

Pantheon Report

Generated at 2018-03-05 20:37:36 (UTC).

Tested in mahimahi: mm-delay 27 mm-link 100.42mbps.trace 100.42mbps.trace
--uplink-queue=droptail --uplink-queue-args=packets=173

Repeated the test of 17 congestion control schemes 10 times.

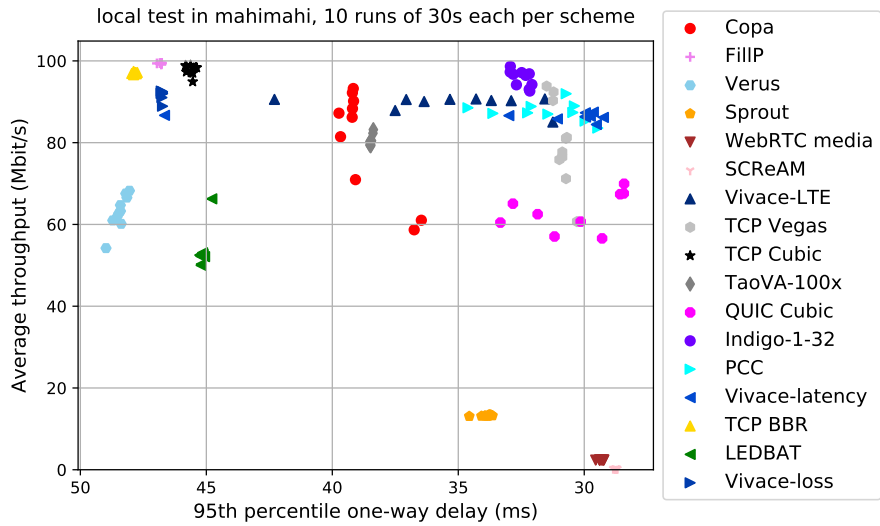
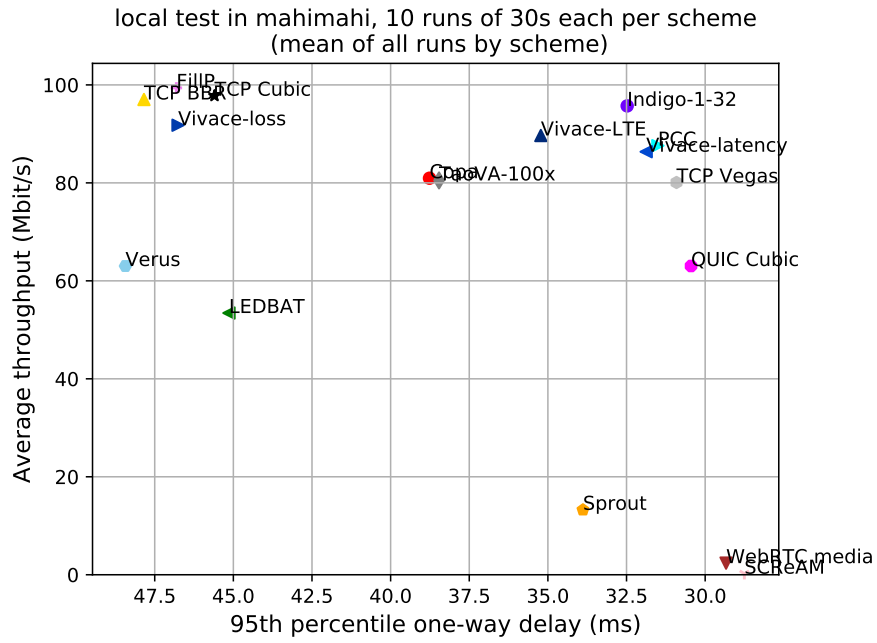
Each test lasted for 30 seconds running 1 flow.

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/fixp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ 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	97.02	47.84	2.73
TCP Cubic	10	97.78	45.60	0.20
LEDBAT	10	53.43	45.14	0.18
PCC	10	87.60	31.50	0.63
QUIC Cubic	9	63.03	30.45	0.30
SCReAM	10	0.22	28.75	0.09
WebRTC media	9	2.37	29.34	0.08
Sprout	10	13.25	33.89	0.08
TaoVA-100x	10	80.50	38.46	2.34
TCP Vegas	10	80.08	30.91	0.24
Verus	10	63.03	48.43	47.02
Copa	10	80.95	38.76	62.54
FillP	10	99.39	46.81	16.43
Indigo-1-32	10	95.71	32.48	0.18
Vivace-latency	10	86.36	31.88	0.38
Vivace-loss	10	91.77	46.76	2.02
Vivace-LTE	10	89.67	35.22	0.87

Run 1: Statistics of TCP BBR

Start at: 2018-03-05 17:42:56

End at: 2018-03-05 17:43:26

Below is generated by plot.py at 2018-03-05 19:47:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 97.17 Mbit/s (96.8% utilization)

95th percentile per-packet one-way delay: 47.741 ms

Loss rate: 2.43%

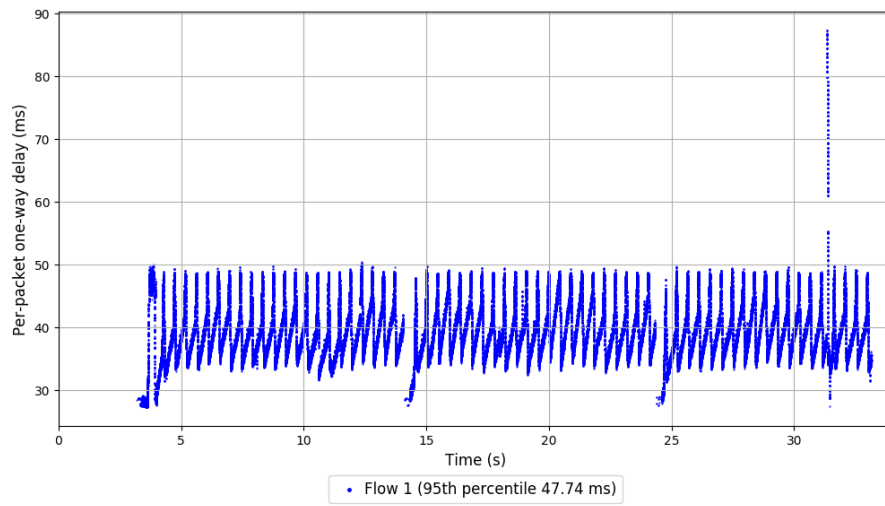
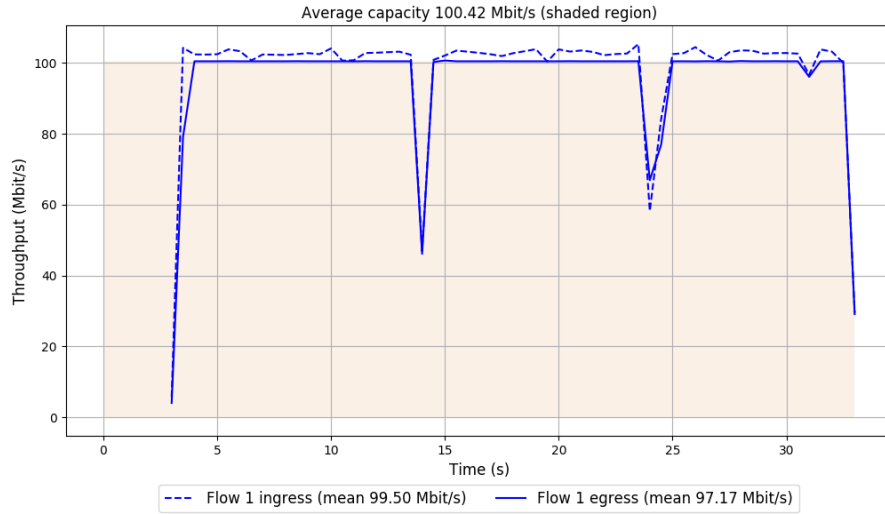
-- Flow 1:

Average throughput: 97.17 Mbit/s

95th percentile per-packet one-way delay: 47.741 ms

Loss rate: 2.43%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

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

End at: 2018-03-05 17:55:24

Below is generated by plot.py at 2018-03-05 19:47:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 96.93 Mbit/s (96.5% utilization)

95th percentile per-packet one-way delay: 47.959 ms

Loss rate: 2.80%

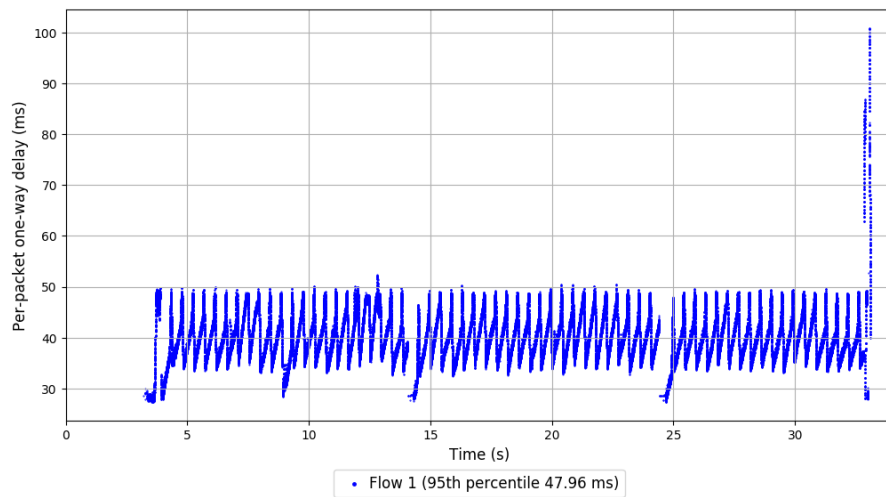
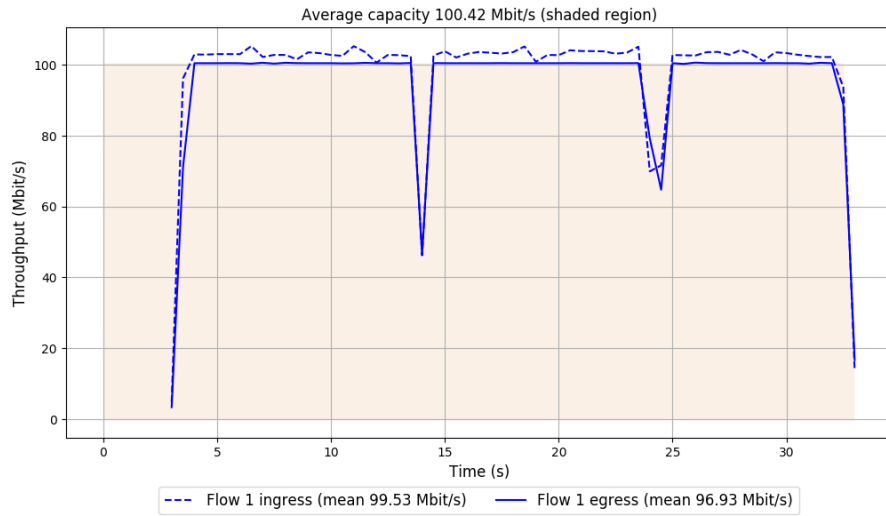
-- Flow 1:

Average throughput: 96.93 Mbit/s

95th percentile per-packet one-way delay: 47.959 ms

Loss rate: 2.80%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-03-05 18:07:02

End at: 2018-03-05 18:07:32

Below is generated by plot.py at 2018-03-05 19:47:55

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 97.09 Mbit/s (96.7% utilization)

95th percentile per-packet one-way delay: 47.811 ms

Loss rate: 2.75%

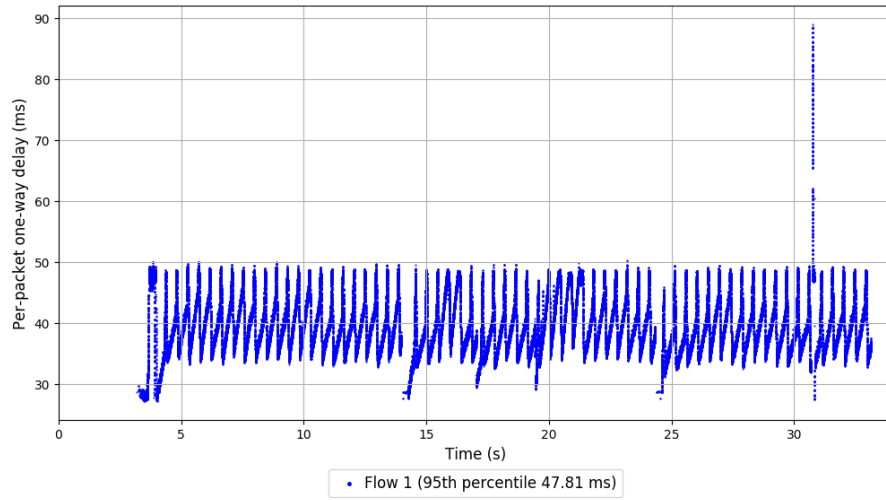
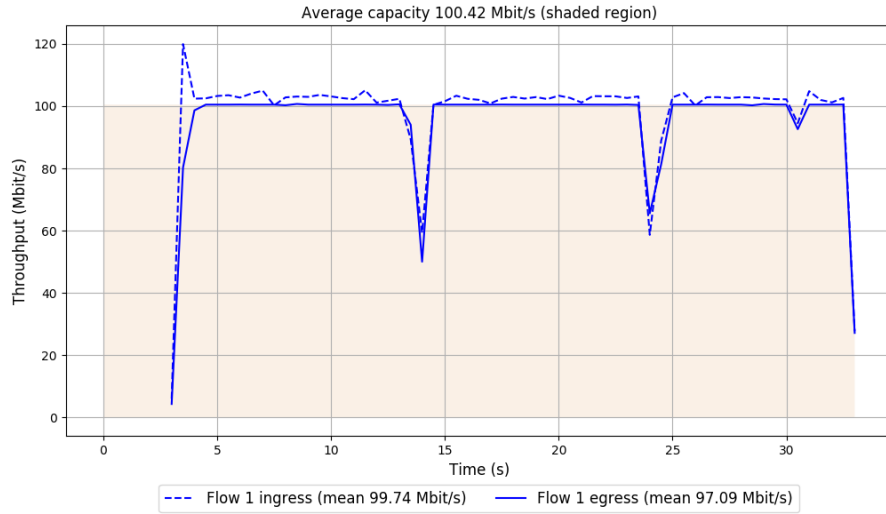
-- Flow 1:

Average throughput: 97.09 Mbit/s

95th percentile per-packet one-way delay: 47.811 ms

Loss rate: 2.75%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

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

End at: 2018-03-05 18:19:25

Below is generated by plot.py at 2018-03-05 19:47:55

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 96.86 Mbit/s (96.4% utilization)

95th percentile per-packet one-way delay: 47.780 ms

Loss rate: 2.55%

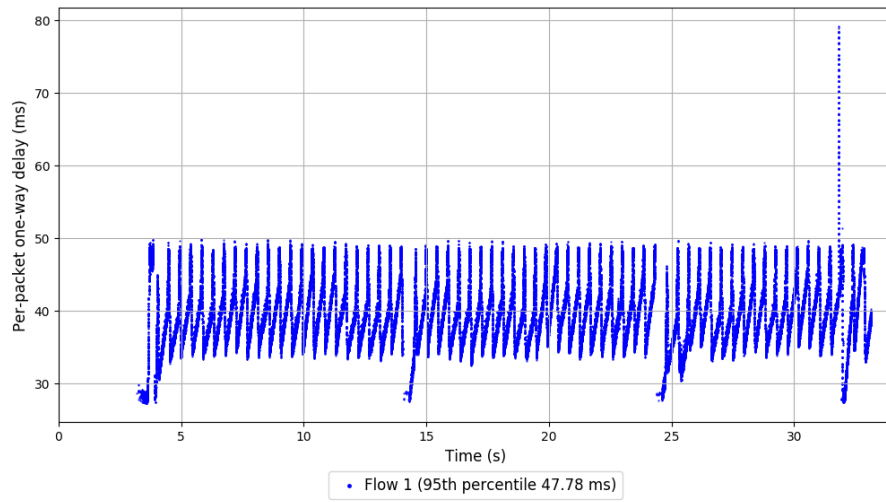
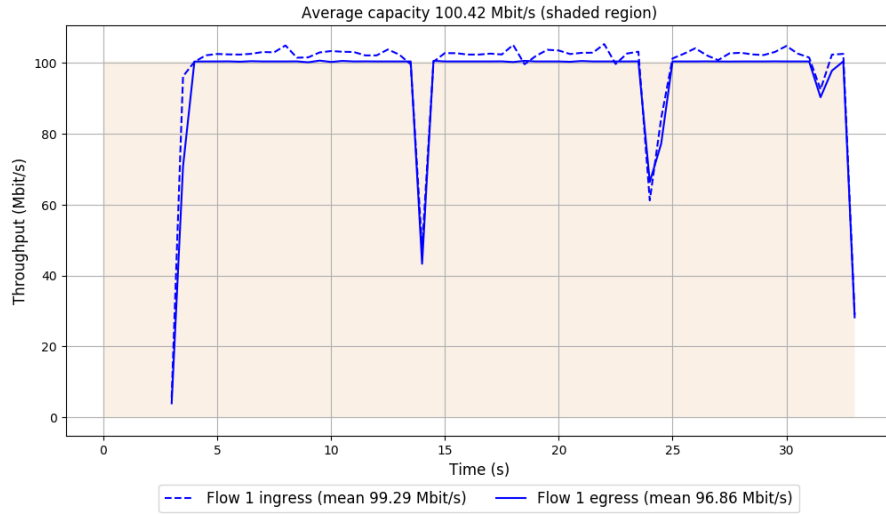
-- Flow 1:

Average throughput: 96.86 Mbit/s

95th percentile per-packet one-way delay: 47.780 ms

Loss rate: 2.55%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-03-05 18:30:59

End at: 2018-03-05 18:31:29

Below is generated by plot.py at 2018-03-05 19:47:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 97.14 Mbit/s (96.7% utilization)

95th percentile per-packet one-way delay: 47.820 ms

Loss rate: 2.52%

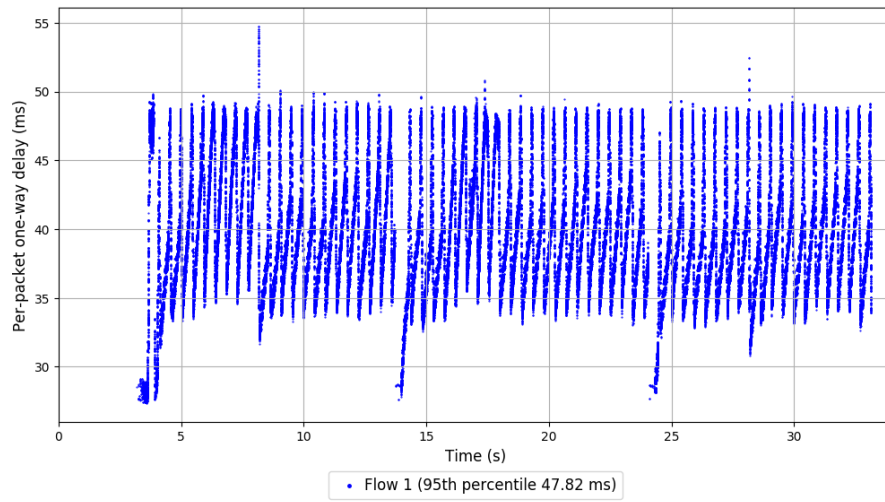
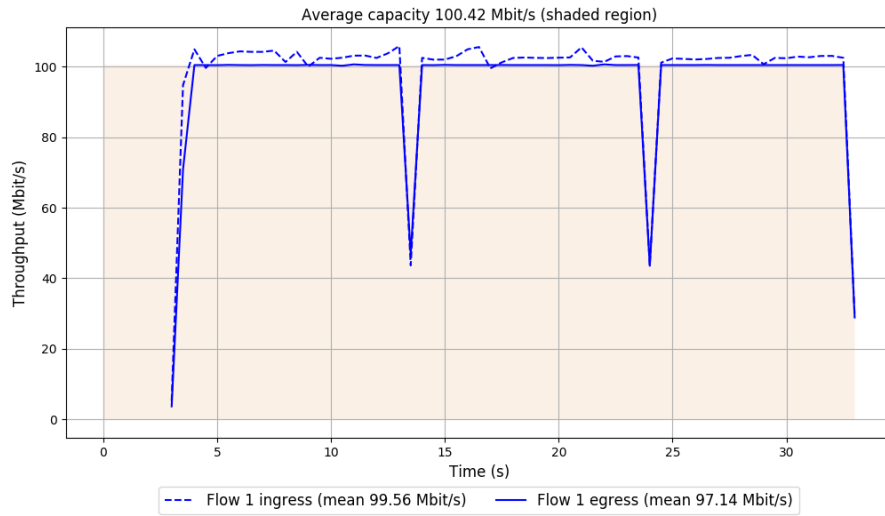
-- Flow 1:

Average throughput: 97.14 Mbit/s

95th percentile per-packet one-way delay: 47.820 ms

Loss rate: 2.52%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-03-05 18:43:02

End at: 2018-03-05 18:43:32

Below is generated by plot.py at 2018-03-05 19:47:57

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 97.42 Mbit/s (97.0% utilization)

95th percentile per-packet one-way delay: 47.887 ms

Loss rate: 3.12%

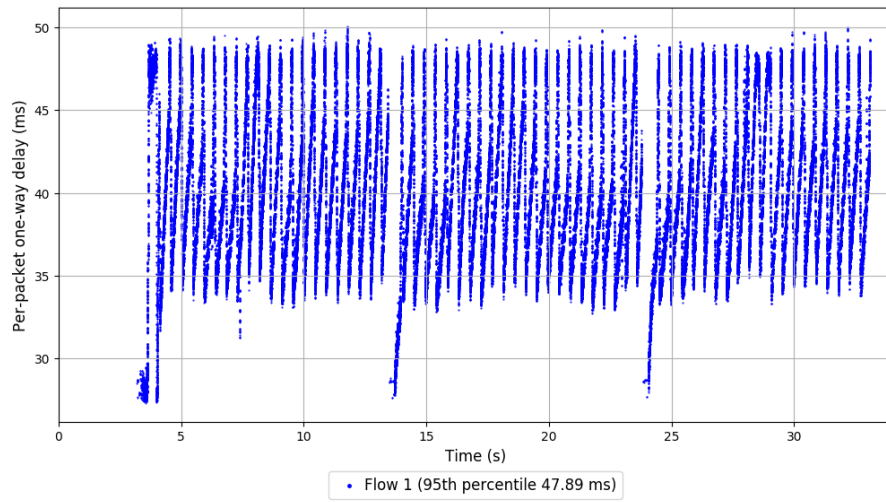
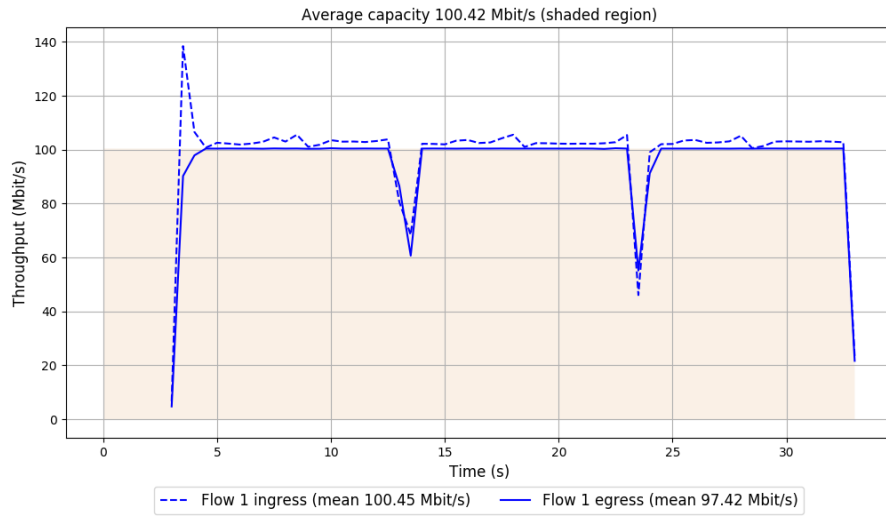
-- Flow 1:

Average throughput: 97.42 Mbit/s

95th percentile per-packet one-way delay: 47.887 ms

Loss rate: 3.12%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-03-05 18:55:11

End at: 2018-03-05 18:55:41

Below is generated by plot.py at 2018-03-05 19:47:57

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 96.62 Mbit/s (96.2% utilization)

95th percentile per-packet one-way delay: 47.886 ms

Loss rate: 2.98%

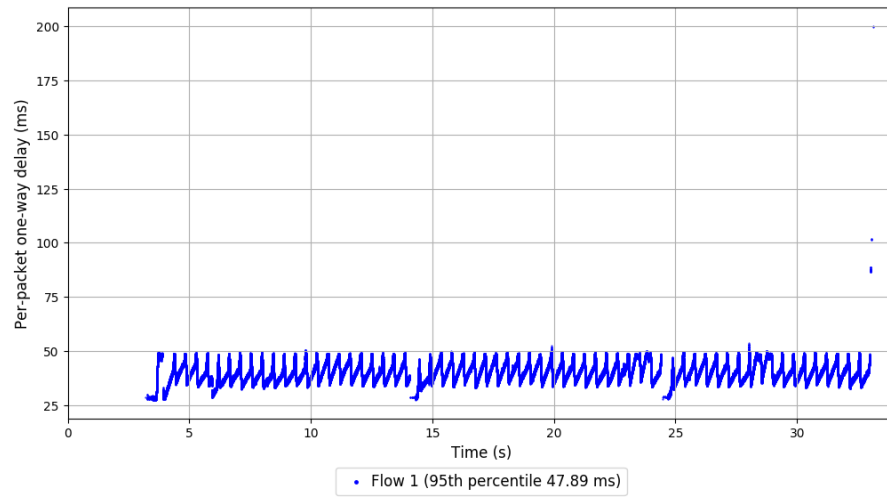
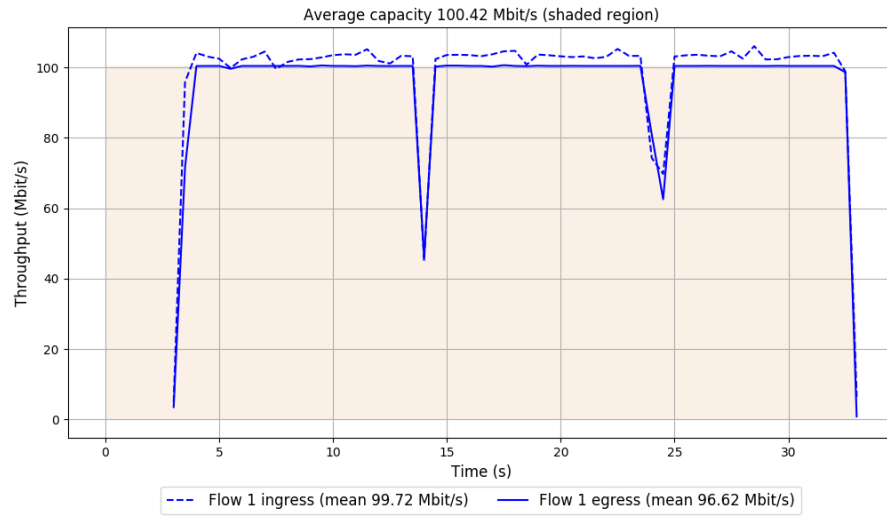
-- Flow 1:

Average throughput: 96.62 Mbit/s

95th percentile per-packet one-way delay: 47.886 ms

Loss rate: 2.98%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-03-05 19:07:00

End at: 2018-03-05 19:07:30

Below is generated by plot.py at 2018-03-05 19:47:57

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 96.99 Mbit/s (96.6% utilization)

95th percentile per-packet one-way delay: 47.870 ms

Loss rate: 2.67%

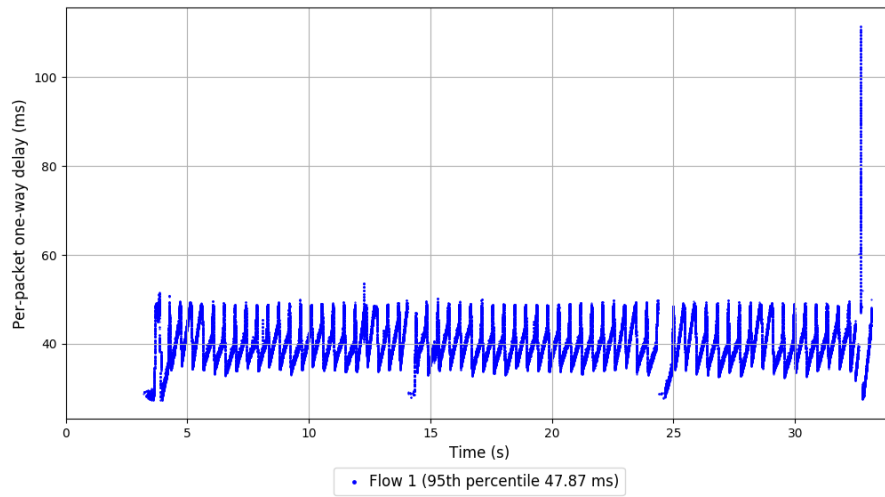
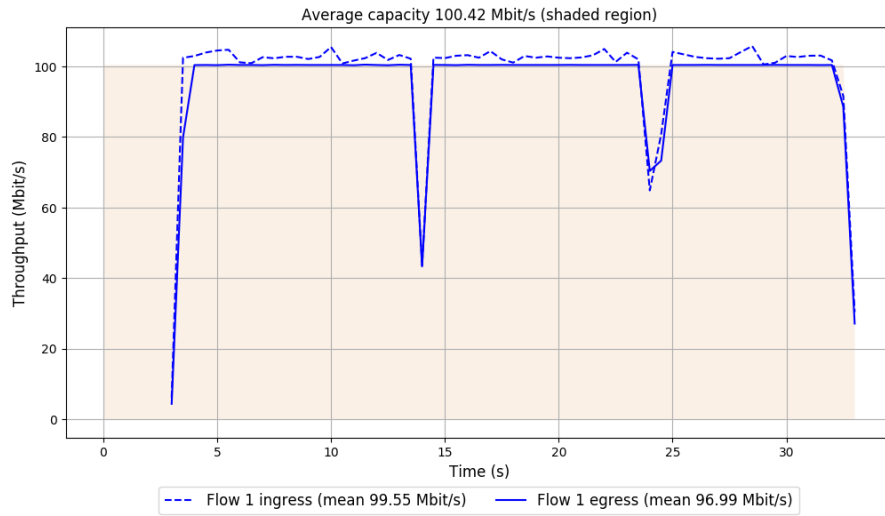
-- Flow 1:

Average throughput: 96.99 Mbit/s

95th percentile per-packet one-way delay: 47.870 ms

Loss rate: 2.67%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

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

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

Below is generated by plot.py at 2018-03-05 19:50:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 96.90 Mbit/s (96.5% utilization)

95th percentile per-packet one-way delay: 47.870 ms

Loss rate: 3.01%

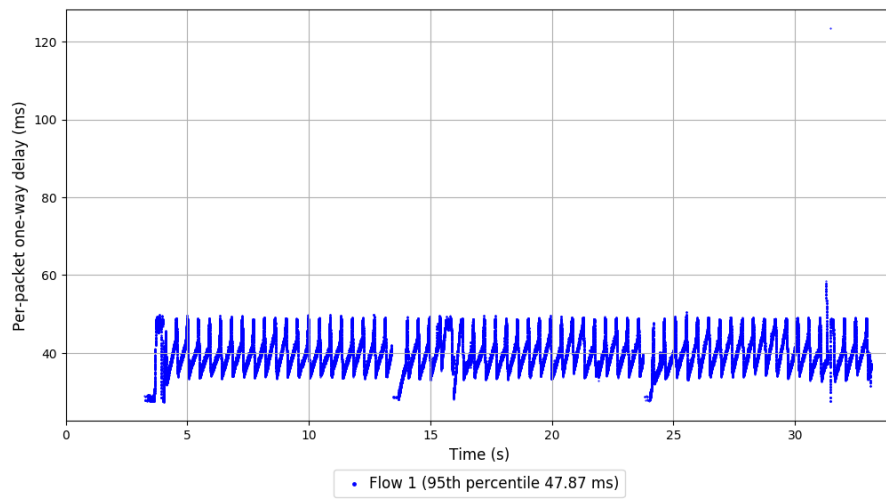
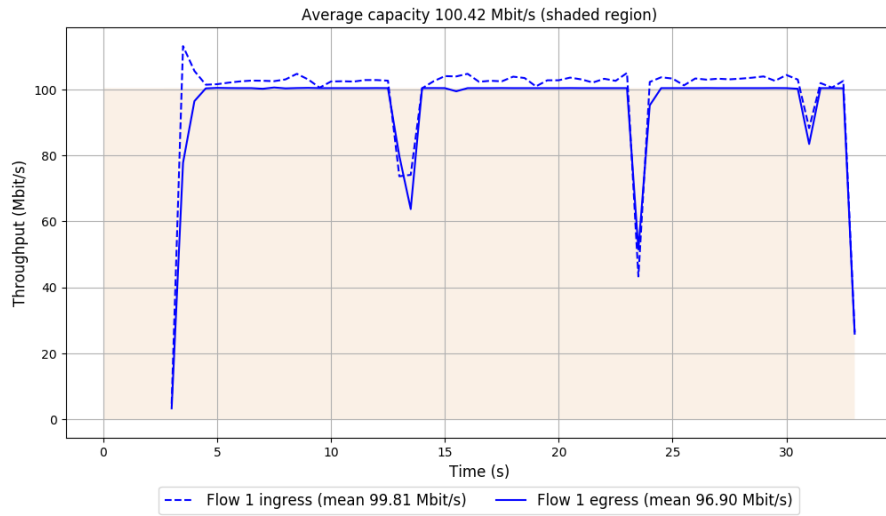
-- Flow 1:

Average throughput: 96.90 Mbit/s

95th percentile per-packet one-way delay: 47.870 ms

Loss rate: 3.01%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-03-05 19:31:03

End at: 2018-03-05 19:31:33

Below is generated by plot.py at 2018-03-05 19:50:27

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 97.12 Mbit/s (96.7% utilization)

95th percentile per-packet one-way delay: 47.795 ms

Loss rate: 2.45%

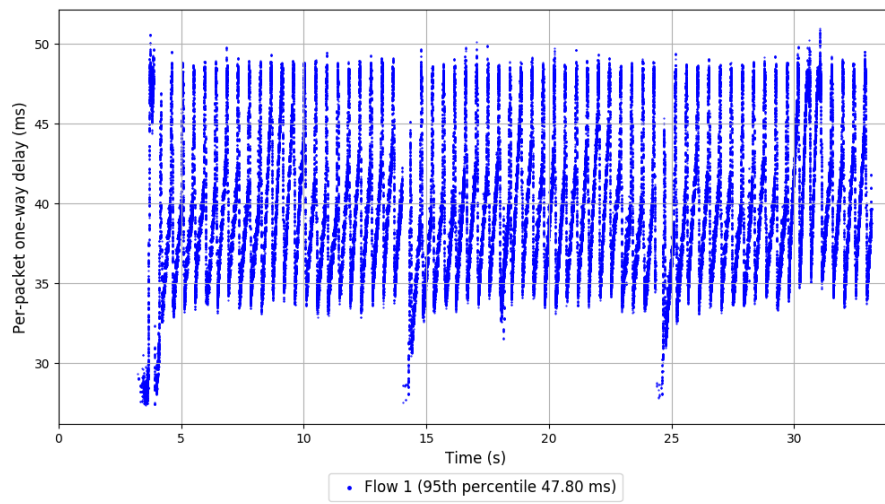
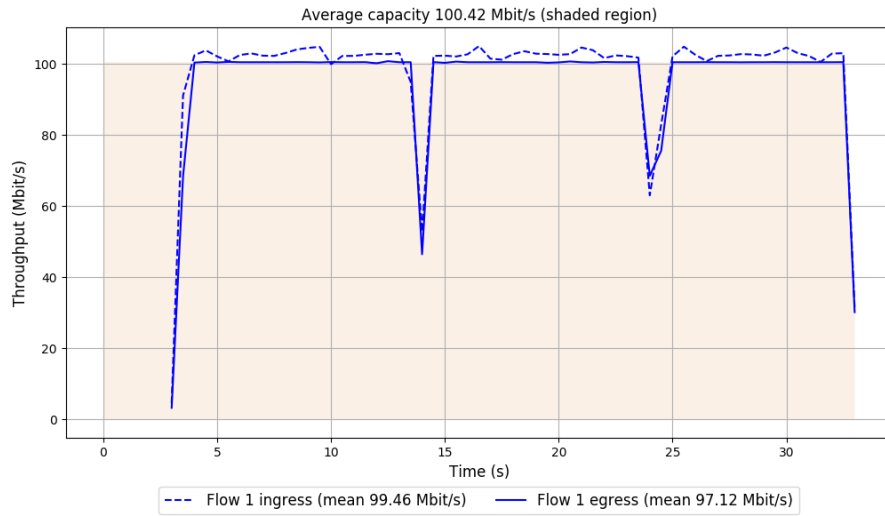
-- Flow 1:

Average throughput: 97.12 Mbit/s

95th percentile per-packet one-way delay: 47.795 ms

Loss rate: 2.45%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-03-05 17:52:18

End at: 2018-03-05 17:52:48

Below is generated by plot.py at 2018-03-05 19:50:30

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 98.89 Mbit/s (98.5% utilization)

95th percentile per-packet one-way delay: 45.825 ms

Loss rate: 0.23%

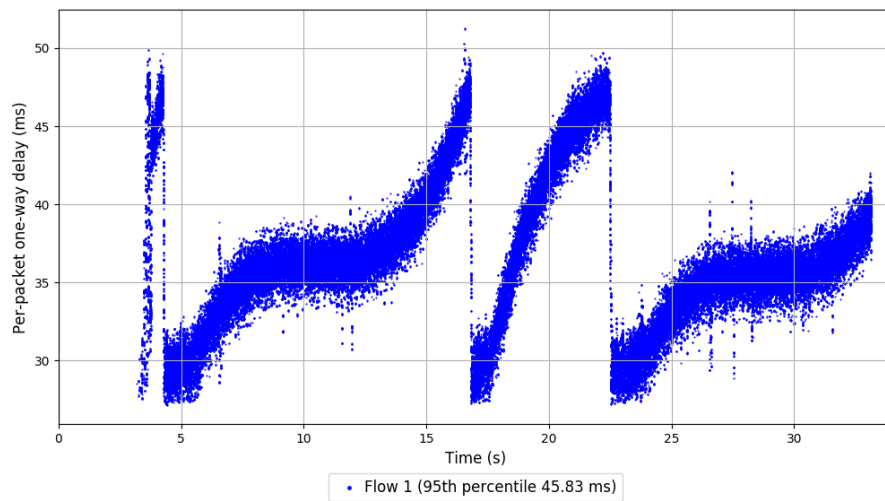
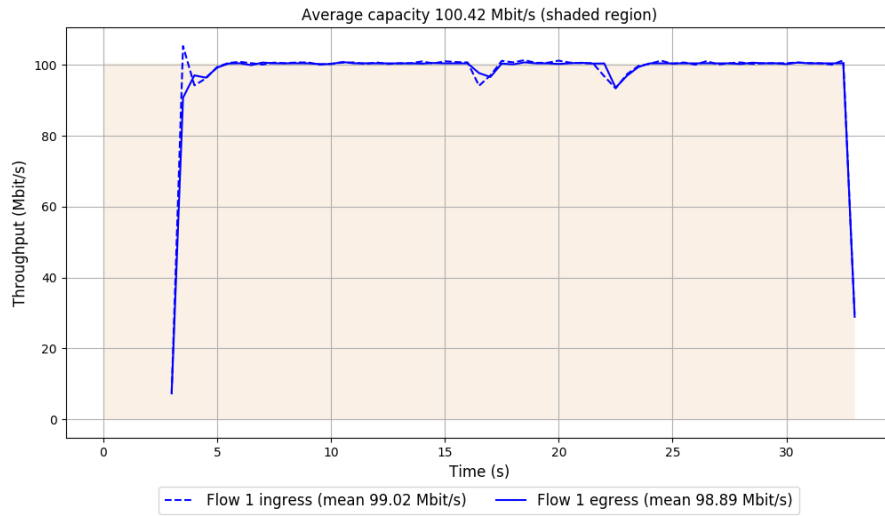
-- Flow 1:

Average throughput: 98.89 Mbit/s

95th percentile per-packet one-way delay: 45.825 ms

Loss rate: 0.23%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-03-05 18:04:27

End at: 2018-03-05 18:04:57

Below is generated by plot.py at 2018-03-05 19:50:30

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 94.91 Mbit/s (94.5% utilization)

95th percentile per-packet one-way delay: 45.540 ms

Loss rate: 0.18%

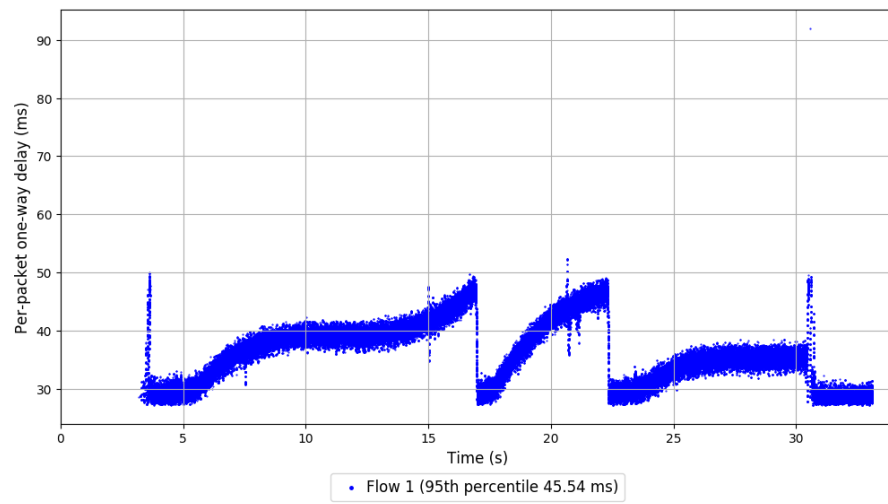
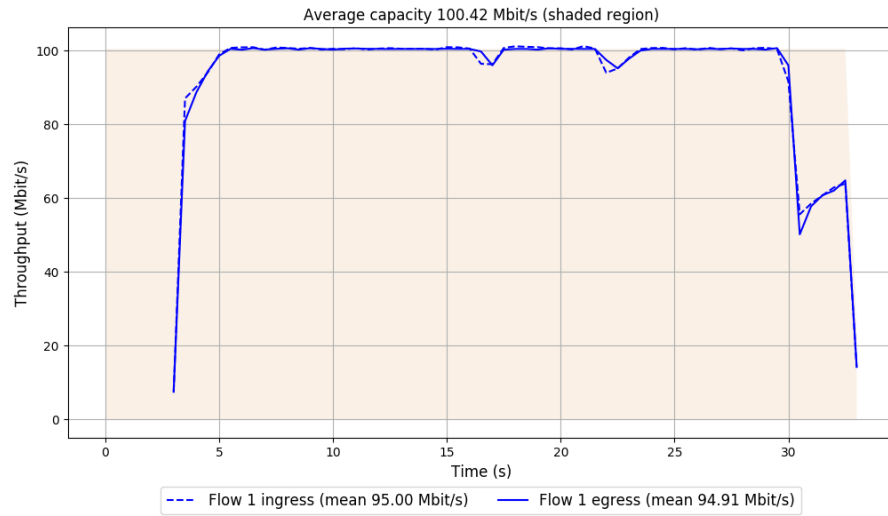
-- Flow 1:

Average throughput: 94.91 Mbit/s

95th percentile per-packet one-way delay: 45.540 ms

Loss rate: 0.18%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

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

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

Below is generated by plot.py at 2018-03-05 19:50:30

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 97.02 Mbit/s (96.6% utilization)

95th percentile per-packet one-way delay: 45.537 ms

Loss rate: 0.23%

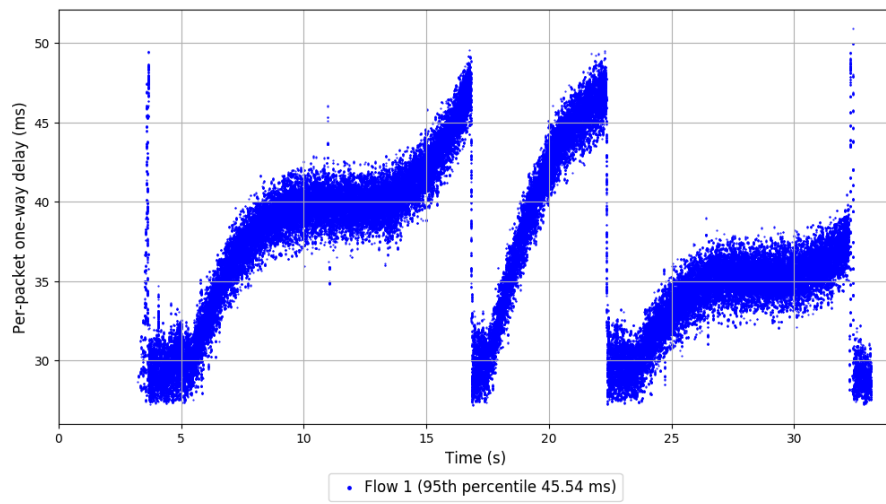
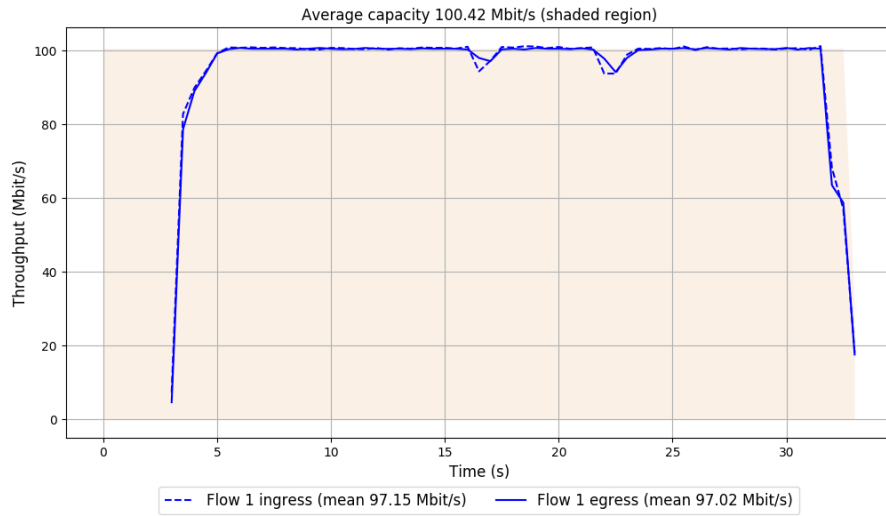
-- Flow 1:

Average throughput: 97.02 Mbit/s

95th percentile per-packet one-way delay: 45.537 ms

Loss rate: 0.23%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-03-05 18:28:23

End at: 2018-03-05 18:28:53

Below is generated by plot.py at 2018-03-05 19:50:30

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 98.26 Mbit/s (97.8% utilization)

95th percentile per-packet one-way delay: 45.496 ms

Loss rate: 0.14%

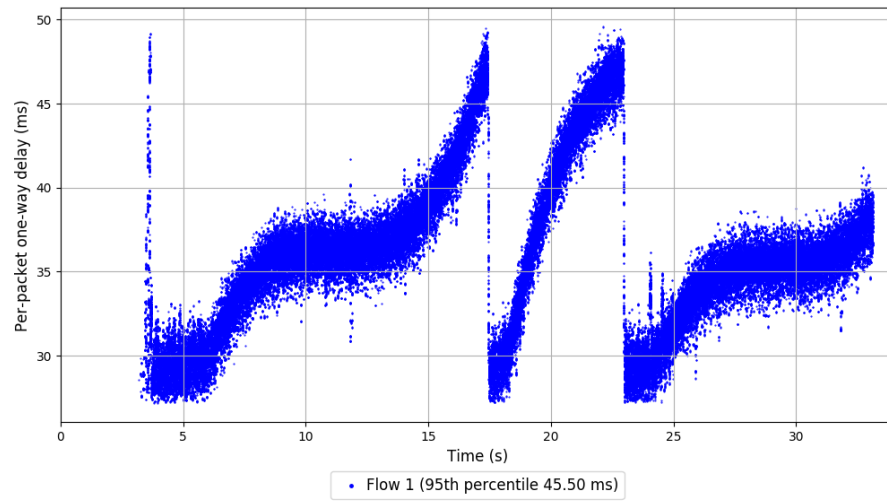
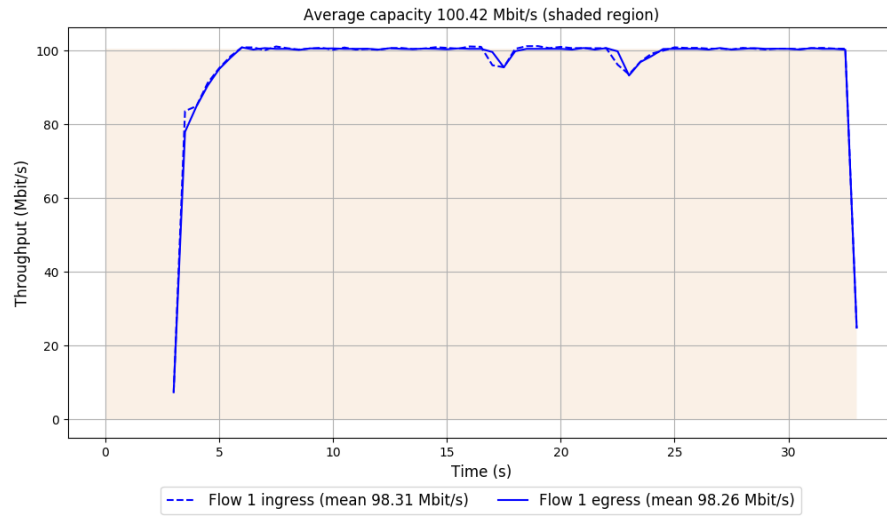
-- Flow 1:

Average throughput: 98.26 Mbit/s

95th percentile per-packet one-way delay: 45.496 ms

Loss rate: 0.14%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-03-05 18:40:27

End at: 2018-03-05 18:40:57

Below is generated by plot.py at 2018-03-05 19:50:30

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 98.40 Mbit/s (98.0% utilization)

95th percentile per-packet one-way delay: 45.411 ms

Loss rate: 0.16%

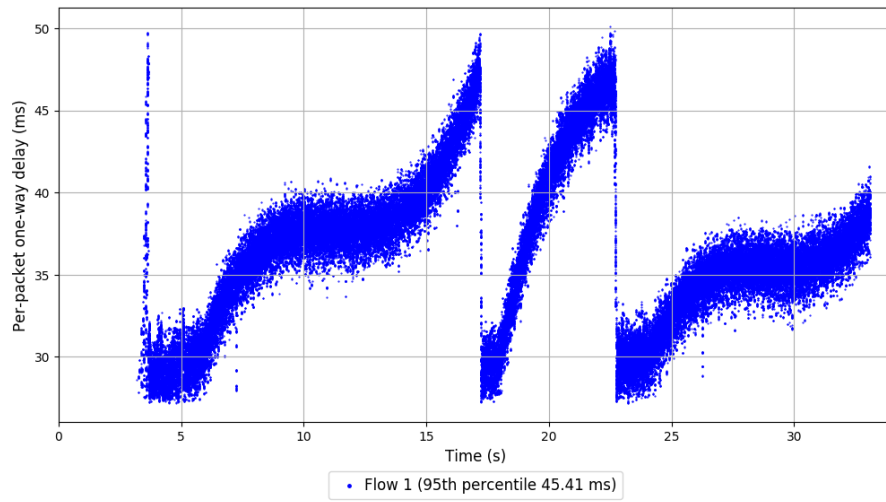
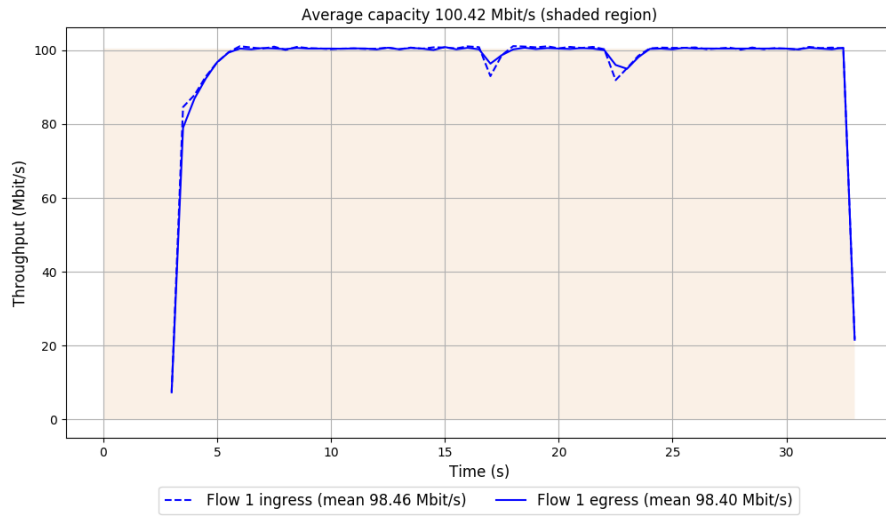
-- Flow 1:

Average throughput: 98.40 Mbit/s

95th percentile per-packet one-way delay: 45.411 ms

Loss rate: 0.16%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-03-05 18:52:35

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

Below is generated by plot.py at 2018-03-05 19:50:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 98.94 Mbit/s (98.5% utilization)

95th percentile per-packet one-way delay: 45.626 ms

Loss rate: 0.27%

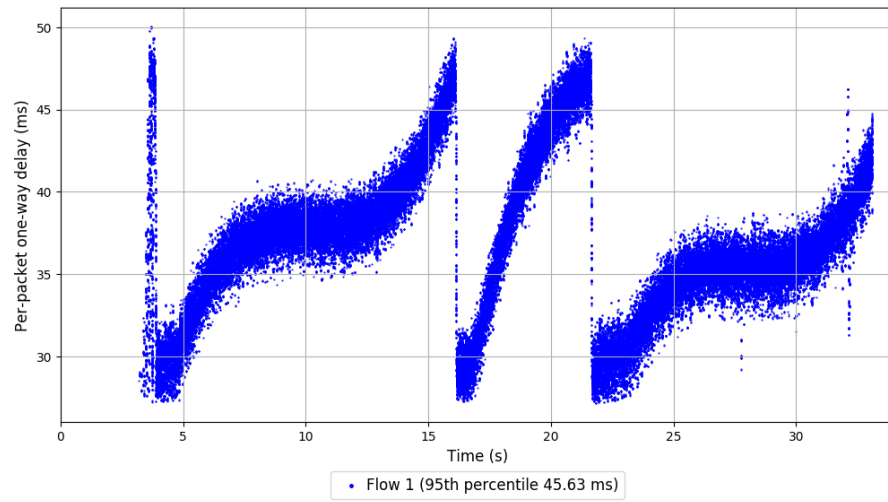
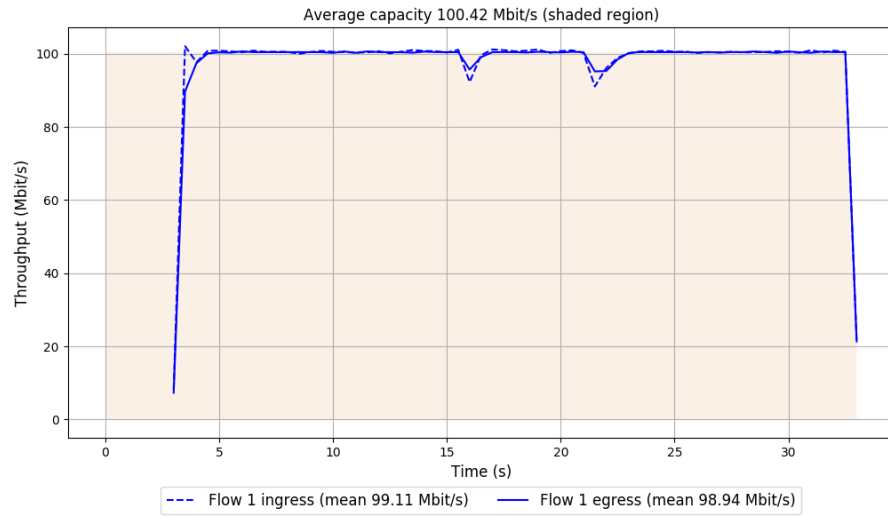
-- Flow 1:

Average throughput: 98.94 Mbit/s

95th percentile per-packet one-way delay: 45.626 ms

Loss rate: 0.27%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-03-05 19:04:24

End at: 2018-03-05 19:04:54

Below is generated by plot.py at 2018-03-05 19:52:57

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 97.32 Mbit/s (96.9% utilization)

95th percentile per-packet one-way delay: 45.791 ms

Loss rate: 0.25%

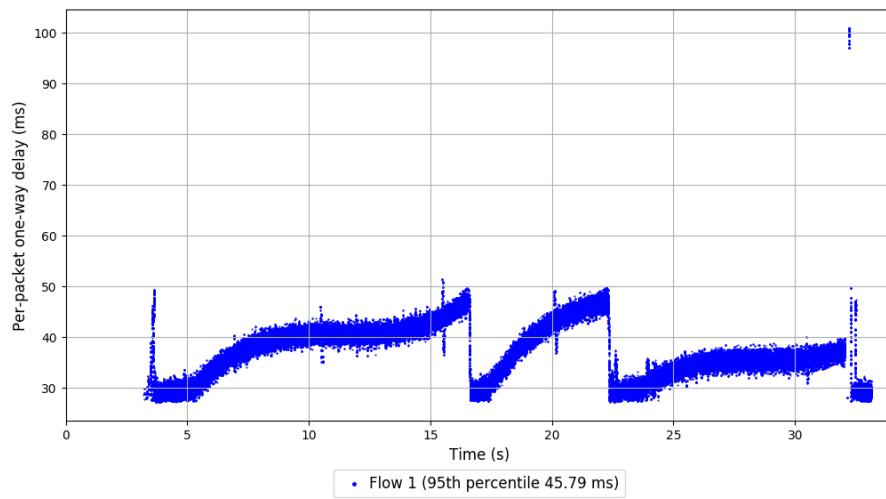
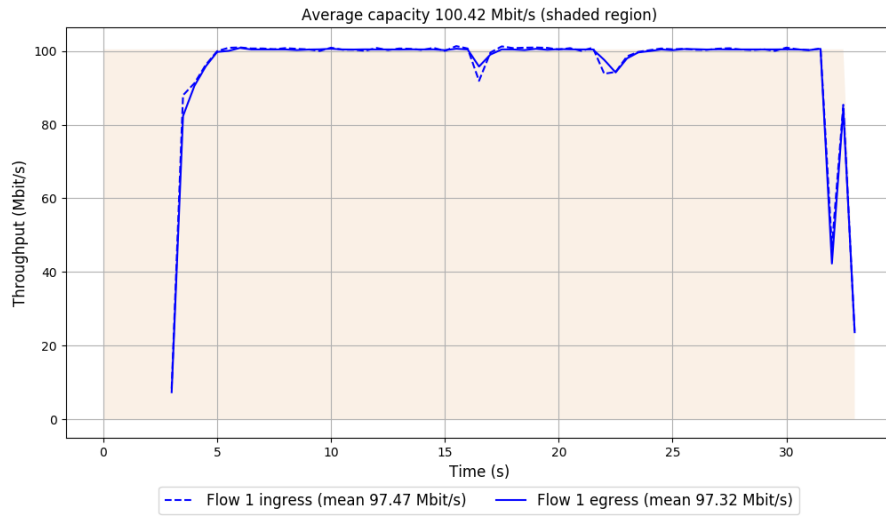
-- Flow 1:

Average throughput: 97.32 Mbit/s

95th percentile per-packet one-way delay: 45.791 ms

Loss rate: 0.25%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-03-05 19:16:26

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

Below is generated by plot.py at 2018-03-05 19:53:01

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 98.34 Mbit/s (97.9% utilization)

95th percentile per-packet one-way delay: 45.383 ms

Loss rate: 0.16%

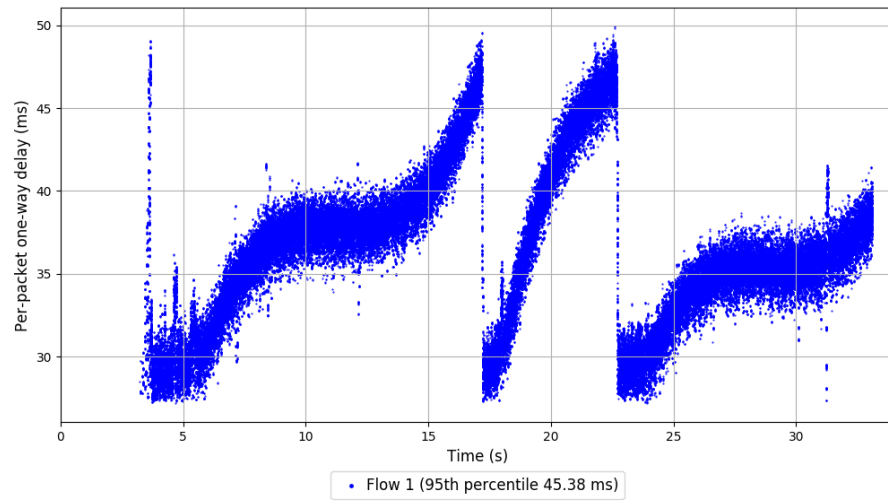
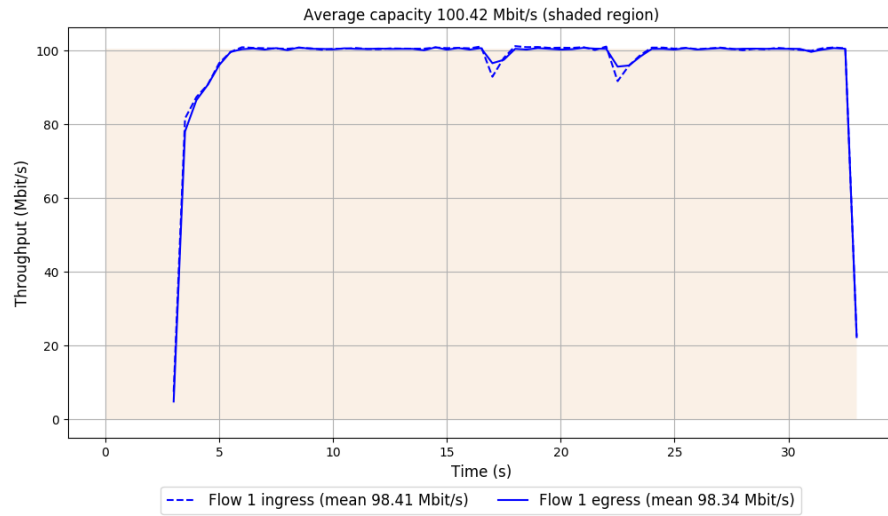
-- Flow 1:

Average throughput: 98.34 Mbit/s

95th percentile per-packet one-way delay: 45.383 ms

Loss rate: 0.16%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-03-05 19:28:29

End at: 2018-03-05 19:28:59

Below is generated by plot.py at 2018-03-05 19:53:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 98.63 Mbit/s (98.2% utilization)

95th percentile per-packet one-way delay: 45.787 ms

Loss rate: 0.17%

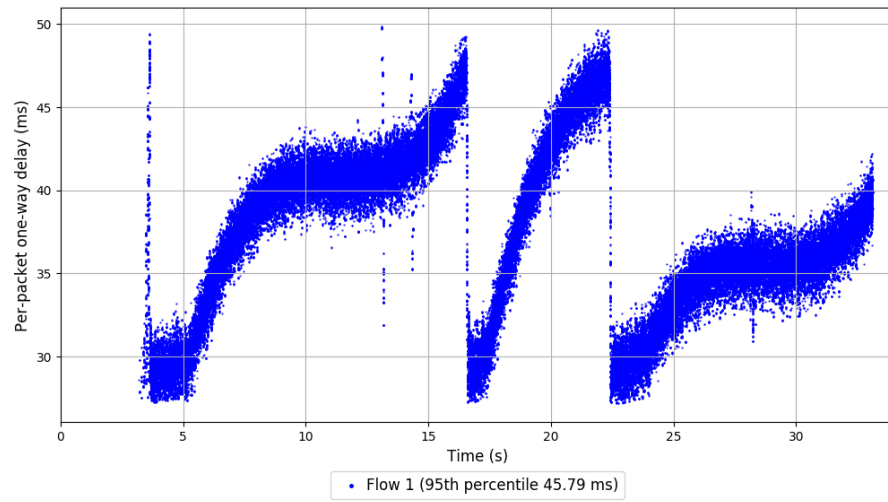
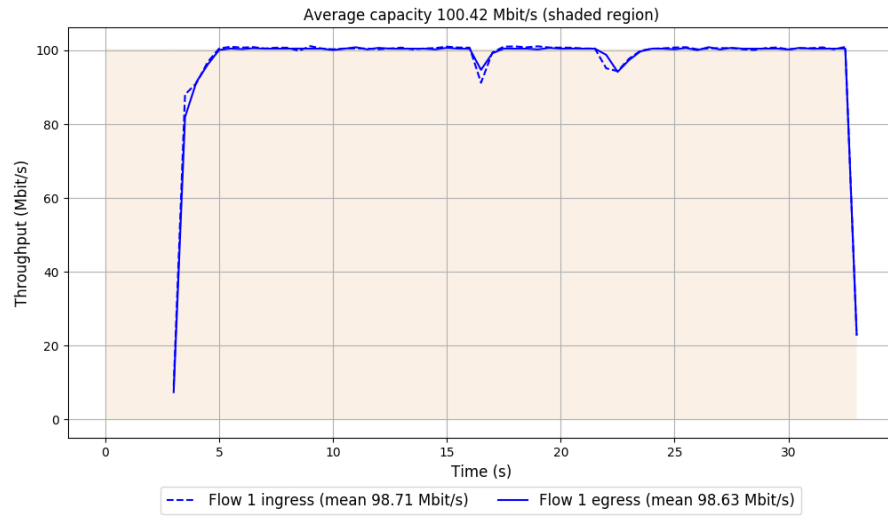
-- Flow 1:

Average throughput: 98.63 Mbit/s

95th percentile per-packet one-way delay: 45.787 ms

Loss rate: 0.17%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-03-05 19:40:16

End at: 2018-03-05 19:40:46

Below is generated by plot.py at 2018-03-05 19:53:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 97.14 Mbit/s (96.7% utilization)

95th percentile per-packet one-way delay: 45.602 ms

Loss rate: 0.24%

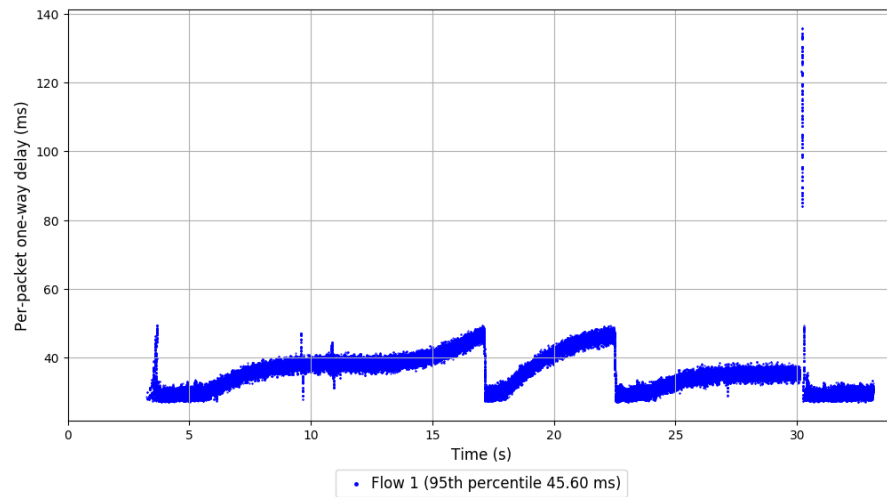
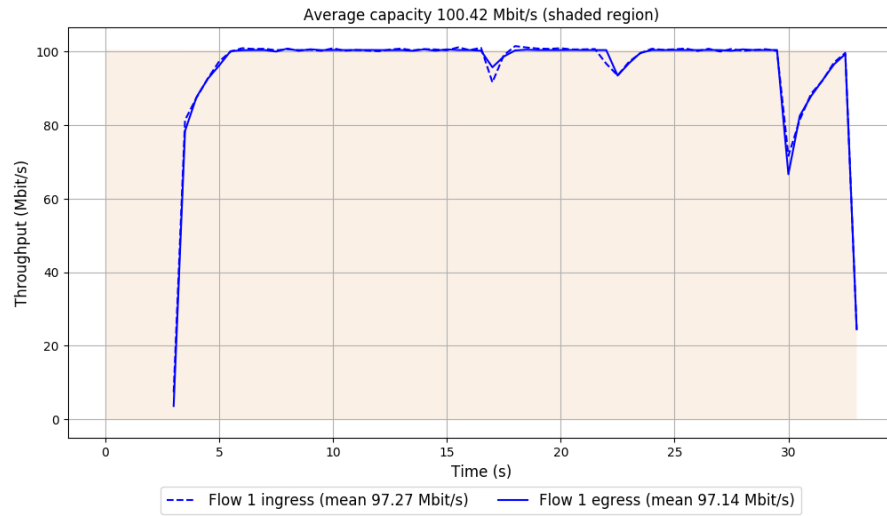
-- Flow 1:

Average throughput: 97.14 Mbit/s

95th percentile per-packet one-way delay: 45.602 ms

Loss rate: 0.24%

Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of LEDBAT

Start at: 2018-03-05 17:43:36

End at: 2018-03-05 17:44:06

Below is generated by plot.py at 2018-03-05 19:53:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 52.68 Mbit/s (52.5% utilization)

95th percentile per-packet one-way delay: 45.191 ms

Loss rate: 0.17%

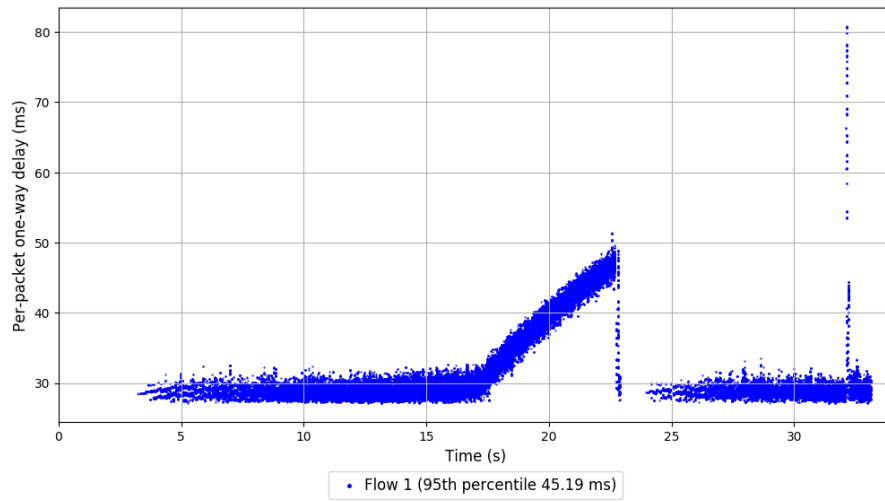
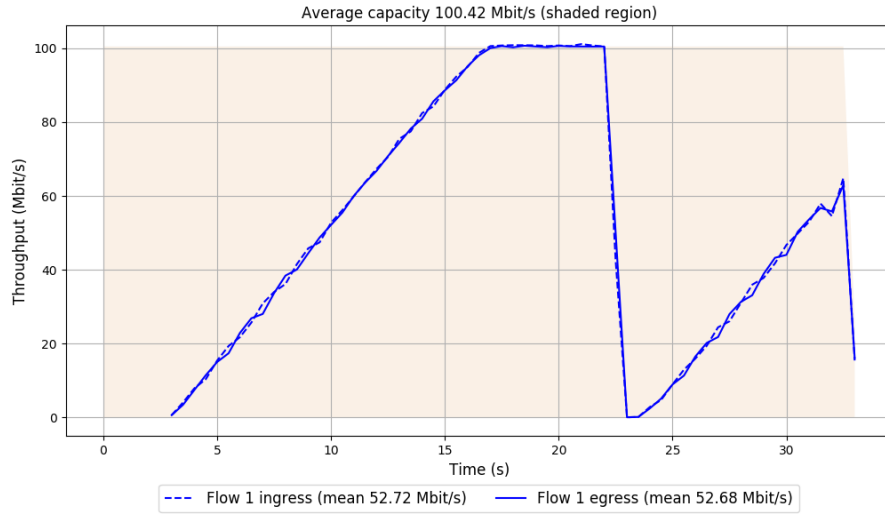
-- Flow 1:

Average throughput: 52.68 Mbit/s

95th percentile per-packet one-way delay: 45.191 ms

Loss rate: 0.17%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-03-05 17:55:34

End at: 2018-03-05 17:56:04

Below is generated by plot.py at 2018-03-05 19:53:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 52.50 Mbit/s (52.3% utilization)

95th percentile per-packet one-way delay: 45.193 ms

Loss rate: 0.20%

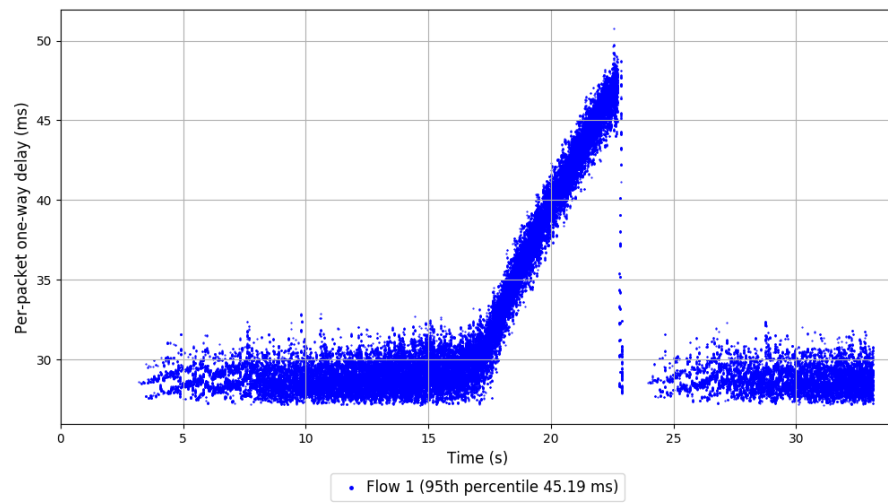
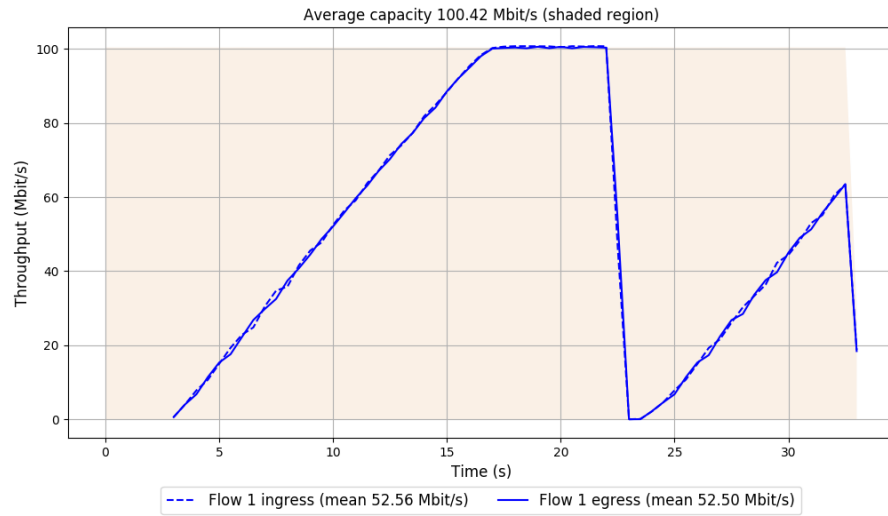
-- Flow 1:

Average throughput: 52.50 Mbit/s

95th percentile per-packet one-way delay: 45.193 ms

Loss rate: 0.20%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-03-05 18:07:42

End at: 2018-03-05 18:08:12

Below is generated by plot.py at 2018-03-05 19:53:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 52.22 Mbit/s (52.0% utilization)

95th percentile per-packet one-way delay: 45.217 ms

Loss rate: 0.14%

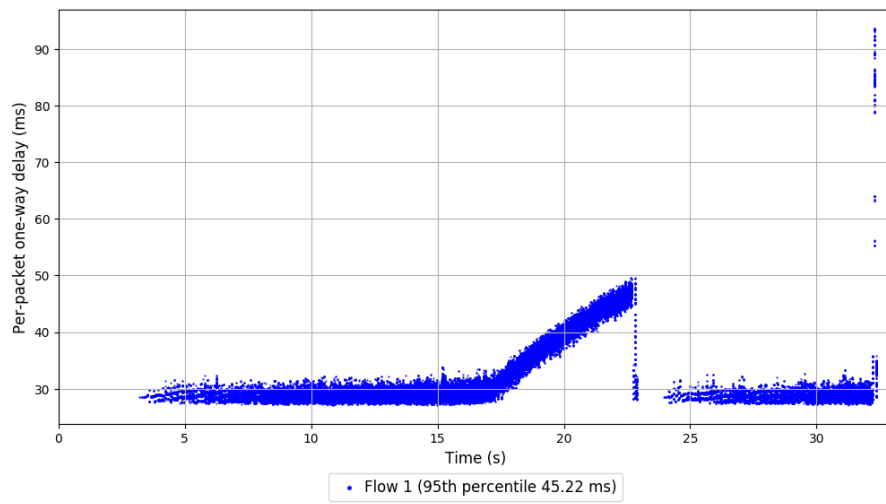
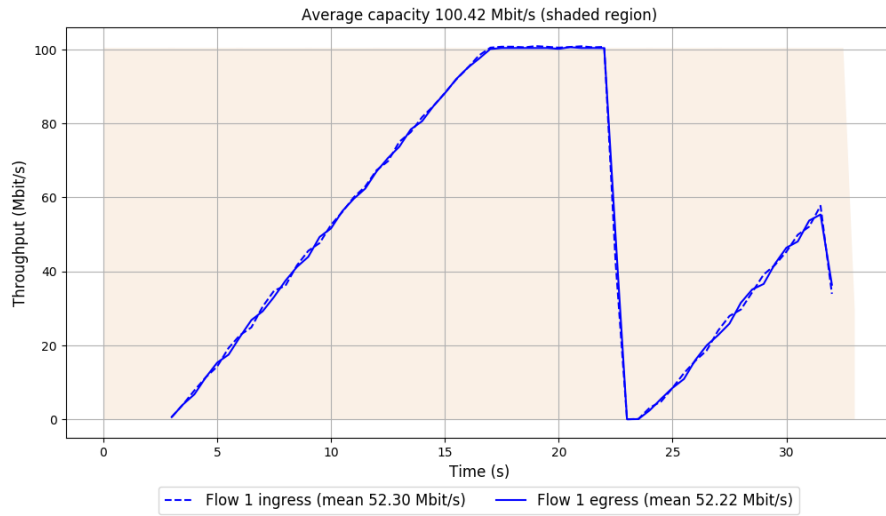
-- Flow 1:

Average throughput: 52.22 Mbit/s

95th percentile per-packet one-way delay: 45.217 ms

Loss rate: 0.14%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-03-05 18:19:35

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

Below is generated by plot.py at 2018-03-05 19:53:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 66.26 Mbit/s (66.0% utilization)

95th percentile per-packet one-way delay: 44.783 ms

Loss rate: 0.30%

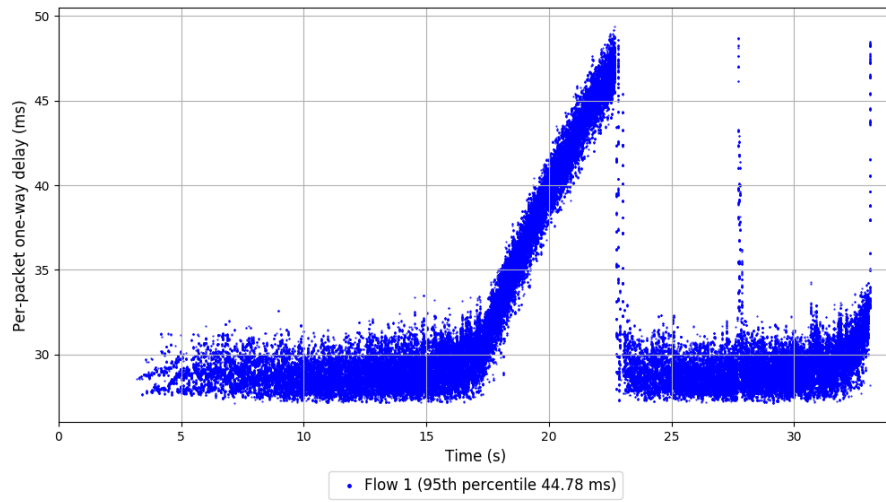
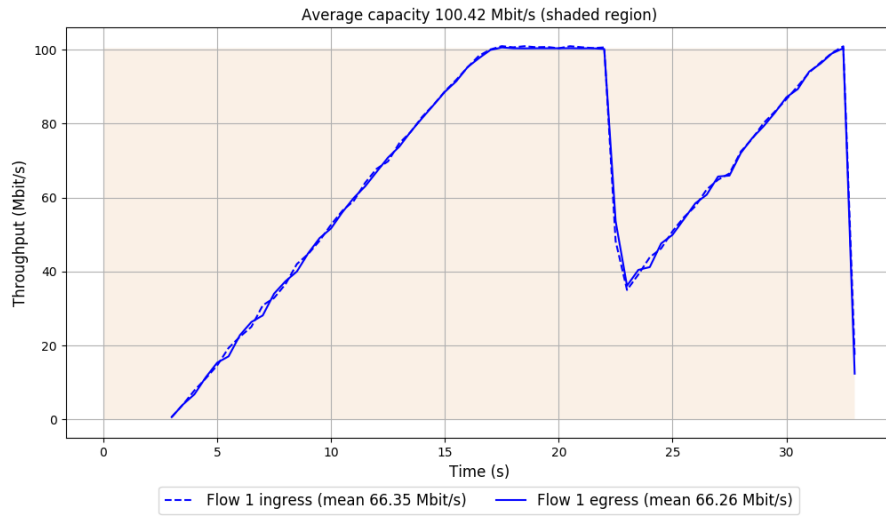
-- Flow 1:

Average throughput: 66.26 Mbit/s

95th percentile per-packet one-way delay: 44.783 ms

Loss rate: 0.30%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-03-05 18:31:39

End at: 2018-03-05 18:32:09

Below is generated by plot.py at 2018-03-05 19:53:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 50.28 Mbit/s (50.1% utilization)

95th percentile per-packet one-way delay: 45.201 ms

Loss rate: 0.24%

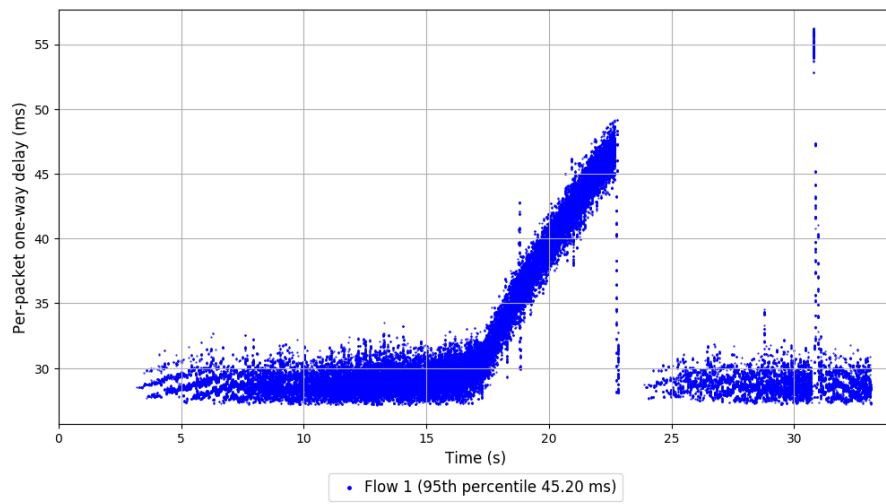
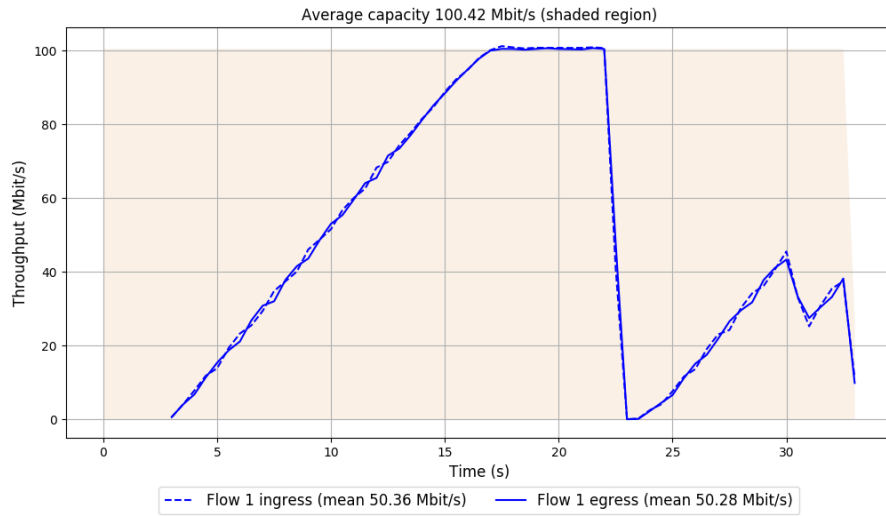
-- Flow 1:

Average throughput: 50.28 Mbit/s

95th percentile per-packet one-way delay: 45.201 ms

Loss rate: 0.24%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

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

End at: 2018-03-05 18:44:13

Below is generated by plot.py at 2018-03-05 19:53:49

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 49.99 Mbit/s (49.8% utilization)

95th percentile per-packet one-way delay: 45.208 ms

Loss rate: 0.11%

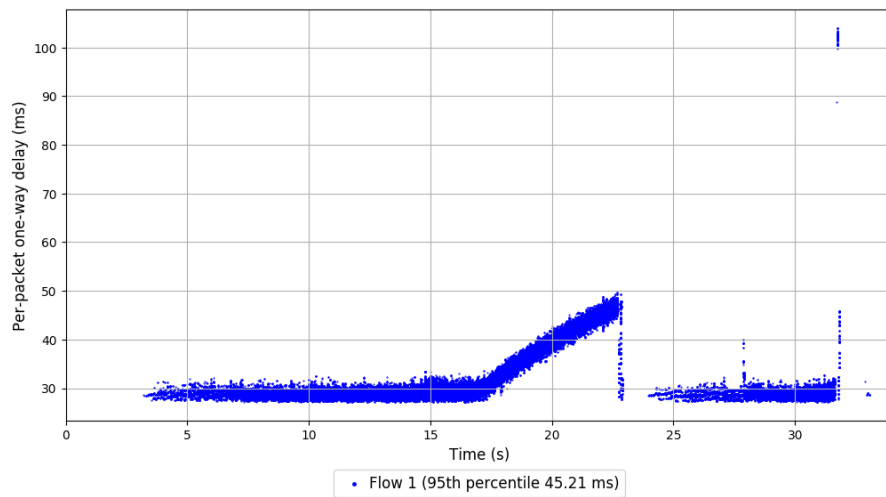
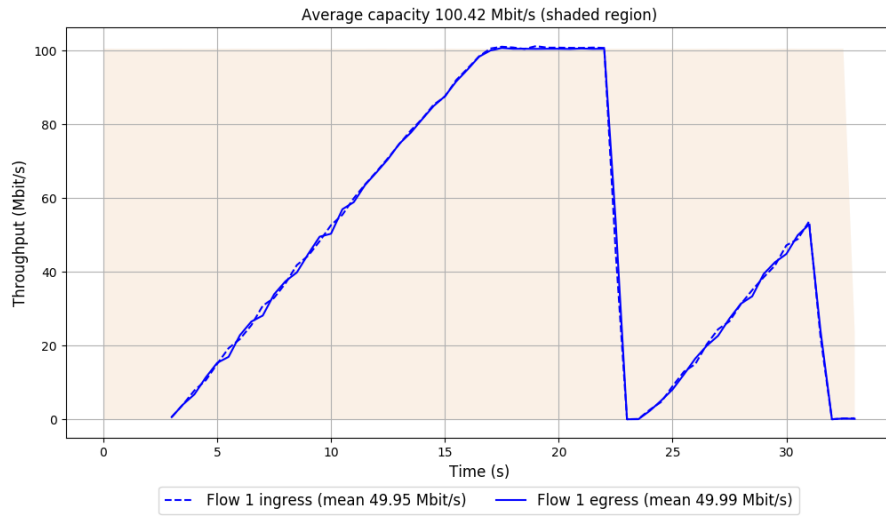
-- Flow 1:

Average throughput: 49.99 Mbit/s

95th percentile per-packet one-way delay: 45.208 ms

Loss rate: 0.11%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-03-05 18:55:51

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

Below is generated by plot.py at 2018-03-05 19:53:55

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 52.67 Mbit/s (52.4% utilization)

95th percentile per-packet one-way delay: 45.129 ms

Loss rate: 0.18%

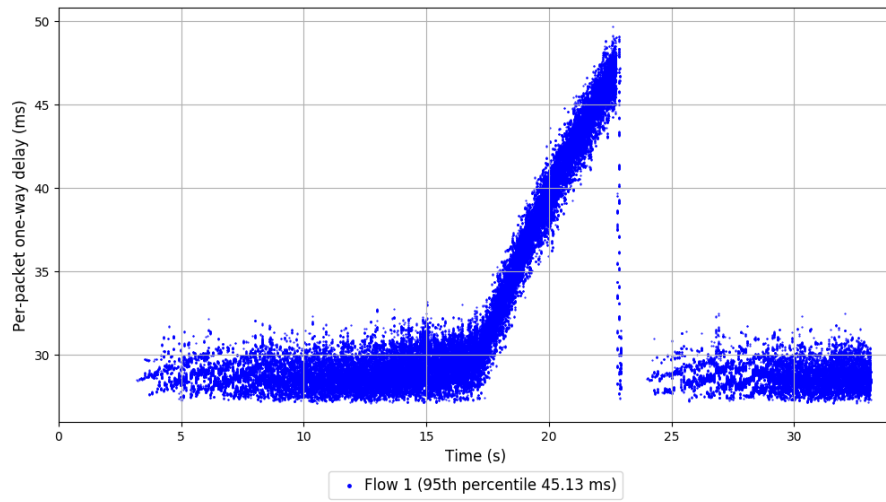
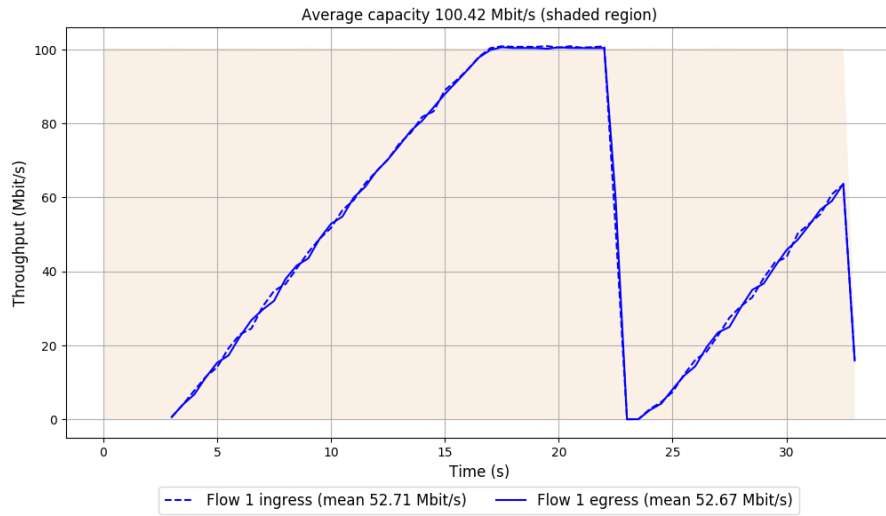
-- Flow 1:

Average throughput: 52.67 Mbit/s

95th percentile per-packet one-way delay: 45.129 ms

Loss rate: 0.18%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-03-05 19:07:40

End at: 2018-03-05 19:08:10

Below is generated by plot.py at 2018-03-05 19:54:10

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 53.07 Mbit/s (52.8% utilization)

95th percentile per-packet one-way delay: 45.150 ms

Loss rate: 0.18%

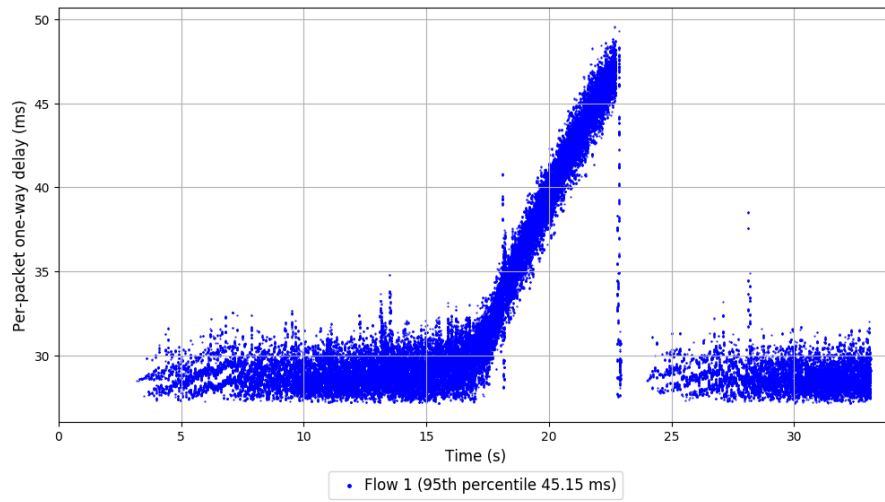
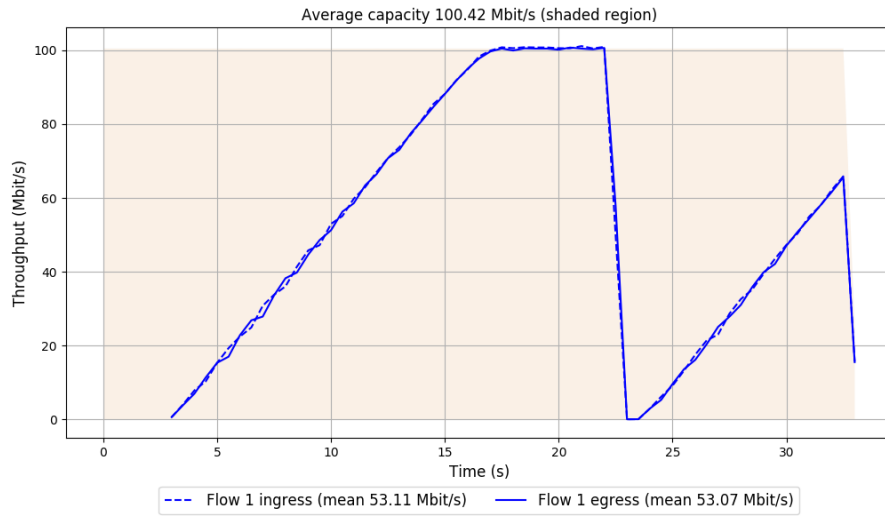
-- Flow 1:

Average throughput: 53.07 Mbit/s

95th percentile per-packet one-way delay: 45.150 ms

Loss rate: 0.18%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

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

End at: 2018-03-05 19:20:10

Below is generated by plot.py at 2018-03-05 19:54:35

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 52.50 Mbit/s (52.3% utilization)

95th percentile per-packet one-way delay: 45.262 ms

Loss rate: 0.15%

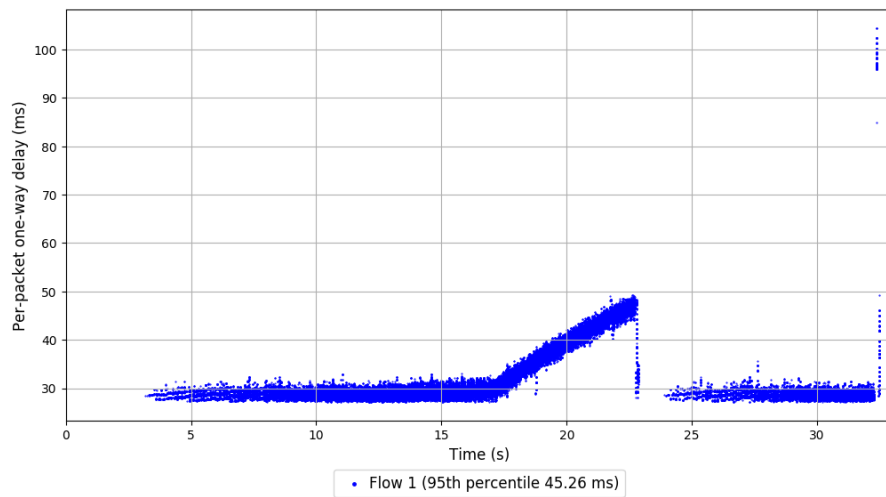
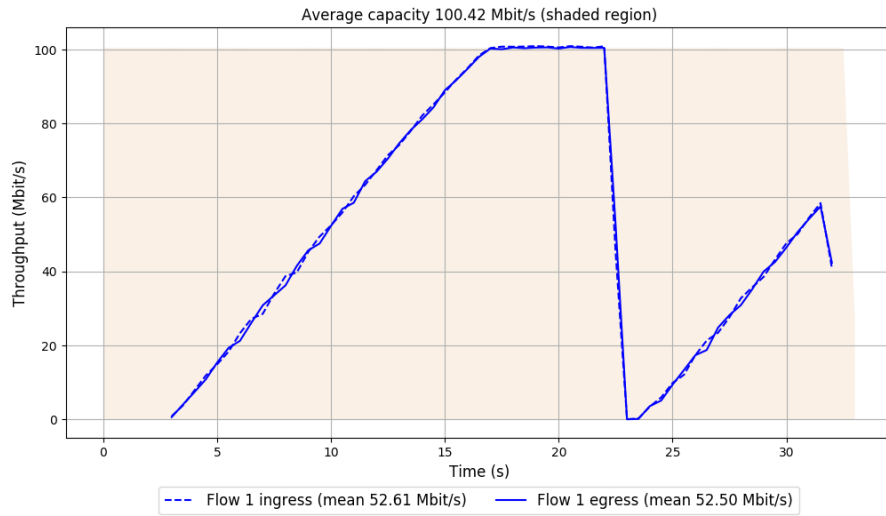
-- Flow 1:

Average throughput: 52.50 Mbit/s

95th percentile per-packet one-way delay: 45.262 ms

Loss rate: 0.15%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-03-05 19:31:43

End at: 2018-03-05 19:32:13

Below is generated by plot.py at 2018-03-05 19:54:39

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 52.13 Mbit/s (51.9% utilization)

95th percentile per-packet one-way delay: 45.070 ms

Loss rate: 0.16%

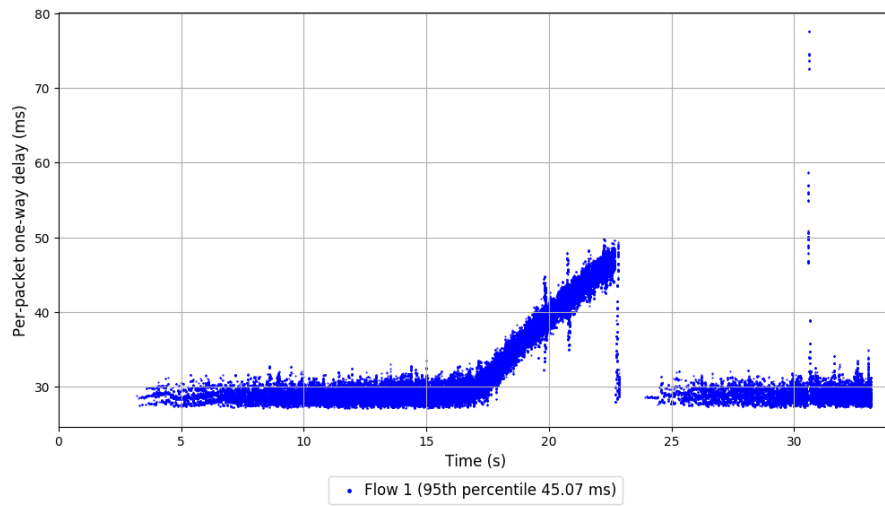
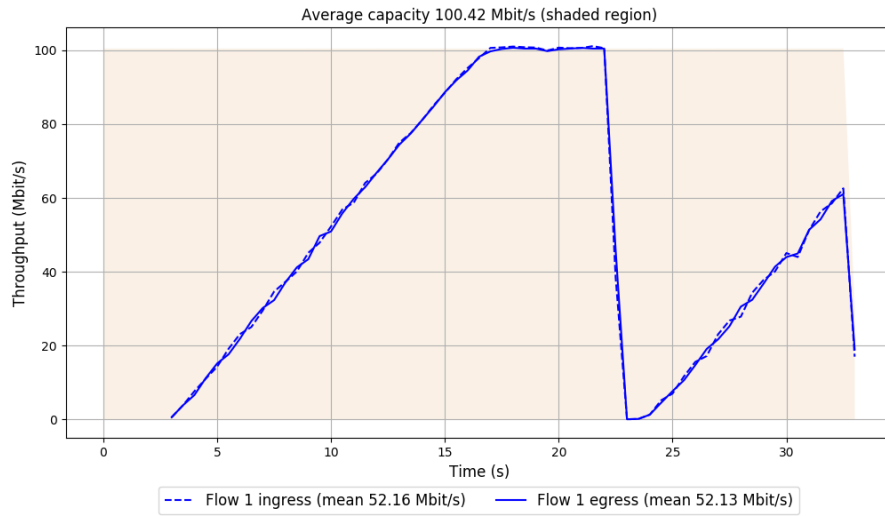
-- Flow 1:

Average throughput: 52.13 Mbit/s

95th percentile per-packet one-way delay: 45.070 ms

Loss rate: 0.16%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC

Start at: 2018-03-05 17:49:43

End at: 2018-03-05 17:50:13

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

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 87.29 Mbit/s (86.9% utilization)

95th percentile per-packet one-way delay: 32.247 ms

Loss rate: 0.60%

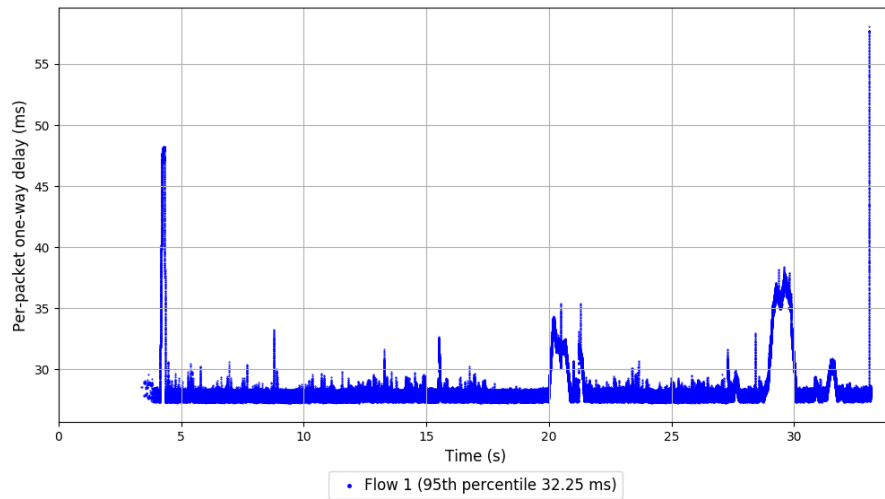
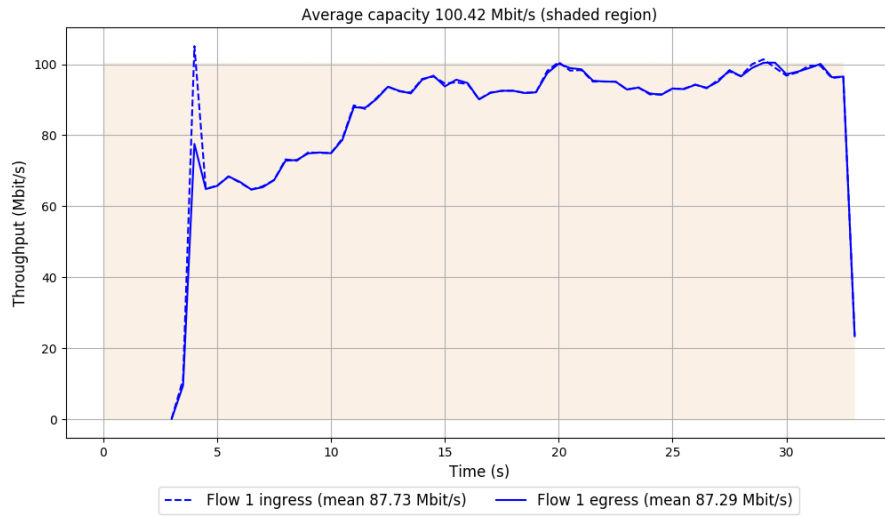
-- Flow 1:

Average throughput: 87.29 Mbit/s

95th percentile per-packet one-way delay: 32.247 ms

Loss rate: 0.60%

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-03-05 18:01:47

End at: 2018-03-05 18:02:17

Below is generated by plot.py at 2018-03-05 19:55:22

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 87.38 Mbit/s (87.0% utilization)

95th percentile per-packet one-way delay: 30.453 ms

Loss rate: 0.58%

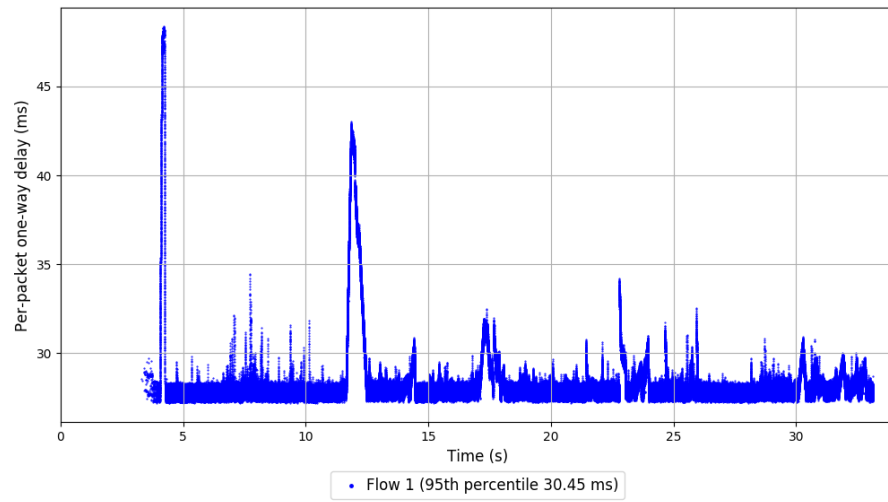
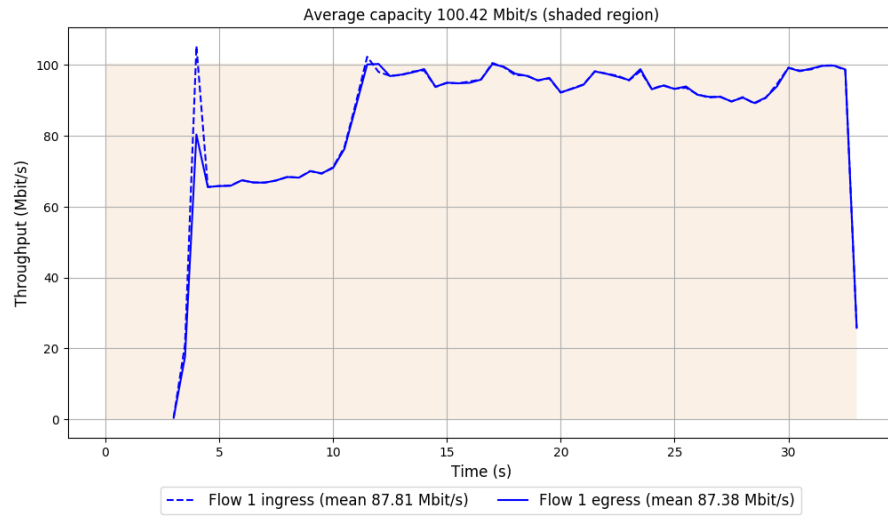
-- Flow 1:

Average throughput: 87.38 Mbit/s

95th percentile per-packet one-way delay: 30.453 ms

Loss rate: 0.58%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

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

End at: 2018-03-05 18:14:08

Below is generated by plot.py at 2018-03-05 19:56:22

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 91.97 Mbit/s (91.6% utilization)

95th percentile per-packet one-way delay: 30.716 ms

Loss rate: 0.68%

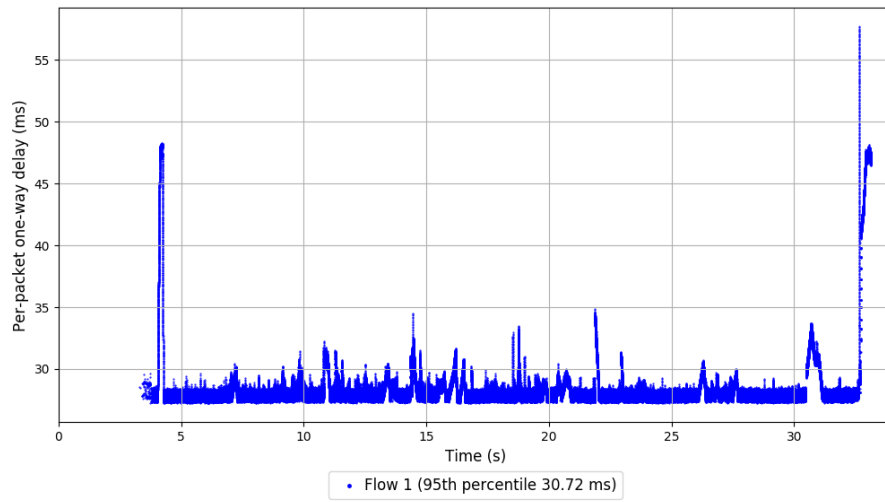
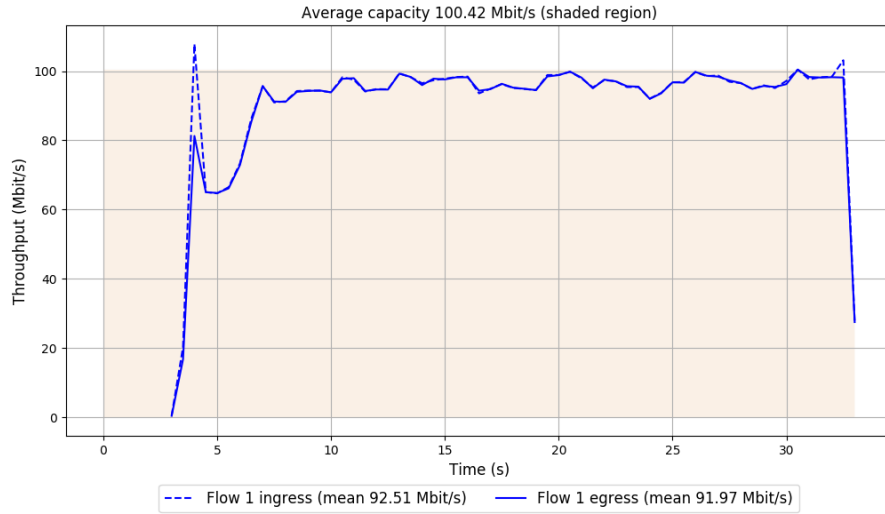
-- Flow 1:

Average throughput: 91.97 Mbit/s

95th percentile per-packet one-way delay: 30.716 ms

Loss rate: 0.68%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-03-05 18:25:42

End at: 2018-03-05 18:26:12

Below is generated by plot.py at 2018-03-05 19:56:22

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 88.53 Mbit/s (88.2% utilization)

95th percentile per-packet one-way delay: 34.614 ms

Loss rate: 0.59%

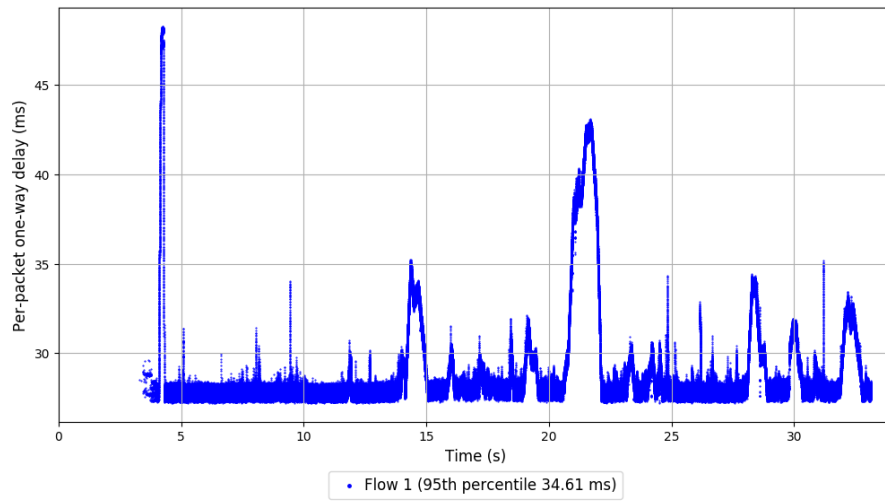
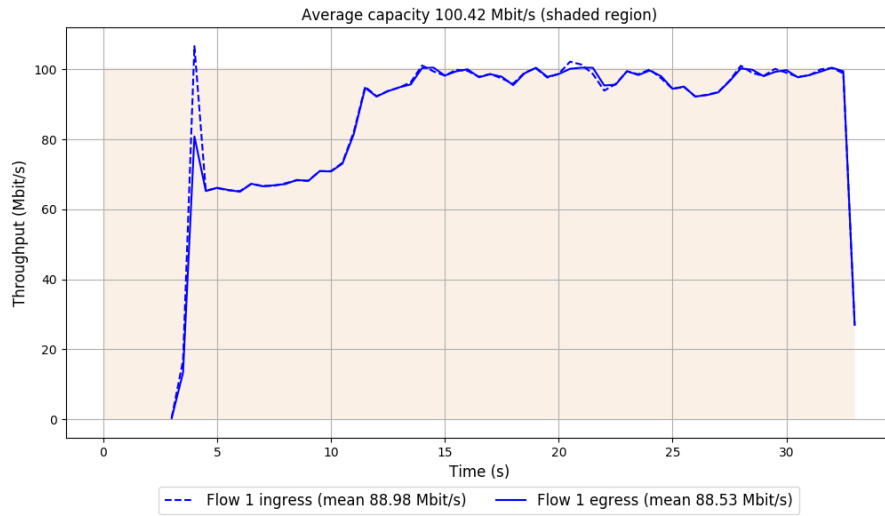
-- Flow 1:

Average throughput: 88.53 Mbit/s

95th percentile per-packet one-way delay: 34.614 ms

Loss rate: 0.59%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-03-05 18:37:47

End at: 2018-03-05 18:38:17

Below is generated by plot.py at 2018-03-05 19:56:22

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 87.16 Mbit/s (86.8% utilization)

95th percentile per-packet one-way delay: 33.625 ms

Loss rate: 0.59%

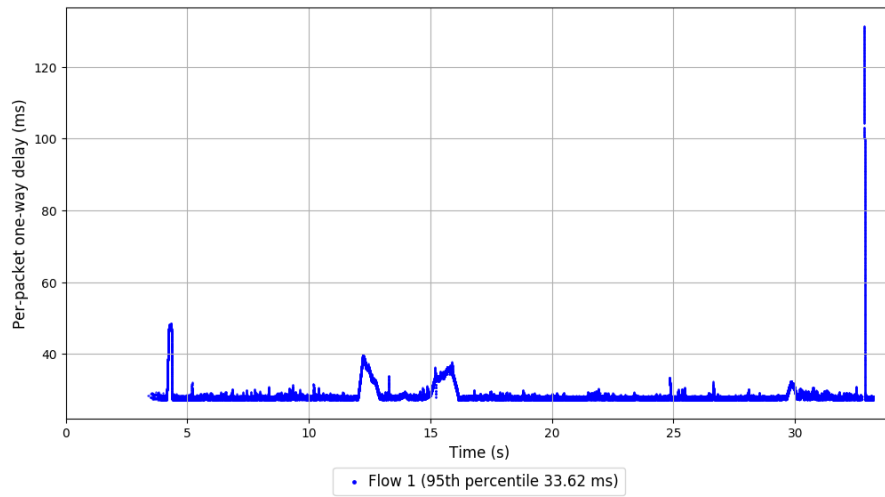
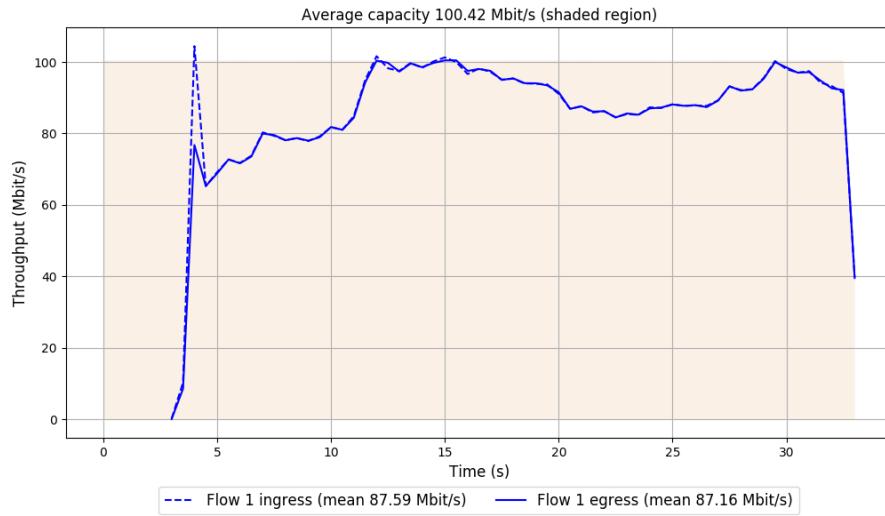
-- Flow 1:

Average throughput: 87.16 Mbit/s

95th percentile per-packet one-way delay: 33.625 ms

Loss rate: 0.59%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-03-05 18:49:53

End at: 2018-03-05 18:50:24

Below is generated by plot.py at 2018-03-05 19:56:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 88.98 Mbit/s (88.6% utilization)

95th percentile per-packet one-way delay: 30.391 ms

Loss rate: 0.60%

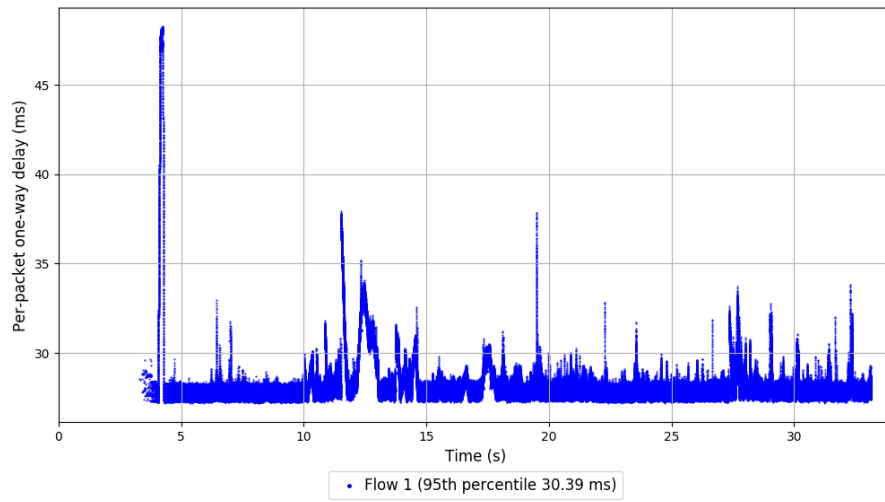
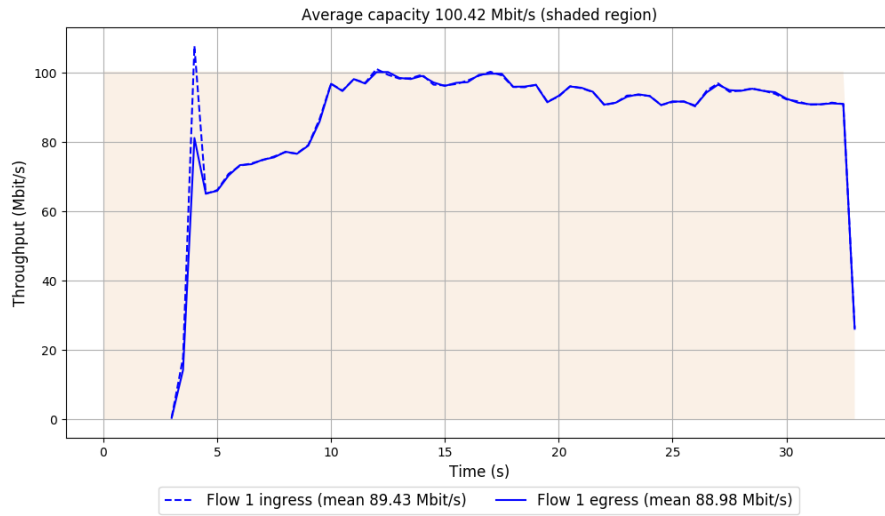
-- Flow 1:

Average throughput: 88.98 Mbit/s

95th percentile per-packet one-way delay: 30.391 ms

Loss rate: 0.60%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-03-05 19:01:43

End at: 2018-03-05 19:02:13

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

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 86.98 Mbit/s (86.6% utilization)

95th percentile per-packet one-way delay: 31.443 ms

Loss rate: 0.70%

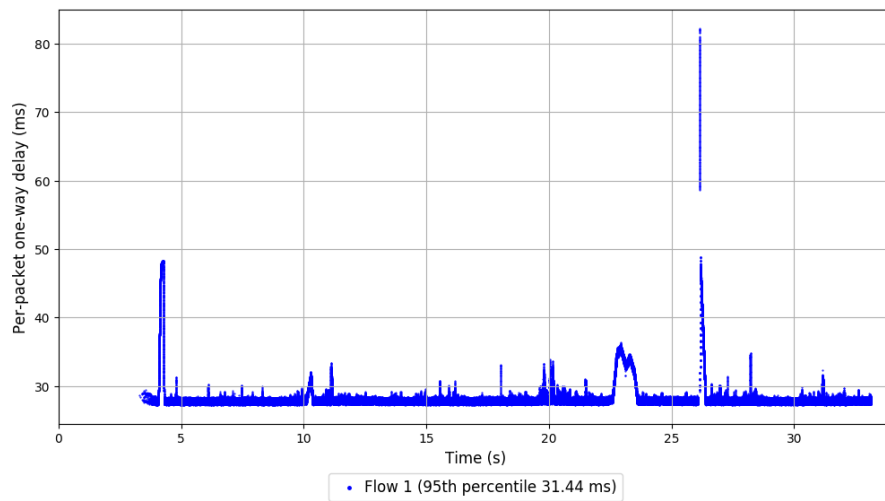
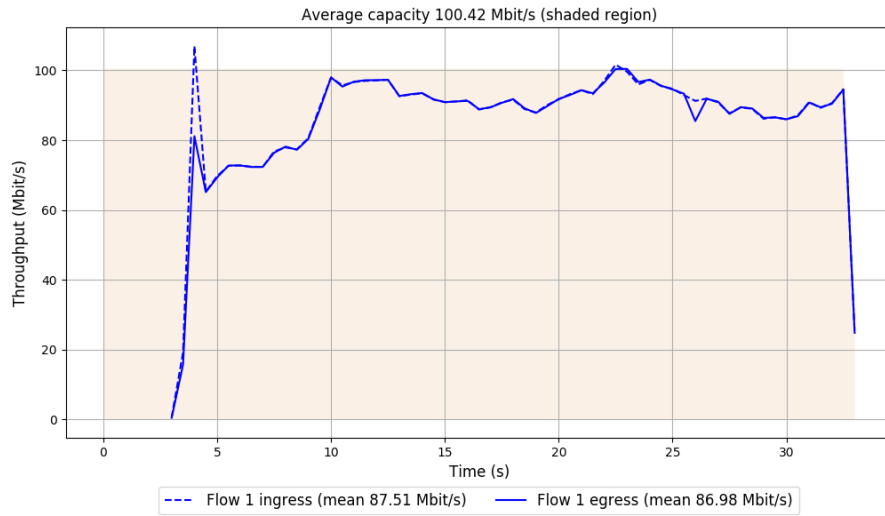
-- Flow 1:

Average throughput: 86.98 Mbit/s

95th percentile per-packet one-way delay: 31.443 ms

Loss rate: 0.70%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-03-05 19:13:46

End at: 2018-03-05 19:14:16

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

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 85.28 Mbit/s (84.9% utilization)

95th percentile per-packet one-way delay: 29.966 ms

Loss rate: 0.63%

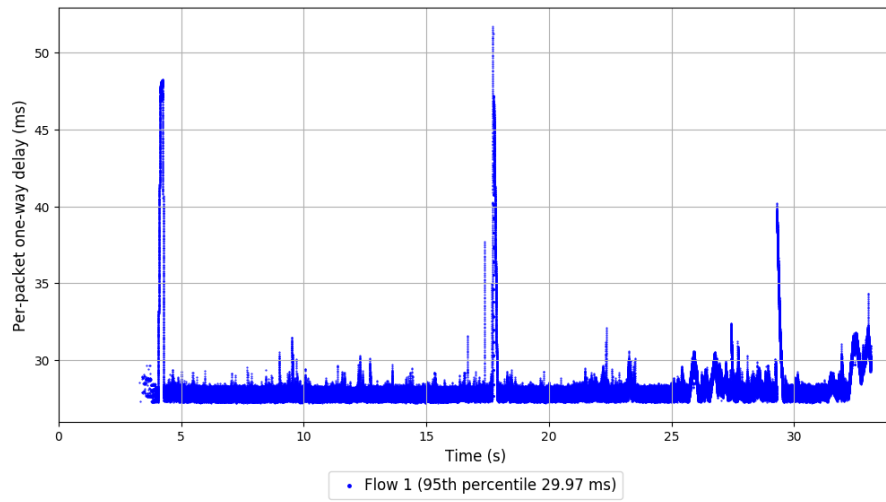
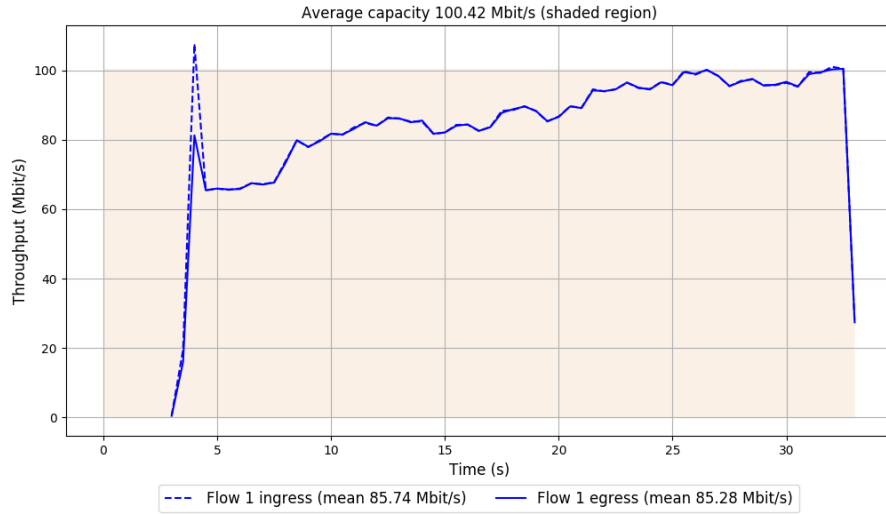
-- Flow 1:

Average throughput: 85.28 Mbit/s

95th percentile per-packet one-way delay: 29.966 ms

Loss rate: 0.63%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-03-05 19:25:49

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

Below is generated by plot.py at 2018-03-05 19:57:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 83.57 Mbit/s (83.2% utilization)

95th percentile per-packet one-way delay: 29.461 ms

Loss rate: 0.79%

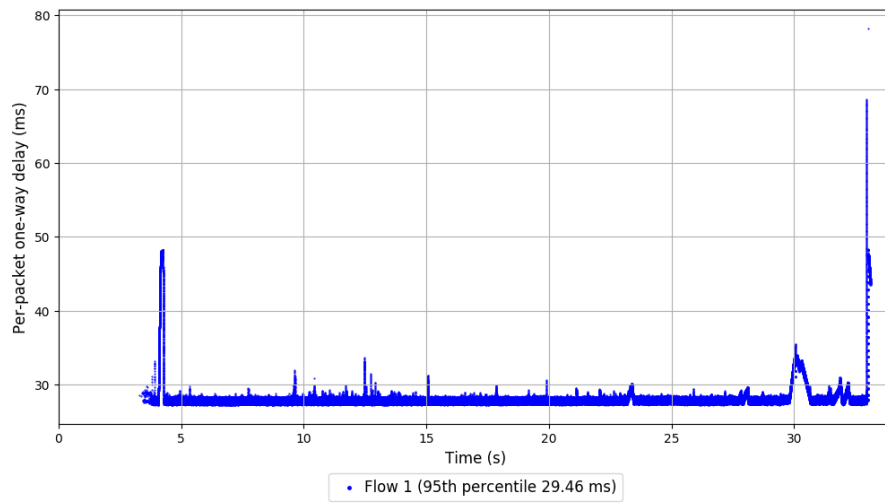
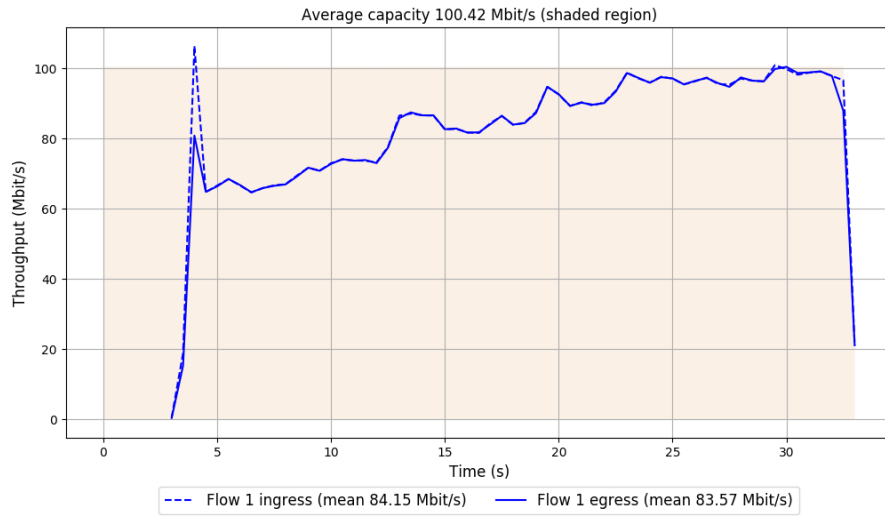
-- Flow 1:

Average throughput: 83.57 Mbit/s

95th percentile per-packet one-way delay: 29.461 ms

Loss rate: 0.79%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-03-05 19:37:36

End at: 2018-03-05 19:38:06

Below is generated by plot.py at 2018-03-05 19:57:52

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 88.86 Mbit/s (88.5% utilization)

95th percentile per-packet one-way delay: 32.106 ms

Loss rate: 0.58%

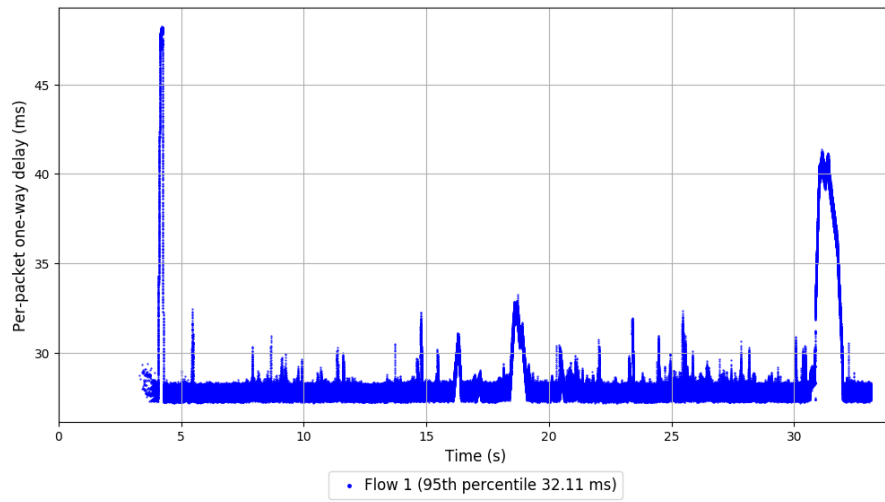
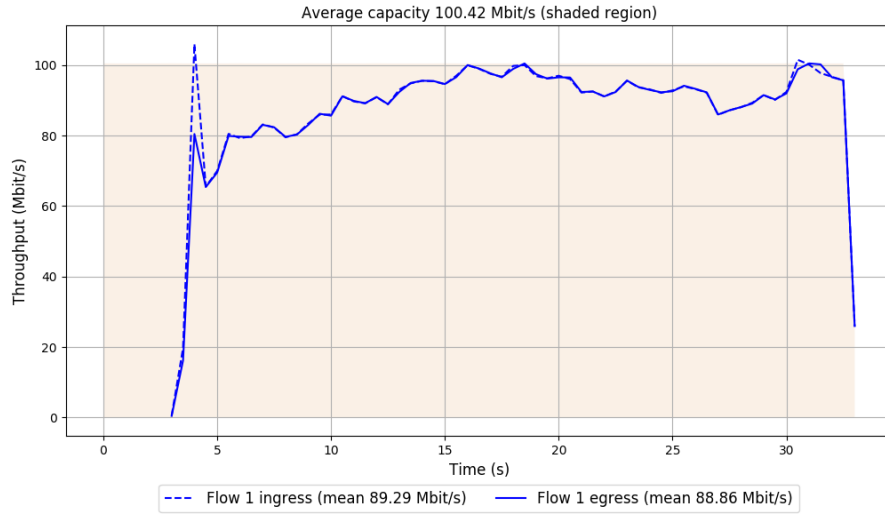
-- Flow 1:

Average throughput: 88.86 Mbit/s

95th percentile per-packet one-way delay: 32.106 ms

Loss rate: 0.58%

Run 10: Report of PCC — Data Link

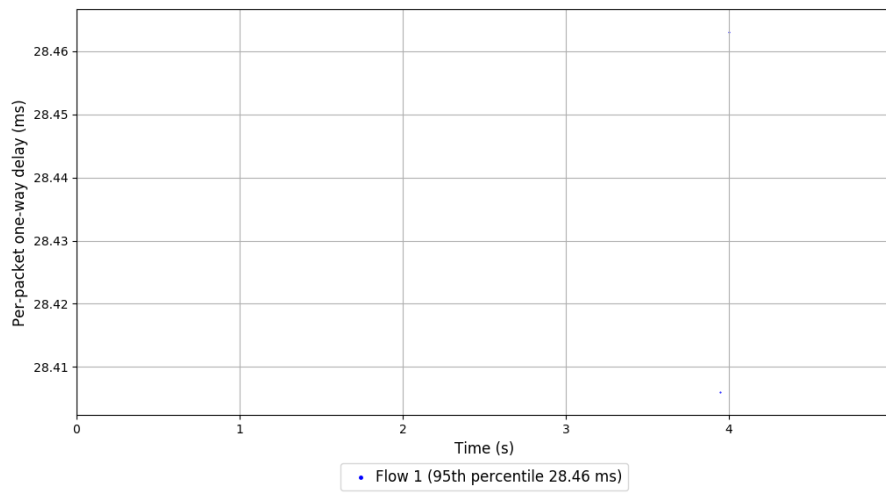
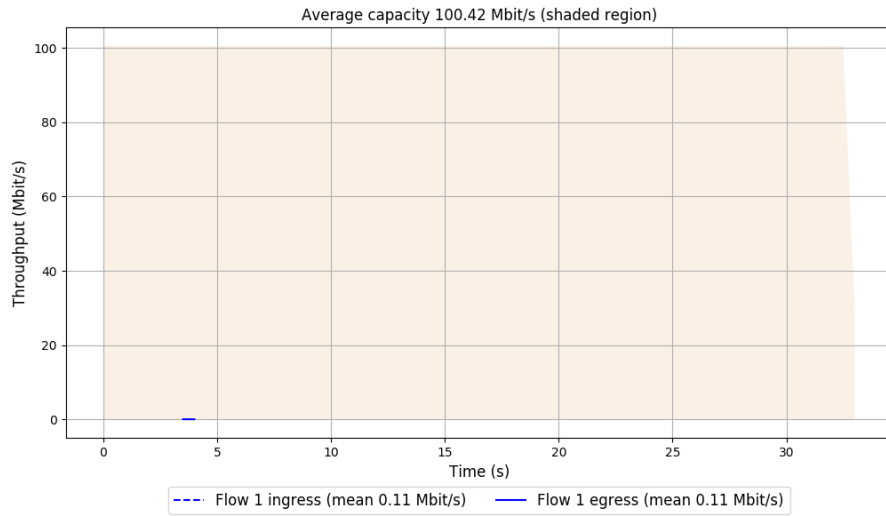


Run 1: Statistics of QUIC Cubic

Start at: 2018-03-05 17:51:01

End at: 2018-03-05 17:51:31

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-03-05 18:03:07

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

Below is generated by plot.py at 2018-03-05 19:58:23

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 65.08 Mbit/s (64.8% utilization)

