

Pantheon Report

Generated at 2018-02-27 12:45:40 (UTC).

Tested in mahimahi: mm-delay 30 mm-link 12mbps.trace 12mbps.trace
--uplink-queue=droptail --uplink-queue-args=bytes=90000

Repeated the test of 17 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

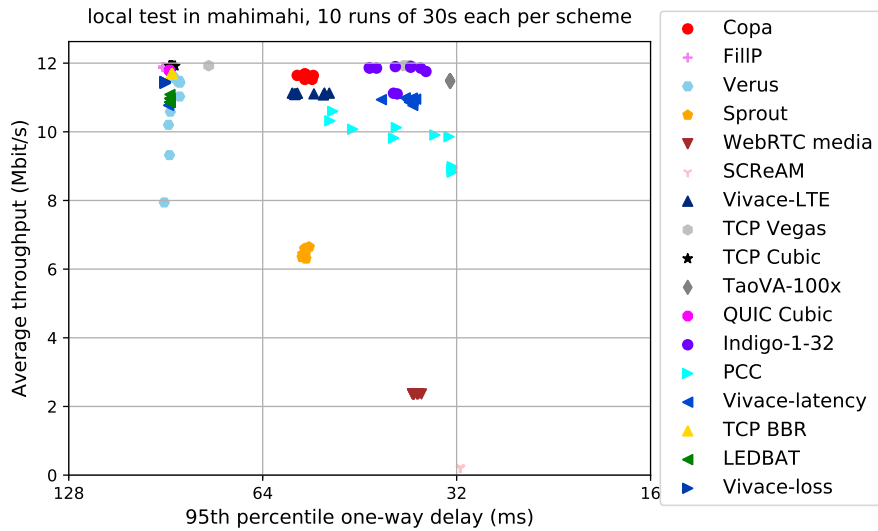
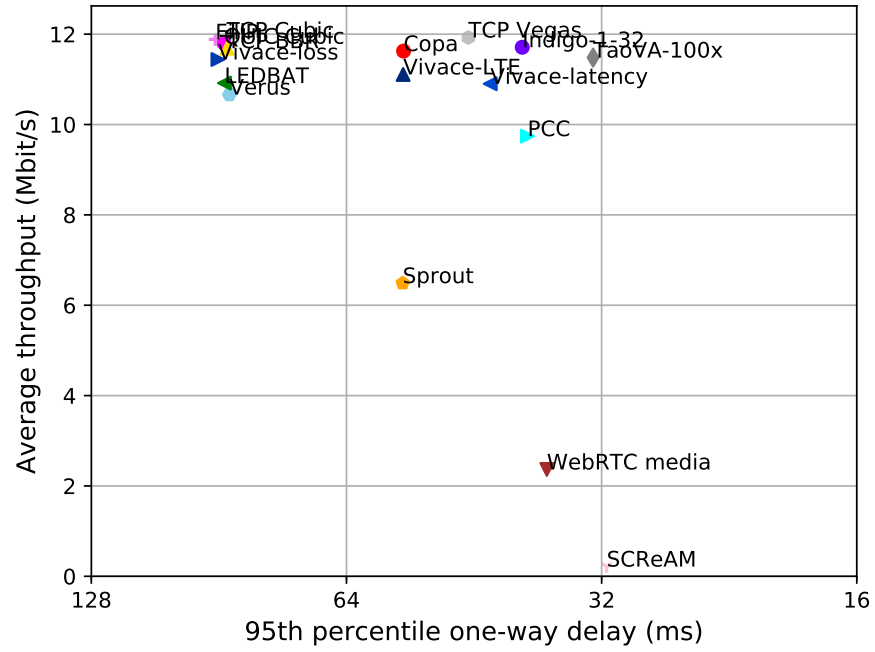
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

Git summary:

```
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

local test in mahimahi, 10 runs of 30s each per scheme
(mean of all runs by scheme)



scheme	# runs	mean avg tput (Mbit/s)	mean 95th-%ile delay (ms)	mean loss rate (%)
		flow 1	flow 1	flow 1
TCP BBR	10	11.69	88.53	1.74
TCP Cubic	10	11.92	88.65	0.42
LEDBAT	10	10.91	89.17	0.23
PCC	10	9.74	39.13	0.83
QUIC Cubic	10	11.79	89.26	0.92
SCReAM	10	0.21	31.57	0.09
WebRTC media	10	2.37	37.14	0.12
Sprout	10	6.49	54.94	0.15
TaoVA-100x	10	11.48	32.75	0.57
TCP Vegas	10	11.93	45.96	0.30
Verus	10	10.66	87.98	22.35
Copa	10	11.63	54.81	0.13
FillP	10	11.88	91.41	40.30
Indigo-1-32	10	11.71	39.70	0.25
Vivace-latency	10	10.90	43.31	0.20
Vivace-loss	10	11.44	90.74	7.94
Vivace-LTE	10	11.11	54.87	0.89

Run 1: Statistics of TCP BBR

Start at: 2018-02-27 10:58:52

End at: 2018-02-27 10:59:22

Below is generated by plot.py at 2018-02-27 12:38:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.69 Mbit/s (97.4% utilization)

95th percentile per-packet one-way delay: 88.656 ms

Loss rate: 1.84%

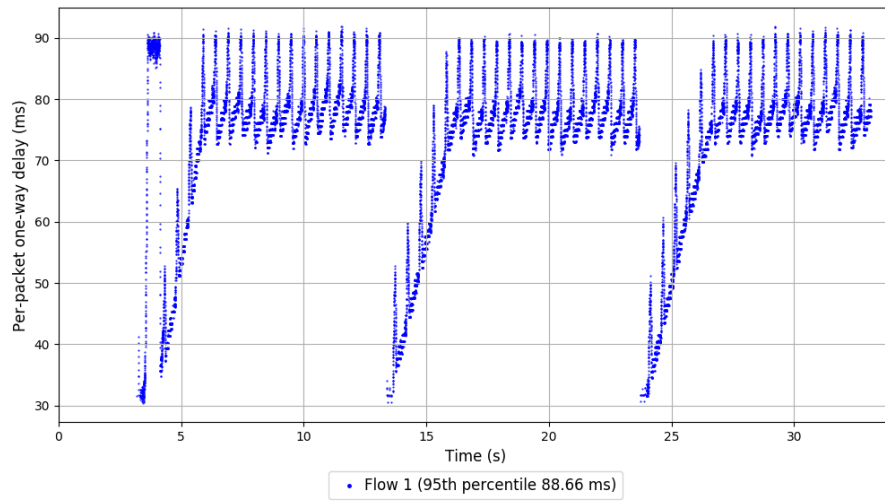
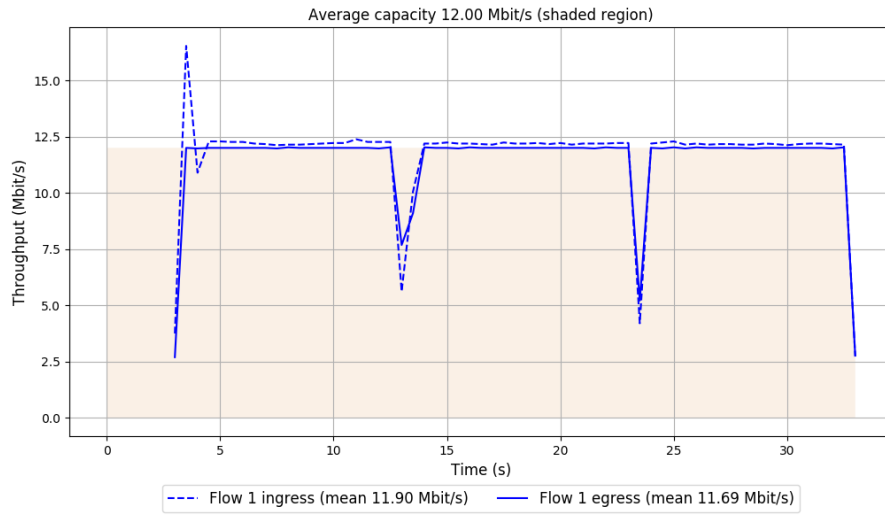
-- Flow 1:

Average throughput: 11.69 Mbit/s

95th percentile per-packet one-way delay: 88.656 ms

Loss rate: 1.84%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-27 11:09:09

End at: 2018-02-27 11:09:39

Below is generated by plot.py at 2018-02-27 12:38:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.69 Mbit/s (97.4% utilization)

95th percentile per-packet one-way delay: 88.571 ms

Loss rate: 1.77%

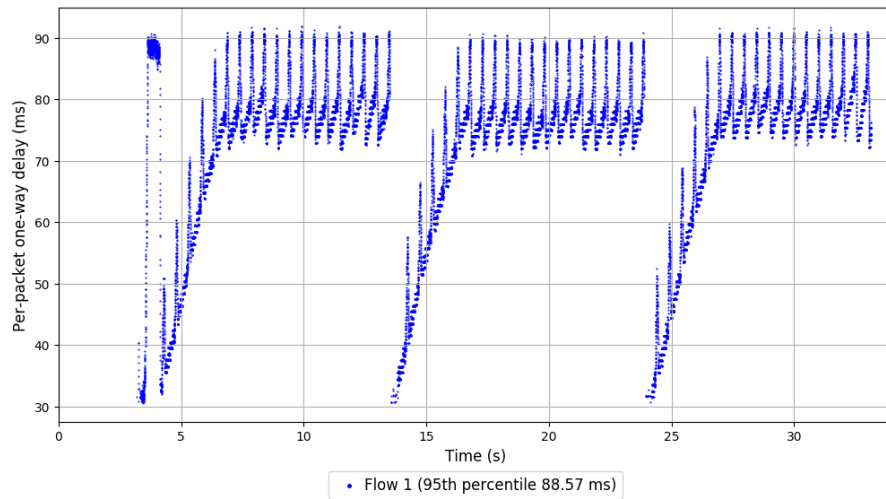
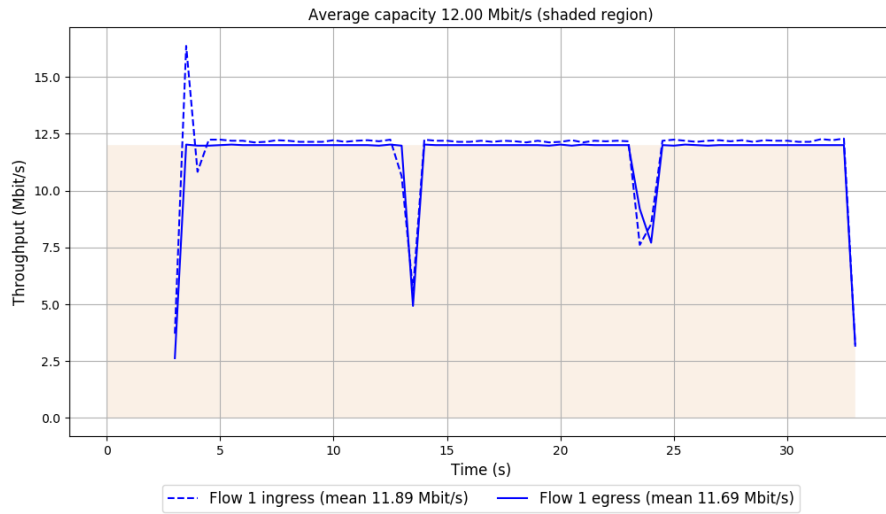
-- Flow 1:

Average throughput: 11.69 Mbit/s

95th percentile per-packet one-way delay: 88.571 ms

Loss rate: 1.77%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-27 11:19:26

End at: 2018-02-27 11:19:56

Below is generated by plot.py at 2018-02-27 12:38:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.69 Mbit/s (97.4% utilization)

95th percentile per-packet one-way delay: 88.444 ms

Loss rate: 1.66%

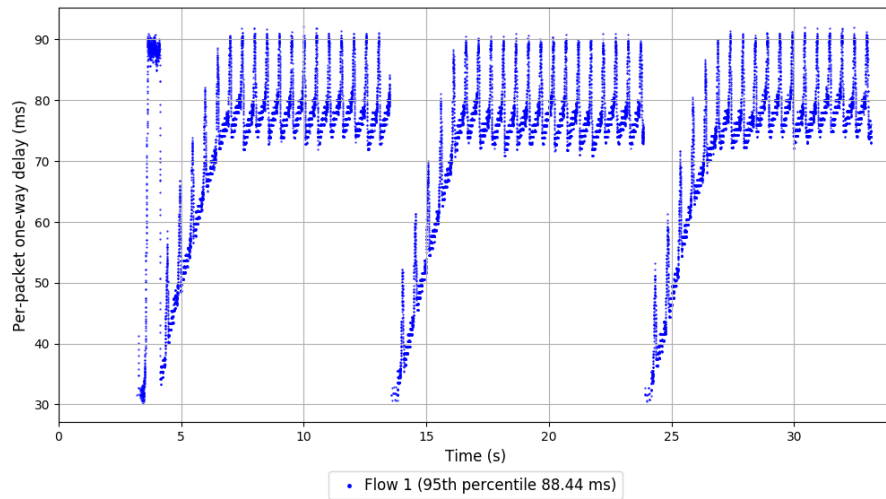
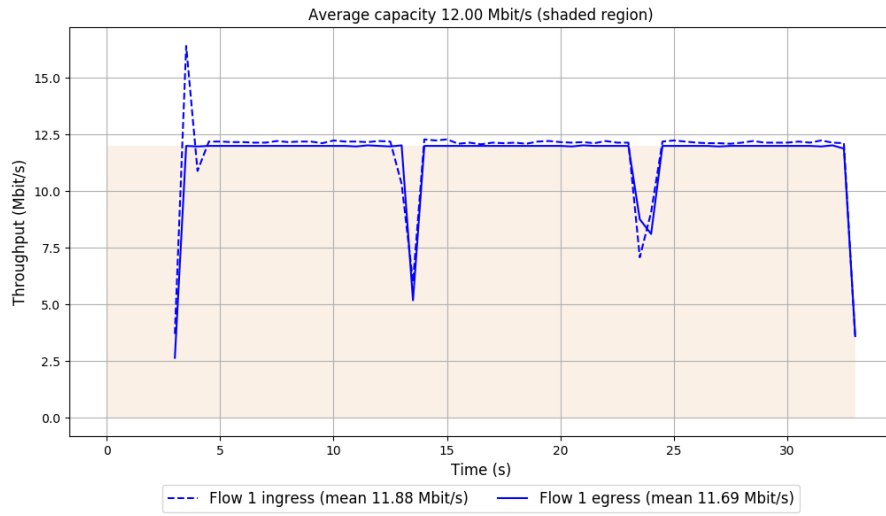
-- Flow 1:

Average throughput: 11.69 Mbit/s

95th percentile per-packet one-way delay: 88.444 ms

Loss rate: 1.66%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-27 11:29:43

End at: 2018-02-27 11:30:13

Below is generated by plot.py at 2018-02-27 12:38:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.68 Mbit/s (97.4% utilization)

95th percentile per-packet one-way delay: 88.546 ms

Loss rate: 1.76%

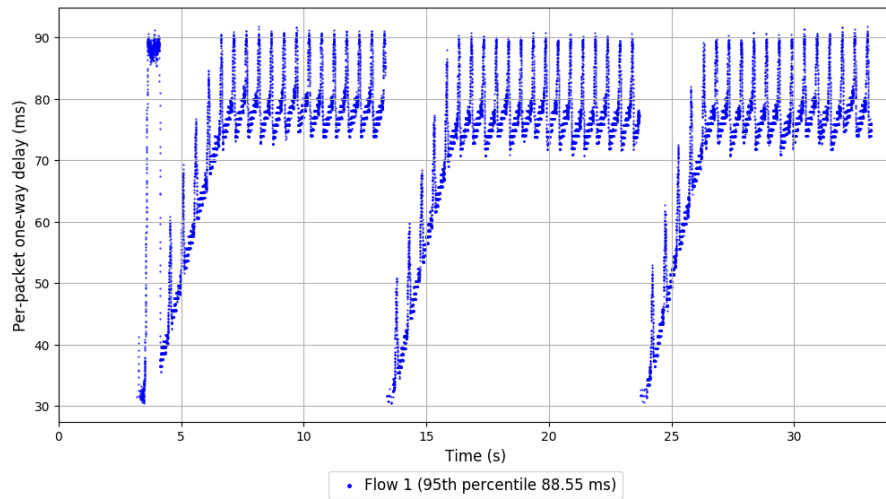
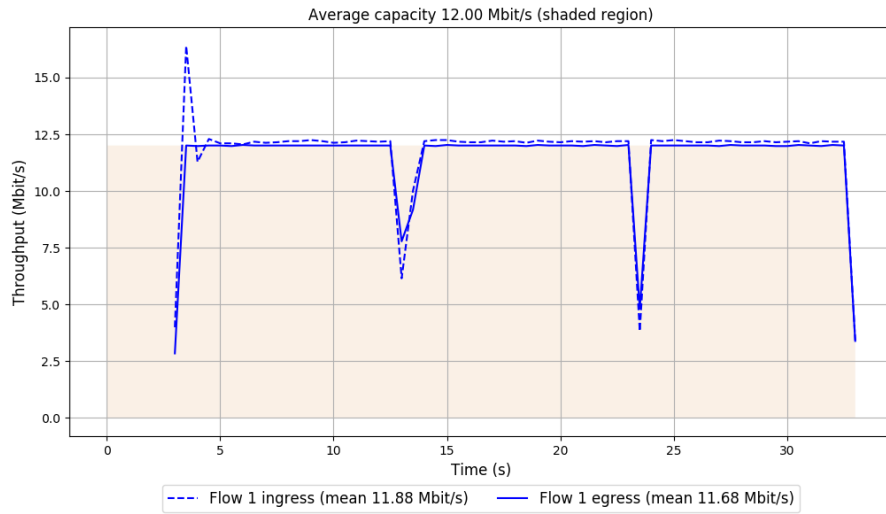
-- Flow 1:

Average throughput: 11.68 Mbit/s

95th percentile per-packet one-way delay: 88.546 ms

Loss rate: 1.76%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-27 11:39:59

End at: 2018-02-27 11:40:29

Below is generated by plot.py at 2018-02-27 12:38:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.70 Mbit/s (97.5% utilization)

95th percentile per-packet one-way delay: 88.531 ms

Loss rate: 1.68%

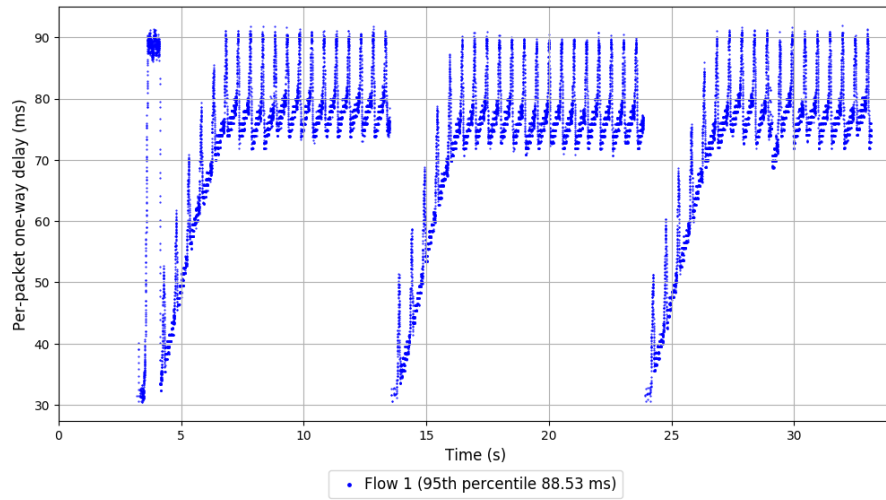
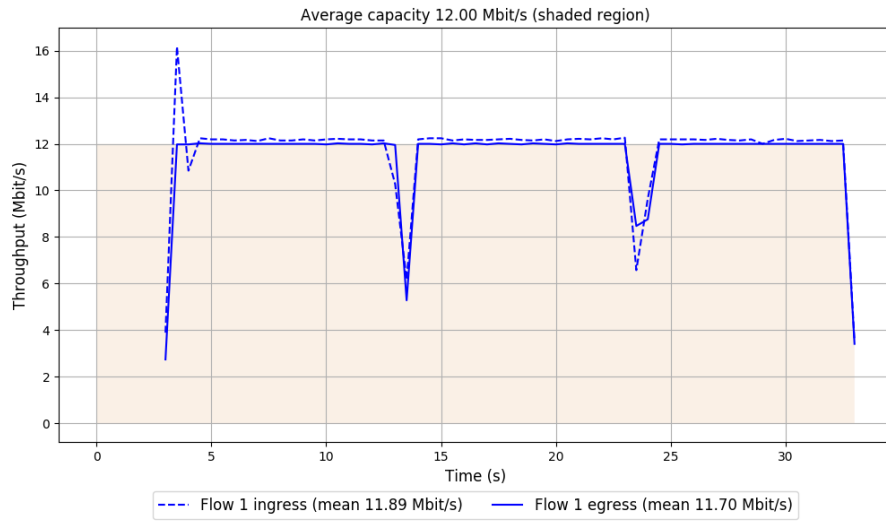
-- Flow 1:

Average throughput: 11.70 Mbit/s

95th percentile per-packet one-way delay: 88.531 ms

Loss rate: 1.68%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-27 11:50:15

End at: 2018-02-27 11:50:45

Below is generated by plot.py at 2018-02-27 12:38:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.69 Mbit/s (97.4% utilization)

95th percentile per-packet one-way delay: 88.394 ms

Loss rate: 1.75%

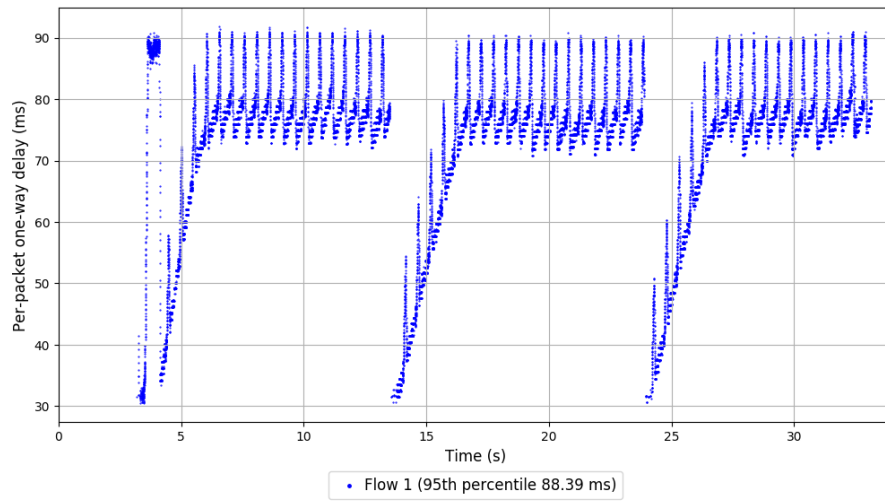
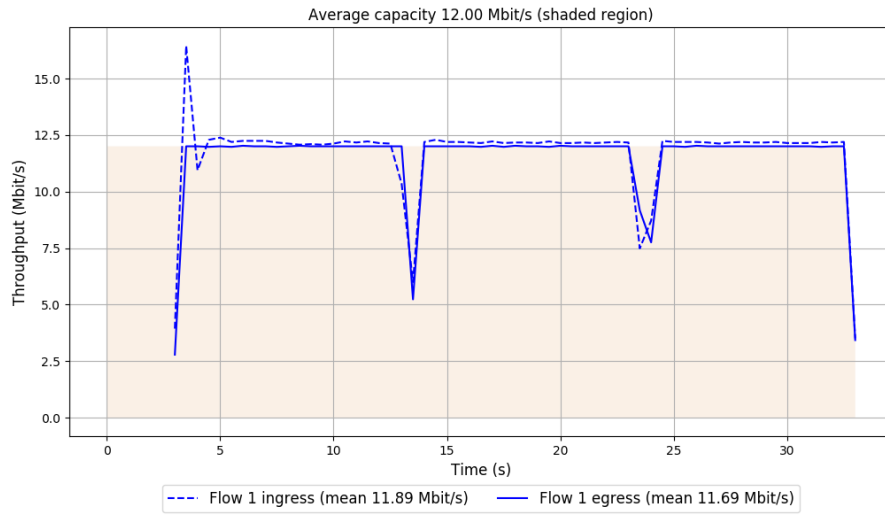
-- Flow 1:

Average throughput: 11.69 Mbit/s

95th percentile per-packet one-way delay: 88.394 ms

Loss rate: 1.75%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-27 12:00:32

End at: 2018-02-27 12:01:02

Below is generated by plot.py at 2018-02-27 12:38:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.68 Mbit/s (97.4% utilization)

95th percentile per-packet one-way delay: 88.384 ms

Loss rate: 1.72%

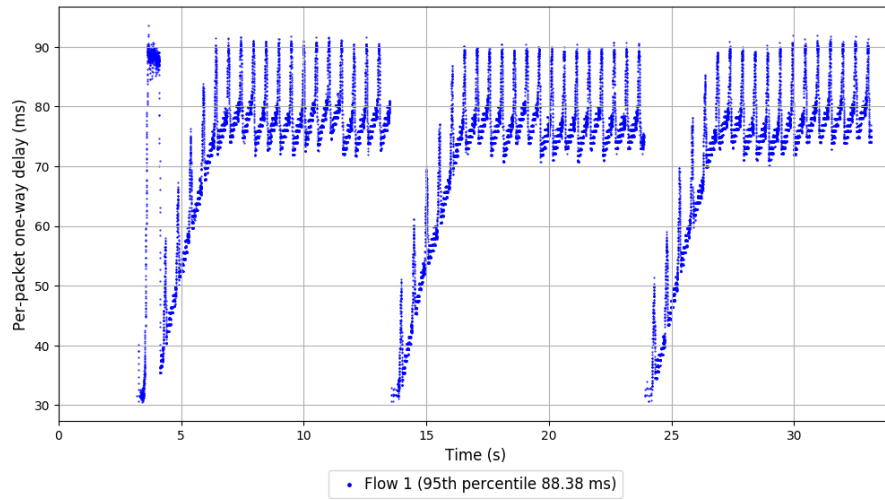
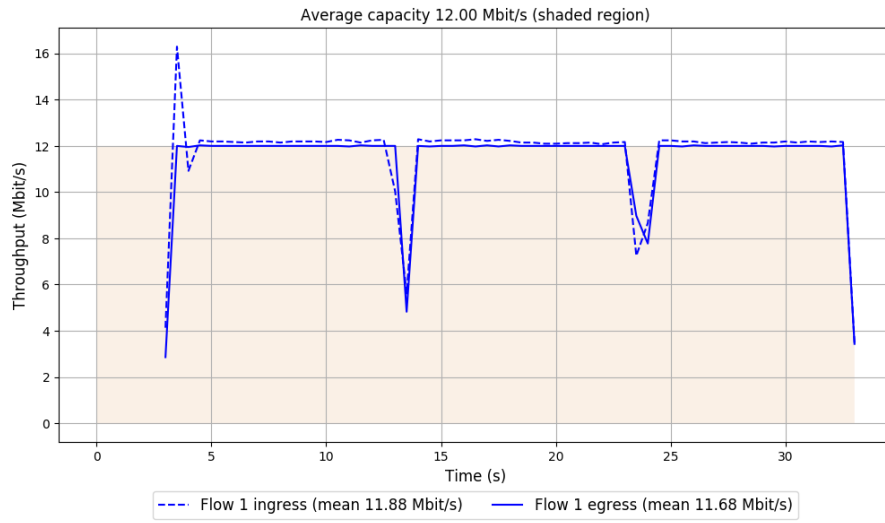
-- Flow 1:

Average throughput: 11.68 Mbit/s

95th percentile per-packet one-way delay: 88.384 ms

Loss rate: 1.72%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-27 12:10:49

End at: 2018-02-27 12:11:19

Below is generated by plot.py at 2018-02-27 12:38:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.69 Mbit/s (97.4% utilization)

95th percentile per-packet one-way delay: 88.534 ms

Loss rate: 1.70%

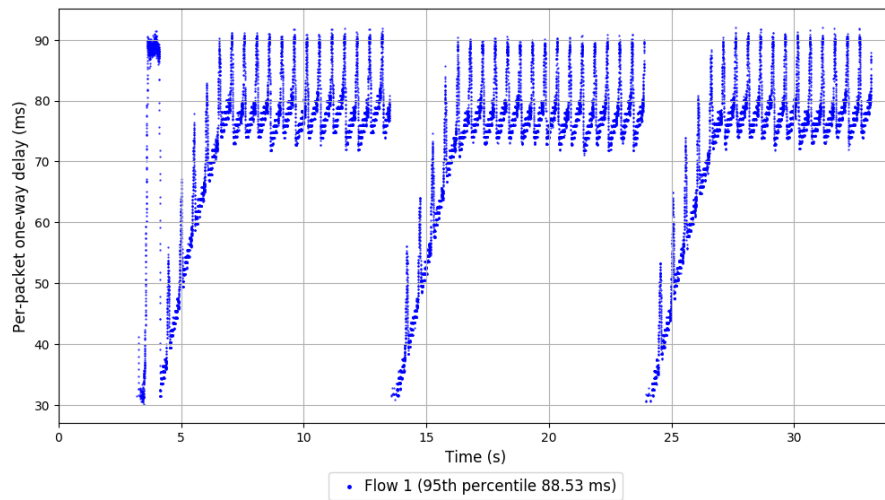
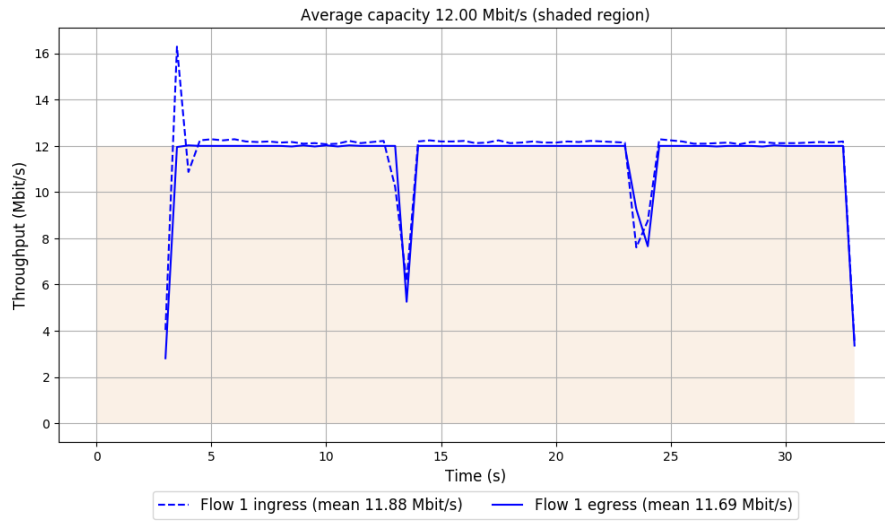
-- Flow 1:

Average throughput: 11.69 Mbit/s

95th percentile per-packet one-way delay: 88.534 ms

Loss rate: 1.70%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-27 12:21:06

End at: 2018-02-27 12:21:36

Below is generated by plot.py at 2018-02-27 12:38:22

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.69 Mbit/s (97.4% utilization)

95th percentile per-packet one-way delay: 88.571 ms

Loss rate: 1.72%

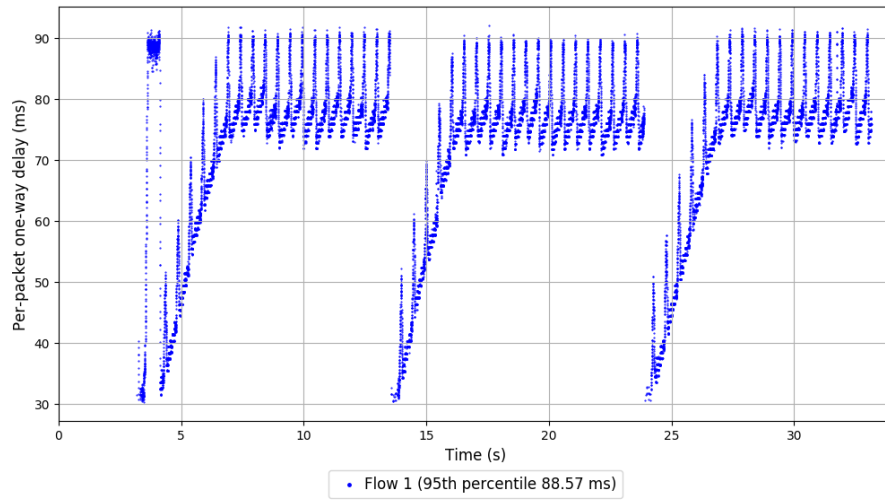
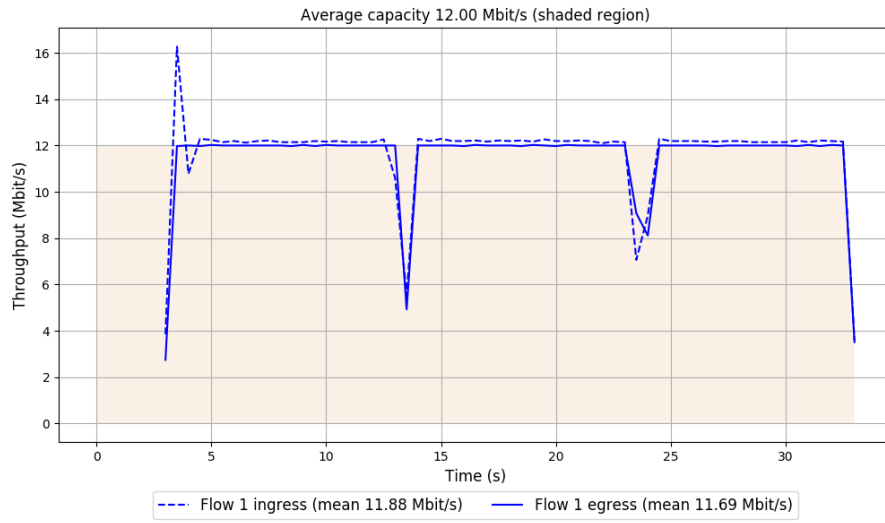
-- Flow 1:

Average throughput: 11.69 Mbit/s

95th percentile per-packet one-way delay: 88.571 ms

Loss rate: 1.72%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-27 12:31:23

End at: 2018-02-27 12:31:53

Below is generated by plot.py at 2018-02-27 12:38:22

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.69 Mbit/s (97.4% utilization)

95th percentile per-packet one-way delay: 88.707 ms

Loss rate: 1.84%

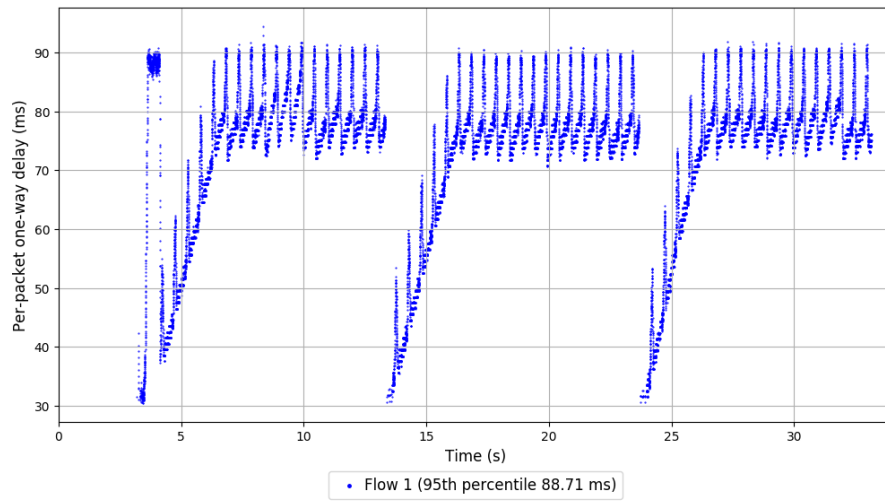
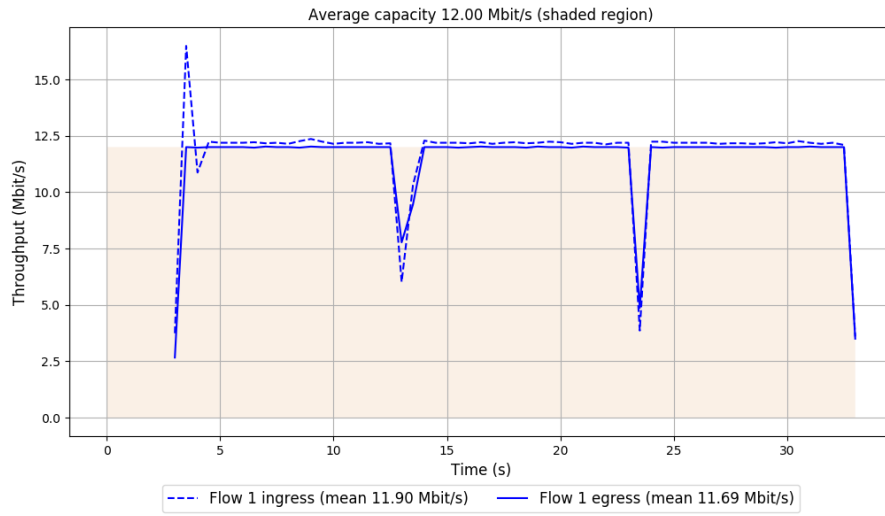
-- Flow 1:

Average throughput: 11.69 Mbit/s

95th percentile per-packet one-way delay: 88.707 ms

Loss rate: 1.84%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-27 11:00:35

End at: 2018-02-27 11:01:05

Below is generated by plot.py at 2018-02-27 12:38:23

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.92 Mbit/s (99.3% utilization)

95th percentile per-packet one-way delay: 88.358 ms

Loss rate: 0.50%

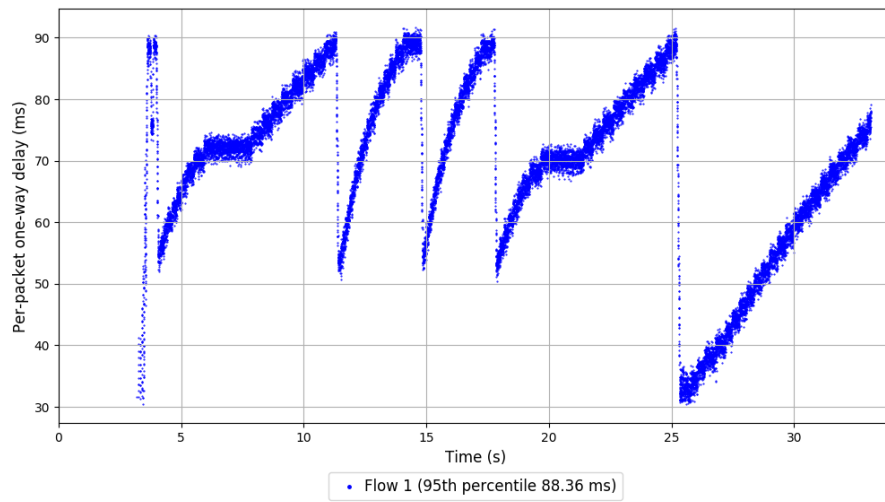
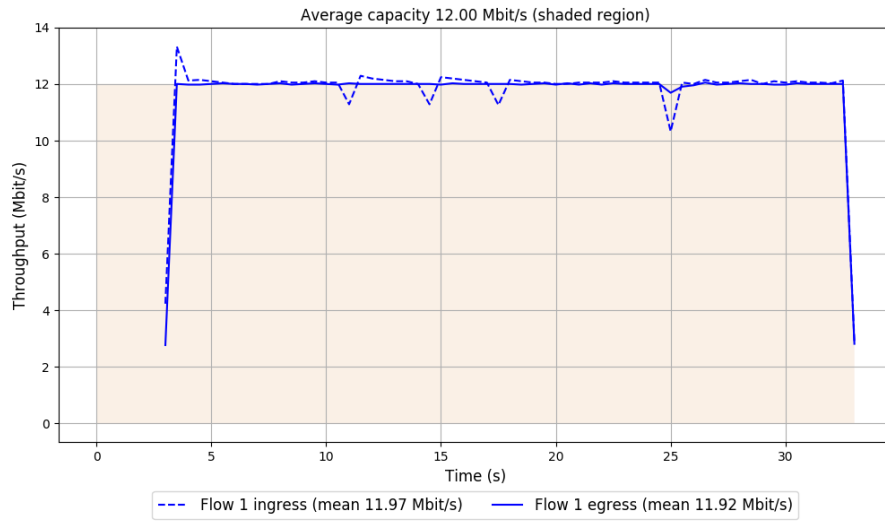
-- Flow 1:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 88.358 ms

Loss rate: 0.50%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-27 11:10:52

End at: 2018-02-27 11:11:22

Below is generated by plot.py at 2018-02-27 12:38:23

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.92 Mbit/s (99.3% utilization)

95th percentile per-packet one-way delay: 88.483 ms

Loss rate: 0.32%

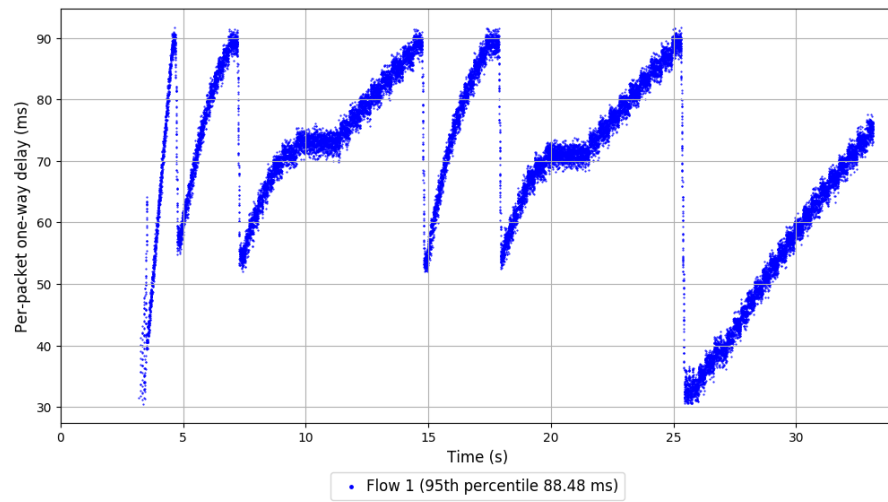
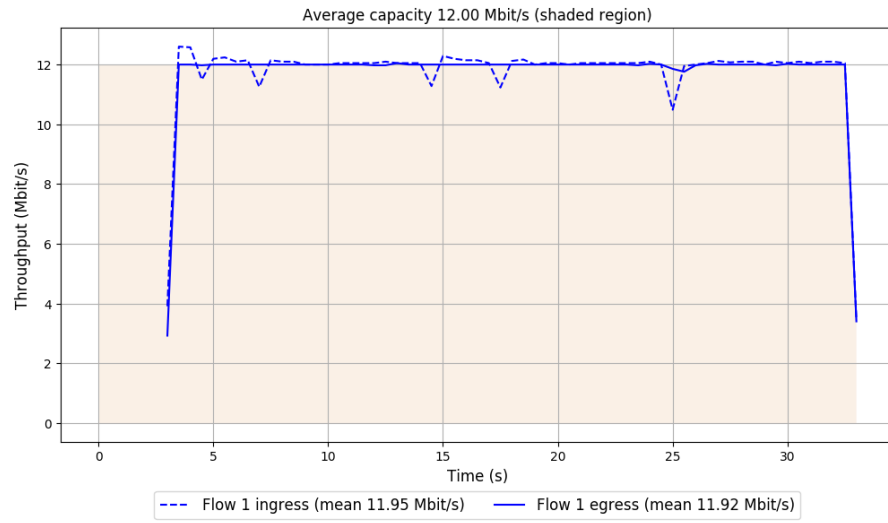
-- Flow 1:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 88.483 ms

Loss rate: 0.32%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-27 11:21:09

End at: 2018-02-27 11:21:39

Below is generated by plot.py at 2018-02-27 12:38:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.92 Mbit/s (99.3% utilization)

95th percentile per-packet one-way delay: 89.184 ms

Loss rate: 0.37%

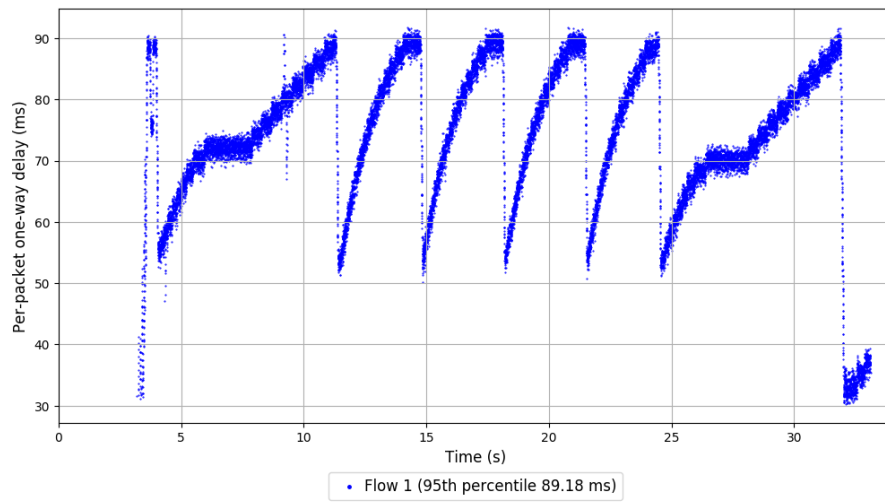
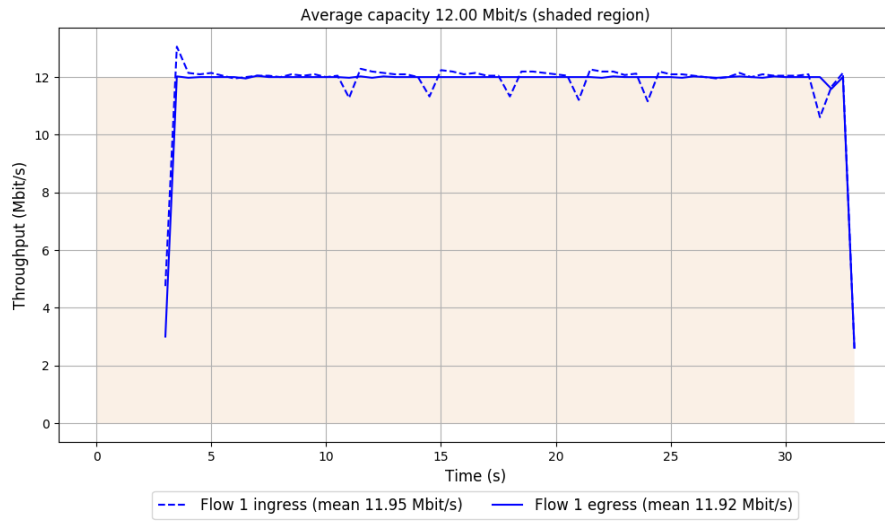
-- Flow 1:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 89.184 ms

Loss rate: 0.37%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-27 11:31:25

End at: 2018-02-27 11:31:56

Below is generated by plot.py at 2018-02-27 12:38:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.93 Mbit/s (99.4% utilization)

95th percentile per-packet one-way delay: 88.606 ms

Loss rate: 0.46%

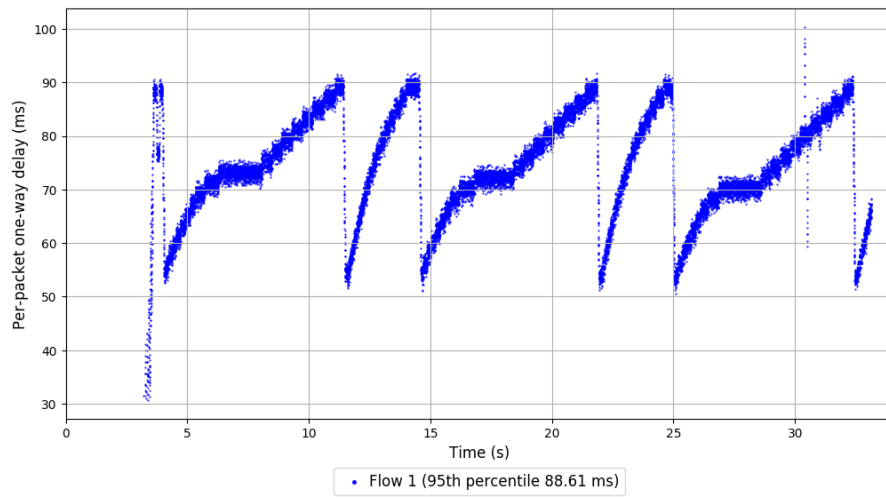
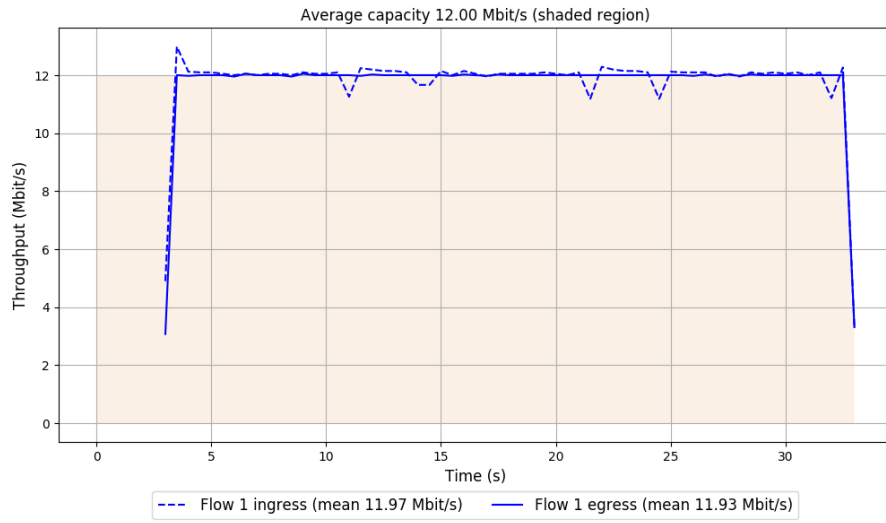
-- Flow 1:

Average throughput: 11.93 Mbit/s

95th percentile per-packet one-way delay: 88.606 ms

Loss rate: 0.46%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-27 11:41:42

End at: 2018-02-27 11:42:12

Below is generated by plot.py at 2018-02-27 12:38:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.92 Mbit/s (99.3% utilization)

95th percentile per-packet one-way delay: 88.563 ms

Loss rate: 0.35%

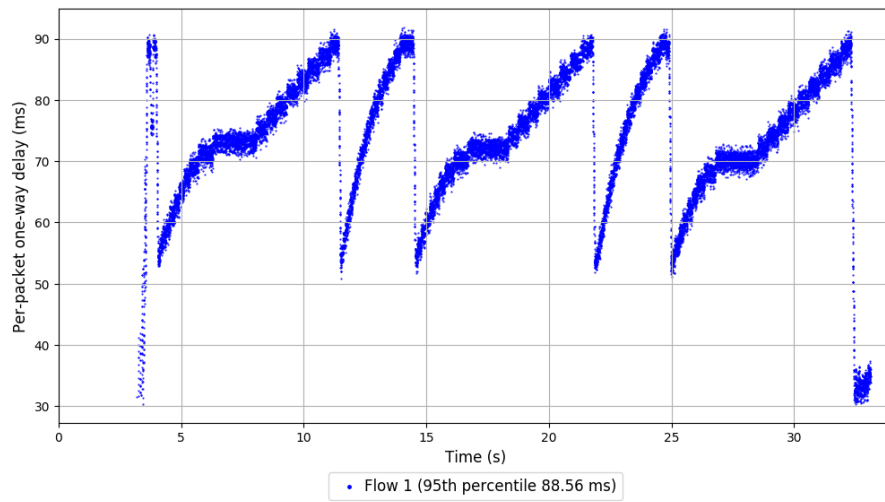
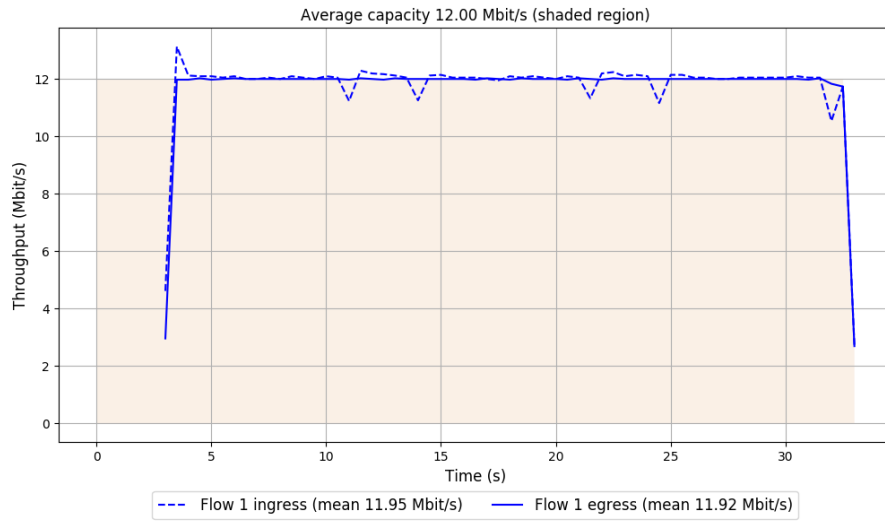
-- Flow 1:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 88.563 ms

Loss rate: 0.35%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-27 11:51:58

End at: 2018-02-27 11:52:28

Below is generated by plot.py at 2018-02-27 12:38:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.93 Mbit/s (99.4% utilization)

95th percentile per-packet one-way delay: 89.269 ms

Loss rate: 0.48%

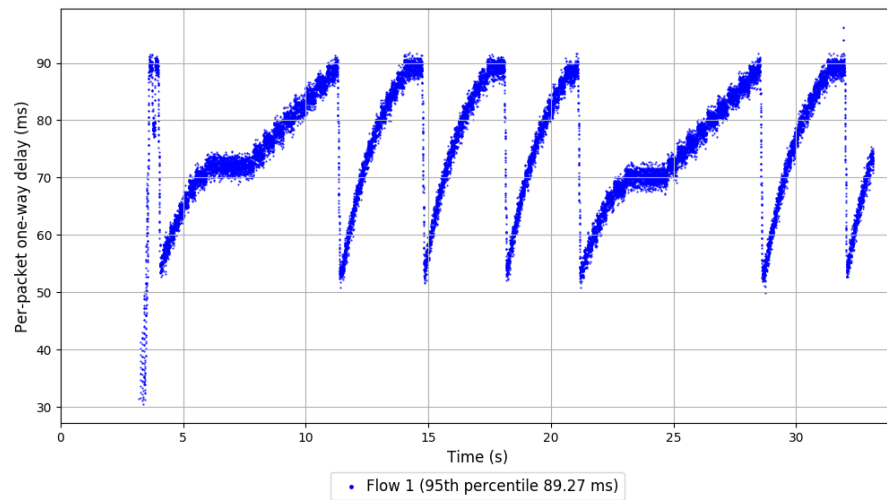
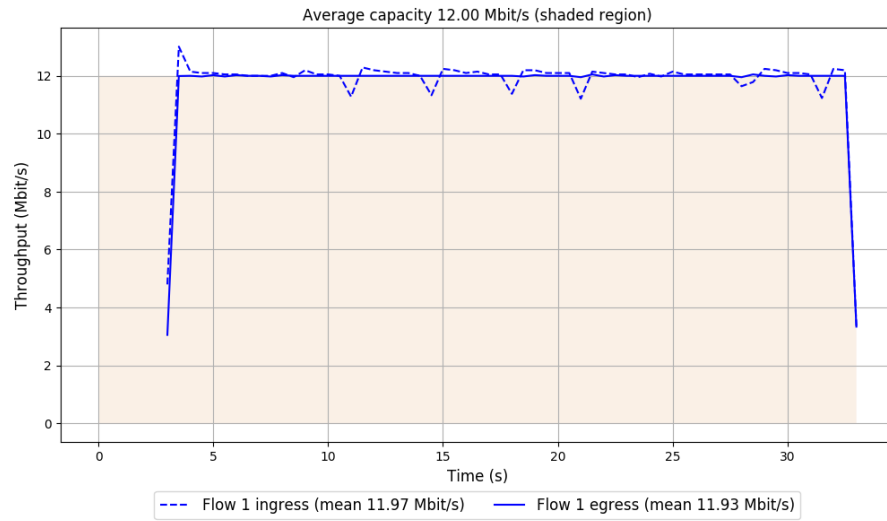
-- Flow 1:

Average throughput: 11.93 Mbit/s

95th percentile per-packet one-way delay: 89.269 ms

Loss rate: 0.48%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-27 12:02:15

End at: 2018-02-27 12:02:45

Below is generated by plot.py at 2018-02-27 12:38:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.92 Mbit/s (99.3% utilization)

95th percentile per-packet one-way delay: 87.534 ms

Loss rate: 0.36%

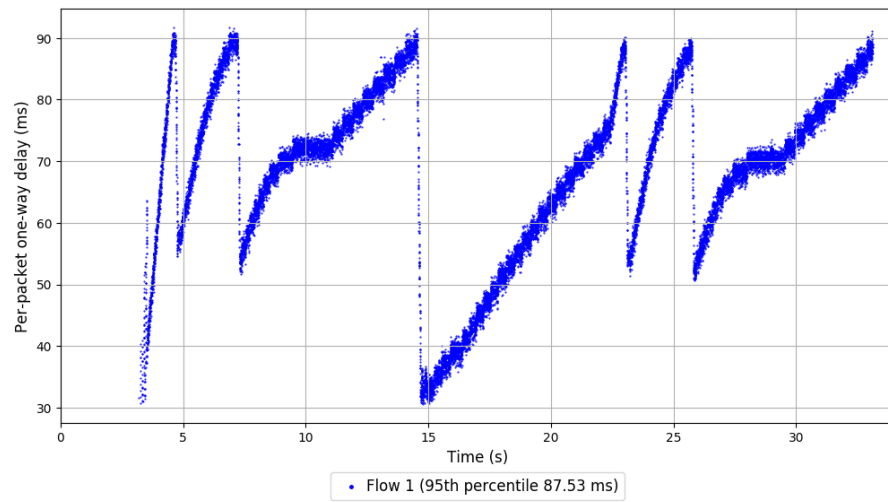
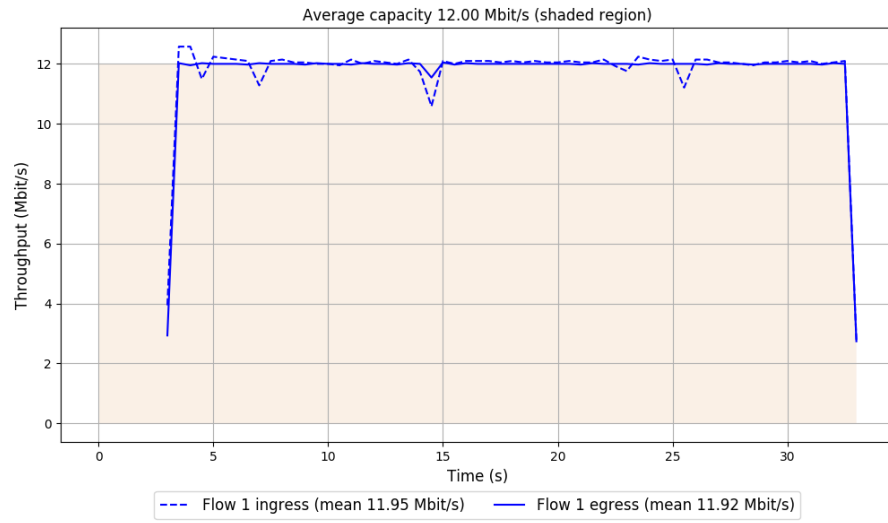
-- Flow 1:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 87.534 ms

Loss rate: 0.36%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-27 12:12:32

End at: 2018-02-27 12:13:02

Below is generated by plot.py at 2018-02-27 12:38:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.92 Mbit/s (99.3% utilization)

95th percentile per-packet one-way delay: 88.181 ms

Loss rate: 0.54%

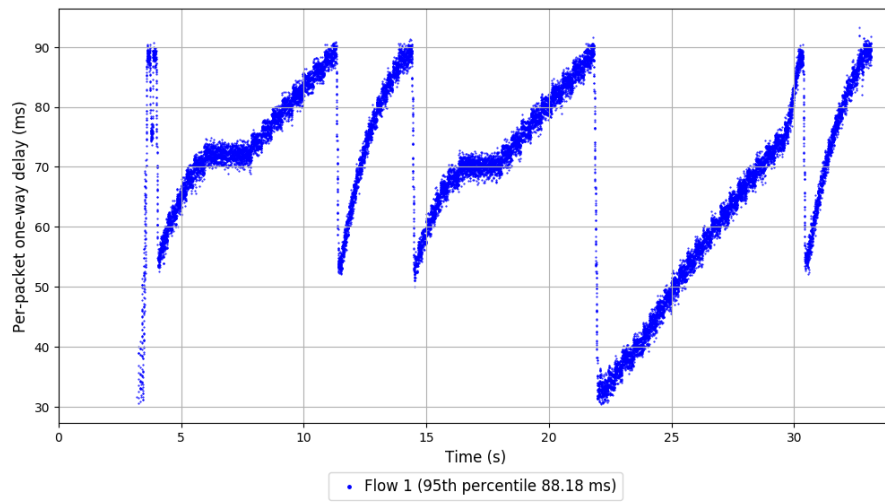
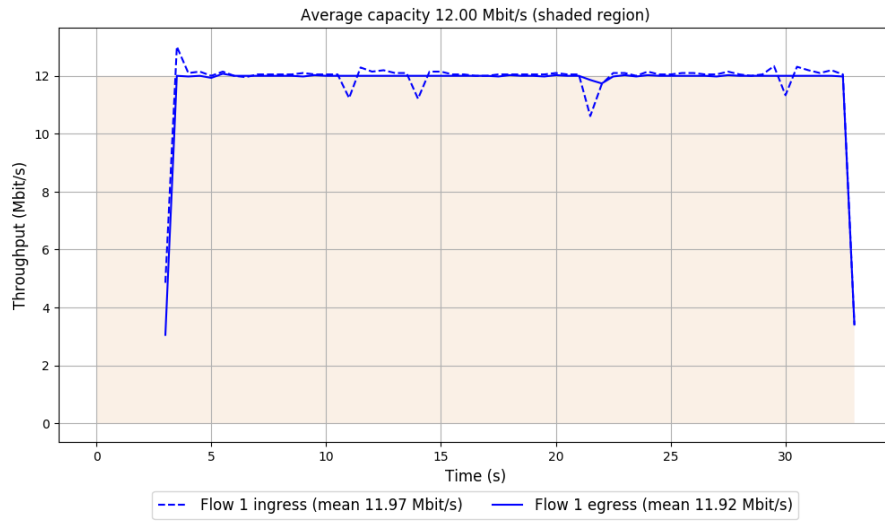
-- Flow 1:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 88.181 ms

Loss rate: 0.54%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-27 12:22:49

End at: 2018-02-27 12:23:19

Below is generated by plot.py at 2018-02-27 12:38:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.93 Mbit/s (99.4% utilization)

95th percentile per-packet one-way delay: 89.305 ms

Loss rate: 0.51%

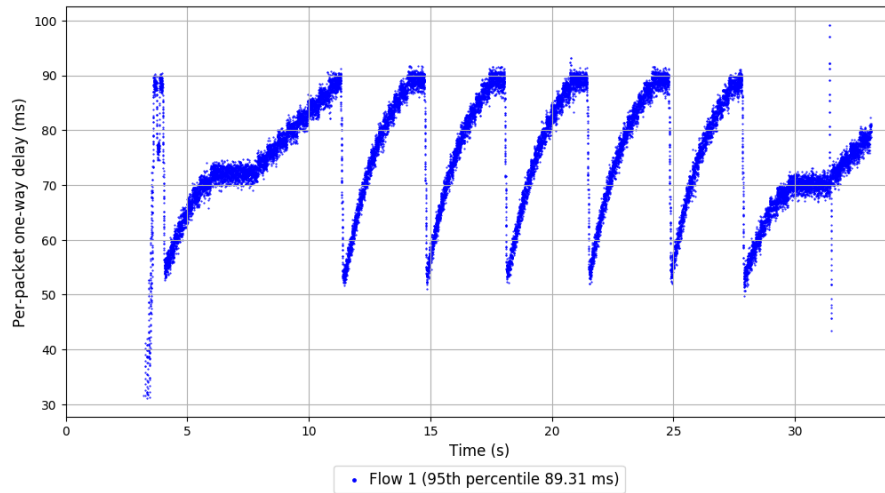
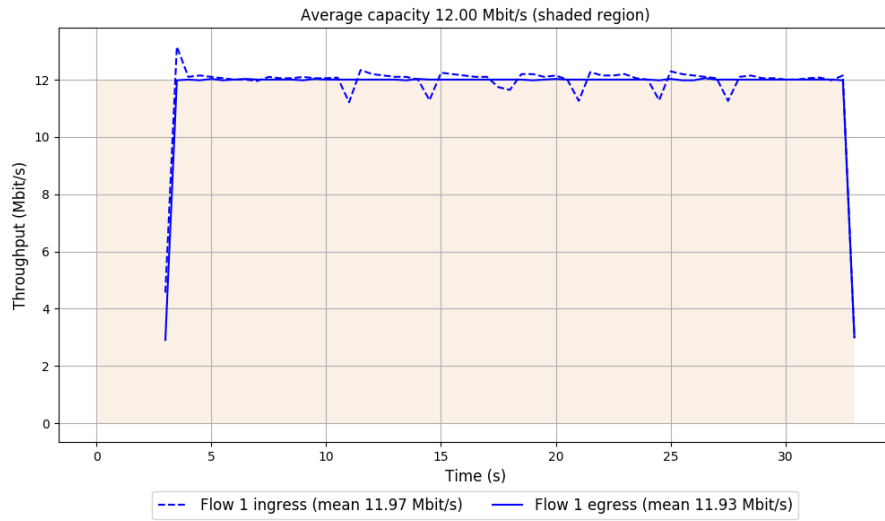
-- Flow 1:

Average throughput: 11.93 Mbit/s

95th percentile per-packet one-way delay: 89.305 ms

Loss rate: 0.51%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-27 12:33:06

End at: 2018-02-27 12:33:36

Below is generated by plot.py at 2018-02-27 12:38:46

