

## Pantheon Report

Generated at 2018-02-27 19:43:54 (UTC).

Tested in mahimahi: mm-delay 10 mm-link 12mbps.trace 0.12mbps.trace

Repeated the test of 17 congestion control schemes 10 times.

Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

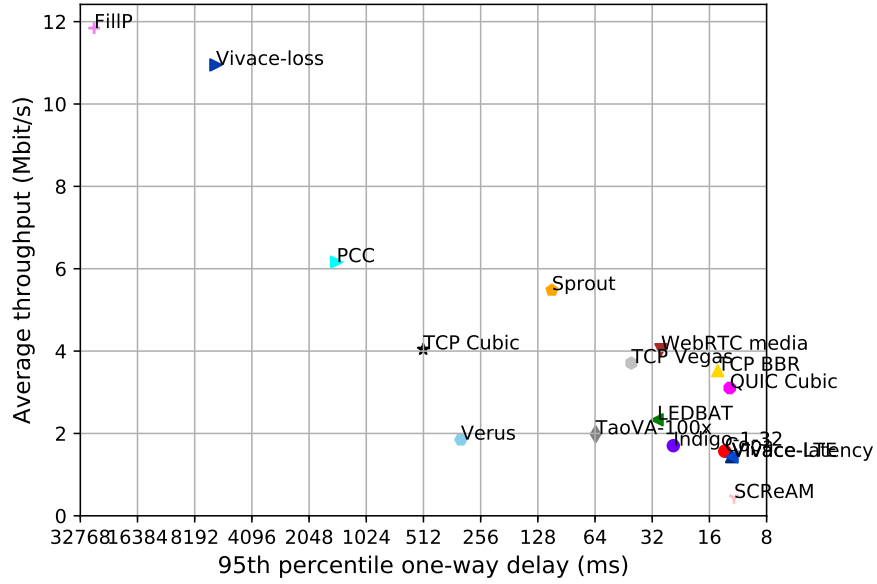
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

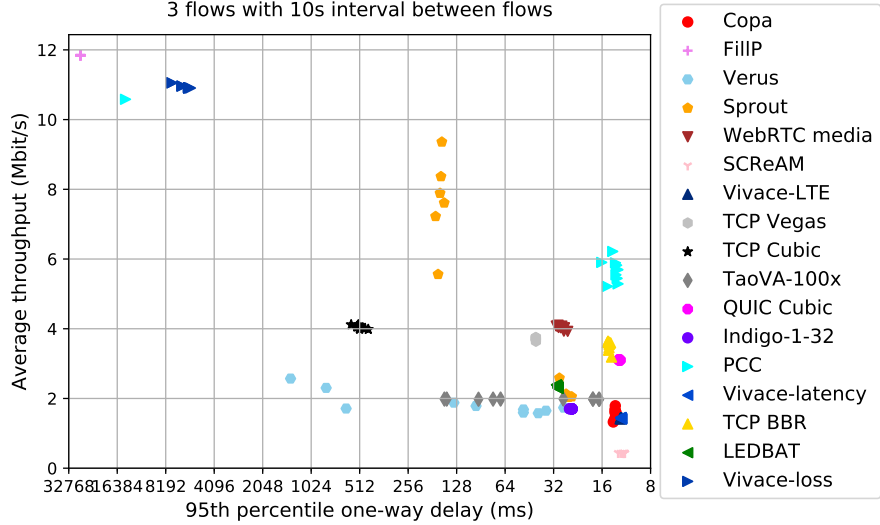
Git summary:

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

local test in mahimahi, 10 runs of 30s each per scheme  
 3 flows with 10s interval between flows (mean of all runs by scheme)



local test in mahimahi, 10 runs of 30s each per scheme  
 3 flows with 10s interval between flows



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	2.19	1.24	1.53	13.97	15.00	15.16	0.03	0.11	0.23
TCP Cubic	10	3.99	0.14	0.00	515.38	138.78	146.92	0.29	1.03	0.00
LEDBAT	10	2.01	0.43	0.12	30.23	29.47	29.79	0.17	0.84	2.31
PCC	10	4.19	2.97	0.00	72.39	1531.43	12.59	5.28	7.47	0.00
QUIC Cubic	10	2.59	0.73	0.18	12.33	12.95	17.87	0.03	0.05	0.16
SCReAM	10	0.22	0.22	0.22	11.78	11.85	11.75	0.00	0.00	0.10
WebRTC media	10	2.27	1.36	0.41	26.64	29.15	34.21	0.14	0.12	0.48
Sprout	10	3.53	2.67	0.55	104.63	111.41	107.34	0.00	0.01	0.17
TaoVA-100x	10	1.13	0.89	0.80	35.41	58.47	105.50	0.07	0.11	0.19
TCP Vegas	10	2.10	1.64	1.60	41.23	41.13	41.09	0.04	0.45	1.16
Verus	10	1.15	0.61	1.18	43.03	137.61	284.63	0.11	0.15	0.36
Copa	10	0.60	0.94	1.05	13.31	14.19	16.44	0.00	0.03	0.16
FillP	10	11.84	0.00	N/A	27721.64	N/A	N/A	65.38	N/A	N/A
Indigo-1-32	10	1.00	0.70	0.77	24.44	25.09	25.87	0.12	0.32	0.79
Vivace-latency	10	1.43	0.00	0.00	12.16	12.32	12.04	0.04	0.00	0.00
Vivace-loss	10	10.95	0.00	0.00	6332.19	728.16	6593.12	36.07	0.00	10.00
Vivace-LTE	10	1.43	0.00	0.00	12.23	12.36	12.14	0.04	0.00	0.00

Run 1: Statistics of TCP BBR

Start at: 2018-02-27 17:58:18

End at: 2018-02-27 17:58:48

# Below is generated by plot.py at 2018-02-27 19:38:47

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.38 Mbit/s (28.2% utilization)

95th percentile per-packet one-way delay: 14.584 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 1.90 Mbit/s

95th percentile per-packet one-way delay: 13.867 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 15.048 ms

Loss rate: 0.08%

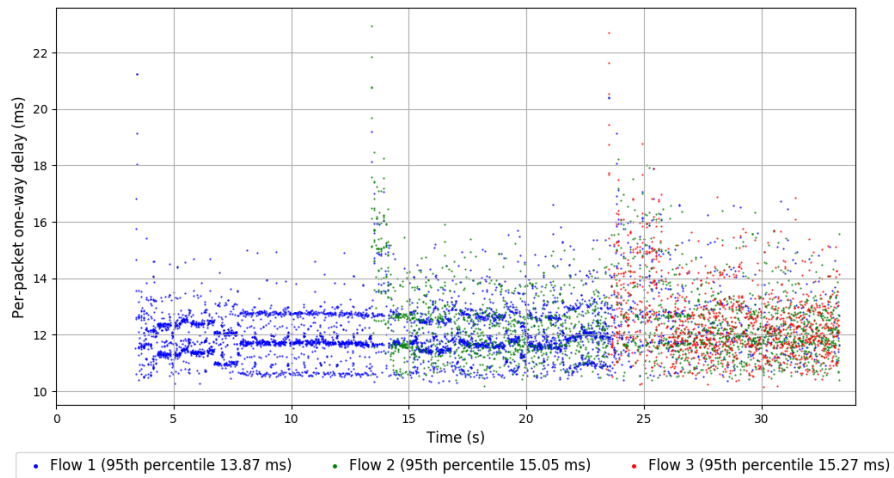
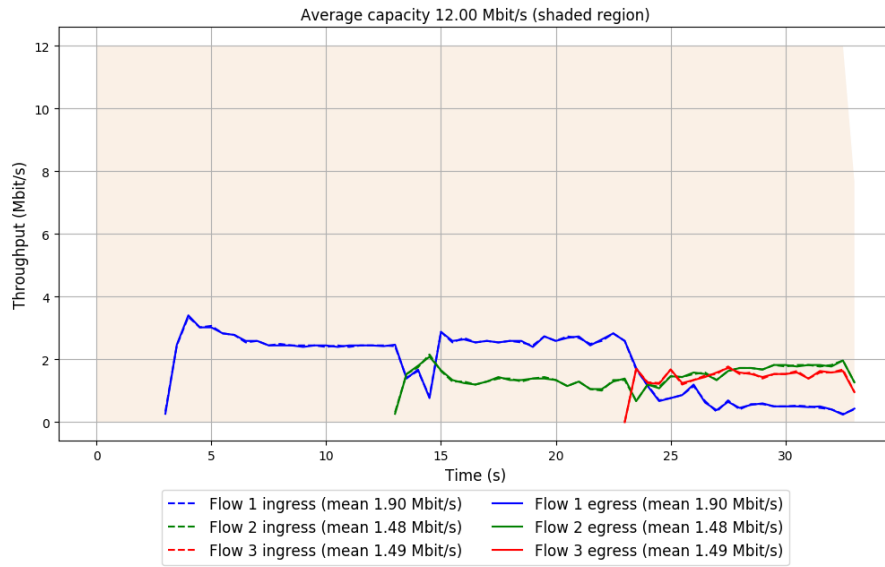
-- Flow 3:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 15.270 ms

Loss rate: 0.16%

# Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-27 18:08:32

End at: 2018-02-27 18:09:02

# Below is generated by plot.py at 2018-02-27 19:38:48

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.55 Mbit/s (29.5% utilization)

95th percentile per-packet one-way delay: 14.447 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 13.902 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 15.251 ms

Loss rate: 0.10%

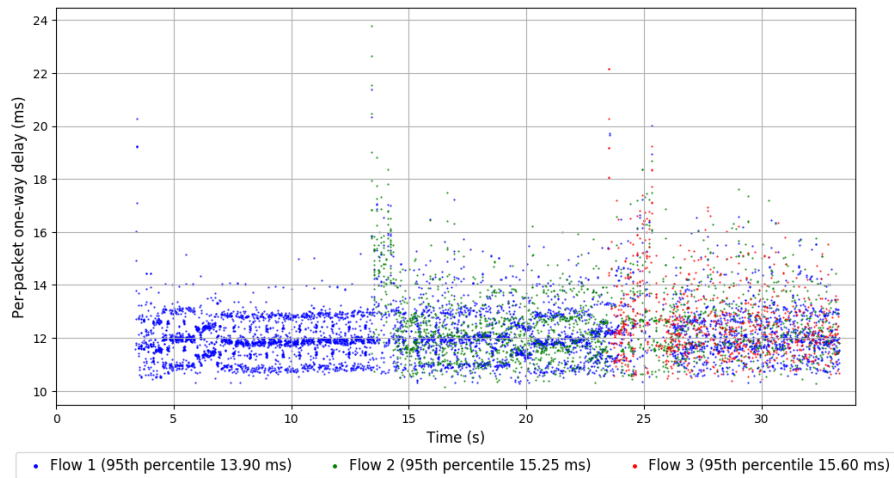
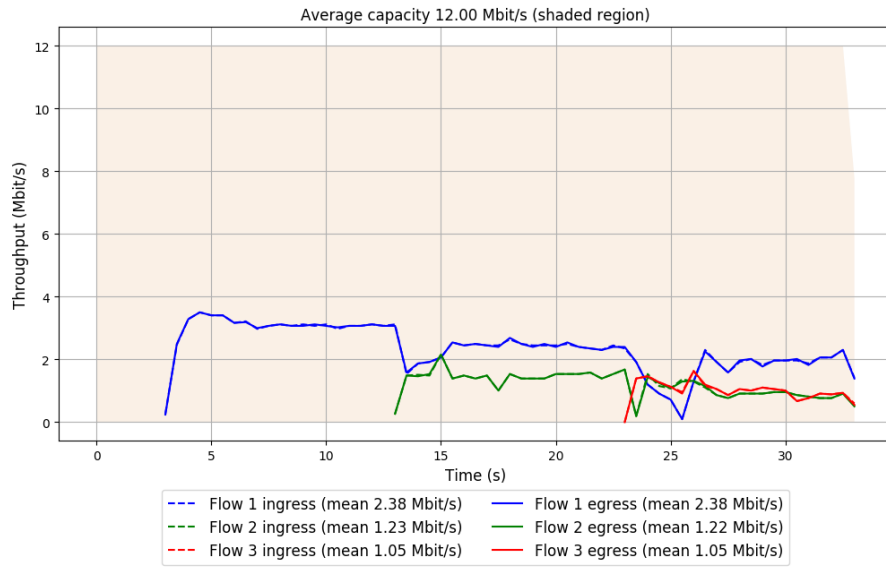
-- Flow 3:

Average throughput: 1.05 Mbit/s

95th percentile per-packet one-way delay: 15.597 ms

Loss rate: 0.23%

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



Run 3: Statistics of TCP BBR

Start at: 2018-02-27 18:18:46

End at: 2018-02-27 18:19:16

# Below is generated by plot.py at 2018-02-27 19:38:48

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.46 Mbit/s (28.8% utilization)

95th percentile per-packet one-way delay: 14.487 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 13.960 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 14.723 ms

Loss rate: 0.10%

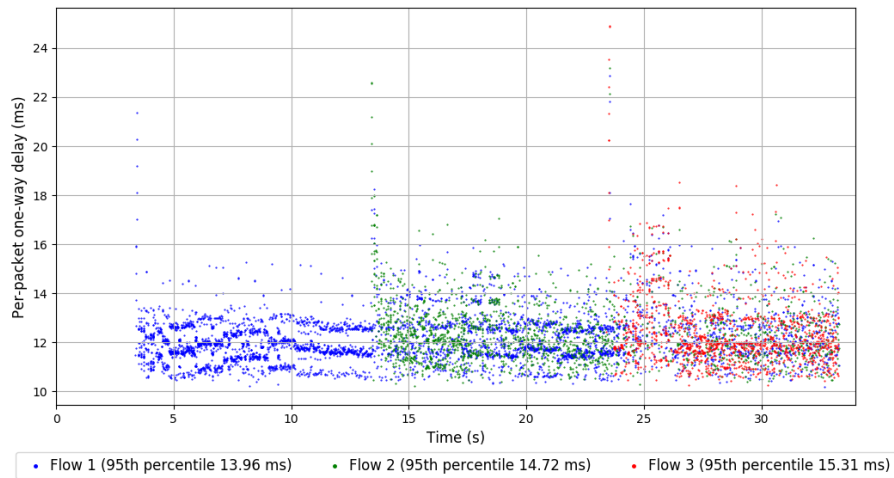
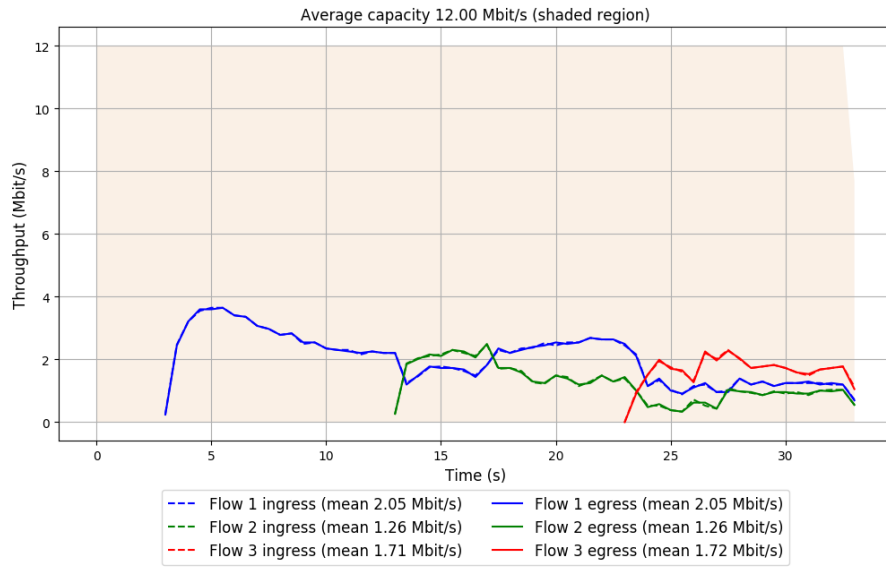
-- Flow 3:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 15.310 ms

Loss rate: 0.21%

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



Run 4: Statistics of TCP BBR

Start at: 2018-02-27 18:29:01

End at: 2018-02-27 18:29:31

# Below is generated by plot.py at 2018-02-27 19:38:48

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.19 Mbit/s (26.6% utilization)

95th percentile per-packet one-way delay: 13.984 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 13.676 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 0.81 Mbit/s

95th percentile per-packet one-way delay: 14.491 ms

Loss rate: 0.15%

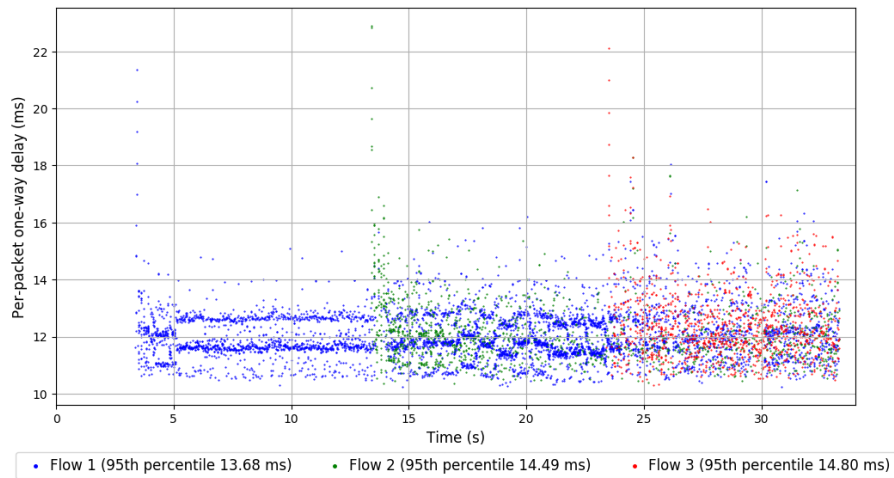
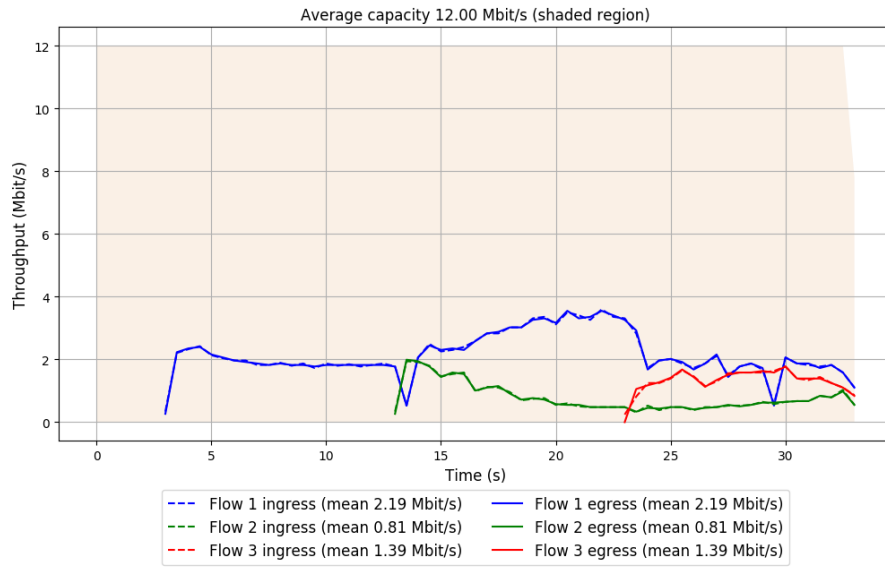
-- Flow 3:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 14.805 ms

Loss rate: 0.26%

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



Run 5: Statistics of TCP BBR

Start at: 2018-02-27 18:39:16

End at: 2018-02-27 18:39:46

# Below is generated by plot.py at 2018-02-27 19:38:49

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.60 Mbit/s (30.0% utilization)

95th percentile per-packet one-way delay: 14.846 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 14.261 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 15.280 ms

Loss rate: 0.10%

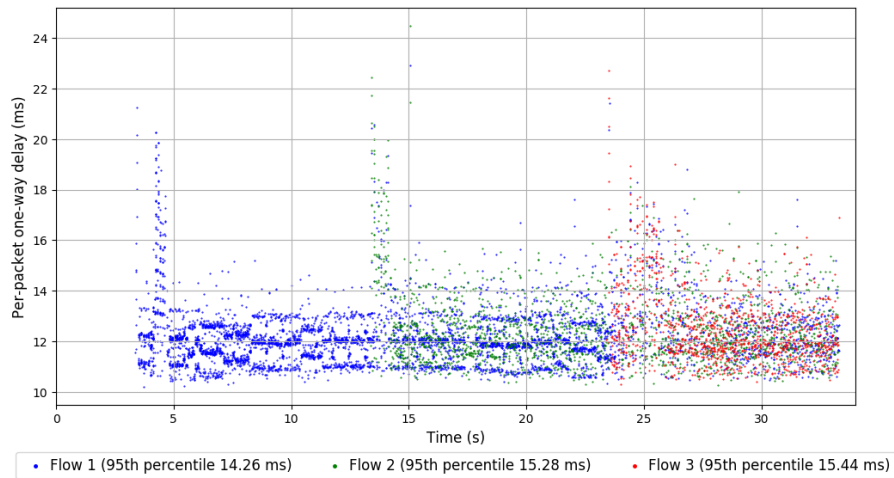
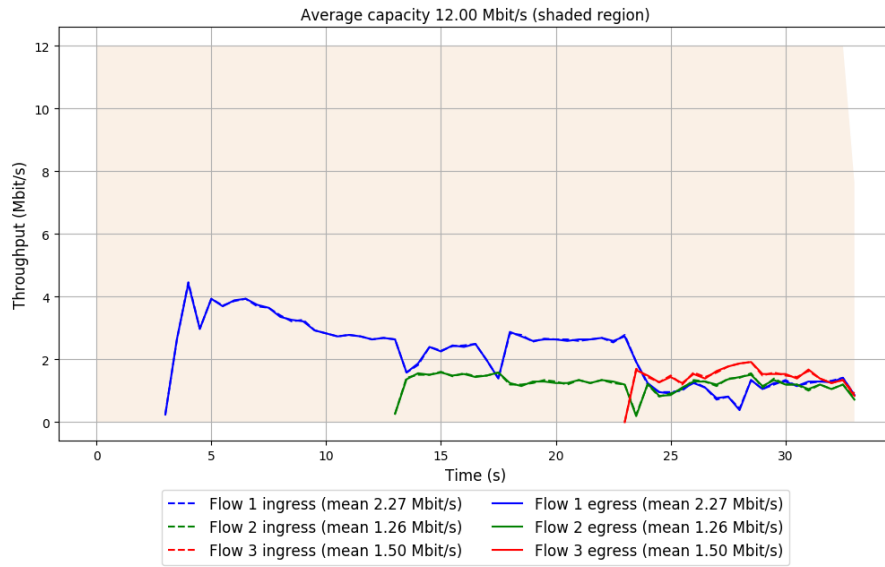
-- Flow 3:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 15.441 ms

Loss rate: 0.24%

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



Run 6: Statistics of TCP BBR

Start at: 2018-02-27 18:49:30

End at: 2018-02-27 18:50:00

# Below is generated by plot.py at 2018-02-27 19:38:49

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.64 Mbit/s (30.4% utilization)

95th percentile per-packet one-way delay: 14.702 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 14.295 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 15.096 ms

Loss rate: 0.16%

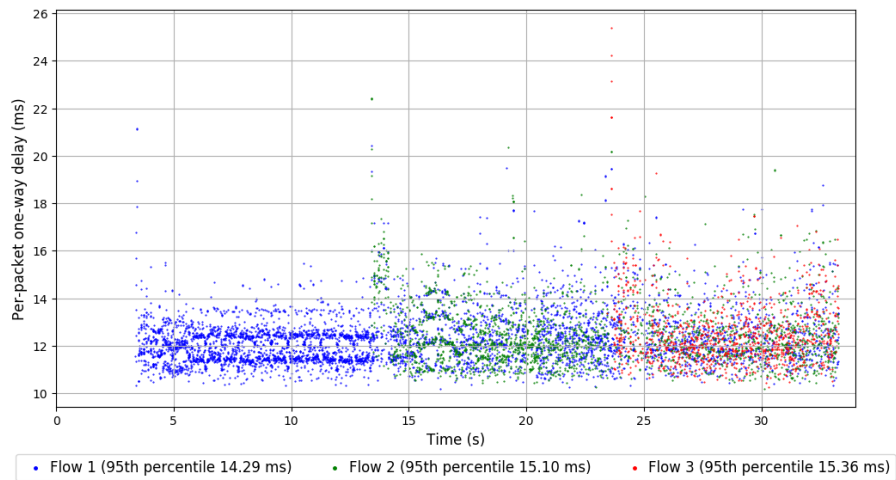
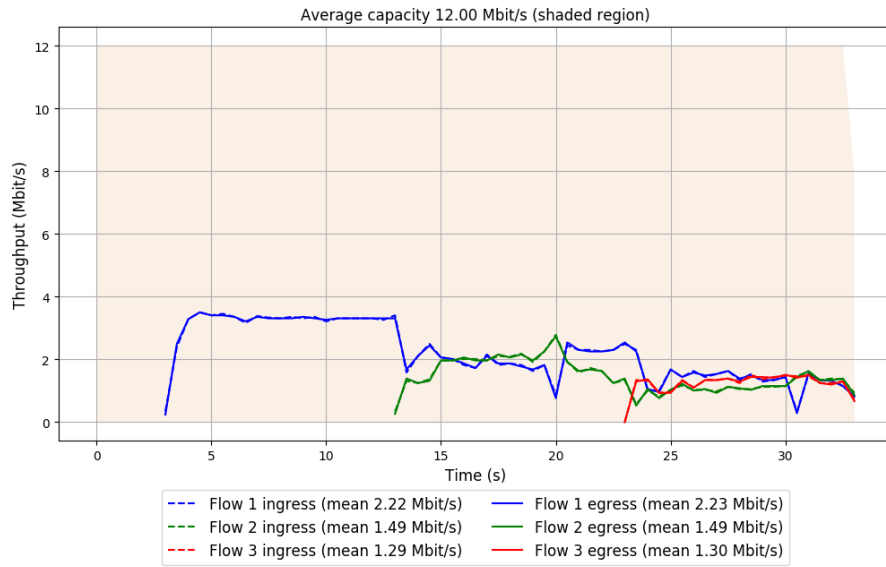
-- Flow 3:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 15.356 ms

Loss rate: 0.38%

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



Run 7: Statistics of TCP BBR

Start at: 2018-02-27 18:59:45

End at: 2018-02-27 19:00:15

# Below is generated by plot.py at 2018-02-27 19:38:49

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.62 Mbit/s (30.2% utilization)

95th percentile per-packet one-way delay: 14.519 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 14.136 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 15.287 ms

Loss rate: 0.12%

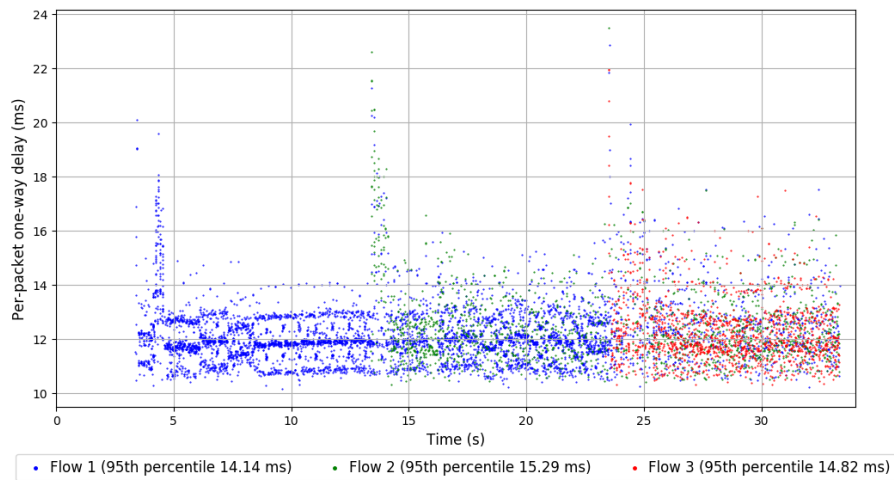
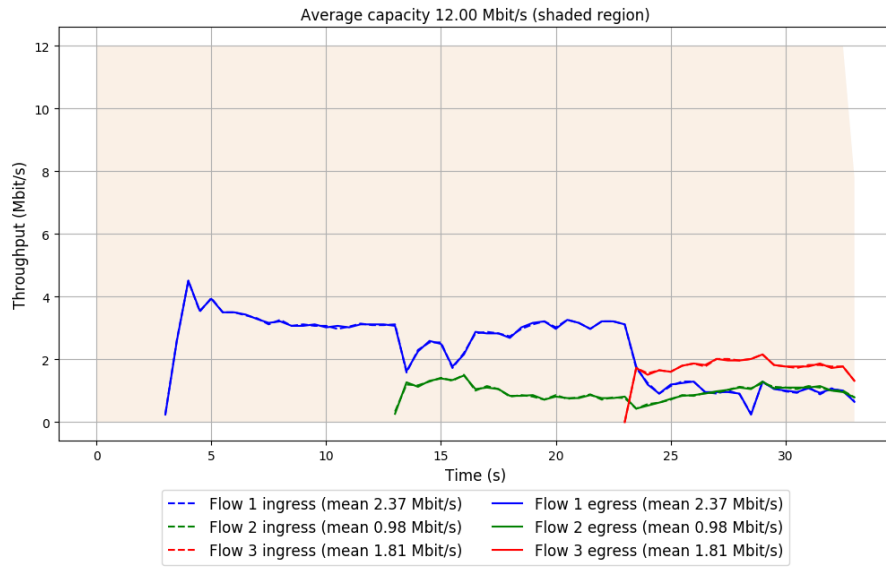
-- Flow 3:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 14.824 ms

Loss rate: 0.13%

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



Run 8: Statistics of TCP BBR

Start at: 2018-02-27 19:09:59

End at: 2018-02-27 19:10:29

# Below is generated by plot.py at 2018-02-27 19:38:49

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.62 Mbit/s (30.1% utilization)

95th percentile per-packet one-way delay: 14.686 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 14.121 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 15.042 ms

Loss rate: 0.12%

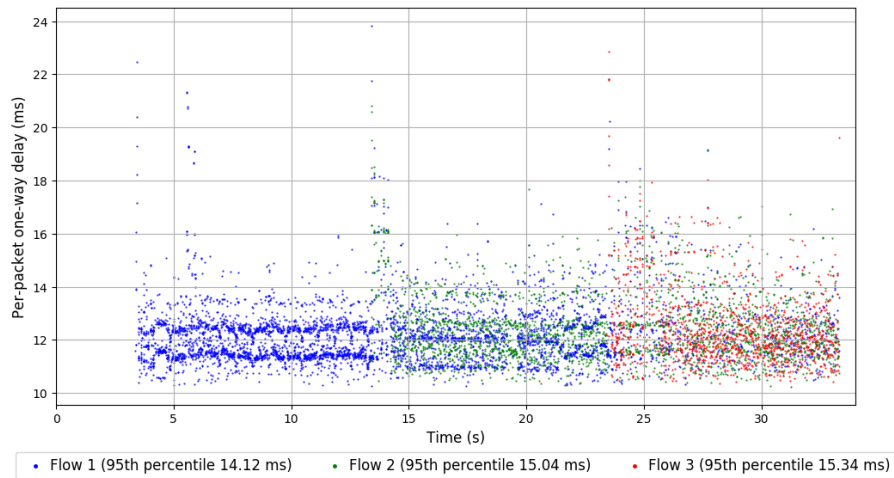
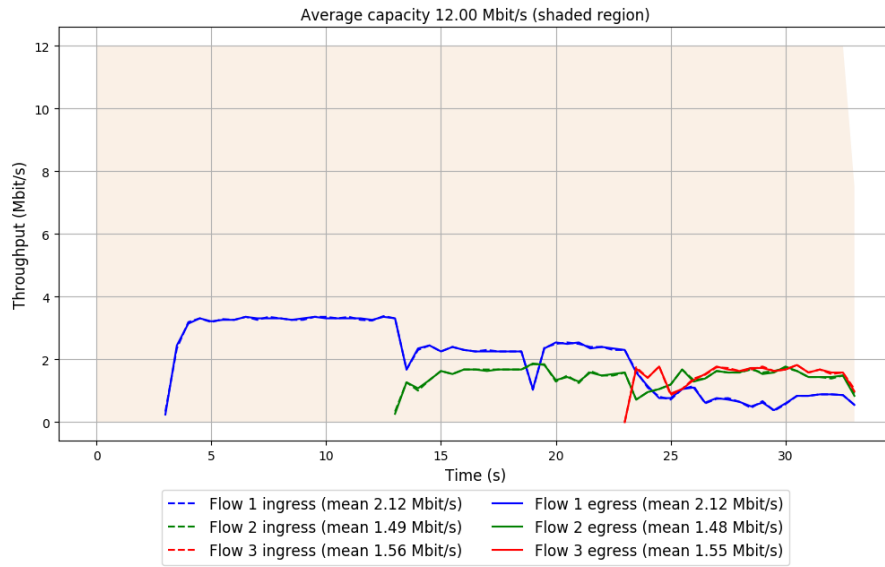
-- Flow 3:

Average throughput: 1.55 Mbit/s

95th percentile per-packet one-way delay: 15.339 ms

Loss rate: 0.23%

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



Run 9: Statistics of TCP BBR

Start at: 2018-02-27 19:20:13

End at: 2018-02-27 19:20:43

# Below is generated by plot.py at 2018-02-27 19:38:58

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.58 Mbit/s (29.8% utilization)

95th percentile per-packet one-way delay: 14.315 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 13.780 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 1.60 Mbit/s

95th percentile per-packet one-way delay: 14.740 ms

Loss rate: 0.15%

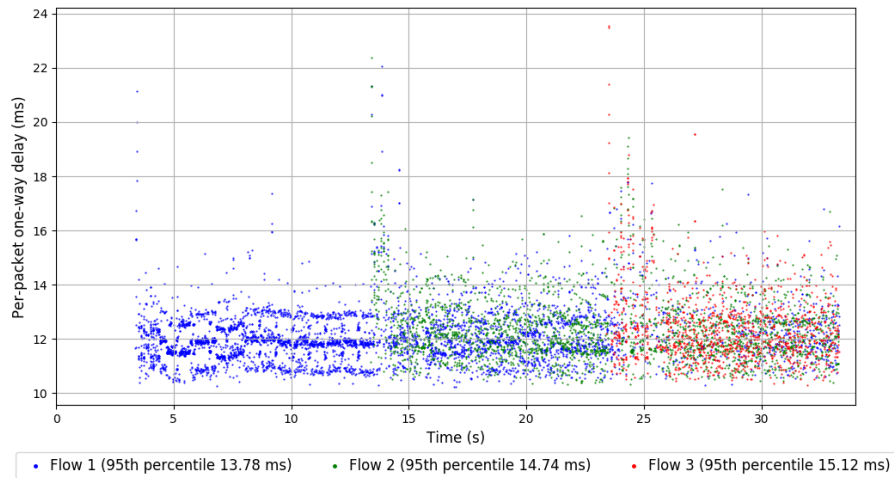
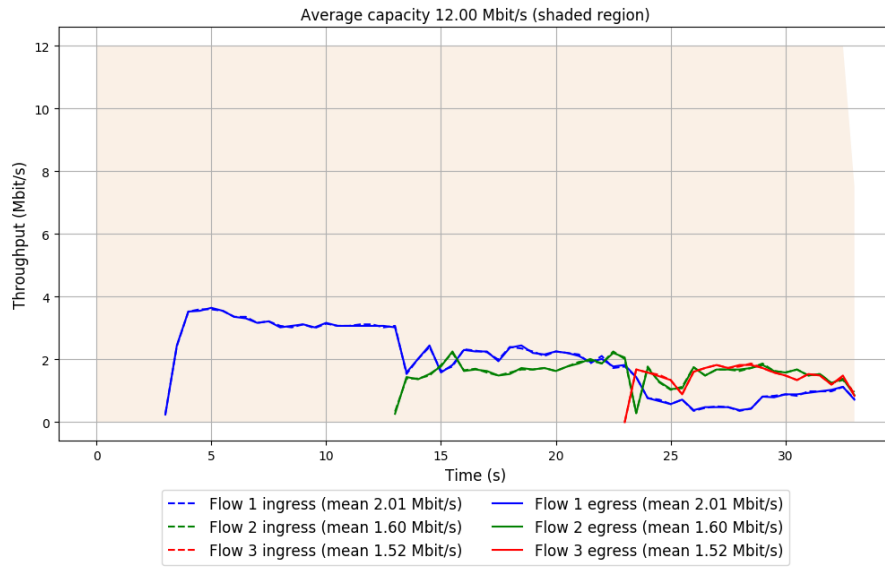
-- Flow 3:

Average throughput: 1.52 Mbit/s

95th percentile per-packet one-way delay: 15.120 ms

Loss rate: 0.24%

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



Run 10: Statistics of TCP BBR

Start at: 2018-02-27 19:30:27

End at: 2018-02-27 19:30:57

# Below is generated by plot.py at 2018-02-27 19:38:59

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.60 Mbit/s (30.0% utilization)

95th percentile per-packet one-way delay: 14.179 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 13.738 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 0.87 Mbit/s

95th percentile per-packet one-way delay: 15.041 ms

Loss rate: 0.07%

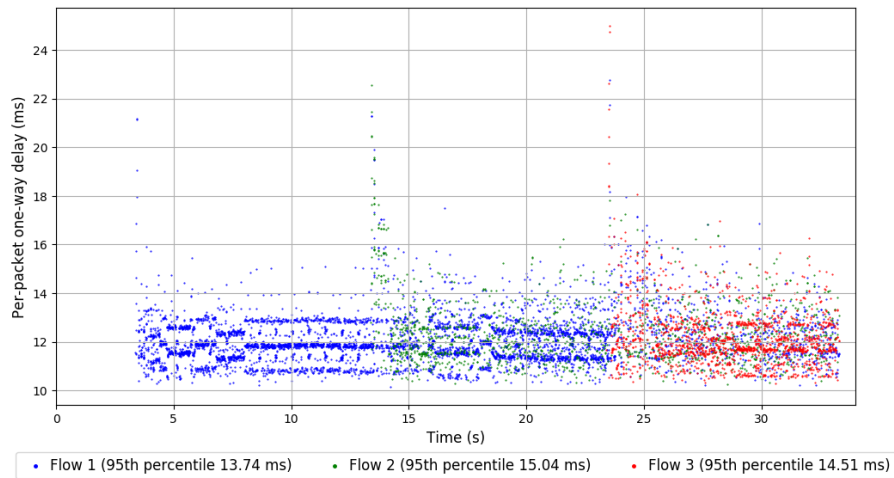
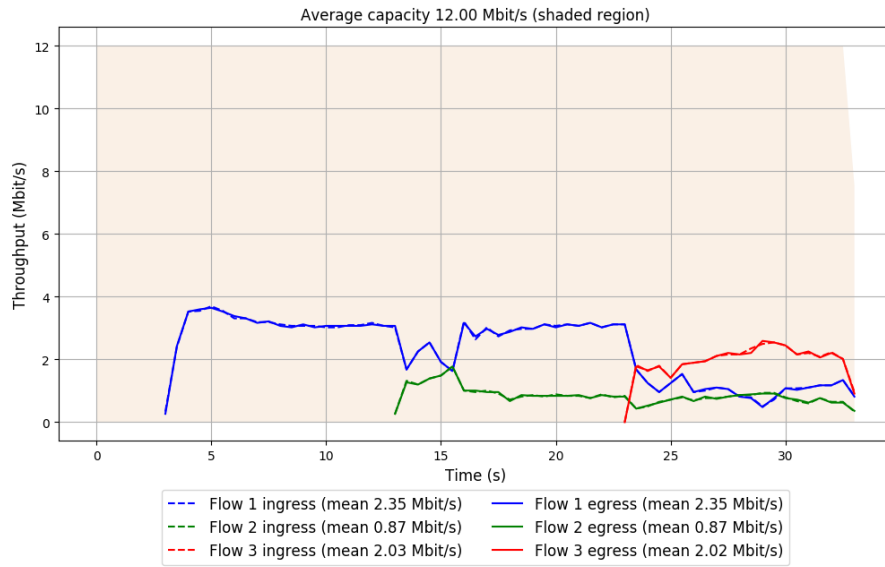
-- Flow 3:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 14.513 ms

Loss rate: 0.24%

# Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-27 17:58:52

End at: 2018-02-27 17:59:22

# Below is generated by plot.py at 2018-02-27 19:39:01

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.99 Mbit/s (33.2% utilization)

95th percentile per-packet one-way delay: 512.695 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 4.03 Mbit/s

95th percentile per-packet one-way delay: 514.109 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 50.619 ms

Loss rate: 10.29%

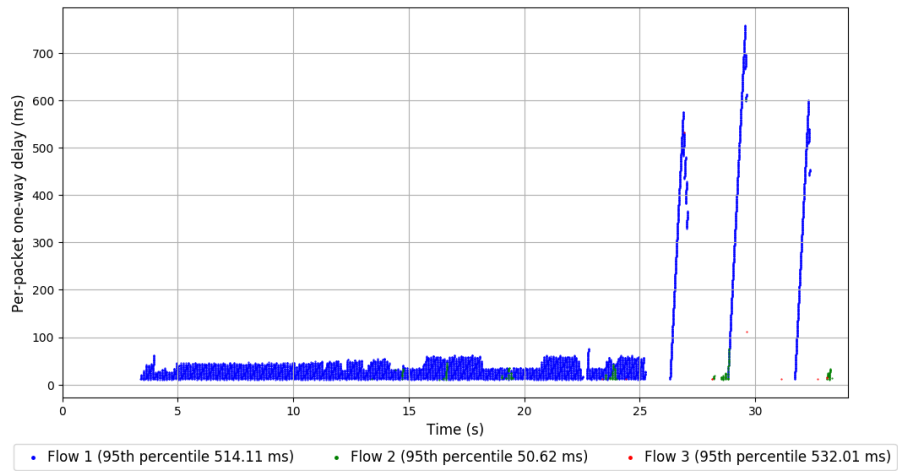
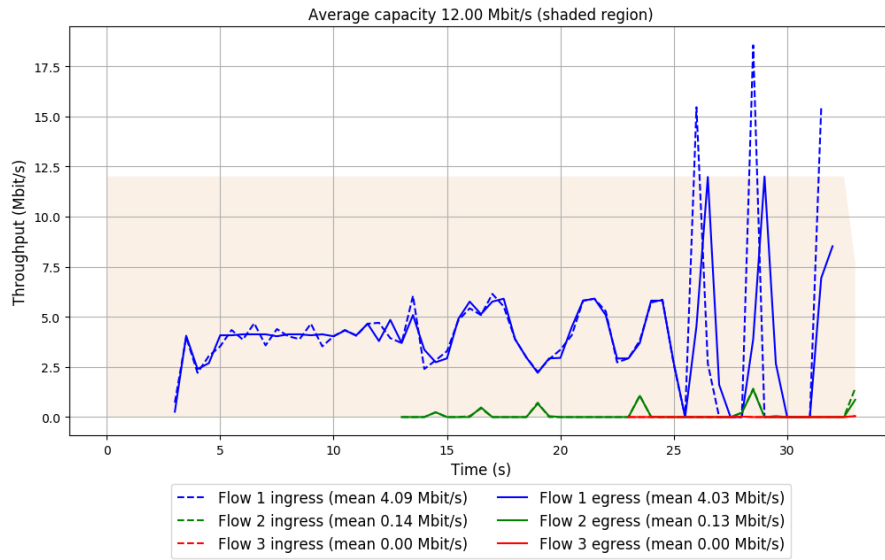
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 532.007 ms

Loss rate: 0.00%

# Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-27 18:09:06

End at: 2018-02-27 18:09:36

# Below is generated by plot.py at 2018-02-27 19:39:01

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.06 Mbit/s (33.8% utilization)

95th percentile per-packet one-way delay: 527.803 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 521.889 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 584.470 ms

Loss rate: 0.00%

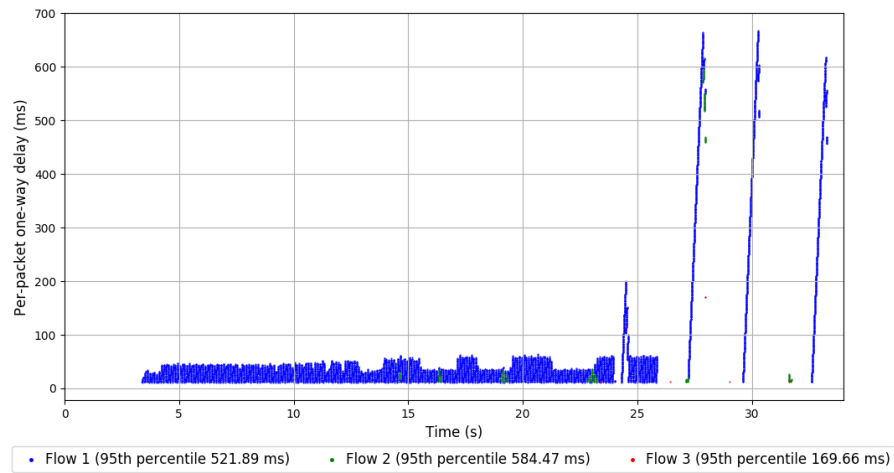
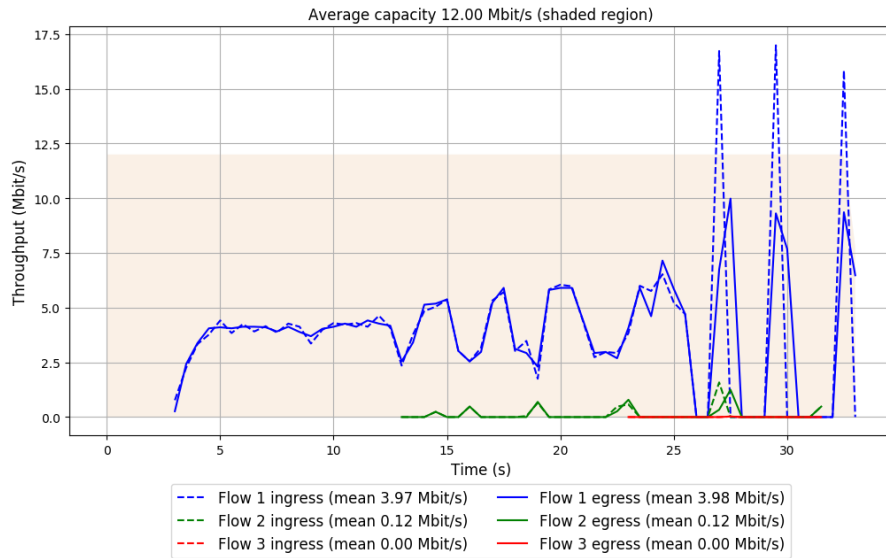
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 169.655 ms

Loss rate: 0.00%

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



Run 3: Statistics of TCP Cubic

Start at: 2018-02-27 18:19:20

End at: 2018-02-27 18:19:50

# Below is generated by plot.py at 2018-02-27 19:39:02

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.01 Mbit/s (33.4% utilization)

95th percentile per-packet one-way delay: 514.870 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 516.283 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 104.730 ms

Loss rate: 0.00%

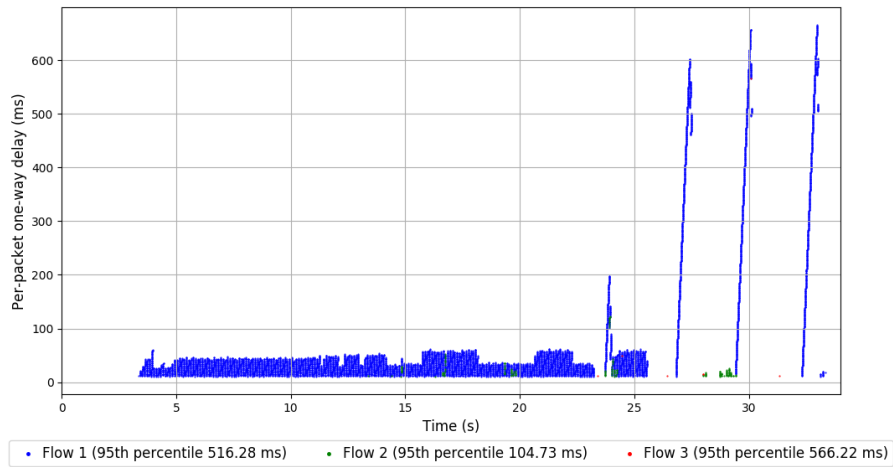
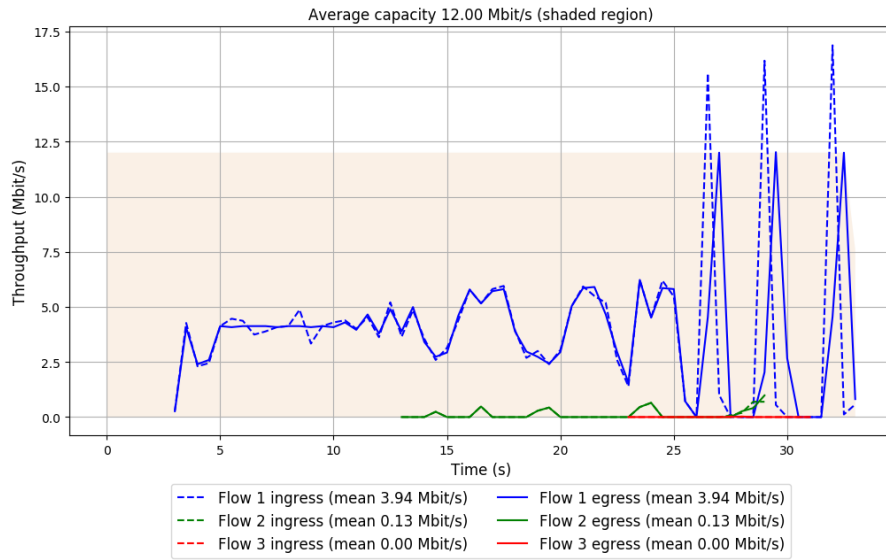
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 566.221 ms

Loss rate: 0.00%

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



Run 4: Statistics of TCP Cubic

Start at: 2018-02-27 18:29:35

End at: 2018-02-27 18:30:05

# Below is generated by plot.py at 2018-02-27 19:39:02

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.12 Mbit/s (34.3% utilization)

95th percentile per-packet one-way delay: 578.168 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 4.05 Mbit/s

95th percentile per-packet one-way delay: 580.508 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 247.775 ms

Loss rate: 0.00%

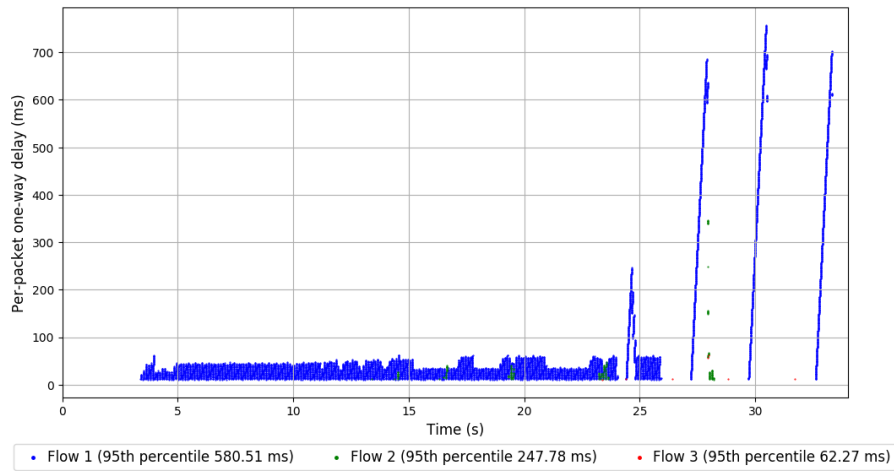
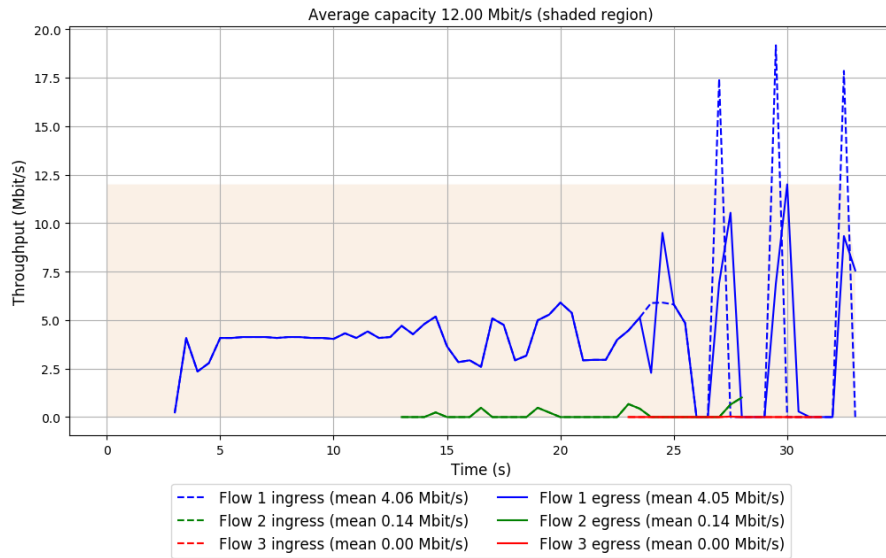
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 62.275 ms

Loss rate: 0.00%

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



Run 5: Statistics of TCP Cubic

Start at: 2018-02-27 18:39:50

End at: 2018-02-27 18:40:20

# Below is generated by plot.py at 2018-02-27 19:39:03

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.12 Mbit/s (34.3% utilization)

95th percentile per-packet one-way delay: 521.762 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.05 Mbit/s

95th percentile per-packet one-way delay: 523.136 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 51.388 ms

Loss rate: 0.00%

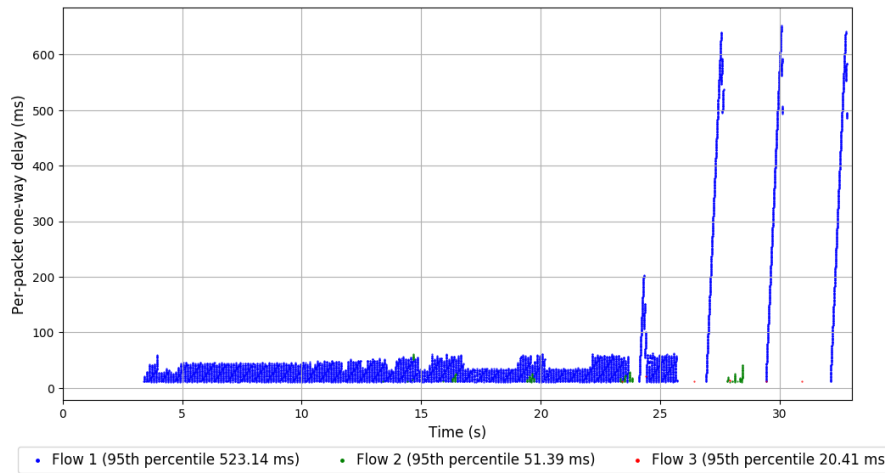
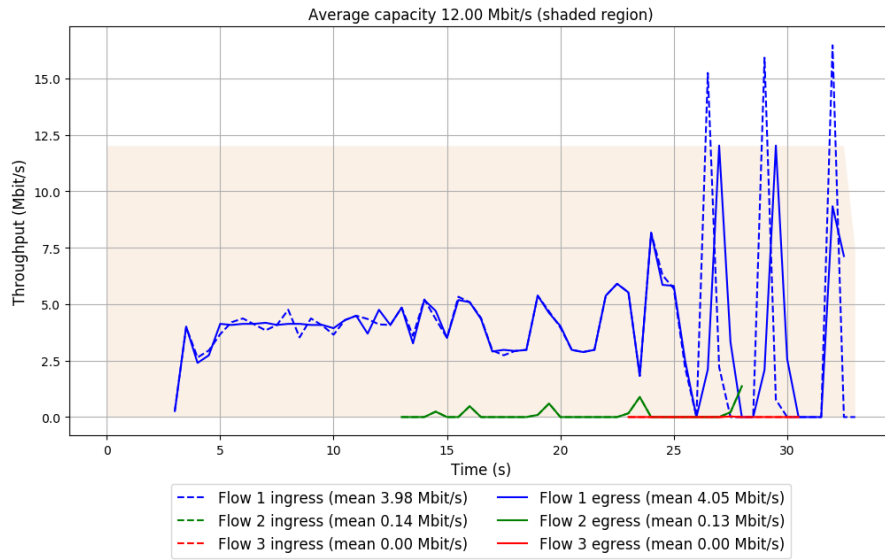
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 20.414 ms

Loss rate: 0.00%

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



Run 6: Statistics of TCP Cubic

Start at: 2018-02-27 18:50:05

End at: 2018-02-27 18:50:35

# Below is generated by plot.py at 2018-02-27 19:39:03

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.06 Mbit/s (33.8% utilization)

95th percentile per-packet one-way delay: 534.296 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 534.888 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 139.596 ms

Loss rate: 0.00%

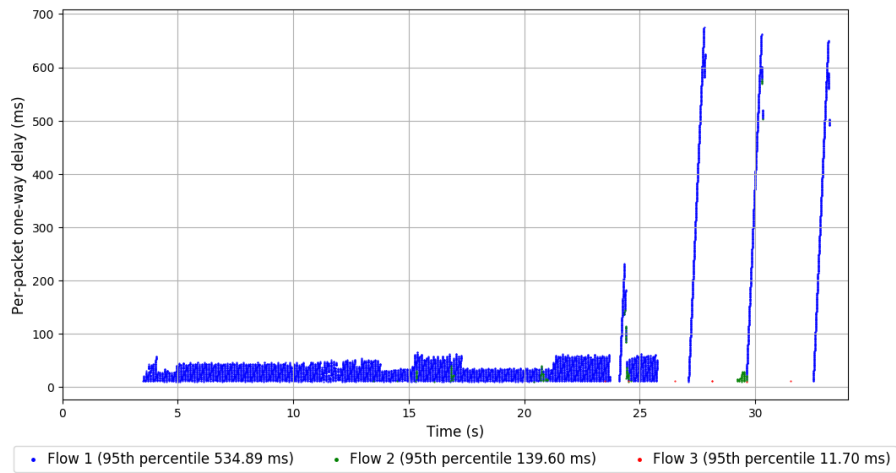
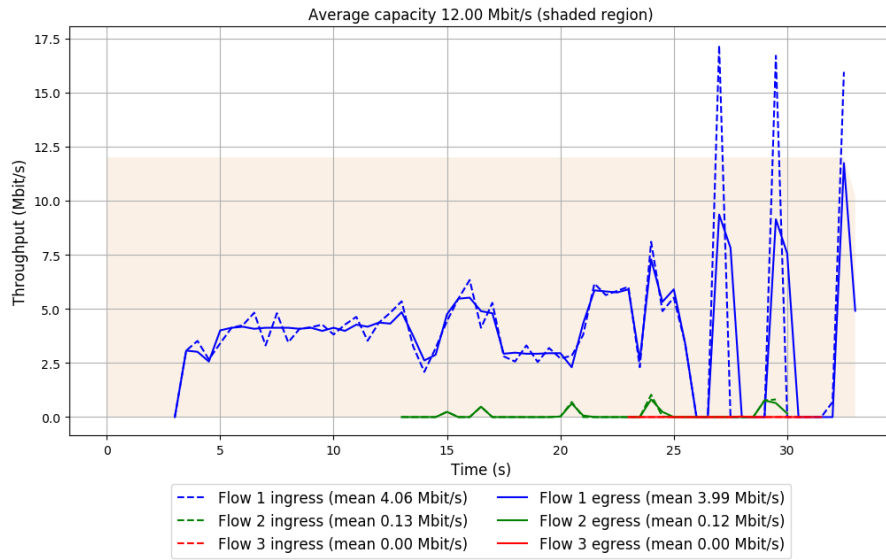
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.699 ms

Loss rate: 0.00%

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



Run 7: Statistics of TCP Cubic

Start at: 2018-02-27 19:00:19

End at: 2018-02-27 19:00:49

# Below is generated by plot.py at 2018-02-27 19:39:13

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.98 Mbit/s (33.2% utilization)

95th percentile per-packet one-way delay: 452.676 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.03 Mbit/s

95th percentile per-packet one-way delay: 460.910 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 38.778 ms

Loss rate: 0.00%

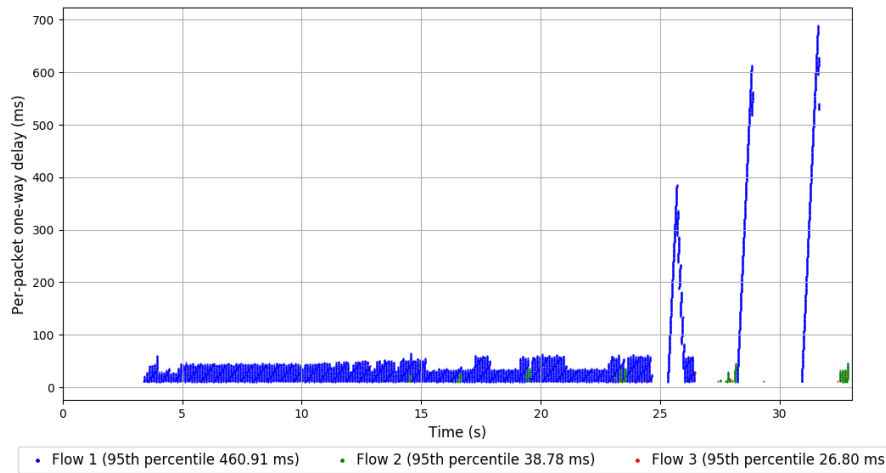
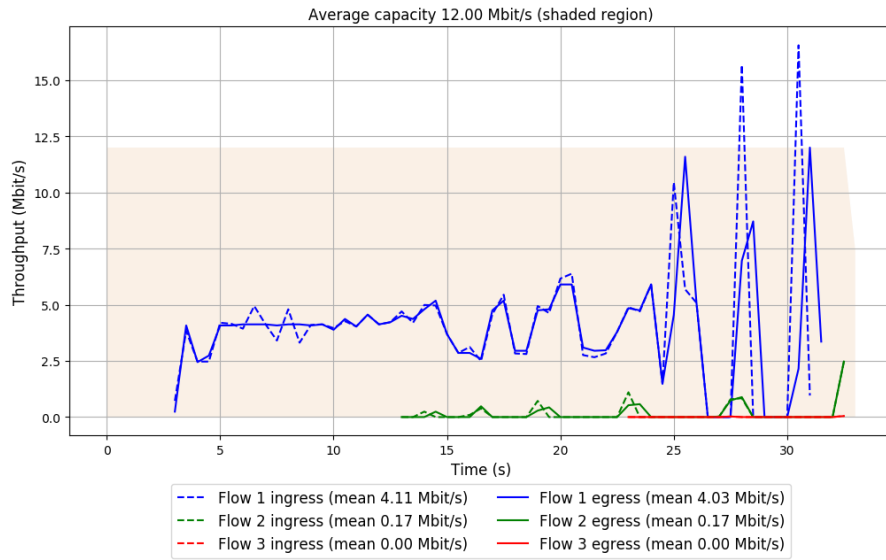
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 26.805 ms

Loss rate: 0.00%

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



Run 8: Statistics of TCP Cubic

Start at: 2018-02-27 19:10:33

End at: 2018-02-27 19:11:03

# Below is generated by plot.py at 2018-02-27 19:39:14

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.01 Mbit/s (33.4% utilization)

95th percentile per-packet one-way delay: 486.465 ms

Loss rate: 2.41%

-- Flow 1:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 489.403 ms

Loss rate: 2.45%

-- Flow 2:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 37.002 ms

Loss rate: 0.00%

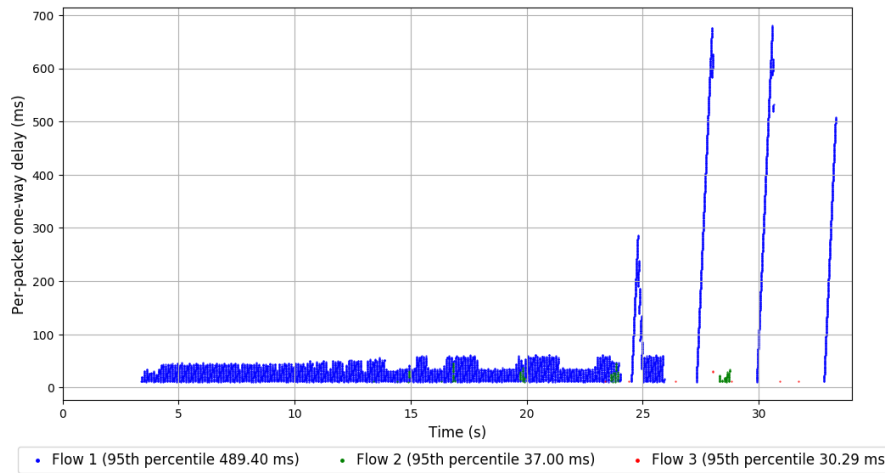
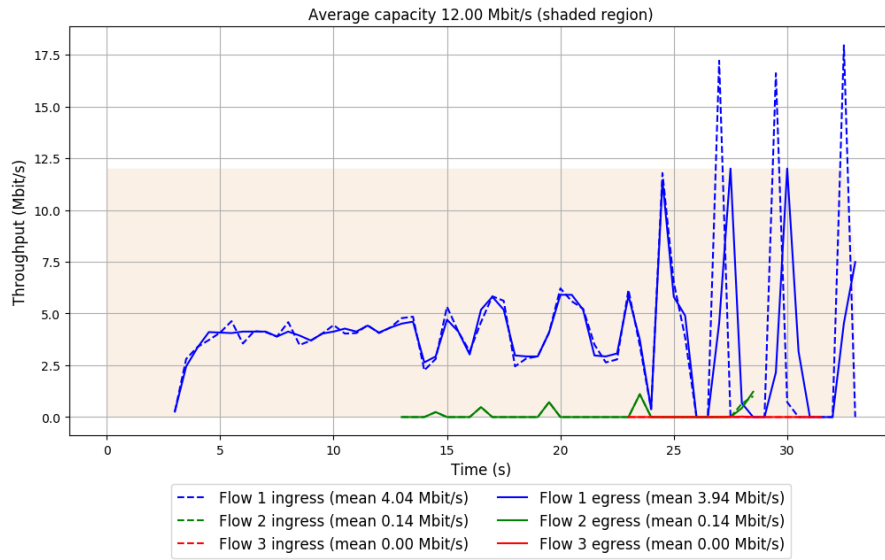
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 30.285 ms

Loss rate: 0.00%

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



Run 9: Statistics of TCP Cubic

Start at: 2018-02-27 19:20:47

End at: 2018-02-27 19:21:17

# Below is generated by plot.py at 2018-02-27 19:39:16

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.07 Mbit/s (33.9% utilization)

95th percentile per-packet one-way delay: 532.504 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.00 Mbit/s

95th percentile per-packet one-way delay: 535.895 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 90.596 ms

Loss rate: 0.00%

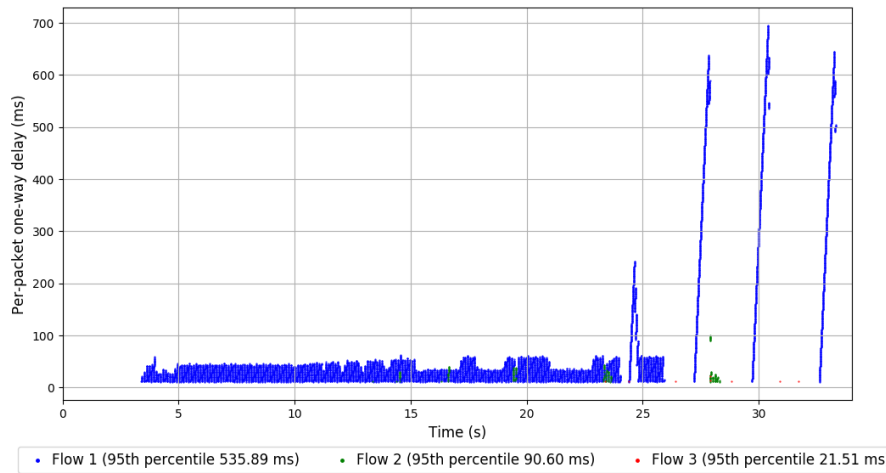
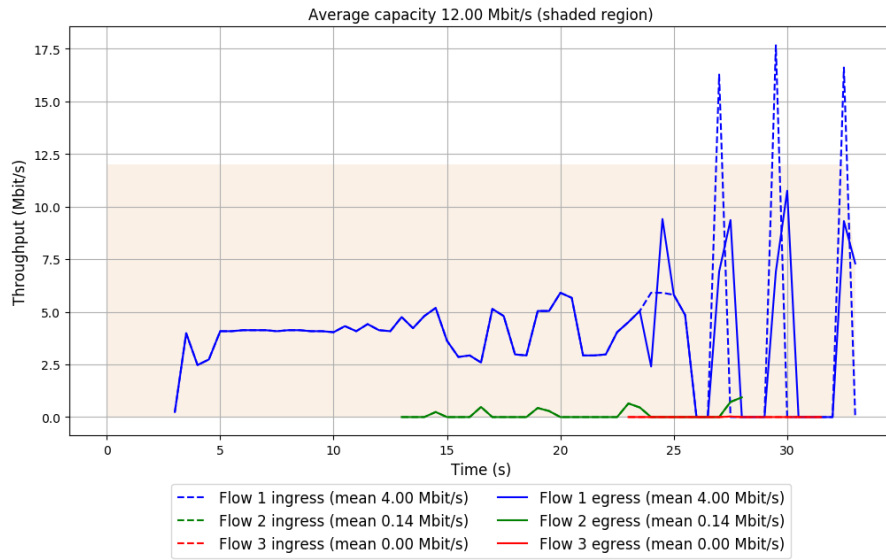
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 21.507 ms

Loss rate: 0.00%

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



Run 10: Statistics of TCP Cubic

Start at: 2018-02-27 19:31:01

End at: 2018-02-27 19:31:31

# Below is generated by plot.py at 2018-02-27 19:39:16

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.01 Mbit/s (33.4% utilization)

95th percentile per-packet one-way delay: 473.829 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 476.749 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 42.872 ms

Loss rate: 0.00%

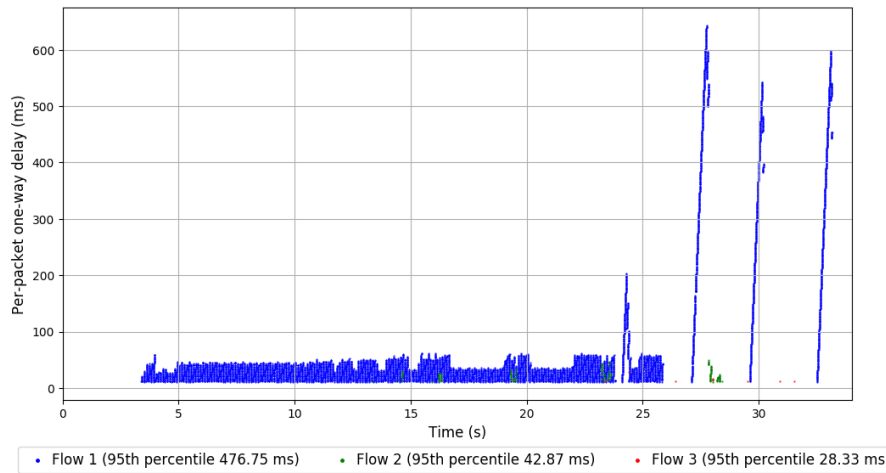
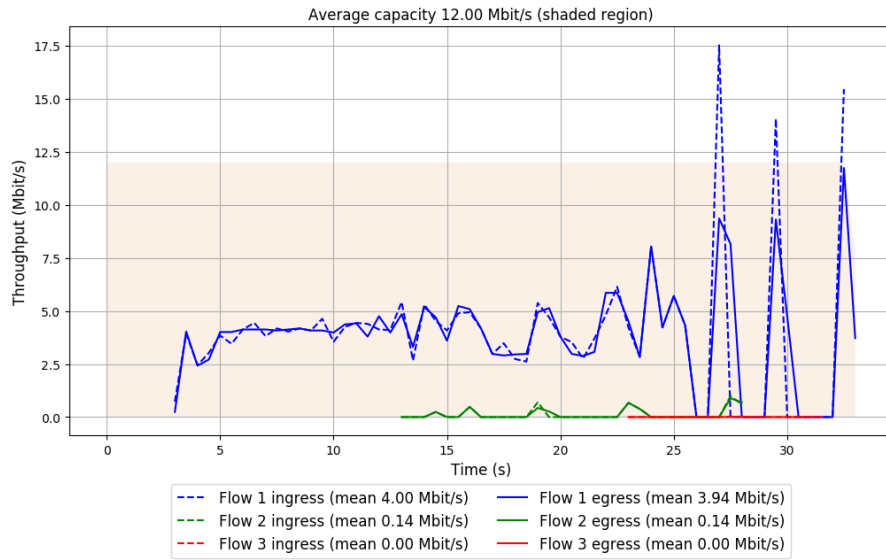
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 28.328 ms

