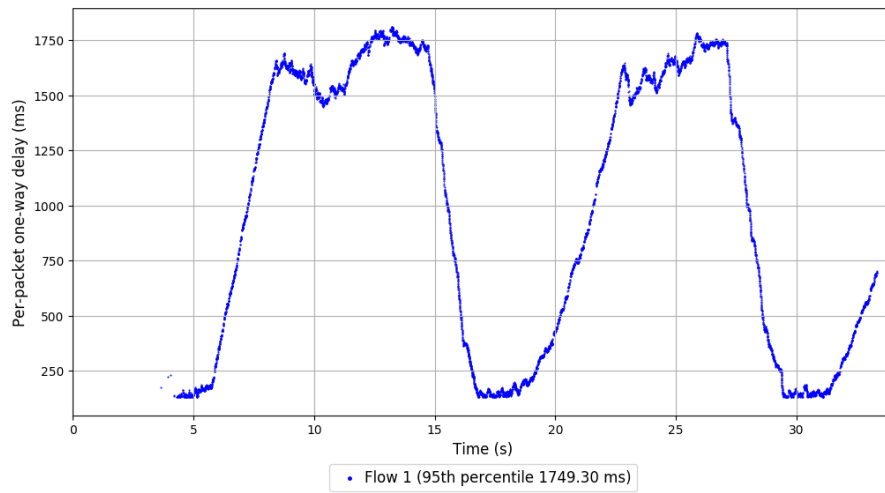
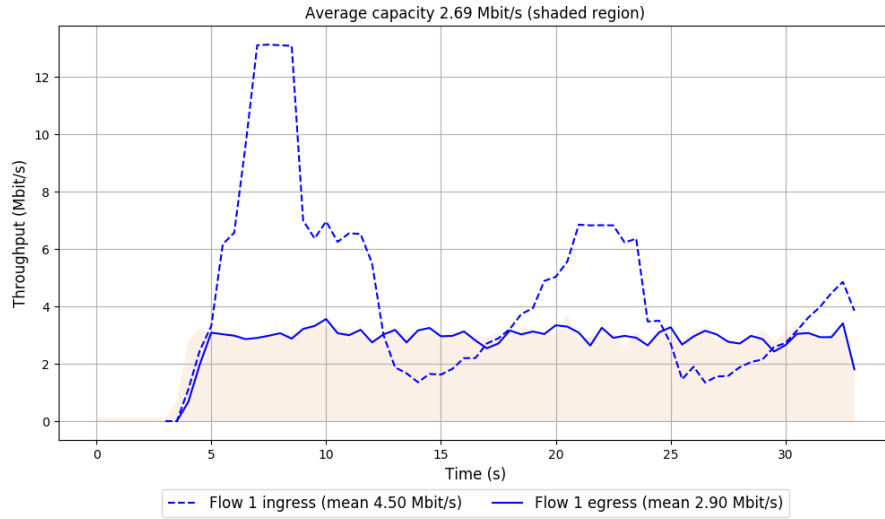
-- Flow 1:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 1749.301 ms

Loss rate: 35.98%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-27 07:20:46

End at: 2018-02-27 07:21:16

Below is generated by plot.py at 2018-02-27 07:52:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.91 Mbit/s (108.2% utilization)

95th percentile per-packet one-way delay: 1796.218 ms

Loss rate: 37.95%

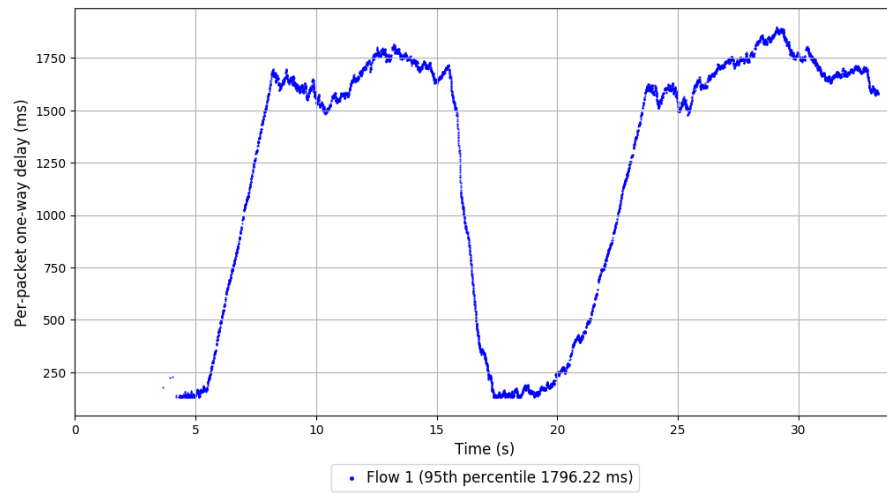
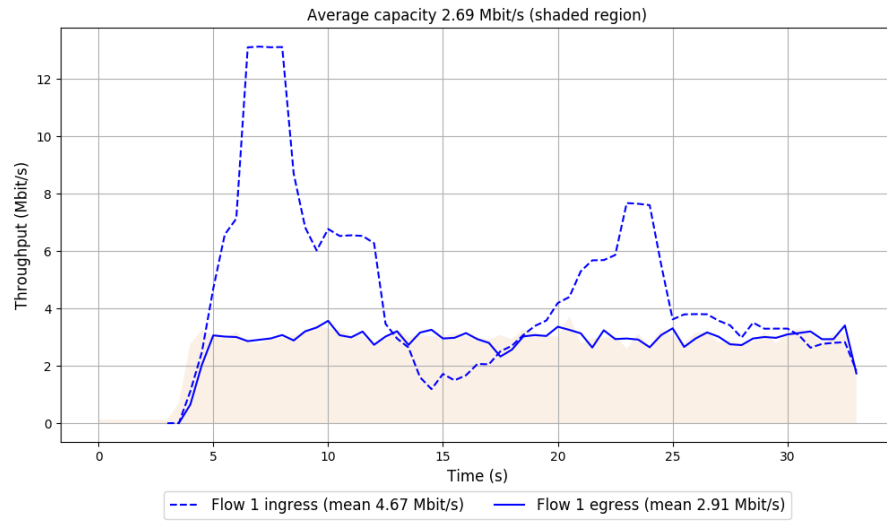
-- Flow 1:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 1796.218 ms

