

Pantheon Report

Generated at 2019-08-26 19:25:05 (UTC).

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

Repeated the test of 24 congestion control schemes 3 times.

Each test lasted for 30 seconds running 1 flow.

System info:

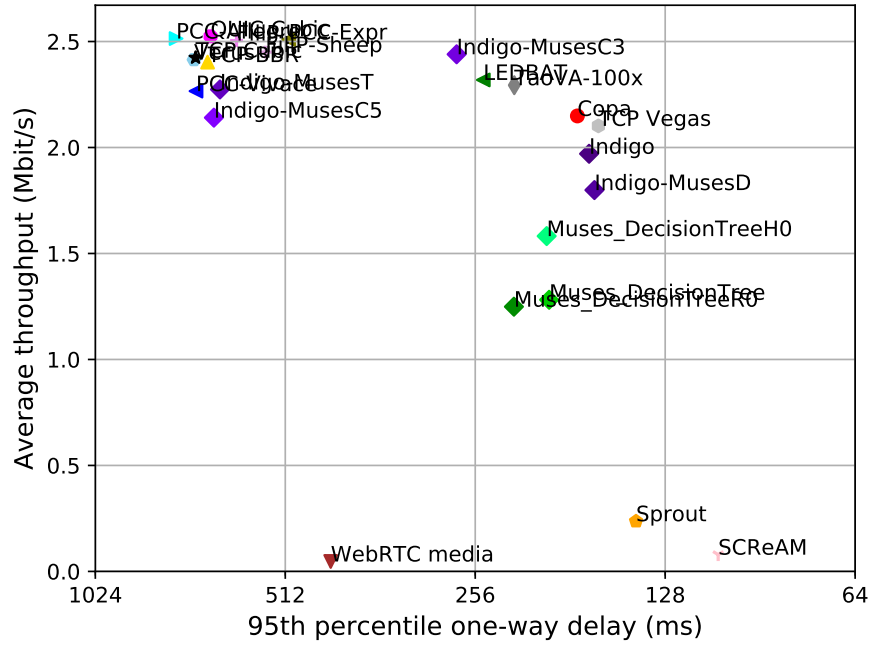
```
Linux 4.15.0-1036-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

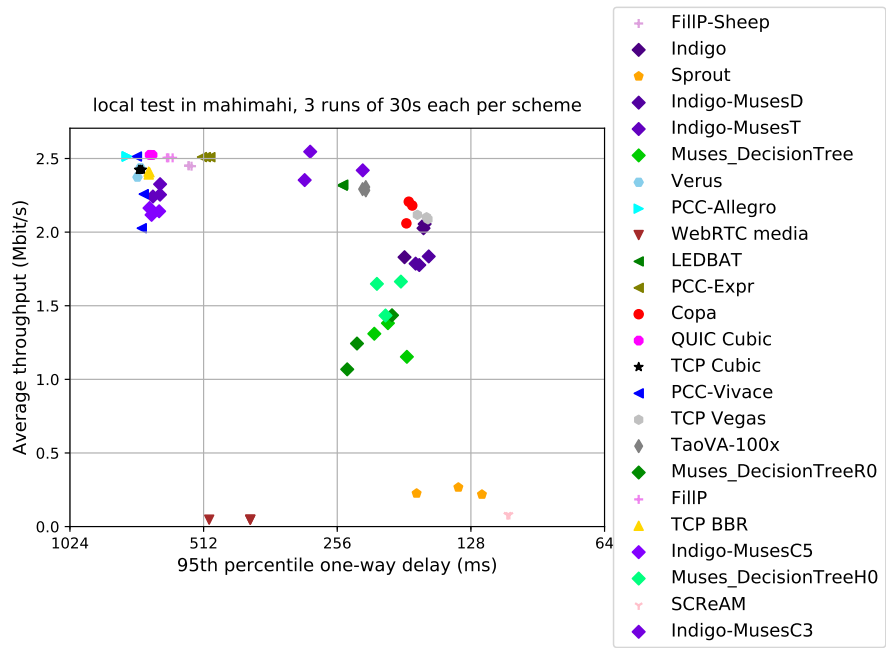
Git summary:

```
branch: muses @ de42328552b3776a75a932a94dfafd722537b0ec
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 387225f7b5f61ddbe92d708a8869ffbb84eb3200
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
  M src/ScreamClient
  M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
```

third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

local test in mahimahi, 3 runs of 30s each per scheme
 (mean of all runs by scheme)





scheme	# runs	mean avg tput (Mbit/s)	mean 95th-%ile delay (ms)	mean loss rate (%)
		flow 1	flow 1	flow 1
TCP BBR	3	2.40	679.81	2.31
Copa	3	2.15	176.34	0.40
TCP Cubic	3	2.42	710.27	3.07
FillP	3	2.50	611.69	17.21
FillP-Sheep	3	2.45	550.57	9.67
Indigo	3	1.97	168.98	0.43
Indigo-MusesC3	3	2.44	273.98	1.09
Indigo-MusesC5	3	2.14	664.38	23.71
Indigo-MusesD	3	1.80	165.71	0.31
Indigo-MusesT	3	2.27	649.79	9.90
LEDBAT	3	2.32	248.62	0.70
Muses_DecisionTree	3	1.28	195.49	0.15
Muses_DecisionTreeH0	3	1.58	197.26	0.48
Muses_DecisionTreeR0	3	1.25	222.30	0.21
PCC-Allegro	3	2.51	762.56	86.61
PCC-Expr	3	2.51	505.61	48.99
QUIC Cubic	3	2.52	672.58	3.19
SCReAM	3	0.08	105.50	0.25
Sprout	3	0.24	142.37	0.26
TaoVA-100x	3	2.29	222.01	1.20
TCP Vegas	3	2.10	163.32	0.49
Verus	3	2.41	714.42	9.04
PCC-Vivace	3	2.27	709.25	19.34
WebRTC media	3	0.05	433.79	0.00

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Run 1: Statistics of TCP BBR

Start at: 2019-08-26 18:54:01

End at: 2019-08-26 18:54:31

Below is generated by plot.py at 2019-08-26 19:23:39

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 677.952 ms

Loss rate: 2.35%

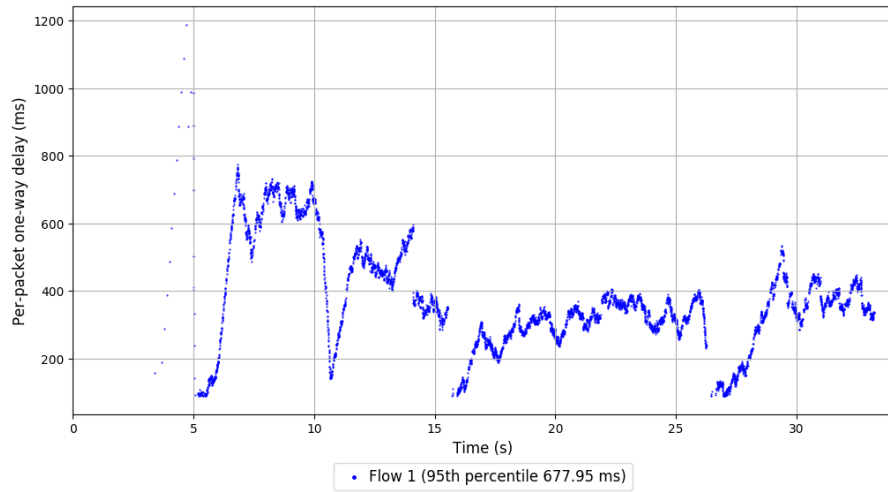
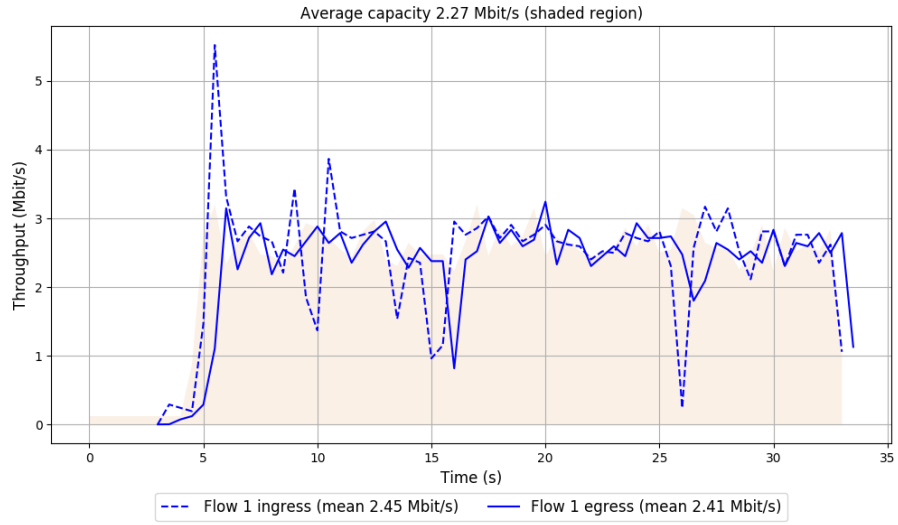
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 677.952 ms

Loss rate: 2.35%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2019-08-26 19:08:08

End at: 2019-08-26 19:08:38

Below is generated by plot.py at 2019-08-26 19:23:39

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 680.924 ms

Loss rate: 2.38%

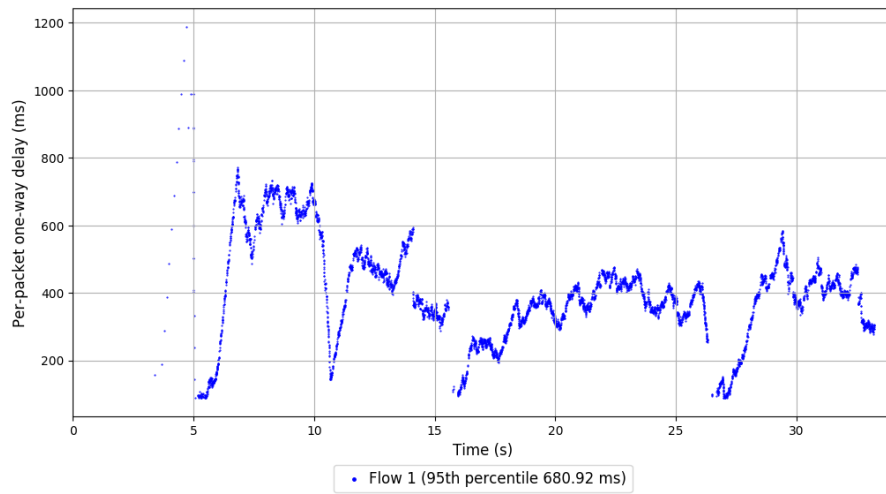
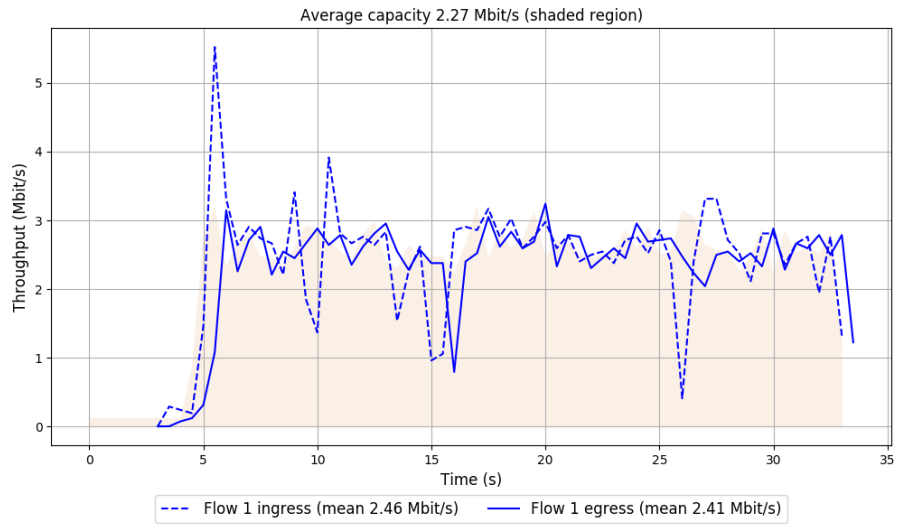
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 680.924 ms

Loss rate: 2.38%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2019-08-26 19:22:16

End at: 2019-08-26 19:22:46

Below is generated by plot.py at 2019-08-26 19:23:39

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.39 Mbit/s (105.3% utilization)

95th percentile per-packet one-way delay: 680.549 ms

Loss rate: 2.19%

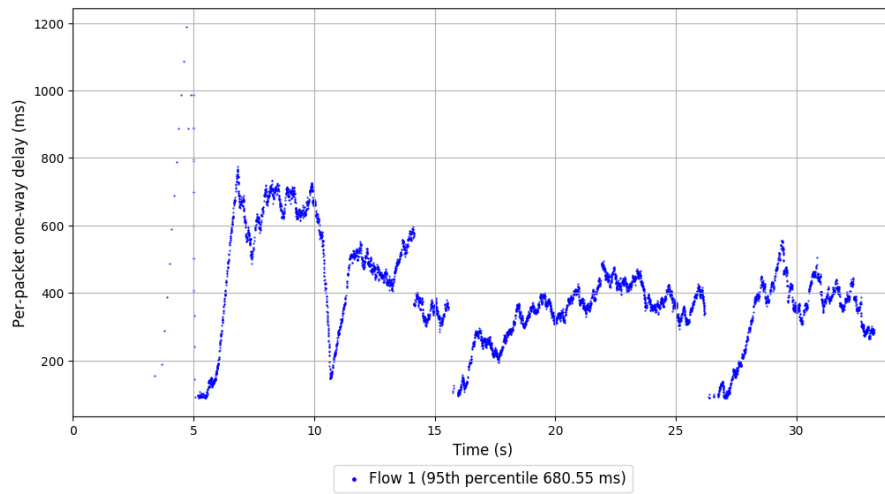
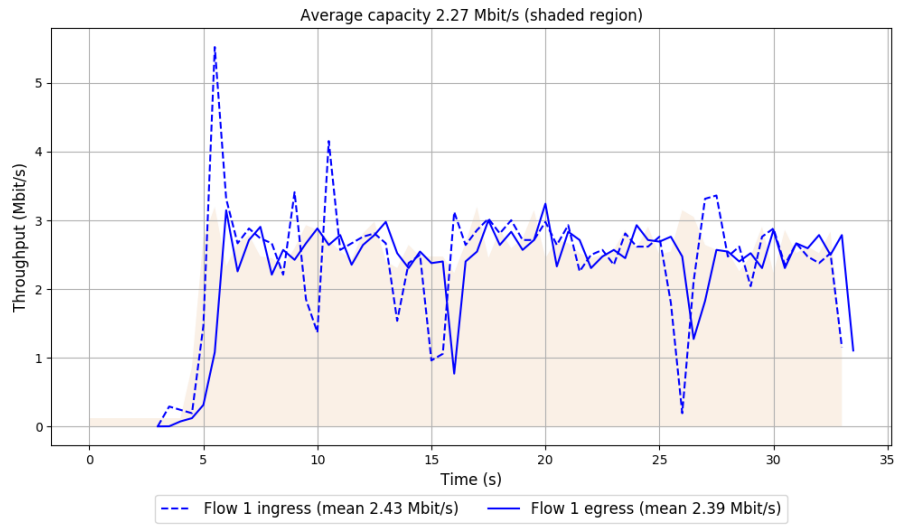
-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 680.549 ms

Loss rate: 2.19%

Run 3: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-08-26 18:50:29

End at: 2019-08-26 18:50:59

Below is generated by plot.py at 2019-08-26 19:23:40

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.21 Mbit/s (97.1% utilization)

95th percentile per-packet one-way delay: 176.667 ms

Loss rate: 0.49%

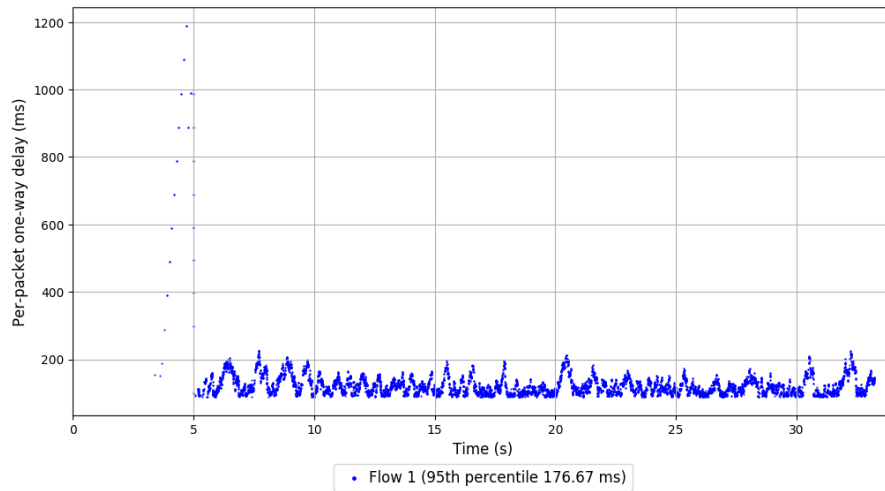
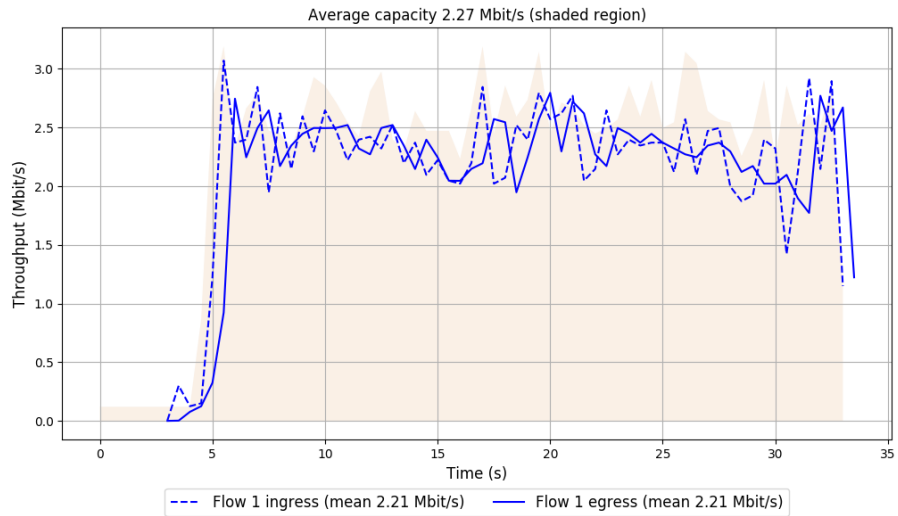
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 176.667 ms

Loss rate: 0.49%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-08-26 19:04:36

End at: 2019-08-26 19:05:06

Below is generated by plot.py at 2019-08-26 19:23:40

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.06 Mbit/s (90.6% utilization)

95th percentile per-packet one-way delay: 178.851 ms

Loss rate: 0.30%

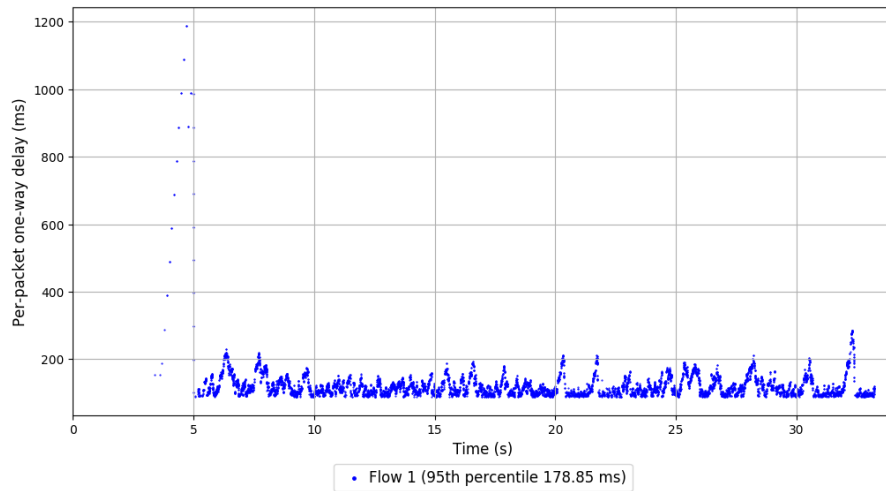
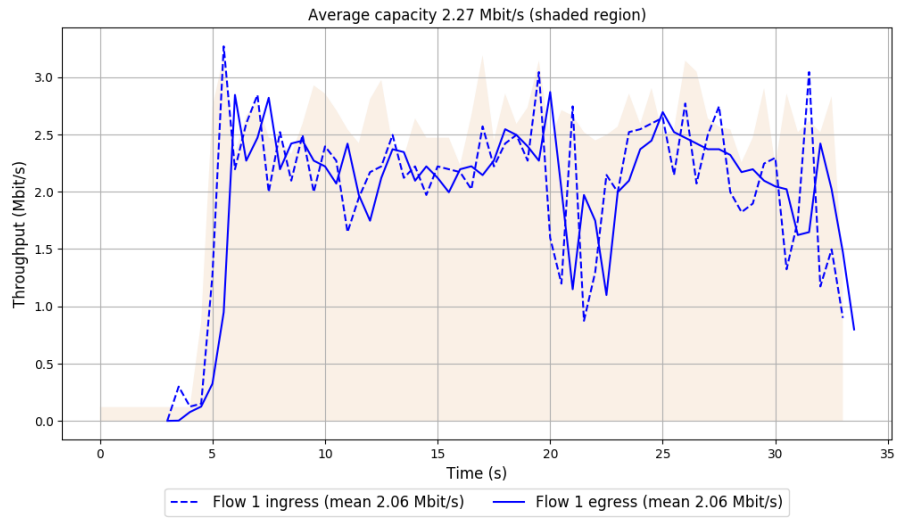
-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 178.851 ms

Loss rate: 0.30%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2019-08-26 19:18:44

End at: 2019-08-26 19:19:14

Below is generated by plot.py at 2019-08-26 19:23:41

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.18 Mbit/s (96.0% utilization)

95th percentile per-packet one-way delay: 173.501 ms

Loss rate: 0.40%

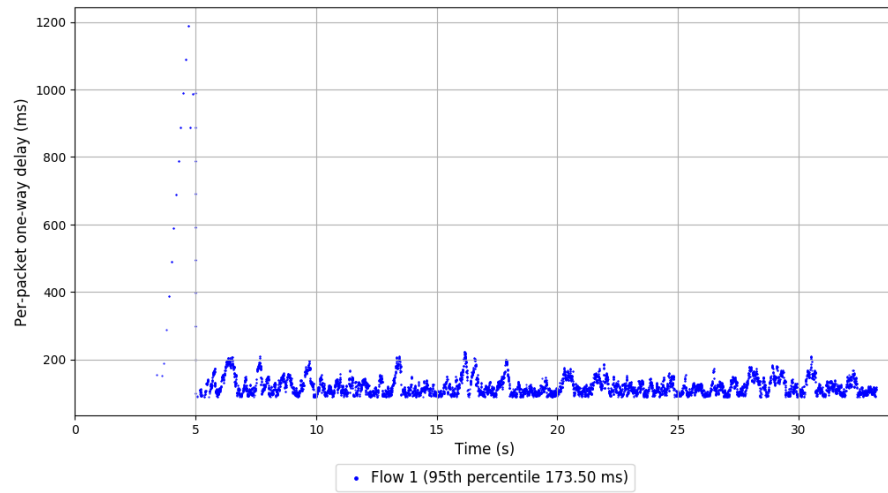
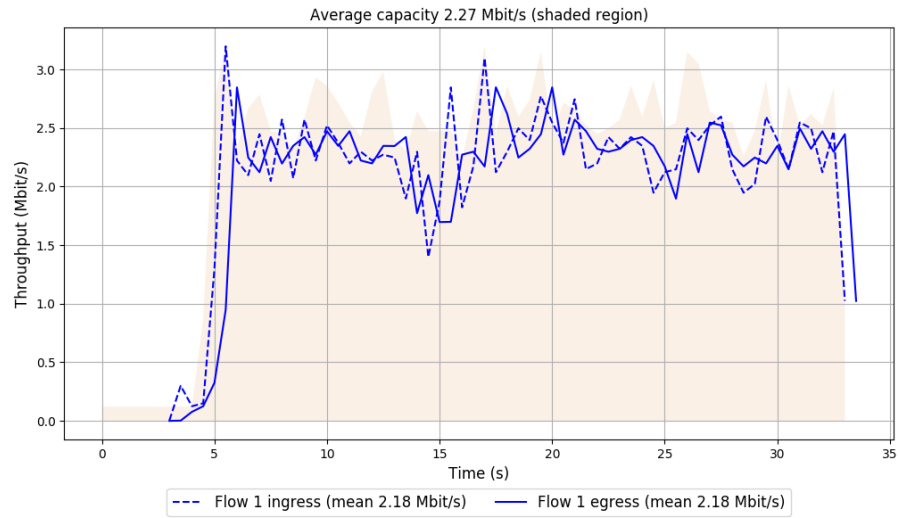
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 173.501 ms

Loss rate: 0.40%