Loss rate: 0.00%

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



Run 1: Statistics of LEDBAT

Start at: 2018-02-27 18:02:50

End at: 2018-02-27 18:03:20

# Below is generated by plot.py at 2018-02-27 19:39:16

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 2.38 Mbit/s (19.9% utilization)

95th percentile per-packet one-way delay: 30.652 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 30.750 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 29.527 ms

Loss rate: 0.40%

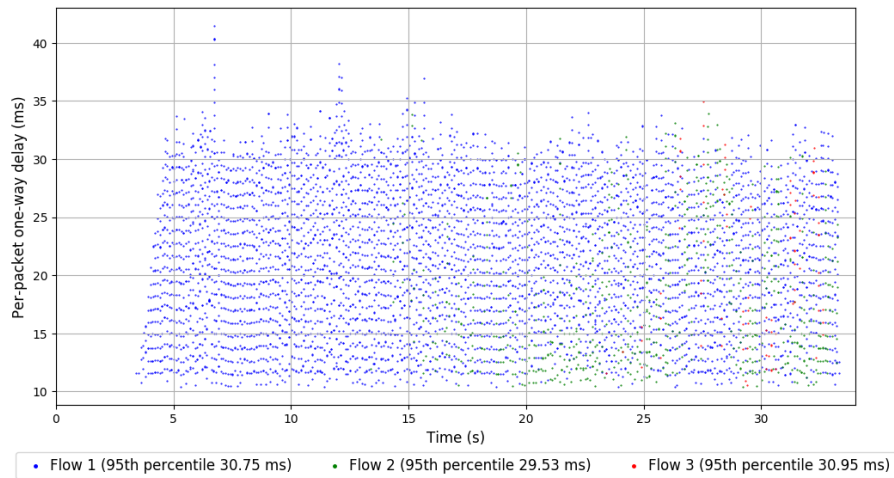
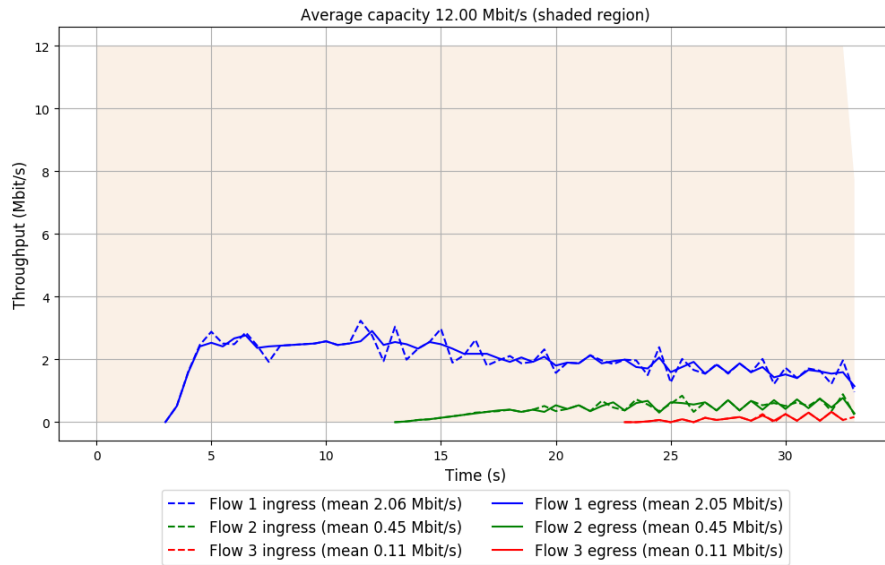
-- Flow 3:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 30.947 ms

Loss rate: 7.44%

# Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-02-27 18:13:05

End at: 2018-02-27 18:13:35

# Below is generated by plot.py at 2018-02-27 19:39:16

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 2.31 Mbit/s (19.3% utilization)

95th percentile per-packet one-way delay: 29.992 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 30.028 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 29.239 ms

Loss rate: 0.69%

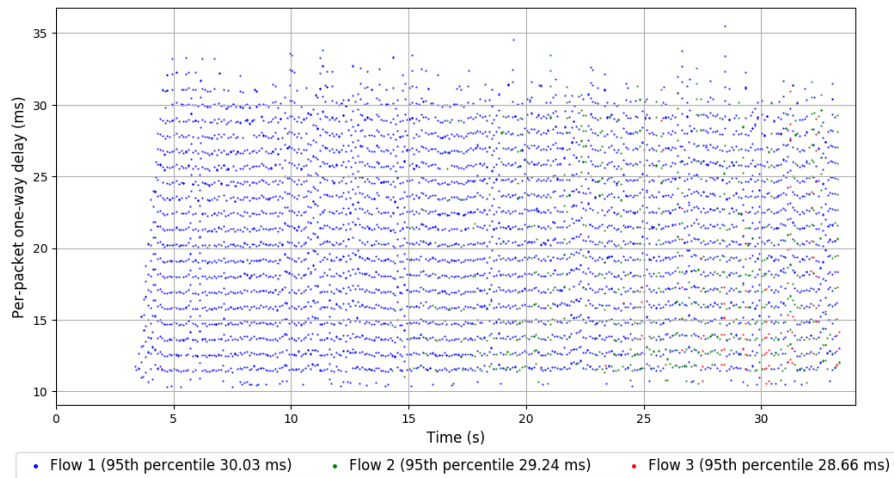
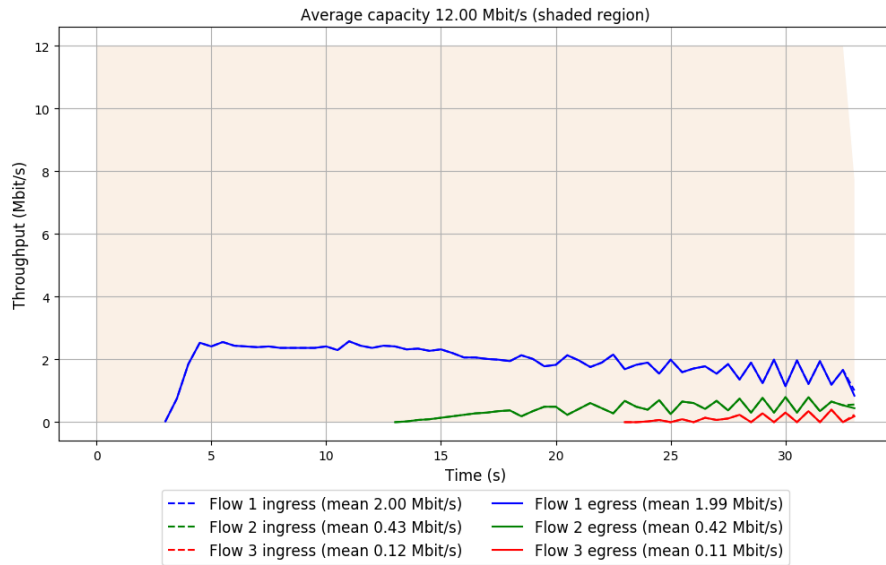
-- Flow 3:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 28.655 ms

Loss rate: 2.02%

## Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-27 18:23:19

End at: 2018-02-27 18:23:49

# Below is generated by plot.py at 2018-02-27 19:39:16

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 2.34 Mbit/s (19.5% utilization)

95th percentile per-packet one-way delay: 30.127 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 30.110 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 29.886 ms

Loss rate: 0.00%

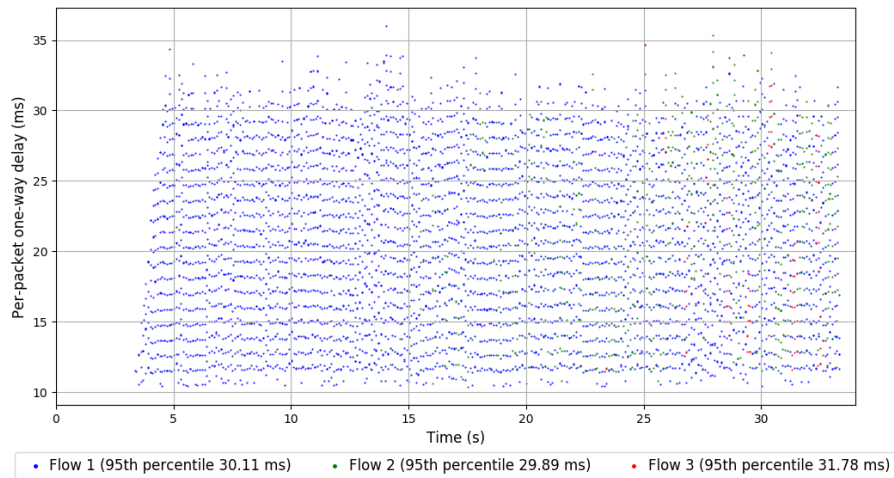
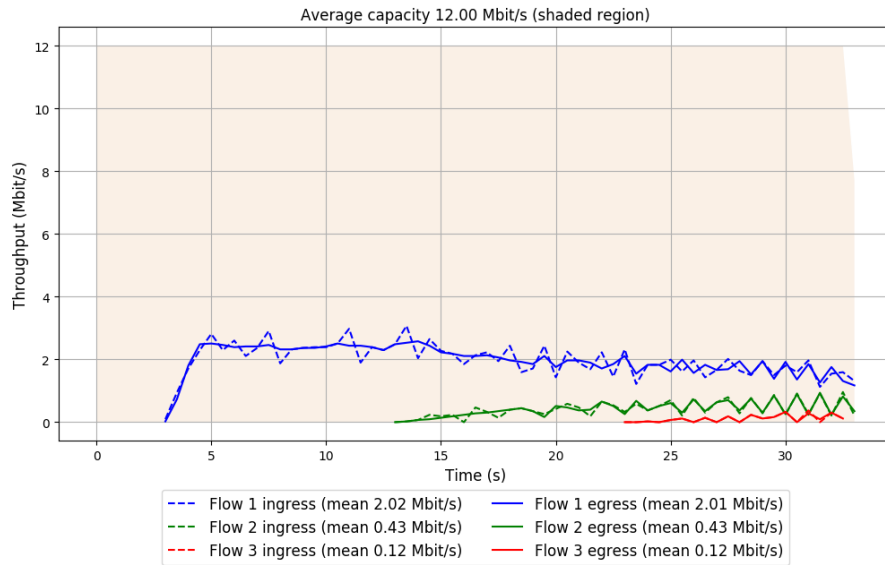
-- Flow 3:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 31.784 ms

Loss rate: 0.00%

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



Run 4: Statistics of LEDBAT

Start at: 2018-02-27 18:33:34

End at: 2018-02-27 18:34:04

# Below is generated by plot.py at 2018-02-27 19:39:16

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 2.39 Mbit/s (20.0% utilization)

95th percentile per-packet one-way delay: 30.740 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 30.809 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 30.242 ms

Loss rate: 1.53%

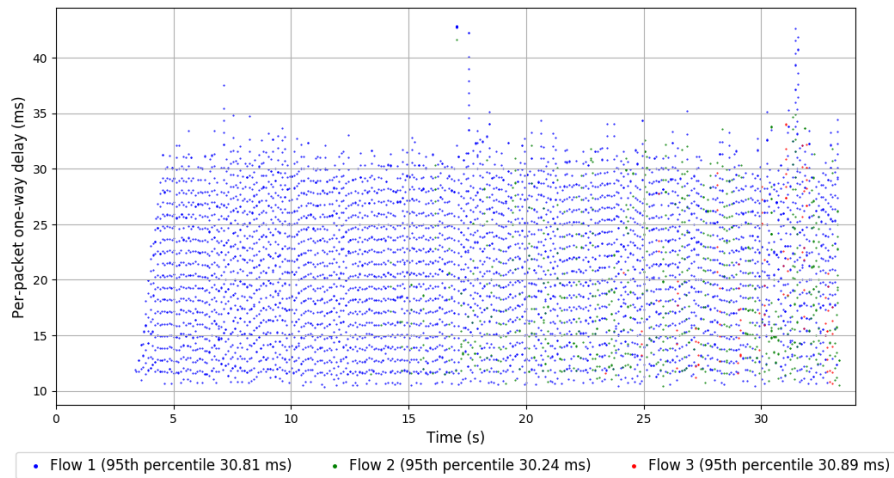
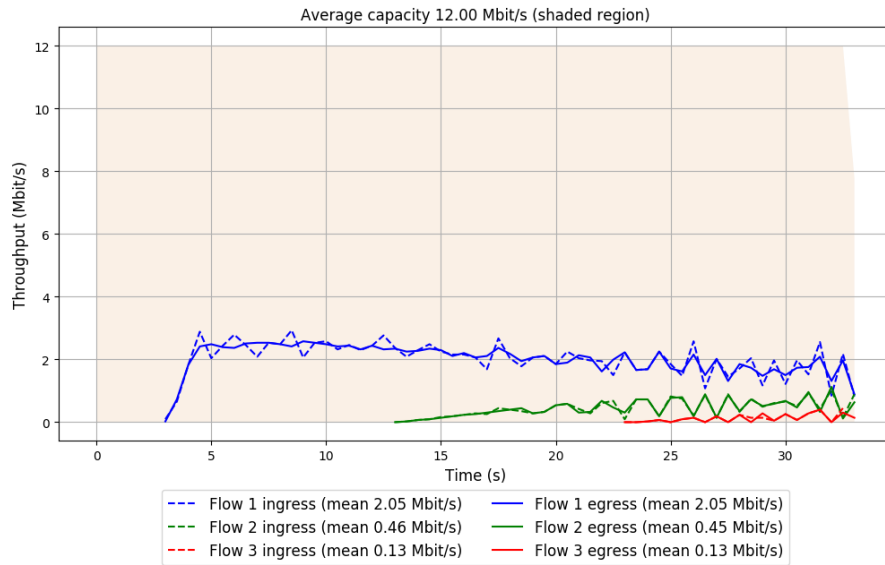
-- Flow 3:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 30.893 ms

Loss rate: 0.00%

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



Run 5: Statistics of LEDBAT

Start at: 2018-02-27 18:43:48

End at: 2018-02-27 18:44:18

# Below is generated by plot.py at 2018-02-27 19:39:24

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 2.30 Mbit/s (19.2% utilization)

95th percentile per-packet one-way delay: 30.048 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 30.047 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 29.997 ms

Loss rate: 1.28%

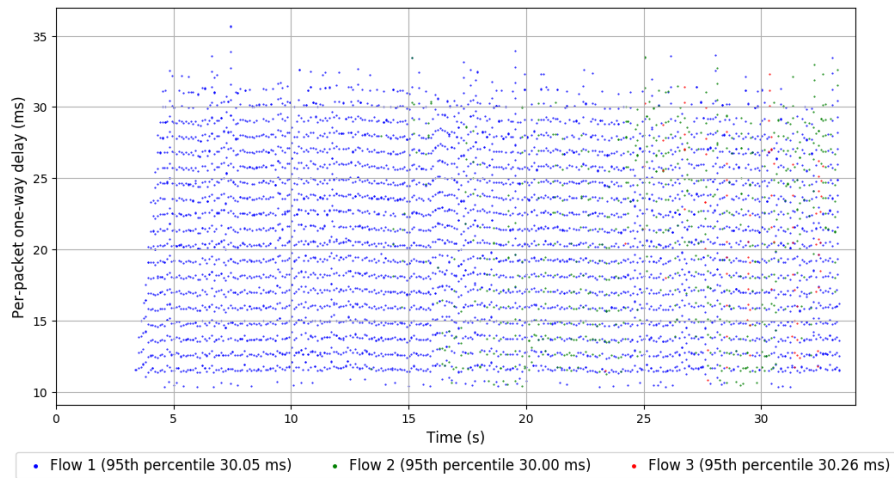
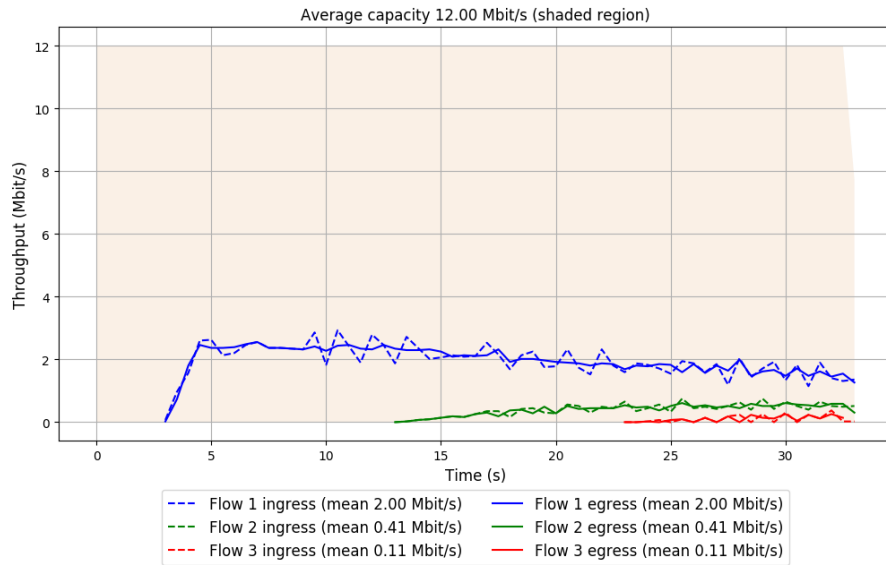
-- Flow 3:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 30.258 ms

Loss rate: 1.12%

## Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-27 18:54:03

End at: 2018-02-27 18:54:33

# Below is generated by plot.py at 2018-02-27 19:39:24

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

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

95th percentile per-packet one-way delay: 30.352 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 30.432 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 29.308 ms

Loss rate: 0.81%

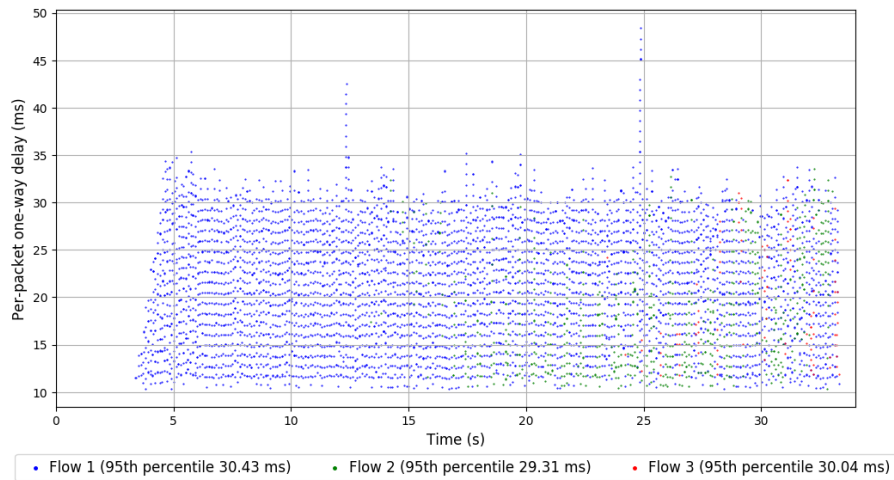
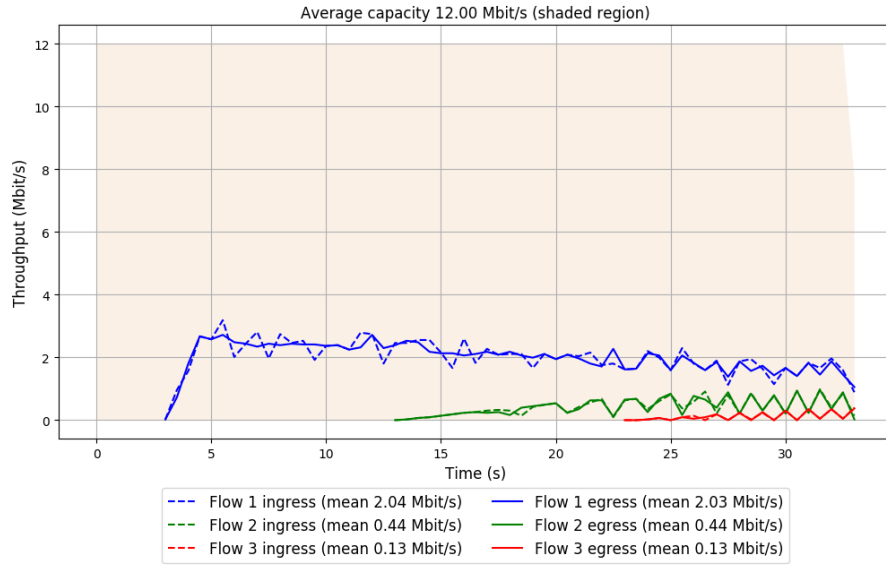
-- Flow 3:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 30.043 ms

Loss rate: 0.93%

## Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-02-27 19:04:17

End at: 2018-02-27 19:04:47

# Below is generated by plot.py at 2018-02-27 19:39:25

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 2.33 Mbit/s (19.4% utilization)

95th percentile per-packet one-way delay: 30.081 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 30.118 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 29.438 ms

Loss rate: 0.82%

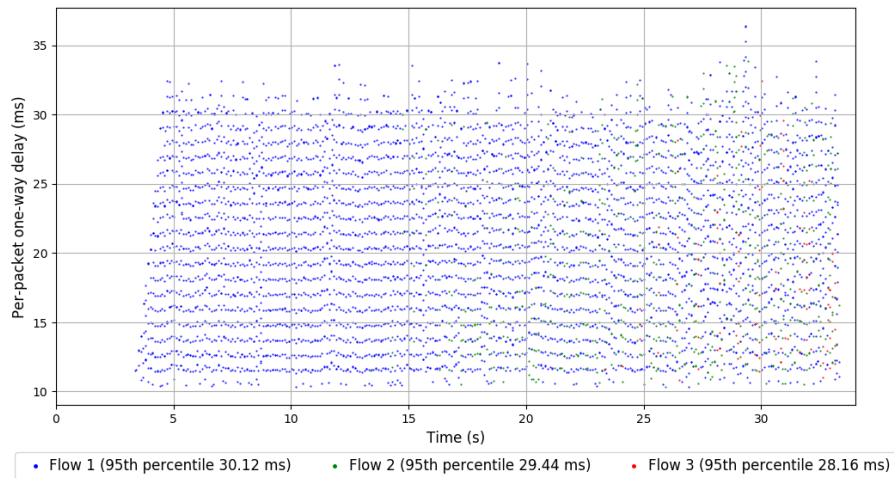
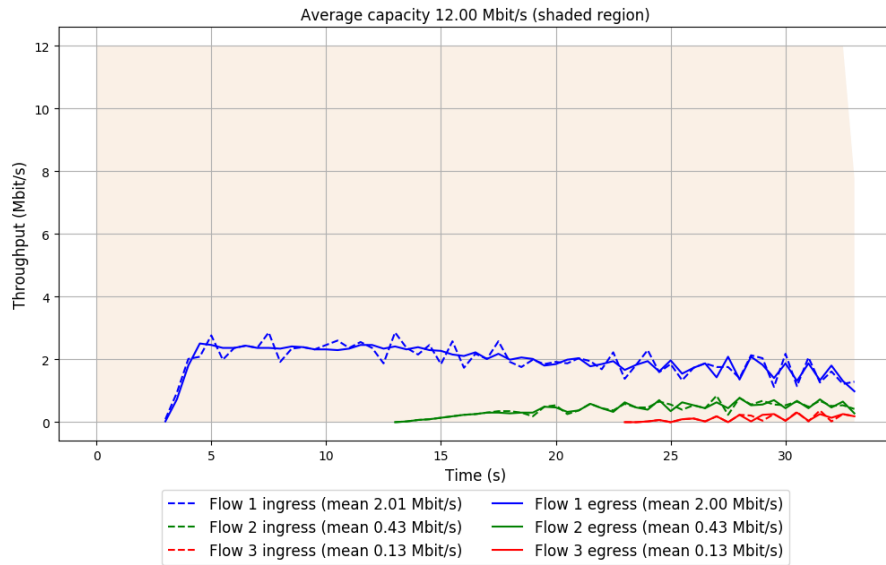
-- Flow 3:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 28.156 ms

Loss rate: 0.00%

## Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-27 19:14:31

End at: 2018-02-27 19:15:01

# Below is generated by plot.py at 2018-02-27 19:39:25

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 2.29 Mbit/s (19.1% utilization)

95th percentile per-packet one-way delay: 29.933 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 30.057 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 28.323 ms

Loss rate: 0.41%

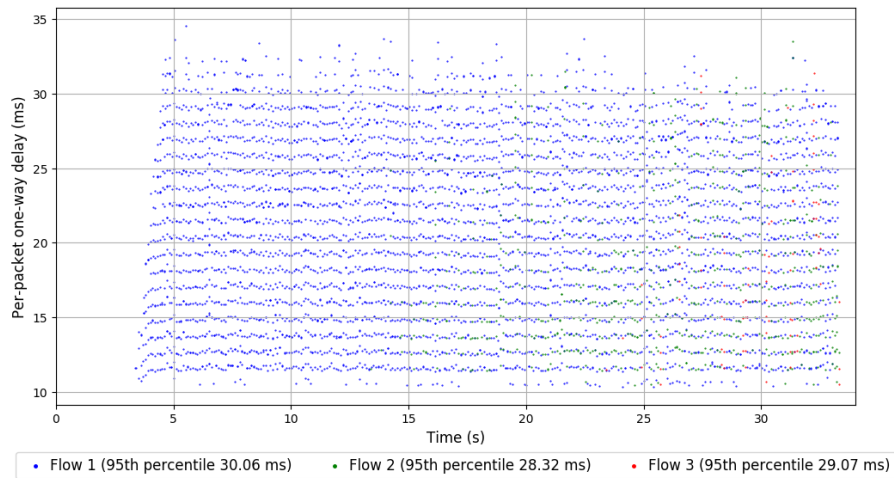
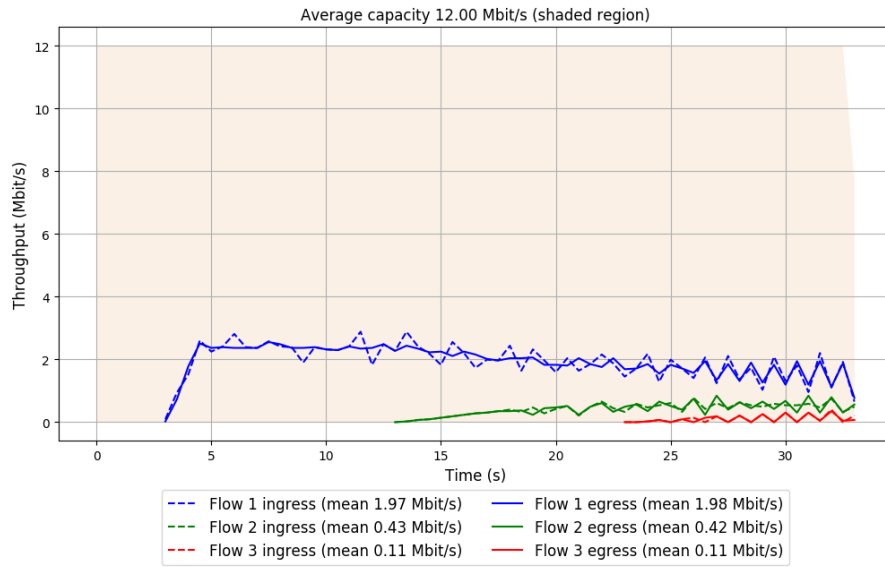
-- Flow 3:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 29.068 ms

Loss rate: 6.25%

# Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-27 19:24:45

End at: 2018-02-27 19:25:15

# Below is generated by plot.py at 2018-02-27 19:39:25

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 2.29 Mbit/s (19.1% utilization)

95th percentile per-packet one-way delay: 29.942 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 29.975 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 28.788 ms

Loss rate: 1.21%

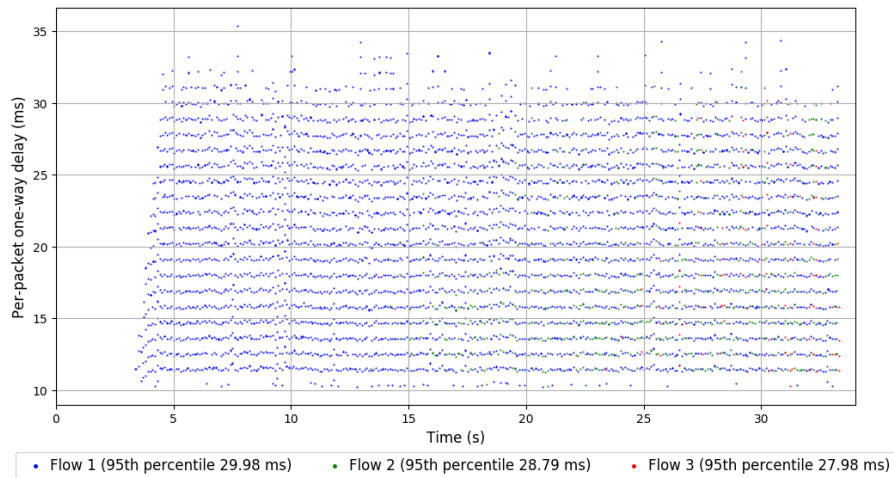
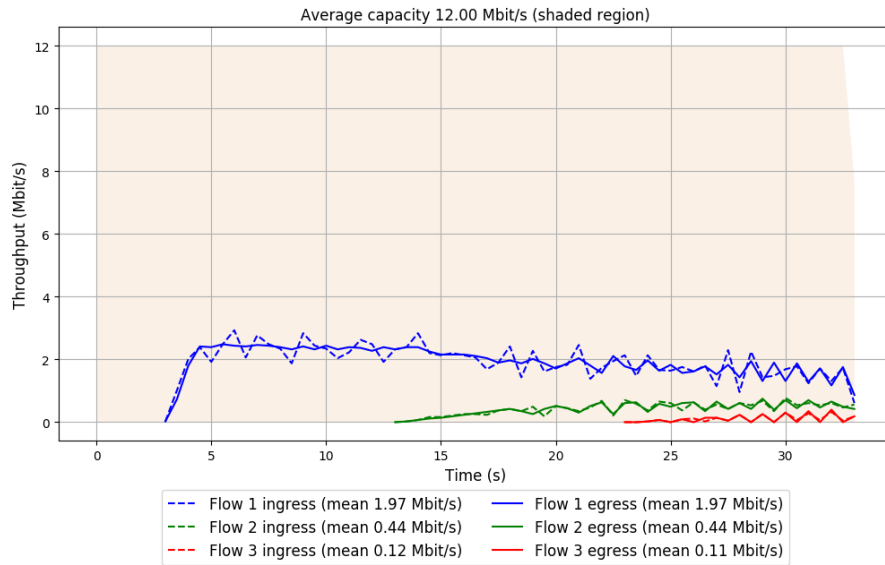
-- Flow 3:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 27.978 ms

Loss rate: 2.04%

# Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-02-27 19:35:00

End at: 2018-02-27 19:35:30

# Below is generated by plot.py at 2018-02-27 19:39:26

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 2.31 Mbit/s (19.2% utilization)

95th percentile per-packet one-way delay: 29.965 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 29.965 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 29.929 ms

Loss rate: 1.26%

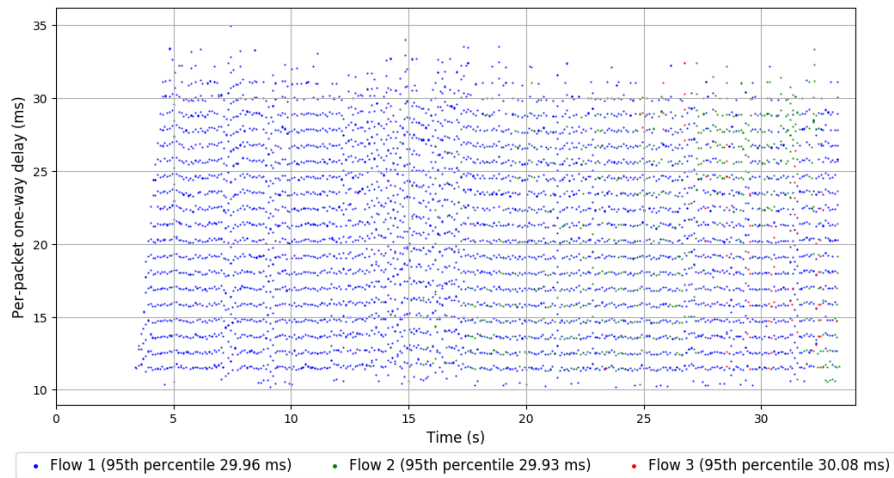
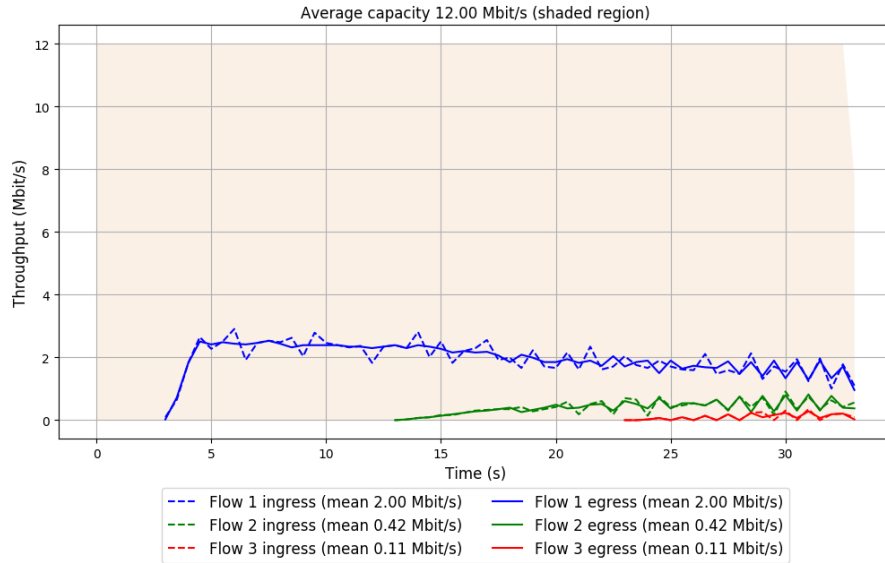
-- Flow 3:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 30.081 ms

Loss rate: 3.26%

# Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC

Start at: 2018-02-27 17:57:44

End at: 2018-02-27 17:58:14

# Below is generated by plot.py at 2018-02-27 19:39:31

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 5.55 Mbit/s (46.2% utilization)

95th percentile per-packet one-way delay: 13.114 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 4.08 Mbit/s

95th percentile per-packet one-way delay: 12.695 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 36.820 ms

Loss rate: 0.05%

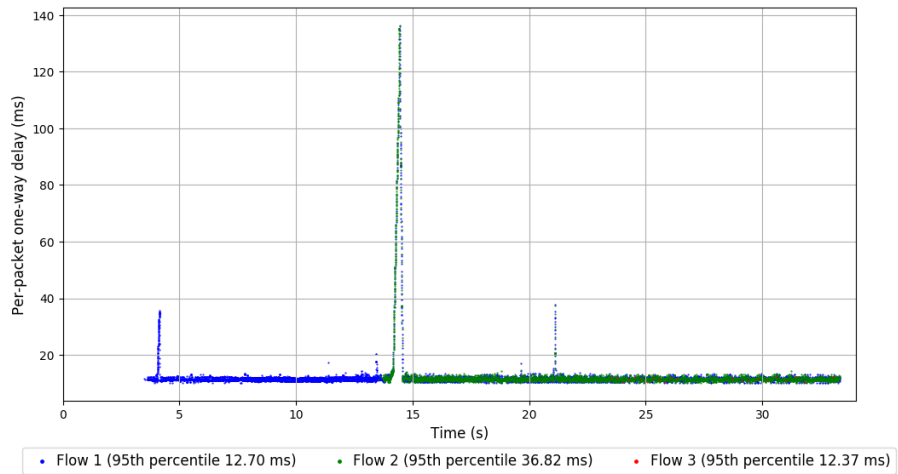
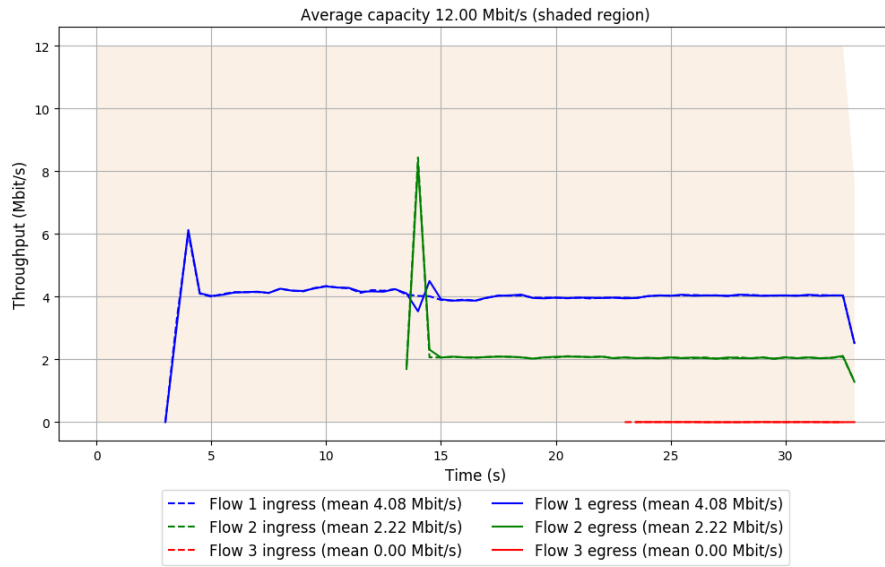
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.365 ms

Loss rate: 0.00%

# Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-02-27 18:07:58

End at: 2018-02-27 18:08:28

# Below is generated by plot.py at 2018-02-27 19:39:31

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 5.82 Mbit/s (48.5% utilization)

95th percentile per-packet one-way delay: 12.988 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 4.35 Mbit/s

95th percentile per-packet one-way delay: 12.603 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 19.038 ms

Loss rate: 0.05%

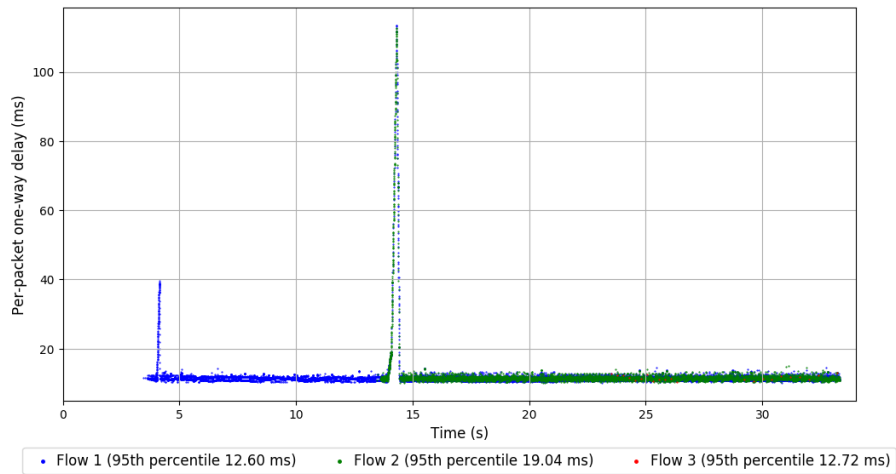
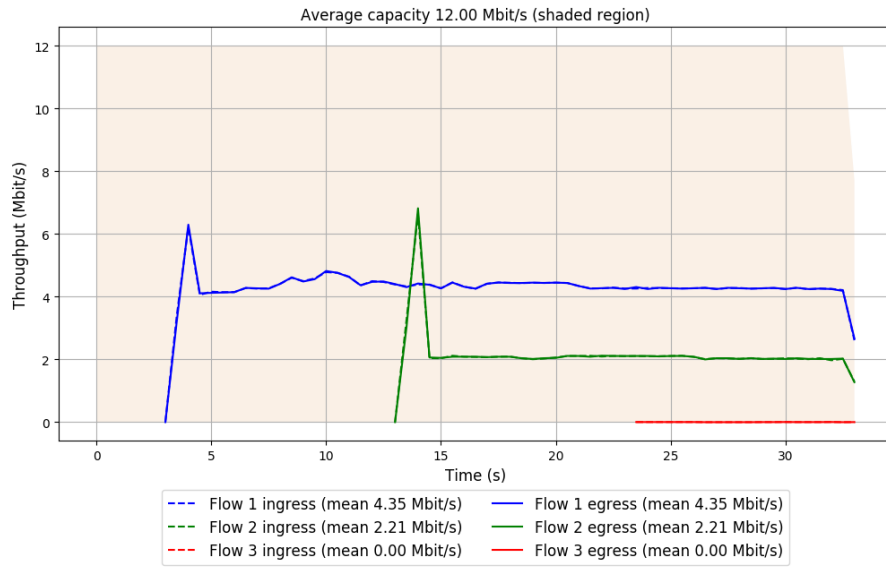
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.723 ms

Loss rate: 0.00%

## Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

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

End at: 2018-02-27 18:18:42

# Below is generated by plot.py at 2018-02-27 19:39:39

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 5.69 Mbit/s (47.5% utilization)

95th percentile per-packet one-way delay: 12.749 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 12.494 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 14.531 ms

Loss rate: 0.06%

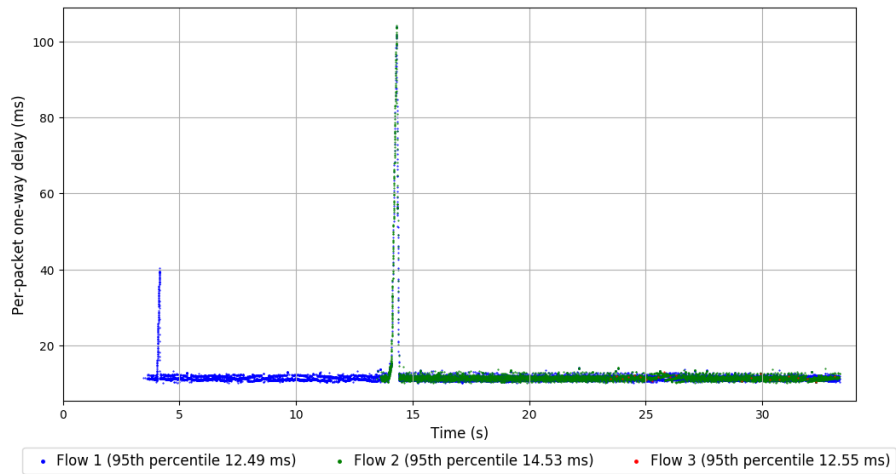
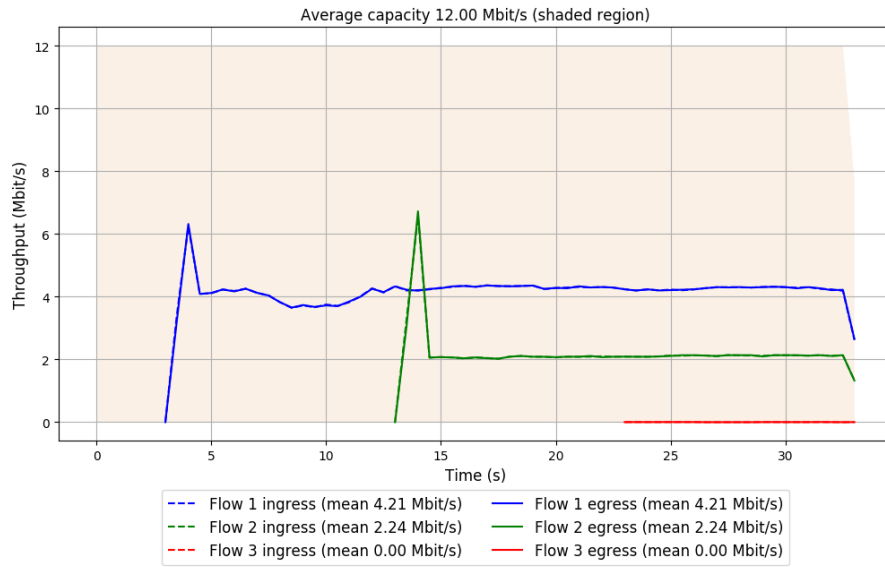
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.554 ms

Loss rate: 0.00%

### Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-02-27 18:28:26

End at: 2018-02-27 18:28:56

# Below is generated by plot.py at 2018-02-27 19:39:57

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

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

95th percentile per-packet one-way delay: 14549.415 ms

Loss rate: 68.74%

-- Flow 1:

Average throughput: 4.02 Mbit/s

95th percentile per-packet one-way delay: 607.329 ms

Loss rate: 52.43%

-- Flow 2:

Average throughput: 9.88 Mbit/s

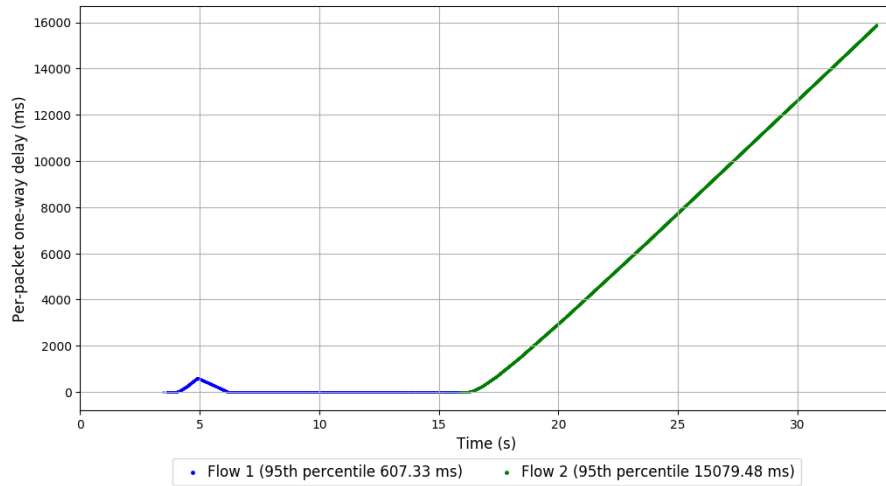
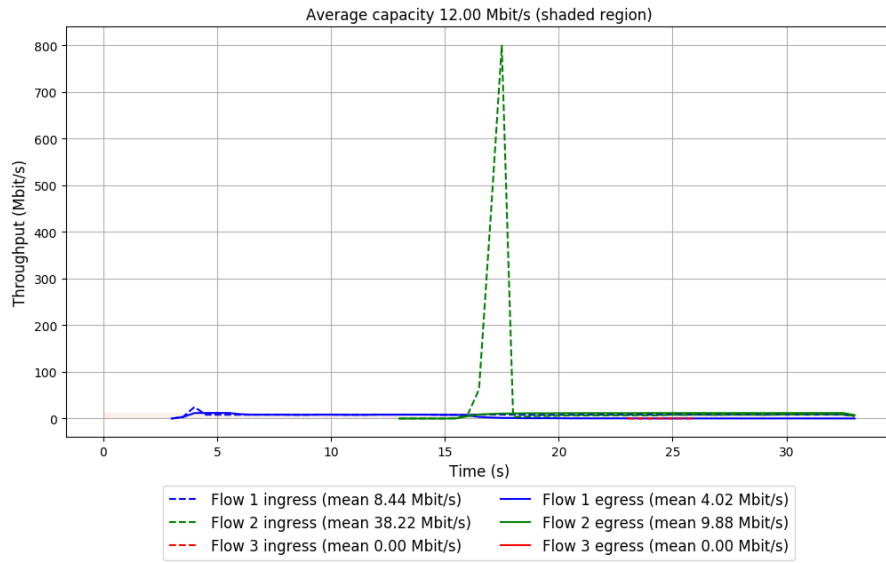
95th percentile per-packet one-way delay: 15079.475 ms

Loss rate: 74.16%

-- Flow 3:

Average throughput: 0.00 Mbit/s

## Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-27 18:38:41

End at: 2018-02-27 18:39:11

# Below is generated by plot.py at 2018-02-27 19:39:57

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 5.44 Mbit/s (45.4% utilization)

95th percentile per-packet one-way delay: 12.893 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 4.00 Mbit/s

95th percentile per-packet one-way delay: 12.607 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 14.180 ms

Loss rate: 0.06%

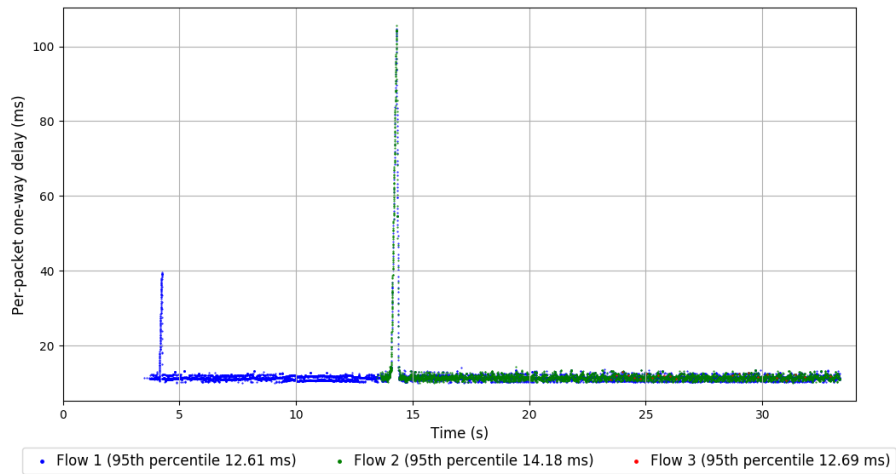
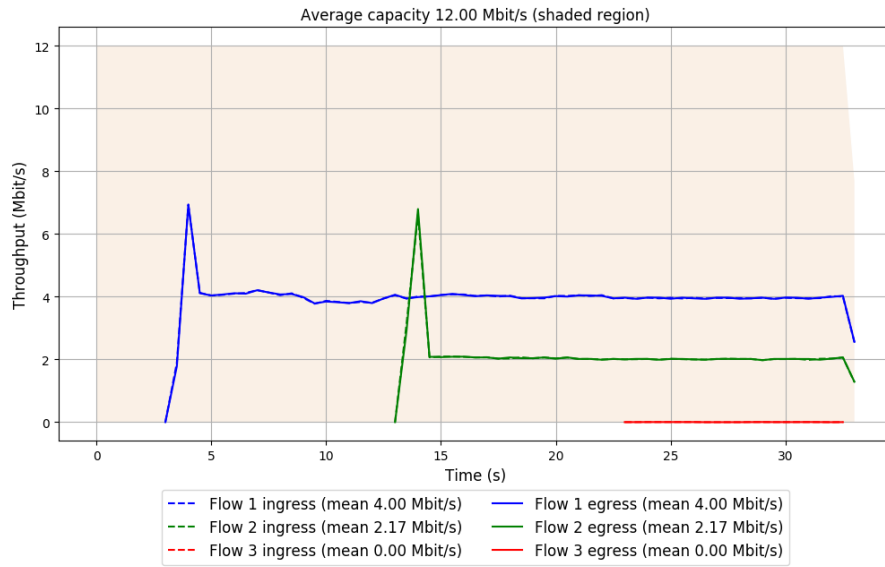
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.689 ms

Loss rate: 0.00%

### Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-27 18:48:56

End at: 2018-02-27 18:49:26

# Below is generated by plot.py at 2018-02-27 19:39:57

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 5.22 Mbit/s (43.5% utilization)

95th percentile per-packet one-way delay: 14.819 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 3.79 Mbit/s

95th percentile per-packet one-way delay: 14.150 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 15.681 ms

Loss rate: 0.09%

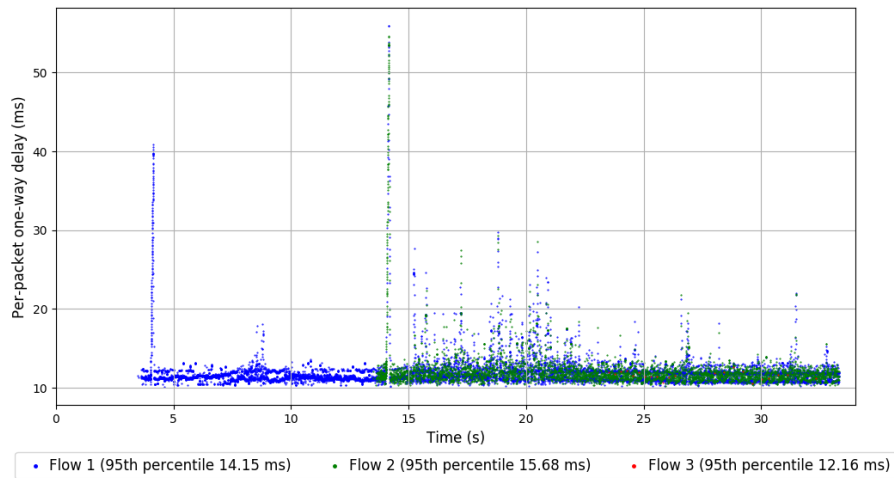
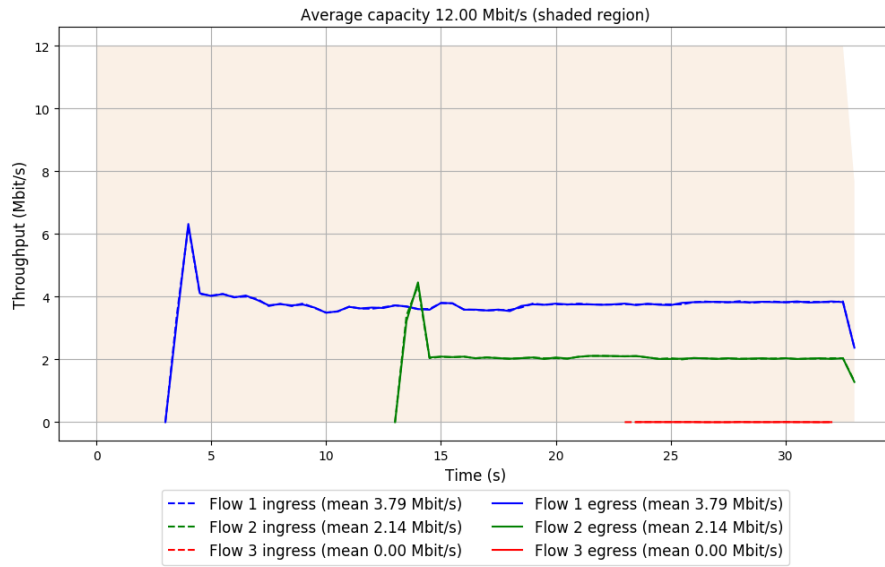
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.163 ms

Loss rate: 0.00%

### Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-02-27 18:59:10

End at: 2018-02-27 18:59:40

# Below is generated by plot.py at 2018-02-27 19:39:57

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 5.29 Mbit/s (44.1% utilization)

95th percentile per-packet one-way delay: 12.726 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 12.543 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 12.926 ms

Loss rate: 0.07%

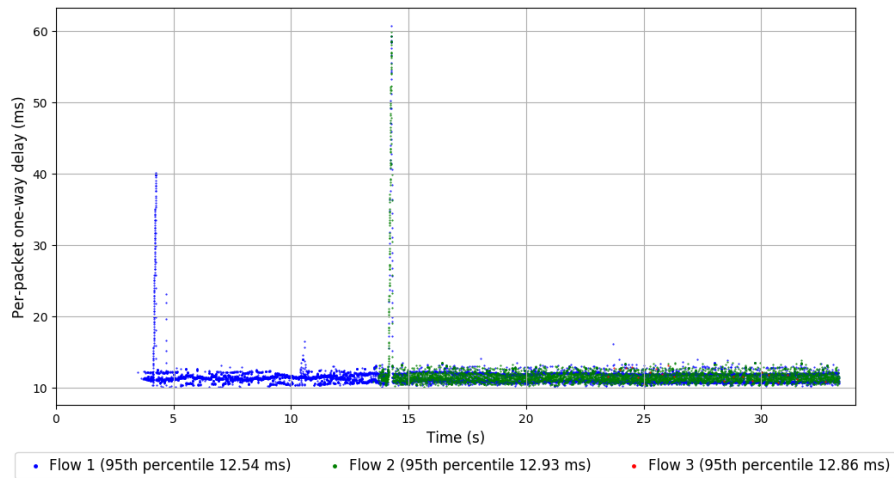
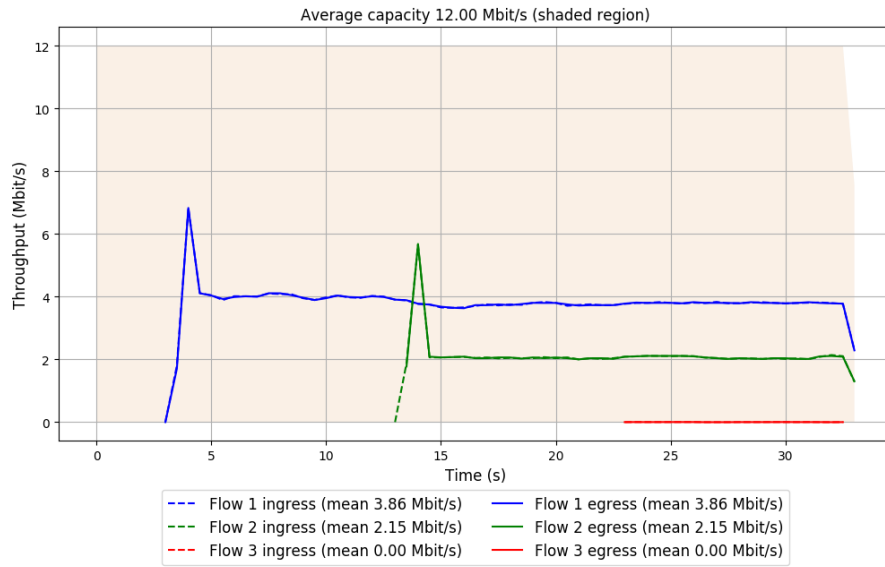
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.860 ms

Loss rate: 0.00%

### Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-27 19:09:25

End at: 2018-02-27 19:09:55

# Below is generated by plot.py at 2018-02-27 19:39:57

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 6.22 Mbit/s (51.8% utilization)

95th percentile per-packet one-way delay: 13.734 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 4.73 Mbit/s

95th percentile per-packet one-way delay: 12.947 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 49.737 ms

Loss rate: 0.05%

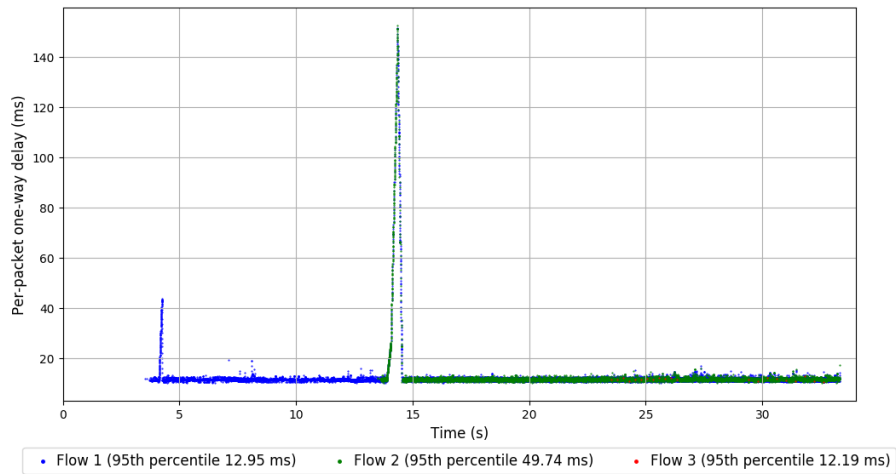
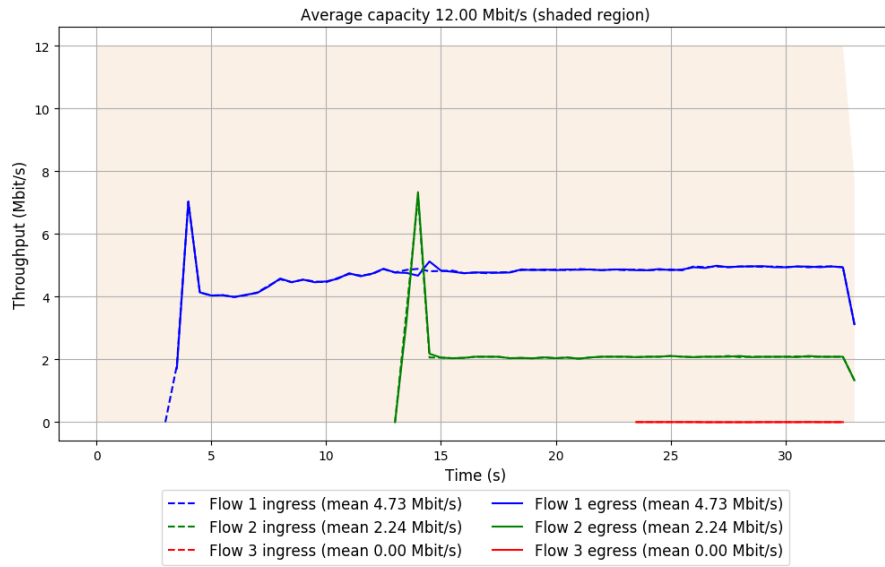
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.190 ms

Loss rate: 0.00%

### Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-27 19:19:39

End at: 2018-02-27 19:20:09

# Below is generated by plot.py at 2018-02-27 19:39:57

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 5.89 Mbit/s (49.1% utilization)

95th percentile per-packet one-way delay: 13.196 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 12.776 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 32.451 ms

Loss rate: 0.03%

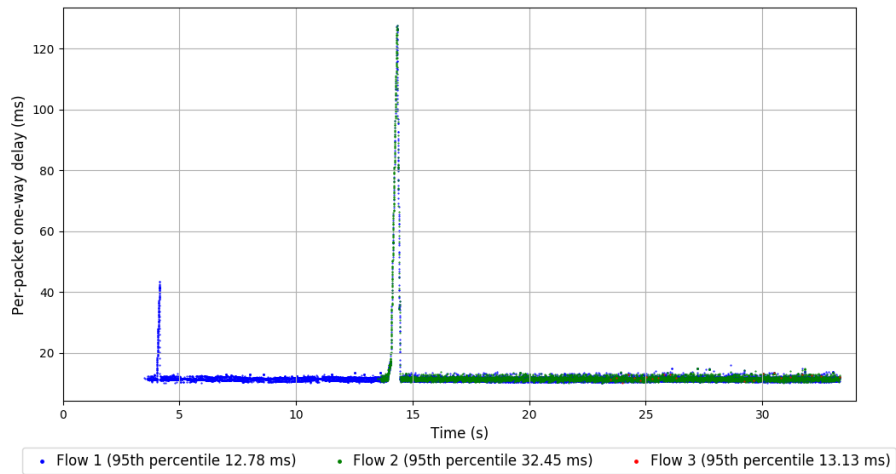
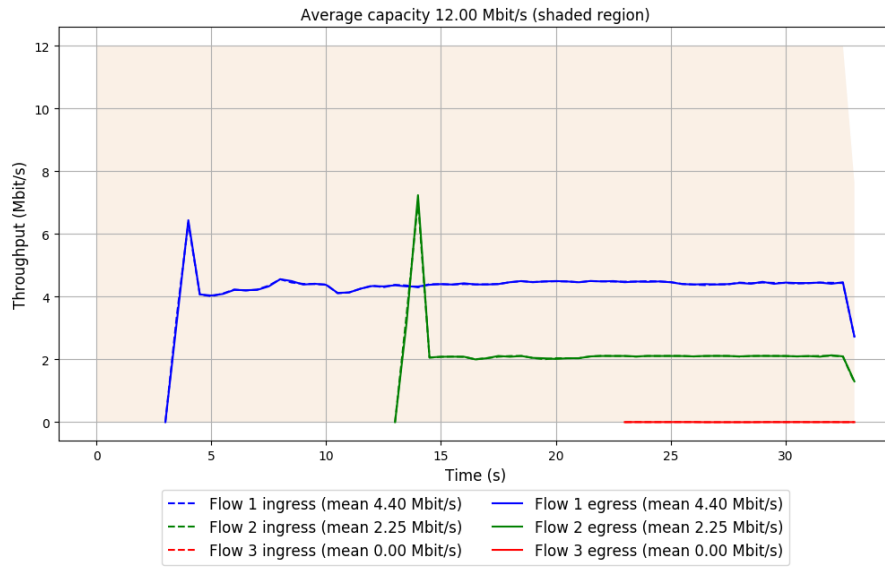
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 13.127 ms

Loss rate: 0.00%

### Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-02-27 19:29:53

End at: 2018-02-27 19:30:23

# Below is generated by plot.py at 2018-02-27 19:39:57

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 5.90 Mbit/s (49.2% utilization)

95th percentile per-packet one-way delay: 16.079 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 4.44 Mbit/s

95th percentile per-packet one-way delay: 13.715 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 39.487 ms

Loss rate: 0.06%

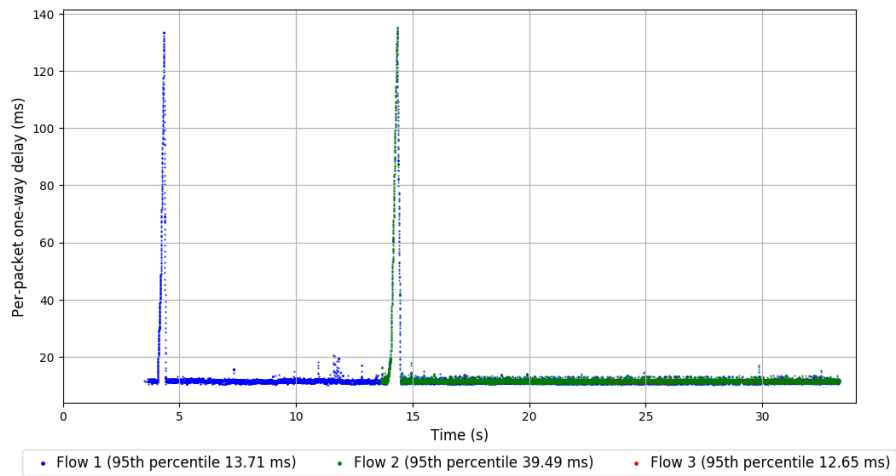
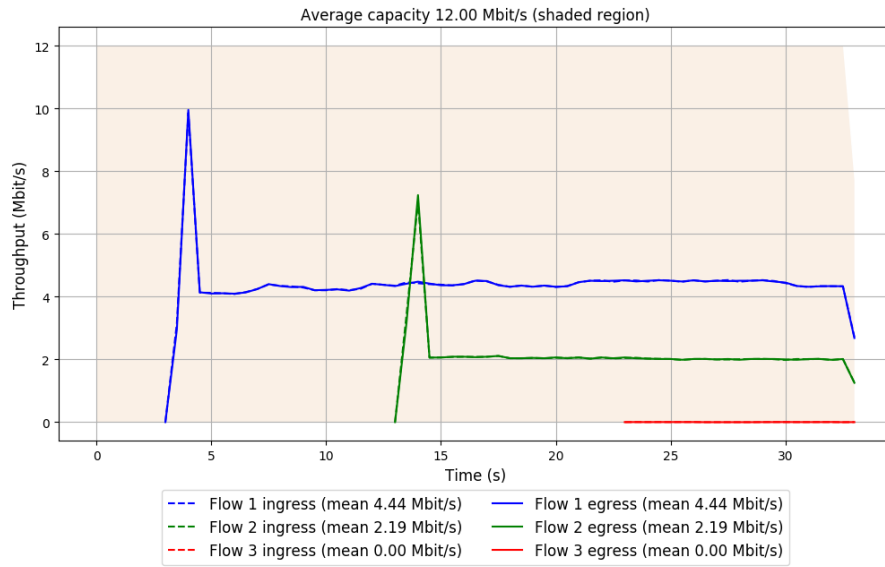
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.647 ms

Loss rate: 0.00%

### Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-02-27 18:05:41

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

# Below is generated by plot.py at 2018-02-27 19:39:57

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.11 Mbit/s (25.9% utilization)

95th percentile per-packet one-way delay: 12.555 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 2.65 Mbit/s

95th percentile per-packet one-way delay: 12.347 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 13.077 ms

Loss rate: 0.00%

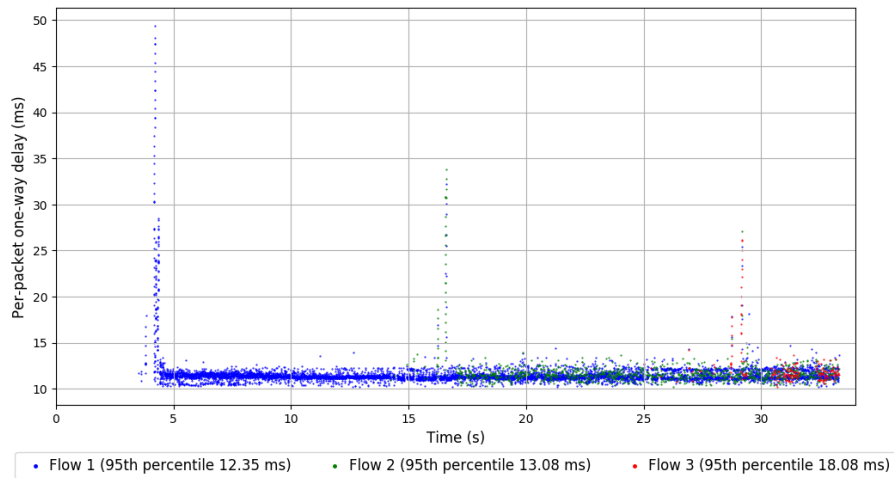
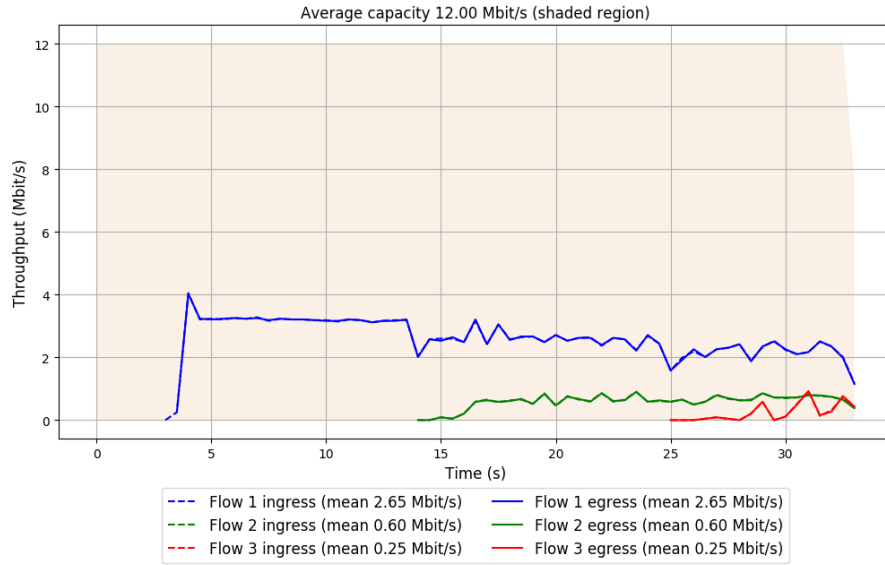
-- Flow 3:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 18.078 ms

