

Pantheon Report

Generated at 2018-05-30 09:30:06 (UTC).

Tested in mahimahi: mm-delay 51 mm-loss uplink 0.0006 mm-link 77.72mbps.trace
77.72mbps.trace --uplink-queue=droptail --uplink-queue-args=packets=94

Repeated the test of 16 congestion control schemes 10 times.

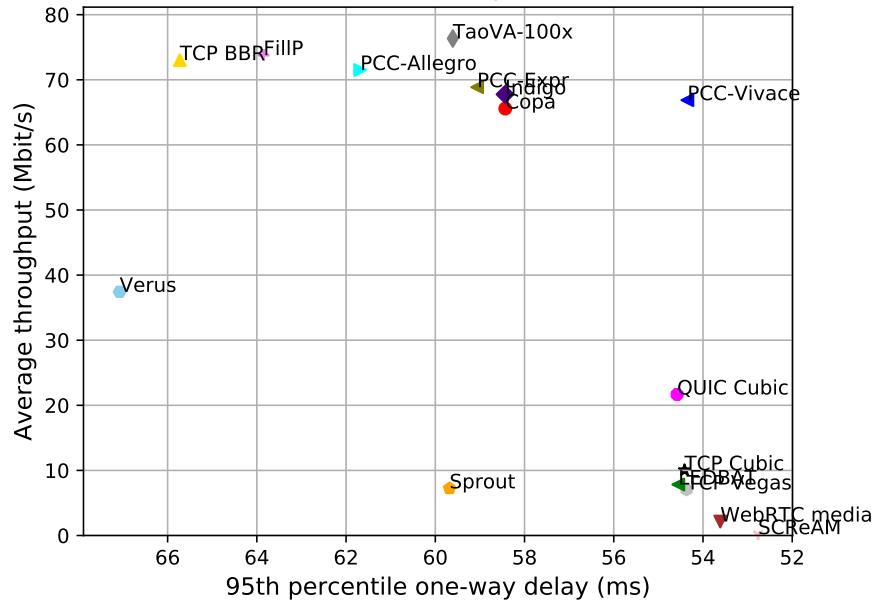
Each test lasted for 30 seconds running 1 flow.

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

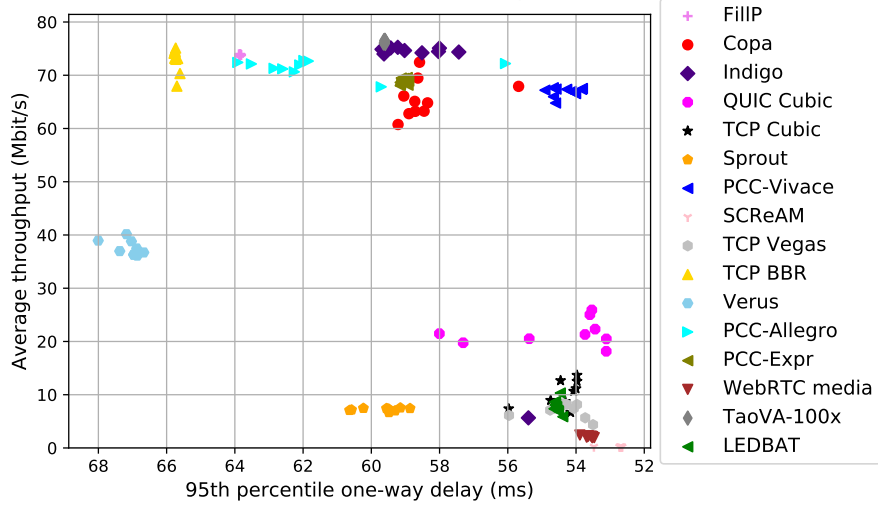
Git summary:

```
branch: master @ 227fdf9a3757f17b88537cceed5743a33037a3d2
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
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/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
  M src/ScreamClient
  M src/ScreamServer
third_party/sprout @ c838669682f0c19f6baf92afc9a596a406d48c1f
  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 @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

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



local test in mahimahi, 10 runs of 30s each per 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	73.02	65.73	3.17
Copa	10	65.58	58.43	2.83
TCP Cubic	10	10.03	54.41	1.15
FillP	10	73.80	63.85	9.23
Indigo	10	67.77	58.44	1.28
LEDBAT	10	7.83	54.55	0.38
PCC-Allegro	10	71.51	61.68	1.66
PCC-Expr	10	68.86	59.06	1.93
QUIC Cubic	9	21.67	54.58	0.83
SReAM	10	0.20	52.77	0.21
Sprout	10	7.24	59.68	0.25
TaoVA-100x	10	76.34	59.61	12.25
TCP Vegas	10	7.07	54.37	0.83
Verus	10	37.43	67.08	79.01
PCC-Vivace	10	66.87	54.35	0.71
WebRTC media	10	2.14	53.61	0.30

Run 1: Statistics of TCP BBR

Start at: 2018-05-30 07:18:13

End at: 2018-05-30 07:18:43

Below is generated by plot.py at 2018-05-30 09:02:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 73.15 Mbit/s (94.1% utilization)

95th percentile per-packet one-way delay: 65.676 ms

Loss rate: 2.68%

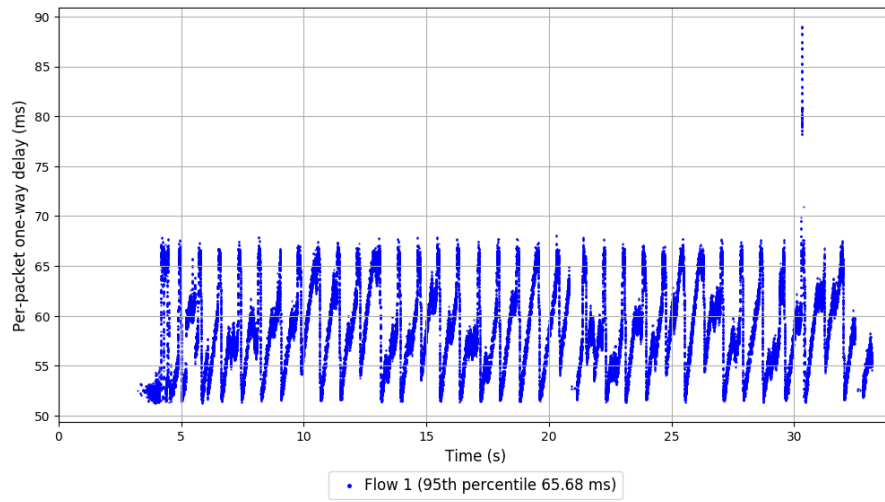
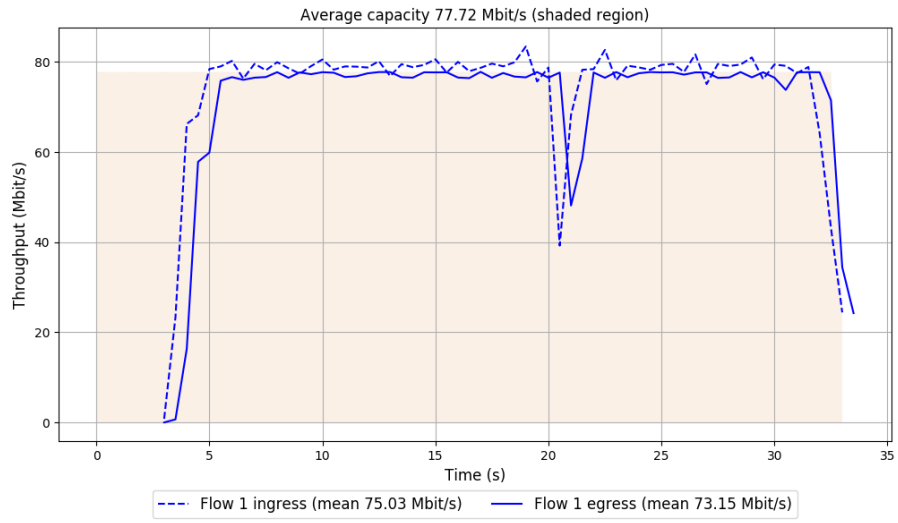
-- Flow 1:

Average throughput: 73.15 Mbit/s

95th percentile per-packet one-way delay: 65.676 ms

Loss rate: 2.68%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-05-30 07:28:15

End at: 2018-05-30 07:28:45

Below is generated by plot.py at 2018-05-30 09:02:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 72.99 Mbit/s (93.9% utilization)

95th percentile per-packet one-way delay: 65.731 ms

Loss rate: 2.86%

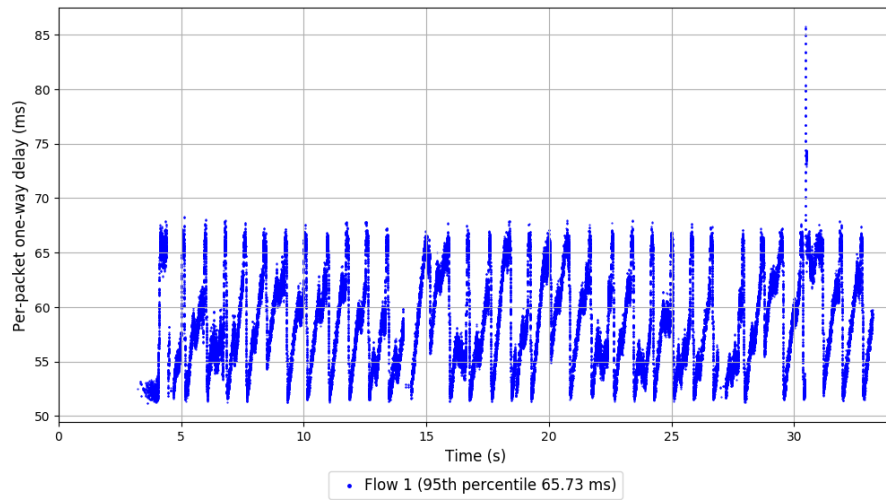
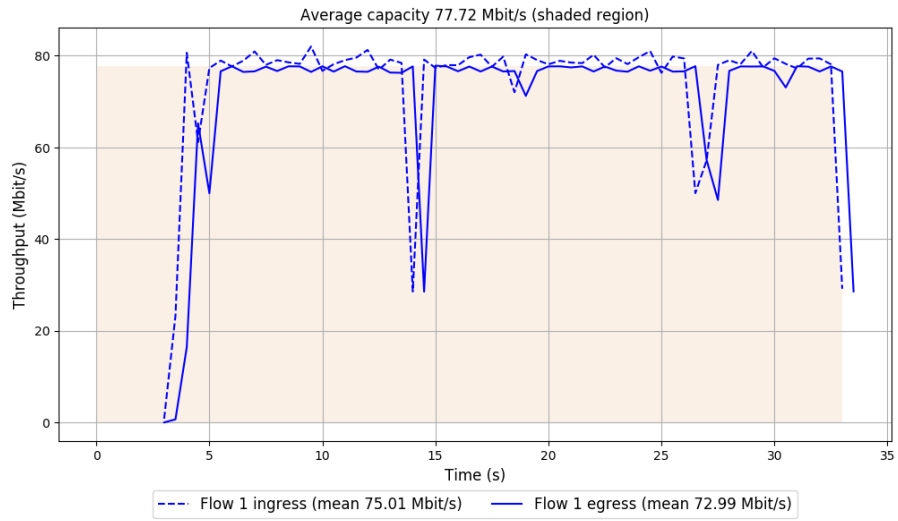
-- Flow 1:

Average throughput: 72.99 Mbit/s

95th percentile per-packet one-way delay: 65.731 ms

Loss rate: 2.86%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-05-30 07:38:25

End at: 2018-05-30 07:38:55

Below is generated by plot.py at 2018-05-30 09:02:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 73.17 Mbit/s (94.1% utilization)

95th percentile per-packet one-way delay: 65.762 ms

Loss rate: 3.39%

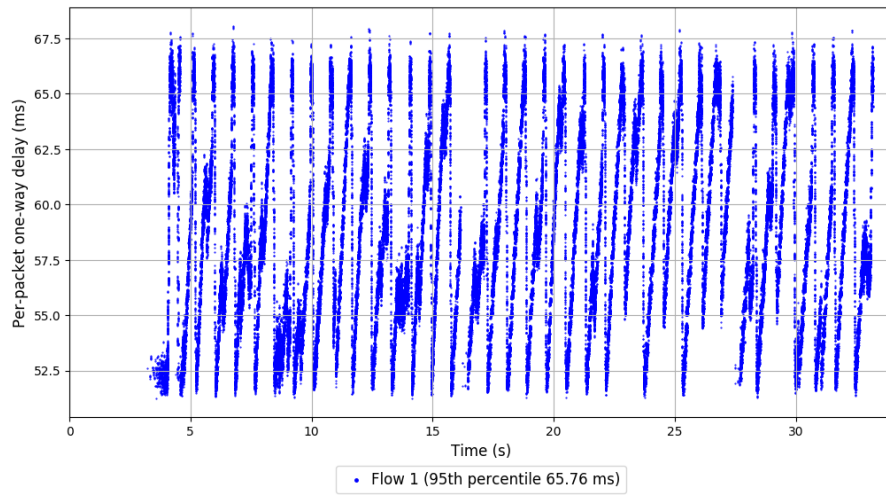
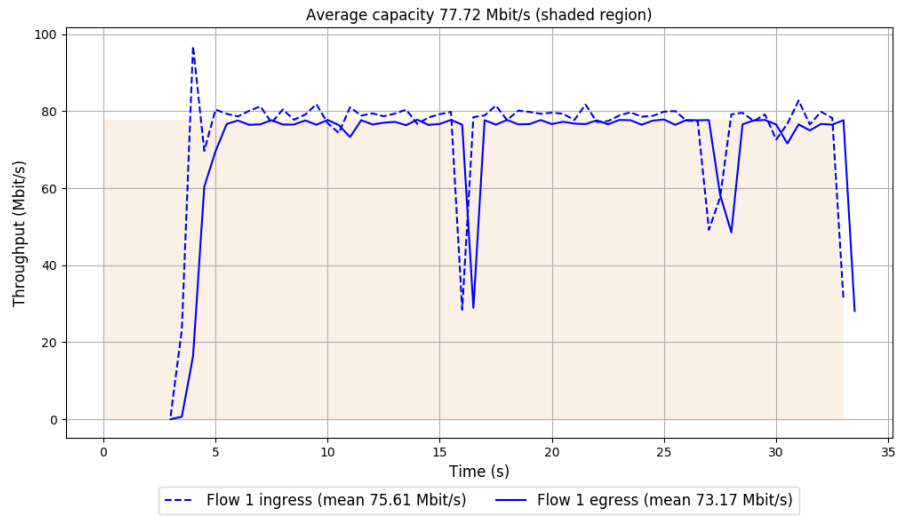
-- Flow 1:

Average throughput: 73.17 Mbit/s

95th percentile per-packet one-way delay: 65.762 ms

Loss rate: 3.39%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-05-30 07:48:32

End at: 2018-05-30 07:49:02

Below is generated by plot.py at 2018-05-30 09:02:51

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 74.40 Mbit/s (95.7% utilization)

95th percentile per-packet one-way delay: 65.761 ms

Loss rate: 2.95%

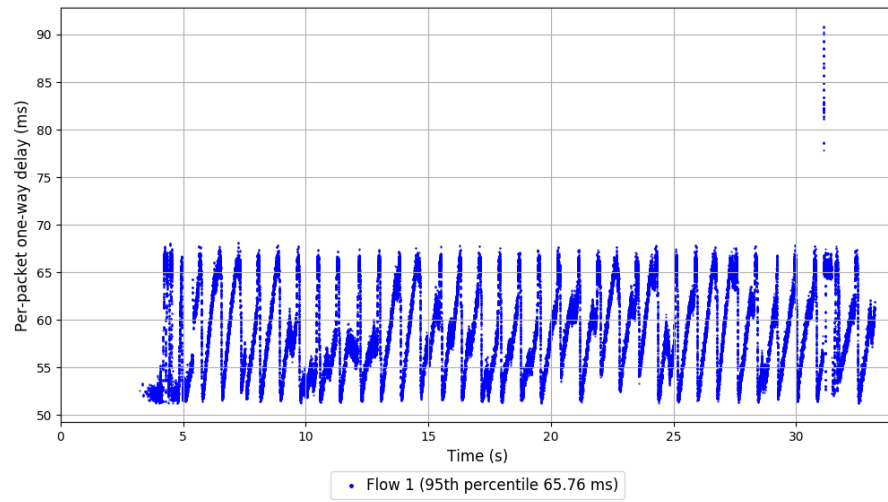
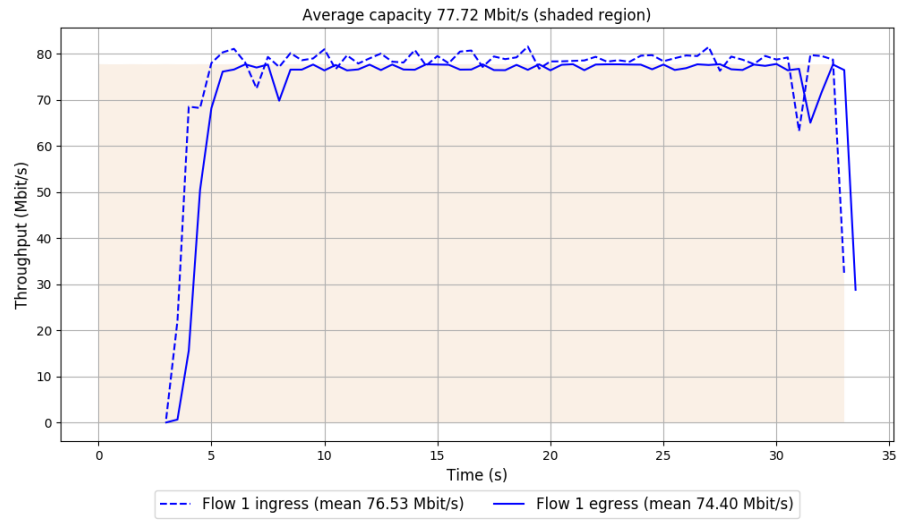
-- Flow 1:

Average throughput: 74.40 Mbit/s

95th percentile per-packet one-way delay: 65.761 ms

Loss rate: 2.95%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-05-30 07:58:41

End at: 2018-05-30 07:59:11

Below is generated by plot.py at 2018-05-30 09:02:51

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 70.32 Mbit/s (90.5% utilization)

95th percentile per-packet one-way delay: 65.608 ms

Loss rate: 3.03%

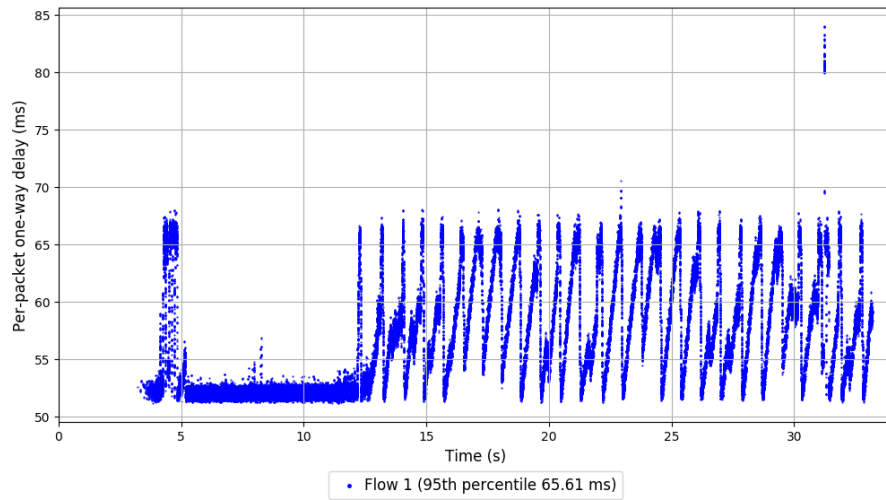
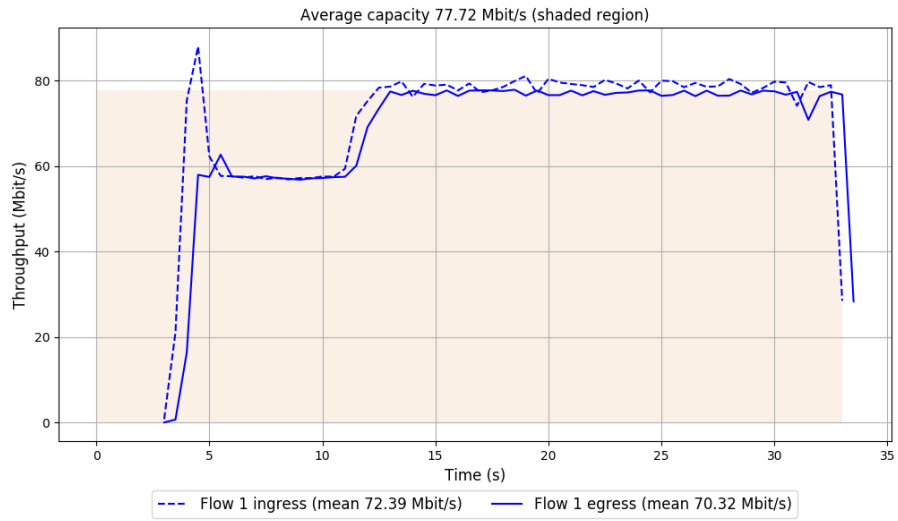
-- Flow 1:

Average throughput: 70.32 Mbit/s

95th percentile per-packet one-way delay: 65.608 ms

Loss rate: 3.03%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-05-30 08:08:50

End at: 2018-05-30 08:09:20

Below is generated by plot.py at 2018-05-30 09:02:51

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 74.33 Mbit/s (95.6% utilization)

95th percentile per-packet one-way delay: 65.746 ms

Loss rate: 3.17%

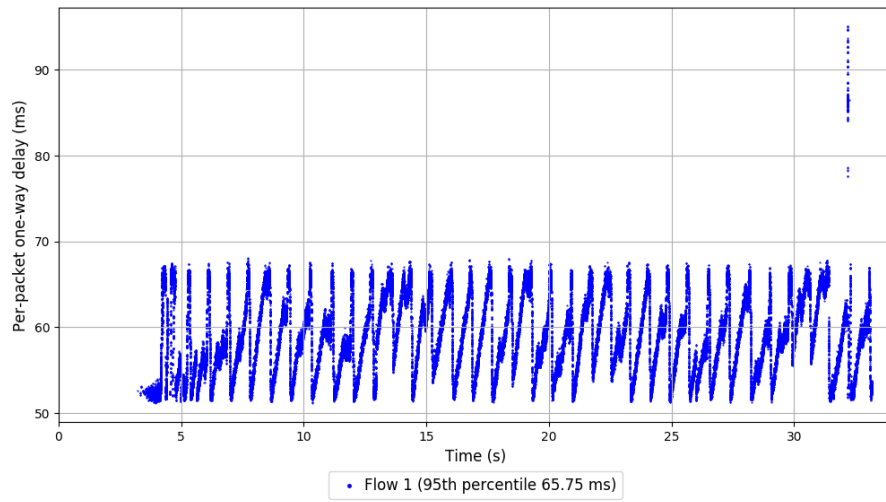
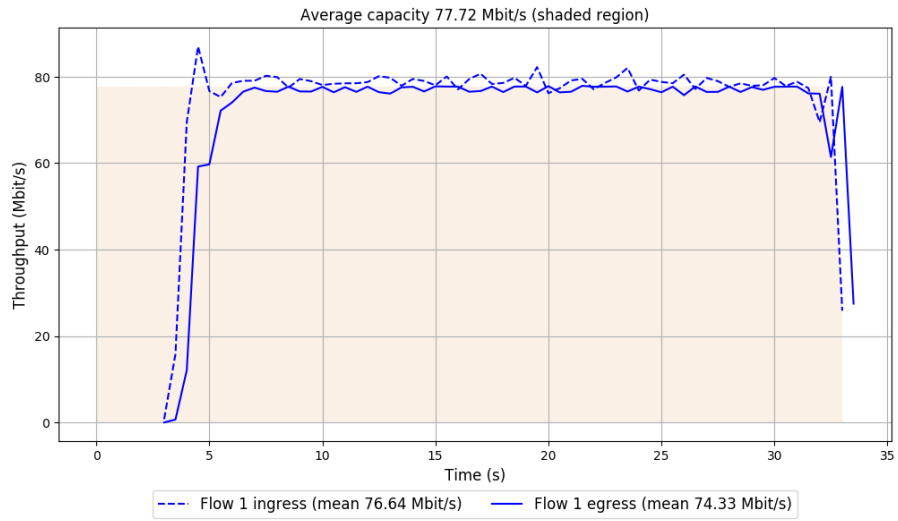
-- Flow 1:

Average throughput: 74.33 Mbit/s

95th percentile per-packet one-way delay: 65.746 ms

Loss rate: 3.17%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-05-30 08:19:01

End at: 2018-05-30 08:19:31

Below is generated by plot.py at 2018-05-30 09:02:52

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 74.67 Mbit/s (96.1% utilization)

95th percentile per-packet one-way delay: 65.757 ms

Loss rate: 3.59%

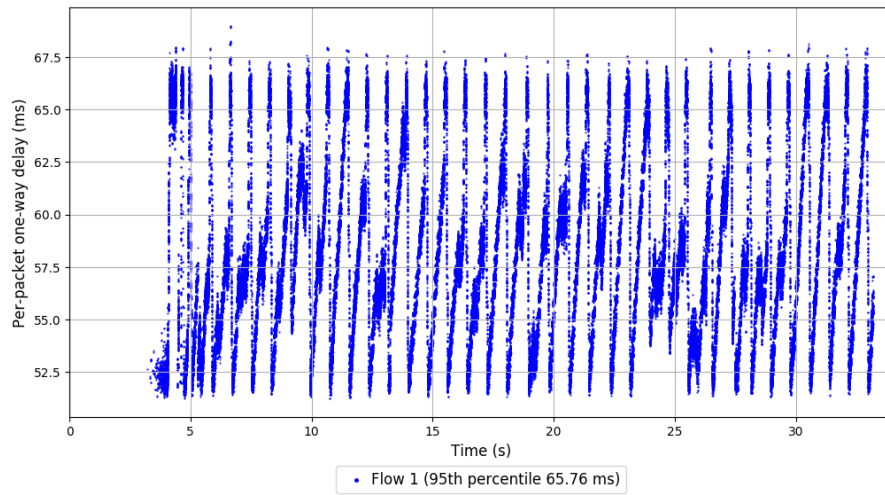
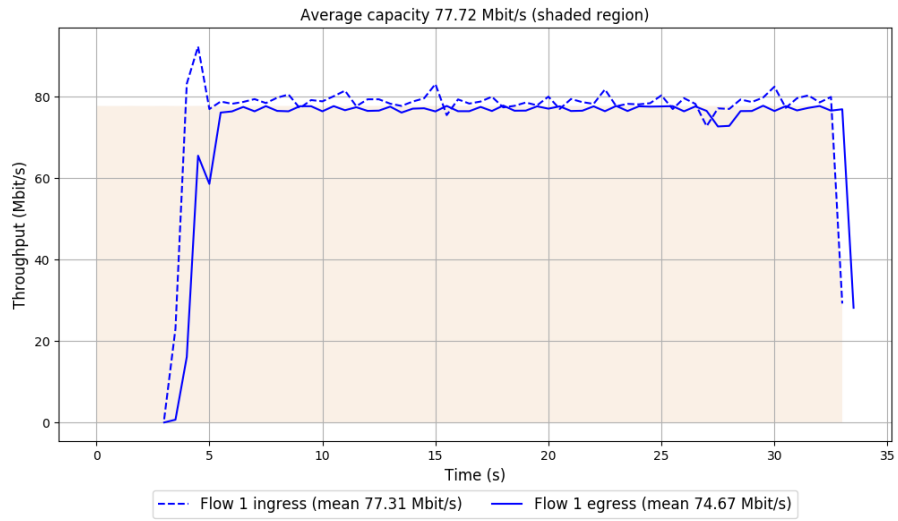
-- Flow 1:

Average throughput: 74.67 Mbit/s

95th percentile per-packet one-way delay: 65.757 ms

Loss rate: 3.59%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-05-30 08:29:10

End at: 2018-05-30 08:29:40

Below is generated by plot.py at 2018-05-30 09:02:52

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 75.10 Mbit/s (96.6% utilization)

95th percentile per-packet one-way delay: 65.735 ms

Loss rate: 3.39%

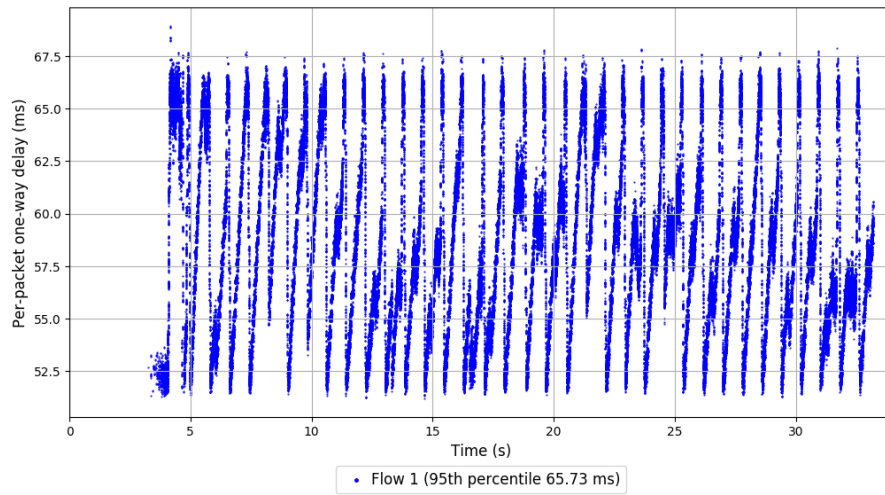
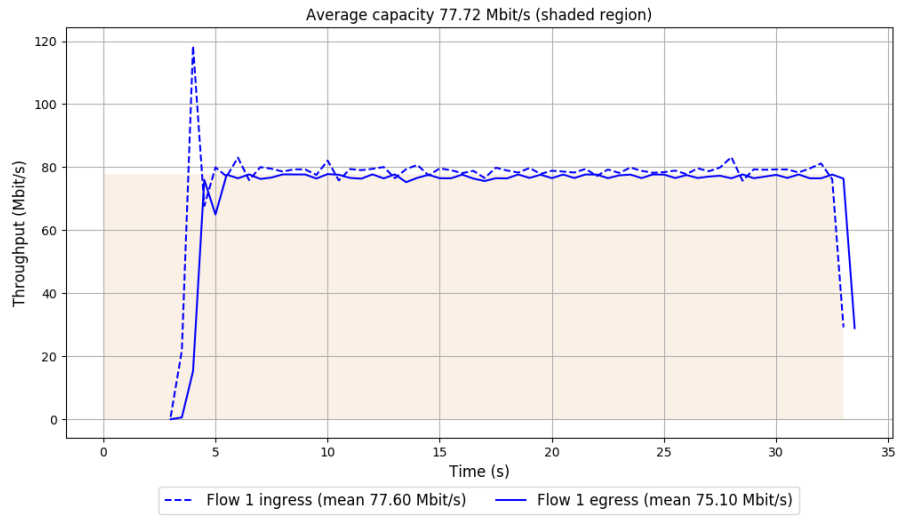
-- Flow 1:

Average throughput: 75.10 Mbit/s

95th percentile per-packet one-way delay: 65.735 ms

Loss rate: 3.39%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-05-30 08:39:23

End at: 2018-05-30 08:39:53

Below is generated by plot.py at 2018-05-30 09:04:13

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 74.13 Mbit/s (95.4% utilization)

95th percentile per-packet one-way delay: 65.781 ms

Loss rate: 3.47%

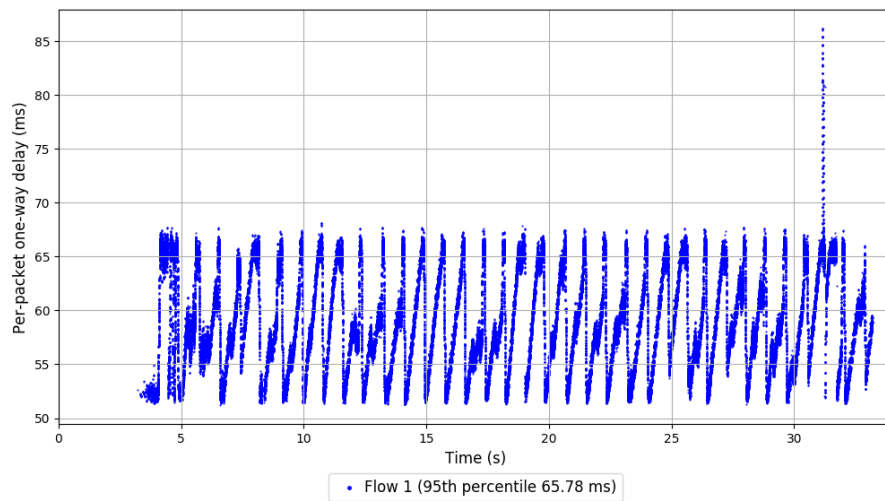
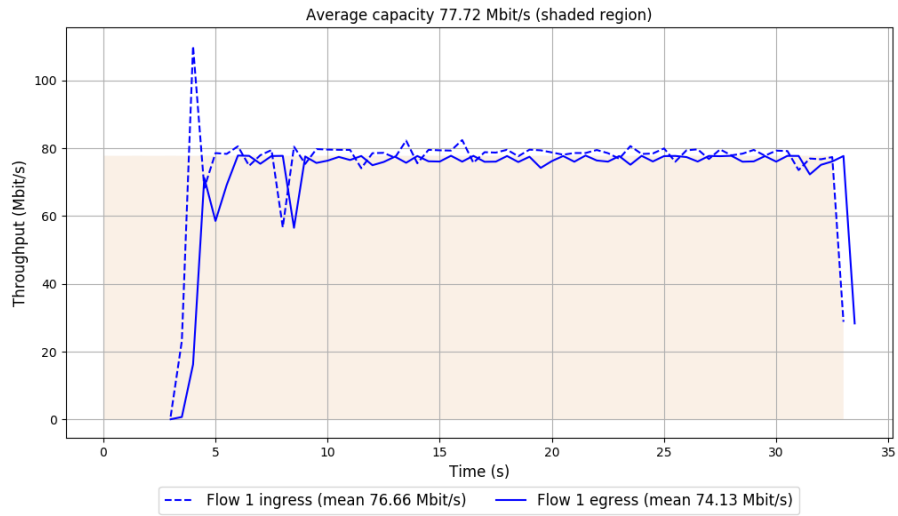
-- Flow 1:

Average throughput: 74.13 Mbit/s

95th percentile per-packet one-way delay: 65.781 ms

Loss rate: 3.47%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-05-30 08:49:30

End at: 2018-05-30 08:50:00

Below is generated by plot.py at 2018-05-30 09:04:13

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 67.96 Mbit/s (87.4% utilization)

95th percentile per-packet one-way delay: 65.699 ms

Loss rate: 3.19%

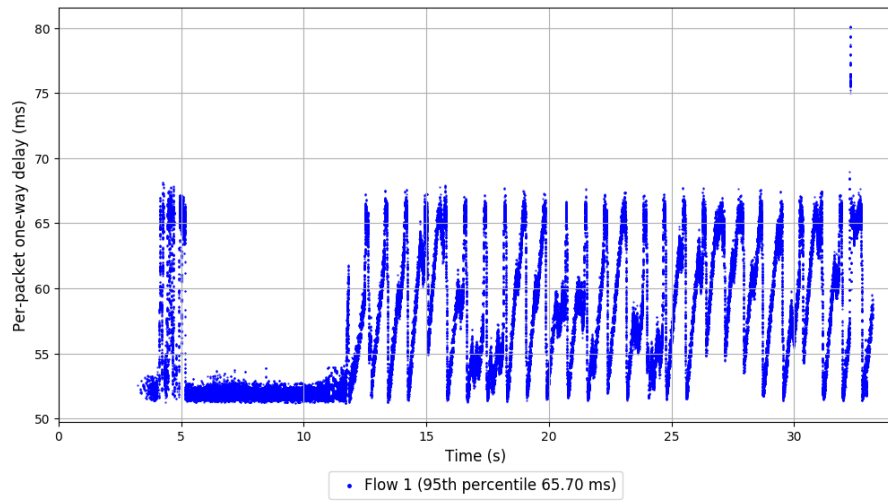
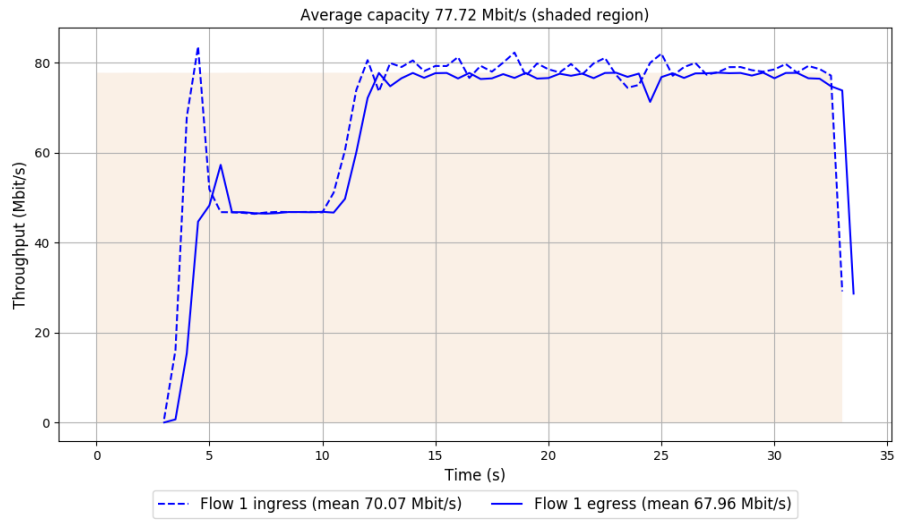
-- Flow 1:

Average throughput: 67.96 Mbit/s

95th percentile per-packet one-way delay: 65.699 ms

Loss rate: 3.19%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2018-05-30 07:24:32

End at: 2018-05-30 07:25:02

Below is generated by plot.py at 2018-05-30 09:05:17

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 62.78 Mbit/s (80.8% utilization)

95th percentile per-packet one-way delay: 58.898 ms

Loss rate: 3.39%

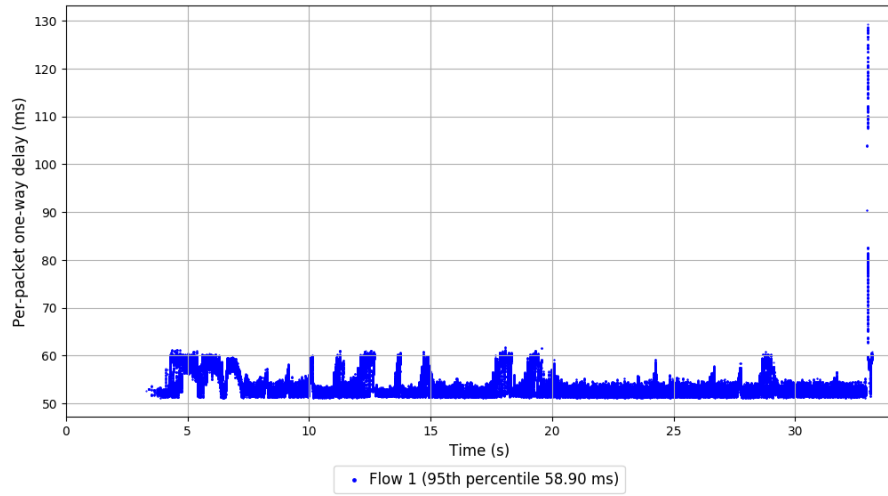
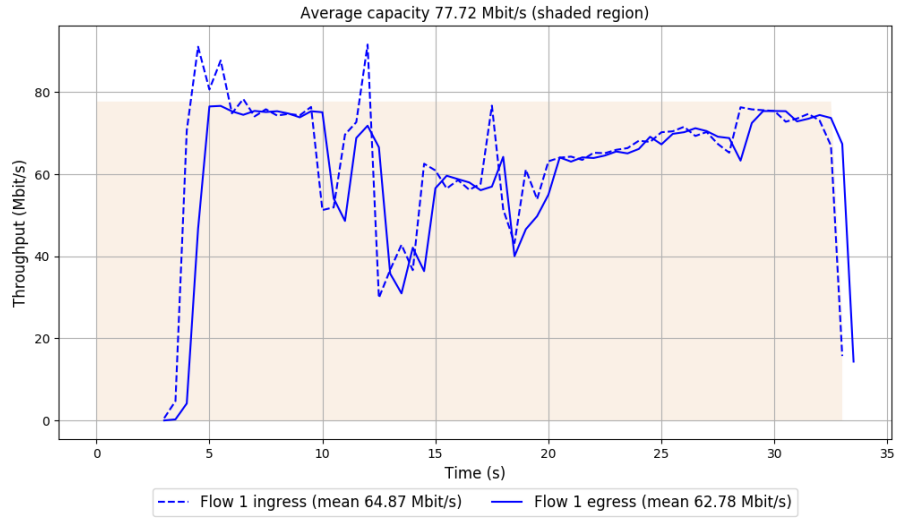
-- Flow 1:

Average throughput: 62.78 Mbit/s

95th percentile per-packet one-way delay: 58.898 ms

Loss rate: 3.39%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-05-30 07:34:41

End at: 2018-05-30 07:35:11

Below is generated by plot.py at 2018-05-30 09:05:19

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 63.22 Mbit/s (81.3% utilization)

95th percentile per-packet one-way delay: 58.712 ms

Loss rate: 3.39%

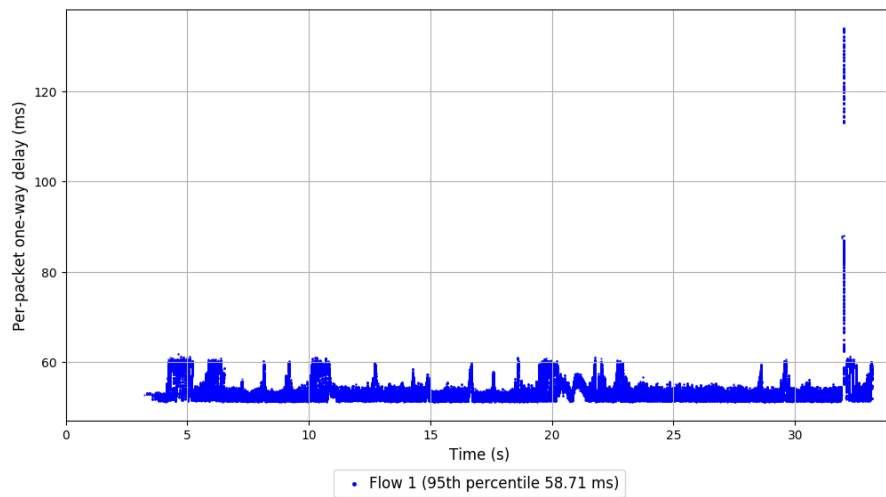
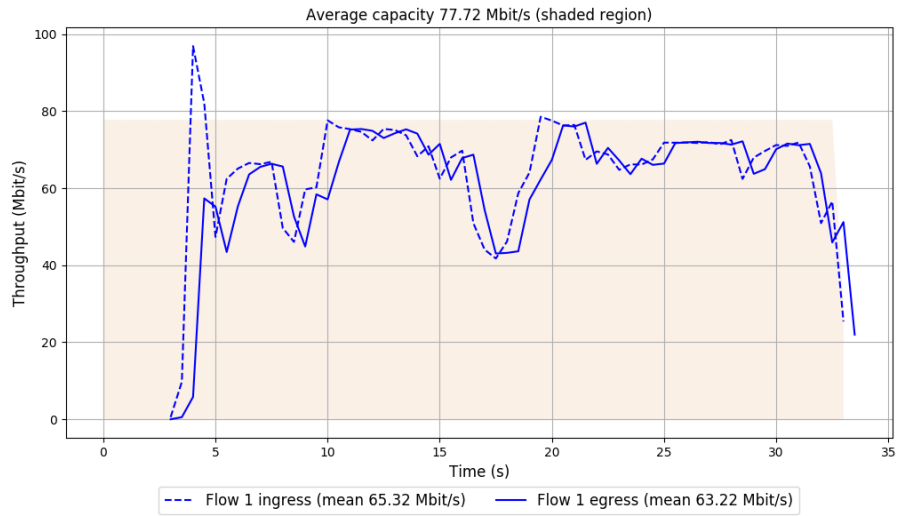
-- Flow 1:

Average throughput: 63.22 Mbit/s

95th percentile per-packet one-way delay: 58.712 ms

Loss rate: 3.39%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-05-30 07:44:48

End at: 2018-05-30 07:45:18

Below is generated by plot.py at 2018-05-30 09:05:19

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 60.75 Mbit/s (78.2% utilization)

95th percentile per-packet one-way delay: 59.217 ms

Loss rate: 5.71%

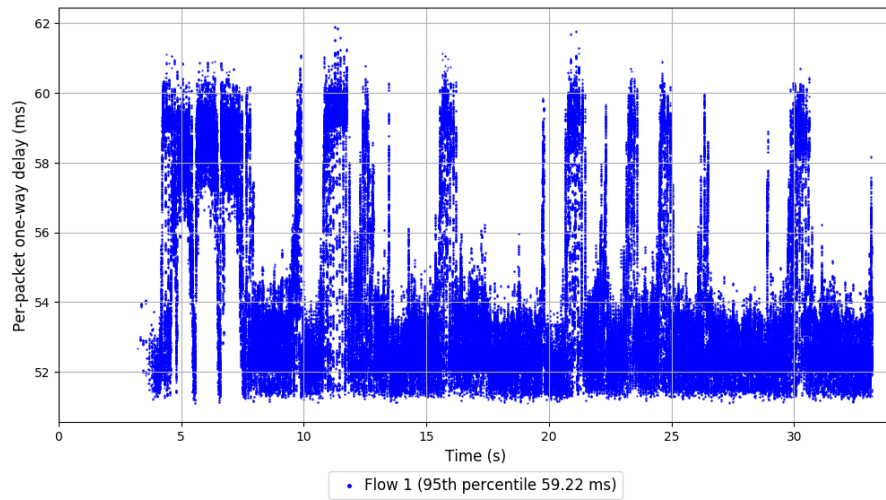
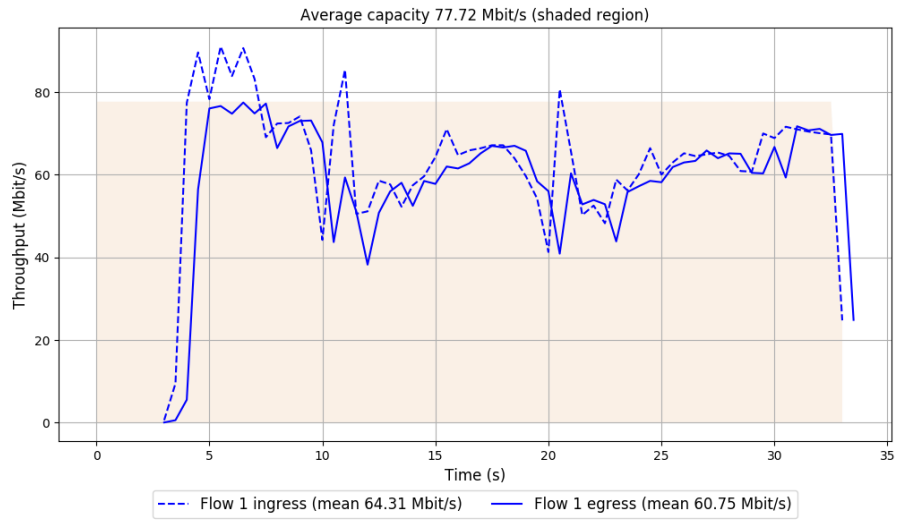
-- Flow 1:

Average throughput: 60.75 Mbit/s

95th percentile per-packet one-way delay: 59.217 ms

Loss rate: 5.71%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-05-30 07:54:56

End at: 2018-05-30 07:55:26

Below is generated by plot.py at 2018-05-30 09:05:20

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 63.25 Mbit/s (81.4% utilization)

95th percentile per-packet one-way delay: 58.453 ms

Loss rate: 1.95%

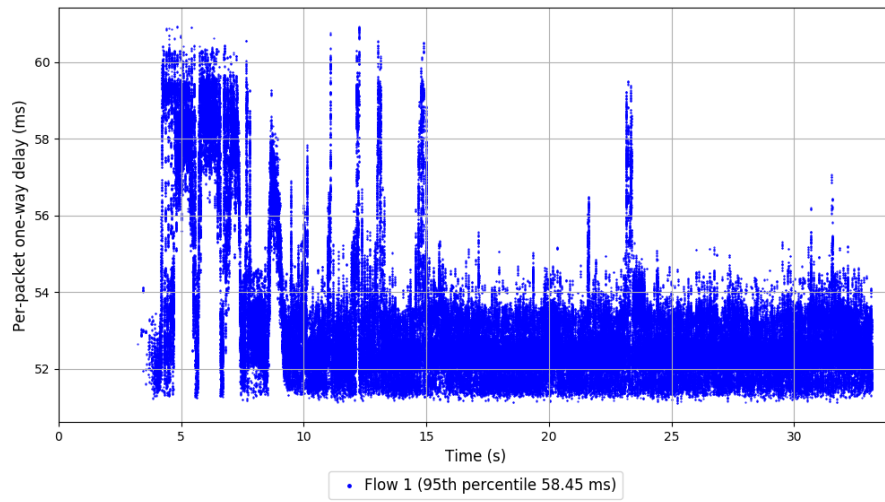
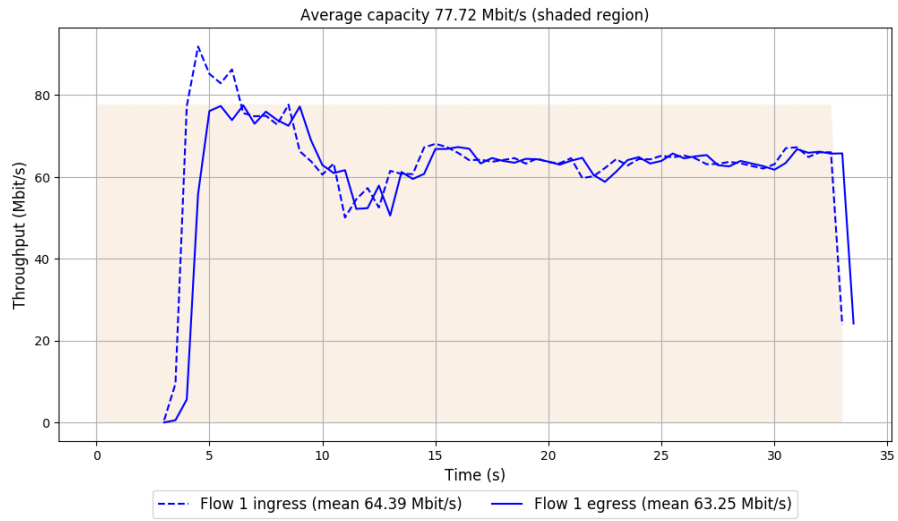
-- Flow 1:

Average throughput: 63.25 Mbit/s

95th percentile per-packet one-way delay: 58.453 ms

Loss rate: 1.95%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-05-30 08:05:05

End at: 2018-05-30 08:05:35

Below is generated by plot.py at 2018-05-30 09:05:27

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 67.91 Mbit/s (87.4% utilization)

95th percentile per-packet one-way delay: 55.683 ms

Loss rate: 1.42%

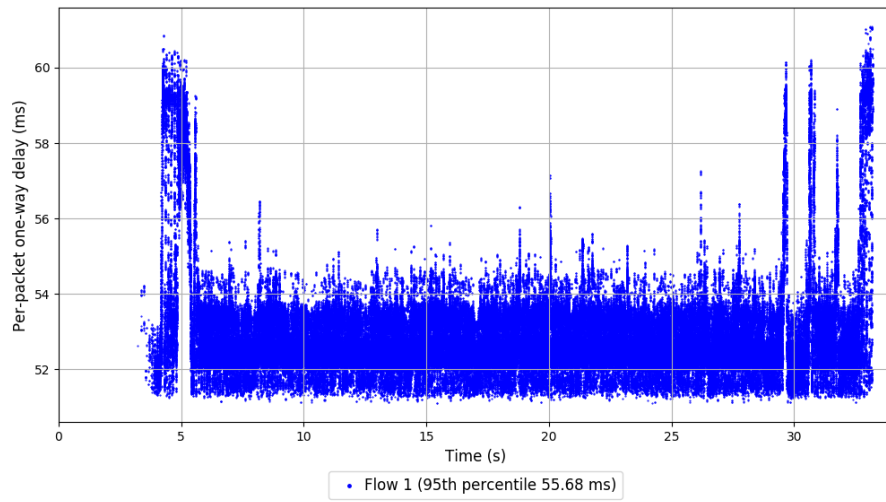
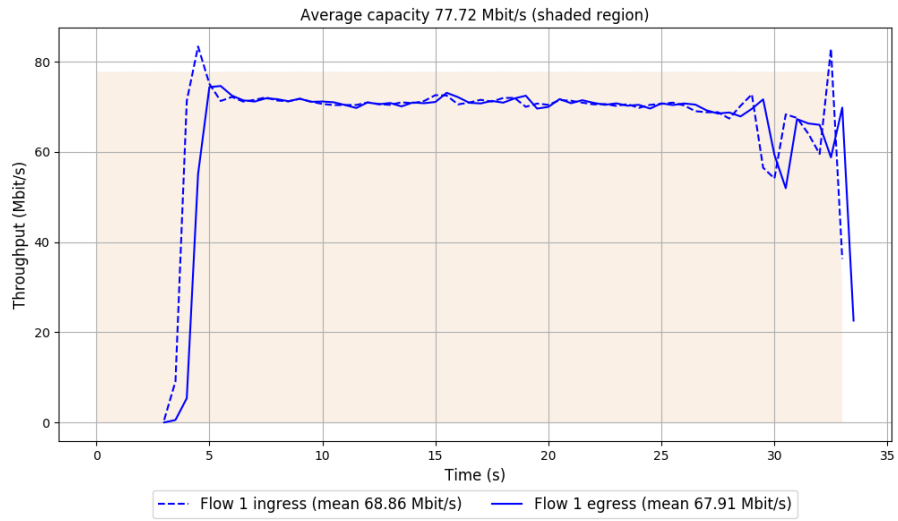
-- Flow 1:

Average throughput: 67.91 Mbit/s

95th percentile per-packet one-way delay: 55.683 ms

Loss rate: 1.42%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-05-30 08:15:16

End at: 2018-05-30 08:15:46

Below is generated by plot.py at 2018-05-30 09:05:27

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 64.81 Mbit/s (83.4% utilization)

95th percentile per-packet one-way delay: 58.351 ms

Loss rate: 2.28%

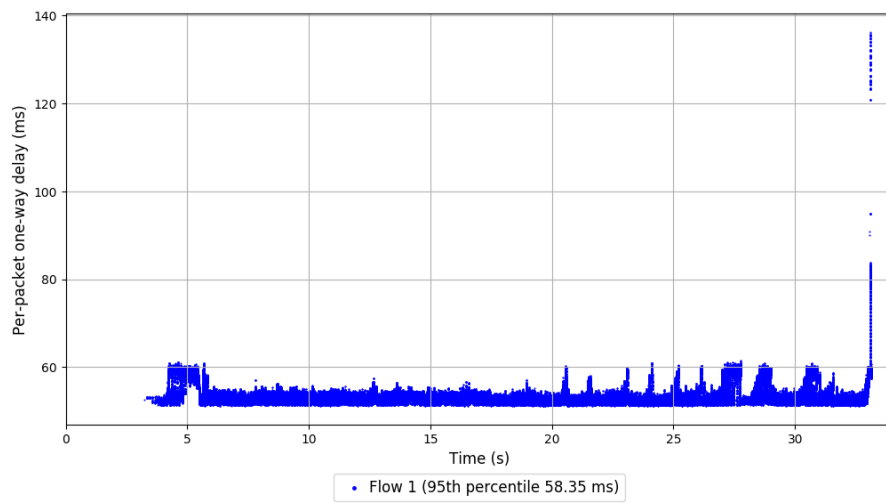
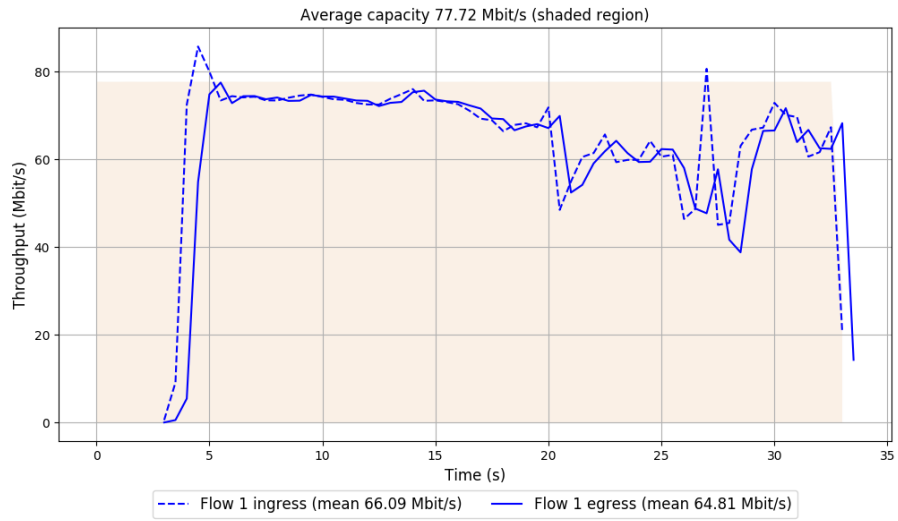
-- Flow 1:

Average throughput: 64.81 Mbit/s

95th percentile per-packet one-way delay: 58.351 ms

Loss rate: 2.28%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-05-30 08:25:25

End at: 2018-05-30 08:25:55

Below is generated by plot.py at 2018-05-30 09:06:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 66.10 Mbit/s (85.0% utilization)

95th percentile per-packet one-way delay: 59.048 ms

Loss rate: 3.12%

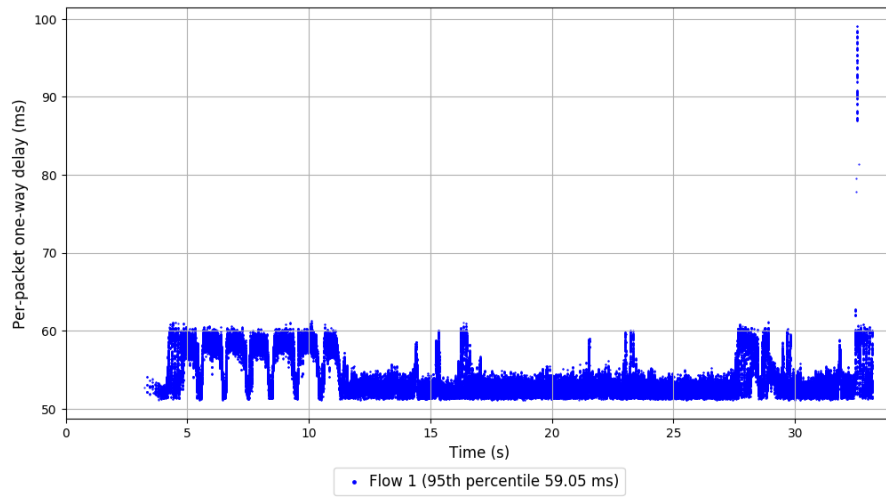
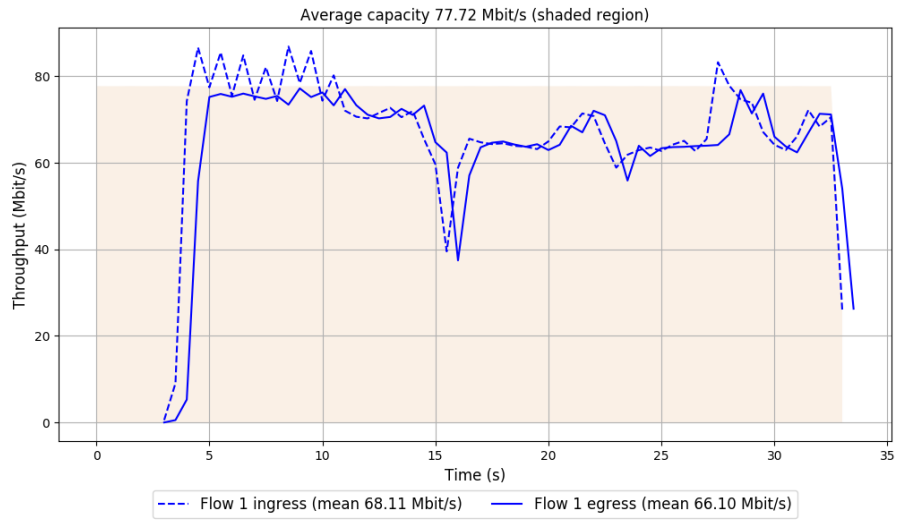
-- Flow 1:

Average throughput: 66.10 Mbit/s

95th percentile per-packet one-way delay: 59.048 ms

Loss rate: 3.12%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-05-30 08:35:38

End at: 2018-05-30 08:36:08

Below is generated by plot.py at 2018-05-30 09:06:57