Loss rate: 37.95%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-27 07:30:58

End at: 2018-02-27 07:31:28

Below is generated by plot.py at 2018-02-27 07:52:30

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.91 Mbit/s (108.0% utilization)

95th percentile per-packet one-way delay: 1786.595 ms

Loss rate: 34.69%

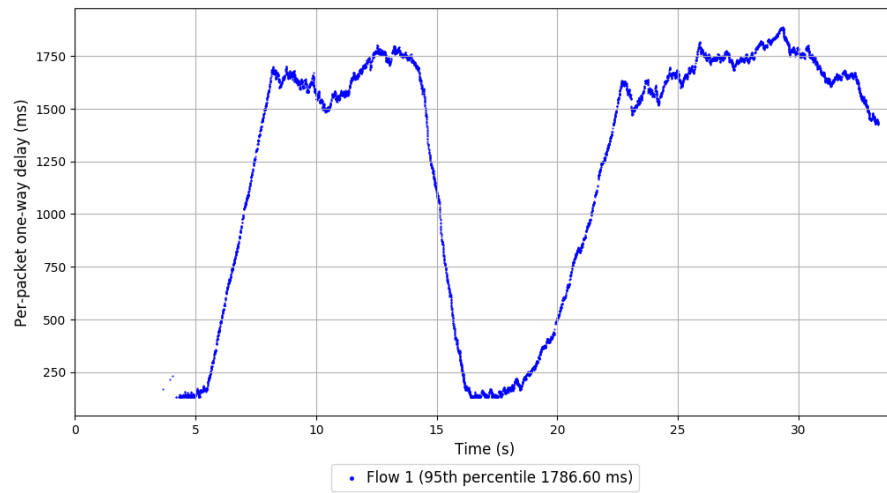
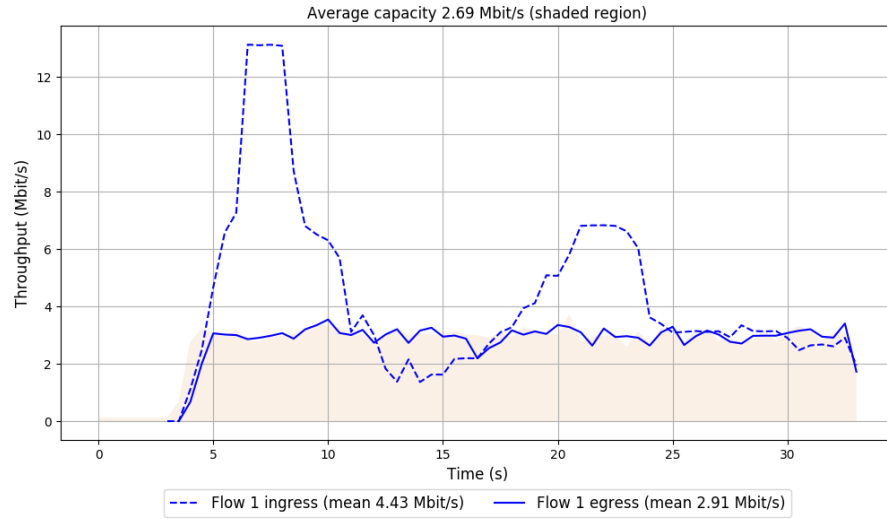
-- Flow 1:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 1786.595 ms

Loss rate: 34.69%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-27 07:41:10

End at: 2018-02-27 07:41:40

Below is generated by plot.py at 2018-02-27 07:52:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.87 Mbit/s (106.7% utilization)