Loss rate: 0.54%

# Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-27 18:15:55

End at: 2018-02-27 18:16:25

# Below is generated by plot.py at 2018-02-27 19:39:57

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.11 Mbit/s (25.9% utilization)

95th percentile per-packet one-way delay: 12.580 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 12.463 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 12.905 ms

Loss rate: 0.07%

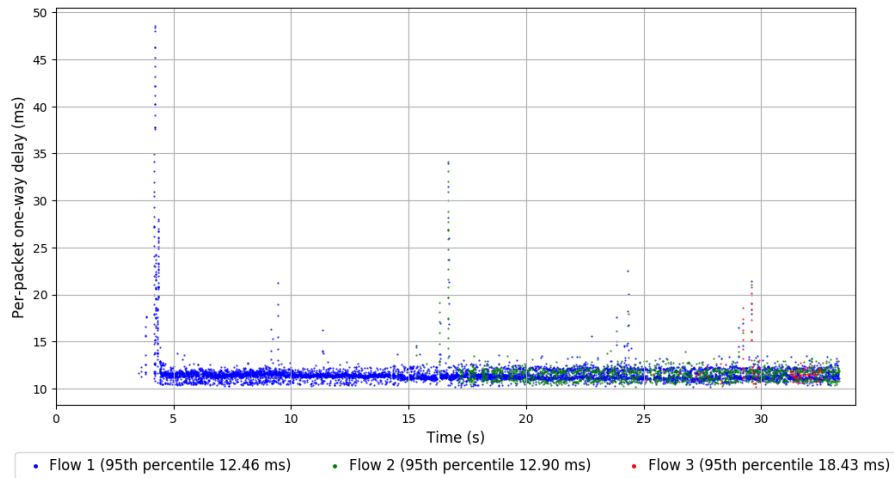
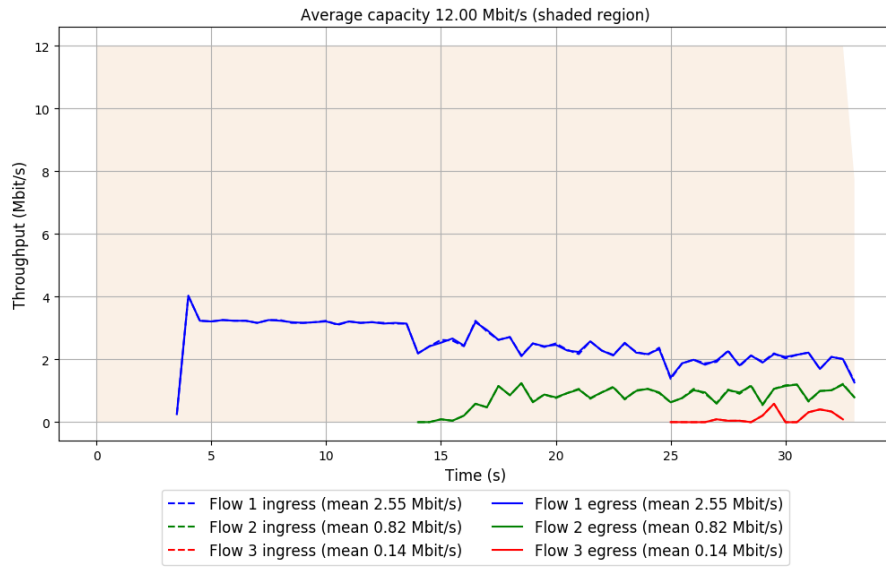
-- Flow 3:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 18.429 ms

Loss rate: 0.00%

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



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-27 18:26:09

End at: 2018-02-27 18:26:39

# Below is generated by plot.py at 2018-02-27 19:39:57

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.11 Mbit/s (25.9% utilization)

95th percentile per-packet one-way delay: 12.598 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 2.66 Mbit/s

95th percentile per-packet one-way delay: 12.404 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 12.985 ms

Loss rate: 0.10%

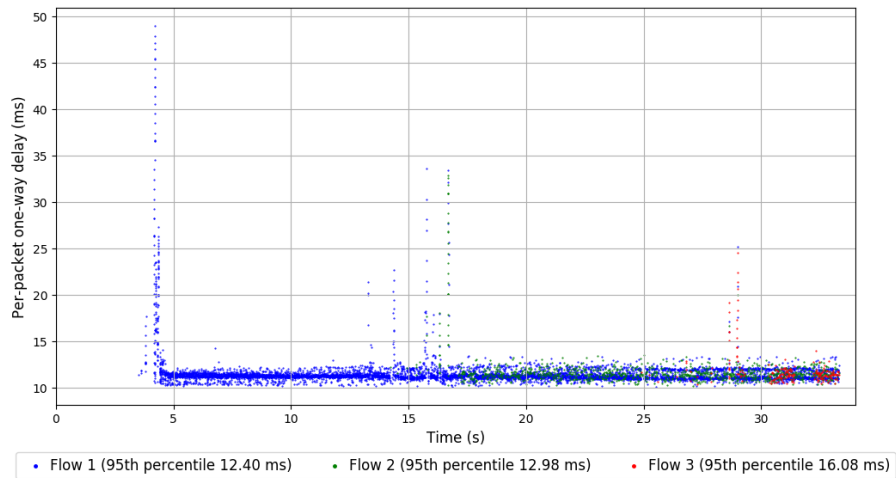
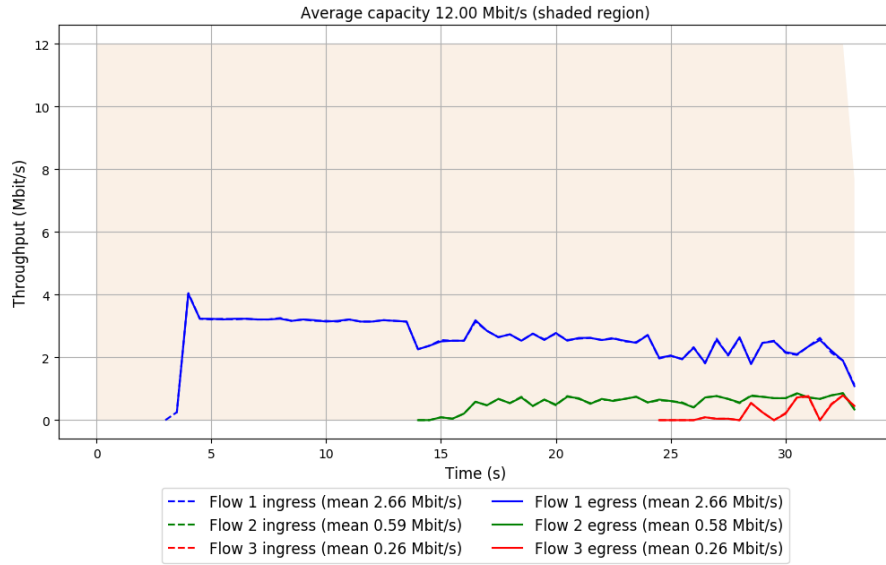
-- Flow 3:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 16.076 ms

Loss rate: 0.51%

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



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-27 18:36:24

End at: 2018-02-27 18:36:54

# Below is generated by plot.py at 2018-02-27 19:39:57

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.10 Mbit/s (25.9% utilization)

95th percentile per-packet one-way delay: 12.314 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 12.243 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 0.81 Mbit/s

95th percentile per-packet one-way delay: 12.766 ms

Loss rate: 0.07%

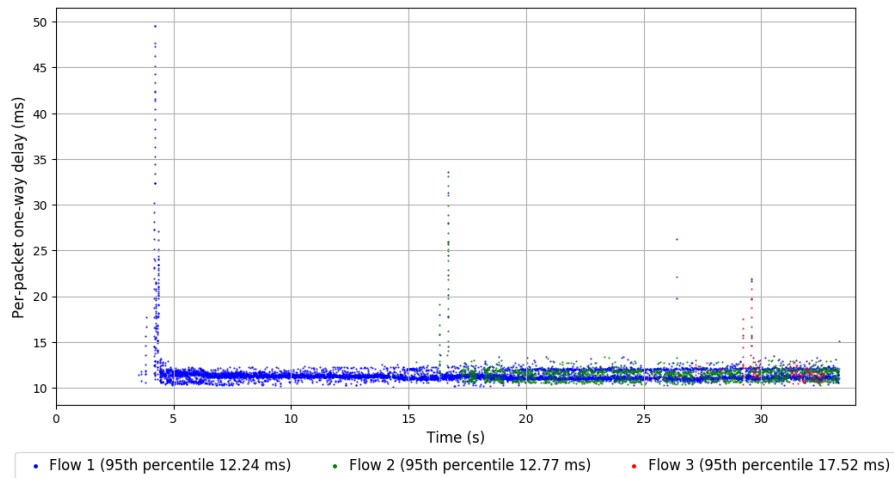
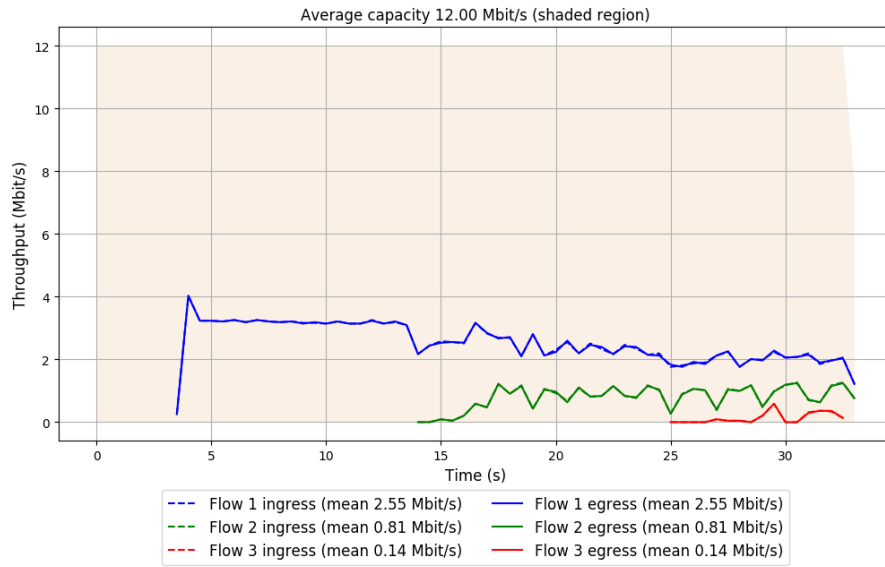
-- Flow 3:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 17.516 ms

Loss rate: 0.00%

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



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-27 18:46:39

End at: 2018-02-27 18:47:09

# Below is generated by plot.py at 2018-02-27 19:39:57

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.09 Mbit/s (25.7% utilization)

95th percentile per-packet one-way delay: 12.399 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 12.252 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 12.893 ms

Loss rate: 0.00%

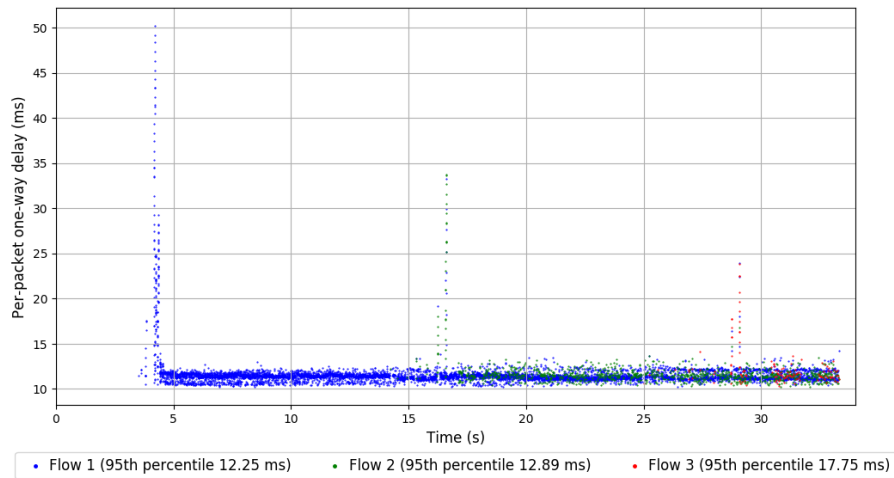
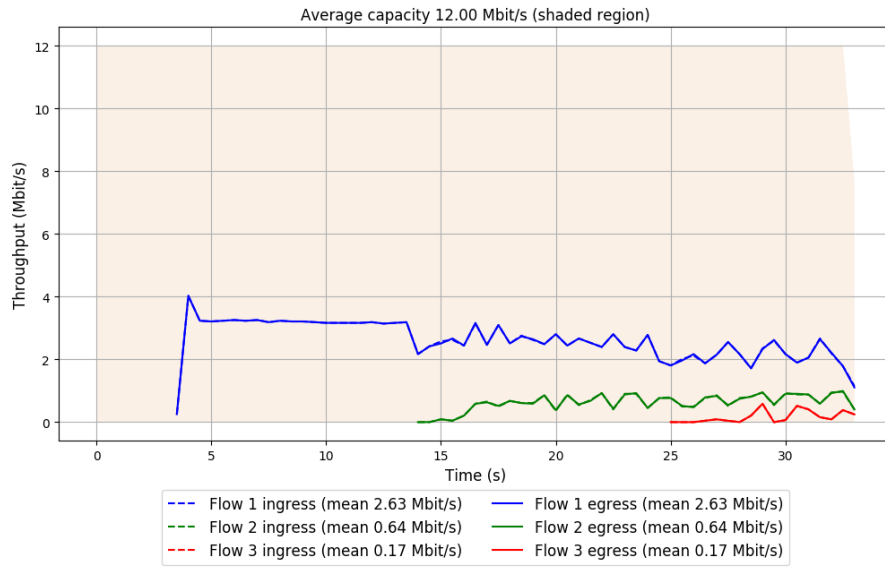
-- Flow 3:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 17.749 ms

Loss rate: 0.00%

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



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-27 18:56:53

End at: 2018-02-27 18:57:23

# Below is generated by plot.py at 2018-02-27 19:40:00

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.10 Mbit/s (25.8% utilization)

95th percentile per-packet one-way delay: 12.443 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 12.287 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 12.935 ms

Loss rate: 0.08%

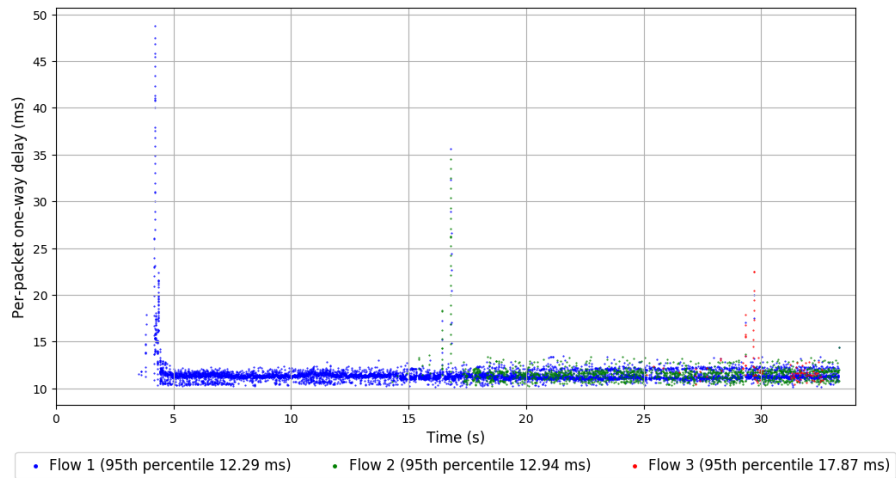
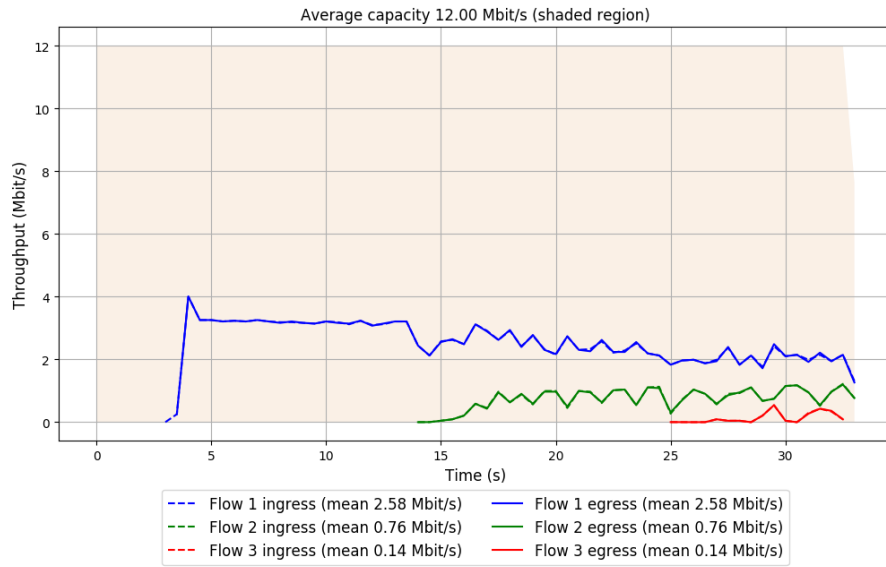
-- Flow 3:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 17.873 ms

Loss rate: 0.00%

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



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-27 19:07:08

End at: 2018-02-27 19:07:38

# Below is generated by plot.py at 2018-02-27 19:40:01

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.10 Mbit/s (25.8% utilization)

95th percentile per-packet one-way delay: 12.596 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 2.64 Mbit/s

95th percentile per-packet one-way delay: 12.349 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 13.207 ms

Loss rate: 0.00%

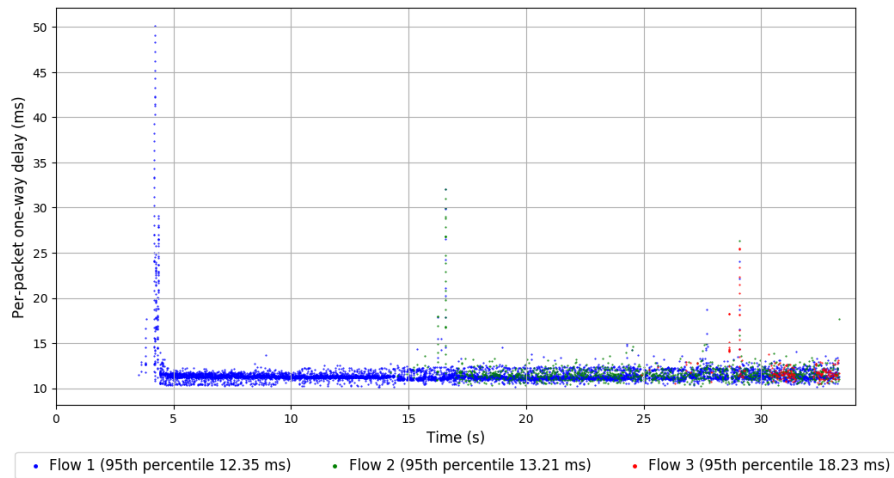
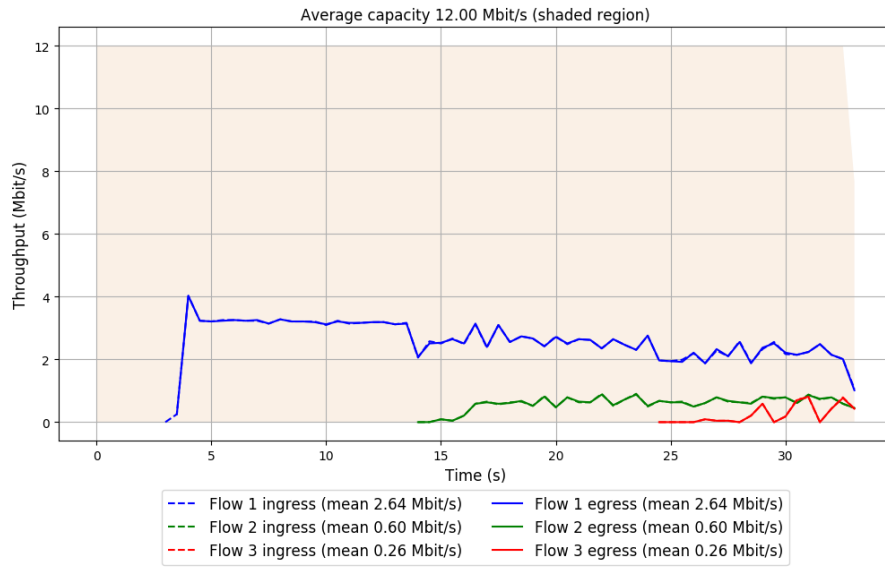
-- Flow 3:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 18.232 ms

Loss rate: 0.52%

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



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-27 19:17:22

End at: 2018-02-27 19:17:52

# Below is generated by plot.py at 2018-02-27 19:40:06

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.11 Mbit/s (25.9% utilization)

95th percentile per-packet one-way delay: 12.659 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 12.422 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 12.962 ms

Loss rate: 0.07%

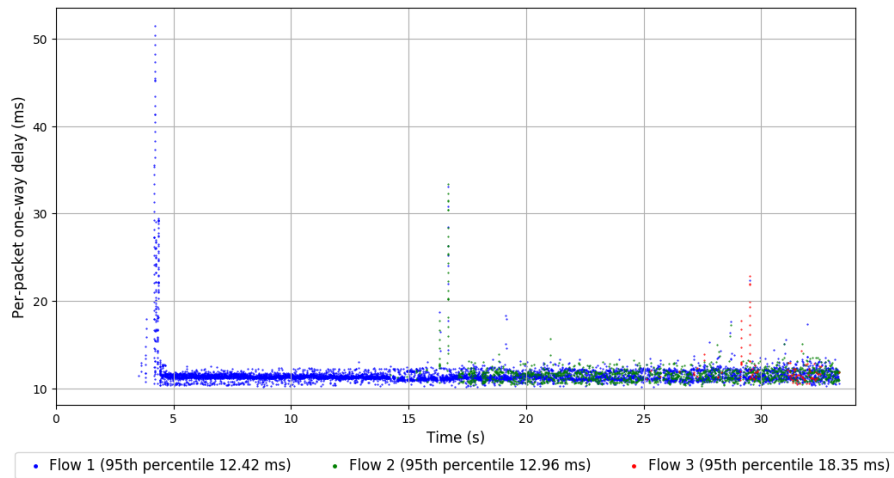
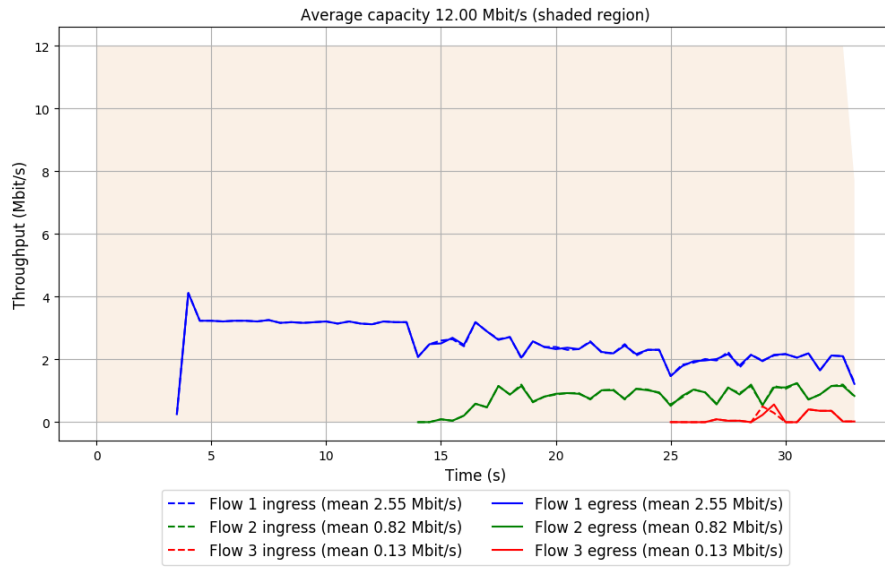
-- Flow 3:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 18.346 ms

Loss rate: 0.00%

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



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-27 19:27:36

End at: 2018-02-27 19:28:06

# Below is generated by plot.py at 2018-02-27 19:40:06

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.11 Mbit/s (25.9% utilization)

95th percentile per-packet one-way delay: 12.505 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 12.286 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 0.83 Mbit/s

95th percentile per-packet one-way delay: 12.956 ms

Loss rate: 0.07%

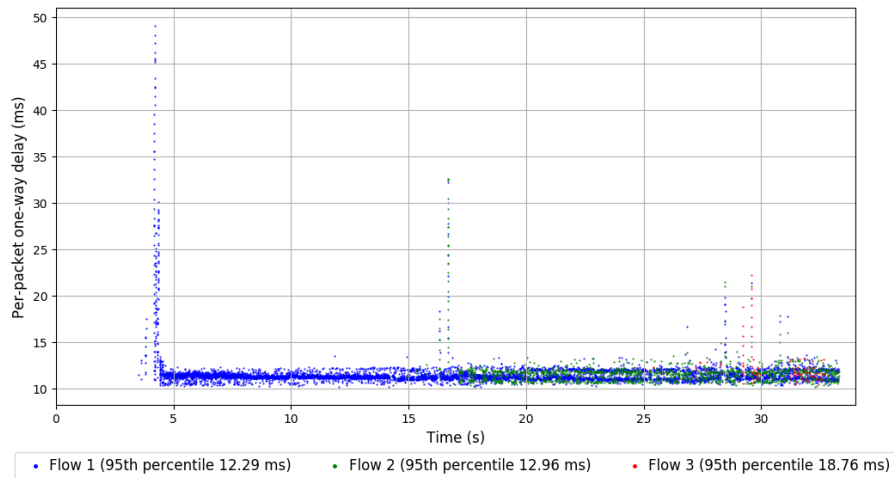
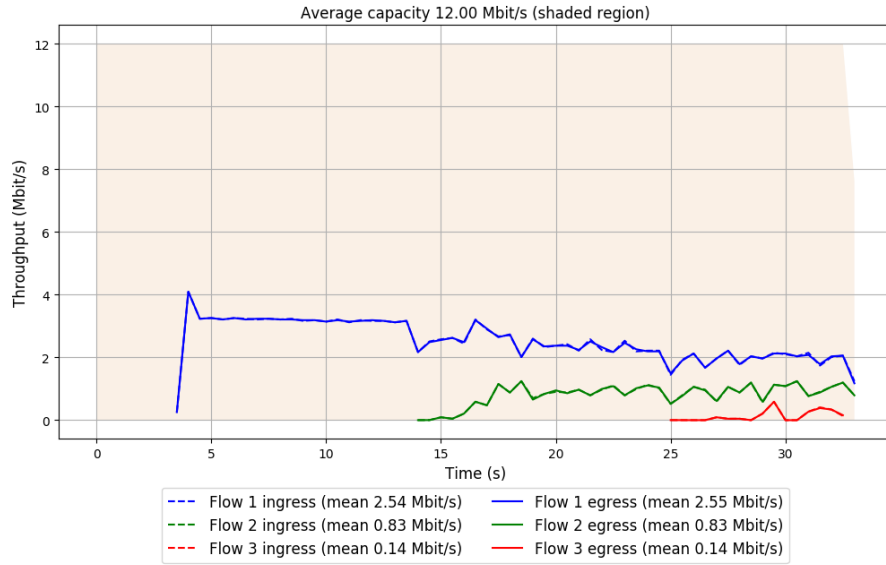
-- Flow 3:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 18.761 ms

Loss rate: 0.00%

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



Run 10: Statistics of QUIC Cubic

Start at: 2018-02-27 19:37:50

End at: 2018-02-27 19:38:20

# Below is generated by plot.py at 2018-02-27 19:40:07

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.11 Mbit/s (25.9% utilization)

95th percentile per-packet one-way delay: 12.387 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 12.237 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 0.84 Mbit/s

95th percentile per-packet one-way delay: 12.852 ms

Loss rate: 0.07%

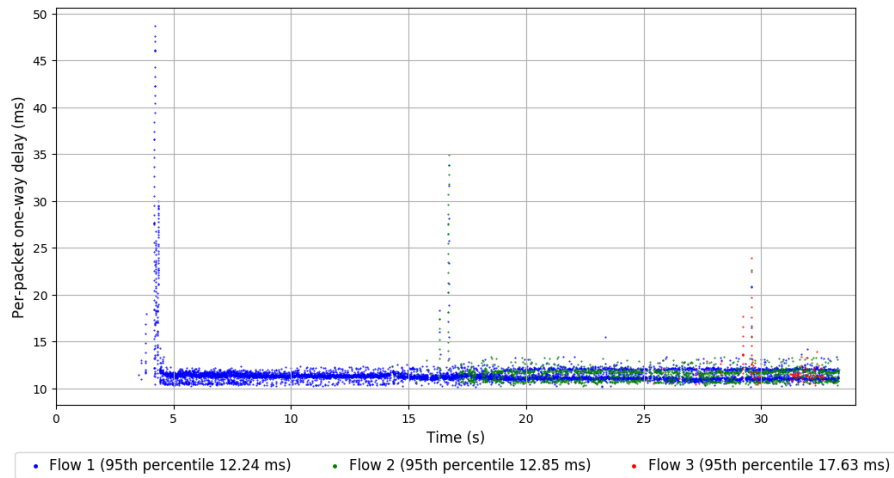
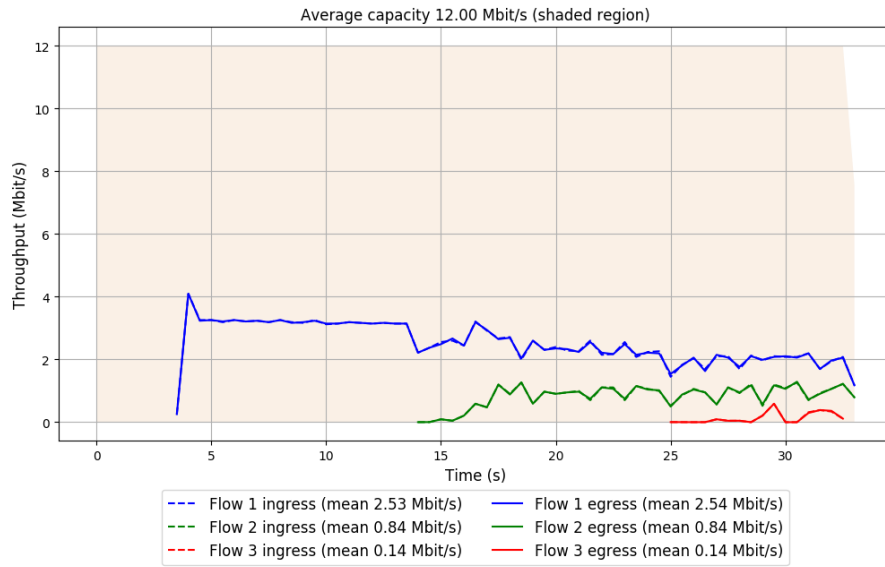
-- Flow 3:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 17.633 ms

Loss rate: 0.00%

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



Run 1: Statistics of SCReAM

Start at: 2018-02-27 18:02:16

End at: 2018-02-27 18:02:46

# Below is generated by plot.py at 2018-02-27 19:40:07

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 0.43 Mbit/s (3.6% utilization)

95th percentile per-packet one-way delay: 11.759 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.568 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.789 ms

Loss rate: 0.00%

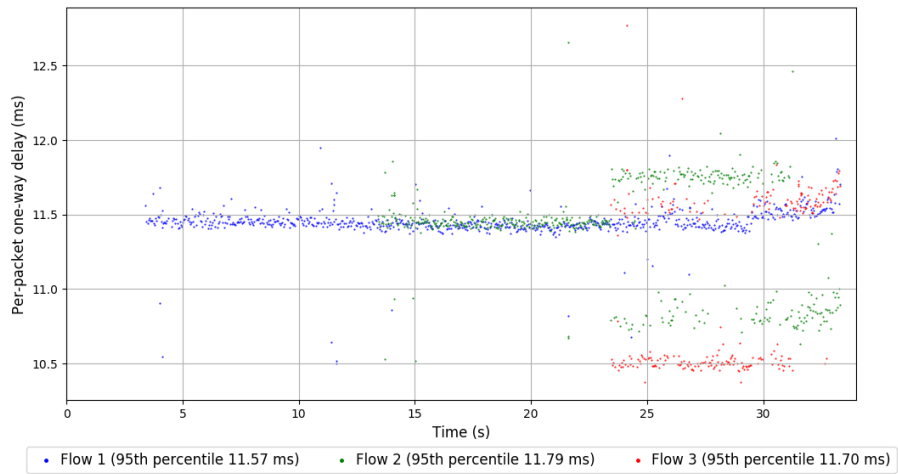
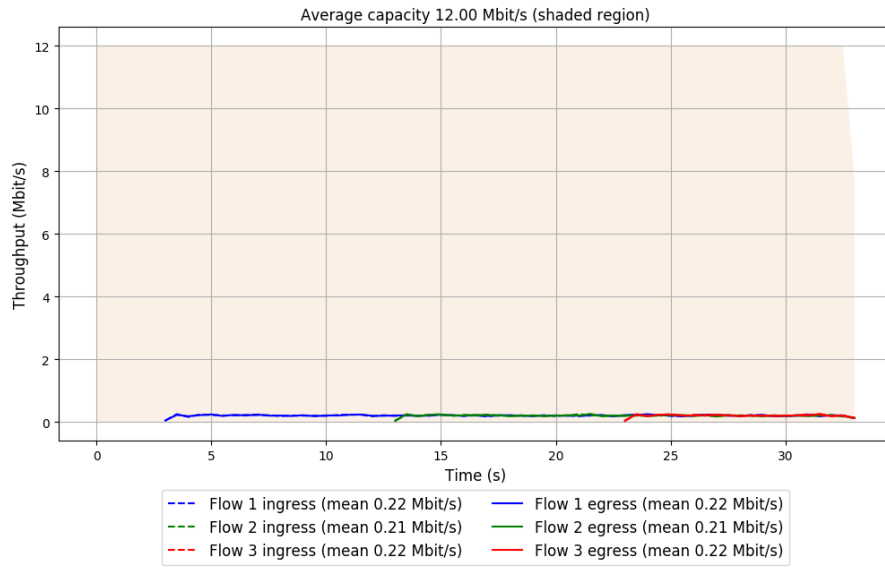
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.701 ms

Loss rate: 0.00%

# Run 1: Report of SCReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2018-02-27 18:12:31

End at: 2018-02-27 18:13:01

# Below is generated by plot.py at 2018-02-27 19:40:07

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 0.43 Mbit/s (3.6% utilization)

95th percentile per-packet one-way delay: 11.608 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.479 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.642 ms

Loss rate: 0.00%

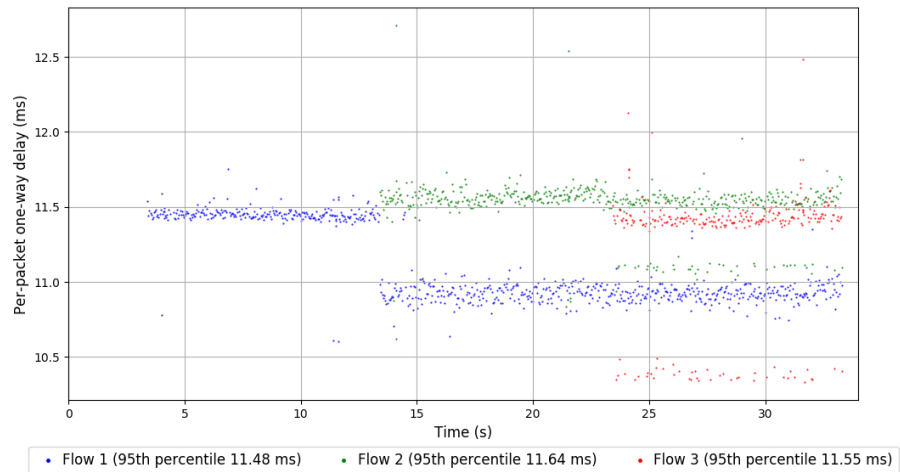
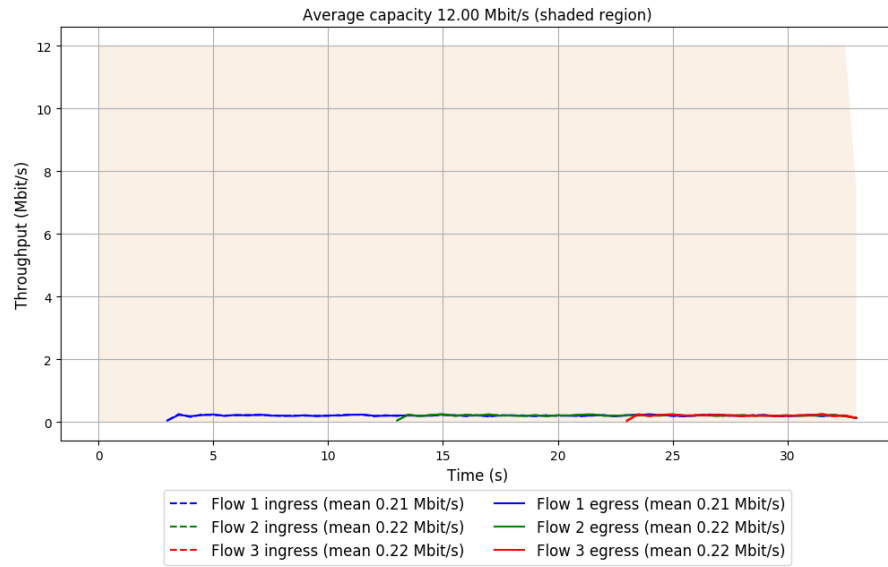
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.550 ms

Loss rate: 0.00%

## Run 2: Report of SCReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-02-27 18:22:45

End at: 2018-02-27 18:23:15

# Below is generated by plot.py at 2018-02-27 19:40:08

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 0.44 Mbit/s (3.6% utilization)

95th percentile per-packet one-way delay: 11.873 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.689 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.783 ms

Loss rate: 0.00%

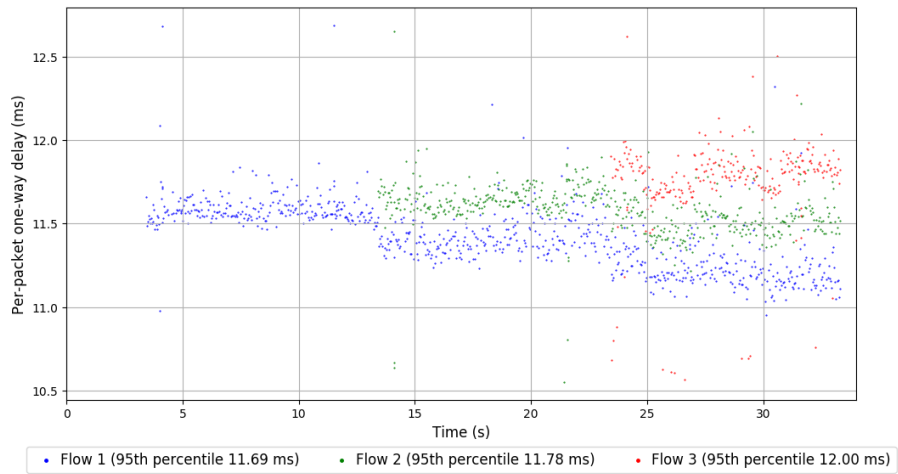
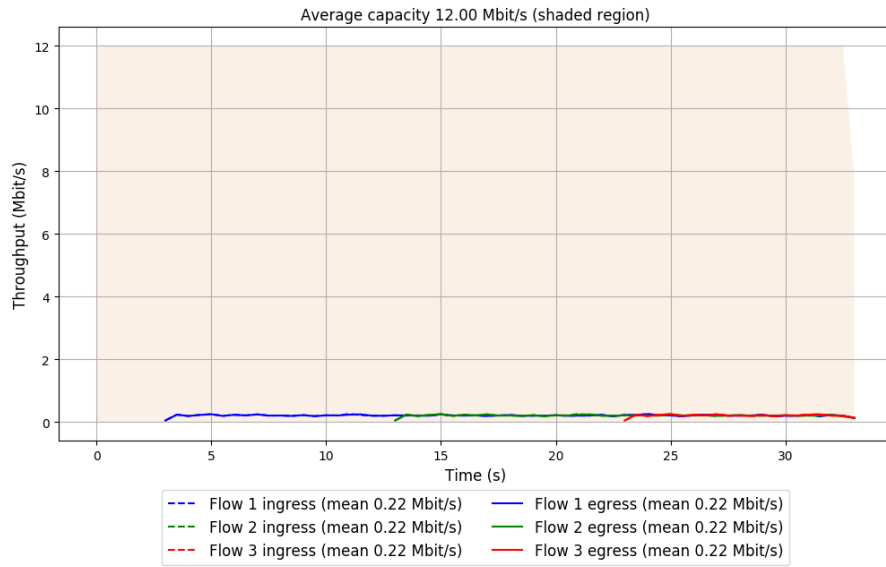
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.996 ms

Loss rate: 0.00%

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



Run 4: Statistics of SCReAM

Start at: 2018-02-27 18:33:00

End at: 2018-02-27 18:33:30

# Below is generated by plot.py at 2018-02-27 19:40:11

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 0.44 Mbit/s (3.6% utilization)

95th percentile per-packet one-way delay: 12.002 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.825 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 12.071 ms

Loss rate: 0.00%

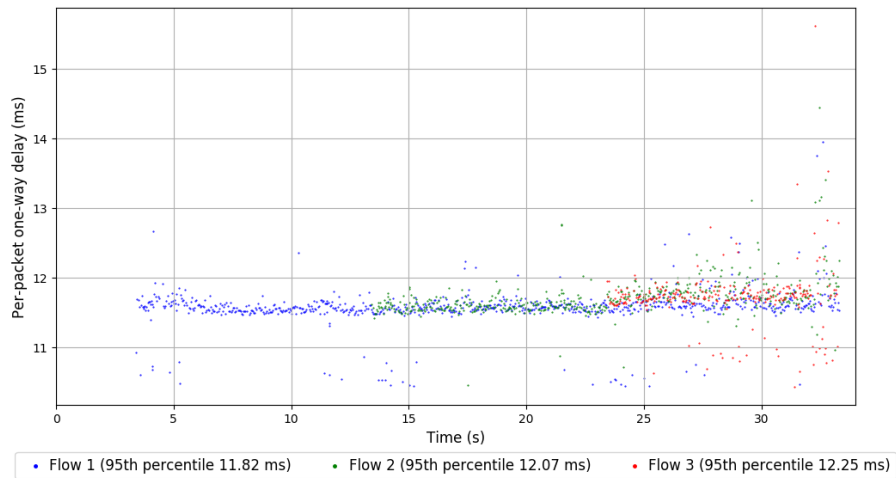
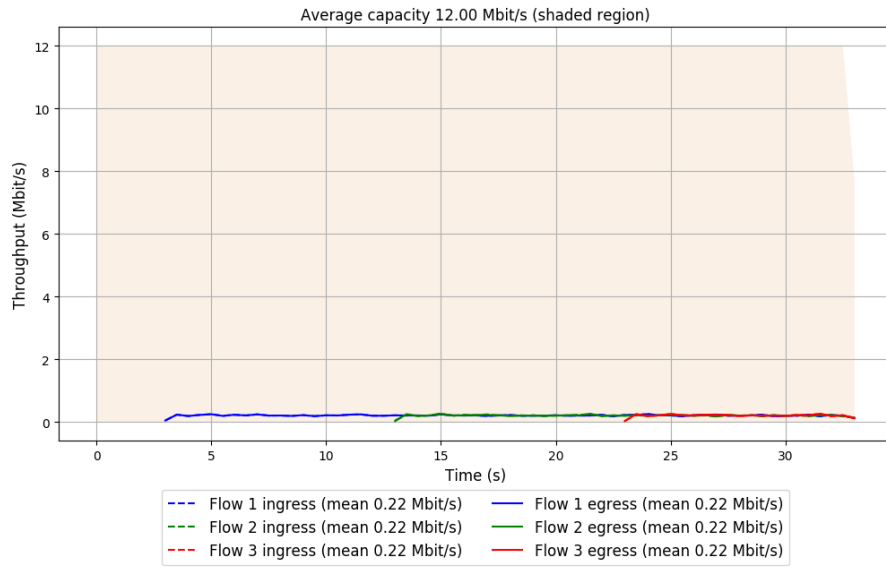
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 12.251 ms

Loss rate: 0.35%

## Run 4: Report of SCReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-02-27 18:43:14

End at: 2018-02-27 18:43:44

# Below is generated by plot.py at 2018-02-27 19:40:12

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 0.44 Mbit/s (3.6% utilization)

95th percentile per-packet one-way delay: 11.705 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.570 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.763 ms

Loss rate: 0.00%

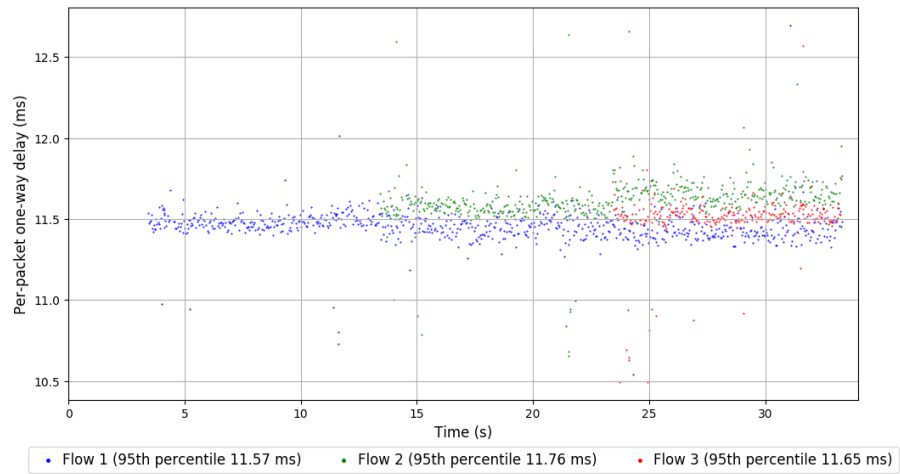
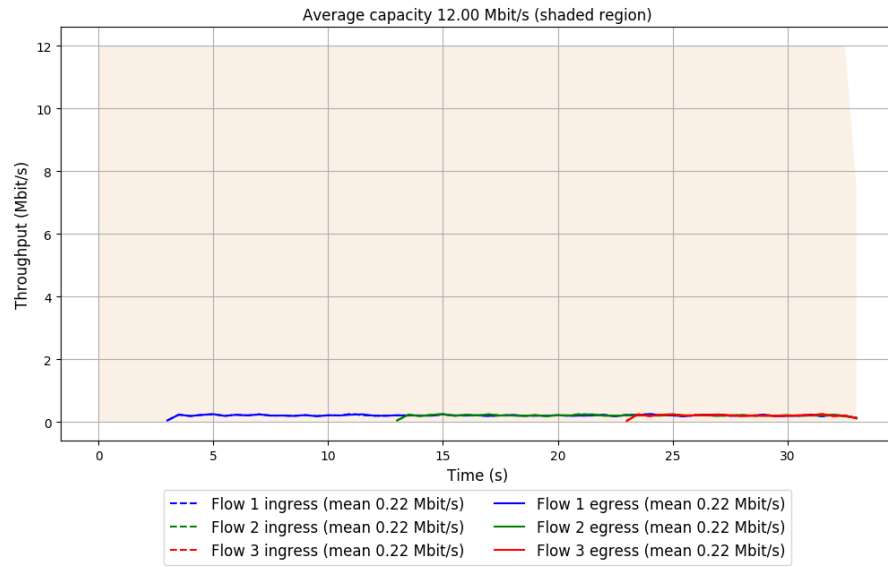
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.653 ms

Loss rate: 0.35%

## Run 5: Report of SCReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-02-27 18:53:29

End at: 2018-02-27 18:53:59

# Below is generated by plot.py at 2018-02-27 19:40:12

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 0.44 Mbit/s (3.6% utilization)

95th percentile per-packet one-way delay: 12.303 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 12.346 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.990 ms

Loss rate: 0.00%

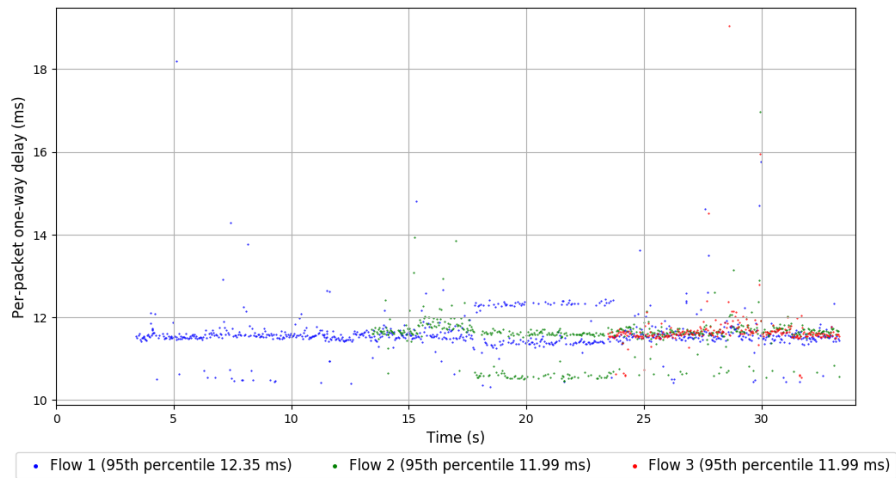
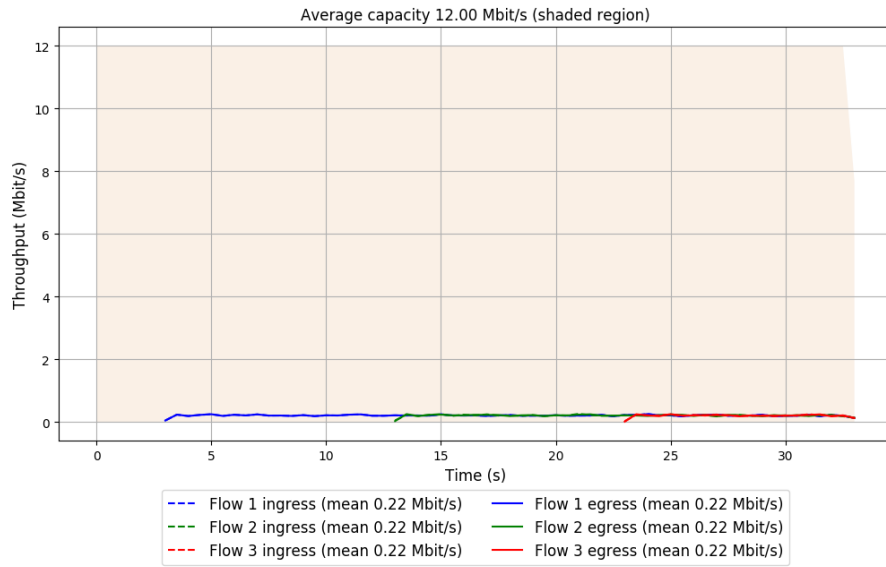
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.995 ms

Loss rate: 0.00%

## Run 6: Report of SCReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-02-27 19:03:43

End at: 2018-02-27 19:04:13

# Below is generated by plot.py at 2018-02-27 19:40:14

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 0.43 Mbit/s (3.6% utilization)

95th percentile per-packet one-way delay: 11.619 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.629 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.579 ms

Loss rate: 0.00%

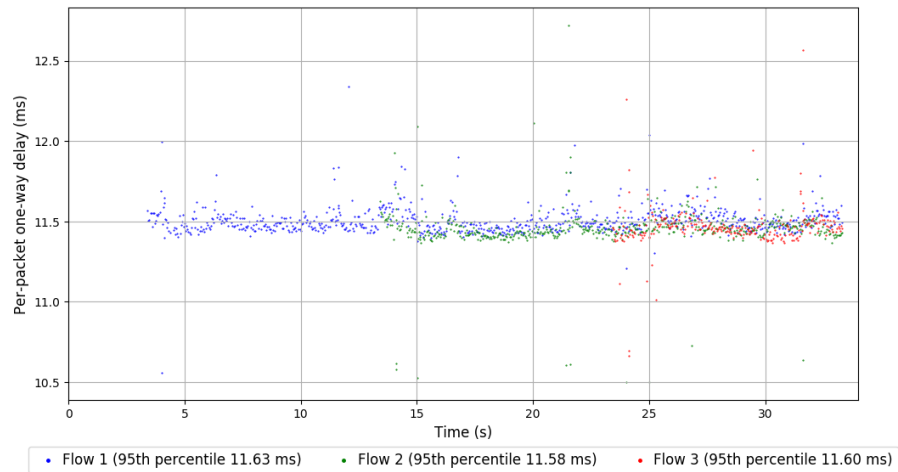
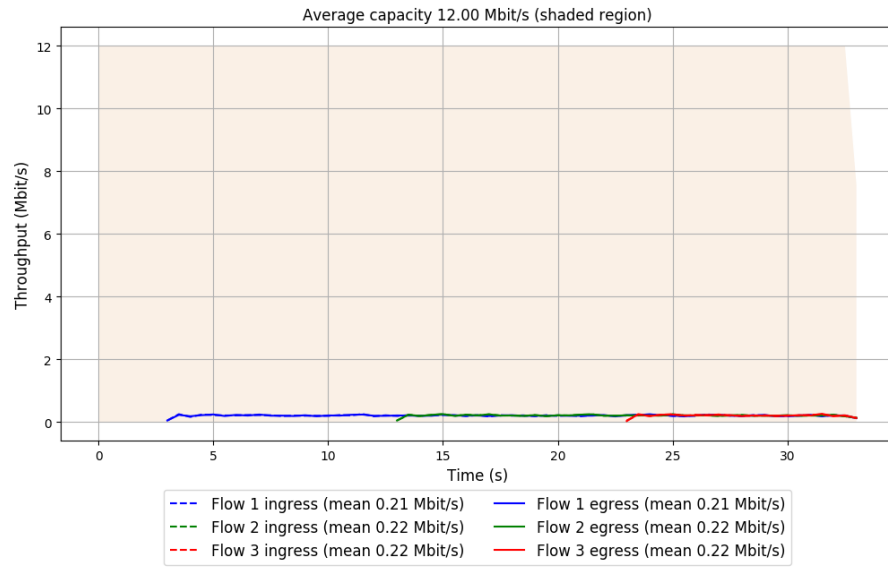
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.598 ms

Loss rate: 0.00%

## Run 7: Report of SCReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-02-27 19:13:57

End at: 2018-02-27 19:14:27

# Below is generated by plot.py at 2018-02-27 19:40:16

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 0.43 Mbit/s (3.6% utilization)

95th percentile per-packet one-way delay: 12.728 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 12.687 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 12.761 ms

Loss rate: 0.00%

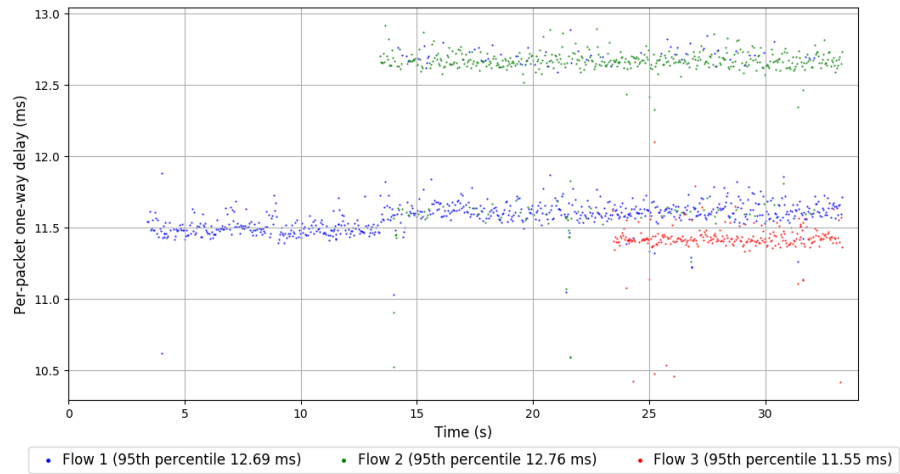
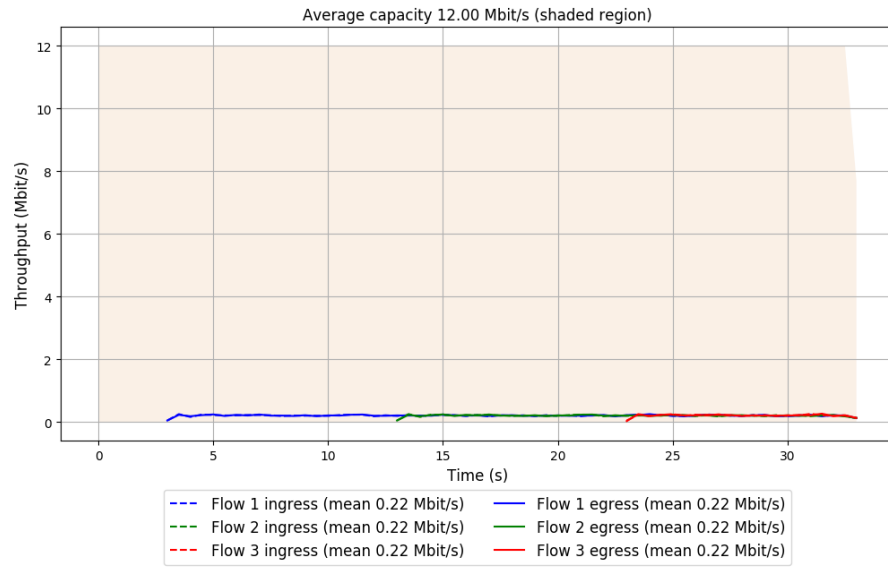
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.553 ms

Loss rate: 0.00%

## Run 8: Report of SCReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-02-27 19:24:11

End at: 2018-02-27 19:24:41

# Below is generated by plot.py at 2018-02-27 19:40:17

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 0.43 Mbit/s (3.6% utilization)

95th percentile per-packet one-way delay: 11.580 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.530 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.589 ms

Loss rate: 0.00%

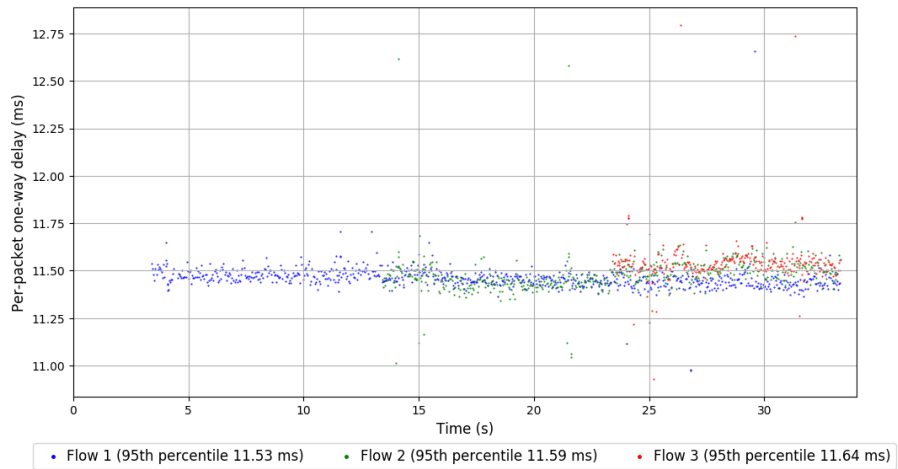
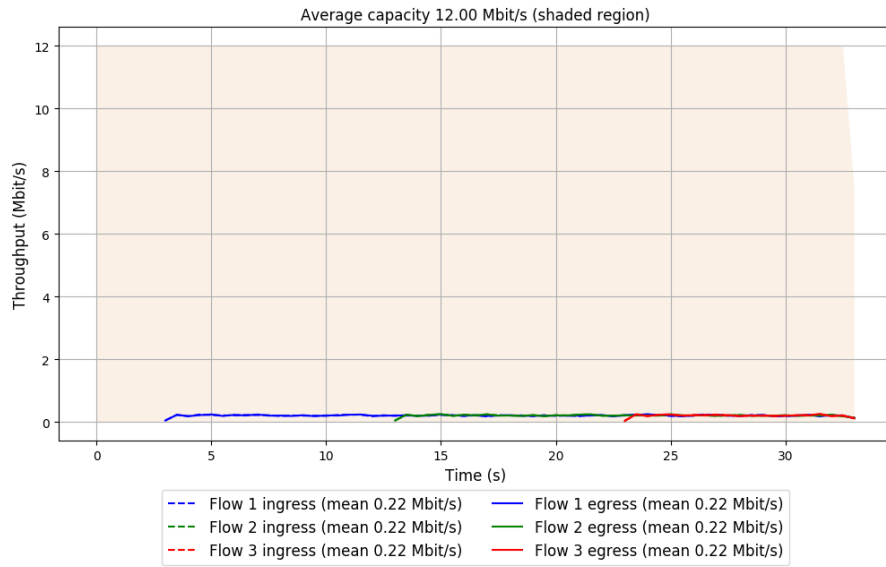
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.637 ms

Loss rate: 0.35%

## Run 9: Report of SCReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-02-27 19:34:26

End at: 2018-02-27 19:34:56

# Below is generated by plot.py at 2018-02-27 19:40:17

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 0.43 Mbit/s (3.6% utilization)

95th percentile per-packet one-way delay: 11.541 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 11.499 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.573 ms

Loss rate: 0.00%

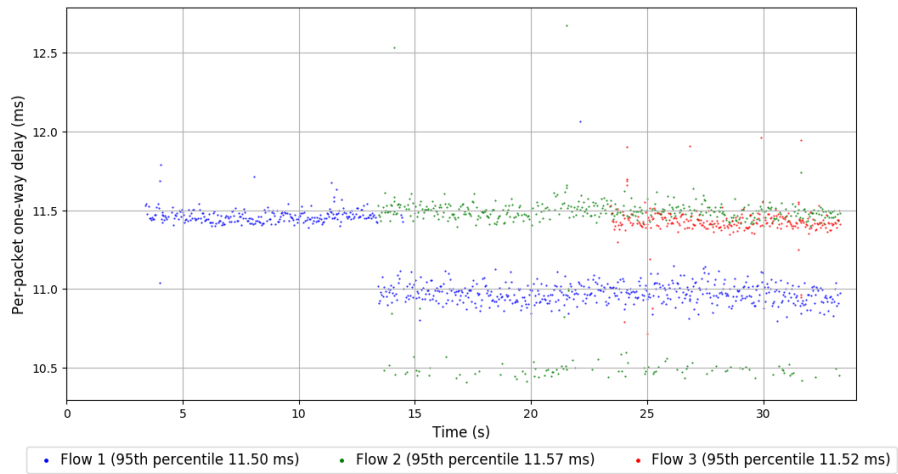
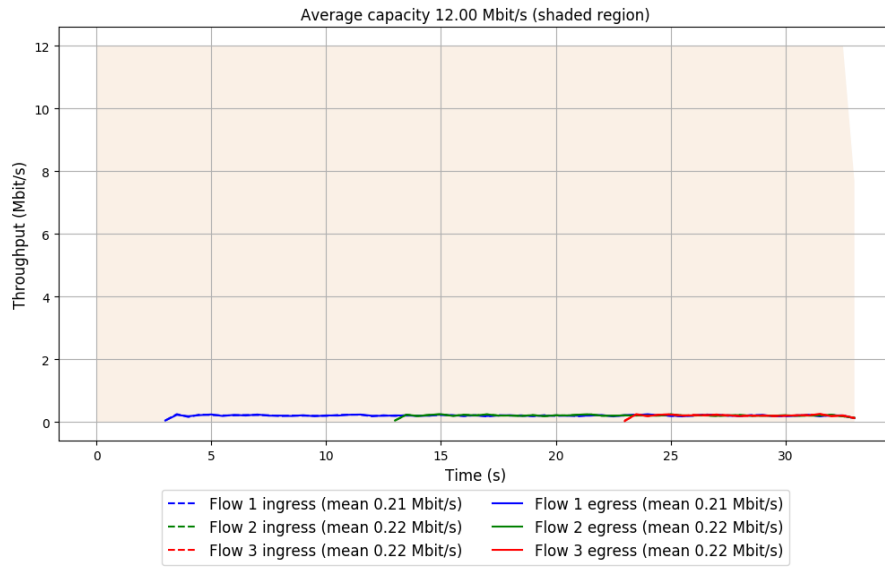
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 11.522 ms

Loss rate: 0.00%

# Run 10: Report of SCReAM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-02-27 18:00:34

End at: 2018-02-27 18:01:04

# Below is generated by plot.py at 2018-02-27 19:40:22

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.08 Mbit/s (34.0% utilization)

95th percentile per-packet one-way delay: 30.783 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 28.059 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 30.889 ms

Loss rate: 0.17%

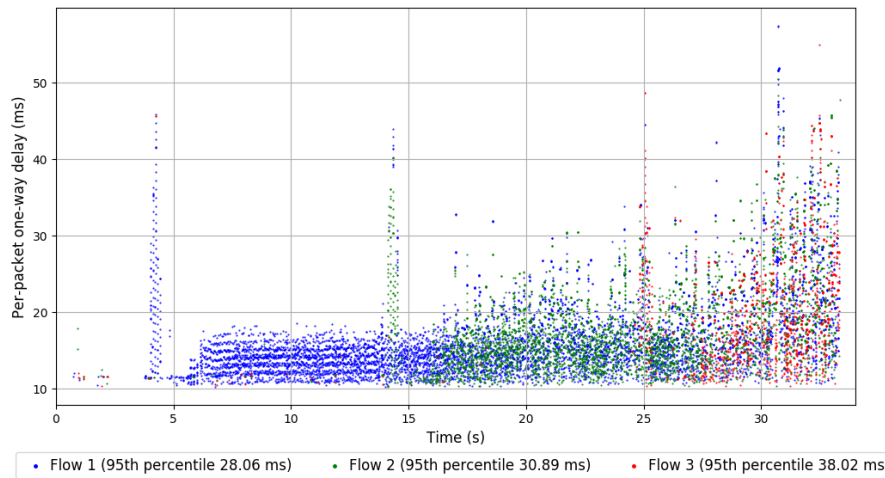
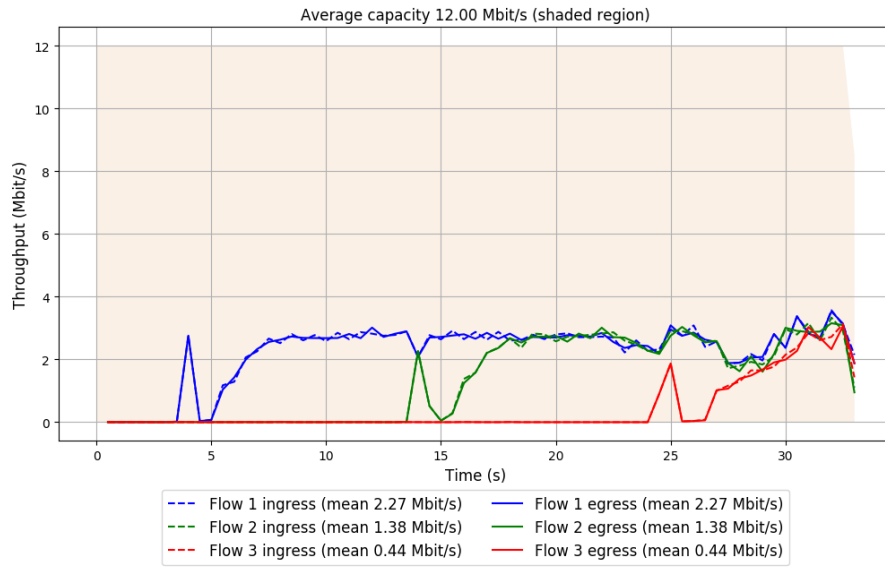
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 38.016 ms

Loss rate: 0.01%

# Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-02-27 18:10:49

End at: 2018-02-27 18:11:19

# Below is generated by plot.py at 2018-02-27 19:40:26

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.04 Mbit/s (33.6% utilization)

95th percentile per-packet one-way delay: 29.813 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 28.239 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 29.401 ms

Loss rate: 0.00%

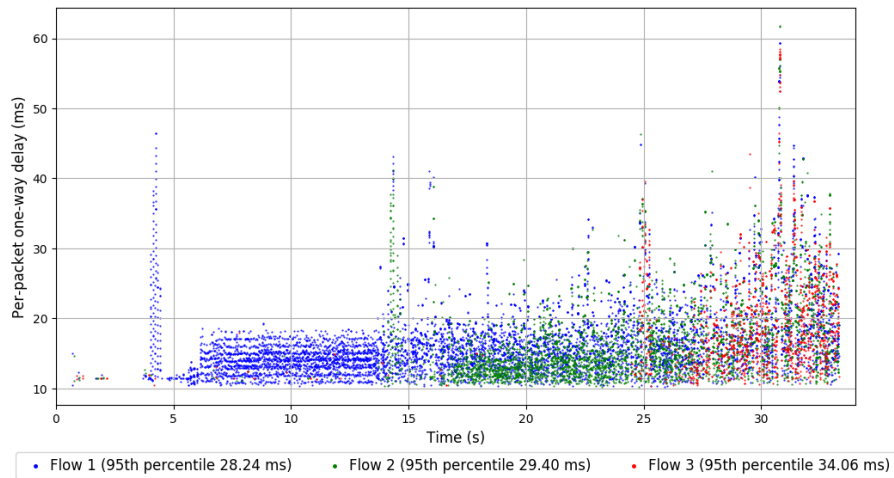
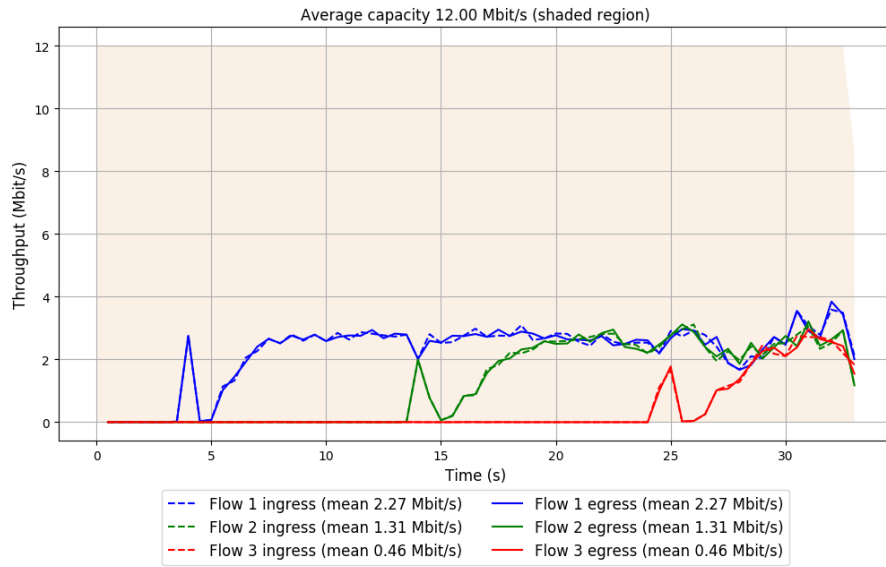
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 34.058 ms

