

## Pantheon Report

Generated at 2018-07-24 13:53:30 (UTC).

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

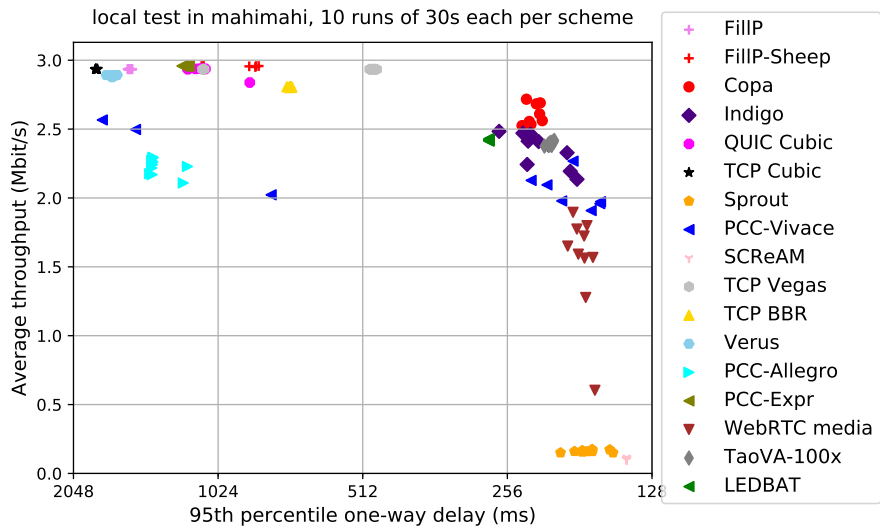
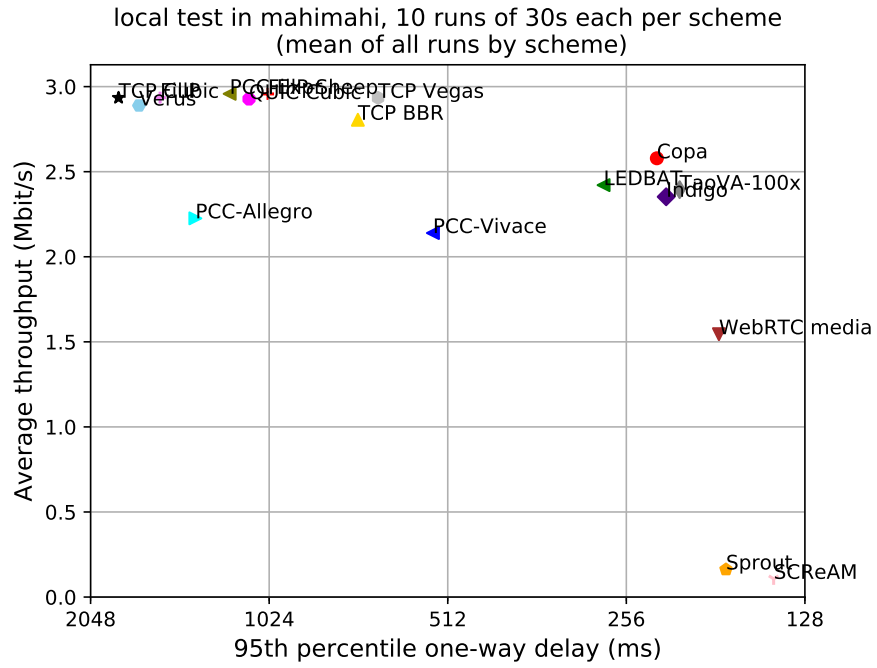
Repeated the test of 17 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

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

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
```



scheme	# runs	mean avg tput (Mbit/s)	mean 95th-%ile delay (ms)	mean loss rate (%)
		flow 1	flow 1	flow 1
TCP BBR	10	2.81	725.71	1.68
Copa	10	2.58	227.40	0.69
TCP Cubic	10	2.93	1837.28	8.21
FillP	10	2.94	1563.61	63.35
FillP-Sheep	10	2.96	1028.57	7.12
Indigo	10	2.35	219.33	0.66
LEDBAT	10	2.42	279.65	1.03
PCC-Allegro	10	2.23	1363.65	1.69
PCC-Expr	10	2.96	1193.83	48.25
QUIC Cubic	10	2.93	1107.33	4.07
SReAM	10	0.11	144.52	0.47
Sprout	10	0.16	173.88	0.24
TaoVA-100x	10	2.39	208.13	0.62
TCP Vegas	10	2.93	671.07	1.66
Verus	10	2.89	1697.13	3.97
PCC-Vivace	10	2.14	542.36	3.13
WebRTC media	10	1.54	178.72	0.65

Run 1: Statistics of TCP BBR

Start at: 2018-07-24 12:19:05

End at: 2018-07-24 12:19:35

# Below is generated by plot.py at 2018-07-24 13:49:39

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 725.150 ms

Loss rate: 1.69%

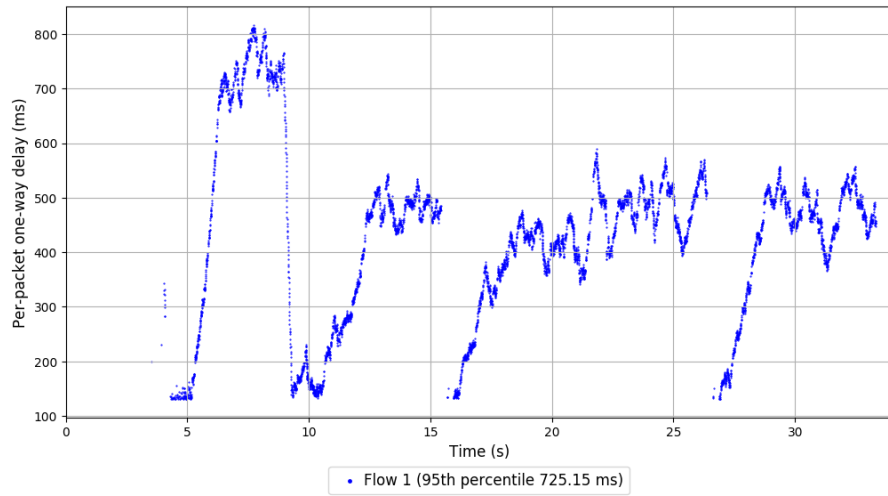
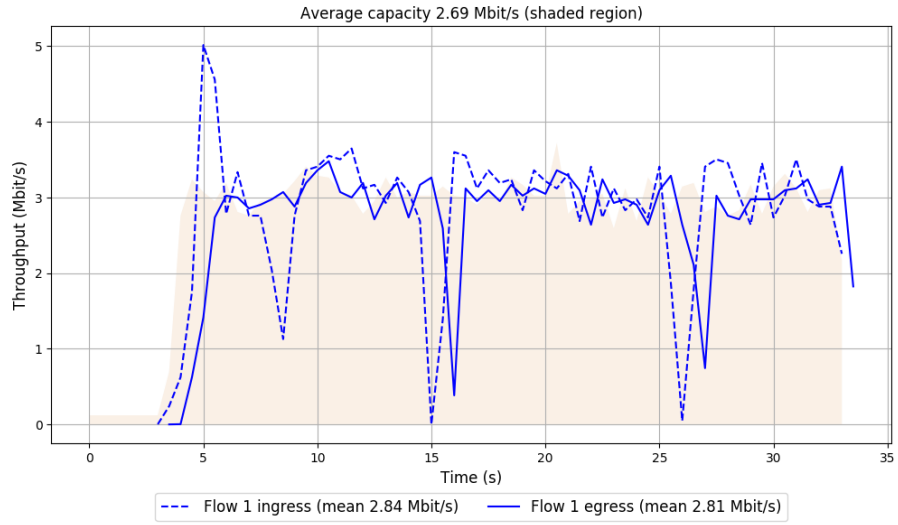
-- Flow 1:

Average throughput: 2.81 Mbit/s

95th percentile per-packet one-way delay: 725.150 ms

Loss rate: 1.69%

# Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-07-24 12:28:47

End at: 2018-07-24 12:29:17

# Below is generated by plot.py at 2018-07-24 13:49:39

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 726.673 ms

Loss rate: 1.74%

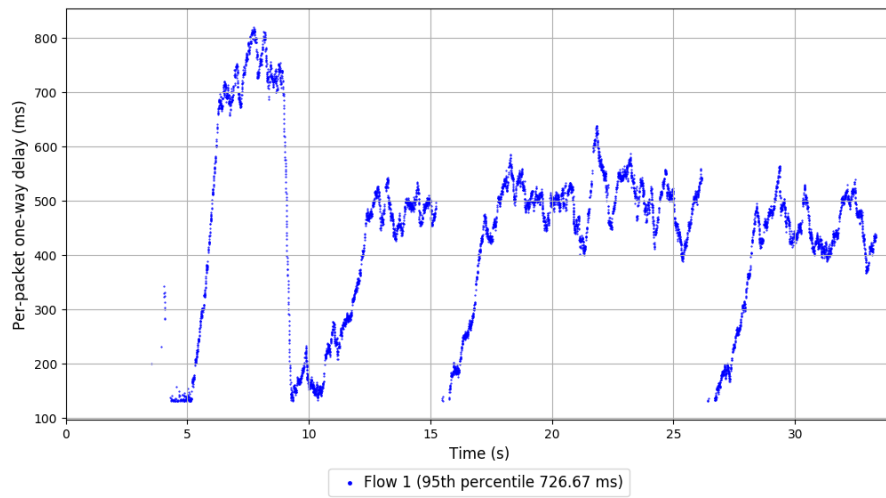
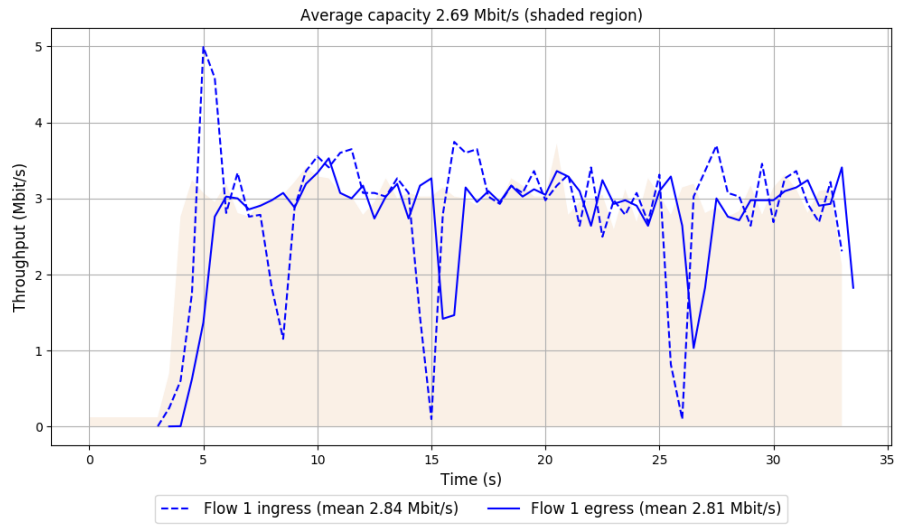
-- Flow 1:

Average throughput: 2.81 Mbit/s

95th percentile per-packet one-way delay: 726.673 ms

Loss rate: 1.74%

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



Run 3: Statistics of TCP BBR

Start at: 2018-07-24 12:38:29

End at: 2018-07-24 12:38:59

# Below is generated by plot.py at 2018-07-24 13:49:39

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 727.313 ms

Loss rate: 1.67%

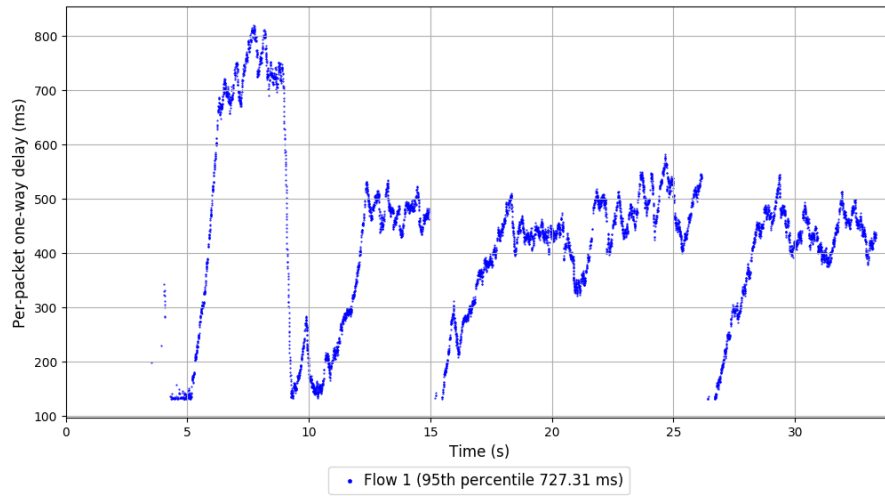
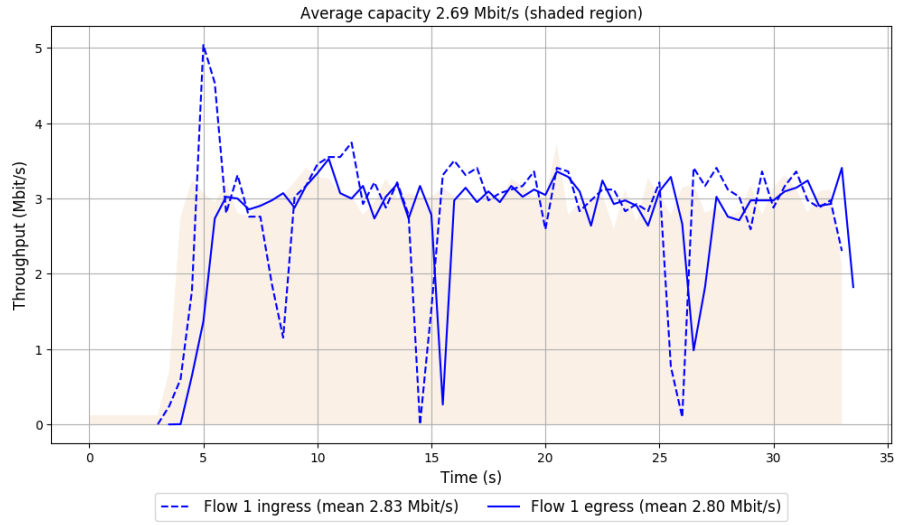
-- Flow 1:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 727.313 ms

Loss rate: 1.67%

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



Run 4: Statistics of TCP BBR

Start at: 2018-07-24 12:48:11

End at: 2018-07-24 12:48:41

# Below is generated by plot.py at 2018-07-24 13:49:39

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.81 Mbit/s (104.3% utilization)

95th percentile per-packet one-way delay: 725.877 ms

Loss rate: 1.72%

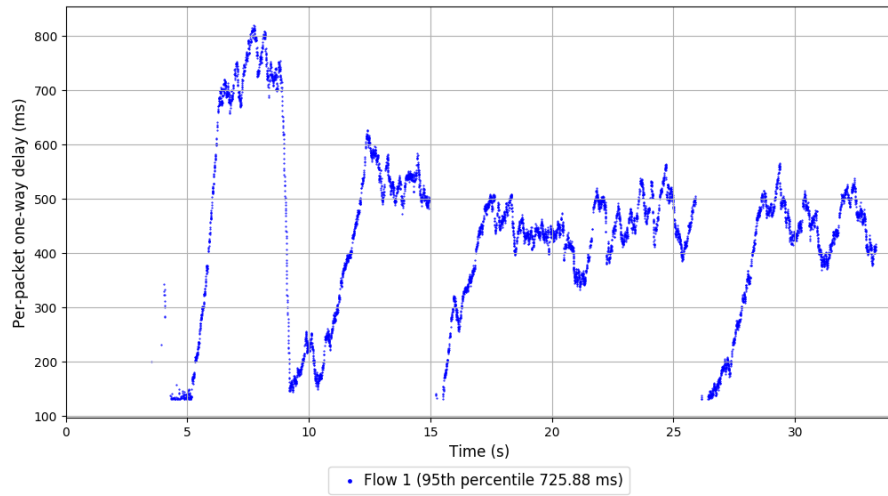
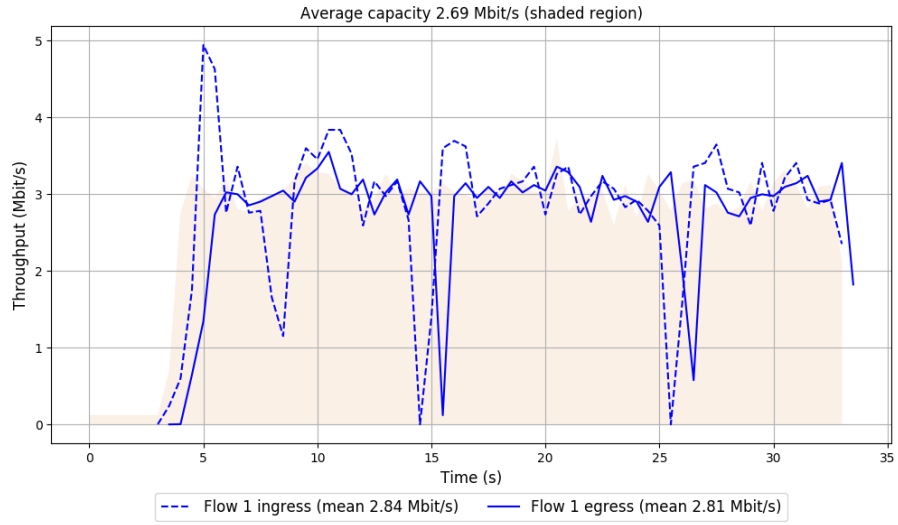
-- Flow 1:

Average throughput: 2.81 Mbit/s

95th percentile per-packet one-way delay: 725.877 ms

Loss rate: 1.72%

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



Run 5: Statistics of TCP BBR

Start at: 2018-07-24 12:57:53

End at: 2018-07-24 12:58:23

# Below is generated by plot.py at 2018-07-24 13:49:39

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 723.060 ms

Loss rate: 1.75%

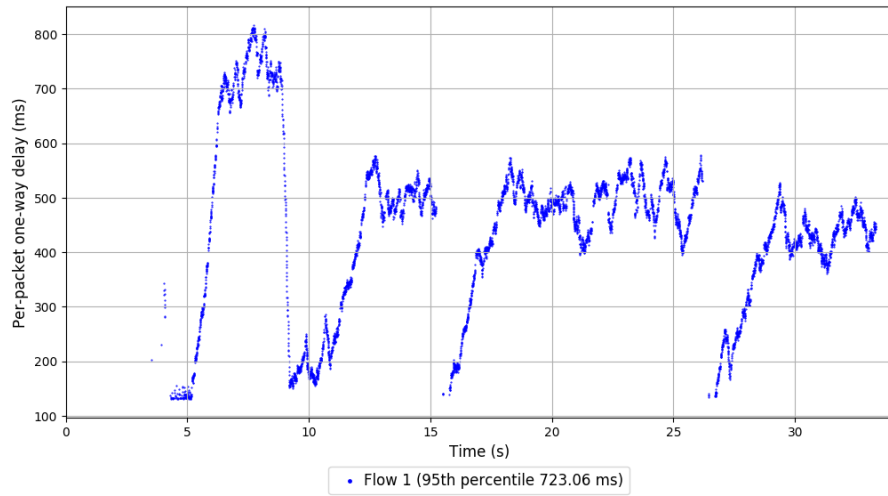
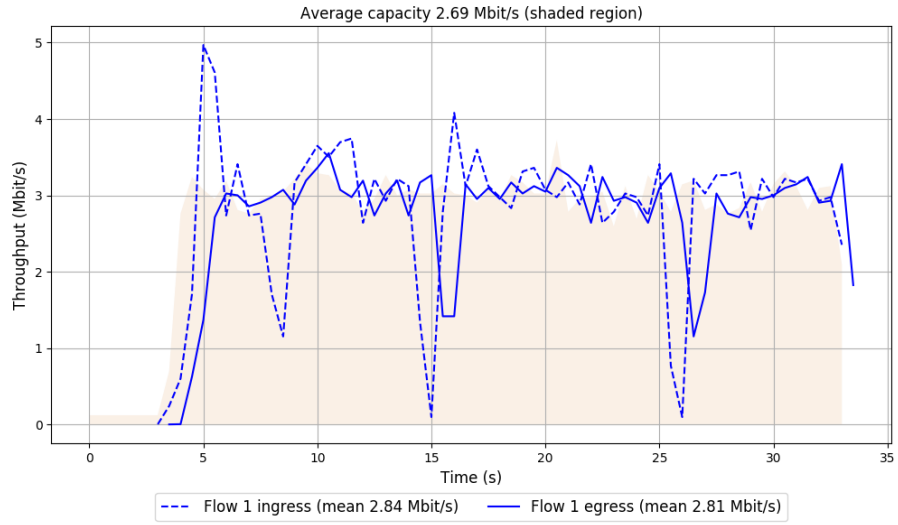
-- Flow 1:

Average throughput: 2.81 Mbit/s

95th percentile per-packet one-way delay: 723.060 ms

Loss rate: 1.75%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-07-24 13:07:35

End at: 2018-07-24 13:08:05

# Below is generated by plot.py at 2018-07-24 13:49:39

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 726.140 ms

Loss rate: 1.72%

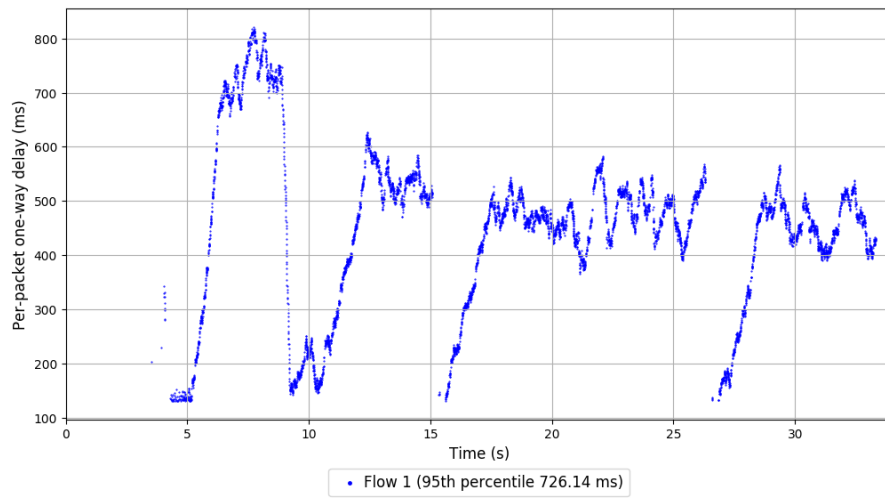
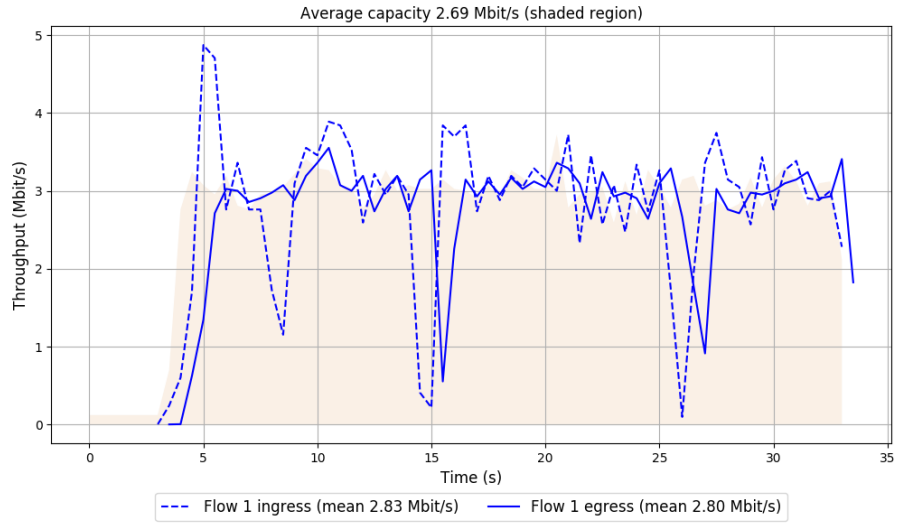
-- Flow 1:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 726.140 ms

Loss rate: 1.72%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-07-24 13:17:17

End at: 2018-07-24 13:17:47

# Below is generated by plot.py at 2018-07-24 13:49:39

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 726.662 ms

Loss rate: 1.71%

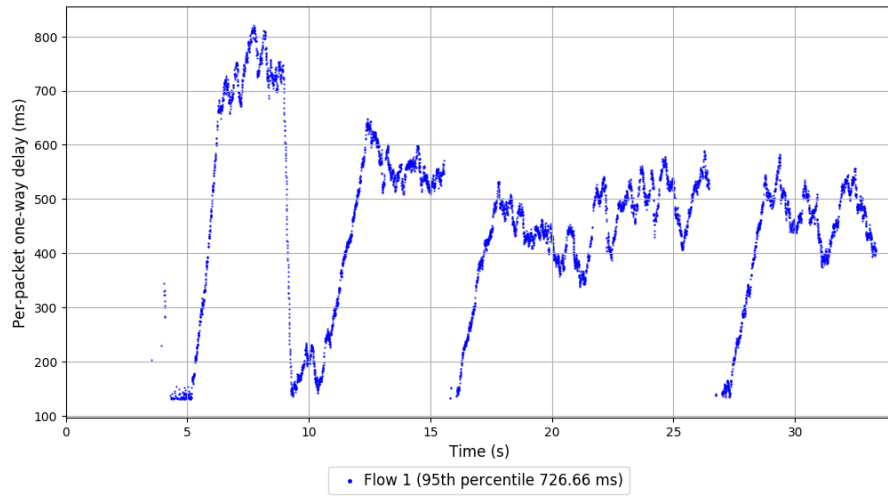
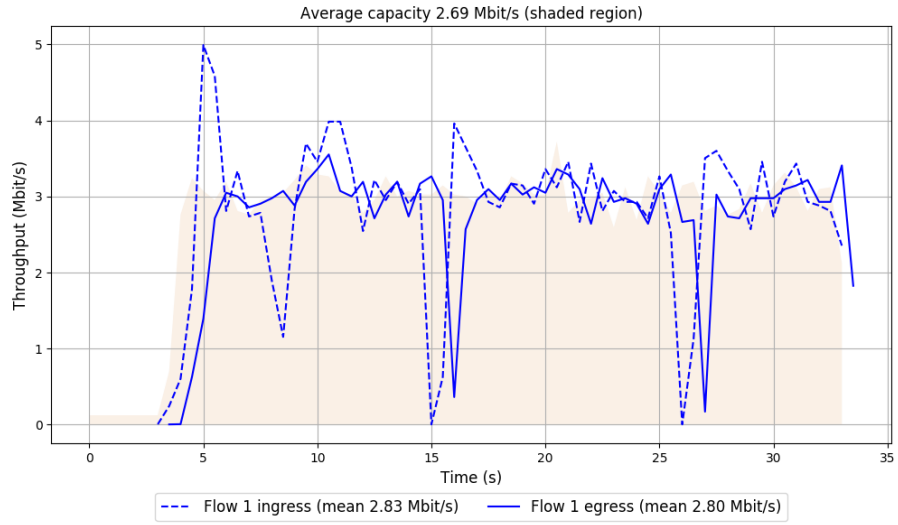
-- Flow 1:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 726.662 ms

Loss rate: 1.71%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-07-24 13:27:00

End at: 2018-07-24 13:27:30

# Below is generated by plot.py at 2018-07-24 13:49:40

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.81 Mbit/s (104.3% utilization)

95th percentile per-packet one-way delay: 719.748 ms

Loss rate: 1.58%

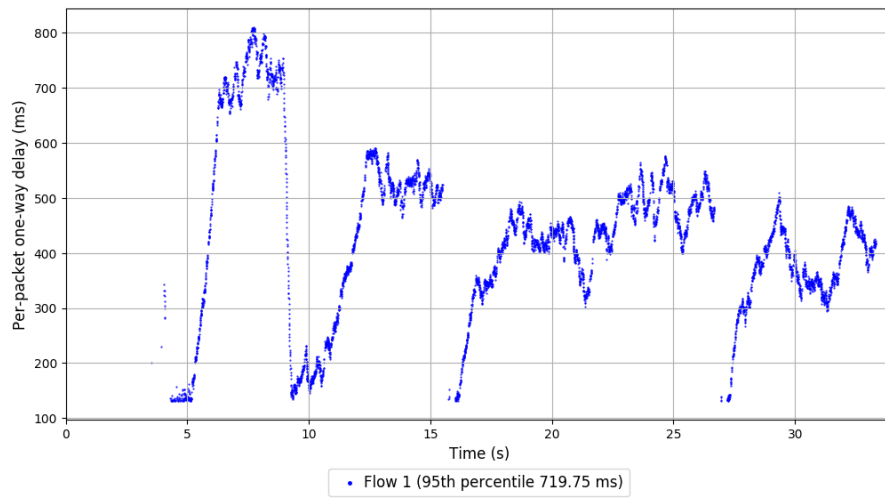
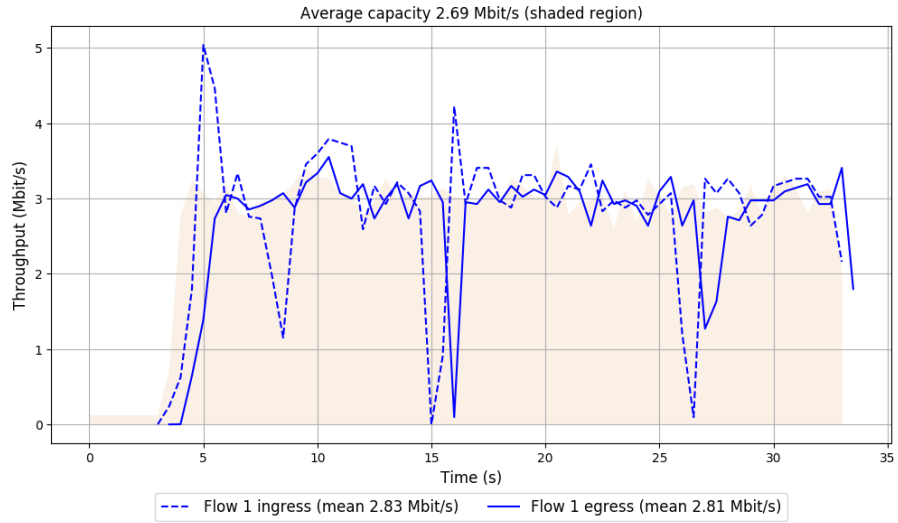
-- Flow 1:

Average throughput: 2.81 Mbit/s

95th percentile per-packet one-way delay: 719.748 ms

Loss rate: 1.58%

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



Run 9: Statistics of TCP BBR

Start at: 2018-07-24 13:36:42

End at: 2018-07-24 13:37:12

# Below is generated by plot.py at 2018-07-24 13:49:44

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 720.166 ms

Loss rate: 1.49%

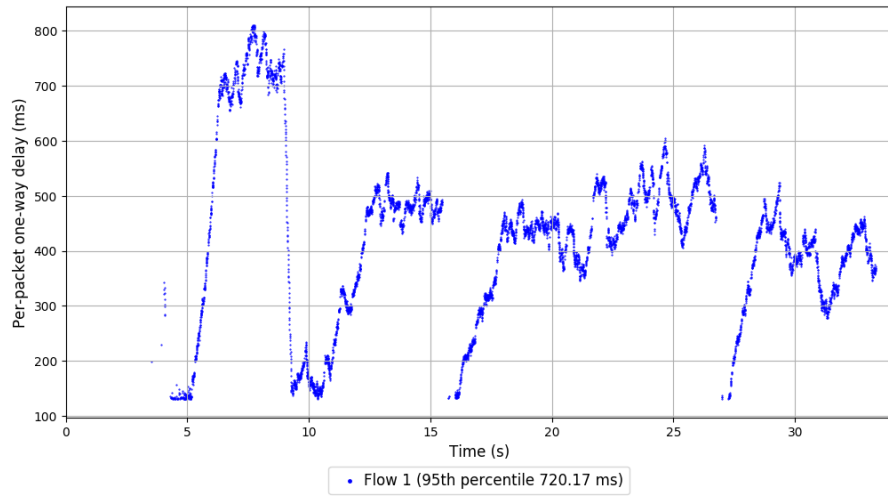
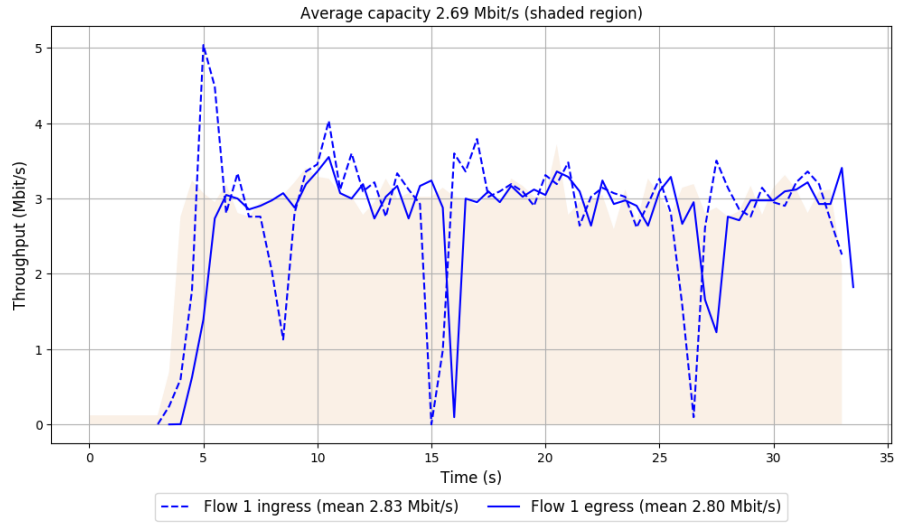
-- Flow 1:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 720.166 ms

Loss rate: 1.49%

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



Run 10: Statistics of TCP BBR

Start at: 2018-07-24 13:46:25

End at: 2018-07-24 13:46:55

# Below is generated by plot.py at 2018-07-24 13:49:44

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.81 Mbit/s (104.3% utilization)

95th percentile per-packet one-way delay: 736.359 ms

Loss rate: 1.68%

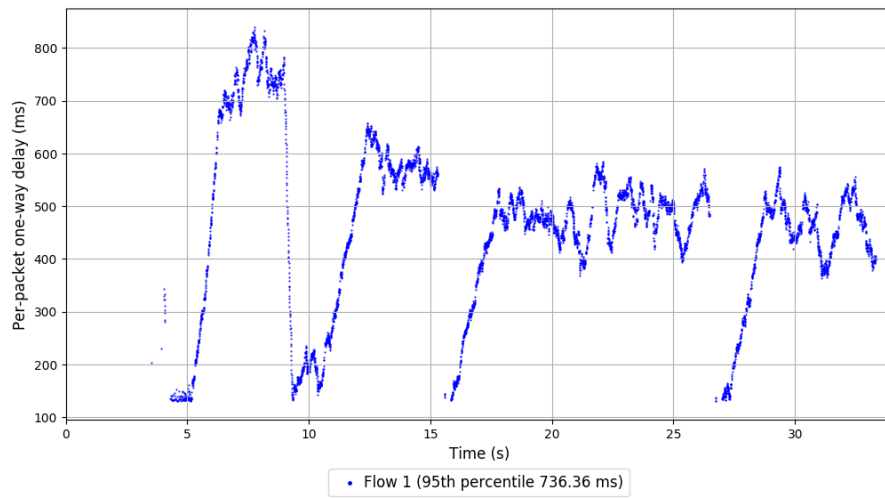
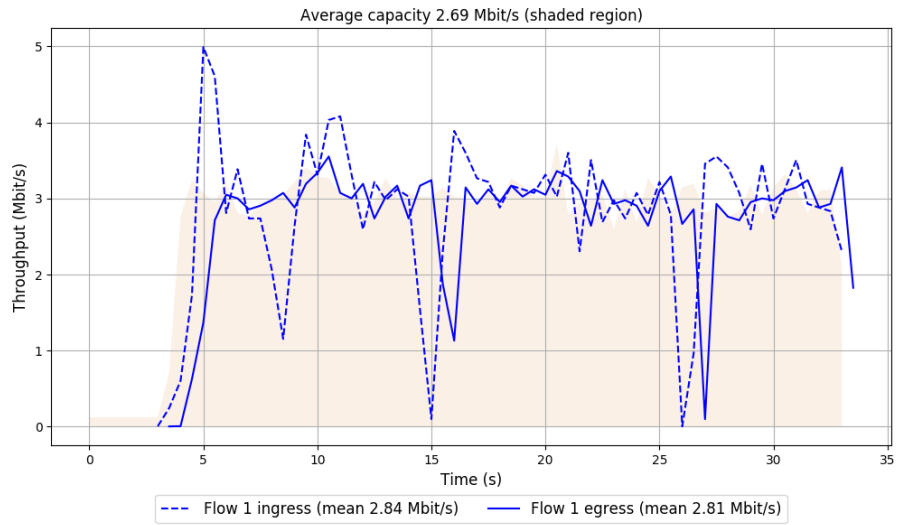
-- Flow 1:

Average throughput: 2.81 Mbit/s

95th percentile per-packet one-way delay: 736.359 ms

Loss rate: 1.68%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2018-07-24 12:13:57

End at: 2018-07-24 12:14:27

# Below is generated by plot.py at 2018-07-24 13:49:51

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.72 Mbit/s (100.9% utilization)

95th percentile per-packet one-way delay: 233.642 ms

Loss rate: 0.64%

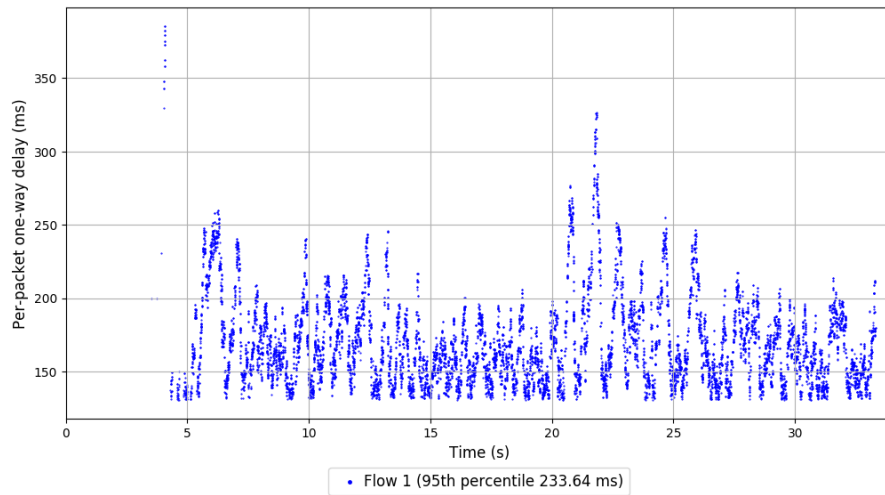
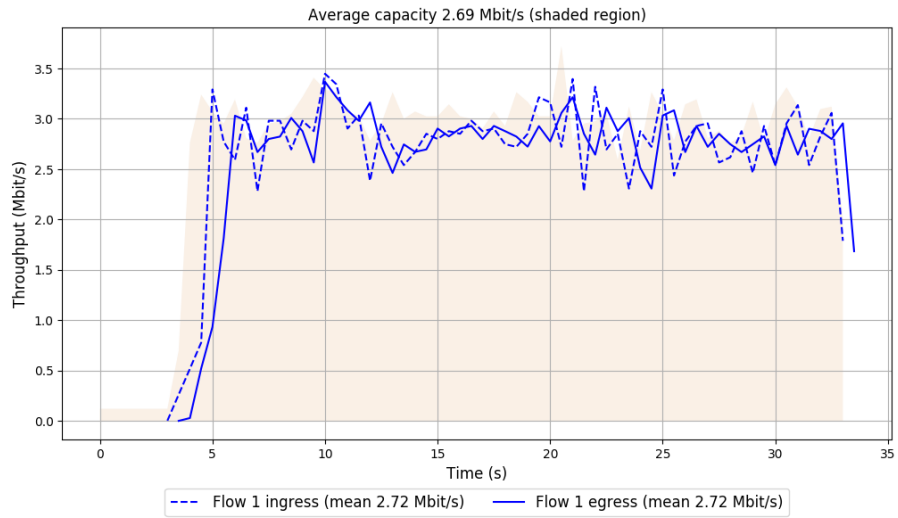
-- Flow 1:

Average throughput: 2.72 Mbit/s

95th percentile per-packet one-way delay: 233.642 ms

Loss rate: 0.64%

# Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-07-24 12:23:39

End at: 2018-07-24 12:24:09

# Below is generated by plot.py at 2018-07-24 13:49:51

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.45 Mbit/s (91.0% utilization)

95th percentile per-packet one-way delay: 230.630 ms

Loss rate: 0.58%

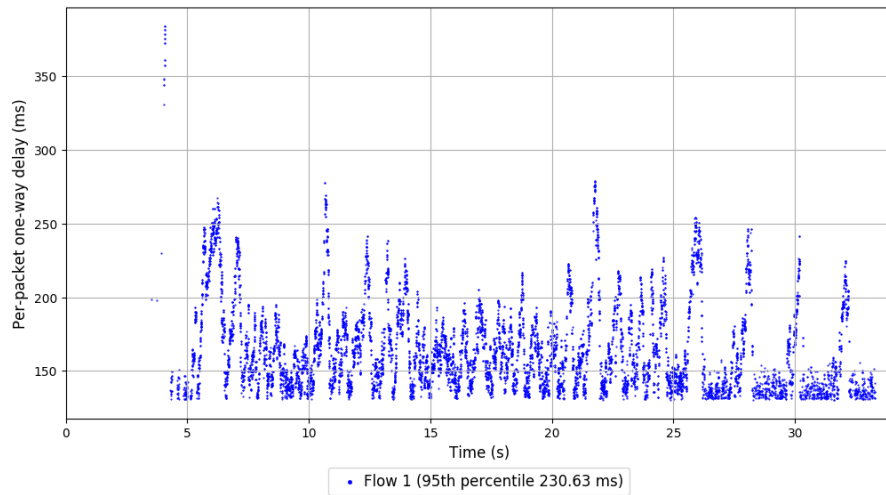
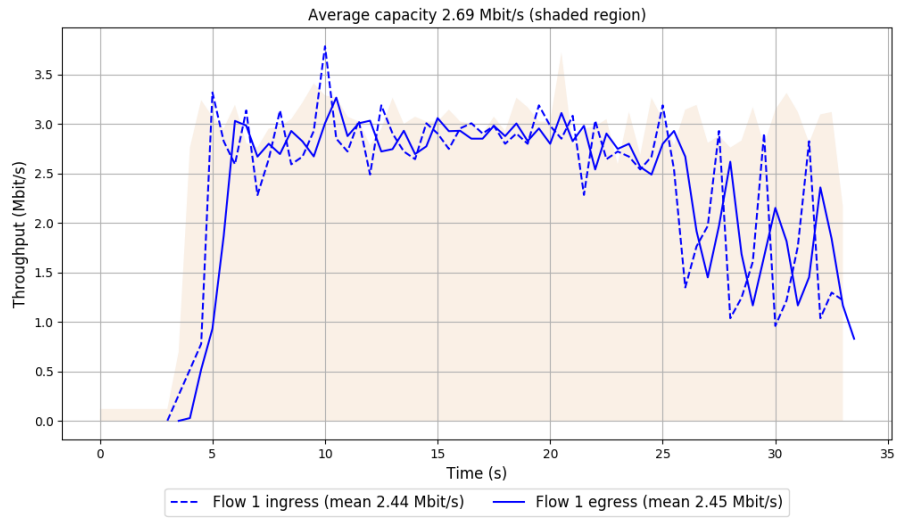
-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 230.630 ms

Loss rate: 0.58%

## Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-07-24 12:33:20

End at: 2018-07-24 12:33:50

# Below is generated by plot.py at 2018-07-24 13:49:51

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.61 Mbit/s (96.9% utilization)

95th percentile per-packet one-way delay: 219.336 ms

Loss rate: 0.60%

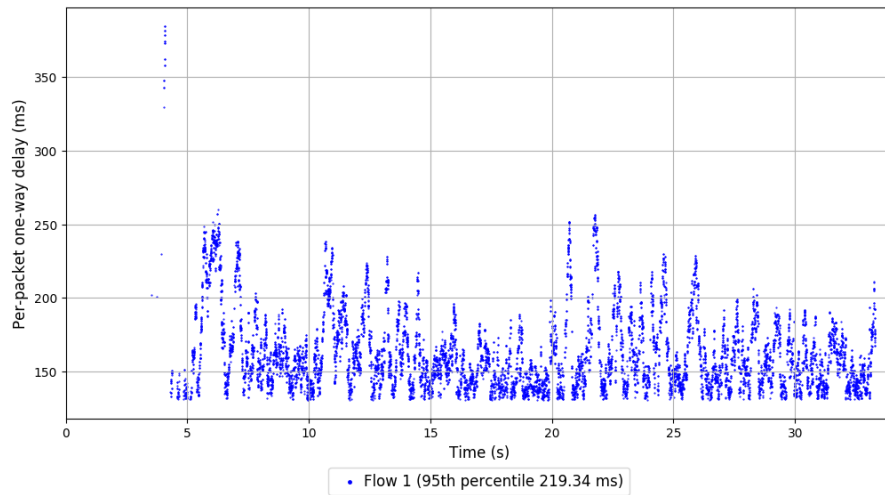
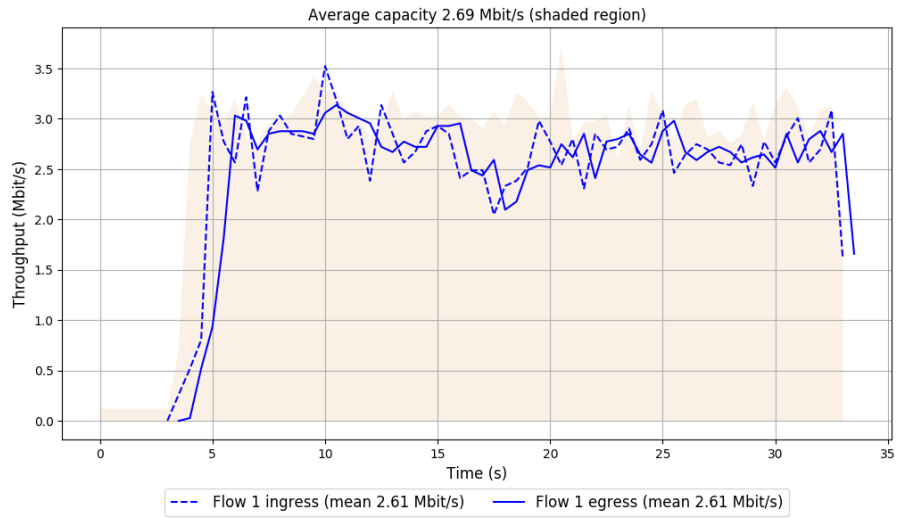
-- Flow 1:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 219.336 ms

Loss rate: 0.60%

### Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-07-24 12:43:03

End at: 2018-07-24 12:43:33

# Below is generated by plot.py at 2018-07-24 13:49:52

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.56 Mbit/s (94.9% utilization)

95th percentile per-packet one-way delay: 230.494 ms

Loss rate: 0.69%

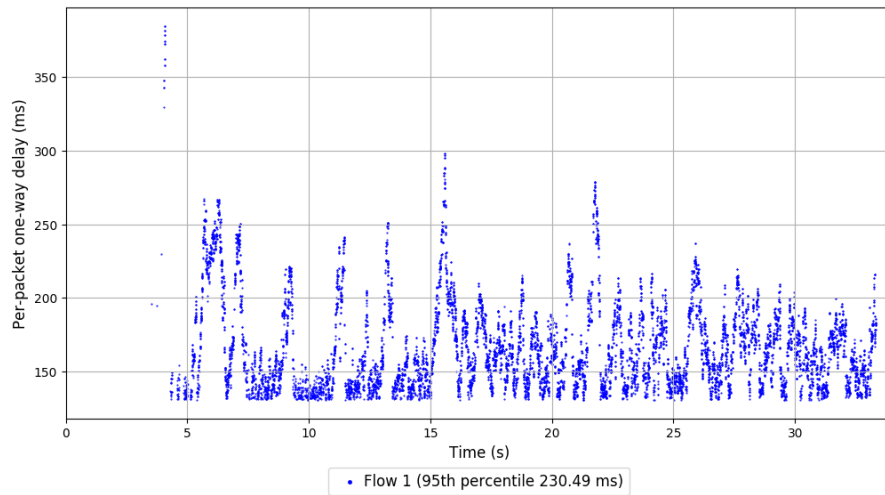
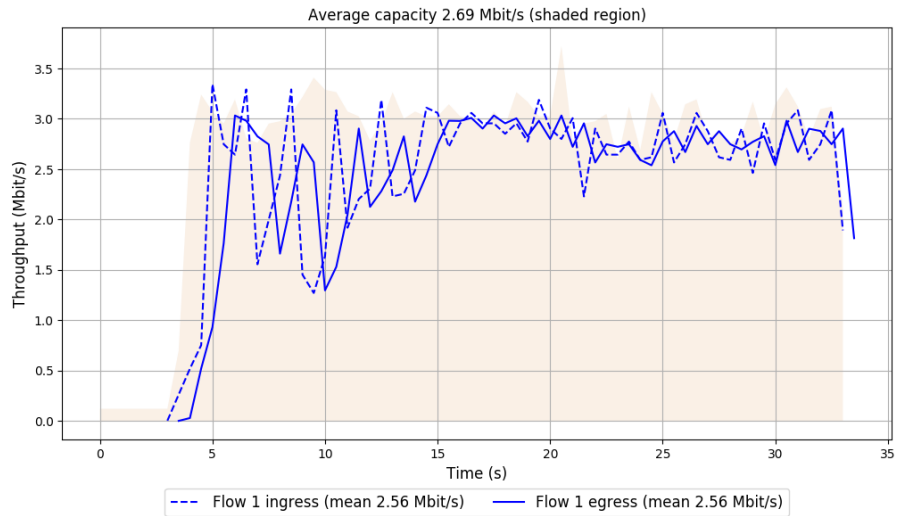
-- Flow 1:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 230.494 ms

Loss rate: 0.69%

### Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-07-24 12:52:45

End at: 2018-07-24 12:53:15

# Below is generated by plot.py at 2018-07-24 13:49:53

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.68 Mbit/s (99.7% utilization)

95th percentile per-packet one-way delay: 222.823 ms

Loss rate: 0.63%

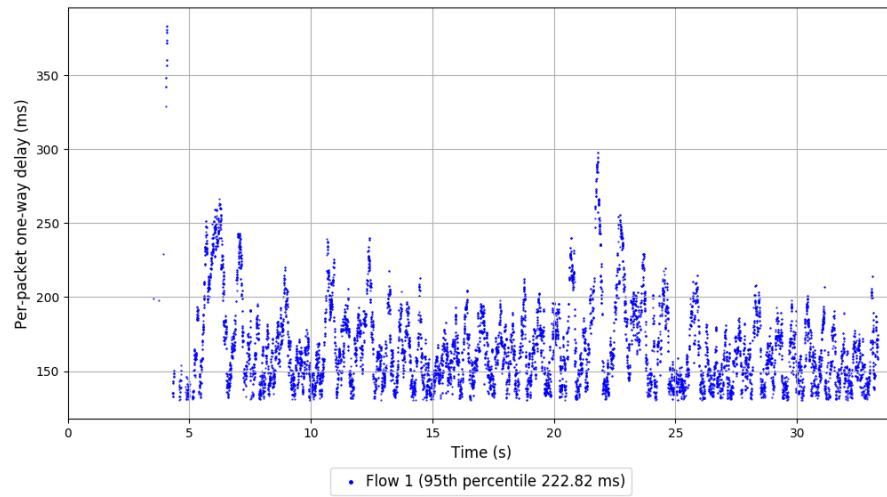
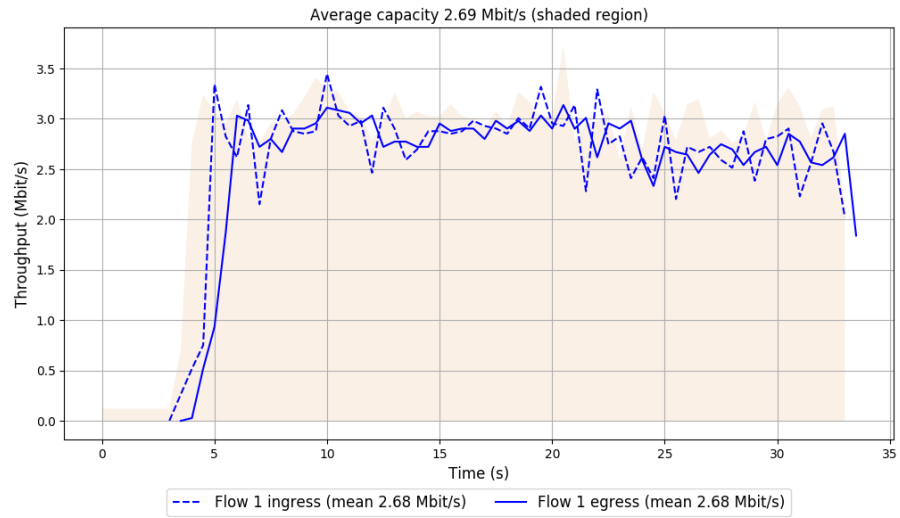
-- Flow 1:

Average throughput: 2.68 Mbit/s

95th percentile per-packet one-way delay: 222.823 ms

Loss rate: 0.63%

### Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

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

End at: 2018-07-24 13:02:57

# Below is generated by plot.py at 2018-07-24 13:49:53

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.69 Mbit/s (99.9% utilization)

95th percentile per-packet one-way delay: 218.662 ms

Loss rate: 0.75%

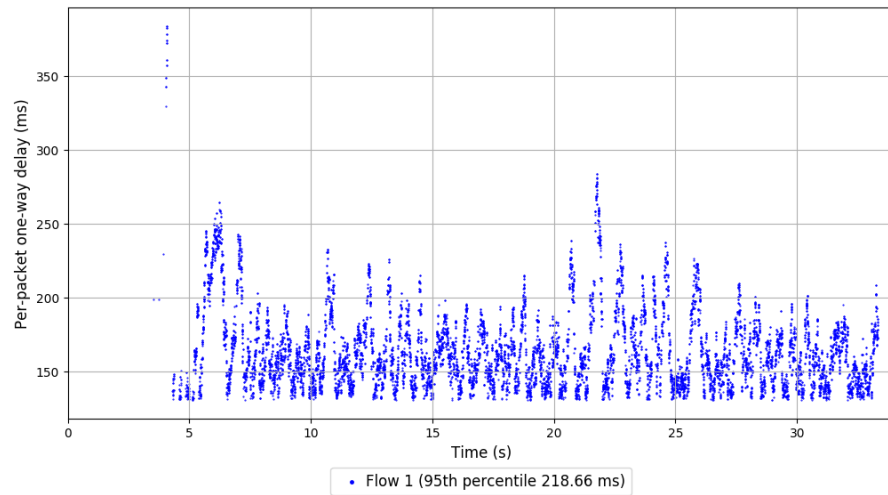
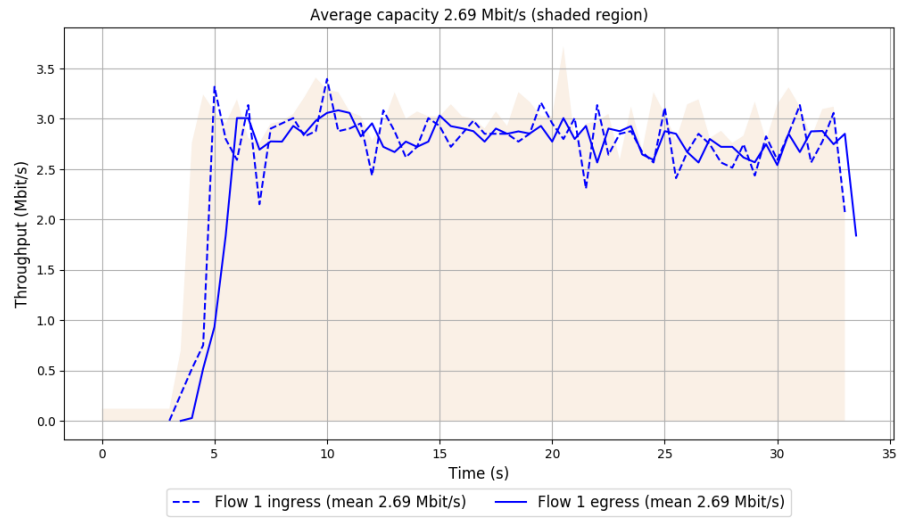
-- Flow 1:

Average throughput: 2.69 Mbit/s

95th percentile per-packet one-way delay: 218.662 ms

Loss rate: 0.75%

## Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-07-24 13:12:09

End at: 2018-07-24 13:12:39

# Below is generated by plot.py at 2018-07-24 13:49:57

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.56 Mbit/s (95.2% utilization)

95th percentile per-packet one-way delay: 216.546 ms

Loss rate: 0.67%

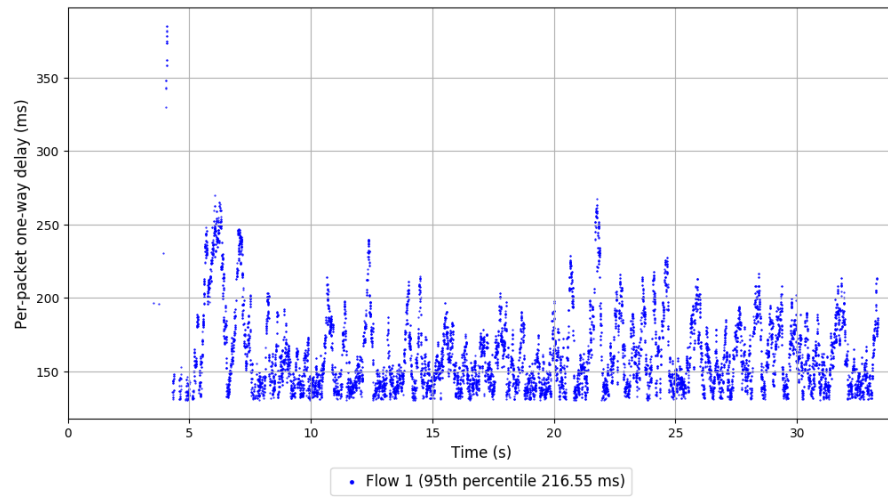
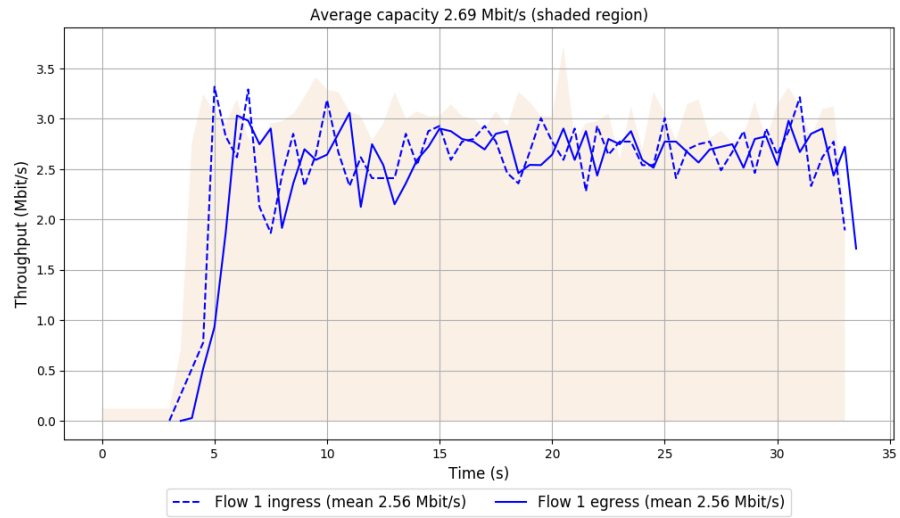
-- Flow 1:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 216.546 ms

Loss rate: 0.67%

## Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-07-24 13:21:51

End at: 2018-07-24 13:22:21

# Below is generated by plot.py at 2018-07-24 13:49:58

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.53 Mbit/s (93.8% utilization)

95th percentile per-packet one-way delay: 238.607 ms

Loss rate: 0.80%

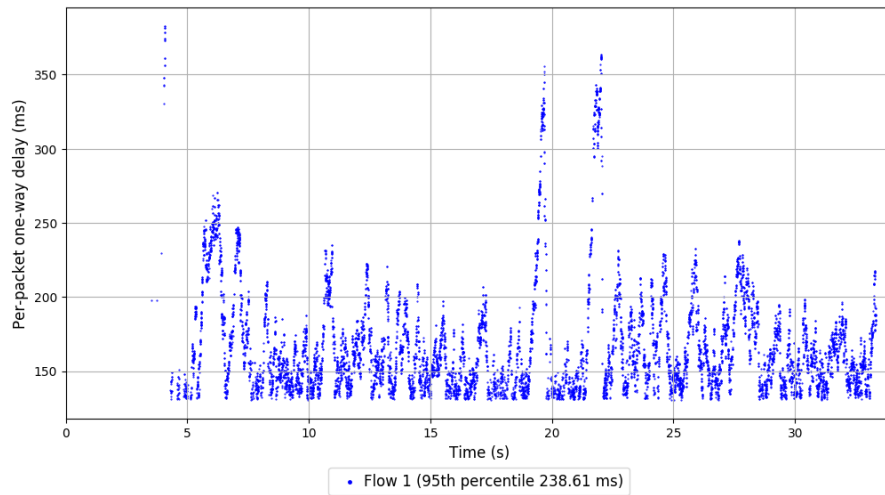
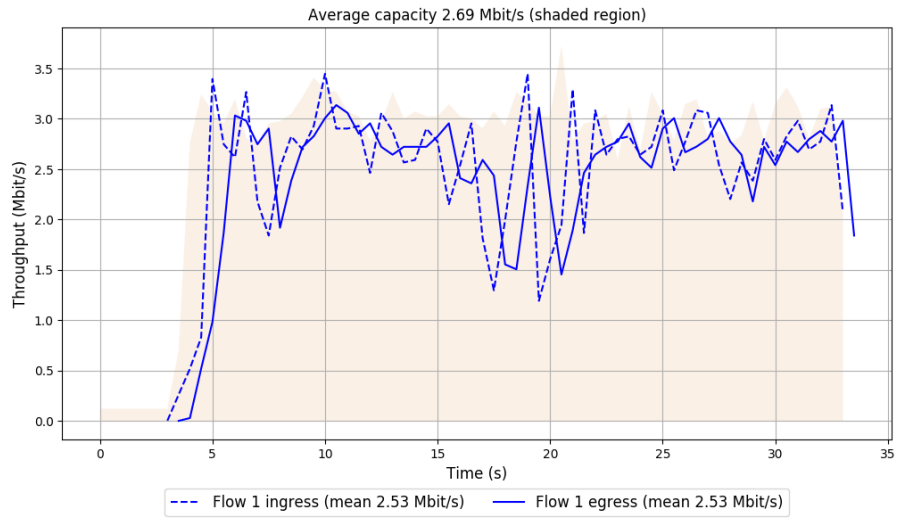
-- Flow 1:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 238.607 ms

Loss rate: 0.80%

### Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-07-24 13:31:34

End at: 2018-07-24 13:32:04

# Below is generated by plot.py at 2018-07-24 13:50:04

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.53 Mbit/s (94.1% utilization)

95th percentile per-packet one-way delay: 228.656 ms

Loss rate: 0.77%

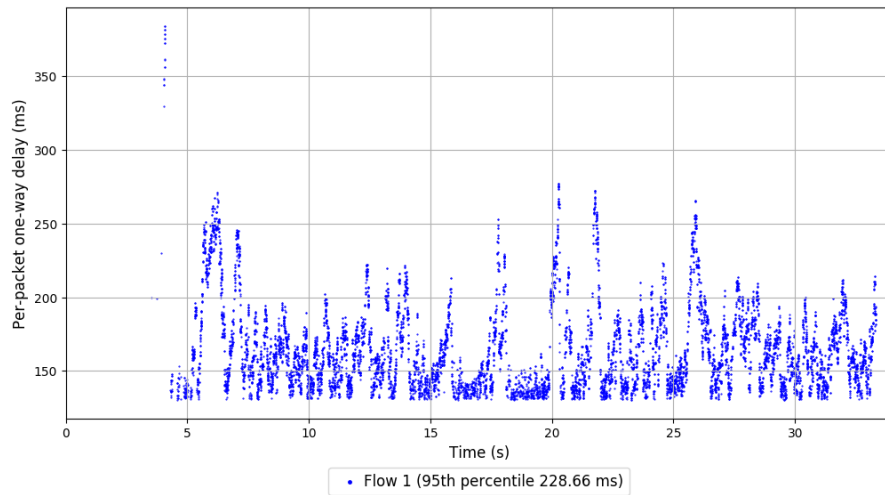
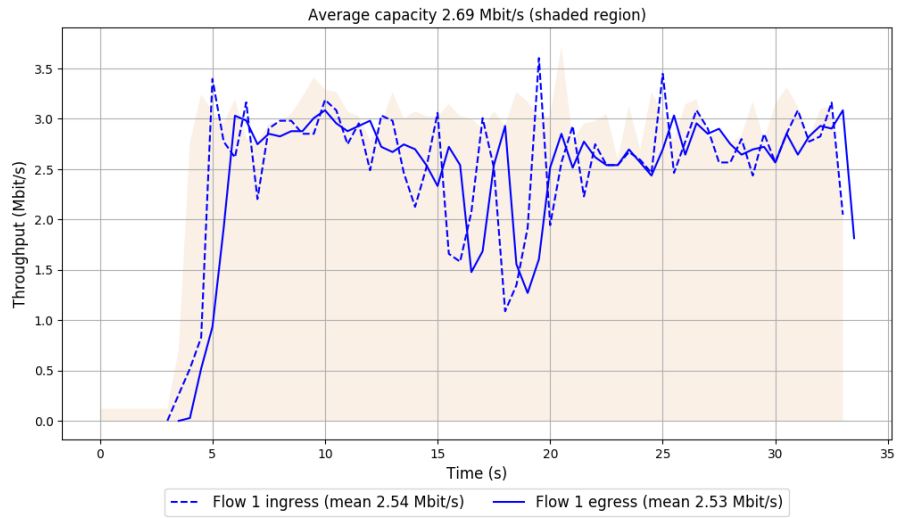
-- Flow 1:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 228.656 ms

Loss rate: 0.77%

### Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-07-24 13:41:16

End at: 2018-07-24 13:41:46

# Below is generated by plot.py at 2018-07-24 13:50:05

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.46 Mbit/s (91.5% utilization)