95th percentile per-packet one-way delay: 1805.139 ms

Loss rate: 39.75%

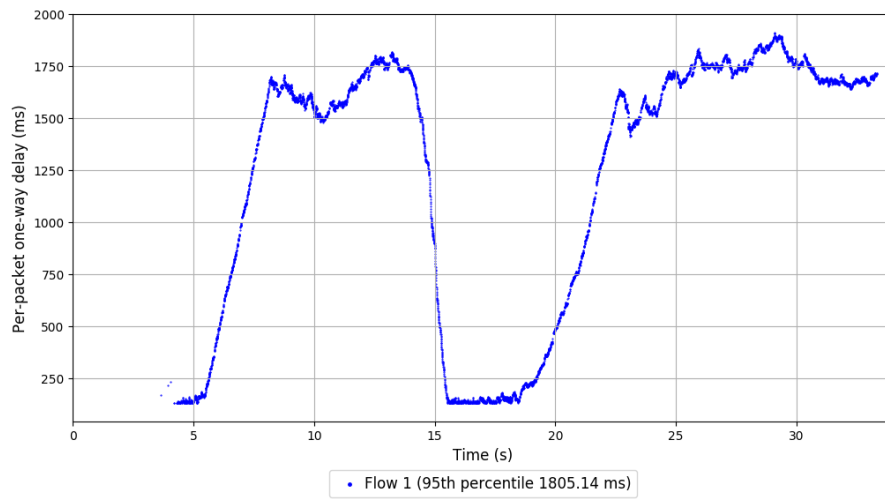
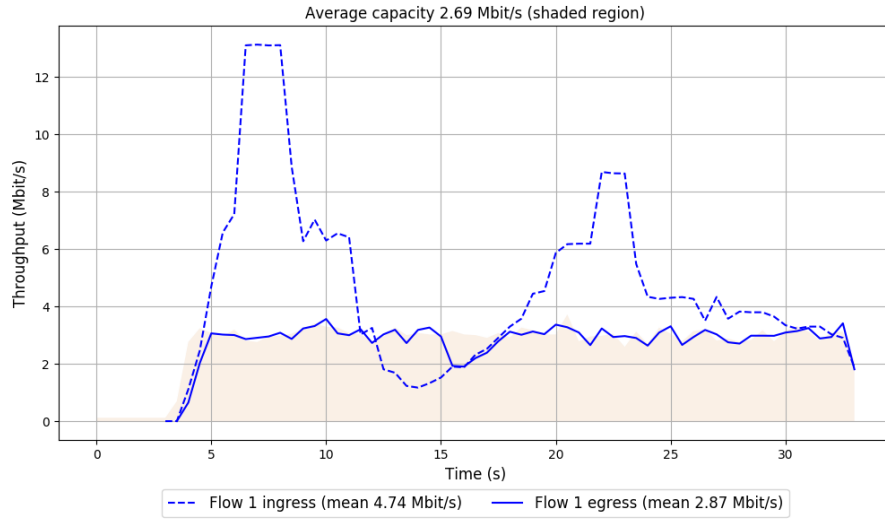
-- Flow 1:

Average throughput: 2.87 Mbit/s

95th percentile per-packet one-way delay: 1805.139 ms

Loss rate: 39.75%

Run 10: Report of Vivace-loss — Data Link



Run 1: Statistics of Vivace-LTE

Start at: 2018-02-27 06:13:21

End at: 2018-02-27 06:13:51

Below is generated by plot.py at 2018-02-27 07:52:32

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.83 Mbit/s (105.0% utilization)

95th percentile per-packet one-way delay: 1463.734 ms

Loss rate: 3.41%

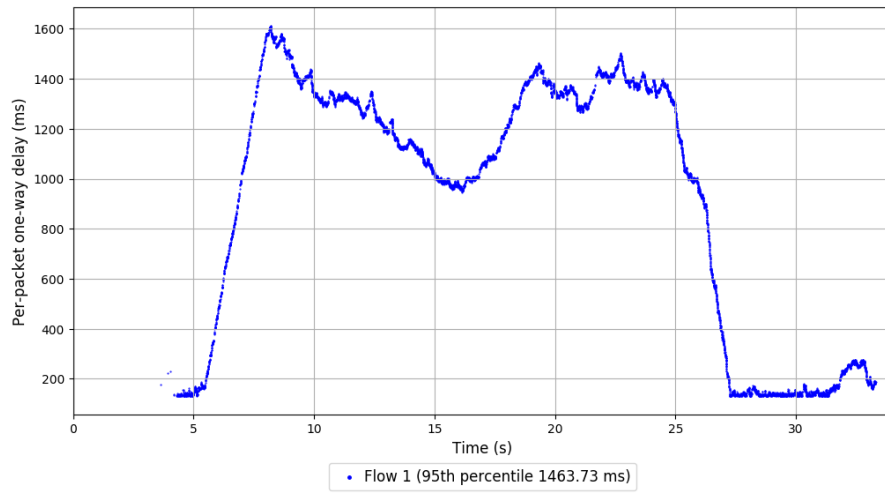
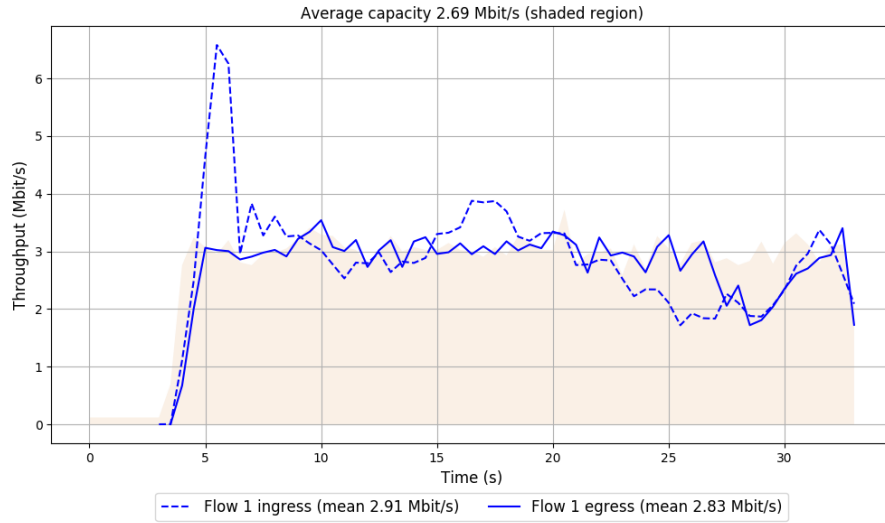
-- Flow 1:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 1463.734 ms