Loss rate: 0.97%

## Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-27 18:21:03

End at: 2018-02-27 18:21:33

# Below is generated by plot.py at 2018-02-27 19:40:27

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.06 Mbit/s (33.8% utilization)

95th percentile per-packet one-way delay: 28.597 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 26.364 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 28.325 ms

Loss rate: 0.00%

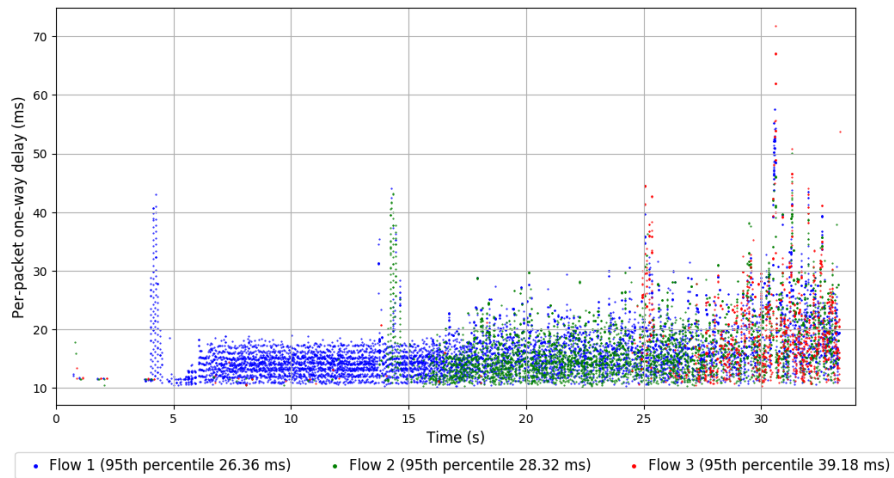
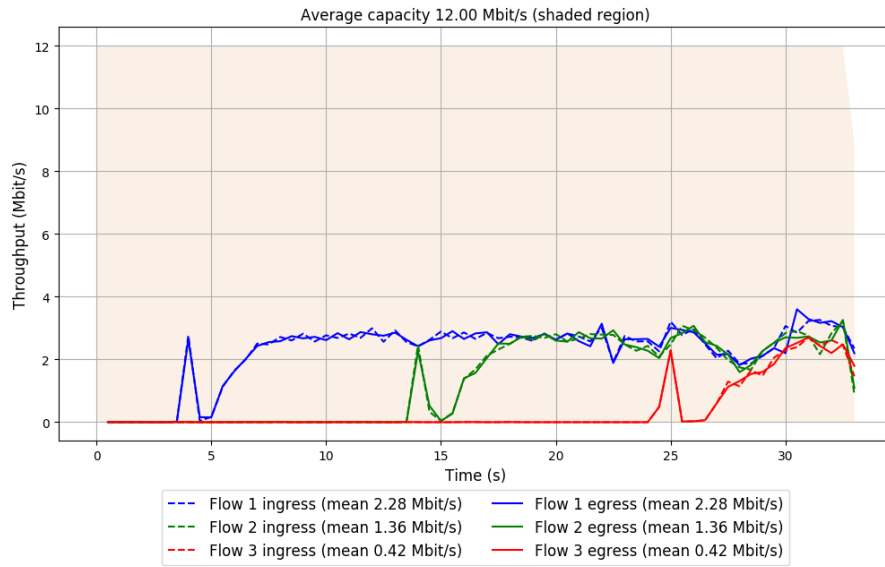
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 39.177 ms

Loss rate: 0.21%

### Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-27 18:31:17

End at: 2018-02-27 18:31:47

# Below is generated by plot.py at 2018-02-27 19:40:30

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.07 Mbit/s (33.9% utilization)

95th percentile per-packet one-way delay: 30.135 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 27.603 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 31.945 ms

Loss rate: 0.16%

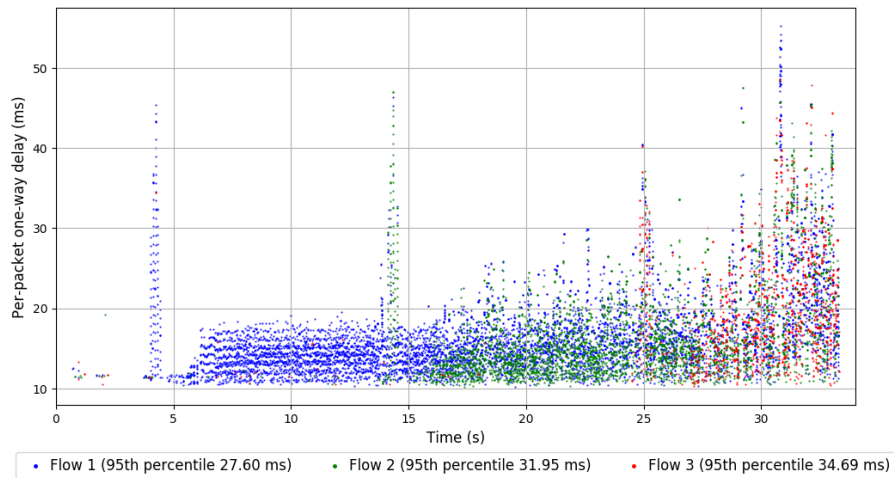
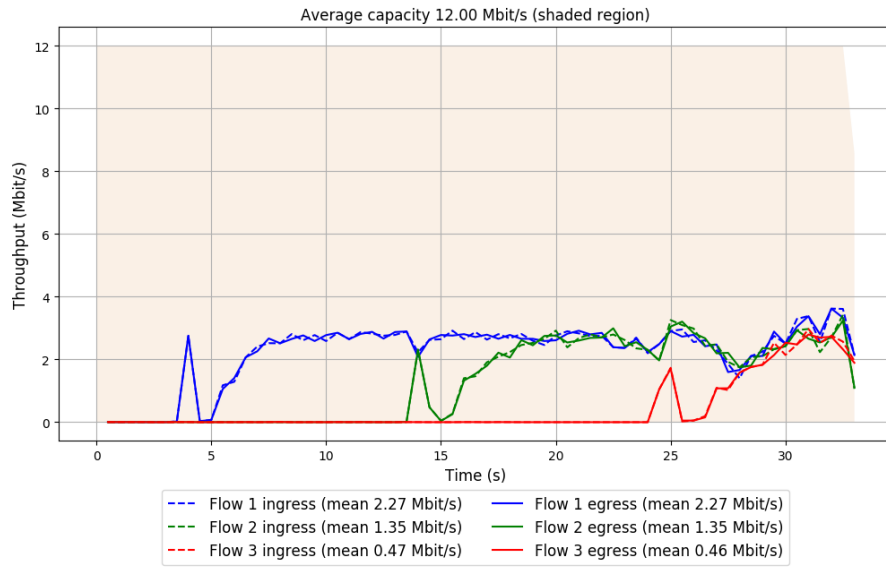
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 34.685 ms

Loss rate: 1.13%

### Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-27 18:41:32

End at: 2018-02-27 18:42:02

# Below is generated by plot.py at 2018-02-27 19:40:31

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.03 Mbit/s (33.6% utilization)

95th percentile per-packet one-way delay: 27.408 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 25.784 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 27.226 ms

Loss rate: 0.00%

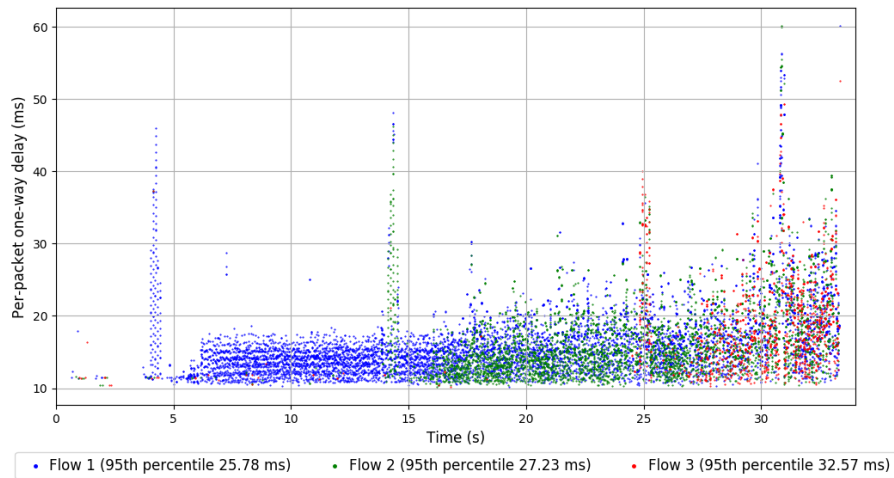
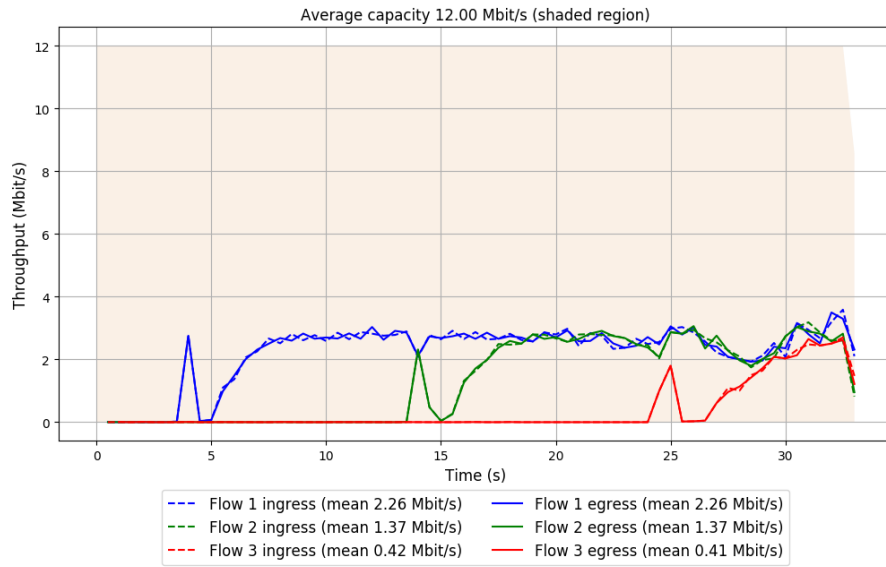
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 32.567 ms

Loss rate: 1.24%

### Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-27 18:51:47

End at: 2018-02-27 18:52:17

# Below is generated by plot.py at 2018-02-27 19:40:32

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.10 Mbit/s (34.2% utilization)

95th percentile per-packet one-way delay: 30.009 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 26.980 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 30.216 ms

Loss rate: 0.24%

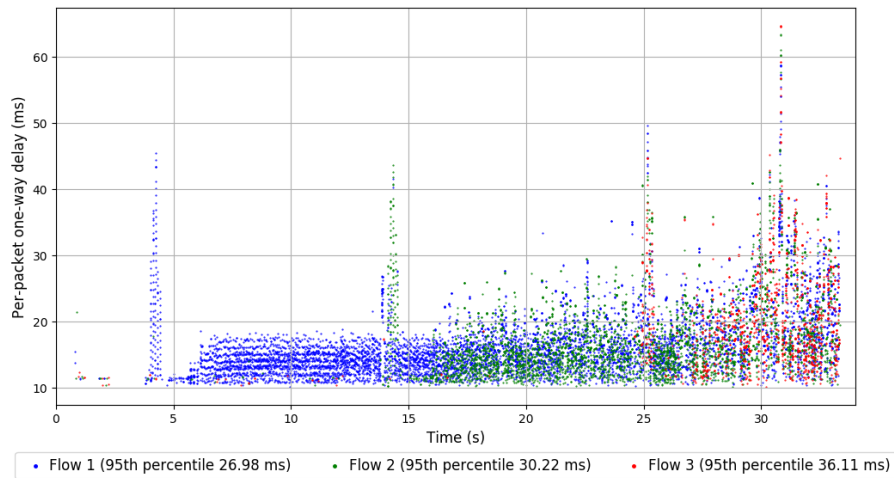
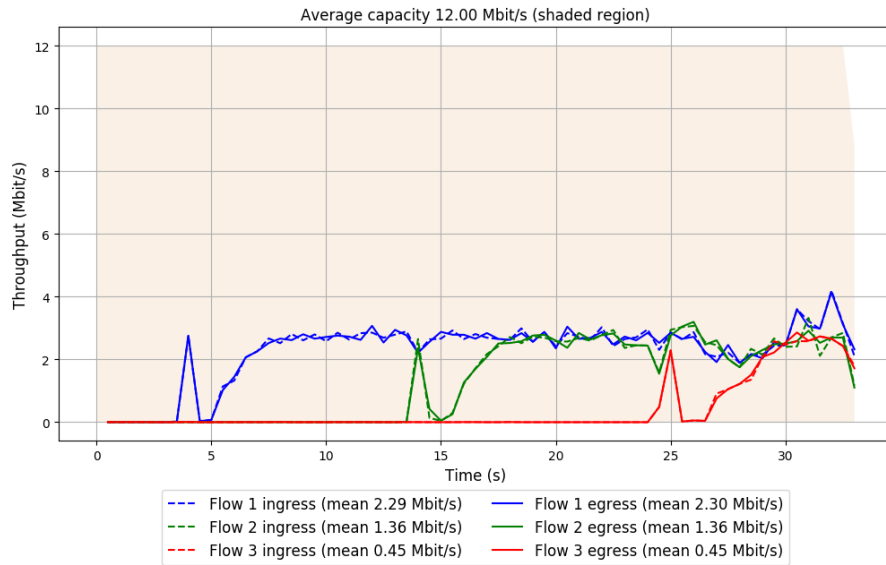
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 36.112 ms

Loss rate: 0.27%

## Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-27 19:02:01

End at: 2018-02-27 19:02:31

# Below is generated by plot.py at 2018-02-27 19:40:33

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.03 Mbit/s (33.6% utilization)

95th percentile per-packet one-way delay: 28.888 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 26.552 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 30.025 ms

Loss rate: 0.00%

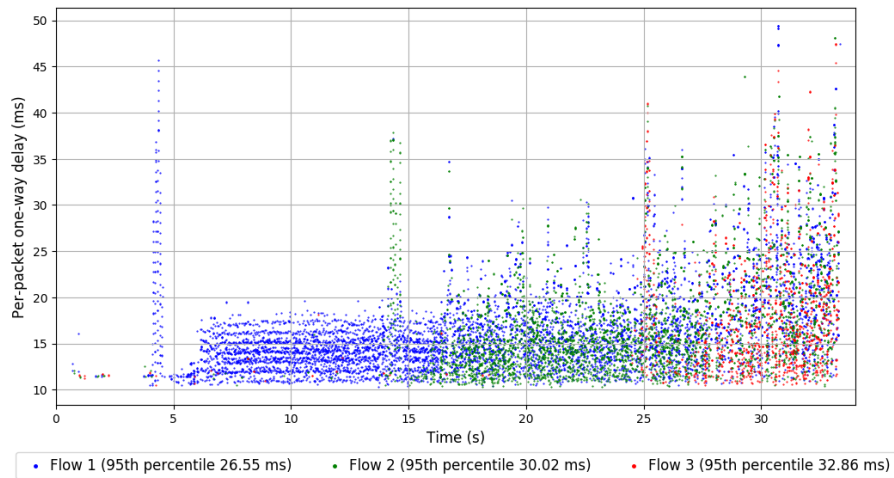
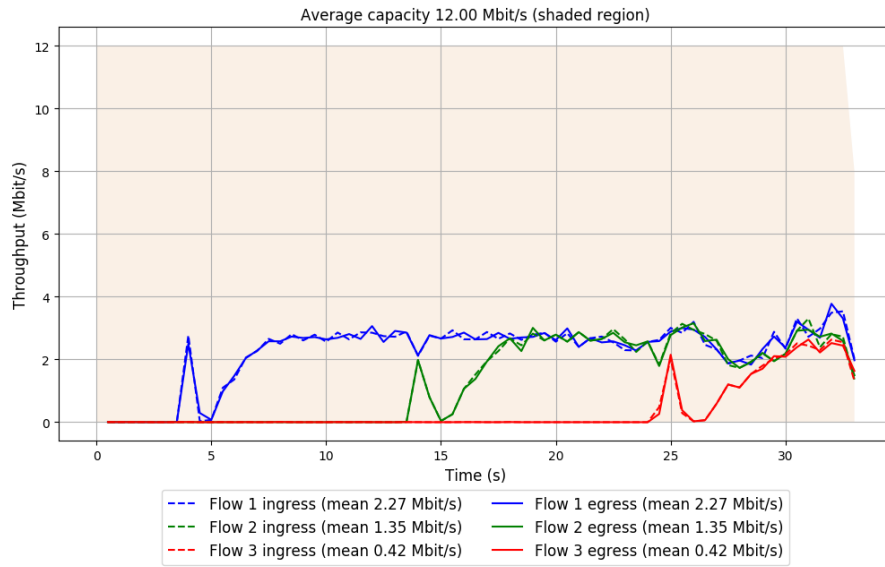
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 32.861 ms

Loss rate: 0.00%

### Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-27 19:12:15

End at: 2018-02-27 19:12:45

# Below is generated by plot.py at 2018-02-27 19:40:33

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.93 Mbit/s (32.8% utilization)

95th percentile per-packet one-way delay: 27.625 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 26.054 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 28.071 ms

Loss rate: 0.17%

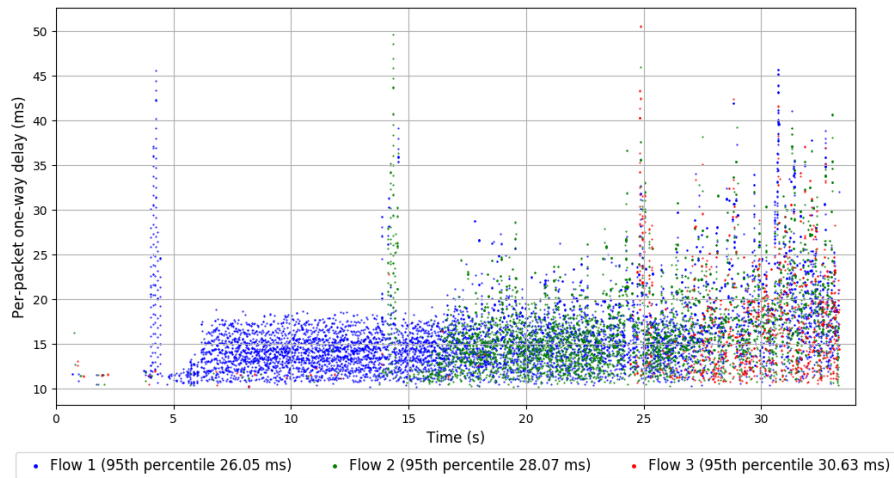
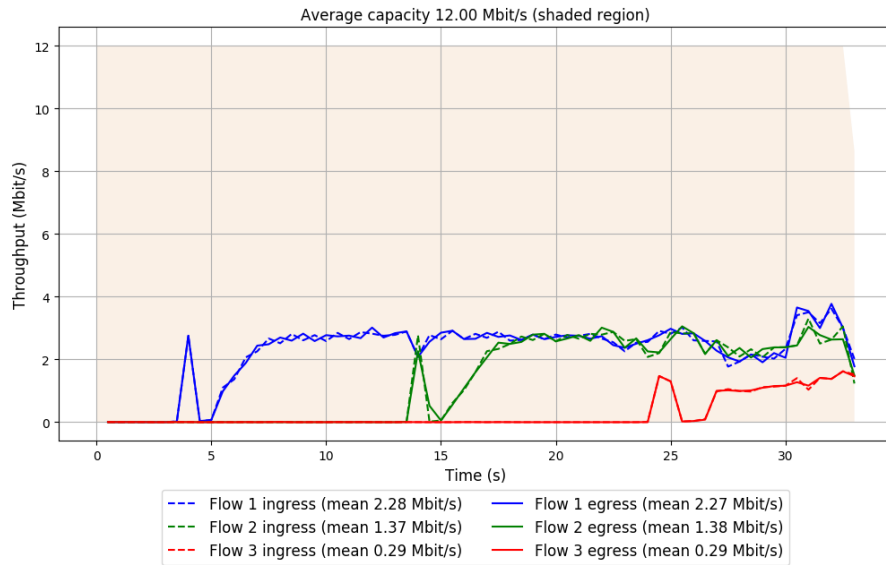
-- Flow 3:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 30.633 ms

Loss rate: 0.31%

## Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-27 19:22:29

End at: 2018-02-27 19:22:59

# Below is generated by plot.py at 2018-02-27 19:40:39

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.08 Mbit/s (34.0% utilization)

95th percentile per-packet one-way delay: 28.441 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 26.173 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 28.219 ms

Loss rate: 0.17%

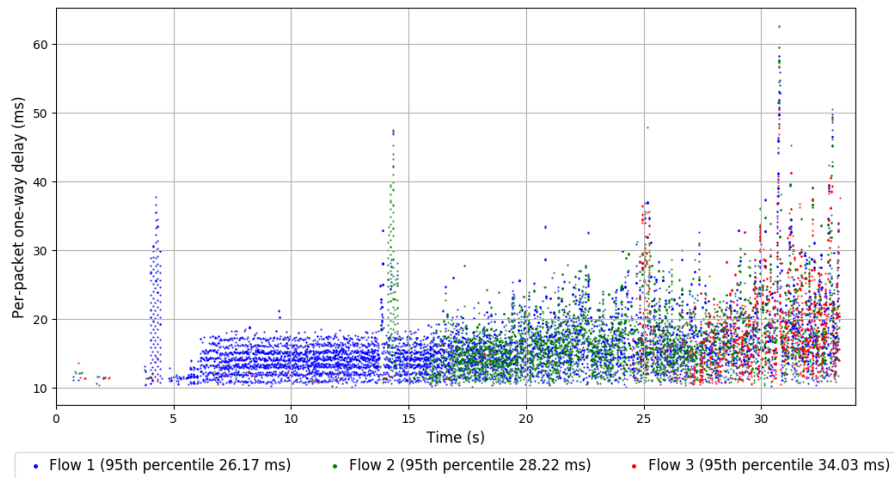
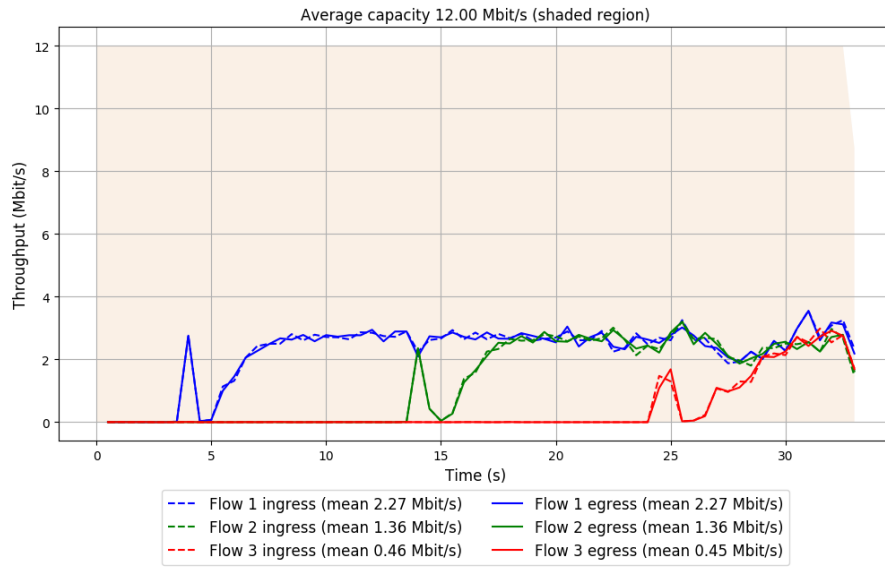
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 34.033 ms

Loss rate: 0.14%

### Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-27 19:32:43

End at: 2018-02-27 19:33:13

# Below is generated by plot.py at 2018-02-27 19:40:42

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.93 Mbit/s (32.7% utilization)

95th percentile per-packet one-way delay: 26.167 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 24.620 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 27.157 ms

Loss rate: 0.30%

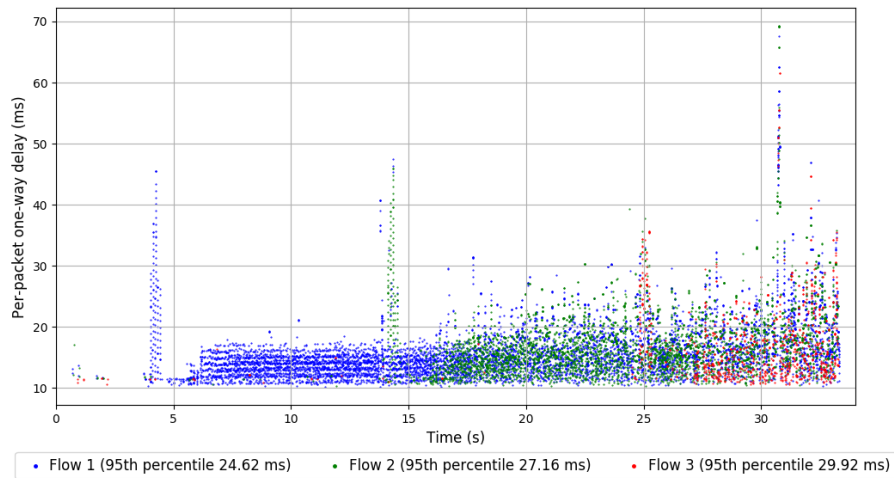
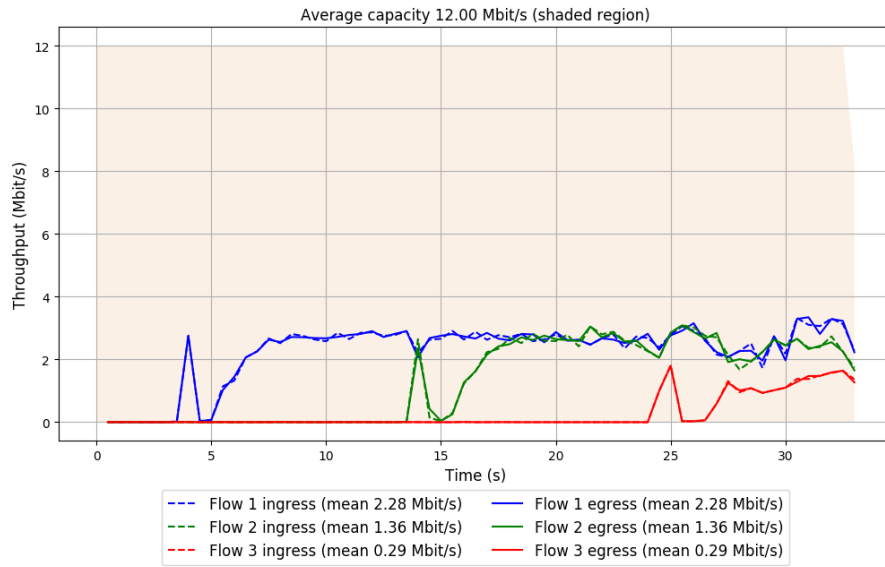
-- Flow 3:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 29.924 ms

Loss rate: 0.52%

# Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-02-27 18:00:00

End at: 2018-02-27 18:00:30

# Below is generated by plot.py at 2018-02-27 19:40:42

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 2.59 Mbit/s (21.5% utilization)

95th percentile per-packet one-way delay: 29.456 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 26.587 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.79 Mbit/s

95th percentile per-packet one-way delay: 30.764 ms

Loss rate: 0.00%

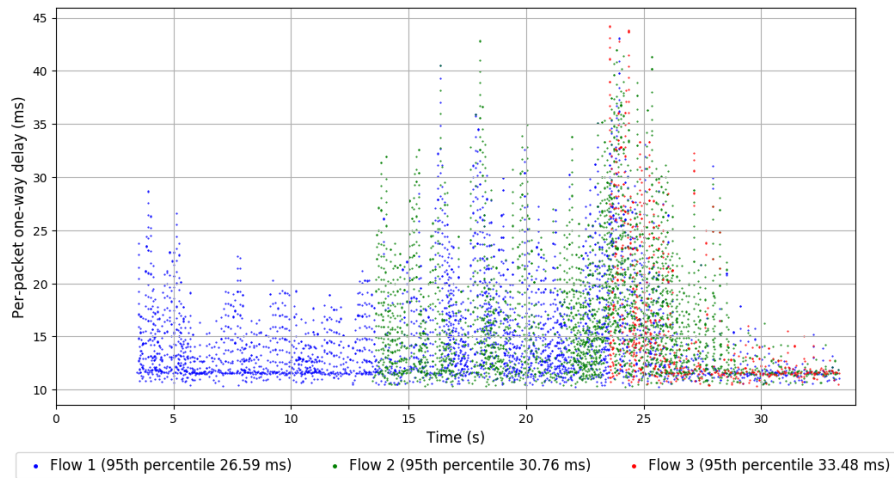
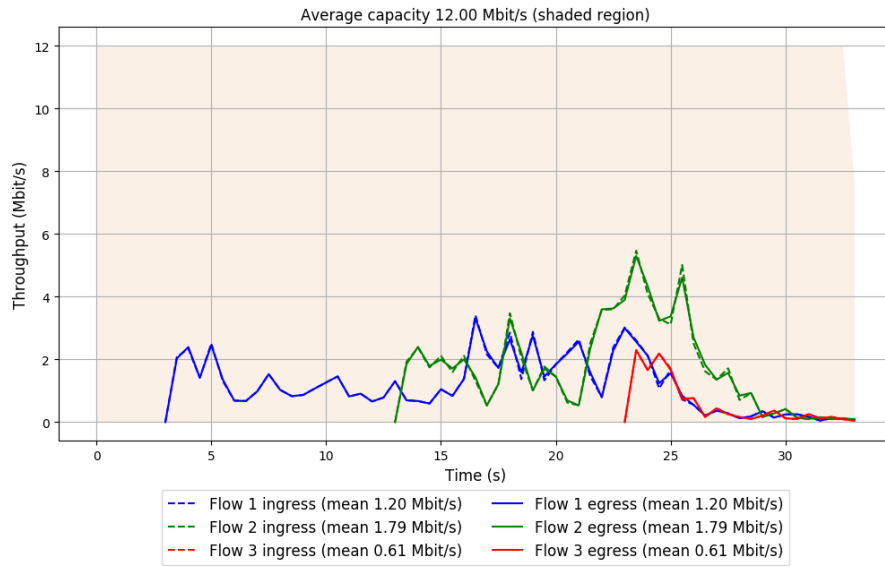
-- Flow 3:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 33.477 ms

Loss rate: 0.00%

# Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-27 18:10:14

End at: 2018-02-27 18:10:44

# Below is generated by plot.py at 2018-02-27 19:40:51

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 9.36 Mbit/s (78.0% utilization)

95th percentile per-packet one-way delay: 158.152 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 6.89 Mbit/s

95th percentile per-packet one-way delay: 151.868 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.27 Mbit/s

95th percentile per-packet one-way delay: 164.122 ms

Loss rate: 0.04%

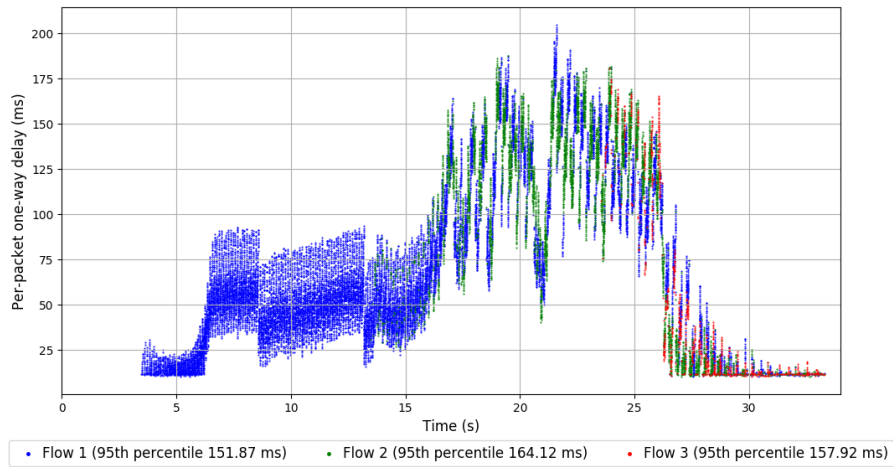
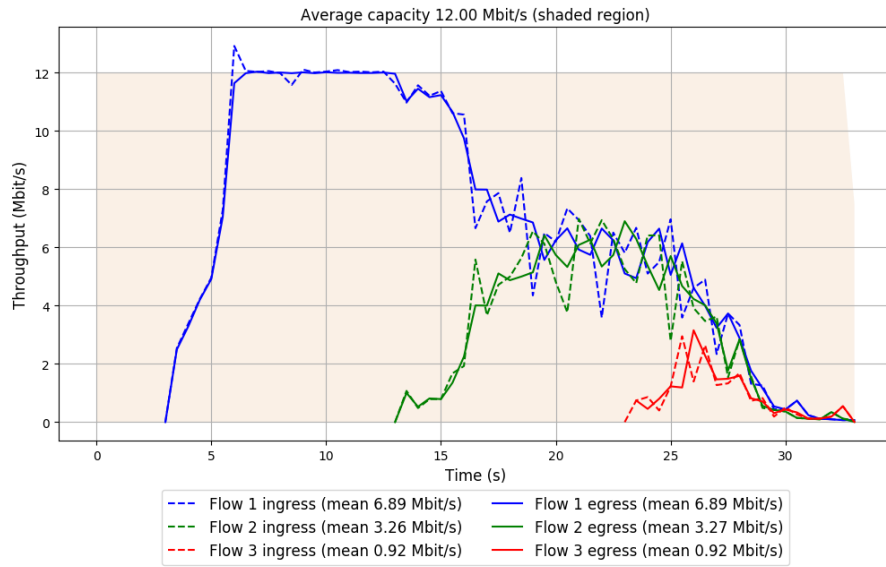
-- Flow 3:

Average throughput: 0.92 Mbit/s

95th percentile per-packet one-way delay: 157.920 ms

Loss rate: 0.00%

## Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-27 18:20:28

End at: 2018-02-27 18:20:58

# Below is generated by plot.py at 2018-02-27 19:40:51

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 7.22 Mbit/s (60.2% utilization)

95th percentile per-packet one-way delay: 172.933 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 167.954 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.09 Mbit/s

95th percentile per-packet one-way delay: 177.765 ms

Loss rate: 0.00%

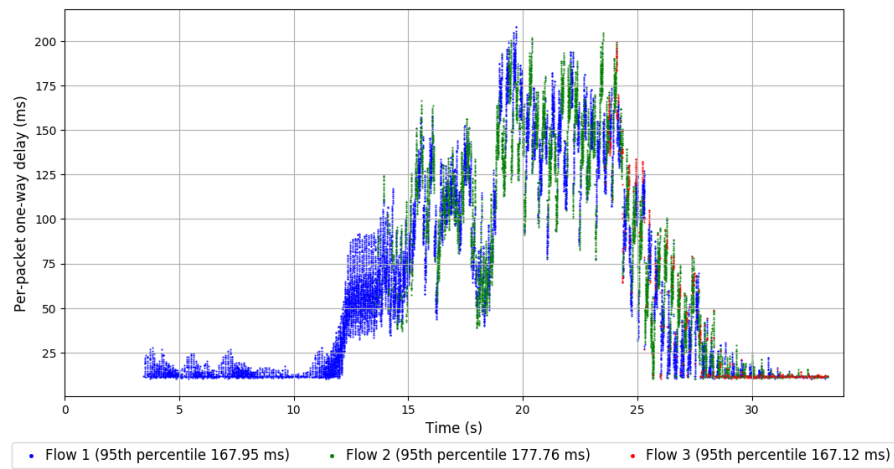
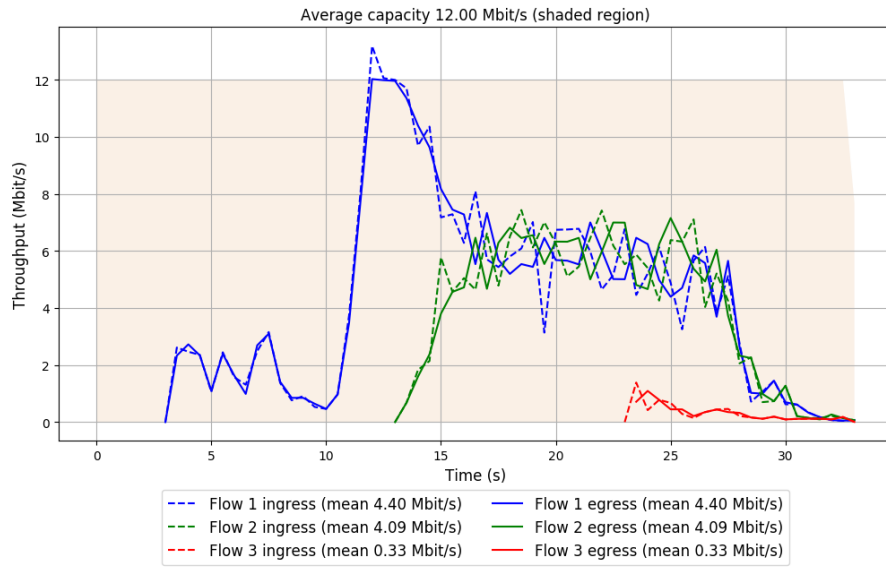
-- Flow 3:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 167.122 ms

Loss rate: 0.00%

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



Run 4: Statistics of Sprout

Start at: 2018-02-27 18:30:43

End at: 2018-02-27 18:31:13

# Below is generated by plot.py at 2018-02-27 19:40:53

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 8.37 Mbit/s (69.7% utilization)

95th percentile per-packet one-way delay: 160.136 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 5.68 Mbit/s

95th percentile per-packet one-way delay: 149.971 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.41 Mbit/s

95th percentile per-packet one-way delay: 175.480 ms

Loss rate: 0.00%

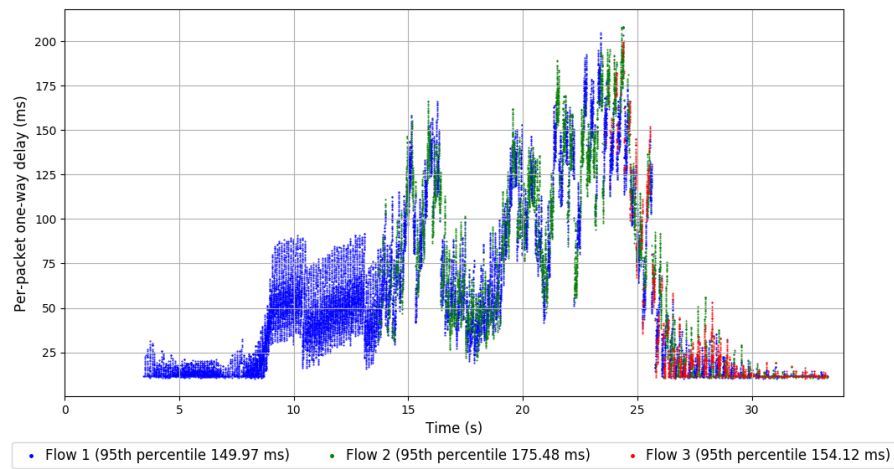
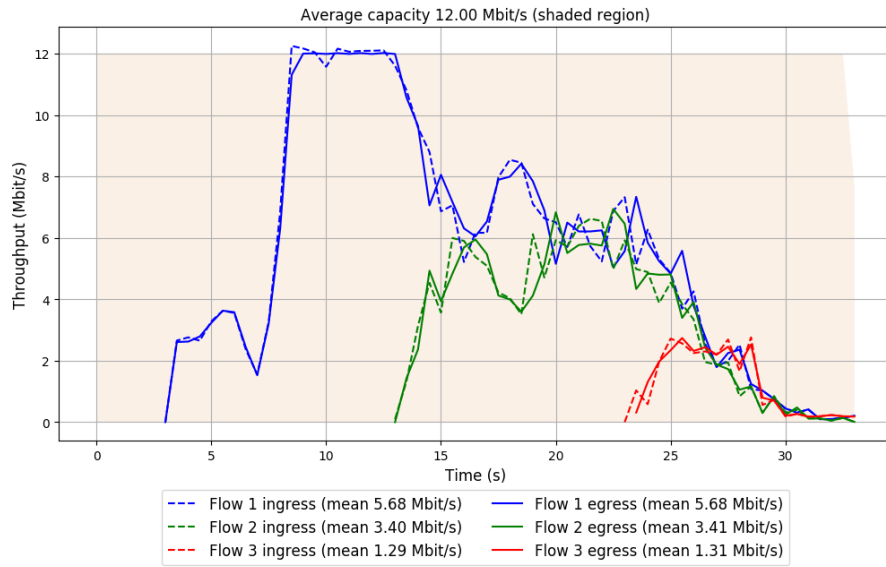
-- Flow 3:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 154.121 ms

Loss rate: 0.00%

## Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-27 18:40:58

End at: 2018-02-27 18:41:28

# Below is generated by plot.py at 2018-02-27 19:40:53

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 5.56 Mbit/s (46.3% utilization)

95th percentile per-packet one-way delay: 166.885 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 2.70 Mbit/s

95th percentile per-packet one-way delay: 170.588 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 162.521 ms

Loss rate: 0.04%

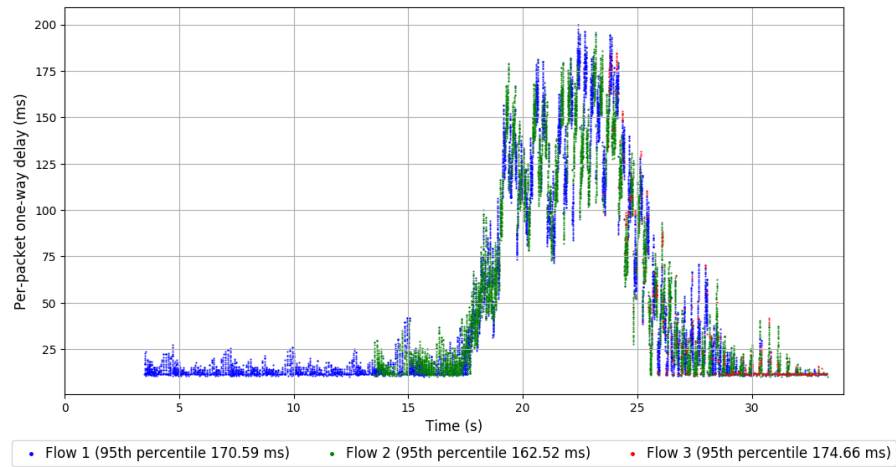
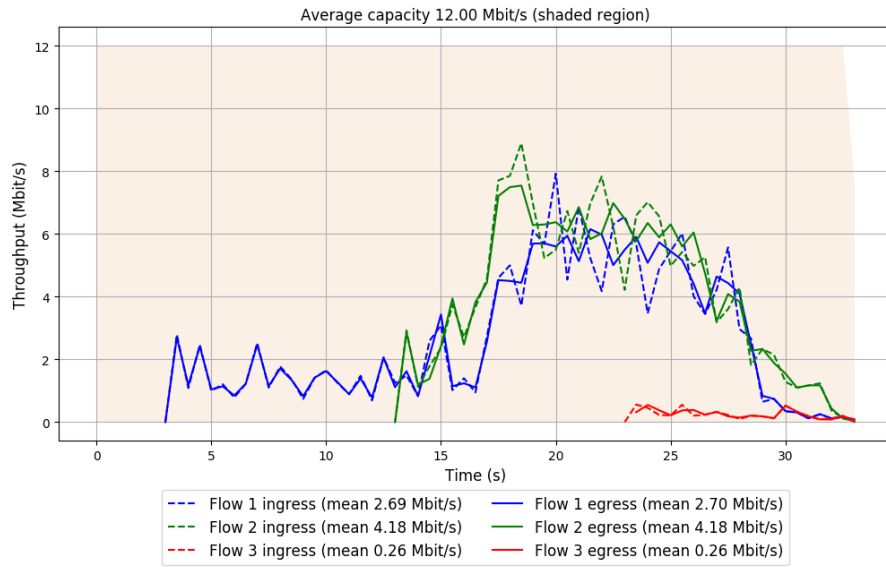
-- Flow 3:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 174.658 ms

Loss rate: 1.68%

## Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-27 18:51:13

End at: 2018-02-27 18:51:43

# Below is generated by plot.py at 2018-02-27 19:40:53

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 2.04 Mbit/s (17.0% utilization)

95th percentile per-packet one-way delay: 25.864 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 23.916 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.16 Mbit/s

95th percentile per-packet one-way delay: 27.416 ms

Loss rate: 0.00%

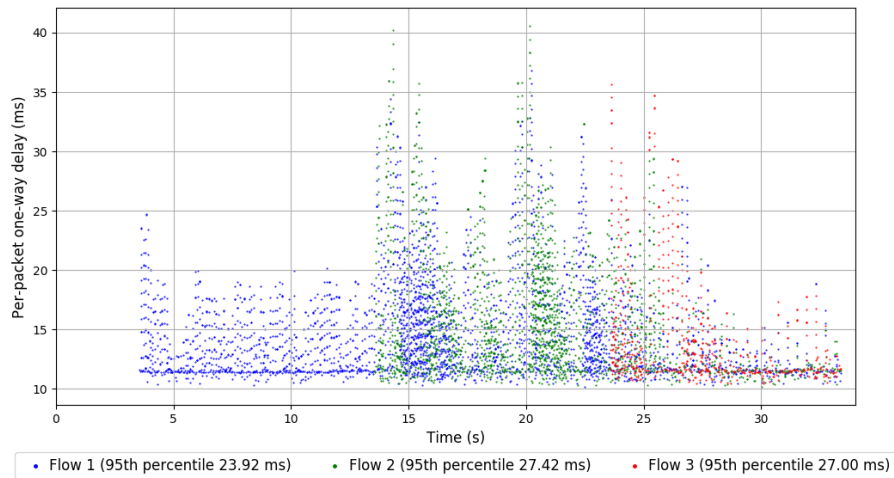
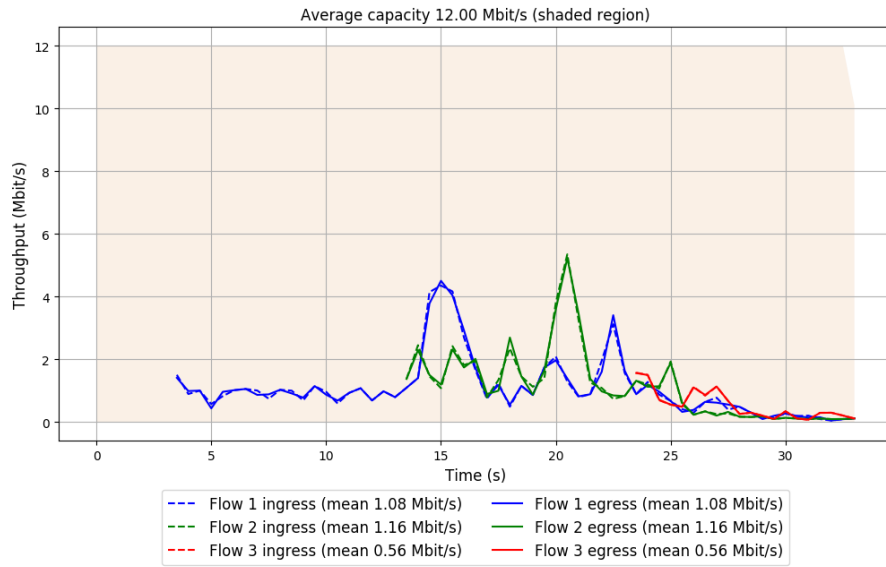
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 27.001 ms

Loss rate: 0.00%

## Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-27 19:01:27

End at: 2018-02-27 19:01:57

# Below is generated by plot.py at 2018-02-27 19:40:53

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 2.13 Mbit/s (17.7% utilization)

95th percentile per-packet one-way delay: 26.772 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 25.803 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.92 Mbit/s

95th percentile per-packet one-way delay: 27.879 ms

Loss rate: 0.00%

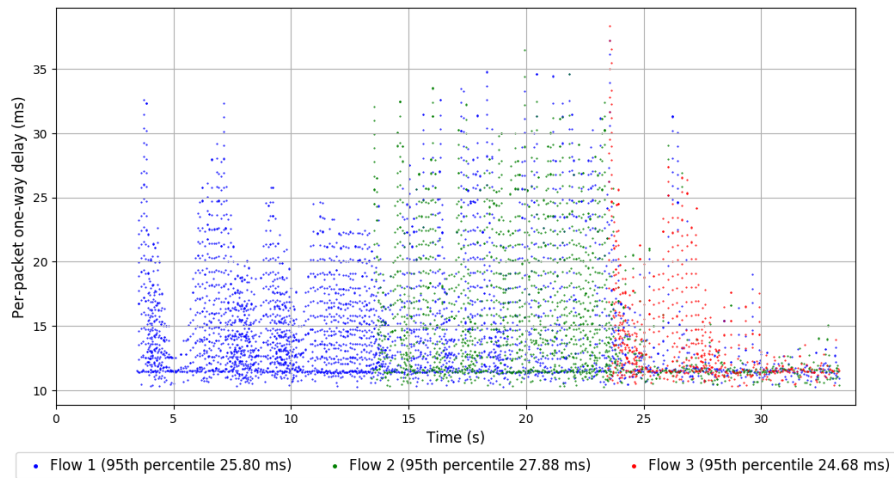
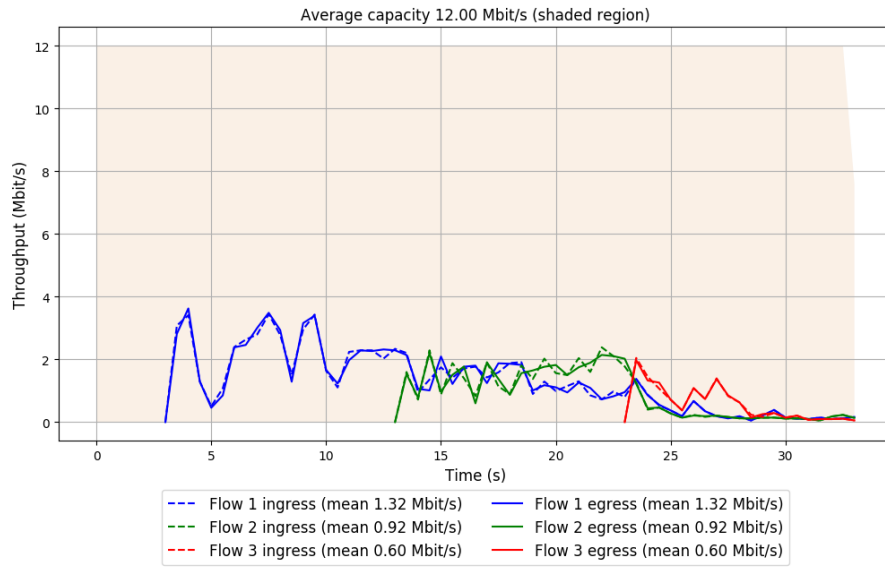
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 24.679 ms

Loss rate: 0.00%

# Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-27 19:11:41

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

# Below is generated by plot.py at 2018-02-27 19:40:53

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 2.05 Mbit/s (17.1% utilization)

95th percentile per-packet one-way delay: 24.726 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 25.692 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 23.097 ms

Loss rate: 0.00%

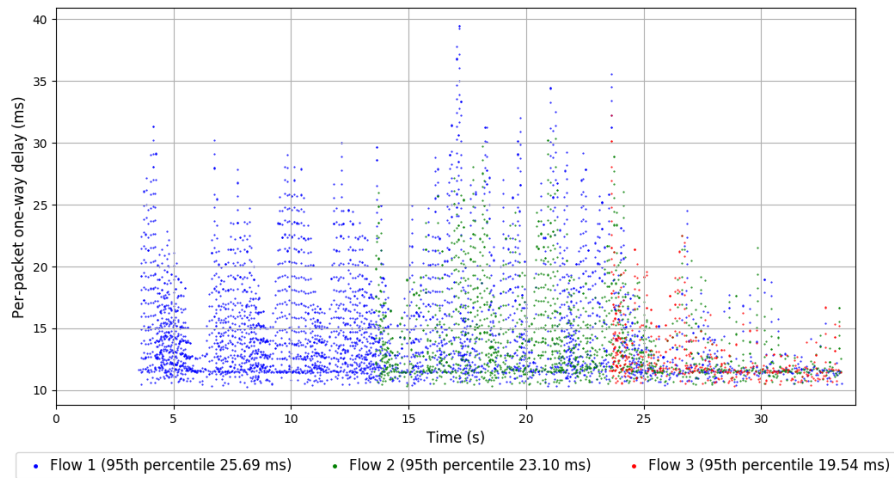
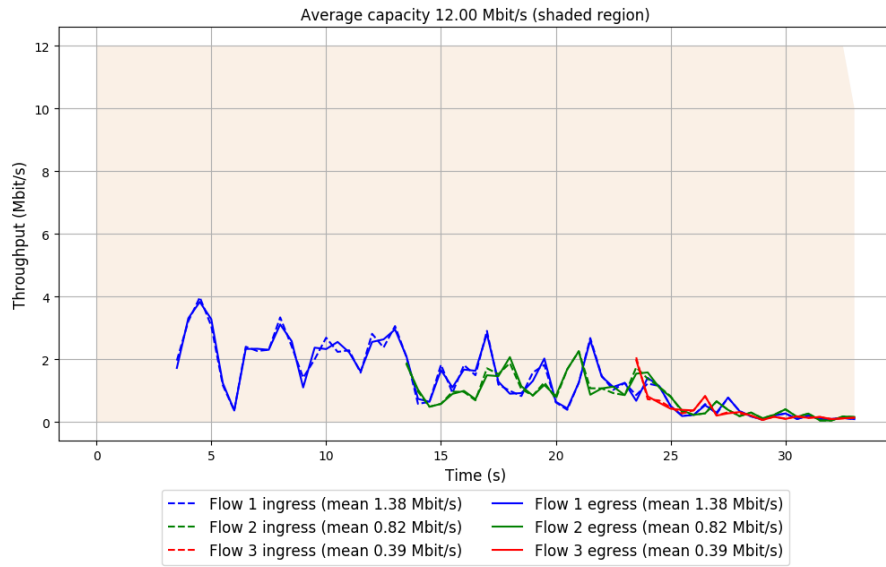
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 19.543 ms

Loss rate: 0.02%

## Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-27 19:21:55

End at: 2018-02-27 19:22:25

# Below is generated by plot.py at 2018-02-27 19:41:04

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 7.89 Mbit/s (65.7% utilization)

95th percentile per-packet one-way delay: 162.215 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 5.91 Mbit/s

95th percentile per-packet one-way delay: 151.230 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.82 Mbit/s

95th percentile per-packet one-way delay: 172.647 ms

Loss rate: 0.02%

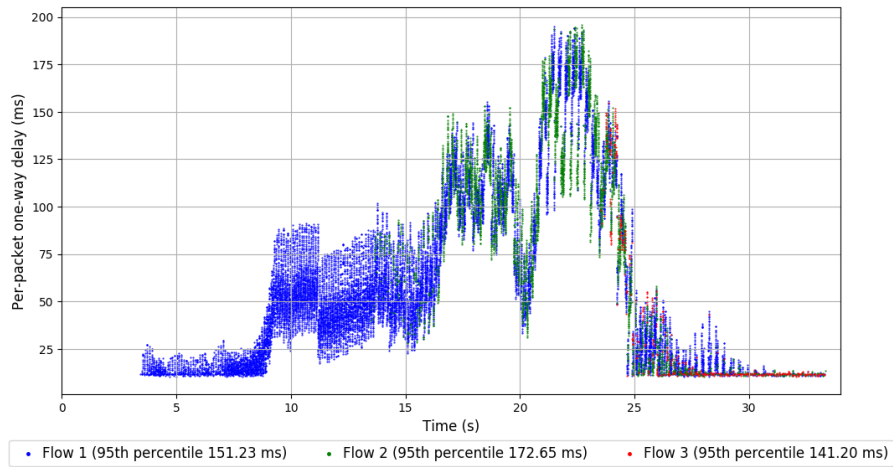
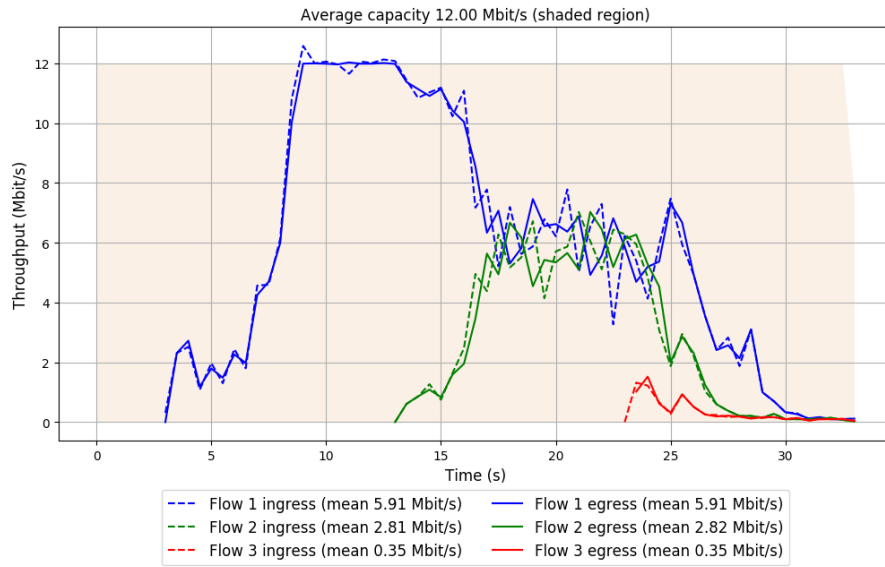
-- Flow 3:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 141.204 ms

Loss rate: 0.00%

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



Run 10: Statistics of Sprout

Start at: 2018-02-27 19:32:09

End at: 2018-02-27 19:32:39

# Below is generated by plot.py at 2018-02-27 19:41:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 7.61 Mbit/s (63.4% utilization)

95th percentile per-packet one-way delay: 152.867 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.75 Mbit/s

95th percentile per-packet one-way delay: 152.700 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 152.455 ms

Loss rate: 0.00%

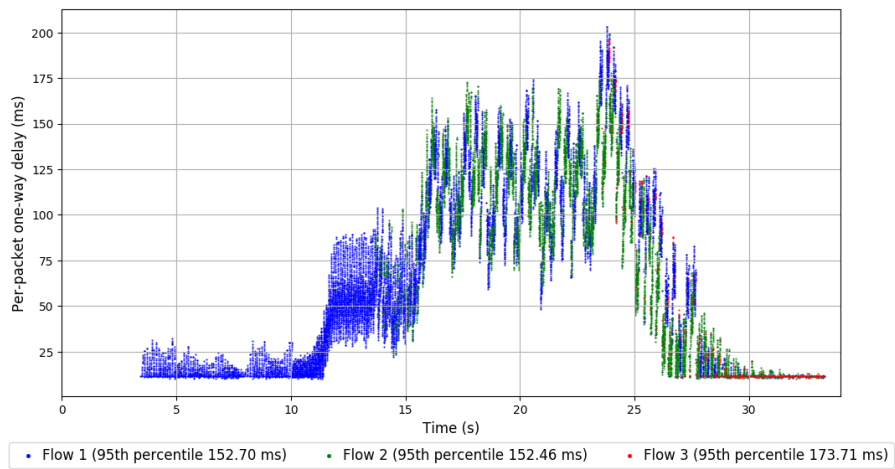
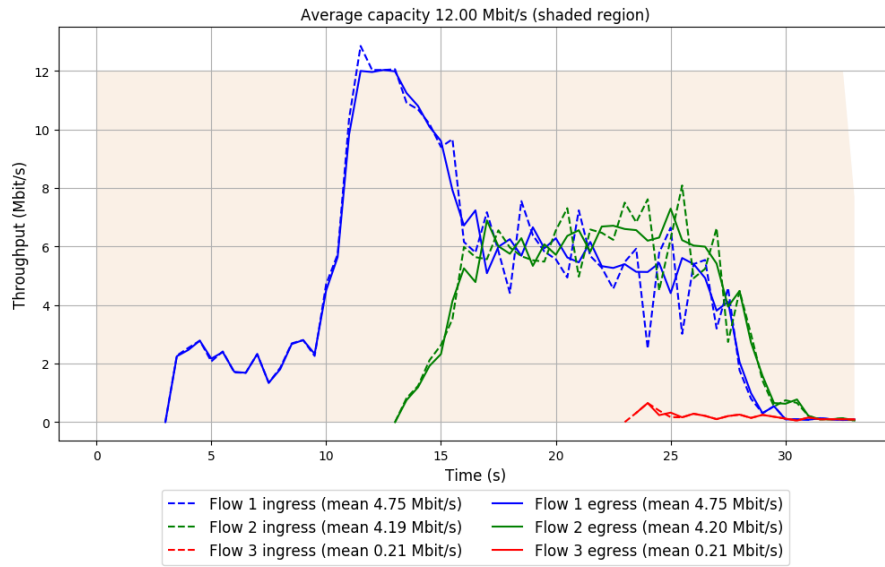
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 173.711 ms

Loss rate: 0.04%

Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-02-27 18:03:24

End at: 2018-02-27 18:03:54

# Below is generated by plot.py at 2018-02-27 19:41:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.98 Mbit/s (16.5% utilization)

95th percentile per-packet one-way delay: 18.232 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 13.396 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 0.89 Mbit/s

95th percentile per-packet one-way delay: 19.737 ms

Loss rate: 0.15%

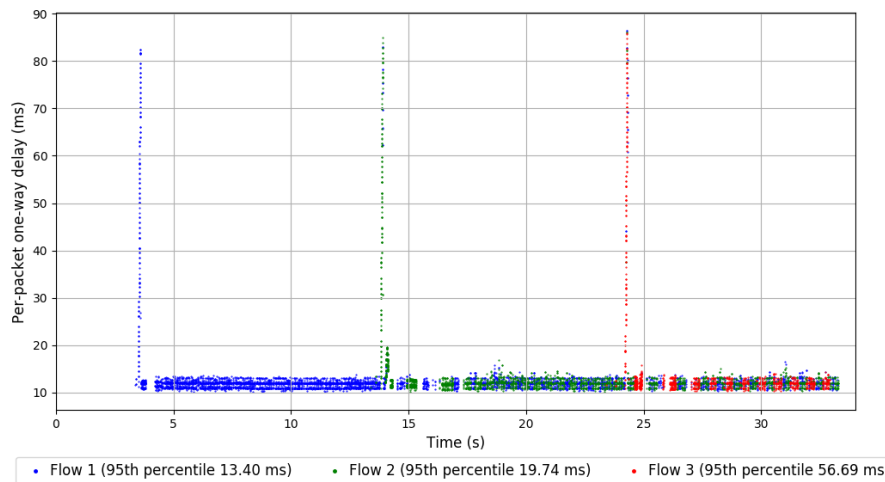
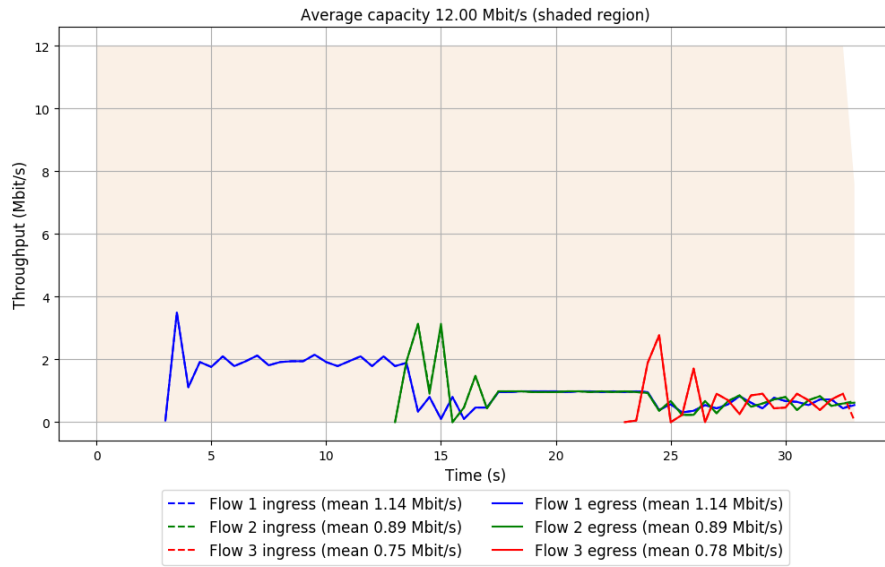
-- Flow 3:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 56.691 ms

Loss rate: 0.35%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-02-27 18:13:39

End at: 2018-02-27 18:14:09

# Below is generated by plot.py at 2018-02-27 19:41:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.98 Mbit/s (16.5% utilization)

95th percentile per-packet one-way delay: 152.391 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 1.11 Mbit/s

95th percentile per-packet one-way delay: 17.615 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 0.89 Mbit/s

95th percentile per-packet one-way delay: 182.857 ms

Loss rate: 0.07%

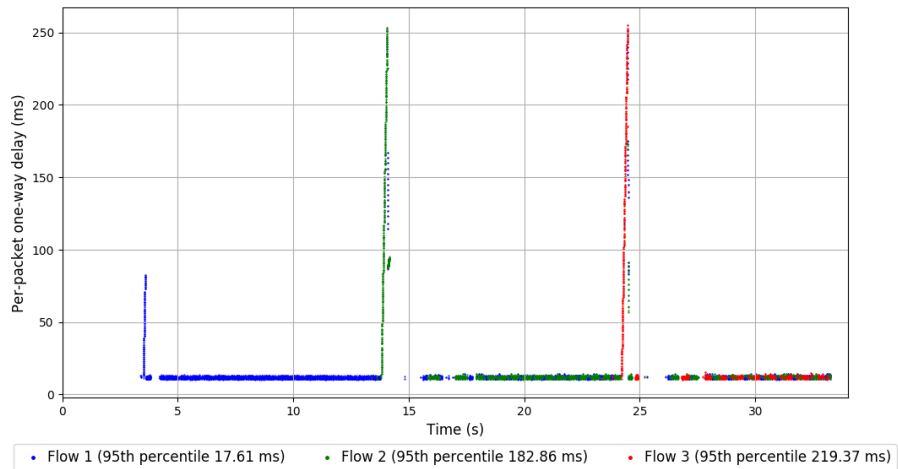
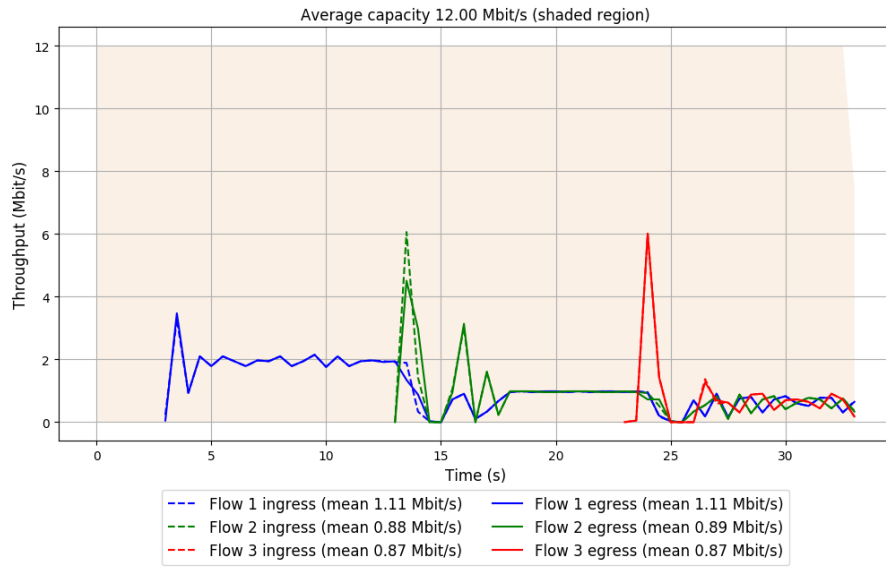
-- Flow 3:

Average throughput: 0.87 Mbit/s

95th percentile per-packet one-way delay: 219.371 ms

Loss rate: 0.00%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-02-27 18:23:53

End at: 2018-02-27 18:24:23

# Below is generated by plot.py at 2018-02-27 19:41:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.98 Mbit/s (16.5% utilization)

95th percentile per-packet one-way delay: 68.287 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 1.13 Mbit/s

95th percentile per-packet one-way delay: 116.544 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 0.91 Mbit/s

95th percentile per-packet one-way delay: 22.278 ms

Loss rate: 0.07%

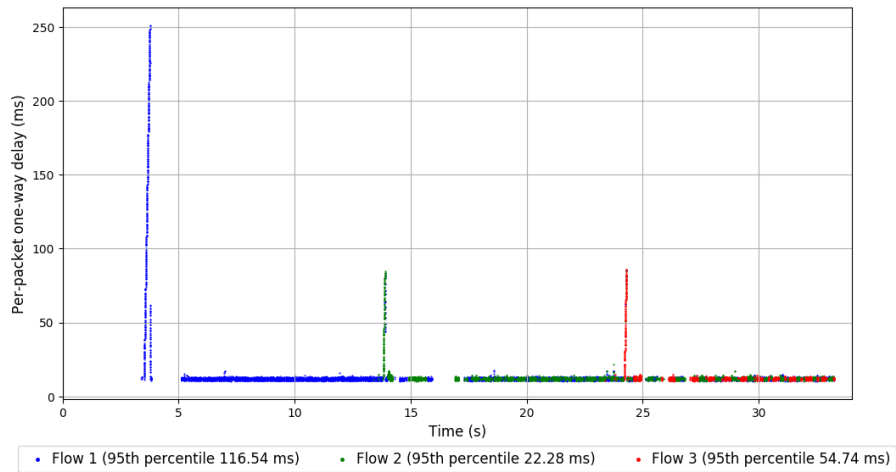
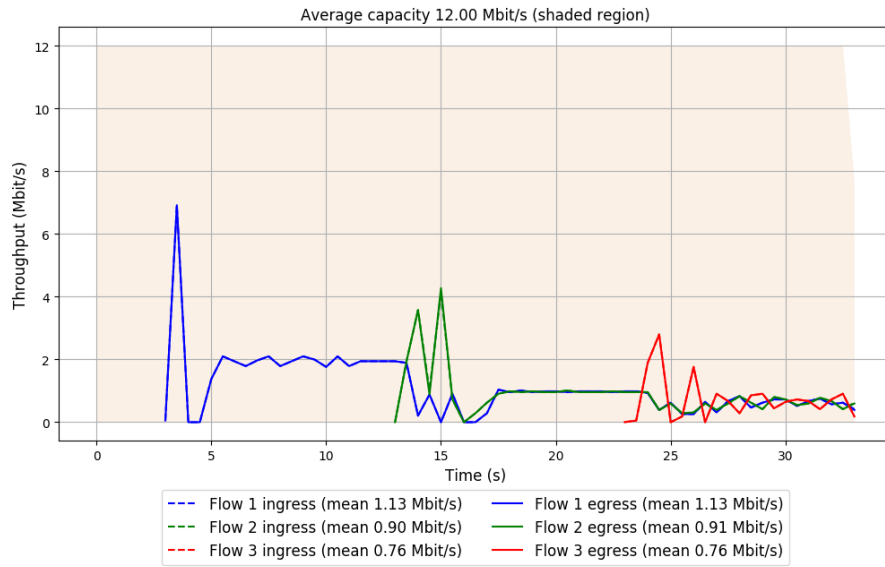
-- Flow 3:

Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 54.740 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-02-27 18:34:08

End at: 2018-02-27 18:34:38

# Below is generated by plot.py at 2018-02-27 19:41:07

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.98 Mbit/s (16.5% utilization)

95th percentile per-packet one-way delay: 76.008 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 1.12 Mbit/s

95th percentile per-packet one-way delay: 13.750 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 0.88 Mbit/s