Run 3: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-08-26 18:45:47

End at: 2019-08-26 18:46:17

Below is generated by plot.py at 2019-08-26 19:23:41

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.42 Mbit/s (106.7% utilization)

95th percentile per-packet one-way delay: 703.947 ms

Loss rate: 2.96%

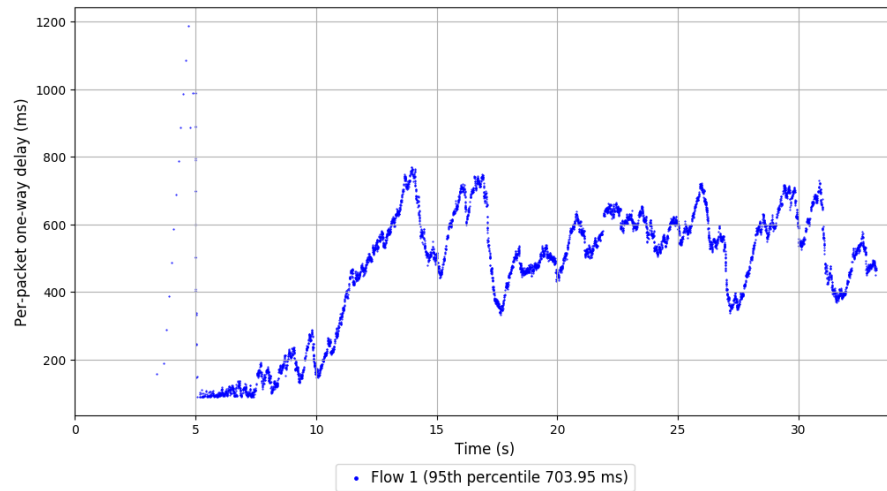
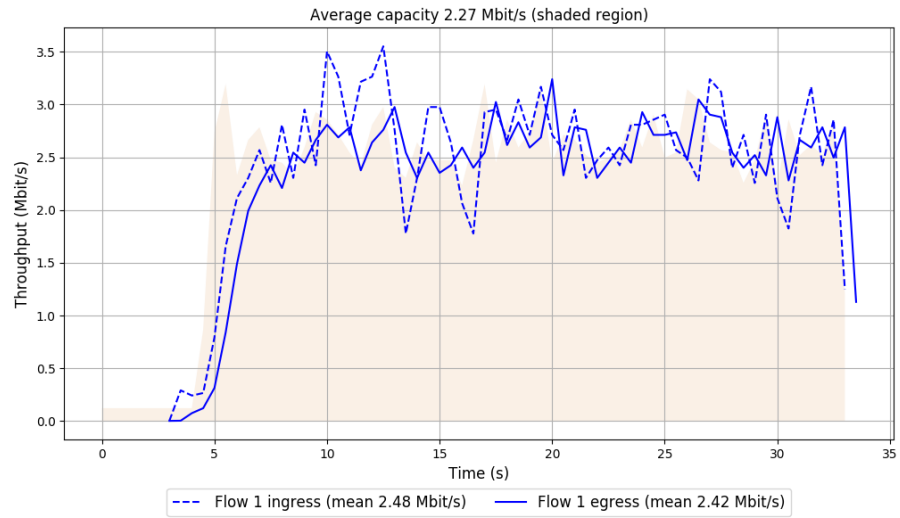
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 703.947 ms

Loss rate: 2.96%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2019-08-26 18:59:54

End at: 2019-08-26 19:00:24

Below is generated by plot.py at 2019-08-26 19:23:41

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.42 Mbit/s (106.7% utilization)

95th percentile per-packet one-way delay: 710.599 ms

Loss rate: 3.21%

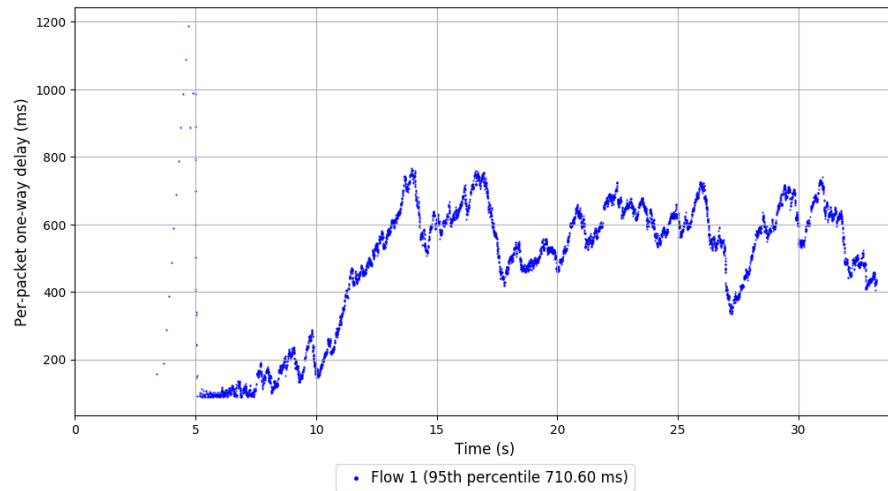
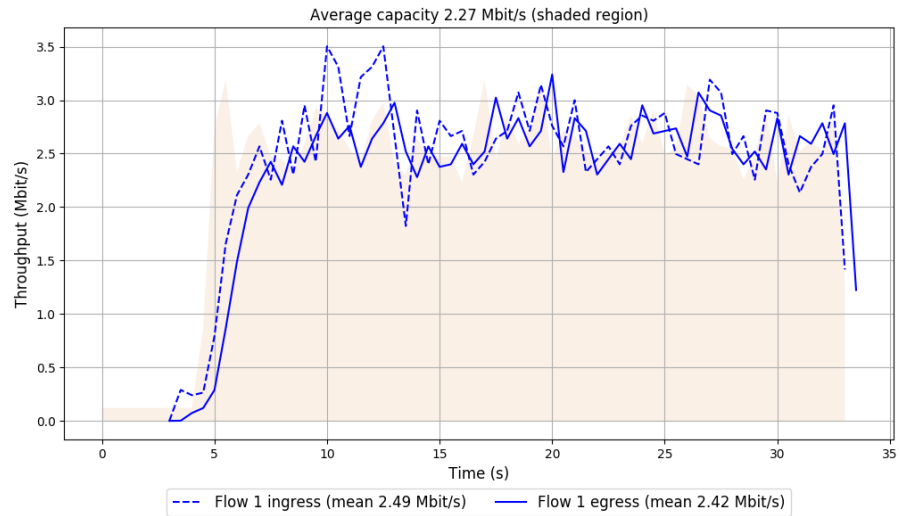
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 710.599 ms

Loss rate: 3.21%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2019-08-26 19:14:01

End at: 2019-08-26 19:14:31

Below is generated by plot.py at 2019-08-26 19:23:47

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.42 Mbit/s (106.7% utilization)

95th percentile per-packet one-way delay: 716.264 ms

Loss rate: 3.04%

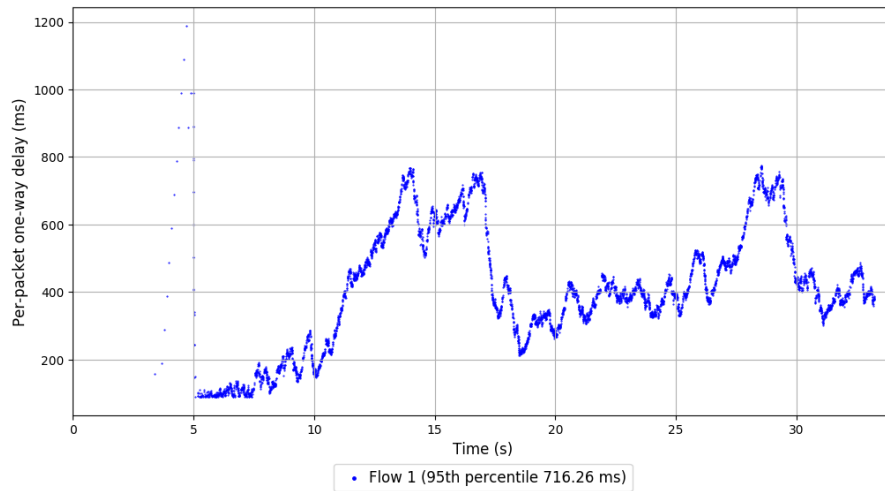
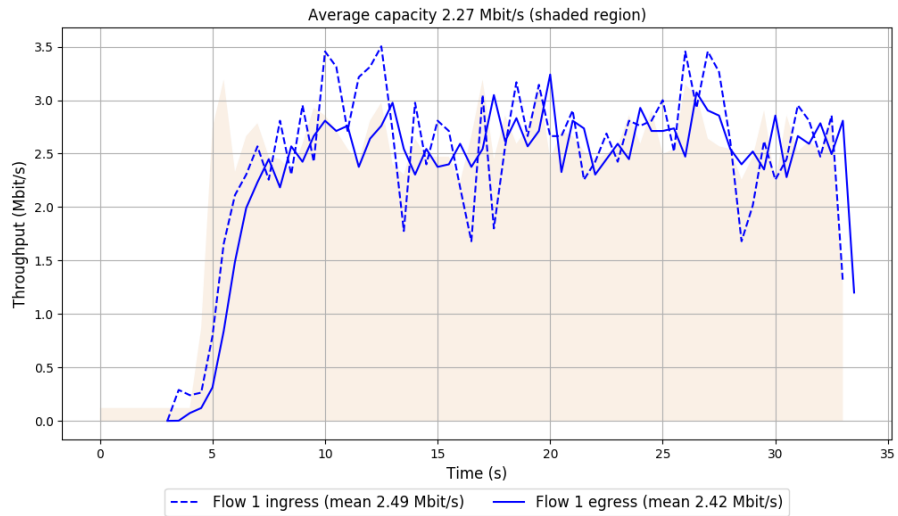
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 716.264 ms

Loss rate: 3.04%

Run 3: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2019-08-26 18:48:43

End at: 2019-08-26 18:49:13

Below is generated by plot.py at 2019-08-26 19:23:50

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 614.790 ms

Loss rate: 17.59%

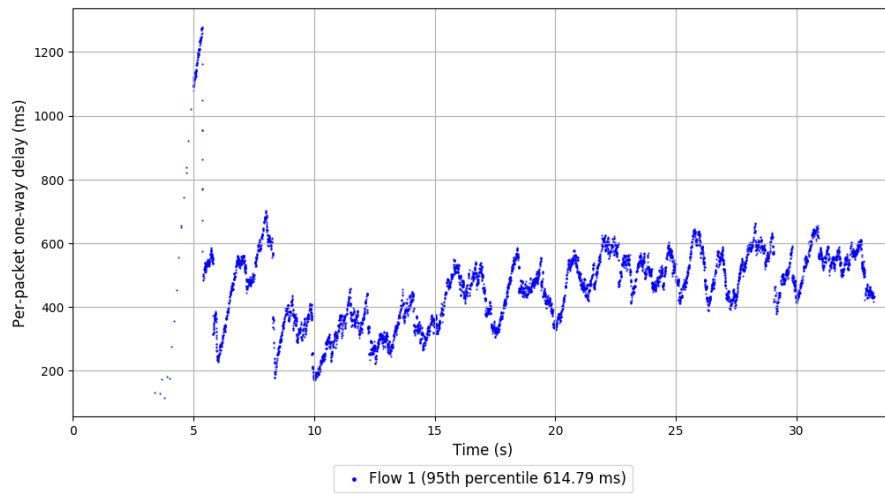
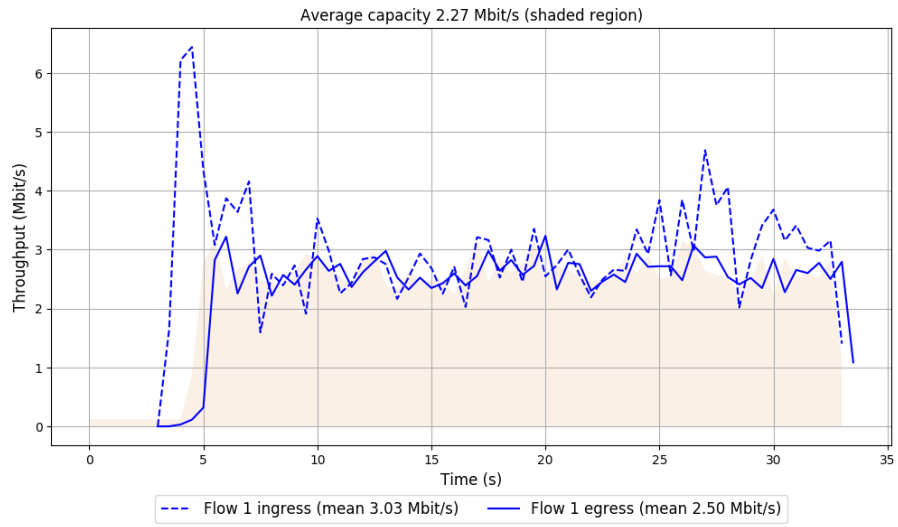
-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 614.790 ms

Loss rate: 17.59%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2019-08-26 19:02:51

End at: 2019-08-26 19:03:21

Below is generated by plot.py at 2019-08-26 19:23:50

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 601.210 ms

Loss rate: 16.09%

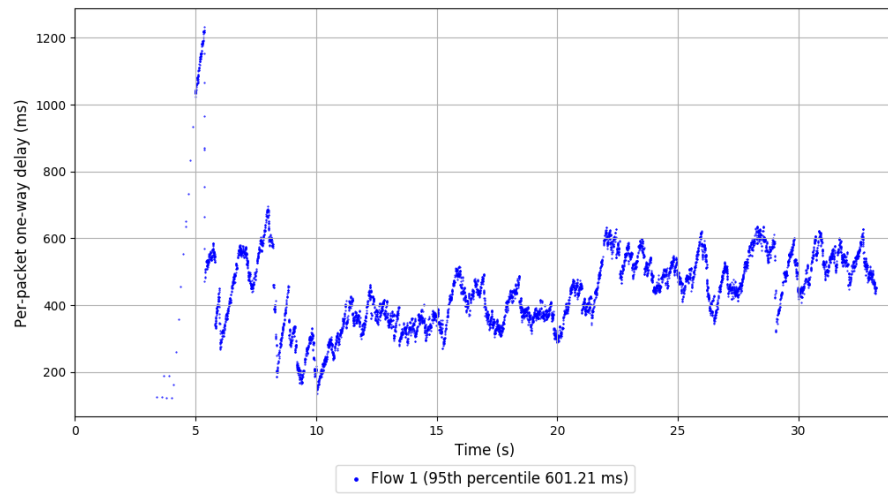
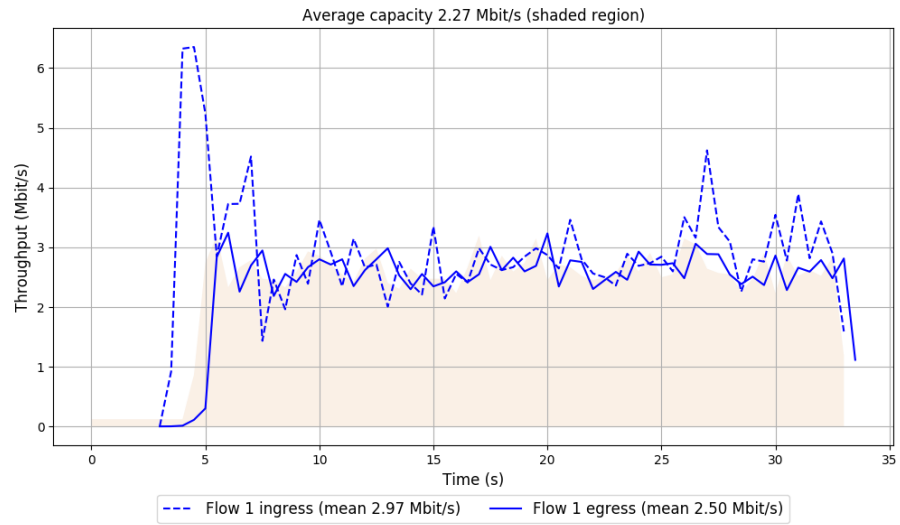
-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 601.210 ms

Loss rate: 16.09%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2019-08-26 19:16:58

End at: 2019-08-26 19:17:28

Below is generated by plot.py at 2019-08-26 19:23:50

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 619.074 ms

Loss rate: 17.94%

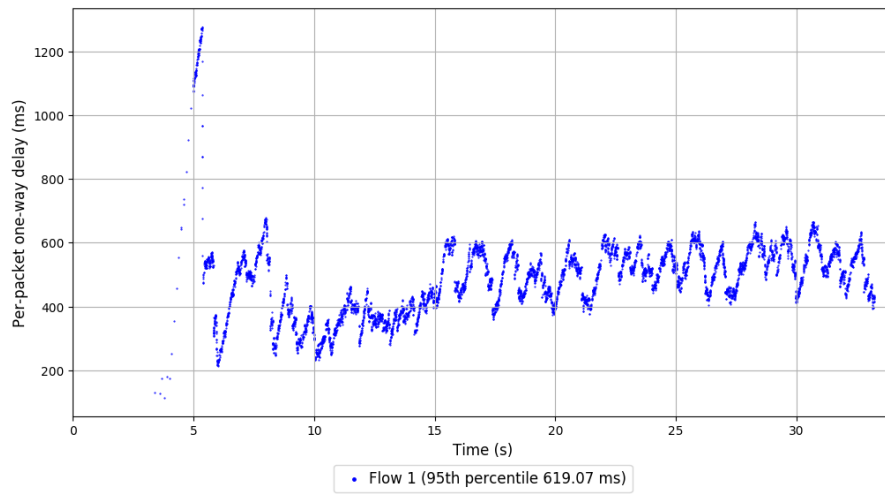
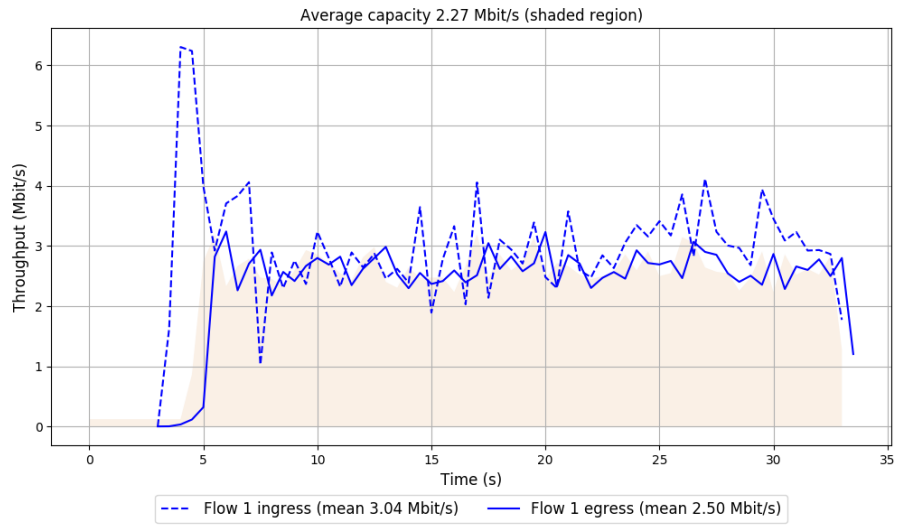
-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 619.074 ms

Loss rate: 17.94%

Run 3: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2019-08-26 18:42:51

End at: 2019-08-26 18:43:21

Below is generated by plot.py at 2019-08-26 19:23:50

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 545.098 ms

Loss rate: 9.47%

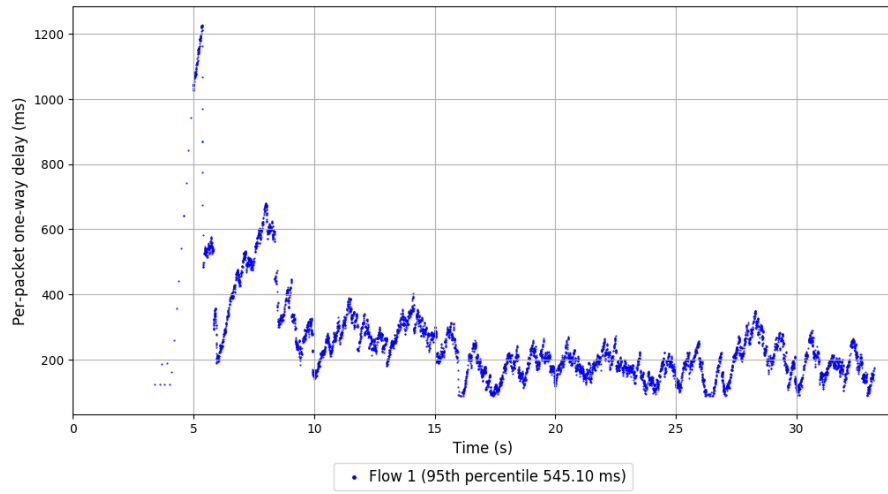
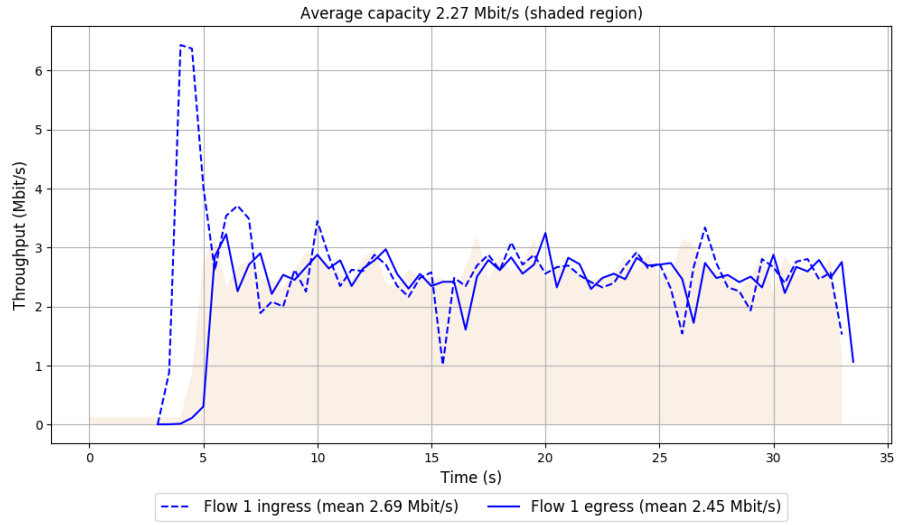
-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 545.098 ms

Loss rate: 9.47%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2019-08-26 18:56:58

End at: 2019-08-26 18:57:28

Below is generated by plot.py at 2019-08-26 19:23:51

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.45 Mbit/s (107.9% utilization)

95th percentile per-packet one-way delay: 553.595 ms

Loss rate: 9.56%

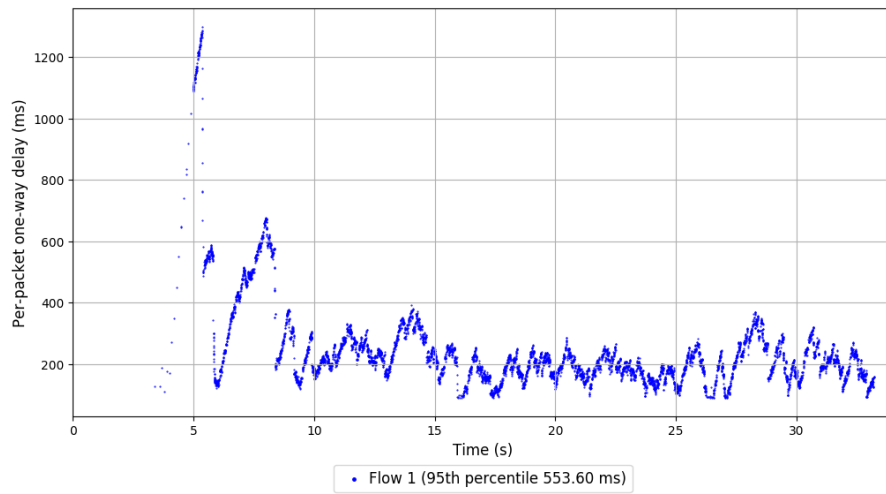
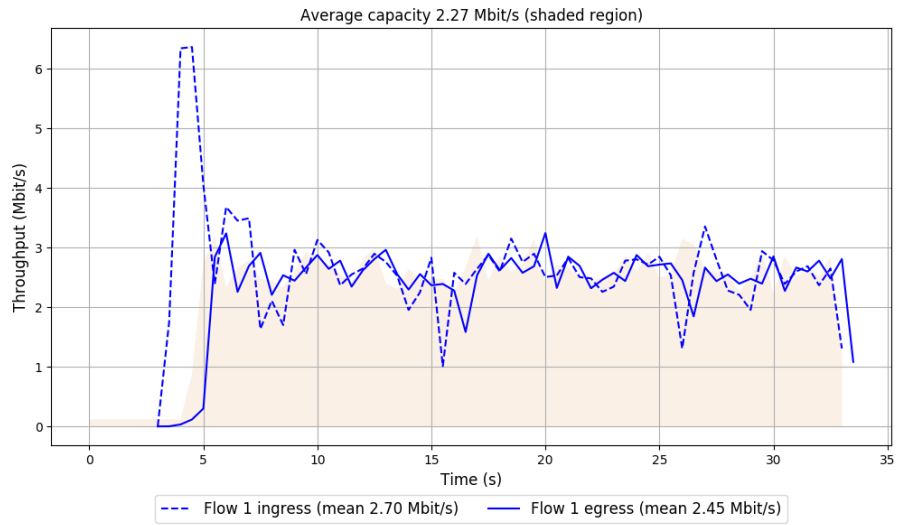
-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 553.595 ms

Loss rate: 9.56%

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-08-26 19:11:05

End at: 2019-08-26 19:11:35

Below is generated by plot.py at 2019-08-26 19:23:51

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.45 Mbit/s (107.9% utilization)

95th percentile per-packet one-way delay: 553.022 ms

Loss rate: 9.98%

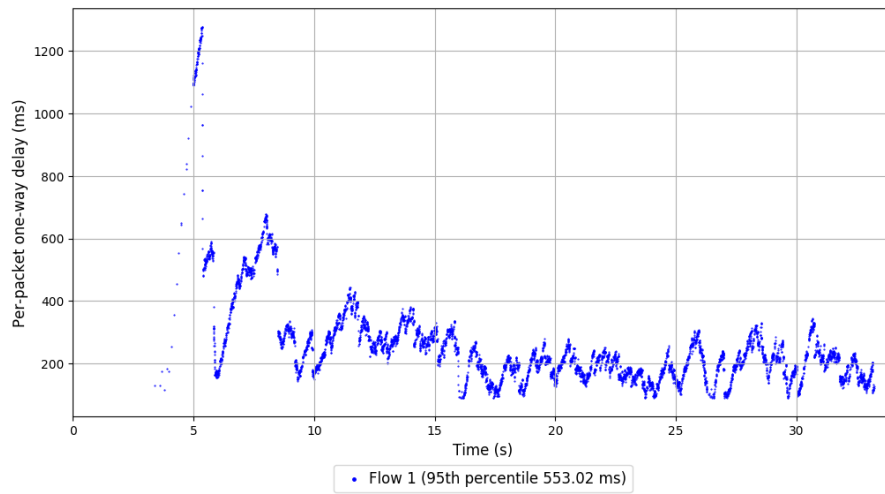
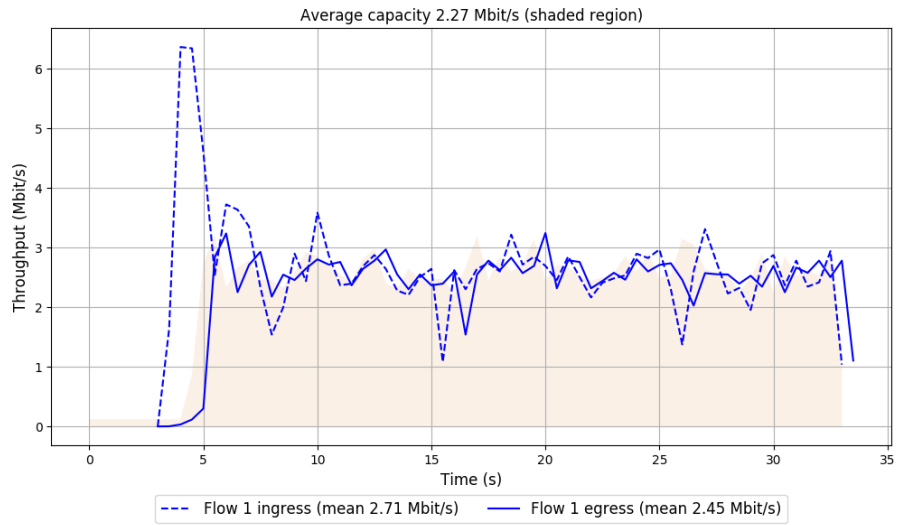
-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 553.022 ms

Loss rate: 9.98%

Run 3: Report of FillP-Sheep — Data Link



Run 1: Statistics of Indigo

Start at: 2019-08-26 18:51:40

End at: 2019-08-26 18:52:10

Below is generated by plot.py at 2019-08-26 19:23:51

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.83 Mbit/s (80.5% utilization)

95th percentile per-packet one-way delay: 180.588 ms

Loss rate: 0.38%

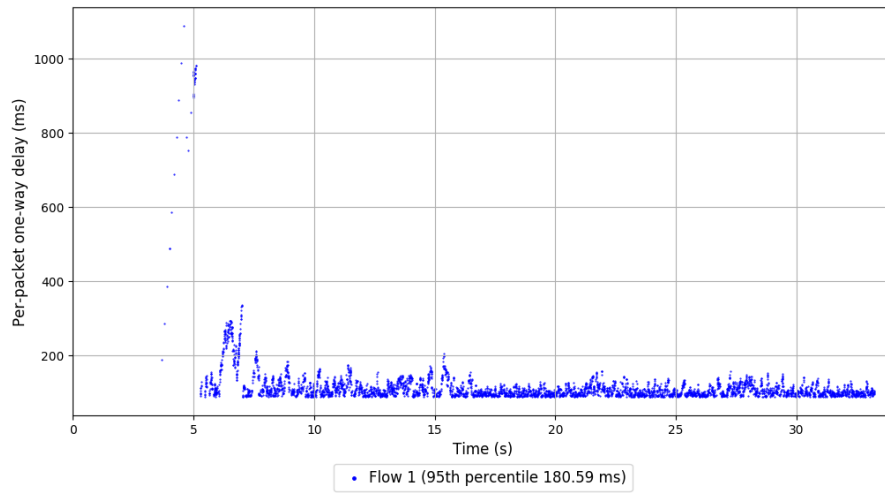
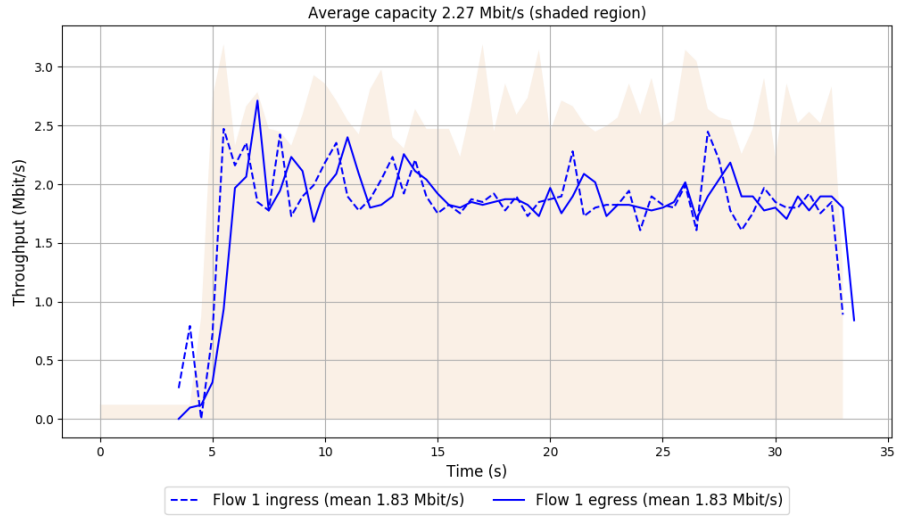
-- Flow 1:

Average throughput: 1.83 Mbit/s

