

## Pantheon Report

Generated at 2018-07-24 07:21:46 (UTC).

Tested in mahimahi: mm-delay 88 mm-link 2.64mbps-poisson.trace 2.64mbps-poisson.trace  
--uplink-queue=droptail --uplink-queue-args=packets=130

Repeated the test of 17 congestion control schemes 10 times.

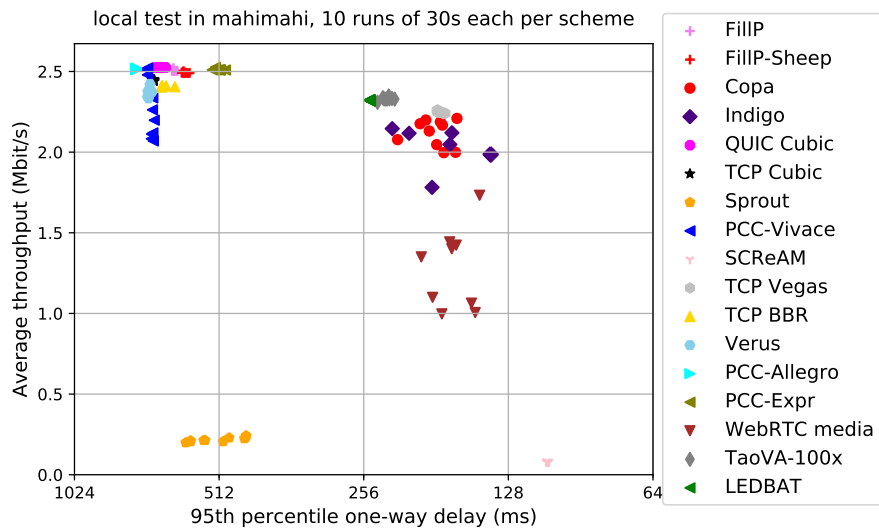
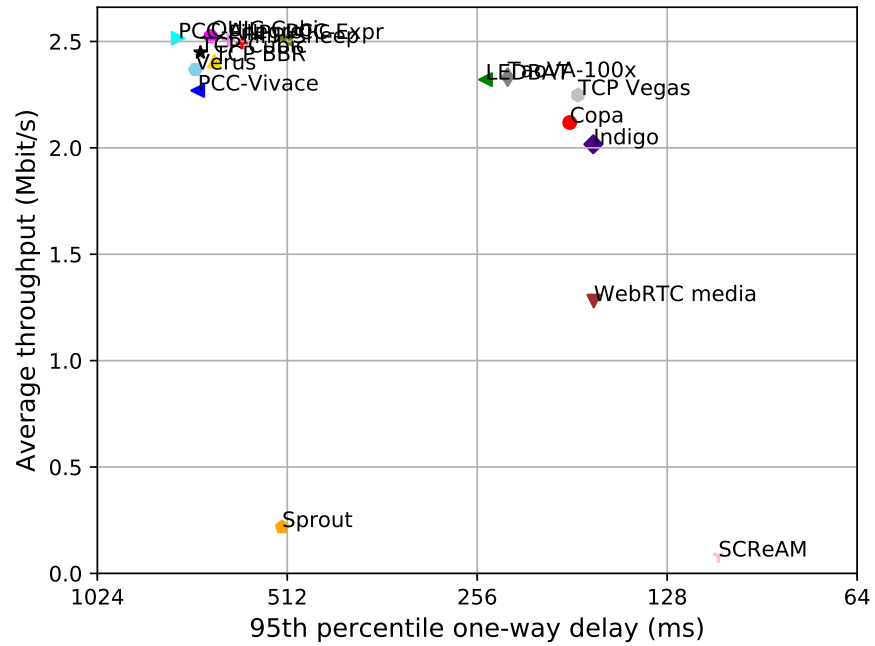
Each test lasted for 30 seconds running 1 flow.

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

Git summary:

```
branch: master @ 640164b5b17c7c6561fff57729b3b5935d8596ce
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ daed0c84f98531712514b2231f43ec6901114ffe
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
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-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
  M src/ScreamClient
  M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
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)



scheme	# runs	mean avg tput (Mbit/s)	mean 95th-%ile delay (ms)	mean loss rate (%)
		flow 1	flow 1	flow 1
TCP BBR	10	2.41	667.86	1.60
Copa	10	2.12	182.67	0.39
TCP Cubic	10	2.45	702.85	2.98
FillP	10	2.50	635.04	53.33
FillP-Sheep	10	2.49	603.78	8.94
Indigo	9	2.02	167.60	0.46
LEDBAT	10	2.32	248.37	0.68
PCC-Allegro	10	2.51	762.30	85.91
PCC-Expr	10	2.51	515.96	57.10
QUIC Cubic	9	2.52	677.15	3.87
SReAM	10	0.08	106.20	0.29
Sprout	10	0.22	521.78	0.11
TaoVA-100x	10	2.33	229.09	1.18
TCP Vegas	10	2.25	177.26	0.47
Verus	10	2.37	716.00	8.70
PCC-Vivace	10	2.27	709.94	17.87
WebRTC media	9	1.28	167.32	0.42

Run 1: Statistics of TCP BBR

Start at: 2018-07-24 05:48:05

End at: 2018-07-24 05:48:35

# Below is generated by plot.py at 2018-07-24 07:18:10

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.41 Mbit/s (106.1% utilization)

95th percentile per-packet one-way delay: 660.017 ms

Loss rate: 1.59%

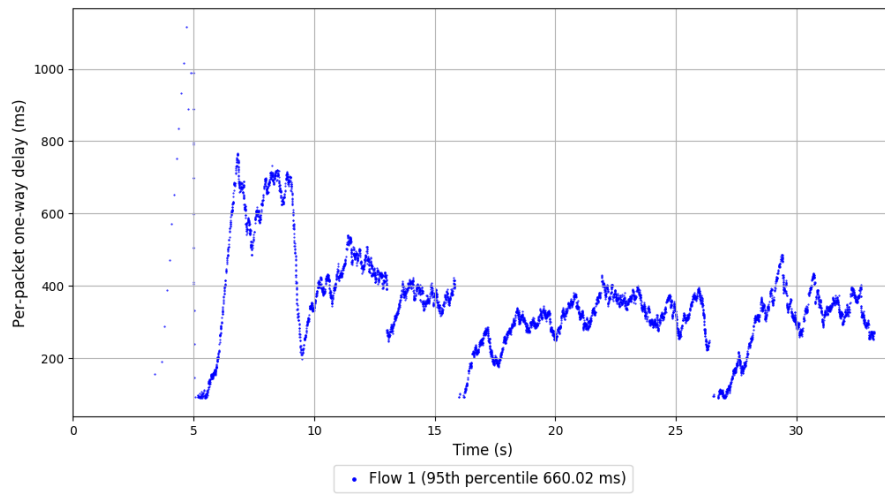
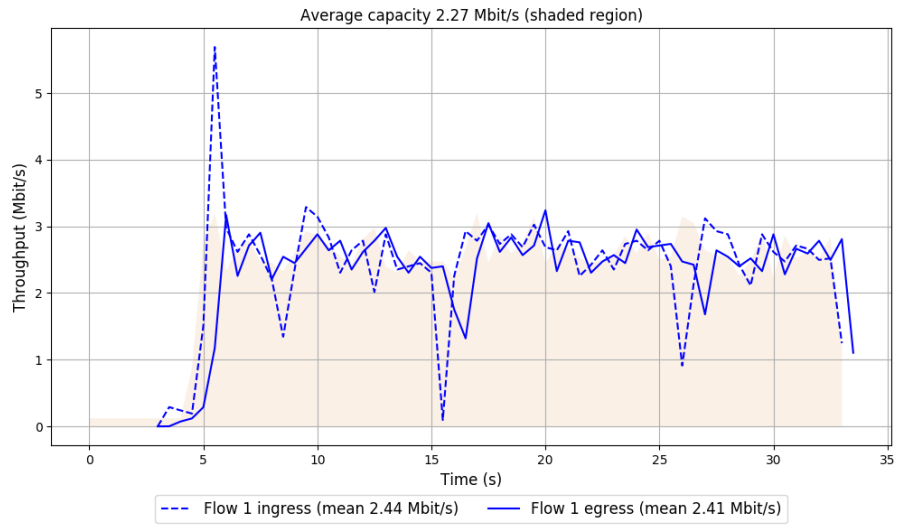
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 660.017 ms

Loss rate: 1.59%

# Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-07-24 05:57:44

End at: 2018-07-24 05:58:14

# Below is generated by plot.py at 2018-07-24 07:18:10

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.40 Mbit/s (105.8% utilization)

95th percentile per-packet one-way delay: 675.089 ms

Loss rate: 1.40%

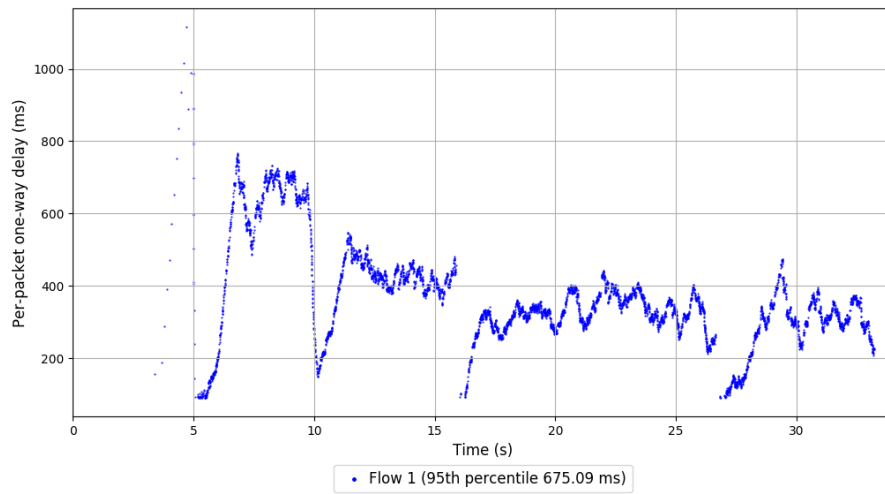
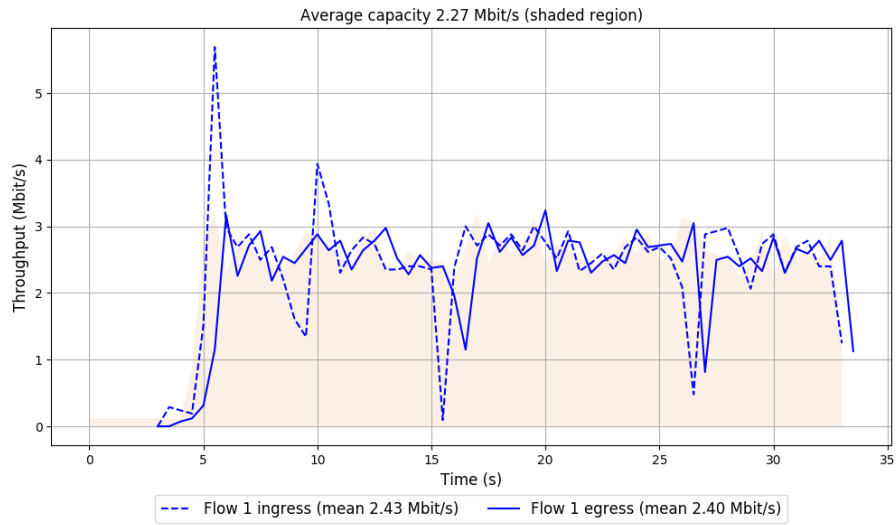
-- Flow 1:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 675.089 ms

Loss rate: 1.40%

## Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-07-24 06:07:23

End at: 2018-07-24 06:07:53

# Below is generated by plot.py at 2018-07-24 07:18:11

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.41 Mbit/s (105.9% utilization)

95th percentile per-packet one-way delay: 673.440 ms

Loss rate: 1.69%

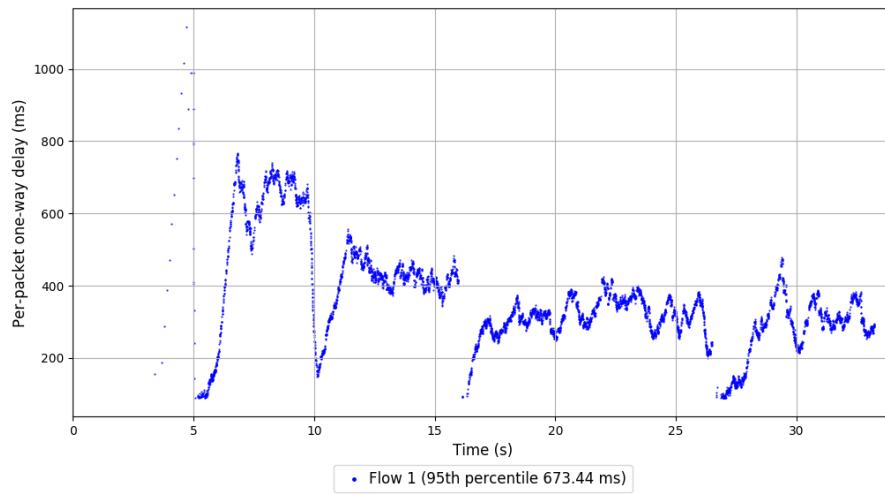
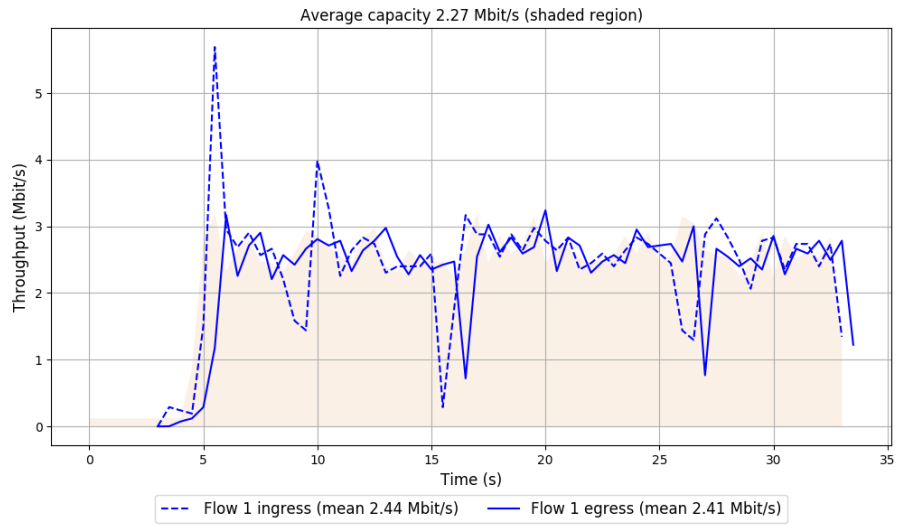
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 673.440 ms

Loss rate: 1.69%

### Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-07-24 06:17:02

End at: 2018-07-24 06:17:32

# Below is generated by plot.py at 2018-07-24 07:18:11

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.41 Mbit/s (106.0% utilization)

95th percentile per-packet one-way delay: 672.527 ms

Loss rate: 1.61%

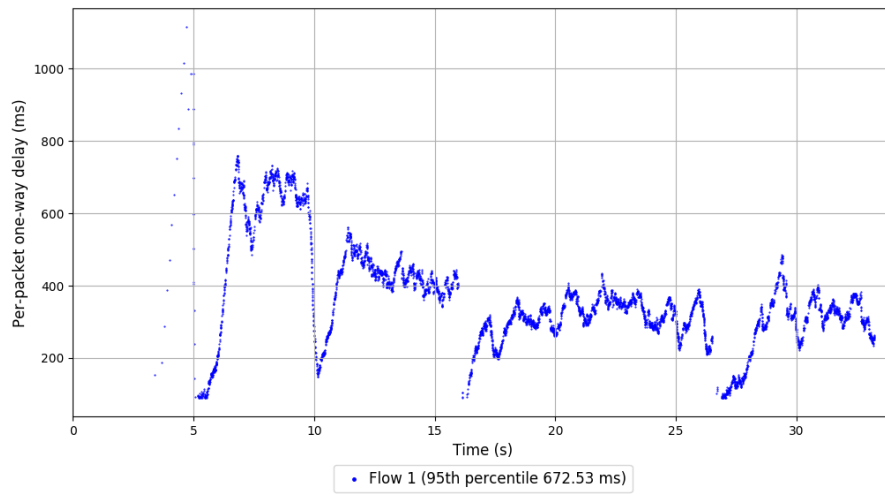
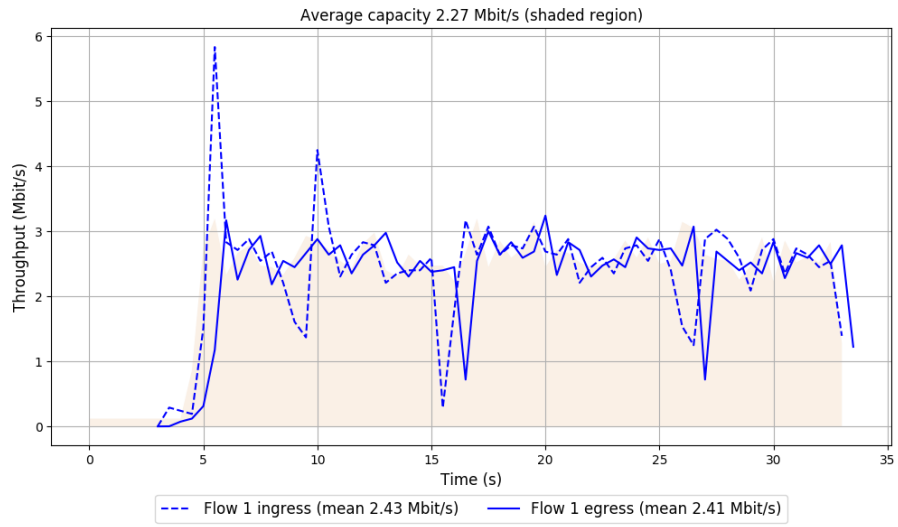
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 672.527 ms

Loss rate: 1.61%

### Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-07-24 06:26:41

End at: 2018-07-24 06:27:11

# Below is generated by plot.py at 2018-07-24 07:18:11

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.41 Mbit/s (105.9% utilization)

95th percentile per-packet one-way delay: 673.037 ms

Loss rate: 1.48%

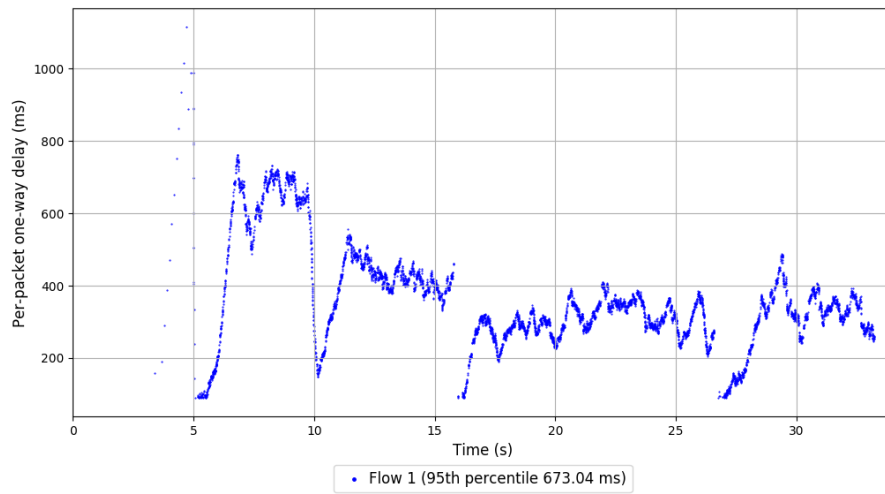
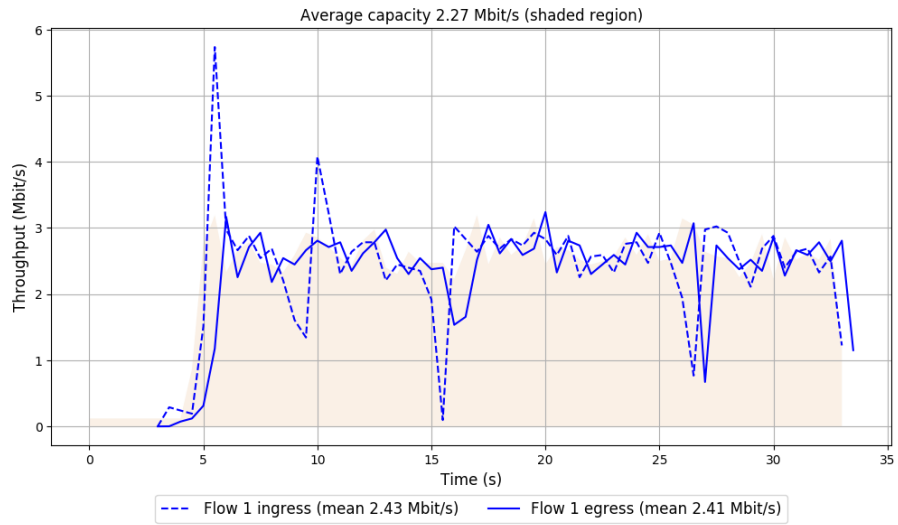
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 673.037 ms

Loss rate: 1.48%

### Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-07-24 06:36:20

End at: 2018-07-24 06:36:50

# Below is generated by plot.py at 2018-07-24 07:18:11

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.41 Mbit/s (105.9% utilization)

95th percentile per-packet one-way delay: 673.667 ms

Loss rate: 1.58%

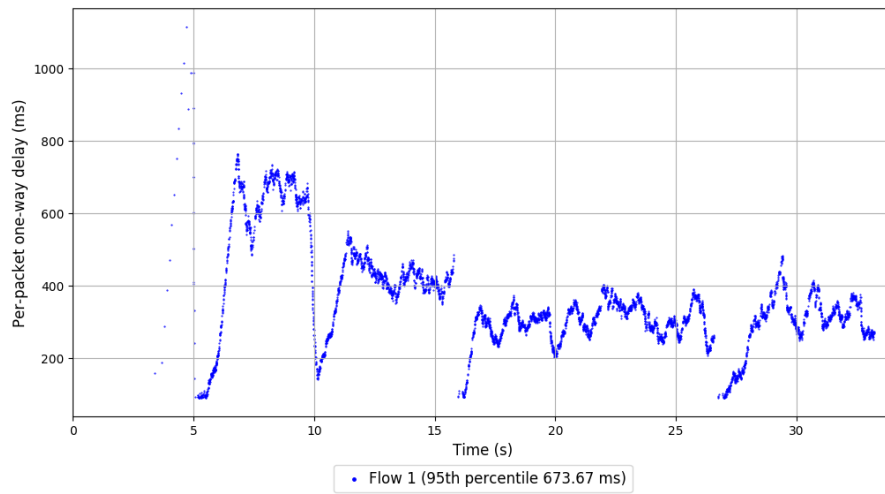
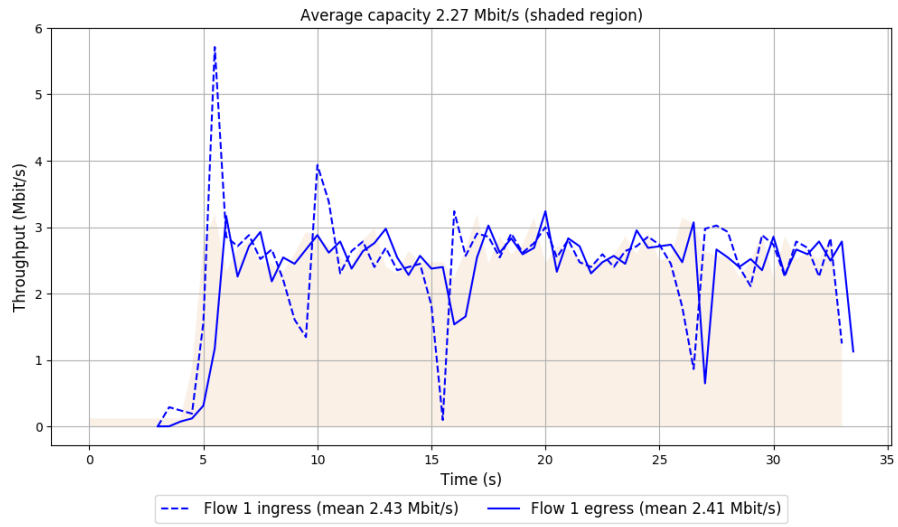
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 673.667 ms

Loss rate: 1.58%

### Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-07-24 06:45:59

End at: 2018-07-24 06:46:29

# Below is generated by plot.py at 2018-07-24 07:18:11

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.41 Mbit/s (106.2% utilization)

95th percentile per-packet one-way delay: 672.835 ms

Loss rate: 1.53%

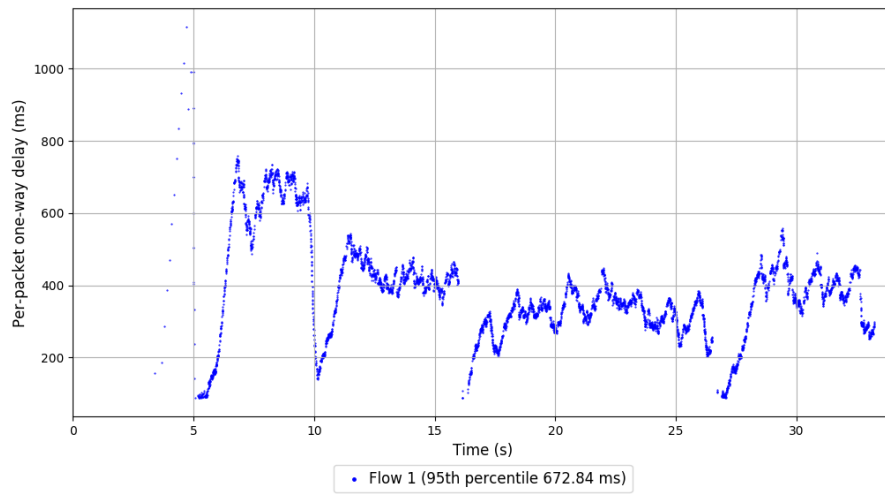
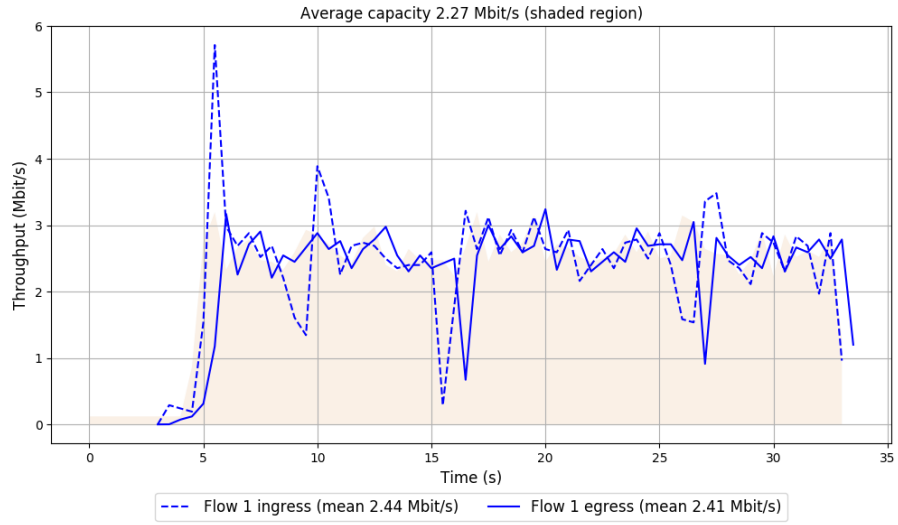
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 672.835 ms

Loss rate: 1.53%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-07-24 06:55:38

End at: 2018-07-24 06:56:08

# Below is generated by plot.py at 2018-07-24 07:18:11

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.41 Mbit/s (105.9% utilization)

95th percentile per-packet one-way delay: 632.998 ms

Loss rate: 1.76%

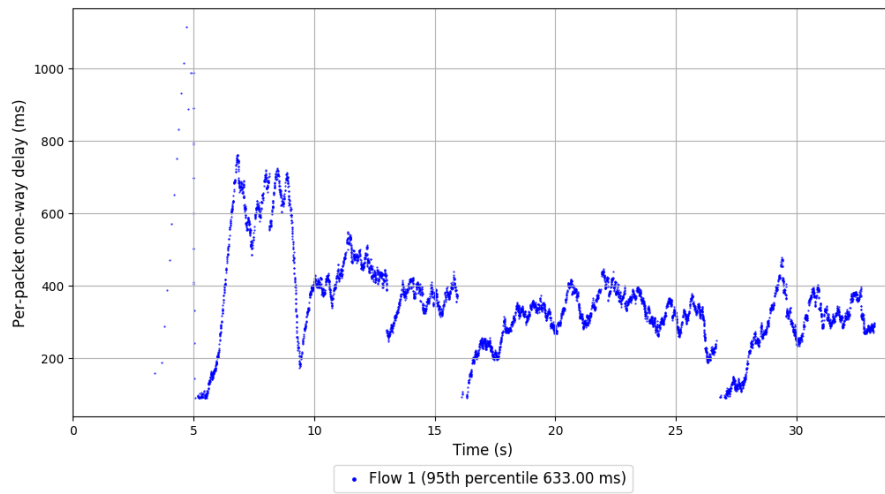
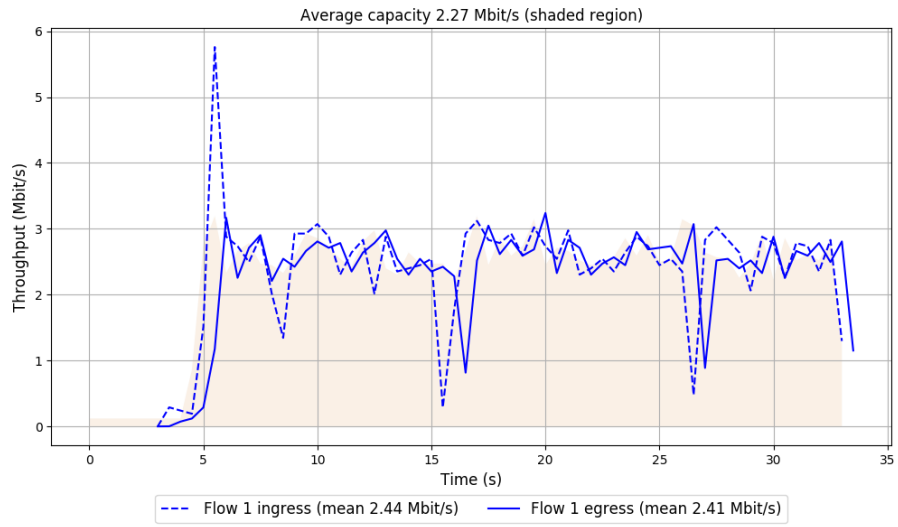
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 632.998 ms

Loss rate: 1.76%

### Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-07-24 07:05:17

End at: 2018-07-24 07:05:47

# Below is generated by plot.py at 2018-07-24 07:18:15

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.41 Mbit/s (106.0% utilization)

95th percentile per-packet one-way delay: 672.310 ms

Loss rate: 1.69%

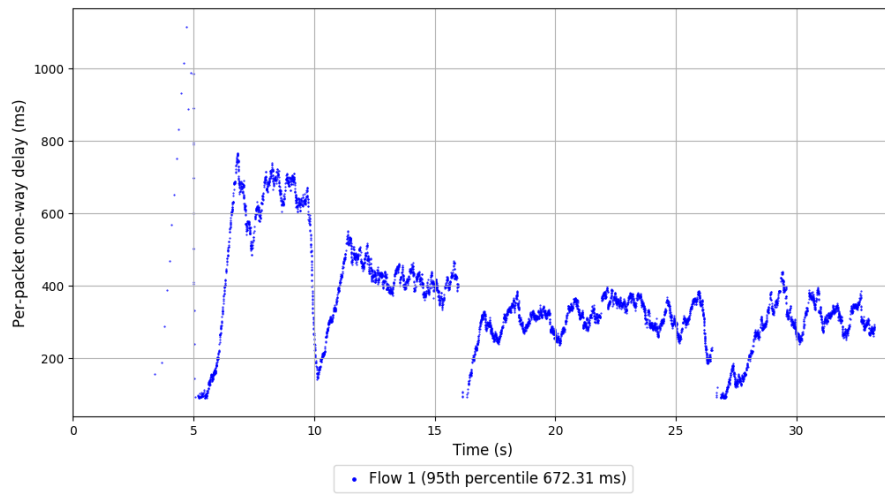
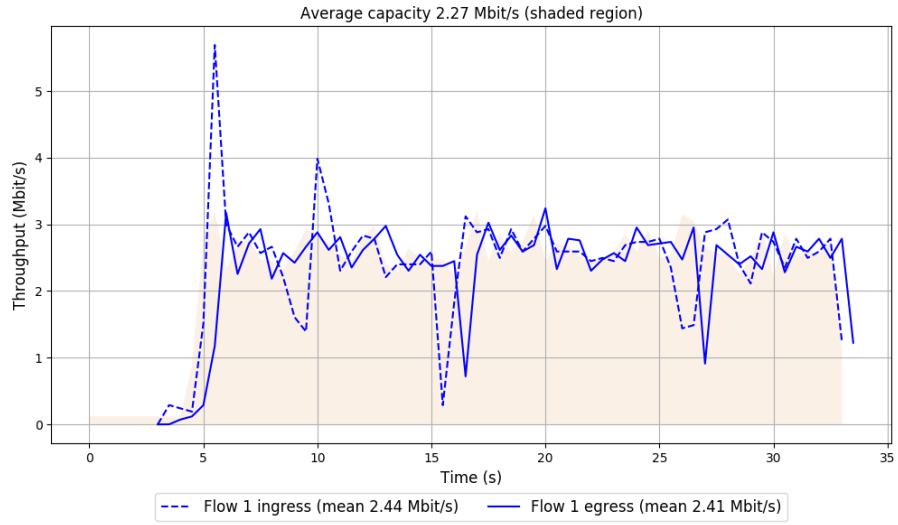
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 672.310 ms

Loss rate: 1.69%

### Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-07-24 07:14:56

End at: 2018-07-24 07:15:26

# Below is generated by plot.py at 2018-07-24 07:18:16

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.41 Mbit/s (106.0% utilization)

95th percentile per-packet one-way delay: 672.643 ms

Loss rate: 1.68%

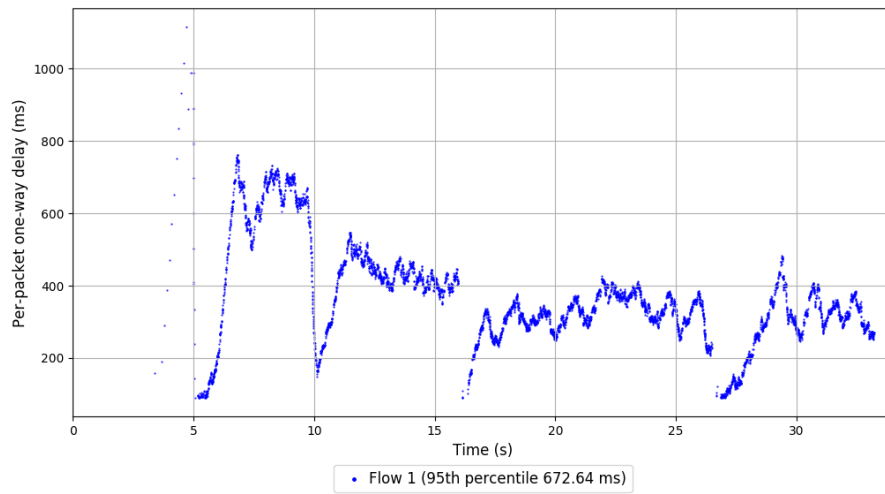
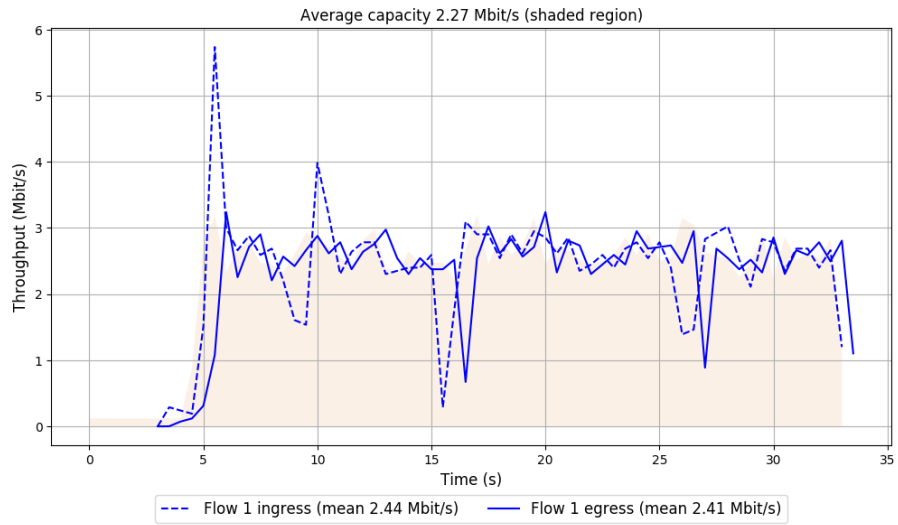
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 672.643 ms

Loss rate: 1.68%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2018-07-24 05:44:07

End at: 2018-07-24 05:44:37

# Below is generated by plot.py at 2018-07-24 07:18:20

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.00 Mbit/s (88.0% utilization)

95th percentile per-packet one-way delay: 164.858 ms

Loss rate: 0.48%

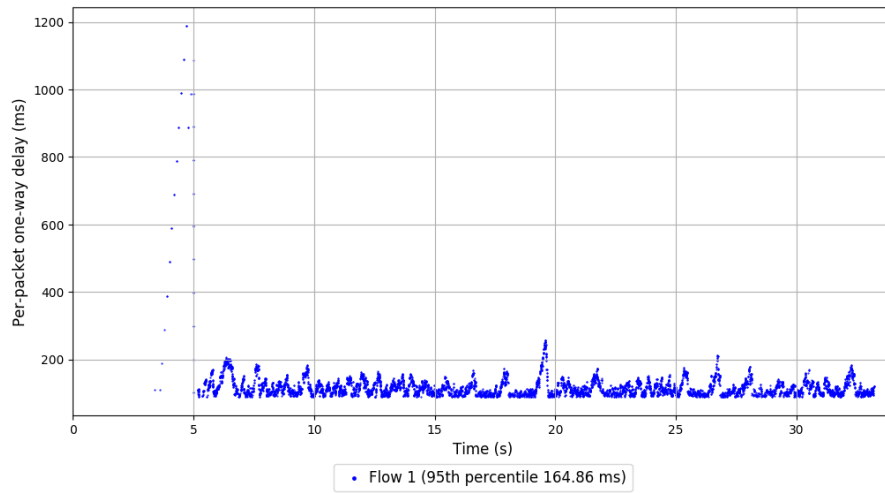
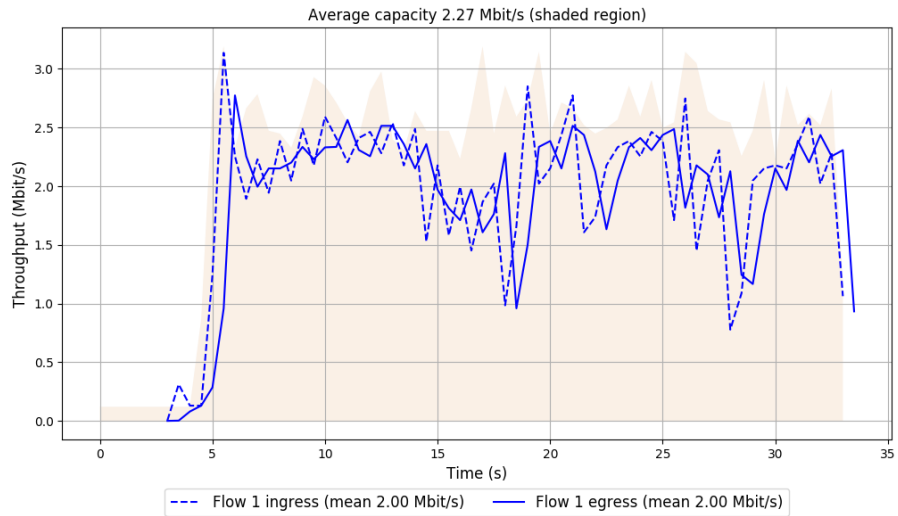
-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 164.858 ms

Loss rate: 0.48%

# Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-07-24 05:53:46

End at: 2018-07-24 05:54:16

# Below is generated by plot.py at 2018-07-24 07:18:21

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.19 Mbit/s (96.3% utilization)

95th percentile per-packet one-way delay: 177.311 ms

Loss rate: 0.36%

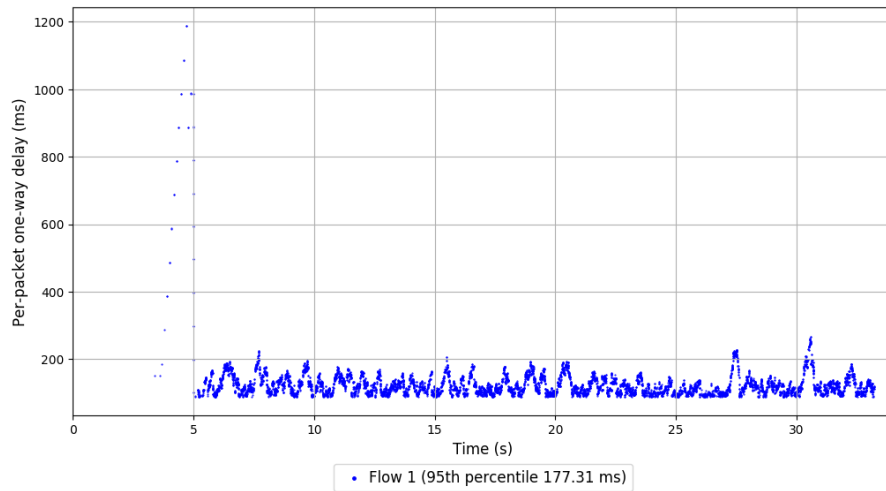
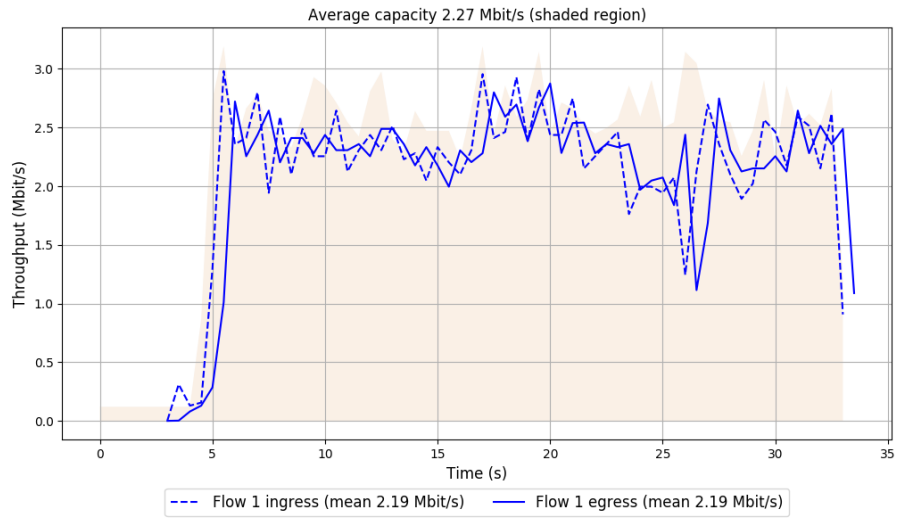
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 177.311 ms

Loss rate: 0.36%

## Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-07-24 06:03:25

End at: 2018-07-24 06:03:55

# Below is generated by plot.py at 2018-07-24 07:18:21

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.05 Mbit/s (90.1% utilization)

95th percentile per-packet one-way delay: 180.495 ms

Loss rate: 0.40%

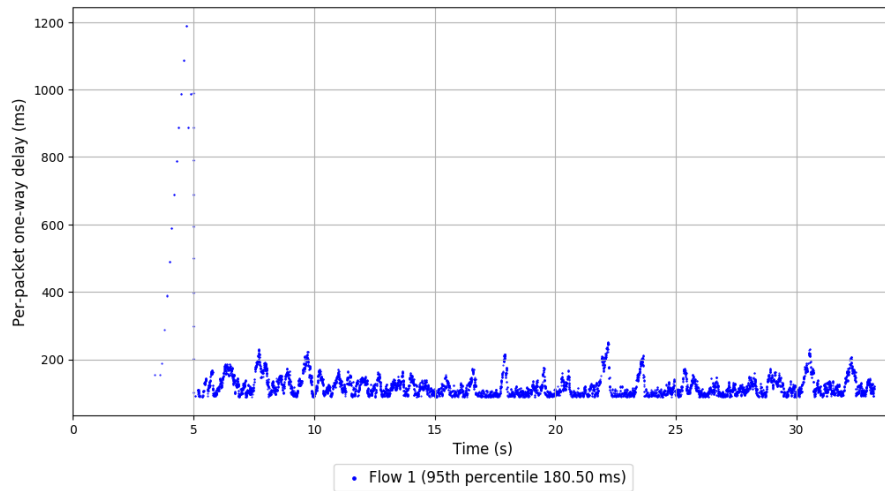
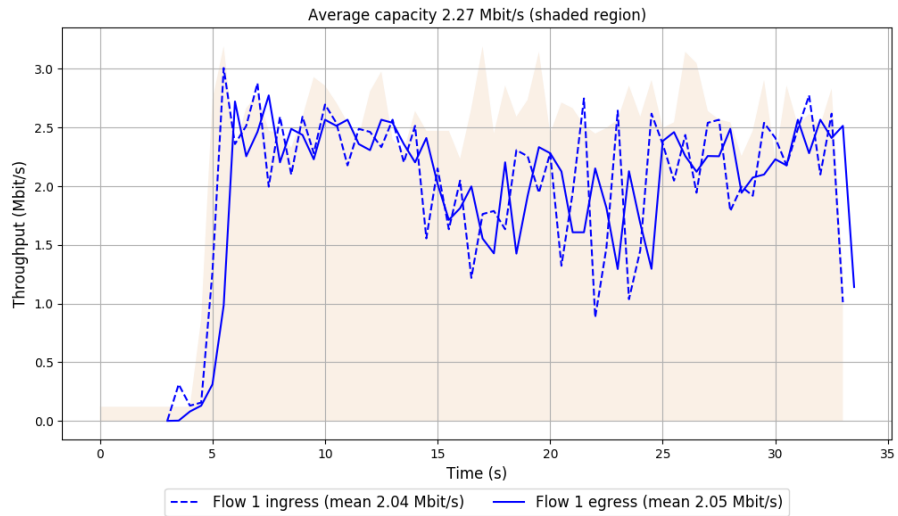
-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 180.495 ms

Loss rate: 0.40%

### Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-07-24 06:13:04

End at: 2018-07-24 06:13:34

# Below is generated by plot.py at 2018-07-24 07:18:23

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.21 Mbit/s (97.2% utilization)

95th percentile per-packet one-way delay: 163.765 ms

Loss rate: 0.39%

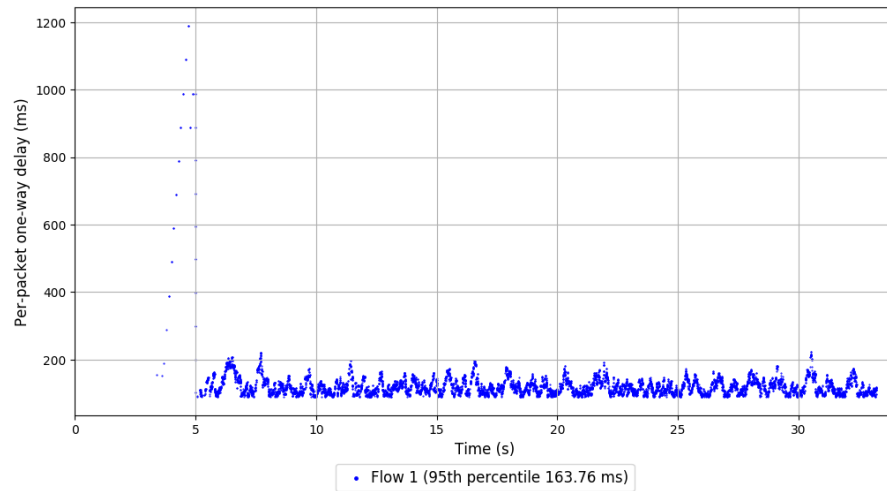
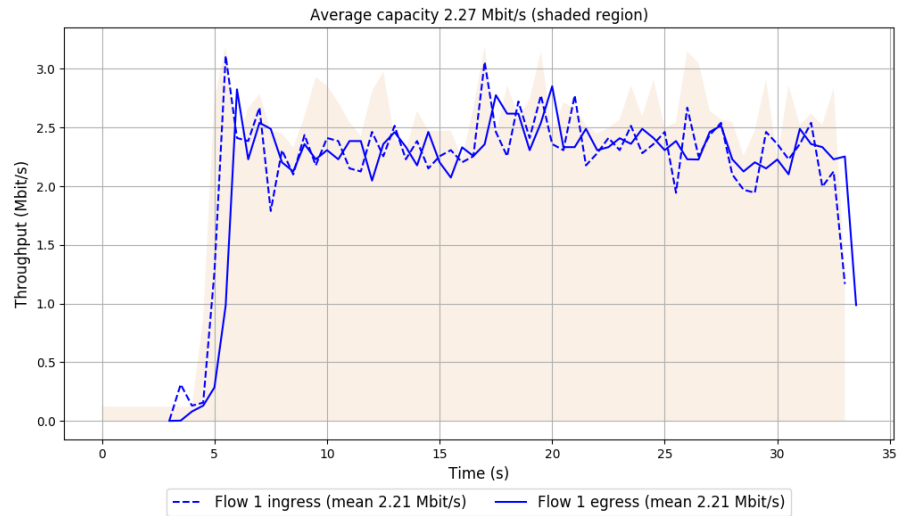
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 163.765 ms

Loss rate: 0.39%

### Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-07-24 06:22:43

End at: 2018-07-24 06:23:13

# Below is generated by plot.py at 2018-07-24 07:18:23

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.20 Mbit/s (96.8% utilization)

95th percentile per-packet one-way delay: 190.115 ms

Loss rate: 0.39%

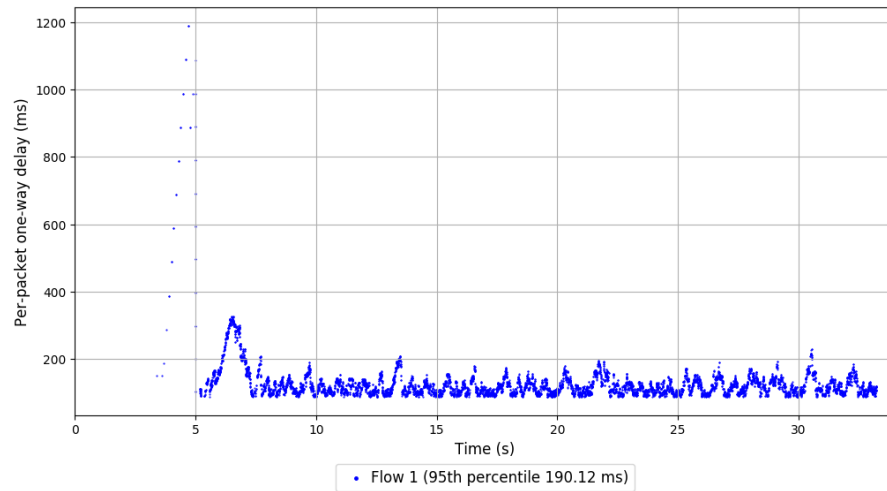
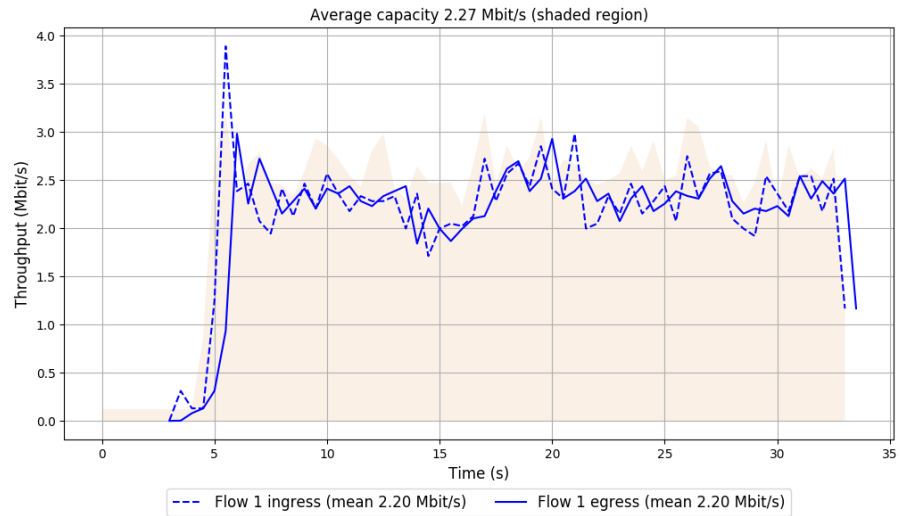
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 190.115 ms

Loss rate: 0.39%

### Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-07-24 06:32:22

End at: 2018-07-24 06:32:52

# Below is generated by plot.py at 2018-07-24 07:18:23

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.08 Mbit/s (91.4% utilization)

95th percentile per-packet one-way delay: 217.666 ms

Loss rate: 0.44%

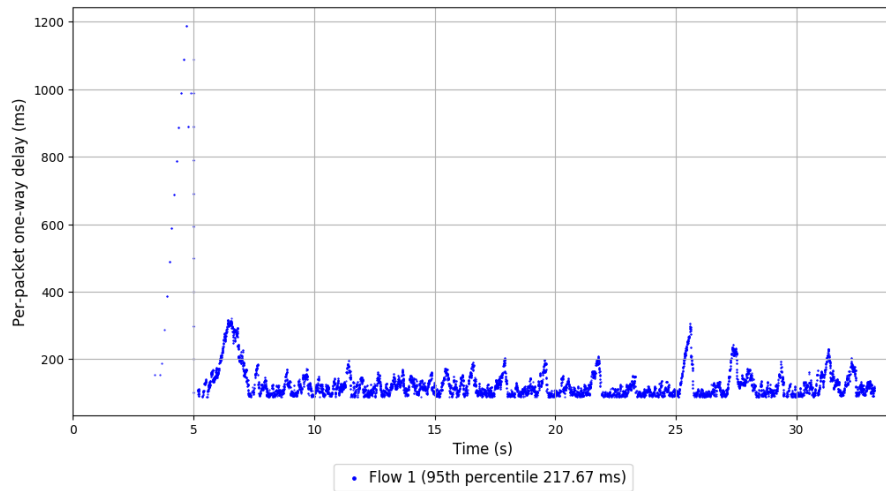
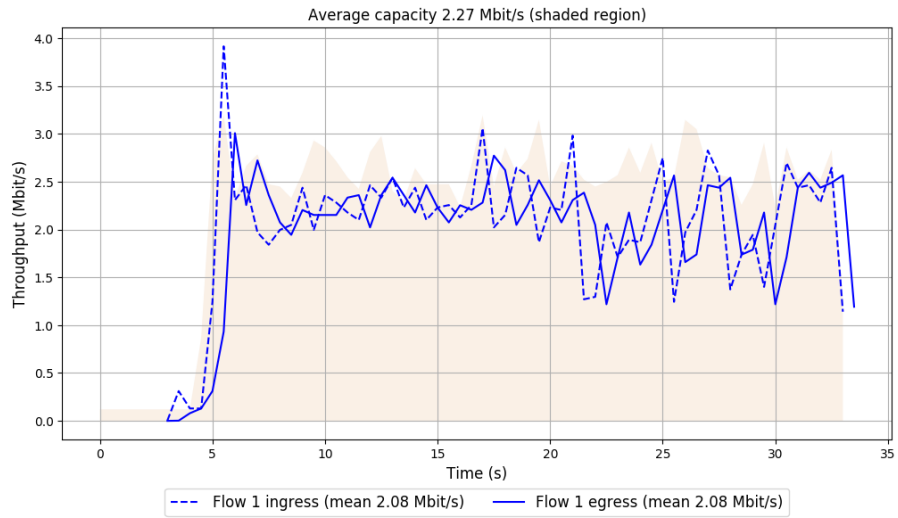
-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 217.666 ms

Loss rate: 0.44%

## Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-07-24 06:42:01

End at: 2018-07-24 06:42:31

# Below is generated by plot.py at 2018-07-24 07:18:27

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.17 Mbit/s (95.4% utilization)

95th percentile per-packet one-way delay: 175.579 ms

Loss rate: 0.12%

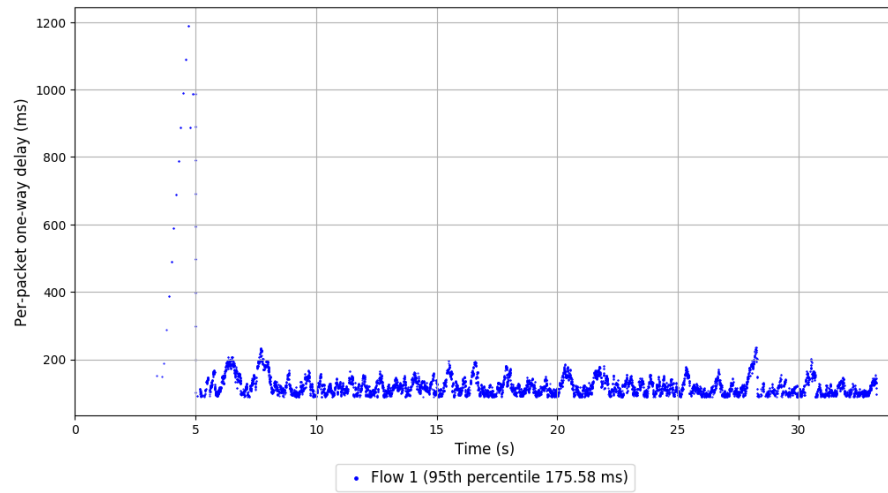
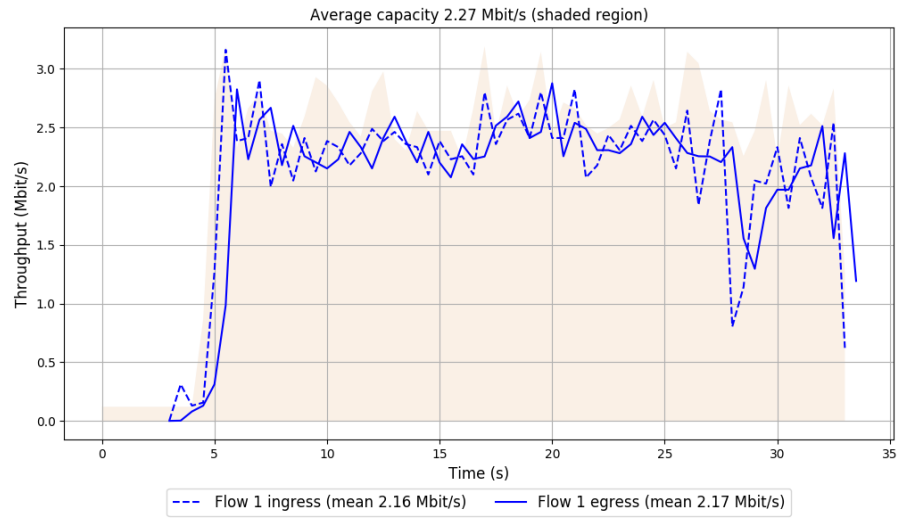
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 175.579 ms

Loss rate: 0.12%

### Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-07-24 06:51:40

End at: 2018-07-24 06:52:10

# Below is generated by plot.py at 2018-07-24 07:18:29

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.00 Mbit/s (87.9% utilization)

95th percentile per-packet one-way delay: 174.423 ms

Loss rate: 0.48%

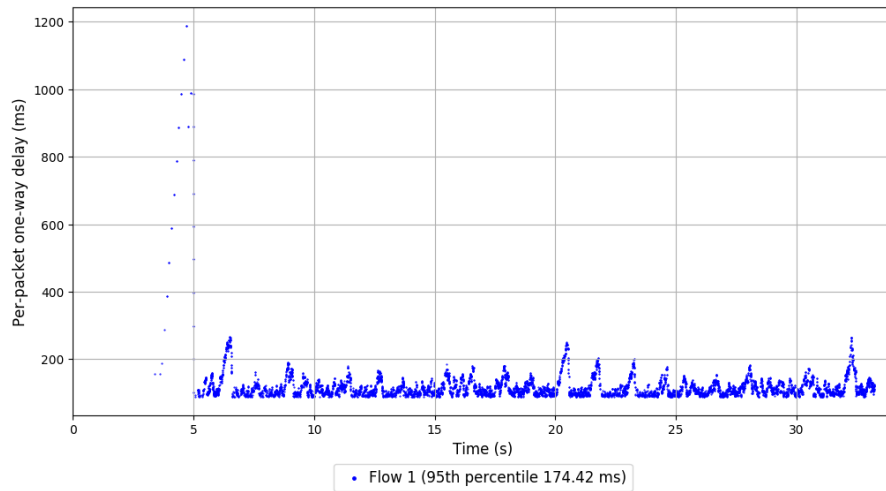
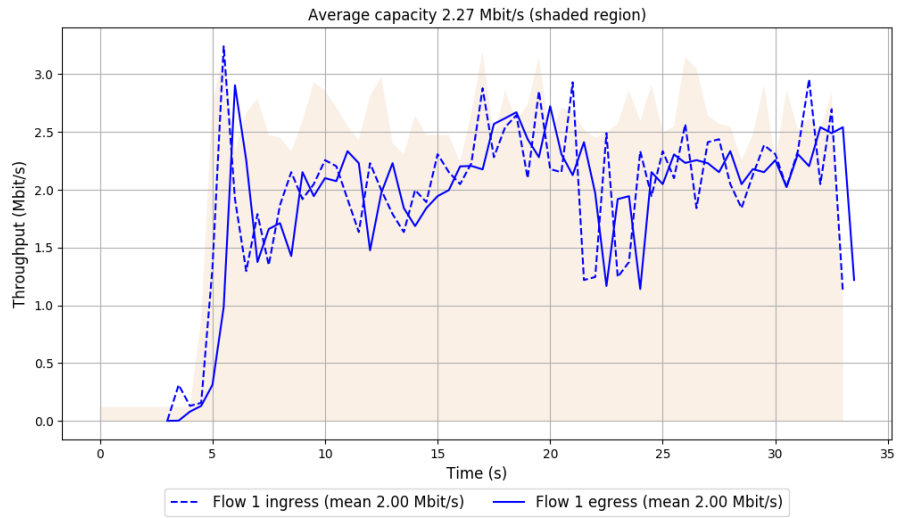
-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 174.423 ms

Loss rate: 0.48%

## Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-07-24 07:01:19

End at: 2018-07-24 07:01:49

# Below is generated by plot.py at 2018-07-24 07:18:33

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.13 Mbit/s (93.8% utilization)

95th percentile per-packet one-way delay: 187.016 ms