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.92 Mbit/s (99.3% utilization)

95th percentile per-packet one-way delay: 89.038 ms

Loss rate: 0.29%

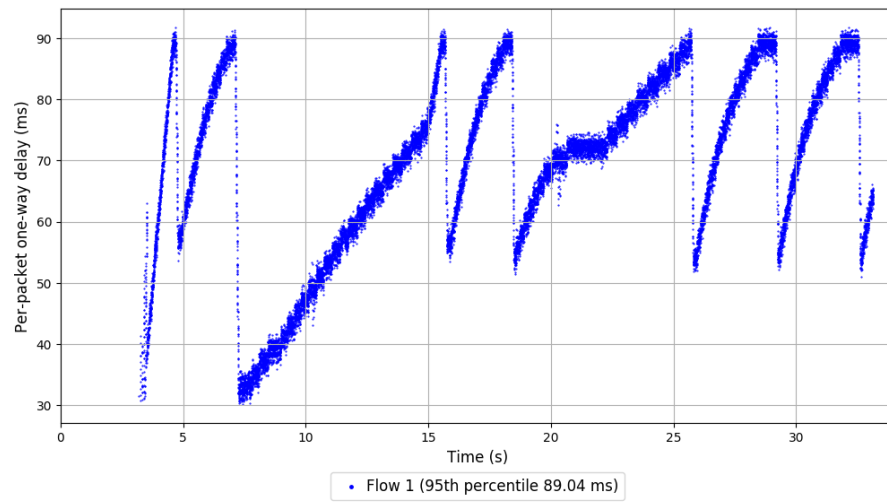
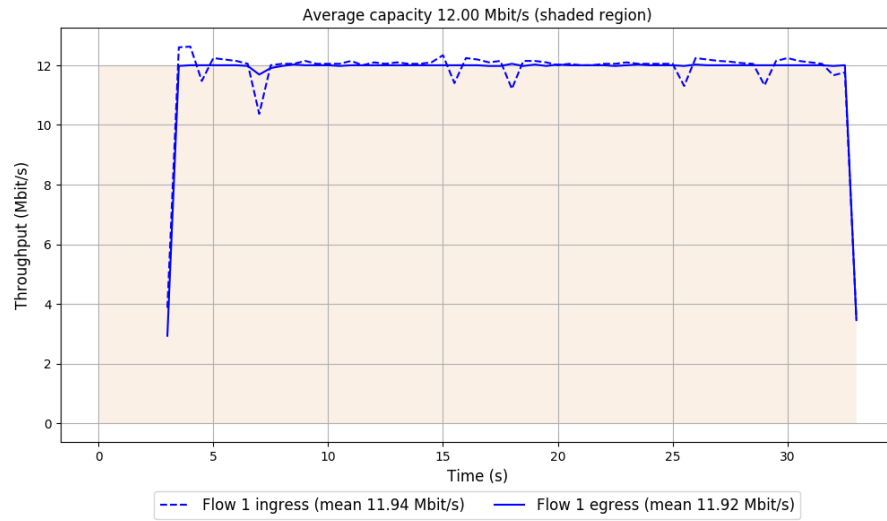
-- Flow 1:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 89.038 ms

Loss rate: 0.29%

Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of LEDBAT

Start at: 2018-02-27 11:00:01

End at: 2018-02-27 11:00:31

Below is generated by plot.py at 2018-02-27 12:38:46

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.85 Mbit/s (90.5% utilization)

95th percentile per-packet one-way delay: 89.153 ms

Loss rate: 0.19%

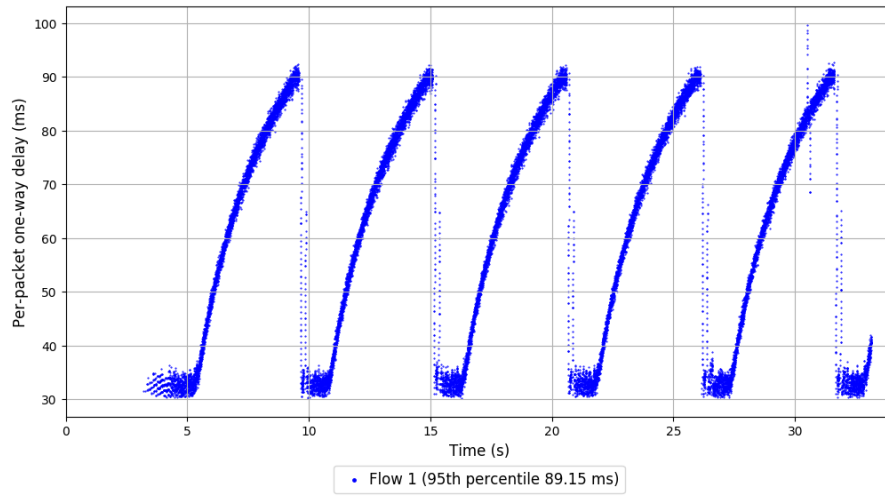
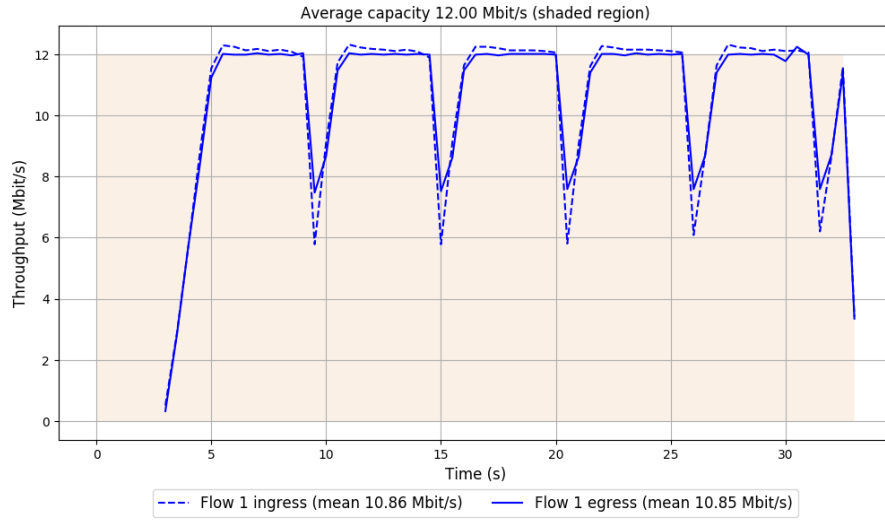
-- Flow 1:

Average throughput: 10.85 Mbit/s

95th percentile per-packet one-way delay: 89.153 ms

Loss rate: 0.19%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-02-27 11:10:18

End at: 2018-02-27 11:10:48

Below is generated by plot.py at 2018-02-27 12:38:46

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.97 Mbit/s (91.4% utilization)

95th percentile per-packet one-way delay: 89.167 ms

Loss rate: 0.26%

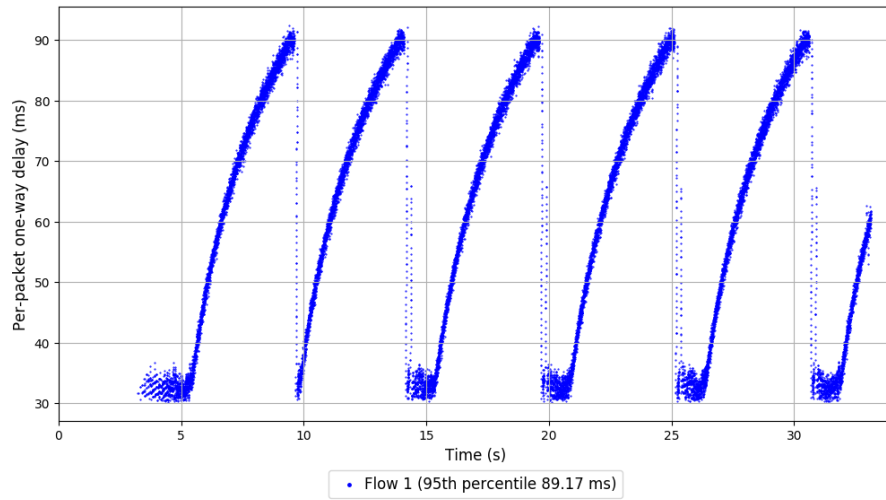
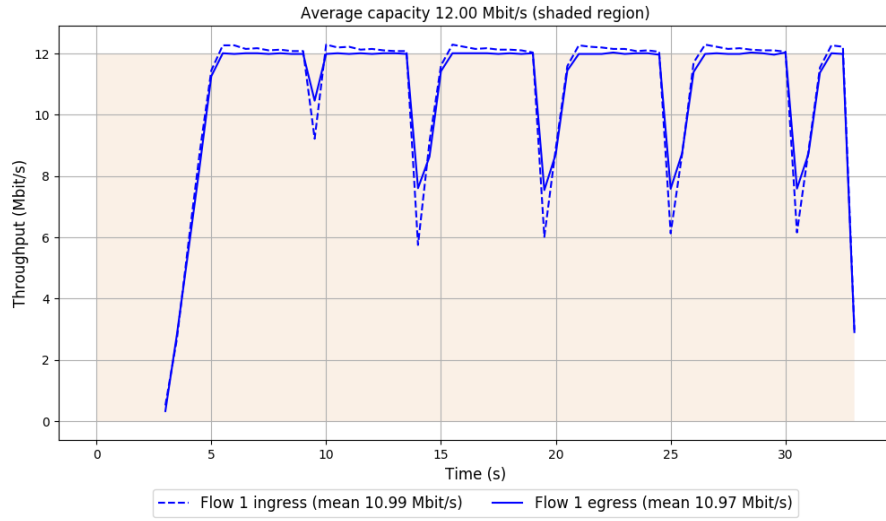
-- Flow 1:

Average throughput: 10.97 Mbit/s

95th percentile per-packet one-way delay: 89.167 ms

Loss rate: 0.26%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-27 11:20:35

End at: 2018-02-27 11:21:05

Below is generated by plot.py at 2018-02-27 12:38:46

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.86 Mbit/s (90.5% utilization)

95th percentile per-packet one-way delay: 89.216 ms

Loss rate: 0.19%

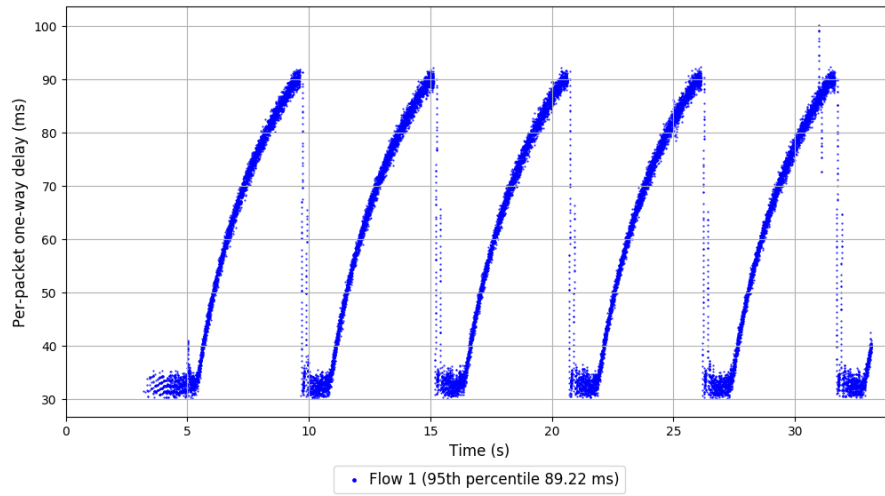
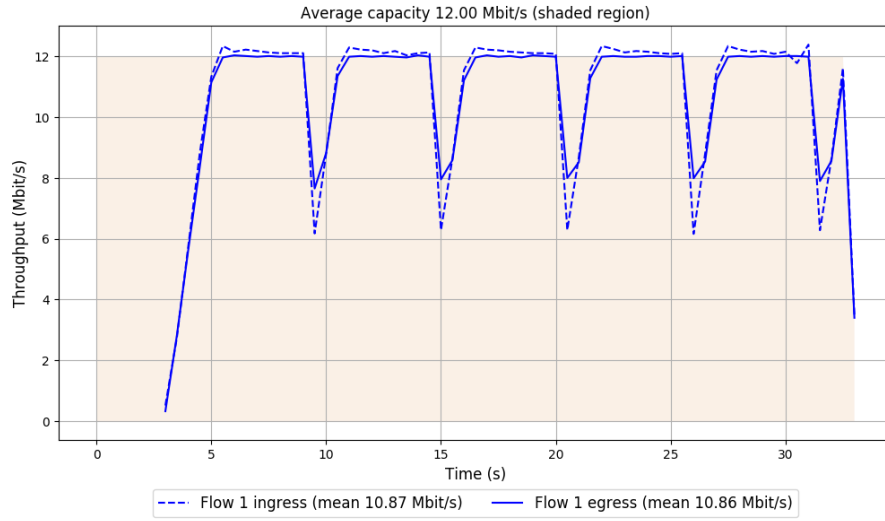
-- Flow 1:

Average throughput: 10.86 Mbit/s

95th percentile per-packet one-way delay: 89.216 ms

Loss rate: 0.19%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-27 11:30:51

End at: 2018-02-27 11:31:21

Below is generated by plot.py at 2018-02-27 12:38:47

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.09 Mbit/s (92.4% utilization)

95th percentile per-packet one-way delay: 89.166 ms

Loss rate: 0.30%

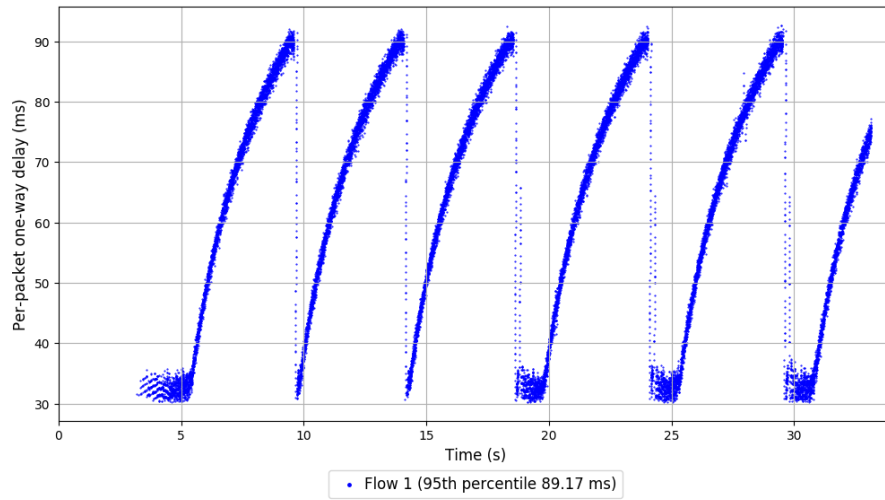
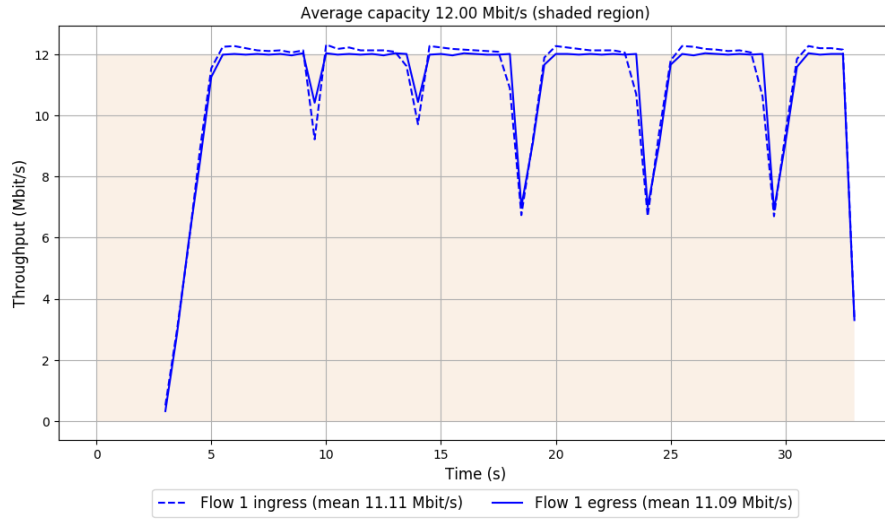
-- Flow 1:

Average throughput: 11.09 Mbit/s

95th percentile per-packet one-way delay: 89.166 ms

Loss rate: 0.30%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-27 11:41:07

End at: 2018-02-27 11:41:37

Below is generated by plot.py at 2018-02-27 12:39:05

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.86 Mbit/s (90.5% utilization)

95th percentile per-packet one-way delay: 89.163 ms

Loss rate: 0.21%

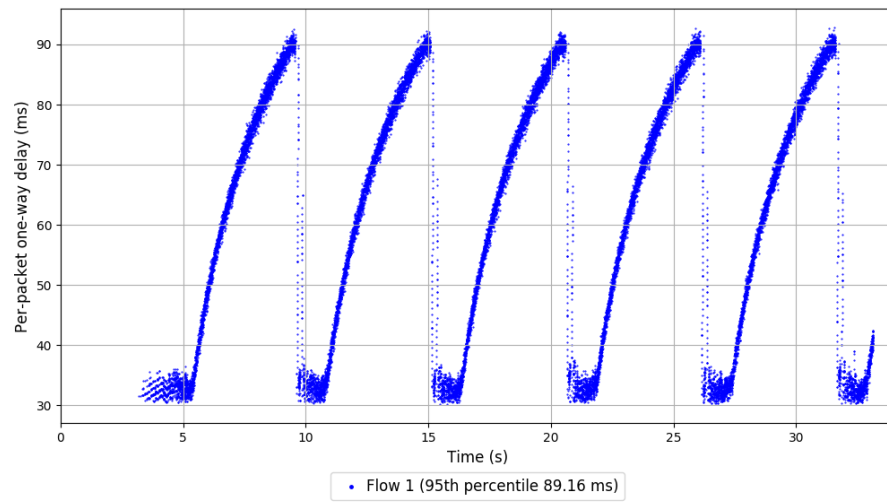
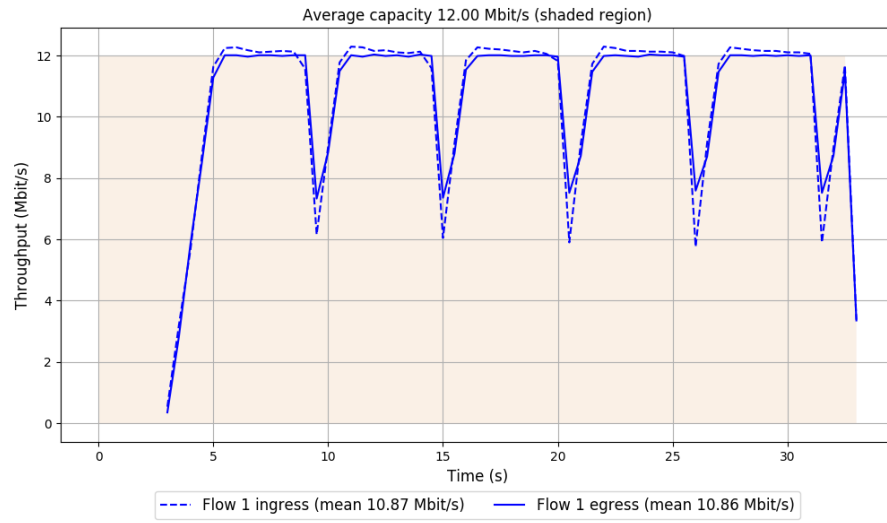
-- Flow 1:

Average throughput: 10.86 Mbit/s

95th percentile per-packet one-way delay: 89.163 ms

Loss rate: 0.21%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-27 11:51:24

End at: 2018-02-27 11:51:54

Below is generated by plot.py at 2018-02-27 12:39:06

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.86 Mbit/s (90.5% utilization)

95th percentile per-packet one-way delay: 89.207 ms

Loss rate: 0.20%

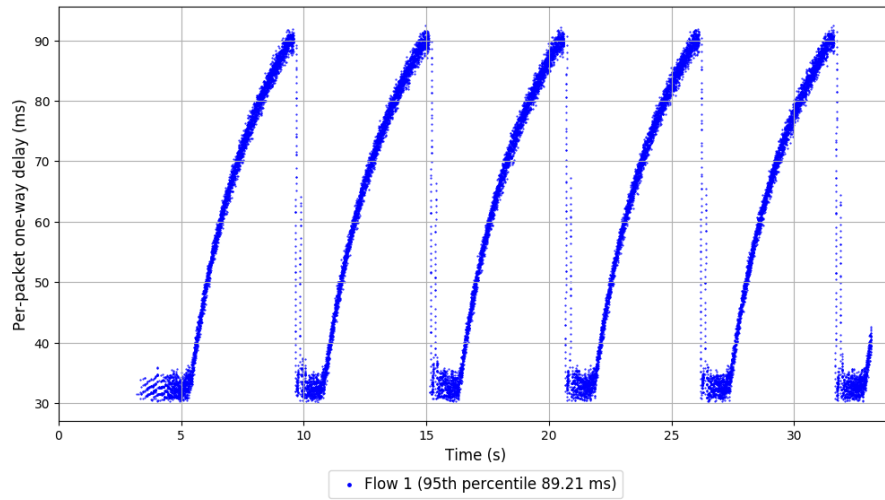
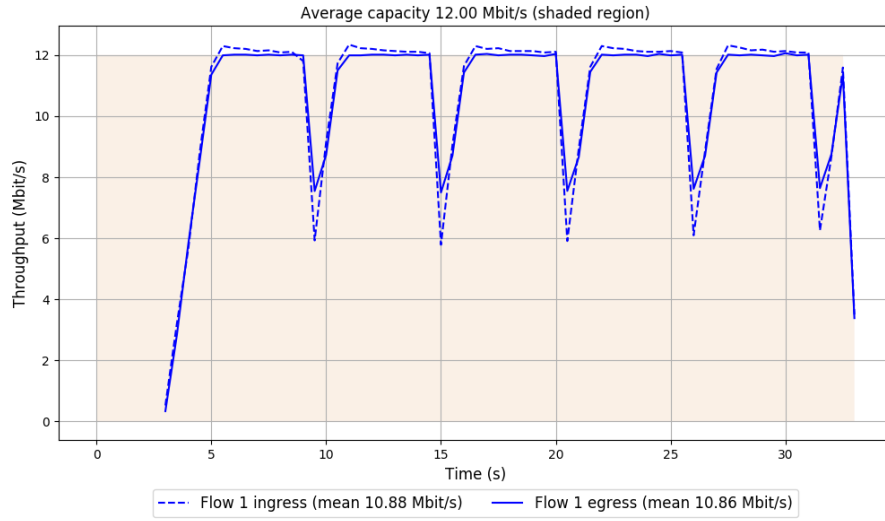
-- Flow 1:

Average throughput: 10.86 Mbit/s

95th percentile per-packet one-way delay: 89.207 ms

Loss rate: 0.20%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-02-27 12:01:41

End at: 2018-02-27 12:02:11

Below is generated by plot.py at 2018-02-27 12:39:07

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.86 Mbit/s (90.5% utilization)

95th percentile per-packet one-way delay: 89.134 ms

Loss rate: 0.20%

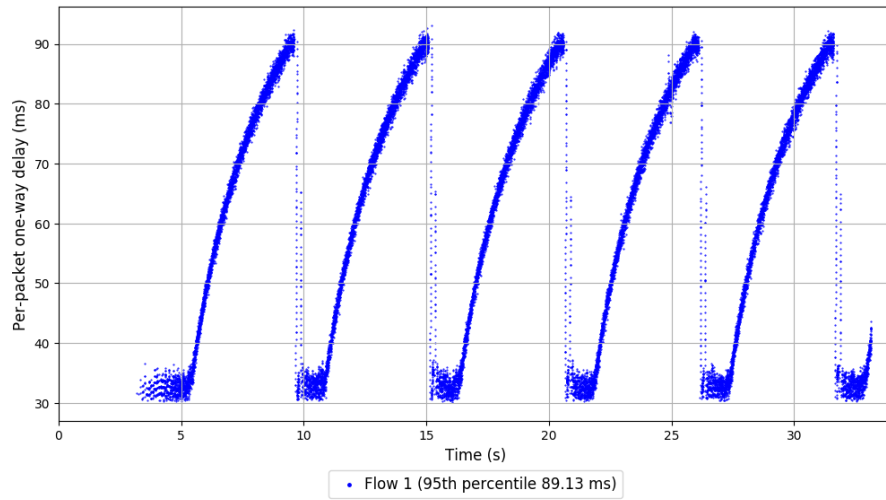
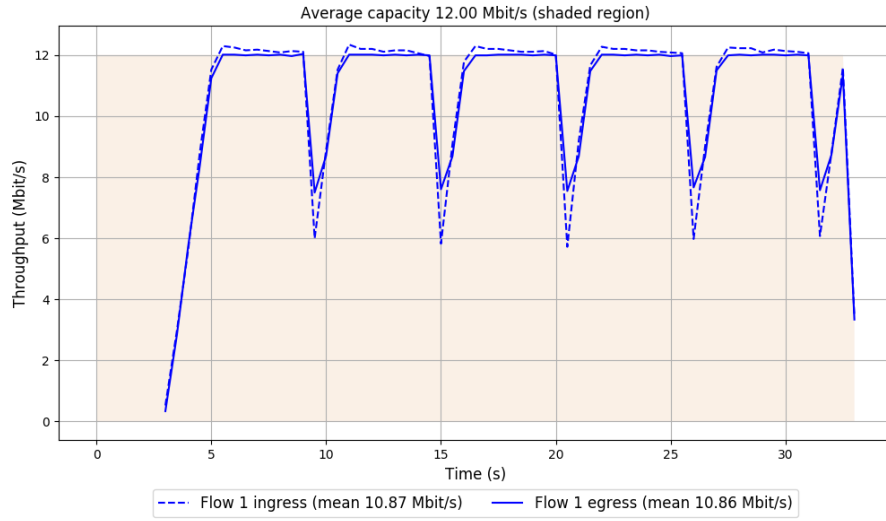
-- Flow 1:

Average throughput: 10.86 Mbit/s

95th percentile per-packet one-way delay: 89.134 ms

Loss rate: 0.20%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-27 12:11:58

End at: 2018-02-27 12:12:28

Below is generated by plot.py at 2018-02-27 12:39:07

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.86 Mbit/s (90.5% utilization)

95th percentile per-packet one-way delay: 89.189 ms

Loss rate: 0.20%

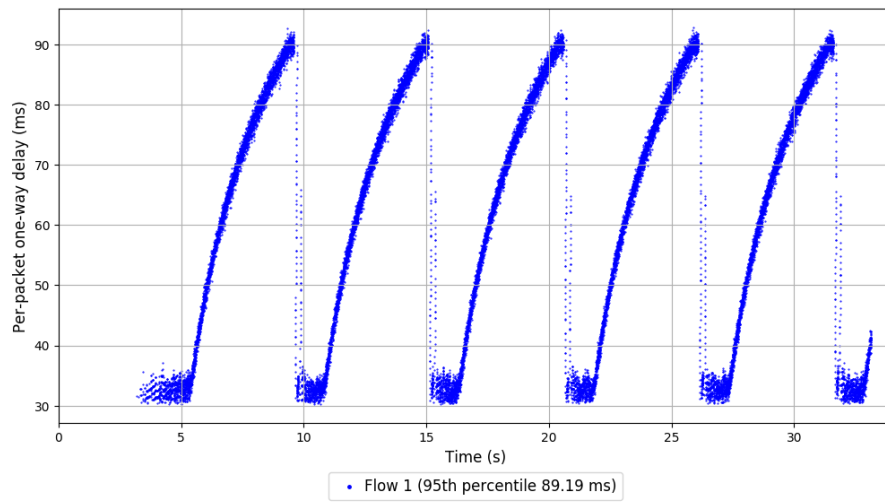
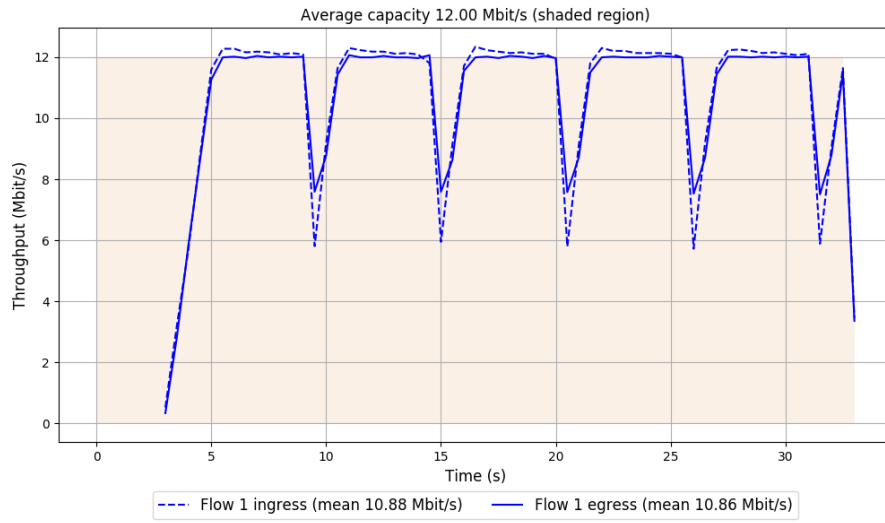
-- Flow 1:

Average throughput: 10.86 Mbit/s

95th percentile per-packet one-way delay: 89.189 ms

Loss rate: 0.20%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-27 12:22:15

End at: 2018-02-27 12:22:45

Below is generated by plot.py at 2018-02-27 12:39:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.97 Mbit/s (91.4% utilization)

95th percentile per-packet one-way delay: 89.155 ms

Loss rate: 0.26%

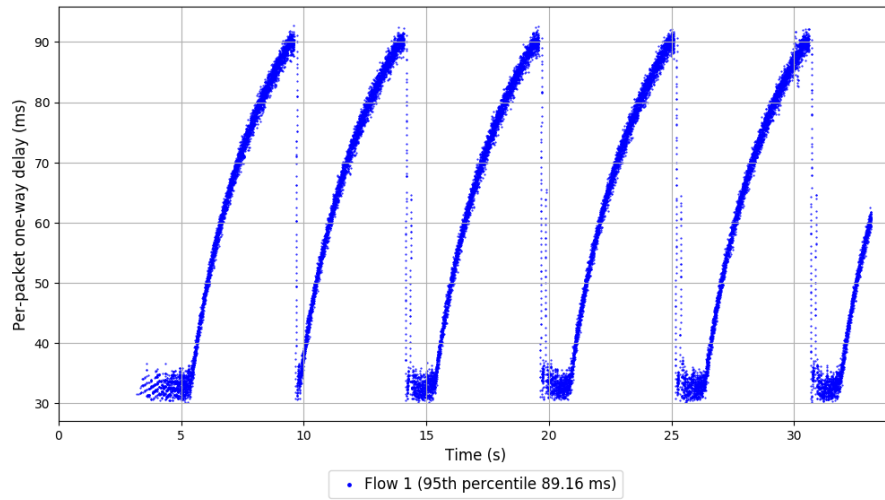
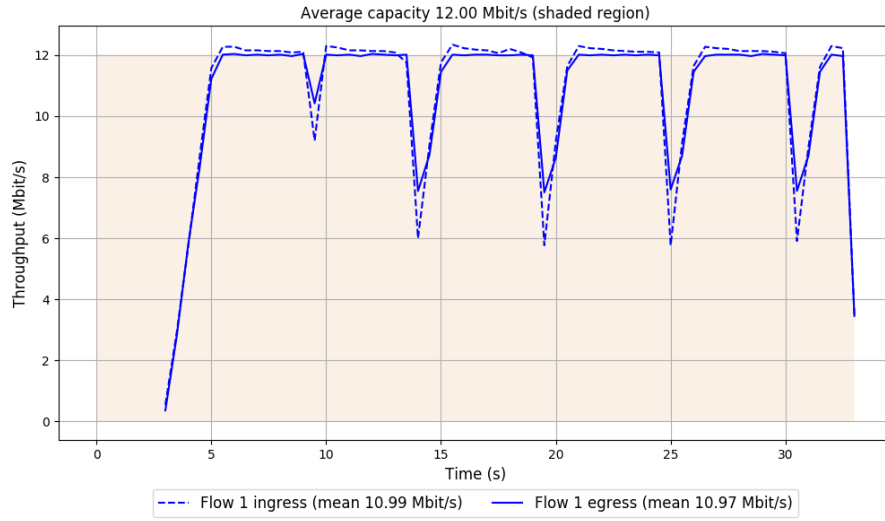
-- Flow 1:

Average throughput: 10.97 Mbit/s

95th percentile per-packet one-way delay: 89.155 ms

Loss rate: 0.26%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-02-27 12:32:32

End at: 2018-02-27 12:33:02

Below is generated by plot.py at 2018-02-27 12:39:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.97 Mbit/s (91.4% utilization)

95th percentile per-packet one-way delay: 89.164 ms

Loss rate: 0.26%

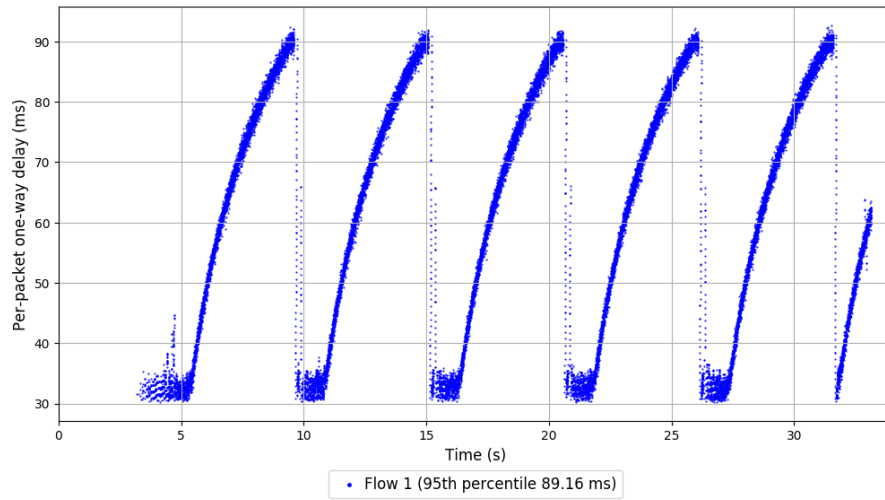
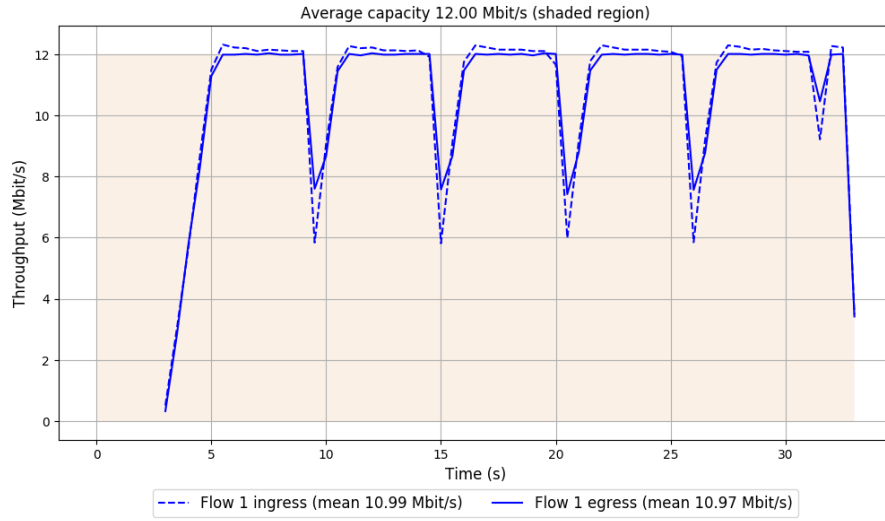
-- Flow 1:

Average throughput: 10.97 Mbit/s

95th percentile per-packet one-way delay: 89.164 ms

Loss rate: 0.26%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC

Start at: 2018-02-27 10:57:10

End at: 2018-02-27 10:57:40

Below is generated by plot.py at 2018-02-27 12:39:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.07 Mbit/s (83.9% utilization)

95th percentile per-packet one-way delay: 46.395 ms

Loss rate: 1.01%

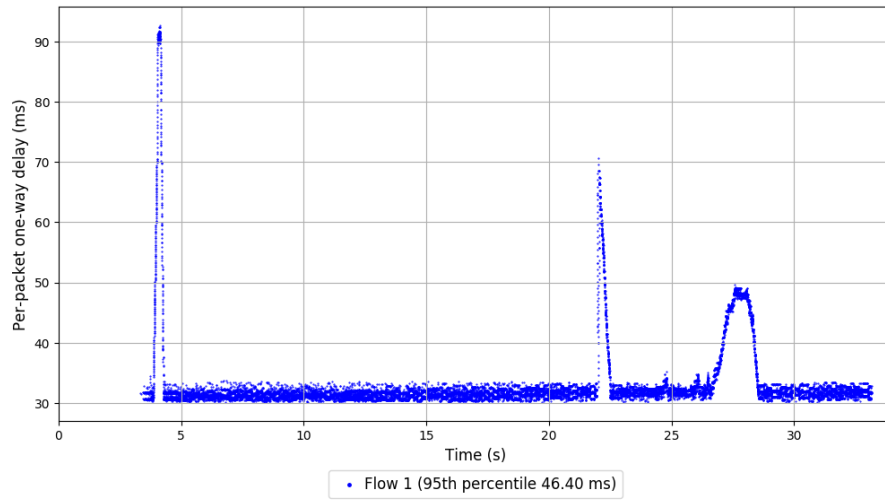
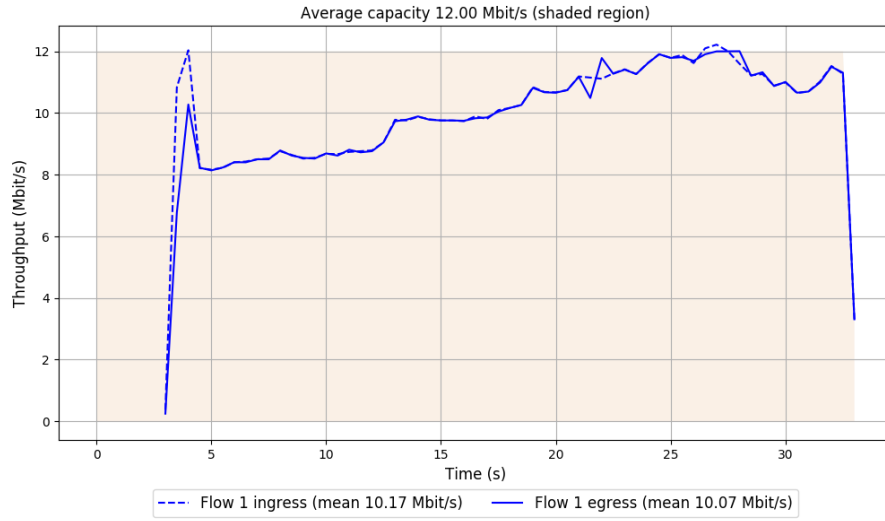
-- Flow 1:

Average throughput: 10.07 Mbit/s

95th percentile per-packet one-way delay: 46.395 ms

Loss rate: 1.01%

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

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

End at: 2018-02-27 11:07:57

Below is generated by plot.py at 2018-02-27 12:39:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 8.82 Mbit/s (73.5% utilization)

95th percentile per-packet one-way delay: 32.517 ms

Loss rate: 1.02%

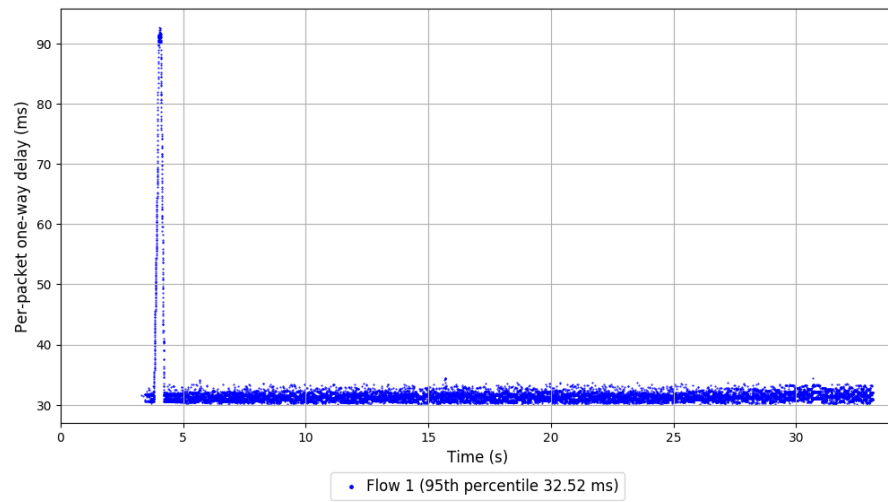
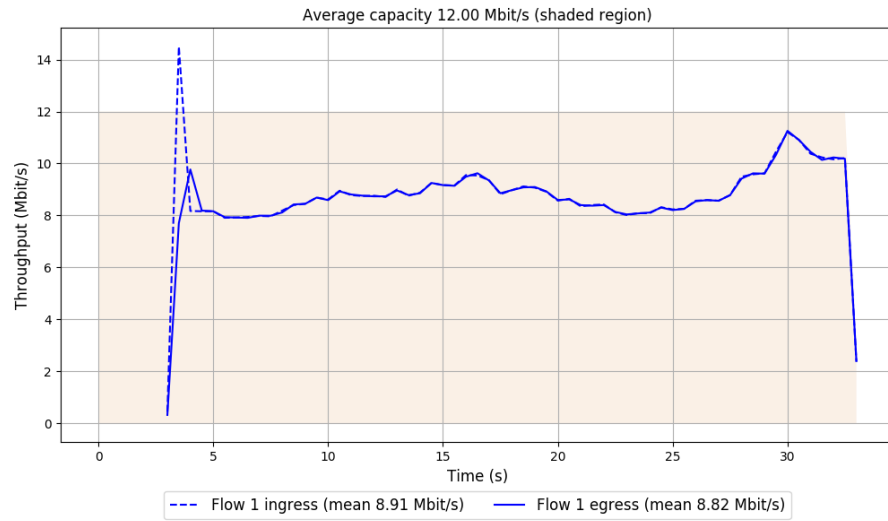
-- Flow 1:

Average throughput: 8.82 Mbit/s

95th percentile per-packet one-way delay: 32.517 ms

Loss rate: 1.02%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-27 11:17:44

End at: 2018-02-27 11:18:14

Below is generated by plot.py at 2018-02-27 12:39:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 9.86 Mbit/s (82.1% utilization)

95th percentile per-packet one-way delay: 32.885 ms

Loss rate: 0.77%

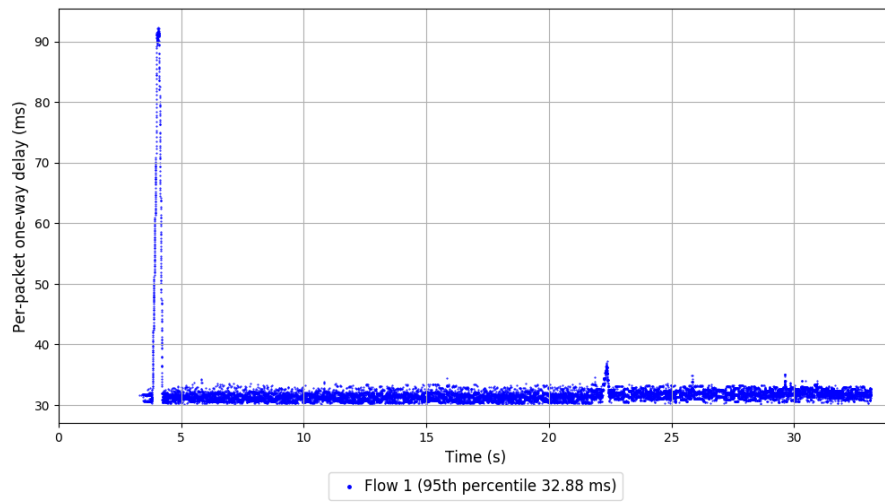
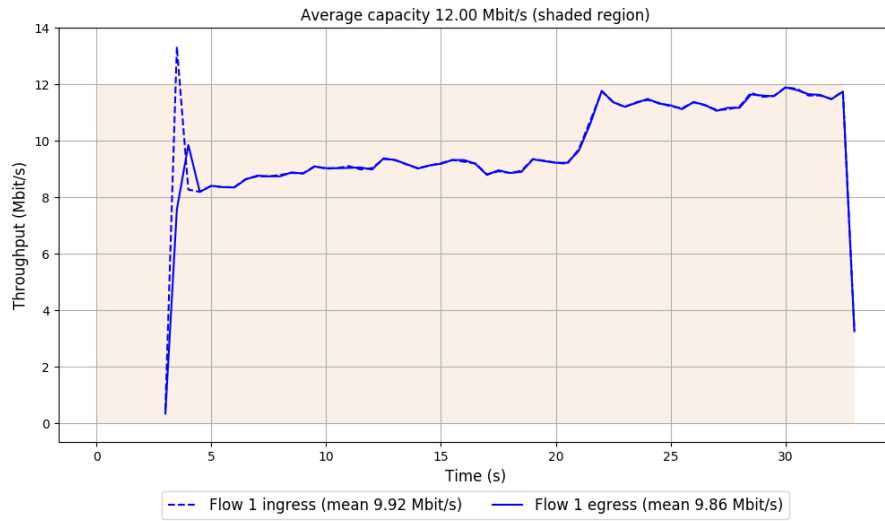
-- Flow 1:

Average throughput: 9.86 Mbit/s

95th percentile per-packet one-way delay: 32.885 ms

Loss rate: 0.77%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-02-27 11:28:00

End at: 2018-02-27 11:28:30

Below is generated by plot.py at 2018-02-27 12:39:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 8.92 Mbit/s (74.3% utilization)

95th percentile per-packet one-way delay: 32.539 ms

Loss rate: 0.79%

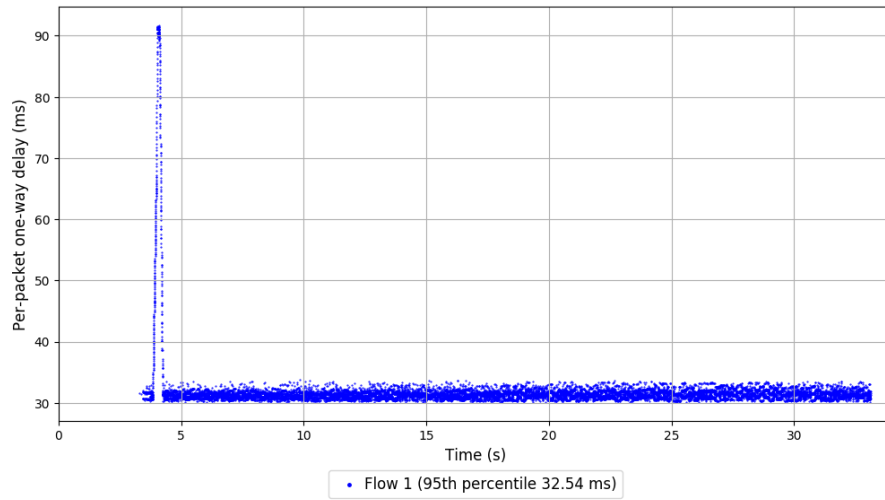
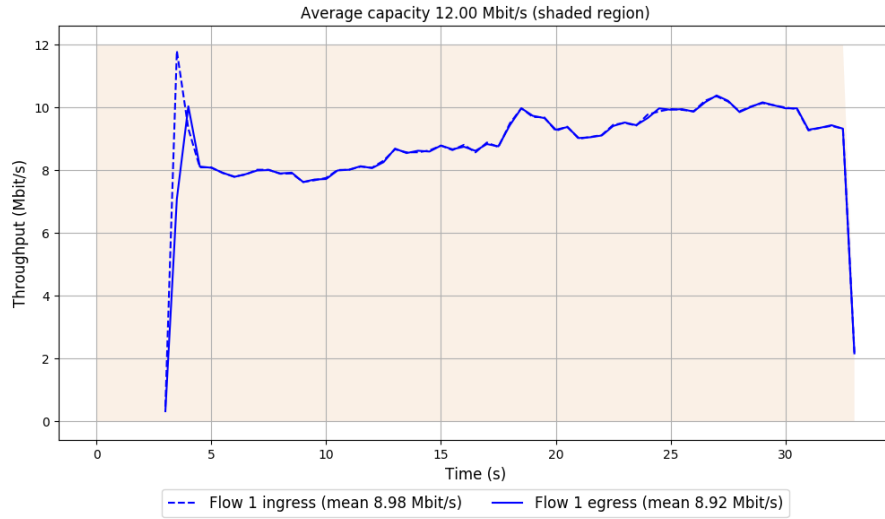
-- Flow 1:

Average throughput: 8.92 Mbit/s

95th percentile per-packet one-way delay: 32.539 ms

Loss rate: 0.79%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-27 11:38:17

End at: 2018-02-27 11:38:47

Below is generated by plot.py at 2018-02-27 12:39:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 8.98 Mbit/s (74.9% utilization)

95th percentile per-packet one-way delay: 32.504 ms

Loss rate: 0.98%

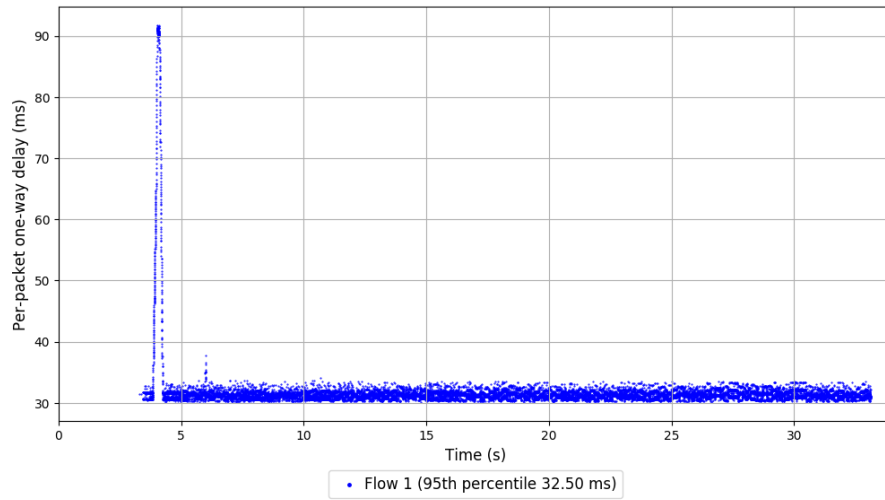
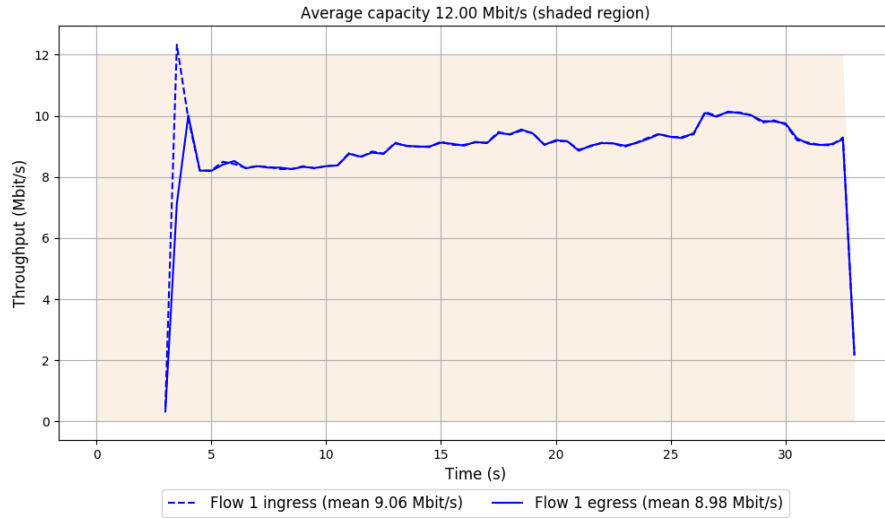
-- Flow 1:

Average throughput: 8.98 Mbit/s

95th percentile per-packet one-way delay: 32.504 ms

Loss rate: 0.98%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-27 11:48:33

End at: 2018-02-27 11:49:03

Below is generated by plot.py at 2018-02-27 12:39:29

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.32 Mbit/s (86.0% utilization)

95th percentile per-packet one-way delay: 50.341 ms

Loss rate: 0.78%

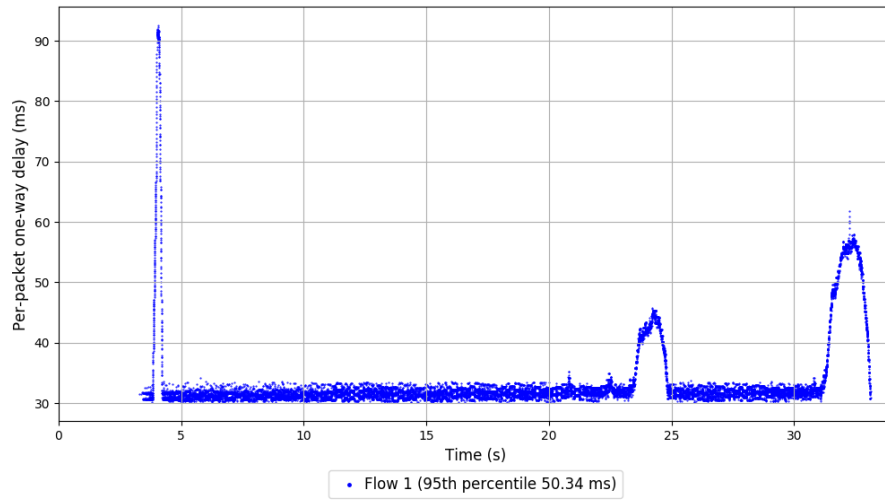
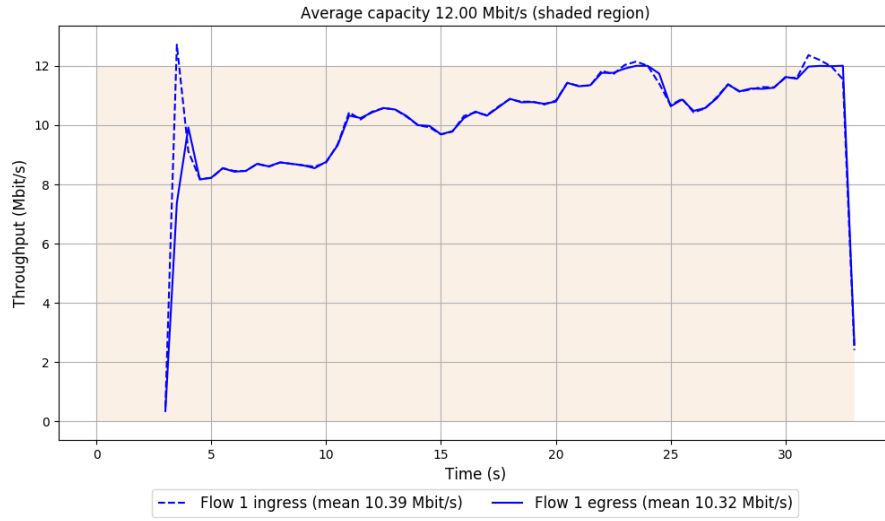
-- Flow 1:

Average throughput: 10.32 Mbit/s

95th percentile per-packet one-way delay: 50.341 ms

Loss rate: 0.78%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-02-27 11:58:50

End at: 2018-02-27 11:59:20

Below is generated by plot.py at 2018-02-27 12:39:29

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 9.82 Mbit/s (81.8% utilization)

95th percentile per-packet one-way delay: 40.072 ms

Loss rate: 0.77%

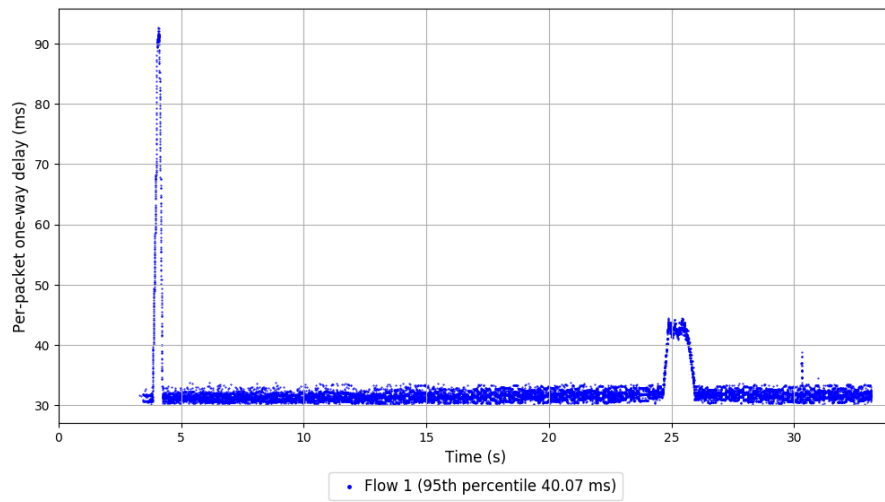
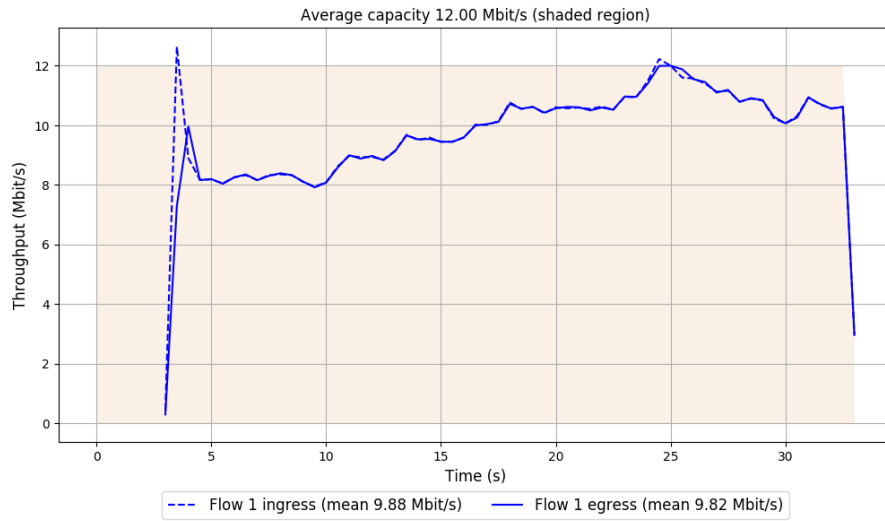
-- Flow 1:

Average throughput: 9.82 Mbit/s

95th percentile per-packet one-way delay: 40.072 ms

Loss rate: 0.77%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-27 12:09:07

End at: 2018-02-27 12:09:37

Below is generated by plot.py at 2018-02-27 12:39:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.60 Mbit/s (88.3% utilization)

95th percentile per-packet one-way delay: 49.826 ms

Loss rate: 0.73%

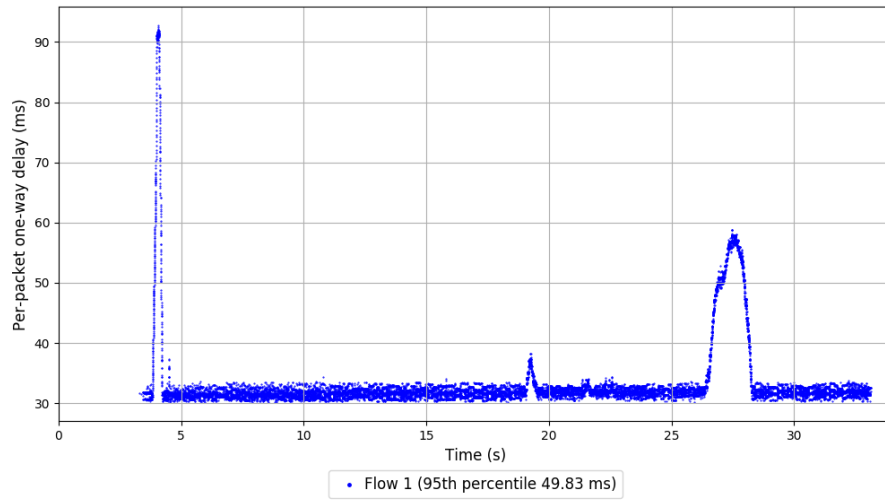
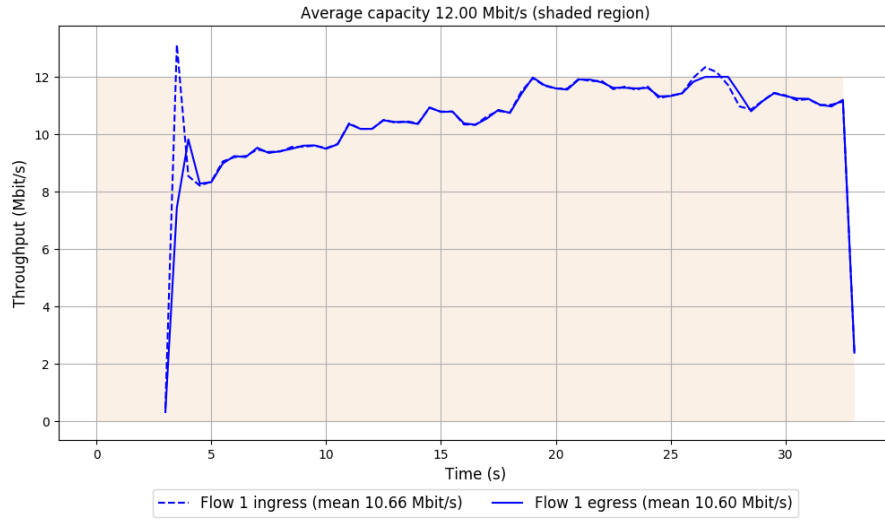
-- Flow 1:

Average throughput: 10.60 Mbit/s

95th percentile per-packet one-way delay: 49.826 ms

Loss rate: 0.73%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-27 12:19:24

End at: 2018-02-27 12:19:54

Below is generated by plot.py at 2018-02-27 12:39:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.12 Mbit/s (84.4% utilization)

95th percentile per-packet one-way delay: 39.688 ms

Loss rate: 0.71%

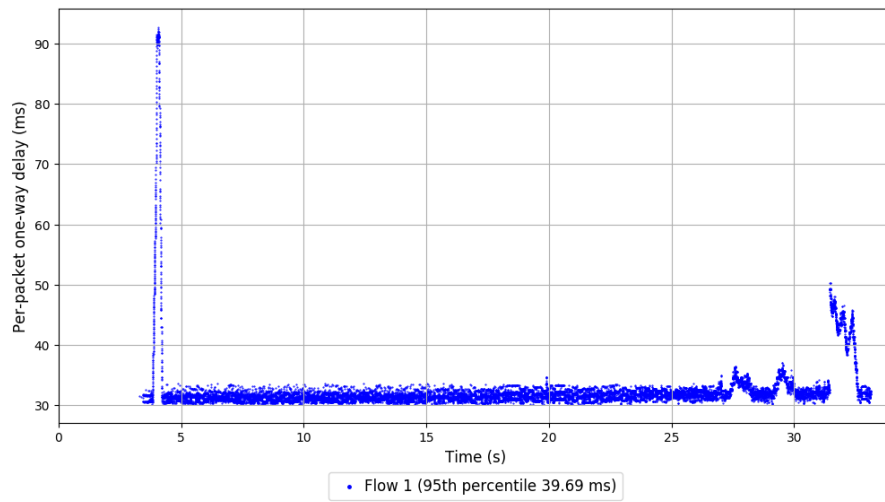
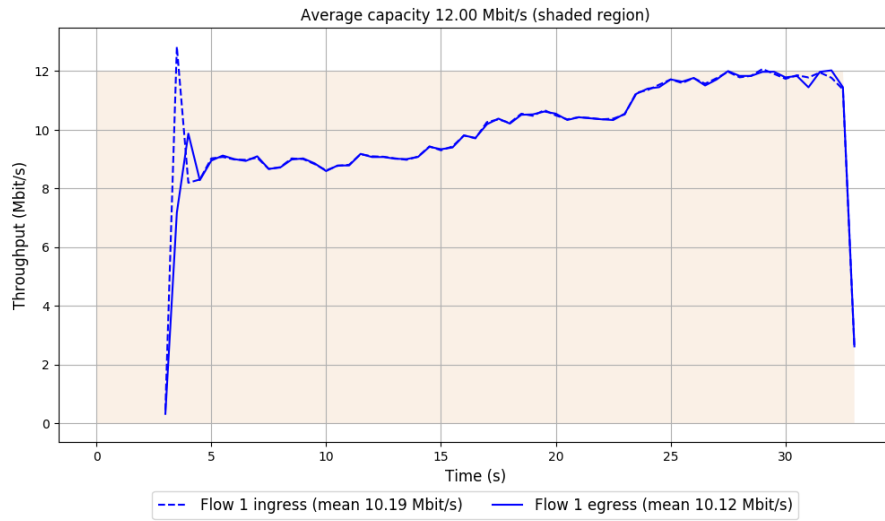
-- Flow 1:

Average throughput: 10.12 Mbit/s

95th percentile per-packet one-way delay: 39.688 ms

Loss rate: 0.71%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-02-27 12:29:41

End at: 2018-02-27 12:30:11

Below is generated by plot.py at 2018-02-27 12:39:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 9.91 Mbit/s (82.6% utilization)

95th percentile per-packet one-way delay: 34.582 ms

Loss rate: 0.77%

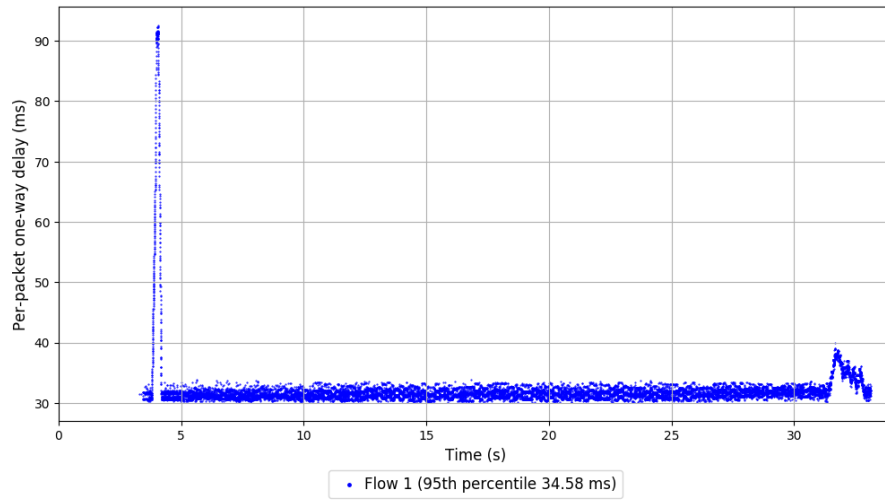
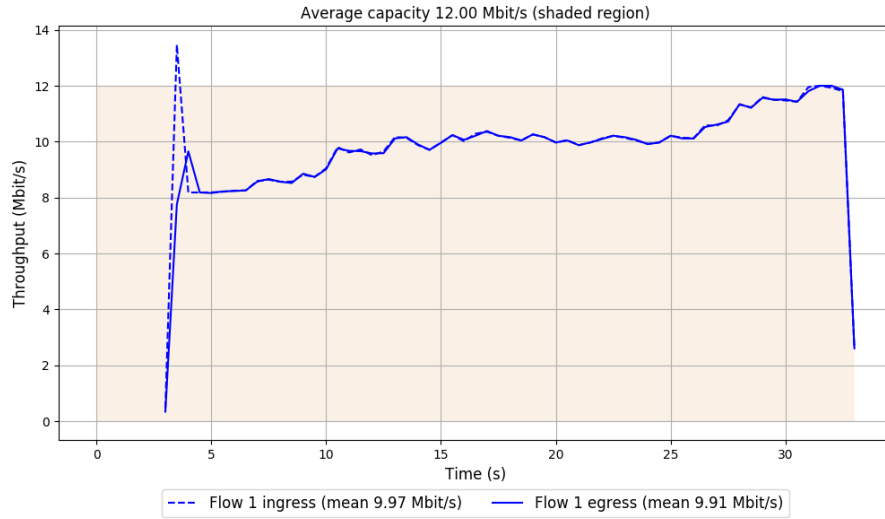
-- Flow 1:

Average throughput: 9.91 Mbit/s

95th percentile per-packet one-way delay: 34.582 ms

Loss rate: 0.77%

Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-02-27 11:02:52

End at: 2018-02-27 11:03:22

Below is generated by plot.py at 2018-02-27 12:39:49

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.79 Mbit/s (98.3% utilization)