95th percentile per-packet one-way delay: 180.588 ms

Loss rate: 0.38%

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2019-08-26 19:05:47

End at: 2019-08-26 19:06:17

Below is generated by plot.py at 2019-08-26 19:23:55

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.05 Mbit/s (90.4% utilization)

95th percentile per-packet one-way delay: 162.693 ms

Loss rate: 0.42%

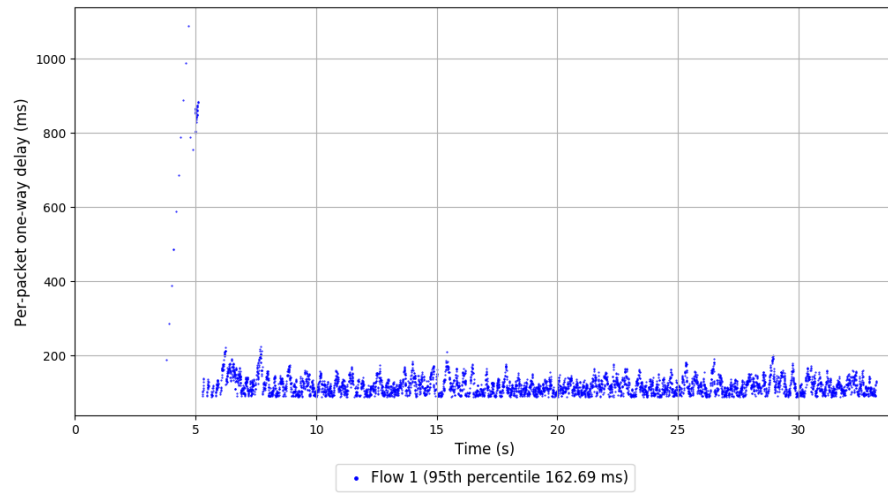
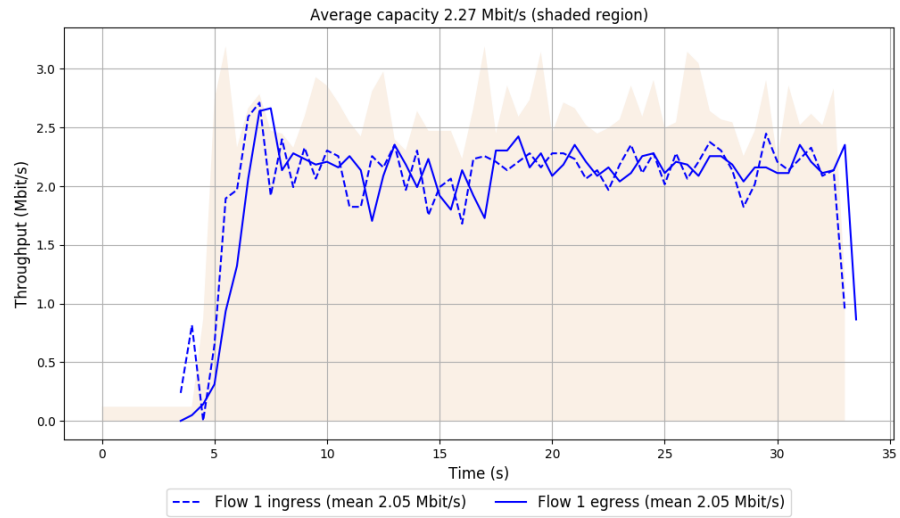
-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 162.693 ms

Loss rate: 0.42%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2019-08-26 19:19:55

End at: 2019-08-26 19:20:25

Below is generated by plot.py at 2019-08-26 19:23:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.03 Mbit/s (89.2% utilization)

95th percentile per-packet one-way delay: 163.652 ms

Loss rate: 0.48%

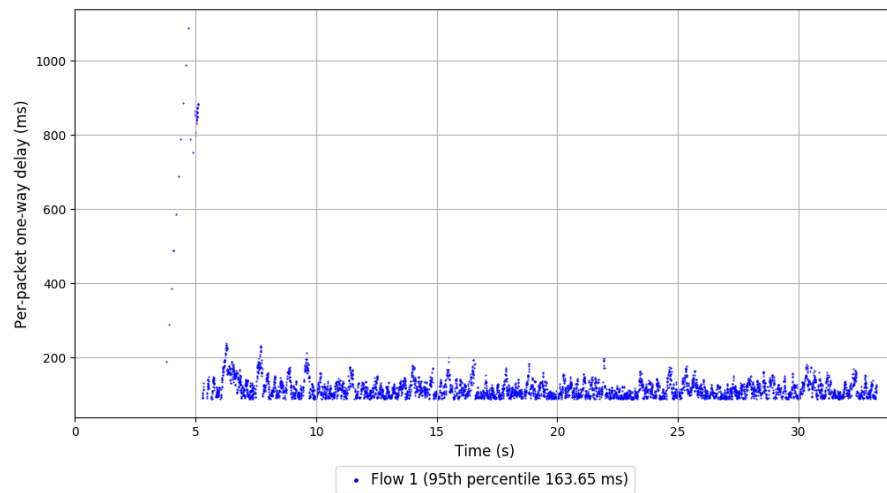
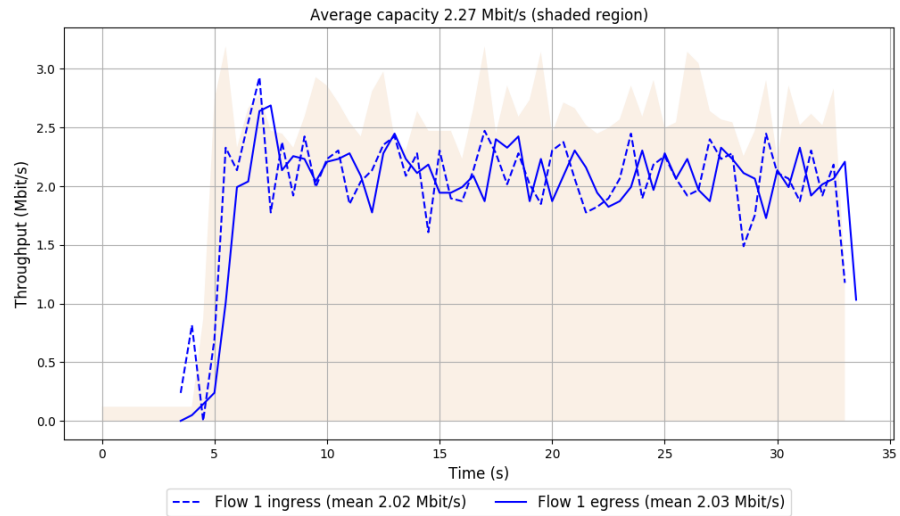
-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 163.652 ms

Loss rate: 0.48%

Run 3: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

Start at: 2019-08-26 18:44:37

End at: 2019-08-26 18:45:07

Below is generated by plot.py at 2019-08-26 19:23:59

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.55 Mbit/s (112.1% utilization)

95th percentile per-packet one-way delay: 294.544 ms

Loss rate: 1.01%

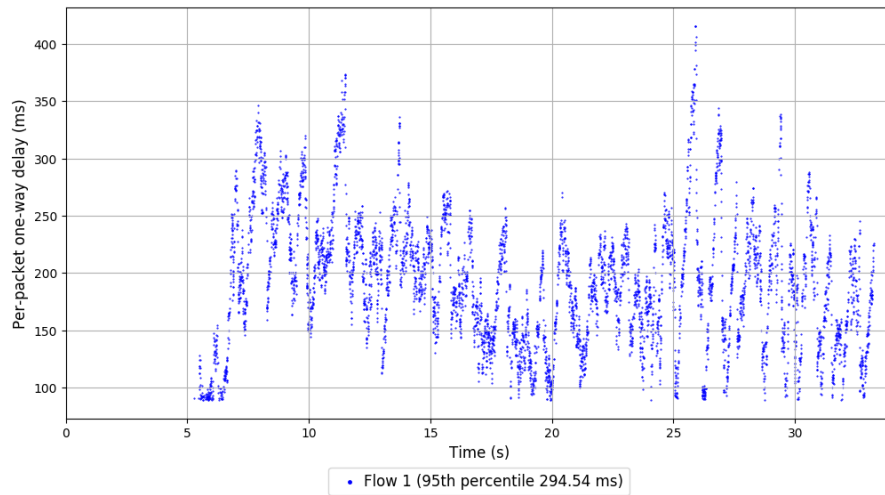
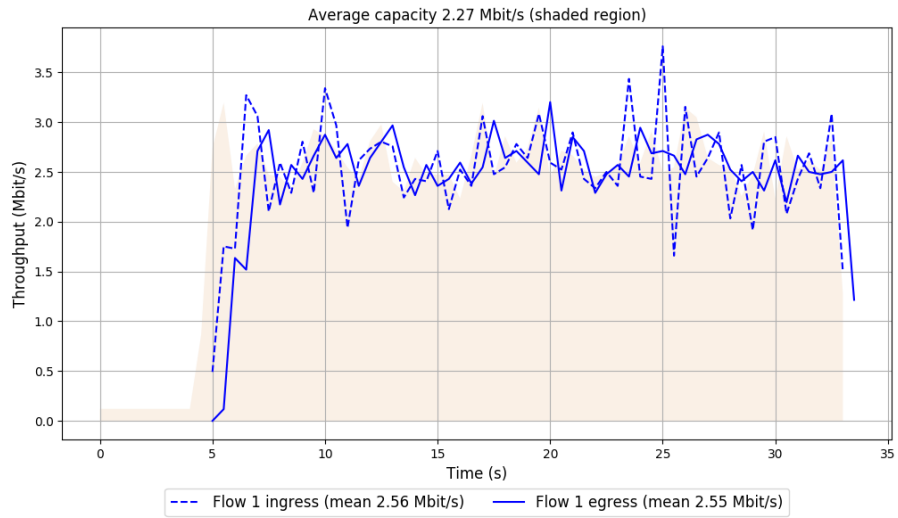
-- Flow 1:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 294.544 ms

Loss rate: 1.01%

Run 1: Report of Indigo-MusesC3 — Data Link



Run 2: Statistics of Indigo-MusesC3

Start at: 2019-08-26 18:58:44

End at: 2019-08-26 18:59:14

Below is generated by plot.py at 2019-08-26 19:24:00

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.35 Mbit/s (103.6% utilization)

95th percentile per-packet one-way delay: 303.108 ms

Loss rate: 1.79%

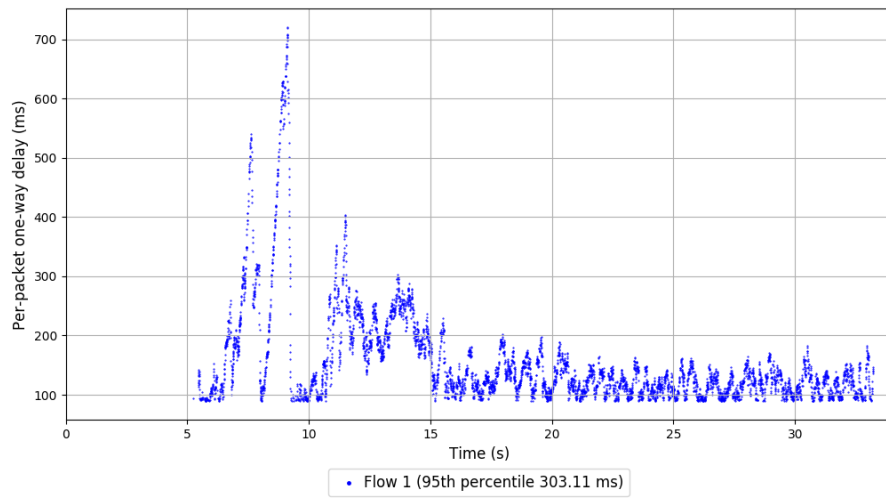
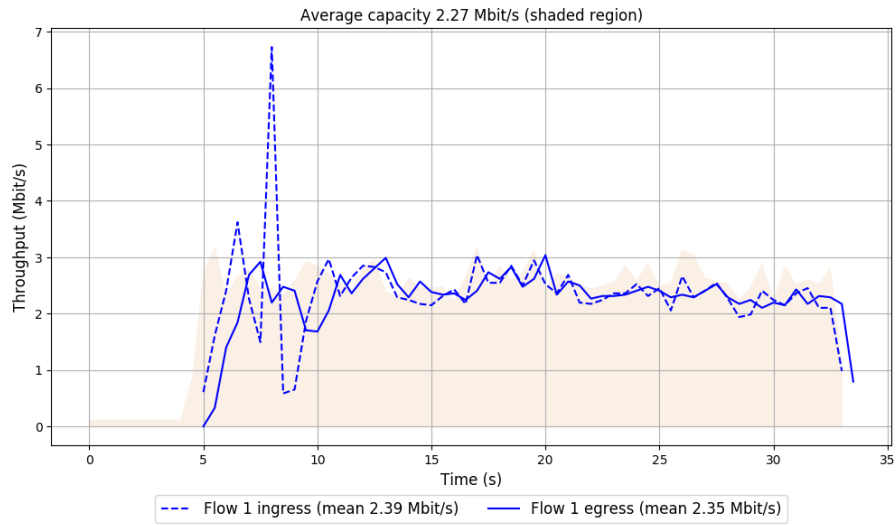
-- Flow 1:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 303.108 ms

Loss rate: 1.79%

Run 2: Report of Indigo-MusesC3 — Data Link



Run 3: Statistics of Indigo-MusesC3

Start at: 2019-08-26 19:12:51

End at: 2019-08-26 19:13:21

Below is generated by plot.py at 2019-08-26 19:24:00

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.42 Mbit/s (106.5% utilization)

95th percentile per-packet one-way delay: 224.297 ms

Loss rate: 0.48%

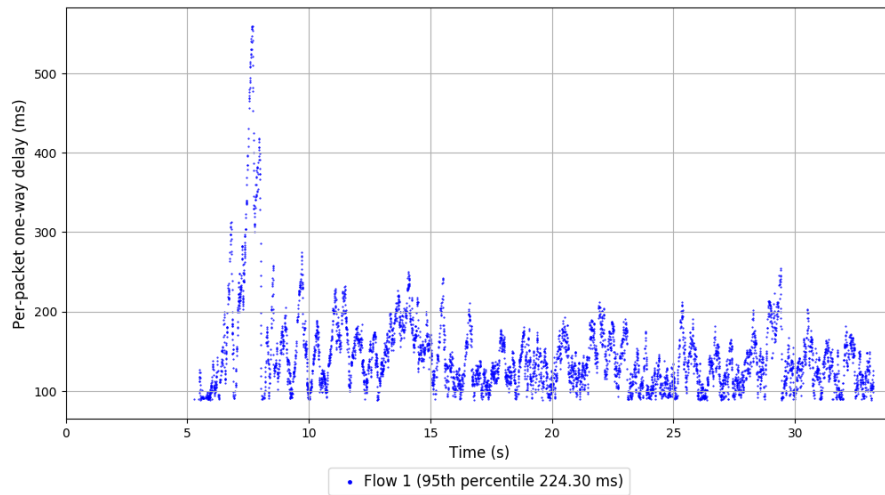
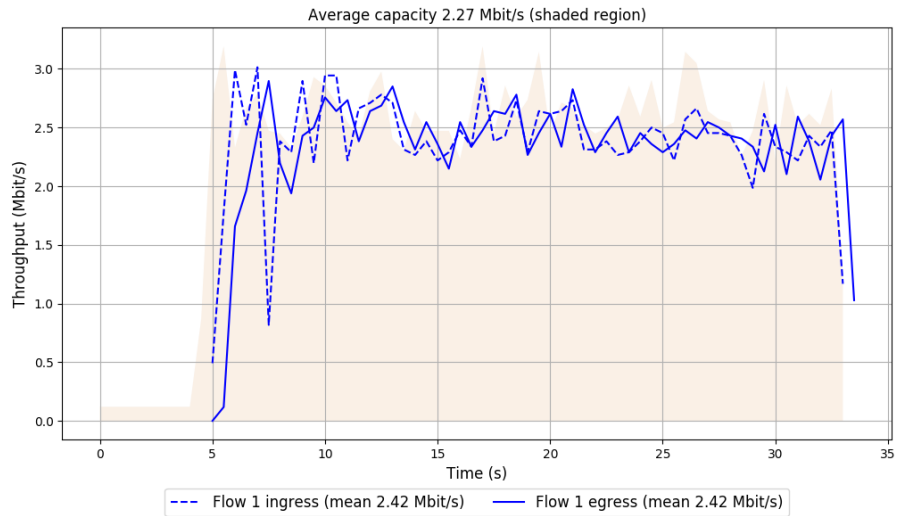
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 224.297 ms

Loss rate: 0.48%

Run 3: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

Start at: 2019-08-26 18:44:01

End at: 2019-08-26 18:44:31

Below is generated by plot.py at 2019-08-26 19:24:01

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.16 Mbit/s (95.2% utilization)

95th percentile per-packet one-way delay: 677.797 ms

Loss rate: 25.97%

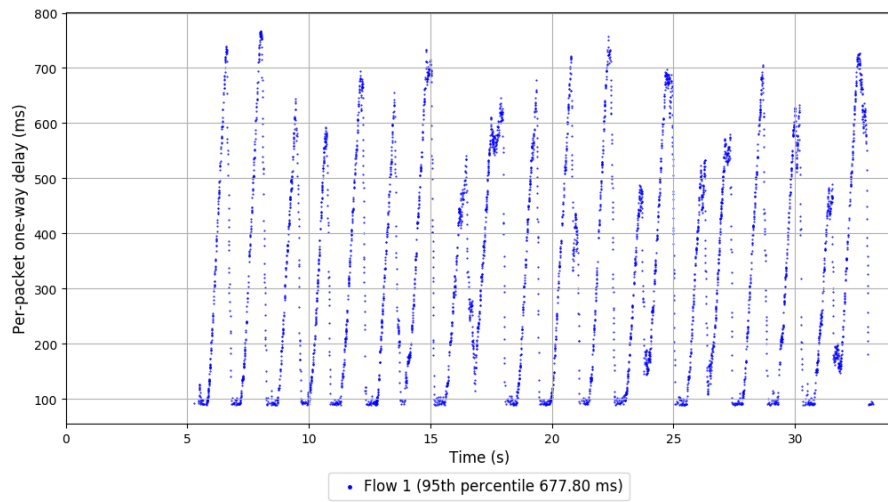
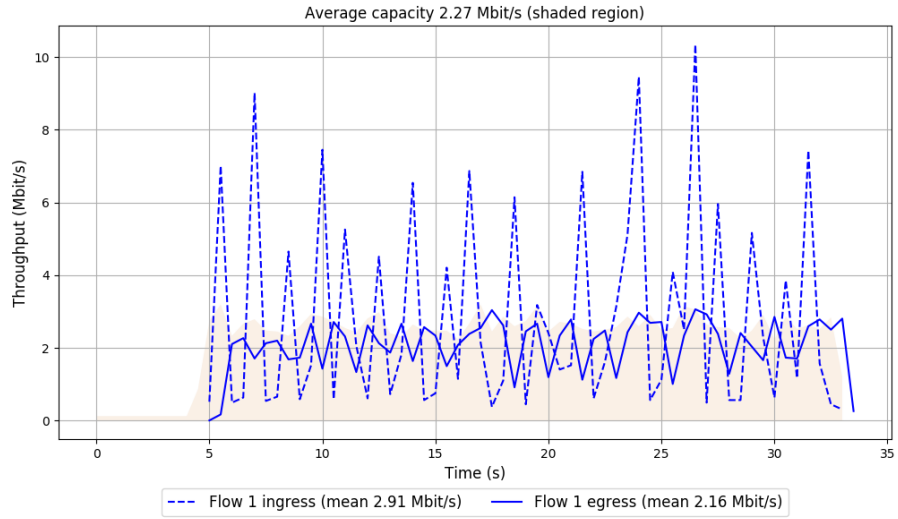
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 677.797 ms

Loss rate: 25.97%

Run 1: Report of Indigo-MusesC5 — Data Link



Run 2: Statistics of Indigo-MusesC5

Start at: 2019-08-26 18:58:09

End at: 2019-08-26 18:58:39

Below is generated by plot.py at 2019-08-26 19:24:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 670.573 ms

Loss rate: 22.96%

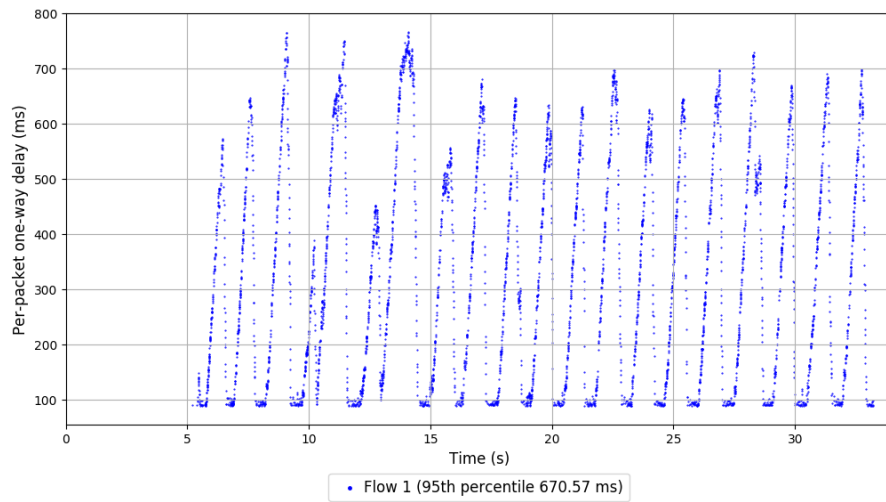
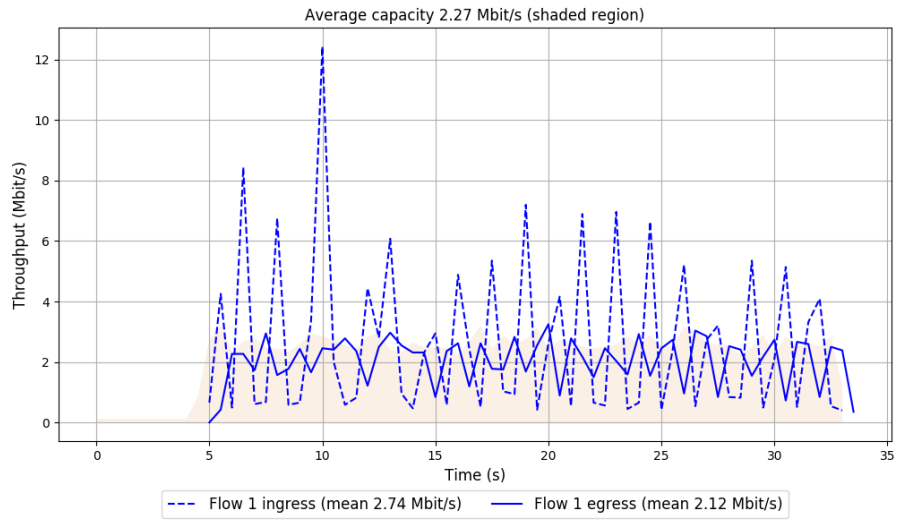
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 670.573 ms

Loss rate: 22.96%

Run 2: Report of Indigo-MusesC5 — Data Link



Run 3: Statistics of Indigo-MusesC5

Start at: 2019-08-26 19:12:16

End at: 2019-08-26 19:12:46

Below is generated by plot.py at 2019-08-26 19:24:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.14 Mbit/s (94.3% utilization)

95th percentile per-packet one-way delay: 644.769 ms

Loss rate: 22.20%

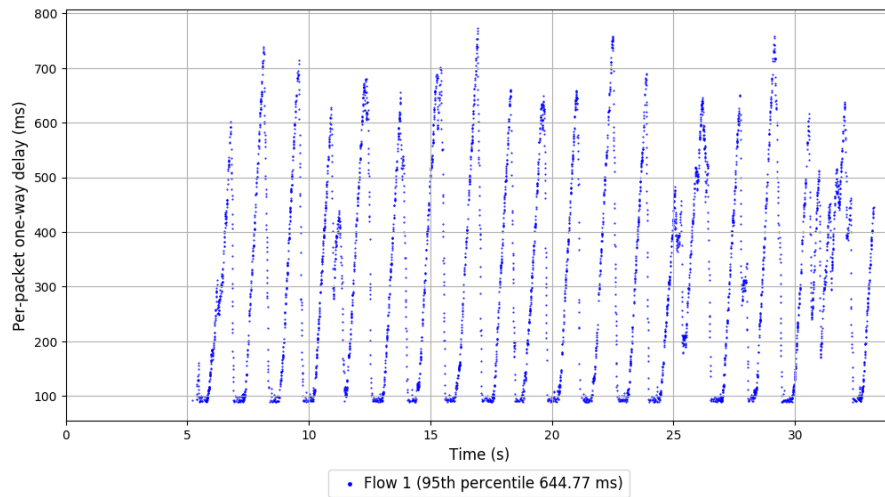
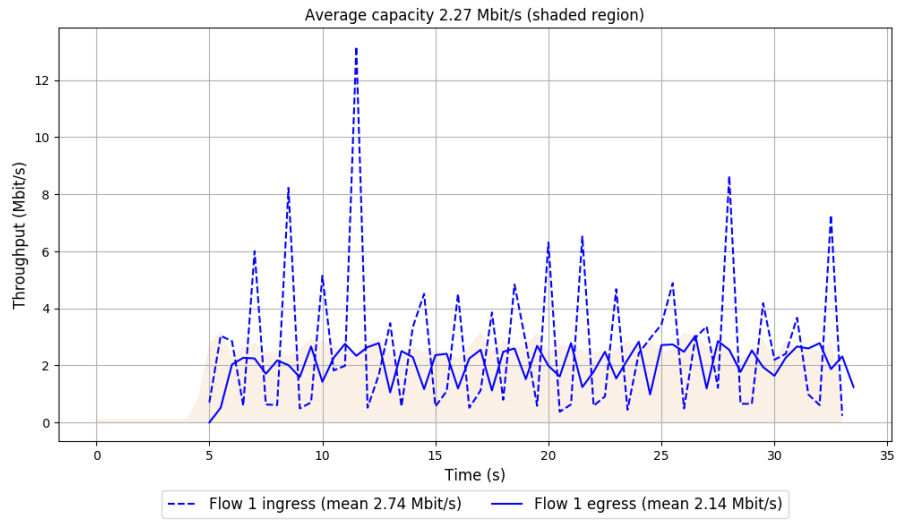
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 644.769 ms

Loss rate: 22.20%

Run 3: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

Start at: 2019-08-26 18:41:40

End at: 2019-08-26 18:42:10

Below is generated by plot.py at 2019-08-26 19:24:04

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.78 Mbit/s (78.2% utilization)

95th percentile per-packet one-way delay: 167.309 ms

Loss rate: 0.16%

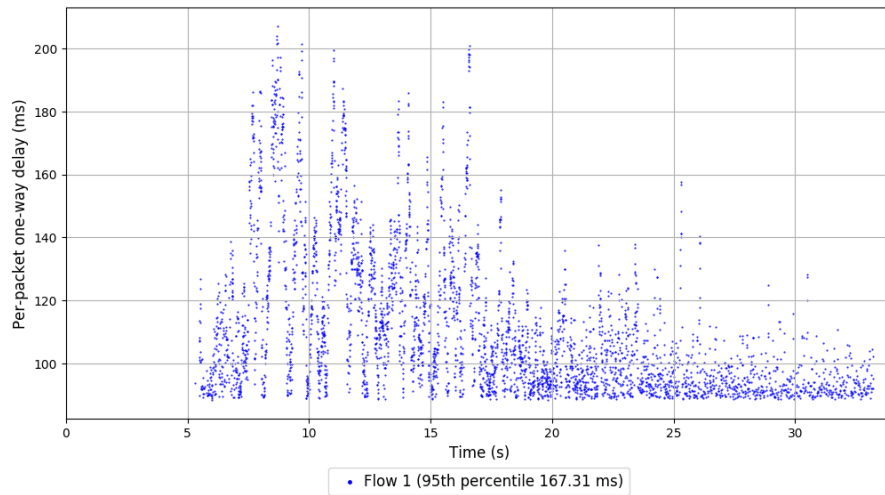
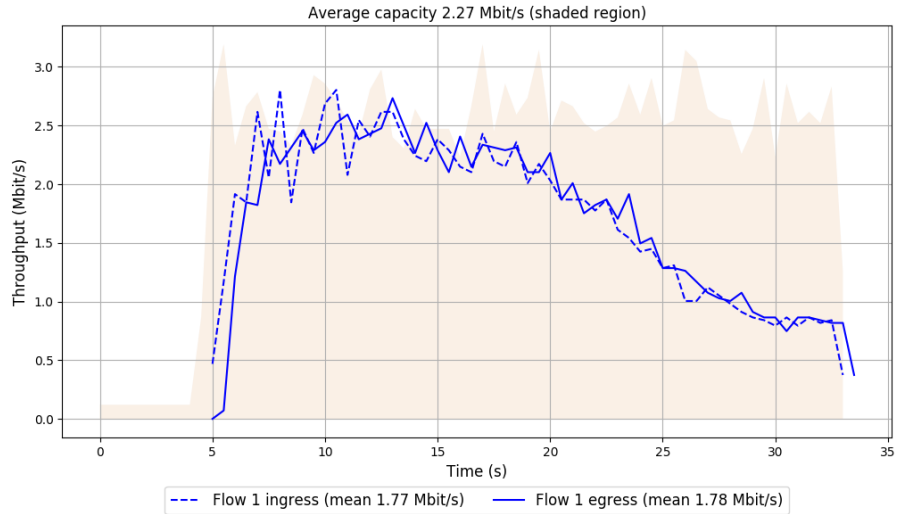