Loss rate: 0.47%

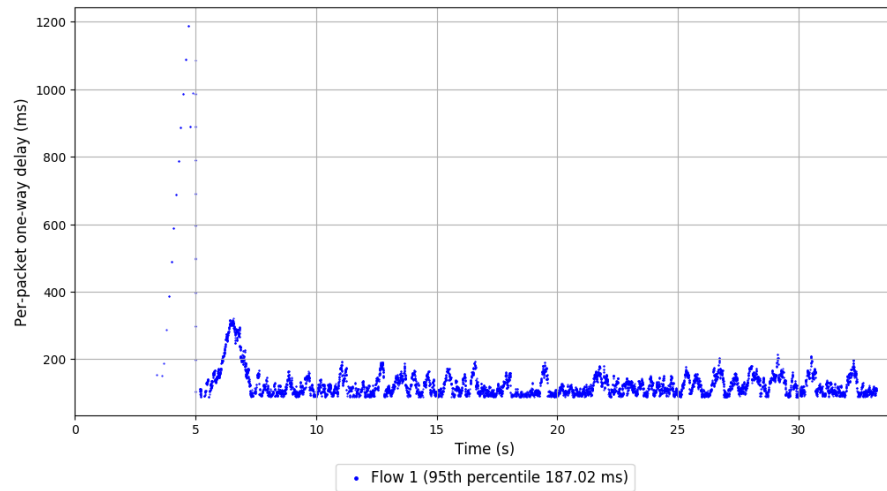
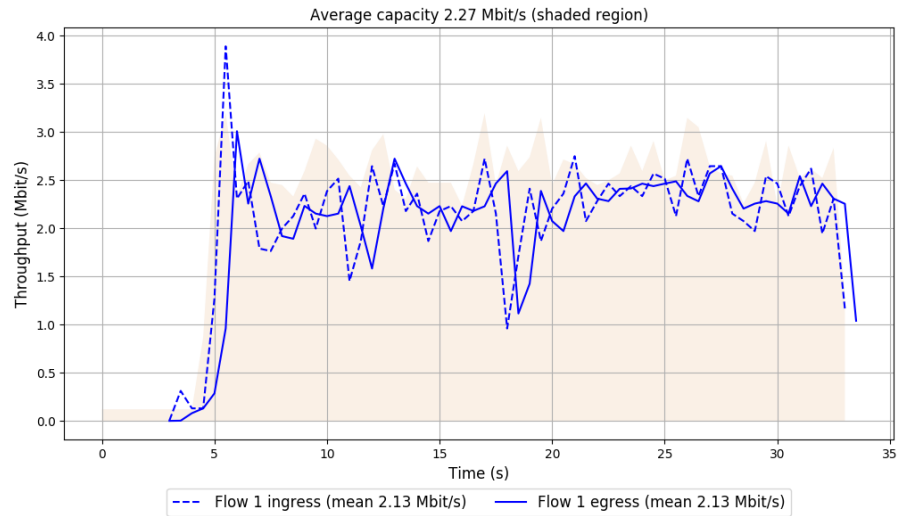
-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 187.016 ms

Loss rate: 0.47%

### Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-07-24 07:10:58

End at: 2018-07-24 07:11:28

# Below is generated by plot.py at 2018-07-24 07:18:34

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.18 Mbit/s (95.8% utilization)

95th percentile per-packet one-way delay: 195.424 ms

Loss rate: 0.36%

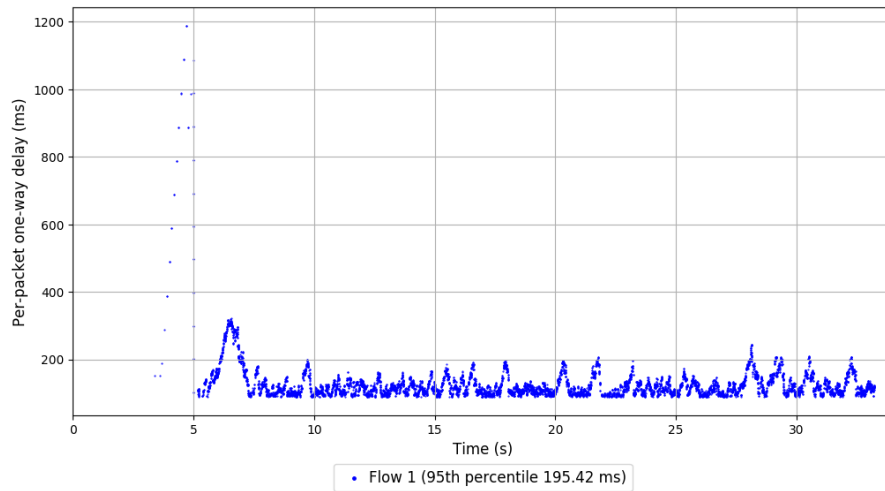
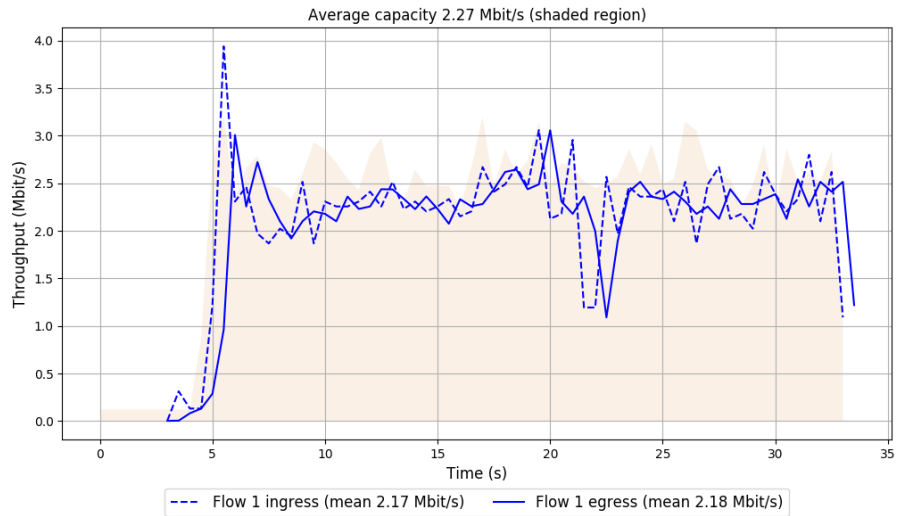
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 195.424 ms

Loss rate: 0.36%

# Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-07-24 05:41:16

End at: 2018-07-24 05:41:46

# Below is generated by plot.py at 2018-07-24 07:18:34

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.45 Mbit/s (107.7% utilization)

95th percentile per-packet one-way delay: 705.639 ms

Loss rate: 2.95%

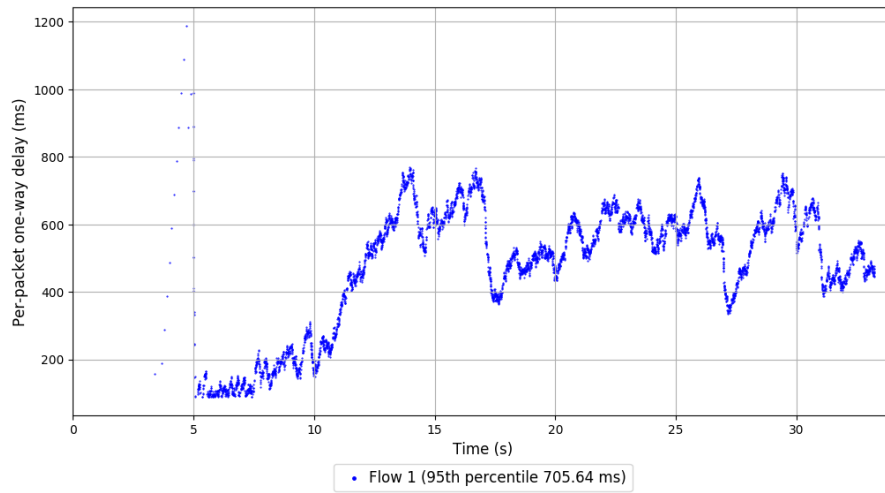
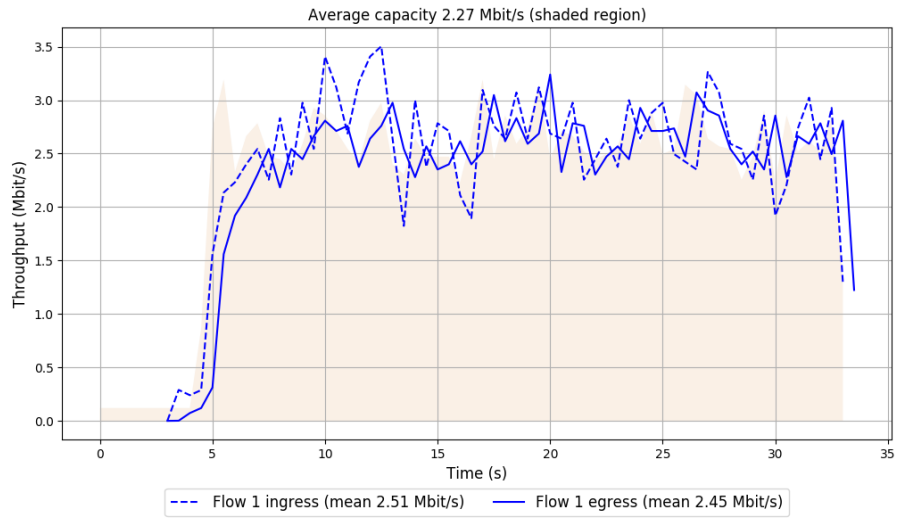
-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 705.639 ms

Loss rate: 2.95%

# Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-07-24 05:50:56

End at: 2018-07-24 05:51:26

# Below is generated by plot.py at 2018-07-24 07:18:34

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.45 Mbit/s (107.8% utilization)

95th percentile per-packet one-way delay: 703.511 ms

Loss rate: 2.93%

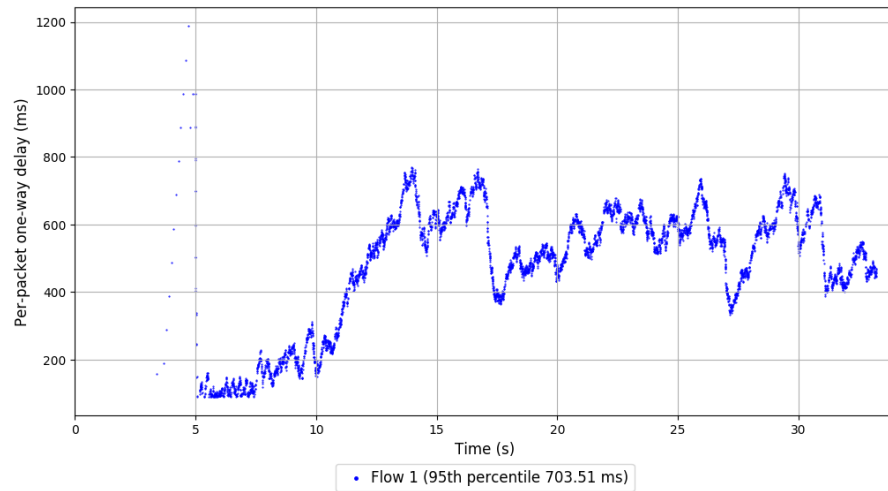
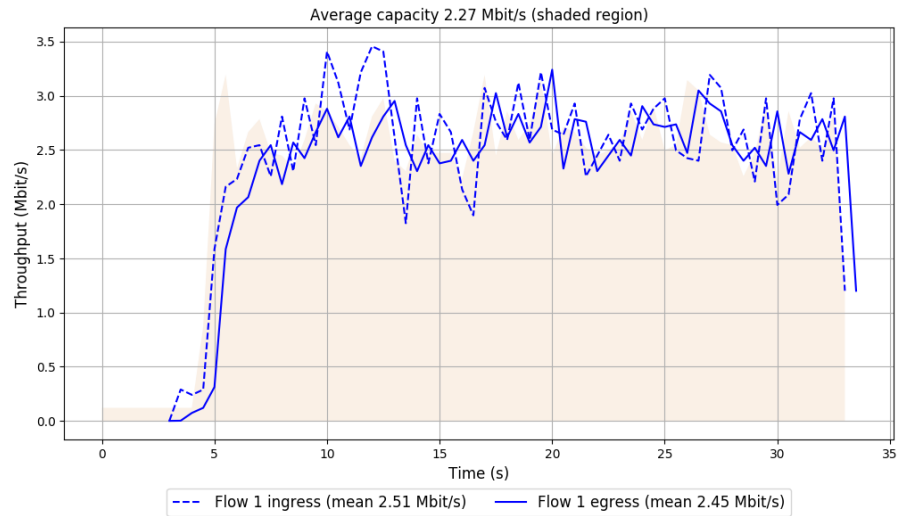
-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 703.511 ms

Loss rate: 2.93%

## Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-07-24 06:00:35

End at: 2018-07-24 06:01:05

# Below is generated by plot.py at 2018-07-24 07:18:34

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.45 Mbit/s (107.8% utilization)

95th percentile per-packet one-way delay: 700.070 ms

Loss rate: 2.90%

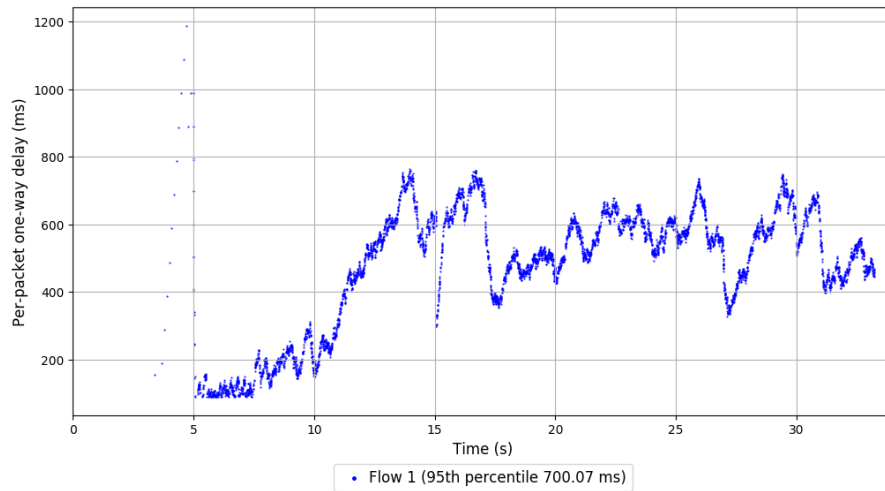
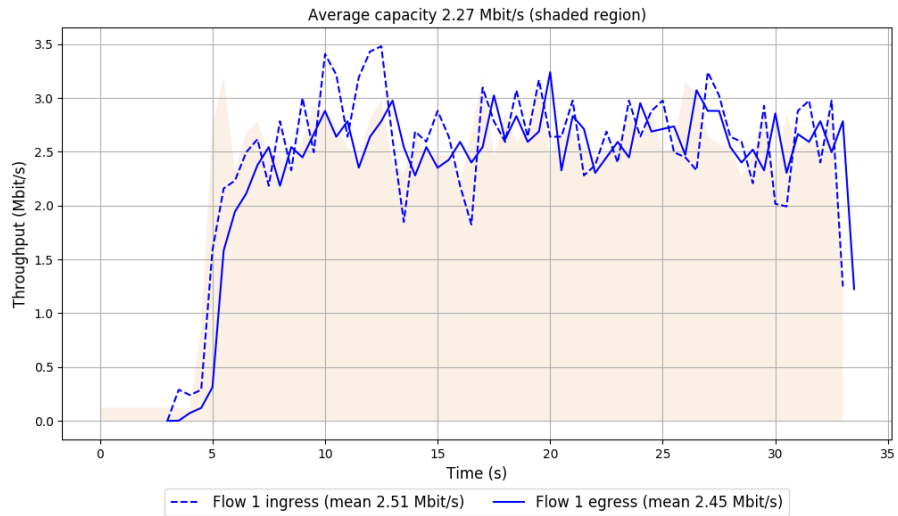
-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 700.070 ms

Loss rate: 2.90%

### Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-07-24 06:10:13

End at: 2018-07-24 06:10:43

# Below is generated by plot.py at 2018-07-24 07:18:34

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.45 Mbit/s (107.8% utilization)

95th percentile per-packet one-way delay: 702.855 ms

Loss rate: 2.79%

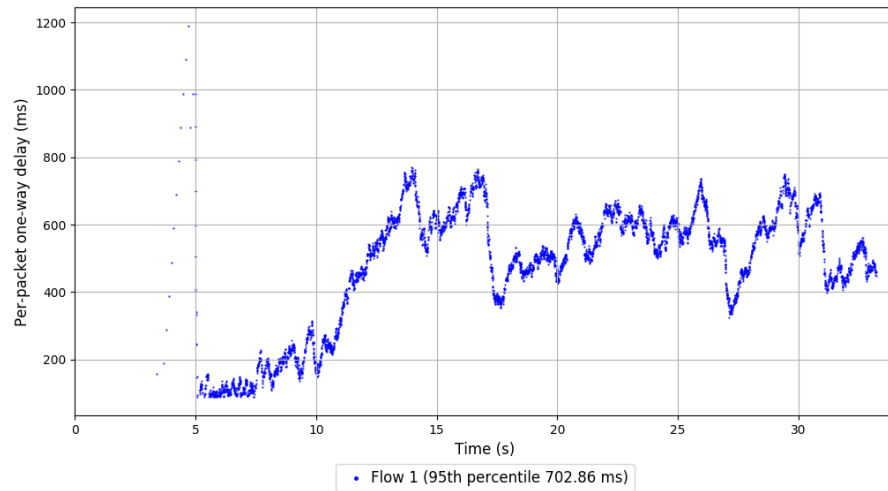
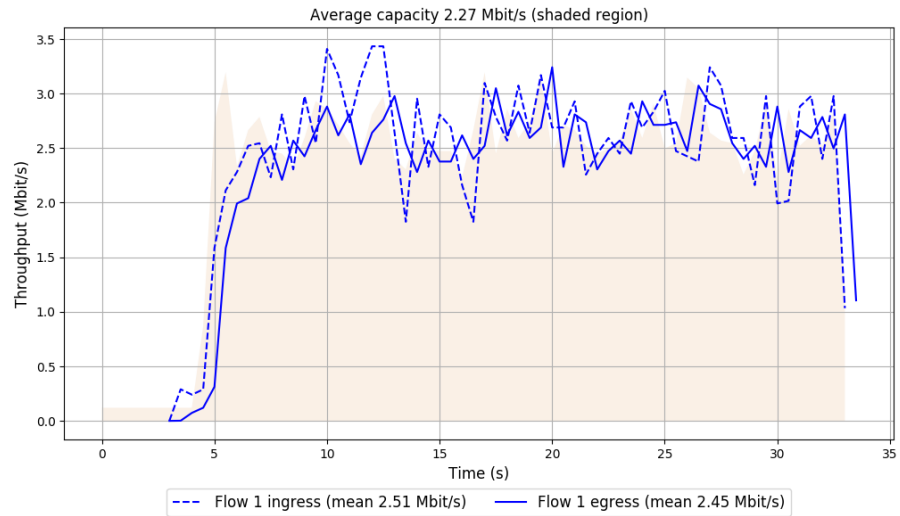
-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 702.855 ms

Loss rate: 2.79%

### Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-07-24 06:19:52

End at: 2018-07-24 06:20:22

# Below is generated by plot.py at 2018-07-24 07:18:37

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.45 Mbit/s (107.8% utilization)

95th percentile per-packet one-way delay: 704.922 ms

Loss rate: 2.98%

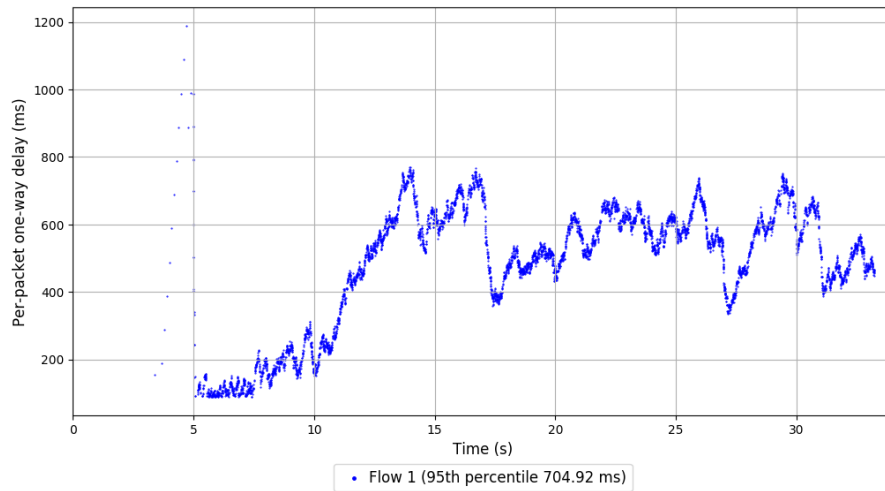
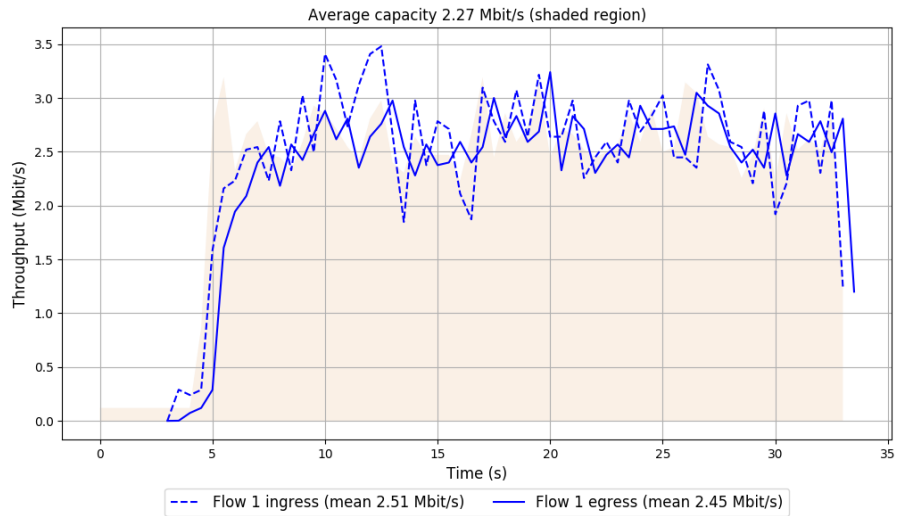
-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 704.922 ms

Loss rate: 2.98%

### Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-07-24 06:29:31

End at: 2018-07-24 06:30:01

# Below is generated by plot.py at 2018-07-24 07:18:38

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.45 Mbit/s (107.8% utilization)

95th percentile per-packet one-way delay: 705.648 ms

Loss rate: 2.92%

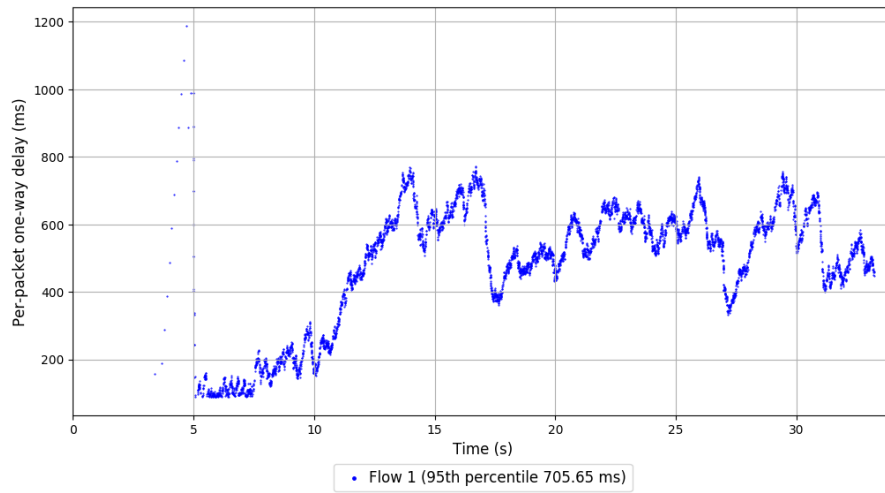
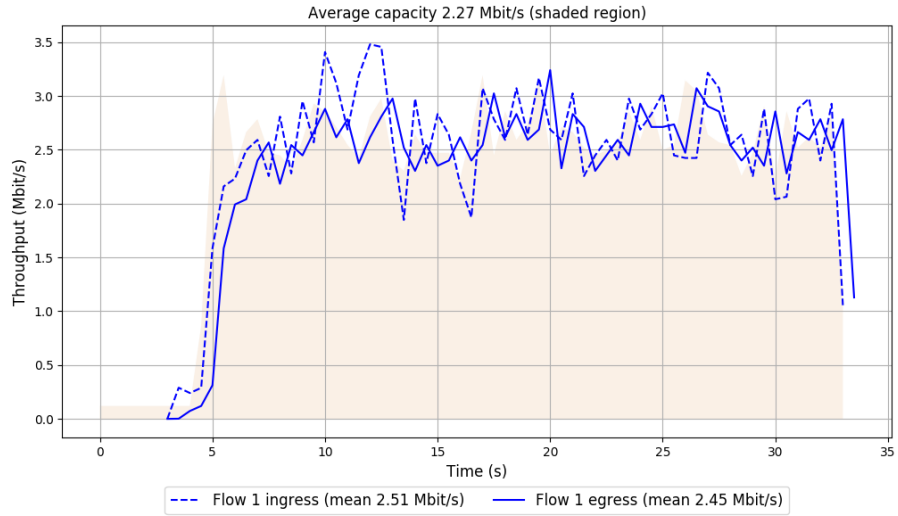
-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 705.648 ms

Loss rate: 2.92%

### Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-07-24 06:39:10

End at: 2018-07-24 06:39:40

# Below is generated by plot.py at 2018-07-24 07:18:40

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.45 Mbit/s (107.8% utilization)

95th percentile per-packet one-way delay: 698.529 ms

Loss rate: 2.86%

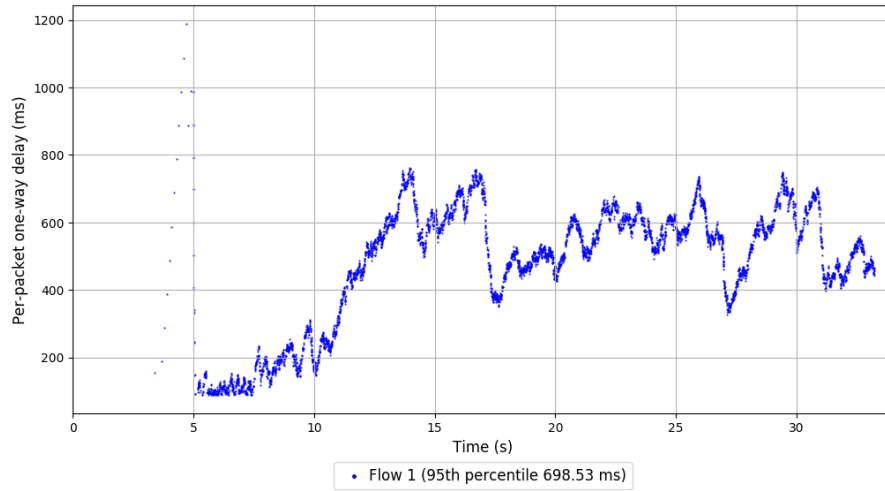
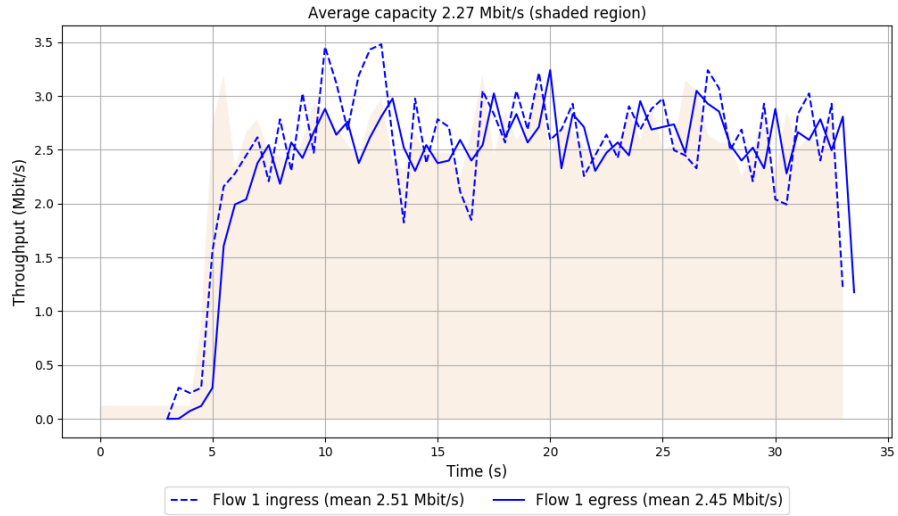
-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 698.529 ms

Loss rate: 2.86%

### Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-07-24 06:48:49

End at: 2018-07-24 06:49:19

# Below is generated by plot.py at 2018-07-24 07:18:40

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.45 Mbit/s (107.8% utilization)

95th percentile per-packet one-way delay: 704.066 ms

Loss rate: 2.95%

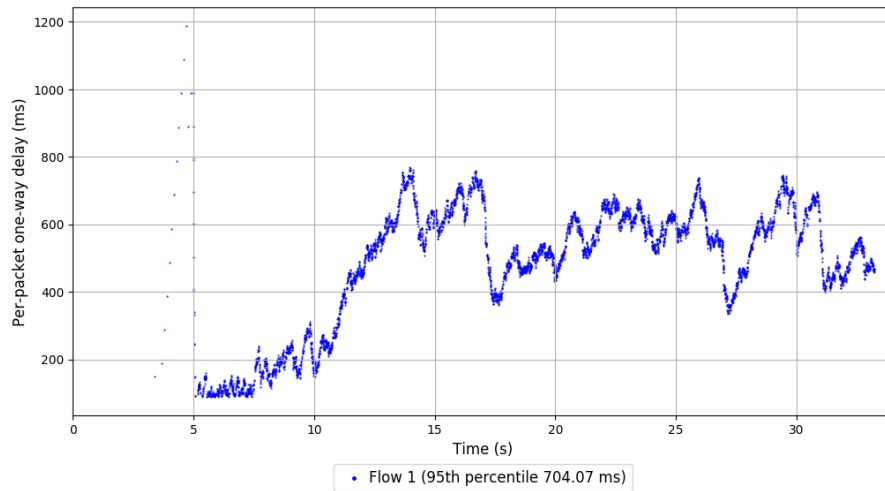
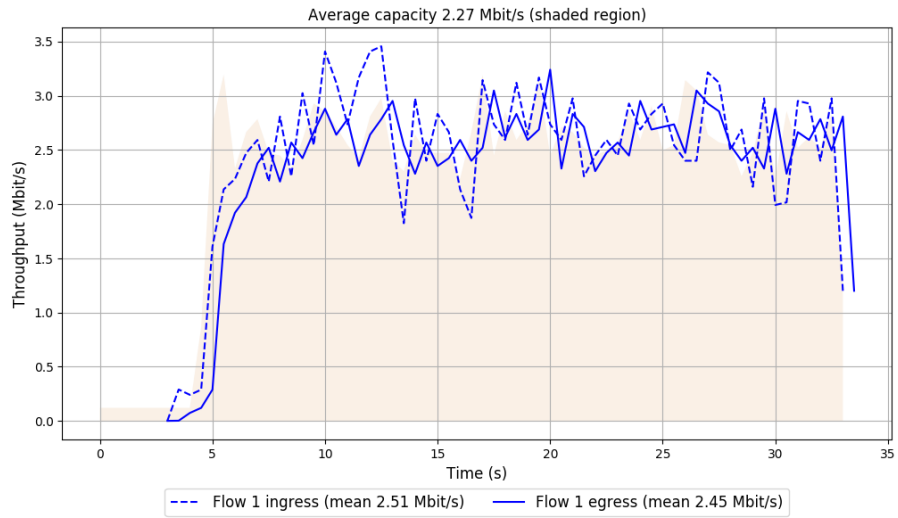
-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 704.066 ms

Loss rate: 2.95%

### Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-07-24 06:58:28

End at: 2018-07-24 06:58:58

# Below is generated by plot.py at 2018-07-24 07:18:42

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.45 Mbit/s (107.8% utilization)

95th percentile per-packet one-way delay: 704.748 ms

Loss rate: 2.96%

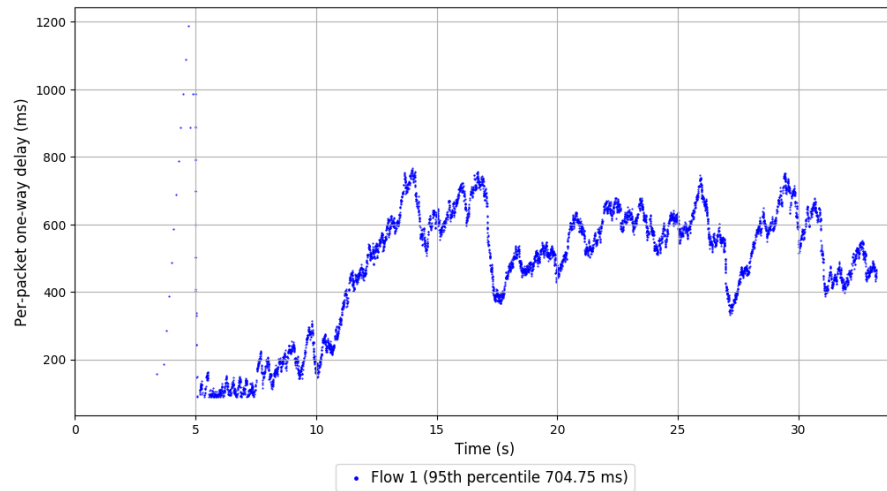
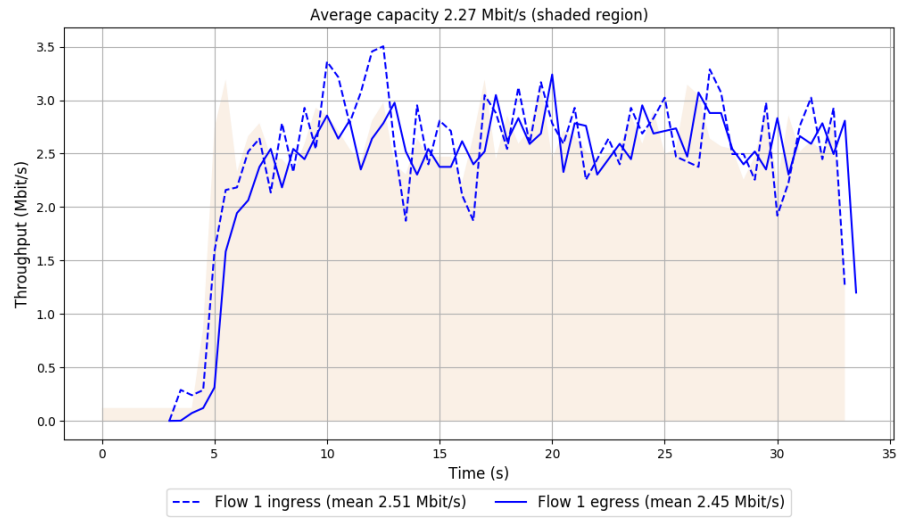
-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 704.748 ms

Loss rate: 2.96%

### Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-07-24 07:08:08

End at: 2018-07-24 07:08:38

# Below is generated by plot.py at 2018-07-24 07:18:42

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.44 Mbit/s (107.3% utilization)

95th percentile per-packet one-way delay: 698.489 ms

Loss rate: 3.53%

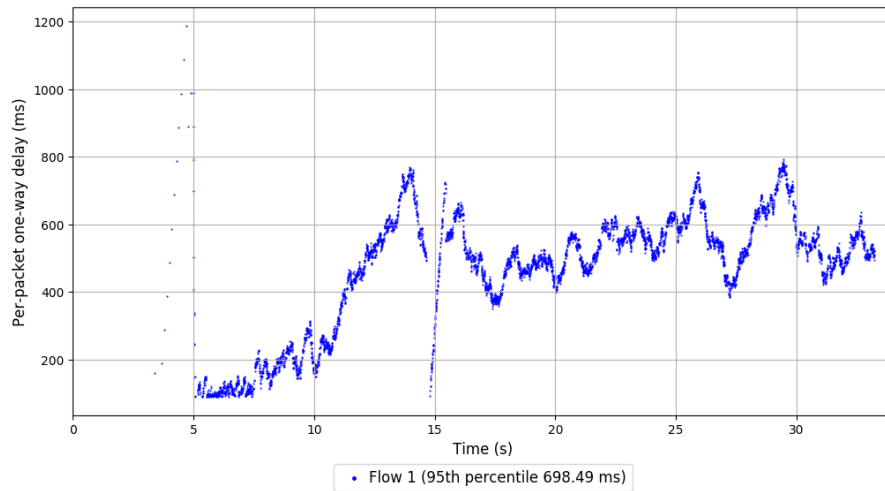
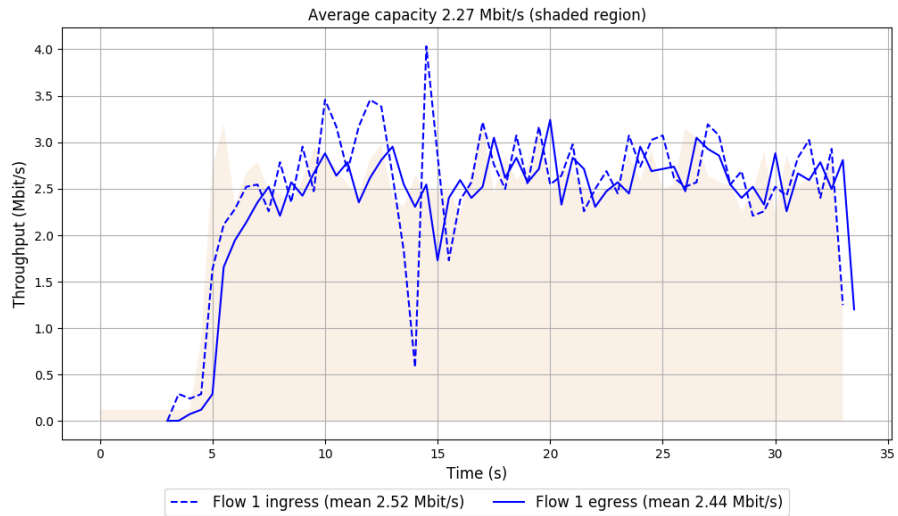
-- Flow 1:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 698.489 ms

Loss rate: 3.53%

Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2018-07-24 05:44:41

End at: 2018-07-24 05:45:11

# Below is generated by plot.py at 2018-07-24 07:18:43

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.52 Mbit/s (110.9% utilization)

95th percentile per-packet one-way delay: 637.093 ms

Loss rate: 31.48%

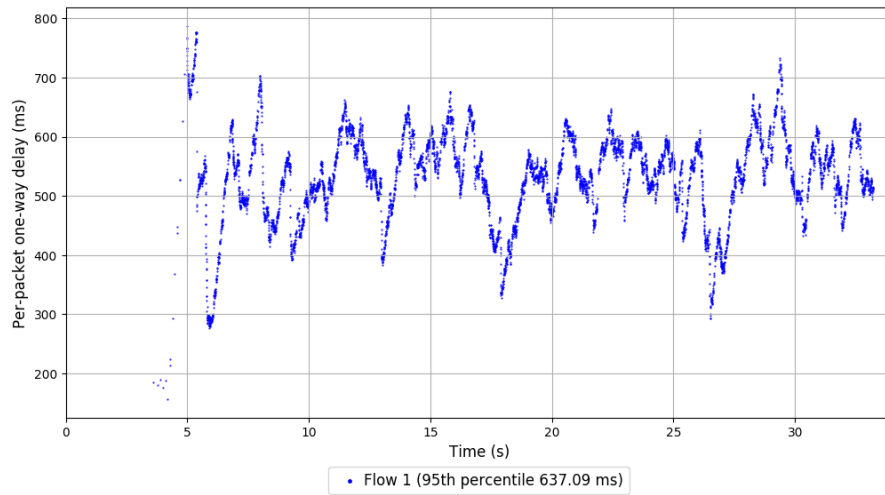
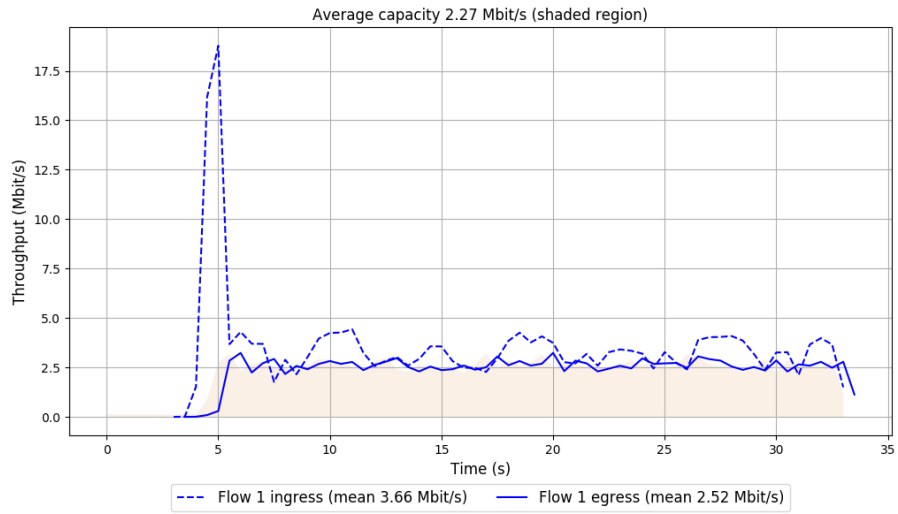
-- Flow 1:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 637.093 ms

Loss rate: 31.48%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-07-24 05:54:20

End at: 2018-07-24 05:54:50

# Below is generated by plot.py at 2018-07-24 07:18:47

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.50 Mbit/s (110.2% utilization)

95th percentile per-packet one-way delay: 635.171 ms

Loss rate: 67.81%

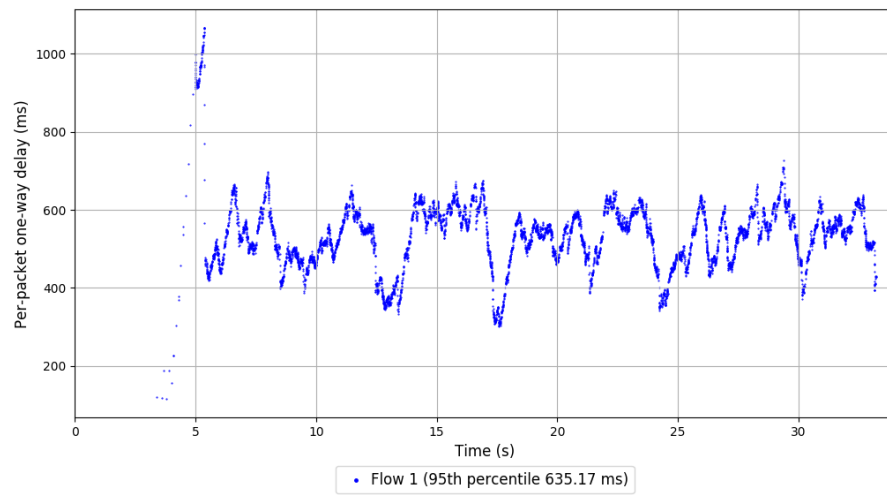
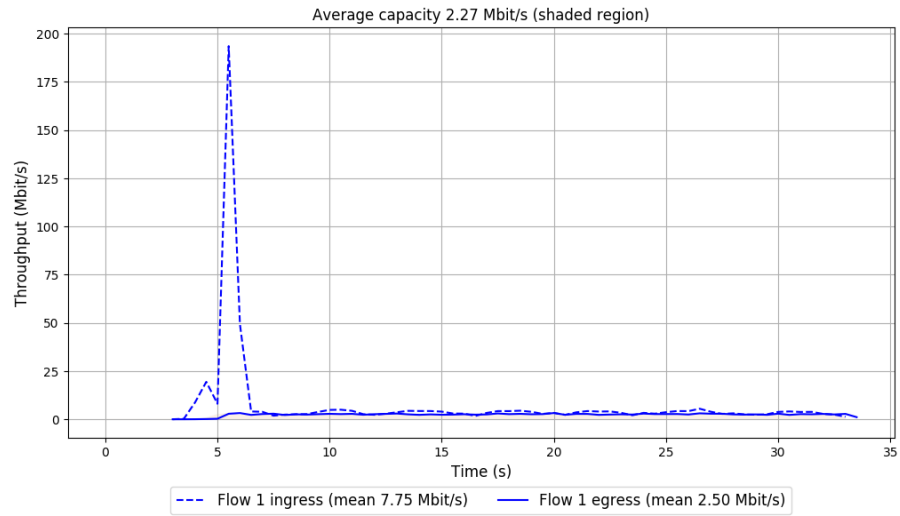
-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 635.171 ms

Loss rate: 67.81%

## Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-07-24 06:03:59

End at: 2018-07-24 06:04:29

# Below is generated by plot.py at 2018-07-24 07:18:48

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.50 Mbit/s (110.2% utilization)

95th percentile per-packet one-way delay: 641.517 ms

Loss rate: 46.46%

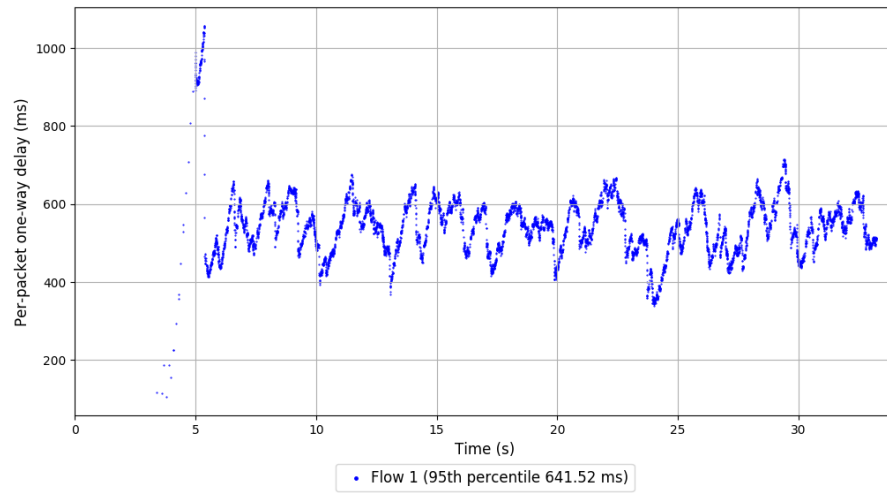
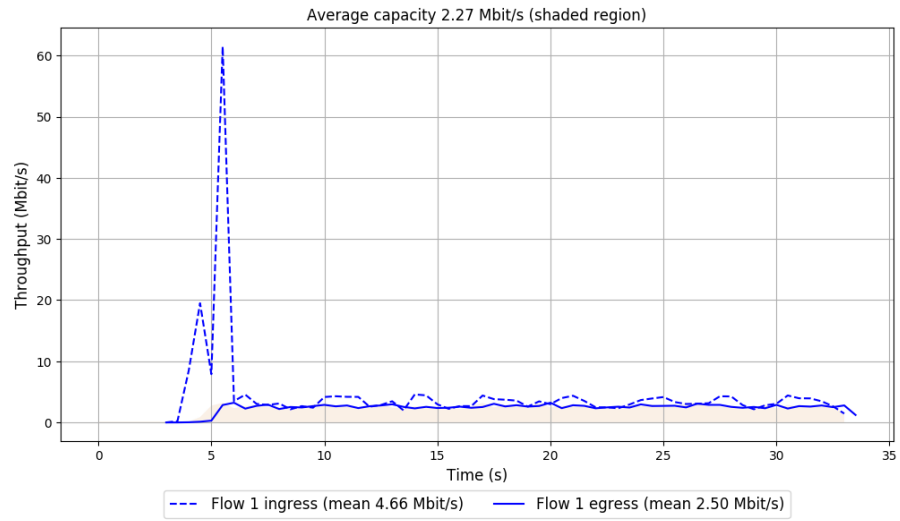
-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 641.517 ms

Loss rate: 46.46%

### Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-07-24 06:13:38

End at: 2018-07-24 06:14:08

# Below is generated by plot.py at 2018-07-24 07:18:49

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.50 Mbit/s (110.2% utilization)

95th percentile per-packet one-way delay: 637.148 ms

Loss rate: 46.74%

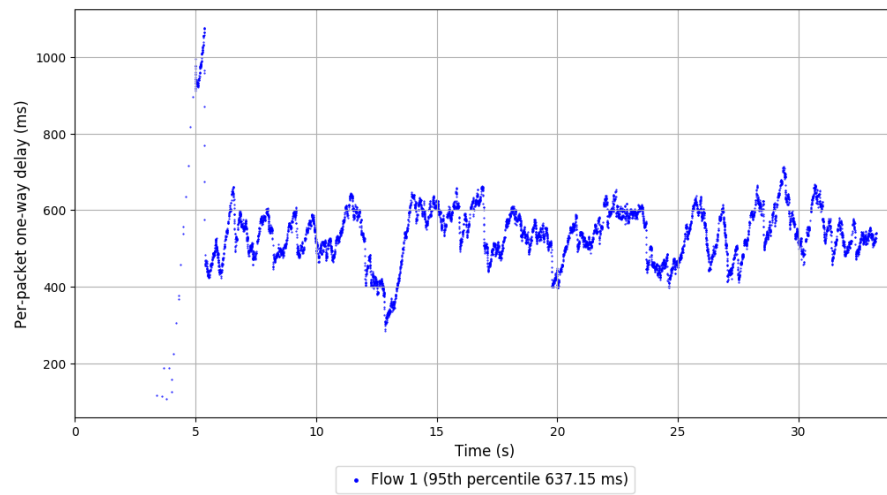
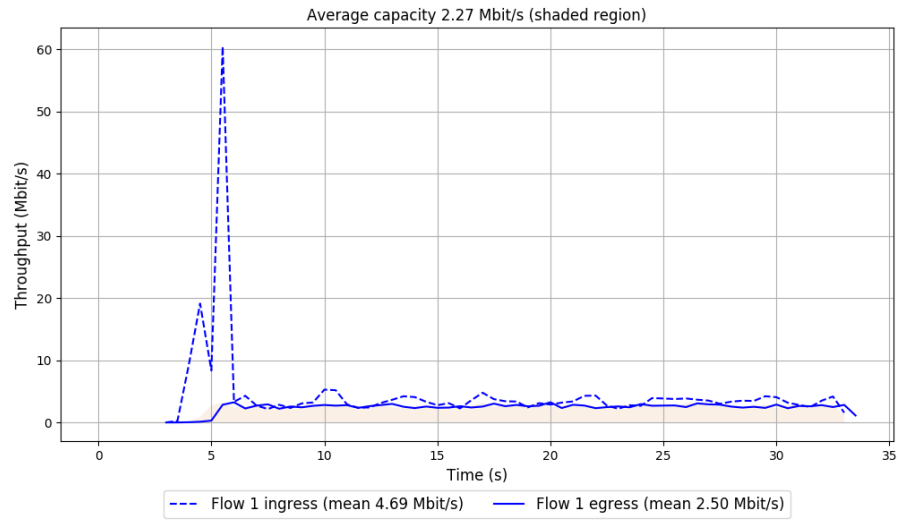
-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 637.148 ms

Loss rate: 46.74%

### Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-07-24 06:23:17

End at: 2018-07-24 06:23:47

# Below is generated by plot.py at 2018-07-24 07:18:53

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.50 Mbit/s (110.2% utilization)

95th percentile per-packet one-way delay: 626.830 ms

Loss rate: 66.75%

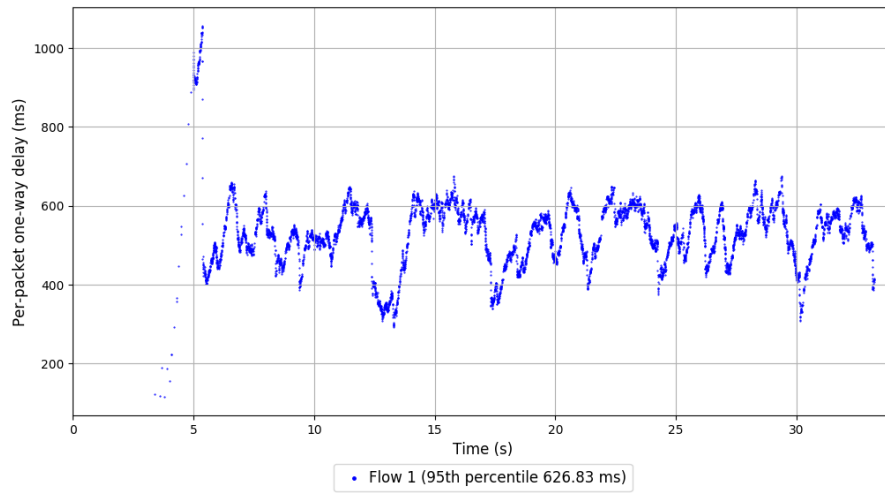
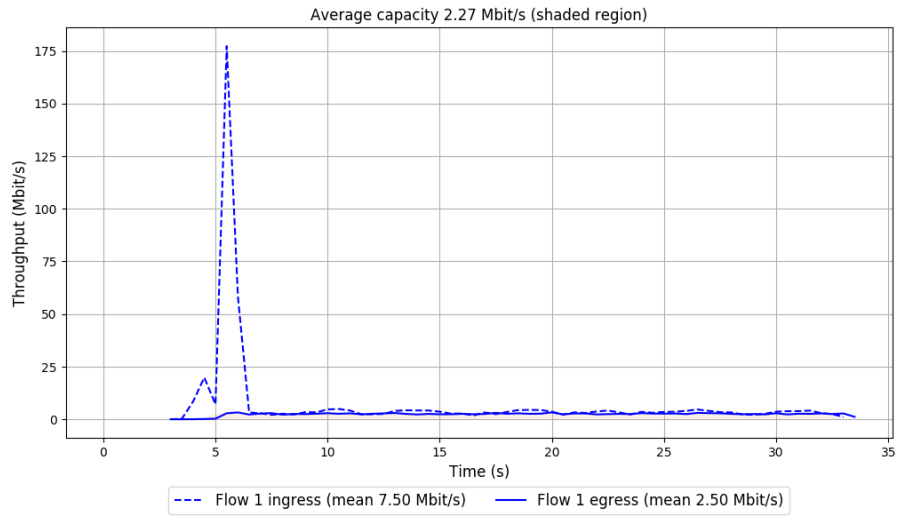
-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 626.830 ms

Loss rate: 66.75%

### Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-07-24 06:32:56

End at: 2018-07-24 06:33:26

# Below is generated by plot.py at 2018-07-24 07:18:53

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.50 Mbit/s (110.2% utilization)

95th percentile per-packet one-way delay: 632.782 ms

Loss rate: 46.12%

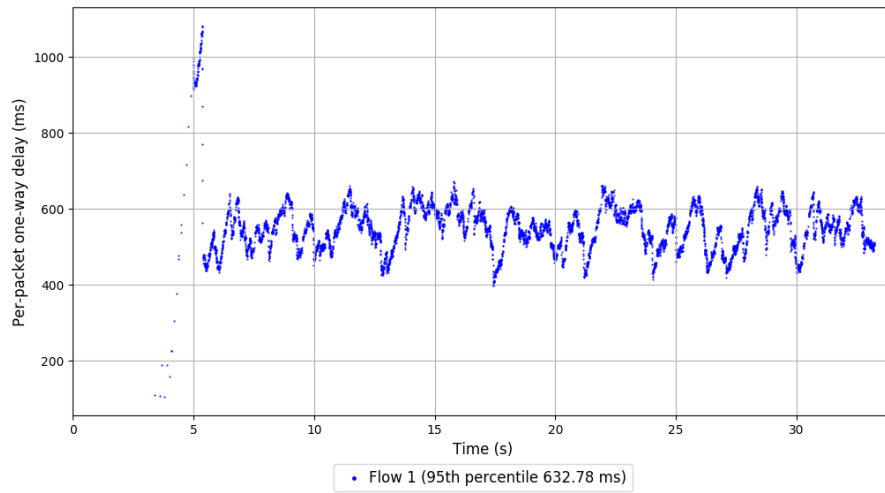
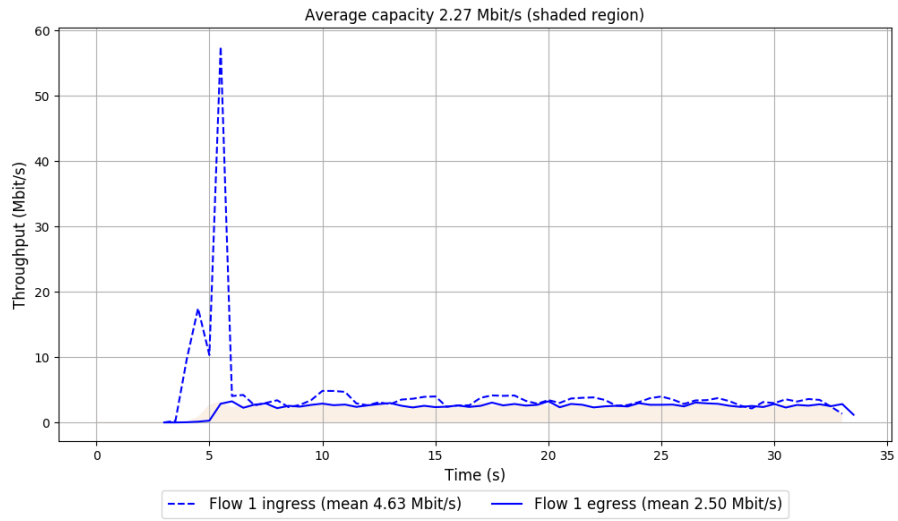
-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 632.782 ms

Loss rate: 46.12%

## Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-07-24 06:42:35

End at: 2018-07-24 06:43:05

# Below is generated by plot.py at 2018-07-24 07:18:53

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.50 Mbit/s (110.2% utilization)

95th percentile per-packet one-way delay: 637.983 ms

Loss rate: 33.90%

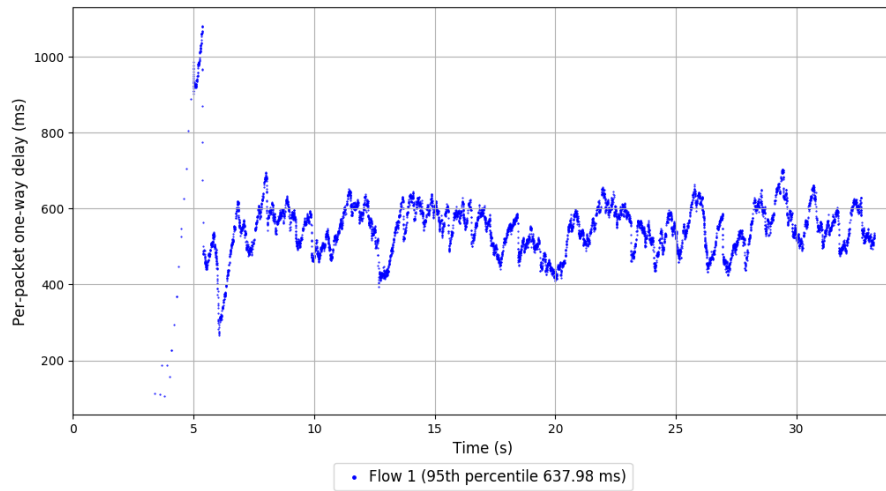
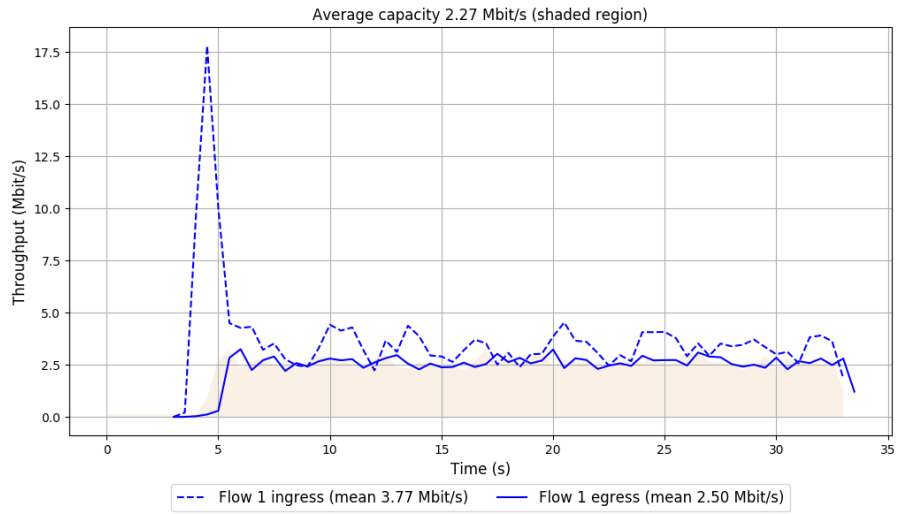
-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 637.983 ms

Loss rate: 33.90%

## Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-07-24 06:52:14

End at: 2018-07-24 06:52:44

# Below is generated by plot.py at 2018-07-24 07:18:54

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.50 Mbit/s (110.2% utilization)

95th percentile per-packet one-way delay: 625.406 ms

Loss rate: 64.11%

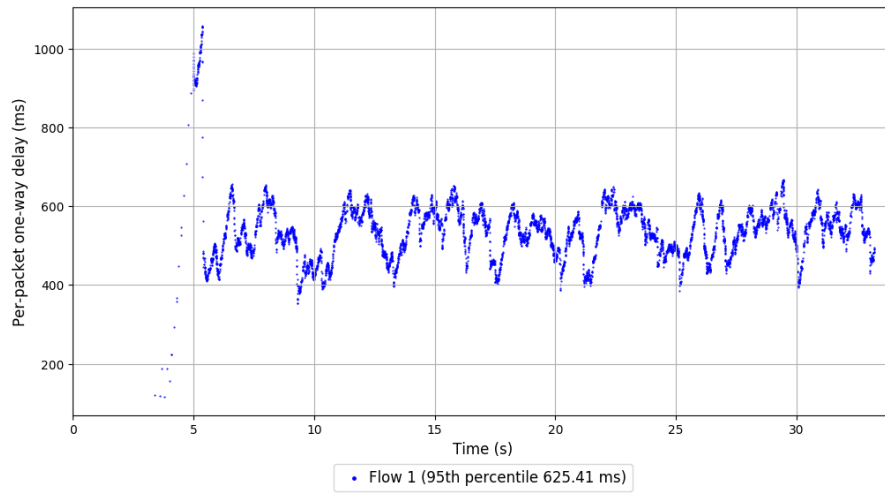
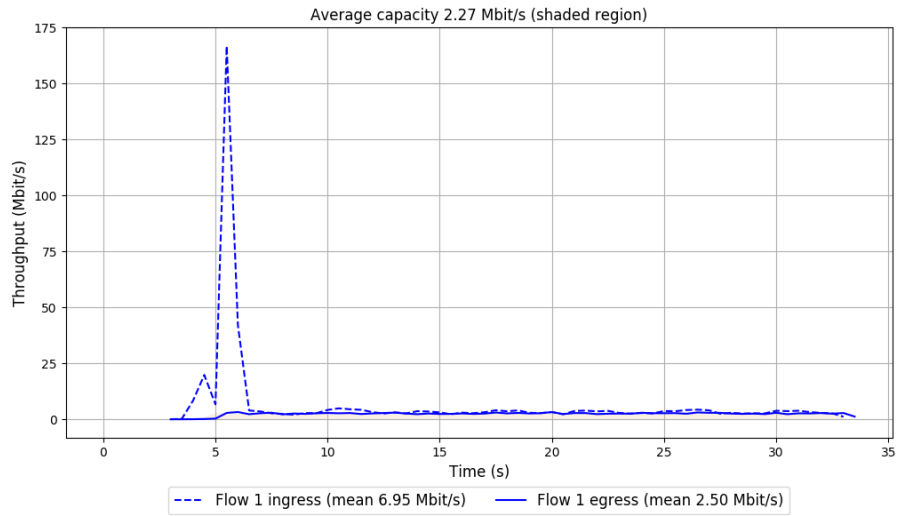
-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 625.406 ms

Loss rate: 64.11%

### Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-07-24 07:01:53

End at: 2018-07-24 07:02:23

# Below is generated by plot.py at 2018-07-24 07:18:56

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.50 Mbit/s (110.2% utilization)

95th percentile per-packet one-way delay: 637.568 ms

Loss rate: 63.22%

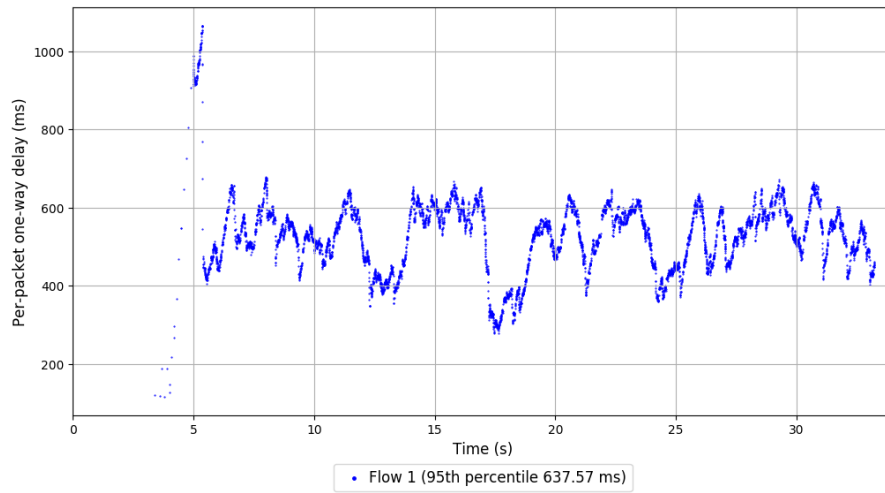
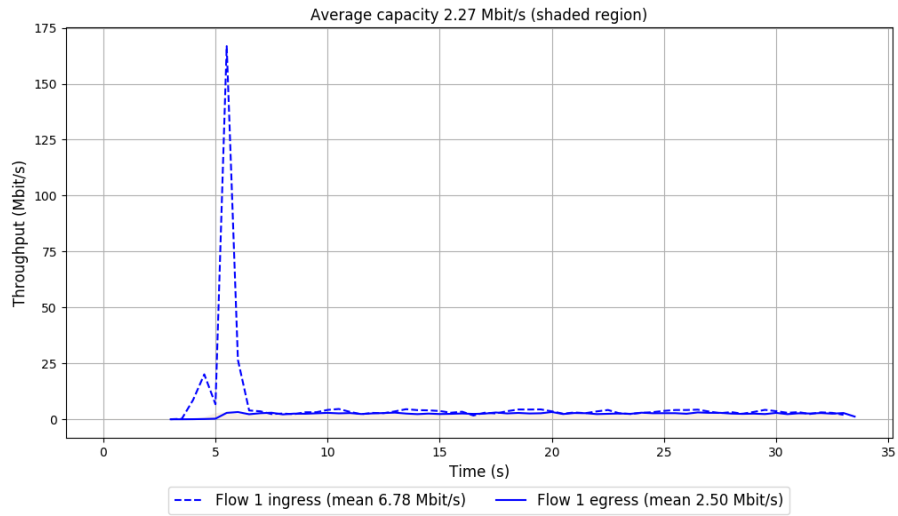
-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 637.568 ms

Loss rate: 63.22%

### Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-07-24 07:11:32

End at: 2018-07-24 07:12:02

# Below is generated by plot.py at 2018-07-24 07:19:02

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.50 Mbit/s (110.2% utilization)

95th percentile per-packet one-way delay: 638.933 ms

Loss rate: 66.71%

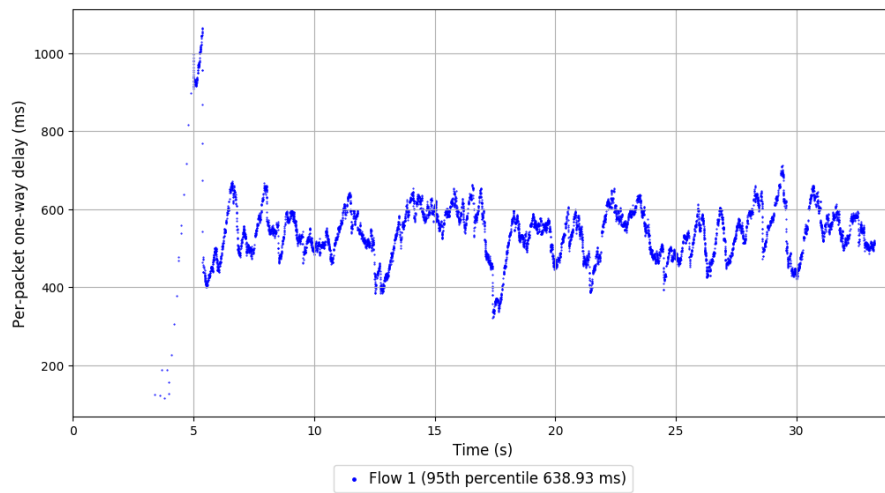
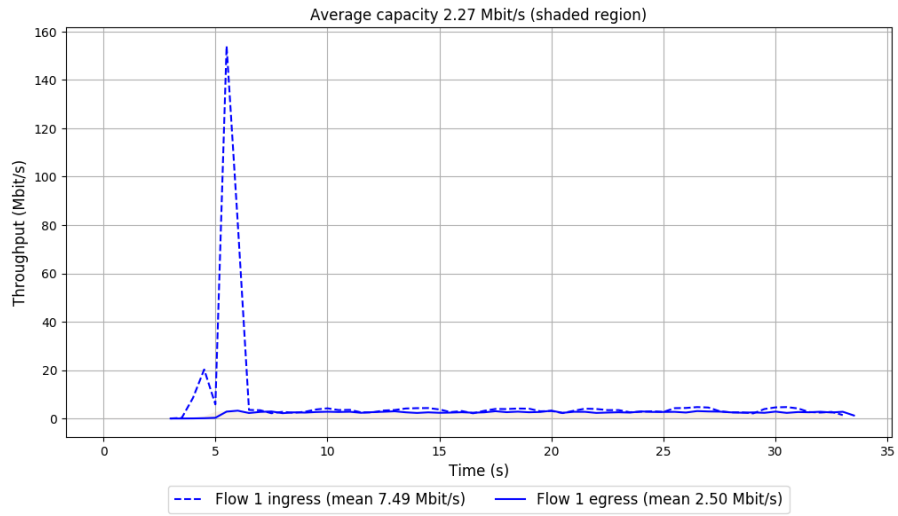
-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 638.933 ms

Loss rate: 66.71%

### Run 10: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2018-07-24 05:48:39

End at: 2018-07-24 05:49:09