95th percentile per-packet one-way delay: 234.633 ms

Loss rate: 0.82%

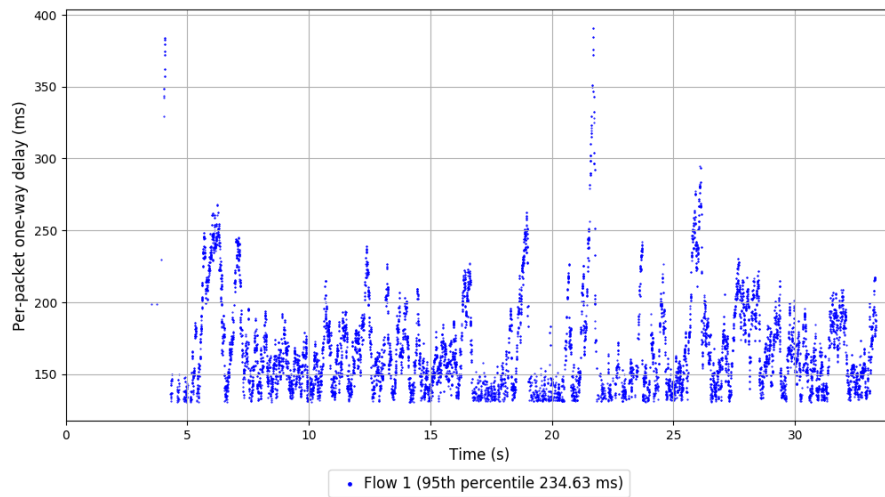
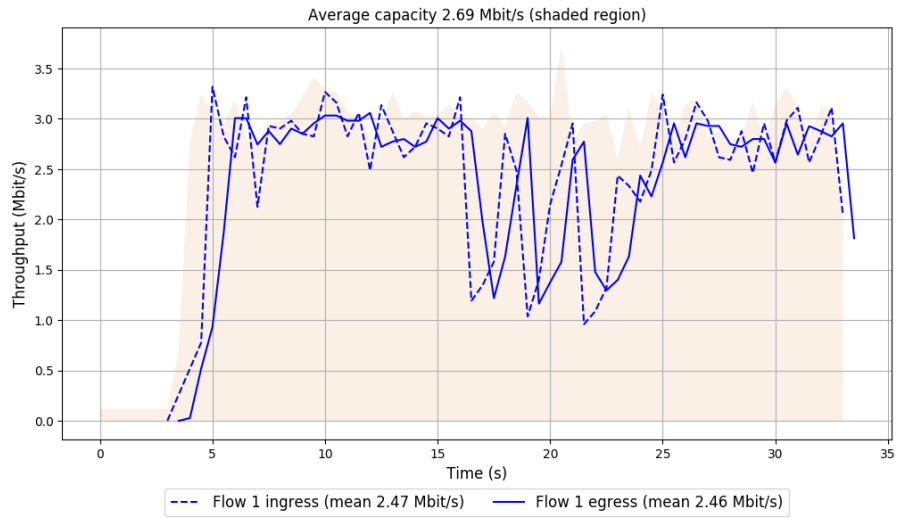
-- Flow 1:

Average throughput: 2.46 Mbit/s

95th percentile per-packet one-way delay: 234.633 ms

Loss rate: 0.82%

# Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

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

End at: 2018-07-24 12:12:44

# Below is generated by plot.py at 2018-07-24 13:50:05

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1840.963 ms

Loss rate: 8.14%

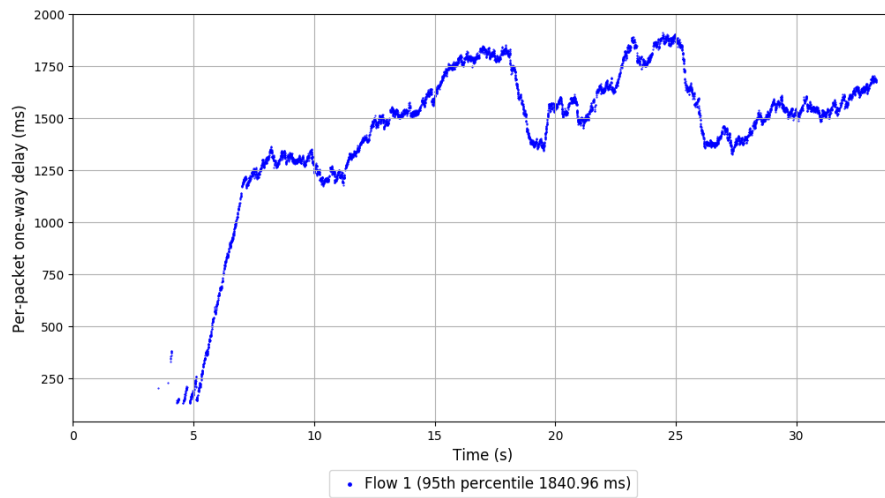
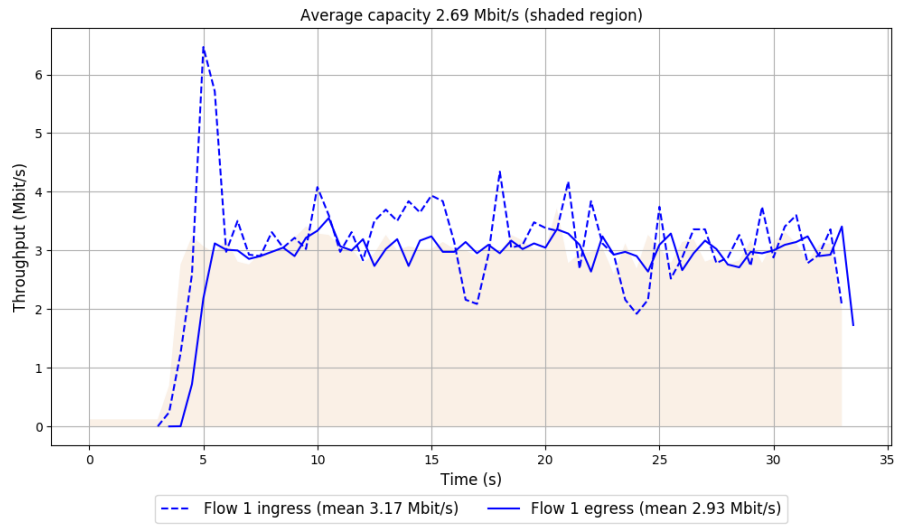
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1840.963 ms

Loss rate: 8.14%

### Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-07-24 12:21:56

End at: 2018-07-24 12:22:26

# Below is generated by plot.py at 2018-07-24 13:50:05

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1827.156 ms

Loss rate: 8.41%

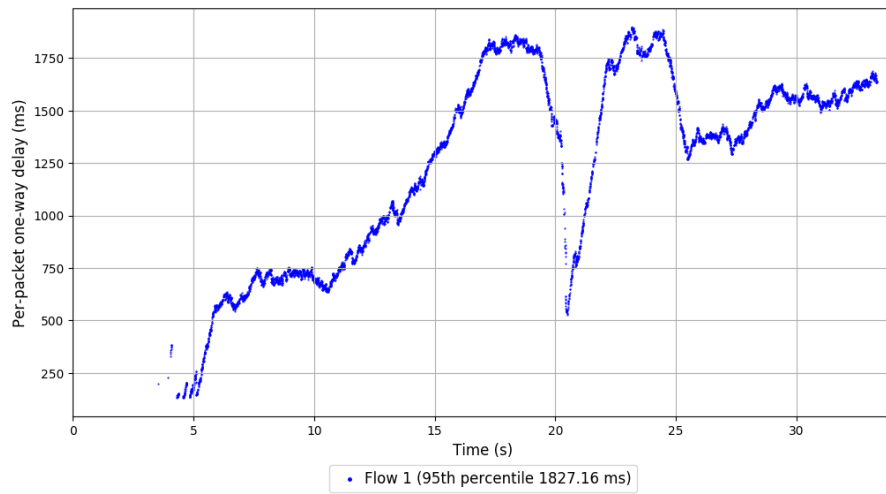
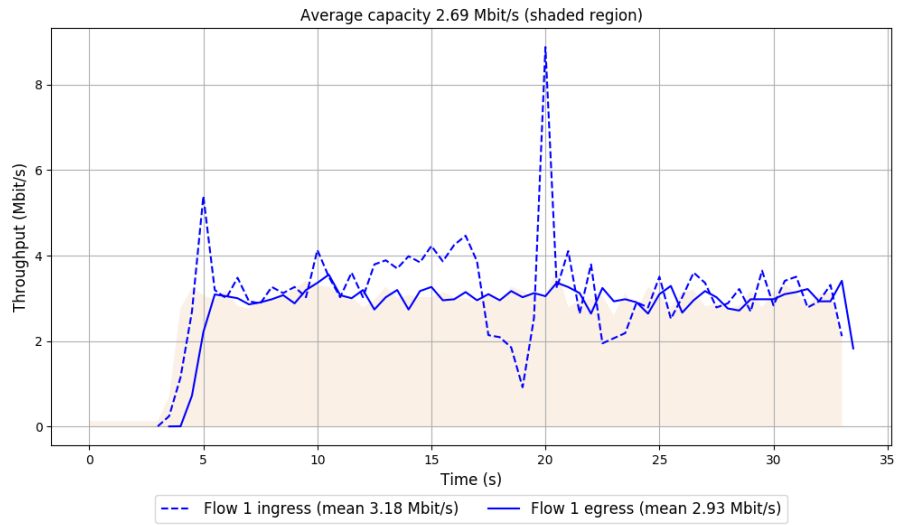
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1827.156 ms

Loss rate: 8.41%

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



Run 3: Statistics of TCP Cubic

Start at: 2018-07-24 12:31:38

End at: 2018-07-24 12:32:08

# Below is generated by plot.py at 2018-07-24 13:50:05

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1838.724 ms

Loss rate: 8.19%

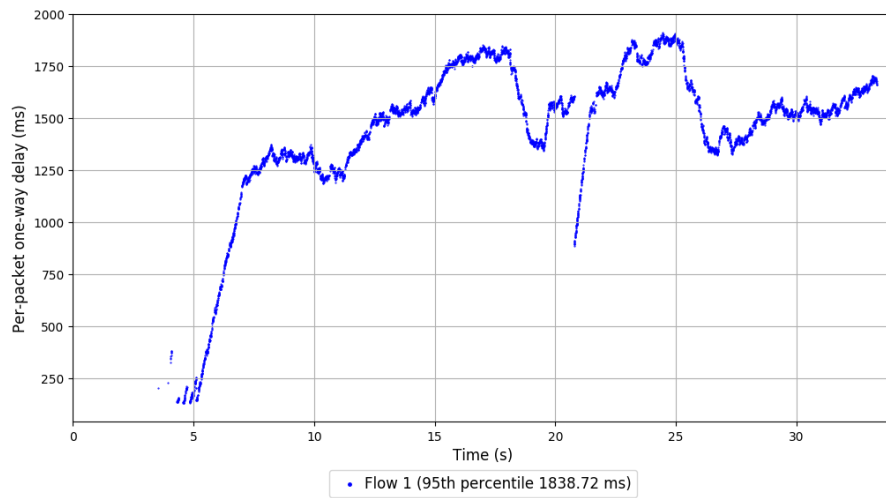
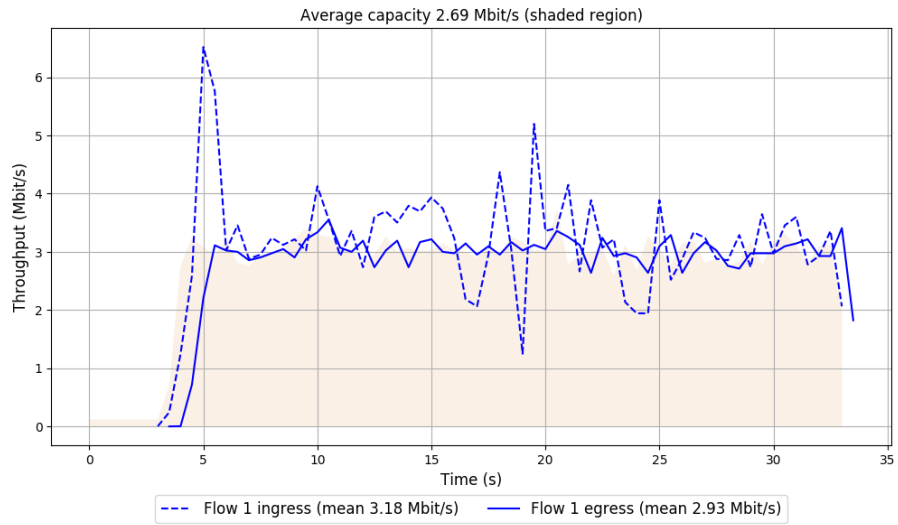
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1838.724 ms

Loss rate: 8.19%

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



Run 4: Statistics of TCP Cubic

Start at: 2018-07-24 12:41:20

End at: 2018-07-24 12:41:50

# Below is generated by plot.py at 2018-07-24 13:50:05

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1839.796 ms

Loss rate: 8.16%

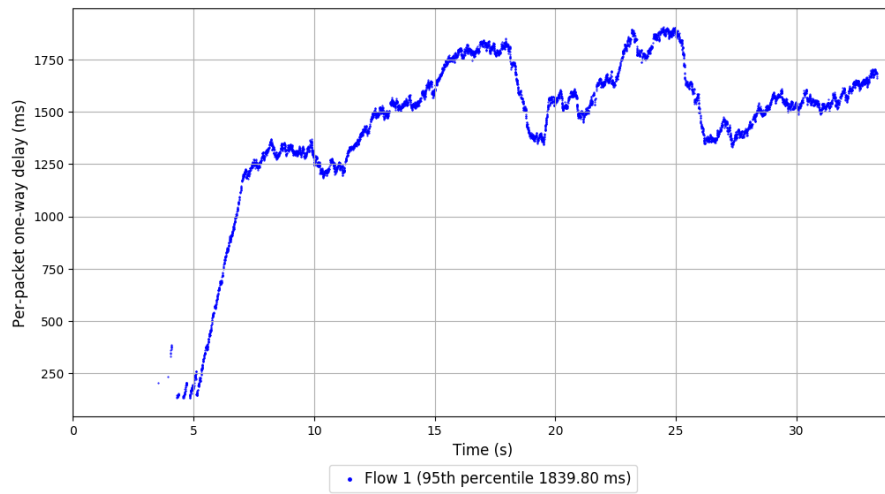
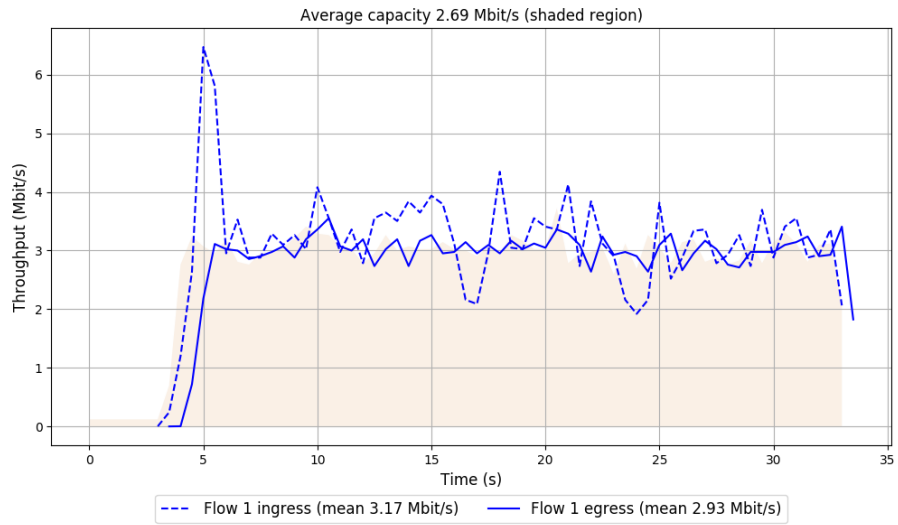
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1839.796 ms

Loss rate: 8.16%

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



Run 5: Statistics of TCP Cubic

Start at: 2018-07-24 12:51:02

End at: 2018-07-24 12:51:32

# Below is generated by plot.py at 2018-07-24 13:50:08

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1840.978 ms

Loss rate: 8.12%

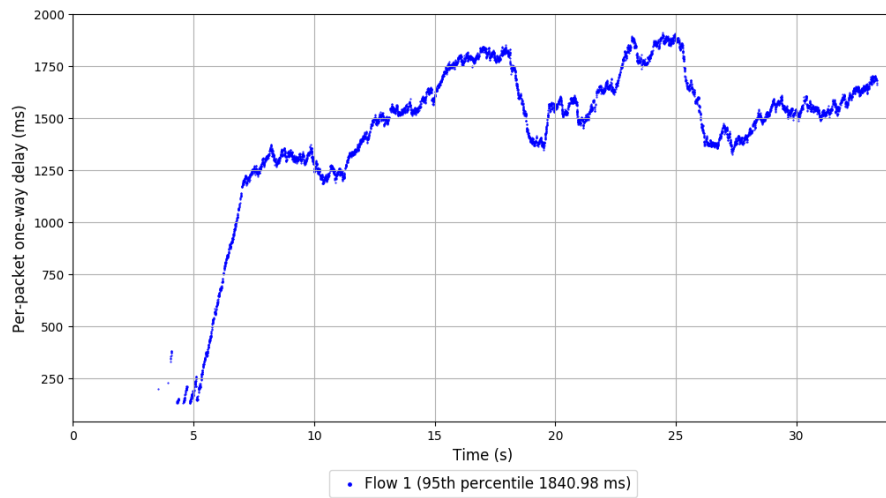
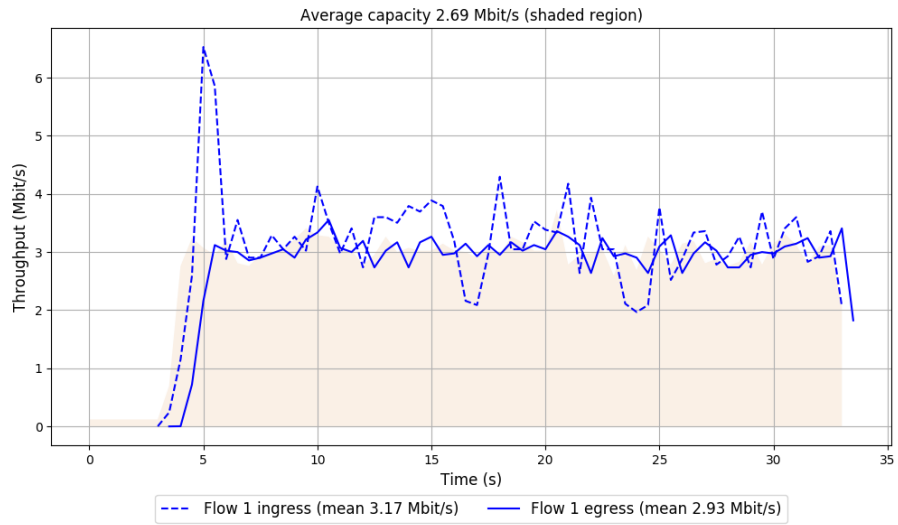
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1840.978 ms

Loss rate: 8.12%

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



Run 6: Statistics of TCP Cubic

Start at: 2018-07-24 13:00:44

End at: 2018-07-24 13:01:14

# Below is generated by plot.py at 2018-07-24 13:50:10

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1841.668 ms

Loss rate: 8.13%

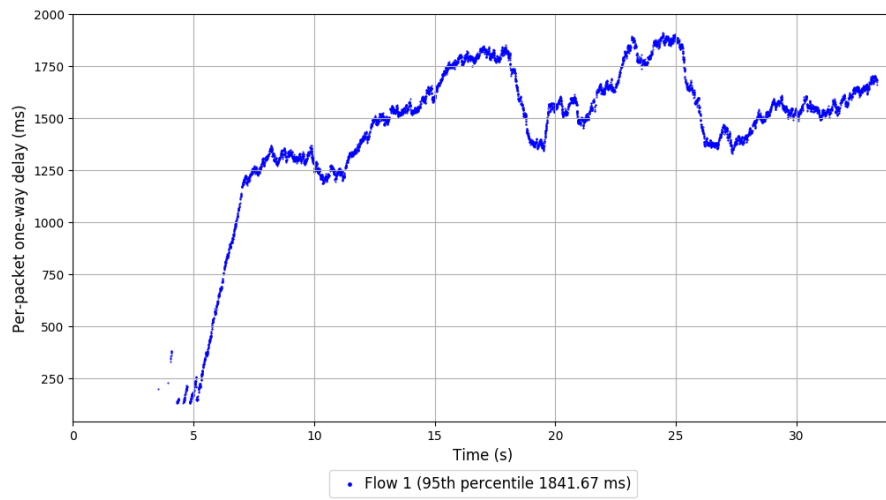
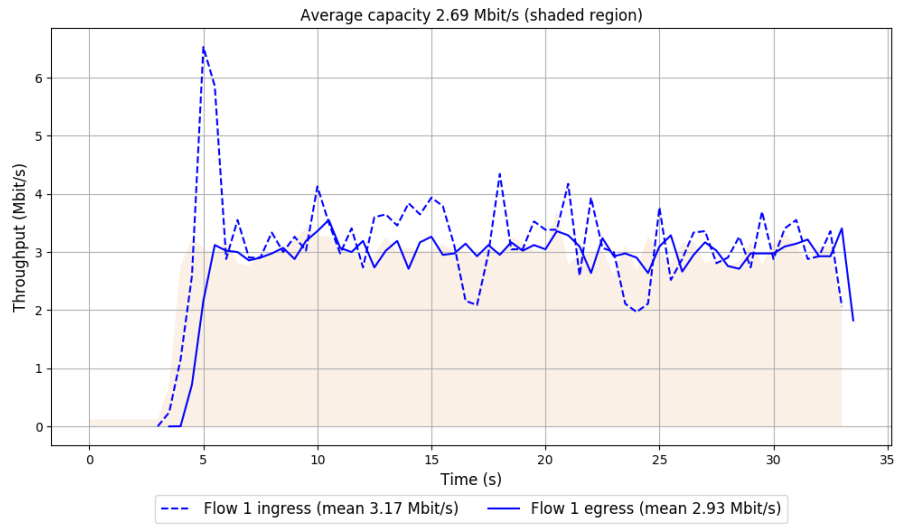
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1841.668 ms

Loss rate: 8.13%

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



Run 7: Statistics of TCP Cubic

Start at: 2018-07-24 13:10:26

End at: 2018-07-24 13:10:56

# Below is generated by plot.py at 2018-07-24 13:50:12

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1842.732 ms

Loss rate: 8.20%

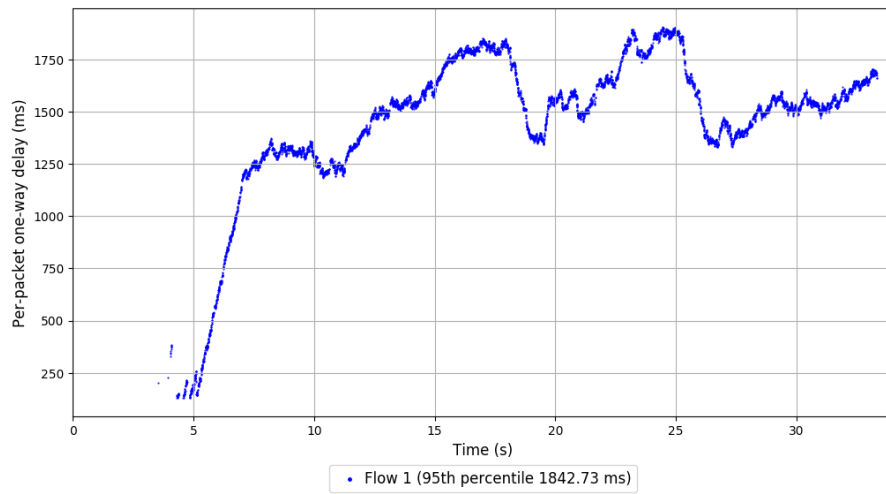
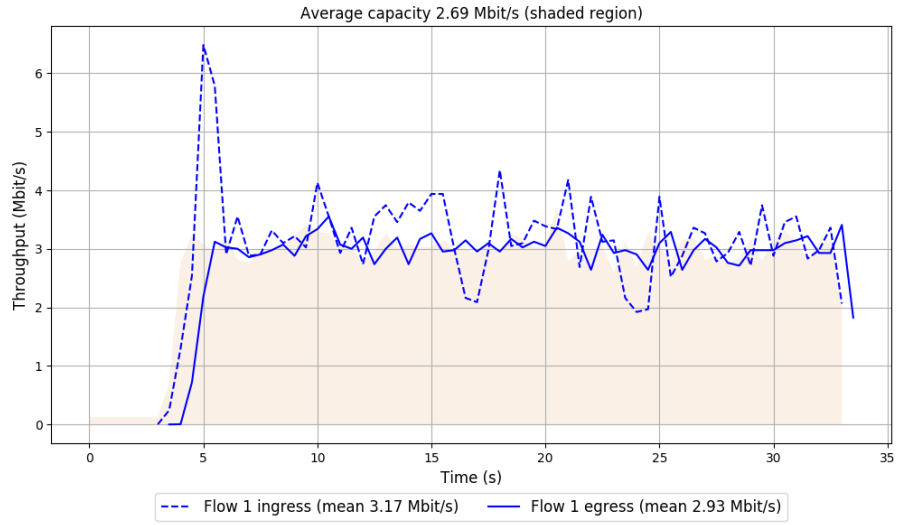
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1842.732 ms

Loss rate: 8.20%

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



Run 8: Statistics of TCP Cubic

Start at: 2018-07-24 13:20:09

End at: 2018-07-24 13:20:39

# Below is generated by plot.py at 2018-07-24 13:50:13

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1836.163 ms

Loss rate: 8.15%

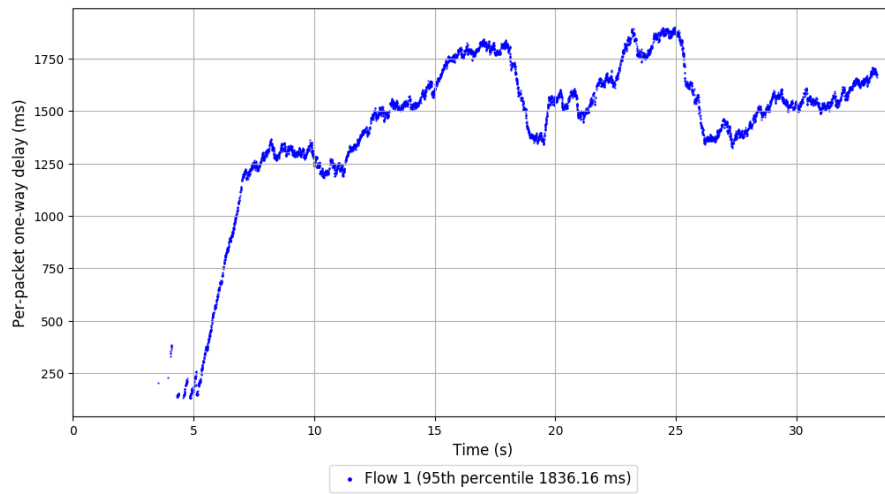
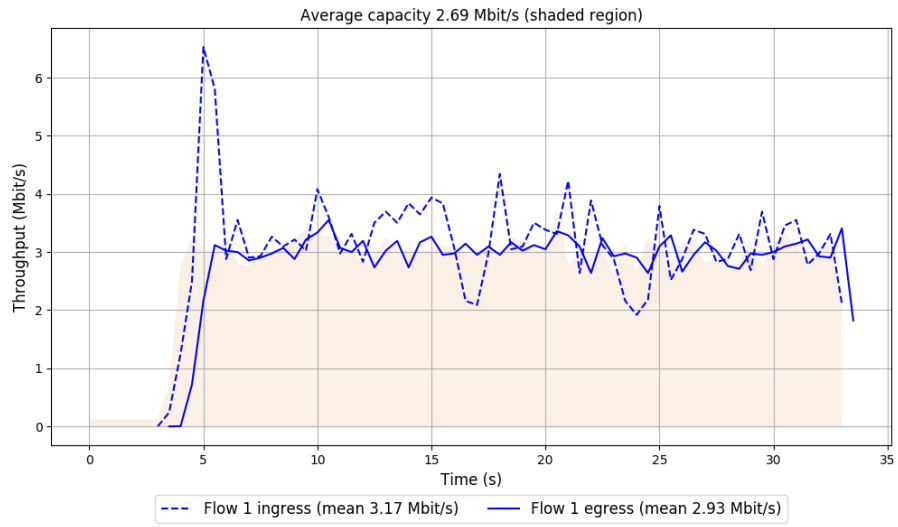
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1836.163 ms

Loss rate: 8.15%

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



Run 9: Statistics of TCP Cubic

Start at: 2018-07-24 13:29:51

End at: 2018-07-24 13:30:21

# Below is generated by plot.py at 2018-07-24 13:50:13

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1837.564 ms

Loss rate: 8.12%

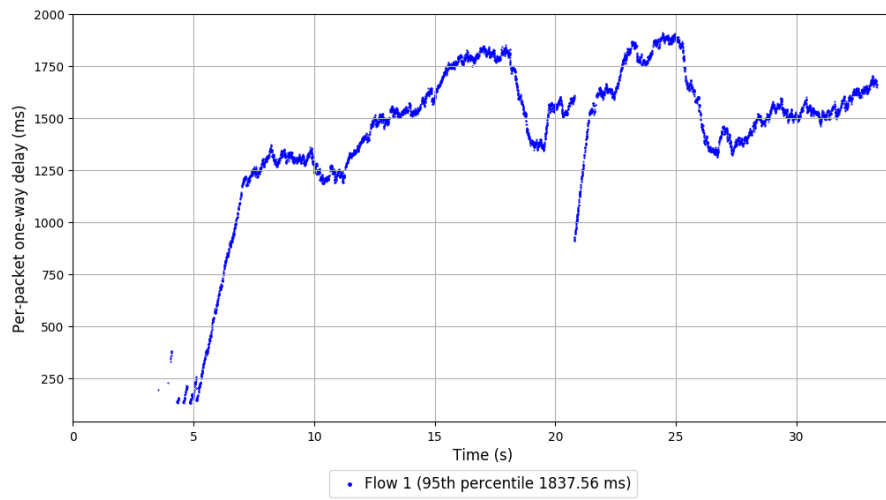
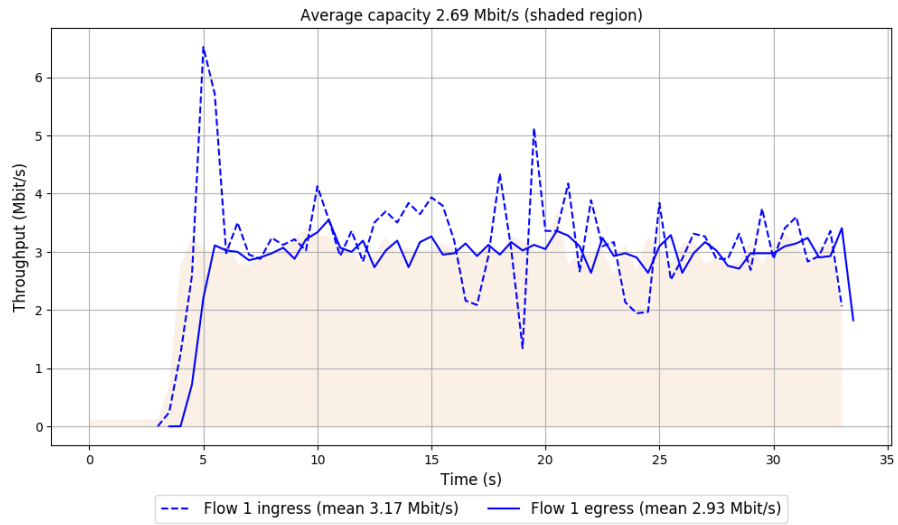
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1837.564 ms

Loss rate: 8.12%

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



Run 10: Statistics of TCP Cubic

Start at: 2018-07-24 13:39:33

End at: 2018-07-24 13:40:03

# Below is generated by plot.py at 2018-07-24 13:50:14

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.94 Mbit/s (109.1% utilization)

95th percentile per-packet one-way delay: 1827.010 ms

Loss rate: 8.50%

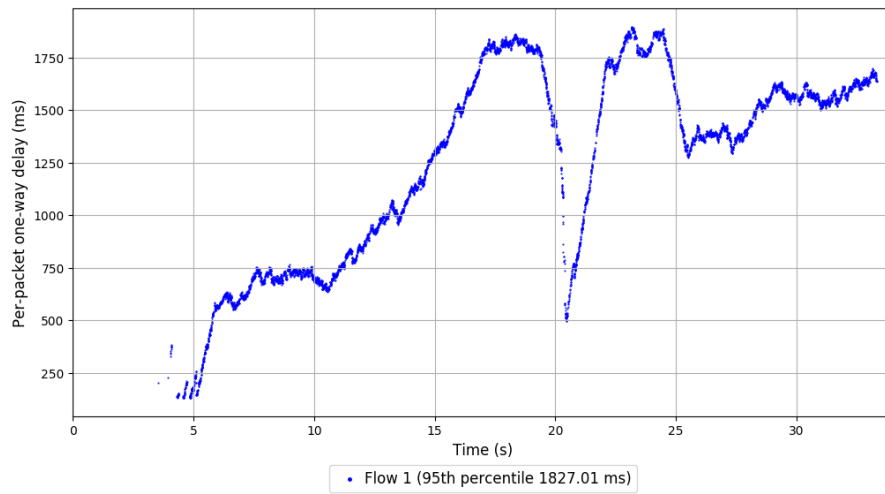
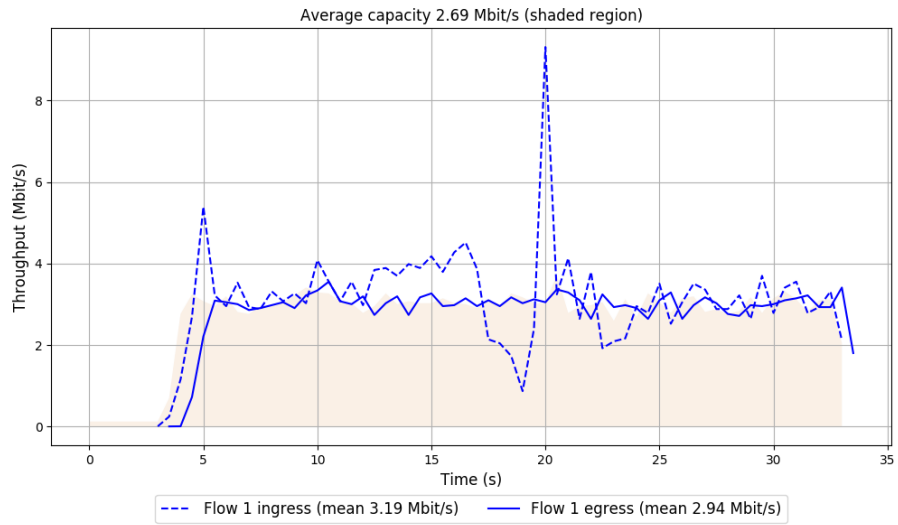
-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 1827.010 ms

Loss rate: 8.50%

### Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2018-07-24 12:20:14

End at: 2018-07-24 12:20:44

# Below is generated by plot.py at 2018-07-24 13:50:17

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1547.123 ms

Loss rate: 61.38%

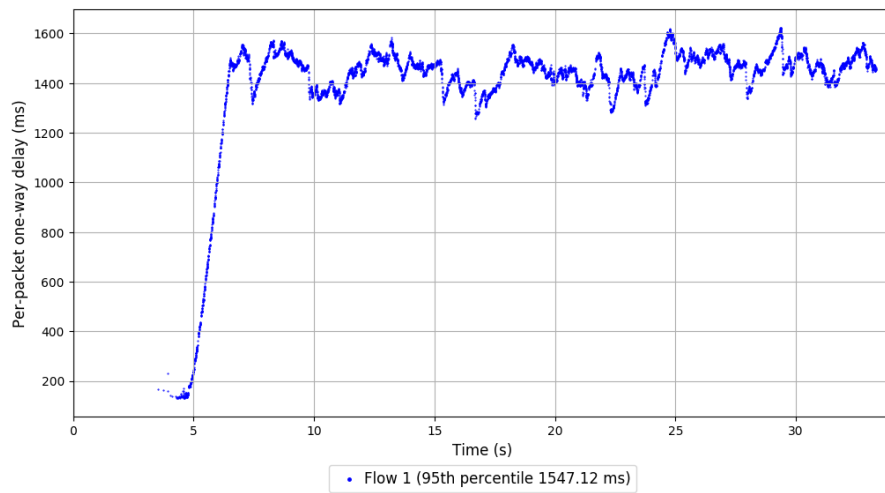
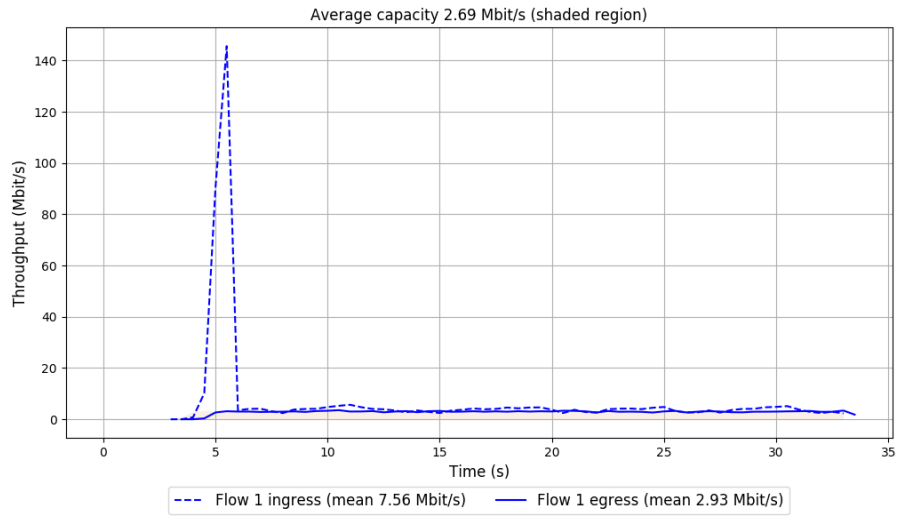
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1547.123 ms

Loss rate: 61.38%

# Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-07-24 12:29:55

End at: 2018-07-24 12:30:25

# Below is generated by plot.py at 2018-07-24 13:50:18

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.94 Mbit/s (109.1% utilization)

95th percentile per-packet one-way delay: 1579.800 ms

Loss rate: 60.84%

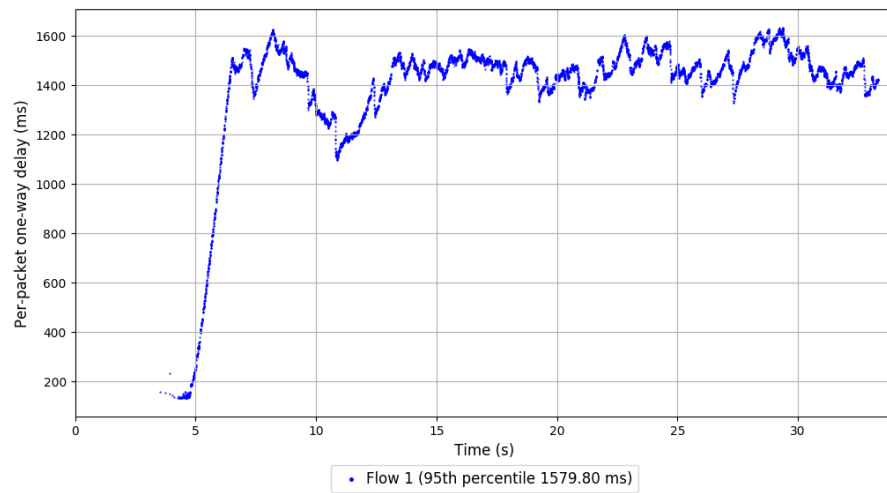
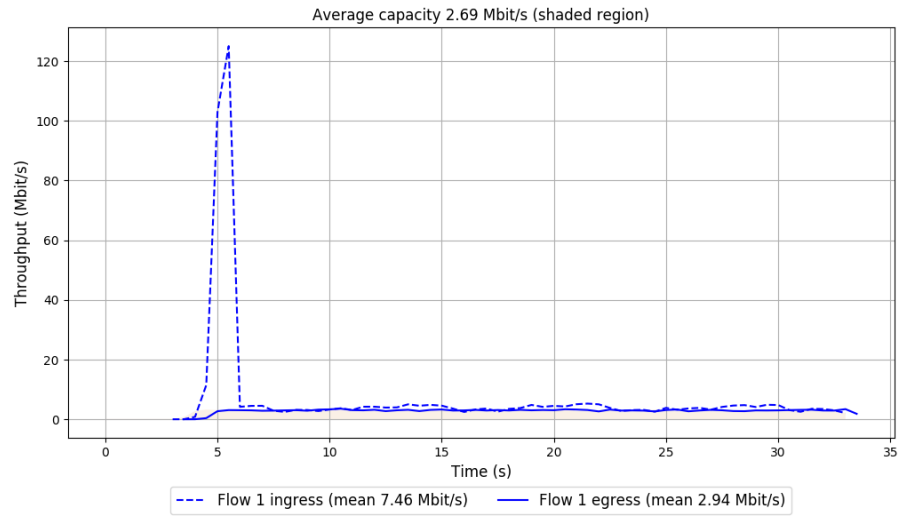
-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 1579.800 ms

Loss rate: 60.84%

## Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-07-24 12:39:37

End at: 2018-07-24 12:40:07

# Below is generated by plot.py at 2018-07-24 13:50:21

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1568.764 ms

Loss rate: 60.65%

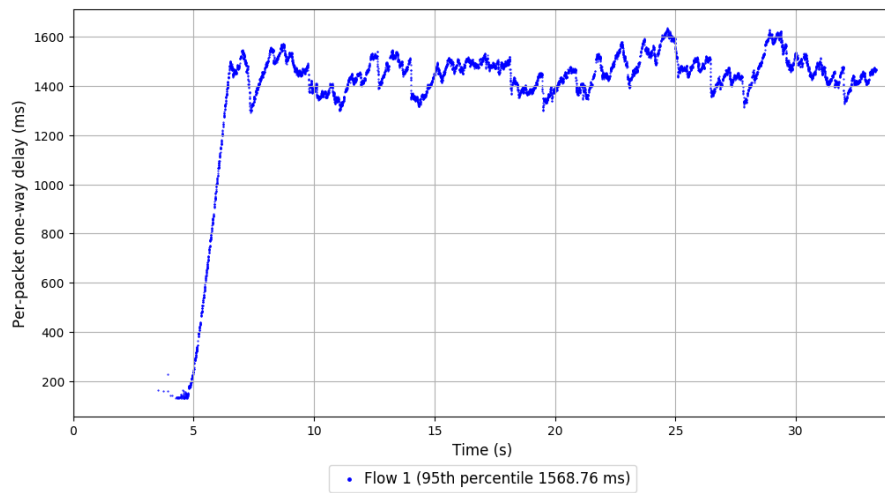
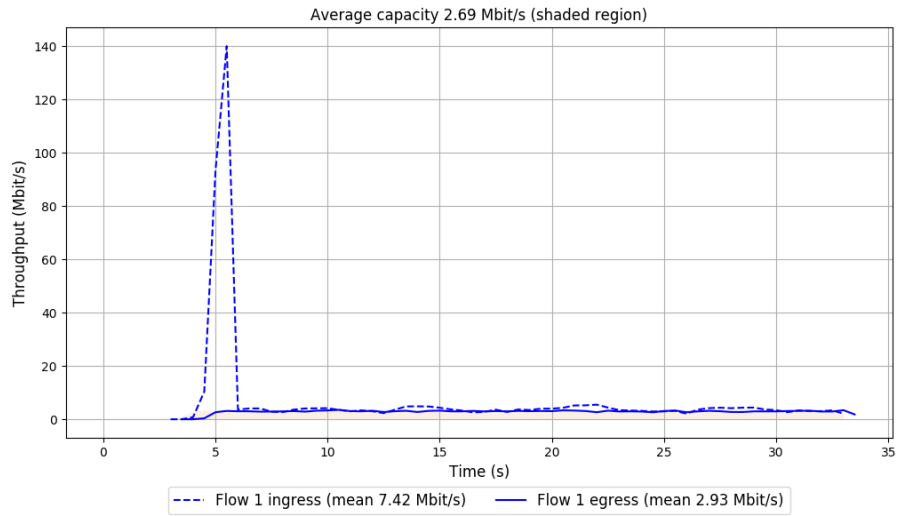
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1568.764 ms

Loss rate: 60.65%

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



Run 4: Statistics of FillP

Start at: 2018-07-24 12:49:19

End at: 2018-07-24 12:49:49

# Below is generated by plot.py at 2018-07-24 13:50:24

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.94 Mbit/s (109.1% utilization)

95th percentile per-packet one-way delay: 1546.332 ms

Loss rate: 60.80%

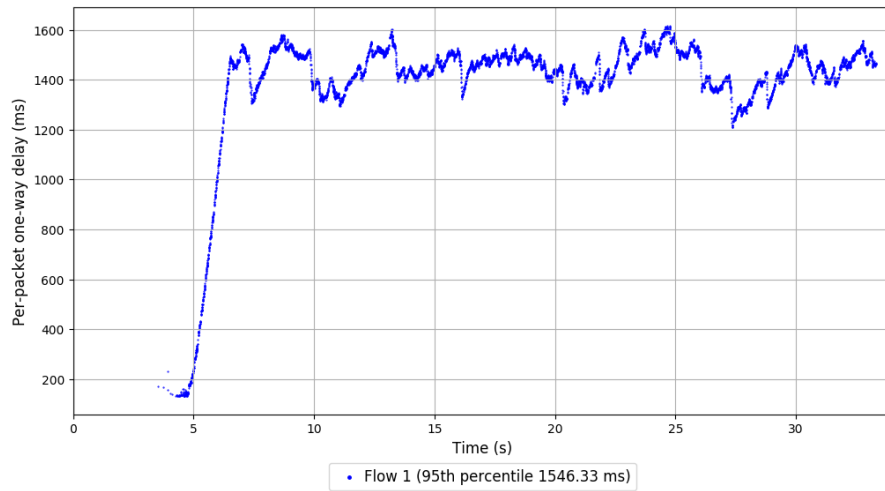
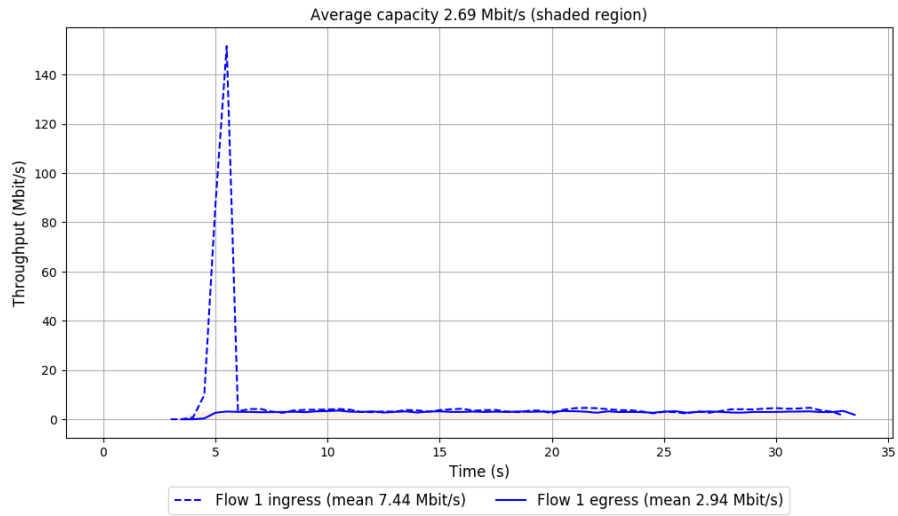
-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 1546.332 ms

Loss rate: 60.80%

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



Run 5: Statistics of FillP

Start at: 2018-07-24 12:59:01

End at: 2018-07-24 12:59:31

# Below is generated by plot.py at 2018-07-24 13:50:25

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1564.936 ms

Loss rate: 60.99%

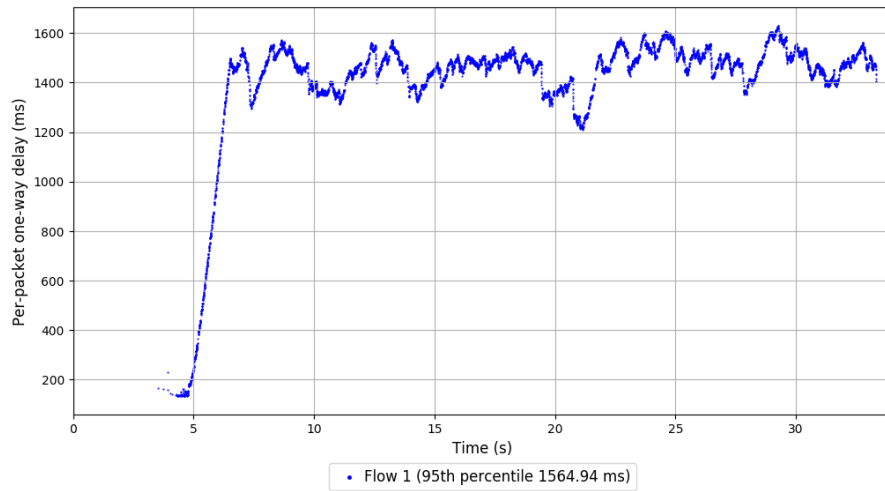
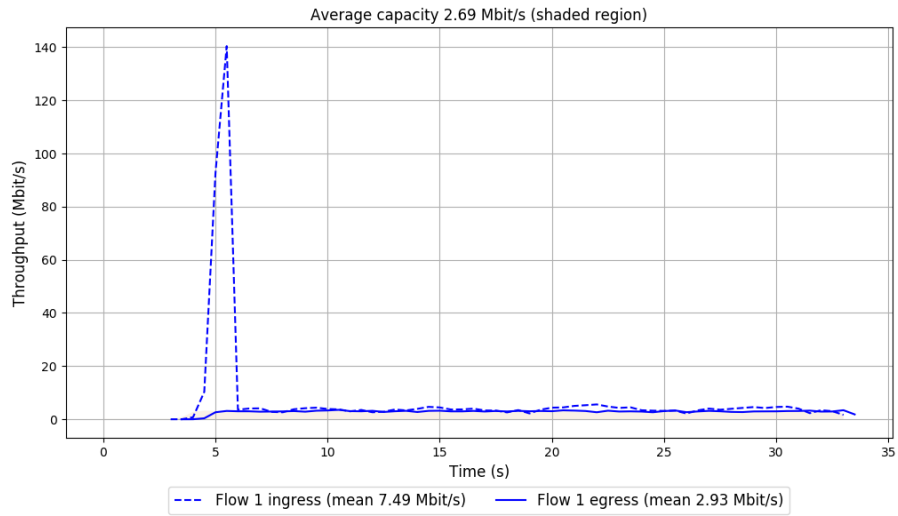
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1564.936 ms

Loss rate: 60.99%

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



Run 6: Statistics of FillP

Start at: 2018-07-24 13:08:44

End at: 2018-07-24 13:09:14

# Below is generated by plot.py at 2018-07-24 13:50:26

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1573.513 ms

Loss rate: 60.91%

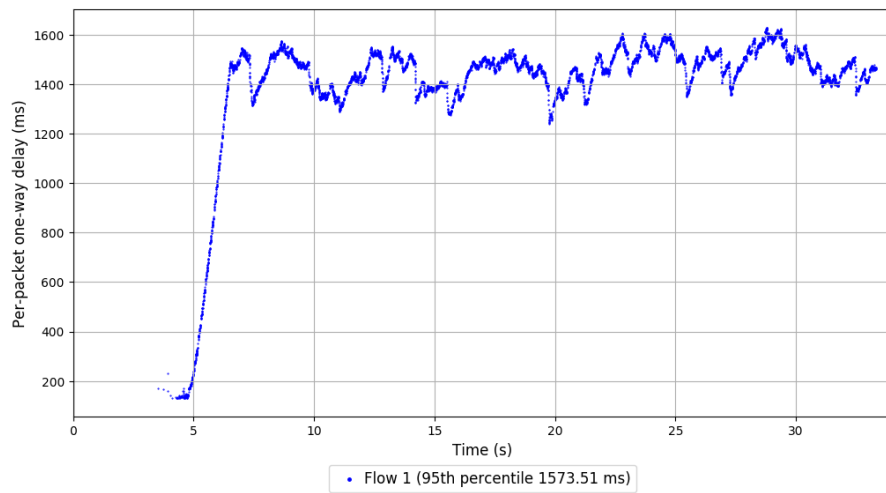
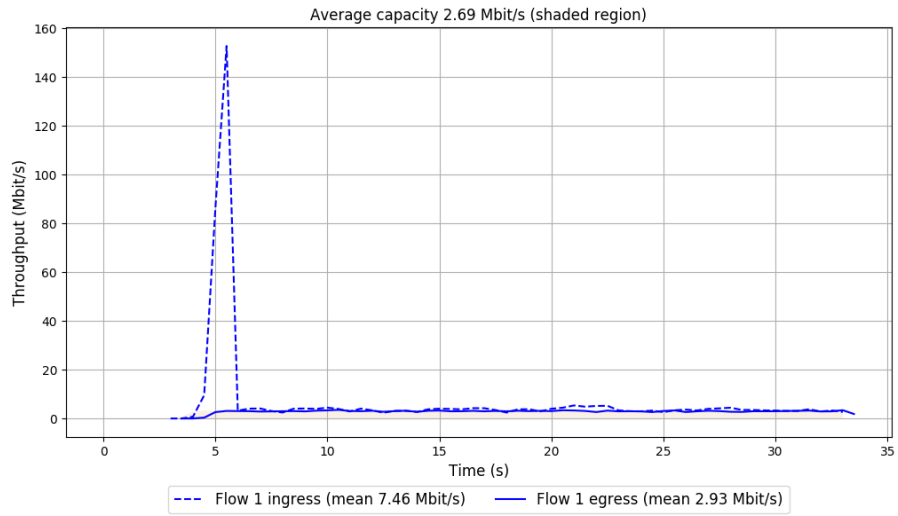
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1573.513 ms

Loss rate: 60.91%

## Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-07-24 13:18:26

End at: 2018-07-24 13:18:56

# Below is generated by plot.py at 2018-07-24 13:50:26

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1553.294 ms

Loss rate: 61.21%

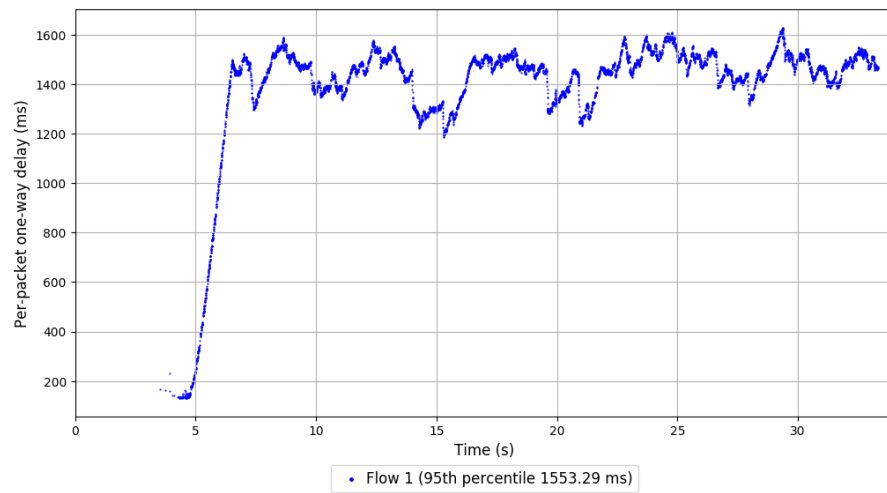
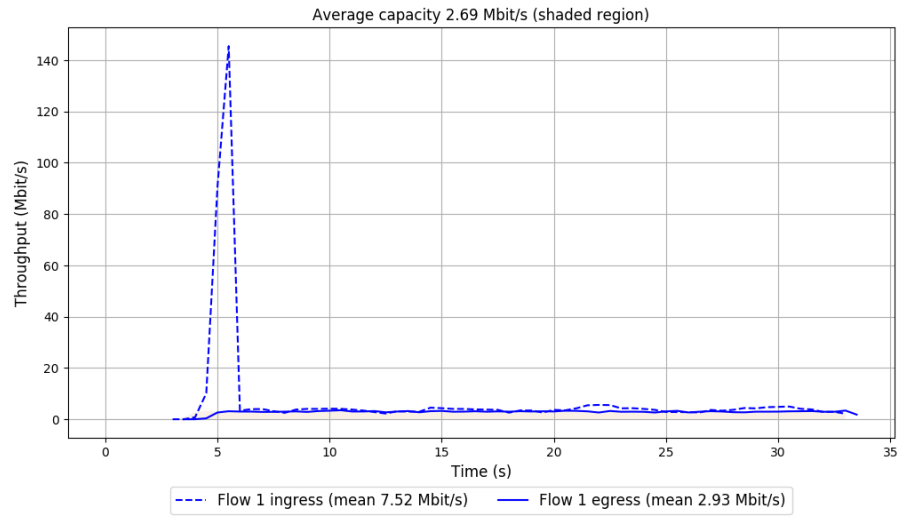
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1553.294 ms

Loss rate: 61.21%

## Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-07-24 13:28:08

End at: 2018-07-24 13:28:38

# Below is generated by plot.py at 2018-07-24 13:50:27

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.94 Mbit/s (109.1% utilization)

95th percentile per-packet one-way delay: 1569.314 ms

Loss rate: 60.81%

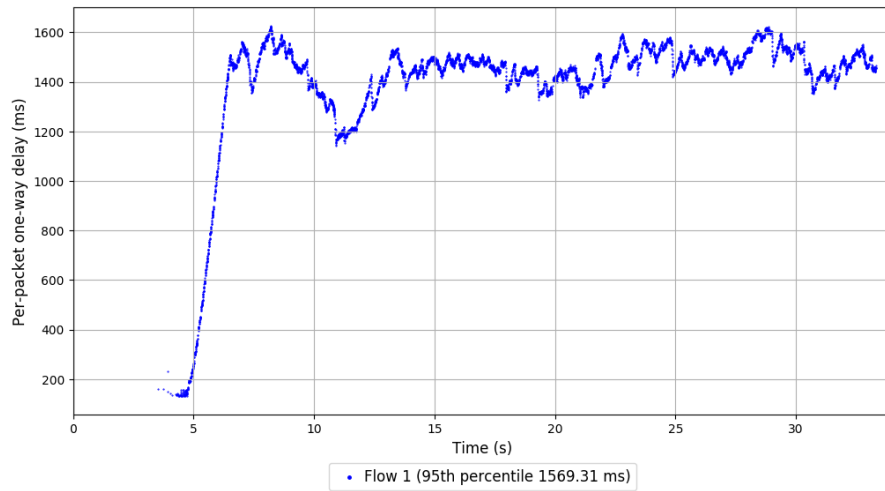
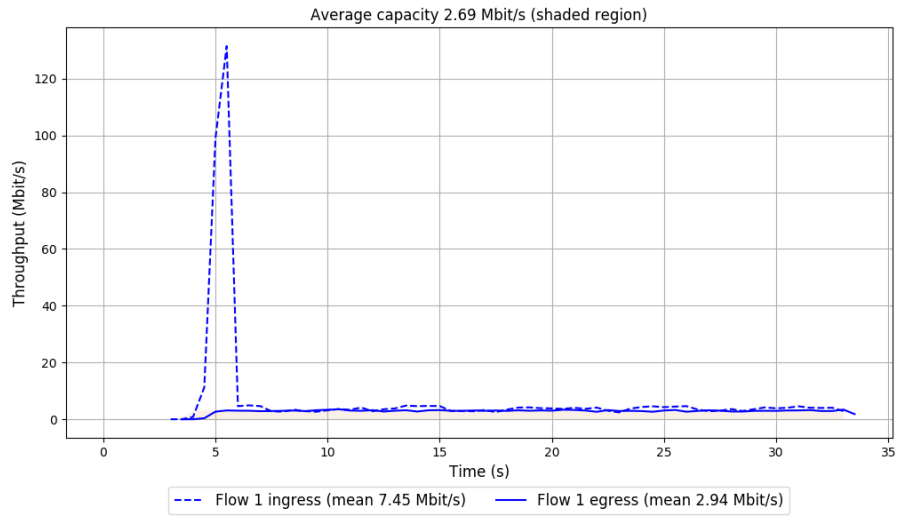
-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 1569.314 ms

Loss rate: 60.81%

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



Run 9: Statistics of FillP

Start at: 2018-07-24 13:37:51

End at: 2018-07-24 13:38:21

# Below is generated by plot.py at 2018-07-24 13:50:30

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.94 Mbit/s (109.1% utilization)

95th percentile per-packet one-way delay: 1569.272 ms

Loss rate: 59.39%

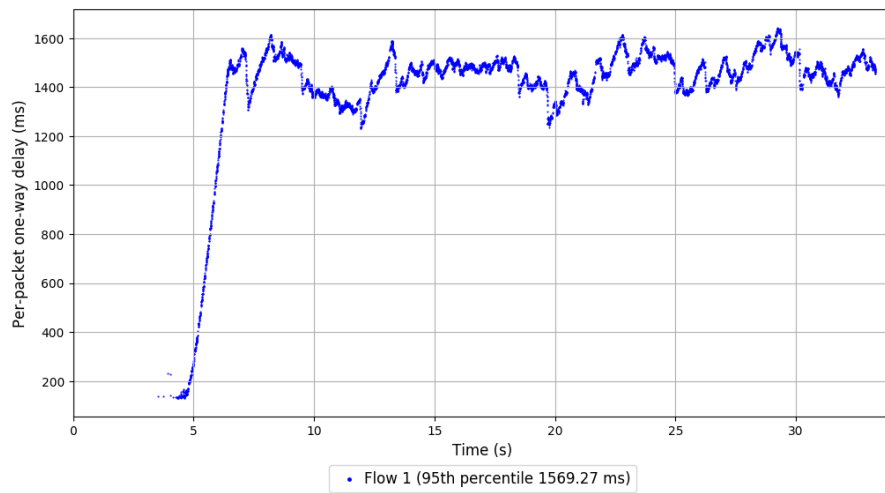
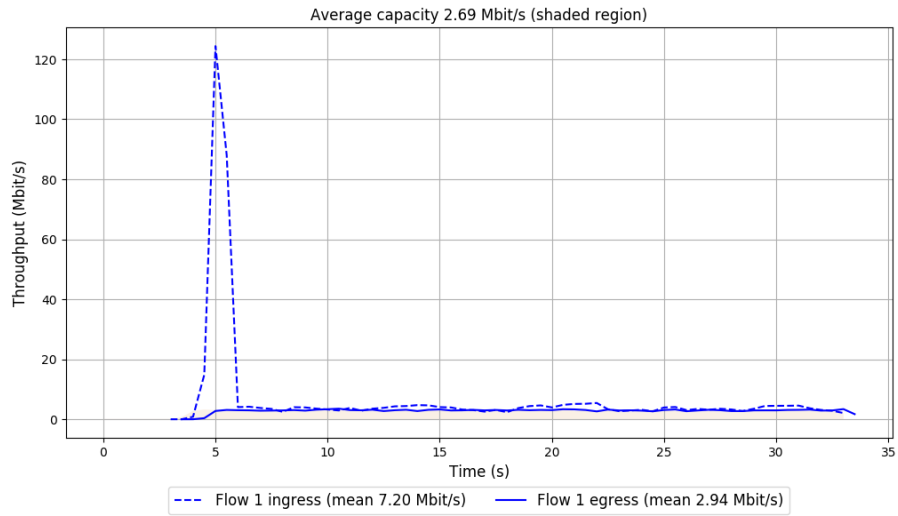
-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 1569.272 ms

Loss rate: 59.39%

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



Run 10: Statistics of FillP

Start at: 2018-07-24 13:47:33

End at: 2018-07-24 13:48:03

# Below is generated by plot.py at 2018-07-24 13:50:46

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.94 Mbit/s (109.1% utilization)

95th percentile per-packet one-way delay: 1563.743 ms

Loss rate: 86.57%

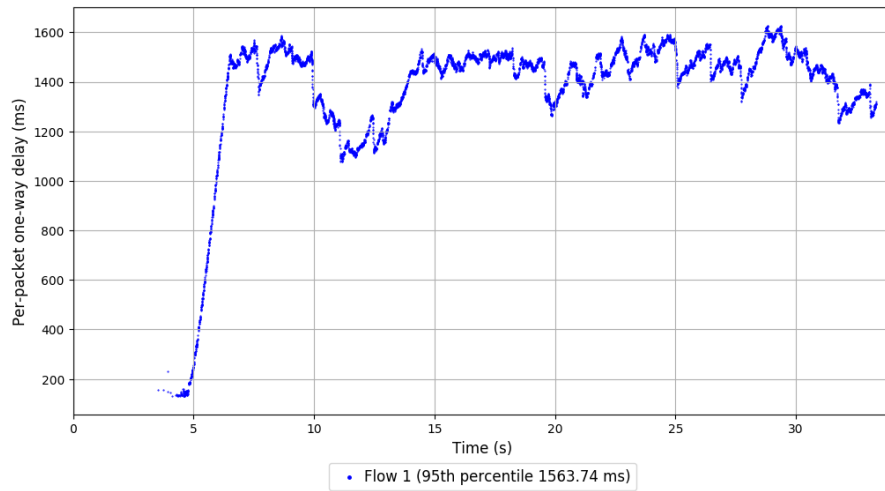
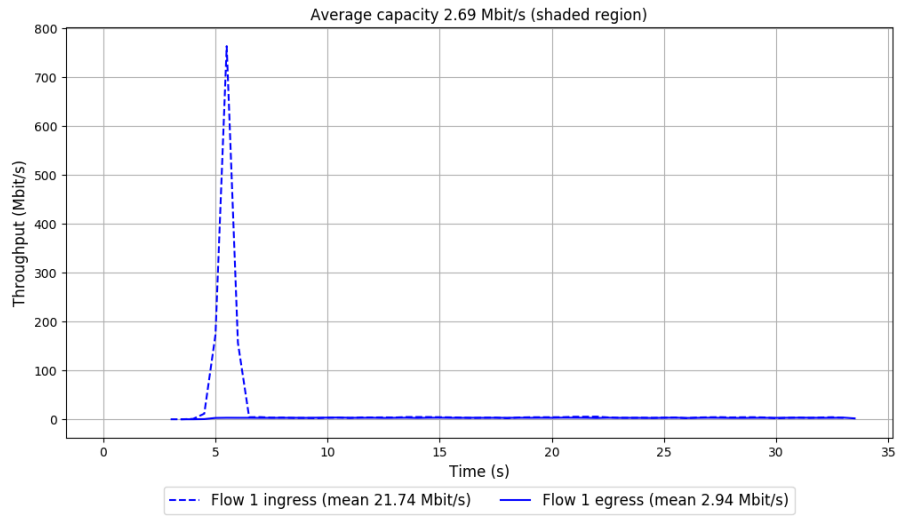
-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 1563.743 ms

Loss rate: 86.57%

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



Run 1: Statistics of FillP-Sheep

Start at: 2018-07-24 12:17:23

End at: 2018-07-24 12:17:53

# Below is generated by plot.py at 2018-07-24 13:50:46

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.9% utilization)

95th percentile per-packet one-way delay: 1164.001 ms

Loss rate: 8.41%

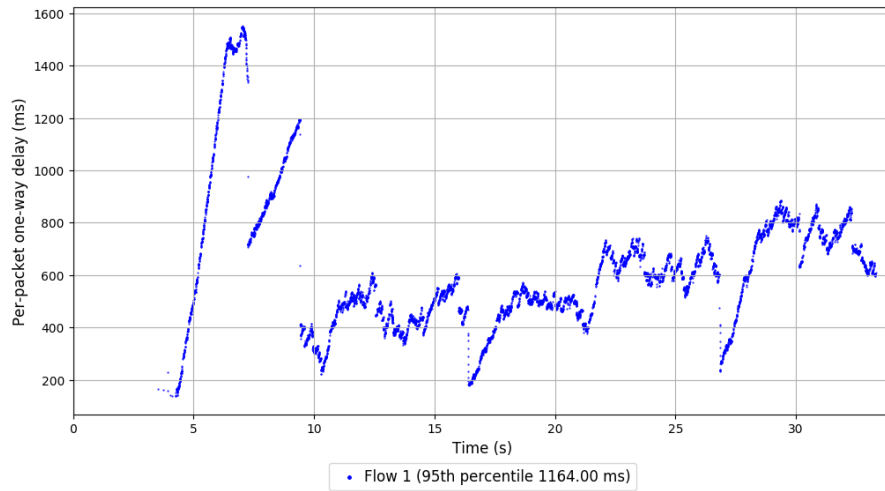
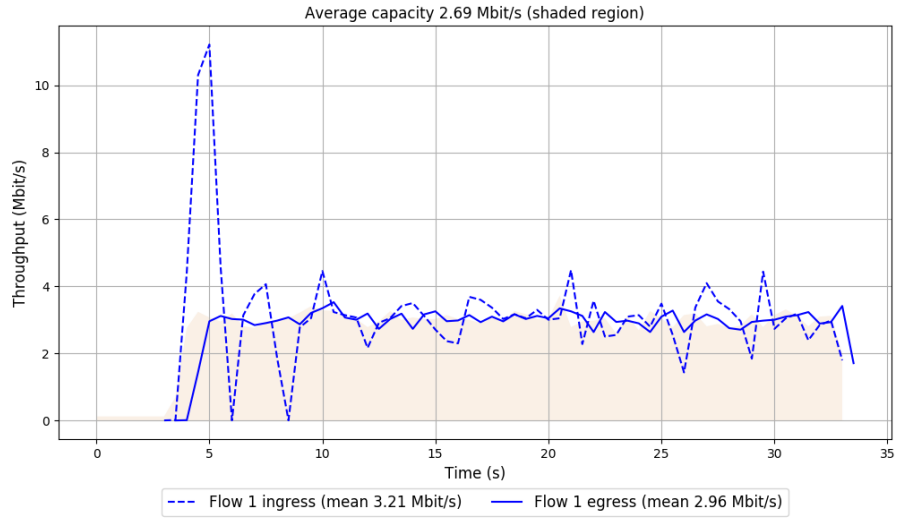
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 1164.001 ms

Loss rate: 8.41%

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



Run 2: Statistics of FillP-Sheep

Start at: 2018-07-24 12:27:04

End at: 2018-07-24 12:27:34

# Below is generated by plot.py at 2018-07-24 13:50:46

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.9% utilization)

95th percentile per-packet one-way delay: 1097.118 ms

Loss rate: 8.77%