95th percentile per-packet one-way delay: 89.362 ms

Loss rate: 0.95%

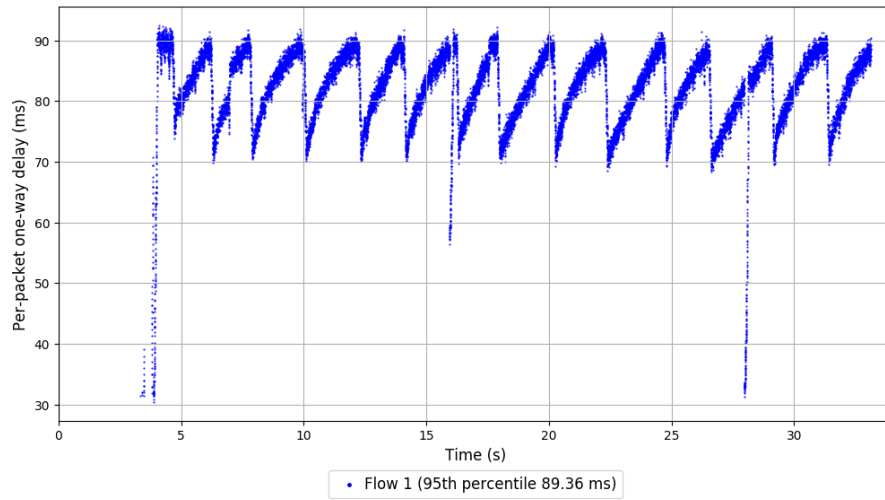
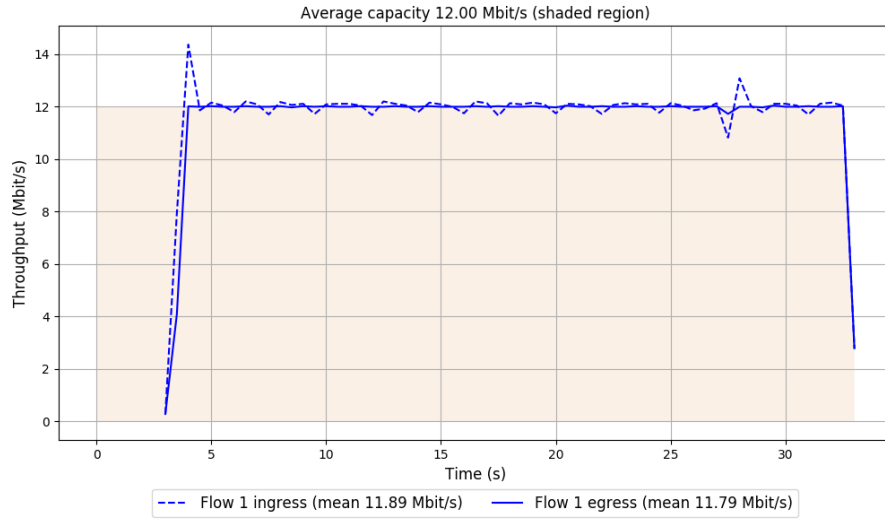
-- Flow 1:

Average throughput: 11.79 Mbit/s

95th percentile per-packet one-way delay: 89.362 ms

Loss rate: 0.95%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-27 11:13:09

End at: 2018-02-27 11:13:39

Below is generated by plot.py at 2018-02-27 12:39:50

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.79 Mbit/s (98.2% utilization)

95th percentile per-packet one-way delay: 89.242 ms

Loss rate: 0.92%

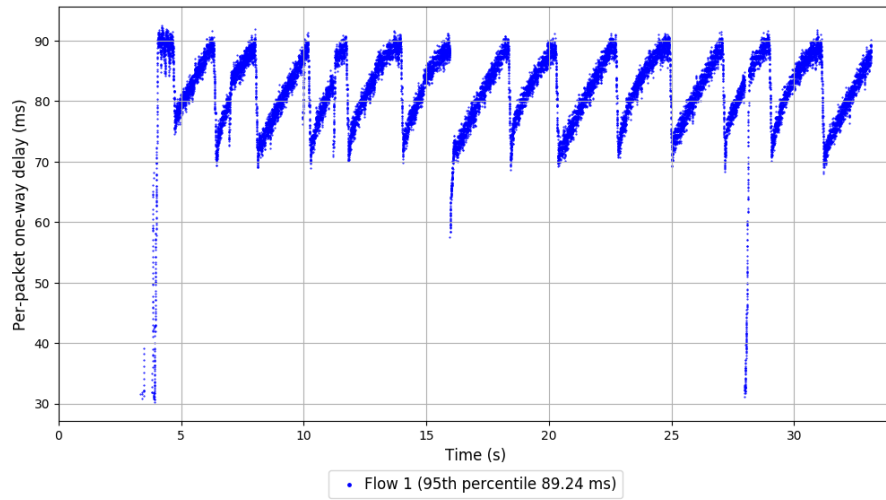
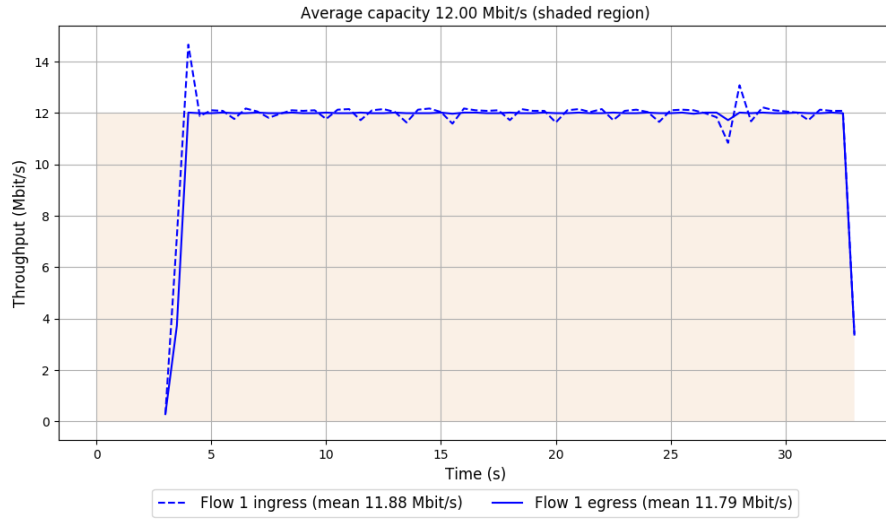
-- Flow 1:

Average throughput: 11.79 Mbit/s

95th percentile per-packet one-way delay: 89.242 ms

Loss rate: 0.92%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-27 11:23:25

End at: 2018-02-27 11:23:55

Below is generated by plot.py at 2018-02-27 12:39:51

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.79 Mbit/s (98.2% utilization)

95th percentile per-packet one-way delay: 89.258 ms

Loss rate: 0.93%

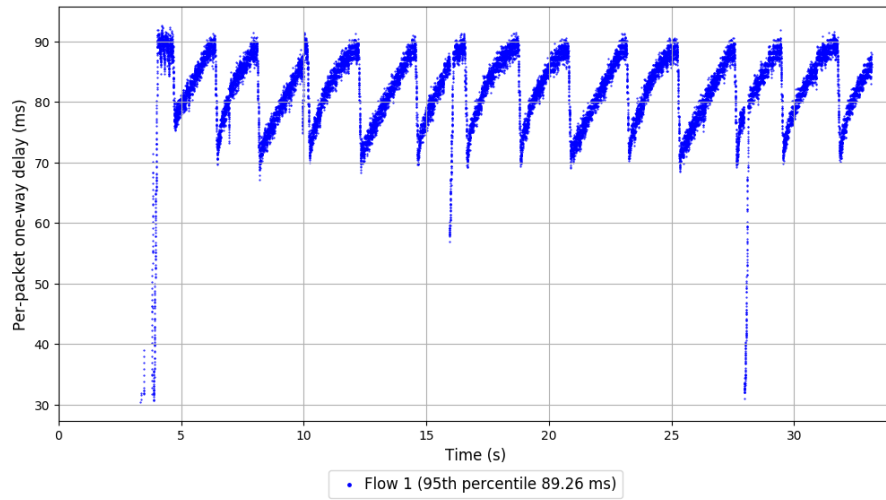
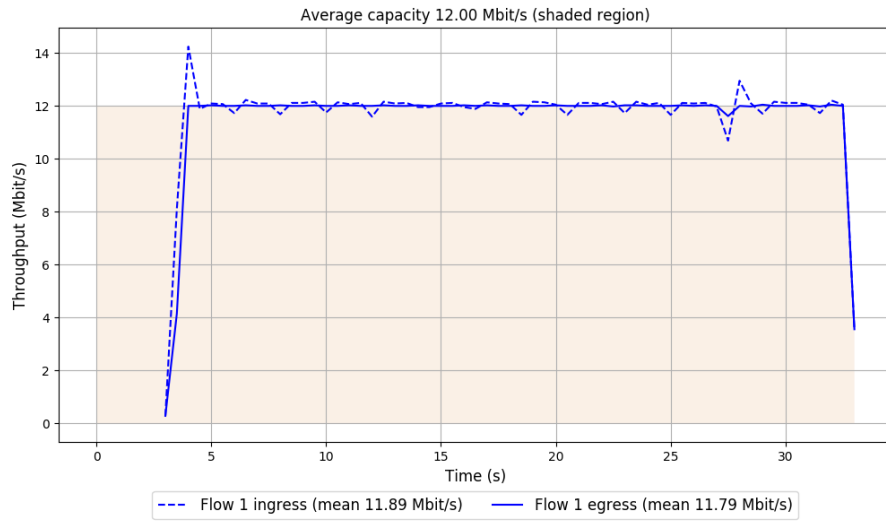
-- Flow 1:

Average throughput: 11.79 Mbit/s

95th percentile per-packet one-way delay: 89.258 ms

Loss rate: 0.93%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-27 11:33:42

End at: 2018-02-27 11:34:12

Below is generated by plot.py at 2018-02-27 12:39:51

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.79 Mbit/s (98.3% utilization)

95th percentile per-packet one-way delay: 89.202 ms

Loss rate: 0.93%

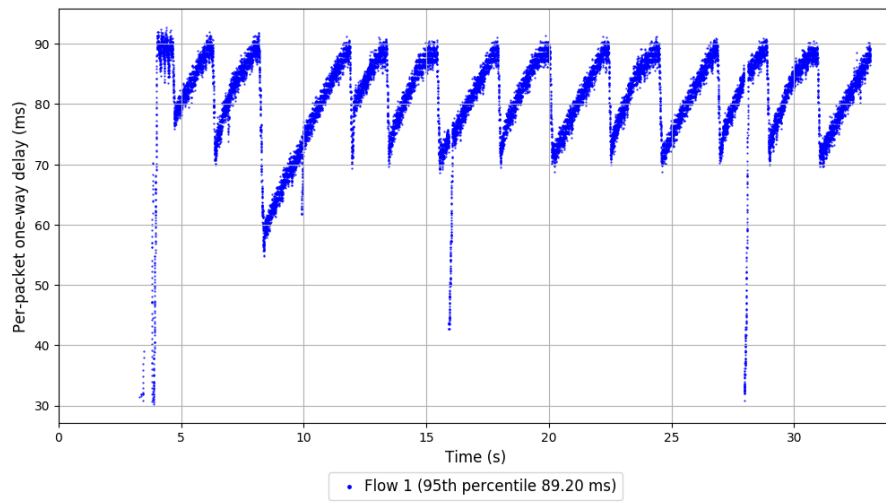
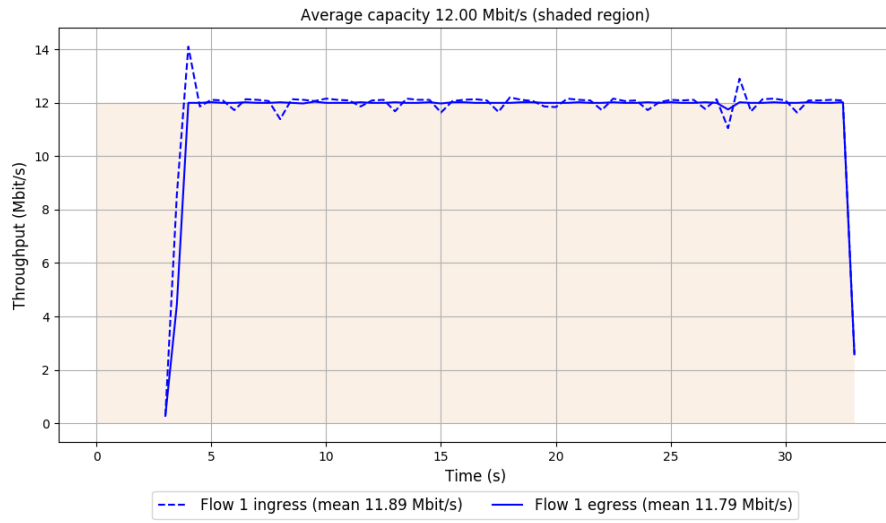
-- Flow 1:

Average throughput: 11.79 Mbit/s

95th percentile per-packet one-way delay: 89.202 ms

Loss rate: 0.93%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-27 11:43:58

End at: 2018-02-27 11:44:28

Below is generated by plot.py at 2018-02-27 12:39:52

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.79 Mbit/s (98.2% utilization)

95th percentile per-packet one-way delay: 89.196 ms

Loss rate: 0.92%

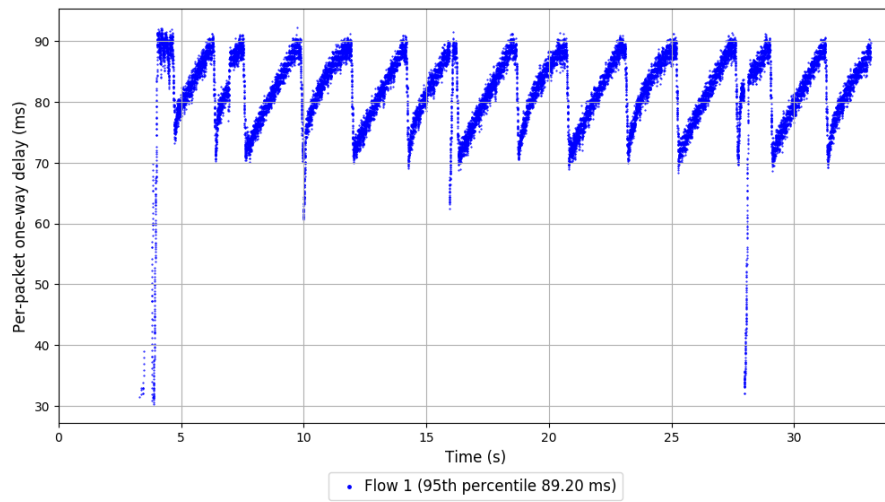
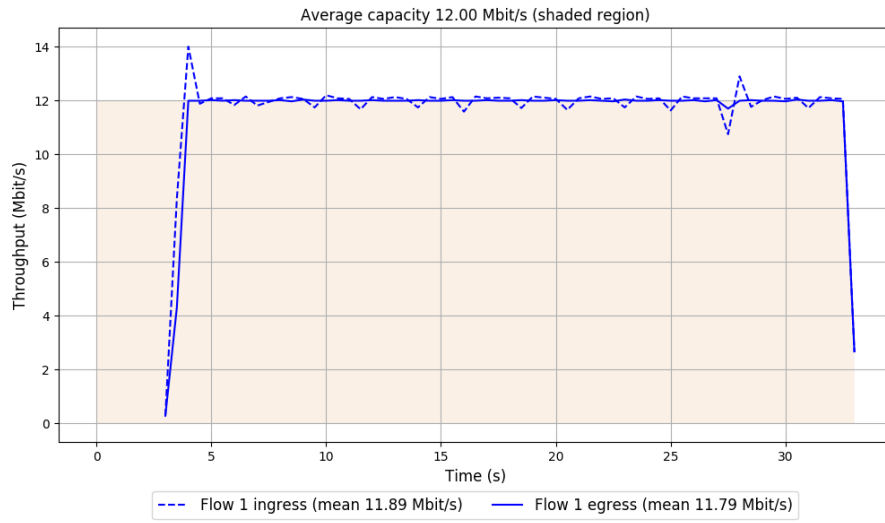
-- Flow 1:

Average throughput: 11.79 Mbit/s

95th percentile per-packet one-way delay: 89.196 ms

Loss rate: 0.92%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-27 11:54:14

End at: 2018-02-27 11:54:45

Below is generated by plot.py at 2018-02-27 12:39:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.79 Mbit/s (98.2% utilization)

95th percentile per-packet one-way delay: 89.211 ms

Loss rate: 0.93%

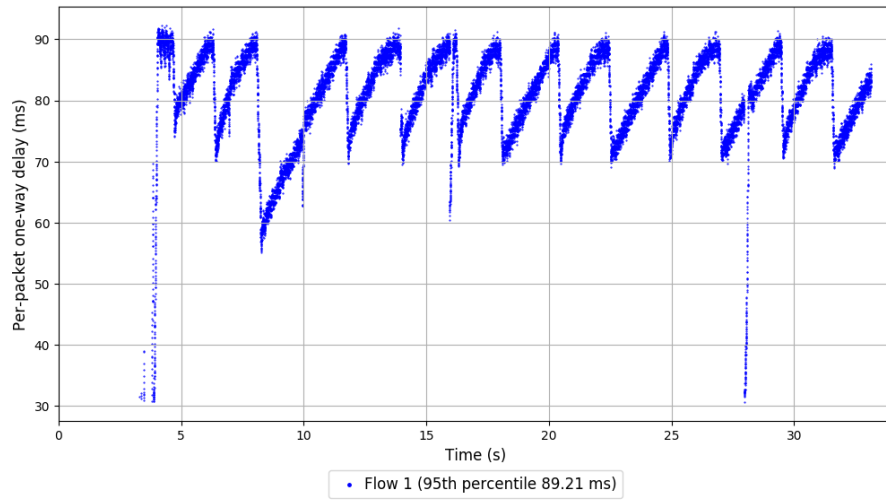
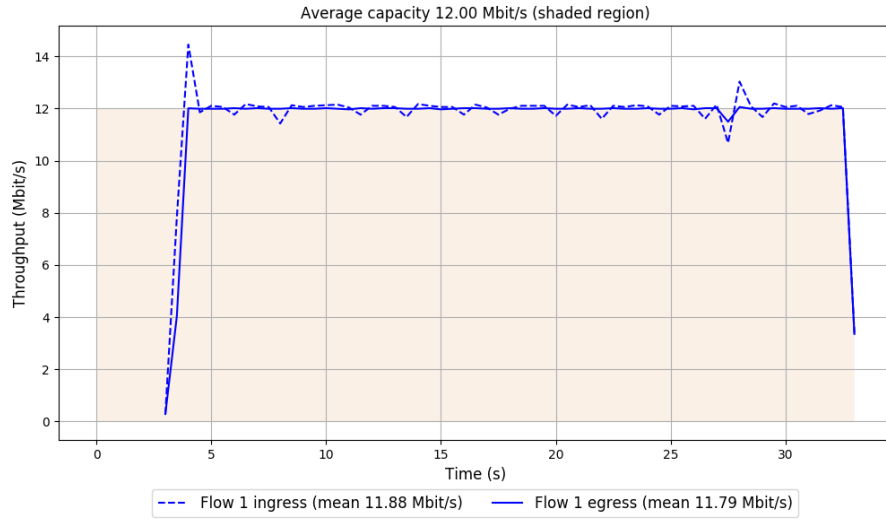
-- Flow 1:

Average throughput: 11.79 Mbit/s

95th percentile per-packet one-way delay: 89.211 ms

Loss rate: 0.93%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-27 12:04:31

End at: 2018-02-27 12:05:01

Below is generated by plot.py at 2018-02-27 12:39:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.77 Mbit/s (98.1% utilization)

95th percentile per-packet one-way delay: 89.386 ms

Loss rate: 0.88%

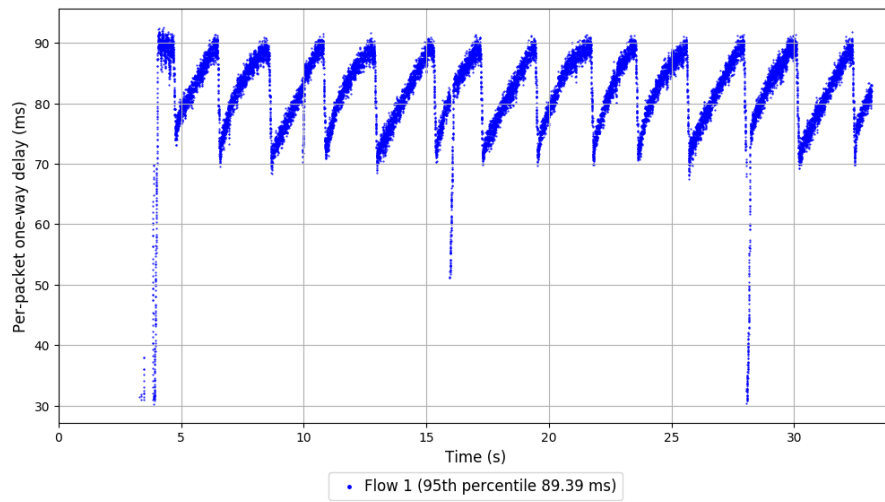
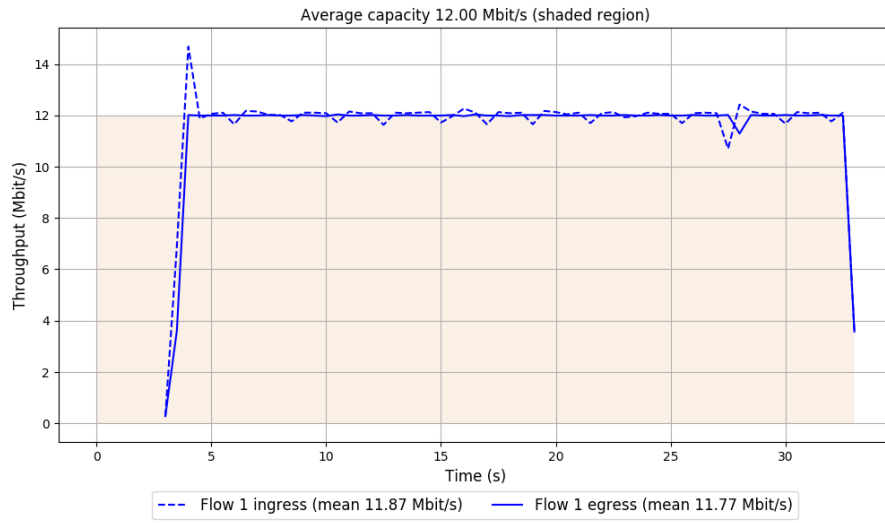
-- Flow 1:

Average throughput: 11.77 Mbit/s

95th percentile per-packet one-way delay: 89.386 ms

Loss rate: 0.88%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-27 12:14:48

End at: 2018-02-27 12:15:18

Below is generated by plot.py at 2018-02-27 12:39:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.78 Mbit/s (98.2% utilization)

95th percentile per-packet one-way delay: 89.275 ms

Loss rate: 0.93%

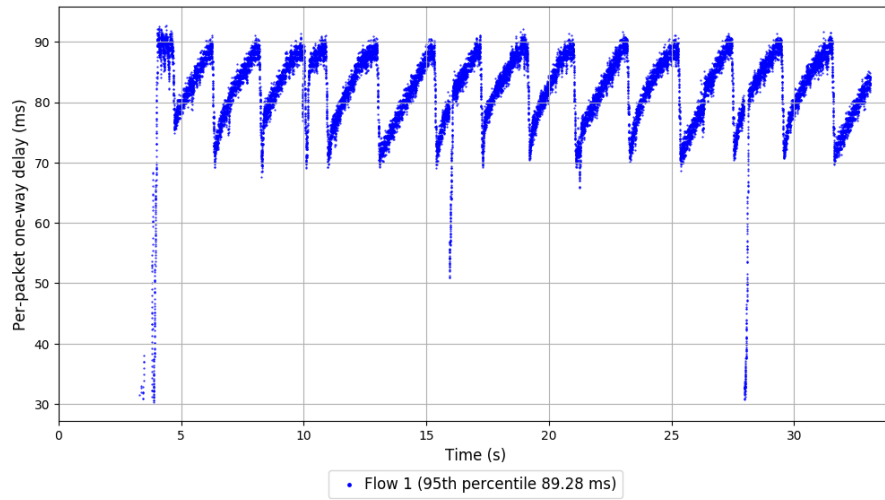
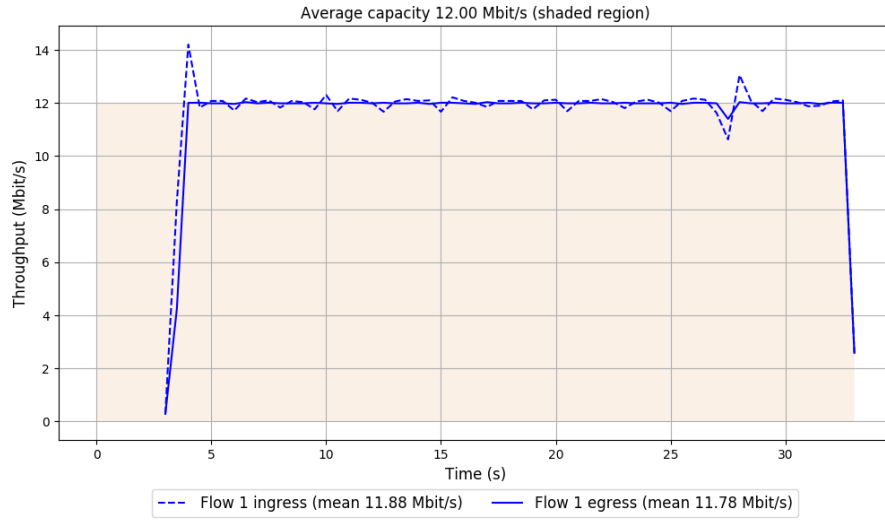
-- Flow 1:

Average throughput: 11.78 Mbit/s

95th percentile per-packet one-way delay: 89.275 ms

Loss rate: 0.93%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-27 12:25:05

End at: 2018-02-27 12:25:35

Below is generated by plot.py at 2018-02-27 12:40:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.79 Mbit/s (98.2% utilization)

95th percentile per-packet one-way delay: 89.298 ms

Loss rate: 0.93%

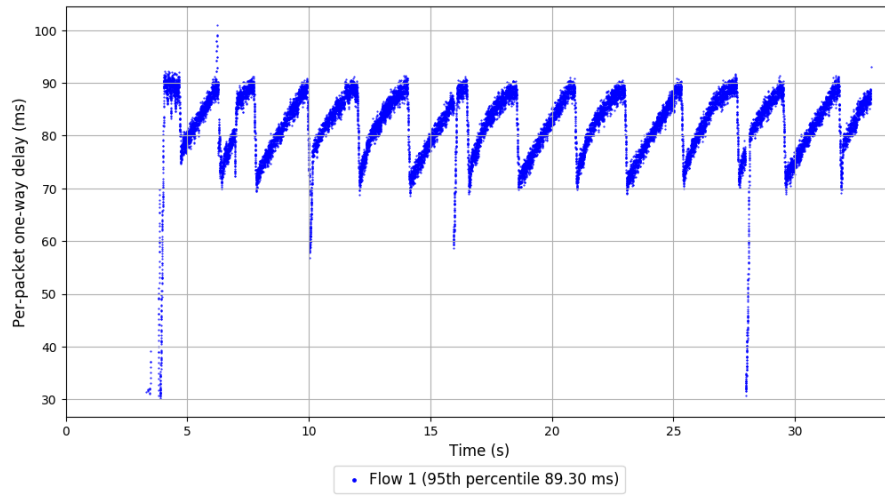
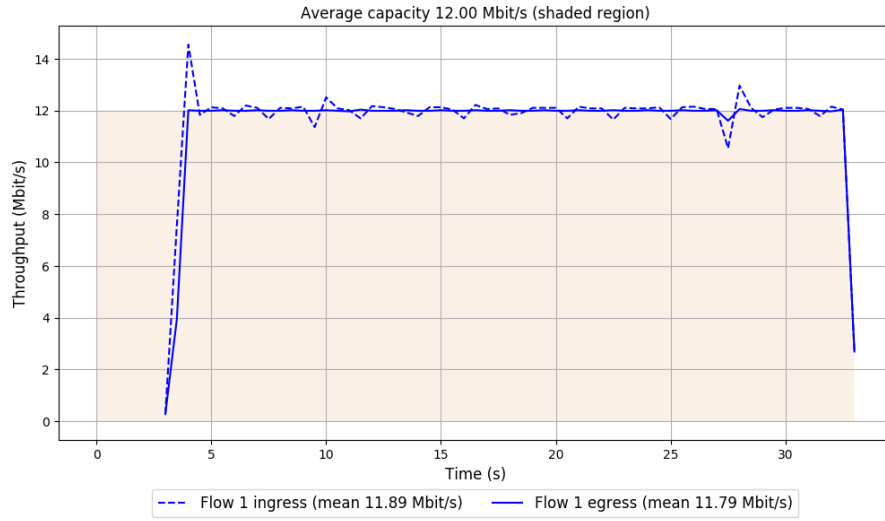
-- Flow 1:

Average throughput: 11.79 Mbit/s

95th percentile per-packet one-way delay: 89.298 ms

Loss rate: 0.93%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-02-27 12:35:22

End at: 2018-02-27 12:35:52

Below is generated by plot.py at 2018-02-27 12:40:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.80 Mbit/s (98.3% utilization)

95th percentile per-packet one-way delay: 89.181 ms

Loss rate: 0.90%

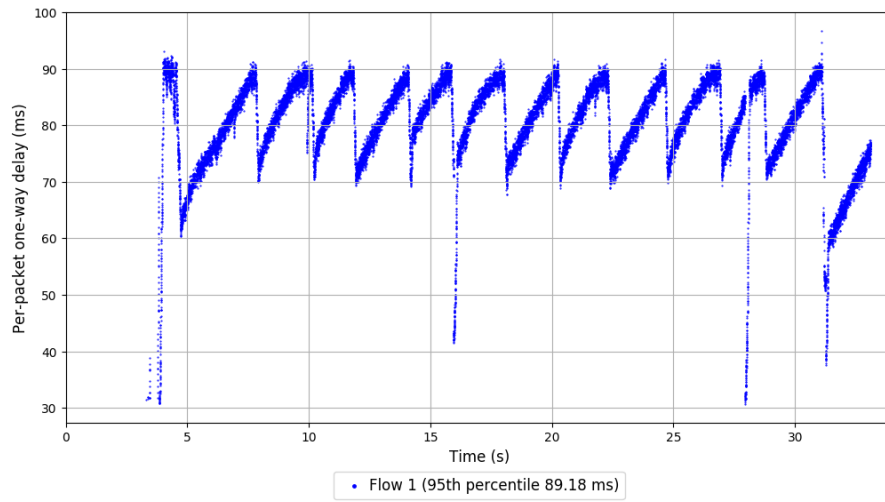
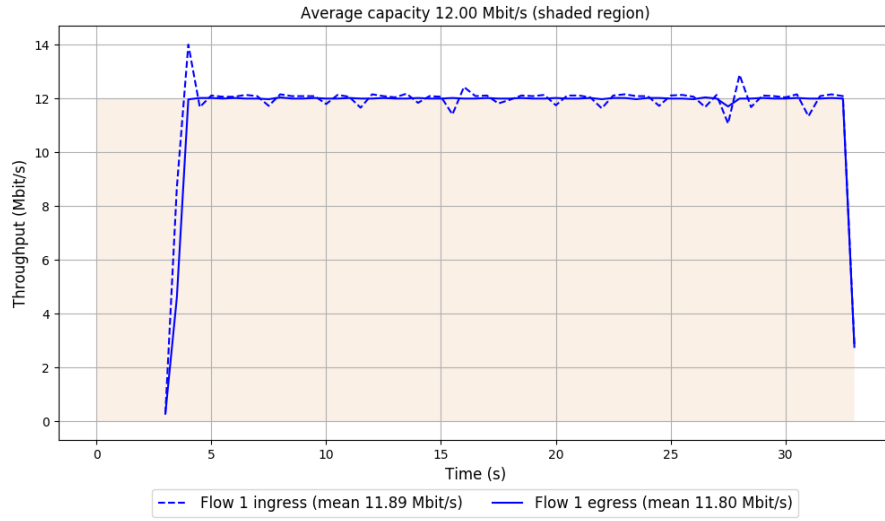
-- Flow 1:

Average throughput: 11.80 Mbit/s

95th percentile per-packet one-way delay: 89.181 ms

Loss rate: 0.90%

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2018-02-27 10:57:44

End at: 2018-02-27 10:58:14

Below is generated by plot.py at 2018-02-27 12:40:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 0.21 Mbit/s (1.8% utilization)

95th percentile per-packet one-way delay: 31.567 ms

Loss rate: 0.13%

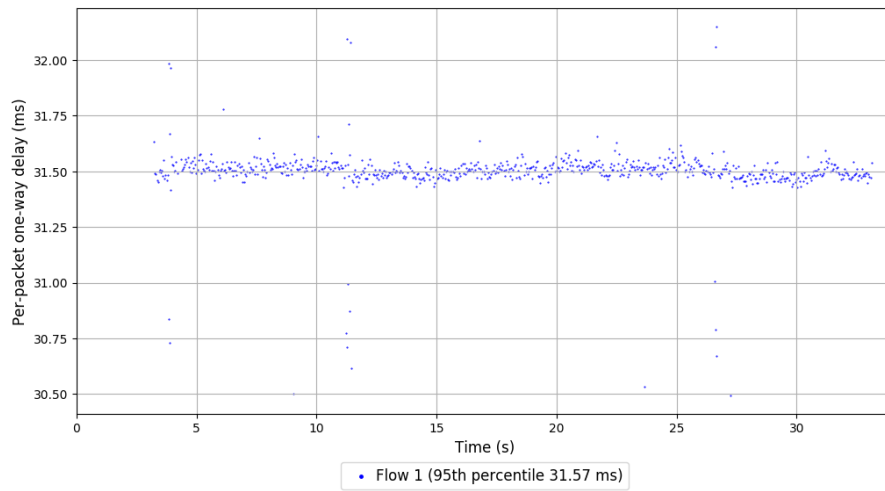
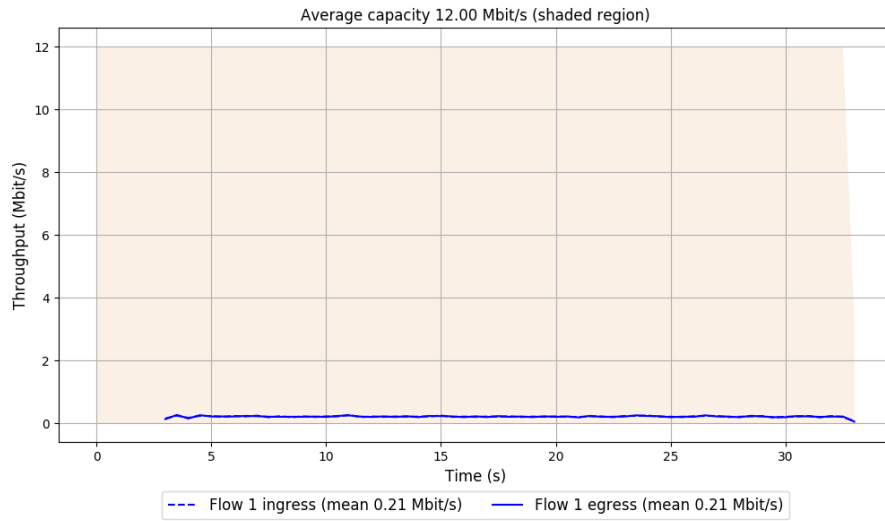
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.567 ms

Loss rate: 0.13%

Run 1: Report of SCReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2018-02-27 11:08:01

End at: 2018-02-27 11:08:31

Below is generated by plot.py at 2018-02-27 12:40:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 0.21 Mbit/s (1.8% utilization)

95th percentile per-packet one-way delay: 31.598 ms

Loss rate: 0.13%

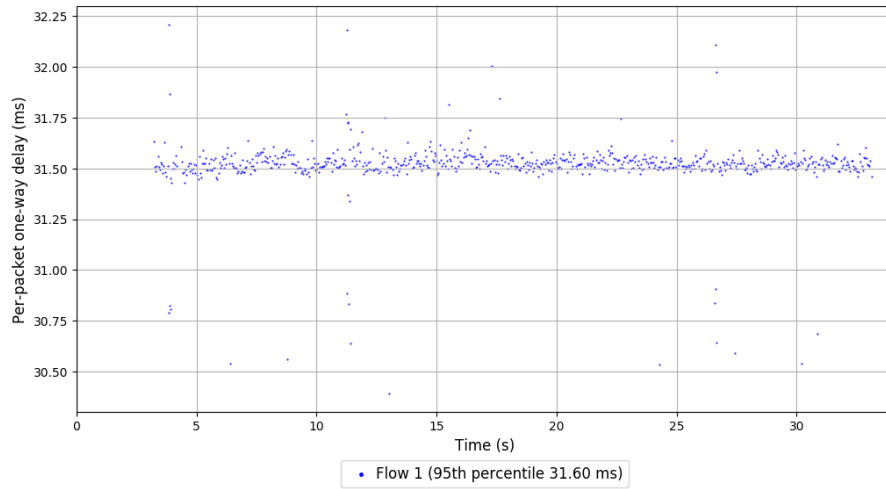
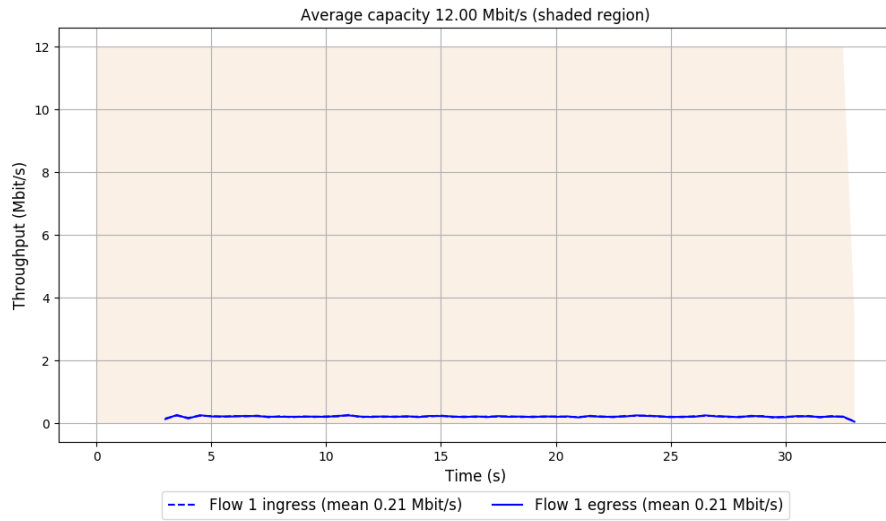
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.598 ms

Loss rate: 0.13%

Run 2: Report of SCReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-02-27 11:18:18

End at: 2018-02-27 11:18:48

Below is generated by plot.py at 2018-02-27 12:40:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 0.21 Mbit/s (1.8% utilization)

95th percentile per-packet one-way delay: 31.576 ms

Loss rate: 0.13%

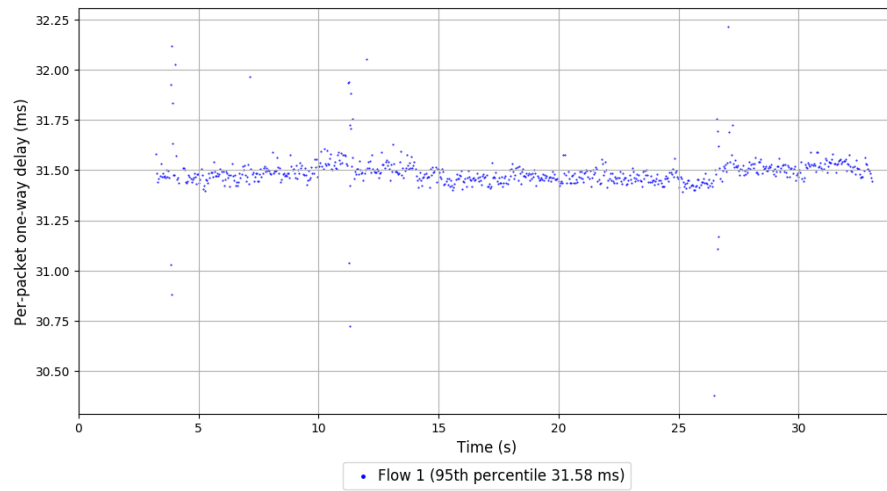
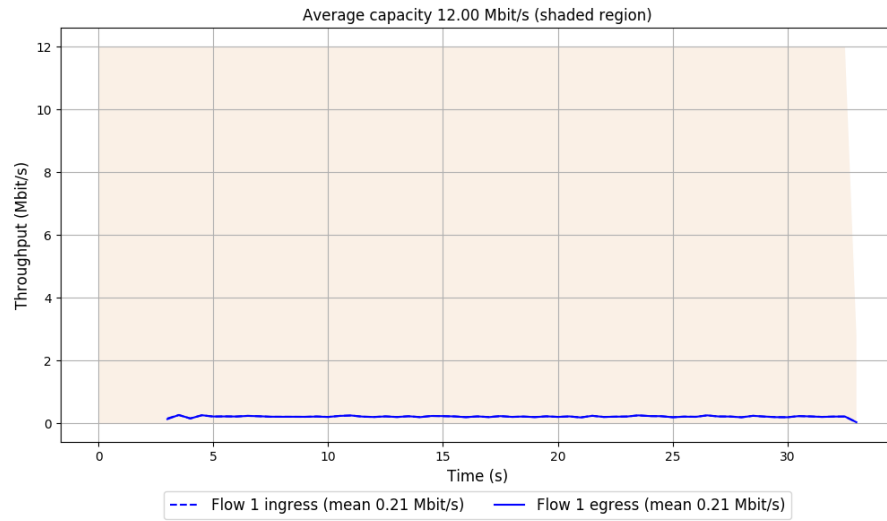
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.576 ms

Loss rate: 0.13%

Run 3: Report of SCReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-02-27 11:28:34

End at: 2018-02-27 11:29:04

Below is generated by plot.py at 2018-02-27 12:40:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 0.21 Mbit/s (1.8% utilization)

95th percentile per-packet one-way delay: 31.528 ms

Loss rate: 0.13%

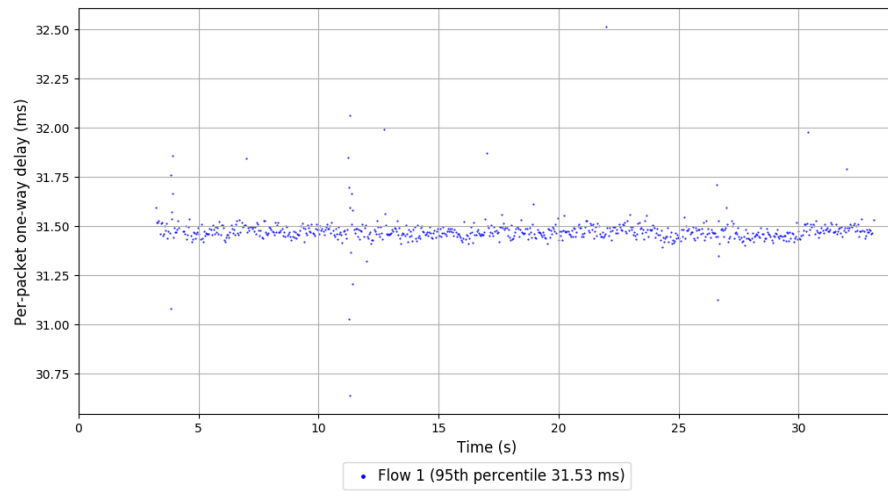
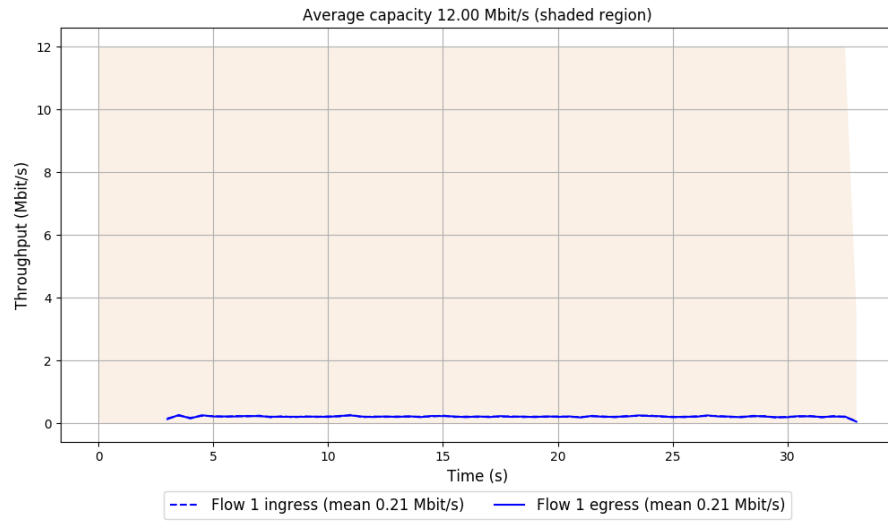
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.528 ms

Loss rate: 0.13%

Run 4: Report of SCReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-02-27 11:38:51

End at: 2018-02-27 11:39:21

Below is generated by plot.py at 2018-02-27 12:40:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 0.21 Mbit/s (1.8% utilization)

95th percentile per-packet one-way delay: 31.533 ms

Loss rate: 0.00%

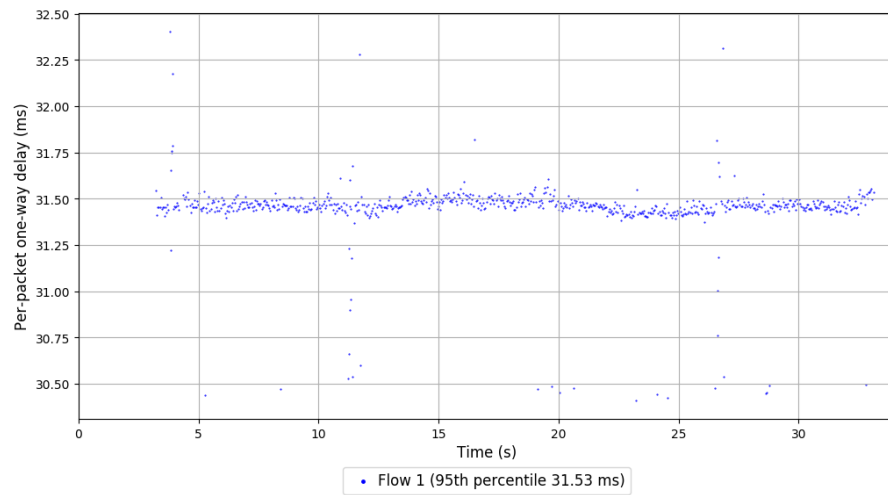
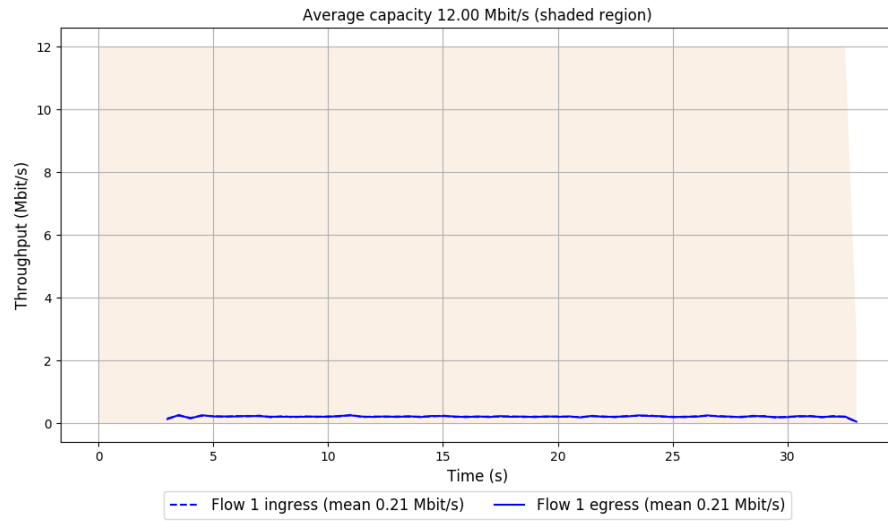
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.533 ms

Loss rate: 0.00%

Run 5: Report of SCReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-02-27 11:49:07

End at: 2018-02-27 11:49:37

Below is generated by plot.py at 2018-02-27 12:40:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 0.21 Mbit/s (1.8% utilization)

95th percentile per-packet one-way delay: 31.556 ms

Loss rate: 0.00%

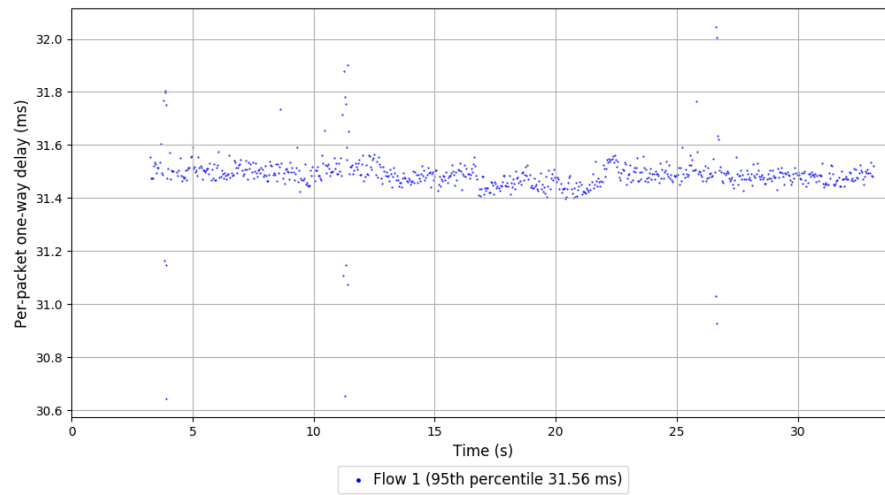
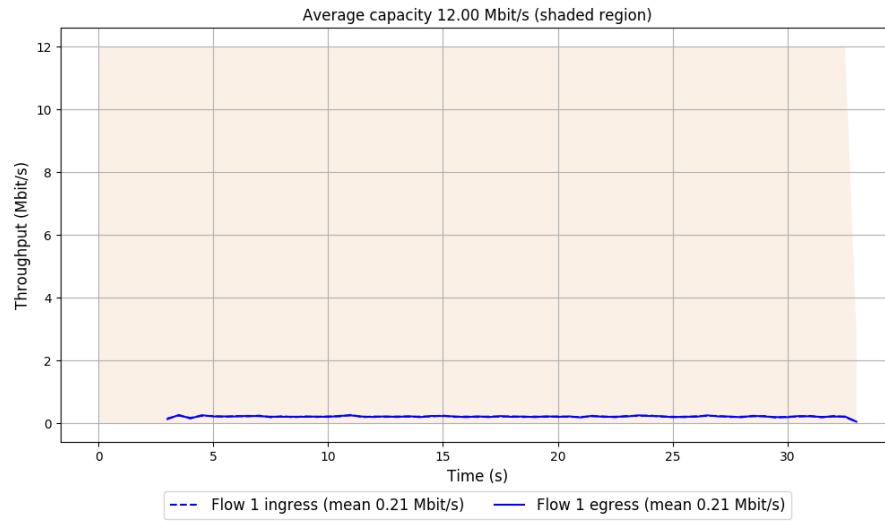
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.556 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-02-27 11:59:24

End at: 2018-02-27 11:59:54

Below is generated by plot.py at 2018-02-27 12:40:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 0.21 Mbit/s (1.8% utilization)

95th percentile per-packet one-way delay: 31.535 ms

Loss rate: 0.13%

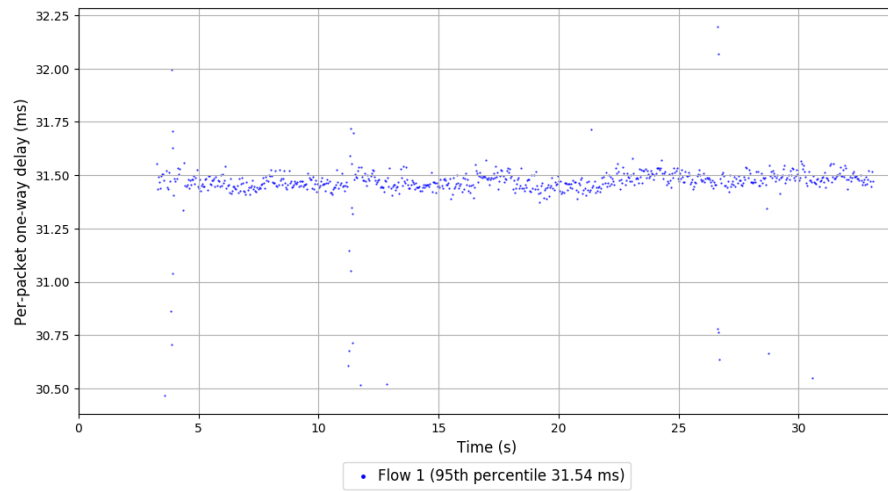
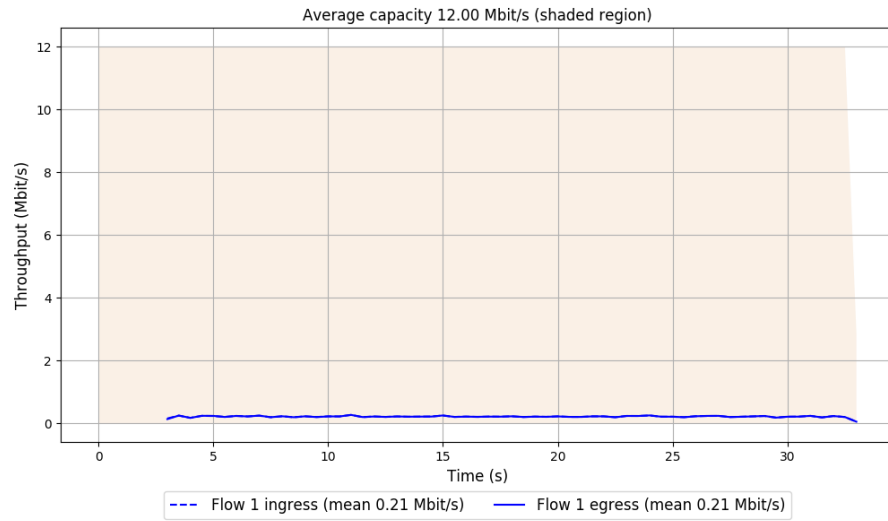
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.535 ms

Loss rate: 0.13%

Run 7: Report of SCReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-02-27 12:09:41

End at: 2018-02-27 12:10:11

Below is generated by plot.py at 2018-02-27 12:40:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 0.21 Mbit/s (1.8% utilization)

95th percentile per-packet one-way delay: 31.561 ms

Loss rate: 0.00%

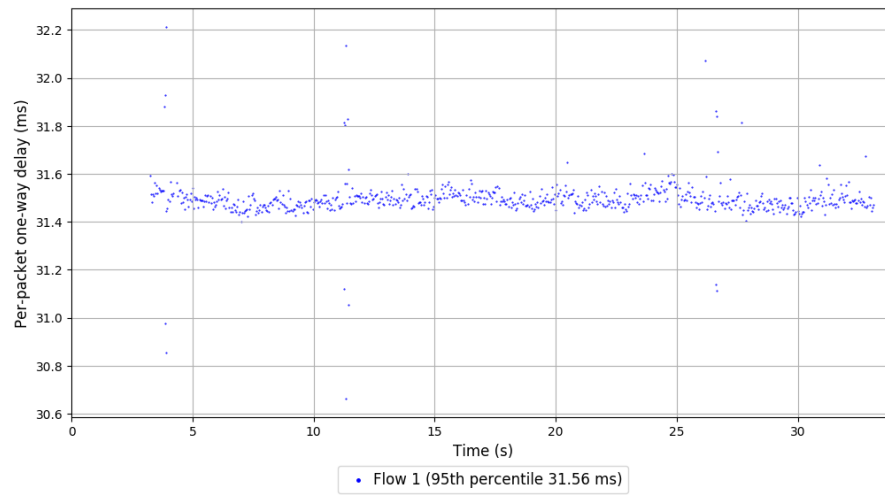
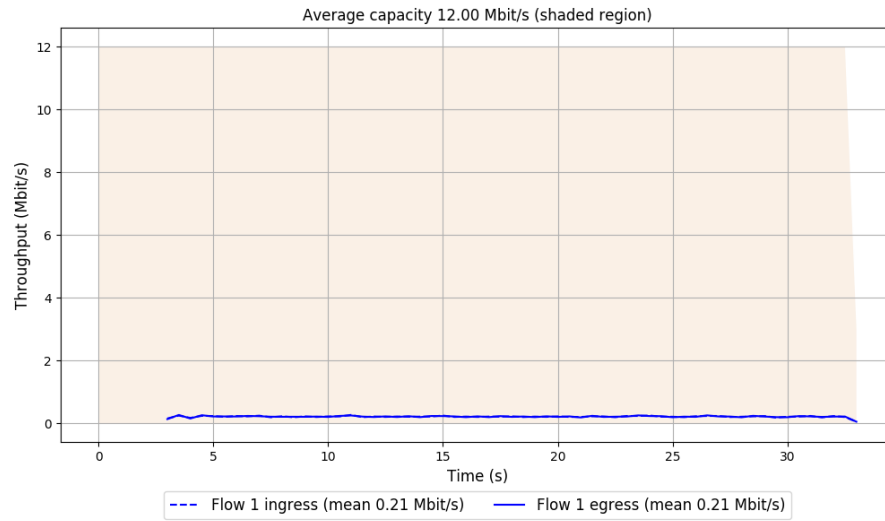
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.561 ms

Loss rate: 0.00%

Run 8: Report of SCReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-02-27 12:19:58

End at: 2018-02-27 12:20:28

Below is generated by plot.py at 2018-02-27 12:40:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 0.21 Mbit/s (1.8% utilization)

95th percentile per-packet one-way delay: 31.604 ms

Loss rate: 0.13%

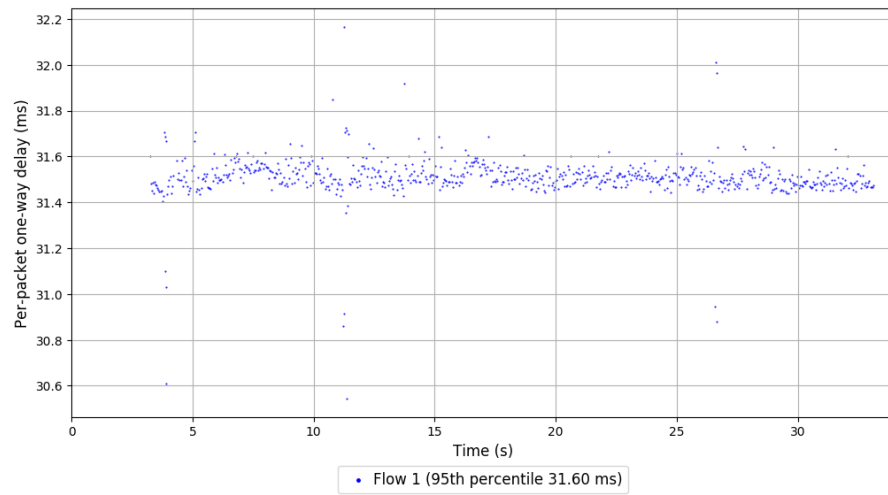
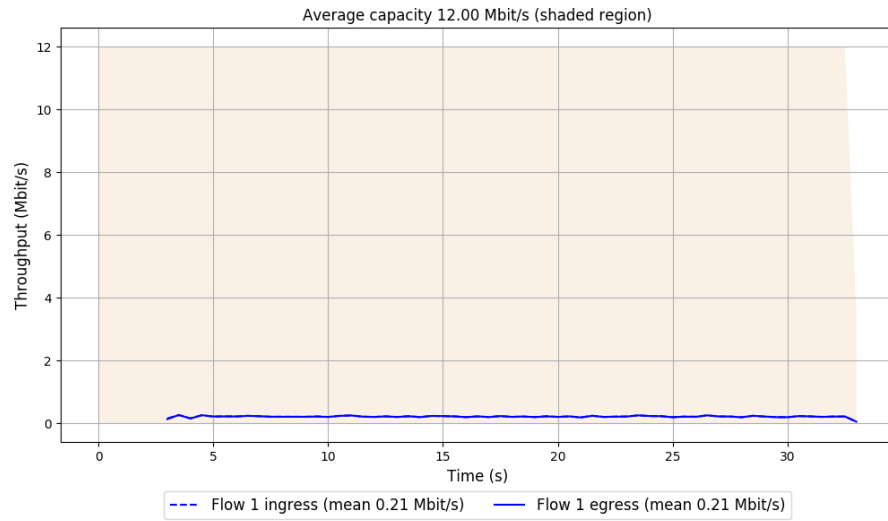
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.604 ms

Loss rate: 0.13%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-02-27 12:30:15

End at: 2018-02-27 12:30:45

Below is generated by plot.py at 2018-02-27 12:40:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 0.21 Mbit/s (1.8% utilization)

95th percentile per-packet one-way delay: 31.608 ms

Loss rate: 0.13%

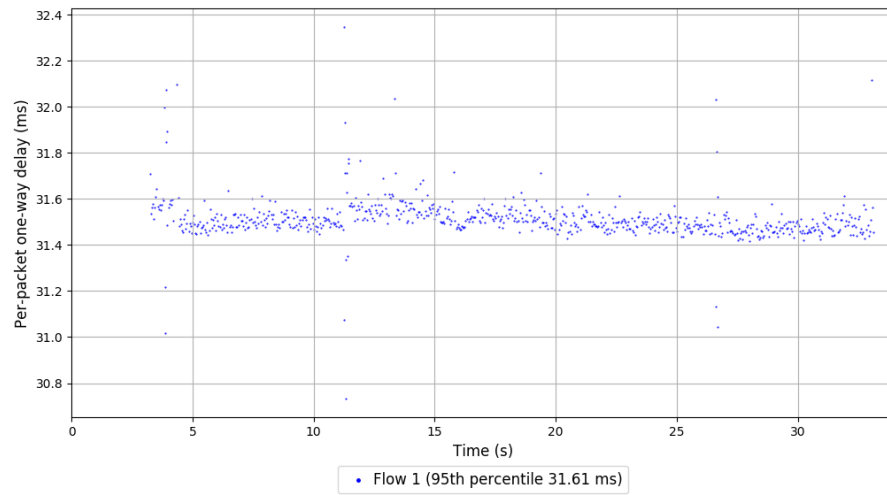
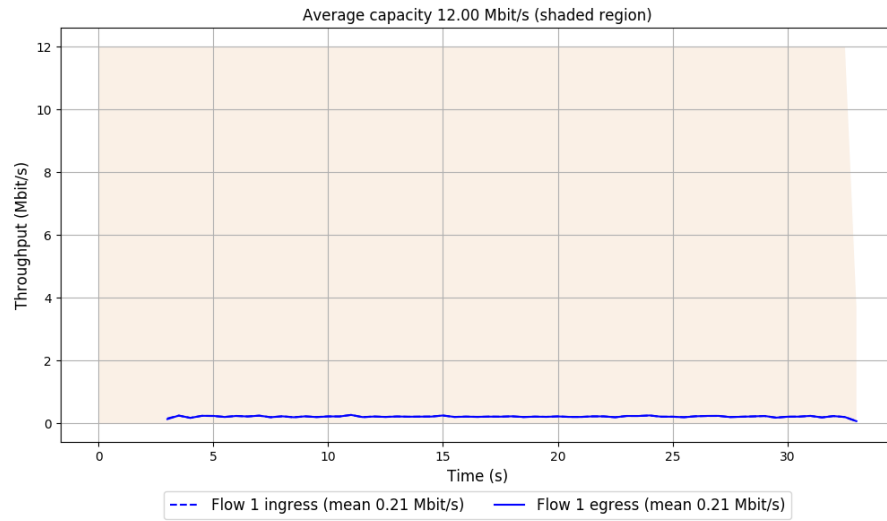
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.608 ms

Loss rate: 0.13%

Run 10: Report of SCReAM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-02-27 11:01:10

End at: 2018-02-27 11:01:40

Below is generated by plot.py at 2018-02-27 12:40:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 2.36 Mbit/s (19.6% utilization)

95th percentile per-packet one-way delay: 36.857 ms

Loss rate: 0.07%

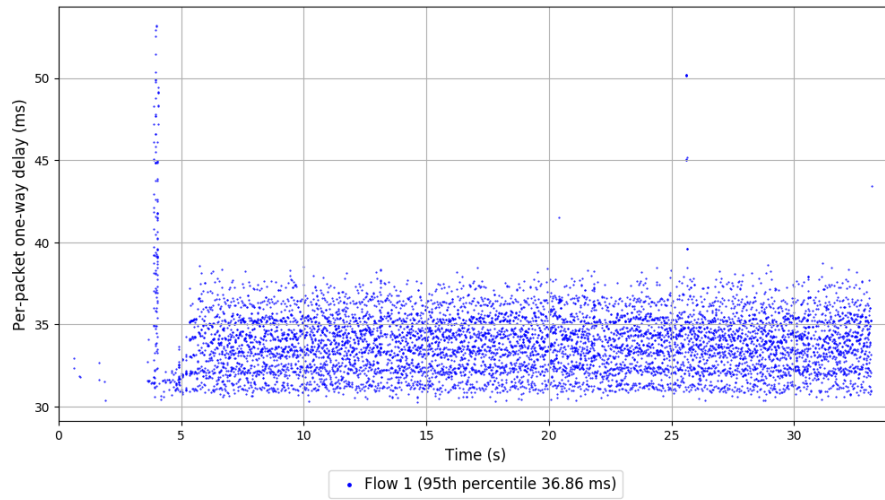
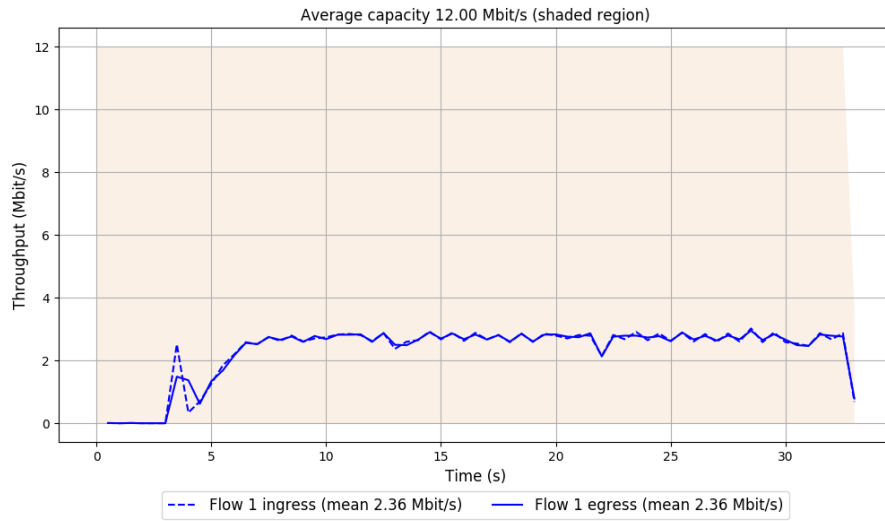
-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 36.857 ms

Loss rate: 0.07%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

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

End at: 2018-02-27 11:11:57

Below is generated by plot.py at 2018-02-27 12:40:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 2.36 Mbit/s (19.7% utilization)

95th percentile per-packet one-way delay: 37.328 ms

Loss rate: 0.15%

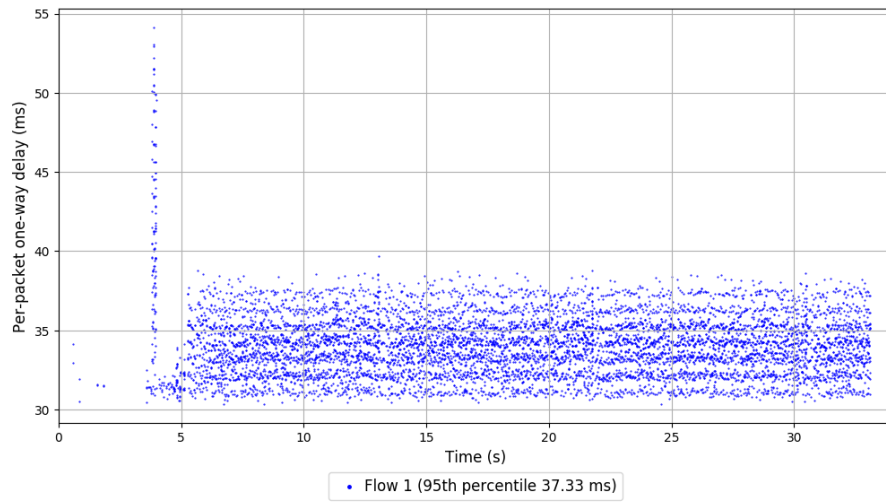
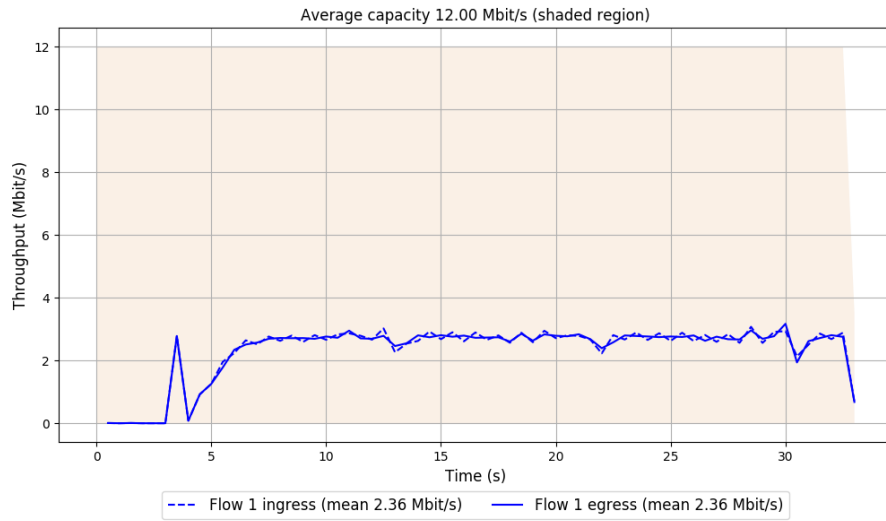
-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 37.328 ms

Loss rate: 0.15%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-27 11:21:43

End at: 2018-02-27 11:22:13