# Below is generated by plot.py at 2018-07-24 07:19:02

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.50 Mbit/s (110.1% utilization)

95th percentile per-packet one-way delay: 607.285 ms

Loss rate: 6.97%

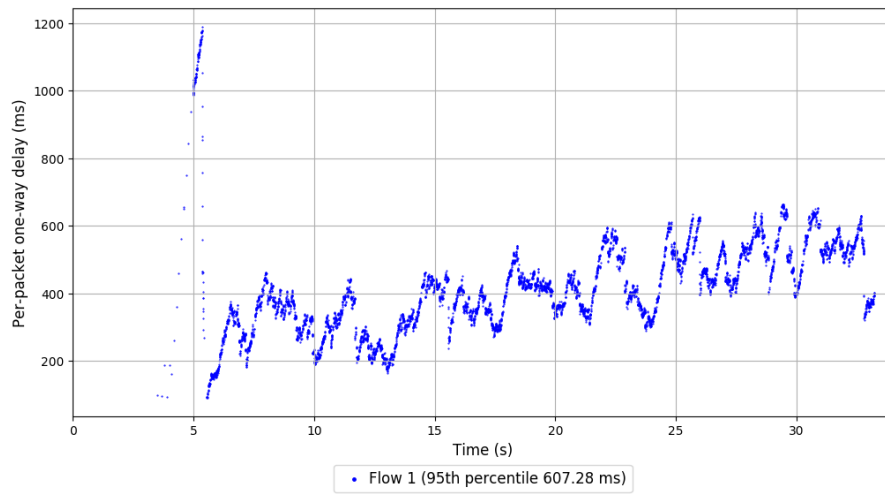
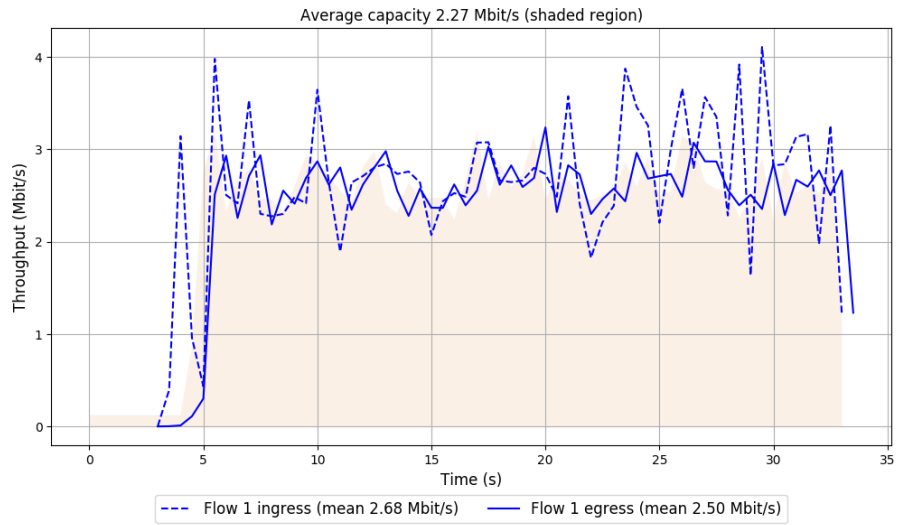
-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 607.285 ms

Loss rate: 6.97%

# Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2018-07-24 05:58:18

End at: 2018-07-24 05:58:48

# Below is generated by plot.py at 2018-07-24 07:19:02

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.49 Mbit/s (109.6% utilization)

95th percentile per-packet one-way delay: 594.914 ms

Loss rate: 7.02%

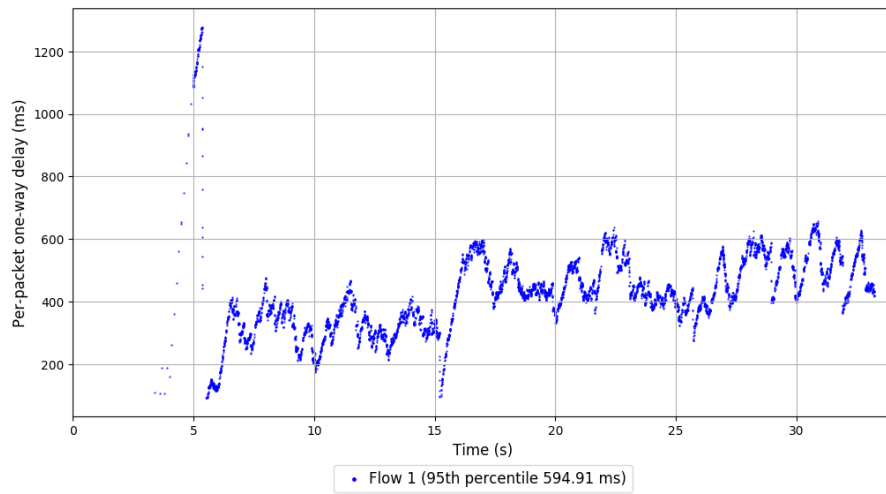
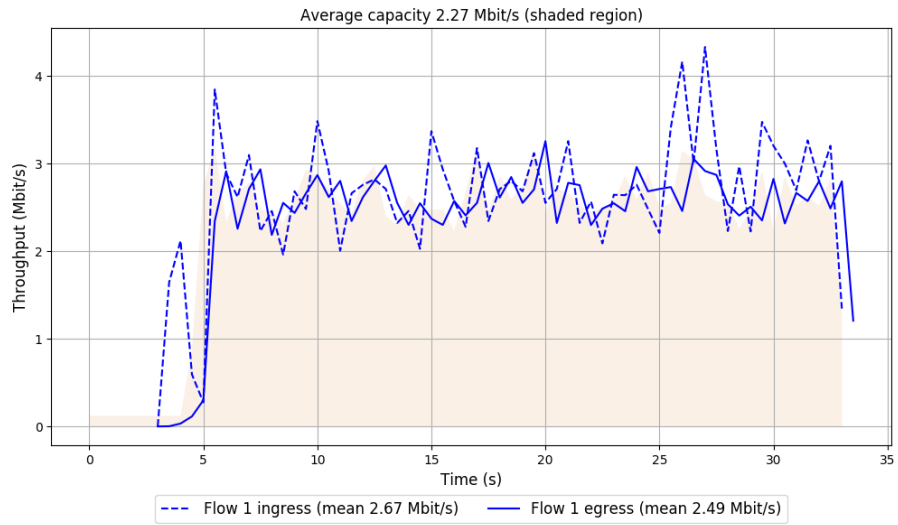
-- Flow 1:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 594.914 ms

Loss rate: 7.02%

## Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2018-07-24 06:07:57

End at: 2018-07-24 06:08:27

# Below is generated by plot.py at 2018-07-24 07:19:02

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.49 Mbit/s (109.7% utilization)

95th percentile per-packet one-way delay: 611.818 ms

Loss rate: 11.61%

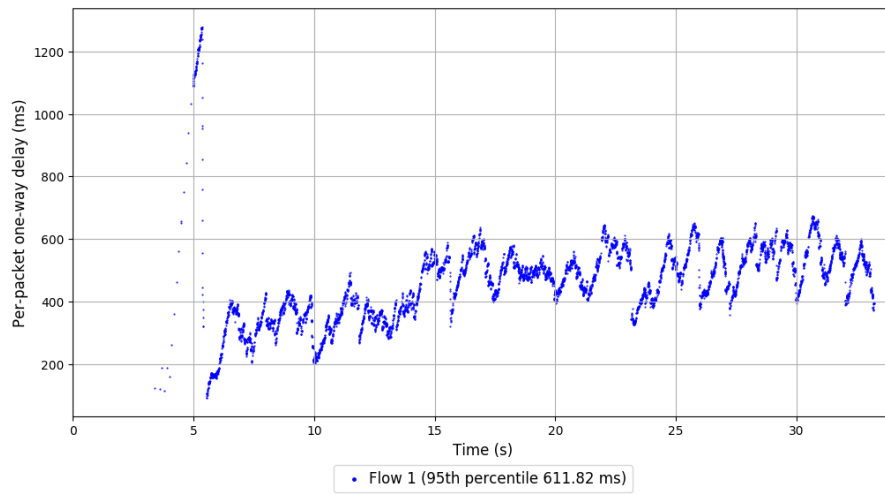
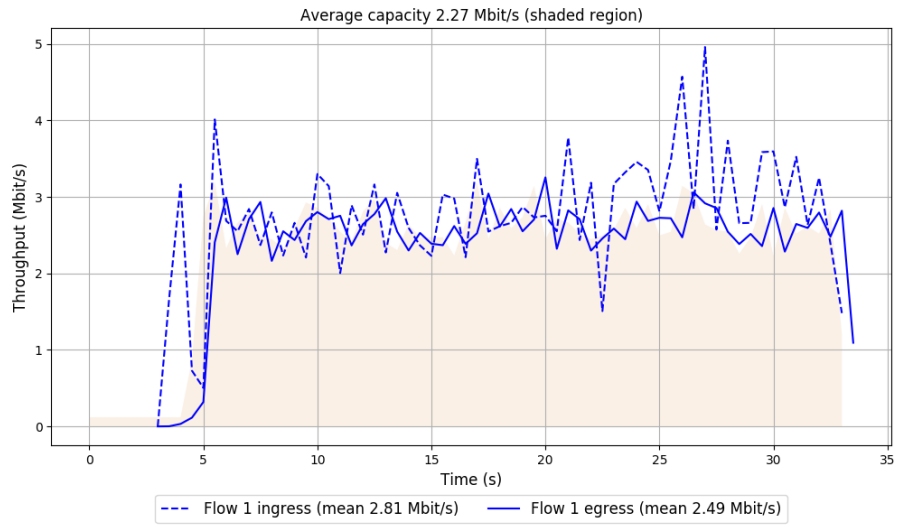
-- Flow 1:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 611.818 ms

Loss rate: 11.61%

### Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2018-07-24 06:17:36

End at: 2018-07-24 06:18:06

# Below is generated by plot.py at 2018-07-24 07:19:03

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.49 Mbit/s (109.7% utilization)

95th percentile per-packet one-way delay: 608.277 ms

Loss rate: 9.22%

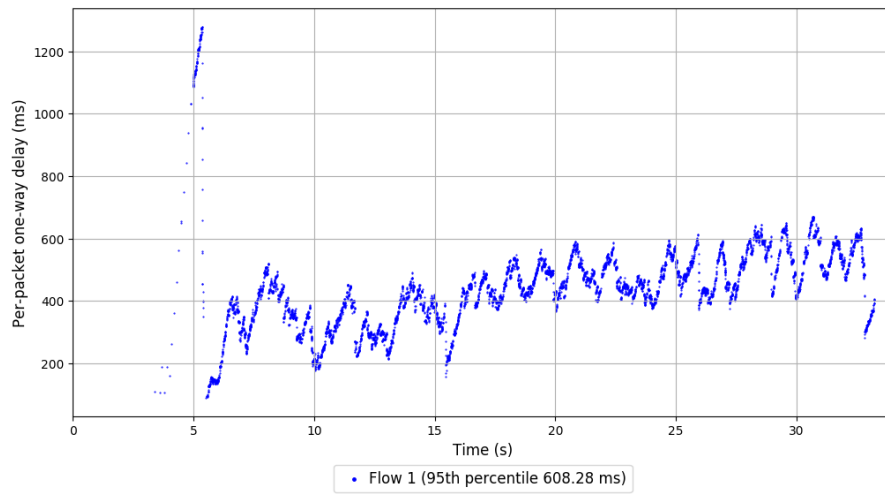
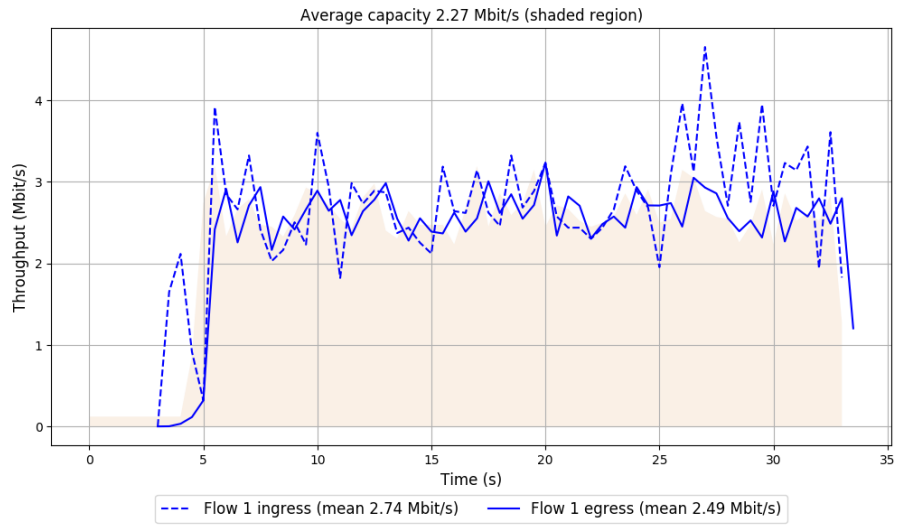
-- Flow 1:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 608.277 ms

Loss rate: 9.22%

### Run 4: Report of FillP-Sheep — Data Link



Run 5: Statistics of FillP-Sheep

Start at: 2018-07-24 06:27:15

End at: 2018-07-24 06:27:45

# Below is generated by plot.py at 2018-07-24 07:19:03

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.49 Mbit/s (109.7% utilization)

95th percentile per-packet one-way delay: 605.502 ms

Loss rate: 7.78%

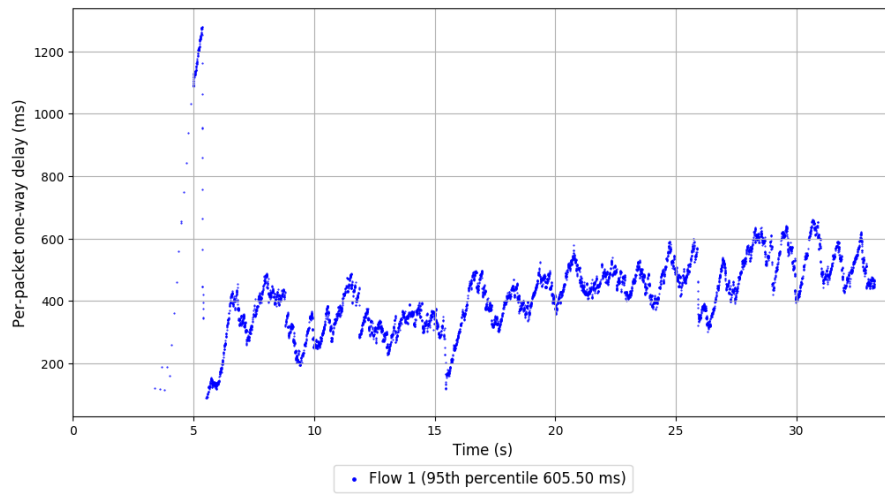
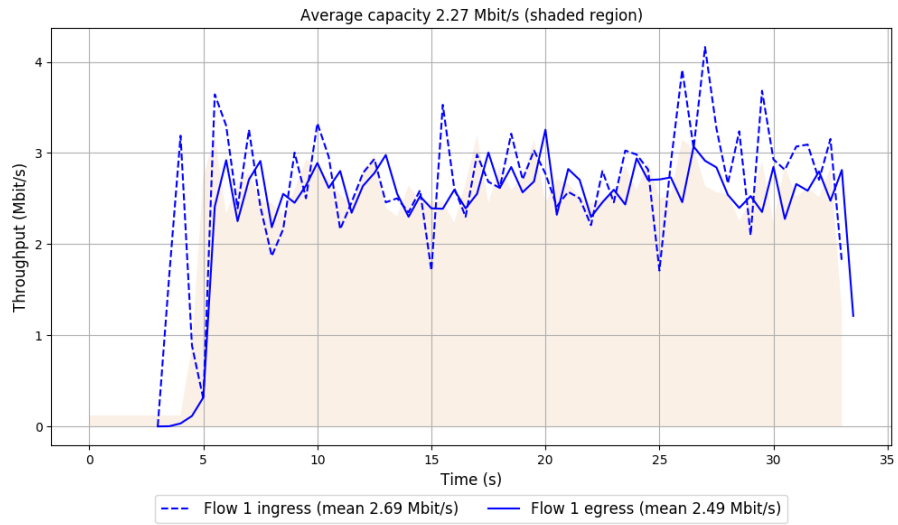
-- Flow 1:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 605.502 ms

Loss rate: 7.78%

### Run 5: Report of FillP-Sheep — Data Link



Run 6: Statistics of FillP-Sheep

Start at: 2018-07-24 06:36:54

End at: 2018-07-24 06:37:24

# Below is generated by plot.py at 2018-07-24 07:19:05

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.49 Mbit/s (109.6% utilization)

95th percentile per-packet one-way delay: 589.707 ms

Loss rate: 7.41%

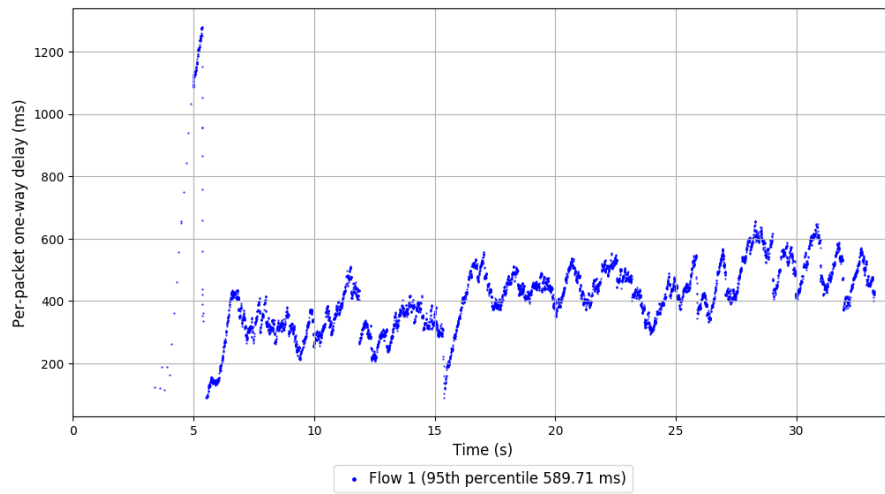
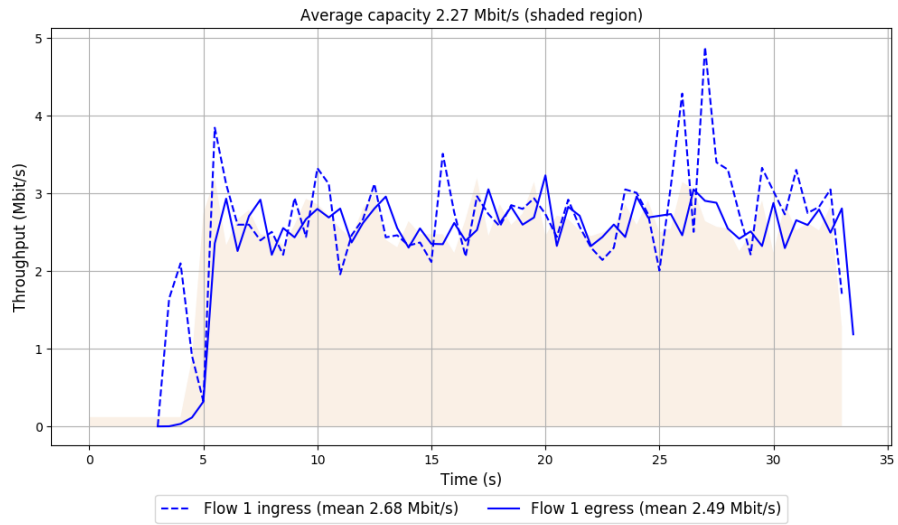
-- Flow 1:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 589.707 ms

Loss rate: 7.41%

### Run 6: Report of FillP-Sheep — Data Link



Run 7: Statistics of FillP-Sheep

Start at: 2018-07-24 06:46:33

End at: 2018-07-24 06:47:03

# Below is generated by plot.py at 2018-07-24 07:19:07

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.49 Mbit/s (109.7% utilization)

95th percentile per-packet one-way delay: 599.475 ms

Loss rate: 9.40%

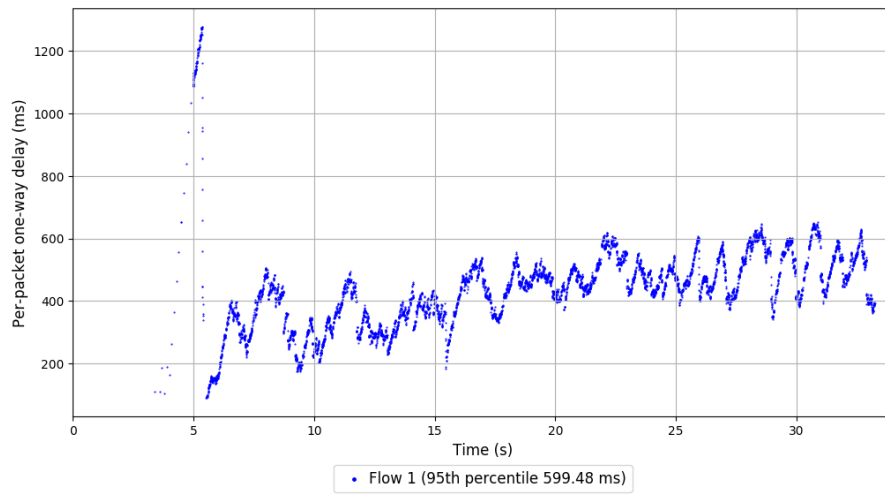
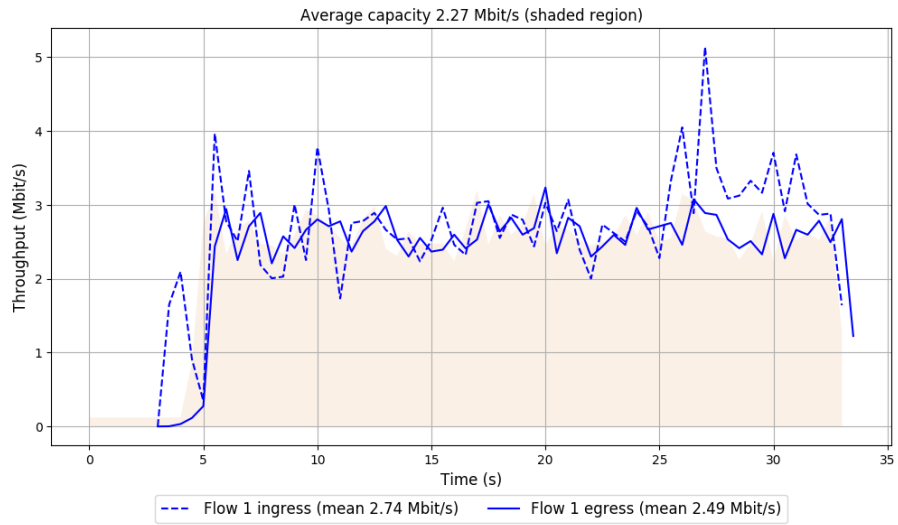
-- Flow 1:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 599.475 ms

Loss rate: 9.40%

Run 7: Report of FillP-Sheep — Data Link



Run 8: Statistics of FillP-Sheep

Start at: 2018-07-24 06:56:12

End at: 2018-07-24 06:56:42

# Below is generated by plot.py at 2018-07-24 07:19:10

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.49 Mbit/s (109.7% utilization)

95th percentile per-packet one-way delay: 604.891 ms

Loss rate: 9.03%

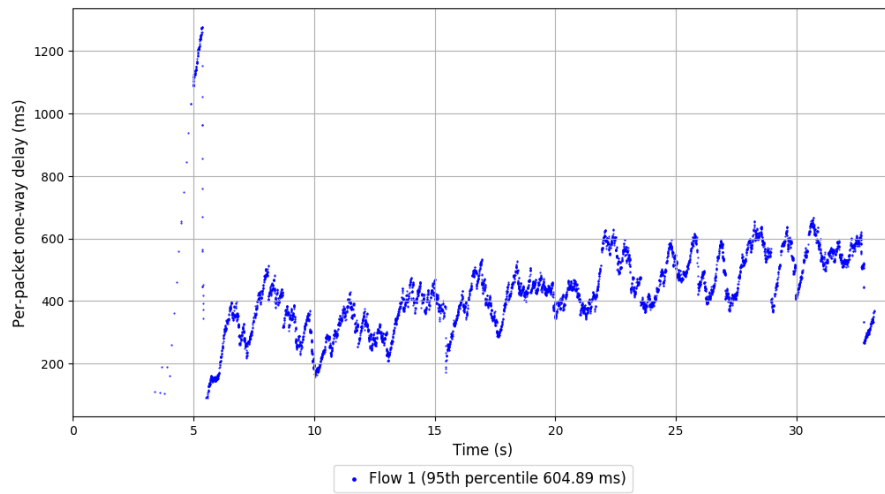
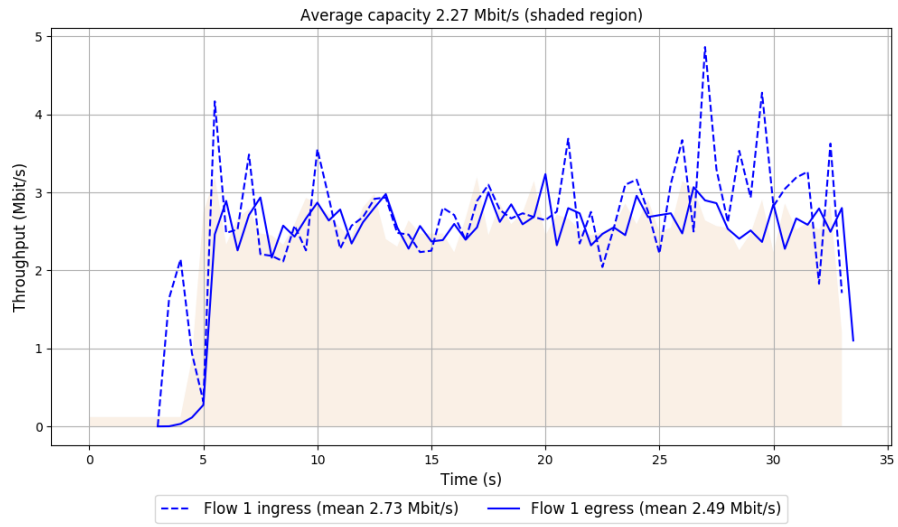
-- Flow 1:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 604.891 ms

Loss rate: 9.03%

Run 8: Report of FillP-Sheep — Data Link



Run 9: Statistics of FillP-Sheep

Start at: 2018-07-24 07:05:51

End at: 2018-07-24 07:06:21

# Below is generated by plot.py at 2018-07-24 07:19:12

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.49 Mbit/s (109.7% utilization)

95th percentile per-packet one-way delay: 611.902 ms

Loss rate: 11.00%

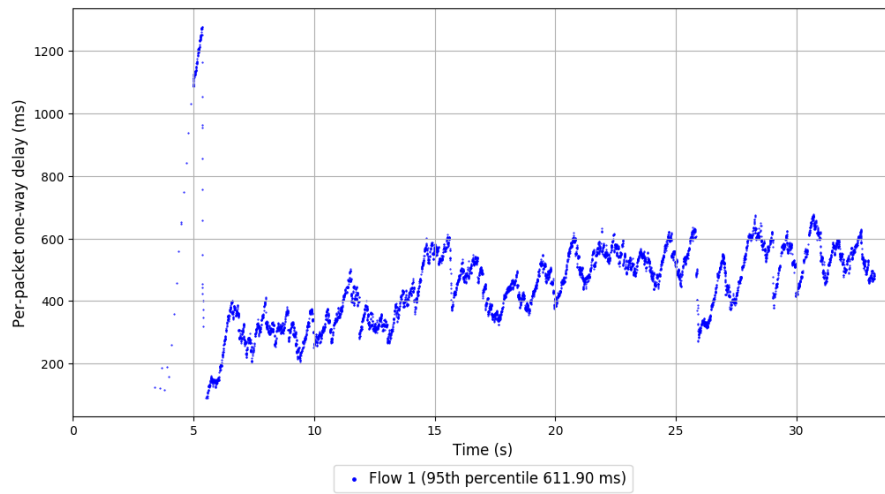
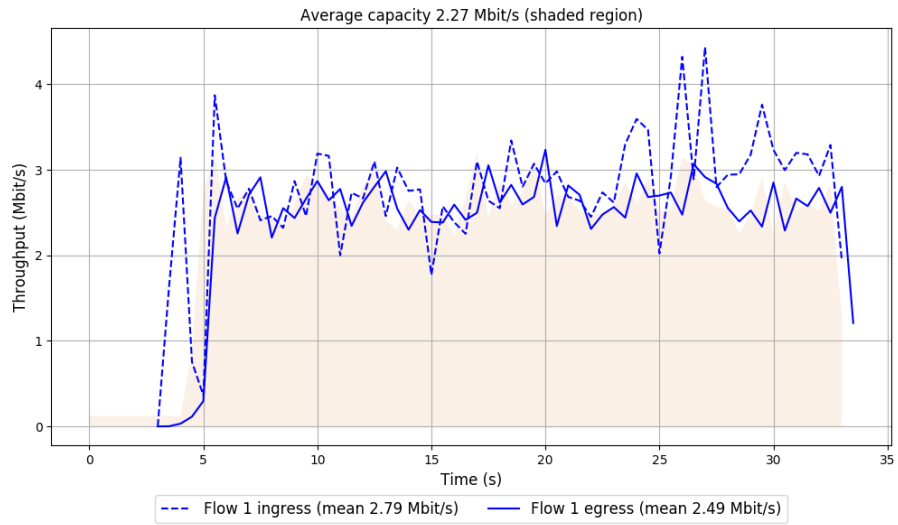
-- Flow 1:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 611.902 ms

Loss rate: 11.00%

### Run 9: Report of FillP-Sheep — Data Link



Run 10: Statistics of FillP-Sheep

Start at: 2018-07-24 07:15:30

End at: 2018-07-24 07:16:00

# Below is generated by plot.py at 2018-07-24 07:19:13

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.49 Mbit/s (109.7% utilization)

95th percentile per-packet one-way delay: 604.064 ms

Loss rate: 9.99%

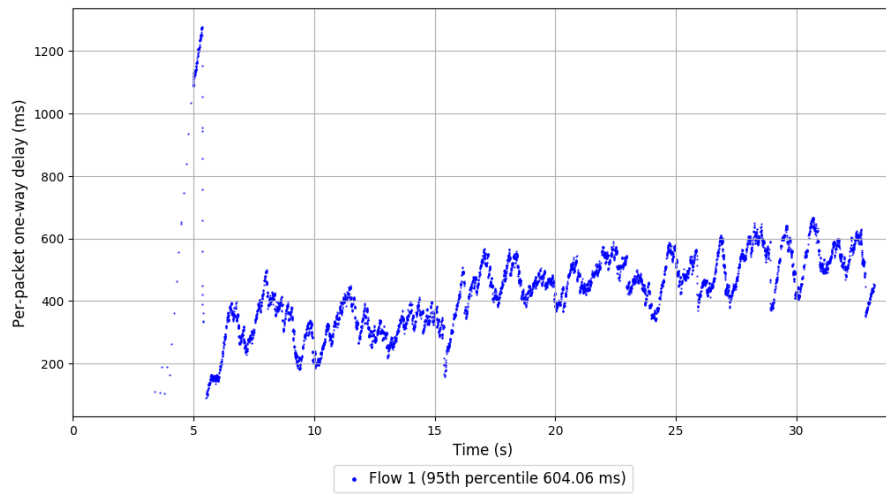
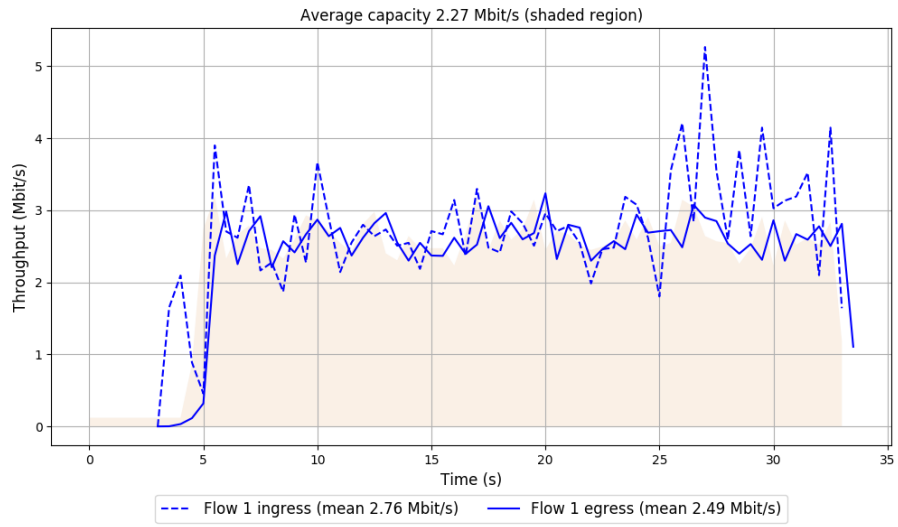
-- Flow 1:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 604.064 ms

Loss rate: 9.99%

Run 10: Report of FillP-Sheep — Data Link

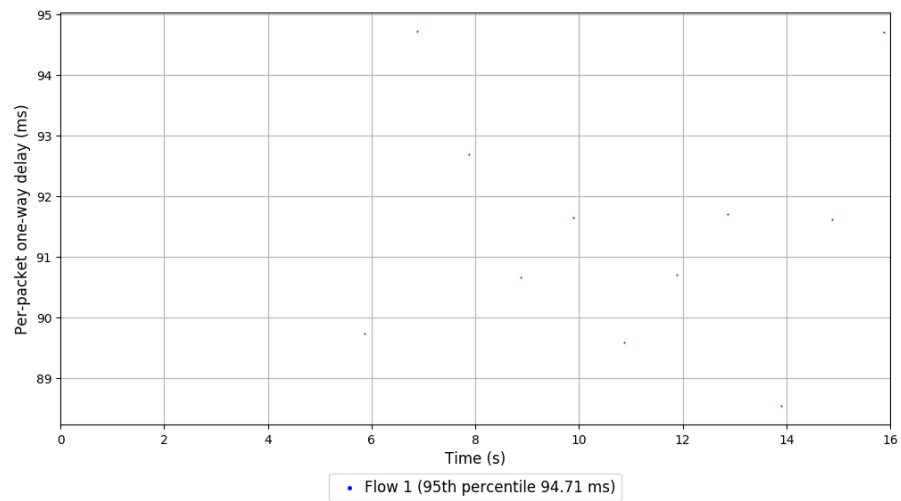
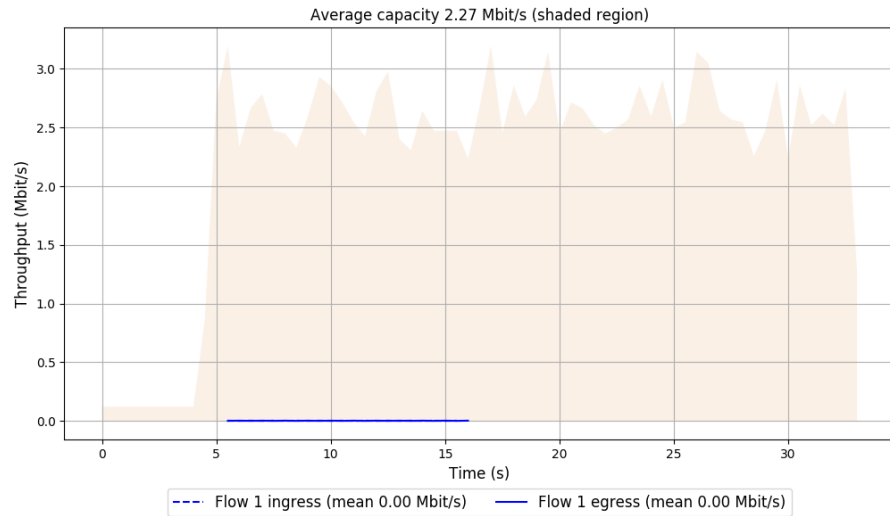


Run 1: Statistics of Indigo

Start at: 2018-07-24 05:47:31

End at: 2018-07-24 05:48:01

# Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-07-24 05:57:10

End at: 2018-07-24 05:57:40

# Below is generated by plot.py at 2018-07-24 07:19:13

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.12 Mbit/s (93.3% utilization)

95th percentile per-packet one-way delay: 167.789 ms

Loss rate: 0.42%

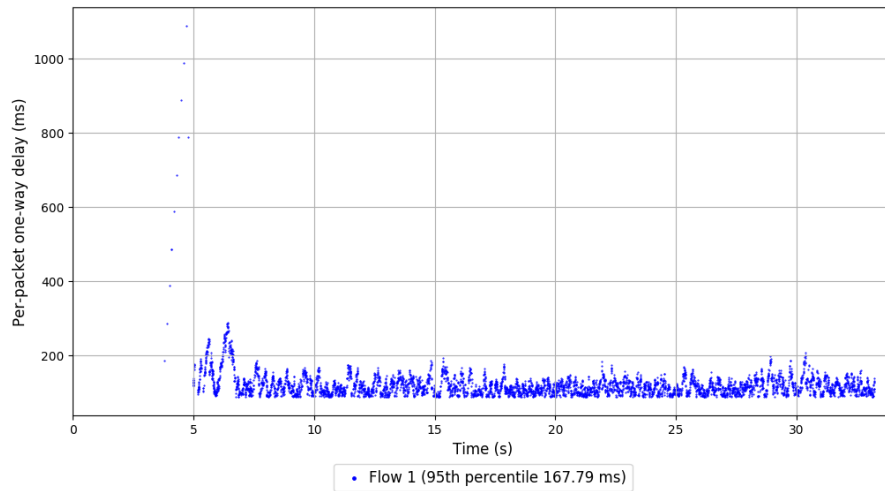
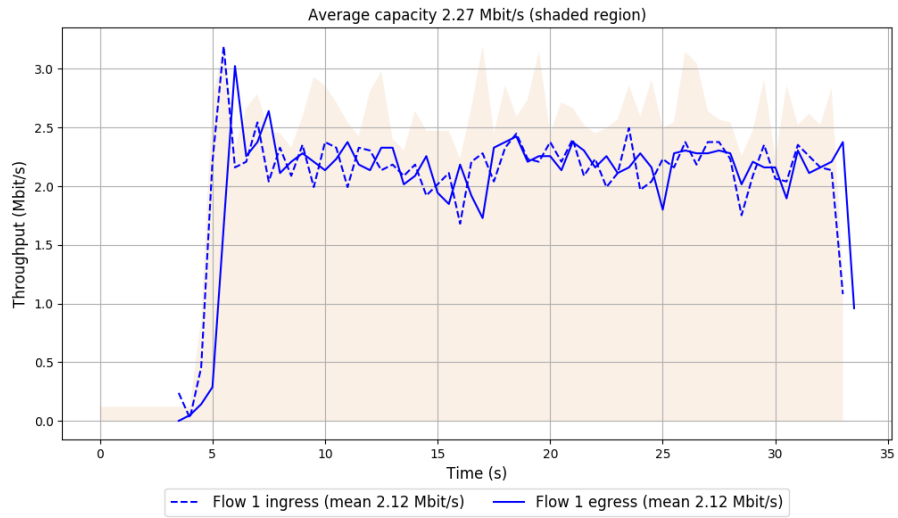
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 167.789 ms

Loss rate: 0.42%

## Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-07-24 06:06:49

End at: 2018-07-24 06:07:19

# Below is generated by plot.py at 2018-07-24 07:19:13

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.12 Mbit/s (93.2% utilization)

95th percentile per-packet one-way delay: 205.996 ms

Loss rate: 0.46%

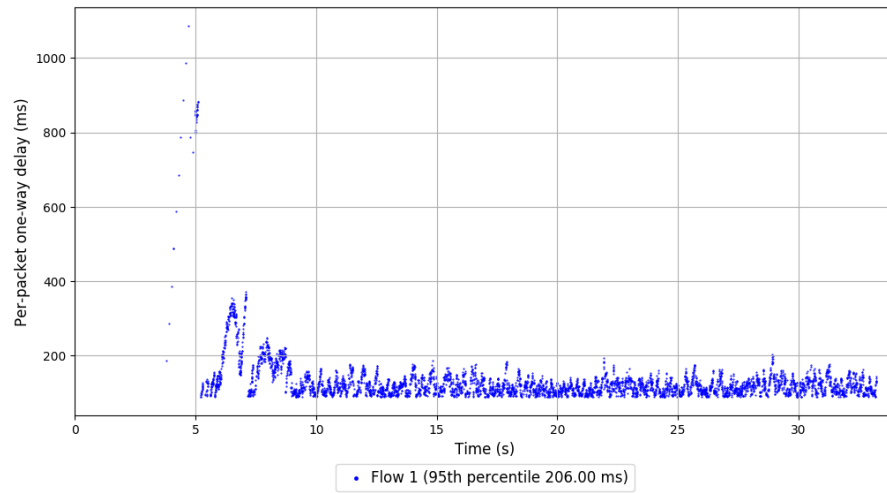
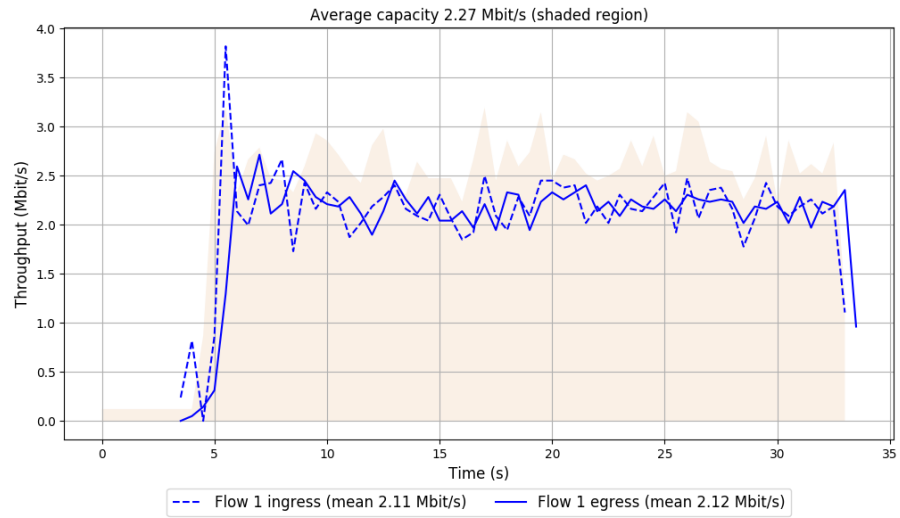
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 205.996 ms

Loss rate: 0.46%

### Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-07-24 06:16:28

End at: 2018-07-24 06:16:58

# Below is generated by plot.py at 2018-07-24 07:19:15

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.98 Mbit/s (87.2% utilization)

95th percentile per-packet one-way delay: 139.485 ms

Loss rate: 0.27%

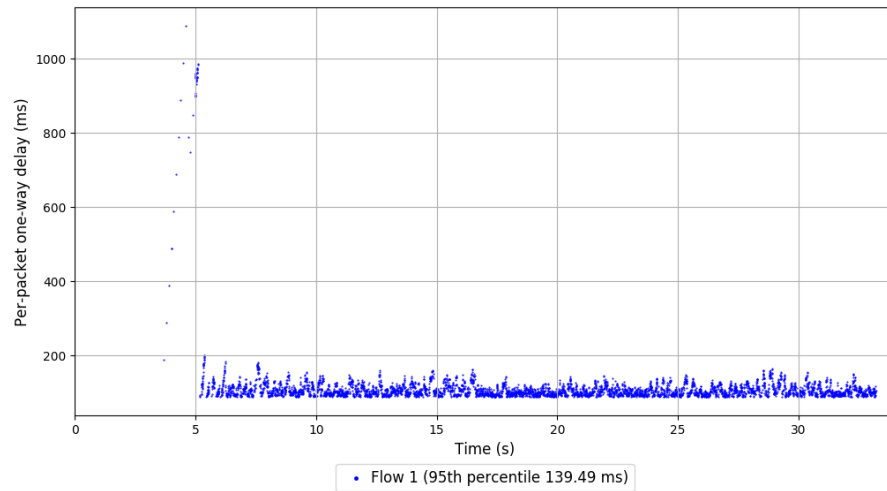
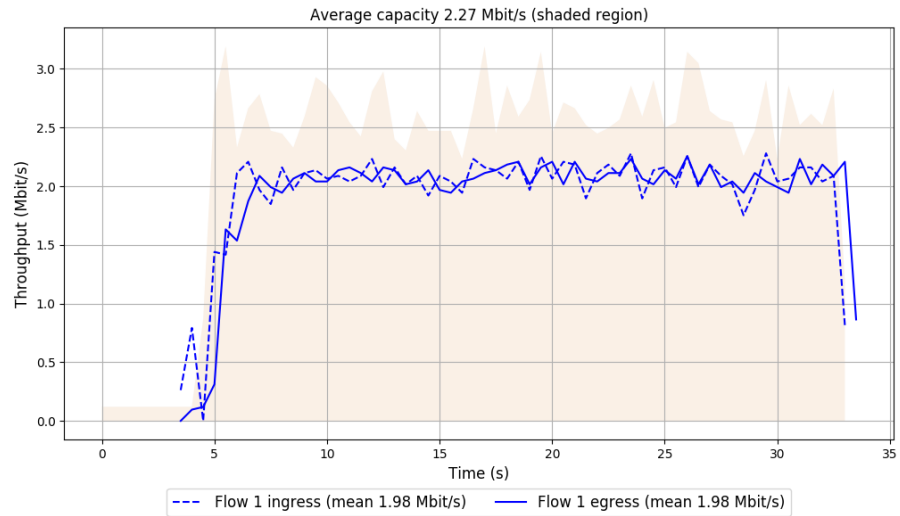
-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 139.485 ms

Loss rate: 0.27%

### Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-07-24 06:26:07

End at: 2018-07-24 06:26:37

# Below is generated by plot.py at 2018-07-24 07:19:15

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.15 Mbit/s (94.4% utilization)

95th percentile per-packet one-way delay: 223.305 ms

Loss rate: 0.98%

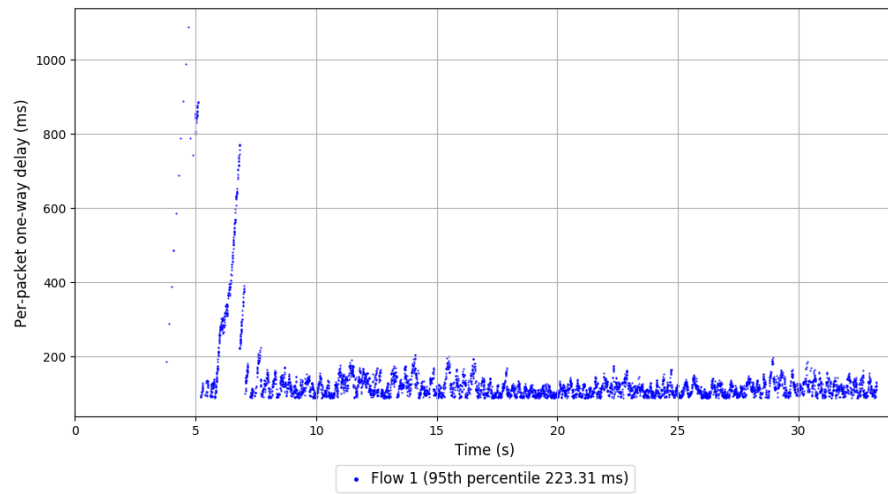
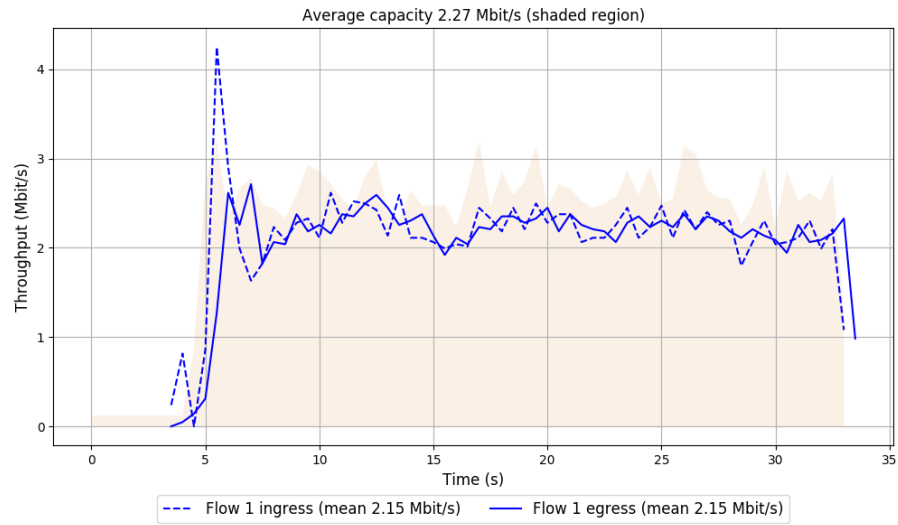
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 223.305 ms

Loss rate: 0.98%

## Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-07-24 06:35:46

End at: 2018-07-24 06:36:16

# Below is generated by plot.py at 2018-07-24 07:19:16

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.78 Mbit/s (78.4% utilization)

95th percentile per-packet one-way delay: 184.524 ms

Loss rate: 0.41%

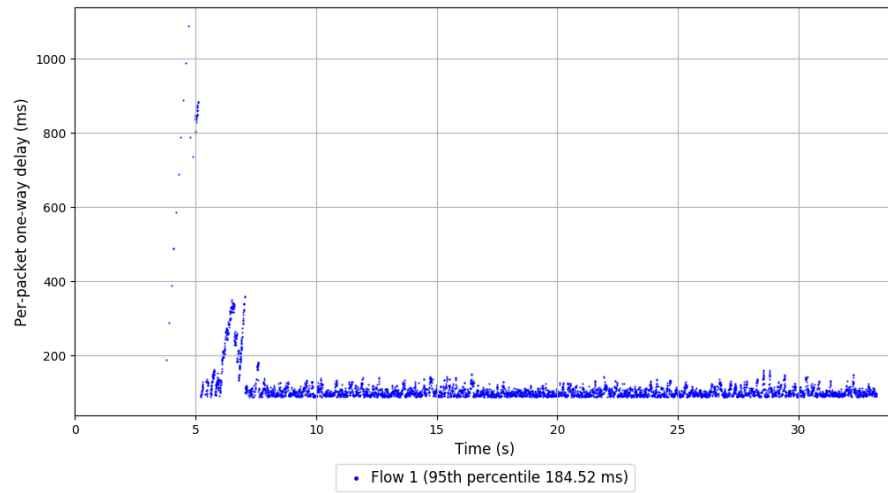
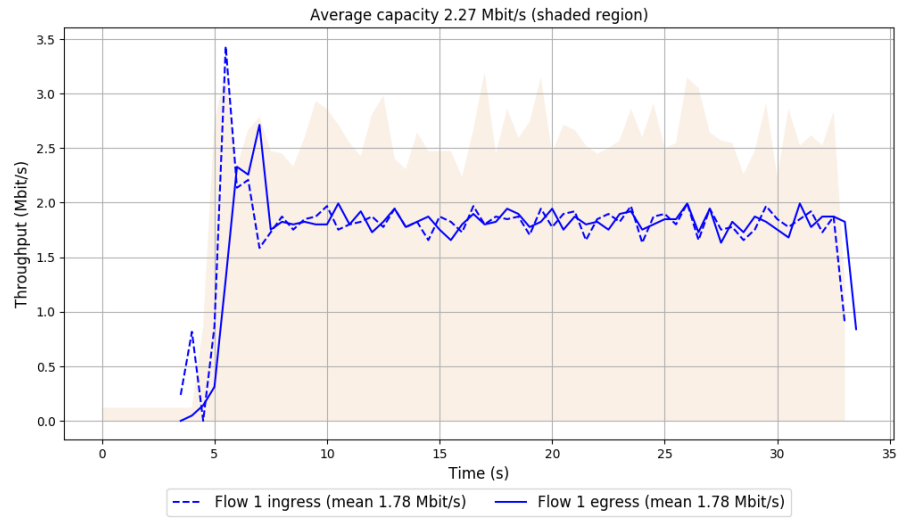
-- Flow 1:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 184.524 ms

Loss rate: 0.41%

## Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-07-24 06:45:25

End at: 2018-07-24 06:45:55

# Below is generated by plot.py at 2018-07-24 07:19:19

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.99 Mbit/s (87.5% utilization)

95th percentile per-packet one-way delay: 138.953 ms

Loss rate: 0.37%

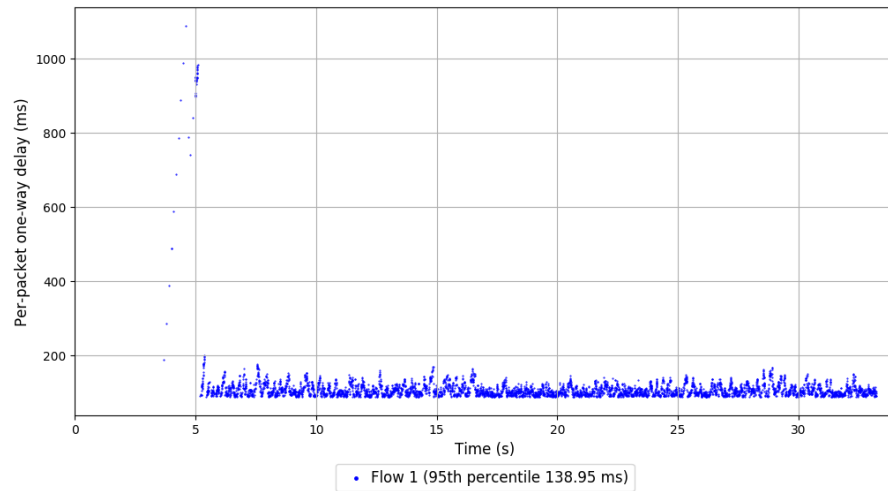
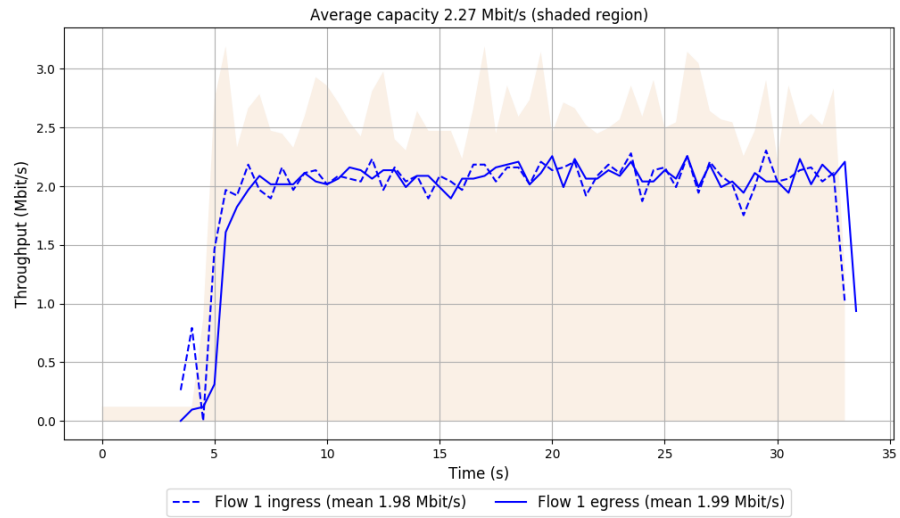
-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 138.953 ms

Loss rate: 0.37%

## Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-07-24 06:55:04

End at: 2018-07-24 06:55:34

# Below is generated by plot.py at 2018-07-24 07:19:20

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.05 Mbit/s (90.1% utilization)

95th percentile per-packet one-way delay: 169.408 ms

Loss rate: 0.46%

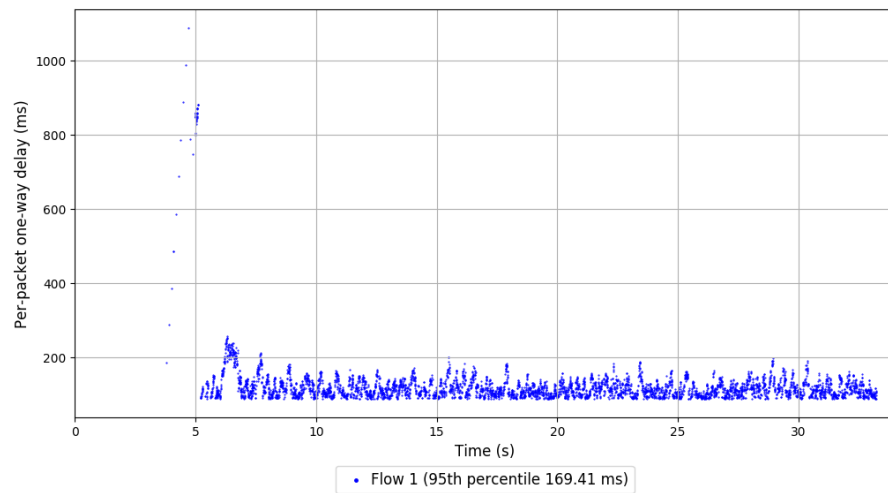
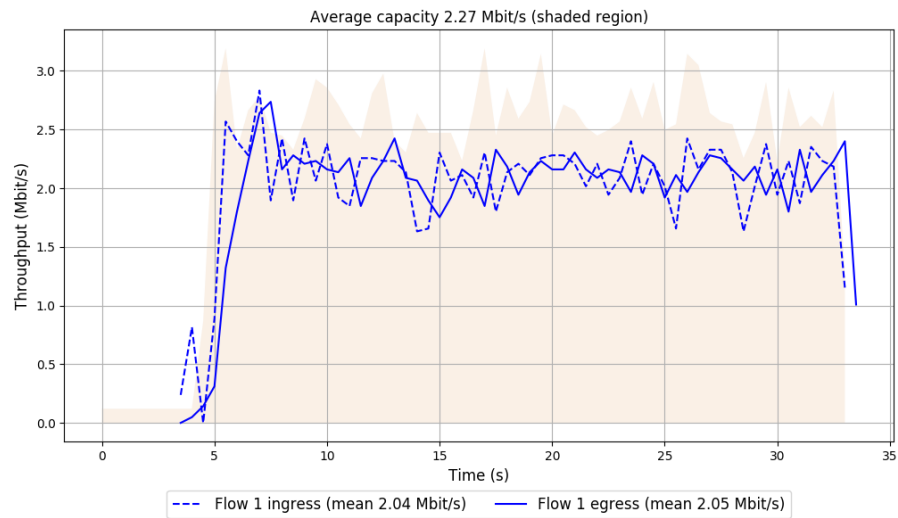
-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 169.408 ms

Loss rate: 0.46%

## Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-07-24 07:04:43

End at: 2018-07-24 07:05:13

# Below is generated by plot.py at 2018-07-24 07:19:21

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.98 Mbit/s (87.2% utilization)

95th percentile per-packet one-way delay: 139.197 ms

Loss rate: 0.37%

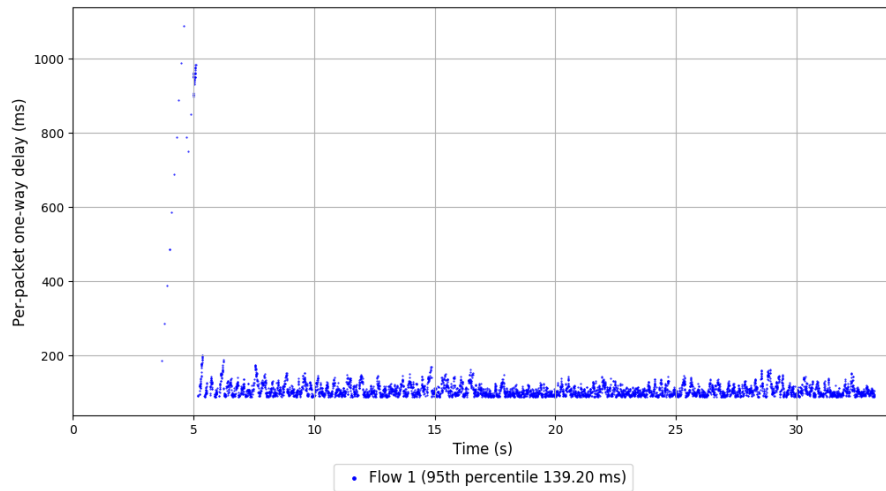
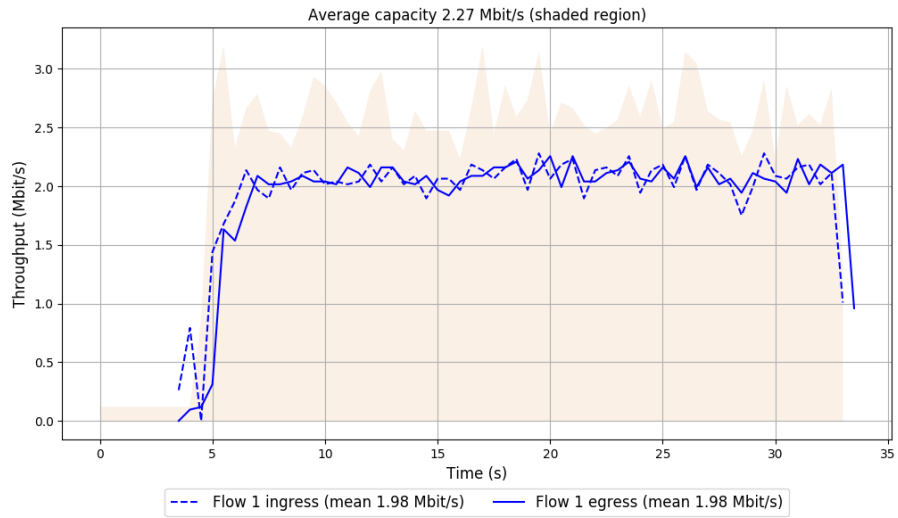
-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 139.197 ms

Loss rate: 0.37%

## Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-07-24 07:14:22

End at: 2018-07-24 07:14:52

# Below is generated by plot.py at 2018-07-24 07:19:22

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.99 Mbit/s (87.5% utilization)

95th percentile per-packet one-way delay: 139.764 ms

Loss rate: 0.37%

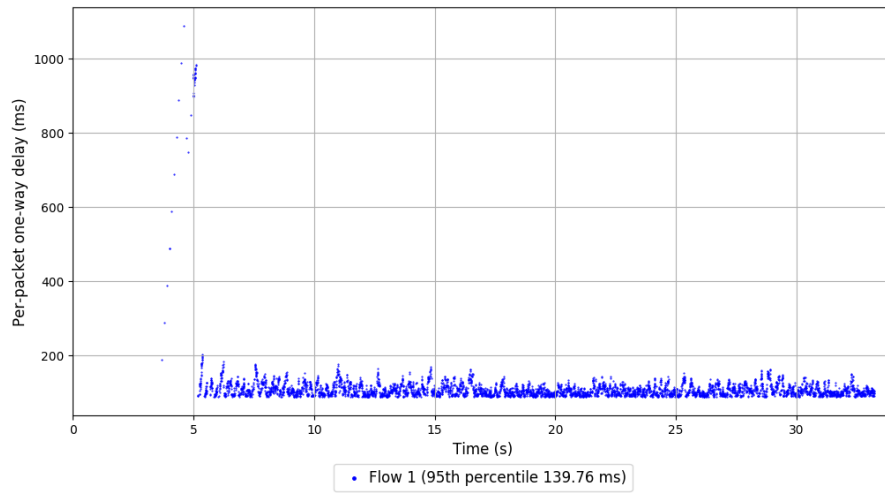
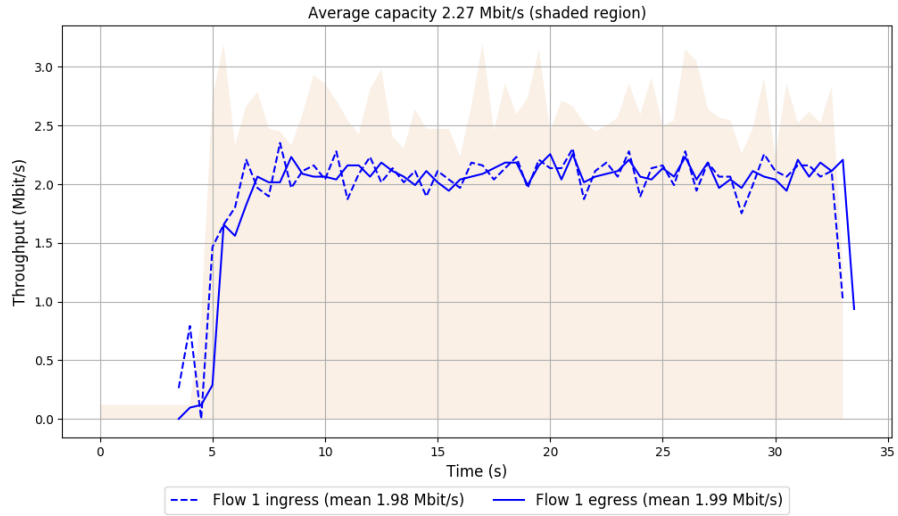
-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 139.764 ms

Loss rate: 0.37%

# Run 10: Report of Indigo — Data Link



Run 1: Statistics of LEDBAT

Start at: 2018-07-24 05:46:57

End at: 2018-07-24 05:47:27

# Below is generated by plot.py at 2018-07-24 07:19:24

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.32 Mbit/s (102.0% utilization)

95th percentile per-packet one-way delay: 248.614 ms

Loss rate: 0.64%

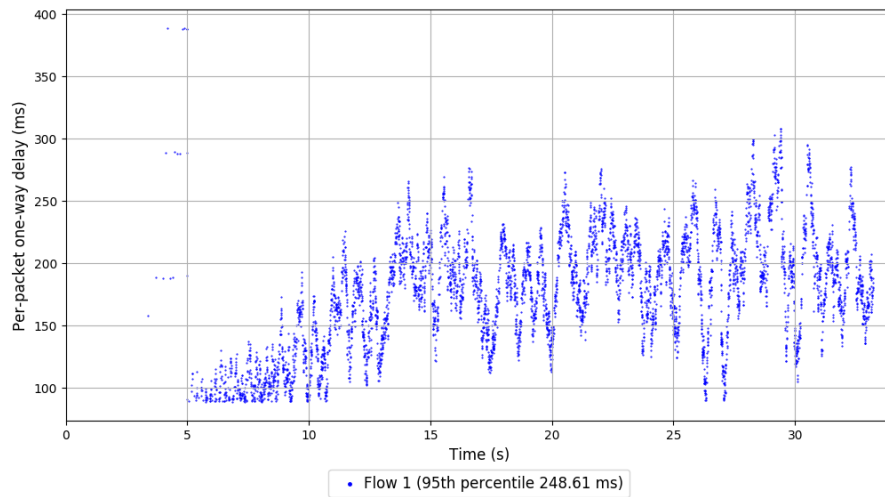
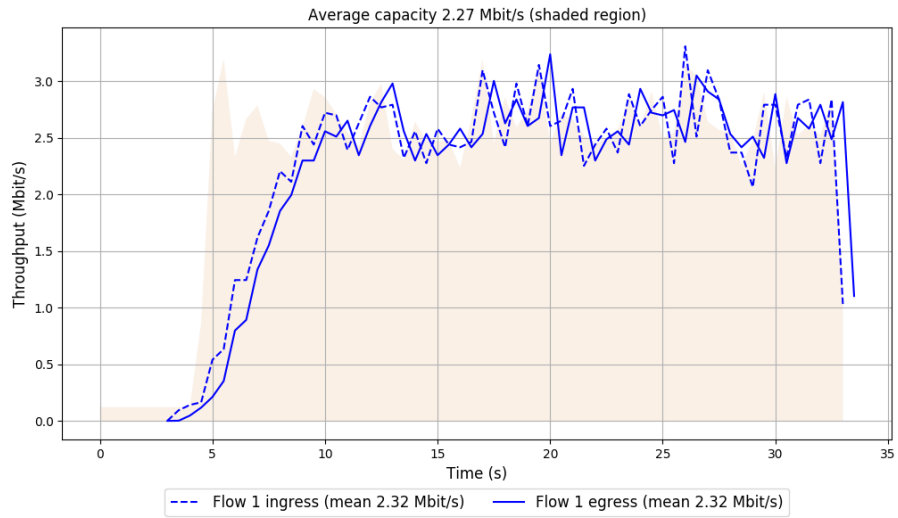
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 248.614 ms

Loss rate: 0.64%

# Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-07-24 05:56:36

End at: 2018-07-24 05:57:06

# Below is generated by plot.py at 2018-07-24 07:19:25

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.32 Mbit/s (102.1% utilization)

95th percentile per-packet one-way delay: 248.200 ms

Loss rate: 0.64%

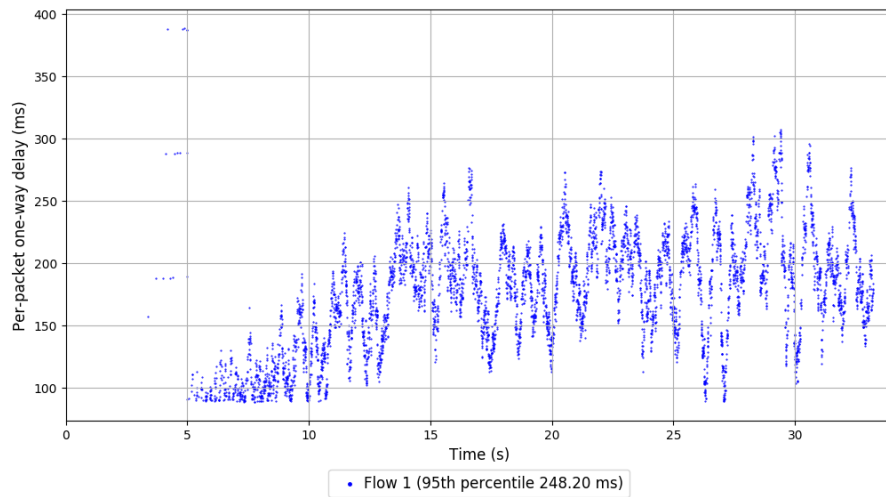
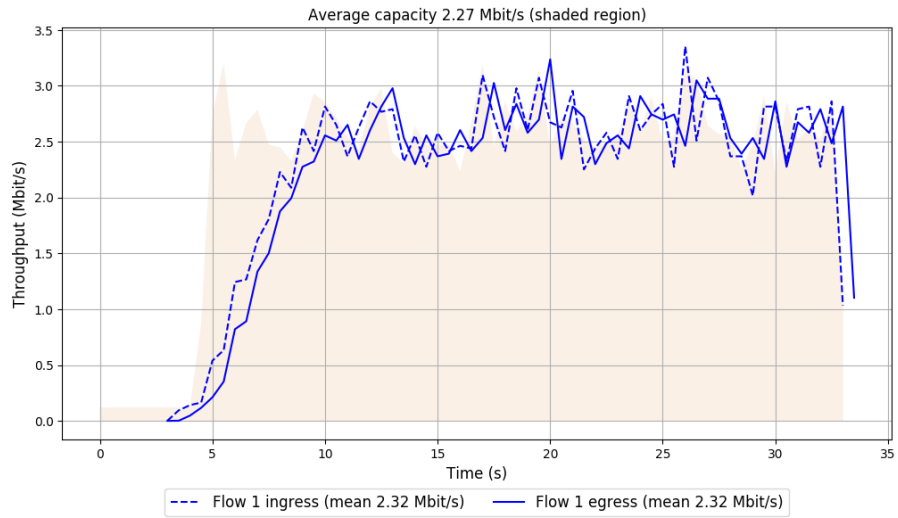