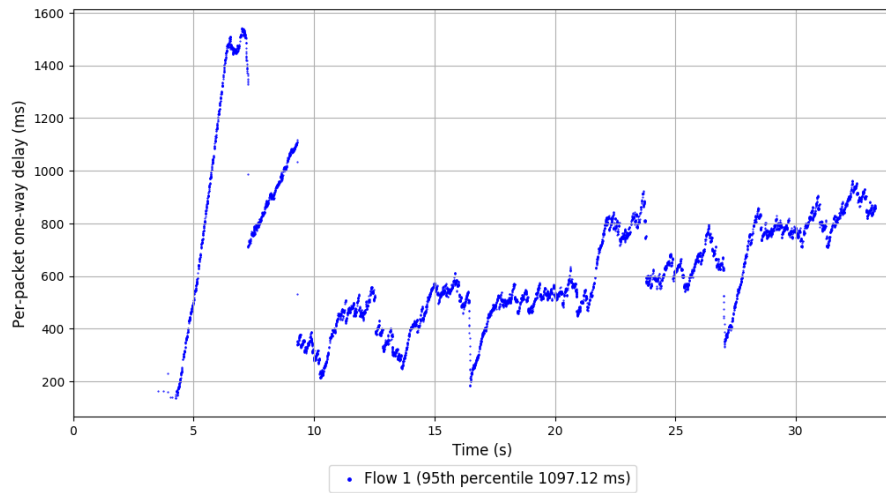
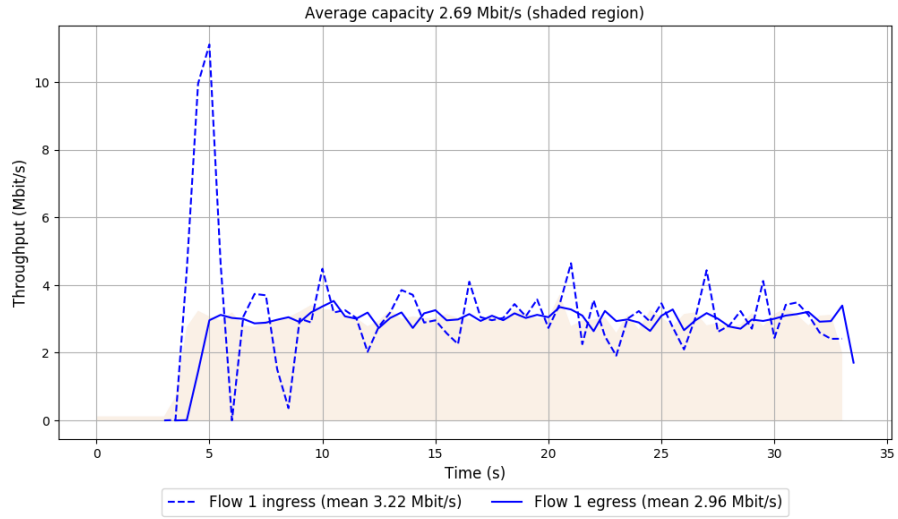
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 1097.118 ms

Loss rate: 8.77%

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



Run 3: Statistics of FillP-Sheep

Start at: 2018-07-24 12:36:46

End at: 2018-07-24 12:37:16

# Below is generated by plot.py at 2018-07-24 13:50:46

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.8% utilization)

95th percentile per-packet one-way delay: 882.002 ms

Loss rate: 6.74%

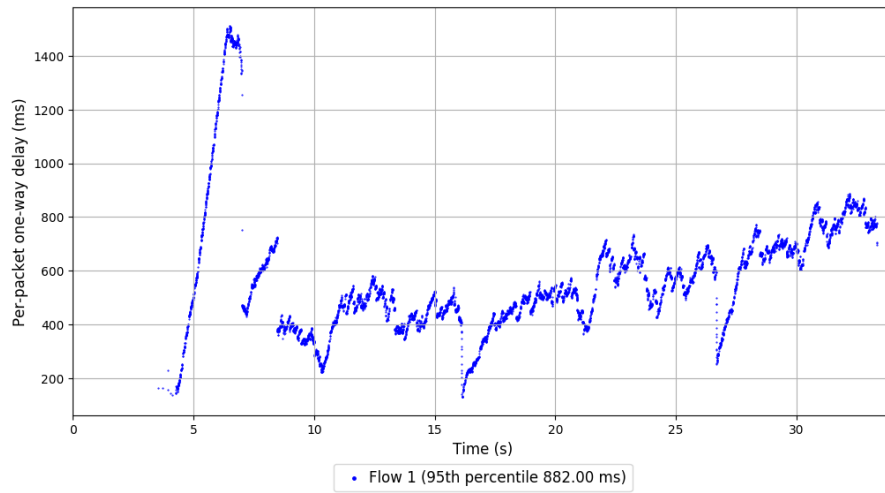
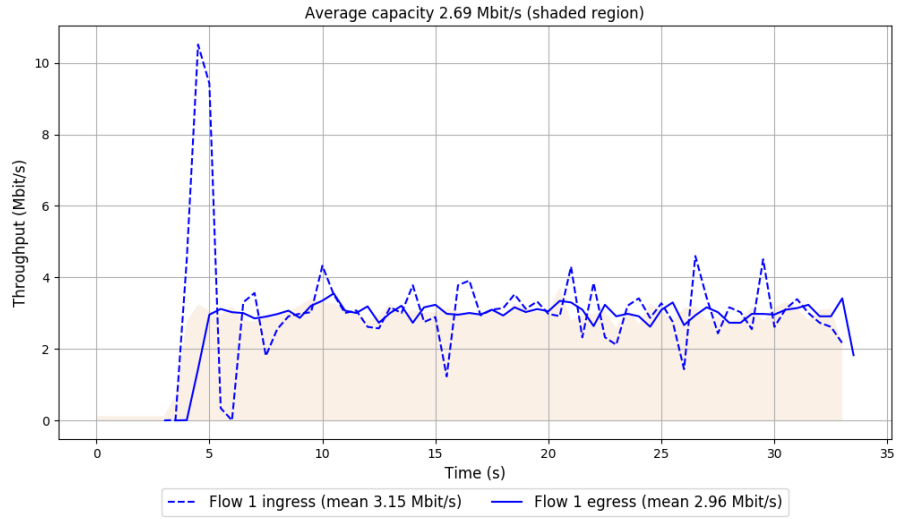
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 882.002 ms

Loss rate: 6.74%

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



Run 4: Statistics of FillP-Sheep

Start at: 2018-07-24 12:46:28

End at: 2018-07-24 12:46:58

# Below is generated by plot.py at 2018-07-24 13:50:46

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.9% utilization)

95th percentile per-packet one-way delay: 1153.793 ms

Loss rate: 8.90%

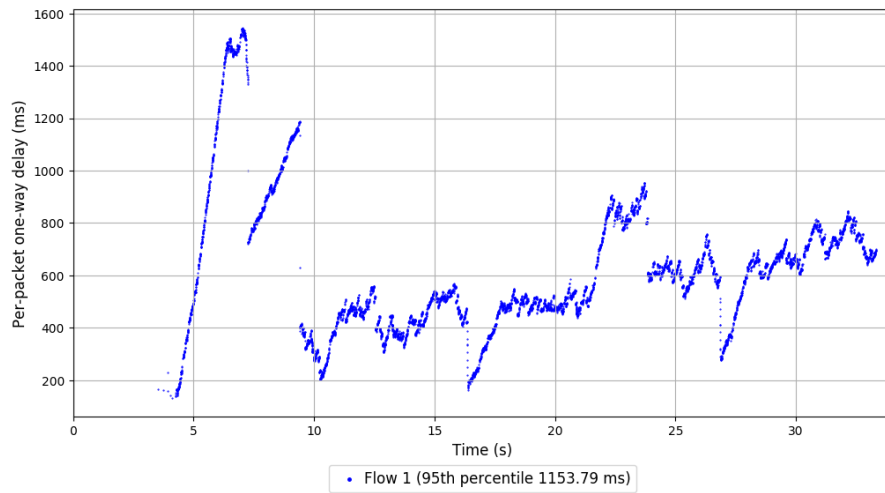
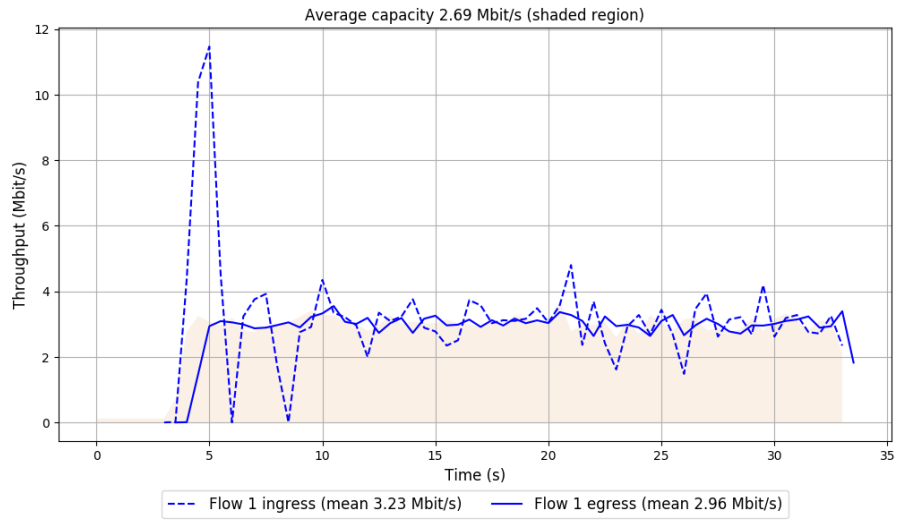
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 1153.793 ms

Loss rate: 8.90%

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



Run 5: Statistics of FillP-Sheep

Start at: 2018-07-24 12:56:10

End at: 2018-07-24 12:56:40

# Below is generated by plot.py at 2018-07-24 13:50:46

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.9% utilization)

95th percentile per-packet one-way delay: 1172.213 ms

Loss rate: 8.77%

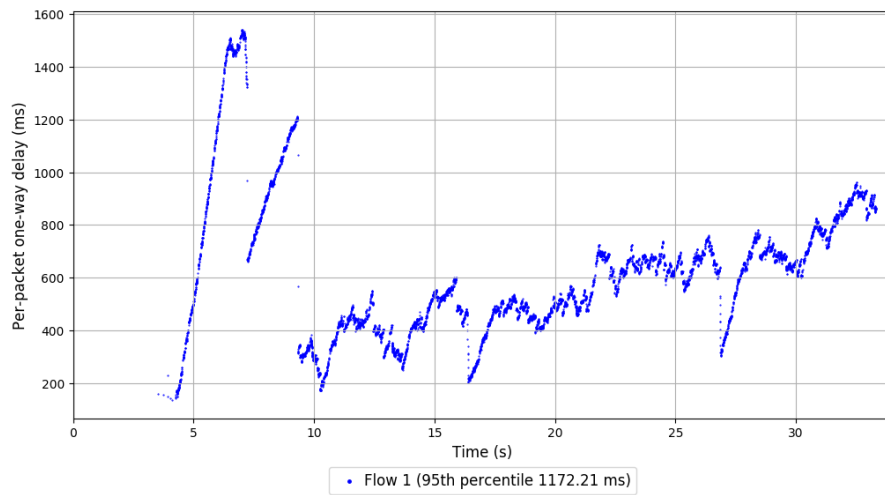
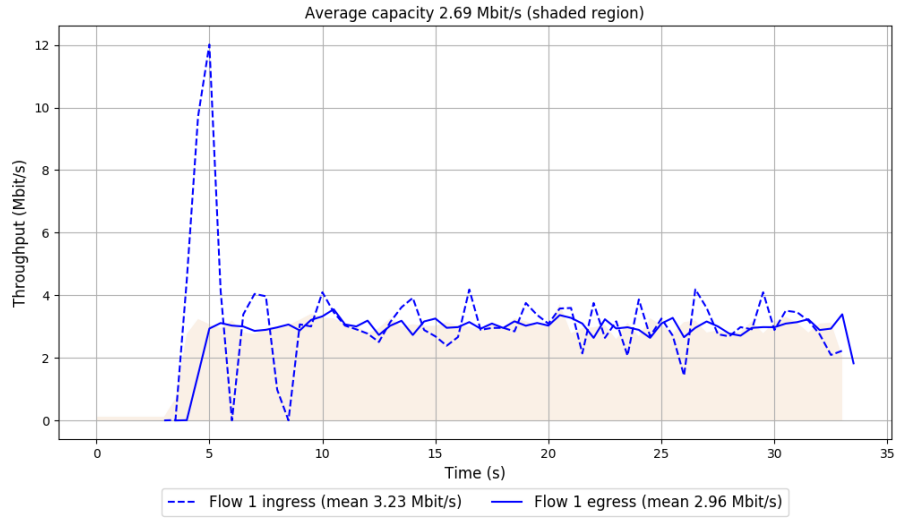
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 1172.213 ms

Loss rate: 8.77%

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



Run 6: Statistics of FillP-Sheep

Start at: 2018-07-24 13:05:52

End at: 2018-07-24 13:06:22

# Below is generated by plot.py at 2018-07-24 13:50:46

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 856.462 ms

Loss rate: 4.01%

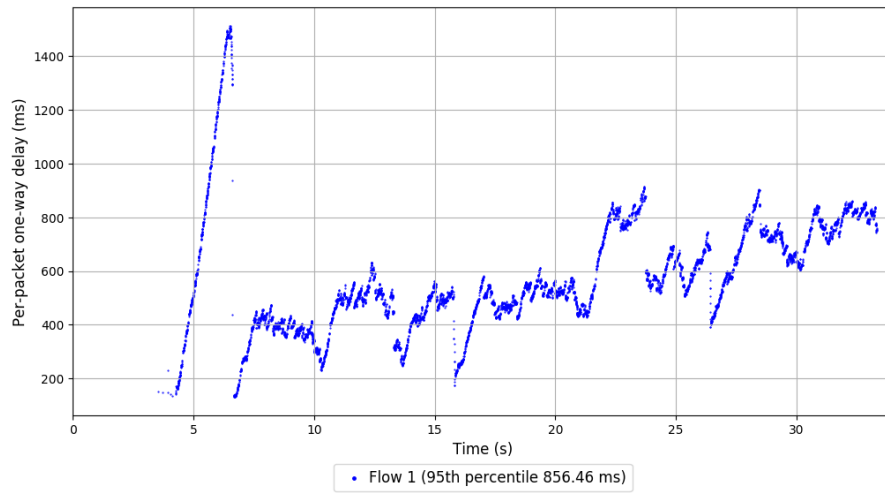
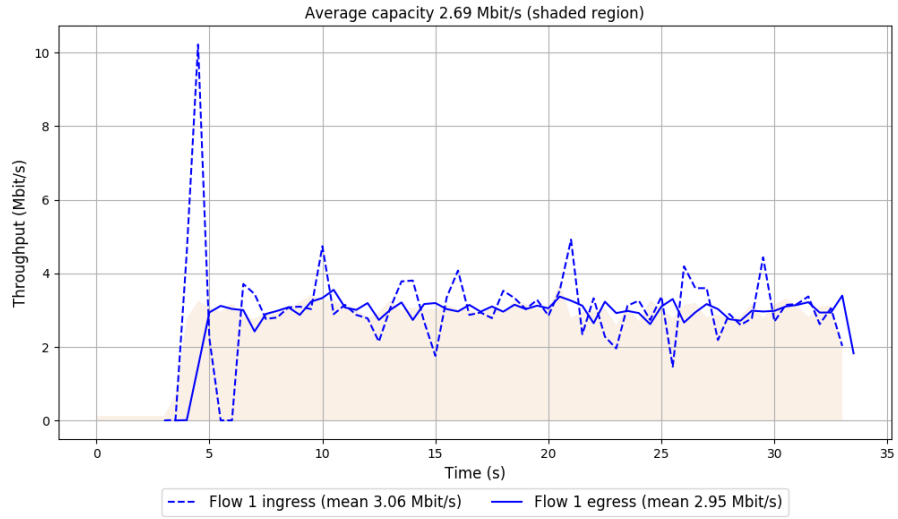
-- Flow 1:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 856.462 ms

Loss rate: 4.01%

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



Run 7: Statistics of FillP-Sheep

Start at: 2018-07-24 13:15:35

End at: 2018-07-24 13:16:05

# Below is generated by plot.py at 2018-07-24 13:50:46

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.9% utilization)

95th percentile per-packet one-way delay: 1108.131 ms

Loss rate: 8.09%

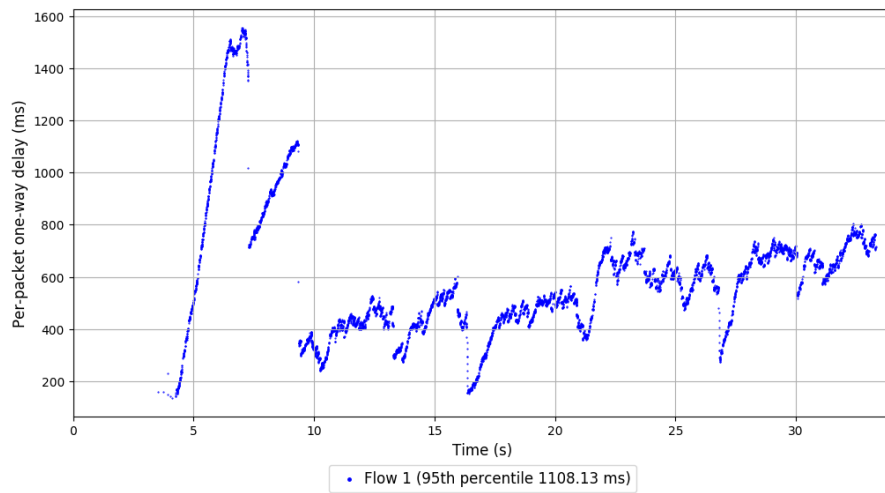
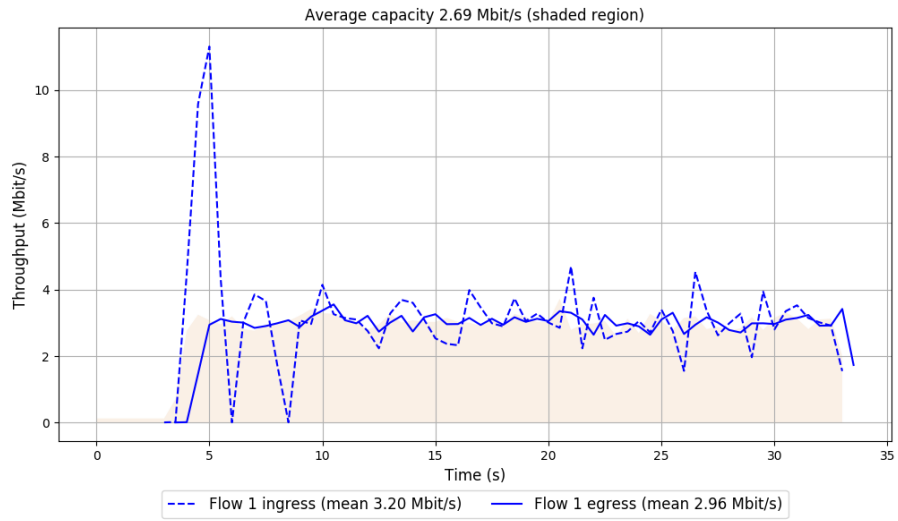
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 1108.131 ms

Loss rate: 8.09%

### Run 7: Report of FillP-Sheep — Data Link



Run 8: Statistics of FillP-Sheep

Start at: 2018-07-24 13:25:17

End at: 2018-07-24 13:25:47

# Below is generated by plot.py at 2018-07-24 13:50:46

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.9% utilization)

95th percentile per-packet one-way delay: 1155.222 ms

Loss rate: 8.71%

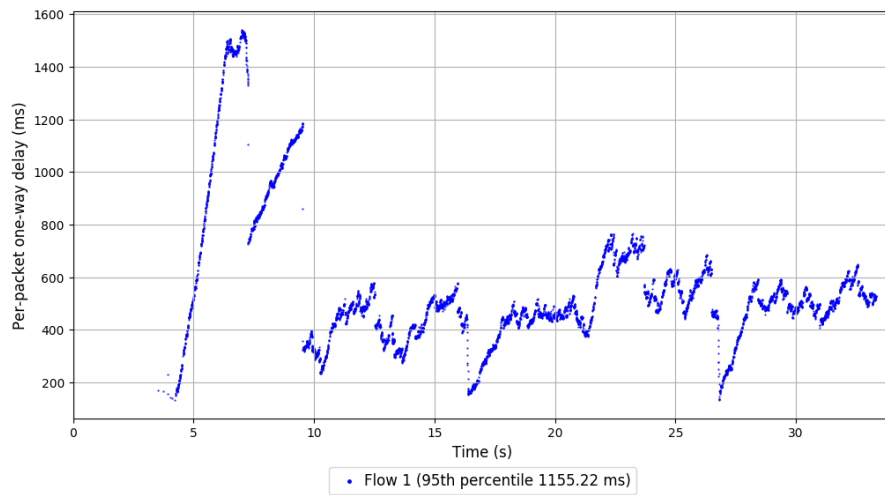
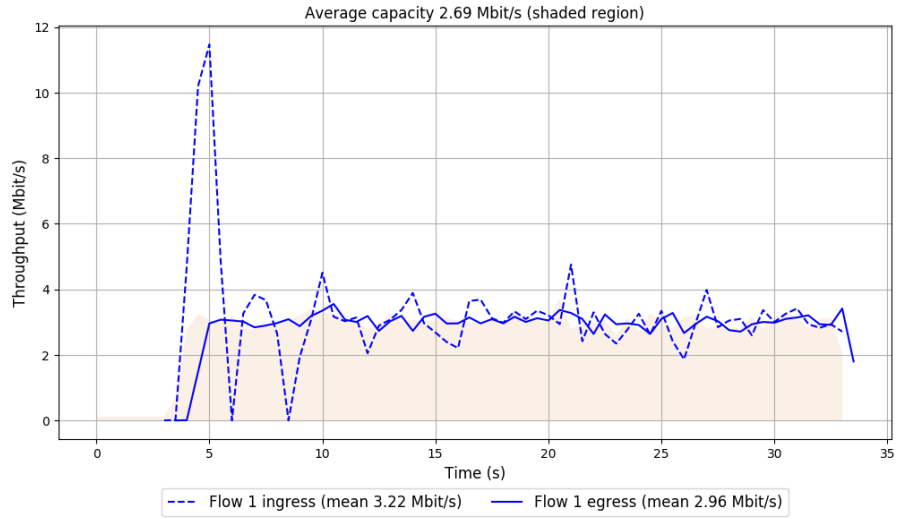
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 1155.222 ms

Loss rate: 8.71%

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



Run 9: Statistics of FillP-Sheep

Start at: 2018-07-24 13:34:59

End at: 2018-07-24 13:35:29

# Below is generated by plot.py at 2018-07-24 13:50:48

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.9% utilization)

95th percentile per-packet one-way delay: 842.915 ms

Loss rate: 4.27%

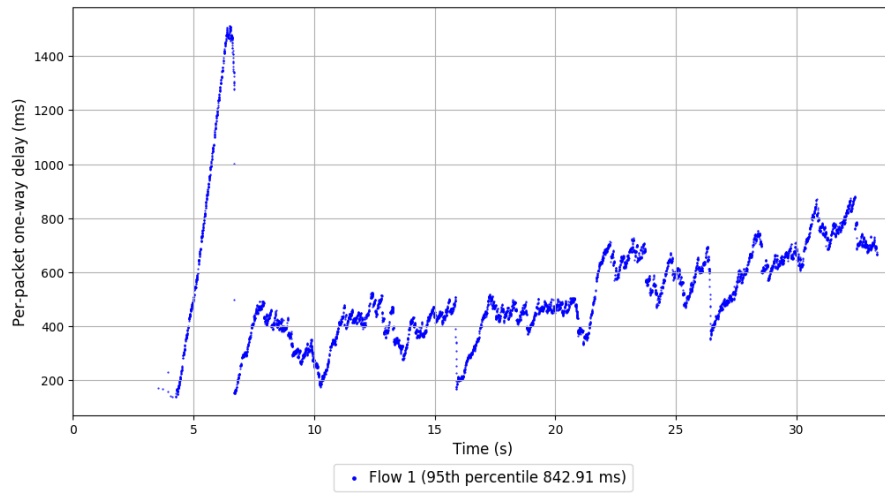
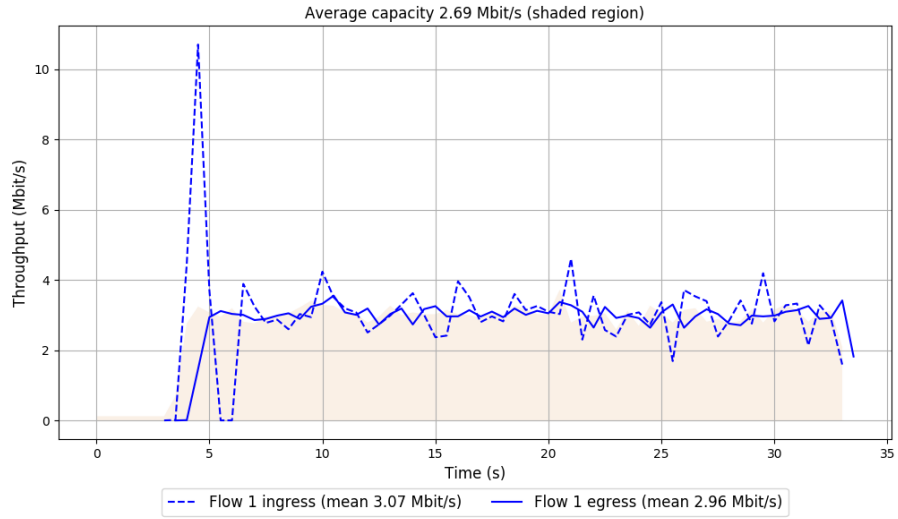
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 842.915 ms

Loss rate: 4.27%

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



Run 10: Statistics of FillP-Sheep

Start at: 2018-07-24 13:44:42

End at: 2018-07-24 13:45:12

# Below is generated by plot.py at 2018-07-24 13:50:49

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.9% utilization)

95th percentile per-packet one-way delay: 853.843 ms

Loss rate: 4.57%

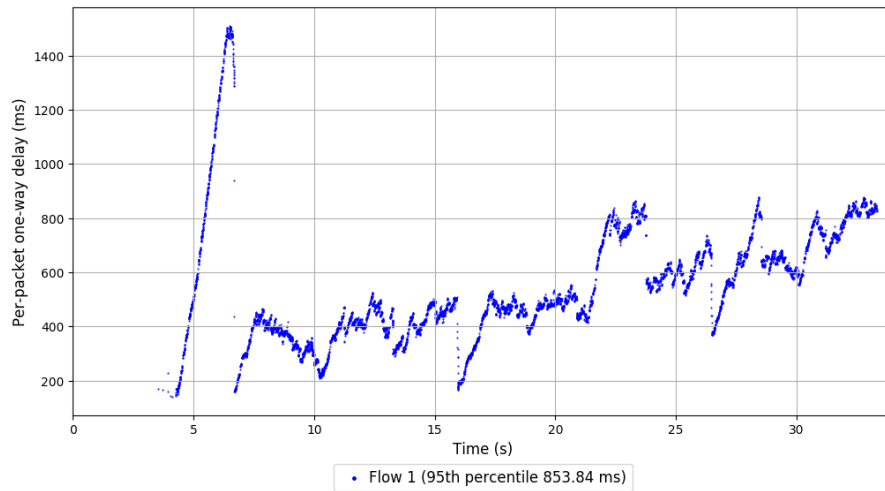
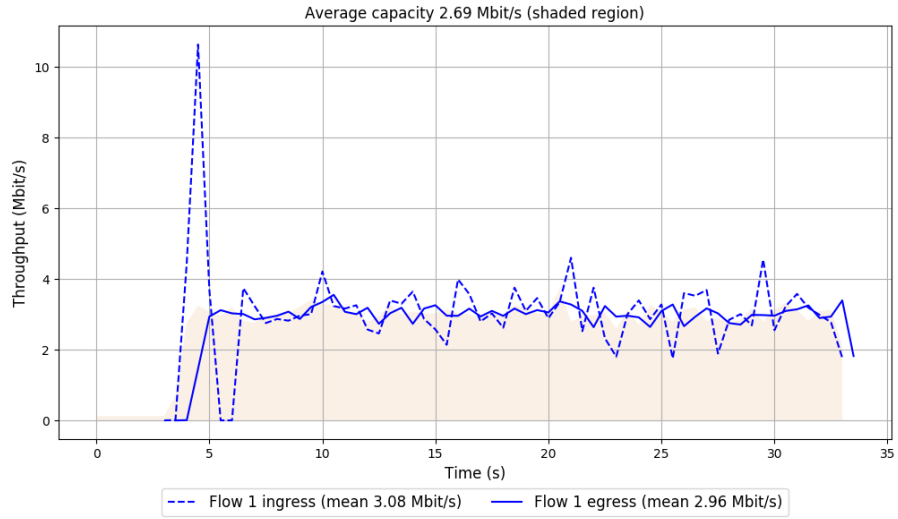
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 853.843 ms

Loss rate: 4.57%

Run 10: Report of FillP-Sheep — Data Link



Run 1: Statistics of Indigo

Start at: 2018-07-24 12:17:57

End at: 2018-07-24 12:18:27

# Below is generated by plot.py at 2018-07-24 13:50:49

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.33 Mbit/s (86.5% utilization)

95th percentile per-packet one-way delay: 192.316 ms

Loss rate: 0.59%

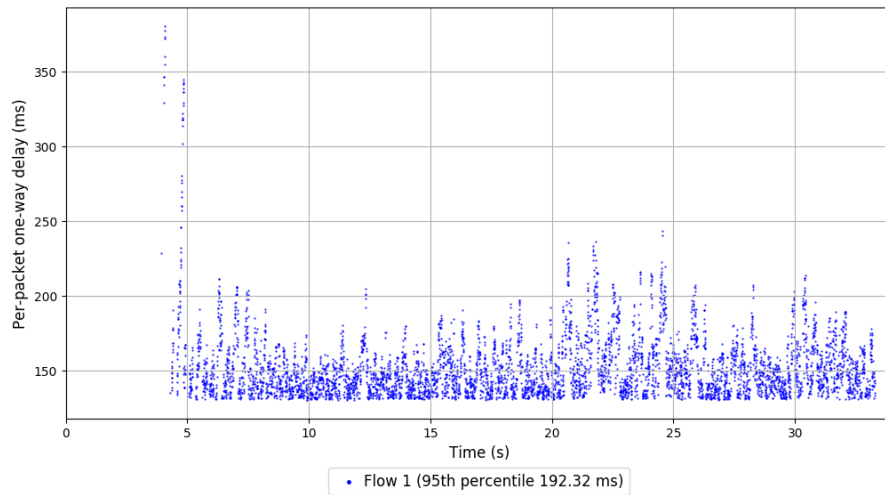
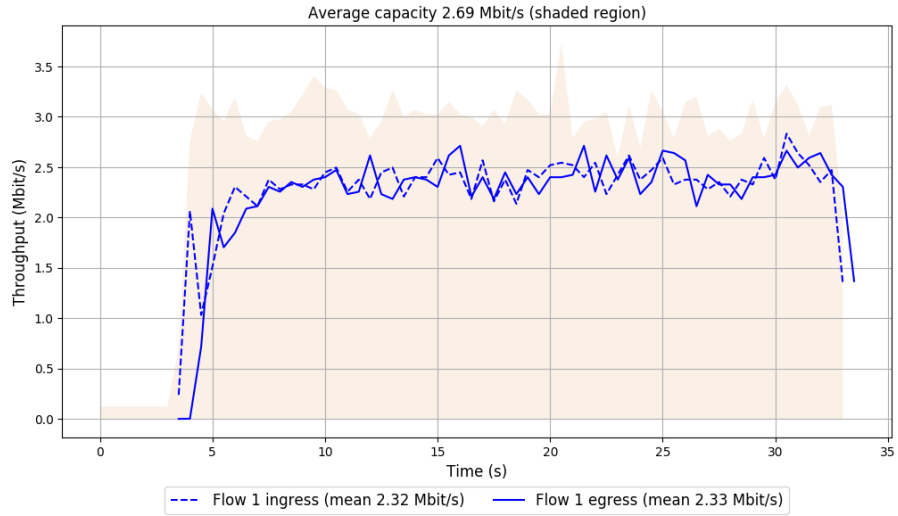
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 192.316 ms

Loss rate: 0.59%

# Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-07-24 12:27:38

End at: 2018-07-24 12:28:08

# Below is generated by plot.py at 2018-07-24 13:50:49

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.19 Mbit/s (81.5% utilization)

95th percentile per-packet one-way delay: 189.395 ms

Loss rate: 0.78%

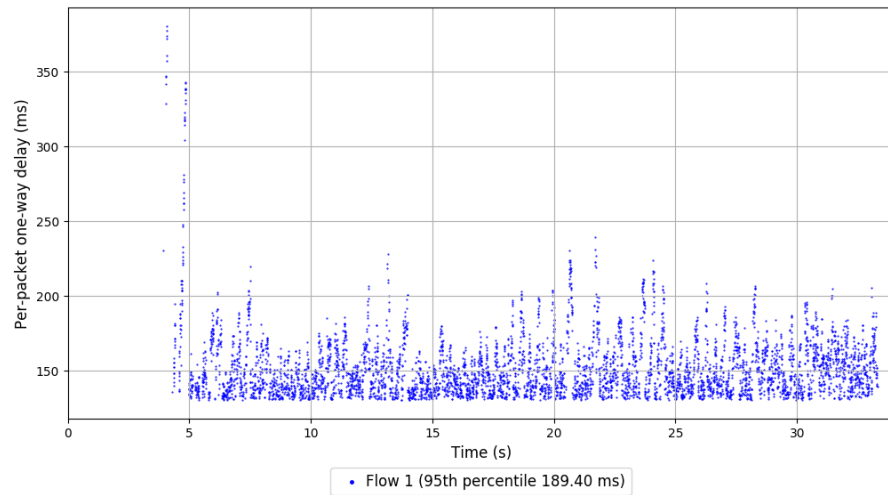
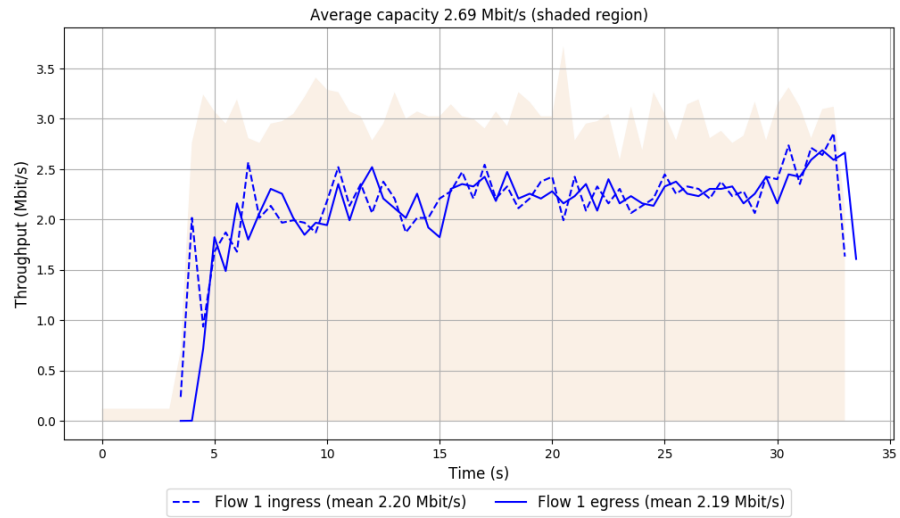
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 189.395 ms

Loss rate: 0.78%

## Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-07-24 12:37:20

End at: 2018-07-24 12:37:50

# Below is generated by plot.py at 2018-07-24 13:50:49

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.46 Mbit/s (91.5% utilization)

95th percentile per-packet one-way delay: 229.126 ms

Loss rate: 0.64%

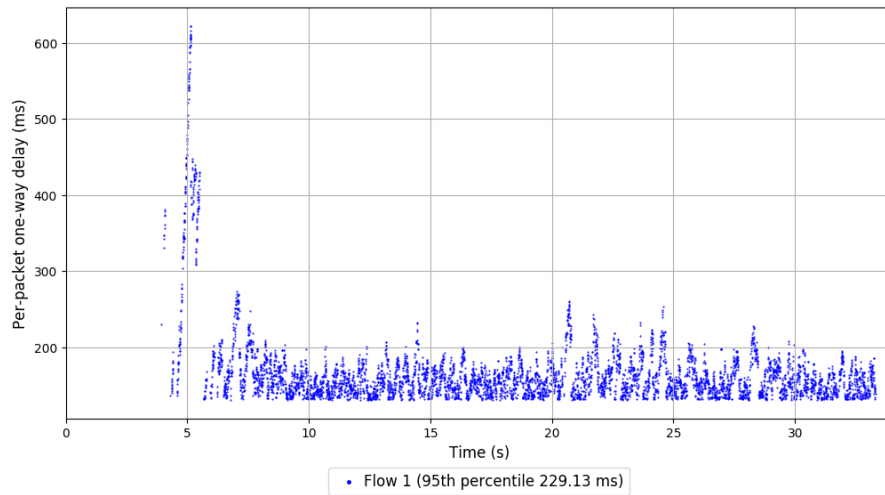
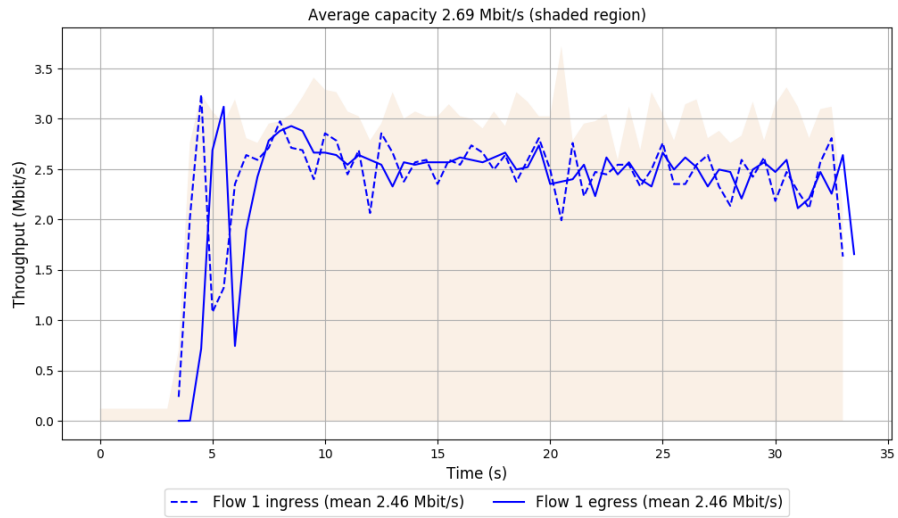
-- Flow 1:

Average throughput: 2.46 Mbit/s

95th percentile per-packet one-way delay: 229.126 ms

Loss rate: 0.64%

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



Run 4: Statistics of Indigo

Start at: 2018-07-24 12:47:02

End at: 2018-07-24 12:47:32

# Below is generated by plot.py at 2018-07-24 13:50:52

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.41 Mbit/s (89.6% utilization)

95th percentile per-packet one-way delay: 231.774 ms

Loss rate: 0.66%

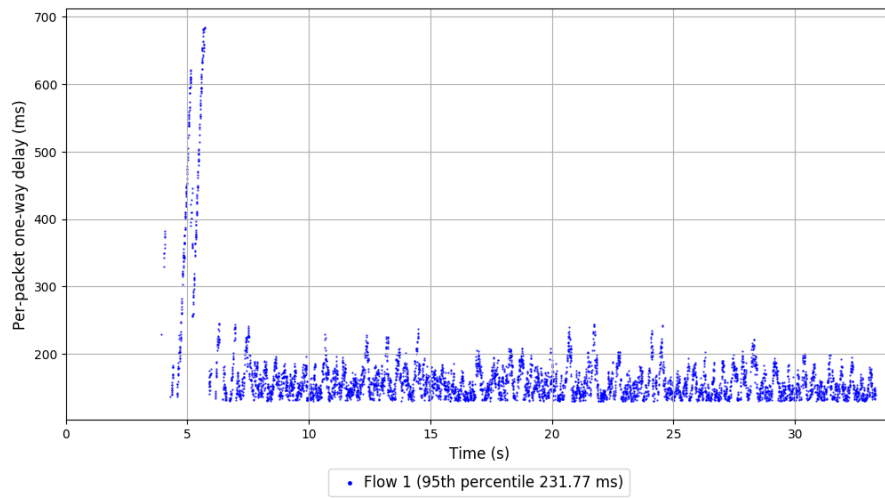
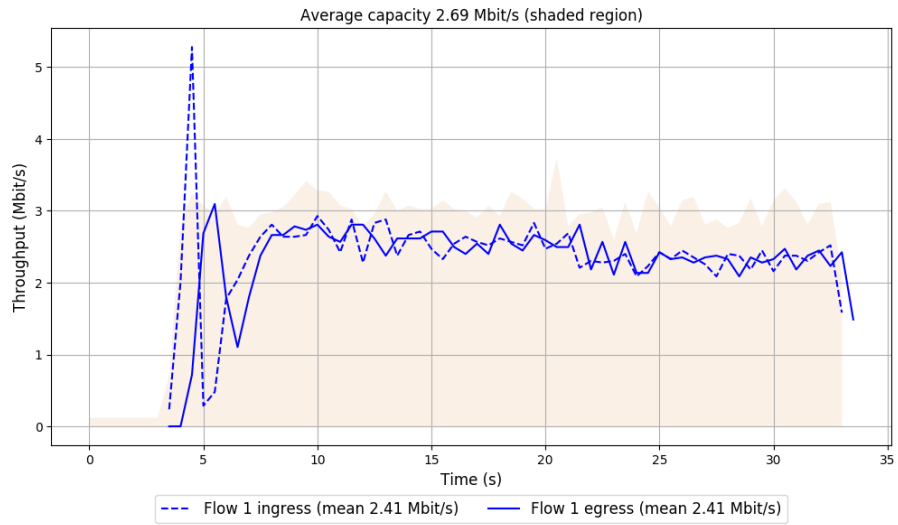
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 231.774 ms

Loss rate: 0.66%

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



Run 5: Statistics of Indigo

Start at: 2018-07-24 12:56:44

End at: 2018-07-24 12:57:14

# Below is generated by plot.py at 2018-07-24 13:50:55

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.48 Mbit/s (92.2% utilization)

95th percentile per-packet one-way delay: 266.332 ms

Loss rate: 0.65%

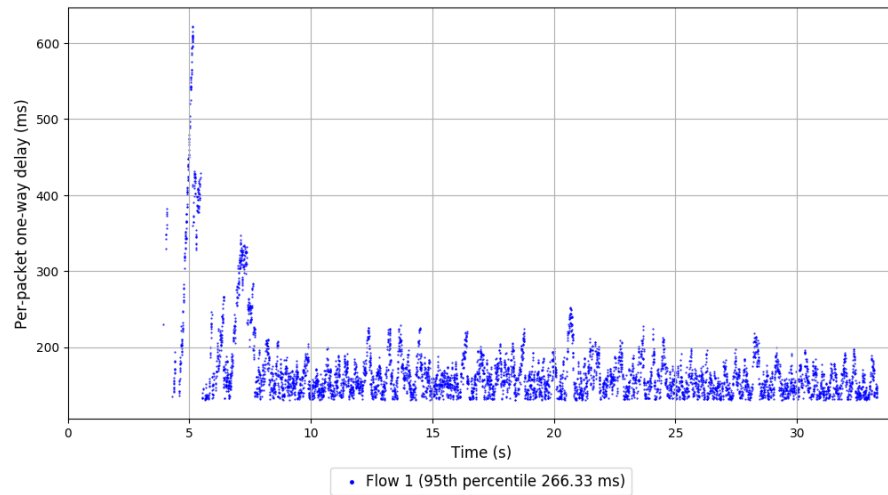
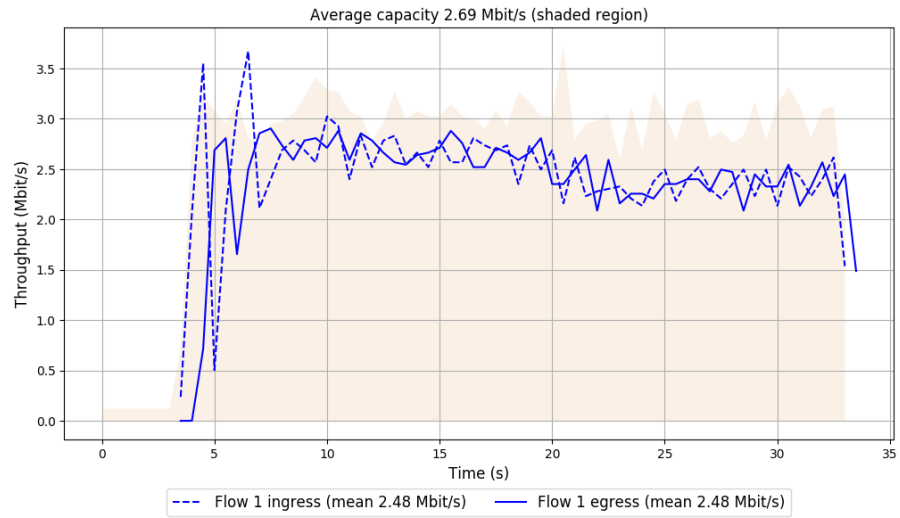
-- Flow 1:

Average throughput: 2.48 Mbit/s

95th percentile per-packet one-way delay: 266.332 ms

Loss rate: 0.65%

## Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-07-24 13:06:27

End at: 2018-07-24 13:06:57

# Below is generated by plot.py at 2018-07-24 13:50:57

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 210.168 ms

Loss rate: 0.71%

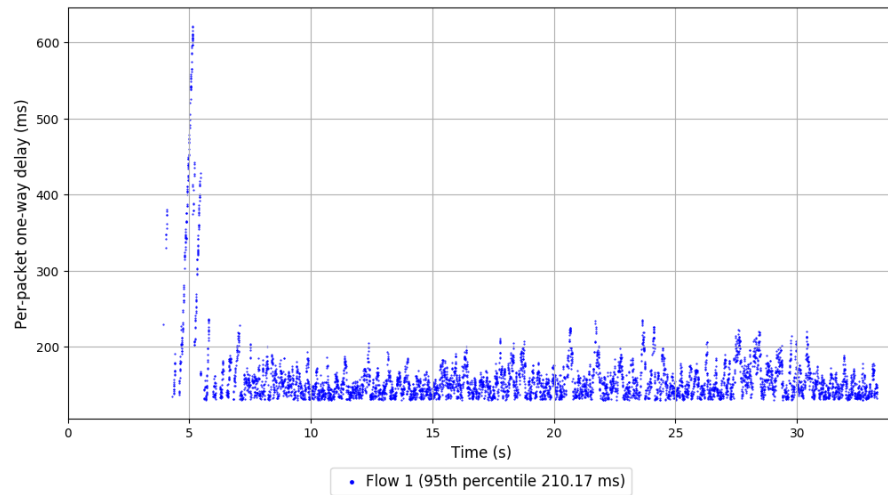
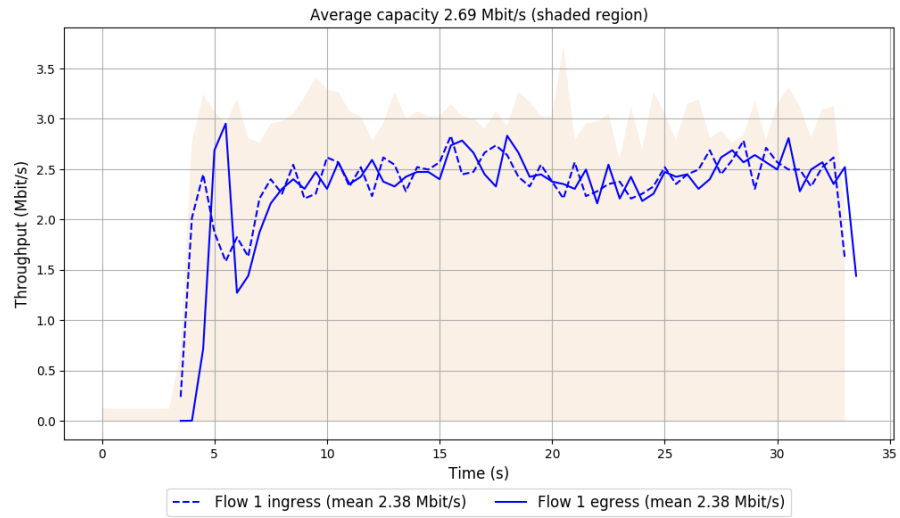
-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 210.168 ms

Loss rate: 0.71%

## Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-07-24 13:16:09

End at: 2018-07-24 13:16:39

# Below is generated by plot.py at 2018-07-24 13:50:57

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.24 Mbit/s (83.3% utilization)

95th percentile per-packet one-way delay: 232.836 ms

Loss rate: 0.42%

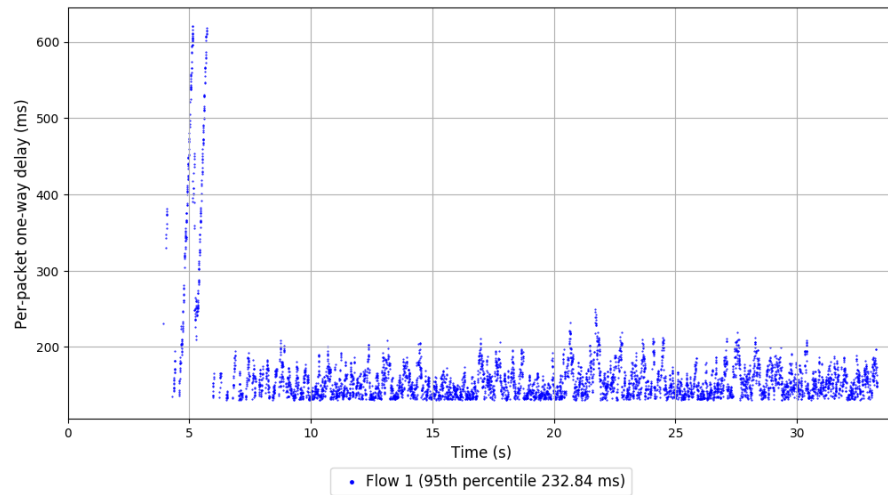
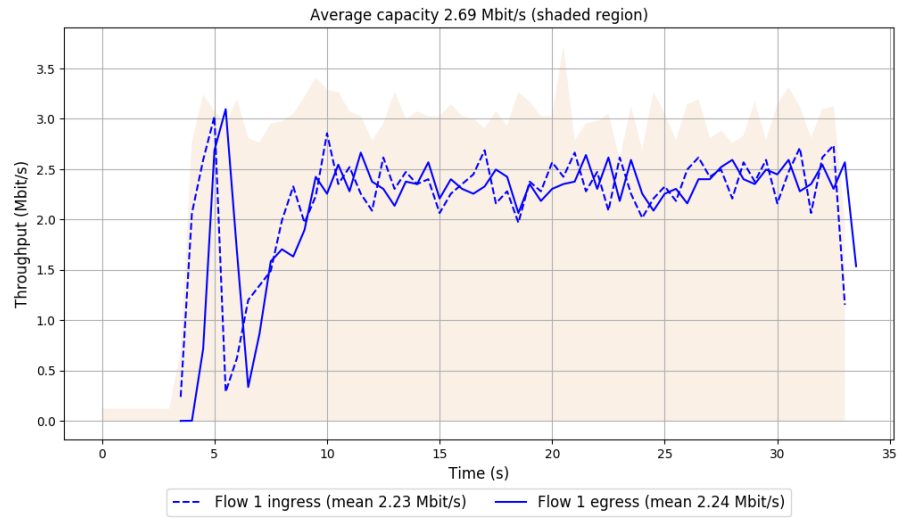
-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 232.836 ms

Loss rate: 0.42%

## Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-07-24 13:25:51

End at: 2018-07-24 13:26:21

# Below is generated by plot.py at 2018-07-24 13:50:58

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 220.379 ms

Loss rate: 0.71%

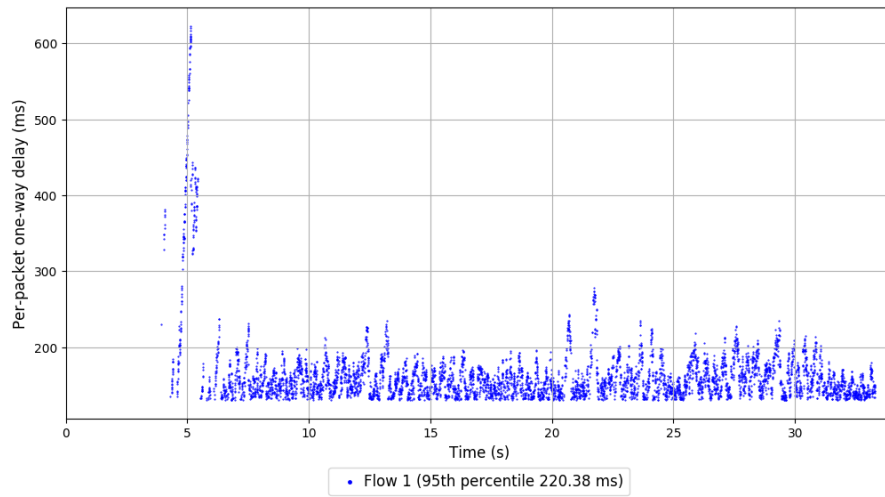
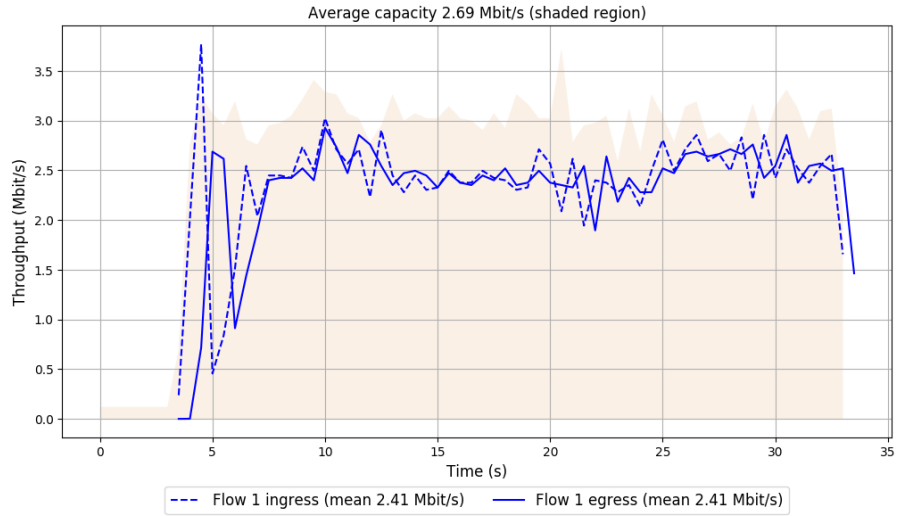
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 220.379 ms

Loss rate: 0.71%

# Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-07-24 13:35:34

End at: 2018-07-24 13:36:04

# Below is generated by plot.py at 2018-07-24 13:50:58

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.47 Mbit/s (91.7% utilization)

95th percentile per-packet one-way delay: 237.613 ms

Loss rate: 0.64%

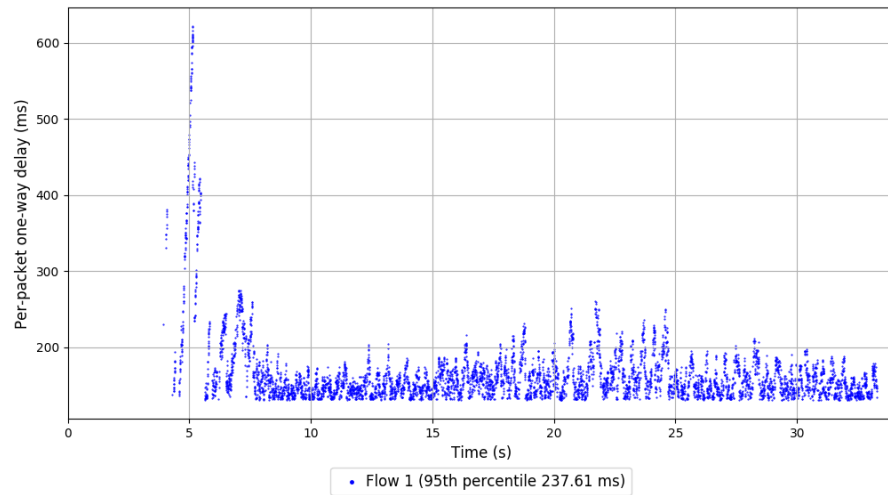
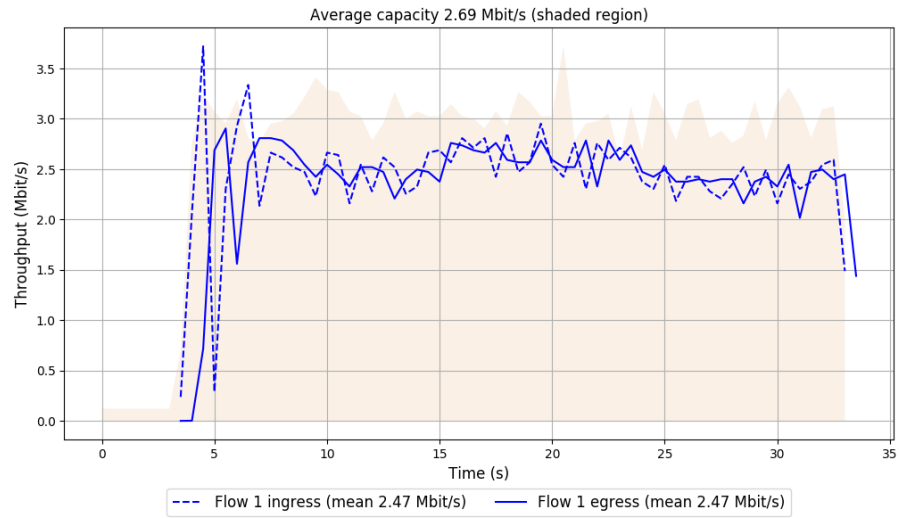
-- Flow 1:

Average throughput: 2.47 Mbit/s

95th percentile per-packet one-way delay: 237.613 ms

Loss rate: 0.64%

## Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-07-24 13:45:16

End at: 2018-07-24 13:45:46

# Below is generated by plot.py at 2018-07-24 13:50:58

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.14 Mbit/s (79.3% utilization)

95th percentile per-packet one-way delay: 183.343 ms

Loss rate: 0.80%

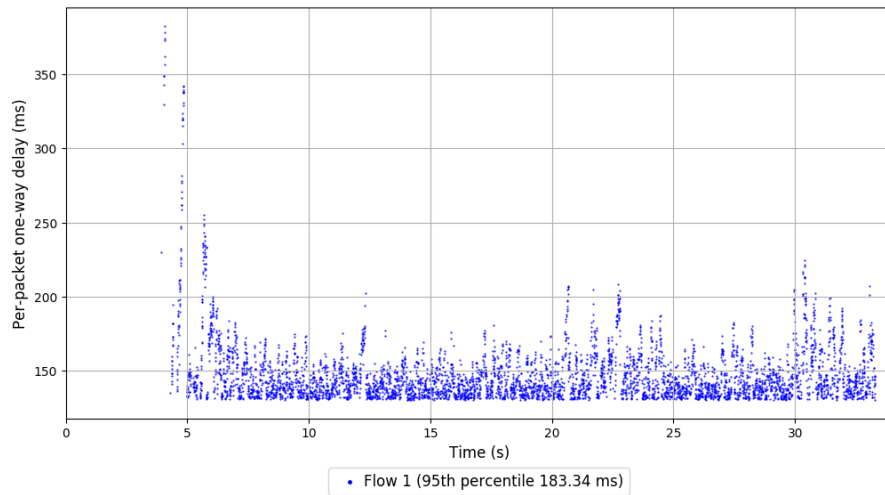
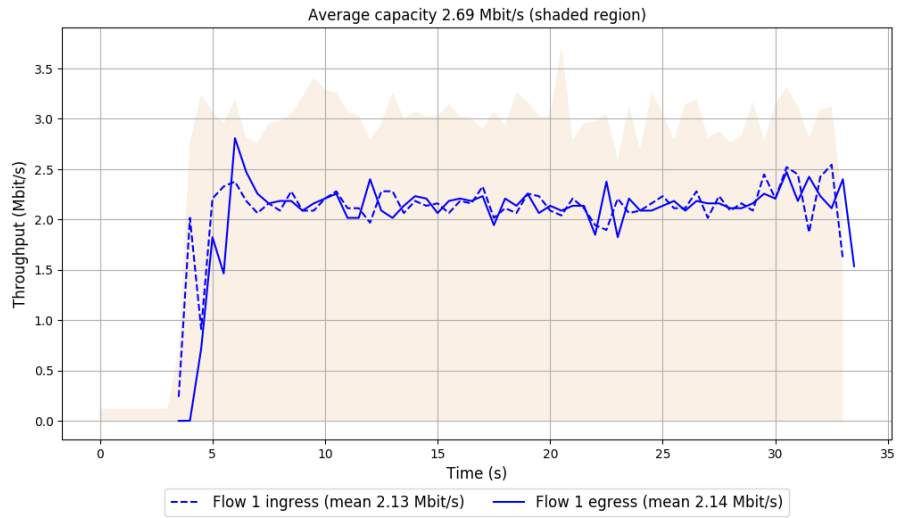
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 183.343 ms

Loss rate: 0.80%

# Run 10: Report of Indigo — Data Link



Run 1: Statistics of LEDBAT

Start at: 2018-07-24 12:20:48

End at: 2018-07-24 12:21:18

# Below is generated by plot.py at 2018-07-24 13:50:59

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.42 Mbit/s (90.1% utilization)

95th percentile per-packet one-way delay: 279.407 ms

Loss rate: 0.98%

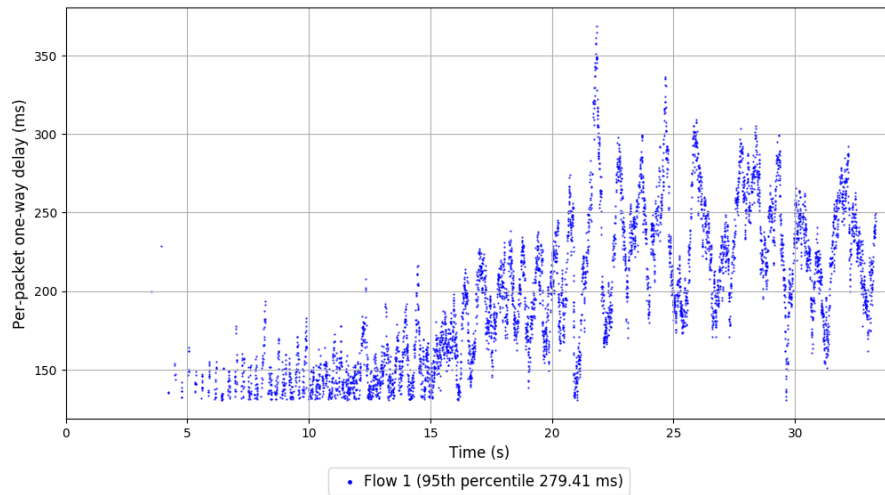
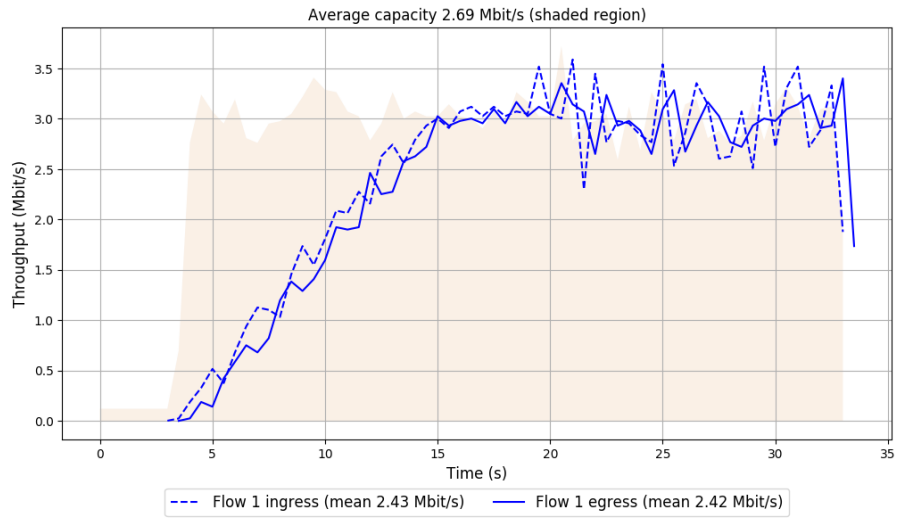
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 279.407 ms

Loss rate: 0.98%

# Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-07-24 12:30:29

End at: 2018-07-24 12:30:59

# Below is generated by plot.py at 2018-07-24 13:51:02

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 279.424 ms

Loss rate: 1.03%

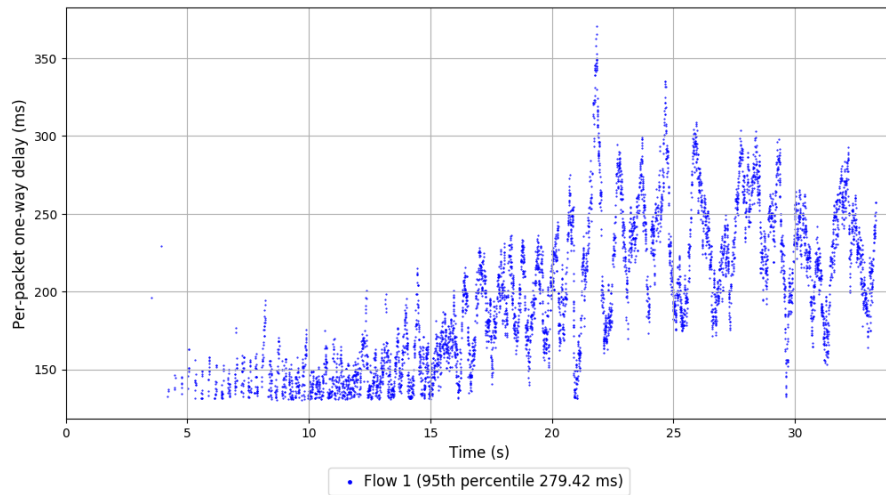
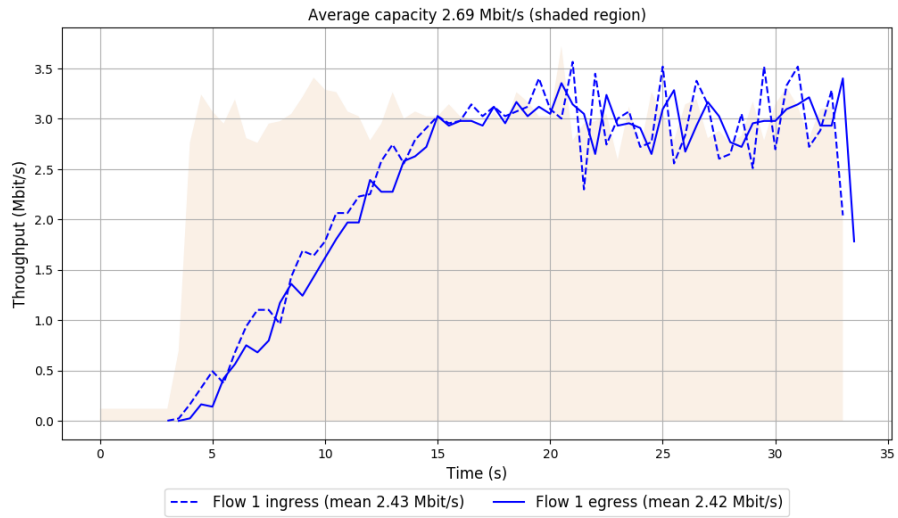
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 279.424 ms

Loss rate: 1.03%

## Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-07-24 12:40:12

End at: 2018-07-24 12:40:42

# Below is generated by plot.py at 2018-07-24 13:51:06

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.42 Mbit/s (89.7% utilization)

95th percentile per-packet one-way delay: 279.364 ms

Loss rate: 1.00%

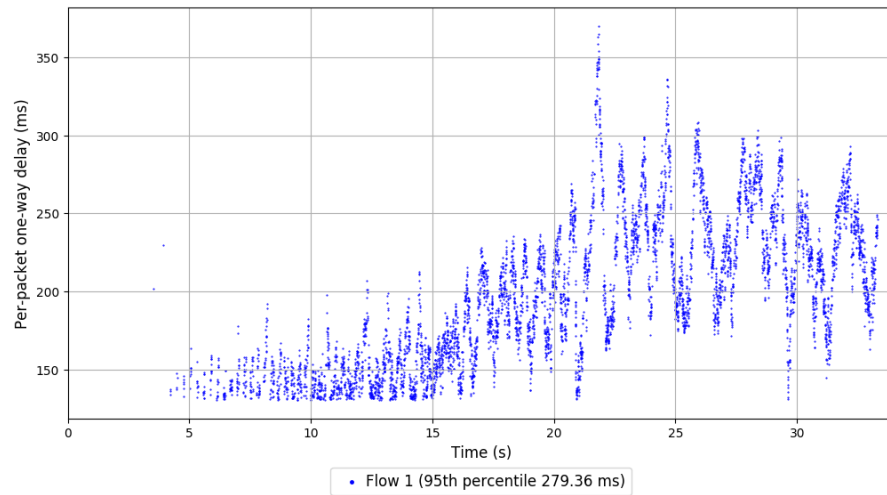
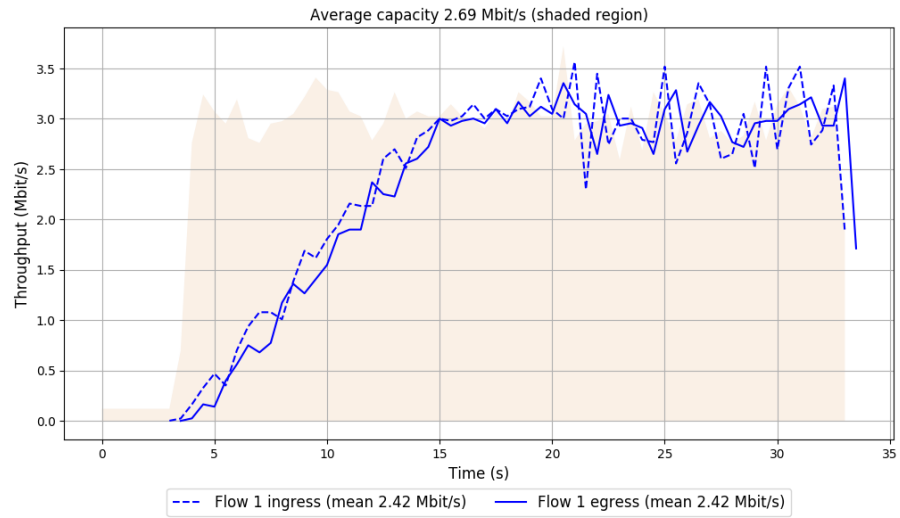
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 279.364 ms