95th percentile per-packet one-way delay: 32.831 ms

Loss rate: 0.43%

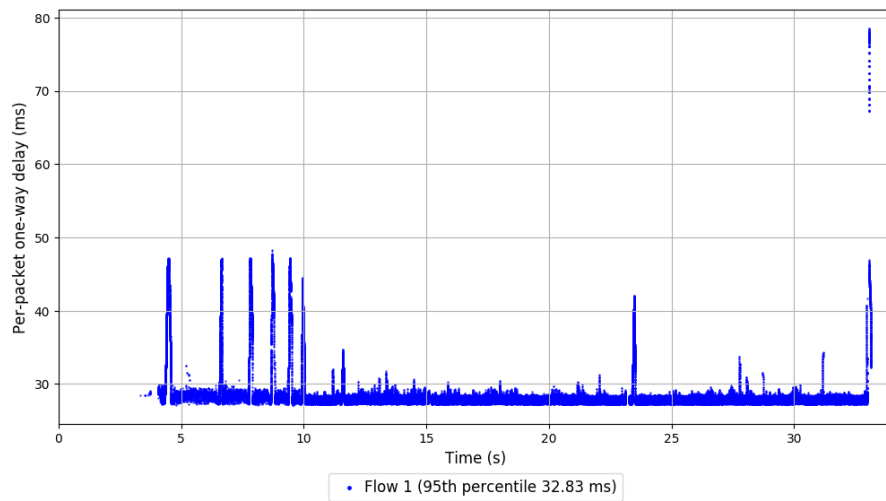
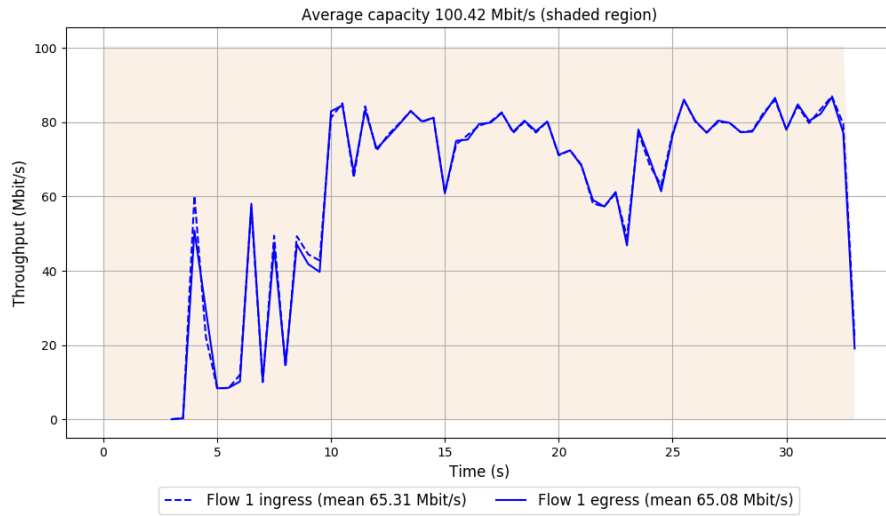
-- Flow 1:

Average throughput: 65.08 Mbit/s

95th percentile per-packet one-way delay: 32.831 ms

Loss rate: 0.43%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-03-05 18:14:59

End at: 2018-03-05 18:15:29

Below is generated by plot.py at 2018-03-05 19:58:27

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 69.95 Mbit/s (69.7% utilization)

95th percentile per-packet one-way delay: 28.418 ms

Loss rate: 0.02%

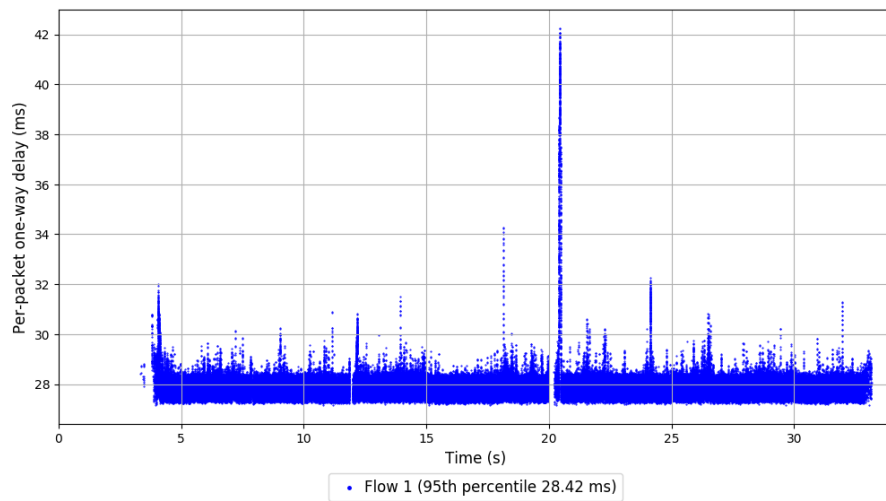
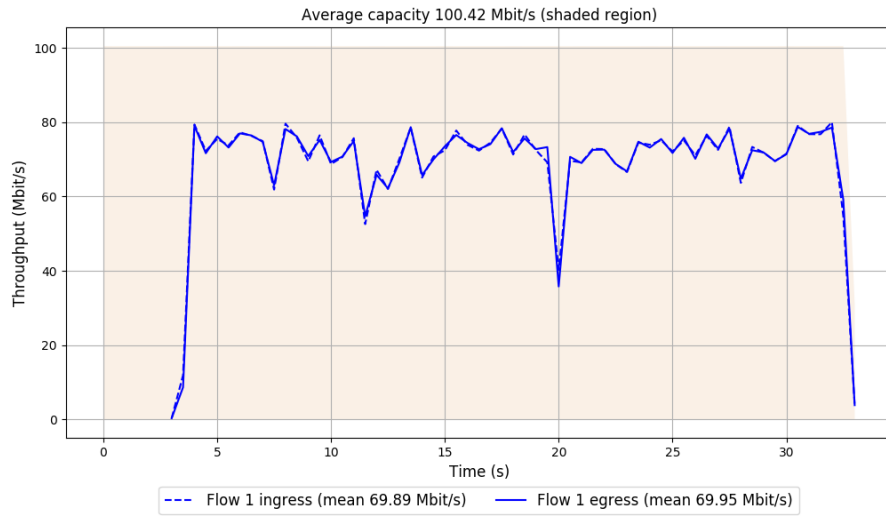
-- Flow 1:

Average throughput: 69.95 Mbit/s

95th percentile per-packet one-way delay: 28.418 ms

Loss rate: 0.02%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-03-05 18:27:02

End at: 2018-03-05 18:27:32

Below is generated by plot.py at 2018-03-05 19:58:35

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 56.59 Mbit/s (56.3% utilization)

95th percentile per-packet one-way delay: 29.291 ms

Loss rate: 0.24%

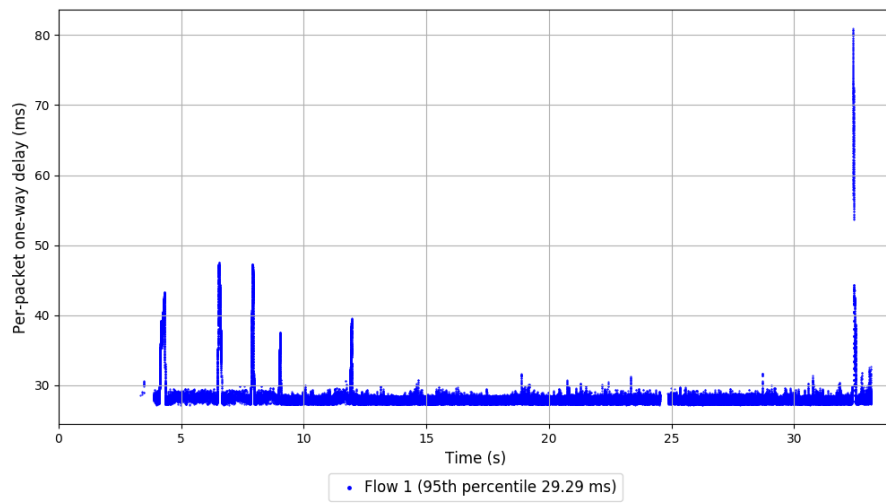
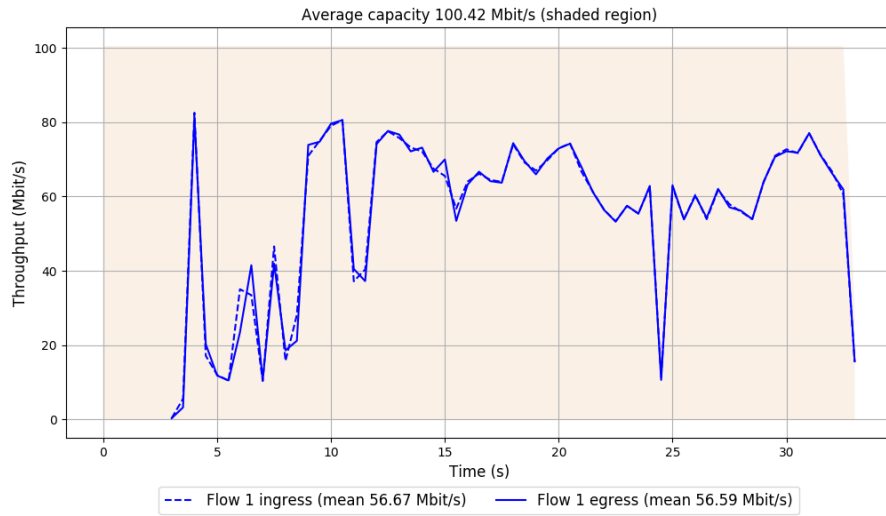
-- Flow 1:

Average throughput: 56.59 Mbit/s

95th percentile per-packet one-way delay: 29.291 ms

Loss rate: 0.24%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-03-05 18:39:07

End at: 2018-03-05 18:39:37

Below is generated by plot.py at 2018-03-05 19:58:57

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 60.45 Mbit/s (60.2% utilization)

95th percentile per-packet one-way delay: 33.328 ms

Loss rate: 0.44%

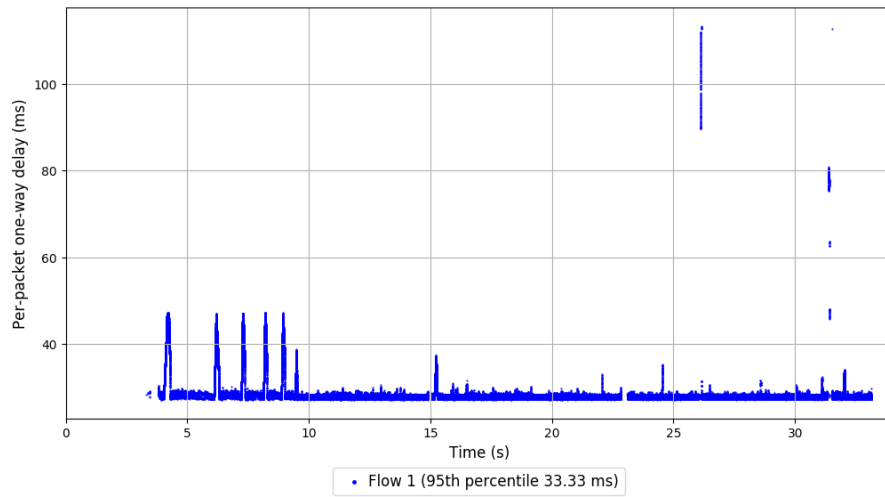
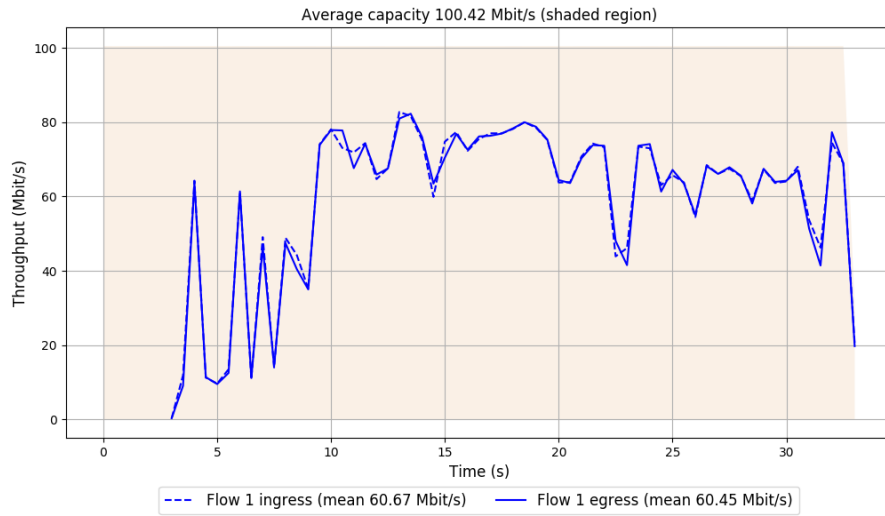
-- Flow 1:

Average throughput: 60.45 Mbit/s

95th percentile per-packet one-way delay: 33.328 ms

Loss rate: 0.44%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-03-05 18:51:14

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

Below is generated by plot.py at 2018-03-05 19:59:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 67.58 Mbit/s (67.3% utilization)

95th percentile per-packet one-way delay: 28.432 ms

Loss rate: 0.14%

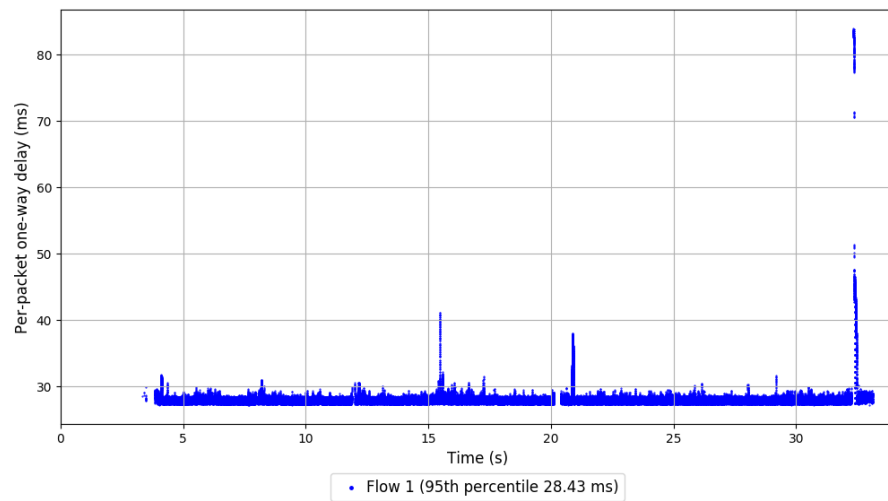
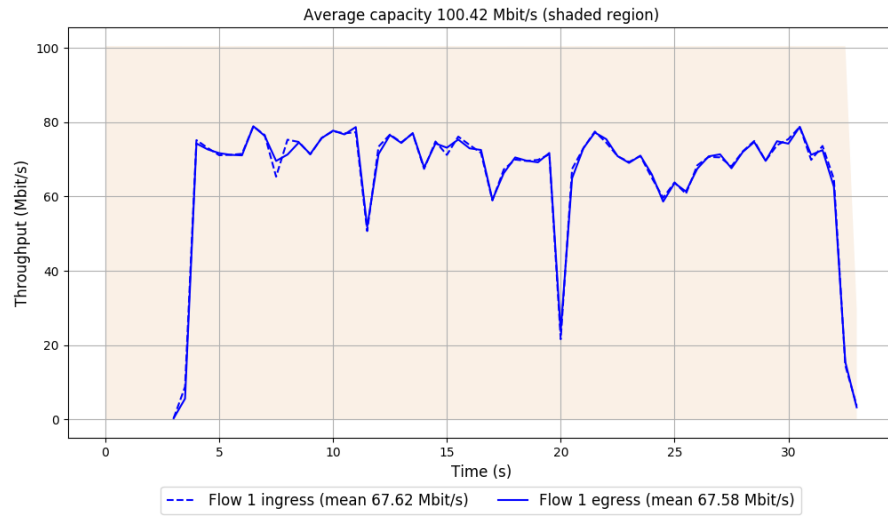
-- Flow 1:

Average throughput: 67.58 Mbit/s

95th percentile per-packet one-way delay: 28.432 ms

Loss rate: 0.14%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

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

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

Below is generated by plot.py at 2018-03-05 19:59:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 62.50 Mbit/s (62.2% utilization)

95th percentile per-packet one-way delay: 31.850 ms

Loss rate: 0.32%

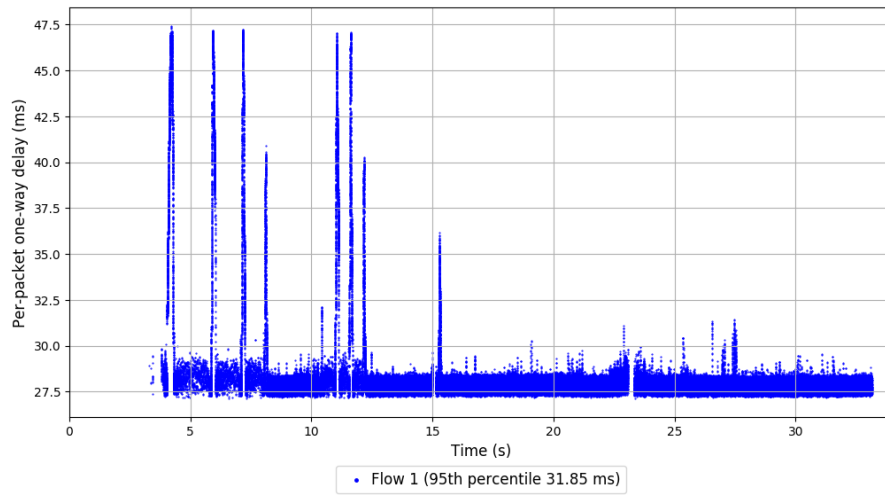
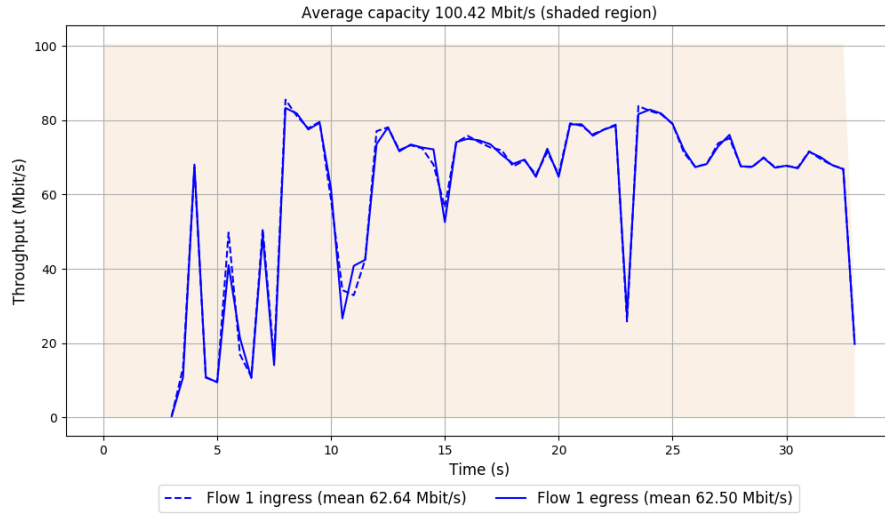
-- Flow 1:

Average throughput: 62.50 Mbit/s

95th percentile per-packet one-way delay: 31.850 ms

Loss rate: 0.32%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-03-05 19:15:06

End at: 2018-03-05 19:15:36

Below is generated by plot.py at 2018-03-05 19:59:41

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 60.69 Mbit/s (60.4% utilization)

95th percentile per-packet one-way delay: 30.142 ms

Loss rate: 0.59%

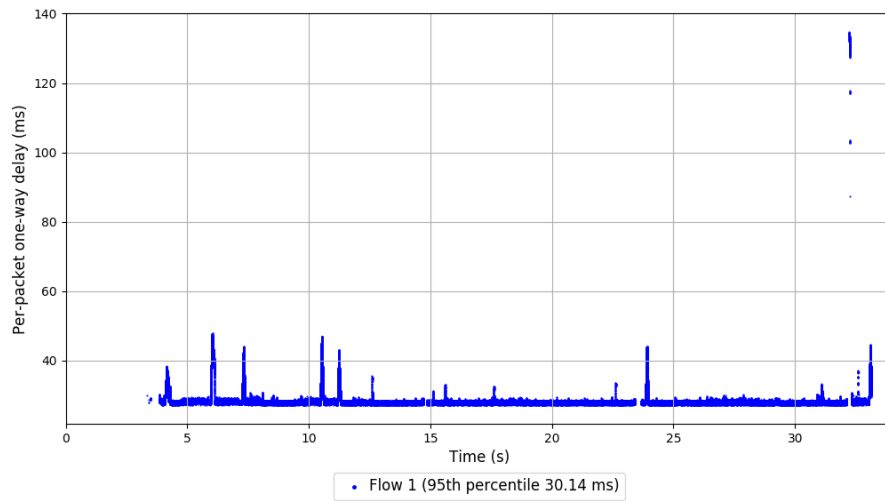
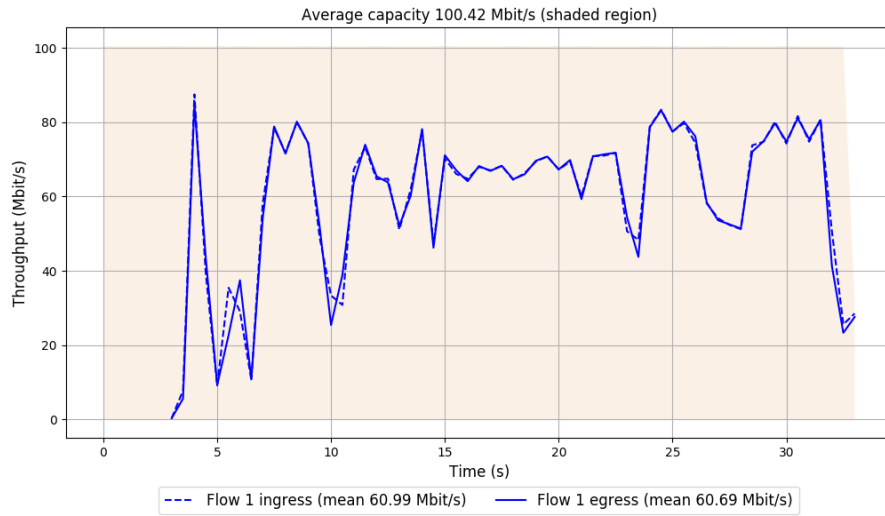
-- Flow 1:

Average throughput: 60.69 Mbit/s

95th percentile per-packet one-way delay: 30.142 ms

Loss rate: 0.59%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-03-05 19:27:08

End at: 2018-03-05 19:27:38

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

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 67.39 Mbit/s (67.1% utilization)

95th percentile per-packet one-way delay: 28.573 ms

Loss rate: 0.14%

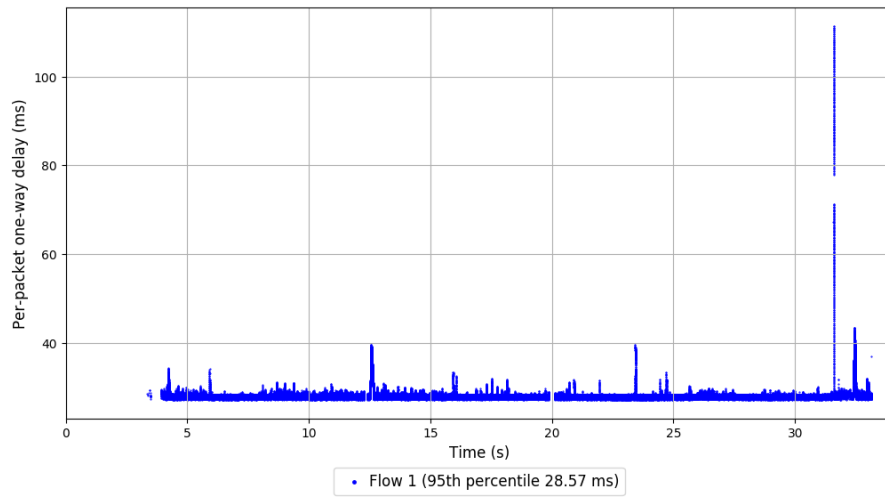
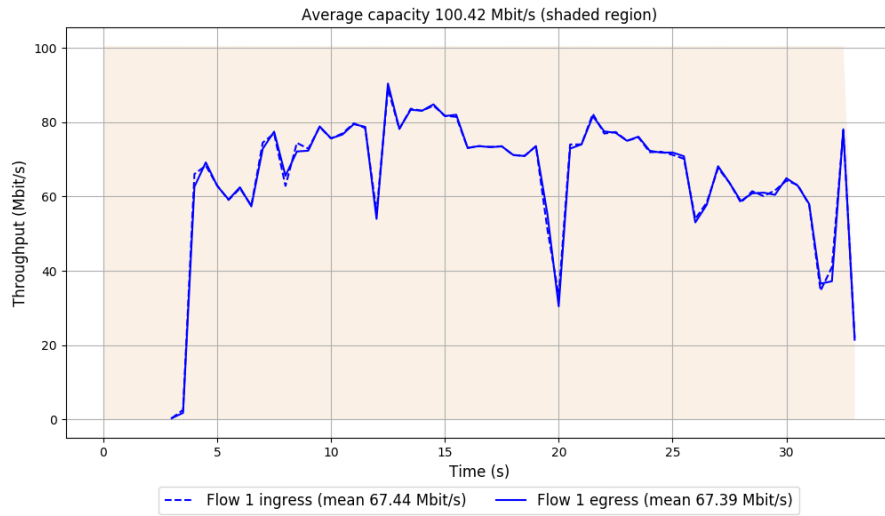
-- Flow 1:

Average throughput: 67.39 Mbit/s

95th percentile per-packet one-way delay: 28.573 ms

Loss rate: 0.14%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-03-05 19:38:56

End at: 2018-03-05 19:39:26

Below is generated by plot.py at 2018-03-05 20:00:10

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 57.05 Mbit/s (56.8% utilization)

95th percentile per-packet one-way delay: 31.180 ms

Loss rate: 0.36%

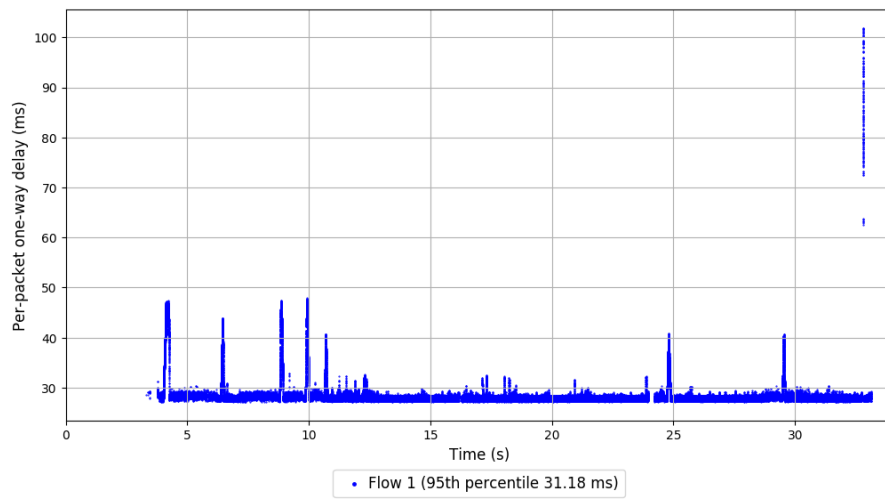
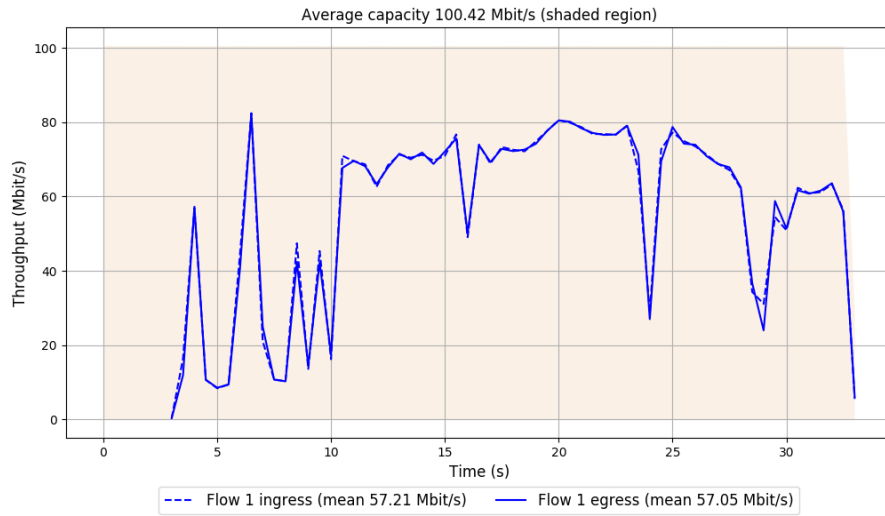
-- Flow 1:

Average throughput: 57.05 Mbit/s

95th percentile per-packet one-way delay: 31.180 ms

Loss rate: 0.36%

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2018-03-05 17:46:18

End at: 2018-03-05 17:46:48

Below is generated by plot.py at 2018-03-05 20:00:10

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

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

95th percentile per-packet one-way delay: 28.775 ms

Loss rate: 0.00%

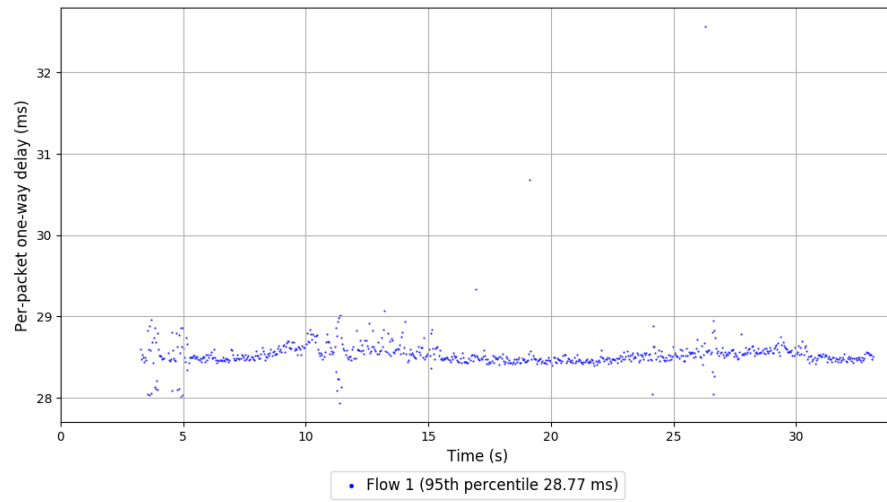
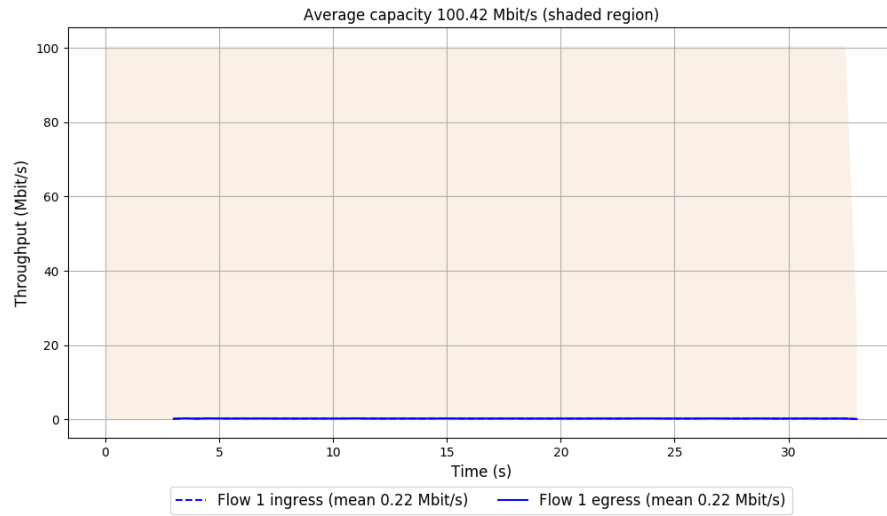
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 28.775 ms

Loss rate: 0.00%

Run 1: Report of SCReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2018-03-05 17:58:16

End at: 2018-03-05 17:58:46

Below is generated by plot.py at 2018-03-05 20:00:10

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

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

95th percentile per-packet one-way delay: 28.764 ms

Loss rate: 0.13%

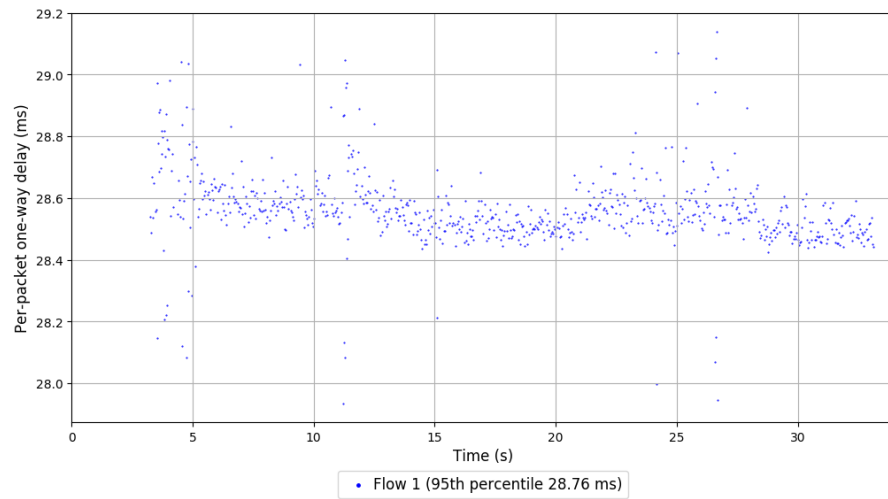
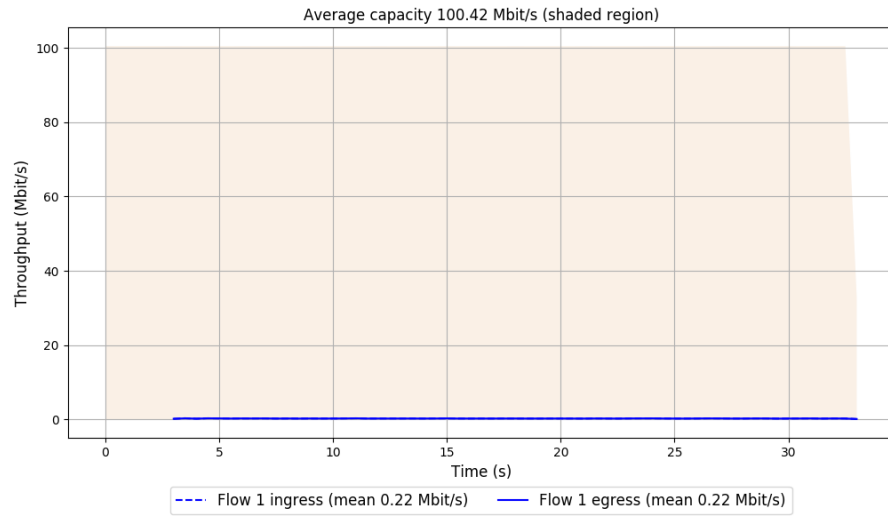
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 28.764 ms

Loss rate: 0.13%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-03-05 18:10:22

End at: 2018-03-05 18:10:52

Below is generated by plot.py at 2018-03-05 20:00:10

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

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

95th percentile per-packet one-way delay: 28.735 ms

Loss rate: 0.13%

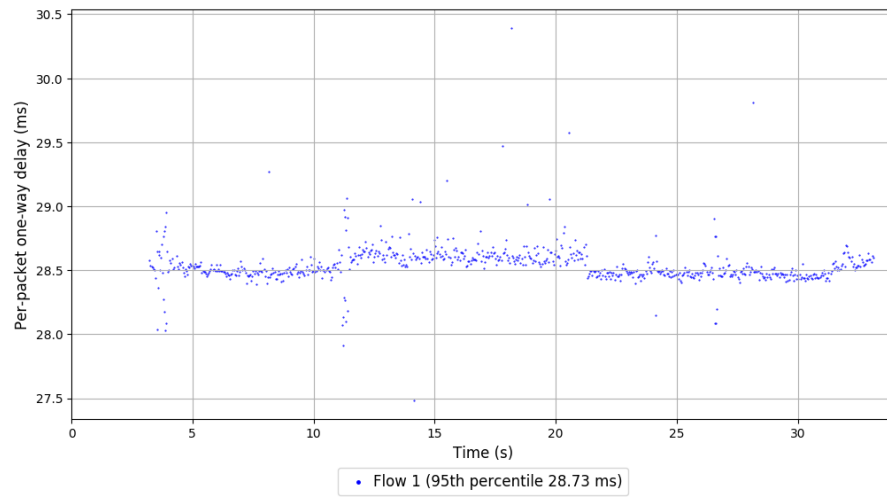
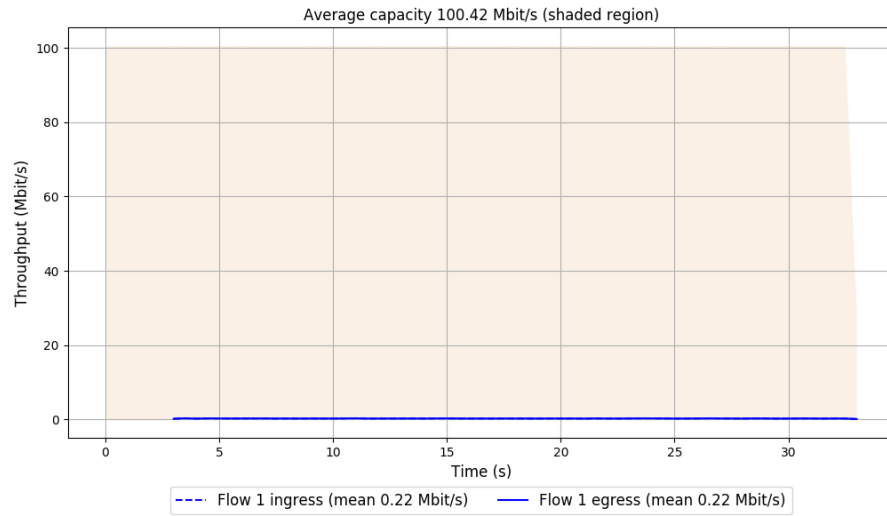
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 28.735 ms

Loss rate: 0.13%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-03-05 18:22:17

End at: 2018-03-05 18:22:47

Below is generated by plot.py at 2018-03-05 20:00:10

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

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

95th percentile per-packet one-way delay: 28.682 ms

Loss rate: 0.00%

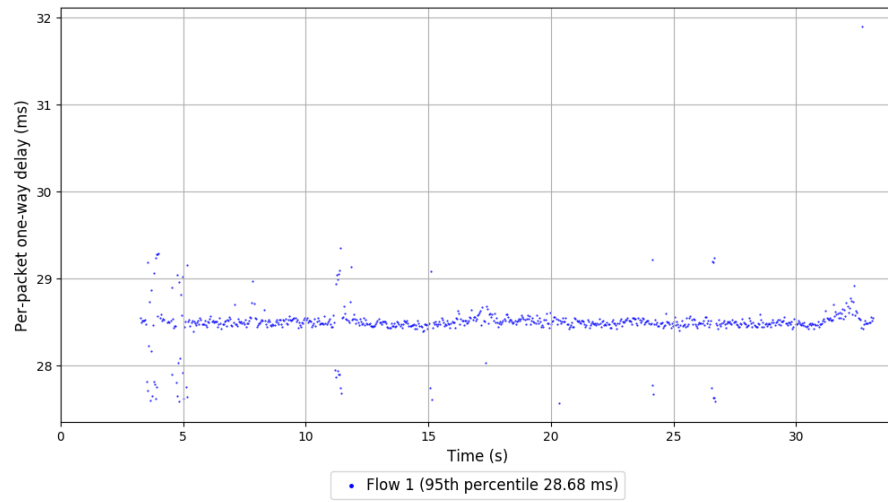
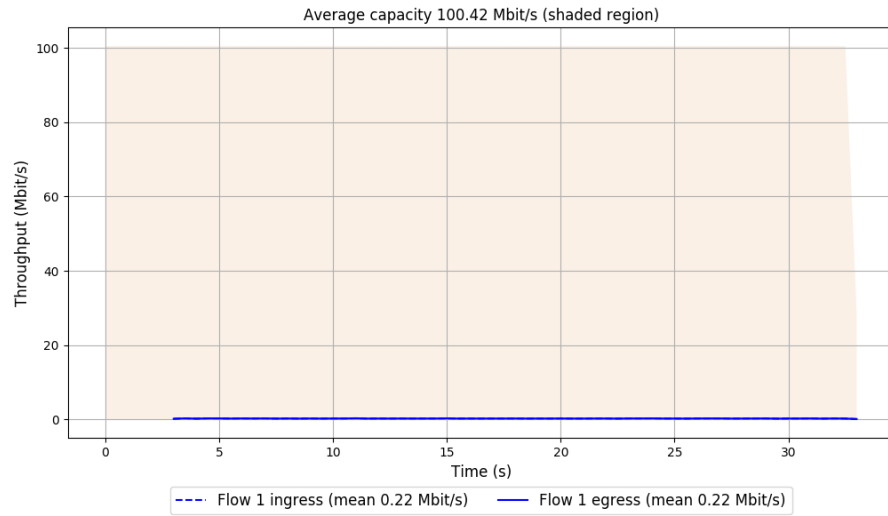
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 28.682 ms

Loss rate: 0.00%

Run 4: Report of SCReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-03-05 18:34:20

End at: 2018-03-05 18:34:50

Below is generated by plot.py at 2018-03-05 20:00:10

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

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

95th percentile per-packet one-way delay: 28.722 ms

Loss rate: 0.13%

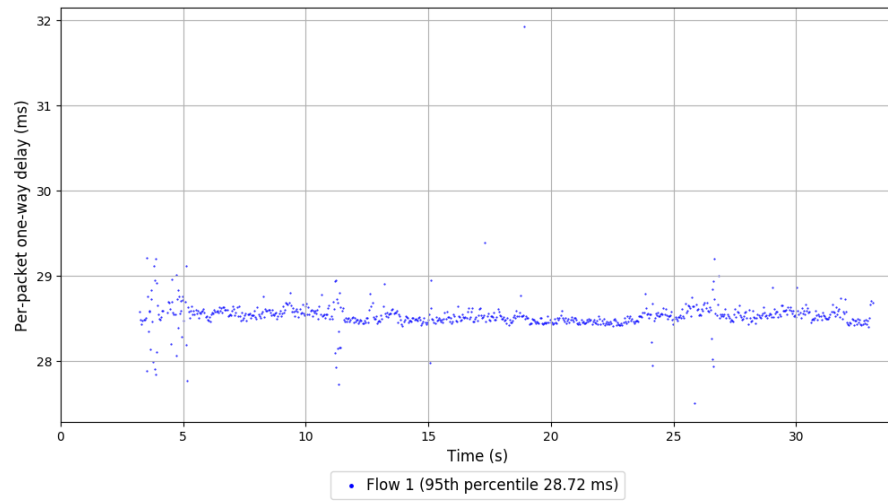
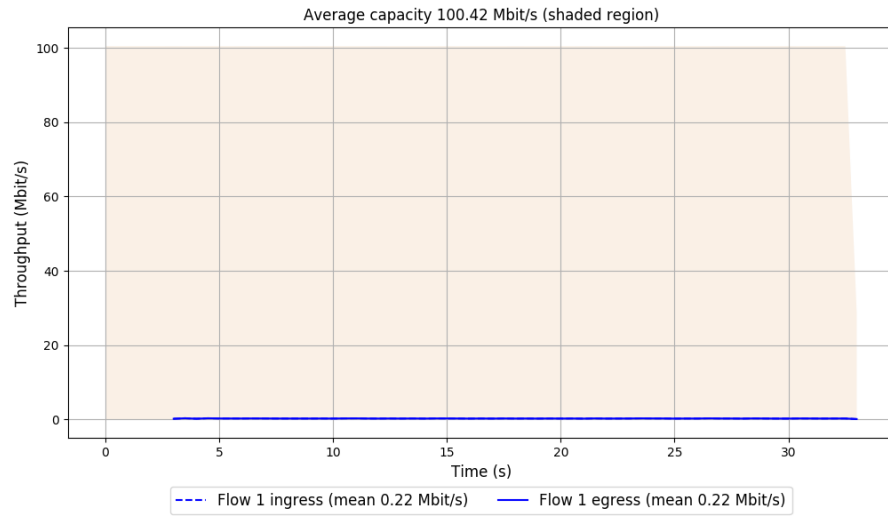
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 28.722 ms

Loss rate: 0.13%

Run 5: Report of SCReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-03-05 18:46:27

End at: 2018-03-05 18:46:57

Below is generated by plot.py at 2018-03-05 20:00:10

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

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

95th percentile per-packet one-way delay: 28.714 ms

Loss rate: 0.13%

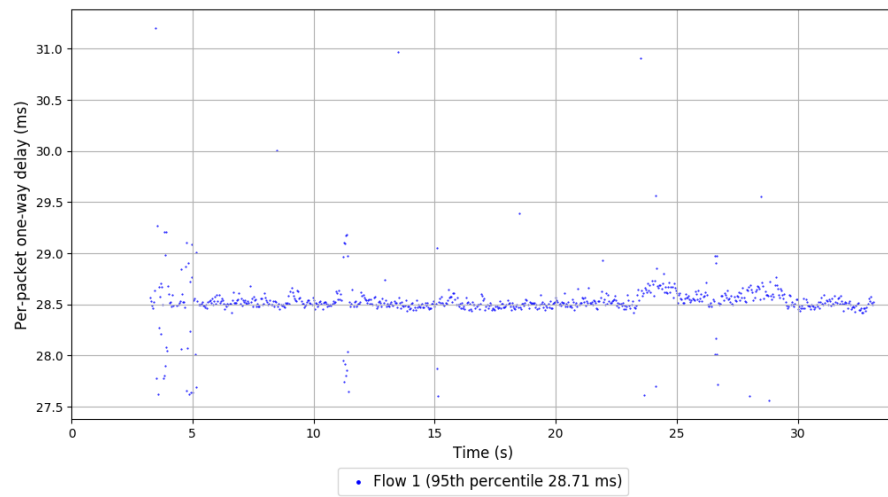
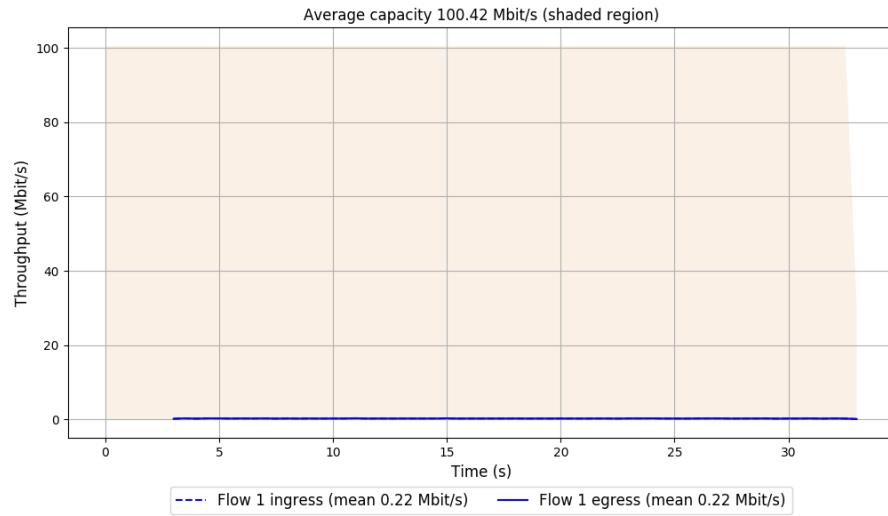
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 28.714 ms

Loss rate: 0.13%

Run 6: Report of SCReAM — Data Link



Run 7: Statistics of SCReAM

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

End at: 2018-03-05 18:59:02

Below is generated by plot.py at 2018-03-05 20:00:10

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

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

95th percentile per-packet one-way delay: 28.785 ms

Loss rate: 0.13%

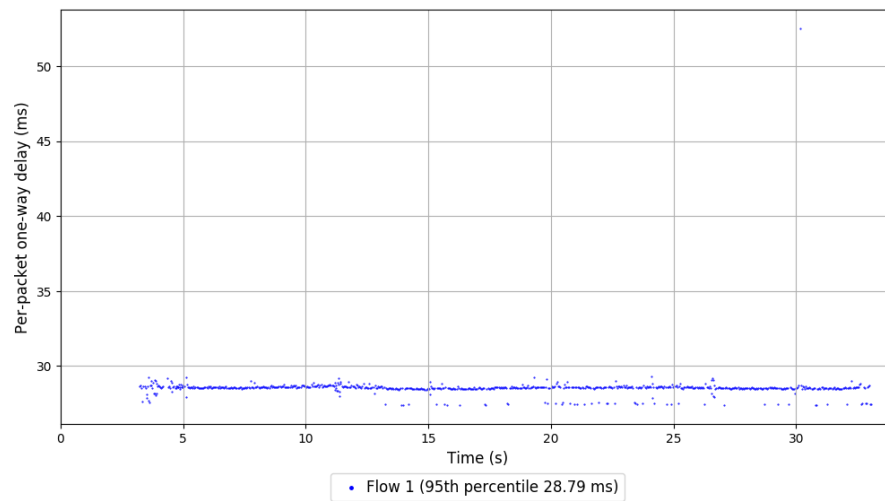
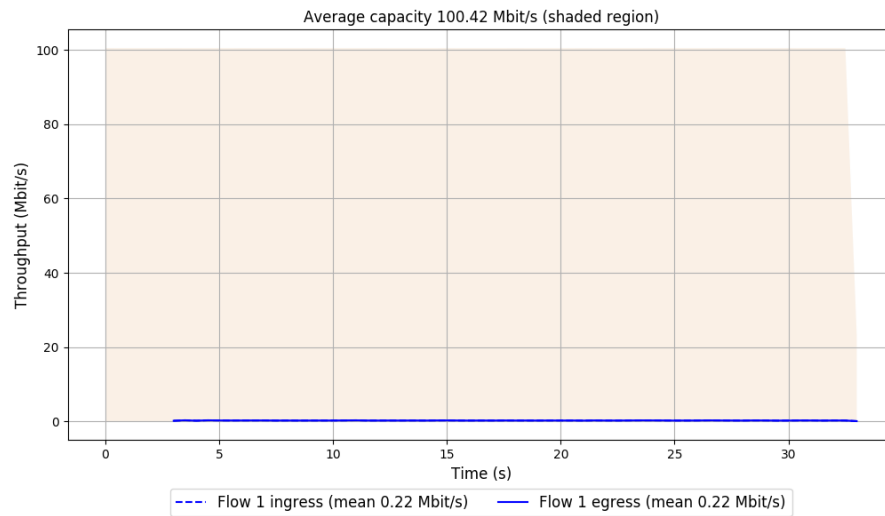
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 28.785 ms

Loss rate: 0.13%

Run 7: Report of SCReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-03-05 19:10:20

End at: 2018-03-05 19:10:50

Below is generated by plot.py at 2018-03-05 20:00:13

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

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

95th percentile per-packet one-way delay: 28.854 ms

Loss rate: 0.13%

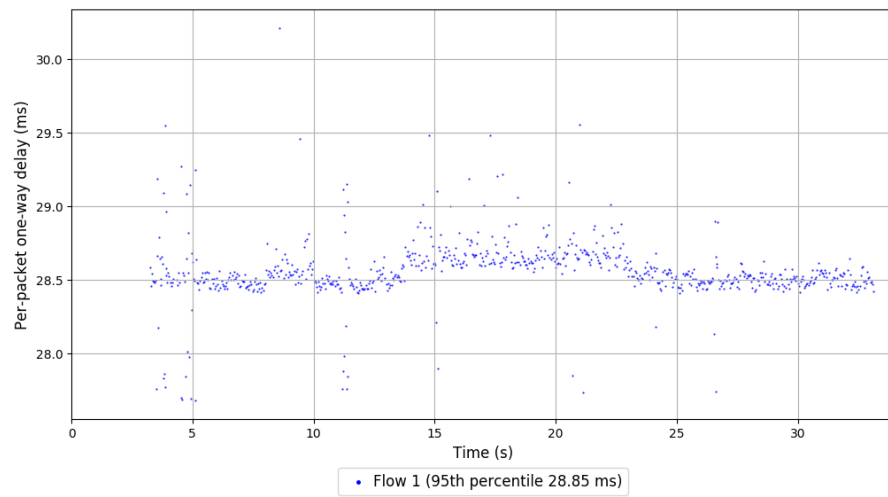
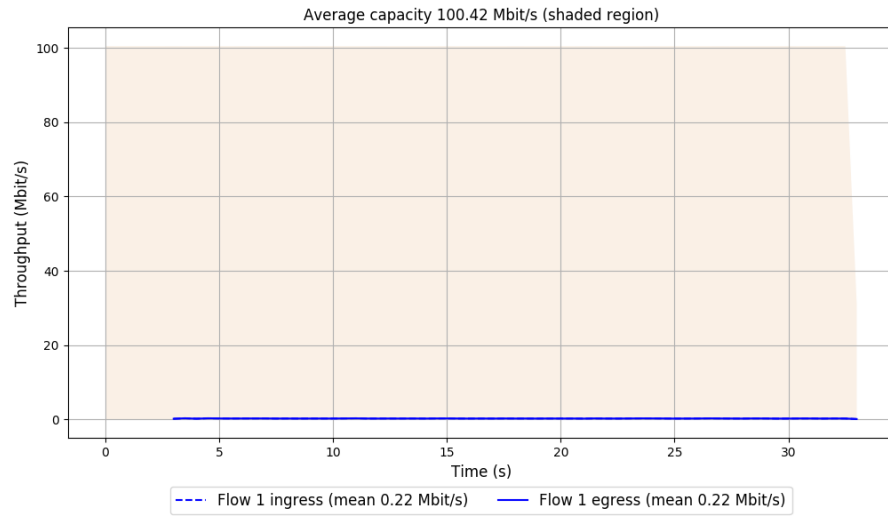
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 28.854 ms

Loss rate: 0.13%

Run 8: Report of SCReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-03-05 19:22:21

End at: 2018-03-05 19:22:51

Below is generated by plot.py at 2018-03-05 20:00:19

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

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

95th percentile per-packet one-way delay: 28.758 ms

Loss rate: 0.13%

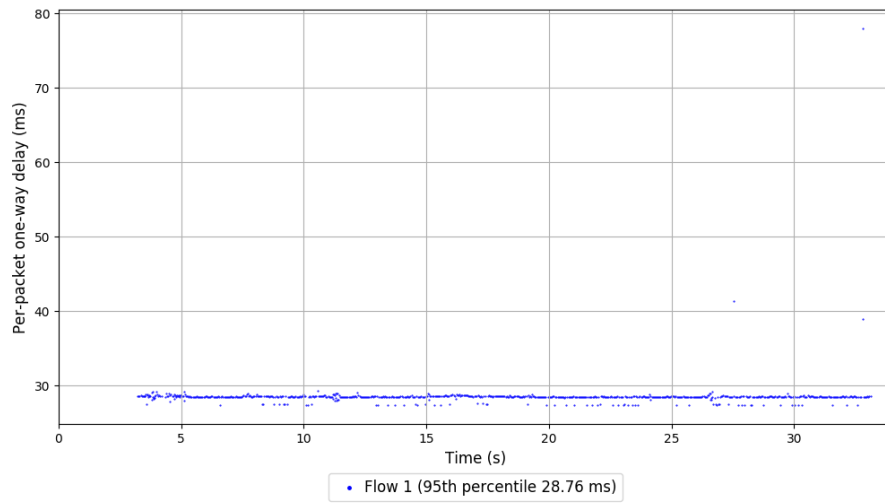
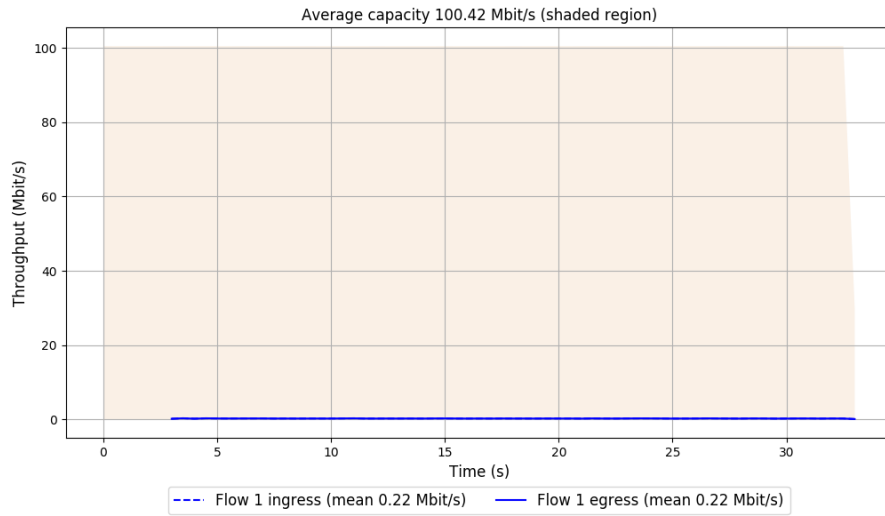
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 28.758 ms

Loss rate: 0.13%

Run 9: Report of SCReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-03-05 19:34:24

End at: 2018-03-05 19:34:54

Below is generated by plot.py at 2018-03-05 20:00:23

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

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

95th percentile per-packet one-way delay: 28.750 ms

Loss rate: 0.00%

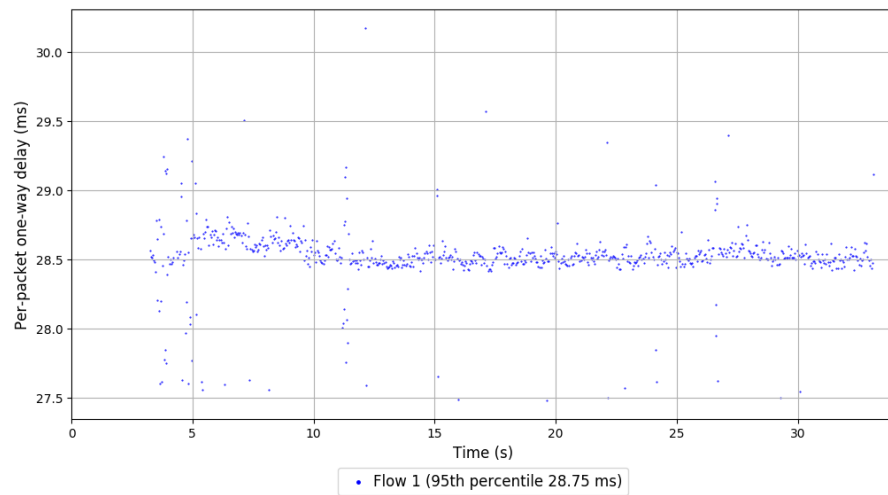
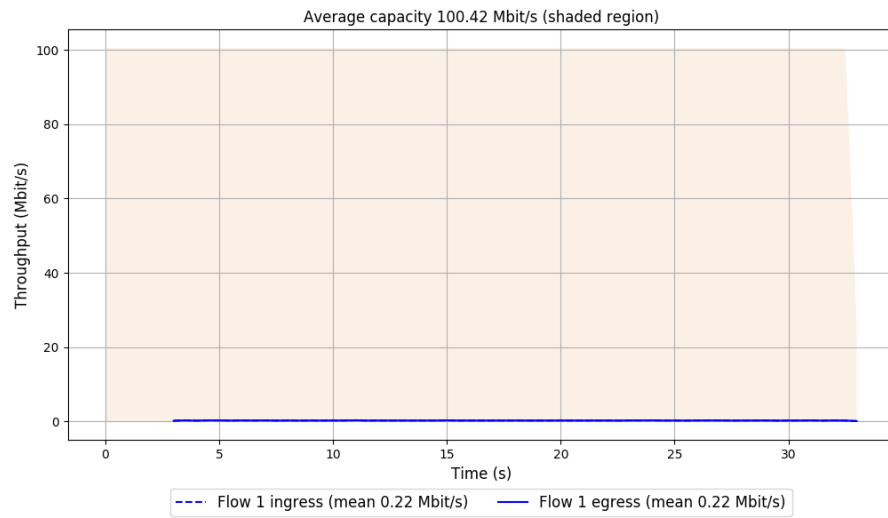
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 28.750 ms

Loss rate: 0.00%

Run 10: Report of SCReAM — Data Link

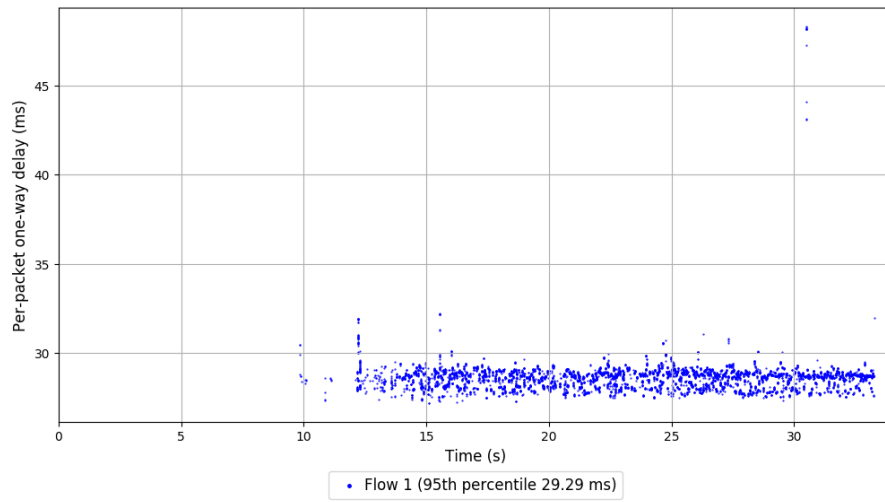
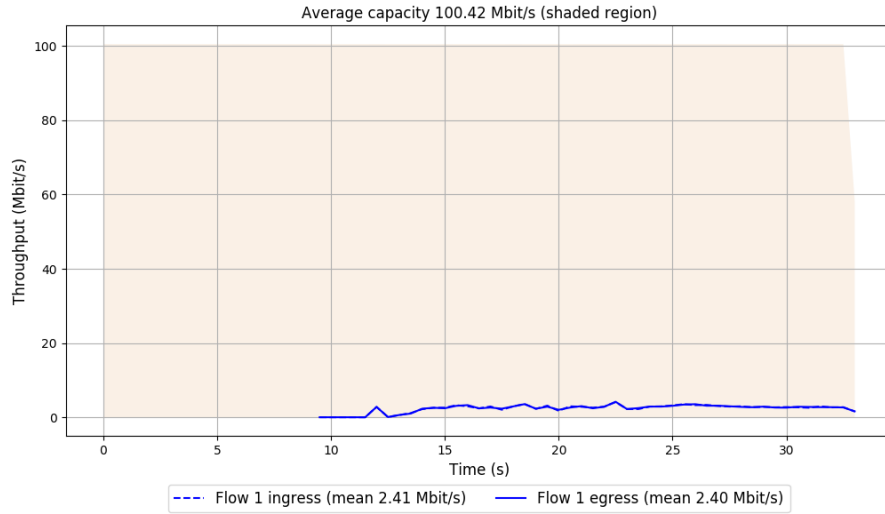


Run 1: Statistics of WebRTC media

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

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

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-03-05 17:54:19

End at: 2018-03-05 17:54:49

Below is generated by plot.py at 2018-03-05 20:00:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 2.36 Mbit/s (2.4% utilization)

95th percentile per-packet one-way delay: 29.546 ms

Loss rate: 0.05%

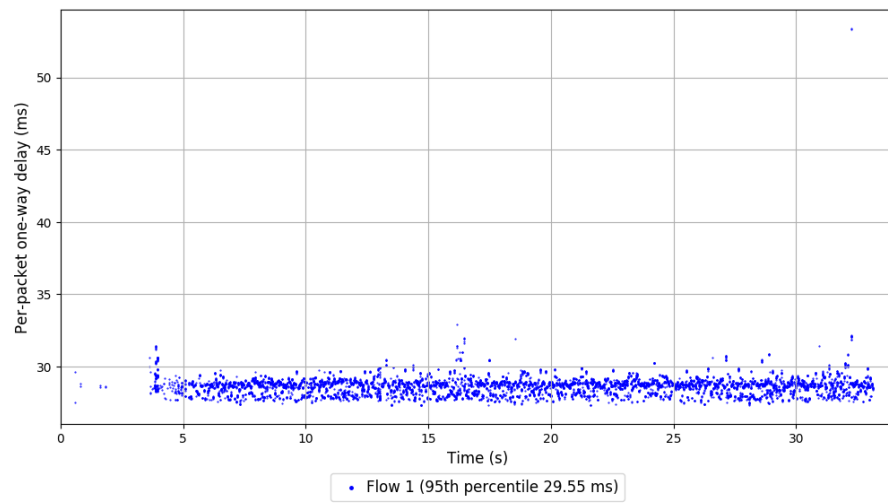
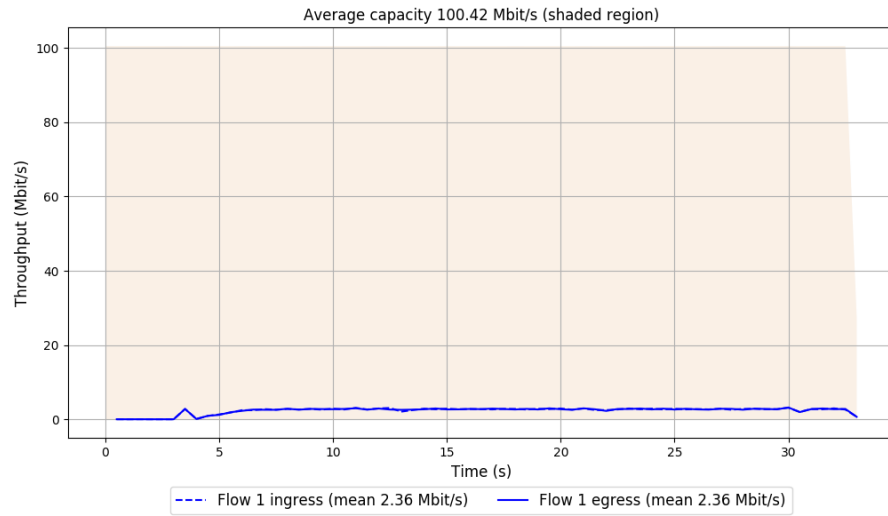
-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 29.546 ms

Loss rate: 0.05%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-03-05 18:06:27

End at: 2018-03-05 18:06:57

Below is generated by plot.py at 2018-03-05 20:00:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 2.37 Mbit/s (2.4% utilization)

95th percentile per-packet one-way delay: 29.380 ms

Loss rate: 0.22%

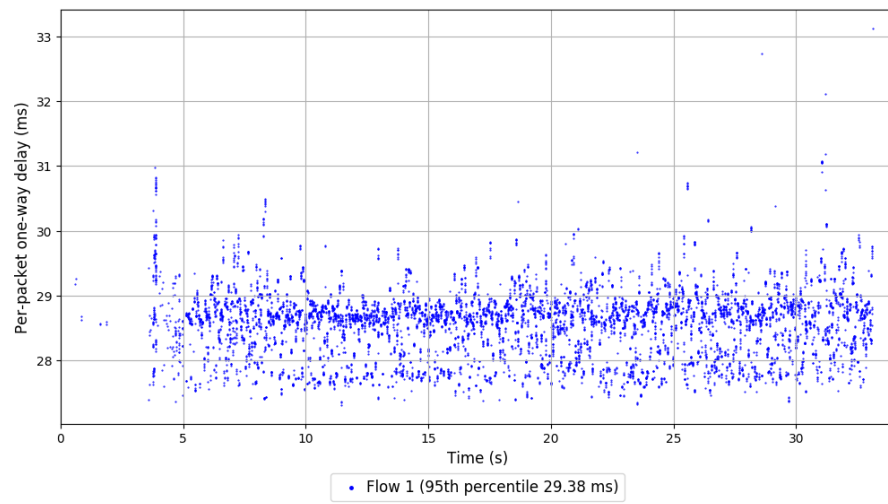
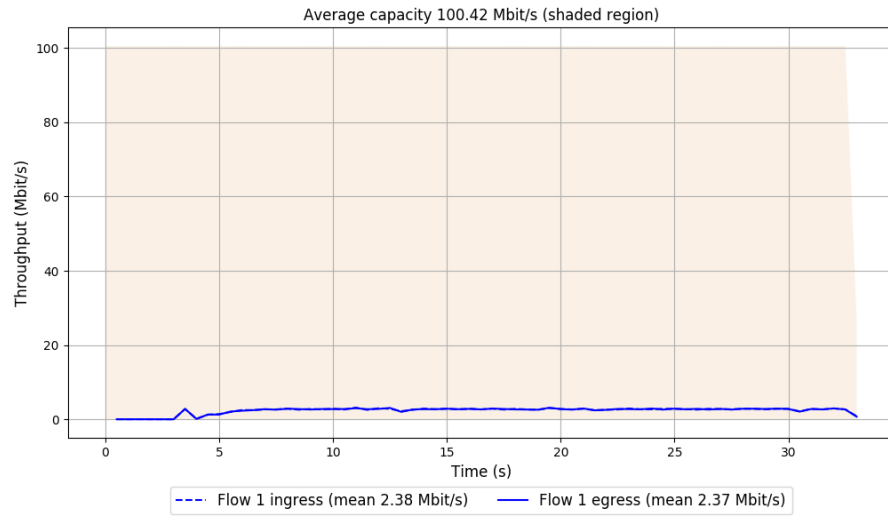
-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 29.380 ms