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 248.200 ms

Loss rate: 0.64%

## Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-07-24 06:06:15

End at: 2018-07-24 06:06:45

# Below is generated by plot.py at 2018-07-24 07:19:25

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.32 Mbit/s (102.3% utilization)

95th percentile per-packet one-way delay: 248.652 ms

Loss rate: 0.71%

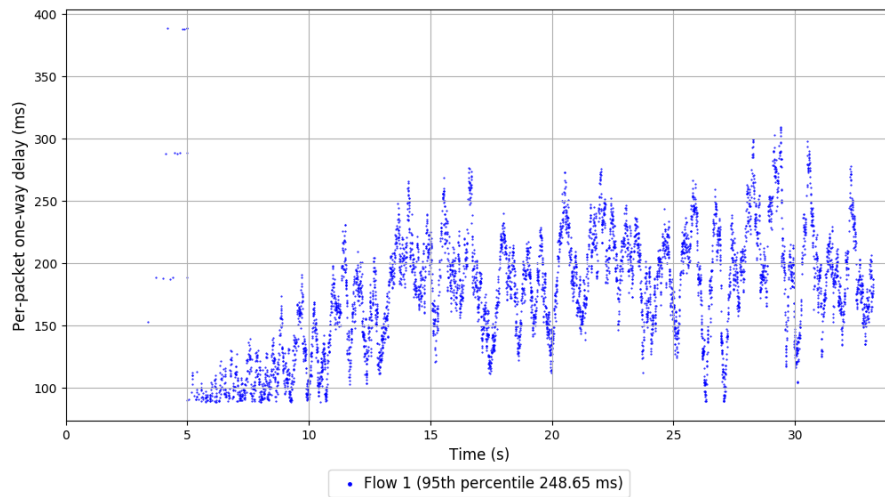
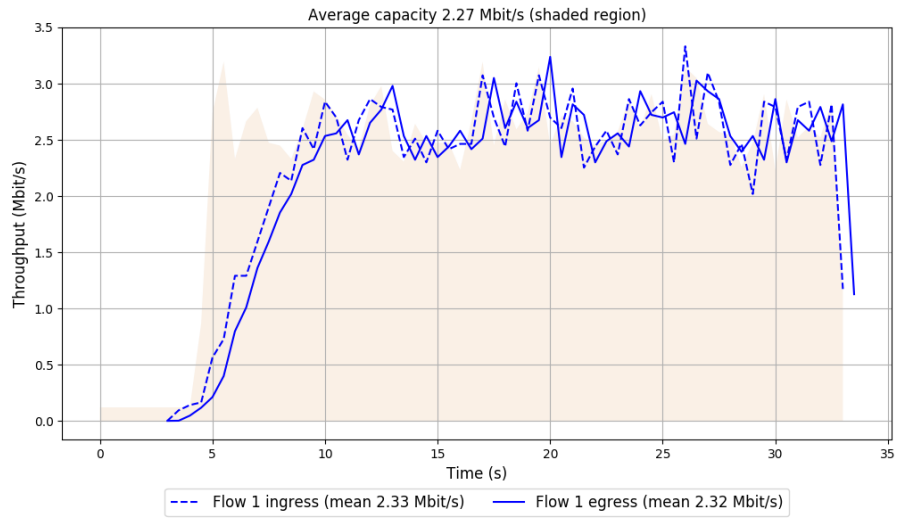
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 248.652 ms

Loss rate: 0.71%

### Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-07-24 06:15:54

End at: 2018-07-24 06:16:24

# Below is generated by plot.py at 2018-07-24 07:19:27

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.32 Mbit/s (102.0% utilization)

95th percentile per-packet one-way delay: 247.838 ms

Loss rate: 0.66%

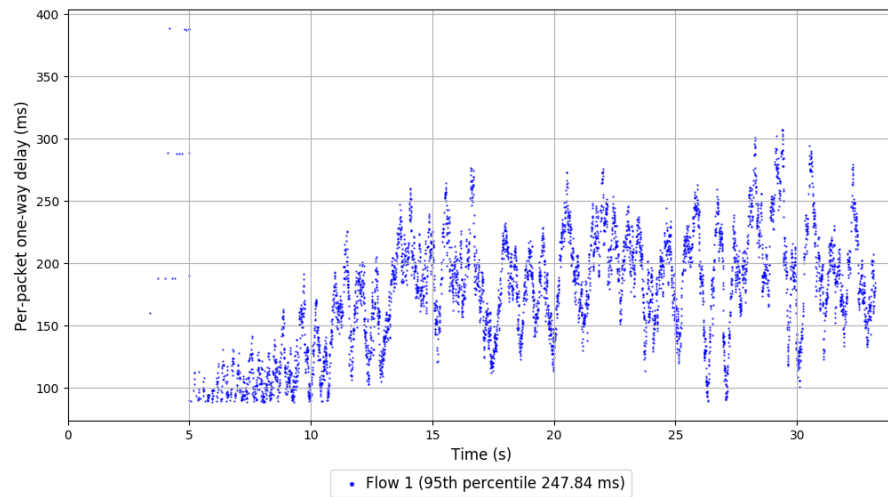
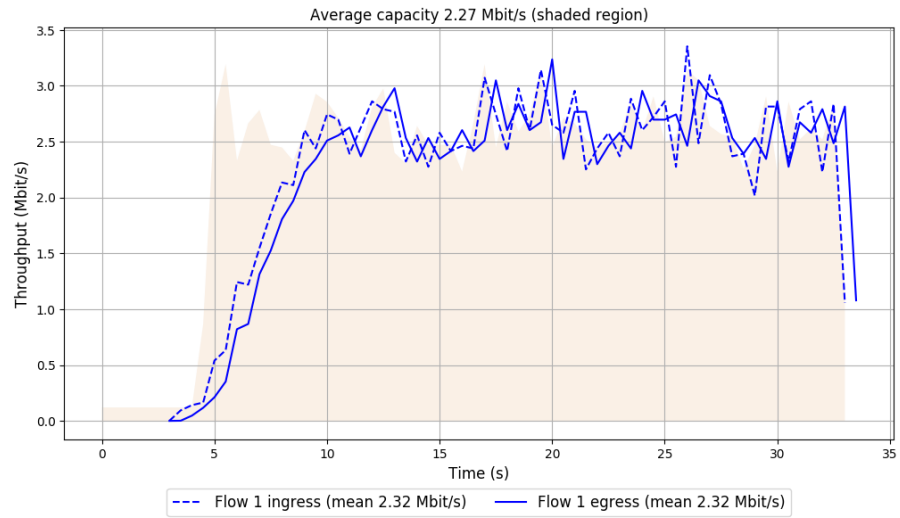
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 247.838 ms

Loss rate: 0.66%

## Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-07-24 06:25:33

End at: 2018-07-24 06:26:03

# Below is generated by plot.py at 2018-07-24 07:19:30

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.32 Mbit/s (102.1% utilization)

95th percentile per-packet one-way delay: 248.628 ms

Loss rate: 0.71%

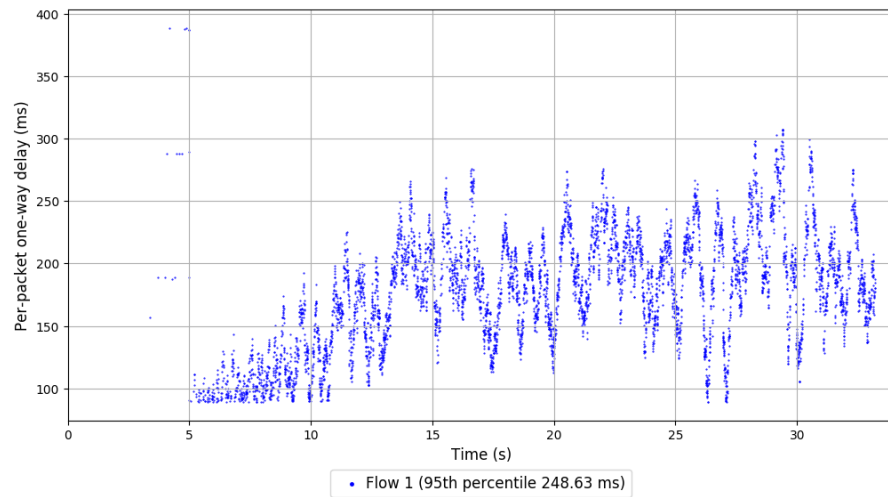
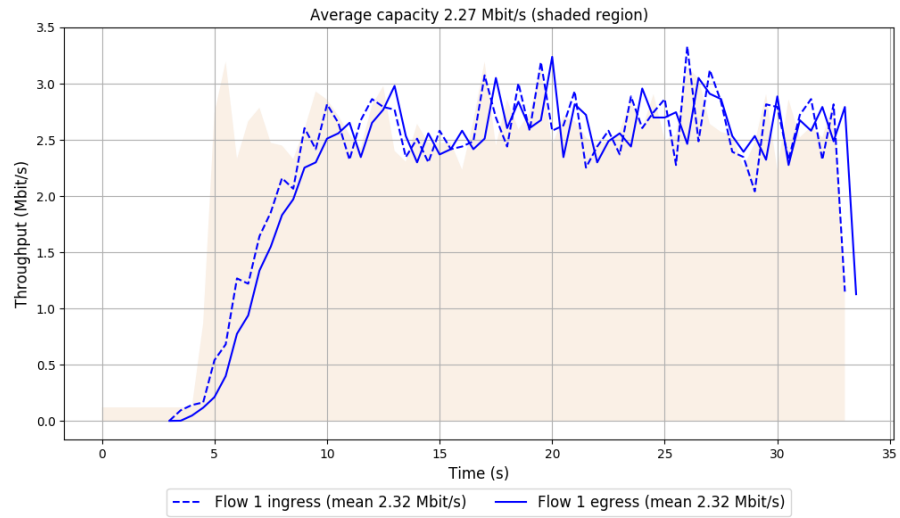
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 248.628 ms

Loss rate: 0.71%

## Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-07-24 06:35:12

End at: 2018-07-24 06:35:42

# Below is generated by plot.py at 2018-07-24 07:19:30

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.32 Mbit/s (102.0% utilization)

95th percentile per-packet one-way delay: 248.159 ms

Loss rate: 0.71%

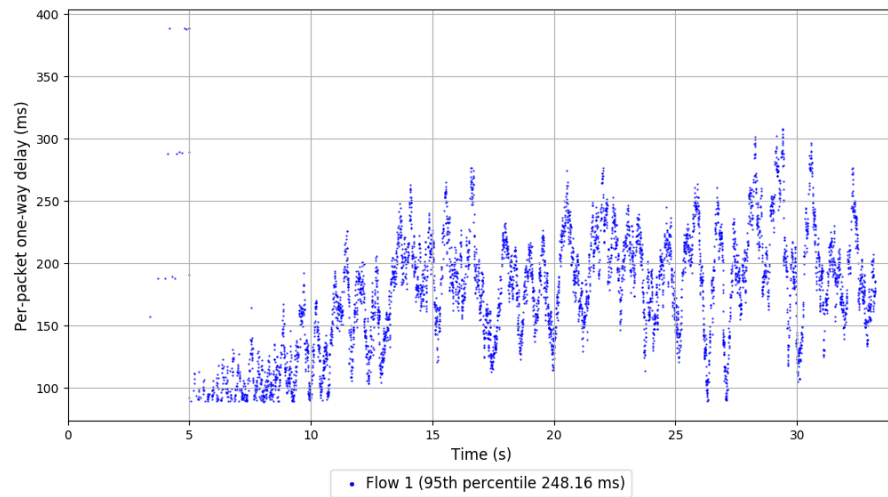
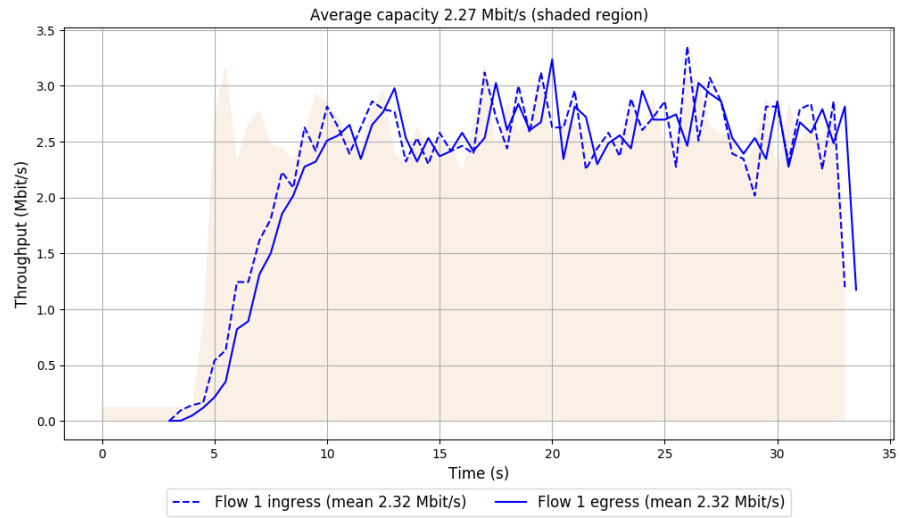
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 248.159 ms

Loss rate: 0.71%

## Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-07-24 06:44:51

End at: 2018-07-24 06:45:21

# Below is generated by plot.py at 2018-07-24 07:19:31

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.33 Mbit/s (102.4% utilization)

95th percentile per-packet one-way delay: 248.636 ms

Loss rate: 0.67%

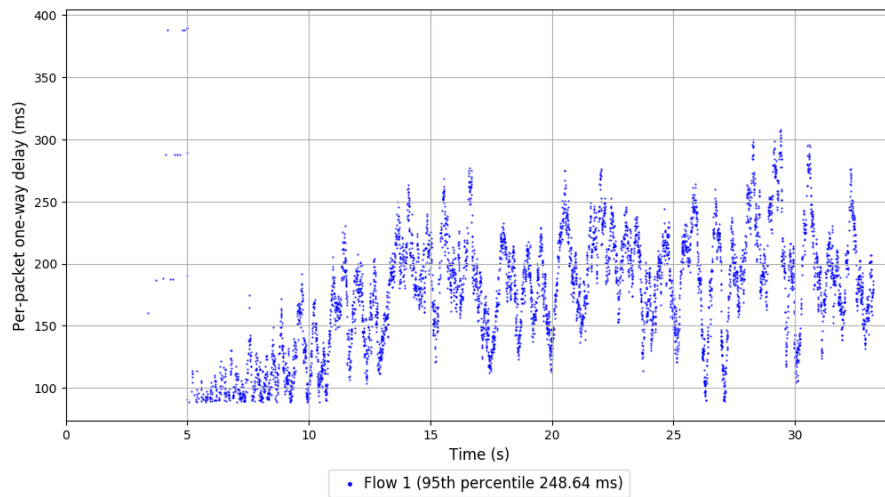
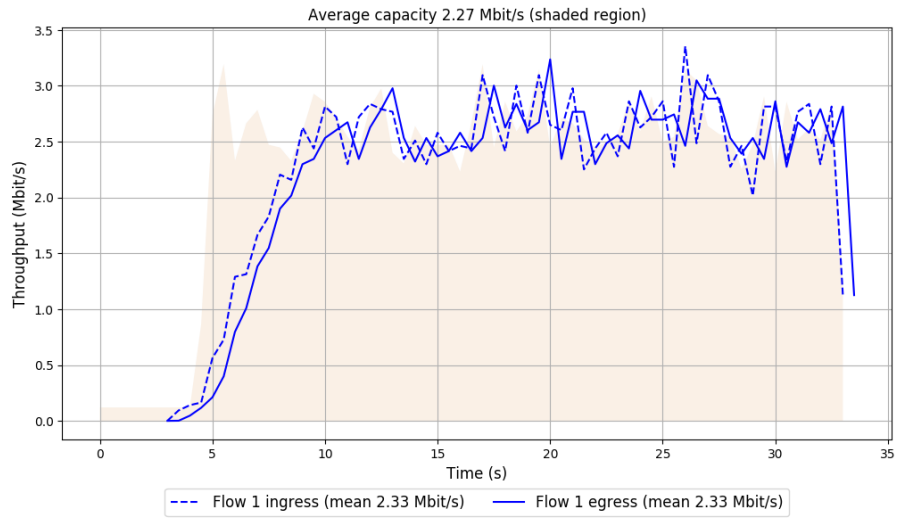
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 248.636 ms

Loss rate: 0.67%

### Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-07-24 06:54:30

End at: 2018-07-24 06:55:00

# Below is generated by plot.py at 2018-07-24 07:19:32

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.32 Mbit/s (102.2% utilization)

95th percentile per-packet one-way delay: 248.184 ms

Loss rate: 0.64%

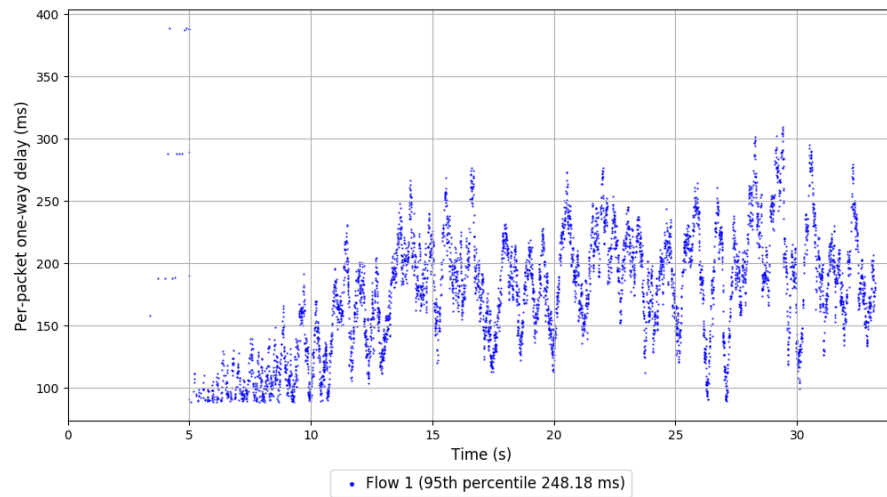
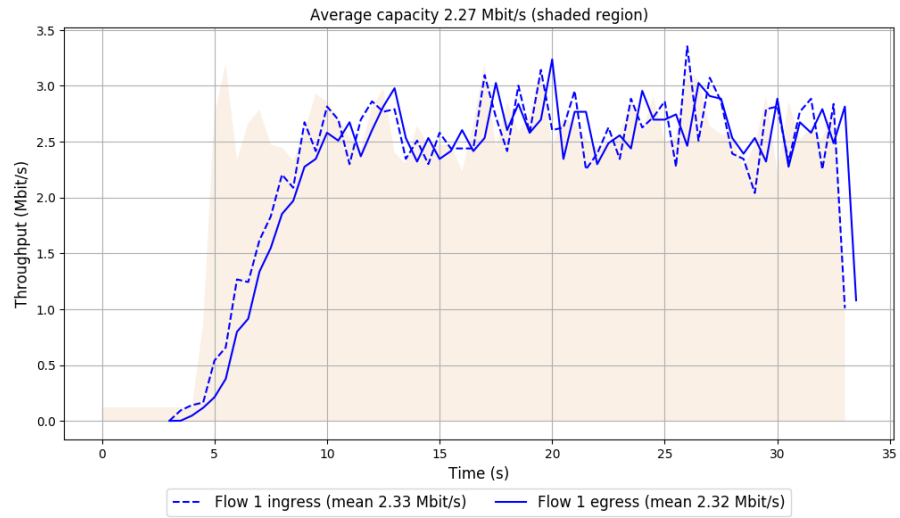
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 248.184 ms

Loss rate: 0.64%

### Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-07-24 07:04:09

End at: 2018-07-24 07:04:39

# Below is generated by plot.py at 2018-07-24 07:19:33

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.33 Mbit/s (102.3% utilization)

95th percentile per-packet one-way delay: 248.345 ms

Loss rate: 0.70%

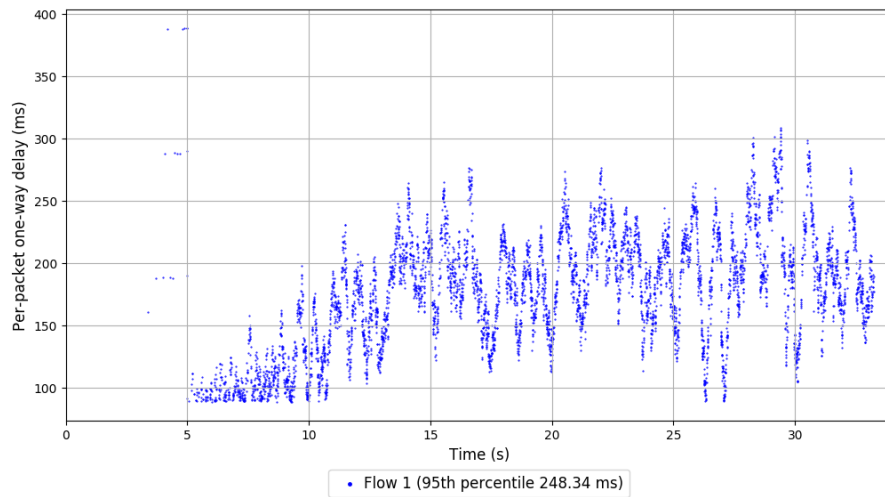
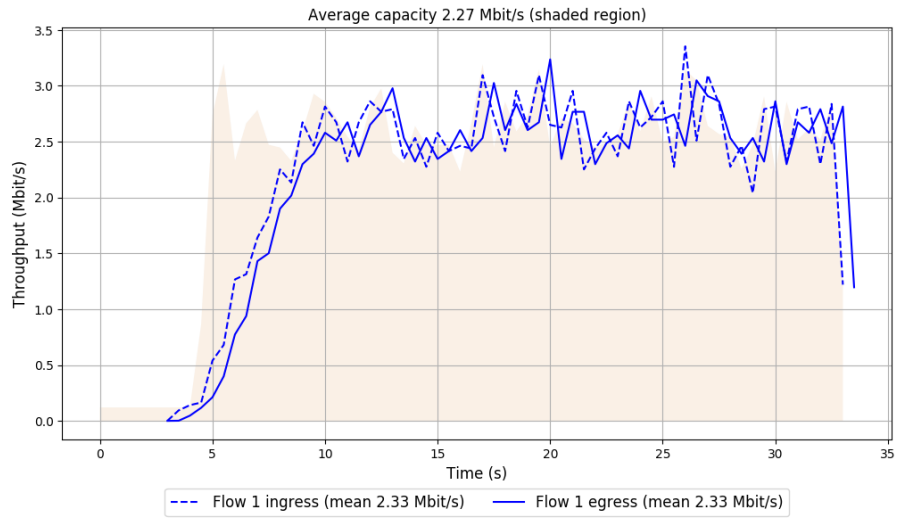
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 248.345 ms

Loss rate: 0.70%

### Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-07-24 07:13:48

End at: 2018-07-24 07:14:18

# Below is generated by plot.py at 2018-07-24 07:19:34

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.32 Mbit/s (102.0% utilization)

95th percentile per-packet one-way delay: 248.478 ms

Loss rate: 0.71%

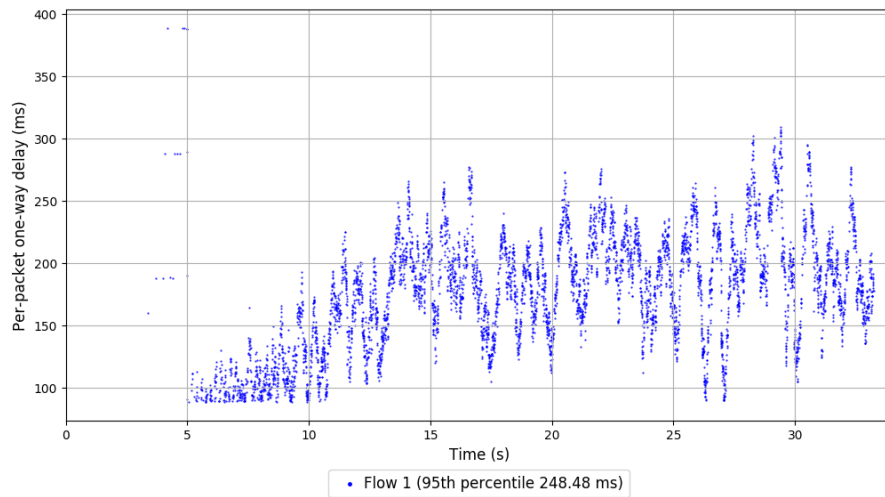
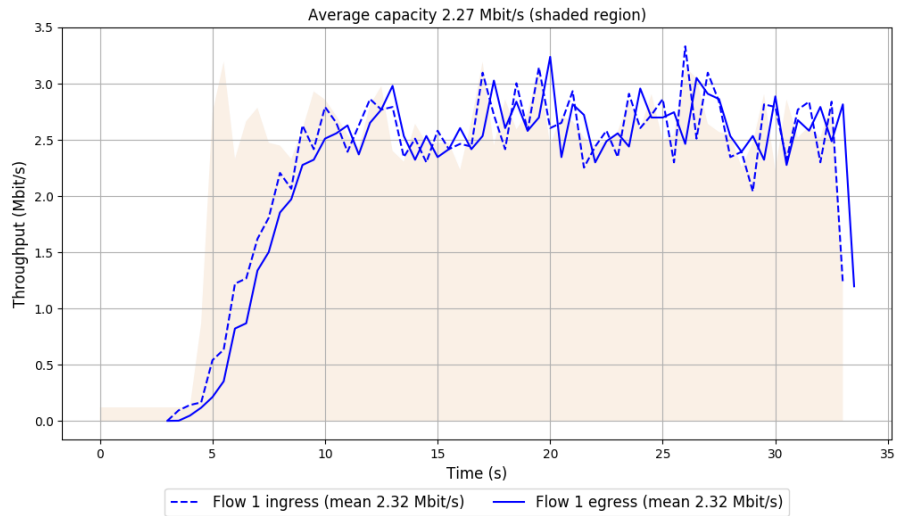
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 248.478 ms

Loss rate: 0.71%

### Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2018-07-24 05:42:25

End at: 2018-07-24 05:42:55

# Below is generated by plot.py at 2018-07-24 07:19:38

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.52 Mbit/s (111.0% utilization)

95th percentile per-packet one-way delay: 762.190 ms

Loss rate: 82.71%

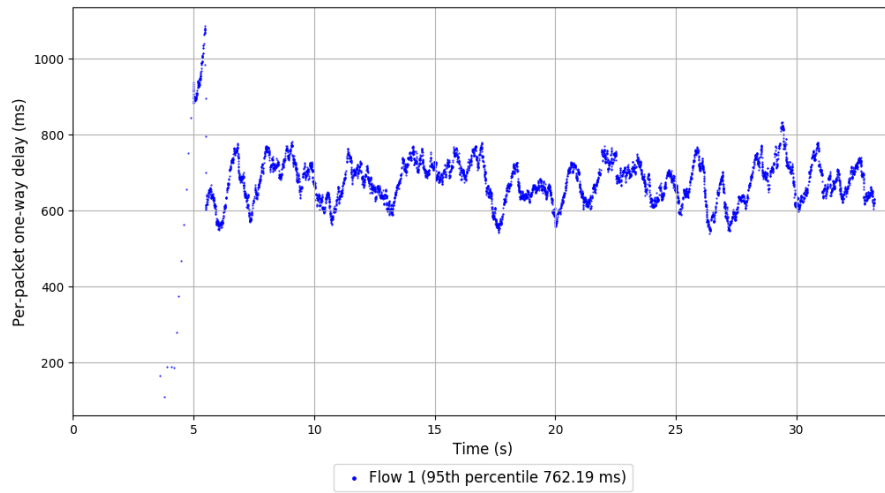
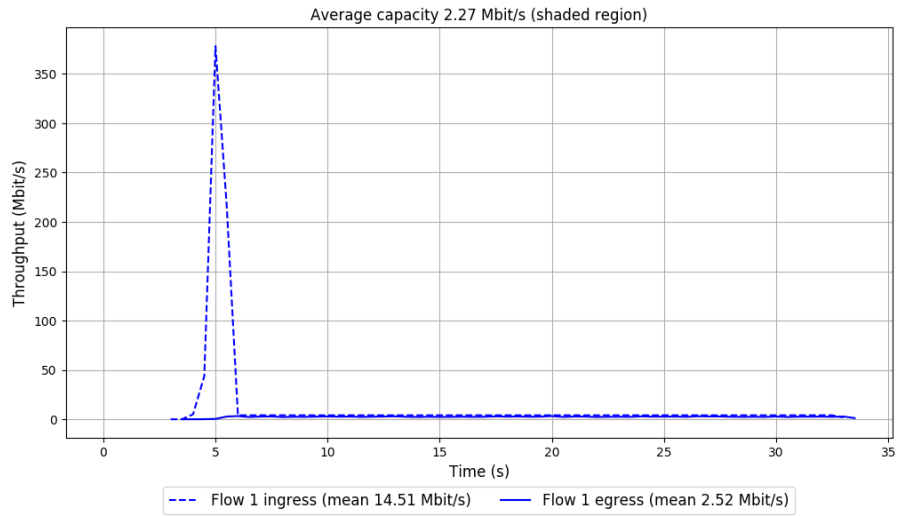
-- Flow 1:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 762.190 ms

Loss rate: 82.71%

# Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-07-24 05:52:04

End at: 2018-07-24 05:52:34

# Below is generated by plot.py at 2018-07-24 07:19:40

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.7% utilization)

95th percentile per-packet one-way delay: 761.635 ms

Loss rate: 85.36%

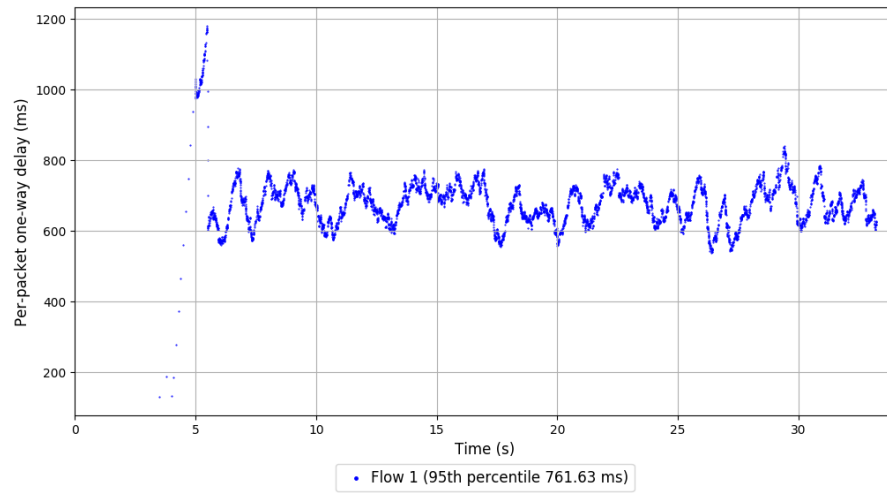
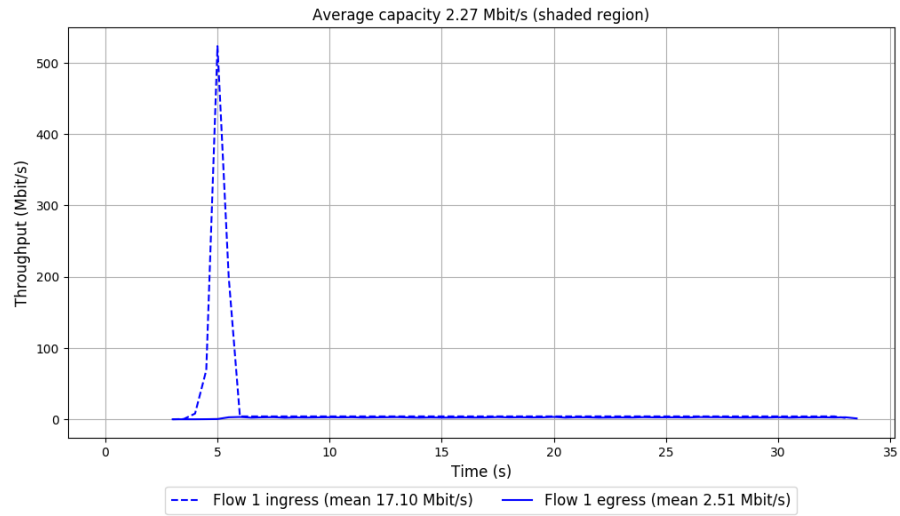
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 761.635 ms

Loss rate: 85.36%

## Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-07-24 06:01:43

End at: 2018-07-24 06:02:13

# Below is generated by plot.py at 2018-07-24 07:19:42

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.6% utilization)

95th percentile per-packet one-way delay: 762.982 ms

Loss rate: 85.30%

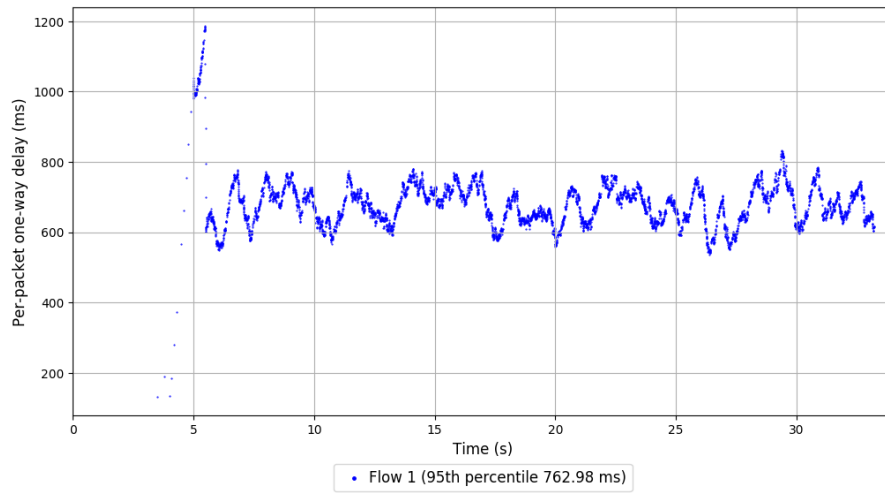
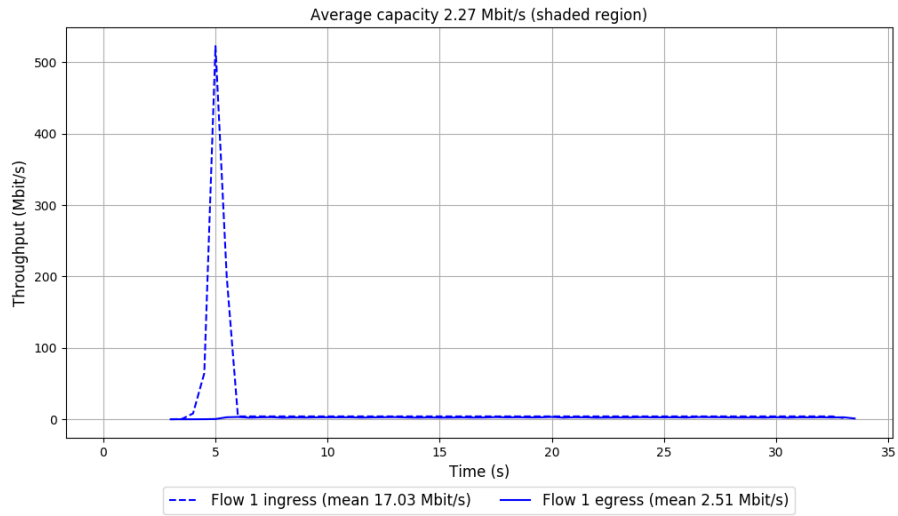
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 762.982 ms

Loss rate: 85.30%

### Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-07-24 06:11:22

End at: 2018-07-24 06:11:52

# Below is generated by plot.py at 2018-07-24 07:19:46

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.7% utilization)

95th percentile per-packet one-way delay: 762.782 ms

Loss rate: 87.81%

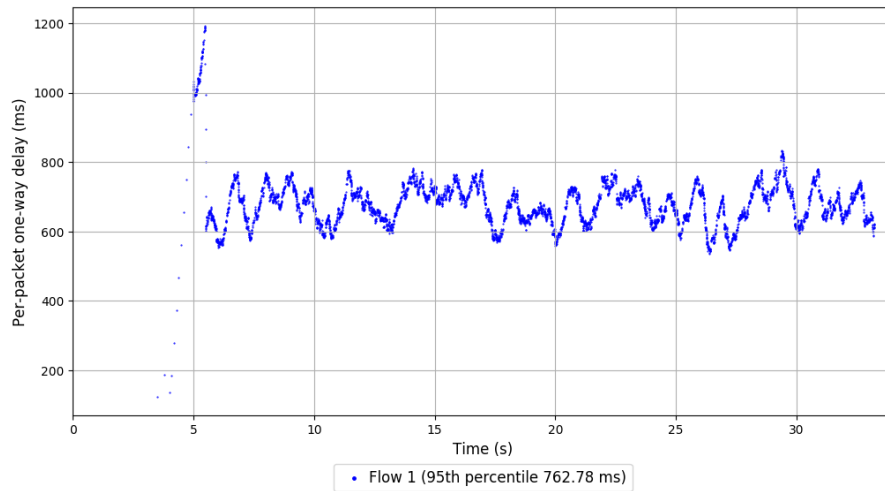
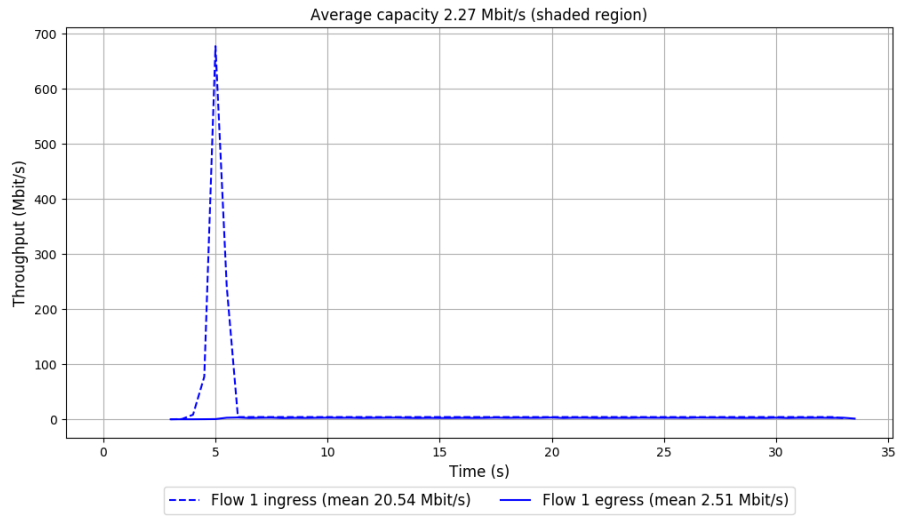
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 762.782 ms

Loss rate: 87.81%

### Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2018-07-24 06:21:00

End at: 2018-07-24 06:21:30

# Below is generated by plot.py at 2018-07-24 07:19:46

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.7% utilization)

95th percentile per-packet one-way delay: 763.454 ms

Loss rate: 85.33%

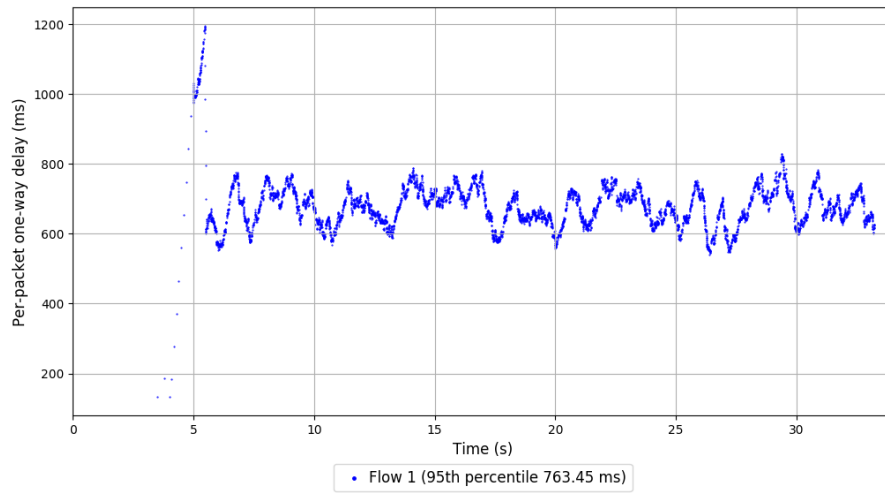
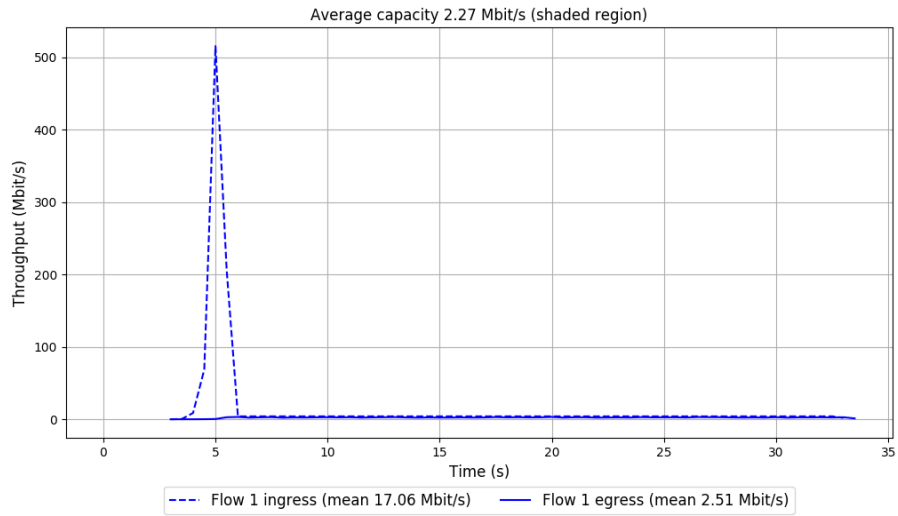
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 763.454 ms

Loss rate: 85.33%

### Run 5: Report of PCC-Allegro — Data Link



Run 6: Statistics of PCC-Allegro

Start at: 2018-07-24 06:30:39

End at: 2018-07-24 06:31:09

# Below is generated by plot.py at 2018-07-24 07:19:47

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.7% utilization)

95th percentile per-packet one-way delay: 761.747 ms

Loss rate: 87.97%

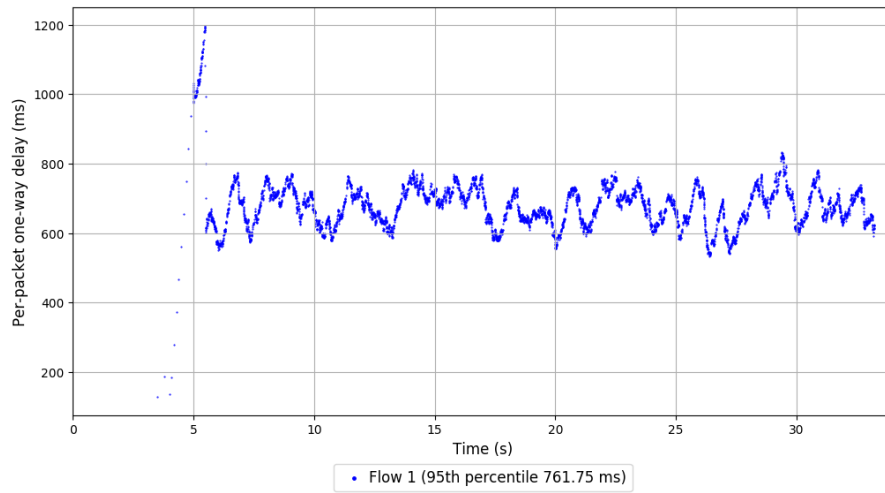
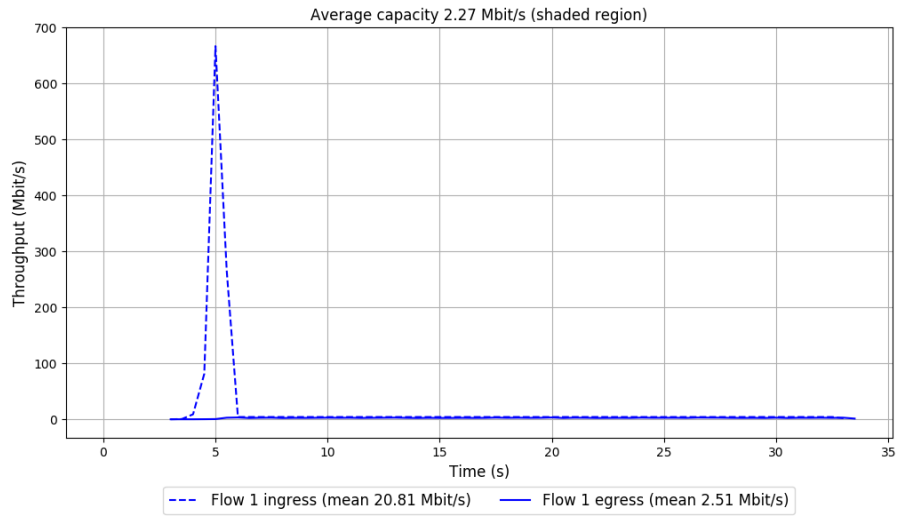
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 761.747 ms

Loss rate: 87.97%

## Run 6: Report of PCC-Allegro — Data Link



Run 7: Statistics of PCC-Allegro

Start at: 2018-07-24 06:40:18

End at: 2018-07-24 06:40:48

# Below is generated by plot.py at 2018-07-24 07:19:47

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.6% utilization)

95th percentile per-packet one-way delay: 761.787 ms

Loss rate: 84.81%

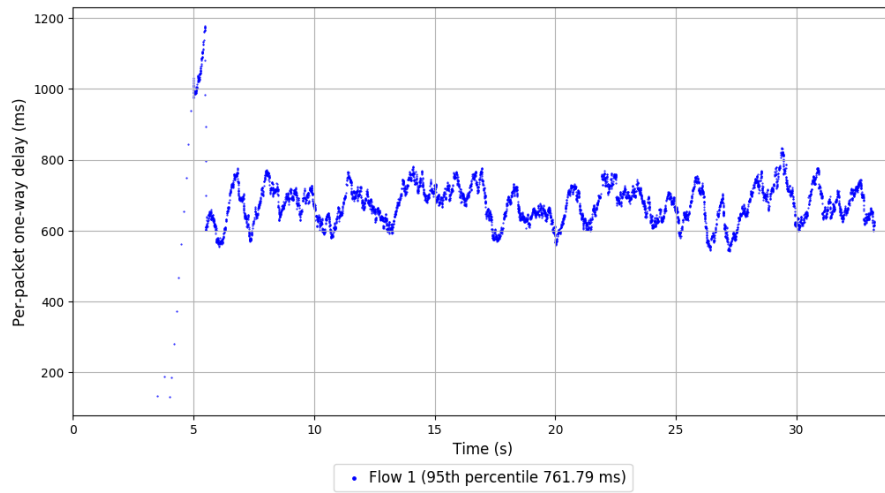
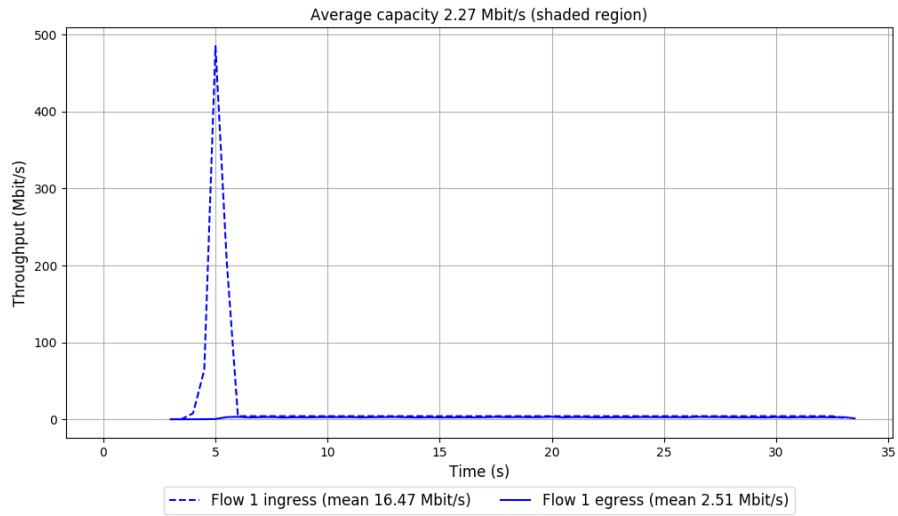
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 761.787 ms

Loss rate: 84.81%

### Run 7: Report of PCC-Allegro — Data Link



Run 8: Statistics of PCC-Allegro

Start at: 2018-07-24 06:49:57

End at: 2018-07-24 06:50:27

# Below is generated by plot.py at 2018-07-24 07:19:48

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.7% utilization)

95th percentile per-packet one-way delay: 762.338 ms

Loss rate: 85.71%

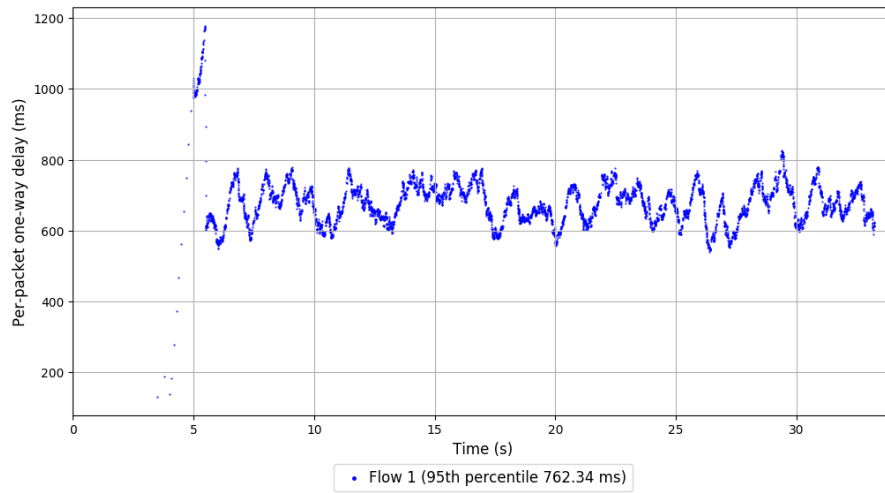
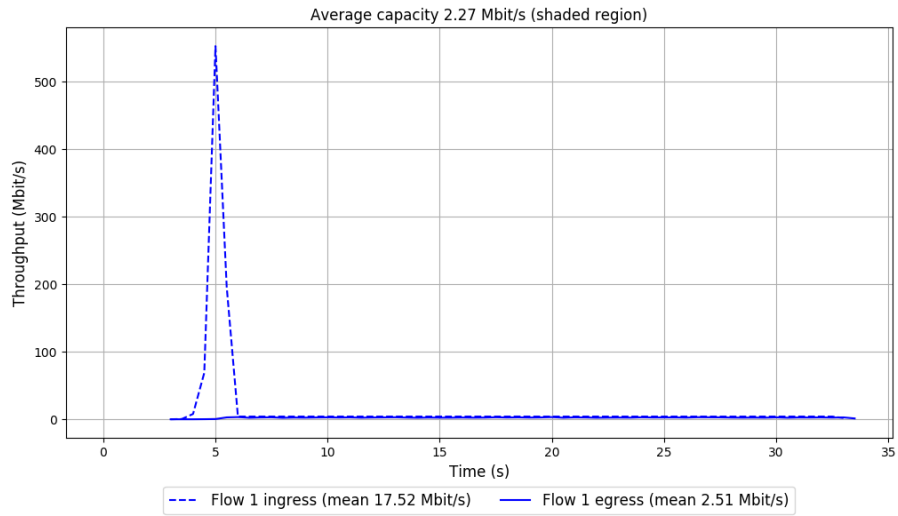
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 762.338 ms

Loss rate: 85.71%

### Run 8: Report of PCC-Allegro — Data Link



Run 9: Statistics of PCC-Allegro

Start at: 2018-07-24 06:59:36

End at: 2018-07-24 07:00:06

# Below is generated by plot.py at 2018-07-24 07:19:53

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.7% utilization)

95th percentile per-packet one-way delay: 760.389 ms

Loss rate: 86.81%

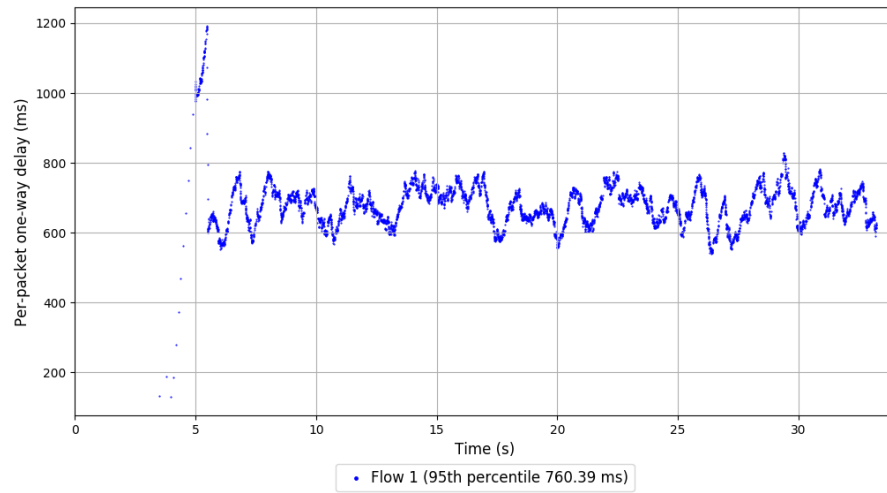
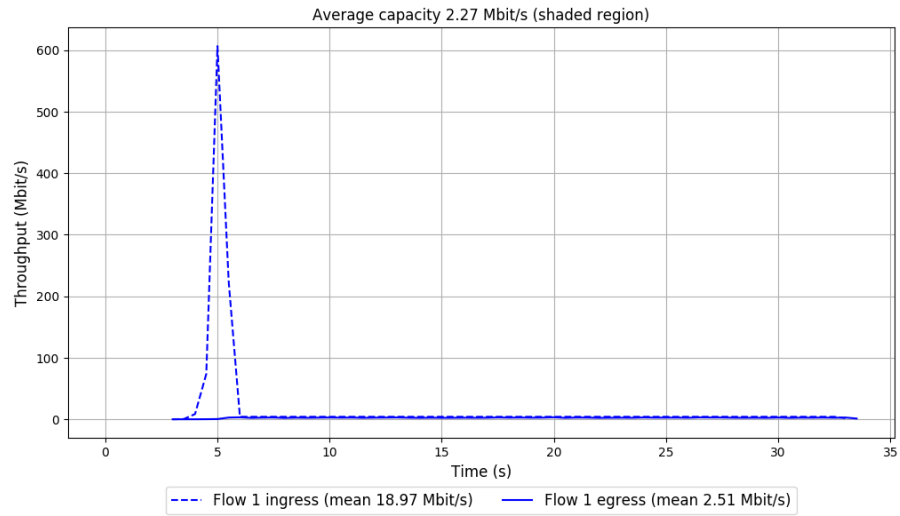
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 760.389 ms

Loss rate: 86.81%

### Run 9: Report of PCC-Allegro — Data Link



Run 10: Statistics of PCC-Allegro

Start at: 2018-07-24 07:09:16

End at: 2018-07-24 07:09:46

# Below is generated by plot.py at 2018-07-24 07:19:58

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.6% utilization)

95th percentile per-packet one-way delay: 763.733 ms

Loss rate: 87.29%

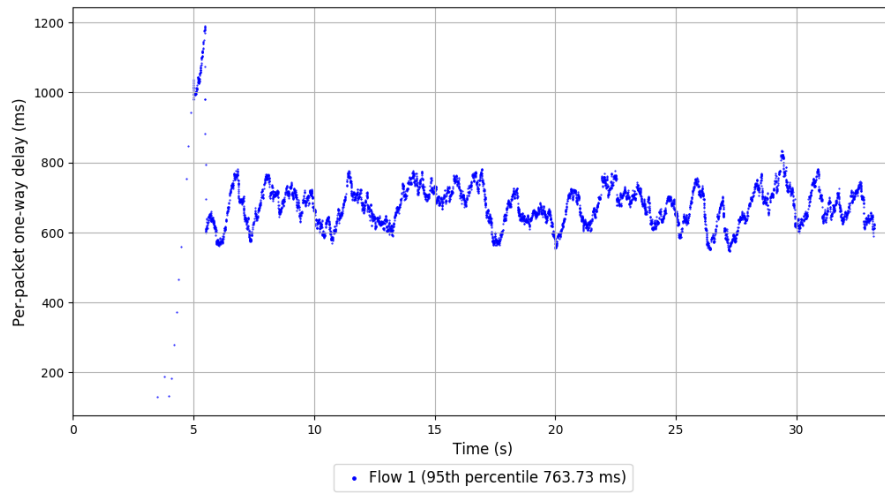
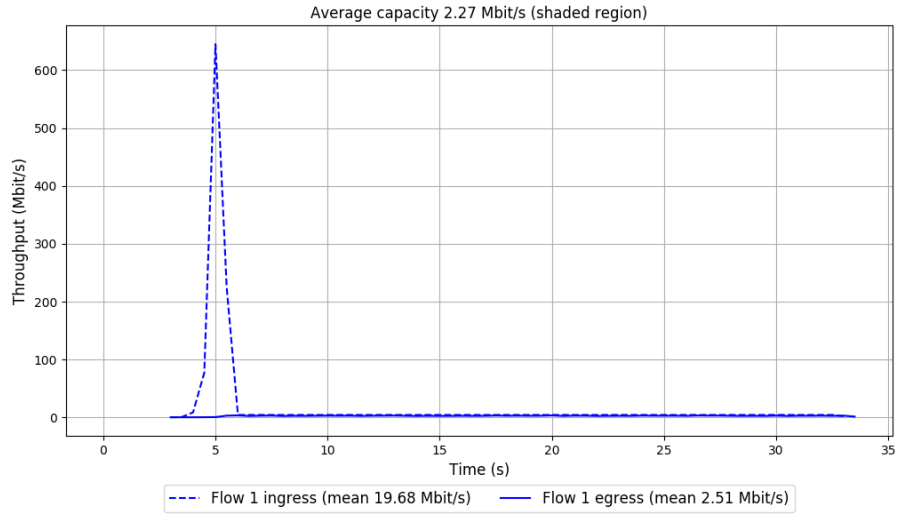
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 763.733 ms

Loss rate: 87.29%

# Run 10: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

Start at: 2018-07-24 05:49:13

End at: 2018-07-24 05:49:43

# Below is generated by plot.py at 2018-07-24 07:19:59

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.53 Mbit/s (111.2% utilization)

95th percentile per-packet one-way delay: 521.234 ms

Loss rate: 61.57%

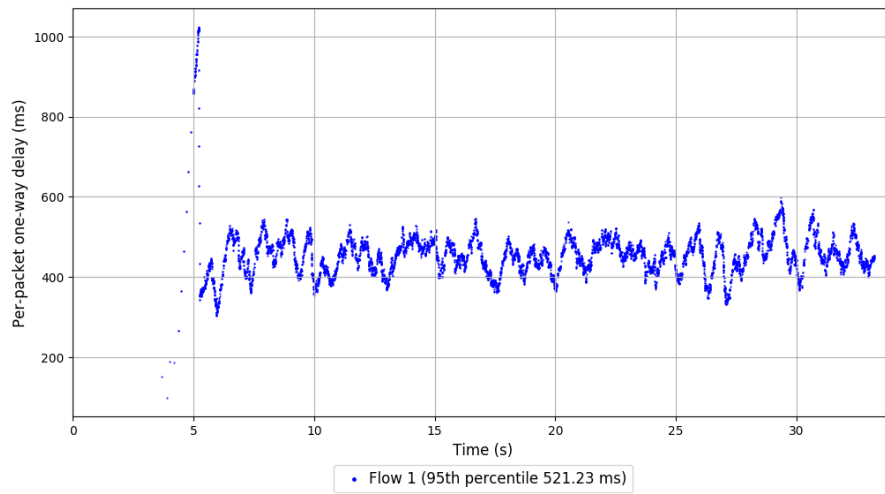
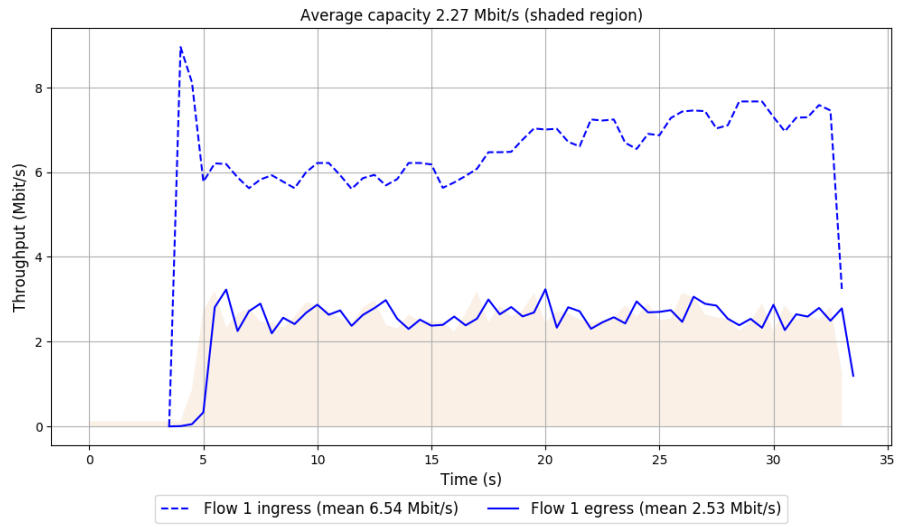
-- Flow 1:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 521.234 ms

Loss rate: 61.57%

# Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2018-07-24 05:58:52

End at: 2018-07-24 05:59:22

# Below is generated by plot.py at 2018-07-24 07:19:59

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.5% utilization)

95th percentile per-packet one-way delay: 509.924 ms

Loss rate: 48.87%

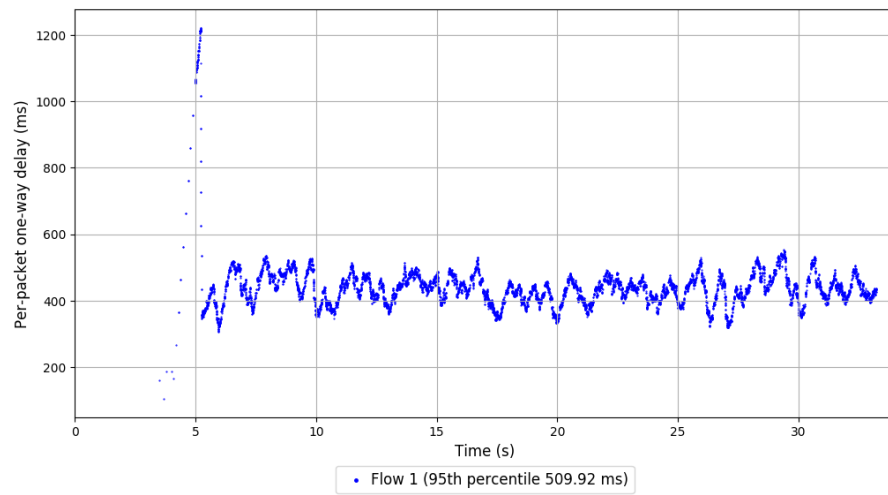
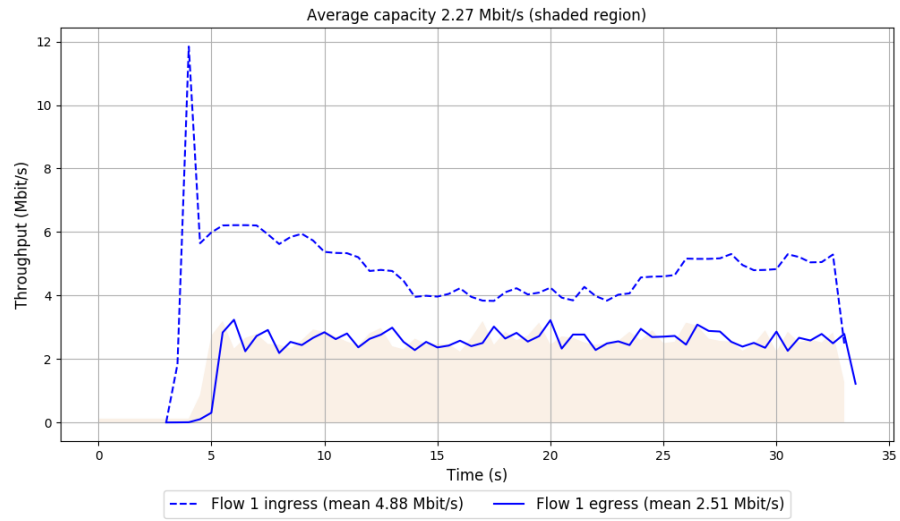
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 509.924 ms

Loss rate: 48.87%

## Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2018-07-24 06:08:31

End at: 2018-07-24 06:09:01

# Below is generated by plot.py at 2018-07-24 07:20:00

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.5% utilization)

95th percentile per-packet one-way delay: 513.774 ms

Loss rate: 58.03%

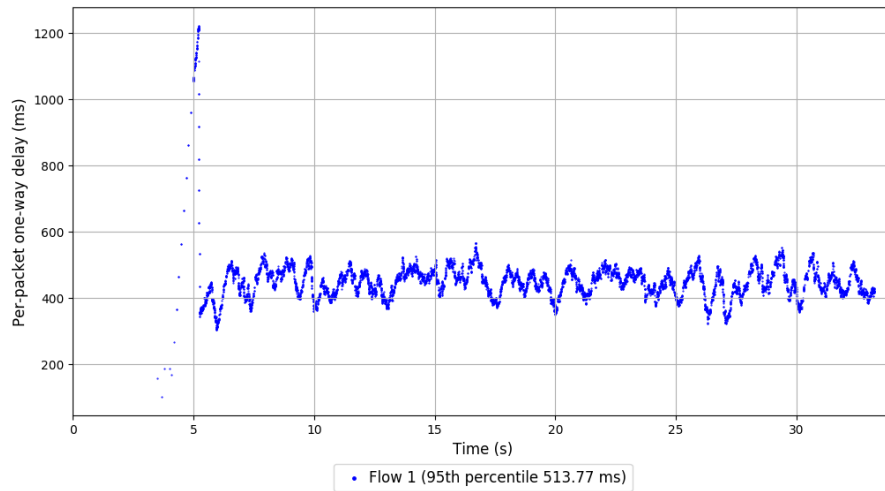
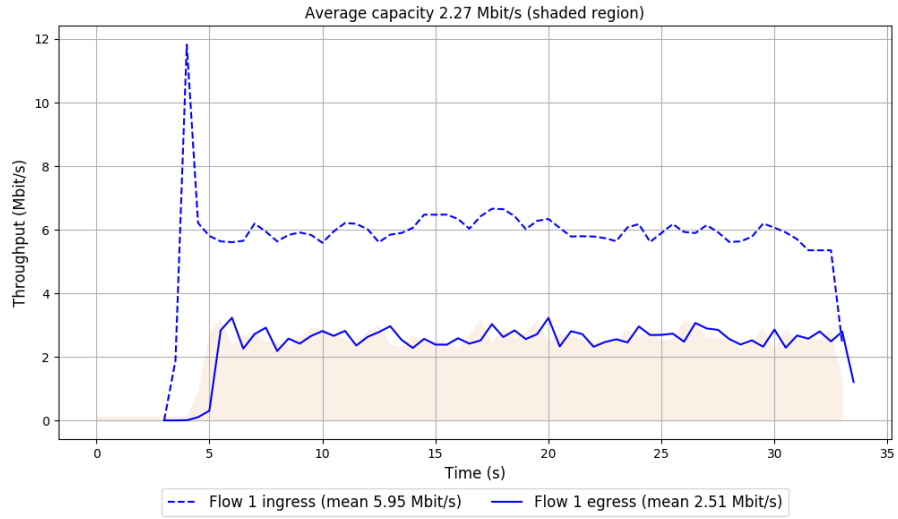
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 513.774 ms

Loss rate: 58.03%

### Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-07-24 06:18:10

End at: 2018-07-24 06:18:40