Loss rate: 1.00%

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



Run 4: Statistics of LEDBAT

Start at: 2018-07-24 12:49:54

End at: 2018-07-24 12:50:24

# Below is generated by plot.py at 2018-07-24 13:51:07

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 280.027 ms

Loss rate: 1.01%

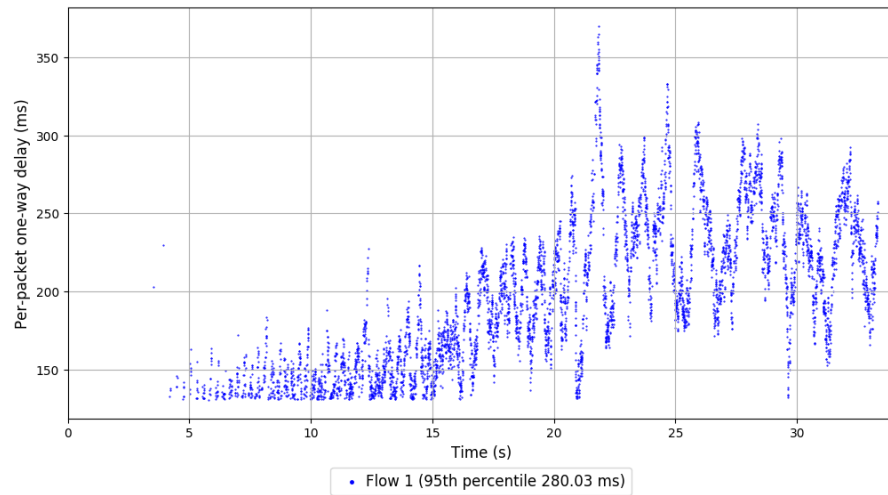
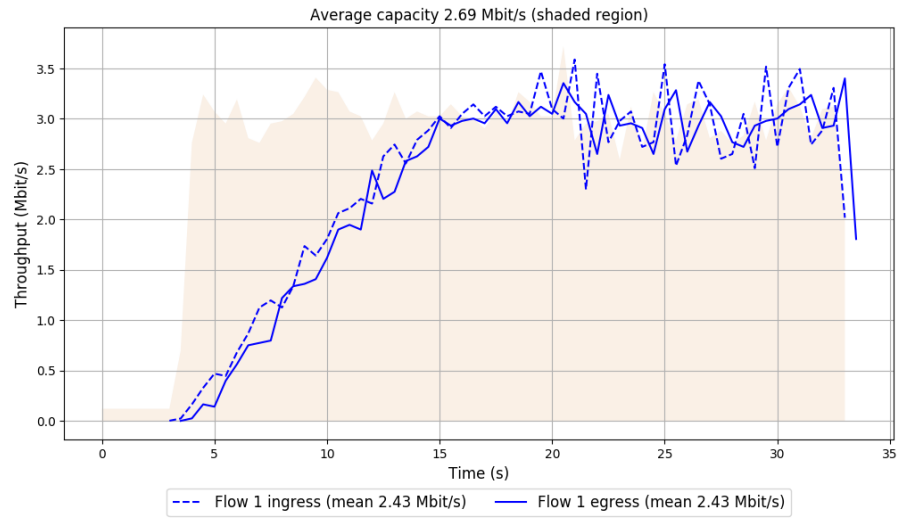
-- Flow 1:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 280.027 ms

Loss rate: 1.01%

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



Run 5: Statistics of LEDBAT

Start at: 2018-07-24 12:59:36

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

# Below is generated by plot.py at 2018-07-24 13:51:08

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 279.624 ms

Loss rate: 1.05%

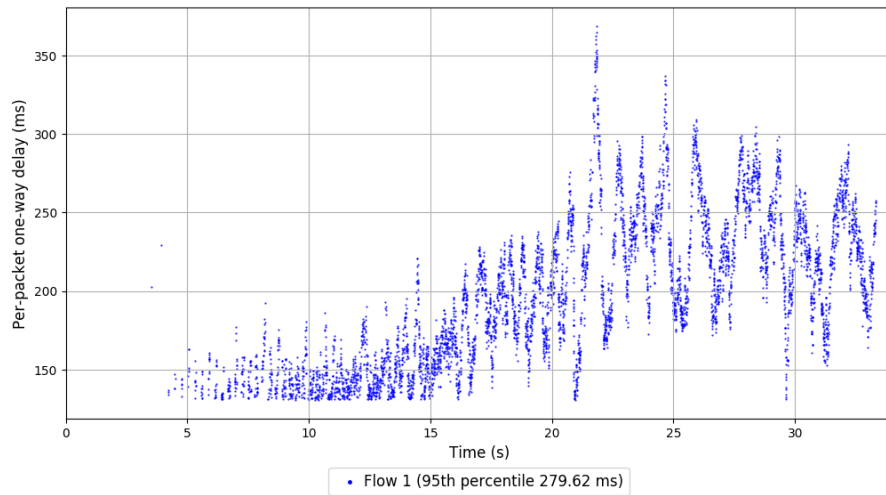
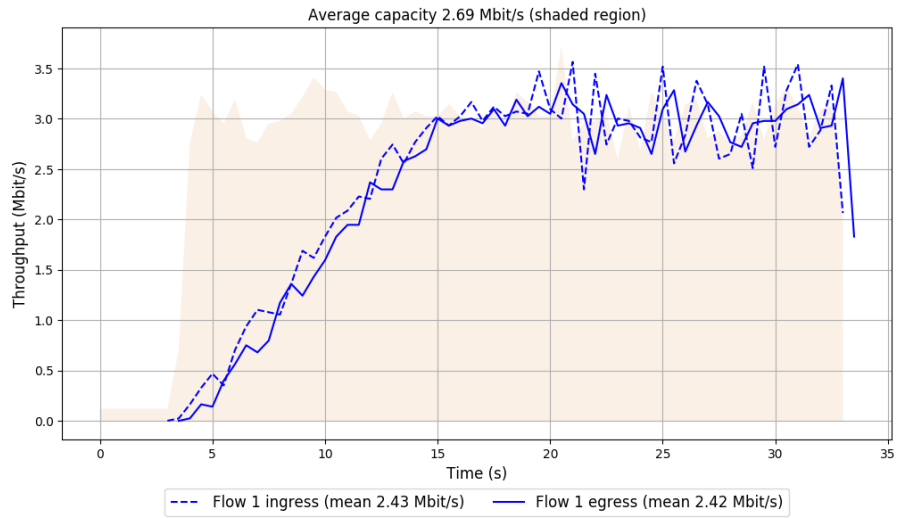
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 279.624 ms

Loss rate: 1.05%

## Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-07-24 13:09:18

End at: 2018-07-24 13:09:48

# Below is generated by plot.py at 2018-07-24 13:51:08

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 279.824 ms

Loss rate: 1.04%

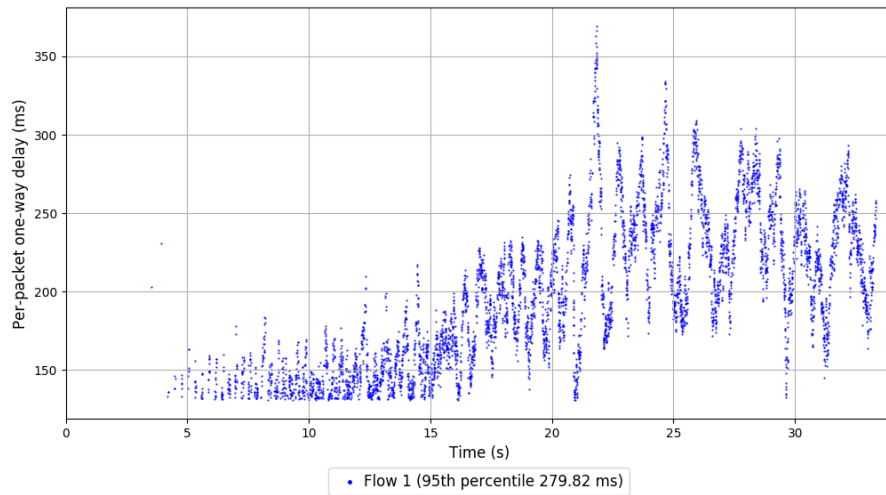
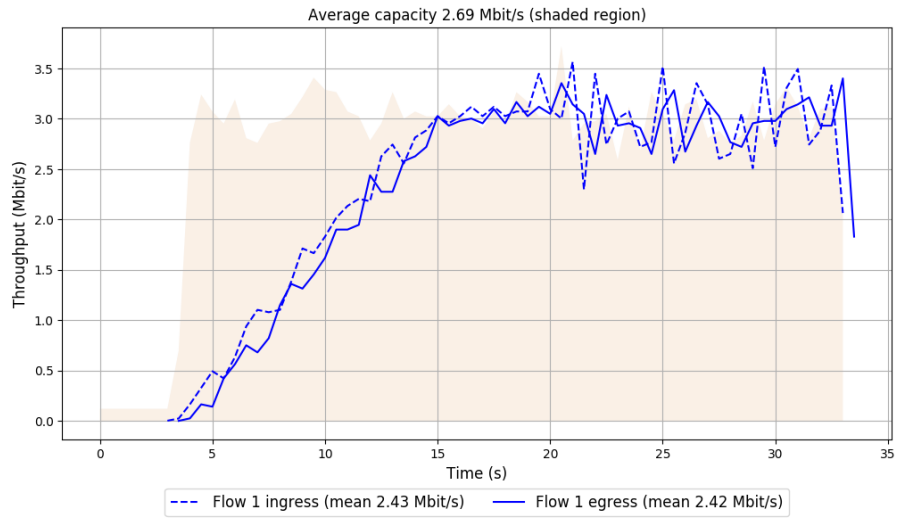
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 279.824 ms

Loss rate: 1.04%

## Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-07-24 13:19:00

End at: 2018-07-24 13:19:30

# Below is generated by plot.py at 2018-07-24 13:51:09

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 279.684 ms

Loss rate: 1.05%

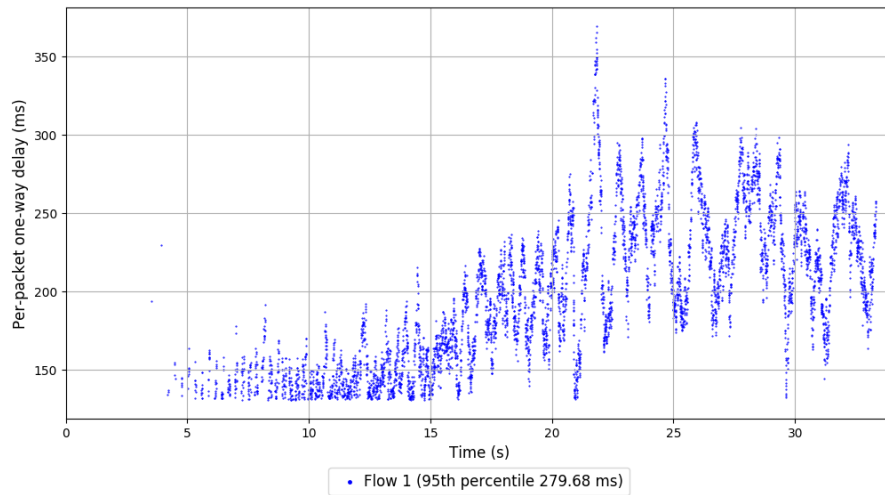
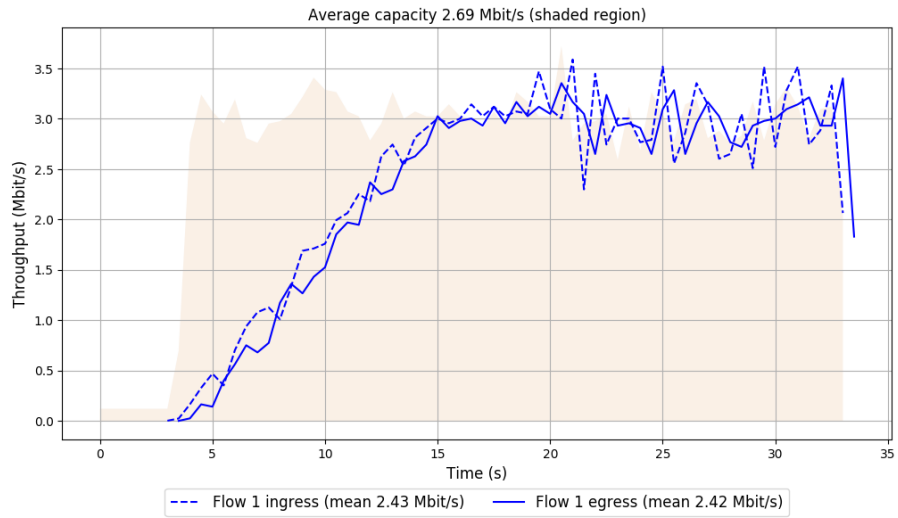
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 279.684 ms

Loss rate: 1.05%

# Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-07-24 13:28:43

End at: 2018-07-24 13:29:13

# Below is generated by plot.py at 2018-07-24 13:51:09

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.41 Mbit/s (89.7% utilization)

95th percentile per-packet one-way delay: 279.946 ms

Loss rate: 1.05%

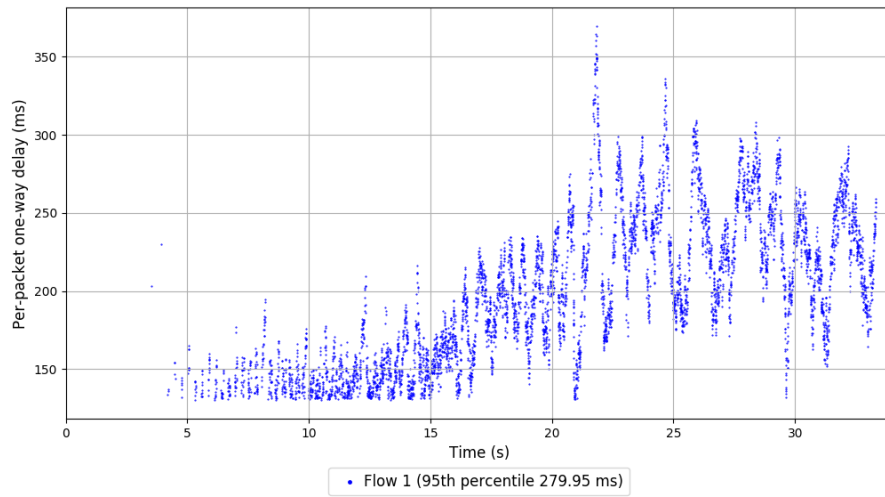
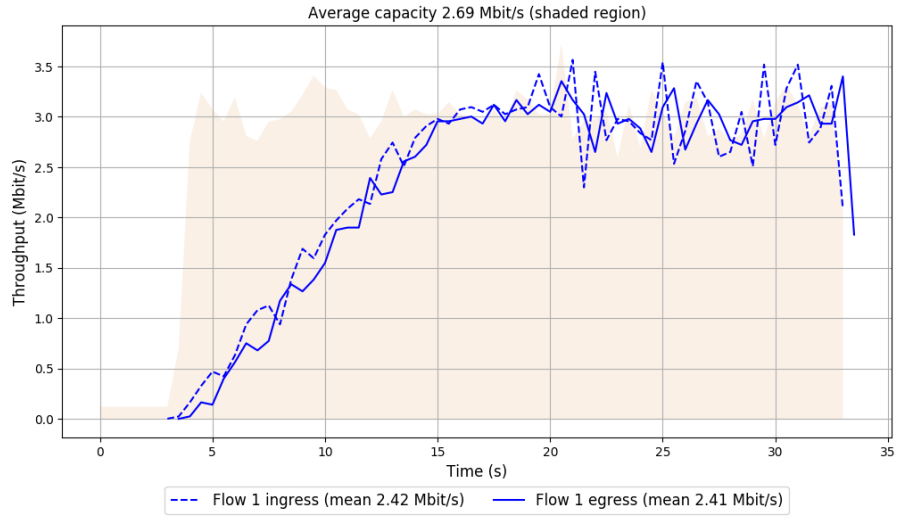
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 279.946 ms

Loss rate: 1.05%

# Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-07-24 13:38:25

End at: 2018-07-24 13:38:55

# Below is generated by plot.py at 2018-07-24 13:51:10

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 279.503 ms

Loss rate: 1.06%

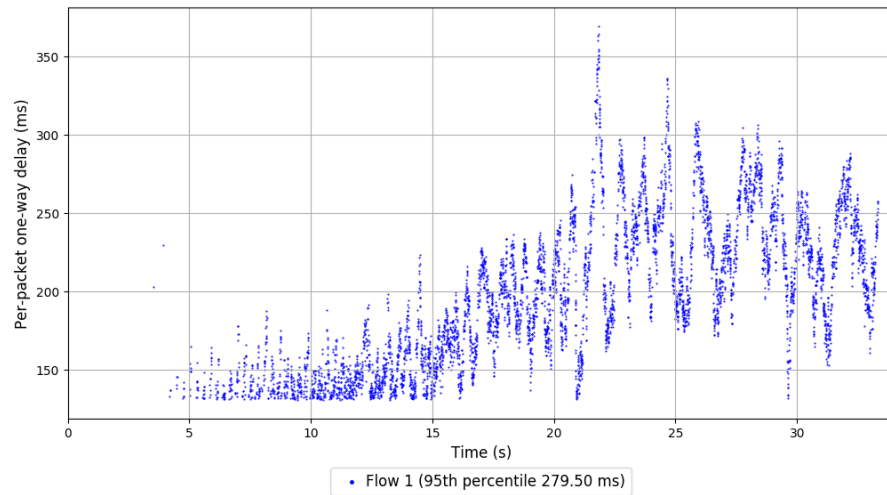
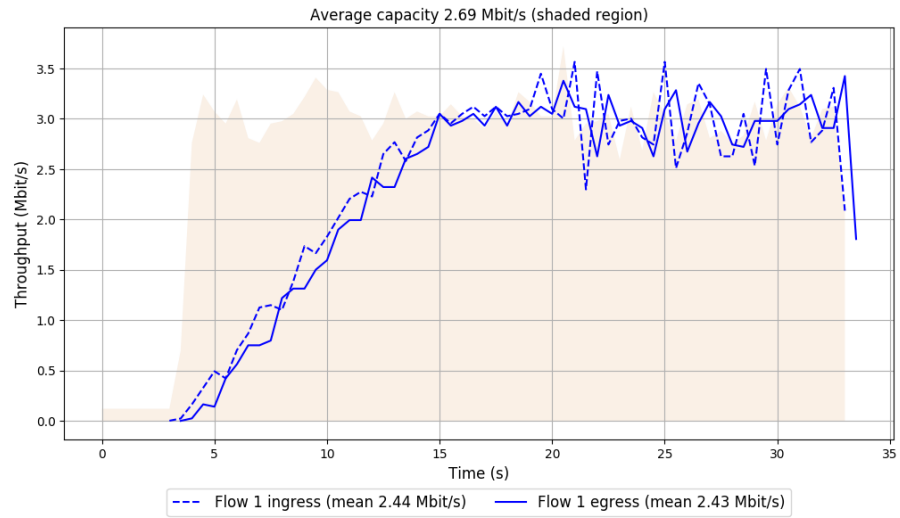
-- Flow 1:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 279.503 ms

Loss rate: 1.06%

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



Run 10: Statistics of LEDBAT

Start at: 2018-07-24 13:48:08

End at: 2018-07-24 13:48:38

# Below is generated by plot.py at 2018-07-24 13:51:12

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.41 Mbit/s (89.7% utilization)

95th percentile per-packet one-way delay: 279.740 ms

Loss rate: 1.05%

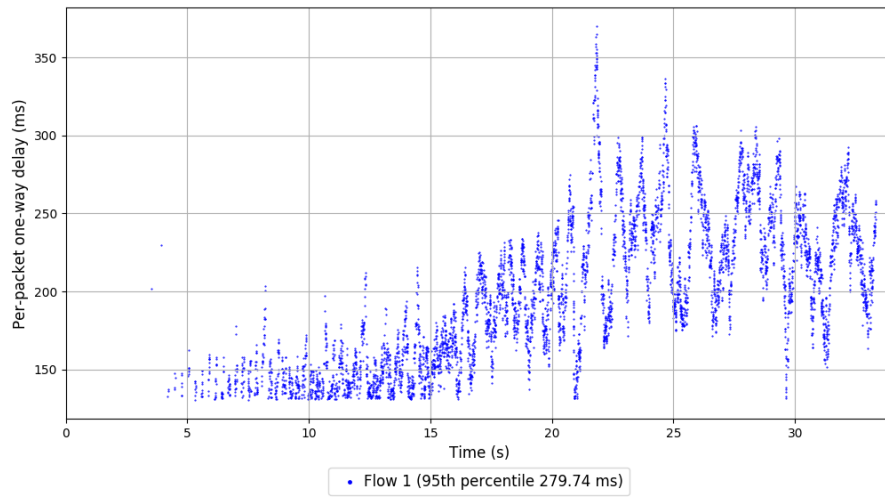
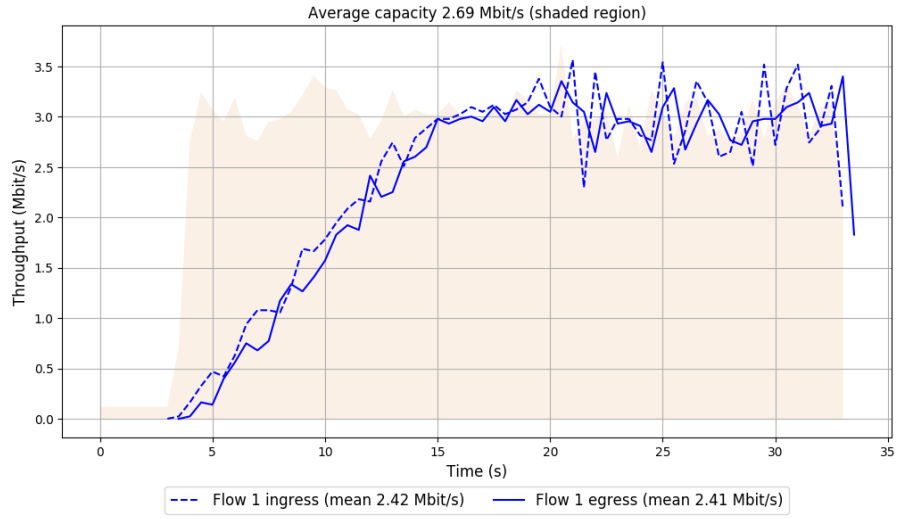
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 279.740 ms

Loss rate: 1.05%

# Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2018-07-24 12:16:48

End at: 2018-07-24 12:17:18

# Below is generated by plot.py at 2018-07-24 13:51:17

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.29 Mbit/s (85.0% utilization)

95th percentile per-packet one-way delay: 1400.413 ms

Loss rate: 1.94%

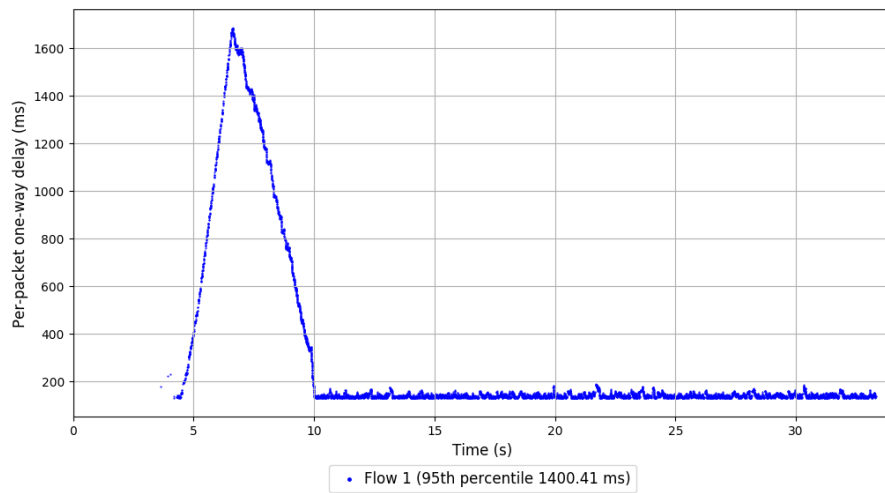
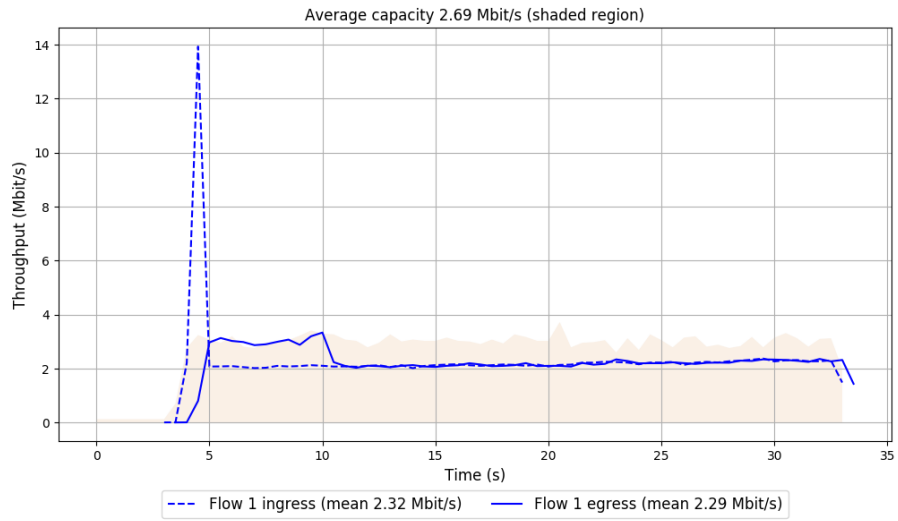
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 1400.413 ms

Loss rate: 1.94%

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



Run 2: Statistics of PCC-Allegro

Start at: 2018-07-24 12:26:30

End at: 2018-07-24 12:27:00

# Below is generated by plot.py at 2018-07-24 13:51:19

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.27 Mbit/s (84.3% utilization)

95th percentile per-packet one-way delay: 1407.305 ms

Loss rate: 3.10%

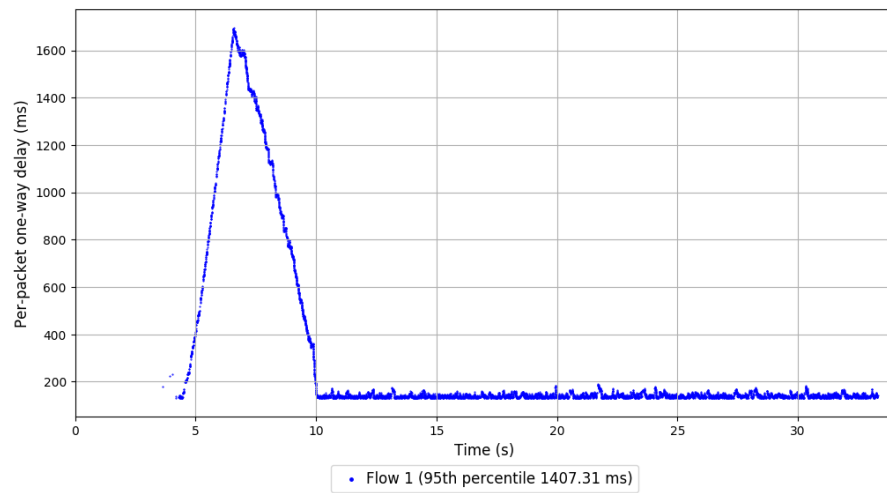
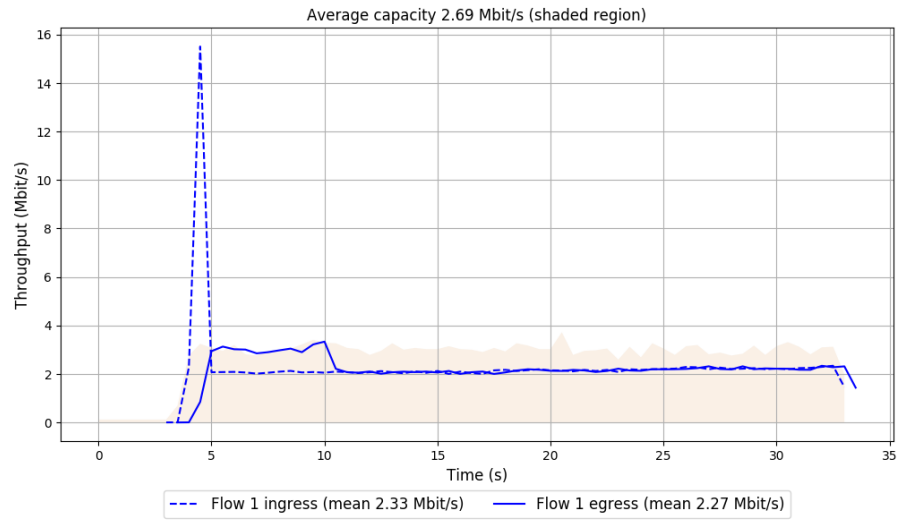
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 1407.305 ms

Loss rate: 3.10%

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



Run 3: Statistics of PCC-Allegro

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

End at: 2018-07-24 12:36:42

# Below is generated by plot.py at 2018-07-24 13:51:19

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.17 Mbit/s (80.6% utilization)

95th percentile per-packet one-way delay: 1405.144 ms

Loss rate: 1.27%

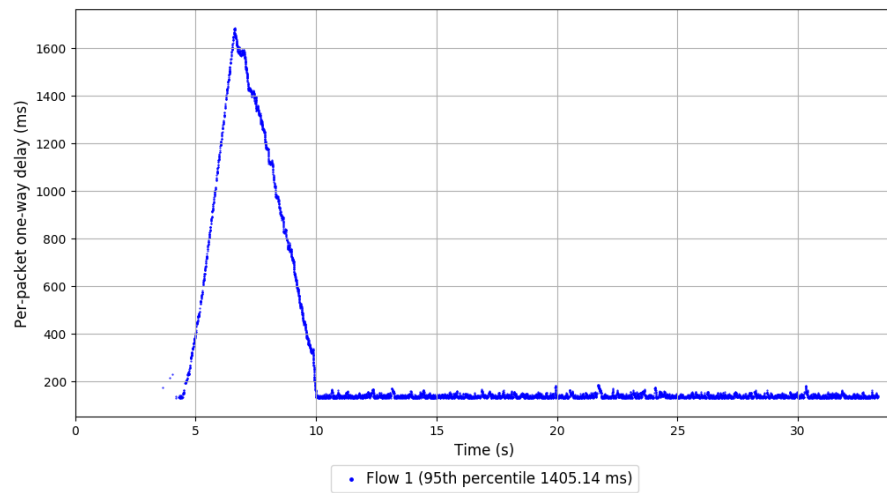
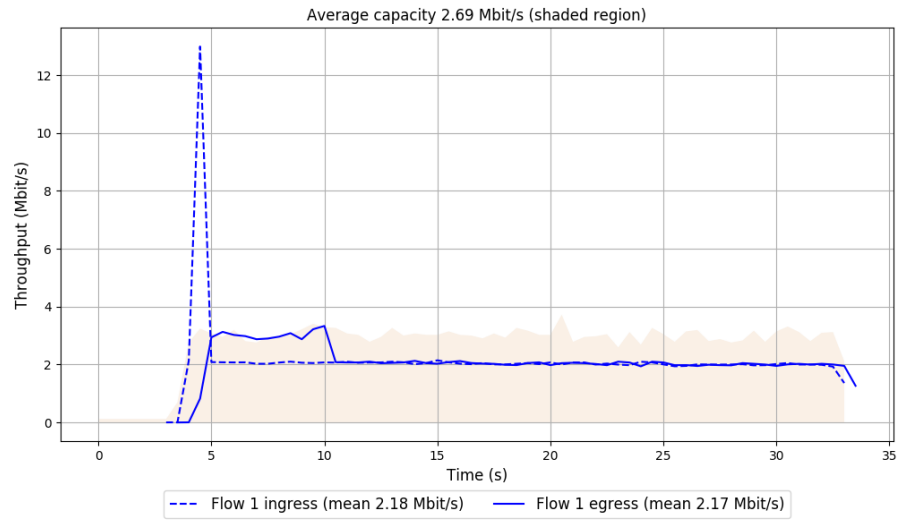
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 1405.144 ms

Loss rate: 1.27%

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



Run 4: Statistics of PCC-Allegro

Start at: 2018-07-24 12:45:54

End at: 2018-07-24 12:46:24

# Below is generated by plot.py at 2018-07-24 13:51:19

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.26 Mbit/s (84.0% utilization)

95th percentile per-packet one-way delay: 1398.823 ms

Loss rate: 1.01%

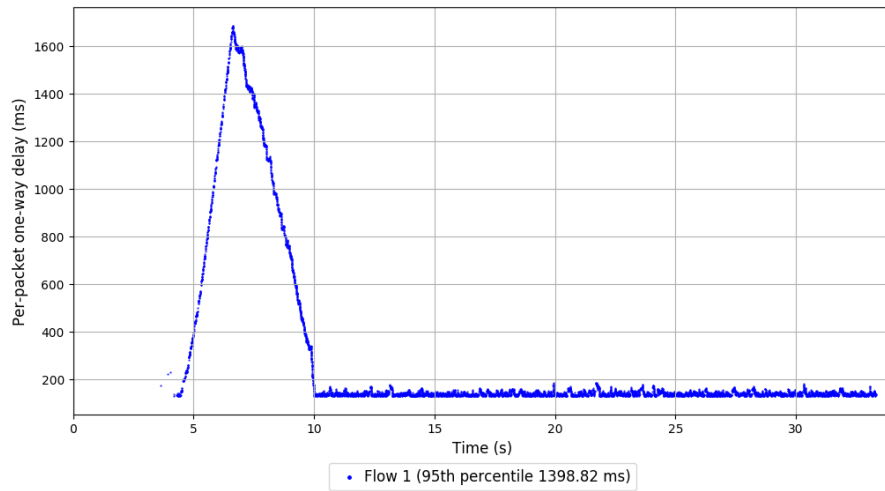
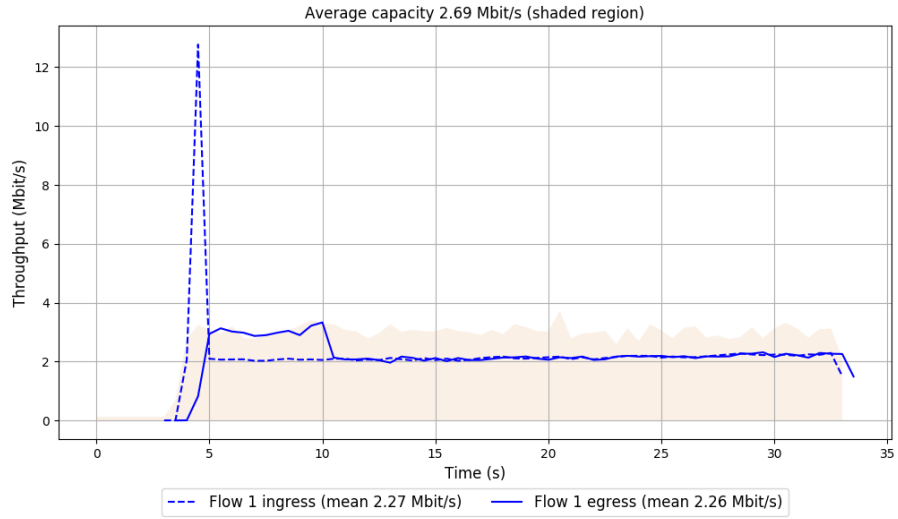
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 1398.823 ms

Loss rate: 1.01%

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



Run 5: Statistics of PCC-Allegro

Start at: 2018-07-24 12:55:36

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

# Below is generated by plot.py at 2018-07-24 13:51:20

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.24 Mbit/s (83.3% utilization)

95th percentile per-packet one-way delay: 1402.691 ms

Loss rate: 2.02%

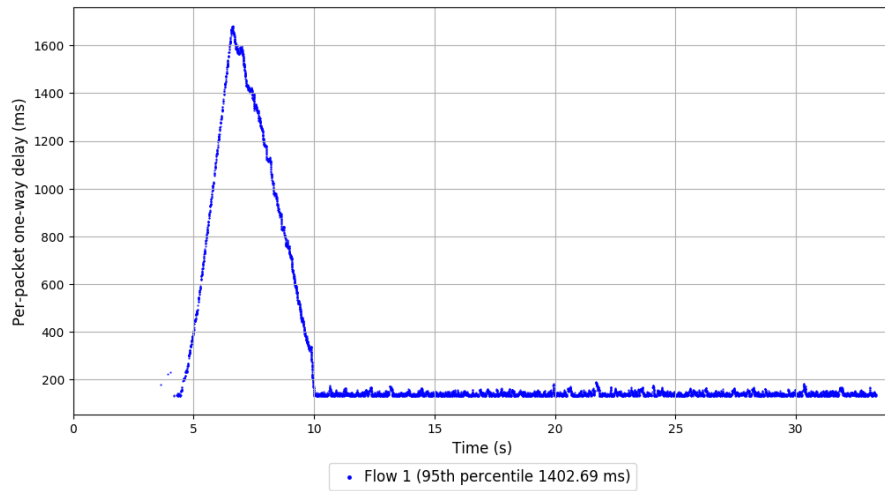
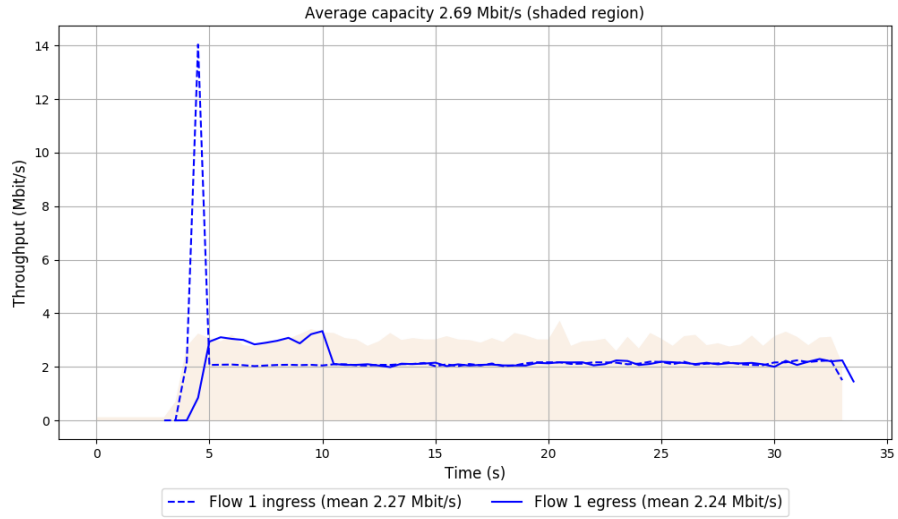
-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 1402.691 ms

Loss rate: 2.02%

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



Run 6: Statistics of PCC-Allegro

Start at: 2018-07-24 13:05:18

End at: 2018-07-24 13:05:48

# Below is generated by plot.py at 2018-07-24 13:51:20

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.11 Mbit/s (78.3% utilization)

95th percentile per-packet one-way delay: 1209.907 ms

Loss rate: 0.45%

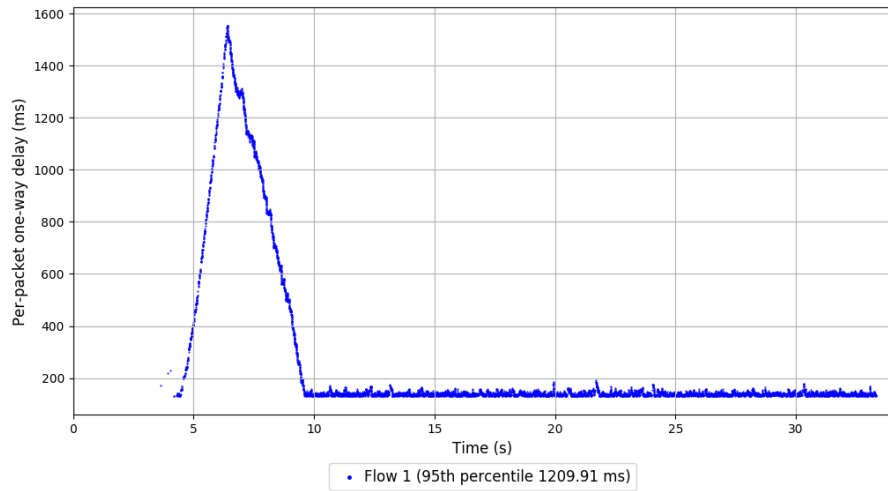
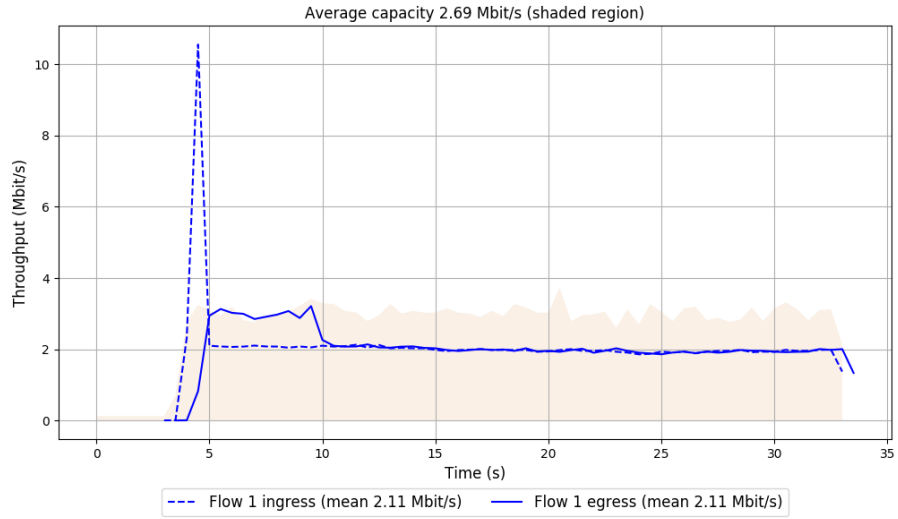
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 1209.907 ms

Loss rate: 0.45%

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



Run 7: Statistics of PCC-Allegro

Start at: 2018-07-24 13:15:00

End at: 2018-07-24 13:15:30

# Below is generated by plot.py at 2018-07-24 13:51:21

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.18 Mbit/s (80.8% utilization)

95th percentile per-packet one-way delay: 1420.980 ms

Loss rate: 2.78%

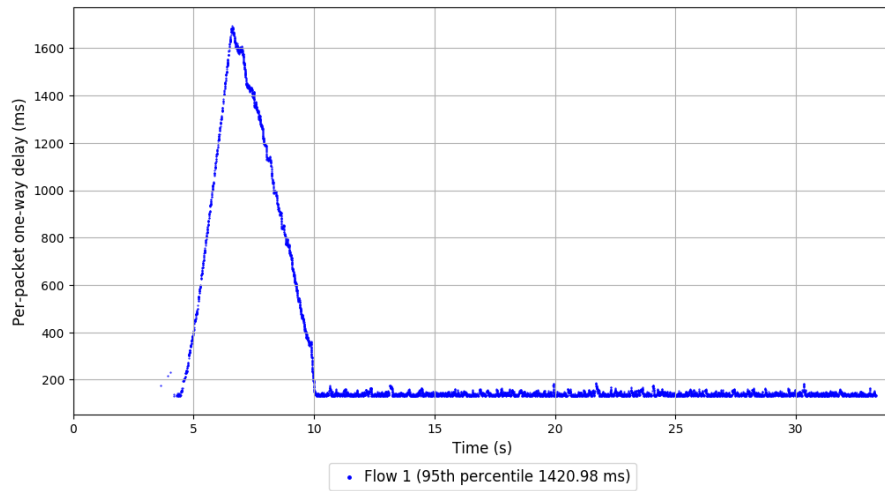
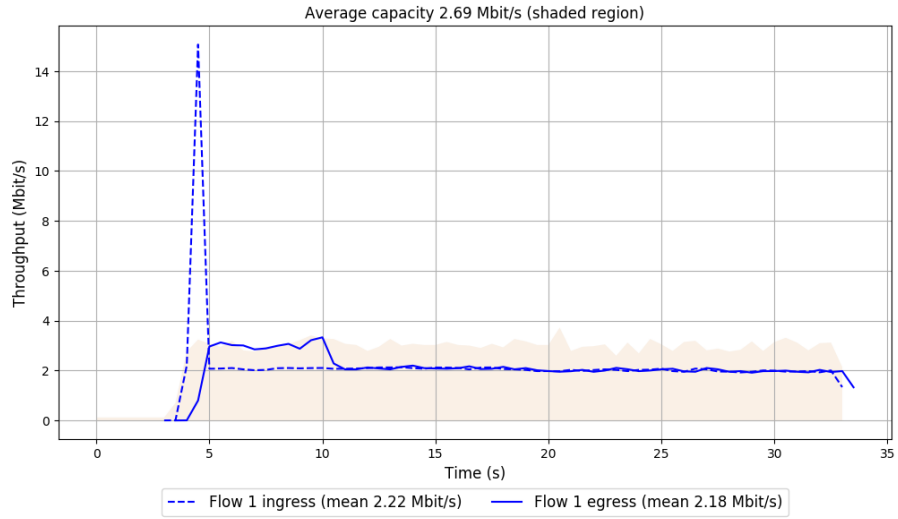
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 1420.980 ms

Loss rate: 2.78%

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



Run 8: Statistics of PCC-Allegro

Start at: 2018-07-24 13:24:43

End at: 2018-07-24 13:25:13

# Below is generated by plot.py at 2018-07-24 13:51:23

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.22 Mbit/s (82.4% utilization)

95th percentile per-packet one-way delay: 1407.466 ms

Loss rate: 2.02%

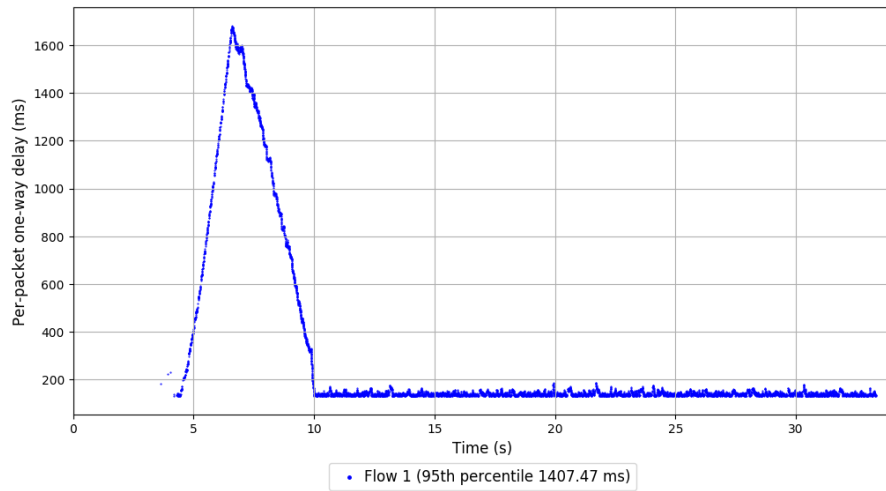
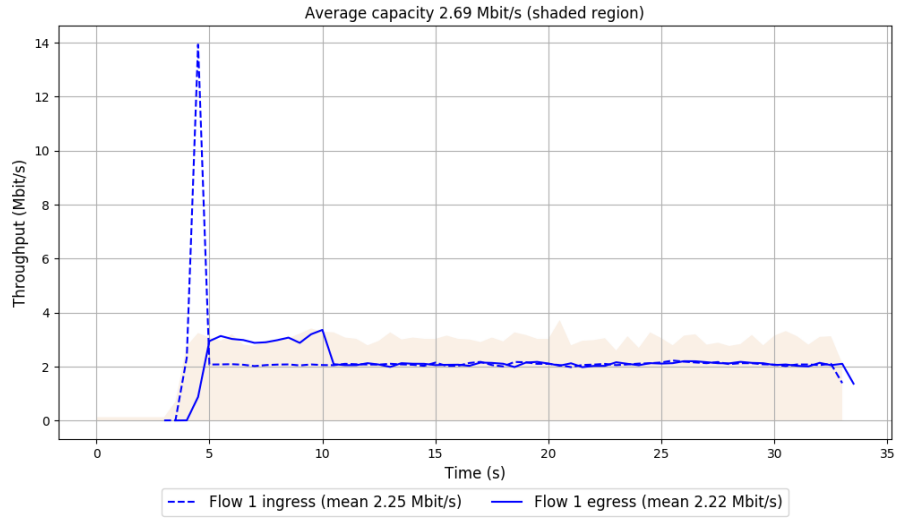
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 1407.466 ms

Loss rate: 2.02%

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



Run 9: Statistics of PCC-Allegro

Start at: 2018-07-24 13:34:25

End at: 2018-07-24 13:34:55

# Below is generated by plot.py at 2018-07-24 13:51:26

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.23 Mbit/s (82.8% utilization)

95th percentile per-packet one-way delay: 1185.808 ms

Loss rate: 0.43%

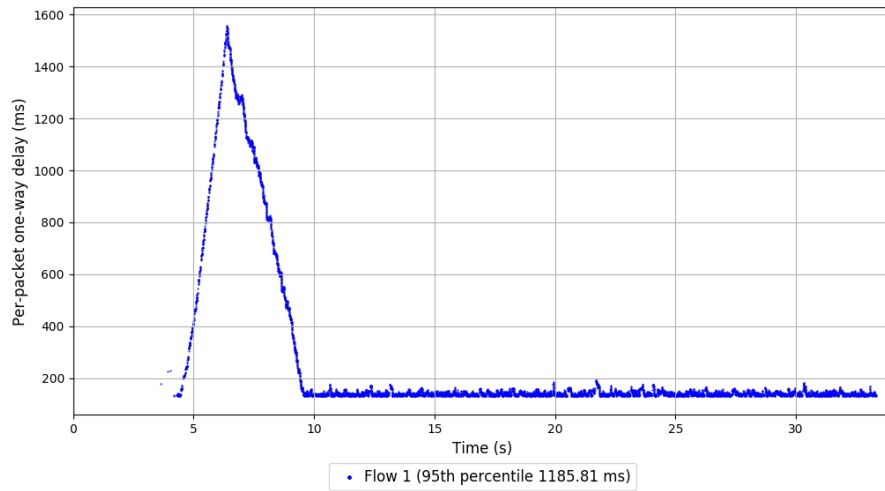
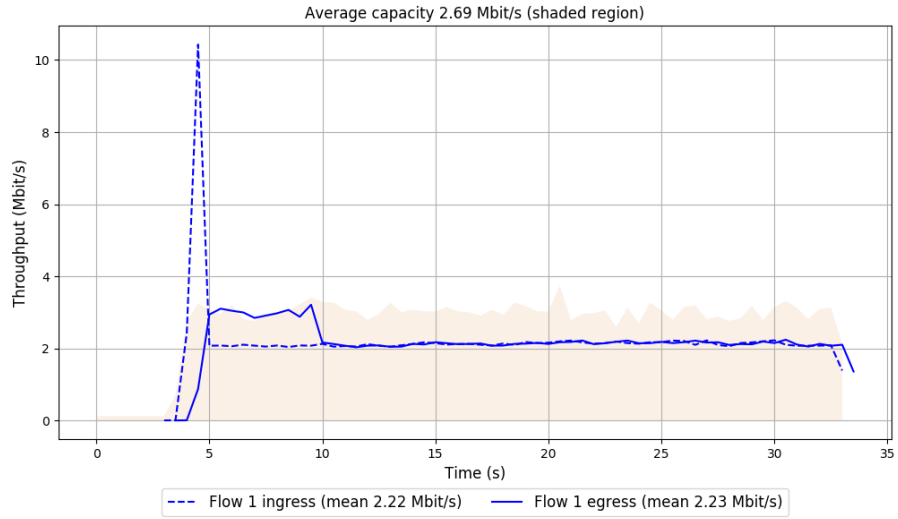
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 1185.808 ms

Loss rate: 0.43%

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



Run 10: Statistics of PCC-Allegro

Start at: 2018-07-24 13:44:08

End at: 2018-07-24 13:44:38

# Below is generated by plot.py at 2018-07-24 13:51:26

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.30 Mbit/s (85.3% utilization)

95th percentile per-packet one-way delay: 1397.986 ms

Loss rate: 1.87%

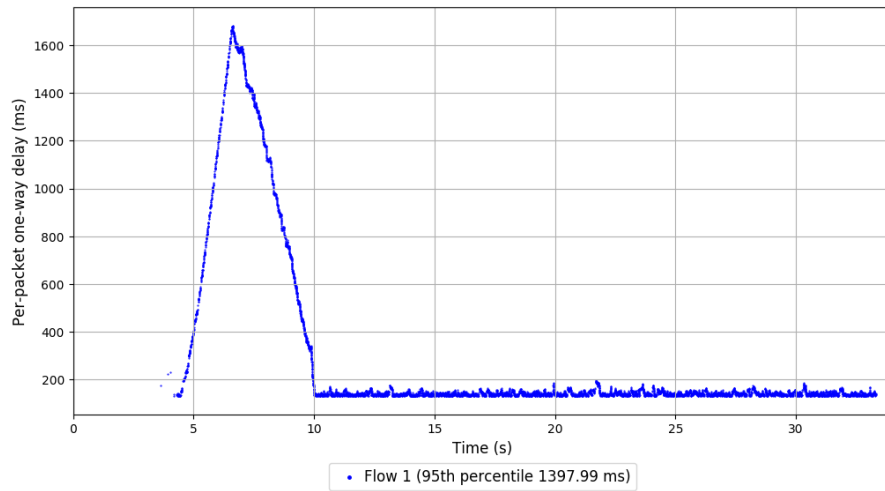
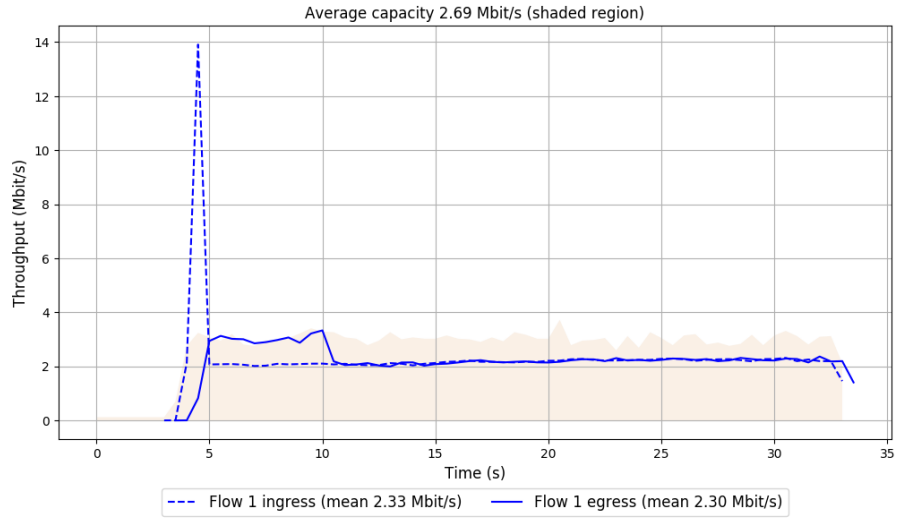
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 1397.986 ms

Loss rate: 1.87%

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



Run 1: Statistics of PCC-Expr

Start at: 2018-07-24 12:14:31

End at: 2018-07-24 12:15:01

# Below is generated by plot.py at 2018-07-24 13:51:33

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.9% utilization)

95th percentile per-packet one-way delay: 1193.129 ms

Loss rate: 45.07%

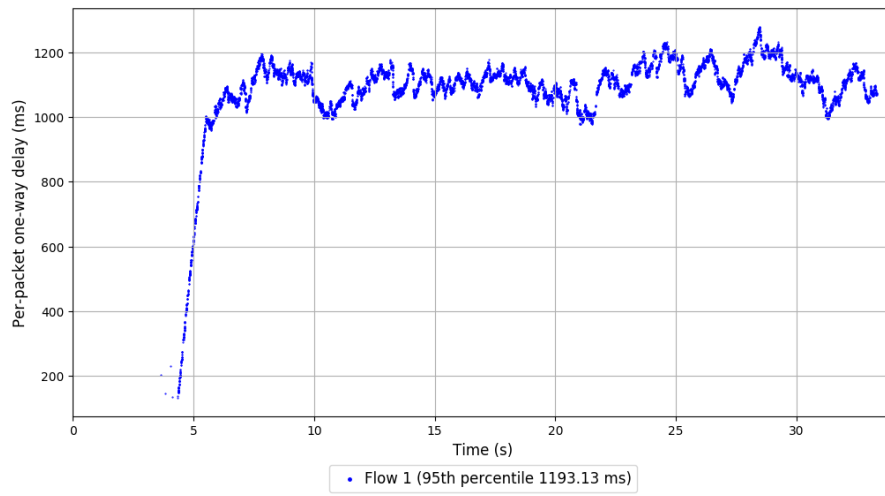
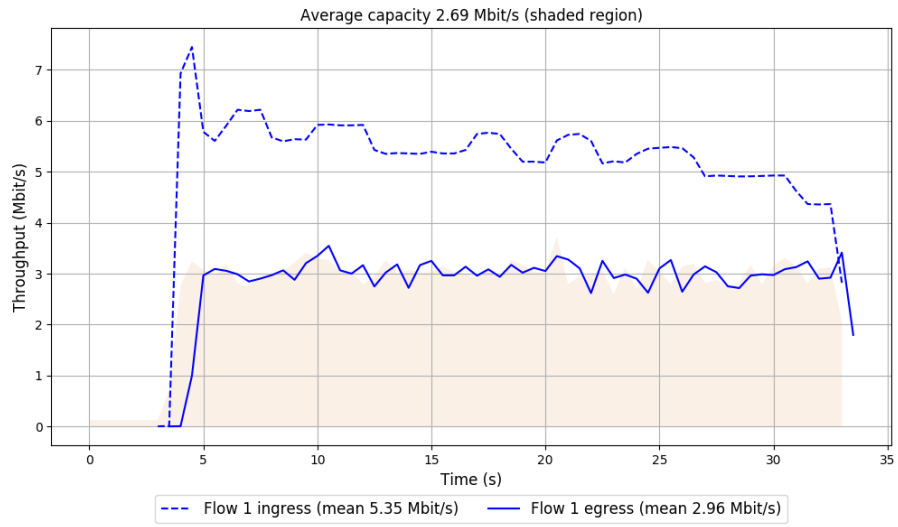
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 1193.129 ms

Loss rate: 45.07%

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



Run 2: Statistics of PCC-Expr

Start at: 2018-07-24 12:24:13

End at: 2018-07-24 12:24:43

# Below is generated by plot.py at 2018-07-24 13:51:33

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.9% utilization)

95th percentile per-packet one-way delay: 1175.781 ms

Loss rate: 45.09%

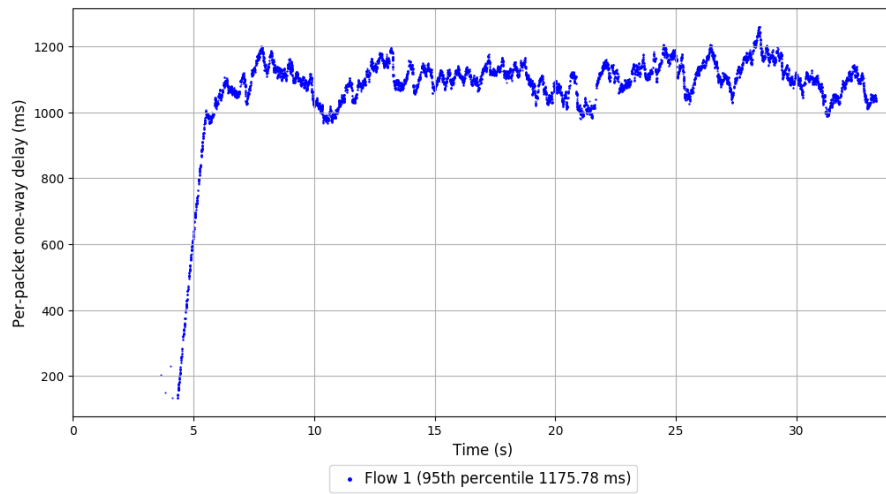
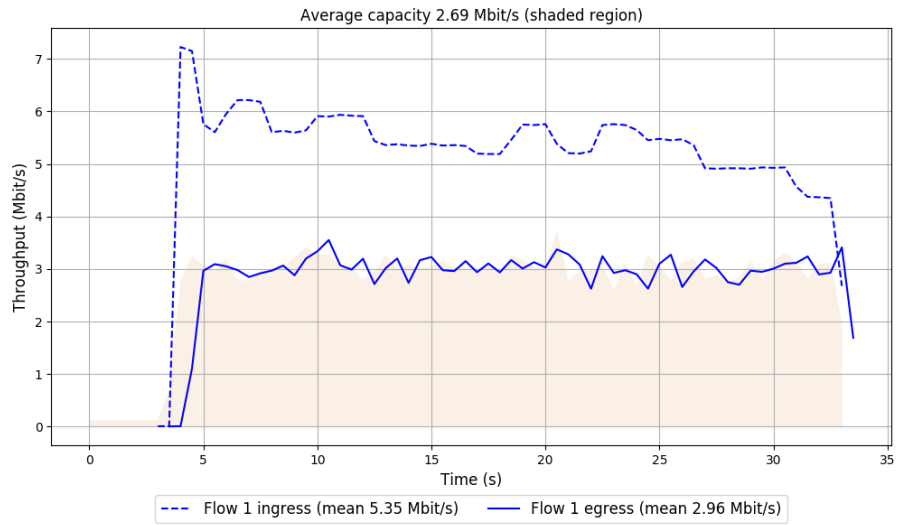
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 1175.781 ms

Loss rate: 45.09%

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



Run 3: Statistics of PCC-Expr

Start at: 2018-07-24 12:33:55

End at: 2018-07-24 12:34:25

# Below is generated by plot.py at 2018-07-24 13:51:35

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.9% utilization)

95th percentile per-packet one-way delay: 1217.986 ms

Loss rate: 52.48%

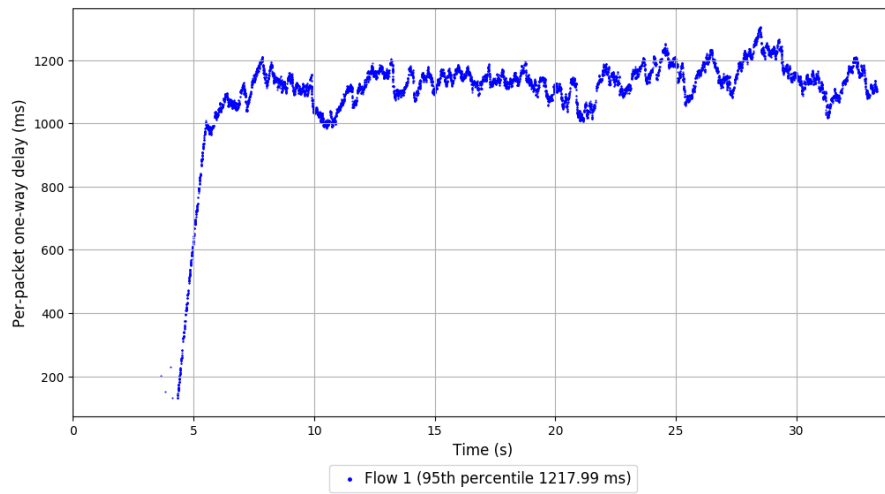
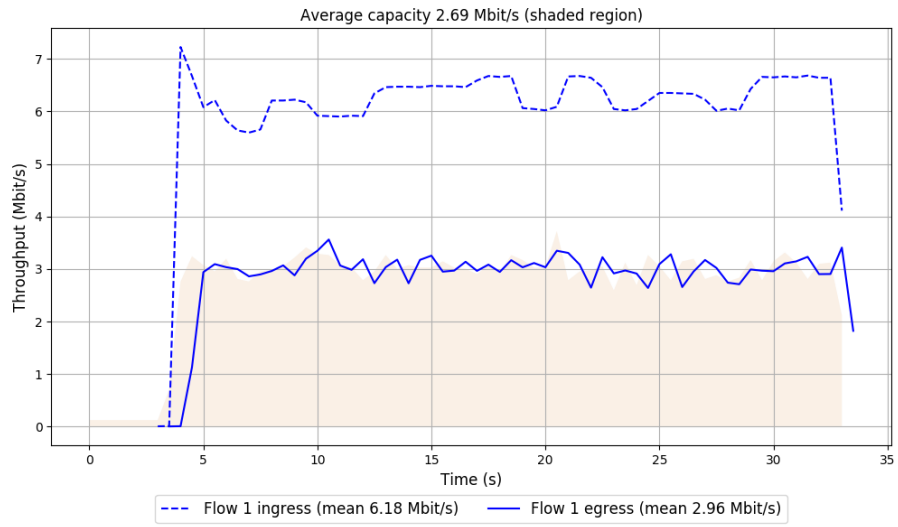
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 1217.986 ms

Loss rate: 52.48%

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



Run 4: Statistics of PCC-Expr

Start at: 2018-07-24 12:43:37

End at: 2018-07-24 12:44:07

# Below is generated by plot.py at 2018-07-24 13:51:35

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.9% utilization)

95th percentile per-packet one-way delay: 1188.037 ms

Loss rate: 45.06%