Below is generated by plot.py at 2018-02-27 12:40:20

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 2.37 Mbit/s (19.7% utilization)

95th percentile per-packet one-way delay: 36.677 ms

Loss rate: 0.09%

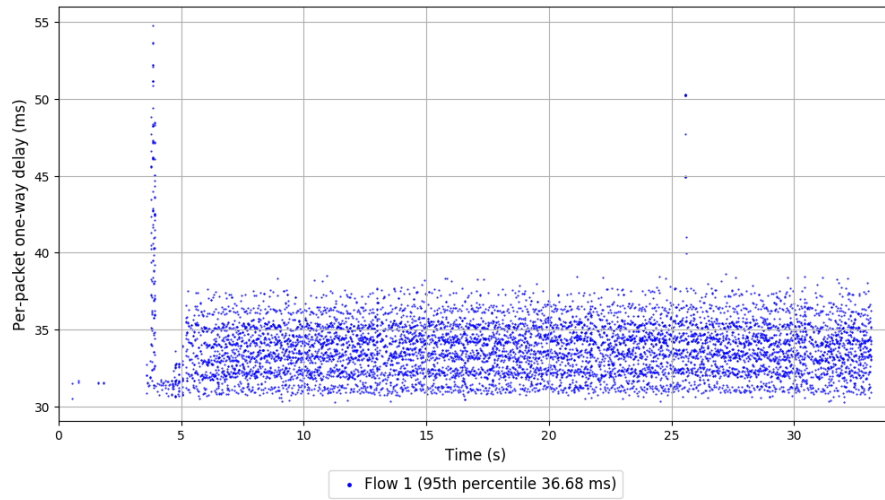
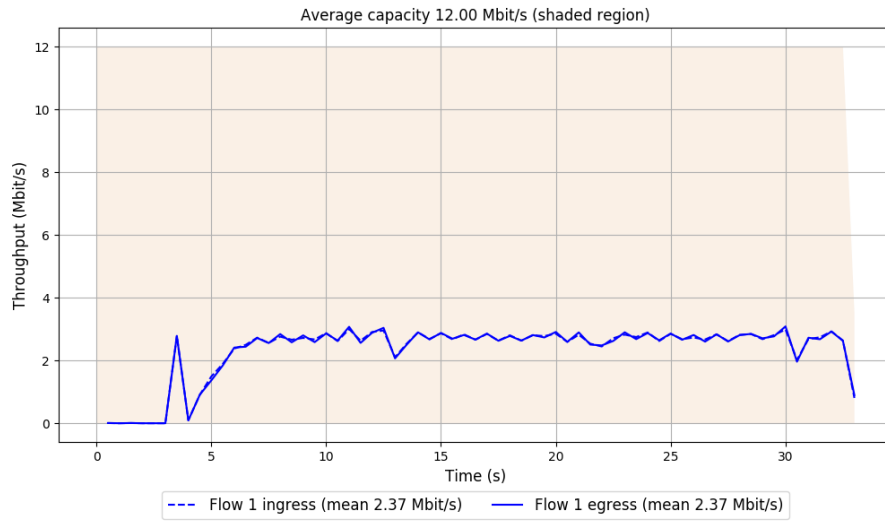
-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 36.677 ms

Loss rate: 0.09%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-27 11:32:00

End at: 2018-02-27 11:32:30

Below is generated by plot.py at 2018-02-27 12:40:22

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 2.37 Mbit/s (19.7% utilization)

95th percentile per-packet one-way delay: 37.450 ms

Loss rate: 0.14%

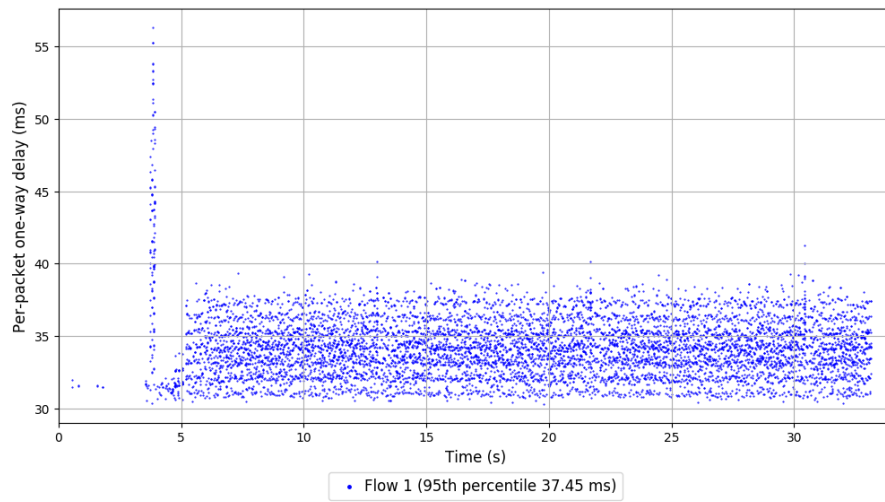
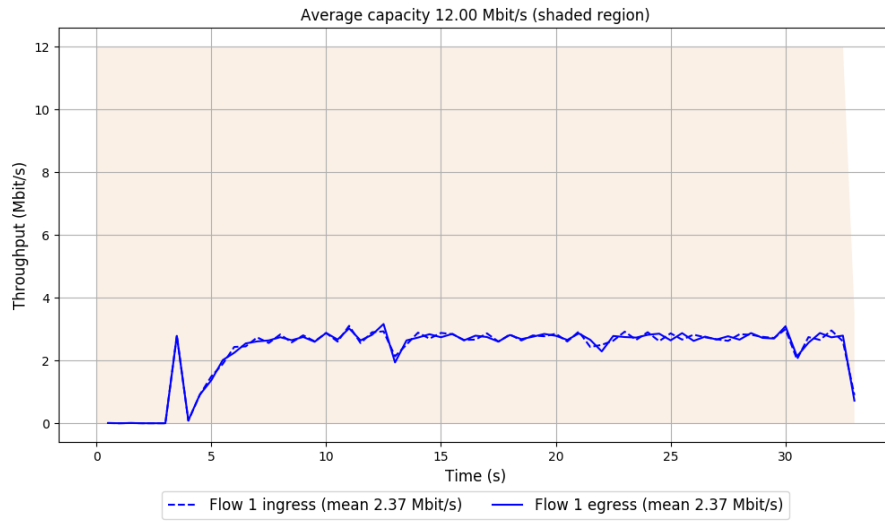
-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 37.450 ms

Loss rate: 0.14%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-27 11:42:16

End at: 2018-02-27 11:42:46

Below is generated by plot.py at 2018-02-27 12:40:22

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 2.37 Mbit/s (19.7% utilization)

95th percentile per-packet one-way delay: 37.271 ms

Loss rate: 0.13%

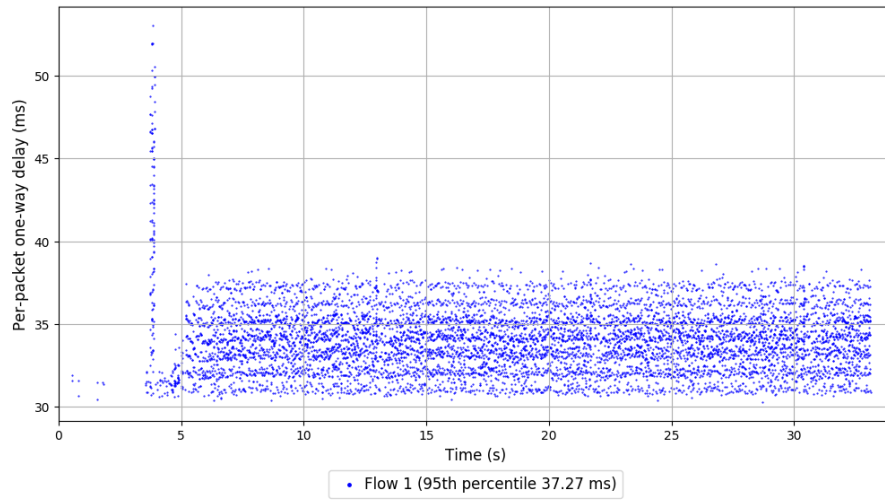
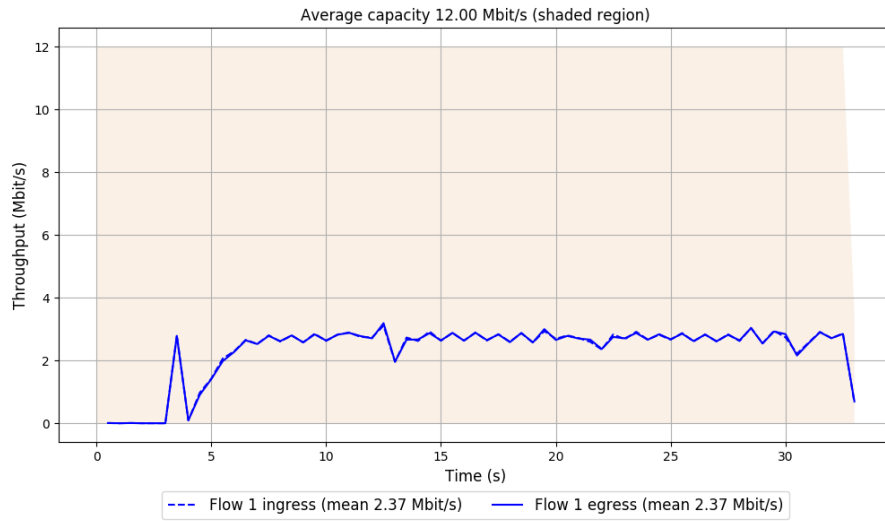
-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 37.271 ms

Loss rate: 0.13%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-27 11:52:33

End at: 2018-02-27 11:53:03

Below is generated by plot.py at 2018-02-27 12:40:23

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 2.37 Mbit/s (19.7% utilization)

95th percentile per-packet one-way delay: 37.463 ms

Loss rate: 0.15%

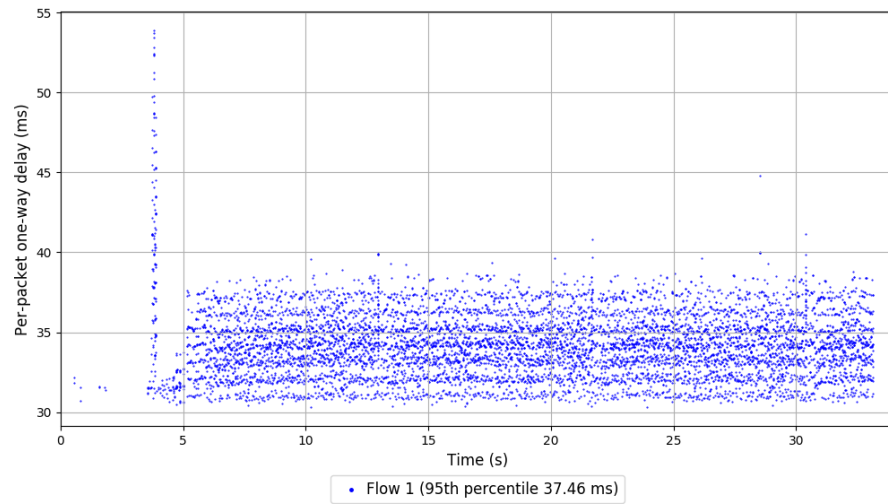
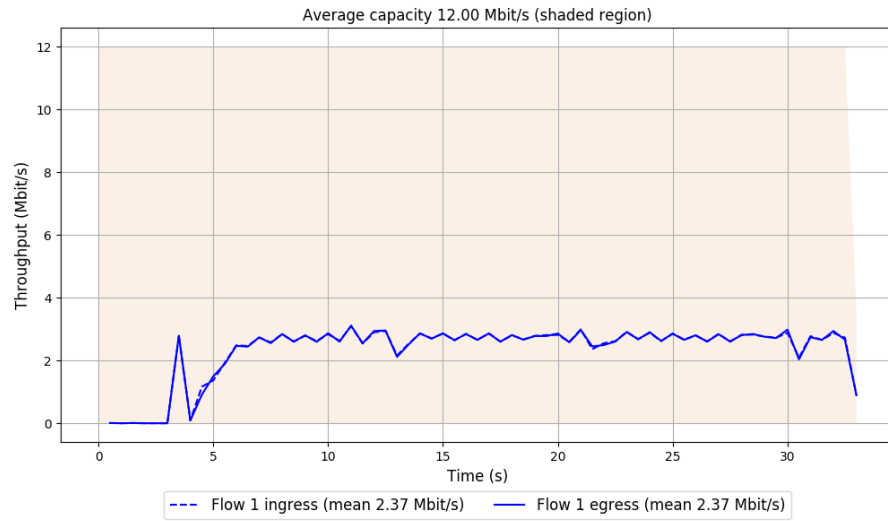
-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 37.463 ms

Loss rate: 0.15%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-27 12:02:49

End at: 2018-02-27 12:03:19

Below is generated by plot.py at 2018-02-27 12:40:29

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 2.37 Mbit/s (19.7% utilization)

95th percentile per-packet one-way delay: 37.459 ms

Loss rate: 0.14%

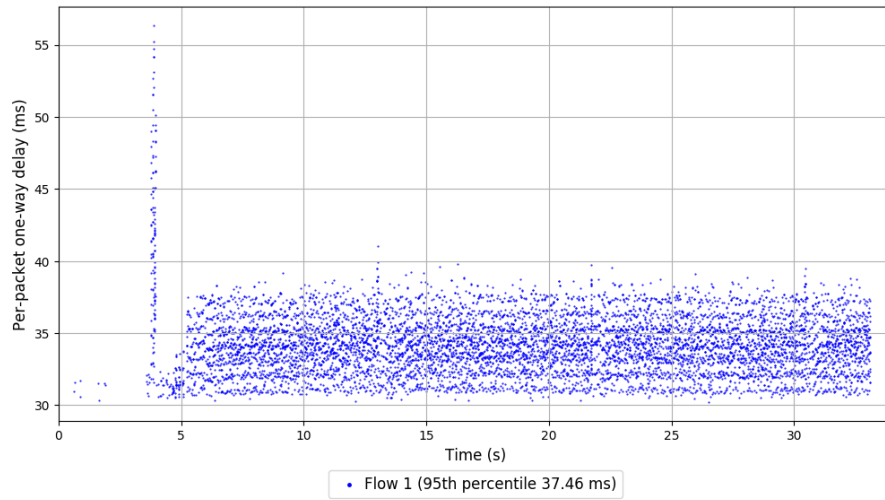
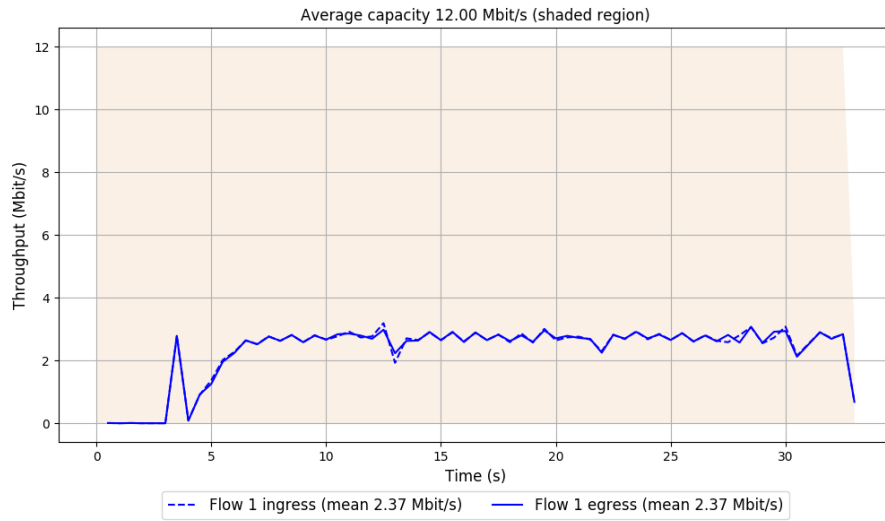
-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 37.459 ms

Loss rate: 0.14%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

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

End at: 2018-02-27 12:13:36

Below is generated by plot.py at 2018-02-27 12:40:29

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 2.37 Mbit/s (19.7% utilization)

95th percentile per-packet one-way delay: 37.324 ms

Loss rate: 0.14%

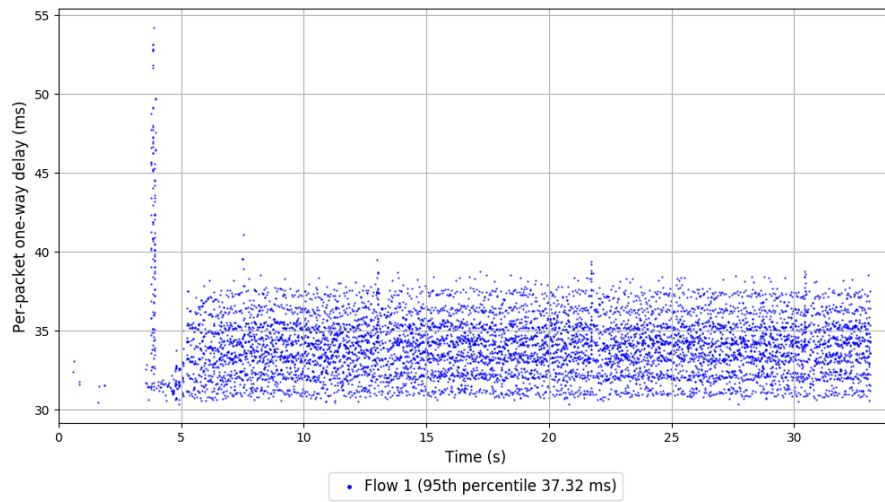
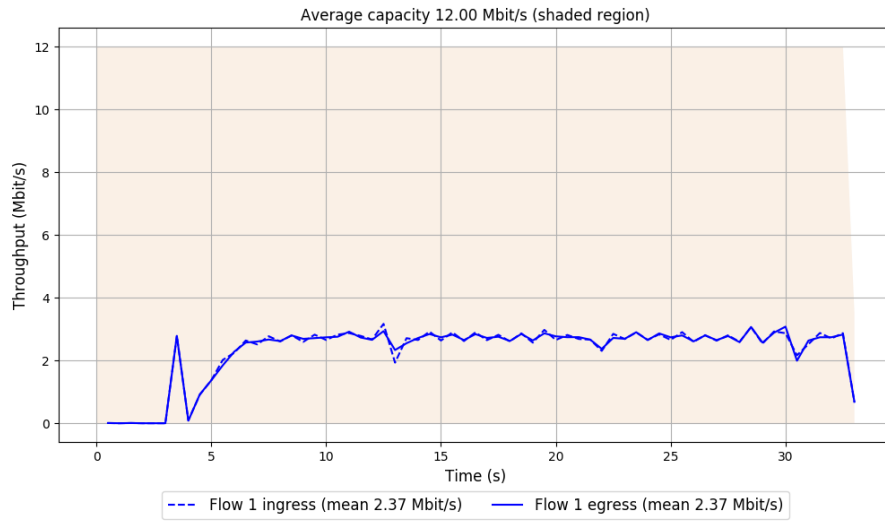
-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 37.324 ms

Loss rate: 0.14%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-27 12:23:23

End at: 2018-02-27 12:23:53

Below is generated by plot.py at 2018-02-27 12:40:29

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 2.36 Mbit/s (19.6% utilization)

95th percentile per-packet one-way delay: 37.274 ms

Loss rate: 0.15%

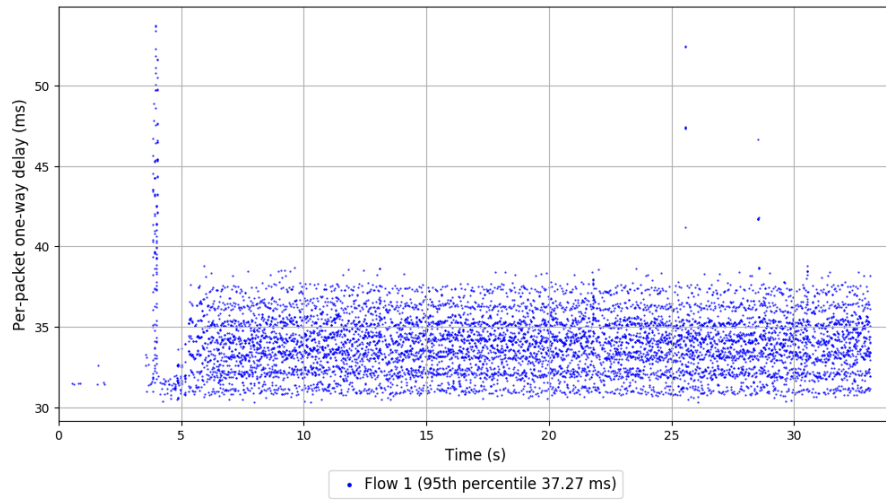
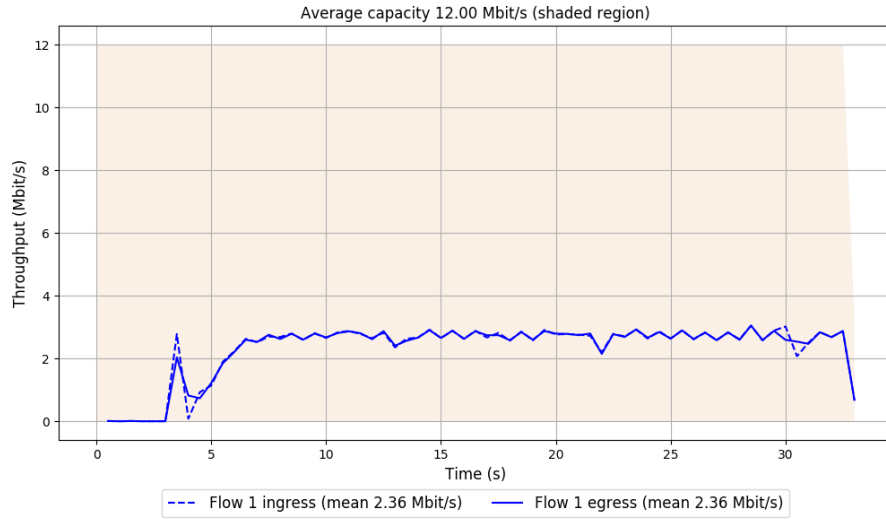
-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 37.274 ms

Loss rate: 0.15%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-27 12:33:40

End at: 2018-02-27 12:34:10

Below is generated by plot.py at 2018-02-27 12:40:29

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 2.37 Mbit/s (19.7% utilization)

95th percentile per-packet one-way delay: 36.288 ms

Loss rate: 0.09%

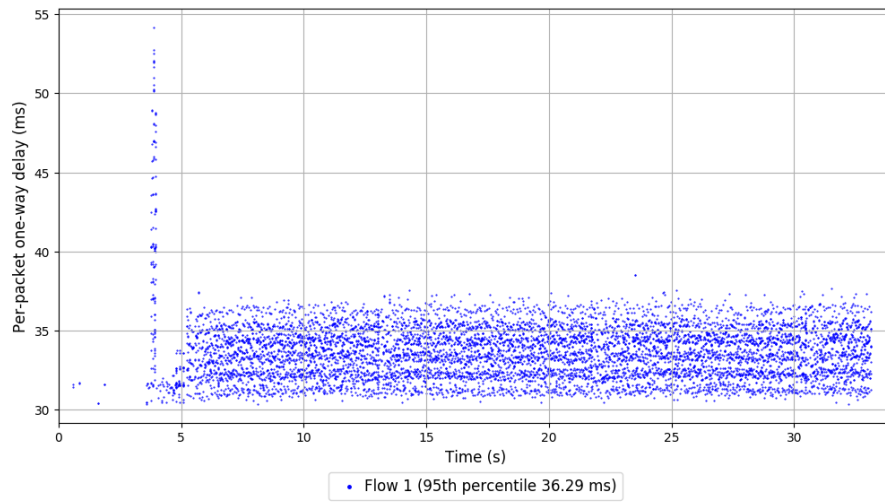
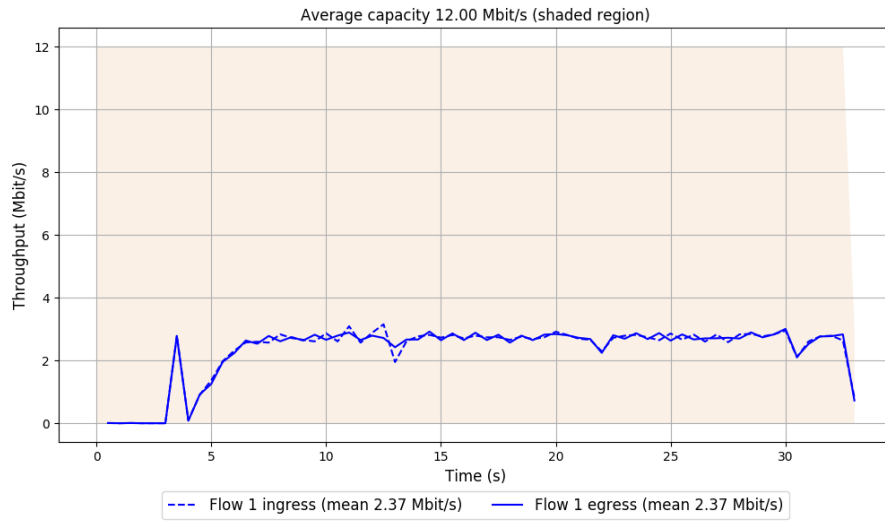
-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 36.288 ms

Loss rate: 0.09%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-02-27 11:01:43

End at: 2018-02-27 11:02:13

Below is generated by plot.py at 2018-02-27 12:40:37

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 6.41 Mbit/s (53.4% utilization)

95th percentile per-packet one-way delay: 54.997 ms

Loss rate: 0.14%

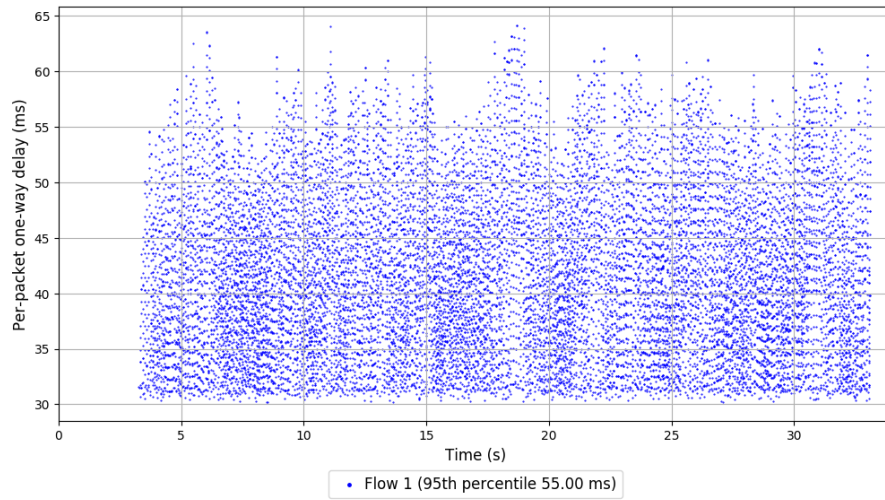
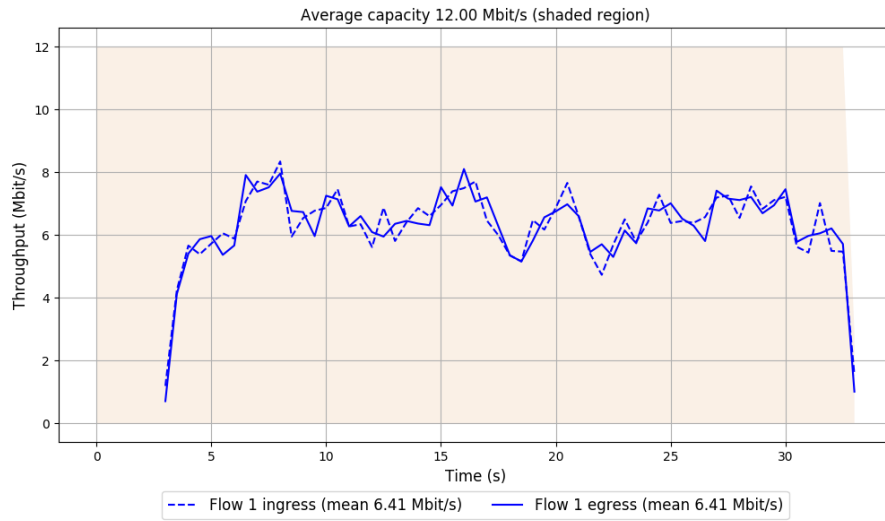
-- Flow 1:

Average throughput: 6.41 Mbit/s

95th percentile per-packet one-way delay: 54.997 ms

Loss rate: 0.14%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-27 11:12:00

End at: 2018-02-27 11:12:30

Below is generated by plot.py at 2018-02-27 12:40:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 6.61 Mbit/s (55.1% utilization)

95th percentile per-packet one-way delay: 55.096 ms

Loss rate: 0.19%

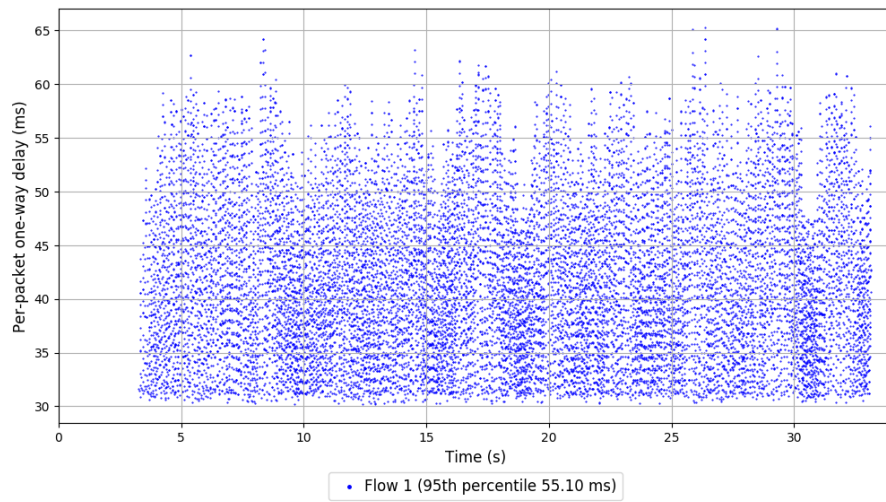
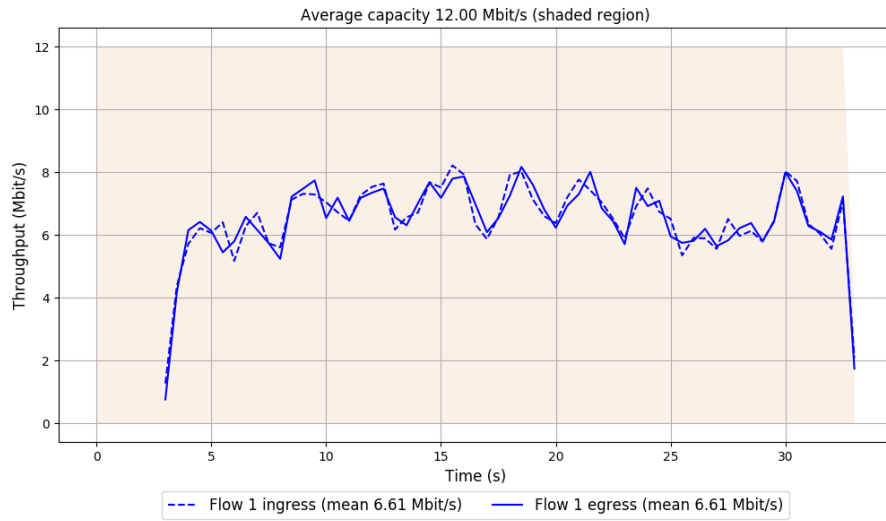
-- Flow 1:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 55.096 ms

Loss rate: 0.19%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-27 11:22:17

End at: 2018-02-27 11:22:47

Below is generated by plot.py at 2018-02-27 12:40:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 6.43 Mbit/s (53.6% utilization)

95th percentile per-packet one-way delay: 55.521 ms

Loss rate: 0.16%

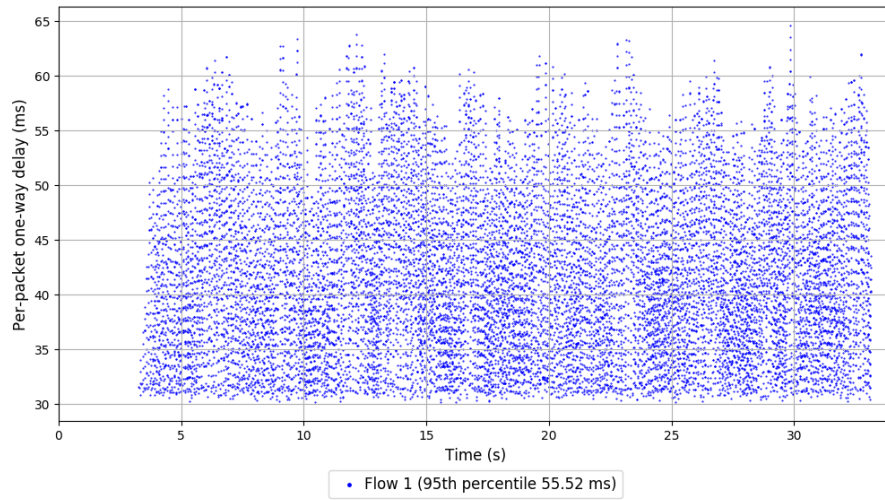
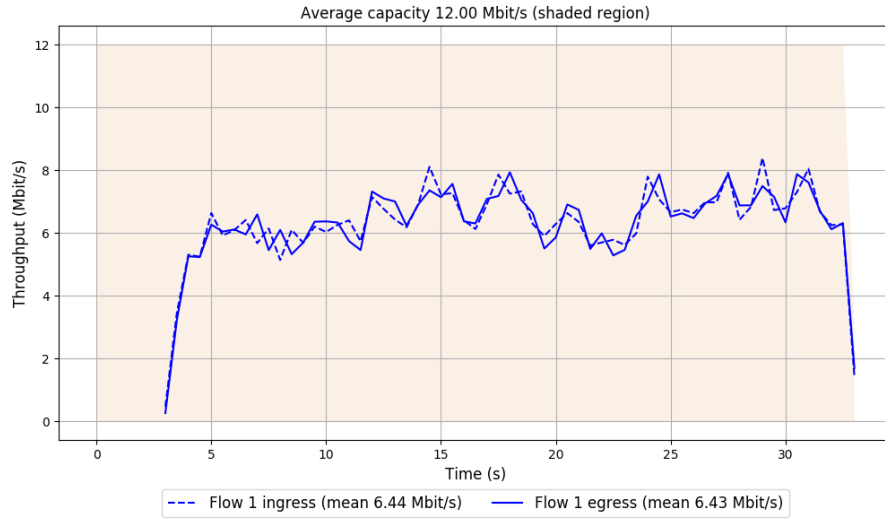
-- Flow 1:

Average throughput: 6.43 Mbit/s

95th percentile per-packet one-way delay: 55.521 ms

Loss rate: 0.16%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-27 11:32:33

End at: 2018-02-27 11:33:03

Below is generated by plot.py at 2018-02-27 12:40:39

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 6.35 Mbit/s (52.9% utilization)

95th percentile per-packet one-way delay: 54.980 ms

Loss rate: 0.13%

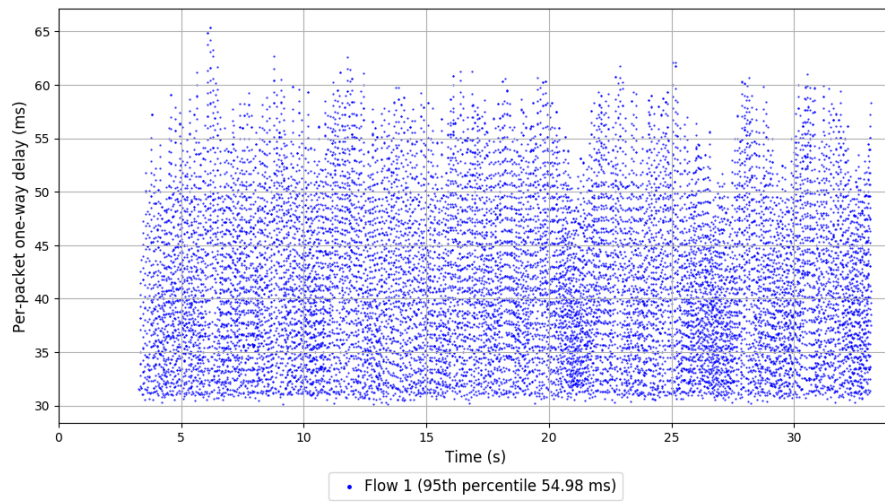
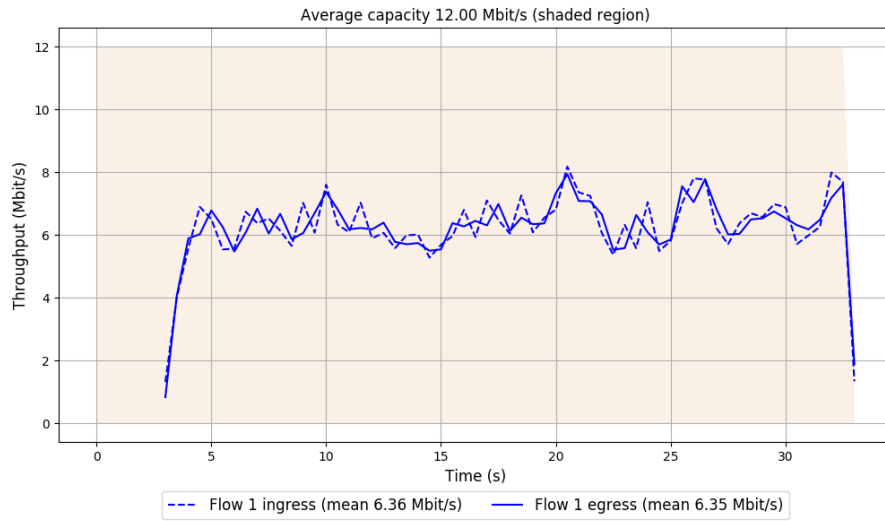
-- Flow 1:

Average throughput: 6.35 Mbit/s

95th percentile per-packet one-way delay: 54.980 ms

Loss rate: 0.13%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-27 11:42:50

End at: 2018-02-27 11:43:20

Below is generated by plot.py at 2018-02-27 12:40:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 6.59 Mbit/s (54.9% utilization)

95th percentile per-packet one-way delay: 54.635 ms

Loss rate: 0.19%

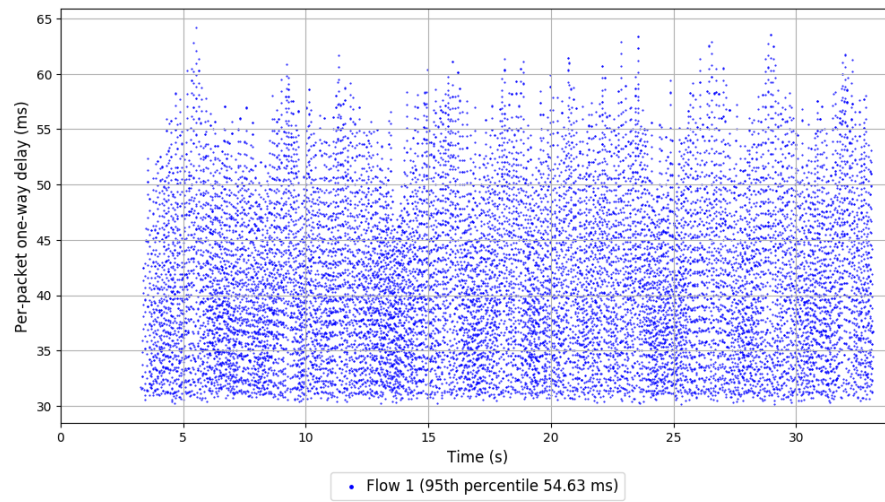
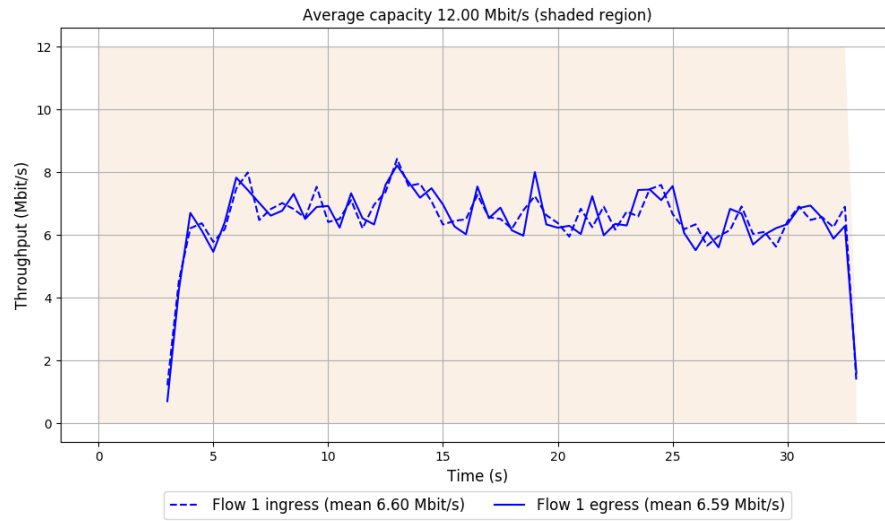
-- Flow 1:

Average throughput: 6.59 Mbit/s

95th percentile per-packet one-way delay: 54.635 ms

Loss rate: 0.19%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-27 11:53:06

End at: 2018-02-27 11:53:36

Below is generated by plot.py at 2018-02-27 12:40:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 6.63 Mbit/s (55.3% utilization)

95th percentile per-packet one-way delay: 54.503 ms

Loss rate: 0.00%

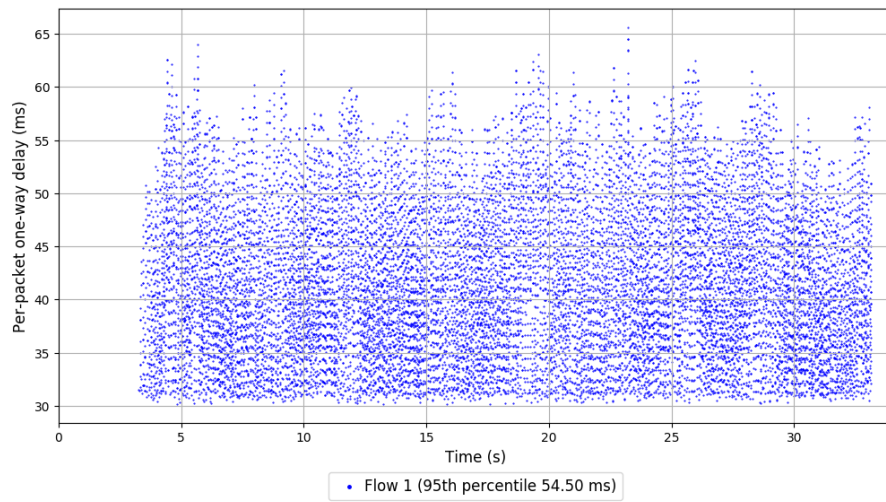
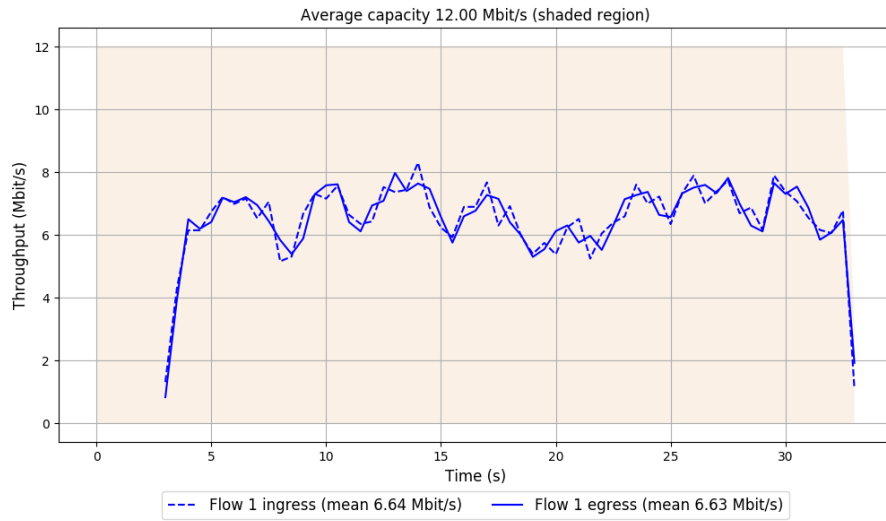
-- Flow 1:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 54.503 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-27 12:03:23

End at: 2018-02-27 12:03:53

Below is generated by plot.py at 2018-02-27 12:40:46

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 6.65 Mbit/s (55.4% utilization)

95th percentile per-packet one-way delay: 54.152 ms

Loss rate: 0.20%

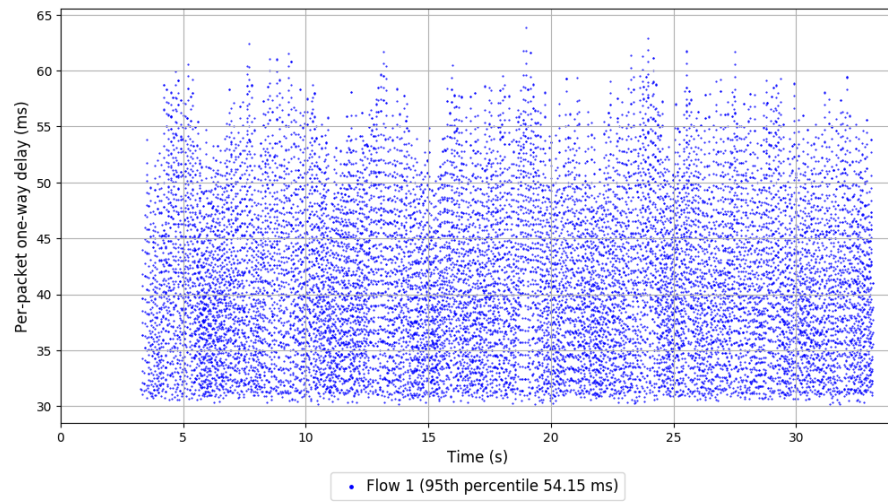
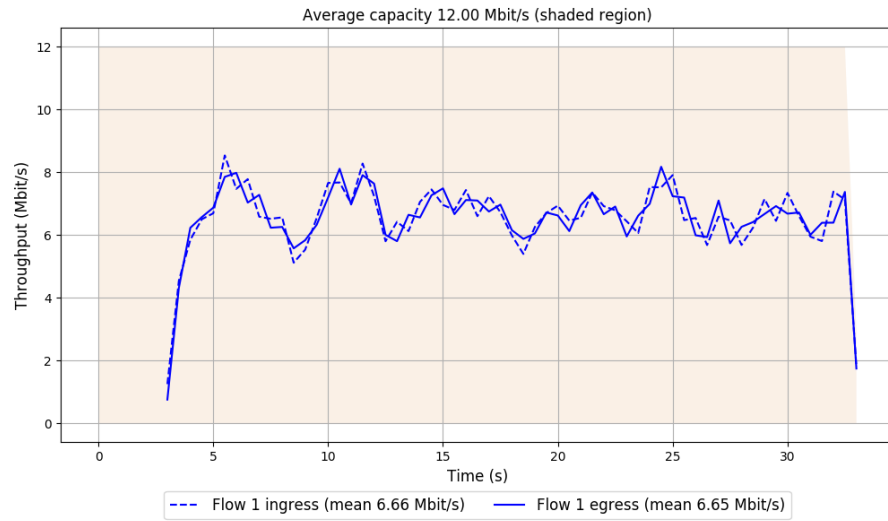
-- Flow 1:

Average throughput: 6.65 Mbit/s

95th percentile per-packet one-way delay: 54.152 ms

Loss rate: 0.20%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-27 12:13:40

End at: 2018-02-27 12:14:10

Below is generated by plot.py at 2018-02-27 12:40:46

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 6.34 Mbit/s (52.9% utilization)

95th percentile per-packet one-way delay: 55.635 ms

Loss rate: 0.13%

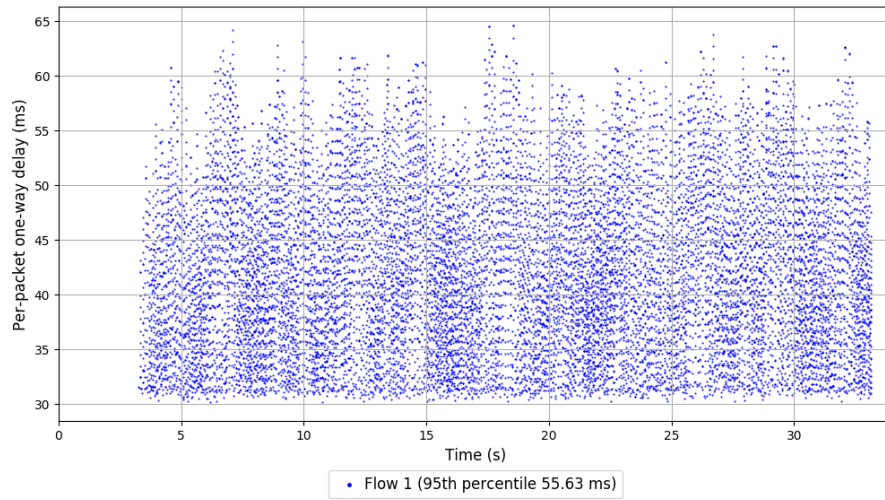
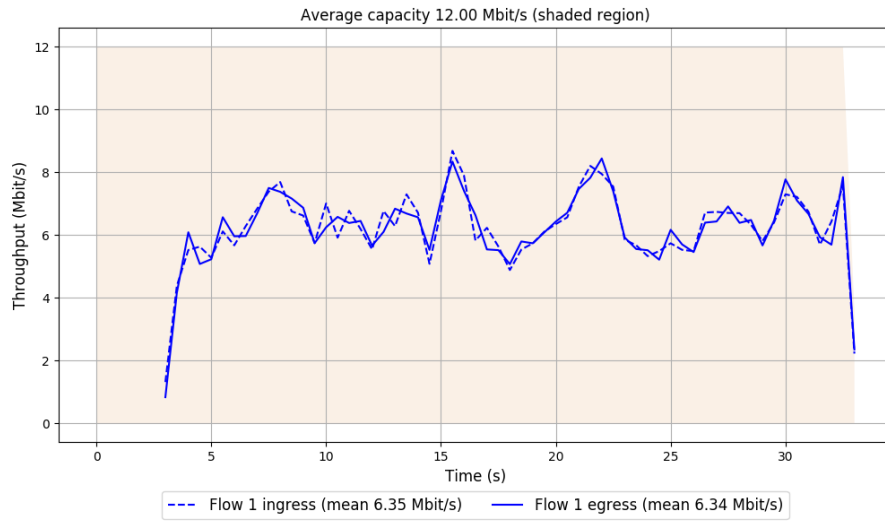
-- Flow 1:

Average throughput: 6.34 Mbit/s

95th percentile per-packet one-way delay: 55.635 ms

Loss rate: 0.13%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-27 12:23:57

End at: 2018-02-27 12:24:27

Below is generated by plot.py at 2018-02-27 12:40:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 6.57 Mbit/s (54.8% utilization)

95th percentile per-packet one-way delay: 55.073 ms

Loss rate: 0.14%

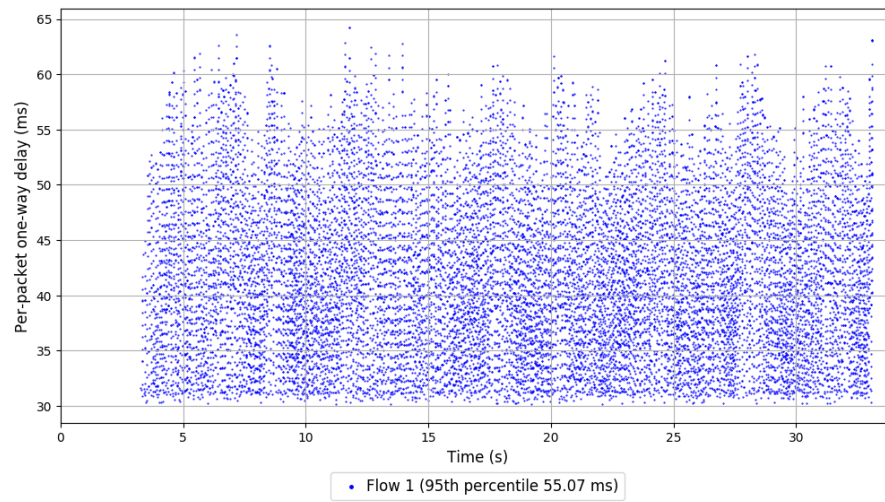
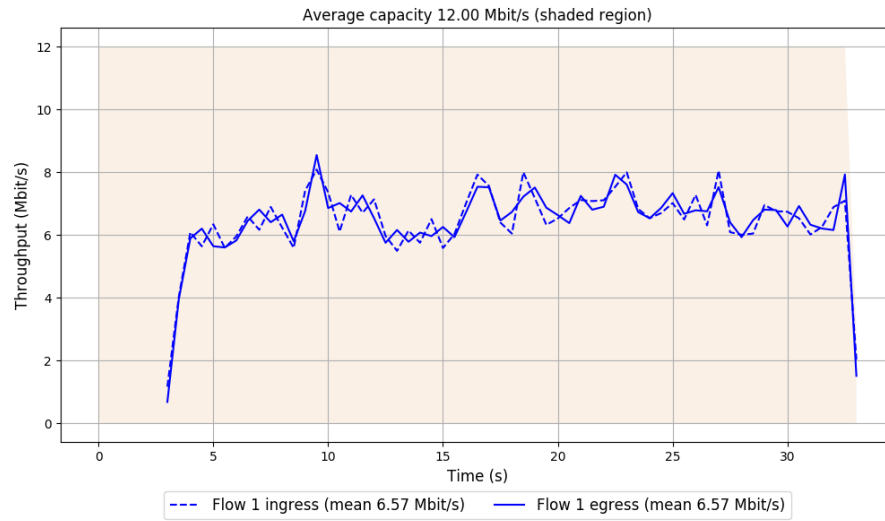
-- Flow 1:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 55.073 ms

Loss rate: 0.14%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-27 12:34:14

End at: 2018-02-27 12:34:44

Below is generated by plot.py at 2018-02-27 12:40:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 6.30 Mbit/s (52.5% utilization)

95th percentile per-packet one-way delay: 54.806 ms

Loss rate: 0.17%

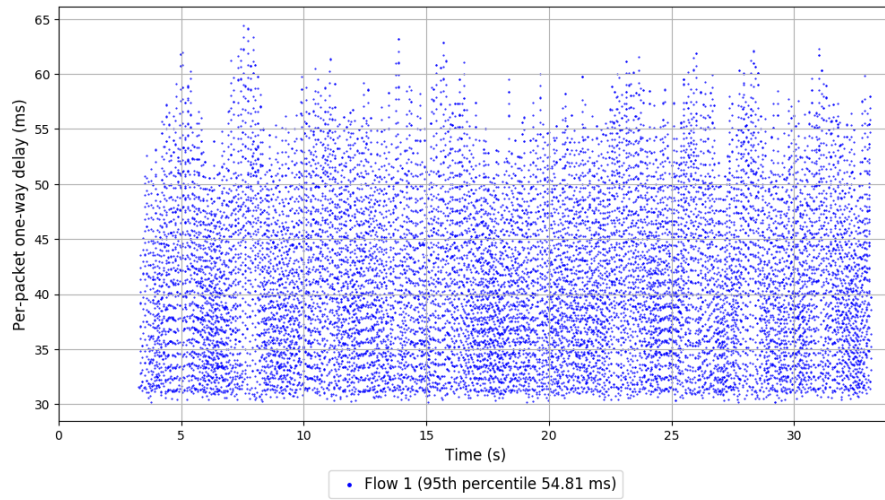
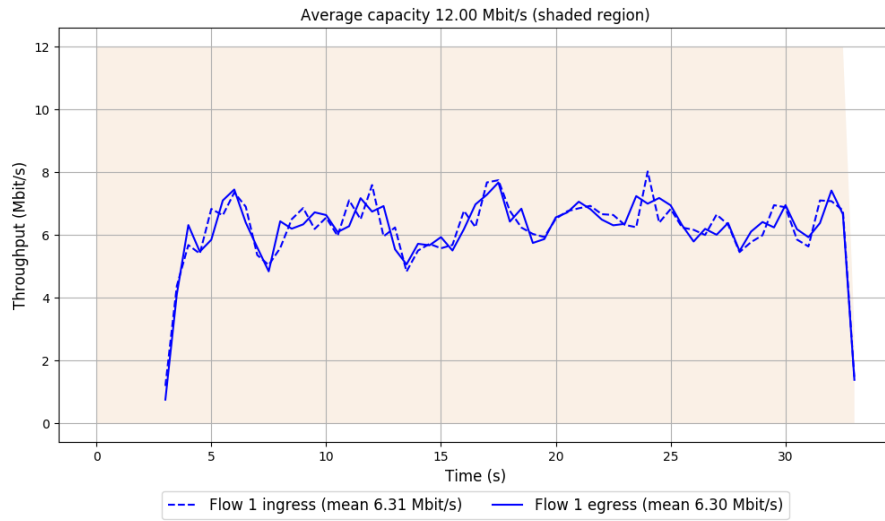
-- Flow 1:

Average throughput: 6.30 Mbit/s

95th percentile per-packet one-way delay: 54.806 ms

Loss rate: 0.17%

Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-02-27 11:04:00

End at: 2018-02-27 11:04:30

Below is generated by plot.py at 2018-02-27 12:41:13

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.49 Mbit/s (95.8% utilization)

95th percentile per-packet one-way delay: 32.766 ms

Loss rate: 0.60%

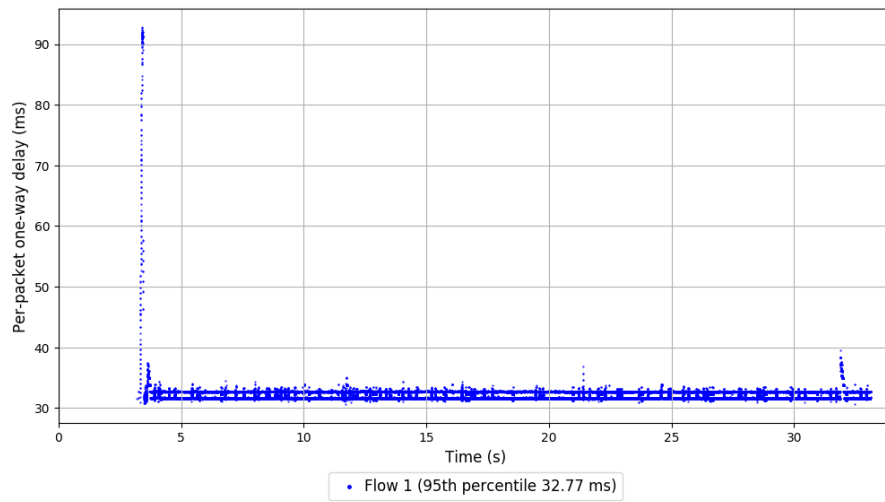
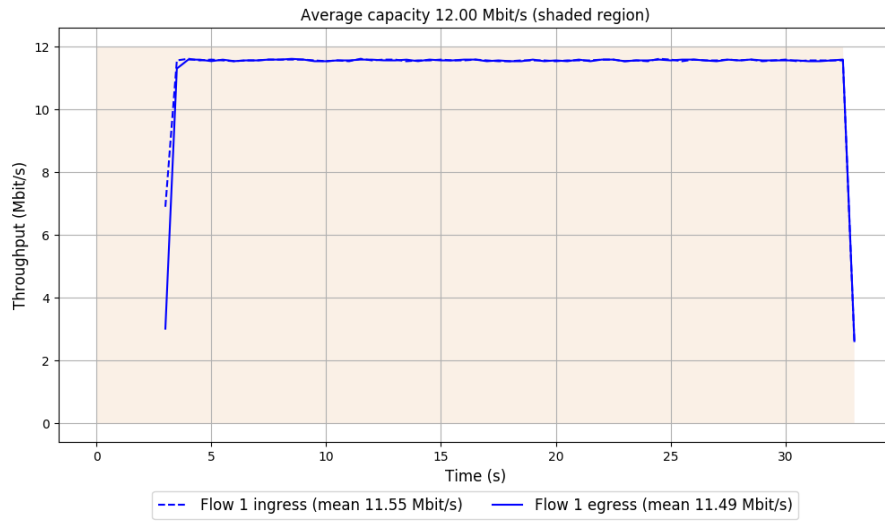
-- Flow 1:

Average throughput: 11.49 Mbit/s

95th percentile per-packet one-way delay: 32.766 ms

Loss rate: 0.60%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-02-27 11:14:17

End at: 2018-02-27 11:14:47

Below is generated by plot.py at 2018-02-27 12:41:14

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.48 Mbit/s (95.7% utilization)

95th percentile per-packet one-way delay: 32.732 ms

Loss rate: 0.60%

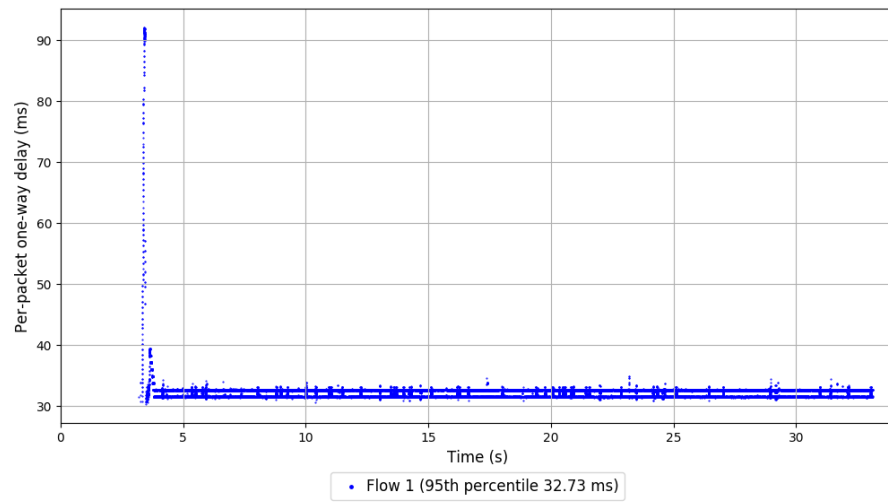
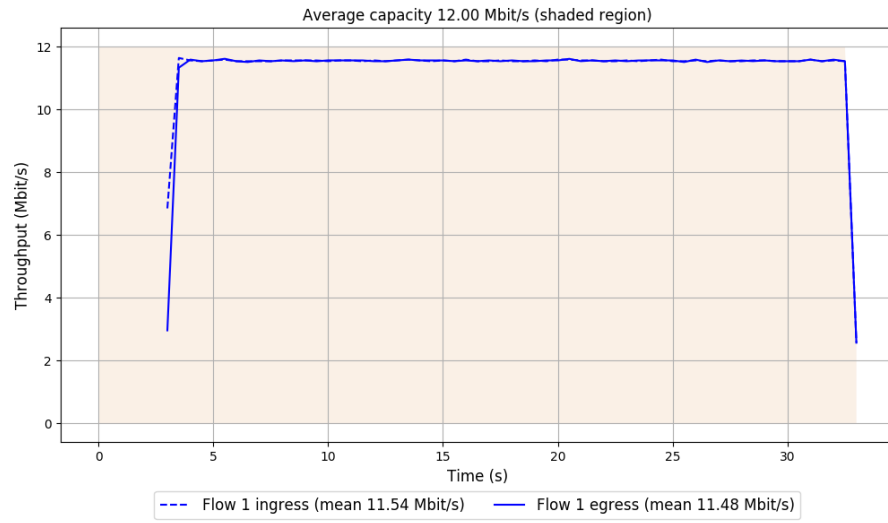
-- Flow 1:

Average throughput: 11.48 Mbit/s

95th percentile per-packet one-way delay: 32.732 ms

Loss rate: 0.60%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-02-27 11:24:34

End at: 2018-02-27 11:25:04

Below is generated by plot.py at 2018-02-27 12:41:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.47 Mbit/s (95.5% utilization)

95th percentile per-packet one-way delay: 32.729 ms

Loss rate: 0.72%

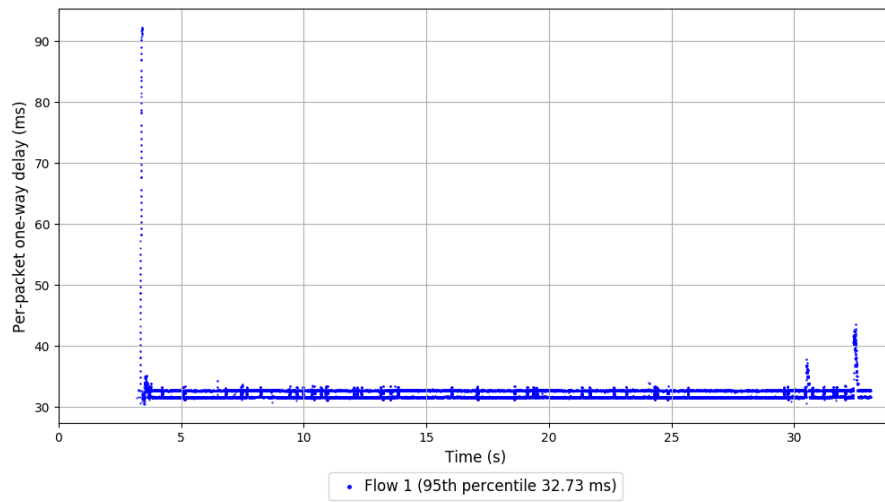
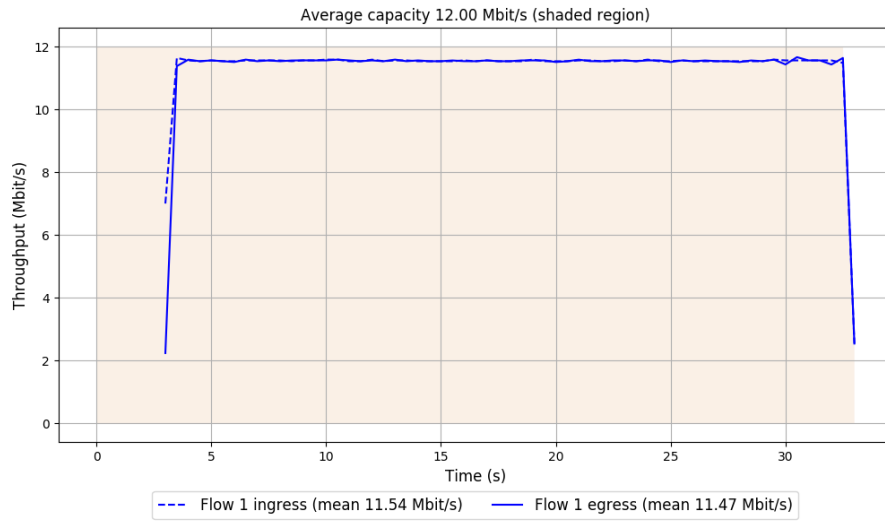
-- Flow 1:

Average throughput: 11.47 Mbit/s

95th percentile per-packet one-way delay: 32.729 ms

Loss rate: 0.72%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-02-27 11:34:50

End at: 2018-02-27 11:35:20

Below is generated by plot.py at 2018-02-27 12:41:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.48 Mbit/s (95.7% utilization)

95th percentile per-packet one-way delay: 32.741 ms

Loss rate: 0.60%

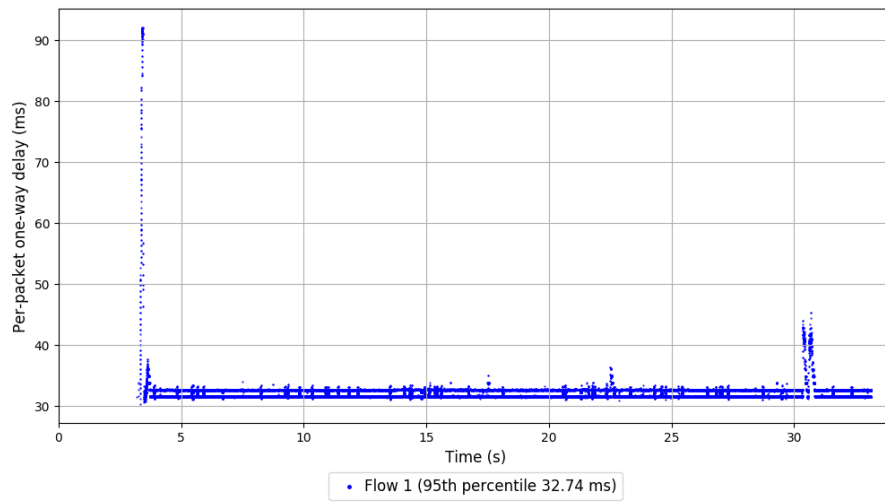
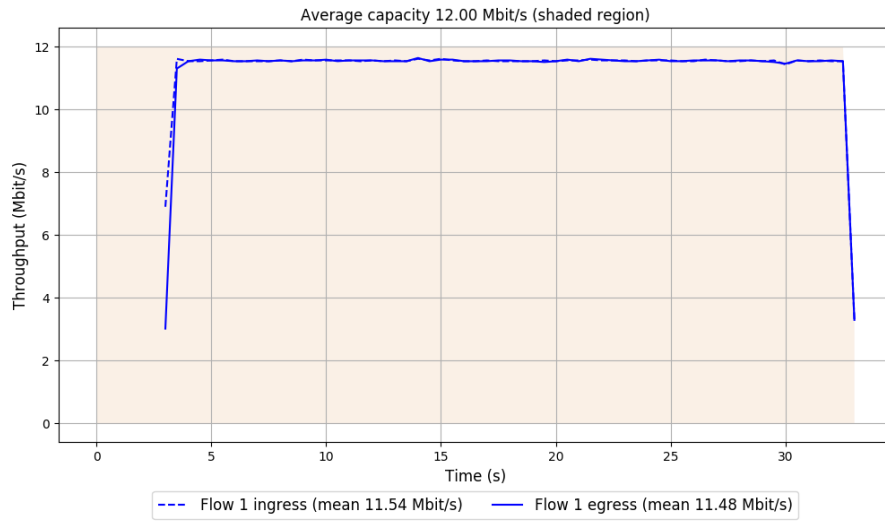
-- Flow 1:

Average throughput: 11.48 Mbit/s

95th percentile per-packet one-way delay: 32.741 ms