-- Flow 1:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 167.309 ms

Loss rate: 0.16%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-08-26 18:55:47

End at: 2019-08-26 18:56:17

Below is generated by plot.py at 2019-08-26 19:24:05

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.83 Mbit/s (80.8% utilization)

95th percentile per-packet one-way delay: 159.303 ms

Loss rate: 0.14%

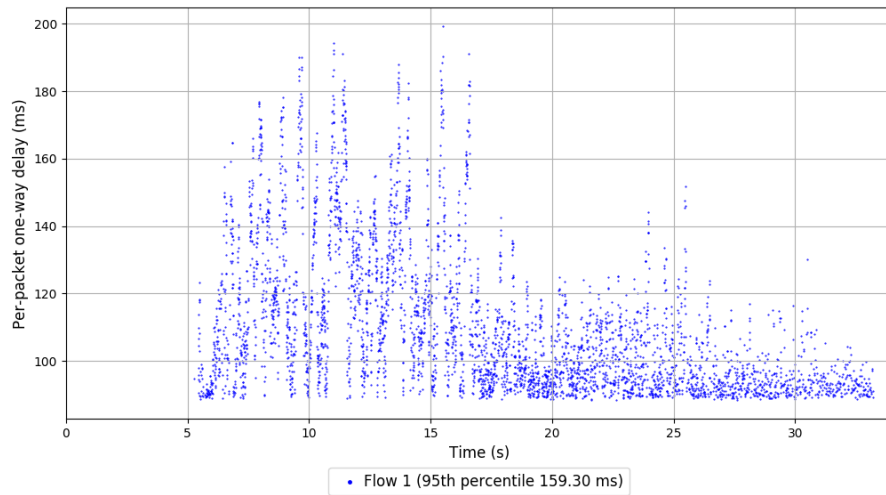
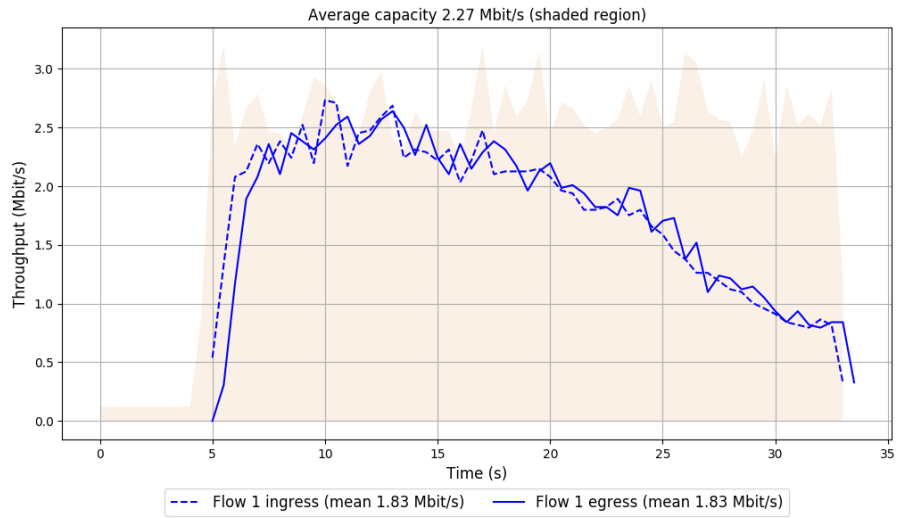
-- Flow 1:

Average throughput: 1.83 Mbit/s

95th percentile per-packet one-way delay: 159.303 ms

Loss rate: 0.14%

Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

Start at: 2019-08-26 19:09:54

End at: 2019-08-26 19:10:24

Below is generated by plot.py at 2019-08-26 19:24:08

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.79 Mbit/s (78.6% utilization)

95th percentile per-packet one-way delay: 170.510 ms

Loss rate: 0.63%

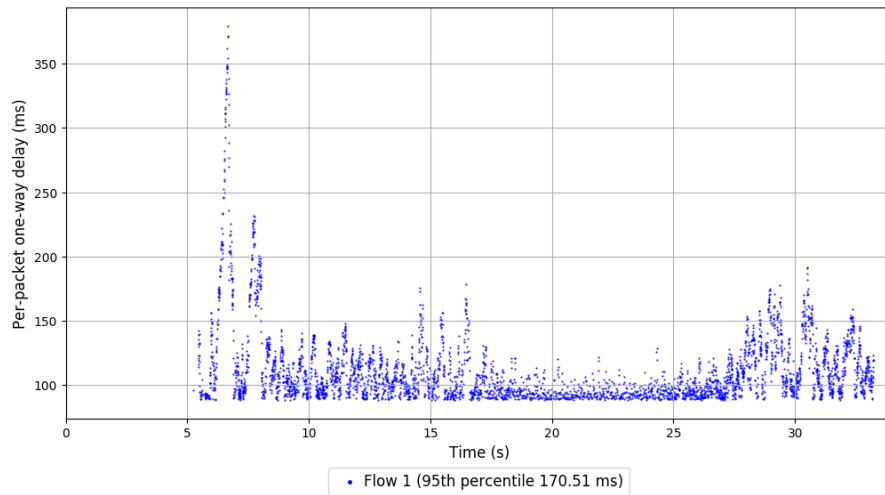
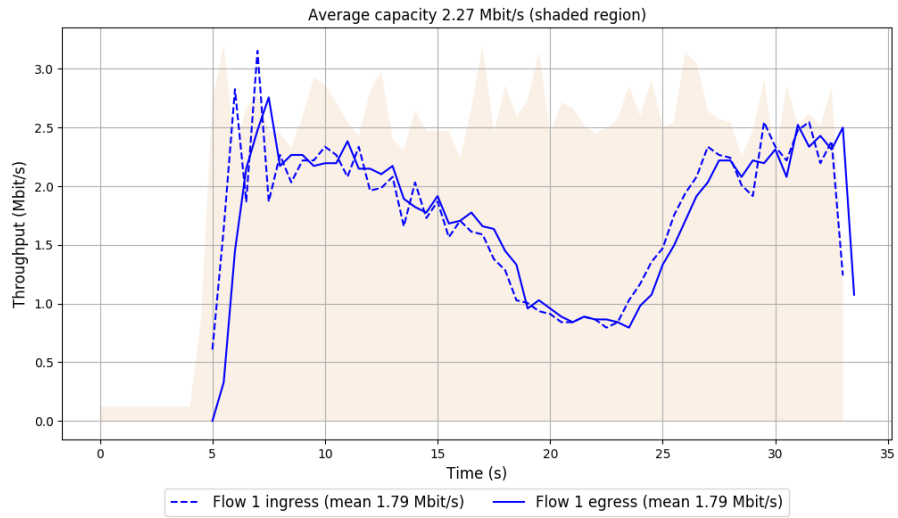
-- Flow 1:

Average throughput: 1.79 Mbit/s

95th percentile per-packet one-way delay: 170.510 ms

Loss rate: 0.63%

Run 3: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MuseST

Start at: 2019-08-26 18:49:19

End at: 2019-08-26 18:49:49

Below is generated by plot.py at 2019-08-26 19:24:11

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.25 Mbit/s (99.2% utilization)

95th percentile per-packet one-way delay: 641.889 ms

Loss rate: 12.58%

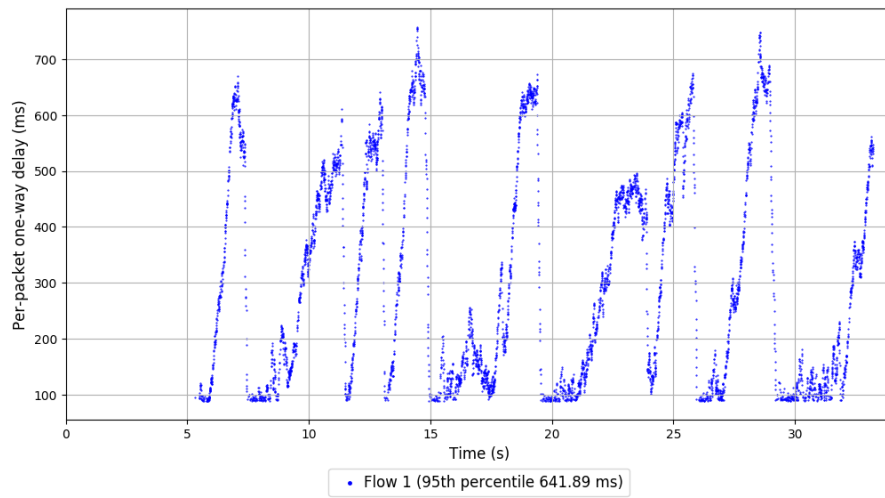
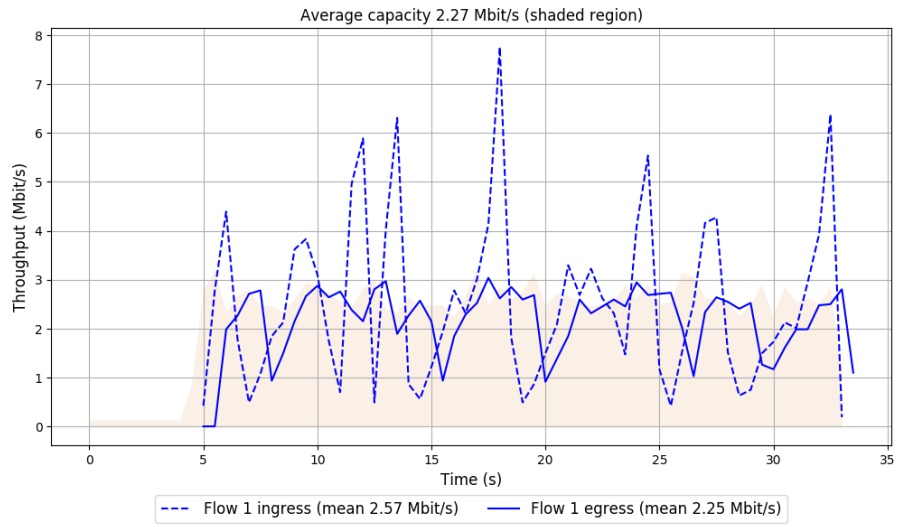
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 641.889 ms

Loss rate: 12.58%

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MuseST

Start at: 2019-08-26 19:03:26

End at: 2019-08-26 19:03:56

Below is generated by plot.py at 2019-08-26 19:24:12

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 641.581 ms

Loss rate: 7.57%

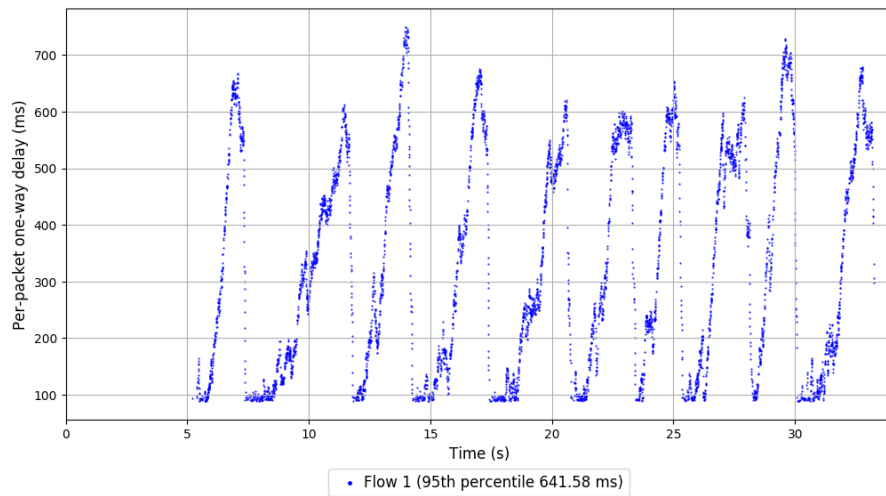
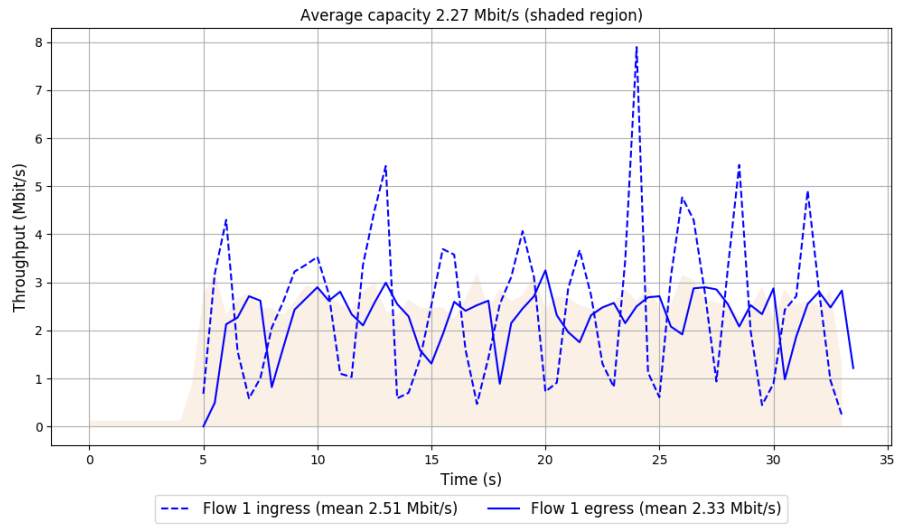
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 641.581 ms

Loss rate: 7.57%

Run 2: Report of Indigo-MusesT — Data Link



Run 3: Statistics of Indigo-MuseST

Start at: 2019-08-26 19:17:33

End at: 2019-08-26 19:18:03

Below is generated by plot.py at 2019-08-26 19:24:13

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.24 Mbit/s (98.7% utilization)

95th percentile per-packet one-way delay: 665.908 ms

Loss rate: 9.55%

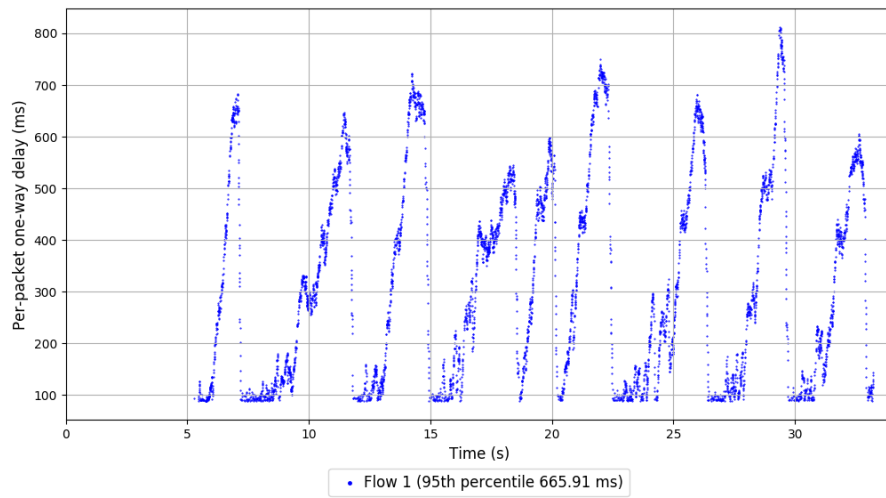
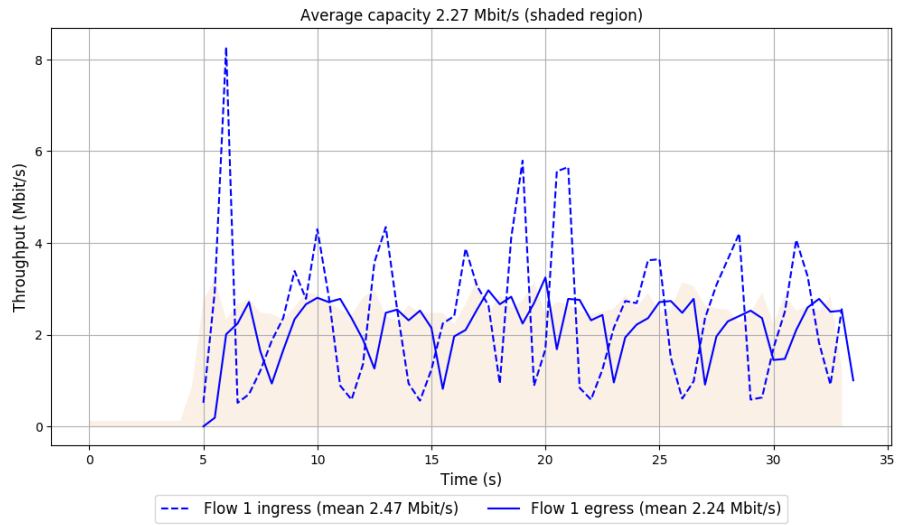
-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 665.908 ms

Loss rate: 9.55%

Run 3: Report of Indigo-MusesT — Data Link



Run 1: Statistics of LEDBAT

Start at: 2019-08-26 18:53:26

End at: 2019-08-26 18:53:56

Below is generated by plot.py at 2019-08-26 19:24:14

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.32 Mbit/s (101.9% utilization)

95th percentile per-packet one-way delay: 248.940 ms

Loss rate: 0.67%

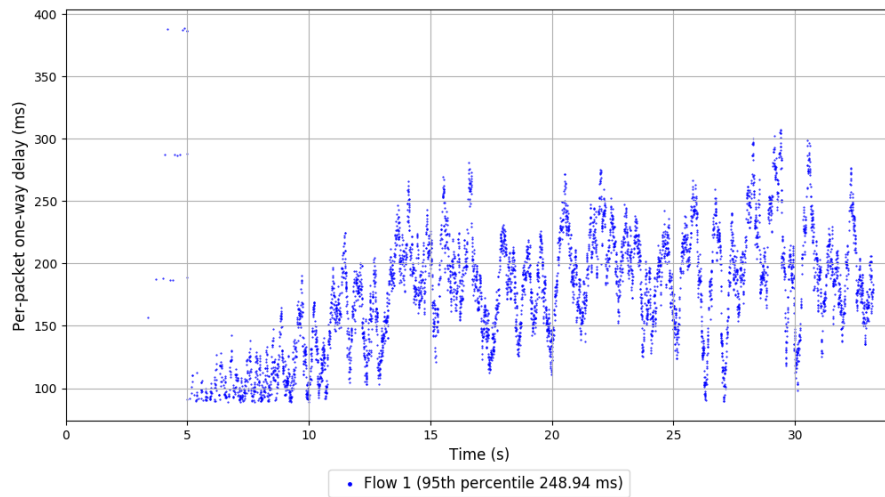
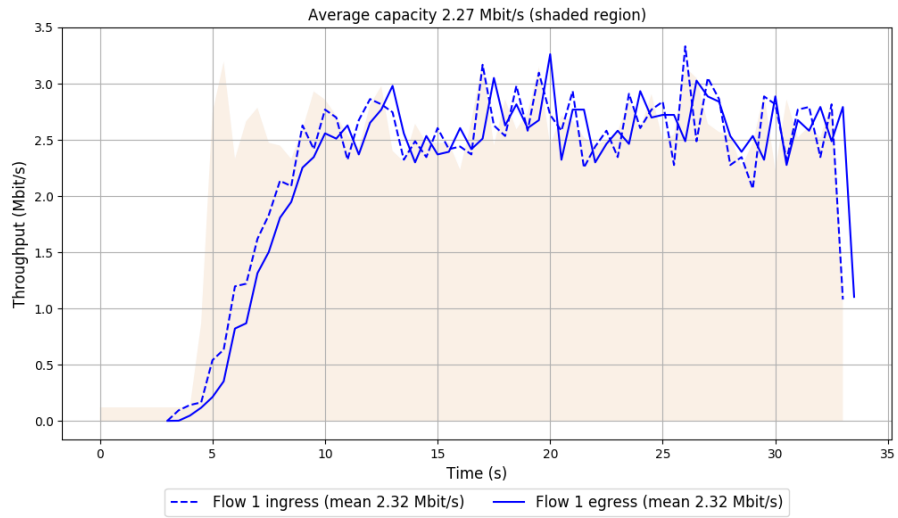
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 248.940 ms

Loss rate: 0.67%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2019-08-26 19:07:33

End at: 2019-08-26 19:08:03

Below is generated by plot.py at 2019-08-26 19:24:14

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 248.171 ms

Loss rate: 0.71%

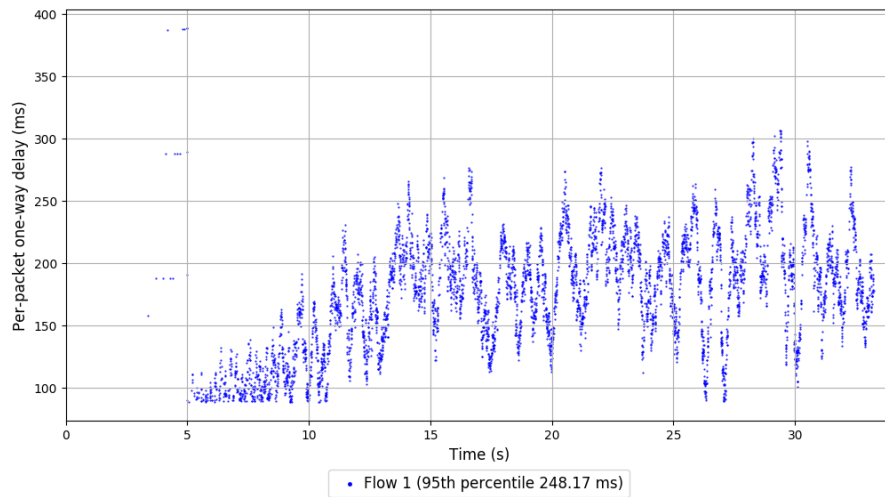
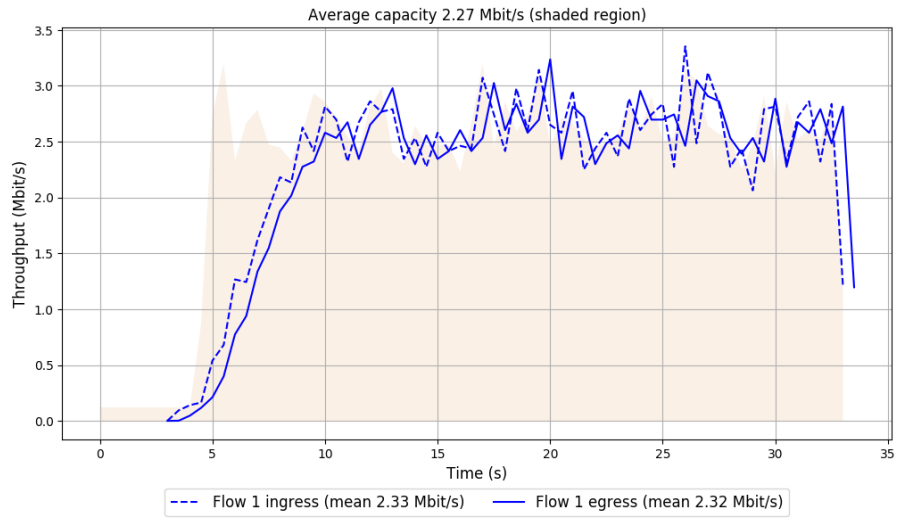
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 248.171 ms

Loss rate: 0.71%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2019-08-26 19:21:41

End at: 2019-08-26 19:22:11

Below is generated by plot.py at 2019-08-26 19:24:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 248.738 ms

Loss rate: 0.71%

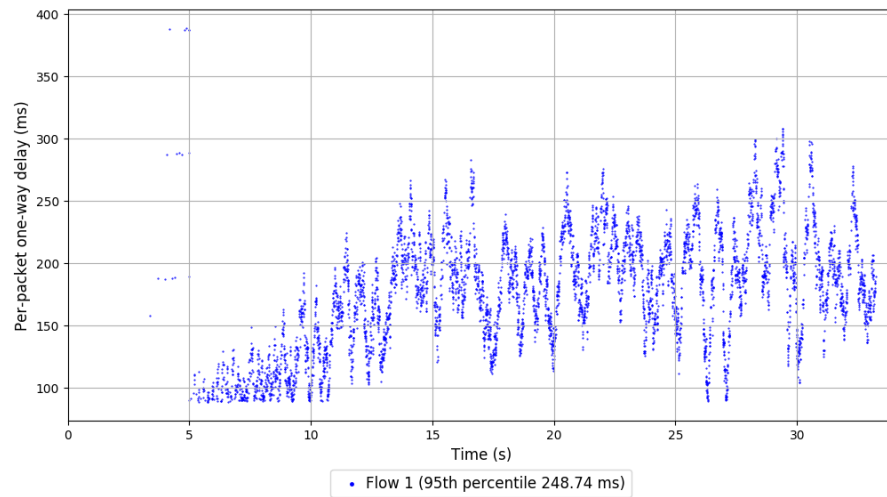
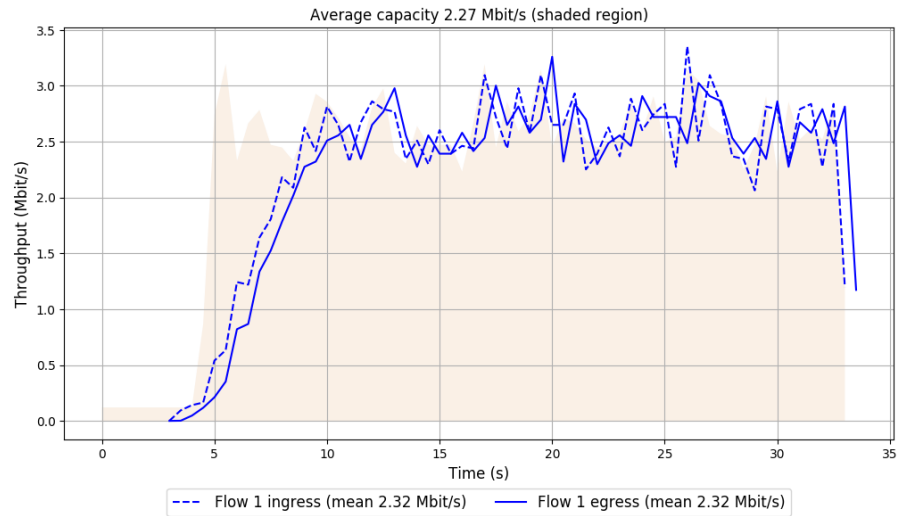
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 248.738 ms

Loss rate: 0.71%

Run 3: Report of LEDBAT — Data Link



Run 1: Statistics of Muses_DecisionTree

Start at: 2019-08-26 18:45:12

End at: 2019-08-26 18:45:42

Below is generated by plot.py at 2019-08-26 19:24:16

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.15 Mbit/s (50.7% utilization)

95th percentile per-packet one-way delay: 178.409 ms

Loss rate: 0.03%

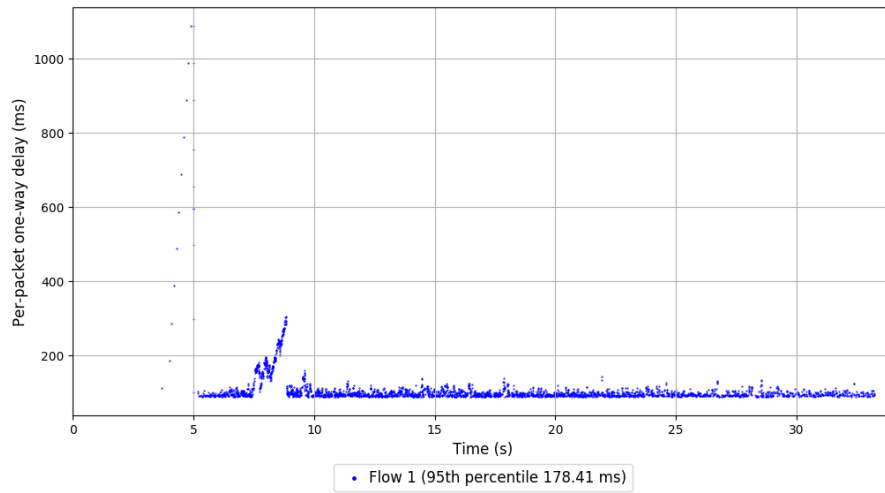
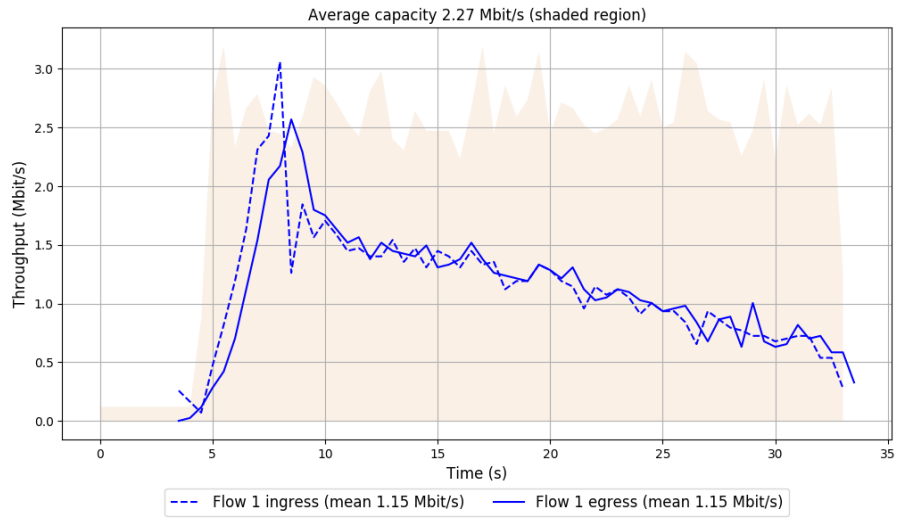
-- Flow 1:

Average throughput: 1.15 Mbit/s

95th percentile per-packet one-way delay: 178.409 ms

Loss rate: 0.03%

Run 1: Report of Muses_DecisionTree — Data Link