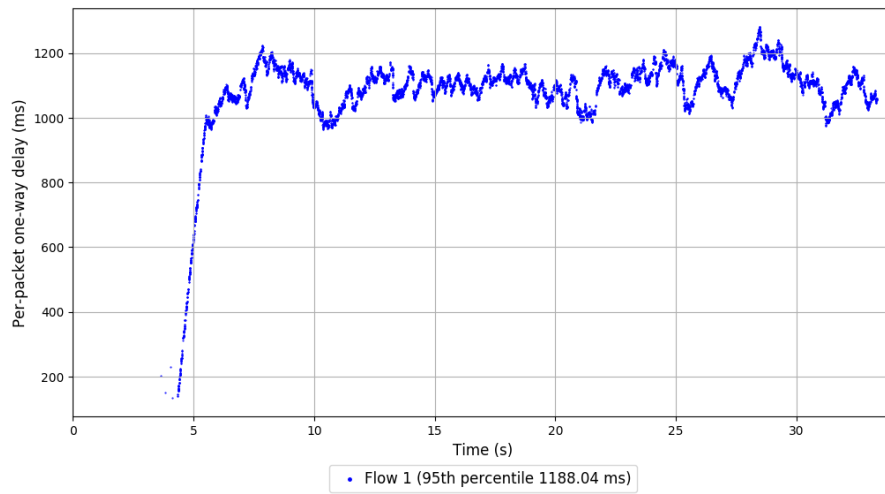
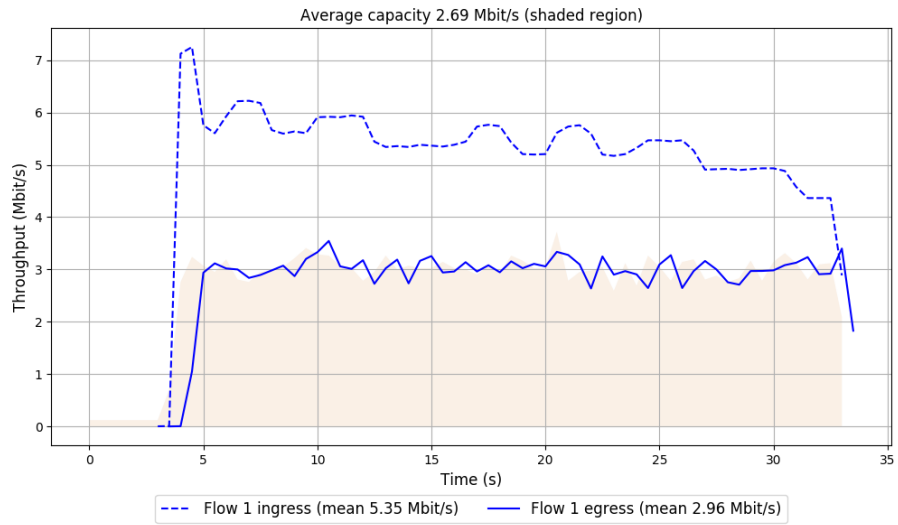
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 1188.037 ms

Loss rate: 45.06%

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



Run 5: Statistics of PCC-Expr

Start at: 2018-07-24 12:53:19

End at: 2018-07-24 12:53:49

# Below is generated by plot.py at 2018-07-24 13:51:36

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.9% utilization)

95th percentile per-packet one-way delay: 1178.246 ms

Loss rate: 46.71%

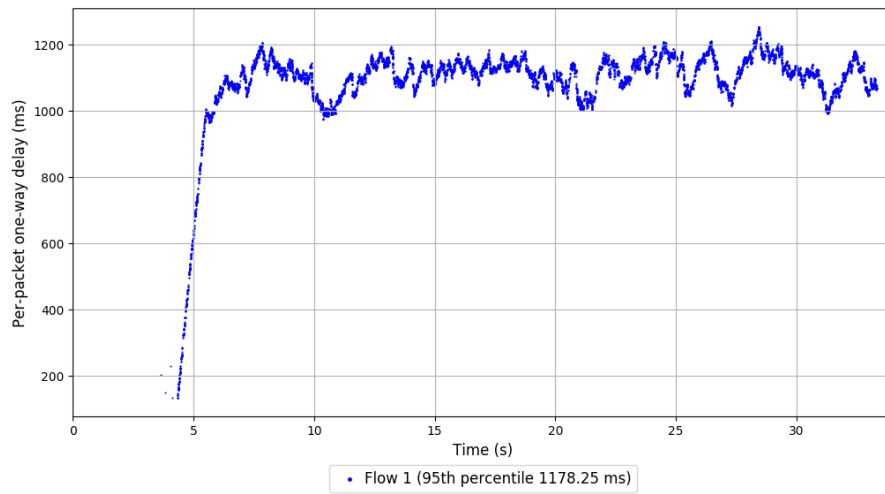
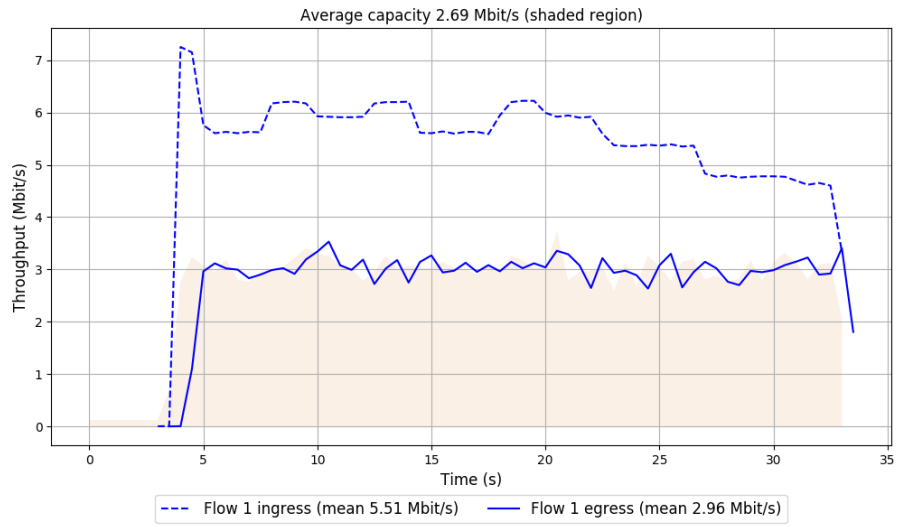
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 1178.246 ms

Loss rate: 46.71%

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



Run 6: Statistics of PCC-Expr

Start at: 2018-07-24 13:03:01

End at: 2018-07-24 13:03:31

# Below is generated by plot.py at 2018-07-24 13:51:38

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.8% utilization)

95th percentile per-packet one-way delay: 1195.163 ms

Loss rate: 49.74%

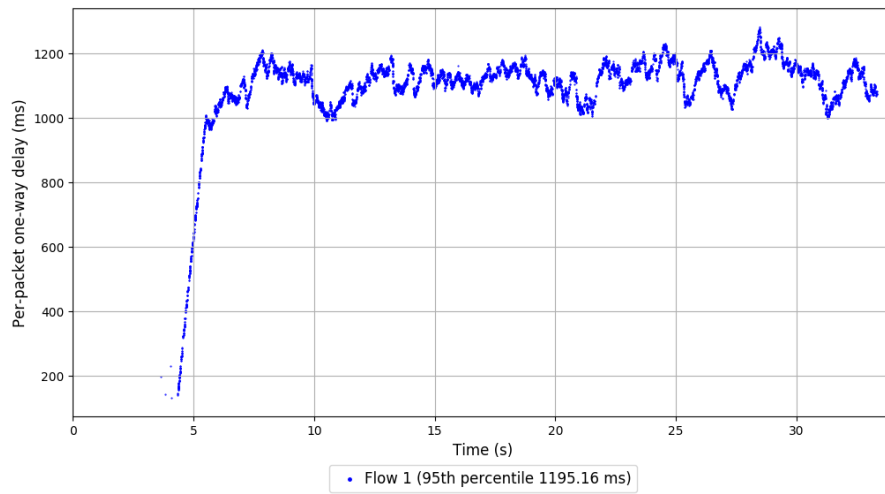
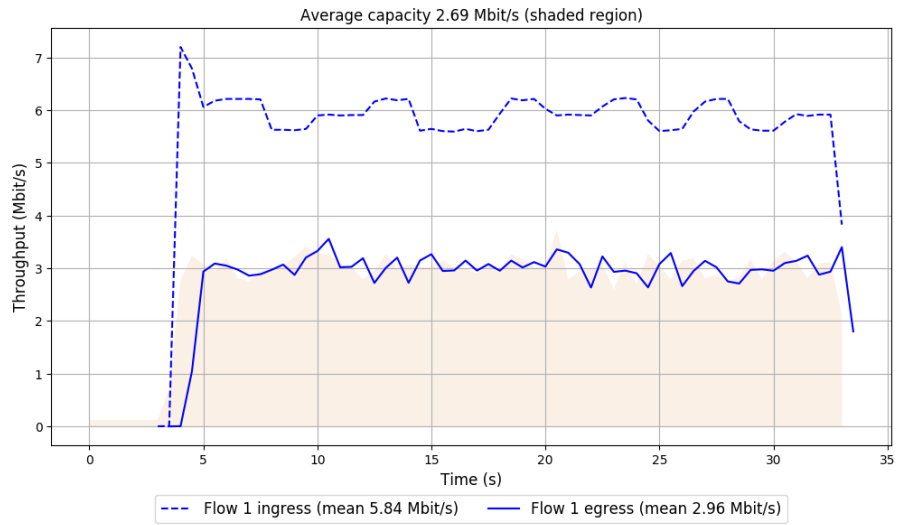
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 1195.163 ms

Loss rate: 49.74%

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



Run 7: Statistics of PCC-Expr

Start at: 2018-07-24 13:12:43

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

# Below is generated by plot.py at 2018-07-24 13:51:41

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.9% utilization)

95th percentile per-packet one-way delay: 1189.536 ms

Loss rate: 46.71%

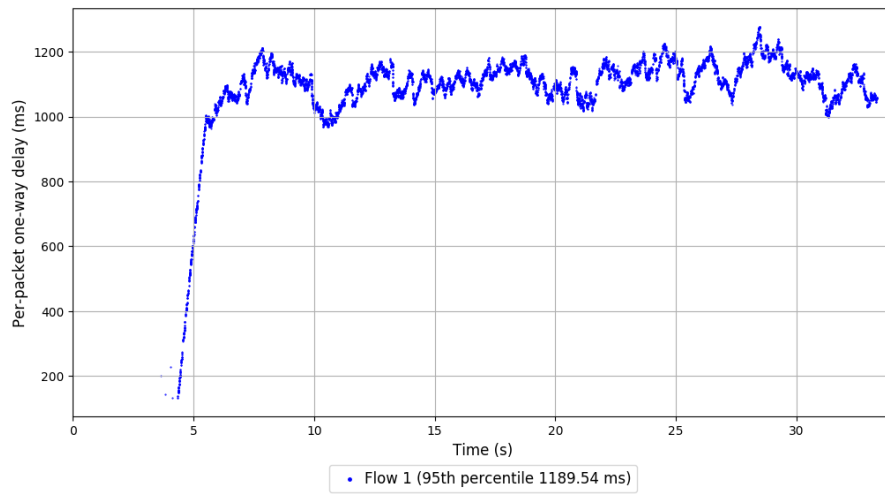
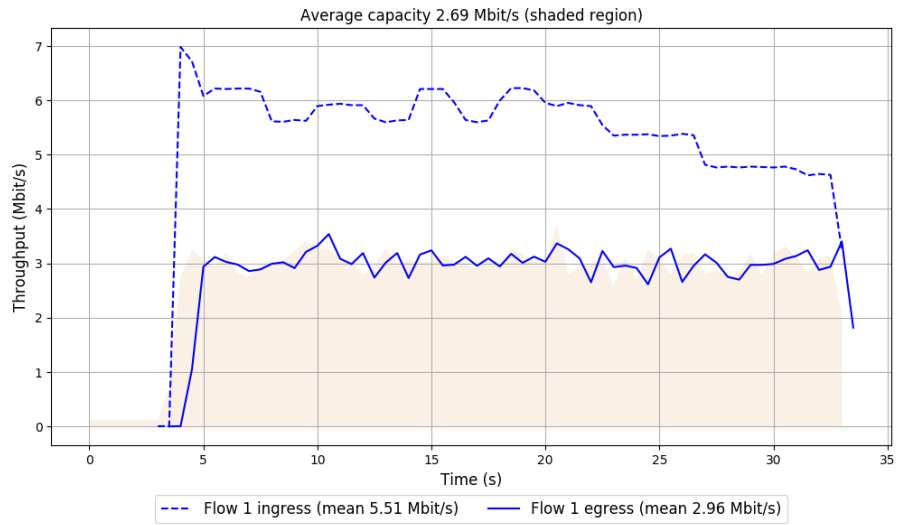
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 1189.536 ms

Loss rate: 46.71%

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



Run 8: Statistics of PCC-Expr

Start at: 2018-07-24 13:22:26

End at: 2018-07-24 13:22:56

# Below is generated by plot.py at 2018-07-24 13:51:43

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.9% utilization)

95th percentile per-packet one-way delay: 1207.293 ms

Loss rate: 51.40%

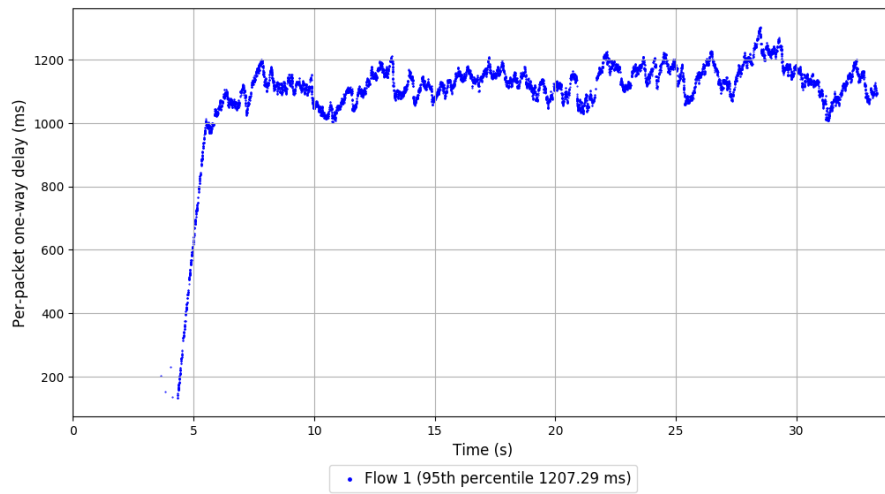
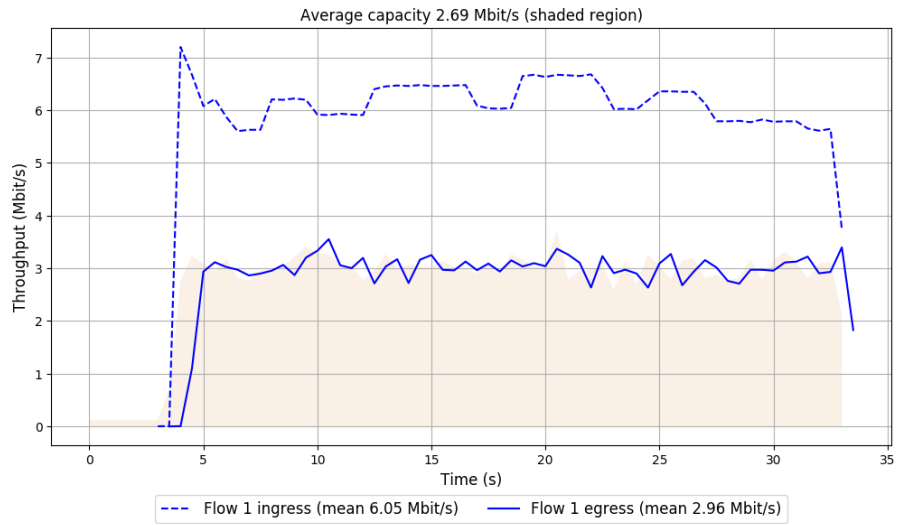
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 1207.293 ms

Loss rate: 51.40%

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



Run 9: Statistics of PCC-Expr

Start at: 2018-07-24 13:32:08

End at: 2018-07-24 13:32:38

# Below is generated by plot.py at 2018-07-24 13:51:50

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.9% utilization)

95th percentile per-packet one-way delay: 1181.083 ms

Loss rate: 46.65%

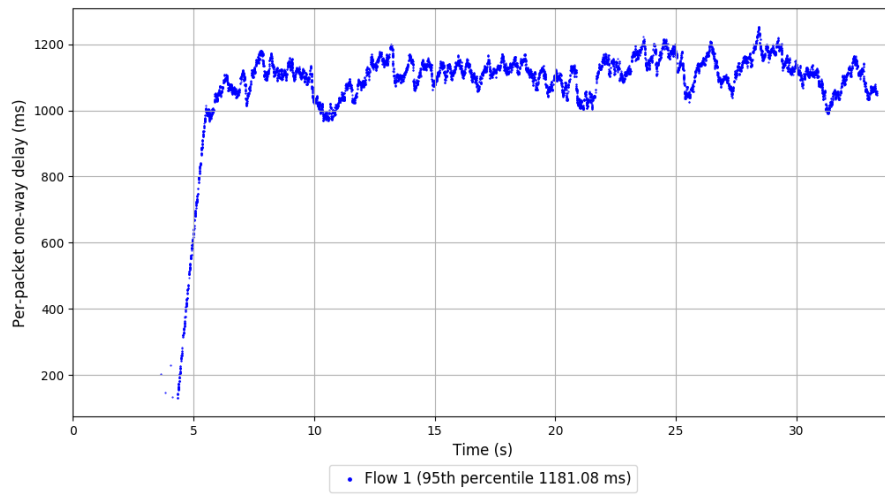
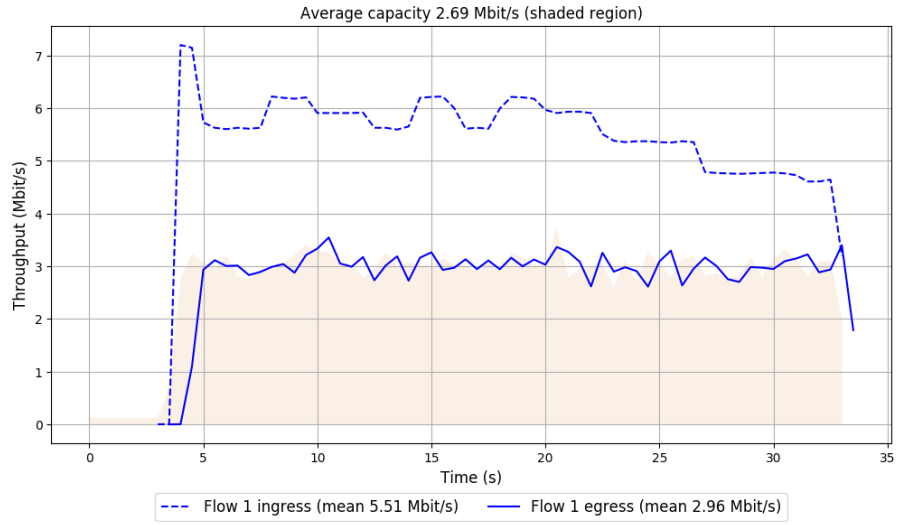
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 1181.083 ms

Loss rate: 46.65%

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



Run 10: Statistics of PCC-Expr

Start at: 2018-07-24 13:41:50

End at: 2018-07-24 13:42:20

# Below is generated by plot.py at 2018-07-24 13:51:53

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.96 Mbit/s (109.8% utilization)

95th percentile per-packet one-way delay: 1212.046 ms

Loss rate: 53.60%

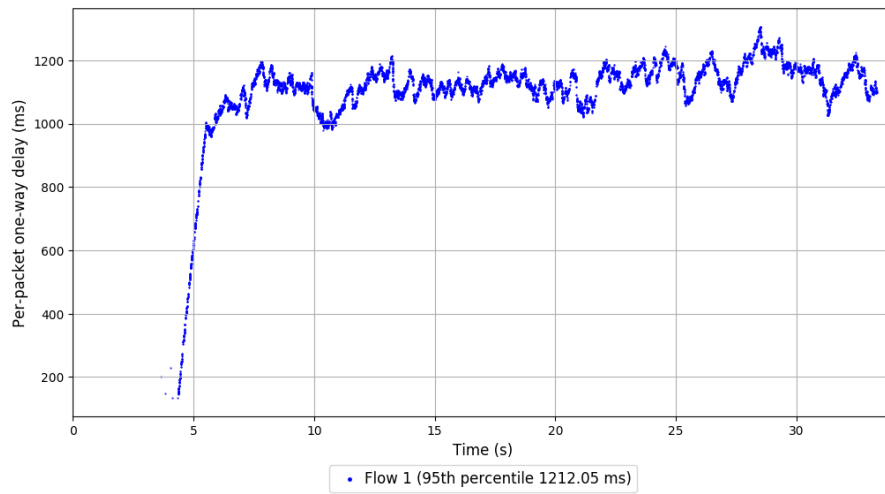
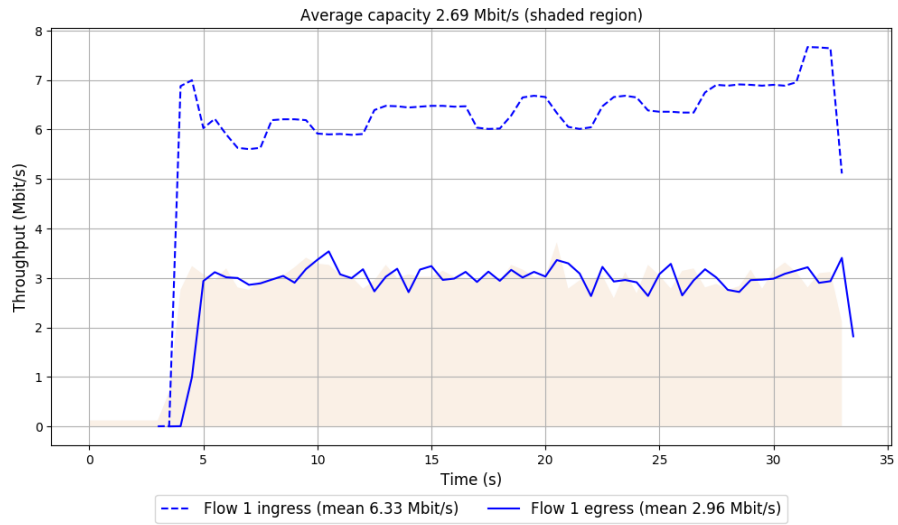
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 1212.046 ms

Loss rate: 53.60%

Run 10: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-07-24 12:16:14

End at: 2018-07-24 12:16:44

# Below is generated by plot.py at 2018-07-24 13:51:53

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.94 Mbit/s (109.1% utilization)

95th percentile per-packet one-way delay: 1092.357 ms

Loss rate: 3.99%

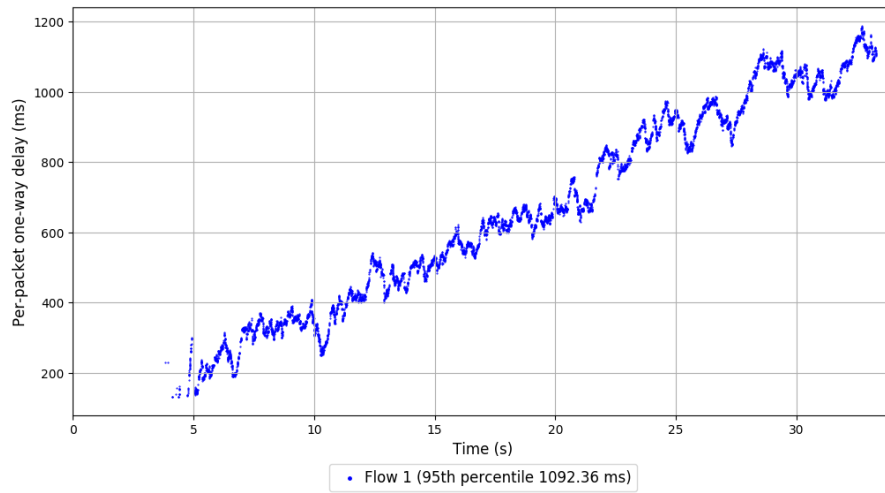
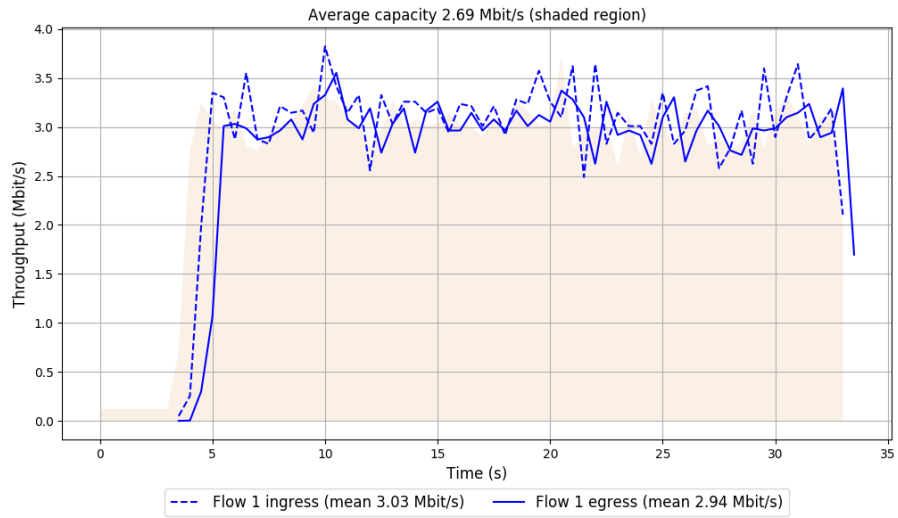
-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 1092.357 ms

Loss rate: 3.99%

# Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-07-24 12:25:56

End at: 2018-07-24 12:26:26

# Below is generated by plot.py at 2018-07-24 13:51:53

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.94 Mbit/s (109.1% utilization)

95th percentile per-packet one-way delay: 1184.441 ms

Loss rate: 4.31%

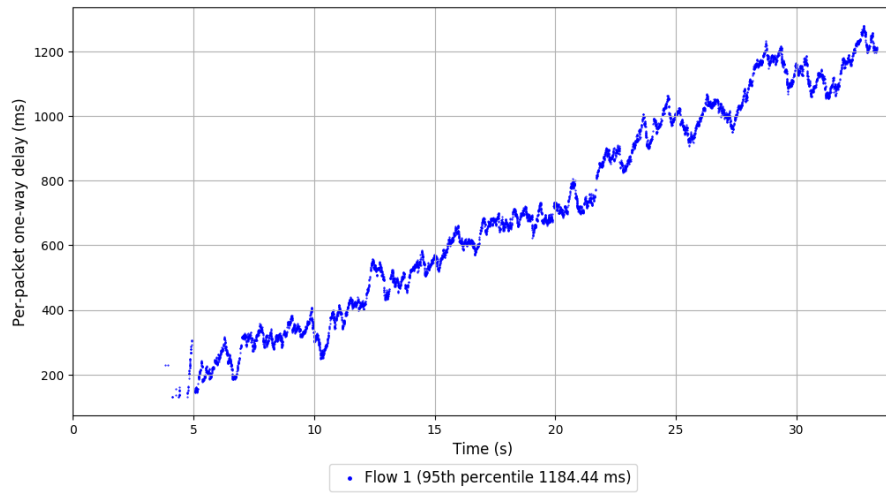
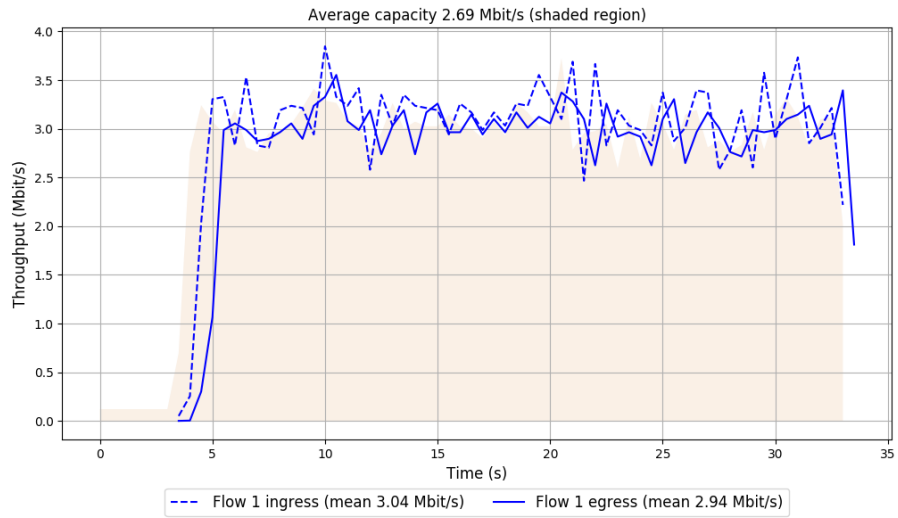
-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 1184.441 ms

Loss rate: 4.31%

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



Run 3: Statistics of QUIC Cubic

Start at: 2018-07-24 12:35:37

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

# Below is generated by plot.py at 2018-07-24 13:51:53

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.94 Mbit/s (109.0% utilization)

95th percentile per-packet one-way delay: 1184.136 ms

Loss rate: 4.26%

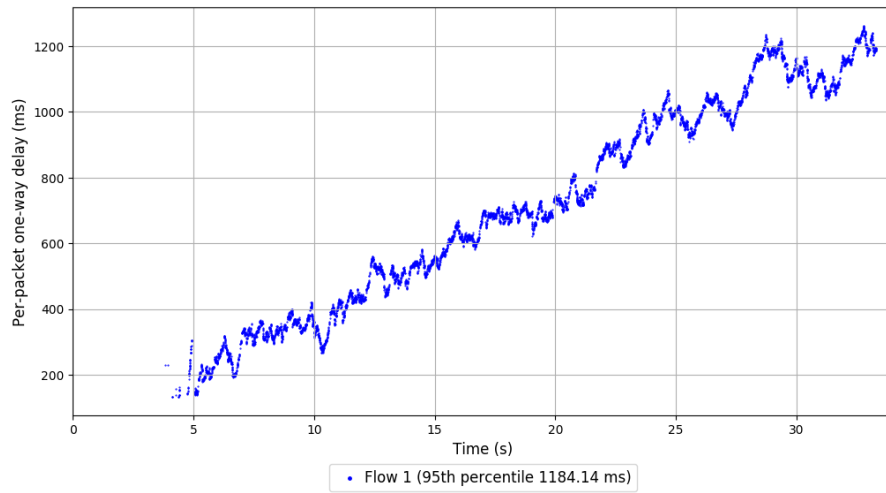
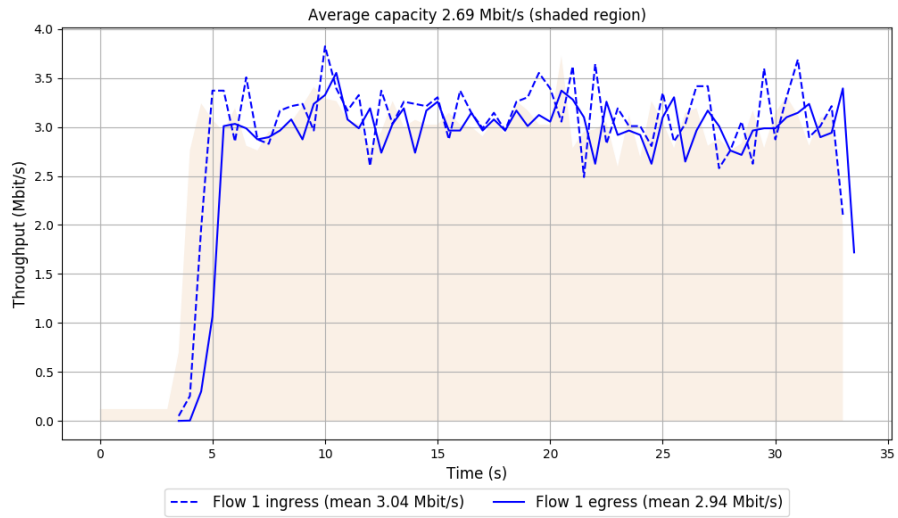
-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 1184.136 ms

Loss rate: 4.26%

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



Run 4: Statistics of QUIC Cubic

Start at: 2018-07-24 12:45:20

End at: 2018-07-24 12:45:50

# Below is generated by plot.py at 2018-07-24 13:51:53

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 879.828 ms

Loss rate: 3.47%

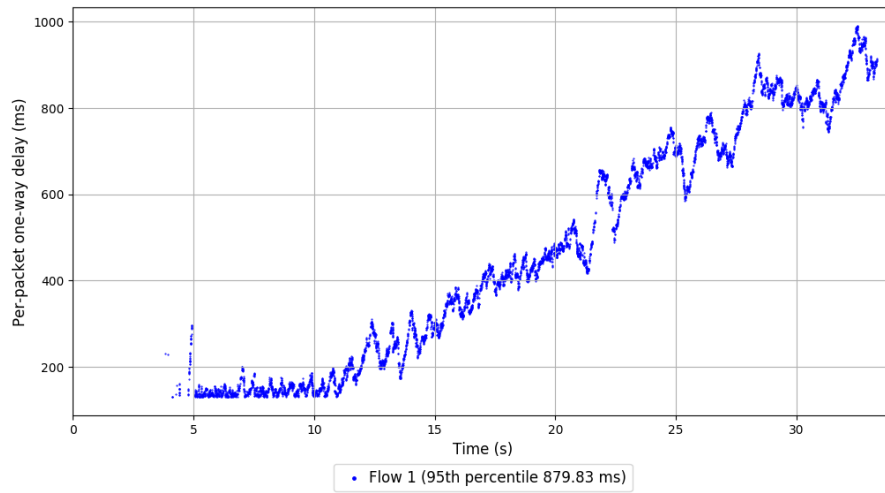
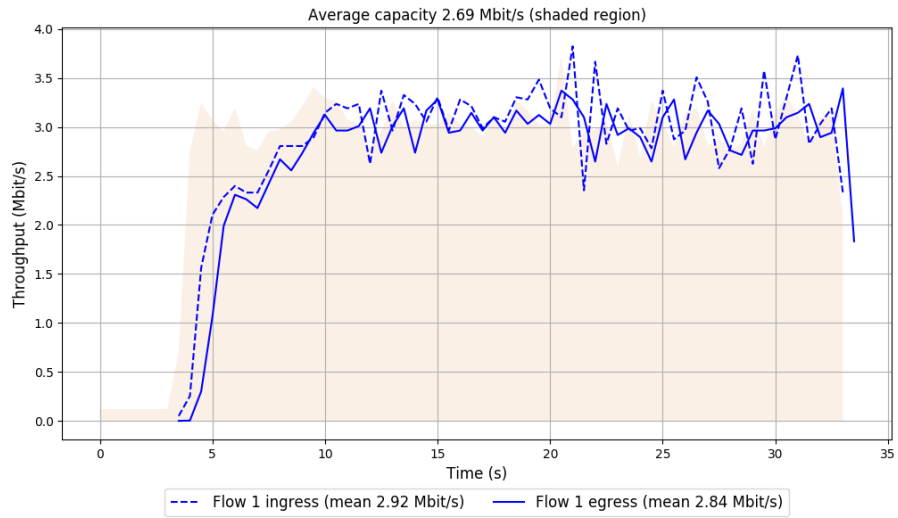
-- Flow 1:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 879.828 ms

Loss rate: 3.47%

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



Run 5: Statistics of QUIC Cubic

Start at: 2018-07-24 12:55:02

End at: 2018-07-24 12:55:32

# Below is generated by plot.py at 2018-07-24 13:51:53

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.94 Mbit/s (109.1% utilization)

95th percentile per-packet one-way delay: 1103.824 ms

Loss rate: 4.06%

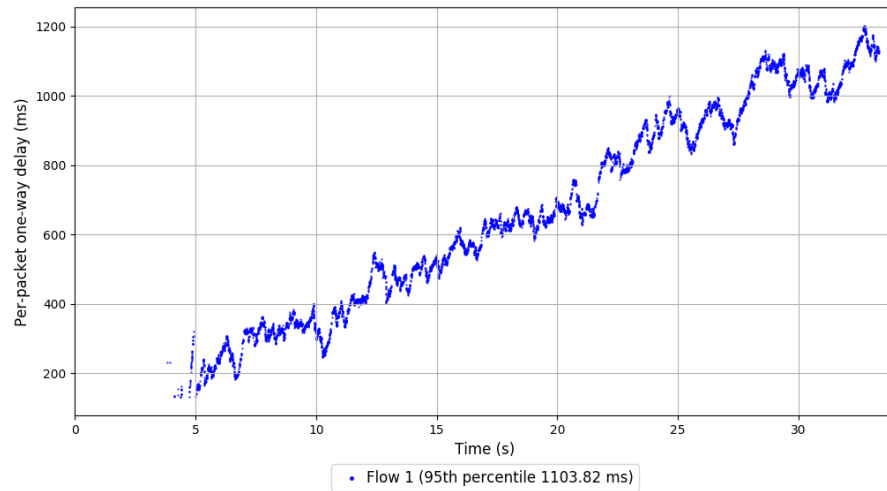
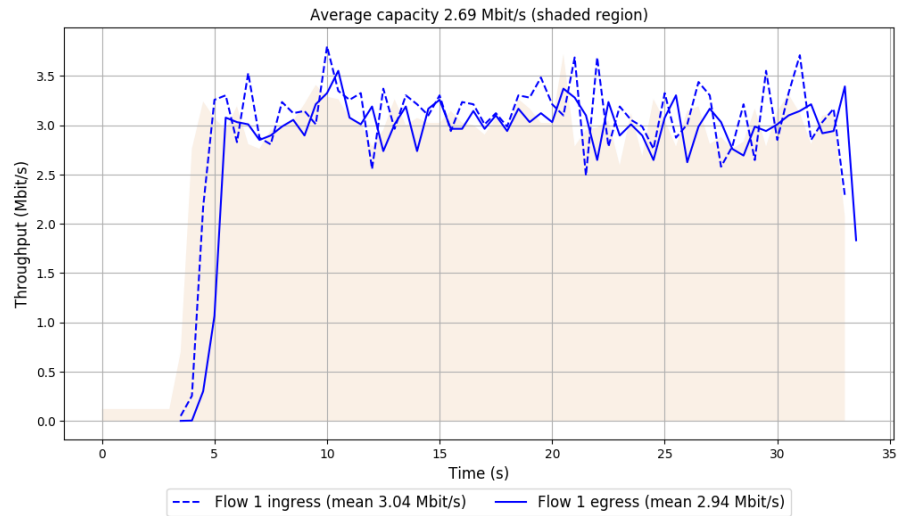
-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 1103.824 ms

Loss rate: 4.06%

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



Run 6: Statistics of QUIC Cubic

Start at: 2018-07-24 13:04:44

End at: 2018-07-24 13:05:14

# Below is generated by plot.py at 2018-07-24 13:51:55

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.94 Mbit/s (109.1% utilization)

95th percentile per-packet one-way delay: 1179.468 ms

Loss rate: 4.28%

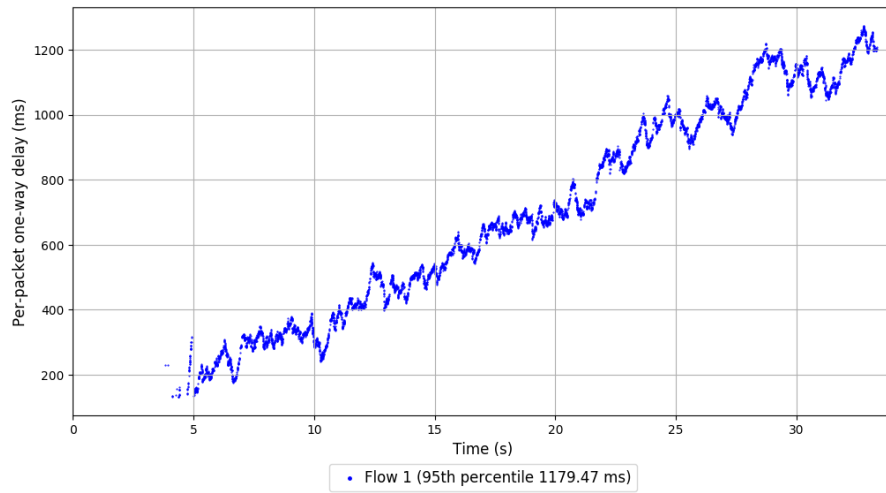
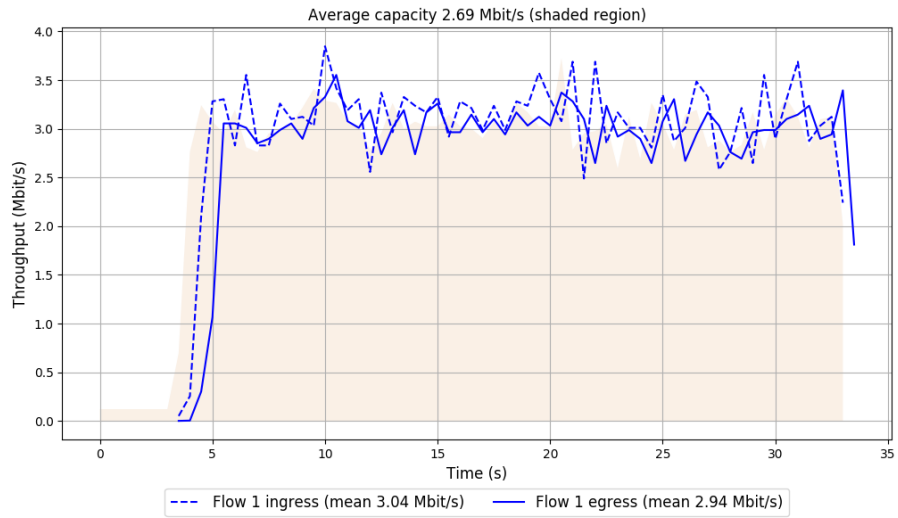
-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 1179.468 ms

Loss rate: 4.28%

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



Run 7: Statistics of QUIC Cubic

Start at: 2018-07-24 13:14:26

End at: 2018-07-24 13:14:56

# Below is generated by plot.py at 2018-07-24 13:51:56

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.94 Mbit/s (109.2% utilization)

95th percentile per-packet one-way delay: 1105.196 ms

Loss rate: 4.08%

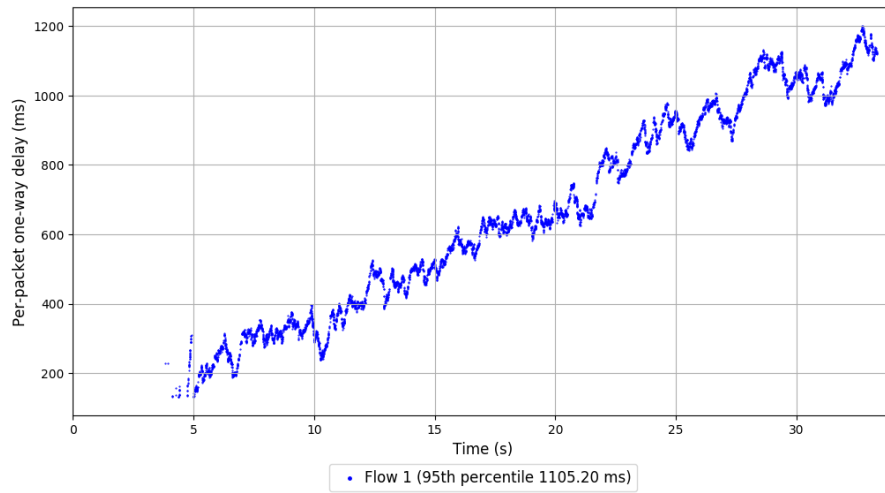
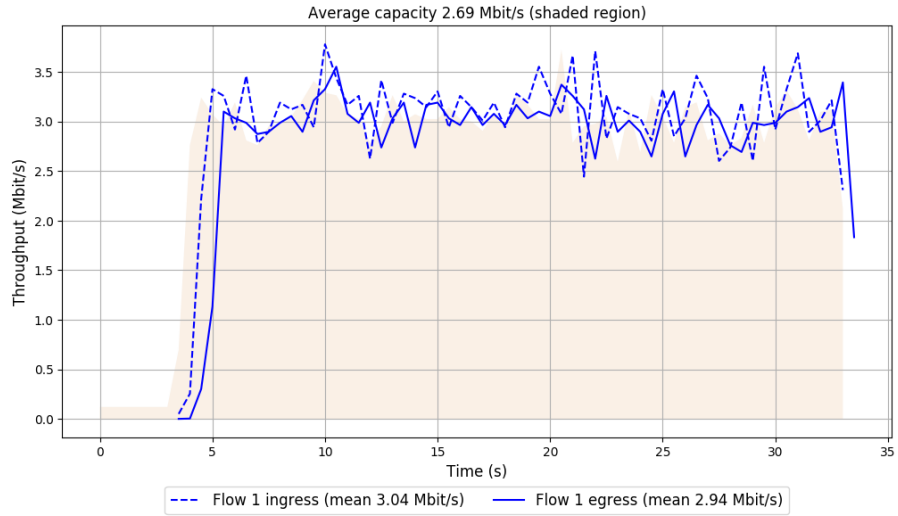
-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 1105.196 ms

Loss rate: 4.08%

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



Run 8: Statistics of QUIC Cubic

Start at: 2018-07-24 13:24:08

End at: 2018-07-24 13:24:39

# Below is generated by plot.py at 2018-07-24 13:51:57

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.94 Mbit/s (109.1% utilization)

95th percentile per-packet one-way delay: 1140.814 ms

Loss rate: 4.18%

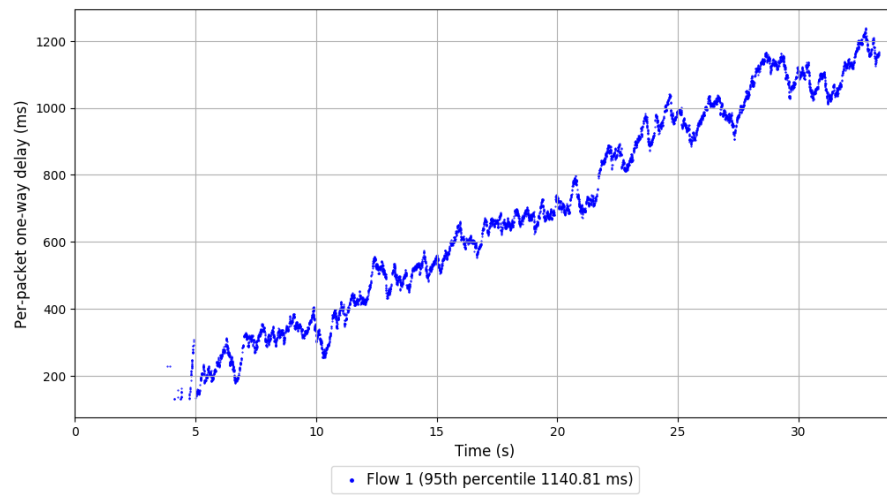
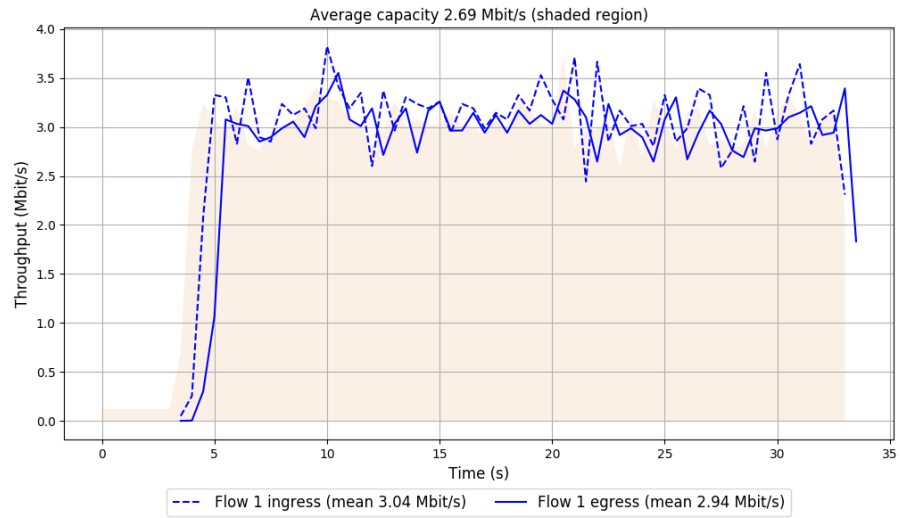
-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 1140.814 ms

Loss rate: 4.18%

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



Run 9: Statistics of QUIC Cubic

Start at: 2018-07-24 13:33:51

End at: 2018-07-24 13:34:21

# Below is generated by plot.py at 2018-07-24 13:51:58

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.94 Mbit/s (109.2% utilization)

95th percentile per-packet one-way delay: 1115.391 ms

Loss rate: 4.10%

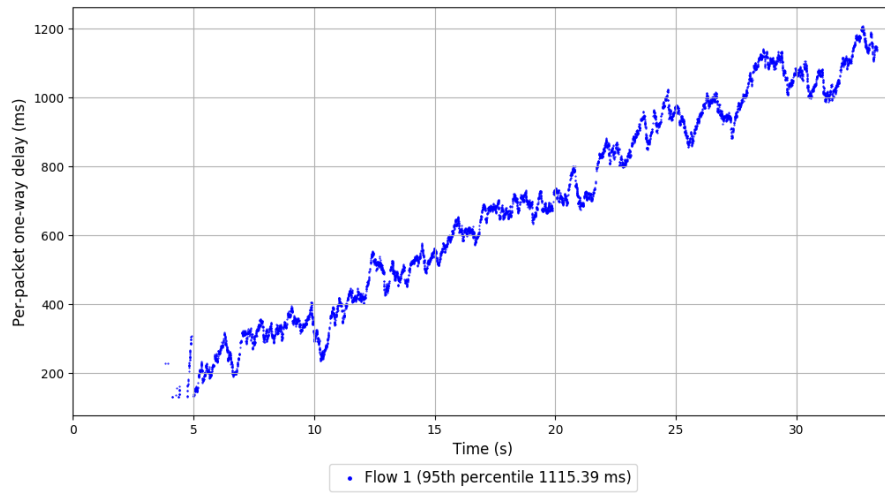
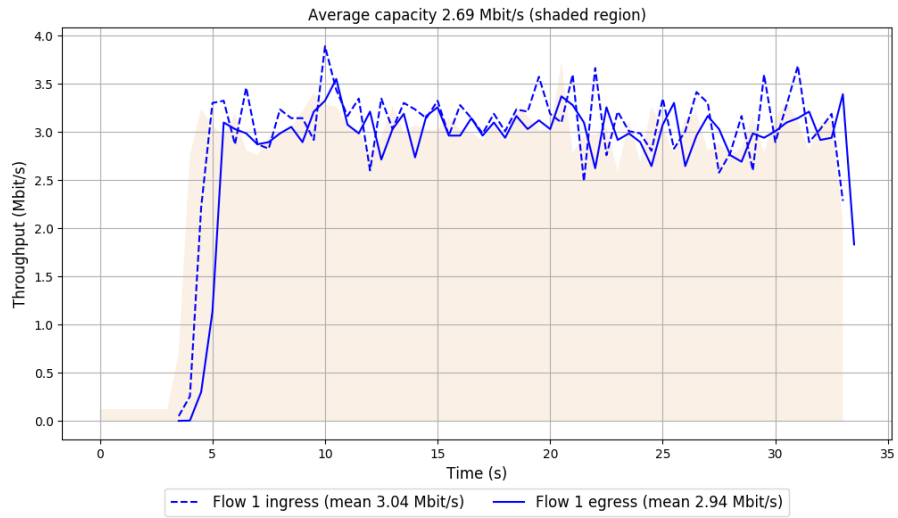
-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 1115.391 ms

Loss rate: 4.10%

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



Run 10: Statistics of QUIC Cubic

Start at: 2018-07-24 13:43:33

End at: 2018-07-24 13:44:03

# Below is generated by plot.py at 2018-07-24 13:52:05

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.94 Mbit/s (109.1% utilization)

95th percentile per-packet one-way delay: 1087.833 ms

Loss rate: 4.01%

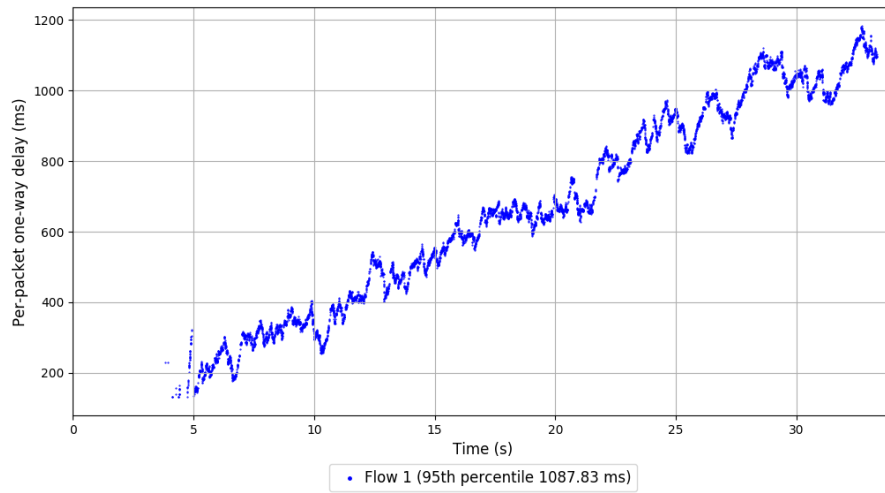
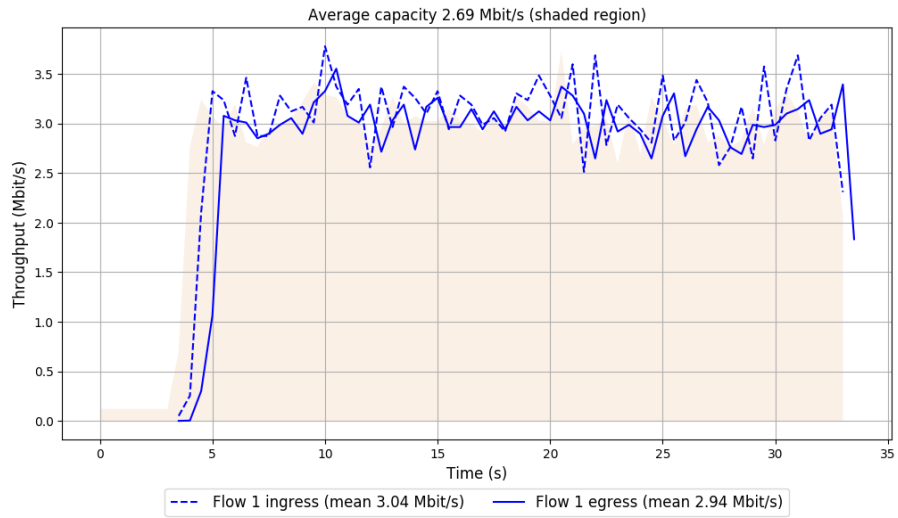
-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 1087.833 ms

Loss rate: 4.01%

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2018-07-24 12:13:23

End at: 2018-07-24 12:13:53

# Below is generated by plot.py at 2018-07-24 13:52:05

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.10 Mbit/s (3.7% utilization)

95th percentile per-packet one-way delay: 144.495 ms

Loss rate: 0.48%

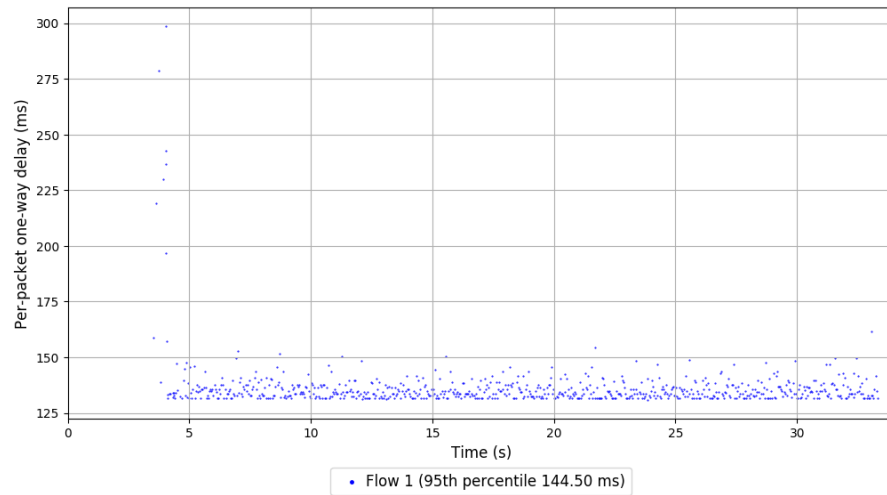
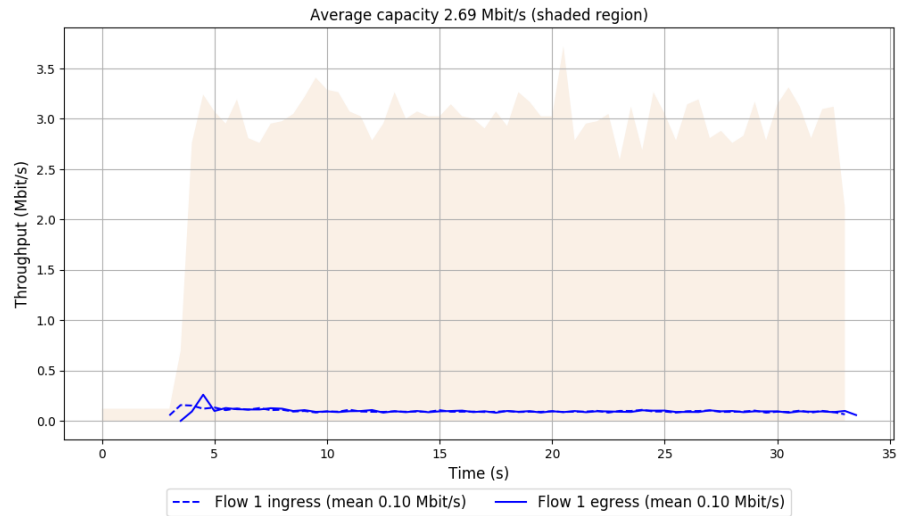
-- Flow 1:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 144.495 ms

Loss rate: 0.48%

# Run 1: Report of SCReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2018-07-24 12:23:05

End at: 2018-07-24 12:23:35

# Below is generated by plot.py at 2018-07-24 13:52:05

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.11 Mbit/s (4.1% utilization)

95th percentile per-packet one-way delay: 144.594 ms

Loss rate: 0.37%

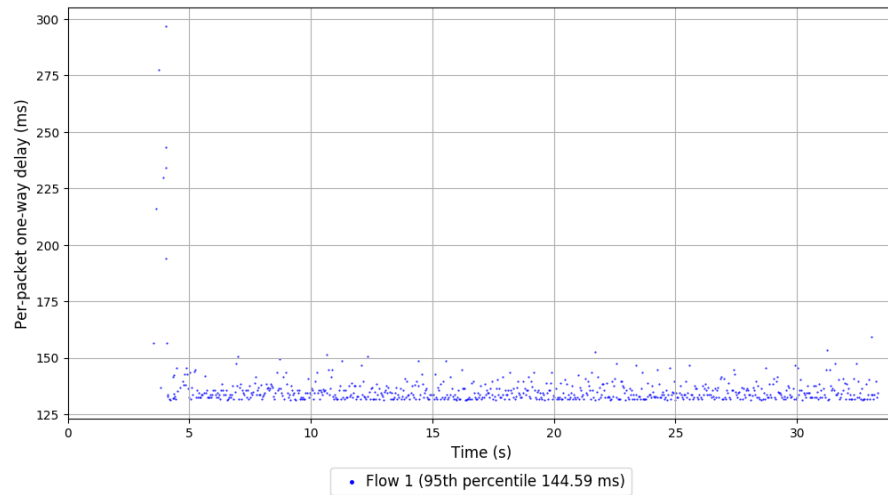
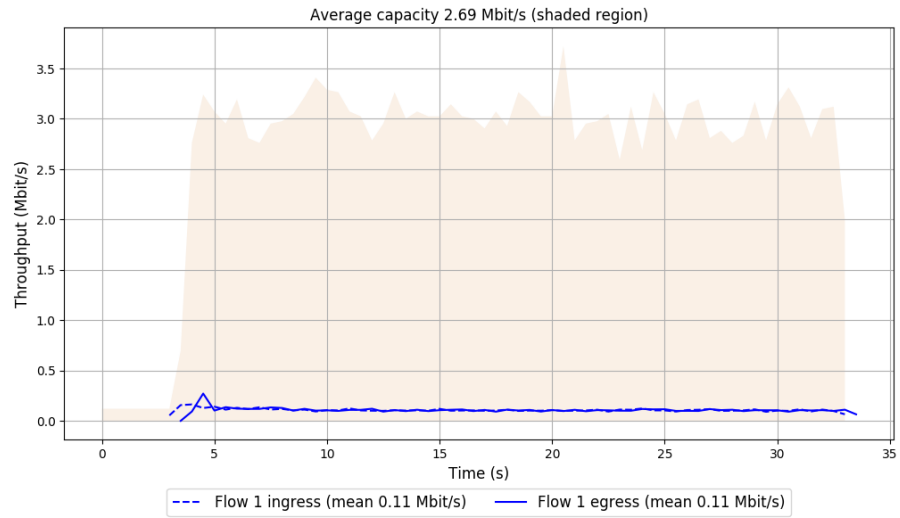
-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 144.594 ms

Loss rate: 0.37%

## Run 2: Report of SCReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-07-24 12:32:46

End at: 2018-07-24 12:33:16

# Below is generated by plot.py at 2018-07-24 13:52:05

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.10 Mbit/s (3.7% utilization)

95th percentile per-packet one-way delay: 144.542 ms

Loss rate: 0.36%

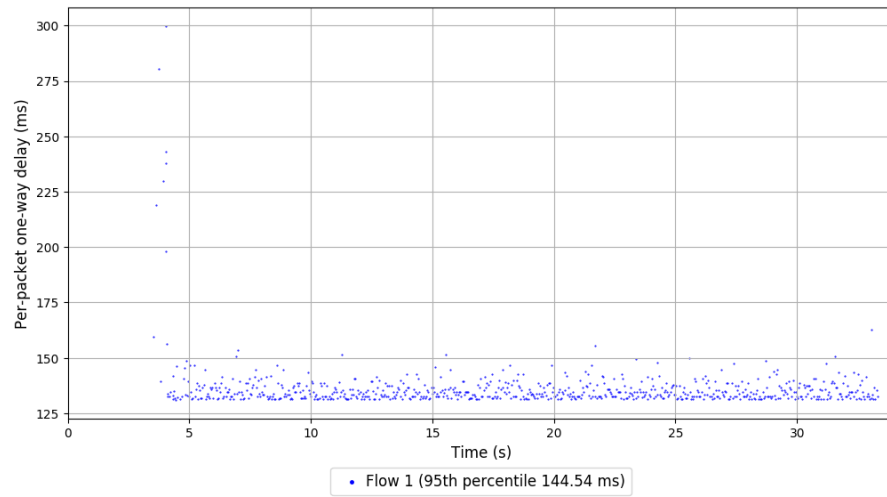
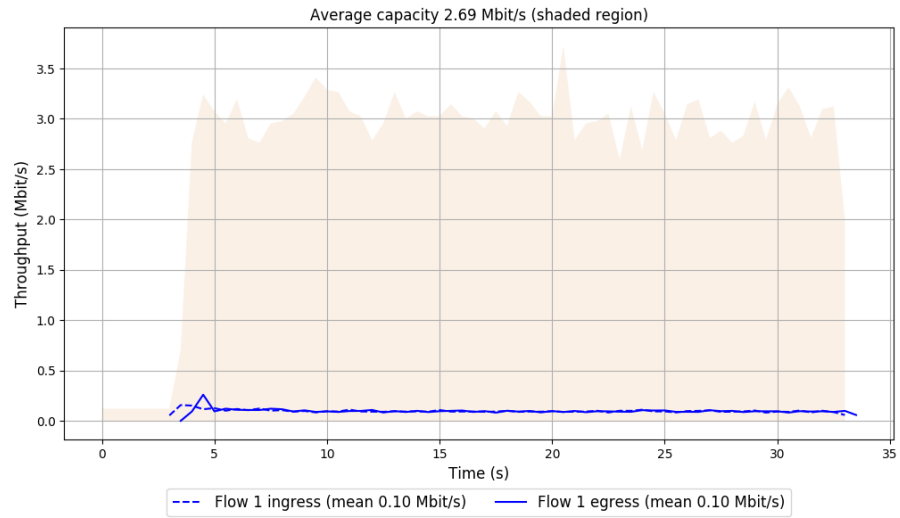
-- Flow 1:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 144.542 ms

Loss rate: 0.36%

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



Run 4: Statistics of SCReAM

Start at: 2018-07-24 12:42:28

End at: 2018-07-24 12:42:58

# Below is generated by plot.py at 2018-07-24 13:52:05

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.11 Mbit/s (4.0% utilization)

95th percentile per-packet one-way delay: 144.472 ms

Loss rate: 0.49%

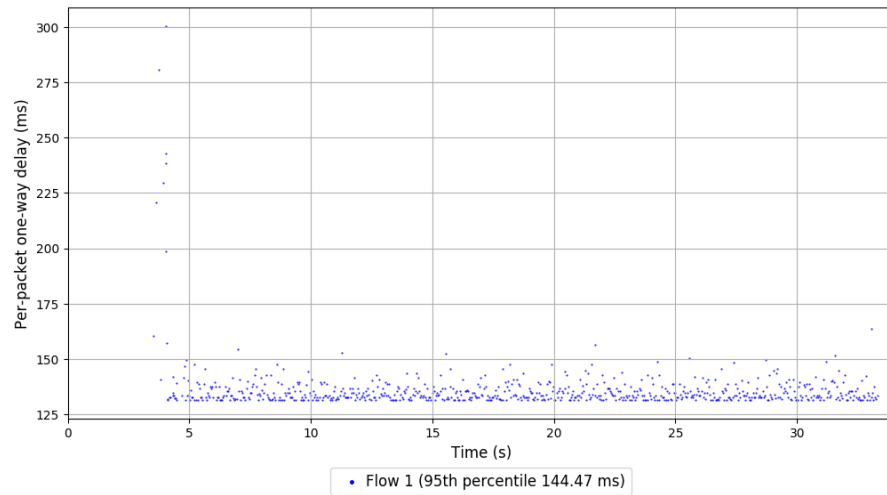
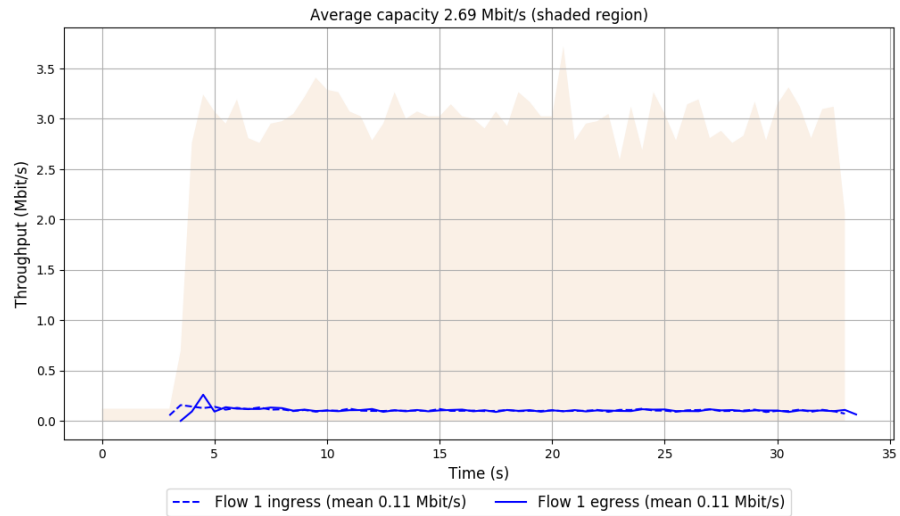