95th percentile per-packet one-way delay: 36.299 ms

Loss rate: 0.15%

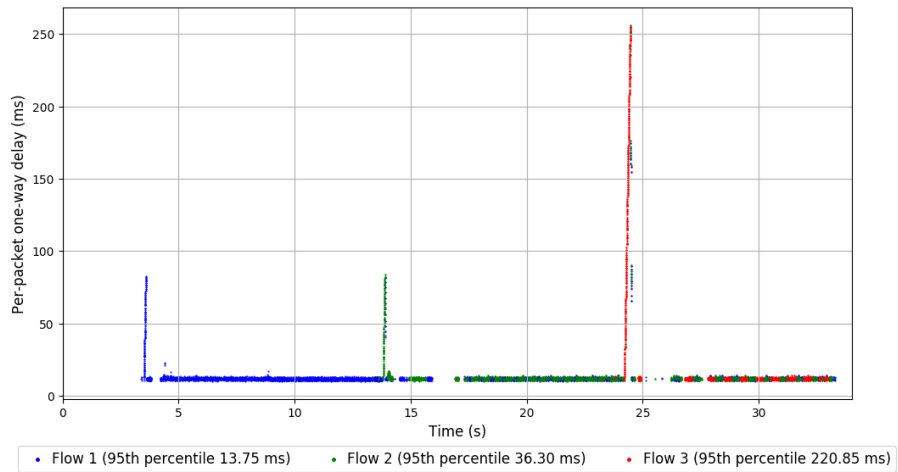
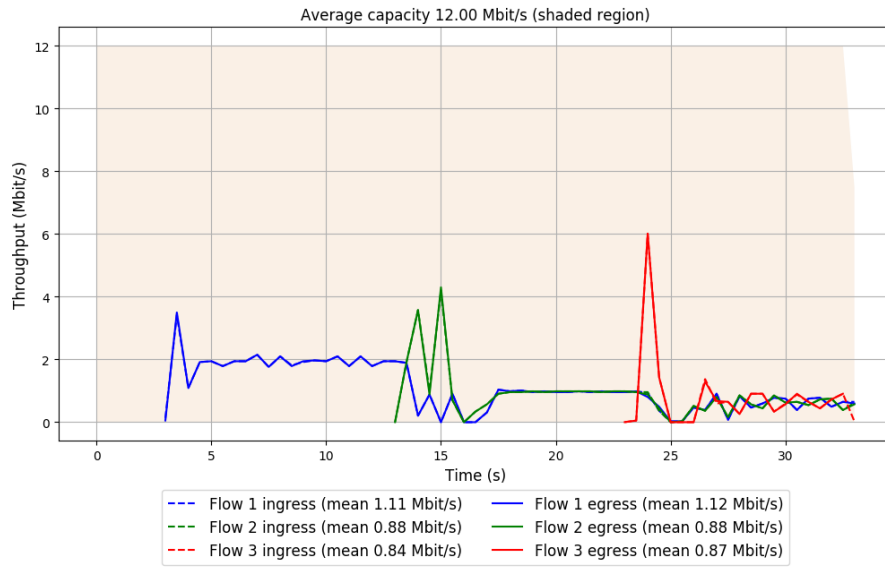
-- Flow 3:

Average throughput: 0.87 Mbit/s

95th percentile per-packet one-way delay: 220.854 ms

Loss rate: 0.15%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-27 18:44:22

End at: 2018-02-27 18:44:52

# Below is generated by plot.py at 2018-02-27 19:41:07

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.98 Mbit/s (16.5% utilization)

95th percentile per-packet one-way delay: 93.630 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 1.11 Mbit/s

95th percentile per-packet one-way delay: 13.762 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 0.93 Mbit/s

95th percentile per-packet one-way delay: 179.809 ms

Loss rate: 0.14%

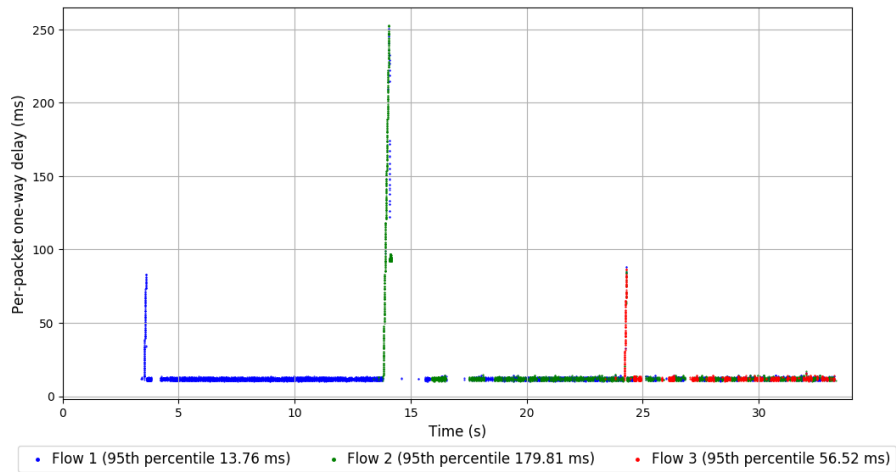
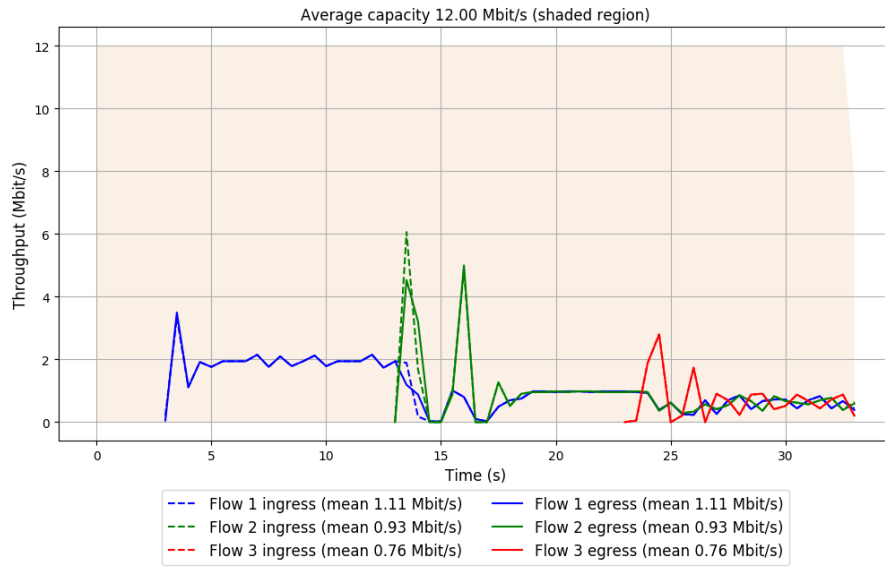
-- Flow 3:

Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 56.524 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-27 18:54:37

End at: 2018-02-27 18:55:07

# Below is generated by plot.py at 2018-02-27 19:41:07

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.98 Mbit/s (16.5% utilization)

95th percentile per-packet one-way delay: 16.637 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 13.692 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 0.89 Mbit/s

95th percentile per-packet one-way delay: 25.076 ms

Loss rate: 0.07%

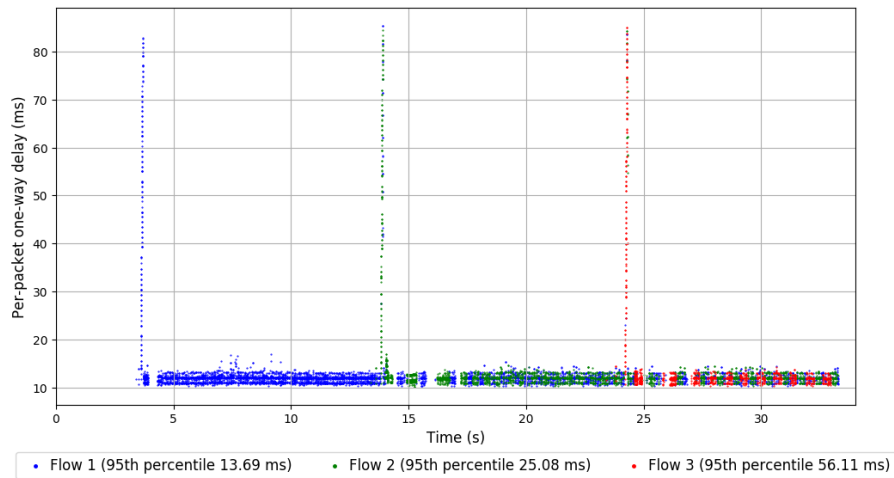
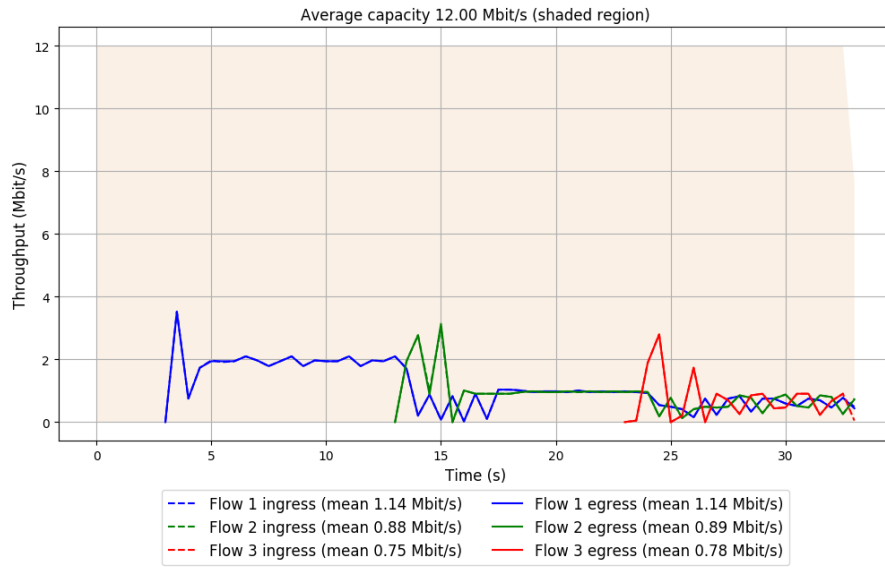
-- Flow 3:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 56.108 ms

Loss rate: 0.35%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-02-27 19:04:51

End at: 2018-02-27 19:05:21

# Below is generated by plot.py at 2018-02-27 19:41:14

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.99 Mbit/s (16.6% utilization)

95th percentile per-packet one-way delay: 27.865 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 1.16 Mbit/s

95th percentile per-packet one-way delay: 15.218 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 0.86 Mbit/s

95th percentile per-packet one-way delay: 35.663 ms

Loss rate: 0.00%

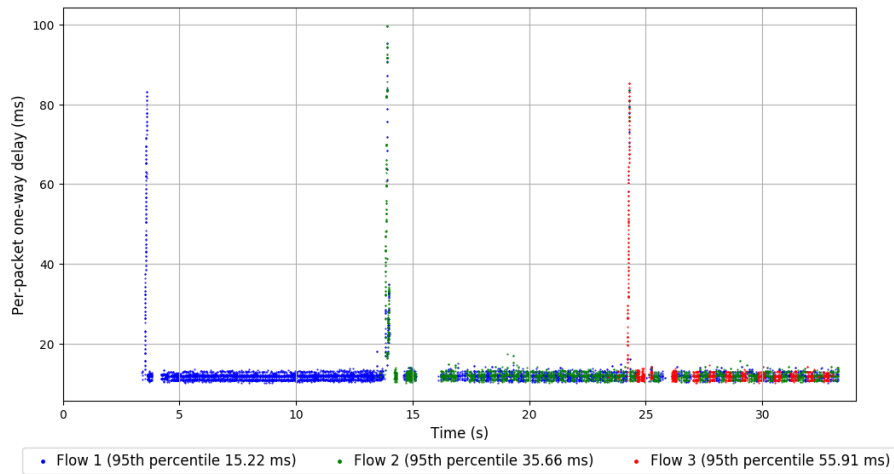
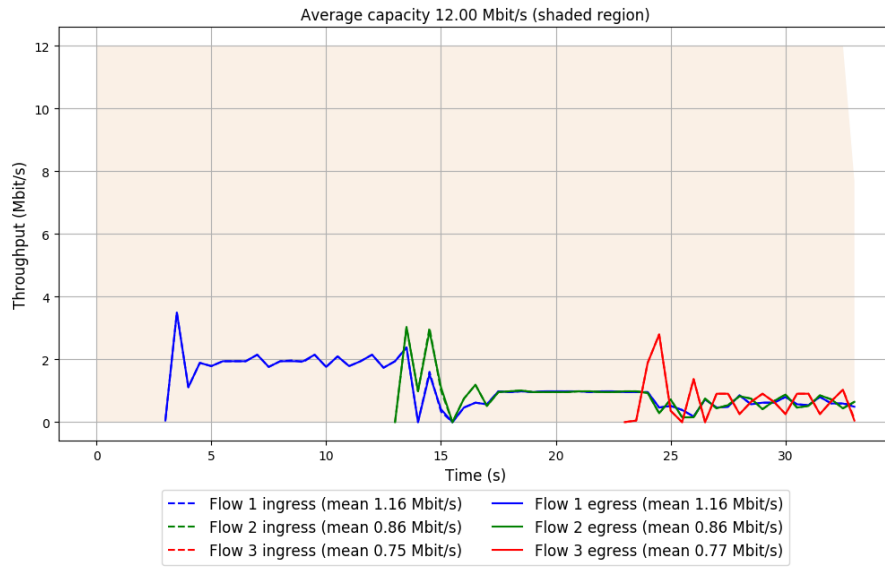
-- Flow 3:

Average throughput: 0.77 Mbit/s

95th percentile per-packet one-way delay: 55.912 ms

Loss rate: 0.35%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-27 19:15:05

End at: 2018-02-27 19:15:35

# Below is generated by plot.py at 2018-02-27 19:41:15

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.98 Mbit/s (16.5% utilization)

95th percentile per-packet one-way delay: 16.748 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 13.395 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 0.89 Mbit/s

95th percentile per-packet one-way delay: 21.088 ms

Loss rate: 0.15%

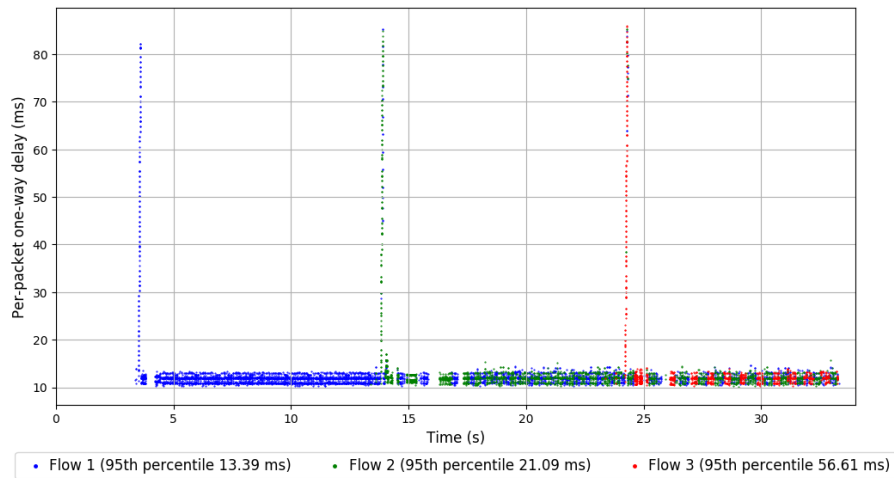
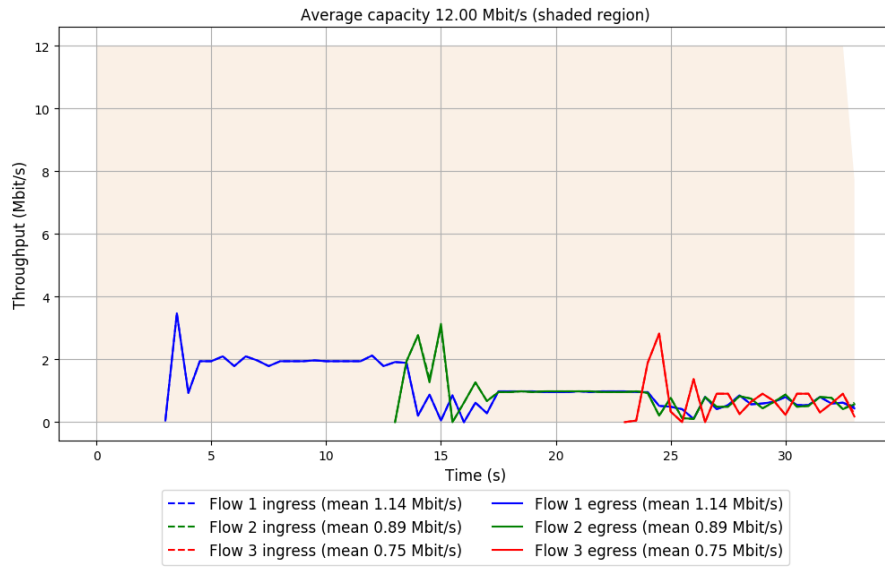
-- Flow 3:

Average throughput: 0.75 Mbit/s

95th percentile per-packet one-way delay: 56.606 ms

Loss rate: 0.52%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-02-27 19:25:19

End at: 2018-02-27 19:25:49

# Below is generated by plot.py at 2018-02-27 19:41:17

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.98 Mbit/s (16.5% utilization)

95th percentile per-packet one-way delay: 147.475 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 1.11 Mbit/s

95th percentile per-packet one-way delay: 123.363 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 0.88 Mbit/s

95th percentile per-packet one-way delay: 42.241 ms

Loss rate: 0.15%

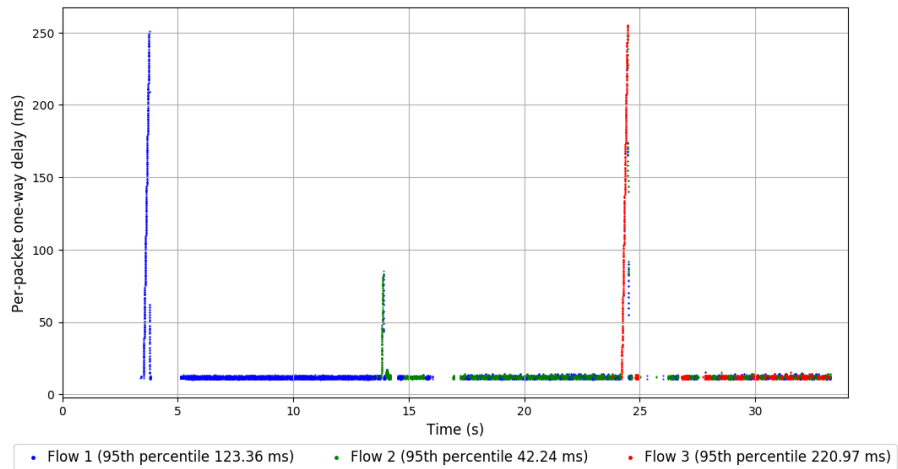
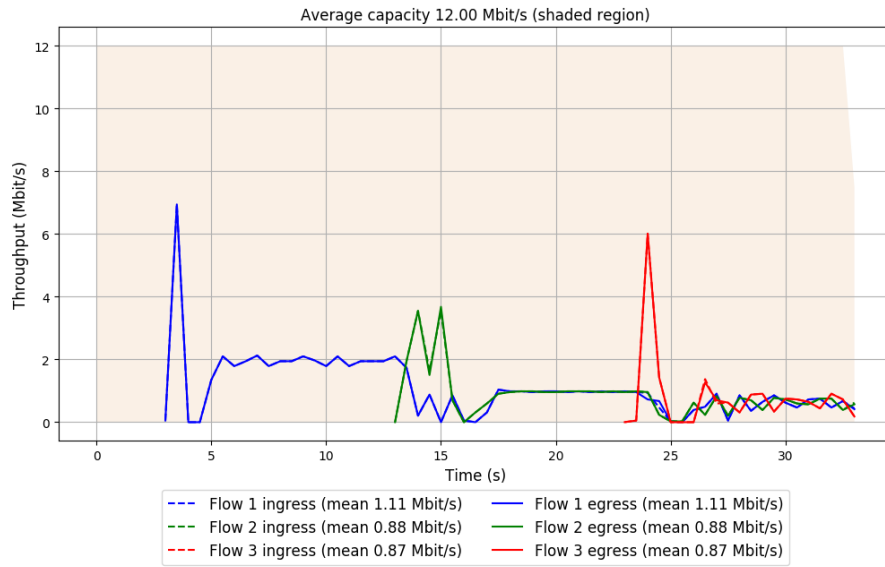
-- Flow 3:

Average throughput: 0.87 Mbit/s

95th percentile per-packet one-way delay: 220.971 ms

Loss rate: 0.00%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-02-27 19:35:33

End at: 2018-02-27 19:36:03

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

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.98 Mbit/s (16.5% utilization)

95th percentile per-packet one-way delay: 18.250 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 13.412 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 0.89 Mbit/s

95th percentile per-packet one-way delay: 19.688 ms

Loss rate: 0.15%

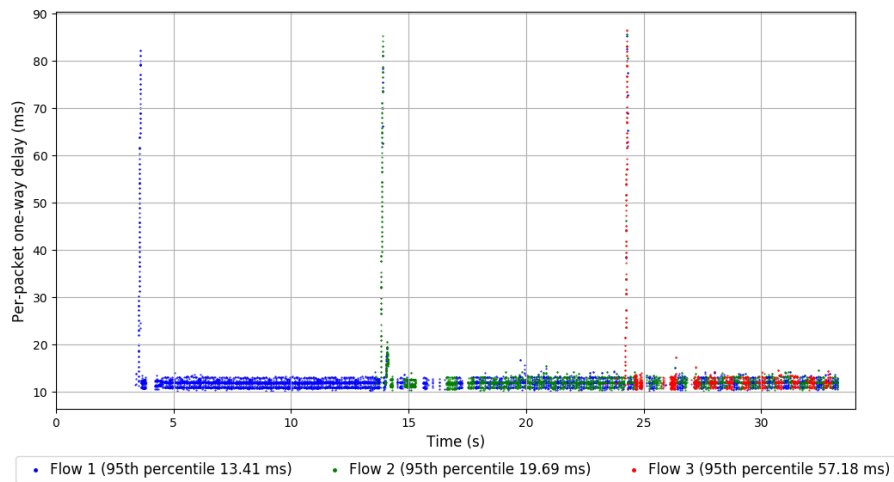
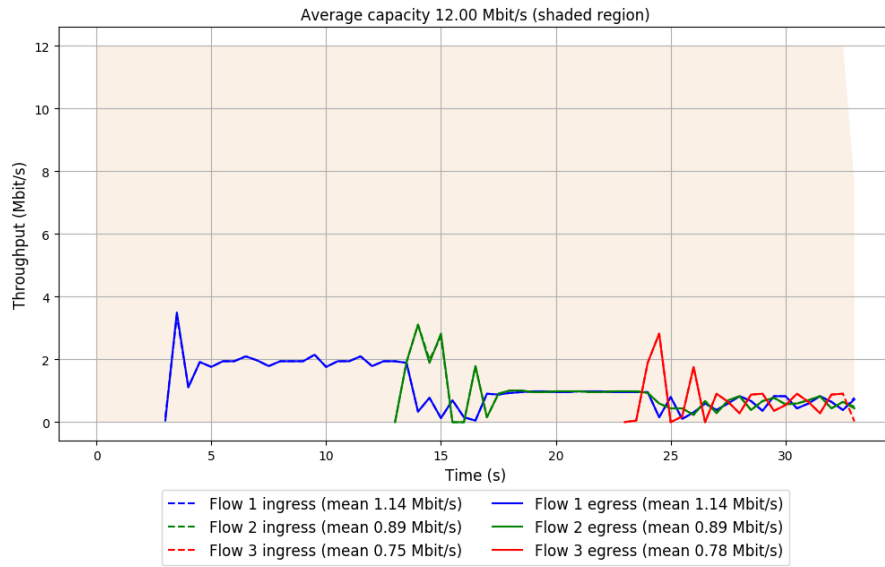
-- Flow 3:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 57.182 ms

Loss rate: 0.17%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-27 18:01:42

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

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

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.72 Mbit/s (31.0% utilization)

95th percentile per-packet one-way delay: 41.227 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 41.195 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 1.71 Mbit/s

95th percentile per-packet one-way delay: 41.227 ms

Loss rate: 0.56%

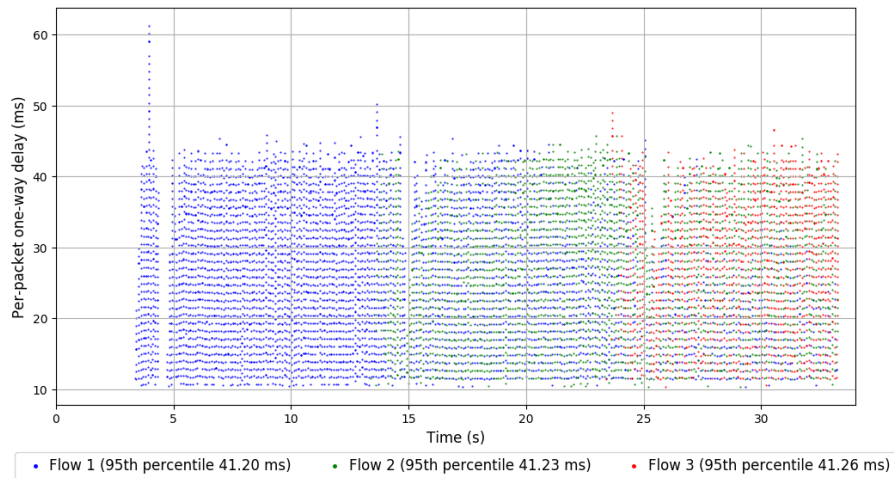
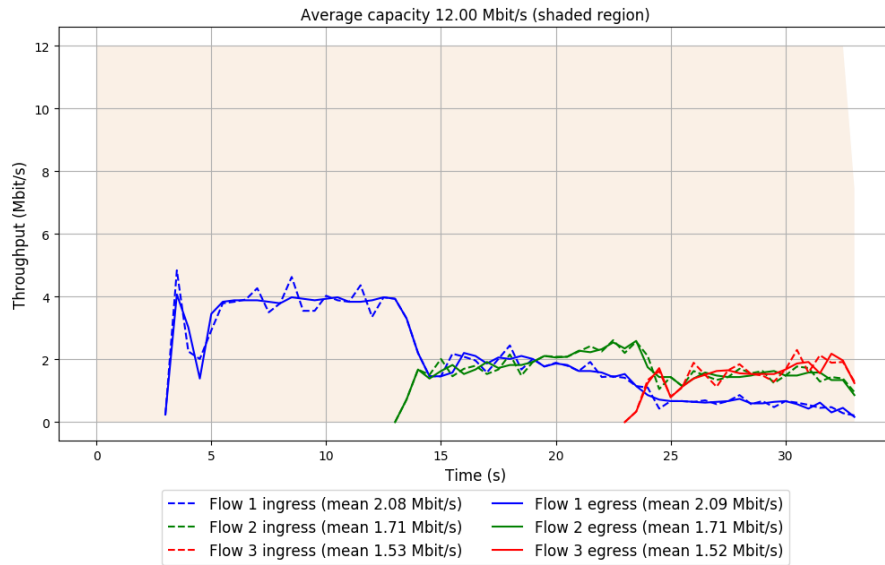
-- Flow 3:

Average throughput: 1.52 Mbit/s

95th percentile per-packet one-way delay: 41.264 ms

Loss rate: 1.26%

# Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-27 18:11:57

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

# Below is generated by plot.py at 2018-02-27 19:41:20

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.75 Mbit/s (31.3% utilization)

95th percentile per-packet one-way delay: 41.310 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 41.327 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 41.305 ms

Loss rate: 0.62%

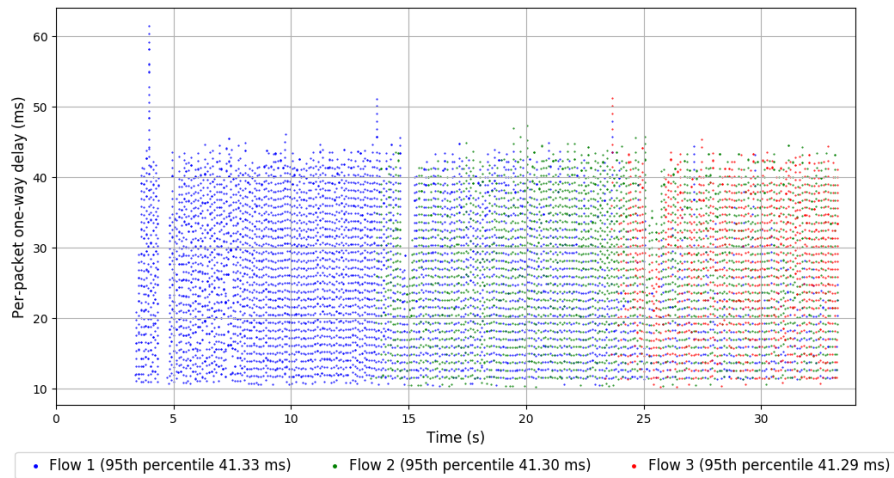
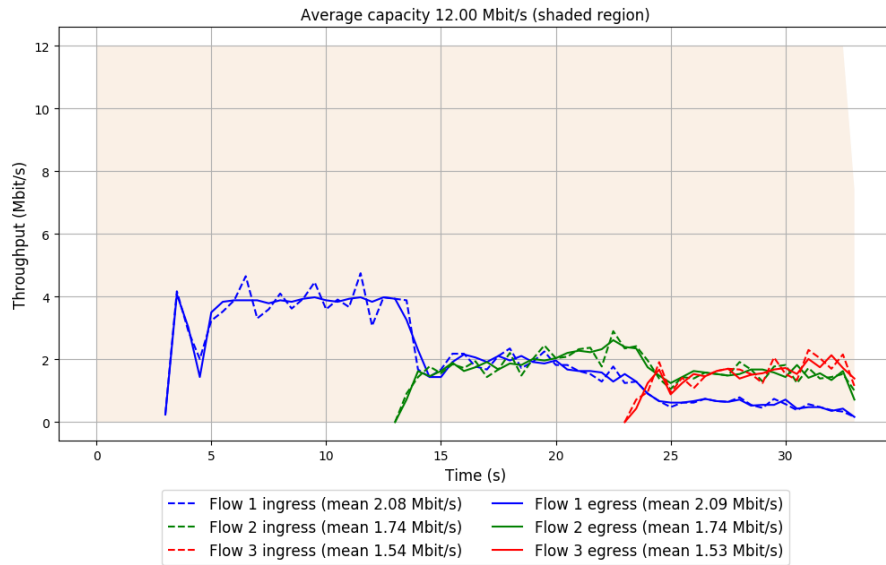
-- Flow 3:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 41.292 ms

Loss rate: 1.10%

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



Run 3: Statistics of TCP Vegas

Start at: 2018-02-27 18:22:11

End at: 2018-02-27 18:22:41

# Below is generated by plot.py at 2018-02-27 19:41:21

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.74 Mbit/s (31.2% utilization)

95th percentile per-packet one-way delay: 41.153 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 41.106 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 1.70 Mbit/s

95th percentile per-packet one-way delay: 41.097 ms

Loss rate: 0.39%

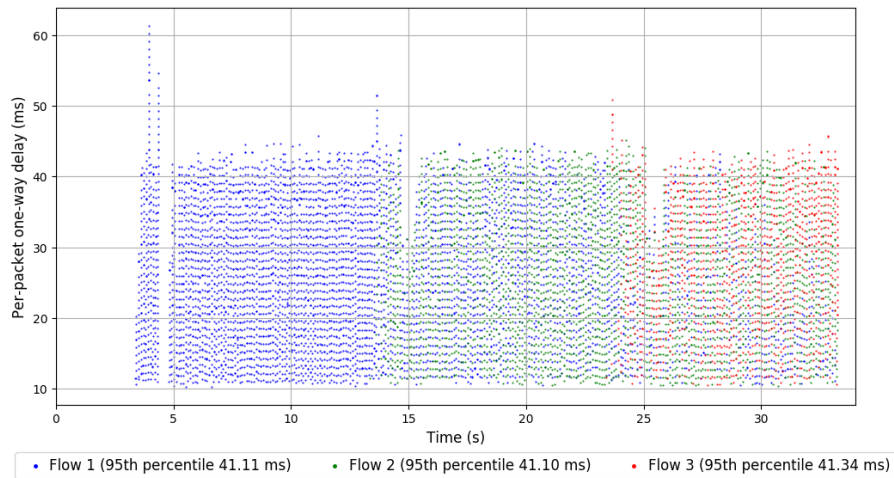
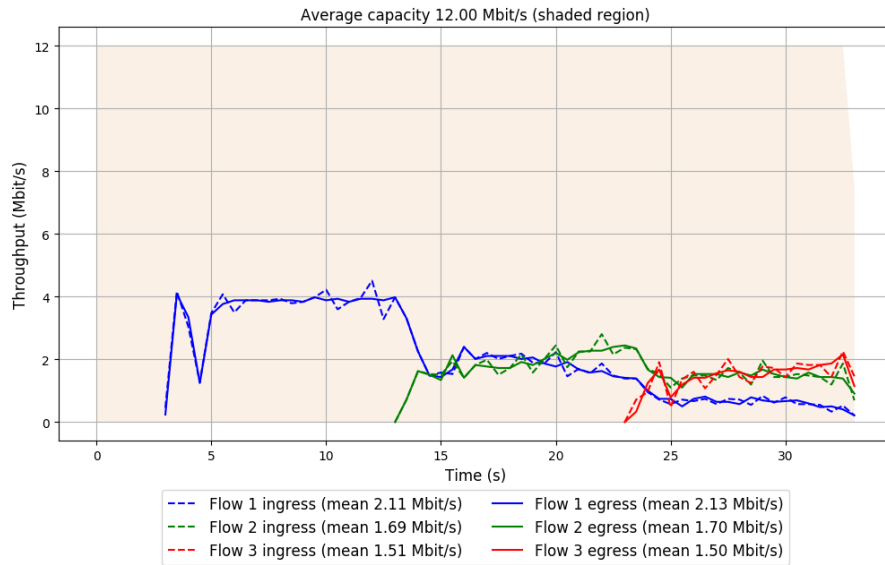
-- Flow 3:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 41.337 ms

Loss rate: 1.36%

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



Run 4: Statistics of TCP Vegas

Start at: 2018-02-27 18:32:25

End at: 2018-02-27 18:32:55

# Below is generated by plot.py at 2018-02-27 19:41:21

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.73 Mbit/s (31.1% utilization)

95th percentile per-packet one-way delay: 41.237 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 41.345 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 1.71 Mbit/s

95th percentile per-packet one-way delay: 40.894 ms

Loss rate: 0.63%

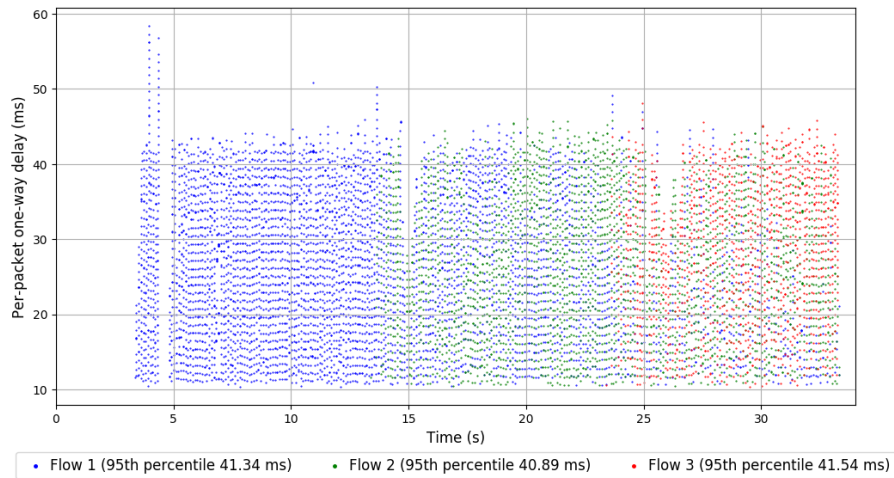
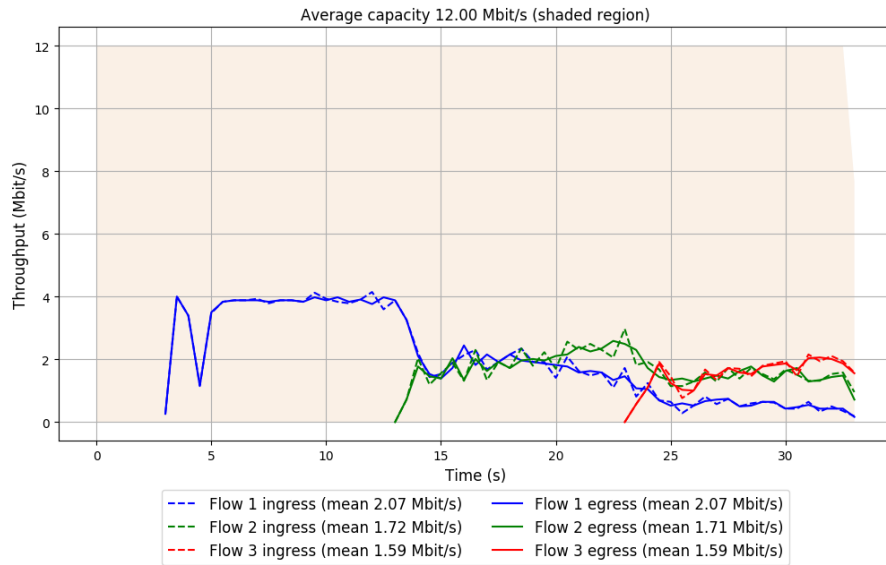
-- Flow 3:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 41.539 ms

Loss rate: 0.61%

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



Run 5: Statistics of TCP Vegas

Start at: 2018-02-27 18:42:40

End at: 2018-02-27 18:43:10

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

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.64 Mbit/s (30.3% utilization)

95th percentile per-packet one-way delay: 41.207 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 41.092 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 41.415 ms

Loss rate: 0.14%

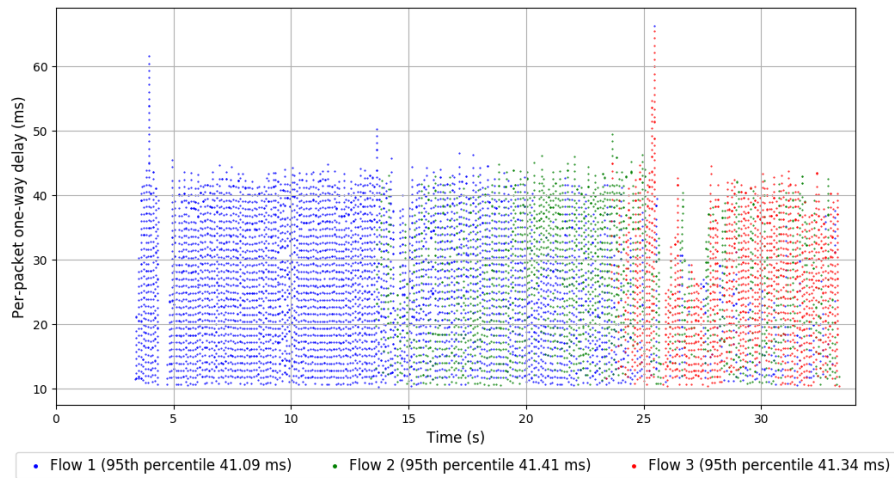
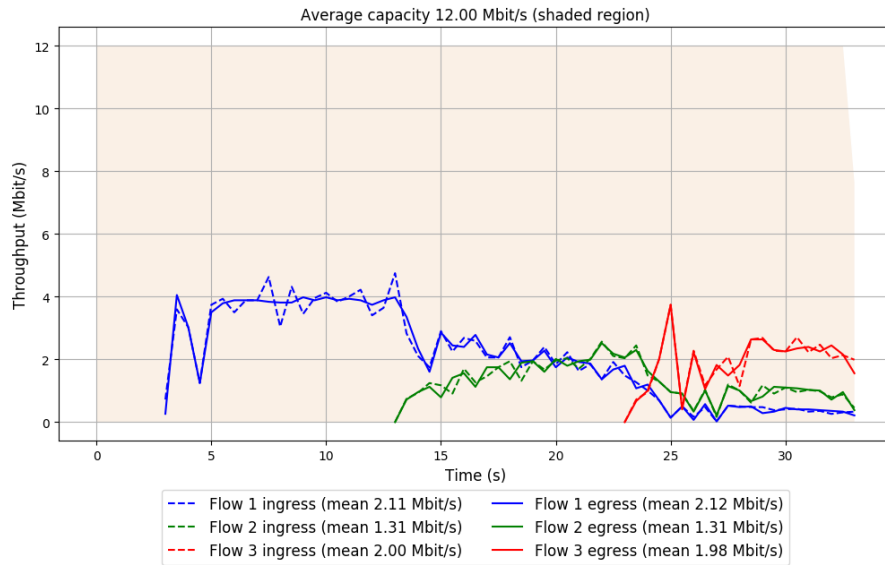
-- Flow 3:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 41.339 ms

Loss rate: 1.09%

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



Run 6: Statistics of TCP Vegas

Start at: 2018-02-27 18:52:55

End at: 2018-02-27 18:53:25

# Below is generated by plot.py at 2018-02-27 19:41:31

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.68 Mbit/s (30.7% utilization)

95th percentile per-packet one-way delay: 41.175 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 41.229 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 41.307 ms

Loss rate: 0.23%

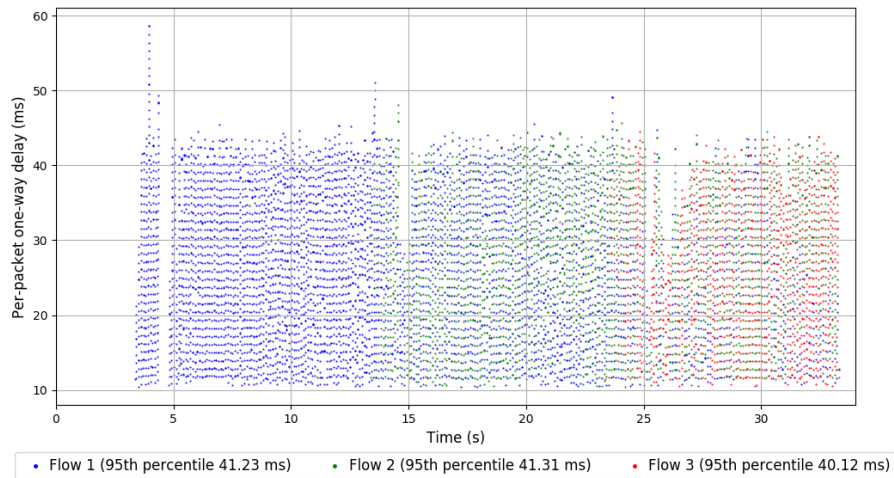
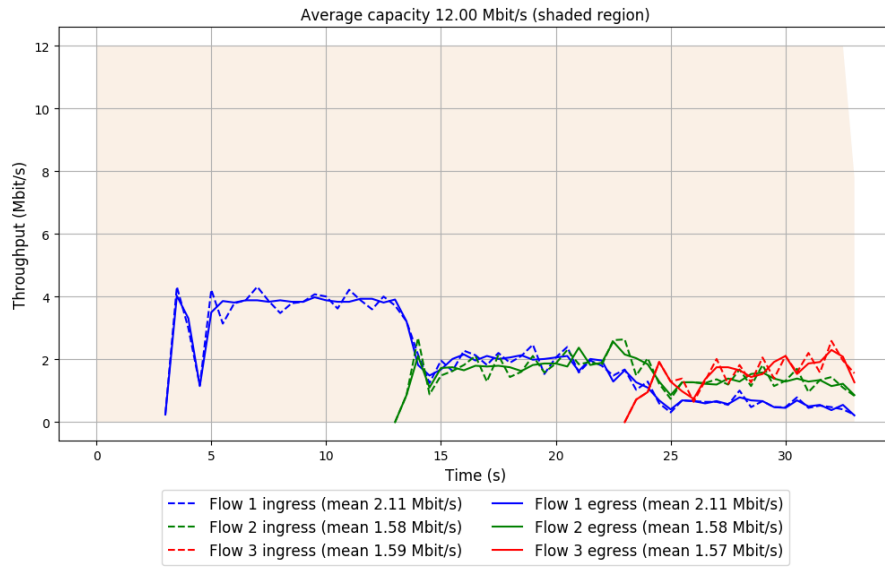
-- Flow 3:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 40.116 ms

Loss rate: 1.59%

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



Run 7: Statistics of TCP Vegas

Start at: 2018-02-27 19:03:09

End at: 2018-02-27 19:03:39

# Below is generated by plot.py at 2018-02-27 19:41:32

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.68 Mbit/s (30.7% utilization)

95th percentile per-packet one-way delay: 41.163 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 41.240 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 41.284 ms

Loss rate: 0.62%

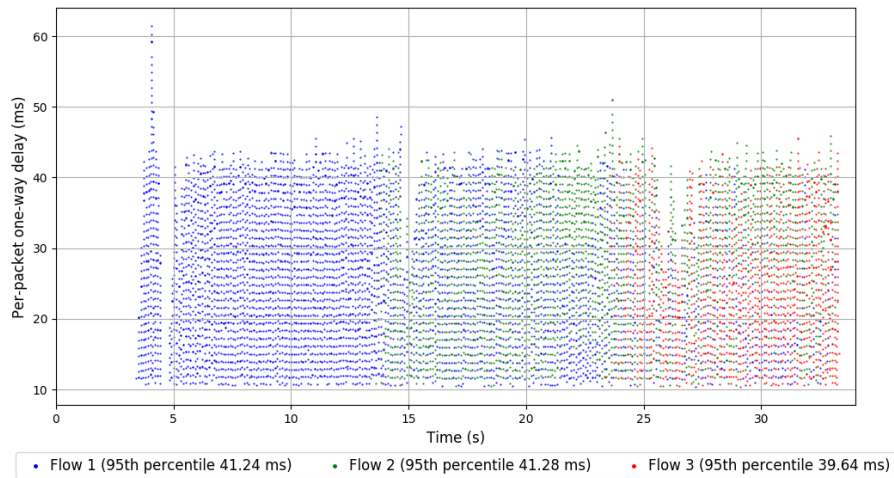
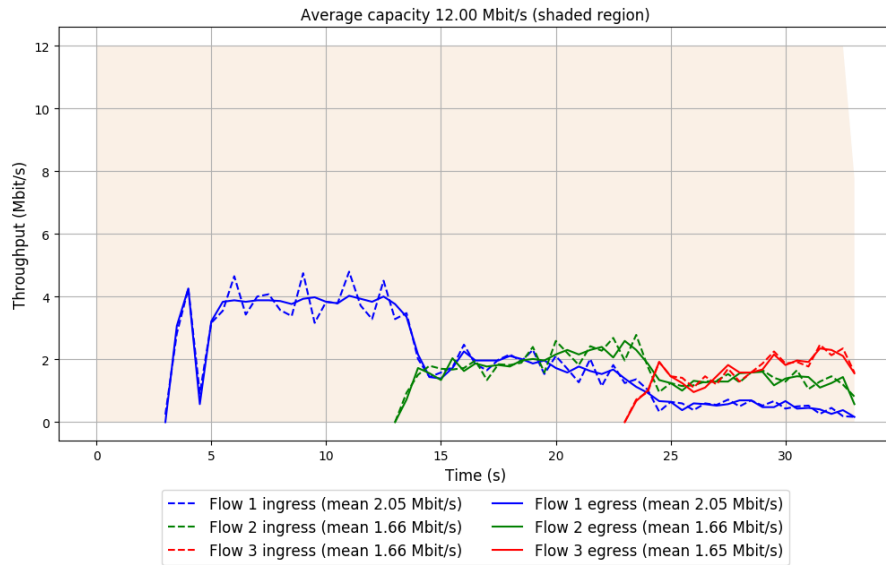
-- Flow 3:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 39.640 ms

Loss rate: 1.09%

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



Run 8: Statistics of TCP Vegas

Start at: 2018-02-27 19:13:23

End at: 2018-02-27 19:13:53

# Below is generated by plot.py at 2018-02-27 19:41:34

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.69 Mbit/s (30.8% utilization)

95th percentile per-packet one-way delay: 41.186 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 41.311 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 1.67 Mbit/s

95th percentile per-packet one-way delay: 40.246 ms

Loss rate: 0.32%

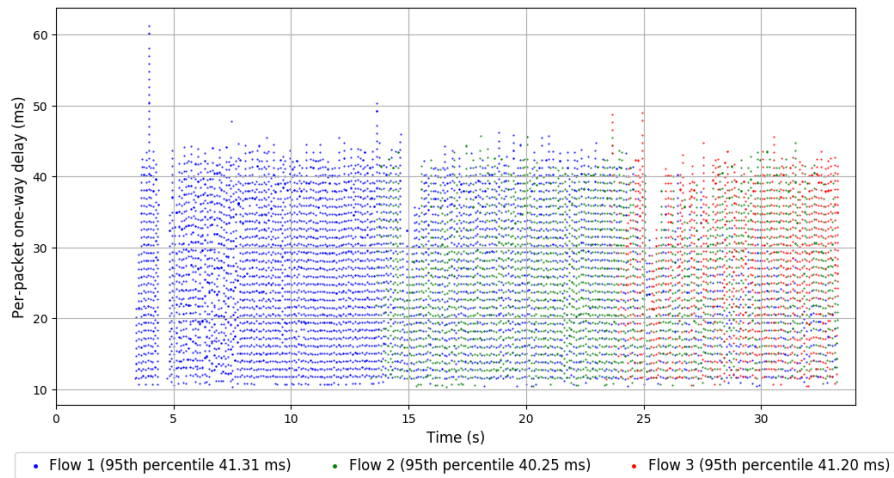
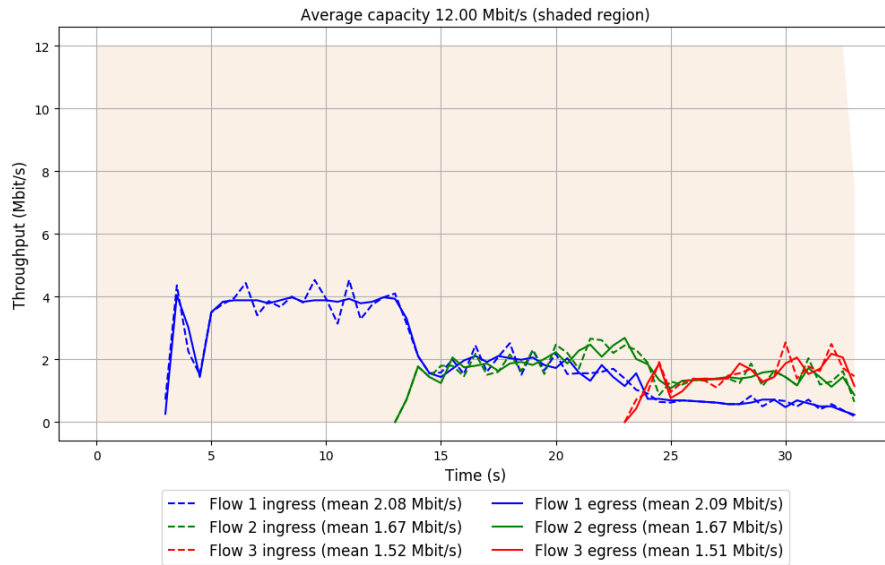
-- Flow 3:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 41.201 ms

Loss rate: 1.51%

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



Run 9: Statistics of TCP Vegas

Start at: 2018-02-27 19:23:37

End at: 2018-02-27 19:24:07

# Below is generated by plot.py at 2018-02-27 19:41:34

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.71 Mbit/s (30.9% utilization)

95th percentile per-packet one-way delay: 41.188 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 41.235 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 41.205 ms

Loss rate: 0.66%

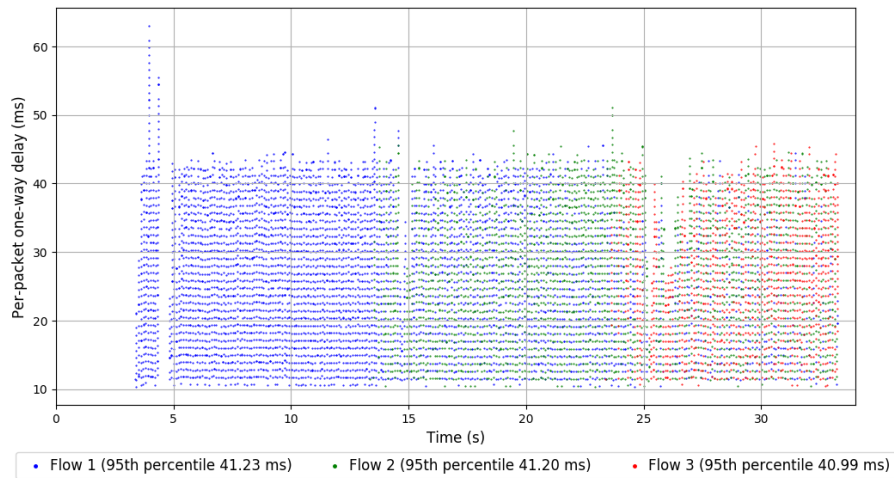
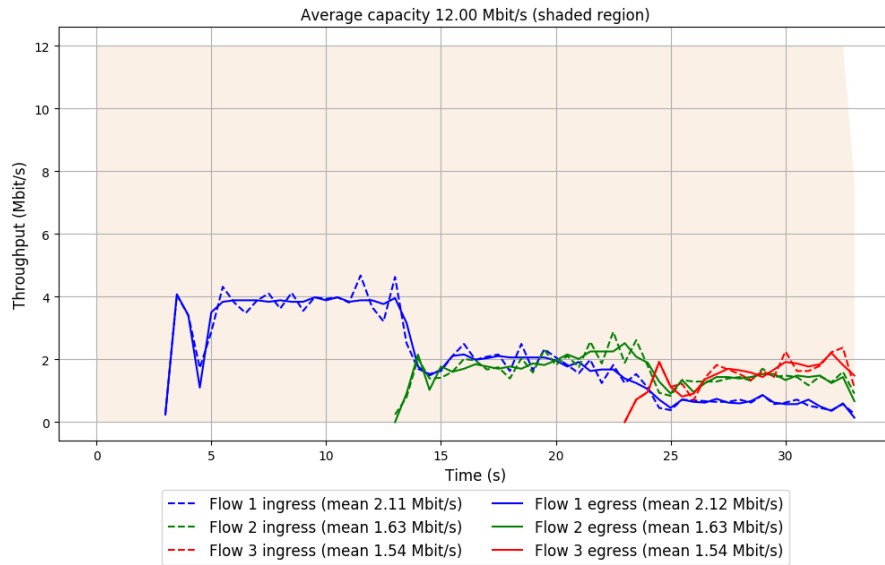
-- Flow 3:

Average throughput: 1.54 Mbit/s

95th percentile per-packet one-way delay: 40.993 ms

Loss rate: 0.63%

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



Run 10: Statistics of TCP Vegas

Start at: 2018-02-27 19:33:52

End at: 2018-02-27 19:34:22

# Below is generated by plot.py at 2018-02-27 19:41:35

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 3.73 Mbit/s (31.1% utilization)

95th percentile per-packet one-way delay: 41.299 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 41.232 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 1.71 Mbit/s

95th percentile per-packet one-way delay: 41.310 ms

Loss rate: 0.35%

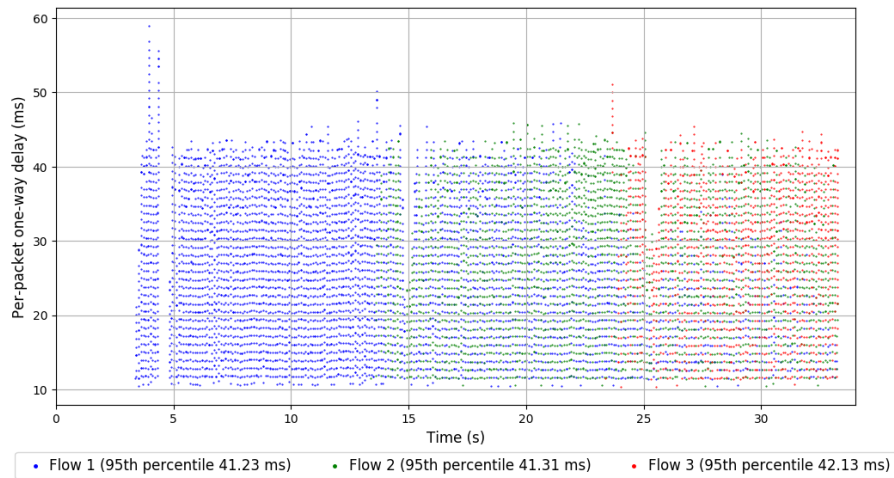
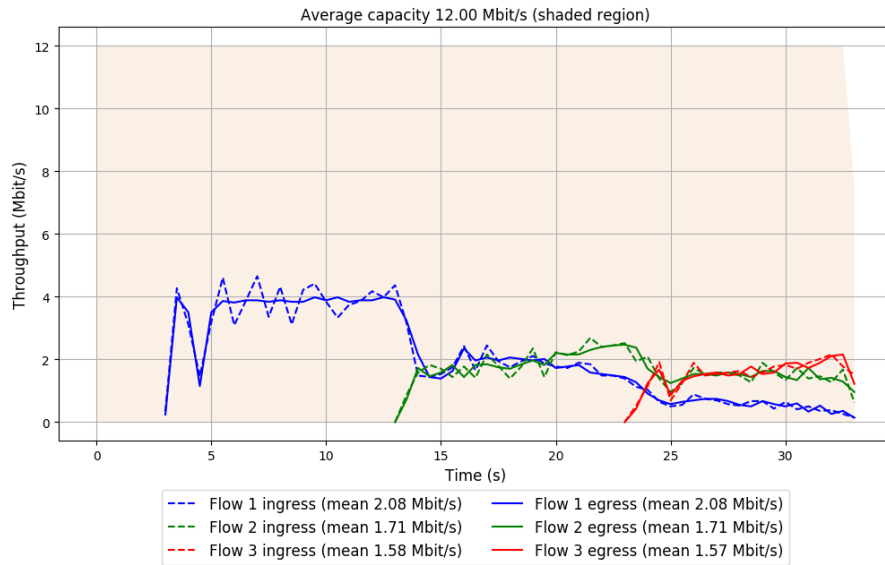
-- Flow 3:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 42.134 ms

Loss rate: 1.38%

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



Run 1: Statistics of Verus

Start at: 2018-02-27 17:56:36

End at: 2018-02-27 17:57:06

# Below is generated by plot.py at 2018-02-27 19:41:35

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.88 Mbit/s (15.7% utilization)

95th percentile per-packet one-way delay: 133.095 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 30.518 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 206.509 ms

Loss rate: 0.00%

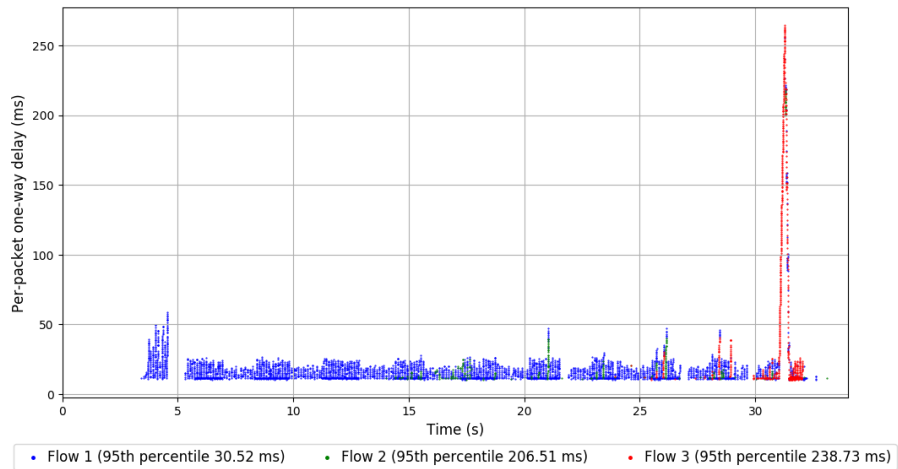
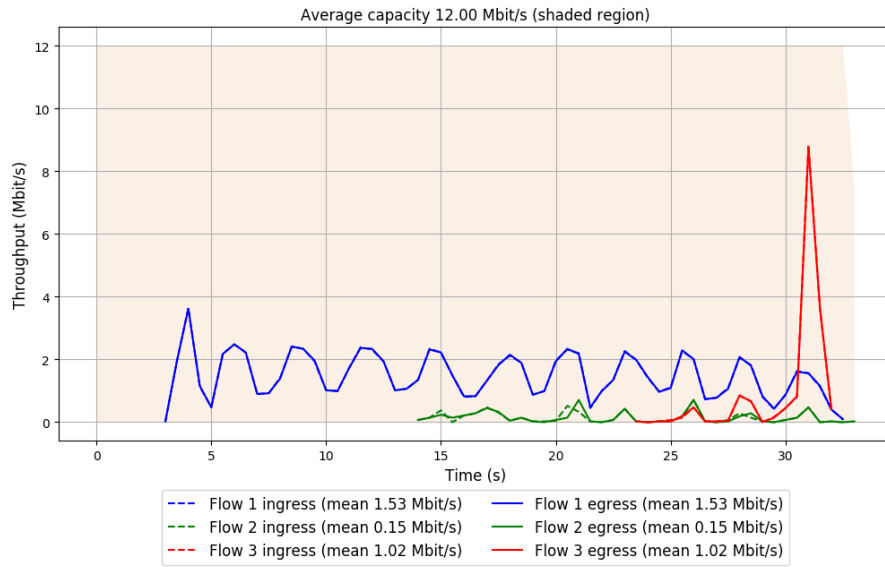
-- Flow 3:

Average throughput: 1.02 Mbit/s

95th percentile per-packet one-way delay: 238.734 ms

Loss rate: 0.00%

# Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-27 18:06:50

End at: 2018-02-27 18:07:20

# Below is generated by plot.py at 2018-02-27 19:41:35

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.58 Mbit/s (13.1% utilization)

95th percentile per-packet one-way delay: 39.847 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 46.197 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.80 Mbit/s

95th percentile per-packet one-way delay: 31.593 ms

Loss rate: 0.00%

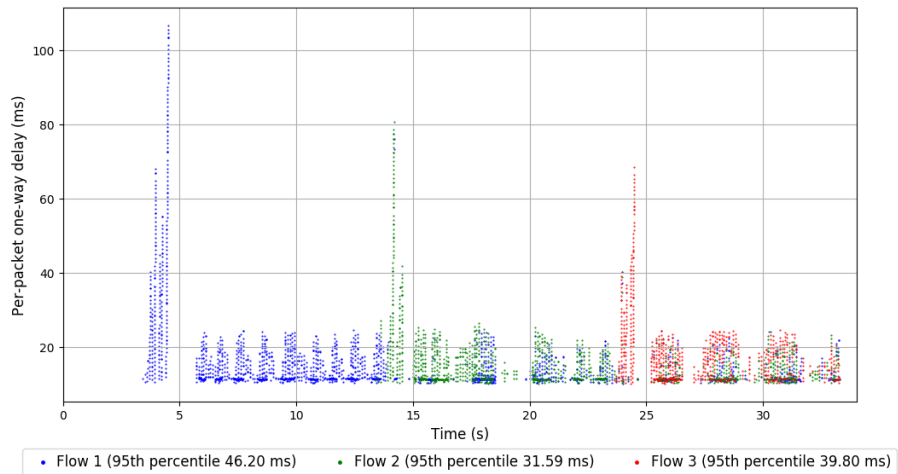
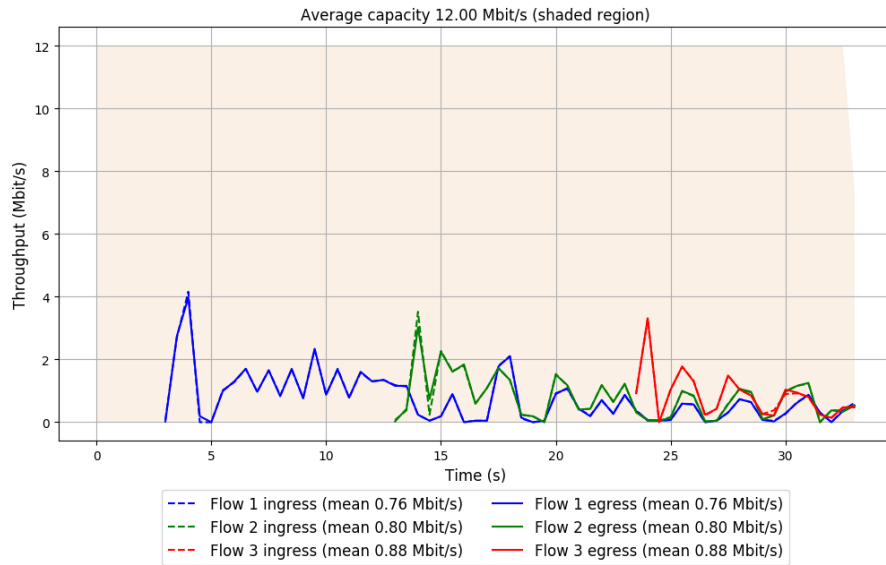
-- Flow 3:

Average throughput: 0.88 Mbit/s

95th percentile per-packet one-way delay: 39.804 ms

Loss rate: 0.14%

## Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-27 18:17:04

End at: 2018-02-27 18:17:34

# Below is generated by plot.py at 2018-02-27 19:41:38

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.59 Mbit/s (13.3% utilization)

95th percentile per-packet one-way delay: 49.294 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 0.97 Mbit/s

95th percentile per-packet one-way delay: 78.238 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 0.68 Mbit/s

95th percentile per-packet one-way delay: 31.013 ms

Loss rate: 0.18%

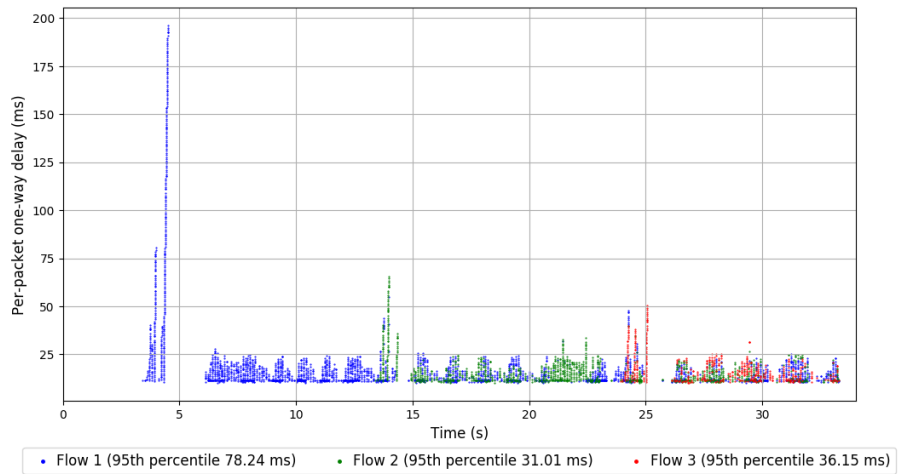
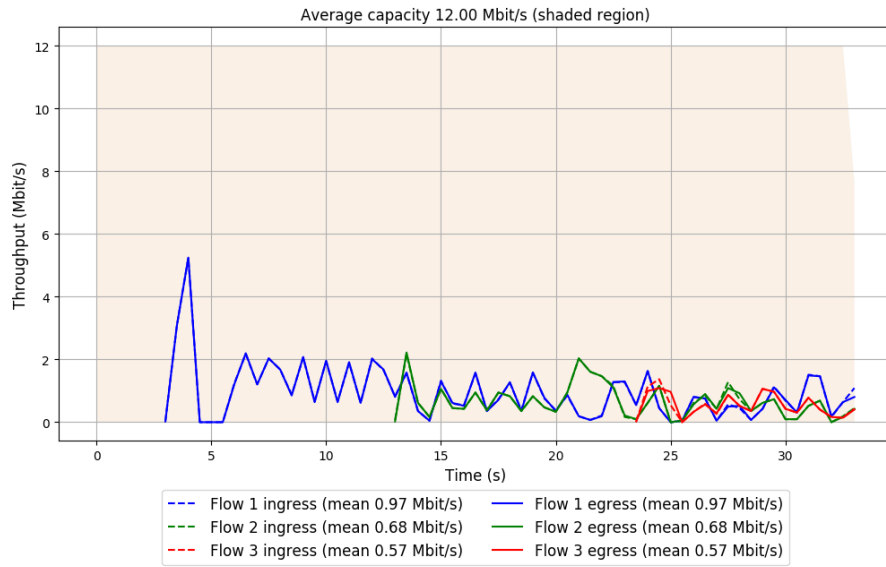
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 36.153 ms

Loss rate: 0.22%

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



Run 4: Statistics of Verus

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

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

# Below is generated by plot.py at 2018-02-27 19:41:42

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.68 Mbit/s (14.0% utilization)

95th percentile per-packet one-way delay: 49.238 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 43.277 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 53.677 ms

Loss rate: 0.57%

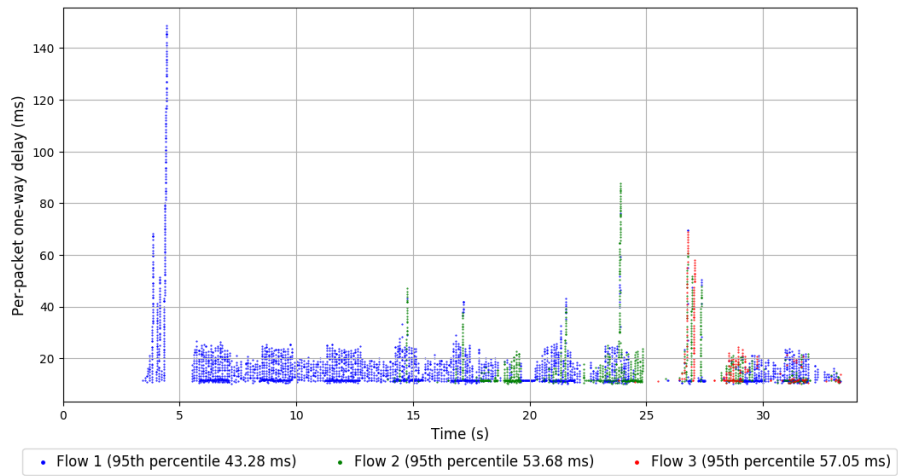
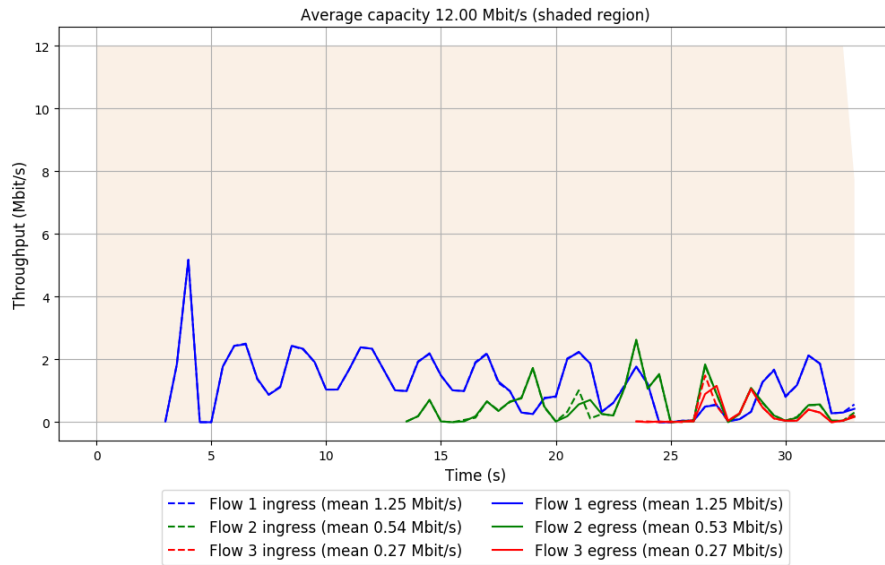
-- Flow 3:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 57.054 ms