Run 2: Statistics of Muses_DecisionTree

Start at: 2019-08-26 18:59:19

End at: 2019-08-26 18:59:49

Below is generated by plot.py at 2019-08-26 19:24:17

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.38 Mbit/s (60.8% utilization)

95th percentile per-packet one-way delay: 196.836 ms

Loss rate: 0.29%

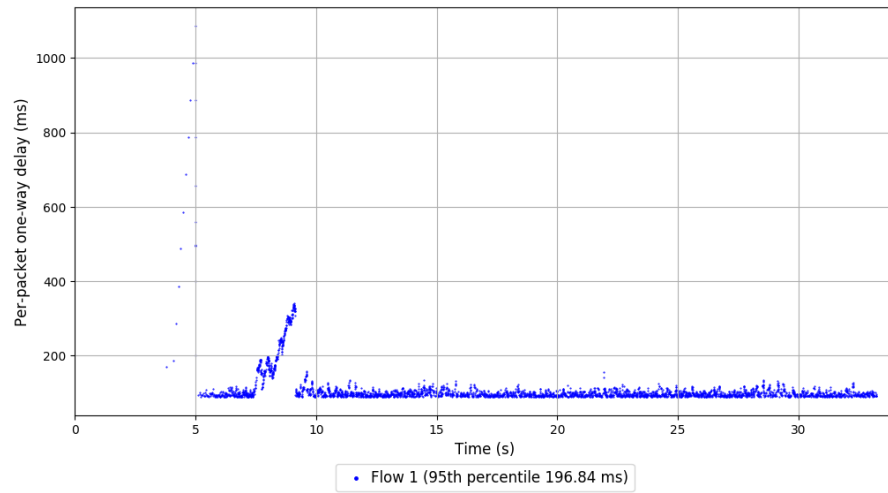
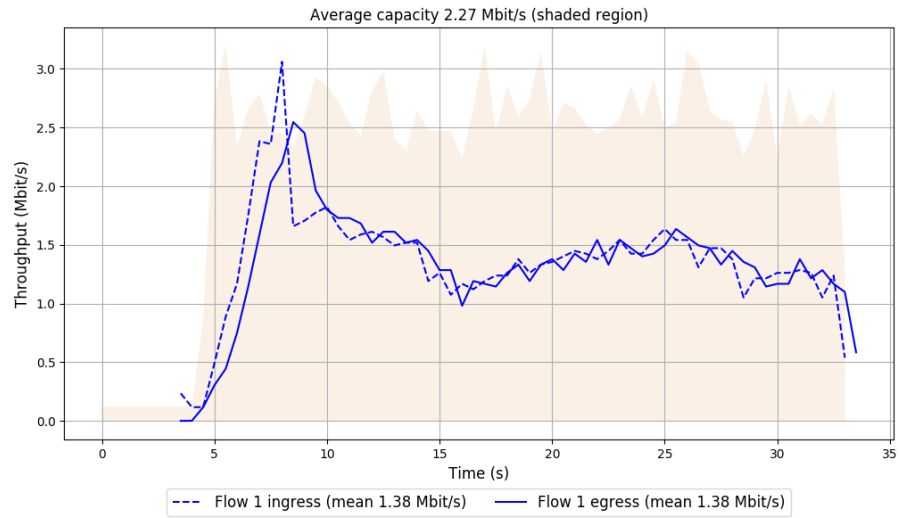
-- Flow 1:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 196.836 ms

Loss rate: 0.29%

Run 2: Report of Muses_DecisionTree — Data Link



Run 3: Statistics of Muses_DecisionTree

Start at: 2019-08-26 19:13:26

End at: 2019-08-26 19:13:56

Below is generated by plot.py at 2019-08-26 19:24:19

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.31 Mbit/s (57.6% utilization)

95th percentile per-packet one-way delay: 211.236 ms

Loss rate: 0.12%

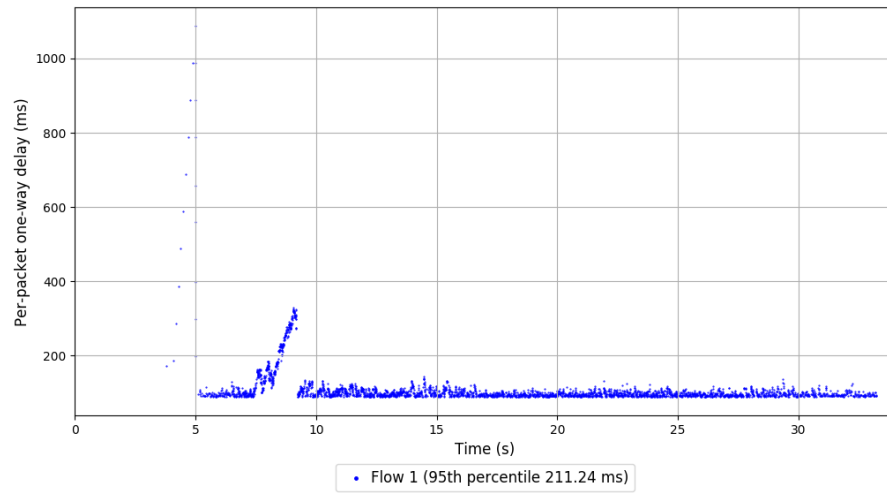
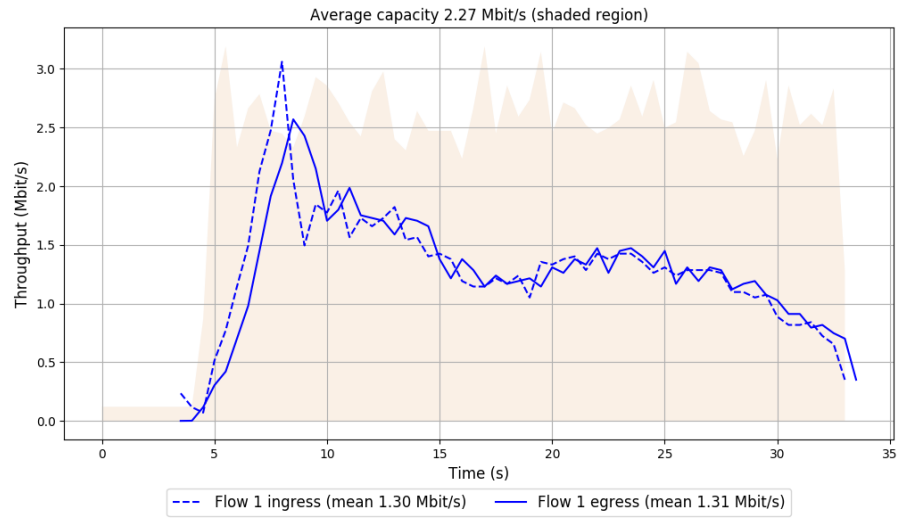
-- Flow 1:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 211.236 ms

Loss rate: 0.12%

Run 3: Report of Muses_DecisionTree — Data Link



Run 1: Statistics of Muses_DecisionTreeH0

Start at: 2019-08-26 18:41:05

End at: 2019-08-26 18:41:35

Below is generated by plot.py at 2019-08-26 19:24:21

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.43 Mbit/s (63.1% utilization)

95th percentile per-packet one-way delay: 199.336 ms

Loss rate: 0.06%

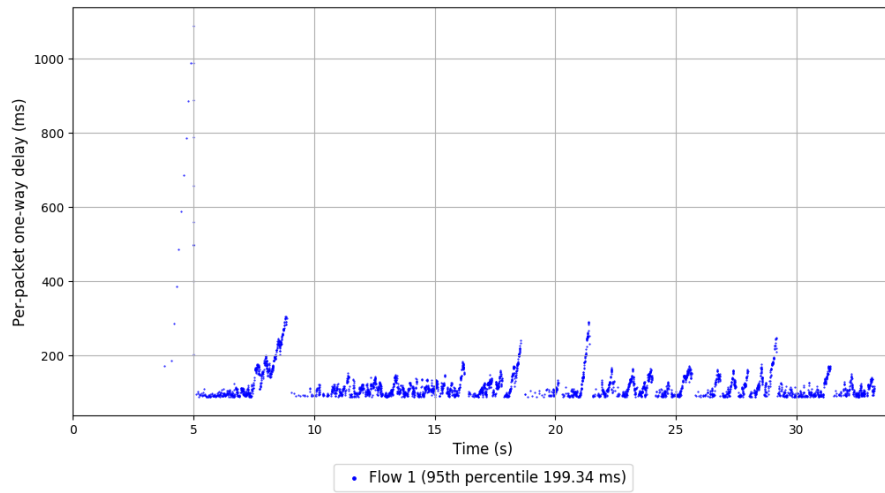
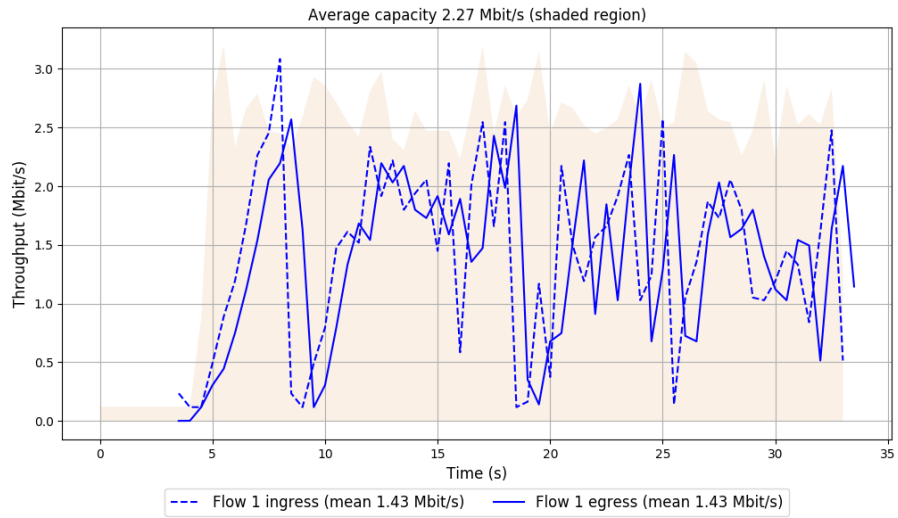
-- Flow 1:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 199.336 ms

Loss rate: 0.06%

Run 1: Report of Muses_DecisionTreeH0 — Data Link



Run 2: Statistics of Muses_DecisionTreeH0

Start at: 2019-08-26 18:55:12

End at: 2019-08-26 18:55:42

Below is generated by plot.py at 2019-08-26 19:24:23

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.66 Mbit/s (73.2% utilization)

95th percentile per-packet one-way delay: 184.030 ms

Loss rate: 0.85%

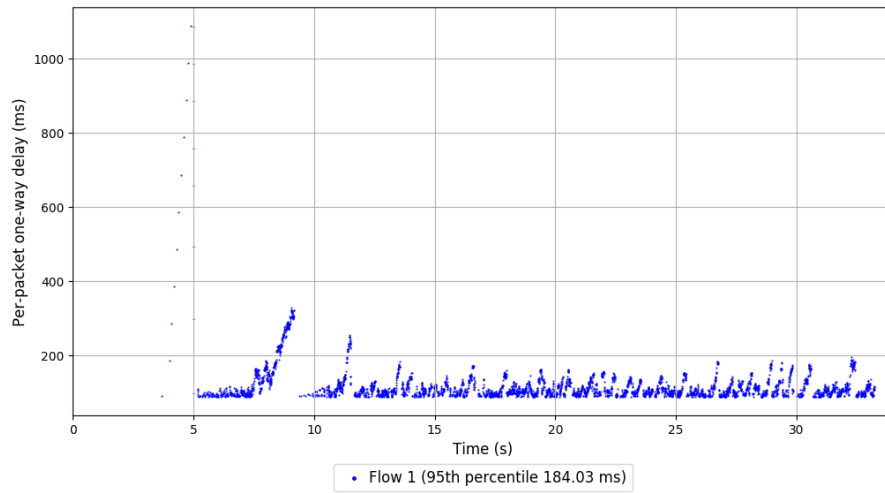
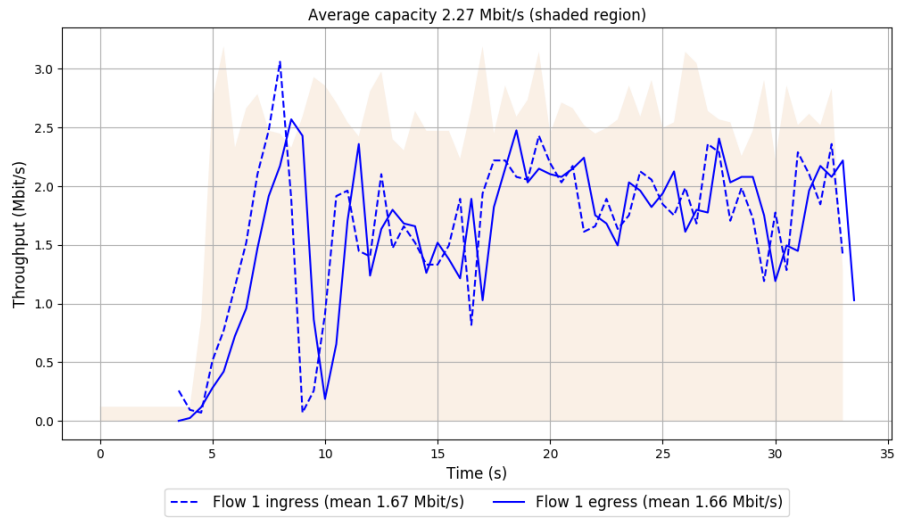
-- Flow 1:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 184.030 ms

Loss rate: 0.85%

Run 2: Report of Muses_DecisionTreeH0 — Data Link



Run 3: Statistics of Muses_DecisionTreeH0

Start at: 2019-08-26 19:09:19

End at: 2019-08-26 19:09:49

Below is generated by plot.py at 2019-08-26 19:24:23

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.65 Mbit/s (72.6% utilization)

95th percentile per-packet one-way delay: 208.414 ms

Loss rate: 0.52%

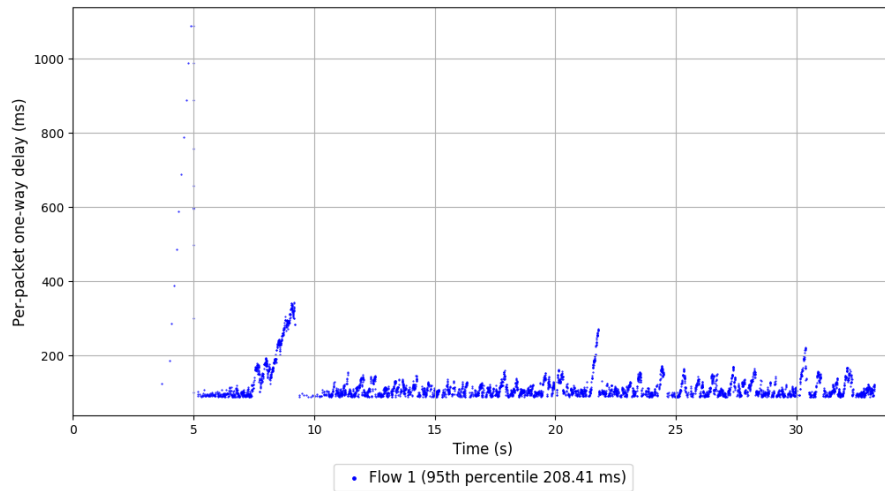
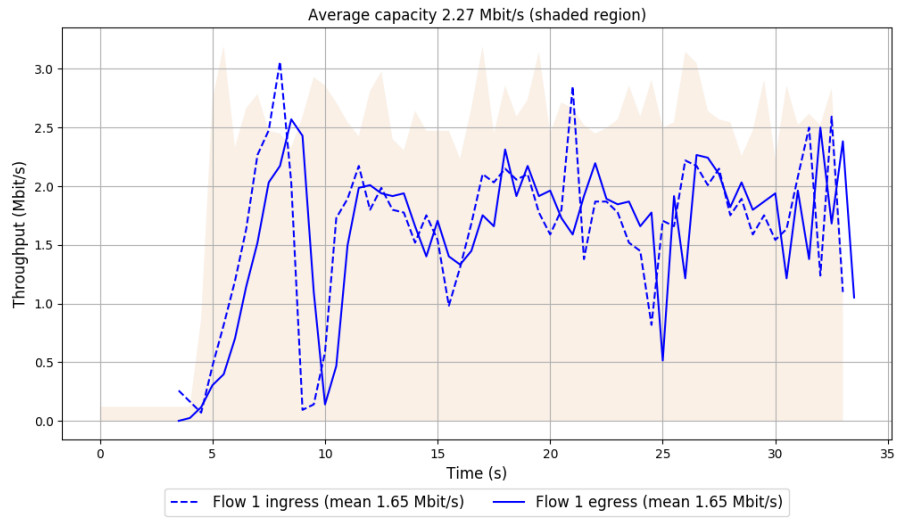
-- Flow 1:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 208.414 ms

Loss rate: 0.52%

Run 3: Report of Muses_DecisionTreeH0 — Data Link



Run 1: Statistics of Muses_DecisionTreeR0

Start at: 2019-08-26 18:48:08

End at: 2019-08-26 18:48:38

Below is generated by plot.py at 2019-08-26 19:24:23

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.07 Mbit/s (47.0% utilization)

95th percentile per-packet one-way delay: 243.100 ms

Loss rate: 0.22%

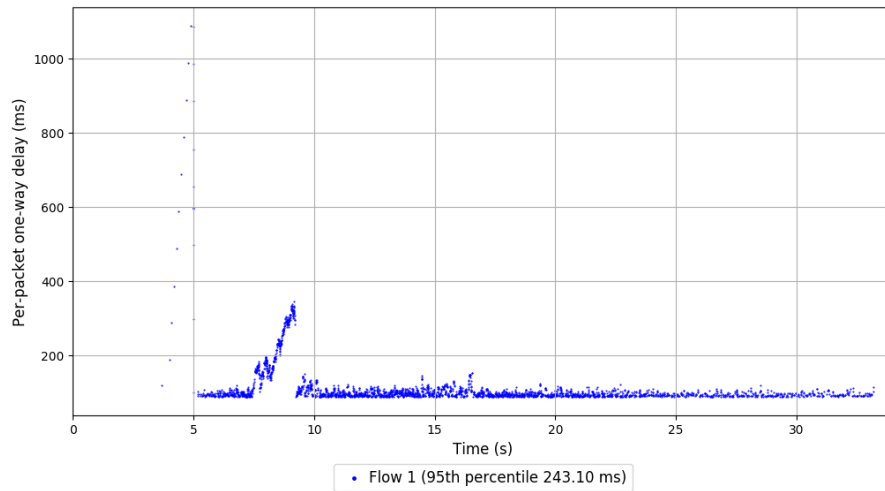
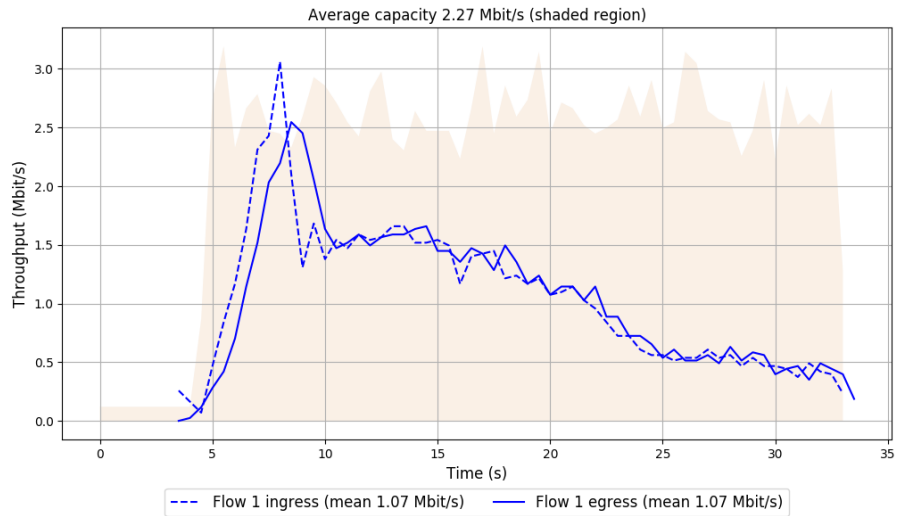
-- Flow 1:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 243.100 ms

Loss rate: 0.22%

Run 1: Report of Muses_DecisionTreeR0 — Data Link



Run 2: Statistics of Muses_DecisionTreeR0

Start at: 2019-08-26 19:02:16

End at: 2019-08-26 19:02:46

Below is generated by plot.py at 2019-08-26 19:24:24

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.44 Mbit/s (63.2% utilization)

95th percentile per-packet one-way delay: 192.703 ms

Loss rate: 0.19%

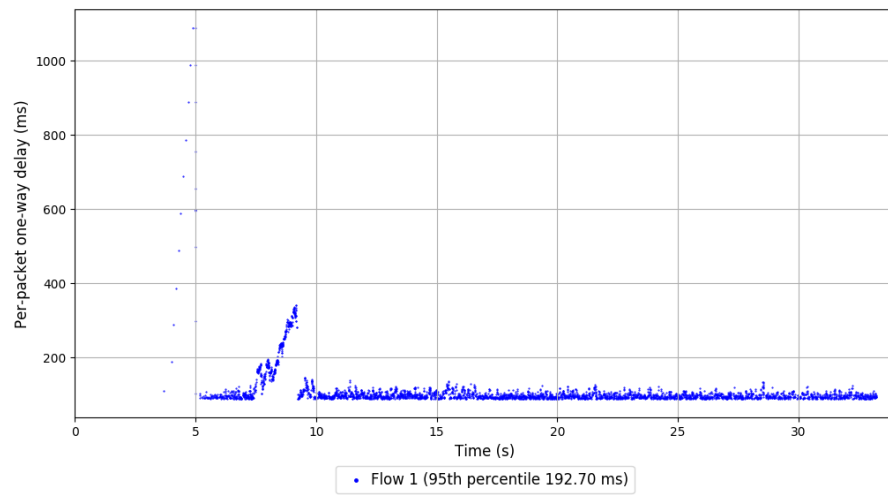
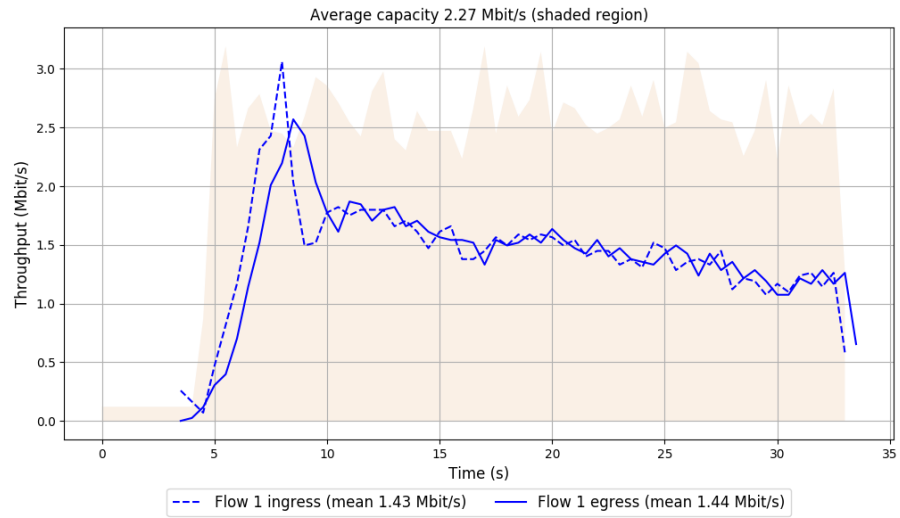
-- Flow 1:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 192.703 ms

Loss rate: 0.19%

Run 2: Report of Muses_DecisionTreeR0 — Data Link



Run 3: Statistics of Muses_DecisionTreeR0

Start at: 2019-08-26 19:16:23

End at: 2019-08-26 19:16:53

Below is generated by plot.py at 2019-08-26 19:24:25

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 1.24 Mbit/s (54.7% utilization)

95th percentile per-packet one-way delay: 231.092 ms

Loss rate: 0.22%

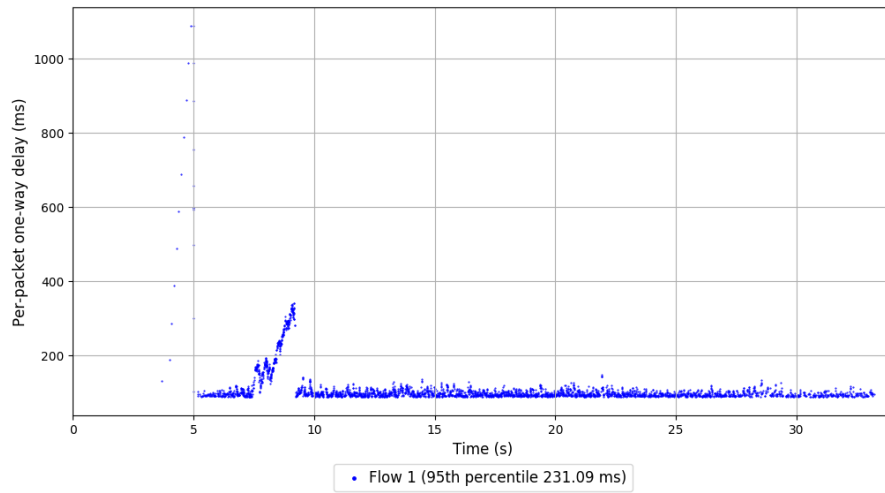
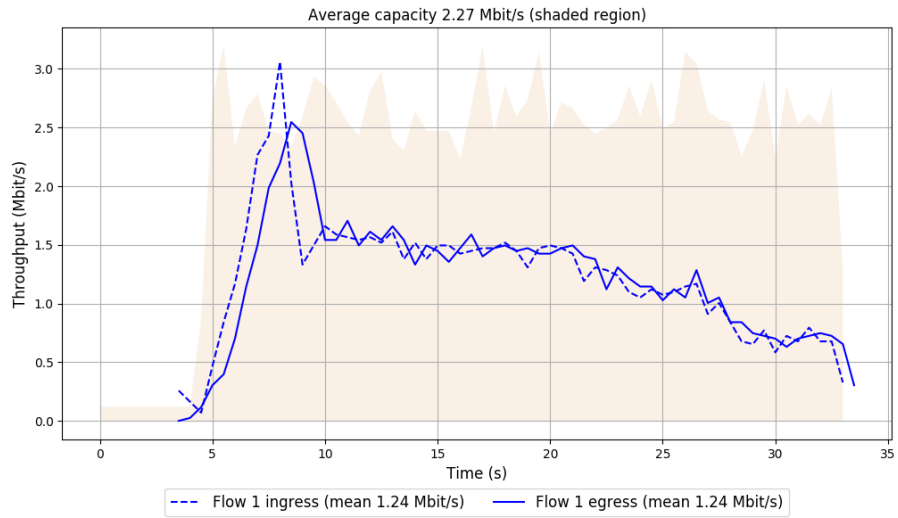
-- Flow 1:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 231.092 ms

Loss rate: 0.22%

Run 3: Report of Muses_DecisionTreeR0 — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-08-26 18:42:15

End at: 2019-08-26 18:42:45

Below is generated by plot.py at 2019-08-26 19:24:35