Loss rate: 3.41%

Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-27 06:23:33

End at: 2018-02-27 06:24:03

Below is generated by plot.py at 2018-02-27 07:52:34

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.79 Mbit/s (103.6% utilization)

95th percentile per-packet one-way delay: 1439.642 ms

Loss rate: 3.59%

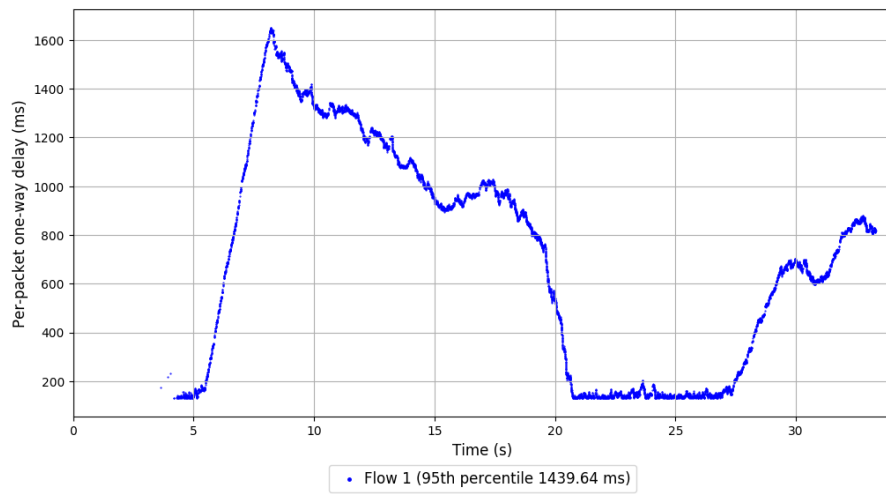
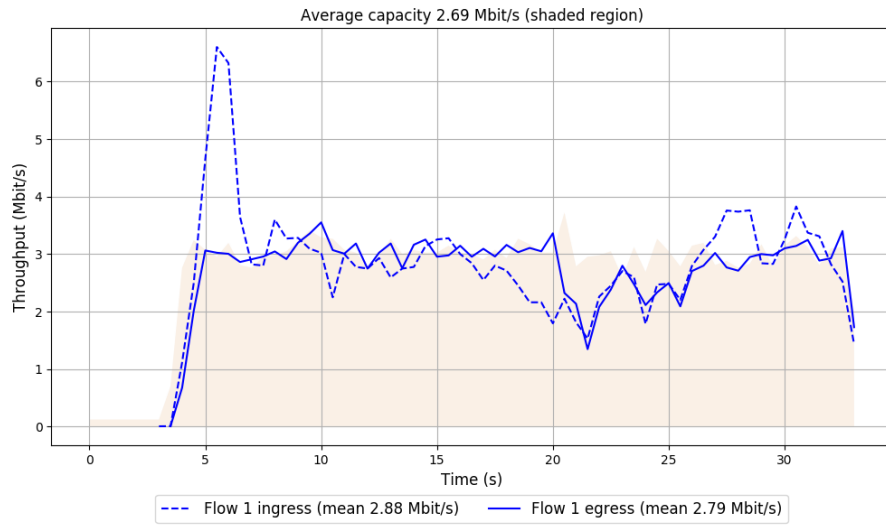
-- Flow 1:

Average throughput: 2.79 Mbit/s

95th percentile per-packet one-way delay: 1439.642 ms

Loss rate: 3.59%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-27 06:33:45

End at: 2018-02-27 06:34:15

Below is generated by plot.py at 2018-02-27 07:52:36

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.81 Mbit/s (104.4% utilization)

95th percentile per-packet one-way delay: 1774.264 ms

Loss rate: 12.10%

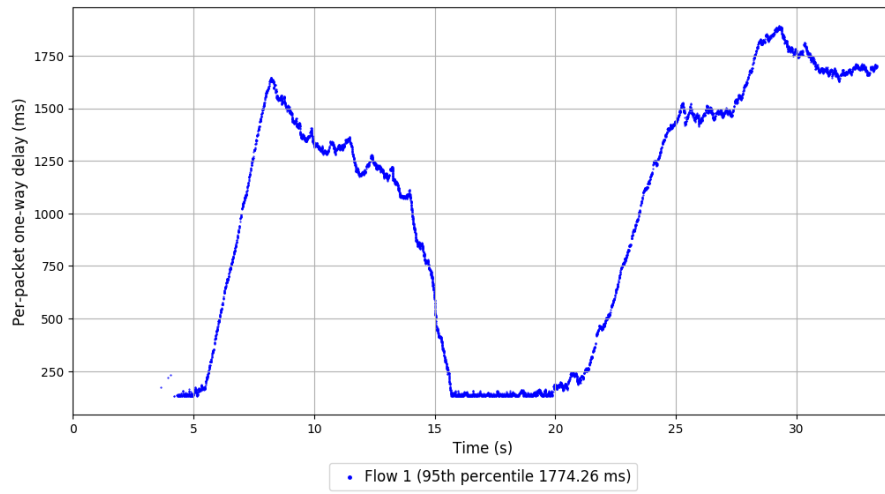
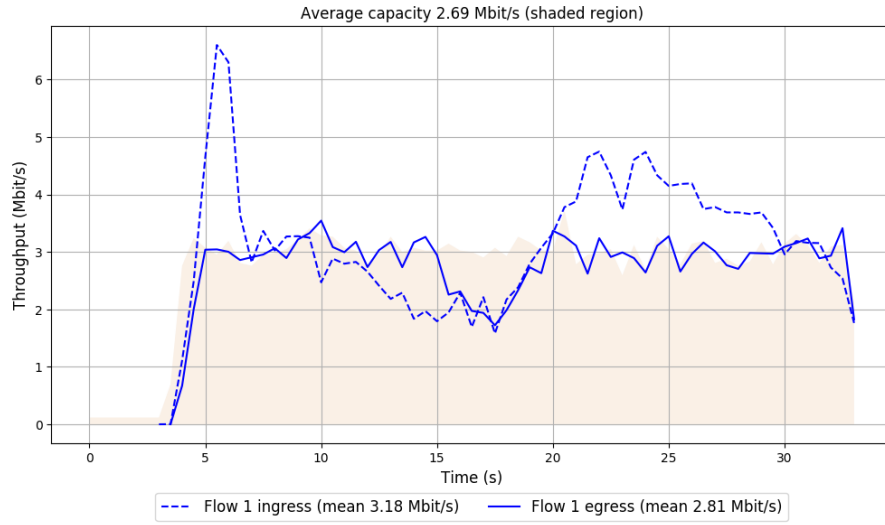
-- Flow 1:

Average throughput: 2.81 Mbit/s

95th percentile per-packet one-way delay: 1774.264 ms

Loss rate: 12.10%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-27 06:43:57

End at: 2018-02-27 06:44:27

Below is generated by plot.py at 2018-02-27 07:52:37

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.69 Mbit/s (99.8% utilization)

95th percentile per-packet one-way delay: 1447.090 ms

Loss rate: 2.24%

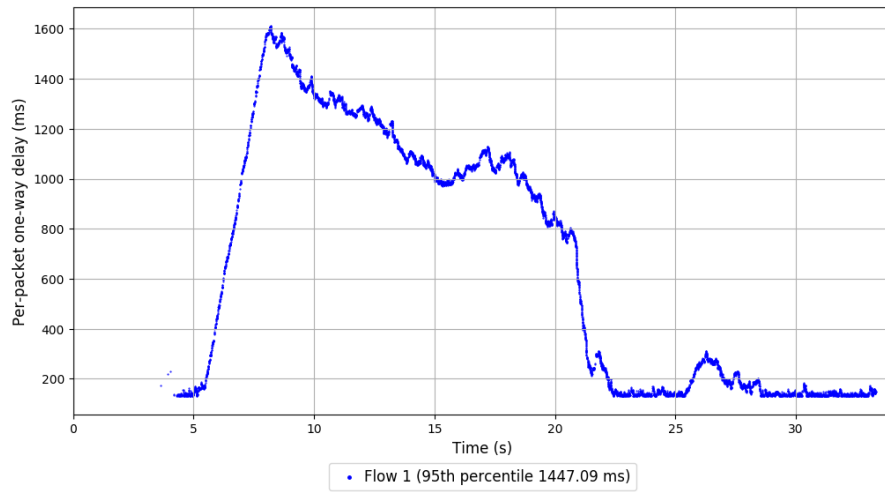
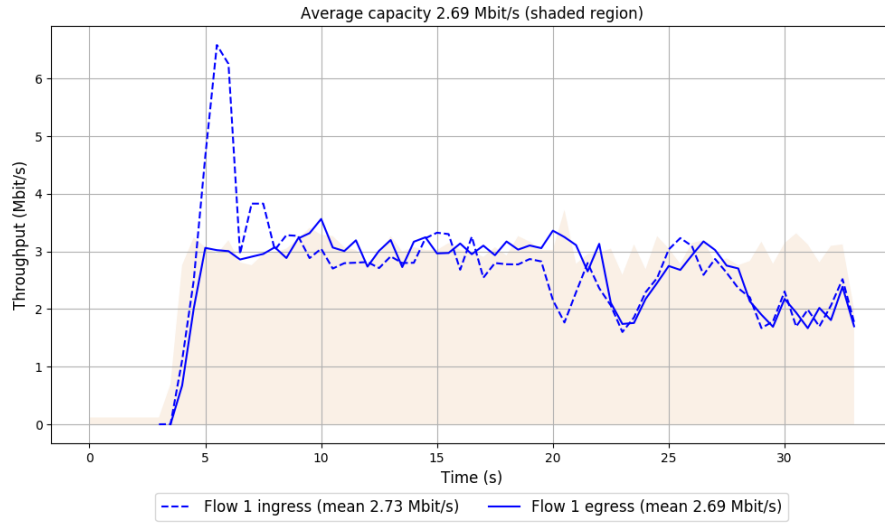
-- Flow 1:

Average throughput: 2.69 Mbit/s

95th percentile per-packet one-way delay: 1447.090 ms

Loss rate: 2.24%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-27 06:54:09

End at: 2018-02-27 06:54:39

Below is generated by plot.py at 2018-02-27 07:52:37

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.82 Mbit/s (104.9% utilization)