Loss rate: 0.60%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-27 11:45:07

End at: 2018-02-27 11:45:37

Below is generated by plot.py at 2018-02-27 12:41:19

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.48 Mbit/s (95.7% utilization)

95th percentile per-packet one-way delay: 32.752 ms

Loss rate: 0.60%

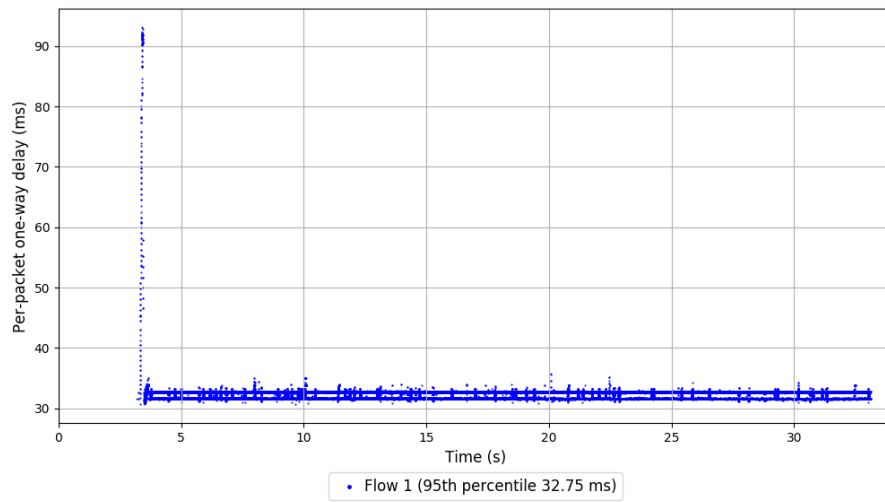
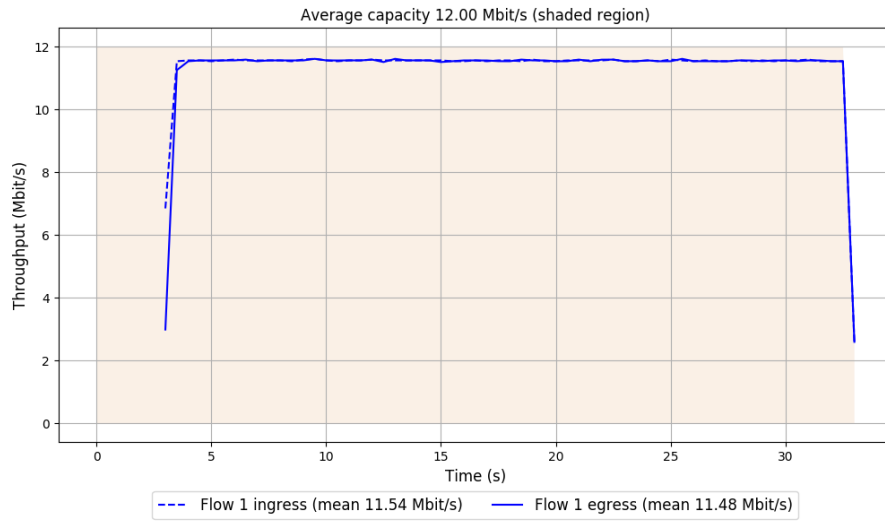
-- Flow 1:

Average throughput: 11.48 Mbit/s

95th percentile per-packet one-way delay: 32.752 ms

Loss rate: 0.60%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-27 11:55:23

End at: 2018-02-27 11:55:53

Below is generated by plot.py at 2018-02-27 12:41:19

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.47 Mbit/s (95.6% utilization)

95th percentile per-packet one-way delay: 32.730 ms

Loss rate: 0.60%

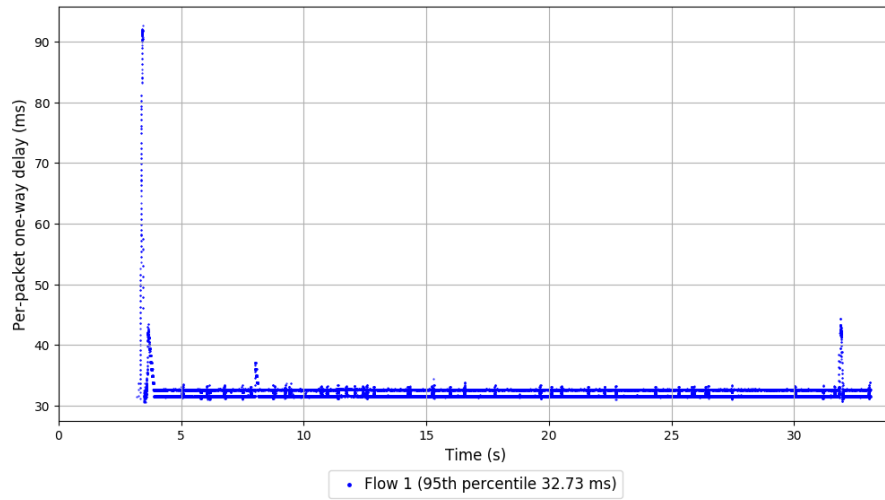
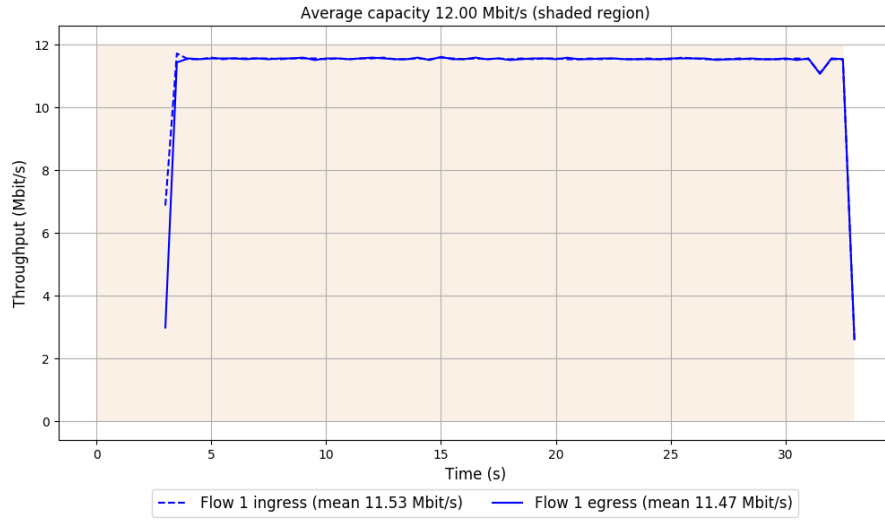
-- Flow 1:

Average throughput: 11.47 Mbit/s

95th percentile per-packet one-way delay: 32.730 ms

Loss rate: 0.60%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-02-27 12:05:40

End at: 2018-02-27 12:06:10

Below is generated by plot.py at 2018-02-27 12:41:26

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.49 Mbit/s (95.7% utilization)

95th percentile per-packet one-way delay: 32.757 ms

Loss rate: 0.15%

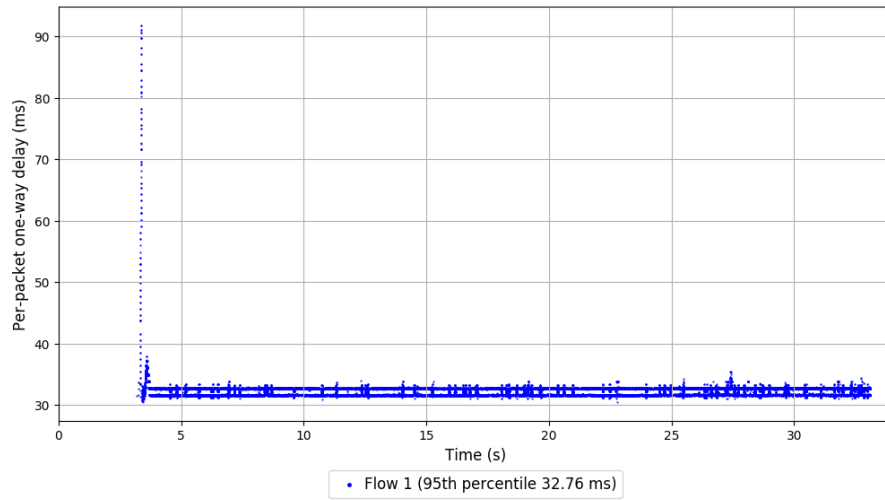
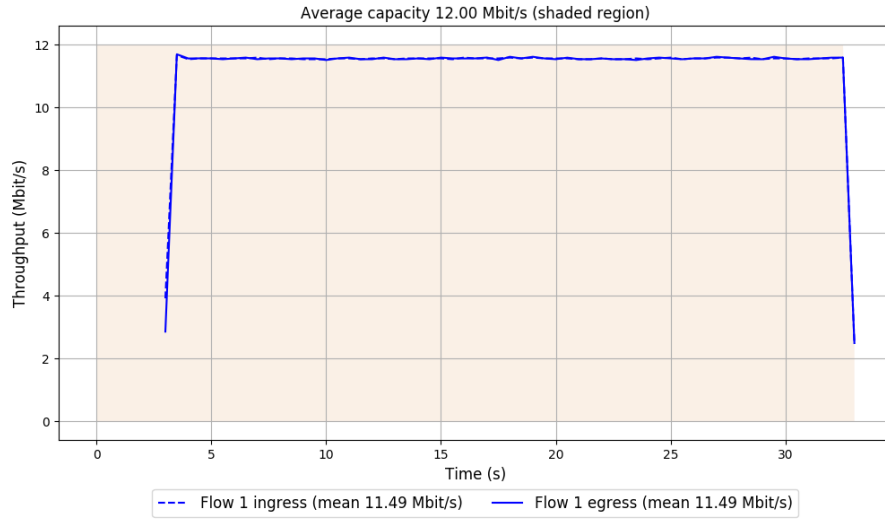
-- Flow 1:

Average throughput: 11.49 Mbit/s

95th percentile per-packet one-way delay: 32.757 ms

Loss rate: 0.15%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-27 12:15:57

End at: 2018-02-27 12:16:27

Below is generated by plot.py at 2018-02-27 12:41:27

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.49 Mbit/s (95.8% utilization)

95th percentile per-packet one-way delay: 32.796 ms

Loss rate: 0.60%

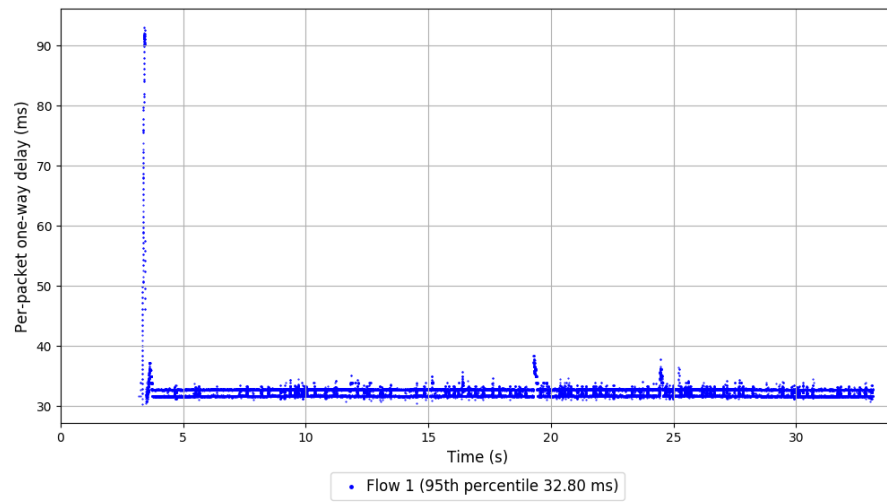
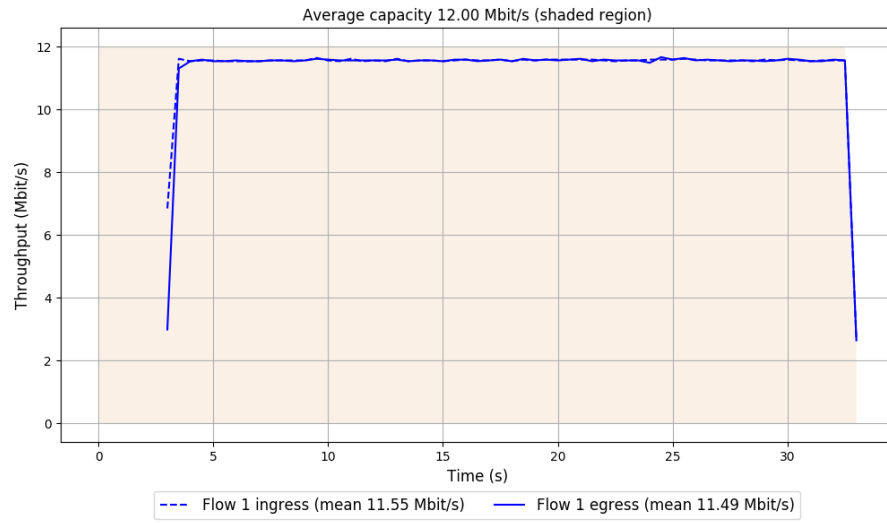
-- Flow 1:

Average throughput: 11.49 Mbit/s

95th percentile per-packet one-way delay: 32.796 ms

Loss rate: 0.60%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-02-27 12:26:14

End at: 2018-02-27 12:26:44

Below is generated by plot.py at 2018-02-27 12:41:46

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.48 Mbit/s (95.7% utilization)

95th percentile per-packet one-way delay: 32.743 ms

Loss rate: 0.60%

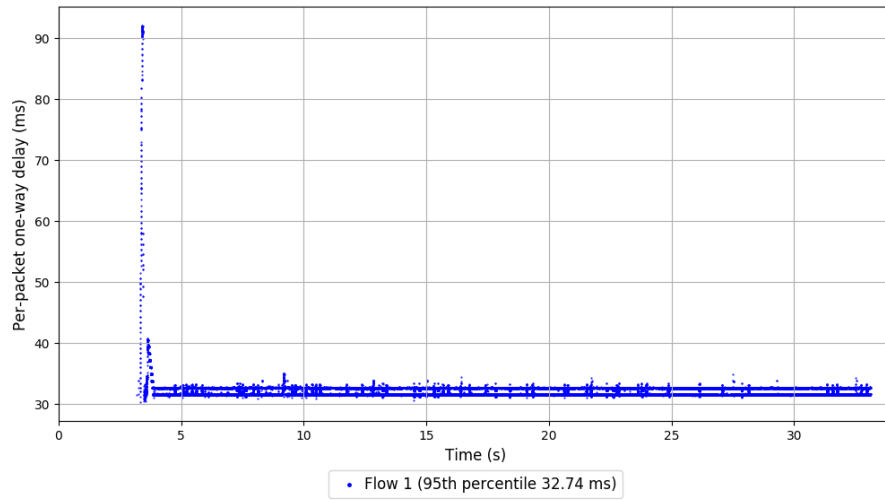
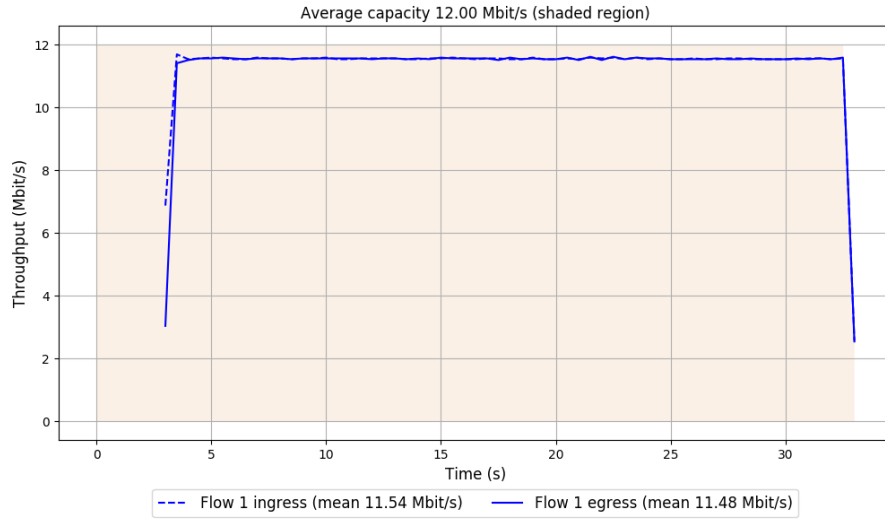
-- Flow 1:

Average throughput: 11.48 Mbit/s

95th percentile per-packet one-way delay: 32.743 ms

Loss rate: 0.60%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-02-27 12:36:31

End at: 2018-02-27 12:37:01

Below is generated by plot.py at 2018-02-27 12:41:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.48 Mbit/s (95.6% utilization)

95th percentile per-packet one-way delay: 32.754 ms

Loss rate: 0.60%

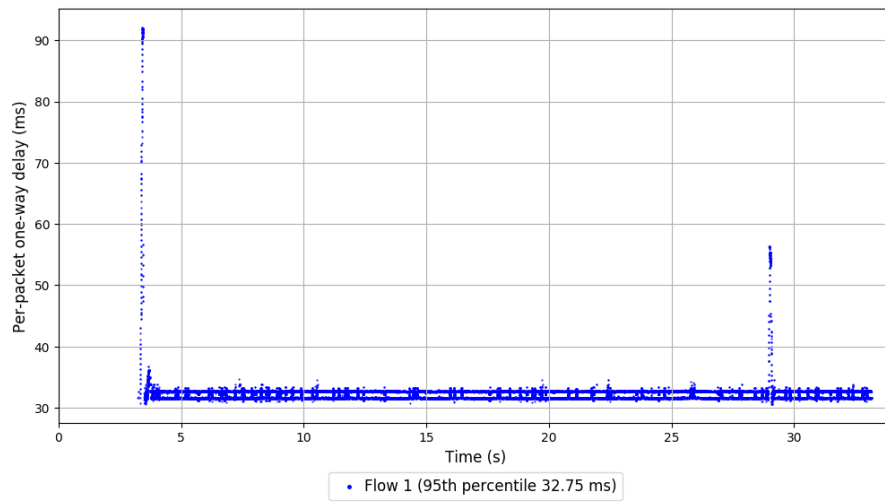
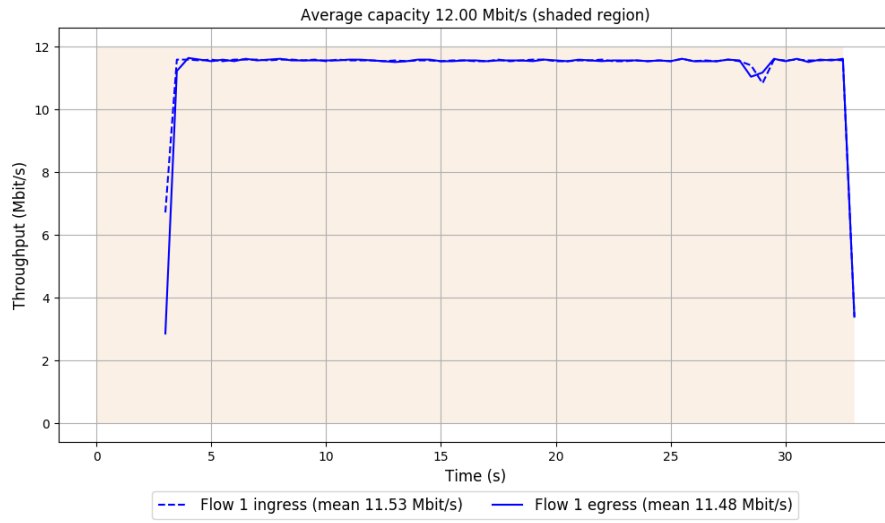
-- Flow 1:

Average throughput: 11.48 Mbit/s

95th percentile per-packet one-way delay: 32.754 ms

Loss rate: 0.60%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-27 10:56:00

End at: 2018-02-27 10:56:30

Below is generated by plot.py at 2018-02-27 12:41:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.92 Mbit/s (99.3% utilization)

95th percentile per-packet one-way delay: 37.594 ms

Loss rate: 0.23%

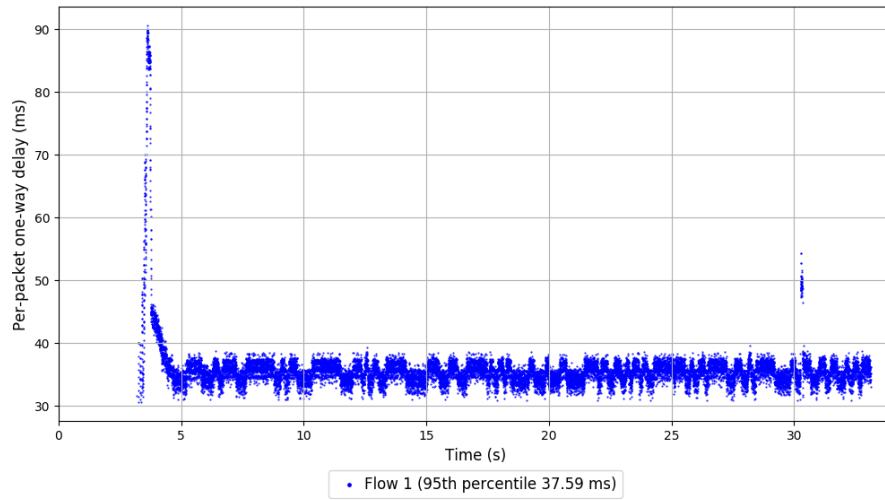
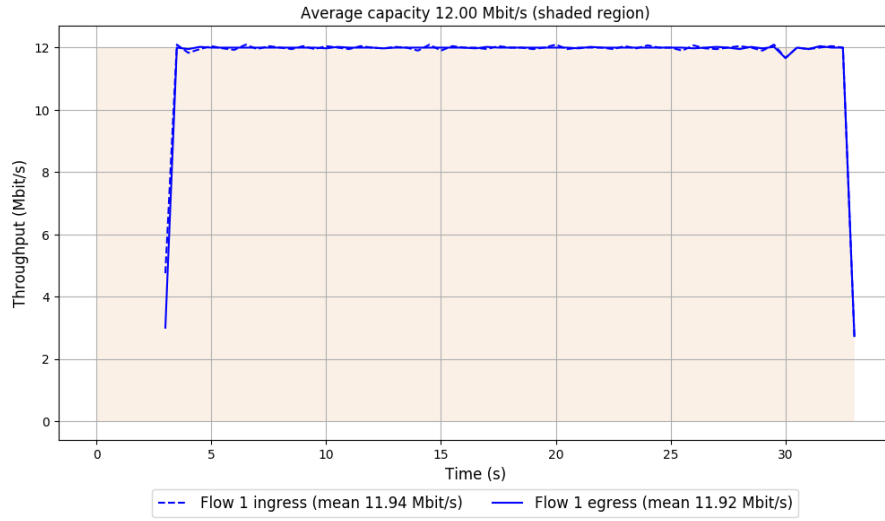
-- Flow 1:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 37.594 ms

Loss rate: 0.23%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-27 11:06:18

End at: 2018-02-27 11:06:48

Below is generated by plot.py at 2018-02-27 12:41:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.93 Mbit/s (99.4% utilization)

95th percentile per-packet one-way delay: 77.717 ms

Loss rate: 0.52%

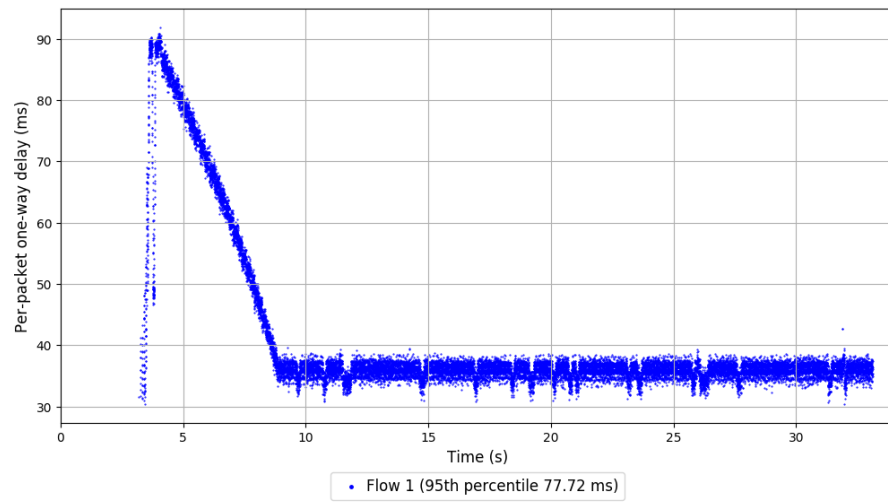
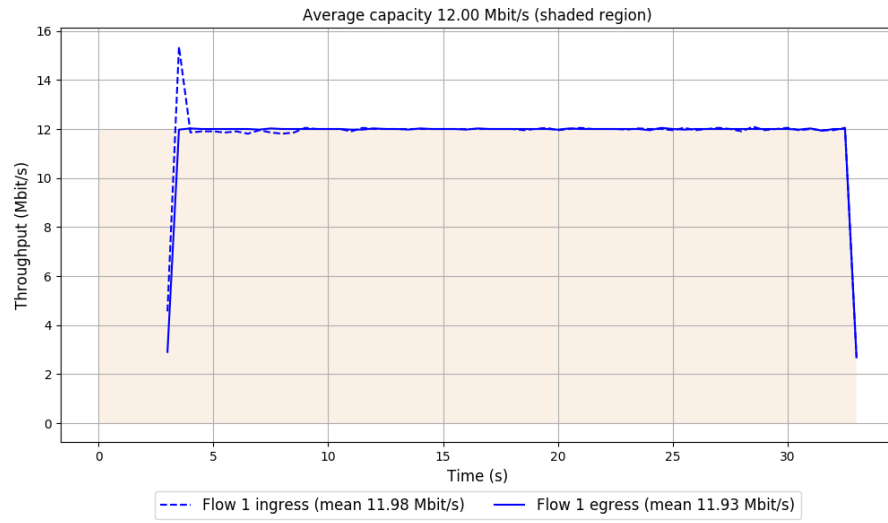
-- Flow 1:

Average throughput: 11.93 Mbit/s

95th percentile per-packet one-way delay: 77.717 ms

Loss rate: 0.52%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-27 11:16:35

End at: 2018-02-27 11:17:05

Below is generated by plot.py at 2018-02-27 12:41:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.93 Mbit/s (99.4% utilization)

95th percentile per-packet one-way delay: 77.521 ms

Loss rate: 0.54%

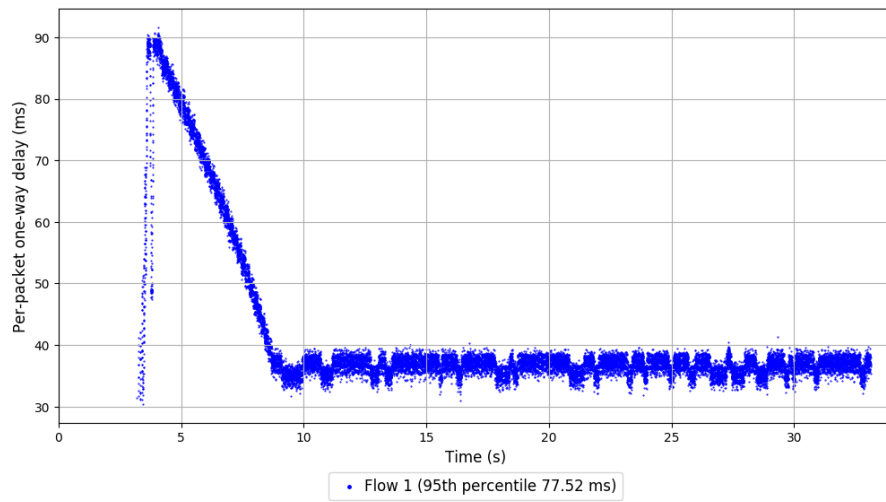
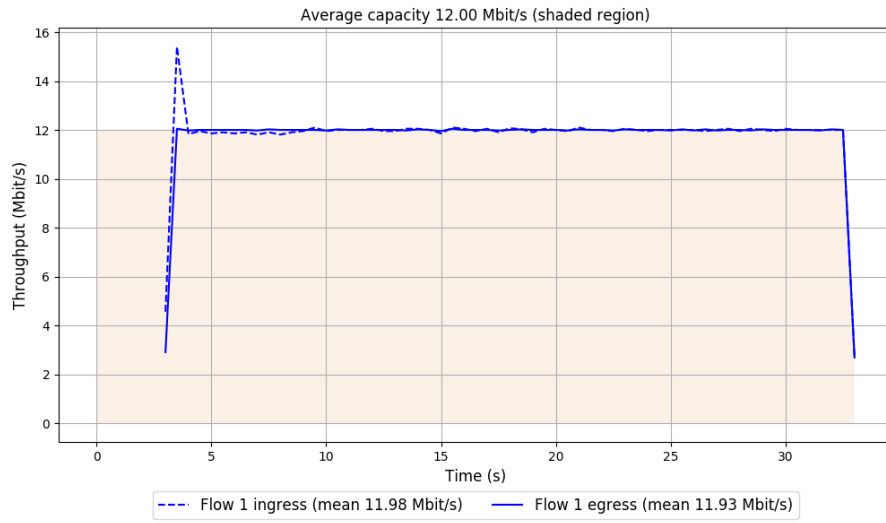
-- Flow 1:

Average throughput: 11.93 Mbit/s

95th percentile per-packet one-way delay: 77.521 ms

Loss rate: 0.54%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-27 11:26:52

End at: 2018-02-27 11:27:22

Below is generated by plot.py at 2018-02-27 12:41:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.93 Mbit/s (99.4% utilization)

95th percentile per-packet one-way delay: 38.257 ms

Loss rate: 0.25%

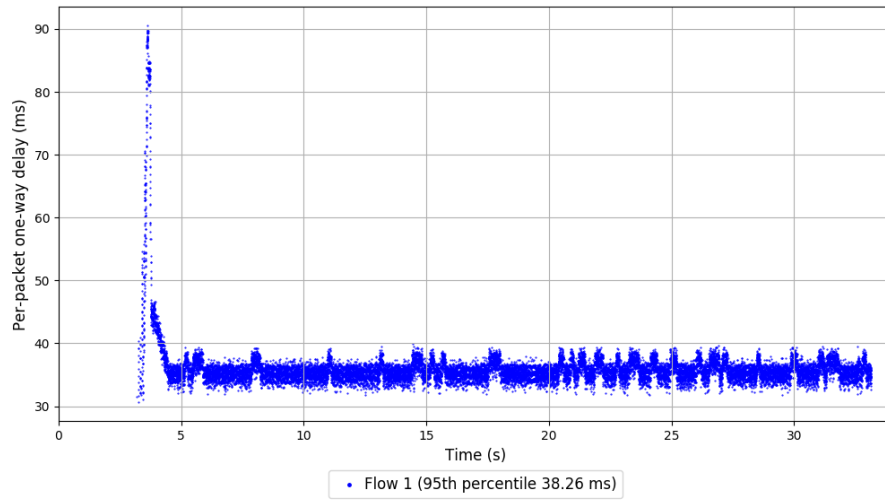
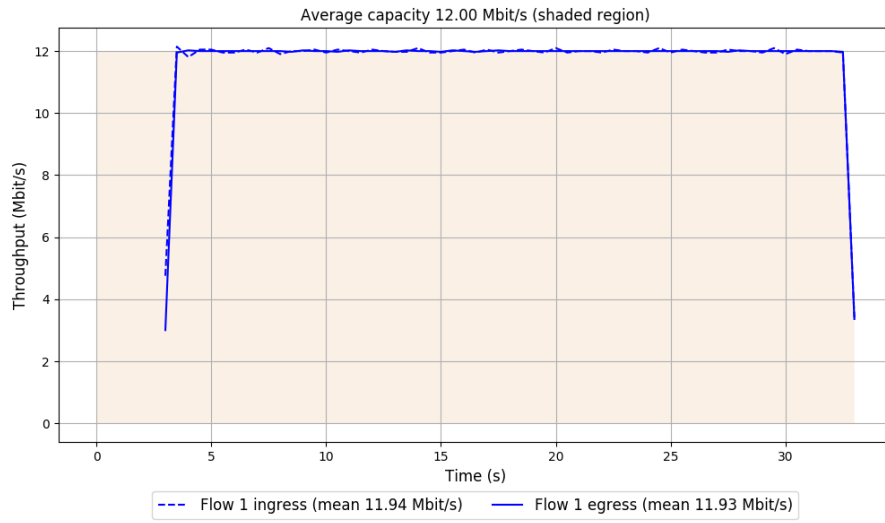
-- Flow 1:

Average throughput: 11.93 Mbit/s

95th percentile per-packet one-way delay: 38.257 ms

Loss rate: 0.25%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-27 11:37:08

End at: 2018-02-27 11:37:38

Below is generated by plot.py at 2018-02-27 12:41:49

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.93 Mbit/s (99.4% utilization)

95th percentile per-packet one-way delay: 38.503 ms

Loss rate: 0.24%

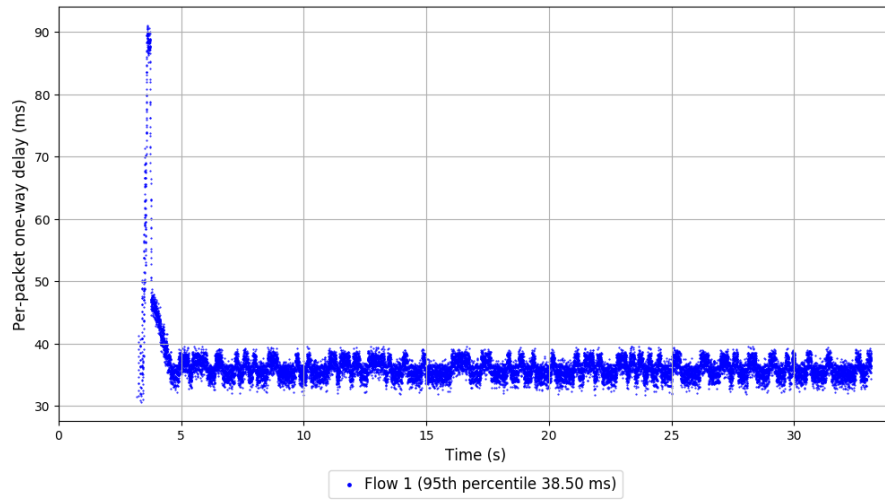
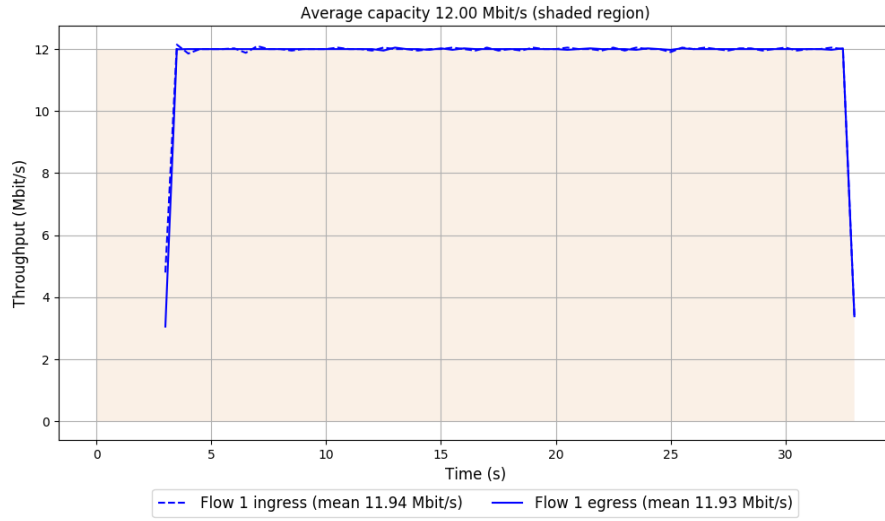
-- Flow 1:

Average throughput: 11.93 Mbit/s

95th percentile per-packet one-way delay: 38.503 ms

Loss rate: 0.24%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-27 11:47:25

End at: 2018-02-27 11:47:55

Below is generated by plot.py at 2018-02-27 12:41:50

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.93 Mbit/s (99.4% utilization)

95th percentile per-packet one-way delay: 37.891 ms

Loss rate: 0.24%

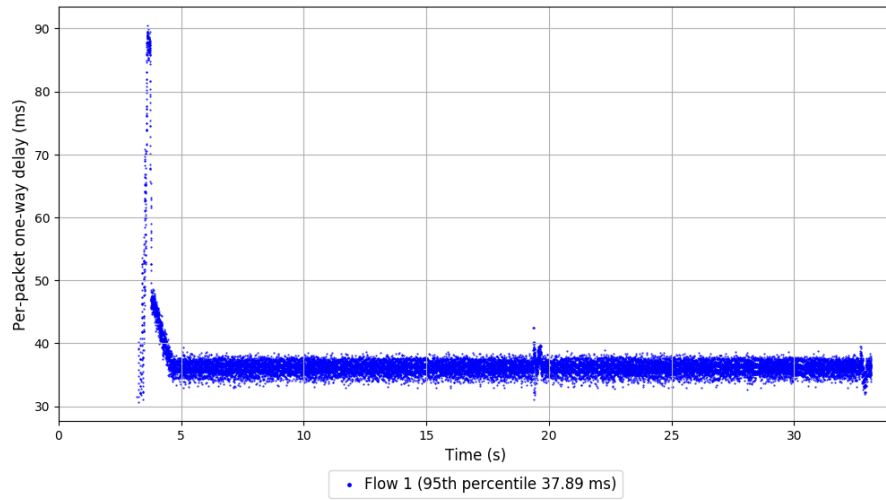
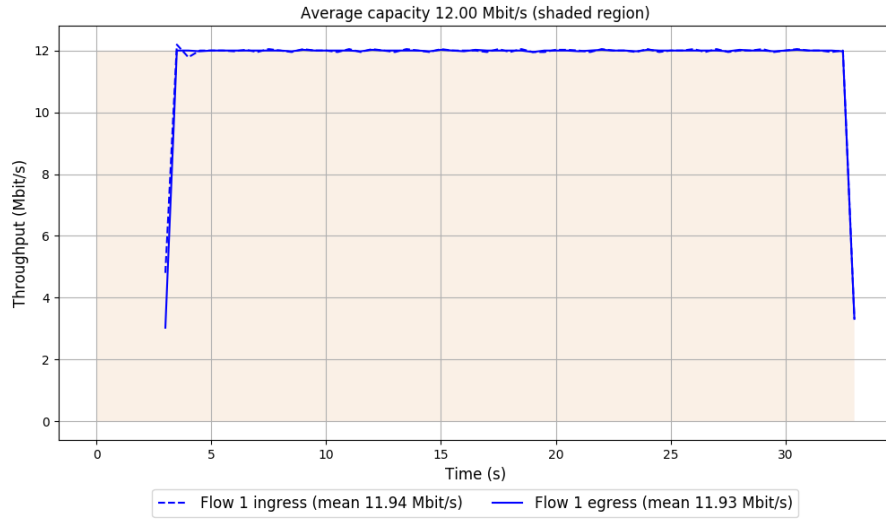
-- Flow 1:

Average throughput: 11.93 Mbit/s

95th percentile per-packet one-way delay: 37.891 ms

Loss rate: 0.24%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-27 11:57:41

End at: 2018-02-27 11:58:11

Below is generated by plot.py at 2018-02-27 12:42:00

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.93 Mbit/s (99.4% utilization)

95th percentile per-packet one-way delay: 37.878 ms

Loss rate: 0.24%

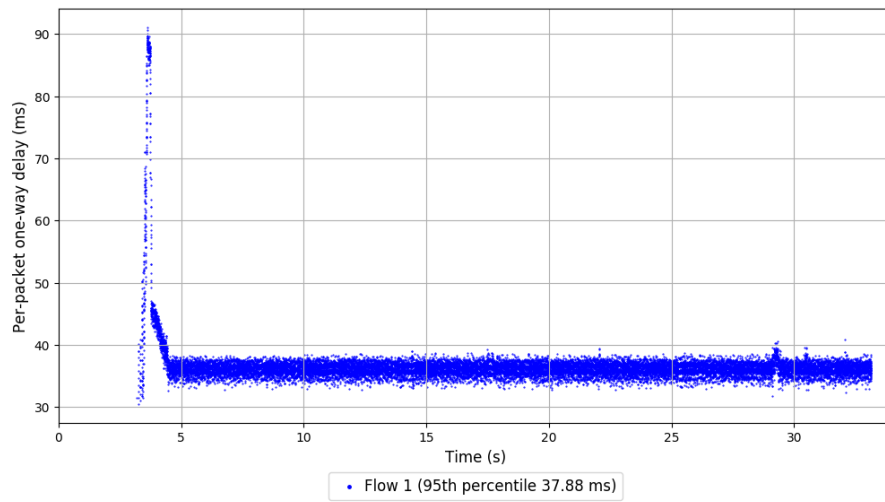
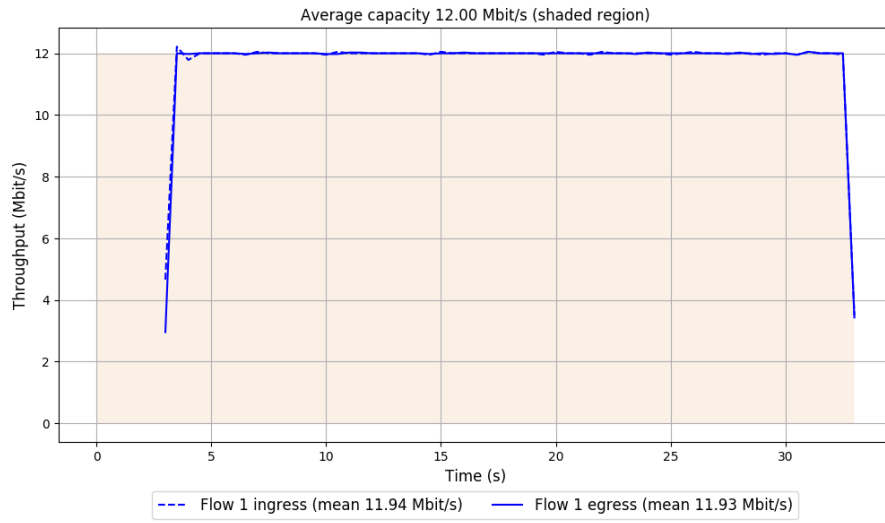
-- Flow 1:

Average throughput: 11.93 Mbit/s

95th percentile per-packet one-way delay: 37.878 ms

Loss rate: 0.24%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-27 12:07:58

End at: 2018-02-27 12:08:28

Below is generated by plot.py at 2018-02-27 12:42:00

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.93 Mbit/s (99.4% utilization)

95th percentile per-packet one-way delay: 38.763 ms

Loss rate: 0.25%

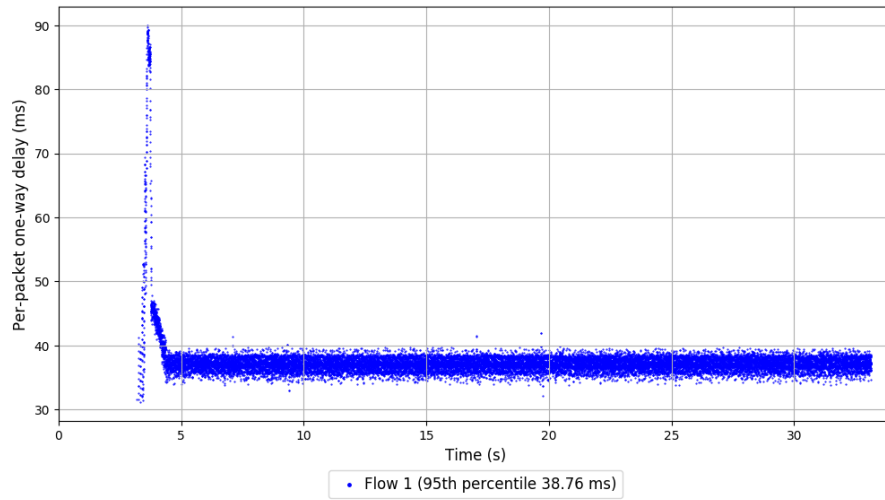
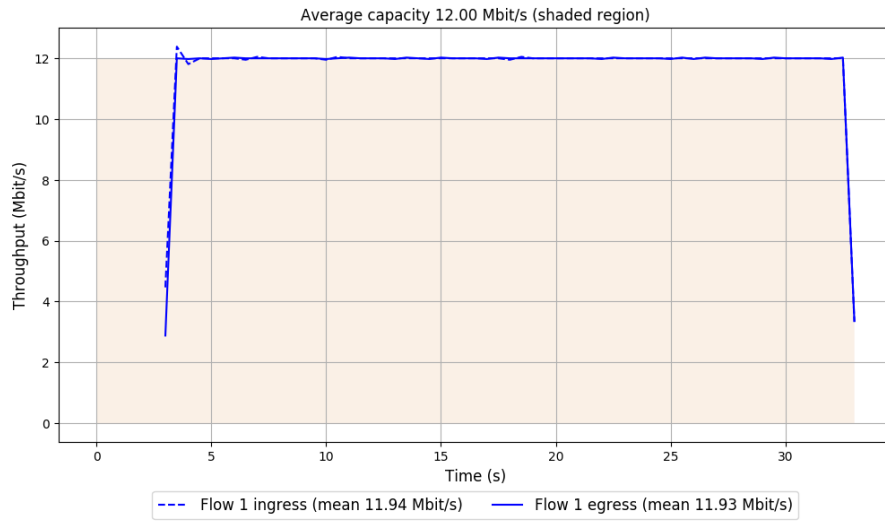
-- Flow 1:

Average throughput: 11.93 Mbit/s

95th percentile per-packet one-way delay: 38.763 ms

Loss rate: 0.25%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-27 12:18:15

End at: 2018-02-27 12:18:45

Below is generated by plot.py at 2018-02-27 12:42:01

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.92 Mbit/s (99.4% utilization)

95th percentile per-packet one-way delay: 37.727 ms

Loss rate: 0.24%

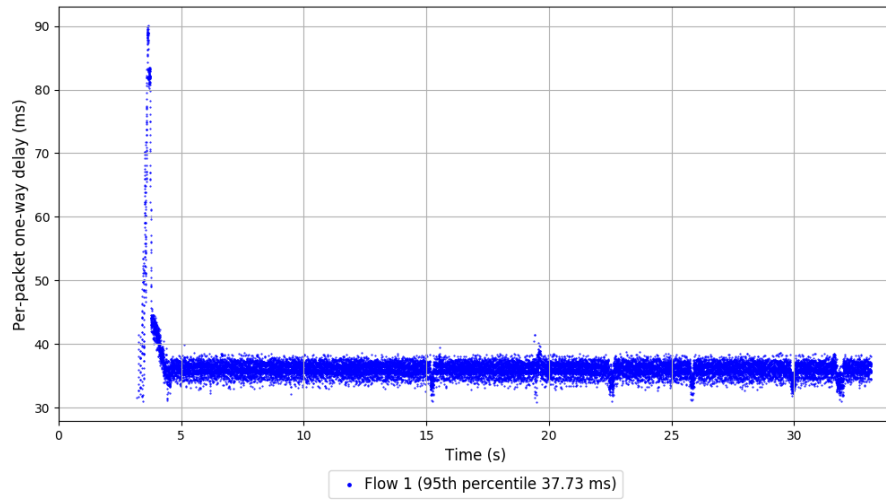
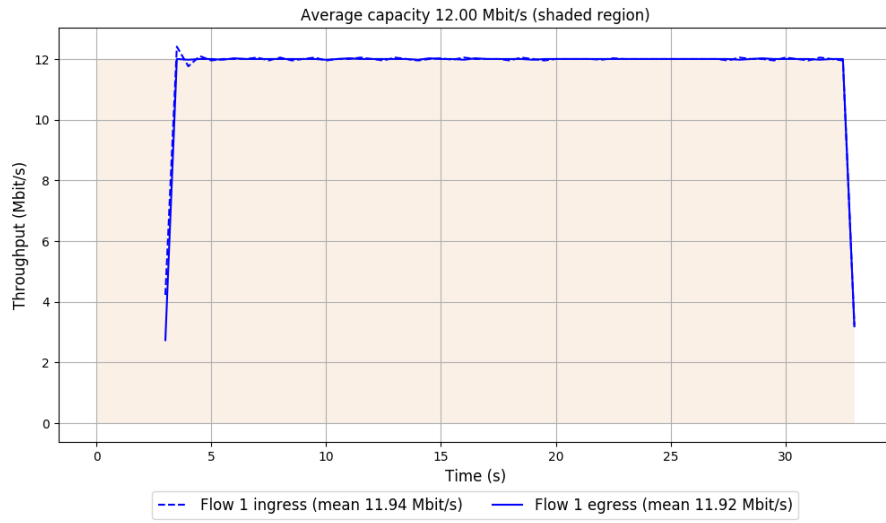
-- Flow 1:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 37.727 ms

Loss rate: 0.24%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-27 12:28:32

End at: 2018-02-27 12:29:02

Below is generated by plot.py at 2018-02-27 12:42:01

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.92 Mbit/s (99.4% utilization)

95th percentile per-packet one-way delay: 37.793 ms

Loss rate: 0.25%

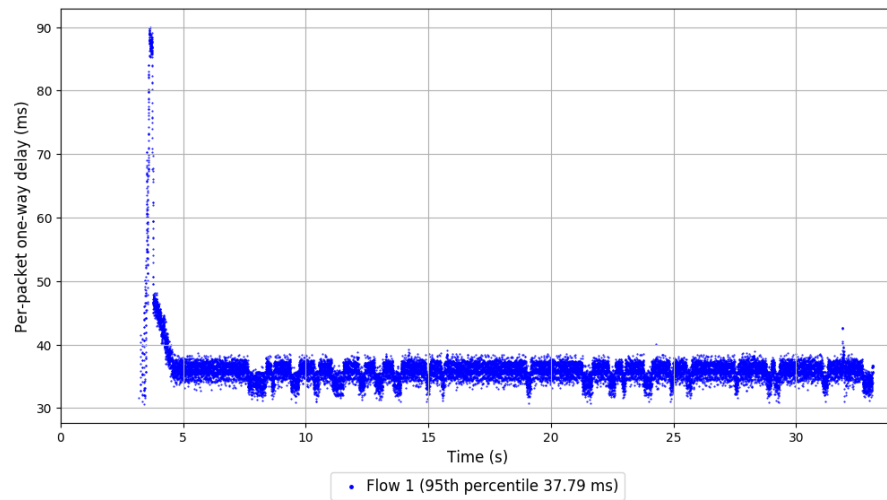
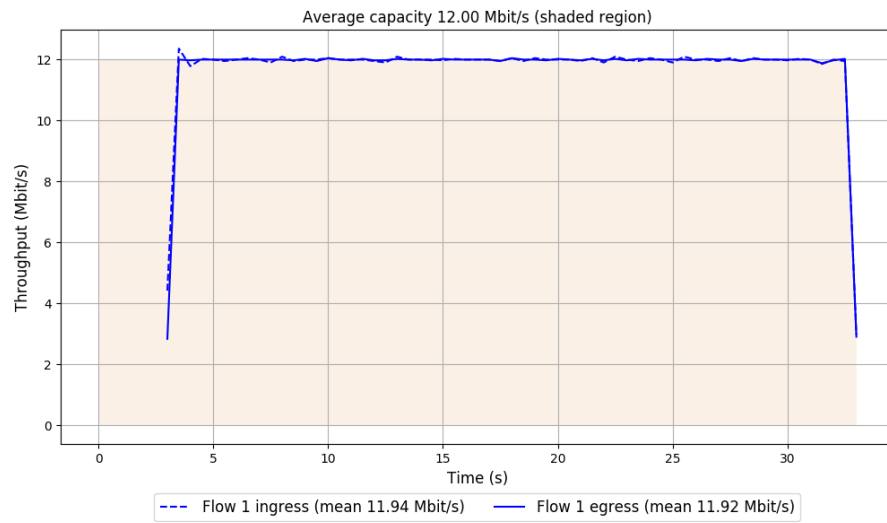
-- Flow 1:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 37.793 ms

Loss rate: 0.25%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-02-27 10:56:34

End at: 2018-02-27 10:57:04

Below is generated by plot.py at 2018-02-27 12:42:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 7.94 Mbit/s (66.2% utilization)

95th percentile per-packet one-way delay: 90.976 ms

Loss rate: 92.43%

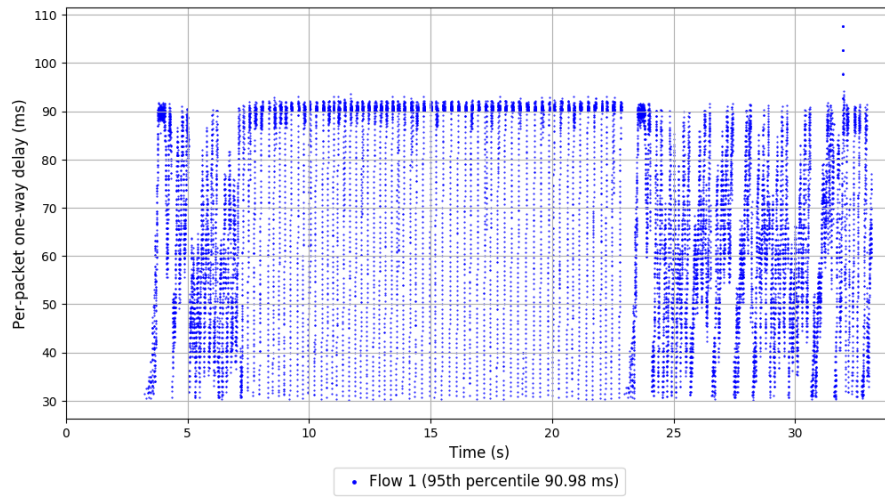
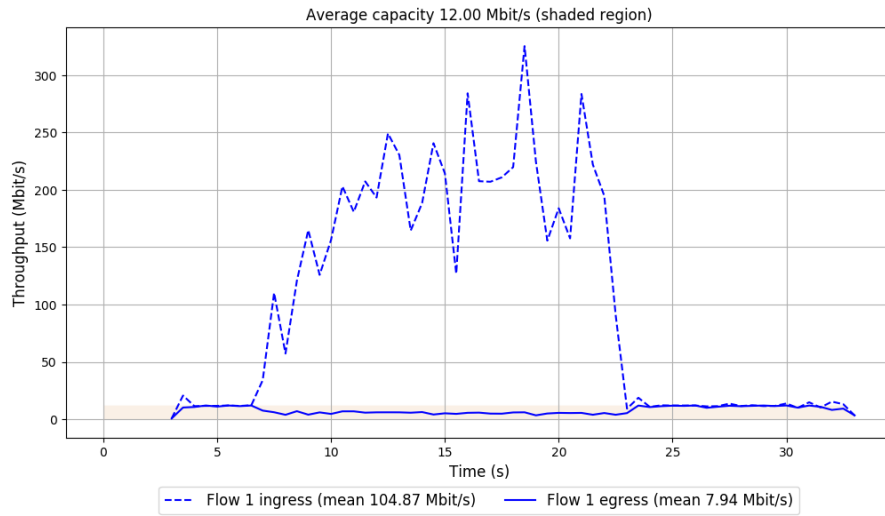
-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 90.976 ms

Loss rate: 92.43%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-27 11:06:53

End at: 2018-02-27 11:07:23

Below is generated by plot.py at 2018-02-27 12:42:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.46 Mbit/s (95.5% utilization)

95th percentile per-packet one-way delay: 86.662 ms

Loss rate: 4.78%

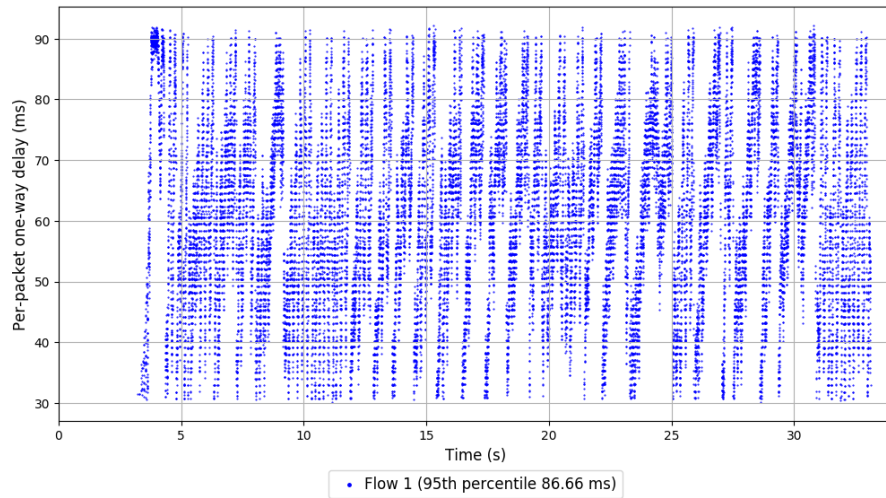
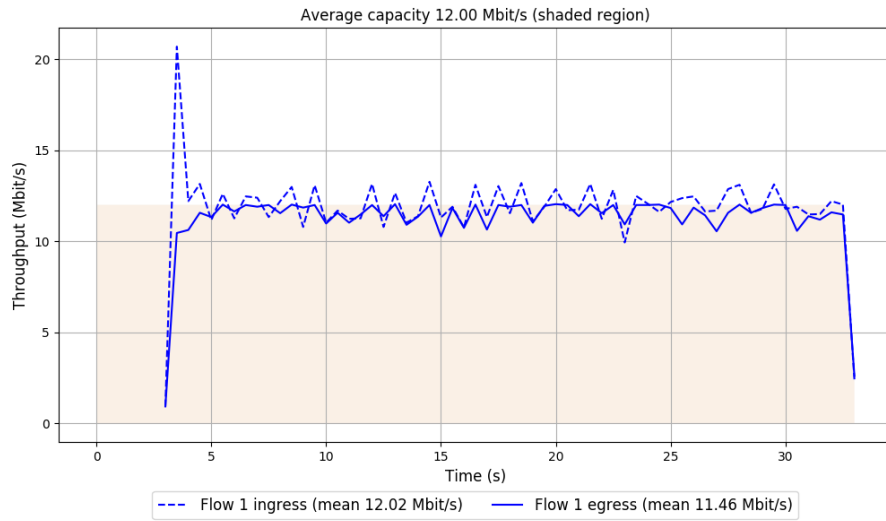
-- Flow 1:

Average throughput: 11.46 Mbit/s

95th percentile per-packet one-way delay: 86.662 ms

Loss rate: 4.78%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-27 11:17:10

End at: 2018-02-27 11:17:40

Below is generated by plot.py at 2018-02-27 12:42:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.58 Mbit/s (96.5% utilization)

95th percentile per-packet one-way delay: 87.932 ms

Loss rate: 3.67%

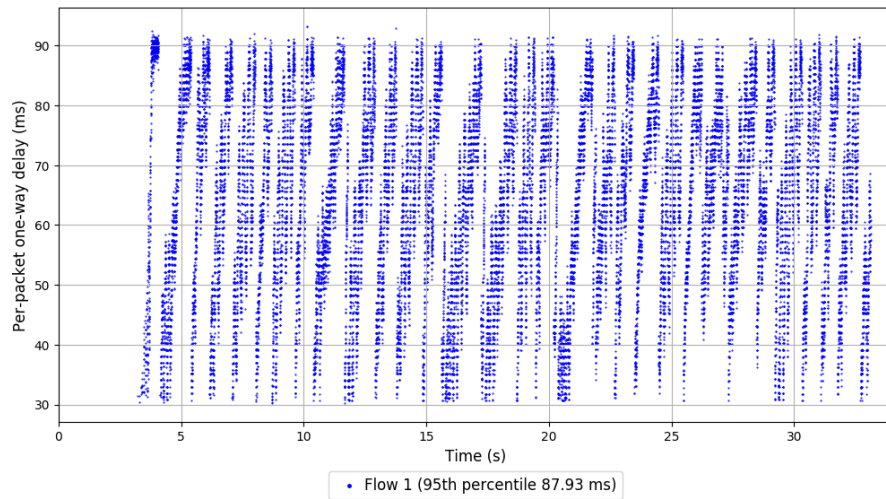
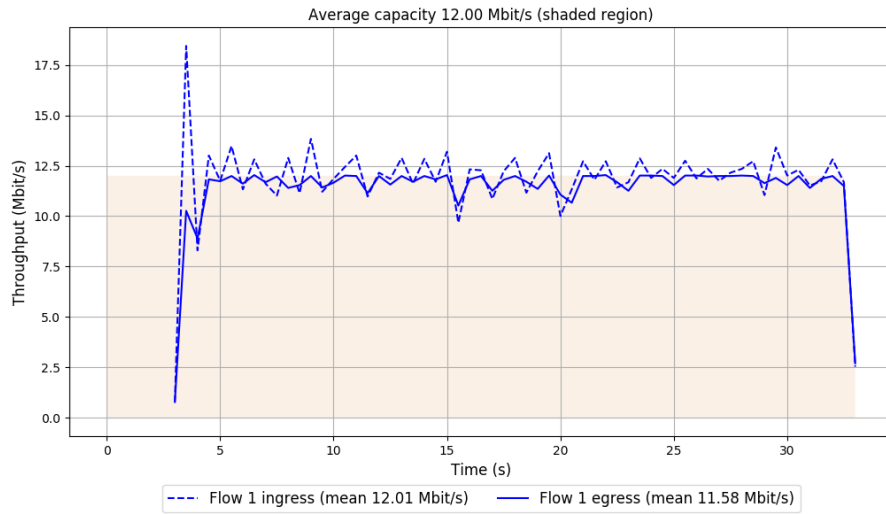
-- Flow 1:

Average throughput: 11.58 Mbit/s

95th percentile per-packet one-way delay: 87.932 ms

Loss rate: 3.67%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-27 11:27:26

End at: 2018-02-27 11:27:56

Below is generated by plot.py at 2018-02-27 12:42:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.03 Mbit/s (91.9% utilization)

95th percentile per-packet one-way delay: 86.124 ms

Loss rate: 6.04%

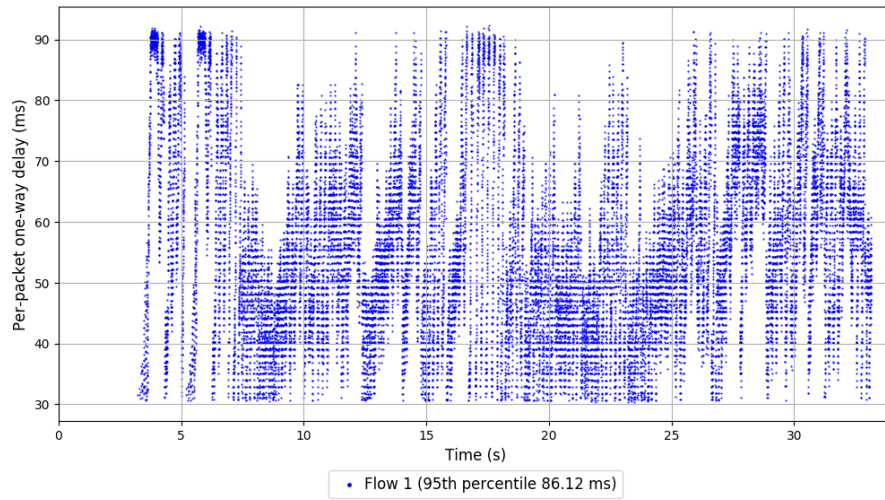
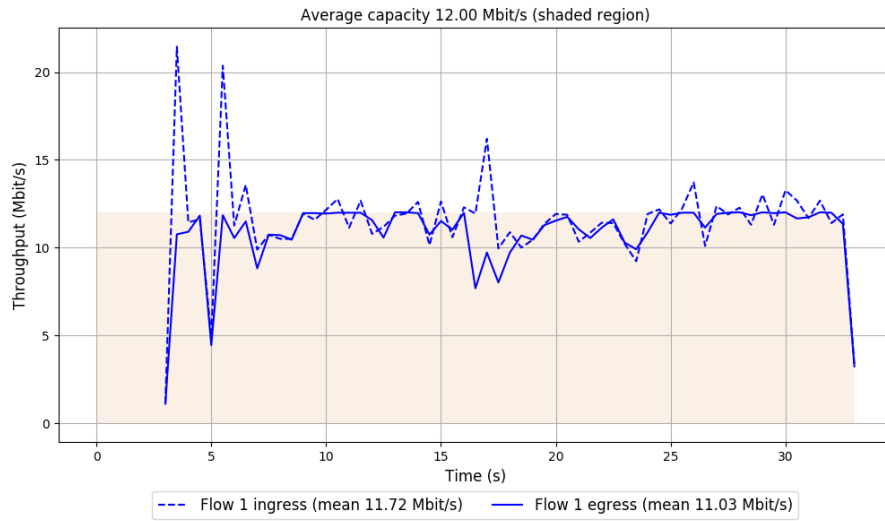
-- Flow 1:

Average throughput: 11.03 Mbit/s

95th percentile per-packet one-way delay: 86.124 ms

Loss rate: 6.04%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-27 11:37:43

End at: 2018-02-27 11:38:13

Below is generated by plot.py at 2018-02-27 12:42:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.48 Mbit/s (95.7% utilization)

95th percentile per-packet one-way delay: 86.194 ms

Loss rate: 4.80%

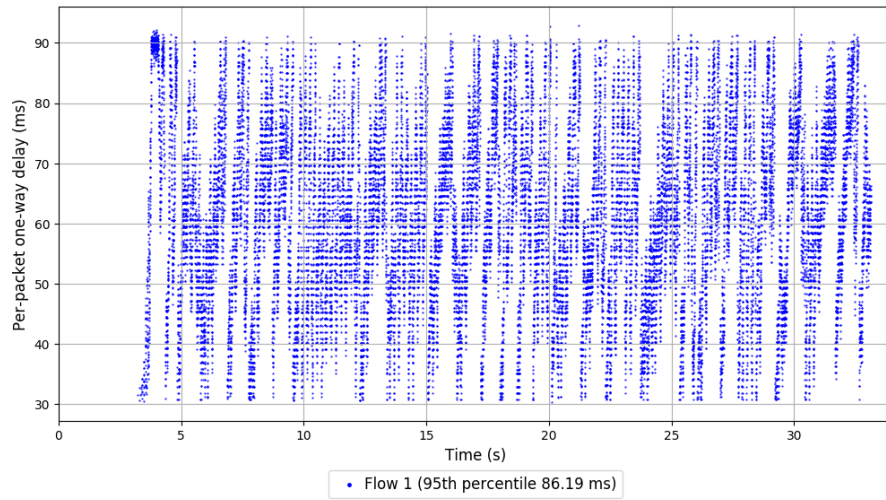
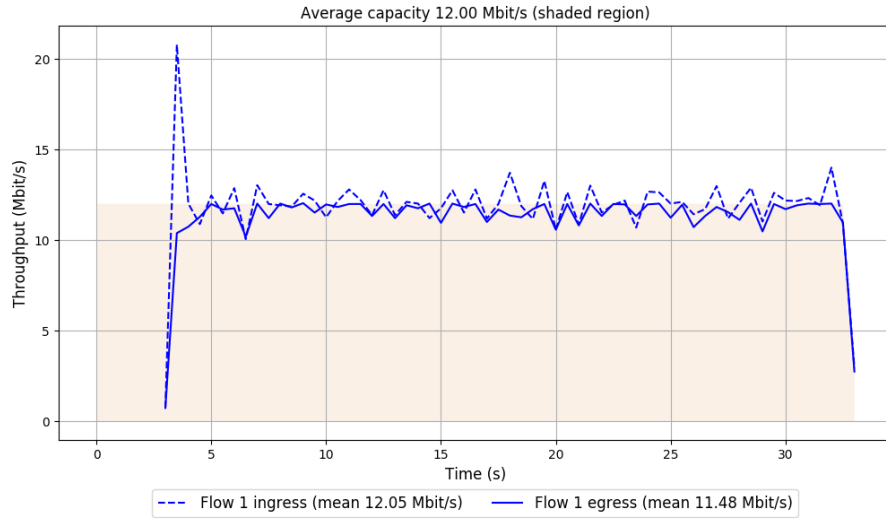
-- Flow 1:

Average throughput: 11.48 Mbit/s

95th percentile per-packet one-way delay: 86.194 ms

Loss rate: 4.80%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-27 11:47:59

End at: 2018-02-27 11:48:29

Below is generated by plot.py at 2018-02-27 12:42:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.43 Mbit/s (95.2% utilization)