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 65.10 Mbit/s (83.8% utilization)

95th percentile per-packet one-way delay: 58.727 ms

Loss rate: 2.70%

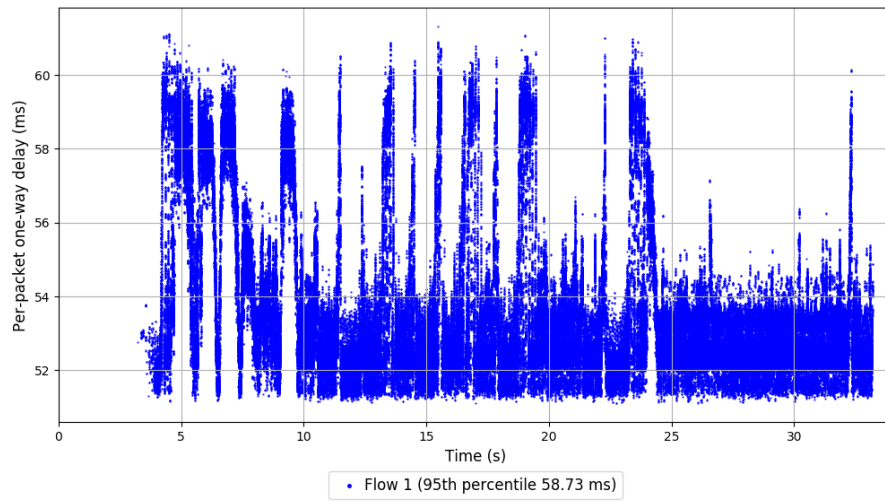
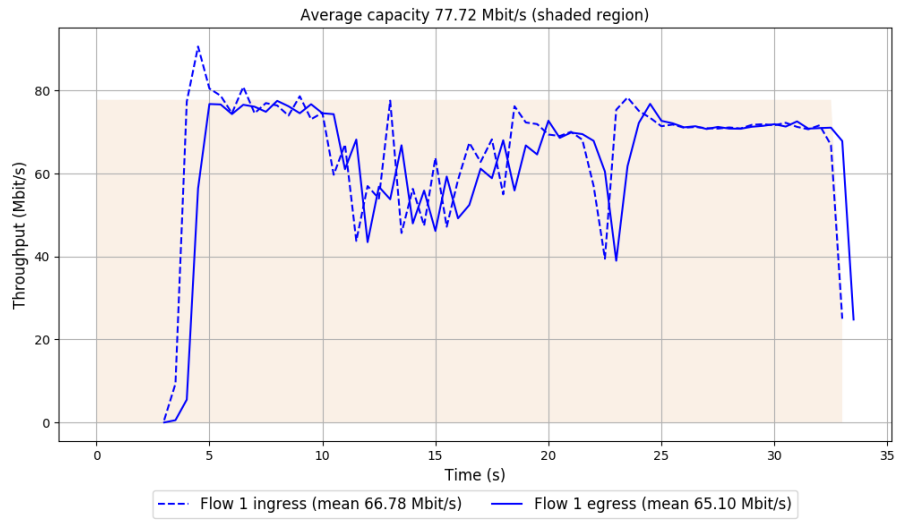
-- Flow 1:

Average throughput: 65.10 Mbit/s

95th percentile per-packet one-way delay: 58.727 ms

Loss rate: 2.70%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-05-30 08:45:45

End at: 2018-05-30 08:46:15

Below is generated by plot.py at 2018-05-30 09:07:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 72.44 Mbit/s (93.2% utilization)

95th percentile per-packet one-way delay: 58.587 ms

Loss rate: 2.32%

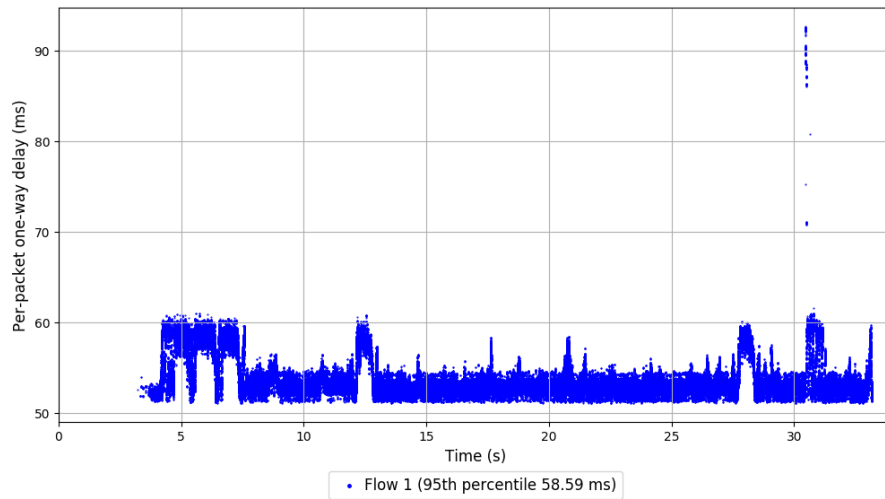
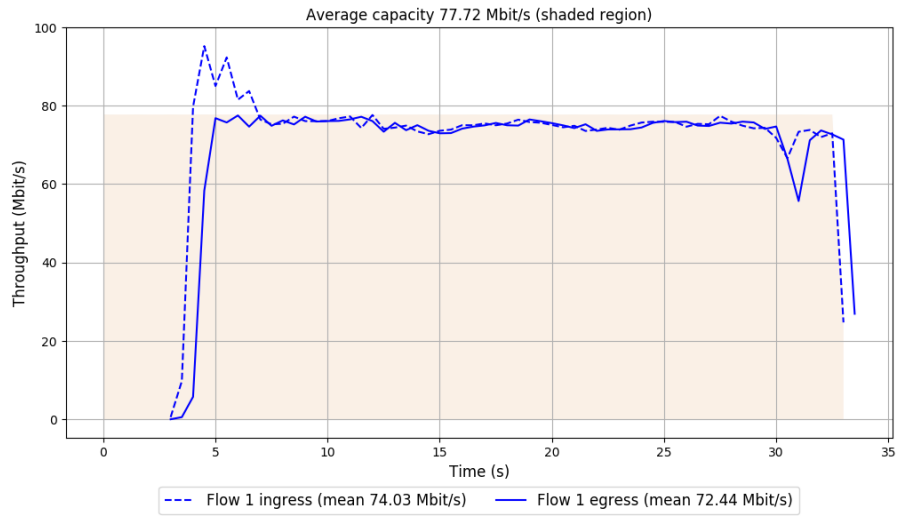
-- Flow 1:

Average throughput: 72.44 Mbit/s

95th percentile per-packet one-way delay: 58.587 ms

Loss rate: 2.32%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-05-30 08:55:53

End at: 2018-05-30 08:56:23

Below is generated by plot.py at 2018-05-30 09:07:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 69.47 Mbit/s (89.4% utilization)

95th percentile per-packet one-way delay: 58.636 ms

Loss rate: 2.01%

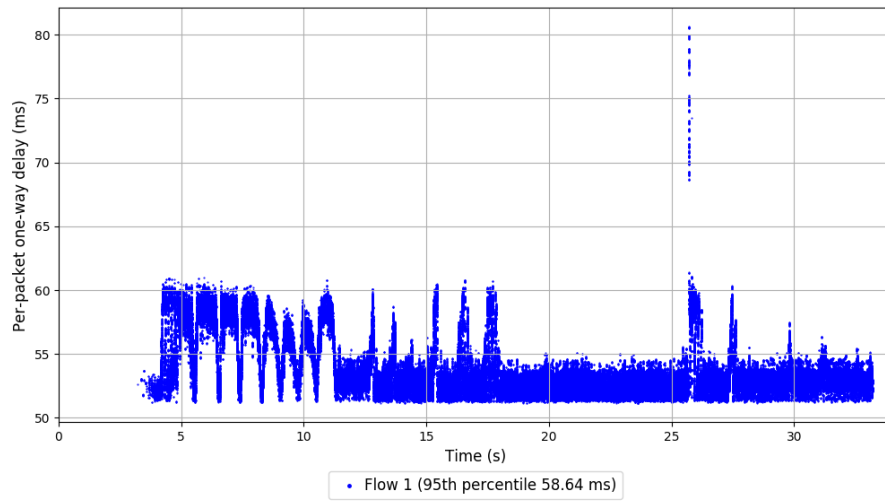
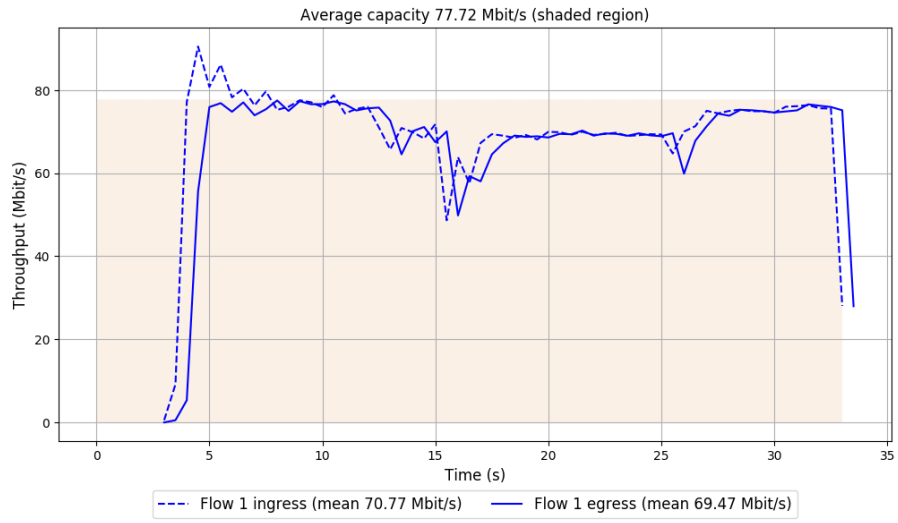
-- Flow 1:

Average throughput: 69.47 Mbit/s

95th percentile per-packet one-way delay: 58.636 ms

Loss rate: 2.01%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-05-30 07:20:07

End at: 2018-05-30 07:20:37

Below is generated by plot.py at 2018-05-30 09:07:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 8.96 Mbit/s (11.5% utilization)

95th percentile per-packet one-way delay: 54.745 ms

Loss rate: 1.60%

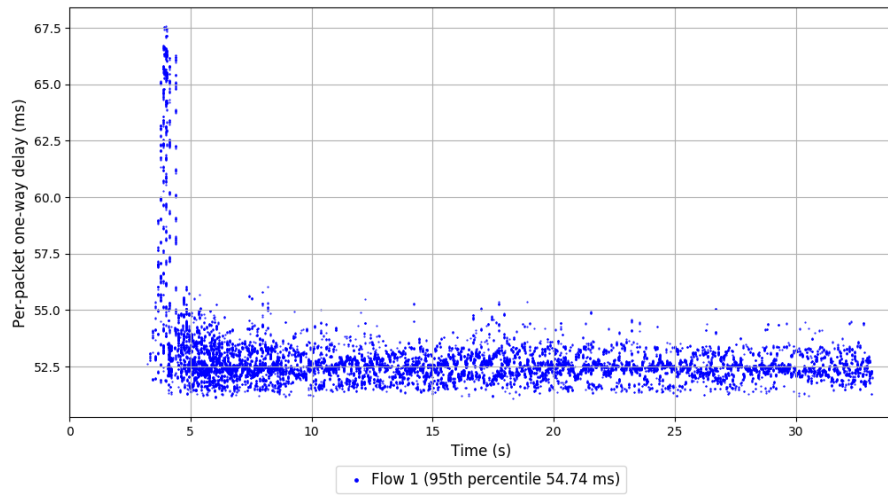
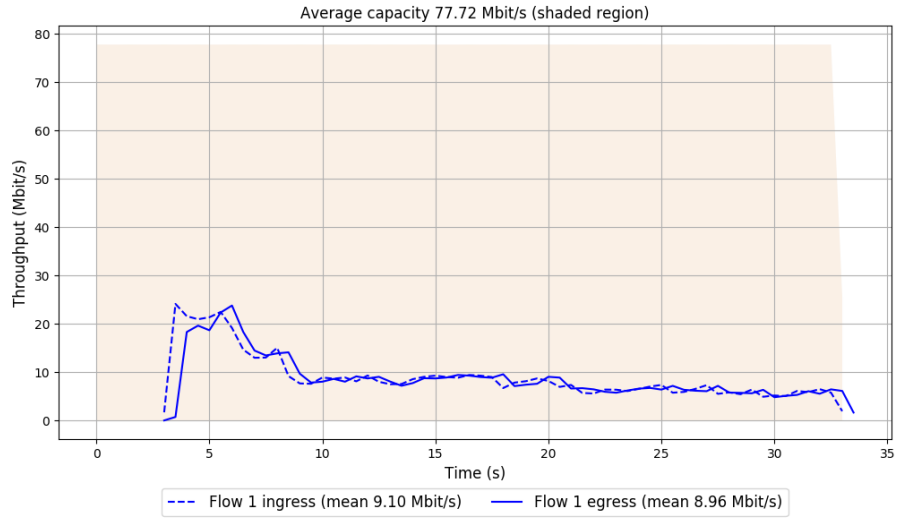
-- Flow 1:

Average throughput: 8.96 Mbit/s

95th percentile per-packet one-way delay: 54.745 ms

Loss rate: 1.60%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-05-30 07:30:14

End at: 2018-05-30 07:30:44

Below is generated by plot.py at 2018-05-30 09:07:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 7.37 Mbit/s (9.5% utilization)

95th percentile per-packet one-way delay: 55.973 ms

Loss rate: 1.72%

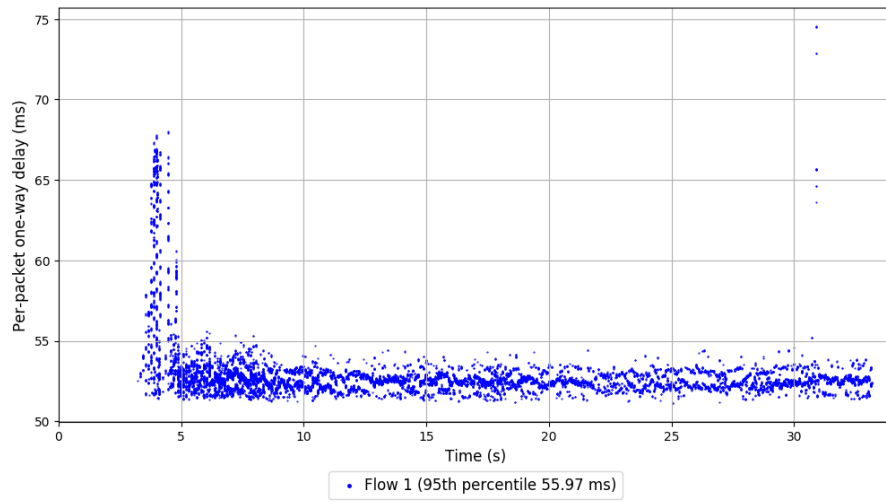
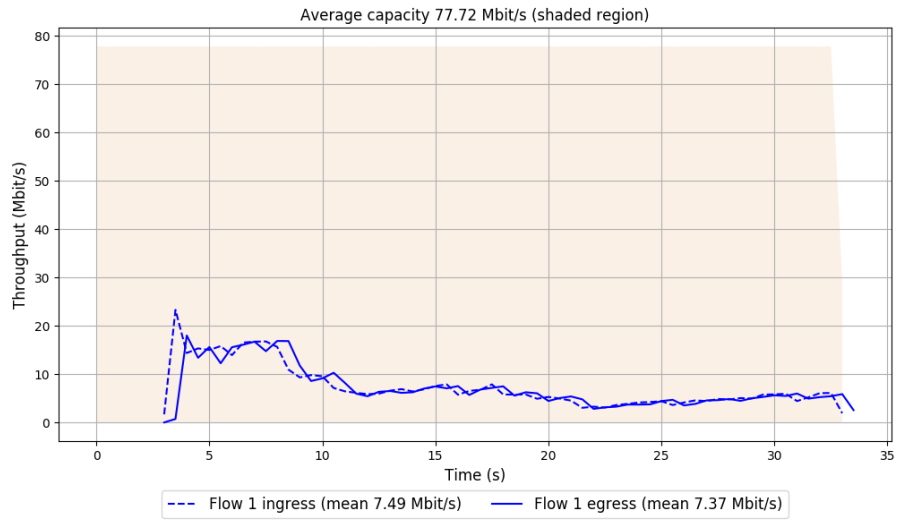
-- Flow 1:

Average throughput: 7.37 Mbit/s

95th percentile per-packet one-way delay: 55.973 ms

Loss rate: 1.72%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-05-30 07:40:23

End at: 2018-05-30 07:40:53

Below is generated by plot.py at 2018-05-30 09:07:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 6.69 Mbit/s (8.6% utilization)

95th percentile per-packet one-way delay: 54.159 ms

Loss rate: 0.86%

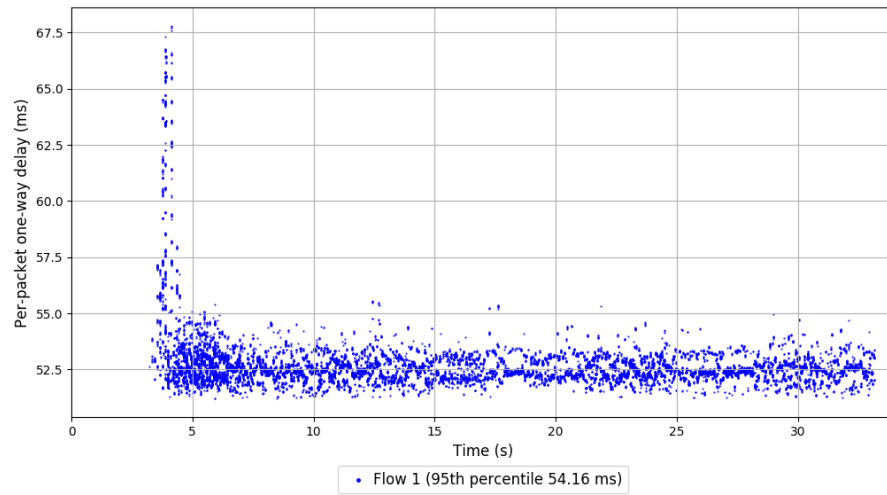
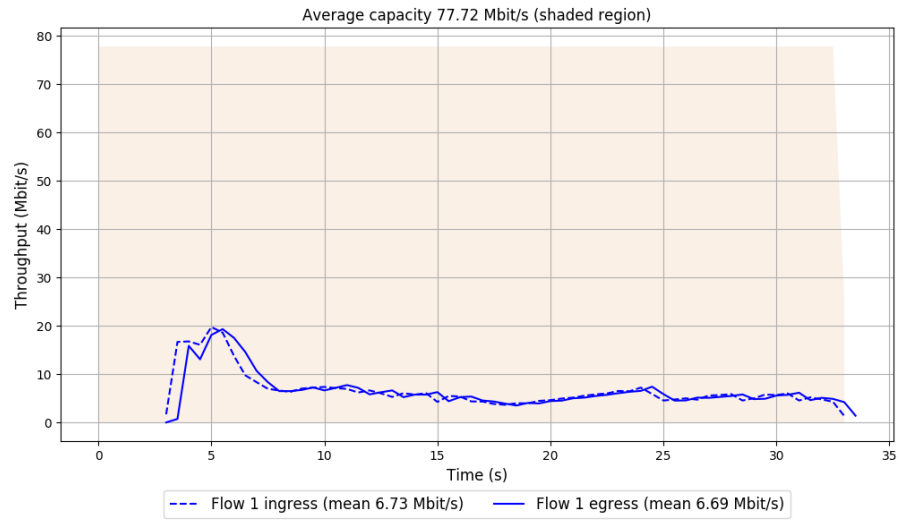
-- Flow 1:

Average throughput: 6.69 Mbit/s

95th percentile per-packet one-way delay: 54.159 ms

Loss rate: 0.86%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-05-30 07:50:31

End at: 2018-05-30 07:51:01

Below is generated by plot.py at 2018-05-30 09:07:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 11.14 Mbit/s (14.3% utilization)

95th percentile per-packet one-way delay: 54.002 ms

Loss rate: 0.74%

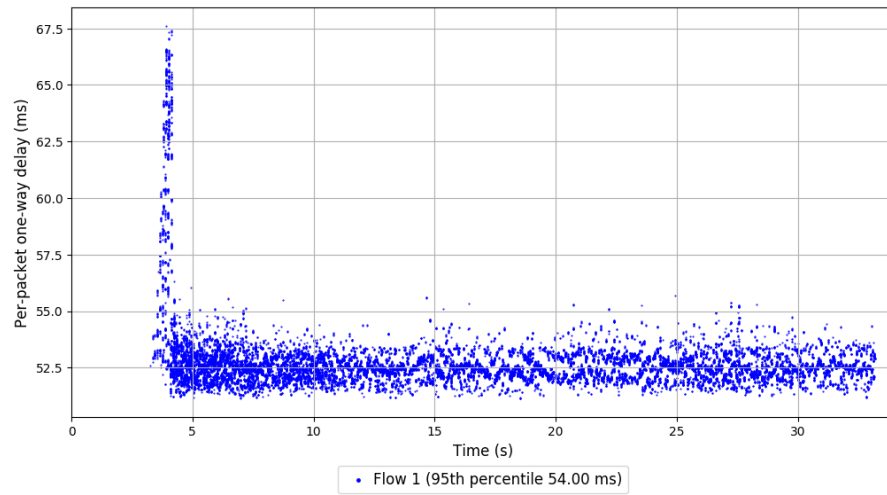
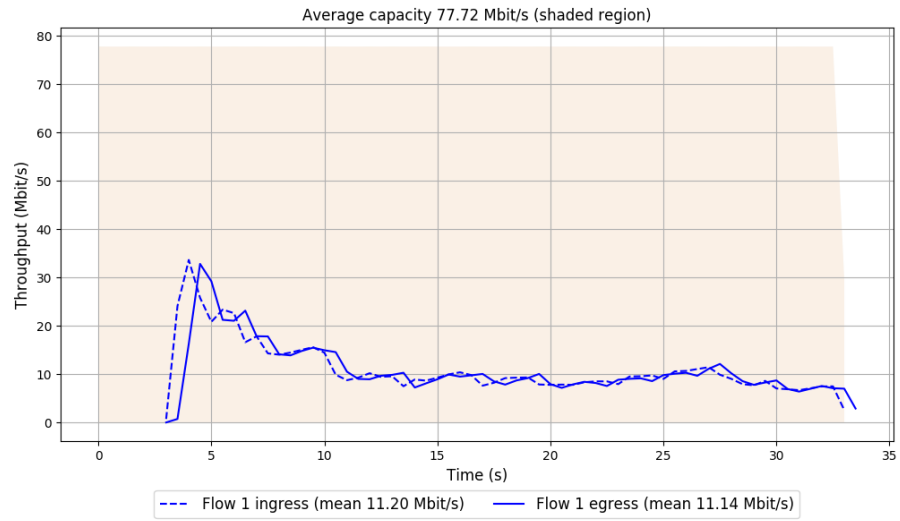
-- Flow 1:

Average throughput: 11.14 Mbit/s

95th percentile per-packet one-way delay: 54.002 ms

Loss rate: 0.74%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-05-30 08:00:39

End at: 2018-05-30 08:01:09

Below is generated by plot.py at 2018-05-30 09:07:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 12.53 Mbit/s (16.1% utilization)

95th percentile per-packet one-way delay: 53.971 ms

Loss rate: 0.94%

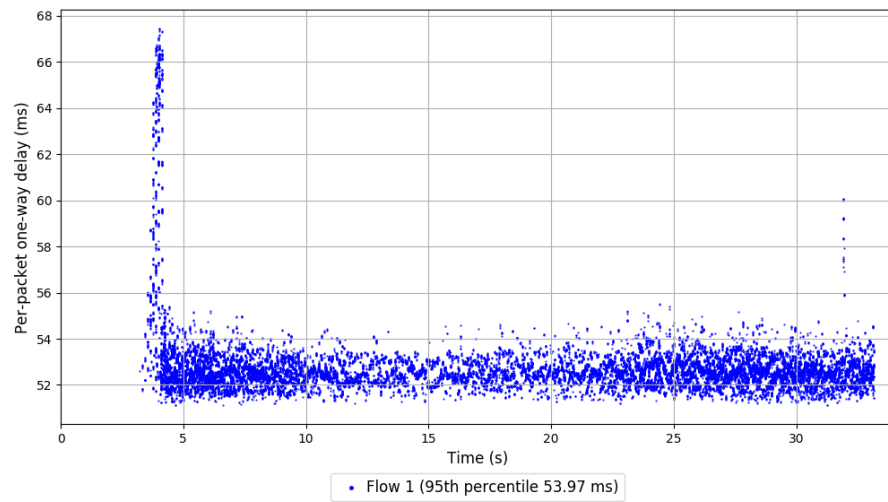
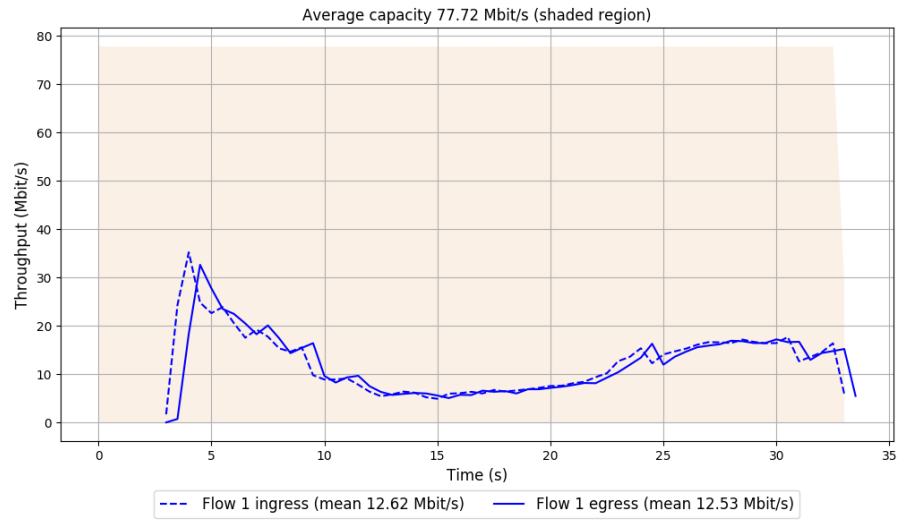
-- Flow 1:

Average throughput: 12.53 Mbit/s

95th percentile per-packet one-way delay: 53.971 ms

Loss rate: 0.94%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-05-30 08:10:50

End at: 2018-05-30 08:11:20

Below is generated by plot.py at 2018-05-30 09:07:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 8.74 Mbit/s (11.2% utilization)

95th percentile per-packet one-way delay: 54.313 ms

Loss rate: 0.96%

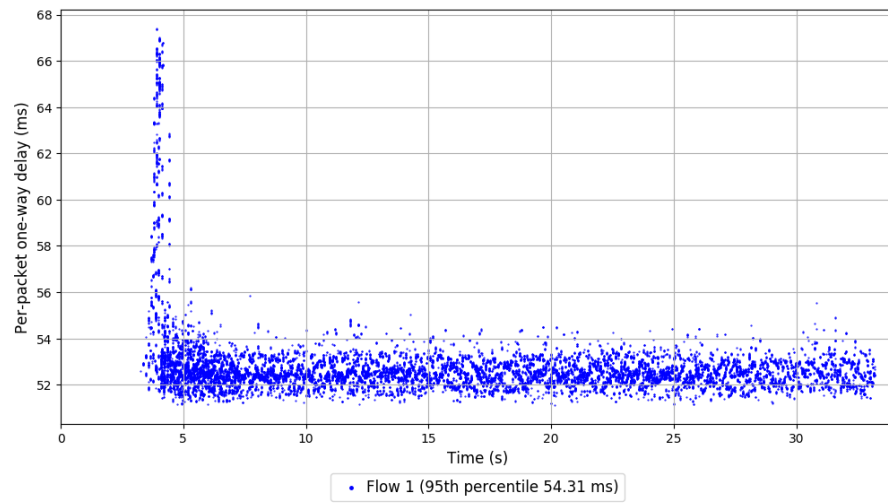
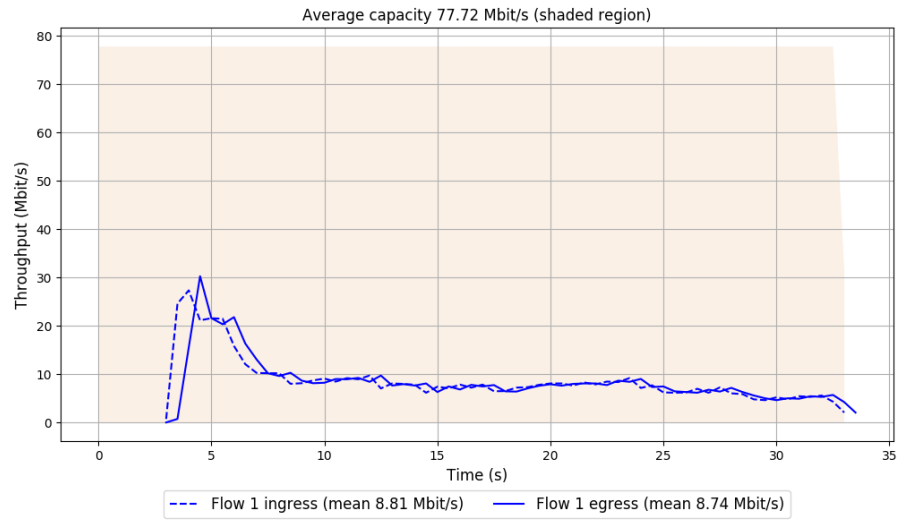
-- Flow 1:

Average throughput: 8.74 Mbit/s

95th percentile per-packet one-way delay: 54.313 ms

Loss rate: 0.96%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-05-30 08:20:59

End at: 2018-05-30 08:21:29

Below is generated by plot.py at 2018-05-30 09:07:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 12.66 Mbit/s (16.3% utilization)

95th percentile per-packet one-way delay: 54.453 ms

Loss rate: 1.08%

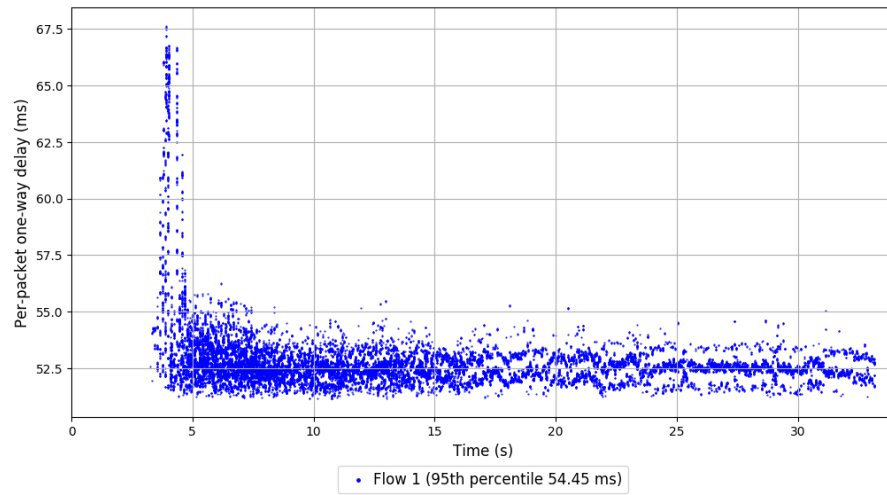
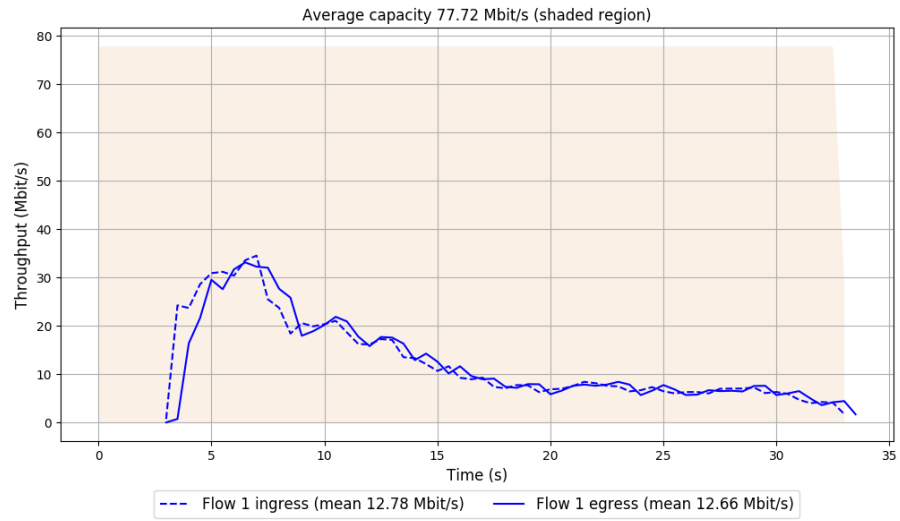
-- Flow 1:

Average throughput: 12.66 Mbit/s

95th percentile per-packet one-way delay: 54.453 ms

Loss rate: 1.08%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-05-30 08:31:10

End at: 2018-05-30 08:31:40

Below is generated by plot.py at 2018-05-30 09:07:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 10.67 Mbit/s (13.7% utilization)

95th percentile per-packet one-way delay: 54.070 ms

Loss rate: 1.34%

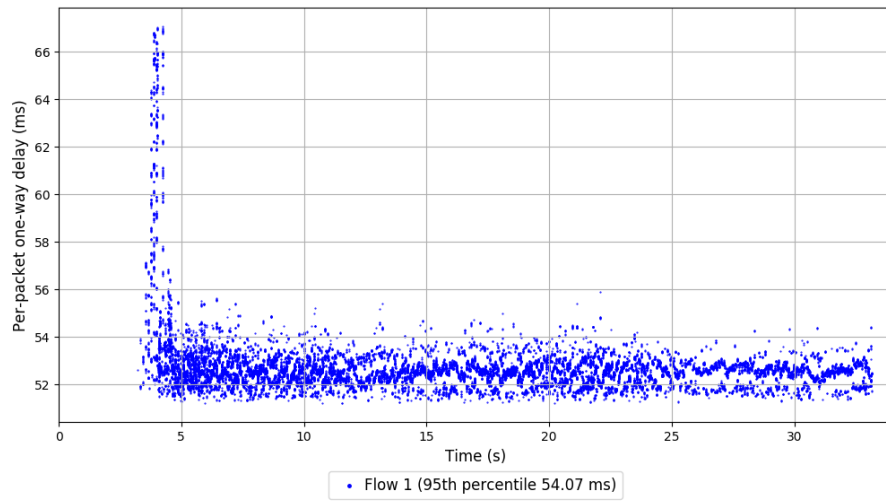
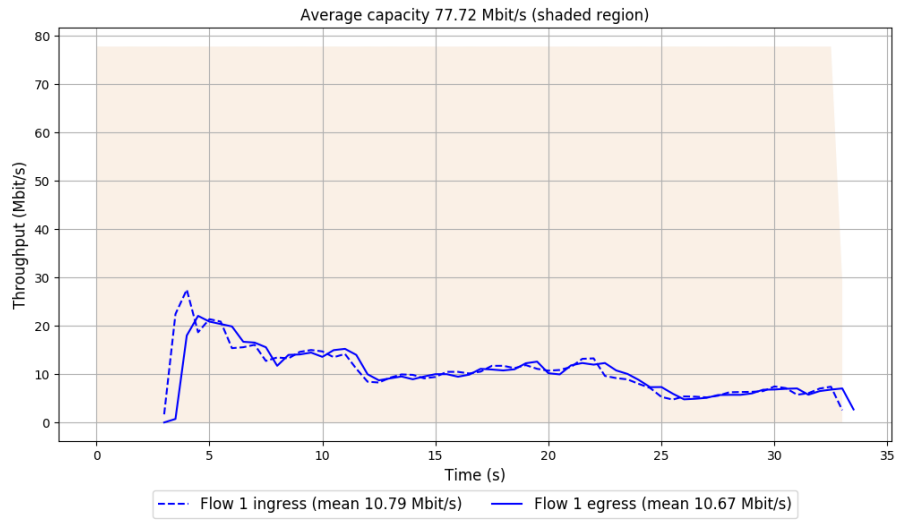
-- Flow 1:

Average throughput: 10.67 Mbit/s

95th percentile per-packet one-way delay: 54.070 ms

Loss rate: 1.34%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-05-30 08:41:21

End at: 2018-05-30 08:41:51

Below is generated by plot.py at 2018-05-30 09:07:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 7.90 Mbit/s (10.2% utilization)

95th percentile per-packet one-way delay: 54.485 ms

Loss rate: 1.80%

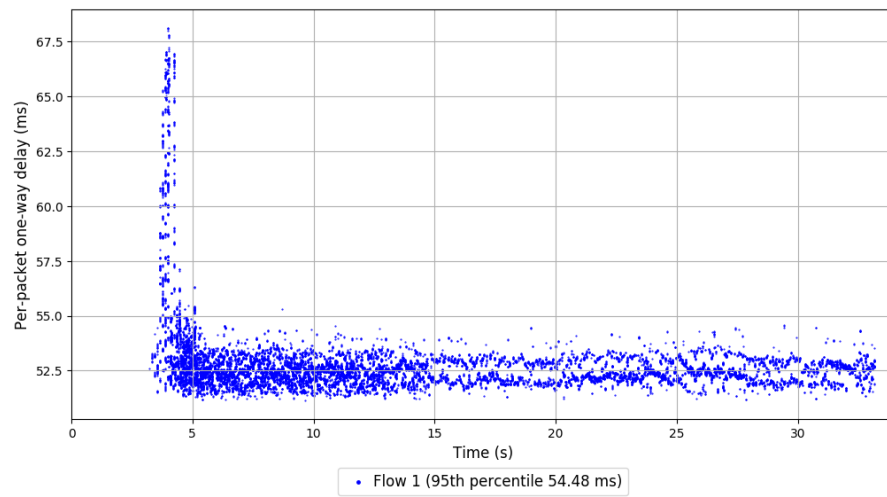
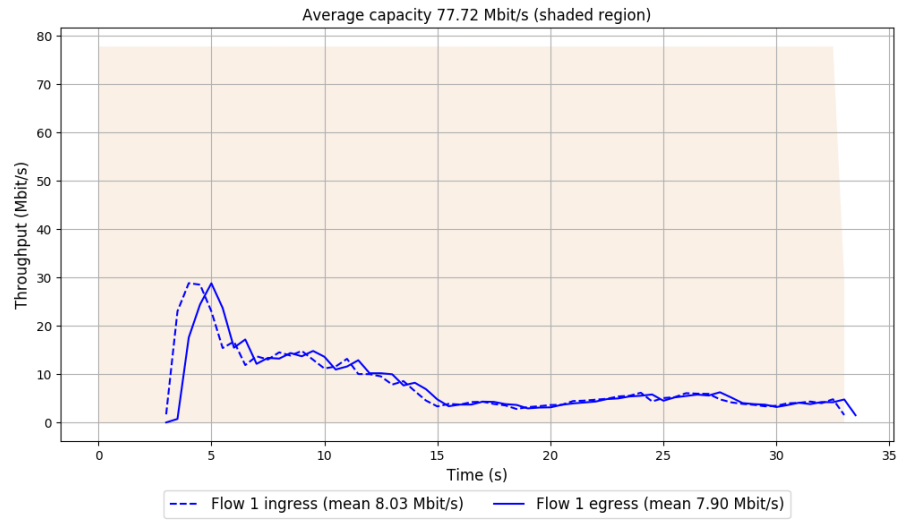
-- Flow 1:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 54.485 ms

Loss rate: 1.80%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-05-30 08:51:28

End at: 2018-05-30 08:51:58

Below is generated by plot.py at 2018-05-30 09:07:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 13.67 Mbit/s (17.6% utilization)

95th percentile per-packet one-way delay: 53.971 ms

Loss rate: 0.47%

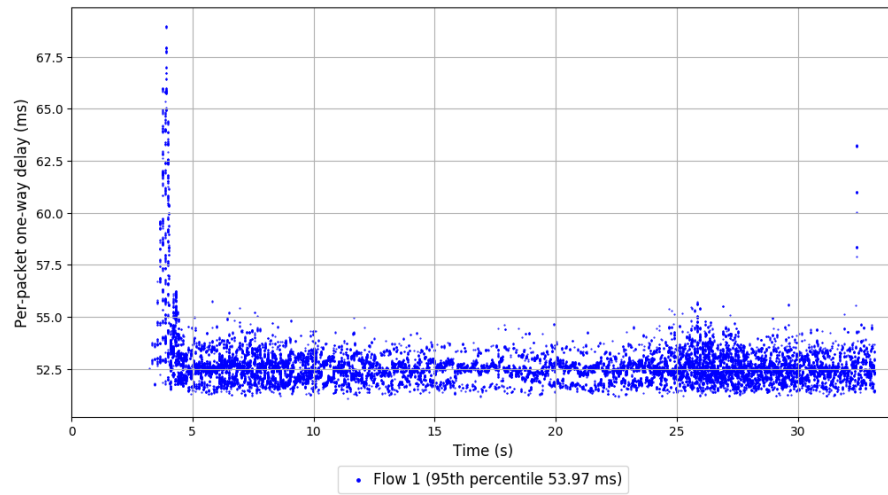
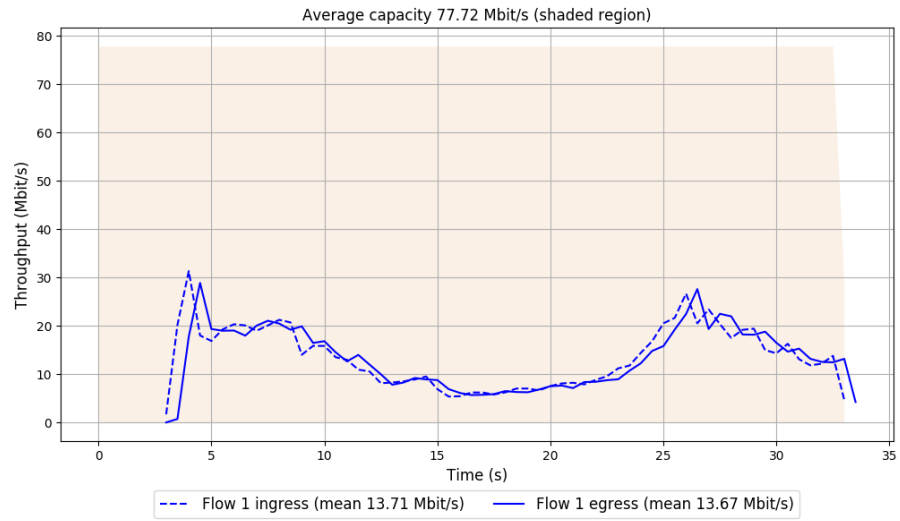
-- Flow 1:

Average throughput: 13.67 Mbit/s

95th percentile per-packet one-way delay: 53.971 ms

Loss rate: 0.47%

Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2018-05-30 07:21:24

End at: 2018-05-30 07:21:54

Below is generated by plot.py at 2018-05-30 09:08:43

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 73.75 Mbit/s (94.9% utilization)

95th percentile per-packet one-way delay: 63.841 ms

Loss rate: 9.69%

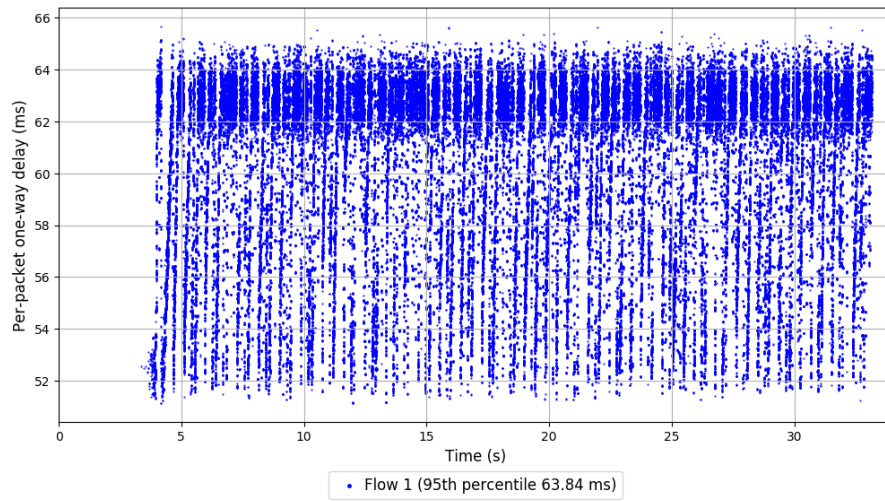
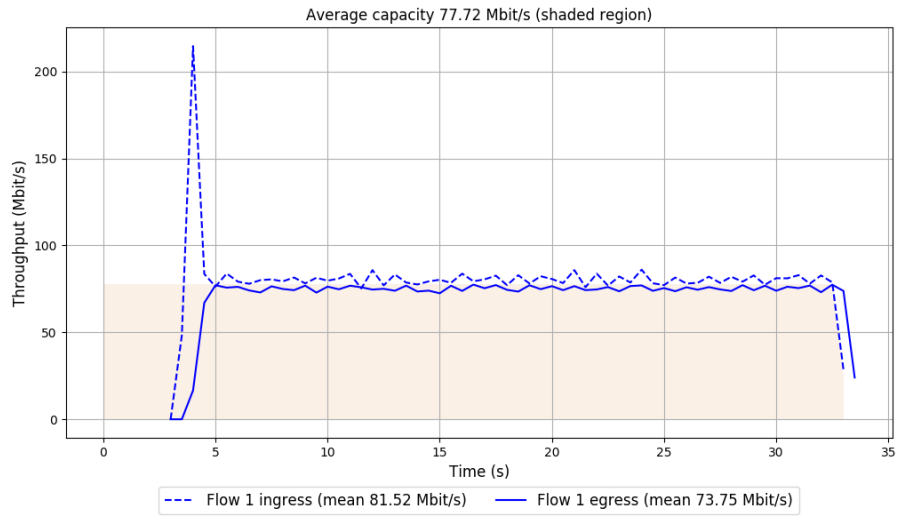
-- Flow 1:

Average throughput: 73.75 Mbit/s

95th percentile per-packet one-way delay: 63.841 ms

Loss rate: 9.69%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-05-30 07:31:32

End at: 2018-05-30 07:32:02

Below is generated by plot.py at 2018-05-30 09:08:52

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 73.84 Mbit/s (95.0% utilization)

95th percentile per-packet one-way delay: 63.849 ms

Loss rate: 8.87%

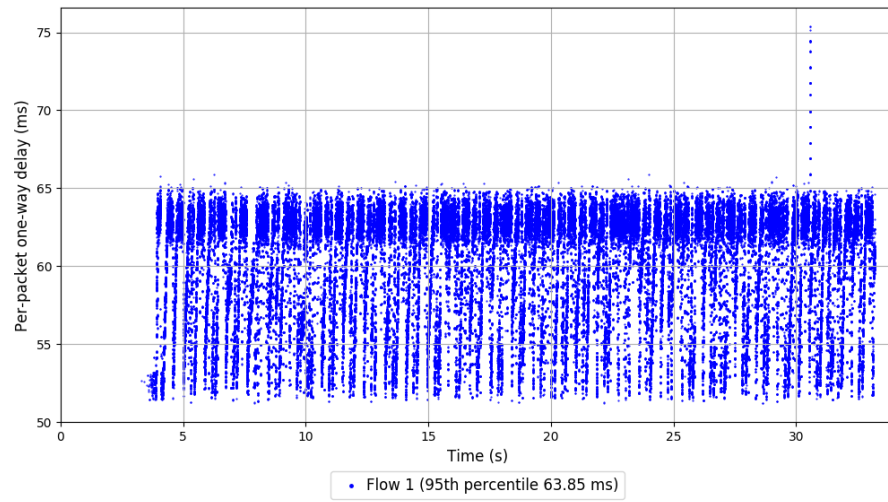
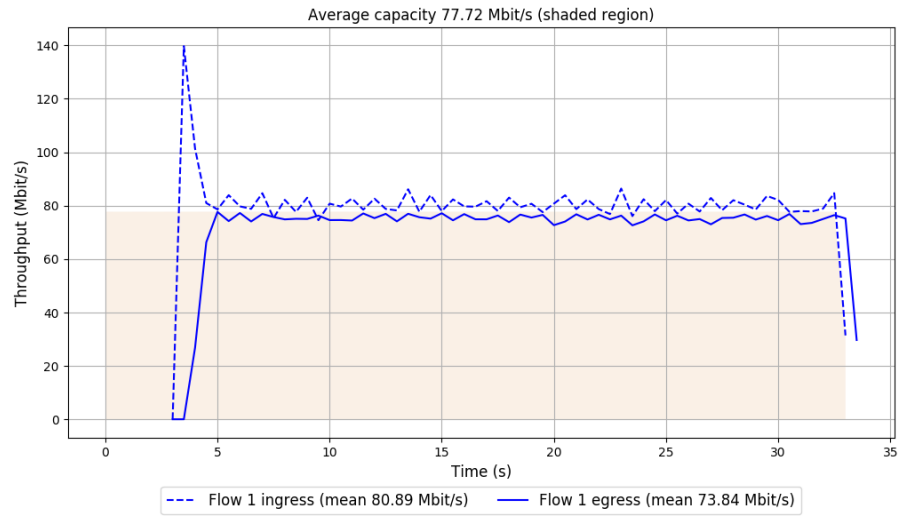
-- Flow 1:

Average throughput: 73.84 Mbit/s

95th percentile per-packet one-way delay: 63.849 ms

Loss rate: 8.87%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-05-30 07:41:39

End at: 2018-05-30 07:42:09

Below is generated by plot.py at 2018-05-30 09:09:06

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 73.72 Mbit/s (94.9% utilization)

95th percentile per-packet one-way delay: 63.866 ms

Loss rate: 9.27%

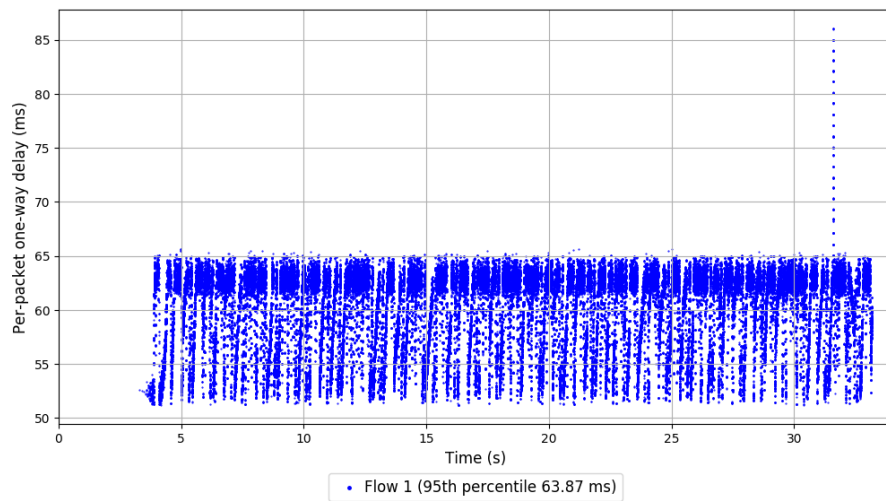
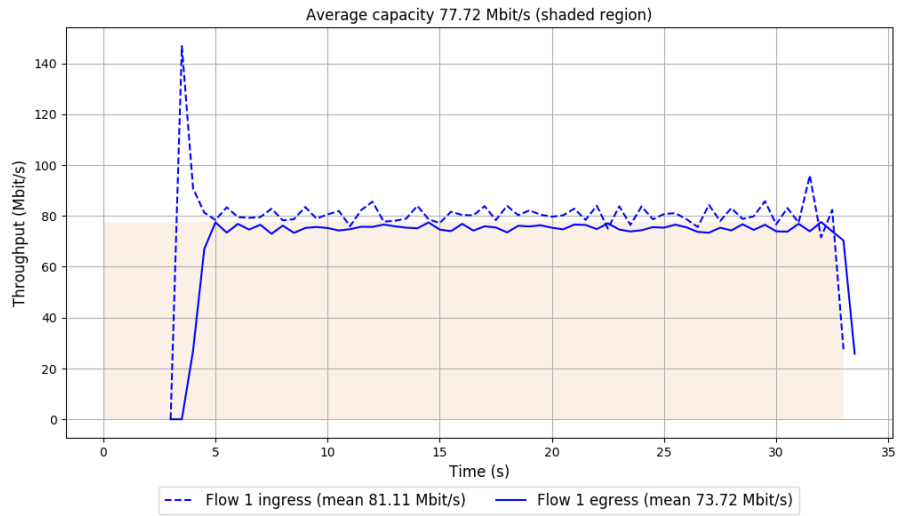
-- Flow 1:

Average throughput: 73.72 Mbit/s

95th percentile per-packet one-way delay: 63.866 ms

Loss rate: 9.27%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-05-30 07:51:47

End at: 2018-05-30 07:52:17

Below is generated by plot.py at 2018-05-30 09:09:10

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 73.50 Mbit/s (94.6% utilization)

95th percentile per-packet one-way delay: 63.874 ms

Loss rate: 9.26%

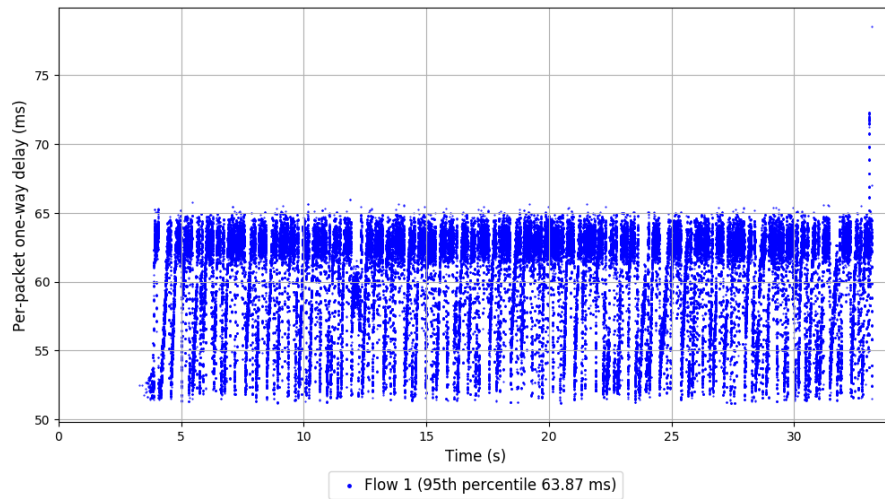
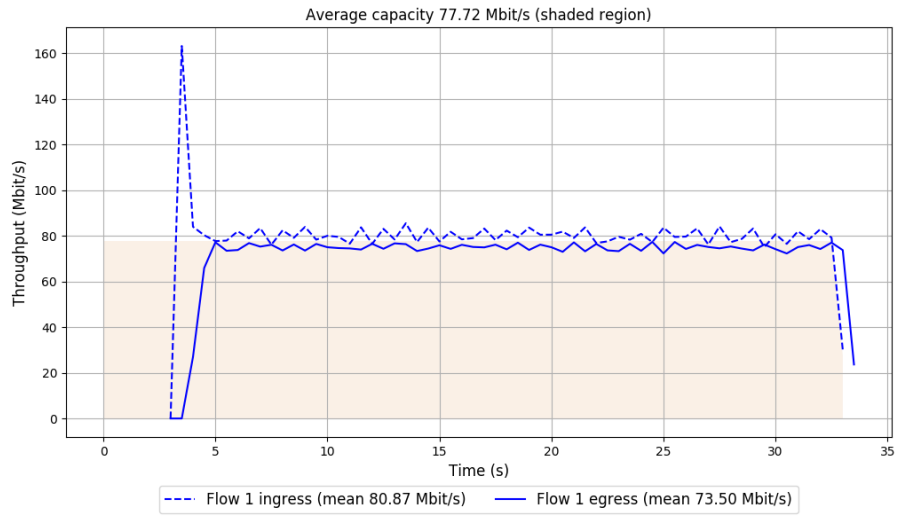
-- Flow 1:

Average throughput: 73.50 Mbit/s

95th percentile per-packet one-way delay: 63.874 ms

Loss rate: 9.26%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-05-30 08:01:55

End at: 2018-05-30 08:02:25

Below is generated by plot.py at 2018-05-30 09:09:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 73.94 Mbit/s (95.1% utilization)

95th percentile per-packet one-way delay: 63.880 ms

Loss rate: 9.20%

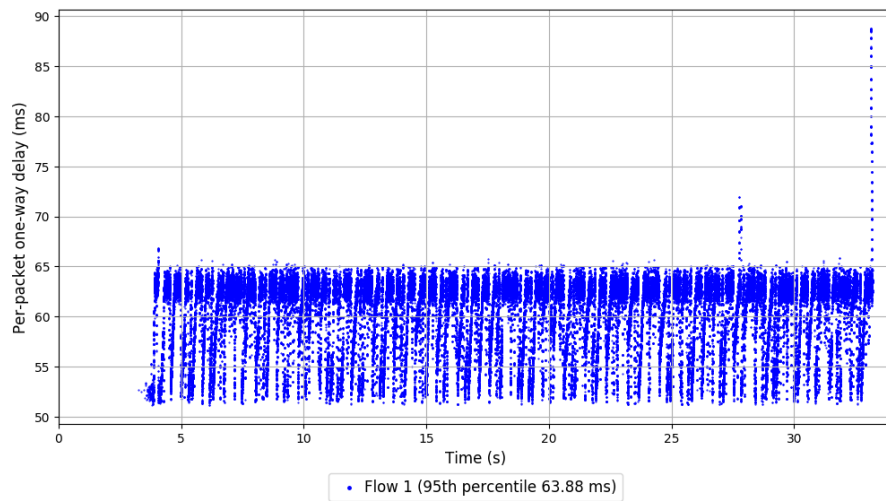
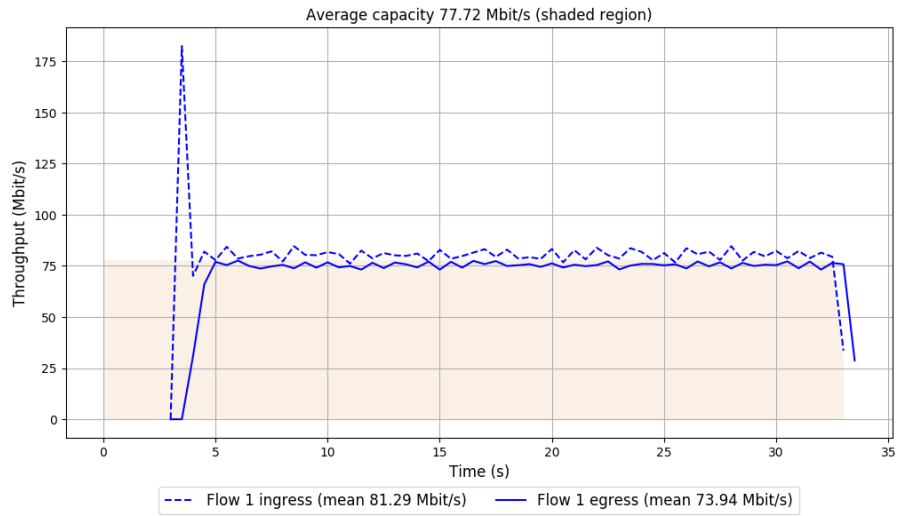
-- Flow 1:

Average throughput: 73.94 Mbit/s

95th percentile per-packet one-way delay: 63.880 ms

Loss rate: 9.20%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-05-30 08:12:07

End at: 2018-05-30 08:12:37

Below is generated by plot.py at 2018-05-30 09:09:23

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 73.78 Mbit/s (94.9% utilization)

95th percentile per-packet one-way delay: 63.847 ms

Loss rate: 8.74%

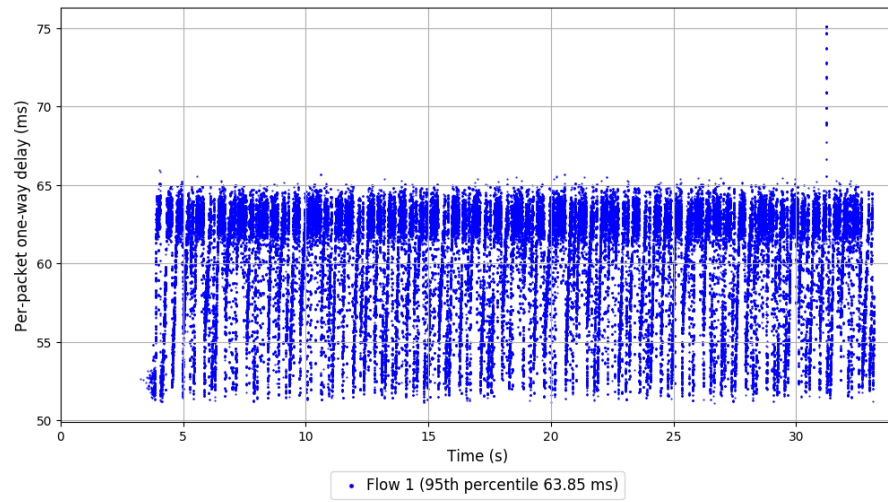
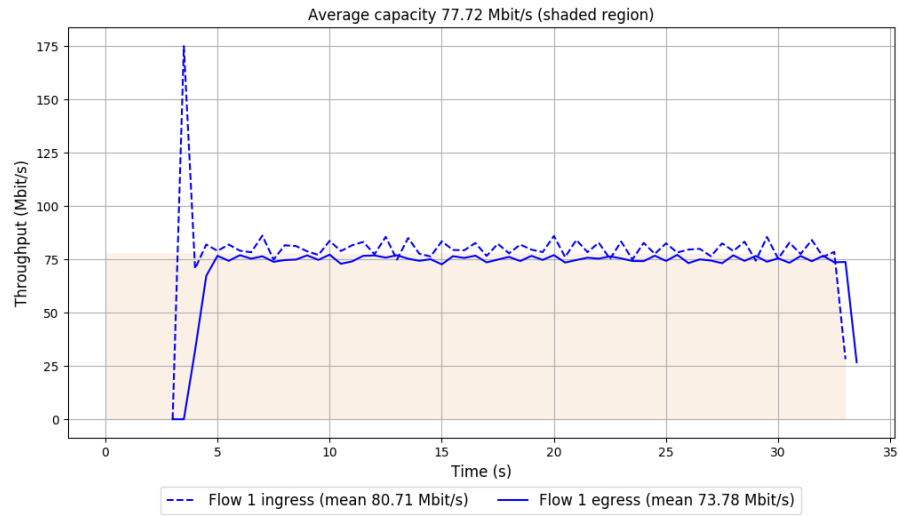
-- Flow 1:

Average throughput: 73.78 Mbit/s

95th percentile per-packet one-way delay: 63.847 ms

Loss rate: 8.74%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-05-30 08:22:16

End at: 2018-05-30 08:22:46

Below is generated by plot.py at 2018-05-30 09:09:58

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 73.72 Mbit/s (94.8% utilization)

95th percentile per-packet one-way delay: 63.867 ms

Loss rate: 9.55%

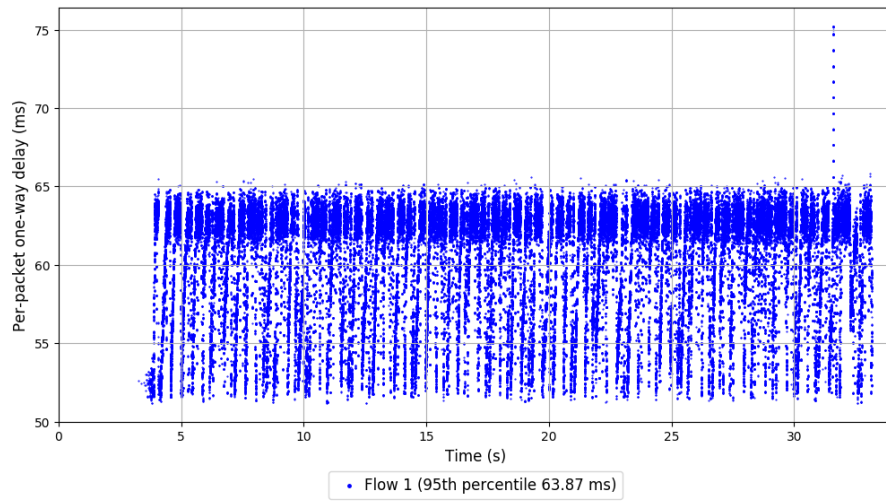
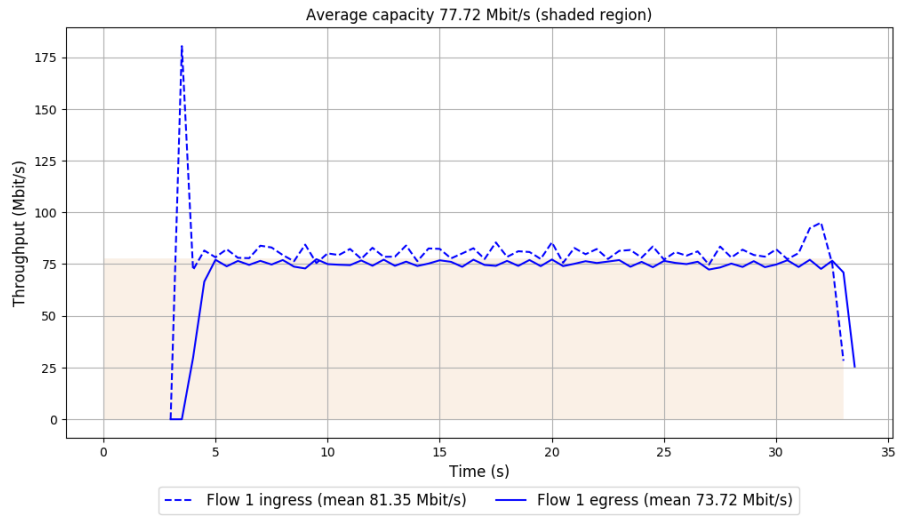
-- Flow 1:

Average throughput: 73.72 Mbit/s

95th percentile per-packet one-way delay: 63.867 ms

Loss rate: 9.55%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-05-30 08:32:29

End at: 2018-05-30 08:32:59

Below is generated by plot.py at 2018-05-30 09:10:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 73.99 Mbit/s (95.2% utilization)

95th percentile per-packet one-way delay: 63.849 ms

Loss rate: 9.40%

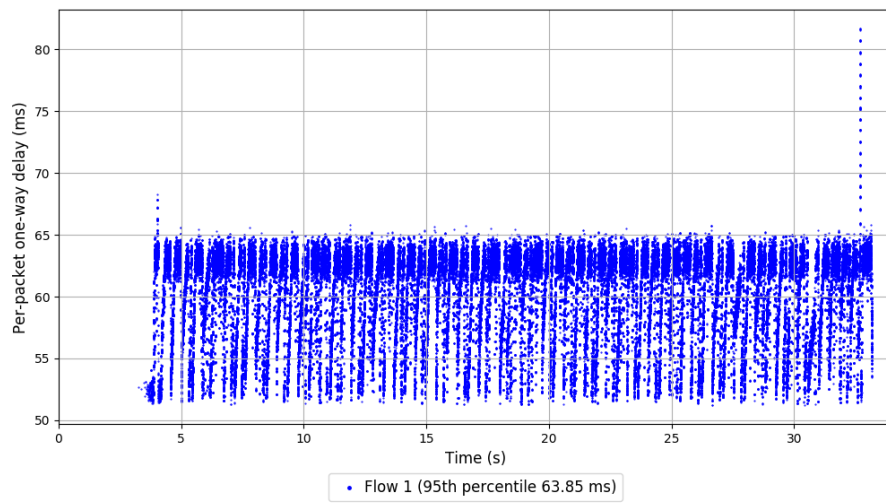
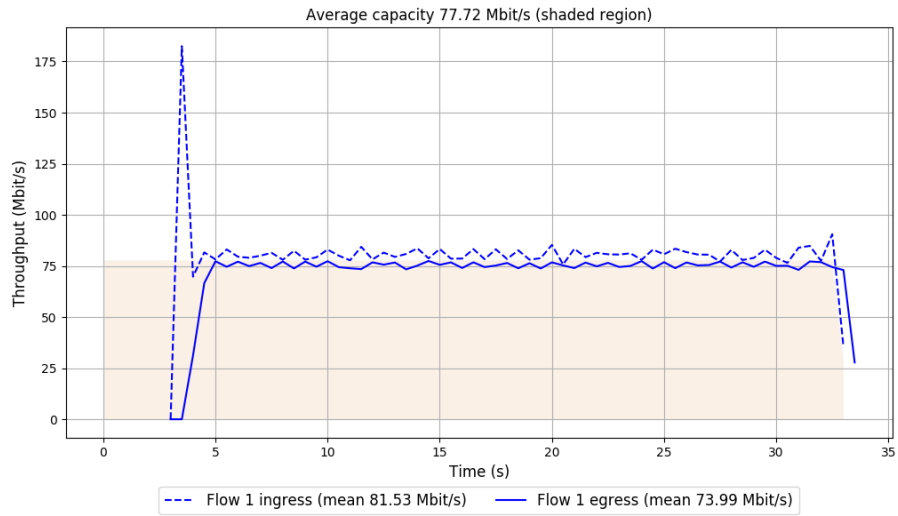