-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 144.472 ms

Loss rate: 0.49%

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



Run 5: Statistics of SCReAM

Start at: 2018-07-24 12:52:10

End at: 2018-07-24 12:52:40

# Below is generated by plot.py at 2018-07-24 13:52:05

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.11 Mbit/s (4.0% utilization)

95th percentile per-packet one-way delay: 144.473 ms

Loss rate: 0.49%

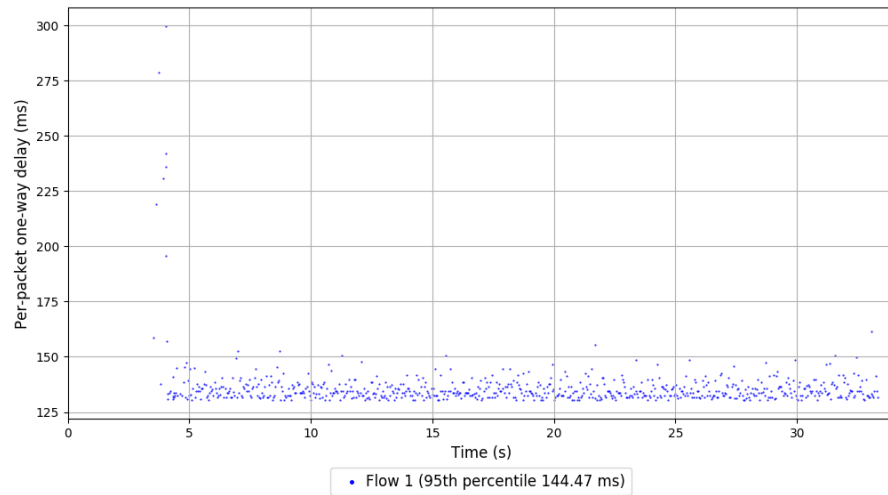
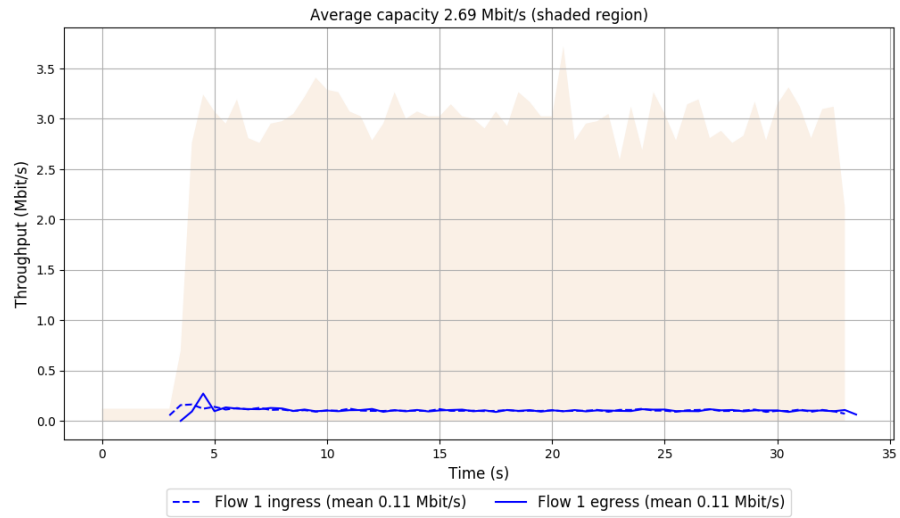
-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 144.473 ms

Loss rate: 0.49%

## Run 5: Report of SCReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-07-24 13:01:53

End at: 2018-07-24 13:02:23

# Below is generated by plot.py at 2018-07-24 13:52:05

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.11 Mbit/s (4.2% utilization)

95th percentile per-packet one-way delay: 144.526 ms

Loss rate: 0.50%

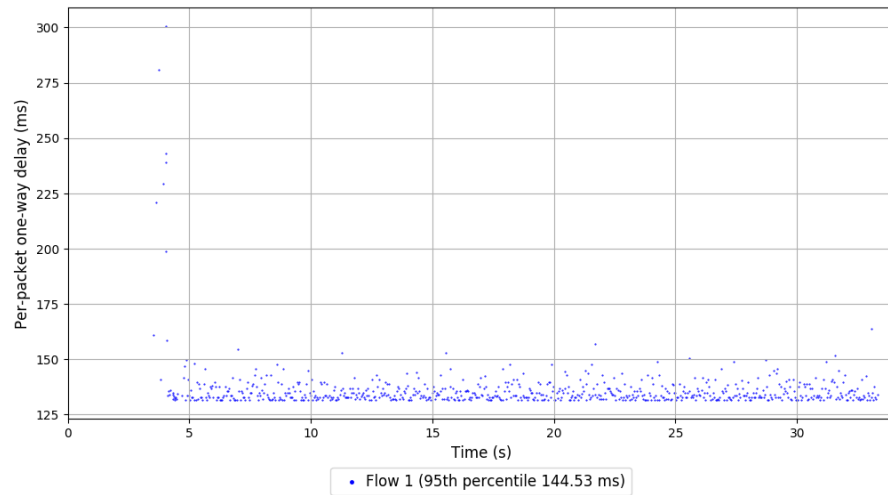
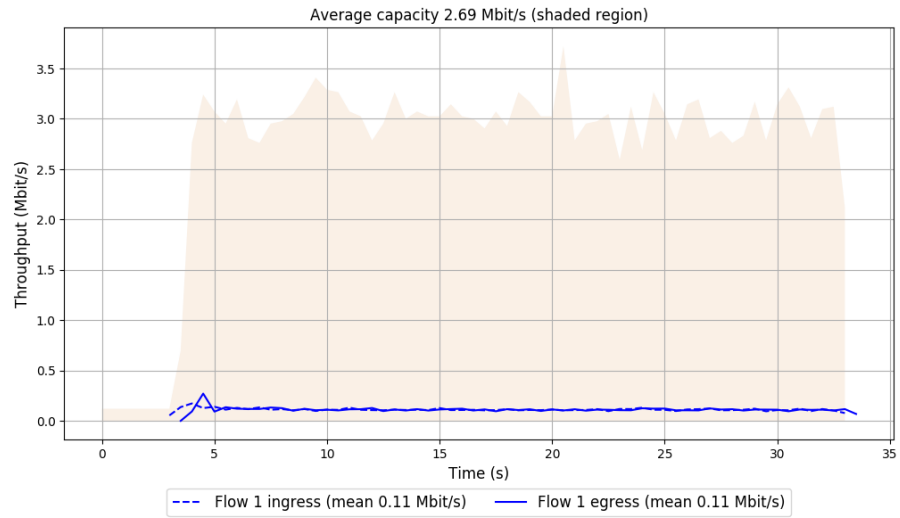
-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 144.526 ms

Loss rate: 0.50%

## Run 6: Report of SCReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-07-24 13:11:35

End at: 2018-07-24 13:12:05

# Below is generated by plot.py at 2018-07-24 13:52:06

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.11 Mbit/s (4.1% utilization)

95th percentile per-packet one-way delay: 144.546 ms

Loss rate: 0.49%

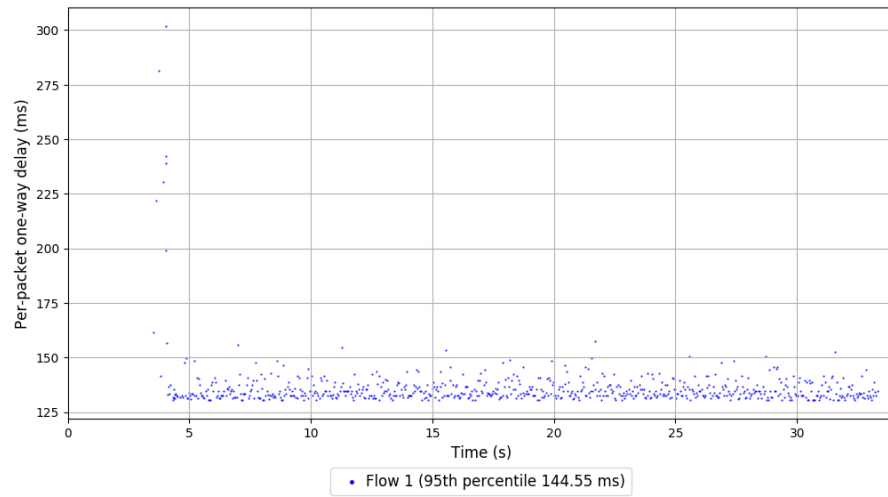
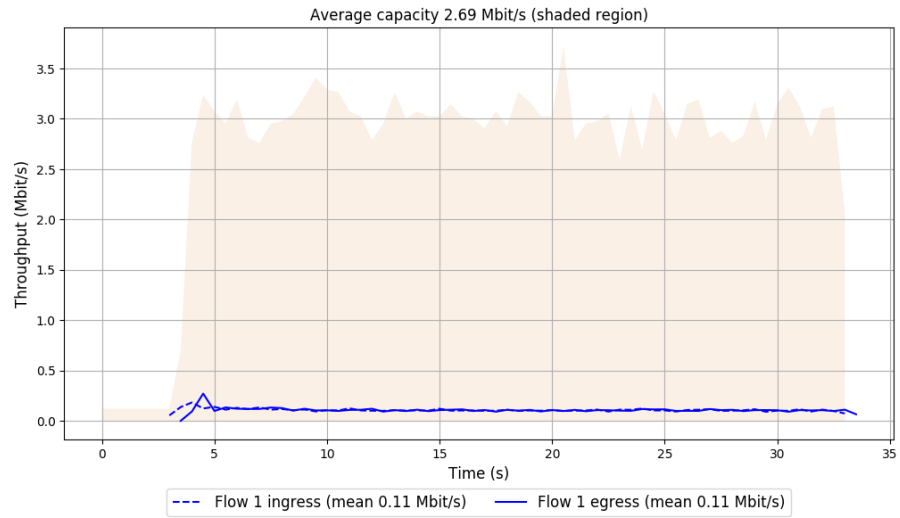
-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 144.546 ms

Loss rate: 0.49%

## Run 7: Report of SCReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-07-24 13:21:17

End at: 2018-07-24 13:21:47

# Below is generated by plot.py at 2018-07-24 13:52:07

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.11 Mbit/s (4.0% utilization)

95th percentile per-packet one-way delay: 144.531 ms

Loss rate: 0.49%

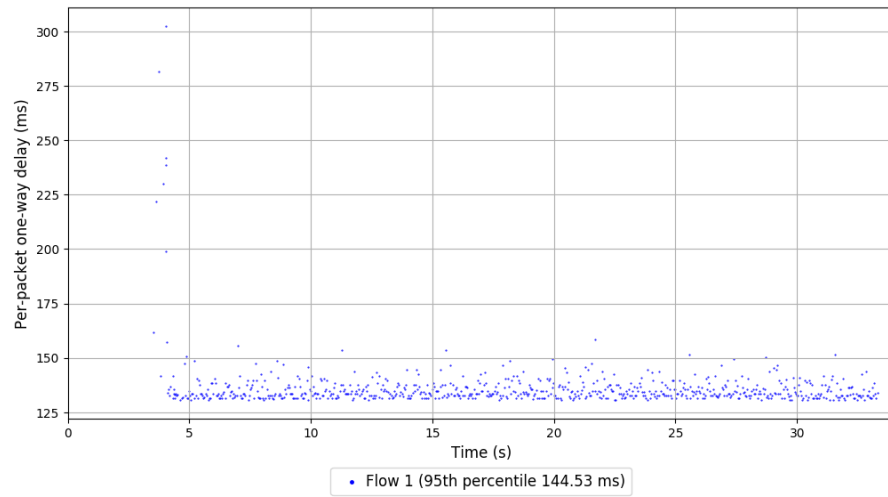
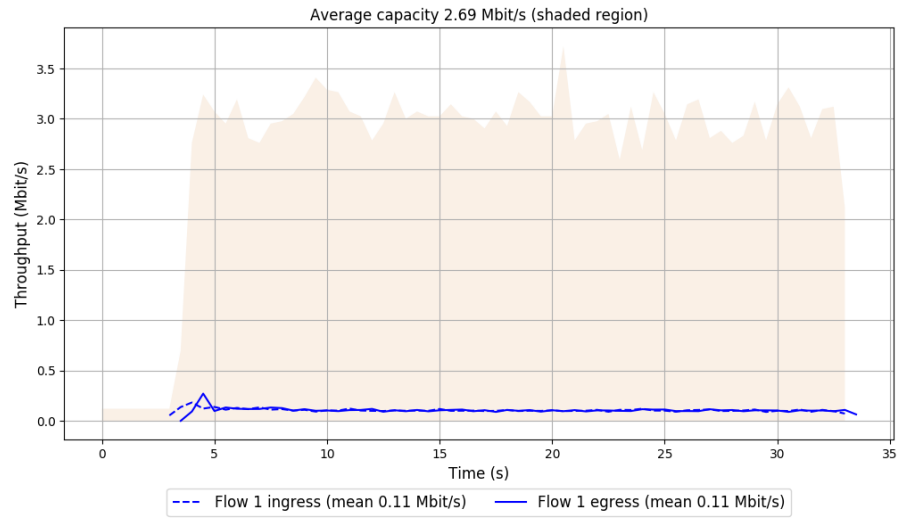
-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 144.531 ms

Loss rate: 0.49%

## Run 8: Report of SCReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-07-24 13:30:59

End at: 2018-07-24 13:31:29

# Below is generated by plot.py at 2018-07-24 13:52:07

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.11 Mbit/s (4.1% utilization)

95th percentile per-packet one-way delay: 144.588 ms

Loss rate: 0.49%

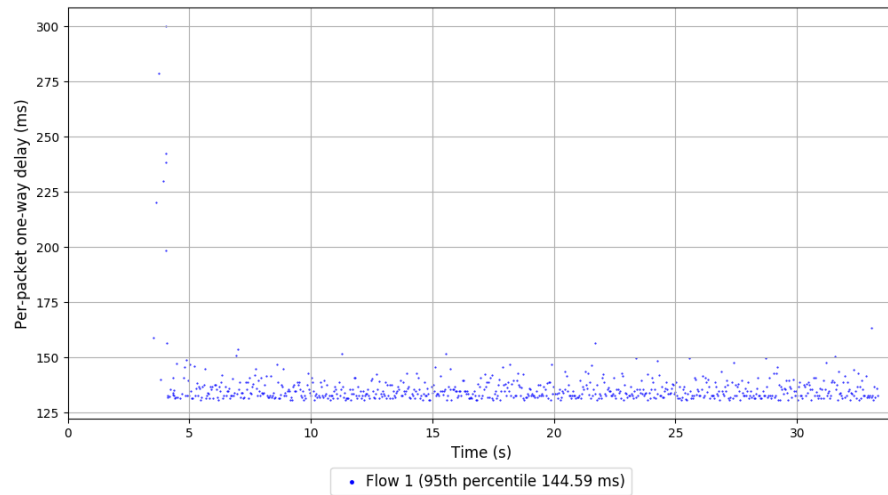
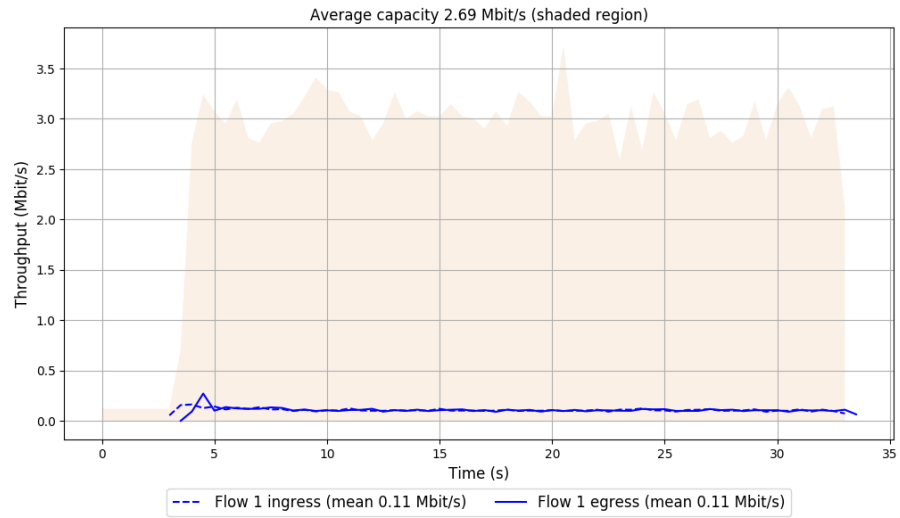
-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 144.588 ms

Loss rate: 0.49%

## Run 9: Report of SCReAM — Data Link



Run 10: Statistics of SCReAM

Start at: 2018-07-24 13:40:42

End at: 2018-07-24 13:41:12

# Below is generated by plot.py at 2018-07-24 13:52:08

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.11 Mbit/s (4.0% utilization)

95th percentile per-packet one-way delay: 144.448 ms

Loss rate: 0.49%

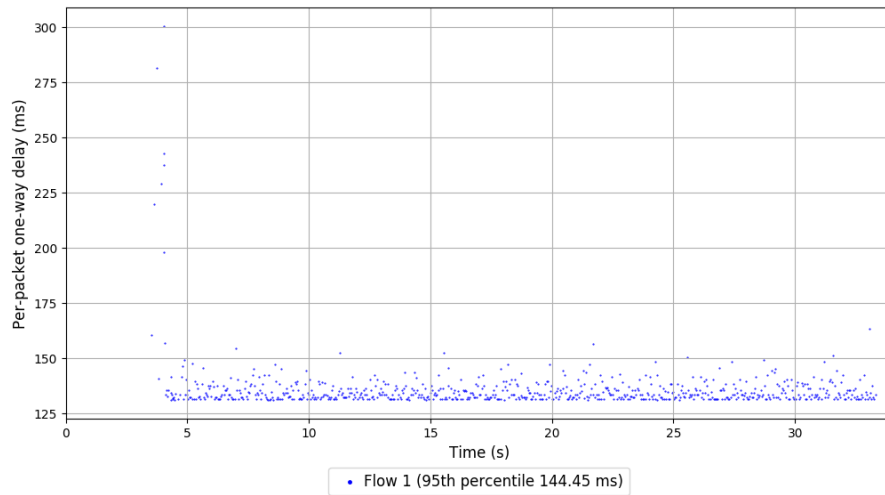
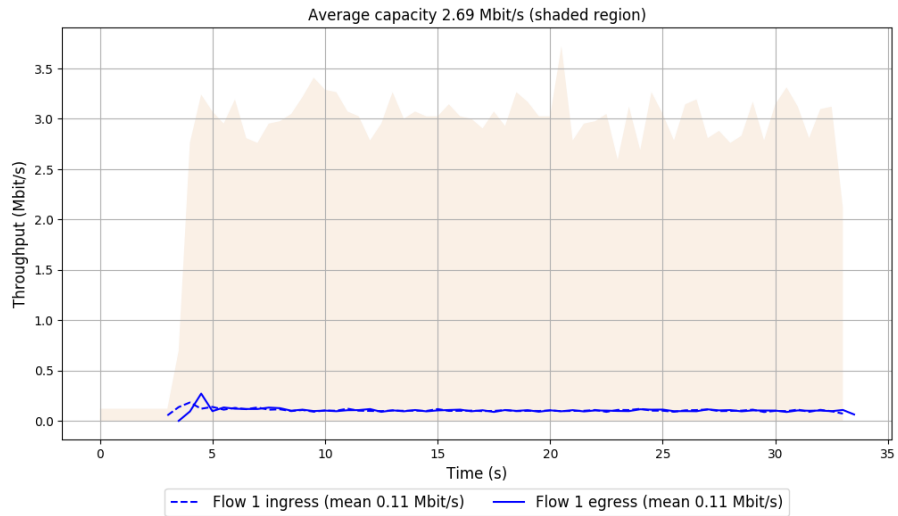
-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 144.448 ms

Loss rate: 0.49%

# Run 10: Report of SCReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2018-07-24 12:21:22

End at: 2018-07-24 12:21:52

# Below is generated by plot.py at 2018-07-24 13:52:10

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.15 Mbit/s (5.6% utilization)

95th percentile per-packet one-way delay: 198.394 ms

Loss rate: 0.75%

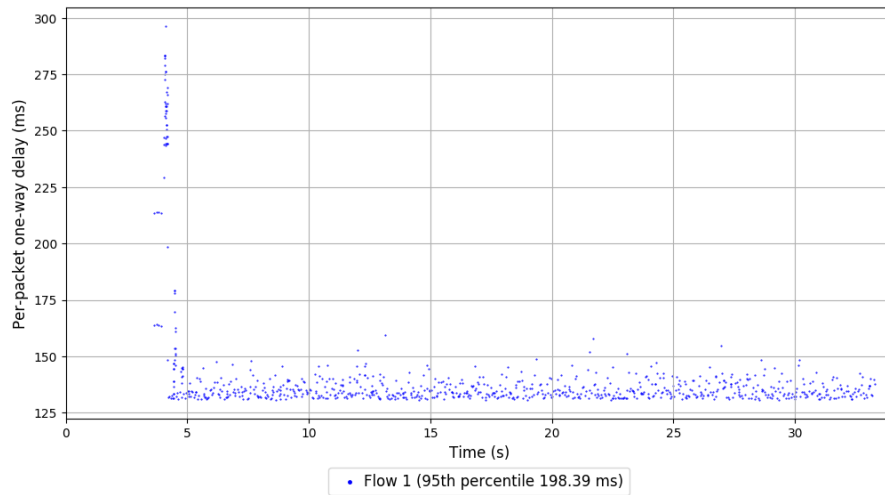
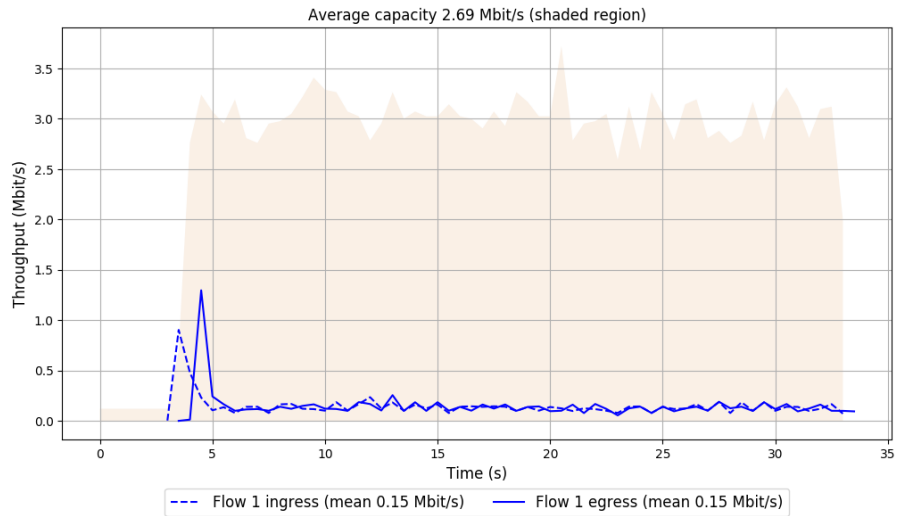
-- Flow 1:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 198.394 ms

Loss rate: 0.75%

# Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-07-24 12:31:04

End at: 2018-07-24 12:31:34

# Below is generated by plot.py at 2018-07-24 13:52:12

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.15 Mbit/s (5.6% utilization)

95th percentile per-packet one-way delay: 154.287 ms

Loss rate: 0.04%

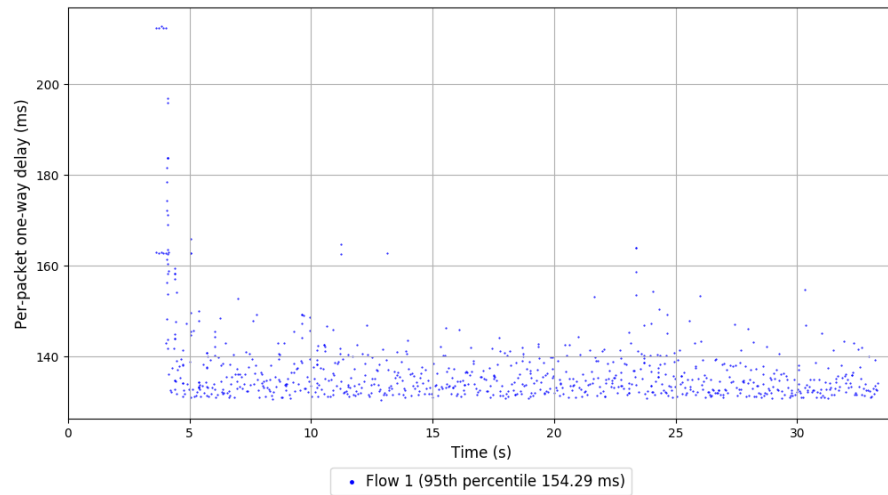
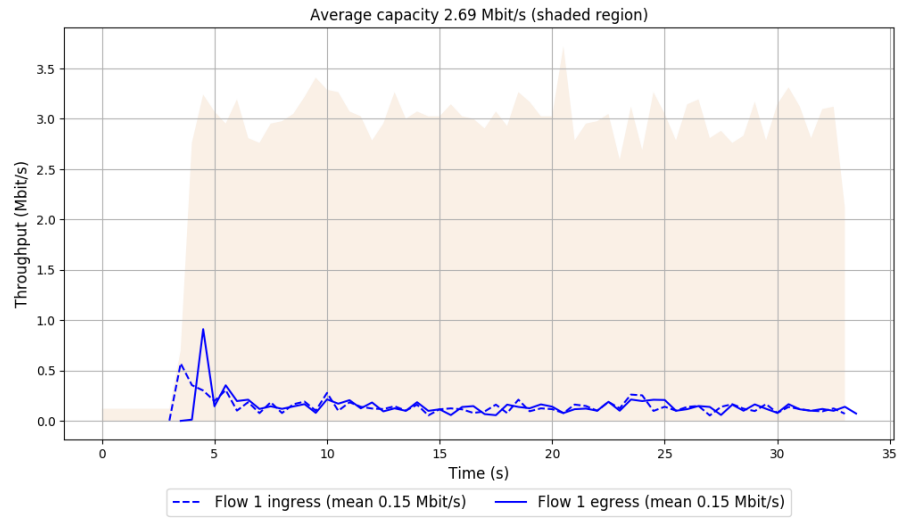
-- Flow 1:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 154.287 ms

Loss rate: 0.04%

## Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-07-24 12:40:46

End at: 2018-07-24 12:41:16

# Below is generated by plot.py at 2018-07-24 13:52:13

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.16 Mbit/s (5.8% utilization)

95th percentile per-packet one-way delay: 178.788 ms

Loss rate: 0.06%

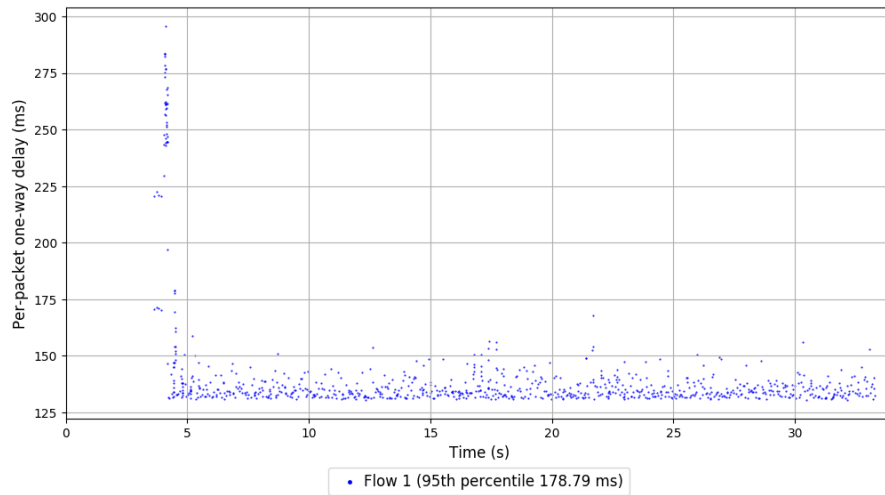
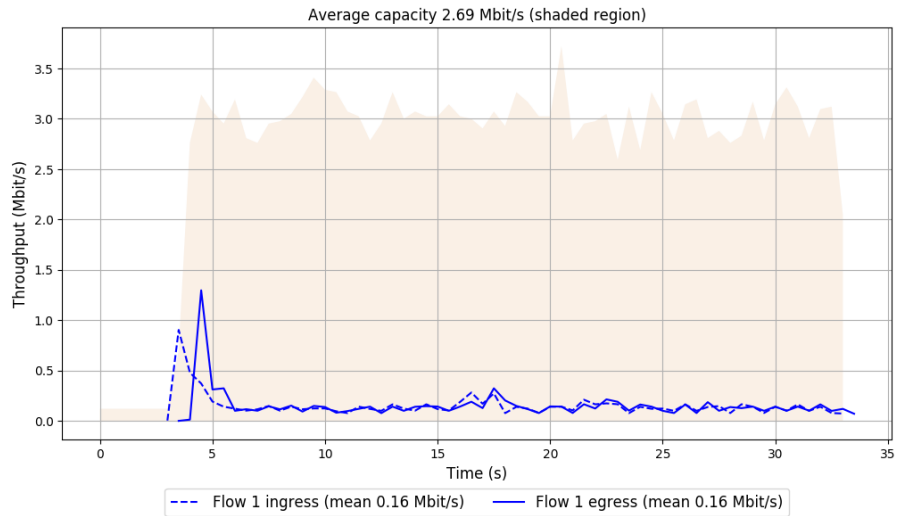
-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 178.788 ms

Loss rate: 0.06%

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



Run 4: Statistics of Sprout

Start at: 2018-07-24 12:50:28

End at: 2018-07-24 12:50:58

# Below is generated by plot.py at 2018-07-24 13:52:14

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 170.322 ms

Loss rate: 0.05%

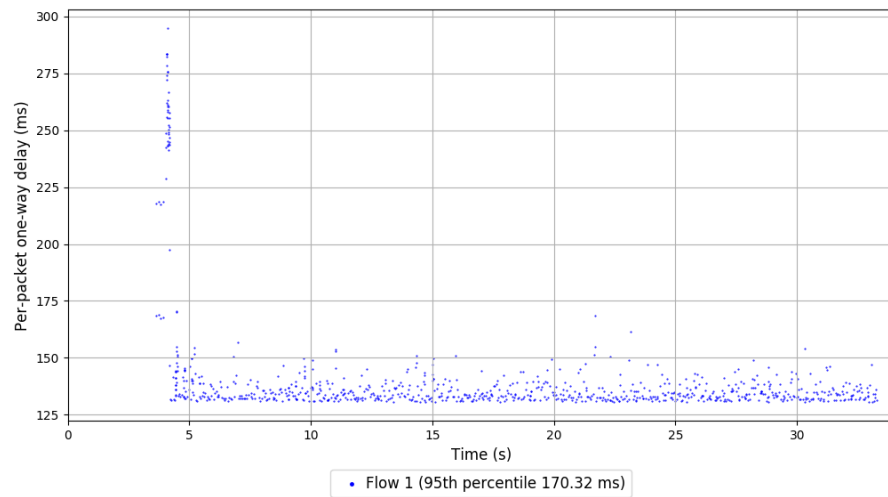
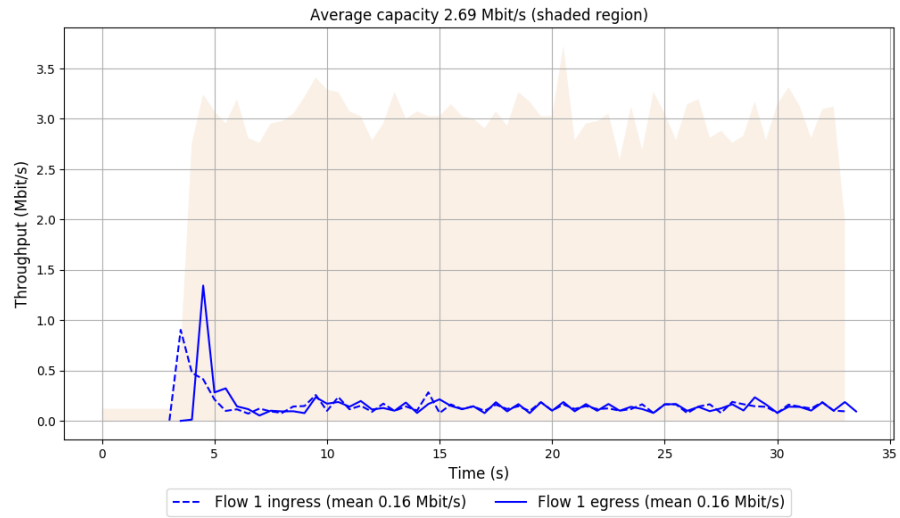
-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 170.322 ms

Loss rate: 0.05%

## Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-07-24 13:00:10

End at: 2018-07-24 13:00:40

# Below is generated by plot.py at 2018-07-24 13:52:14

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.17 Mbit/s (6.3% utilization)

95th percentile per-packet one-way delay: 170.452 ms

Loss rate: 0.05%

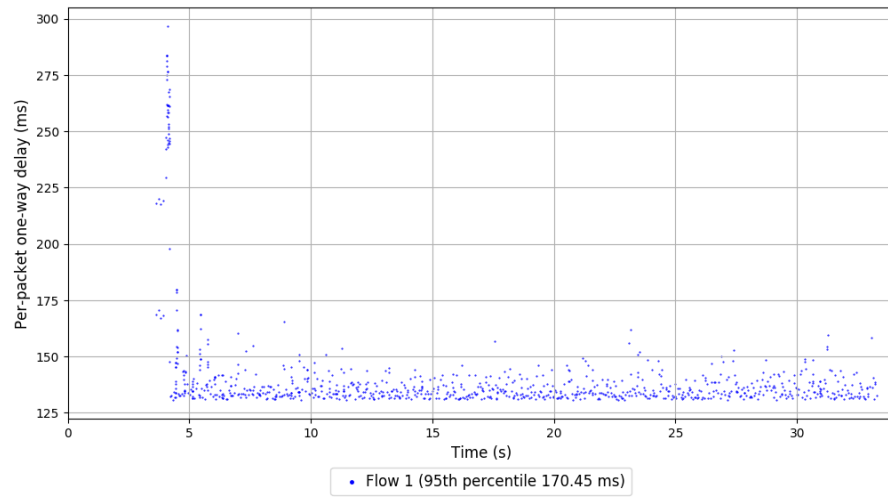
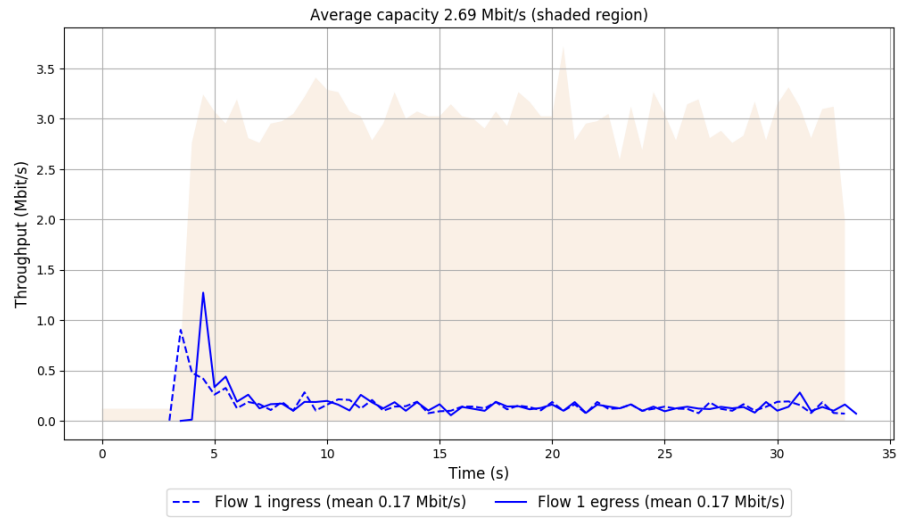
-- Flow 1:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 170.452 ms

Loss rate: 0.05%

## Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-07-24 13:09:52

End at: 2018-07-24 13:10:22

# Below is generated by plot.py at 2018-07-24 13:52:16

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.18 Mbit/s (6.5% utilization)

95th percentile per-packet one-way delay: 170.560 ms

Loss rate: 0.03%

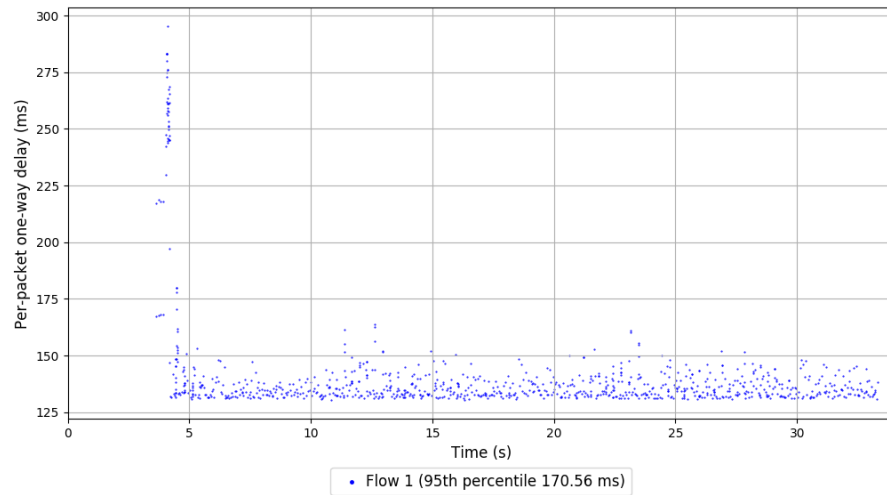
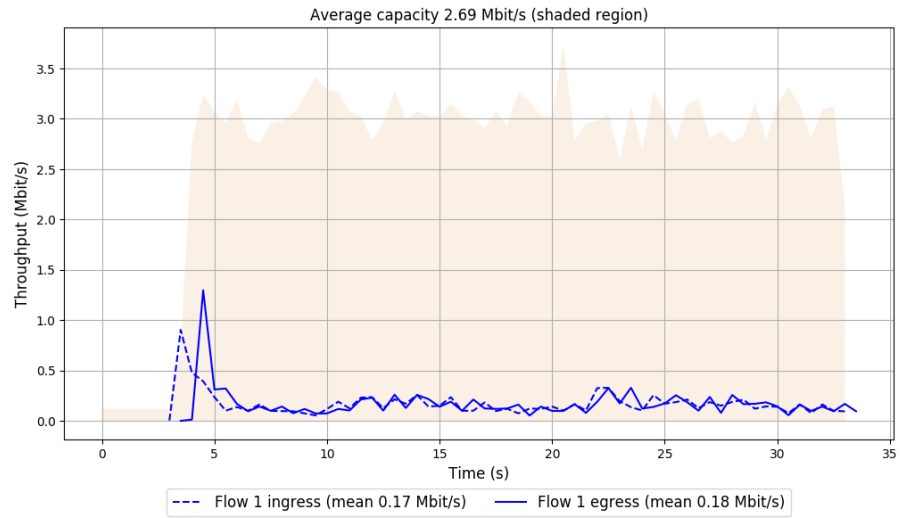
-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 170.560 ms

Loss rate: 0.03%

## Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-07-24 13:19:35

End at: 2018-07-24 13:20:05

# Below is generated by plot.py at 2018-07-24 13:52:17

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 175.015 ms

Loss rate: 0.20%

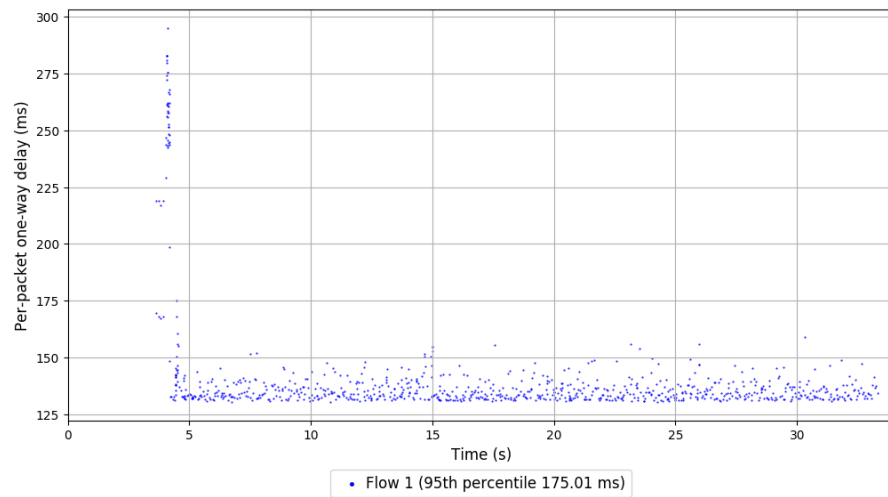
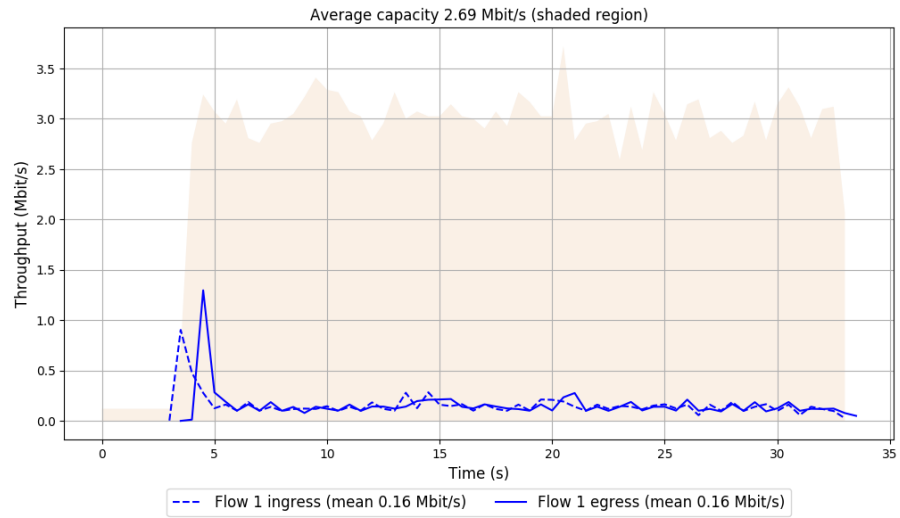
-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 175.015 ms

Loss rate: 0.20%

## Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-07-24 13:29:17

End at: 2018-07-24 13:29:47

# Below is generated by plot.py at 2018-07-24 13:52:17

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.17 Mbit/s (6.4% utilization)

95th percentile per-packet one-way delay: 156.743 ms

Loss rate: 0.05%

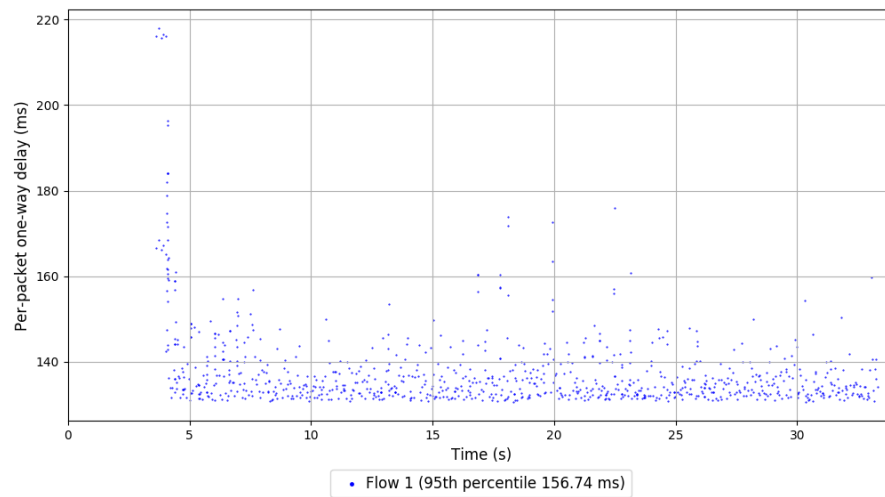
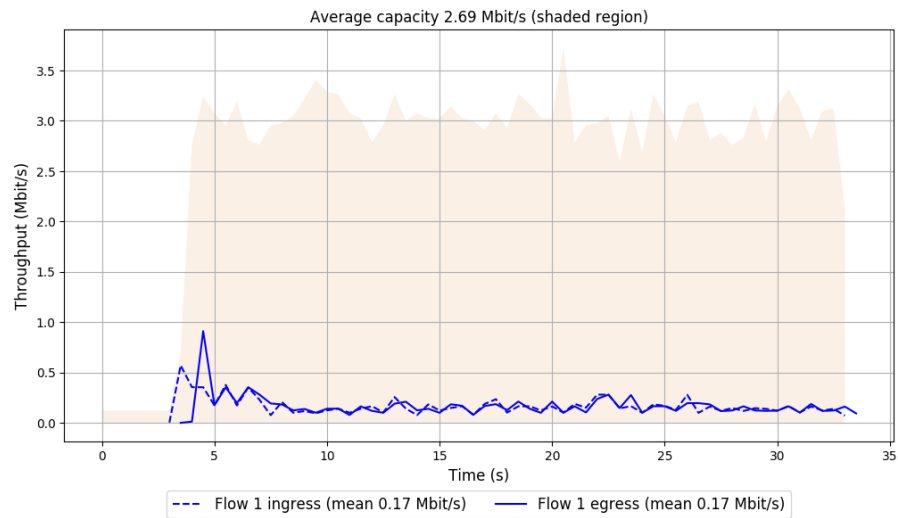
-- Flow 1:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 156.743 ms

Loss rate: 0.05%

## Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-07-24 13:38:59

End at: 2018-07-24 13:39:29

# Below is generated by plot.py at 2018-07-24 13:52:17

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.17 Mbit/s (6.2% utilization)

95th percentile per-packet one-way delay: 178.732 ms

Loss rate: 1.14%

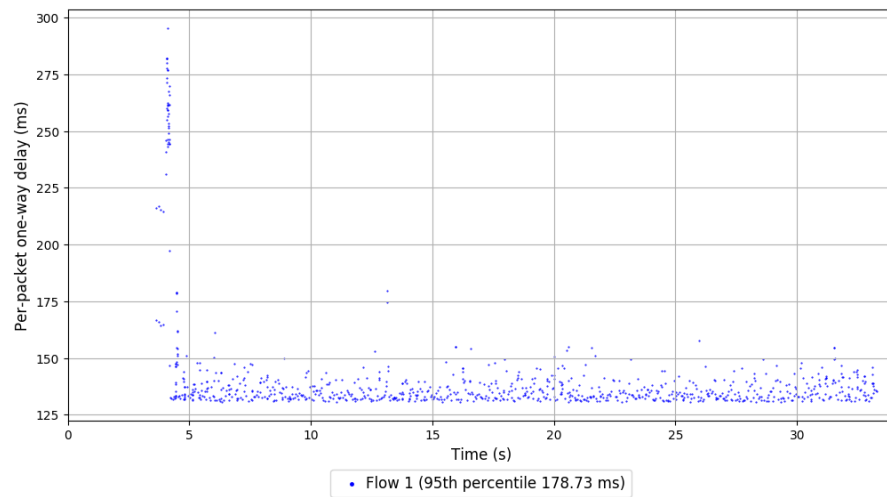
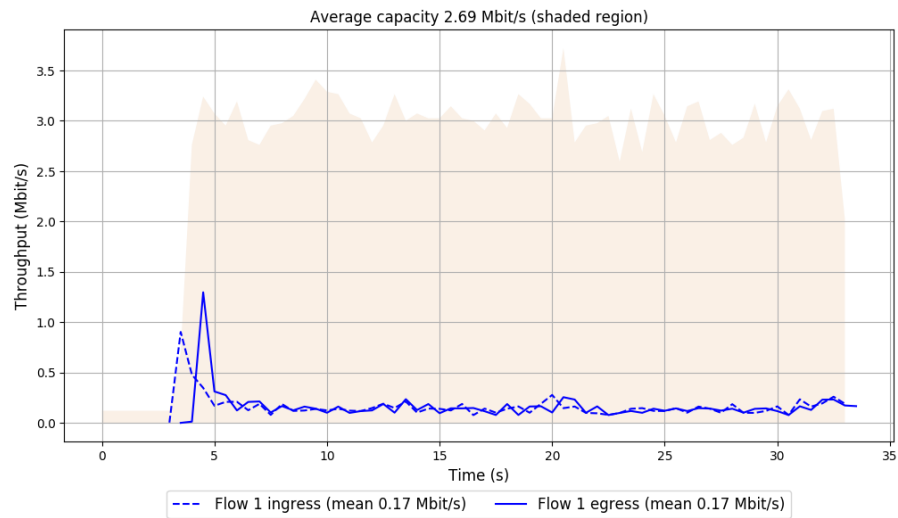
-- Flow 1:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 178.732 ms

Loss rate: 1.14%

## Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-07-24 13:48:42

End at: 2018-07-24 13:49:12

# Below is generated by plot.py at 2018-07-24 13:52:18

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.16 Mbit/s (6.0% utilization)

95th percentile per-packet one-way delay: 185.551 ms

Loss rate: 0.03%

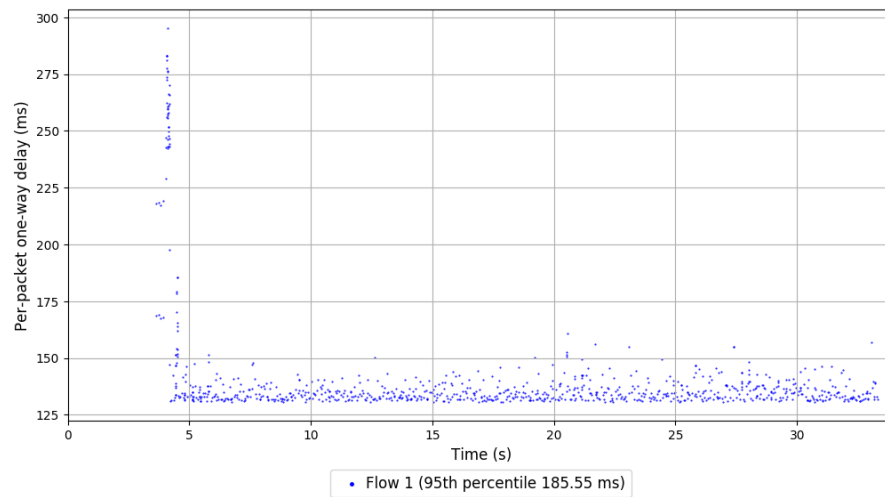
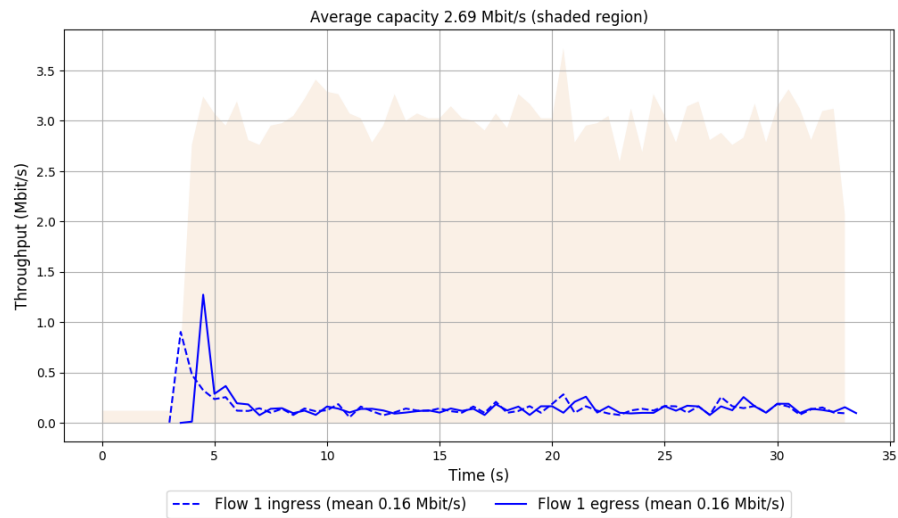
-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 185.551 ms

Loss rate: 0.03%

## Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-07-24 12:18:31

End at: 2018-07-24 12:19:01

# Below is generated by plot.py at 2018-07-24 13:52:27

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.40 Mbit/s (89.3% utilization)

95th percentile per-packet one-way delay: 205.142 ms

Loss rate: 0.61%

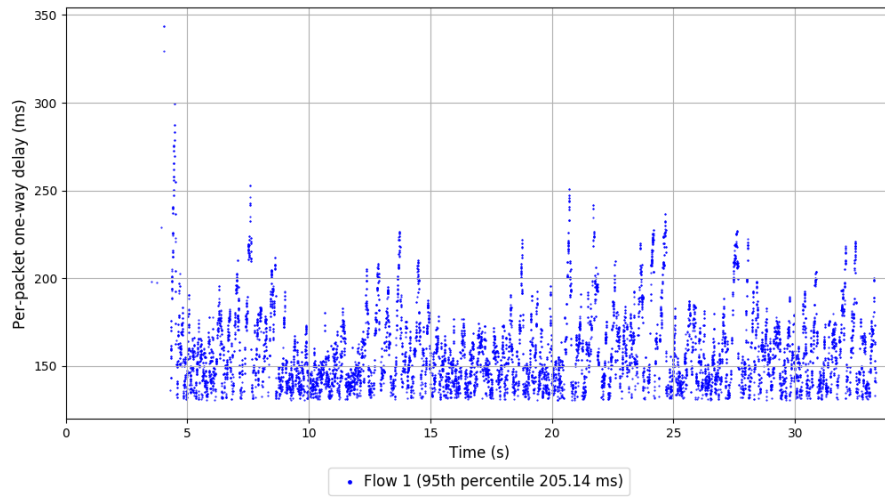
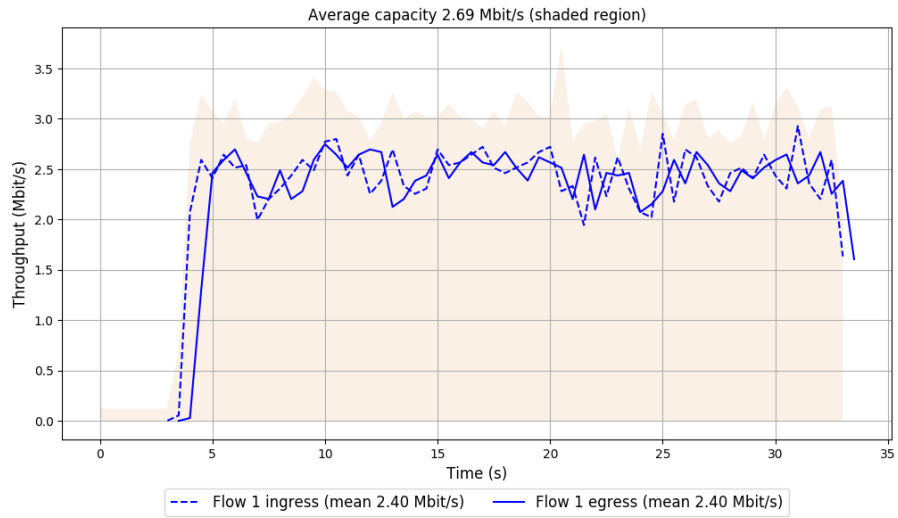
-- Flow 1:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 205.142 ms

Loss rate: 0.61%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-07-24 12:28:12

End at: 2018-07-24 12:28:42

# Below is generated by plot.py at 2018-07-24 13:52:28

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.39 Mbit/s (88.8% utilization)

95th percentile per-packet one-way delay: 207.744 ms

Loss rate: 0.58%

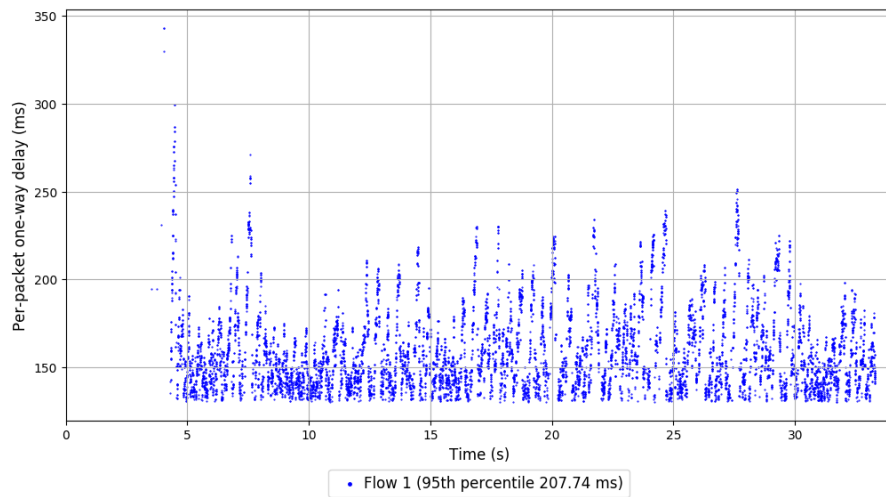
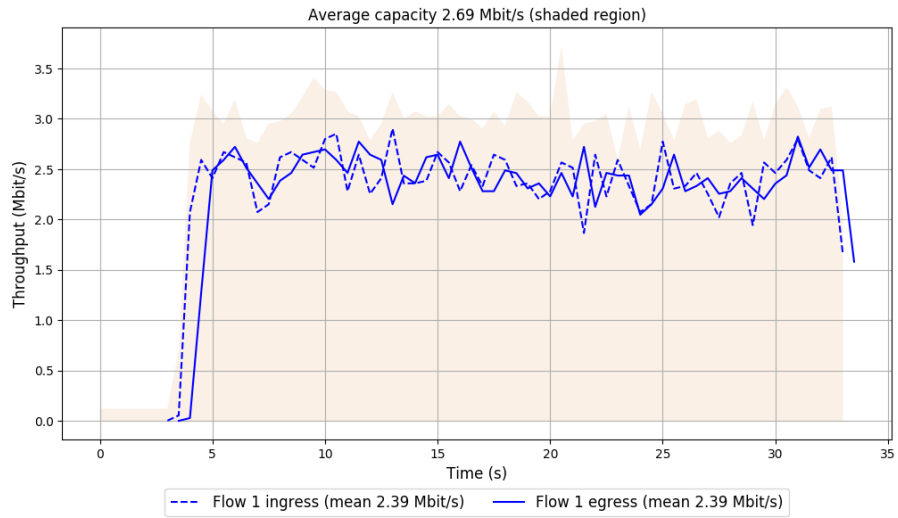
-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 207.744 ms

Loss rate: 0.58%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-07-24 12:37:54

End at: 2018-07-24 12:38:24

# Below is generated by plot.py at 2018-07-24 13:52:28

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.39 Mbit/s (88.9% utilization)

95th percentile per-packet one-way delay: 210.240 ms

Loss rate: 0.62%

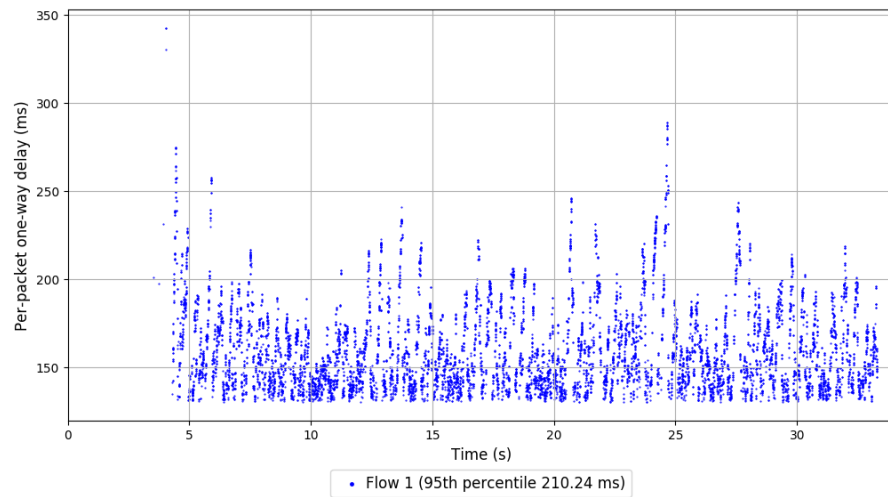
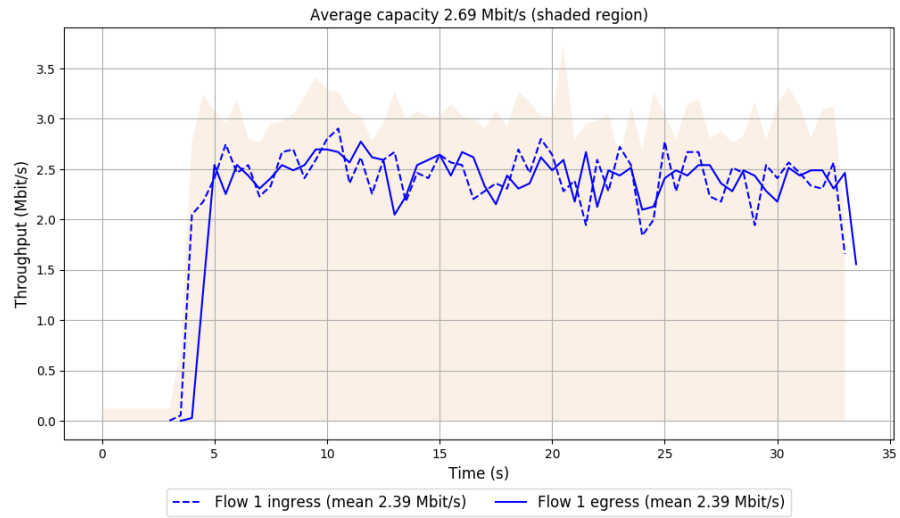
-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 210.240 ms

Loss rate: 0.62%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-07-24 12:47:36

End at: 2018-07-24 12:48:07

# Below is generated by plot.py at 2018-07-24 13:52:28

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.38 Mbit/s (88.5% utilization)

95th percentile per-packet one-way delay: 207.071 ms

Loss rate: 0.64%

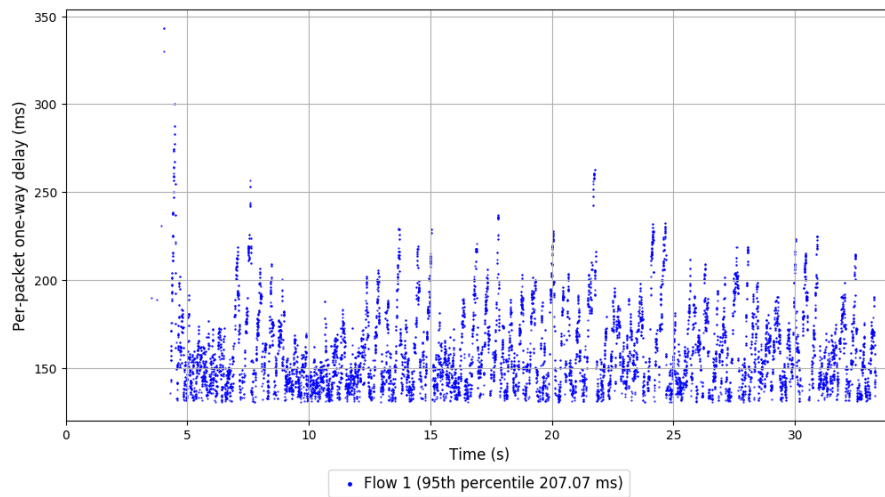
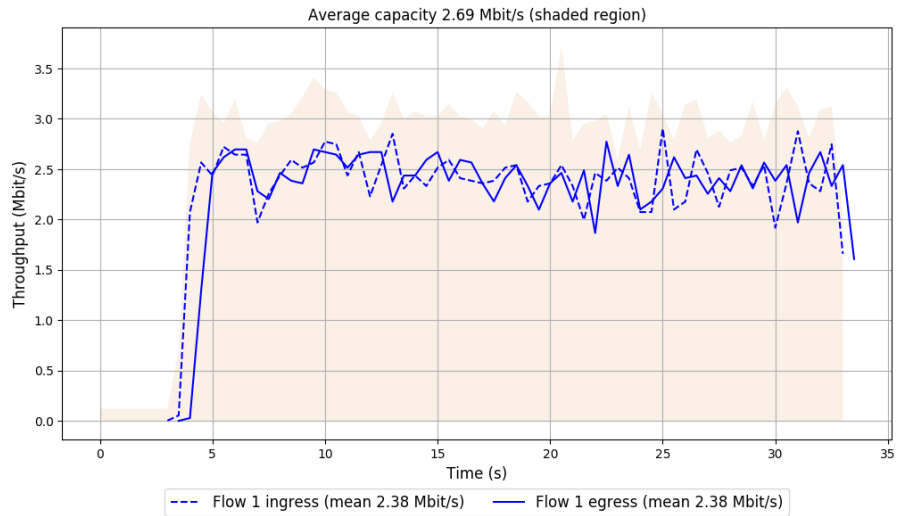
-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 207.071 ms

Loss rate: 0.64%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-07-24 12:57:19

End at: 2018-07-24 12:57:49

# Below is generated by plot.py at 2018-07-24 13:52:29

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 204.429 ms

Loss rate: 0.47%

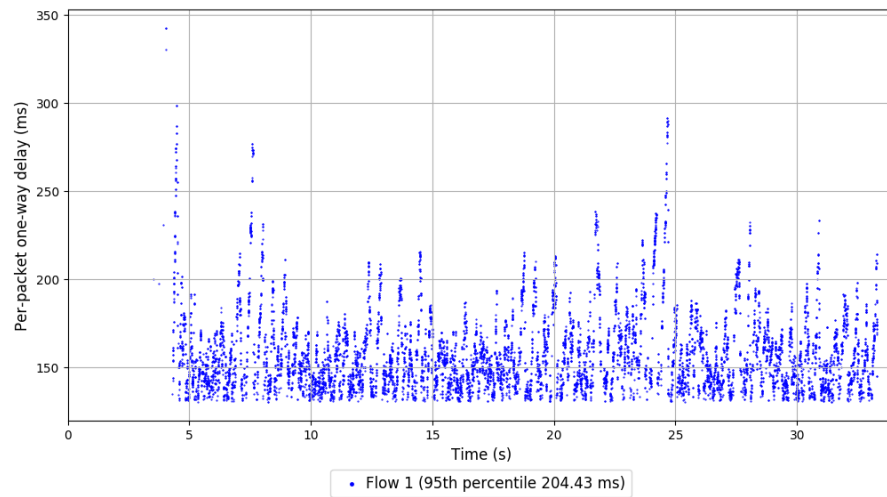
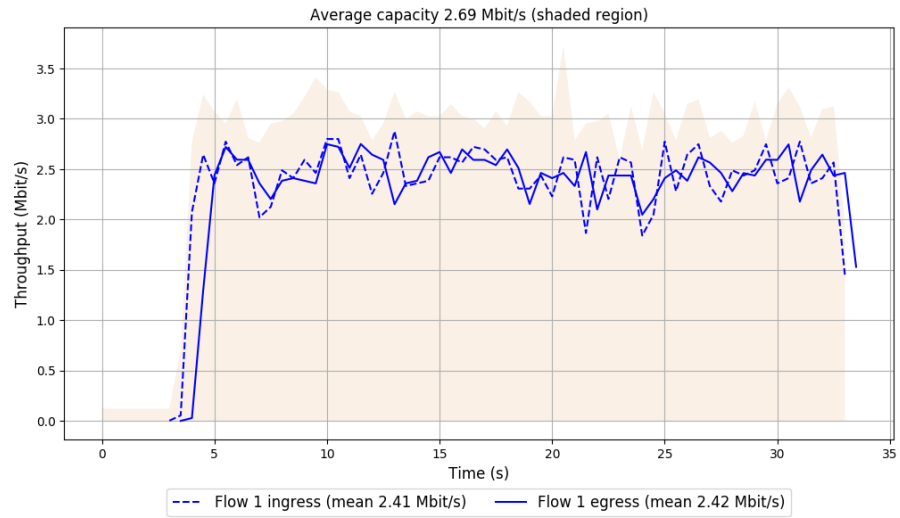
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 204.429 ms

Loss rate: 0.47%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-07-24 13:07:01

End at: 2018-07-24 13:07:31

# Below is generated by plot.py at 2018-07-24 13:52:30

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.38 Mbit/s (88.5% utilization)