95th percentile per-packet one-way delay: 86.050 ms

Loss rate: 4.43%

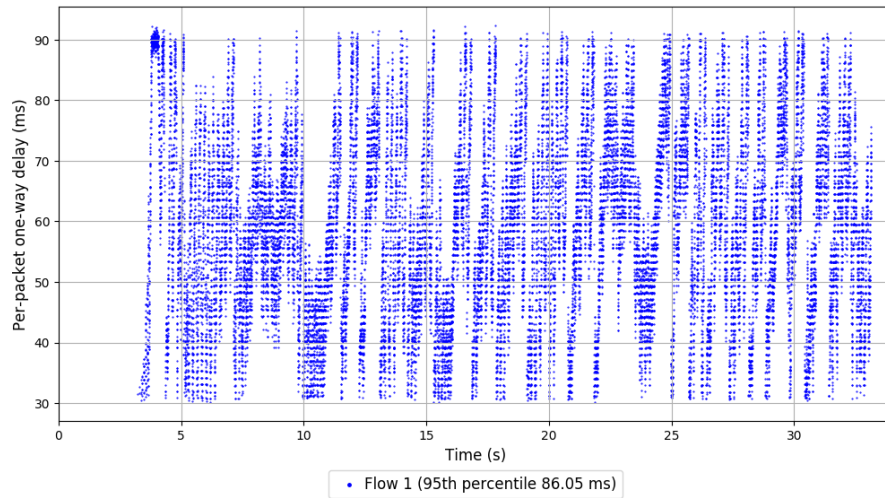
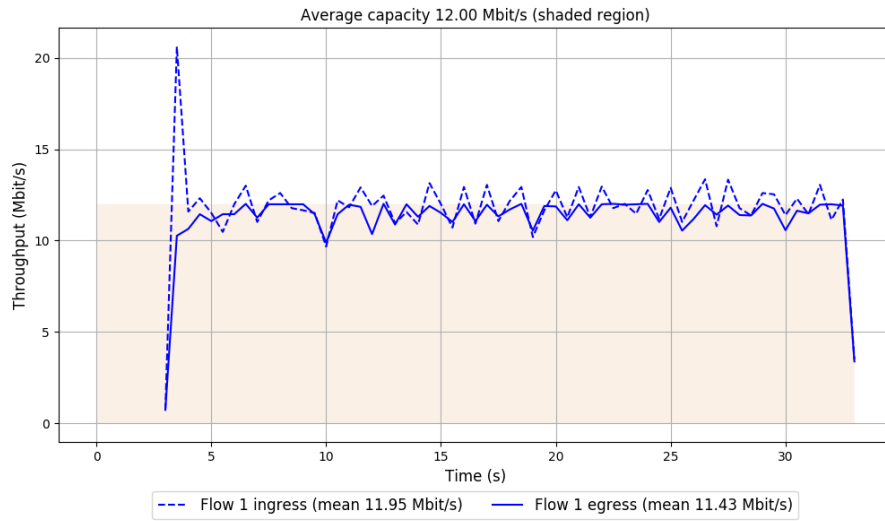
-- Flow 1:

Average throughput: 11.43 Mbit/s

95th percentile per-packet one-way delay: 86.050 ms

Loss rate: 4.43%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-27 11:58:16

End at: 2018-02-27 11:58:46

Below is generated by plot.py at 2018-02-27 12:42:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.58 Mbit/s (88.2% utilization)

95th percentile per-packet one-way delay: 89.028 ms

Loss rate: 29.29%

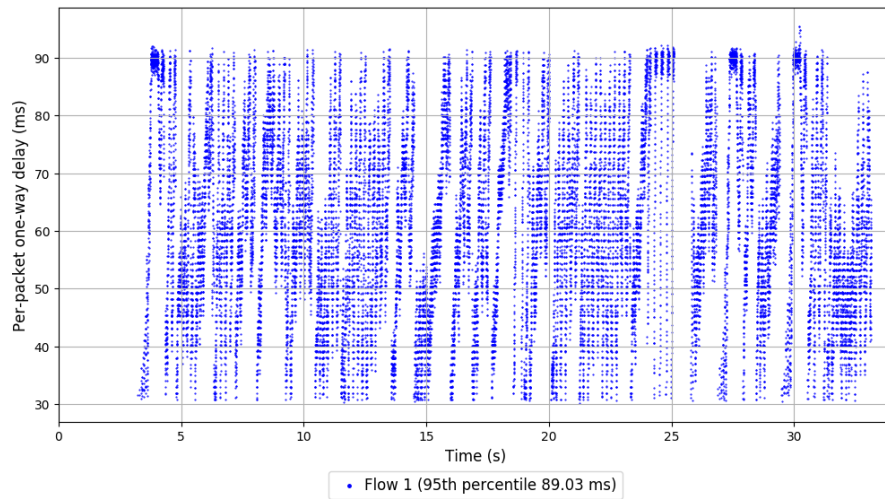
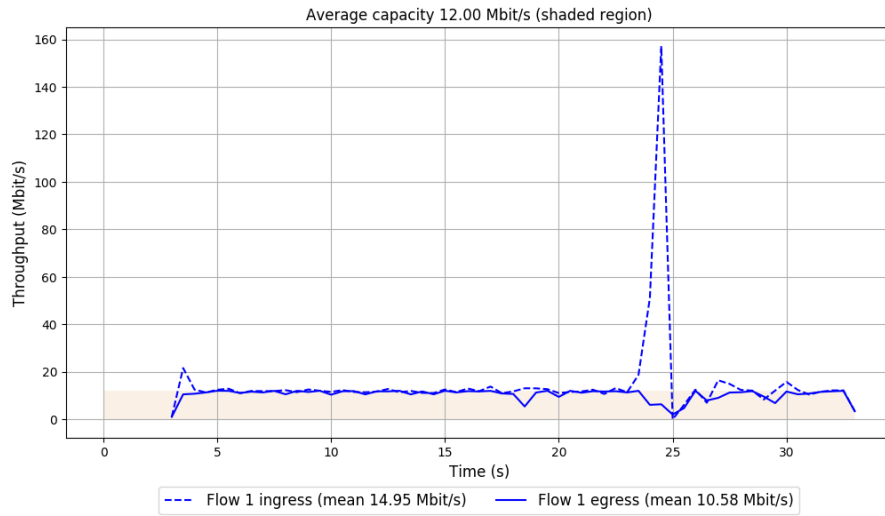
-- Flow 1:

Average throughput: 10.58 Mbit/s

95th percentile per-packet one-way delay: 89.028 ms

Loss rate: 29.29%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-27 12:08:33

End at: 2018-02-27 12:09:03

Below is generated by plot.py at 2018-02-27 12:42:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 9.32 Mbit/s (77.7% utilization)

95th percentile per-packet one-way delay: 89.308 ms

Loss rate: 37.95%

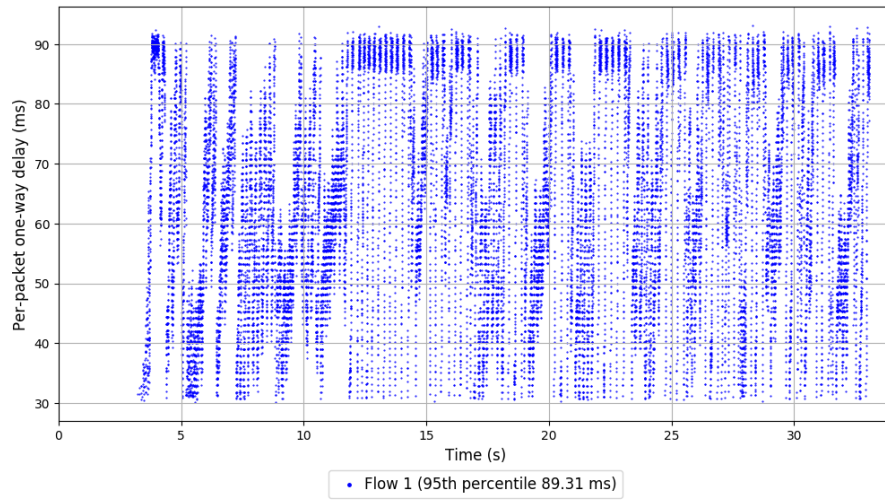
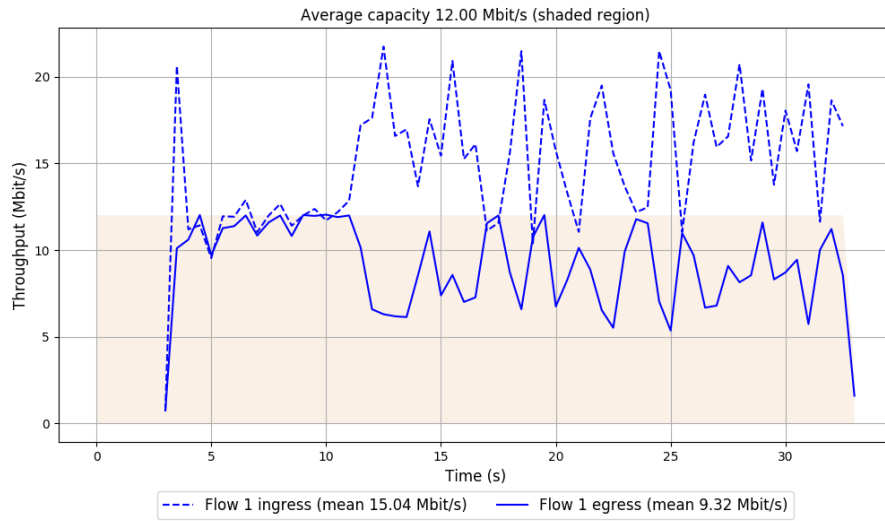
-- Flow 1:

Average throughput: 9.32 Mbit/s

95th percentile per-packet one-way delay: 89.308 ms

Loss rate: 37.95%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-27 12:18:49

End at: 2018-02-27 12:19:19

Below is generated by plot.py at 2018-02-27 12:42:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.58 Mbit/s (96.5% utilization)

95th percentile per-packet one-way delay: 87.873 ms

Loss rate: 3.77%

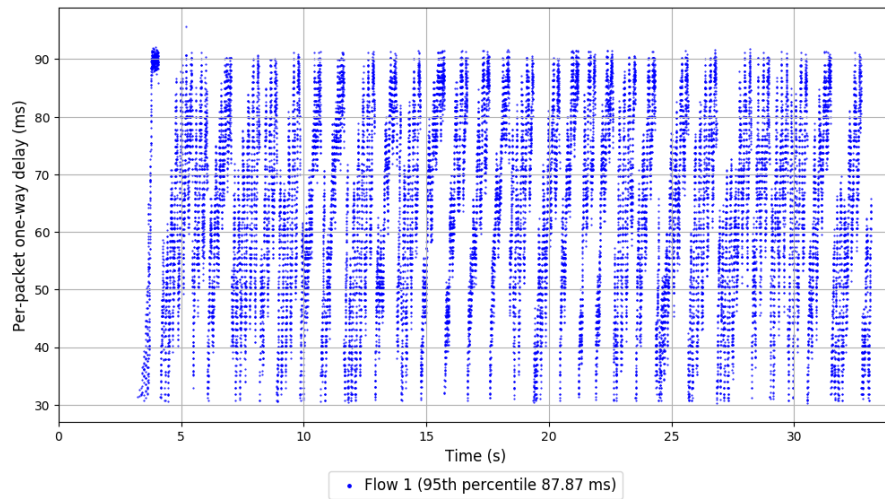
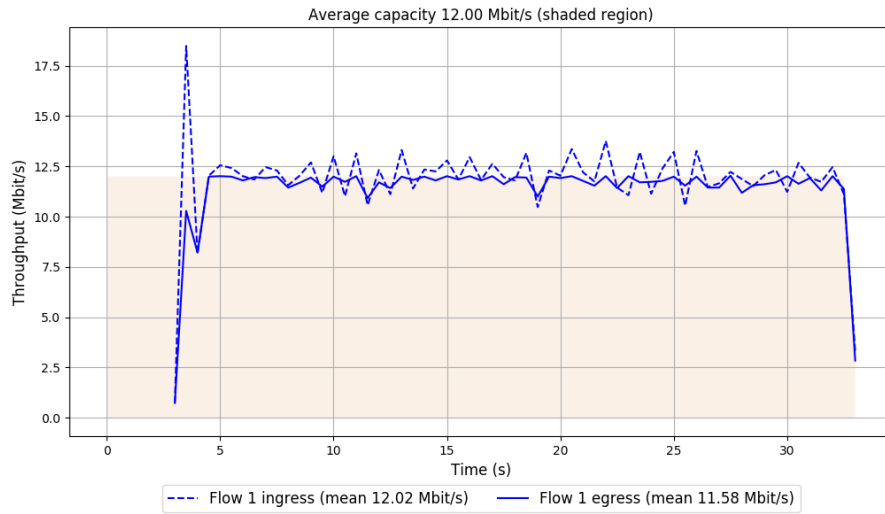
-- Flow 1:

Average throughput: 11.58 Mbit/s

95th percentile per-packet one-way delay: 87.873 ms

Loss rate: 3.77%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-27 12:29:06

End at: 2018-02-27 12:29:36

Below is generated by plot.py at 2018-02-27 12:42:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.20 Mbit/s (85.0% utilization)

95th percentile per-packet one-way delay: 89.612 ms

Loss rate: 36.34%

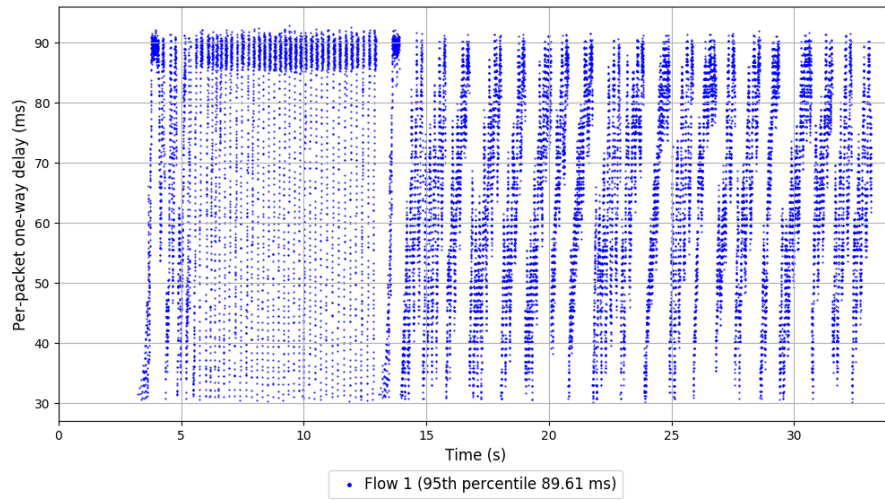
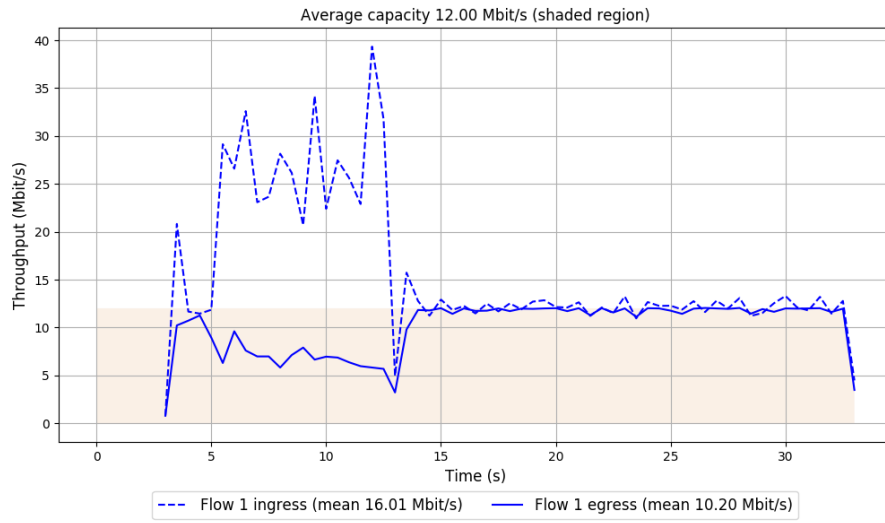
-- Flow 1:

Average throughput: 10.20 Mbit/s

95th percentile per-packet one-way delay: 89.612 ms

Loss rate: 36.34%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-02-27 10:54:17

End at: 2018-02-27 10:54:47

Below is generated by plot.py at 2018-02-27 12:42:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.63 Mbit/s (96.9% utilization)

95th percentile per-packet one-way delay: 54.530 ms

Loss rate: 0.11%

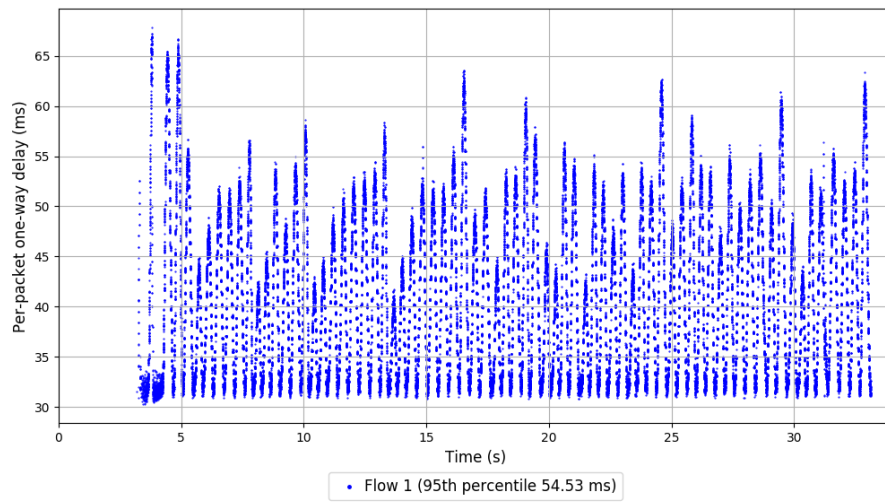
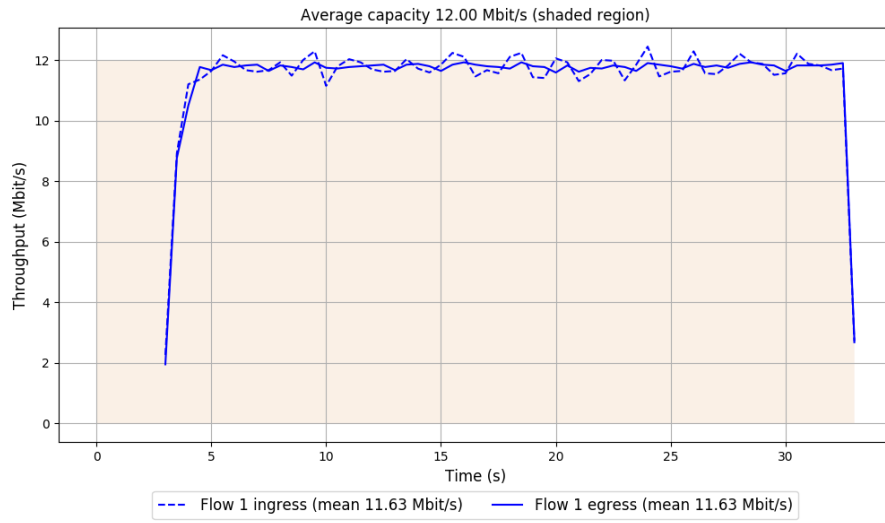
-- Flow 1:

Average throughput: 11.63 Mbit/s

95th percentile per-packet one-way delay: 54.530 ms

Loss rate: 0.11%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-27 11:04:35

End at: 2018-02-27 11:05:05

Below is generated by plot.py at 2018-02-27 12:42:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.53 Mbit/s (96.0% utilization)

95th percentile per-packet one-way delay: 55.051 ms

Loss rate: 0.12%

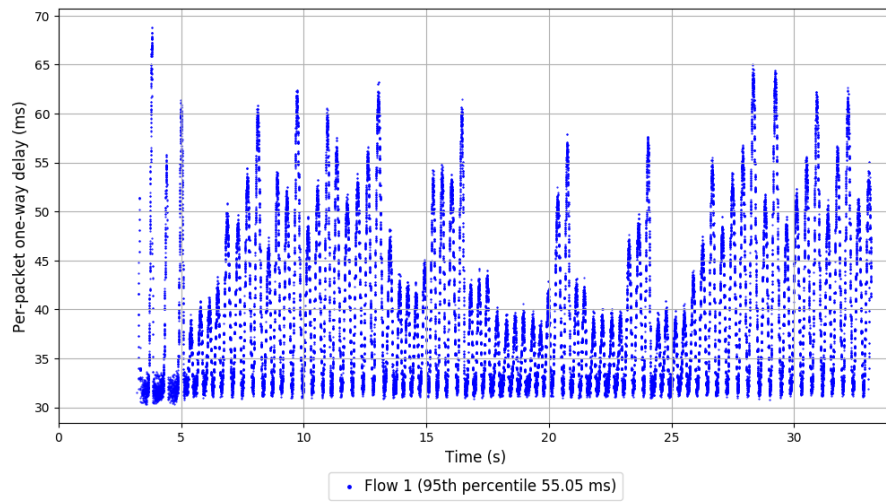
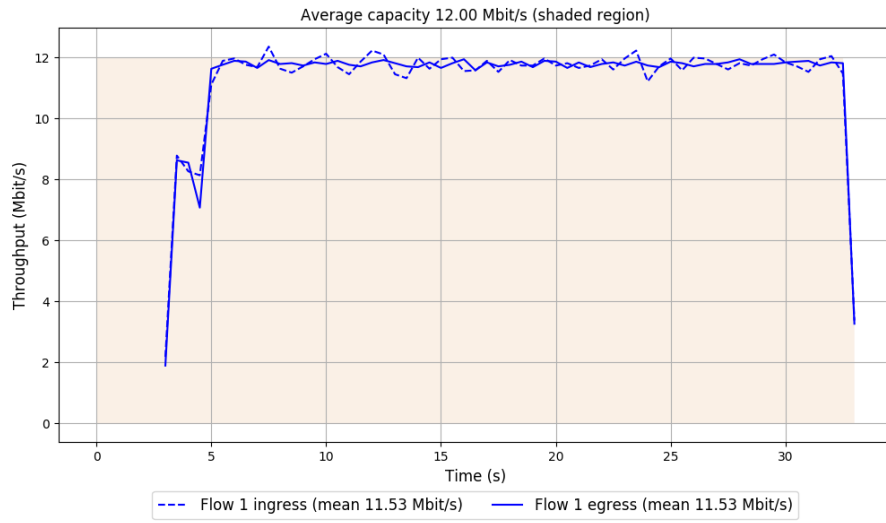
-- Flow 1:

Average throughput: 11.53 Mbit/s

95th percentile per-packet one-way delay: 55.051 ms

Loss rate: 0.12%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-27 11:14:52

End at: 2018-02-27 11:15:22

Below is generated by plot.py at 2018-02-27 12:42:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.53 Mbit/s (96.1% utilization)

95th percentile per-packet one-way delay: 53.631 ms

Loss rate: 0.09%

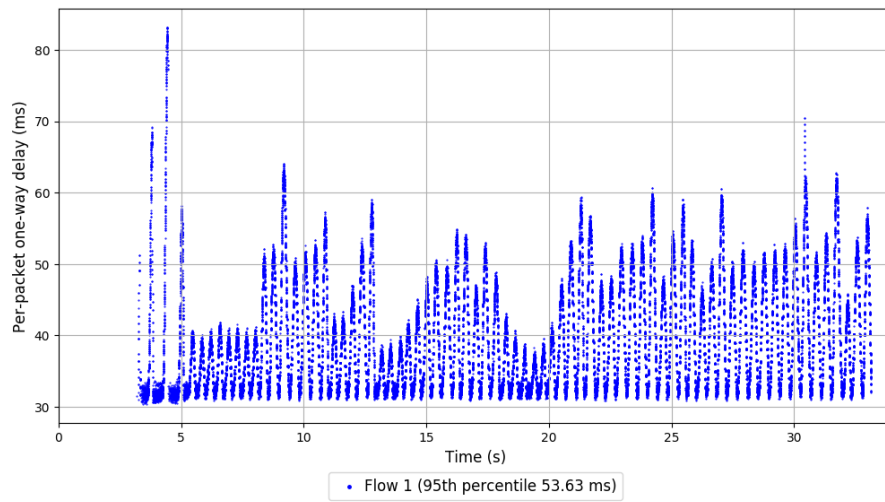
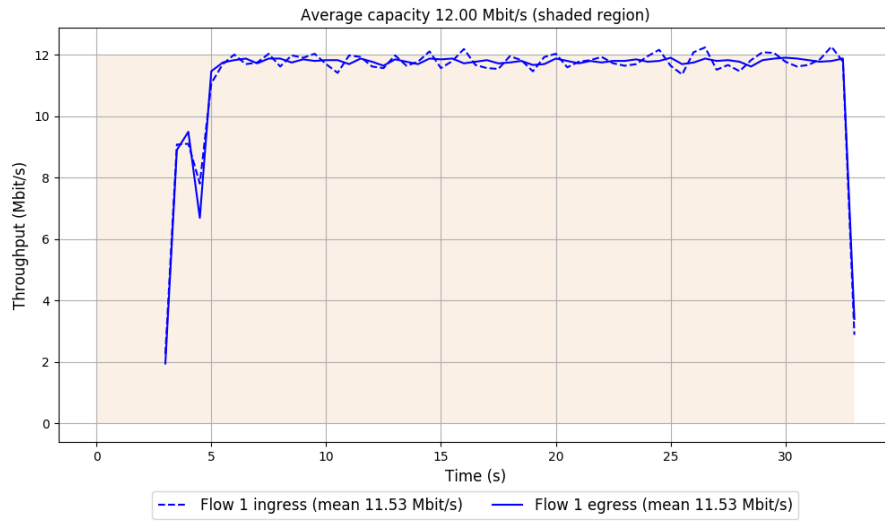
-- Flow 1:

Average throughput: 11.53 Mbit/s

95th percentile per-packet one-way delay: 53.631 ms

Loss rate: 0.09%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-27 11:25:09

End at: 2018-02-27 11:25:39

Below is generated by plot.py at 2018-02-27 12:42:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.69 Mbit/s (97.4% utilization)

95th percentile per-packet one-way delay: 55.082 ms

Loss rate: 0.20%

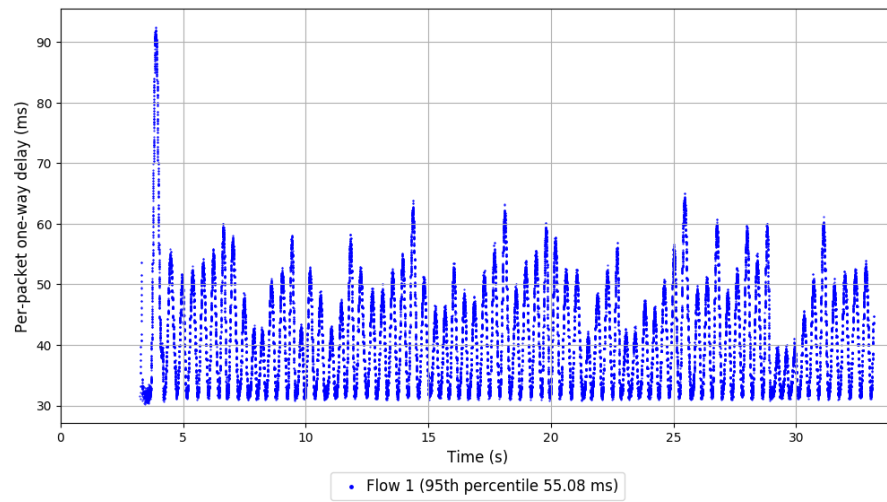
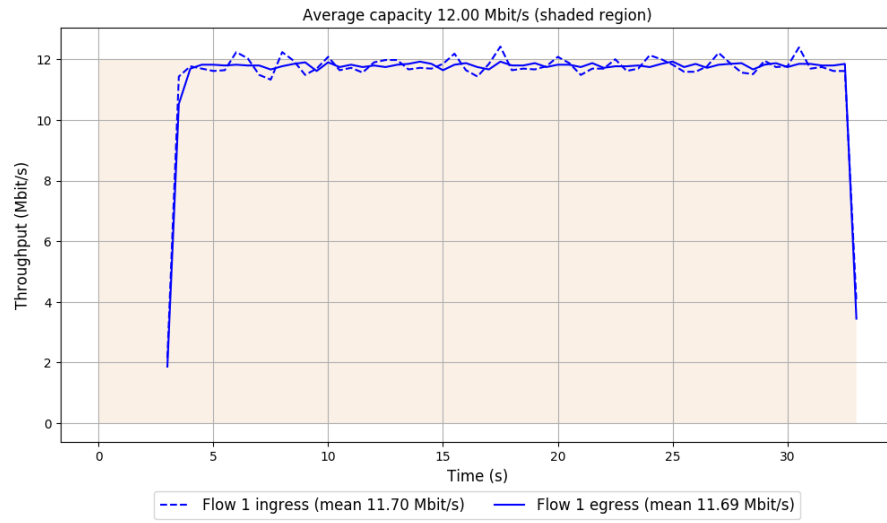
-- Flow 1:

Average throughput: 11.69 Mbit/s

95th percentile per-packet one-way delay: 55.082 ms

Loss rate: 0.20%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-27 11:35:25

End at: 2018-02-27 11:35:55

Below is generated by plot.py at 2018-02-27 12:42:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.64 Mbit/s (97.0% utilization)

95th percentile per-packet one-way delay: 56.578 ms

Loss rate: 0.16%

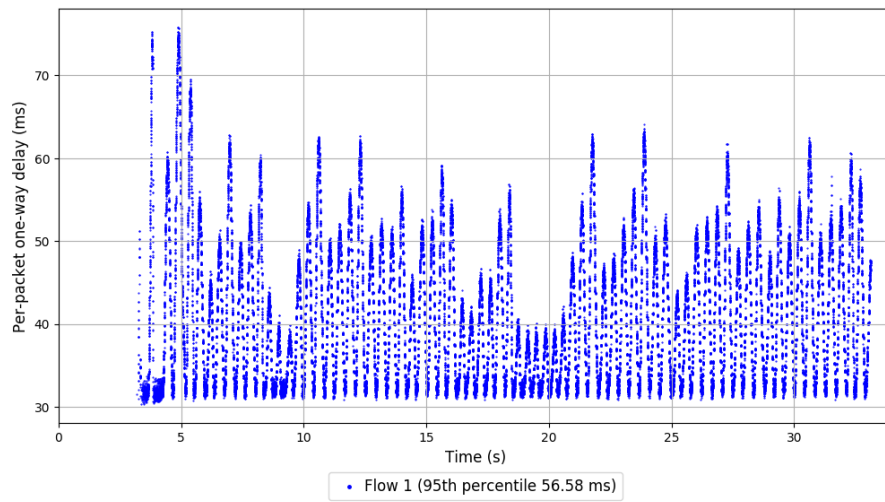
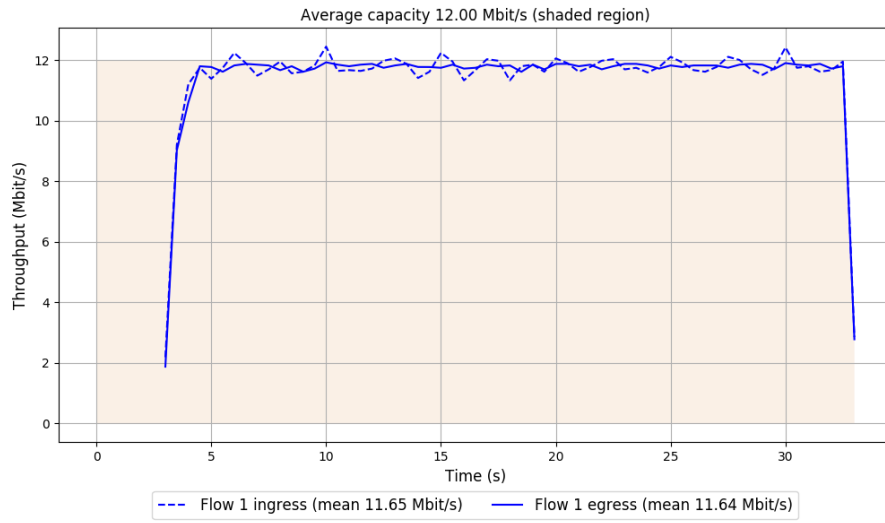
-- Flow 1:

Average throughput: 11.64 Mbit/s

95th percentile per-packet one-way delay: 56.578 ms

Loss rate: 0.16%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-27 11:45:41

End at: 2018-02-27 11:46:11

Below is generated by plot.py at 2018-02-27 12:43:04

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.66 Mbit/s (97.1% utilization)

95th percentile per-packet one-way delay: 54.986 ms

Loss rate: 0.11%

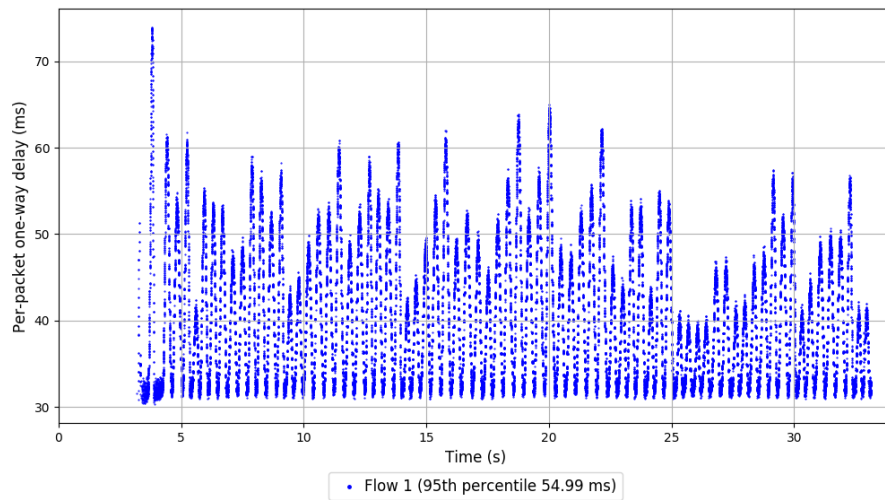
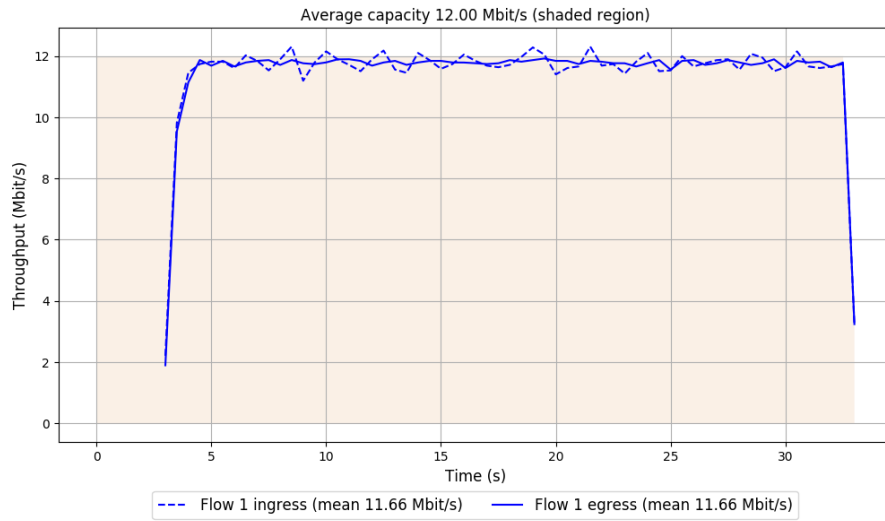
-- Flow 1:

Average throughput: 11.66 Mbit/s

95th percentile per-packet one-way delay: 54.986 ms

Loss rate: 0.11%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-27 11:55:58

End at: 2018-02-27 11:56:28

Below is generated by plot.py at 2018-02-27 12:43:05

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.64 Mbit/s (97.0% utilization)

95th percentile per-packet one-way delay: 55.361 ms

Loss rate: 0.15%

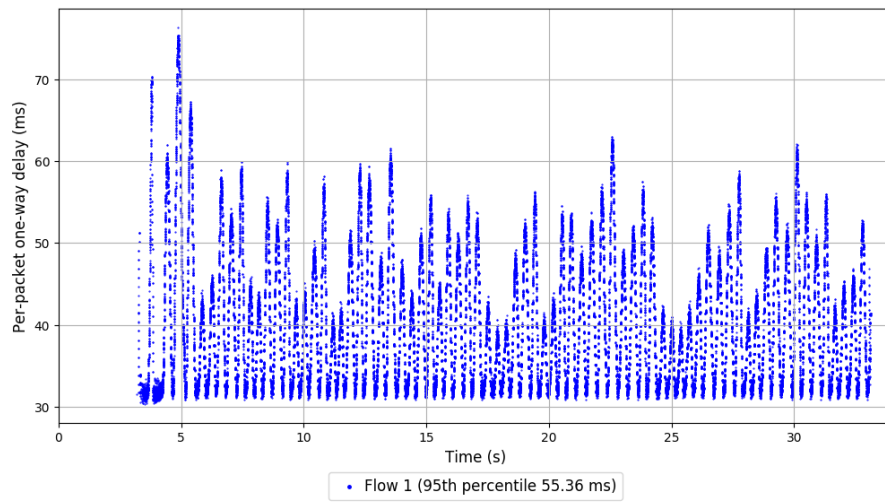
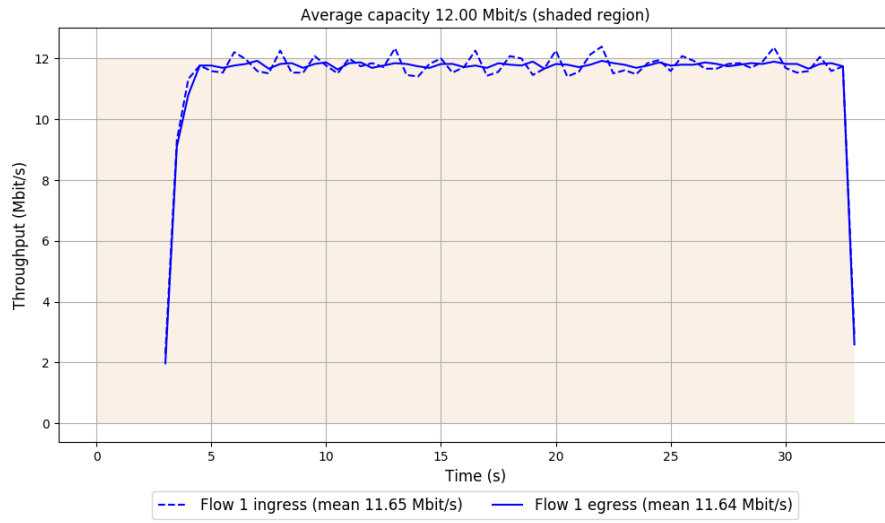
-- Flow 1:

Average throughput: 11.64 Mbit/s

95th percentile per-packet one-way delay: 55.361 ms

Loss rate: 0.15%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-27 12:06:15

End at: 2018-02-27 12:06:45

Below is generated by plot.py at 2018-02-27 12:43:11

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.63 Mbit/s (96.9% utilization)

95th percentile per-packet one-way delay: 54.483 ms

Loss rate: 0.11%

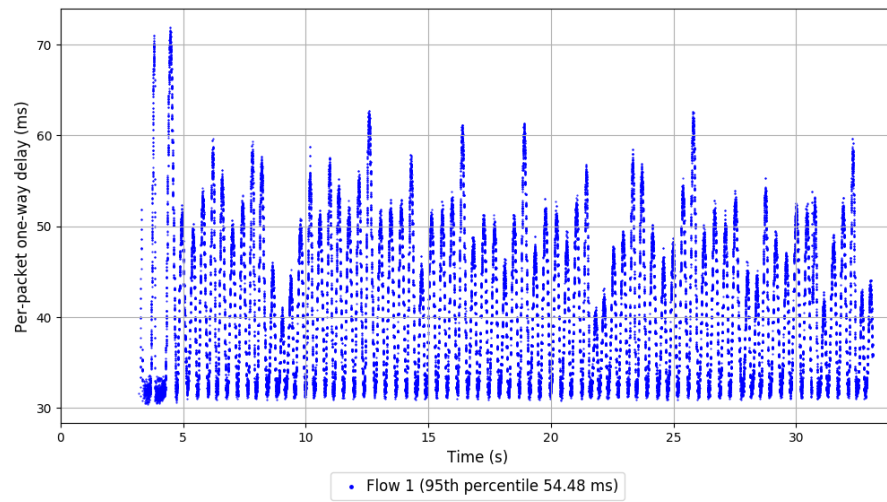
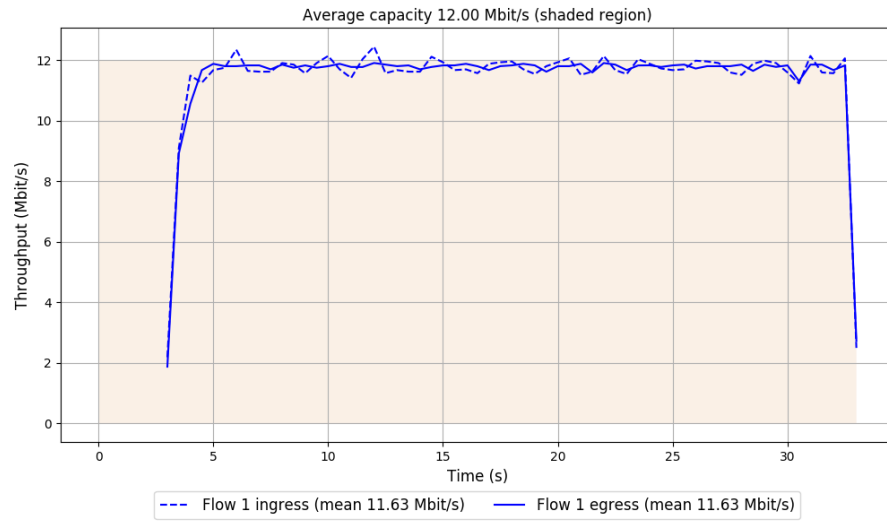
-- Flow 1:

Average throughput: 11.63 Mbit/s

95th percentile per-packet one-way delay: 54.483 ms

Loss rate: 0.11%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-27 12:16:32

End at: 2018-02-27 12:17:02

Below is generated by plot.py at 2018-02-27 12:43:20

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.64 Mbit/s (97.0% utilization)

95th percentile per-packet one-way delay: 53.409 ms

Loss rate: 0.13%

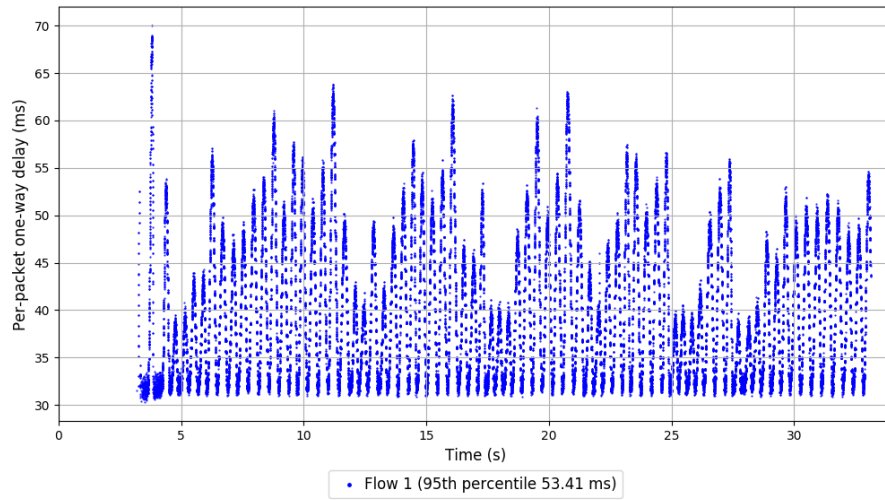
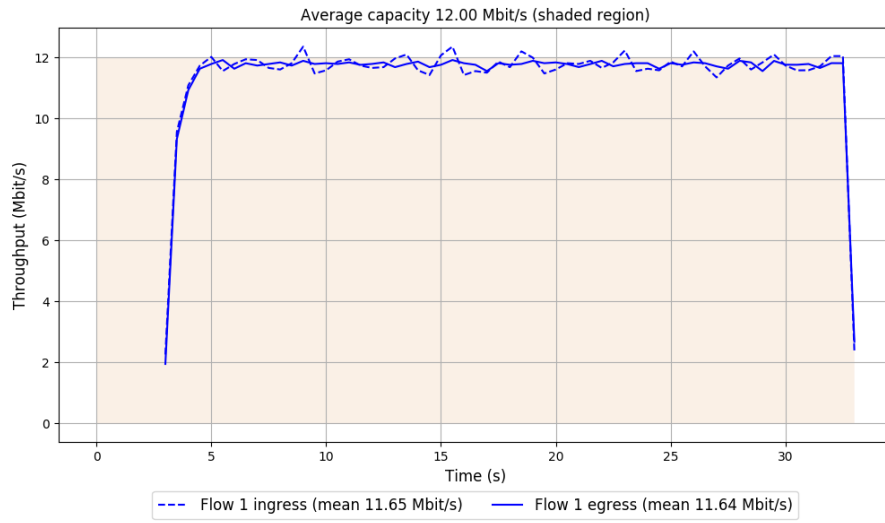
-- Flow 1:

Average throughput: 11.64 Mbit/s

95th percentile per-packet one-way delay: 53.409 ms

Loss rate: 0.13%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-27 12:26:48

End at: 2018-02-27 12:27:18

Below is generated by plot.py at 2018-02-27 12:43:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.68 Mbit/s (97.3% utilization)

95th percentile per-packet one-way delay: 54.945 ms

Loss rate: 0.10%

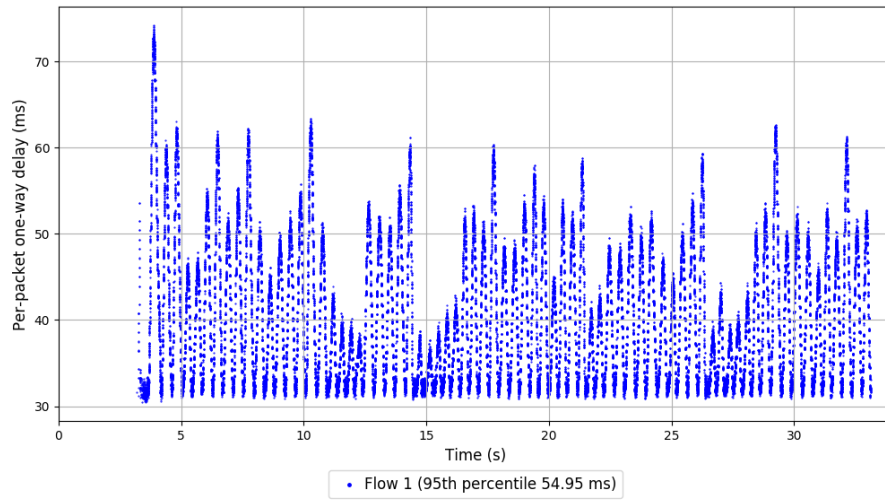
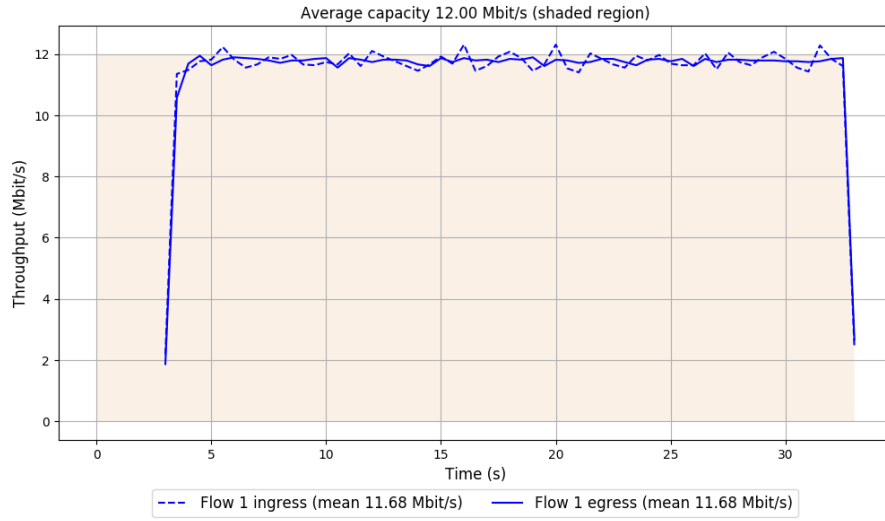
-- Flow 1:

Average throughput: 11.68 Mbit/s

95th percentile per-packet one-way delay: 54.945 ms

Loss rate: 0.10%

Run 10: Report of Copa — Data Link



Run 1: Statistics of FillP

Start at: 2018-02-27 11:03:26

End at: 2018-02-27 11:03:56

Below is generated by plot.py at 2018-02-27 12:43:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 91.398 ms

Loss rate: 41.01%

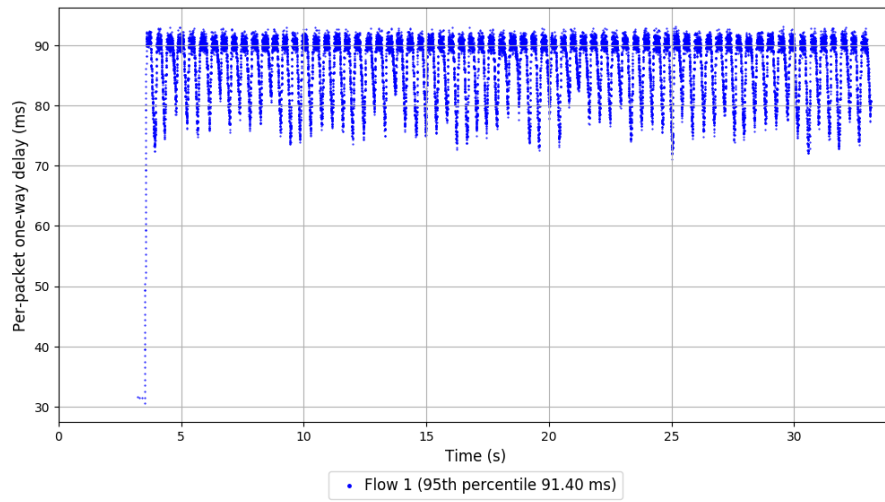
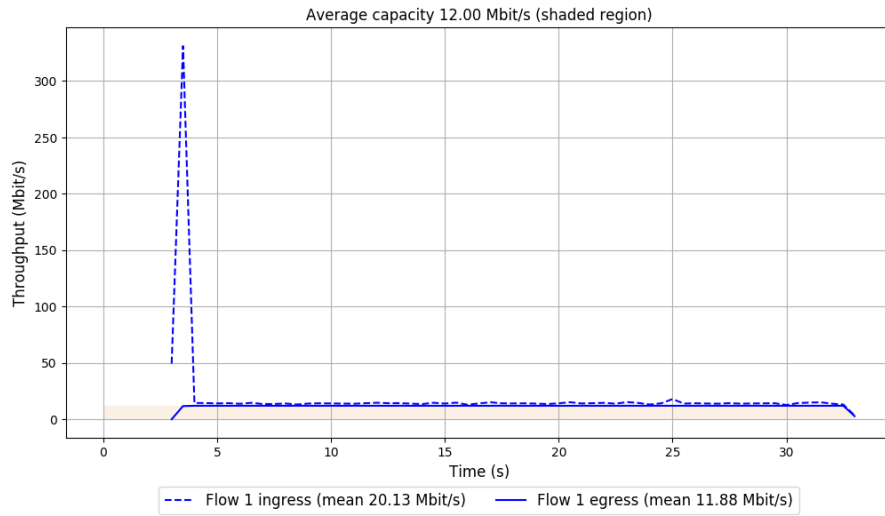
-- Flow 1:

Average throughput: 11.88 Mbit/s

95th percentile per-packet one-way delay: 91.398 ms

Loss rate: 41.01%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-02-27 11:13:43

End at: 2018-02-27 11:14:13

Below is generated by plot.py at 2018-02-27 12:43:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 91.405 ms

Loss rate: 40.52%

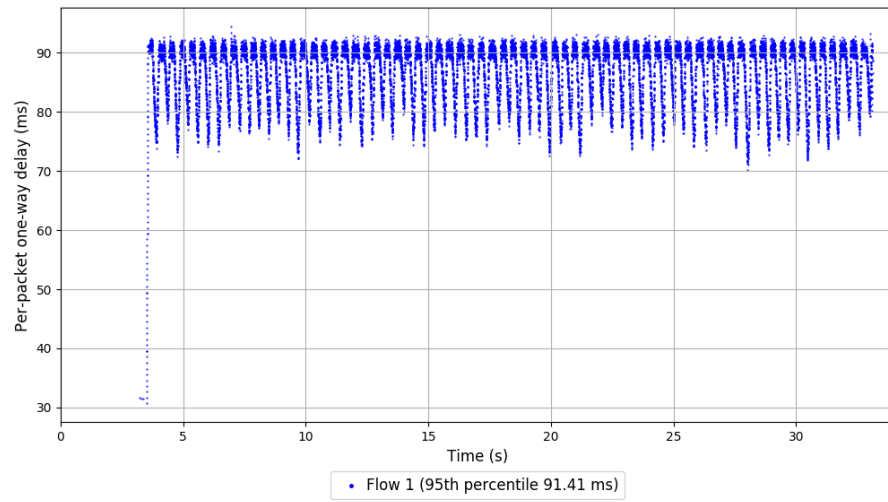
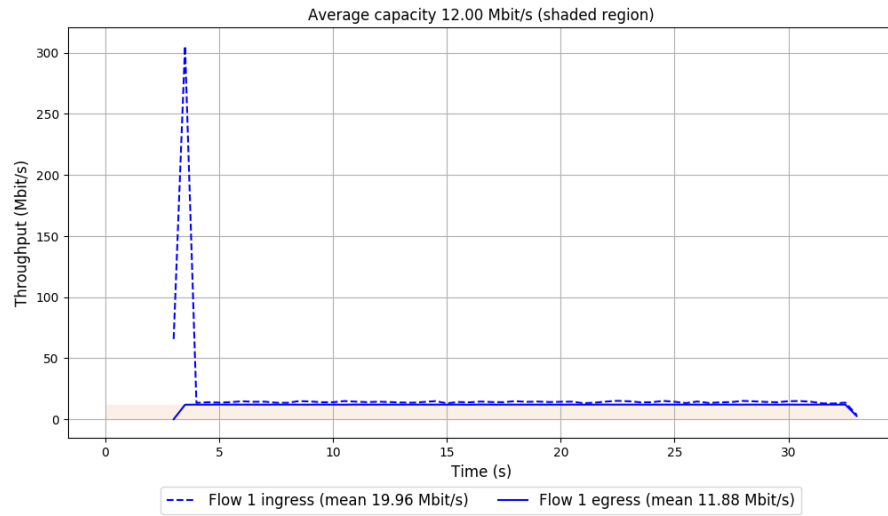
-- Flow 1:

Average throughput: 11.88 Mbit/s

95th percentile per-packet one-way delay: 91.405 ms

Loss rate: 40.52%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-27 11:23:59

End at: 2018-02-27 11:24:29

Below is generated by plot.py at 2018-02-27 12:43:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 91.401 ms

Loss rate: 39.60%

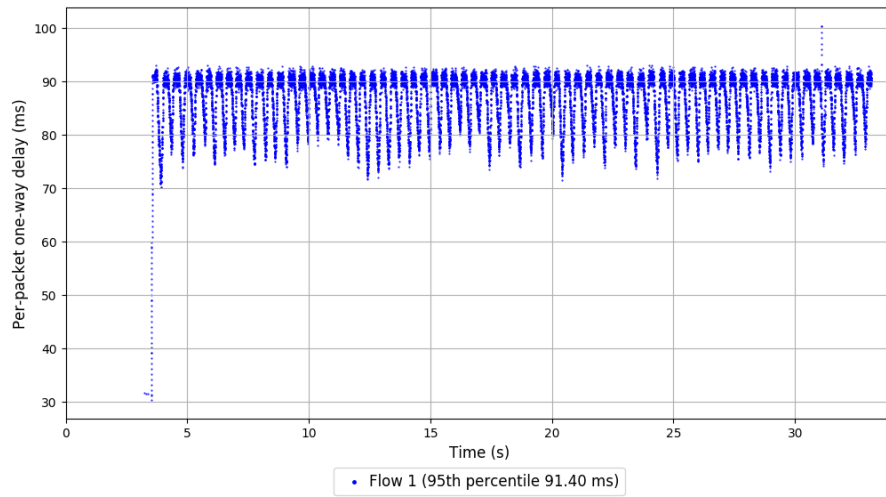
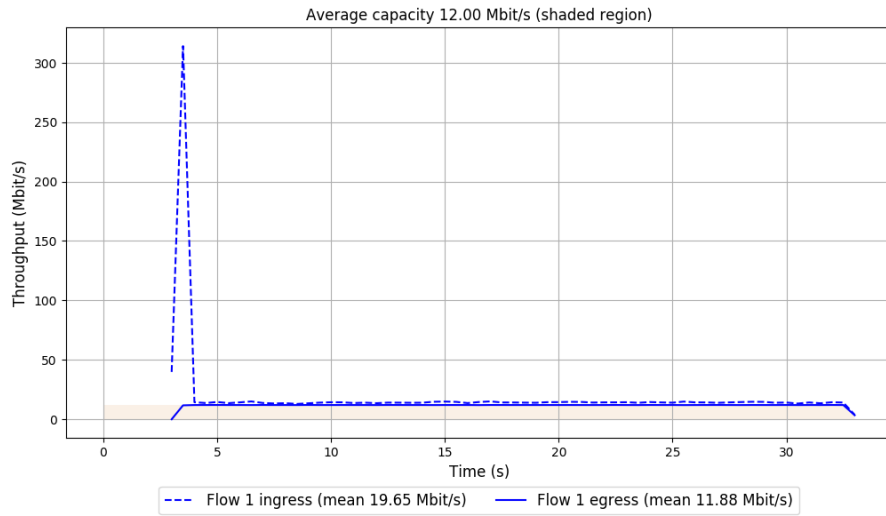
-- Flow 1:

Average throughput: 11.88 Mbit/s

95th percentile per-packet one-way delay: 91.401 ms

Loss rate: 39.60%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-27 11:34:16

End at: 2018-02-27 11:34:46

Below is generated by plot.py at 2018-02-27 12:43:30

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.89 Mbit/s (99.1% utilization)

95th percentile per-packet one-way delay: 91.416 ms

Loss rate: 41.83%

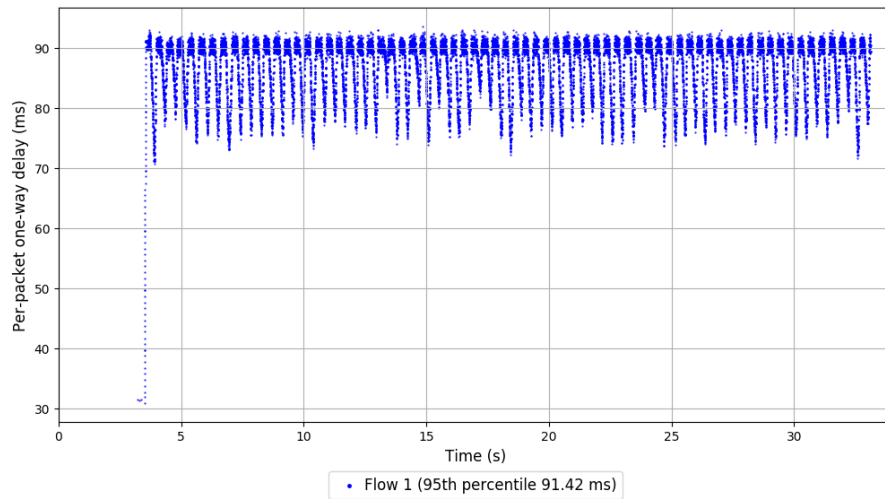
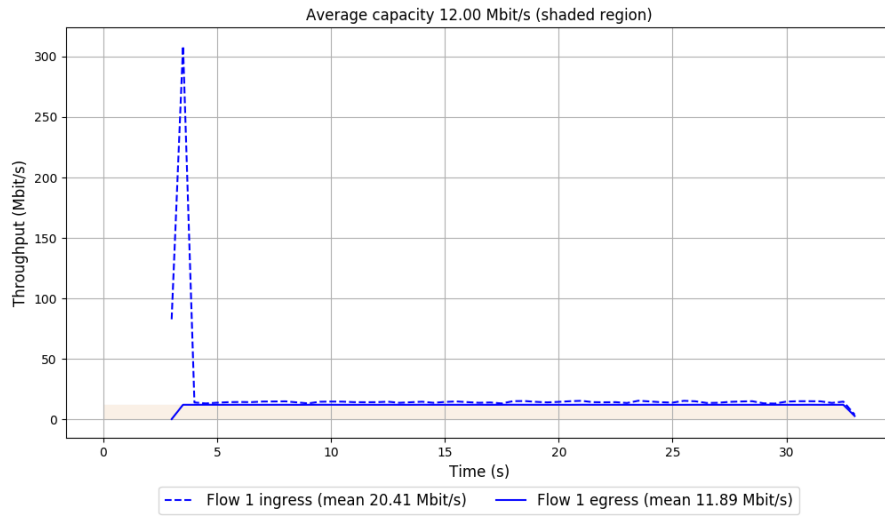
-- Flow 1:

Average throughput: 11.89 Mbit/s

95th percentile per-packet one-way delay: 91.416 ms

Loss rate: 41.83%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-27 11:44:32

End at: 2018-02-27 11:45:02

Below is generated by plot.py at 2018-02-27 12:43:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 91.430 ms

Loss rate: 41.01%

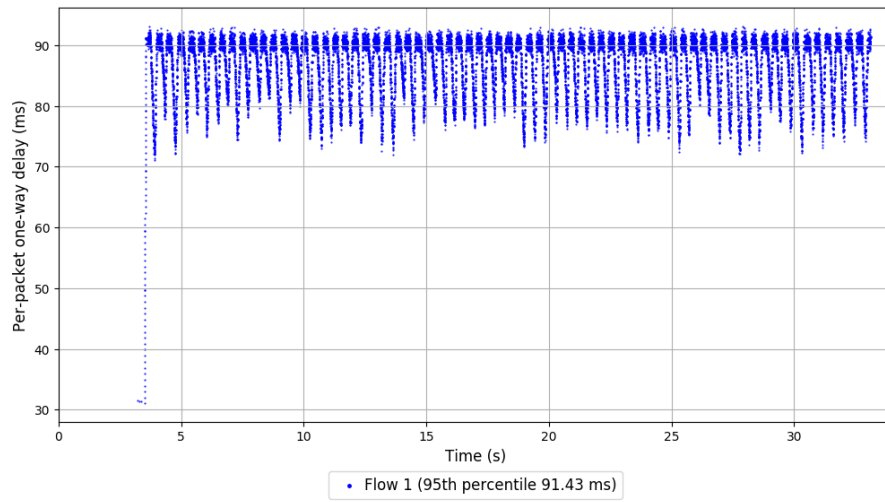
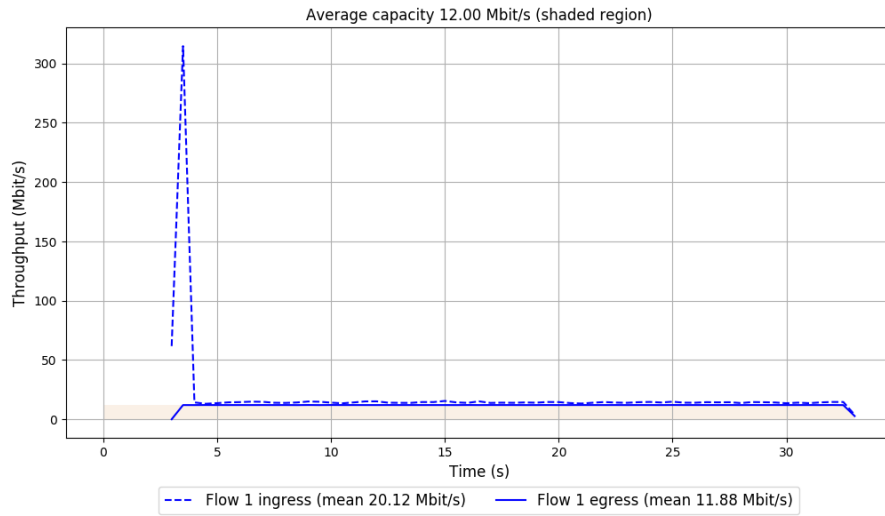
-- Flow 1:

Average throughput: 11.88 Mbit/s

95th percentile per-packet one-way delay: 91.430 ms

Loss rate: 41.01%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-27 11:54:49

End at: 2018-02-27 11:55:19

Below is generated by plot.py at 2018-02-27 12:43:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.89 Mbit/s (99.1% utilization)

95th percentile per-packet one-way delay: 91.420 ms

Loss rate: 41.33%

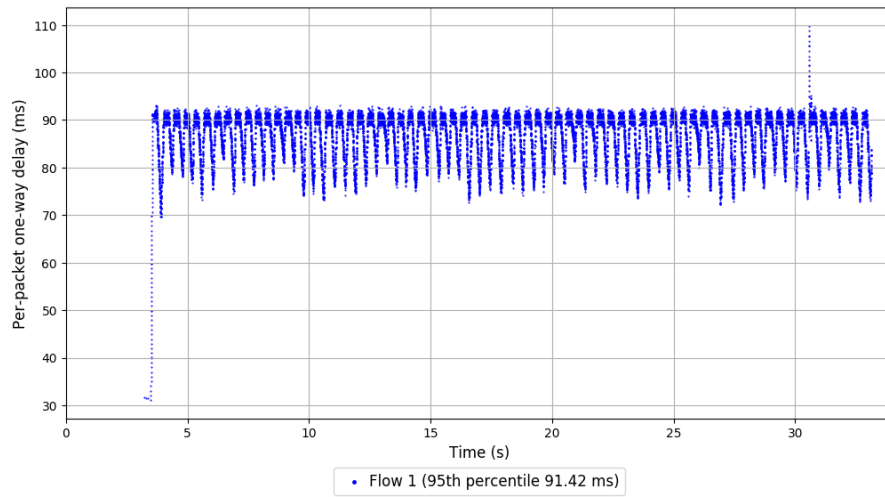
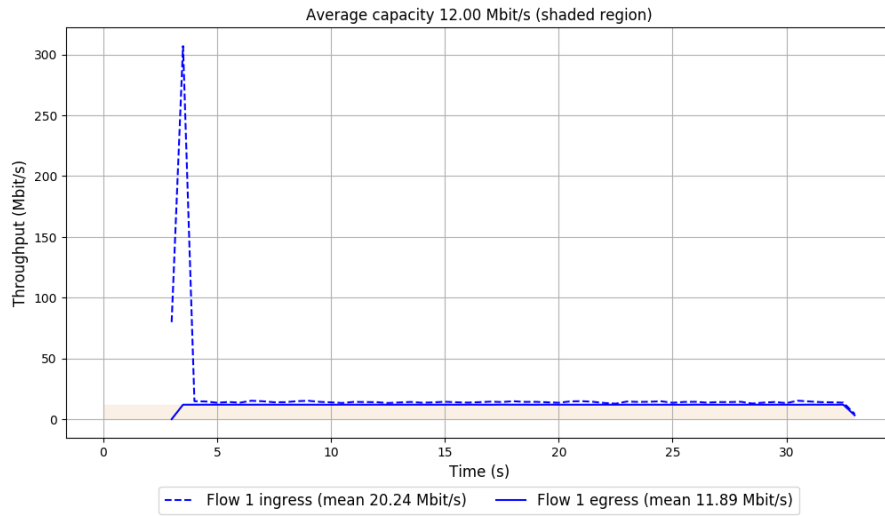
-- Flow 1:

Average throughput: 11.89 Mbit/s

95th percentile per-packet one-way delay: 91.420 ms

Loss rate: 41.33%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-27 12:05:06

End at: 2018-02-27 12:05:36

Below is generated by plot.py at 2018-02-27 12:43:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 91.424 ms

Loss rate: 40.62%

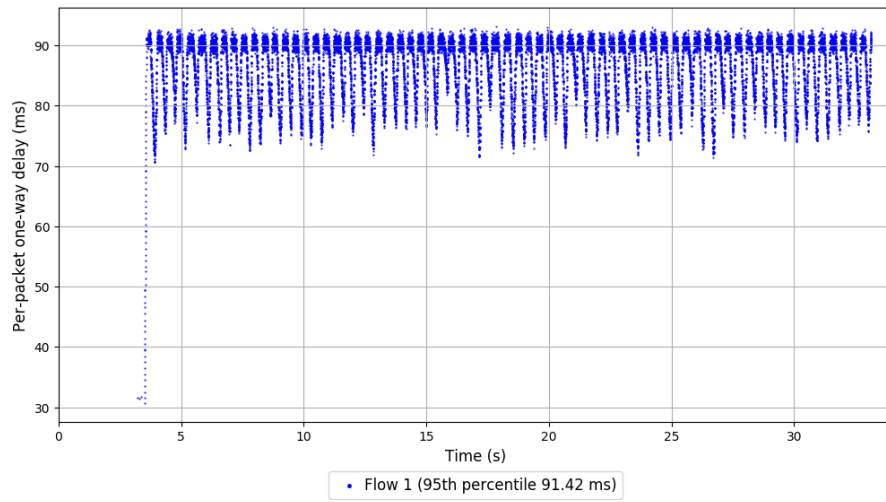
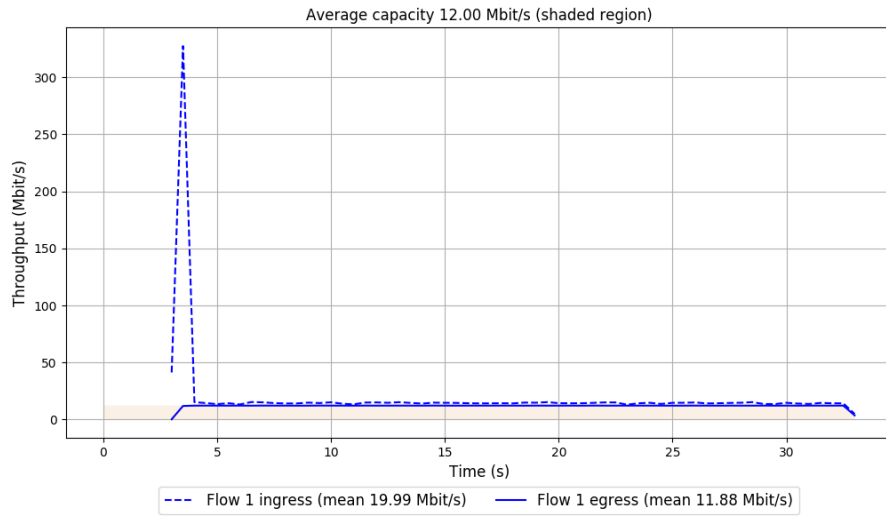
-- Flow 1:

Average throughput: 11.88 Mbit/s

95th percentile per-packet one-way delay: 91.424 ms

Loss rate: 40.62%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-27 12:15:23

End at: 2018-02-27 12:15:53

Below is generated by plot.py at 2018-02-27 12:43:47

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.89 Mbit/s (99.1% utilization)