# Below is generated by plot.py at 2018-07-24 07:20:00

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.5% utilization)

95th percentile per-packet one-way delay: 508.787 ms

Loss rate: 53.48%

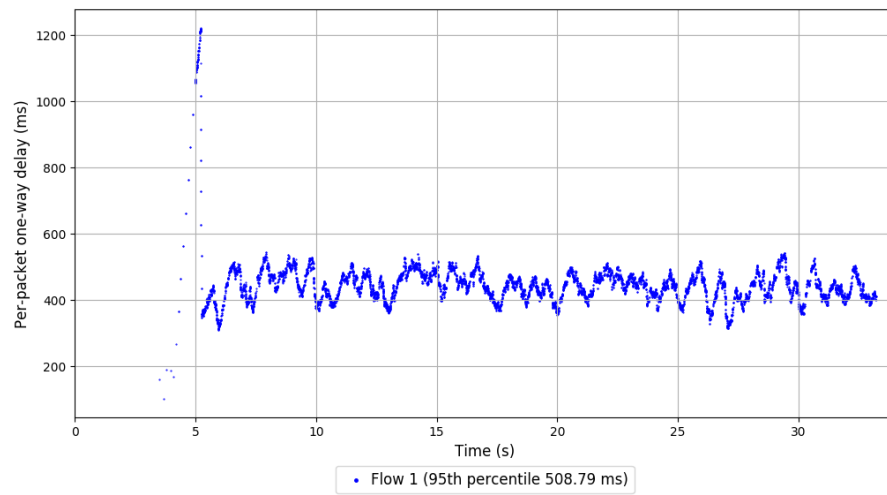
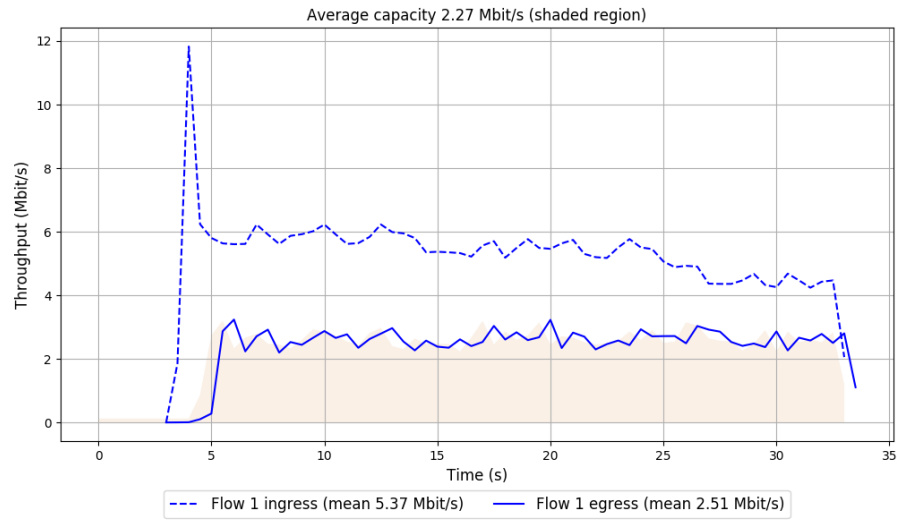
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 508.787 ms

Loss rate: 53.48%

### Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2018-07-24 06:27:49

End at: 2018-07-24 06:28:19

# Below is generated by plot.py at 2018-07-24 07:20:00

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.4% utilization)

95th percentile per-packet one-way delay: 496.700 ms

Loss rate: 41.42%

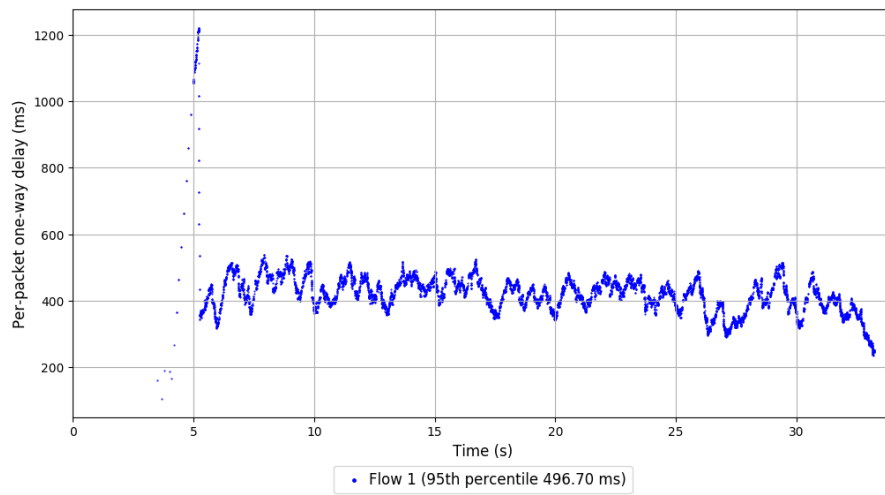
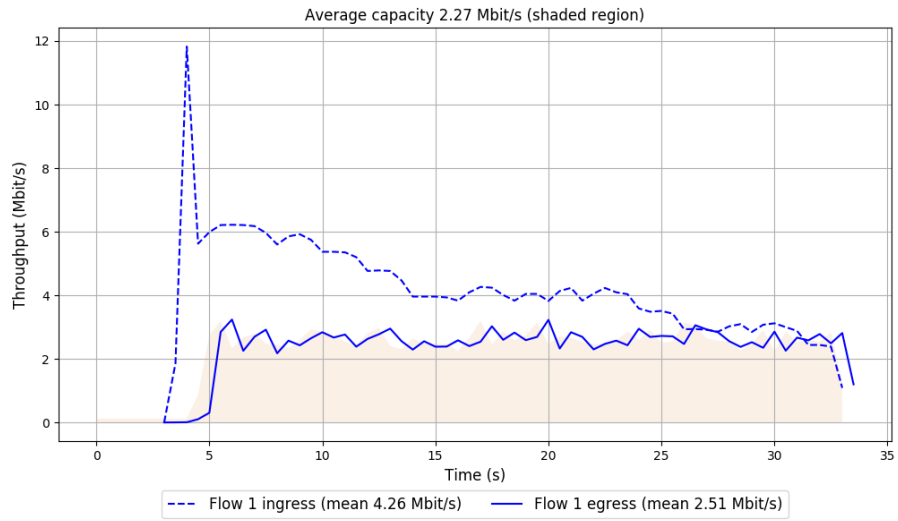
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 496.700 ms

Loss rate: 41.42%

### Run 5: Report of PCC-Expr — Data Link



Run 6: Statistics of PCC-Expr

Start at: 2018-07-24 06:37:28

End at: 2018-07-24 06:37:58

# Below is generated by plot.py at 2018-07-24 07:20:01

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.4% utilization)

95th percentile per-packet one-way delay: 510.752 ms

Loss rate: 54.64%

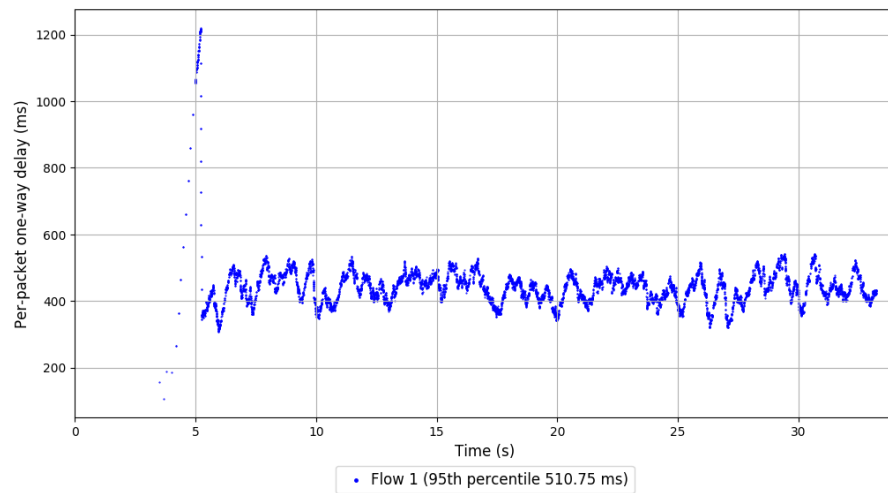
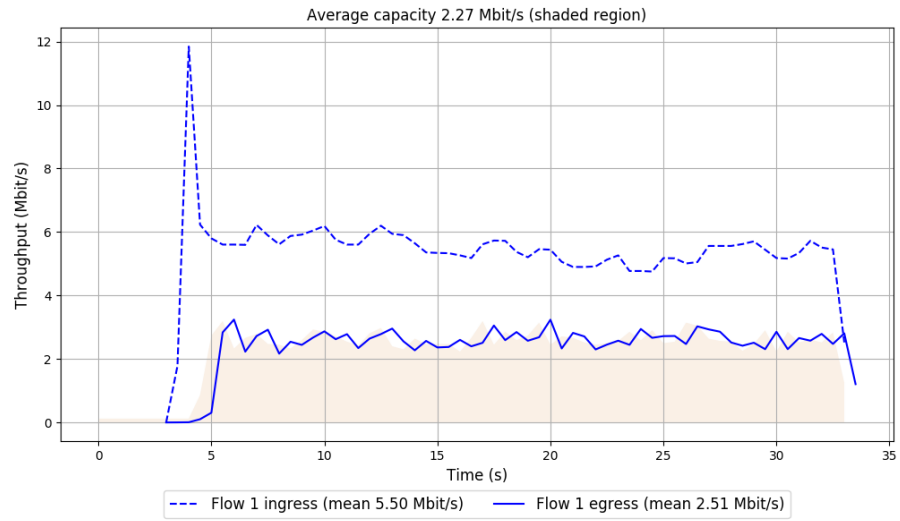
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 510.752 ms

Loss rate: 54.64%

## Run 6: Report of PCC-Expr — Data Link



Run 7: Statistics of PCC-Expr

Start at: 2018-07-24 06:47:07

End at: 2018-07-24 06:47:37

# Below is generated by plot.py at 2018-07-24 07:20:11

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.5% utilization)

95th percentile per-packet one-way delay: 524.460 ms

Loss rate: 63.60%

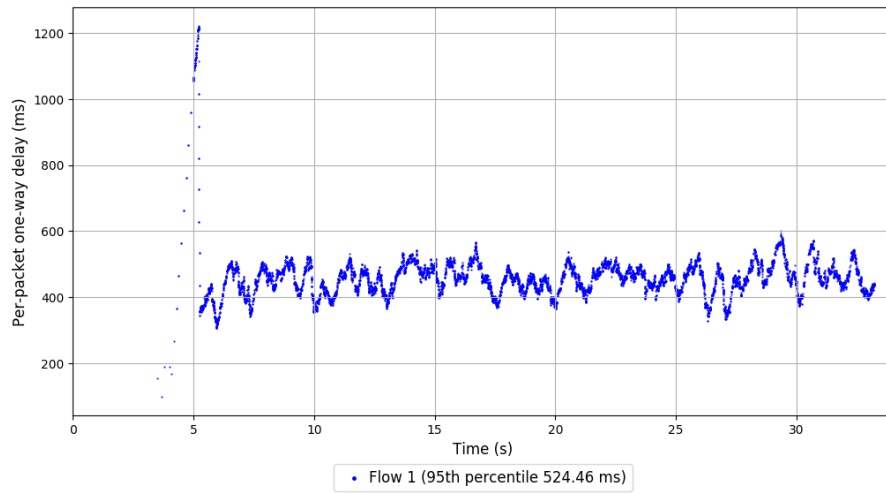
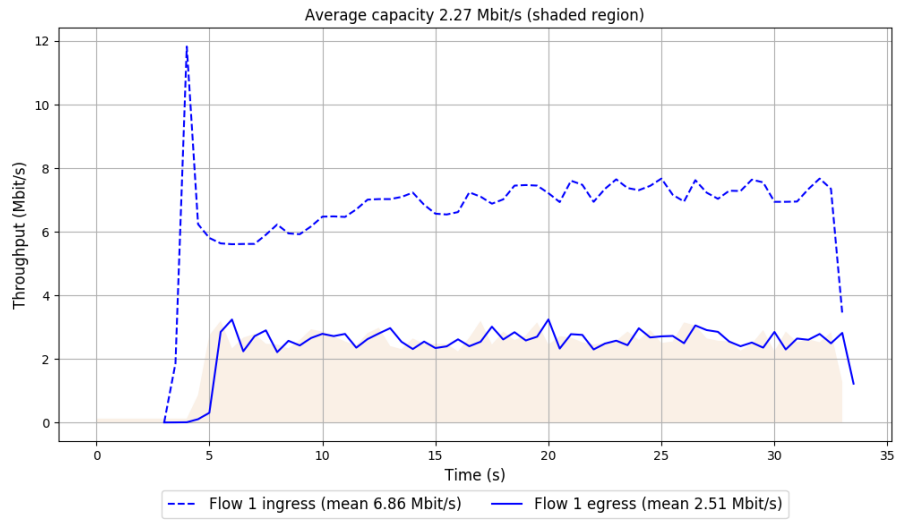
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 524.460 ms

Loss rate: 63.60%

## Run 7: Report of PCC-Expr — Data Link



Run 8: Statistics of PCC-Expr

Start at: 2018-07-24 06:56:46

End at: 2018-07-24 06:57:16

# Below is generated by plot.py at 2018-07-24 07:20:12

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.4% utilization)

95th percentile per-packet one-way delay: 518.942 ms

Loss rate: 58.98%

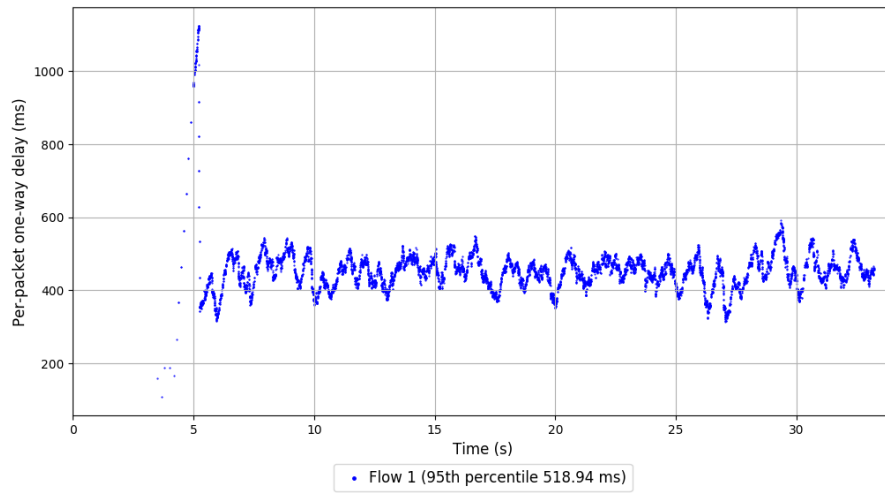
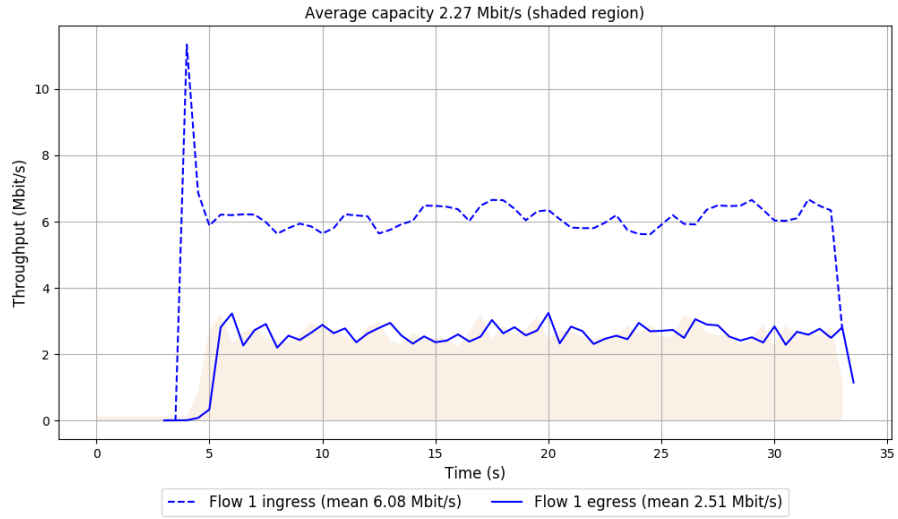
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 518.942 ms

Loss rate: 58.98%

### Run 8: Report of PCC-Expr — Data Link



Run 9: Statistics of PCC-Expr

Start at: 2018-07-24 07:06:25

End at: 2018-07-24 07:06:55

# Below is generated by plot.py at 2018-07-24 07:20:14

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.5% utilization)

95th percentile per-packet one-way delay: 525.899 ms

Loss rate: 65.05%

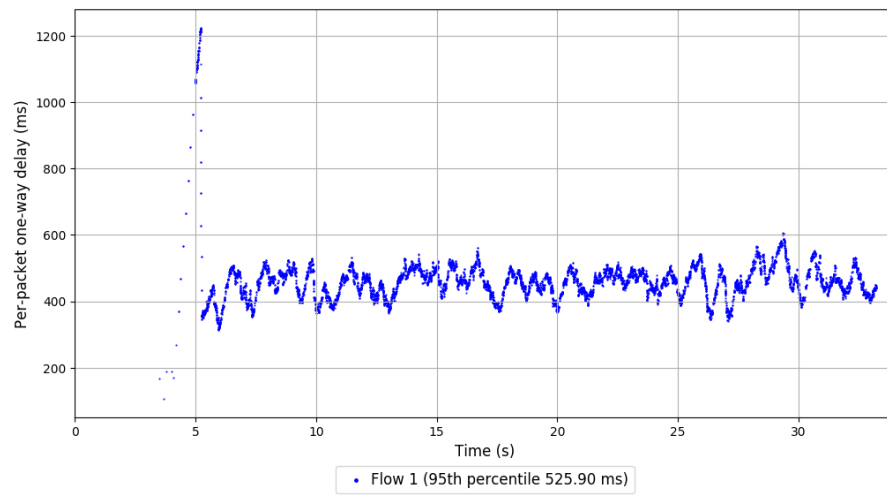
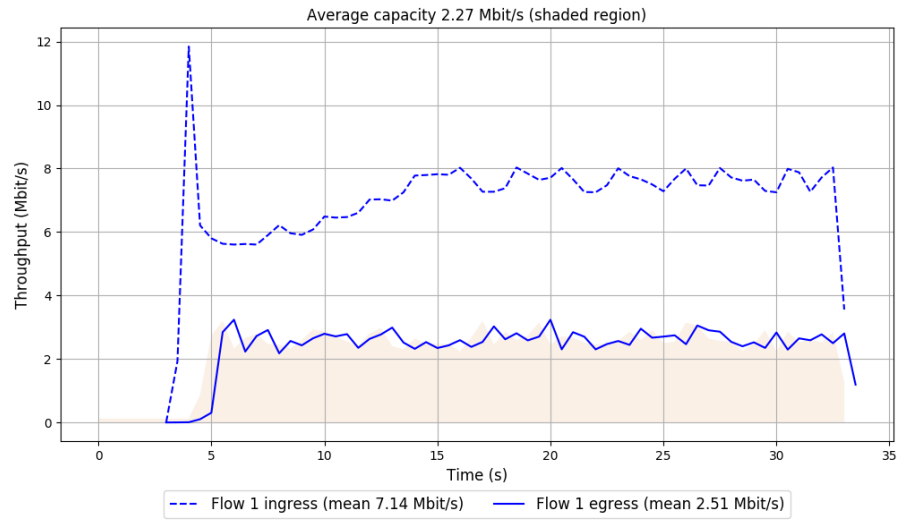
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 525.899 ms

Loss rate: 65.05%

### Run 9: Report of PCC-Expr — Data Link



Run 10: Statistics of PCC-Expr

Start at: 2018-07-24 07:16:04

End at: 2018-07-24 07:16:34

# Below is generated by plot.py at 2018-07-24 07:20:16

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.5% utilization)

95th percentile per-packet one-way delay: 529.159 ms

Loss rate: 65.32%

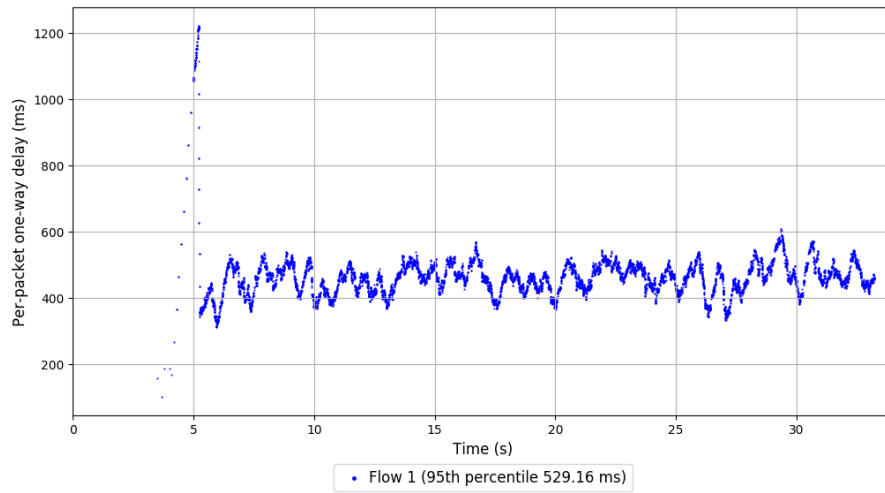
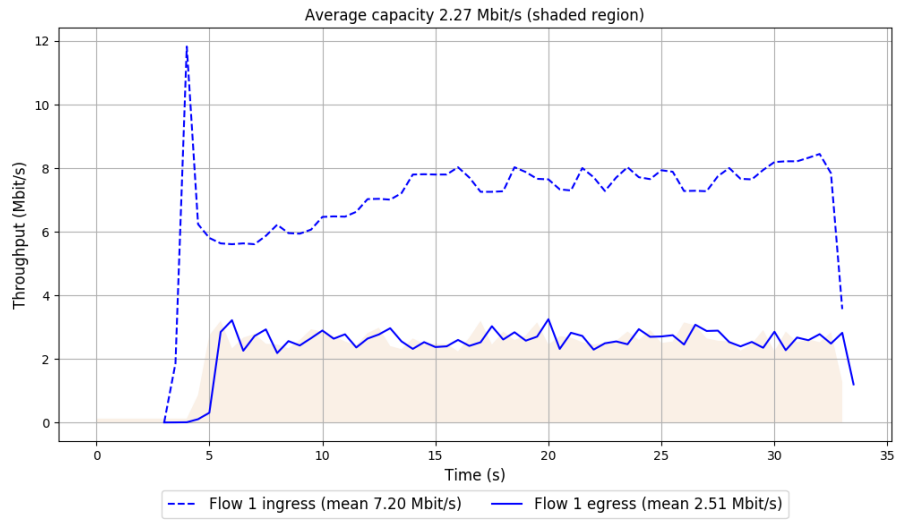
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 529.159 ms

Loss rate: 65.32%

Run 10: Report of PCC-Expr — Data Link

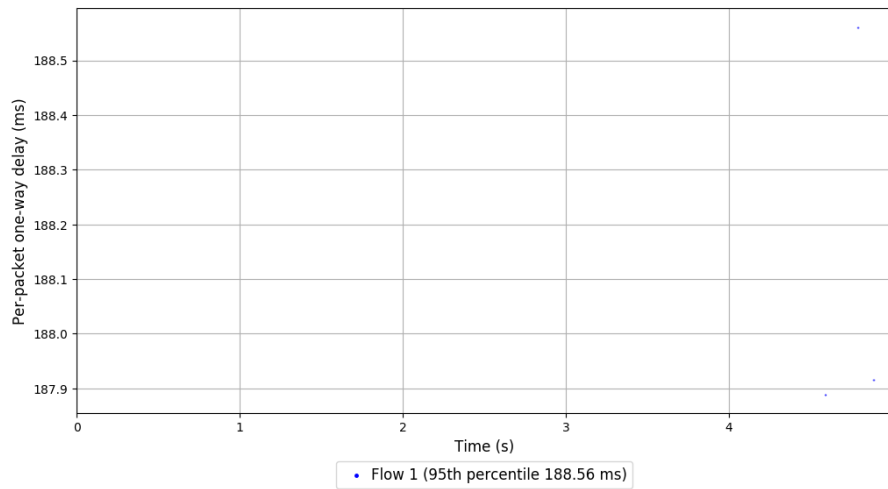
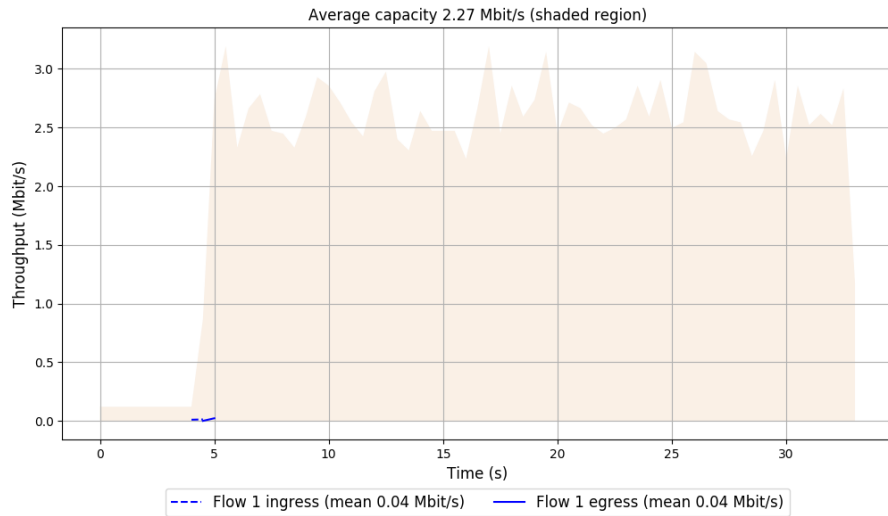


Run 1: Statistics of QUIC Cubic

Start at: 2018-07-24 05:45:15

End at: 2018-07-24 05:45:45

# Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-07-24 05:54:54

End at: 2018-07-24 05:55:24

# Below is generated by plot.py at 2018-07-24 07:20:16

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.53 Mbit/s (111.1% utilization)

95th percentile per-packet one-way delay: 662.993 ms

Loss rate: 2.83%

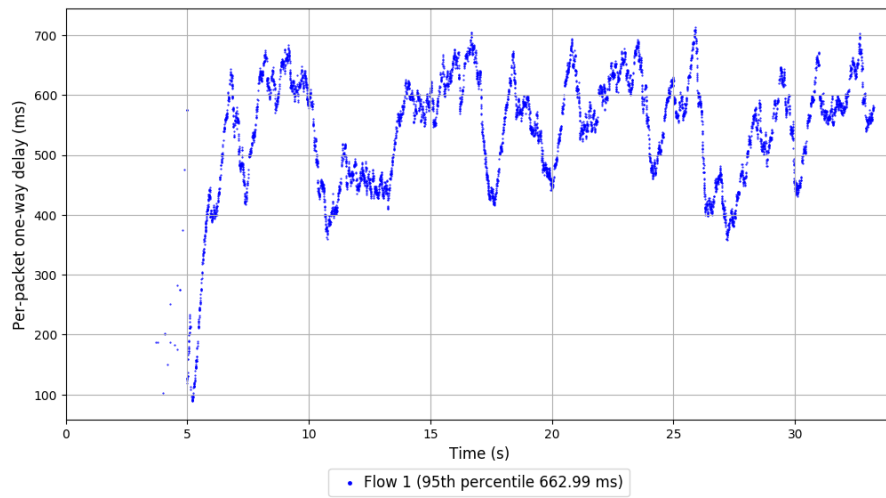
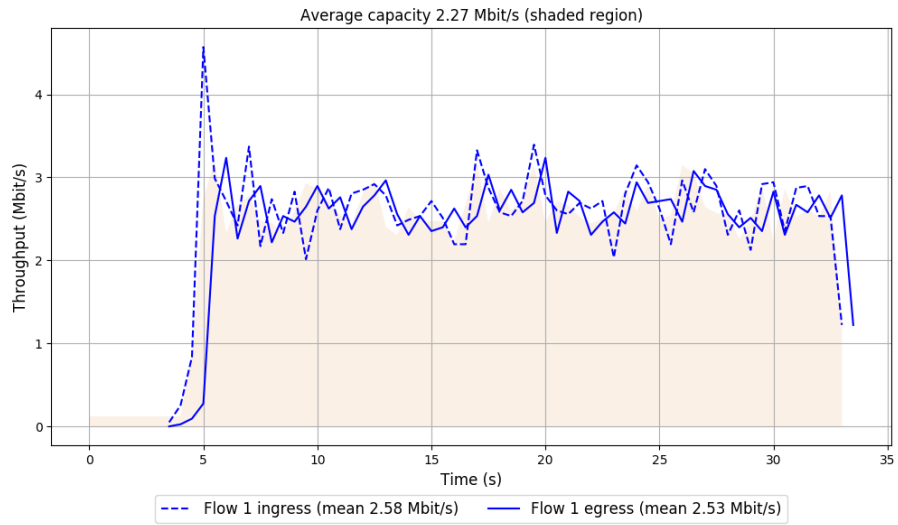
-- Flow 1:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 662.993 ms

Loss rate: 2.83%

## Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-07-24 06:04:33

End at: 2018-07-24 06:05:03

# Below is generated by plot.py at 2018-07-24 07:20:16

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.52 Mbit/s (111.1% utilization)

95th percentile per-packet one-way delay: 677.918 ms

Loss rate: 3.16%

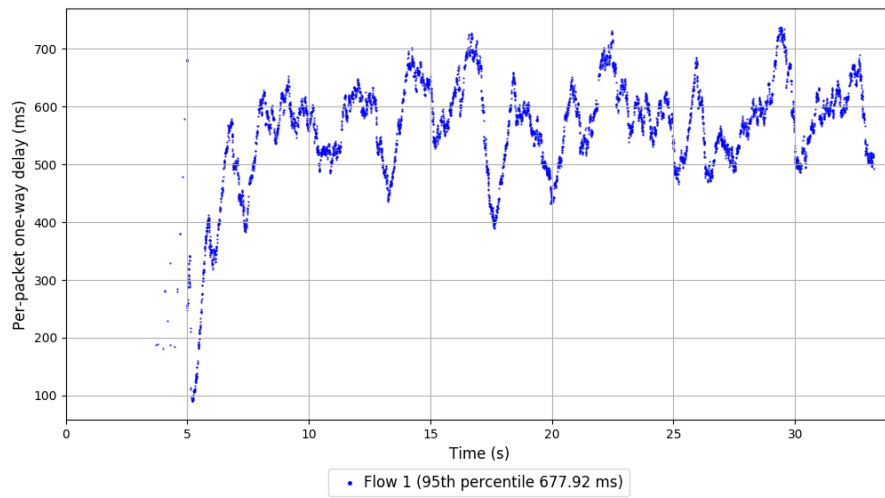
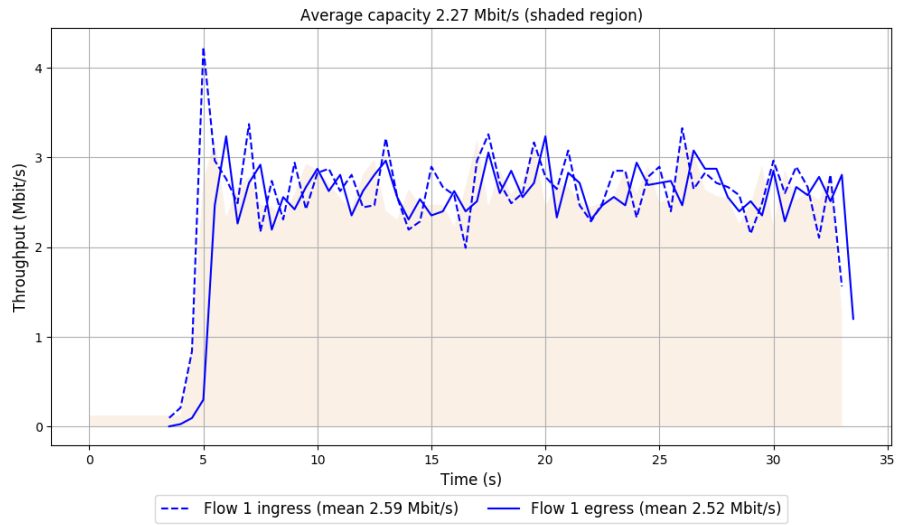
-- Flow 1:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 677.918 ms

Loss rate: 3.16%

### Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-07-24 06:14:12

End at: 2018-07-24 06:14:42

# Below is generated by plot.py at 2018-07-24 07:20:16

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.52 Mbit/s (111.1% utilization)

95th percentile per-packet one-way delay: 693.581 ms

Loss rate: 6.22%

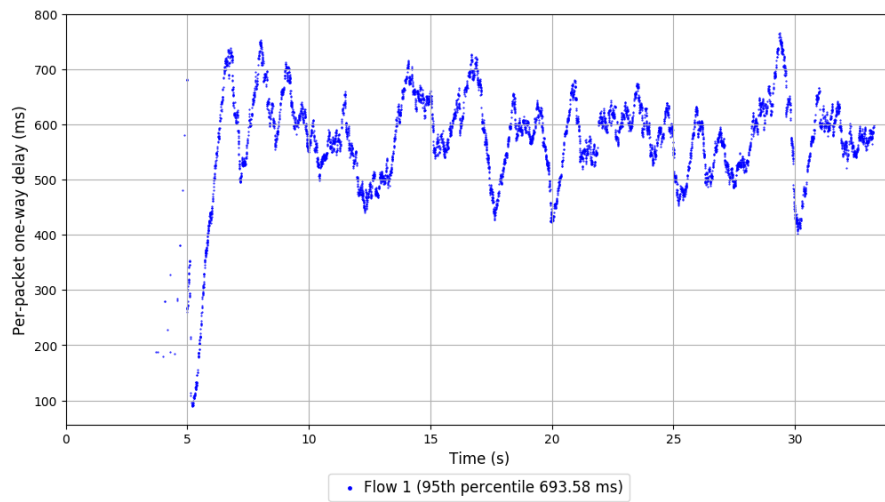
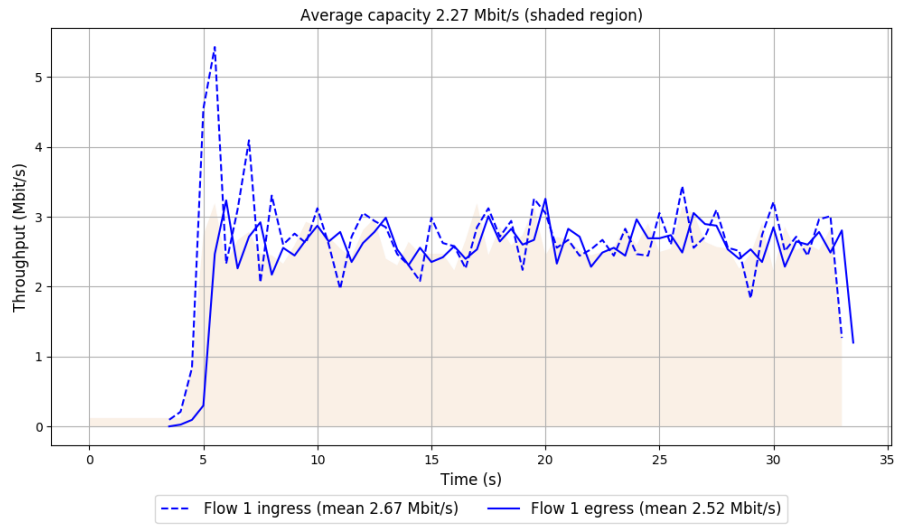
-- Flow 1:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 693.581 ms

Loss rate: 6.22%

### Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-07-24 06:23:51

End at: 2018-07-24 06:24:21

# Below is generated by plot.py at 2018-07-24 07:20:16

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.52 Mbit/s (111.1% utilization)

95th percentile per-packet one-way delay: 679.412 ms

Loss rate: 3.24%

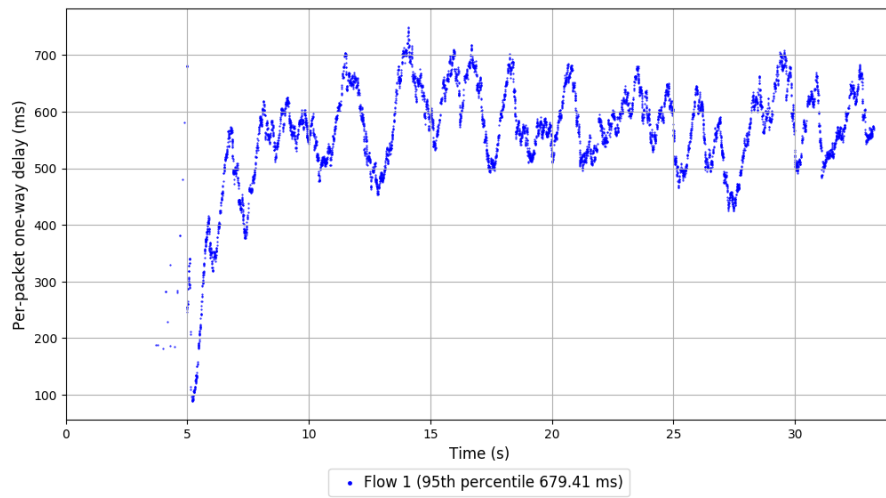
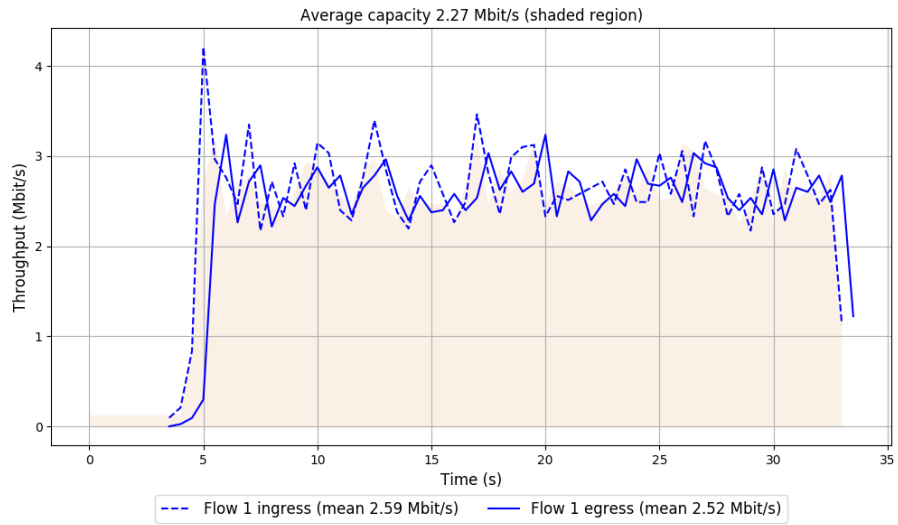
-- Flow 1:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 679.412 ms

Loss rate: 3.24%

### Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-07-24 06:33:30

End at: 2018-07-24 06:34:00

# Below is generated by plot.py at 2018-07-24 07:20:17

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.52 Mbit/s (111.1% utilization)

95th percentile per-packet one-way delay: 692.727 ms

Loss rate: 6.12%

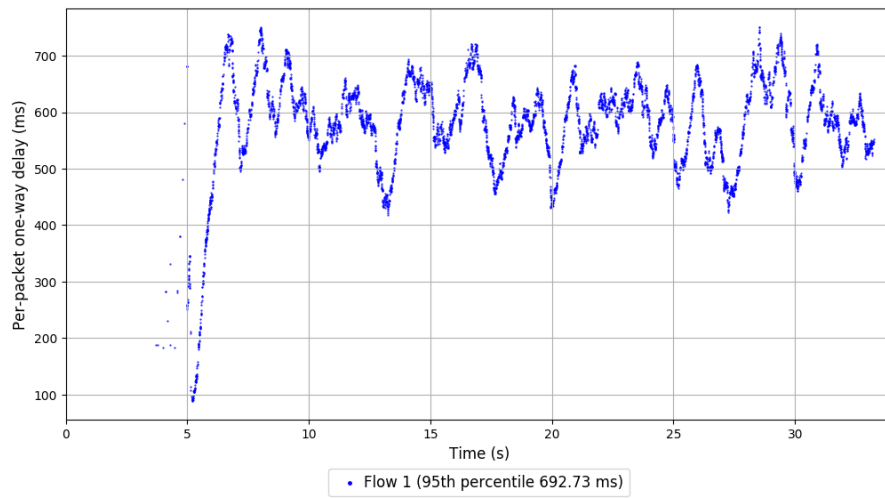
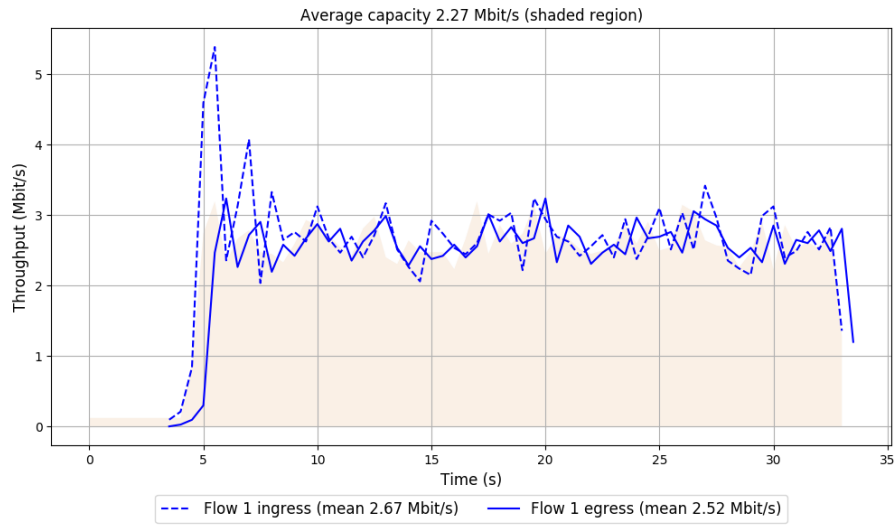
-- Flow 1:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 692.727 ms

Loss rate: 6.12%

## Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-07-24 06:43:09

End at: 2018-07-24 06:43:39

# Below is generated by plot.py at 2018-07-24 07:20:18

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.52 Mbit/s (111.1% utilization)

95th percentile per-packet one-way delay: 680.491 ms

Loss rate: 4.02%

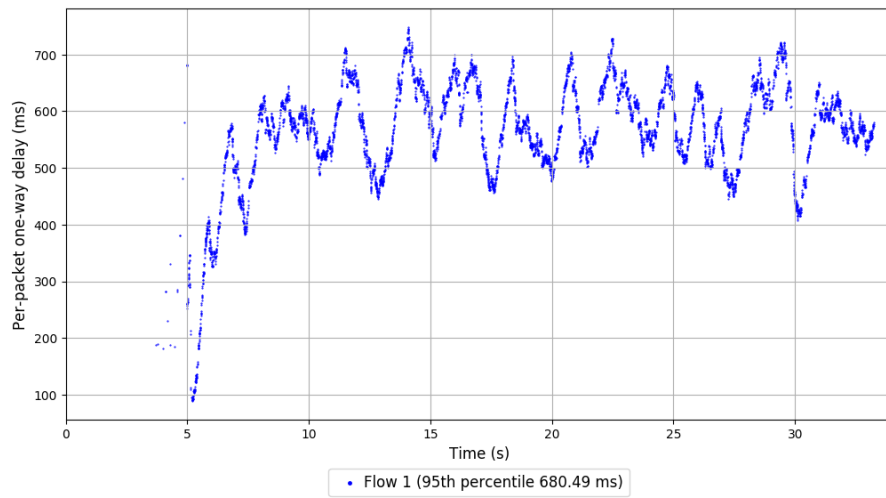
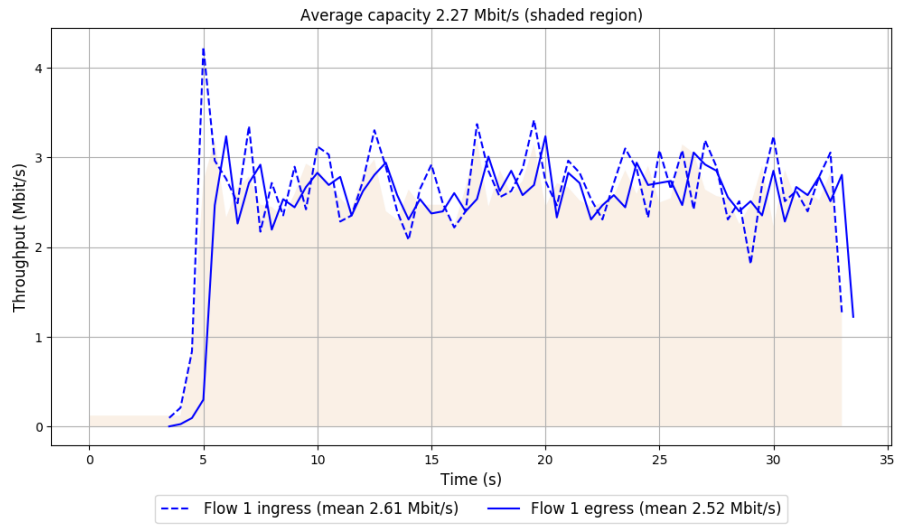
-- Flow 1:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 680.491 ms

Loss rate: 4.02%

### Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-07-24 06:52:48

End at: 2018-07-24 06:53:18

# Below is generated by plot.py at 2018-07-24 07:20:20

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.52 Mbit/s (111.1% utilization)

95th percentile per-packet one-way delay: 674.134 ms

Loss rate: 3.47%

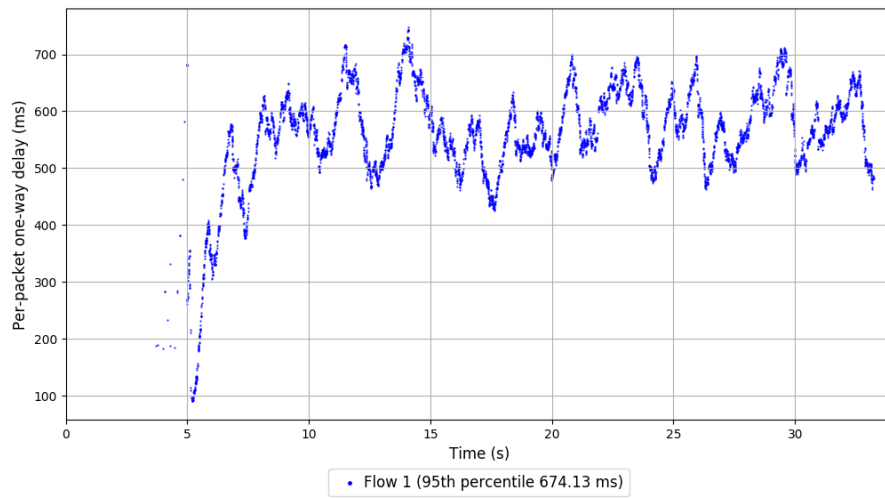
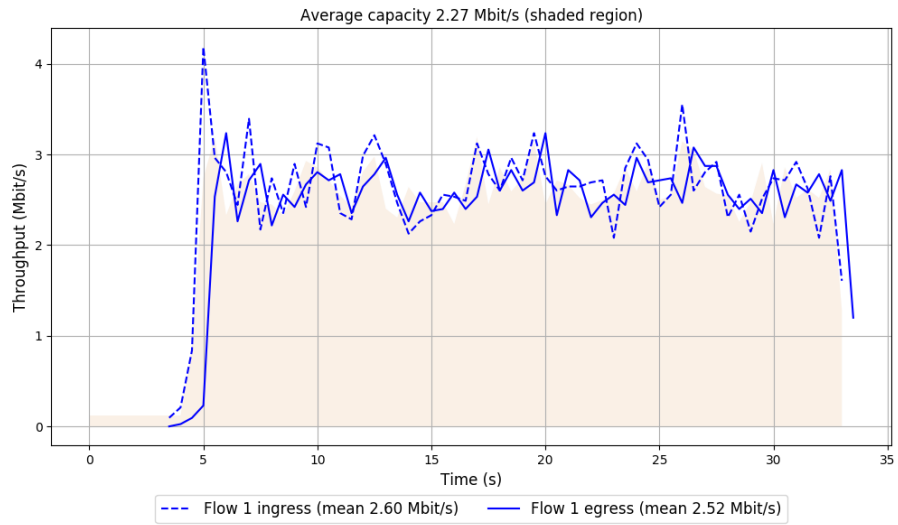
-- Flow 1:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 674.134 ms

Loss rate: 3.47%

### Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

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

End at: 2018-07-24 07:02:57

# Below is generated by plot.py at 2018-07-24 07:20:22

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.52 Mbit/s (111.1% utilization)

95th percentile per-packet one-way delay: 671.796 ms

Loss rate: 3.07%

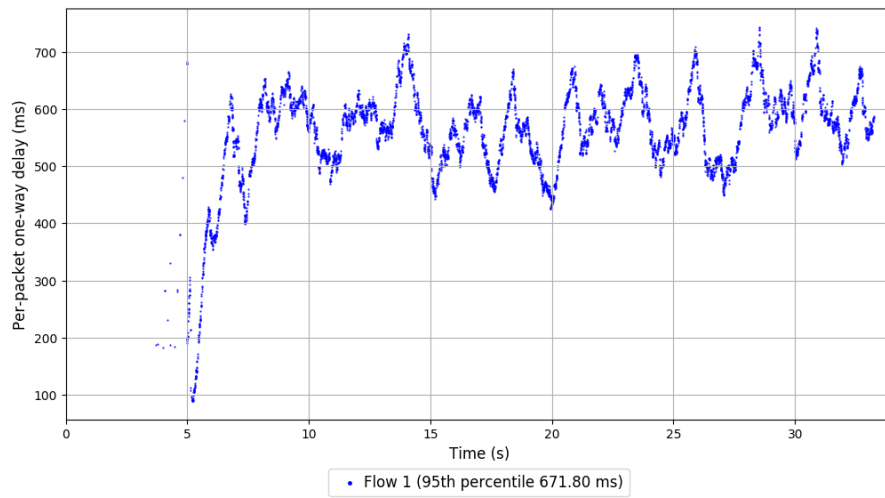
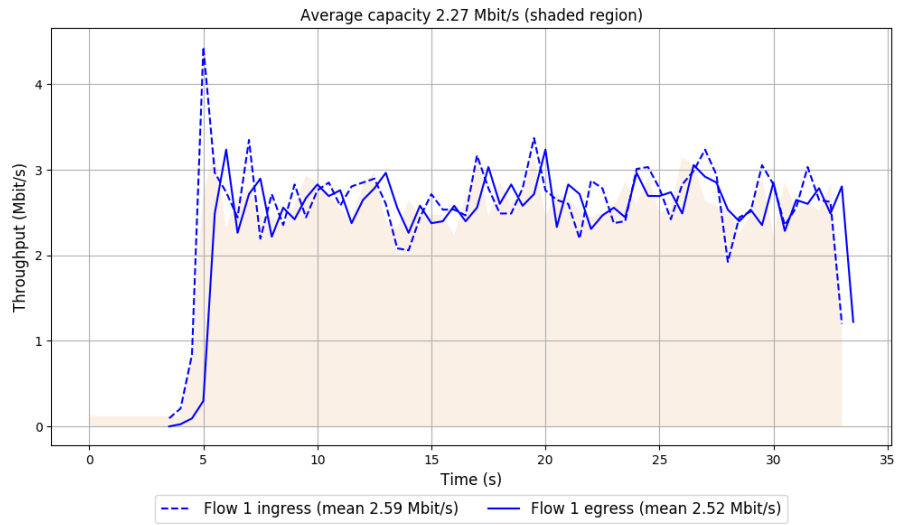
-- Flow 1:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 671.796 ms

Loss rate: 3.07%

### Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-07-24 07:12:06

End at: 2018-07-24 07:12:36

# Below is generated by plot.py at 2018-07-24 07:20:26

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.52 Mbit/s (111.1% utilization)

95th percentile per-packet one-way delay: 661.259 ms

Loss rate: 2.74%

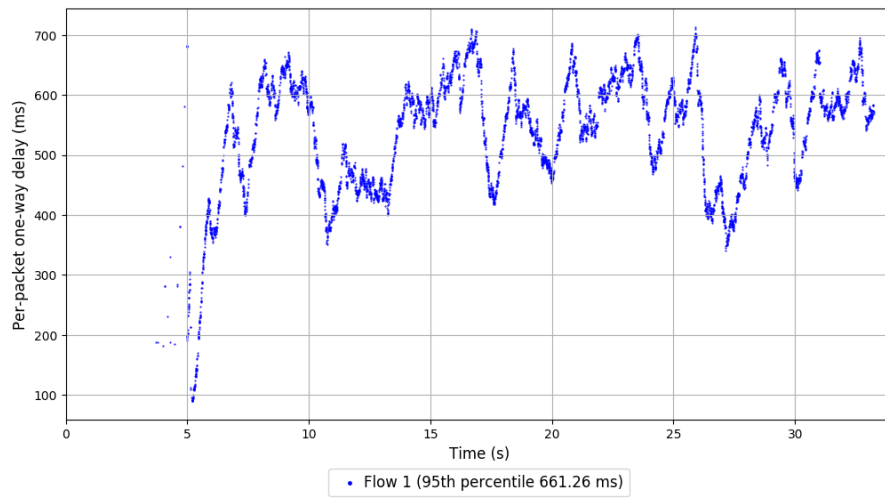
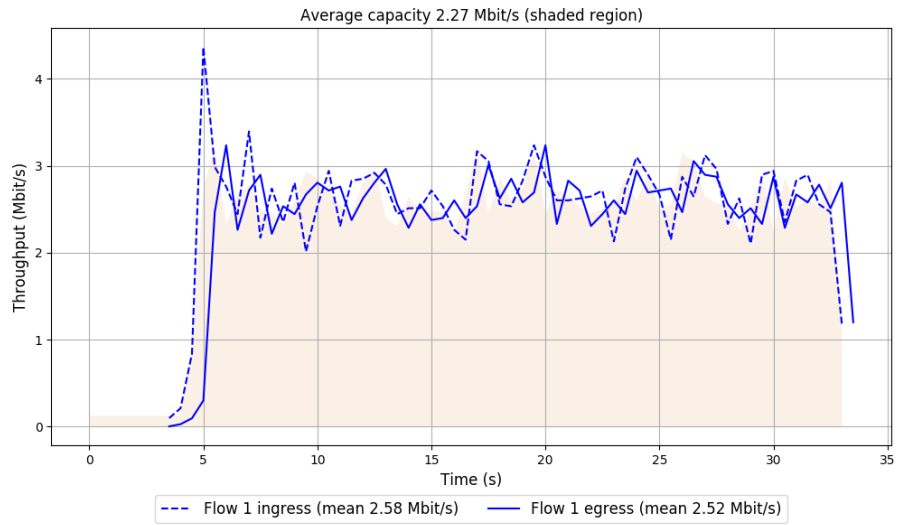
-- Flow 1:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 661.259 ms

Loss rate: 2.74%

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2018-07-24 05:46:23

End at: 2018-07-24 05:46:53

# Below is generated by plot.py at 2018-07-24 07:20:26

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.08 Mbit/s (3.6% utilization)

95th percentile per-packet one-way delay: 106.571 ms

Loss rate: 0.37%

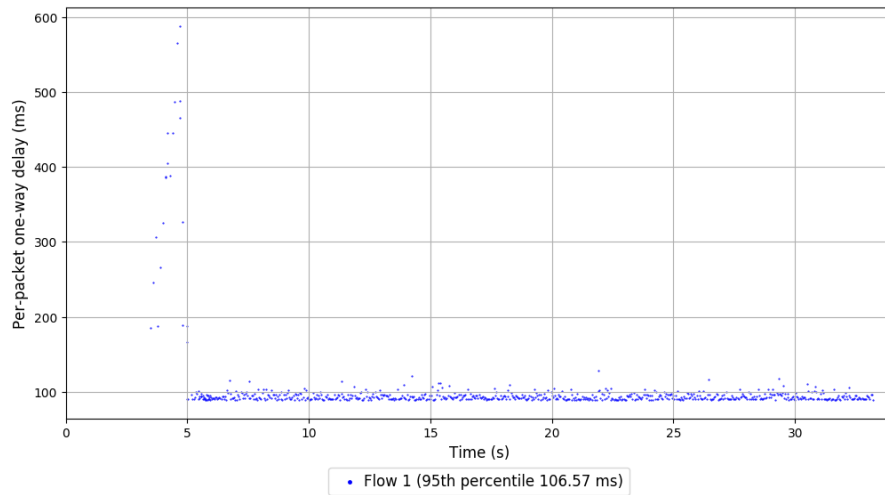
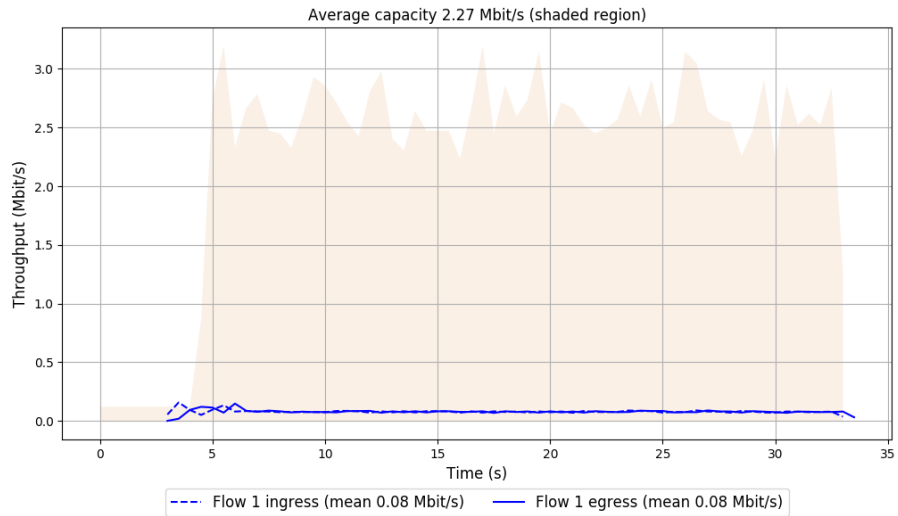
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 106.571 ms

Loss rate: 0.37%

# Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2018-07-24 05:56:02

End at: 2018-07-24 05:56:32

# Below is generated by plot.py at 2018-07-24 07:20:26

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.08 Mbit/s (3.5% utilization)

95th percentile per-packet one-way delay: 106.616 ms

Loss rate: 0.38%

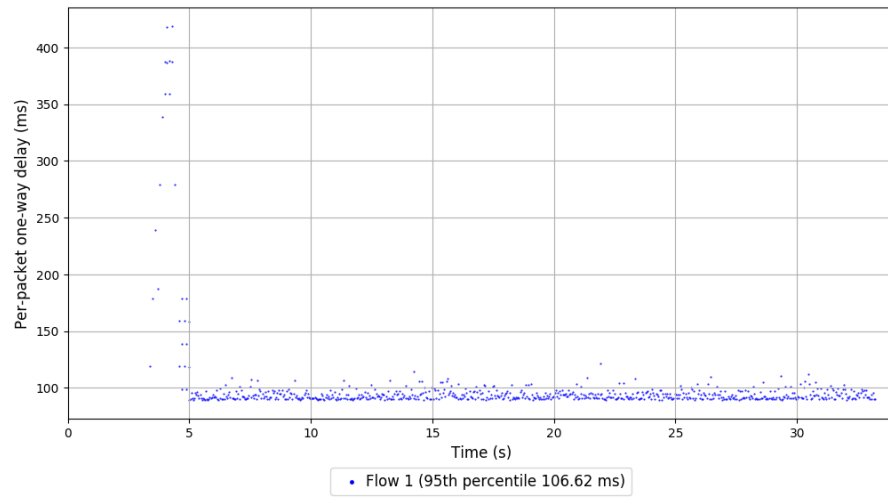
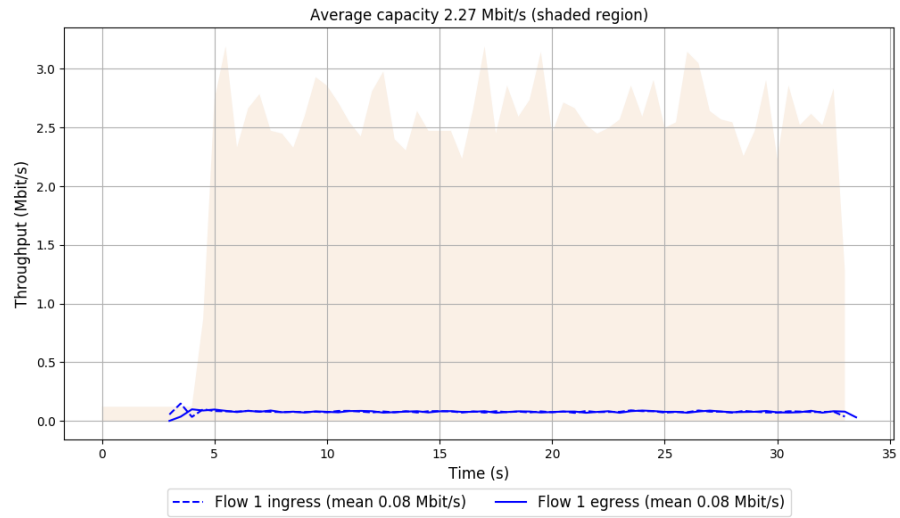
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 106.616 ms

Loss rate: 0.38%

## Run 2: Report of SCReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-07-24 06:05:41

End at: 2018-07-24 06:06:11

# Below is generated by plot.py at 2018-07-24 07:20:26

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.08 Mbit/s (3.5% utilization)

95th percentile per-packet one-way delay: 105.656 ms

Loss rate: 0.26%

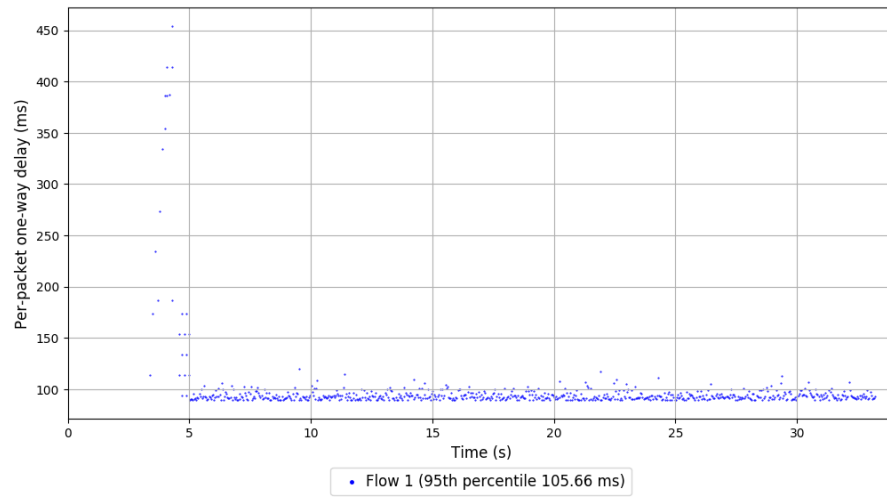
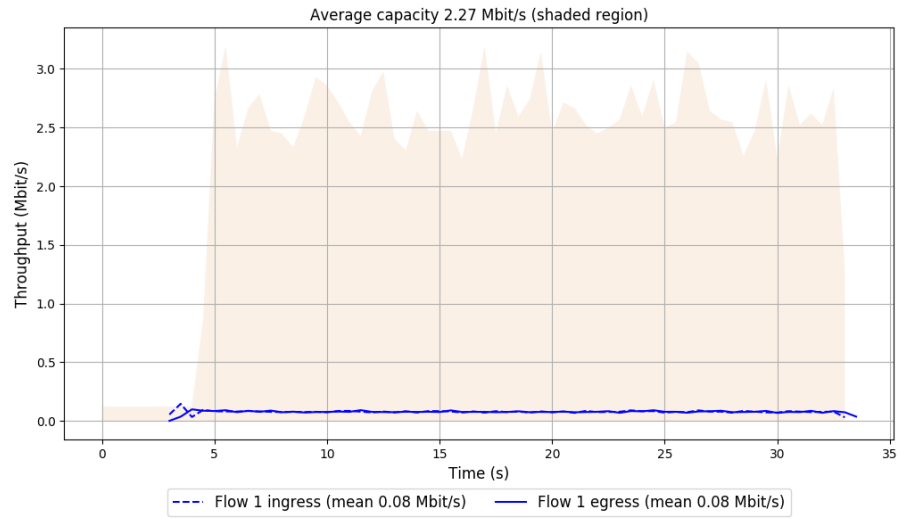
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 105.656 ms

Loss rate: 0.26%

### Run 3: Report of SCReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-07-24 06:15:20

End at: 2018-07-24 06:15:50

# Below is generated by plot.py at 2018-07-24 07:20:26

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.08 Mbit/s (3.5% utilization)

95th percentile per-packet one-way delay: 105.437 ms

Loss rate: 0.26%

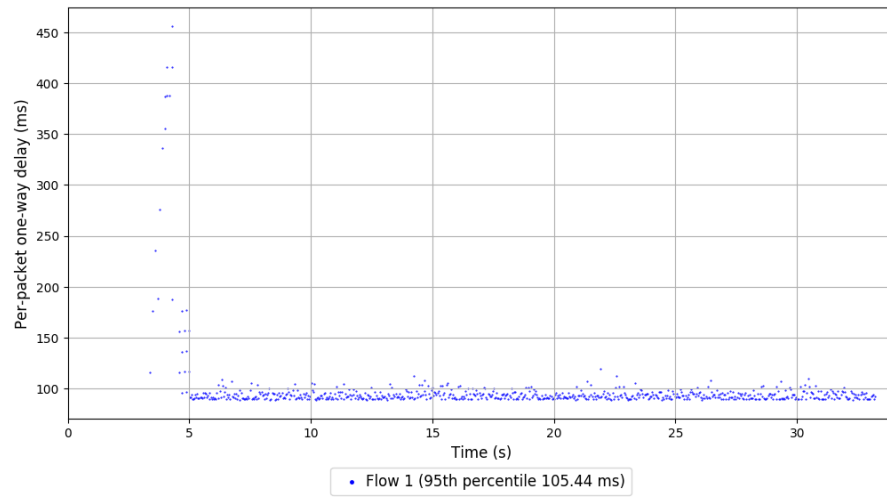
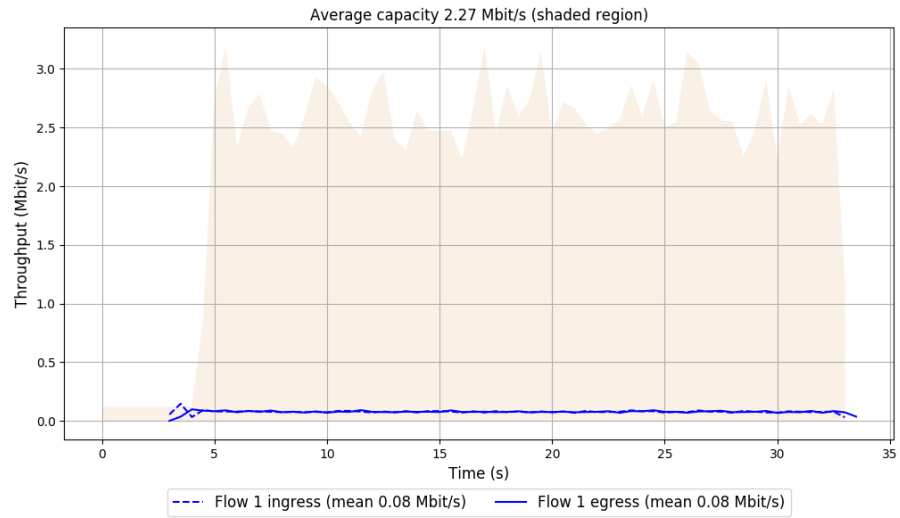
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 105.437 ms

Loss rate: 0.26%

### Run 4: Report of SCReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-07-24 06:24:59

End at: 2018-07-24 06:25:29

# Below is generated by plot.py at 2018-07-24 07:20:26

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.08 Mbit/s (3.5% utilization)

95th percentile per-packet one-way delay: 106.781 ms

Loss rate: 0.25%

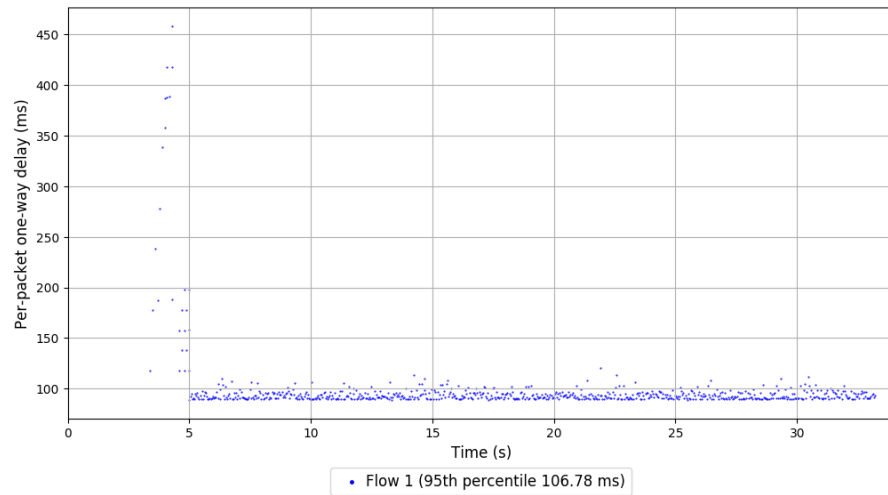
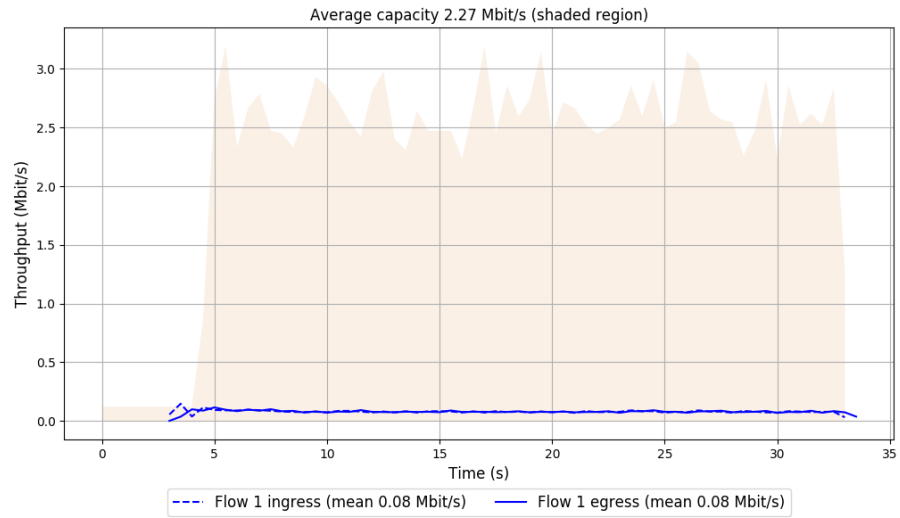
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 106.781 ms

Loss rate: 0.25%