-- Flow 1:

Average throughput: 73.99 Mbit/s

95th percentile per-packet one-way delay: 63.849 ms

Loss rate: 9.40%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-05-30 08:42:36

End at: 2018-05-30 08:43:06

Below is generated by plot.py at 2018-05-30 09:10:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 73.92 Mbit/s (95.1% utilization)

95th percentile per-packet one-way delay: 63.837 ms

Loss rate: 9.78%

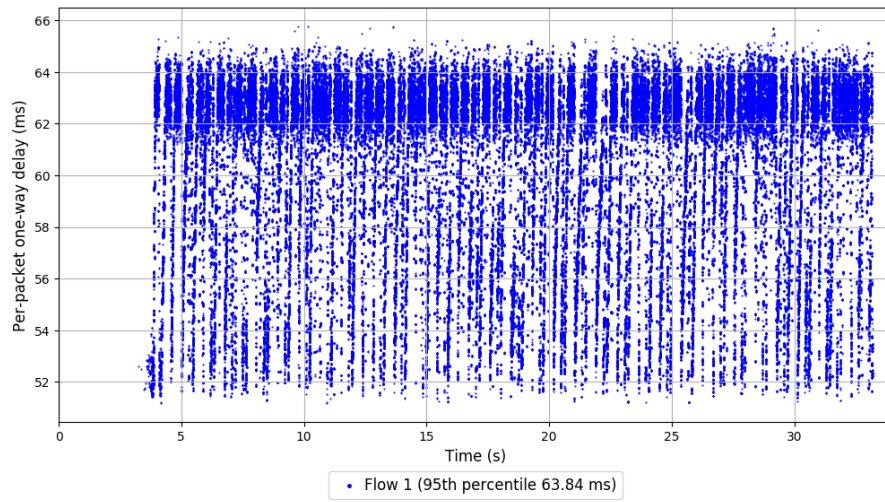
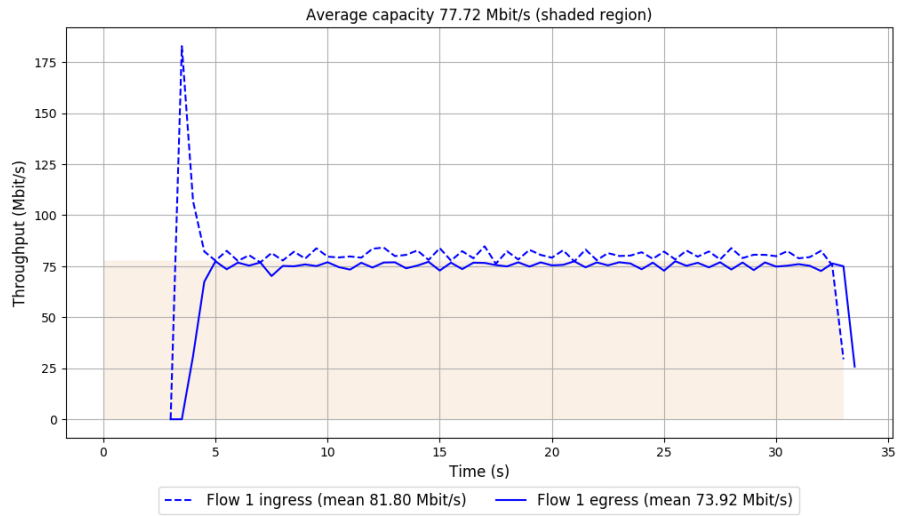
-- Flow 1:

Average throughput: 73.92 Mbit/s

95th percentile per-packet one-way delay: 63.837 ms

Loss rate: 9.78%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-05-30 08:52:44

End at: 2018-05-30 08:53:14

Below is generated by plot.py at 2018-05-30 09:10:57

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 73.82 Mbit/s (95.0% utilization)

95th percentile per-packet one-way delay: 63.815 ms

Loss rate: 8.50%

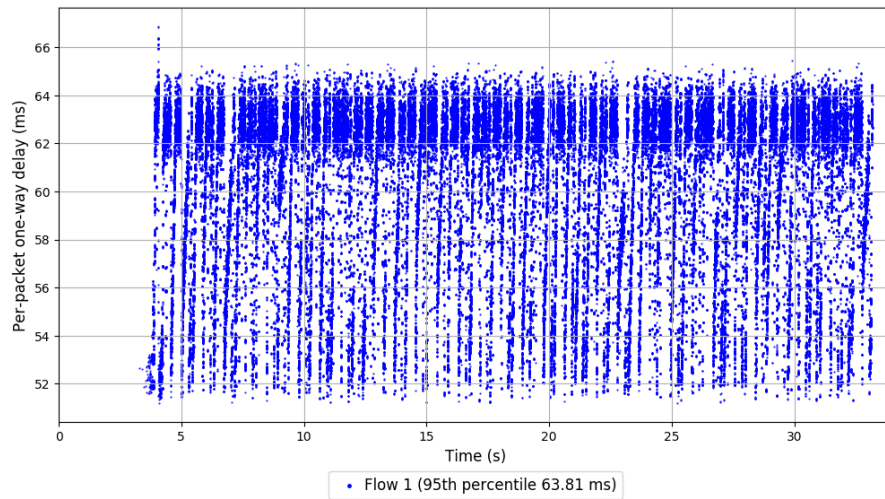
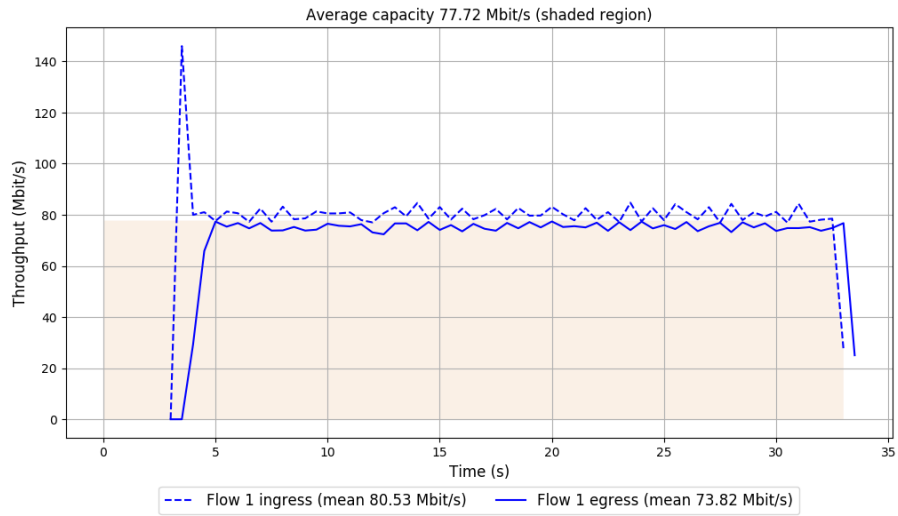
-- Flow 1:

Average throughput: 73.82 Mbit/s

95th percentile per-packet one-way delay: 63.815 ms

Loss rate: 8.50%

Run 10: Report of FillP — Data Link



Run 1: Statistics of Indigo

Start at: 2018-05-30 07:18:52

End at: 2018-05-30 07:19:22

Below is generated by plot.py at 2018-05-30 09:10:57

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 5.65 Mbit/s (7.3% utilization)

95th percentile per-packet one-way delay: 55.396 ms

Loss rate: 0.04%

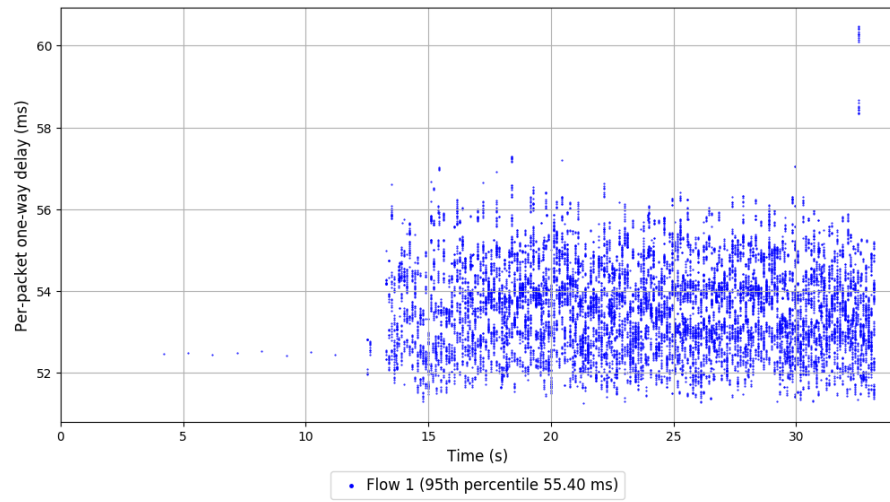
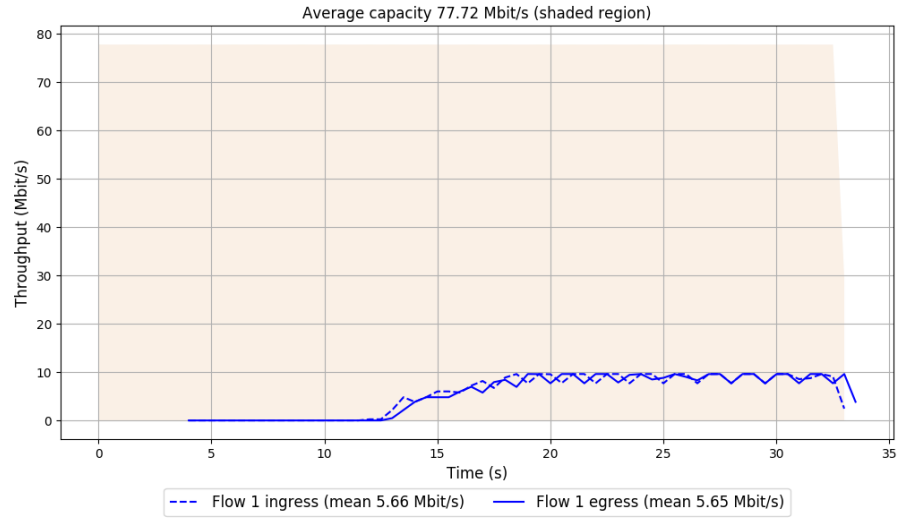
-- Flow 1:

Average throughput: 5.65 Mbit/s

95th percentile per-packet one-way delay: 55.396 ms

Loss rate: 0.04%

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-05-30 07:28:54

End at: 2018-05-30 07:29:24

Below is generated by plot.py at 2018-05-30 09:10:57

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 74.46 Mbit/s (95.8% utilization)

95th percentile per-packet one-way delay: 58.031 ms

Loss rate: 1.52%

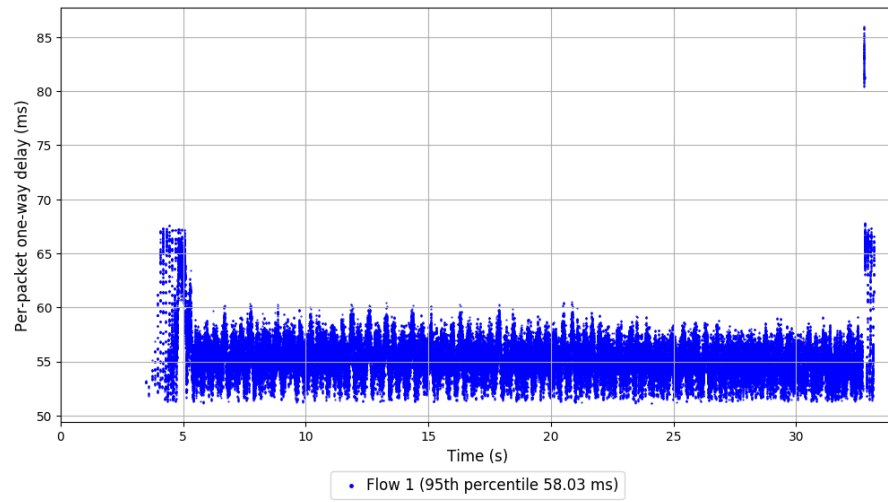
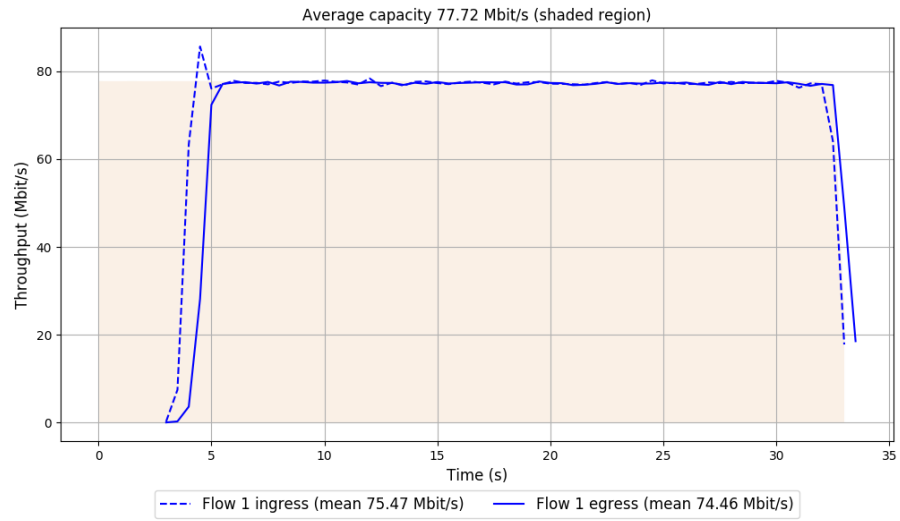
-- Flow 1:

Average throughput: 74.46 Mbit/s

95th percentile per-packet one-way delay: 58.031 ms

Loss rate: 1.52%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-05-30 07:39:04

End at: 2018-05-30 07:39:34

Below is generated by plot.py at 2018-05-30 09:11:04

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 74.00 Mbit/s (95.2% utilization)

95th percentile per-packet one-way delay: 59.629 ms

Loss rate: 2.45%

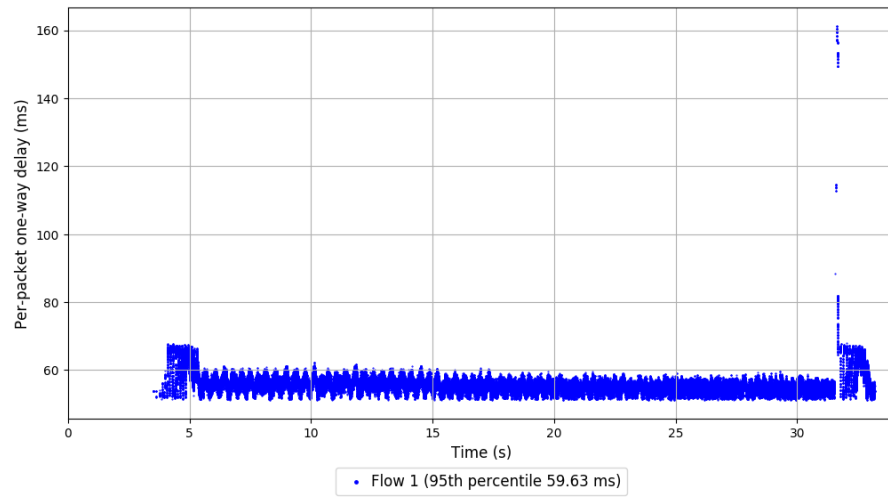
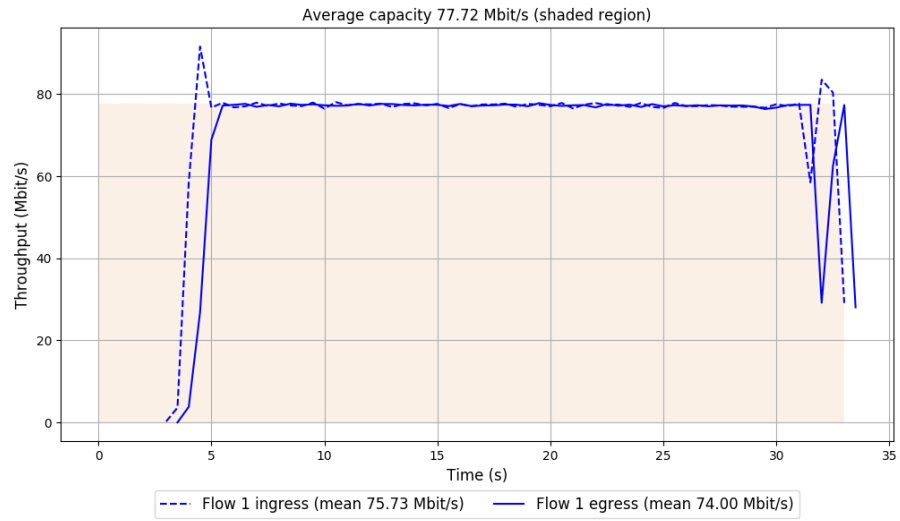
-- Flow 1:

Average throughput: 74.00 Mbit/s

95th percentile per-packet one-way delay: 59.629 ms

Loss rate: 2.45%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-05-30 07:49:12

End at: 2018-05-30 07:49:42

Below is generated by plot.py at 2018-05-30 09:11:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 75.13 Mbit/s (96.7% utilization)

95th percentile per-packet one-way delay: 59.432 ms

Loss rate: 1.15%

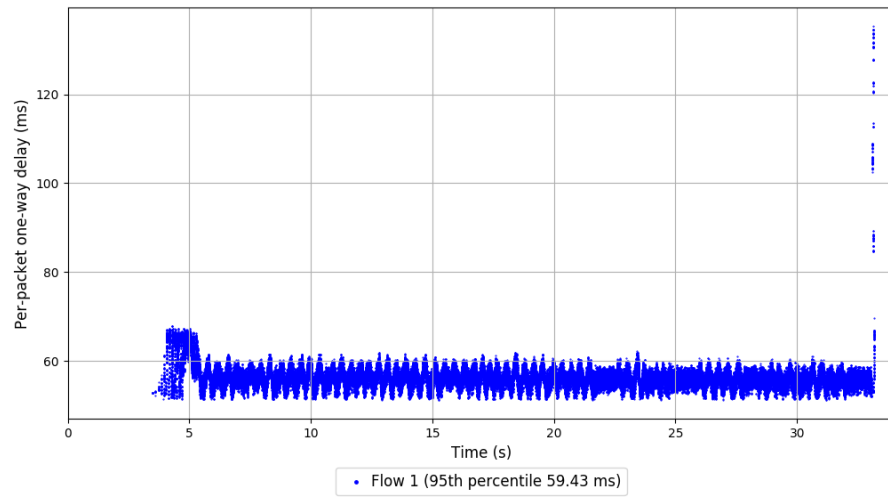
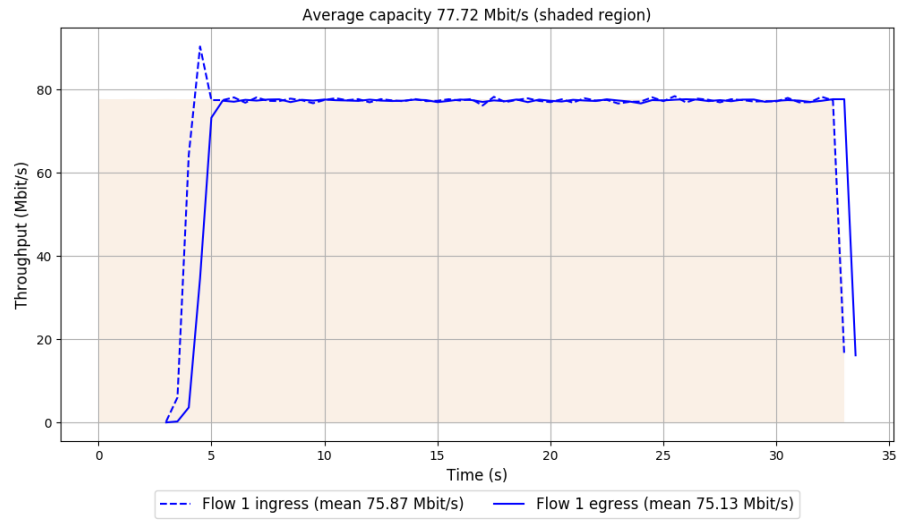
-- Flow 1:

Average throughput: 75.13 Mbit/s

95th percentile per-packet one-way delay: 59.432 ms

Loss rate: 1.15%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-05-30 07:59:20

End at: 2018-05-30 07:59:50

Below is generated by plot.py at 2018-05-30 09:11:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 75.09 Mbit/s (96.6% utilization)

95th percentile per-packet one-way delay: 58.004 ms

Loss rate: 1.24%

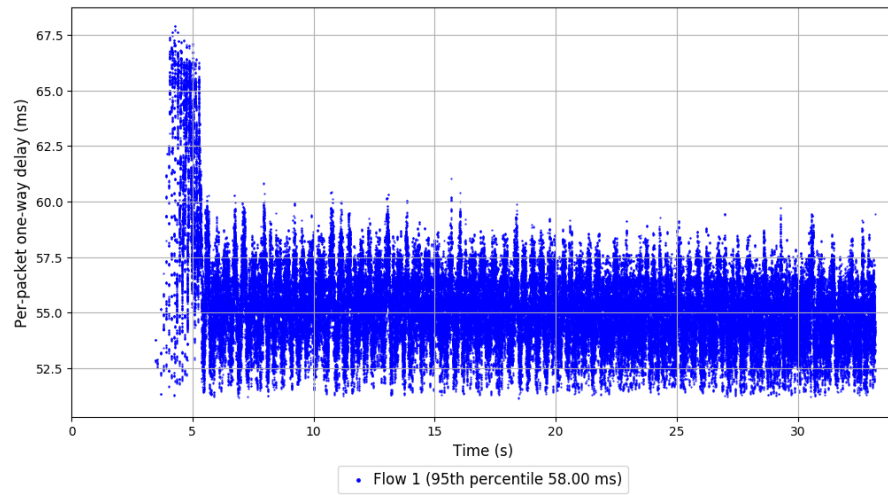
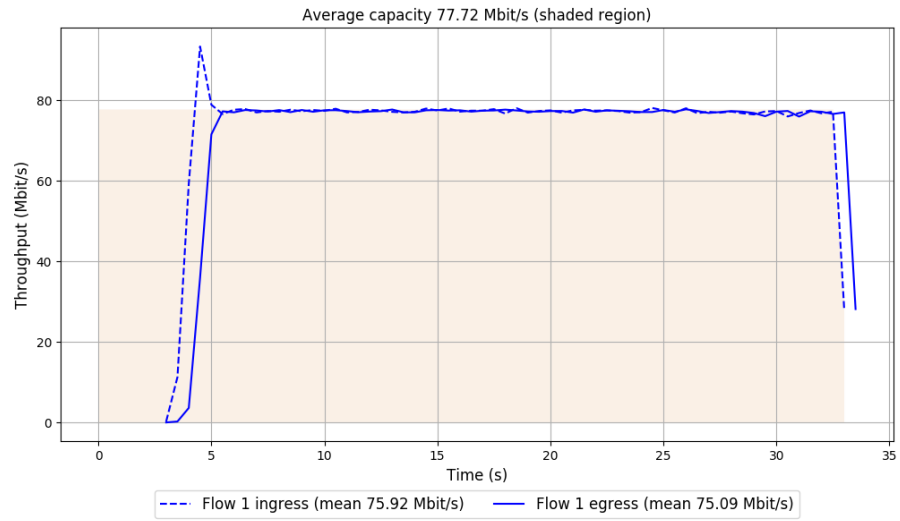
-- Flow 1:

Average throughput: 75.09 Mbit/s

95th percentile per-packet one-way delay: 58.004 ms

Loss rate: 1.24%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-05-30 08:09:29

End at: 2018-05-30 08:09:59

Below is generated by plot.py at 2018-05-30 09:11:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 74.36 Mbit/s (95.7% utilization)

95th percentile per-packet one-way delay: 57.436 ms

Loss rate: 0.93%

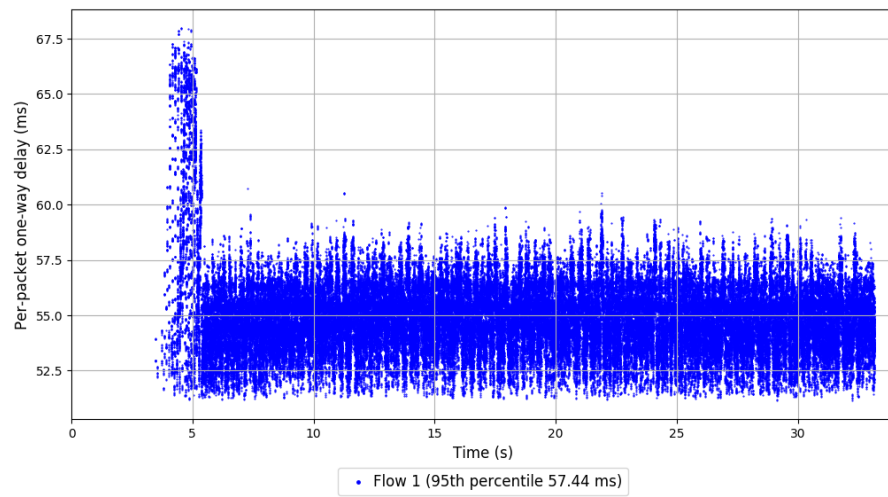
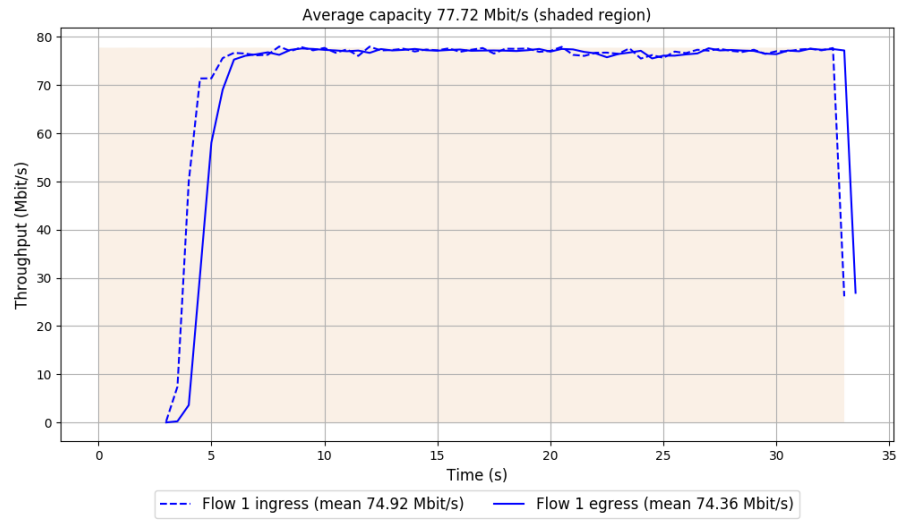
-- Flow 1:

Average throughput: 74.36 Mbit/s

95th percentile per-packet one-way delay: 57.436 ms

Loss rate: 0.93%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-05-30 08:19:40

End at: 2018-05-30 08:20:10

Below is generated by plot.py at 2018-05-30 09:11:52

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 74.64 Mbit/s (96.0% utilization)

95th percentile per-packet one-way delay: 59.026 ms

Loss rate: 1.54%

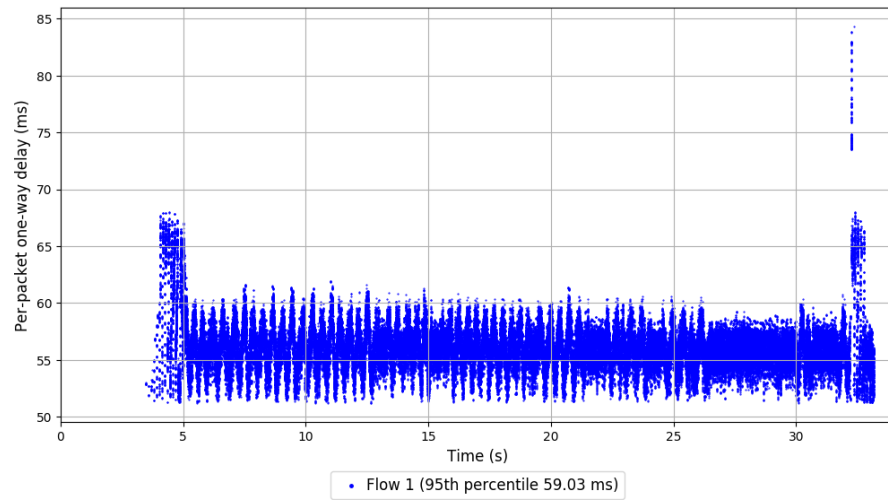
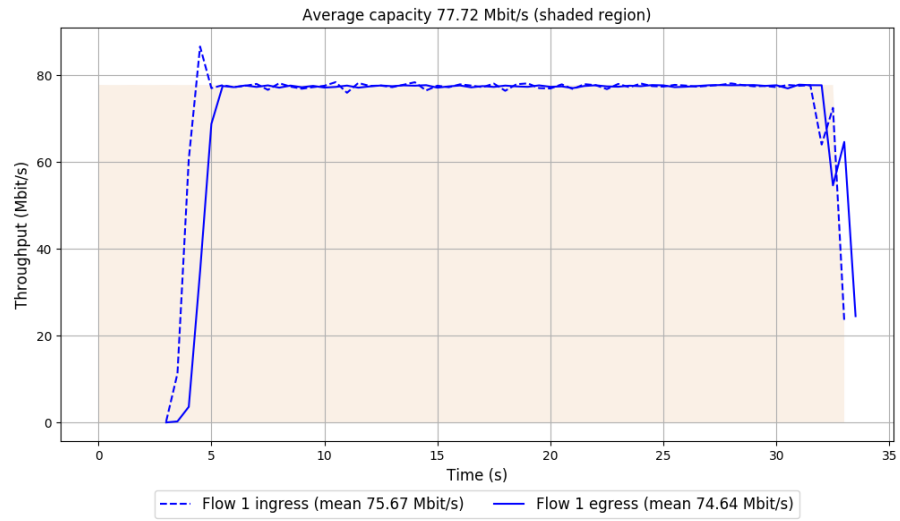
-- Flow 1:

Average throughput: 74.64 Mbit/s

95th percentile per-packet one-way delay: 59.026 ms

Loss rate: 1.54%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-05-30 08:29:50

End at: 2018-05-30 08:30:20

Below is generated by plot.py at 2018-05-30 09:12:37

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 74.21 Mbit/s (95.5% utilization)

95th percentile per-packet one-way delay: 58.515 ms

Loss rate: 1.53%

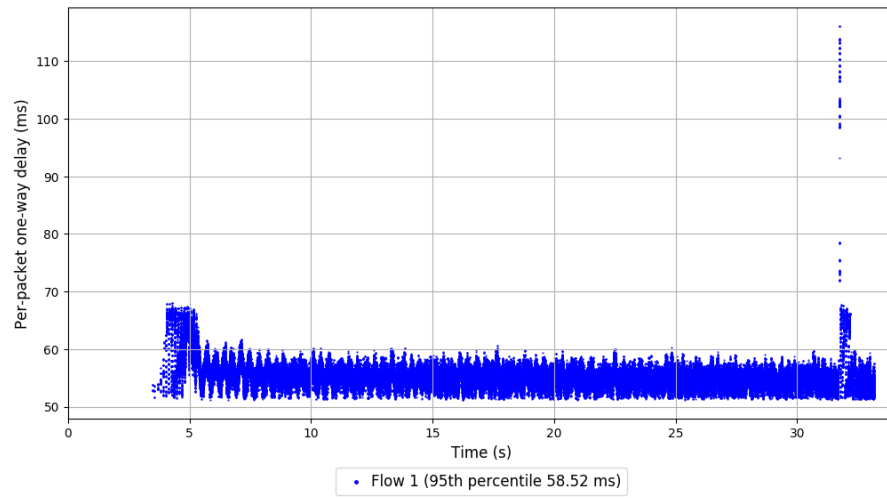
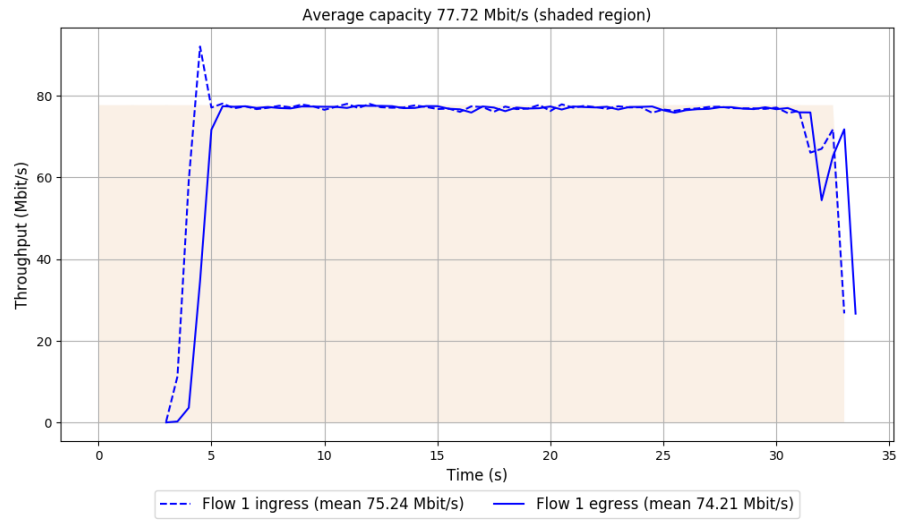
-- Flow 1:

Average throughput: 74.21 Mbit/s

95th percentile per-packet one-way delay: 58.515 ms

Loss rate: 1.53%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-05-30 08:40:02

End at: 2018-05-30 08:40:32

Below is generated by plot.py at 2018-05-30 09:12:41

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 75.25 Mbit/s (96.8% utilization)

95th percentile per-packet one-way delay: 59.225 ms

Loss rate: 1.13%

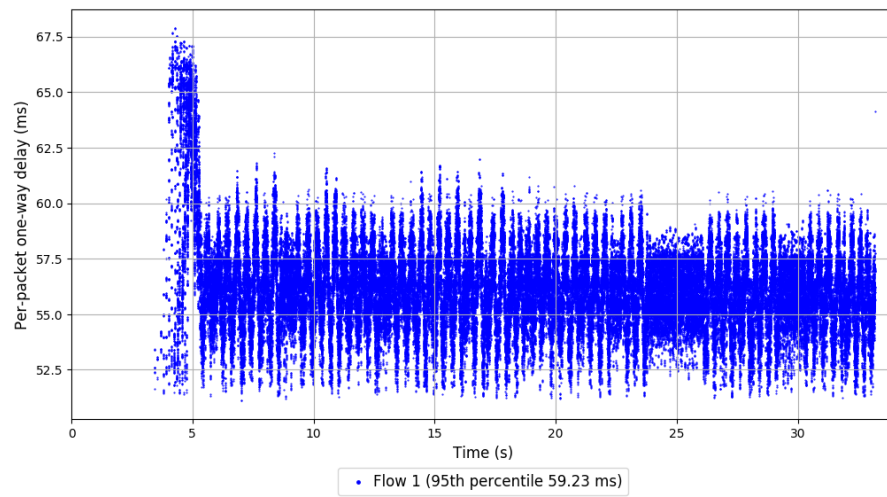
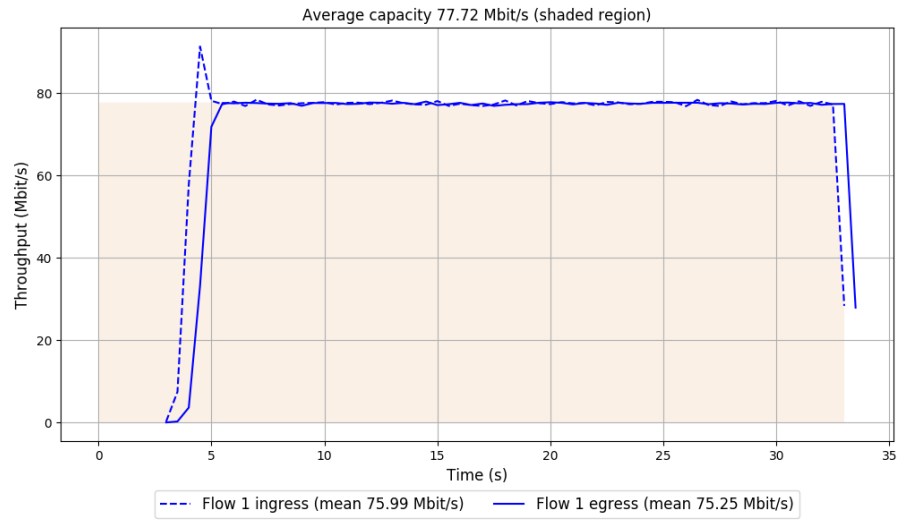
-- Flow 1:

Average throughput: 75.25 Mbit/s

95th percentile per-packet one-way delay: 59.225 ms

Loss rate: 1.13%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-05-30 08:50:09

End at: 2018-05-30 08:50:39

Below is generated by plot.py at 2018-05-30 09:12:41

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 74.87 Mbit/s (96.3% utilization)

95th percentile per-packet one-way delay: 59.687 ms

Loss rate: 1.30%

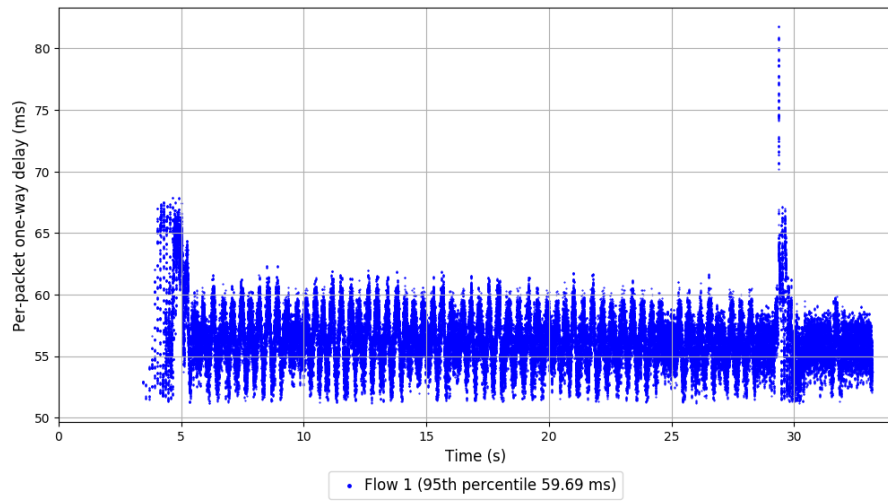
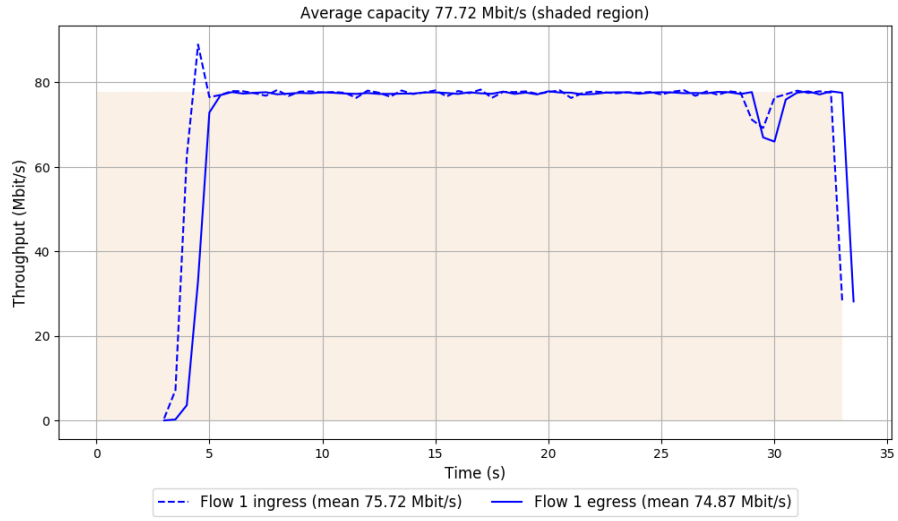
-- Flow 1:

Average throughput: 74.87 Mbit/s

95th percentile per-packet one-way delay: 59.687 ms

Loss rate: 1.30%

Run 10: Report of Indigo — Data Link



Run 1: Statistics of LEDBAT

Start at: 2018-05-30 07:25:12

End at: 2018-05-30 07:25:42

Below is generated by plot.py at 2018-05-30 09:12:41

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 8.10 Mbit/s (10.4% utilization)

95th percentile per-packet one-way delay: 54.614 ms

Loss rate: 0.05%

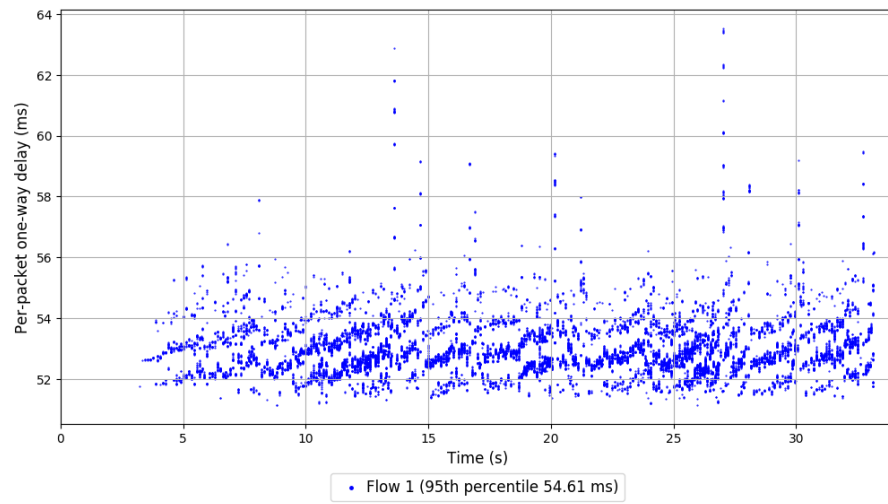
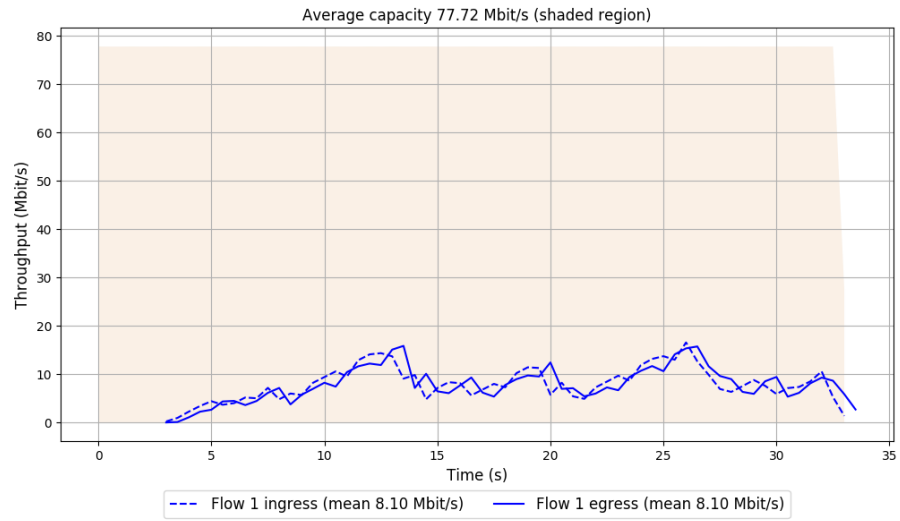
-- Flow 1:

Average throughput: 8.10 Mbit/s

95th percentile per-packet one-way delay: 54.614 ms

Loss rate: 0.05%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-05-30 07:35:21

End at: 2018-05-30 07:35:51

Below is generated by plot.py at 2018-05-30 09:12:41

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 7.37 Mbit/s (9.5% utilization)

95th percentile per-packet one-way delay: 54.648 ms

Loss rate: 0.06%

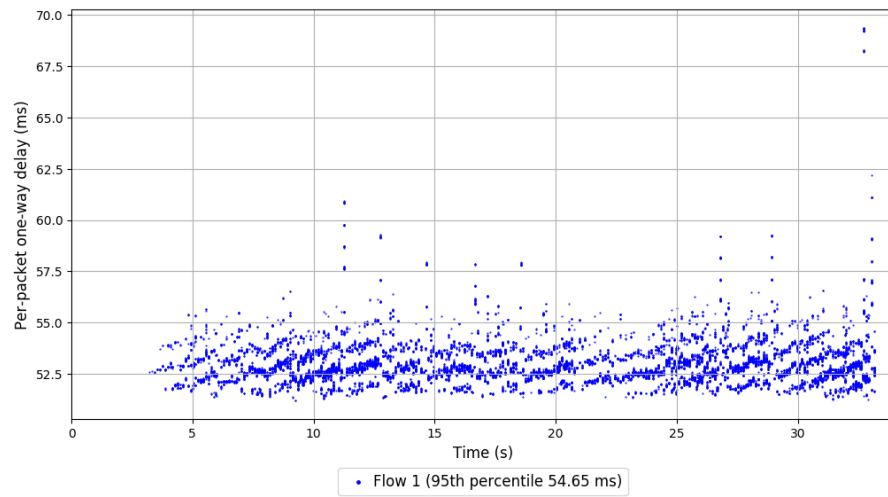
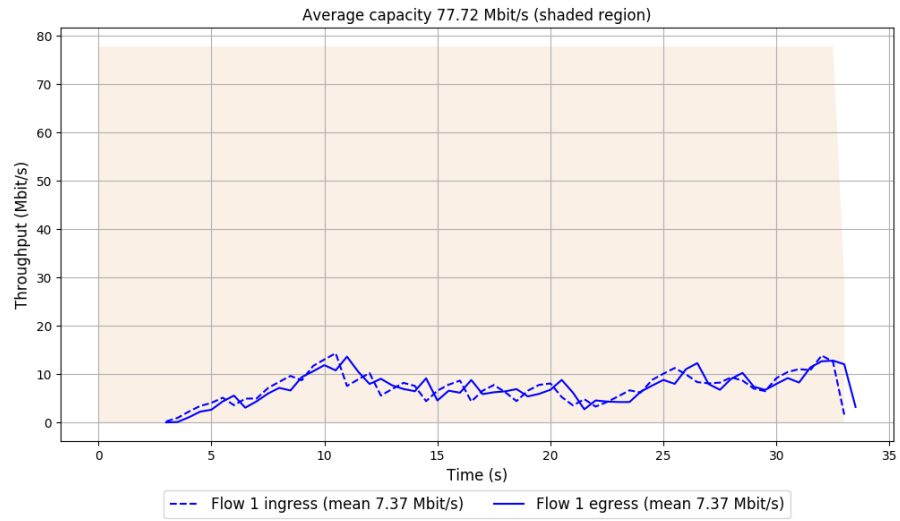
-- Flow 1:

Average throughput: 7.37 Mbit/s

95th percentile per-packet one-way delay: 54.648 ms

Loss rate: 0.06%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-05-30 07:45:29

End at: 2018-05-30 07:45:59

Below is generated by plot.py at 2018-05-30 09:12:41

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 7.67 Mbit/s (9.9% utilization)

95th percentile per-packet one-way delay: 54.584 ms

Loss rate: 0.18%

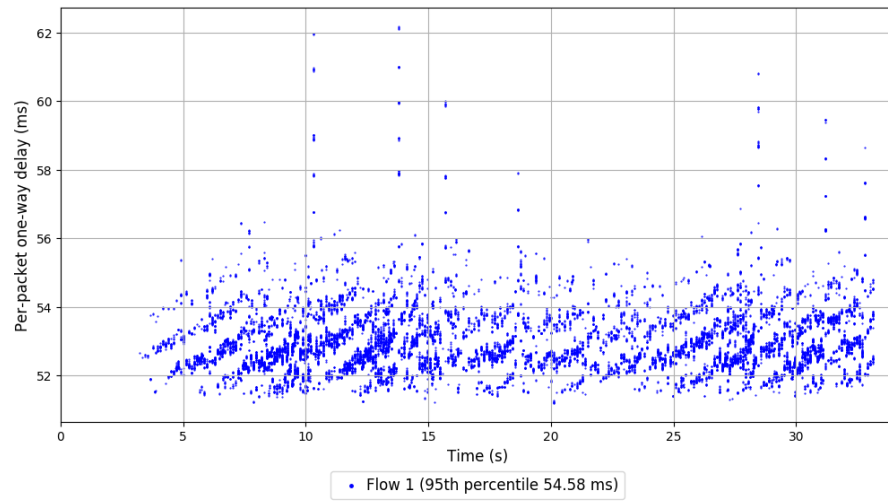
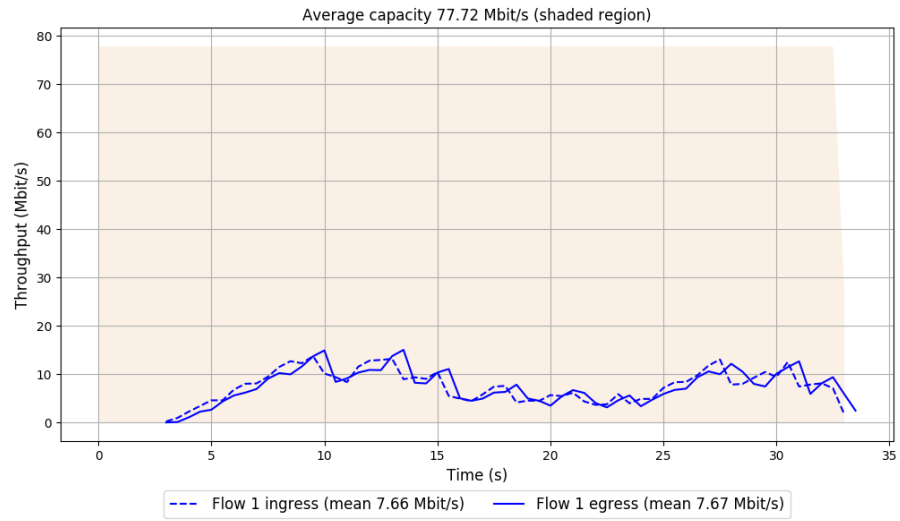
-- Flow 1:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 54.584 ms

Loss rate: 0.18%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-05-30 07:55:37

End at: 2018-05-30 07:56:07

Below is generated by plot.py at 2018-05-30 09:12:41

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 5.87 Mbit/s (7.6% utilization)

95th percentile per-packet one-way delay: 54.389 ms

Loss rate: 0.68%

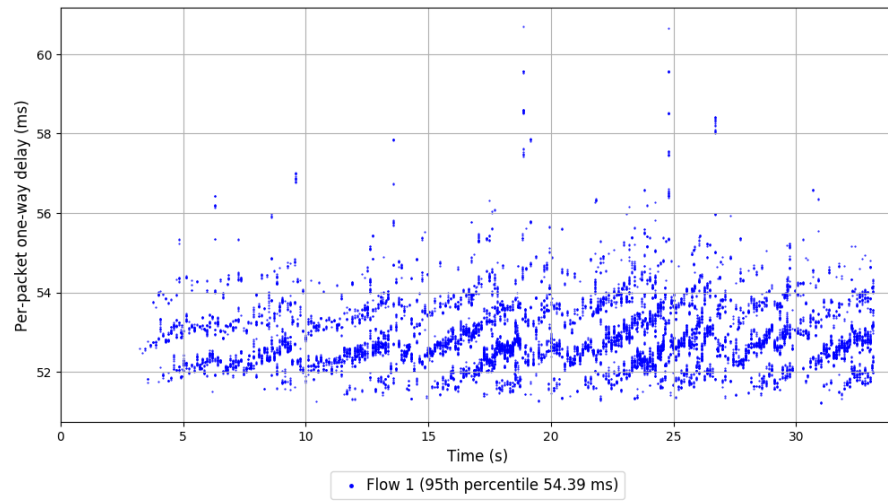
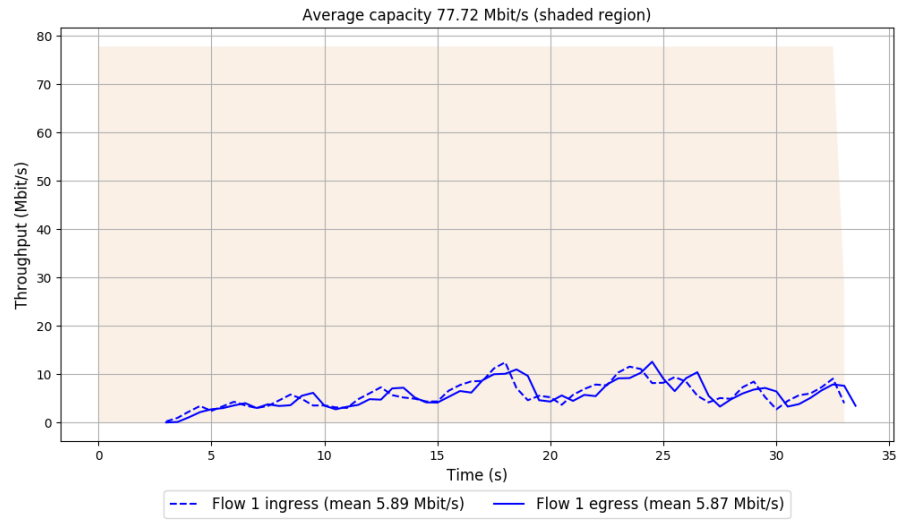
-- Flow 1:

Average throughput: 5.87 Mbit/s

95th percentile per-packet one-way delay: 54.389 ms

Loss rate: 0.68%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-05-30 08:05:46

End at: 2018-05-30 08:06:16

Below is generated by plot.py at 2018-05-30 09:12:41

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 10.32 Mbit/s (13.3% utilization)

95th percentile per-packet one-way delay: 54.462 ms

Loss rate: 0.35%

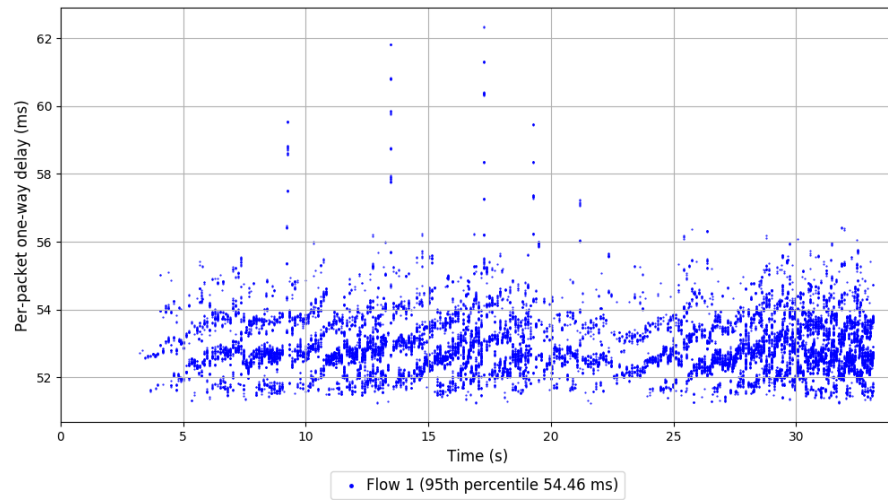
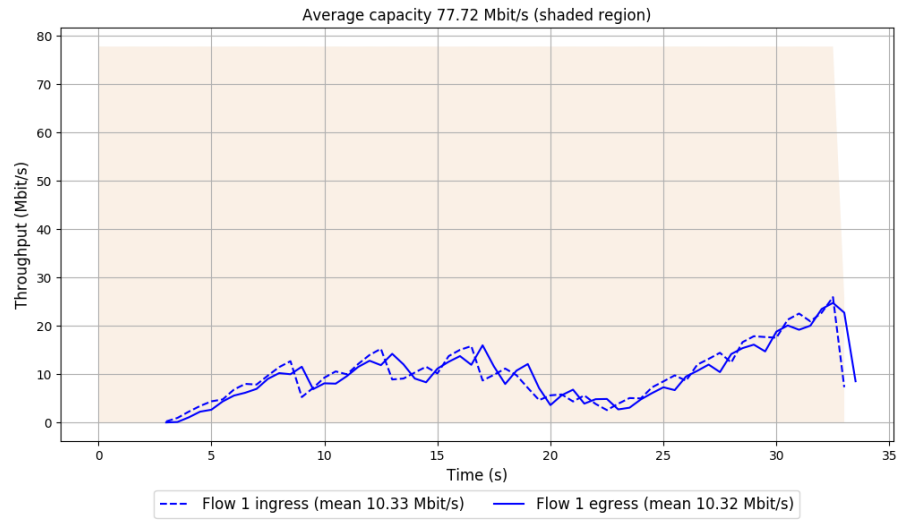
-- Flow 1:

Average throughput: 10.32 Mbit/s

95th percentile per-packet one-way delay: 54.462 ms

Loss rate: 0.35%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-05-30 08:15:57

End at: 2018-05-30 08:16:27

Below is generated by plot.py at 2018-05-30 09:12:41

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 8.63 Mbit/s (11.1% utilization)

95th percentile per-packet one-way delay: 54.630 ms

Loss rate: 0.38%

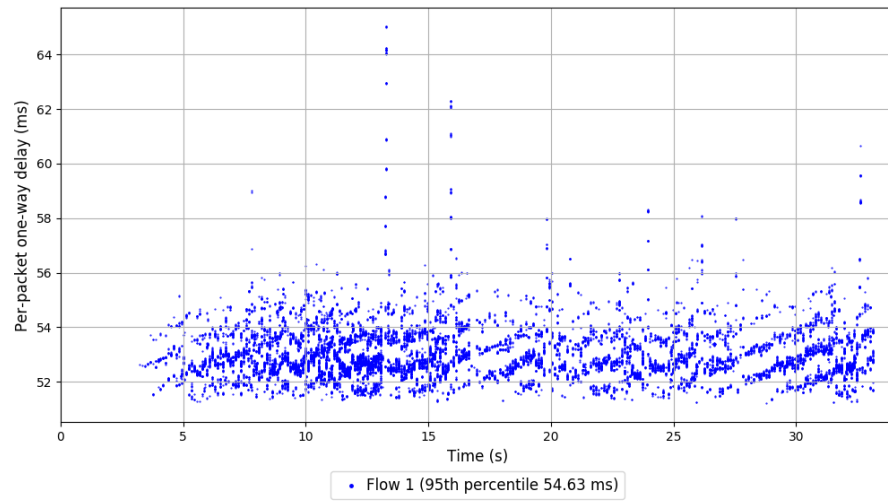
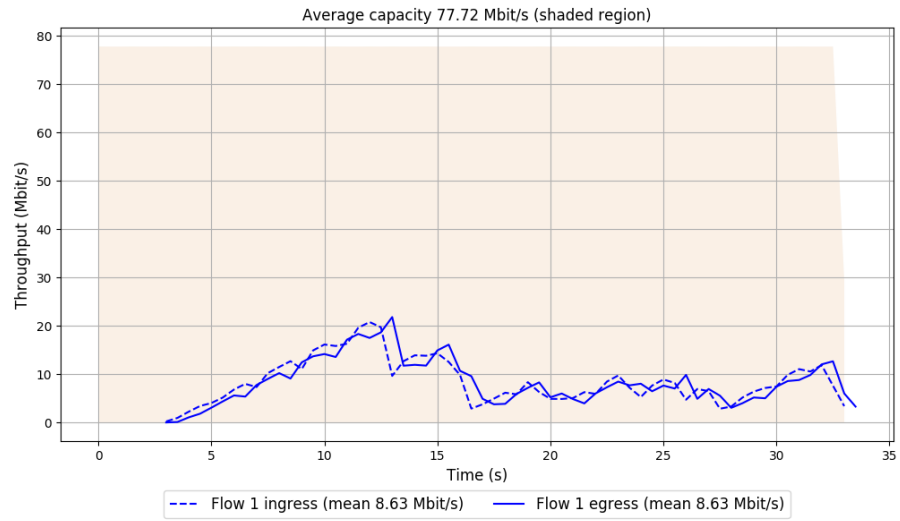
-- Flow 1:

Average throughput: 8.63 Mbit/s

95th percentile per-packet one-way delay: 54.630 ms

Loss rate: 0.38%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-05-30 08:26:06

End at: 2018-05-30 08:26:36

Below is generated by plot.py at 2018-05-30 09:12:41

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 7.06 Mbit/s (9.1% utilization)

95th percentile per-packet one-way delay: 54.533 ms

Loss rate: 0.48%

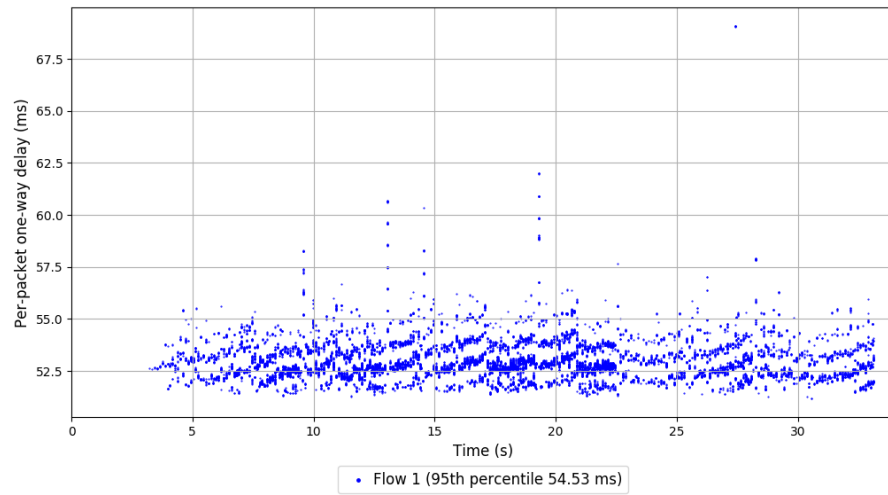
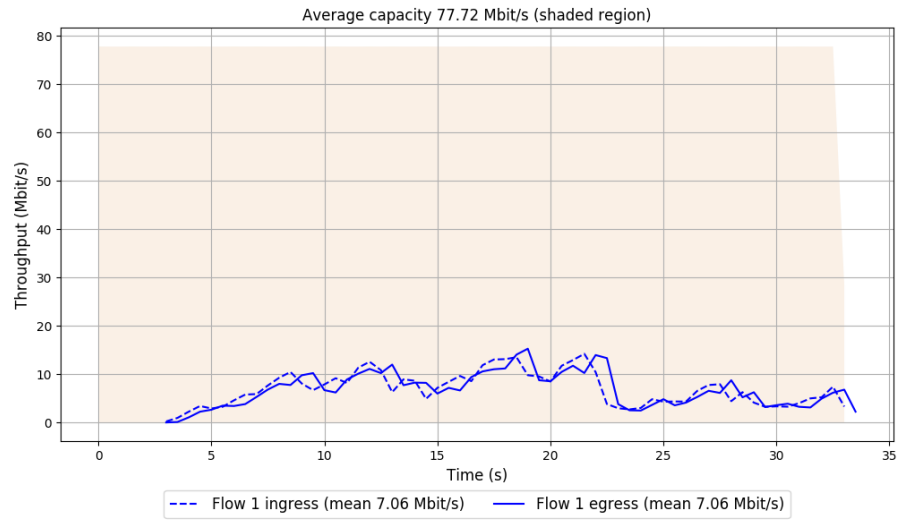
-- Flow 1:

Average throughput: 7.06 Mbit/s

95th percentile per-packet one-way delay: 54.533 ms

Loss rate: 0.48%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-05-30 08:36:19

End at: 2018-05-30 08:36:49

Below is generated by plot.py at 2018-05-30 09:12:46

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 8.68 Mbit/s (11.2% utilization)

95th percentile per-packet one-way delay: 54.599 ms

Loss rate: 0.40%

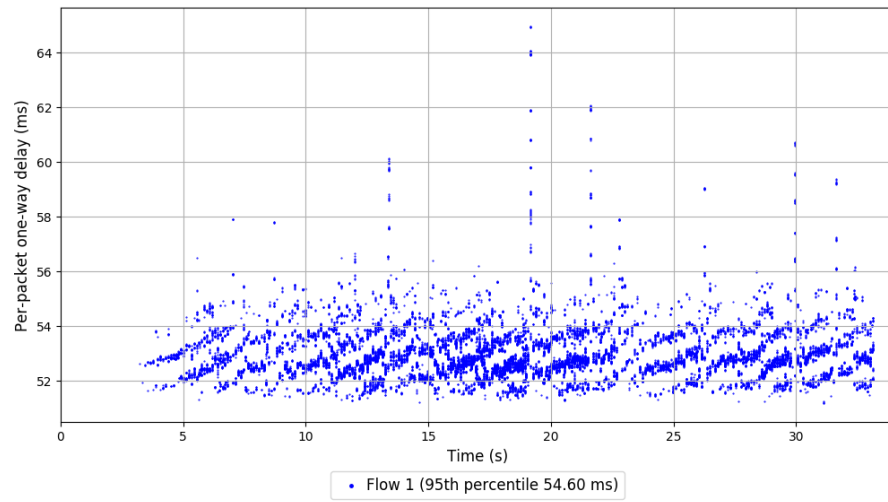
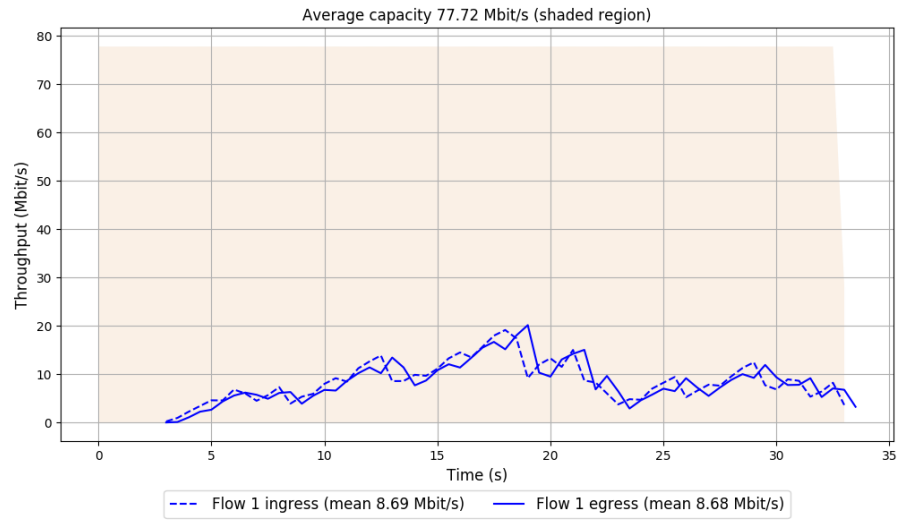
-- Flow 1:

Average throughput: 8.68 Mbit/s

95th percentile per-packet one-way delay: 54.599 ms