95th percentile per-packet one-way delay: 1508.081 ms

Loss rate: 3.37%

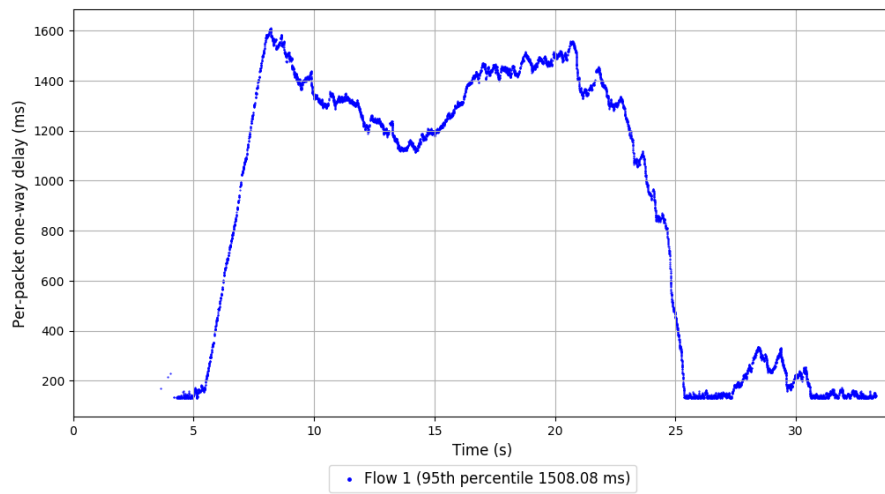
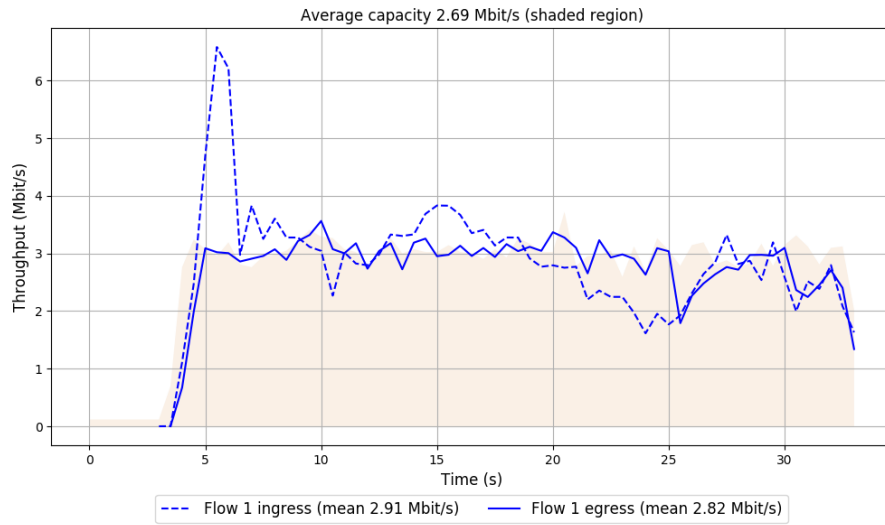
-- Flow 1:

Average throughput: 2.82 Mbit/s

95th percentile per-packet one-way delay: 1508.081 ms

Loss rate: 3.37%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-27 07:04:20

End at: 2018-02-27 07:04:50

Below is generated by plot.py at 2018-02-27 07:52:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.82 Mbit/s (104.8% utilization)

95th percentile per-packet one-way delay: 1477.195 ms

Loss rate: 3.25%

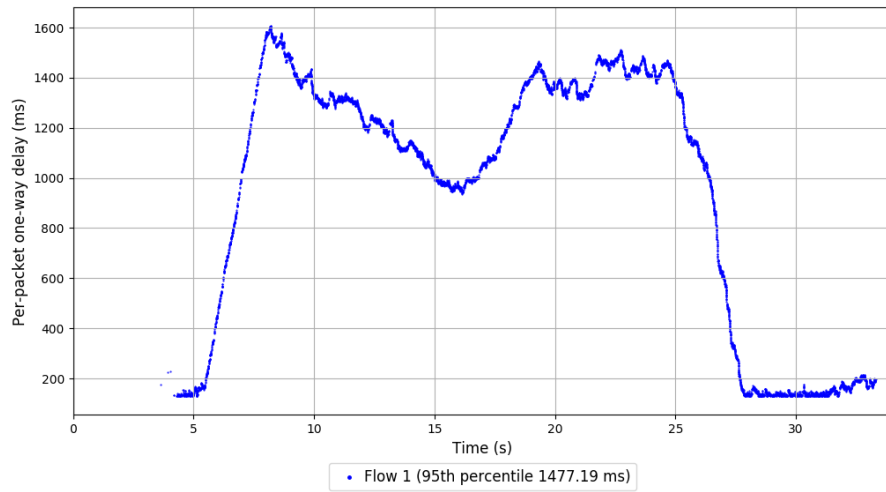
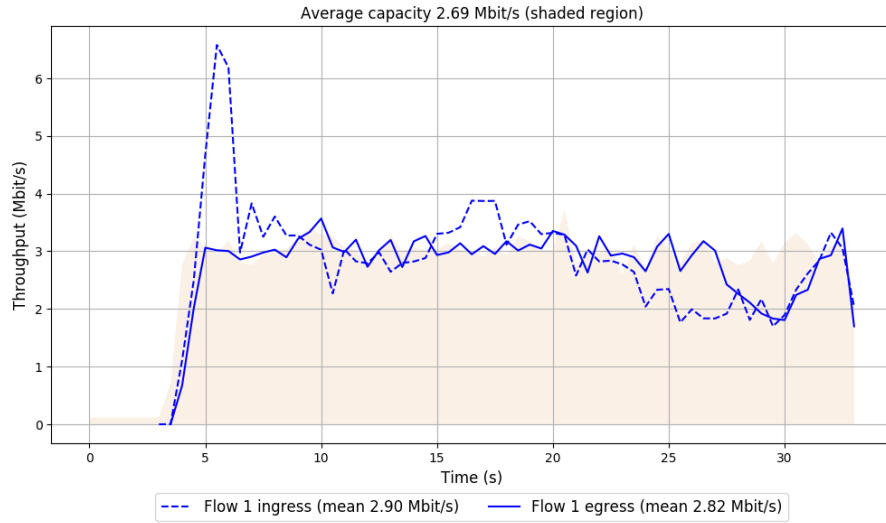
-- Flow 1:

Average throughput: 2.82 Mbit/s

95th percentile per-packet one-way delay: 1477.195 ms

Loss rate: 3.25%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-27 07:14:32

End at: 2018-02-27 07:15:02

Below is generated by plot.py at 2018-02-27 07:52:40

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.92 Mbit/s (108.5% utilization)

95th percentile per-packet one-way delay: 1434.407 ms

Loss rate: 3.30%

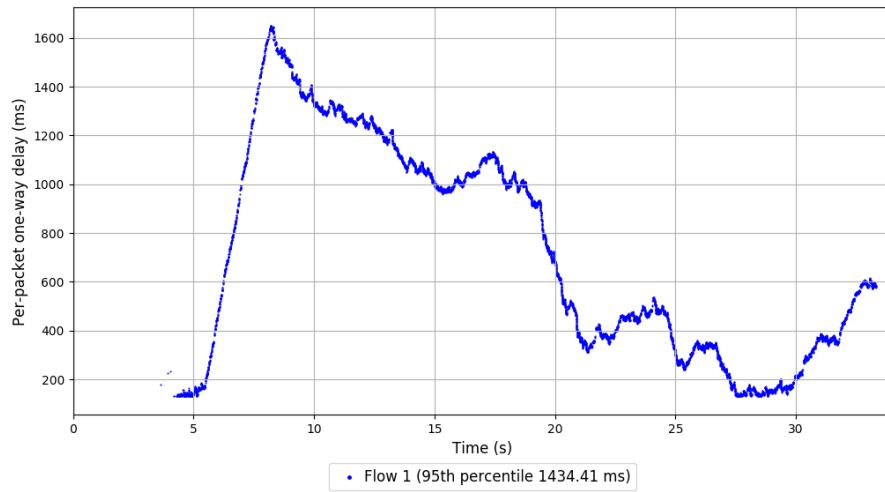
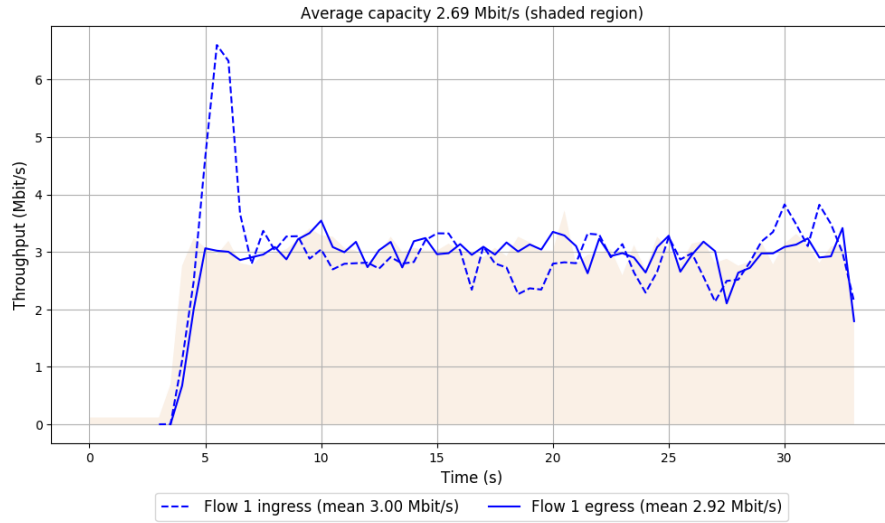
-- Flow 1:

Average throughput: 2.92 Mbit/s

95th percentile per-packet one-way delay: 1434.407 ms

Loss rate: 3.30%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-27 07:24:44

End at: 2018-02-27 07:25:14

Below is generated by plot.py at 2018-02-27 07:52:40

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.94 Mbit/s (109.1% utilization)