95th percentile per-packet one-way delay: 91.414 ms

Loss rate: 38.63%

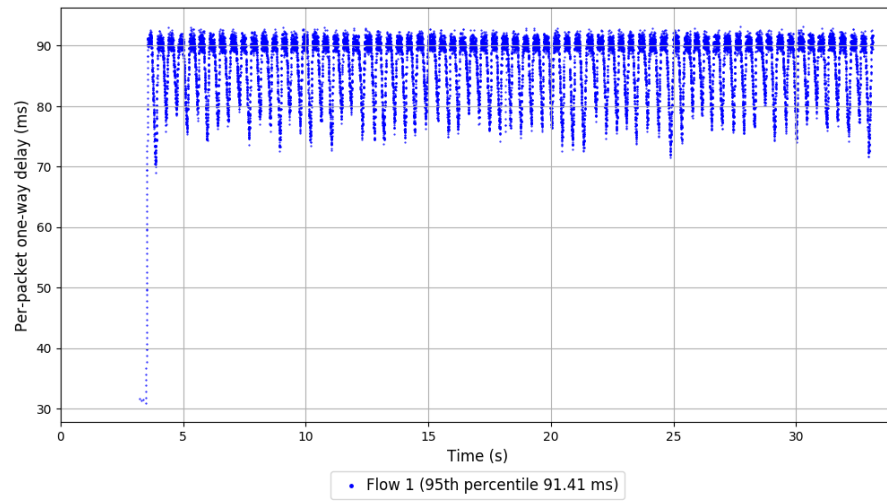
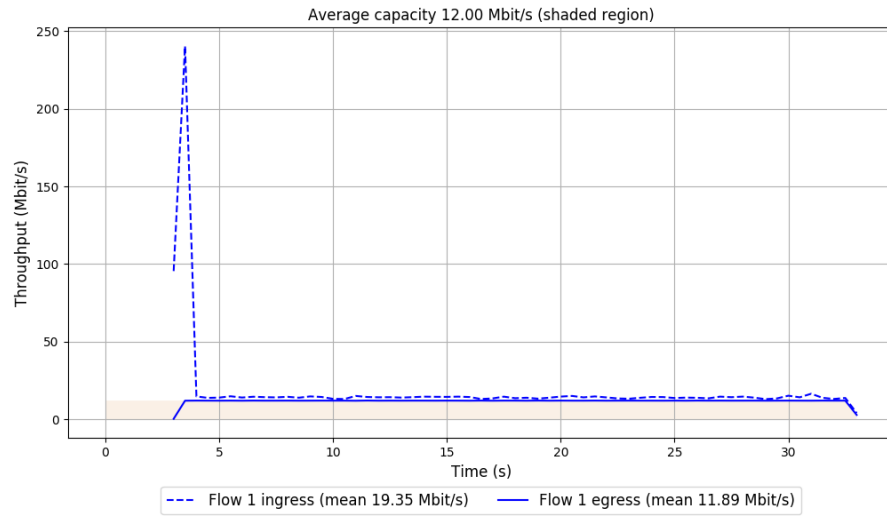
-- Flow 1:

Average throughput: 11.89 Mbit/s

95th percentile per-packet one-way delay: 91.414 ms

Loss rate: 38.63%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-27 12:25:39

End at: 2018-02-27 12:26:09

Below is generated by plot.py at 2018-02-27 12:43:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 91.404 ms

Loss rate: 38.52%

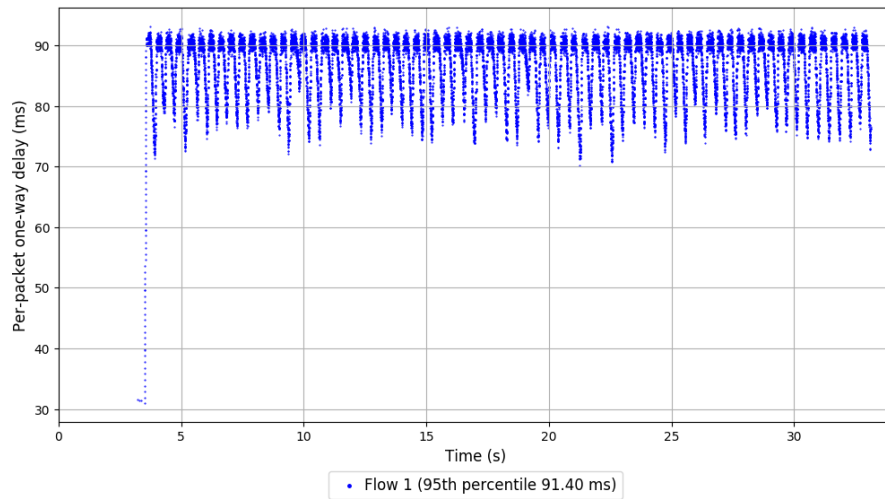
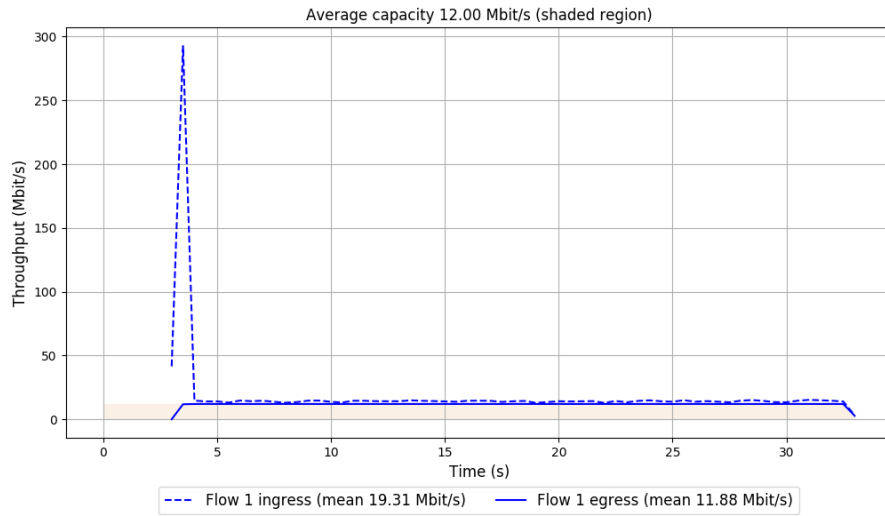
-- Flow 1:

Average throughput: 11.88 Mbit/s

95th percentile per-packet one-way delay: 91.404 ms

Loss rate: 38.52%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-02-27 12:35:56

End at: 2018-02-27 12:36:26

Below is generated by plot.py at 2018-02-27 12:43:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 91.418 ms

Loss rate: 39.90%

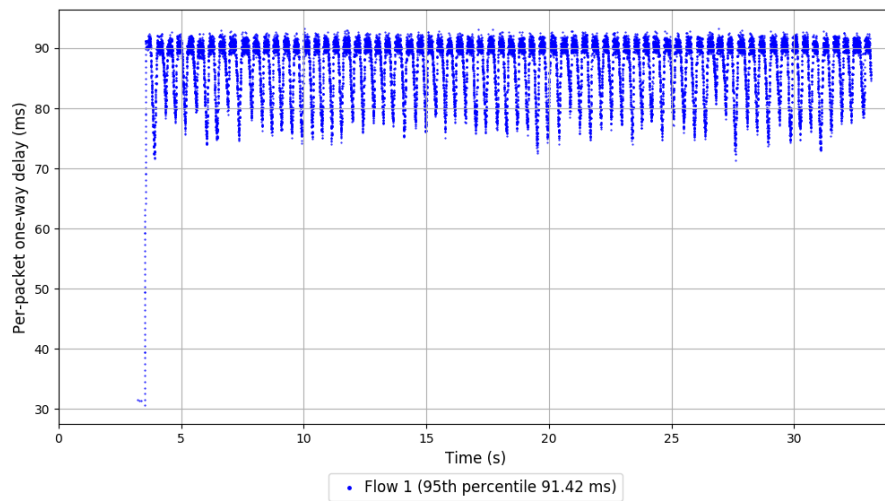
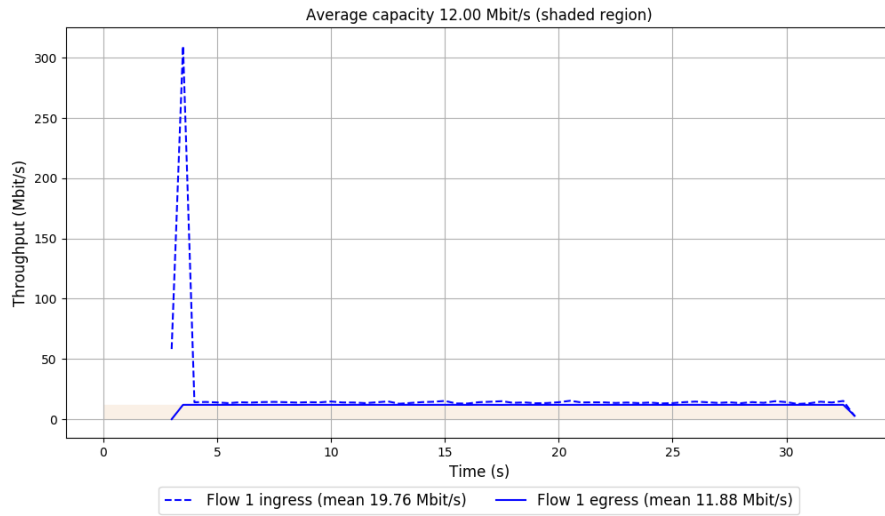
-- Flow 1:

Average throughput: 11.88 Mbit/s

95th percentile per-packet one-way delay: 91.418 ms

Loss rate: 39.90%

Run 10: Report of FillP — Data Link



Run 1: Statistics of Indigo-1-32

Start at: 2018-02-27 10:54:51

End at: 2018-02-27 10:55:21

Below is generated by plot.py at 2018-02-27 12:43:51

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.86 Mbit/s (98.8% utilization)

95th percentile per-packet one-way delay: 36.388 ms

Loss rate: 0.24%

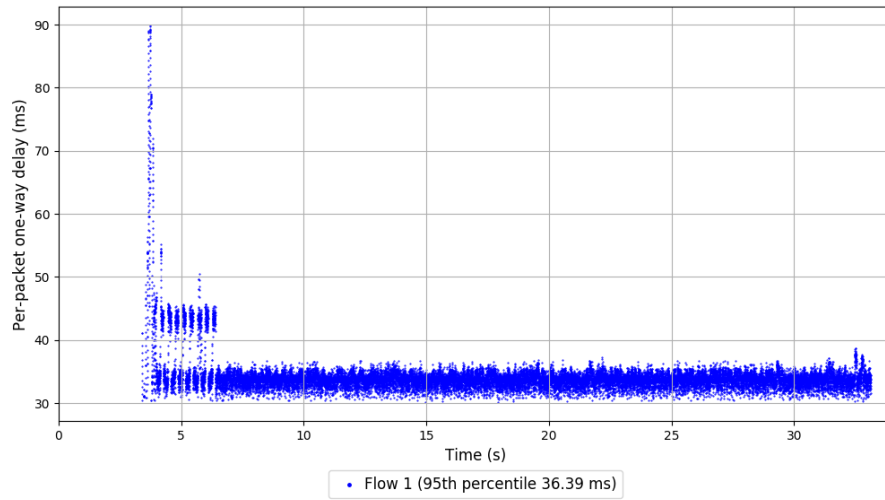
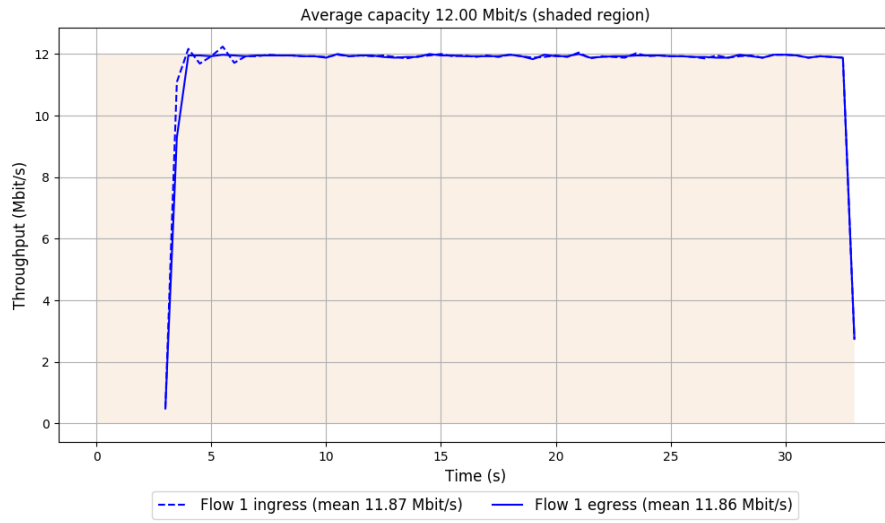
-- Flow 1:

Average throughput: 11.86 Mbit/s

95th percentile per-packet one-way delay: 36.388 ms

Loss rate: 0.24%

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



Run 2: Statistics of Indigo-1-32

Start at: 2018-02-27 11:05:10

End at: 2018-02-27 11:05:40

Below is generated by plot.py at 2018-02-27 12:43:52

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.10 Mbit/s (92.5% utilization)

95th percentile per-packet one-way delay: 39.574 ms

Loss rate: 0.26%

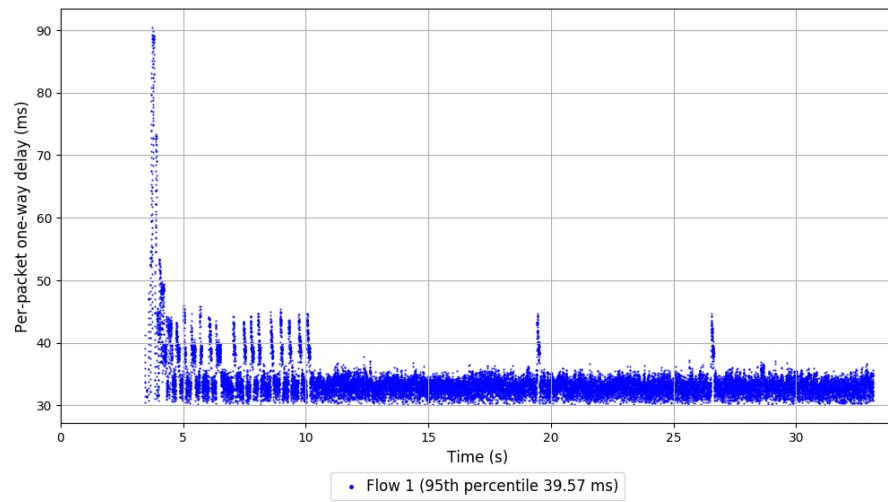
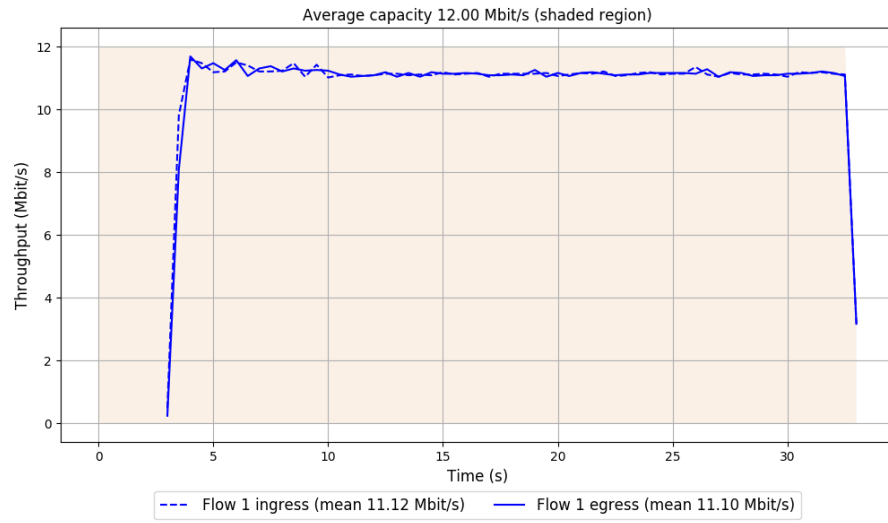
-- Flow 1:

Average throughput: 11.10 Mbit/s

95th percentile per-packet one-way delay: 39.574 ms

Loss rate: 0.26%

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-27 11:15:27

End at: 2018-02-27 11:15:57

Below is generated by plot.py at 2018-02-27 12:43:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.87 Mbit/s (98.9% utilization)

95th percentile per-packet one-way delay: 43.731 ms

Loss rate: 0.25%

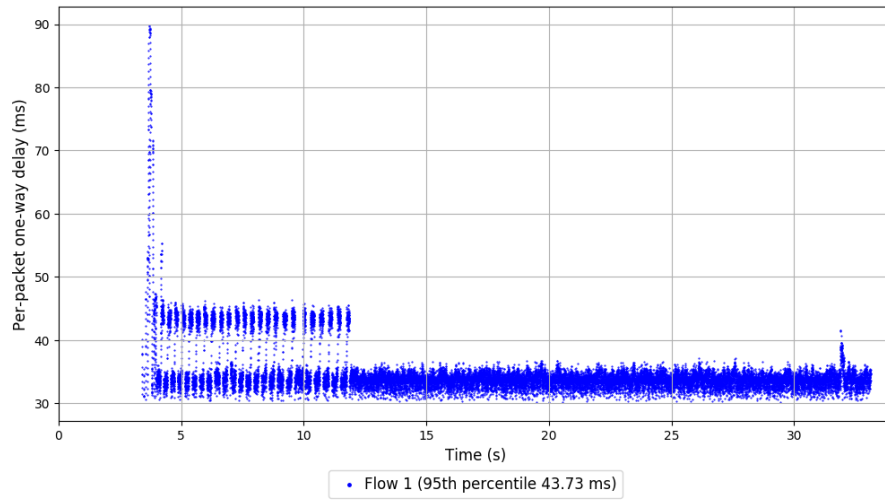
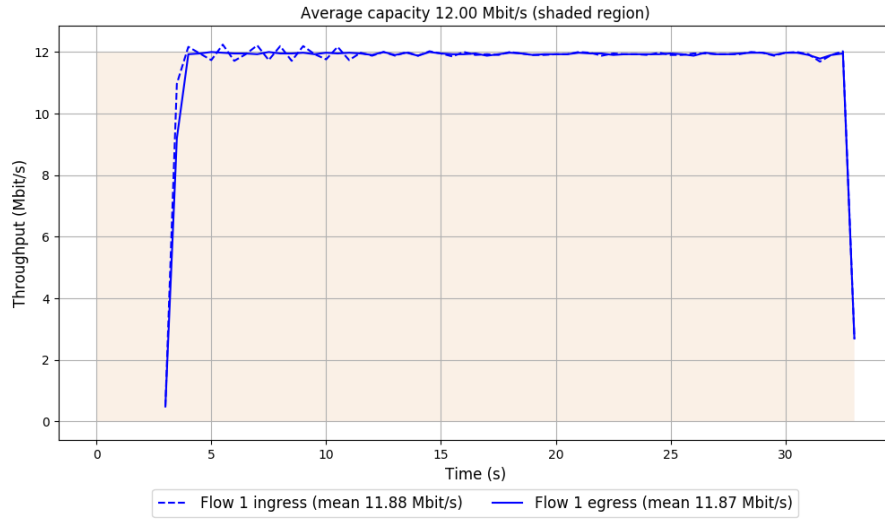
-- Flow 1:

Average throughput: 11.87 Mbit/s

95th percentile per-packet one-way delay: 43.731 ms

Loss rate: 0.25%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-27 11:25:43

End at: 2018-02-27 11:26:13

Below is generated by plot.py at 2018-02-27 12:44:01

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 37.710 ms

Loss rate: 0.26%

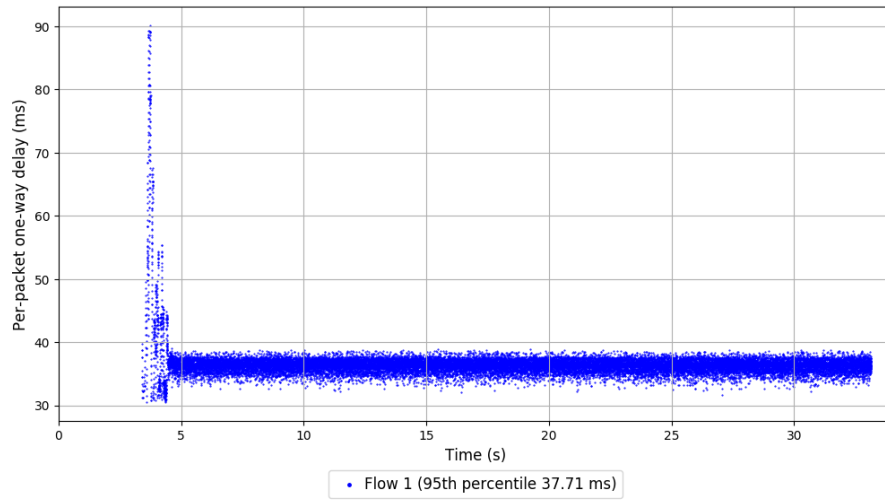
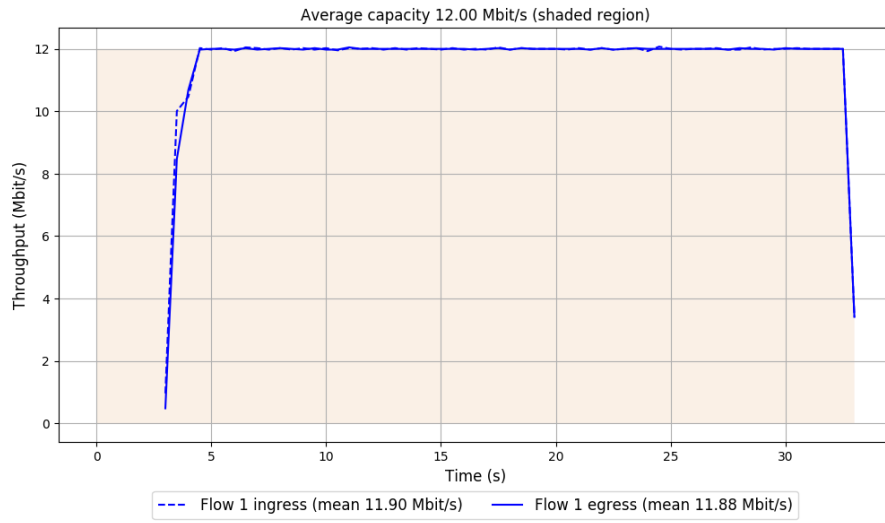
-- Flow 1:

Average throughput: 11.88 Mbit/s

95th percentile per-packet one-way delay: 37.710 ms

Loss rate: 0.26%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-27 11:36:00

End at: 2018-02-27 11:36:30

Below is generated by plot.py at 2018-02-27 12:44:09

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.90 Mbit/s (99.2% utilization)

95th percentile per-packet one-way delay: 37.686 ms

Loss rate: 0.25%

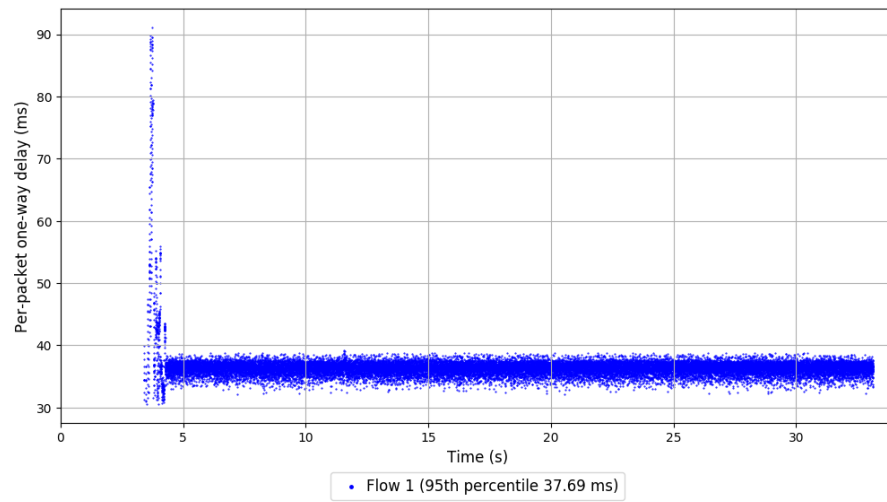
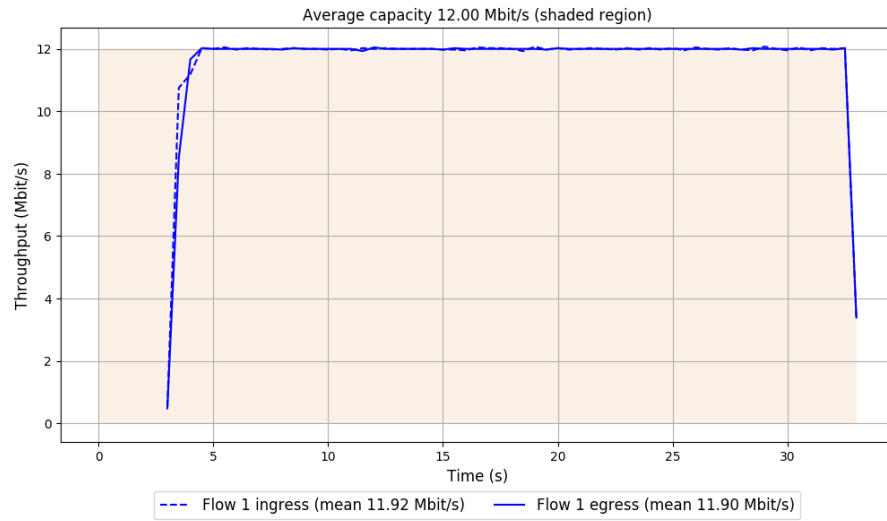
-- Flow 1:

Average throughput: 11.90 Mbit/s

95th percentile per-packet one-way delay: 37.686 ms

Loss rate: 0.25%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-27 11:46:16

End at: 2018-02-27 11:46:46

Below is generated by plot.py at 2018-02-27 12:44:11

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.76 Mbit/s (98.0% utilization)

95th percentile per-packet one-way delay: 35.704 ms

Loss rate: 0.22%

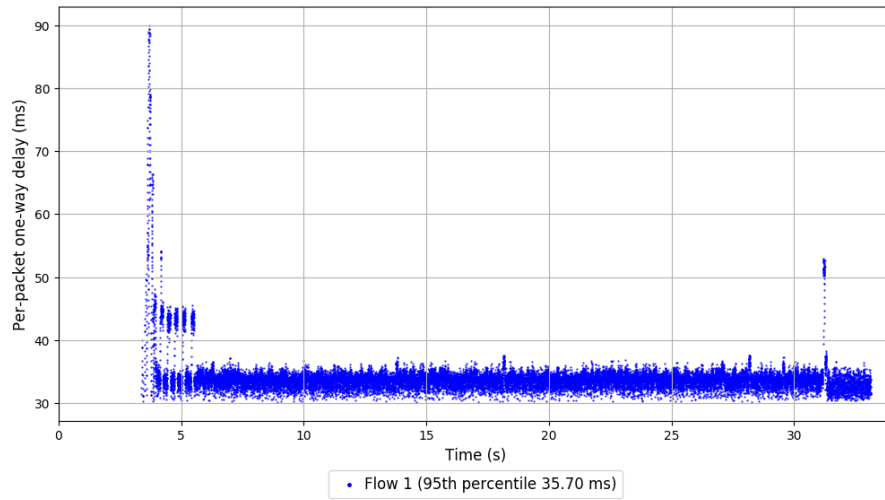
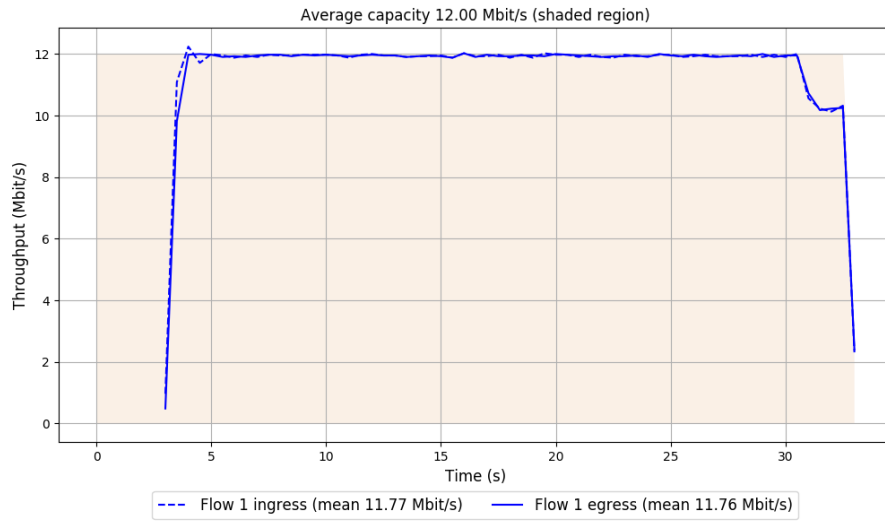
-- Flow 1:

Average throughput: 11.76 Mbit/s

95th percentile per-packet one-way delay: 35.704 ms

Loss rate: 0.22%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-27 11:56:32

End at: 2018-02-27 11:57:03

Below is generated by plot.py at 2018-02-27 12:44:12

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.90 Mbit/s (99.2% utilization)

95th percentile per-packet one-way delay: 39.841 ms

Loss rate: 0.27%

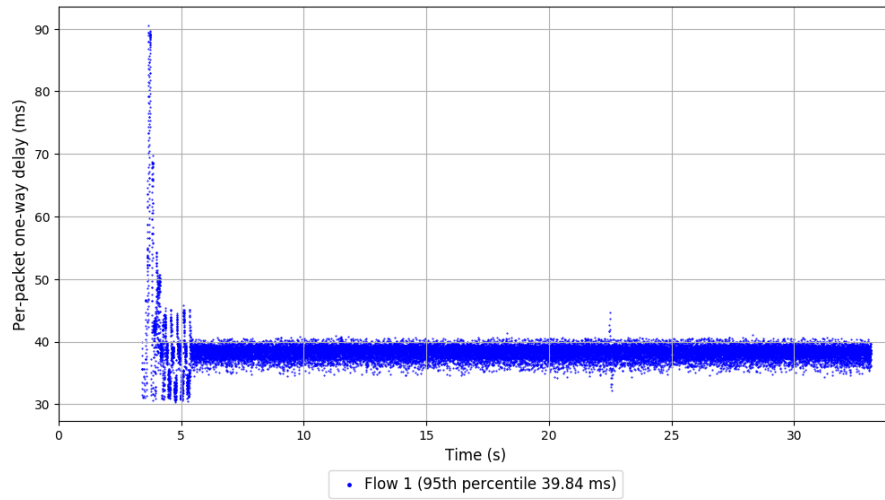
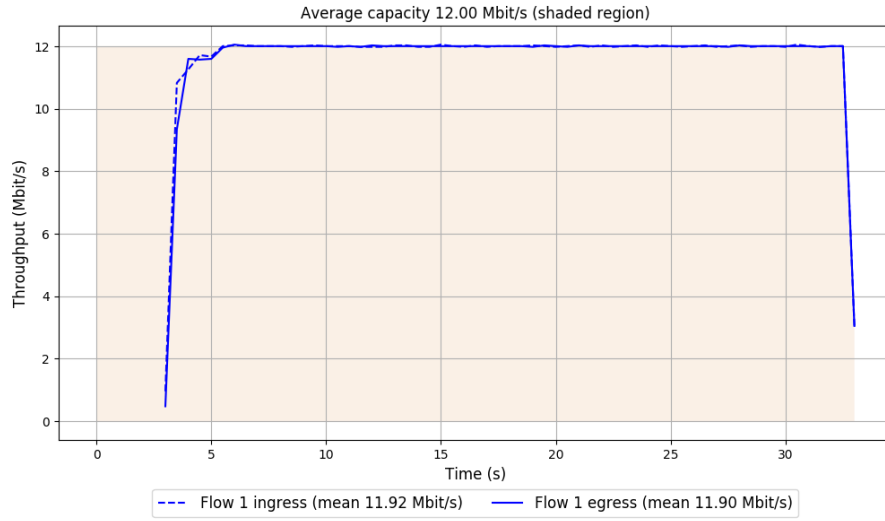
-- Flow 1:

Average throughput: 11.90 Mbit/s

95th percentile per-packet one-way delay: 39.841 ms

Loss rate: 0.27%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-27 12:06:50

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

Below is generated by plot.py at 2018-02-27 12:44:12

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.12 Mbit/s (92.7% utilization)

95th percentile per-packet one-way delay: 40.101 ms

Loss rate: 0.25%

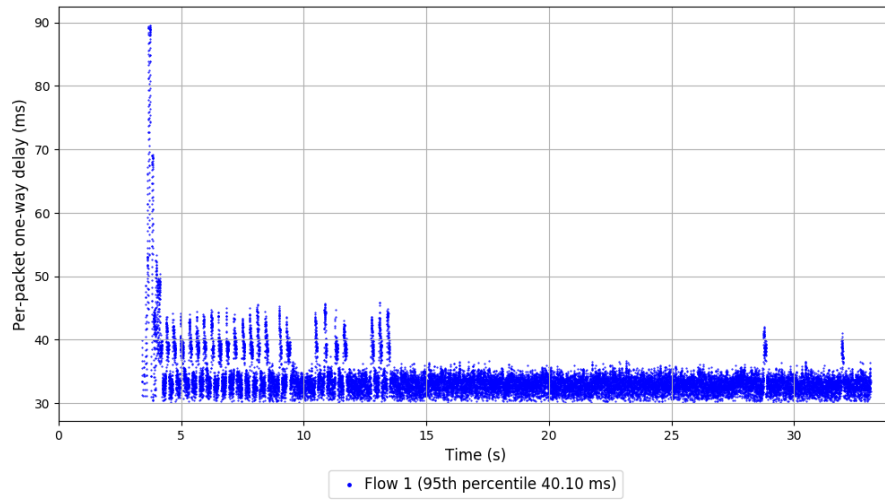
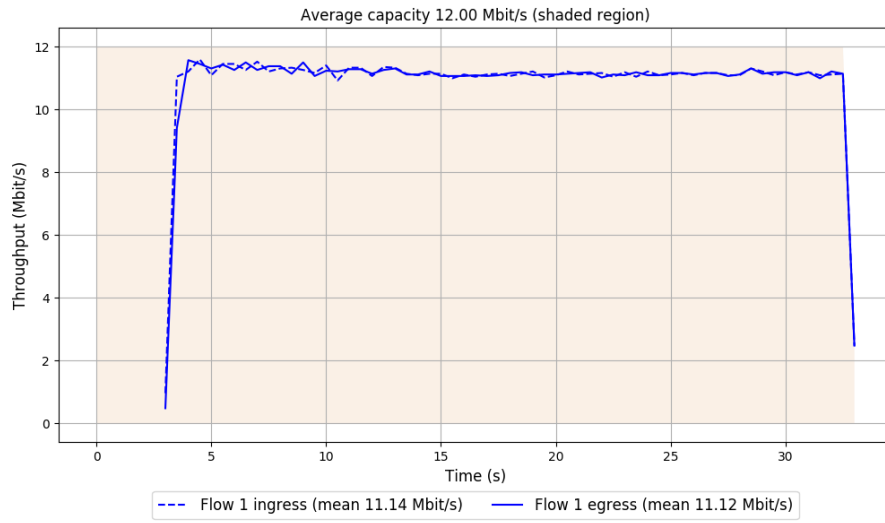
-- Flow 1:

Average throughput: 11.12 Mbit/s

95th percentile per-packet one-way delay: 40.101 ms

Loss rate: 0.25%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-27 12:17:06

End at: 2018-02-27 12:17:36

Below is generated by plot.py at 2018-02-27 12:44:13

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.86 Mbit/s (98.8% utilization)

95th percentile per-packet one-way delay: 43.676 ms

Loss rate: 0.25%

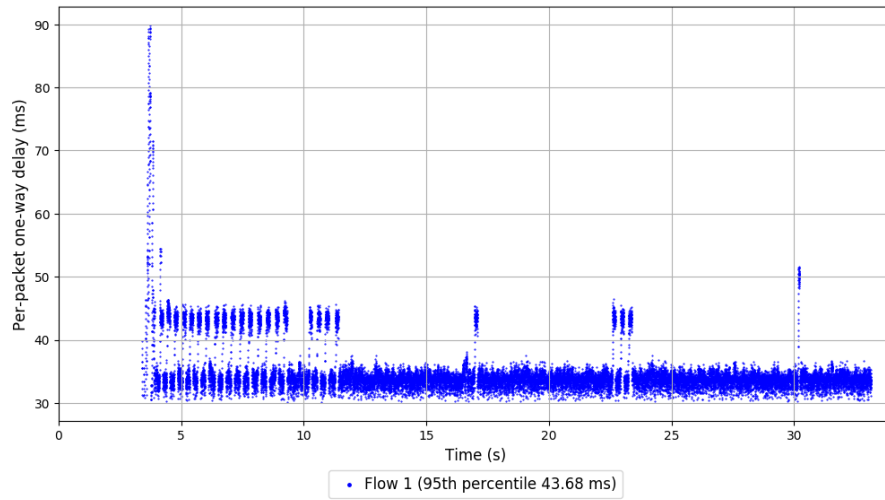
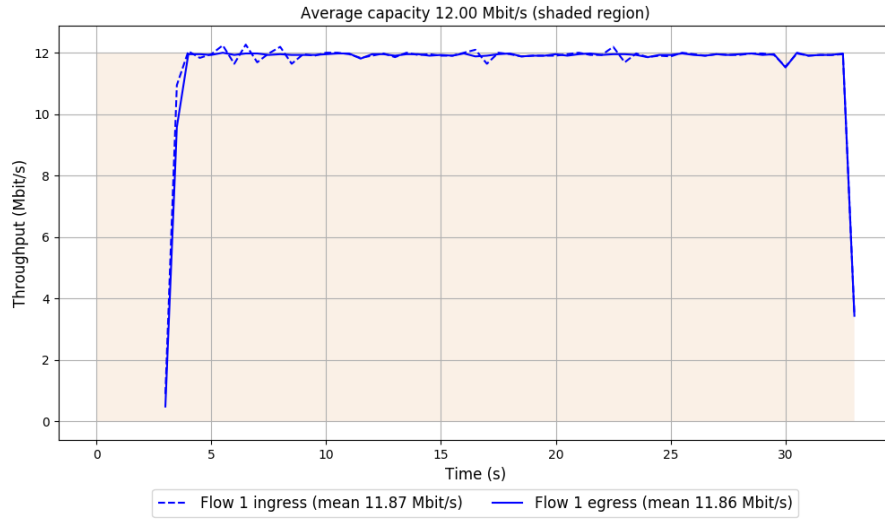
-- Flow 1:

Average throughput: 11.86 Mbit/s

95th percentile per-packet one-way delay: 43.676 ms

Loss rate: 0.25%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-27 12:27:23

End at: 2018-02-27 12:27:53

Below is generated by plot.py at 2018-02-27 12:44:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.85 Mbit/s (98.8% utilization)

95th percentile per-packet one-way delay: 42.604 ms

Loss rate: 0.25%

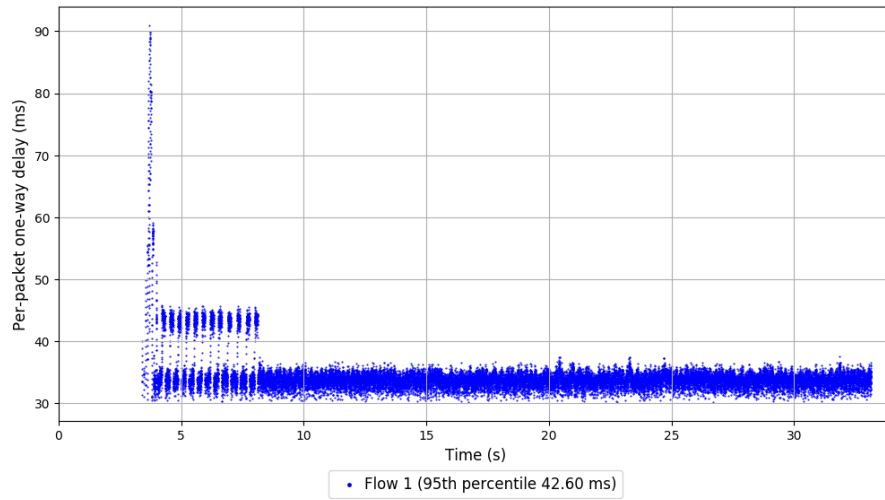
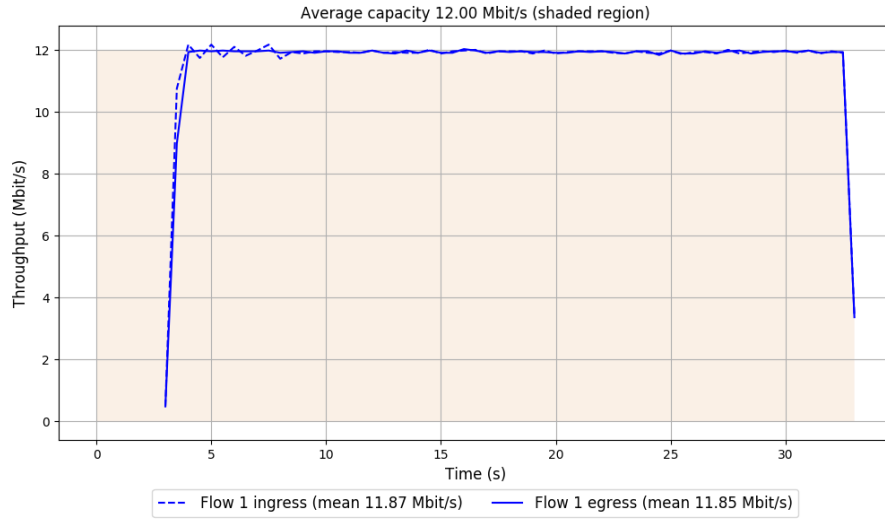
-- Flow 1:

Average throughput: 11.85 Mbit/s

95th percentile per-packet one-way delay: 42.604 ms

Loss rate: 0.25%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-02-27 10:59:26

End at: 2018-02-27 10:59:56

Below is generated by plot.py at 2018-02-27 12:44:19

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.99 Mbit/s (91.6% utilization)

95th percentile per-packet one-way delay: 38.455 ms

Loss rate: 0.12%

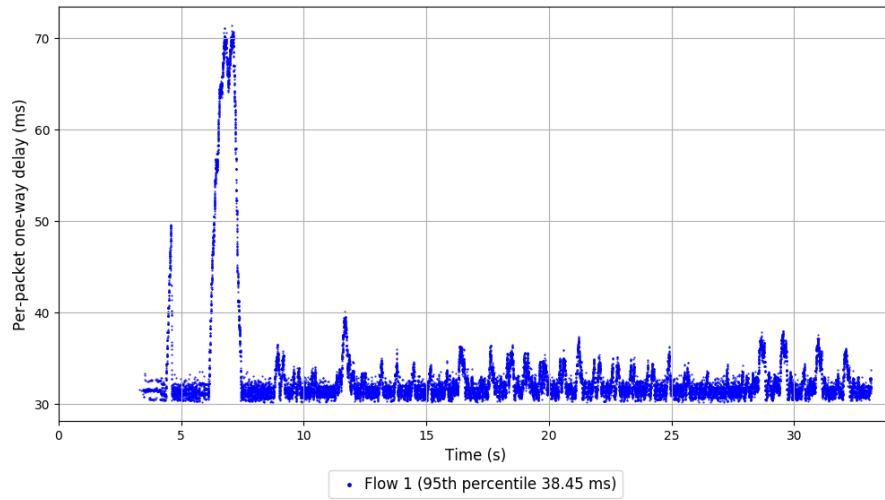
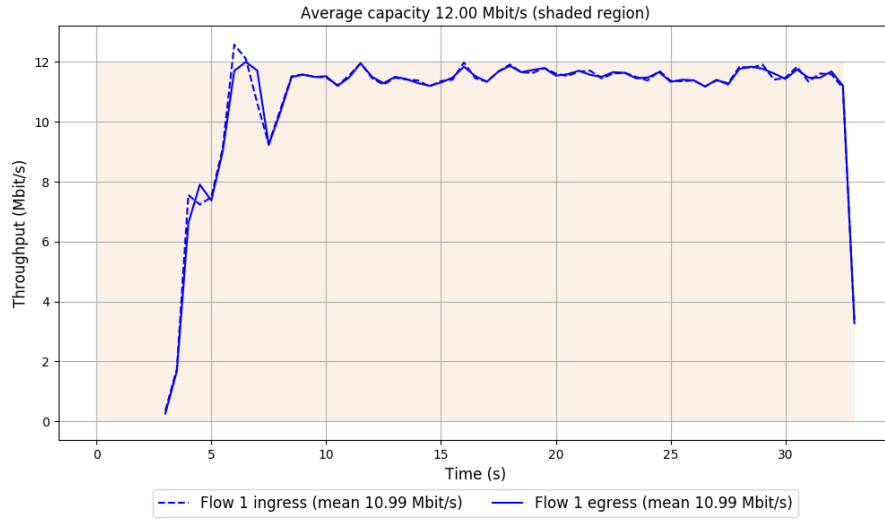
-- Flow 1:

Average throughput: 10.99 Mbit/s

95th percentile per-packet one-way delay: 38.455 ms

Loss rate: 0.12%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-27 11:09:44

End at: 2018-02-27 11:10:14

Below is generated by plot.py at 2018-02-27 12:44:26

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.95 Mbit/s (91.3% utilization)

95th percentile per-packet one-way delay: 37.047 ms

Loss rate: 0.13%

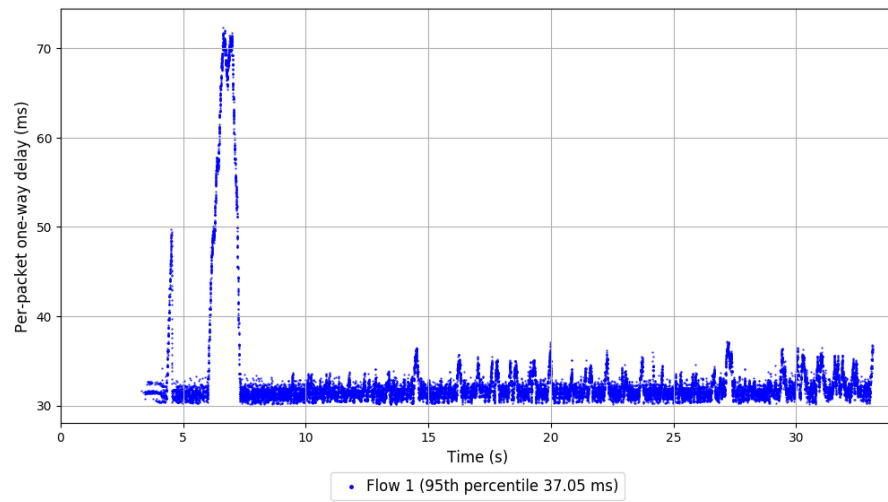
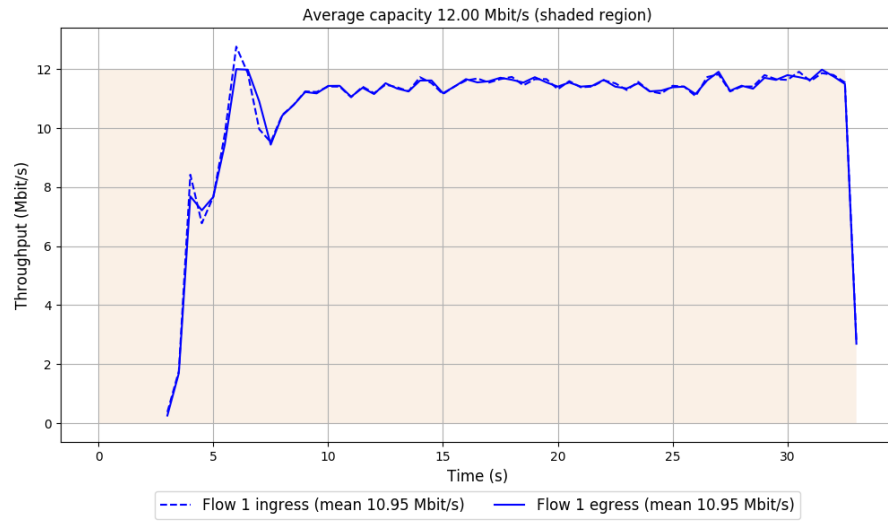
-- Flow 1:

Average throughput: 10.95 Mbit/s

95th percentile per-packet one-way delay: 37.047 ms

Loss rate: 0.13%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-27 11:20:00

End at: 2018-02-27 11:20:30

Below is generated by plot.py at 2018-02-27 12:44:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.93 Mbit/s (91.1% utilization)

95th percentile per-packet one-way delay: 37.855 ms

Loss rate: 0.11%

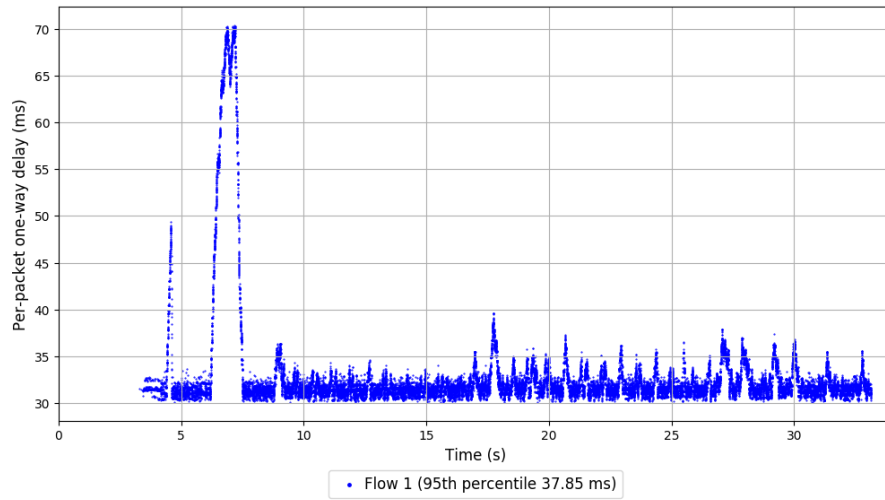
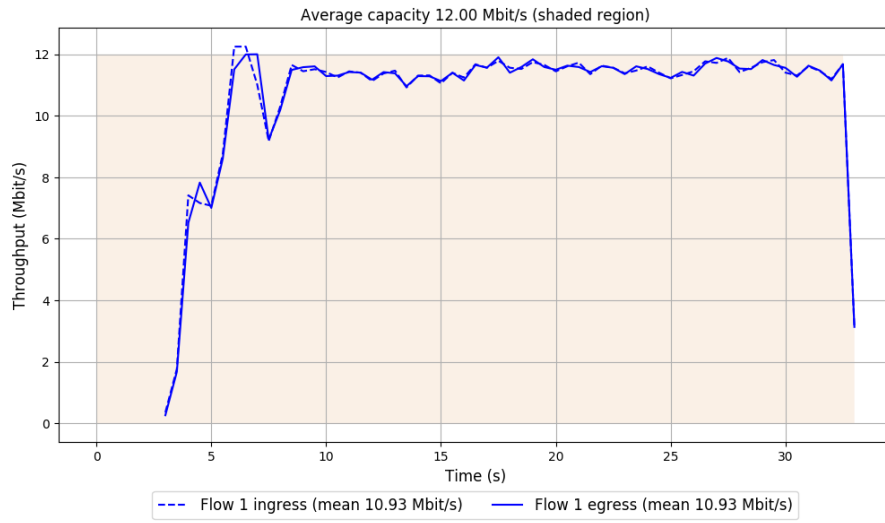
-- Flow 1:

Average throughput: 10.93 Mbit/s

95th percentile per-packet one-way delay: 37.855 ms

Loss rate: 0.11%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-27 11:30:17

End at: 2018-02-27 11:30:47

Below is generated by plot.py at 2018-02-27 12:44:35

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.92 Mbit/s (91.0% utilization)

95th percentile per-packet one-way delay: 38.044 ms

Loss rate: 0.11%

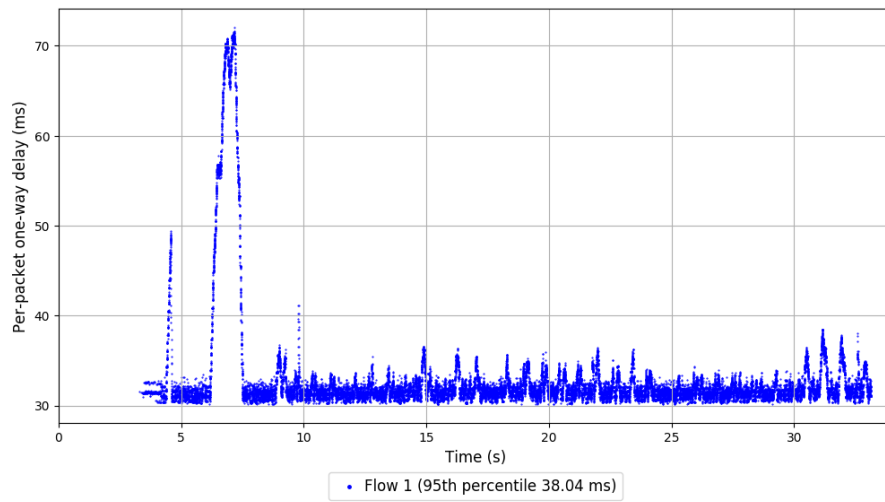
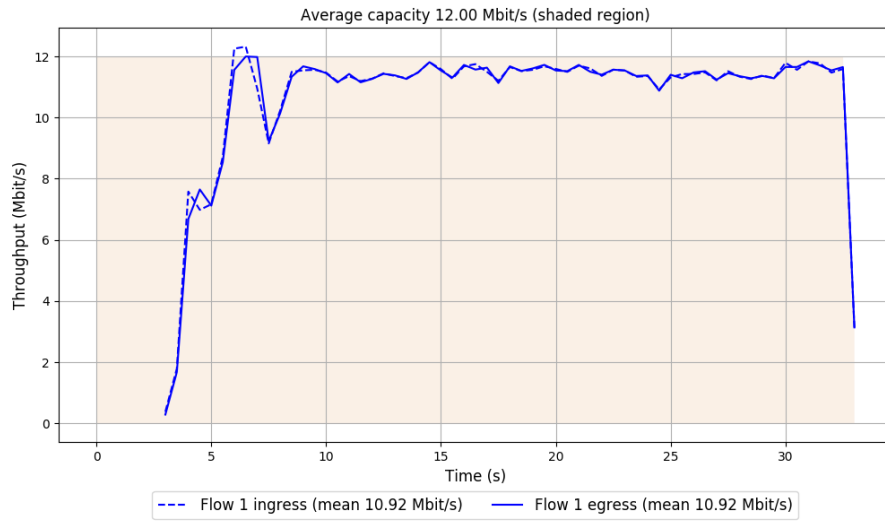
-- Flow 1:

Average throughput: 10.92 Mbit/s

95th percentile per-packet one-way delay: 38.044 ms

Loss rate: 0.11%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-27 11:40:33

End at: 2018-02-27 11:41:03

Below is generated by plot.py at 2018-02-27 12:44:35

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.94 Mbit/s (91.1% utilization)

95th percentile per-packet one-way delay: 41.877 ms

Loss rate: 0.11%

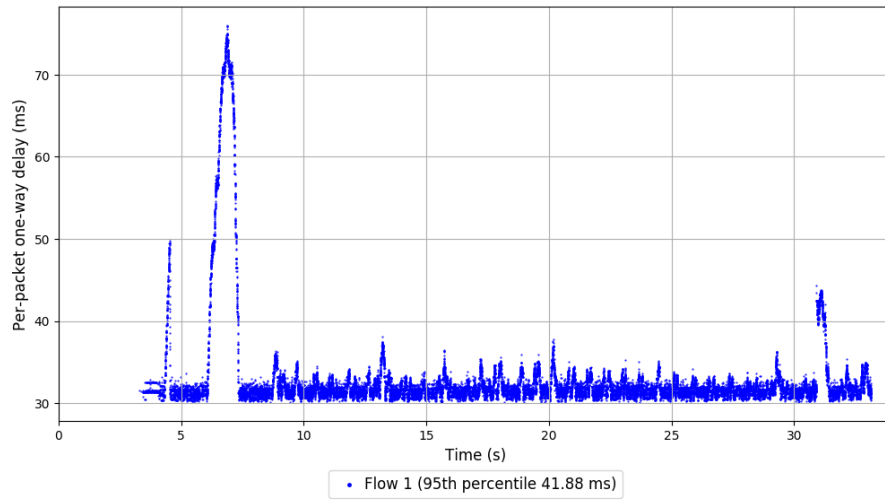
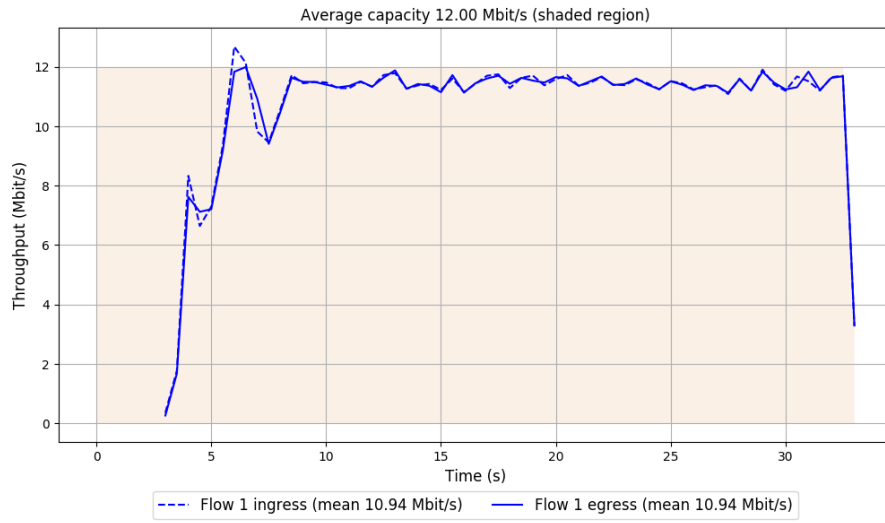
-- Flow 1:

Average throughput: 10.94 Mbit/s

95th percentile per-packet one-way delay: 41.877 ms

Loss rate: 0.11%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-27 11:50:50

End at: 2018-02-27 11:51:20

Below is generated by plot.py at 2018-02-27 12:44:36

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.90 Mbit/s (90.9% utilization)

95th percentile per-packet one-way delay: 37.401 ms

Loss rate: 0.11%

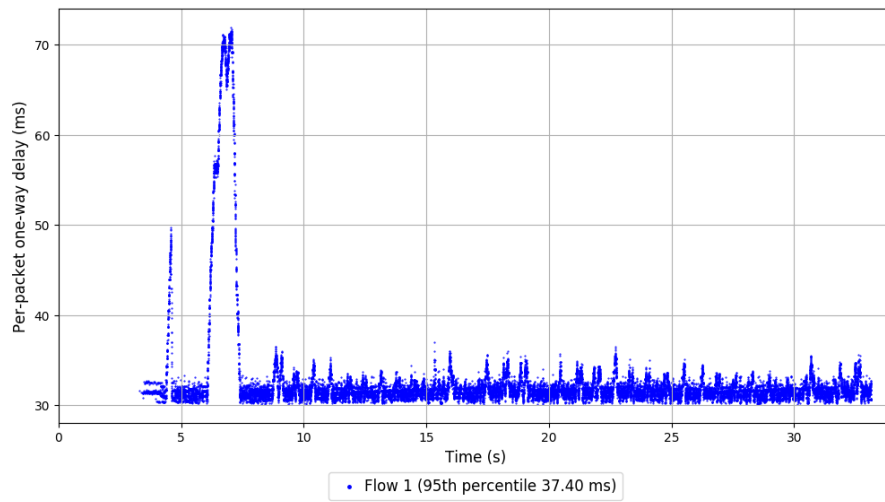
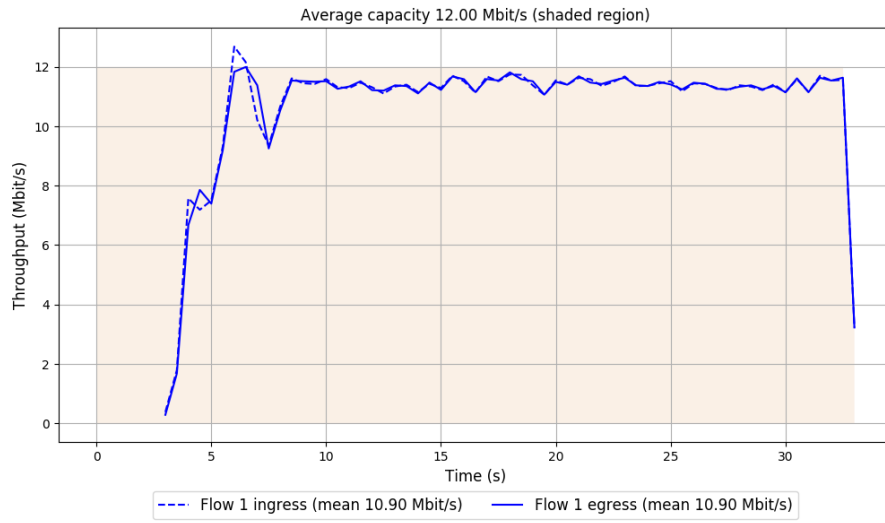
-- Flow 1:

Average throughput: 10.90 Mbit/s

95th percentile per-packet one-way delay: 37.401 ms

Loss rate: 0.11%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-27 12:01:06

End at: 2018-02-27 12:01:36

Below is generated by plot.py at 2018-02-27 12:44:37

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.86 Mbit/s (90.5% utilization)

95th percentile per-packet one-way delay: 37.883 ms

Loss rate: 0.11%

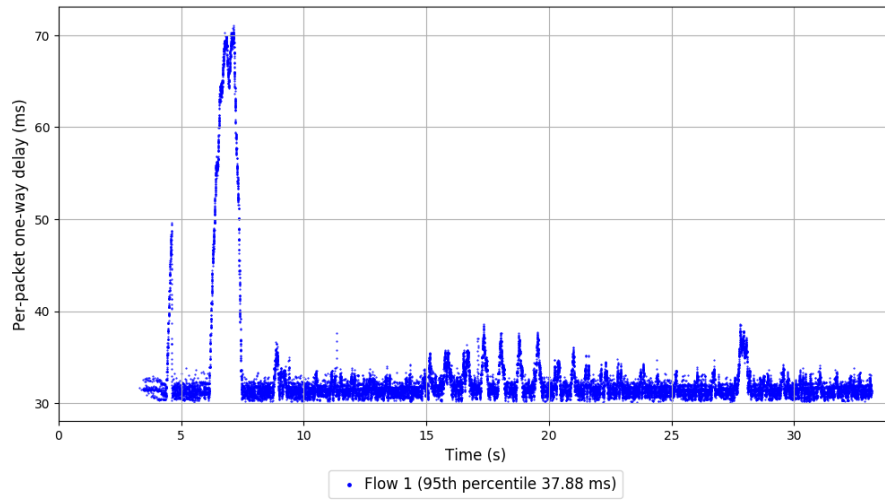
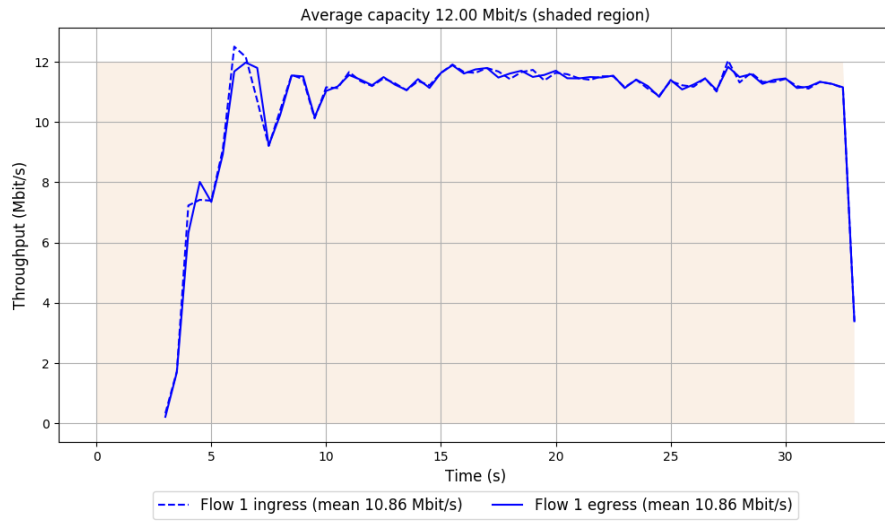
-- Flow 1:

Average throughput: 10.86 Mbit/s

95th percentile per-packet one-way delay: 37.883 ms

Loss rate: 0.11%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-27 12:11:23

End at: 2018-02-27 12:11:53

Below is generated by plot.py at 2018-02-27 12:44:40

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.98 Mbit/s (91.5% utilization)

95th percentile per-packet one-way delay: 37.497 ms

Loss rate: 0.11%

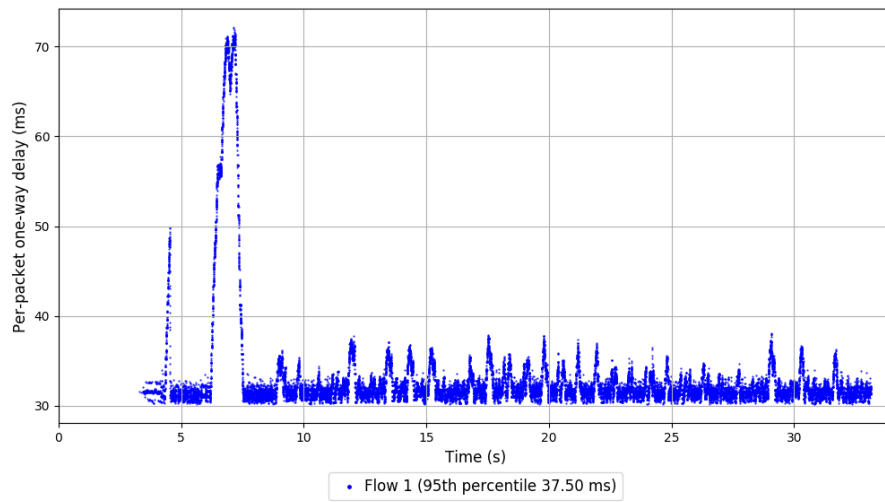
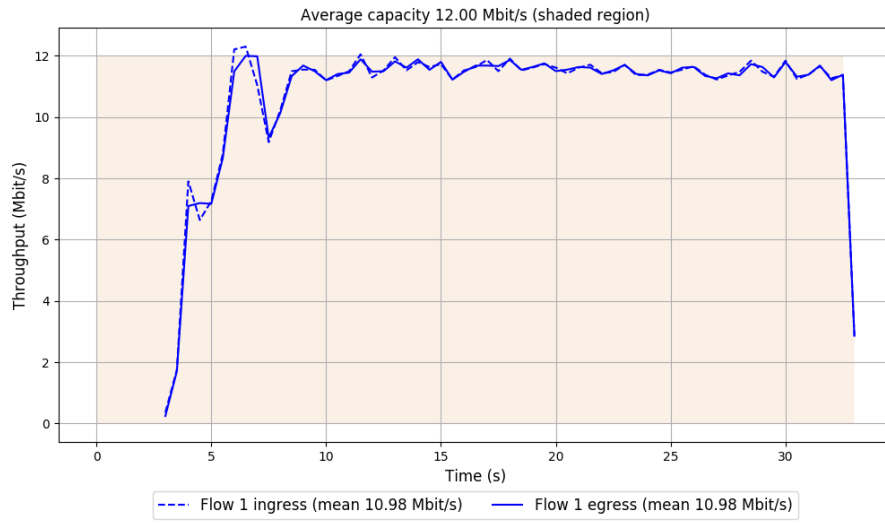
-- Flow 1:

Average throughput: 10.98 Mbit/s

95th percentile per-packet one-way delay: 37.497 ms

Loss rate: 0.11%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-27 12:21:40

End at: 2018-02-27 12:22:10

Below is generated by plot.py at 2018-02-27 12:44:42

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.77 Mbit/s (89.7% utilization)

95th percentile per-packet one-way delay: 37.428 ms

Loss rate: 0.10%

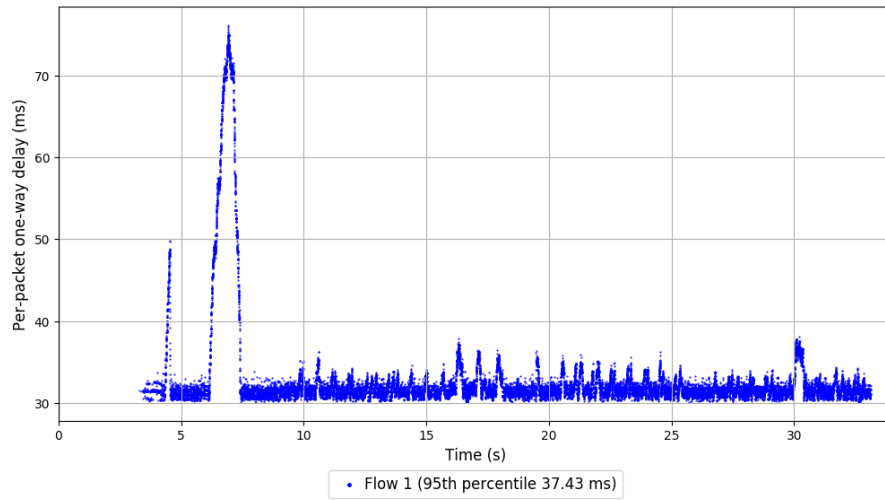
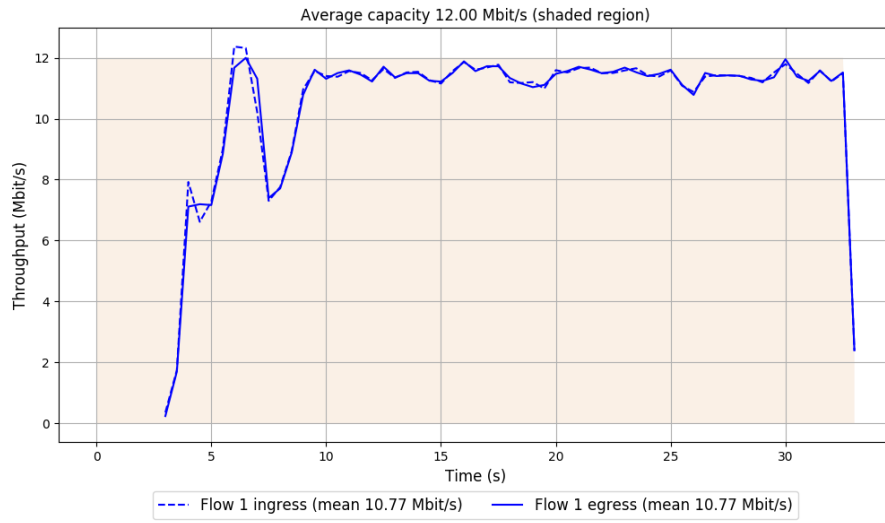
-- Flow 1:

Average throughput: 10.77 Mbit/s

95th percentile per-packet one-way delay: 37.428 ms