Loss rate: 0.22%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

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

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

Below is generated by plot.py at 2018-03-05 20:00:39

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 2.38 Mbit/s (2.4% utilization)

95th percentile per-packet one-way delay: 29.224 ms

Loss rate: 0.00%

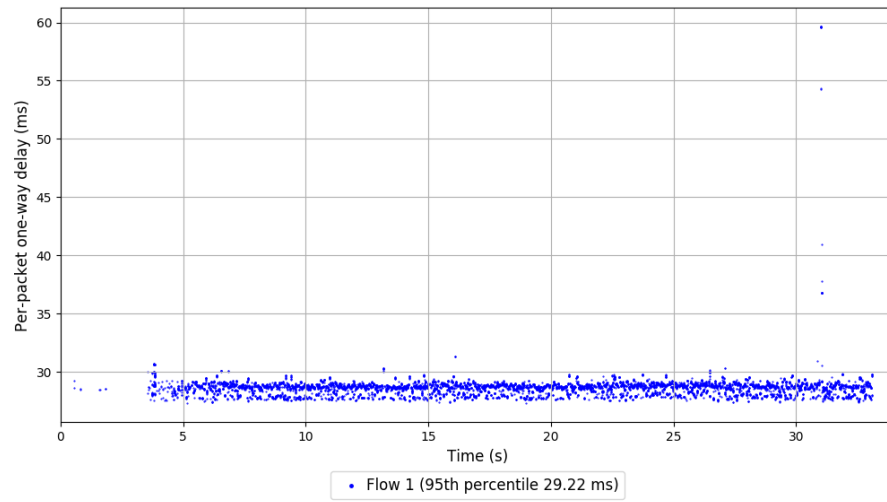
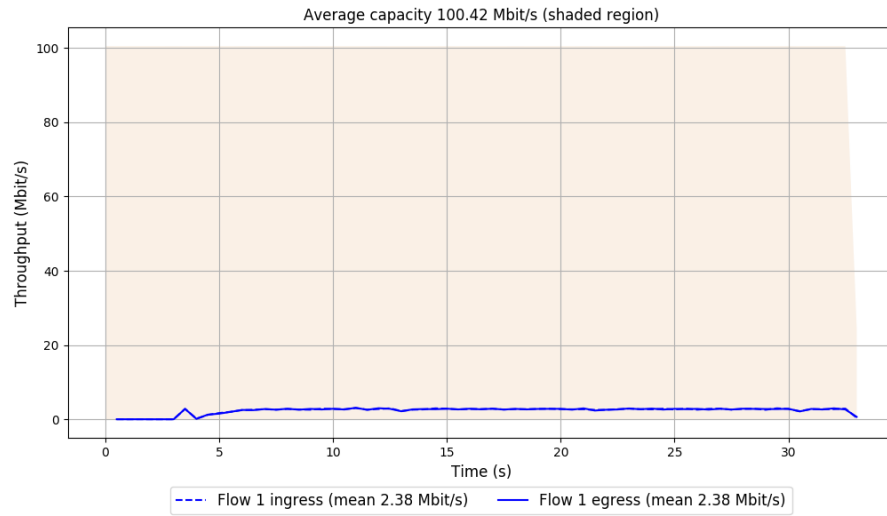
-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 29.224 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-03-05 18:30:24

End at: 2018-03-05 18:30:54

Below is generated by plot.py at 2018-03-05 20:00:52

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 2.35 Mbit/s (2.3% utilization)

95th percentile per-packet one-way delay: 29.392 ms

Loss rate: 0.03%

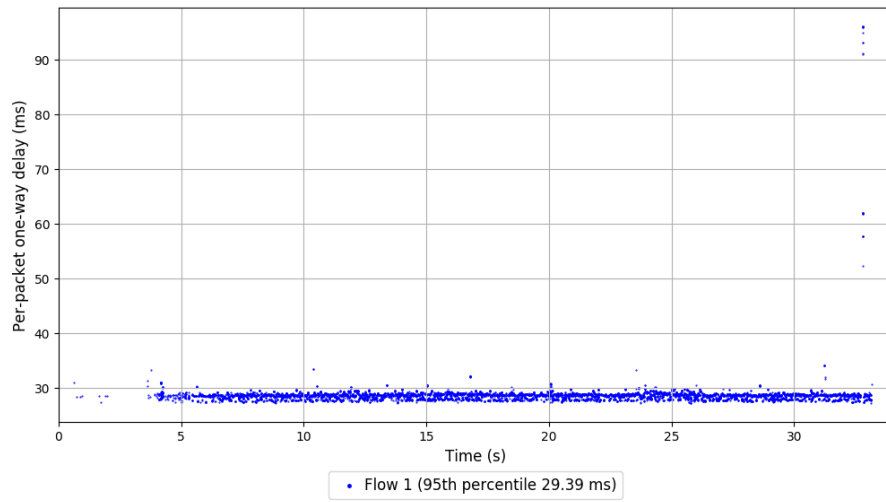
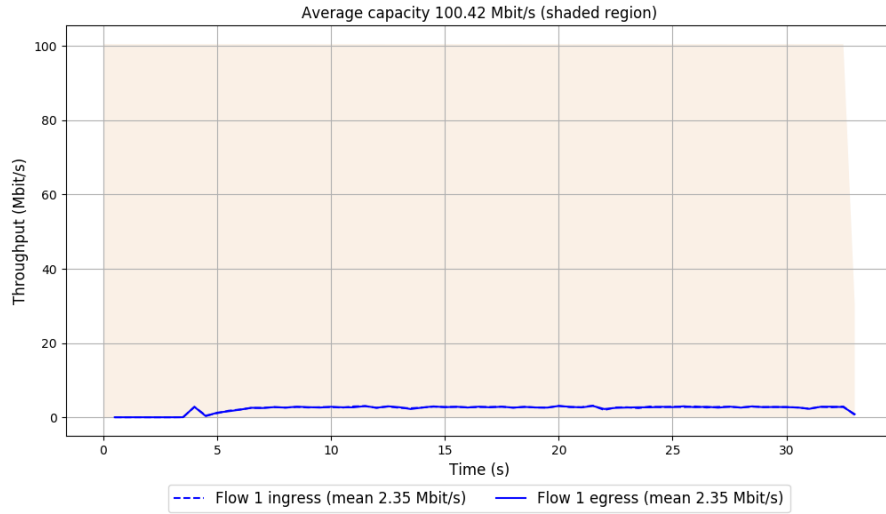
-- Flow 1:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 29.392 ms

Loss rate: 0.03%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-03-05 18:42:27

End at: 2018-03-05 18:42:57

Below is generated by plot.py at 2018-03-05 20:00:55

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 2.37 Mbit/s (2.4% utilization)

95th percentile per-packet one-way delay: 29.250 ms

Loss rate: 0.15%

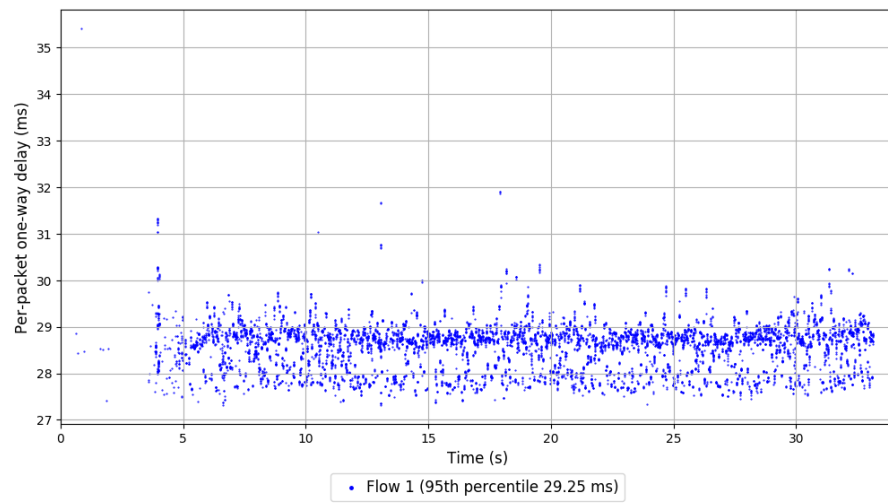
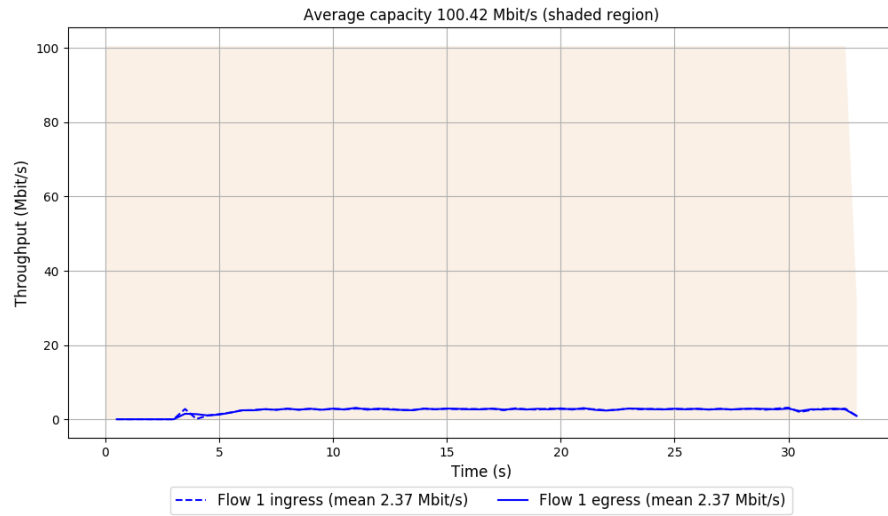
-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 29.250 ms

Loss rate: 0.15%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-03-05 18:54:36

End at: 2018-03-05 18:55:06

Below is generated by plot.py at 2018-03-05 20:01:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 2.36 Mbit/s (2.3% utilization)

95th percentile per-packet one-way delay: 29.284 ms

Loss rate: 0.15%

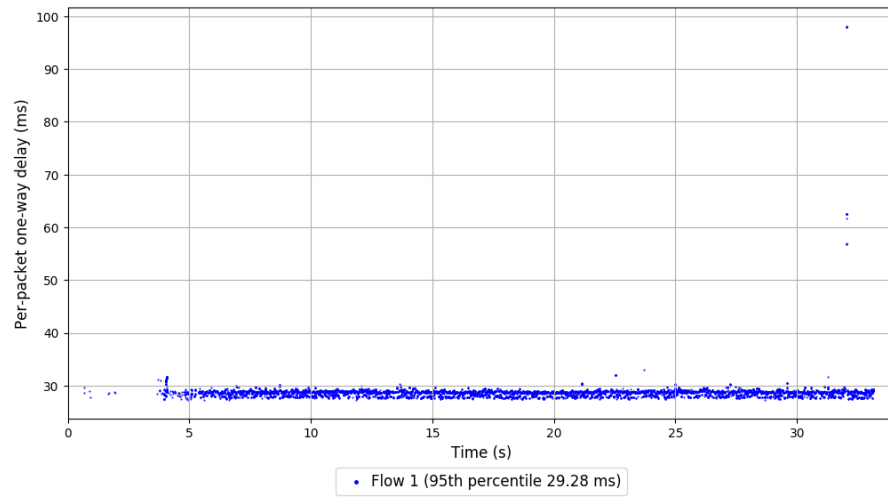
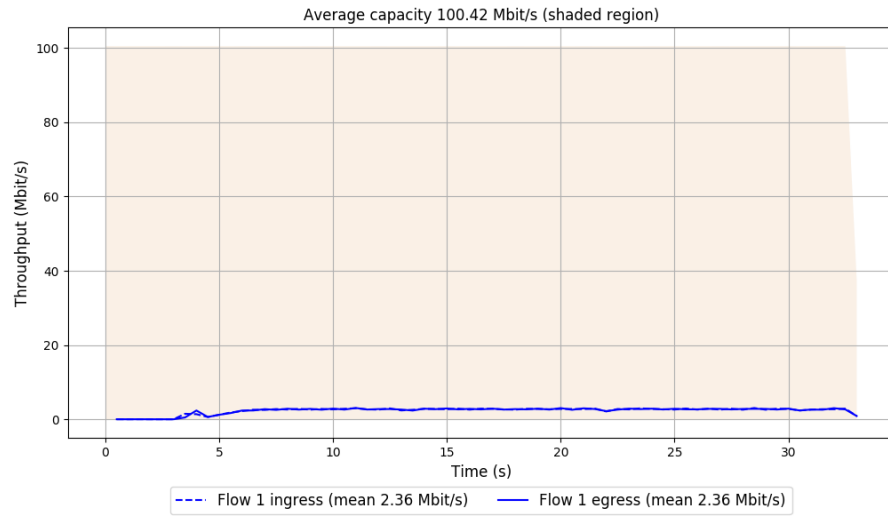
-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 29.284 ms

Loss rate: 0.15%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-03-05 19:06:25

End at: 2018-03-05 19:06:55

Below is generated by plot.py at 2018-03-05 20:01:07

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 2.38 Mbit/s (2.4% utilization)

95th percentile per-packet one-way delay: 29.230 ms

Loss rate: 0.00%

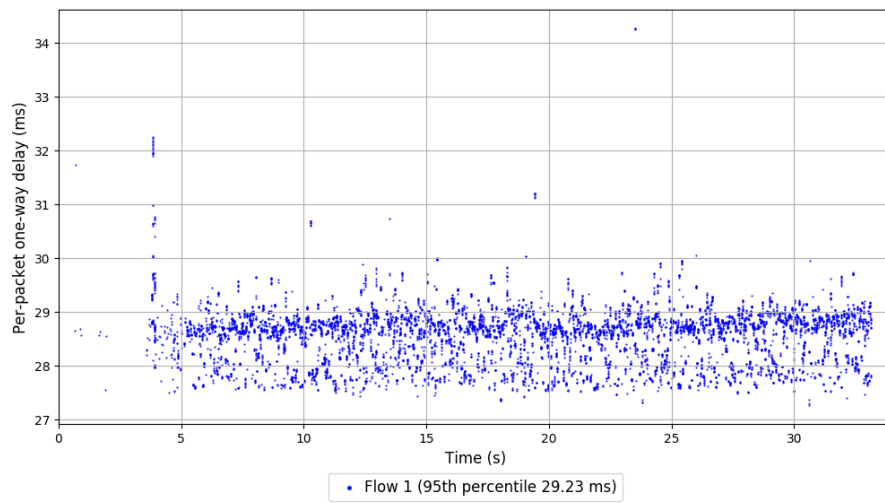
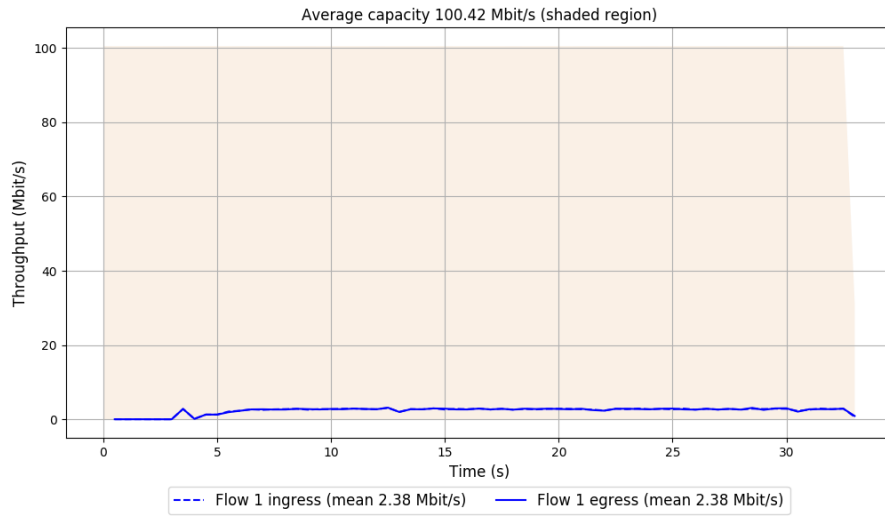
-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 29.230 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-03-05 19:18:25

End at: 2018-03-05 19:18:55

Below is generated by plot.py at 2018-03-05 20:01:12

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 2.38 Mbit/s (2.4% utilization)

95th percentile per-packet one-way delay: 29.387 ms

Loss rate: 0.10%

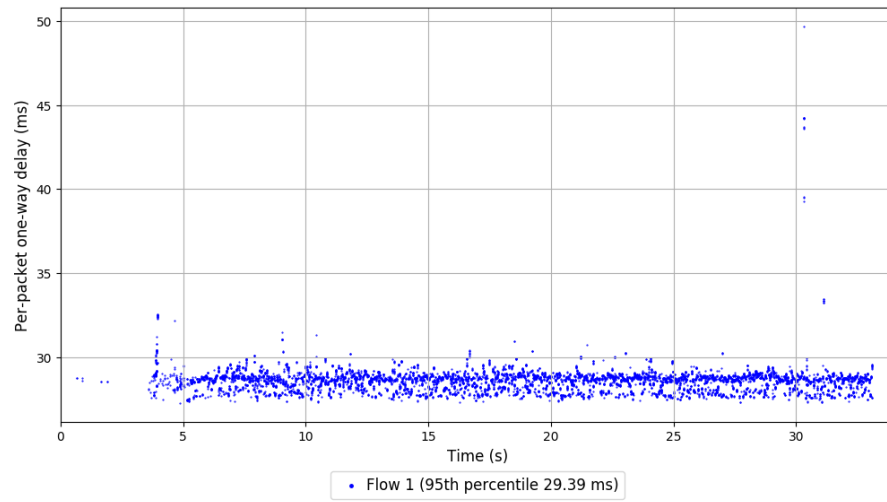
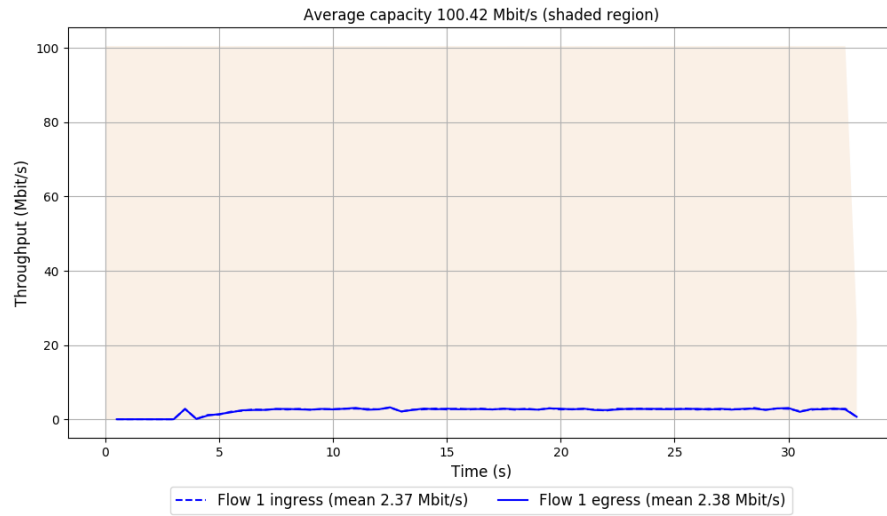
-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 29.387 ms

Loss rate: 0.10%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-03-05 19:30:28

End at: 2018-03-05 19:30:58

Below is generated by plot.py at 2018-03-05 20:01:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 2.37 Mbit/s (2.4% utilization)

95th percentile per-packet one-way delay: 29.326 ms

Loss rate: 0.00%

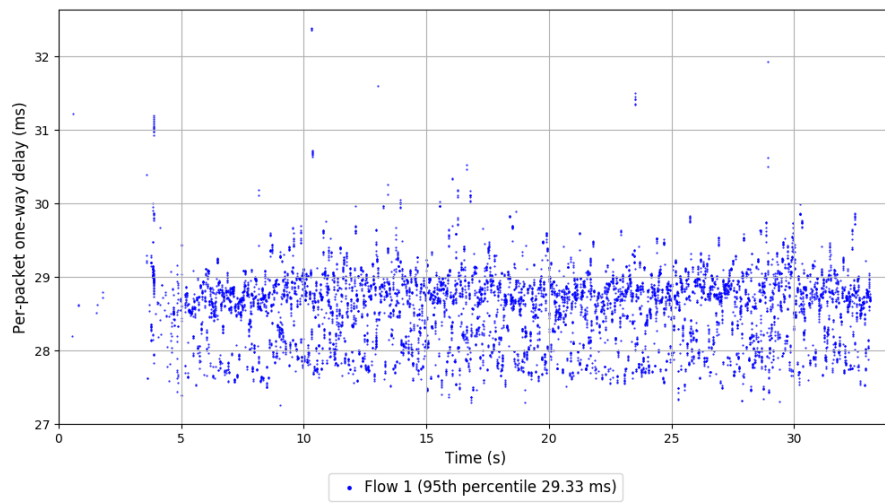
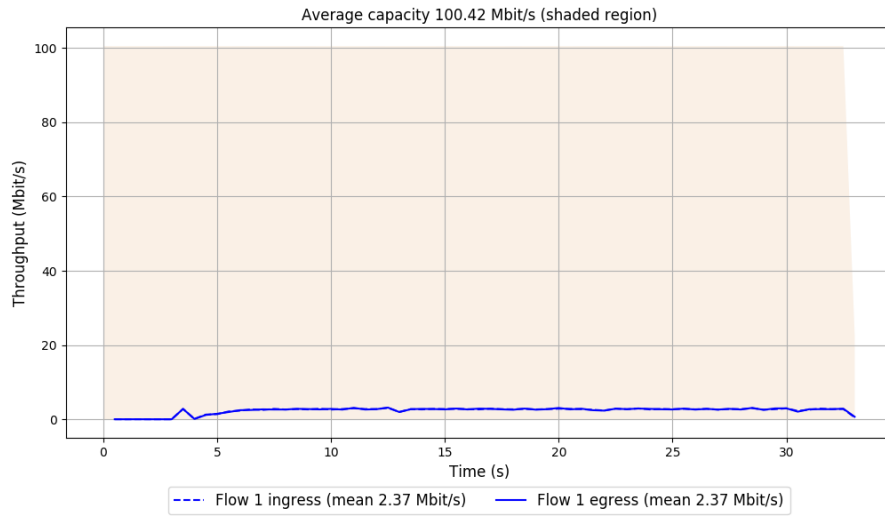
-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 29.326 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-03-05 17:48:13

End at: 2018-03-05 17:48:43

Below is generated by plot.py at 2018-03-05 20:01:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 13.48 Mbit/s (13.4% utilization)

95th percentile per-packet one-way delay: 33.756 ms

Loss rate: 0.19%

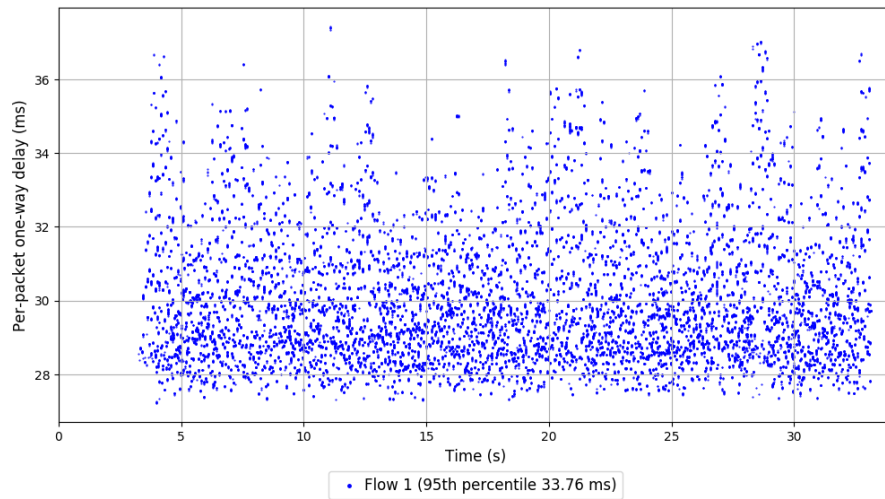
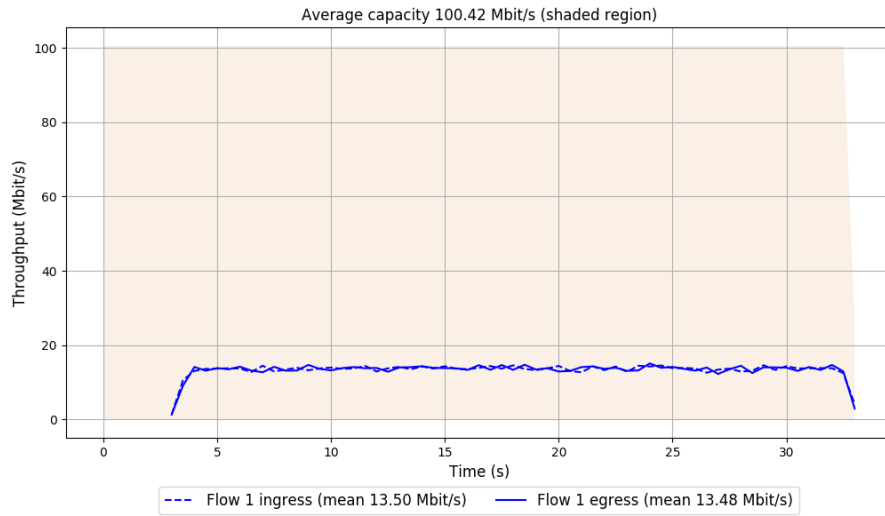
-- Flow 1:

Average throughput: 13.48 Mbit/s

95th percentile per-packet one-way delay: 33.756 ms

Loss rate: 0.19%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-03-05 18:00:13

End at: 2018-03-05 18:00:43

Below is generated by plot.py at 2018-03-05 20:01:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 13.24 Mbit/s (13.2% utilization)

95th percentile per-packet one-way delay: 33.643 ms

Loss rate: 0.09%

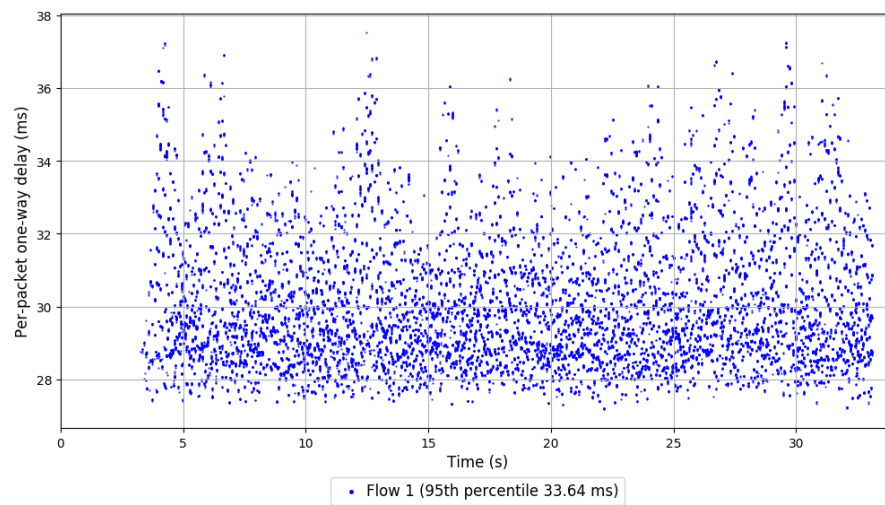
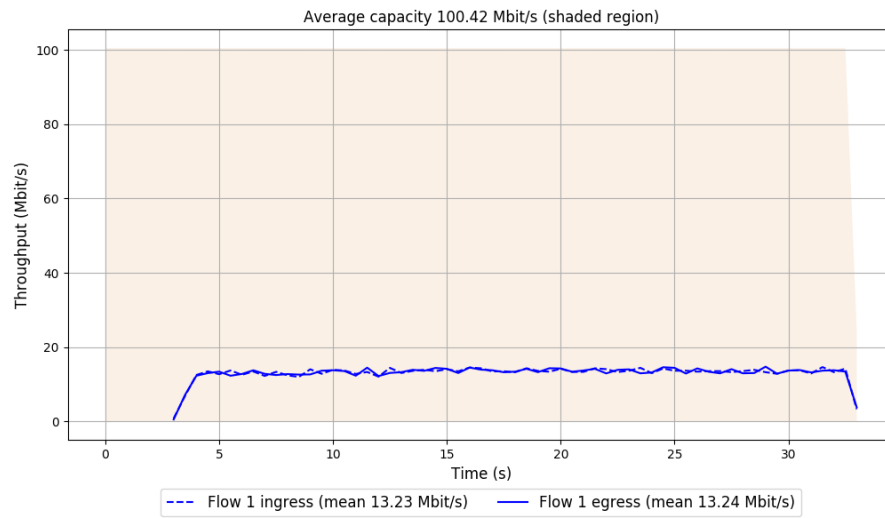
-- Flow 1:

Average throughput: 13.24 Mbit/s

95th percentile per-packet one-way delay: 33.643 ms

Loss rate: 0.09%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-03-05 18:12:19

End at: 2018-03-05 18:12:49

Below is generated by plot.py at 2018-03-05 20:01:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 13.14 Mbit/s (13.1% utilization)

95th percentile per-packet one-way delay: 33.857 ms

Loss rate: 0.08%

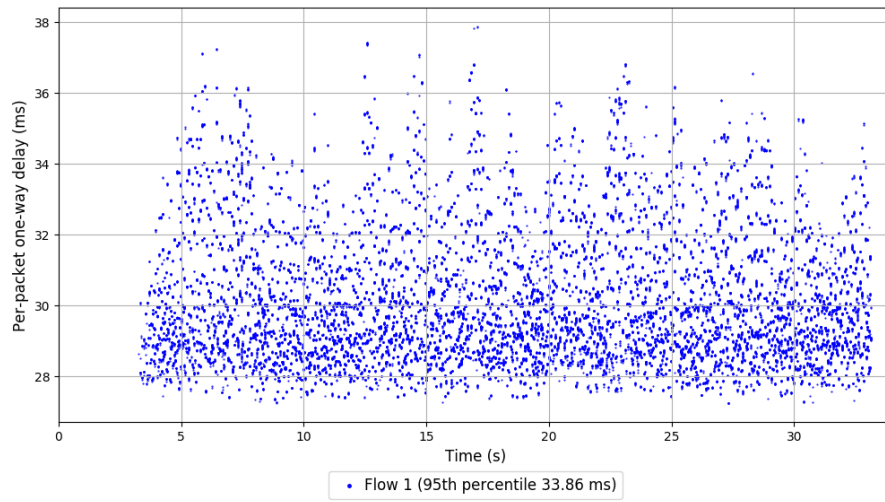
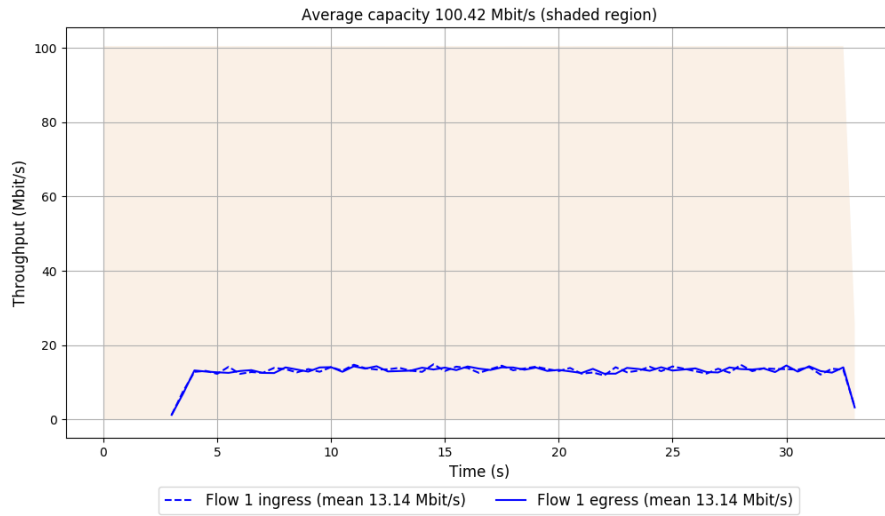
-- Flow 1:

Average throughput: 13.14 Mbit/s

95th percentile per-packet one-way delay: 33.857 ms

Loss rate: 0.08%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-03-05 18:24:13

End at: 2018-03-05 18:24:43

Below is generated by plot.py at 2018-03-05 20:01:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 13.37 Mbit/s (13.3% utilization)

95th percentile per-packet one-way delay: 33.803 ms

Loss rate: 0.04%

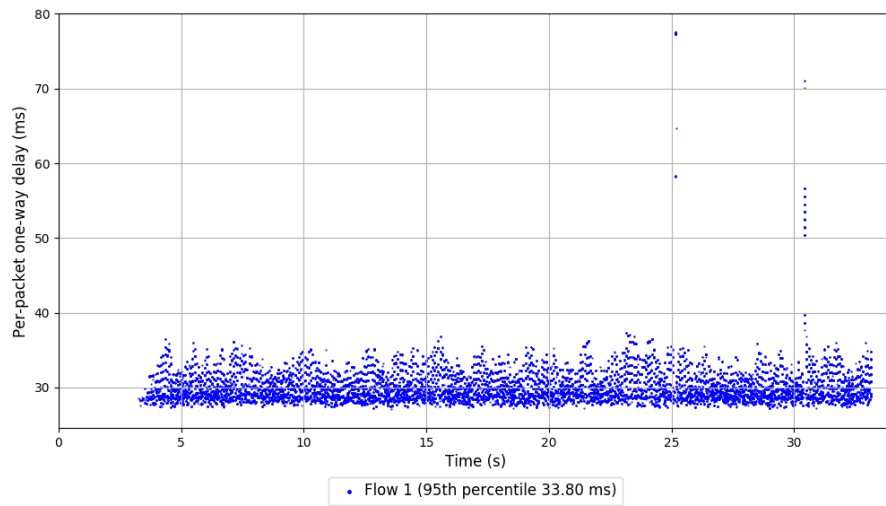
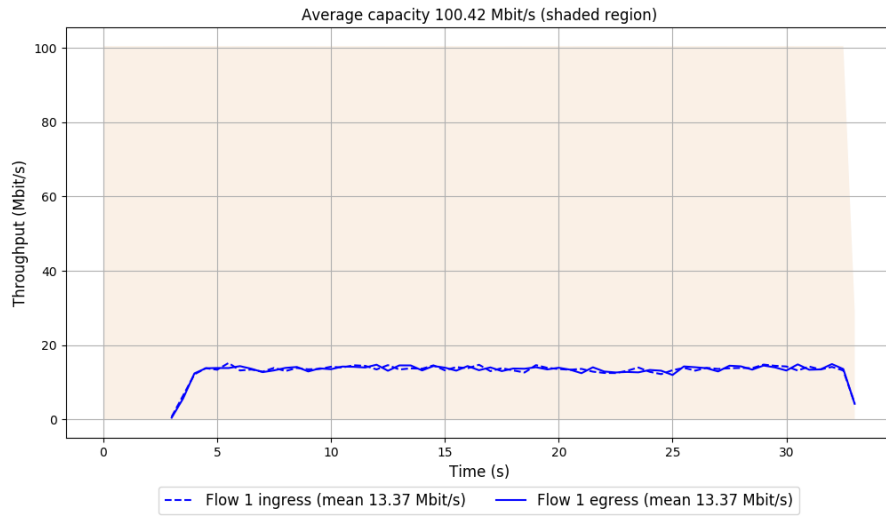
-- Flow 1:

Average throughput: 13.37 Mbit/s

95th percentile per-packet one-way delay: 33.803 ms

Loss rate: 0.04%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-03-05 18:36:17

End at: 2018-03-05 18:36:47

Below is generated by plot.py at 2018-03-05 20:01:55

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 13.22 Mbit/s (13.2% utilization)

95th percentile per-packet one-way delay: 33.939 ms

Loss rate: 0.15%

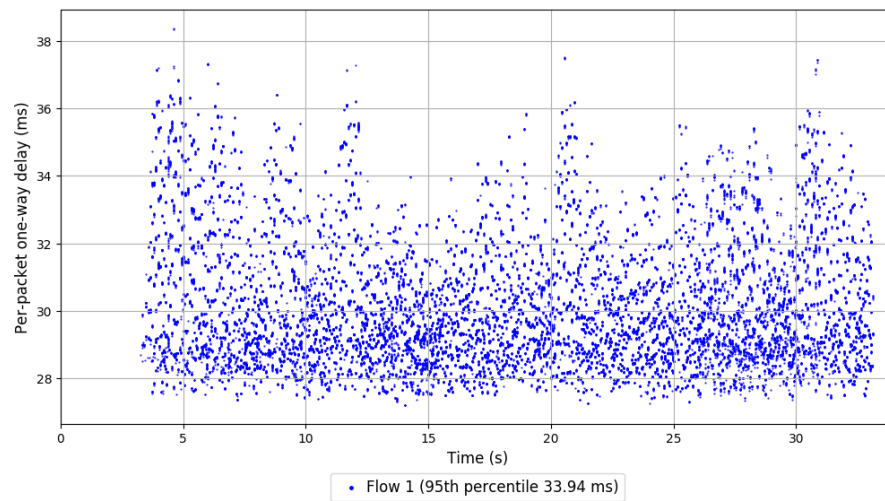
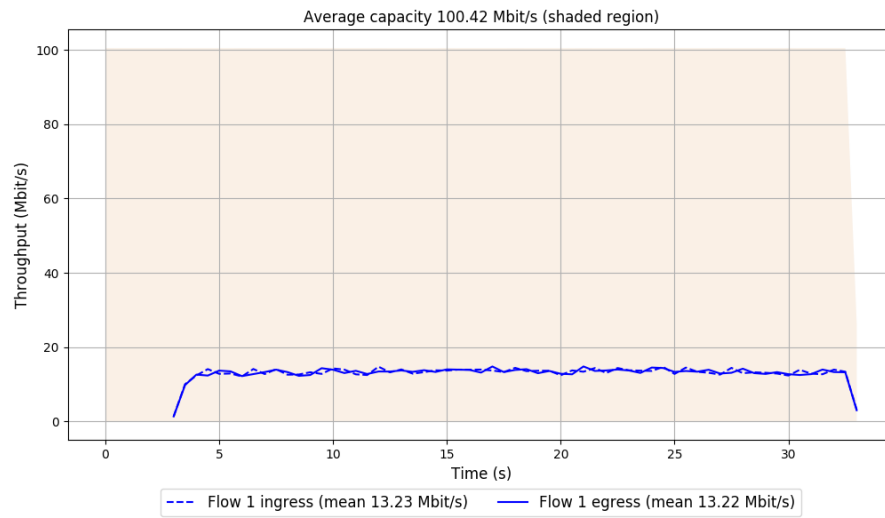
-- Flow 1:

Average throughput: 13.22 Mbit/s

95th percentile per-packet one-way delay: 33.939 ms

Loss rate: 0.15%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-03-05 18:48:24

End at: 2018-03-05 18:48:54

Below is generated by plot.py at 2018-03-05 20:02:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 13.36 Mbit/s (13.3% utilization)

95th percentile per-packet one-way delay: 33.700 ms

Loss rate: 0.10%

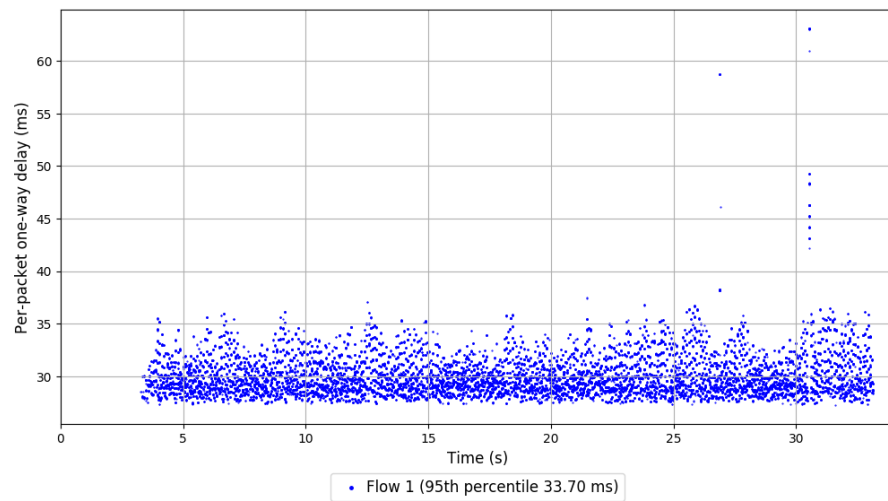
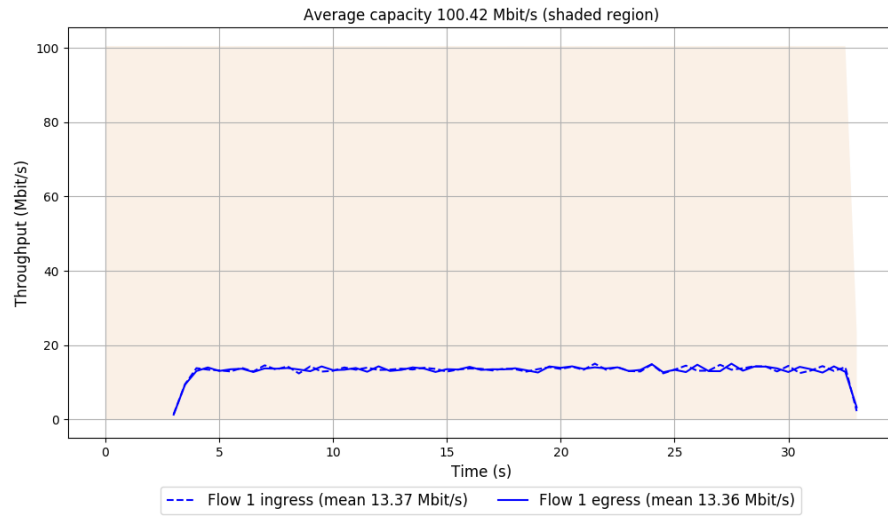
-- Flow 1:

Average throughput: 13.36 Mbit/s

95th percentile per-packet one-way delay: 33.700 ms

Loss rate: 0.10%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-03-05 19:00:27

End at: 2018-03-05 19:00:57

Below is generated by plot.py at 2018-03-05 20:02:06

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 13.08 Mbit/s (13.0% utilization)

95th percentile per-packet one-way delay: 34.563 ms

Loss rate: 0.03%

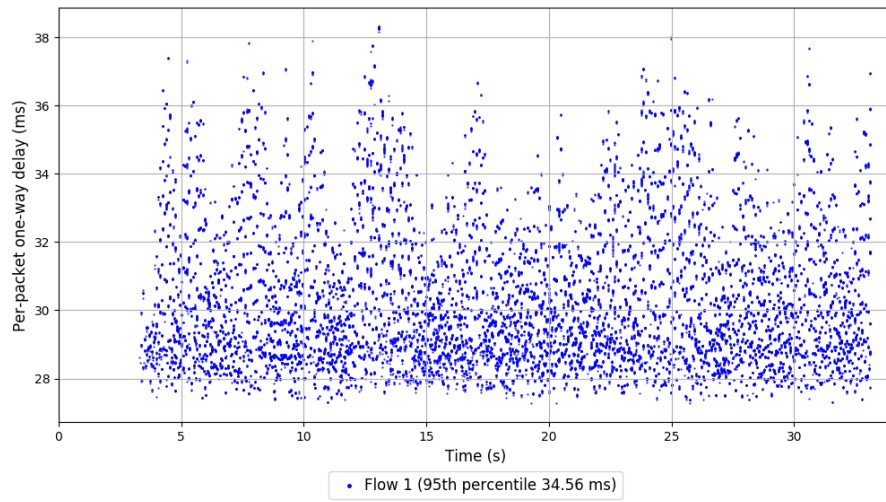
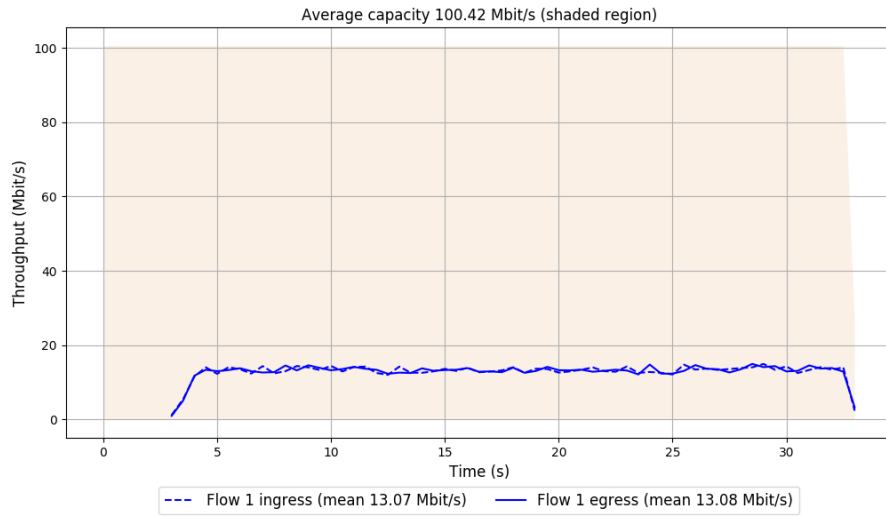
-- Flow 1:

Average throughput: 13.08 Mbit/s

95th percentile per-packet one-way delay: 34.563 ms

Loss rate: 0.03%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-03-05 19:12:16

End at: 2018-03-05 19:12:46

Below is generated by plot.py at 2018-03-05 20:02:09

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 13.13 Mbit/s (13.1% utilization)

95th percentile per-packet one-way delay: 34.079 ms

Loss rate: 0.01%

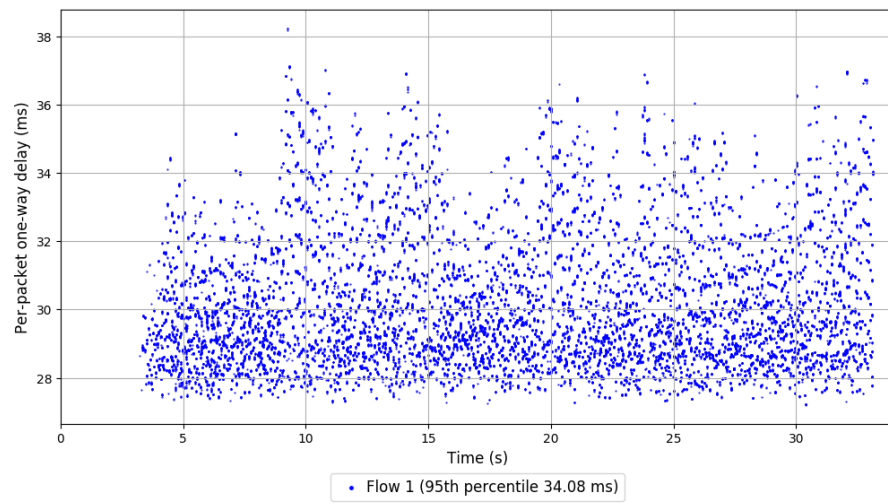
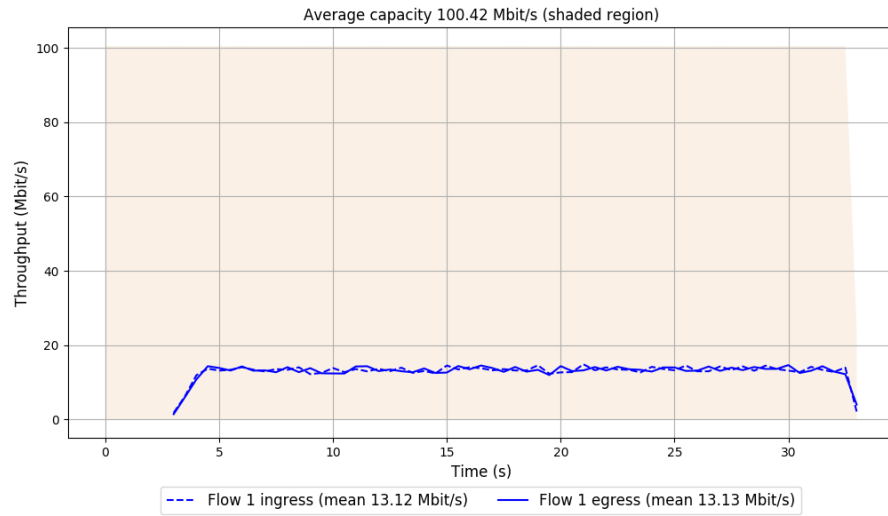
-- Flow 1:

Average throughput: 13.13 Mbit/s

95th percentile per-packet one-way delay: 34.079 ms

Loss rate: 0.01%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

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

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

Below is generated by plot.py at 2018-03-05 20:02:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 13.35 Mbit/s (13.3% utilization)

95th percentile per-packet one-way delay: 33.707 ms

Loss rate: 0.07%

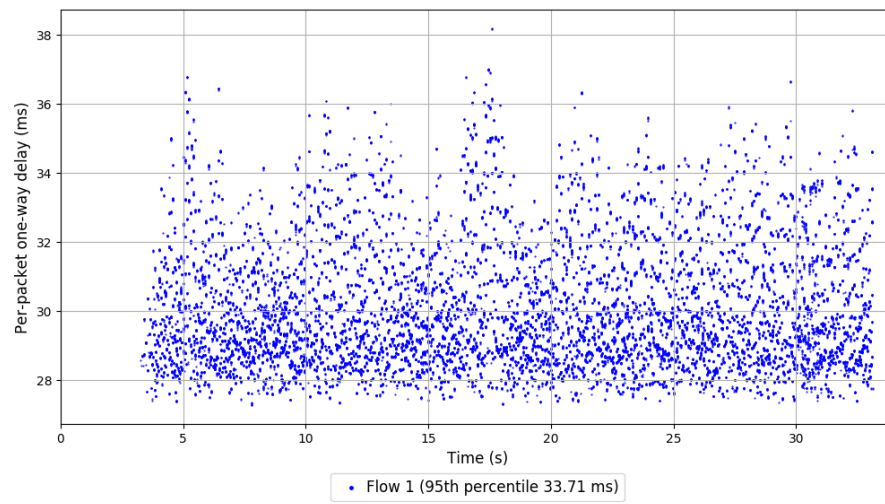
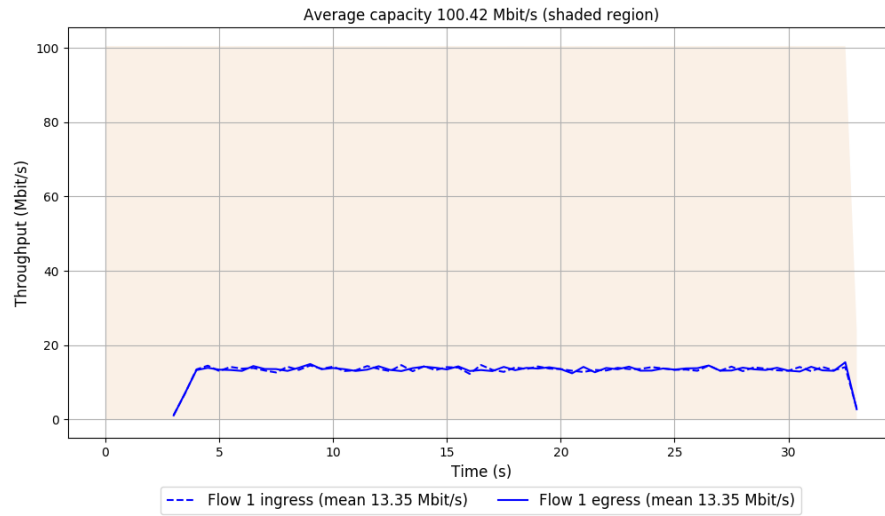
-- Flow 1:

Average throughput: 13.35 Mbit/s

95th percentile per-packet one-way delay: 33.707 ms

Loss rate: 0.07%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-03-05 19:36:20

End at: 2018-03-05 19:36:50

Below is generated by plot.py at 2018-03-05 20:02:26

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 13.14 Mbit/s (13.1% utilization)

95th percentile per-packet one-way delay: 33.809 ms

Loss rate: 0.03%

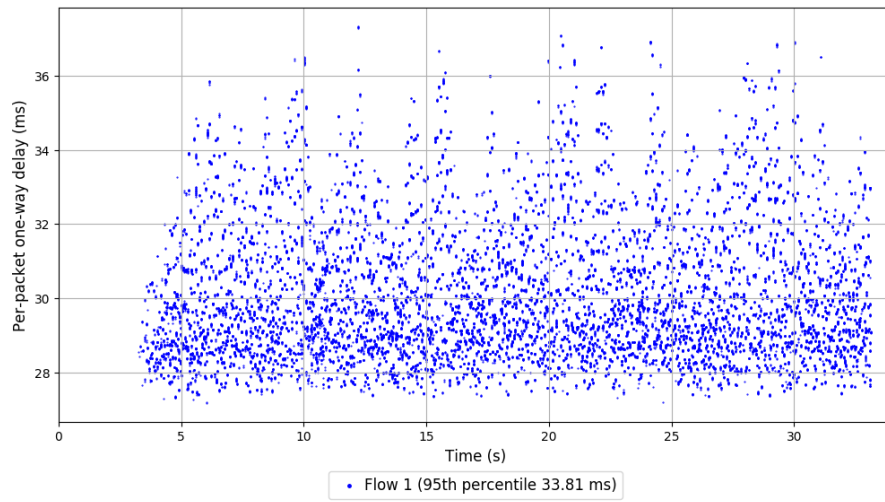
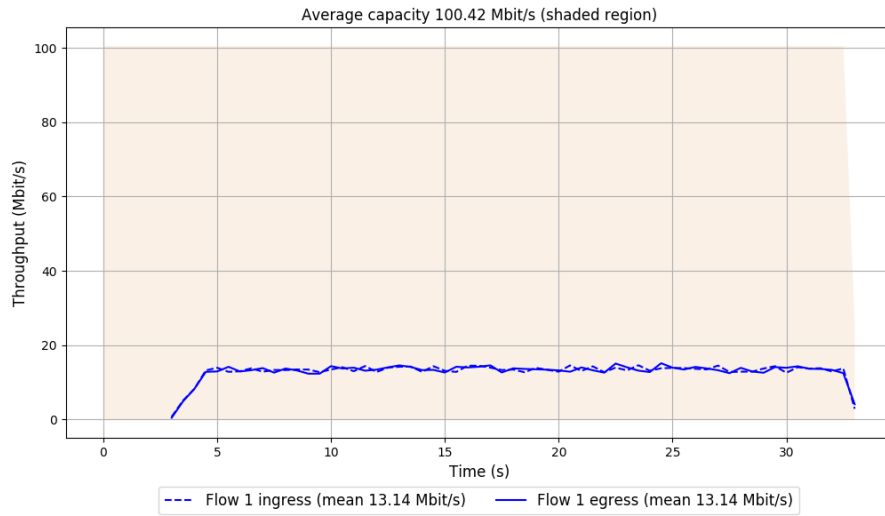
-- Flow 1:

Average throughput: 13.14 Mbit/s

95th percentile per-packet one-way delay: 33.809 ms

Loss rate: 0.03%

Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-03-05 17:51:35

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

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

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 82.30 Mbit/s (82.0% utilization)

95th percentile per-packet one-way delay: 38.387 ms

Loss rate: 1.54%

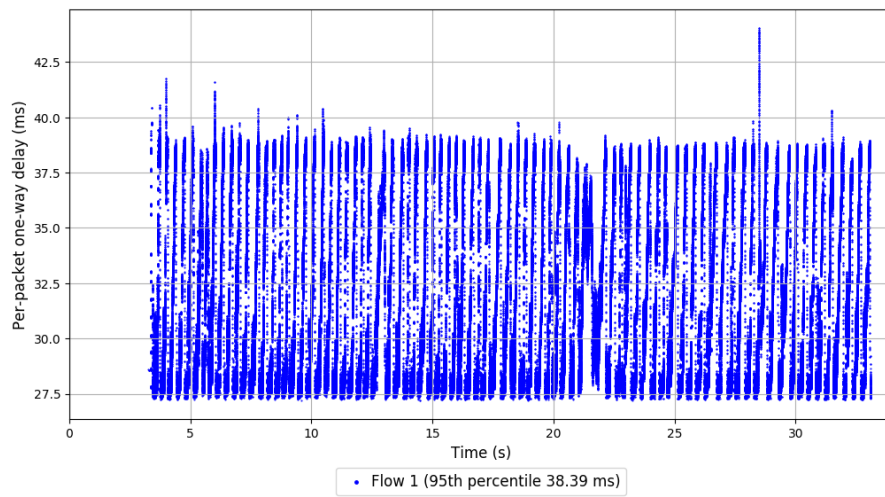
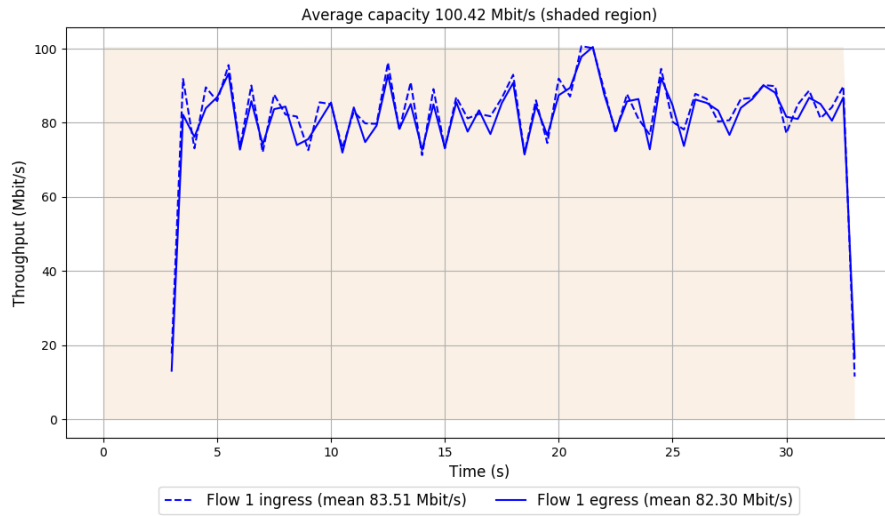
-- Flow 1:

Average throughput: 82.30 Mbit/s

95th percentile per-packet one-way delay: 38.387 ms

Loss rate: 1.54%

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



Run 2: Statistics of TaoVA-100x

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

End at: 2018-03-05 18:04:15

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

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 79.43 Mbit/s (79.1% utilization)

95th percentile per-packet one-way delay: 38.507 ms

Loss rate: 2.67%

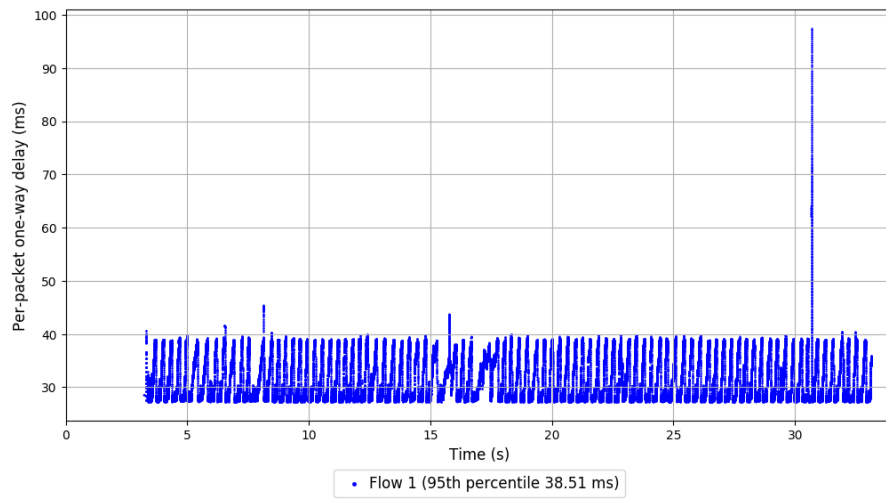
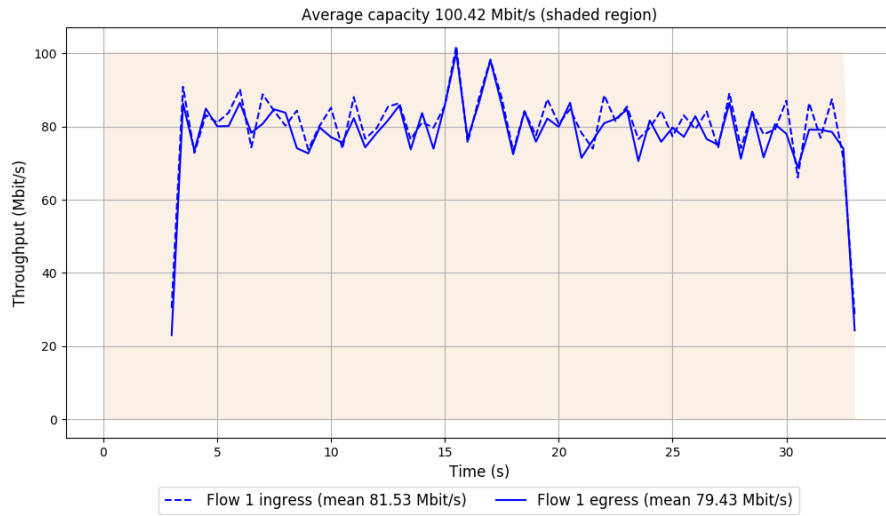
-- Flow 1:

Average throughput: 79.43 Mbit/s

95th percentile per-packet one-way delay: 38.507 ms

Loss rate: 2.67%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-03-05 18:15:38

End at: 2018-03-05 18:16:08

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

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 79.46 Mbit/s (79.1% utilization)

95th percentile per-packet one-way delay: 38.474 ms

Loss rate: 2.82%

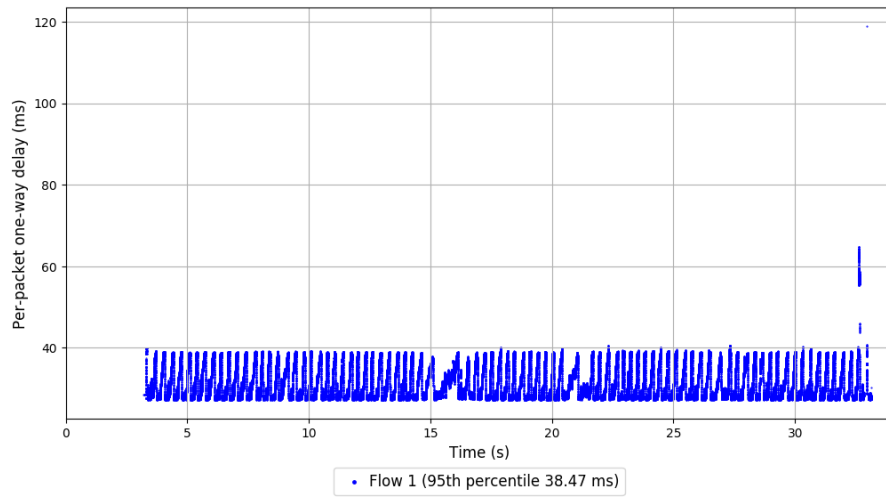
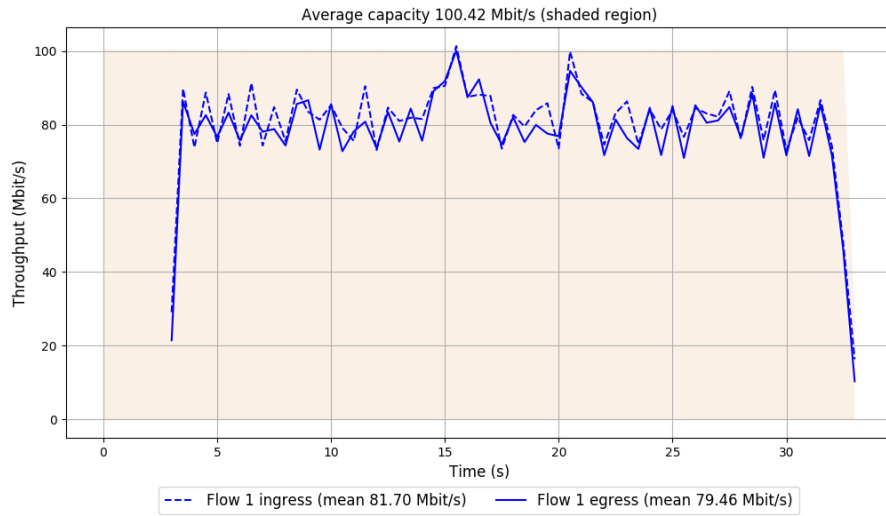
-- Flow 1:

Average throughput: 79.46 Mbit/s

95th percentile per-packet one-way delay: 38.474 ms

Loss rate: 2.82%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-03-05 18:27:40

End at: 2018-03-05 18:28:10

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

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 80.21 Mbit/s (79.9% utilization)

95th percentile per-packet one-way delay: 38.462 ms

Loss rate: 2.33%

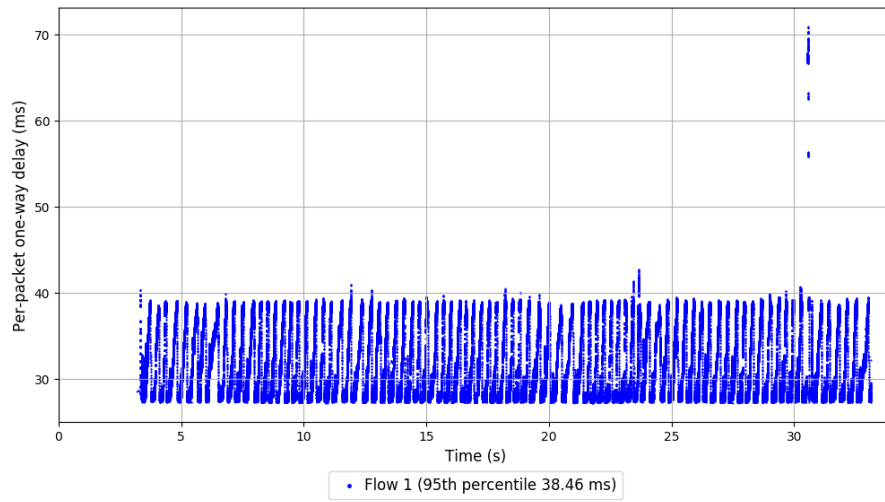
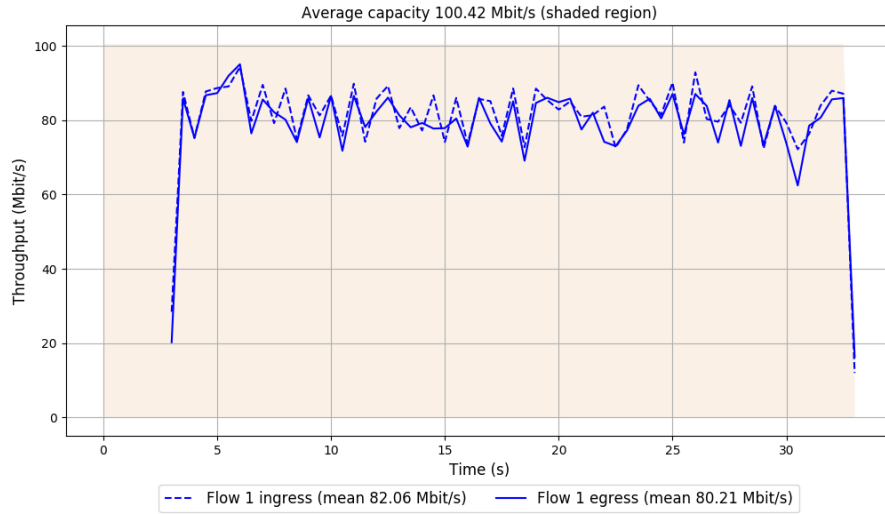
-- Flow 1:

Average throughput: 80.21 Mbit/s

95th percentile per-packet one-way delay: 38.462 ms

Loss rate: 2.33%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-03-05 18:39:45

End at: 2018-03-05 18:40:15

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

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 80.49 Mbit/s (80.1% utilization)