## Run 5: Report of SCReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-07-24 06:34:38

End at: 2018-07-24 06:35:08

# Below is generated by plot.py at 2018-07-24 07:20:27

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.08 Mbit/s (3.5% utilization)

95th percentile per-packet one-way delay: 105.686 ms

Loss rate: 0.25%

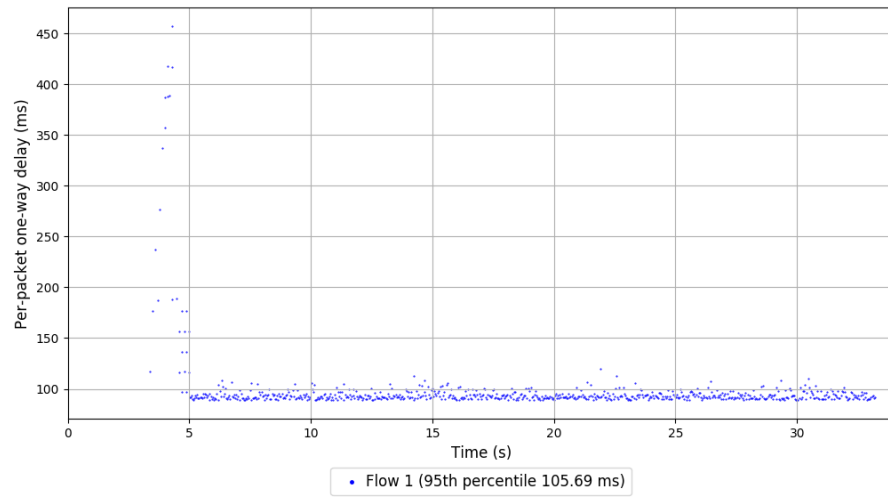
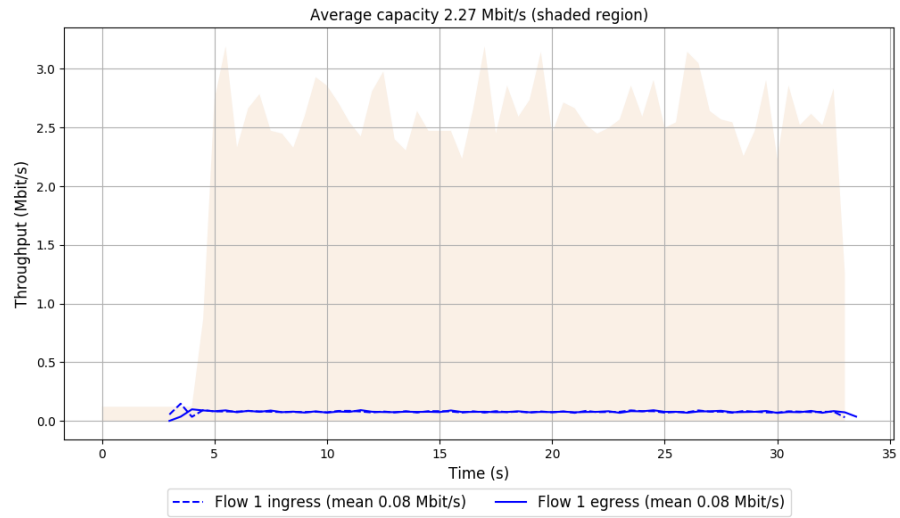
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 105.686 ms

Loss rate: 0.25%

## Run 6: Report of SCReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-07-24 06:44:17

End at: 2018-07-24 06:44:47

# Below is generated by plot.py at 2018-07-24 07:20:27

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.08 Mbit/s (3.5% utilization)

95th percentile per-packet one-way delay: 106.454 ms

Loss rate: 0.38%

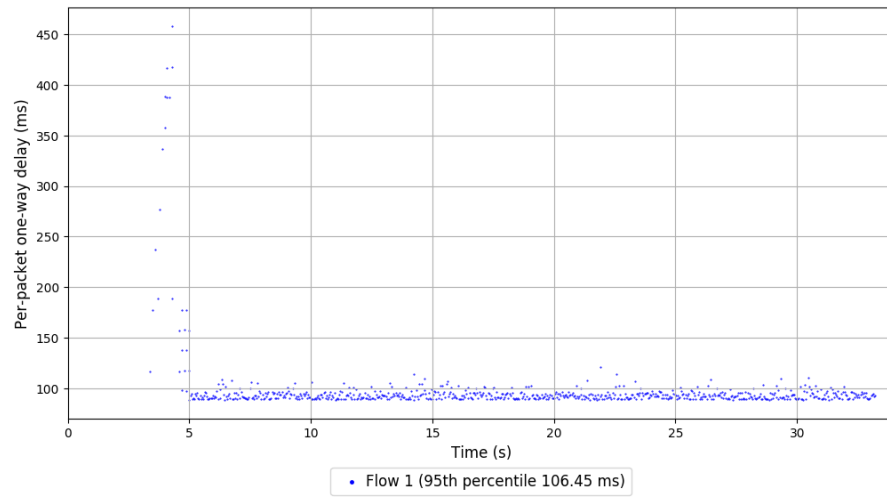
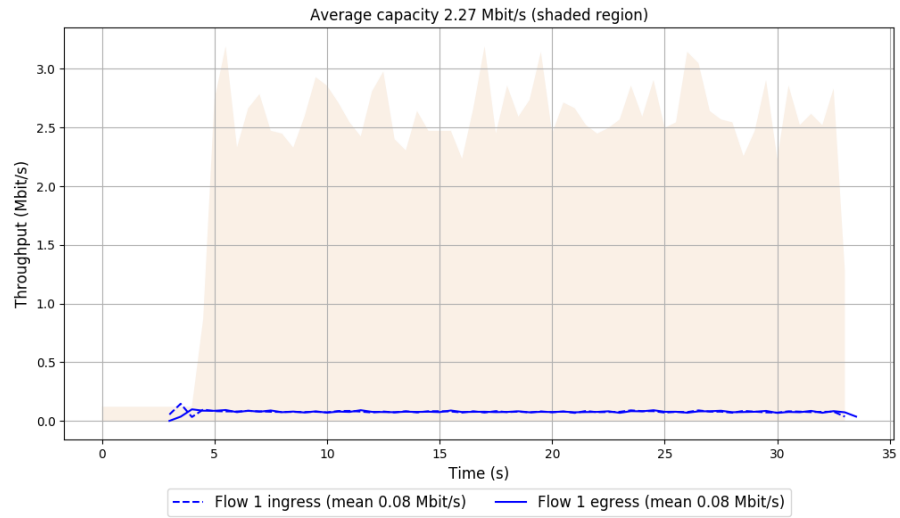
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 106.454 ms

Loss rate: 0.38%

## Run 7: Report of SCReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-07-24 06:53:56

End at: 2018-07-24 06:54:26

# Below is generated by plot.py at 2018-07-24 07:20:28

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.08 Mbit/s (3.5% utilization)

95th percentile per-packet one-way delay: 106.739 ms

Loss rate: 0.26%

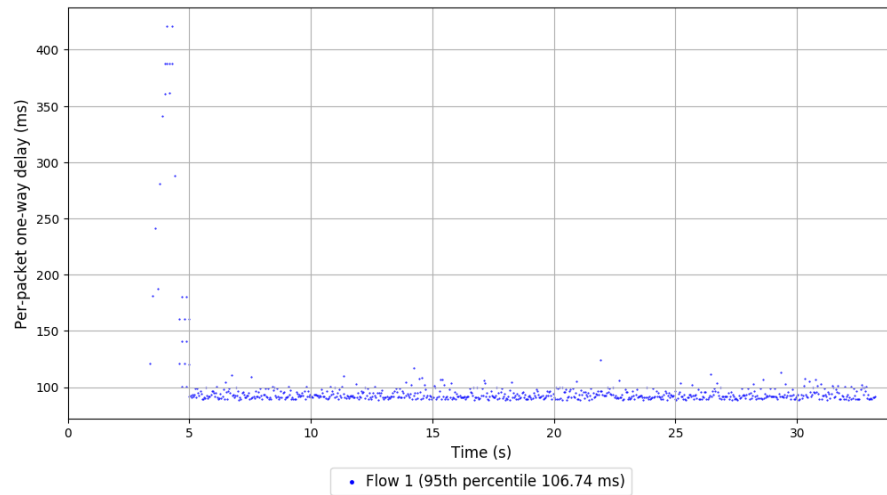
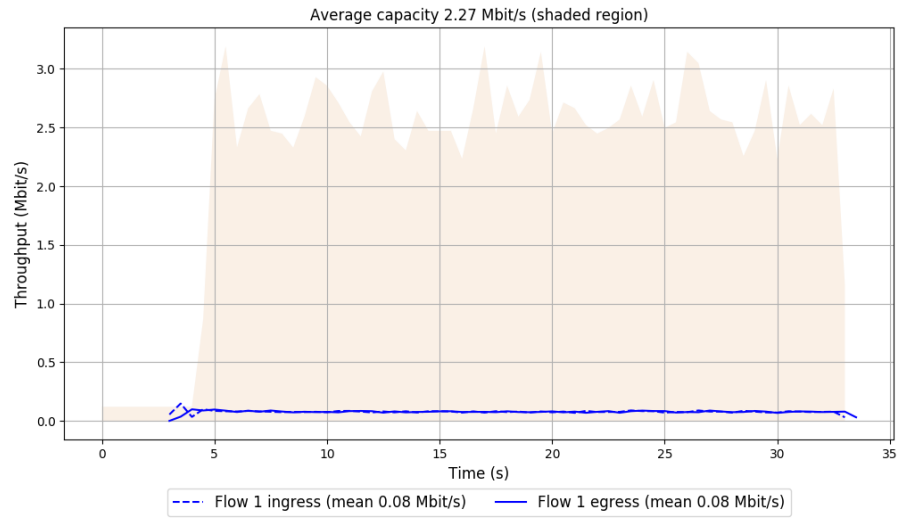
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 106.739 ms

Loss rate: 0.26%

## Run 8: Report of SCReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-07-24 07:03:35

End at: 2018-07-24 07:04:05

# Below is generated by plot.py at 2018-07-24 07:20:29

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.08 Mbit/s (3.5% utilization)

95th percentile per-packet one-way delay: 105.520 ms

Loss rate: 0.25%

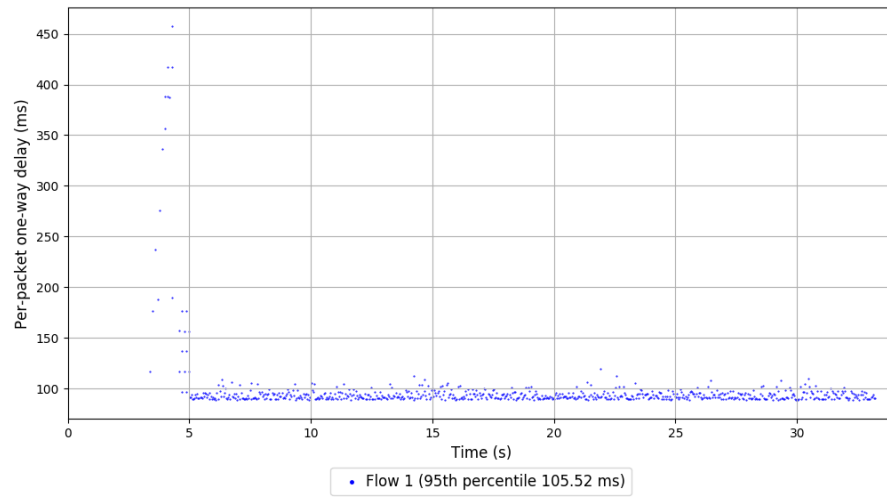
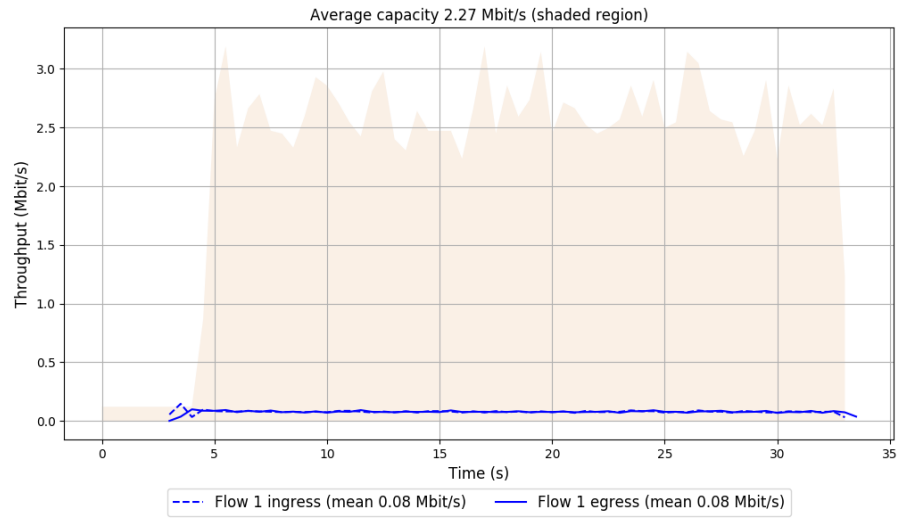
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 105.520 ms

Loss rate: 0.25%

### Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-07-24 07:13:14

End at: 2018-07-24 07:13:44

# Below is generated by plot.py at 2018-07-24 07:20:30

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.08 Mbit/s (3.5% utilization)

95th percentile per-packet one-way delay: 106.580 ms

Loss rate: 0.25%

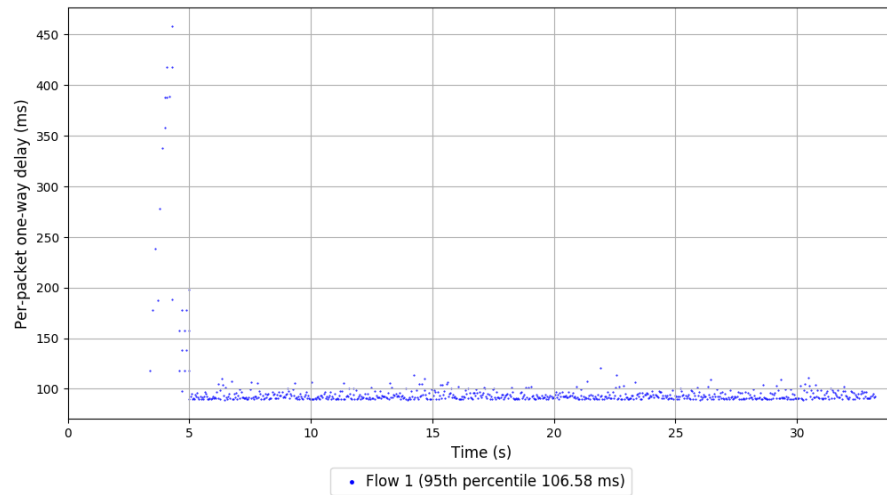
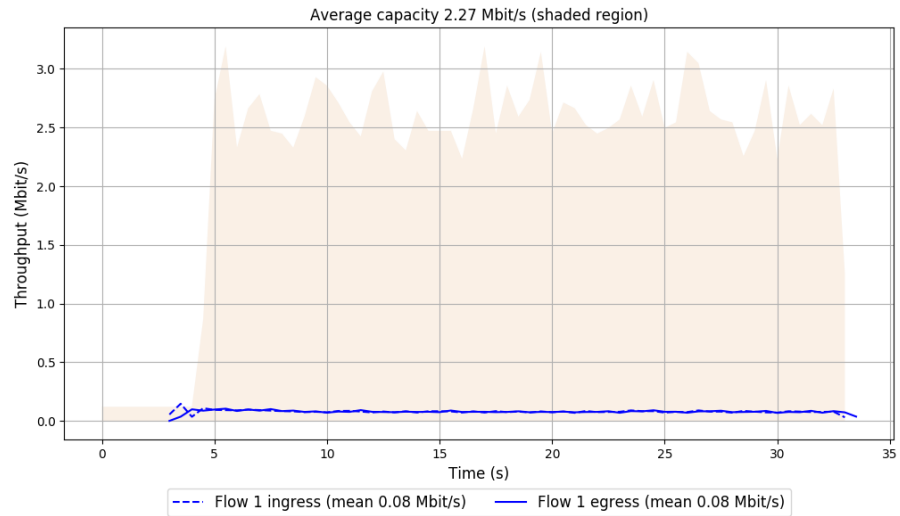
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 106.580 ms

Loss rate: 0.25%

### Run 10: Report of SCReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2018-07-24 05:43:33

End at: 2018-07-24 05:44:03

# Below is generated by plot.py at 2018-07-24 07:20:31

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.23 Mbit/s (10.1% utilization)

95th percentile per-packet one-way delay: 487.966 ms

Loss rate: 0.33%

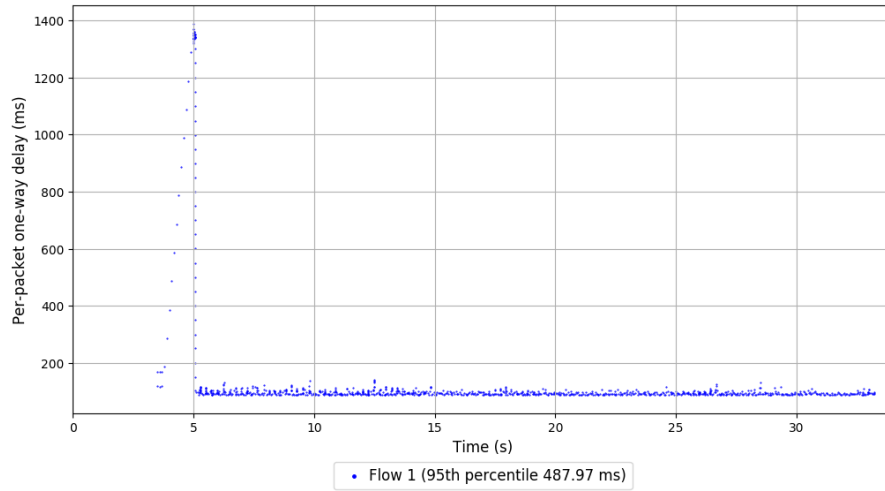
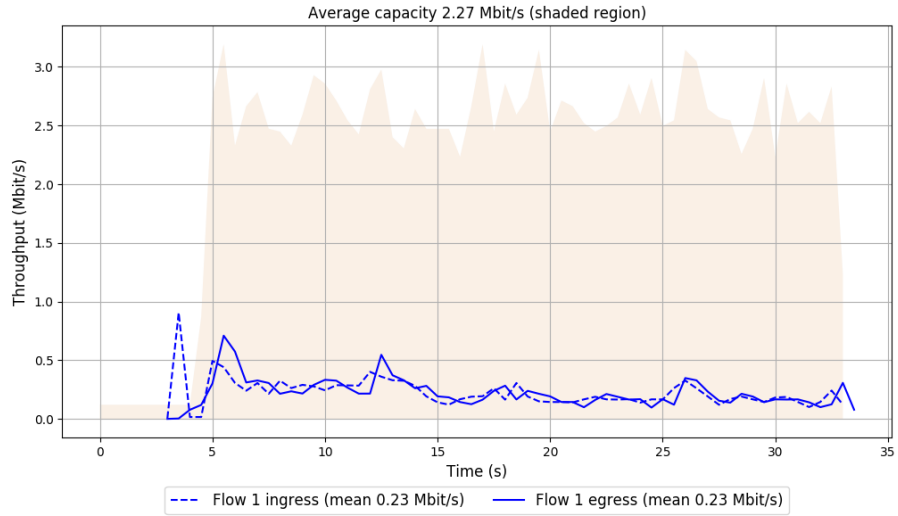
-- Flow 1:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 487.966 ms

Loss rate: 0.33%

# Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-07-24 05:53:12

End at: 2018-07-24 05:53:42

# Below is generated by plot.py at 2018-07-24 07:20:33

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.21 Mbit/s (9.1% utilization)

95th percentile per-packet one-way delay: 502.327 ms

Loss rate: 0.03%

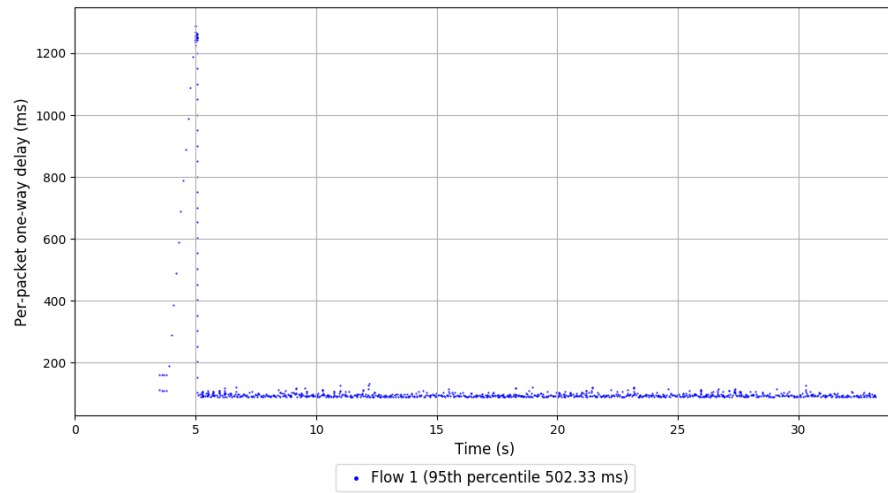
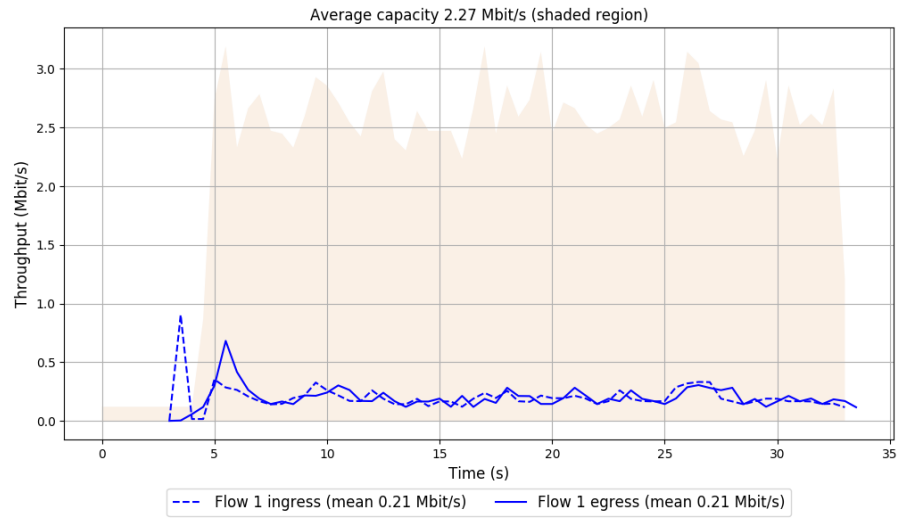
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 502.327 ms

Loss rate: 0.03%

## Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-07-24 06:02:51

End at: 2018-07-24 06:03:21

# Below is generated by plot.py at 2018-07-24 07:20:34

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.22 Mbit/s (9.9% utilization)

95th percentile per-packet one-way delay: 453.514 ms

Loss rate: 0.20%

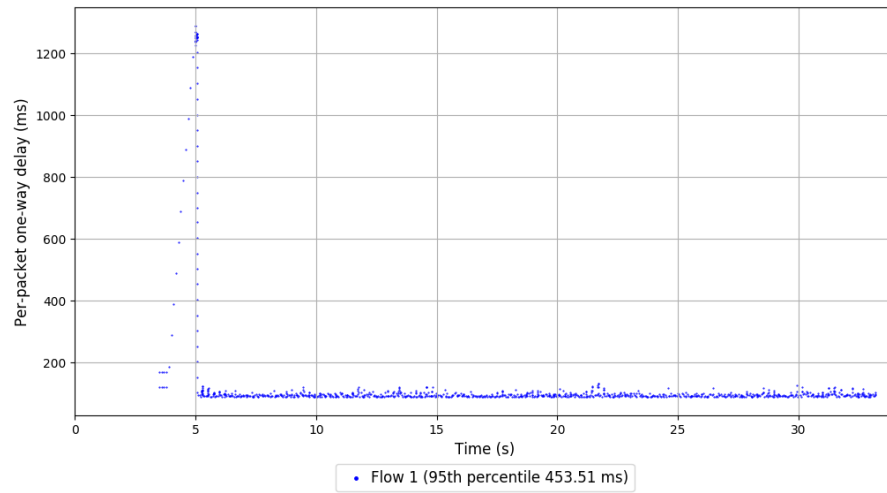
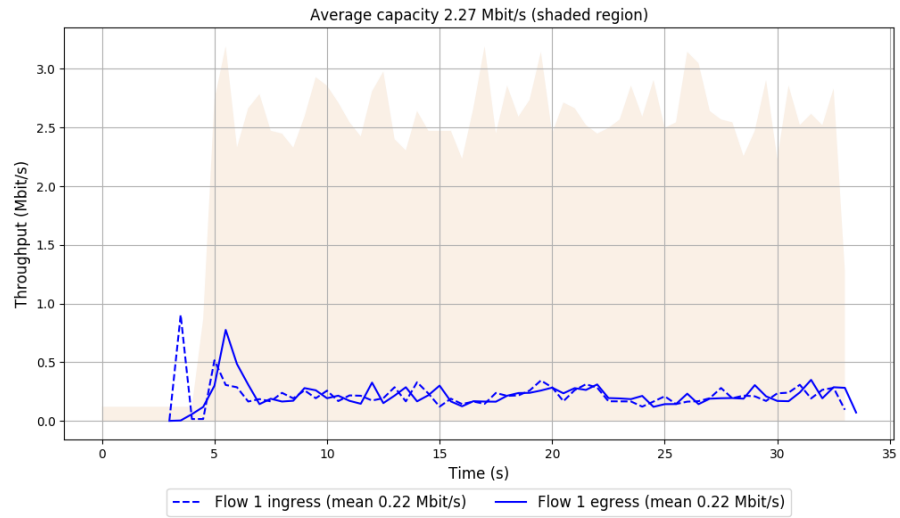
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 453.514 ms

Loss rate: 0.20%

### Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-07-24 06:12:30

End at: 2018-07-24 06:13:00

# Below is generated by plot.py at 2018-07-24 07:20:35

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.21 Mbit/s (9.3% utilization)

95th percentile per-packet one-way delay: 587.138 ms

Loss rate: 0.03%

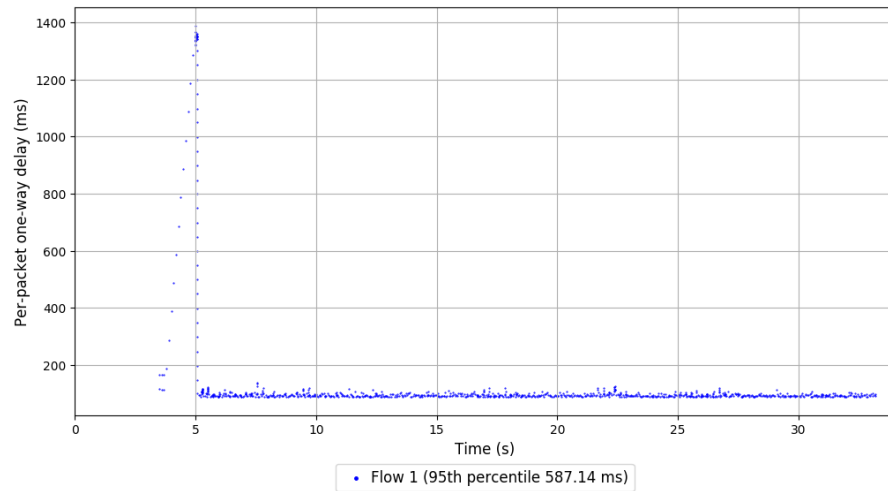
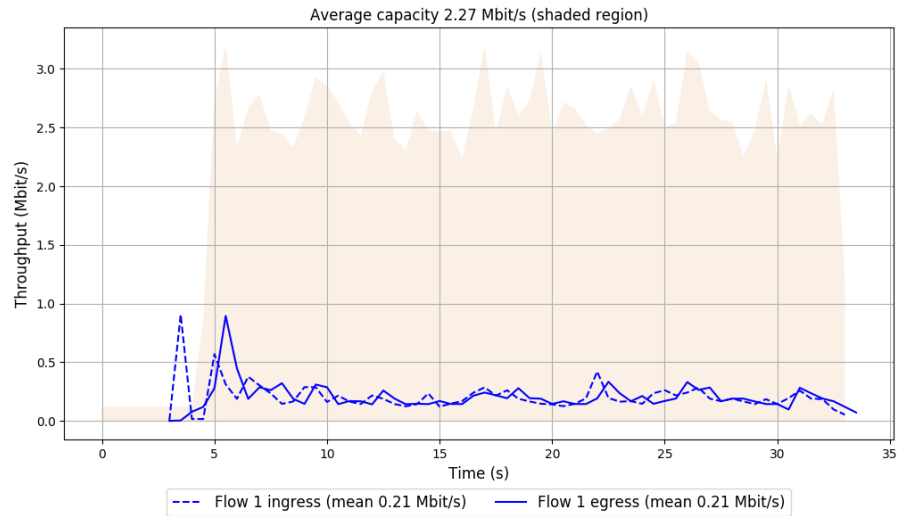
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 587.138 ms

Loss rate: 0.03%

## Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-07-24 06:22:09

End at: 2018-07-24 06:22:39

# Below is generated by plot.py at 2018-07-24 07:20:35

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.23 Mbit/s (10.2% utilization)

95th percentile per-packet one-way delay: 450.203 ms

Loss rate: 0.31%

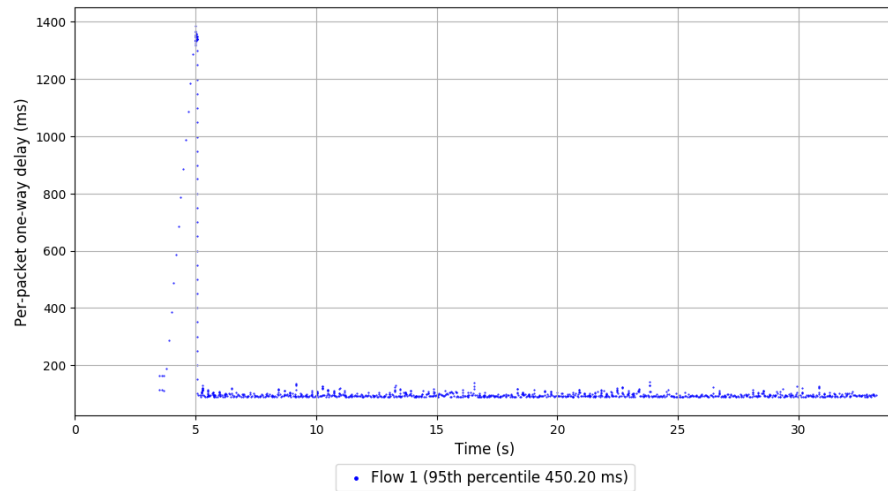
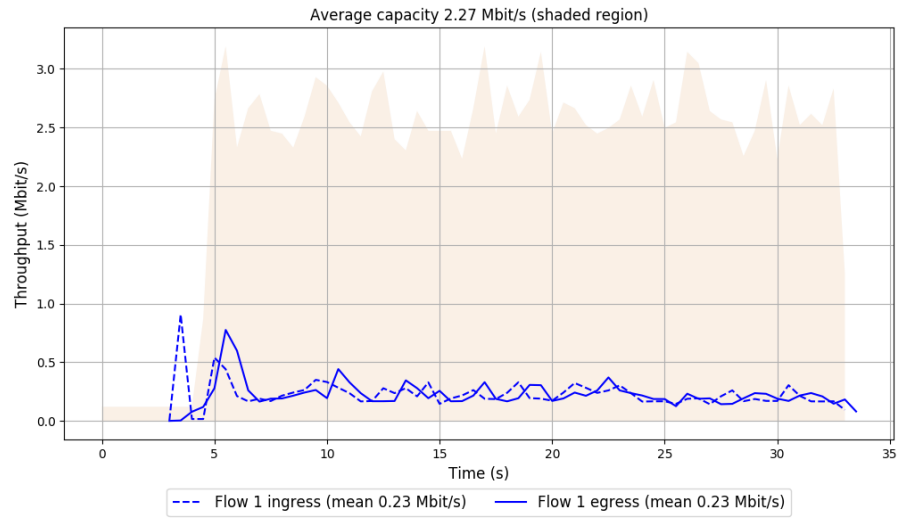
-- Flow 1:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 450.203 ms

Loss rate: 0.31%

## Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-07-24 06:31:48

End at: 2018-07-24 06:32:18

# Below is generated by plot.py at 2018-07-24 07:20:36

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.24 Mbit/s (10.7% utilization)

95th percentile per-packet one-way delay: 449.956 ms

Loss rate: 0.14%

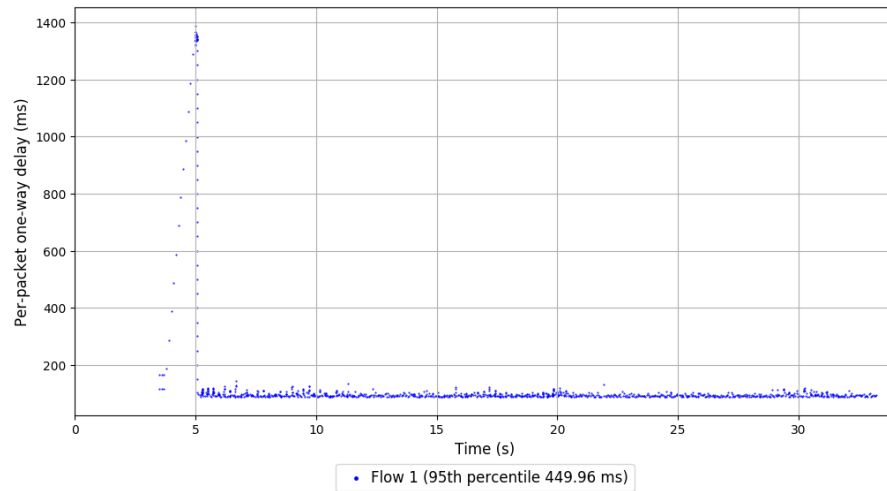
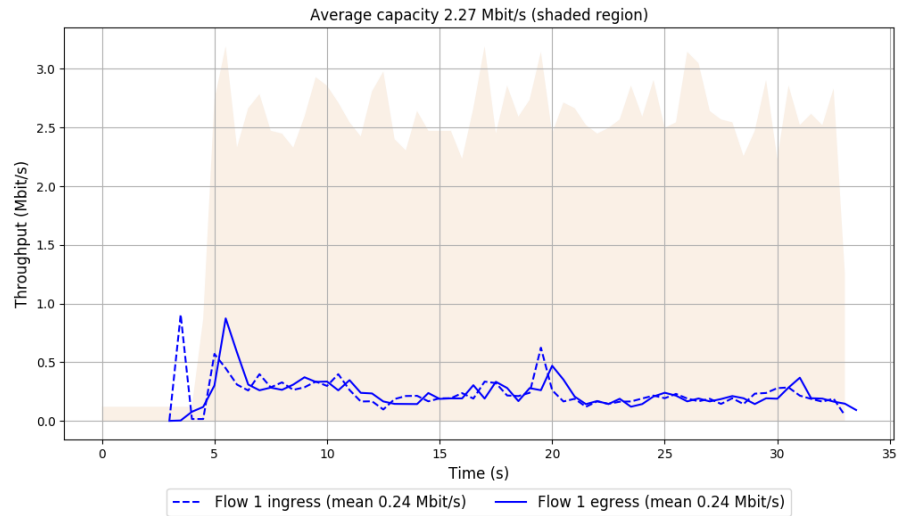
-- Flow 1:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 449.956 ms

Loss rate: 0.14%

## Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-07-24 06:41:27

End at: 2018-07-24 06:41:57

# Below is generated by plot.py at 2018-07-24 07:20:37

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.21 Mbit/s (9.4% utilization)

95th percentile per-packet one-way delay: 551.194 ms

Loss rate: 0.01%

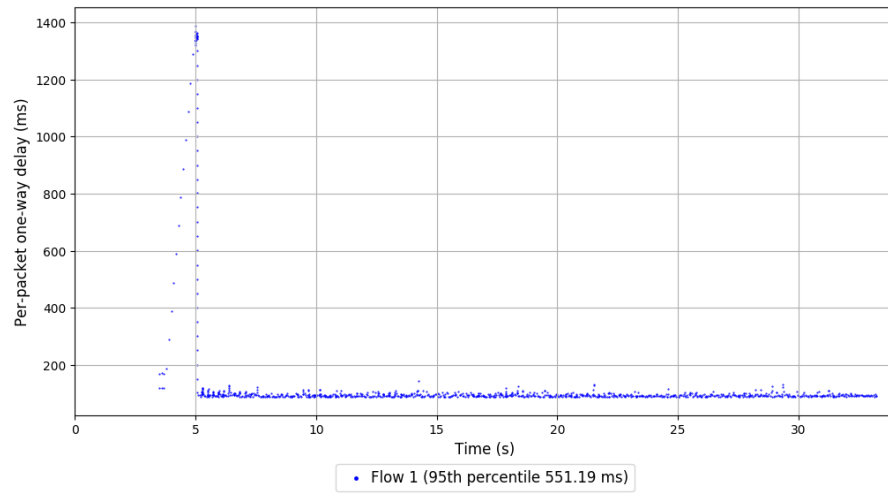
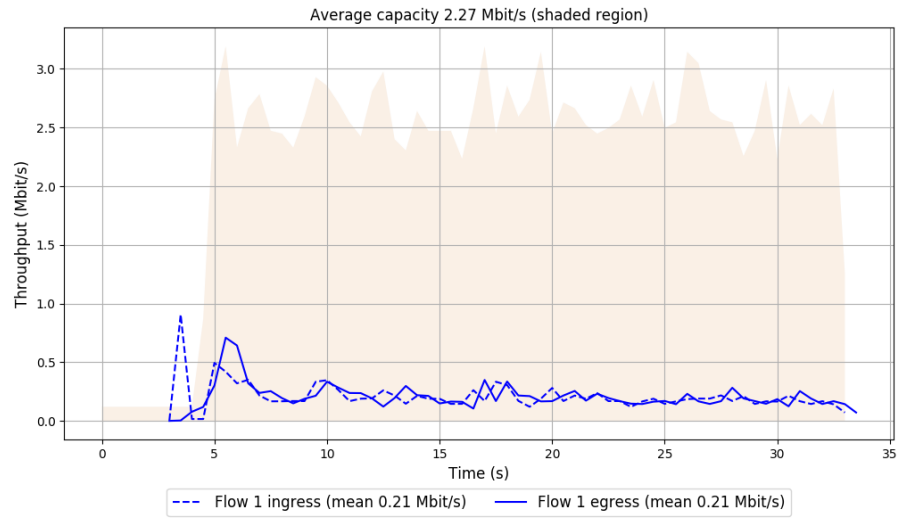
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 551.194 ms

Loss rate: 0.01%

## Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-07-24 06:51:06

End at: 2018-07-24 06:51:36

# Below is generated by plot.py at 2018-07-24 07:20:38

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.21 Mbit/s (9.4% utilization)

95th percentile per-packet one-way delay: 547.505 ms

Loss rate: 0.03%

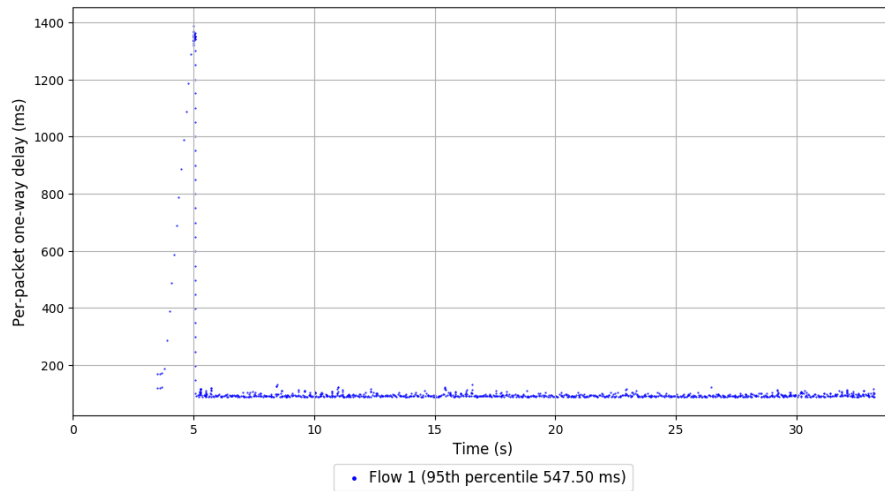
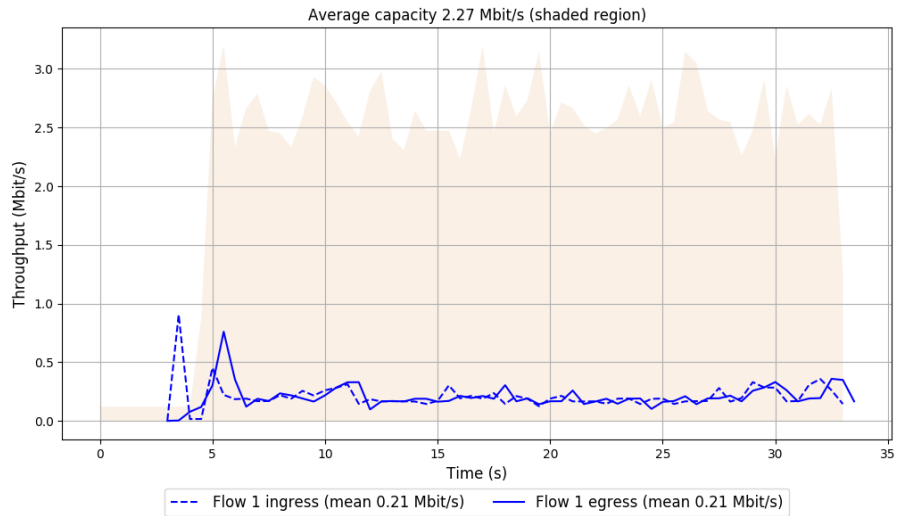
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 547.505 ms

Loss rate: 0.03%

# Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-07-24 07:00:45

End at: 2018-07-24 07:01:15

# Below is generated by plot.py at 2018-07-24 07:20:38

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.20 Mbit/s (8.8% utilization)

95th percentile per-packet one-way delay: 600.709 ms

Loss rate: 0.03%

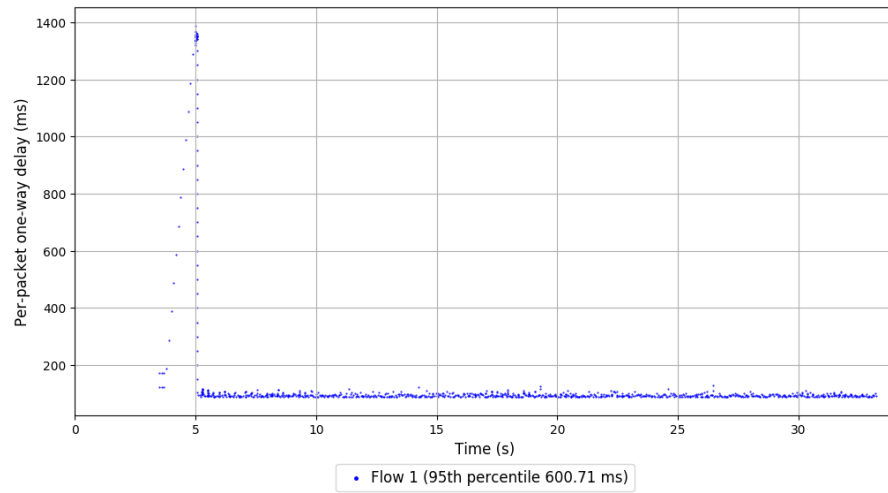
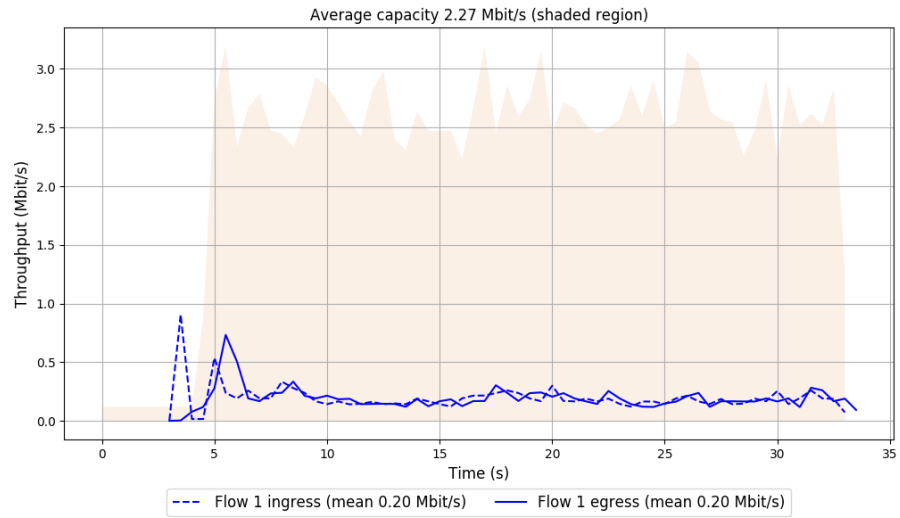
-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 600.709 ms

Loss rate: 0.03%

## Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-07-24 07:10:24

End at: 2018-07-24 07:10:54

# Below is generated by plot.py at 2018-07-24 07:20:39

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.21 Mbit/s (9.1% utilization)

95th percentile per-packet one-way delay: 587.242 ms

Loss rate: 0.03%

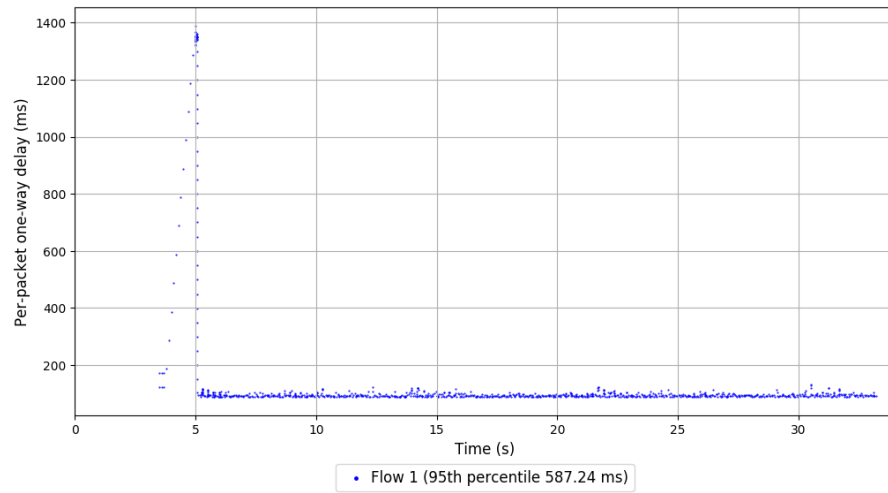
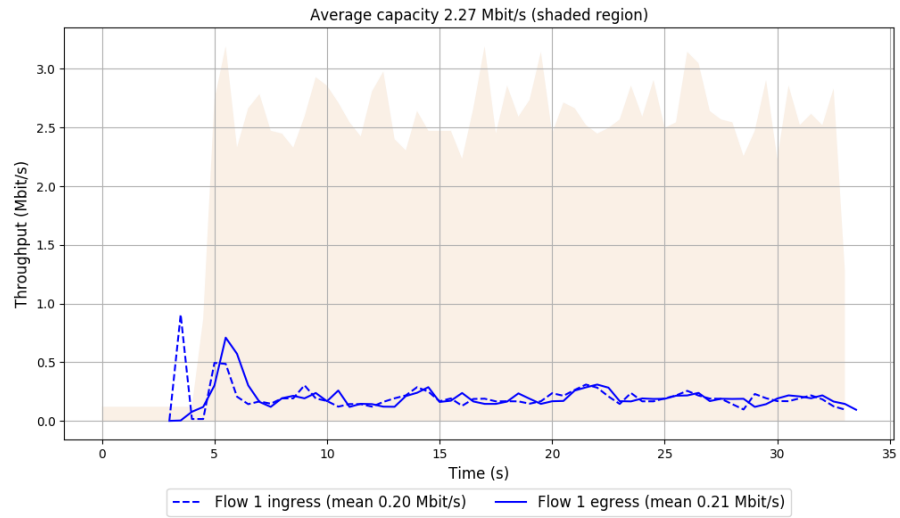
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 587.242 ms

Loss rate: 0.03%

## Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-07-24 05:49:48

End at: 2018-07-24 05:50:18

# Below is generated by plot.py at 2018-07-24 07:20:46

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.34 Mbit/s (102.9% utilization)

95th percentile per-packet one-way delay: 233.564 ms

Loss rate: 1.18%

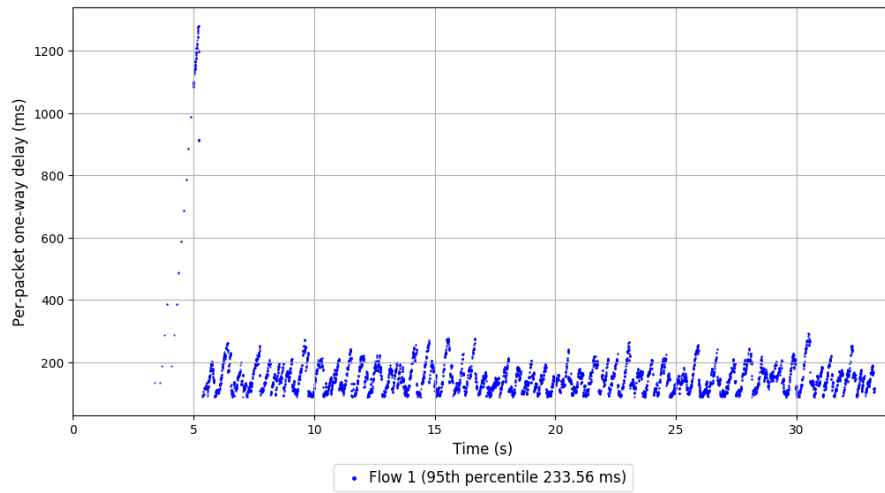
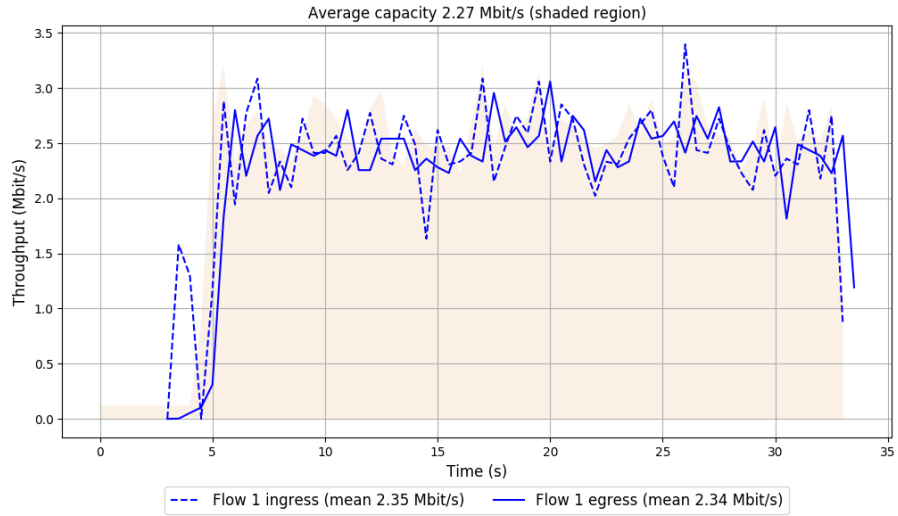
-- Flow 1:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 233.564 ms

Loss rate: 1.18%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-07-24 05:59:26

End at: 2018-07-24 05:59:57

# Below is generated by plot.py at 2018-07-24 07:20:48

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.33 Mbit/s (102.5% utilization)

95th percentile per-packet one-way delay: 220.714 ms

Loss rate: 1.13%

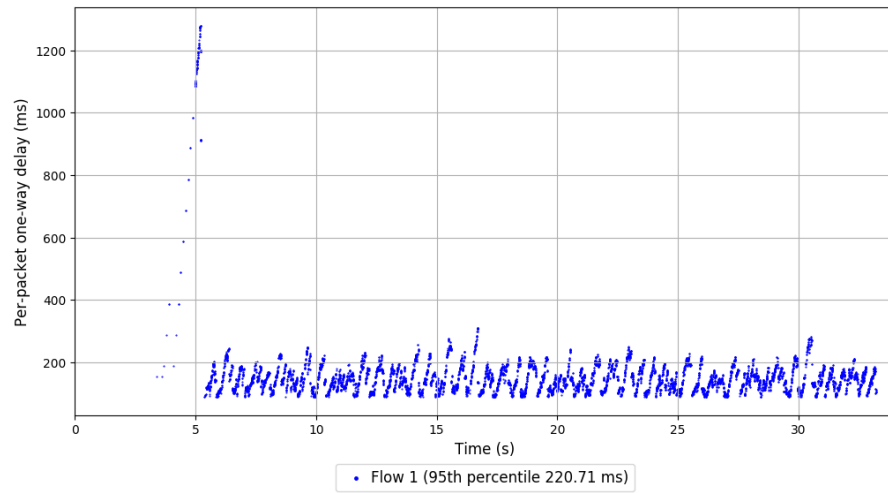
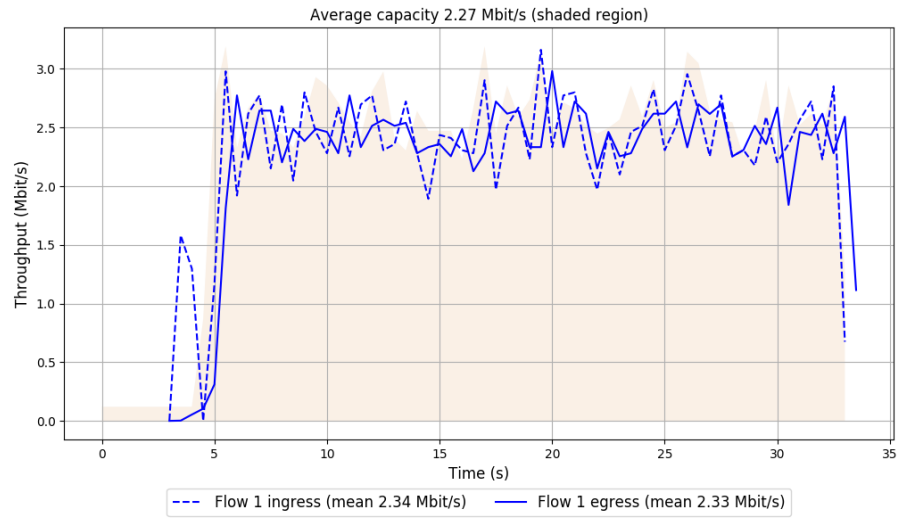
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 220.714 ms

Loss rate: 1.13%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-07-24 06:09:05

End at: 2018-07-24 06:09:35

# Below is generated by plot.py at 2018-07-24 07:20:48

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.33 Mbit/s (102.6% utilization)

95th percentile per-packet one-way delay: 232.819 ms

Loss rate: 1.18%

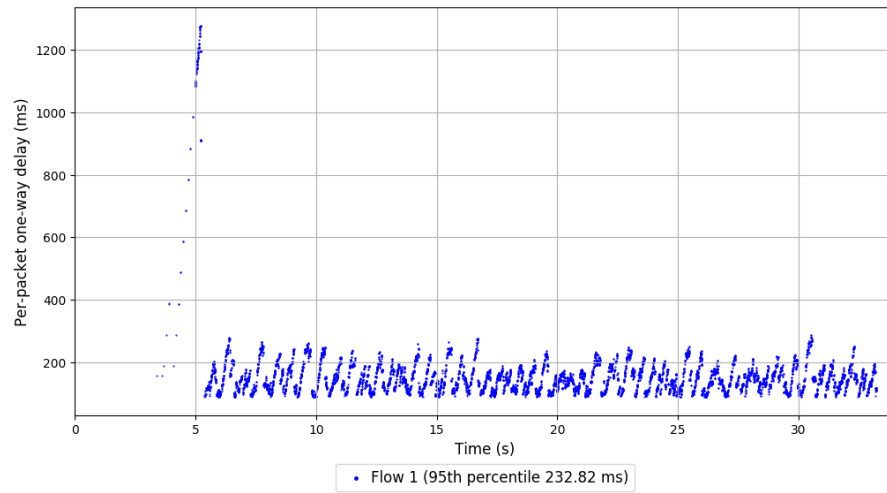
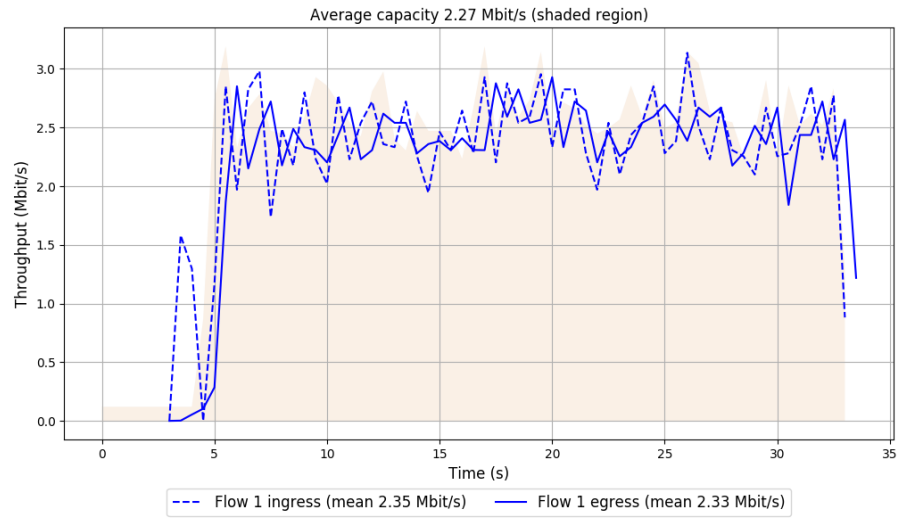
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 232.819 ms

Loss rate: 1.18%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-07-24 06:18:44

End at: 2018-07-24 06:19:14

# Below is generated by plot.py at 2018-07-24 07:20:49

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.34 Mbit/s (103.2% utilization)

95th percentile per-packet one-way delay: 227.045 ms

Loss rate: 1.06%

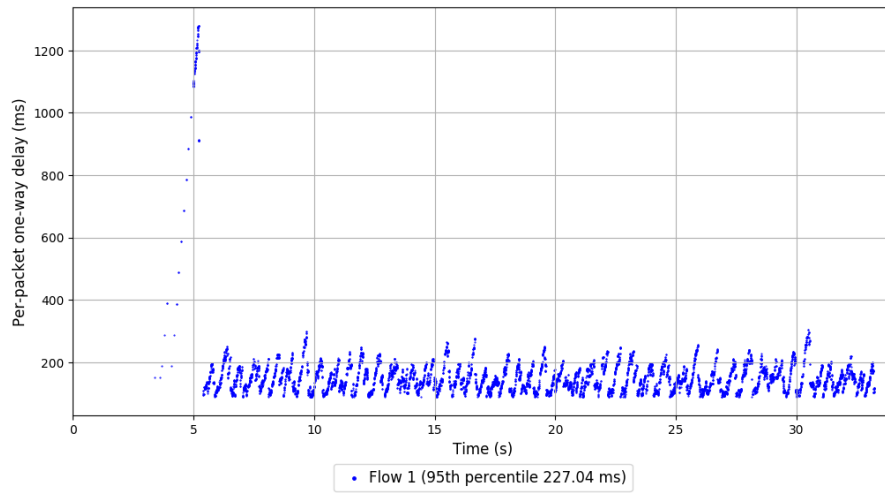
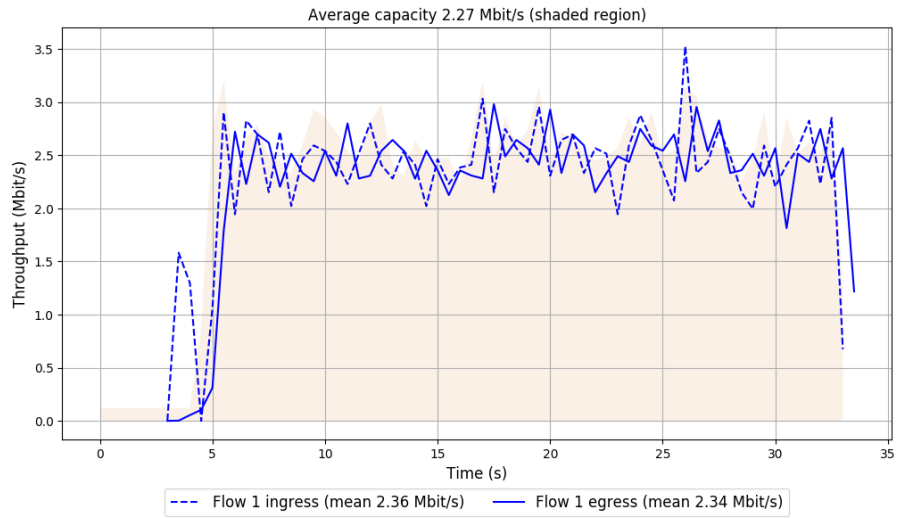
-- Flow 1:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 227.045 ms

Loss rate: 1.06%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-07-24 06:28:23

End at: 2018-07-24 06:28:53

# Below is generated by plot.py at 2018-07-24 07:20:49

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.33 Mbit/s (102.5% utilization)

95th percentile per-packet one-way delay: 231.003 ms

Loss rate: 1.25%

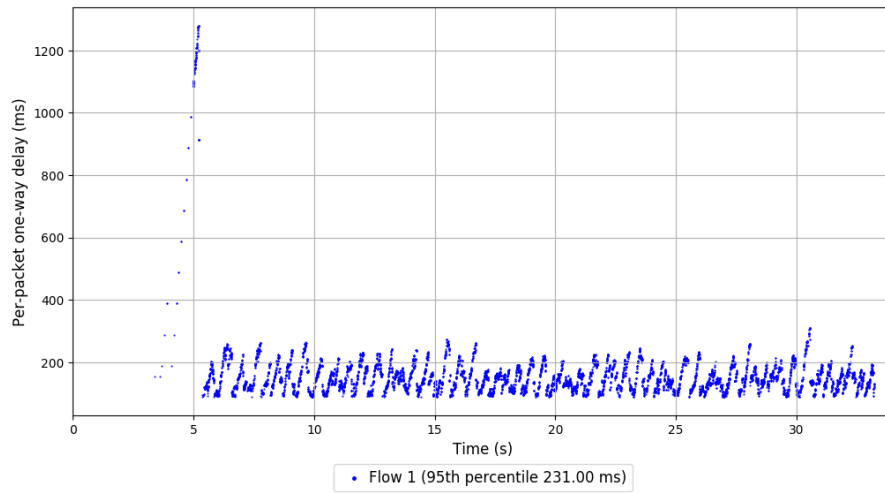
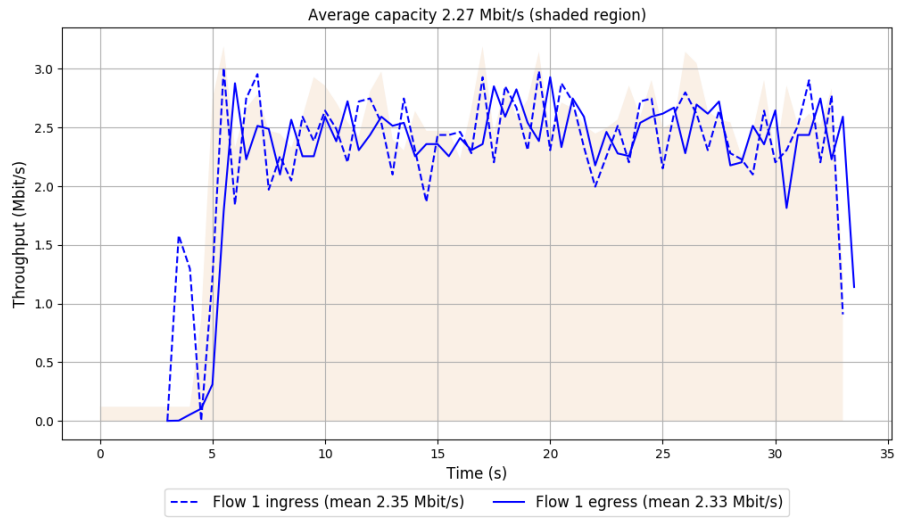
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 231.003 ms

Loss rate: 1.25%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-07-24 06:38:02

End at: 2018-07-24 06:38:32

# Below is generated by plot.py at 2018-07-24 07:20:50

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.33 Mbit/s (102.6% utilization)

95th percentile per-packet one-way delay: 226.437 ms

Loss rate: 1.13%

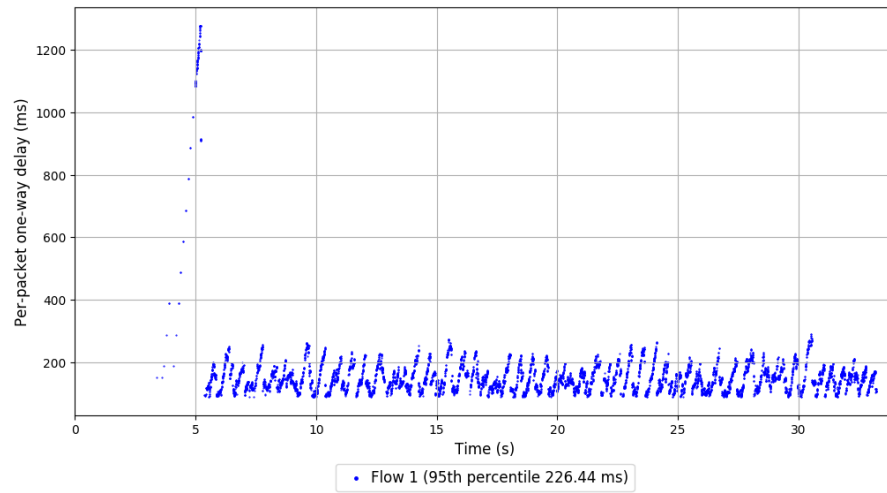
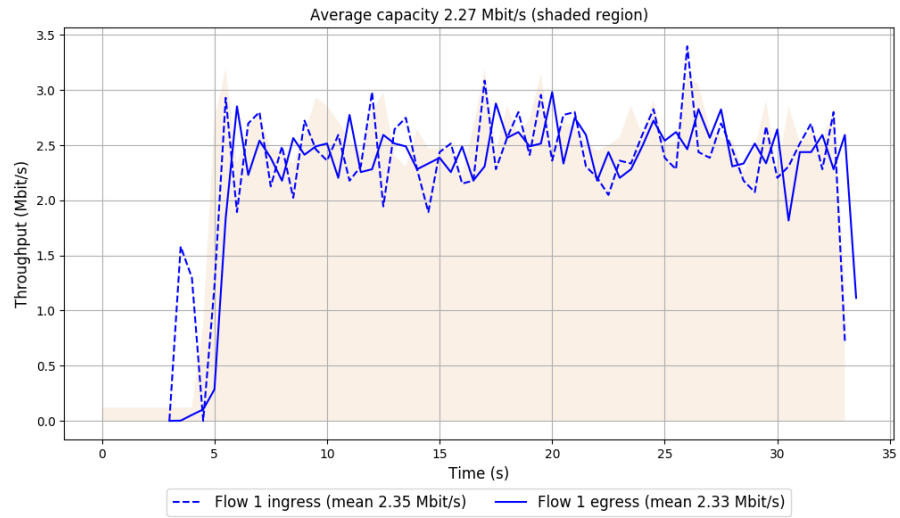
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 226.437 ms

Loss rate: 1.13%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-07-24 06:47:41

End at: 2018-07-24 06:48:11

# Below is generated by plot.py at 2018-07-24 07:20:51

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.31 Mbit/s (101.6% utilization)

95th percentile per-packet one-way delay: 239.647 ms