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 763.095 ms

Loss rate: 85.76%

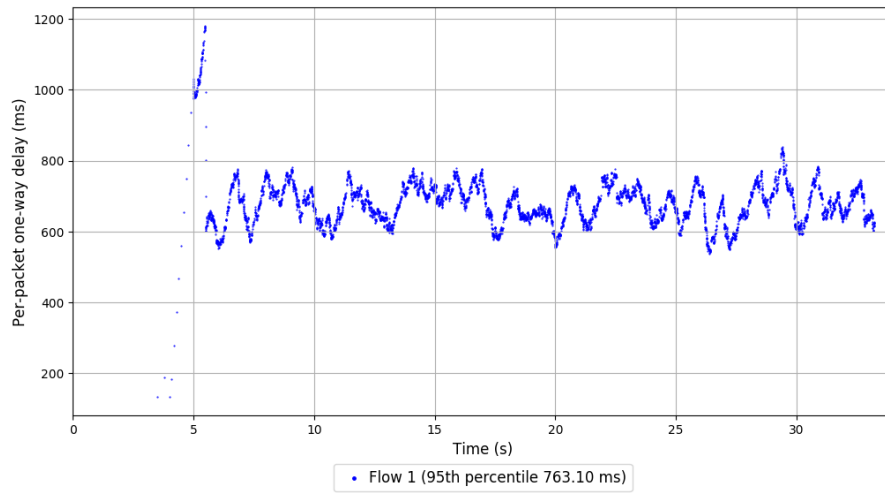
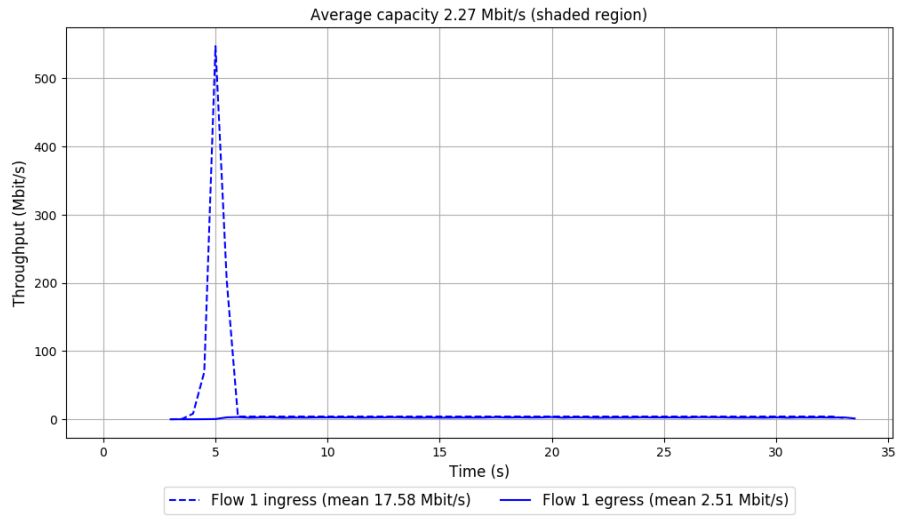
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 763.095 ms

Loss rate: 85.76%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-08-26 18:56:23

End at: 2019-08-26 18:56:53

Below is generated by plot.py at 2019-08-26 19:24:40

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 762.711 ms

Loss rate: 87.03%

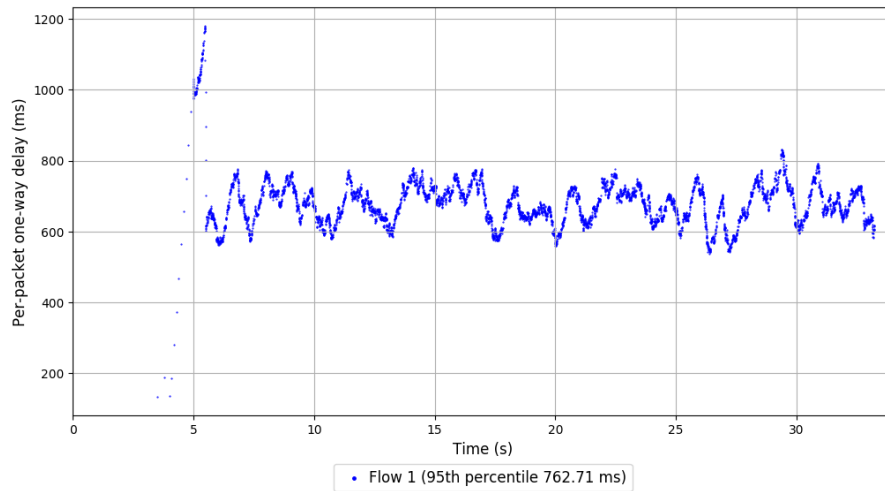
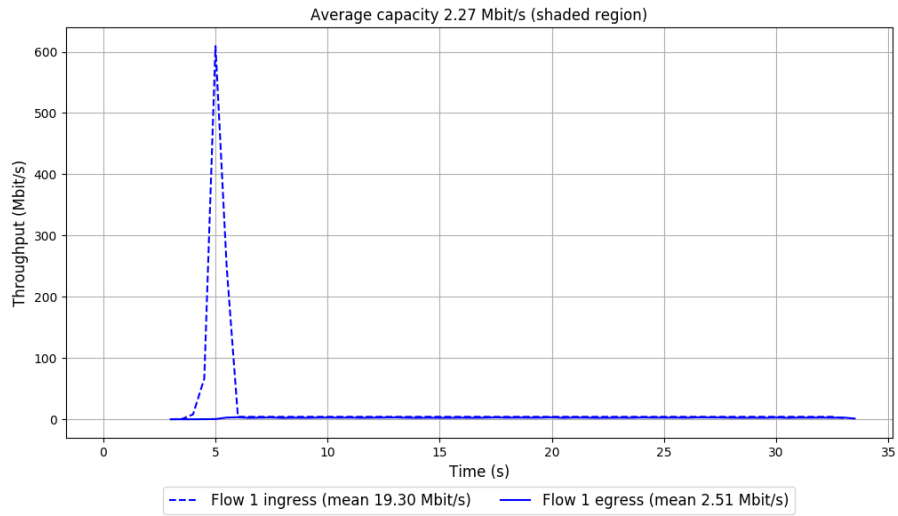
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 762.711 ms

Loss rate: 87.03%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-08-26 19:10:29

End at: 2019-08-26 19:10:59

Below is generated by plot.py at 2019-08-26 19:24:43

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 761.880 ms

Loss rate: 87.05%

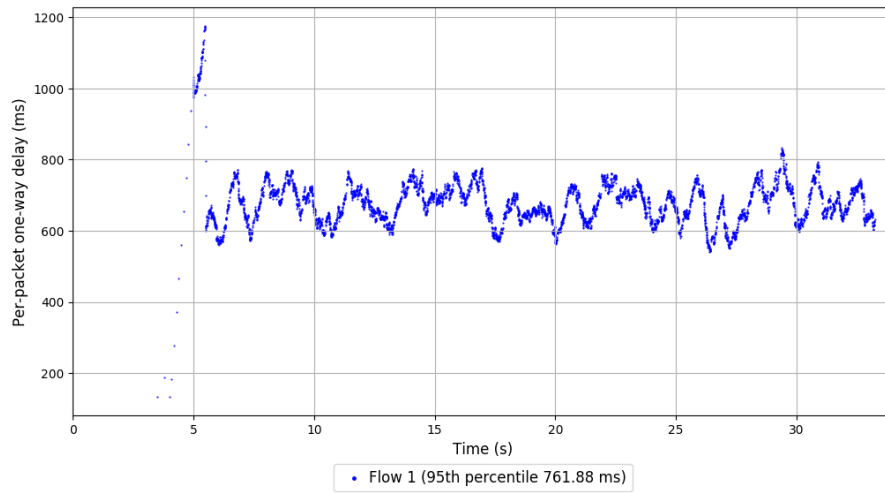
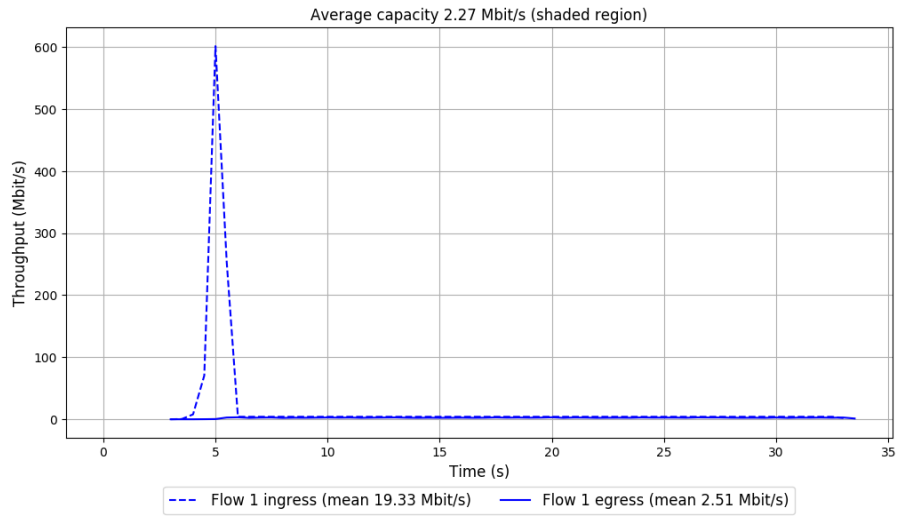
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 761.880 ms

Loss rate: 87.05%

Run 3: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

Start at: 2019-08-26 18:52:15

End at: 2019-08-26 18:52:45

Below is generated by plot.py at 2019-08-26 19:24:43

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 494.386 ms

Loss rate: 41.90%

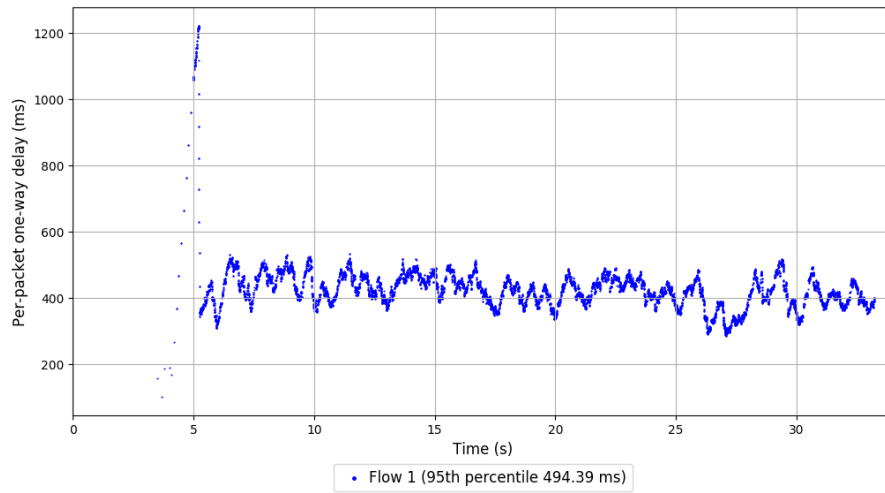
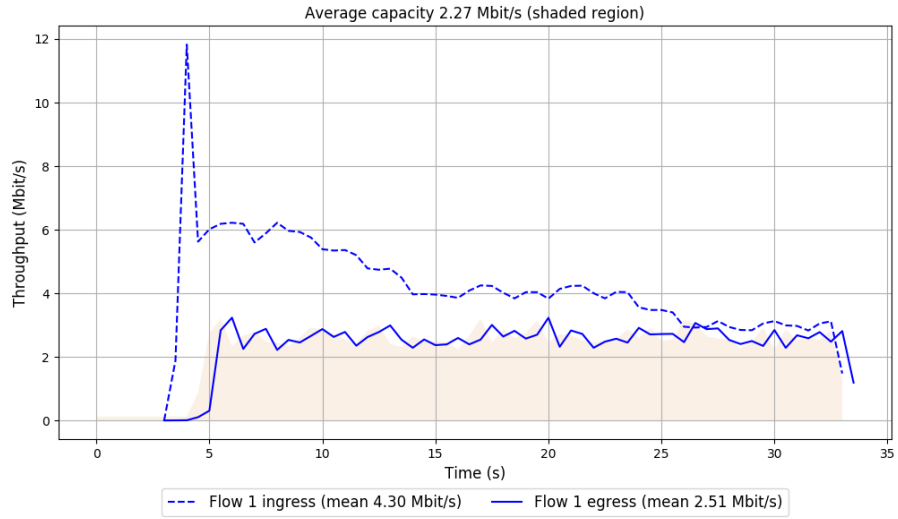
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 494.386 ms

Loss rate: 41.90%

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2019-08-26 19:06:22

End at: 2019-08-26 19:06:52

Below is generated by plot.py at 2019-08-26 19:24:43

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 506.120 ms

Loss rate: 46.52%

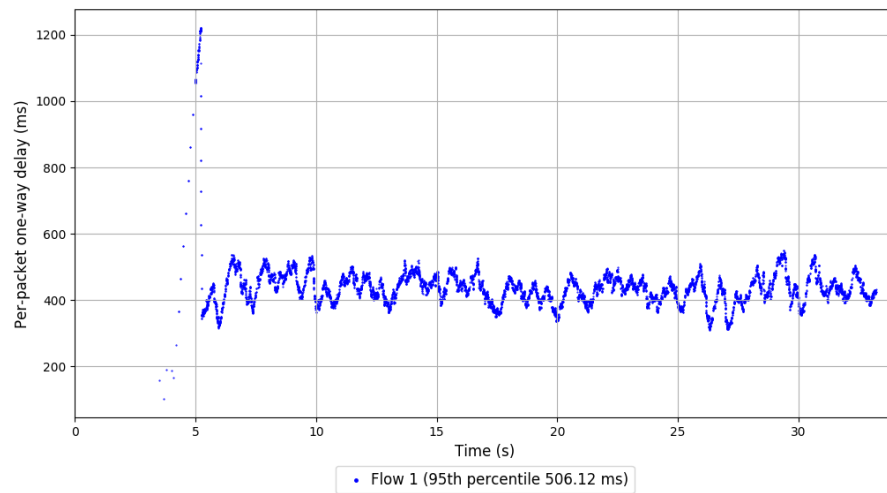
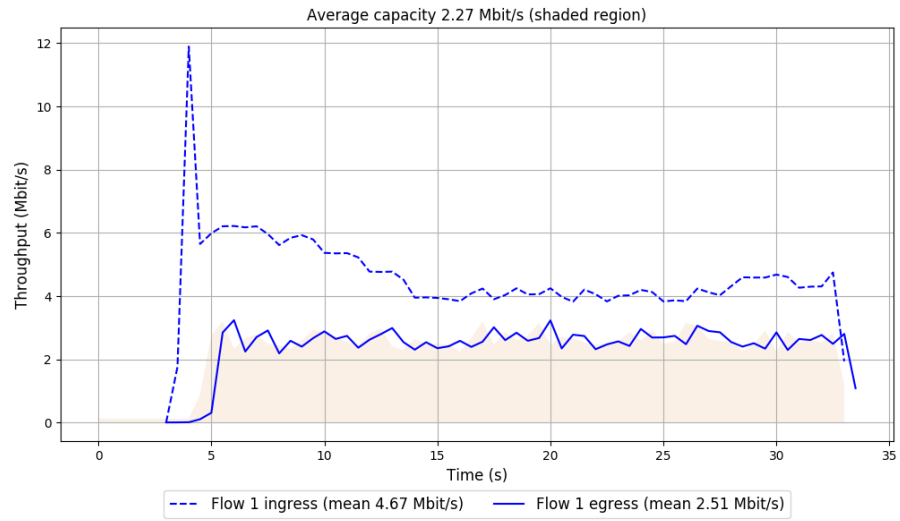
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 506.120 ms

Loss rate: 46.52%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2019-08-26 19:20:30

End at: 2019-08-26 19:21:00

Below is generated by plot.py at 2019-08-26 19:24:43

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 516.329 ms

Loss rate: 58.56%

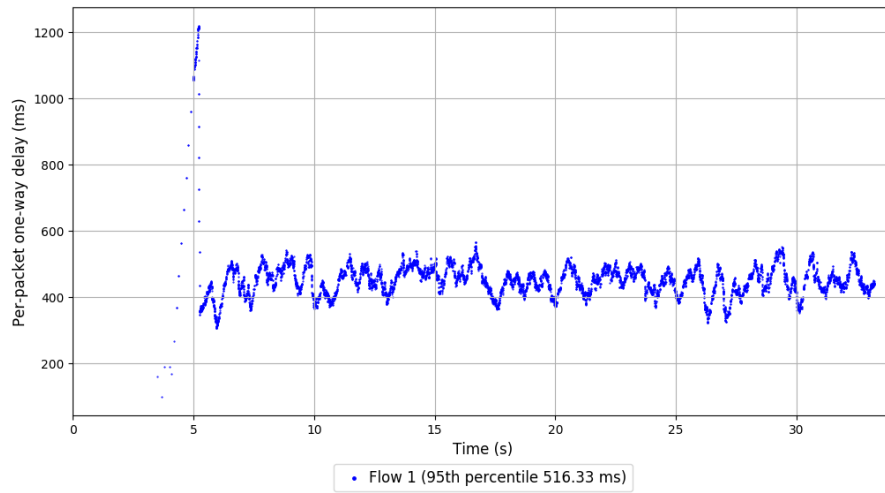
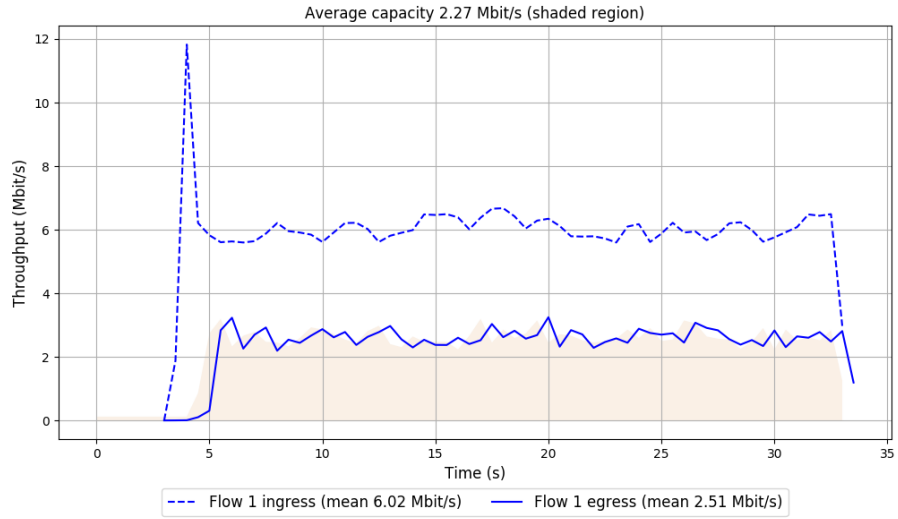
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 516.329 ms

Loss rate: 58.56%

Run 3: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-08-26 18:43:26

End at: 2019-08-26 18:43:56

Below is generated by plot.py at 2019-08-26 19:24:43

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 667.297 ms

Loss rate: 3.24%

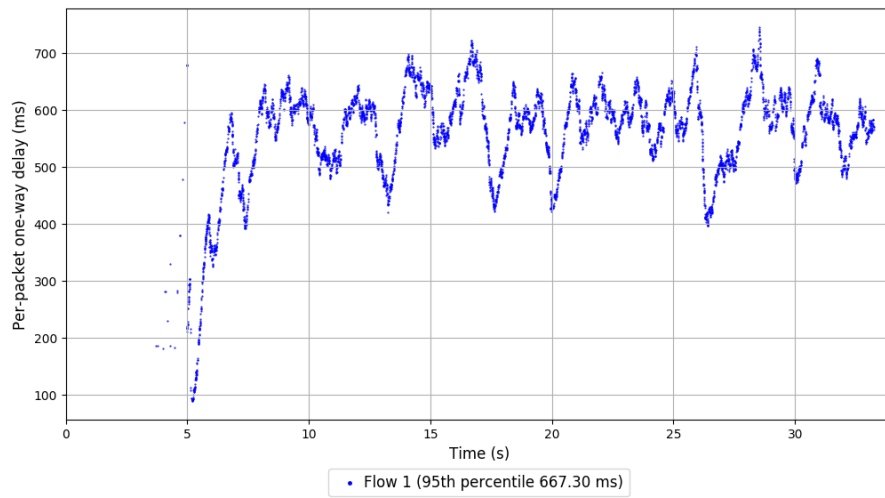
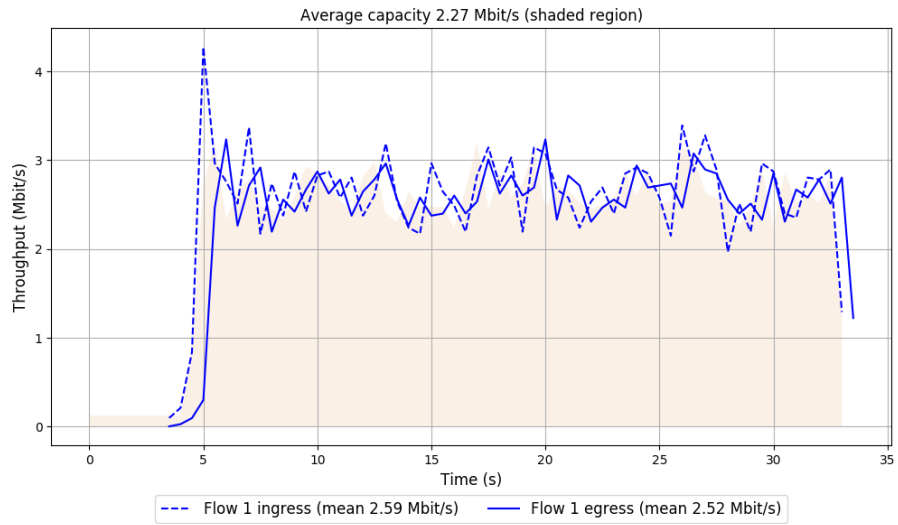
-- Flow 1:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 667.297 ms

Loss rate: 3.24%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-08-26 18:57:34

End at: 2019-08-26 18:58:04

Below is generated by plot.py at 2019-08-26 19:24:43

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 677.209 ms

Loss rate: 3.05%

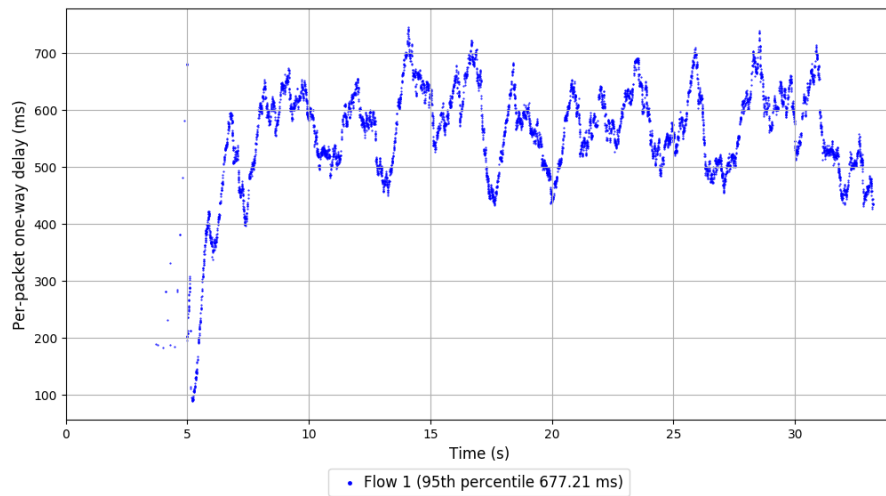
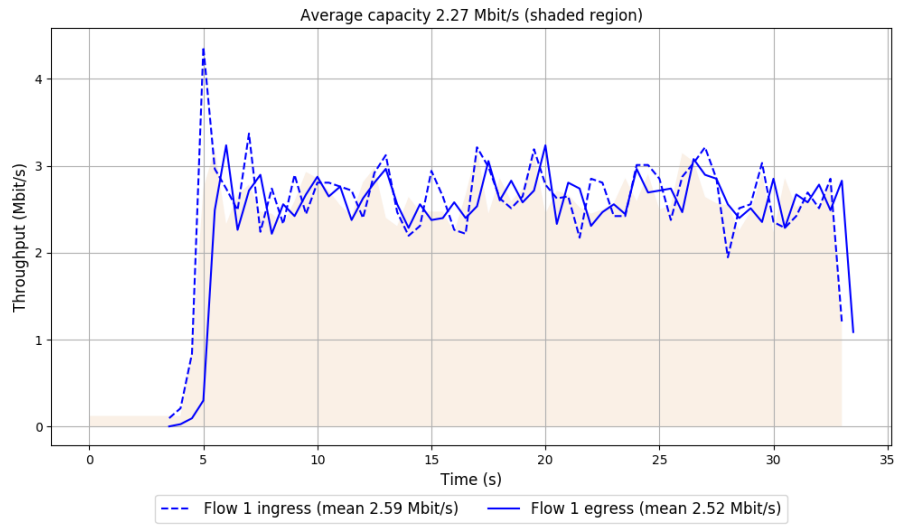
-- Flow 1:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 677.209 ms

Loss rate: 3.05%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-08-26 19:11:40

End at: 2019-08-26 19:12:10

Below is generated by plot.py at 2019-08-26 19:24:43

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 673.228 ms

Loss rate: 3.28%

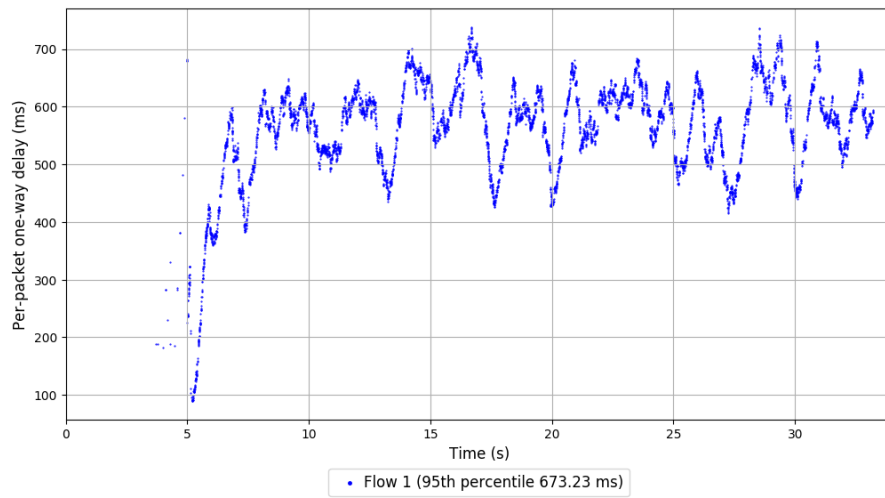
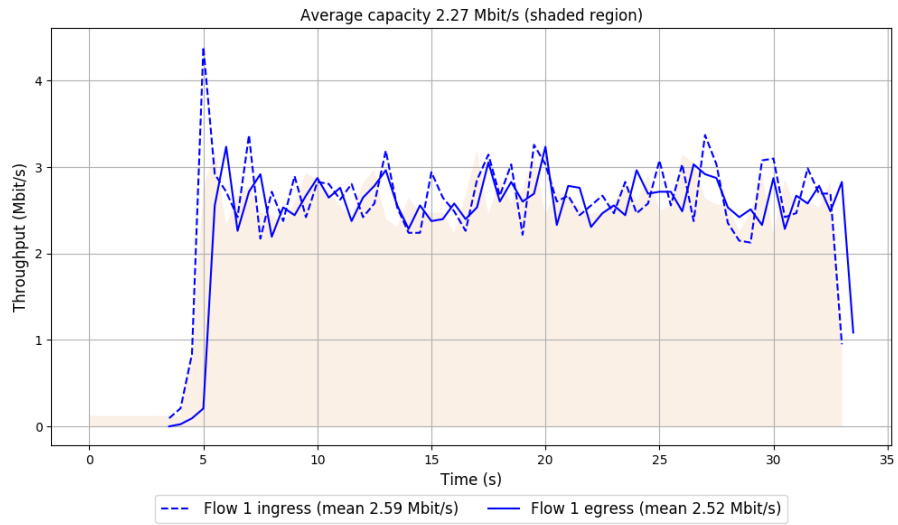
-- Flow 1:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 673.228 ms

Loss rate: 3.28%

Run 3: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2019-08-26 18:46:58

End at: 2019-08-26 18:47:28

Below is generated by plot.py at 2019-08-26 19:24:43

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 105.807 ms

Loss rate: 0.25%

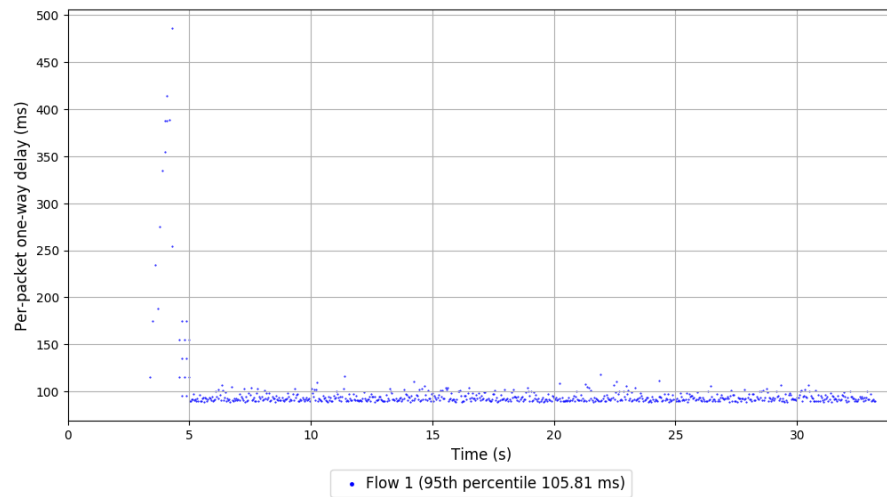
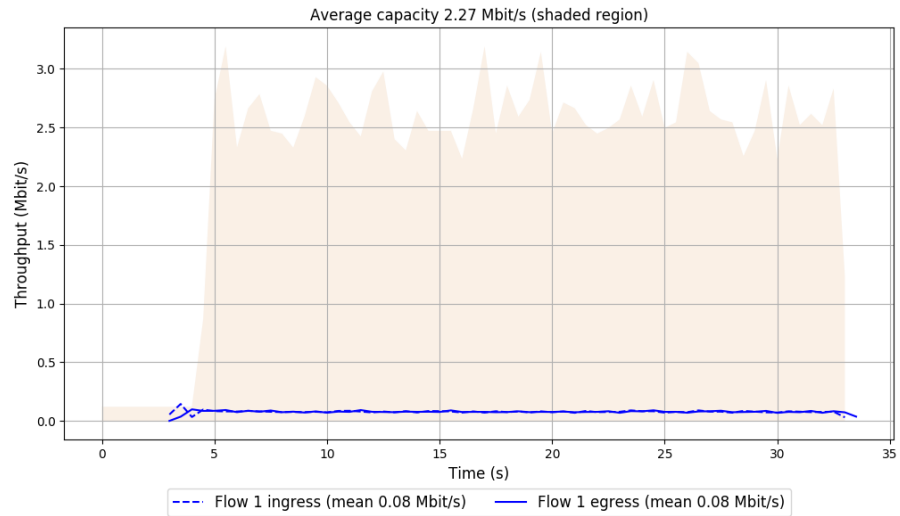
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 105.807 ms

Loss rate: 0.25%

Run 1: Report of SCReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2019-08-26 19:01:05

End at: 2019-08-26 19:01:35

Below is generated by plot.py at 2019-08-26 19:24:43

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 105.838 ms

Loss rate: 0.25%

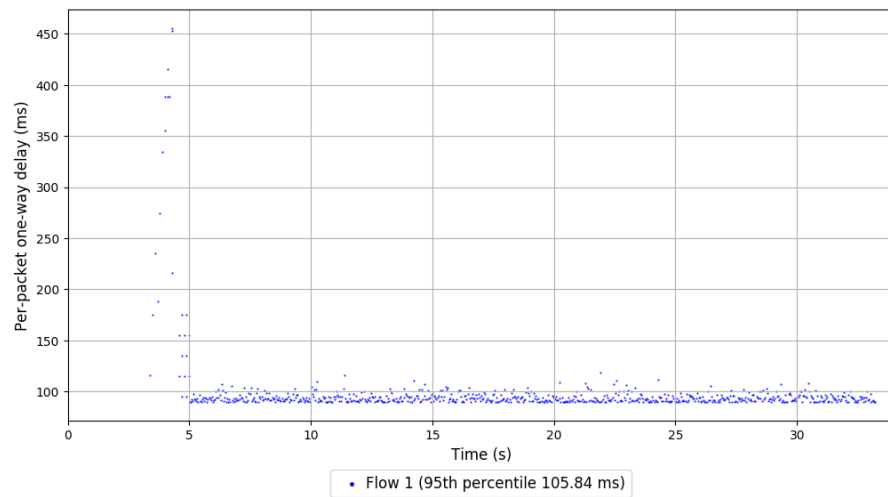
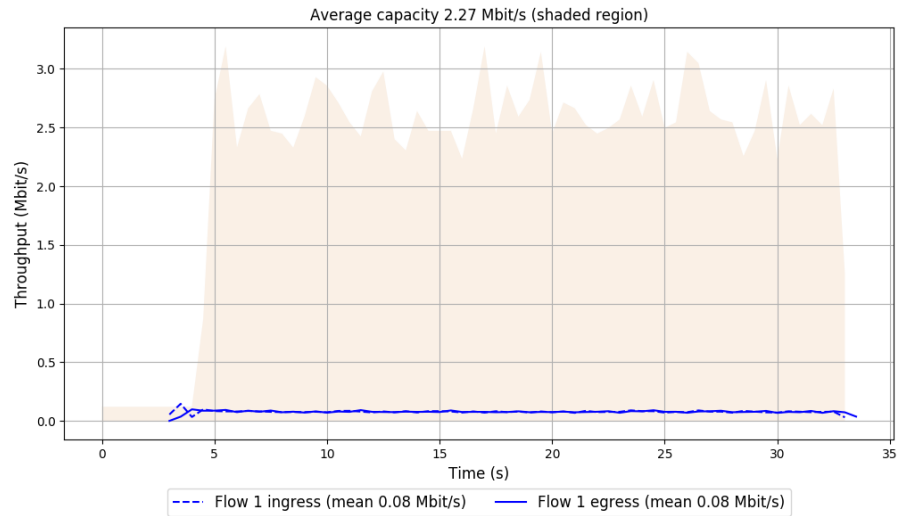
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 105.838 ms

Loss rate: 0.25%

Run 2: Report of SCReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2019-08-26 19:15:12