95th percentile per-packet one-way delay: 38.445 ms

Loss rate: 2.09%

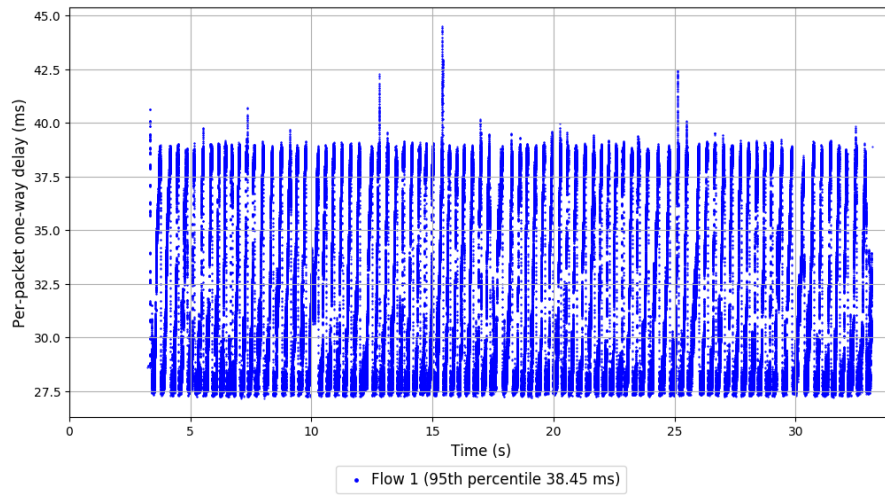
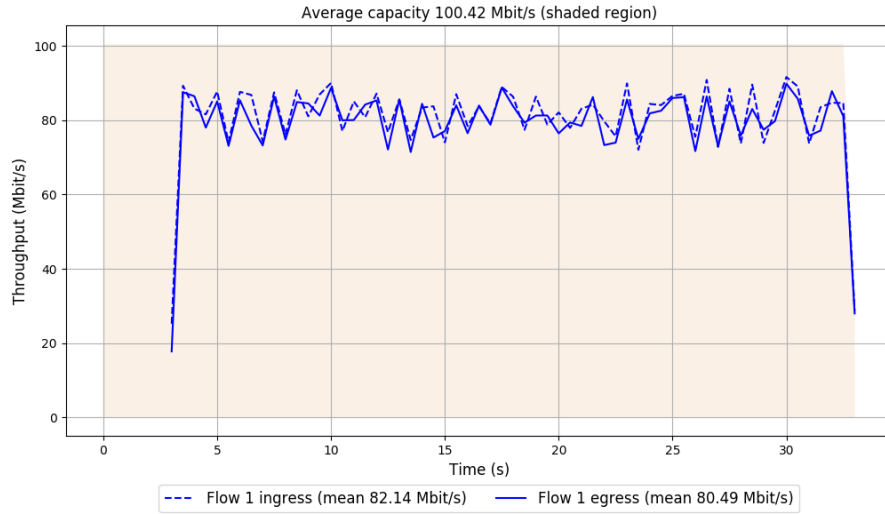
-- Flow 1:

Average throughput: 80.49 Mbit/s

95th percentile per-packet one-way delay: 38.445 ms

Loss rate: 2.09%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-03-05 18:51:53

End at: 2018-03-05 18:52:23

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

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 79.22 Mbit/s (78.9% utilization)

95th percentile per-packet one-way delay: 38.480 ms

Loss rate: 2.59%

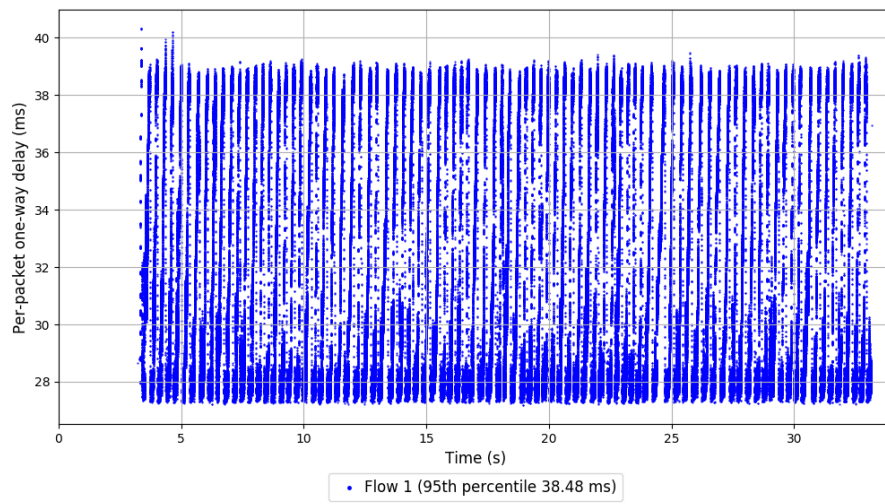
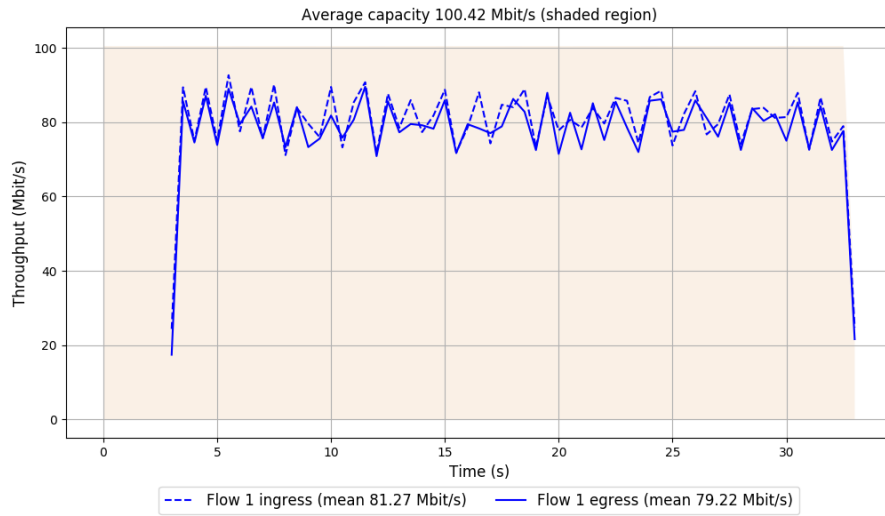
-- Flow 1:

Average throughput: 79.22 Mbit/s

95th percentile per-packet one-way delay: 38.480 ms

Loss rate: 2.59%

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



Run 7: Statistics of TaoVA-100x

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

End at: 2018-03-05 19:04:12

Below is generated by plot.py at 2018-03-05 20:06:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 80.07 Mbit/s (79.7% utilization)

95th percentile per-packet one-way delay: 38.488 ms

Loss rate: 2.60%

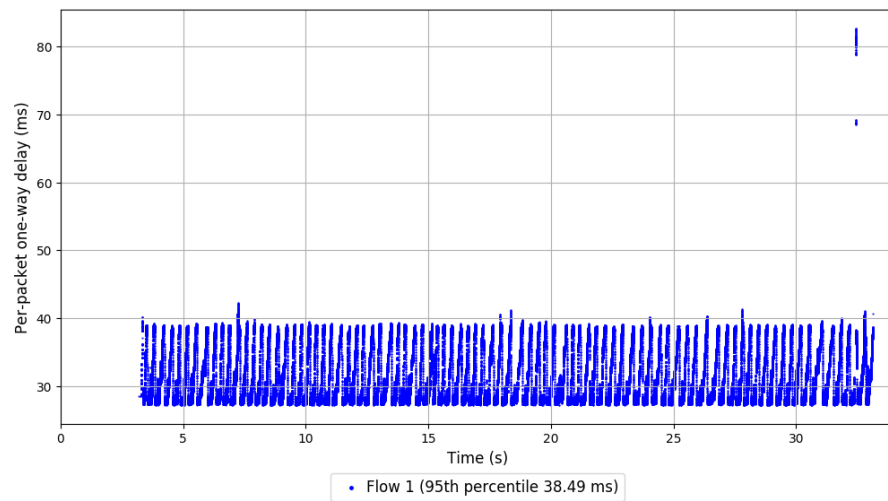
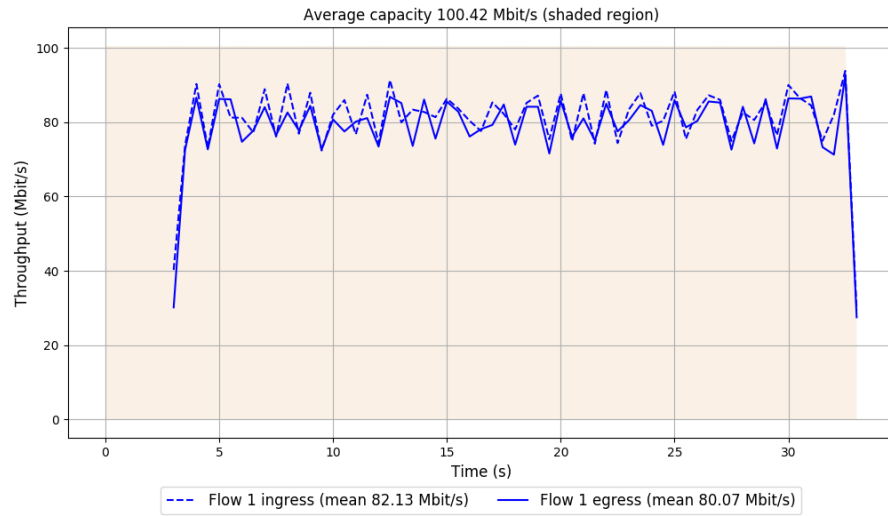
-- Flow 1:

Average throughput: 80.07 Mbit/s

95th percentile per-packet one-way delay: 38.488 ms

Loss rate: 2.60%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-03-05 19:15:44

End at: 2018-03-05 19:16:14

Below is generated by plot.py at 2018-03-05 20:06:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 80.15 Mbit/s (79.8% utilization)

95th percentile per-packet one-way delay: 38.509 ms

Loss rate: 2.79%

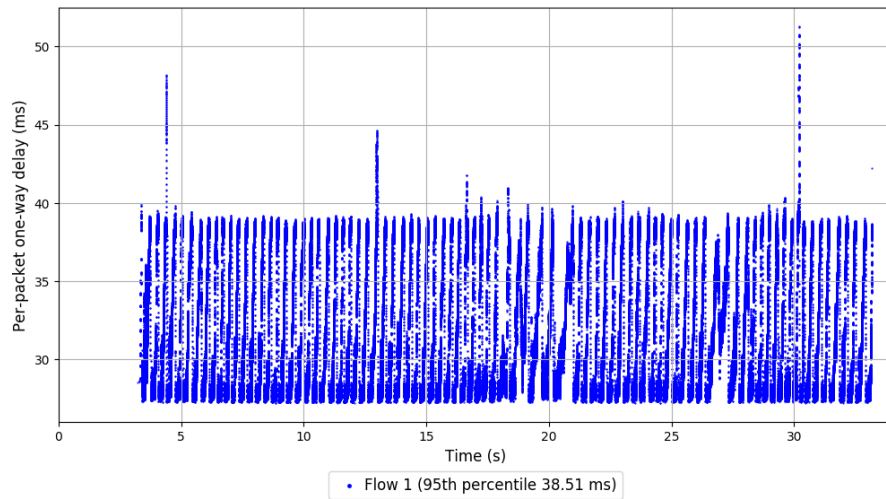
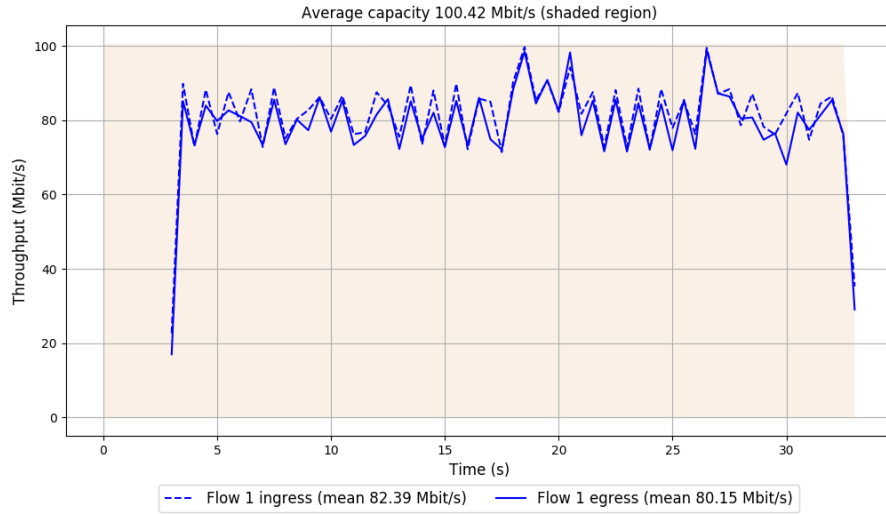
-- Flow 1:

Average throughput: 80.15 Mbit/s

95th percentile per-packet one-way delay: 38.509 ms

Loss rate: 2.79%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-03-05 19:27:46

End at: 2018-03-05 19:28:16

Below is generated by plot.py at 2018-03-05 20:09:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 83.19 Mbit/s (82.8% utilization)

95th percentile per-packet one-way delay: 38.371 ms

Loss rate: 1.59%

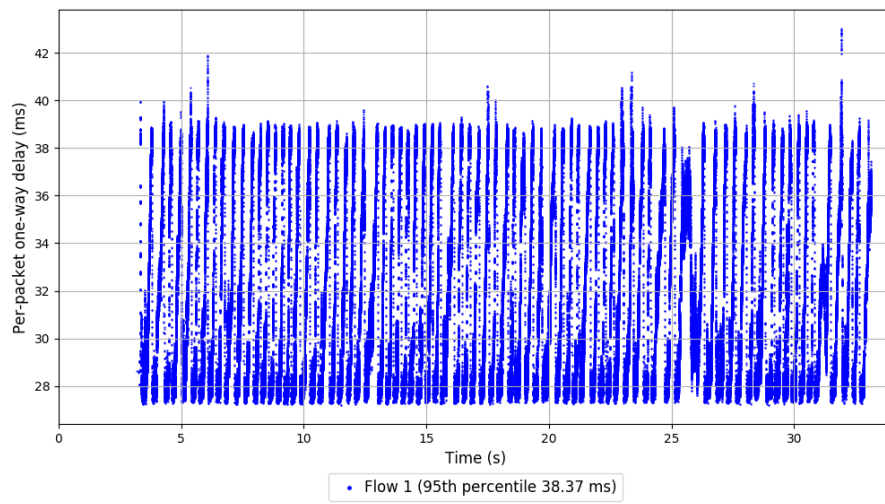
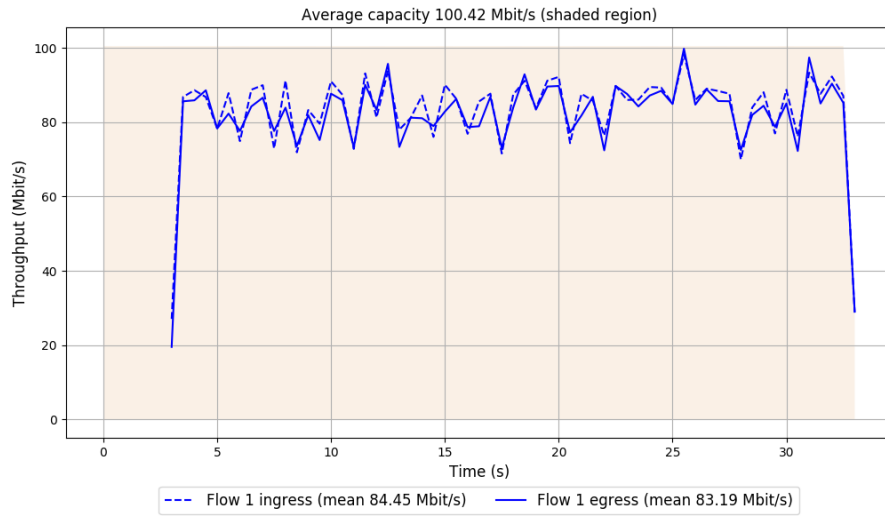
-- Flow 1:

Average throughput: 83.19 Mbit/s

95th percentile per-packet one-way delay: 38.371 ms

Loss rate: 1.59%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-03-05 19:39:34

End at: 2018-03-05 19:40:04

Below is generated by plot.py at 2018-03-05 20:09:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 80.47 Mbit/s (80.1% utilization)

95th percentile per-packet one-way delay: 38.484 ms

Loss rate: 2.34%

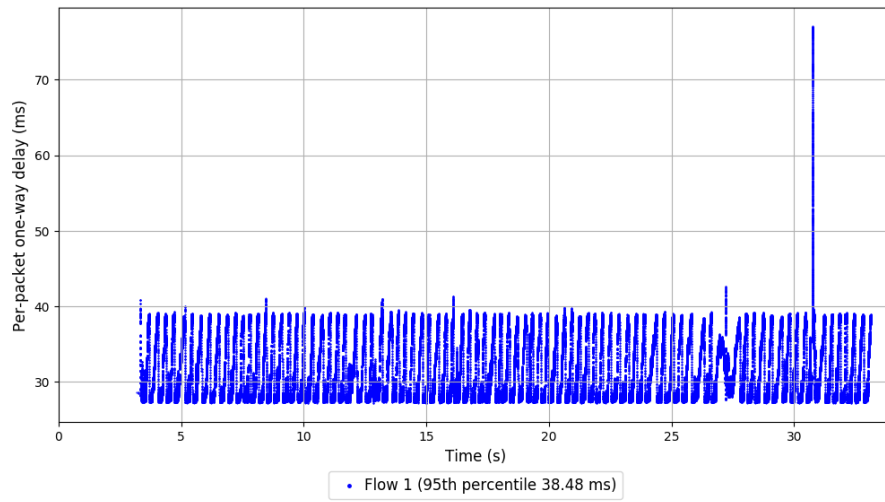
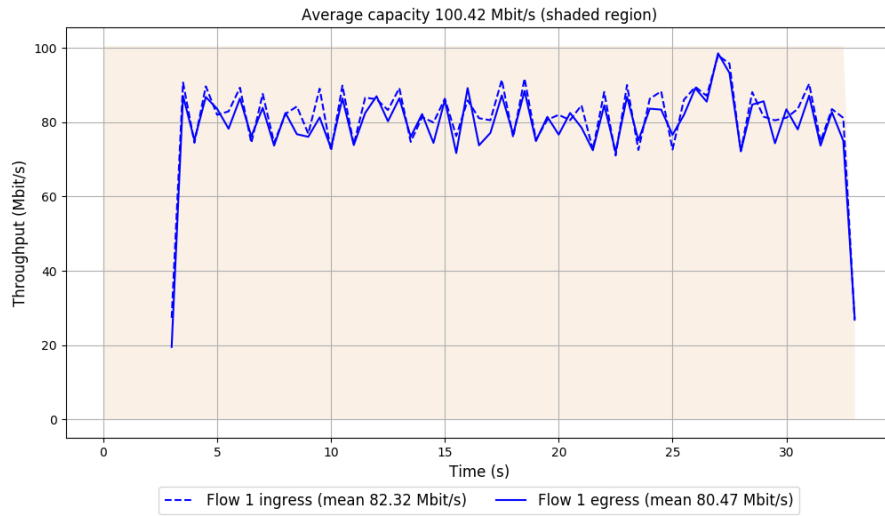
-- Flow 1:

Average throughput: 80.47 Mbit/s

95th percentile per-packet one-way delay: 38.484 ms

Loss rate: 2.34%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-03-05 17:52:58

End at: 2018-03-05 17:53:28

Below is generated by plot.py at 2018-03-05 20:09:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 90.28 Mbit/s (89.9% utilization)

95th percentile per-packet one-way delay: 31.242 ms

Loss rate: 0.29%

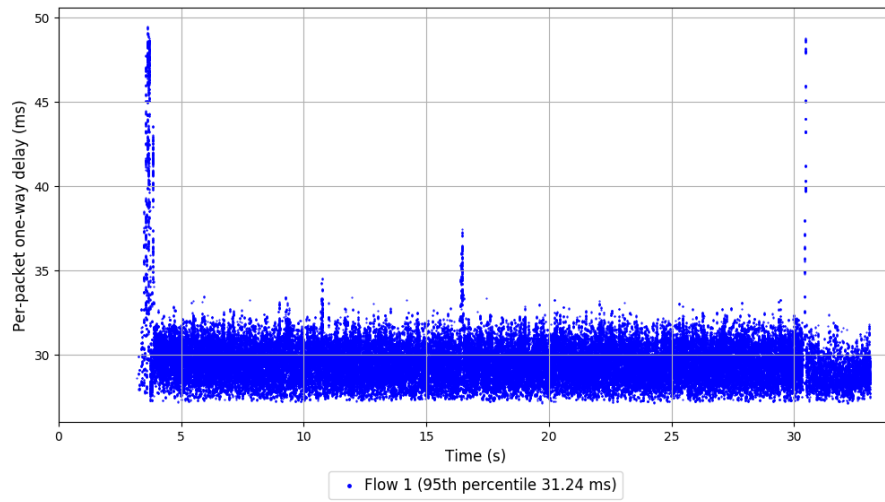
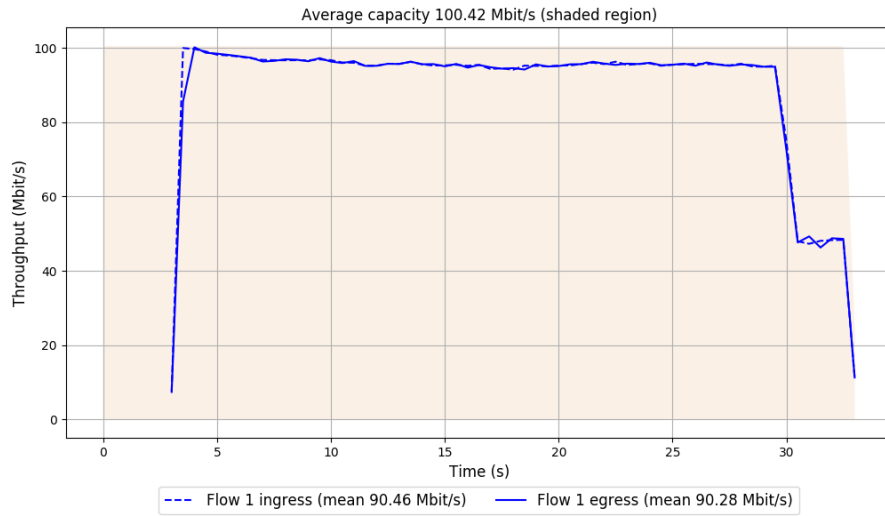
-- Flow 1:

Average throughput: 90.28 Mbit/s

95th percentile per-packet one-way delay: 31.242 ms

Loss rate: 0.29%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-03-05 18:05:07

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

Below is generated by plot.py at 2018-03-05 20:09:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 77.71 Mbit/s (77.4% utilization)

95th percentile per-packet one-way delay: 30.871 ms

Loss rate: 0.27%

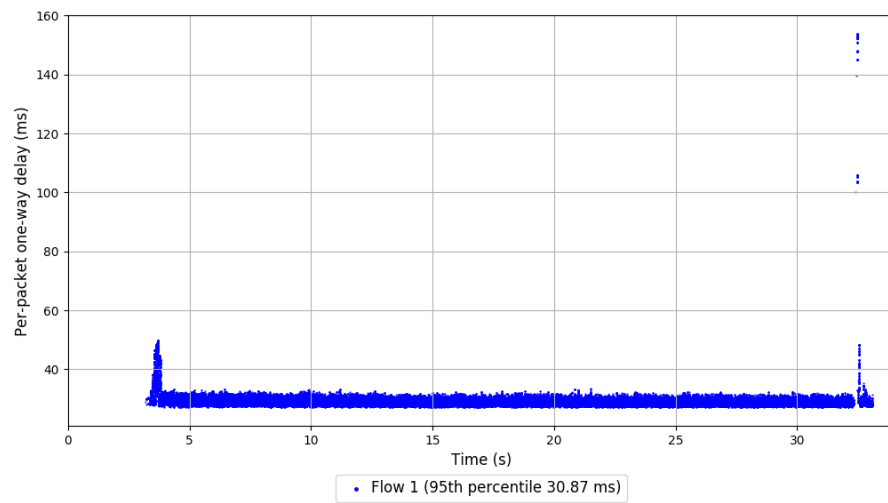
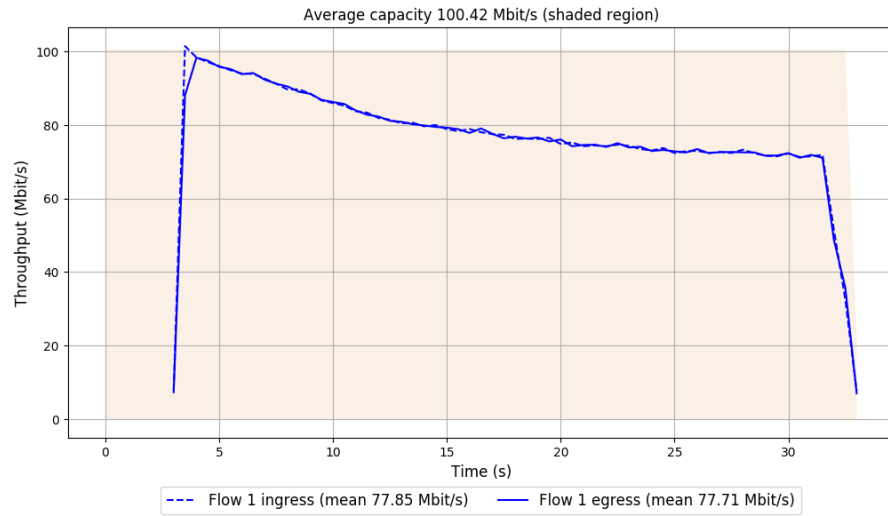
-- Flow 1:

Average throughput: 77.71 Mbit/s

95th percentile per-packet one-way delay: 30.871 ms

Loss rate: 0.27%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-03-05 18:17:00

End at: 2018-03-05 18:17:30

Below is generated by plot.py at 2018-03-05 20:09:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 81.27 Mbit/s (80.9% utilization)

95th percentile per-packet one-way delay: 30.690 ms

Loss rate: 0.11%

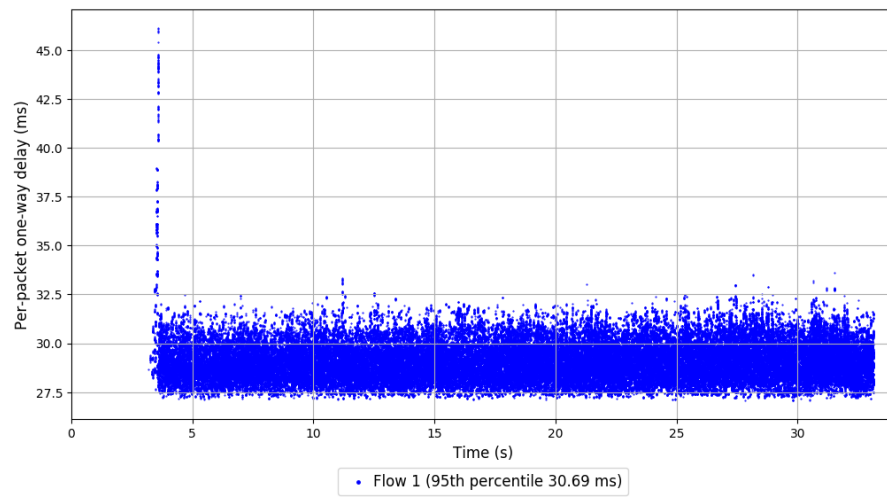
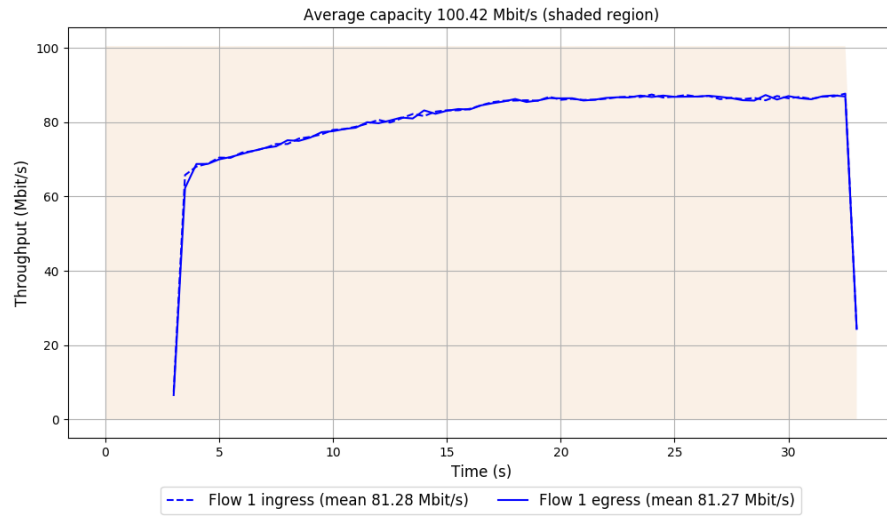
-- Flow 1:

Average throughput: 81.27 Mbit/s

95th percentile per-packet one-way delay: 30.690 ms

Loss rate: 0.11%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

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

End at: 2018-03-05 18:29:33

Below is generated by plot.py at 2018-03-05 20:09:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 75.85 Mbit/s (75.5% utilization)

95th percentile per-packet one-way delay: 30.988 ms

Loss rate: 0.30%

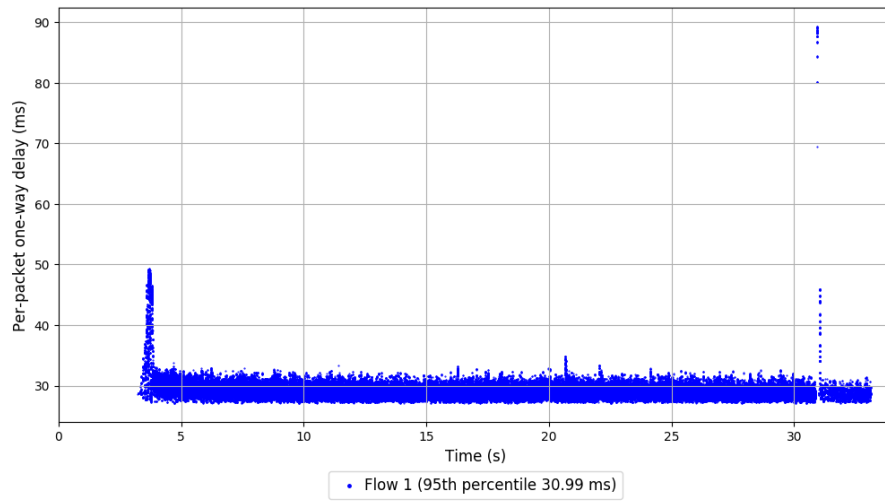
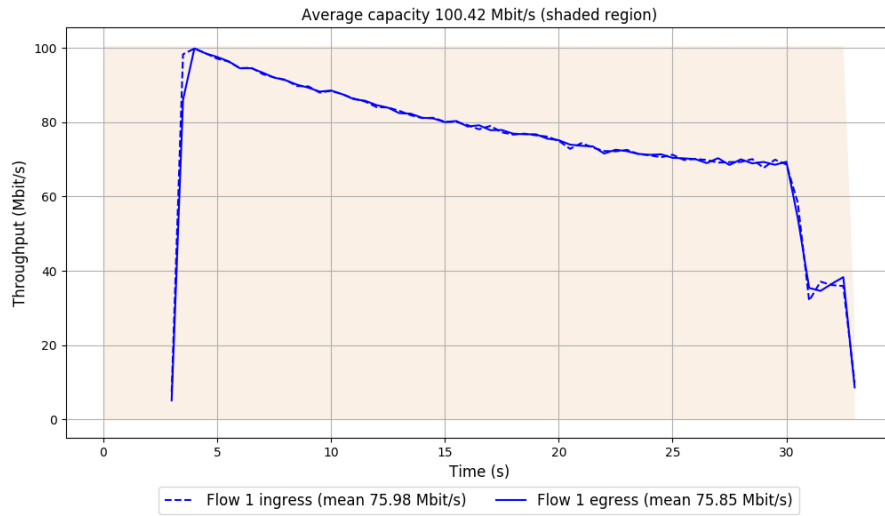
-- Flow 1:

Average throughput: 75.85 Mbit/s

95th percentile per-packet one-way delay: 30.988 ms

Loss rate: 0.30%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-03-05 18:41:07

End at: 2018-03-05 18:41:37

Below is generated by plot.py at 2018-03-05 20:09:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 76.49 Mbit/s (76.2% utilization)

95th percentile per-packet one-way delay: 30.870 ms

Loss rate: 0.27%

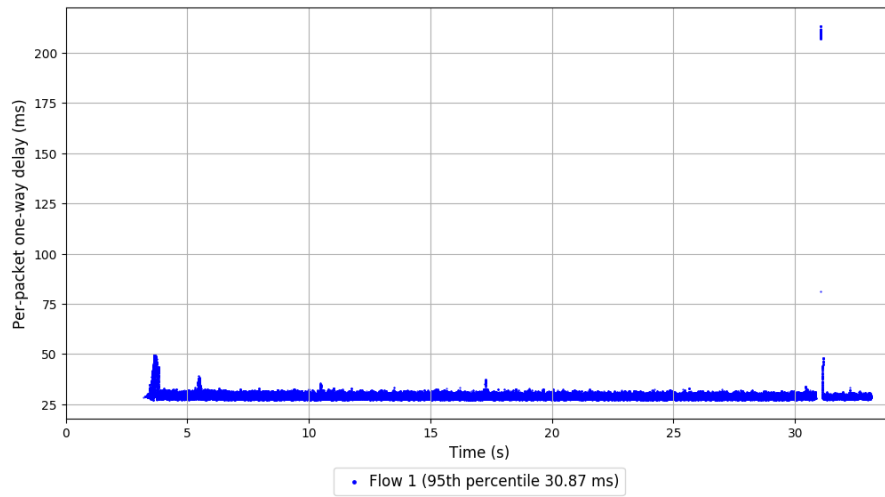
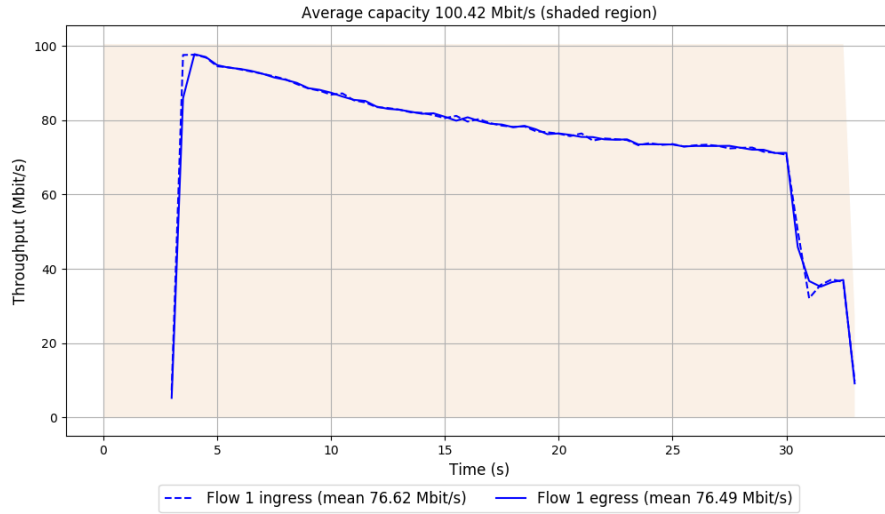
-- Flow 1:

Average throughput: 76.49 Mbit/s

95th percentile per-packet one-way delay: 30.870 ms

Loss rate: 0.27%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

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

End at: 2018-03-05 18:53:45

Below is generated by plot.py at 2018-03-05 20:09:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 81.04 Mbit/s (80.7% utilization)

95th percentile per-packet one-way delay: 30.727 ms

Loss rate: 0.11%

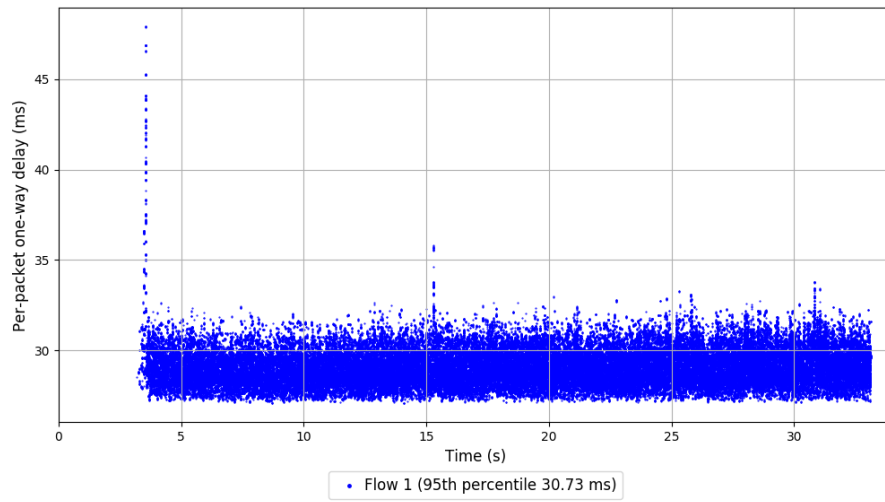
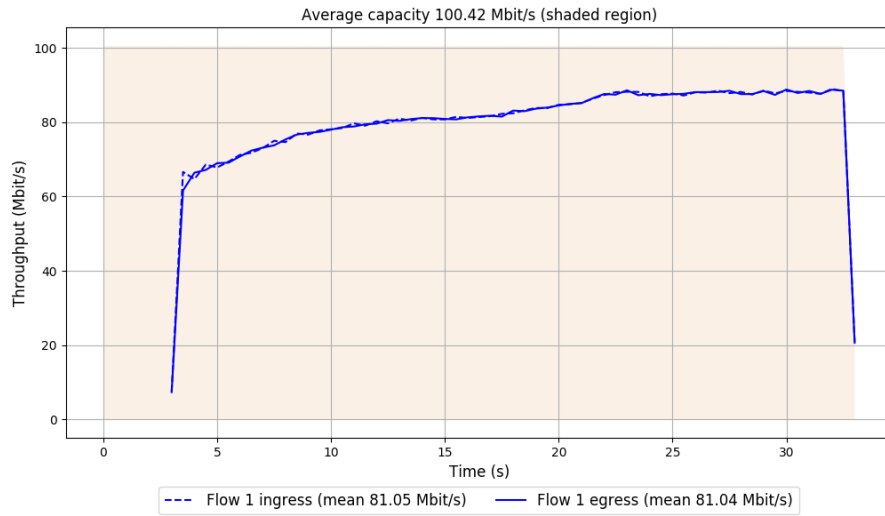
-- Flow 1:

Average throughput: 81.04 Mbit/s

95th percentile per-packet one-way delay: 30.727 ms

Loss rate: 0.11%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

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

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

Below is generated by plot.py at 2018-03-05 20:10:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 92.40 Mbit/s (92.0% utilization)

95th percentile per-packet one-way delay: 31.218 ms

Loss rate: 0.23%

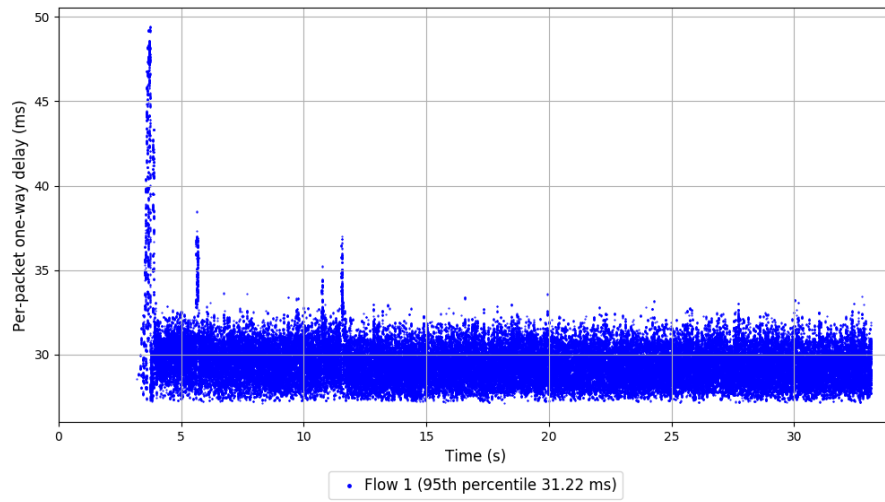
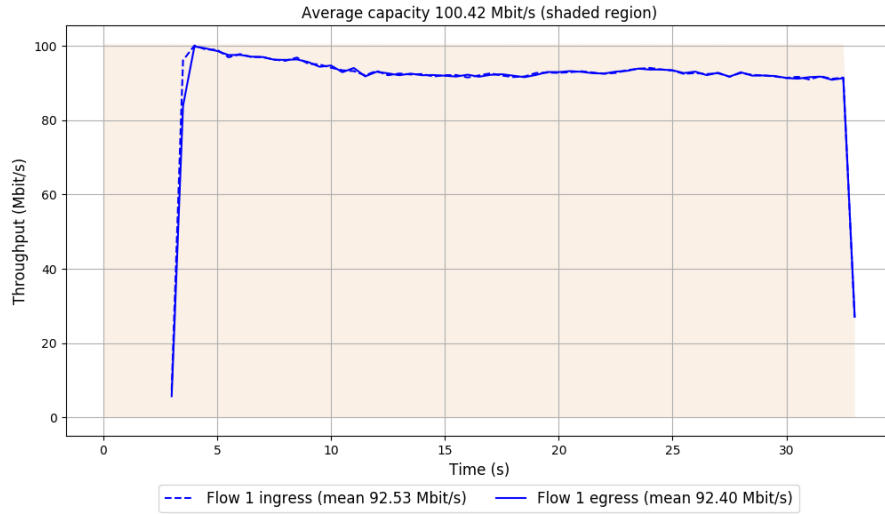
-- Flow 1:

Average throughput: 92.40 Mbit/s

95th percentile per-packet one-way delay: 31.218 ms

Loss rate: 0.23%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-03-05 19:17:06

End at: 2018-03-05 19:17:36

Below is generated by plot.py at 2018-03-05 20:10:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 71.20 Mbit/s (70.9% utilization)

95th percentile per-packet one-way delay: 30.724 ms

Loss rate: 0.37%

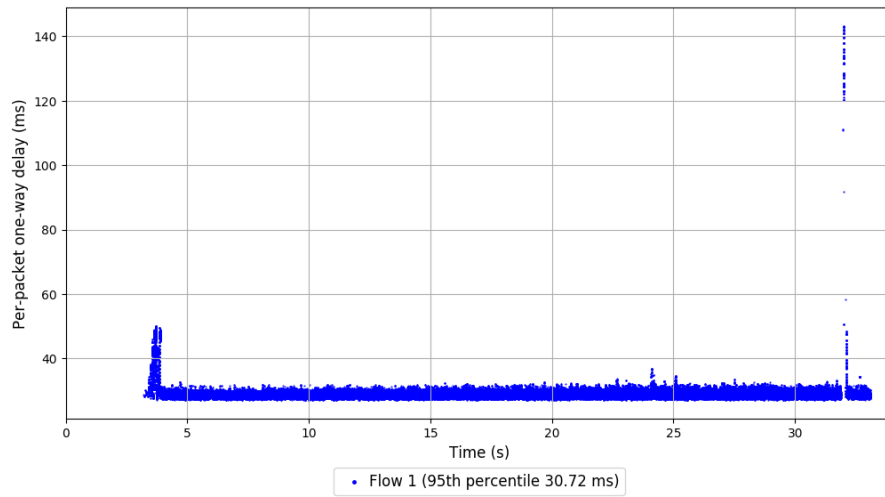
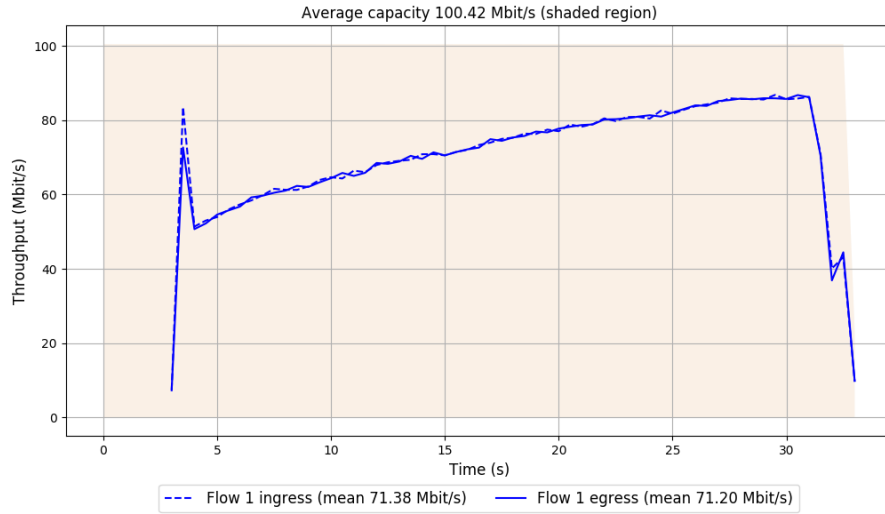
-- Flow 1:

Average throughput: 71.20 Mbit/s

95th percentile per-packet one-way delay: 30.724 ms

Loss rate: 0.37%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-03-05 19:29:09

End at: 2018-03-05 19:29:39

Below is generated by plot.py at 2018-03-05 20:10:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 60.69 Mbit/s (60.4% utilization)

95th percentile per-packet one-way delay: 30.290 ms

Loss rate: 0.14%

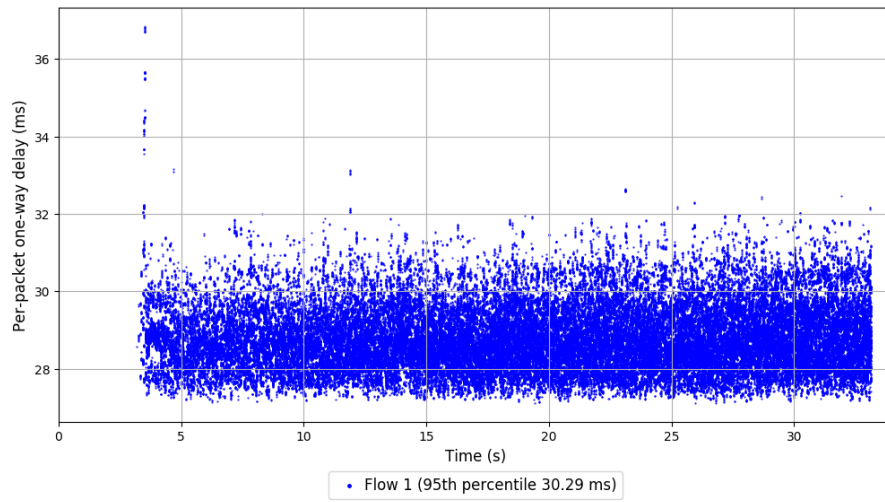
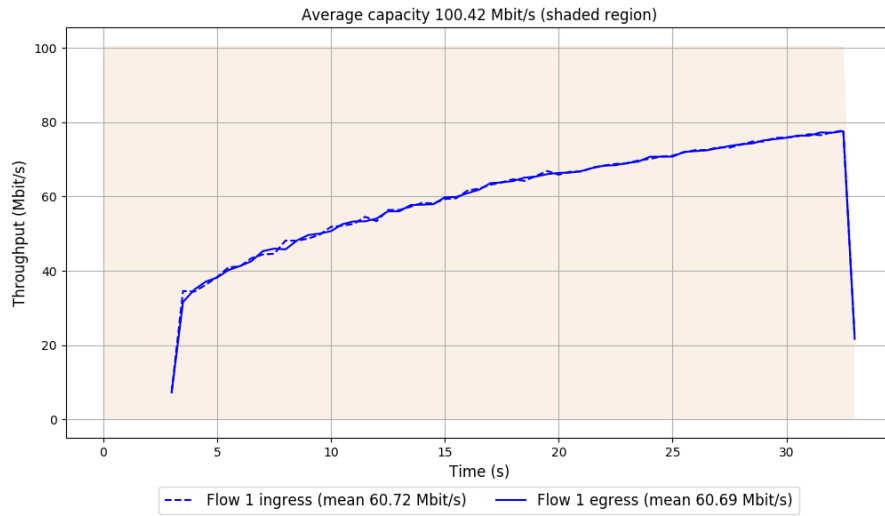
-- Flow 1:

Average throughput: 60.69 Mbit/s

95th percentile per-packet one-way delay: 30.290 ms

Loss rate: 0.14%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-03-05 19:40:56

End at: 2018-03-05 19:41:26

Below is generated by plot.py at 2018-03-05 20:10:39

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 93.83 Mbit/s (93.4% utilization)

95th percentile per-packet one-way delay: 31.492 ms

Loss rate: 0.30%

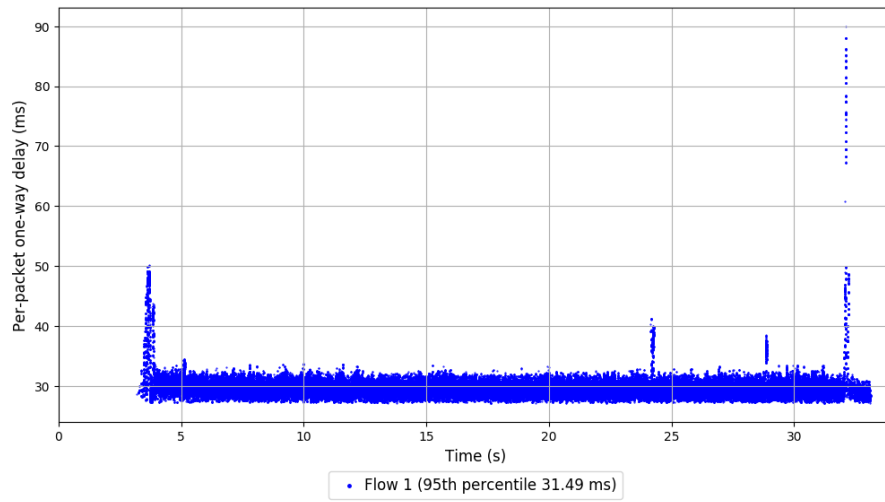
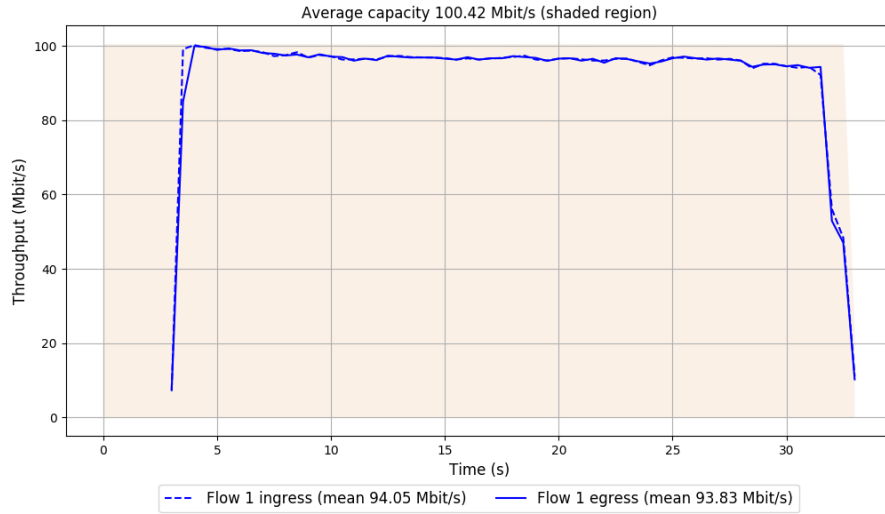
-- Flow 1:

Average throughput: 93.83 Mbit/s

95th percentile per-packet one-way delay: 31.492 ms

Loss rate: 0.30%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-03-05 17:45:38

End at: 2018-03-05 17:46:08

Below is generated by plot.py at 2018-03-05 20:10:47

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 64.72 Mbit/s (64.4% utilization)

95th percentile per-packet one-way delay: 48.412 ms

Loss rate: 48.59%

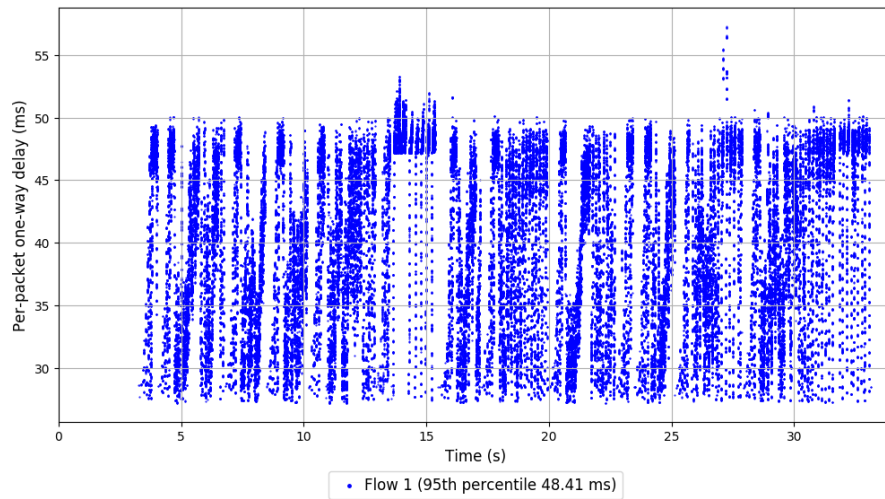
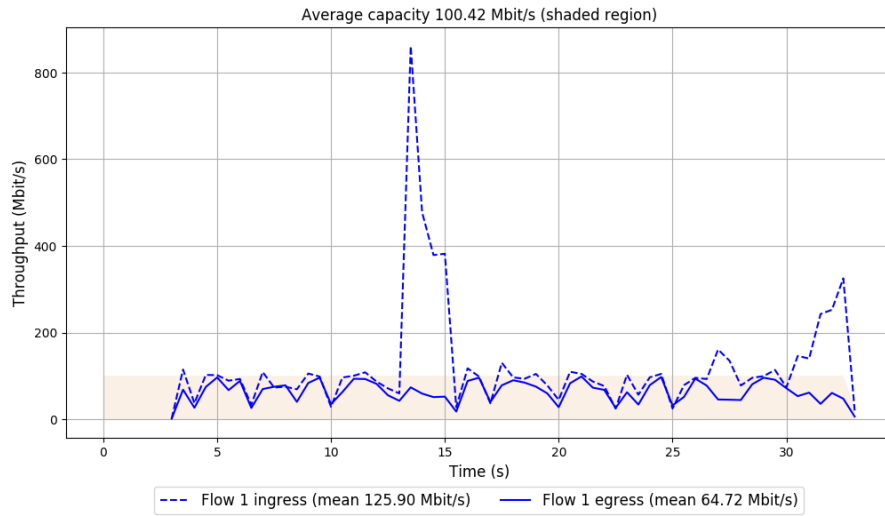
-- Flow 1:

Average throughput: 64.72 Mbit/s

95th percentile per-packet one-way delay: 48.412 ms

Loss rate: 48.59%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-03-05 17:57:35

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

Below is generated by plot.py at 2018-03-05 20:10:49

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 67.56 Mbit/s (67.3% utilization)

95th percentile per-packet one-way delay: 48.199 ms

Loss rate: 31.83%

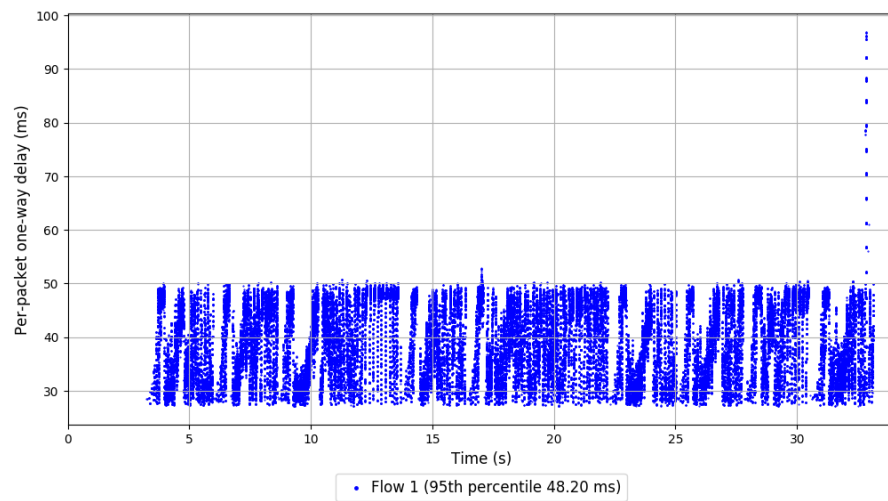
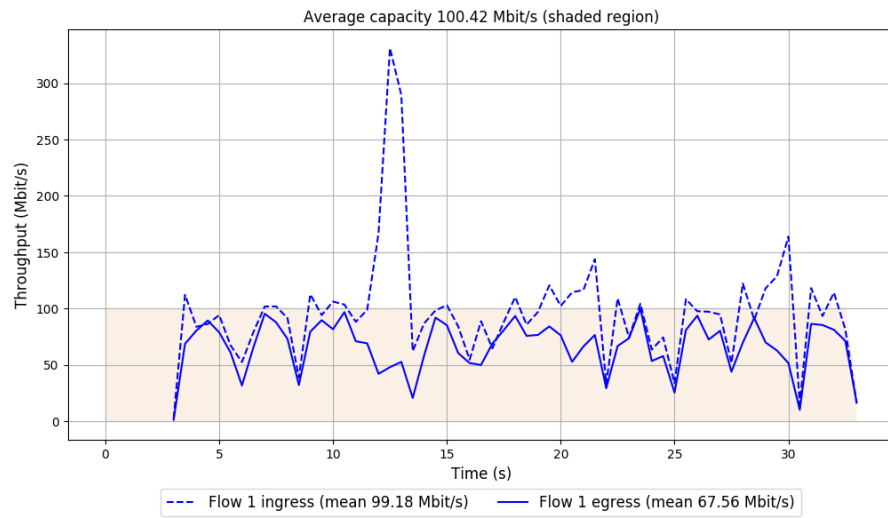
-- Flow 1:

Average throughput: 67.56 Mbit/s

95th percentile per-packet one-way delay: 48.199 ms

Loss rate: 31.83%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

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

End at: 2018-03-05 18:10:12

Below is generated by plot.py at 2018-03-05 20:11:24

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 68.25 Mbit/s (68.0% utilization)

95th percentile per-packet one-way delay: 48.051 ms

Loss rate: 27.33%

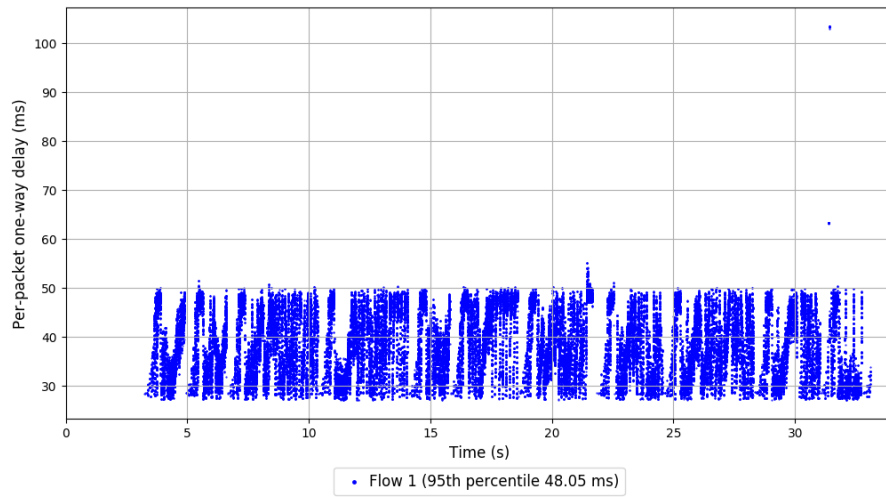
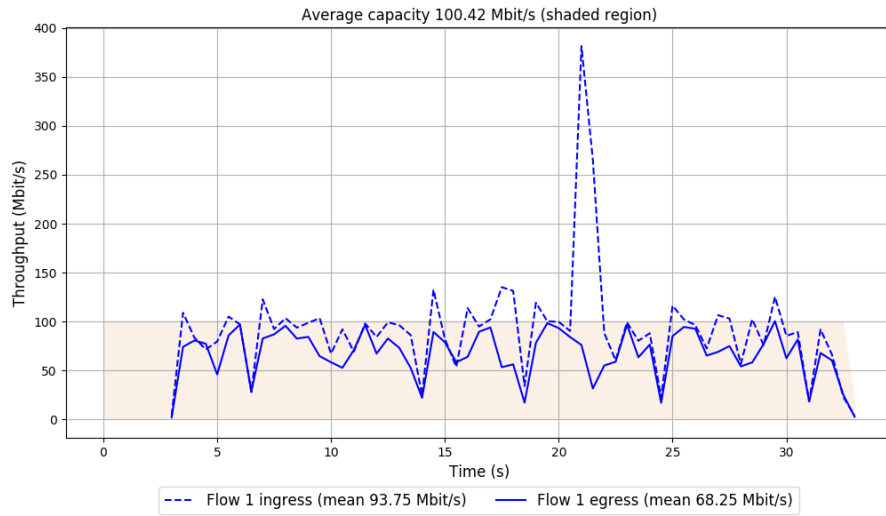
-- Flow 1:

Average throughput: 68.25 Mbit/s

95th percentile per-packet one-way delay: 48.051 ms

Loss rate: 27.33%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-03-05 18:21:37

End at: 2018-03-05 18:22:07

Below is generated by plot.py at 2018-03-05 20:11:29

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 60.15 Mbit/s (59.9% utilization)

95th percentile per-packet one-way delay: 48.380 ms

Loss rate: 47.48%

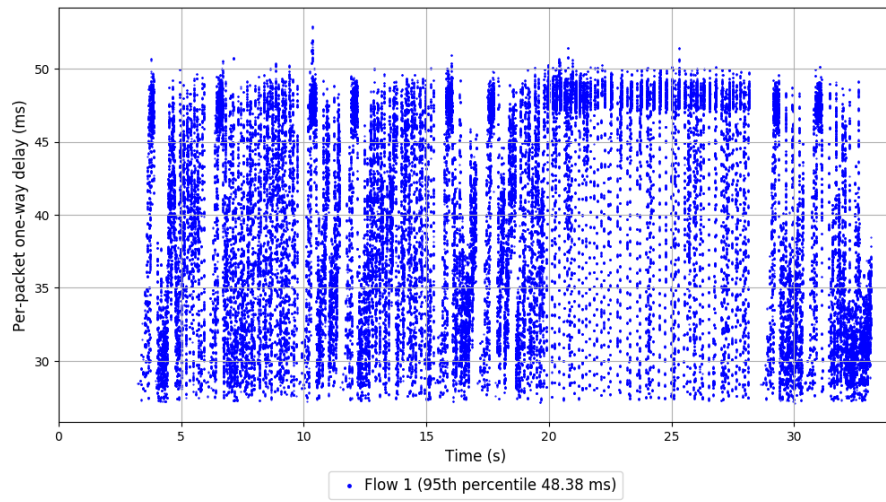
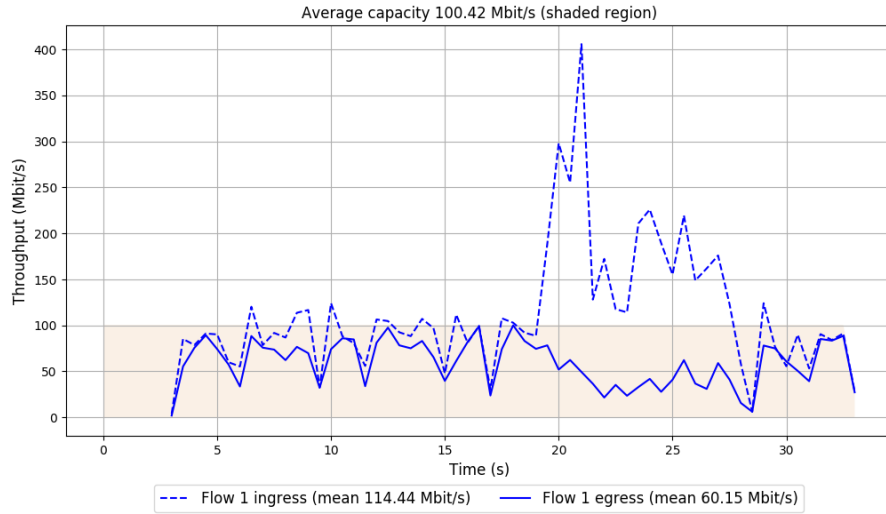
-- Flow 1:

Average throughput: 60.15 Mbit/s

95th percentile per-packet one-way delay: 48.380 ms

Loss rate: 47.48%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-03-05 18:33:40

End at: 2018-03-05 18:34:10

Below is generated by plot.py at 2018-03-05 20:12:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 60.98 Mbit/s (60.7% utilization)

95th percentile per-packet one-way delay: 48.715 ms

Loss rate: 64.55%

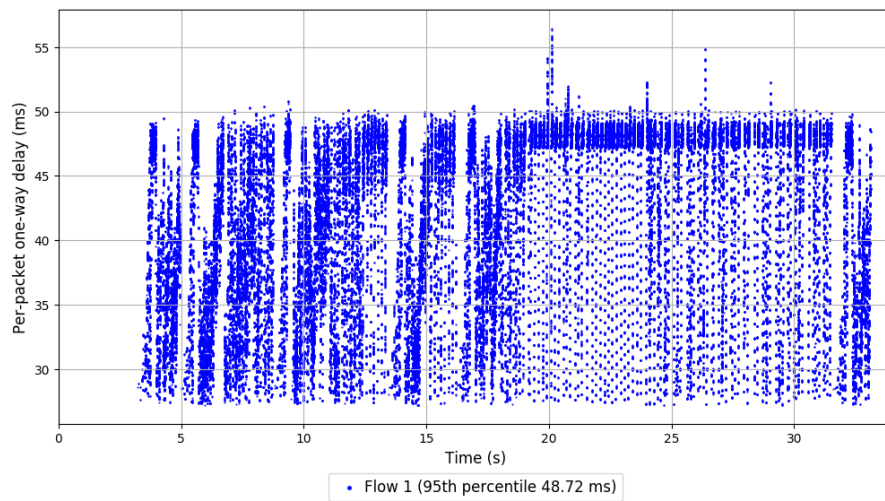
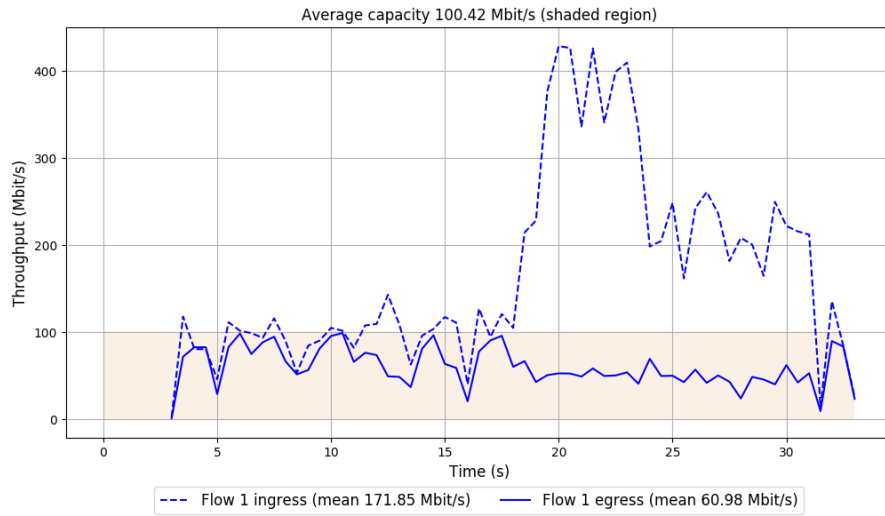
-- Flow 1:

Average throughput: 60.98 Mbit/s

95th percentile per-packet one-way delay: 48.715 ms

Loss rate: 64.55%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

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

End at: 2018-03-05 18:46:15

Below is generated by plot.py at 2018-03-05 20:12:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 54.21 Mbit/s (54.0% utilization)

95th percentile per-packet one-way delay: 48.982 ms

Loss rate: 76.15%

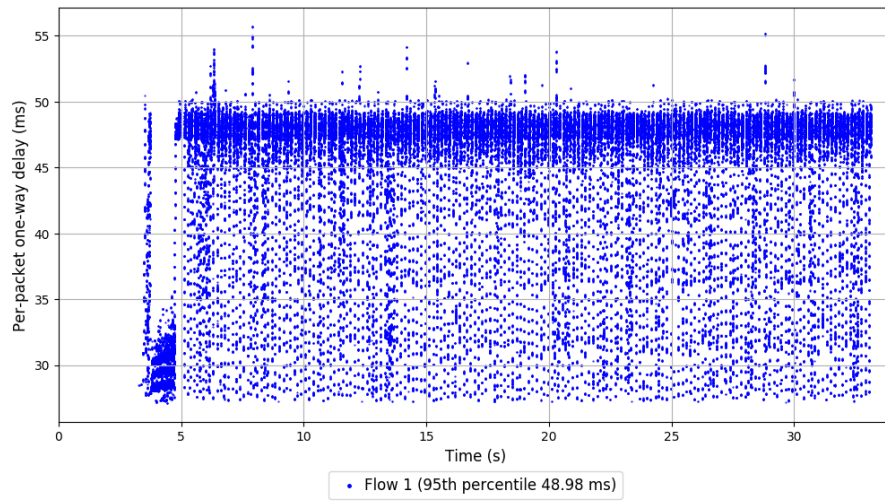
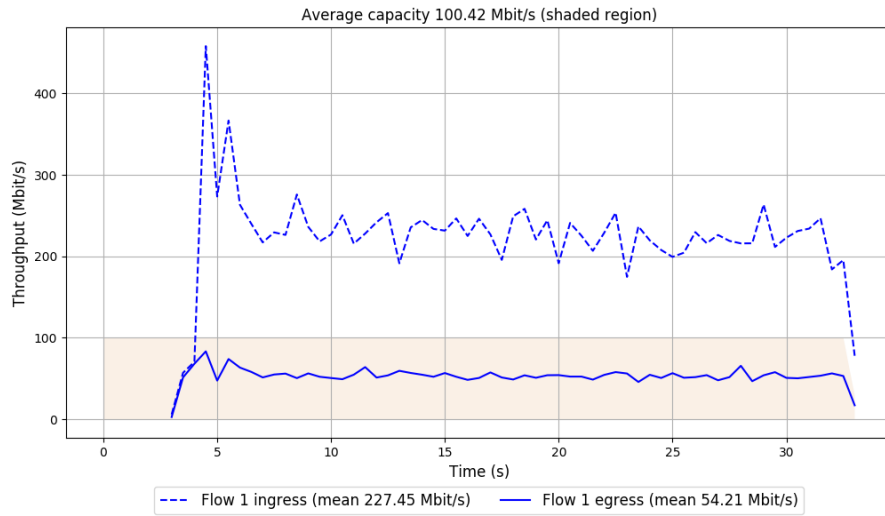
-- Flow 1:

Average throughput: 54.21 Mbit/s

95th percentile per-packet one-way delay: 48.982 ms

Loss rate: 76.15%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-03-05 18:57:52

End at: 2018-03-05 18:58:22

Below is generated by plot.py at 2018-03-05 20:12:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 63.27 Mbit/s (63.0% utilization)

95th percentile per-packet one-way delay: 48.407 ms

Loss rate: 39.13%

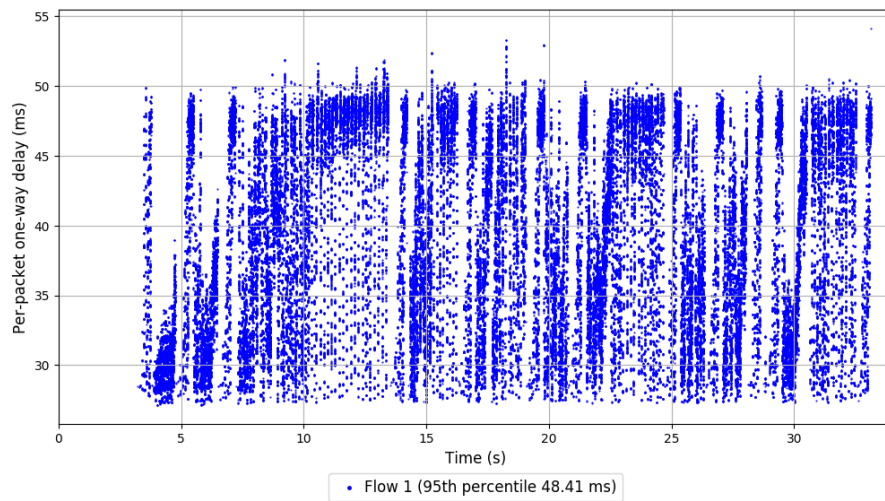
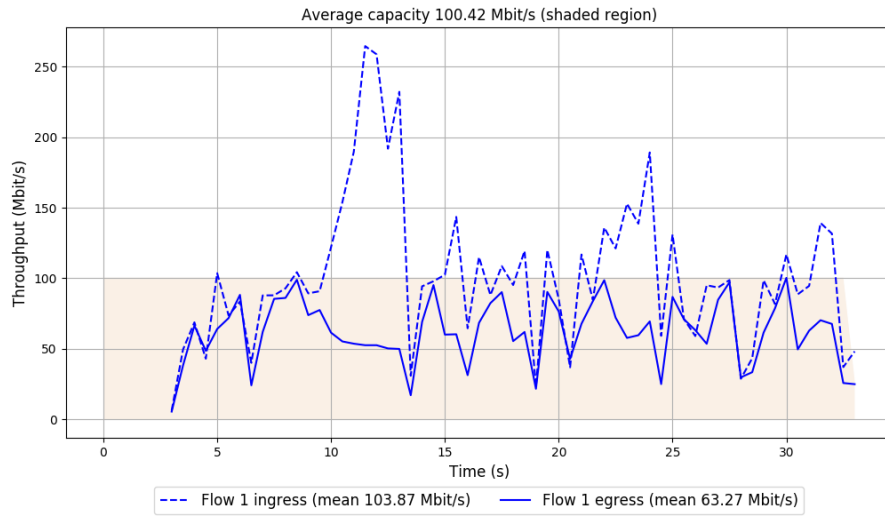
-- Flow 1:

Average throughput: 63.27 Mbit/s

95th percentile per-packet one-way delay: 48.407 ms

Loss rate: 39.13%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-03-05 19:09:40

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

Below is generated by plot.py at 2018-03-05 20:12:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 62.71 Mbit/s (62.4% utilization)

95th percentile per-packet one-way delay: 48.475 ms

Loss rate: 51.66%

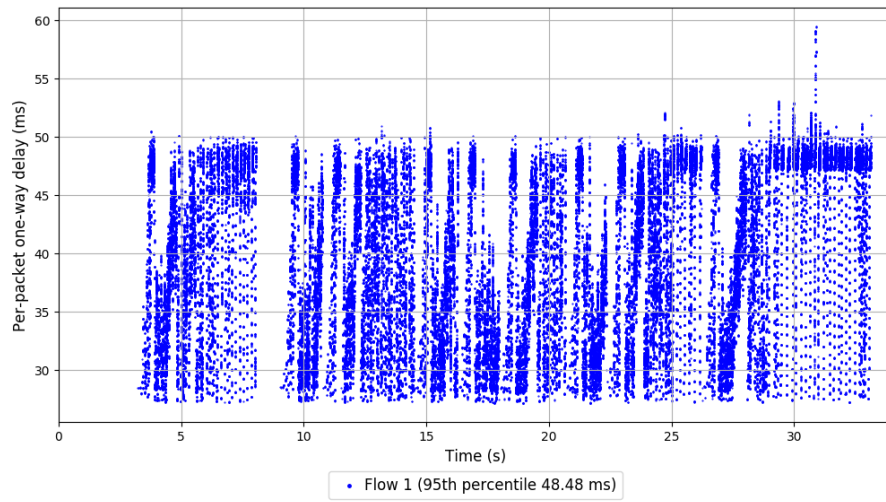
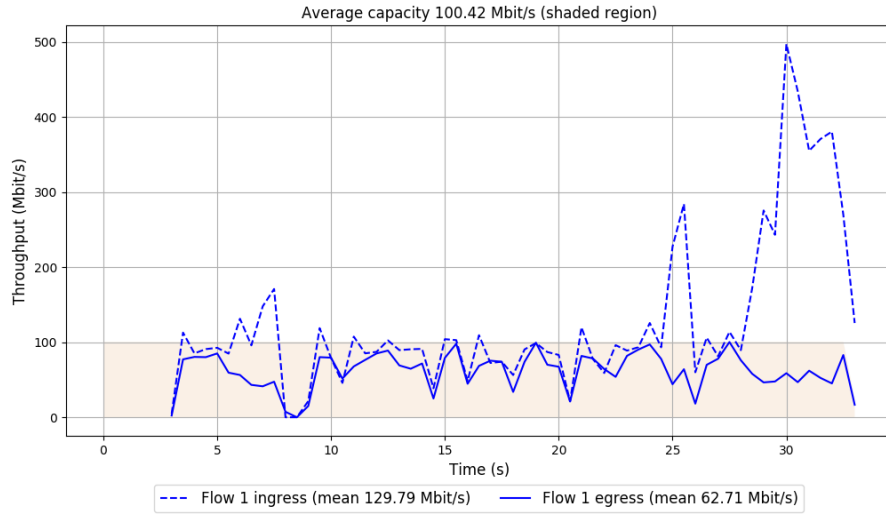
-- Flow 1:

Average throughput: 62.71 Mbit/s

95th percentile per-packet one-way delay: 48.475 ms

Loss rate: 51.66%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-03-05 19:21:41

End at: 2018-03-05 19:22:11

Below is generated by plot.py at 2018-03-05 20:12:59

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 61.86 Mbit/s (61.6% utilization)

95th percentile per-packet one-way delay: 48.546 ms

Loss rate: 47.57%

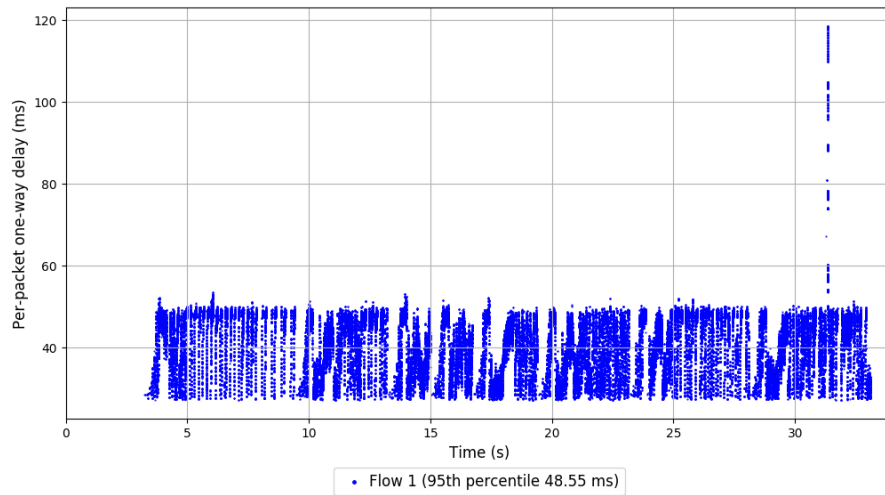
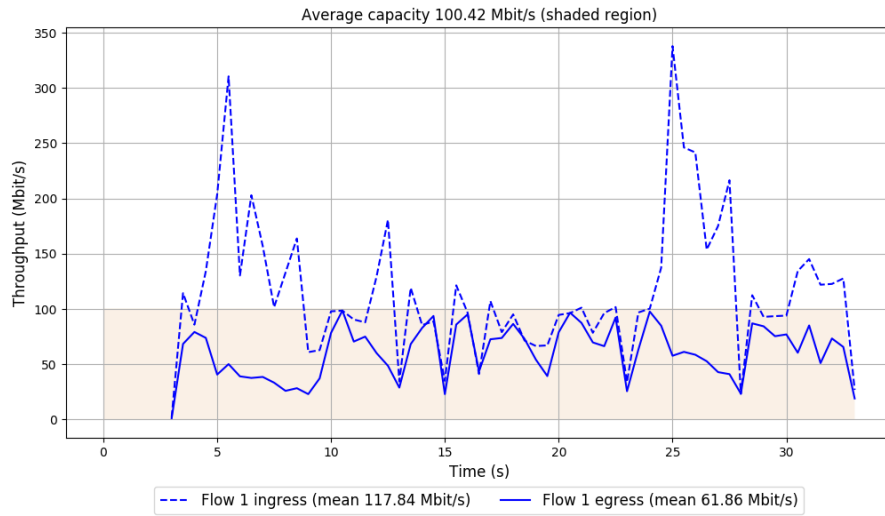
-- Flow 1:

Average throughput: 61.86 Mbit/s

95th percentile per-packet one-way delay: 48.546 ms

Loss rate: 47.57%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-03-05 19:33:44

End at: 2018-03-05 19:34:14

Below is generated by plot.py at 2018-03-05 20:13:01

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 66.56 Mbit/s (66.3% utilization)

95th percentile per-packet one-way delay: 48.154 ms

Loss rate: 35.93%

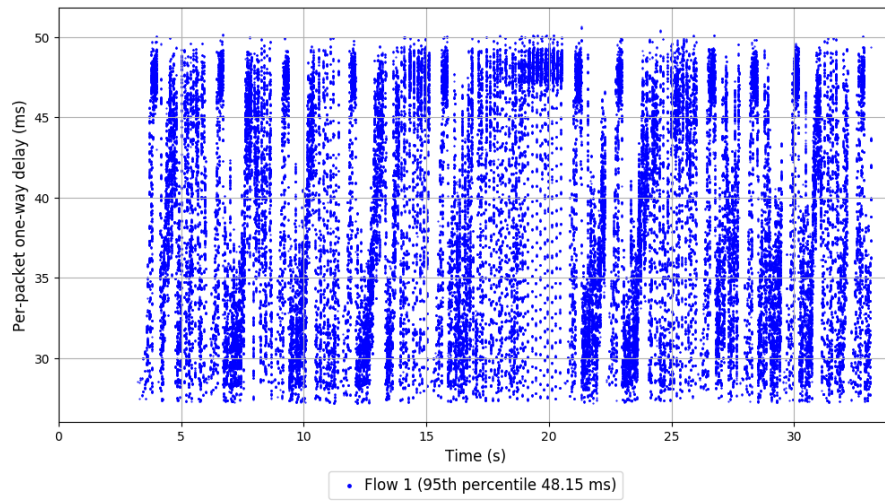
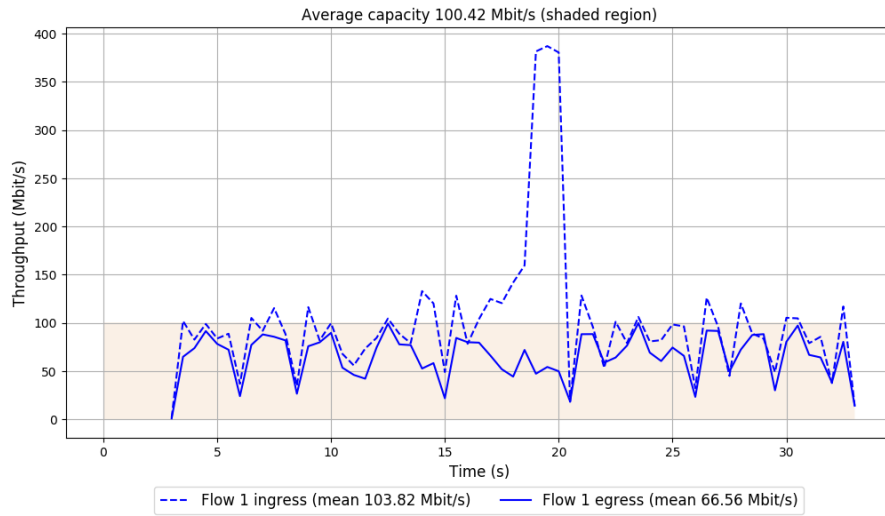
-- Flow 1:

Average throughput: 66.56 Mbit/s

95th percentile per-packet one-way delay: 48.154 ms

Loss rate: 35.93%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-03-05 17:48:49

End at: 2018-03-05 17:49:19

Below is generated by plot.py at 2018-03-05 20:18:39

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 90.17 Mbit/s (89.8% utilization)

95th percentile per-packet one-way delay: 39.156 ms

Loss rate: 79.31%

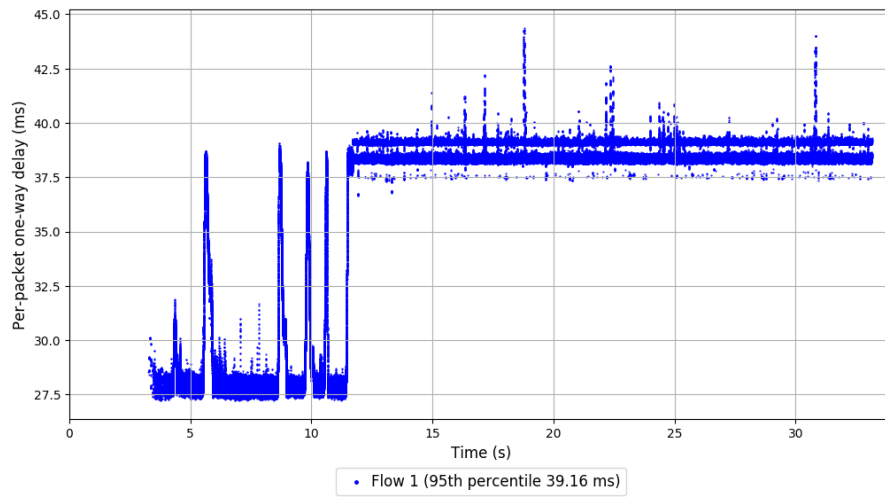
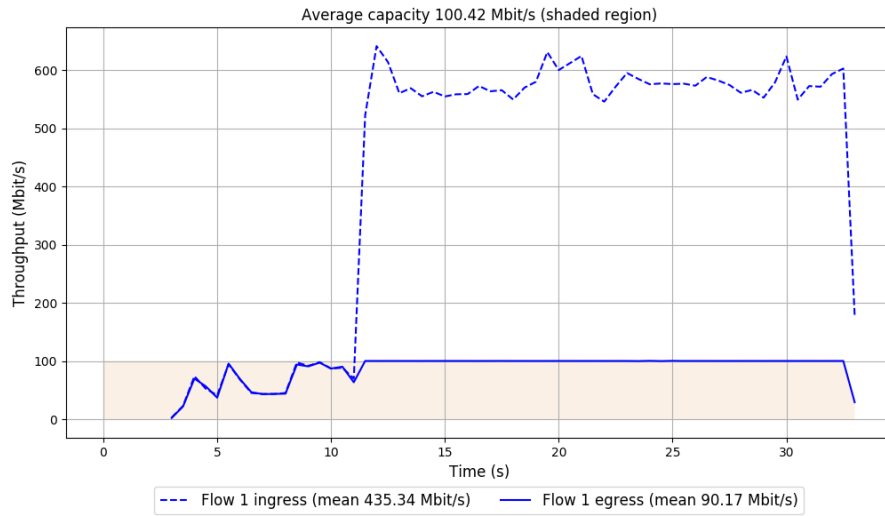
-- Flow 1:

Average throughput: 90.17 Mbit/s

95th percentile per-packet one-way delay: 39.156 ms

Loss rate: 79.31%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-03-05 18:00:48

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

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

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 93.25 Mbit/s (92.9% utilization)

95th percentile per-packet one-way delay: 39.168 ms

Loss rate: 84.51%

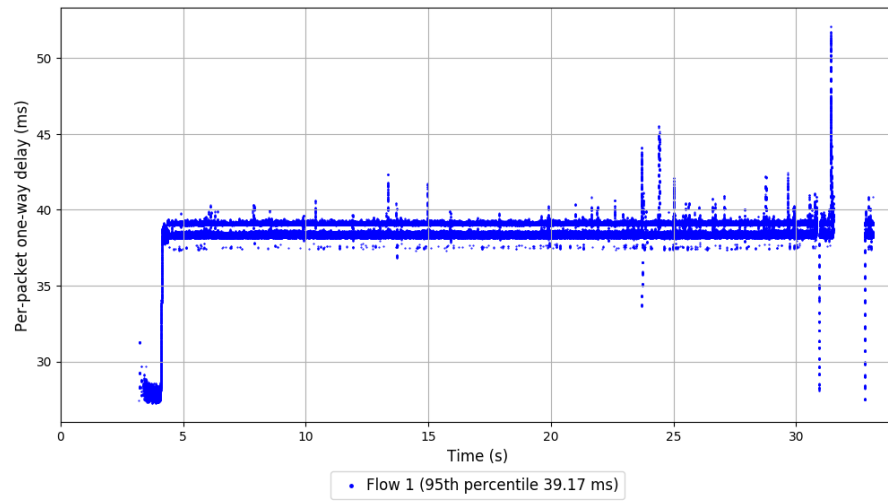
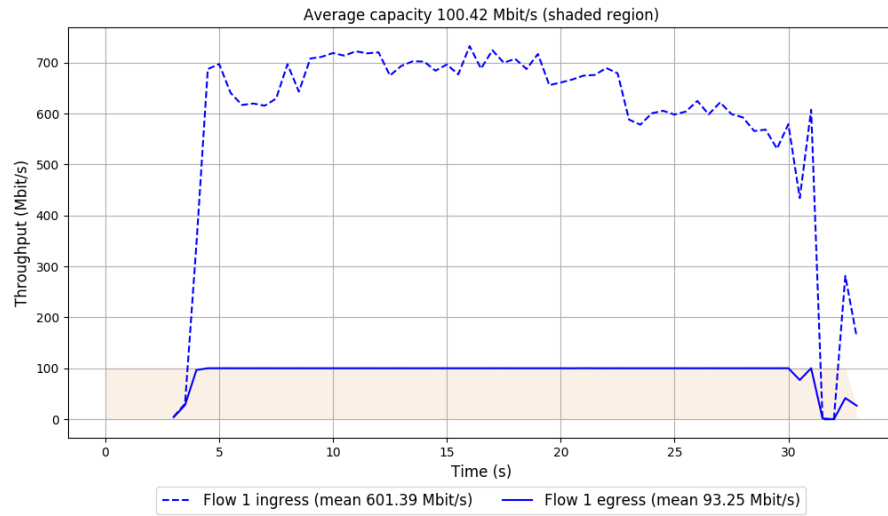
-- Flow 1:

Average throughput: 93.25 Mbit/s

95th percentile per-packet one-way delay: 39.168 ms

Loss rate: 84.51%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

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

End at: 2018-03-05 18:13:24

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

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 70.95 Mbit/s (70.7% utilization)

95th percentile per-packet one-way delay: 39.080 ms

Loss rate: 54.59%

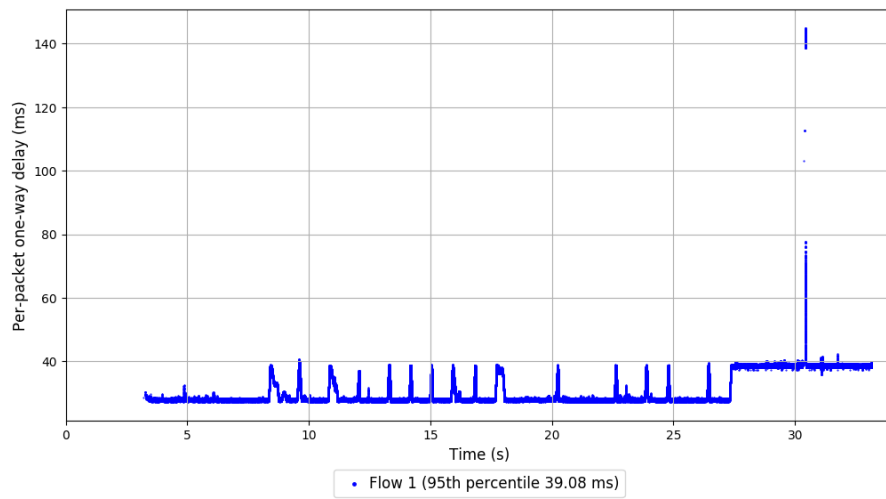
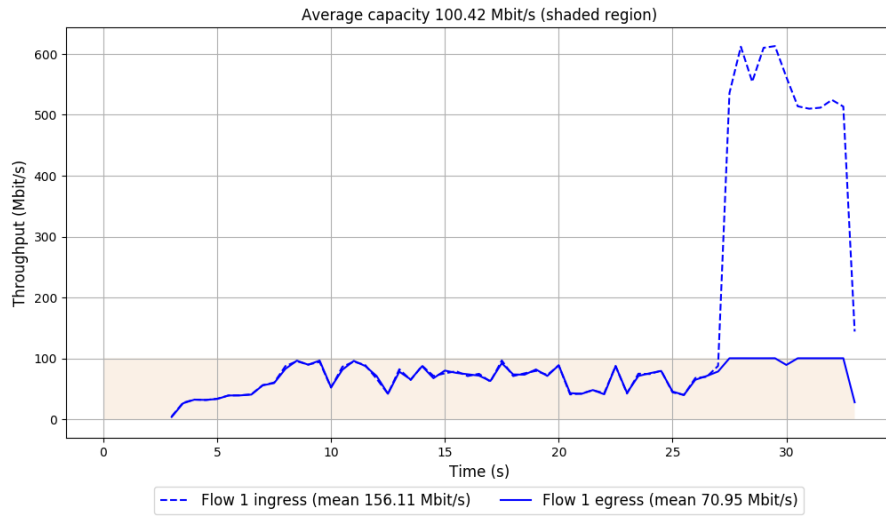
-- Flow 1:

Average throughput: 70.95 Mbit/s

95th percentile per-packet one-way delay: 39.080 ms

Loss rate: 54.59%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-03-05 18:24:48

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

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

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 81.46 Mbit/s (81.1% utilization)

95th percentile per-packet one-way delay: 39.673 ms

Loss rate: 78.83%

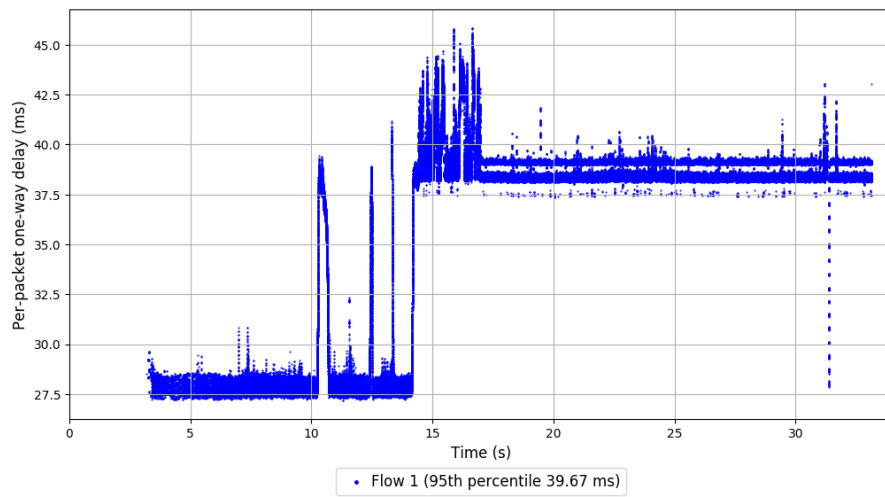
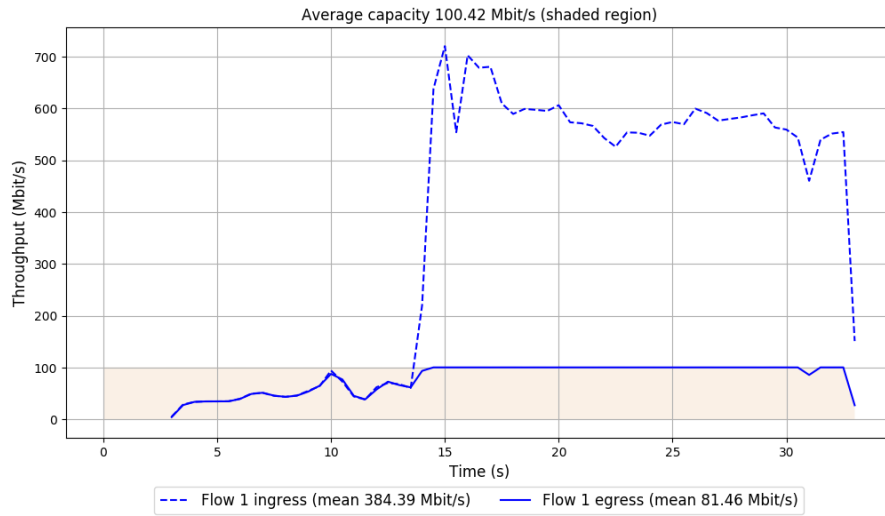
-- Flow 1:

Average throughput: 81.46 Mbit/s

95th percentile per-packet one-way delay: 39.673 ms

Loss rate: 78.83%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-03-05 18:36:52

End at: 2018-03-05 18:37:22

Below is generated by plot.py at 2018-03-05 20:20:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 88.34 Mbit/s (88.0% utilization)

95th percentile per-packet one-way delay: 39.199 ms

Loss rate: 81.78%

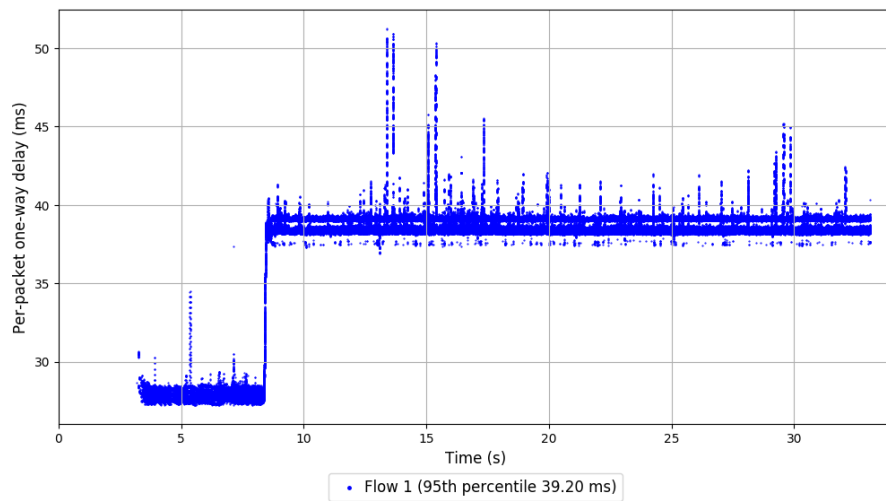
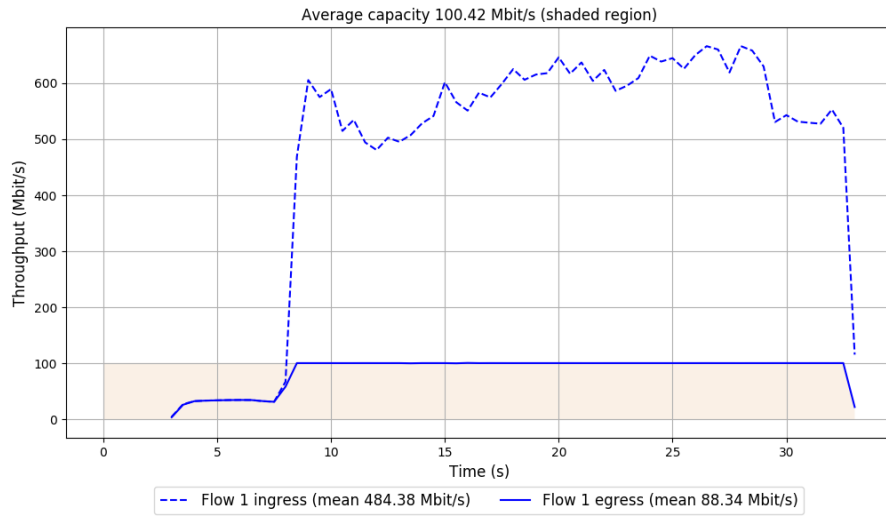
-- Flow 1:

Average throughput: 88.34 Mbit/s

95th percentile per-packet one-way delay: 39.199 ms

Loss rate: 81.78%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-03-05 18:48:59

End at: 2018-03-05 18:49:29

Below is generated by plot.py at 2018-03-05 20:20:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 86.21 Mbit/s (85.9% utilization)

95th percentile per-packet one-way delay: 39.211 ms

Loss rate: 81.18%

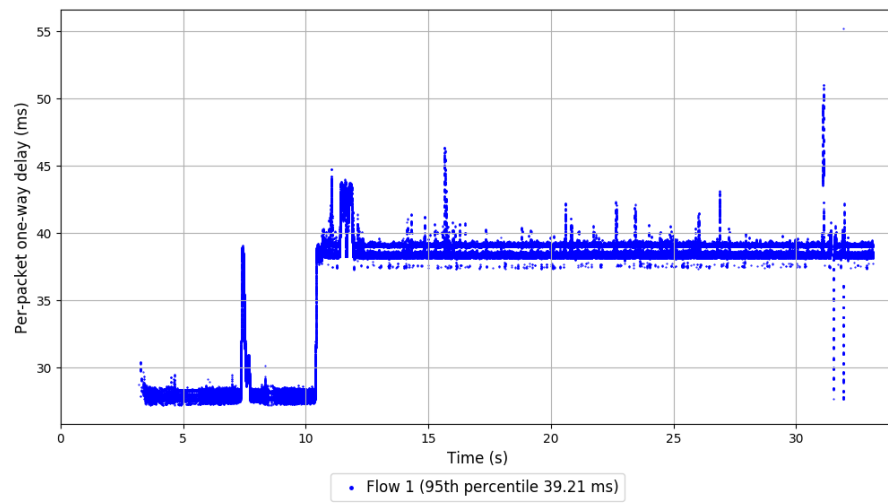
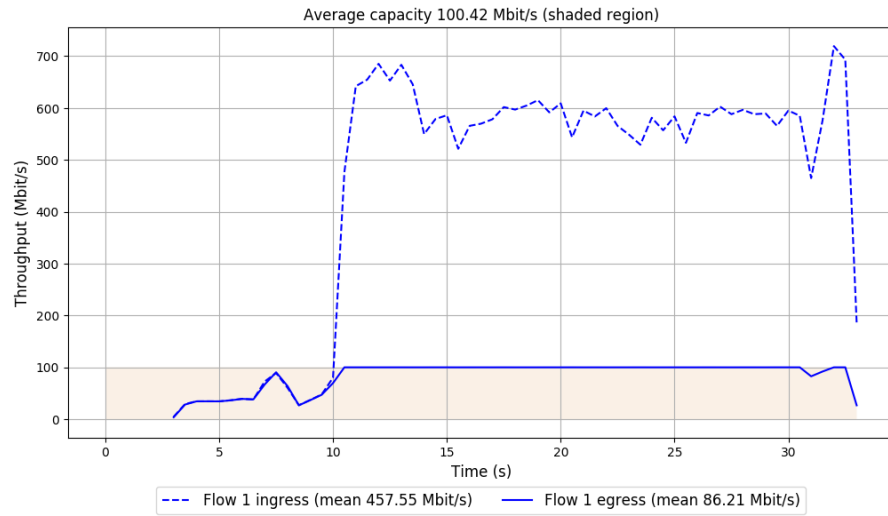
-- Flow 1:

Average throughput: 86.21 Mbit/s

95th percentile per-packet one-way delay: 39.211 ms

Loss rate: 81.18%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

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

End at: 2018-03-05 19:01:33

Below is generated by plot.py at 2018-03-05 20:20:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 61.02 Mbit/s (60.8% utilization)

95th percentile per-packet one-way delay: 36.466 ms

Loss rate: 0.36%

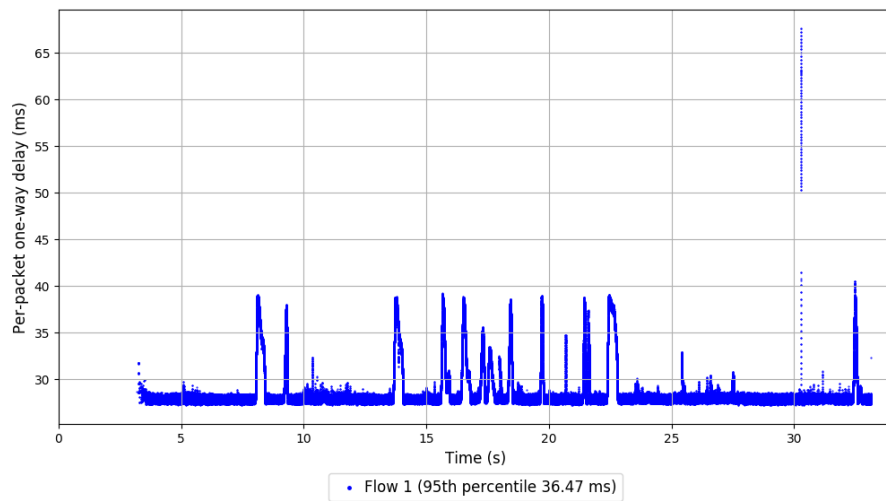
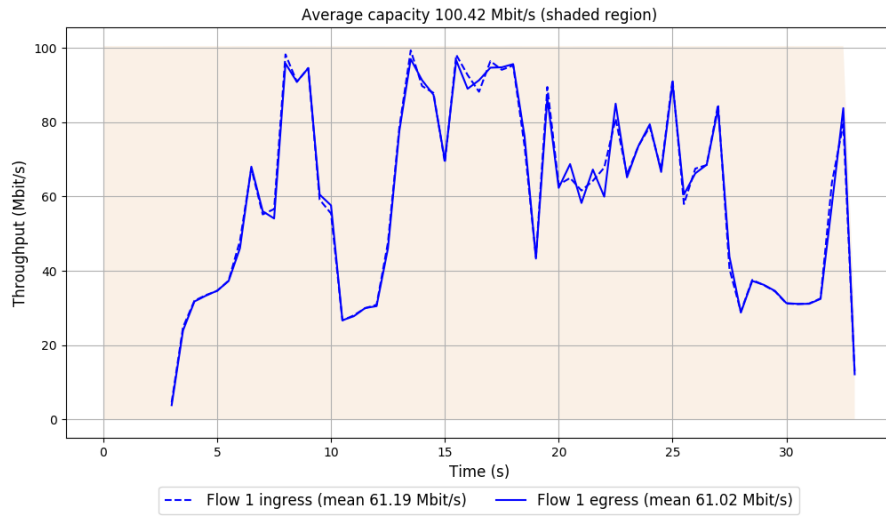
-- Flow 1:

Average throughput: 61.02 Mbit/s

95th percentile per-packet one-way delay: 36.466 ms

Loss rate: 0.36%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-03-05 19:12:52

End at: 2018-03-05 19:13:22

Below is generated by plot.py at 2018-03-05 20:20:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 87.21 Mbit/s (86.8% utilization)

95th percentile per-packet one-way delay: 39.736 ms

Loss rate: 81.88%

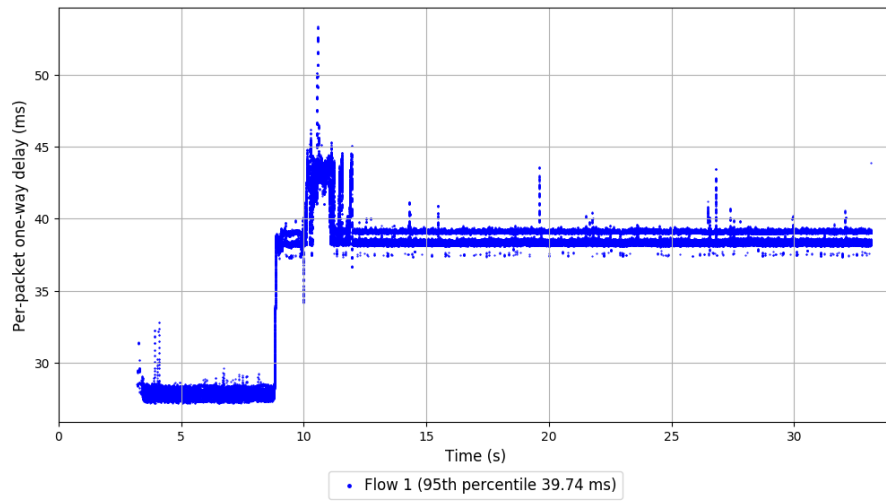
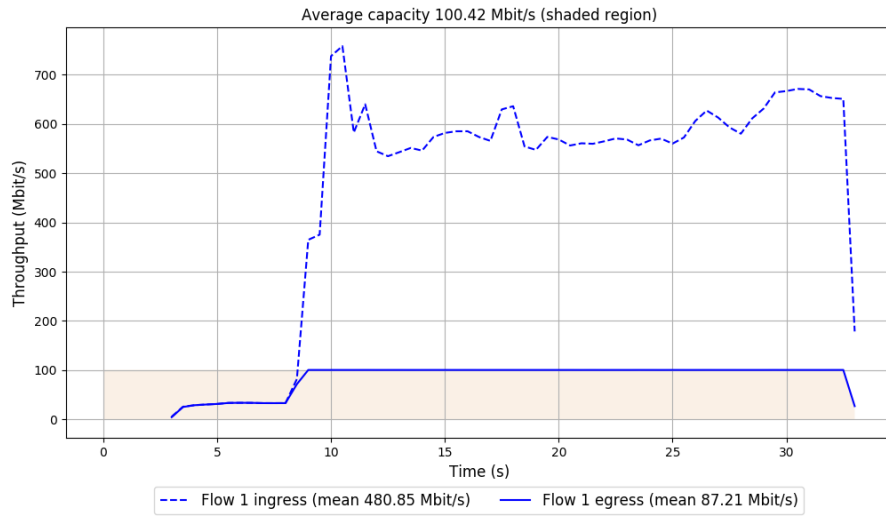
-- Flow 1:

Average throughput: 87.21 Mbit/s

95th percentile per-packet one-way delay: 39.736 ms

Loss rate: 81.88%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-03-05 19:24:51

End at: 2018-03-05 19:25:21

Below is generated by plot.py at 2018-03-05 20:24:32

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 92.20 Mbit/s (91.8% utilization)

95th percentile per-packet one-way delay: 39.203 ms

Loss rate: 82.58%

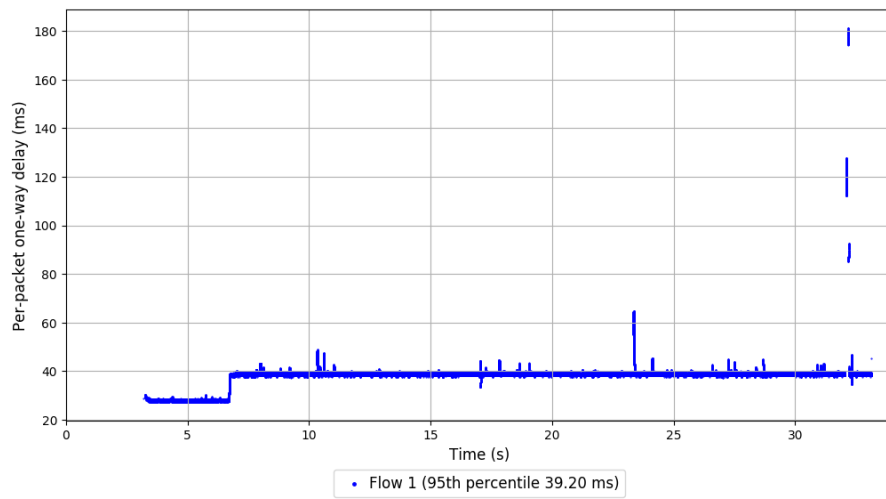
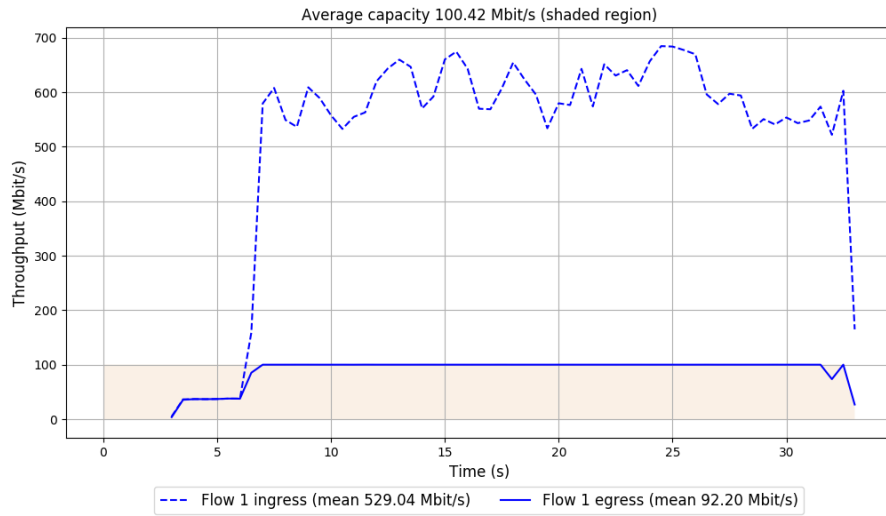
-- Flow 1:

Average throughput: 92.20 Mbit/s

95th percentile per-packet one-way delay: 39.203 ms

Loss rate: 82.58%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-03-05 19:36:55

End at: 2018-03-05 19:37:26

Below is generated by plot.py at 2018-03-05 20:24:32

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 58.69 Mbit/s (58.4% utilization)

95th percentile per-packet one-way delay: 36.750 ms

Loss rate: 0.36%

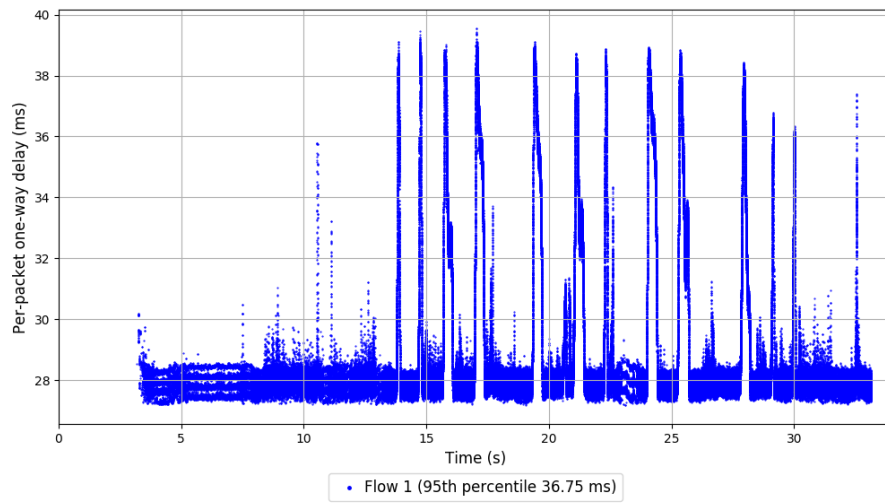
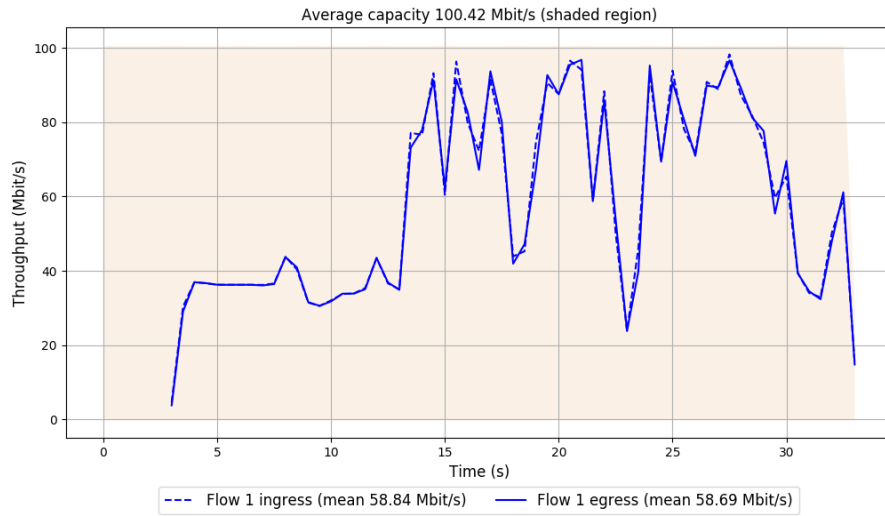
-- Flow 1:

Average throughput: 58.69 Mbit/s

95th percentile per-packet one-way delay: 36.750 ms

Loss rate: 0.36%

Run 10: Report of Copa — Data Link



Run 1: Statistics of FillP

Start at: 2018-03-05 17:47:34

End at: 2018-03-05 17:48:04

Below is generated by plot.py at 2018-03-05 20:24:32

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 99.21 Mbit/s (98.8% utilization)

95th percentile per-packet one-way delay: 46.782 ms

Loss rate: 15.87%

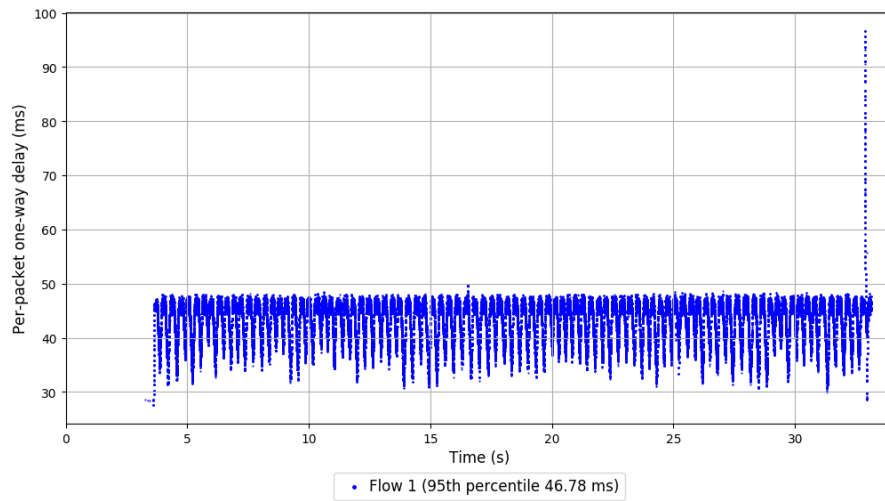
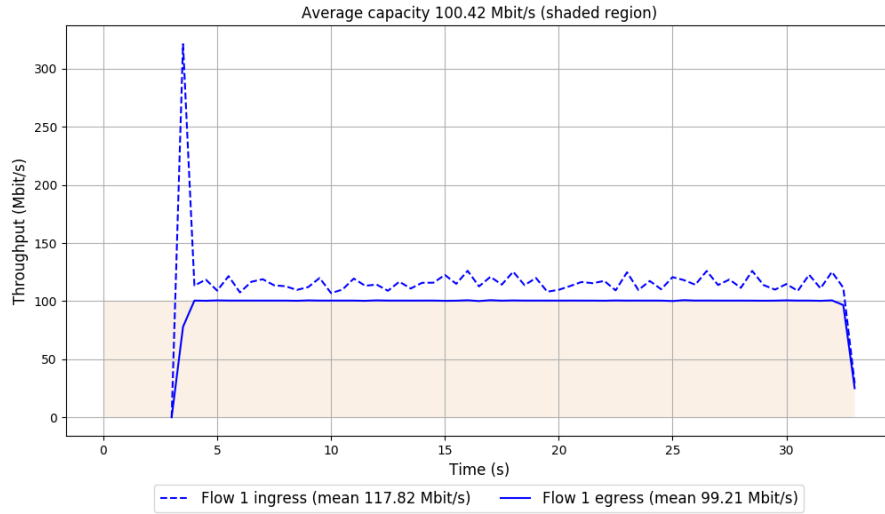
-- Flow 1:

Average throughput: 99.21 Mbit/s

95th percentile per-packet one-way delay: 46.782 ms

Loss rate: 15.87%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-03-05 17:59:33

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

Below is generated by plot.py at 2018-03-05 20:24:32

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 99.50 Mbit/s (99.1% utilization)

95th percentile per-packet one-way delay: 46.806 ms

Loss rate: 16.00%

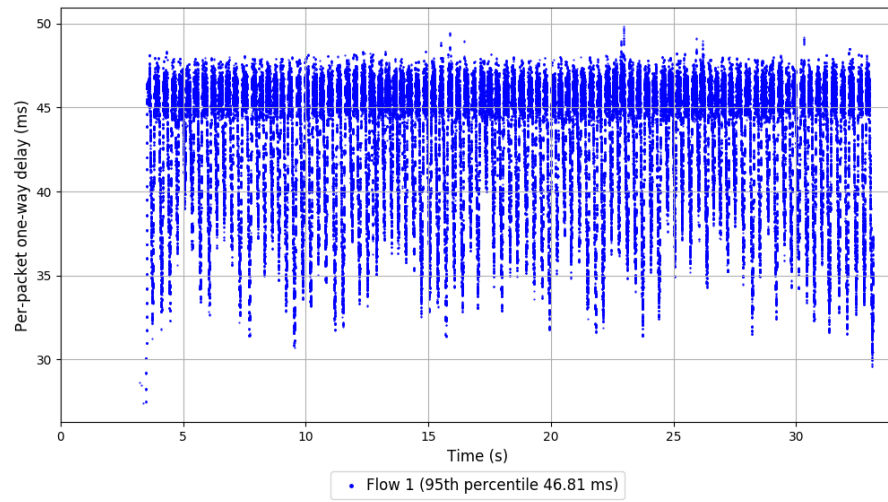
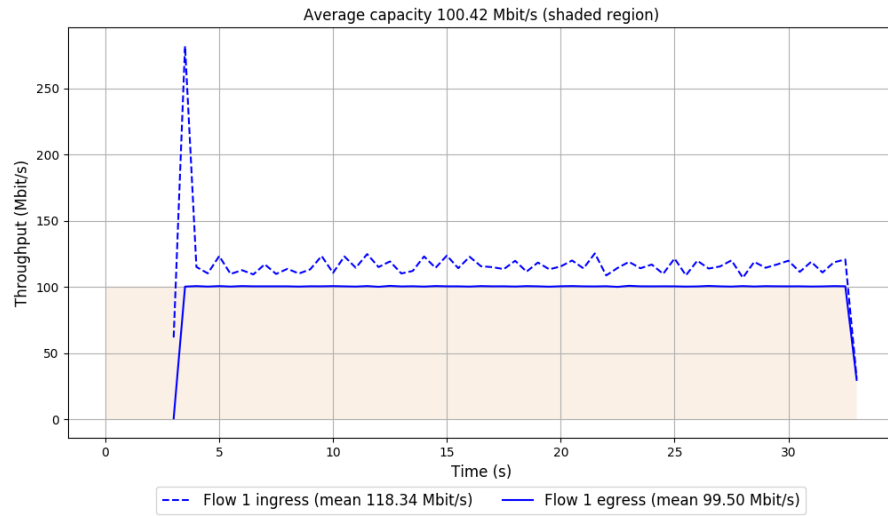
-- Flow 1:

Average throughput: 99.50 Mbit/s

95th percentile per-packet one-way delay: 46.806 ms

Loss rate: 16.00%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-03-05 18:11:39

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

Below is generated by plot.py at 2018-03-05 20:24:32

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 99.45 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 46.810 ms

Loss rate: 16.62%

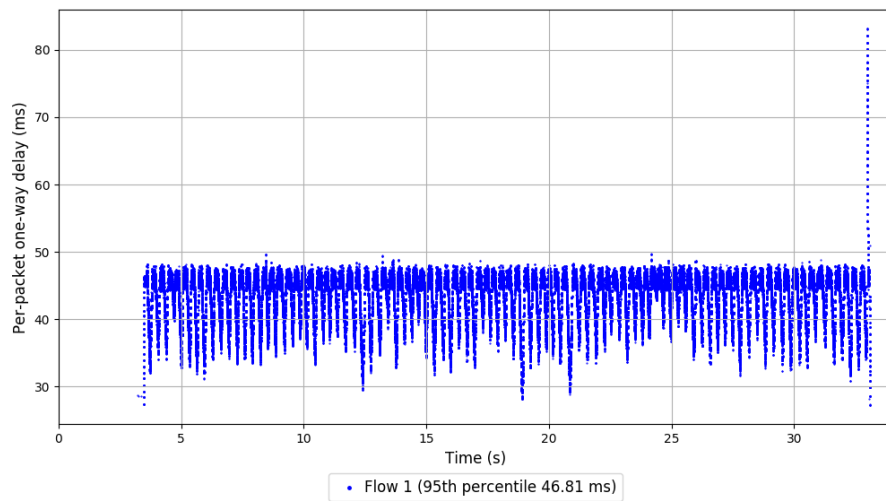
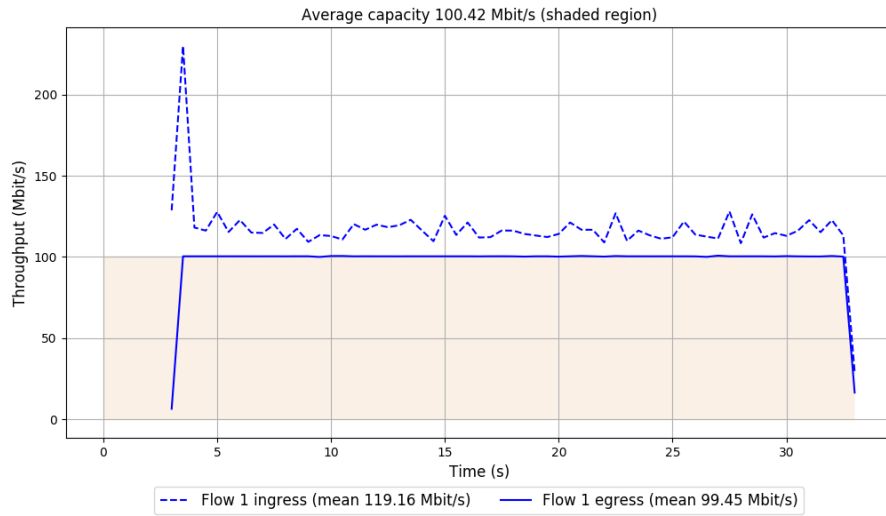
-- Flow 1:

Average throughput: 99.45 Mbit/s

95th percentile per-packet one-way delay: 46.810 ms

Loss rate: 16.62%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-03-05 18:23:33

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

Below is generated by plot.py at 2018-03-05 20:24:32

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 99.50 Mbit/s (99.1% utilization)

95th percentile per-packet one-way delay: 46.767 ms

Loss rate: 15.99%

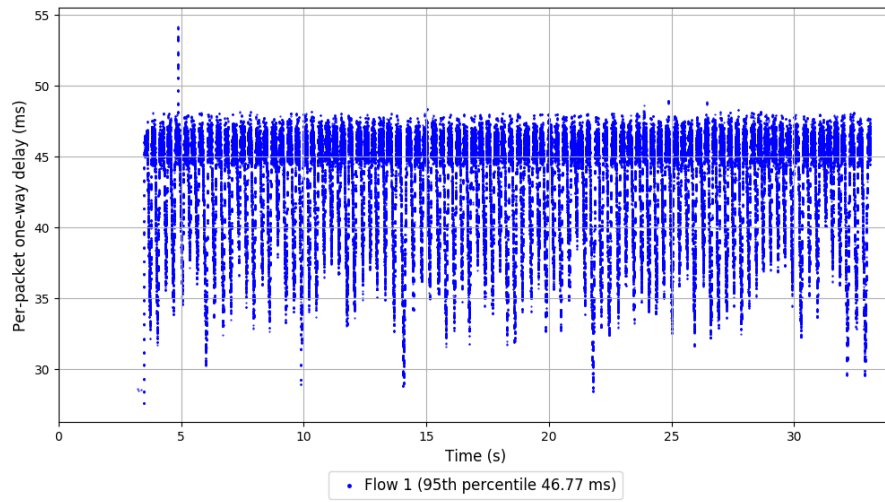
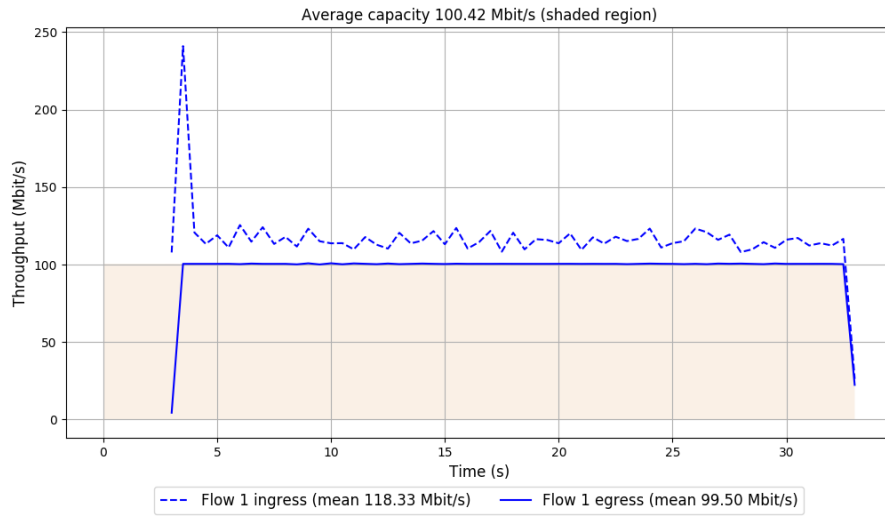
-- Flow 1:

Average throughput: 99.50 Mbit/s

95th percentile per-packet one-way delay: 46.767 ms

Loss rate: 15.99%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-03-05 18:35:37

End at: 2018-03-05 18:36:07

Below is generated by plot.py at 2018-03-05 20:24:32

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 99.46 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 46.849 ms

Loss rate: 16.64%

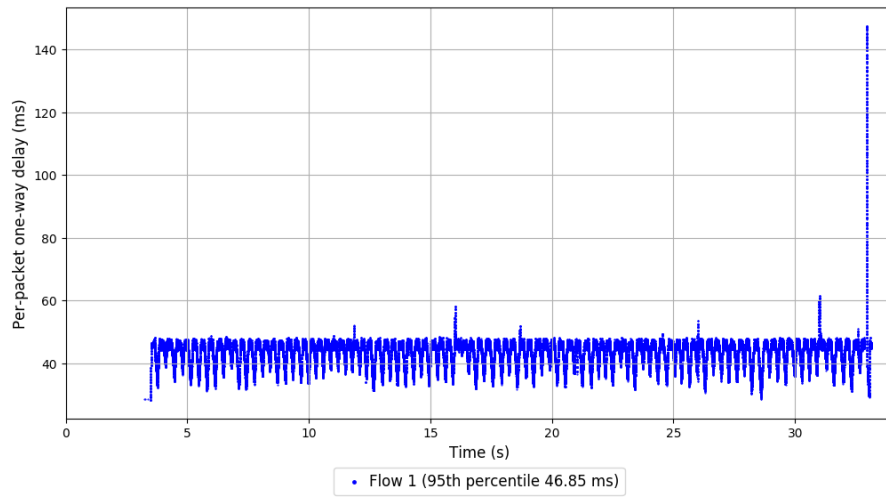
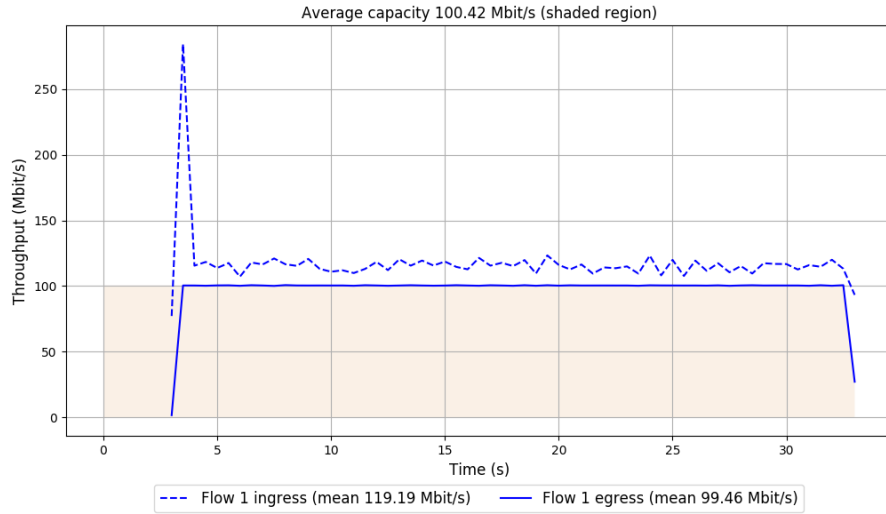
-- Flow 1:

Average throughput: 99.46 Mbit/s

95th percentile per-packet one-way delay: 46.849 ms

Loss rate: 16.64%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-03-05 18:47:44

End at: 2018-03-05 18:48:14

Below is generated by plot.py at 2018-03-05 20:24:32

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 99.41 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 46.788 ms

Loss rate: 15.84%

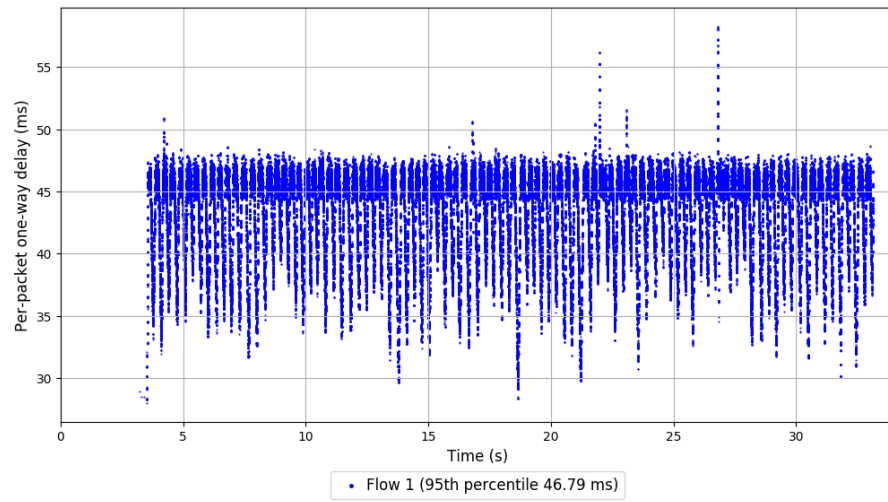
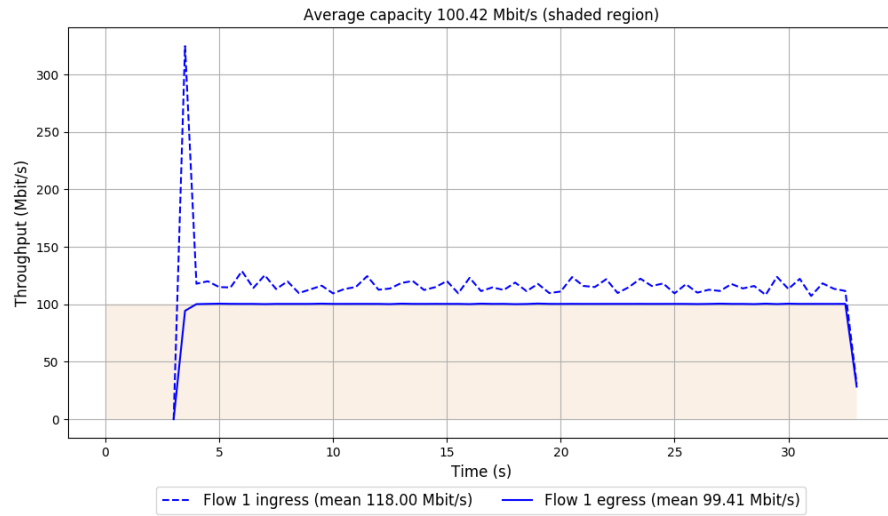
-- Flow 1:

Average throughput: 99.41 Mbit/s

95th percentile per-packet one-way delay: 46.788 ms

Loss rate: 15.84%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-03-05 18:59:48

End at: 2018-03-05 19:00:18

Below is generated by plot.py at 2018-03-05 20:24:32

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 99.39 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 46.962 ms

Loss rate: 18.69%

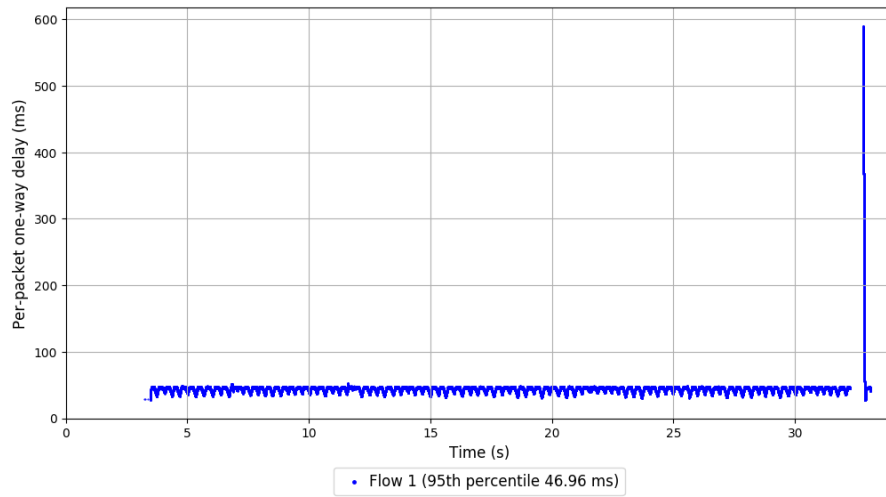
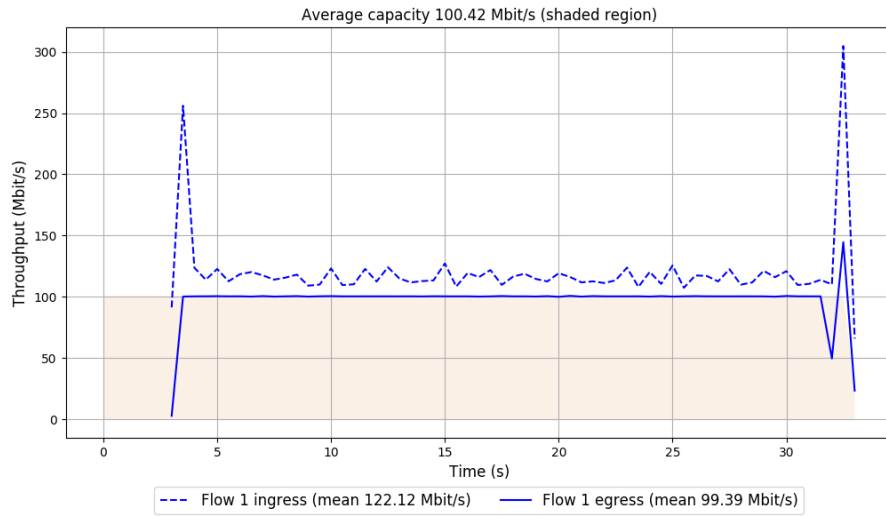
-- Flow 1:

Average throughput: 99.39 Mbit/s

95th percentile per-packet one-way delay: 46.962 ms

Loss rate: 18.69%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-03-05 19:11:37

End at: 2018-03-05 19:12:07

Below is generated by plot.py at 2018-03-05 20:24:51

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 99.12 Mbit/s (98.7% utilization)

95th percentile per-packet one-way delay: 46.790 ms

Loss rate: 16.34%

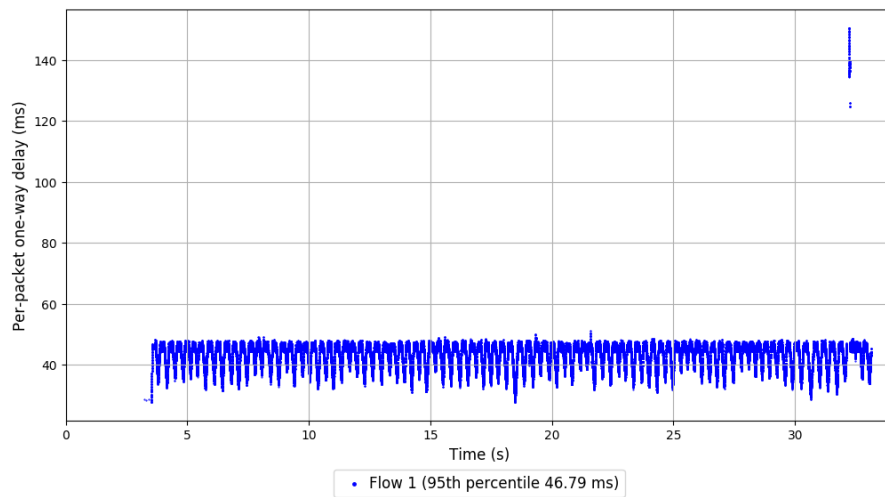
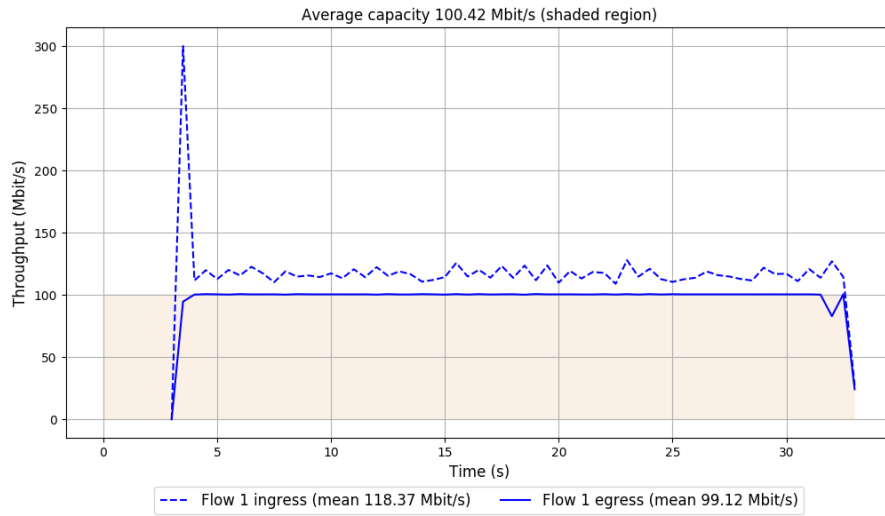
-- Flow 1:

Average throughput: 99.12 Mbit/s

95th percentile per-packet one-way delay: 46.790 ms

Loss rate: 16.34%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-03-05 19:23:37

End at: 2018-03-05 19:24:07

Below is generated by plot.py at 2018-03-05 20:25:07

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 99.49 Mbit/s (99.1% utilization)

95th percentile per-packet one-way delay: 46.769 ms

Loss rate: 16.03%

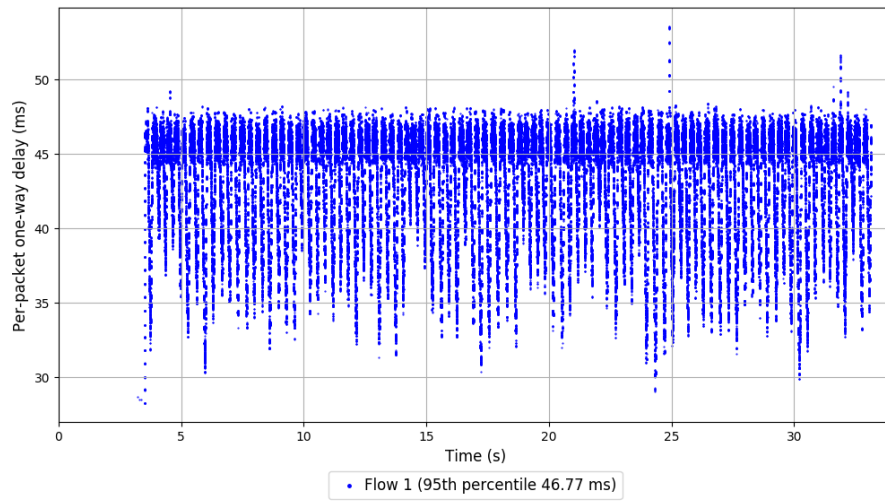
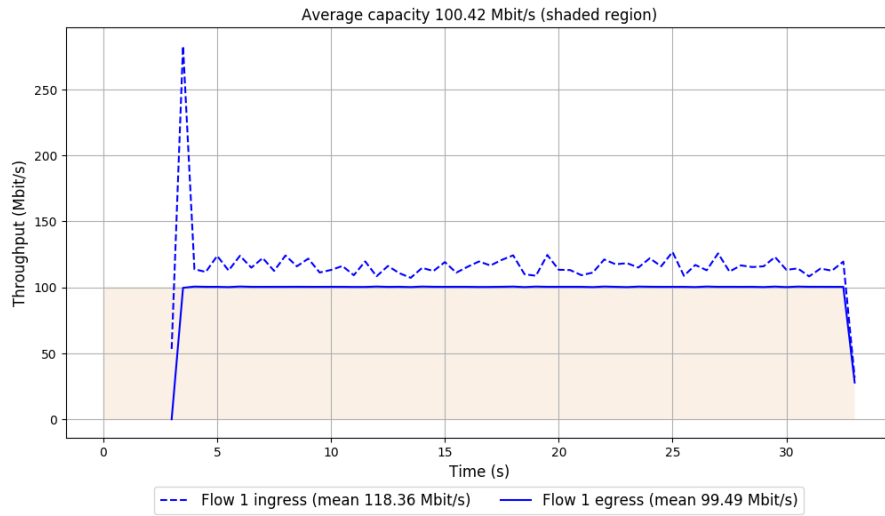
-- Flow 1:

Average throughput: 99.49 Mbit/s

95th percentile per-packet one-way delay: 46.769 ms

Loss rate: 16.03%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-03-05 19:35:41

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

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

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 99.39 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 46.795 ms

Loss rate: 16.30%

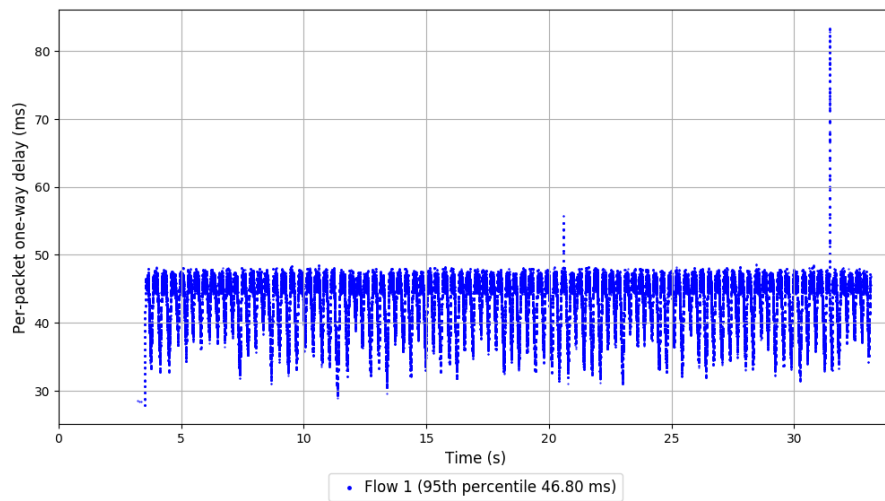
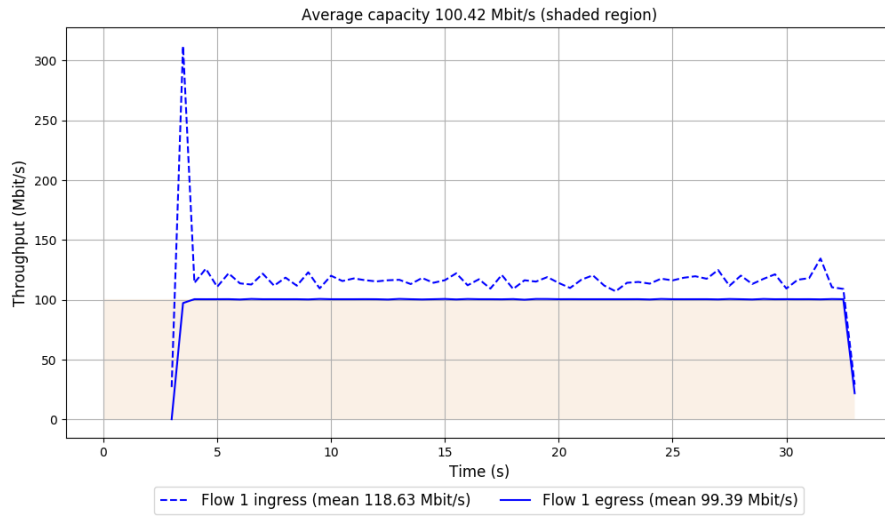
-- Flow 1:

Average throughput: 99.39 Mbit/s

95th percentile per-packet one-way delay: 46.795 ms

Loss rate: 16.30%

Run 10: Report of FillP — Data Link



Run 1: Statistics of Indigo-1-32

Start at: 2018-03-05 17:53:37

End at: 2018-03-05 17:54:07

Below is generated by plot.py at 2018-03-05 20:25:58

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 96.45 Mbit/s (96.0% utilization)

95th percentile per-packet one-way delay: 32.322 ms

Loss rate: 0.26%

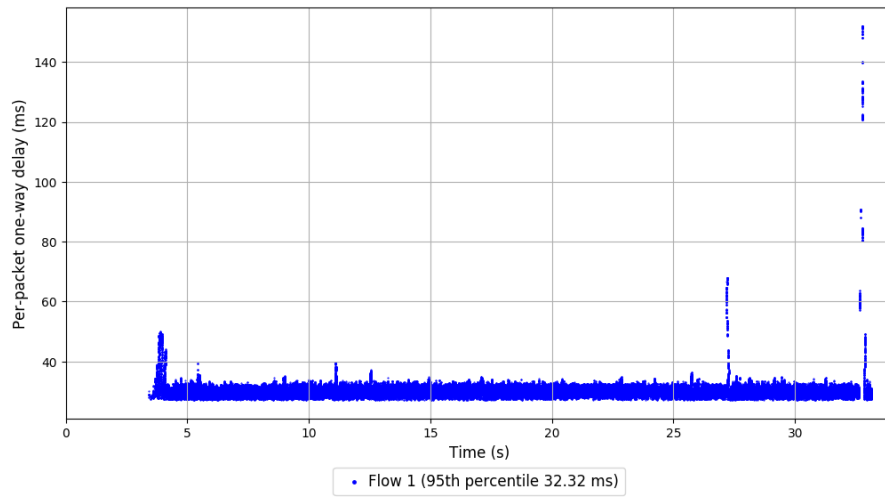
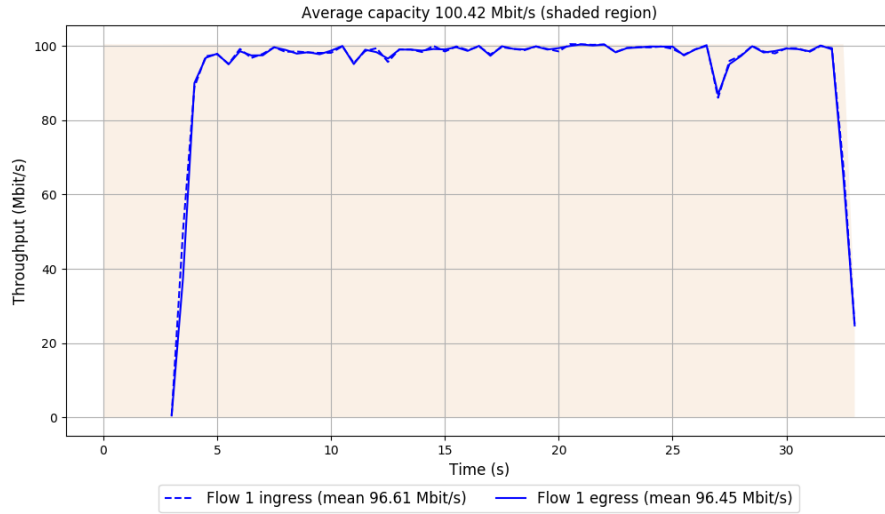
-- Flow 1:

Average throughput: 96.45 Mbit/s

95th percentile per-packet one-way delay: 32.322 ms

Loss rate: 0.26%

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



Run 2: Statistics of Indigo-1-32

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

End at: 2018-03-05 18:06:16

Below is generated by plot.py at 2018-03-05 20:26:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 98.66 Mbit/s (98.2% utilization)

95th percentile per-packet one-way delay: 32.933 ms

Loss rate: 0.14%

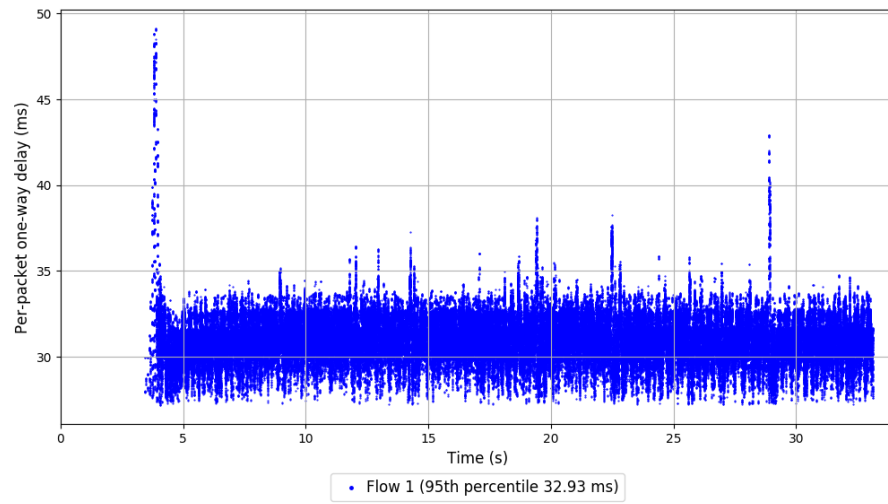
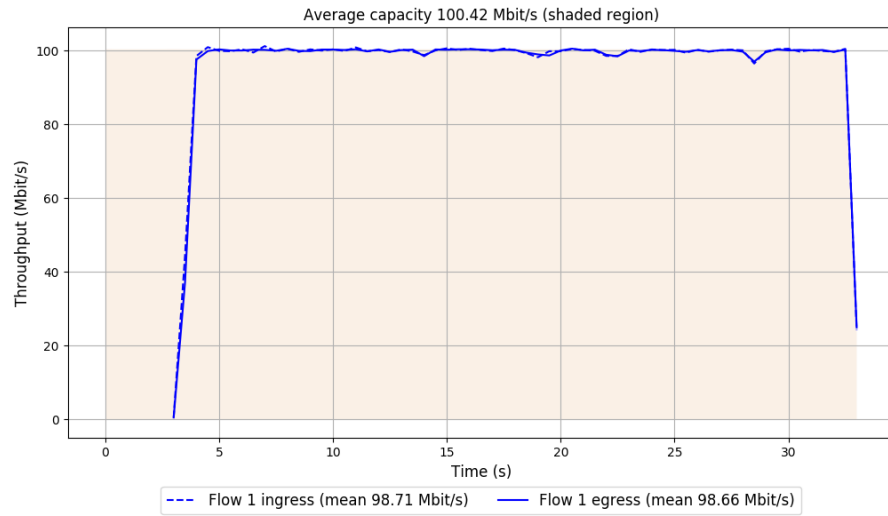
-- Flow 1:

Average throughput: 98.66 Mbit/s

95th percentile per-packet one-way delay: 32.933 ms

Loss rate: 0.14%

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-03-05 18:17:39

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

Below is generated by plot.py at 2018-03-05 20:26:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 97.14 Mbit/s (96.7% utilization)

95th percentile per-packet one-way delay: 32.483 ms

Loss rate: 0.23%

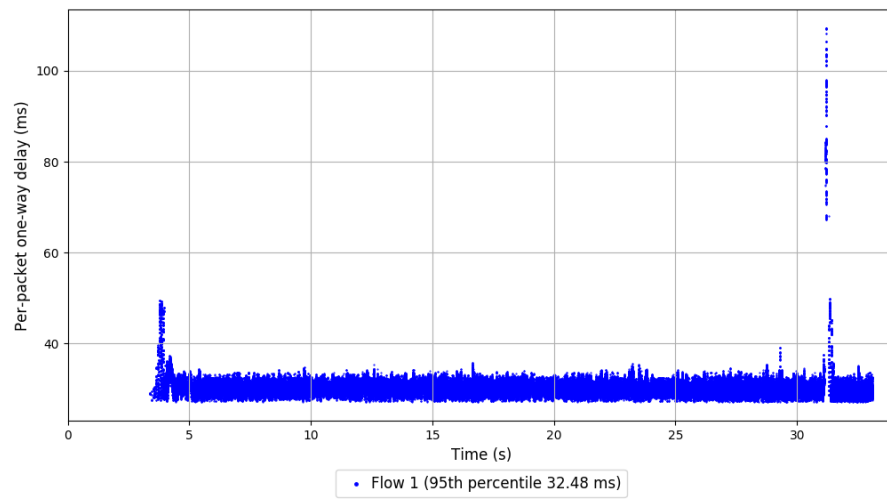
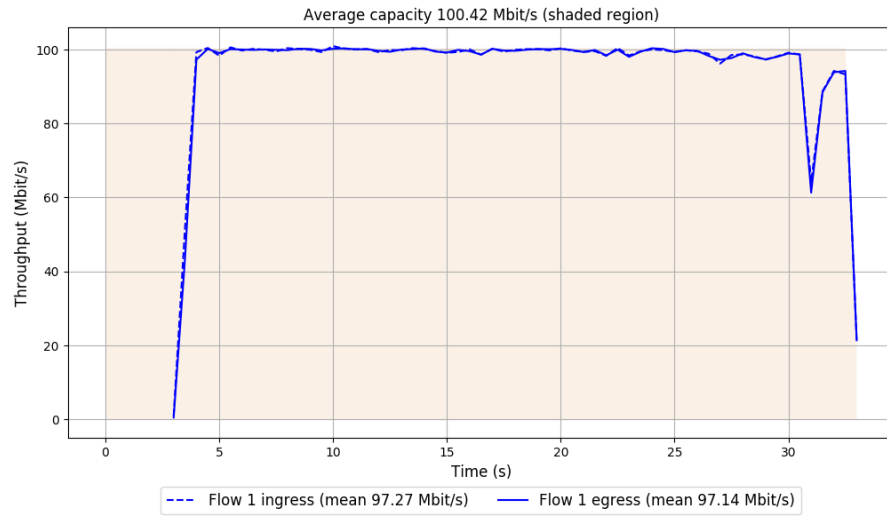
-- Flow 1:

Average throughput: 97.14 Mbit/s

95th percentile per-packet one-way delay: 32.483 ms

Loss rate: 0.23%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-03-05 18:29:42

End at: 2018-03-05 18:30:12

Below is generated by plot.py at 2018-03-05 20:26:19

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 97.28 Mbit/s (96.9% utilization)

95th percentile per-packet one-way delay: 32.940 ms

Loss rate: 0.21%

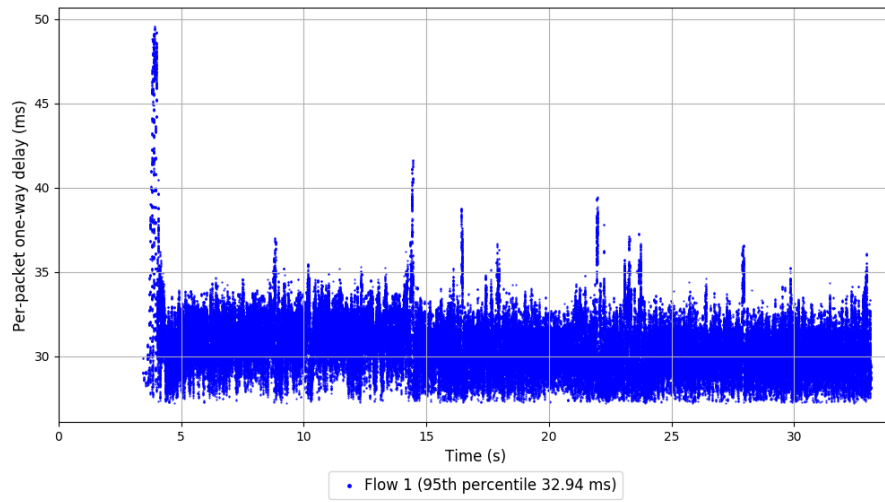
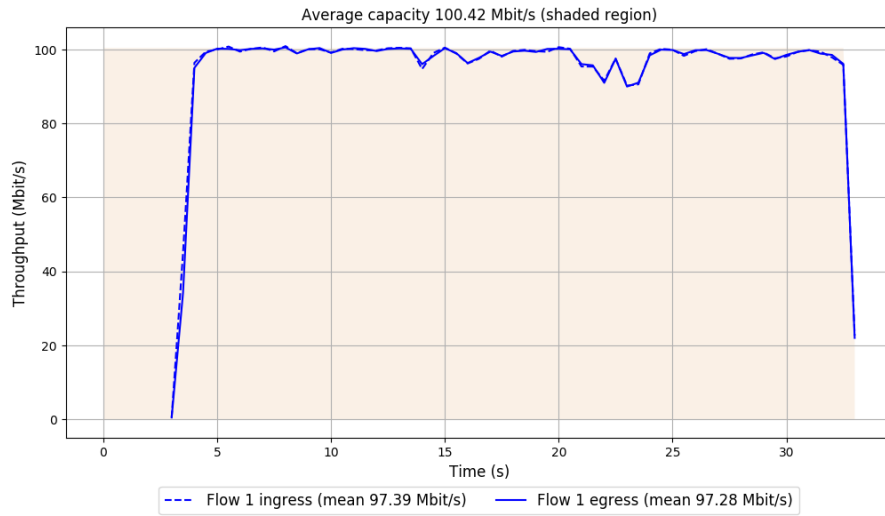
-- Flow 1:

Average throughput: 97.28 Mbit/s

95th percentile per-packet one-way delay: 32.940 ms

Loss rate: 0.21%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-03-05 18:41:46

End at: 2018-03-05 18:42:16

Below is generated by plot.py at 2018-03-05 20:27:07

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 94.21 Mbit/s (93.8% utilization)

95th percentile per-packet one-way delay: 32.076 ms

Loss rate: 0.11%

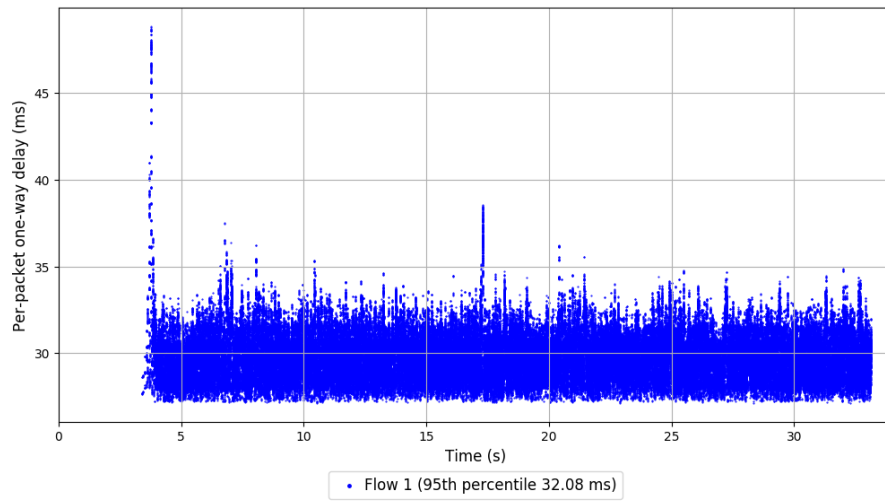
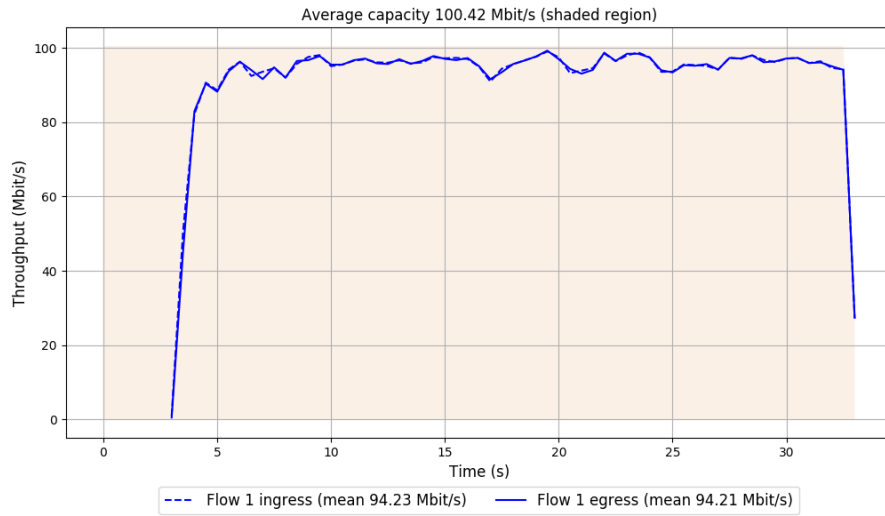
-- Flow 1:

Average throughput: 94.21 Mbit/s

95th percentile per-packet one-way delay: 32.076 ms

Loss rate: 0.11%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-03-05 18:53:54

End at: 2018-03-05 18:54:24

Below is generated by plot.py at 2018-03-05 20:27:23

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 92.62 Mbit/s (92.2% utilization)

95th percentile per-packet one-way delay: 32.161 ms

Loss rate: 0.15%

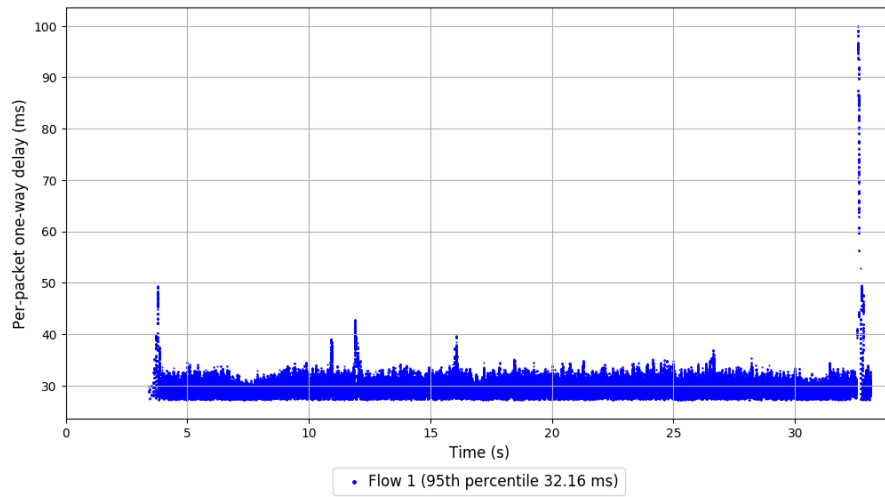
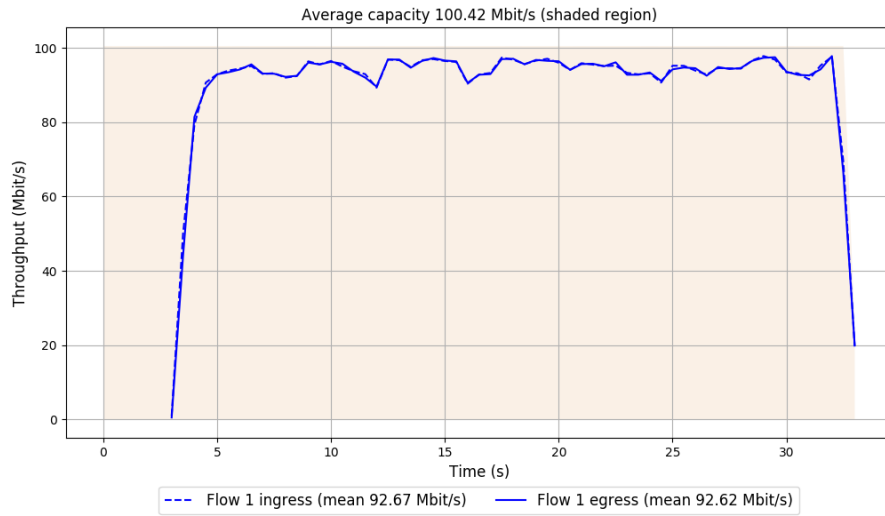
-- Flow 1:

Average throughput: 92.62 Mbit/s

95th percentile per-packet one-way delay: 32.161 ms

Loss rate: 0.15%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-03-05 19:05:44

End at: 2018-03-05 19:06:14

Below is generated by plot.py at 2018-03-05 20:27:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 94.15 Mbit/s (93.8% utilization)

95th percentile per-packet one-way delay: 32.692 ms

Loss rate: 0.19%

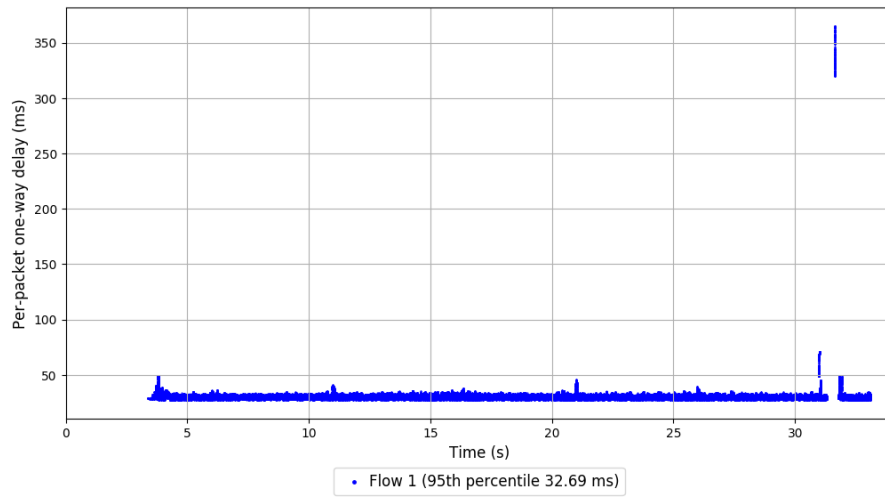
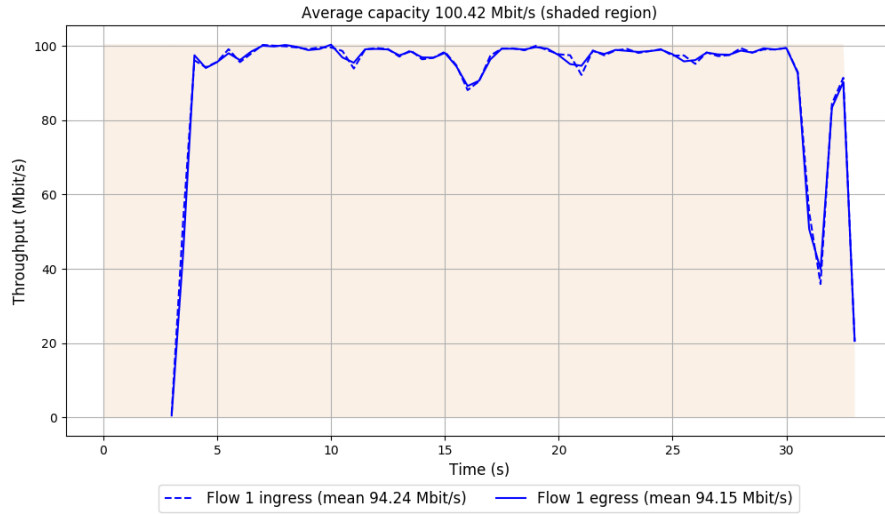
-- Flow 1:

Average throughput: 94.15 Mbit/s

95th percentile per-packet one-way delay: 32.692 ms

Loss rate: 0.19%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-03-05 19:17:44

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

Below is generated by plot.py at 2018-03-05 20:28:01

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 96.84 Mbit/s (96.4% utilization)

95th percentile per-packet one-way delay: 32.182 ms

Loss rate: 0.20%

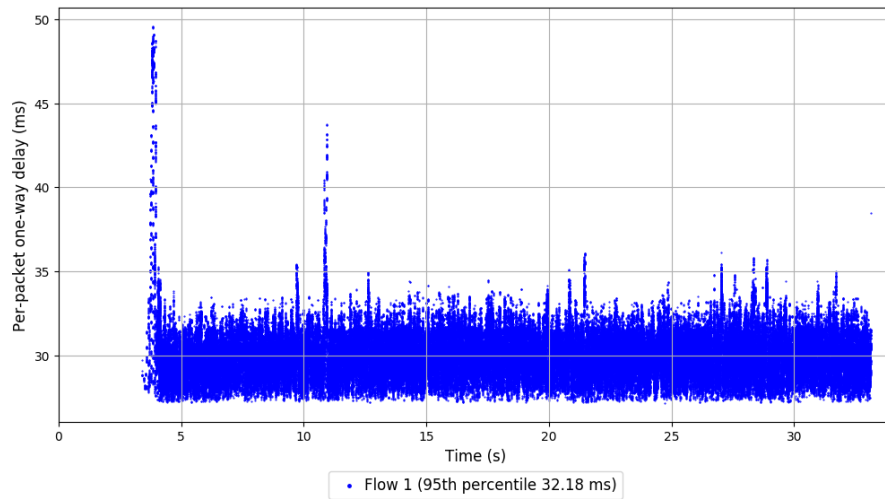
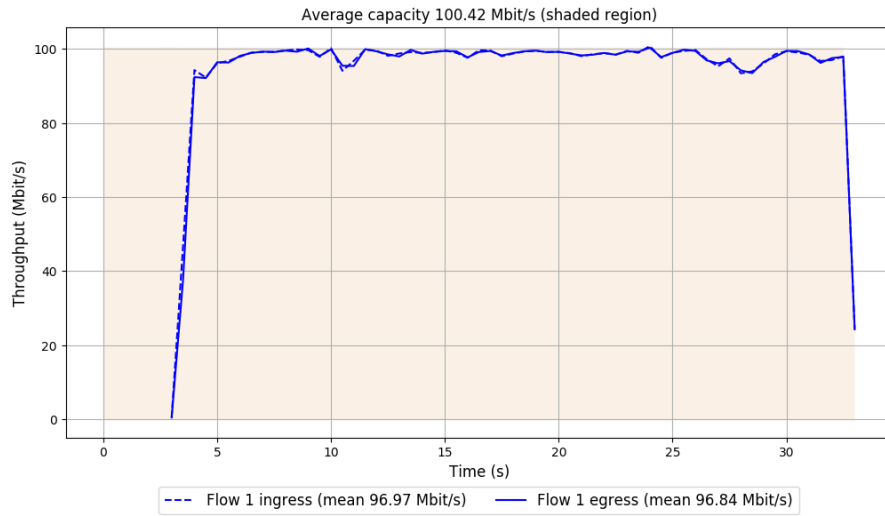
-- Flow 1:

Average throughput: 96.84 Mbit/s

95th percentile per-packet one-way delay: 32.182 ms

Loss rate: 0.20%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-03-05 19:29:47

End at: 2018-03-05 19:30:17

Below is generated by plot.py at 2018-03-05 20:28:34

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 93.04 Mbit/s (92.6% utilization)

95th percentile per-packet one-way delay: 32.185 ms

Loss rate: 0.03%

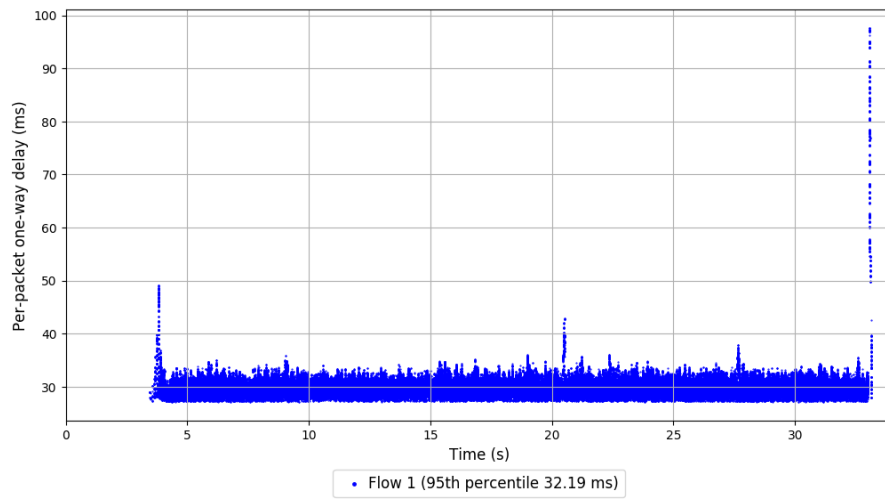
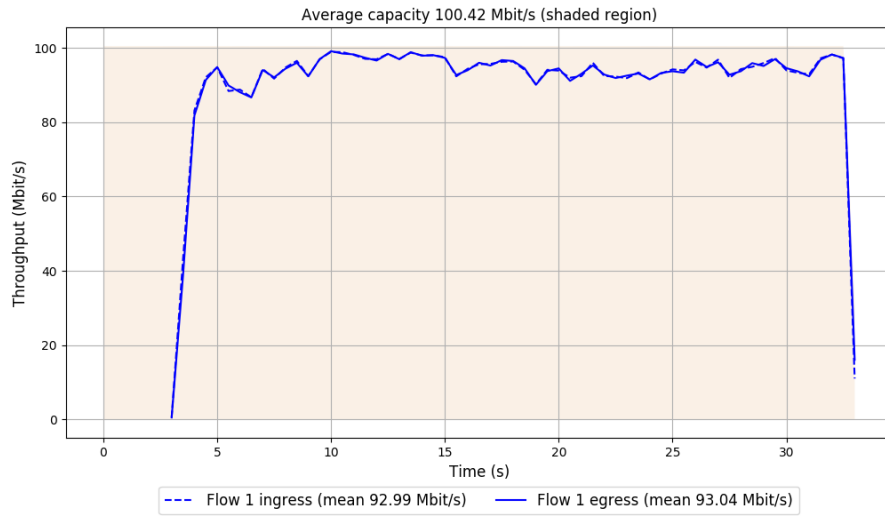
-- Flow 1:

Average throughput: 93.04 Mbit/s

95th percentile per-packet one-way delay: 32.185 ms

Loss rate: 0.03%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-03-05 19:41:35

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

Below is generated by plot.py at 2018-03-05 20:28:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 96.74 Mbit/s (96.3% utilization)

95th percentile per-packet one-way delay: 32.820 ms

Loss rate: 0.25%

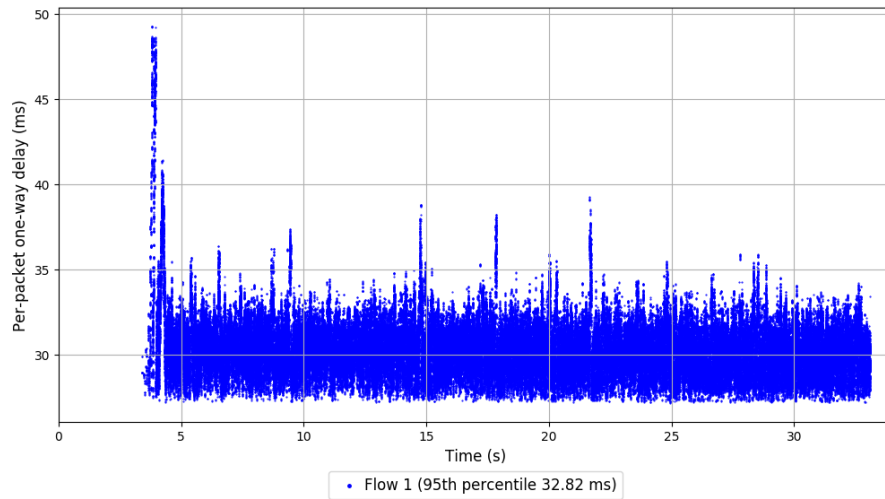
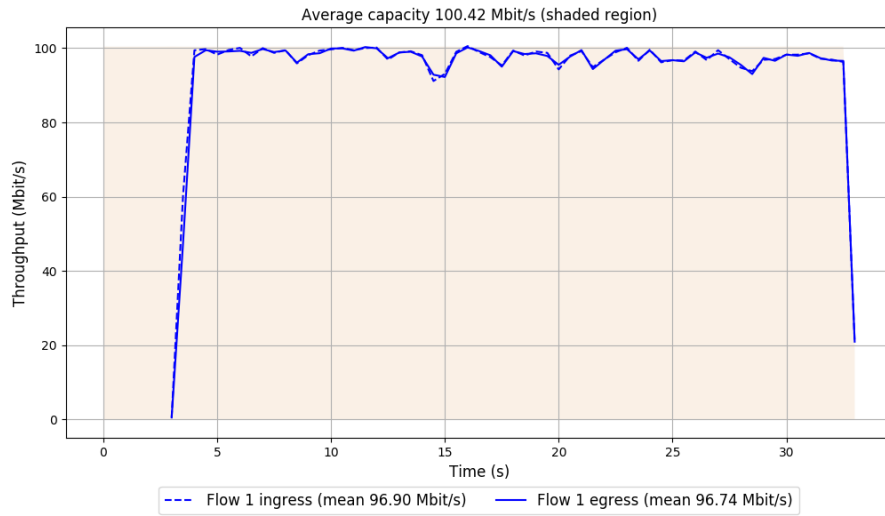
-- Flow 1:

Average throughput: 96.74 Mbit/s

95th percentile per-packet one-way delay: 32.820 ms

Loss rate: 0.25%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-03-05 17:44:56

End at: 2018-03-05 17:45:26

Below is generated by plot.py at 2018-03-05 20:28:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 86.37 Mbit/s (86.0% utilization)

95th percentile per-packet one-way delay: 29.968 ms

Loss rate: 0.12%

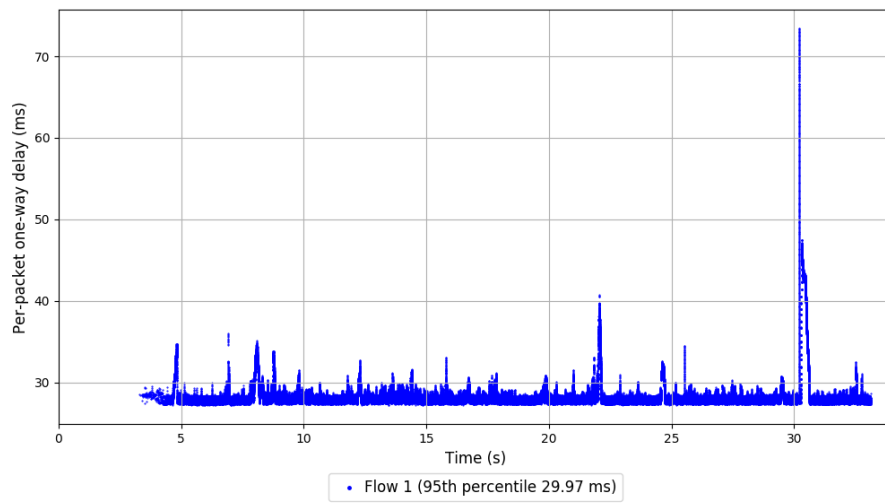
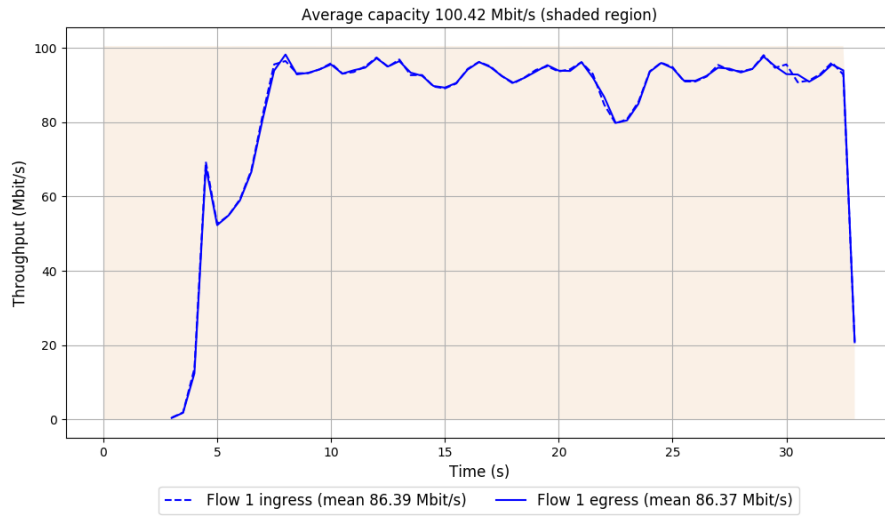
-- Flow 1:

Average throughput: 86.37 Mbit/s

95th percentile per-packet one-way delay: 29.968 ms

Loss rate: 0.12%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-03-05 17:56:54

End at: 2018-03-05 17:57:24

Below is generated by plot.py at 2018-03-05 20:28:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 87.31 Mbit/s (86.9% utilization)

95th percentile per-packet one-way delay: 29.956 ms

Loss rate: 0.15%

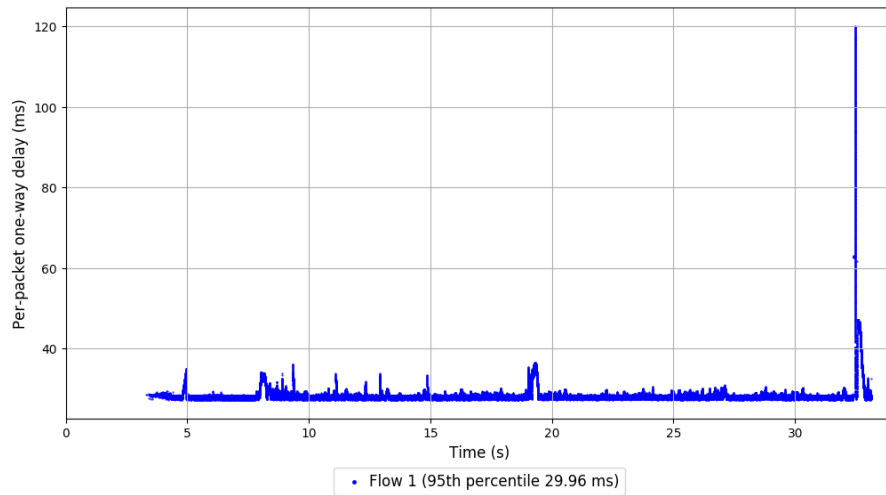
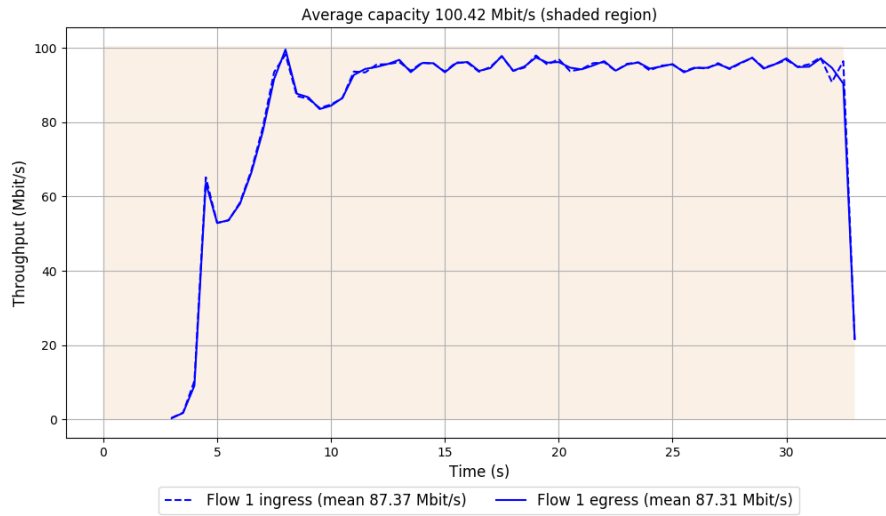
-- Flow 1:

Average throughput: 87.31 Mbit/s

95th percentile per-packet one-way delay: 29.956 ms

Loss rate: 0.15%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-03-05 18:09:01

End at: 2018-03-05 18:09:31

Below is generated by plot.py at 2018-03-05 20:29:43

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 84.44 Mbit/s (84.1% utilization)

95th percentile per-packet one-way delay: 29.521 ms

Loss rate: 0.21%

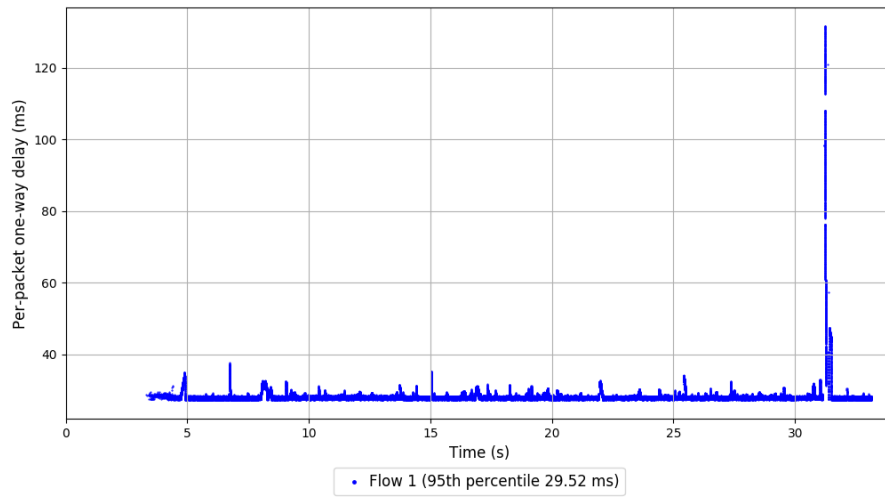
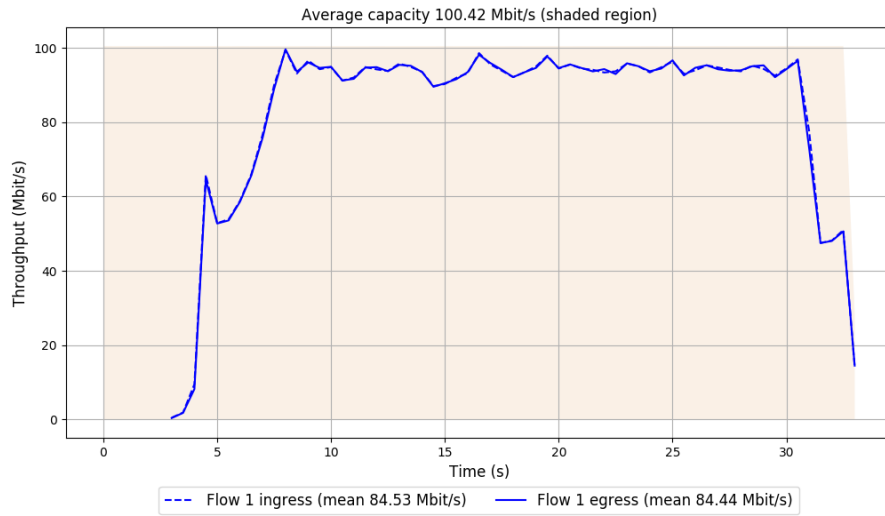
-- Flow 1:

Average throughput: 84.44 Mbit/s

95th percentile per-packet one-way delay: 29.521 ms

Loss rate: 0.21%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-03-05 18:20:56

End at: 2018-03-05 18:21:26

Below is generated by plot.py at 2018-03-05 20:30:00

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 86.28 Mbit/s (85.9% utilization)

95th percentile per-packet one-way delay: 29.949 ms

Loss rate: 0.27%

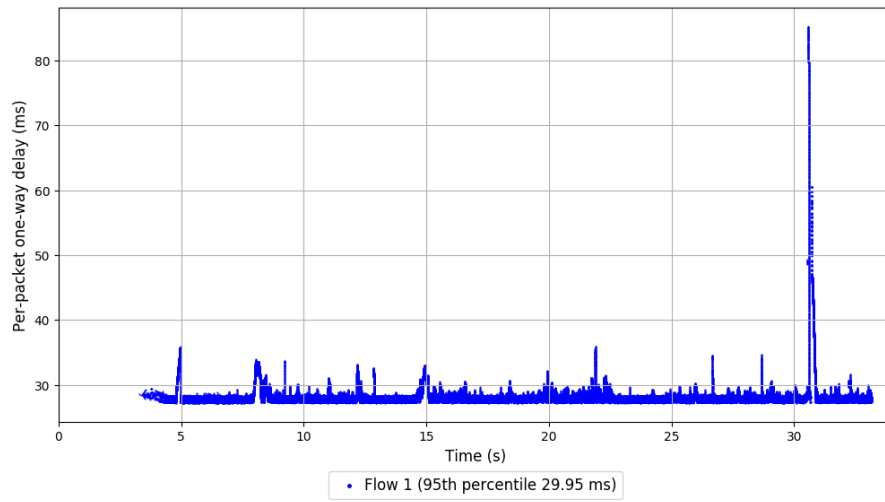
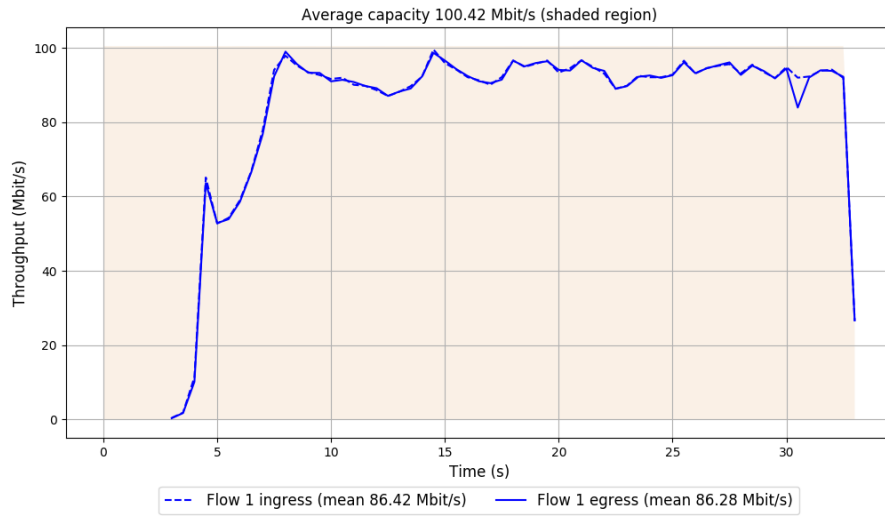
-- Flow 1:

Average throughput: 86.28 Mbit/s

95th percentile per-packet one-way delay: 29.949 ms

Loss rate: 0.27%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

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

End at: 2018-03-05 18:33:28

Below is generated by plot.py at 2018-03-05 20:30:23

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 86.45 Mbit/s (86.1% utilization)

95th percentile per-packet one-way delay: 29.761 ms

Loss rate: 0.10%

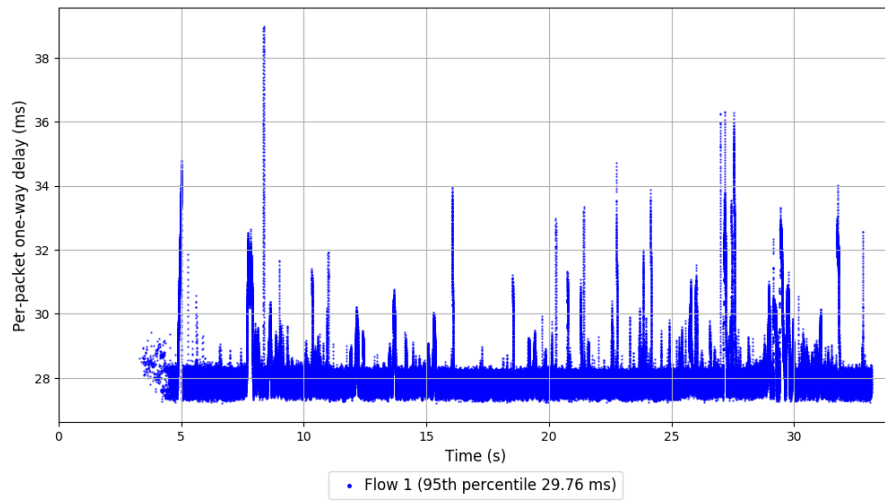
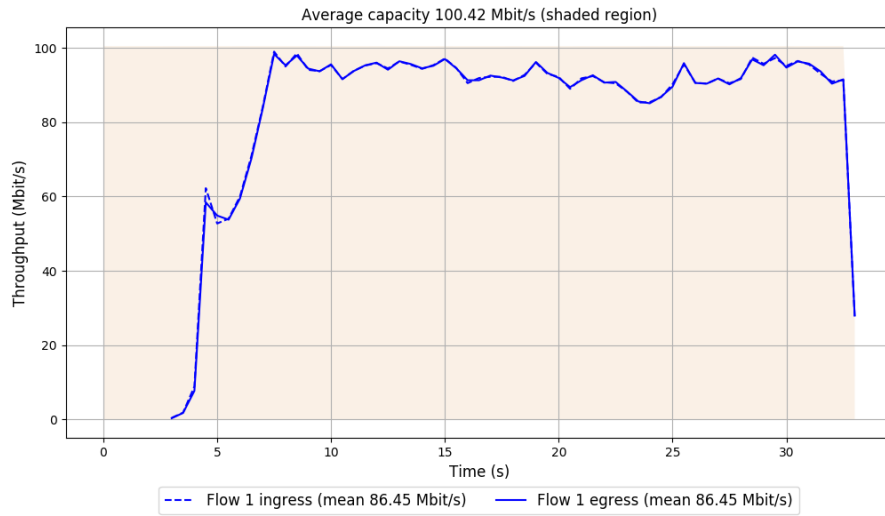
-- Flow 1:

Average throughput: 86.45 Mbit/s

95th percentile per-packet one-way delay: 29.761 ms

Loss rate: 0.10%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

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

End at: 2018-03-05 18:45:33

Below is generated by plot.py at 2018-03-05 20:30:40

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 86.18 Mbit/s (85.8% utilization)

95th percentile per-packet one-way delay: 29.240 ms

Loss rate: 0.10%

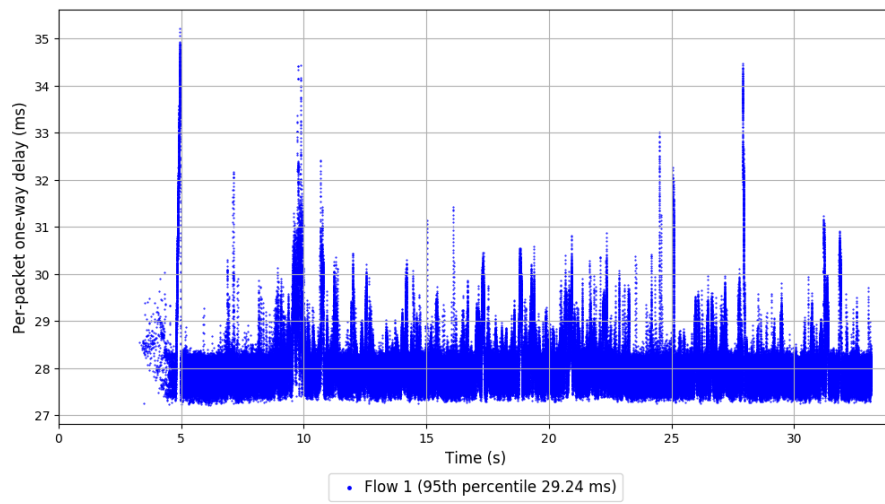
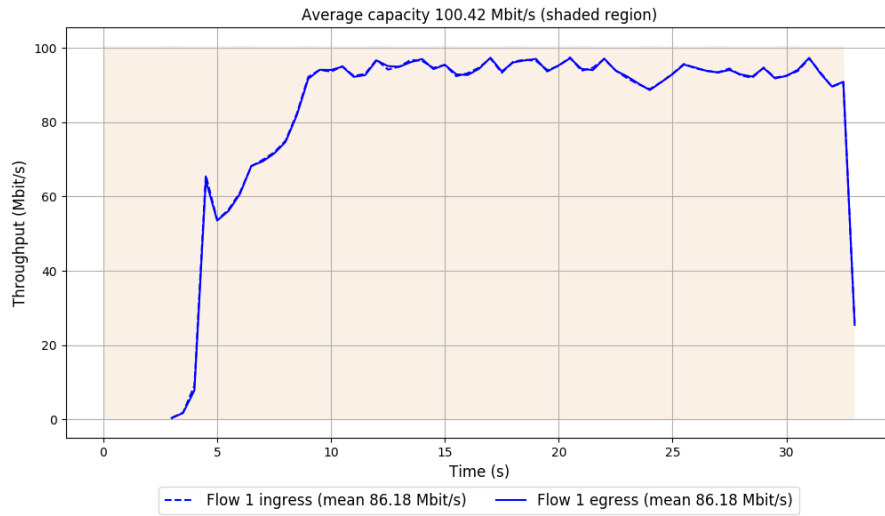
-- Flow 1:

Average throughput: 86.18 Mbit/s

95th percentile per-packet one-way delay: 29.240 ms

Loss rate: 0.10%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-03-05 18:57:11

End at: 2018-03-05 18:57:41

Below is generated by plot.py at 2018-03-05 20:31:13

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 86.62 Mbit/s (86.3% utilization)

95th percentile per-packet one-way delay: 32.994 ms

Loss rate: 0.10%

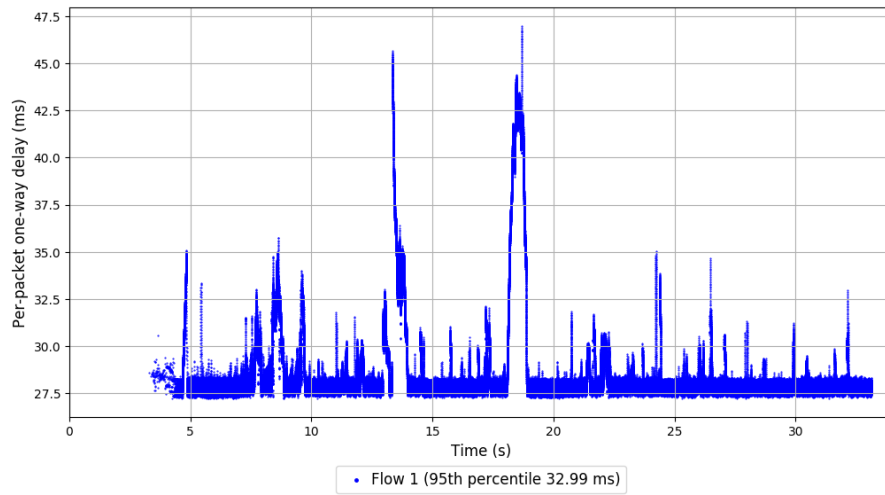
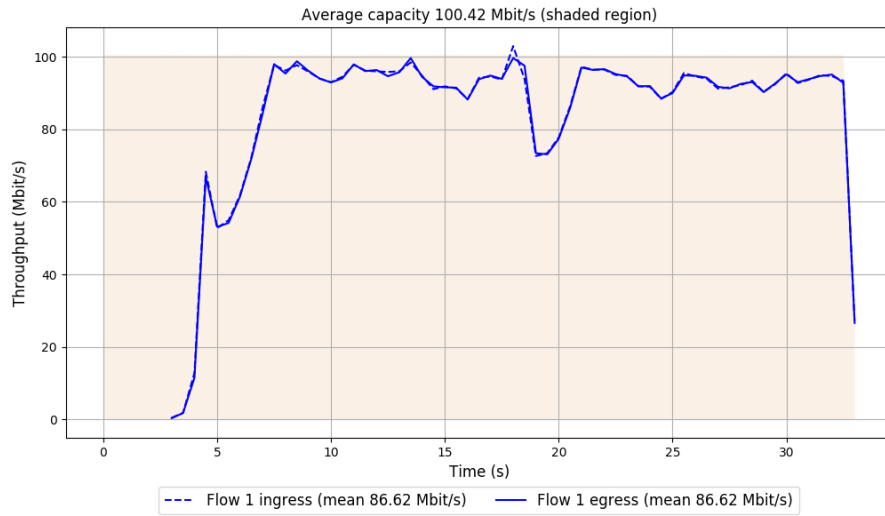
-- Flow 1:

Average throughput: 86.62 Mbit/s

95th percentile per-packet one-way delay: 32.994 ms

Loss rate: 0.10%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-03-05 19:08:59

End at: 2018-03-05 19:09:29

Below is generated by plot.py at 2018-03-05 20:31:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 86.68 Mbit/s (86.3% utilization)

95th percentile per-packet one-way delay: 46.661 ms

Loss rate: 2.39%

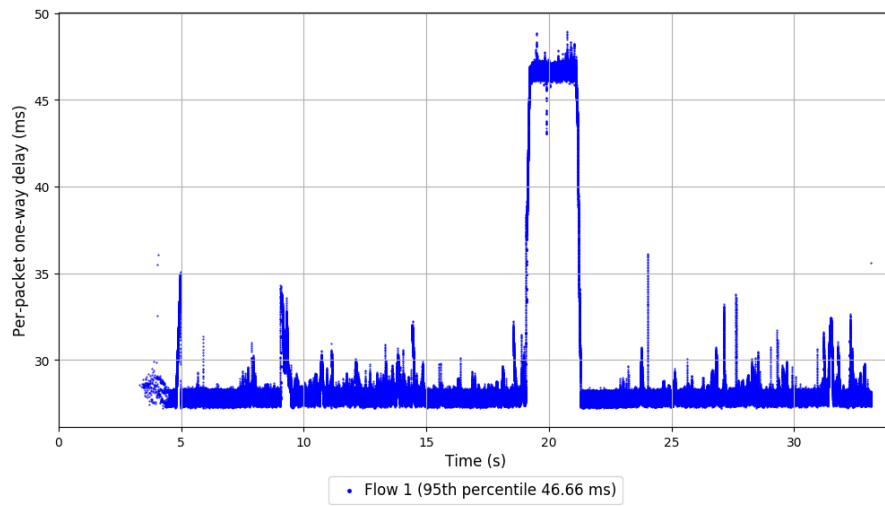
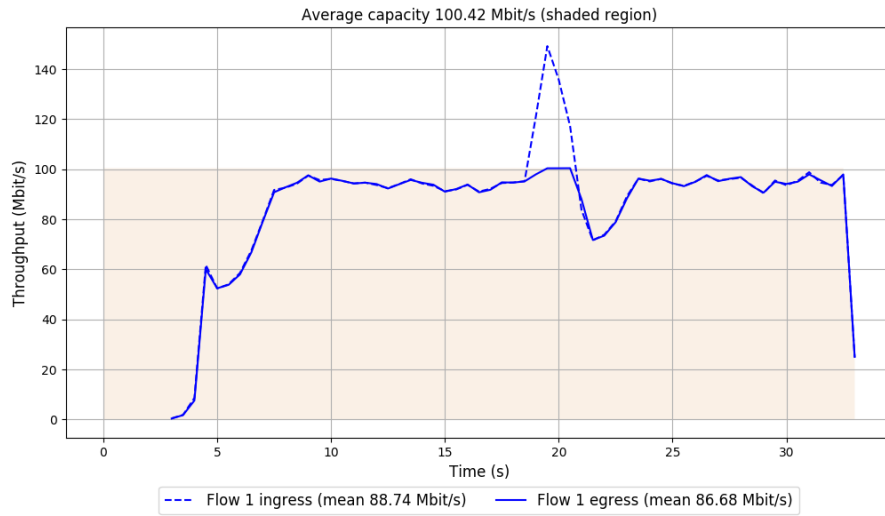
-- Flow 1:

Average throughput: 86.68 Mbit/s

95th percentile per-packet one-way delay: 46.661 ms

Loss rate: 2.39%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-03-05 19:21:00

End at: 2018-03-05 19:21:30

Below is generated by plot.py at 2018-03-05 20:31:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 87.48 Mbit/s (87.1% utilization)