Loss rate: 0.40%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-05-30 08:46:26

End at: 2018-05-30 08:46:56

Below is generated by plot.py at 2018-05-30 09:12:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 6.88 Mbit/s (8.8% utilization)

95th percentile per-packet one-way delay: 54.514 ms

Loss rate: 0.47%

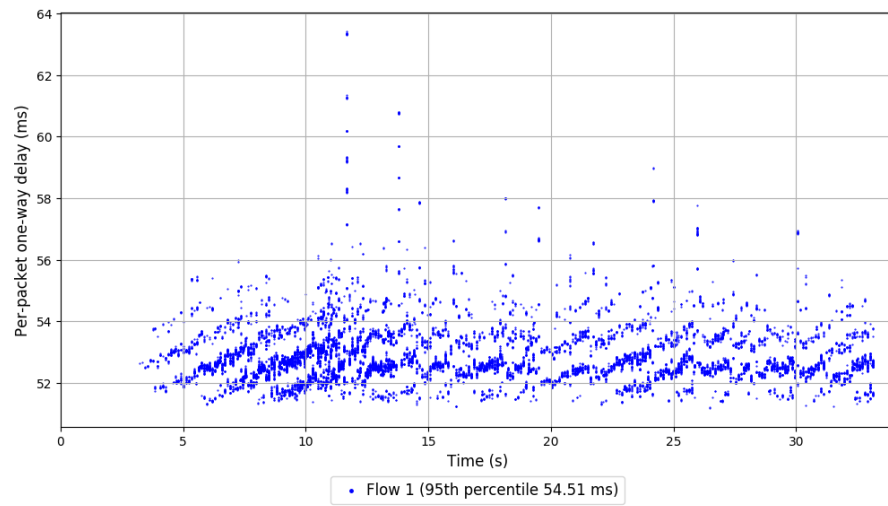
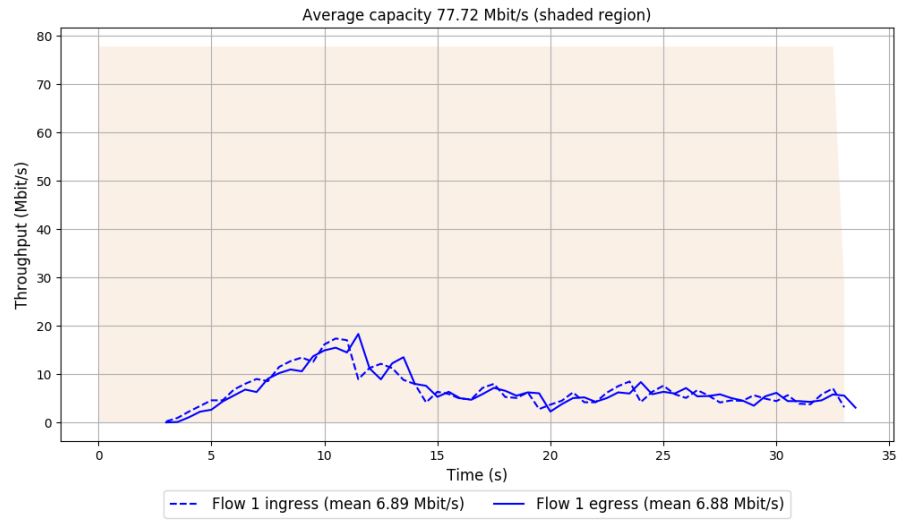
-- Flow 1:

Average throughput: 6.88 Mbit/s

95th percentile per-packet one-way delay: 54.514 ms

Loss rate: 0.47%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-05-30 08:56:34

End at: 2018-05-30 08:57:04

Below is generated by plot.py at 2018-05-30 09:13:05

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 7.73 Mbit/s (9.9% utilization)

95th percentile per-packet one-way delay: 54.567 ms

Loss rate: 0.70%

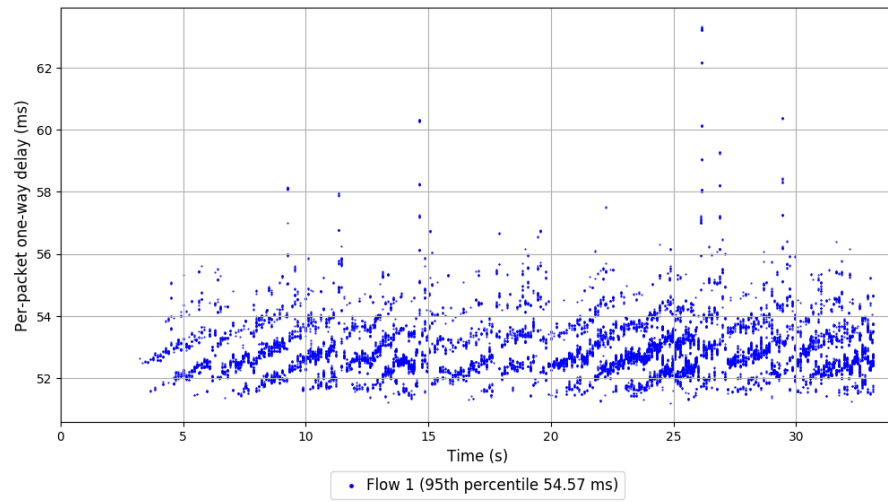
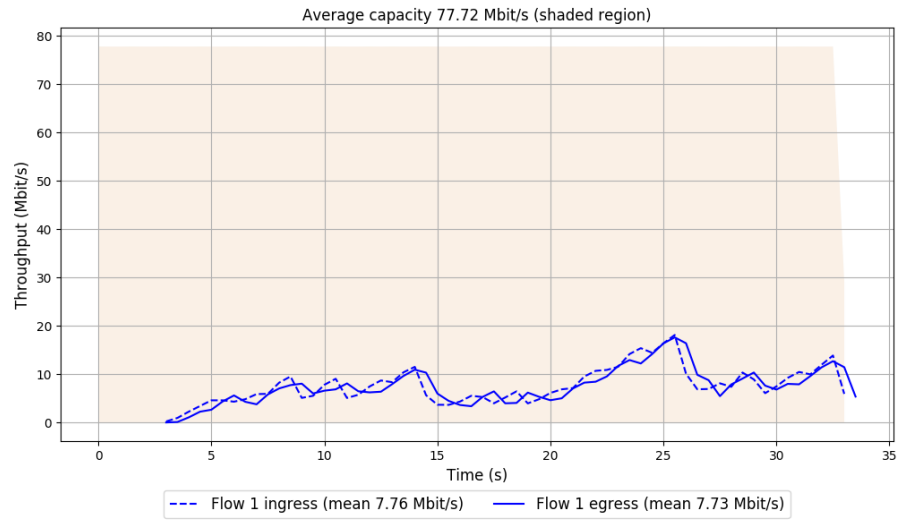
-- Flow 1:

Average throughput: 7.73 Mbit/s

95th percentile per-packet one-way delay: 54.567 ms

Loss rate: 0.70%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2018-05-30 07:22:02

End at: 2018-05-30 07:22:32

Below is generated by plot.py at 2018-05-30 09:14:13

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 71.20 Mbit/s (91.6% utilization)

95th percentile per-packet one-way delay: 62.596 ms

Loss rate: 1.64%

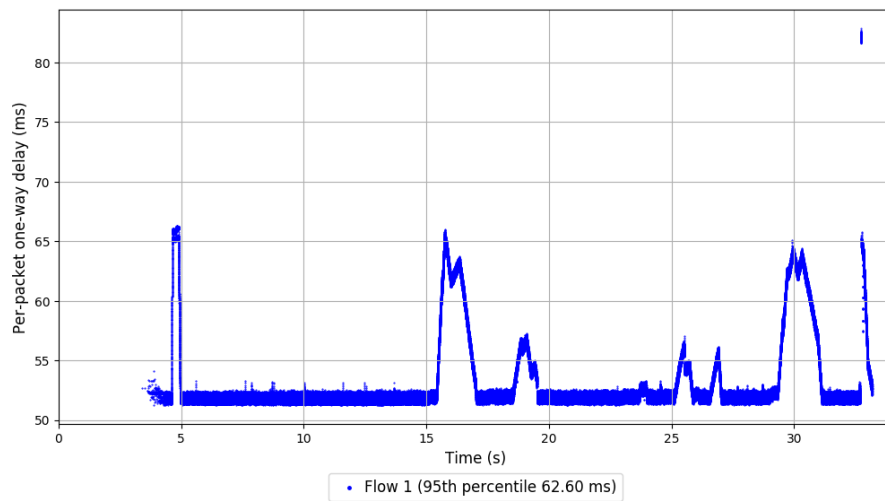
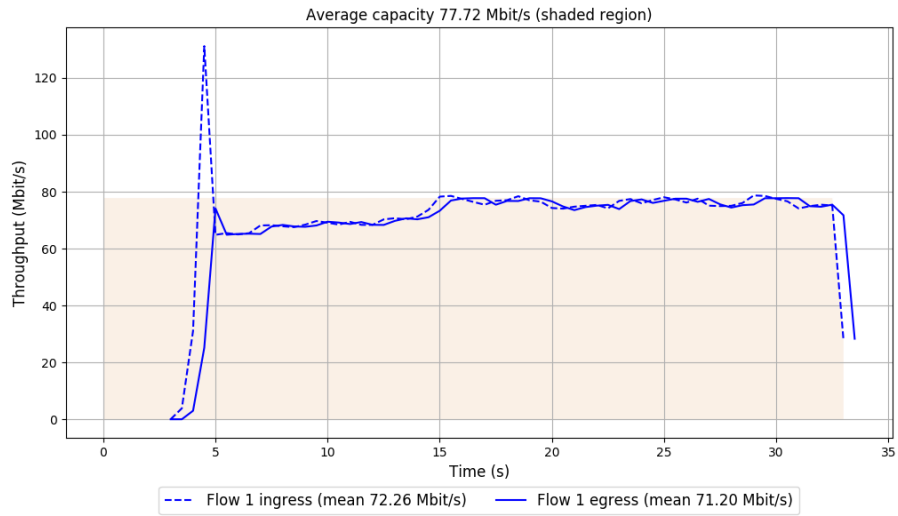
-- Flow 1:

Average throughput: 71.20 Mbit/s

95th percentile per-packet one-way delay: 62.596 ms

Loss rate: 1.64%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-05-30 07:32:10

End at: 2018-05-30 07:32:40

Below is generated by plot.py at 2018-05-30 09:14:15

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 72.77 Mbit/s (93.6% utilization)

95th percentile per-packet one-way delay: 61.976 ms

Loss rate: 1.62%

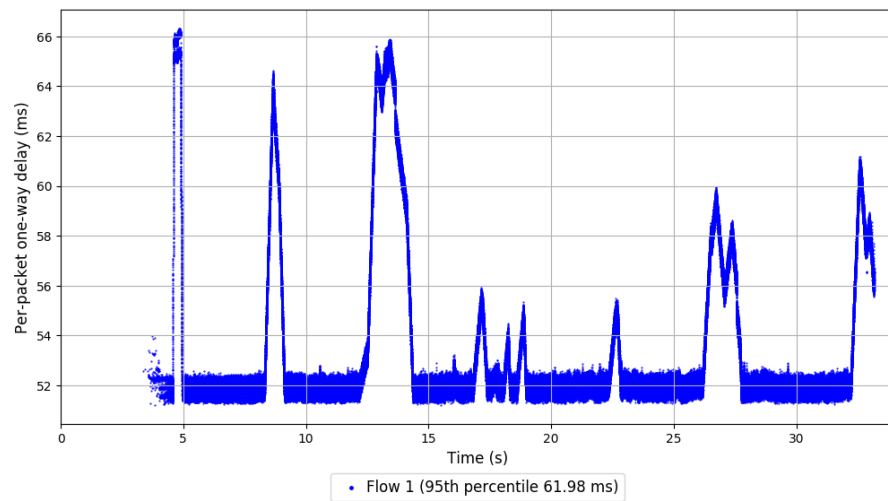
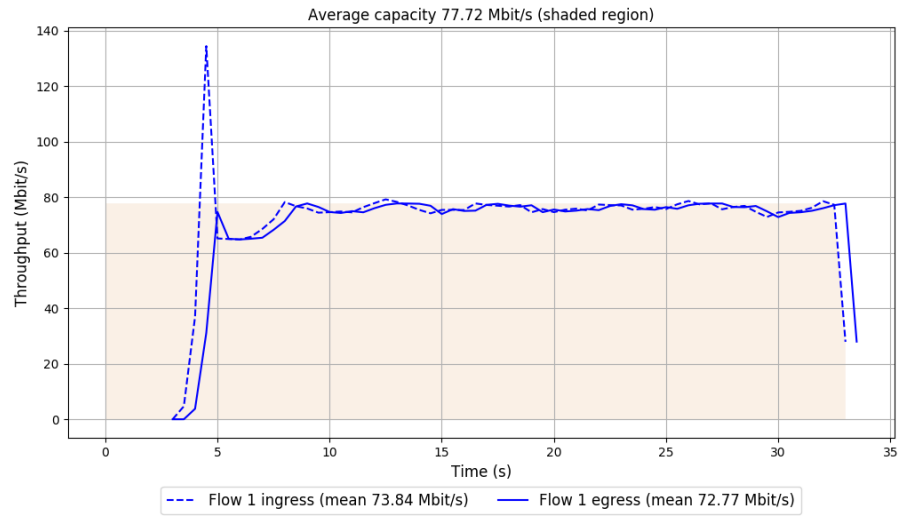
-- Flow 1:

Average throughput: 72.77 Mbit/s

95th percentile per-packet one-way delay: 61.976 ms

Loss rate: 1.62%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-05-30 07:42:17

End at: 2018-05-30 07:42:47

Below is generated by plot.py at 2018-05-30 09:14:22

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 72.13 Mbit/s (92.8% utilization)

95th percentile per-packet one-way delay: 63.514 ms

Loss rate: 1.56%

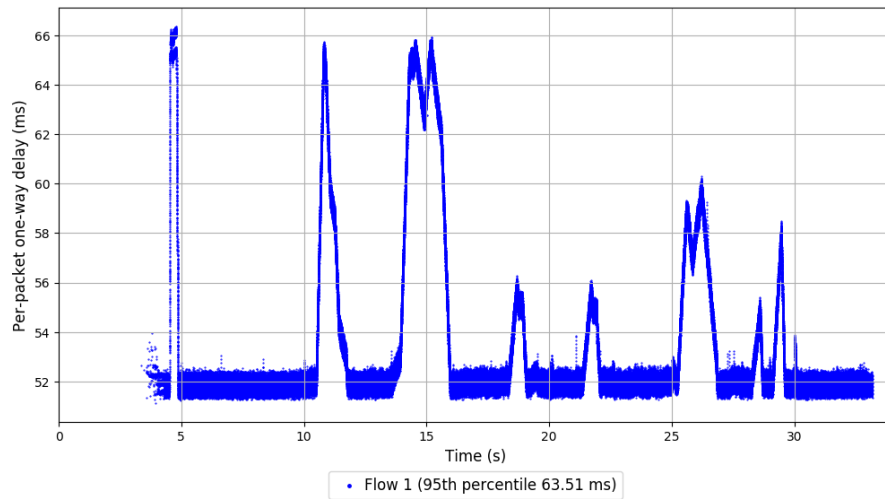
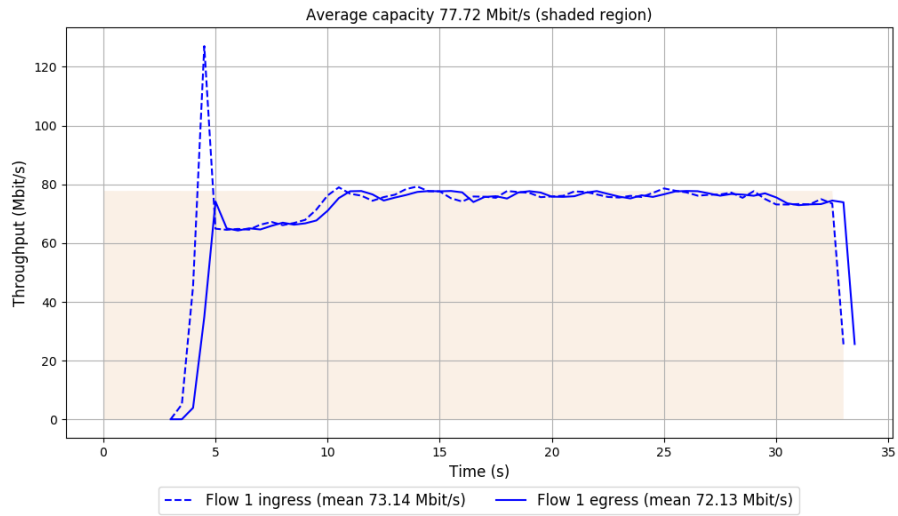
-- Flow 1:

Average throughput: 72.13 Mbit/s

95th percentile per-packet one-way delay: 63.514 ms

Loss rate: 1.56%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-05-30 07:52:25

End at: 2018-05-30 07:52:55

Below is generated by plot.py at 2018-05-30 09:14:24

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 72.20 Mbit/s (92.9% utilization)

95th percentile per-packet one-way delay: 56.067 ms

Loss rate: 1.66%

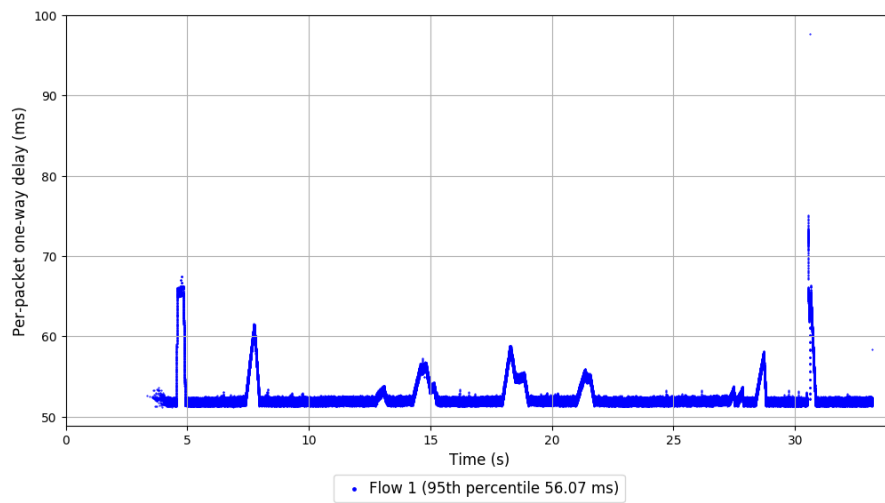
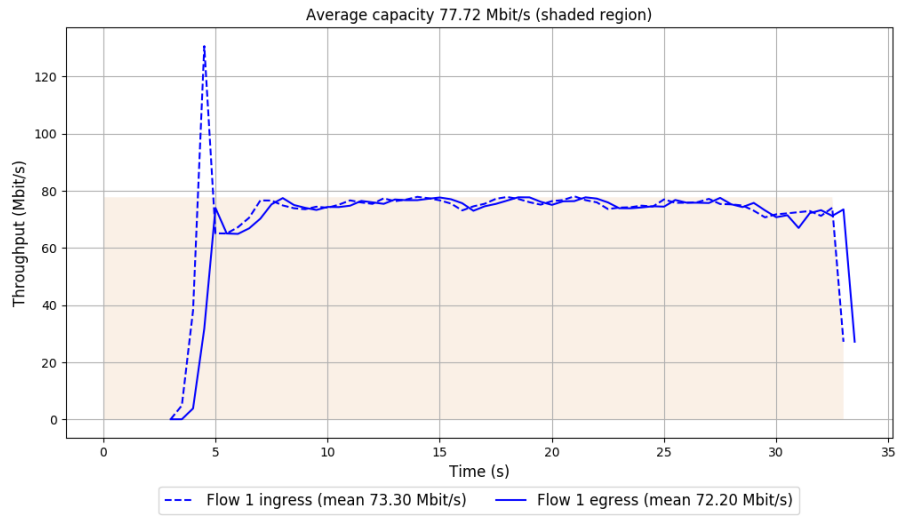
-- Flow 1:

Average throughput: 72.20 Mbit/s

95th percentile per-packet one-way delay: 56.067 ms

Loss rate: 1.66%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2018-05-30 08:02:34

End at: 2018-05-30 08:03:04

Below is generated by plot.py at 2018-05-30 09:14:26

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 71.93 Mbit/s (92.6% utilization)

95th percentile per-packet one-way delay: 62.097 ms

Loss rate: 1.65%

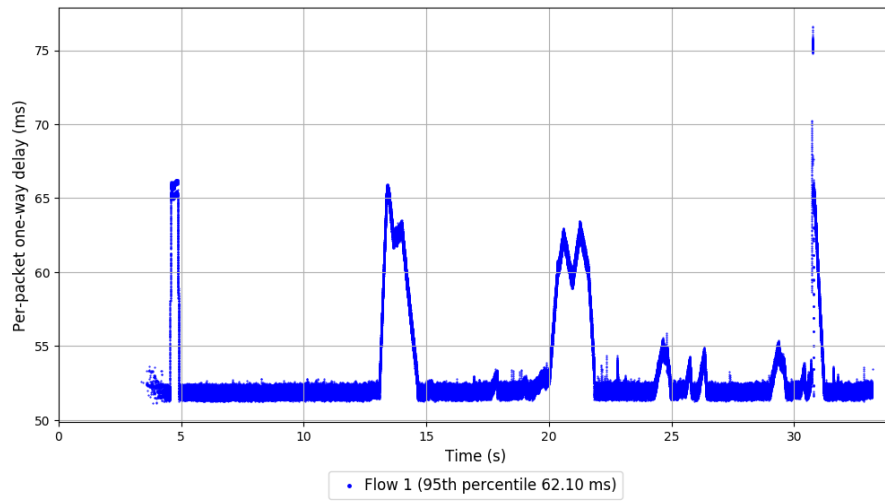
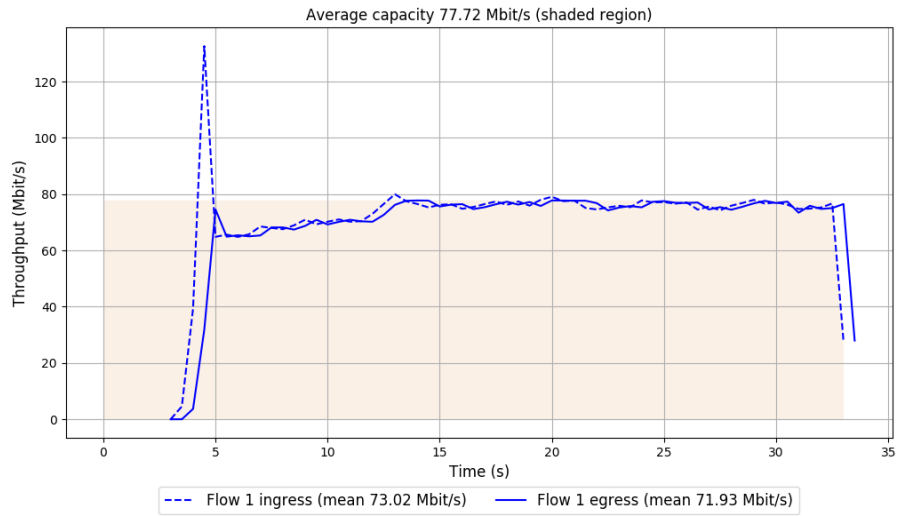
-- Flow 1:

Average throughput: 71.93 Mbit/s

95th percentile per-packet one-way delay: 62.097 ms

Loss rate: 1.65%

Run 5: Report of PCC-Allegro — Data Link



Run 6: Statistics of PCC-Allegro

Start at: 2018-05-30 08:12:45

End at: 2018-05-30 08:13:15

Below is generated by plot.py at 2018-05-30 09:14:29

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 70.63 Mbit/s (90.9% utilization)

95th percentile per-packet one-way delay: 62.257 ms

Loss rate: 1.57%

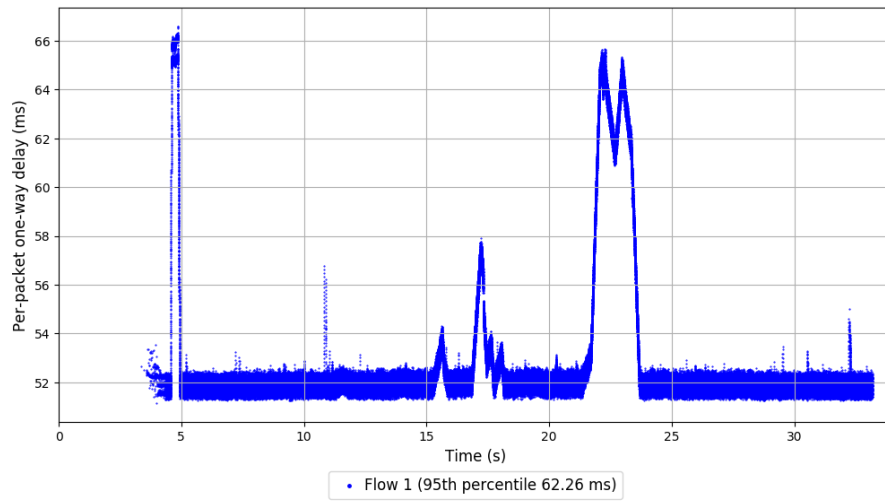
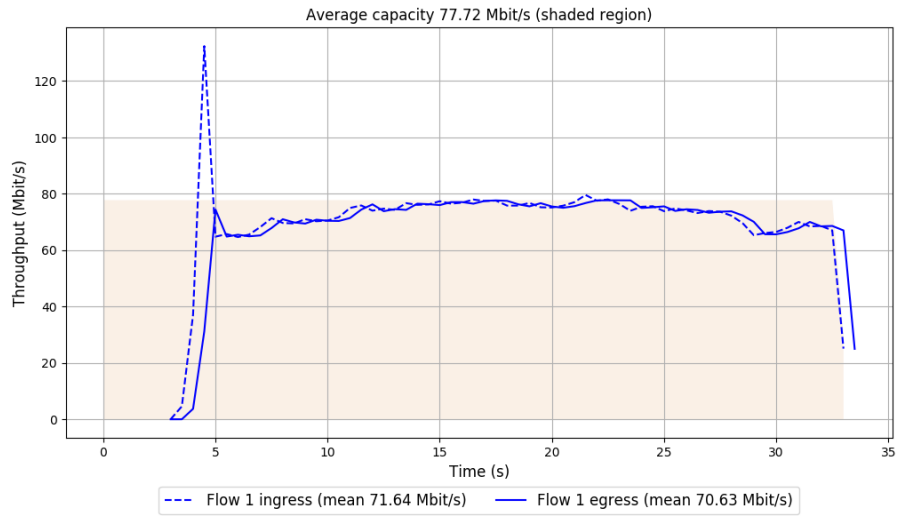
-- Flow 1:

Average throughput: 70.63 Mbit/s

95th percentile per-packet one-way delay: 62.257 ms

Loss rate: 1.57%

Run 6: Report of PCC-Allegro — Data Link



Run 7: Statistics of PCC-Allegro

Start at: 2018-05-30 08:22:54

End at: 2018-05-30 08:23:24

Below is generated by plot.py at 2018-05-30 09:14:43

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 72.66 Mbit/s (93.5% utilization)

95th percentile per-packet one-way delay: 61.846 ms

Loss rate: 1.60%

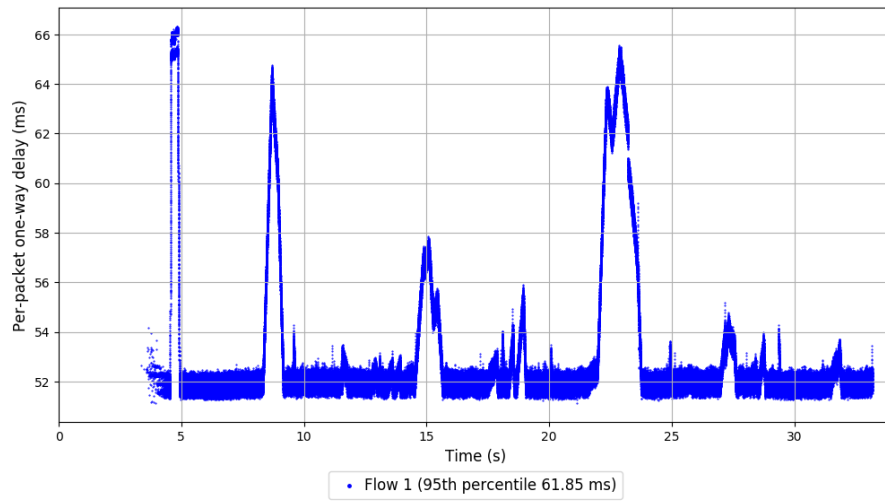
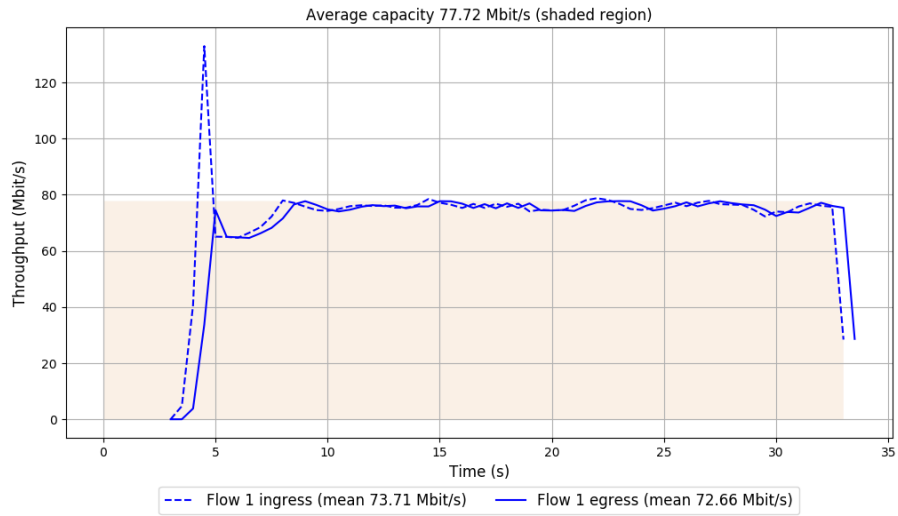
-- Flow 1:

Average throughput: 72.66 Mbit/s

95th percentile per-packet one-way delay: 61.846 ms

Loss rate: 1.60%

Run 7: Report of PCC-Allegro — Data Link



Run 8: Statistics of PCC-Allegro

Start at: 2018-05-30 08:33:07

End at: 2018-05-30 08:33:37

Below is generated by plot.py at 2018-05-30 09:14:52

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 71.30 Mbit/s (91.7% utilization)

95th percentile per-packet one-way delay: 62.850 ms

Loss rate: 1.82%

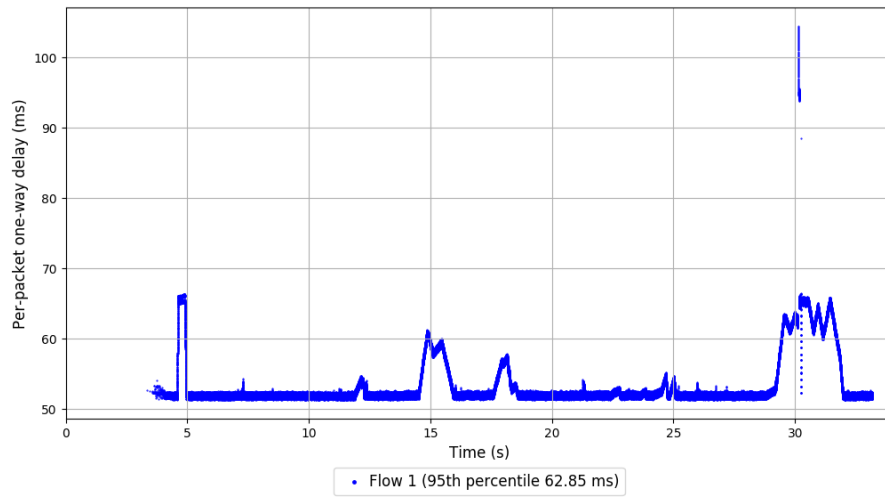
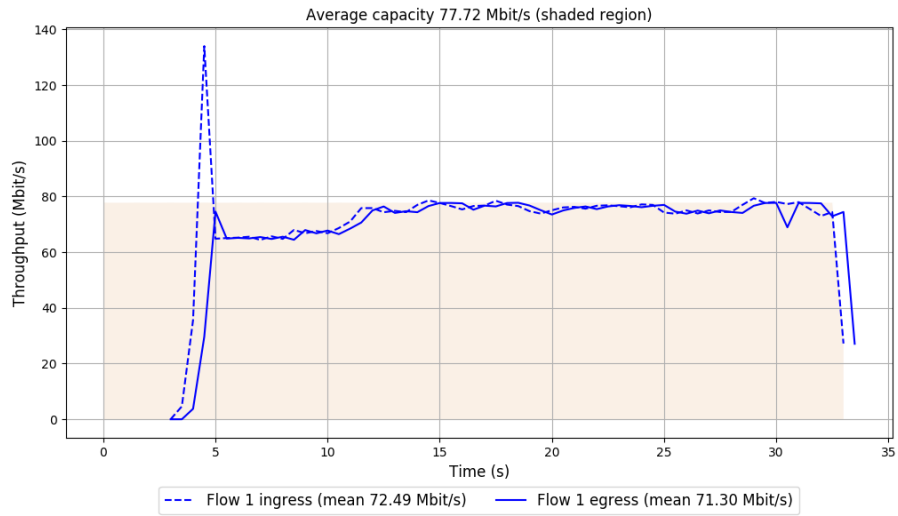
-- Flow 1:

Average throughput: 71.30 Mbit/s

95th percentile per-packet one-way delay: 62.850 ms

Loss rate: 1.82%

Run 8: Report of PCC-Allegro — Data Link



Run 9: Statistics of PCC-Allegro

Start at: 2018-05-30 08:43:14

End at: 2018-05-30 08:43:45

Below is generated by plot.py at 2018-05-30 09:15:49

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 72.41 Mbit/s (93.2% utilization)

95th percentile per-packet one-way delay: 63.913 ms

Loss rate: 1.77%

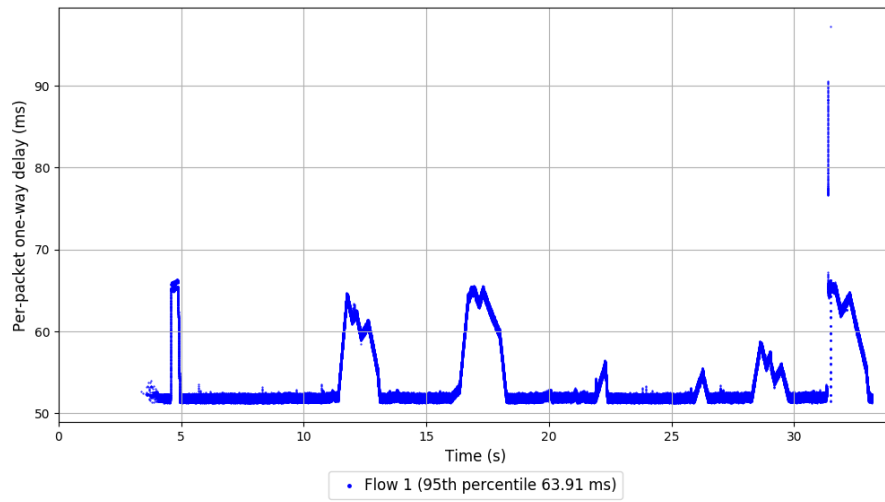
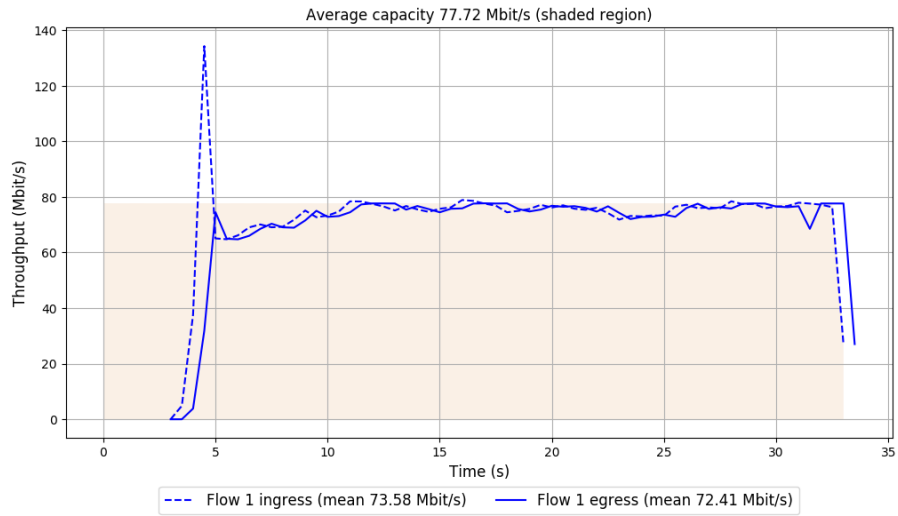
-- Flow 1:

Average throughput: 72.41 Mbit/s

95th percentile per-packet one-way delay: 63.913 ms

Loss rate: 1.77%

Run 9: Report of PCC-Allegro — Data Link



Run 10: Statistics of PCC-Allegro

Start at: 2018-05-30 08:53:23

End at: 2018-05-30 08:53:53

Below is generated by plot.py at 2018-05-30 09:15:49

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 67.83 Mbit/s (87.3% utilization)

95th percentile per-packet one-way delay: 59.709 ms

Loss rate: 1.71%

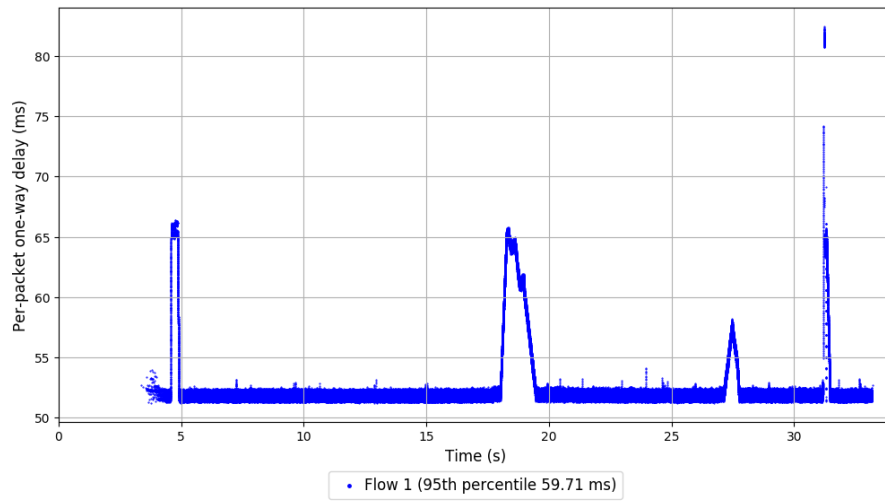
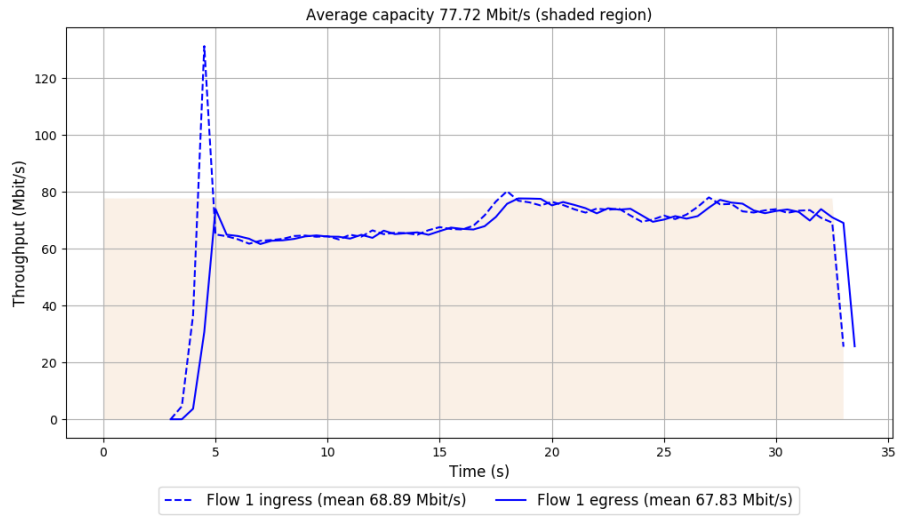
-- Flow 1:

Average throughput: 67.83 Mbit/s

95th percentile per-packet one-way delay: 59.709 ms

Loss rate: 1.71%

Run 10: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

Start at: 2018-05-30 07:22:40

End at: 2018-05-30 07:23:10

Below is generated by plot.py at 2018-05-30 09:17:10

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 68.97 Mbit/s (88.7% utilization)

95th percentile per-packet one-way delay: 59.114 ms

Loss rate: 2.28%

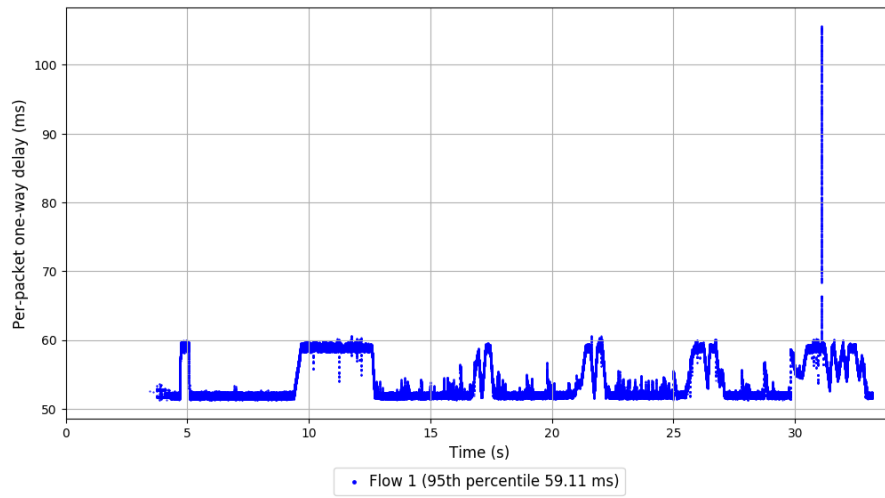
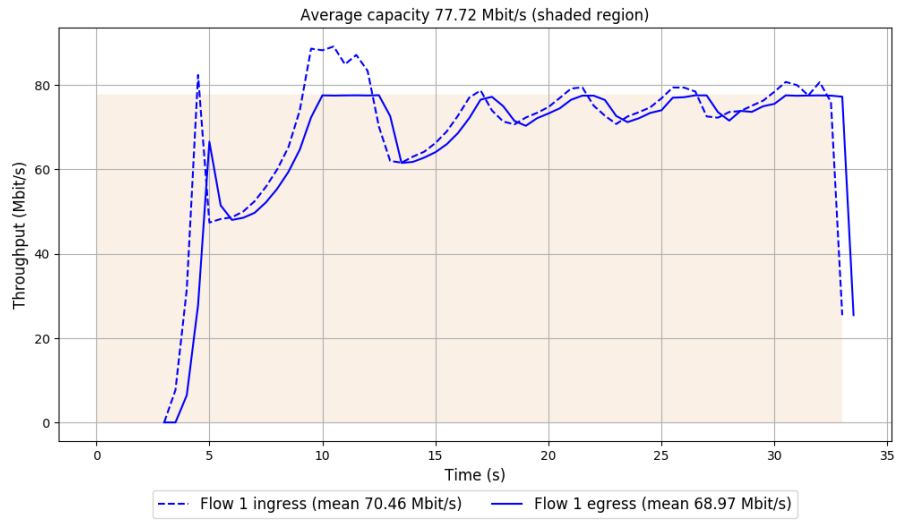
-- Flow 1:

Average throughput: 68.97 Mbit/s

95th percentile per-packet one-way delay: 59.114 ms

Loss rate: 2.28%

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2018-05-30 07:32:48

End at: 2018-05-30 07:33:18

Below is generated by plot.py at 2018-05-30 09:17:11

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 68.04 Mbit/s (87.5% utilization)

95th percentile per-packet one-way delay: 59.156 ms

Loss rate: 2.62%

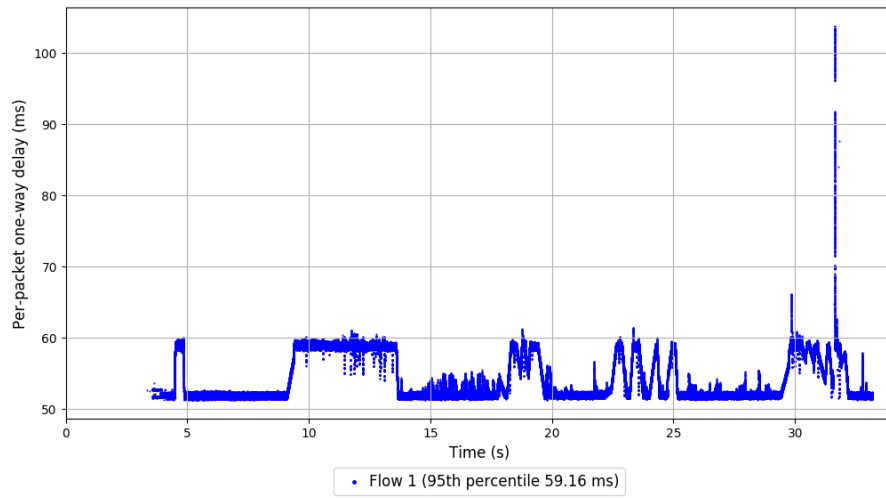
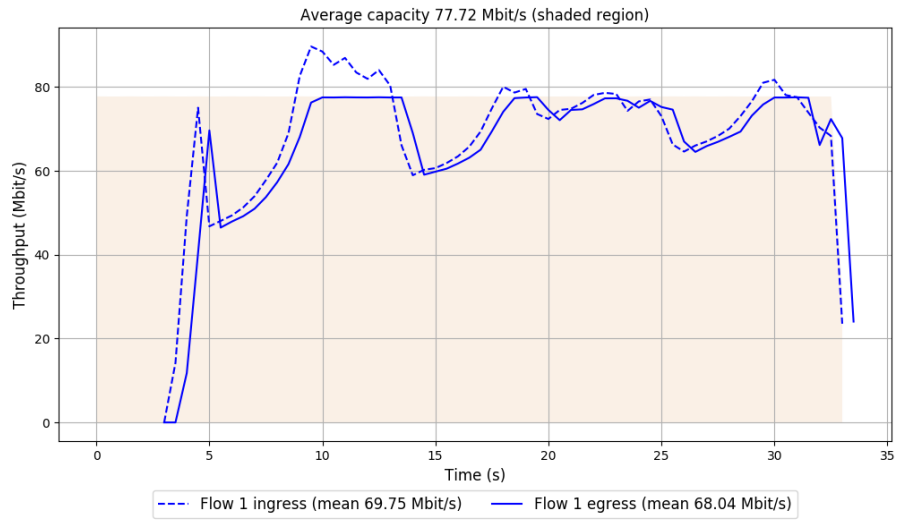
-- Flow 1:

Average throughput: 68.04 Mbit/s

95th percentile per-packet one-way delay: 59.156 ms

Loss rate: 2.62%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2018-05-30 07:42:55

End at: 2018-05-30 07:43:25

Below is generated by plot.py at 2018-05-30 09:17:13

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 68.65 Mbit/s (88.3% utilization)

95th percentile per-packet one-way delay: 59.157 ms

Loss rate: 2.58%

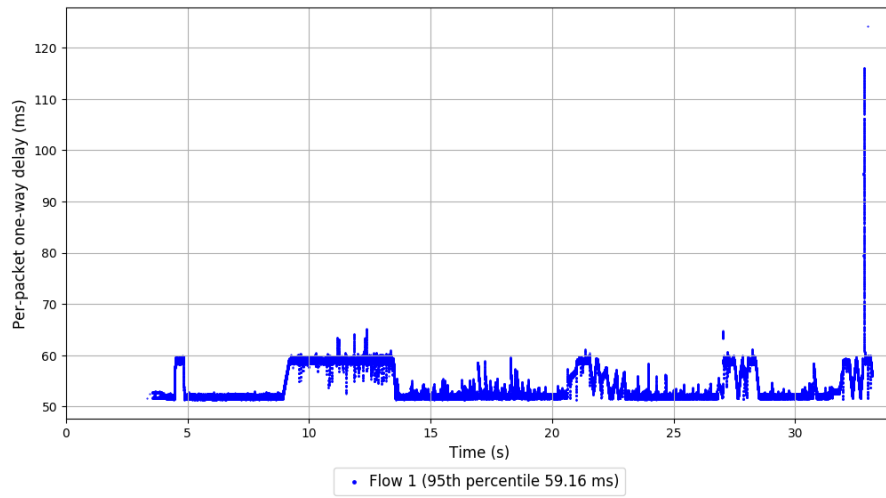
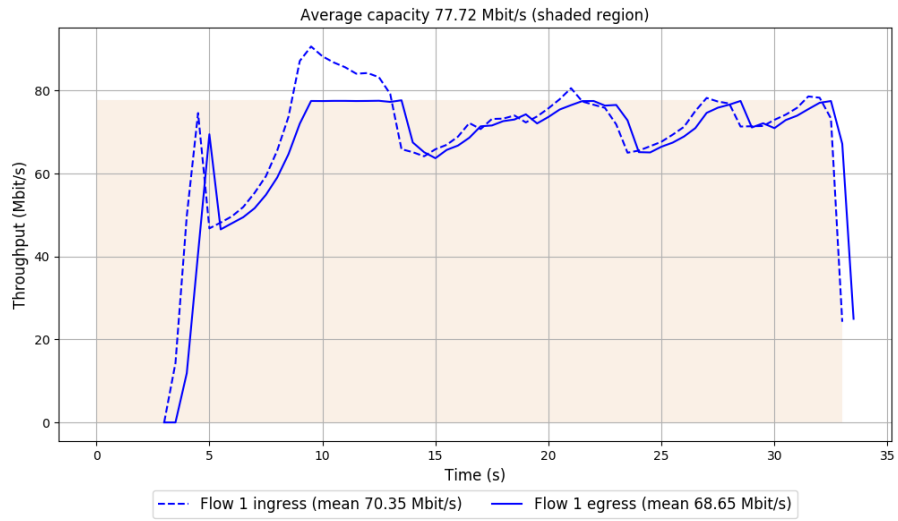
-- Flow 1:

Average throughput: 68.65 Mbit/s

95th percentile per-packet one-way delay: 59.157 ms

Loss rate: 2.58%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-05-30 07:53:03

End at: 2018-05-30 07:53:33

Below is generated by plot.py at 2018-05-30 09:17:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 68.32 Mbit/s (87.9% utilization)

95th percentile per-packet one-way delay: 59.144 ms

Loss rate: 2.48%

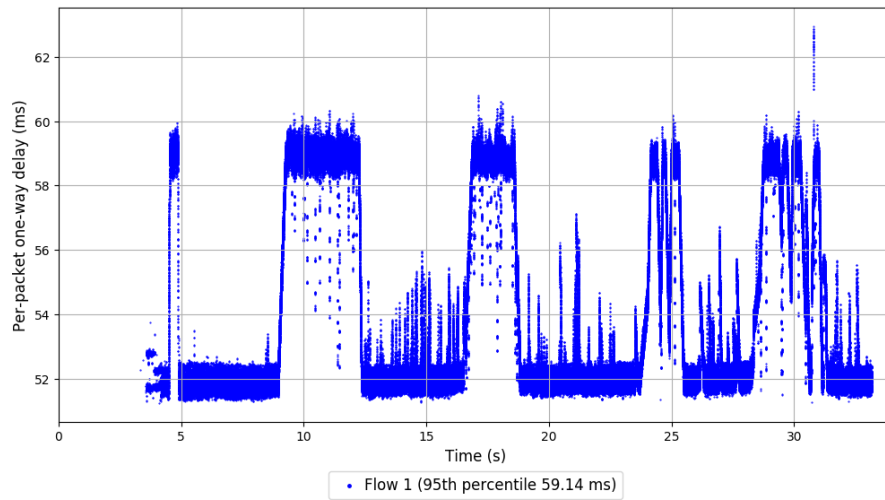
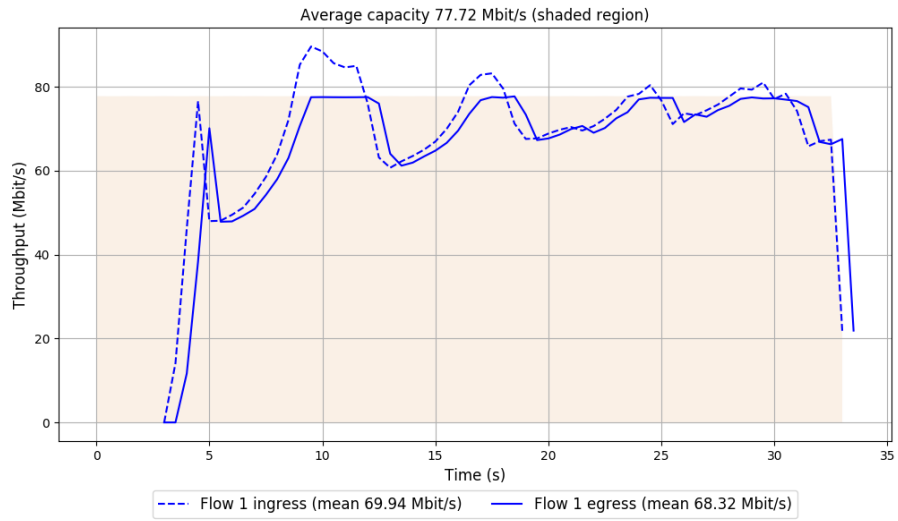
-- Flow 1:

Average throughput: 68.32 Mbit/s

95th percentile per-packet one-way delay: 59.144 ms

Loss rate: 2.48%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2018-05-30 08:03:11

End at: 2018-05-30 08:03:41

Below is generated by plot.py at 2018-05-30 09:17:26

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 68.13 Mbit/s (87.7% utilization)

95th percentile per-packet one-way delay: 58.924 ms

Loss rate: 0.98%

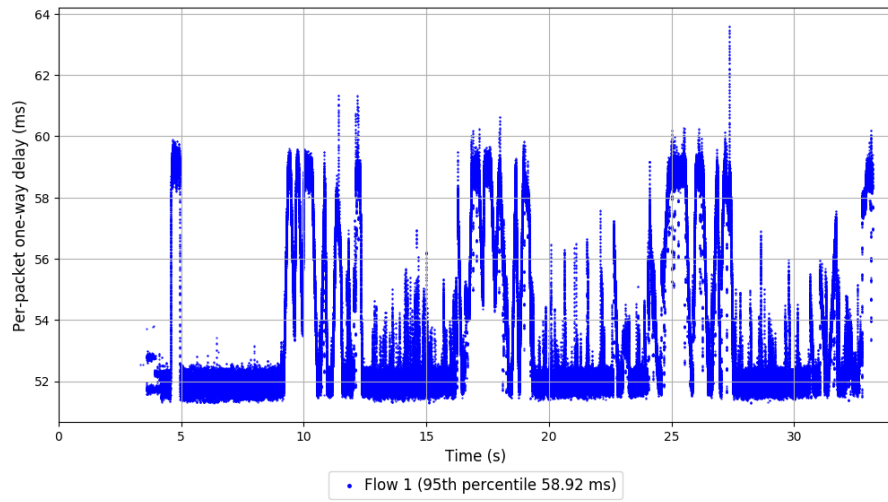
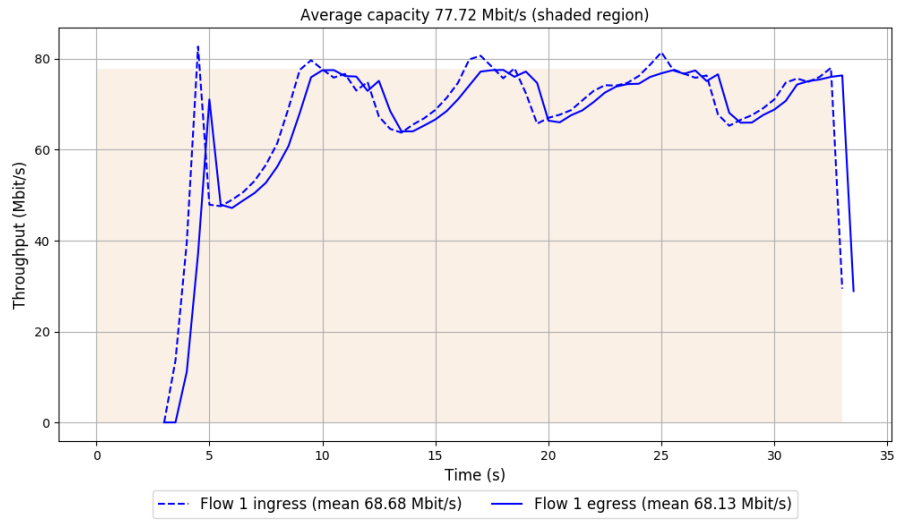
-- Flow 1:

Average throughput: 68.13 Mbit/s

95th percentile per-packet one-way delay: 58.924 ms

Loss rate: 0.98%

Run 5: Report of PCC-Expr — Data Link



Run 6: Statistics of PCC-Expr

Start at: 2018-05-30 08:13:23

End at: 2018-05-30 08:13:53

Below is generated by plot.py at 2018-05-30 09:17:39

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 69.58 Mbit/s (89.5% utilization)

95th percentile per-packet one-way delay: 58.948 ms

Loss rate: 1.10%

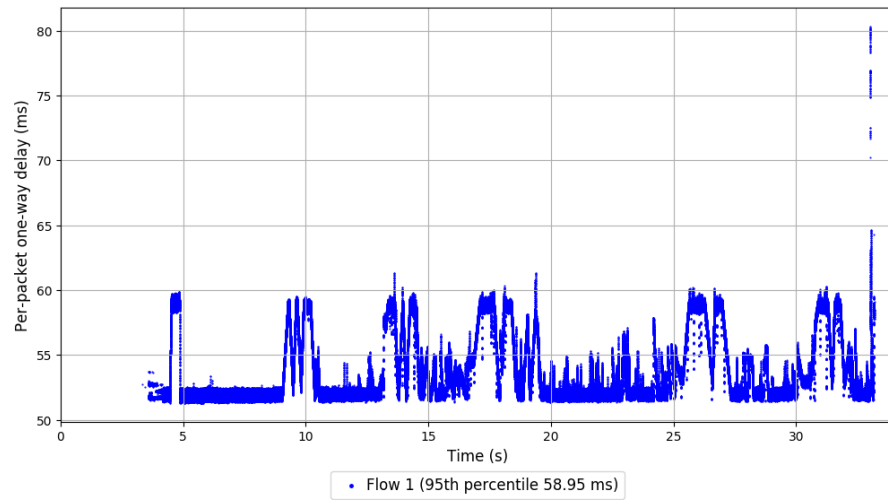
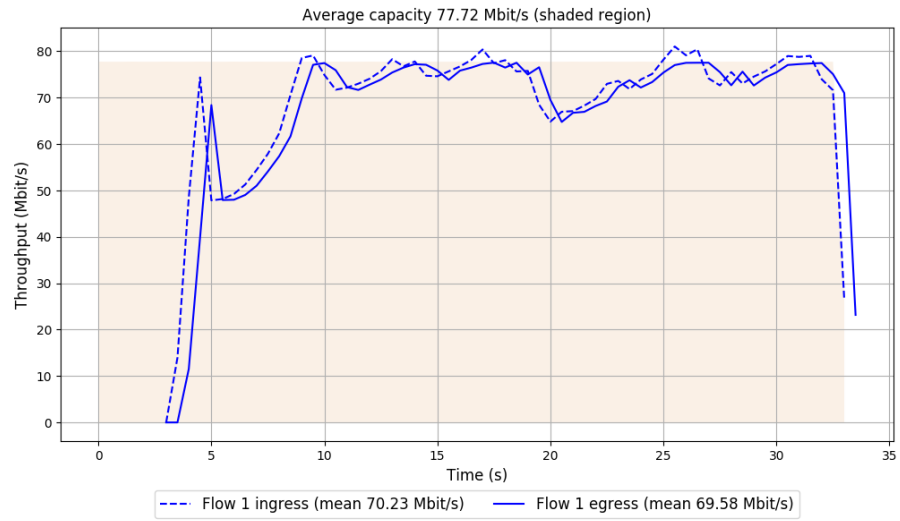
-- Flow 1:

Average throughput: 69.58 Mbit/s

95th percentile per-packet one-way delay: 58.948 ms

Loss rate: 1.10%

Run 6: Report of PCC-Expr — Data Link



Run 7: Statistics of PCC-Expr

Start at: 2018-05-30 08:23:32

End at: 2018-05-30 08:24:02

Below is generated by plot.py at 2018-05-30 09:18:41

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 69.18 Mbit/s (89.0% utilization)

95th percentile per-packet one-way delay: 59.110 ms

Loss rate: 1.95%

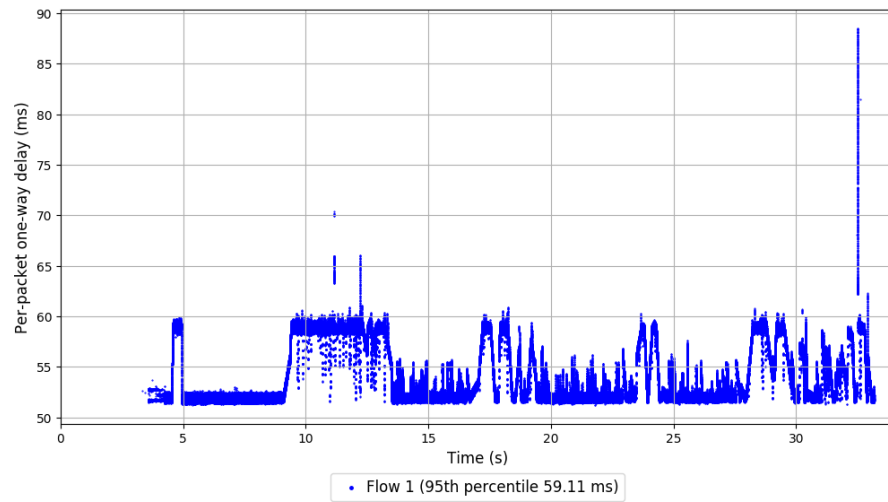
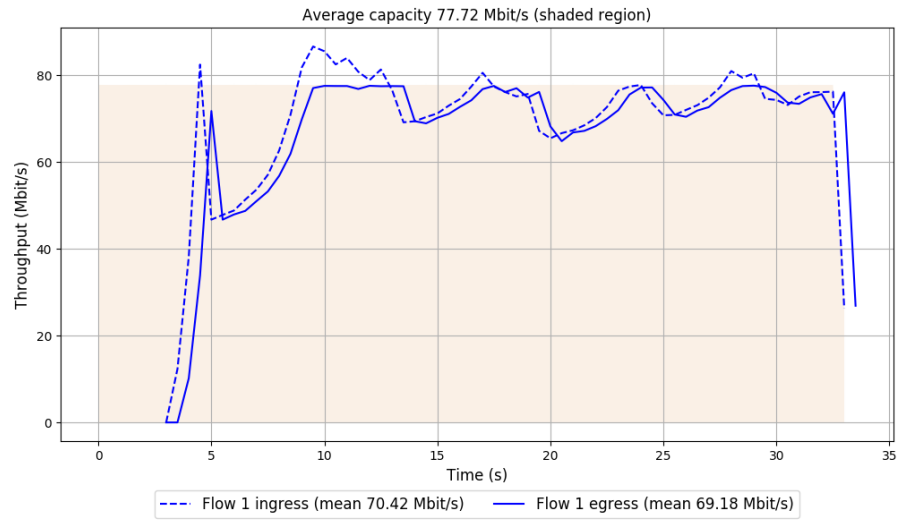
-- Flow 1:

Average throughput: 69.18 Mbit/s

95th percentile per-packet one-way delay: 59.110 ms

Loss rate: 1.95%

Run 7: Report of PCC-Expr — Data Link



Run 8: Statistics of PCC-Expr

Start at: 2018-05-30 08:33:45

End at: 2018-05-30 08:34:15

Below is generated by plot.py at 2018-05-30 09:18:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 69.47 Mbit/s (89.4% utilization)

95th percentile per-packet one-way delay: 59.124 ms

Loss rate: 2.82%