End at: 2019-08-26 19:15:42

Below is generated by plot.py at 2019-08-26 19:24:43

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 104.843 ms

Loss rate: 0.26%

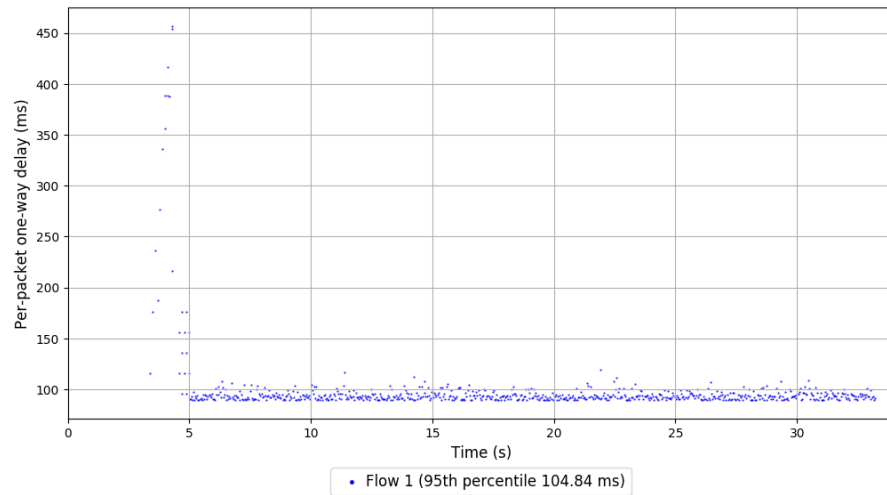
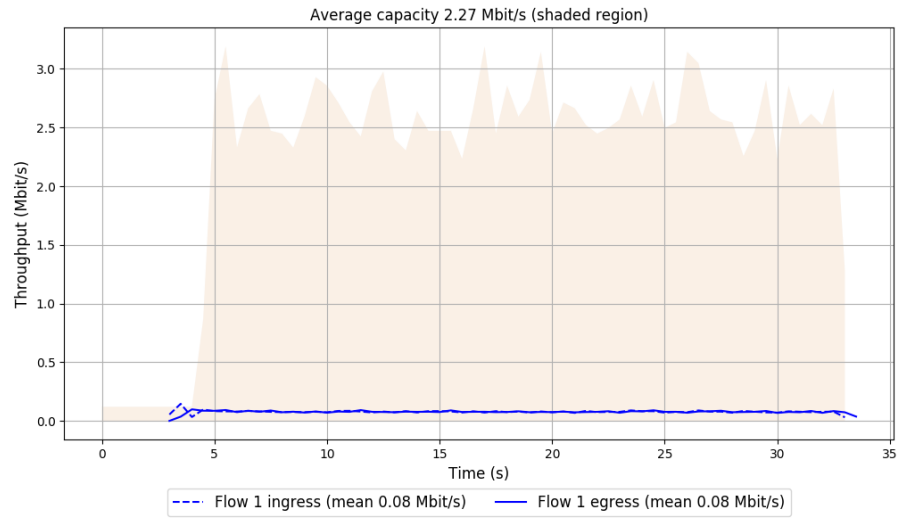
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 104.843 ms

Loss rate: 0.26%

Run 3: Report of SCReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-08-26 18:47:33

End at: 2019-08-26 18:48:03

Below is generated by plot.py at 2019-08-26 19:24:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.22 Mbit/s (9.6% utilization)

95th percentile per-packet one-way delay: 120.880 ms

Loss rate: 0.02%

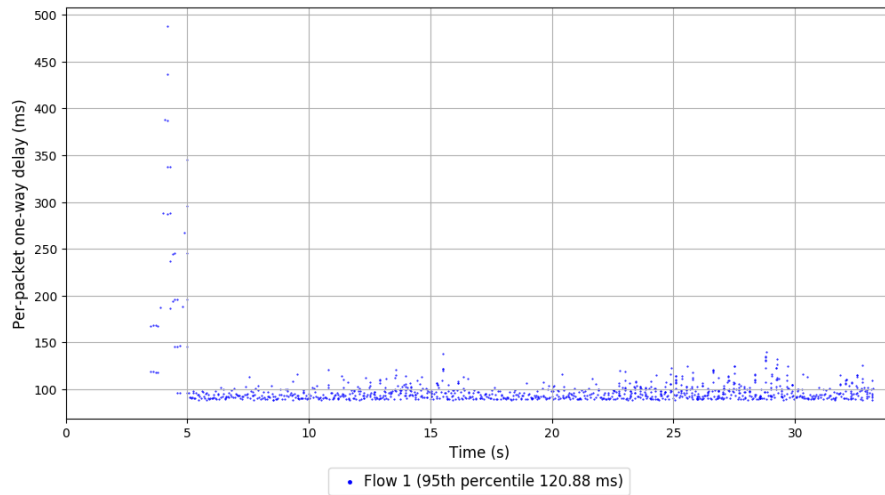
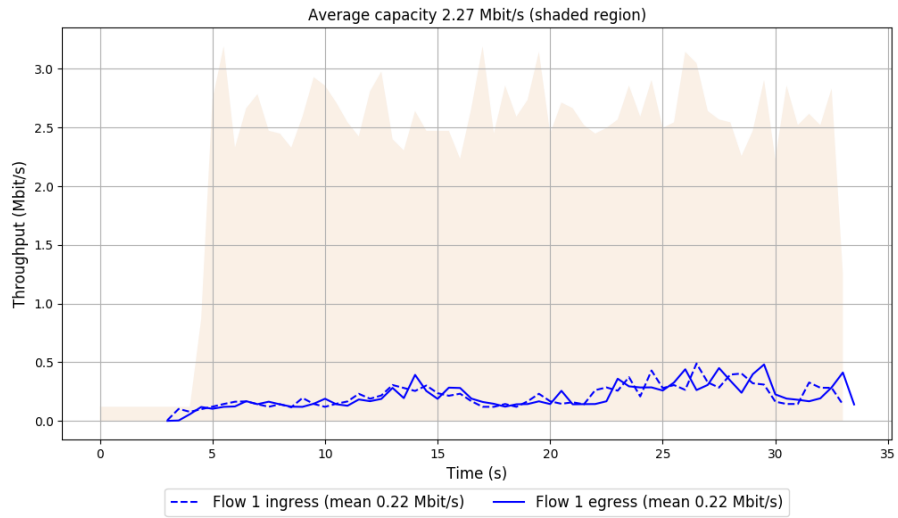
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 120.880 ms

Loss rate: 0.02%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2019-08-26 19:01:40

End at: 2019-08-26 19:02:10

Below is generated by plot.py at 2019-08-26 19:24:44

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.23 Mbit/s (9.9% utilization)

95th percentile per-packet one-way delay: 169.622 ms

Loss rate: 0.50%

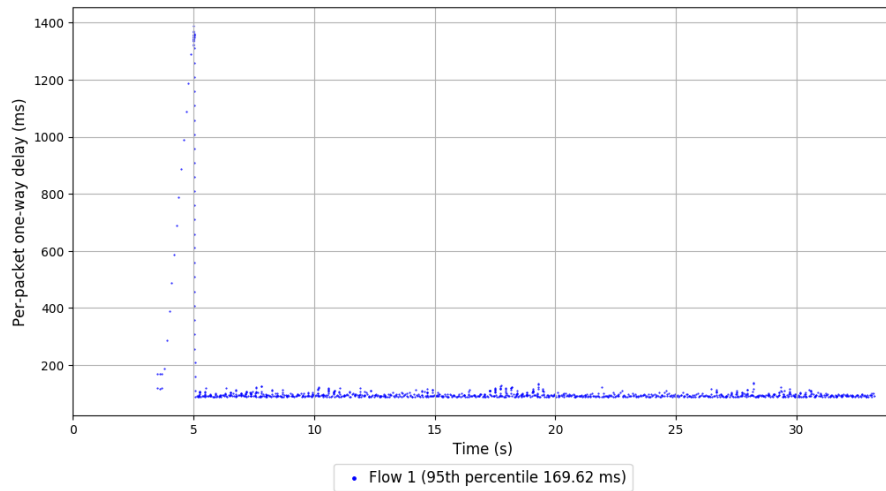
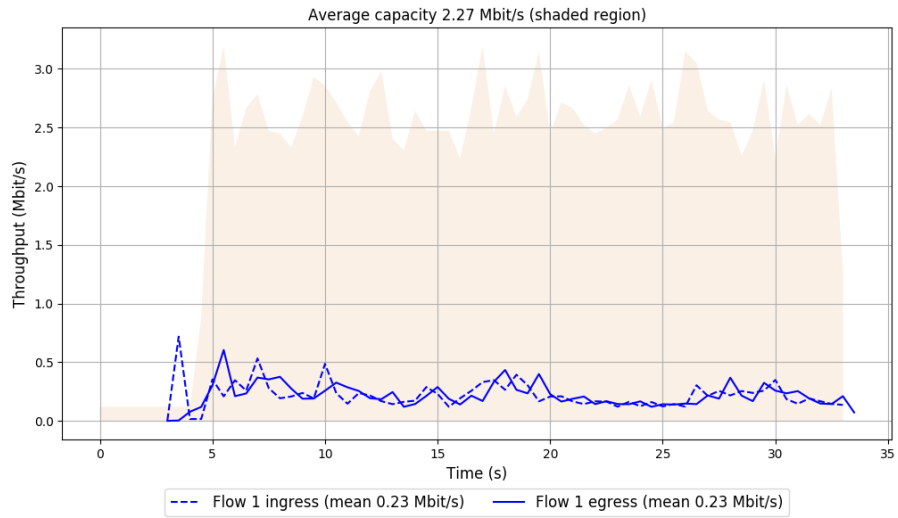
-- Flow 1:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 169.622 ms

Loss rate: 0.50%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2019-08-26 19:15:47

End at: 2019-08-26 19:16:17

Below is generated by plot.py at 2019-08-26 19:24:45

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.27 Mbit/s (11.7% utilization)

95th percentile per-packet one-way delay: 136.602 ms

Loss rate: 0.27%

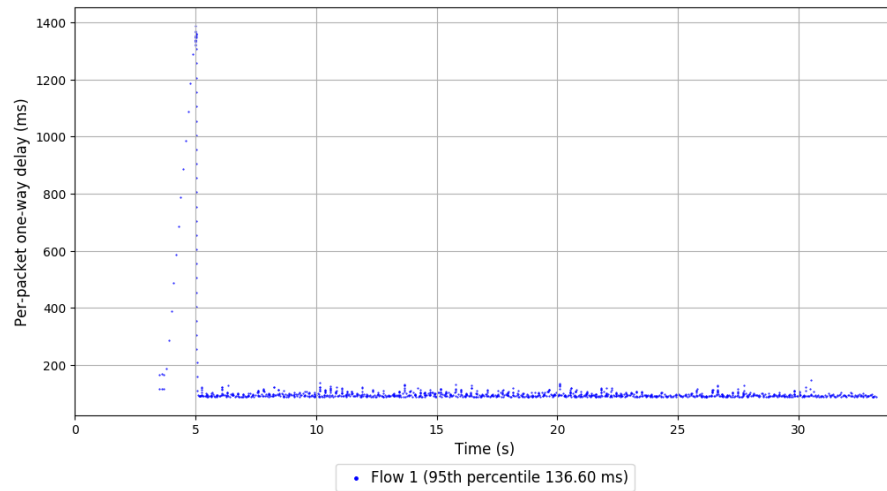
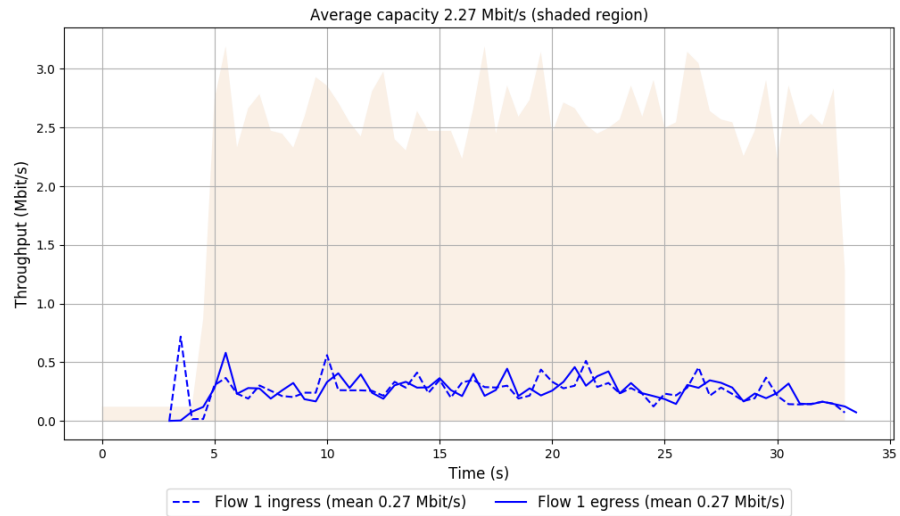
-- Flow 1:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 136.602 ms

Loss rate: 0.27%

Run 3: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2019-08-26 18:51:05

End at: 2019-08-26 18:51:35

Below is generated by plot.py at 2019-08-26 19:24:54

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.28 Mbit/s (100.5% utilization)

95th percentile per-packet one-way delay: 220.781 ms

Loss rate: 1.27%

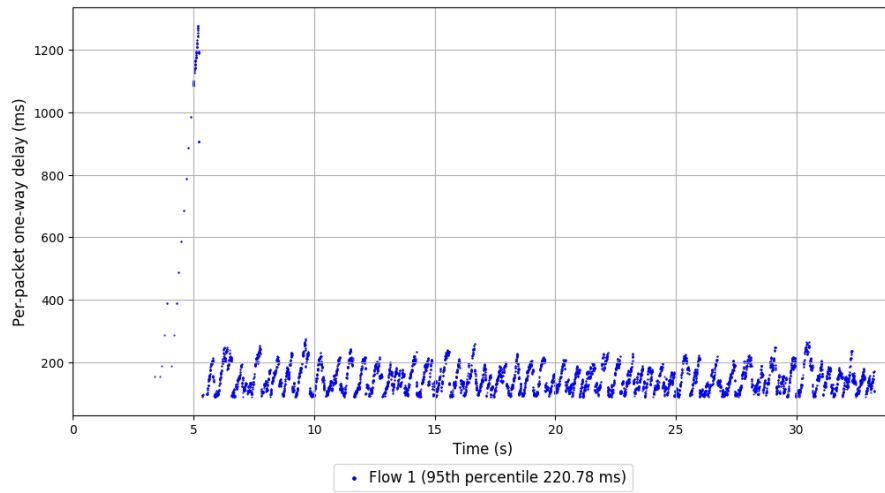
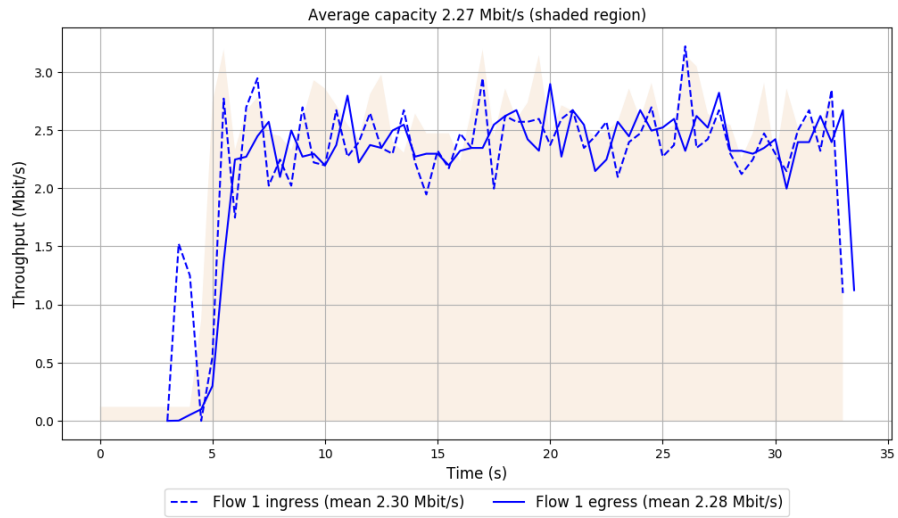
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 220.781 ms

Loss rate: 1.27%

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



Run 2: Statistics of TaoVA-100x

Start at: 2019-08-26 19:05:12

End at: 2019-08-26 19:05:42

Below is generated by plot.py at 2019-08-26 19:24:55

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.31 Mbit/s (101.5% utilization)

95th percentile per-packet one-way delay: 220.790 ms

Loss rate: 1.18%

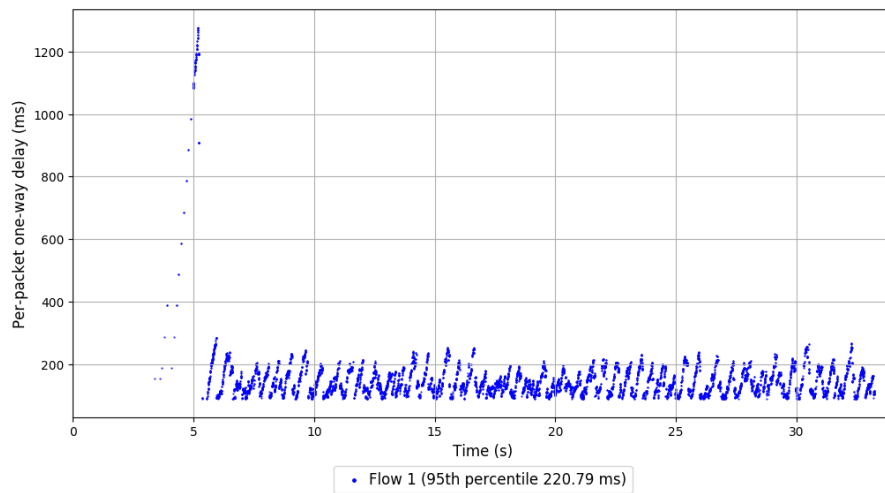
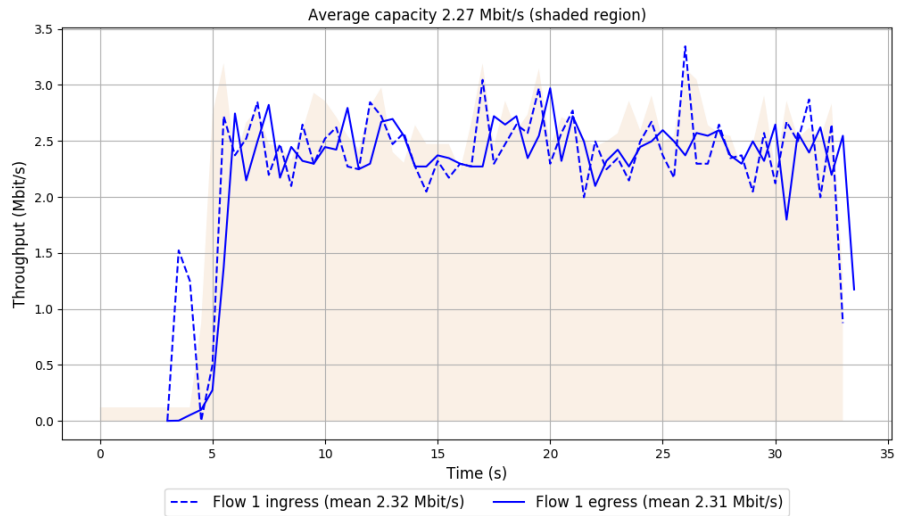
-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 220.790 ms

Loss rate: 1.18%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-08-26 19:19:19

End at: 2019-08-26 19:19:49

Below is generated by plot.py at 2019-08-26 19:24:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.29 Mbit/s (100.9% utilization)

95th percentile per-packet one-way delay: 224.460 ms

Loss rate: 1.14%

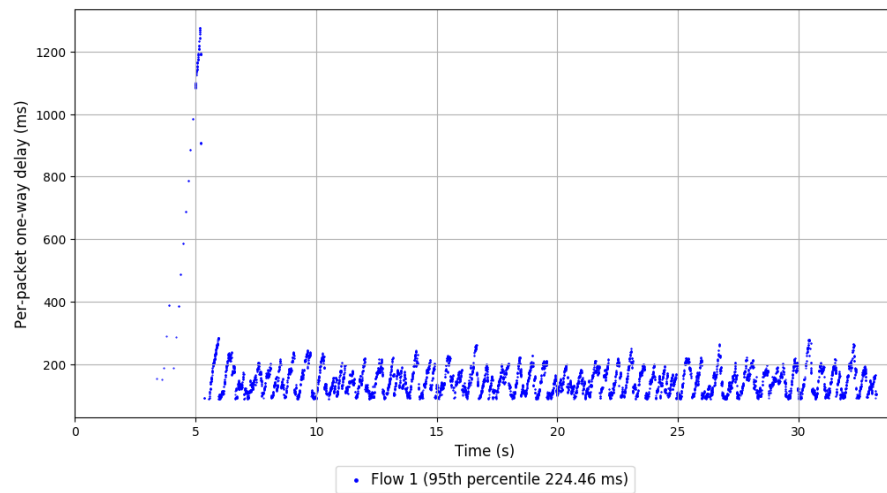
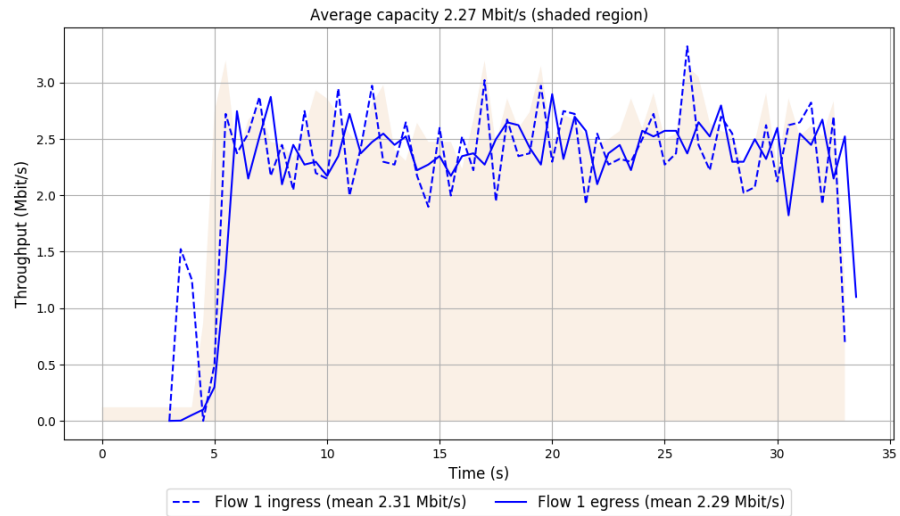
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 224.460 ms

Loss rate: 1.14%

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



Run 1: Statistics of TCP Vegas

Start at: 2019-08-26 18:52:51

End at: 2019-08-26 18:53:21

Below is generated by plot.py at 2019-08-26 19:24:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 168.934 ms

Loss rate: 0.49%

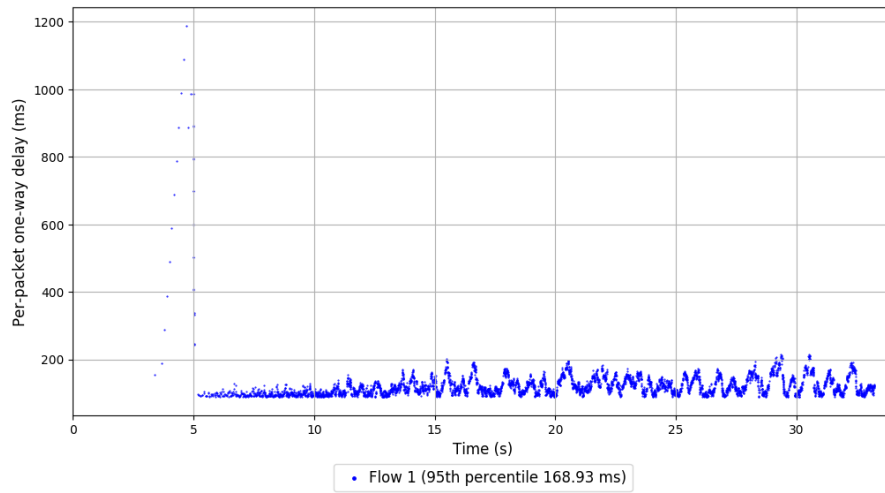
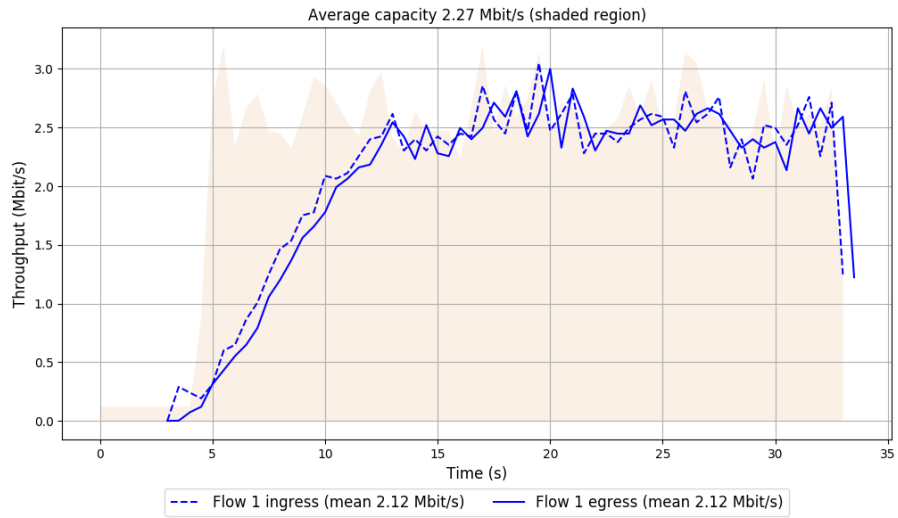
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 168.934 ms

Loss rate: 0.49%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-08-26 19:06:58

End at: 2019-08-26 19:07:28

Below is generated by plot.py at 2019-08-26 19:24:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.10 Mbit/s (92.5% utilization)

95th percentile per-packet one-way delay: 161.068 ms

Loss rate: 0.51%

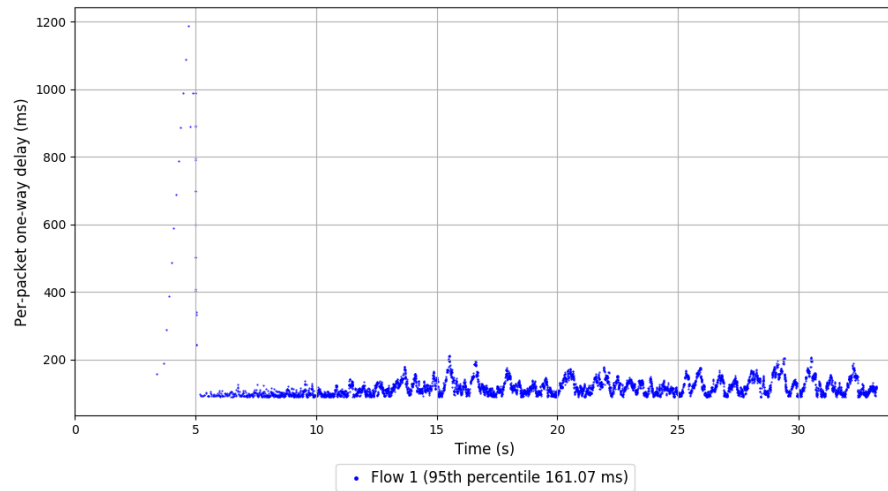
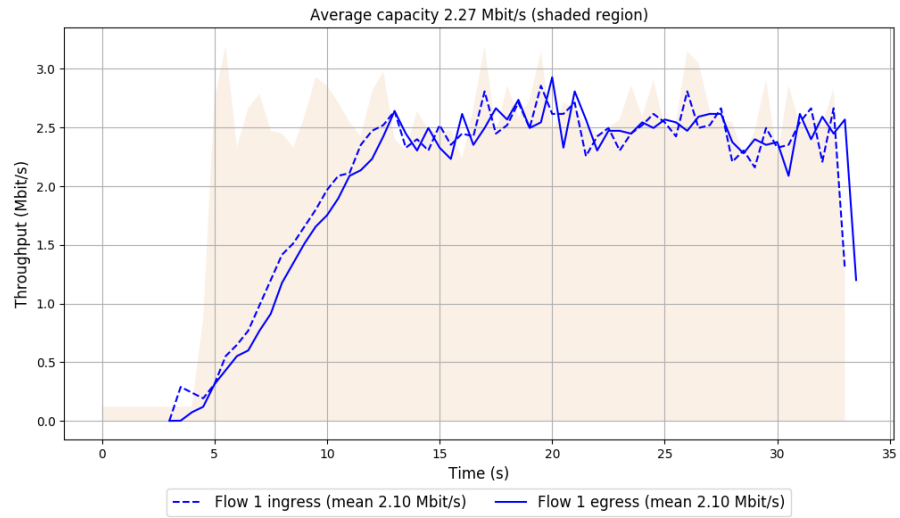
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 161.068 ms

Loss rate: 0.51%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2019-08-26 19:21:05

End at: 2019-08-26 19:21:35

Below is generated by plot.py at 2019-08-26 19:24:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.09 Mbit/s (91.9% utilization)

95th percentile per-packet one-way delay: 159.958 ms