95th percentile per-packet one-way delay: 209.773 ms

Loss rate: 0.65%

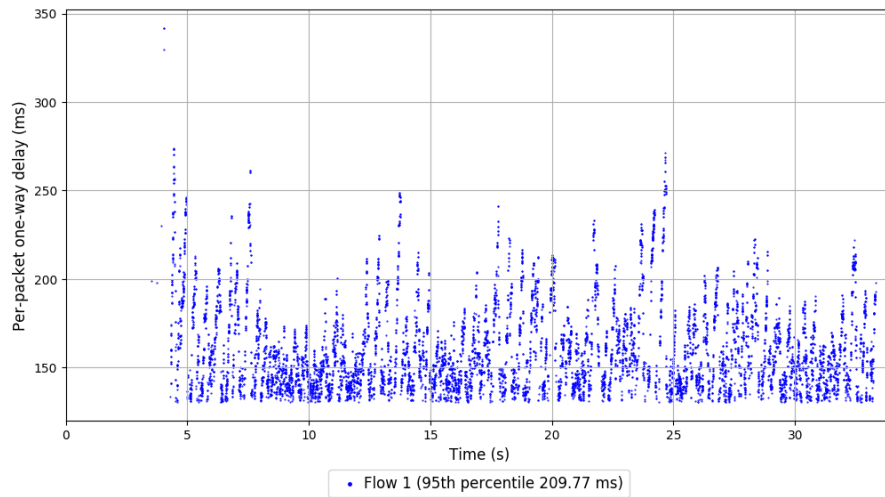
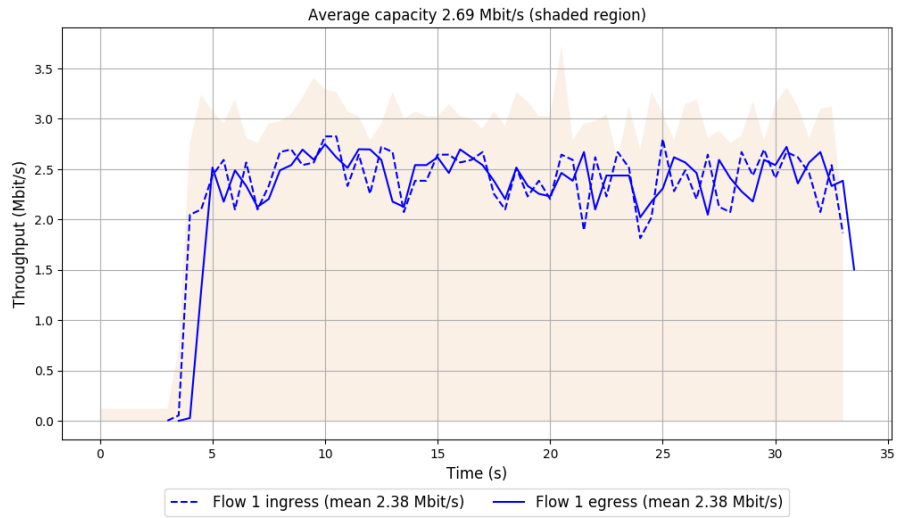
-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 209.773 ms

Loss rate: 0.65%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-07-24 13:16:43

End at: 2018-07-24 13:17:13

# Below is generated by plot.py at 2018-07-24 13:52:31

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 206.269 ms

Loss rate: 0.65%

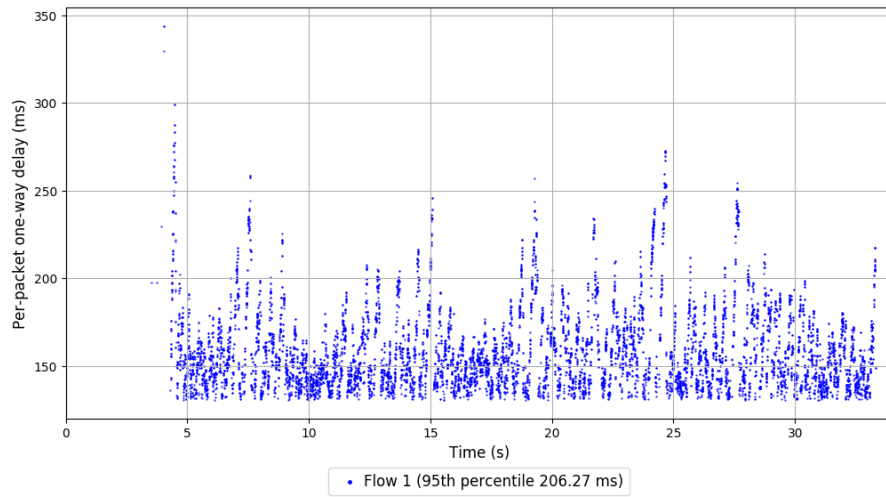
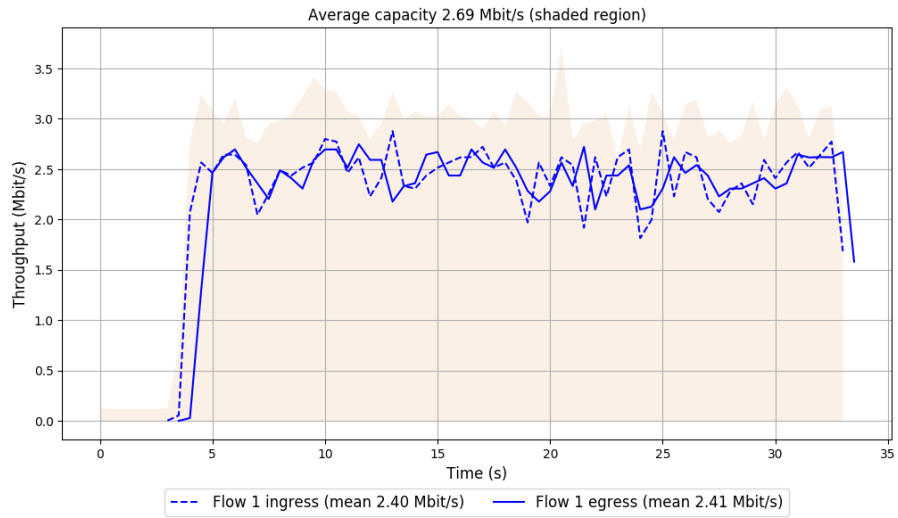
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 206.269 ms

Loss rate: 0.65%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-07-24 13:26:25

End at: 2018-07-24 13:26:55

# Below is generated by plot.py at 2018-07-24 13:52:31

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.40 Mbit/s (89.3% utilization)

95th percentile per-packet one-way delay: 208.302 ms

Loss rate: 0.65%

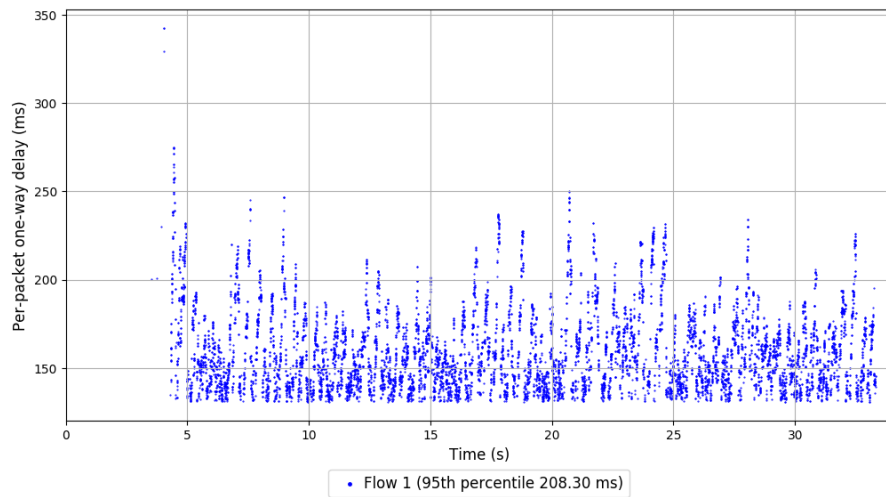
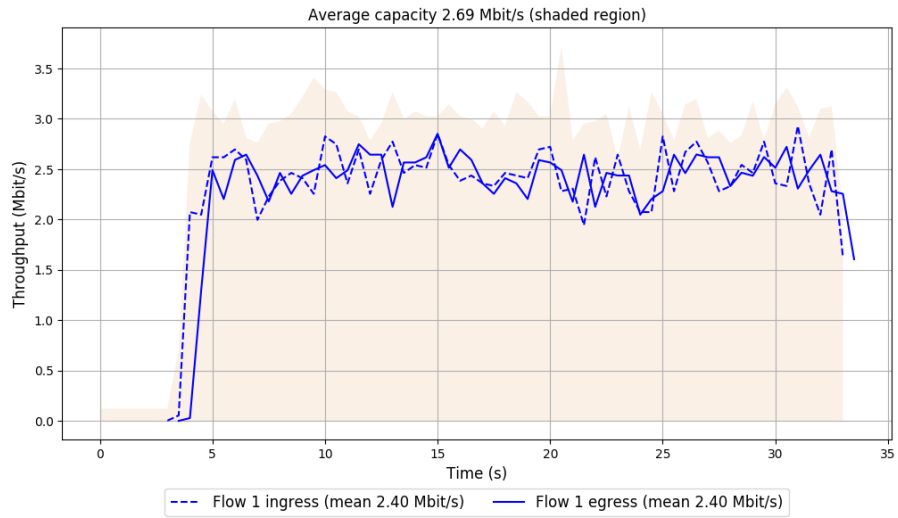
-- Flow 1:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 208.302 ms

Loss rate: 0.65%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-07-24 13:36:08

End at: 2018-07-24 13:36:38

# Below is generated by plot.py at 2018-07-24 13:52:40

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.38 Mbit/s (88.3% utilization)

95th percentile per-packet one-way delay: 214.320 ms

Loss rate: 0.69%

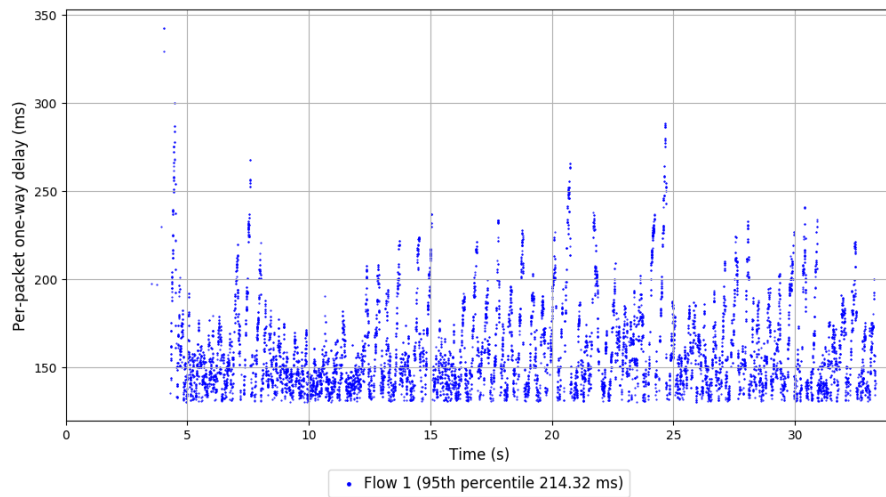
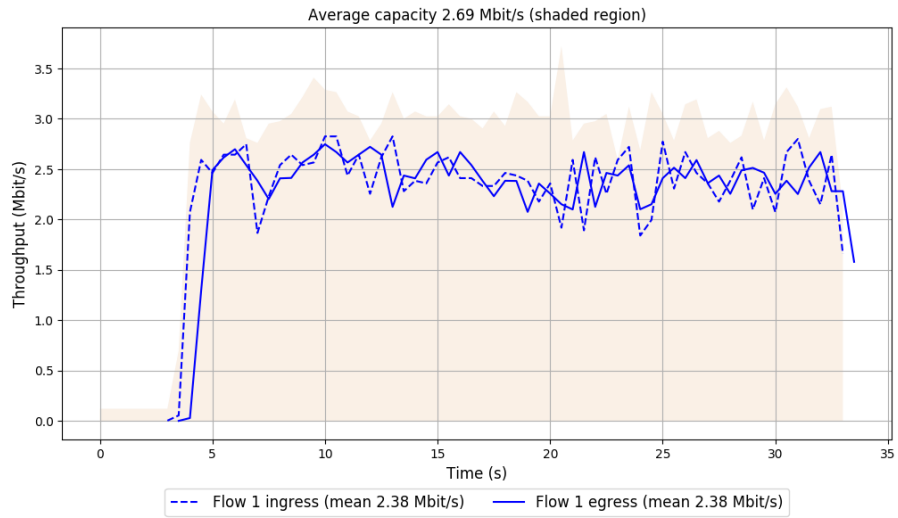
-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 214.320 ms

Loss rate: 0.69%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-07-24 13:45:50

End at: 2018-07-24 13:46:20

# Below is generated by plot.py at 2018-07-24 13:52:42

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.39 Mbit/s (88.8% utilization)

95th percentile per-packet one-way delay: 208.035 ms

Loss rate: 0.63%

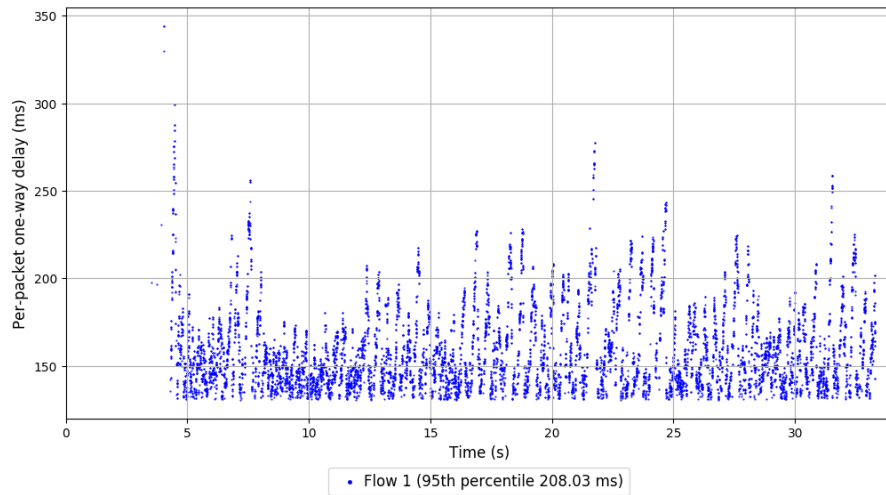
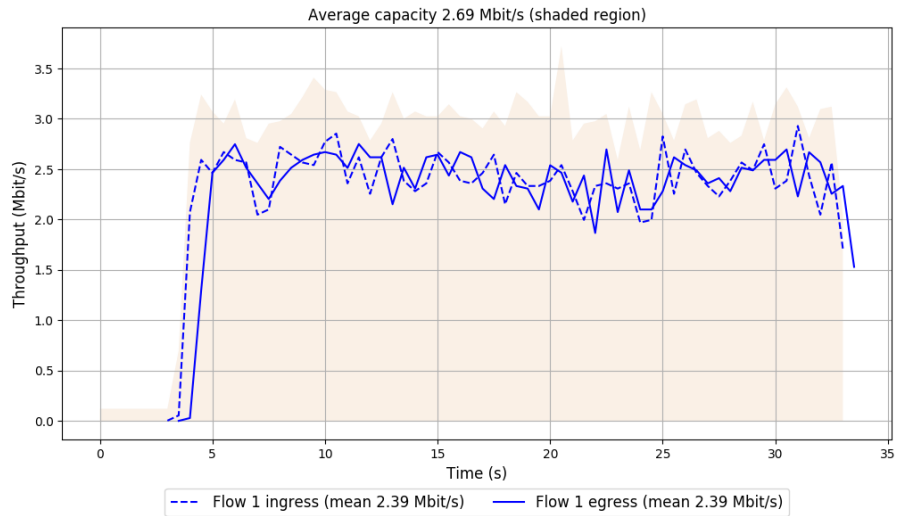
-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 208.035 ms

Loss rate: 0.63%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-07-24 12:15:40

End at: 2018-07-24 12:16:10

# Below is generated by plot.py at 2018-07-24 13:52:42

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1104.748 ms

Loss rate: 3.32%

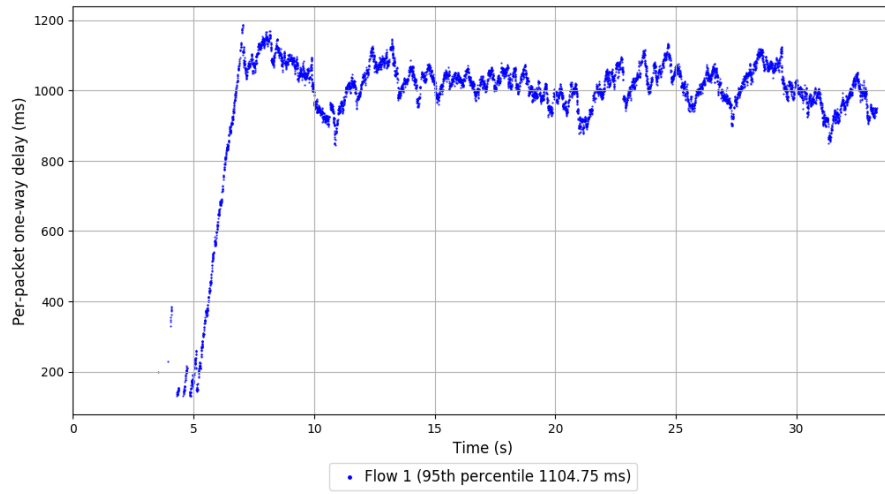
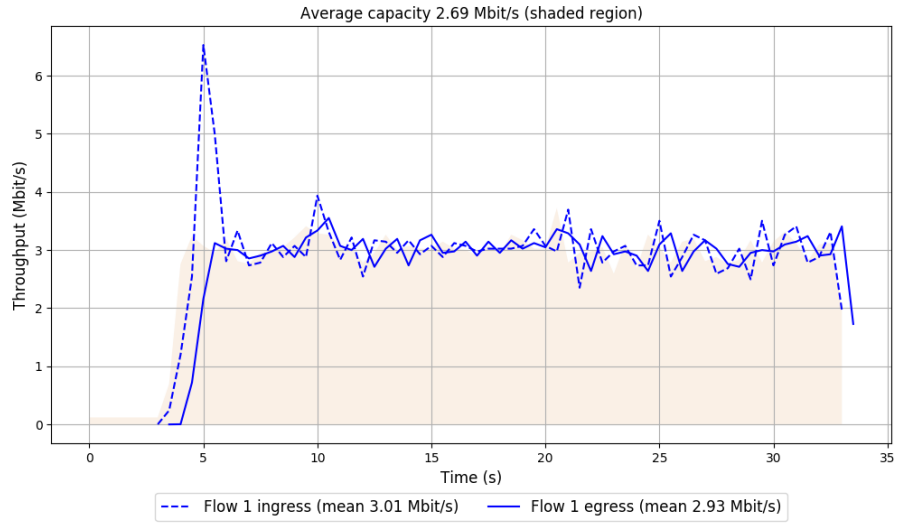
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1104.748 ms

Loss rate: 3.32%

# Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-07-24 12:25:21

End at: 2018-07-24 12:25:51

# Below is generated by plot.py at 2018-07-24 13:52:42

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 490.611 ms

Loss rate: 0.99%

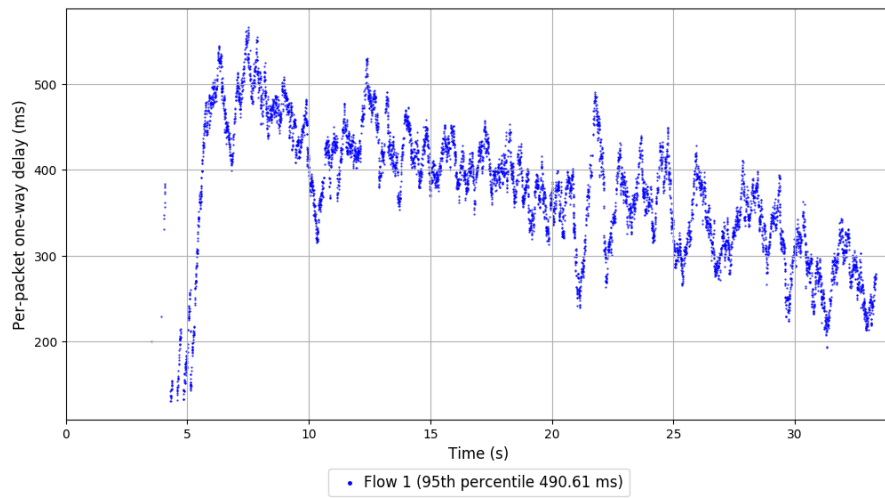
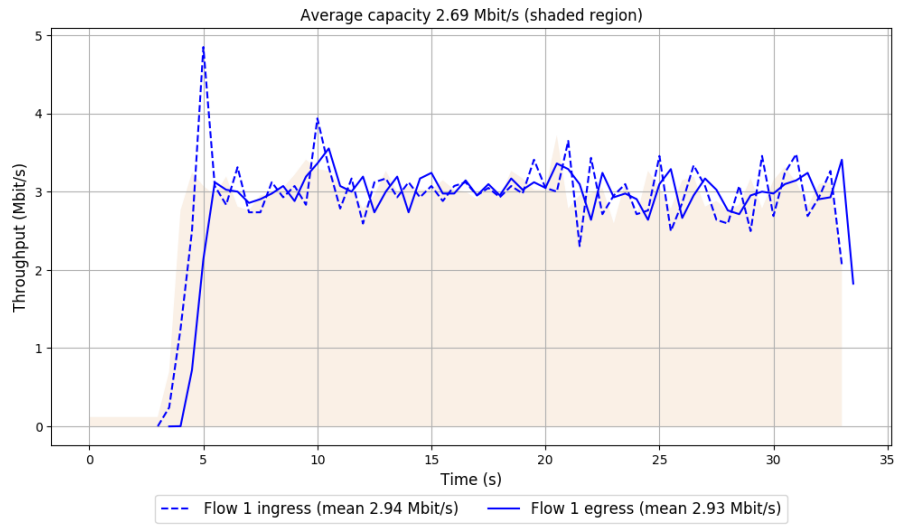
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 490.611 ms

Loss rate: 0.99%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-07-24 12:35:03

End at: 2018-07-24 12:35:33

# Below is generated by plot.py at 2018-07-24 13:52:42

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1093.544 ms

Loss rate: 3.27%

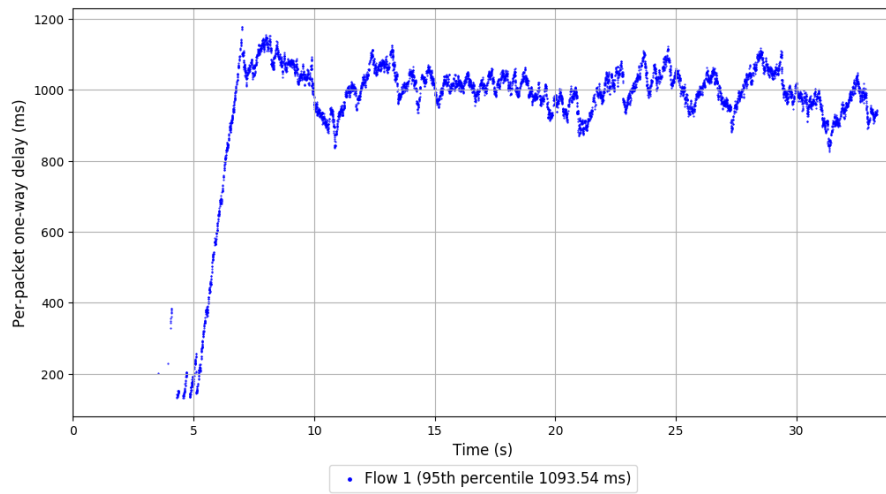
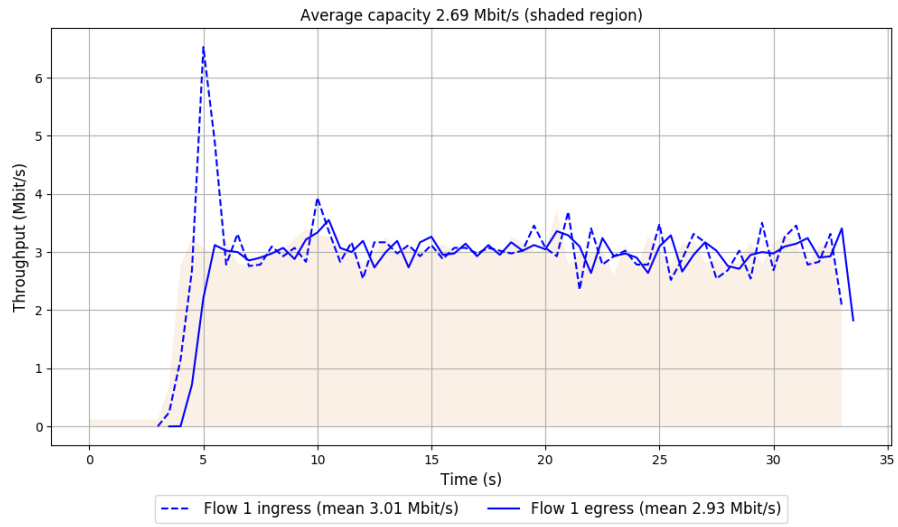
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1093.544 ms

Loss rate: 3.27%

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



Run 4: Statistics of TCP Vegas

Start at: 2018-07-24 12:44:45

End at: 2018-07-24 12:45:15

# Below is generated by plot.py at 2018-07-24 13:52:42

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 494.402 ms

Loss rate: 1.01%

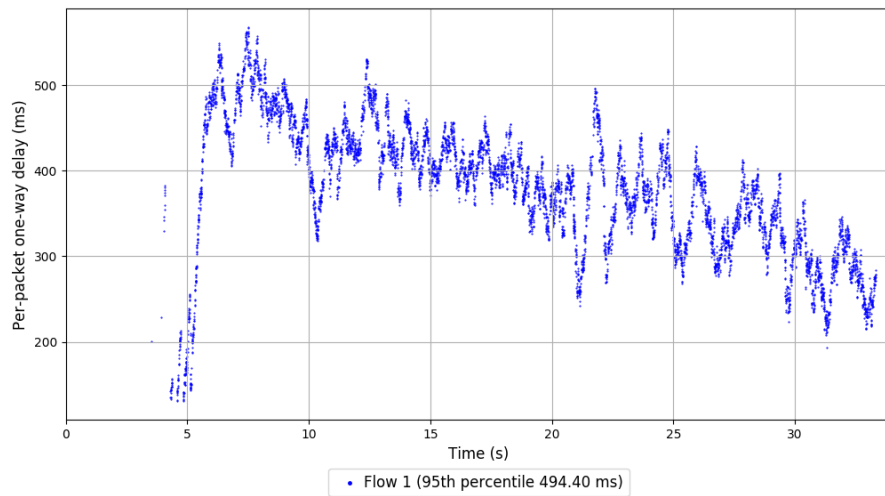
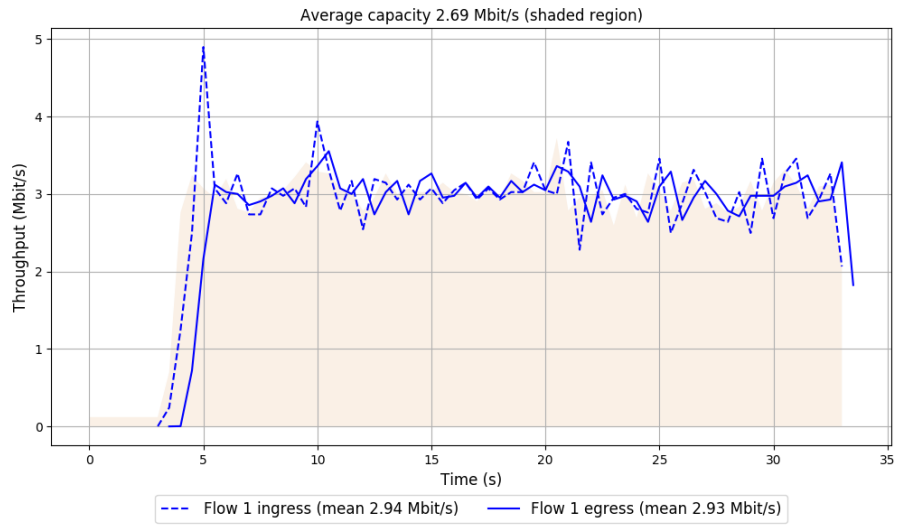
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 494.402 ms

Loss rate: 1.01%

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



Run 5: Statistics of TCP Vegas

Start at: 2018-07-24 12:54:27

End at: 2018-07-24 12:54:57

# Below is generated by plot.py at 2018-07-24 13:52:42

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 483.176 ms

Loss rate: 0.92%

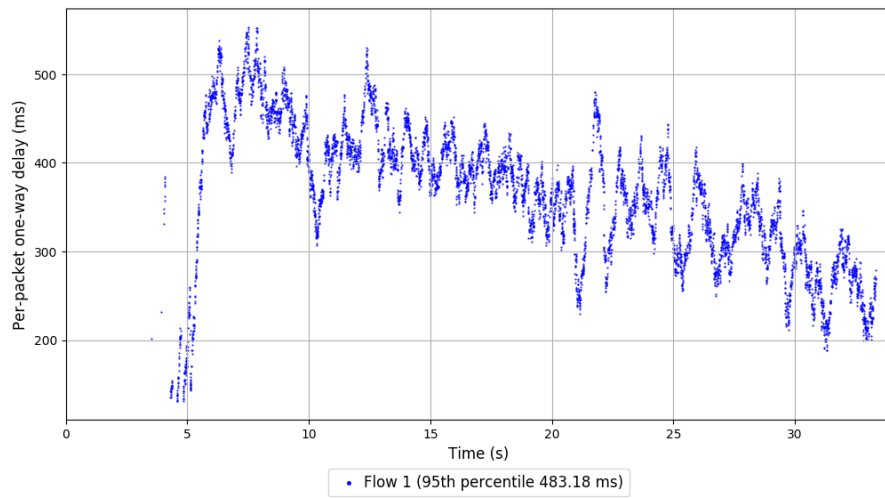
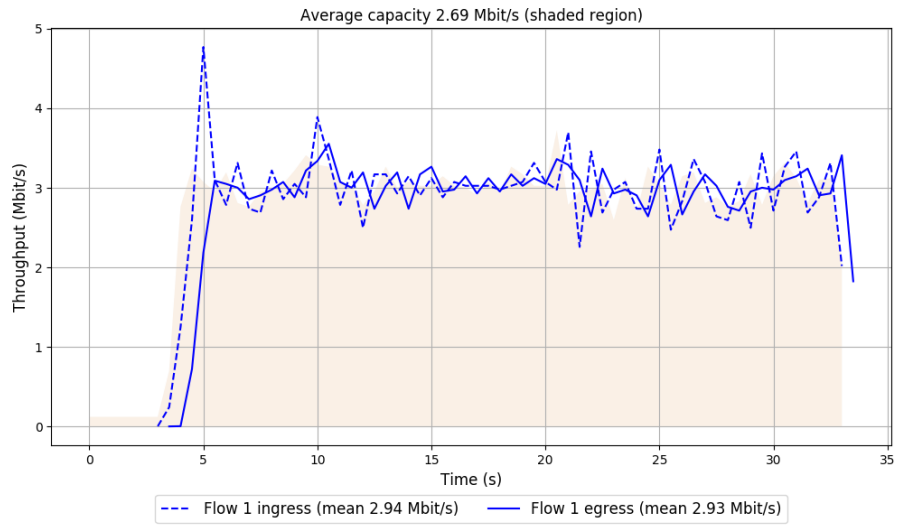
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 483.176 ms

Loss rate: 0.92%

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



Run 6: Statistics of TCP Vegas

Start at: 2018-07-24 13:04:10

End at: 2018-07-24 13:04:40

# Below is generated by plot.py at 2018-07-24 13:52:42

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 478.402 ms

Loss rate: 0.92%

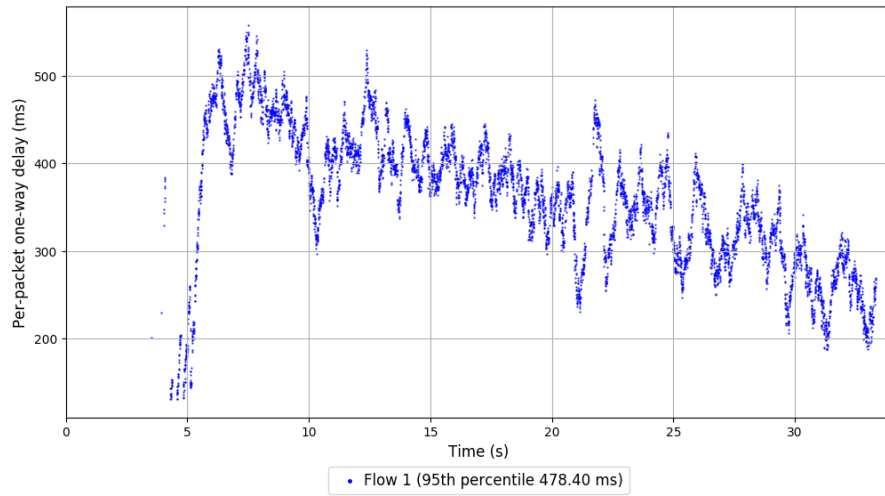
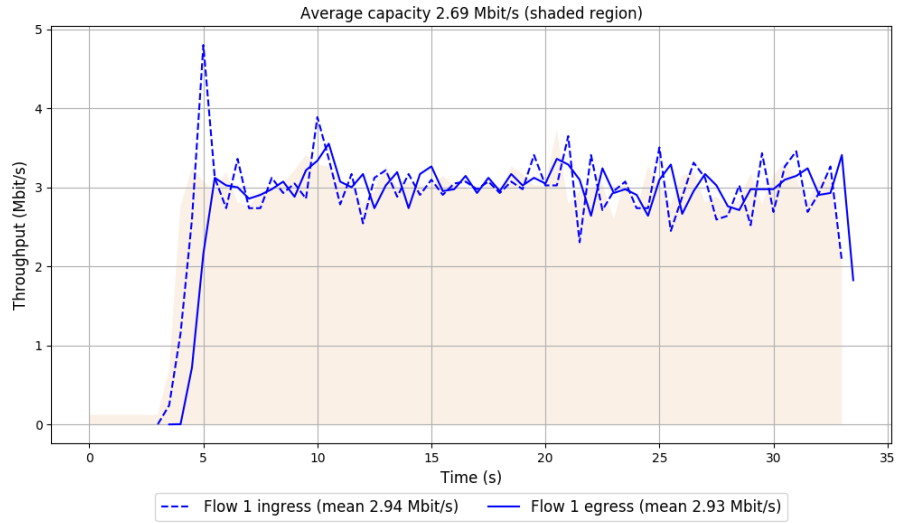
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 478.402 ms

Loss rate: 0.92%

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



Run 7: Statistics of TCP Vegas

Start at: 2018-07-24 13:13:52

End at: 2018-07-24 13:14:22

# Below is generated by plot.py at 2018-07-24 13:52:48

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 487.811 ms

Loss rate: 0.97%

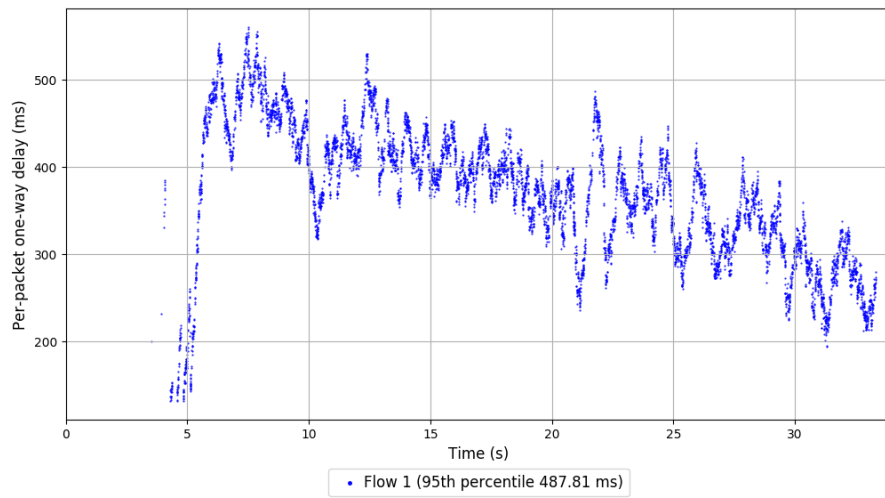
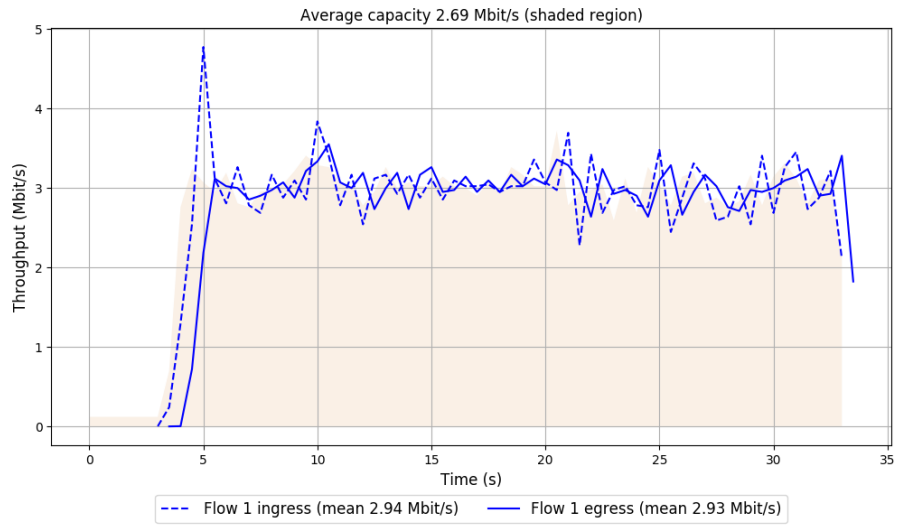
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 487.811 ms

Loss rate: 0.97%

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



Run 8: Statistics of TCP Vegas

Start at: 2018-07-24 13:23:34

End at: 2018-07-24 13:24:04

# Below is generated by plot.py at 2018-07-24 13:52:49

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 495.701 ms

Loss rate: 0.98%

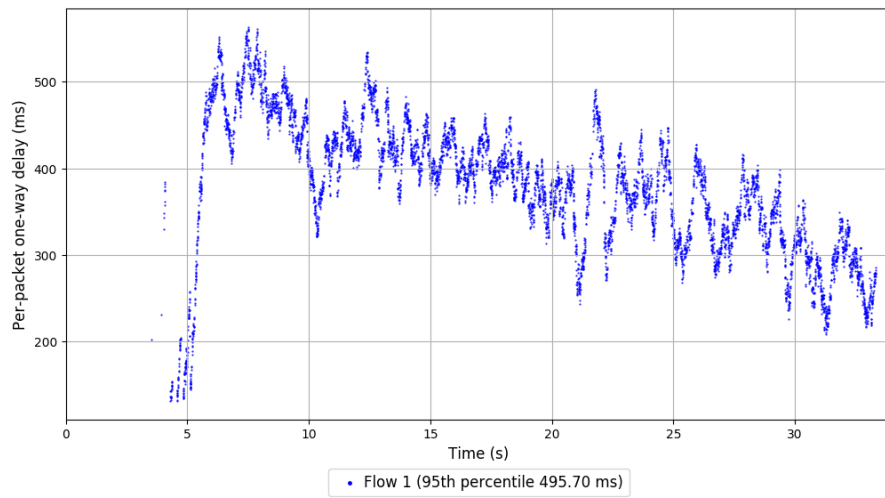
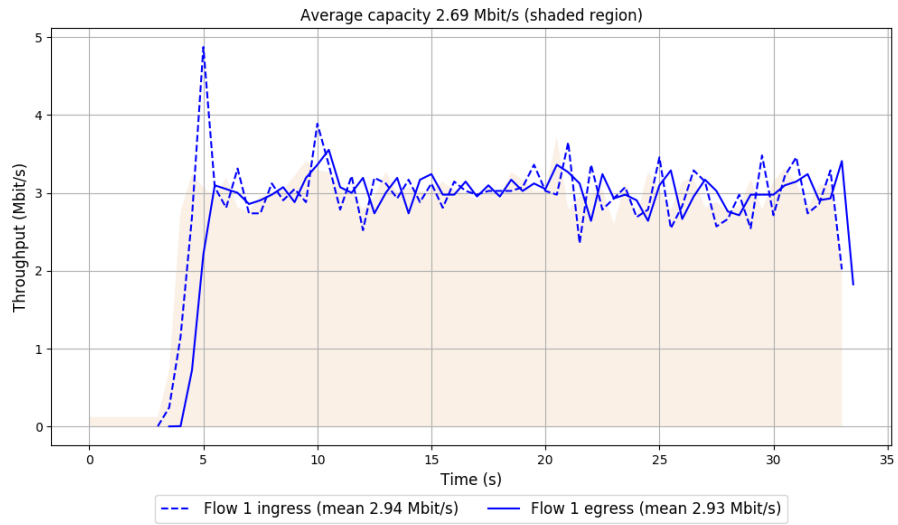
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 495.701 ms

Loss rate: 0.98%

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



Run 9: Statistics of TCP Vegas

Start at: 2018-07-24 13:33:17

End at: 2018-07-24 13:33:47

# Below is generated by plot.py at 2018-07-24 13:52:51

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 482.331 ms

Loss rate: 0.94%

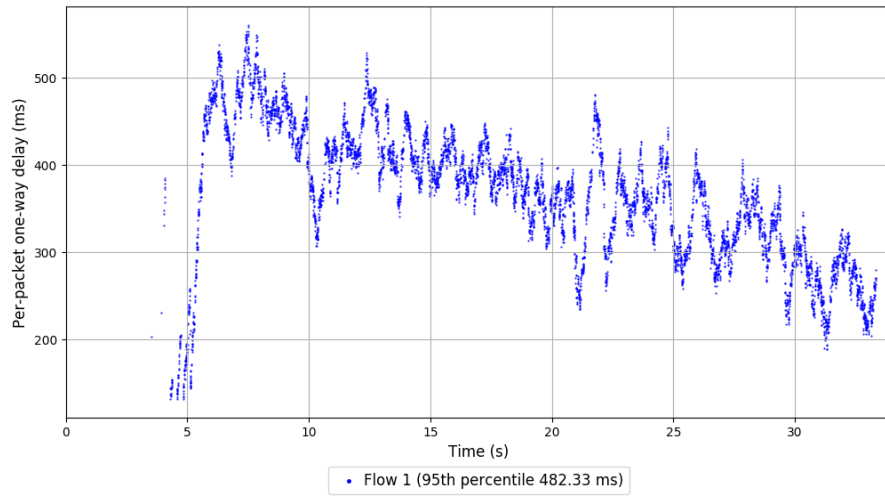
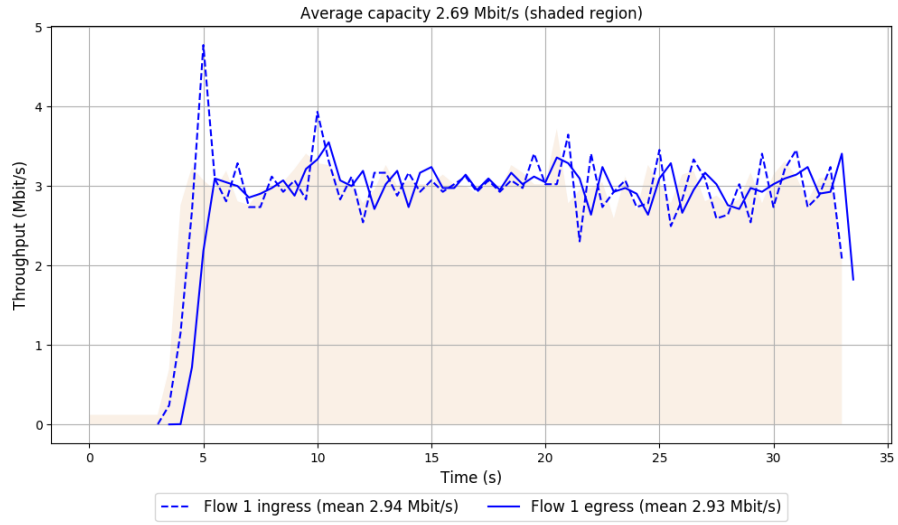
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 482.331 ms

Loss rate: 0.94%

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



Run 10: Statistics of TCP Vegas

Start at: 2018-07-24 13:42:59

End at: 2018-07-24 13:43:29

# Below is generated by plot.py at 2018-07-24 13:52:51

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1099.966 ms

Loss rate: 3.29%

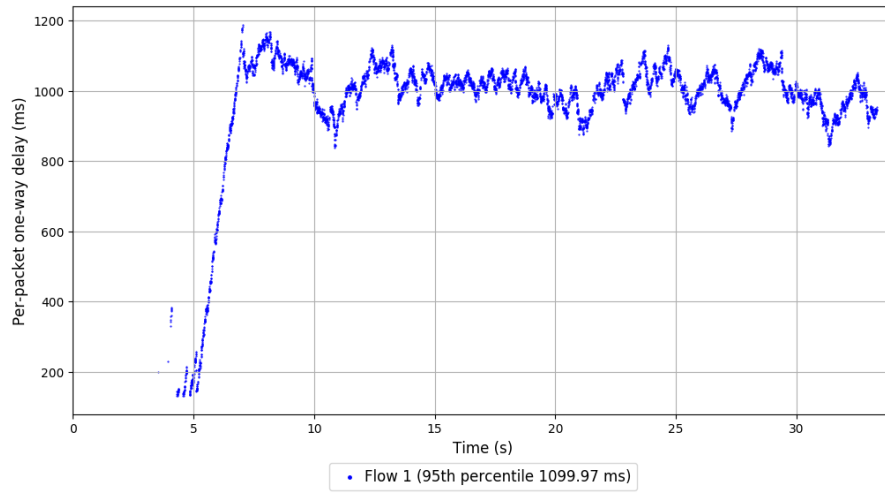
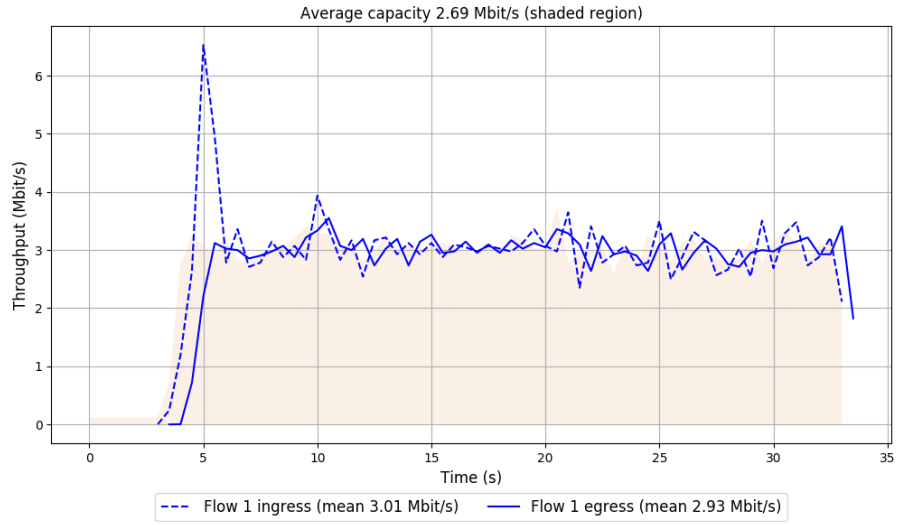
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 1099.966 ms

Loss rate: 3.29%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-07-24 12:12:49

End at: 2018-07-24 12:13:19

# Below is generated by plot.py at 2018-07-24 13:52:51

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1672.997 ms

Loss rate: 4.14%

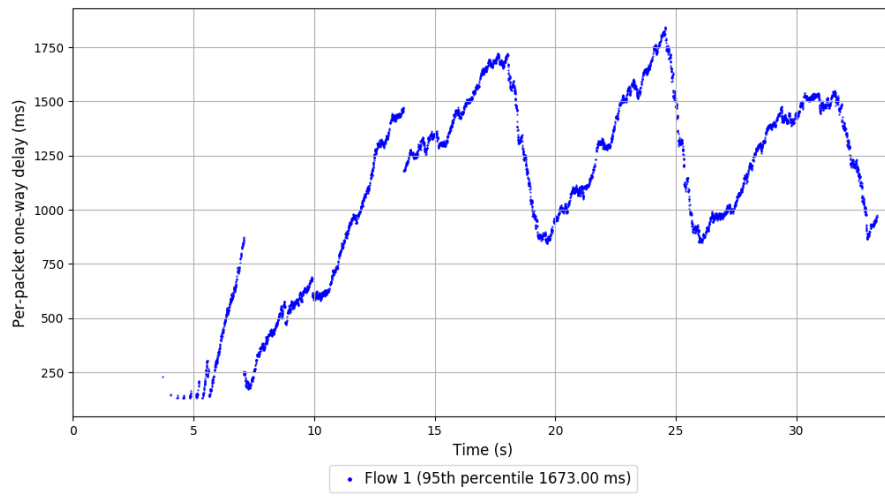
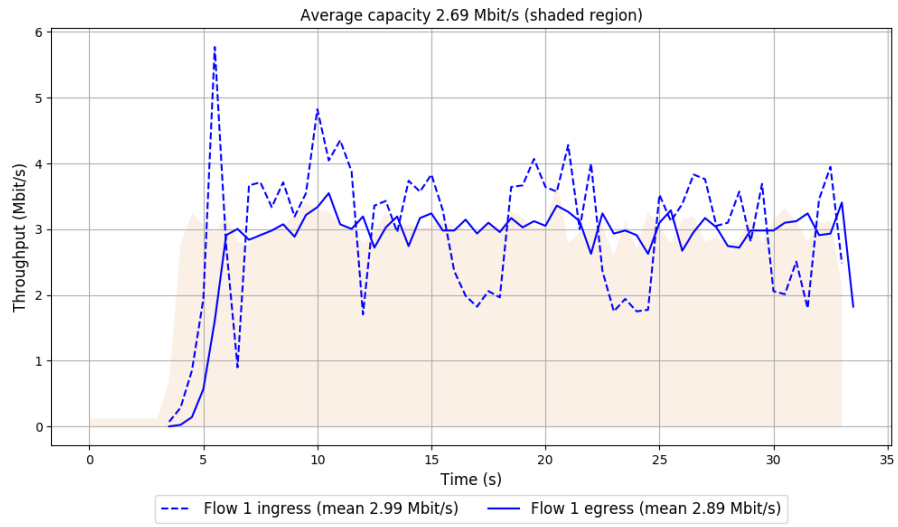
-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 1672.997 ms

Loss rate: 4.14%

# Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-07-24 12:22:30

End at: 2018-07-24 12:23:00

# Below is generated by plot.py at 2018-07-24 13:52:52

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1692.855 ms

Loss rate: 3.36%

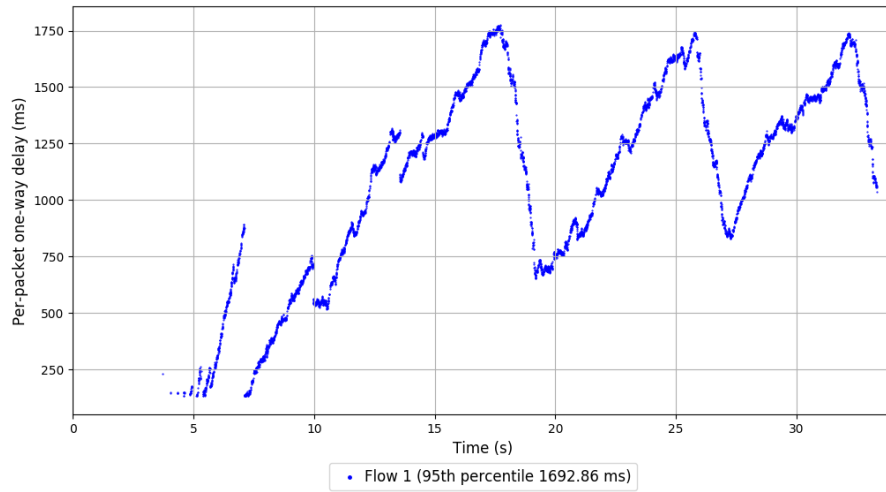
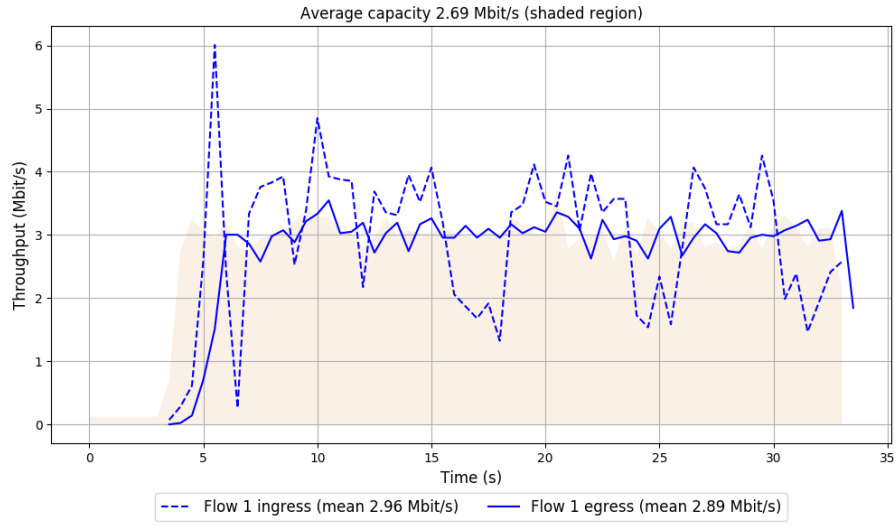
-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 1692.855 ms

Loss rate: 3.36%

## Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-07-24 12:32:12

End at: 2018-07-24 12:32:42

# Below is generated by plot.py at 2018-07-24 13:52:53

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1660.440 ms

Loss rate: 4.62%

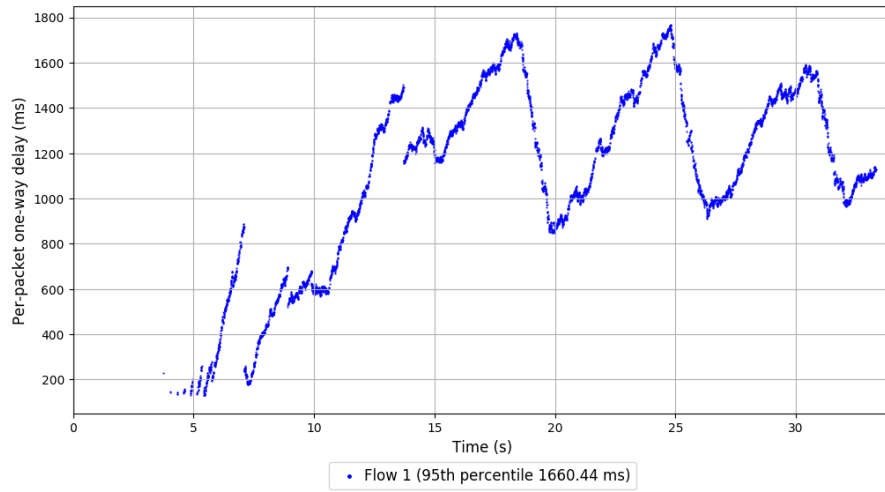
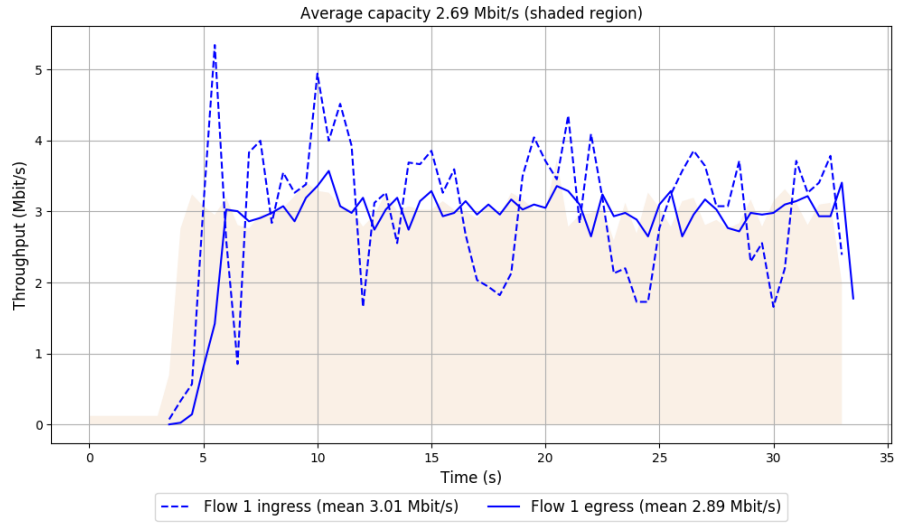
-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 1660.440 ms

Loss rate: 4.62%

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



Run 4: Statistics of Verus

Start at: 2018-07-24 12:41:54

End at: 2018-07-24 12:42:24

# Below is generated by plot.py at 2018-07-24 13:52:53

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1685.993 ms

Loss rate: 4.81%

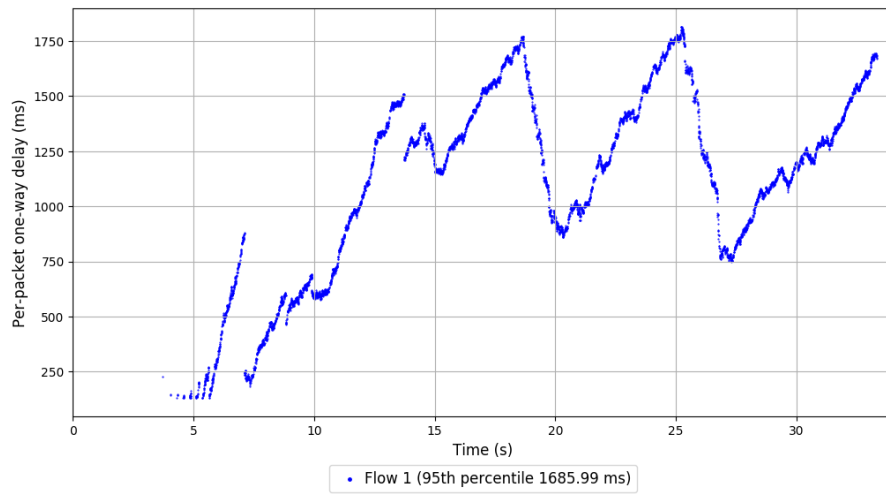
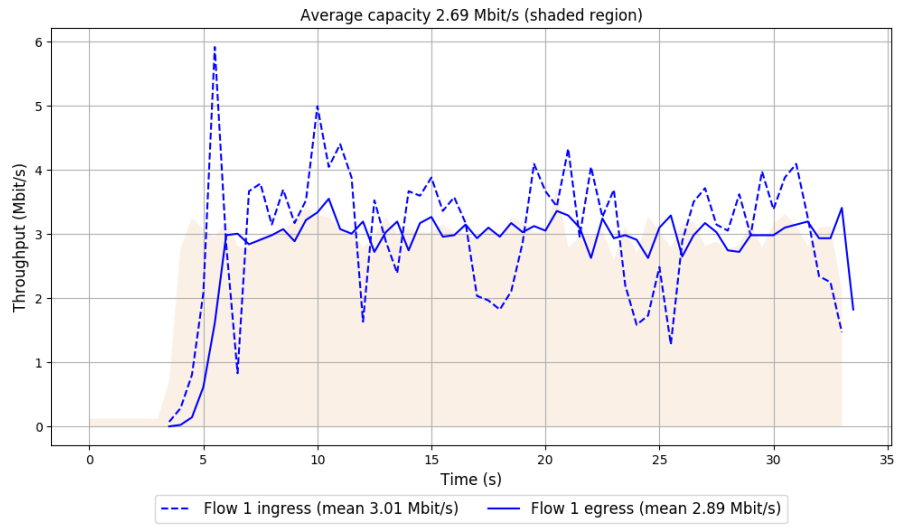
-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 1685.993 ms

Loss rate: 4.81%

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



Run 5: Statistics of Verus

Start at: 2018-07-24 12:51:36

End at: 2018-07-24 12:52:06

# Below is generated by plot.py at 2018-07-24 13:52:59

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1750.279 ms

Loss rate: 4.17%

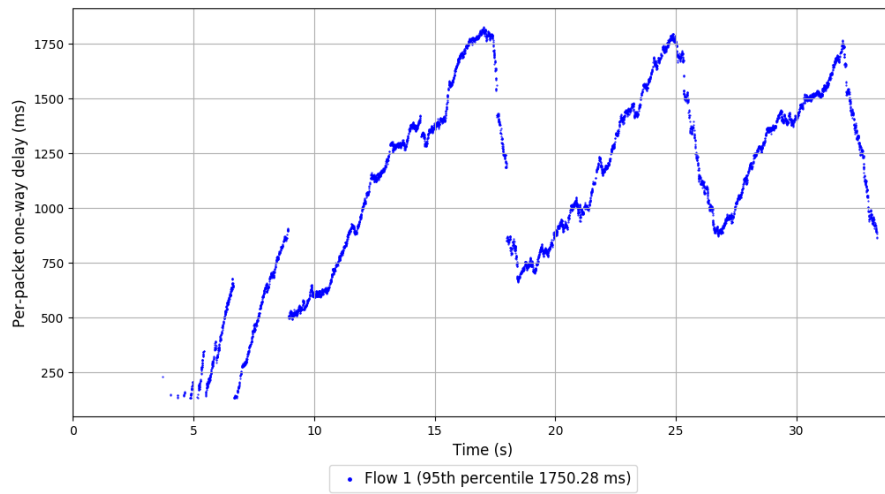
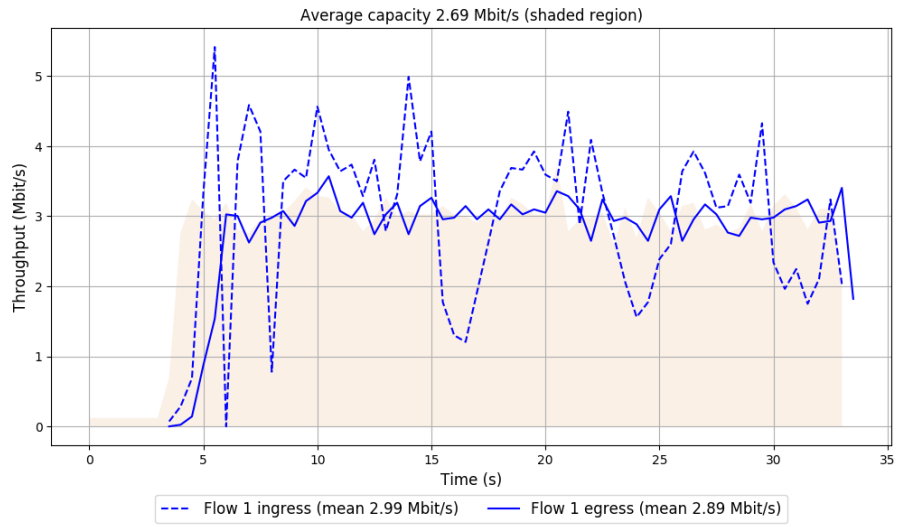
-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 1750.279 ms

Loss rate: 4.17%

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



Run 6: Statistics of Verus

Start at: 2018-07-24 13:01:18

End at: 2018-07-24 13:01:48

# Below is generated by plot.py at 2018-07-24 13:53:01

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1711.262 ms

Loss rate: 4.80%

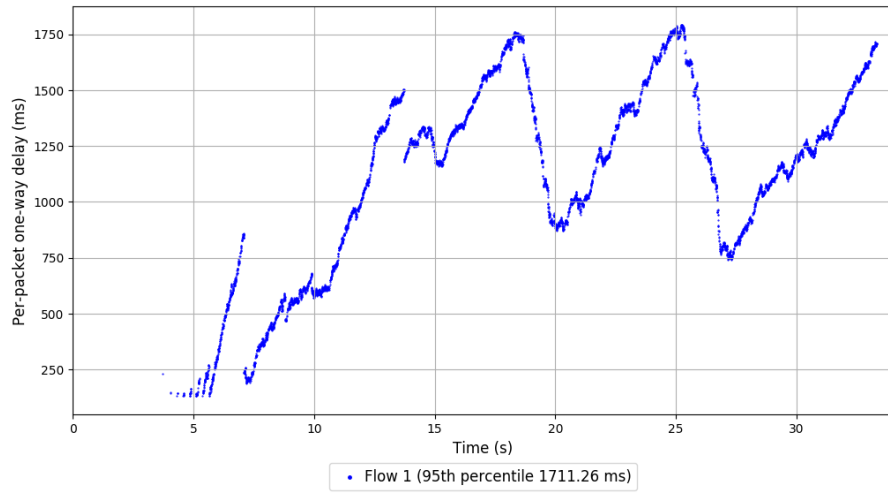
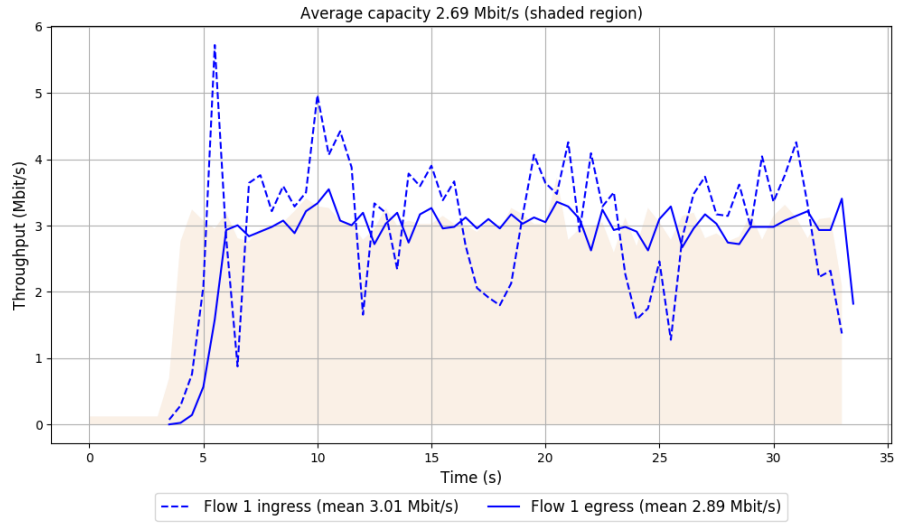
-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 1711.262 ms

Loss rate: 4.80%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-07-24 13:11:01

End at: 2018-07-24 13:11:31

# Below is generated by plot.py at 2018-07-24 13:53:02

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1701.328 ms

Loss rate: 3.23%

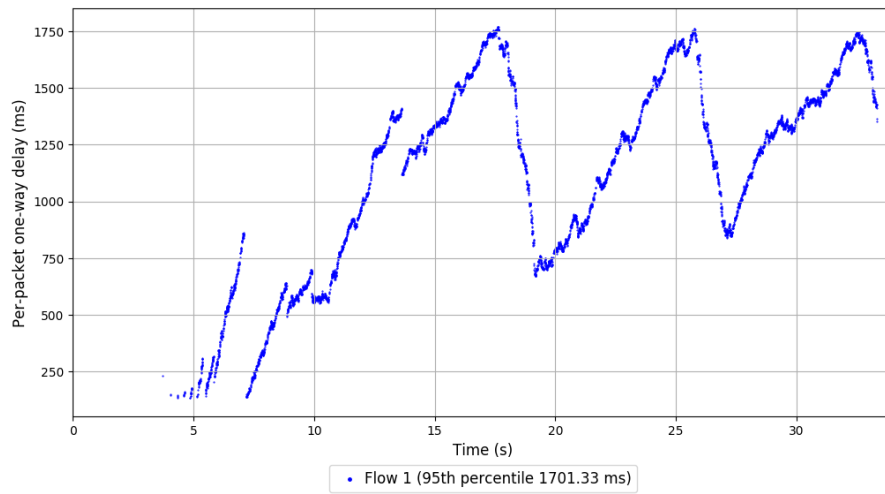
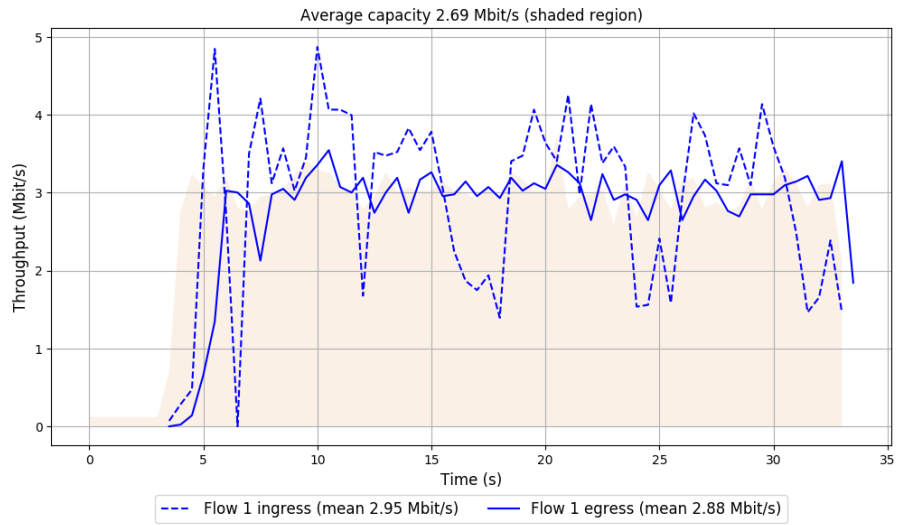
-- Flow 1:

Average throughput: 2.88 Mbit/s

95th percentile per-packet one-way delay: 1701.328 ms

Loss rate: 3.23%

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



Run 8: Statistics of Verus

Start at: 2018-07-24 13:20:43

End at: 2018-07-24 13:21:13

# Below is generated by plot.py at 2018-07-24 13:53:02

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1713.686 ms

Loss rate: 3.16%

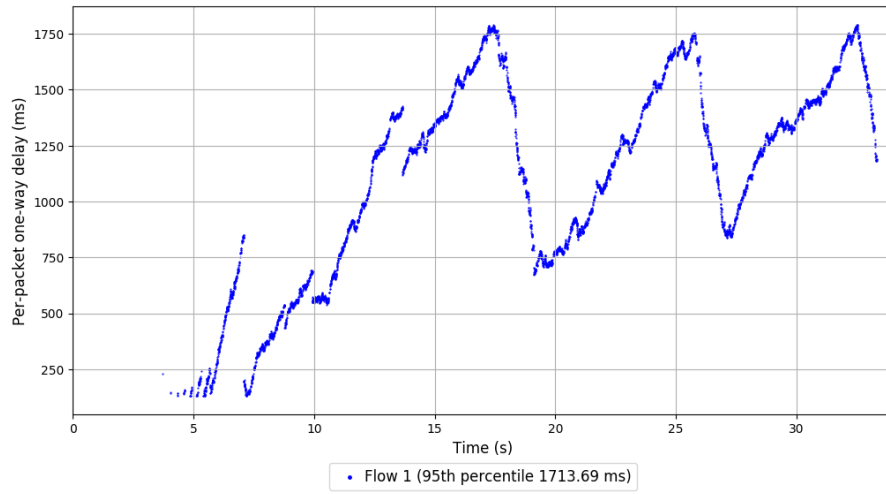
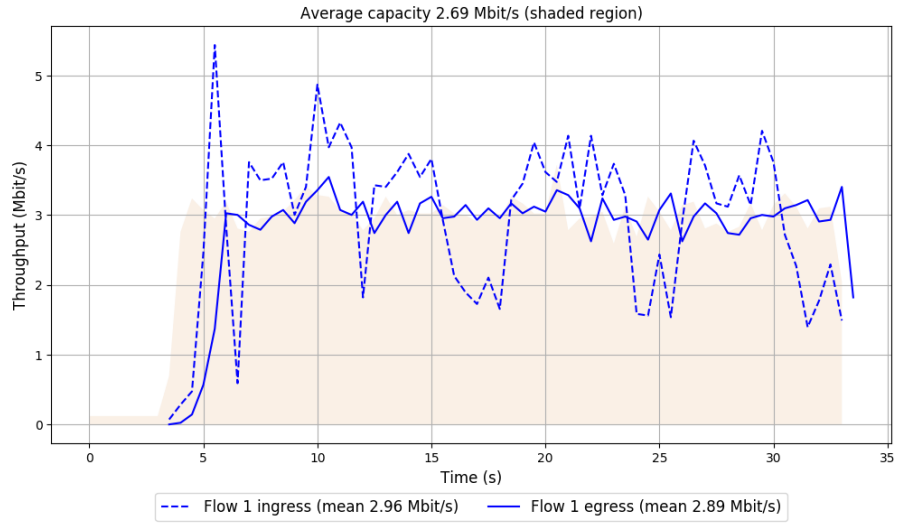
-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 1713.686 ms

Loss rate: 3.16%

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



Run 9: Statistics of Verus

Start at: 2018-07-24 13:30:25

End at: 2018-07-24 13:30:55

# Below is generated by plot.py at 2018-07-24 13:53:03

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1700.945 ms

Loss rate: 3.49%

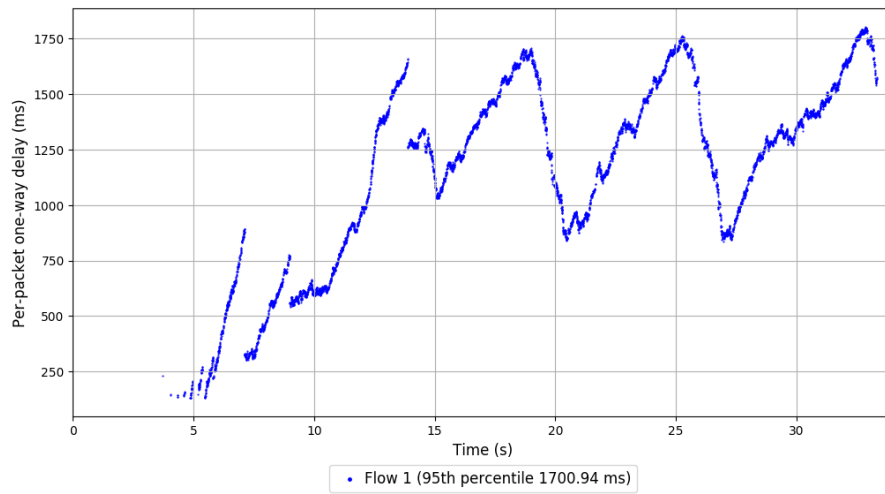
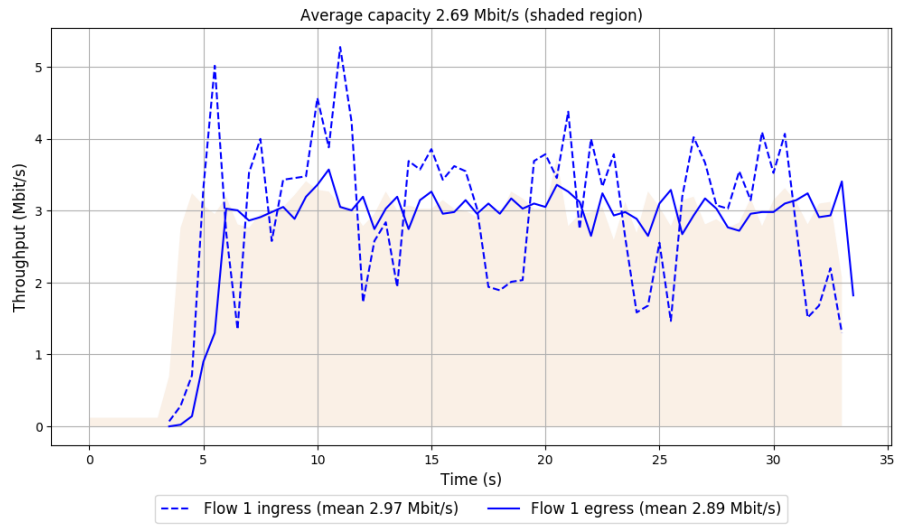
-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 1700.945 ms

Loss rate: 3.49%

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