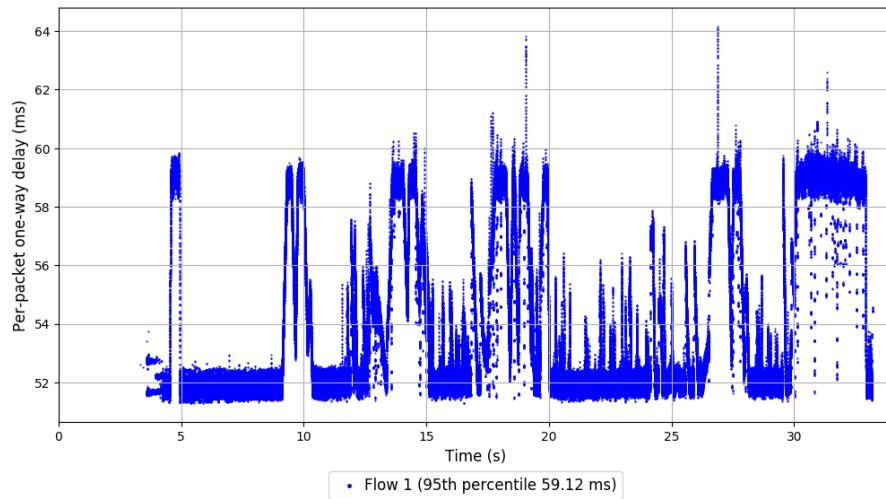
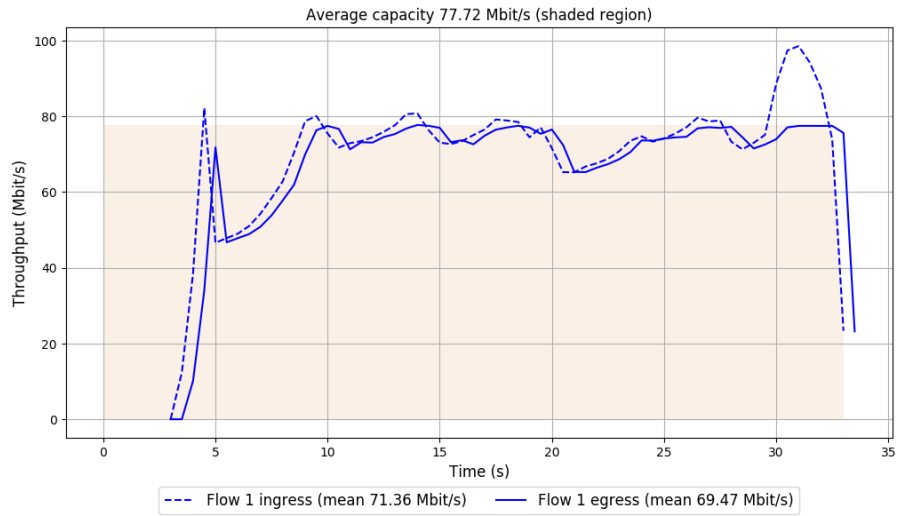
-- Flow 1:

Average throughput: 69.47 Mbit/s

95th percentile per-packet one-way delay: 59.124 ms

Loss rate: 2.82%

Run 8: Report of PCC-Expr — Data Link



Run 9: Statistics of PCC-Expr

Start at: 2018-05-30 08:43:52

End at: 2018-05-30 08:44:22

Below is generated by plot.py at 2018-05-30 09:19:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 69.40 Mbit/s (89.3% utilization)

95th percentile per-packet one-way delay: 59.050 ms

Loss rate: 1.51%

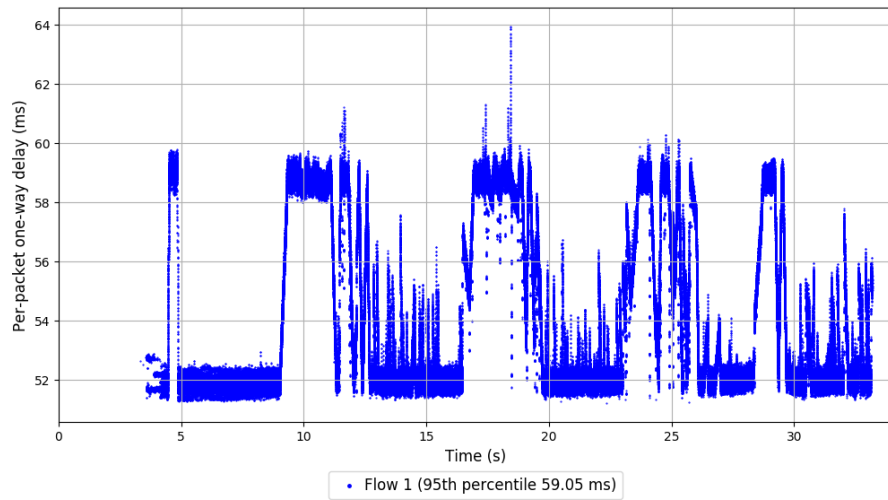
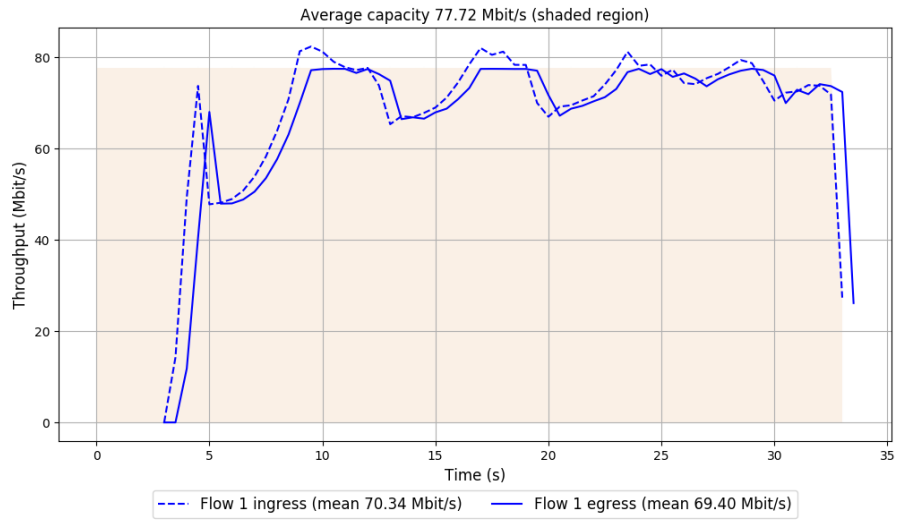
-- Flow 1:

Average throughput: 69.40 Mbit/s

95th percentile per-packet one-way delay: 59.050 ms

Loss rate: 1.51%

Run 9: Report of PCC-Expr — Data Link



Run 10: Statistics of PCC-Expr

Start at: 2018-05-30 08:54:00

End at: 2018-05-30 08:54:30

Below is generated by plot.py at 2018-05-30 09:19:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 68.91 Mbit/s (88.7% utilization)

95th percentile per-packet one-way delay: 58.903 ms

Loss rate: 0.99%

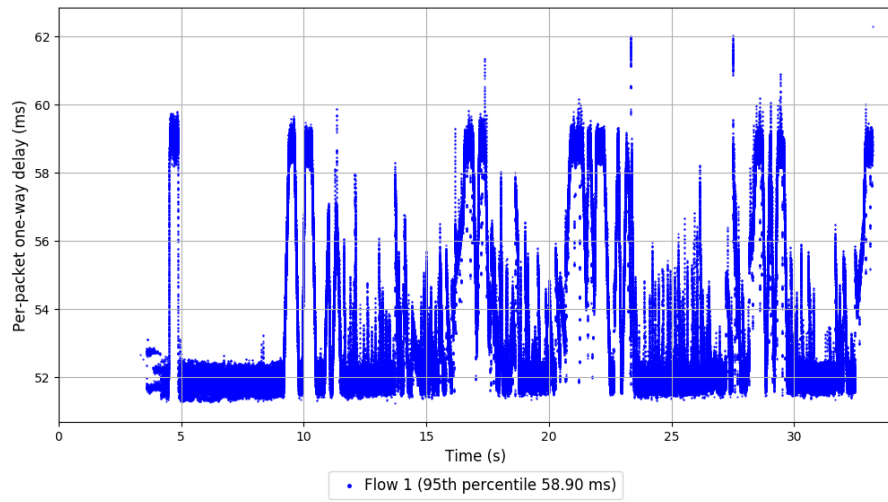
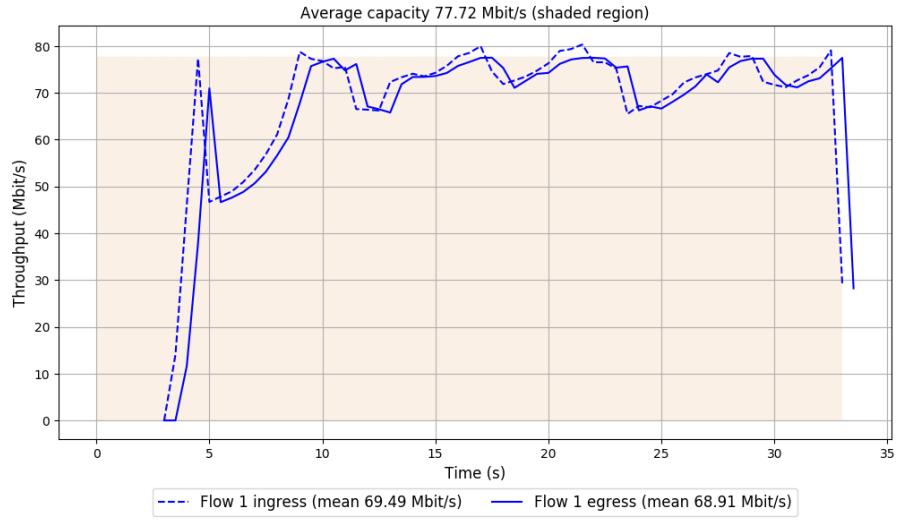
-- Flow 1:

Average throughput: 68.91 Mbit/s

95th percentile per-packet one-way delay: 58.903 ms

Loss rate: 0.99%

Run 10: Report of PCC-Expr — Data Link

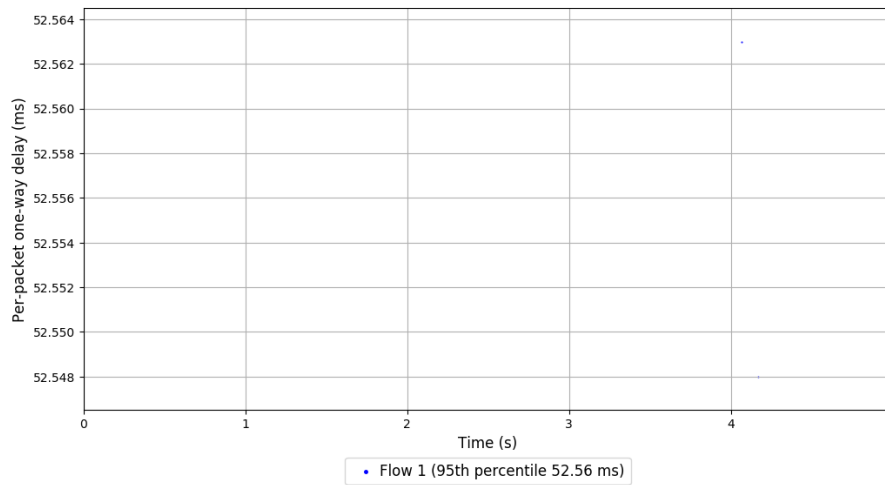
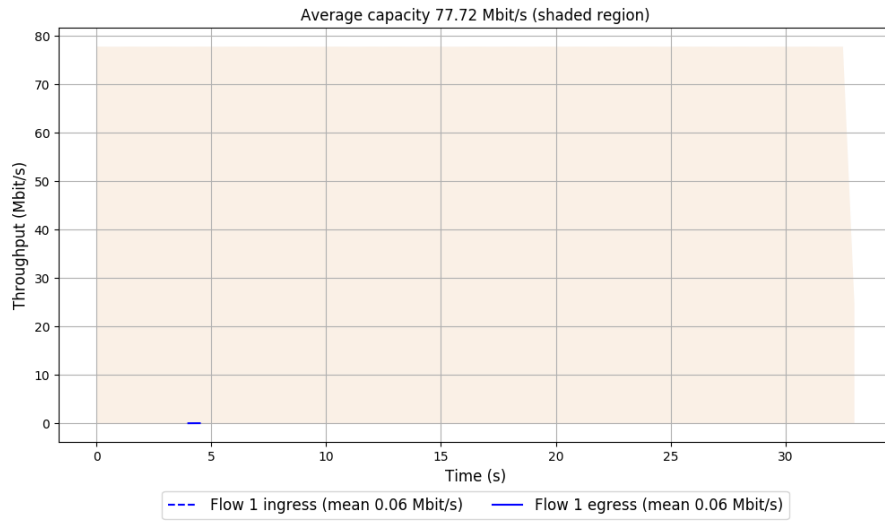


Run 1: Statistics of QUIC Cubic

Start at: 2018-05-30 07:23:56

End at: 2018-05-30 07:24:26

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-05-30 07:34:04

End at: 2018-05-30 07:34:34

Below is generated by plot.py at 2018-05-30 09:19:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 25.04 Mbit/s (32.2% utilization)

95th percentile per-packet one-way delay: 53.594 ms

Loss rate: 0.85%

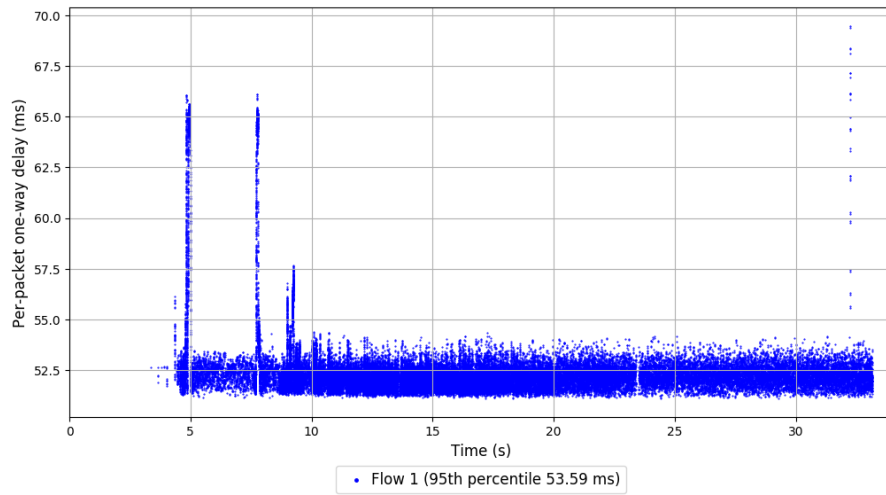
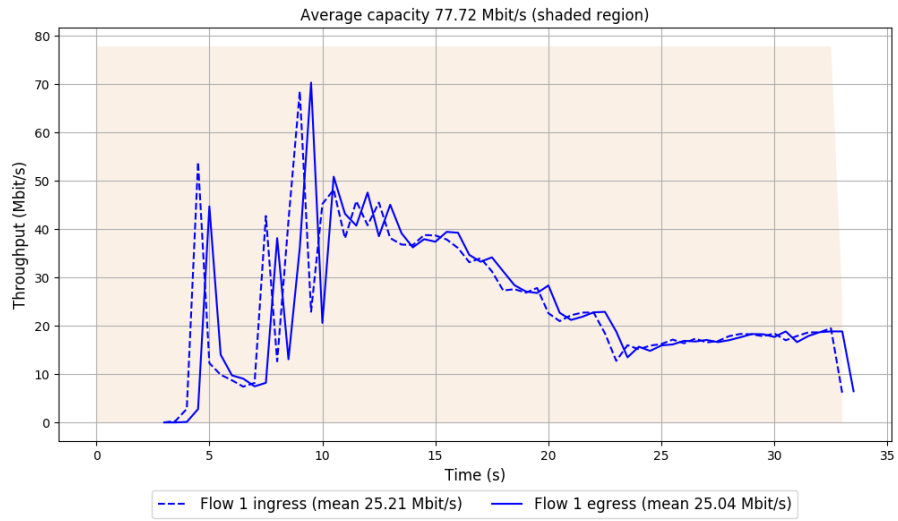
-- Flow 1:

Average throughput: 25.04 Mbit/s

95th percentile per-packet one-way delay: 53.594 ms

Loss rate: 0.85%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-05-30 07:44:12

End at: 2018-05-30 07:44:42

Below is generated by plot.py at 2018-05-30 09:19:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 18.16 Mbit/s (23.4% utilization)

95th percentile per-packet one-way delay: 53.115 ms

Loss rate: 0.20%

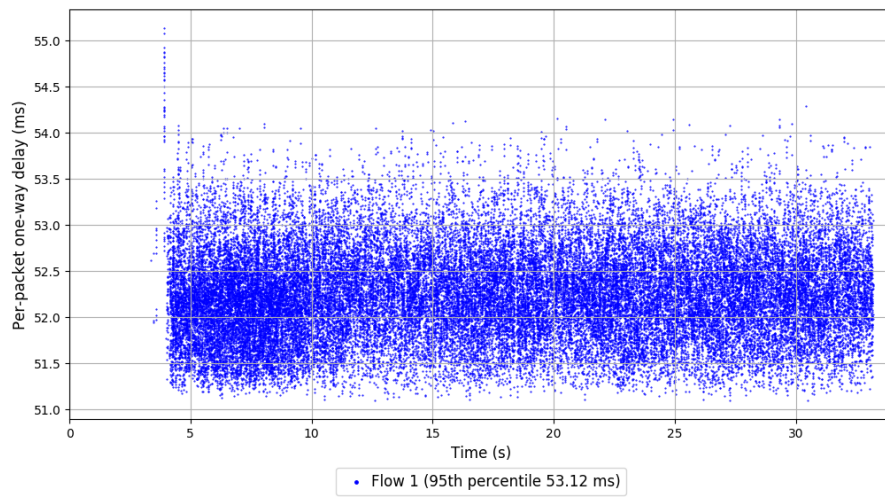
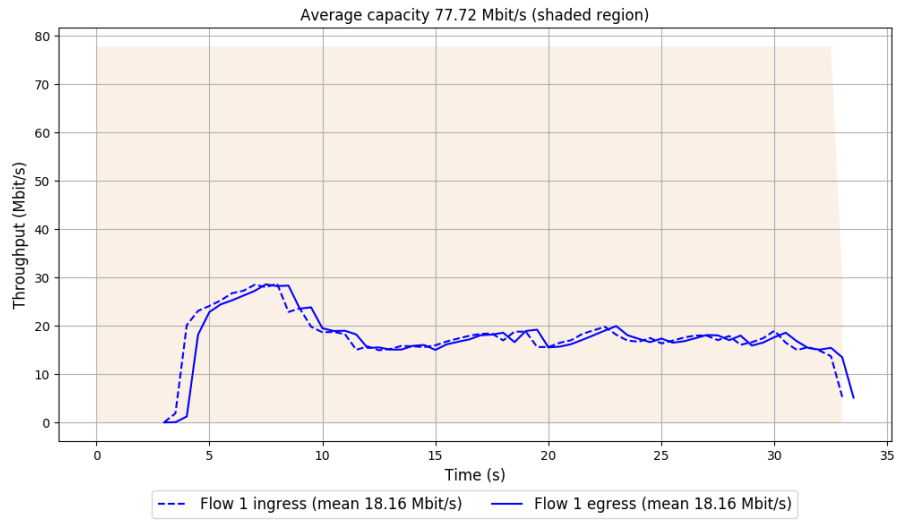
-- Flow 1:

Average throughput: 18.16 Mbit/s

95th percentile per-packet one-way delay: 53.115 ms

Loss rate: 0.20%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-05-30 07:54:20

End at: 2018-05-30 07:54:50

Below is generated by plot.py at 2018-05-30 09:19:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 21.48 Mbit/s (27.6% utilization)

95th percentile per-packet one-way delay: 58.005 ms

Loss rate: 1.32%

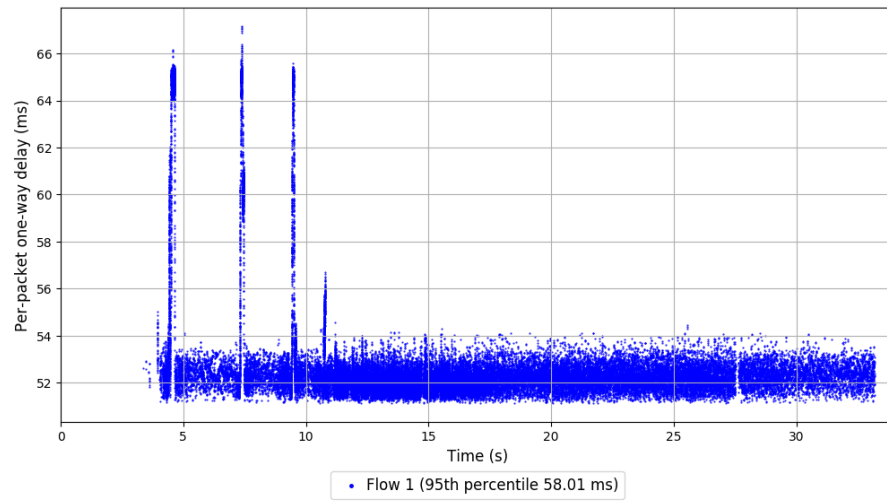
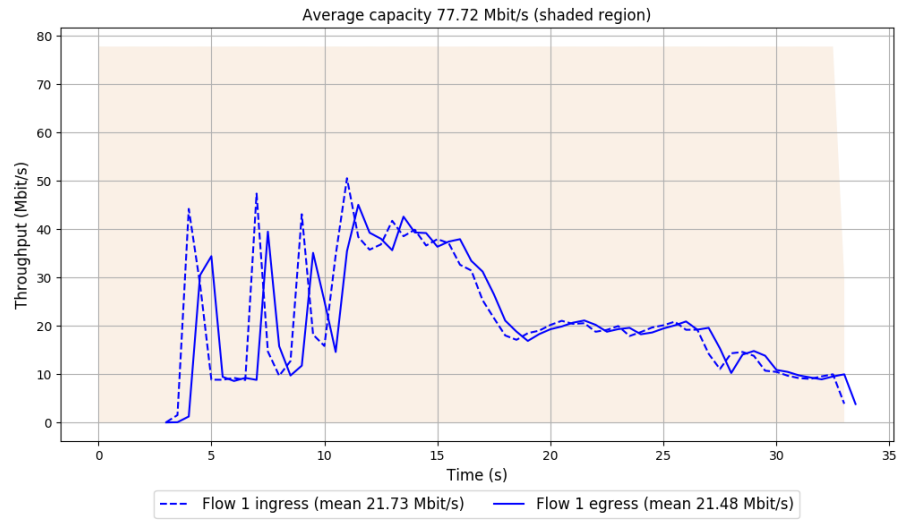
-- Flow 1:

Average throughput: 21.48 Mbit/s

95th percentile per-packet one-way delay: 58.005 ms

Loss rate: 1.32%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-05-30 08:04:28

End at: 2018-05-30 08:04:58

Below is generated by plot.py at 2018-05-30 09:19:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 25.92 Mbit/s (33.4% utilization)

95th percentile per-packet one-way delay: 53.537 ms

Loss rate: 1.06%

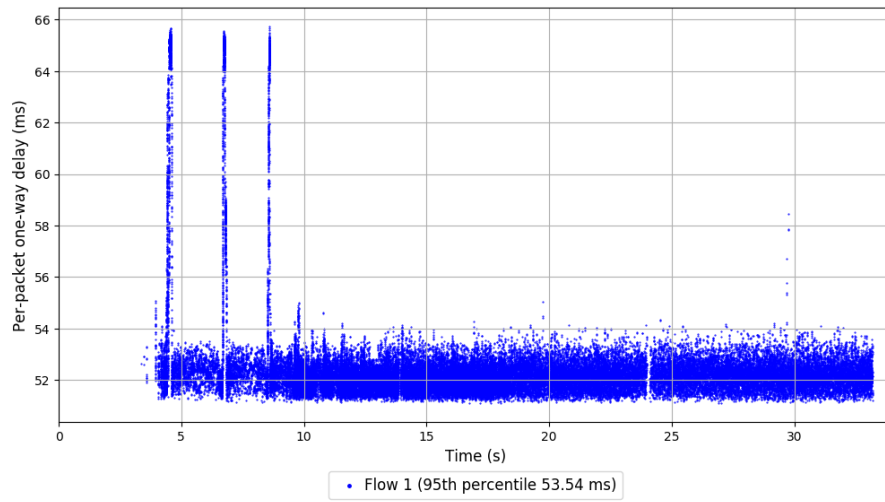
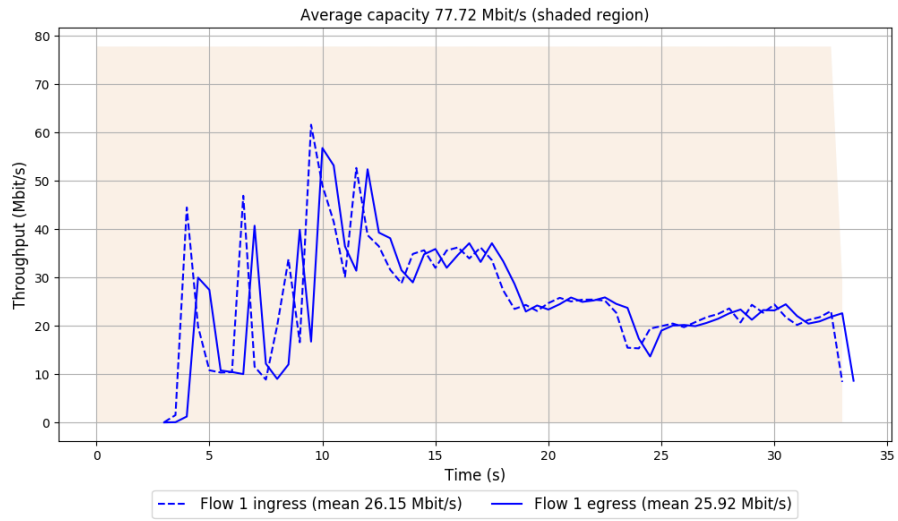
-- Flow 1:

Average throughput: 25.92 Mbit/s

95th percentile per-packet one-way delay: 53.537 ms

Loss rate: 1.06%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-05-30 08:14:40

End at: 2018-05-30 08:15:10

Below is generated by plot.py at 2018-05-30 09:19:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 19.76 Mbit/s (25.4% utilization)

95th percentile per-packet one-way delay: 57.308 ms

Loss rate: 1.29%

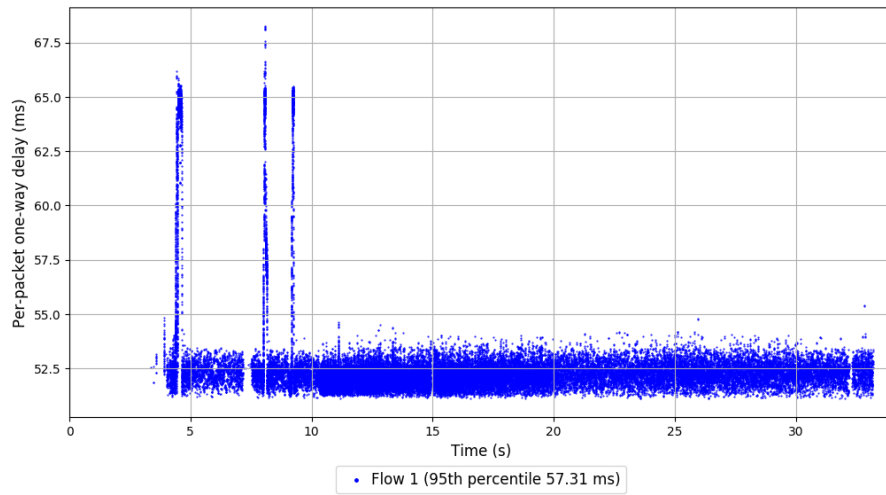
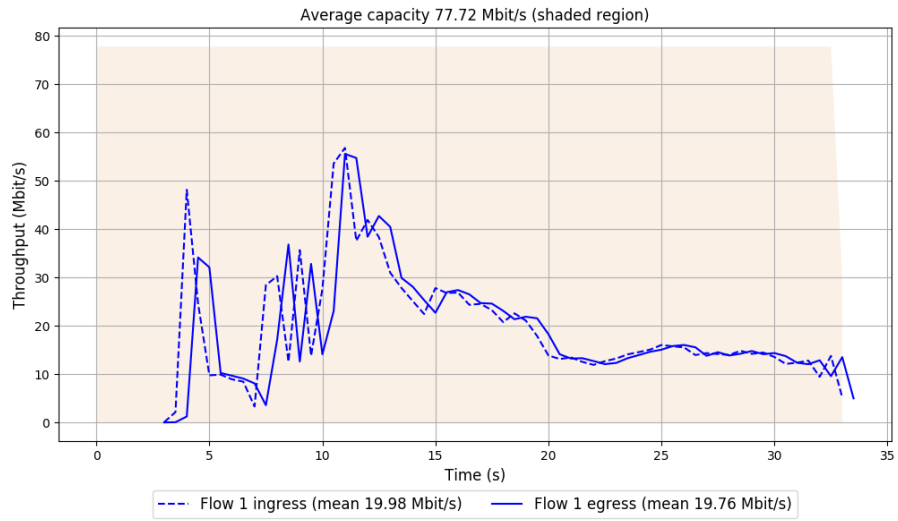
-- Flow 1:

Average throughput: 19.76 Mbit/s

95th percentile per-packet one-way delay: 57.308 ms

Loss rate: 1.29%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-05-30 08:24:49

End at: 2018-05-30 08:25:19

Below is generated by plot.py at 2018-05-30 09:19:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 20.48 Mbit/s (26.4% utilization)

95th percentile per-packet one-way delay: 53.112 ms

Loss rate: 0.27%

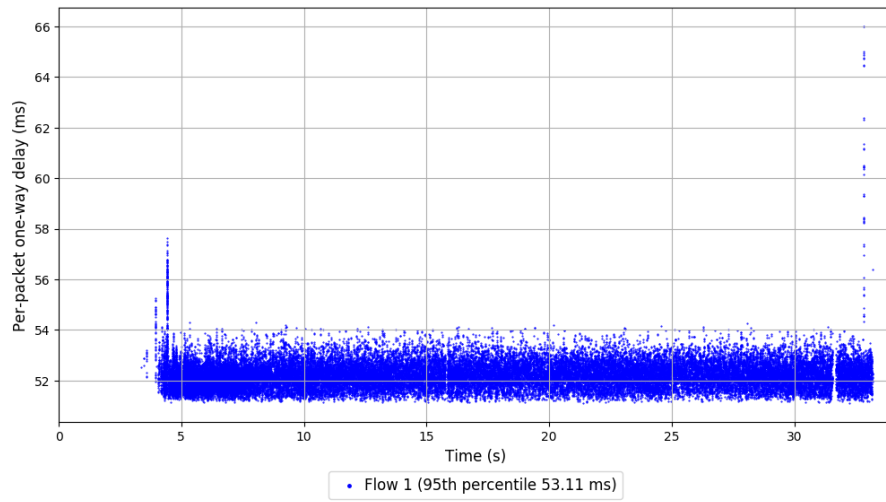
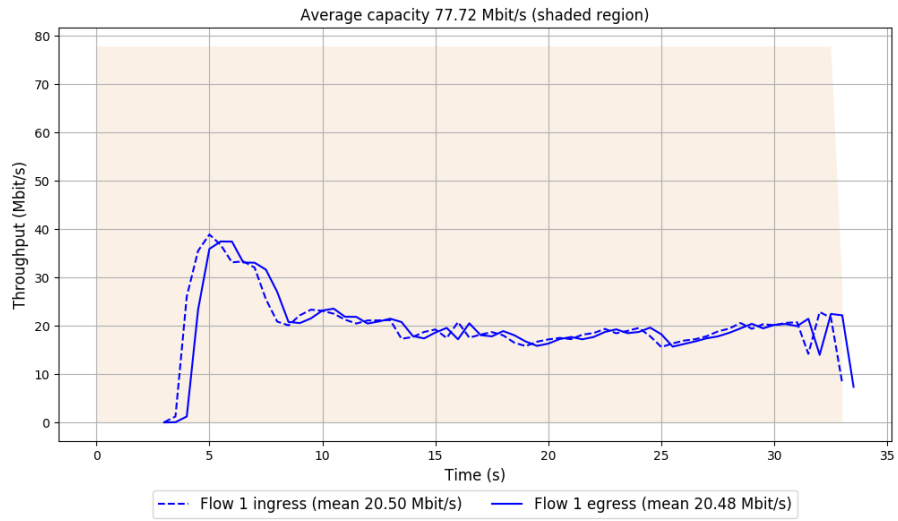
-- Flow 1:

Average throughput: 20.48 Mbit/s

95th percentile per-packet one-way delay: 53.112 ms

Loss rate: 0.27%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-05-30 08:35:02

End at: 2018-05-30 08:35:32

Below is generated by plot.py at 2018-05-30 09:19:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 22.32 Mbit/s (28.7% utilization)

95th percentile per-packet one-way delay: 53.441 ms

Loss rate: 0.72%

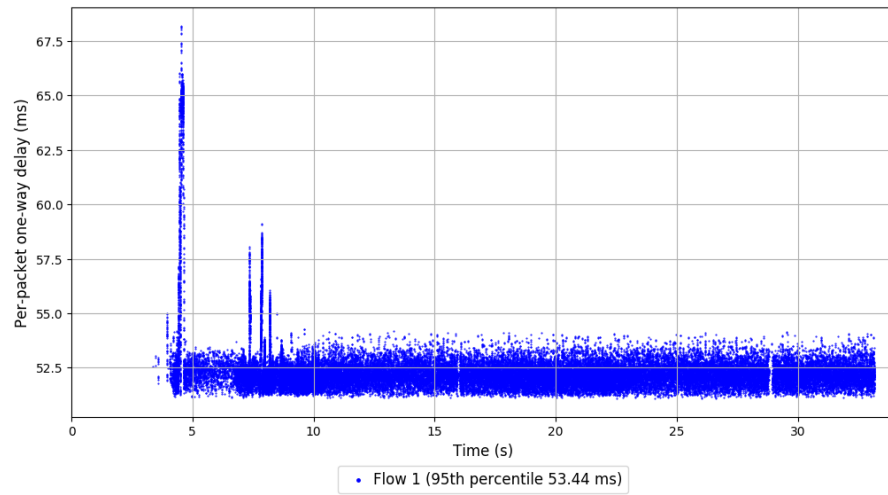
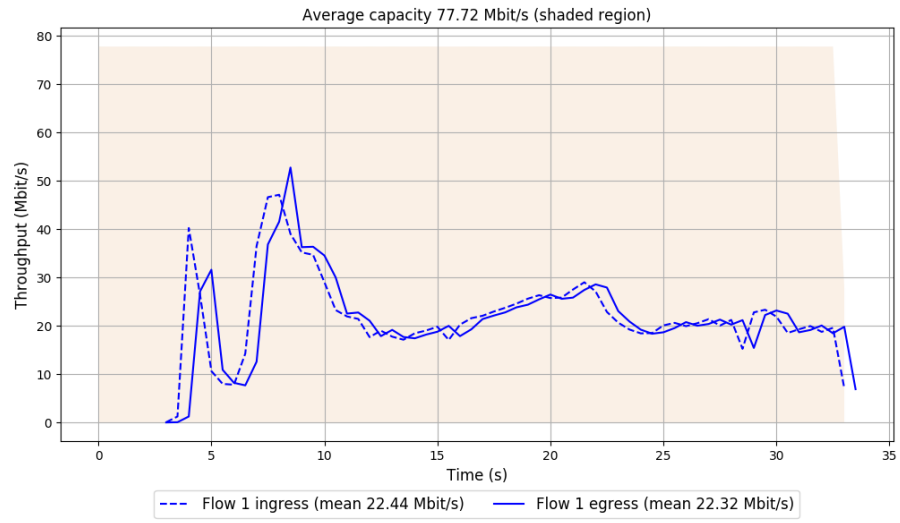
-- Flow 1:

Average throughput: 22.32 Mbit/s

95th percentile per-packet one-way delay: 53.441 ms

Loss rate: 0.72%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-05-30 08:45:09

End at: 2018-05-30 08:45:39

Below is generated by plot.py at 2018-05-30 09:19:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 21.32 Mbit/s (27.4% utilization)

95th percentile per-packet one-way delay: 53.737 ms

Loss rate: 0.63%

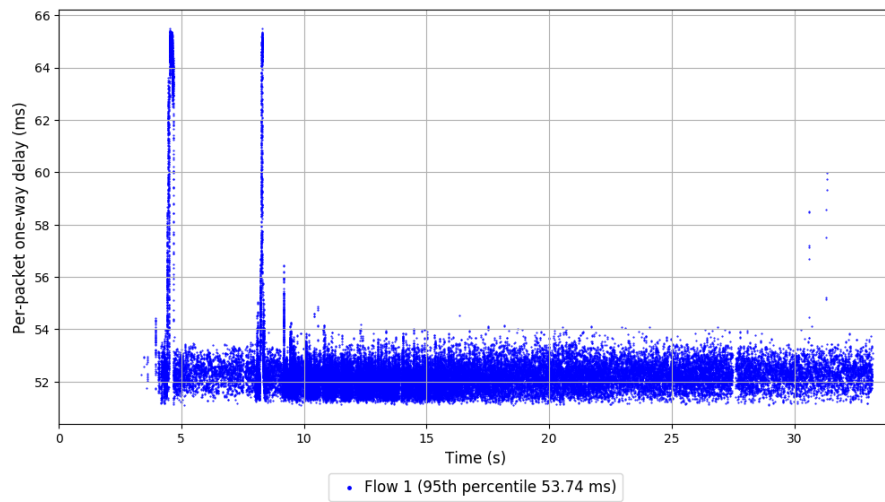
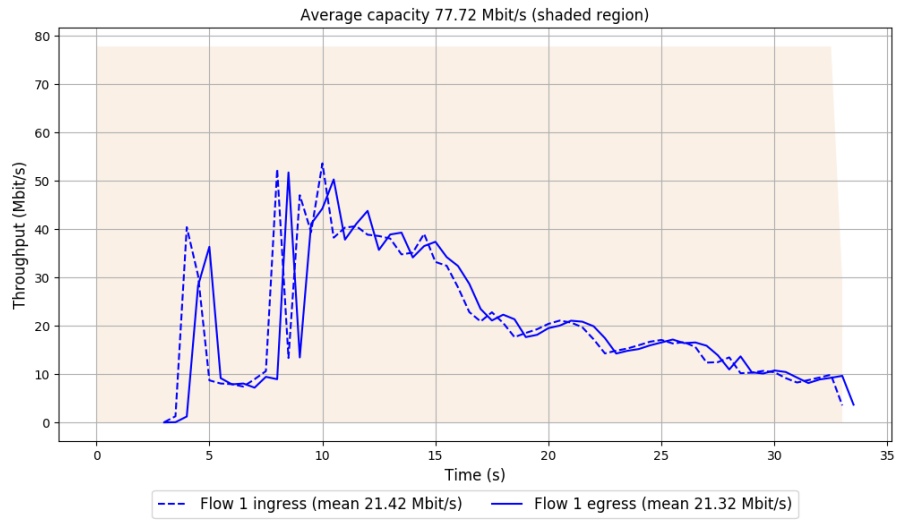
-- Flow 1:

Average throughput: 21.32 Mbit/s

95th percentile per-packet one-way delay: 53.737 ms

Loss rate: 0.63%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-05-30 08:55:17

End at: 2018-05-30 08:55:47

Below is generated by plot.py at 2018-05-30 09:19:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 20.52 Mbit/s (26.4% utilization)

95th percentile per-packet one-way delay: 55.372 ms

Loss rate: 1.10%

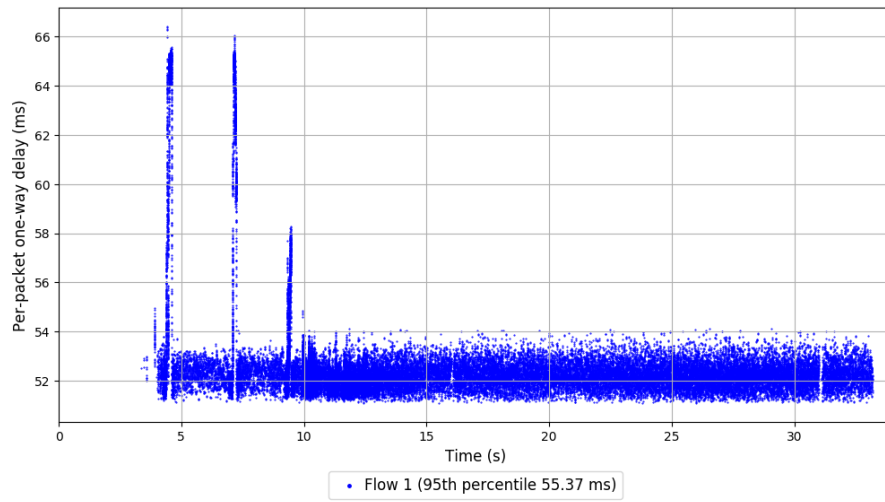
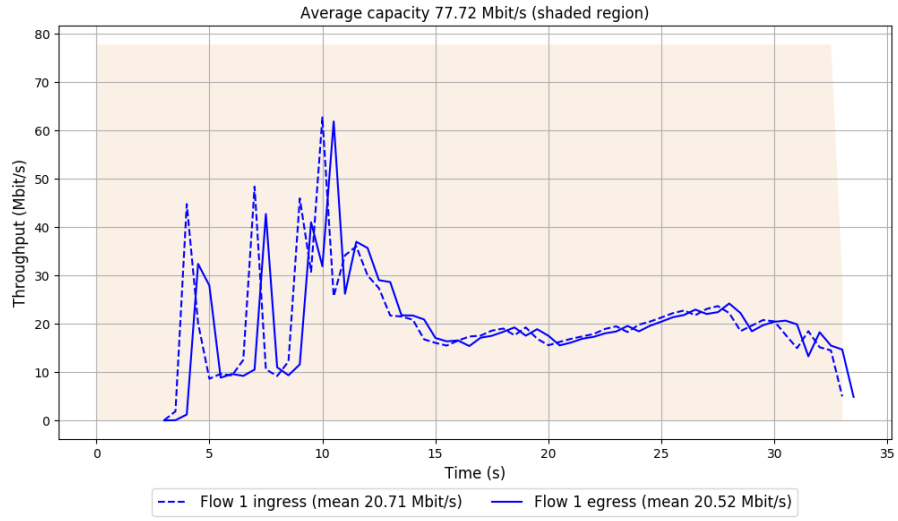
-- Flow 1:

Average throughput: 20.52 Mbit/s

95th percentile per-packet one-way delay: 55.372 ms

Loss rate: 1.10%

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2018-05-30 07:17:02

End at: 2018-05-30 07:17:32

Below is generated by plot.py at 2018-05-30 09:19:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 0.21 Mbit/s (0.3% utilization)

95th percentile per-packet one-way delay: 53.476 ms

Loss rate: 0.13%

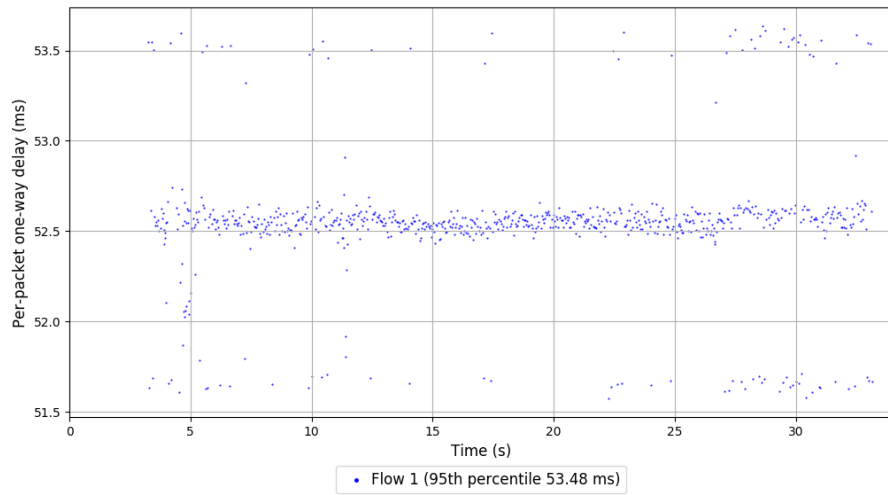
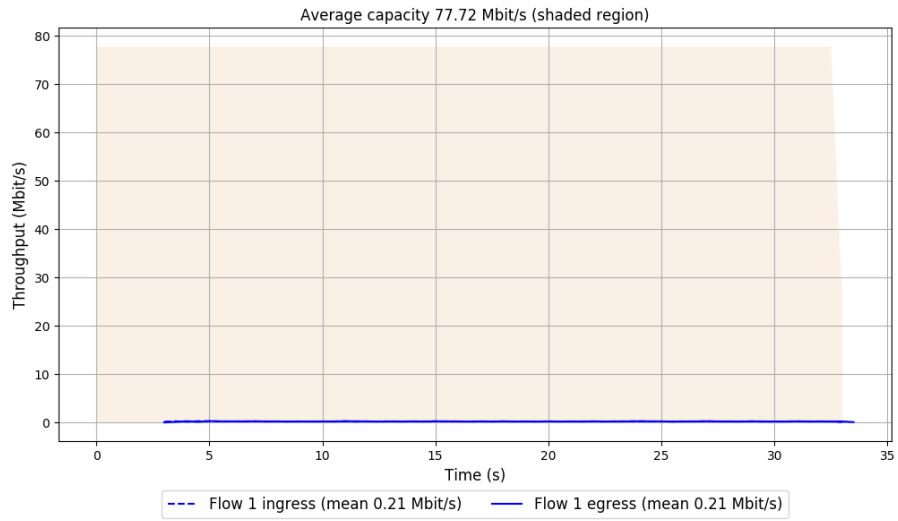
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.476 ms

Loss rate: 0.13%

Run 1: Report of SCReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2018-05-30 07:27:05

End at: 2018-05-30 07:27:35

Below is generated by plot.py at 2018-05-30 09:19:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 0.21 Mbit/s (0.3% utilization)

95th percentile per-packet one-way delay: 52.683 ms

Loss rate: 0.26%

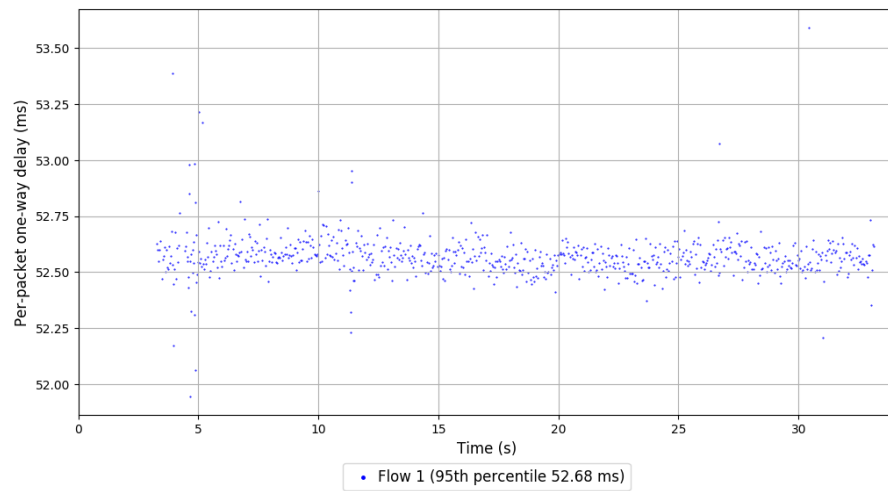
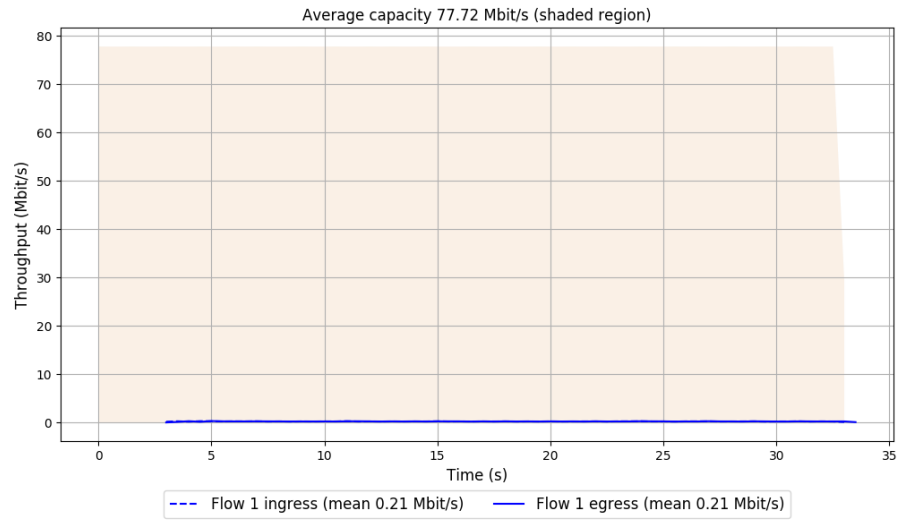
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 52.683 ms

Loss rate: 0.26%

Run 2: Report of SCReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-05-30 07:37:15

End at: 2018-05-30 07:37:45

Below is generated by plot.py at 2018-05-30 09:19:48

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 0.18 Mbit/s (0.2% utilization)

95th percentile per-packet one-way delay: 52.681 ms

Loss rate: 0.24%

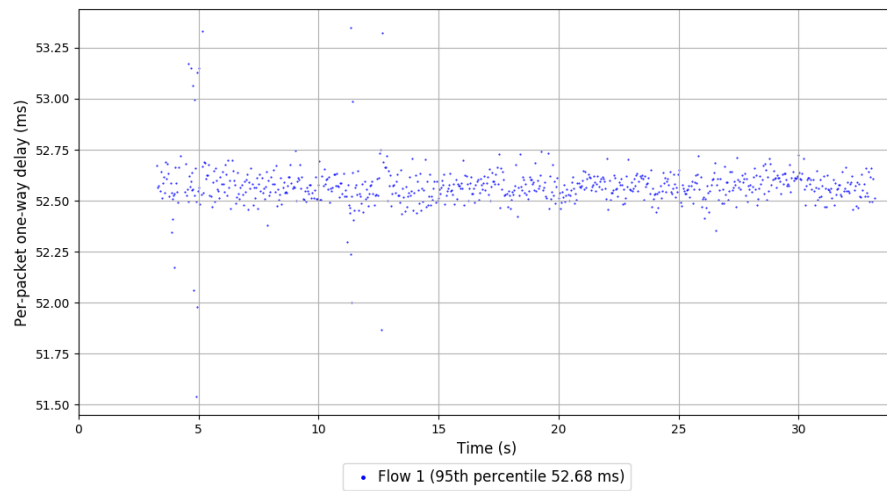
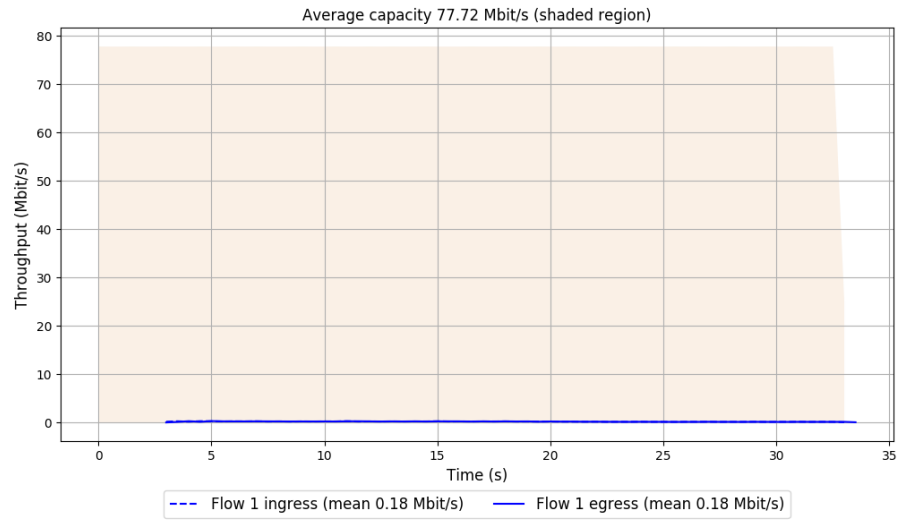
-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 52.681 ms

Loss rate: 0.24%

Run 3: Report of SCReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-05-30 07:47:22

End at: 2018-05-30 07:47:52

Below is generated by plot.py at 2018-05-30 09:19:49

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 0.19 Mbit/s (0.2% utilization)

95th percentile per-packet one-way delay: 52.693 ms

Loss rate: 0.32%

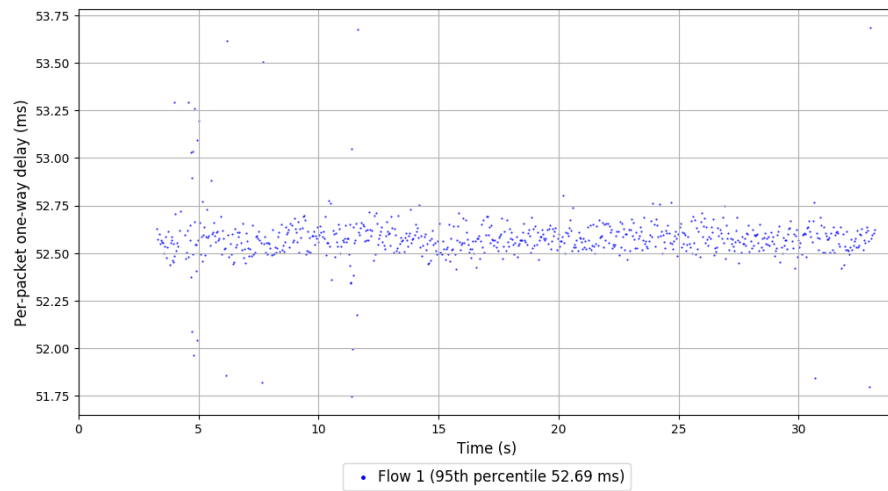
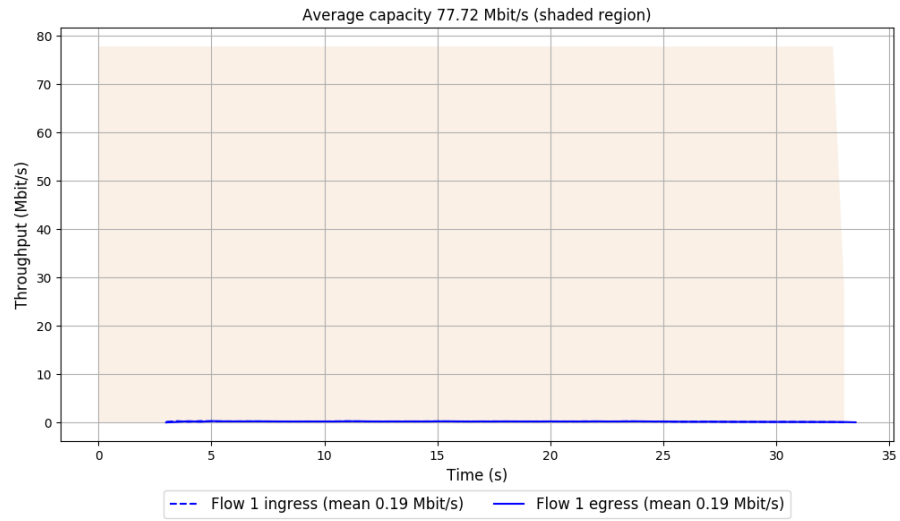
-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 52.693 ms

Loss rate: 0.32%

Run 4: Report of SCReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-05-30 07:57:30

End at: 2018-05-30 07:58:00

Below is generated by plot.py at 2018-05-30 09:19:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 0.21 Mbit/s (0.3% utilization)

95th percentile per-packet one-way delay: 52.683 ms

Loss rate: 0.26%

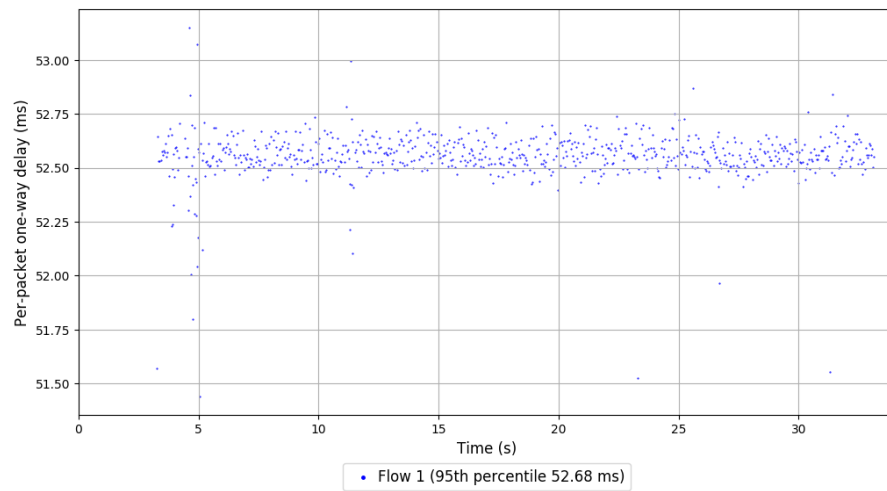
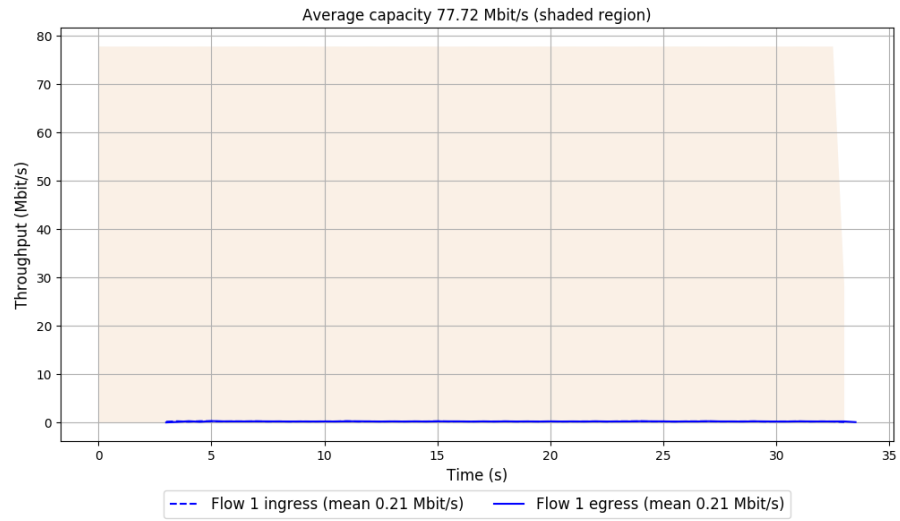
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 52.683 ms

Loss rate: 0.26%

Run 5: Report of SCReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-05-30 08:07:39

End at: 2018-05-30 08:08:09

Below is generated by plot.py at 2018-05-30 09:19:58

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 0.21 Mbit/s (0.3% utilization)

95th percentile per-packet one-way delay: 52.701 ms

Loss rate: 0.13%

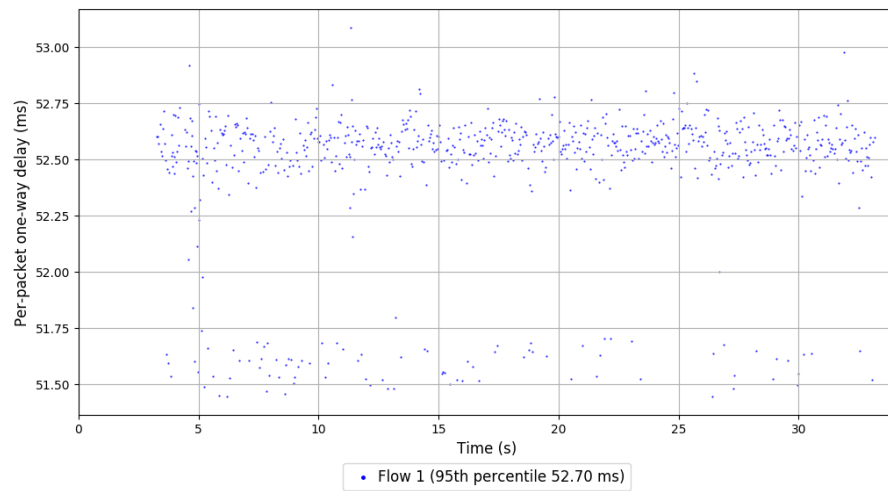
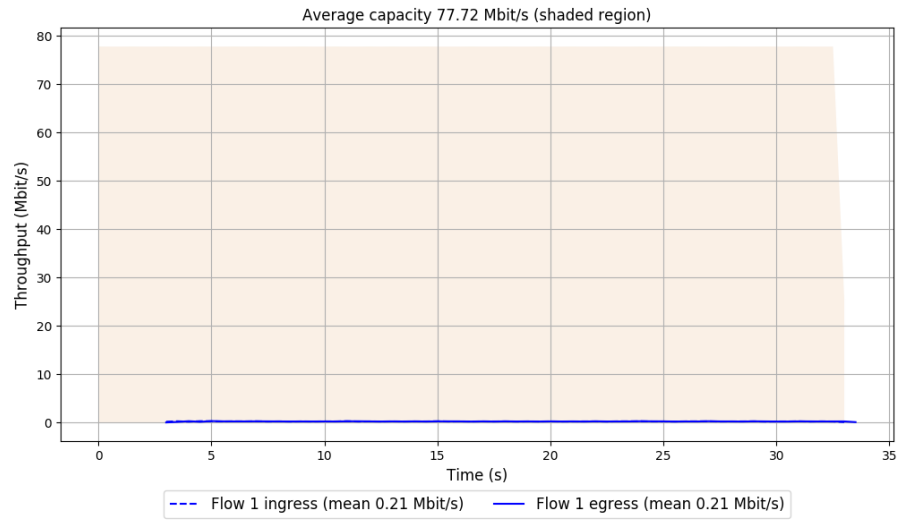
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 52.701 ms

Loss rate: 0.13%

Run 6: Report of SCReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-05-30 08:17:50

End at: 2018-05-30 08:18:20

Below is generated by plot.py at 2018-05-30 09:20:01

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 0.21 Mbit/s (0.3% utilization)

95th percentile per-packet one-way delay: 52.726 ms

Loss rate: 0.13%

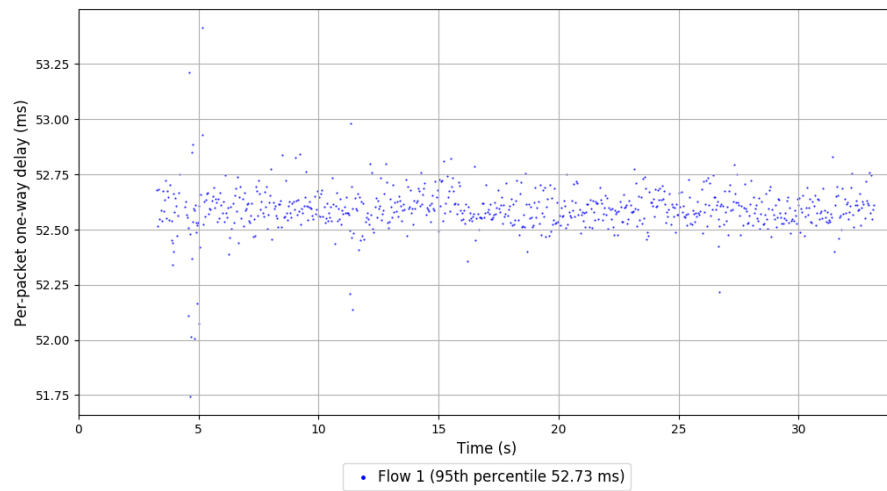
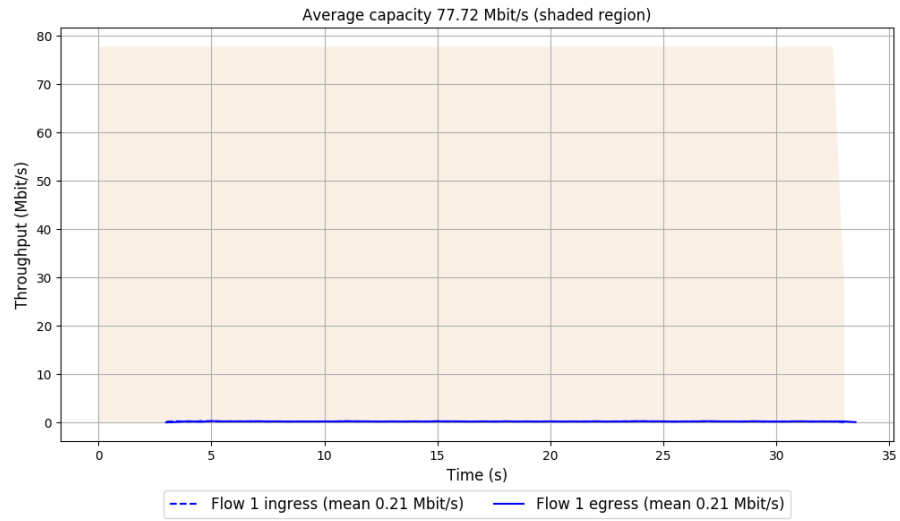
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 52.726 ms

Loss rate: 0.13%

Run 7: Report of SCReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-05-30 08:28:00

End at: 2018-05-30 08:28:30

Below is generated by plot.py at 2018-05-30 09:20:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 0.21 Mbit/s (0.3% utilization)

95th percentile per-packet one-way delay: 52.712 ms

Loss rate: 0.26%

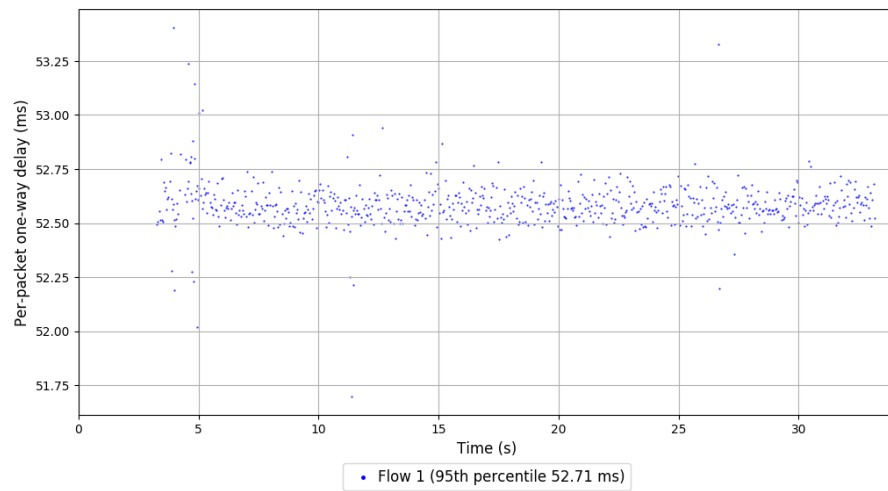
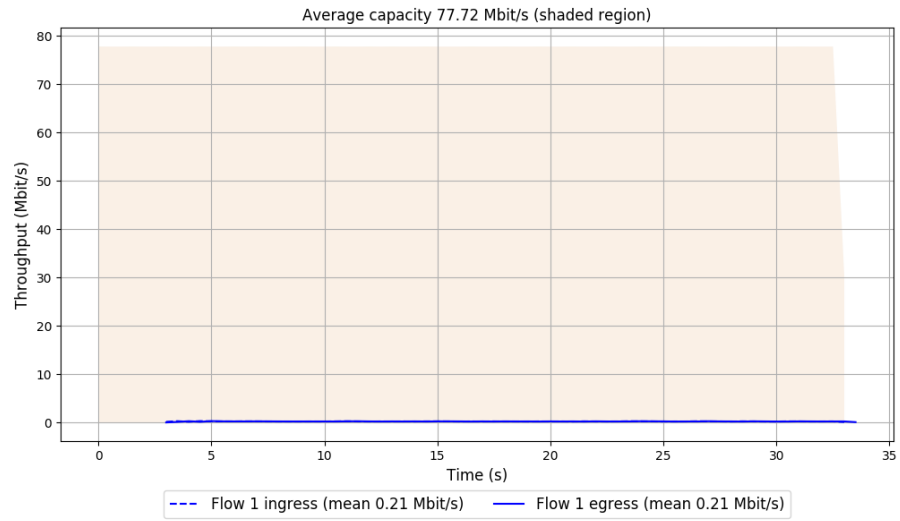
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 52.712 ms

Loss rate: 0.26%

Run 8: Report of SCReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-05-30 08:38:12

End at: 2018-05-30 08:38:42

Below is generated by plot.py at 2018-05-30 09:20:06

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 0.21 Mbit/s (0.3% utilization)

95th percentile per-packet one-way delay: 52.656 ms

Loss rate: 0.13%