Loss rate: 1.36%

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



Run 5: Statistics of Verus

Start at: 2018-02-27 18:37:33

End at: 2018-02-27 18:38:03

# Below is generated by plot.py at 2018-02-27 19:41:45

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 2.30 Mbit/s (19.2% utilization)

95th percentile per-packet one-way delay: 826.436 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 40.453 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 46.701 ms

Loss rate: 0.00%

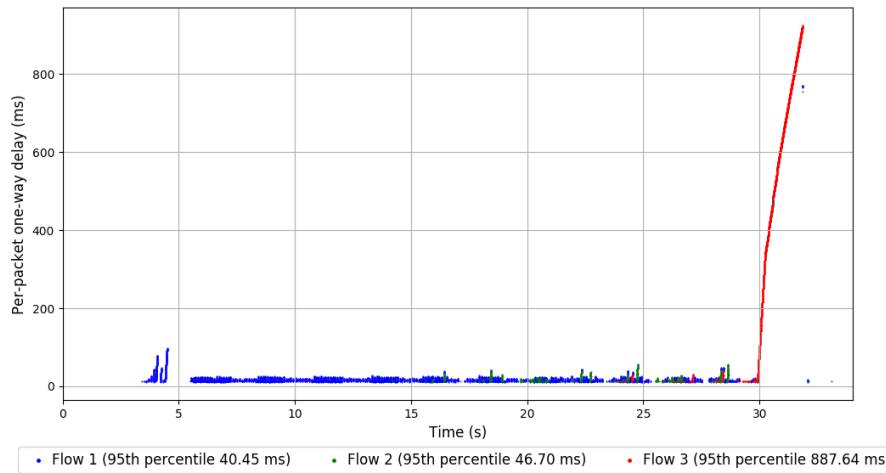
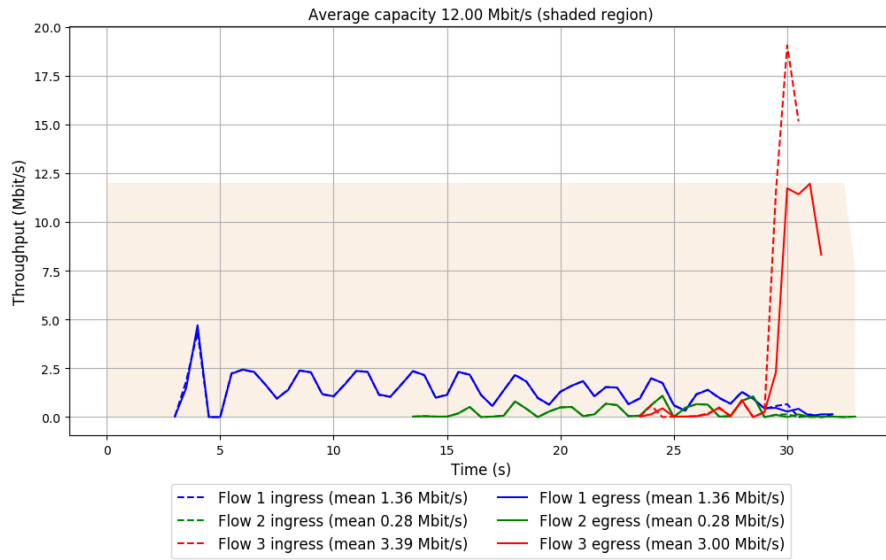
-- Flow 3:

Average throughput: 3.00 Mbit/s

95th percentile per-packet one-way delay: 887.644 ms

Loss rate: 0.00%

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



Run 6: Statistics of Verus

Start at: 2018-02-27 18:47:48

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

# Below is generated by plot.py at 2018-02-27 19:41:45

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.74 Mbit/s (14.5% utilization)

95th percentile per-packet one-way delay: 27.702 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 25.441 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 36.021 ms

Loss rate: 0.17%

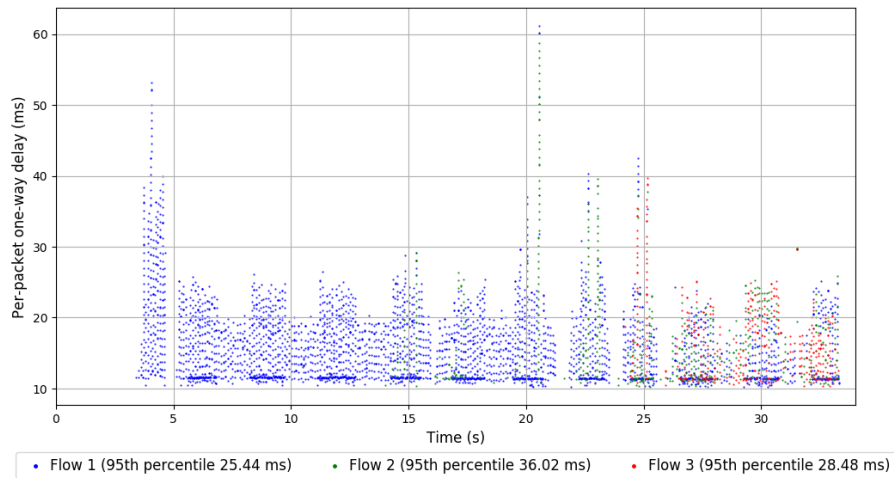
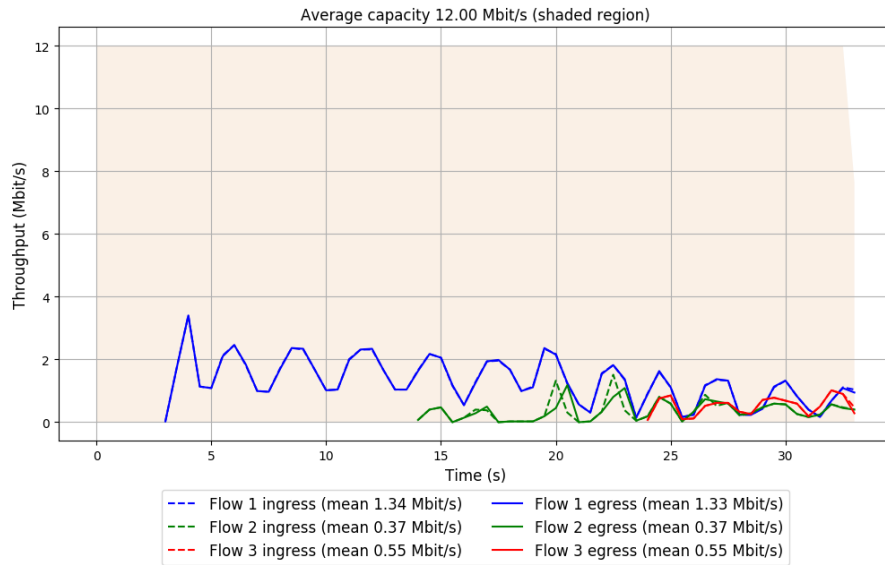
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 28.484 ms

Loss rate: 1.88%

### Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-27 18:58:02

End at: 2018-02-27 18:58:32

# Below is generated by plot.py at 2018-02-27 19:41:45

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.71 Mbit/s (14.3% utilization)

95th percentile per-packet one-way delay: 621.296 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.05 Mbit/s

95th percentile per-packet one-way delay: 35.991 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.10 Mbit/s

95th percentile per-packet one-way delay: 659.481 ms

Loss rate: 0.00%

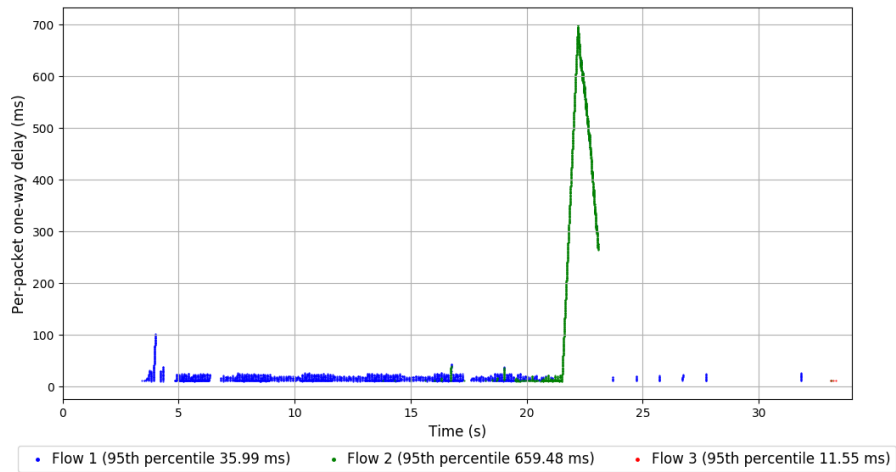
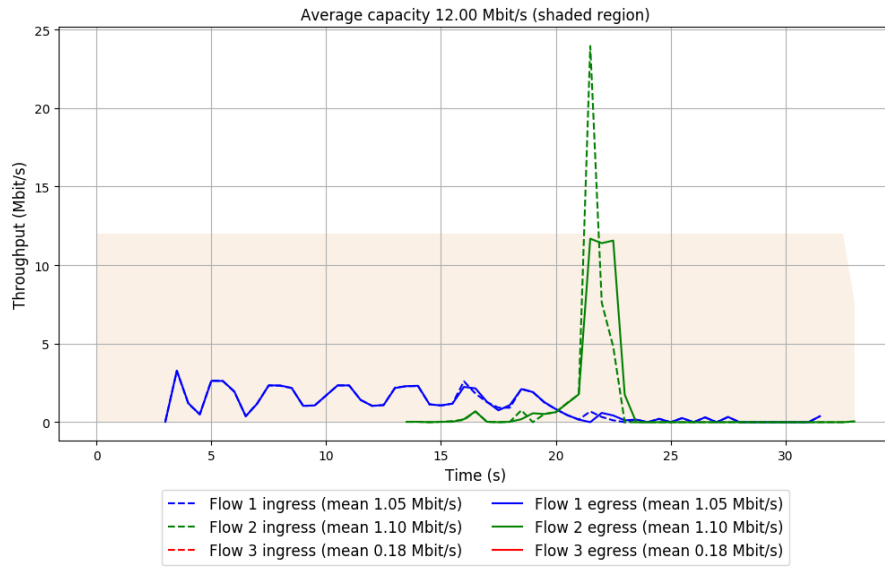
-- Flow 3:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 11.554 ms

Loss rate: 0.00%

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



Run 8: Statistics of Verus

Start at: 2018-02-27 19:08:16

End at: 2018-02-27 19:08:46

# Below is generated by plot.py at 2018-02-27 19:41:46

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 2.57 Mbit/s (21.4% utilization)

95th percentile per-packet one-way delay: 1374.992 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.92 Mbit/s

95th percentile per-packet one-way delay: 50.022 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.67 Mbit/s

95th percentile per-packet one-way delay: 108.119 ms

Loss rate: 0.00%

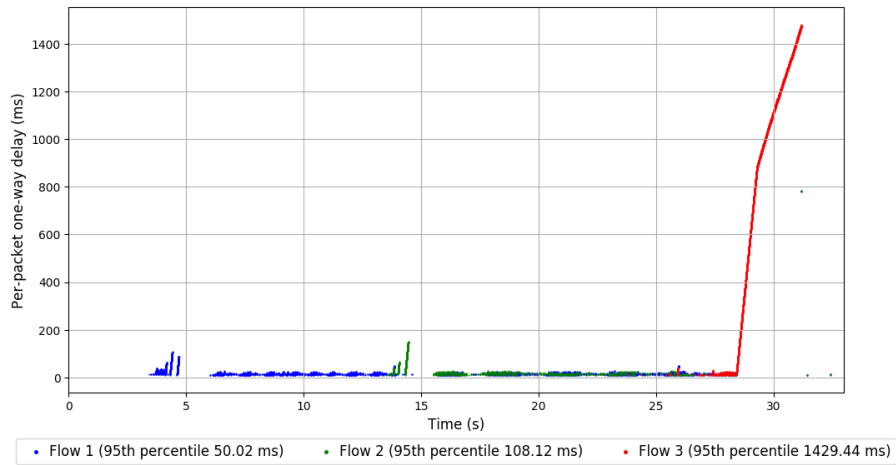
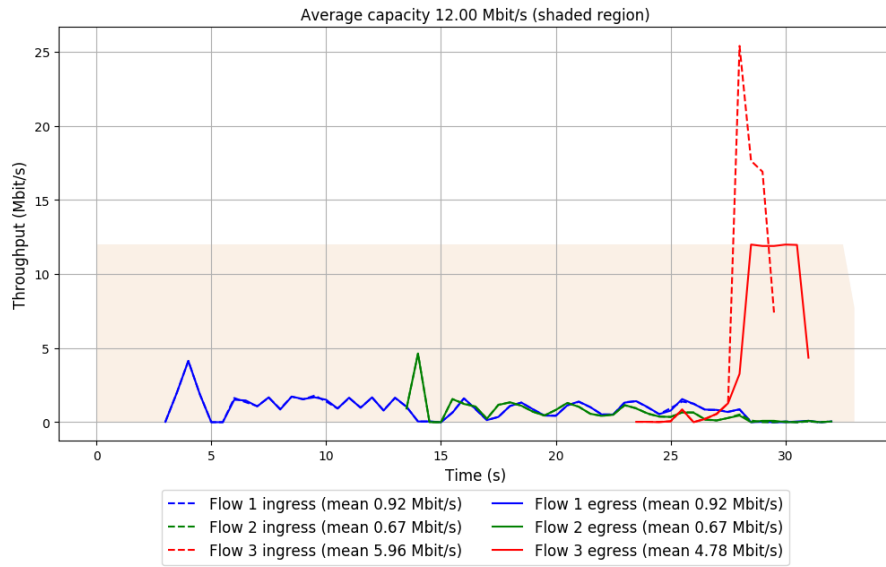
-- Flow 3:

Average throughput: 4.78 Mbit/s

95th percentile per-packet one-way delay: 1429.437 ms

Loss rate: 0.00%

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



Run 9: Statistics of Verus

Start at: 2018-02-27 19:18:31

End at: 2018-02-27 19:19:01

# Below is generated by plot.py at 2018-02-27 19:41:46

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.65 Mbit/s (13.7% utilization)

95th percentile per-packet one-way delay: 35.689 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 1.04 Mbit/s

95th percentile per-packet one-way delay: 32.437 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 34.182 ms

Loss rate: 0.22%

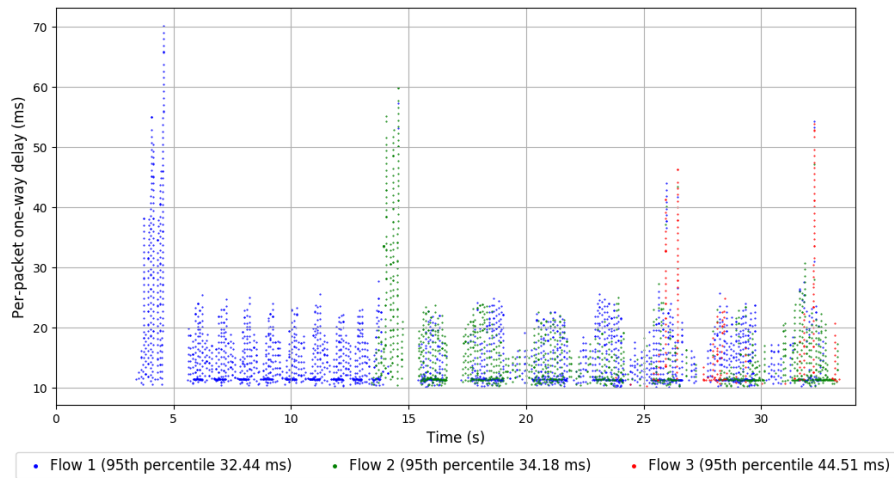
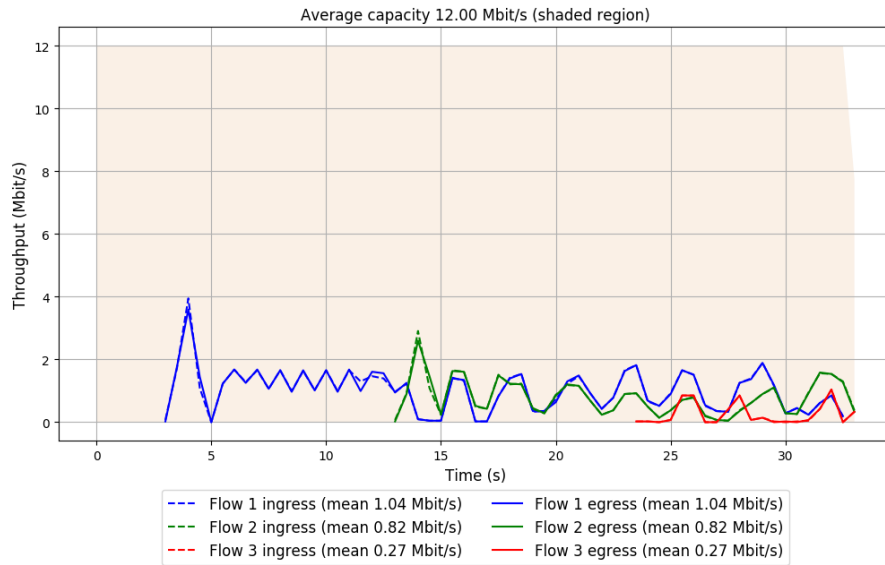
-- Flow 3:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 44.514 ms

Loss rate: 0.00%

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



Run 10: Statistics of Verus

Start at: 2018-02-27 19:28:45

End at: 2018-02-27 19:29:15

# Below is generated by plot.py at 2018-02-27 19:41:47

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.78 Mbit/s (14.9% utilization)

95th percentile per-packet one-way delay: 96.992 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 47.721 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.72 Mbit/s

95th percentile per-packet one-way delay: 168.767 ms

Loss rate: 0.34%

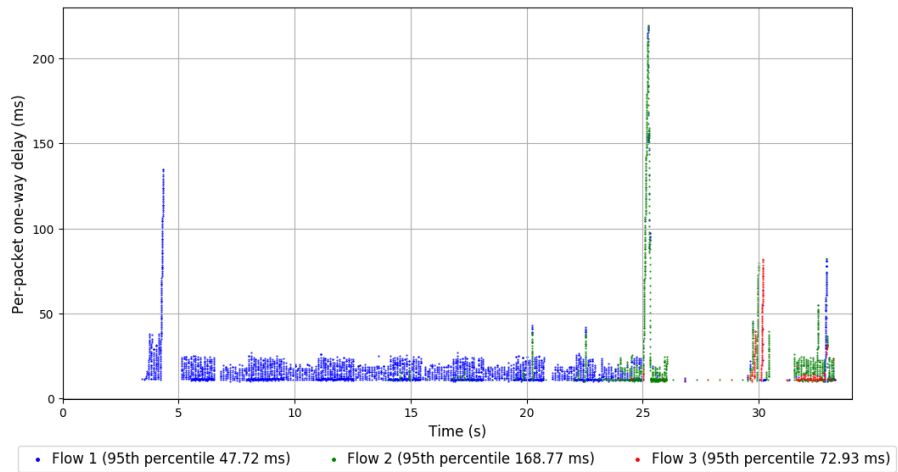
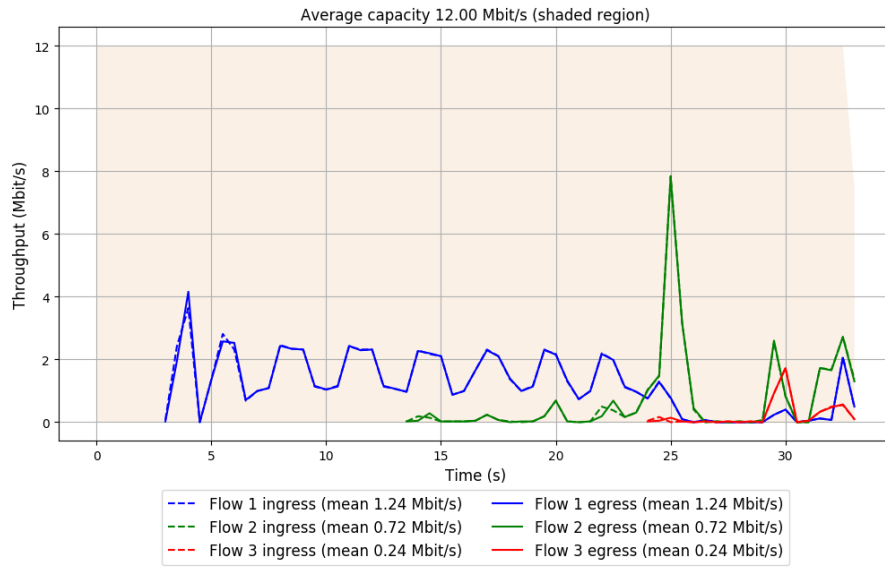
-- Flow 3:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 72.927 ms

Loss rate: 0.00%

# Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-02-27 17:57:10

End at: 2018-02-27 17:57:40

# Below is generated by plot.py at 2018-02-27 19:41:51

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.60 Mbit/s (13.4% utilization)

95th percentile per-packet one-way delay: 13.213 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 13.842 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.71 Mbit/s

95th percentile per-packet one-way delay: 13.043 ms

Loss rate: 0.04%

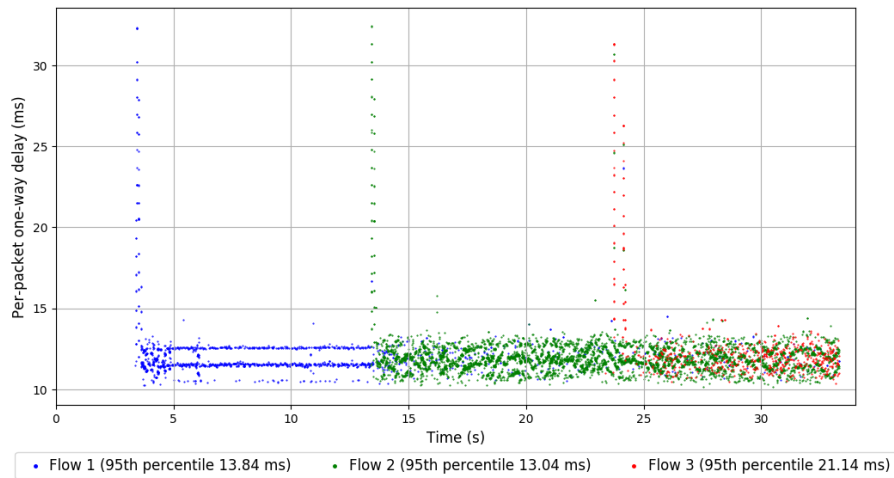
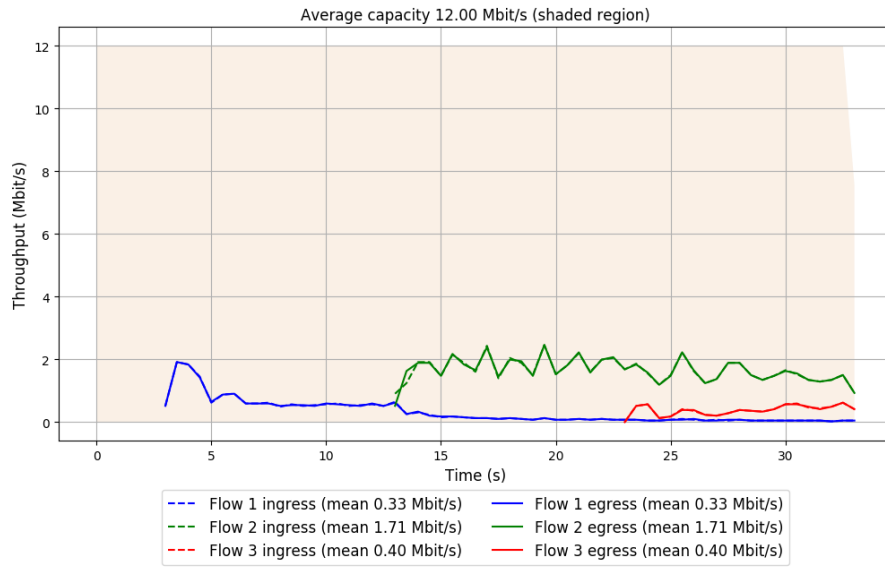
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 21.143 ms

Loss rate: 0.32%

# Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-27 18:07:24

End at: 2018-02-27 18:07:54

# Below is generated by plot.py at 2018-02-27 19:41:53

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.32 Mbit/s (11.0% utilization)

95th percentile per-packet one-way delay: 13.631 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 13.383 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 14.318 ms

Loss rate: 0.00%

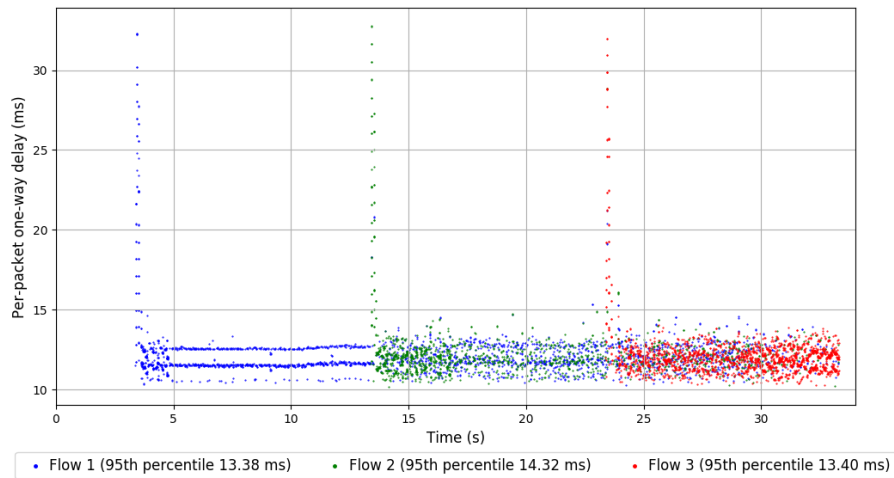
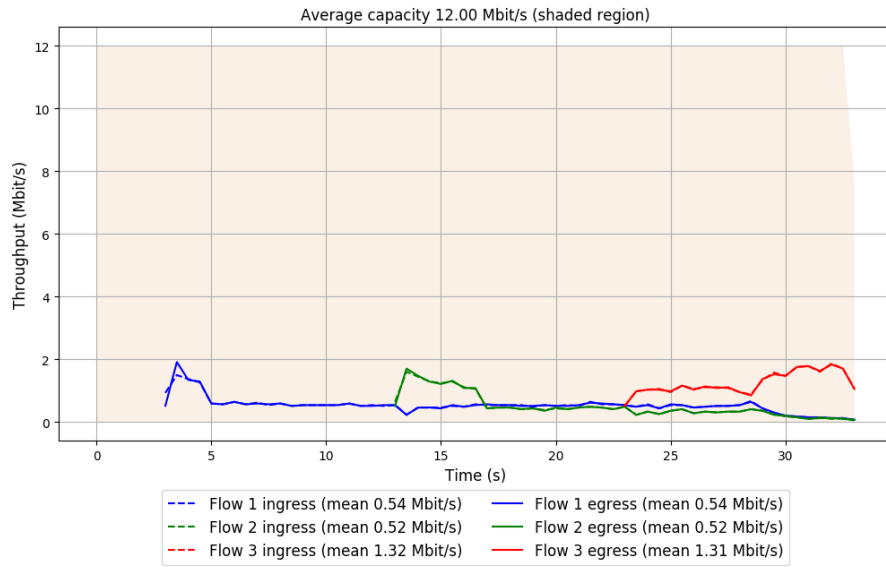
-- Flow 3:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 13.397 ms

Loss rate: 0.20%

## Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-27 18:17:38

End at: 2018-02-27 18:18:08

# Below is generated by plot.py at 2018-02-27 19:41:57

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.79 Mbit/s (14.9% utilization)

95th percentile per-packet one-way delay: 13.246 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 13.367 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 13.054 ms

Loss rate: 0.04%

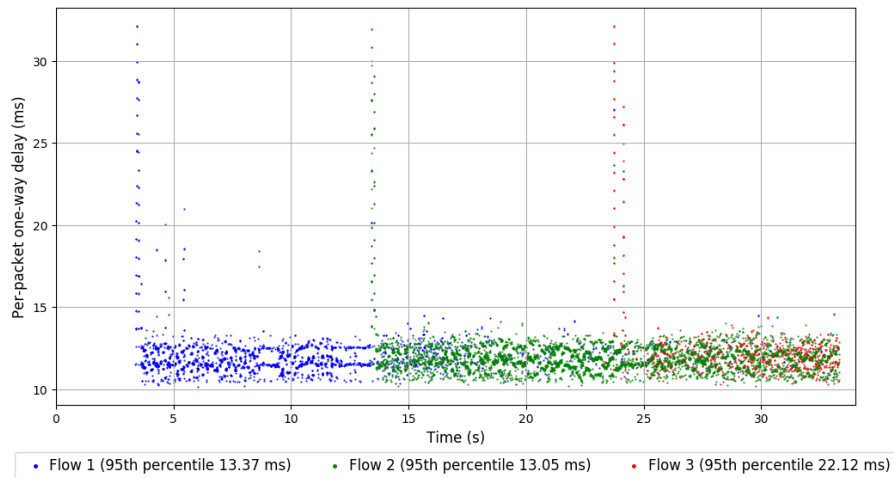
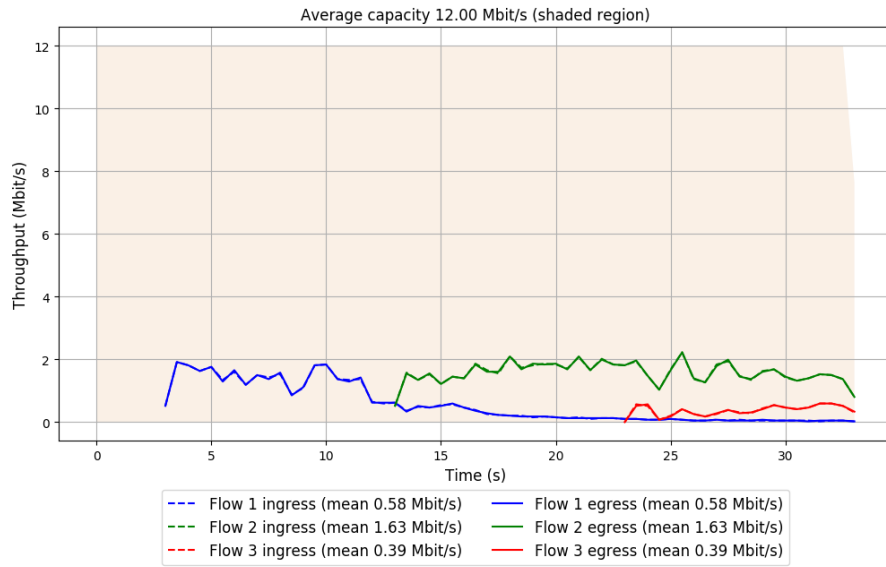
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 22.121 ms

Loss rate: 0.00%

### Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-27 18:27:52

End at: 2018-02-27 18:28:22

# Below is generated by plot.py at 2018-02-27 19:41:58

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.62 Mbit/s (13.5% utilization)

95th percentile per-packet one-way delay: 13.185 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 13.347 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 13.046 ms

Loss rate: 0.04%

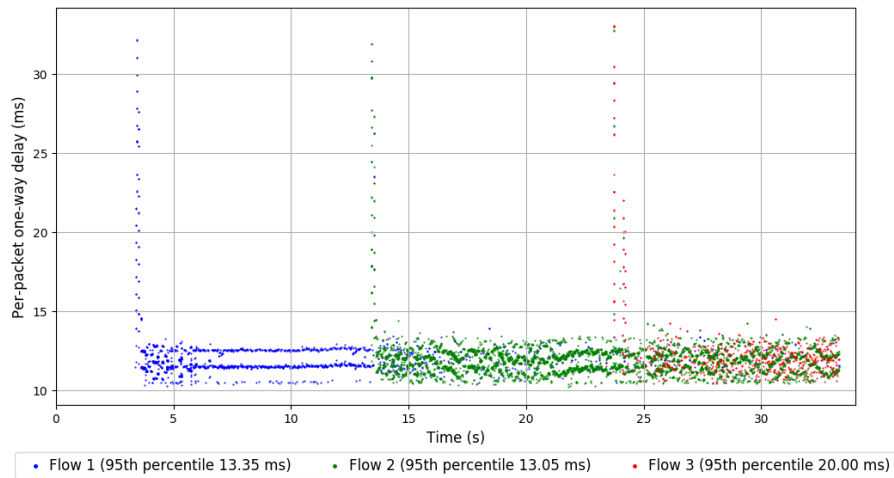
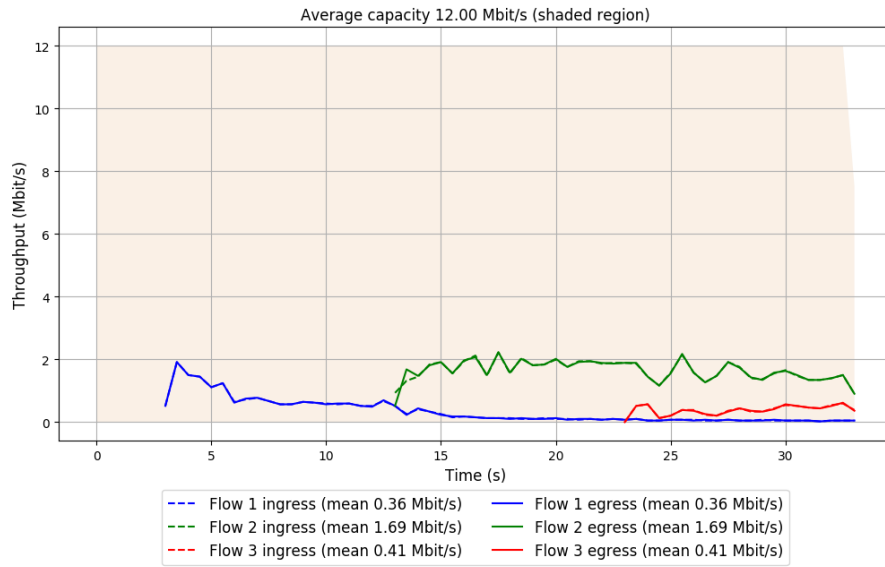
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 20.004 ms

Loss rate: 0.32%

### Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-27 18:38:07

End at: 2018-02-27 18:38:37

# Below is generated by plot.py at 2018-02-27 19:41:58

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.62 Mbit/s (13.5% utilization)

95th percentile per-packet one-way delay: 13.162 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 13.025 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 14.273 ms

Loss rate: 0.15%

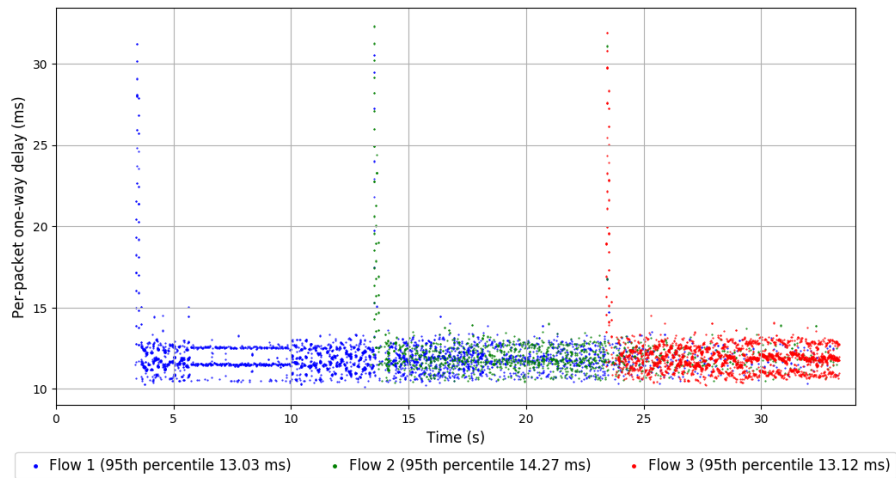
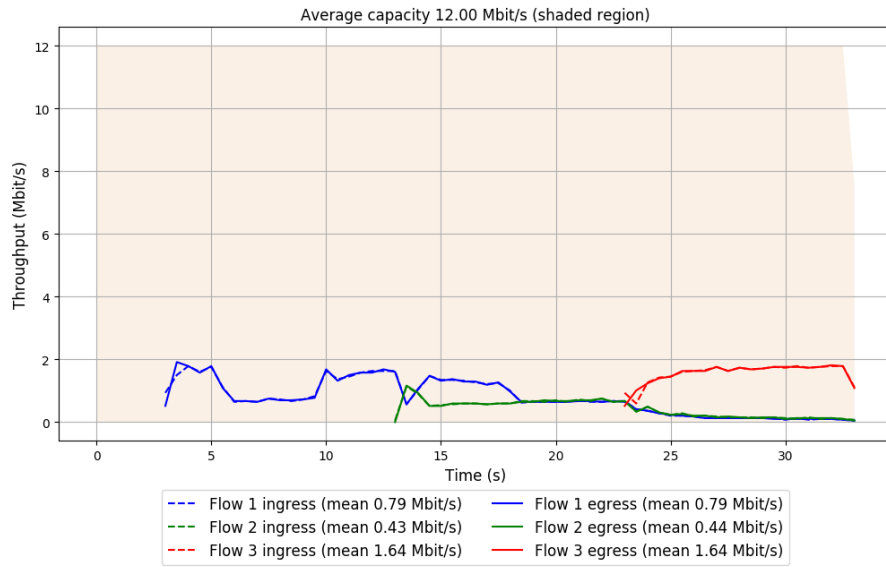
-- Flow 3:

Average throughput: 1.64 Mbit/s

95th percentile per-packet one-way delay: 13.115 ms

Loss rate: 0.16%

## Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-27 18:48:22

End at: 2018-02-27 18:48:52

# Below is generated by plot.py at 2018-02-27 19:41:59

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.68 Mbit/s (14.0% utilization)

95th percentile per-packet one-way delay: 13.317 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 0.96 Mbit/s

95th percentile per-packet one-way delay: 13.057 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 15.250 ms

Loss rate: 0.00%

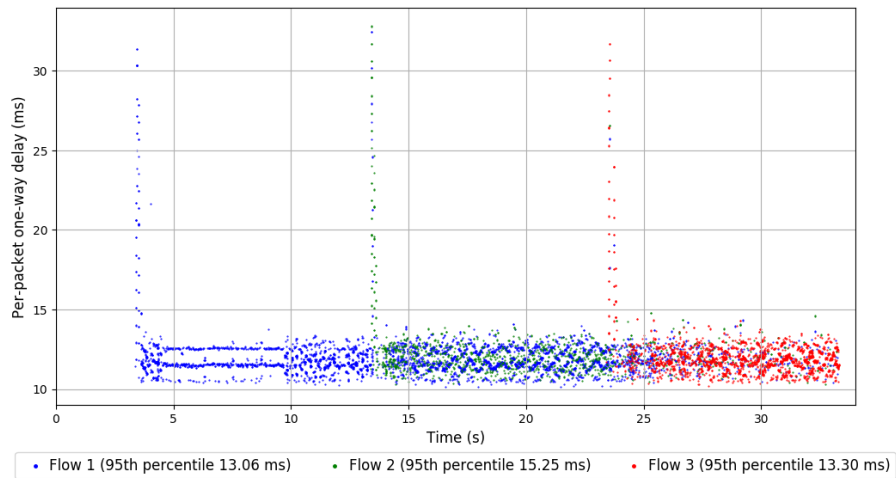
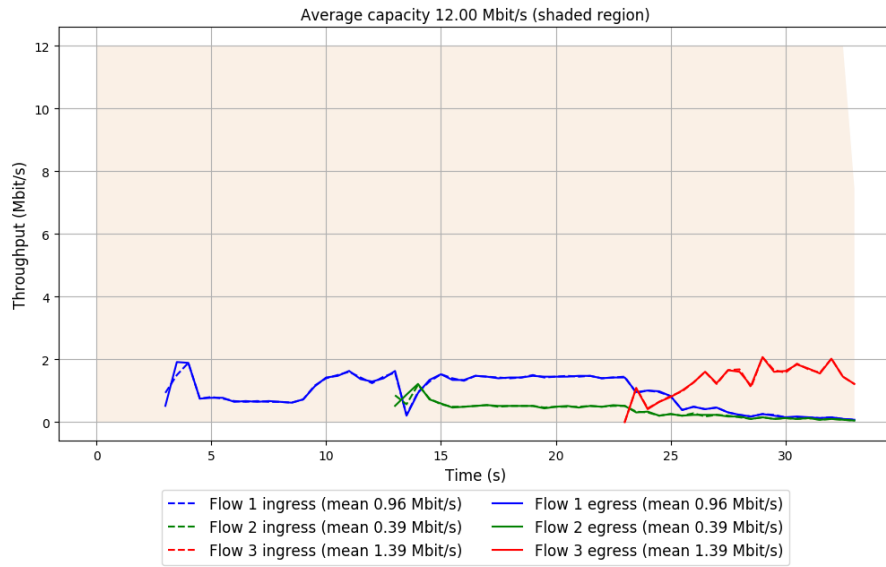
-- Flow 3:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 13.301 ms

Loss rate: 0.19%

## Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-27 18:58:36

End at: 2018-02-27 18:59:06

# Below is generated by plot.py at 2018-02-27 19:42:00

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.61 Mbit/s (13.4% utilization)

95th percentile per-packet one-way delay: 13.236 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.04 Mbit/s

95th percentile per-packet one-way delay: 13.068 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 18.116 ms

Loss rate: 0.00%

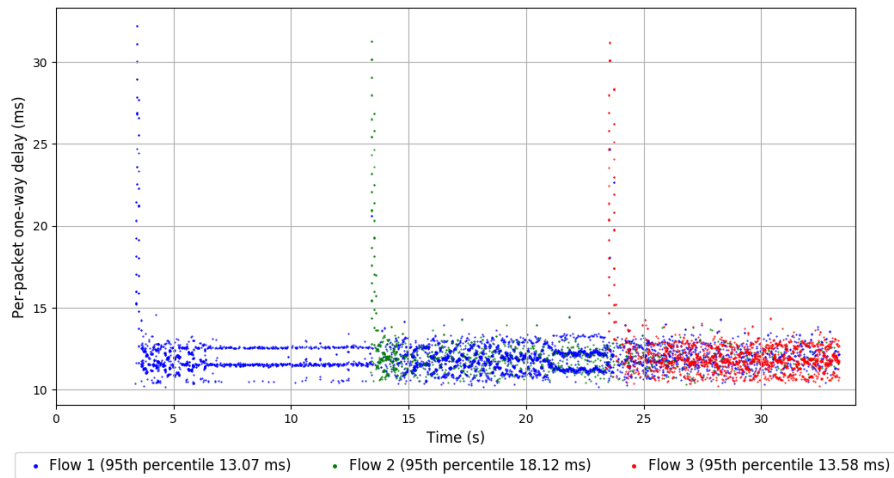
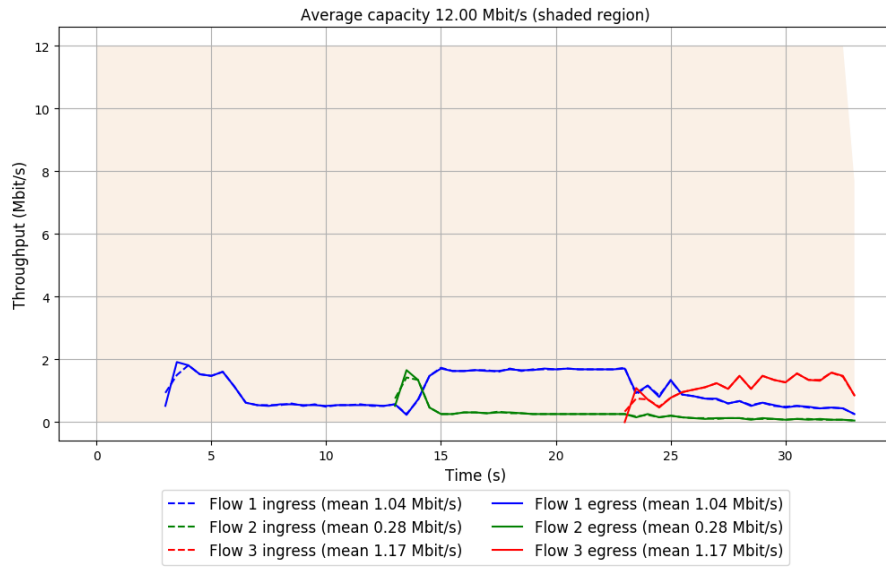
-- Flow 3:

Average throughput: 1.17 Mbit/s

95th percentile per-packet one-way delay: 13.578 ms

Loss rate: 0.11%

## Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-27 19:08:51

End at: 2018-02-27 19:09:21

# Below is generated by plot.py at 2018-02-27 19:42:00

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.39 Mbit/s (11.6% utilization)

95th percentile per-packet one-way delay: 13.421 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 13.154 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 14.064 ms

Loss rate: 0.00%

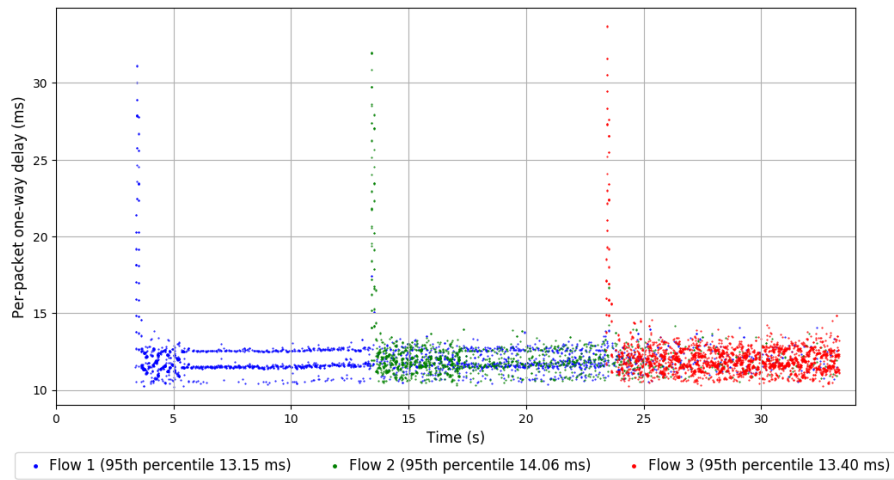
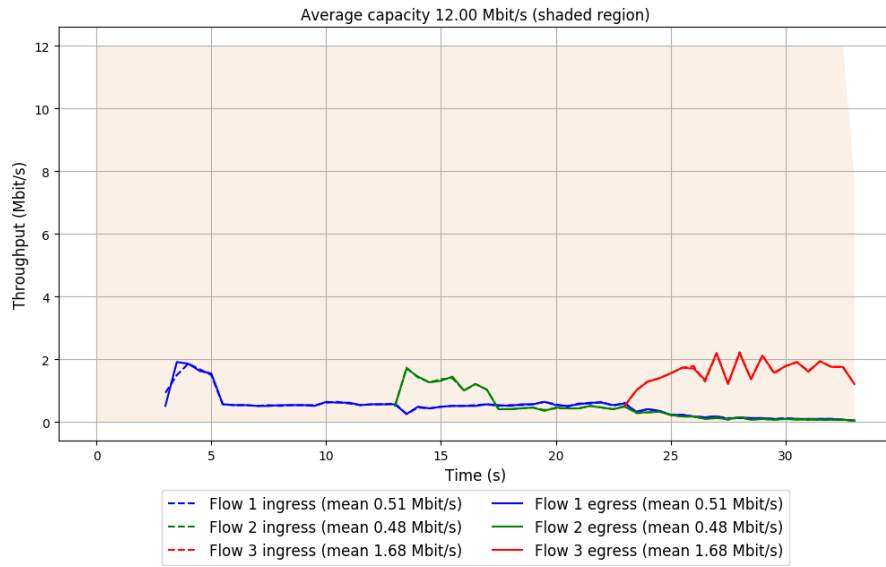
-- Flow 3:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 13.402 ms

Loss rate: 0.16%

### Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-27 19:19:05

End at: 2018-02-27 19:19:35

# Below is generated by plot.py at 2018-02-27 19:42:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.59 Mbit/s (13.2% utilization)

95th percentile per-packet one-way delay: 13.271 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 13.649 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 13.111 ms

Loss rate: 0.04%

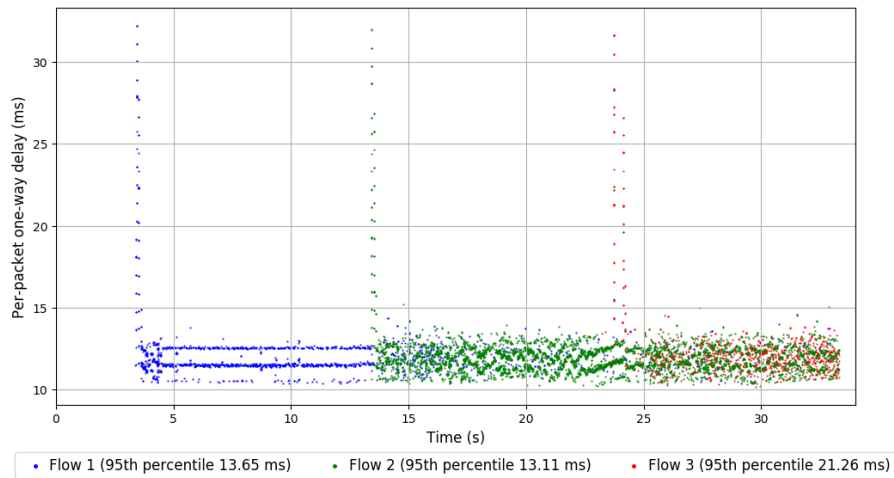
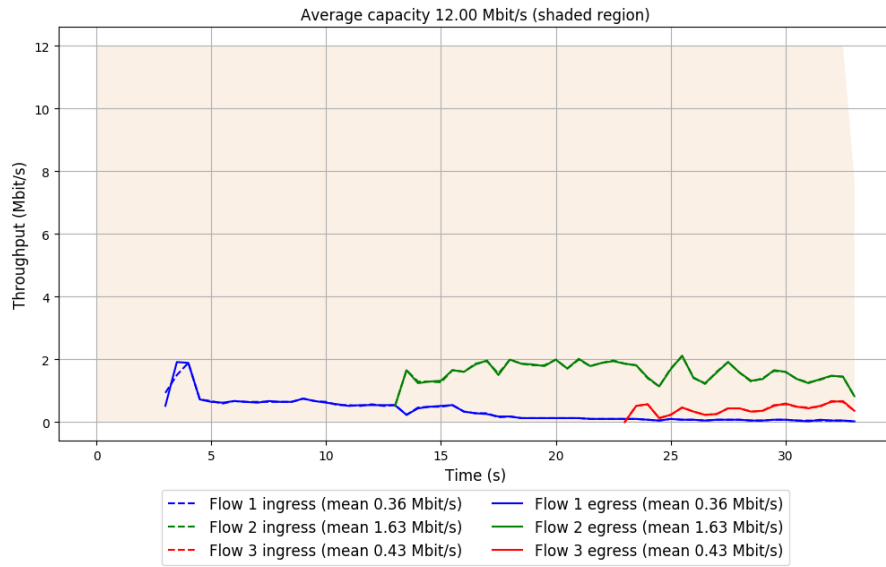
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 21.261 ms

Loss rate: 0.00%

### Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-27 19:29:19

End at: 2018-02-27 19:29:49

# Below is generated by plot.py at 2018-02-27 19:42:06

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.47 Mbit/s (12.2% utilization)

95th percentile per-packet one-way delay: 13.215 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 13.165 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 13.641 ms

Loss rate: 0.00%

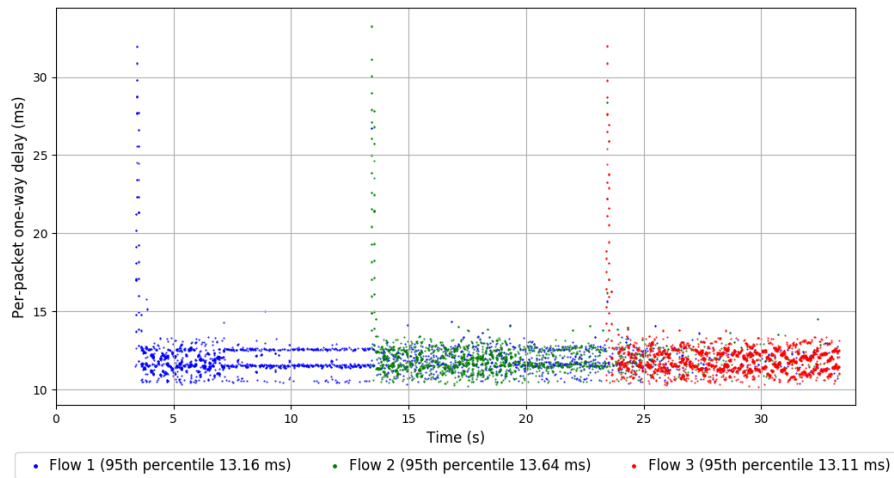
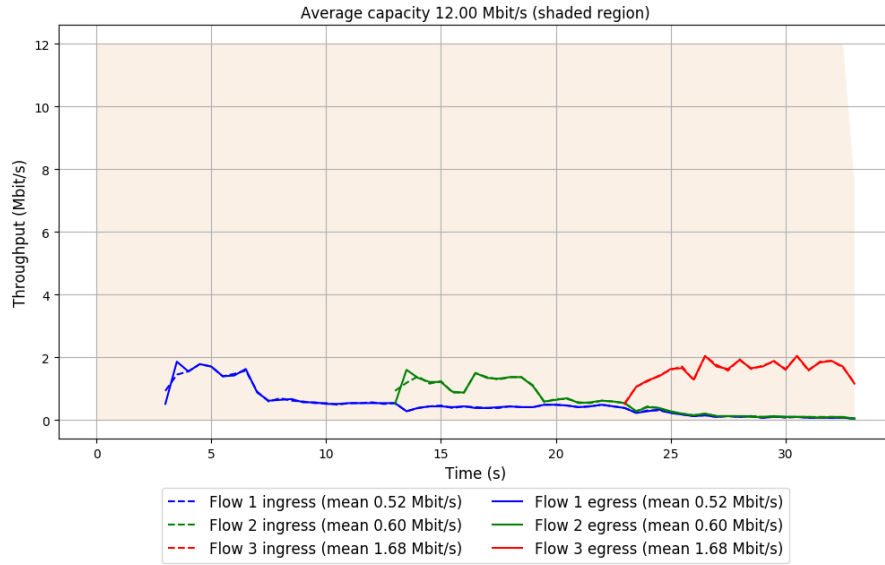
-- Flow 3:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 13.108 ms

Loss rate: 0.16%

# Run 10: Report of Copa — Data Link



Run 1: Statistics of FillP

Start at: 2018-02-27 17:56:01

End at: 2018-02-27 17:56:31

# Below is generated by plot.py at 2018-02-27 19:42:24

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.84 Mbit/s (98.7% utilization)

95th percentile per-packet one-way delay: 27679.606 ms

Loss rate: 63.81%

-- Flow 1:

Average throughput: 11.84 Mbit/s

95th percentile per-packet one-way delay: 27679.606 ms

Loss rate: 63.81%

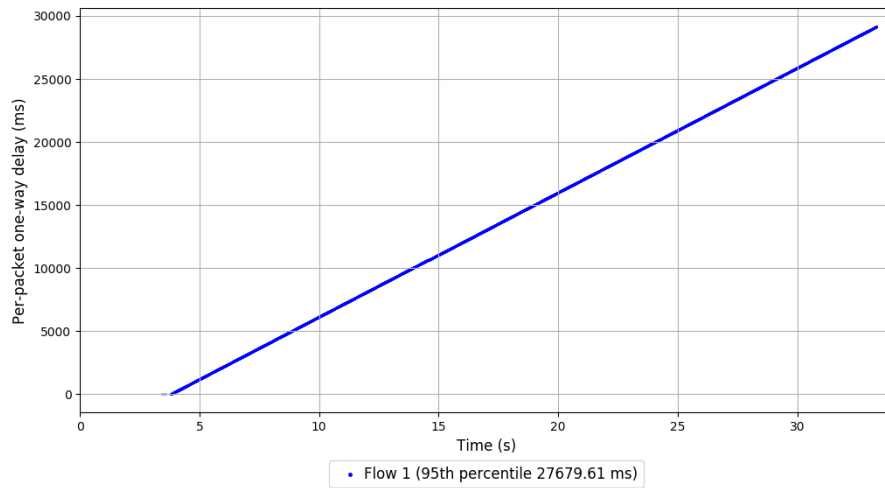
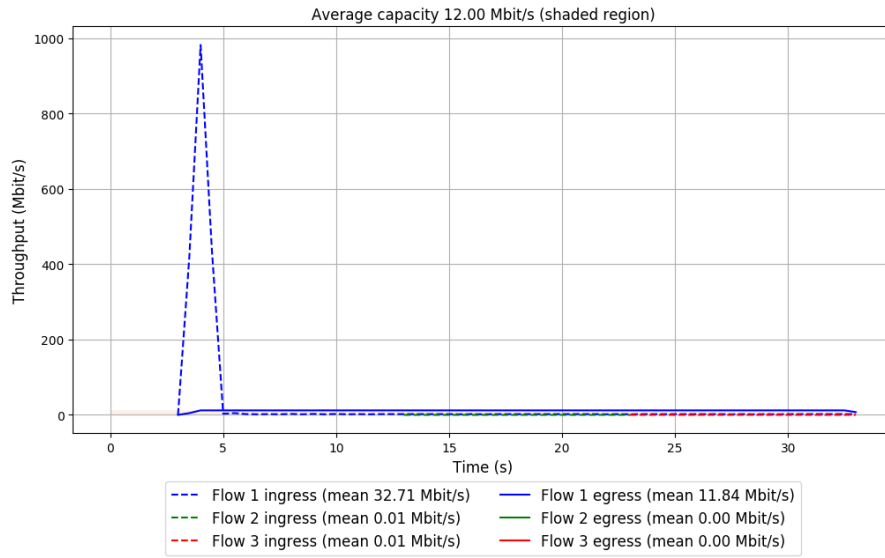
-- Flow 2:

Average throughput: 0.00 Mbit/s

-- Flow 3:

Average throughput: 0.00 Mbit/s

# Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-02-27 18:06:15

End at: 2018-02-27 18:06:45

# Below is generated by plot.py at 2018-02-27 19:42:26

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.84 Mbit/s (98.7% utilization)

95th percentile per-packet one-way delay: 27732.605 ms

Loss rate: 62.02%

-- Flow 1:

Average throughput: 11.84 Mbit/s

95th percentile per-packet one-way delay: 27732.605 ms

Loss rate: 62.01%

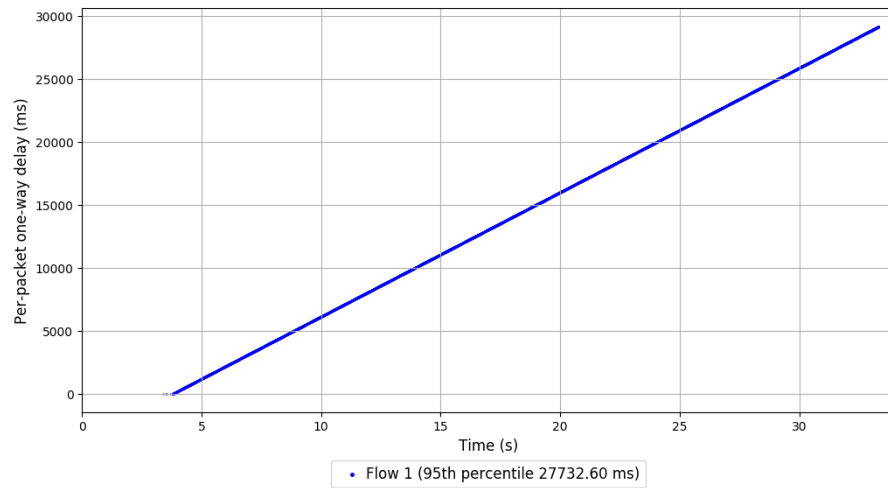
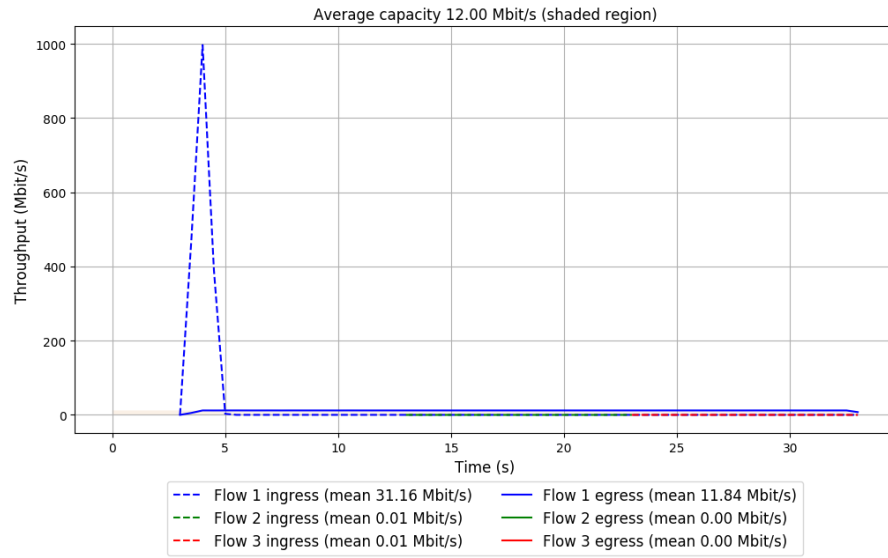
-- Flow 2:

Average throughput: 0.00 Mbit/s

-- Flow 3:

Average throughput: 0.00 Mbit/s

## Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-27 18:16:29

End at: 2018-02-27 18:16:59

# Below is generated by plot.py at 2018-02-27 19:42:26

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.84 Mbit/s (98.7% utilization)

95th percentile per-packet one-way delay: 27725.814 ms

Loss rate: 63.10%

-- Flow 1:

Average throughput: 11.84 Mbit/s

95th percentile per-packet one-way delay: 27725.814 ms

Loss rate: 63.10%

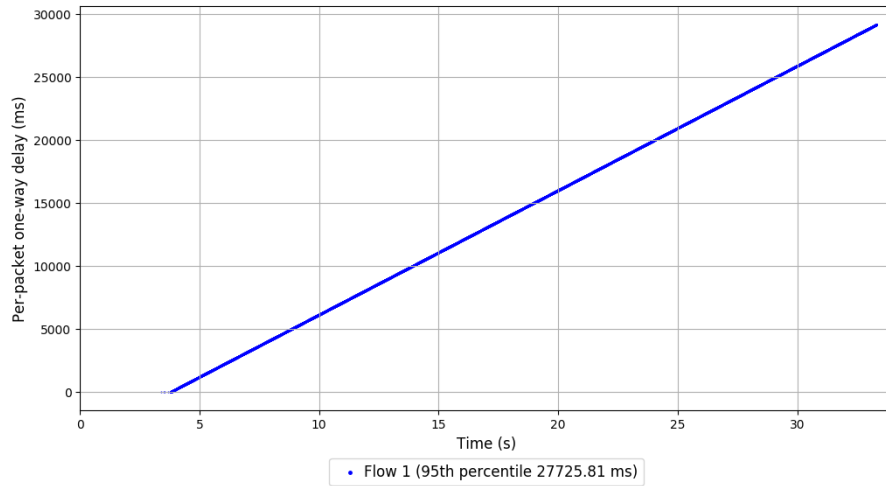
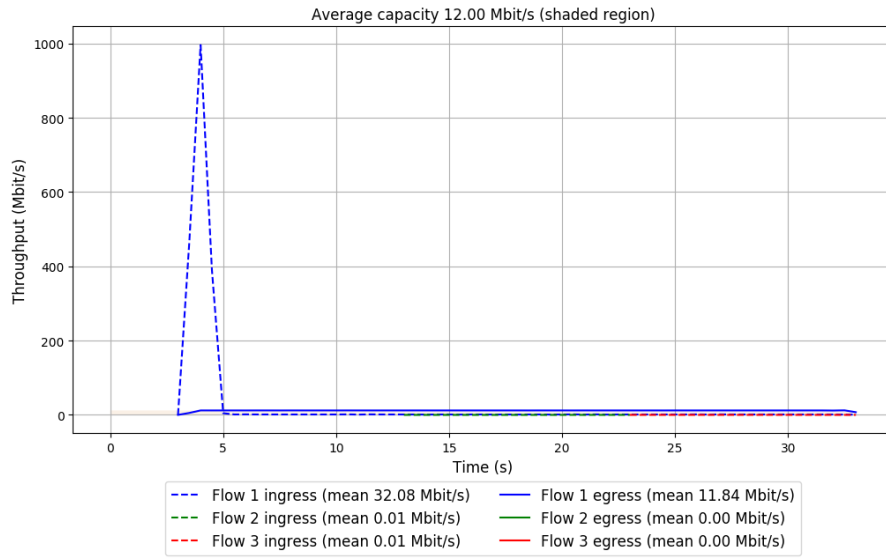
-- Flow 2:

Average throughput: 0.00 Mbit/s

-- Flow 3:

Average throughput: 0.00 Mbit/s

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



Run 4: Statistics of FillP

Start at: 2018-02-27 18:26:43

End at: 2018-02-27 18:27:13

# Below is generated by plot.py at 2018-02-27 19:42:27

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.84 Mbit/s (98.6% utilization)

95th percentile per-packet one-way delay: 27717.213 ms

Loss rate: 64.24%

-- Flow 1:

Average throughput: 11.84 Mbit/s

95th percentile per-packet one-way delay: 27717.213 ms

Loss rate: 64.23%

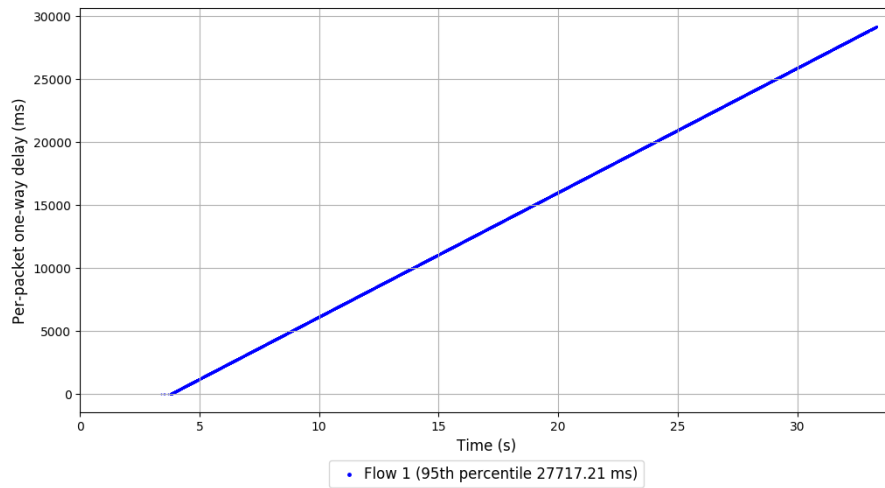
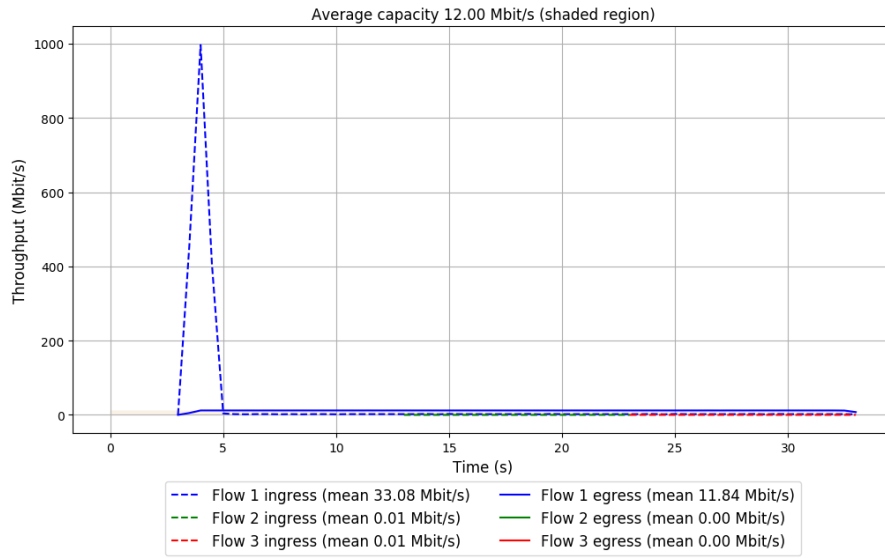
-- Flow 2:

Average throughput: 0.00 Mbit/s

-- Flow 3:

Average throughput: 0.00 Mbit/s

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



Run 5: Statistics of FillP

Start at: 2018-02-27 18:36:58

End at: 2018-02-27 18:37:28

# Below is generated by plot.py at 2018-02-27 19:42:32

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.84 Mbit/s (98.7% utilization)

95th percentile per-packet one-way delay: 27725.819 ms

Loss rate: 72.21%

-- Flow 1:

Average throughput: 11.84 Mbit/s

95th percentile per-packet one-way delay: 27725.819 ms

Loss rate: 72.21%

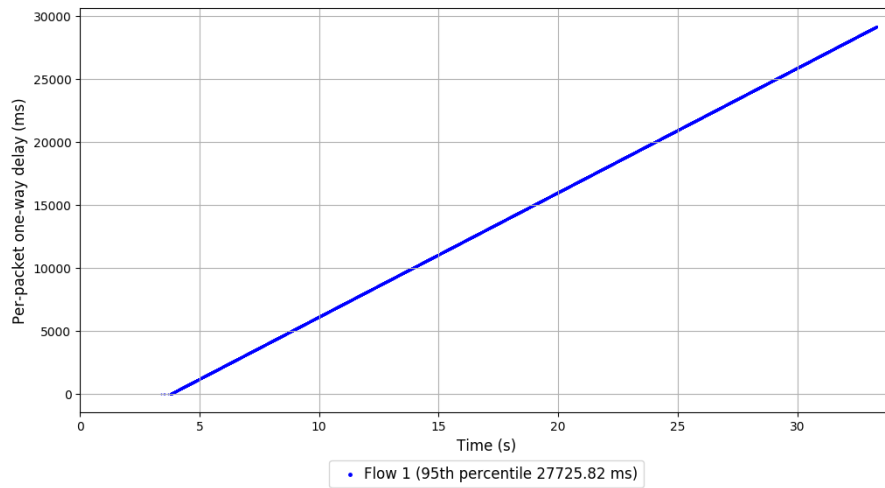
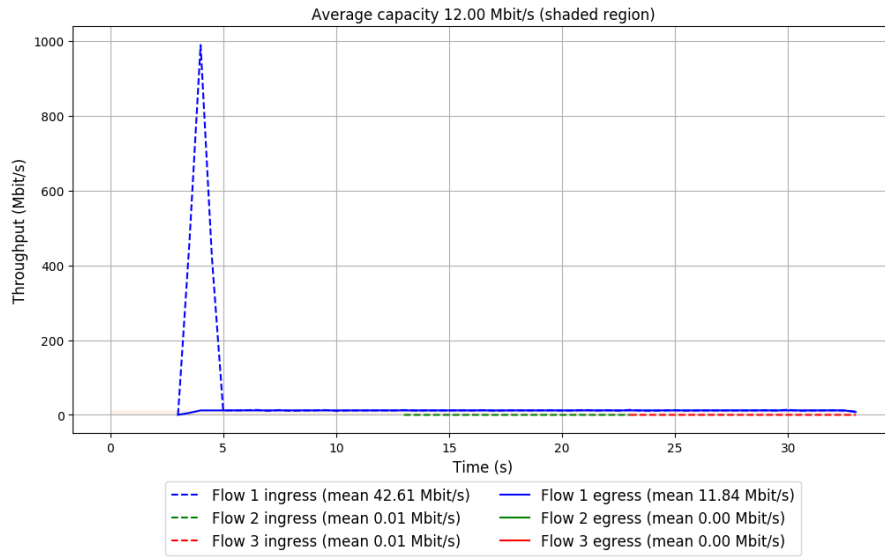
-- Flow 2:

Average throughput: 0.00 Mbit/s

-- Flow 3:

Average throughput: 0.00 Mbit/s

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



Run 6: Statistics of FillP

Start at: 2018-02-27 18:47:13

End at: 2018-02-27 18:47:43

# Below is generated by plot.py at 2018-02-27 19:42:32

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.84 Mbit/s (98.7% utilization)

95th percentile per-packet one-way delay: 27732.887 ms

Loss rate: 62.73%

-- Flow 1:

Average throughput: 11.84 Mbit/s

95th percentile per-packet one-way delay: 27732.887 ms

Loss rate: 62.73%

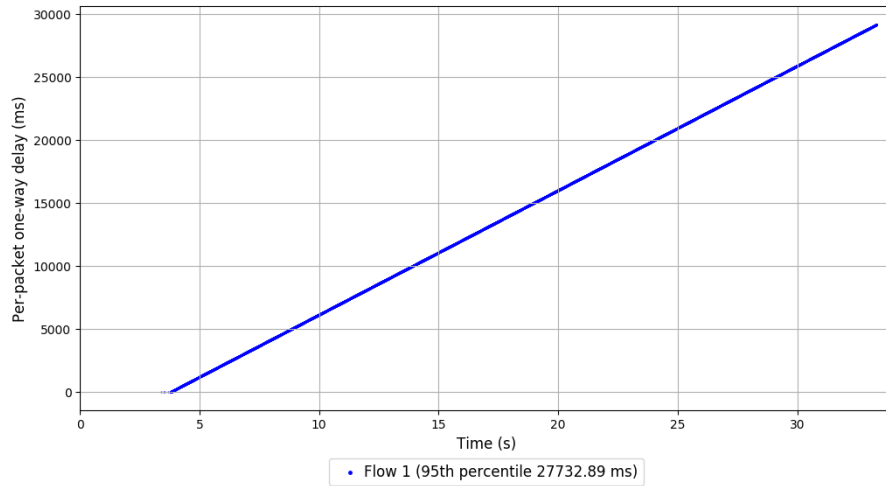
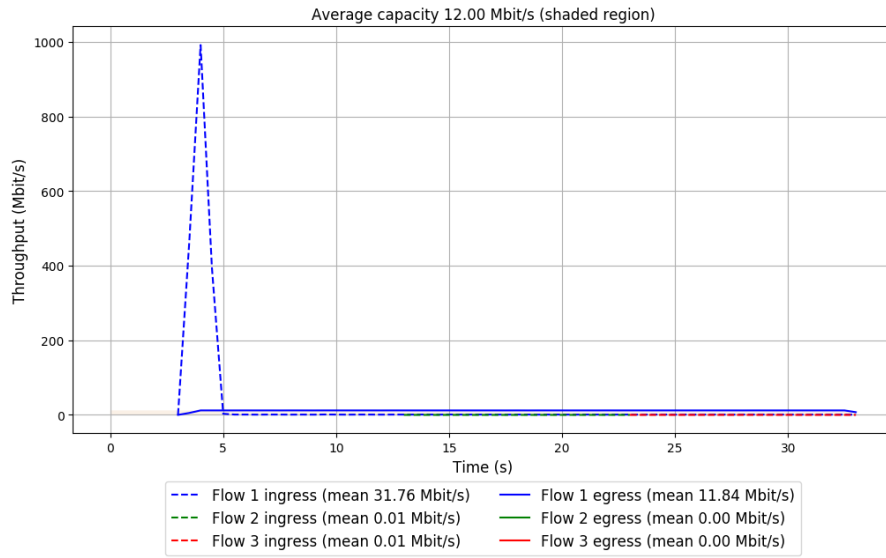
-- Flow 2:

Average throughput: 0.00 Mbit/s

-- Flow 3:

Average throughput: 0.00 Mbit/s

## Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-27 18:57:28

End at: 2018-02-27 18:57:58

# Below is generated by plot.py at 2018-02-27 19:42:35

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.84 Mbit/s (98.7% utilization)

95th percentile per-packet one-way delay: 27728.493 ms

Loss rate: 64.67%

-- Flow 1:

Average throughput: 11.84 Mbit/s

95th percentile per-packet one-way delay: 27728.493 ms

Loss rate: 64.67%

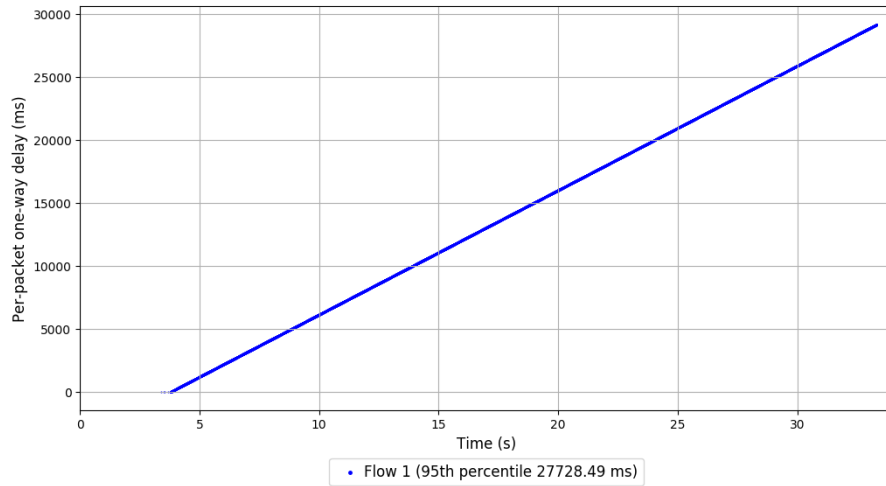
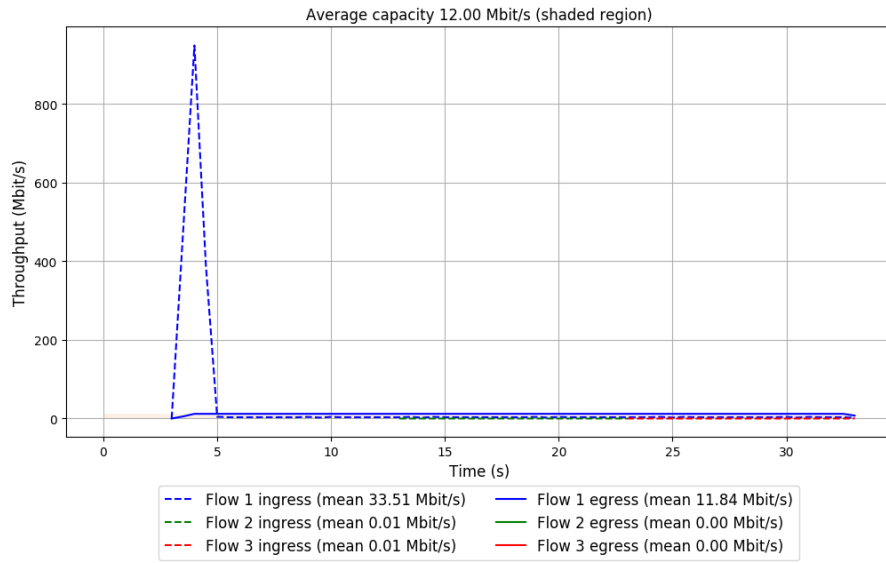
-- Flow 2:

Average throughput: 0.00 Mbit/s

-- Flow 3:

Average throughput: 0.00 Mbit/s

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



Run 8: Statistics of FillP

Start at: 2018-02-27 19:07:42

End at: 2018-02-27 19:08:12

# Below is generated by plot.py at 2018-02-27 19:42:36

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.86 Mbit/s (98.8% utilization)

95th percentile per-packet one-way delay: 27713.707 ms

Loss rate: 64.10%

-- Flow 1:

Average throughput: 11.86 Mbit/s

95th percentile per-packet one-way delay: 27713.707 ms

Loss rate: 64.10%

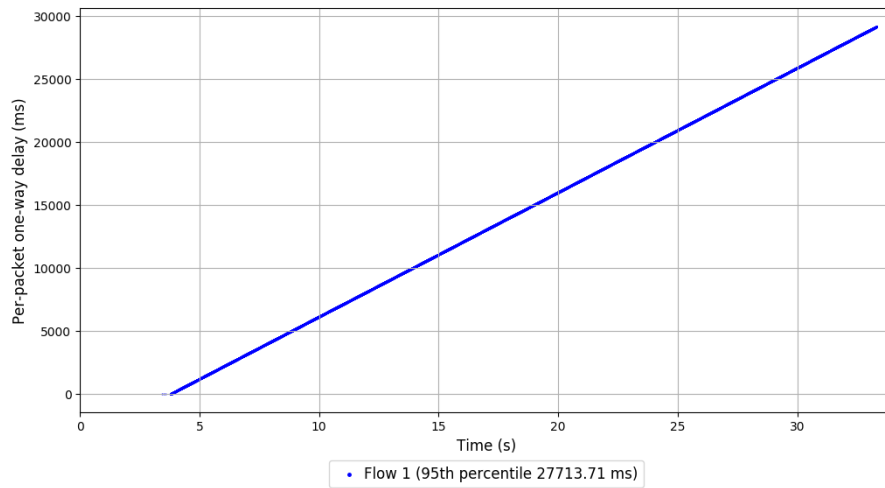
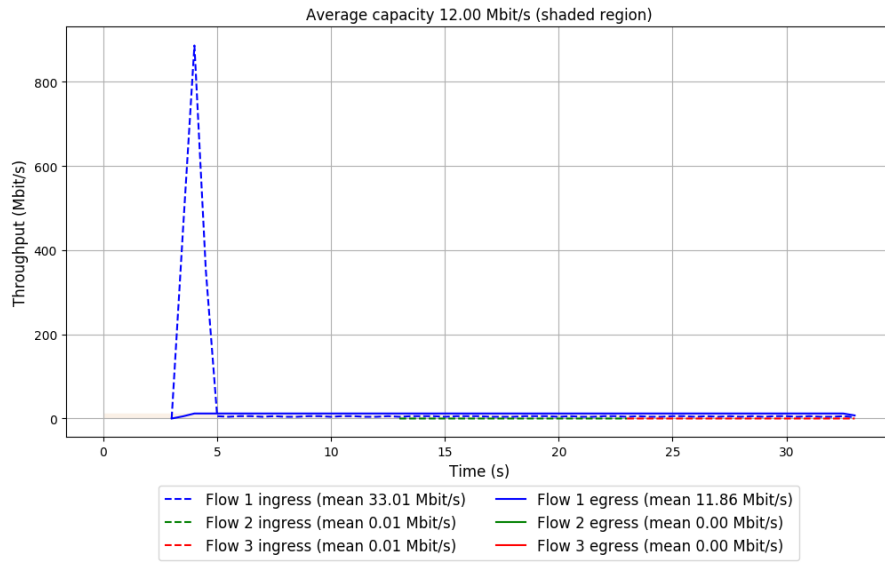
-- Flow 2:

Average throughput: 0.00 Mbit/s

-- Flow 3:

Average throughput: 0.00 Mbit/s

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



Run 9: Statistics of FillP

Start at: 2018-02-27 19:17:56

End at: 2018-02-27 19:18:26

# Below is generated by plot.py at 2018-02-27 19:43:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.84 Mbit/s (98.7% utilization)

95th percentile per-packet one-way delay: 27725.113 ms

Loss rate: 70.92%

-- Flow 1:

Average throughput: 11.84 Mbit/s

95th percentile per-packet one-way delay: 27725.113 ms

Loss rate: 70.91%

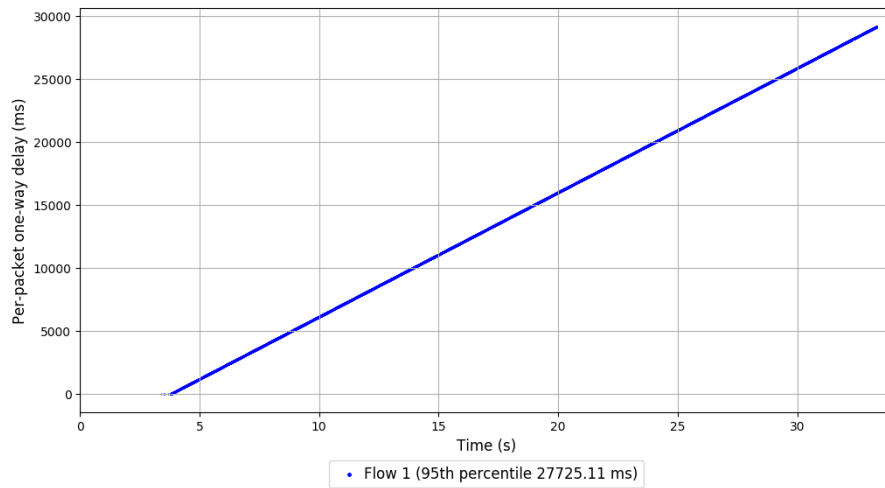
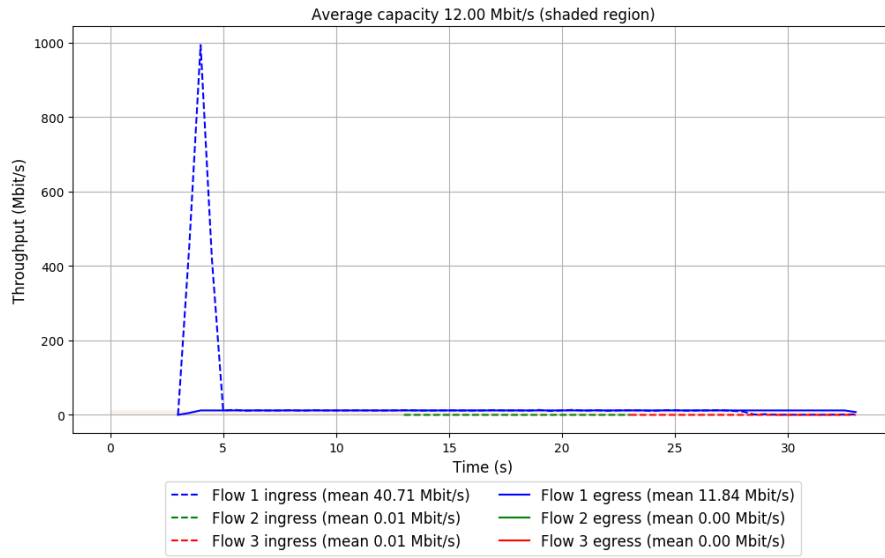
-- Flow 2:

Average throughput: 0.00 Mbit/s

-- Flow 3:

Average throughput: 0.00 Mbit/s

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



Run 10: Statistics of FillP

Start at: 2018-02-27 19:28:10

End at: 2018-02-27 19:28:40

# Below is generated by plot.py at 2018-02-27 19:43:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.85 Mbit/s (98.7% utilization)

95th percentile per-packet one-way delay: 27735.102 ms

Loss rate: 66.01%

-- Flow 1:

Average throughput: 11.85 Mbit/s

95th percentile per-packet one-way delay: 27735.102 ms

Loss rate: 66.00%

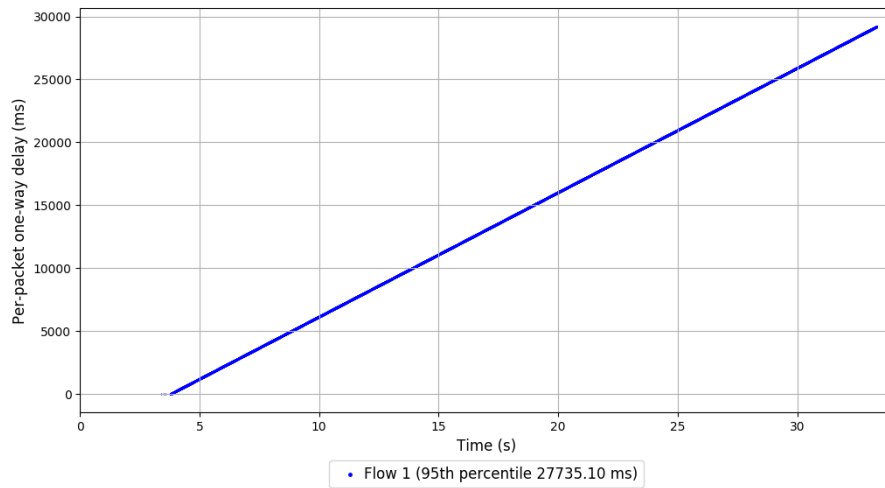
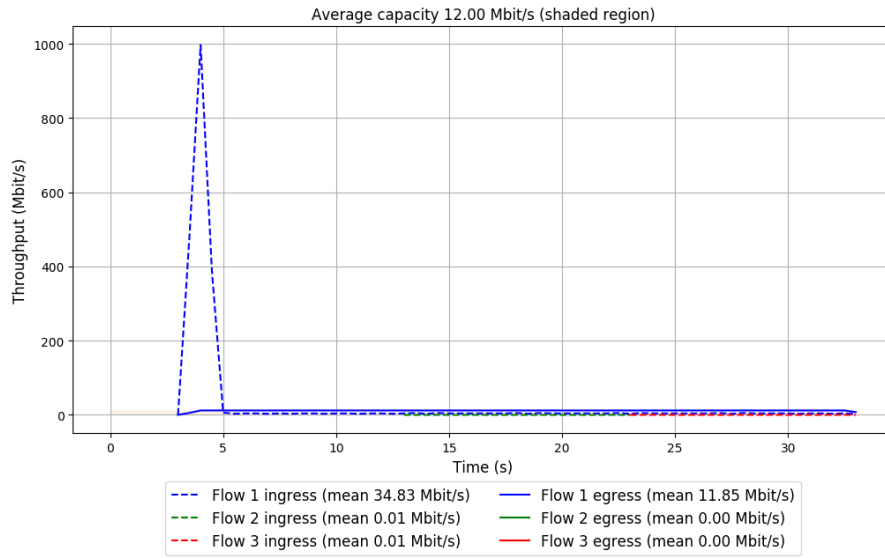
-- Flow 2:

Average throughput: 0.00 Mbit/s

-- Flow 3:

Average throughput: 0.00 Mbit/s

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



Run 1: Statistics of Indigo-1-32

Start at: 2018-02-27 18:03:58

End at: 2018-02-27 18:04:28

# Below is generated by plot.py at 2018-02-27 19:43:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.70 Mbit/s (14.2% utilization)

95th percentile per-packet one-way delay: 25.491 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 0.97 Mbit/s

95th percentile per-packet one-way delay: 24.377 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 26.675 ms

Loss rate: 0.00%

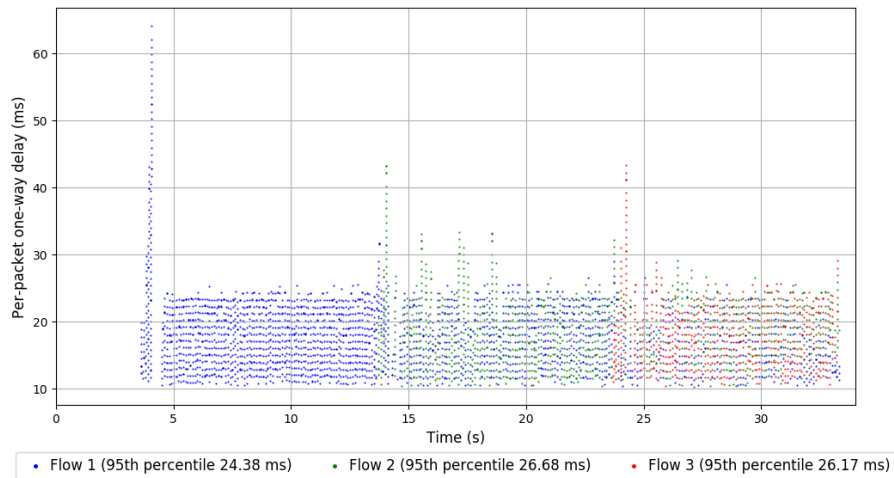
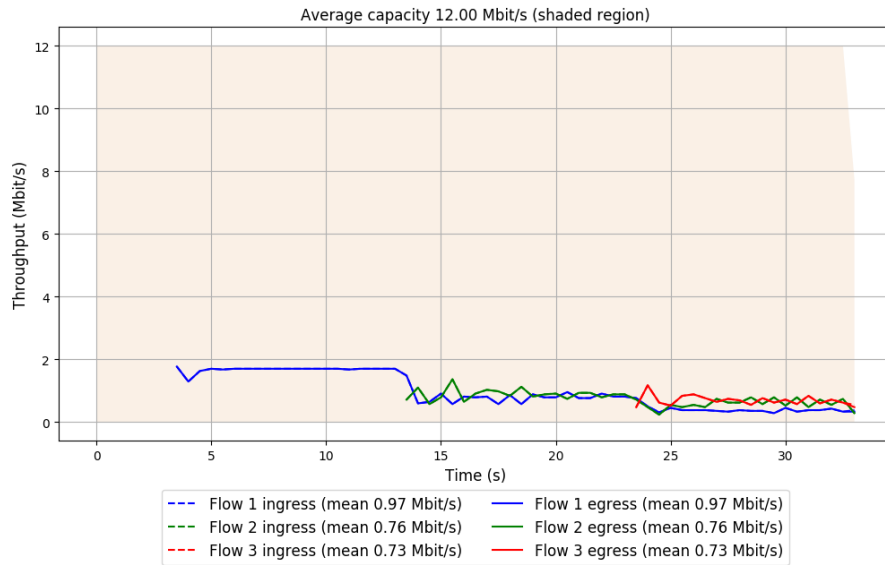
-- Flow 3:

Average throughput: 0.73 Mbit/s

95th percentile per-packet one-way delay: 26.174 ms

Loss rate: 0.52%

# Run 1: Report of Indigo-1-32 — Data Link



Run 2: Statistics of Indigo-1-32

Start at: 2018-02-27 18:14:13

End at: 2018-02-27 18:14:43

# Below is generated by plot.py at 2018-02-27 19:43:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.70 Mbit/s (14.2% utilization)

95th percentile per-packet one-way delay: 24.748 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 24.404 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 0.77 Mbit/s

95th percentile per-packet one-way delay: 24.755 ms

Loss rate: 0.47%

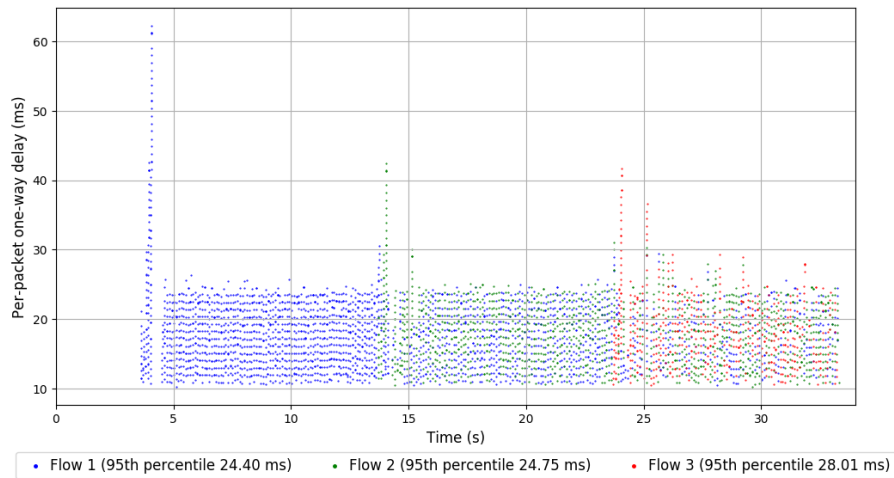
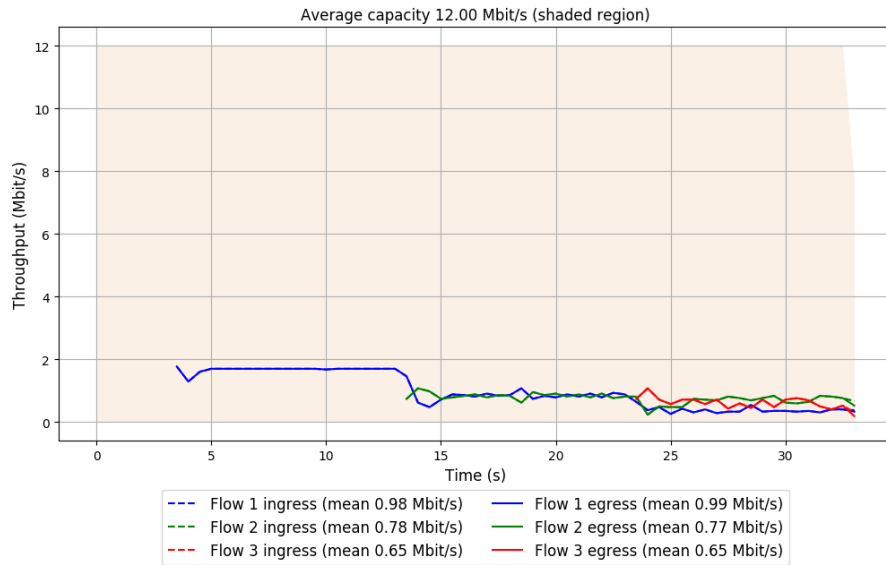
-- Flow 3:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 28.012 ms

Loss rate: 0.96%

## Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-27 18:24:27

End at: 2018-02-27 18:24:57

# Below is generated by plot.py at 2018-02-27 19:43:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.70 Mbit/s (14.2% utilization)

95th percentile per-packet one-way delay: 24.553 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 1.01 Mbit/s

95th percentile per-packet one-way delay: 24.491 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 24.562 ms

Loss rate: 0.47%

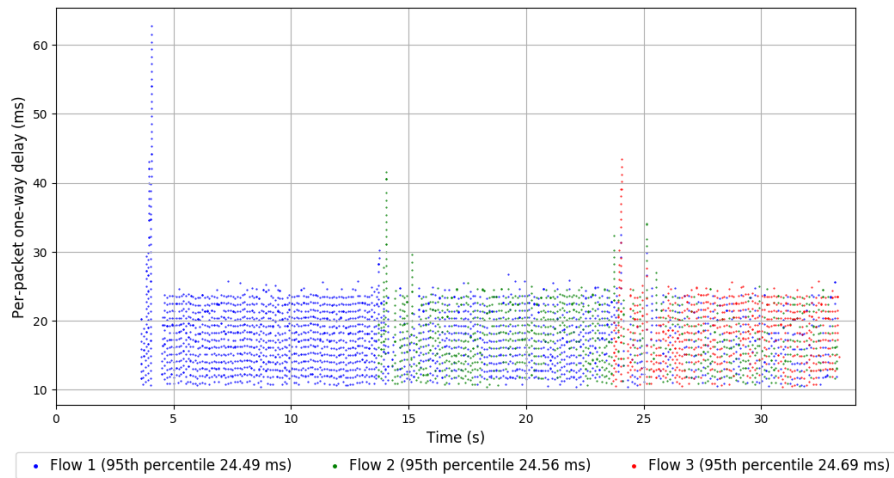
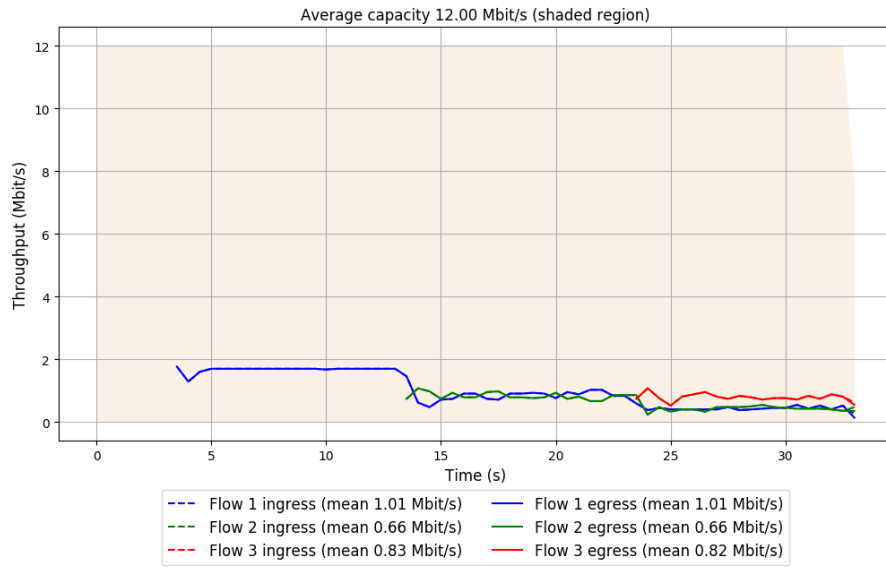
-- Flow 3:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 24.690 ms

Loss rate: 0.45%

### Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-27 18:34:42

End at: 2018-02-27 18:35:12

# Below is generated by plot.py at 2018-02-27 19:43:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.70 Mbit/s (14.2% utilization)

95th percentile per-packet one-way delay: 24.560 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 24.368 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 24.723 ms

Loss rate: 0.27%

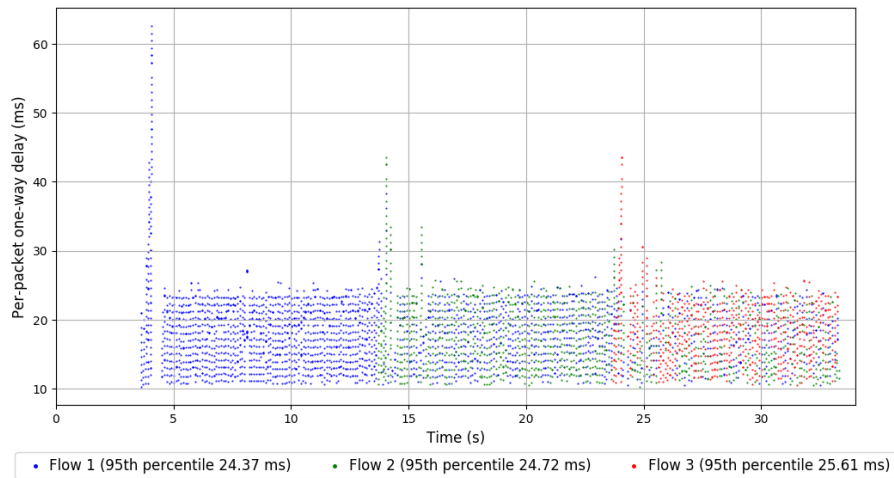
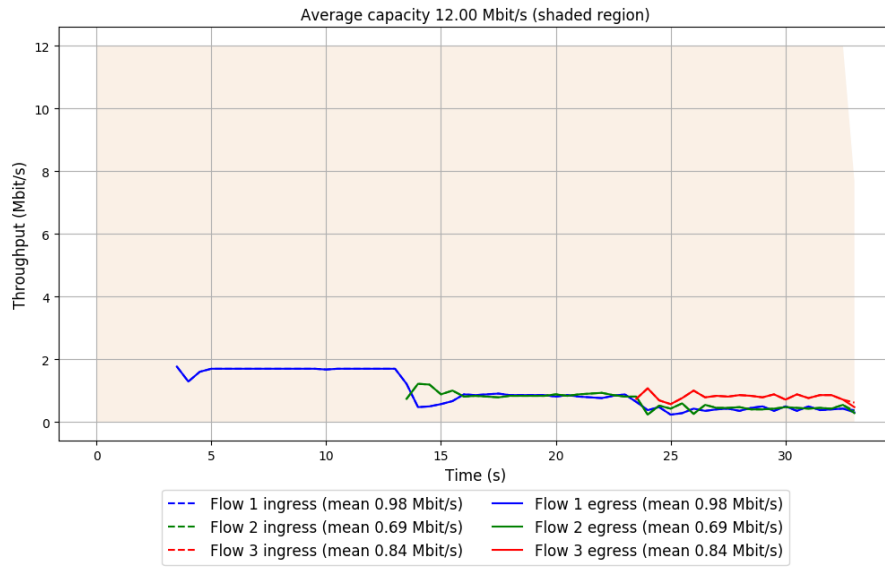
-- Flow 3:

Average throughput: 0.84 Mbit/s

95th percentile per-packet one-way delay: 25.608 ms

Loss rate: 0.89%

### Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-27 18:44:57

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

# Below is generated by plot.py at 2018-02-27 19:43:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.70 Mbit/s (14.2% utilization)

95th percentile per-packet one-way delay: 24.551 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 1.00 Mbit/s

95th percentile per-packet one-way delay: 24.415 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 0.67 Mbit/s

95th percentile per-packet one-way delay: 24.564 ms

Loss rate: 0.45%

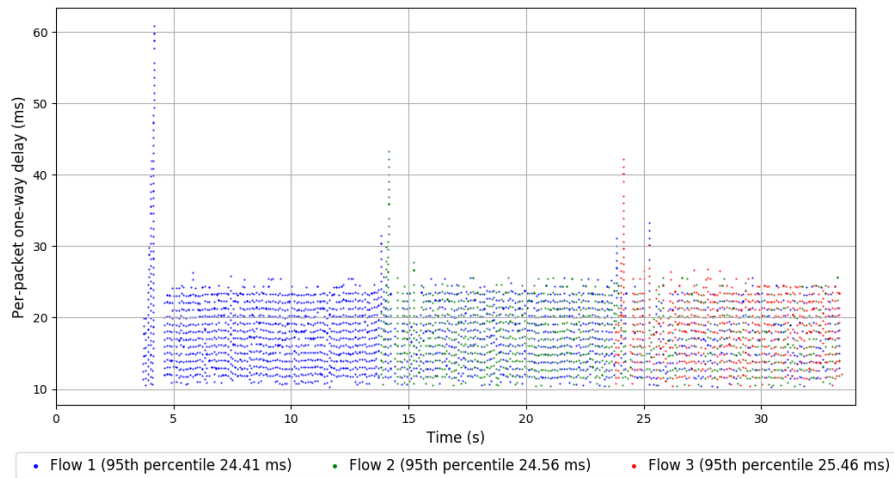
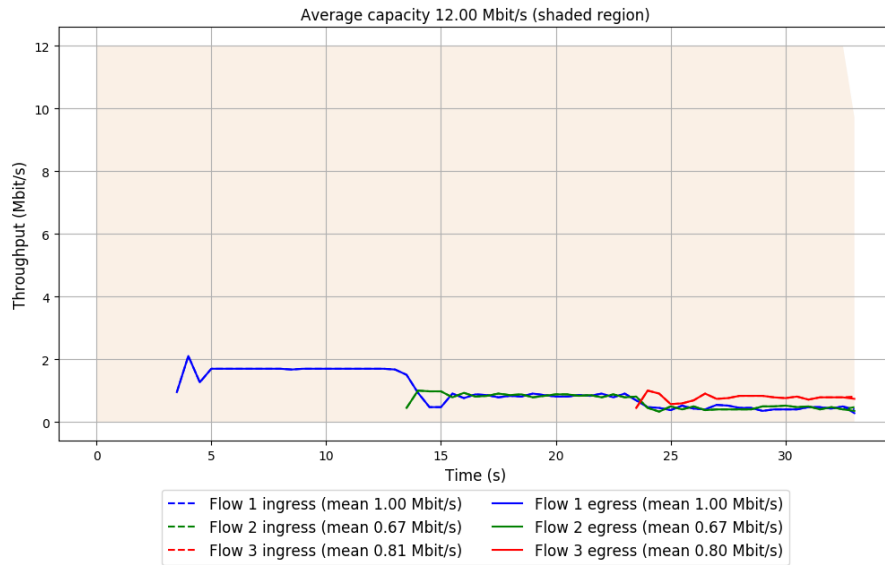
-- Flow 3:

Average throughput: 0.80 Mbit/s

95th percentile per-packet one-way delay: 25.460 ms

Loss rate: 0.47%

### Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-27 18:55:11

End at: 2018-02-27 18:55:41

# Below is generated by plot.py at 2018-02-27 19:43:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.70 Mbit/s (14.2% utilization)

95th percentile per-packet one-way delay: 24.562 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 1.01 Mbit/s

95th percentile per-packet one-way delay: 24.446 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 24.551 ms

Loss rate: 0.28%

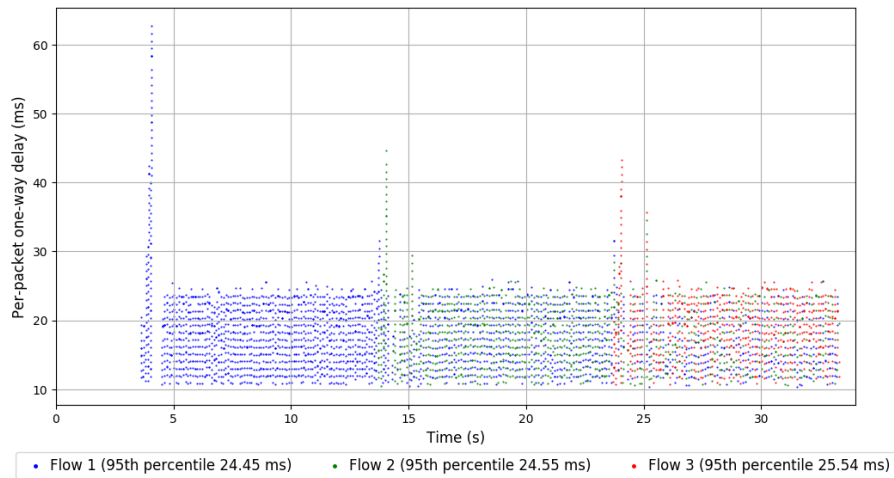
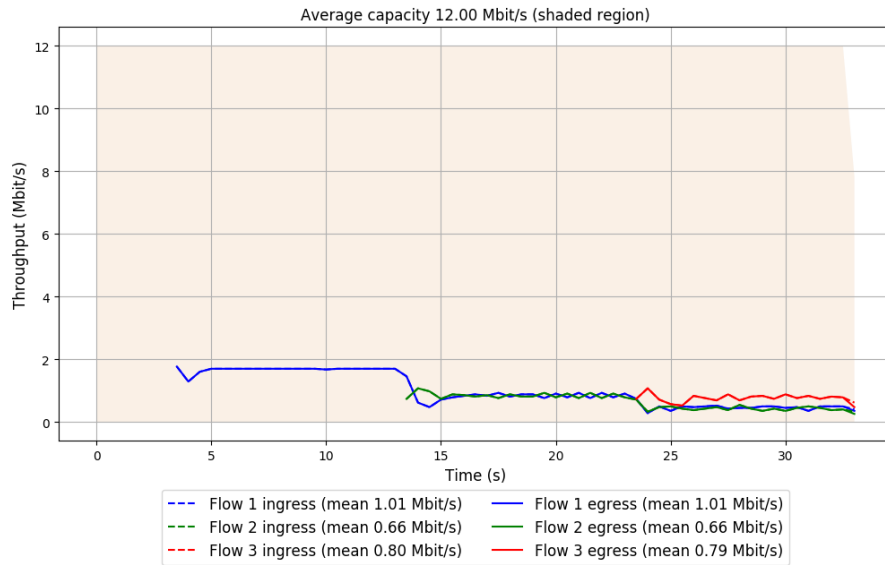
-- Flow 3:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 25.536 ms

Loss rate: 0.93%

### Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-27 19:05:25

End at: 2018-02-27 19:05:55

# Below is generated by plot.py at 2018-02-27 19:43:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.70 Mbit/s (14.2% utilization)

95th percentile per-packet one-way delay: 24.557 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 1.01 Mbit/s

95th percentile per-packet one-way delay: 24.415 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 24.573 ms

Loss rate: 0.28%

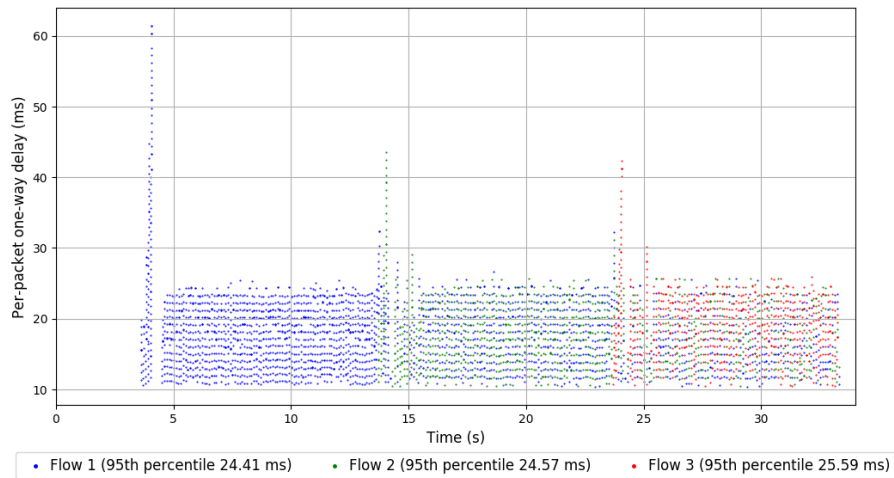
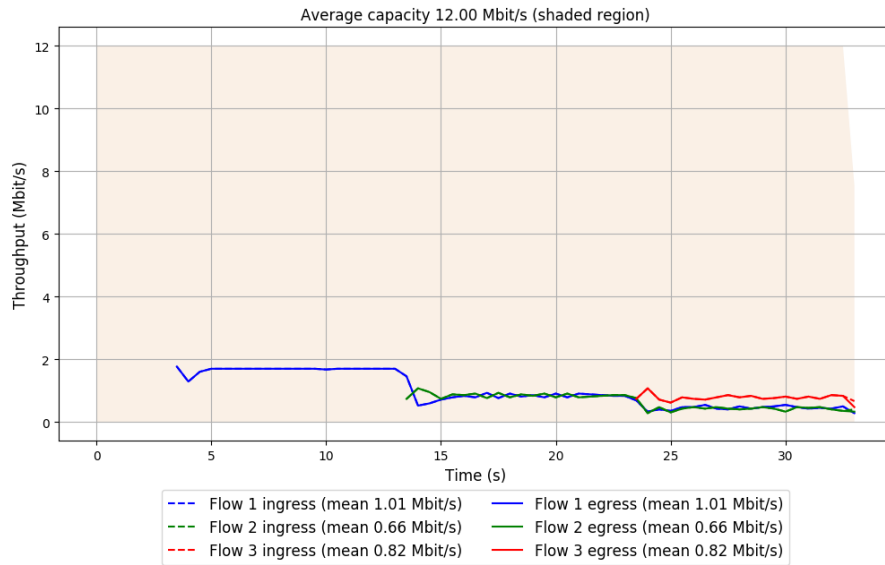
-- Flow 3:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 25.588 ms

Loss rate: 1.22%

### Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-27 19:15:39

End at: 2018-02-27 19:16:09

# Below is generated by plot.py at 2018-02-27 19:43:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.70 Mbit/s (14.2% utilization)

95th percentile per-packet one-way delay: 24.720 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 24.474 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 0.71 Mbit/s

95th percentile per-packet one-way delay: 25.138 ms

Loss rate: 0.35%

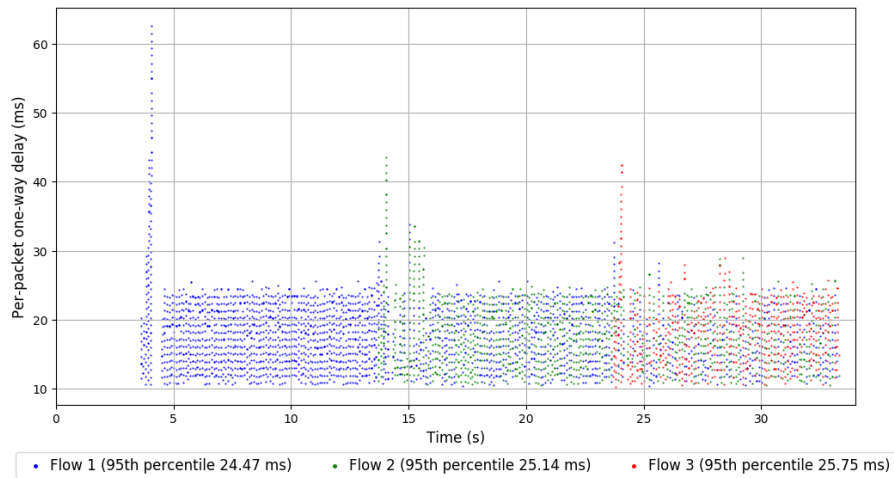
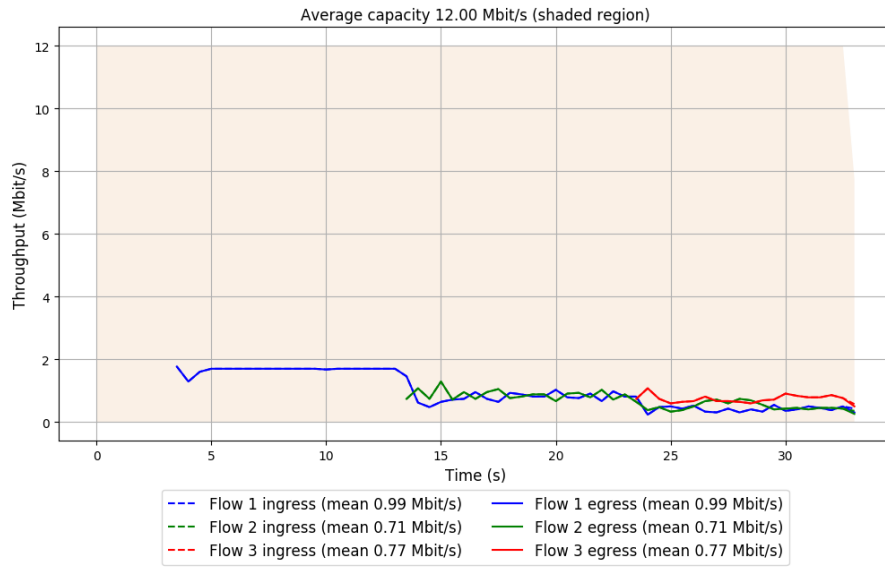
-- Flow 3:

Average throughput: 0.77 Mbit/s

95th percentile per-packet one-way delay: 25.748 ms

Loss rate: 0.48%

### Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-27 19:25:53

End at: 2018-02-27 19:26:23

# Below is generated by plot.py at 2018-02-27 19:43:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.70 Mbit/s (14.2% utilization)

95th percentile per-packet one-way delay: 25.450 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 1.00 Mbit/s

95th percentile per-packet one-way delay: 24.513 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 0.74 Mbit/s

95th percentile per-packet one-way delay: 26.465 ms

Loss rate: 0.17%

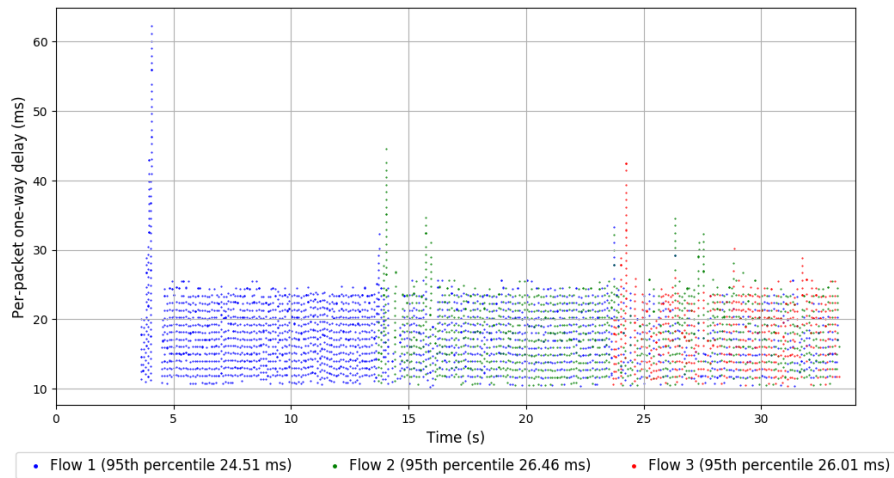
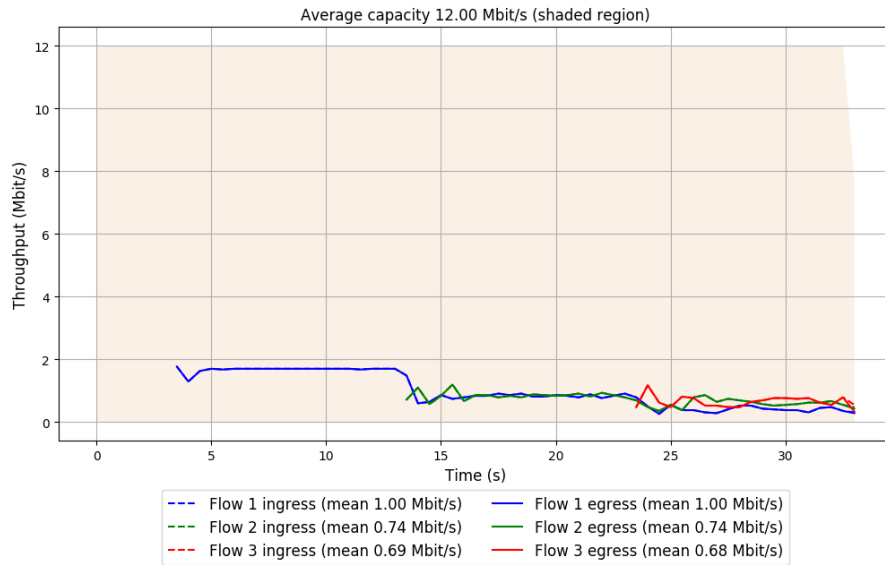
-- Flow 3:

Average throughput: 0.68 Mbit/s

95th percentile per-packet one-way delay: 26.012 ms

Loss rate: 1.63%

### Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-27 19:36:08

End at: 2018-02-27 19:36:38

# Below is generated by plot.py at 2018-02-27 19:43:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.70 Mbit/s (14.2% utilization)

95th percentile per-packet one-way delay: 24.638 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 1.00 Mbit/s

95th percentile per-packet one-way delay: 24.462 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 0.68 Mbit/s

95th percentile per-packet one-way delay: 24.935 ms

Loss rate: 0.45%

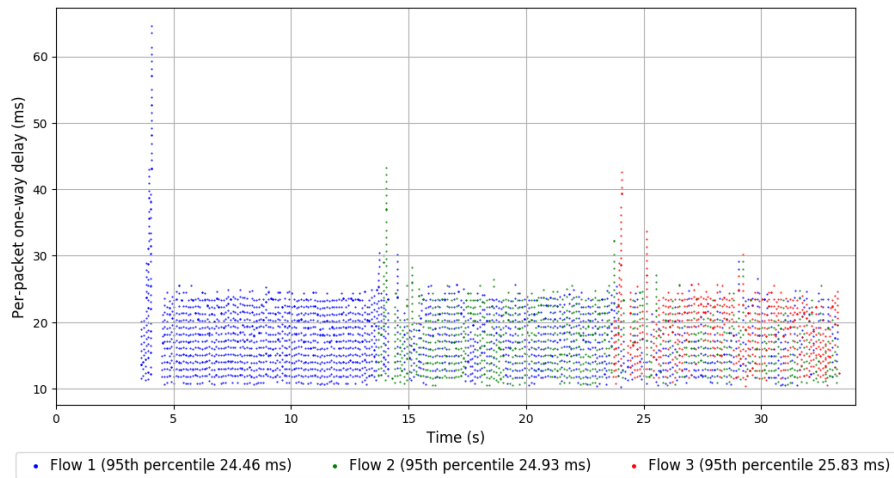
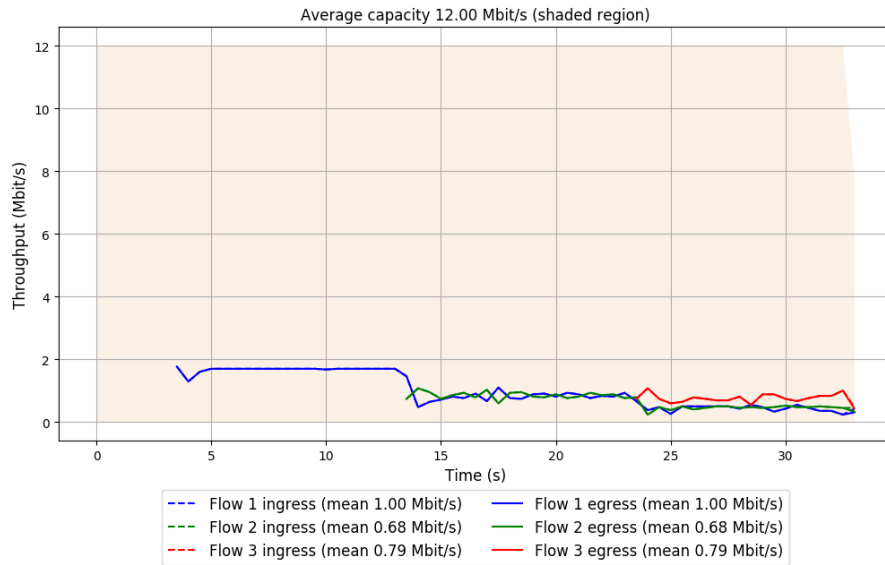
-- Flow 3:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 25.831 ms

Loss rate: 0.32%

# Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-02-27 18:04:32

End at: 2018-02-27 18:05:02

# Below is generated by plot.py at 2018-02-27 19:43:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.46 Mbit/s (12.1% utilization)

95th percentile per-packet one-way delay: 12.177 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 12.177 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.115 ms

Loss rate: 0.00%

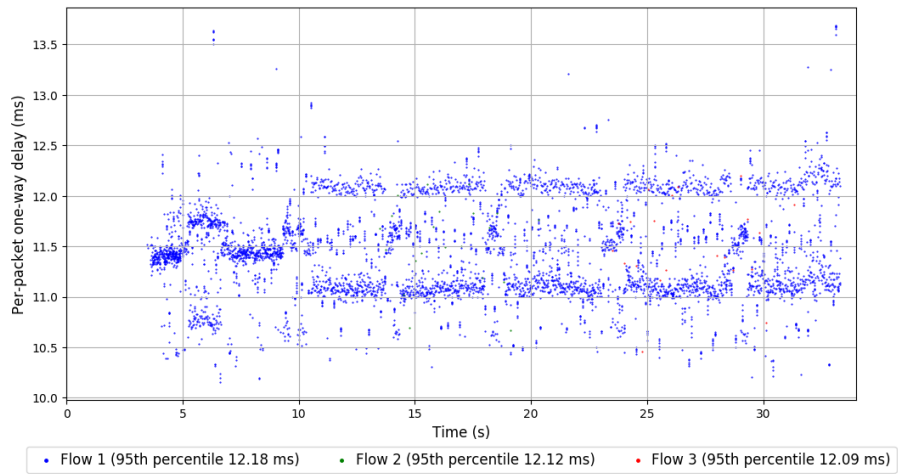
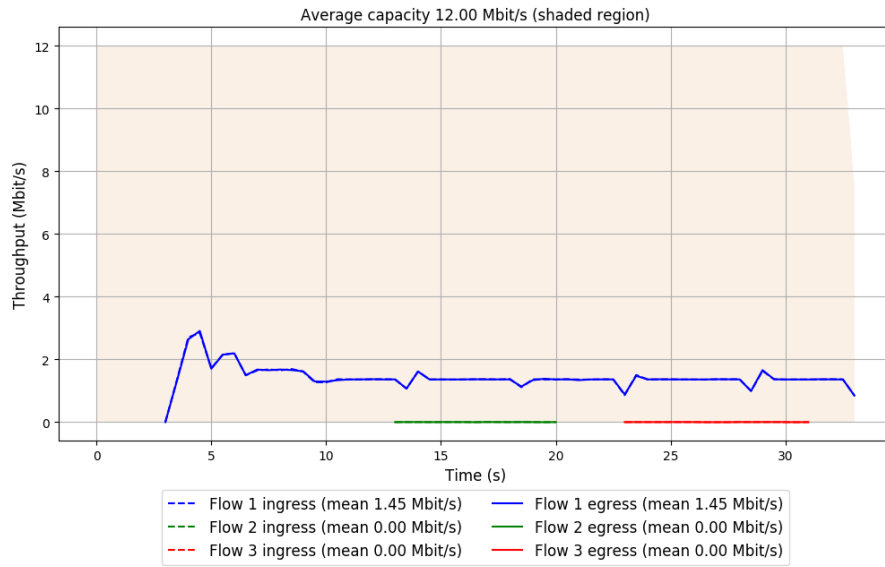
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.086 ms

Loss rate: 0.00%

# Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-27 18:14:47

End at: 2018-02-27 18:15:17

# Below is generated by plot.py at 2018-02-27 19:43:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.45 Mbit/s (12.1% utilization)

95th percentile per-packet one-way delay: 12.239 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 12.237 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 13.481 ms

Loss rate: 0.00%

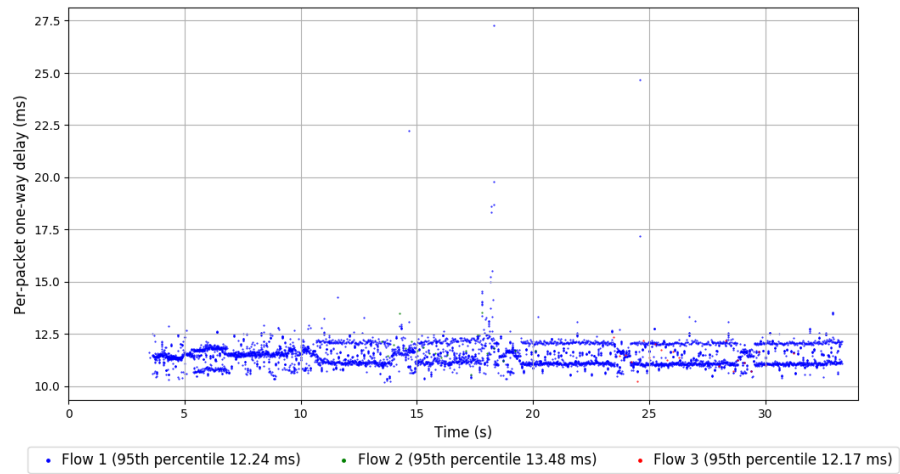
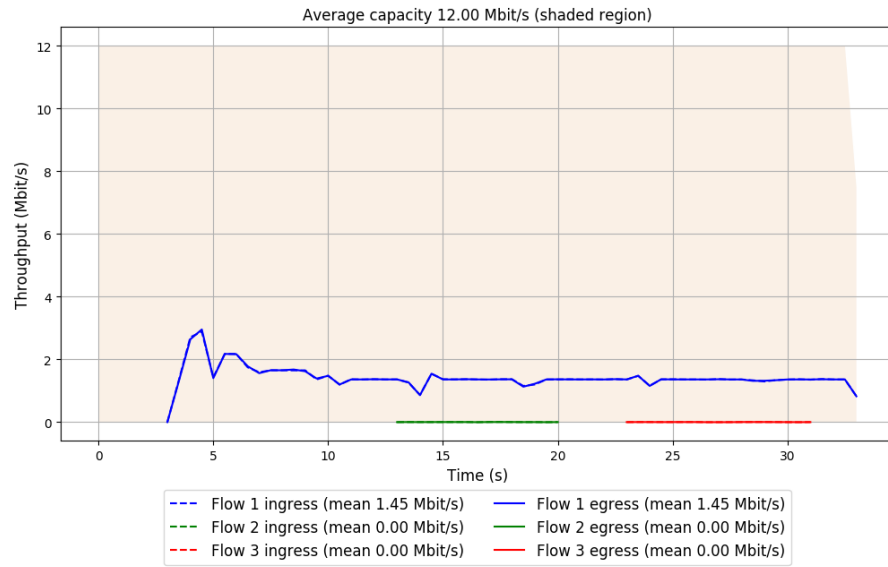
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.174 ms

Loss rate: 0.00%

## Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-27 18:25:01

End at: 2018-02-27 18:25:31

# Below is generated by plot.py at 2018-02-27 19:43:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.42 Mbit/s (11.8% utilization)

95th percentile per-packet one-way delay: 12.099 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 12.099 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.169 ms

Loss rate: 0.00%

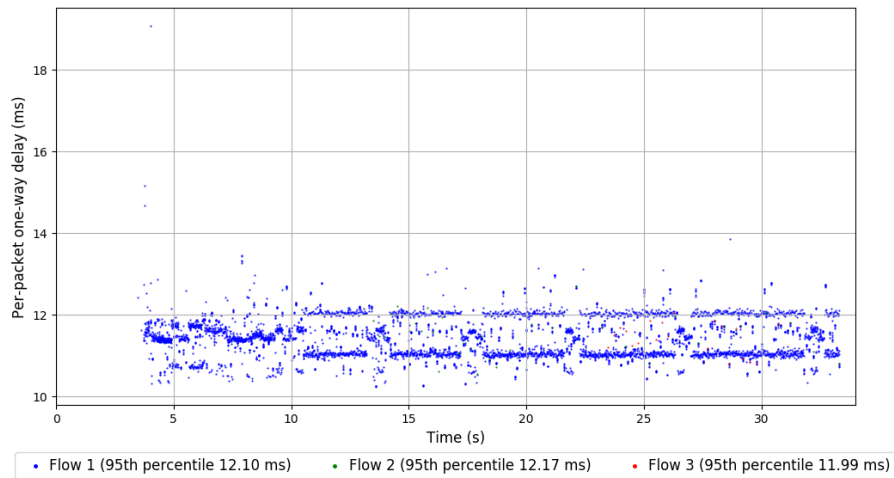
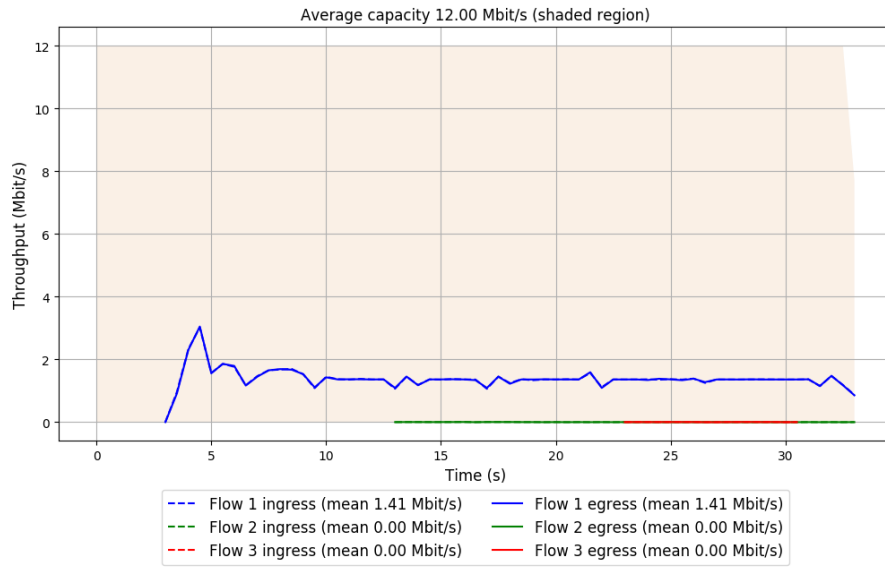
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.995 ms

Loss rate: 0.00%

### Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-27 18:35:16

End at: 2018-02-27 18:35:46

# Below is generated by plot.py at 2018-02-27 19:43:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.42 Mbit/s (11.9% utilization)

95th percentile per-packet one-way delay: 12.149 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 12.148 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.204 ms

Loss rate: 0.00%

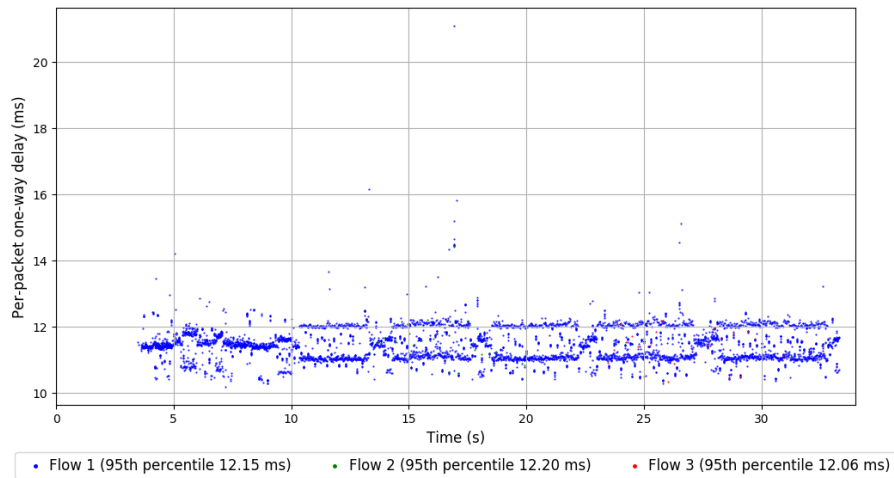
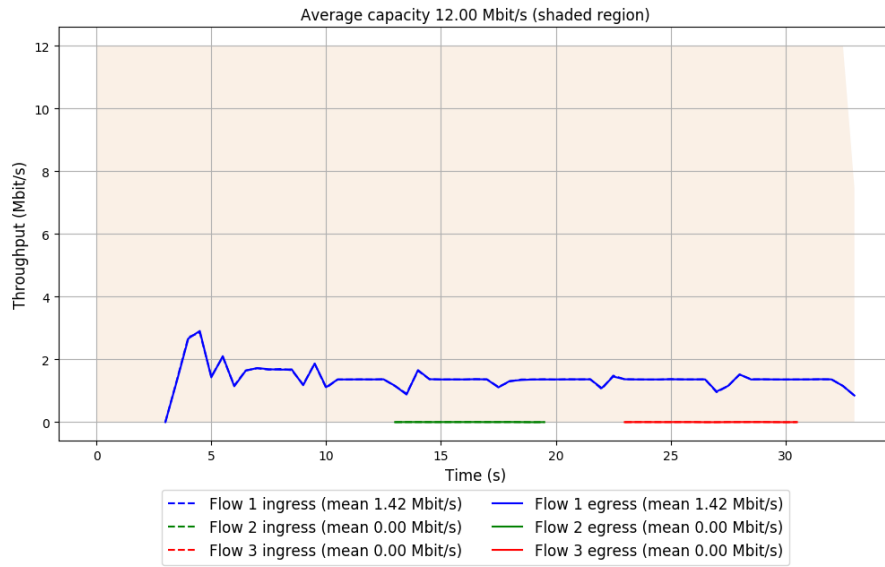
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.061 ms

Loss rate: 0.00%

### Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-27 18:45:31

End at: 2018-02-27 18:46:01

# Below is generated by plot.py at 2018-02-27 19:43:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.41 Mbit/s (11.8% utilization)

95th percentile per-packet one-way delay: 12.101 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 12.101 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.106 ms

Loss rate: 0.00%

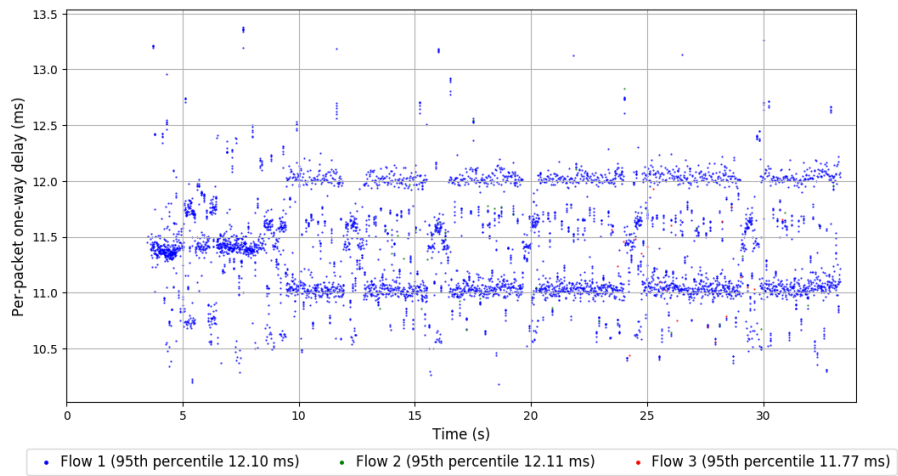
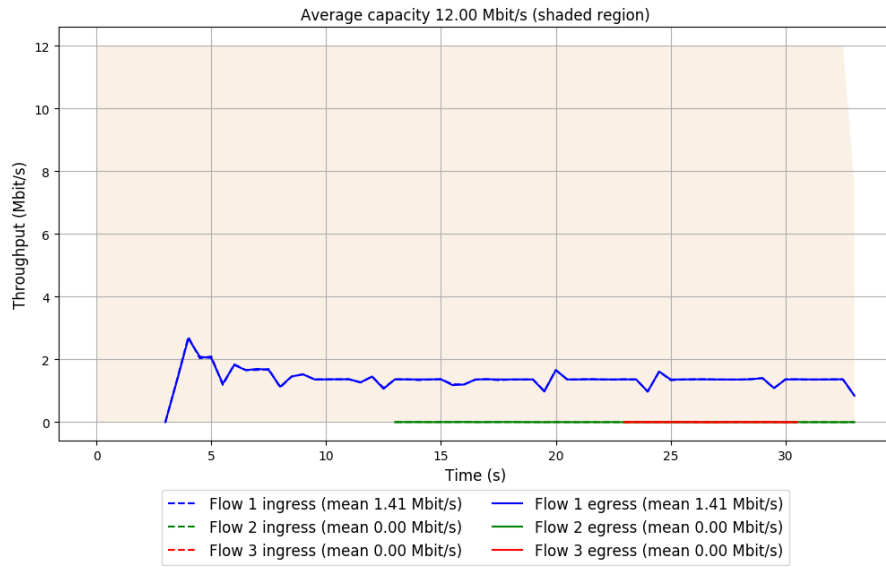
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.774 ms

Loss rate: 0.00%

### Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-27 18:55:45

End at: 2018-02-27 18:56:15

# Below is generated by plot.py at 2018-02-27 19:43:05

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.42 Mbit/s (11.9% utilization)

95th percentile per-packet one-way delay: 12.150 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 12.149 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.238 ms