Loss rate: 0.10%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-27 12:31:57

End at: 2018-02-27 12:32:27

Below is generated by plot.py at 2018-02-27 12:44:49

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 10.77 Mbit/s (89.8% utilization)

95th percentile per-packet one-way delay: 89.592 ms

Loss rate: 1.01%

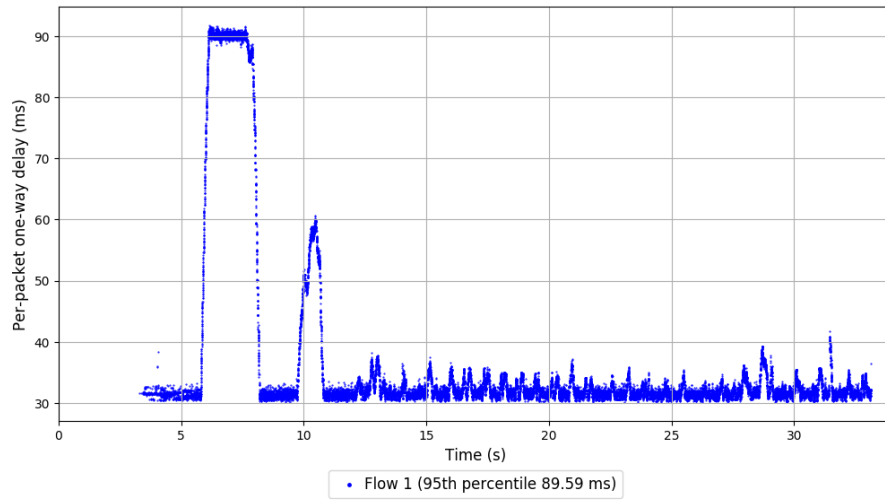
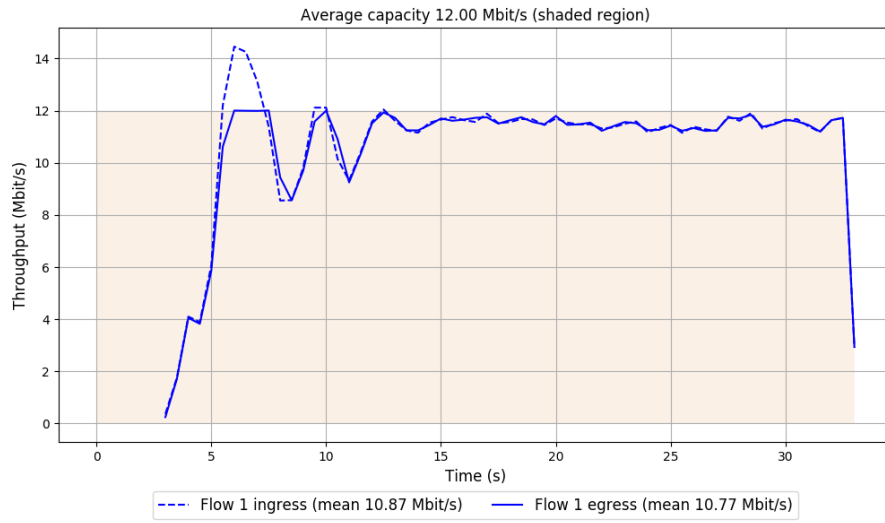
-- Flow 1:

Average throughput: 10.77 Mbit/s

95th percentile per-packet one-way delay: 89.592 ms

Loss rate: 1.01%

Run 10: Report of Vivace-latency — Data Link



Run 1: Statistics of Vivace-loss

Start at: 2018-02-27 10:58:18

End at: 2018-02-27 10:58:48

Below is generated by plot.py at 2018-02-27 12:44:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.43 Mbit/s (95.3% utilization)

95th percentile per-packet one-way delay: 90.731 ms

Loss rate: 8.24%

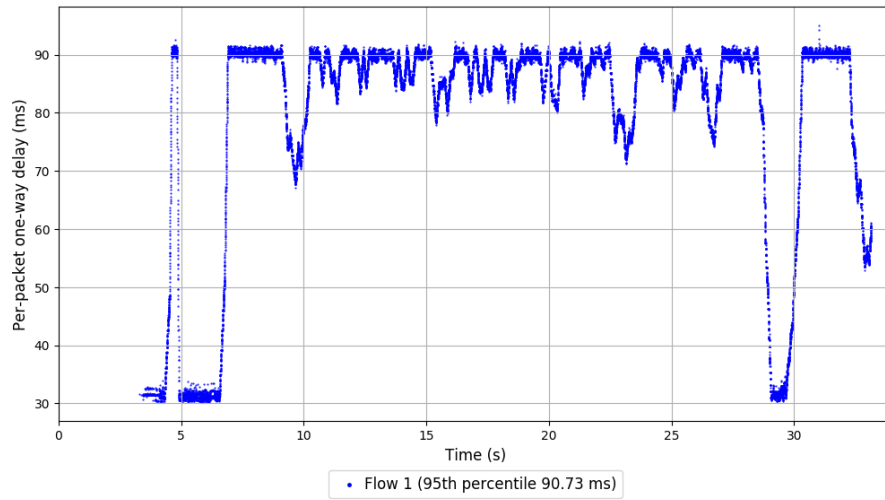
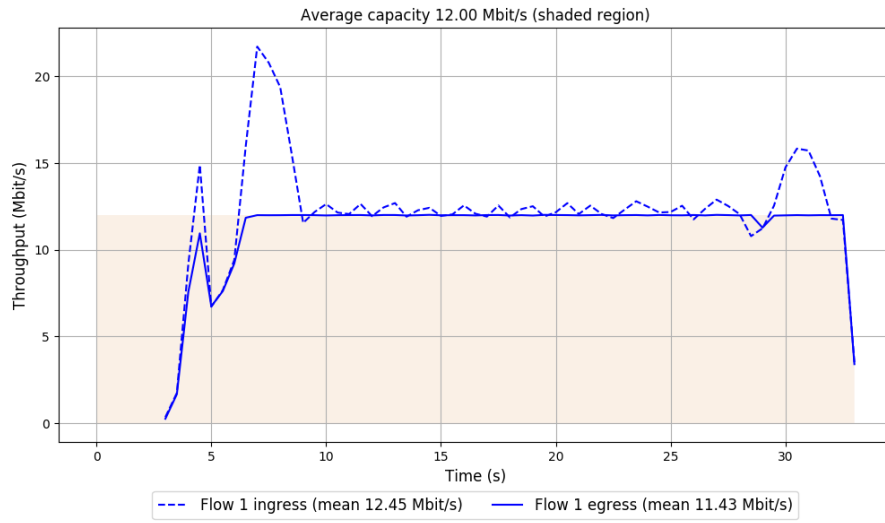
-- Flow 1:

Average throughput: 11.43 Mbit/s

95th percentile per-packet one-way delay: 90.731 ms

Loss rate: 8.24%

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-02-27 11:08:35

End at: 2018-02-27 11:09:05

Below is generated by plot.py at 2018-02-27 12:44:58

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.46 Mbit/s (95.5% utilization)

95th percentile per-packet one-way delay: 90.765 ms

Loss rate: 6.99%

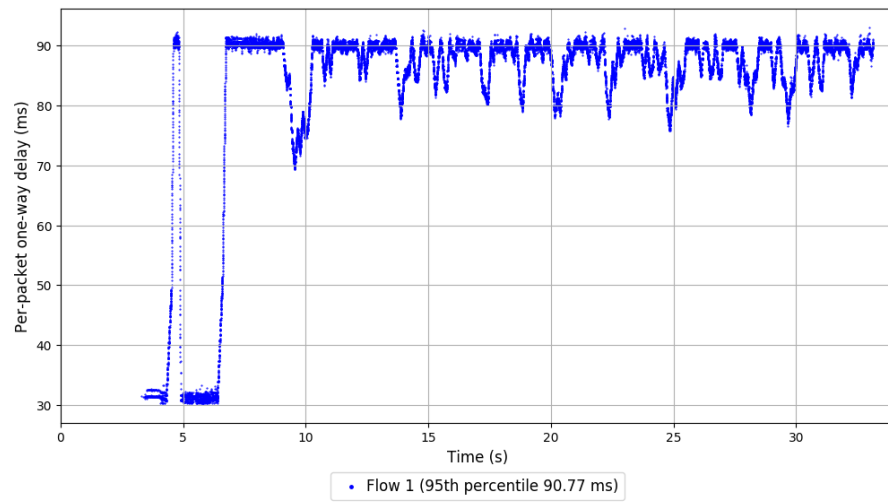
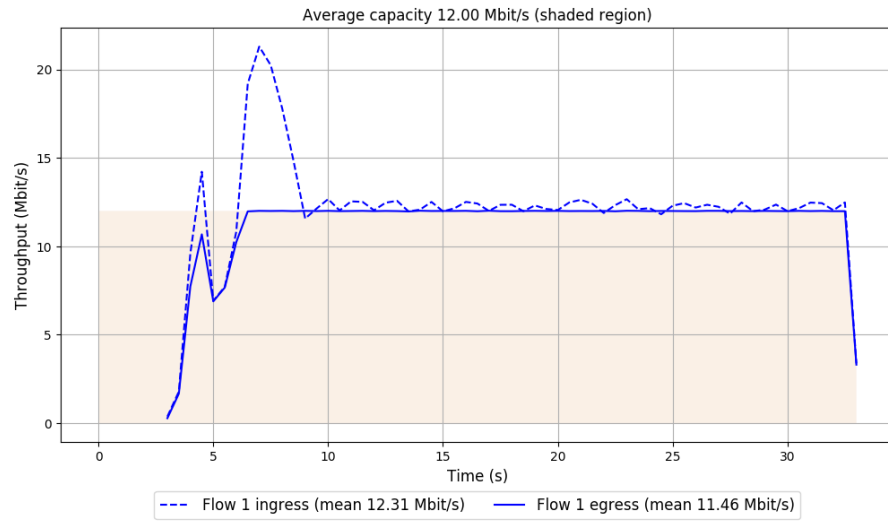
-- Flow 1:

Average throughput: 11.46 Mbit/s

95th percentile per-packet one-way delay: 90.765 ms

Loss rate: 6.99%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-27 11:18:52

End at: 2018-02-27 11:19:22

Below is generated by plot.py at 2018-02-27 12:44:59

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.43 Mbit/s (95.3% utilization)

95th percentile per-packet one-way delay: 90.772 ms

Loss rate: 8.90%

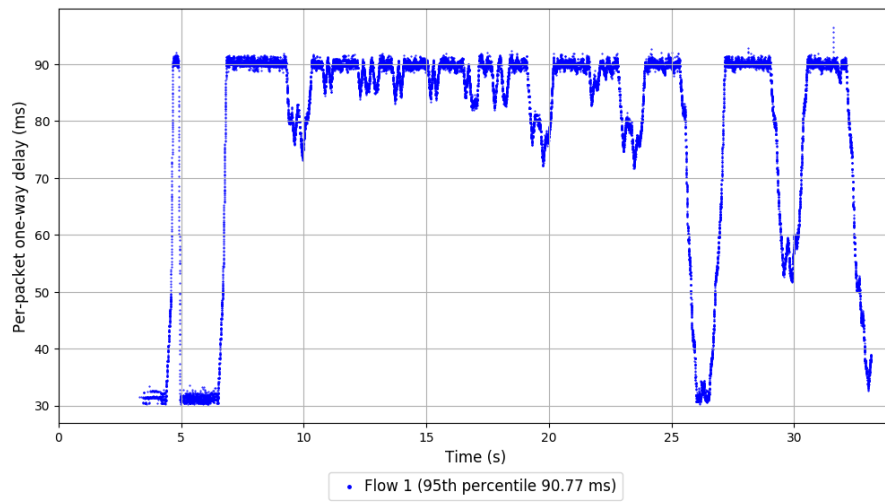
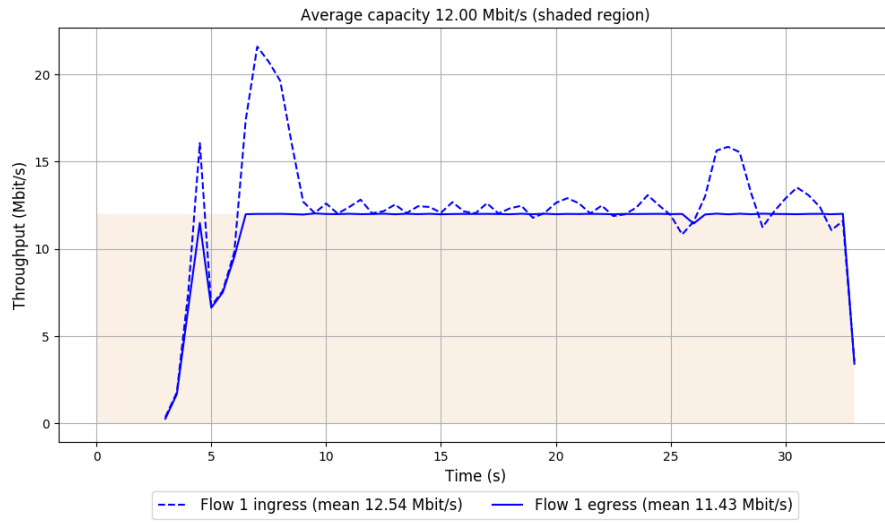
-- Flow 1:

Average throughput: 11.43 Mbit/s

95th percentile per-packet one-way delay: 90.772 ms

Loss rate: 8.90%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-27 11:29:08

End at: 2018-02-27 11:29:38

Below is generated by plot.py at 2018-02-27 12:44:59

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.44 Mbit/s (95.3% utilization)

95th percentile per-packet one-way delay: 90.726 ms

Loss rate: 9.46%

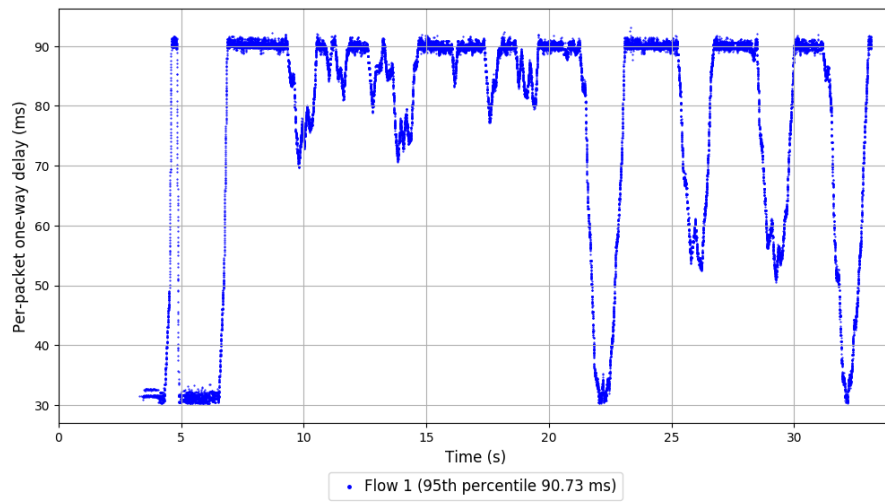
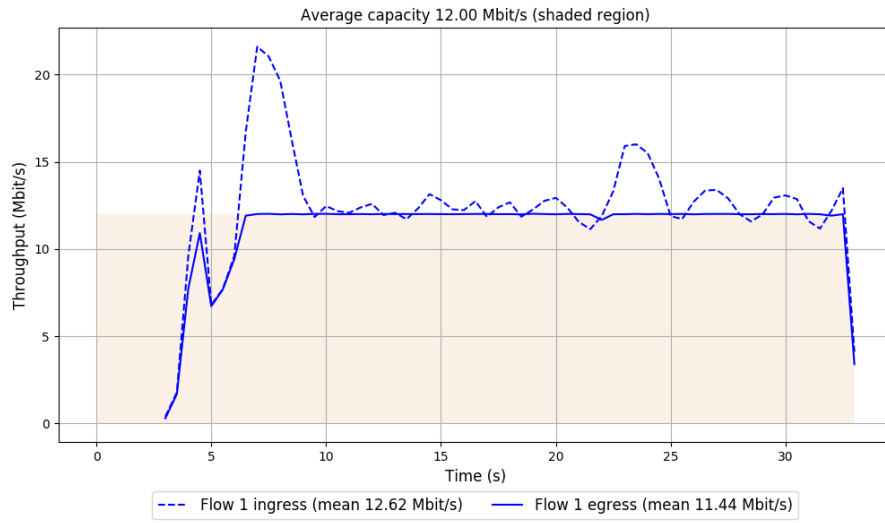
-- Flow 1:

Average throughput: 11.44 Mbit/s

95th percentile per-packet one-way delay: 90.726 ms

Loss rate: 9.46%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-27 11:39:24

End at: 2018-02-27 11:39:54

Below is generated by plot.py at 2018-02-27 12:45:00

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.45 Mbit/s (95.4% utilization)

95th percentile per-packet one-way delay: 90.686 ms

Loss rate: 6.93%

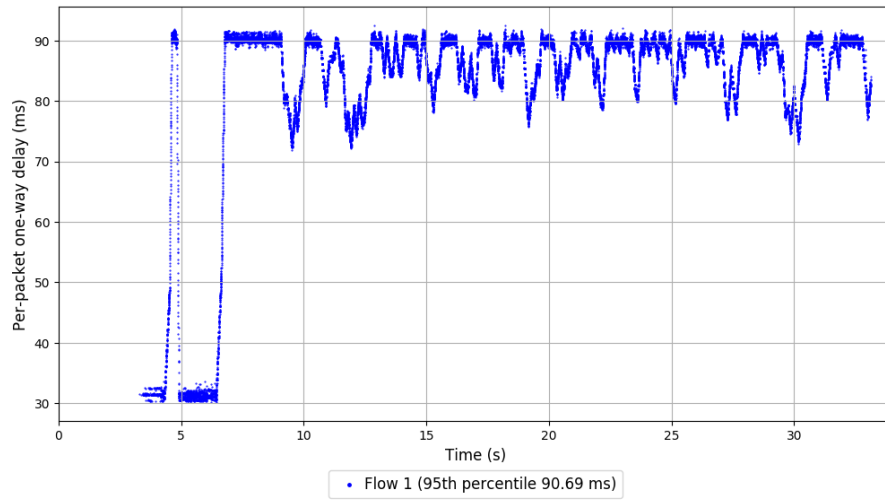
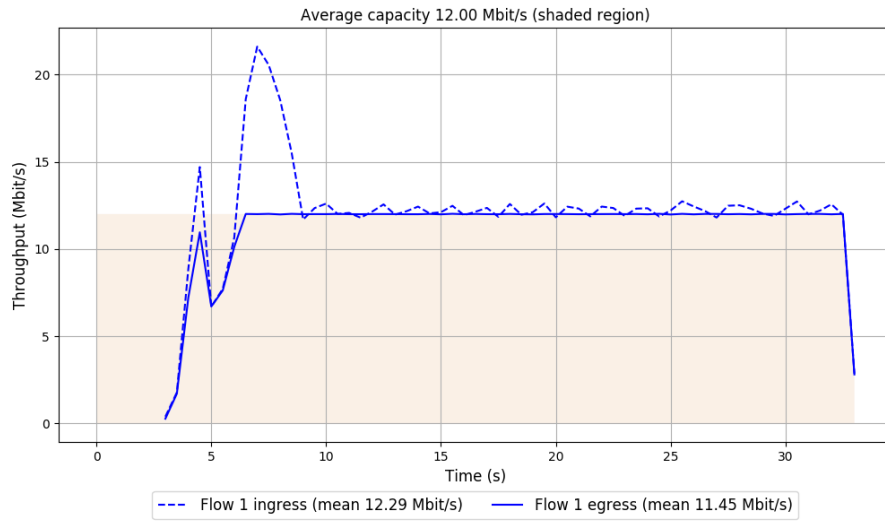
-- Flow 1:

Average throughput: 11.45 Mbit/s

95th percentile per-packet one-way delay: 90.686 ms

Loss rate: 6.93%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-27 11:49:41

End at: 2018-02-27 11:50:11

Below is generated by plot.py at 2018-02-27 12:45:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.41 Mbit/s (95.1% utilization)

95th percentile per-packet one-way delay: 90.702 ms

Loss rate: 8.33%

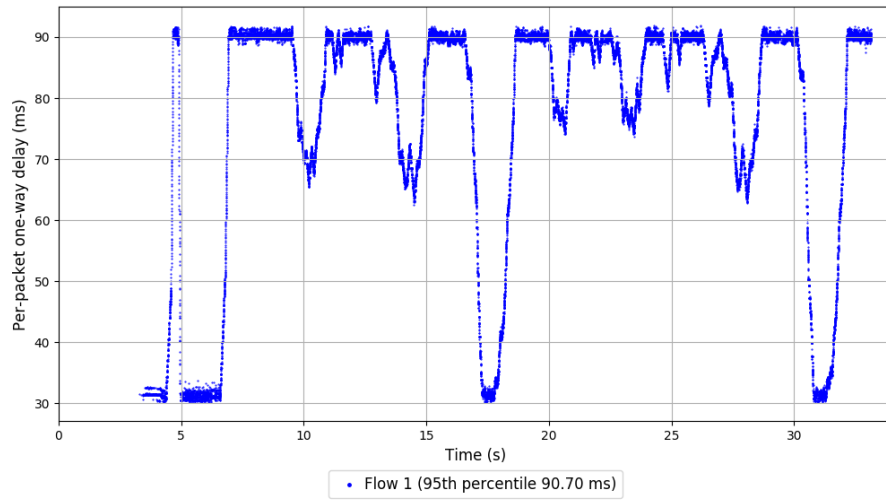
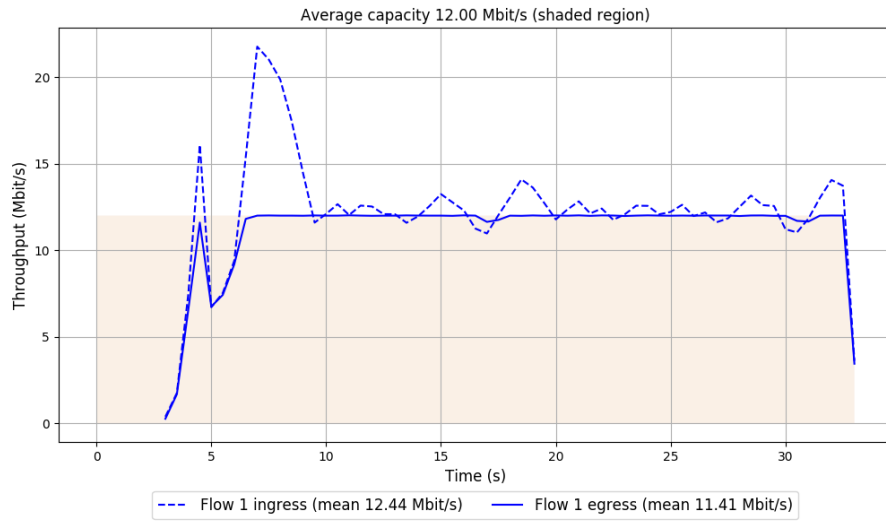
-- Flow 1:

Average throughput: 11.41 Mbit/s

95th percentile per-packet one-way delay: 90.702 ms

Loss rate: 8.33%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-27 11:59:58

End at: 2018-02-27 12:00:28

Below is generated by plot.py at 2018-02-27 12:45:06

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.43 Mbit/s (95.3% utilization)

95th percentile per-packet one-way delay: 90.788 ms

Loss rate: 7.17%

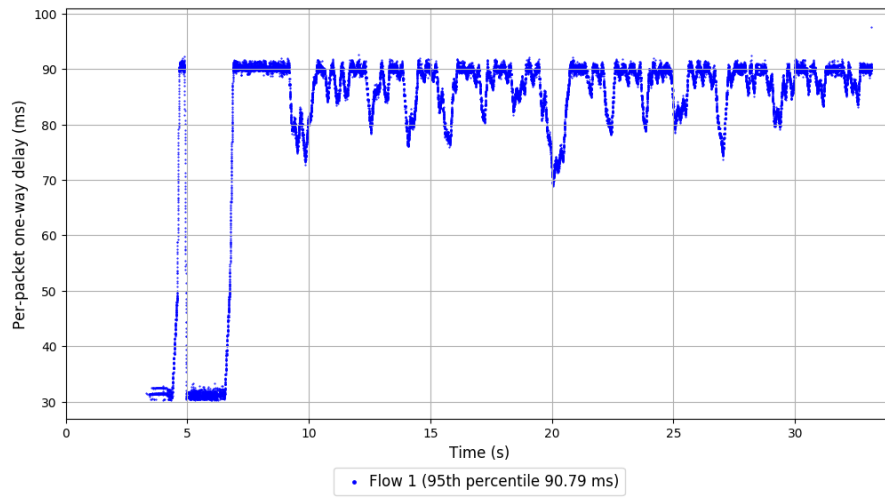
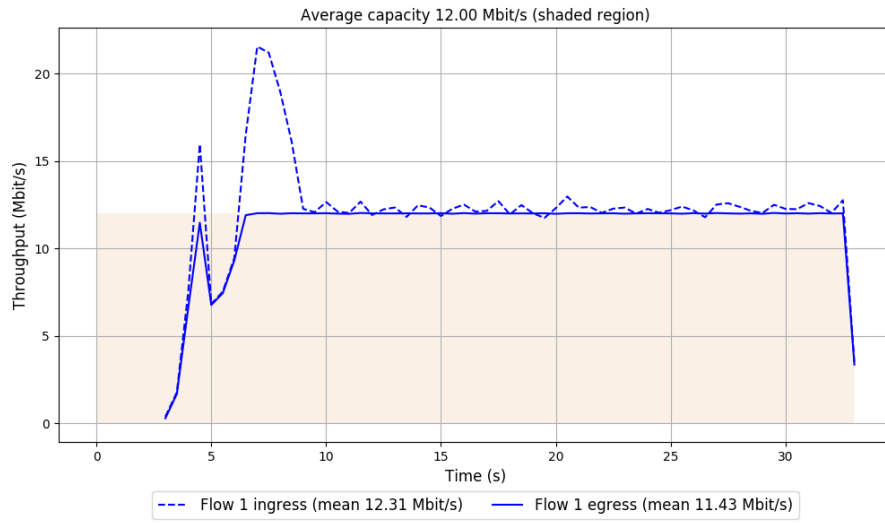
-- Flow 1:

Average throughput: 11.43 Mbit/s

95th percentile per-packet one-way delay: 90.788 ms

Loss rate: 7.17%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-27 12:10:15

End at: 2018-02-27 12:10:45

Below is generated by plot.py at 2018-02-27 12:45:14

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.45 Mbit/s (95.5% utilization)

95th percentile per-packet one-way delay: 90.755 ms

Loss rate: 7.09%

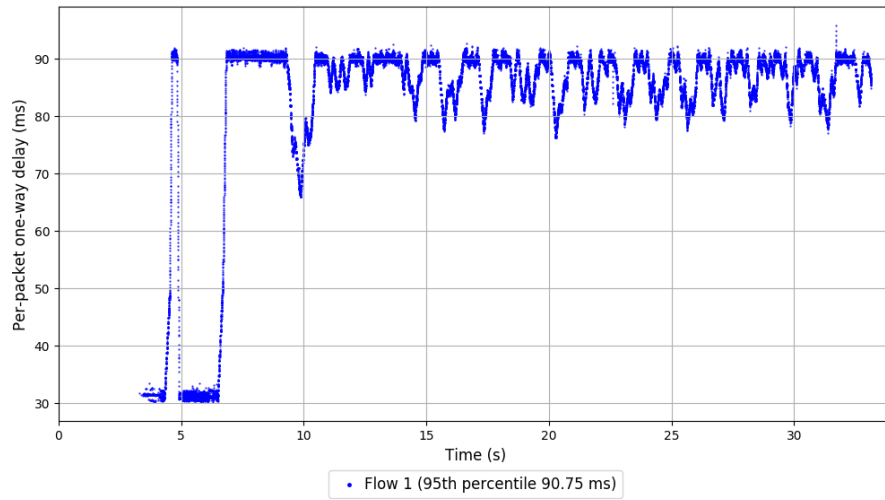
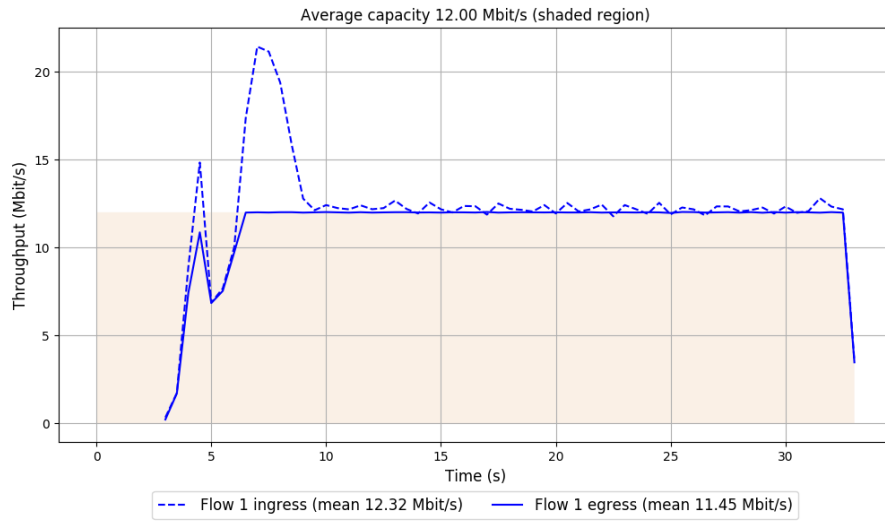
-- Flow 1:

Average throughput: 11.45 Mbit/s

95th percentile per-packet one-way delay: 90.755 ms

Loss rate: 7.09%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-27 12:20:31

End at: 2018-02-27 12:21:01

Below is generated by plot.py at 2018-02-27 12:45:20

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.43 Mbit/s (95.2% utilization)

95th percentile per-packet one-way delay: 90.749 ms

Loss rate: 9.26%

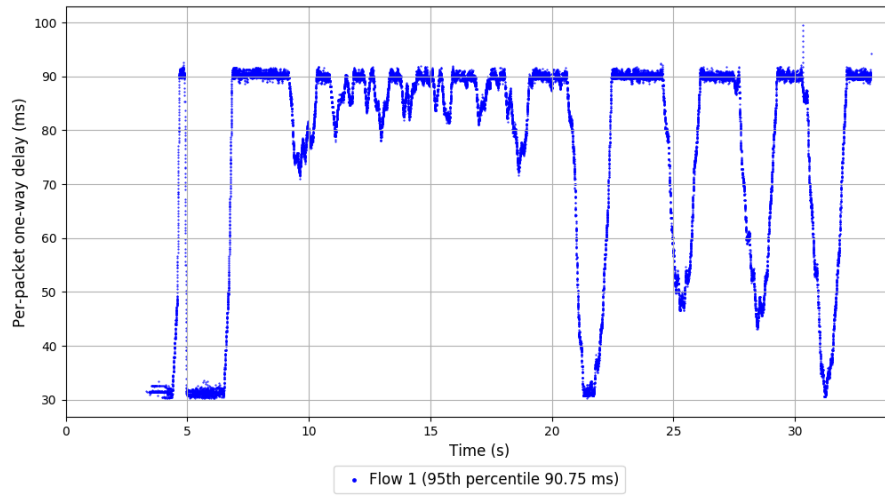
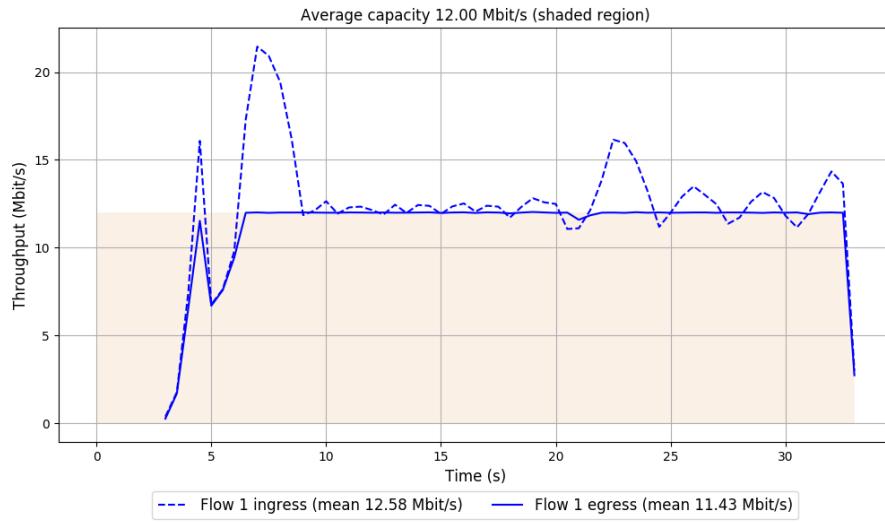
-- Flow 1:

Average throughput: 11.43 Mbit/s

95th percentile per-packet one-way delay: 90.749 ms

Loss rate: 9.26%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-27 12:30:48

End at: 2018-02-27 12:31:18

Below is generated by plot.py at 2018-02-27 12:45:23

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.44 Mbit/s (95.4% utilization)

95th percentile per-packet one-way delay: 90.765 ms

Loss rate: 7.04%

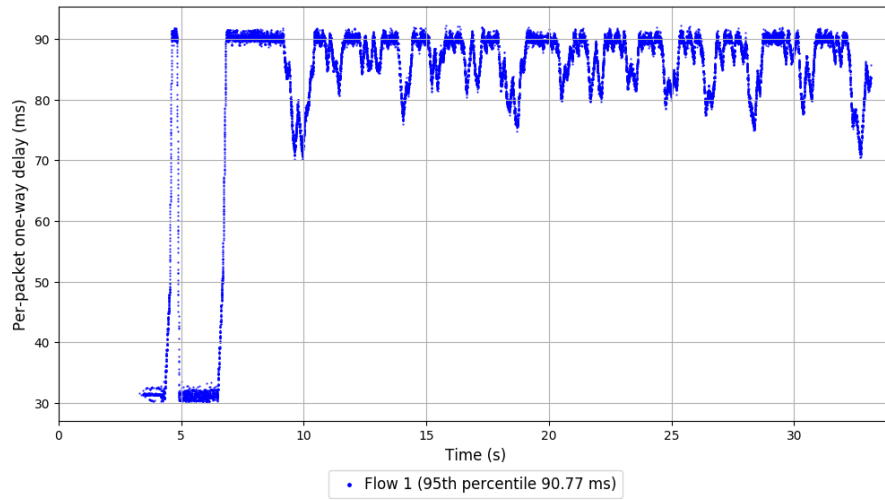
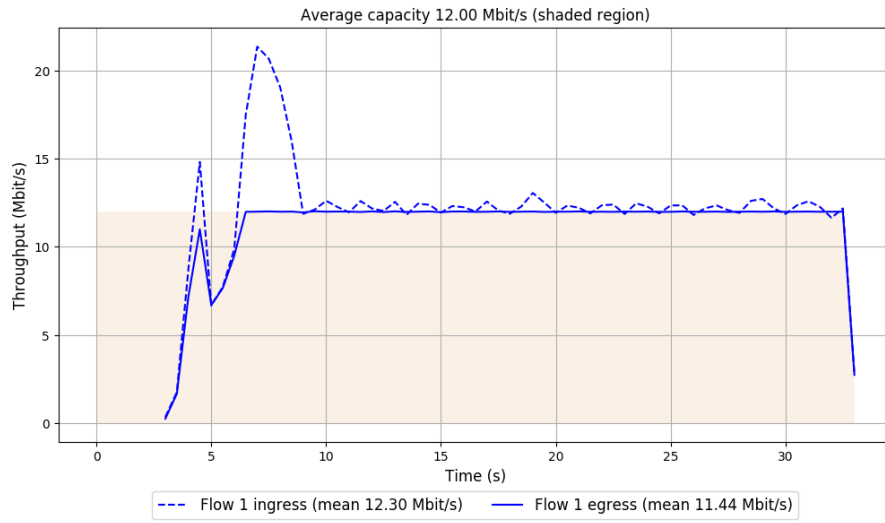
-- Flow 1:

Average throughput: 11.44 Mbit/s

95th percentile per-packet one-way delay: 90.765 ms

Loss rate: 7.04%

Run 10: Report of Vivace-loss — Data Link



Run 1: Statistics of Vivace-LTE

Start at: 2018-02-27 10:55:26

End at: 2018-02-27 10:55:56

Below is generated by plot.py at 2018-02-27 12:45:23

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.09 Mbit/s (92.4% utilization)

95th percentile per-packet one-way delay: 57.033 ms

Loss rate: 0.90%

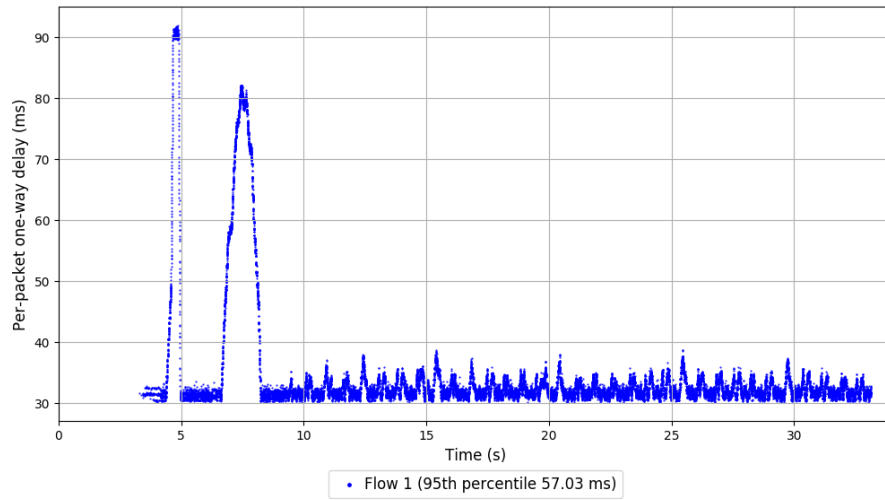
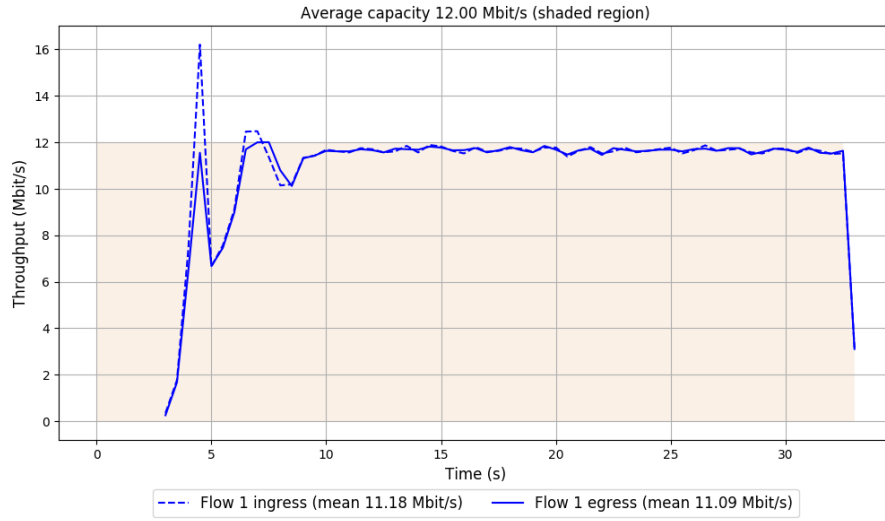
-- Flow 1:

Average throughput: 11.09 Mbit/s

95th percentile per-packet one-way delay: 57.033 ms

Loss rate: 0.90%

Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-27 11:05:44

End at: 2018-02-27 11:06:14

Below is generated by plot.py at 2018-02-27 12:45:23

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.12 Mbit/s (92.6% utilization)

95th percentile per-packet one-way delay: 56.803 ms

Loss rate: 0.89%

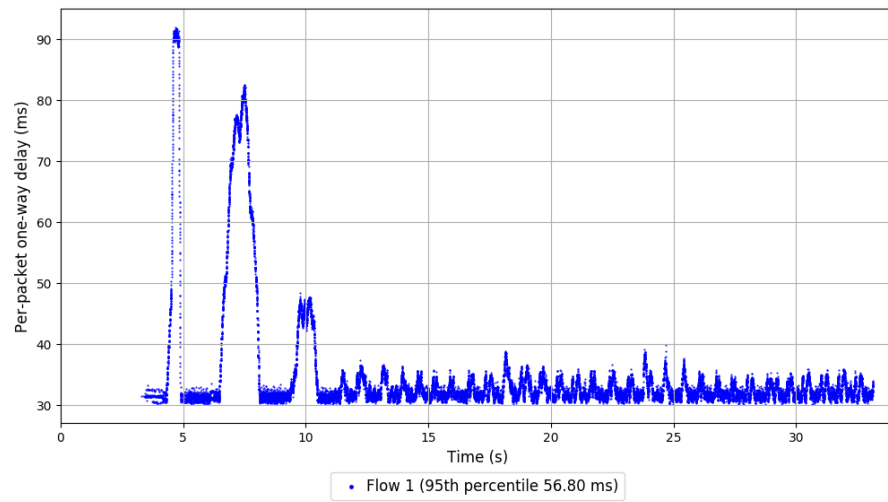
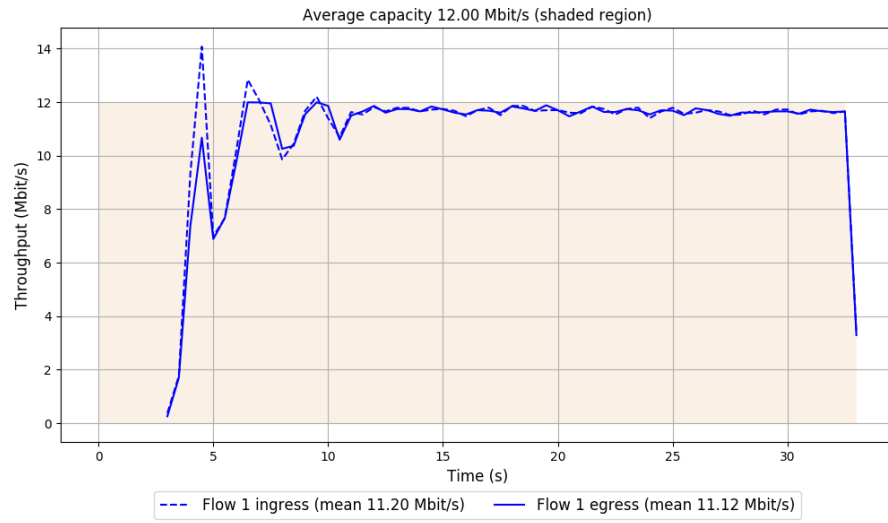
-- Flow 1:

Average throughput: 11.12 Mbit/s

95th percentile per-packet one-way delay: 56.803 ms

Loss rate: 0.89%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-27 11:16:01

End at: 2018-02-27 11:16:31

Below is generated by plot.py at 2018-02-27 12:45:23

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.11 Mbit/s (92.6% utilization)

95th percentile per-packet one-way delay: 57.145 ms

Loss rate: 0.89%

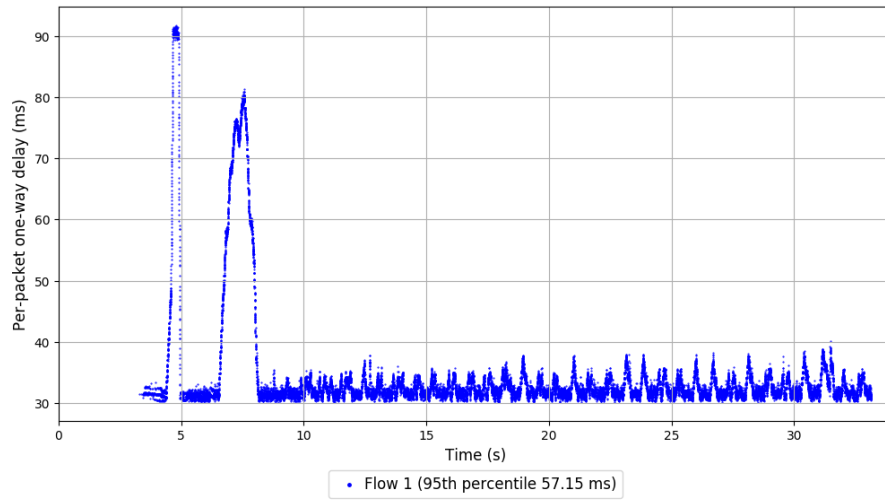
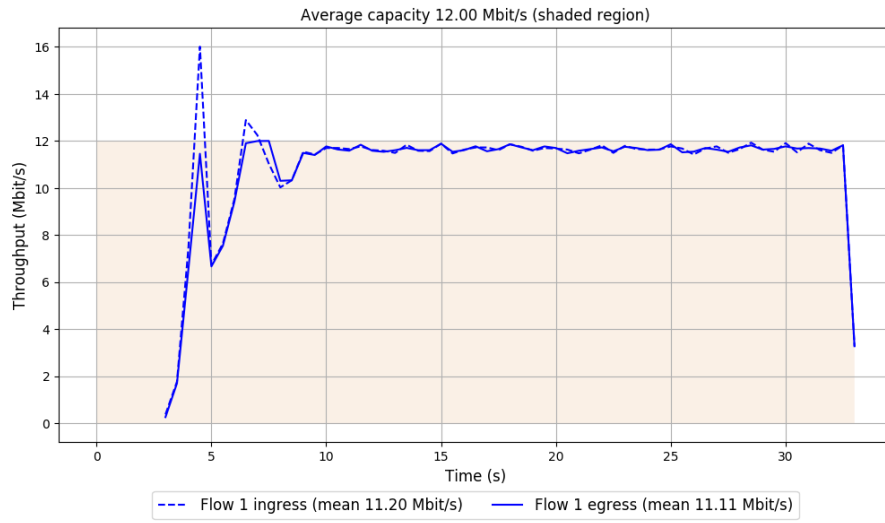
-- Flow 1:

Average throughput: 11.11 Mbit/s

95th percentile per-packet one-way delay: 57.145 ms

Loss rate: 0.89%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-27 11:26:18

End at: 2018-02-27 11:26:48

Below is generated by plot.py at 2018-02-27 12:45:27

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.09 Mbit/s (92.4% utilization)

95th percentile per-packet one-way delay: 57.028 ms

Loss rate: 0.89%

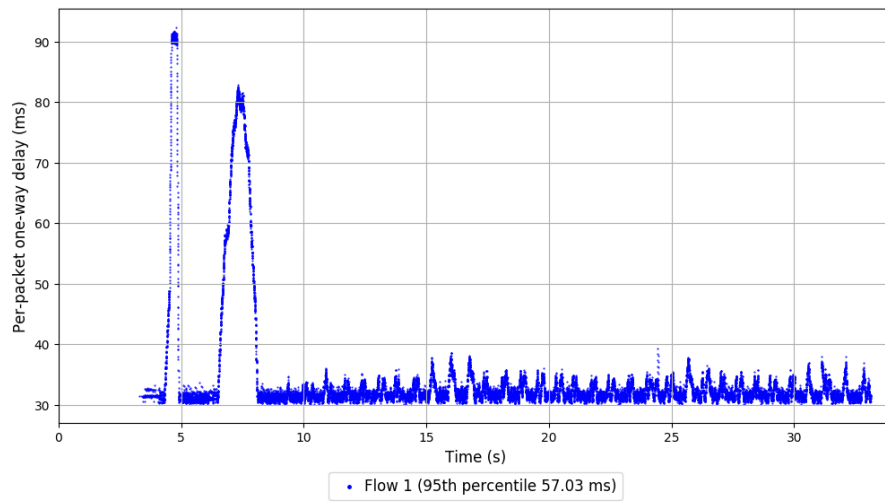
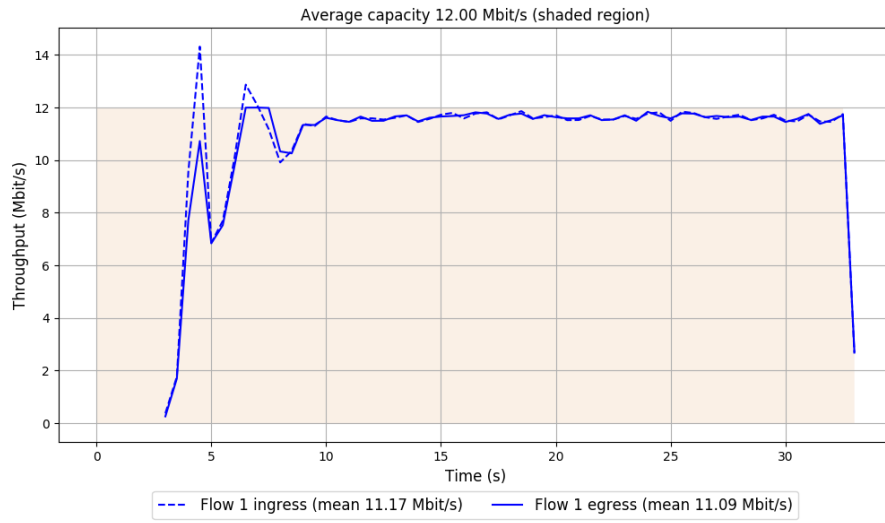
-- Flow 1:

Average throughput: 11.09 Mbit/s

95th percentile per-packet one-way delay: 57.028 ms

Loss rate: 0.89%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-27 11:36:34

End at: 2018-02-27 11:37:04

Below is generated by plot.py at 2018-02-27 12:45:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.12 Mbit/s (92.7% utilization)

95th percentile per-packet one-way delay: 56.520 ms

Loss rate: 0.88%

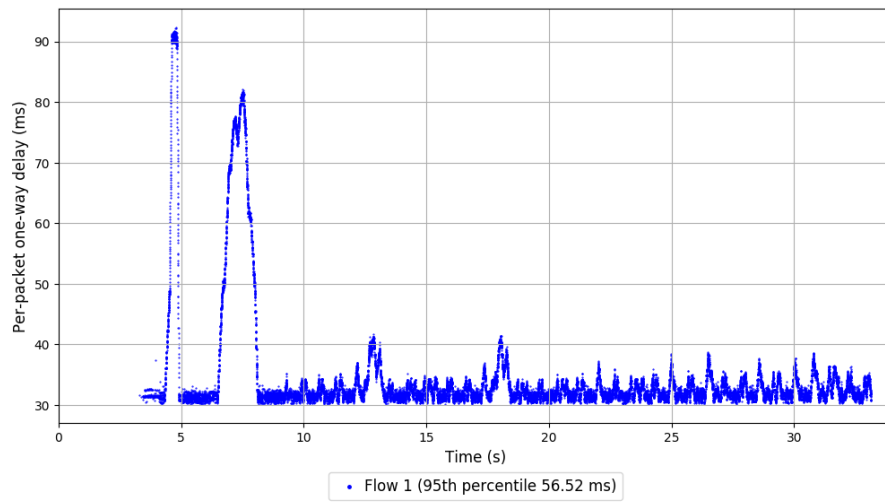
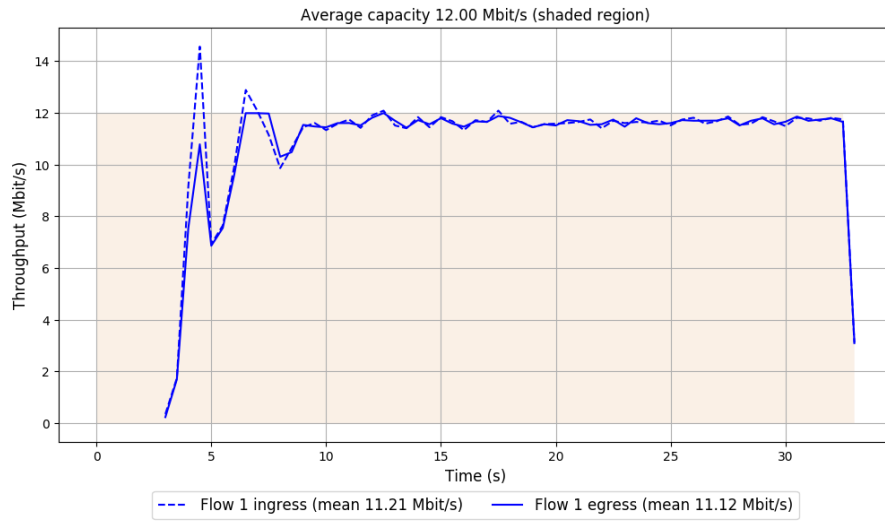
-- Flow 1:

Average throughput: 11.12 Mbit/s

95th percentile per-packet one-way delay: 56.520 ms

Loss rate: 0.88%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-27 11:46:50

End at: 2018-02-27 11:47:20

Below is generated by plot.py at 2018-02-27 12:45:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.07 Mbit/s (92.3% utilization)

95th percentile per-packet one-way delay: 51.518 ms

Loss rate: 0.88%

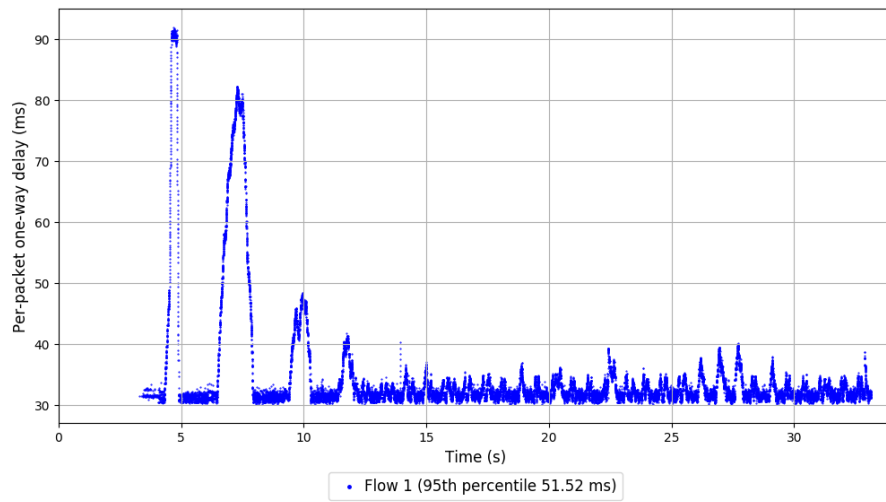
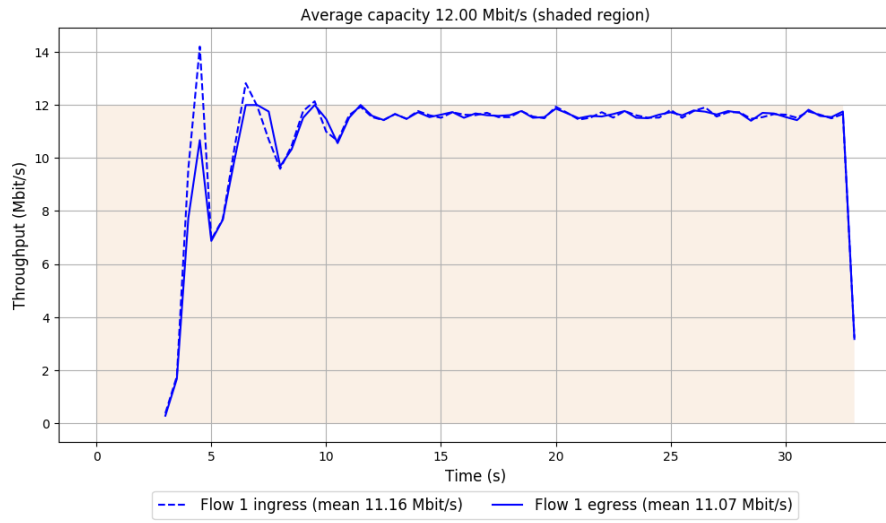
-- Flow 1:

Average throughput: 11.07 Mbit/s

95th percentile per-packet one-way delay: 51.518 ms

Loss rate: 0.88%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-27 11:57:07

End at: 2018-02-27 11:57:37

Below is generated by plot.py at 2018-02-27 12:45:37

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.11 Mbit/s (92.5% utilization)

95th percentile per-packet one-way delay: 53.289 ms

Loss rate: 0.90%

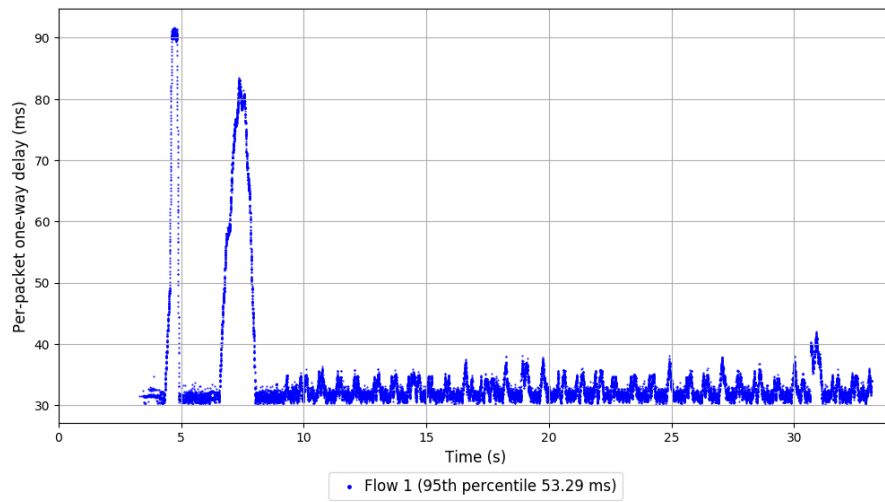
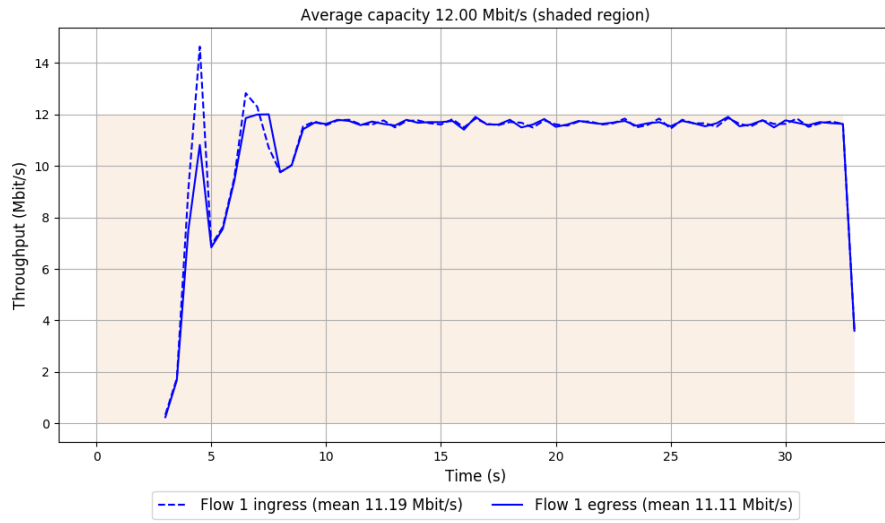
-- Flow 1:

Average throughput: 11.11 Mbit/s

95th percentile per-packet one-way delay: 53.289 ms

Loss rate: 0.90%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-27 12:07:24

End at: 2018-02-27 12:07:54

Below is generated by plot.py at 2018-02-27 12:45:37

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.13 Mbit/s (92.7% utilization)

95th percentile per-packet one-way delay: 50.442 ms

Loss rate: 0.88%

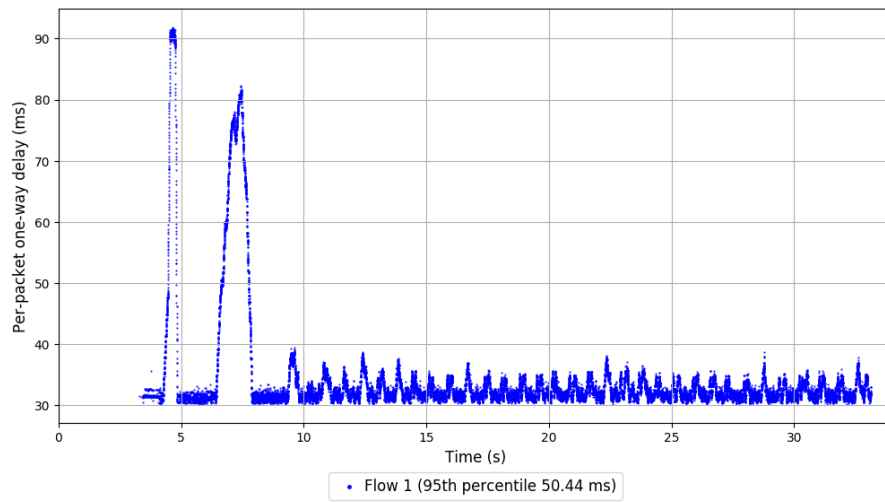
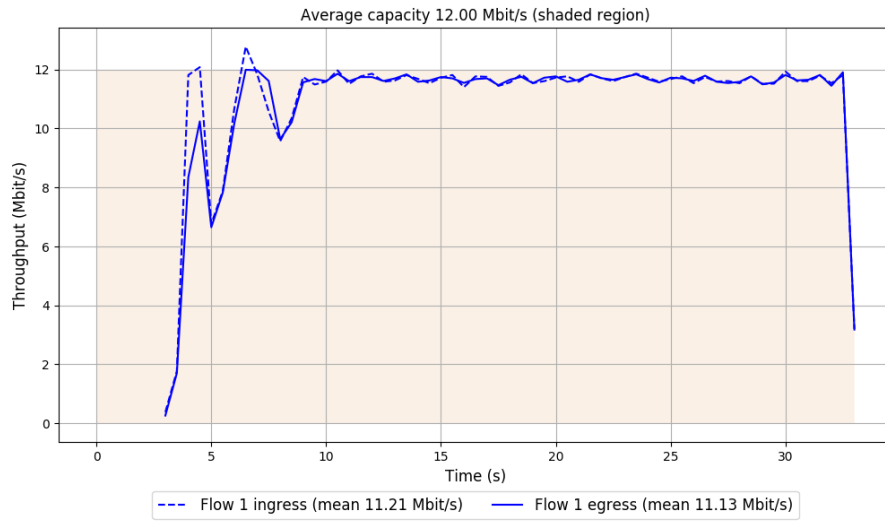
-- Flow 1:

Average throughput: 11.13 Mbit/s

95th percentile per-packet one-way delay: 50.442 ms

Loss rate: 0.88%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-27 12:17:41

End at: 2018-02-27 12:18:11

Below is generated by plot.py at 2018-02-27 12:45:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.13 Mbit/s (92.7% utilization)

95th percentile per-packet one-way delay: 51.333 ms

Loss rate: 0.89%

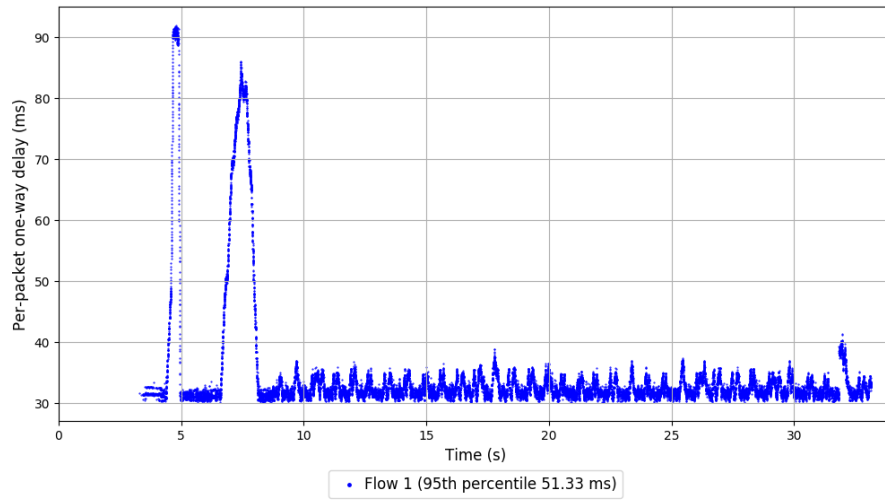
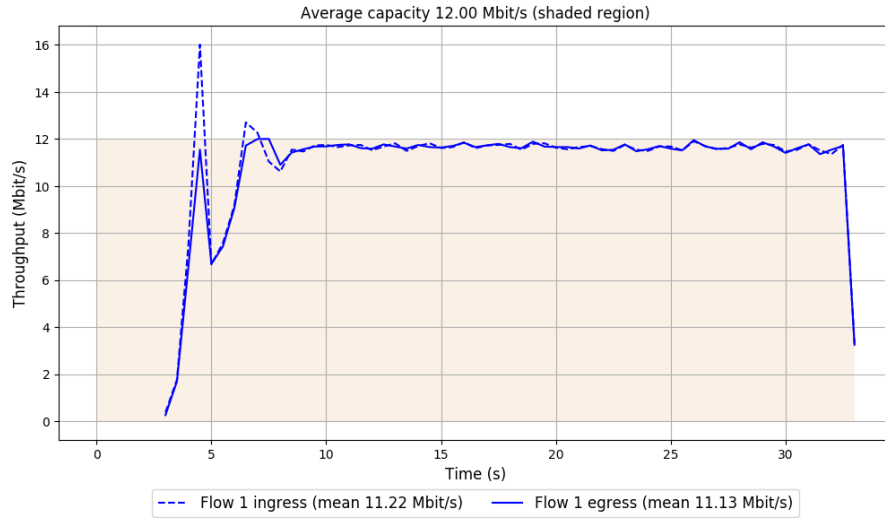
-- Flow 1:

Average throughput: 11.13 Mbit/s

95th percentile per-packet one-way delay: 51.333 ms

Loss rate: 0.89%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-02-27 12:27:57

End at: 2018-02-27 12:28:27

Below is generated by plot.py at 2018-02-27 12:45:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 12.00 Mbit/s

Average throughput: 11.13 Mbit/s (92.7% utilization)

95th percentile per-packet one-way delay: 57.577 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 11.13 Mbit/s

95th percentile per-packet one-way delay: 57.577 ms

Loss rate: 0.91%

Run 10: Report of Vivace-LTE — Data Link