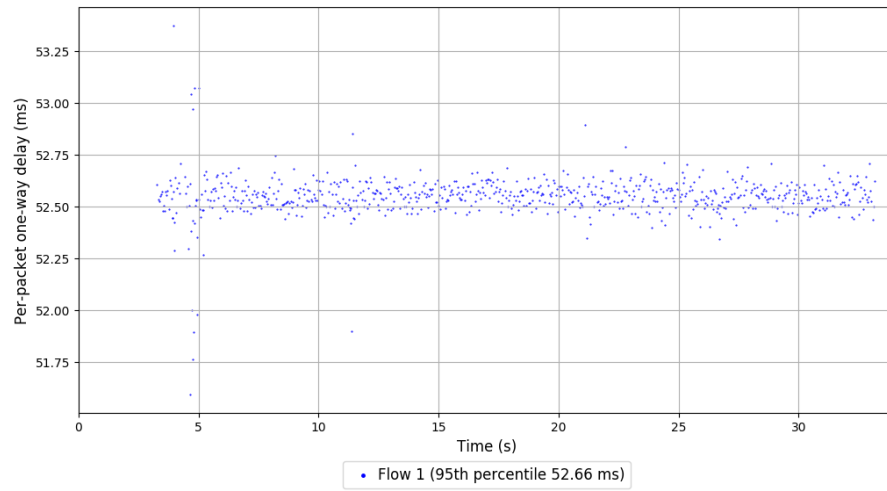
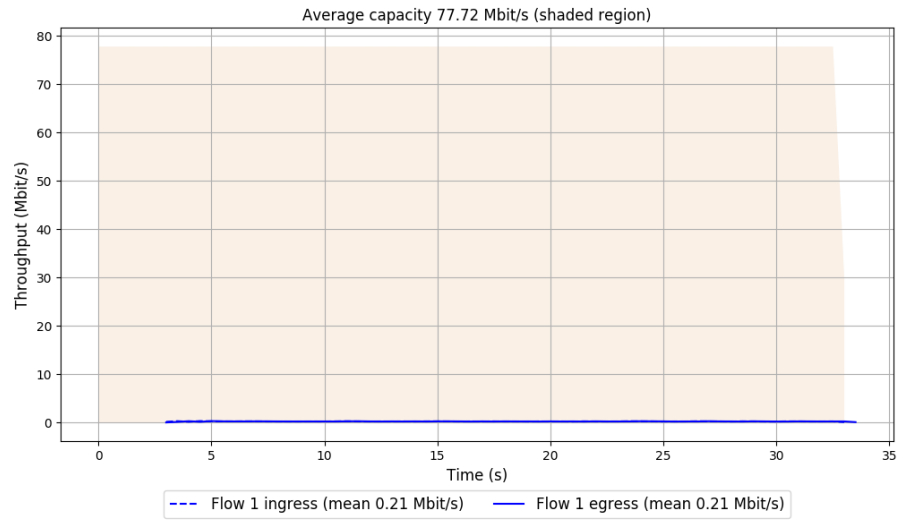
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 52.656 ms

Loss rate: 0.13%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-05-30 08:48:19

End at: 2018-05-30 08:48:49

Below is generated by plot.py at 2018-05-30 09:20:11

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 0.21 Mbit/s (0.3% utilization)

95th percentile per-packet one-way delay: 52.648 ms

Loss rate: 0.26%

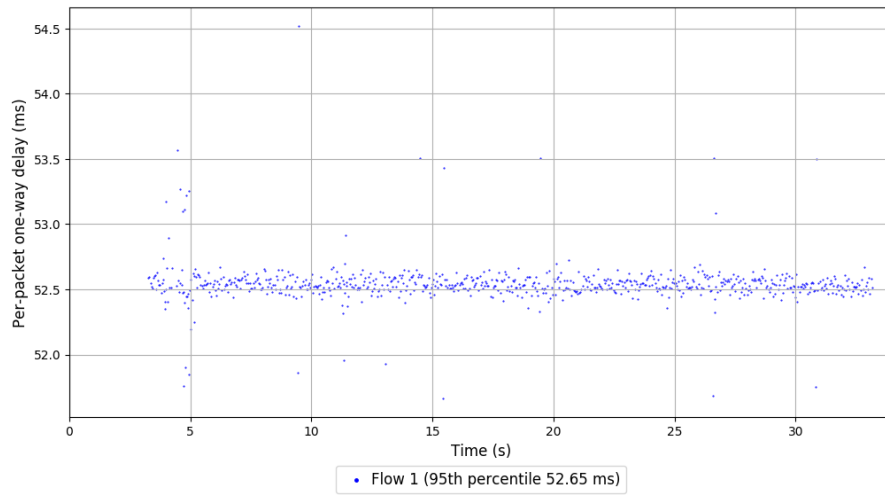
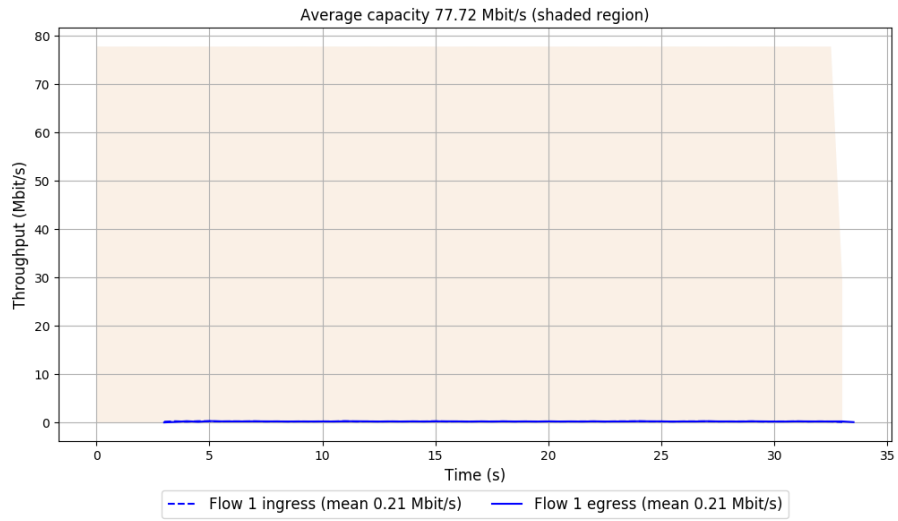
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 52.648 ms

Loss rate: 0.26%

Run 10: Report of SCReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2018-05-30 07:16:26

End at: 2018-05-30 07:16:56

Below is generated by plot.py at 2018-05-30 09:20:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 7.08 Mbit/s (9.1% utilization)

95th percentile per-packet one-way delay: 60.638 ms

Loss rate: 0.34%

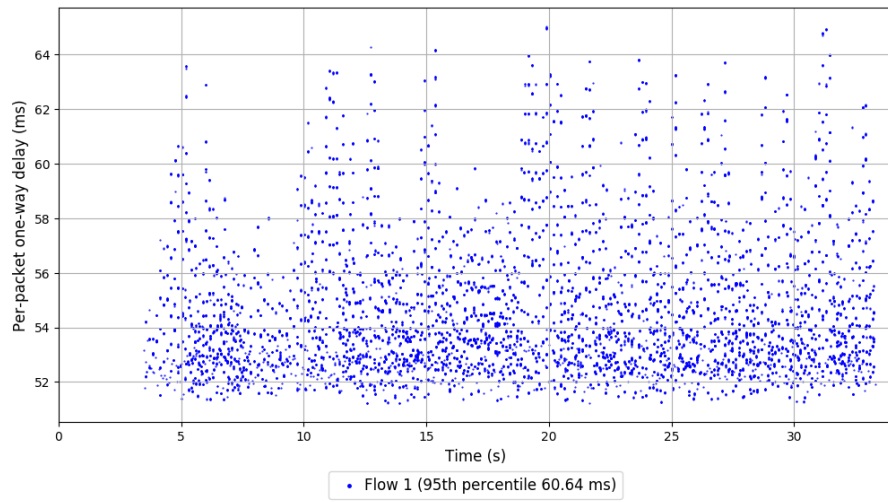
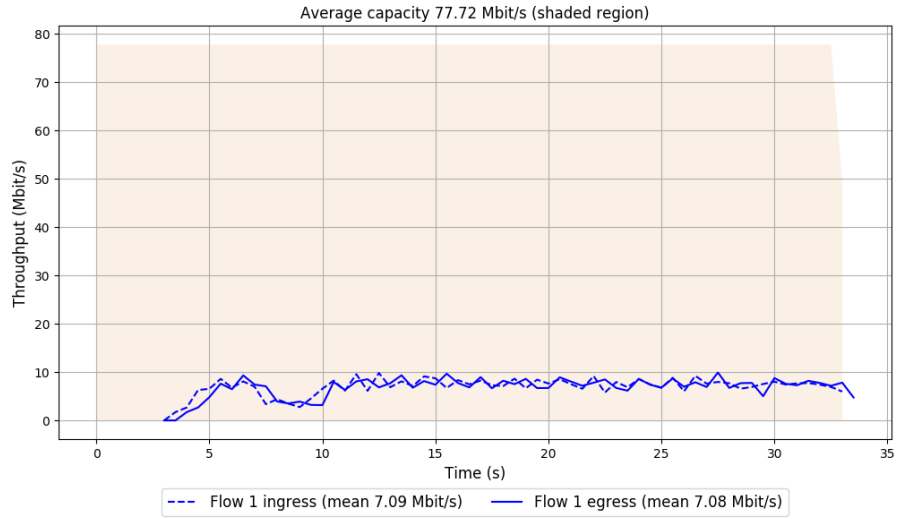
-- Flow 1:

Average throughput: 7.08 Mbit/s

95th percentile per-packet one-way delay: 60.638 ms

Loss rate: 0.34%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-05-30 07:26:29

End at: 2018-05-30 07:26:59

Below is generated by plot.py at 2018-05-30 09:20:19

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 7.55 Mbit/s (9.7% utilization)

95th percentile per-packet one-way delay: 59.149 ms

Loss rate: 0.33%

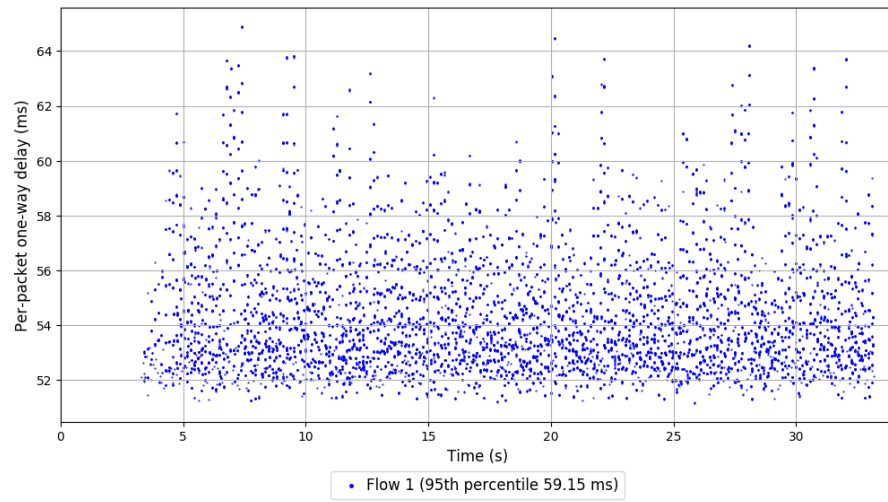
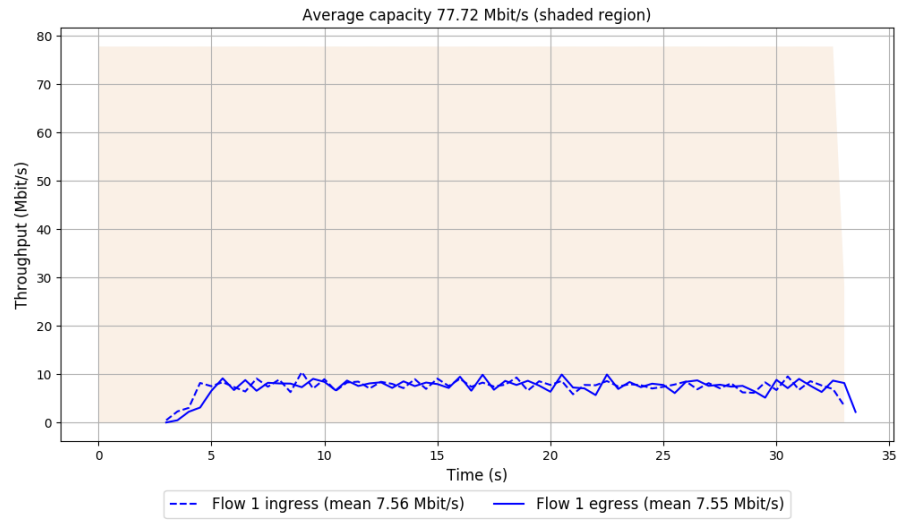
-- Flow 1:

Average throughput: 7.55 Mbit/s

95th percentile per-packet one-way delay: 59.149 ms

Loss rate: 0.33%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-05-30 07:36:39

End at: 2018-05-30 07:37:09

Below is generated by plot.py at 2018-05-30 09:20:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 7.44 Mbit/s (9.6% utilization)

95th percentile per-packet one-way delay: 58.865 ms

Loss rate: 0.20%

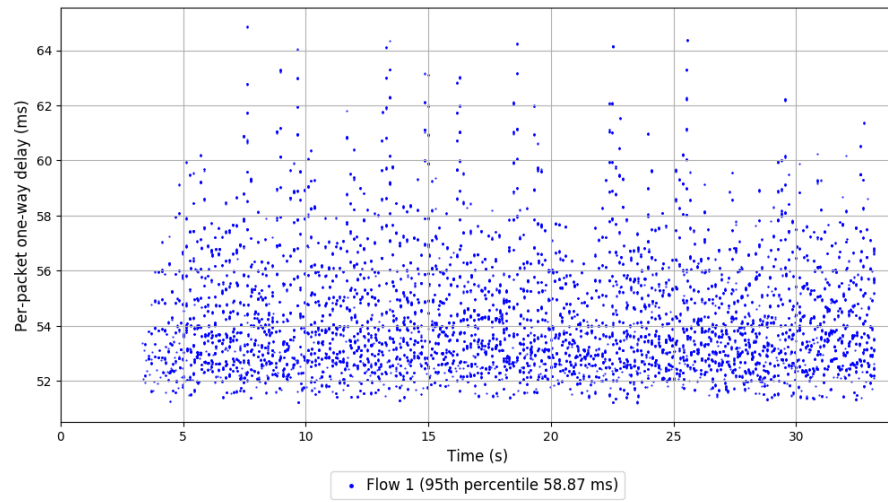
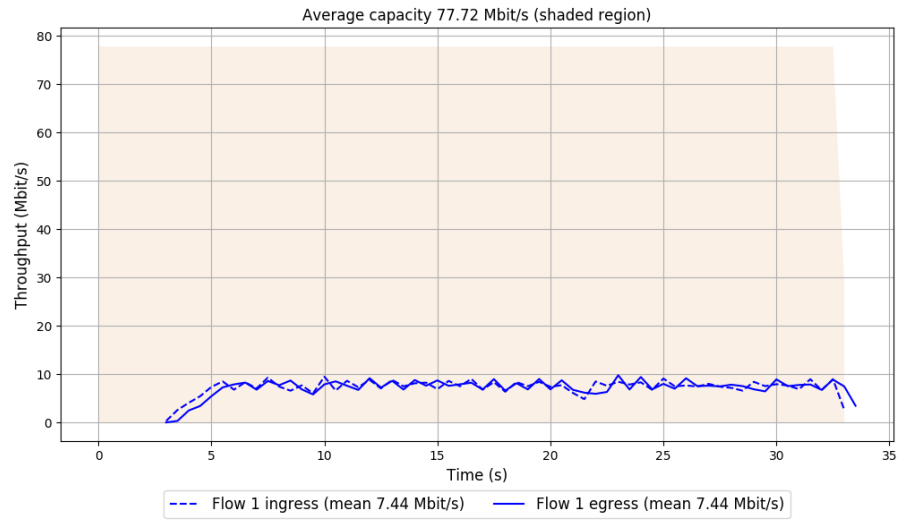
-- Flow 1:

Average throughput: 7.44 Mbit/s

95th percentile per-packet one-way delay: 58.865 ms

Loss rate: 0.20%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-05-30 07:46:46

End at: 2018-05-30 07:47:16

Below is generated by plot.py at 2018-05-30 09:20:28

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 6.68 Mbit/s (8.6% utilization)

95th percentile per-packet one-way delay: 59.485 ms

Loss rate: 0.09%

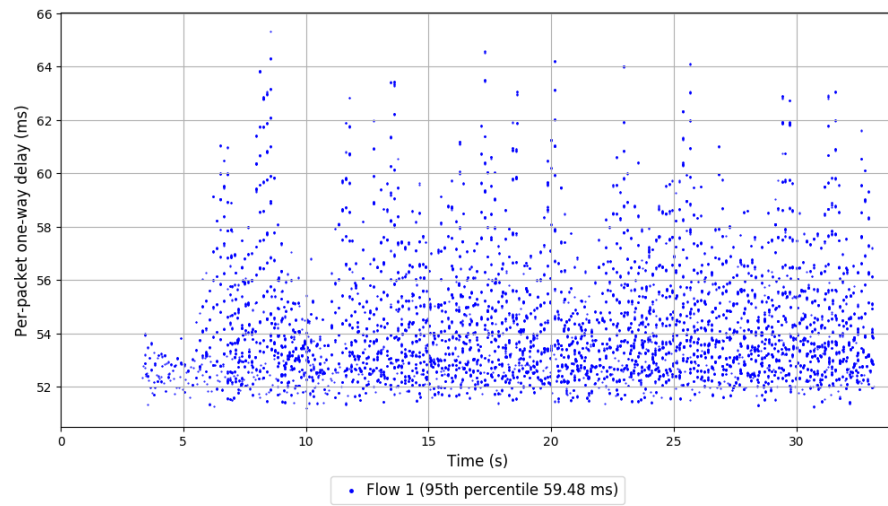
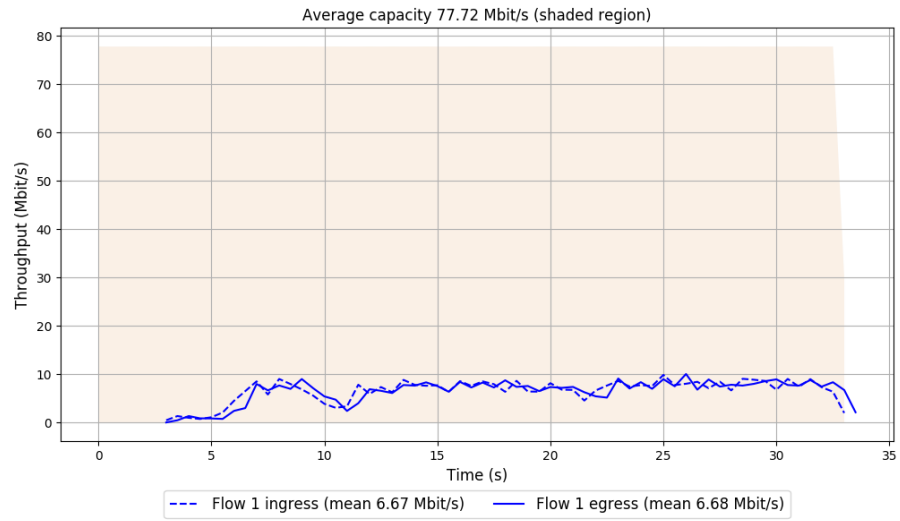
-- Flow 1:

Average throughput: 6.68 Mbit/s

95th percentile per-packet one-way delay: 59.485 ms

Loss rate: 0.09%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-05-30 07:56:54

End at: 2018-05-30 07:57:24

Below is generated by plot.py at 2018-05-30 09:20:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 7.43 Mbit/s (9.6% utilization)

95th percentile per-packet one-way delay: 59.556 ms

Loss rate: 0.33%

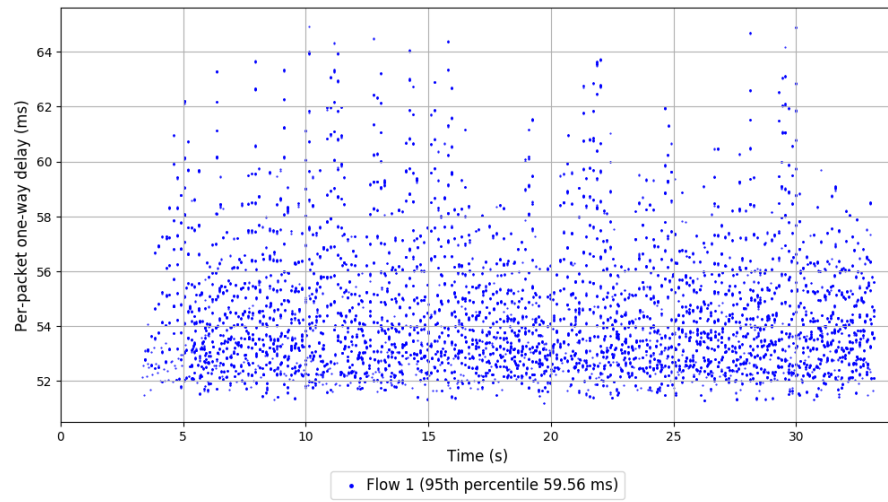
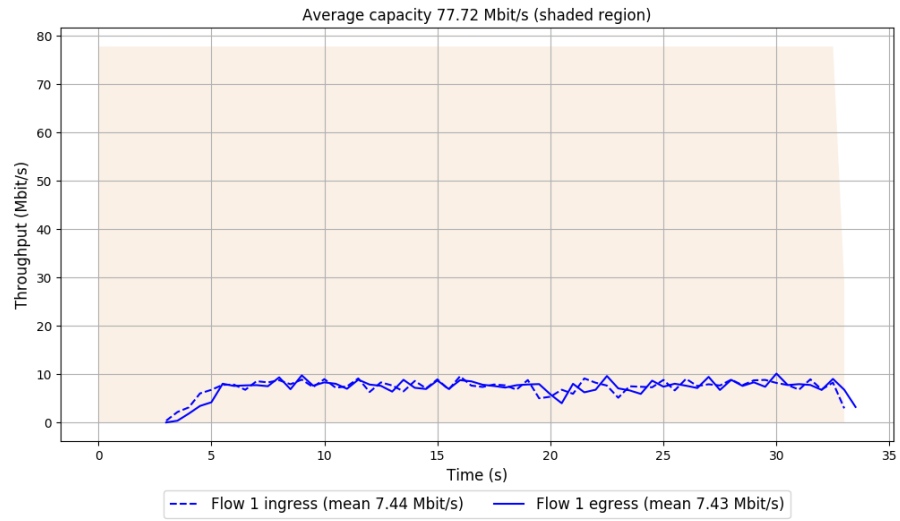
-- Flow 1:

Average throughput: 7.43 Mbit/s

95th percentile per-packet one-way delay: 59.556 ms

Loss rate: 0.33%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-05-30 08:07:03

End at: 2018-05-30 08:07:33

Below is generated by plot.py at 2018-05-30 09:20:34

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 6.99 Mbit/s (9.0% utilization)

95th percentile per-packet one-way delay: 59.304 ms

Loss rate: 0.46%

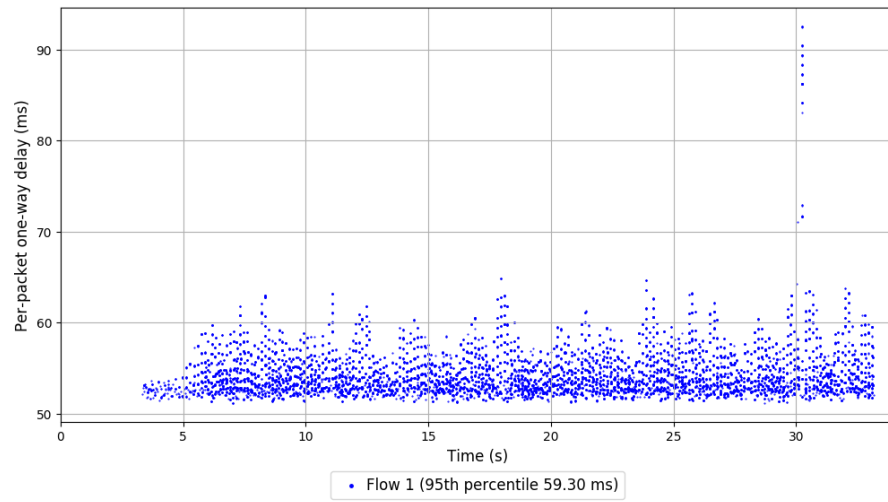
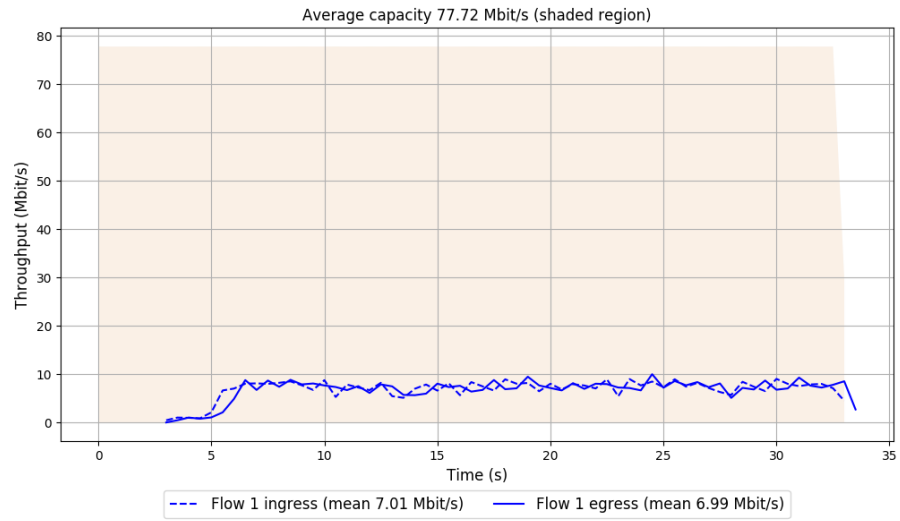
-- Flow 1:

Average throughput: 6.99 Mbit/s

95th percentile per-packet one-way delay: 59.304 ms

Loss rate: 0.46%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-05-30 08:17:14

End at: 2018-05-30 08:17:44

Below is generated by plot.py at 2018-05-30 09:20:38

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 7.32 Mbit/s (9.4% utilization)

95th percentile per-packet one-way delay: 59.521 ms

Loss rate: 0.45%

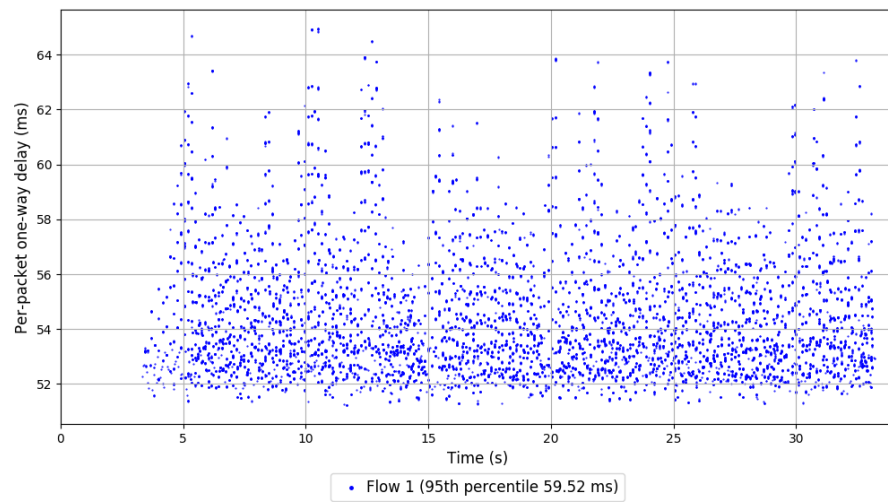
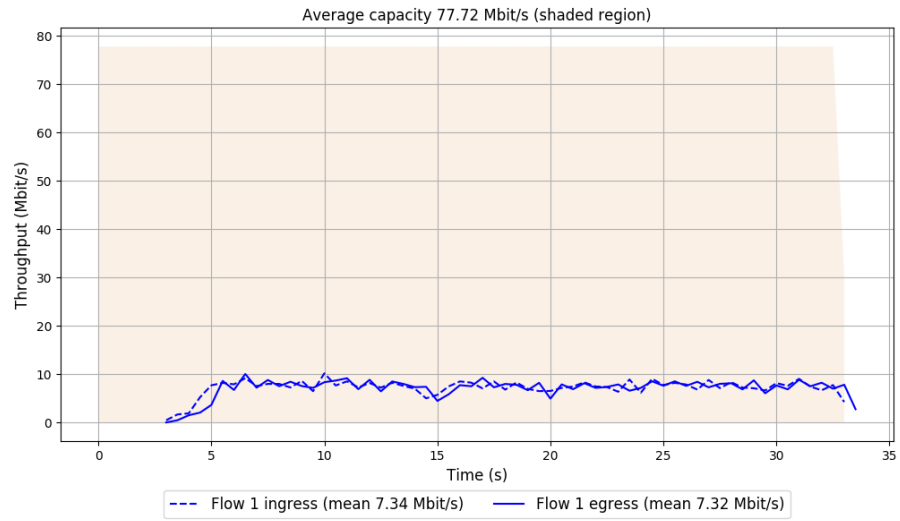
-- Flow 1:

Average throughput: 7.32 Mbit/s

95th percentile per-packet one-way delay: 59.521 ms

Loss rate: 0.45%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-05-30 08:27:24

End at: 2018-05-30 08:27:54

Below is generated by plot.py at 2018-05-30 09:20:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 7.17 Mbit/s (9.2% utilization)

95th percentile per-packet one-way delay: 60.579 ms

Loss rate: 0.08%

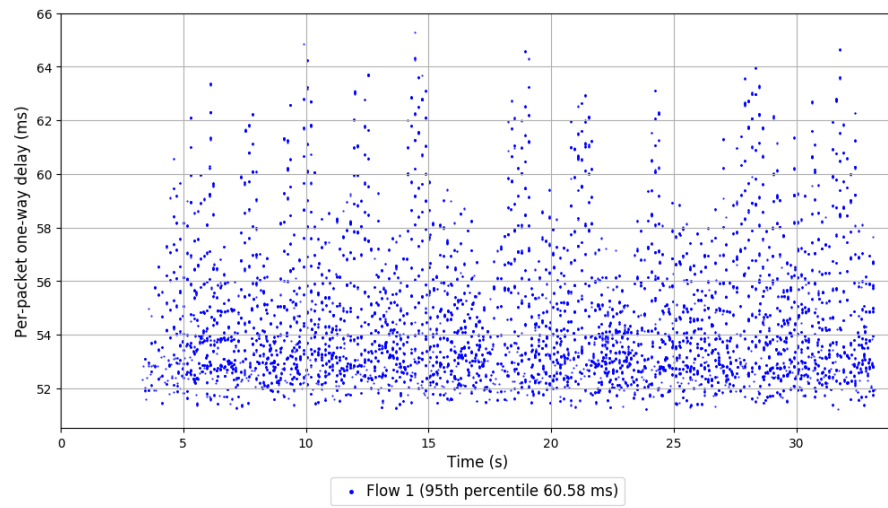
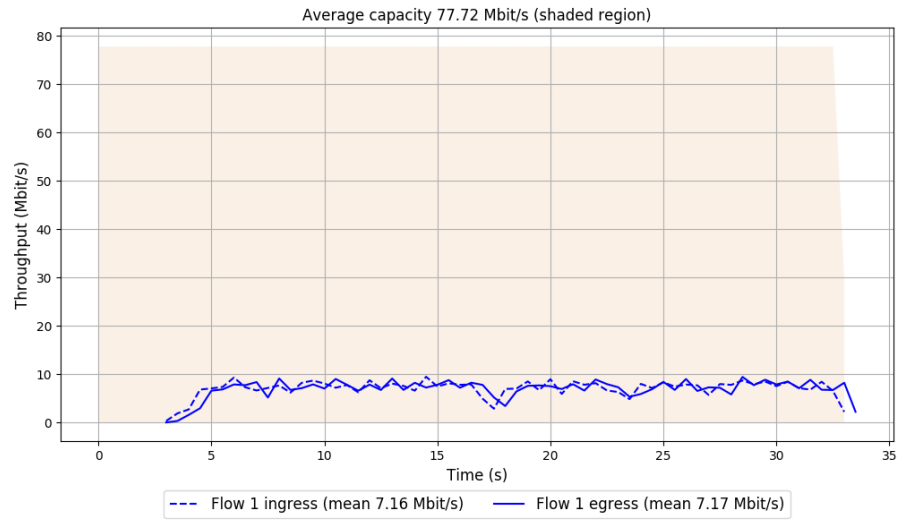
-- Flow 1:

Average throughput: 7.17 Mbit/s

95th percentile per-packet one-way delay: 60.579 ms

Loss rate: 0.08%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-05-30 08:37:37

End at: 2018-05-30 08:38:07

Below is generated by plot.py at 2018-05-30 09:20:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 7.31 Mbit/s (9.4% utilization)

95th percentile per-packet one-way delay: 59.488 ms

Loss rate: 0.09%

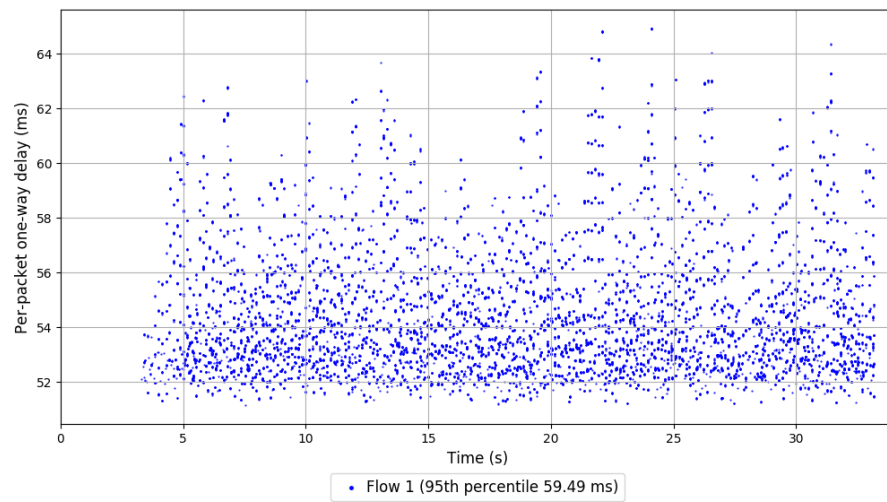
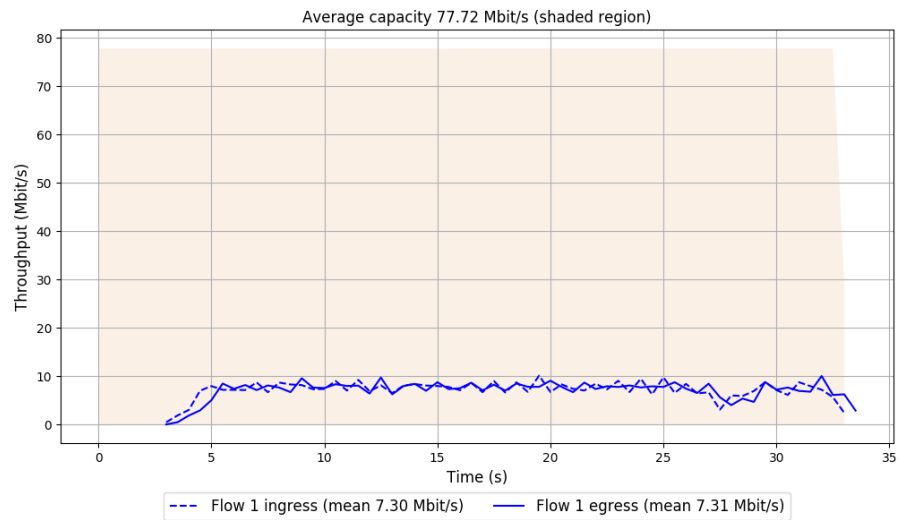
-- Flow 1:

Average throughput: 7.31 Mbit/s

95th percentile per-packet one-way delay: 59.488 ms

Loss rate: 0.09%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-05-30 08:47:44

End at: 2018-05-30 08:48:14

Below is generated by plot.py at 2018-05-30 09:20:53

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 7.46 Mbit/s (9.6% utilization)

95th percentile per-packet one-way delay: 60.232 ms

Loss rate: 0.12%

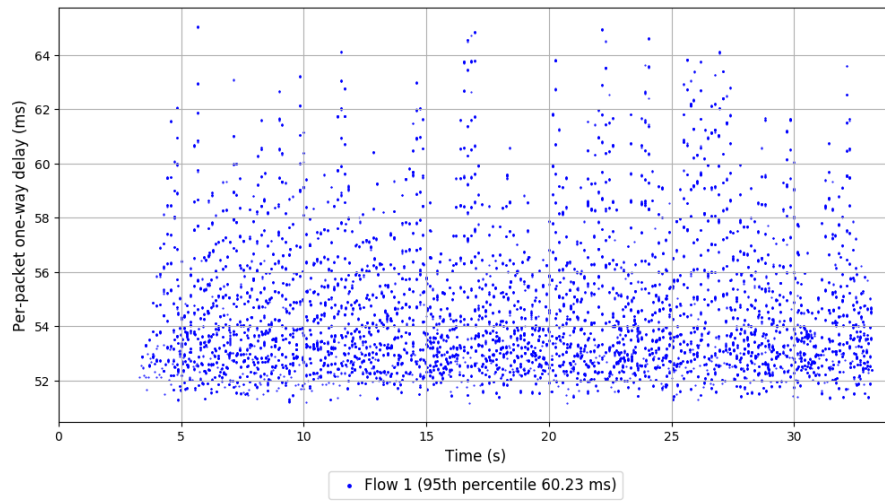
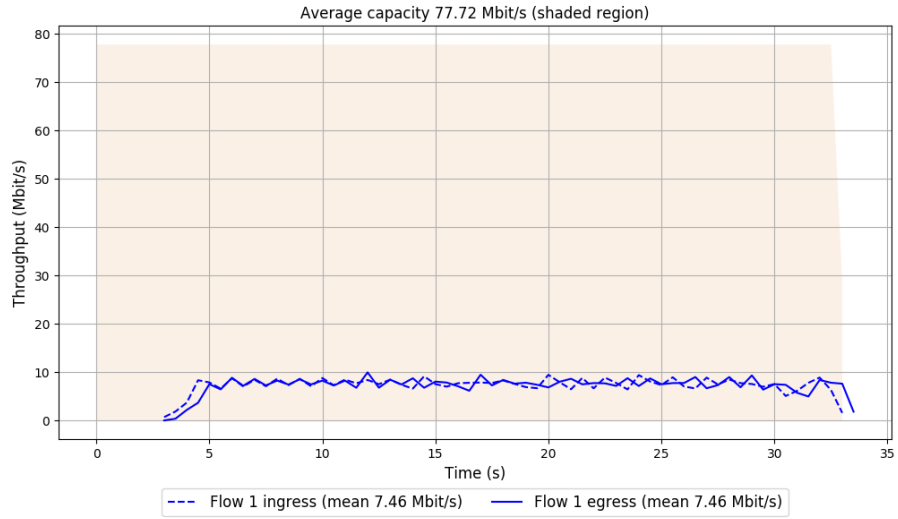
-- Flow 1:

Average throughput: 7.46 Mbit/s

95th percentile per-packet one-way delay: 60.232 ms

Loss rate: 0.12%

Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-05-30 07:25:48

End at: 2018-05-30 07:26:18

Below is generated by plot.py at 2018-05-30 09:23:31

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 76.33 Mbit/s (98.2% utilization)

95th percentile per-packet one-way delay: 59.596 ms

Loss rate: 12.38%

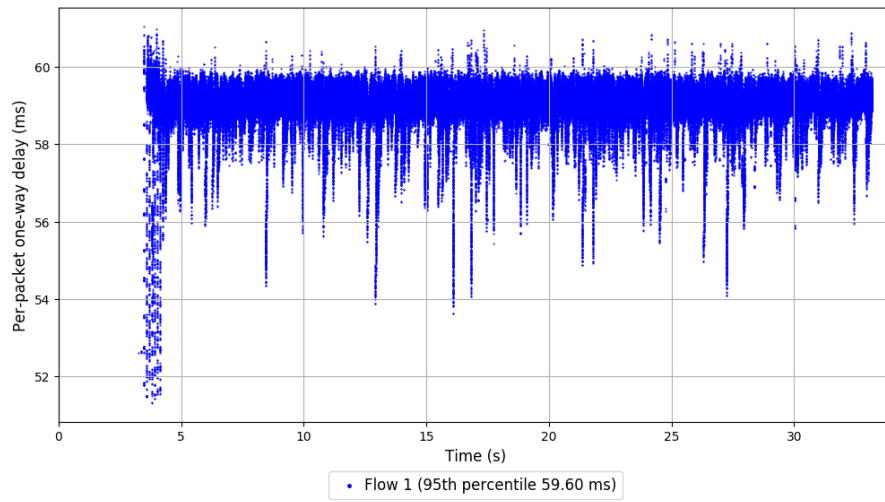
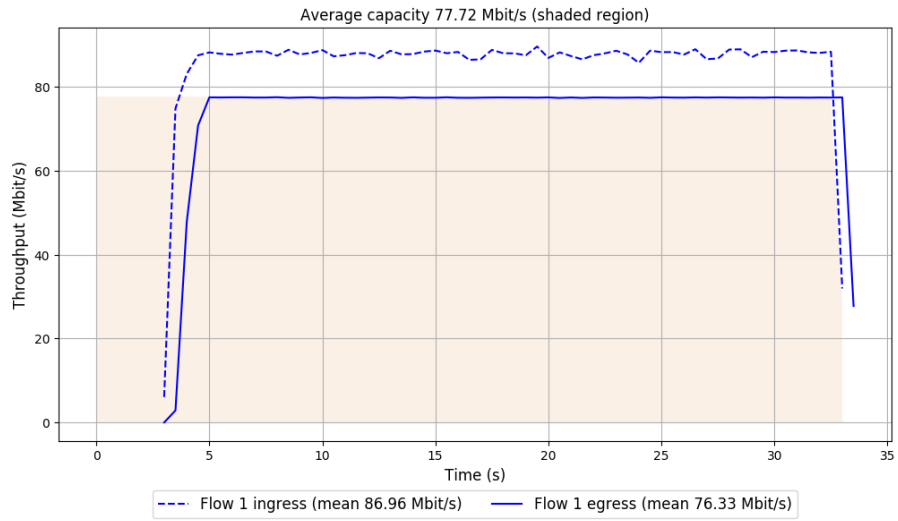
-- Flow 1:

Average throughput: 76.33 Mbit/s

95th percentile per-packet one-way delay: 59.596 ms

Loss rate: 12.38%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-05-30 07:35:57

End at: 2018-05-30 07:36:27

Below is generated by plot.py at 2018-05-30 09:23:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 76.30 Mbit/s (98.2% utilization)

95th percentile per-packet one-way delay: 59.606 ms

Loss rate: 12.21%

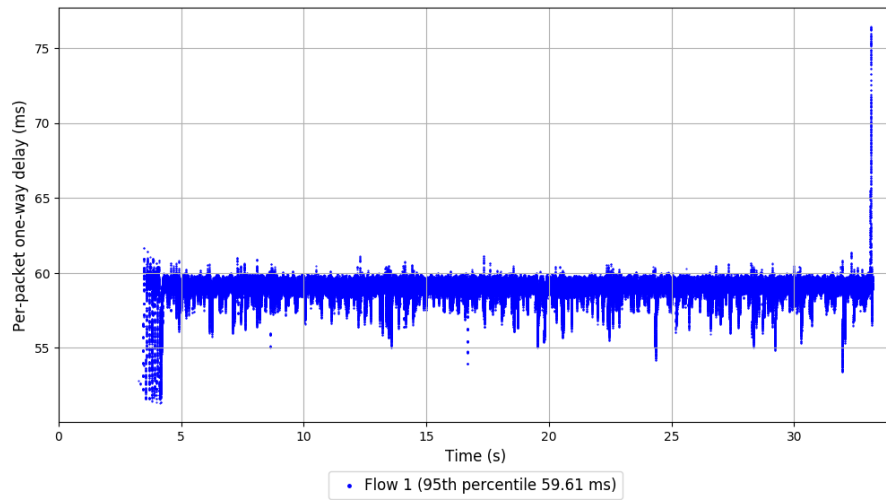
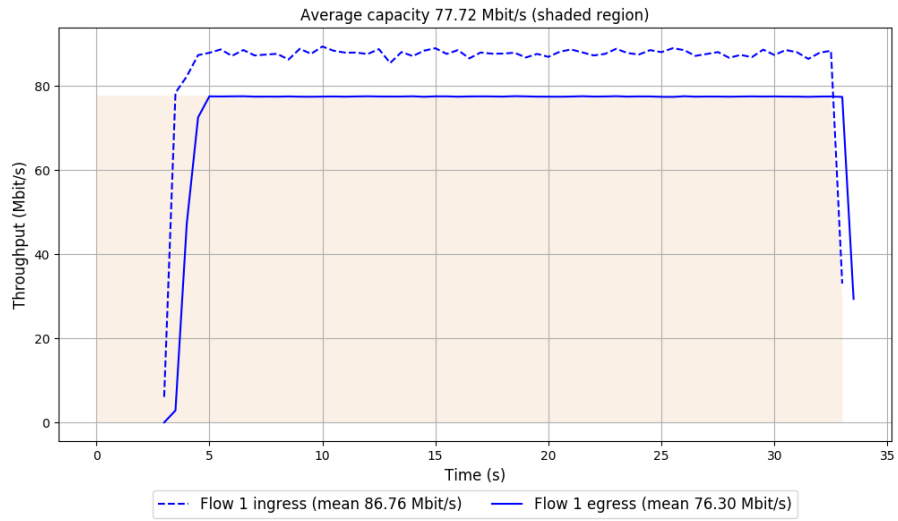
-- Flow 1:

Average throughput: 76.30 Mbit/s

95th percentile per-packet one-way delay: 59.606 ms

Loss rate: 12.21%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-05-30 07:46:04

End at: 2018-05-30 07:46:34

Below is generated by plot.py at 2018-05-30 09:23:37

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 76.51 Mbit/s (98.4% utilization)

95th percentile per-packet one-way delay: 59.627 ms

Loss rate: 12.05%

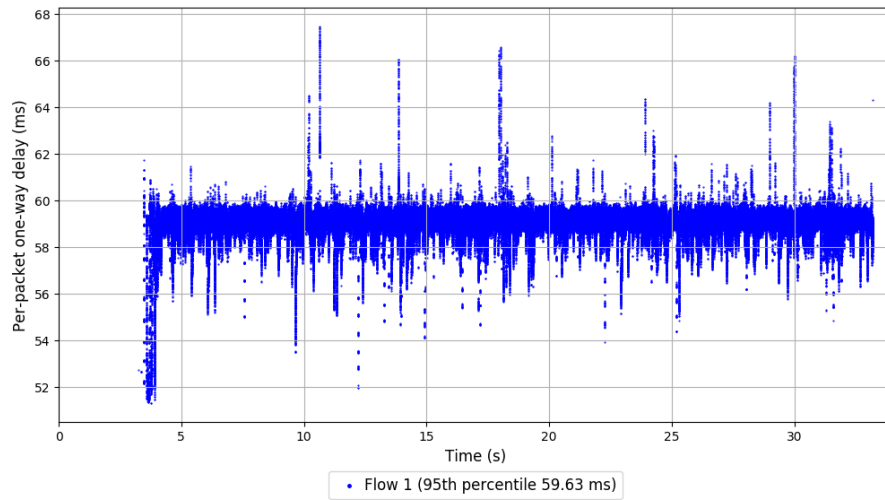
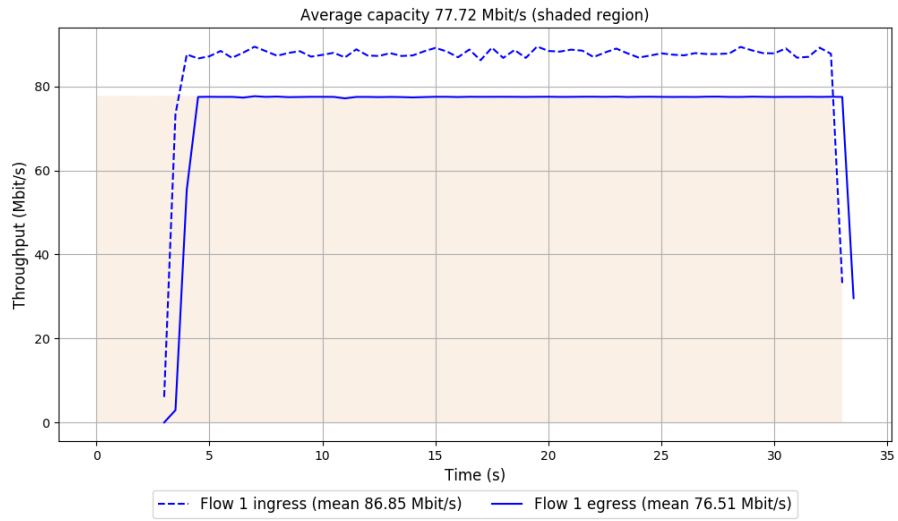
-- Flow 1:

Average throughput: 76.51 Mbit/s

95th percentile per-packet one-way delay: 59.627 ms

Loss rate: 12.05%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-05-30 07:56:12

End at: 2018-05-30 07:56:42

Below is generated by plot.py at 2018-05-30 09:23:37

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 76.05 Mbit/s (97.8% utilization)

95th percentile per-packet one-way delay: 59.642 ms

Loss rate: 11.96%

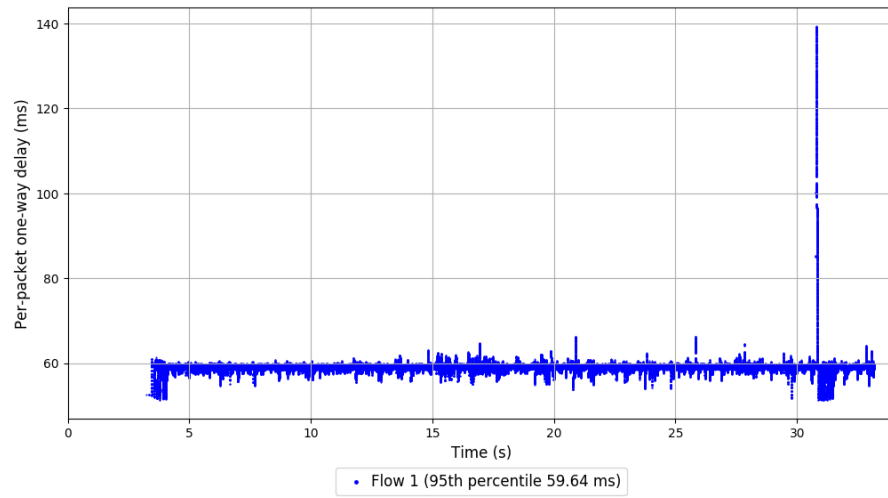
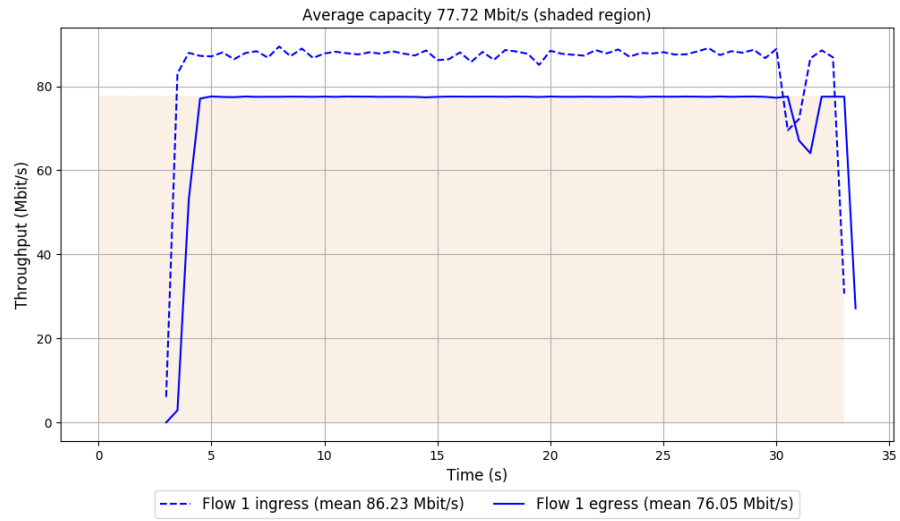
-- Flow 1:

Average throughput: 76.05 Mbit/s

95th percentile per-packet one-way delay: 59.642 ms

Loss rate: 11.96%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-05-30 08:06:21

End at: 2018-05-30 08:06:51

Below is generated by plot.py at 2018-05-30 09:23:42

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 76.56 Mbit/s (98.5% utilization)

95th percentile per-packet one-way delay: 59.601 ms

Loss rate: 12.07%

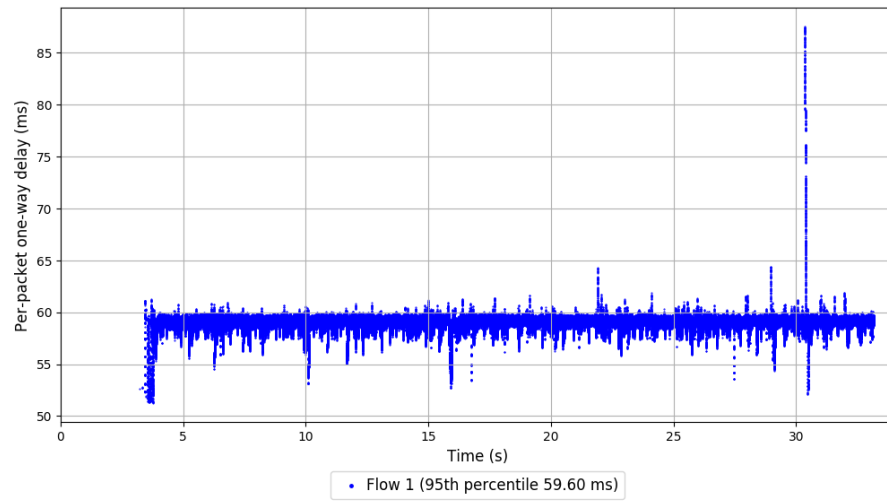
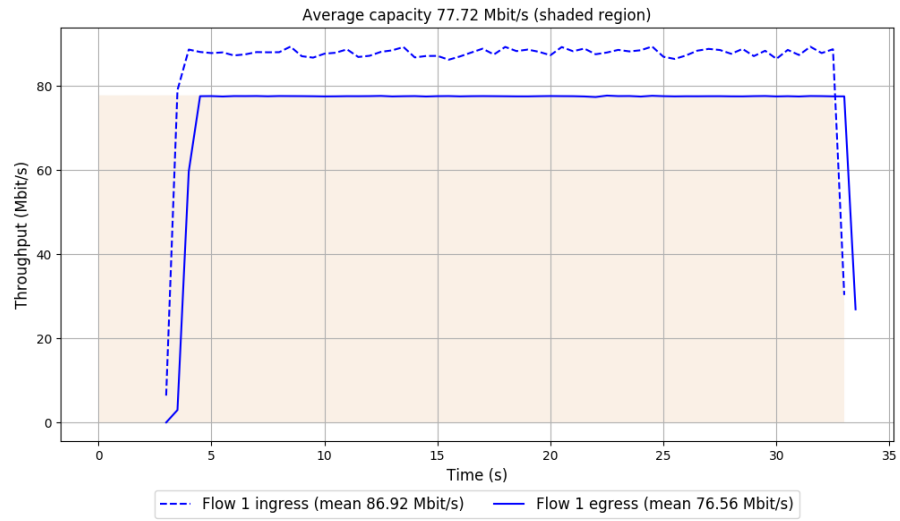
-- Flow 1:

Average throughput: 76.56 Mbit/s

95th percentile per-packet one-way delay: 59.601 ms

Loss rate: 12.07%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-05-30 08:16:32

End at: 2018-05-30 08:17:02

Below is generated by plot.py at 2018-05-30 09:23:47

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 76.47 Mbit/s (98.4% utilization)

95th percentile per-packet one-way delay: 59.607 ms

Loss rate: 12.49%

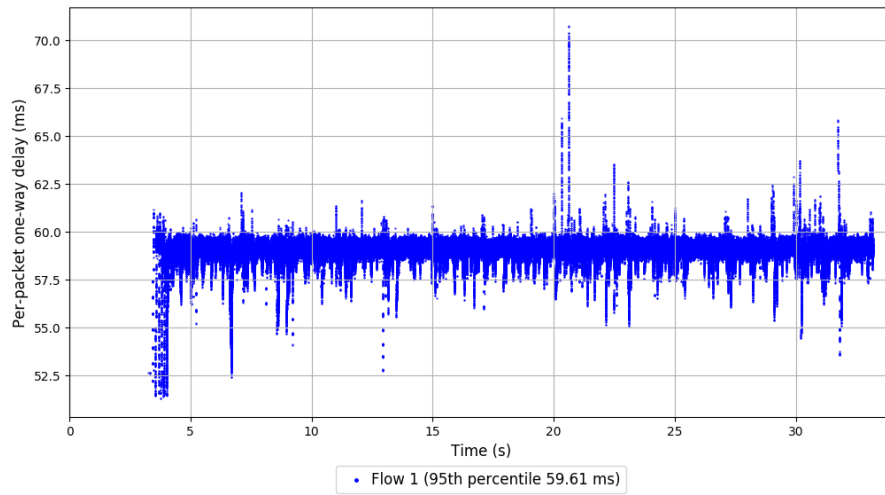
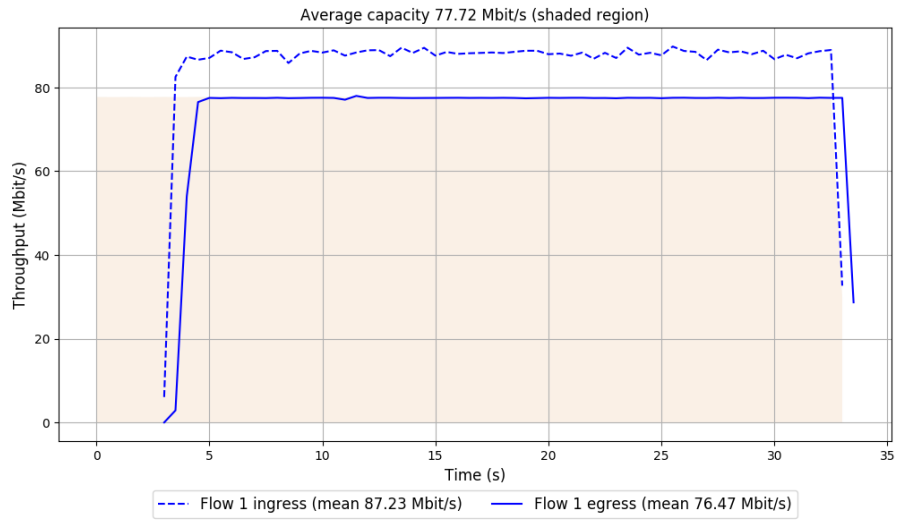
-- Flow 1:

Average throughput: 76.47 Mbit/s

95th percentile per-packet one-way delay: 59.607 ms

Loss rate: 12.49%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-05-30 08:26:42

End at: 2018-05-30 08:27:12

Below is generated by plot.py at 2018-05-30 09:23:55

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 76.46 Mbit/s (98.4% utilization)

95th percentile per-packet one-way delay: 59.613 ms

Loss rate: 12.33%

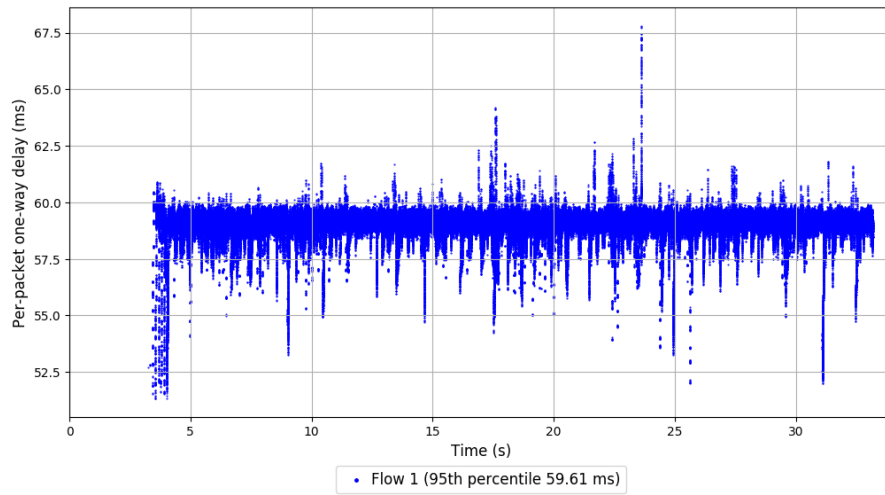
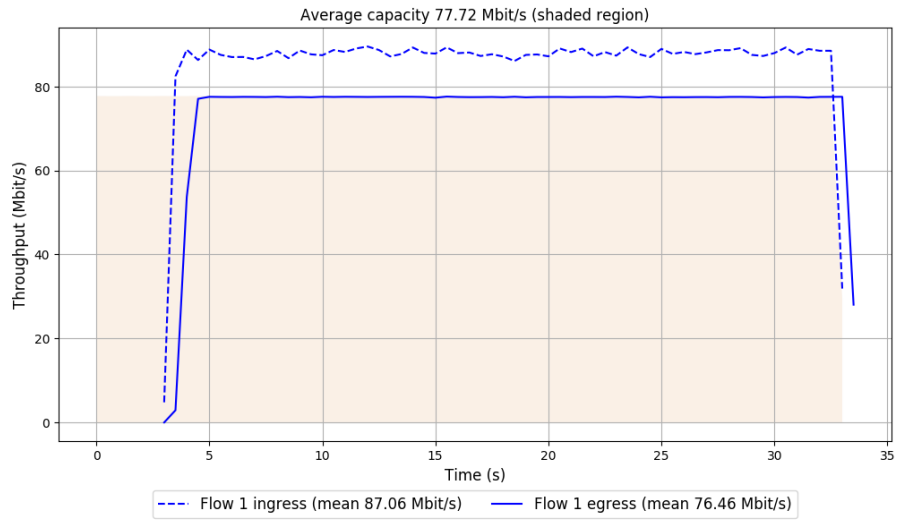
-- Flow 1:

Average throughput: 76.46 Mbit/s

95th percentile per-packet one-way delay: 59.613 ms

Loss rate: 12.33%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-05-30 08:36:55

End at: 2018-05-30 08:37:25

Below is generated by plot.py at 2018-05-30 09:23:55

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 76.51 Mbit/s (98.4% utilization)

95th percentile per-packet one-way delay: 59.602 ms

Loss rate: 12.38%

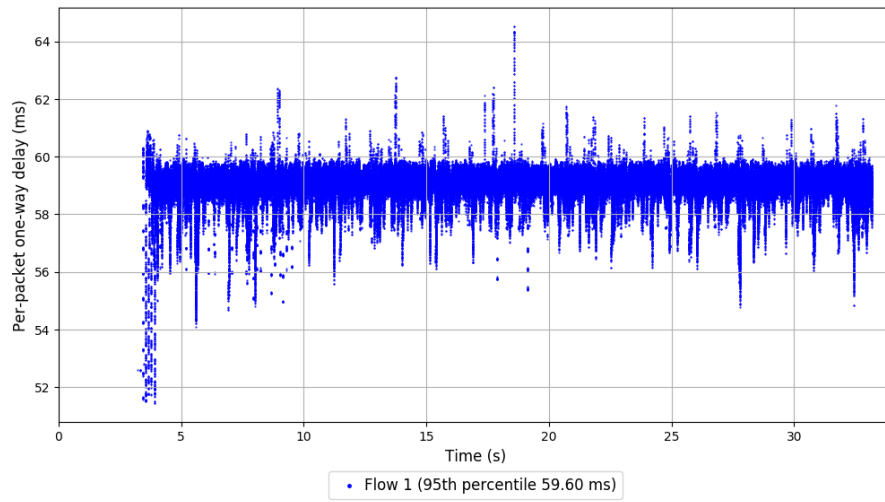
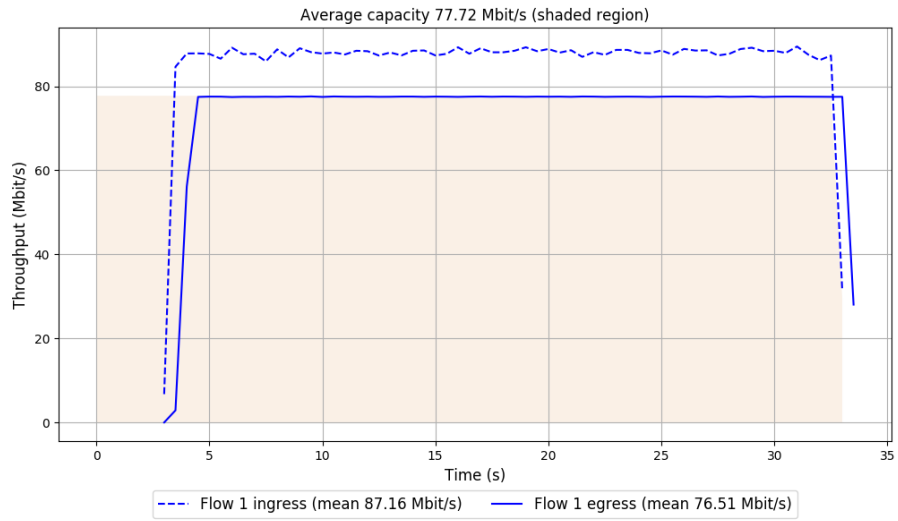
-- Flow 1:

Average throughput: 76.51 Mbit/s

95th percentile per-packet one-way delay: 59.602 ms

Loss rate: 12.38%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-05-30 08:47:02

End at: 2018-05-30 08:47:32

Below is generated by plot.py at 2018-05-30 09:26:05

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 75.97 Mbit/s (97.7% utilization)

95th percentile per-packet one-way delay: 59.593 ms

Loss rate: 12.13%

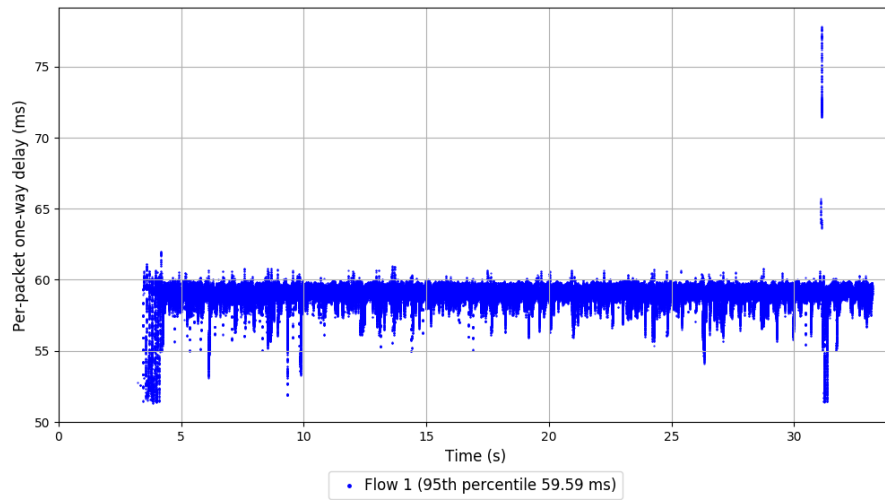
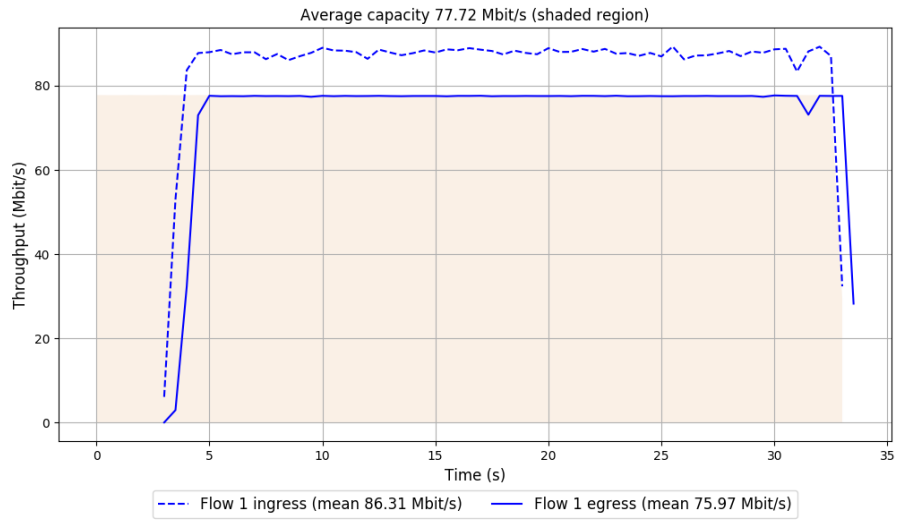
-- Flow 1:

Average throughput: 75.97 Mbit/s

95th percentile per-packet one-way delay: 59.593 ms