Loss rate: 0.46%

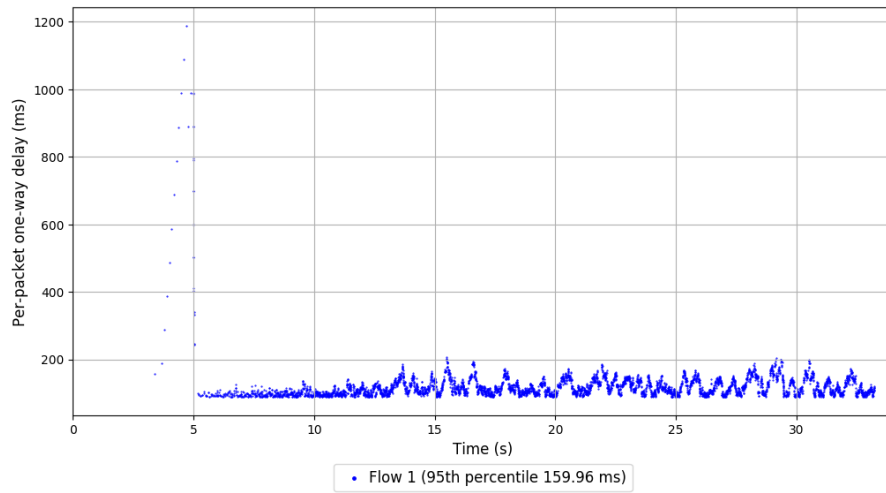
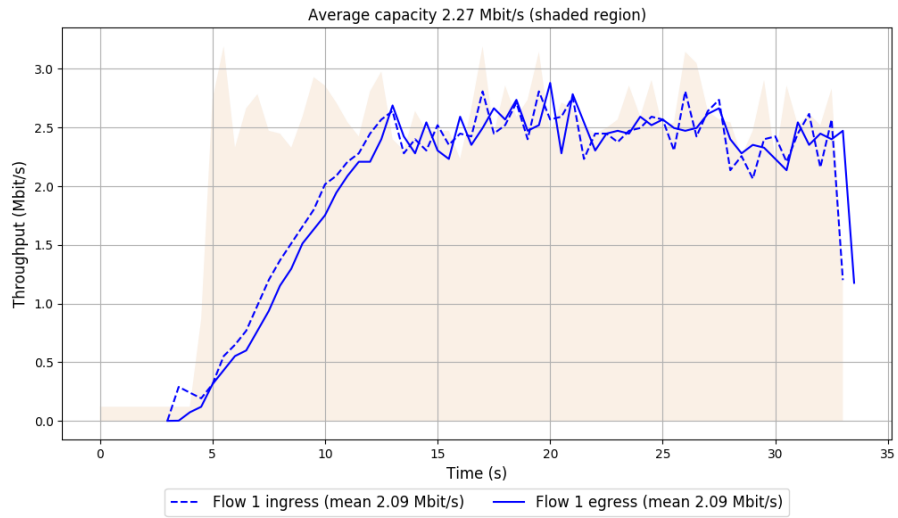
-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 159.958 ms

Loss rate: 0.46%

Run 3: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2019-08-26 18:54:37

End at: 2019-08-26 18:55:07

Below is generated by plot.py at 2019-08-26 19:24:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.37 Mbit/s (104.4% utilization)

95th percentile per-packet one-way delay: 721.570 ms

Loss rate: 7.31%

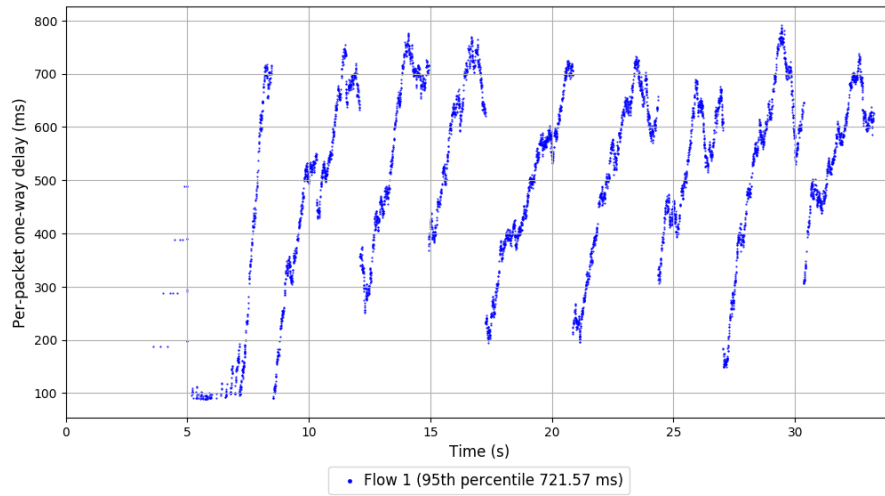
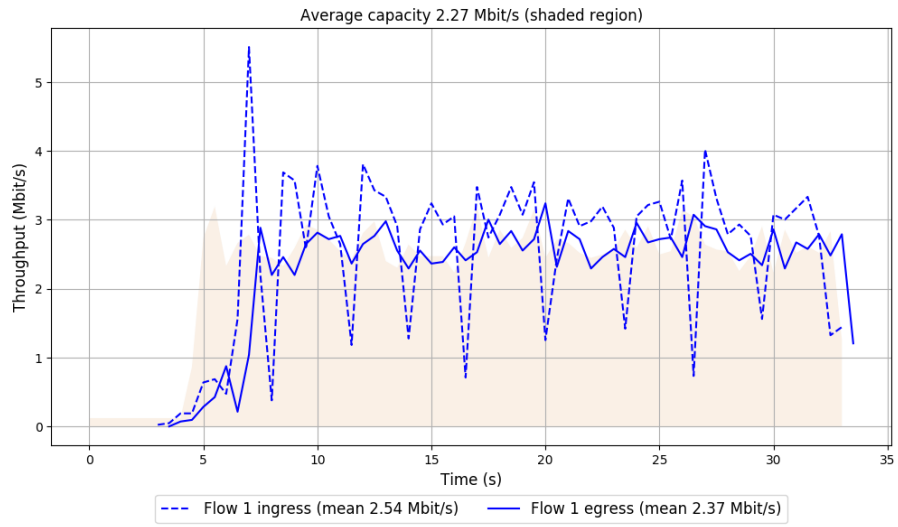
-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 721.570 ms

Loss rate: 7.31%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2019-08-26 19:08:44

End at: 2019-08-26 19:09:14

Below is generated by plot.py at 2019-08-26 19:24:56

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.43 Mbit/s (107.1% utilization)

95th percentile per-packet one-way delay: 711.592 ms

Loss rate: 10.24%

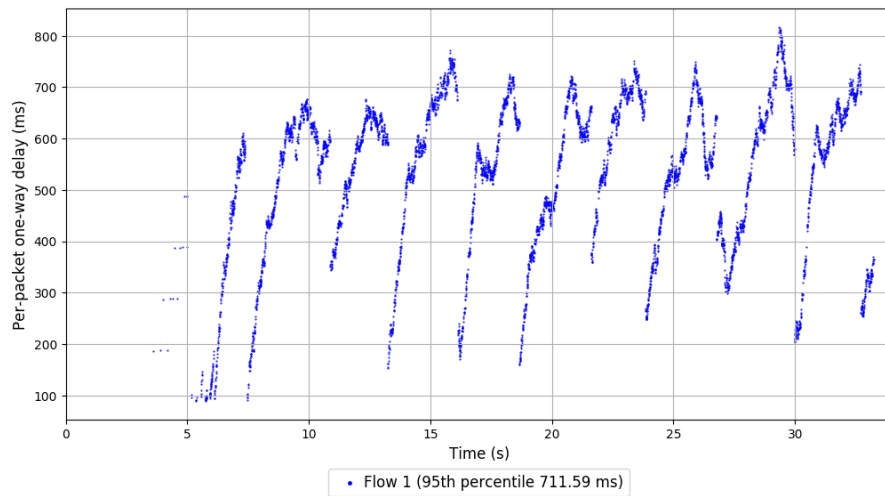
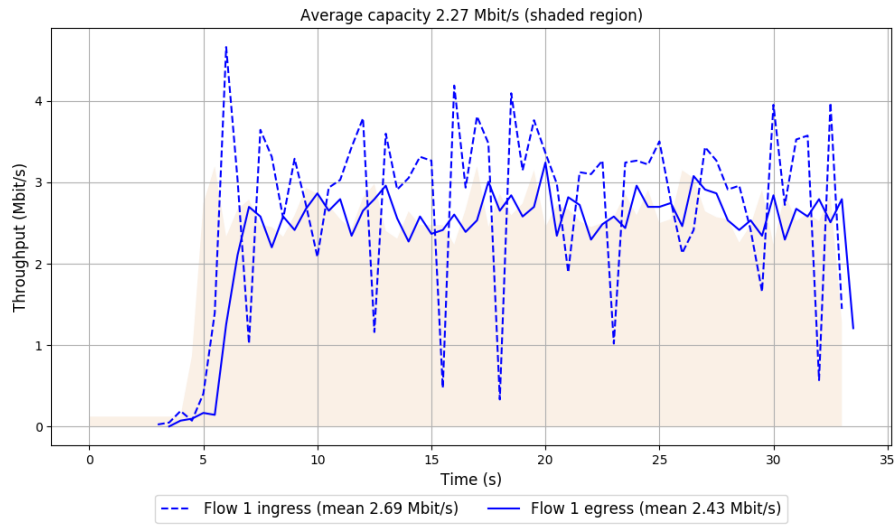
-- Flow 1:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 711.592 ms

Loss rate: 10.24%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2019-08-26 19:22:51

End at: 2019-08-26 19:23:21

Below is generated by plot.py at 2019-08-26 19:25:02

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.44 Mbit/s (107.2% utilization)

95th percentile per-packet one-way delay: 710.101 ms

Loss rate: 9.56%

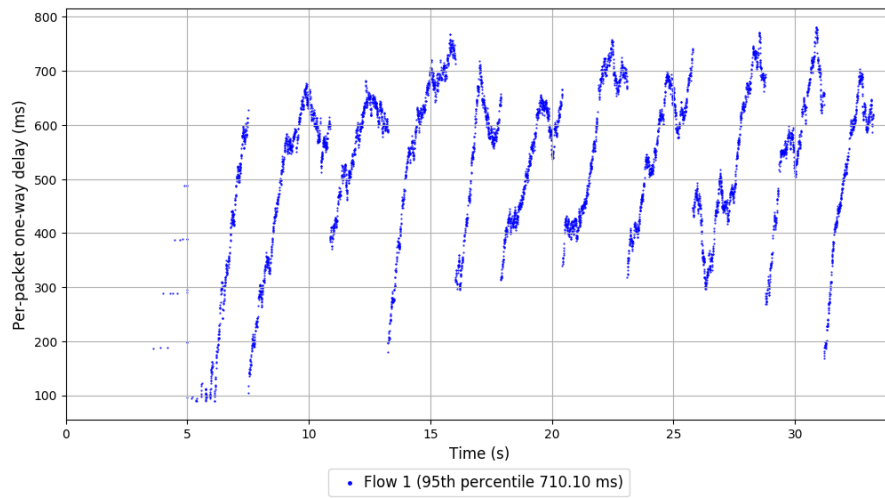
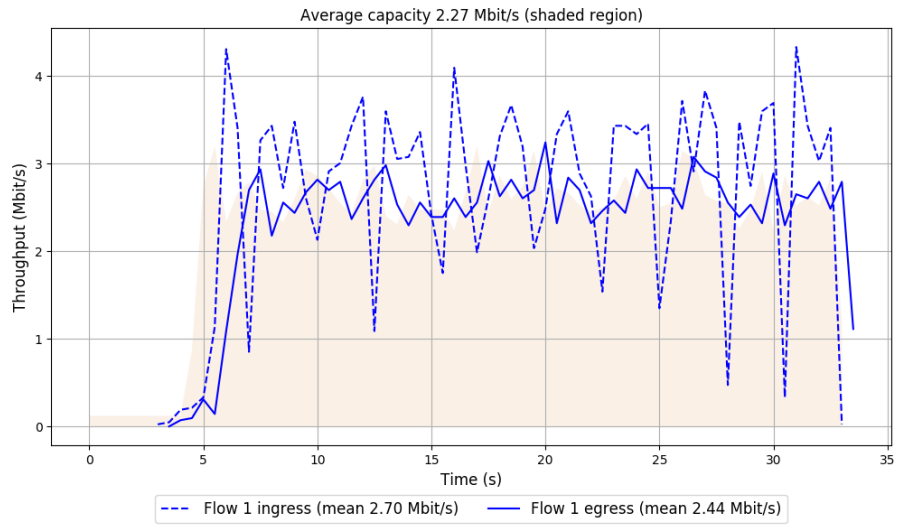
-- Flow 1:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 710.101 ms

Loss rate: 9.56%

Run 3: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-08-26 18:46:22

End at: 2019-08-26 18:46:52

Below is generated by plot.py at 2019-08-26 19:25:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.03 Mbit/s (89.2% utilization)

95th percentile per-packet one-way delay: 705.689 ms

Loss rate: 14.17%

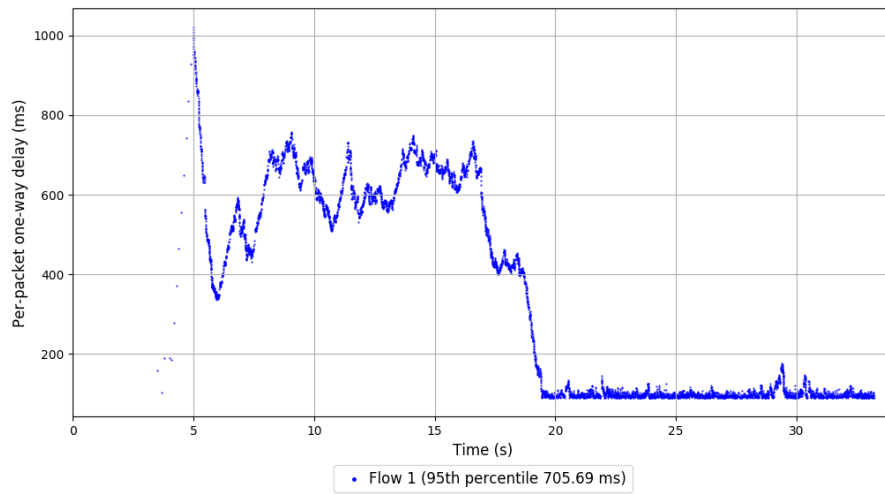
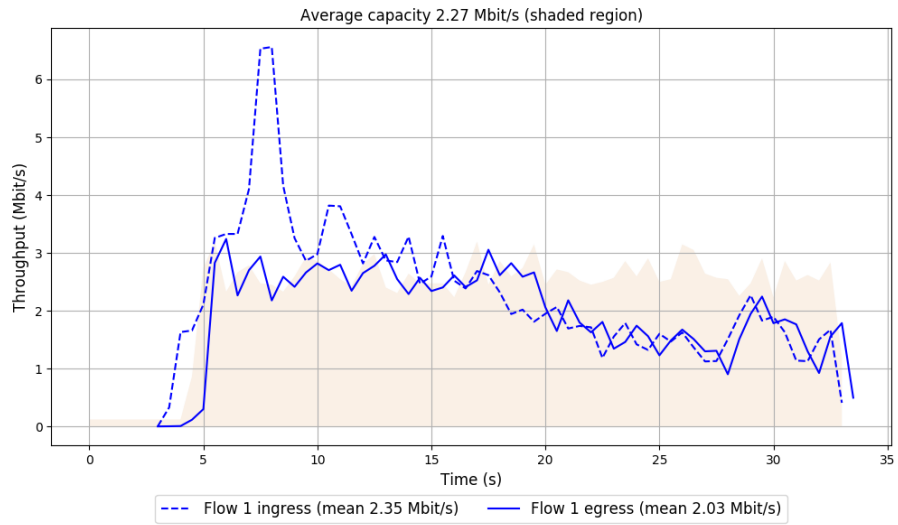
-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 705.689 ms

Loss rate: 14.17%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2019-08-26 19:00:30

End at: 2019-08-26 19:01:00

Below is generated by plot.py at 2019-08-26 19:25:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 2.26 Mbit/s (99.4% utilization)

95th percentile per-packet one-way delay: 698.464 ms

Loss rate: 13.05%

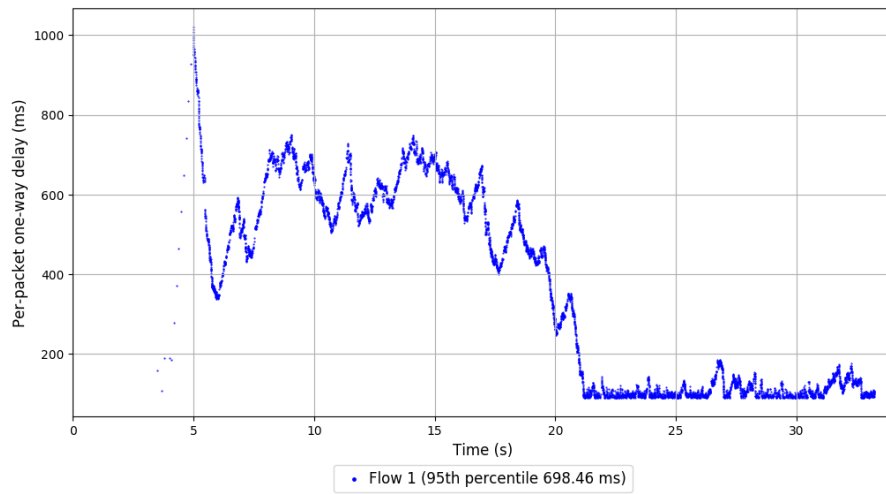
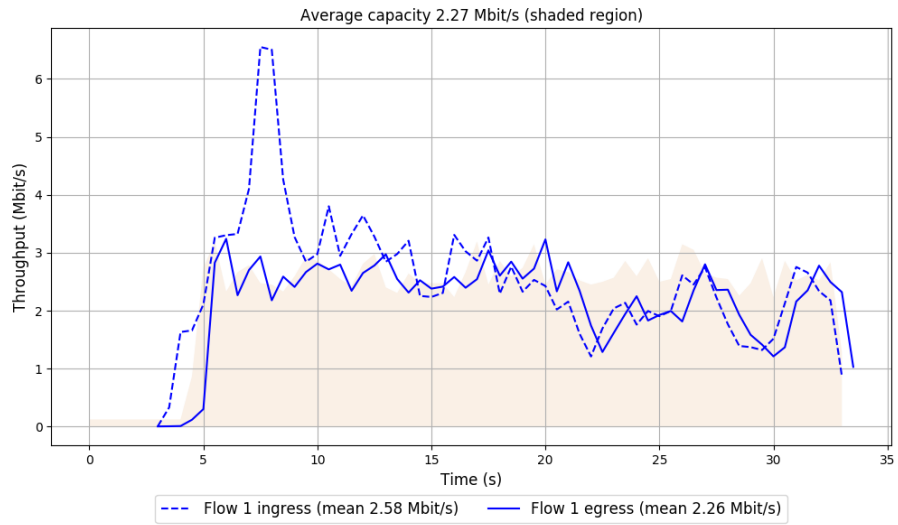
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 698.464 ms

Loss rate: 13.05%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2019-08-26 19:14:37

End at: 2019-08-26 19:15:07

Below is generated by plot.py at 2019-08-26 19:25:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

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

95th percentile per-packet one-way delay: 723.593 ms

Loss rate: 30.81%

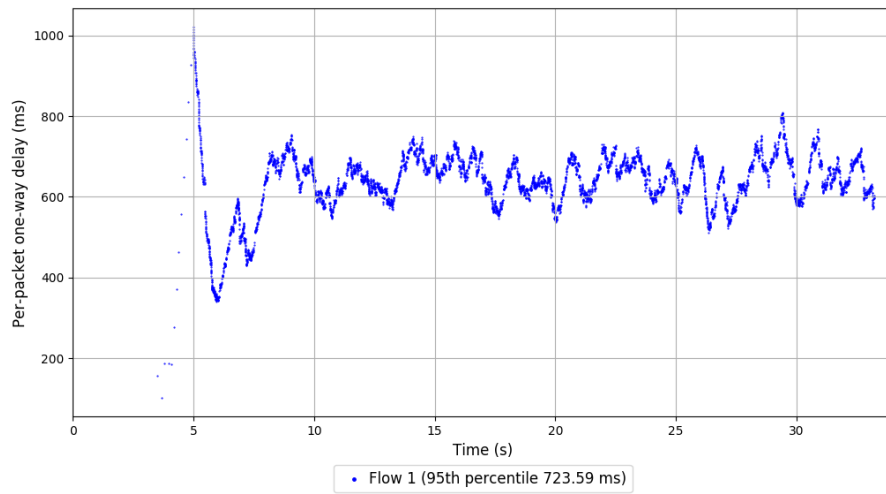
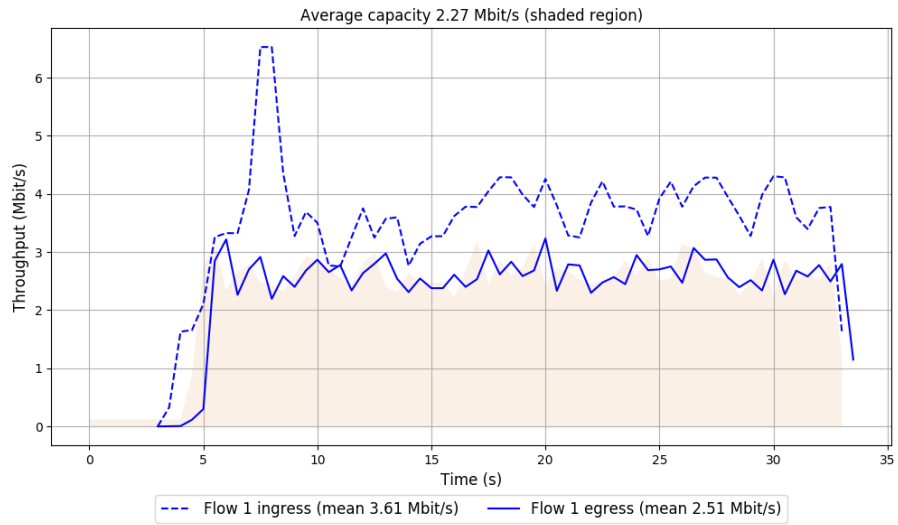
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 723.593 ms

Loss rate: 30.81%

Run 3: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-08-26 18:49:54

End at: 2019-08-26 18:50:24

Below is generated by plot.py at 2019-08-26 19:25:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.05 Mbit/s (2.1% utilization)

95th percentile per-packet one-way delay: 401.822 ms

Loss rate: 0.00%

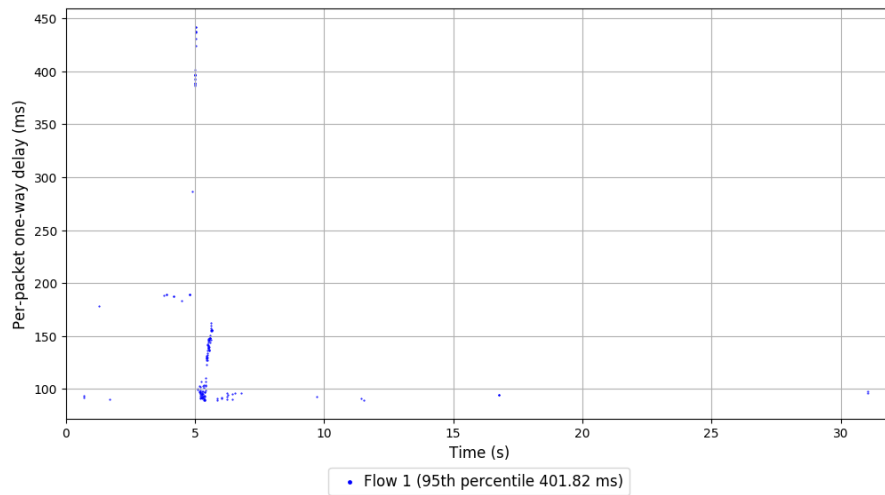
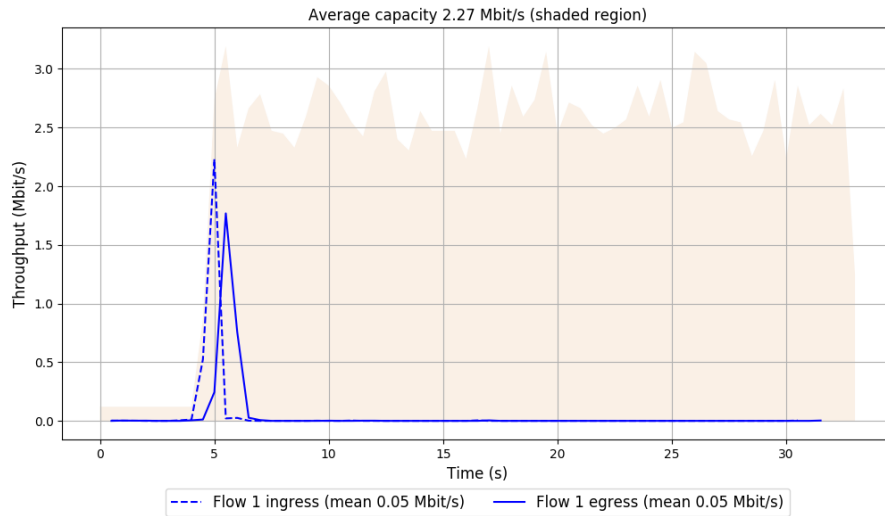
-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 401.822 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2019-08-26 19:04:01

End at: 2019-08-26 19:04:31

Below is generated by plot.py at 2019-08-26 19:25:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.05 Mbit/s (2.1% utilization)

95th percentile per-packet one-way delay: 402.130 ms

Loss rate: 0.00%

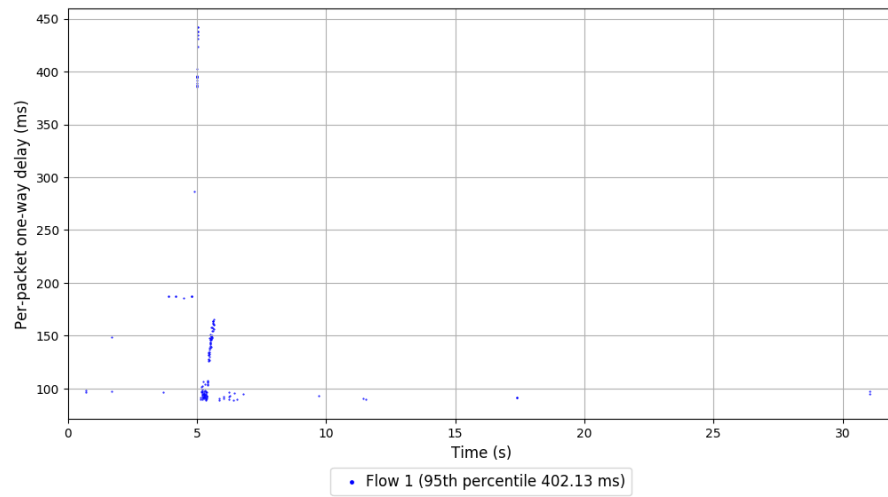
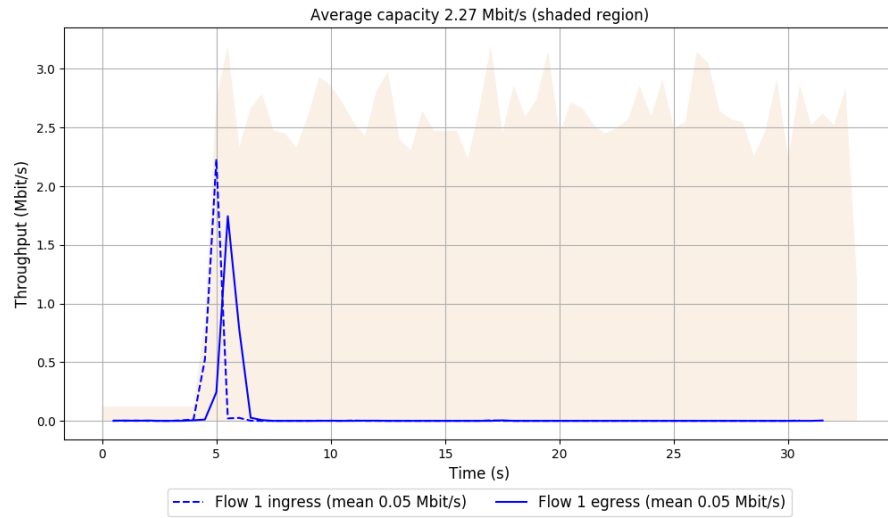
-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 402.130 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2019-08-26 19:18:09

End at: 2019-08-26 19:18:39

Below is generated by plot.py at 2019-08-26 19:25:03

Datalink statistics

-- Total of 1 flow:

Average capacity: 2.27 Mbit/s

Average throughput: 0.05 Mbit/s (2.1% utilization)

95th percentile per-packet one-way delay: 497.407 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 497.407 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