95th percentile per-packet one-way delay: 29.641 ms

Loss rate: 0.16%

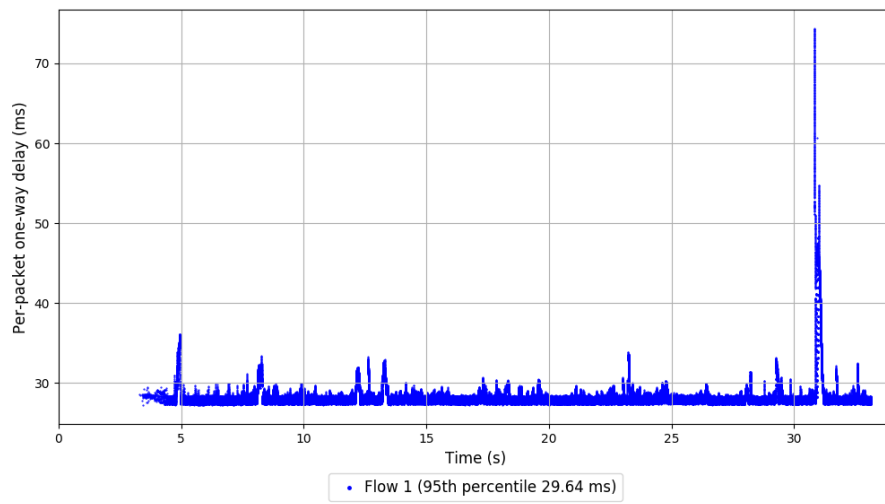
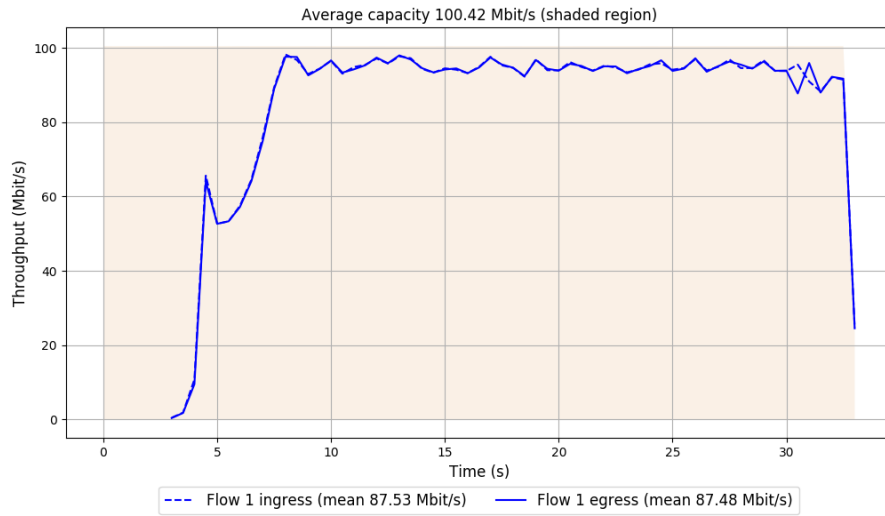
-- Flow 1:

Average throughput: 87.48 Mbit/s

95th percentile per-packet one-way delay: 29.641 ms

Loss rate: 0.16%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

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

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

Below is generated by plot.py at 2018-03-05 20:31:32

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 85.81 Mbit/s (85.5% utilization)

95th percentile per-packet one-way delay: 31.068 ms

Loss rate: 0.23%

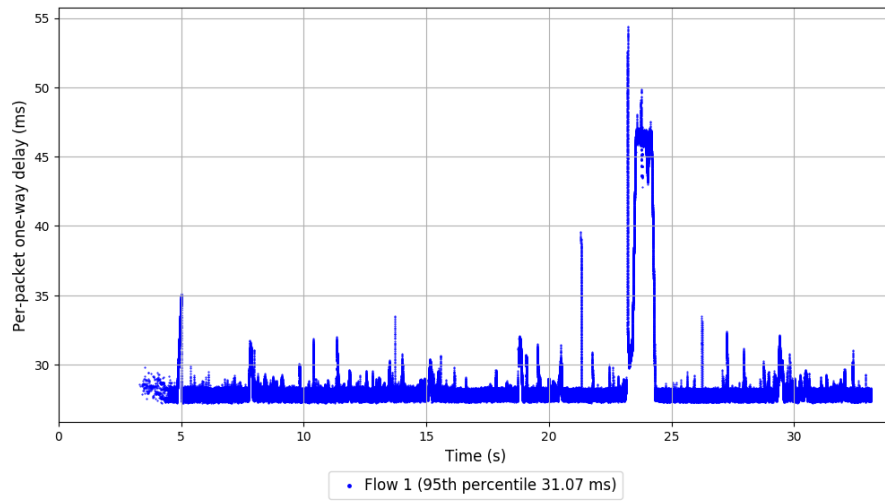
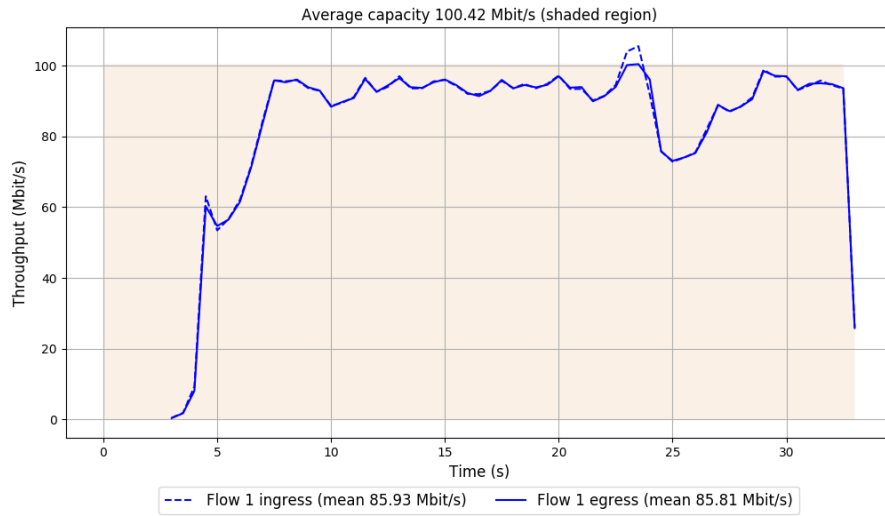
-- Flow 1:

Average throughput: 85.81 Mbit/s

95th percentile per-packet one-way delay: 31.068 ms

Loss rate: 0.23%

Run 10: Report of Vivace-latency — Data Link



Run 1: Statistics of Vivace-loss

Start at: 2018-03-05 17:44:14

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

Below is generated by plot.py at 2018-03-05 20:32:30

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 92.20 Mbit/s (91.8% utilization)

95th percentile per-packet one-way delay: 46.748 ms

Loss rate: 2.00%

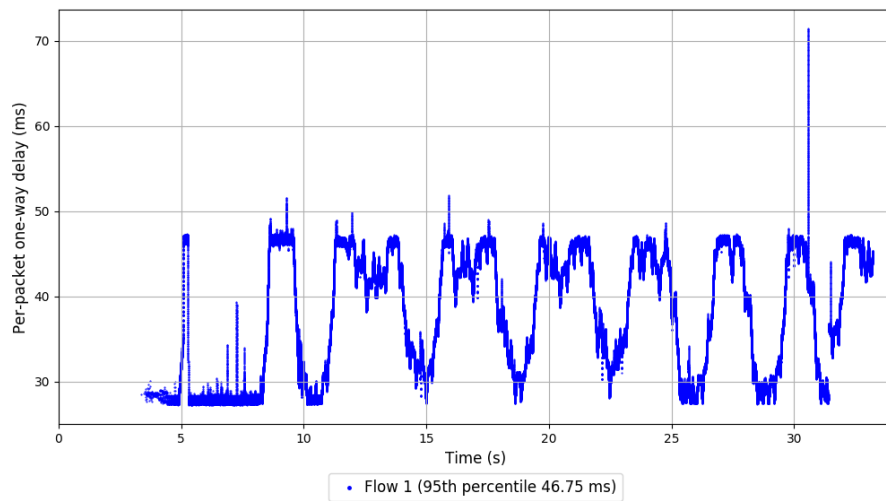
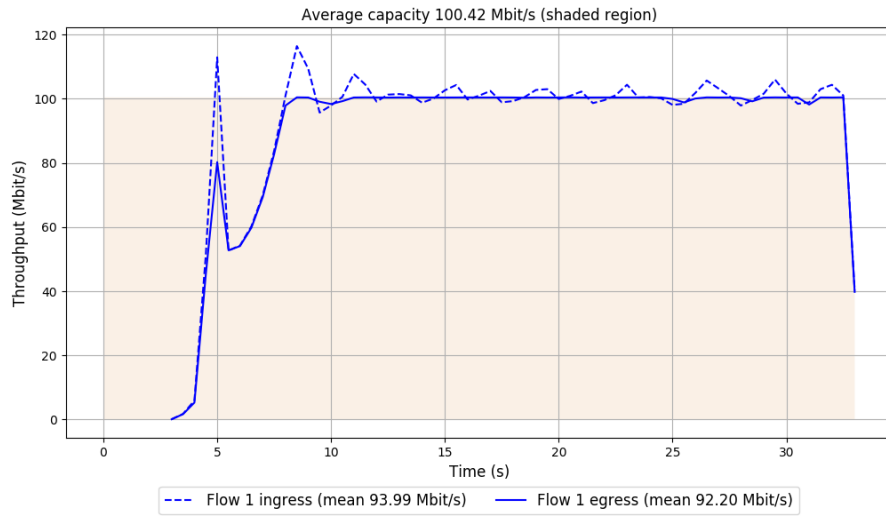
-- Flow 1:

Average throughput: 92.20 Mbit/s

95th percentile per-packet one-way delay: 46.748 ms

Loss rate: 2.00%

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-03-05 17:56:13

End at: 2018-03-05 17:56:43

Below is generated by plot.py at 2018-03-05 20:32:46

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 91.04 Mbit/s (90.7% utilization)

95th percentile per-packet one-way delay: 46.762 ms

Loss rate: 2.04%

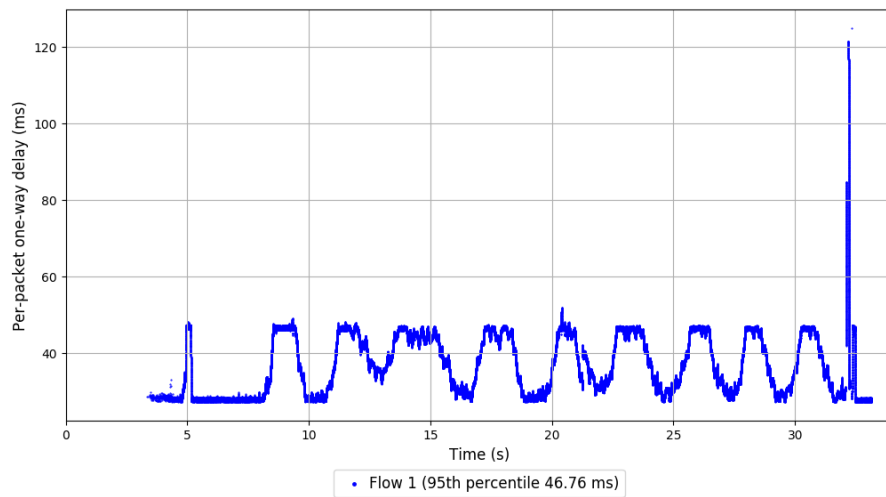
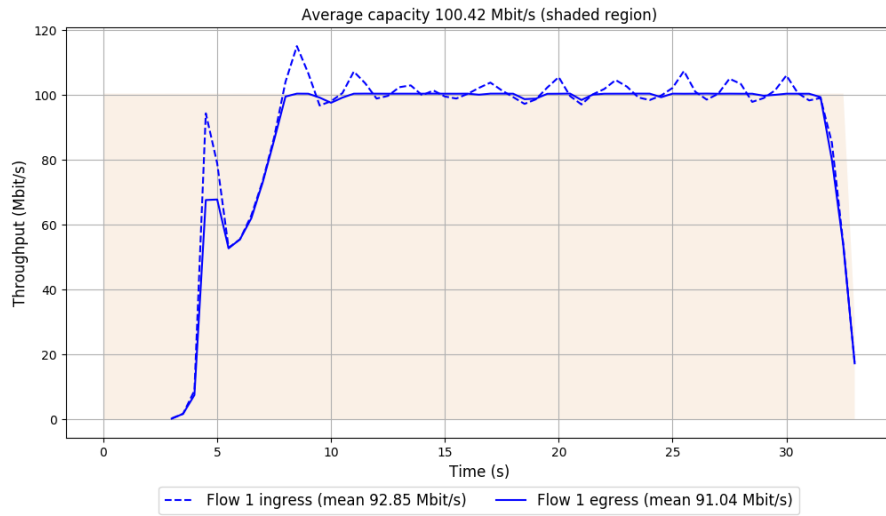
-- Flow 1:

Average throughput: 91.04 Mbit/s

95th percentile per-packet one-way delay: 46.762 ms

Loss rate: 2.04%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-03-05 18:08:20

End at: 2018-03-05 18:08:50

Below is generated by plot.py at 2018-03-05 20:33:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 88.92 Mbit/s (88.5% utilization)

95th percentile per-packet one-way delay: 46.738 ms

Loss rate: 2.02%

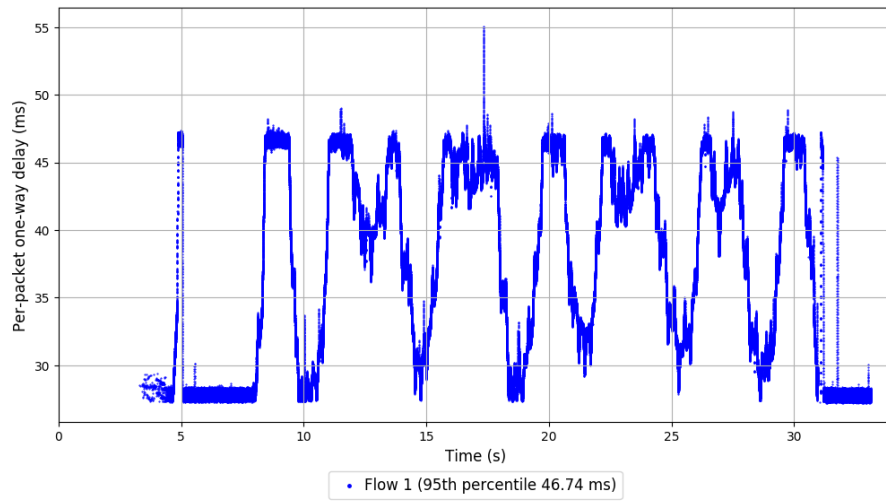
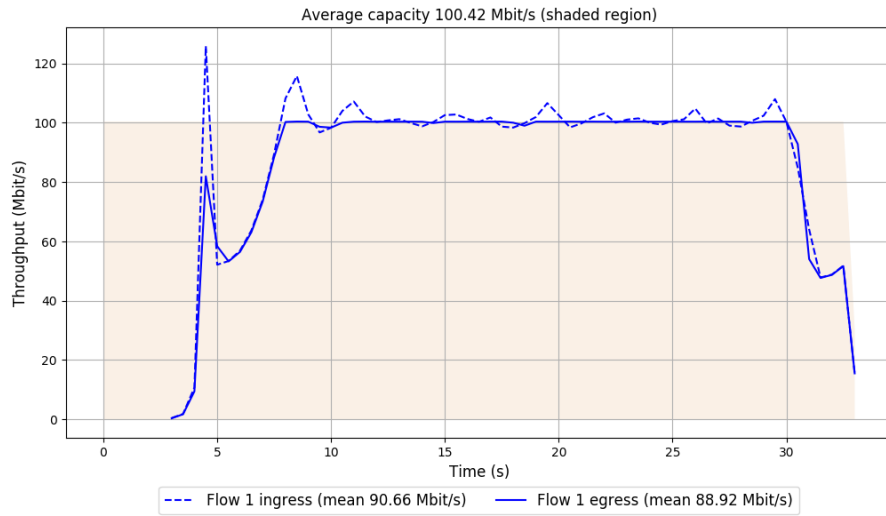
-- Flow 1:

Average throughput: 88.92 Mbit/s

95th percentile per-packet one-way delay: 46.738 ms

Loss rate: 2.02%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-03-05 18:20:14

End at: 2018-03-05 18:20:44

Below is generated by plot.py at 2018-03-05 20:33:27

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 92.19 Mbit/s (91.8% utilization)

95th percentile per-packet one-way delay: 46.747 ms

Loss rate: 2.08%

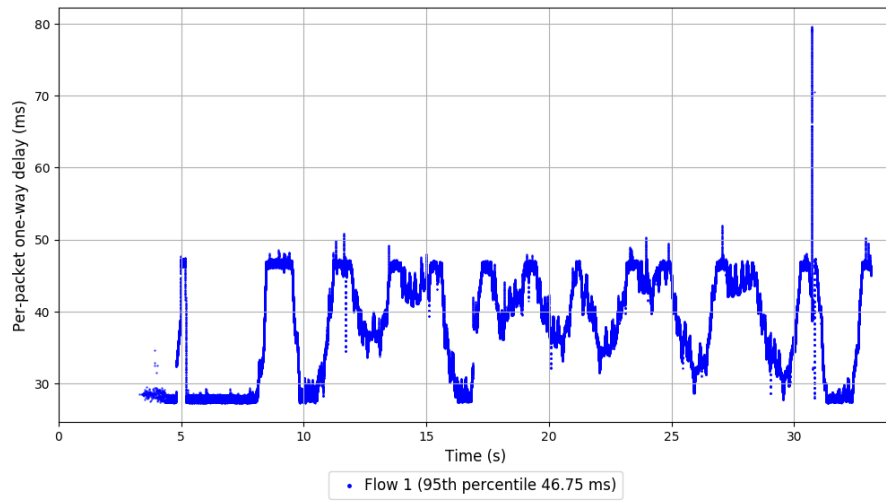
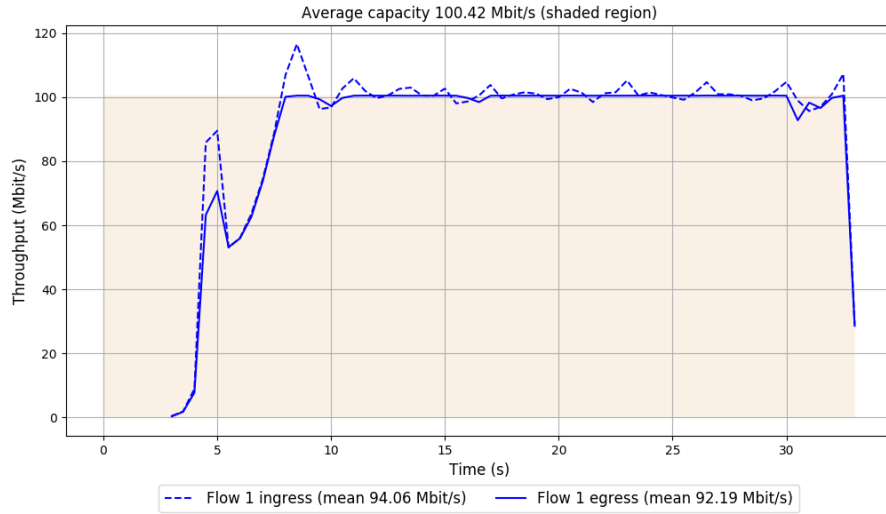
-- Flow 1:

Average throughput: 92.19 Mbit/s

95th percentile per-packet one-way delay: 46.747 ms

Loss rate: 2.08%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-03-05 18:32:17

End at: 2018-03-05 18:32:47

Below is generated by plot.py at 2018-03-05 20:33:59

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 92.14 Mbit/s (91.8% utilization)

95th percentile per-packet one-way delay: 46.773 ms

Loss rate: 2.01%

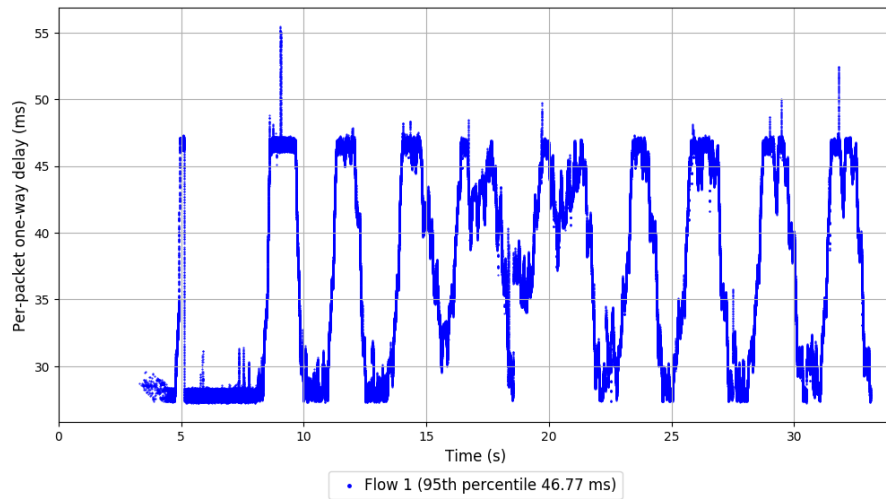
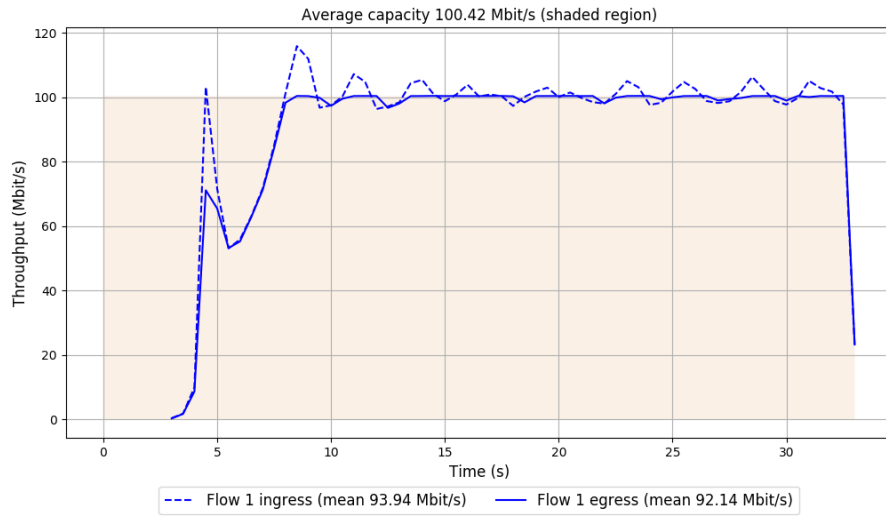
-- Flow 1:

Average throughput: 92.14 Mbit/s

95th percentile per-packet one-way delay: 46.773 ms

Loss rate: 2.01%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

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

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

Below is generated by plot.py at 2018-03-05 20:34:13

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 92.03 Mbit/s (91.6% utilization)

95th percentile per-packet one-way delay: 46.752 ms

Loss rate: 1.94%

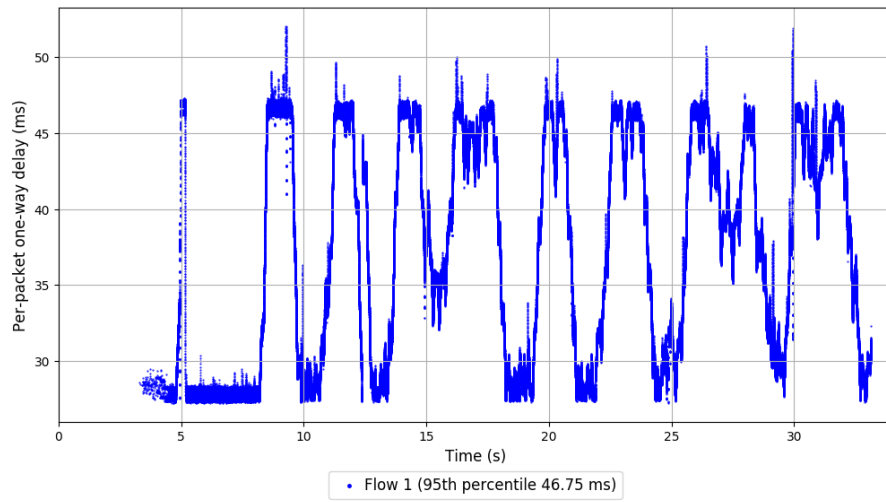
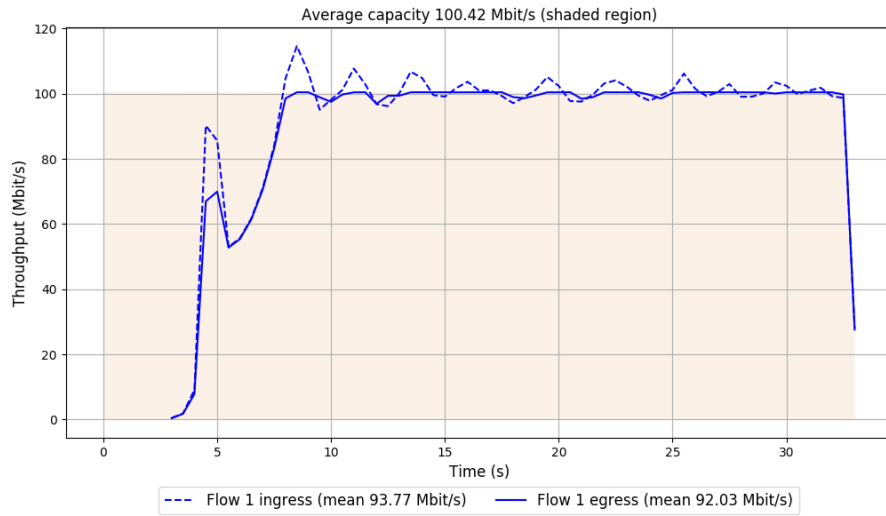
-- Flow 1:

Average throughput: 92.03 Mbit/s

95th percentile per-packet one-way delay: 46.752 ms

Loss rate: 1.94%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-03-05 18:56:29

End at: 2018-03-05 18:56:59

Below is generated by plot.py at 2018-03-05 20:34:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 92.01 Mbit/s (91.6% utilization)

95th percentile per-packet one-way delay: 46.735 ms

Loss rate: 1.91%

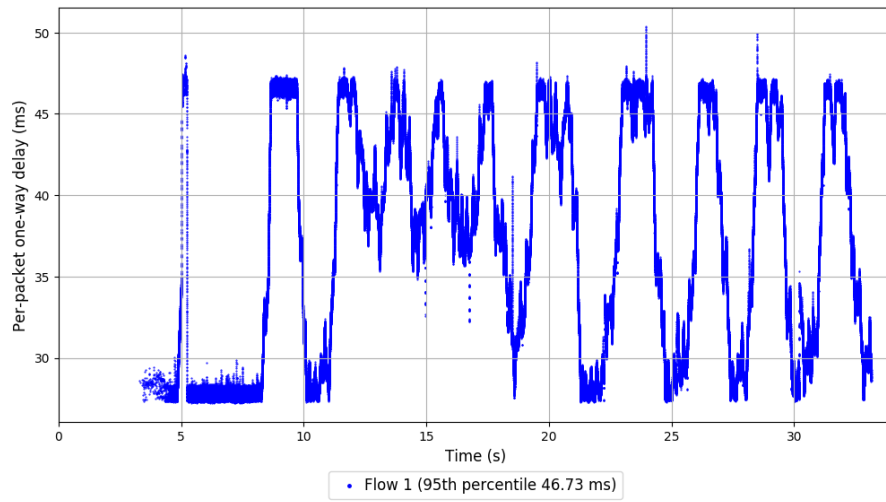
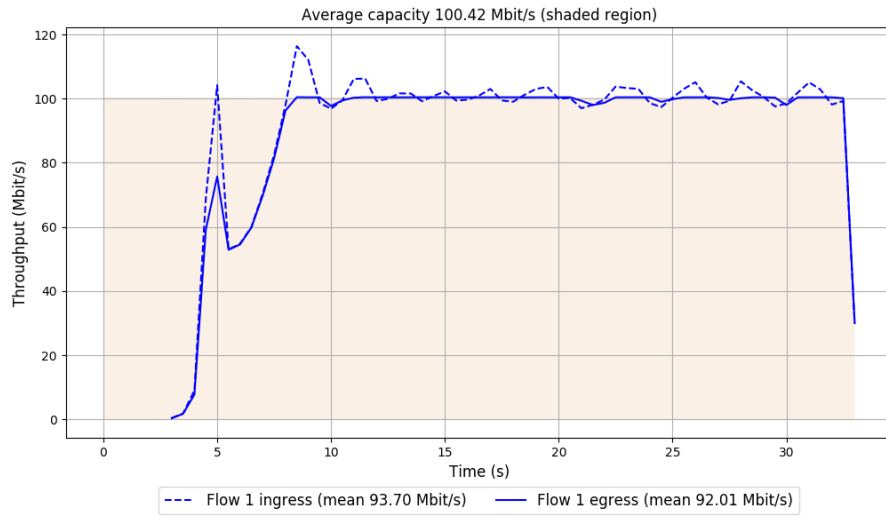
-- Flow 1:

Average throughput: 92.01 Mbit/s

95th percentile per-packet one-way delay: 46.735 ms

Loss rate: 1.91%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-03-05 19:08:18

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

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

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 92.62 Mbit/s (92.2% utilization)

95th percentile per-packet one-way delay: 46.790 ms

Loss rate: 1.93%

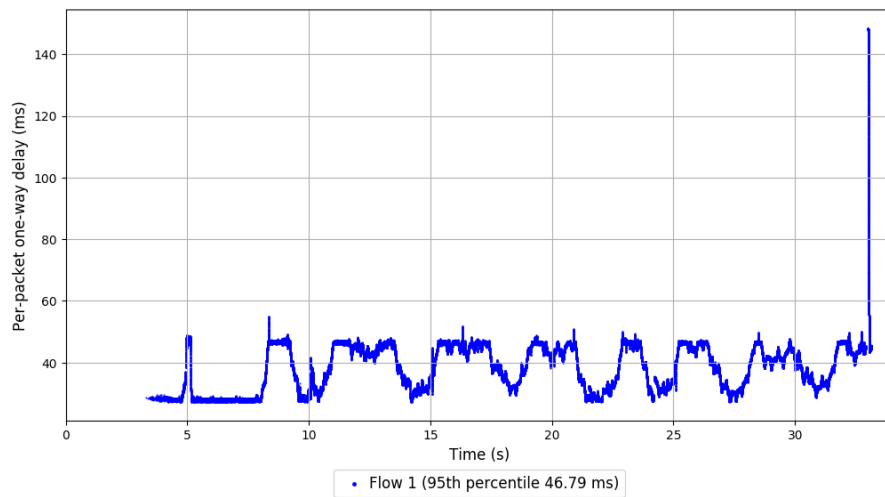
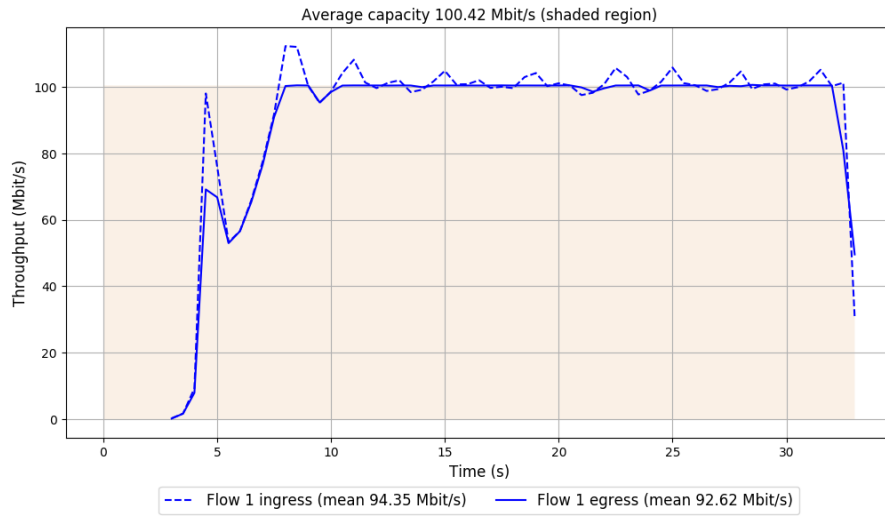
-- Flow 1:

Average throughput: 92.62 Mbit/s

95th percentile per-packet one-way delay: 46.790 ms

Loss rate: 1.93%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

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

End at: 2018-03-05 19:20:49

Below is generated by plot.py at 2018-03-05 20:35:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 92.07 Mbit/s (91.7% utilization)

95th percentile per-packet one-way delay: 46.796 ms

Loss rate: 2.24%

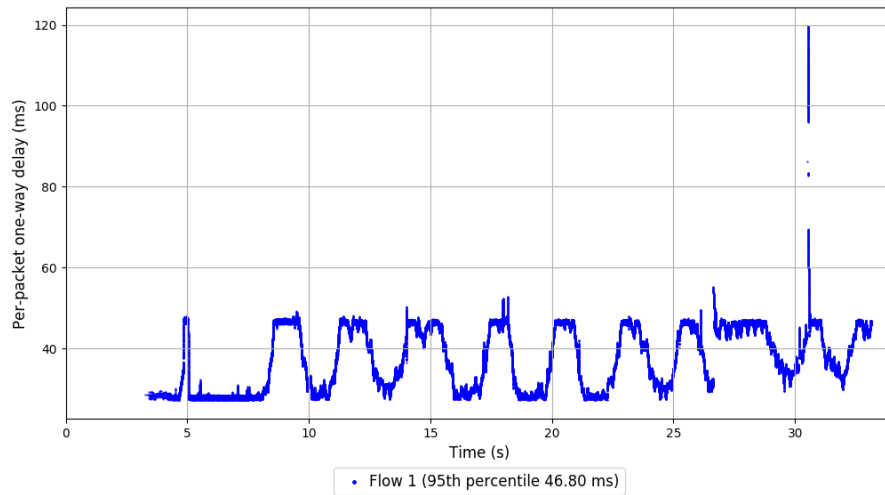
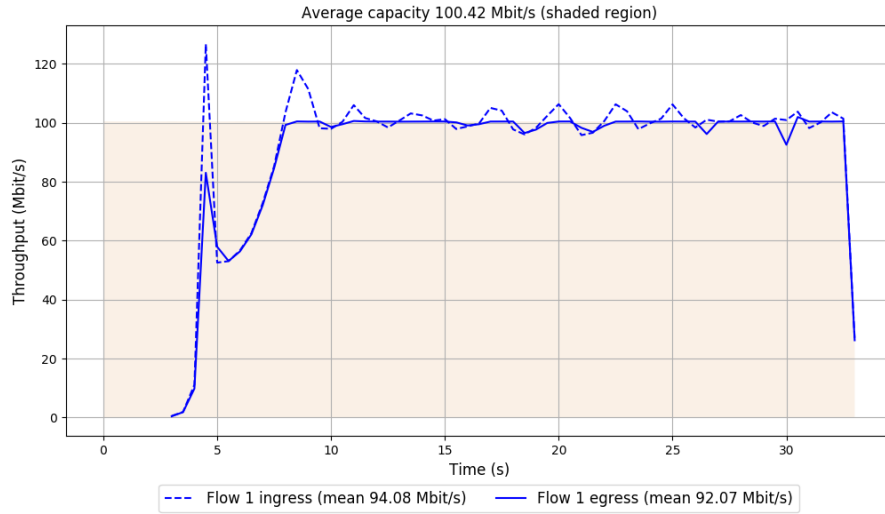
-- Flow 1:

Average throughput: 92.07 Mbit/s

95th percentile per-packet one-way delay: 46.796 ms

Loss rate: 2.24%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-03-05 19:32:21

End at: 2018-03-05 19:32:51

Below is generated by plot.py at 2018-03-05 20:35:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 92.46 Mbit/s (92.1% utilization)

95th percentile per-packet one-way delay: 46.738 ms

Loss rate: 2.03%

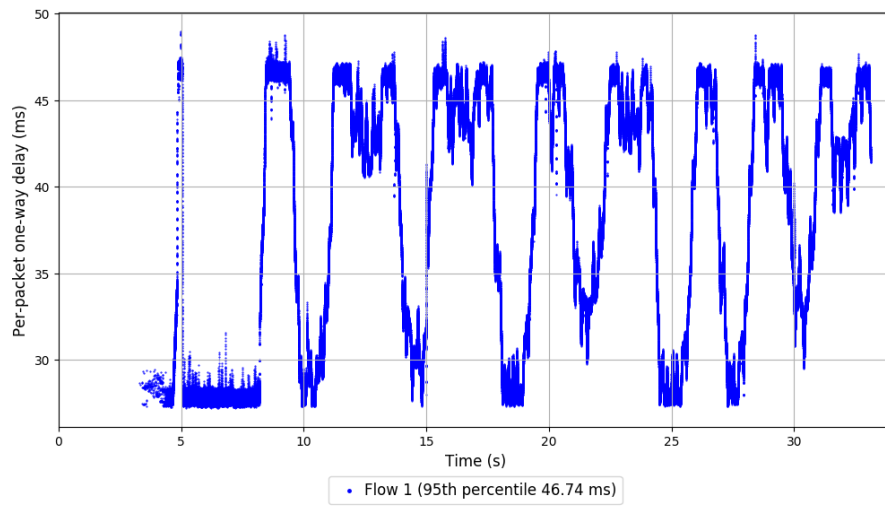
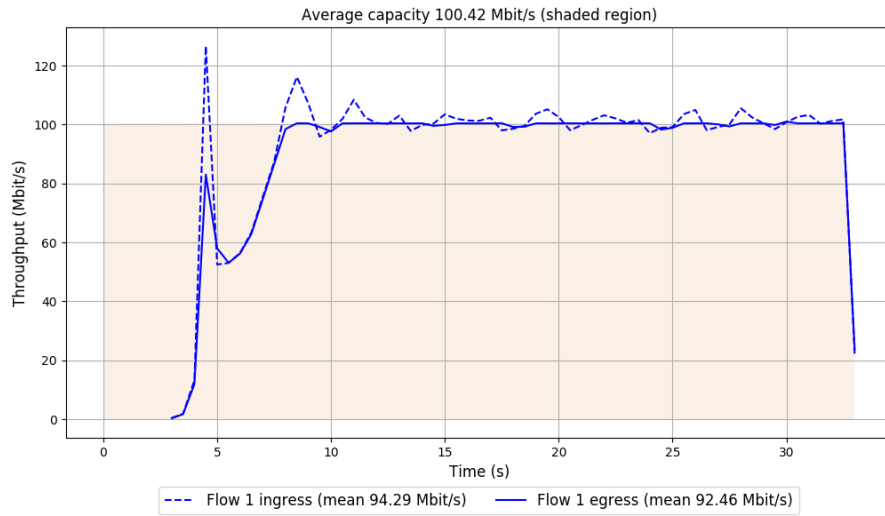
-- Flow 1:

Average throughput: 92.46 Mbit/s

95th percentile per-packet one-way delay: 46.738 ms

Loss rate: 2.03%

Run 10: Report of Vivace-loss — Data Link



Run 1: Statistics of Vivace-LTE

Start at: 2018-03-05 17:46:53

End at: 2018-03-05 17:47:23

Below is generated by plot.py at 2018-03-05 20:35:49

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 90.60 Mbit/s (90.2% utilization)

95th percentile per-packet one-way delay: 35.331 ms

Loss rate: 0.90%

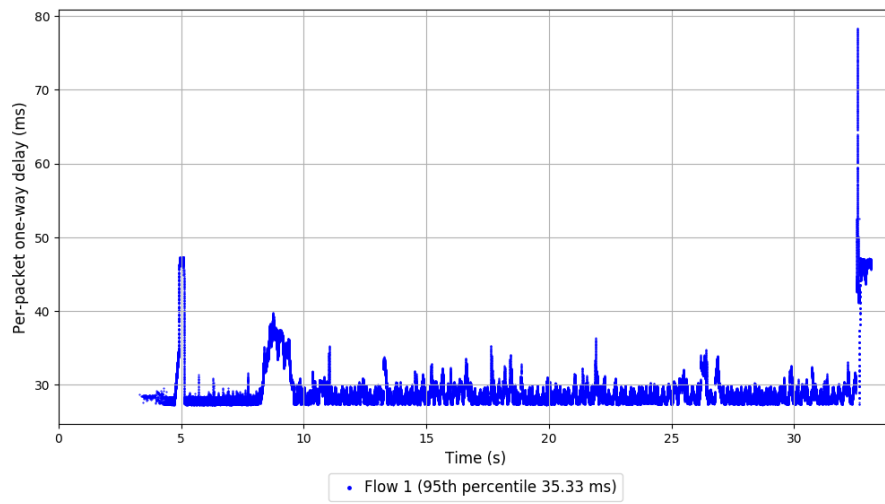
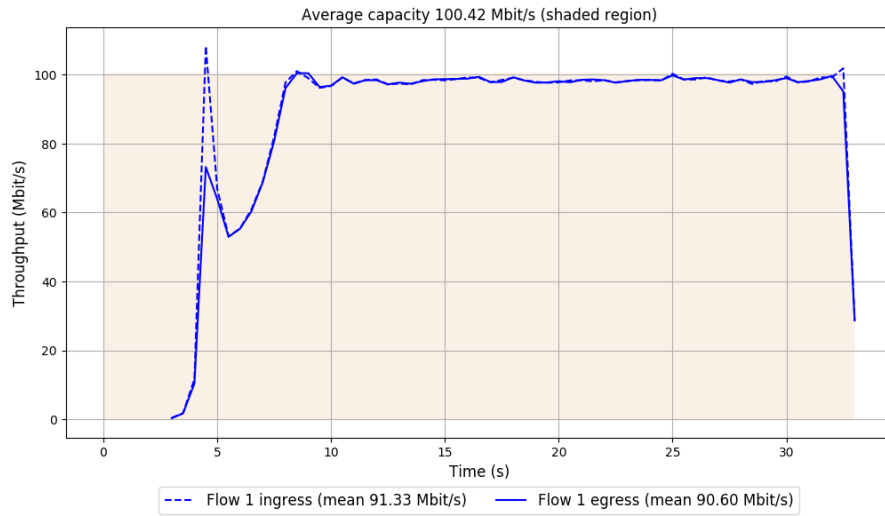
-- Flow 1:

Average throughput: 90.60 Mbit/s

95th percentile per-packet one-way delay: 35.331 ms

Loss rate: 0.90%

Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-03-05 17:58:51

End at: 2018-03-05 17:59:21

Below is generated by plot.py at 2018-03-05 20:36:07

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 90.70 Mbit/s (90.3% utilization)

95th percentile per-packet one-way delay: 31.564 ms

Loss rate: 0.78%

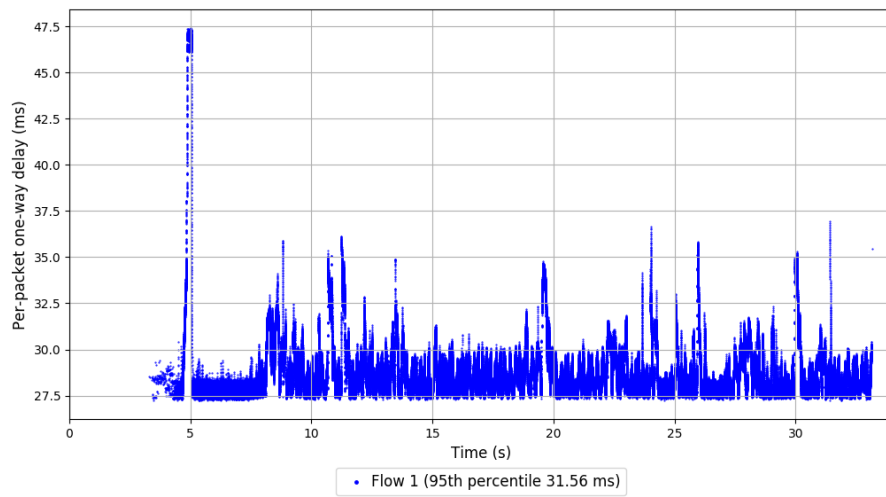
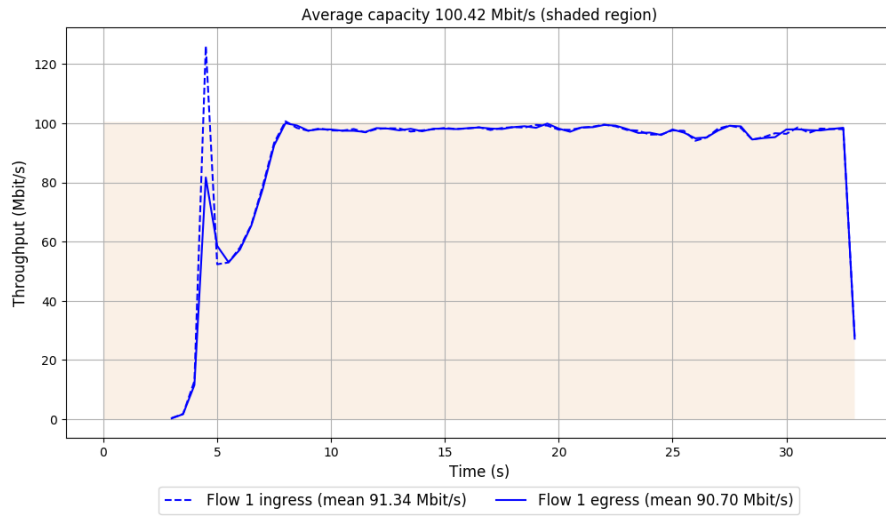
-- Flow 1:

Average throughput: 90.70 Mbit/s

95th percentile per-packet one-way delay: 31.564 ms

Loss rate: 0.78%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-03-05 18:10:57

End at: 2018-03-05 18:11:27

Below is generated by plot.py at 2018-03-05 20:36:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 90.27 Mbit/s (89.9% utilization)

95th percentile per-packet one-way delay: 32.898 ms

Loss rate: 0.86%

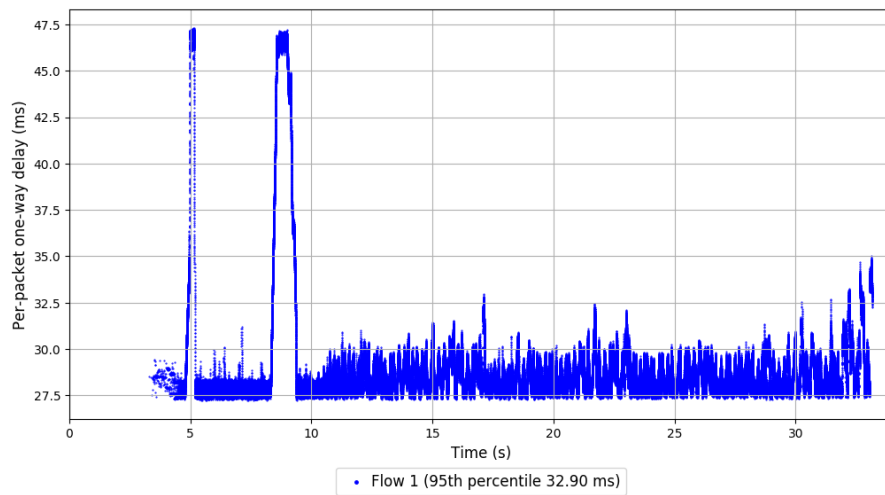
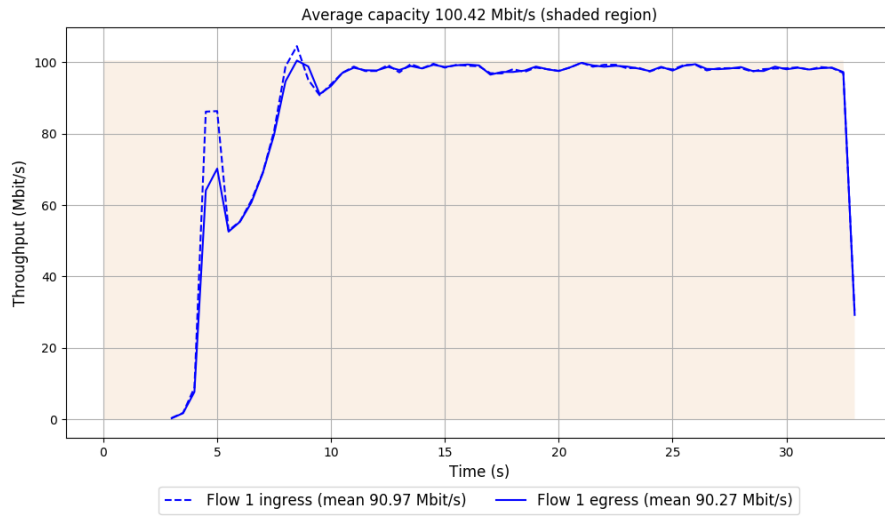
-- Flow 1:

Average throughput: 90.27 Mbit/s

95th percentile per-packet one-way delay: 32.898 ms

Loss rate: 0.86%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-03-05 18:22:52

End at: 2018-03-05 18:23:22

Below is generated by plot.py at 2018-03-05 20:36:52

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 90.31 Mbit/s (89.9% utilization)

95th percentile per-packet one-way delay: 33.688 ms

Loss rate: 0.96%

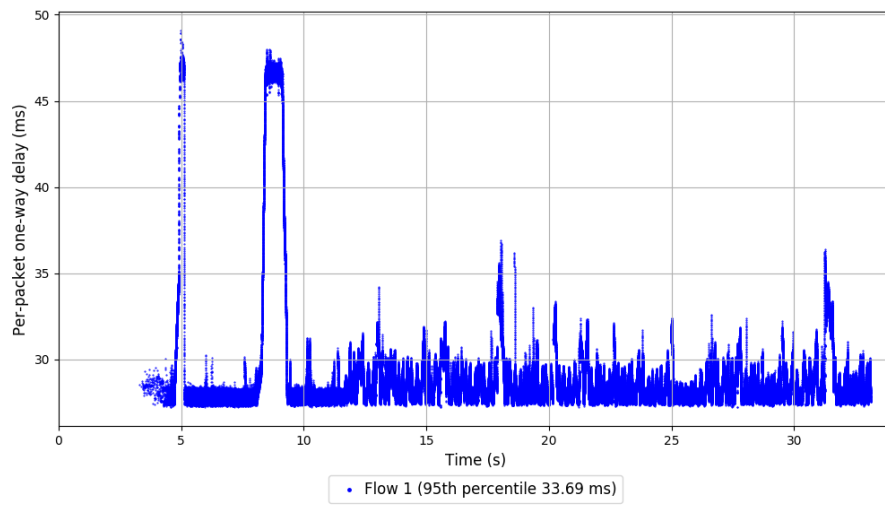
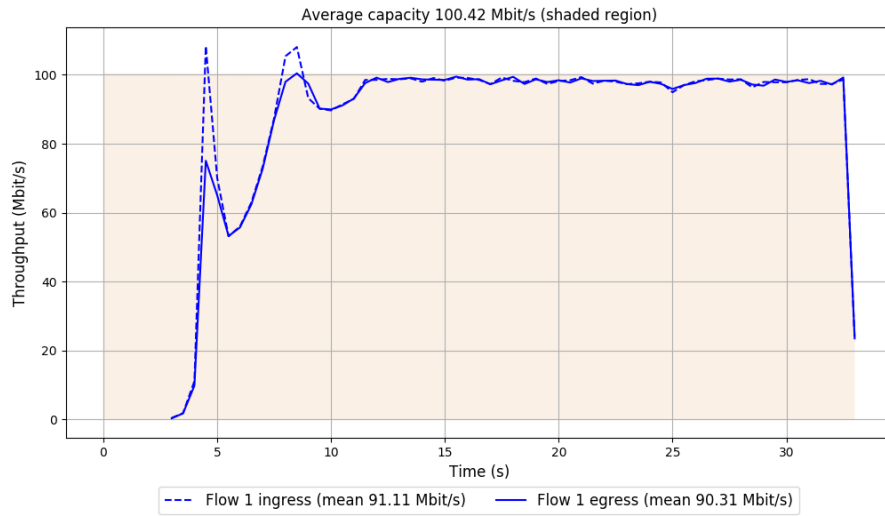
-- Flow 1:

Average throughput: 90.31 Mbit/s

95th percentile per-packet one-way delay: 33.688 ms

Loss rate: 0.96%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-03-05 18:34:56

End at: 2018-03-05 18:35:26

Below is generated by plot.py at 2018-03-05 20:36:52

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 85.04 Mbit/s (84.7% utilization)

95th percentile per-packet one-way delay: 31.246 ms

Loss rate: 0.99%

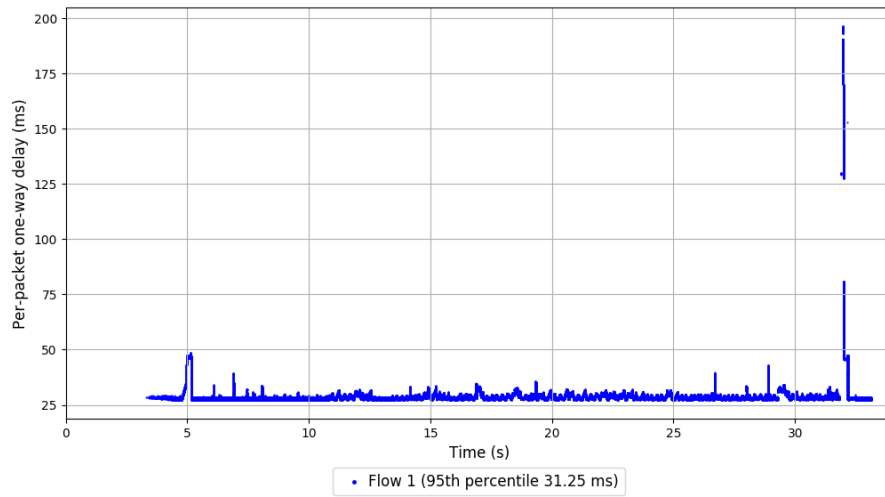
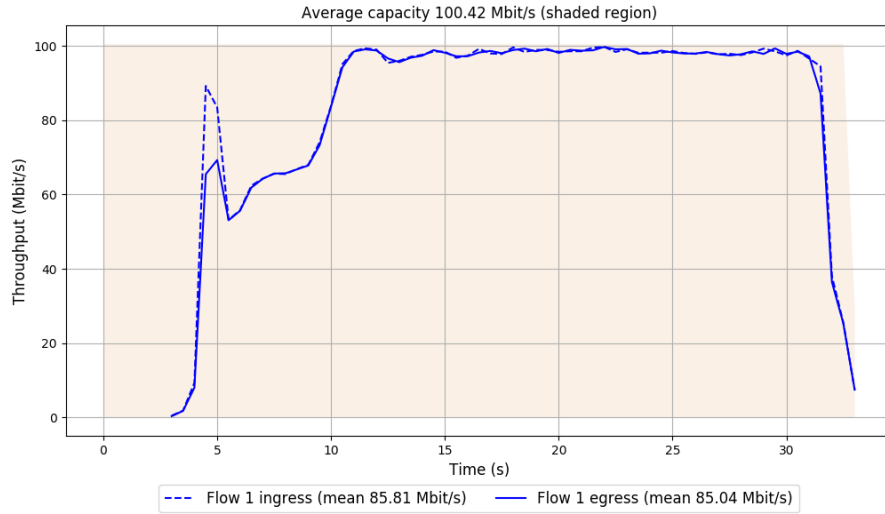
-- Flow 1:

Average throughput: 85.04 Mbit/s

95th percentile per-packet one-way delay: 31.246 ms

Loss rate: 0.99%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-03-05 18:47:02

End at: 2018-03-05 18:47:32

Below is generated by plot.py at 2018-03-05 20:36:55

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 90.07 Mbit/s (89.7% utilization)

95th percentile per-packet one-way delay: 36.355 ms

Loss rate: 0.77%

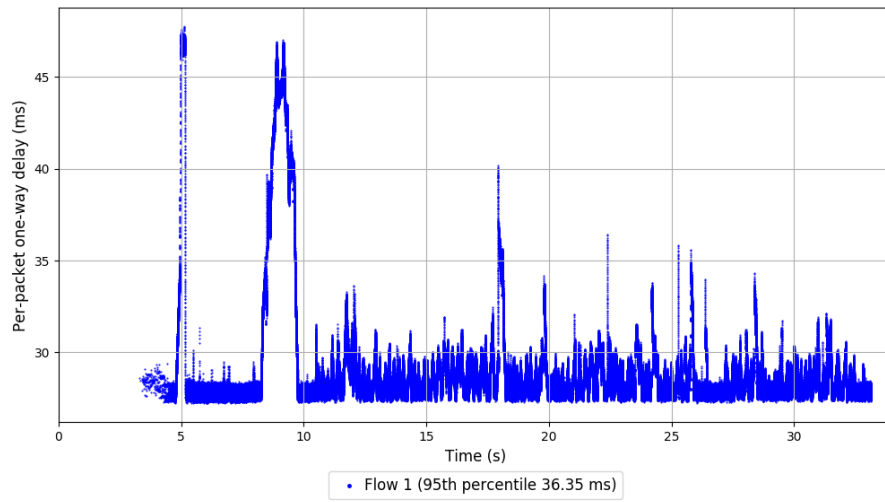
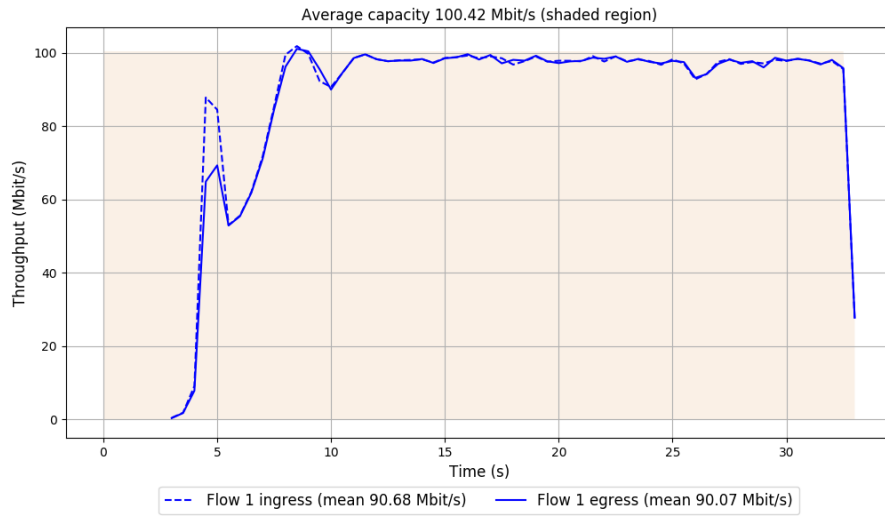
-- Flow 1:

Average throughput: 90.07 Mbit/s

95th percentile per-packet one-way delay: 36.355 ms

Loss rate: 0.77%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-03-05 18:59:07

End at: 2018-03-05 18:59:37

Below is generated by plot.py at 2018-03-05 20:37:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 90.56 Mbit/s (90.2% utilization)

95th percentile per-packet one-way delay: 37.066 ms

Loss rate: 0.94%

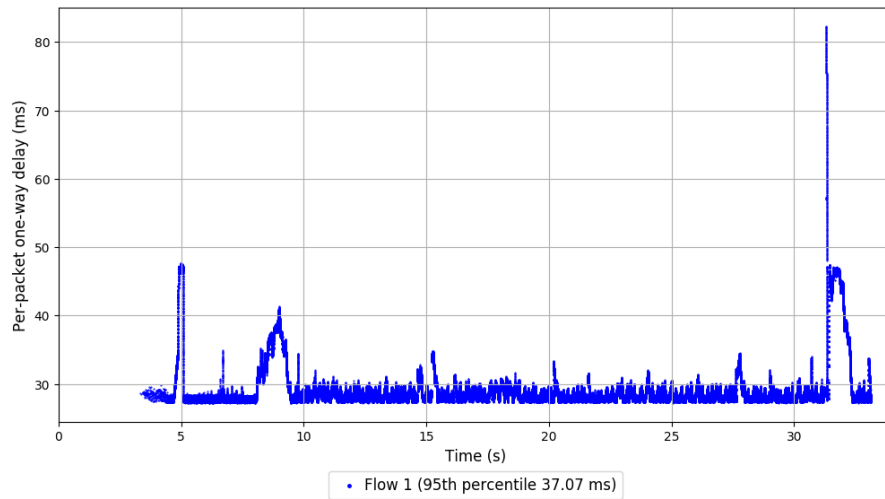
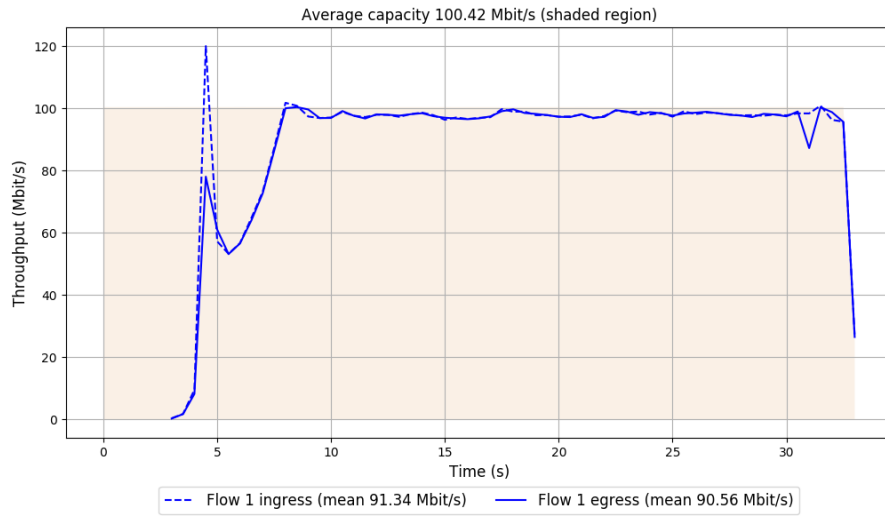
-- Flow 1:

Average throughput: 90.56 Mbit/s

95th percentile per-packet one-way delay: 37.066 ms

Loss rate: 0.94%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-03-05 19:10:55

End at: 2018-03-05 19:11:25

Below is generated by plot.py at 2018-03-05 20:37:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 90.59 Mbit/s (90.2% utilization)

95th percentile per-packet one-way delay: 42.296 ms

Loss rate: 0.84%

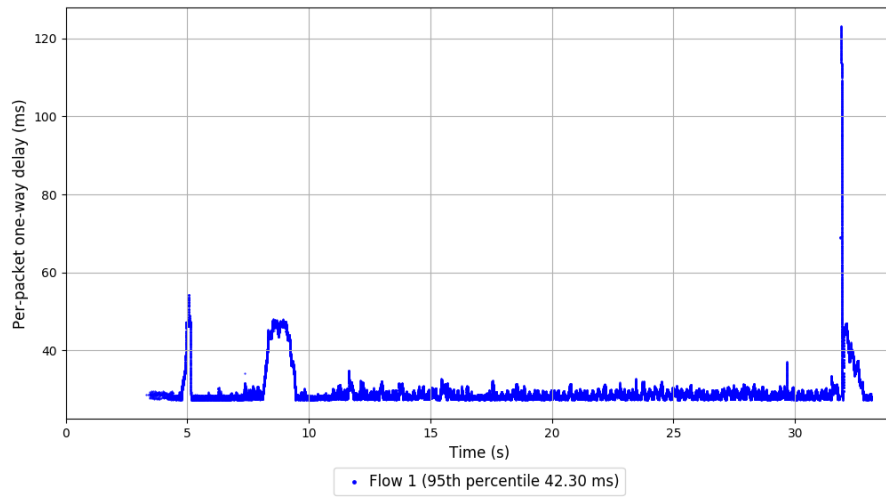
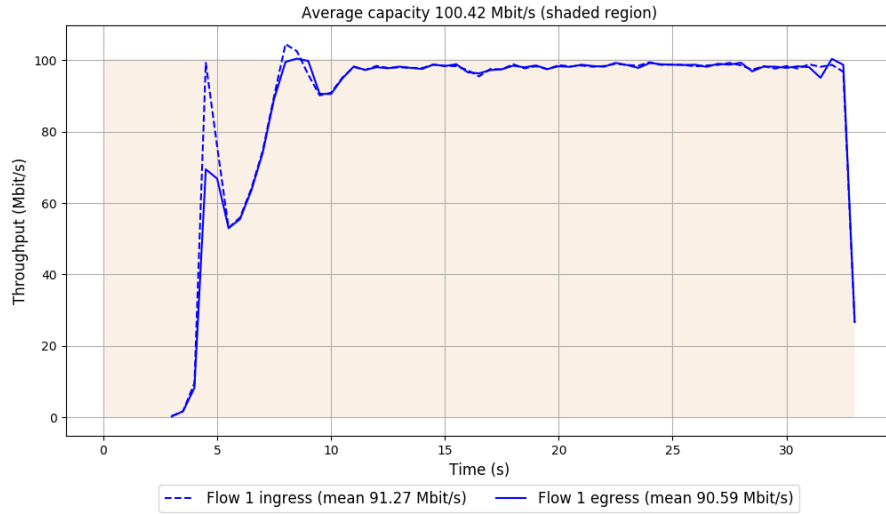
-- Flow 1:

Average throughput: 90.59 Mbit/s

95th percentile per-packet one-way delay: 42.296 ms

Loss rate: 0.84%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-03-05 19:22:56

End at: 2018-03-05 19:23:26

Below is generated by plot.py at 2018-03-05 20:37:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 90.69 Mbit/s (90.3% utilization)

95th percentile per-packet one-way delay: 34.294 ms

Loss rate: 0.77%

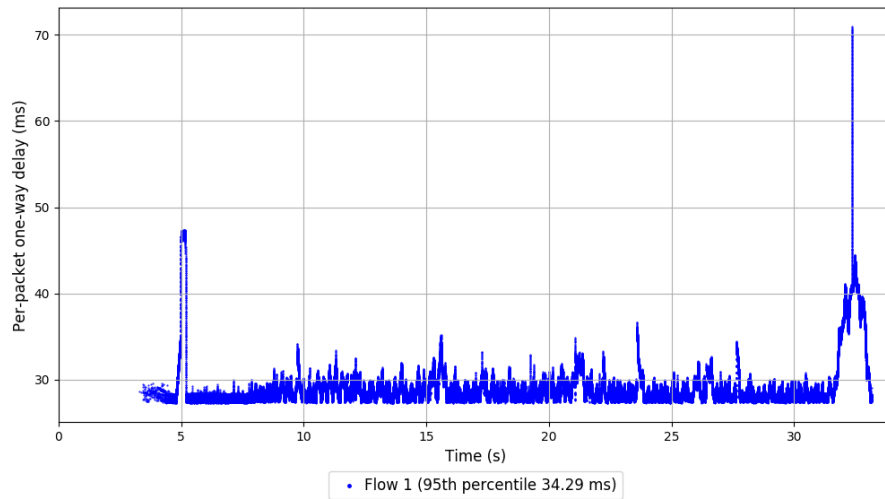
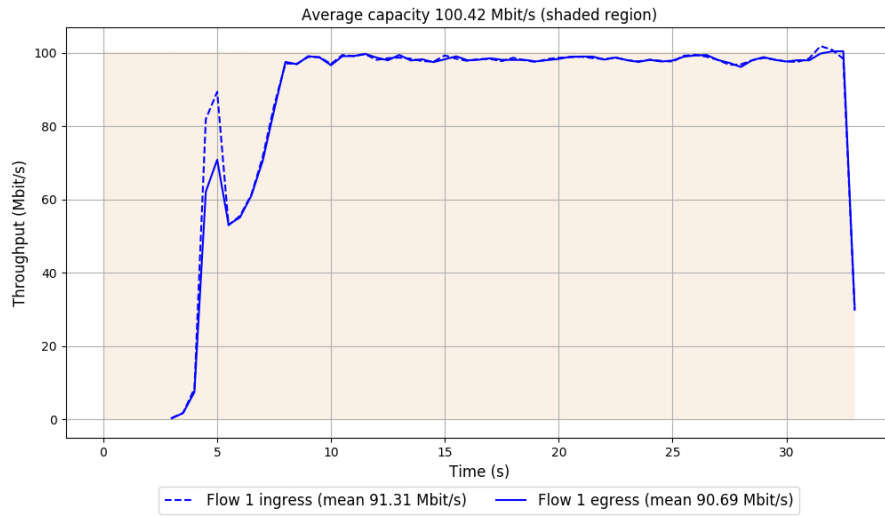
-- Flow 1:

Average throughput: 90.69 Mbit/s

95th percentile per-packet one-way delay: 34.294 ms

Loss rate: 0.77%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-03-05 19:34:59

End at: 2018-03-05 19:35:29

Below is generated by plot.py at 2018-03-05 20:37:34

Datalink statistics

-- Total of 1 flow:

Average capacity: 100.42 Mbit/s

Average throughput: 87.87 Mbit/s (87.5% utilization)

95th percentile per-packet one-way delay: 37.505 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 87.87 Mbit/s

95th percentile per-packet one-way delay: 37.505 ms

Loss rate: 0.90%

Run 10: Report of Vivace-LTE — Data Link