Loss rate: 12.13%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-05-30 08:57:10

End at: 2018-05-30 08:57:40

Below is generated by plot.py at 2018-05-30 09:26:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 76.25 Mbit/s (98.1% utilization)

95th percentile per-packet one-way delay: 59.594 ms

Loss rate: 12.54%

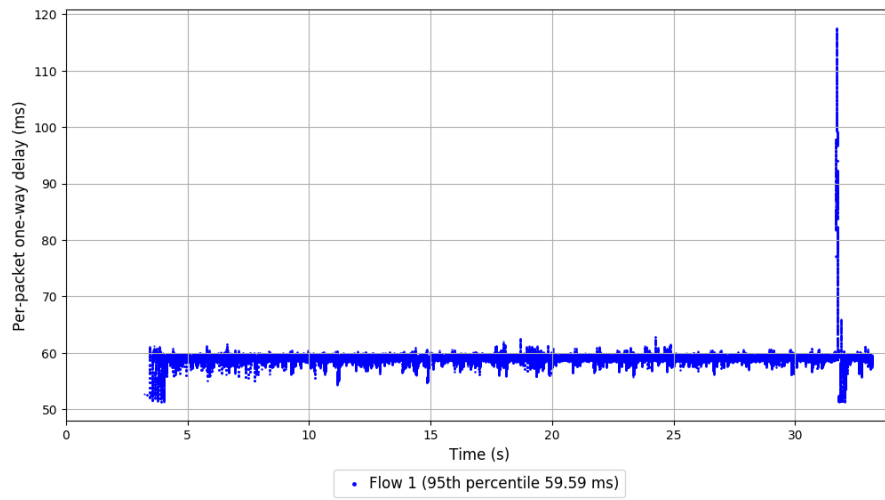
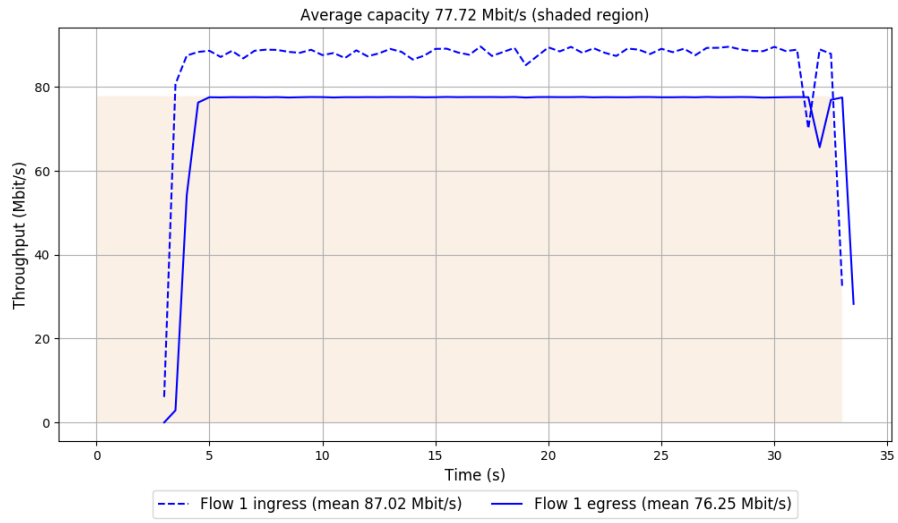
-- Flow 1:

Average throughput: 76.25 Mbit/s

95th percentile per-packet one-way delay: 59.594 ms

Loss rate: 12.54%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-05-30 07:23:21

End at: 2018-05-30 07:23:51

Below is generated by plot.py at 2018-05-30 09:26:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 7.11 Mbit/s (9.1% utilization)

95th percentile per-packet one-way delay: 54.758 ms

Loss rate: 0.90%

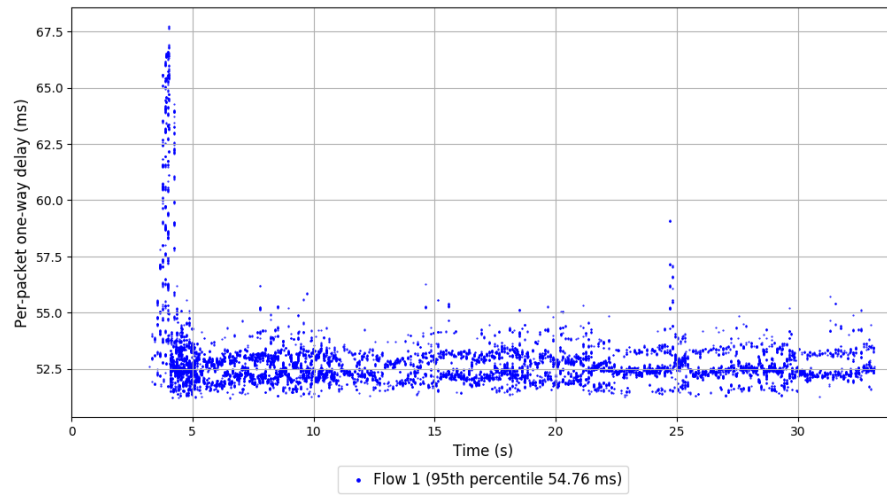
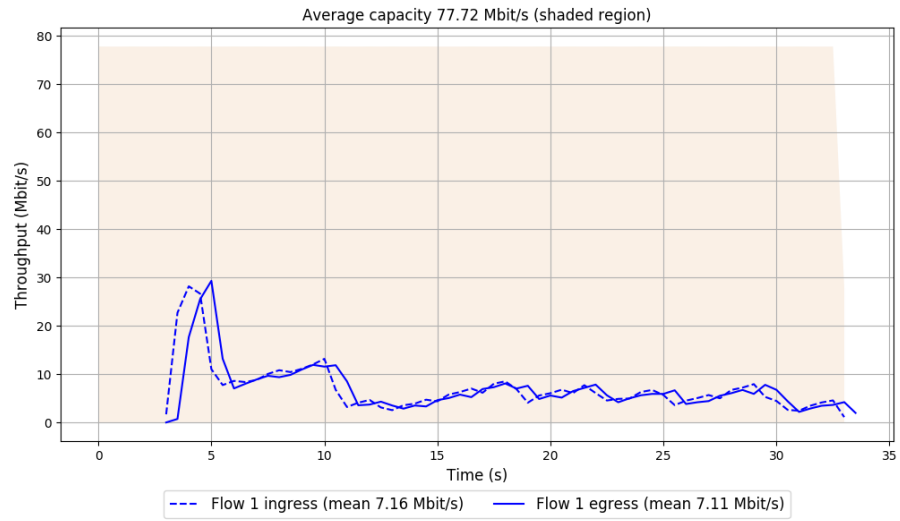
-- Flow 1:

Average throughput: 7.11 Mbit/s

95th percentile per-packet one-way delay: 54.758 ms

Loss rate: 0.90%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-05-30 07:33:29

End at: 2018-05-30 07:33:59

Below is generated by plot.py at 2018-05-30 09:26:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 8.19 Mbit/s (10.5% utilization)

95th percentile per-packet one-way delay: 54.272 ms

Loss rate: 1.21%

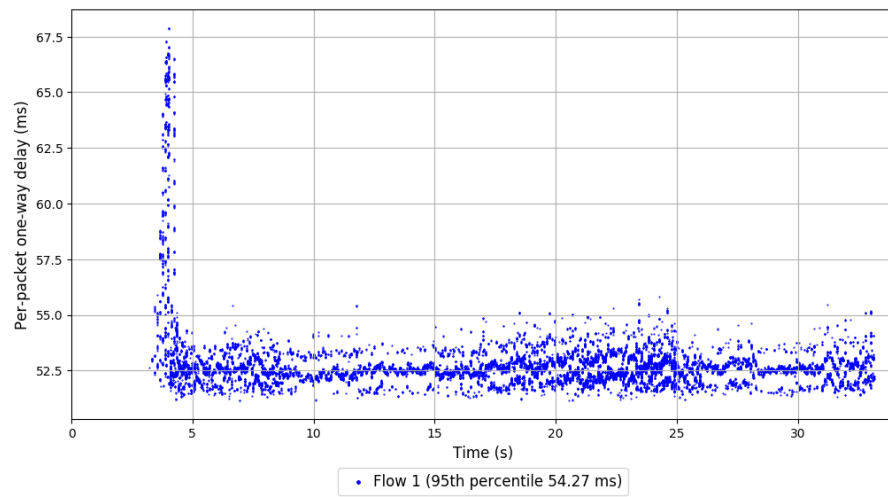
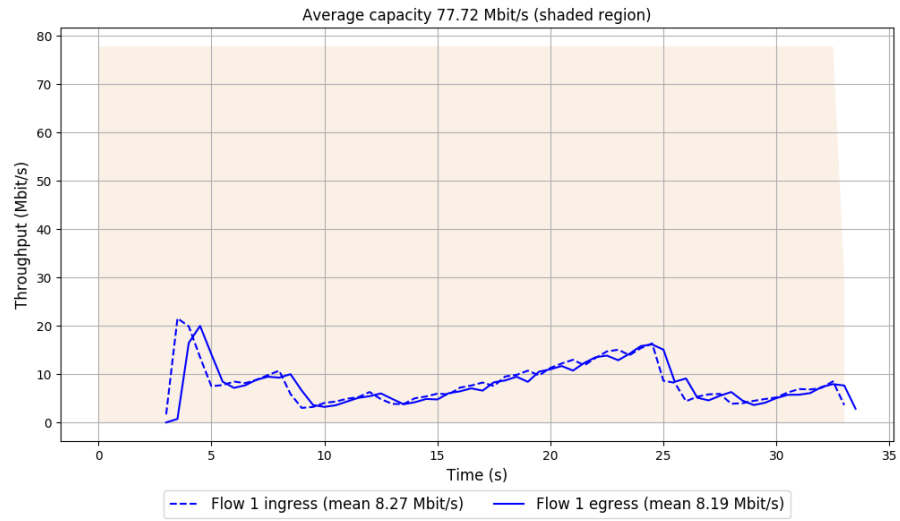
-- Flow 1:

Average throughput: 8.19 Mbit/s

95th percentile per-packet one-way delay: 54.272 ms

Loss rate: 1.21%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-05-30 07:43:37

End at: 2018-05-30 07:44:07

Below is generated by plot.py at 2018-05-30 09:26:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 6.12 Mbit/s (7.9% utilization)

95th percentile per-packet one-way delay: 55.965 ms

Loss rate: 1.59%

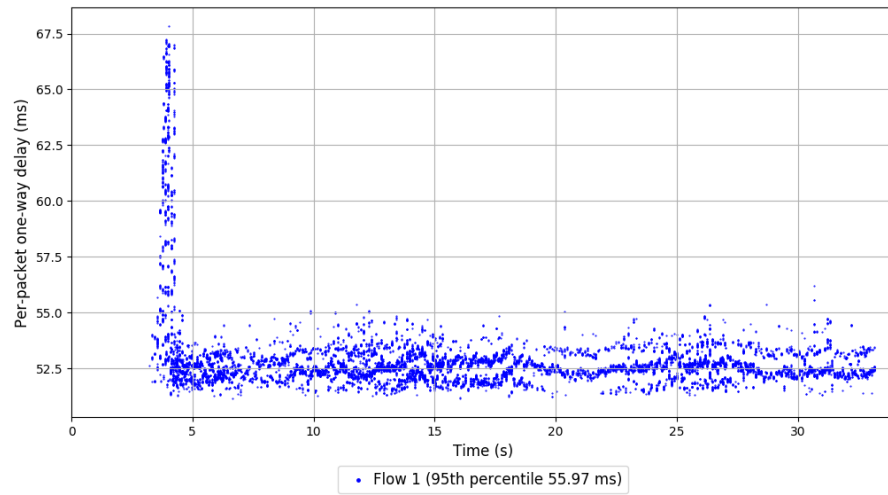
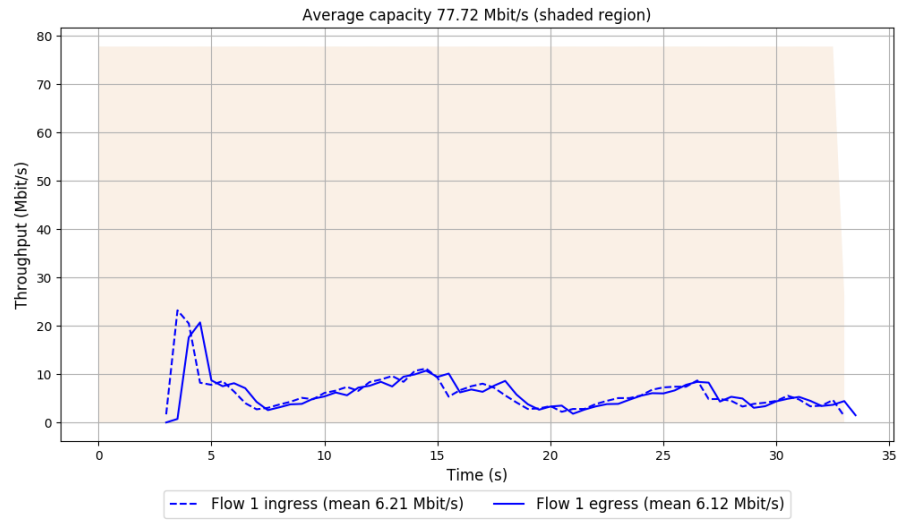
-- Flow 1:

Average throughput: 6.12 Mbit/s

95th percentile per-packet one-way delay: 55.965 ms

Loss rate: 1.59%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-05-30 07:53:44

End at: 2018-05-30 07:54:14

Below is generated by plot.py at 2018-05-30 09:26:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 7.89 Mbit/s (10.2% utilization)

95th percentile per-packet one-way delay: 54.427 ms

Loss rate: 0.83%

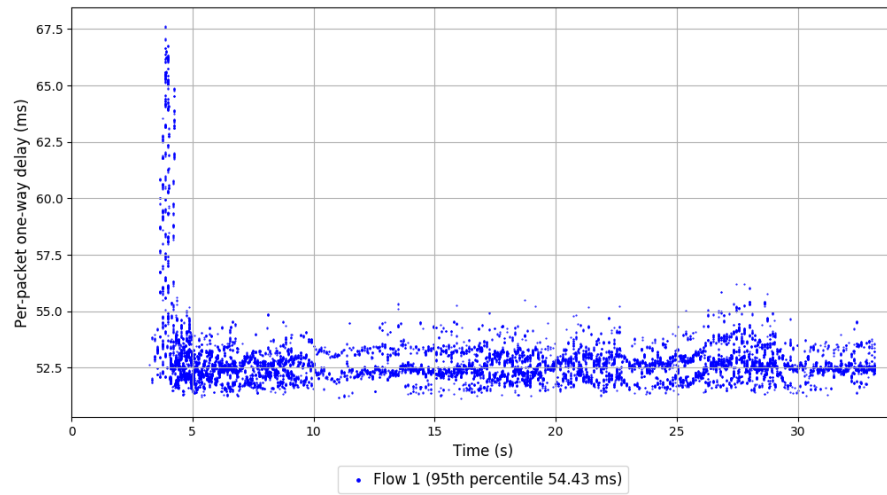
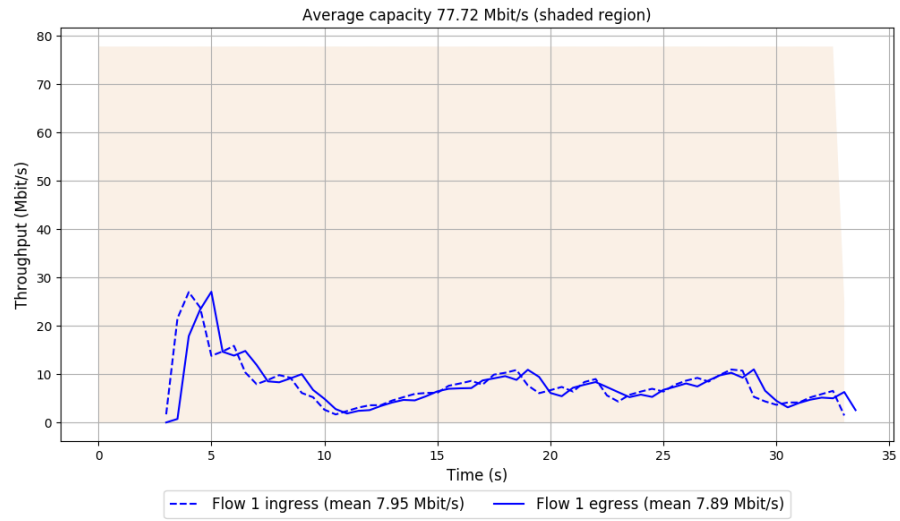
-- Flow 1:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 54.427 ms

Loss rate: 0.83%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-05-30 08:03:53

End at: 2018-05-30 08:04:23

Below is generated by plot.py at 2018-05-30 09:26:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 8.32 Mbit/s (10.7% utilization)

95th percentile per-packet one-way delay: 54.369 ms

Loss rate: 1.14%

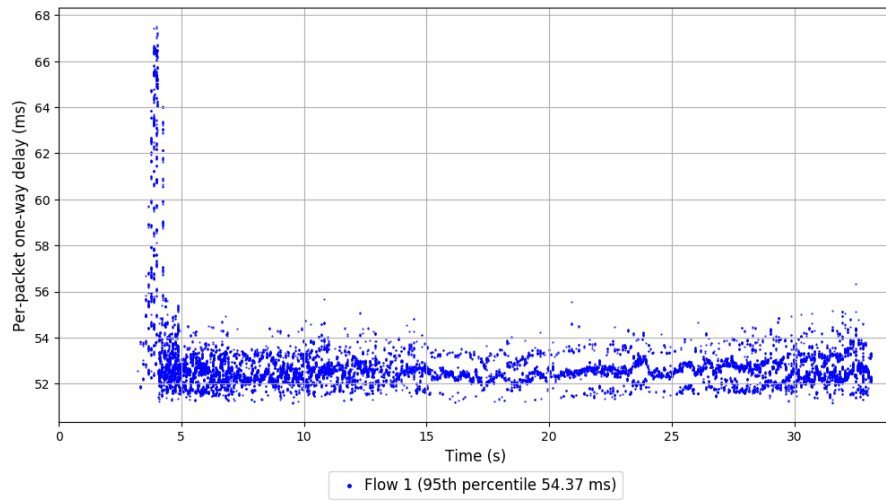
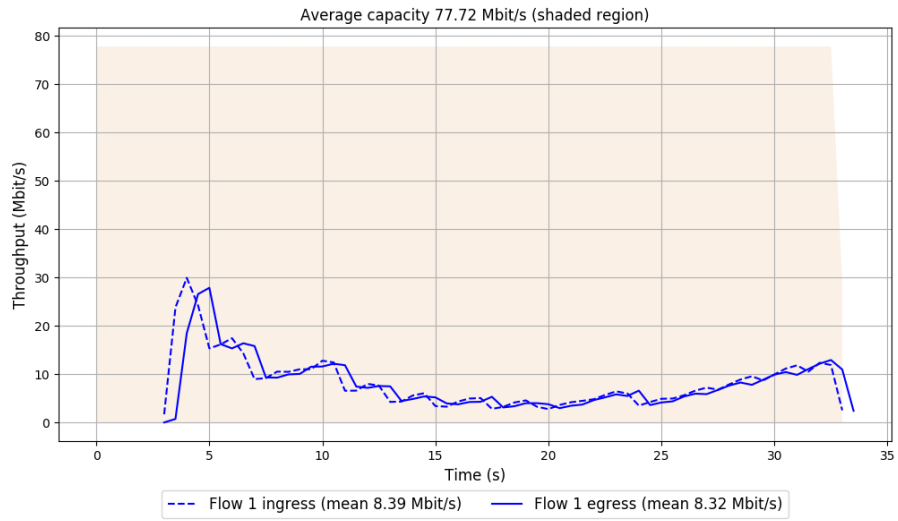
-- Flow 1:

Average throughput: 8.32 Mbit/s

95th percentile per-packet one-way delay: 54.369 ms

Loss rate: 1.14%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-05-30 08:14:04

End at: 2018-05-30 08:14:34

Below is generated by plot.py at 2018-05-30 09:26:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 5.66 Mbit/s (7.3% utilization)

95th percentile per-packet one-way delay: 53.731 ms

Loss rate: 0.18%

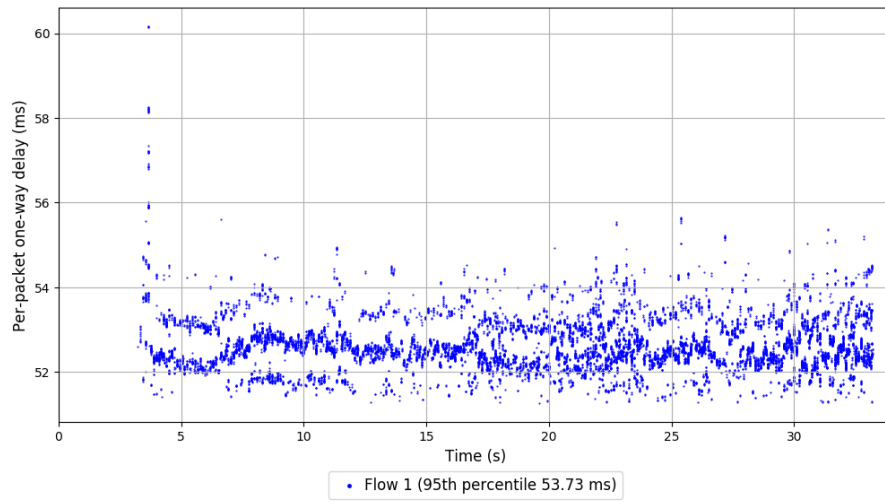
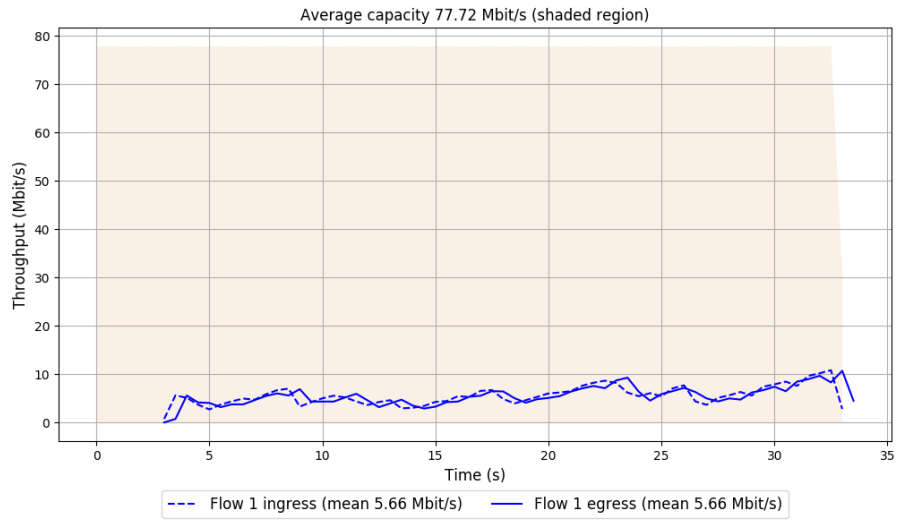
-- Flow 1:

Average throughput: 5.66 Mbit/s

95th percentile per-packet one-way delay: 53.731 ms

Loss rate: 0.18%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-05-30 08:24:14

End at: 2018-05-30 08:24:44

Below is generated by plot.py at 2018-05-30 09:26:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 7.47 Mbit/s (9.6% utilization)

95th percentile per-packet one-way delay: 54.620 ms

Loss rate: 1.02%

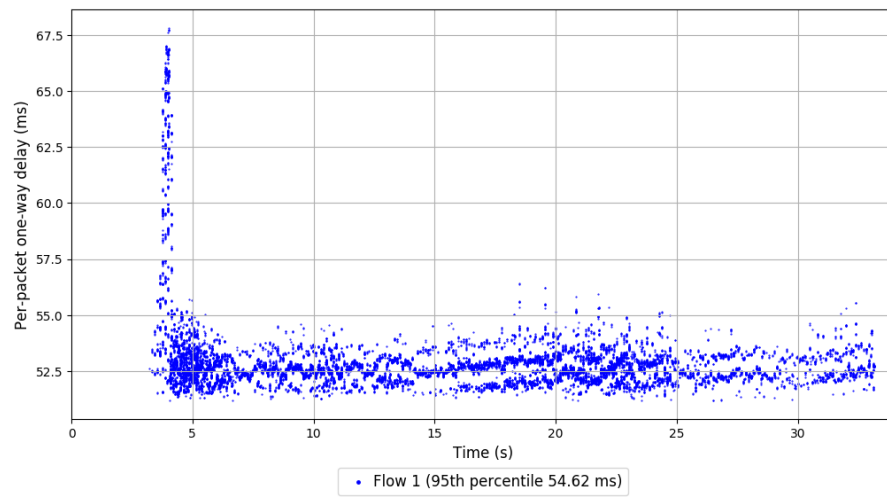
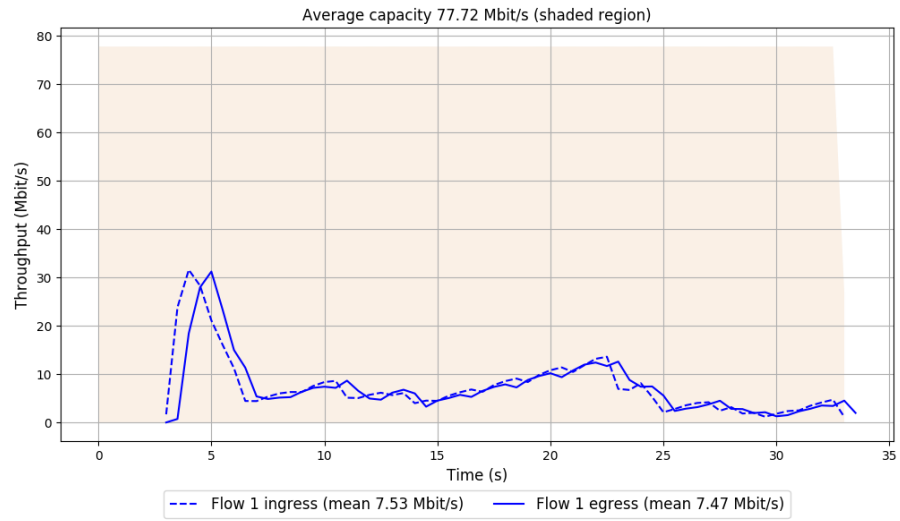
-- Flow 1:

Average throughput: 7.47 Mbit/s

95th percentile per-packet one-way delay: 54.620 ms

Loss rate: 1.02%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-05-30 08:34:26

End at: 2018-05-30 08:34:56

Below is generated by plot.py at 2018-05-30 09:26:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 8.16 Mbit/s (10.5% utilization)

95th percentile per-packet one-way delay: 53.972 ms

Loss rate: 0.83%

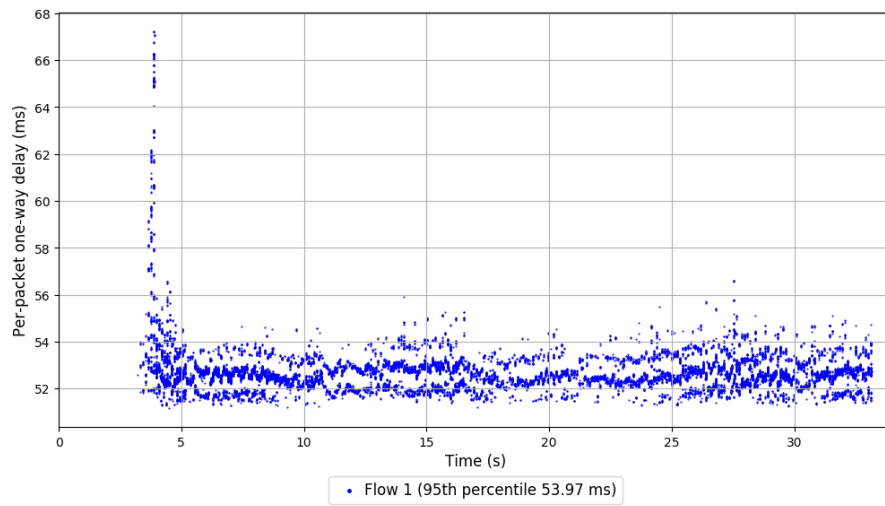
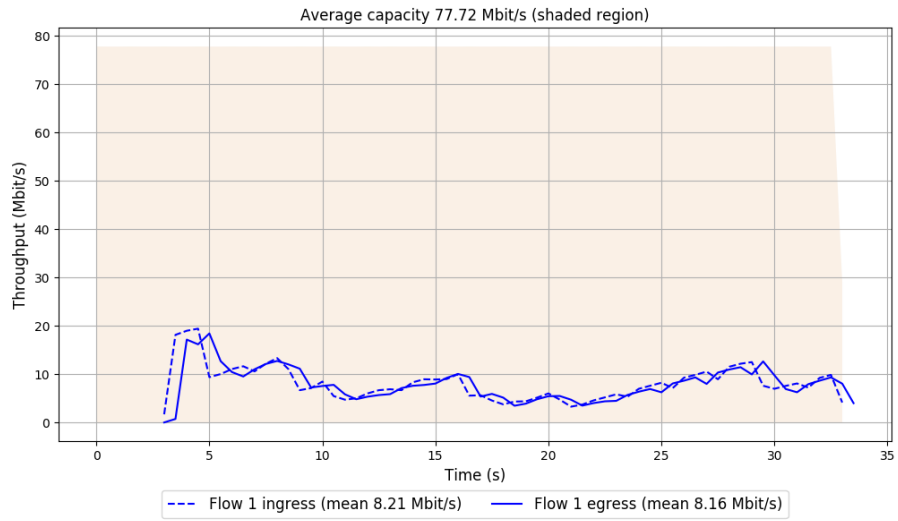
-- Flow 1:

Average throughput: 8.16 Mbit/s

95th percentile per-packet one-way delay: 53.972 ms

Loss rate: 0.83%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-05-30 08:44:33

End at: 2018-05-30 08:45:03

Below is generated by plot.py at 2018-05-30 09:26:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 7.42 Mbit/s (9.6% utilization)

95th percentile per-packet one-way delay: 54.068 ms

Loss rate: 0.49%

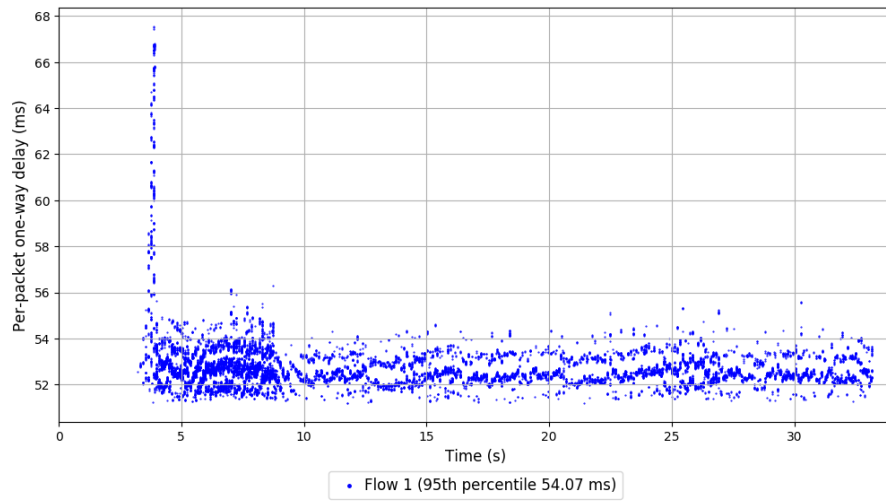
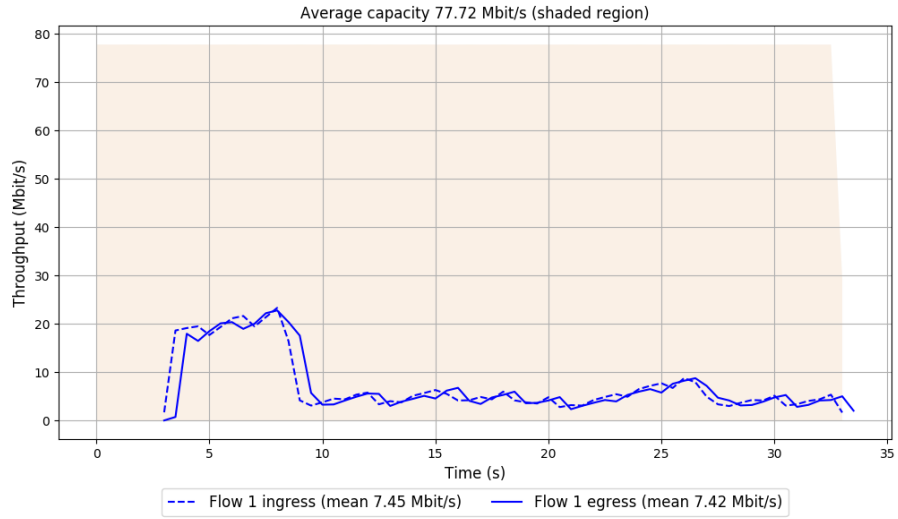
-- Flow 1:

Average throughput: 7.42 Mbit/s

95th percentile per-packet one-way delay: 54.068 ms

Loss rate: 0.49%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-05-30 08:54:41

End at: 2018-05-30 08:55:11

Below is generated by plot.py at 2018-05-30 09:26:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 4.37 Mbit/s (5.6% utilization)

95th percentile per-packet one-way delay: 53.502 ms

Loss rate: 0.15%

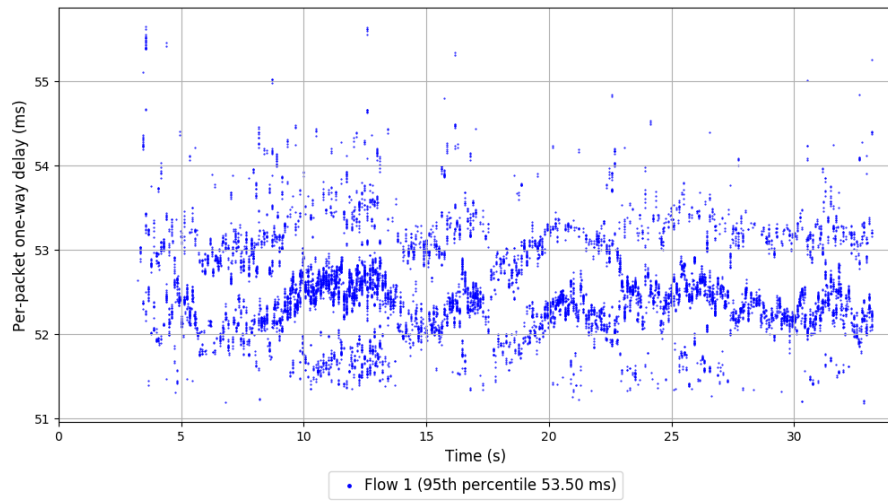
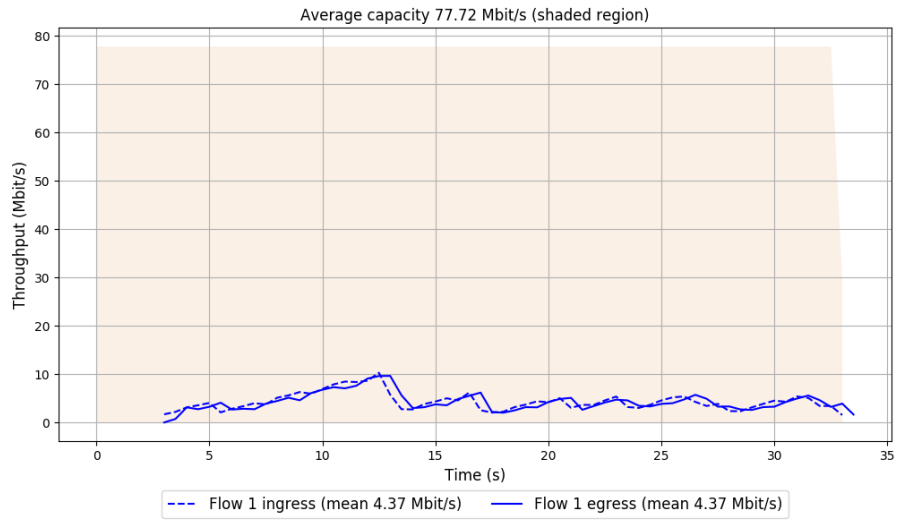
-- Flow 1:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 53.502 ms

Loss rate: 0.15%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-05-30 07:20:43

End at: 2018-05-30 07:21:13

Below is generated by plot.py at 2018-05-30 09:26:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 36.12 Mbit/s (46.5% utilization)

95th percentile per-packet one-way delay: 66.862 ms

Loss rate: 75.50%

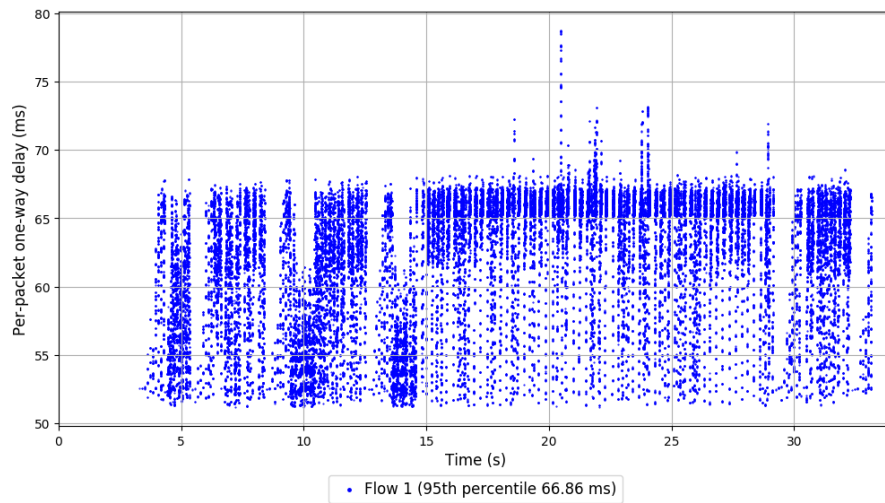
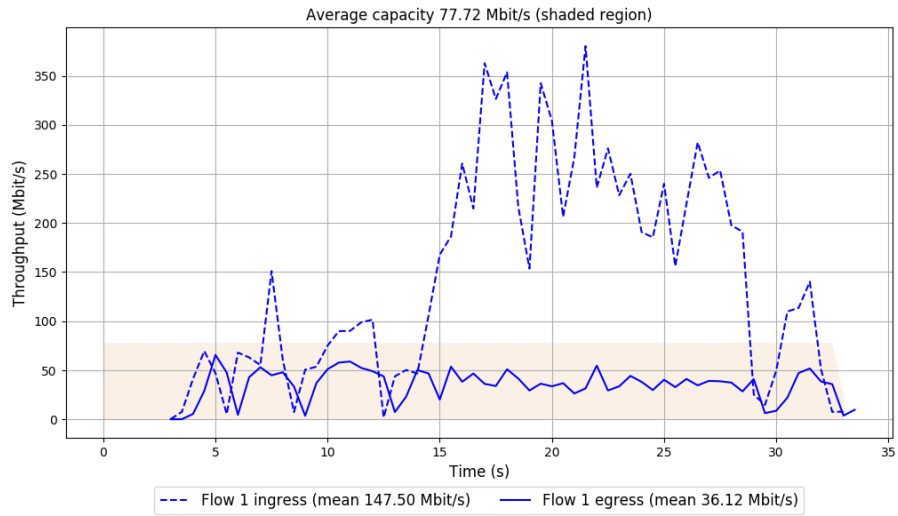
-- Flow 1:

Average throughput: 36.12 Mbit/s

95th percentile per-packet one-way delay: 66.862 ms

Loss rate: 75.50%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-05-30 07:30:49

End at: 2018-05-30 07:31:19

Below is generated by plot.py at 2018-05-30 09:26:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 40.15 Mbit/s (51.7% utilization)

95th percentile per-packet one-way delay: 67.176 ms

Loss rate: 83.31%

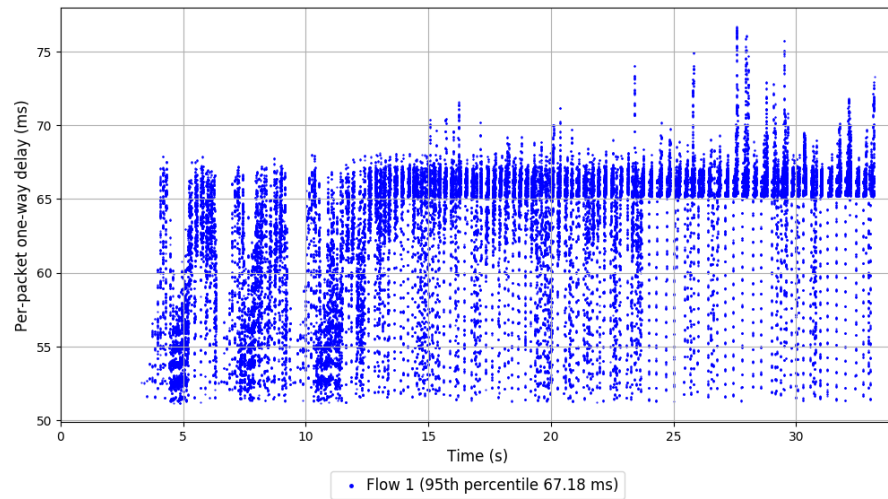
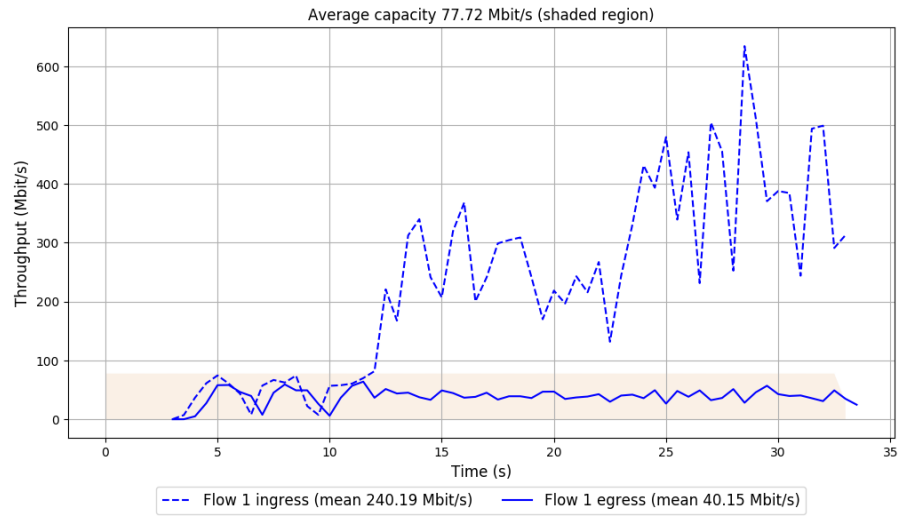
-- Flow 1:

Average throughput: 40.15 Mbit/s

95th percentile per-packet one-way delay: 67.176 ms

Loss rate: 83.31%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-05-30 07:40:59

End at: 2018-05-30 07:41:29

Below is generated by plot.py at 2018-05-30 09:26:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 38.81 Mbit/s (49.9% utilization)

95th percentile per-packet one-way delay: 67.032 ms

Loss rate: 79.93%

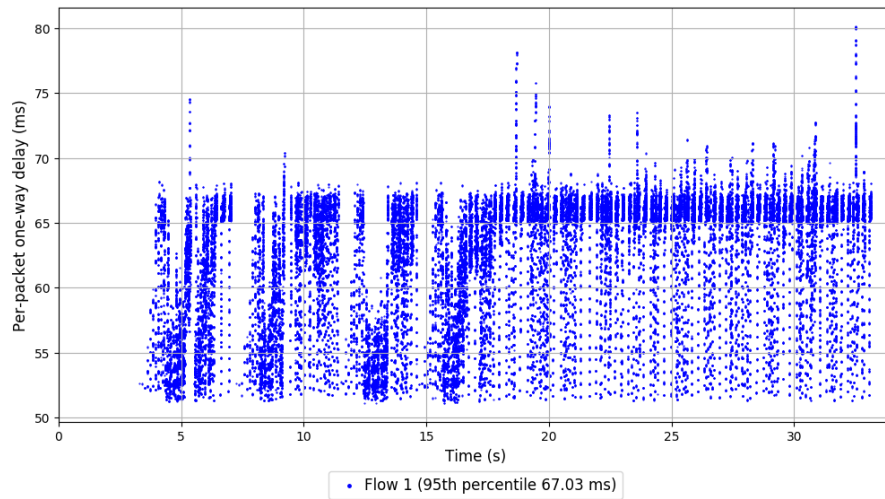
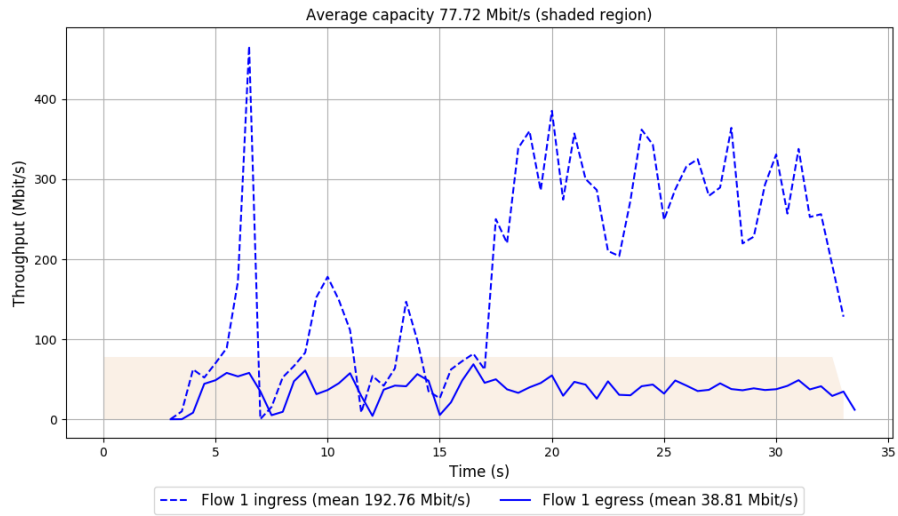
-- Flow 1:

Average throughput: 38.81 Mbit/s

95th percentile per-packet one-way delay: 67.032 ms

Loss rate: 79.93%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-05-30 07:51:07

End at: 2018-05-30 07:51:37

Below is generated by plot.py at 2018-05-30 09:26:33

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 36.48 Mbit/s (46.9% utilization)

95th percentile per-packet one-way delay: 66.840 ms

Loss rate: 75.48%

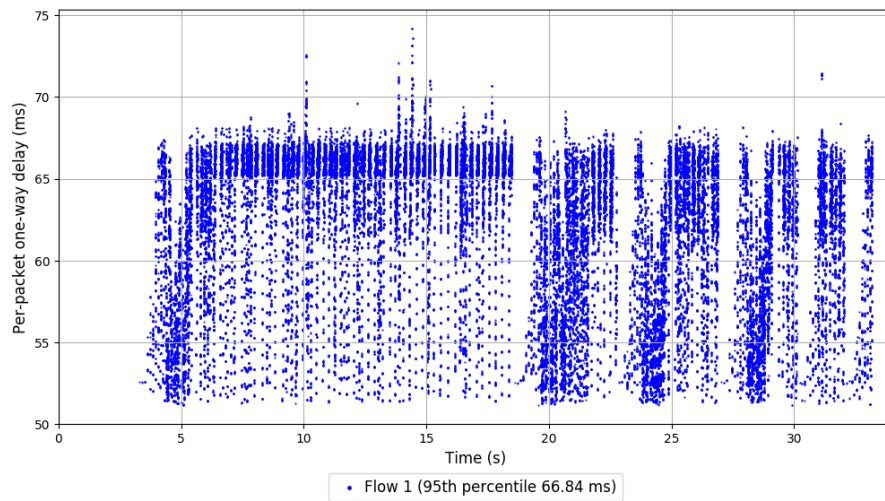
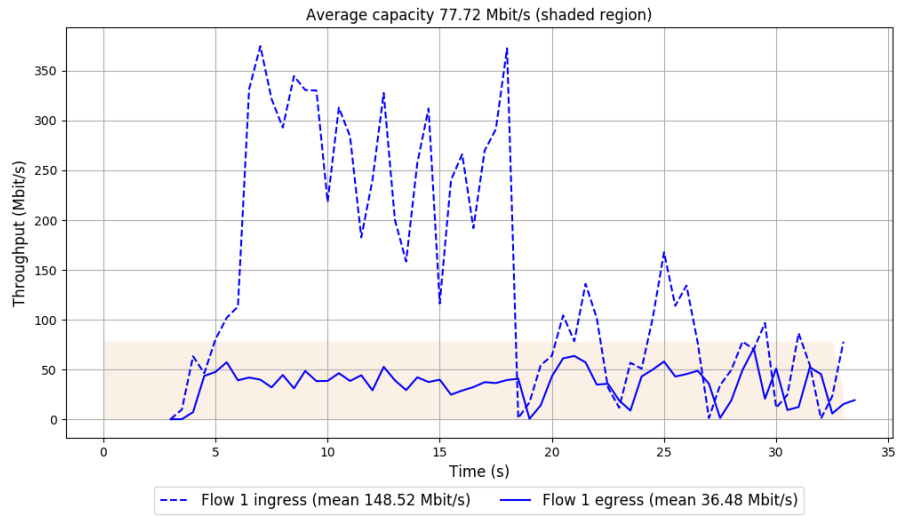
-- Flow 1:

Average throughput: 36.48 Mbit/s

95th percentile per-packet one-way delay: 66.840 ms

Loss rate: 75.48%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-05-30 08:01:15

End at: 2018-05-30 08:01:45

Below is generated by plot.py at 2018-05-30 09:26:36

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 36.30 Mbit/s (46.7% utilization)

95th percentile per-packet one-way delay: 66.963 ms

Loss rate: 81.68%

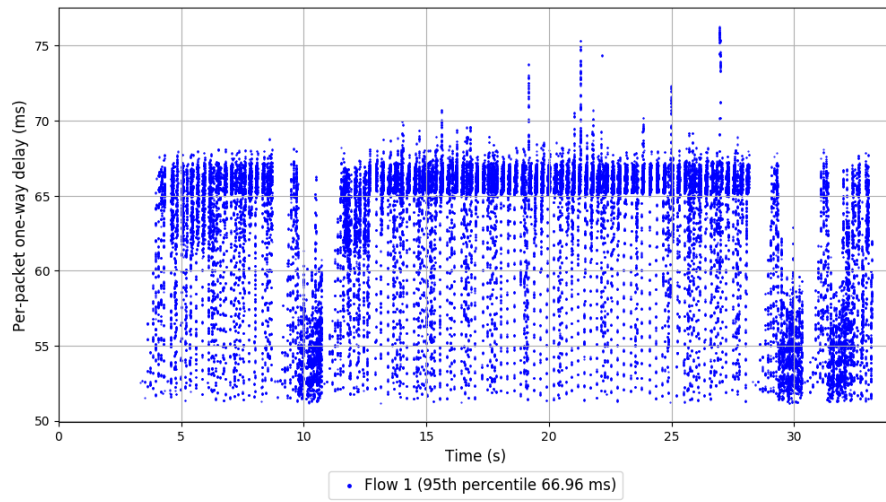
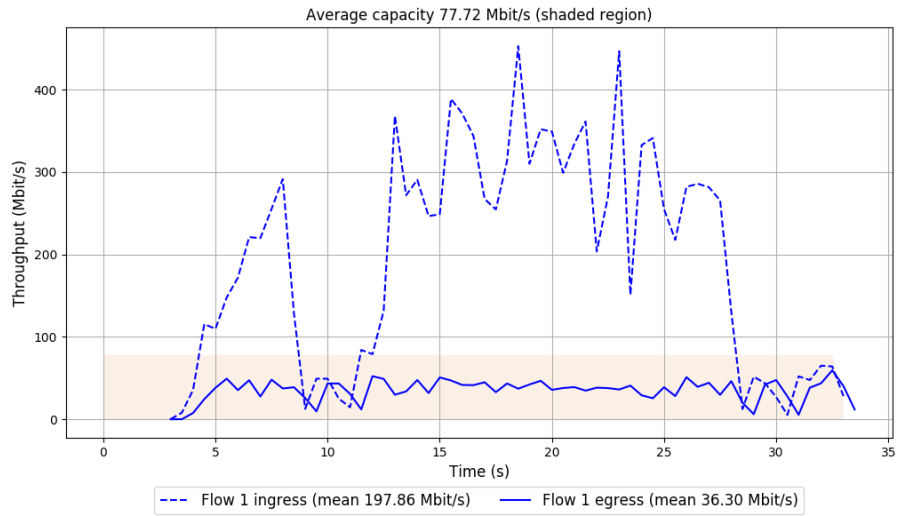
-- Flow 1:

Average throughput: 36.30 Mbit/s

95th percentile per-packet one-way delay: 66.963 ms

Loss rate: 81.68%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-05-30 08:11:25

End at: 2018-05-30 08:11:55

Below is generated by plot.py at 2018-05-30 09:26:58

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 36.97 Mbit/s (47.6% utilization)

95th percentile per-packet one-way delay: 67.374 ms

Loss rate: 86.03%

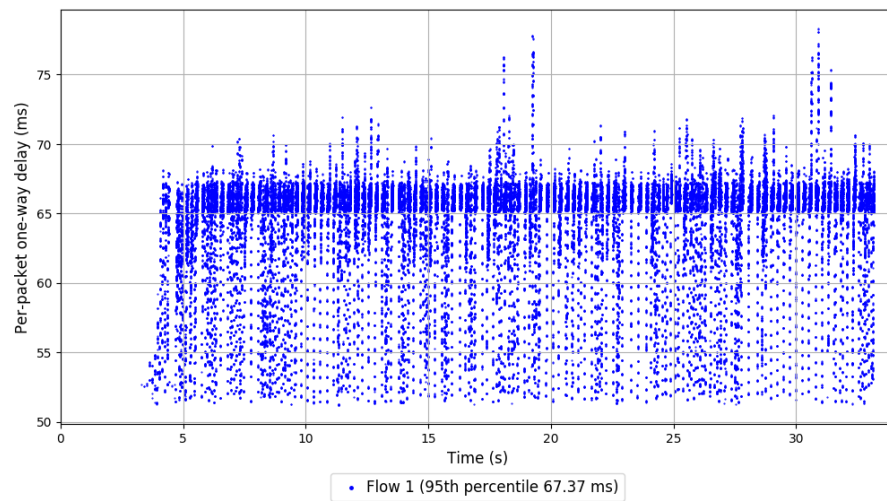
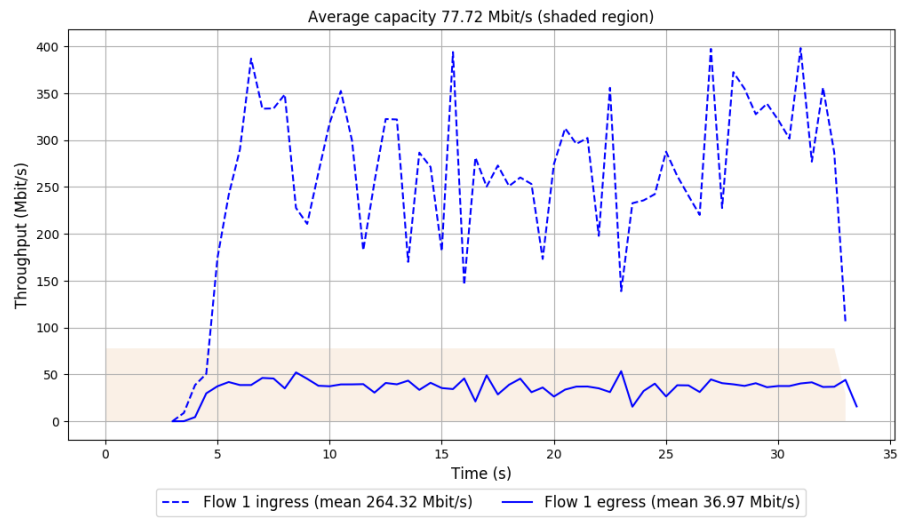
-- Flow 1:

Average throughput: 36.97 Mbit/s

95th percentile per-packet one-way delay: 67.374 ms

Loss rate: 86.03%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-05-30 08:21:35

End at: 2018-05-30 08:22:05

Below is generated by plot.py at 2018-05-30 09:27:36

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 36.30 Mbit/s (46.7% utilization)

95th percentile per-packet one-way delay: 66.965 ms

Loss rate: 78.75%

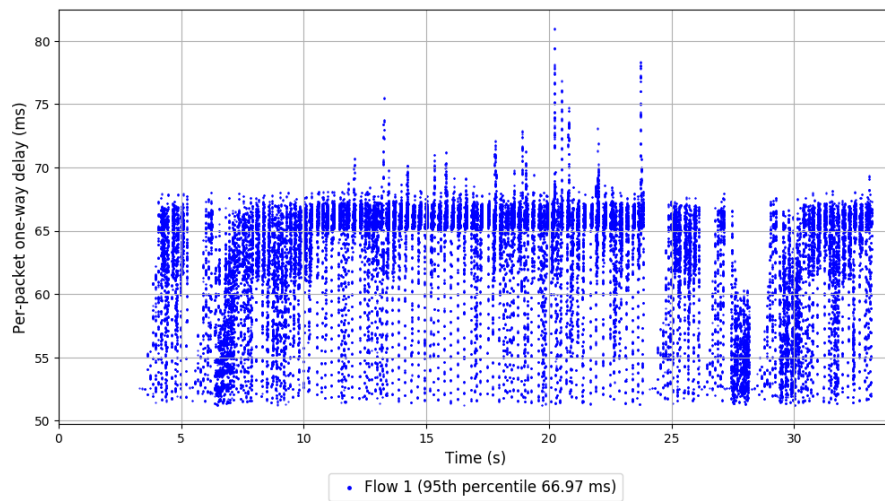
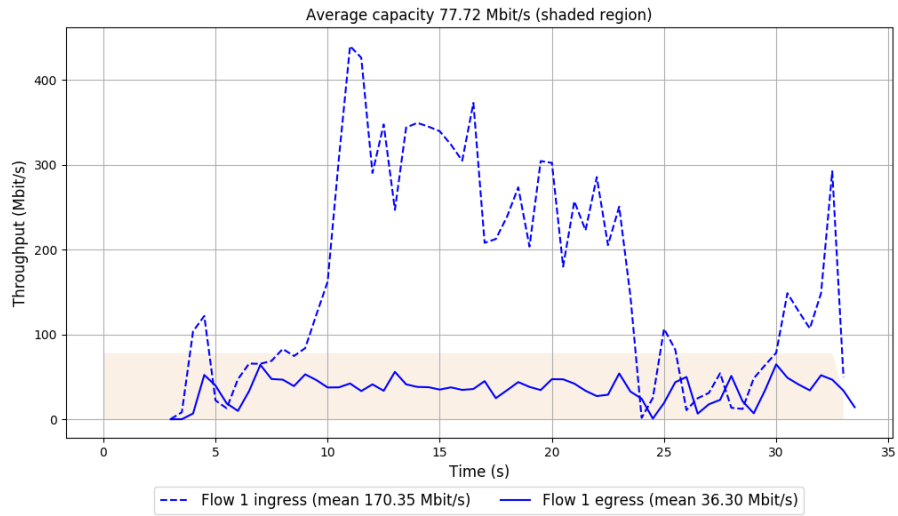
-- Flow 1:

Average throughput: 36.30 Mbit/s

95th percentile per-packet one-way delay: 66.965 ms

Loss rate: 78.75%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-05-30 08:31:45

End at: 2018-05-30 08:32:16

Below is generated by plot.py at 2018-05-30 09:28:42

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 38.94 Mbit/s (50.1% utilization)

95th percentile per-packet one-way delay: 68.005 ms

Loss rate: 88.40%

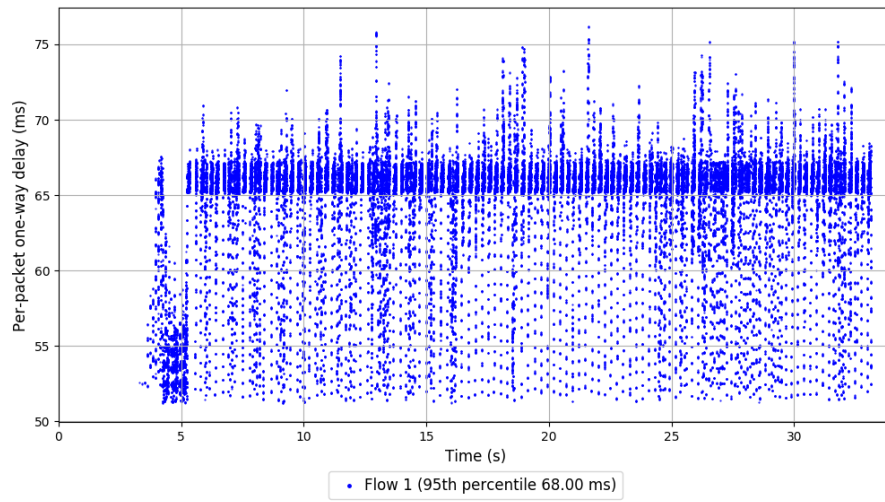
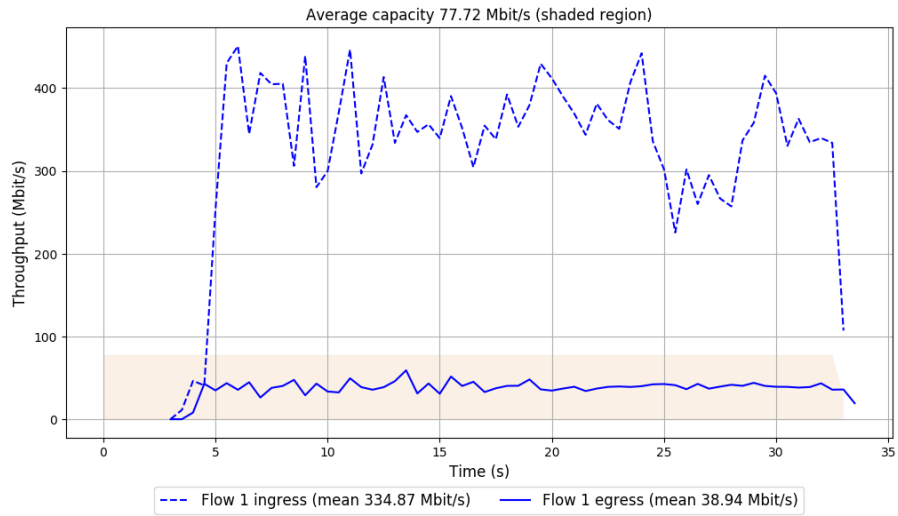
-- Flow 1:

Average throughput: 38.94 Mbit/s

95th percentile per-packet one-way delay: 68.005 ms

Loss rate: 88.40%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-05-30 08:41:57

End at: 2018-05-30 08:42:27

Below is generated by plot.py at 2018-05-30 09:28:42

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 37.48 Mbit/s (48.2% utilization)

95th percentile per-packet one-way delay: 66.876 ms

Loss rate: 73.18%

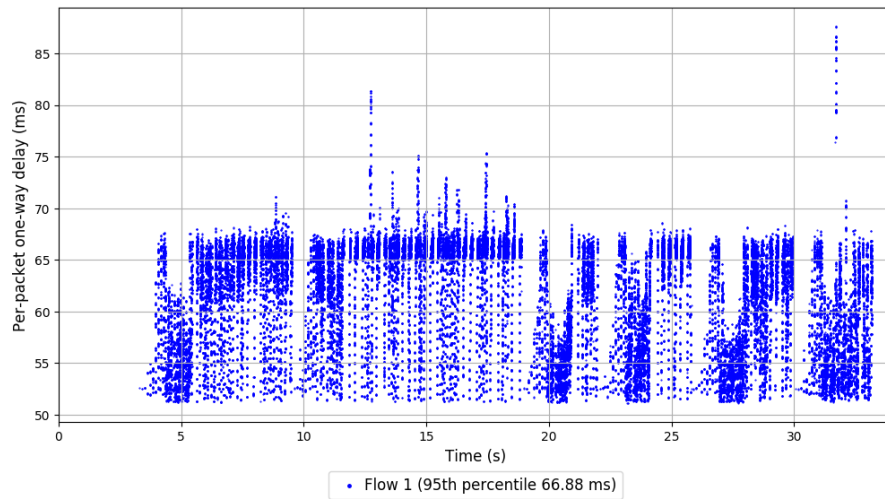
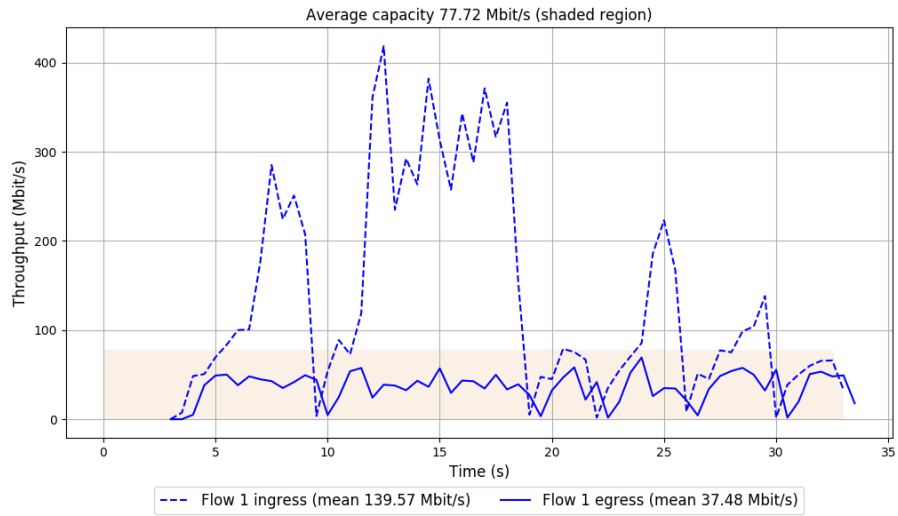
-- Flow 1:

Average throughput: 37.48 Mbit/s

95th percentile per-packet one-way delay: 66.876 ms

Loss rate: 73.18%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-05-30 08:52:04

End at: 2018-05-30 08:52:34

Below is generated by plot.py at 2018-05-30 09:28:42

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 36.72 Mbit/s (47.2% utilization)