Loss rate: 1.17%

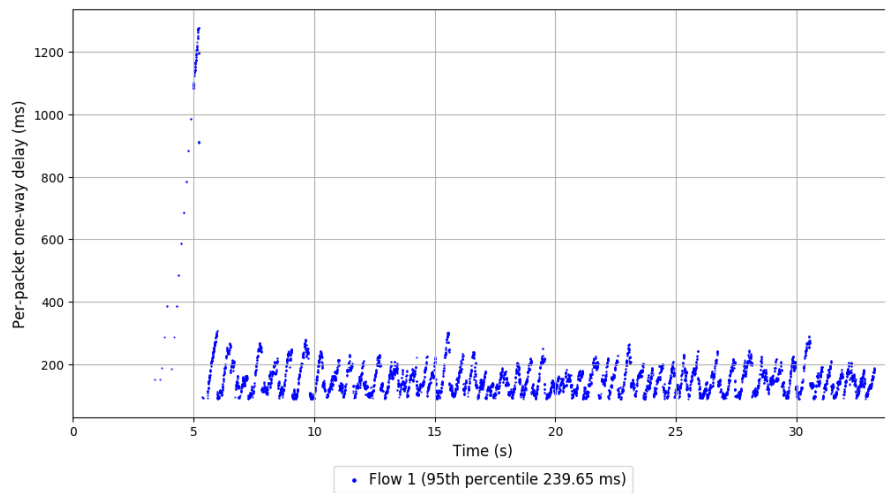
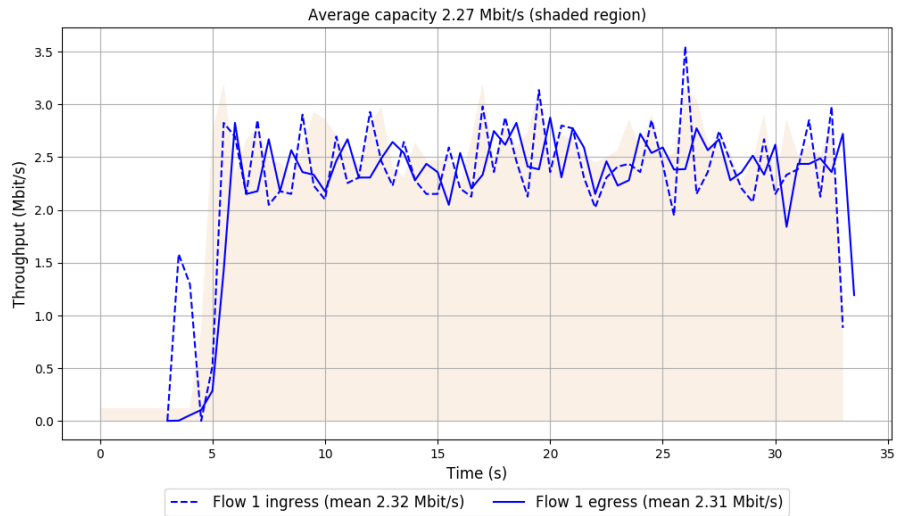
-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 239.647 ms

Loss rate: 1.17%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-07-24 06:57:20

End at: 2018-07-24 06:57:50

# Below is generated by plot.py at 2018-07-24 07:20:51

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.33 Mbit/s (102.5% utilization)

95th percentile per-packet one-way delay: 228.941 ms

Loss rate: 1.23%

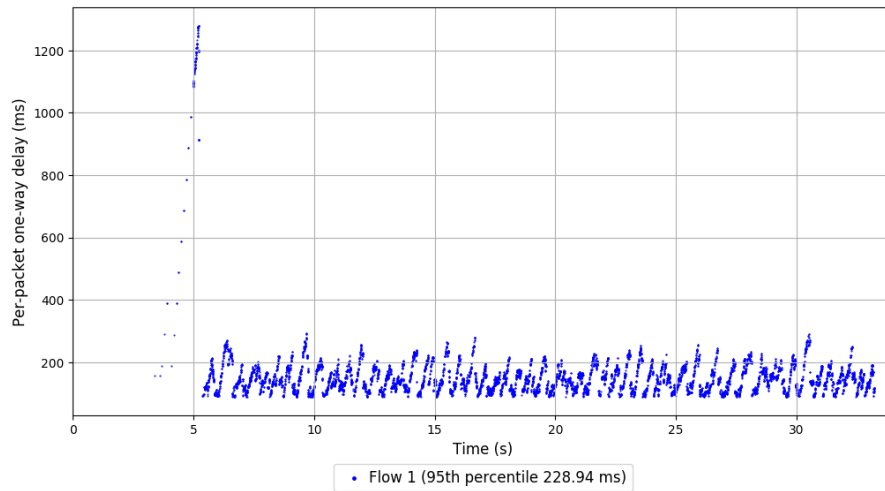
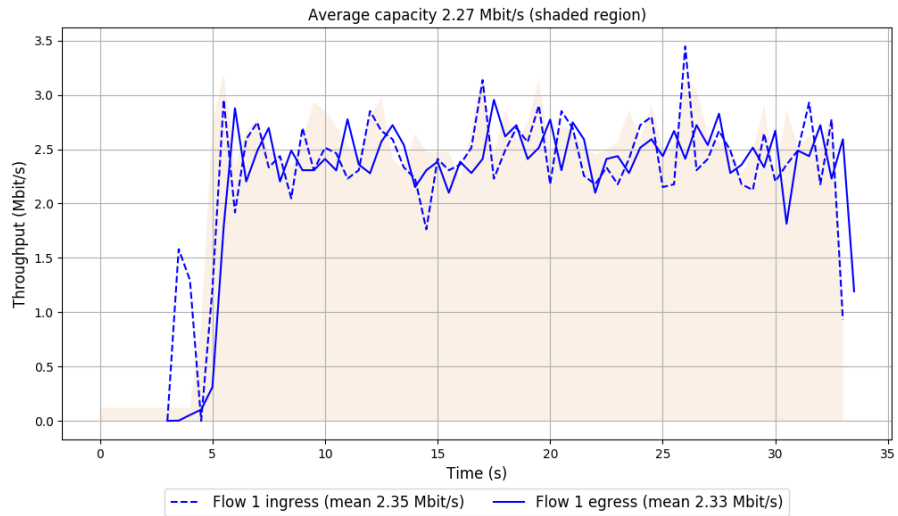
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 228.941 ms

Loss rate: 1.23%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-07-24 07:06:59

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

# Below is generated by plot.py at 2018-07-24 07:21:00

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.35 Mbit/s (103.3% utilization)

95th percentile per-packet one-way delay: 227.097 ms

Loss rate: 1.28%

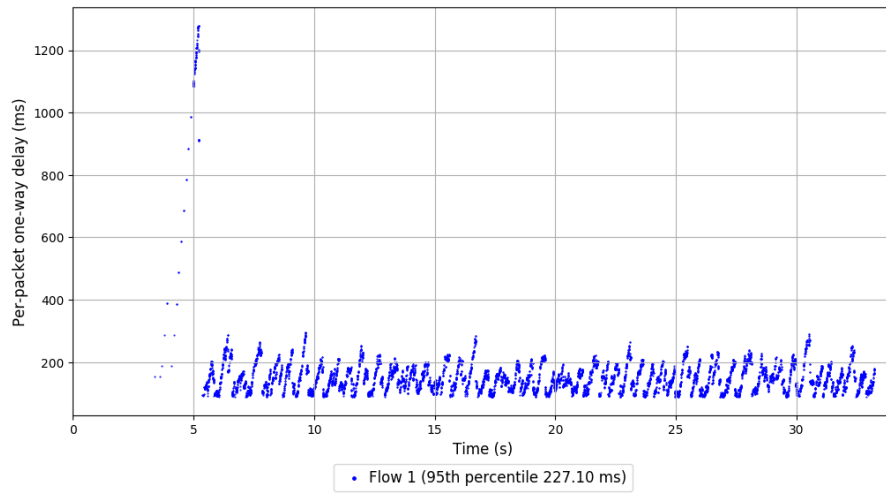
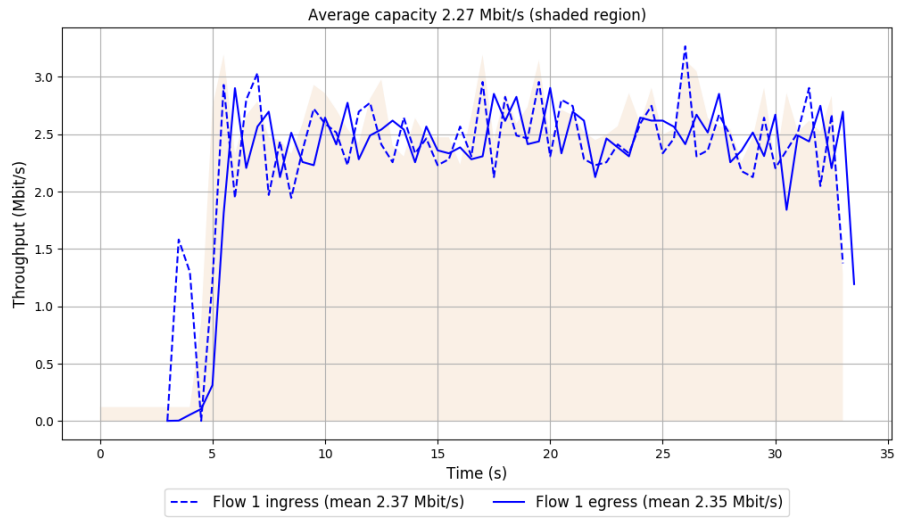
-- Flow 1:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 227.097 ms

Loss rate: 1.28%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-07-24 07:16:39

End at: 2018-07-24 07:17:09

# Below is generated by plot.py at 2018-07-24 07:21:02

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.33 Mbit/s (102.7% utilization)

95th percentile per-packet one-way delay: 223.648 ms

Loss rate: 1.16%

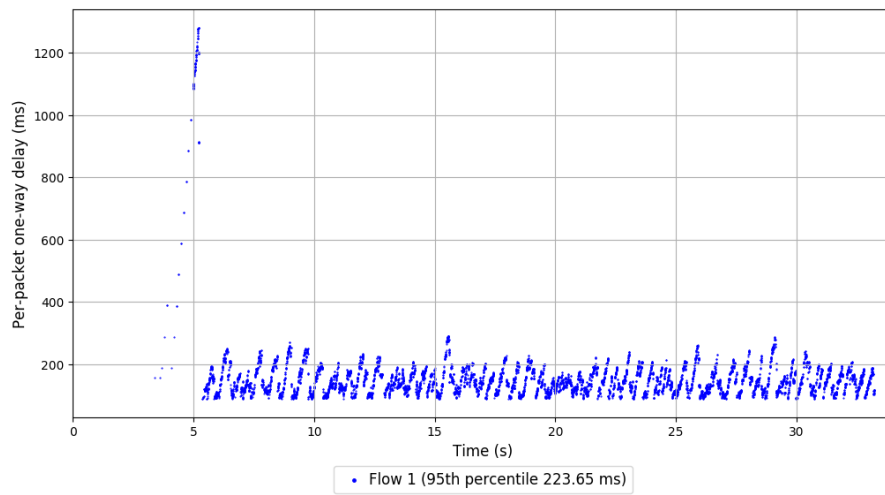
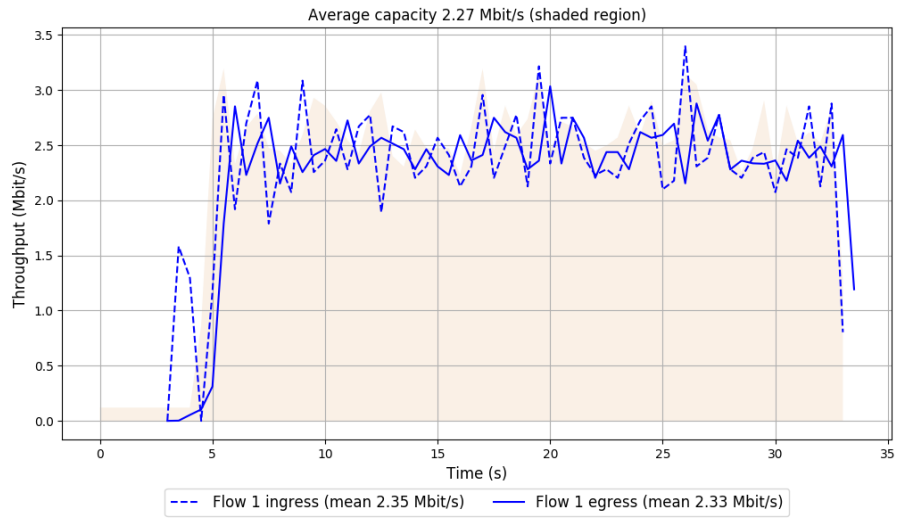
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 223.648 ms

Loss rate: 1.16%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-07-24 05:42:59

End at: 2018-07-24 05:43:29

# Below is generated by plot.py at 2018-07-24 07:21:02

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.24 Mbit/s (98.5% utilization)

95th percentile per-packet one-way delay: 174.985 ms

Loss rate: 0.46%

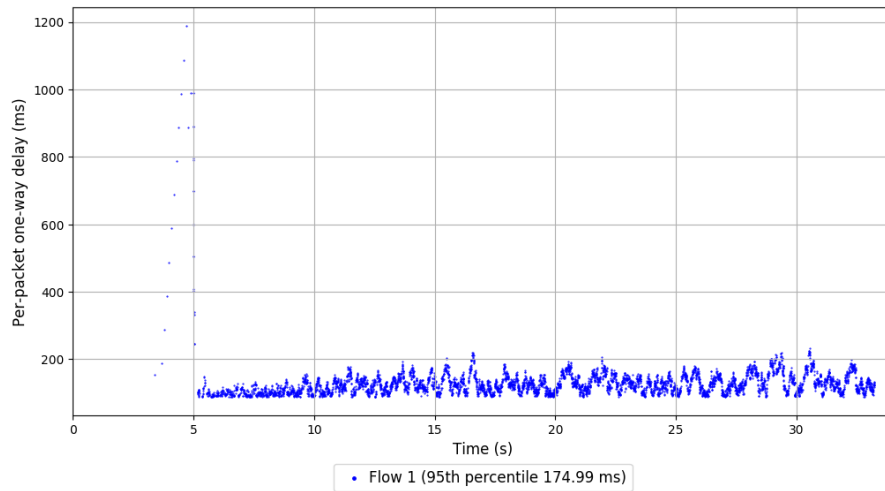
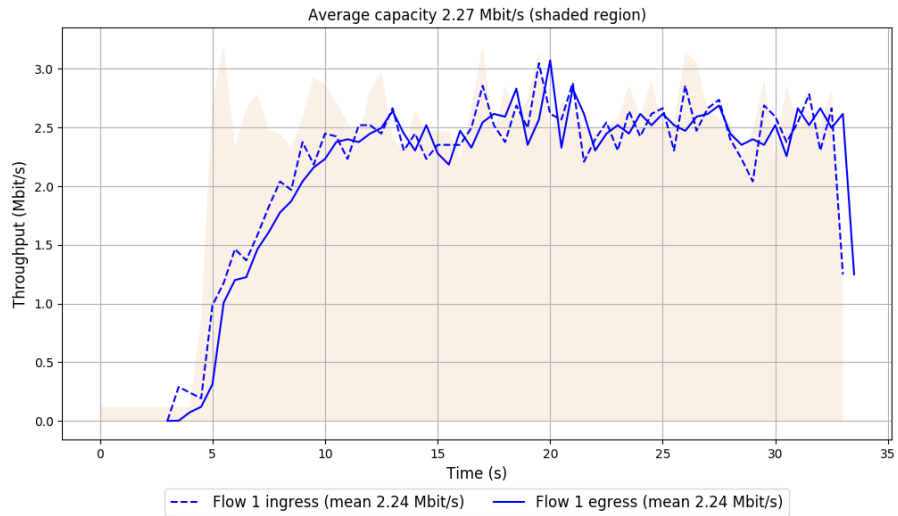
-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 174.985 ms

Loss rate: 0.46%

# Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-07-24 05:52:38

End at: 2018-07-24 05:53:08

# Below is generated by plot.py at 2018-07-24 07:21:02

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.25 Mbit/s (99.2% utilization)

95th percentile per-packet one-way delay: 177.776 ms

Loss rate: 0.46%

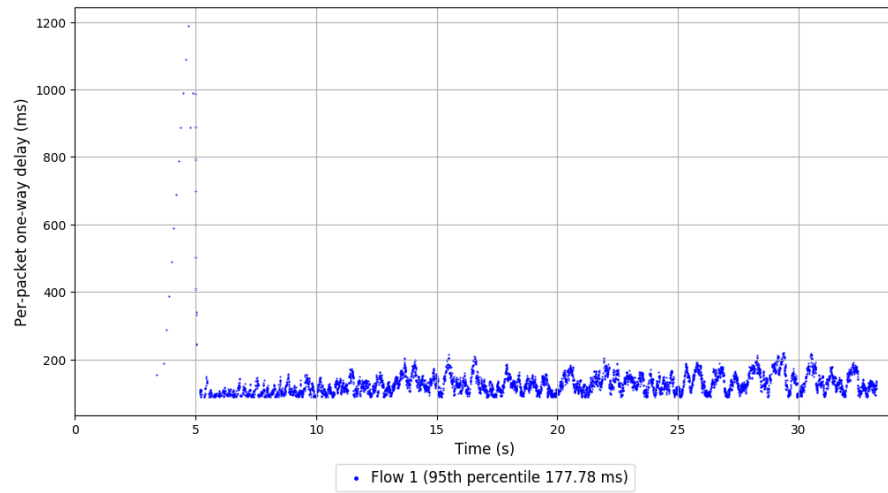
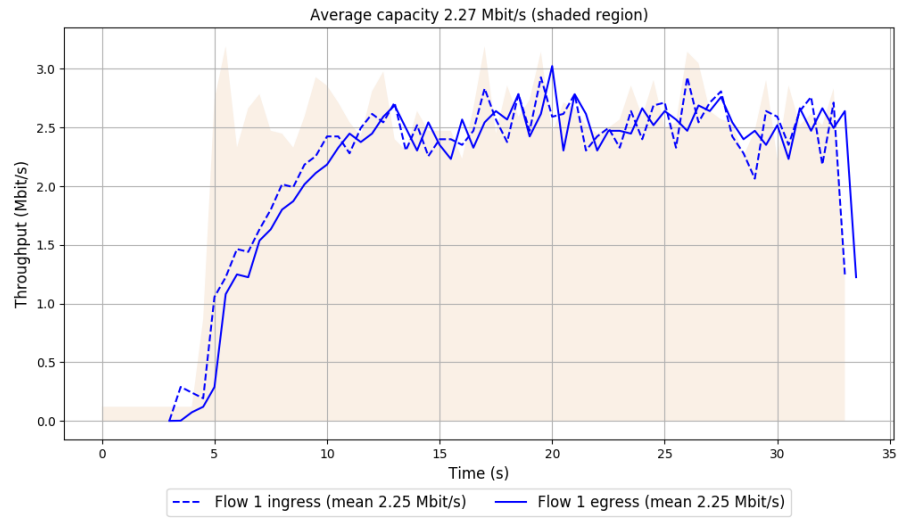
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 177.776 ms

Loss rate: 0.46%

## Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-07-24 06:02:17

End at: 2018-07-24 06:02:47

# Below is generated by plot.py at 2018-07-24 07:21:02

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.25 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 179.529 ms

Loss rate: 0.48%

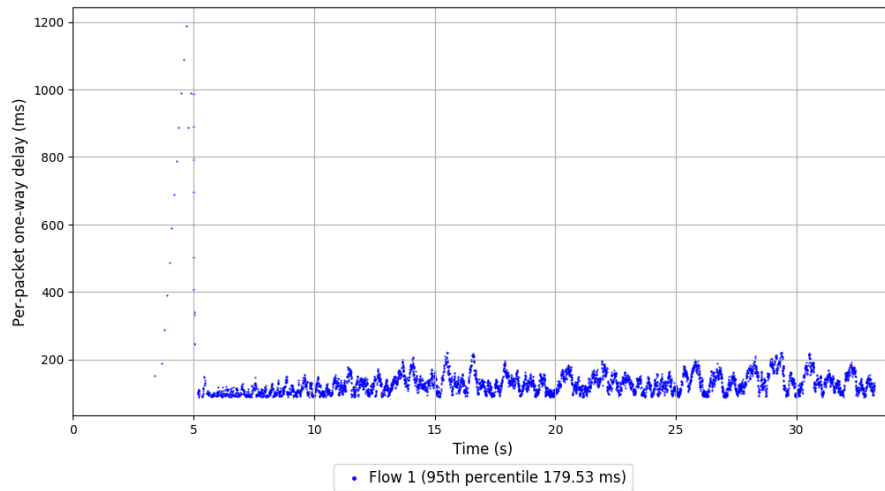
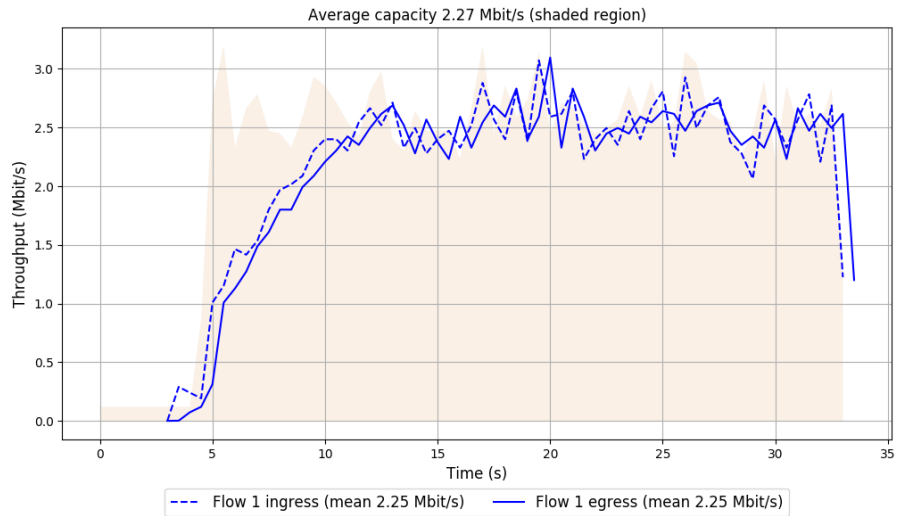
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 179.529 ms

Loss rate: 0.48%

### Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-07-24 06:11:56

End at: 2018-07-24 06:12:26

# Below is generated by plot.py at 2018-07-24 07:21:02

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.24 Mbit/s (98.7% utilization)

95th percentile per-packet one-way delay: 175.442 ms

Loss rate: 0.50%

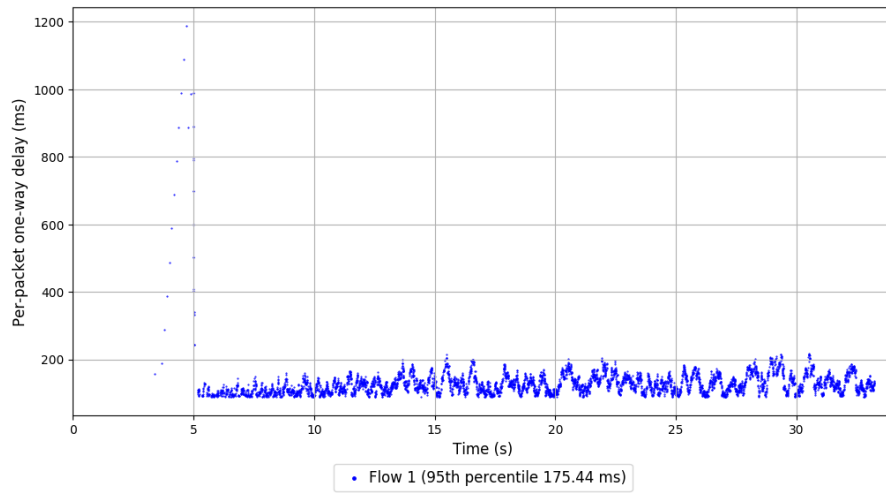
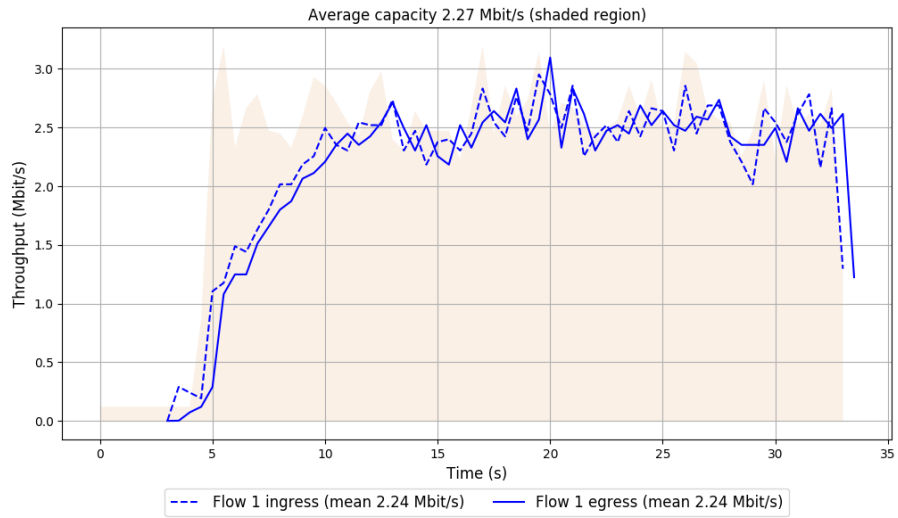
-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 175.442 ms

Loss rate: 0.50%

### Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-07-24 06:21:35

End at: 2018-07-24 06:22:05

# Below is generated by plot.py at 2018-07-24 07:21:02

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.25 Mbit/s (98.8% utilization)

95th percentile per-packet one-way delay: 177.631 ms

Loss rate: 0.46%

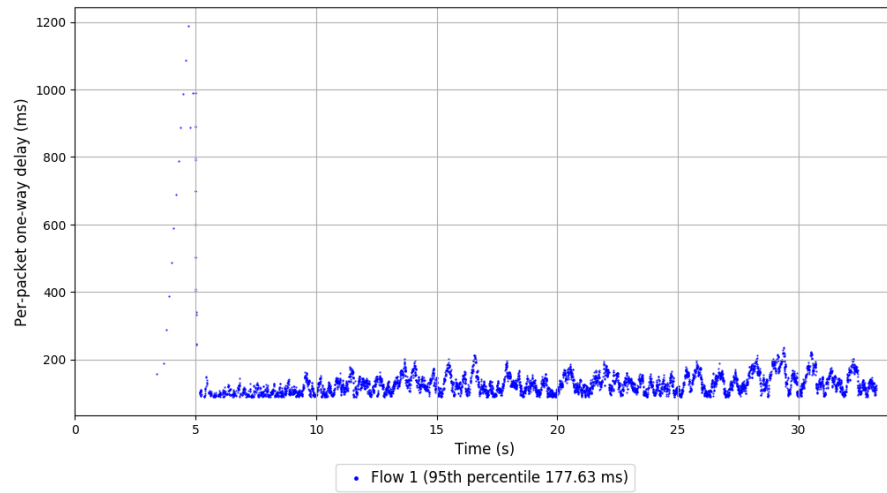
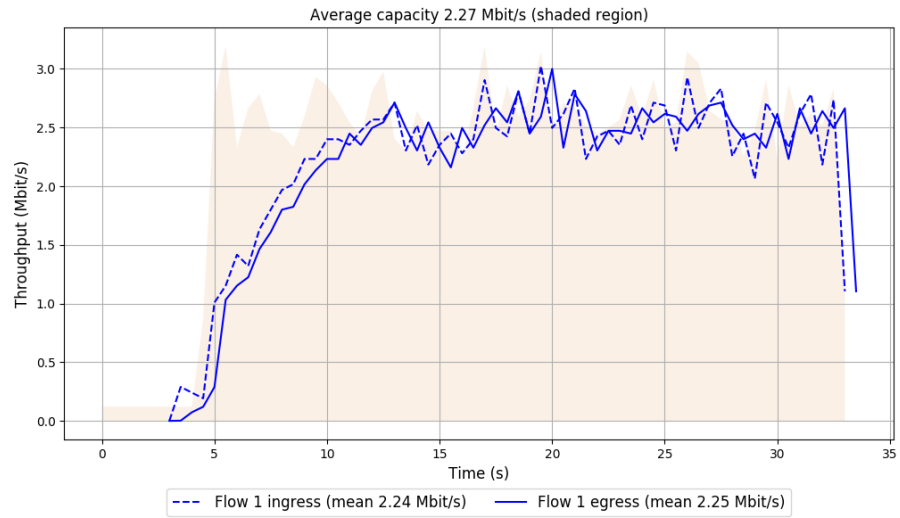
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 177.631 ms

Loss rate: 0.46%

### Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-07-24 06:31:14

End at: 2018-07-24 06:31:44

# Below is generated by plot.py at 2018-07-24 07:21:02

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.24 Mbit/s (98.7% utilization)

95th percentile per-packet one-way delay: 174.110 ms

Loss rate: 0.45%

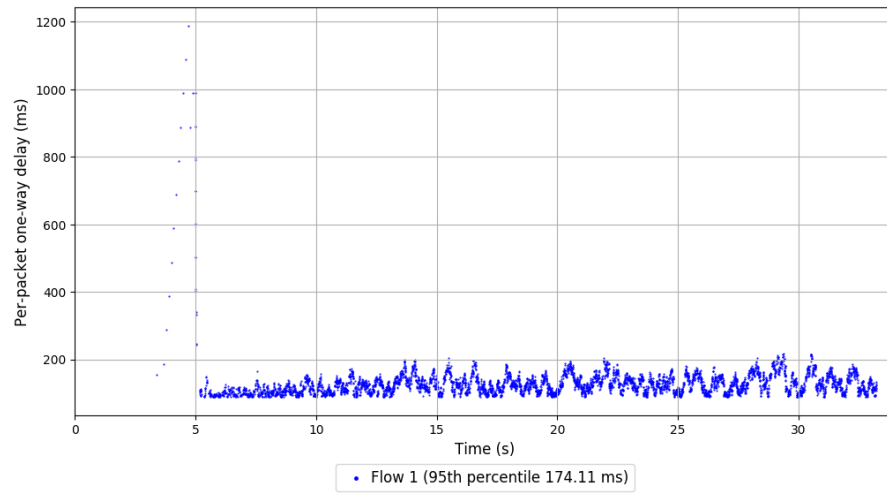
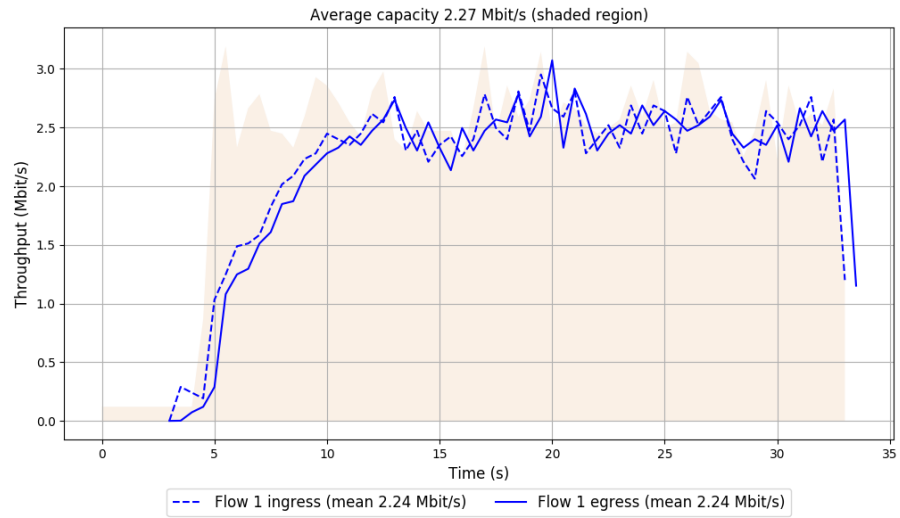
-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 174.110 ms

Loss rate: 0.45%

### Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-07-24 06:40:52

End at: 2018-07-24 06:41:23

# Below is generated by plot.py at 2018-07-24 07:21:05

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.24 Mbit/s (98.6% utilization)

95th percentile per-packet one-way delay: 173.031 ms

Loss rate: 0.45%

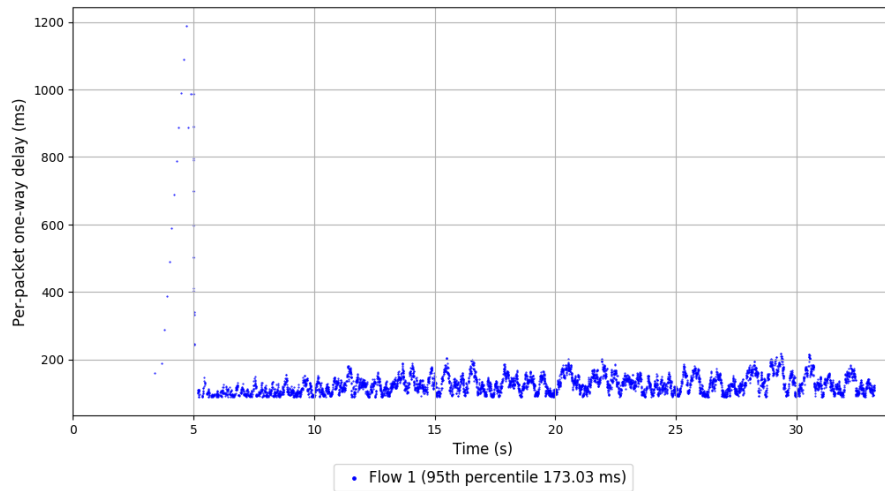
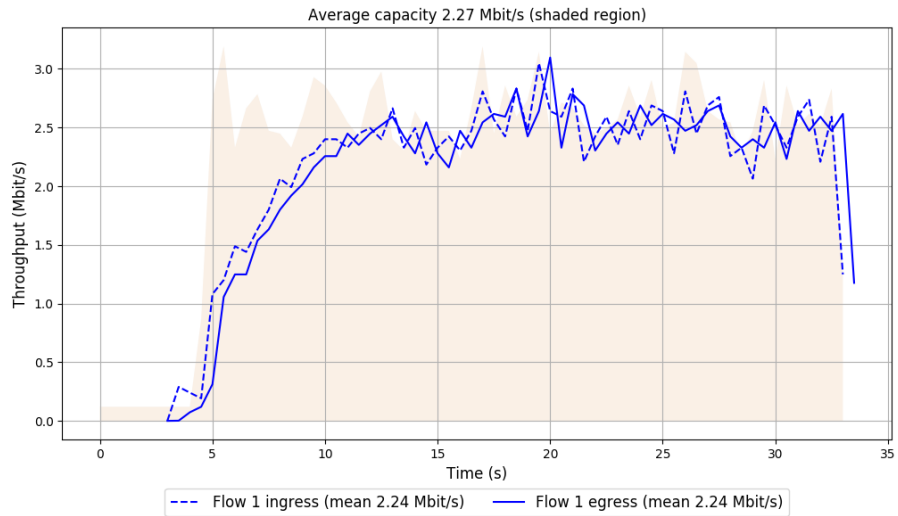
-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 173.031 ms

Loss rate: 0.45%

### Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-07-24 06:50:32

End at: 2018-07-24 06:51:02

# Below is generated by plot.py at 2018-07-24 07:21:06

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.25 Mbit/s (98.9% utilization)

95th percentile per-packet one-way delay: 179.826 ms

Loss rate: 0.50%

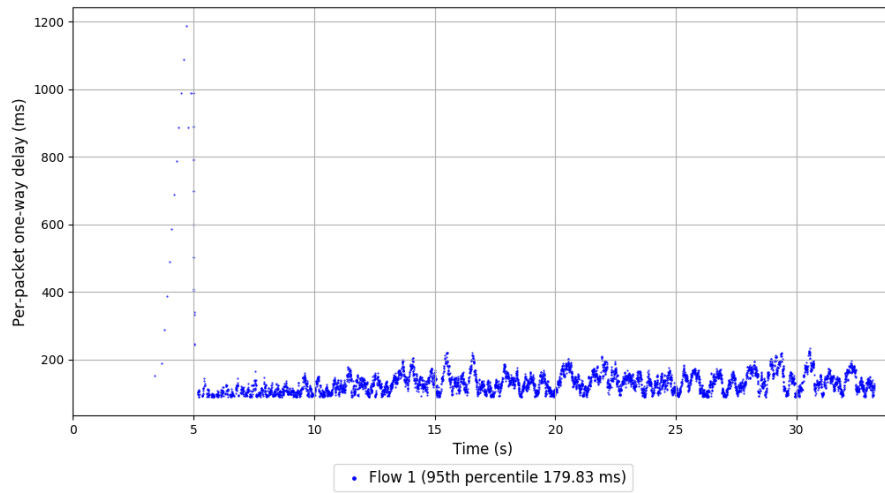
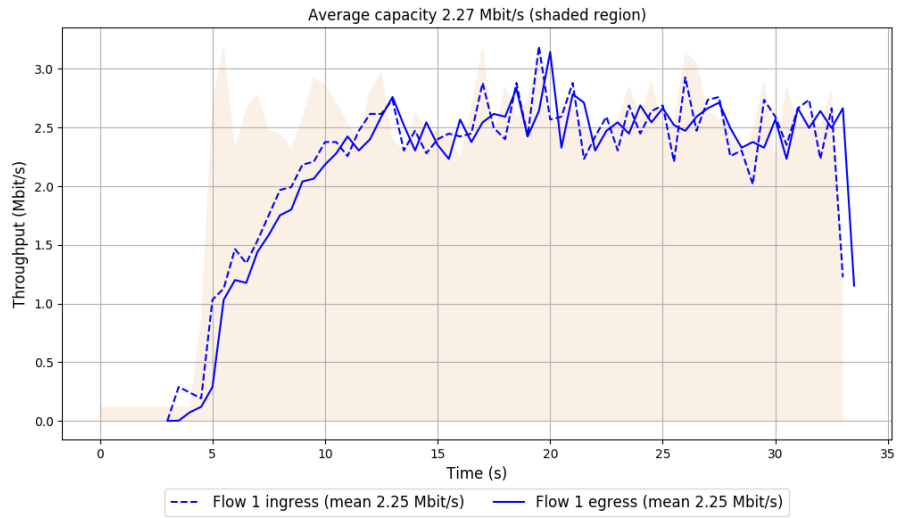
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 179.826 ms

Loss rate: 0.50%

### Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-07-24 07:00:11

End at: 2018-07-24 07:00:41

# Below is generated by plot.py at 2018-07-24 07:21:08

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.26 Mbit/s (99.6% utilization)

95th percentile per-packet one-way delay: 179.675 ms

Loss rate: 0.42%

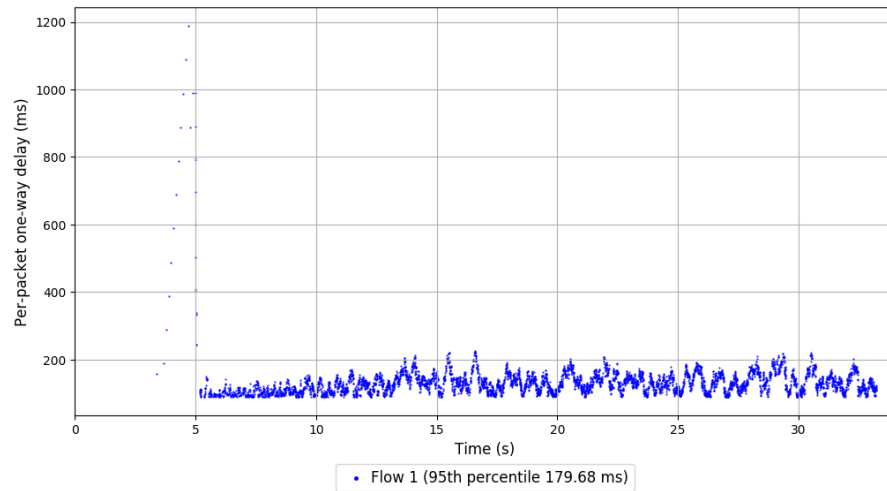
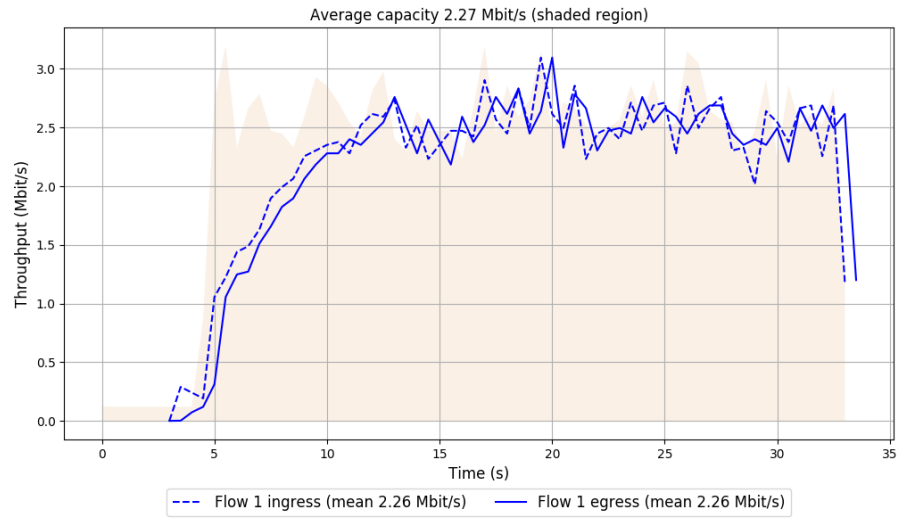
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 179.675 ms

Loss rate: 0.42%

### Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-07-24 07:09:50

End at: 2018-07-24 07:10:20

# Below is generated by plot.py at 2018-07-24 07:21:09

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.26 Mbit/s (99.3% utilization)

95th percentile per-packet one-way delay: 180.584 ms

Loss rate: 0.48%

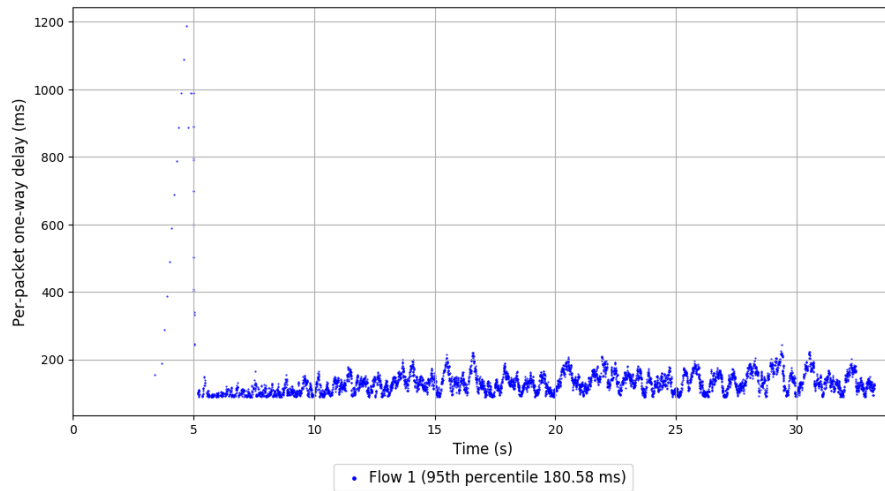
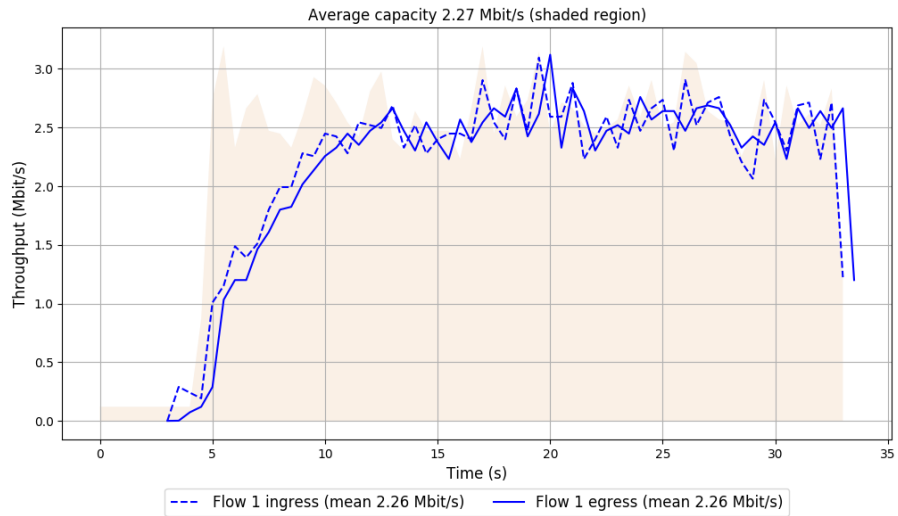
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 180.584 ms

Loss rate: 0.48%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-07-24 05:41:51

End at: 2018-07-24 05:42:21

# Below is generated by plot.py at 2018-07-24 07:21:09

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.36 Mbit/s (104.1% utilization)

95th percentile per-packet one-way delay: 711.654 ms

Loss rate: 7.25%

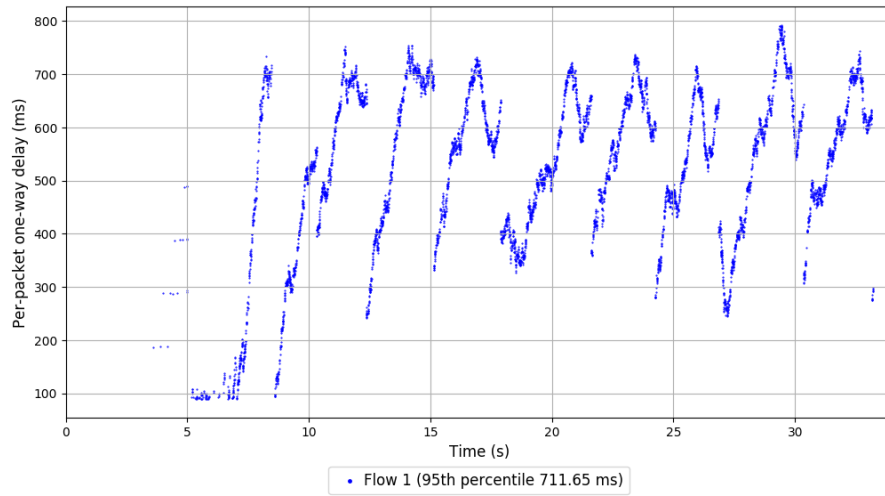
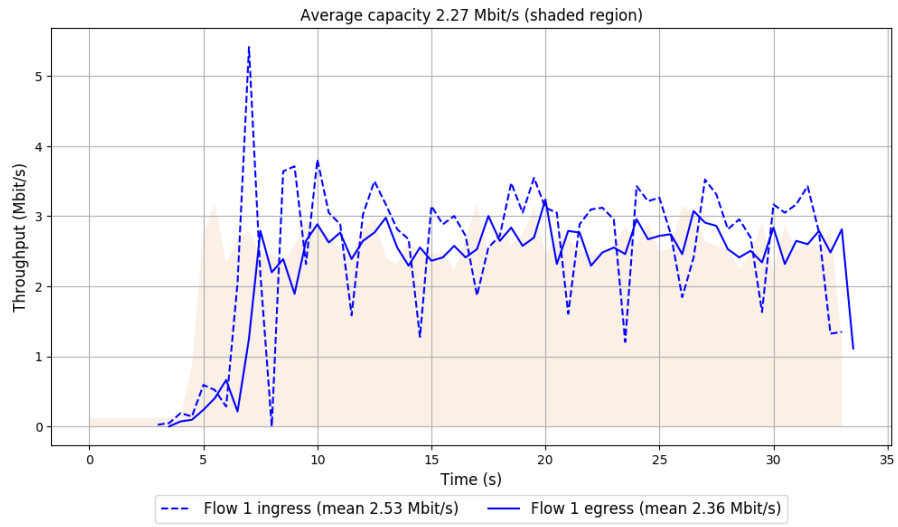
-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 711.654 ms

Loss rate: 7.25%

# Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-07-24 05:51:30

End at: 2018-07-24 05:52:00

# Below is generated by plot.py at 2018-07-24 07:21:11

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.42 Mbit/s (106.6% utilization)

95th percentile per-packet one-way delay: 712.651 ms

Loss rate: 8.95%

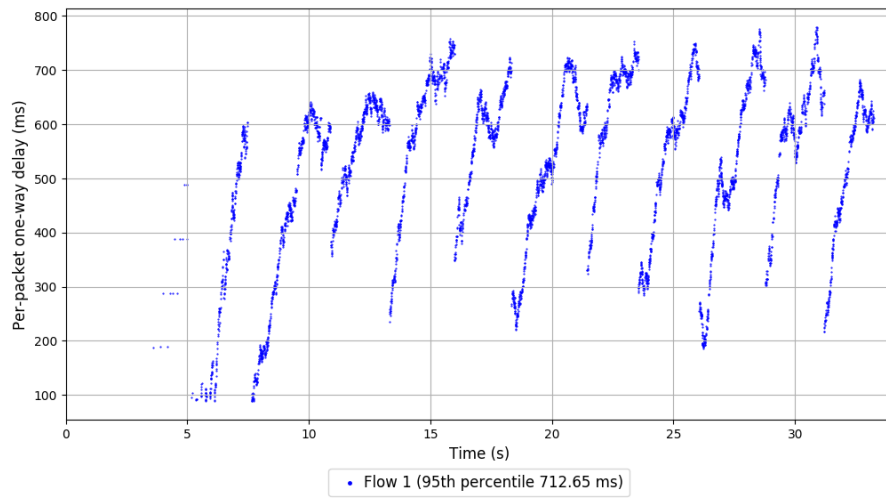
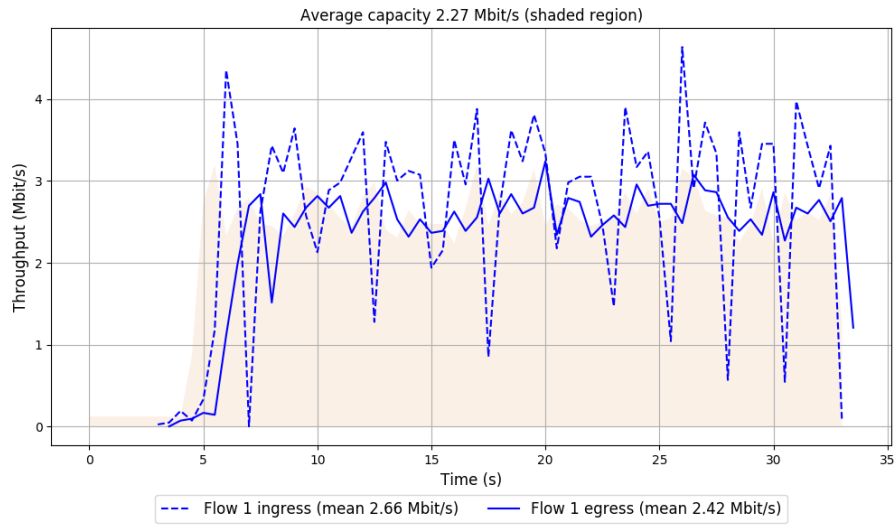
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 712.651 ms

Loss rate: 8.95%

## Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-07-24 06:01:09

End at: 2018-07-24 06:01:39

# Below is generated by plot.py at 2018-07-24 07:21:11

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.37 Mbit/s (104.5% utilization)

95th percentile per-packet one-way delay: 718.143 ms

Loss rate: 8.79%

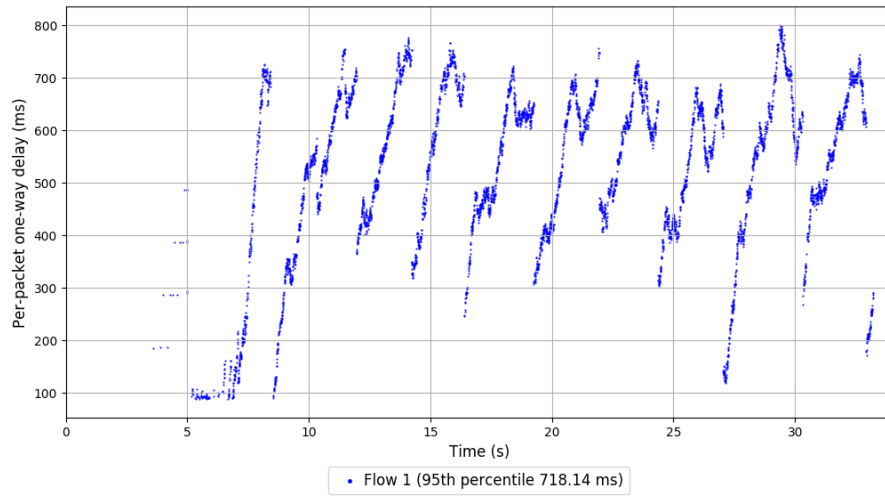
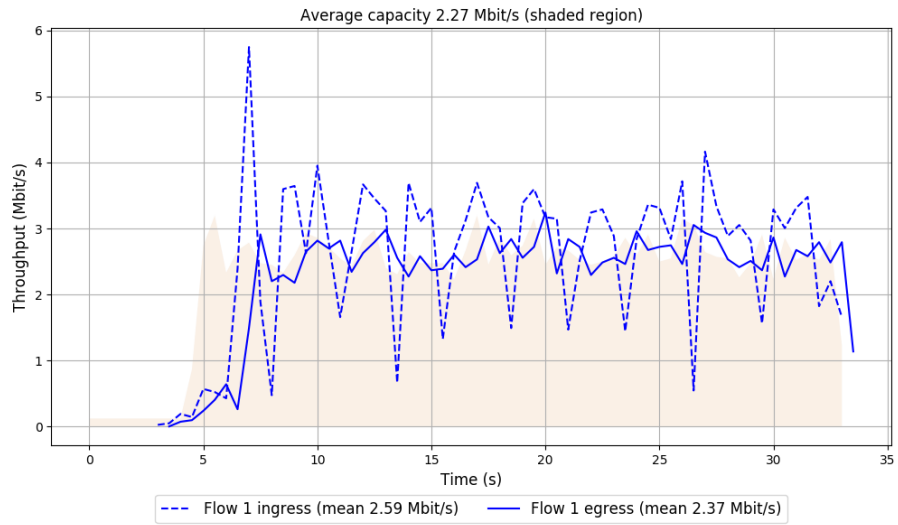
-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 718.143 ms

Loss rate: 8.79%

### Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-07-24 06:10:47

End at: 2018-07-24 06:11:17

# Below is generated by plot.py at 2018-07-24 07:21:12

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.38 Mbit/s (104.7% utilization)

95th percentile per-packet one-way delay: 720.082 ms

Loss rate: 10.69%

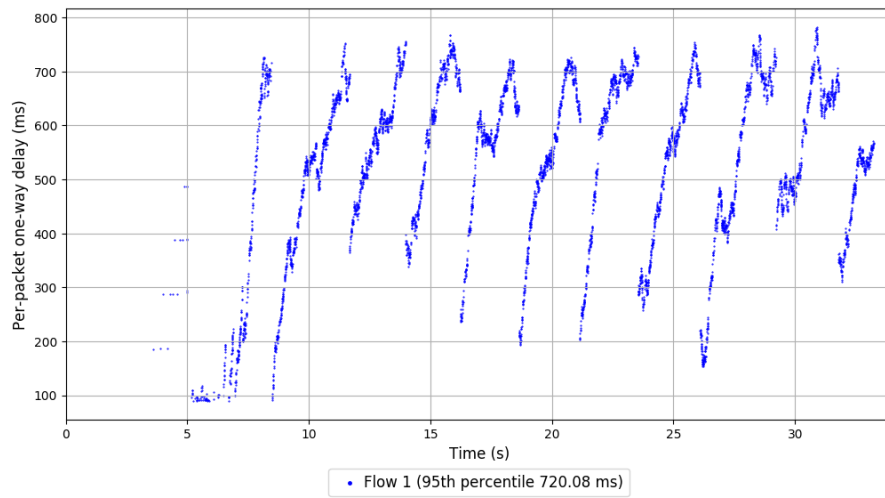
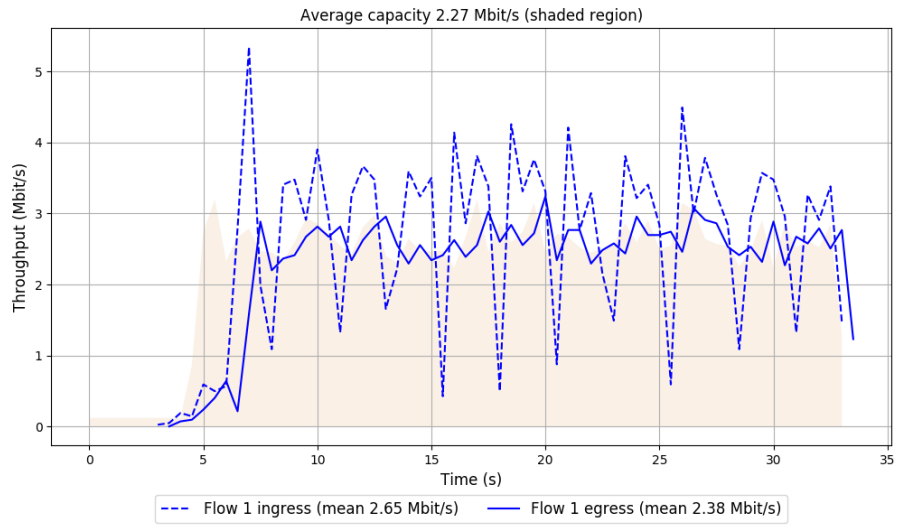
-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 720.082 ms

Loss rate: 10.69%

### Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-07-24 06:20:26

End at: 2018-07-24 06:20:56

# Below is generated by plot.py at 2018-07-24 07:21:15

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.37 Mbit/s (104.5% utilization)

95th percentile per-packet one-way delay: 705.573 ms

Loss rate: 10.01%

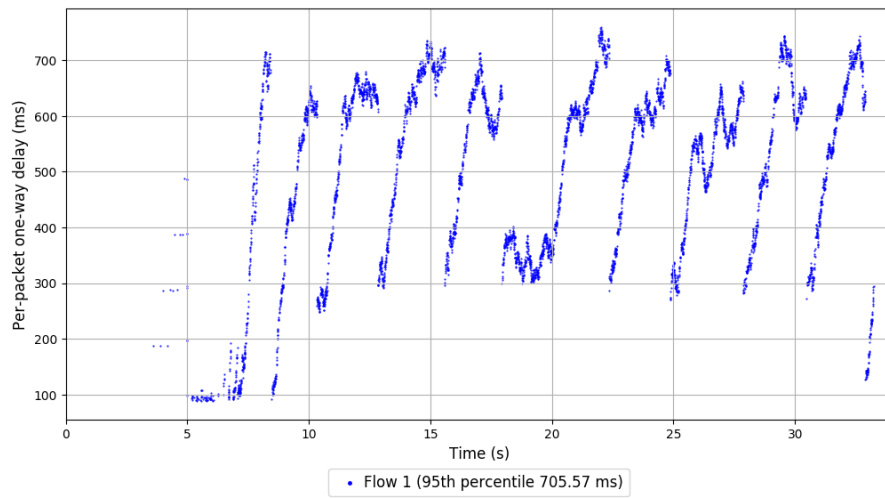
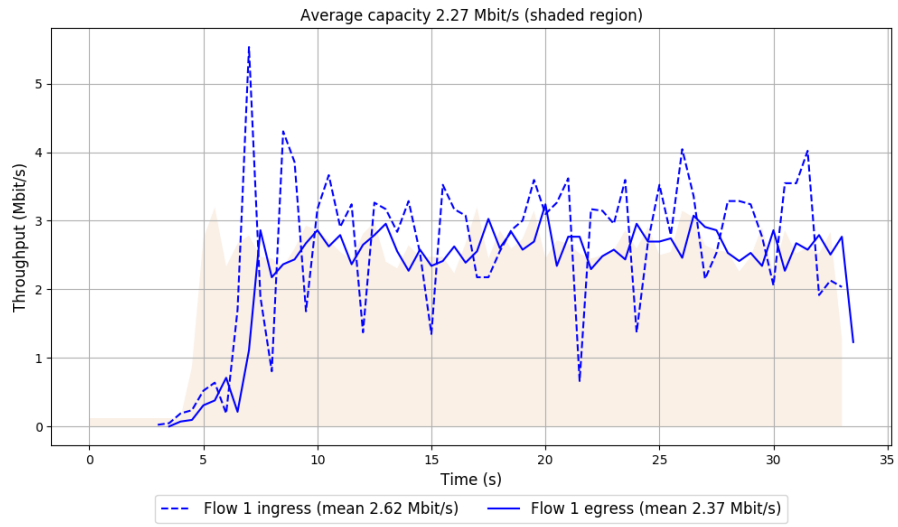
-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 705.573 ms

Loss rate: 10.01%

### Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-07-24 06:30:05

End at: 2018-07-24 06:30:35

# Below is generated by plot.py at 2018-07-24 07:21:16

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.33 Mbit/s (102.7% utilization)

95th percentile per-packet one-way delay: 718.414 ms

Loss rate: 7.28%

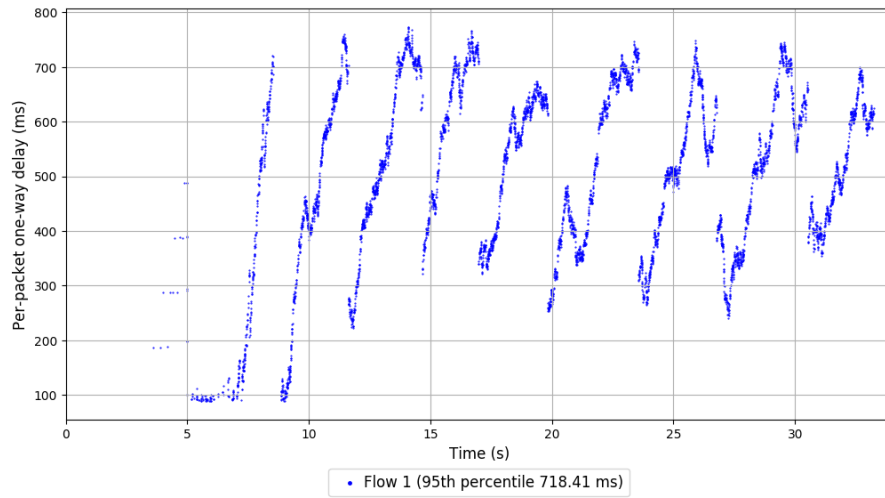
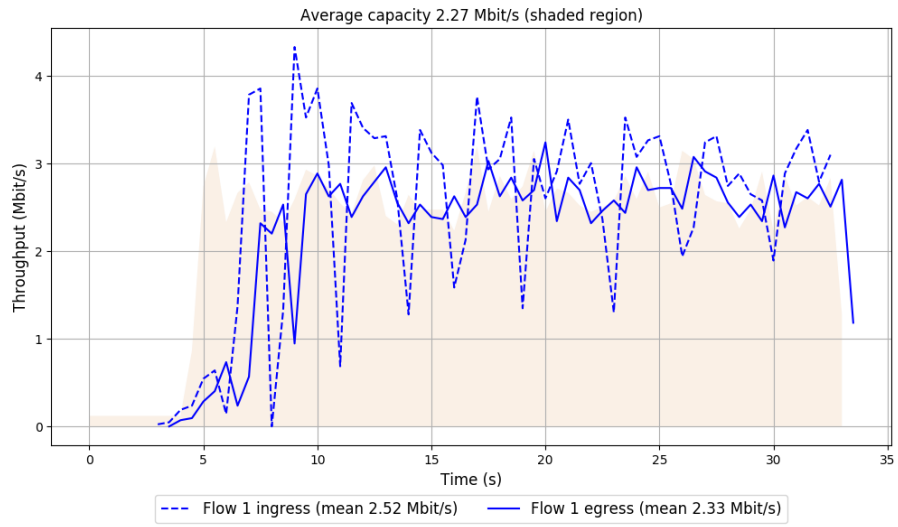
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 718.414 ms

Loss rate: 7.28%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-07-24 06:39:44

End at: 2018-07-24 06:40:14

# Below is generated by plot.py at 2018-07-24 07:21:18

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.37 Mbit/s (104.1% utilization)

95th percentile per-packet one-way delay: 716.234 ms

Loss rate: 8.59%

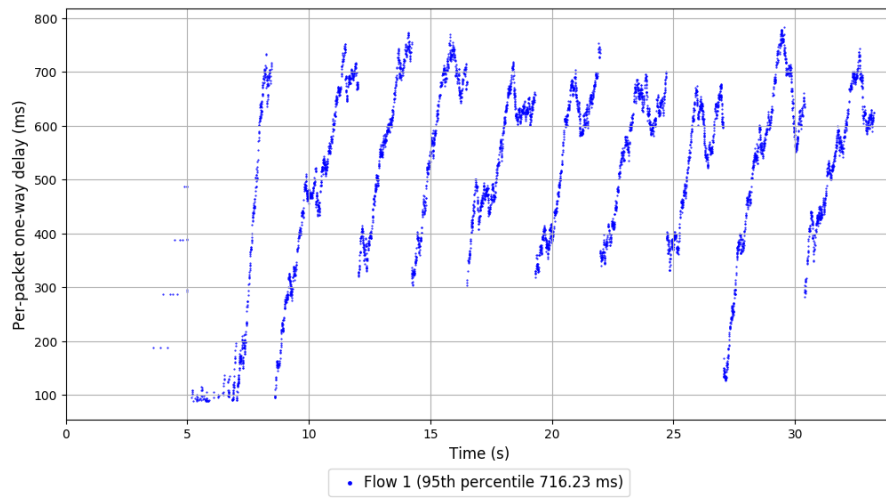
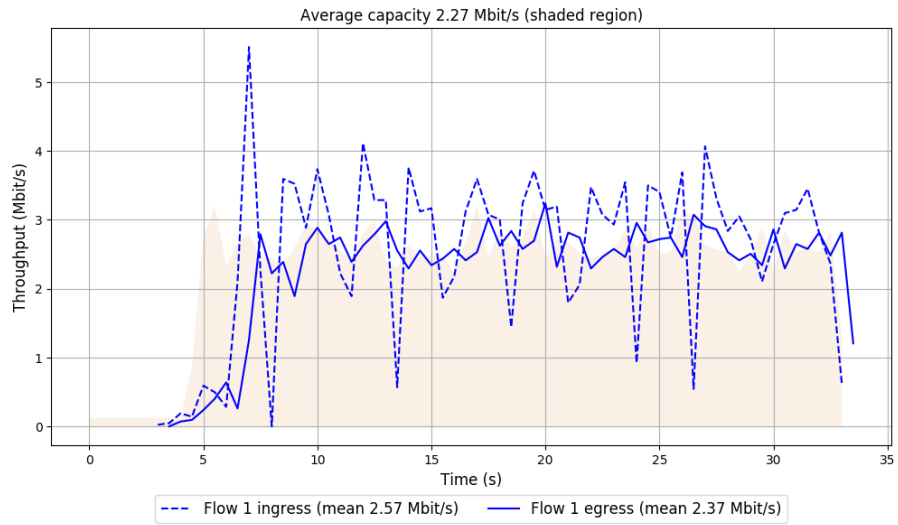
-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 716.234 ms

Loss rate: 8.59%

### Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-07-24 06:49:23

End at: 2018-07-24 06:49:53

# Below is generated by plot.py at 2018-07-24 07:21:19

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.36 Mbit/s (103.7% utilization)

95th percentile per-packet one-way delay: 718.237 ms

Loss rate: 8.29%

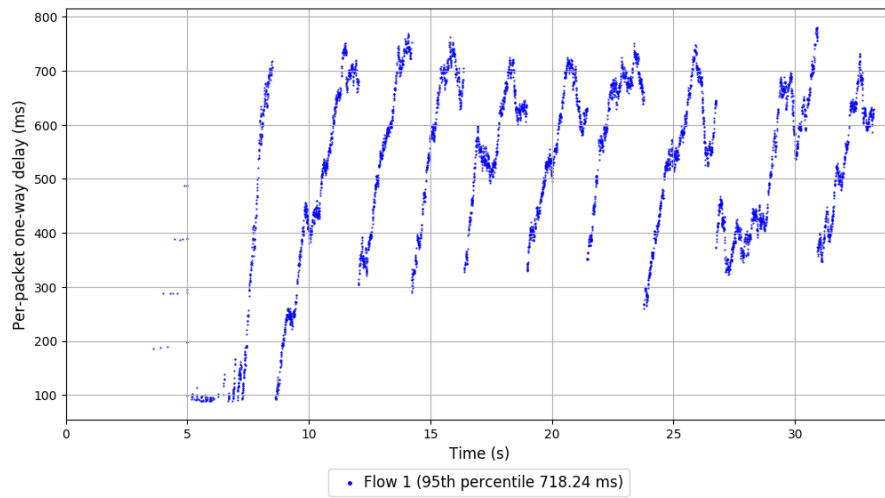
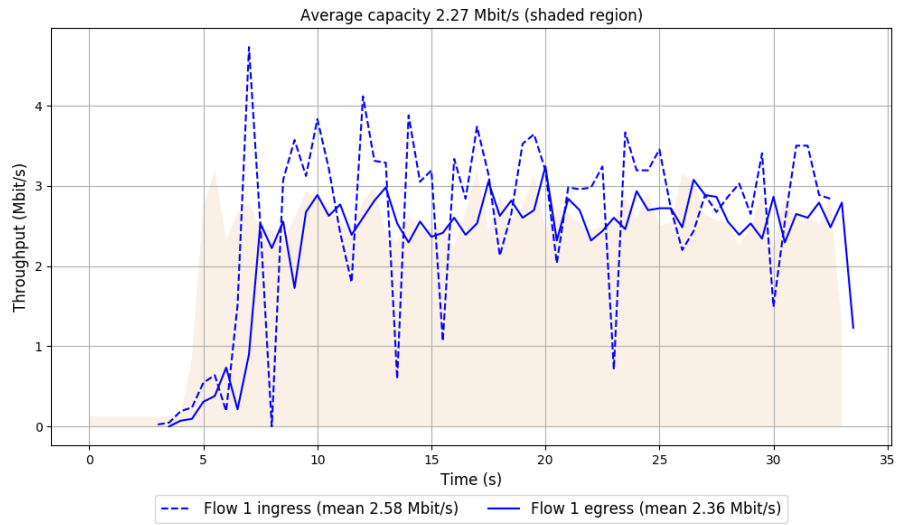
-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 718.237 ms

Loss rate: 8.29%

### Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-07-24 06:59:02

End at: 2018-07-24 06:59:32

# Below is generated by plot.py at 2018-07-24 07:21:20

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.37 Mbit/s (104.3% utilization)