Run 10: Statistics of Verus

Start at: 2018-07-24 13:40:08

End at: 2018-07-24 13:40:38

# Below is generated by plot.py at 2018-07-24 13:53:04

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 1681.477 ms

Loss rate: 3.90%

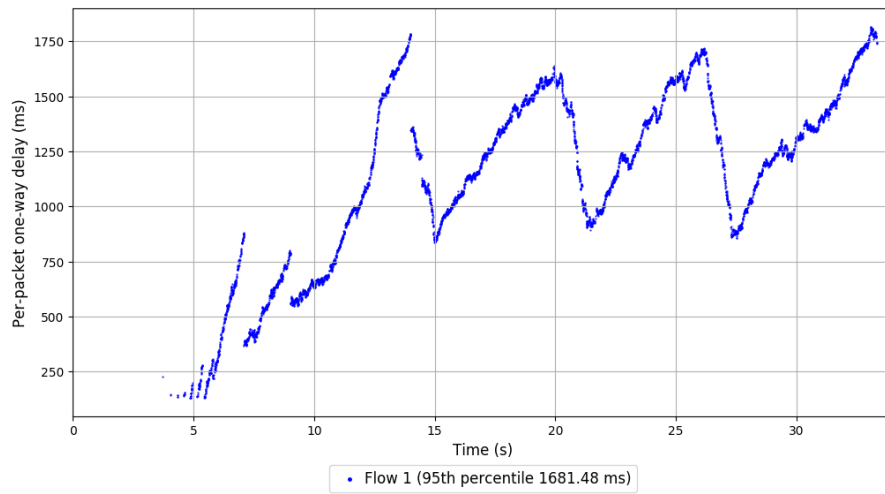
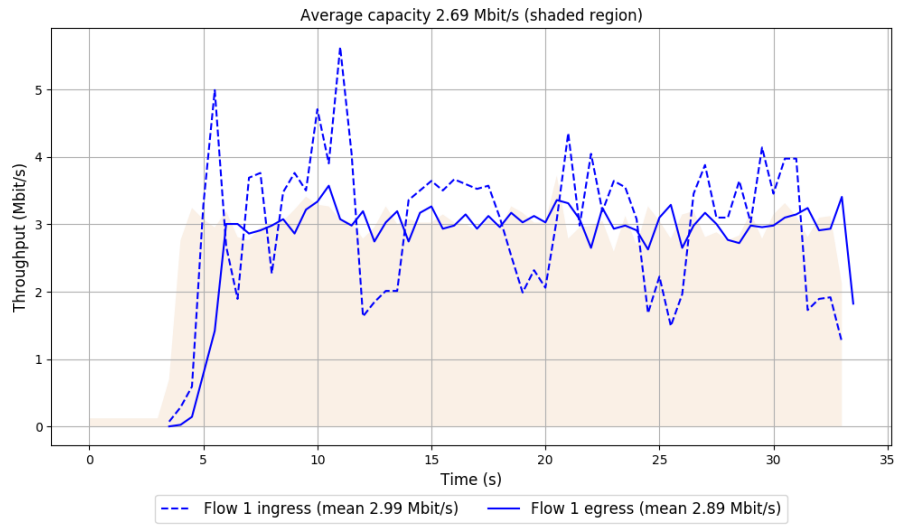
-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 1681.477 ms

Loss rate: 3.90%

Run 10: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-07-24 12:19:39

End at: 2018-07-24 12:20:09

# Below is generated by plot.py at 2018-07-24 13:53:04

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.91 Mbit/s (70.9% utilization)

95th percentile per-packet one-way delay: 171.377 ms

Loss rate: 0.54%

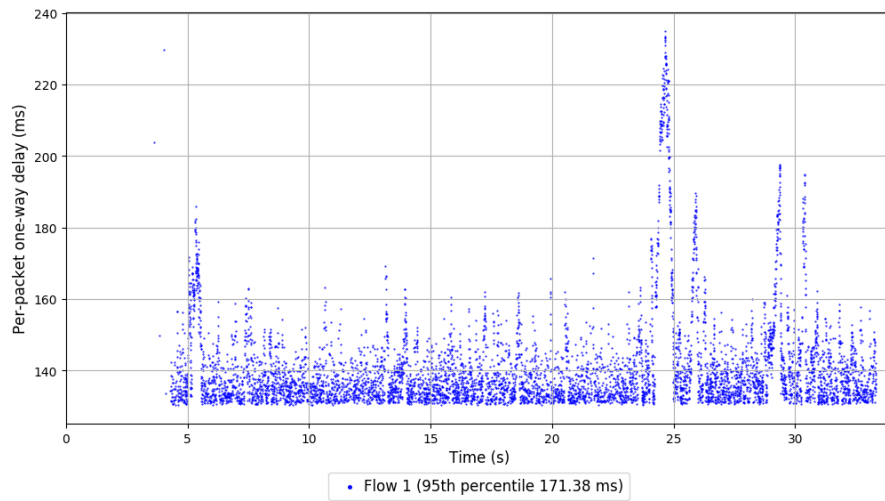
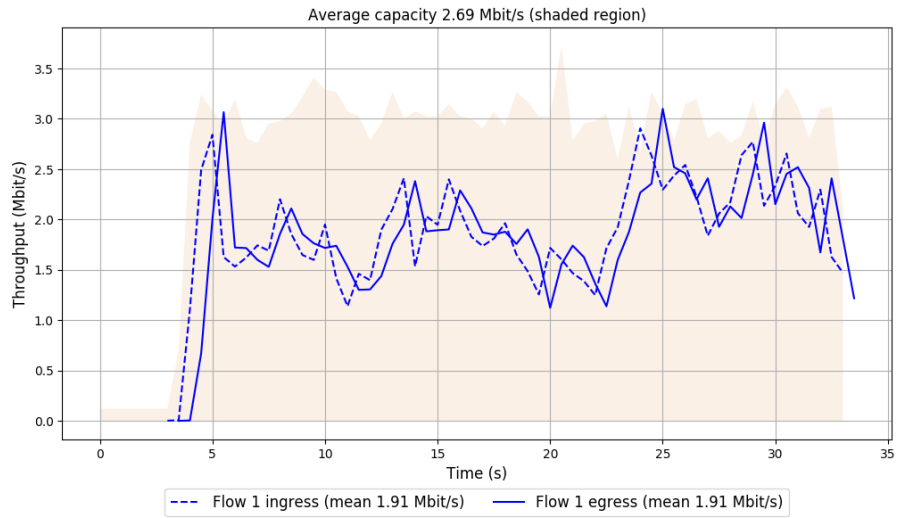
-- Flow 1:

Average throughput: 1.91 Mbit/s

95th percentile per-packet one-way delay: 171.377 ms

Loss rate: 0.54%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-07-24 12:29:21

End at: 2018-07-24 12:29:51

# Below is generated by plot.py at 2018-07-24 13:53:04

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 197.338 ms

Loss rate: 1.12%

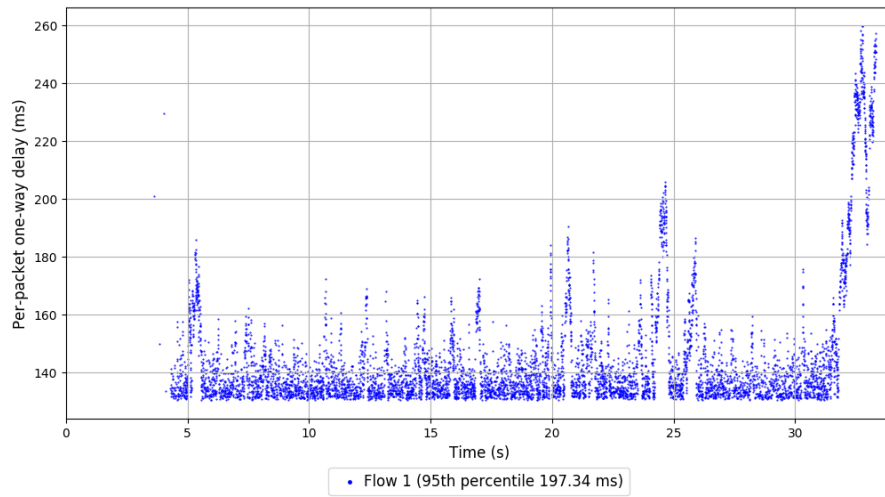
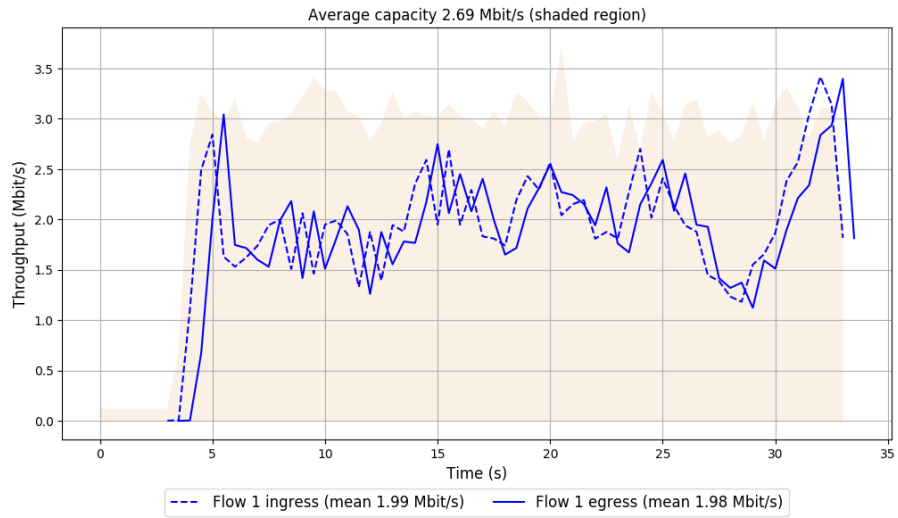
-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 197.338 ms

Loss rate: 1.12%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-07-24 12:39:03

End at: 2018-07-24 12:39:33

# Below is generated by plot.py at 2018-07-24 13:53:08

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 164.402 ms

Loss rate: 0.84%

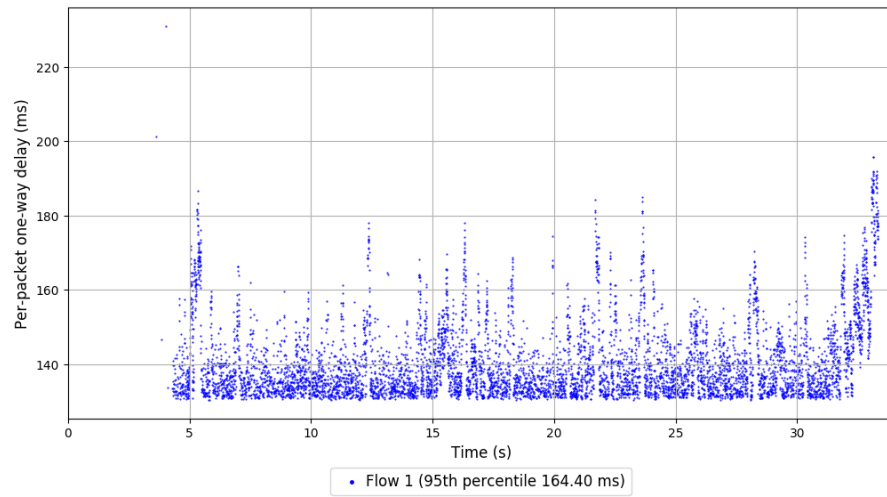
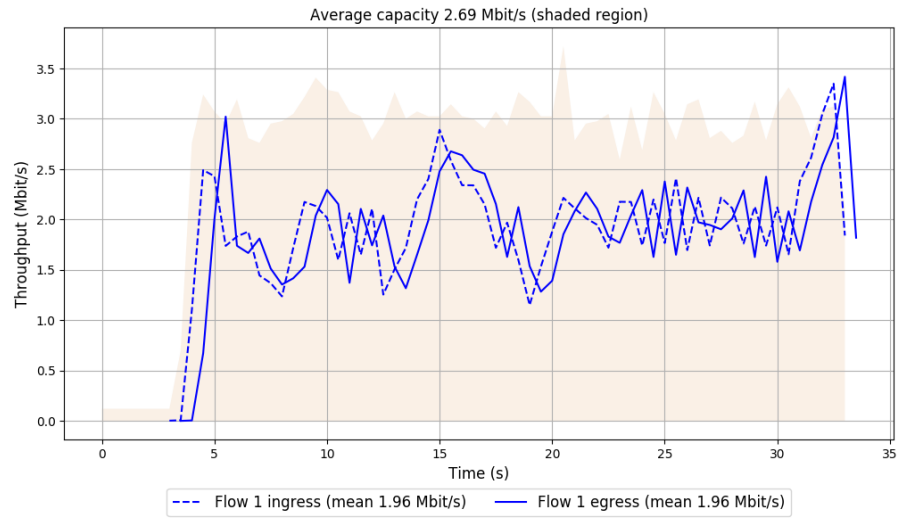
-- Flow 1:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 164.402 ms

Loss rate: 0.84%

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



Run 4: Statistics of PCC-Vivace

Start at: 2018-07-24 12:48:45

End at: 2018-07-24 12:49:15

# Below is generated by plot.py at 2018-07-24 13:53:12

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 794.240 ms

Loss rate: 5.04%

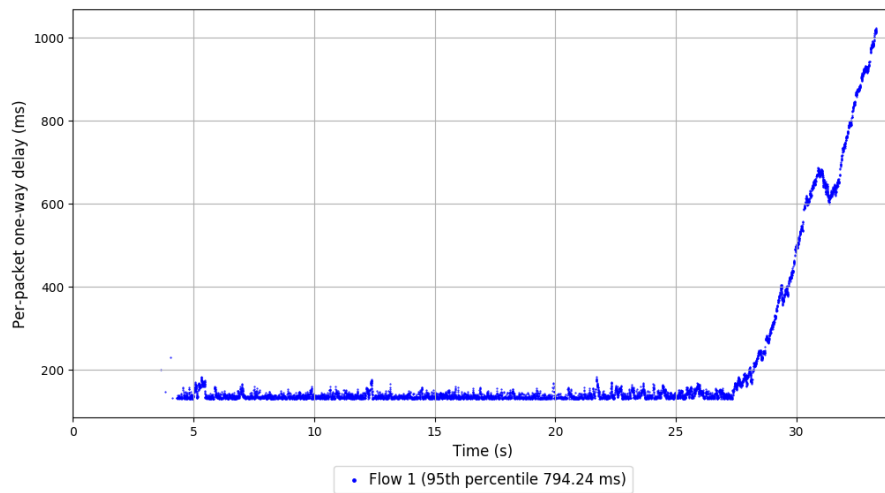
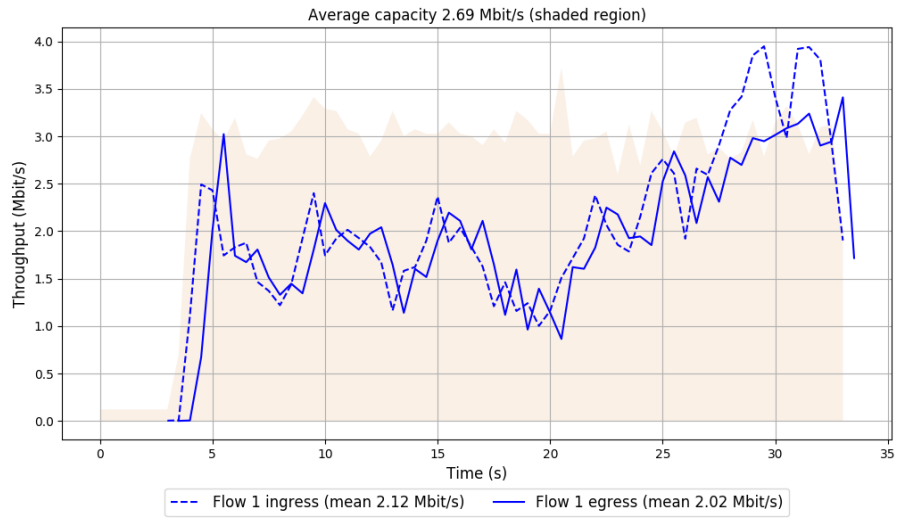
-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 794.240 ms

Loss rate: 5.04%

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



Run 5: Statistics of PCC-Vivace

Start at: 2018-07-24 12:58:27

End at: 2018-07-24 12:58:57

# Below is generated by plot.py at 2018-07-24 13:53:14

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.50 Mbit/s (92.8% utilization)

95th percentile per-packet one-way delay: 1521.381 ms

Loss rate: 2.98%

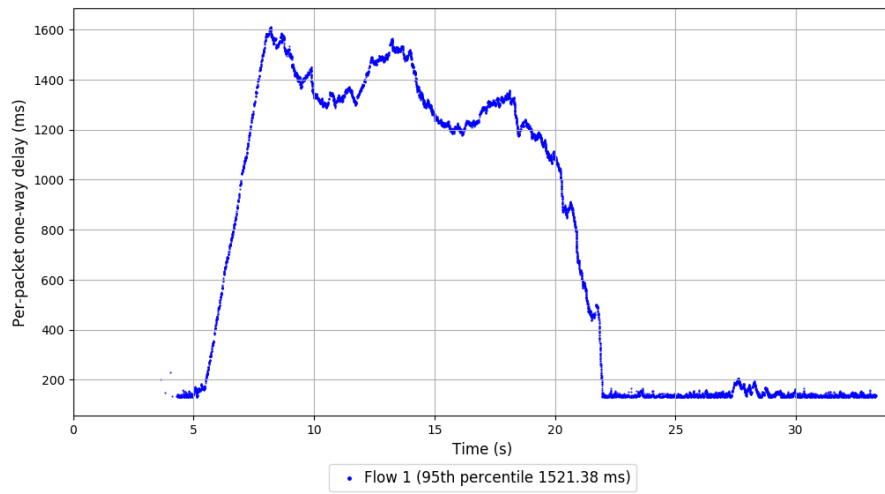
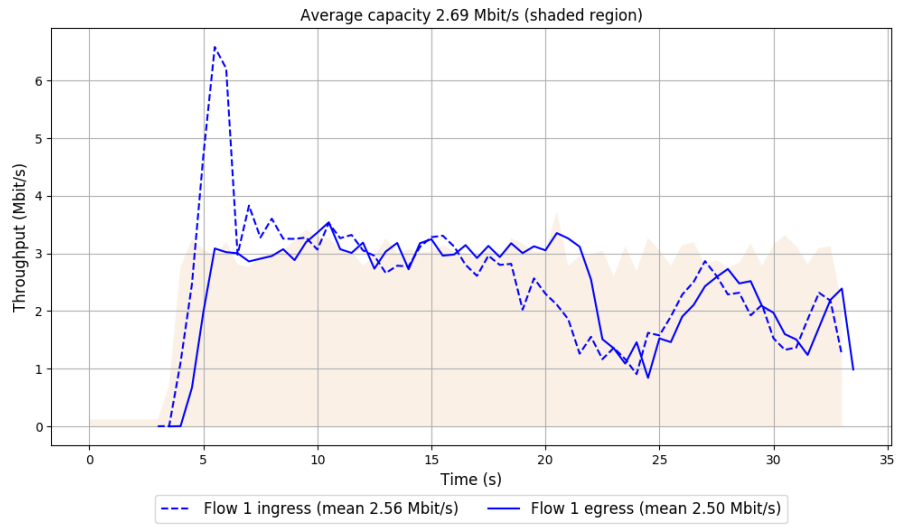
-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 1521.381 ms

Loss rate: 2.98%

Run 5: Report of PCC-Vivace — Data Link



Run 6: Statistics of PCC-Vivace

Start at: 2018-07-24 13:08:09

End at: 2018-07-24 13:08:39

# Below is generated by plot.py at 2018-07-24 13:53:14

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.57 Mbit/s (95.3% utilization)

95th percentile per-packet one-way delay: 1783.797 ms

Loss rate: 18.58%

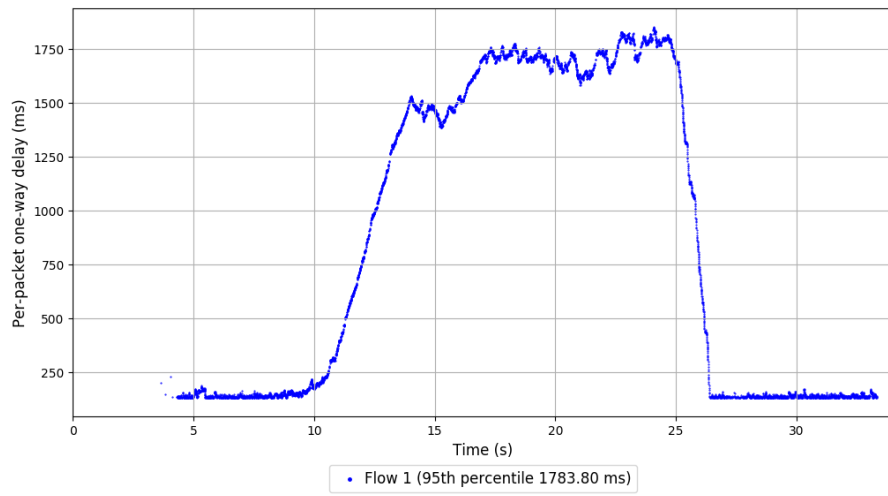
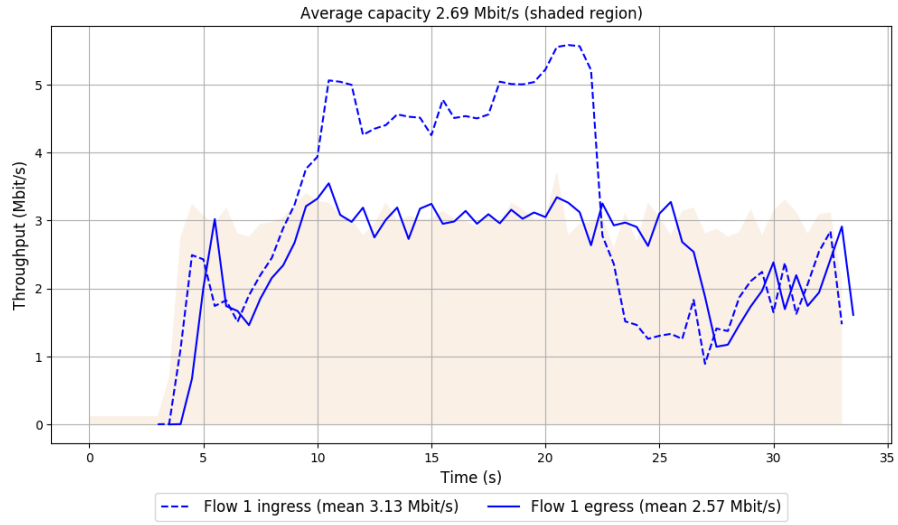
-- Flow 1:

Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 1783.797 ms

Loss rate: 18.58%

Run 6: Report of PCC-Vivace — Data Link



Run 7: Statistics of PCC-Vivace

Start at: 2018-07-24 13:17:52

End at: 2018-07-24 13:18:22

# Below is generated by plot.py at 2018-07-24 13:53:14

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.13 Mbit/s (79.0% utilization)

95th percentile per-packet one-way delay: 228.505 ms

Loss rate: 0.50%

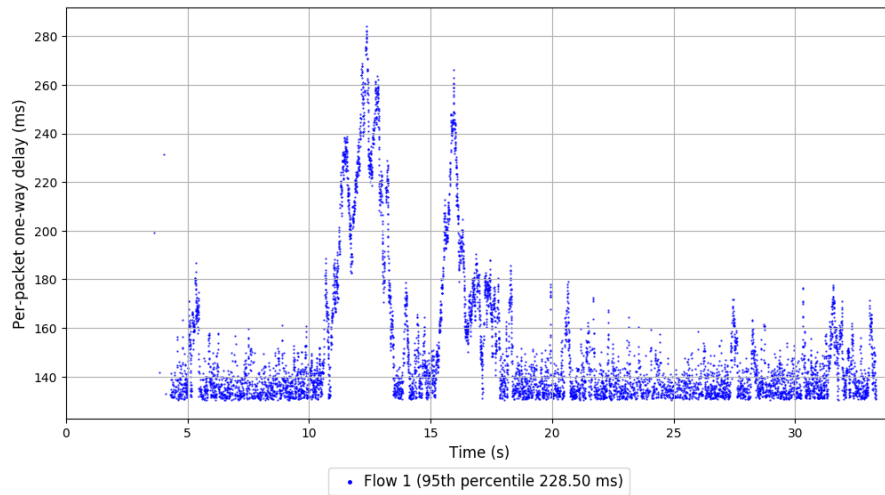
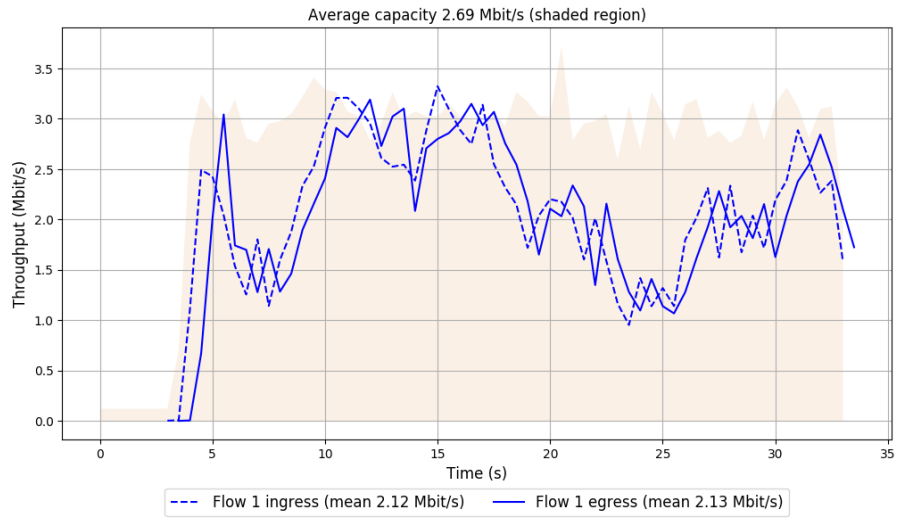
-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 228.505 ms

Loss rate: 0.50%

Run 7: Report of PCC-Vivace — Data Link



Run 8: Statistics of PCC-Vivace

Start at: 2018-07-24 13:27:34

End at: 2018-07-24 13:28:04

# Below is generated by plot.py at 2018-07-24 13:53:14

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

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

95th percentile per-packet one-way delay: 163.838 ms

Loss rate: 0.71%

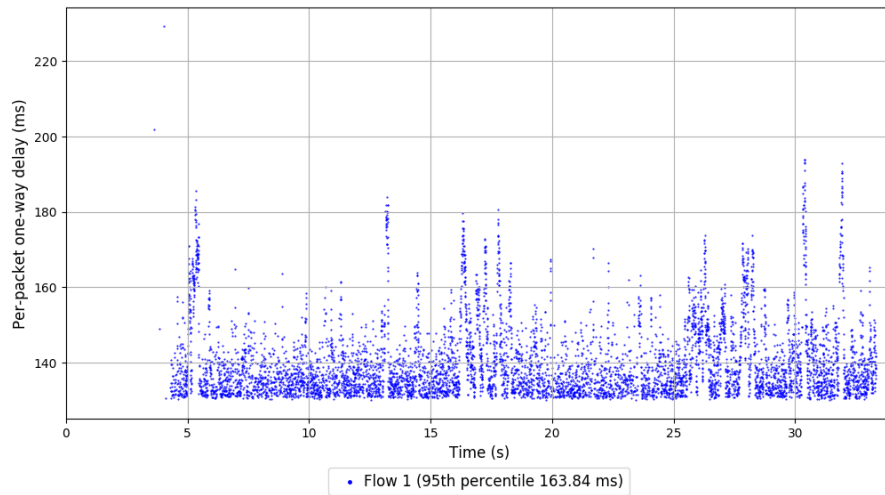
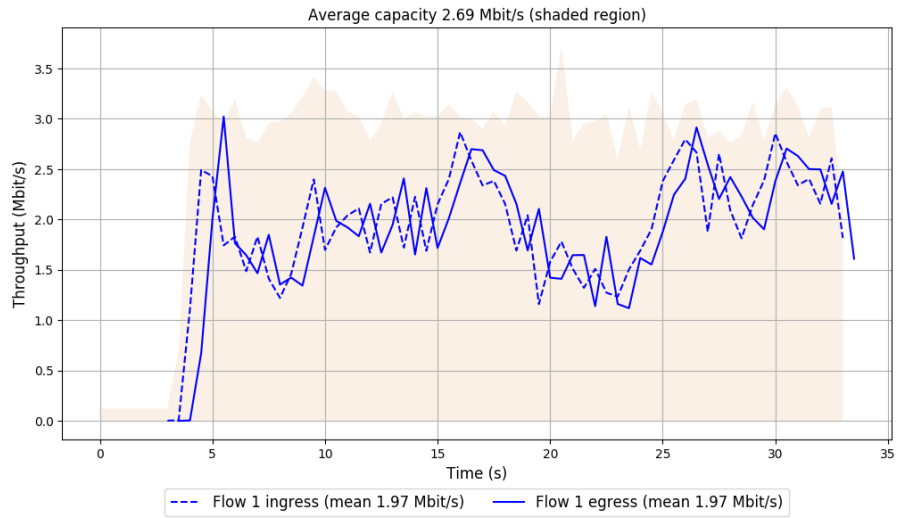
-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 163.838 ms

Loss rate: 0.71%

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



Run 9: Statistics of PCC-Vivace

Start at: 2018-07-24 13:37:16

End at: 2018-07-24 13:37:46

# Below is generated by plot.py at 2018-07-24 13:53:15

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.27 Mbit/s (84.2% utilization)

95th percentile per-packet one-way delay: 186.892 ms

Loss rate: 0.34%

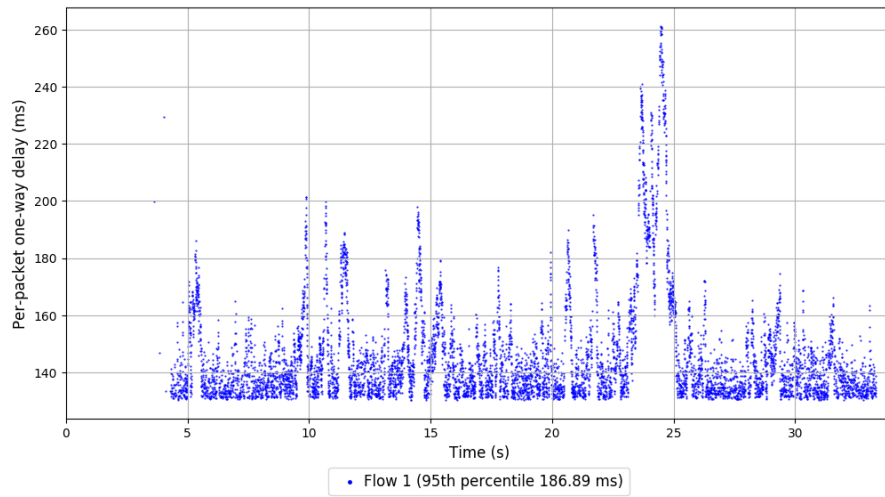
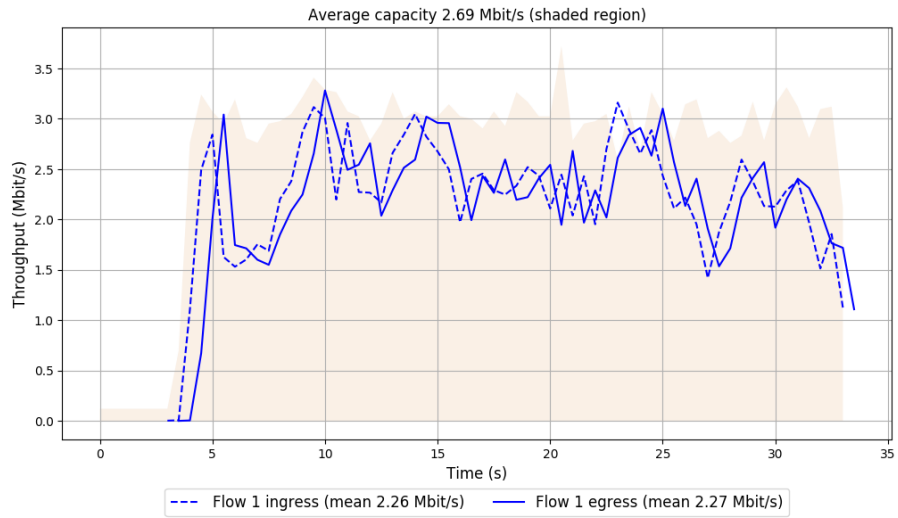
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 186.892 ms

Loss rate: 0.34%

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



Run 10: Statistics of PCC-Vivace

Start at: 2018-07-24 13:46:59

End at: 2018-07-24 13:47:29

# Below is generated by plot.py at 2018-07-24 13:53:15

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 2.09 Mbit/s (77.8% utilization)

95th percentile per-packet one-way delay: 211.797 ms

Loss rate: 0.65%

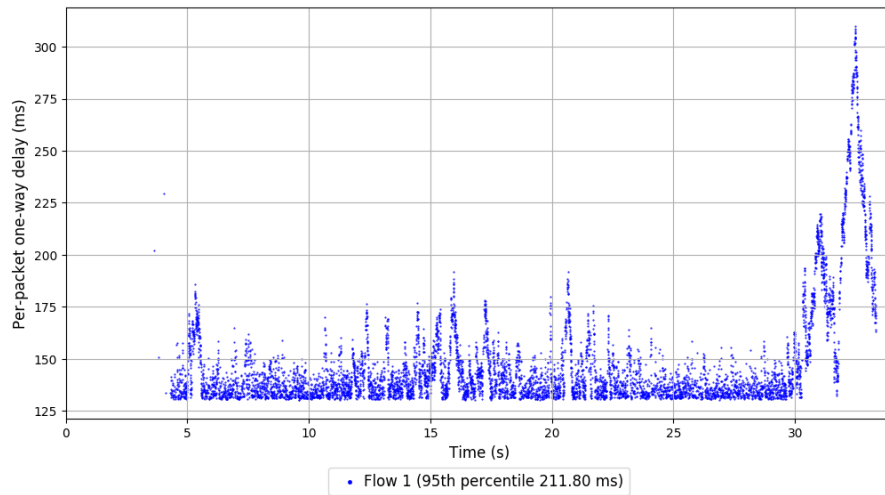
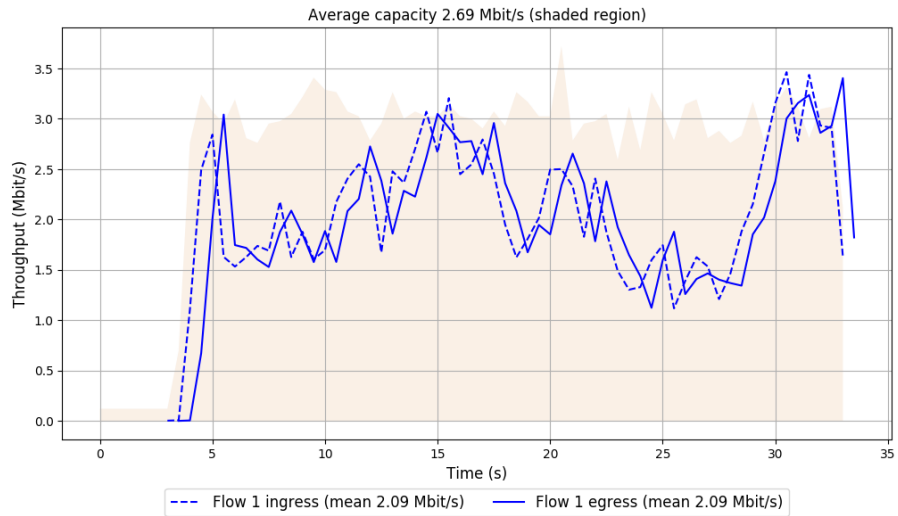
-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 211.797 ms

Loss rate: 0.65%

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



Run 1: Statistics of WebRTC media

Start at: 2018-07-24 12:15:06

End at: 2018-07-24 12:15:36

# Below is generated by plot.py at 2018-07-24 13:53:19

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.56 Mbit/s (58.1% utilization)

95th percentile per-packet one-way delay: 176.894 ms

Loss rate: 0.93%

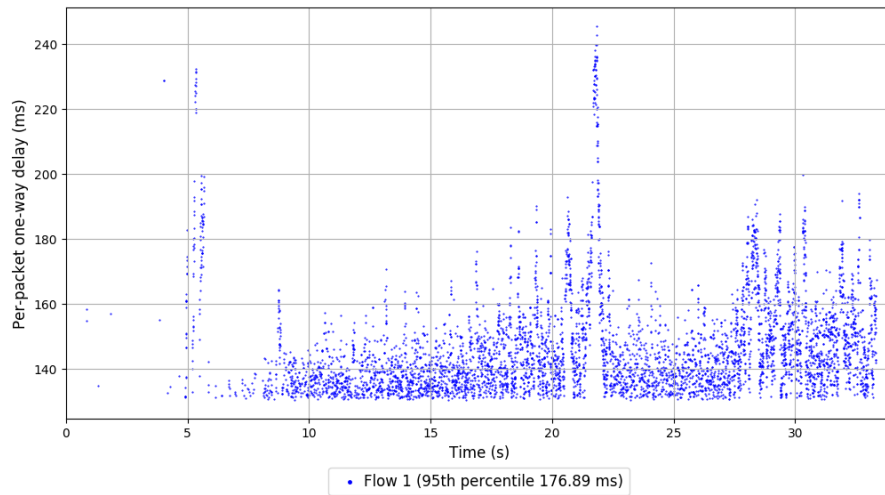
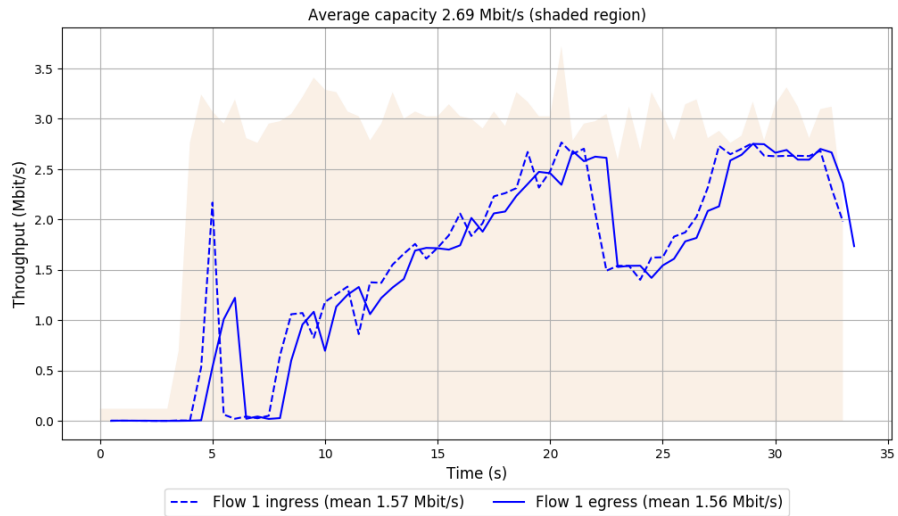
-- Flow 1:

Average throughput: 1.56 Mbit/s

95th percentile per-packet one-way delay: 176.894 ms

Loss rate: 0.93%

# Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-07-24 12:24:47

End at: 2018-07-24 12:25:17

# Below is generated by plot.py at 2018-07-24 13:53:19

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 0.60 Mbit/s (22.4% utilization)

95th percentile per-packet one-way delay: 168.266 ms

Loss rate: 0.42%

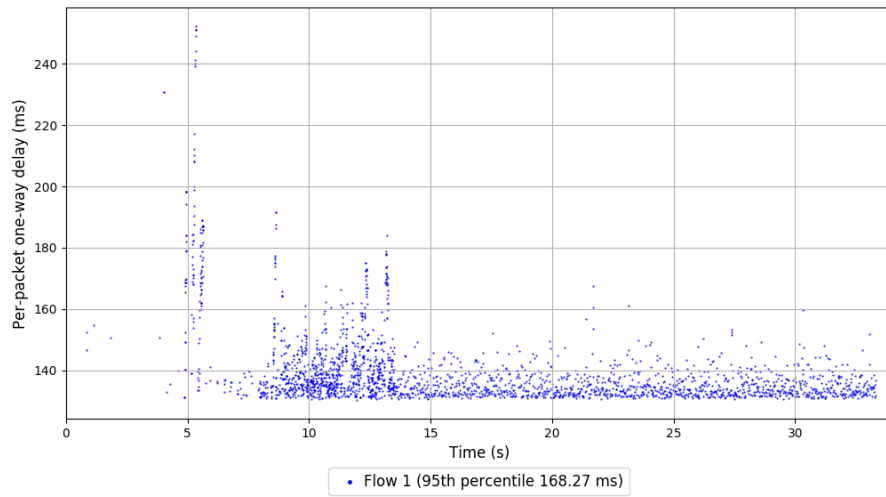
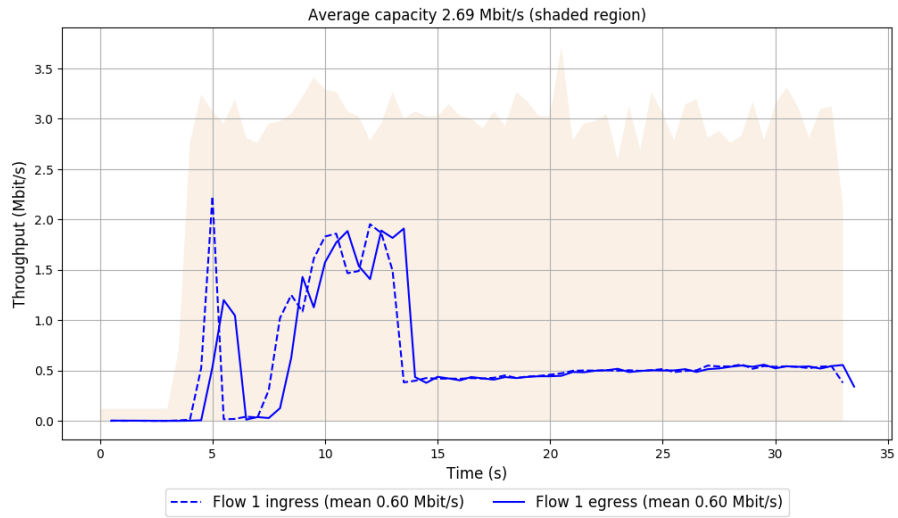
-- Flow 1:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 168.266 ms

Loss rate: 0.42%

## Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-07-24 12:34:29

End at: 2018-07-24 12:34:59

# Below is generated by plot.py at 2018-07-24 13:53:24

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.65 Mbit/s (61.3% utilization)

95th percentile per-packet one-way delay: 191.708 ms

Loss rate: 0.47%

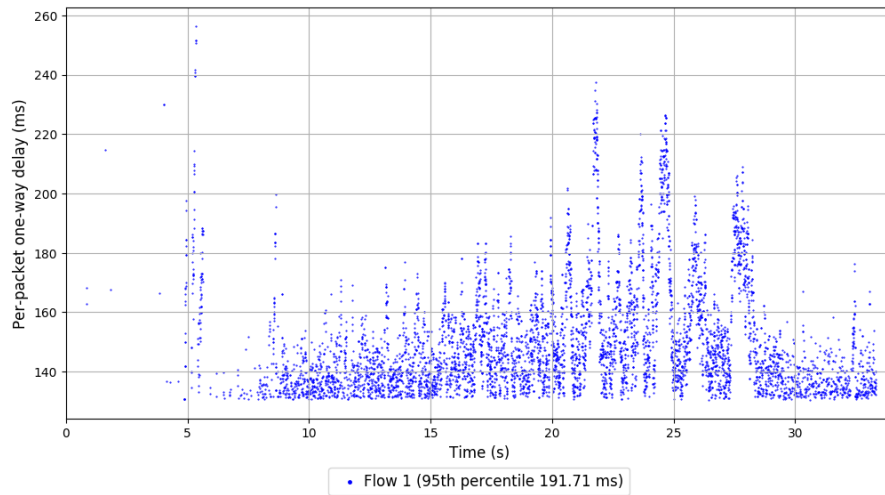
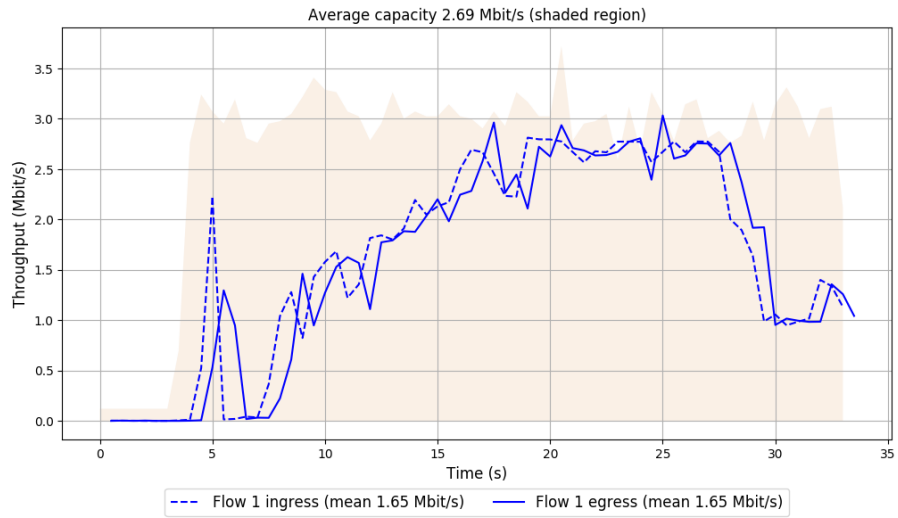
-- Flow 1:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 191.708 ms

Loss rate: 0.47%

### Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-07-24 12:44:11

End at: 2018-07-24 12:44:41

# Below is generated by plot.py at 2018-07-24 13:53:24

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.59 Mbit/s (59.1% utilization)

95th percentile per-packet one-way delay: 182.188 ms

Loss rate: 0.82%

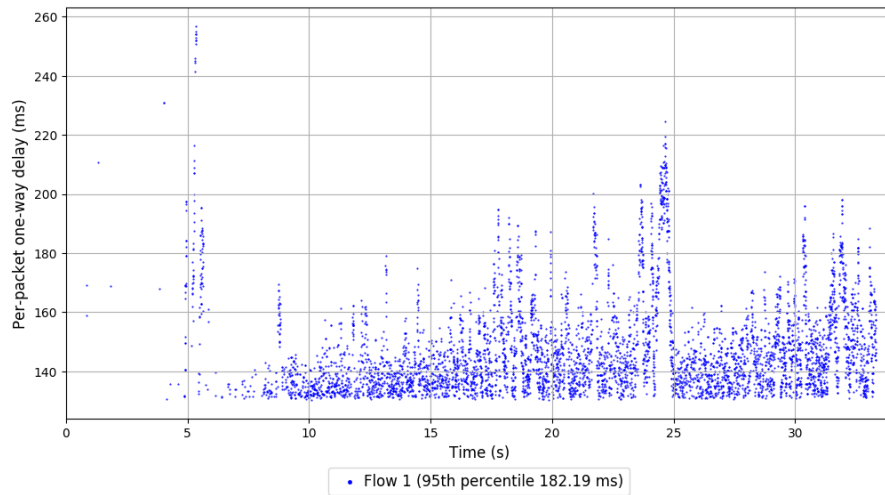
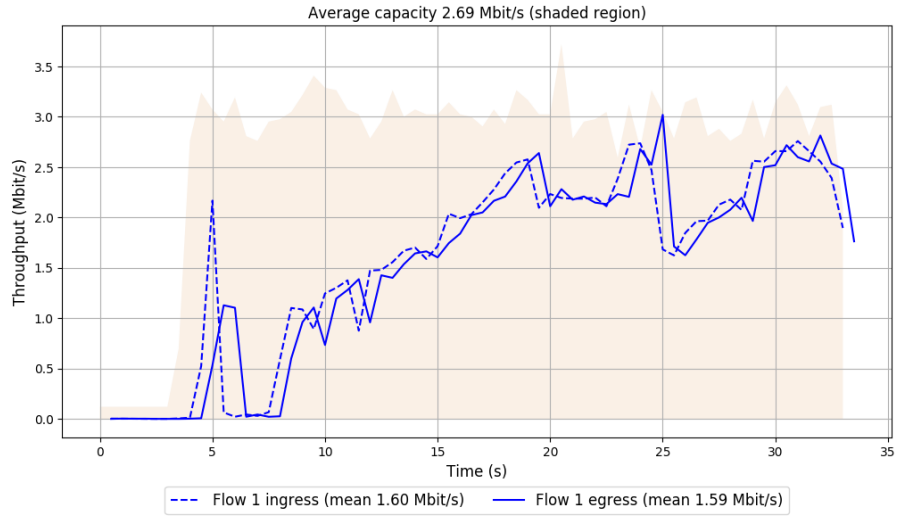
-- Flow 1:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 182.188 ms

Loss rate: 0.82%

### Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

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

End at: 2018-07-24 12:54:23

# Below is generated by plot.py at 2018-07-24 13:53:25

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.57 Mbit/s (58.2% utilization)

95th percentile per-packet one-way delay: 169.909 ms

Loss rate: 0.76%

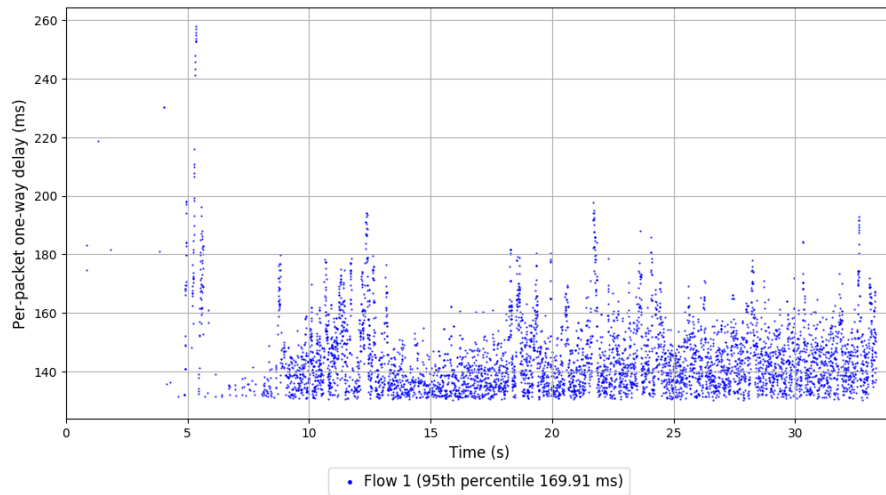
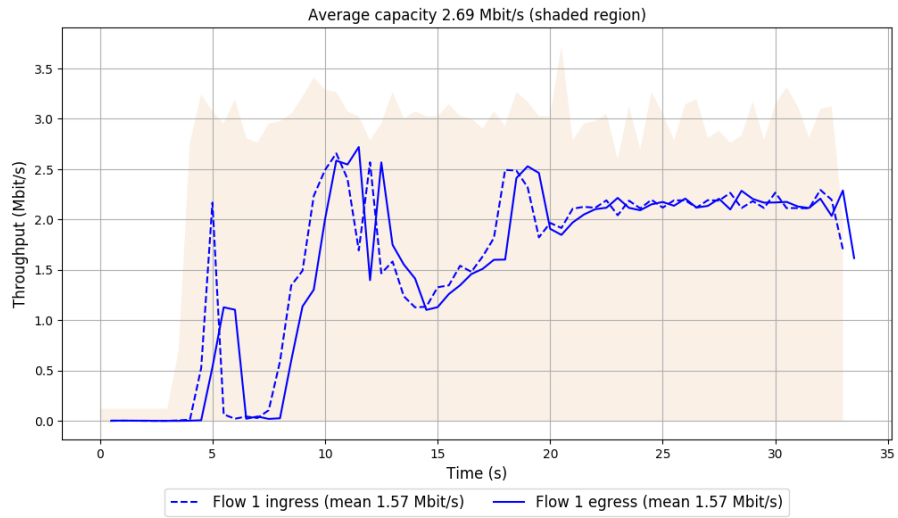
-- Flow 1:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 169.909 ms

Loss rate: 0.76%

### Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-07-24 13:03:36

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

# Below is generated by plot.py at 2018-07-24 13:53:25

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.72 Mbit/s (64.0% utilization)

95th percentile per-packet one-way delay: 177.210 ms

Loss rate: 0.79%

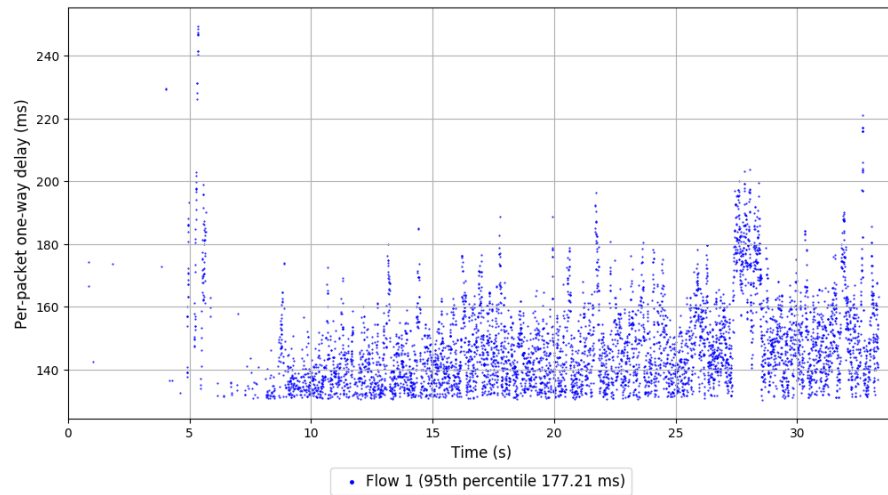
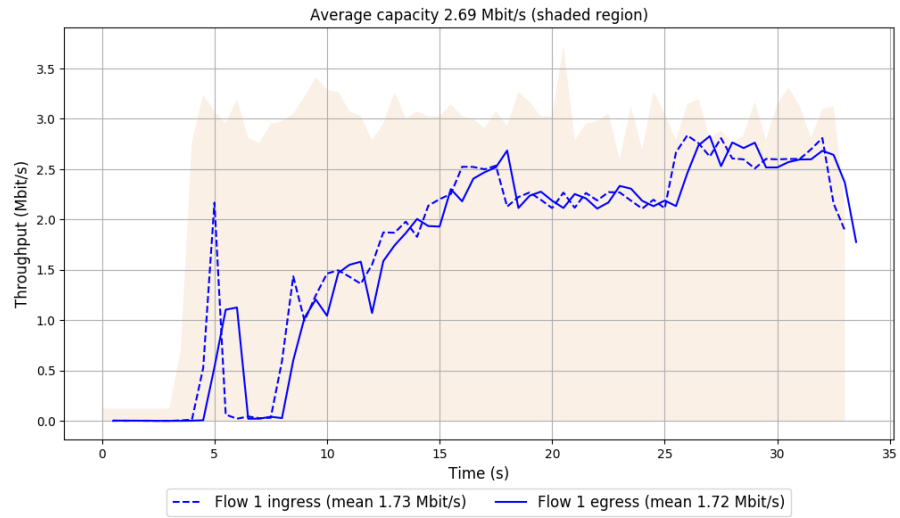
-- Flow 1:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 177.210 ms

Loss rate: 0.79%

## Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-07-24 13:13:18

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

# Below is generated by plot.py at 2018-07-24 13:53:25

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.77 Mbit/s (65.9% utilization)

95th percentile per-packet one-way delay: 183.483 ms

Loss rate: 0.57%

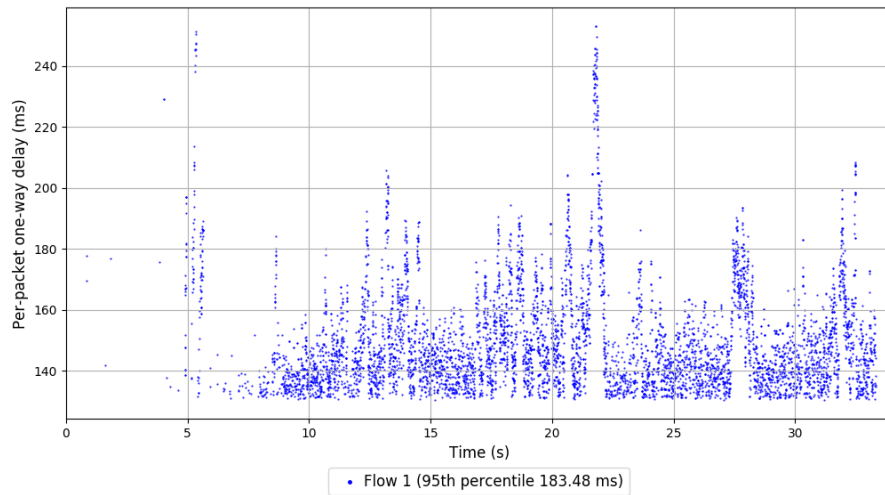
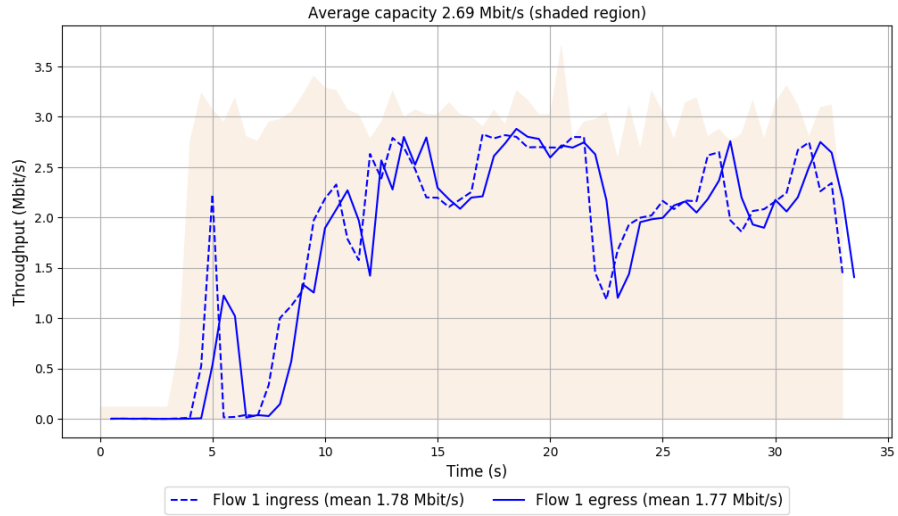
-- Flow 1:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 183.483 ms

Loss rate: 0.57%

### Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-07-24 13:23:00

End at: 2018-07-24 13:23:30

# Below is generated by plot.py at 2018-07-24 13:53:27

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.80 Mbit/s (66.8% utilization)

95th percentile per-packet one-way delay: 174.808 ms

Loss rate: 0.74%

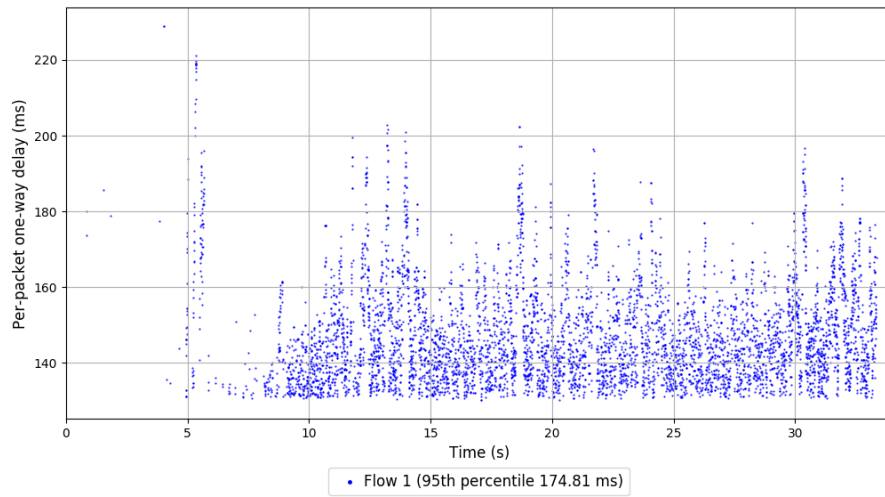
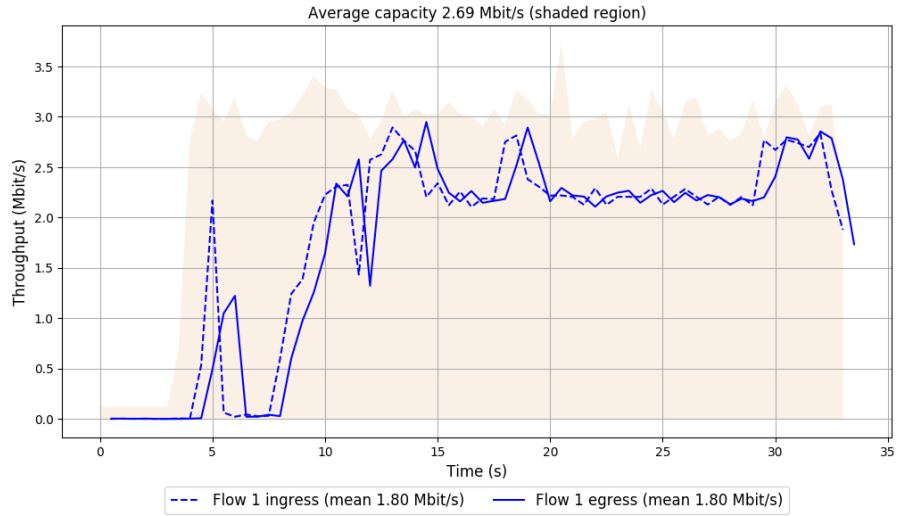
-- Flow 1:

Average throughput: 1.80 Mbit/s

95th percentile per-packet one-way delay: 174.808 ms

Loss rate: 0.74%

# Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-07-24 13:32:42

End at: 2018-07-24 13:33:12

# Below is generated by plot.py at 2018-07-24 13:53:27

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.90 Mbit/s (70.4% utilization)

95th percentile per-packet one-way delay: 186.876 ms

Loss rate: 0.71%

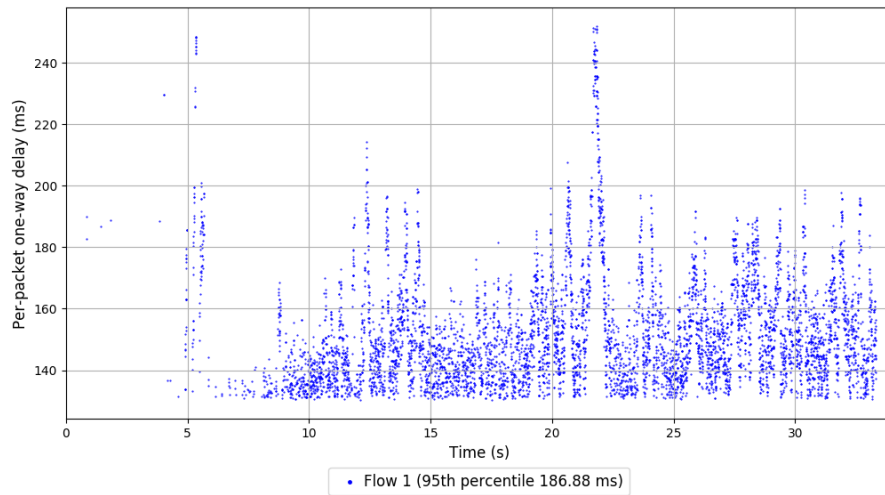
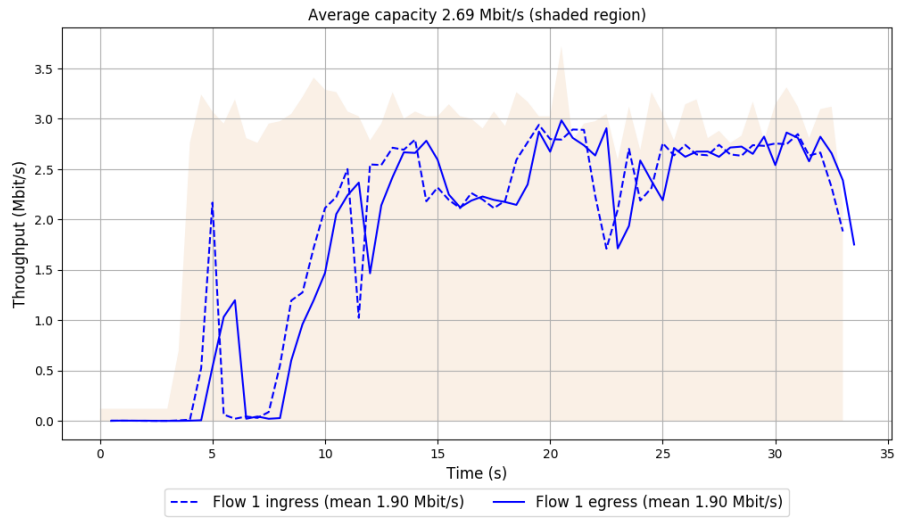
-- Flow 1:

Average throughput: 1.90 Mbit/s

95th percentile per-packet one-way delay: 186.876 ms

Loss rate: 0.71%

### Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-07-24 13:42:25

End at: 2018-07-24 13:42:55

# Below is generated by plot.py at 2018-07-24 13:53:27

# Datalink statistics

-- Total of 1 flow:

Average capacity: 2.69 Mbit/s

Average throughput: 1.28 Mbit/s (47.5% utilization)

95th percentile per-packet one-way delay: 175.862 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 175.862 ms

Loss rate: 0.33%

### Run 10: Report of WebRTC media — Data Link