95th percentile per-packet one-way delay: 1546.041 ms

Loss rate: 4.37%

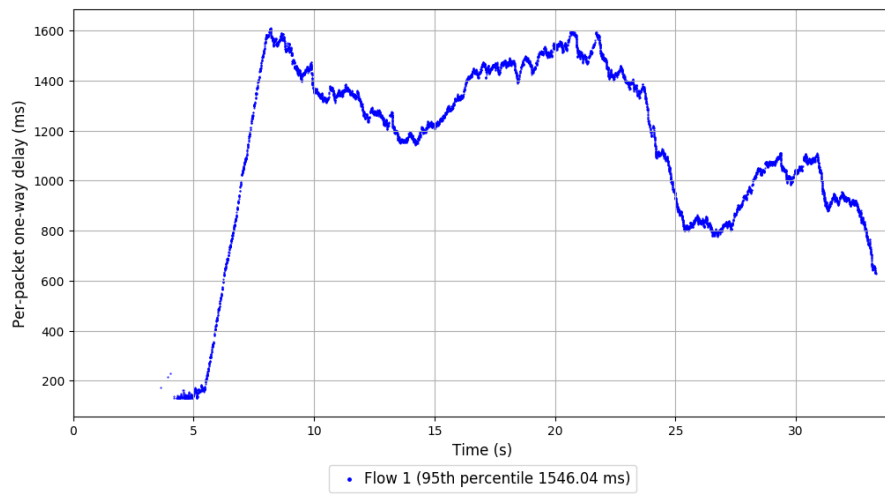
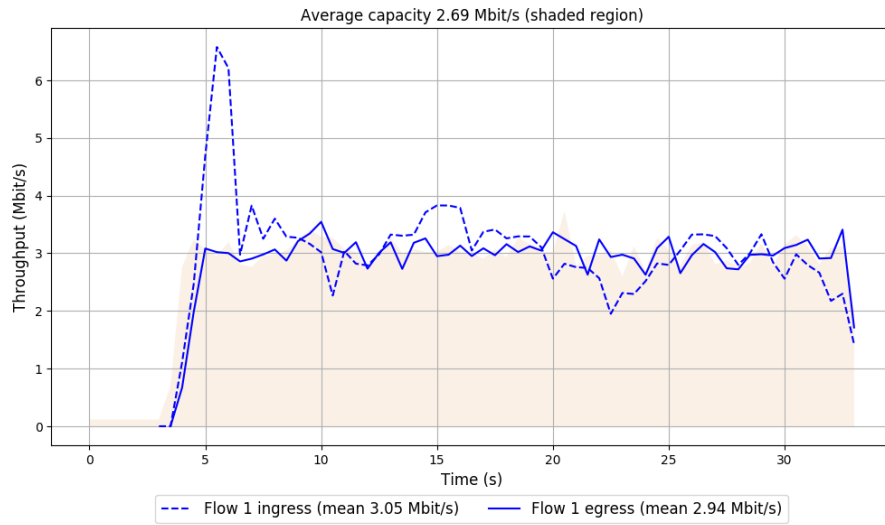
-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 1546.041 ms

Loss rate: 4.37%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-27 07:34:56

End at: 2018-02-27 07:35:26

Below is generated by plot.py at 2018-02-27 07:52:41

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.89 Mbit/s (107.5% utilization)

95th percentile per-packet one-way delay: 1475.733 ms

Loss rate: 3.18%

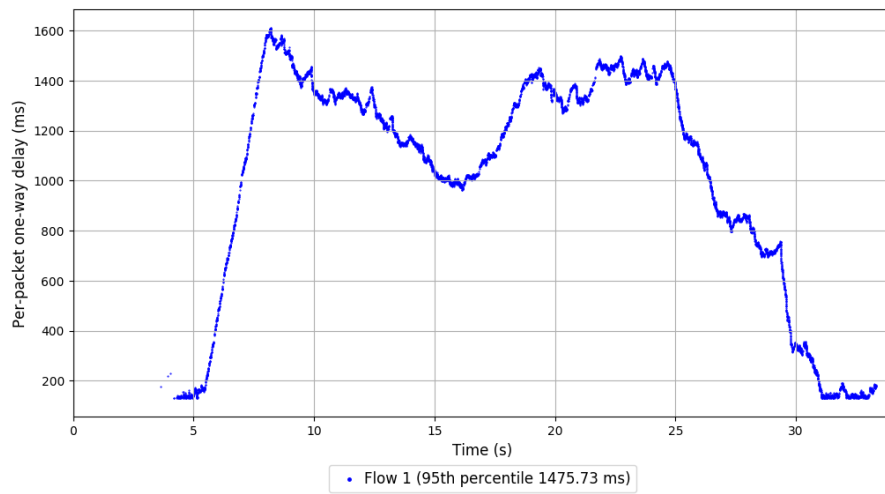
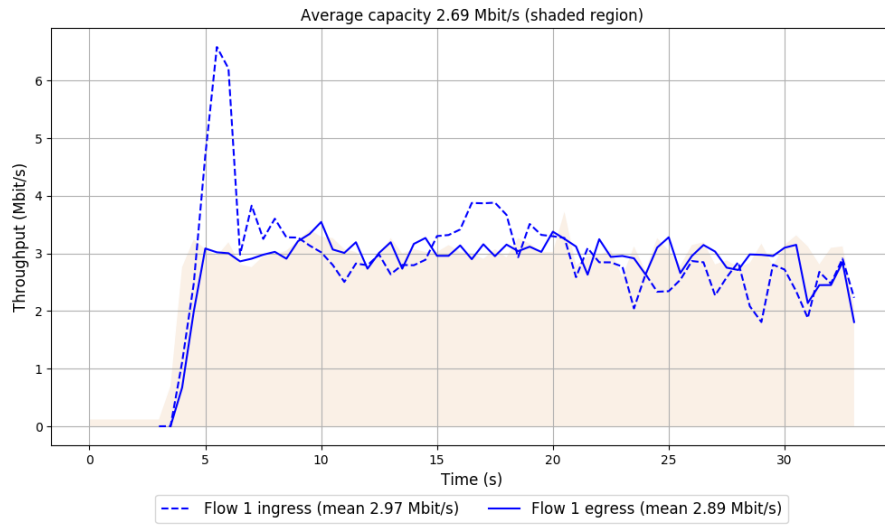
-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 1475.733 ms

Loss rate: 3.18%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-02-27 07:45:08

End at: 2018-02-27 07:45:38

Below is generated by plot.py at 2018-02-27 07:52:41

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.79 Mbit/s (103.6% utilization)

95th percentile per-packet one-way delay: 1443.266 ms

Loss rate: 2.02%

-- Flow 1:

Average throughput: 2.79 Mbit/s

95th percentile per-packet one-way delay: 1443.266 ms

Loss rate: 2.02%

Run 10: Report of Vivace-LTE — Data Link