95th percentile per-packet one-way delay: 717.938 ms

Loss rate: 7.90%

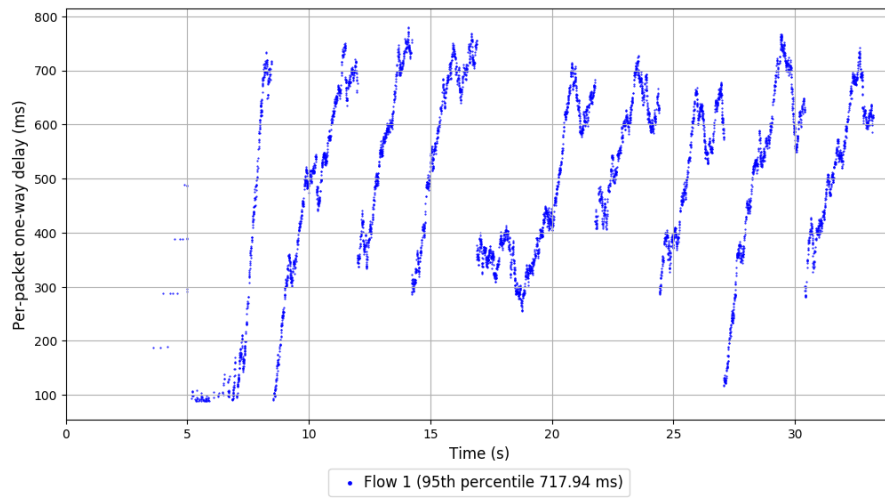
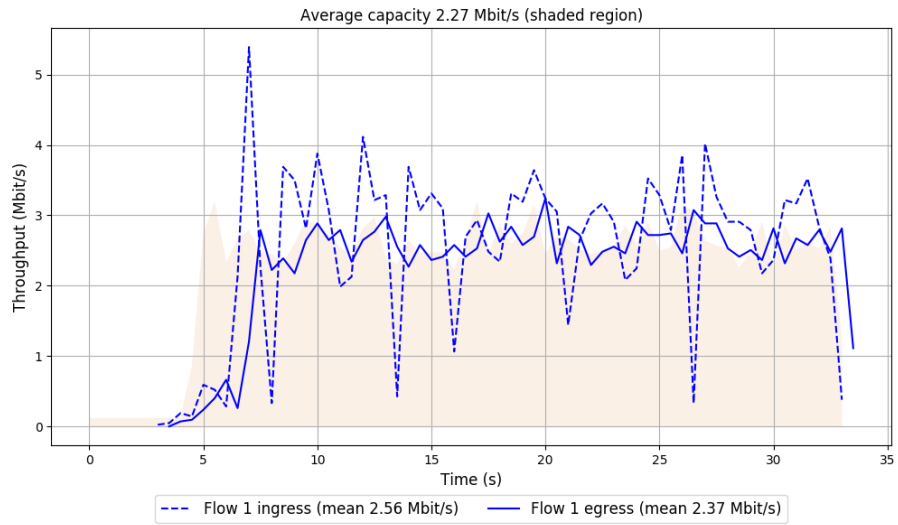
-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 717.938 ms

Loss rate: 7.90%

### Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-07-24 07:08:42

End at: 2018-07-24 07:09:12

# Below is generated by plot.py at 2018-07-24 07:21:20

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.34 Mbit/s (103.1% utilization)

95th percentile per-packet one-way delay: 721.088 ms

Loss rate: 9.28%

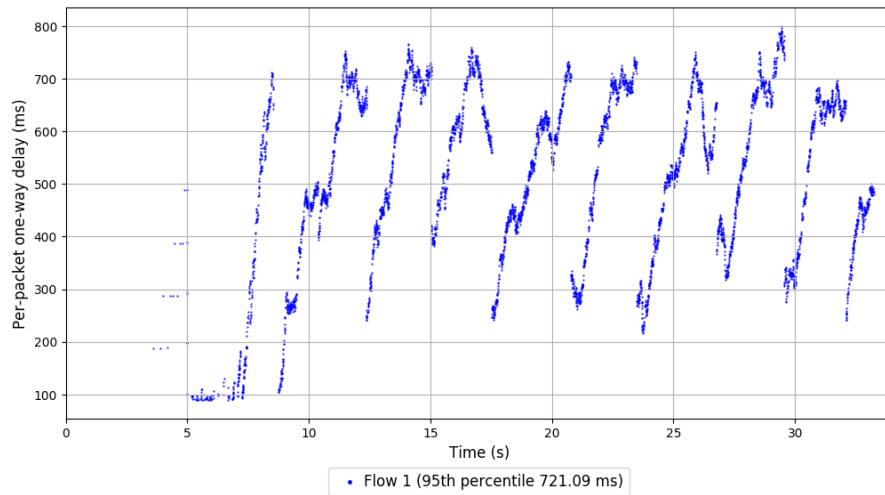
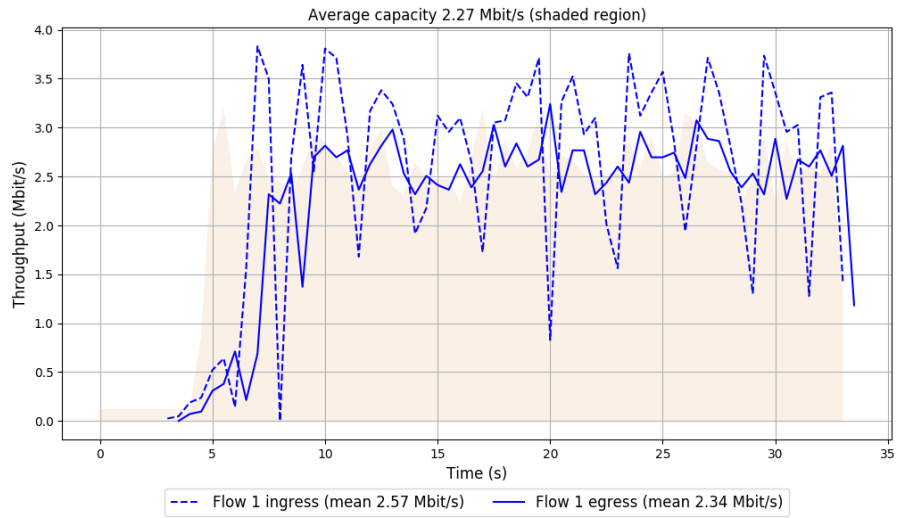
-- Flow 1:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 721.088 ms

Loss rate: 9.28%

Run 10: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-07-24 05:50:22

End at: 2018-07-24 05:50:52

# Below is generated by plot.py at 2018-07-24 07:21:21

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.52 Mbit/s (111.0% utilization)

95th percentile per-packet one-way delay: 720.812 ms

Loss rate: 27.29%

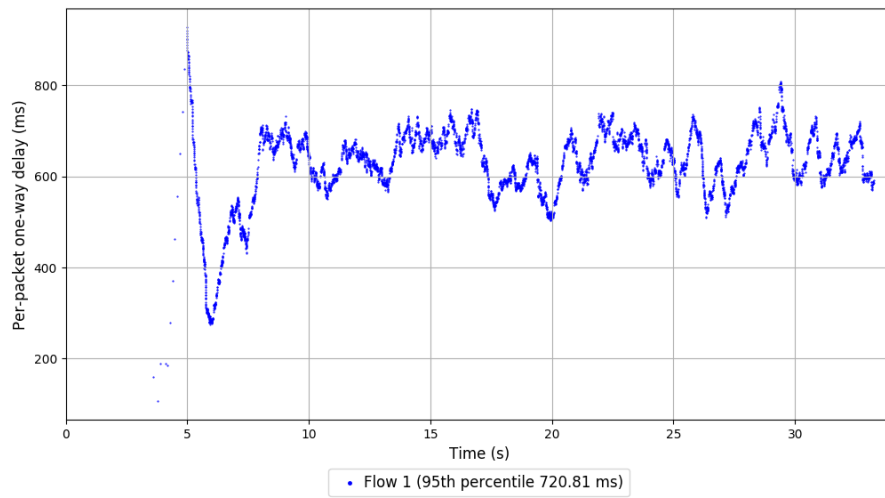
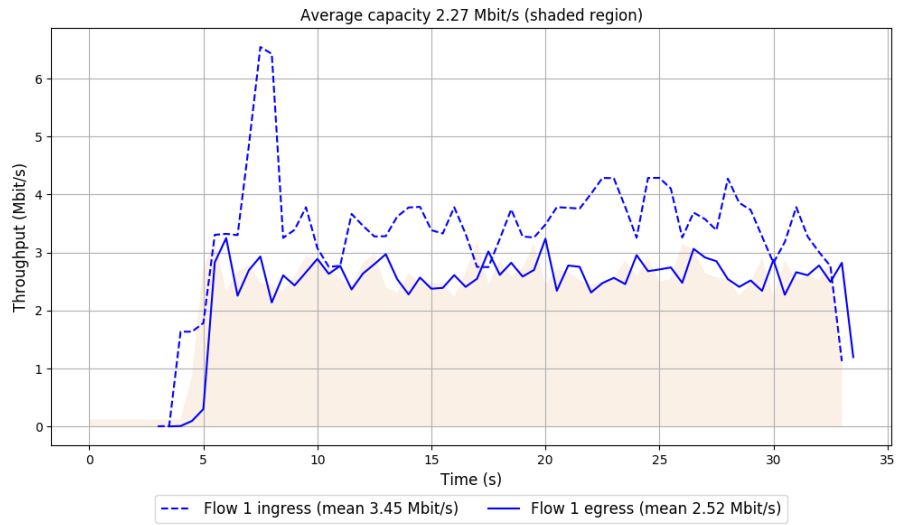
-- Flow 1:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 720.812 ms

Loss rate: 27.29%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-07-24 06:00:01

End at: 2018-07-24 06:00:31

# Below is generated by plot.py at 2018-07-24 07:21:23

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.26 Mbit/s (99.6% utilization)

95th percentile per-packet one-way delay: 704.732 ms

Loss rate: 15.40%

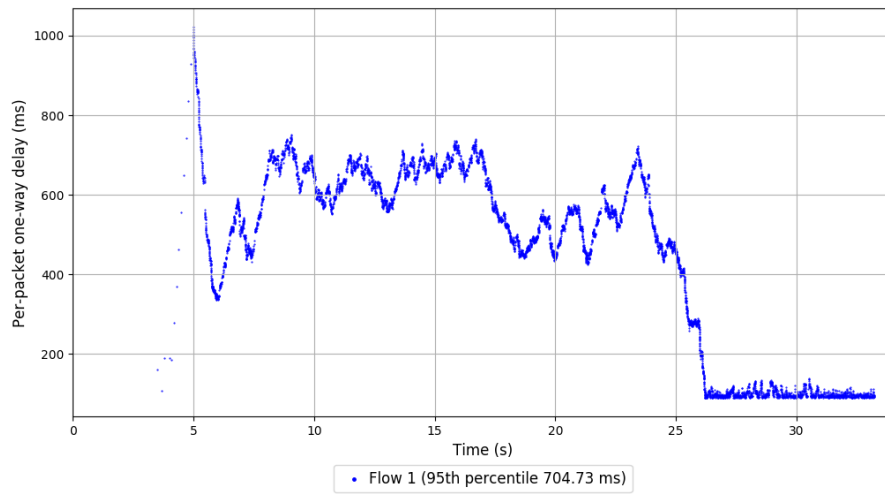
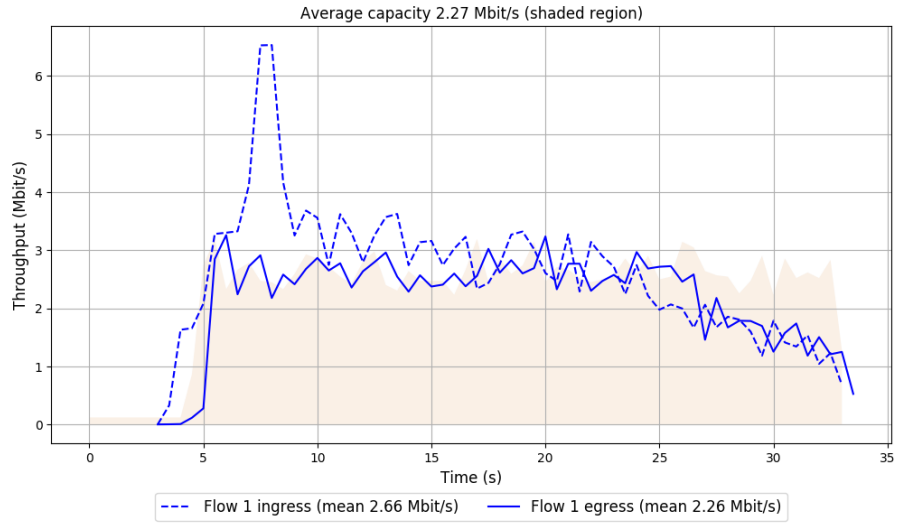
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 704.732 ms

Loss rate: 15.40%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-07-24 06:09:39

End at: 2018-07-24 06:10:09

# Below is generated by plot.py at 2018-07-24 07:21:27

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.34 Mbit/s (102.8% utilization)

95th percentile per-packet one-way delay: 703.527 ms

Loss rate: 15.12%

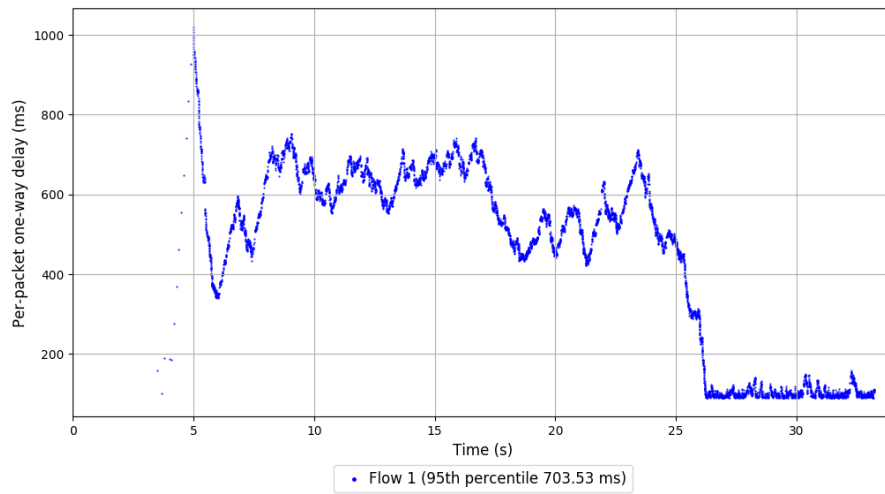
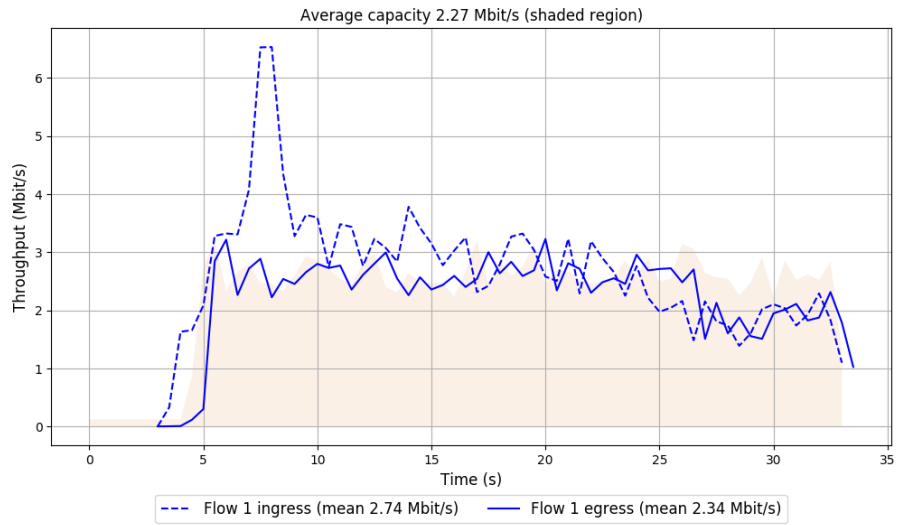
-- Flow 1:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 703.527 ms

Loss rate: 15.12%

### Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-07-24 06:19:18

End at: 2018-07-24 06:19:48

# Below is generated by plot.py at 2018-07-24 07:21:27

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.08 Mbit/s (91.7% utilization)

95th percentile per-packet one-way delay: 708.597 ms

Loss rate: 14.02%

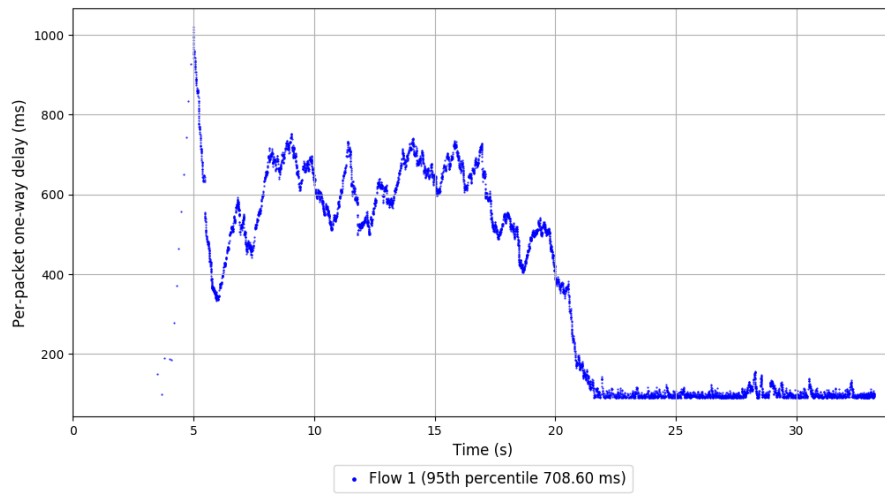
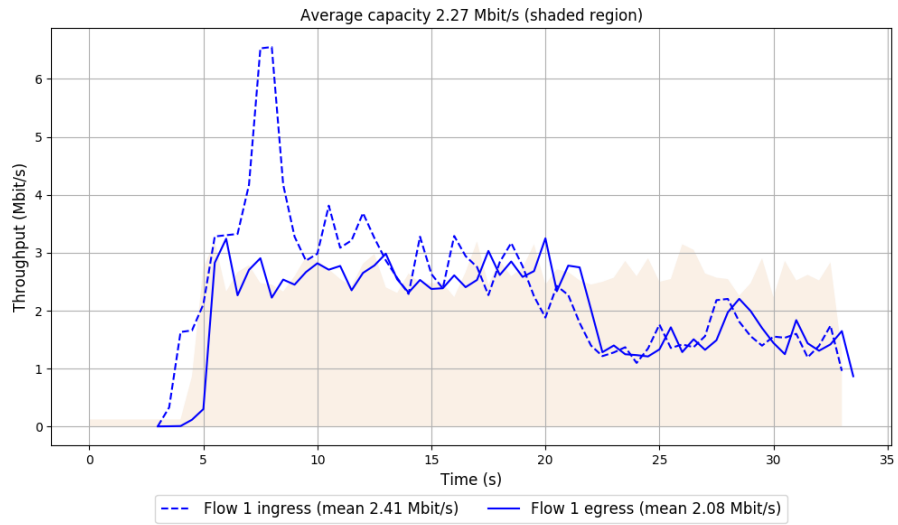
-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 708.597 ms

Loss rate: 14.02%

### Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2018-07-24 06:28:57

End at: 2018-07-24 06:29:27

# Below is generated by plot.py at 2018-07-24 07:21:28

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.11 Mbit/s (92.9% utilization)

95th percentile per-packet one-way delay: 708.073 ms

Loss rate: 13.63%

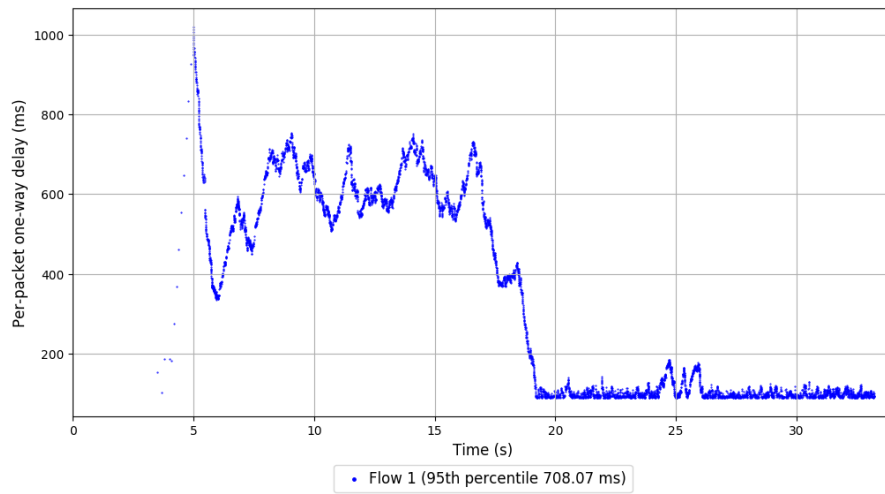
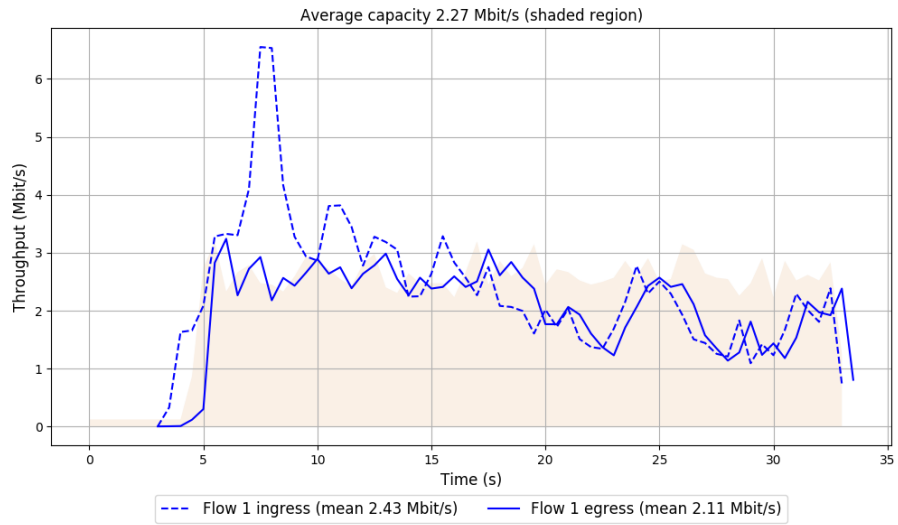
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 708.073 ms

Loss rate: 13.63%

### Run 5: Report of PCC-Vivace — Data Link



Run 6: Statistics of PCC-Vivace

Start at: 2018-07-24 06:38:36

End at: 2018-07-24 06:39:06

# Below is generated by plot.py at 2018-07-24 07:21:29

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.20 Mbit/s (96.7% utilization)

95th percentile per-packet one-way delay: 698.761 ms

Loss rate: 13.28%

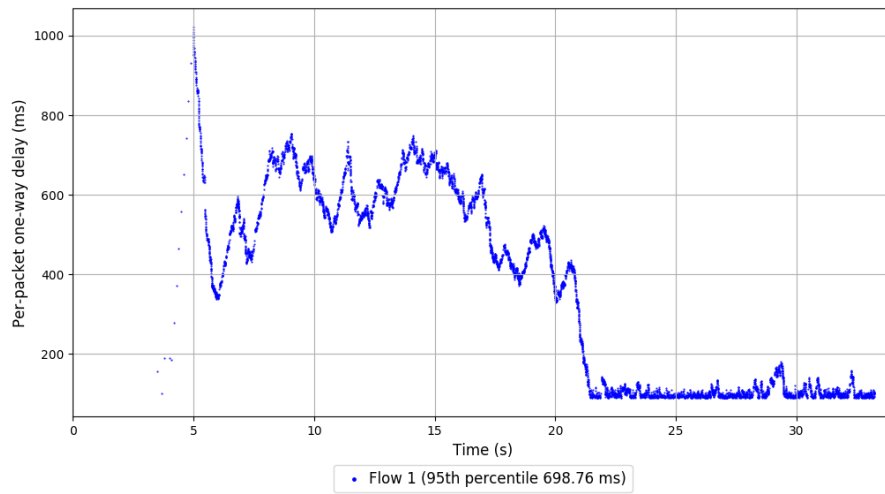
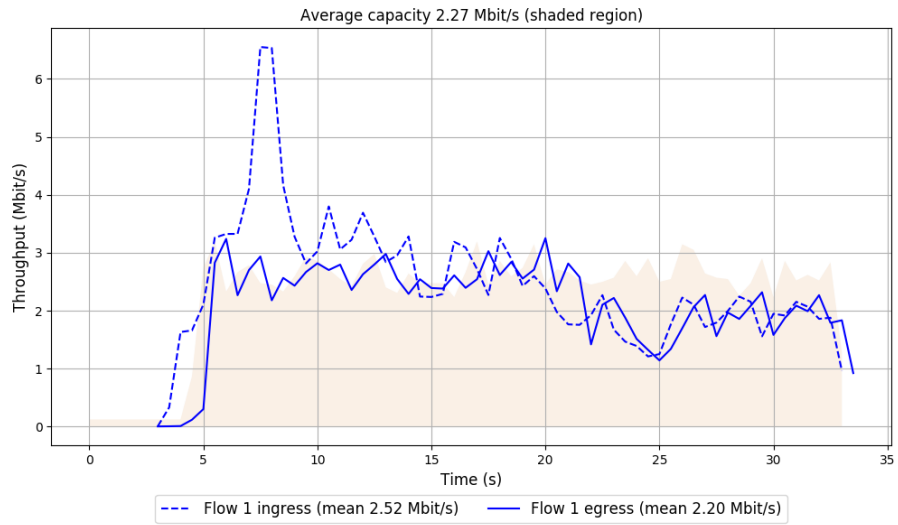
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 698.761 ms

Loss rate: 13.28%

### Run 6: Report of PCC-Vivace — Data Link



Run 7: Statistics of PCC-Vivace

Start at: 2018-07-24 06:48:15

End at: 2018-07-24 06:48:45

# Below is generated by plot.py at 2018-07-24 07:21:31

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.51 Mbit/s (110.6% utilization)

95th percentile per-packet one-way delay: 727.890 ms

Loss rate: 30.71%

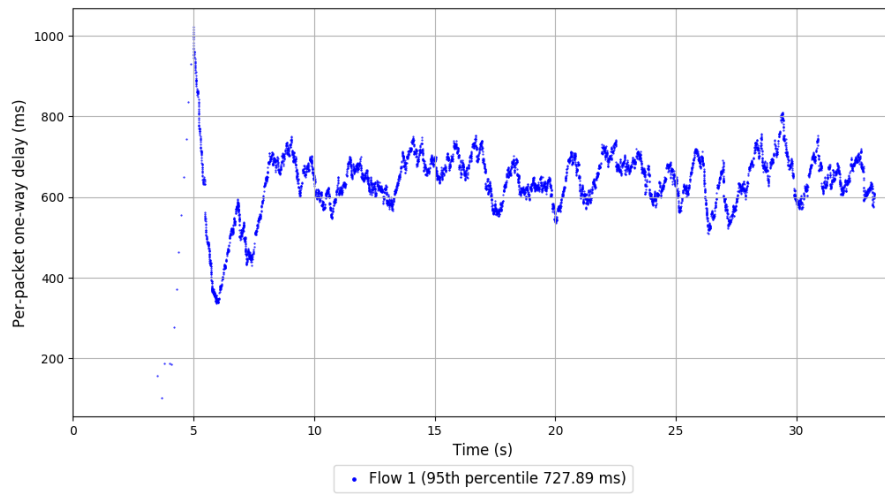
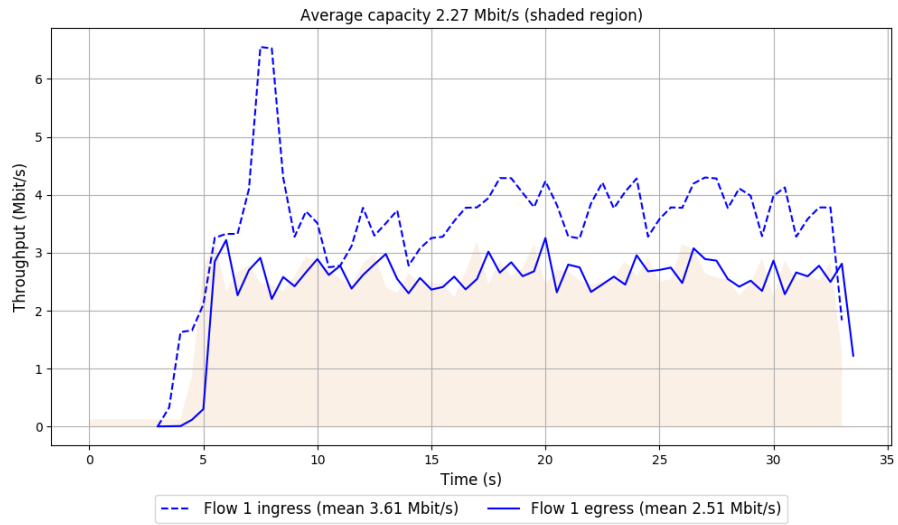
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 727.890 ms

Loss rate: 30.71%

Run 7: Report of PCC-Vivace — Data Link



Run 8: Statistics of PCC-Vivace

Start at: 2018-07-24 06:57:54

End at: 2018-07-24 06:58:24

# Below is generated by plot.py at 2018-07-24 07:21:31

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.07 Mbit/s (91.1% utilization)

95th percentile per-packet one-way delay: 701.720 ms

Loss rate: 13.66%

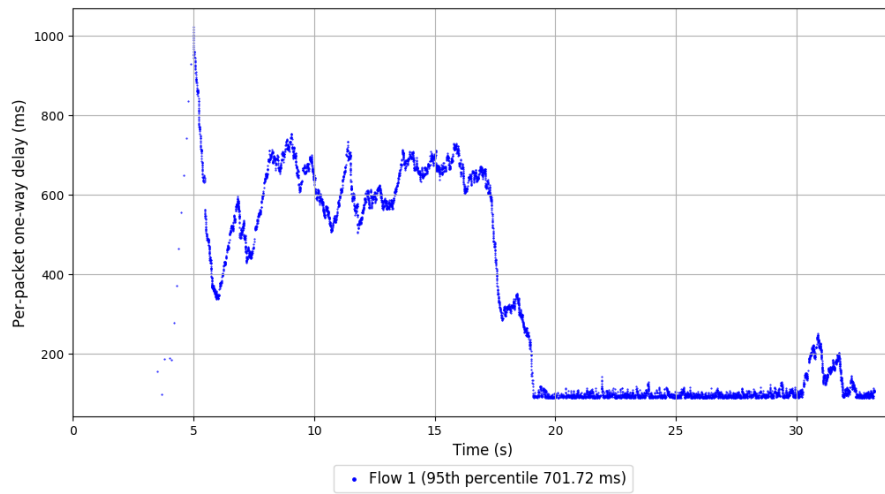
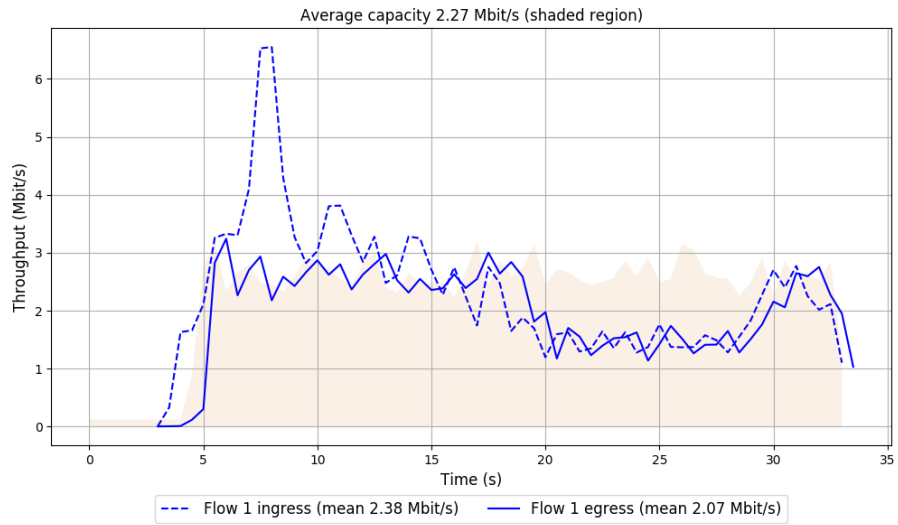
-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 701.720 ms

Loss rate: 13.66%

Run 8: Report of PCC-Vivace — Data Link



Run 9: Statistics of PCC-Vivace

Start at: 2018-07-24 07:07:33

End at: 2018-07-24 07:08:04

# Below is generated by plot.py at 2018-07-24 07:21:32

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.48 Mbit/s (109.1% utilization)

95th percentile per-packet one-way delay: 722.097 ms

Loss rate: 22.45%

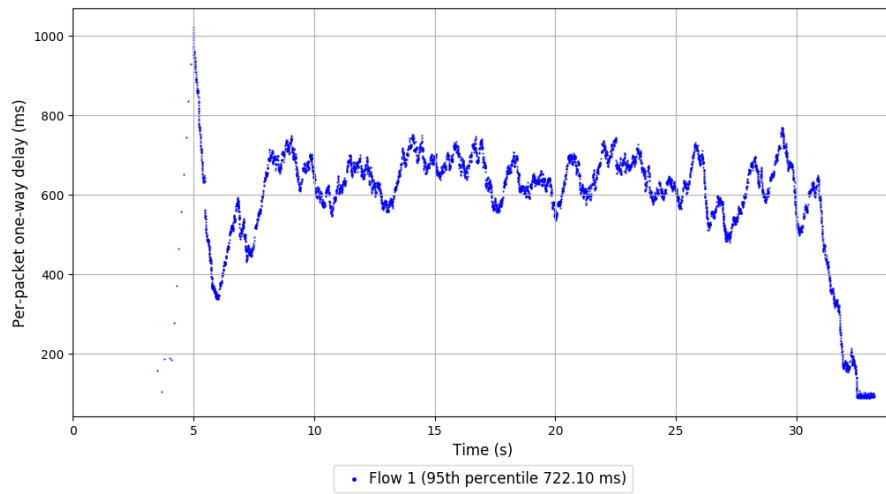
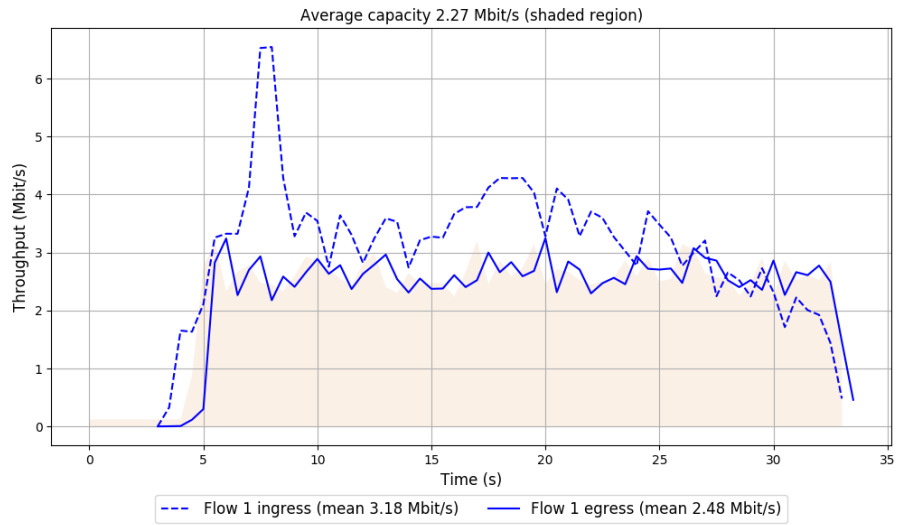
-- Flow 1:

Average throughput: 2.48 Mbit/s

95th percentile per-packet one-way delay: 722.097 ms

Loss rate: 22.45%

Run 9: Report of PCC-Vivace — Data Link



Run 10: Statistics of PCC-Vivace

Start at: 2018-07-24 07:17:13

End at: 2018-07-24 07:17:43

# Below is generated by plot.py at 2018-07-24 07:21:34

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.12 Mbit/s (93.3% utilization)

95th percentile per-packet one-way delay: 703.180 ms

Loss rate: 13.14%

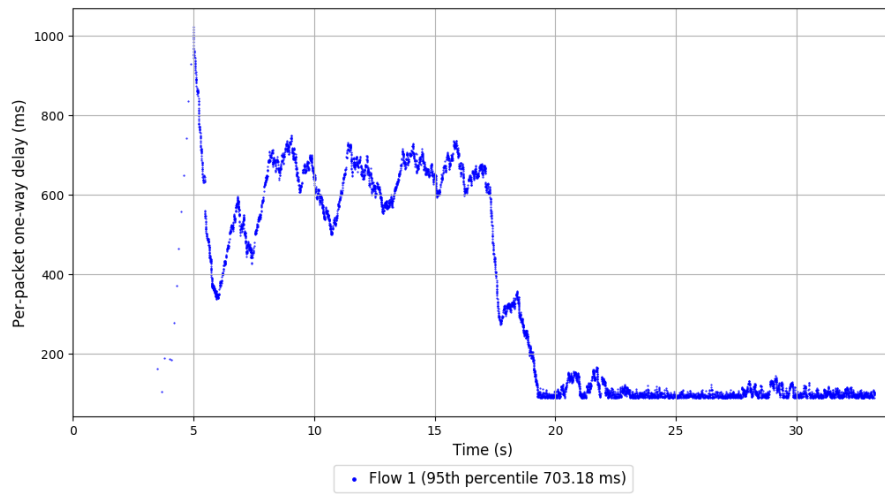
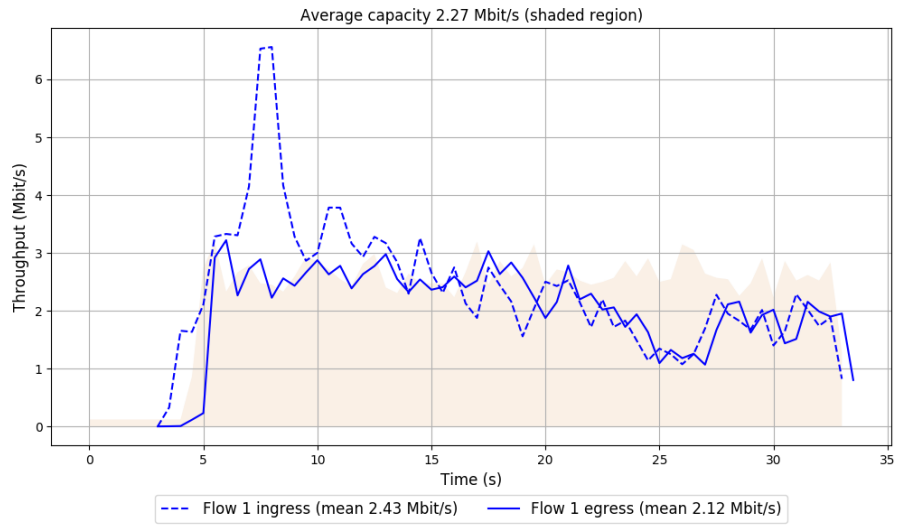
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 703.180 ms

Loss rate: 13.14%

Run 10: Report of PCC-Vivace — Data Link

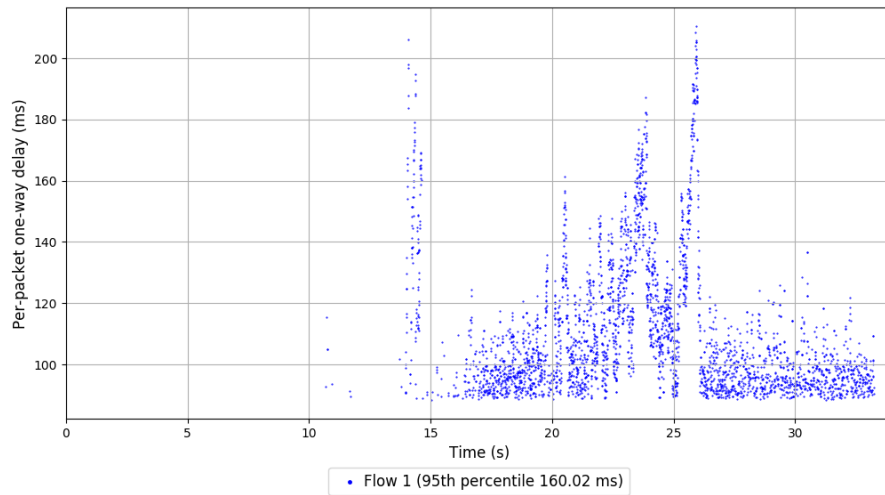
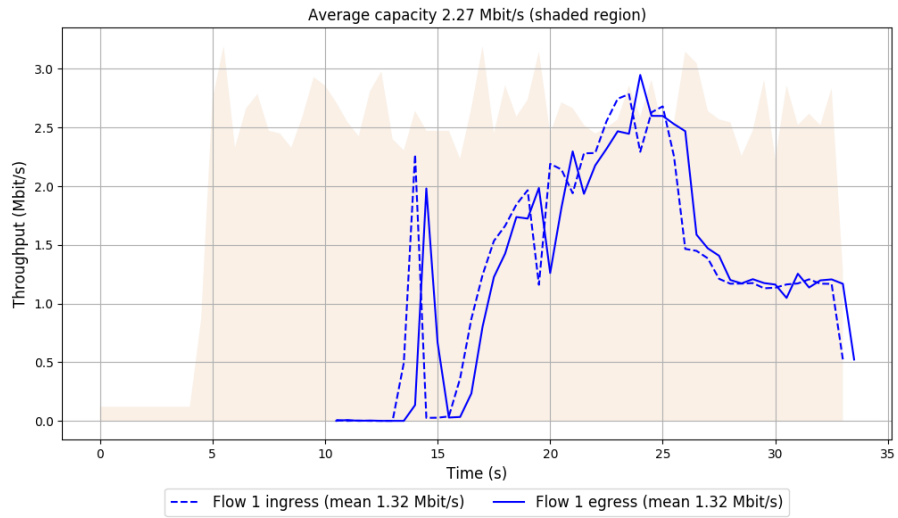


Run 1: Statistics of WebRTC media

Start at: 2018-07-24 05:45:49

End at: 2018-07-24 05:46:19

# Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-07-24 05:55:28

End at: 2018-07-24 05:55:58

# Below is generated by plot.py at 2018-07-24 07:21:35

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.00 Mbit/s (43.9% utilization)

95th percentile per-packet one-way delay: 176.069 ms

Loss rate: 0.27%

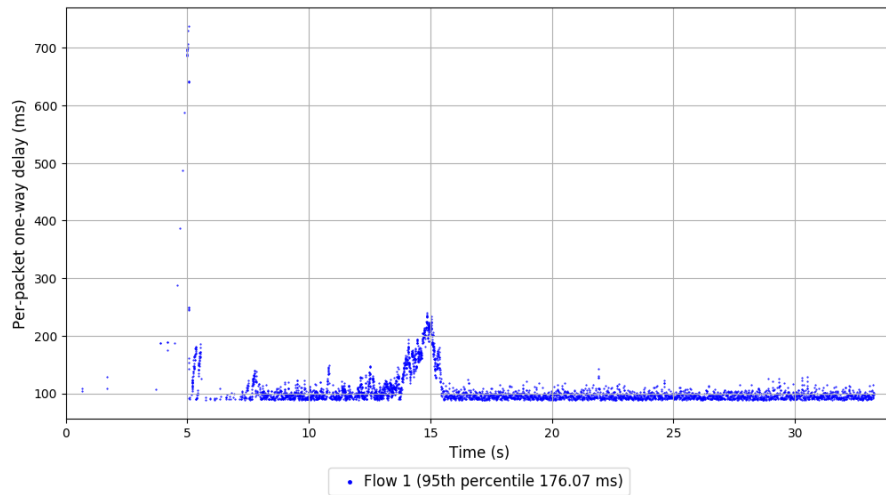
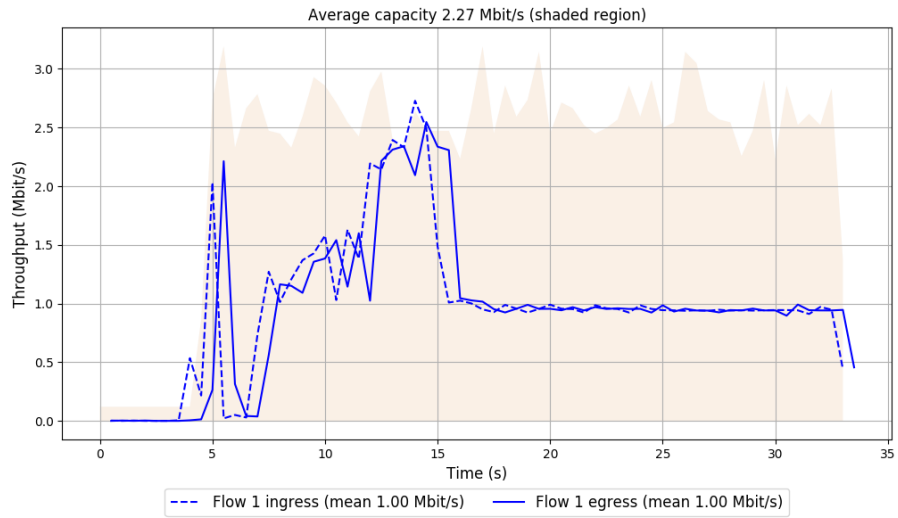
-- Flow 1:

Average throughput: 1.00 Mbit/s

95th percentile per-packet one-way delay: 176.069 ms

Loss rate: 0.27%

## Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-07-24 06:05:07

End at: 2018-07-24 06:05:37

# Below is generated by plot.py at 2018-07-24 07:21:36

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.01 Mbit/s (44.3% utilization)

95th percentile per-packet one-way delay: 150.034 ms

Loss rate: 0.21%

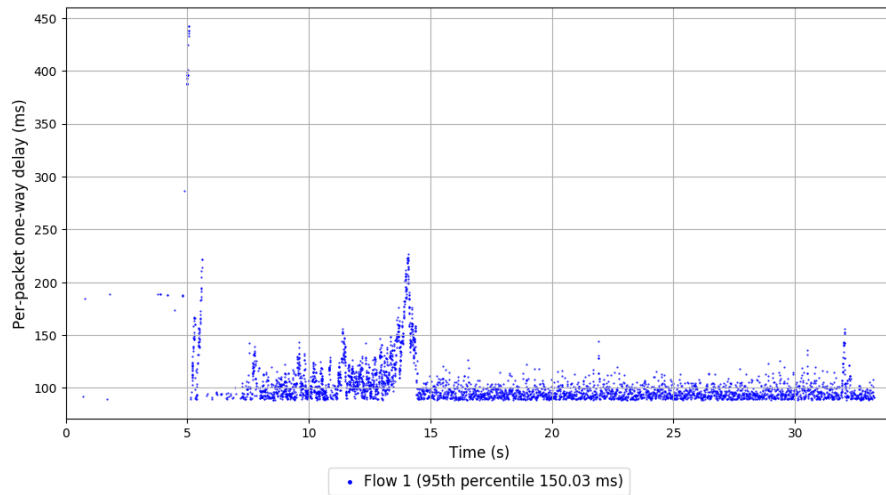
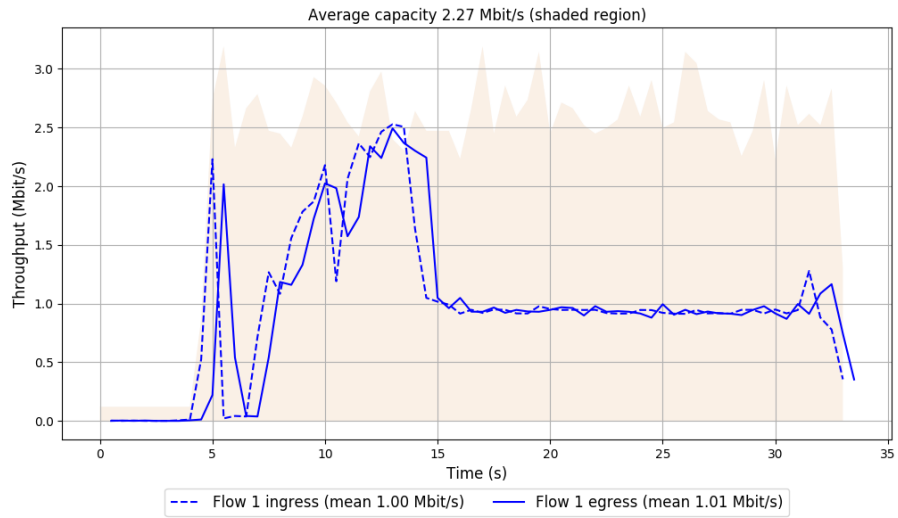
-- Flow 1:

Average throughput: 1.01 Mbit/s

95th percentile per-packet one-way delay: 150.034 ms

Loss rate: 0.21%

### Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-07-24 06:14:46

End at: 2018-07-24 06:15:16

# Below is generated by plot.py at 2018-07-24 07:21:39

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.35 Mbit/s (59.5% utilization)

95th percentile per-packet one-way delay: 194.280 ms

Loss rate: 0.60%

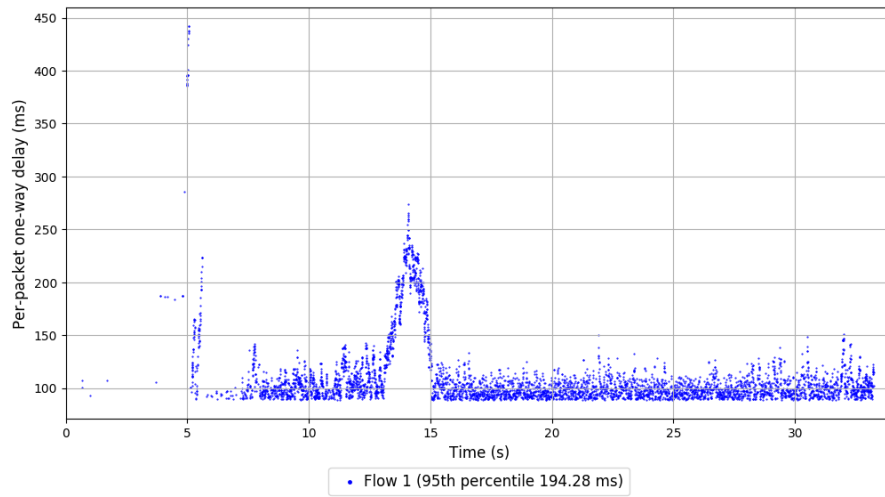
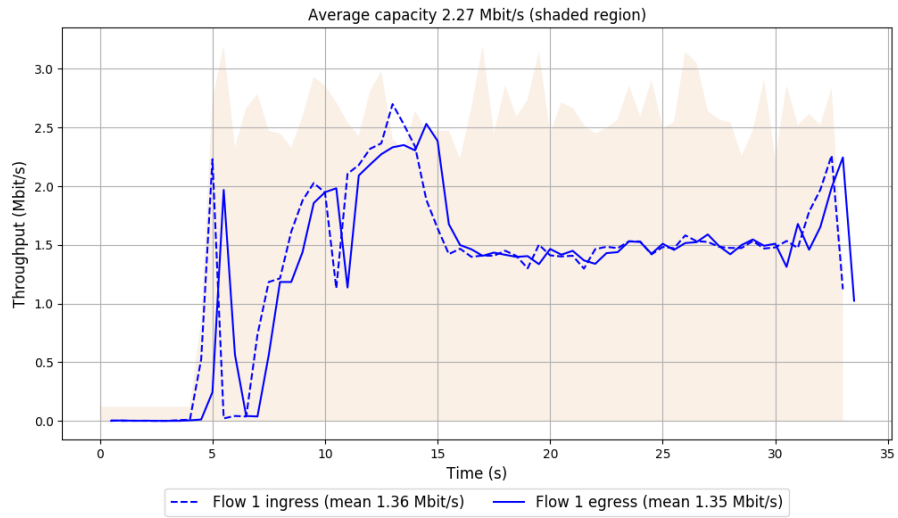
-- Flow 1:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 194.280 ms

Loss rate: 0.60%

### Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-07-24 06:24:25

End at: 2018-07-24 06:24:55

# Below is generated by plot.py at 2018-07-24 07:21:41

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.73 Mbit/s (76.3% utilization)

95th percentile per-packet one-way delay: 146.933 ms

Loss rate: 0.46%

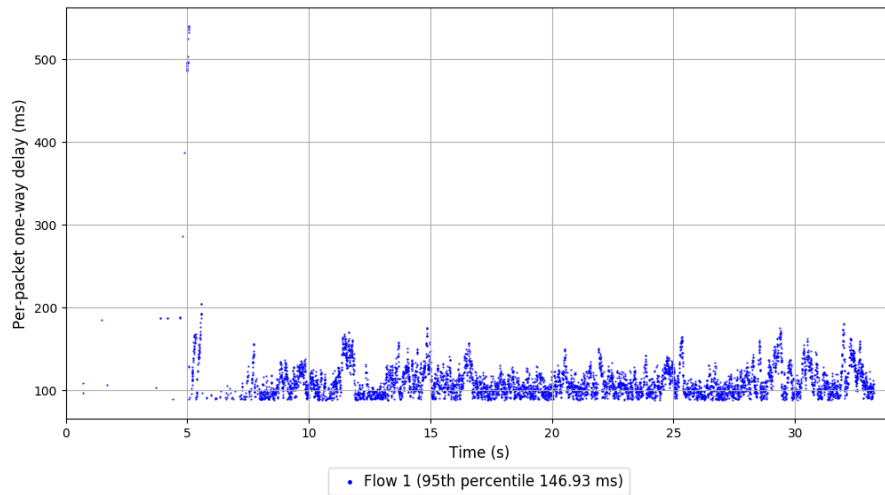
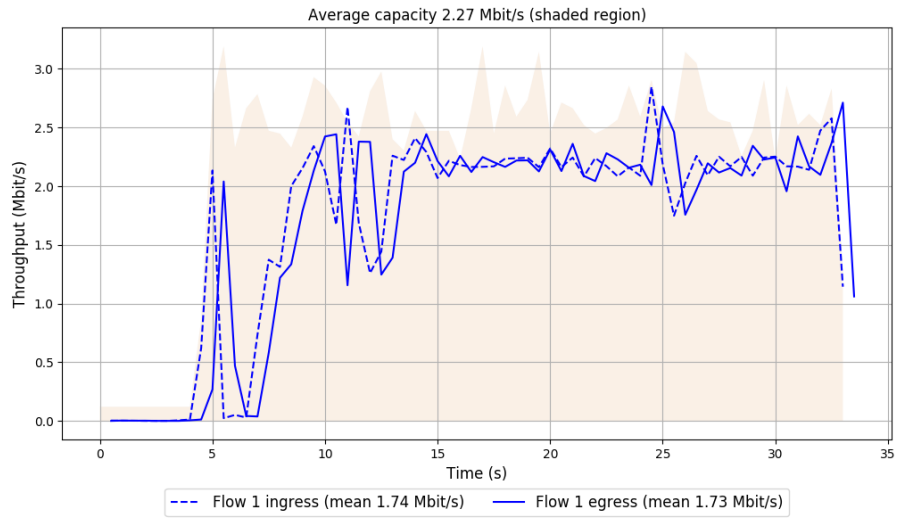
-- Flow 1:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 146.933 ms

Loss rate: 0.46%

## Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-07-24 06:34:04

End at: 2018-07-24 06:34:34

# Below is generated by plot.py at 2018-07-24 07:21:41

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.44 Mbit/s (63.5% utilization)

95th percentile per-packet one-way delay: 169.522 ms

Loss rate: 0.50%

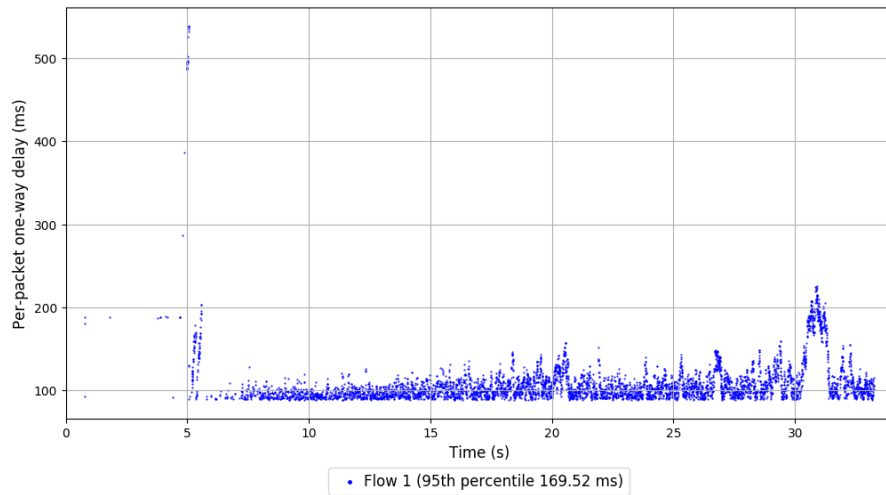
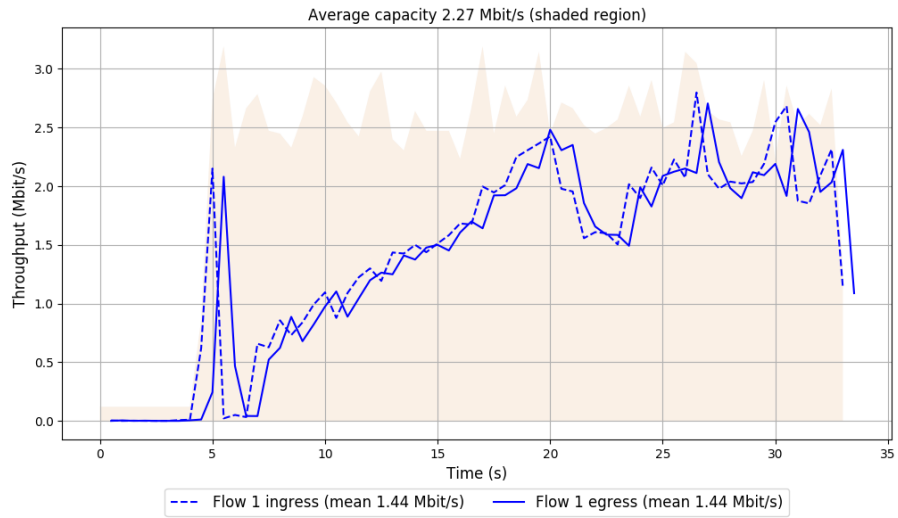
-- Flow 1:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 169.522 ms

Loss rate: 0.50%

## Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-07-24 06:43:43

End at: 2018-07-24 06:44:13

# Below is generated by plot.py at 2018-07-24 07:21:42

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.40 Mbit/s (61.7% utilization)

95th percentile per-packet one-way delay: 167.910 ms

Loss rate: 0.40%

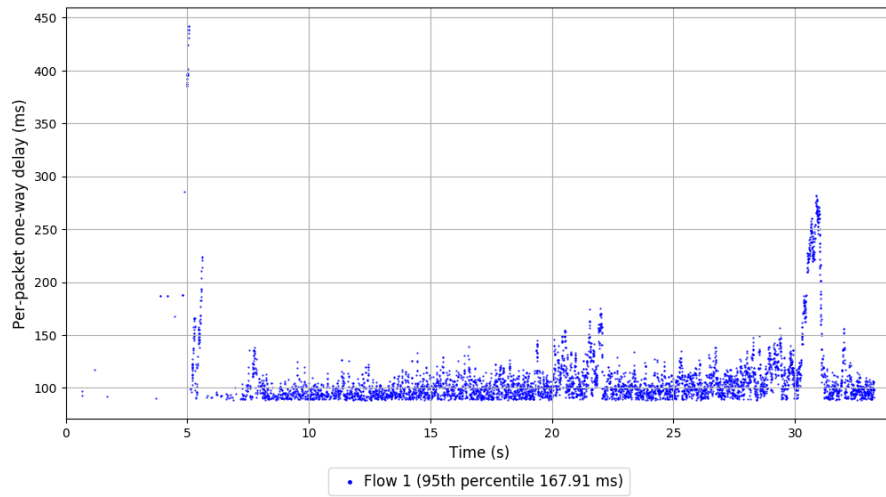
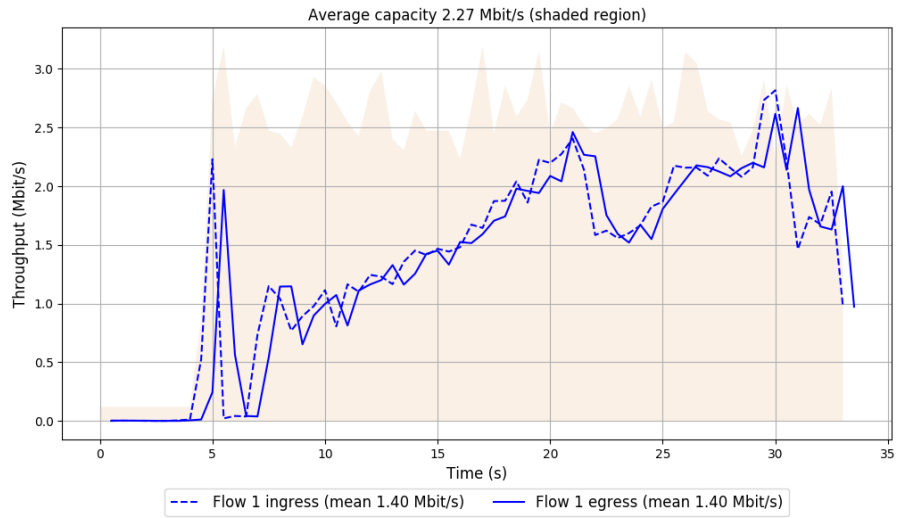
-- Flow 1:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 167.910 ms

Loss rate: 0.40%

## Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-07-24 06:53:22

End at: 2018-07-24 06:53:52

# Below is generated by plot.py at 2018-07-24 07:21:43

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.10 Mbit/s (48.4% utilization)

95th percentile per-packet one-way delay: 184.061 ms

Loss rate: 0.53%

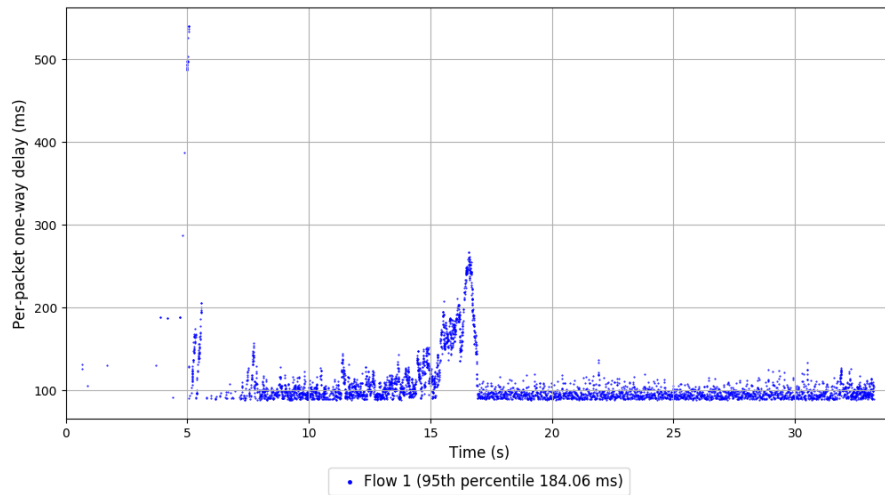
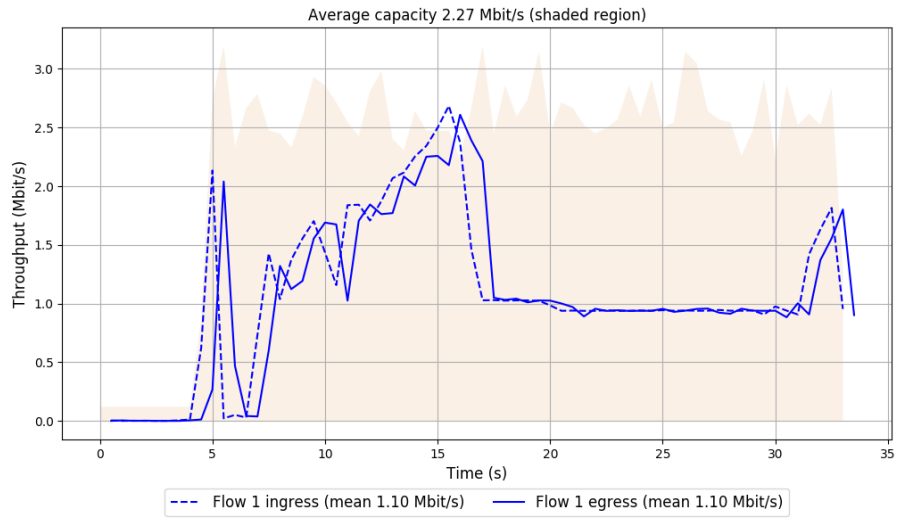
-- Flow 1:

Average throughput: 1.10 Mbit/s

95th percentile per-packet one-way delay: 184.061 ms

Loss rate: 0.53%

## Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-07-24 07:03:01

End at: 2018-07-24 07:03:31

# Below is generated by plot.py at 2018-07-24 07:21:43

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.06 Mbit/s (46.8% utilization)

95th percentile per-packet one-way delay: 152.767 ms

Loss rate: 0.30%

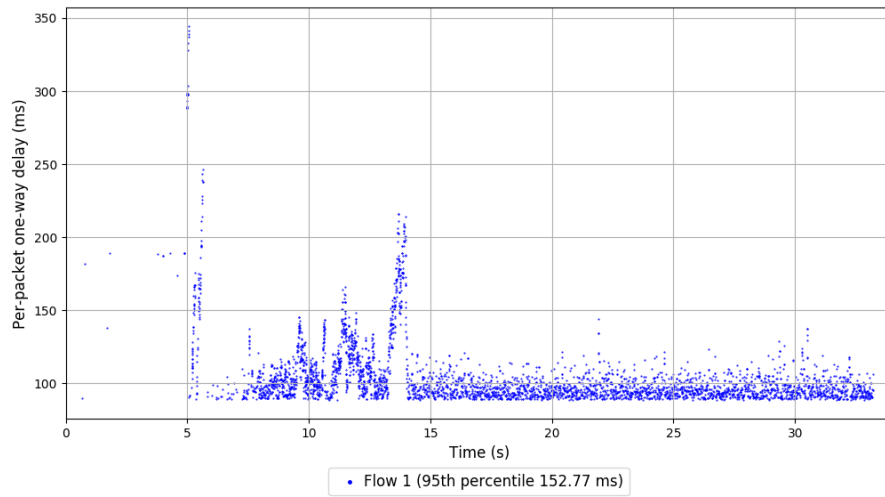
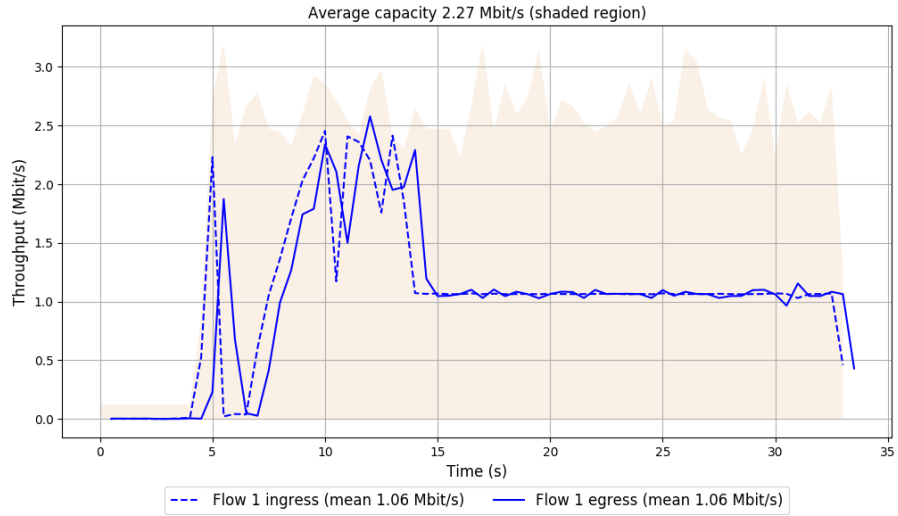
-- Flow 1:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 152.767 ms

Loss rate: 0.30%

### Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-07-24 07:12:40

End at: 2018-07-24 07:13:10

# Below is generated by plot.py at 2018-07-24 07:21:43

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.42 Mbit/s (62.7% utilization)

95th percentile per-packet one-way delay: 164.334 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 164.334 ms

Loss rate: 0.50%

# Run 10: Report of WebRTC media — Data Link