95th percentile per-packet one-way delay: 66.670 ms

Loss rate: 67.86%

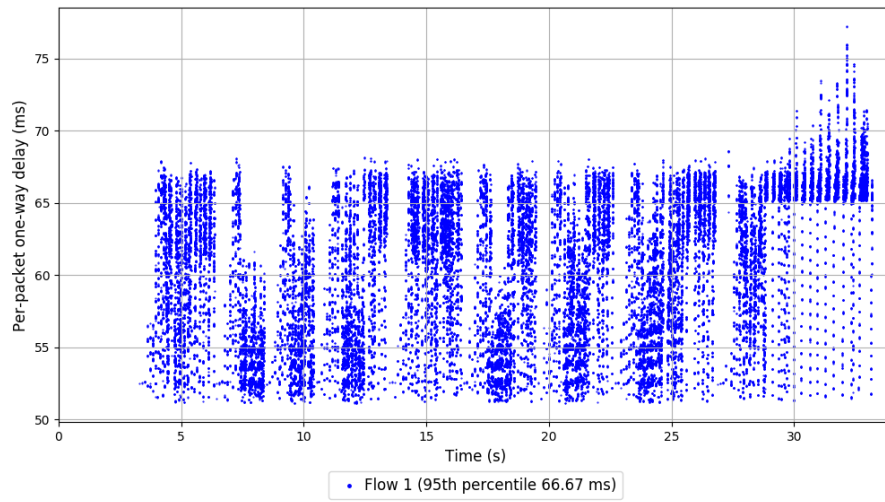
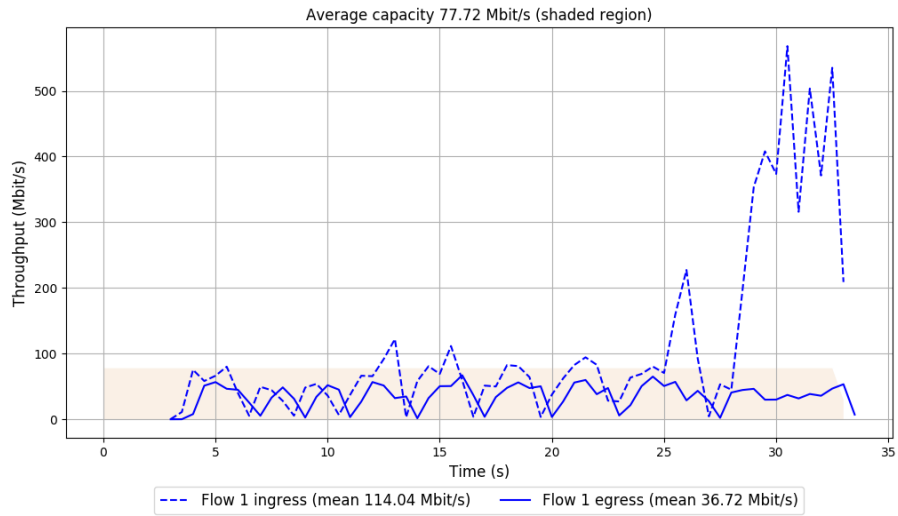
-- Flow 1:

Average throughput: 36.72 Mbit/s

95th percentile per-packet one-way delay: 66.670 ms

Loss rate: 67.86%

Run 10: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-05-30 07:19:27

End at: 2018-05-30 07:19:57

Below is generated by plot.py at 2018-05-30 09:28:42

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 67.40 Mbit/s (86.7% utilization)

95th percentile per-packet one-way delay: 54.587 ms

Loss rate: 0.81%

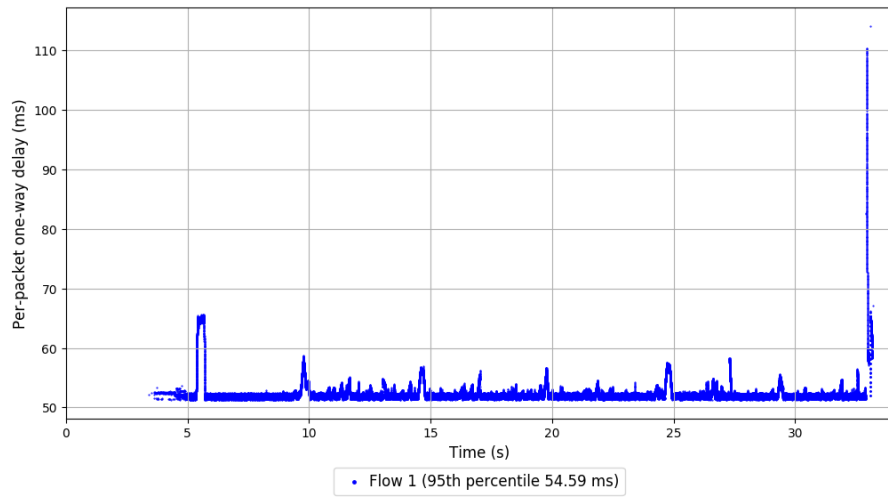
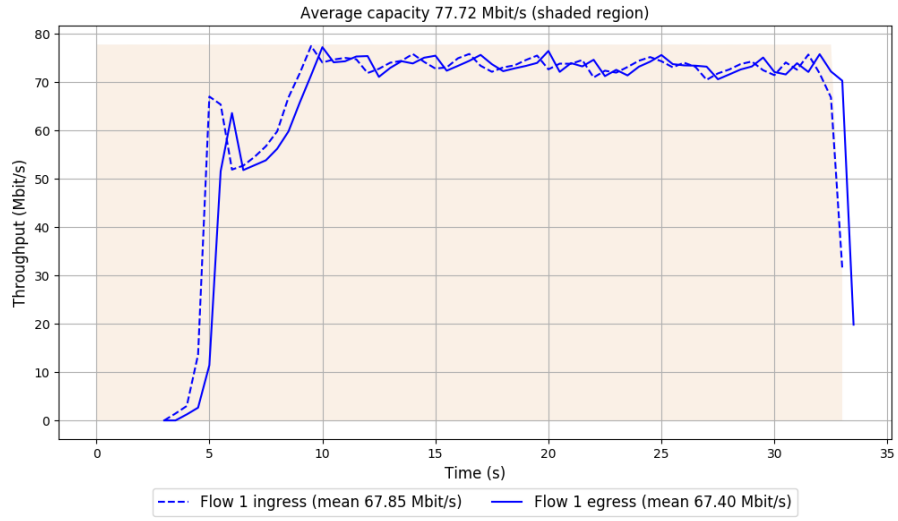
-- Flow 1:

Average throughput: 67.40 Mbit/s

95th percentile per-packet one-way delay: 54.587 ms

Loss rate: 0.81%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-05-30 07:29:34

End at: 2018-05-30 07:30:04

Below is generated by plot.py at 2018-05-30 09:28:42

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 66.55 Mbit/s (85.6% utilization)

95th percentile per-packet one-way delay: 54.013 ms

Loss rate: 0.61%

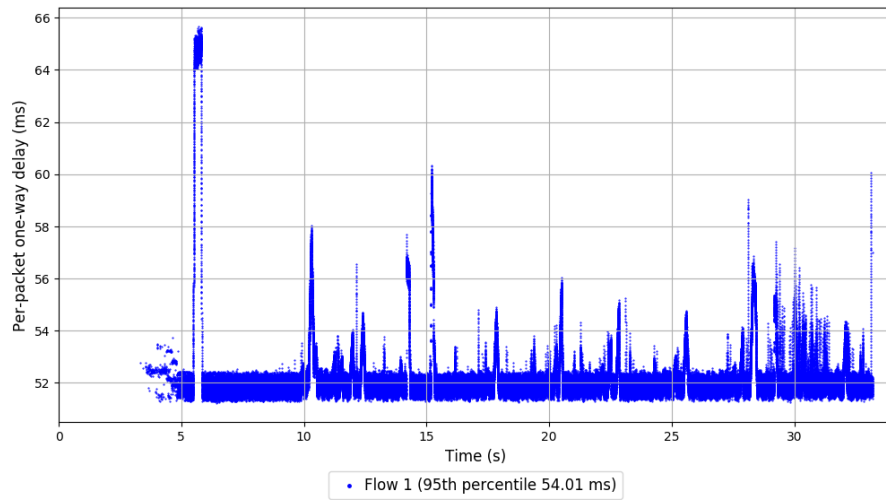
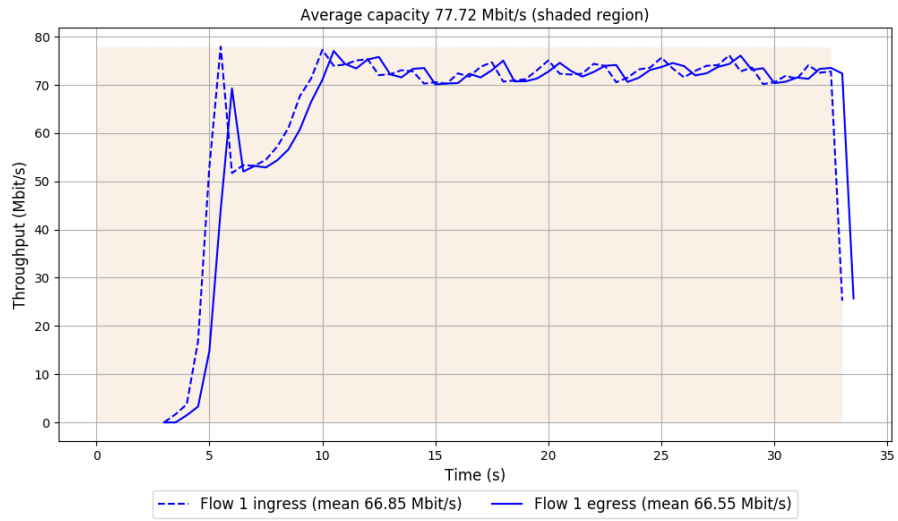
-- Flow 1:

Average throughput: 66.55 Mbit/s

95th percentile per-packet one-way delay: 54.013 ms

Loss rate: 0.61%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-05-30 07:39:44

End at: 2018-05-30 07:40:14

Below is generated by plot.py at 2018-05-30 09:28:42

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 67.35 Mbit/s (86.7% utilization)

95th percentile per-packet one-way delay: 53.836 ms

Loss rate: 0.71%

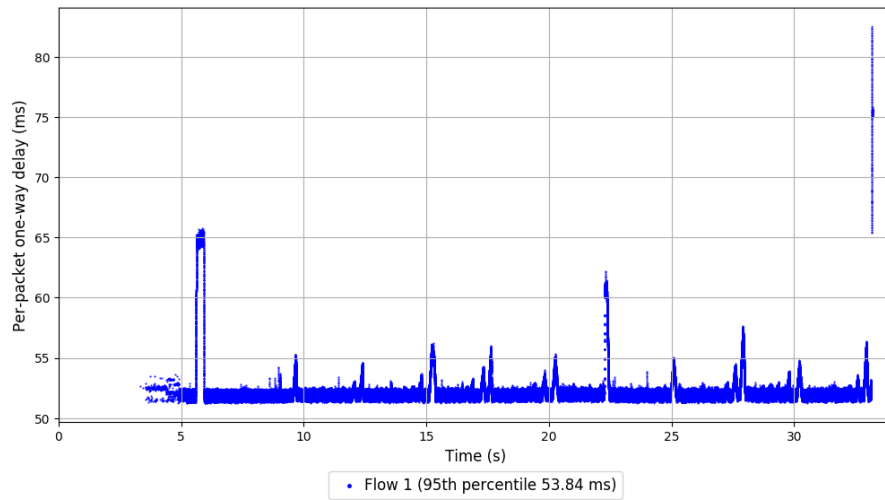
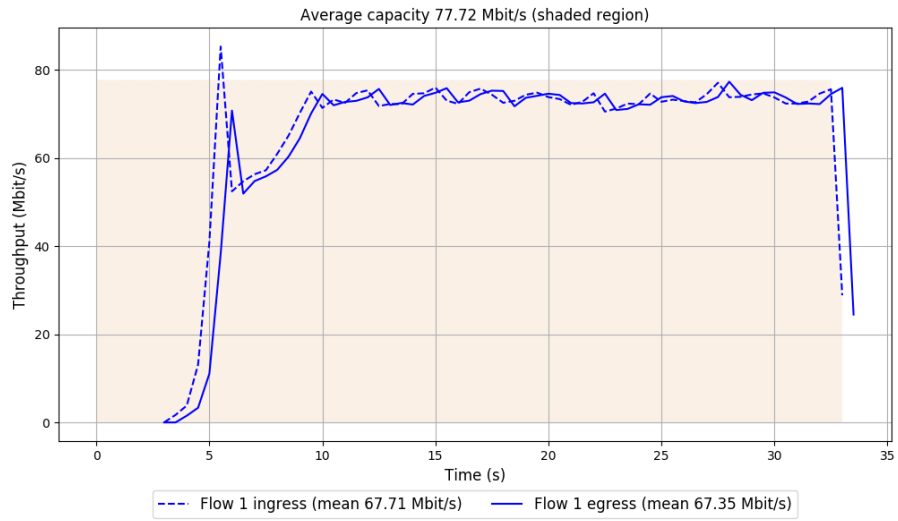
-- Flow 1:

Average throughput: 67.35 Mbit/s

95th percentile per-packet one-way delay: 53.836 ms

Loss rate: 0.71%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-05-30 07:49:52

End at: 2018-05-30 07:50:22

Below is generated by plot.py at 2018-05-30 09:28:42

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 67.19 Mbit/s (86.5% utilization)

95th percentile per-packet one-way delay: 54.913 ms

Loss rate: 0.61%

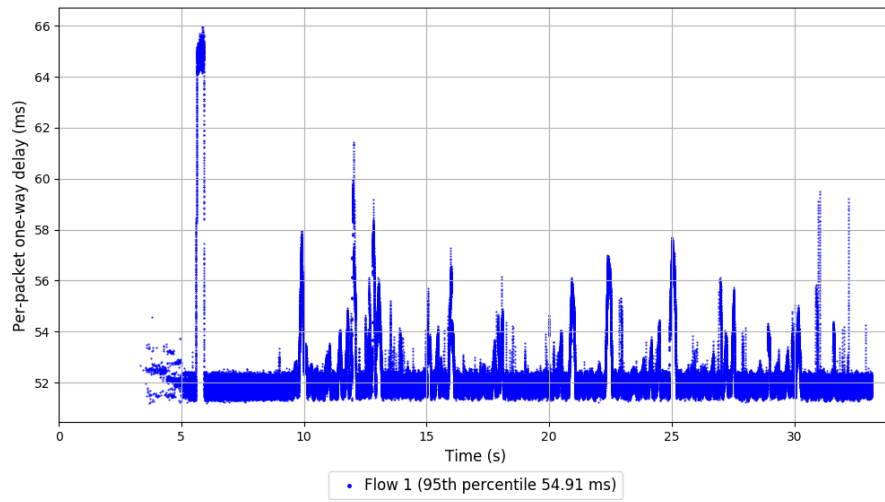
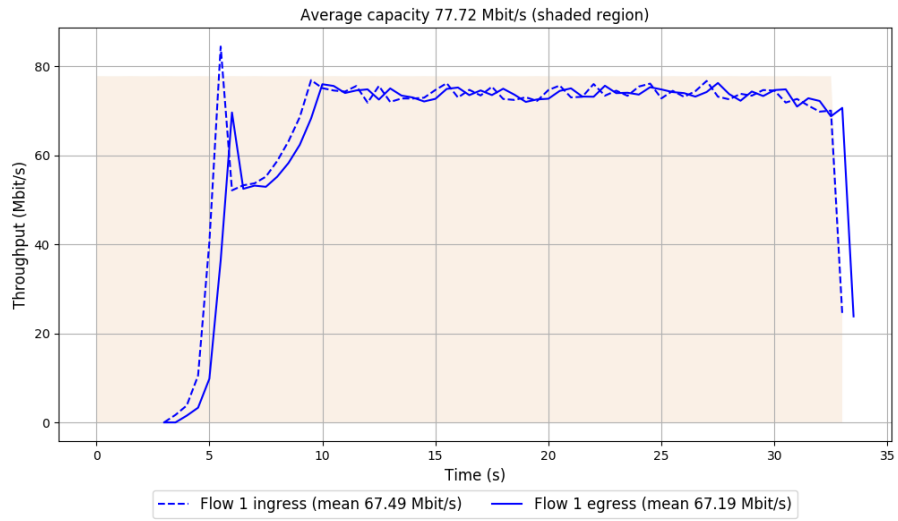
-- Flow 1:

Average throughput: 67.19 Mbit/s

95th percentile per-packet one-way delay: 54.913 ms

Loss rate: 0.61%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2018-05-30 07:59:59

End at: 2018-05-30 08:00:29

Below is generated by plot.py at 2018-05-30 09:29:18

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 64.78 Mbit/s (83.3% utilization)

95th percentile per-packet one-way delay: 54.601 ms

Loss rate: 0.92%

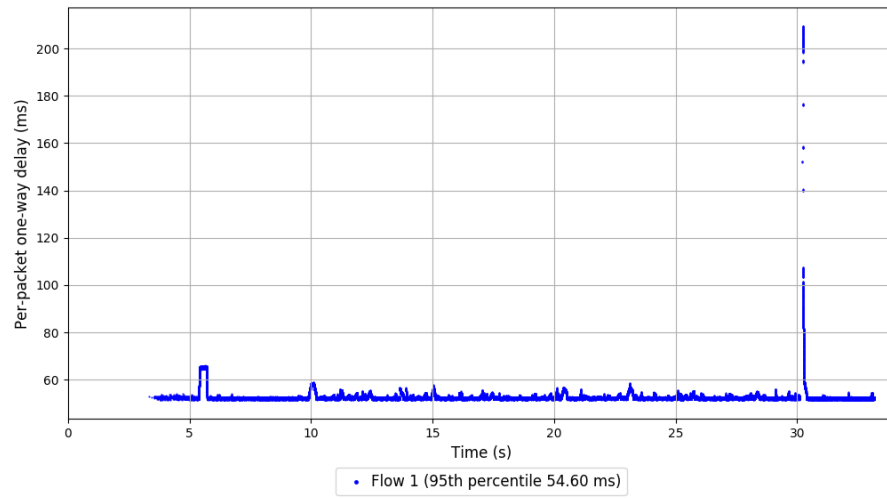
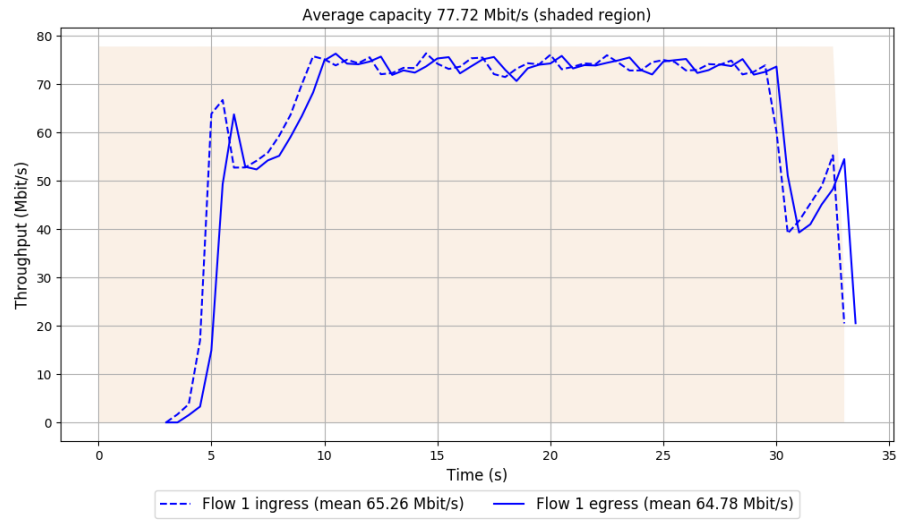
-- Flow 1:

Average throughput: 64.78 Mbit/s

95th percentile per-packet one-way delay: 54.601 ms

Loss rate: 0.92%

Run 5: Report of PCC-Vivace — Data Link



Run 6: Statistics of PCC-Vivace

Start at: 2018-05-30 08:10:09

End at: 2018-05-30 08:10:39

Below is generated by plot.py at 2018-05-30 09:29:21

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 67.36 Mbit/s (86.7% utilization)

95th percentile per-packet one-way delay: 54.274 ms

Loss rate: 0.64%

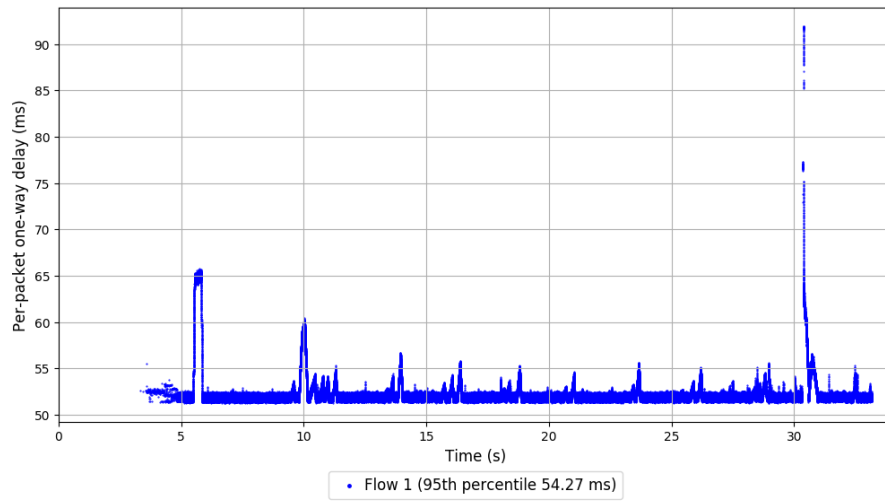
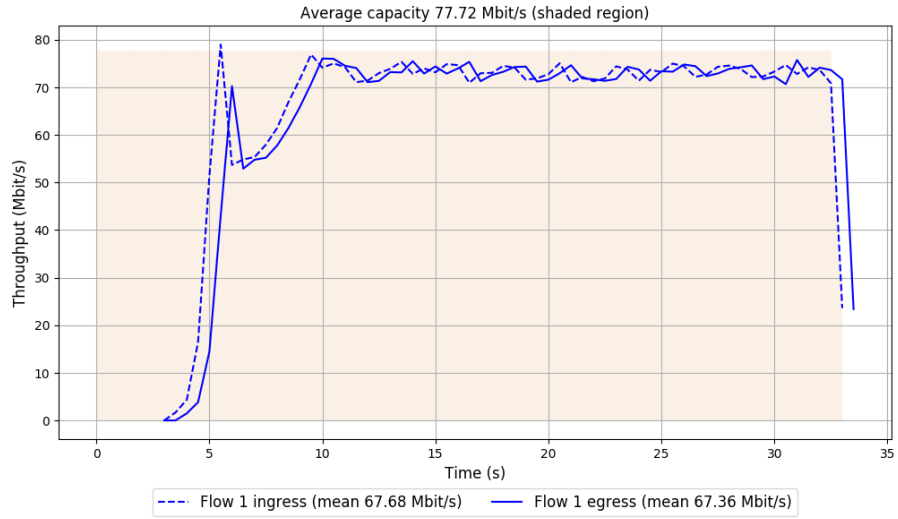
-- Flow 1:

Average throughput: 67.36 Mbit/s

95th percentile per-packet one-way delay: 54.274 ms

Loss rate: 0.64%

Run 6: Report of PCC-Vivace — Data Link



Run 7: Statistics of PCC-Vivace

Start at: 2018-05-30 08:20:20

End at: 2018-05-30 08:20:50

Below is generated by plot.py at 2018-05-30 09:29:26

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 67.51 Mbit/s (86.9% utilization)

95th percentile per-packet one-way delay: 53.814 ms

Loss rate: 0.62%

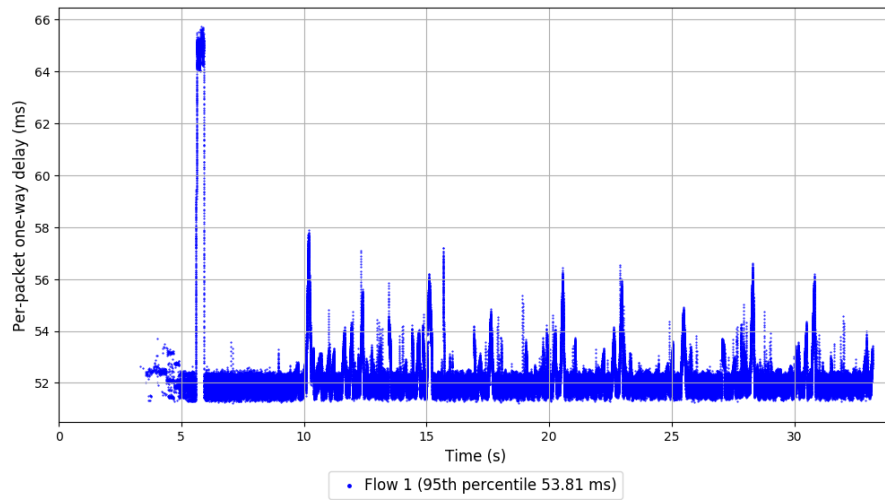
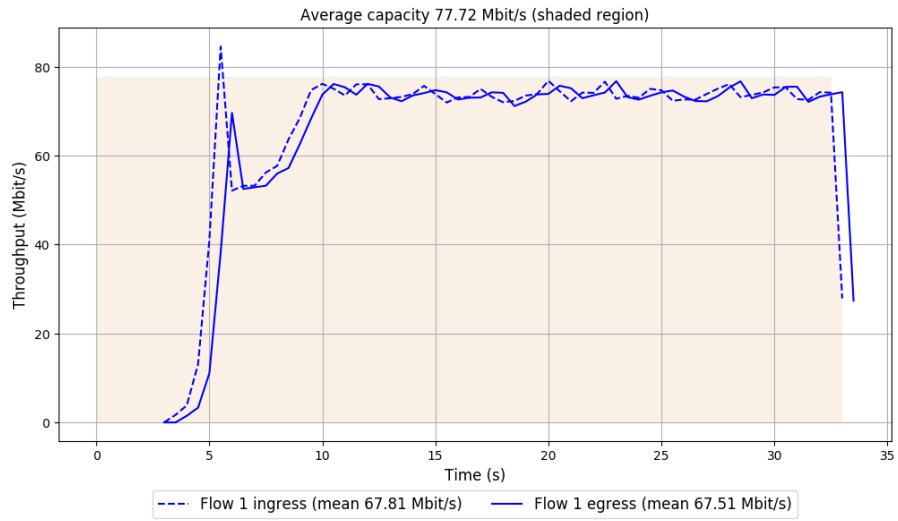
-- Flow 1:

Average throughput: 67.51 Mbit/s

95th percentile per-packet one-way delay: 53.814 ms

Loss rate: 0.62%

Run 7: Report of PCC-Vivace — Data Link



Run 8: Statistics of PCC-Vivace

Start at: 2018-05-30 08:30:30

End at: 2018-05-30 08:31:00

Below is generated by plot.py at 2018-05-30 09:29:47

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 65.97 Mbit/s (84.9% utilization)

95th percentile per-packet one-way delay: 54.663 ms

Loss rate: 0.76%

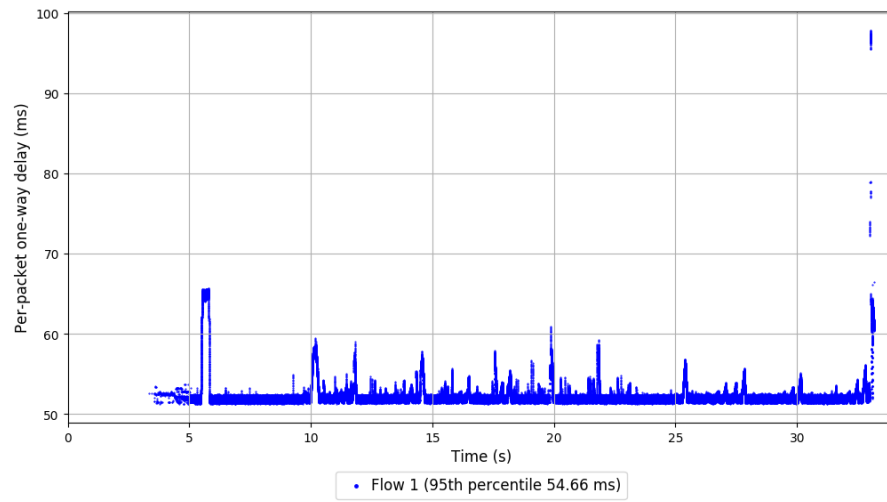
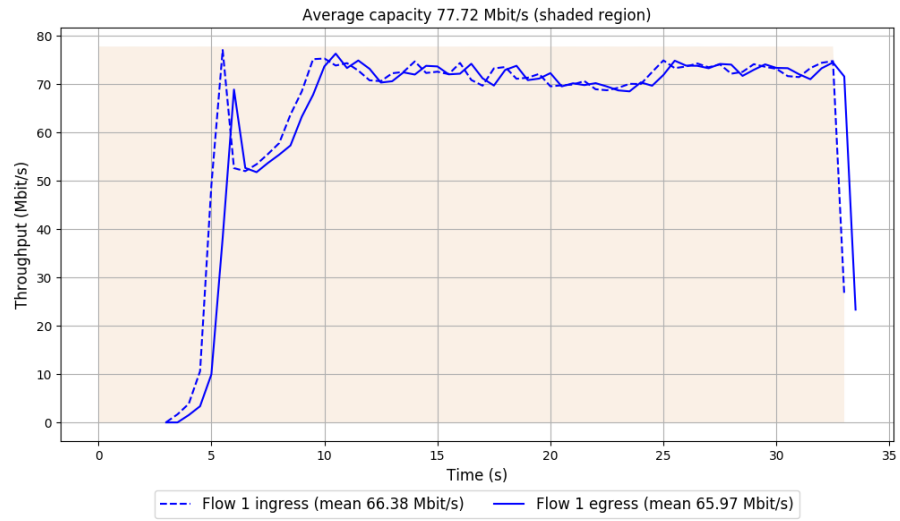
-- Flow 1:

Average throughput: 65.97 Mbit/s

95th percentile per-packet one-way delay: 54.663 ms

Loss rate: 0.76%

Run 8: Report of PCC-Vivace — Data Link



Run 9: Statistics of PCC-Vivace

Start at: 2018-05-30 08:40:42

End at: 2018-05-30 08:41:12

Below is generated by plot.py at 2018-05-30 09:29:50

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 66.96 Mbit/s (86.2% utilization)

95th percentile per-packet one-way delay: 54.137 ms

Loss rate: 0.64%

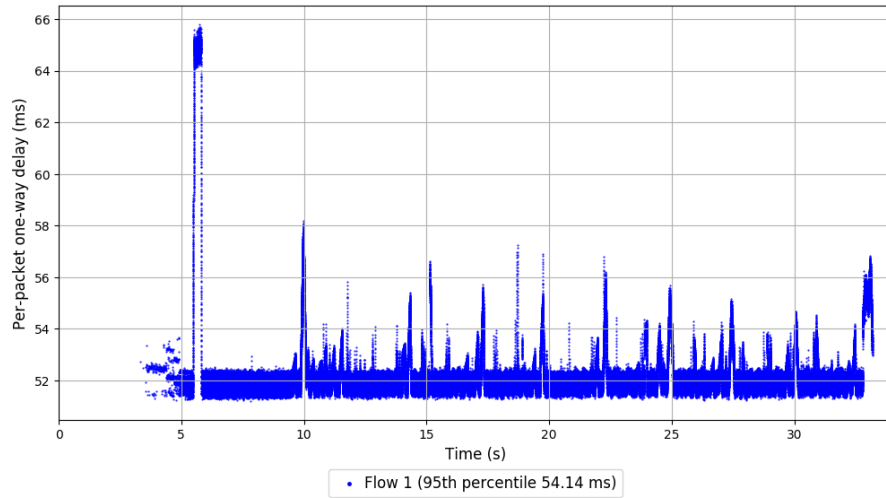
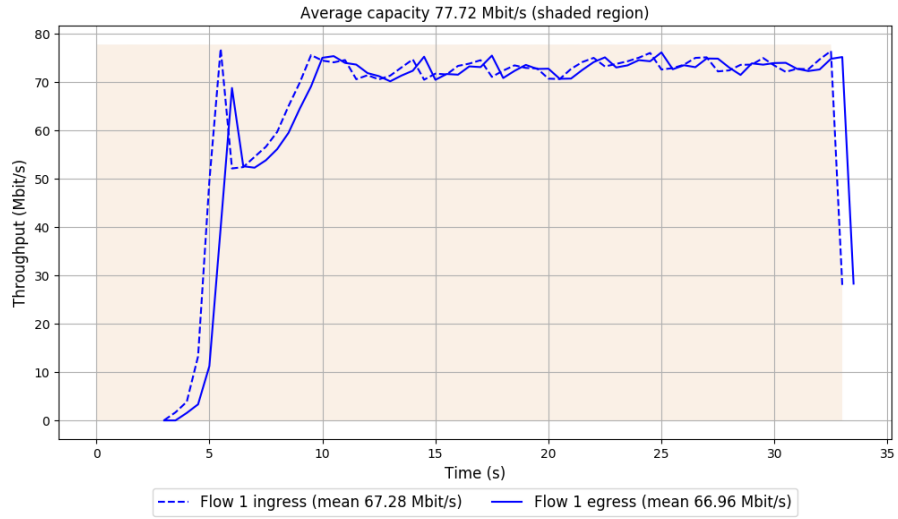
-- Flow 1:

Average throughput: 66.96 Mbit/s

95th percentile per-packet one-way delay: 54.137 ms

Loss rate: 0.64%

Run 9: Report of PCC-Vivace — Data Link



Run 10: Statistics of PCC-Vivace

Start at: 2018-05-30 08:50:49

End at: 2018-05-30 08:51:19

Below is generated by plot.py at 2018-05-30 09:29:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 67.66 Mbit/s (87.0% utilization)

95th percentile per-packet one-way delay: 54.668 ms

Loss rate: 0.76%

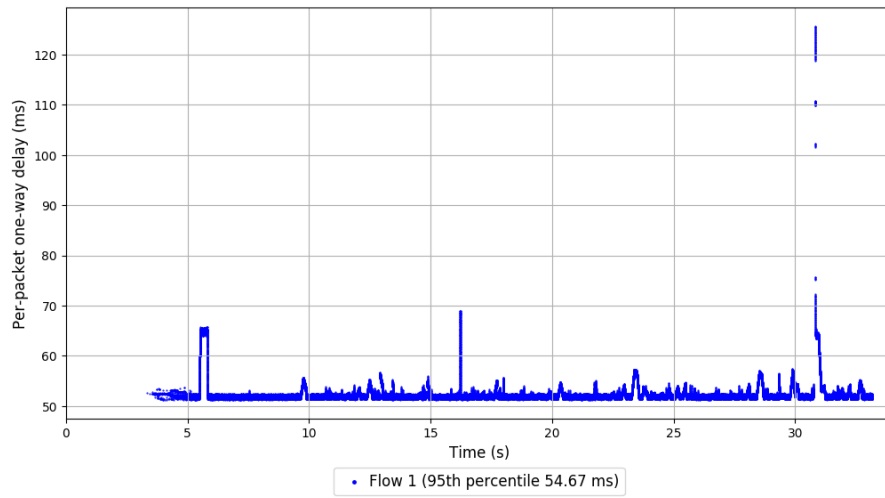
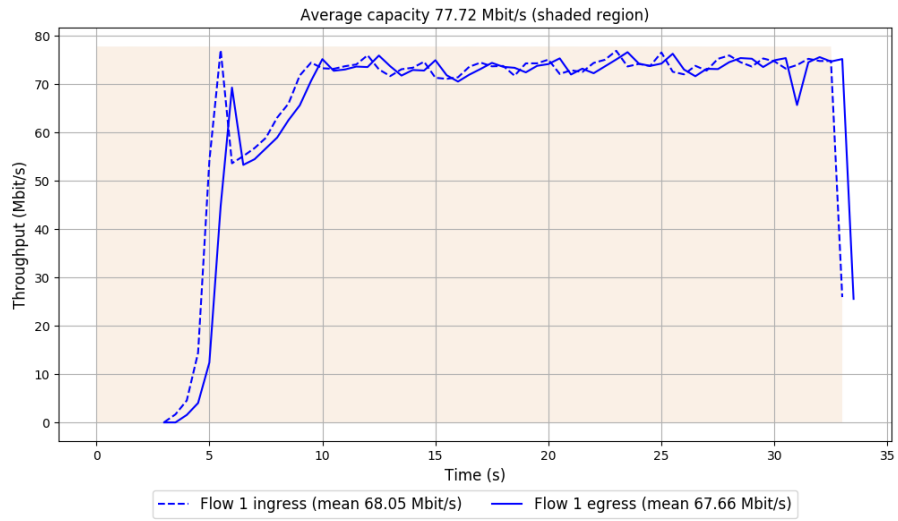
-- Flow 1:

Average throughput: 67.66 Mbit/s

95th percentile per-packet one-way delay: 54.668 ms

Loss rate: 0.76%

Run 10: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-05-30 07:17:37

End at: 2018-05-30 07:18:07

Below is generated by plot.py at 2018-05-30 09:29:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 2.22 Mbit/s (2.9% utilization)

95th percentile per-packet one-way delay: 53.660 ms

Loss rate: 0.31%

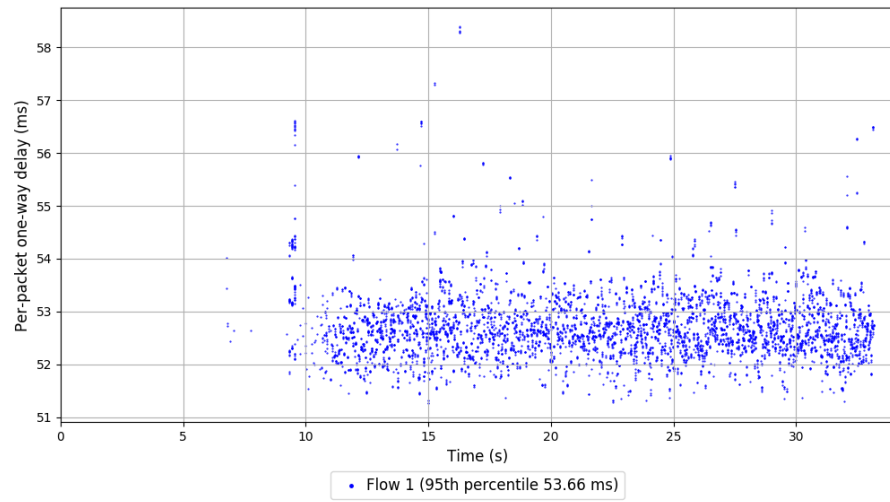
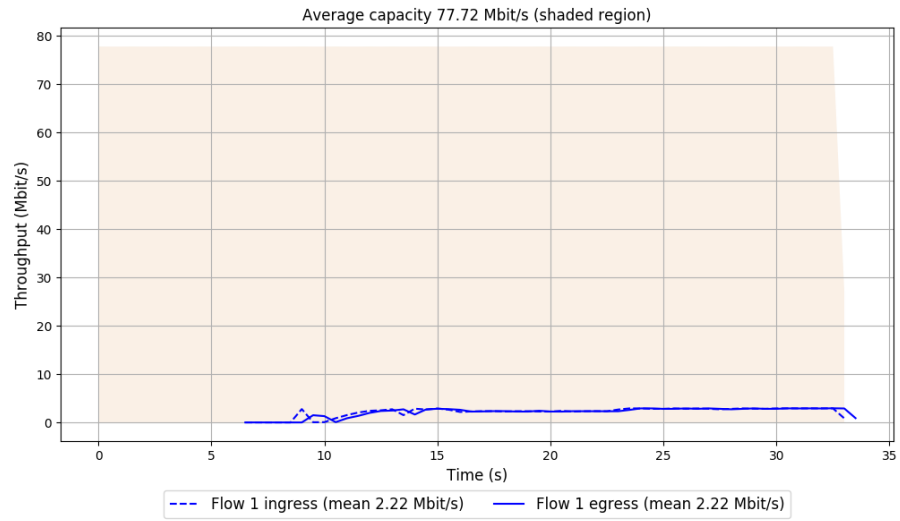
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 53.660 ms

Loss rate: 0.31%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-05-30 07:27:40

End at: 2018-05-30 07:28:10

Below is generated by plot.py at 2018-05-30 09:29:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 1.94 Mbit/s (2.5% utilization)

95th percentile per-packet one-way delay: 53.467 ms

Loss rate: 0.24%

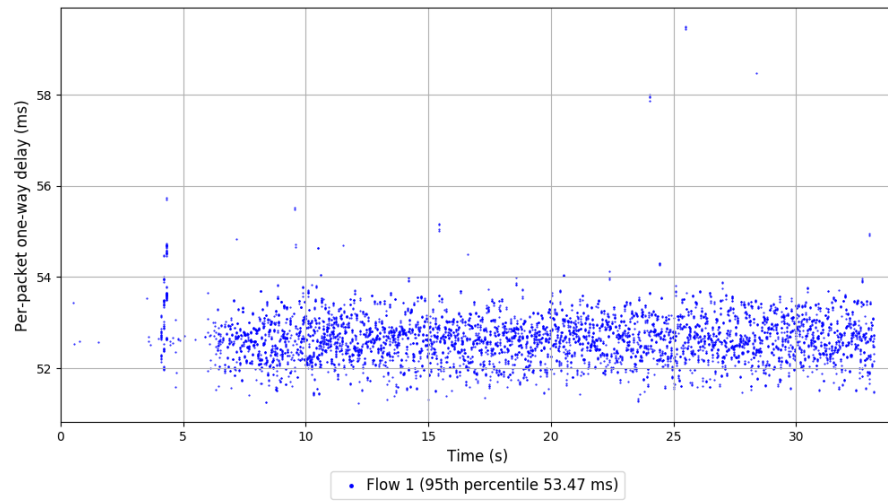
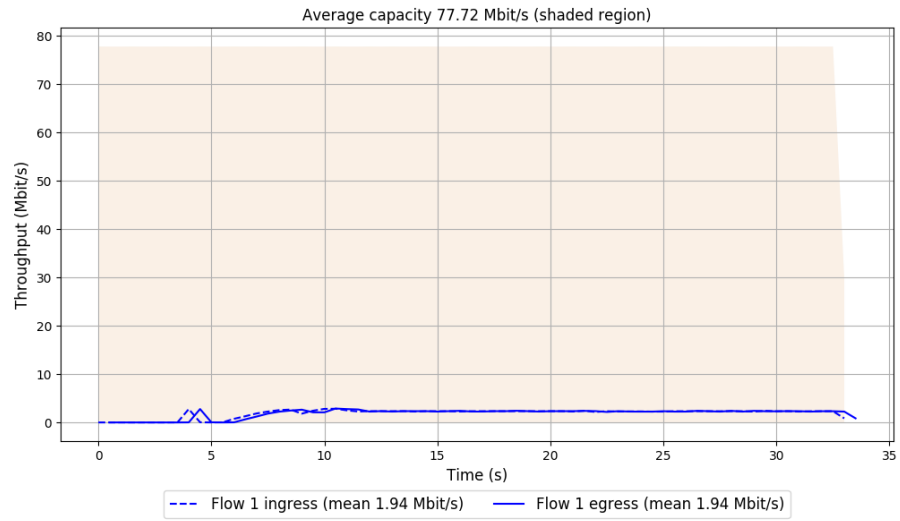
-- Flow 1:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 53.467 ms

Loss rate: 0.24%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-05-30 07:37:50

End at: 2018-05-30 07:38:20

Below is generated by plot.py at 2018-05-30 09:29:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 2.44 Mbit/s (3.1% utilization)

95th percentile per-packet one-way delay: 53.887 ms

Loss rate: 0.25%

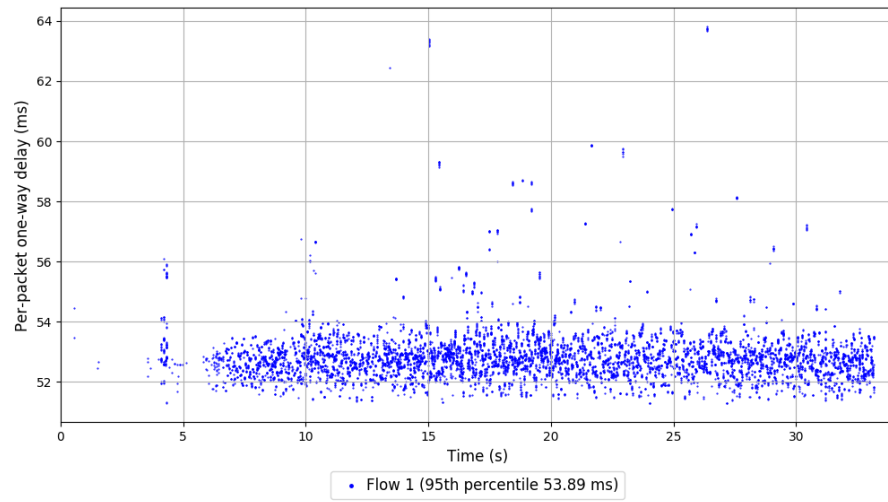
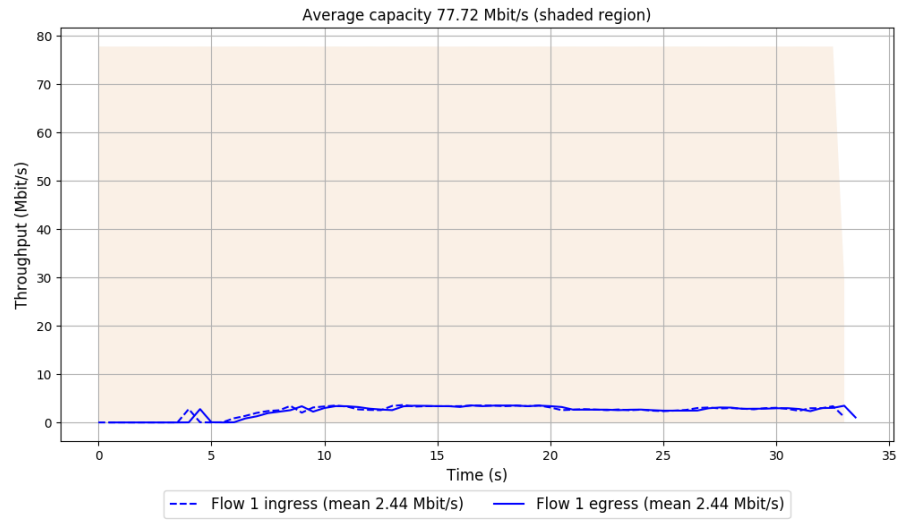
-- Flow 1:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 53.887 ms

Loss rate: 0.25%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-05-30 07:47:57

End at: 2018-05-30 07:48:27

Below is generated by plot.py at 2018-05-30 09:29:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 2.27 Mbit/s (2.9% utilization)

95th percentile per-packet one-way delay: 53.633 ms

Loss rate: 0.33%

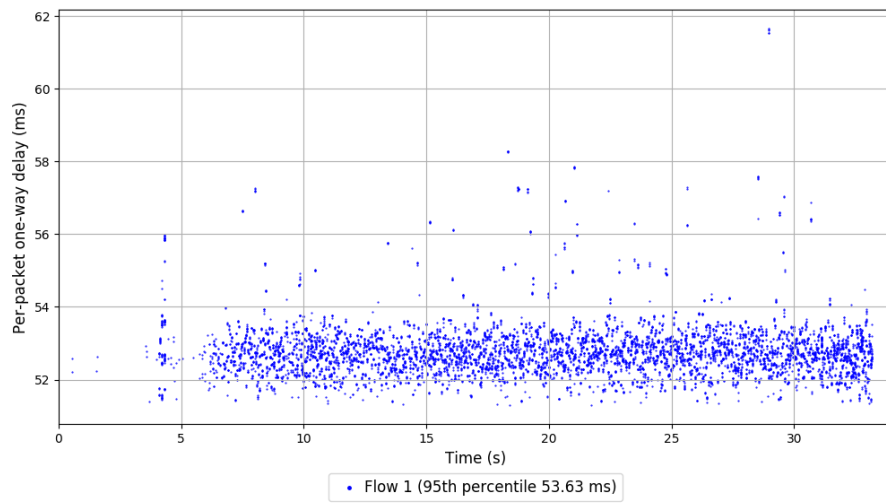
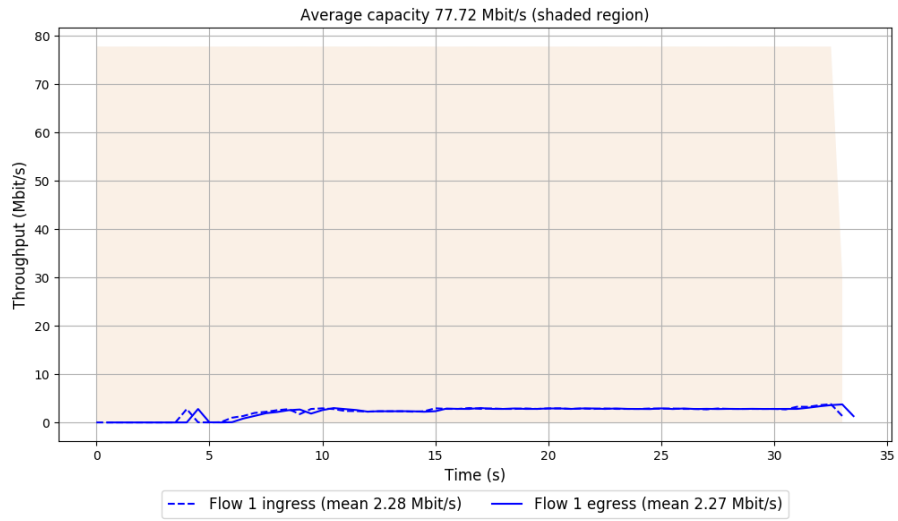
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 53.633 ms

Loss rate: 0.33%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-05-30 07:58:06

End at: 2018-05-30 07:58:36

Below is generated by plot.py at 2018-05-30 09:29:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 2.20 Mbit/s (2.8% utilization)

95th percentile per-packet one-way delay: 53.551 ms

Loss rate: 0.45%

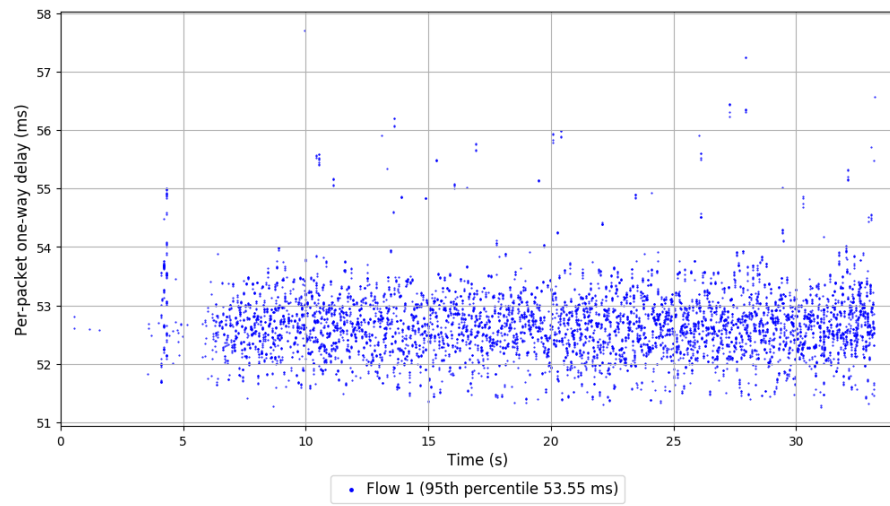
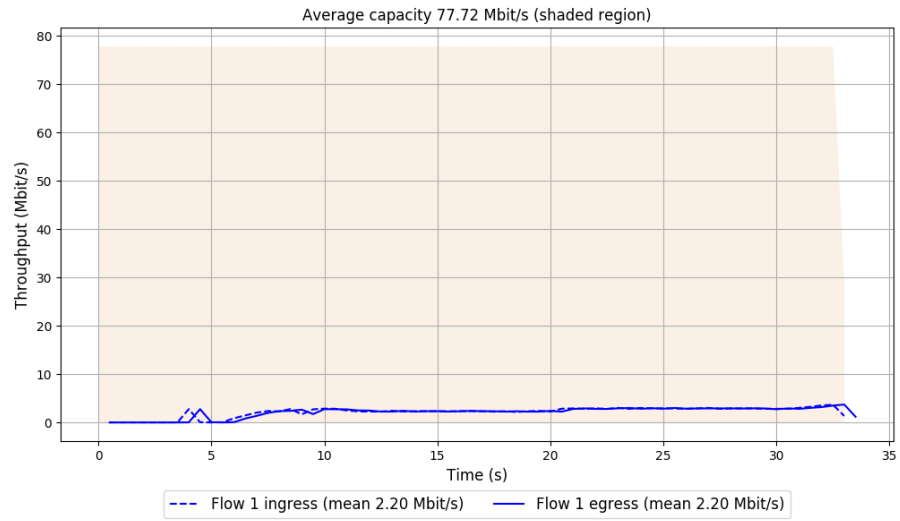
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 53.551 ms

Loss rate: 0.45%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-05-30 08:08:14

End at: 2018-05-30 08:08:44

Below is generated by plot.py at 2018-05-30 09:29:57

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 2.12 Mbit/s (2.7% utilization)

95th percentile per-packet one-way delay: 53.660 ms

Loss rate: 0.29%

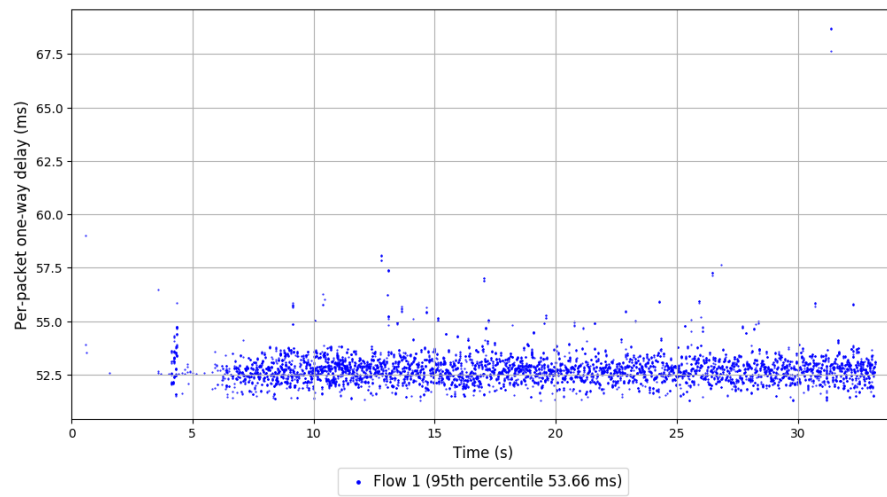
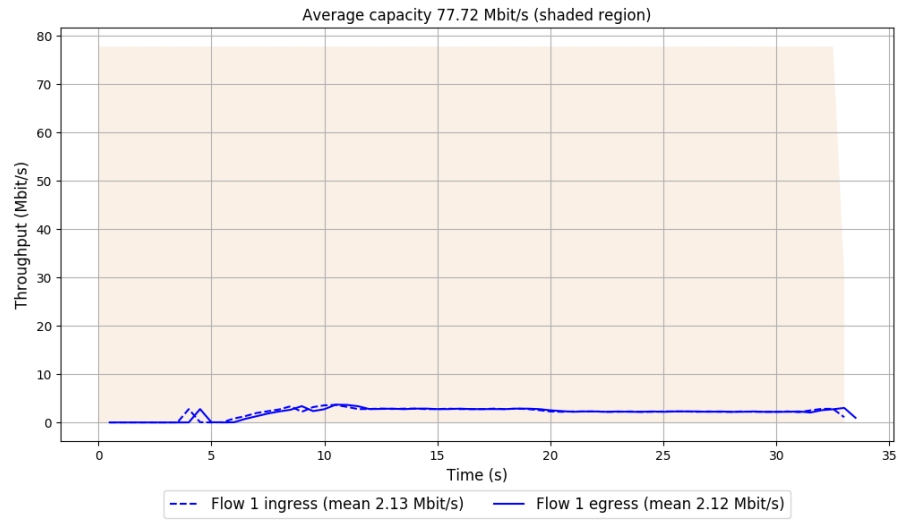
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 53.660 ms

Loss rate: 0.29%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-05-30 08:18:25

End at: 2018-05-30 08:18:55

Below is generated by plot.py at 2018-05-30 09:29:59

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 2.15 Mbit/s (2.8% utilization)

95th percentile per-packet one-way delay: 53.547 ms

Loss rate: 0.28%

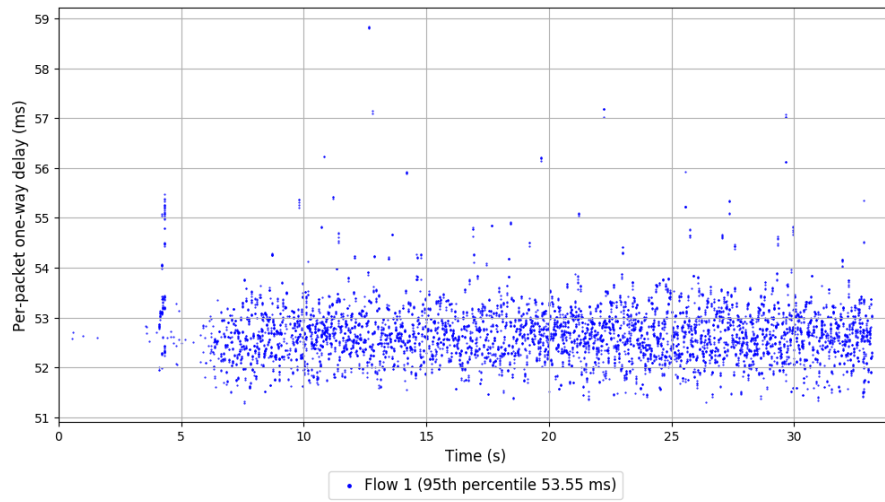
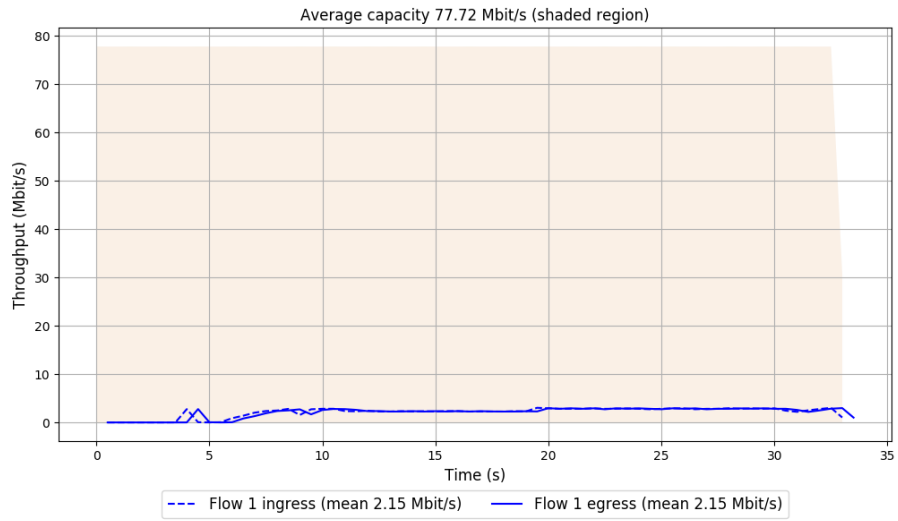
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 53.547 ms

Loss rate: 0.28%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-05-30 08:28:35

End at: 2018-05-30 08:29:05

Below is generated by plot.py at 2018-05-30 09:30:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 2.02 Mbit/s (2.6% utilization)

95th percentile per-packet one-way delay: 53.690 ms

Loss rate: 0.29%

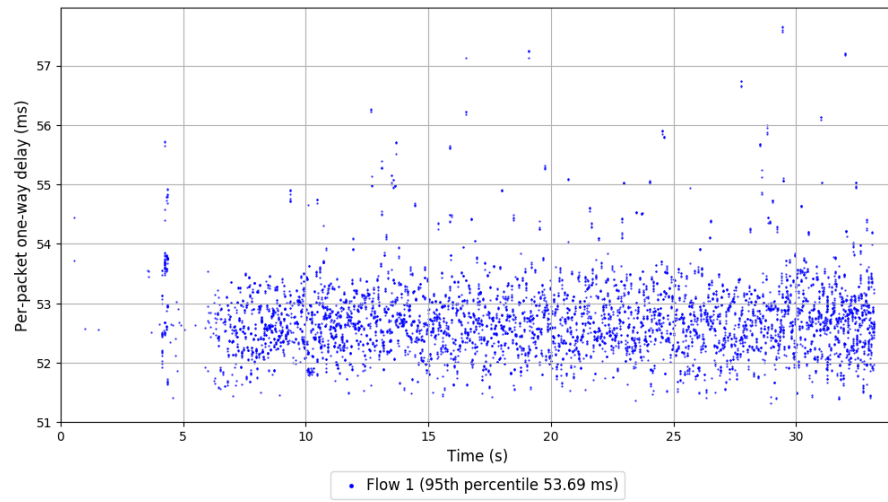
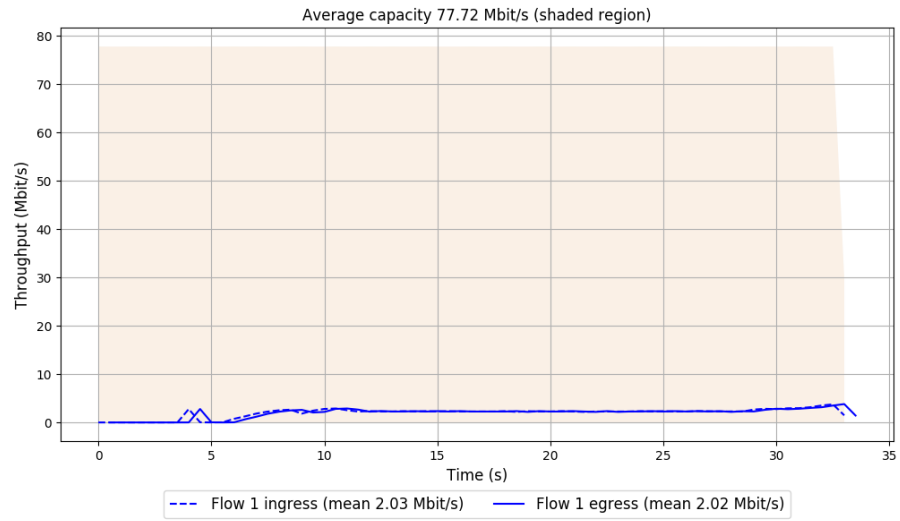
-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 53.690 ms

Loss rate: 0.29%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-05-30 08:38:47

End at: 2018-05-30 08:39:17

Below is generated by plot.py at 2018-05-30 09:30:04

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 2.14 Mbit/s (2.8% utilization)

95th percentile per-packet one-way delay: 53.513 ms

Loss rate: 0.33%

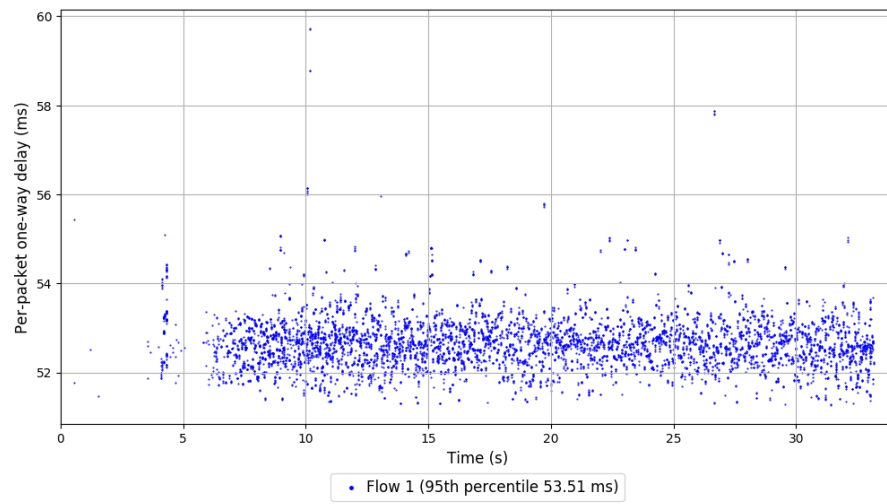
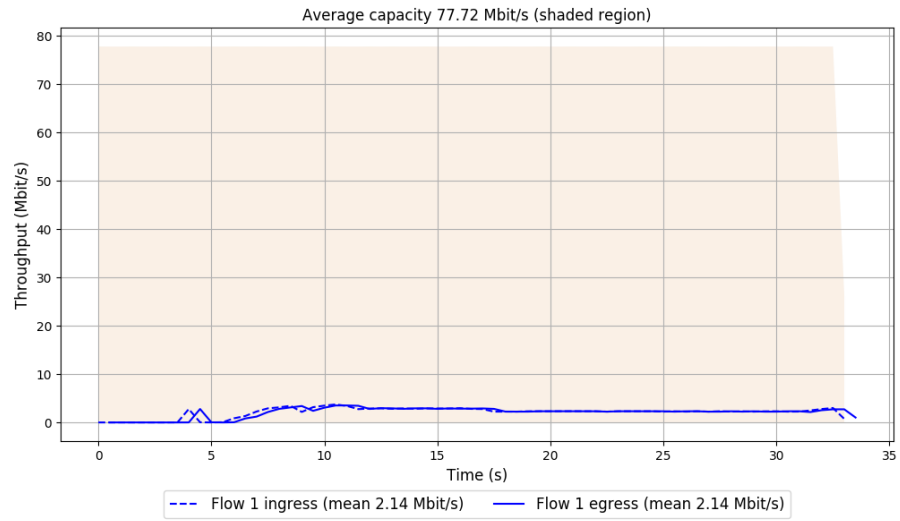
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 53.513 ms

Loss rate: 0.33%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-05-30 08:48:55

End at: 2018-05-30 08:49:25

Below is generated by plot.py at 2018-05-30 09:30:04

Datalink statistics

-- Total of 1 flow:

Average capacity: 77.72 Mbit/s

Average throughput: 1.92 Mbit/s (2.5% utilization)

95th percentile per-packet one-way delay: 53.524 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 1.92 Mbit/s

95th percentile per-packet one-way delay: 53.524 ms

Loss rate: 0.26%

Run 10: Report of WebRTC media — Data Link