Loss rate: 0.00%

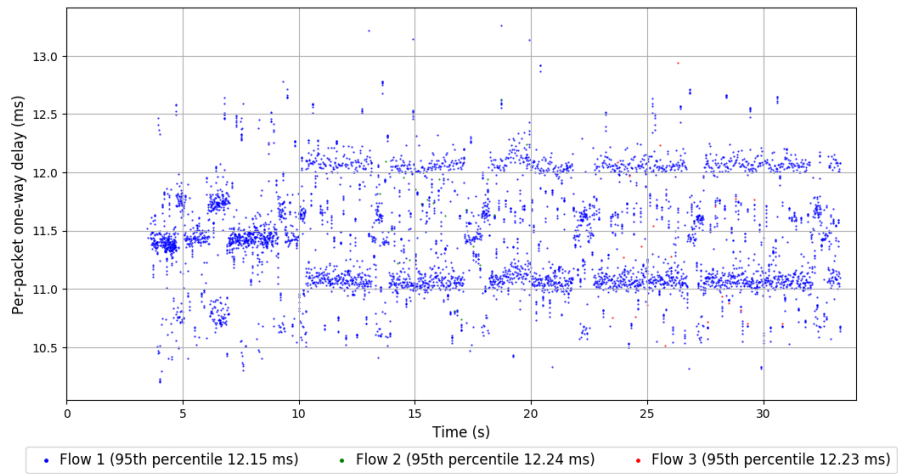
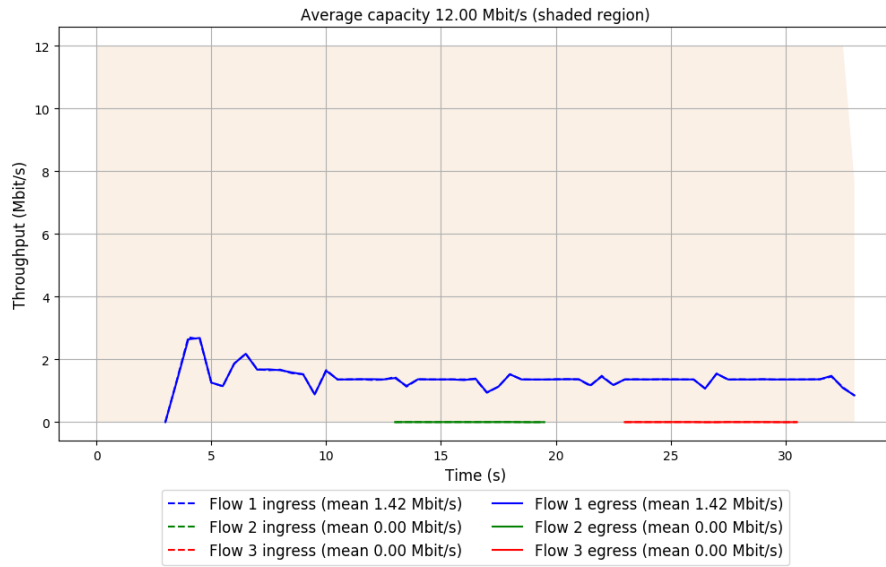
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.230 ms

Loss rate: 0.00%

## Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-27 19:05:59

End at: 2018-02-27 19:06:29

# Below is generated by plot.py at 2018-02-27 19:43:08

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.44 Mbit/s (12.0% utilization)

95th percentile per-packet one-way delay: 12.183 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 12.186 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.968 ms

Loss rate: 0.00%

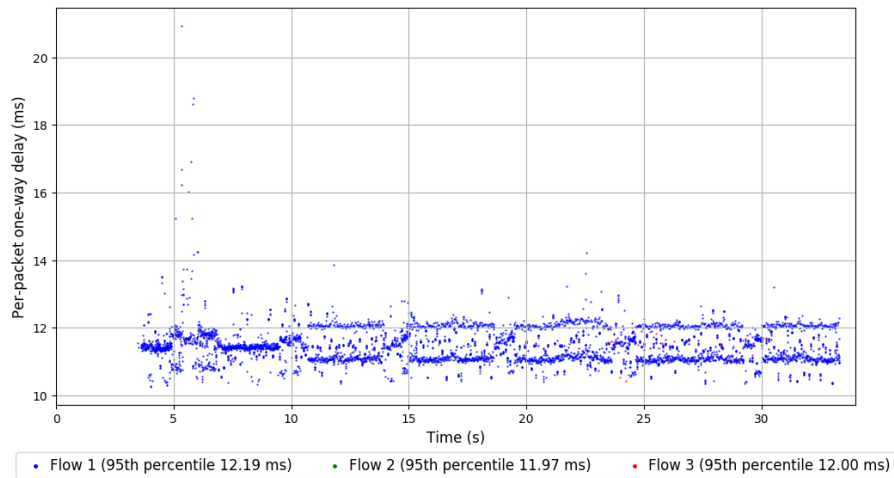
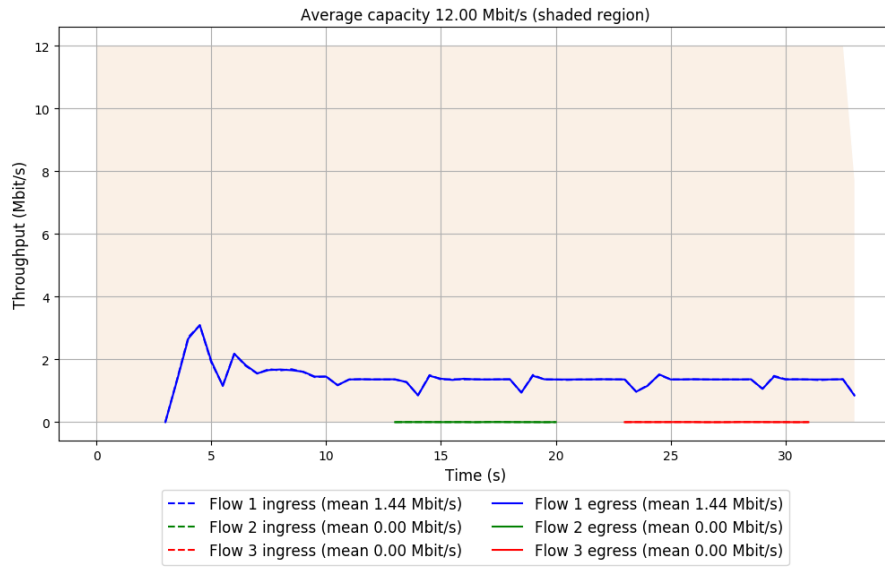
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.002 ms

Loss rate: 0.00%

### Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-27 19:16:13

End at: 2018-02-27 19:16:43

# Below is generated by plot.py at 2018-02-27 19:43:09

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.43 Mbit/s (11.9% utilization)

95th percentile per-packet one-way delay: 12.267 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 12.265 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 13.009 ms

Loss rate: 0.00%

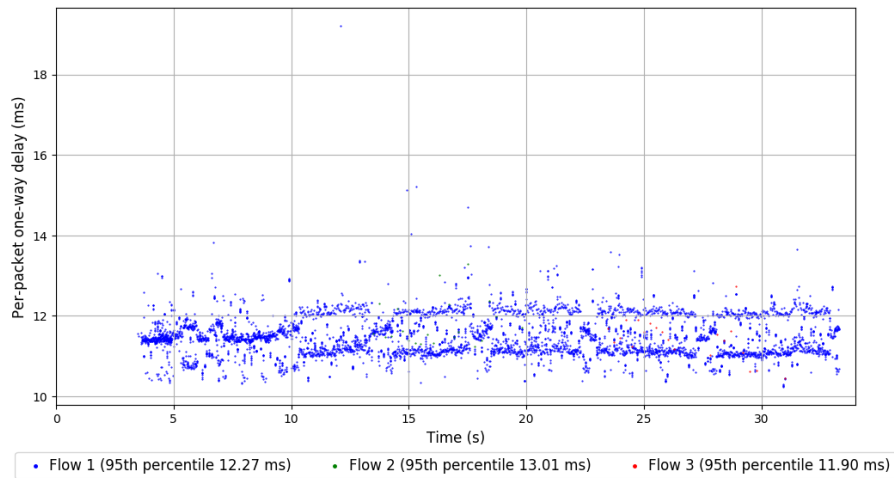
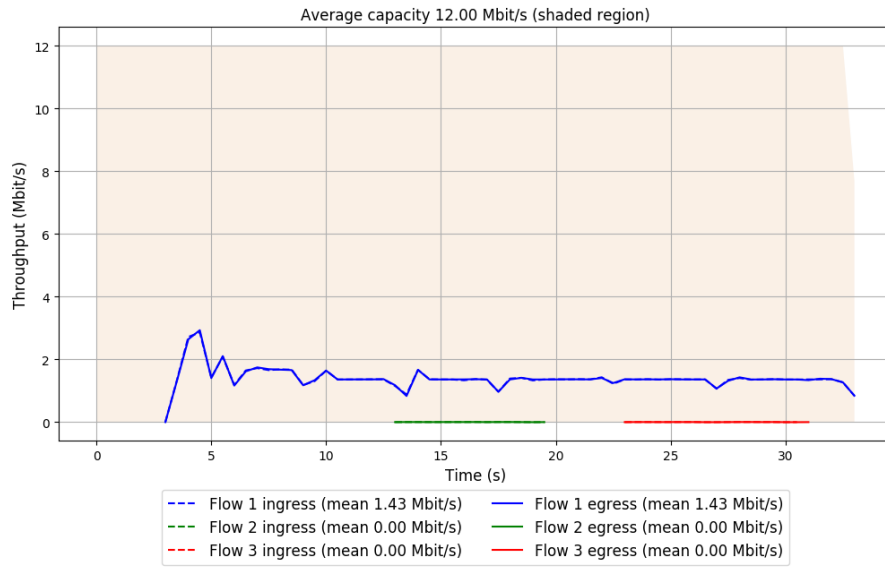
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.902 ms

Loss rate: 0.00%

### Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

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

End at: 2018-02-27 19:26:57

# Below is generated by plot.py at 2018-02-27 19:43:10

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.42 Mbit/s (11.9% utilization)

95th percentile per-packet one-way delay: 12.084 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 12.085 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.909 ms

Loss rate: 0.00%

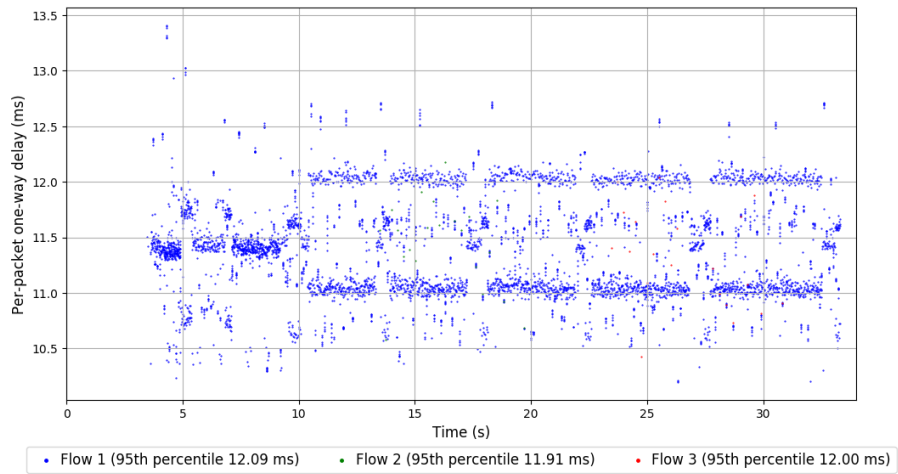
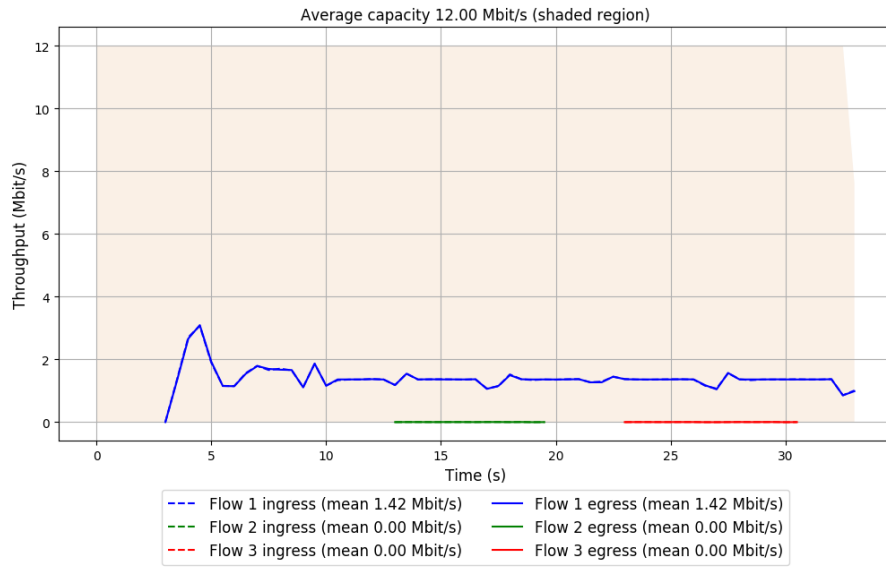
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.998 ms

Loss rate: 0.00%

### Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-27 19:36:42

End at: 2018-02-27 19:37:12

# Below is generated by plot.py at 2018-02-27 19:43:10

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.42 Mbit/s (11.9% utilization)

95th percentile per-packet one-way delay: 12.184 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 12.184 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.003 ms

Loss rate: 0.00%

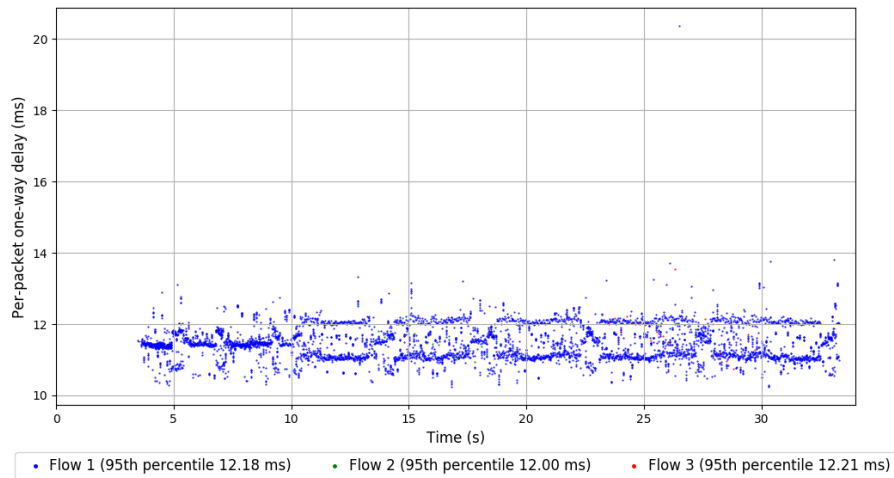
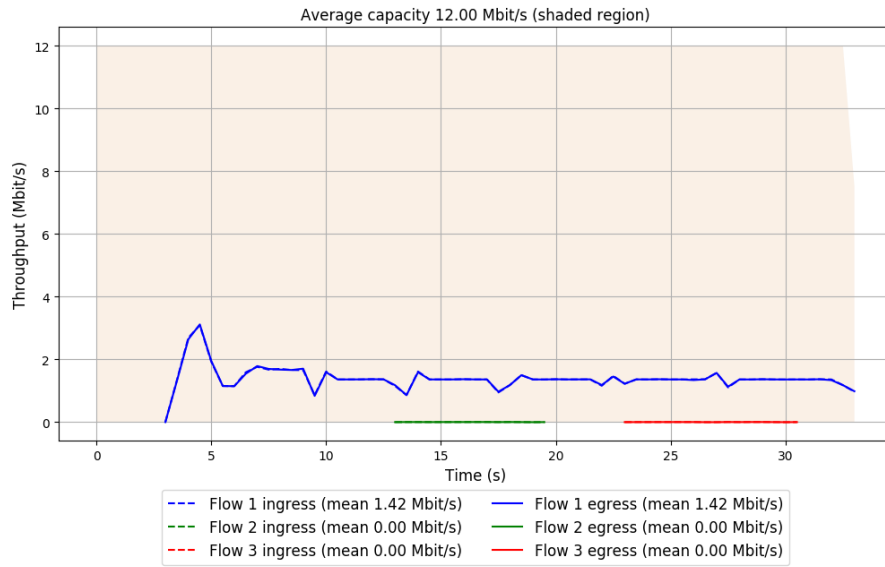
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.206 ms

Loss rate: 0.00%

### Run 10: Report of Vivace-latency — Data Link



Run 1: Statistics of Vivace-loss

Start at: 2018-02-27 18:05:06

End at: 2018-02-27 18:05:36

# Below is generated by plot.py at 2018-02-27 19:43:21

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.91 Mbit/s (90.9% utilization)

95th percentile per-packet one-way delay: 5907.323 ms

Loss rate: 34.79%

-- Flow 1:

Average throughput: 10.91 Mbit/s

95th percentile per-packet one-way delay: 5906.934 ms

Loss rate: 34.80%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 706.333 ms

Loss rate: 0.00%

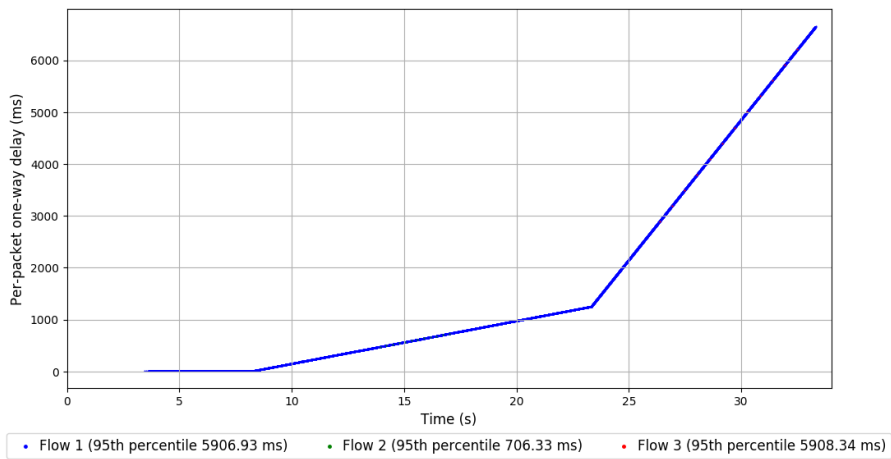
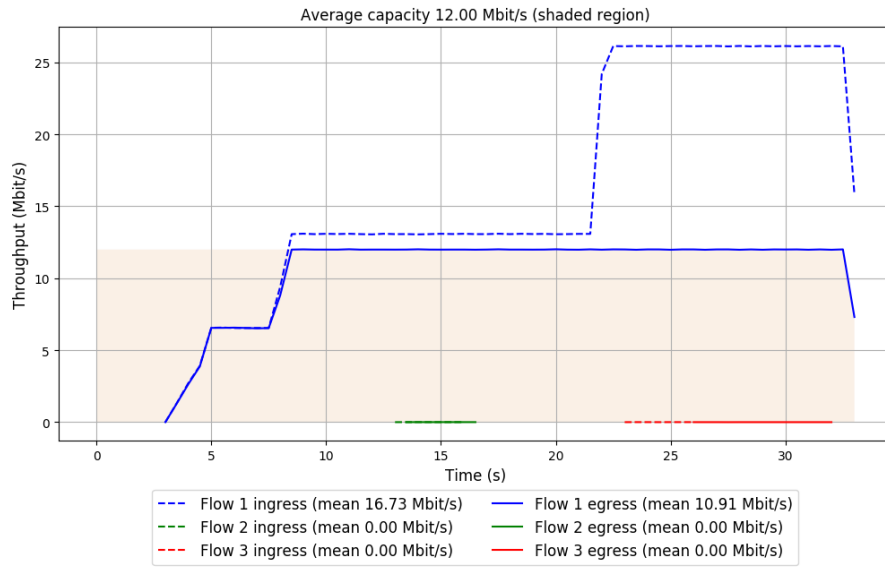
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 5908.342 ms

Loss rate: 0.00%

### Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-02-27 18:15:21

End at: 2018-02-27 18:15:51

# Below is generated by plot.py at 2018-02-27 19:43:24

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.91 Mbit/s (90.9% utilization)

95th percentile per-packet one-way delay: 5911.389 ms

Loss rate: 34.80%

-- Flow 1:

Average throughput: 10.91 Mbit/s

95th percentile per-packet one-way delay: 5910.709 ms

Loss rate: 34.80%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 708.172 ms

Loss rate: 0.00%

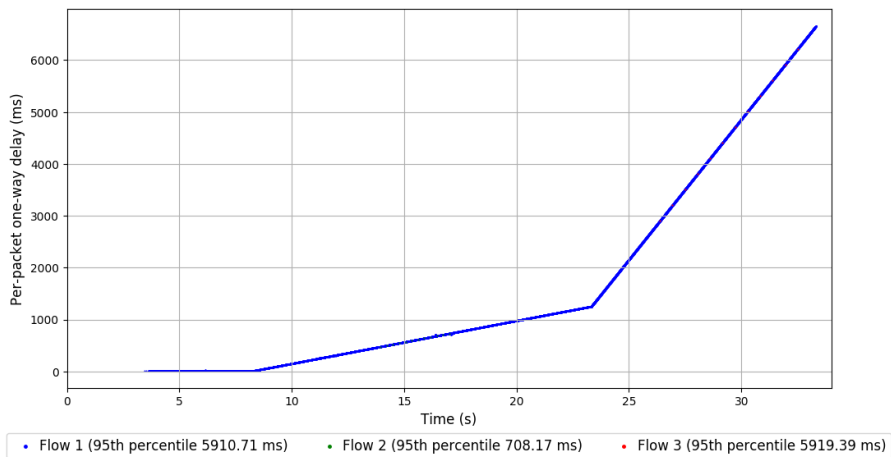
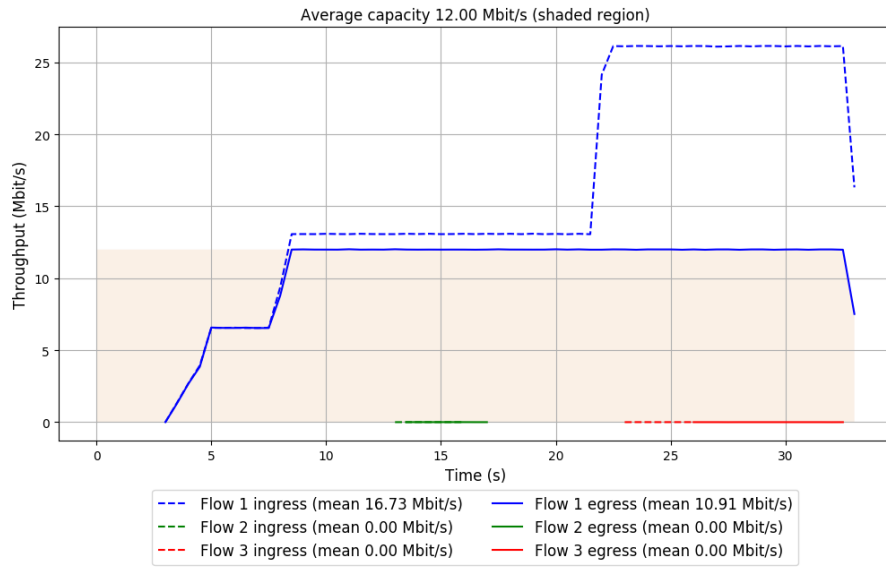
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 5919.388 ms

Loss rate: 0.00%

## Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-27 18:25:35

End at: 2018-02-27 18:26:05

# Below is generated by plot.py at 2018-02-27 19:43:29

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.91 Mbit/s (90.9% utilization)

95th percentile per-packet one-way delay: 5753.676 ms

Loss rate: 34.26%

-- Flow 1:

Average throughput: 10.90 Mbit/s

95th percentile per-packet one-way delay: 5753.676 ms

Loss rate: 34.26%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 708.597 ms

Loss rate: 0.00%

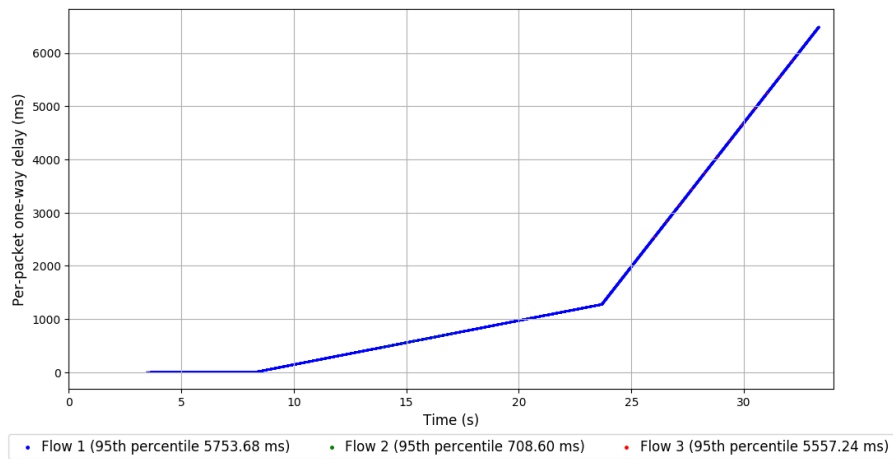
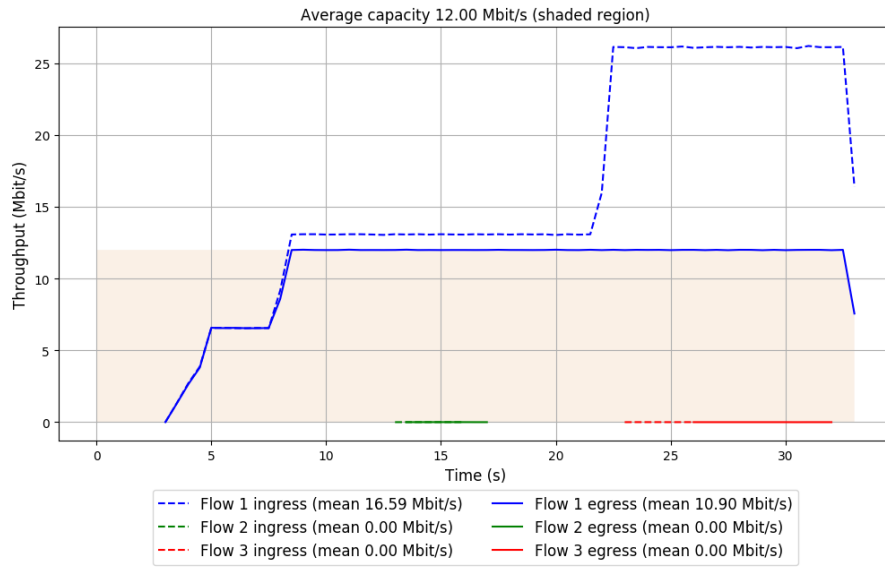
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 5557.240 ms

Loss rate: 0.00%

### Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-27 18:35:50

End at: 2018-02-27 18:36:20

# Below is generated by plot.py at 2018-02-27 19:43:30

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.05 Mbit/s (92.1% utilization)

95th percentile per-packet one-way delay: 7513.718 ms

Loss rate: 39.56%

-- Flow 1:

Average throughput: 11.05 Mbit/s

95th percentile per-packet one-way delay: 7512.418 ms

Loss rate: 39.56%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 780.634 ms

Loss rate: 0.00%

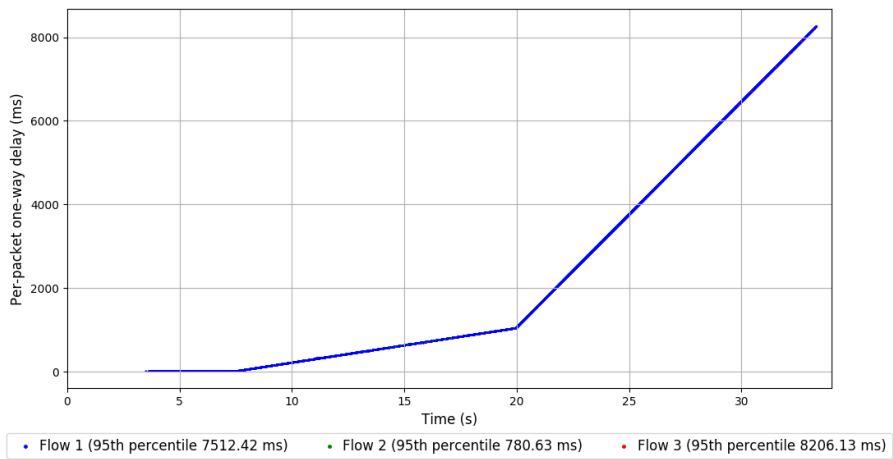
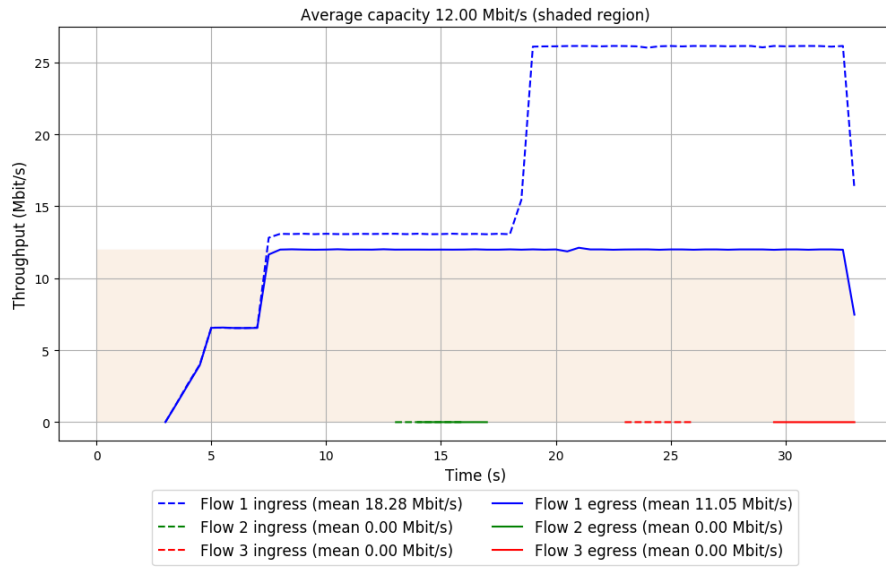
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 8206.127 ms

Loss rate: 41.67%

### Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-27 18:46:05

End at: 2018-02-27 18:46:35

# Below is generated by plot.py at 2018-02-27 19:43:32

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.96 Mbit/s (91.3% utilization)

95th percentile per-packet one-way delay: 6499.381 ms

Loss rate: 36.65%

-- Flow 1:

Average throughput: 10.96 Mbit/s

95th percentile per-packet one-way delay: 6498.315 ms

Loss rate: 36.65%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 732.645 ms

Loss rate: 0.00%

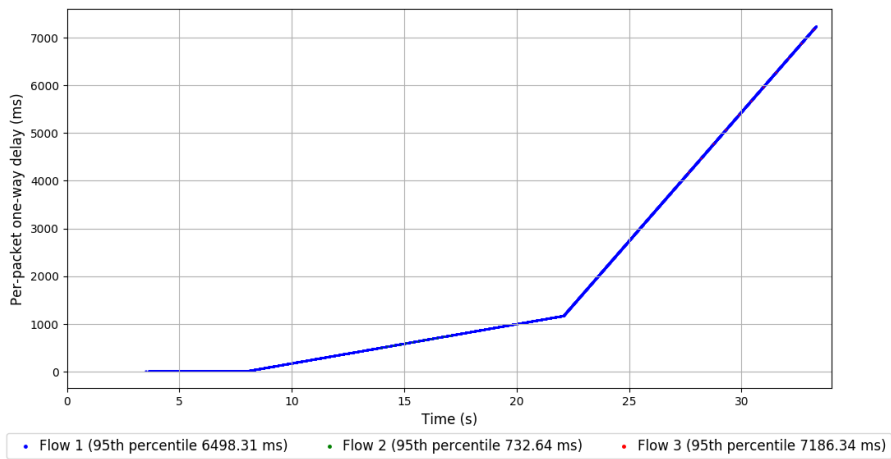
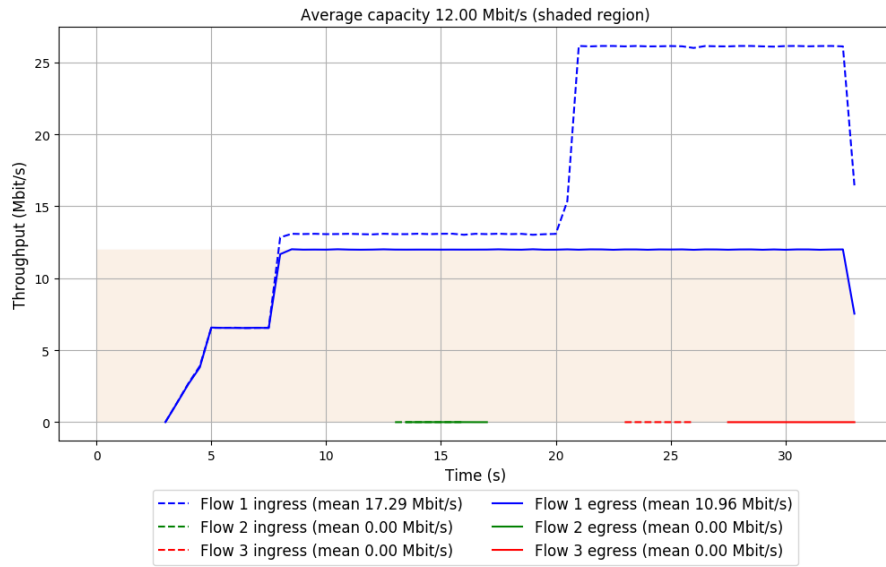
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 7186.342 ms

Loss rate: 8.33%

### Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-27 18:56:19

End at: 2018-02-27 18:56:49

# Below is generated by plot.py at 2018-02-27 19:43:32

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.91 Mbit/s (90.9% utilization)

95th percentile per-packet one-way delay: 5903.468 ms

Loss rate: 34.78%

-- Flow 1:

Average throughput: 10.91 Mbit/s

95th percentile per-packet one-way delay: 5903.072 ms

Loss rate: 34.78%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 708.759 ms

Loss rate: 0.00%

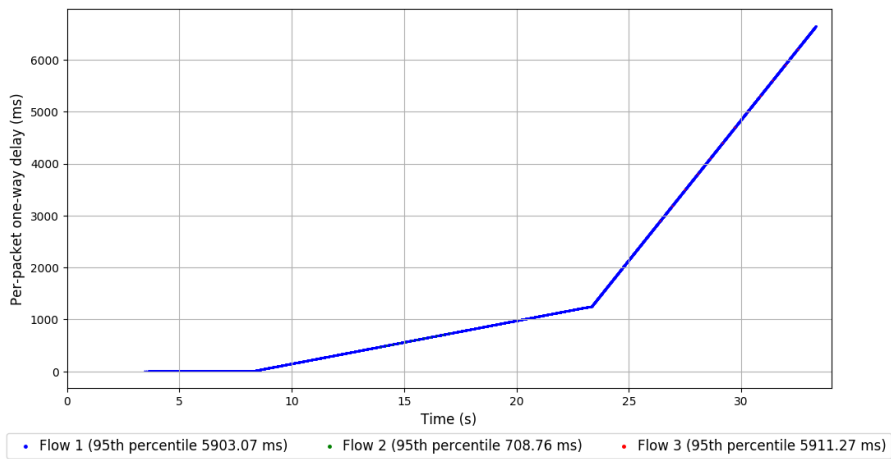
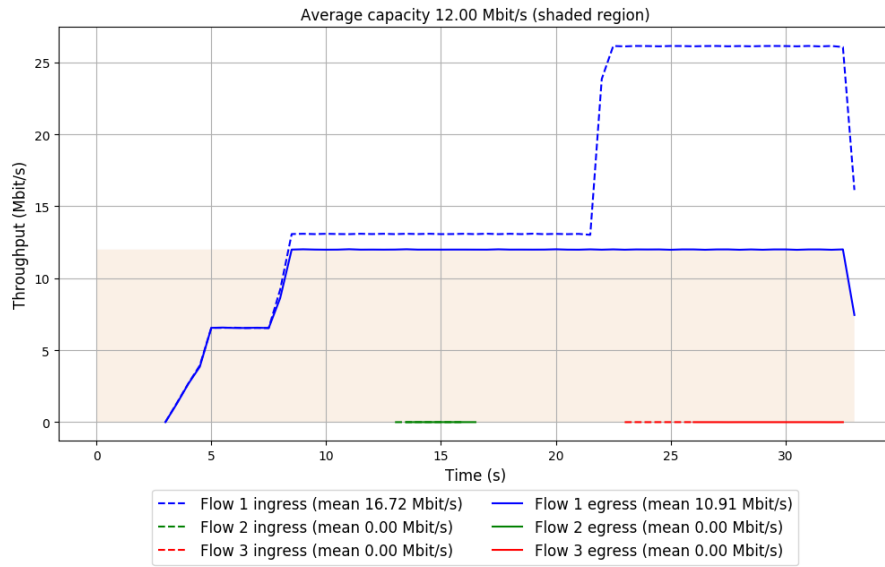
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 5911.267 ms

Loss rate: 0.00%

### Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-27 19:06:33

End at: 2018-02-27 19:07:03

# Below is generated by plot.py at 2018-02-27 19:43:32

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.91 Mbit/s (90.9% utilization)

95th percentile per-packet one-way delay: 5903.588 ms

Loss rate: 34.77%

-- Flow 1:

Average throughput: 10.91 Mbit/s

95th percentile per-packet one-way delay: 5903.588 ms

Loss rate: 34.77%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 710.571 ms

Loss rate: 0.00%

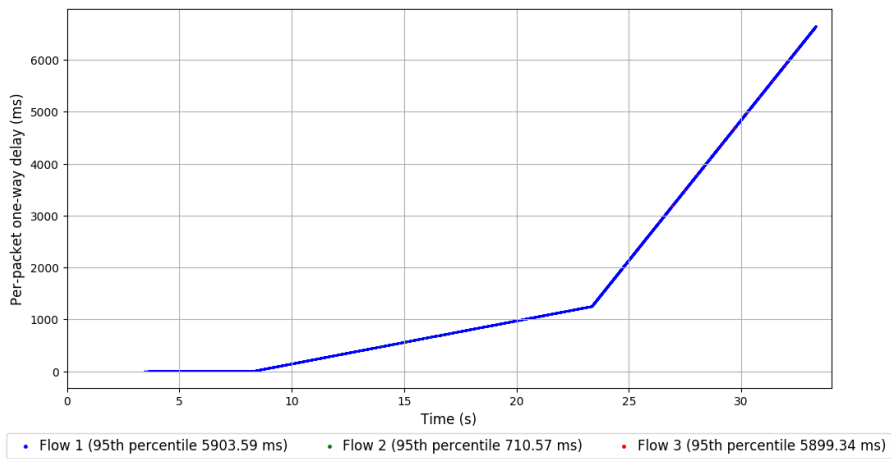
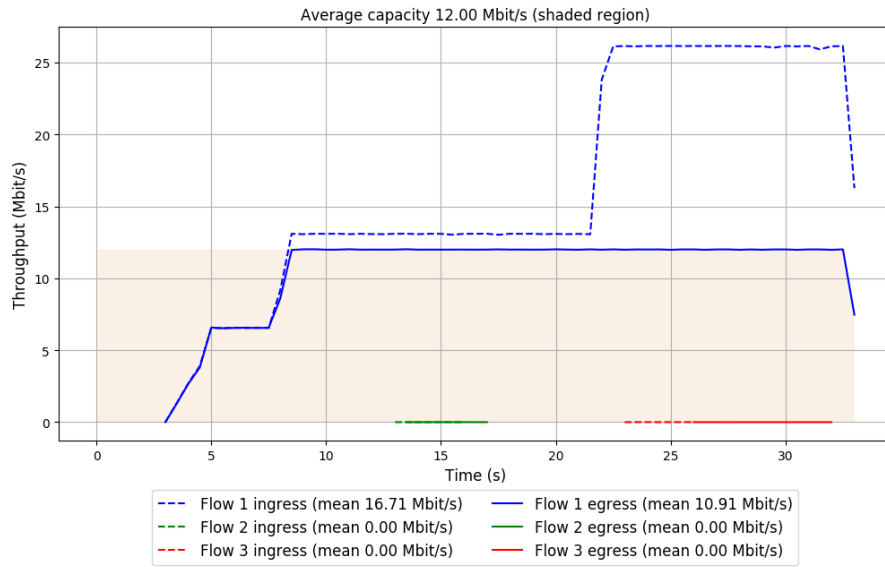
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 5899.344 ms

Loss rate: 0.00%

### Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-27 19:16:47

End at: 2018-02-27 19:17:17

# Below is generated by plot.py at 2018-02-27 19:43:33

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.05 Mbit/s (92.1% utilization)

95th percentile per-packet one-way delay: 7521.442 ms

Loss rate: 39.58%

-- Flow 1:

Average throughput: 11.05 Mbit/s

95th percentile per-packet one-way delay: 7521.043 ms

Loss rate: 39.58%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 780.830 ms

Loss rate: 0.00%

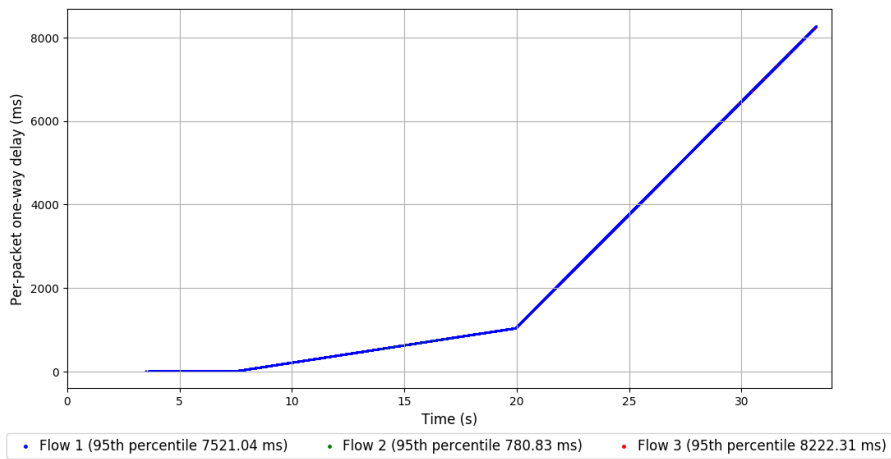
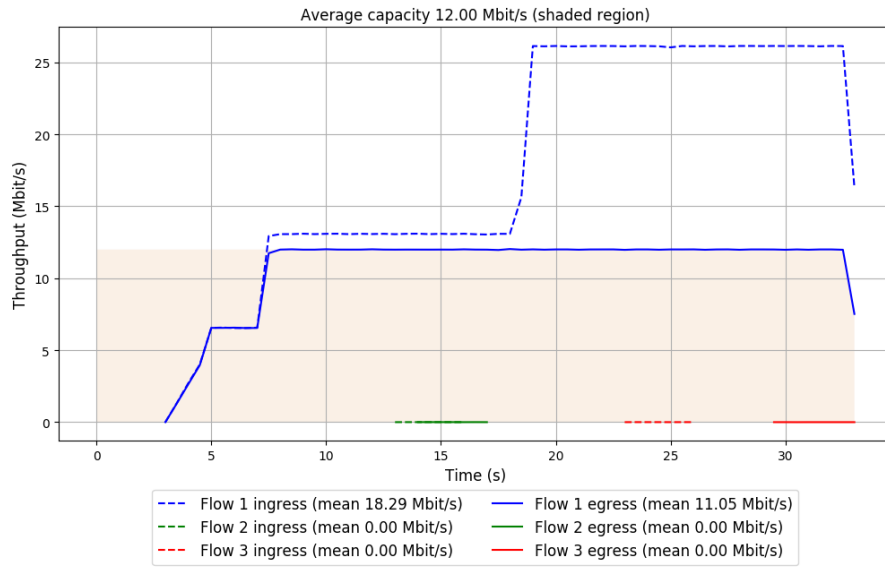
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 8222.309 ms

Loss rate: 41.67%

### Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-27 19:27:01

End at: 2018-02-27 19:27:31

# Below is generated by plot.py at 2018-02-27 19:43:49

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.96 Mbit/s (91.3% utilization)

95th percentile per-packet one-way delay: 6498.816 ms

Loss rate: 36.65%

-- Flow 1:

Average throughput: 10.96 Mbit/s

95th percentile per-packet one-way delay: 6497.691 ms

Loss rate: 36.65%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 732.331 ms

Loss rate: 0.00%

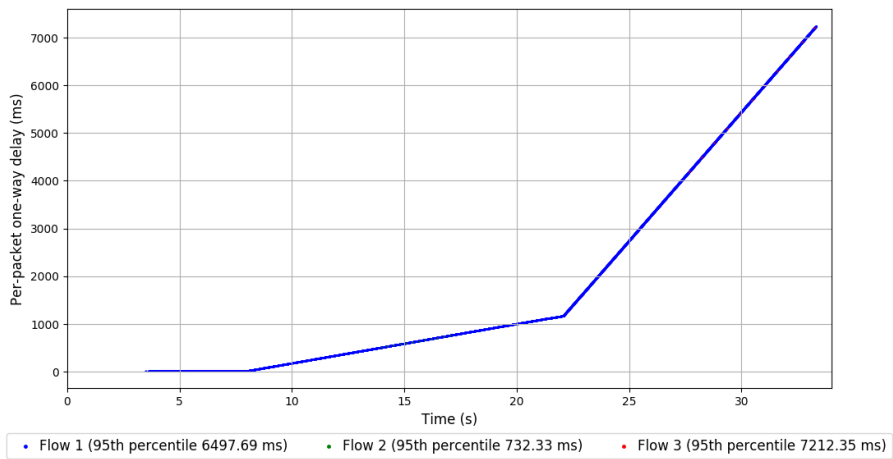
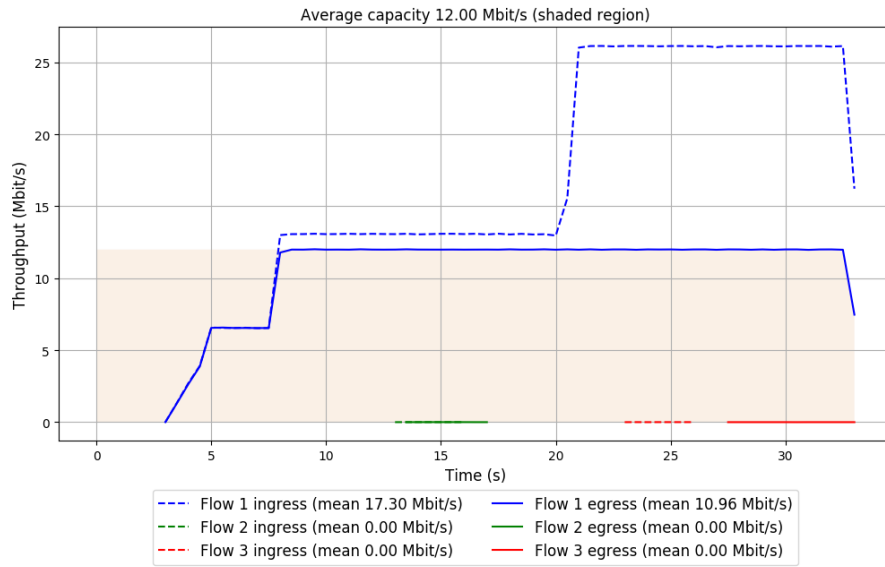
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 7212.353 ms

Loss rate: 8.33%

### Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-27 19:37:16

End at: 2018-02-27 19:37:46

# Below is generated by plot.py at 2018-02-27 19:43:51

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.91 Mbit/s (90.9% utilization)

95th percentile per-packet one-way delay: 5914.495 ms

Loss rate: 34.81%

-- Flow 1:

Average throughput: 10.91 Mbit/s

95th percentile per-packet one-way delay: 5914.495 ms

Loss rate: 34.81%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 712.679 ms

Loss rate: 0.00%

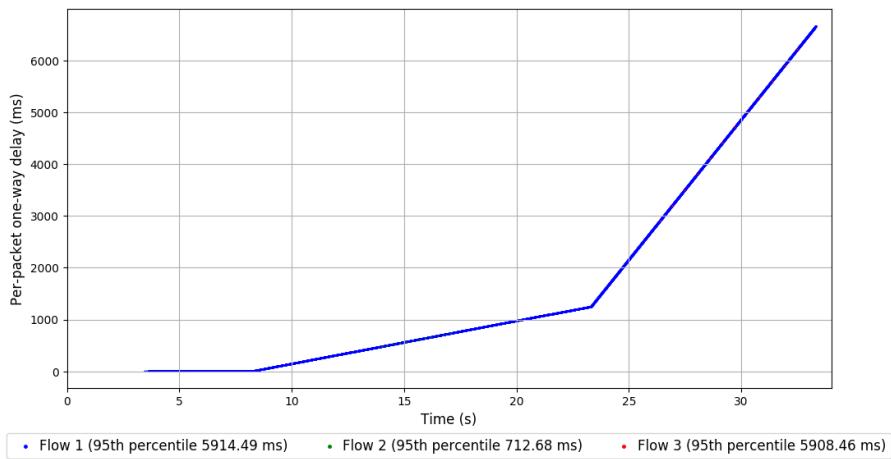
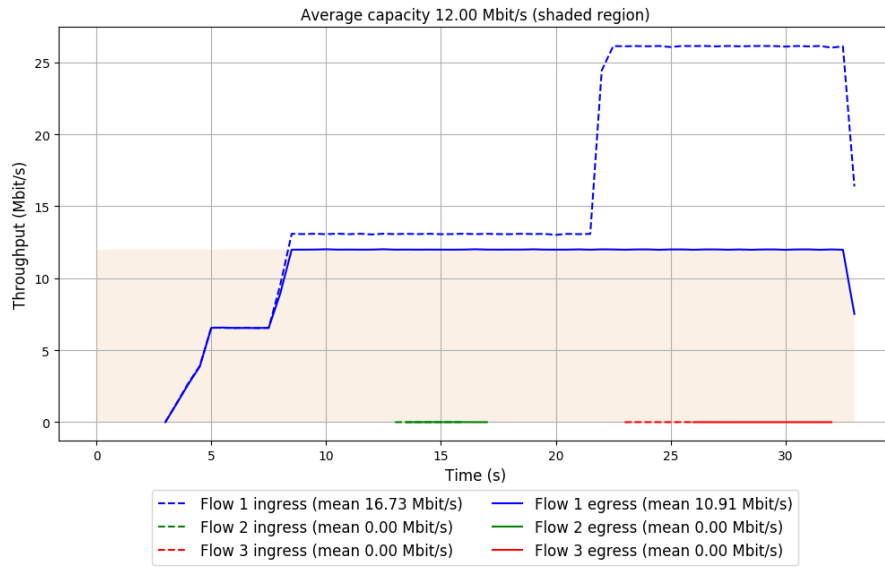
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 5908.458 ms

Loss rate: 0.00%

### Run 10: Report of Vivace-loss — Data Link



Run 1: Statistics of Vivace-LTE

Start at: 2018-02-27 17:59:26

End at: 2018-02-27 17:59:56

# Below is generated by plot.py at 2018-02-27 19:43:51

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.45 Mbit/s (12.1% utilization)

95th percentile per-packet one-way delay: 12.249 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 12.246 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.143 ms

Loss rate: 0.00%

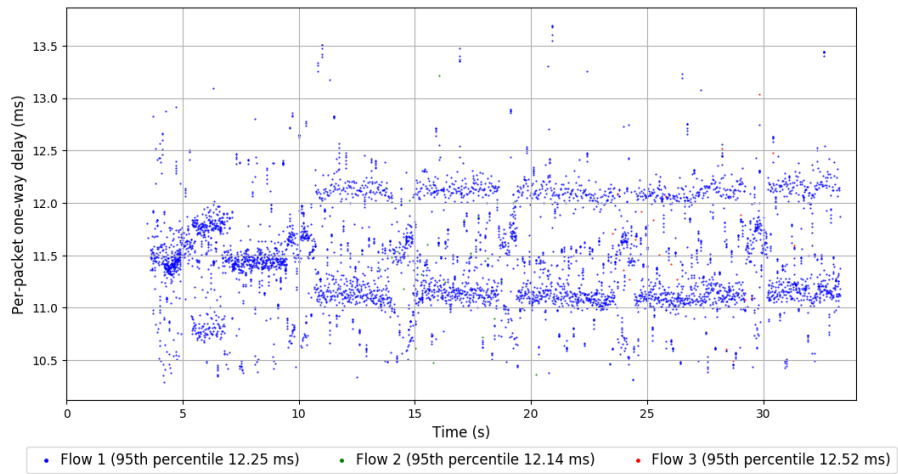
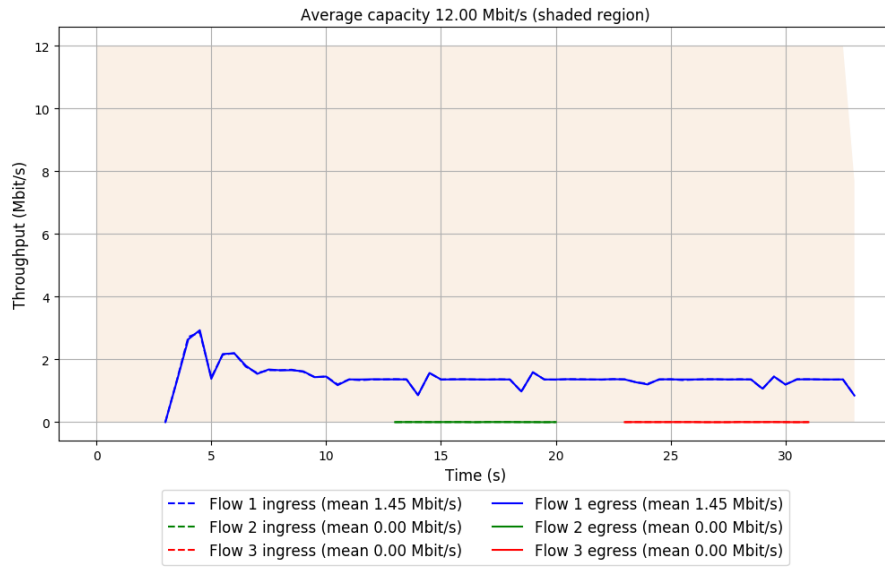
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.517 ms

Loss rate: 0.00%

# Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-27 18:09:40

End at: 2018-02-27 18:10:10

# Below is generated by plot.py at 2018-02-27 19:43:51

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.42 Mbit/s (11.8% utilization)

95th percentile per-packet one-way delay: 12.279 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 12.278 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.219 ms

Loss rate: 0.00%

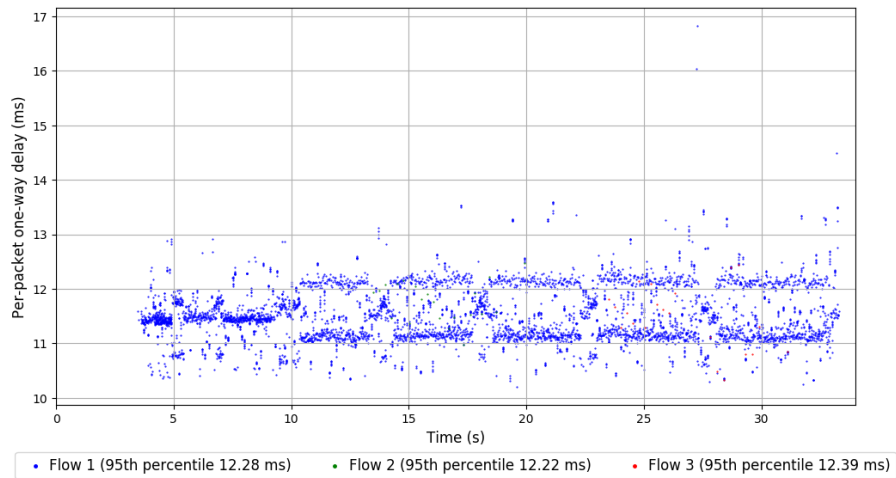
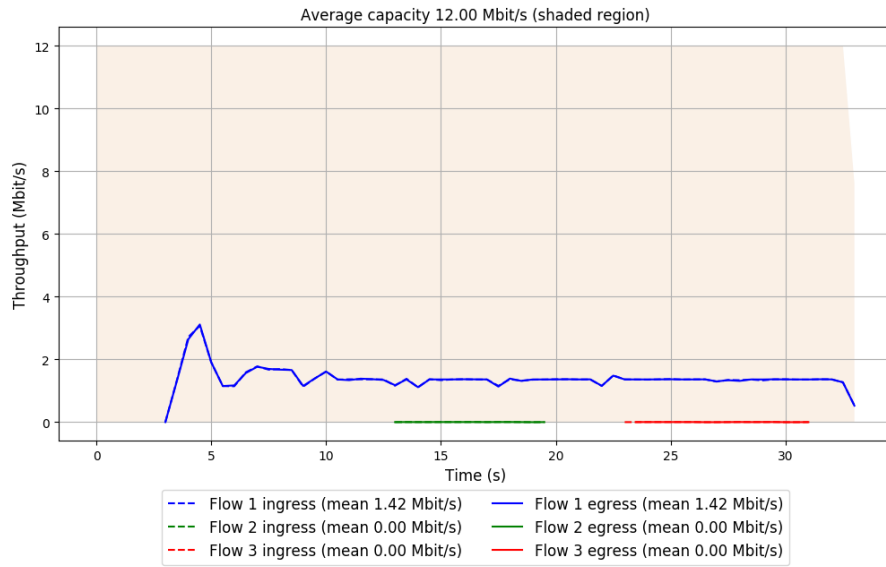
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.393 ms

Loss rate: 0.00%

## Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-27 18:19:54

End at: 2018-02-27 18:20:24

# Below is generated by plot.py at 2018-02-27 19:43:51

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.43 Mbit/s (12.0% utilization)

95th percentile per-packet one-way delay: 12.260 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 12.260 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.456 ms

Loss rate: 0.00%

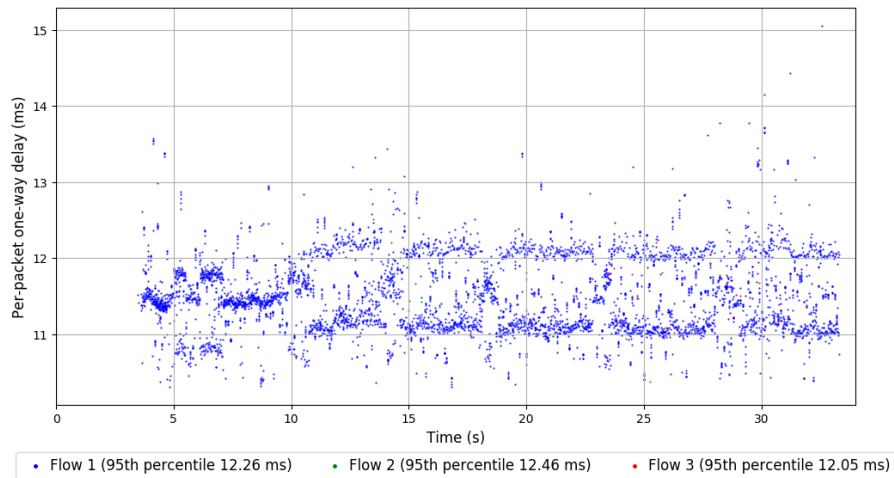
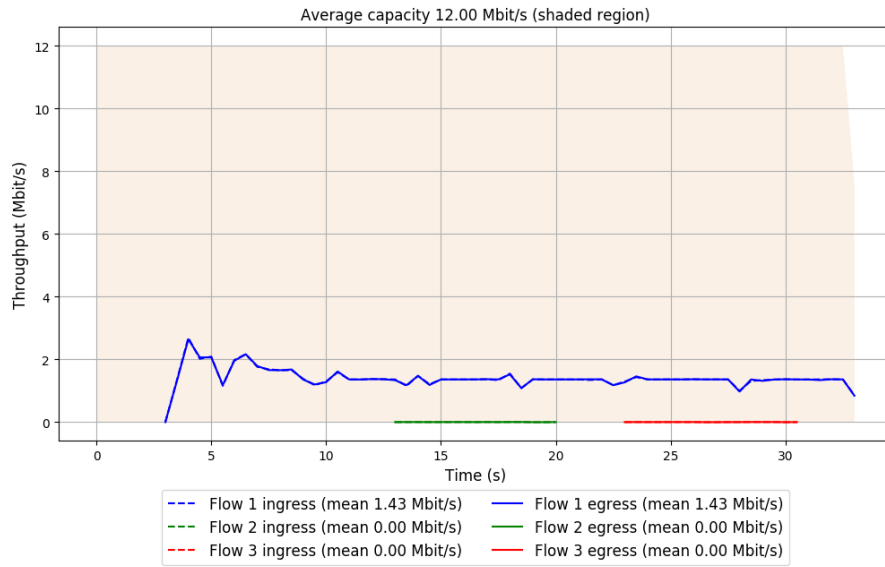
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.047 ms

Loss rate: 0.00%

### Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-27 18:30:09

End at: 2018-02-27 18:30:39

# Below is generated by plot.py at 2018-02-27 19:43:51

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.44 Mbit/s (12.0% utilization)

95th percentile per-packet one-way delay: 12.117 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 12.117 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.619 ms

Loss rate: 0.00%

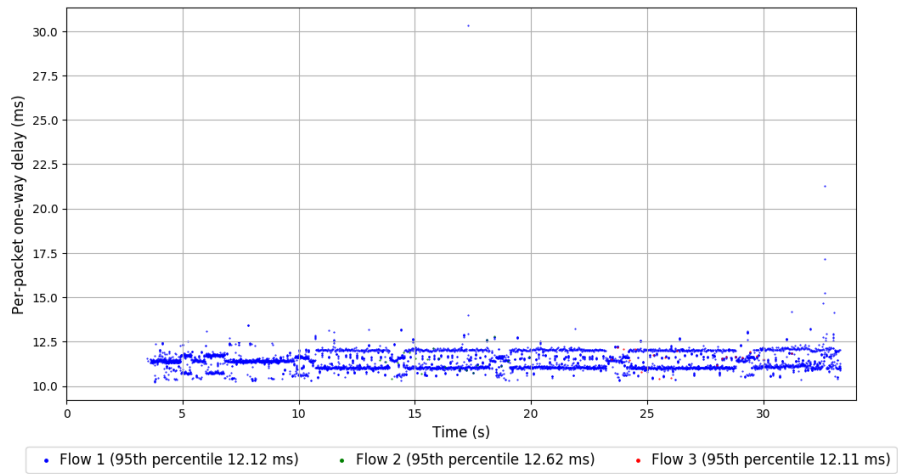
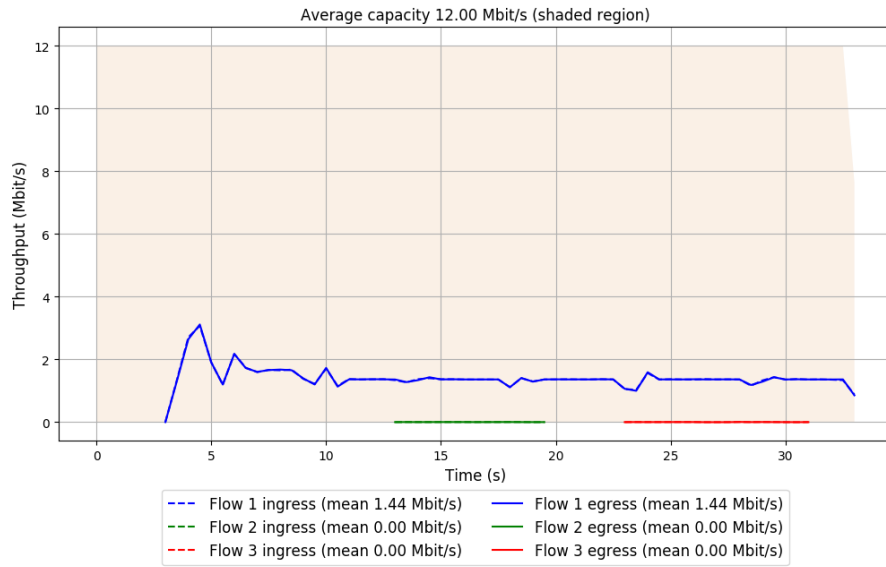
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.109 ms

Loss rate: 0.00%

### Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-27 18:40:24

End at: 2018-02-27 18:40:54

# Below is generated by plot.py at 2018-02-27 19:43:51

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.41 Mbit/s (11.8% utilization)

95th percentile per-packet one-way delay: 12.376 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 12.376 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.532 ms

Loss rate: 0.00%

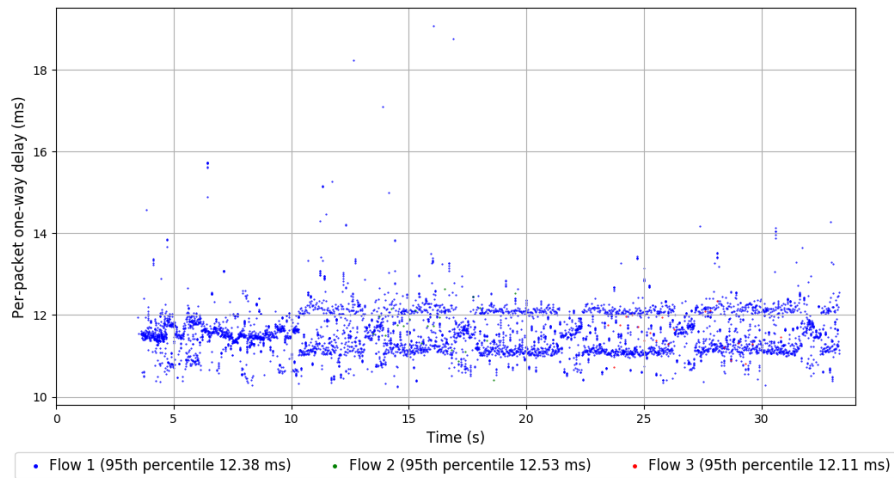
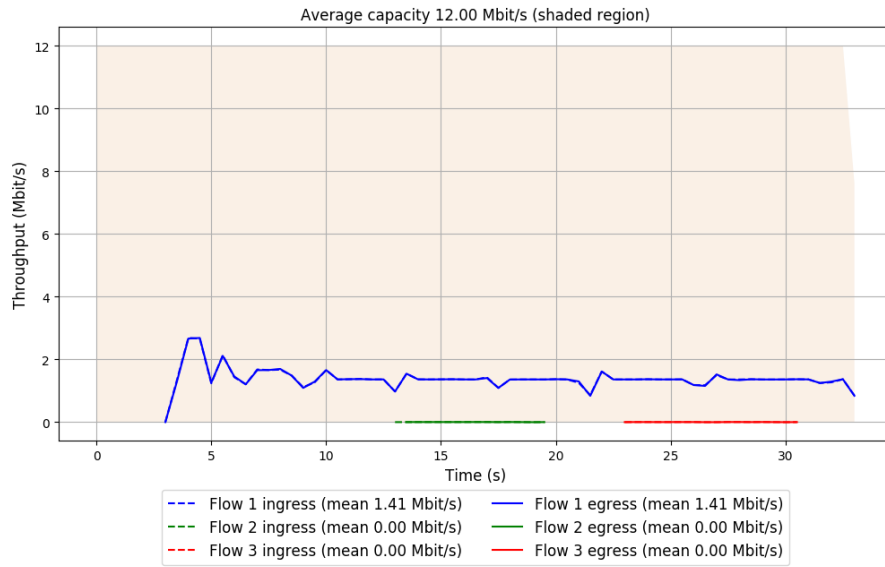
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.110 ms

Loss rate: 0.00%

### Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-27 18:50:39

End at: 2018-02-27 18:51:09

# Below is generated by plot.py at 2018-02-27 19:43:51

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.45 Mbit/s (12.1% utilization)

95th percentile per-packet one-way delay: 12.259 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 12.258 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.424 ms

Loss rate: 0.00%

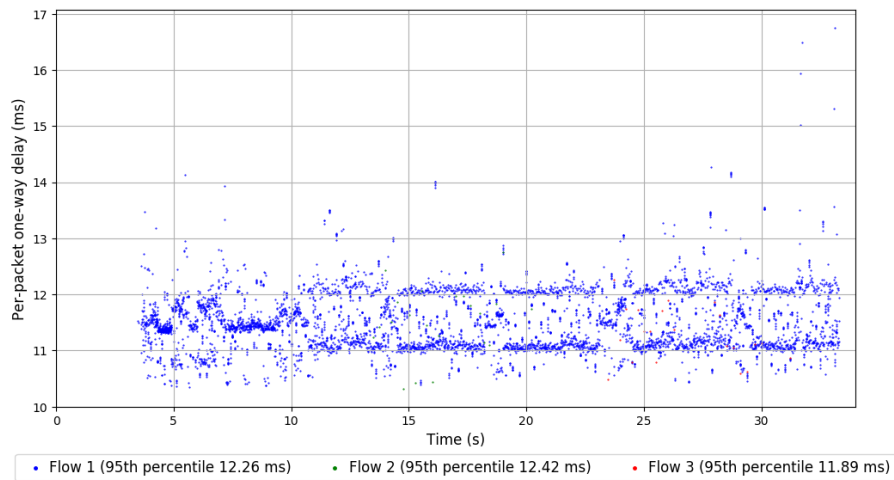
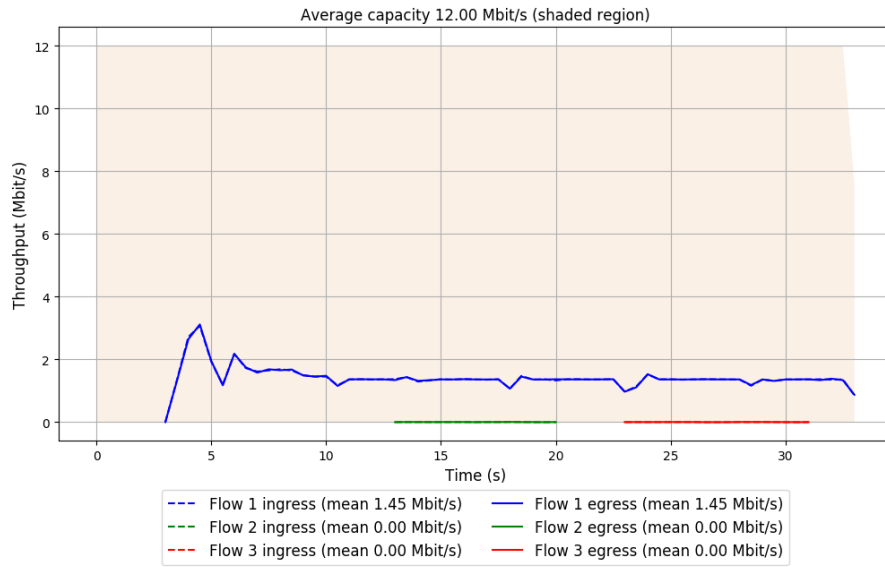
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 11.888 ms

Loss rate: 0.00%

### Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-27 19:00:53

End at: 2018-02-27 19:01:23

# Below is generated by plot.py at 2018-02-27 19:43:51

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.42 Mbit/s (11.9% utilization)

95th percentile per-packet one-way delay: 12.255 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 12.252 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.425 ms

Loss rate: 0.00%

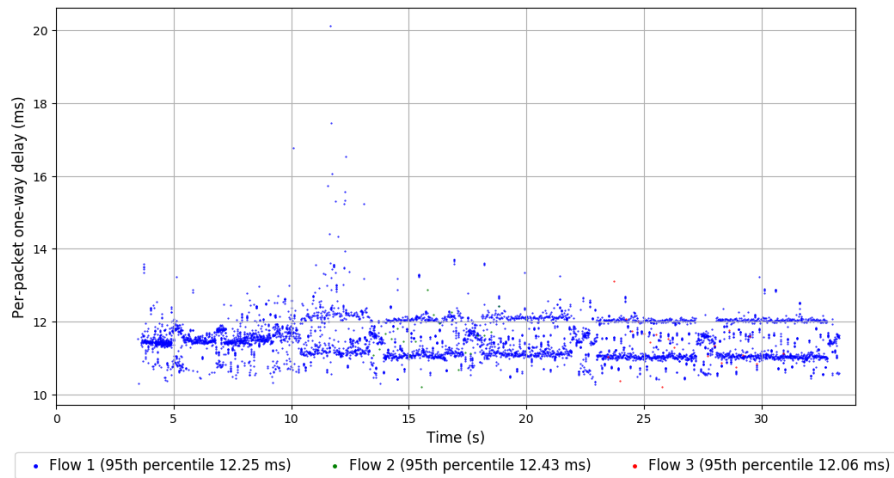
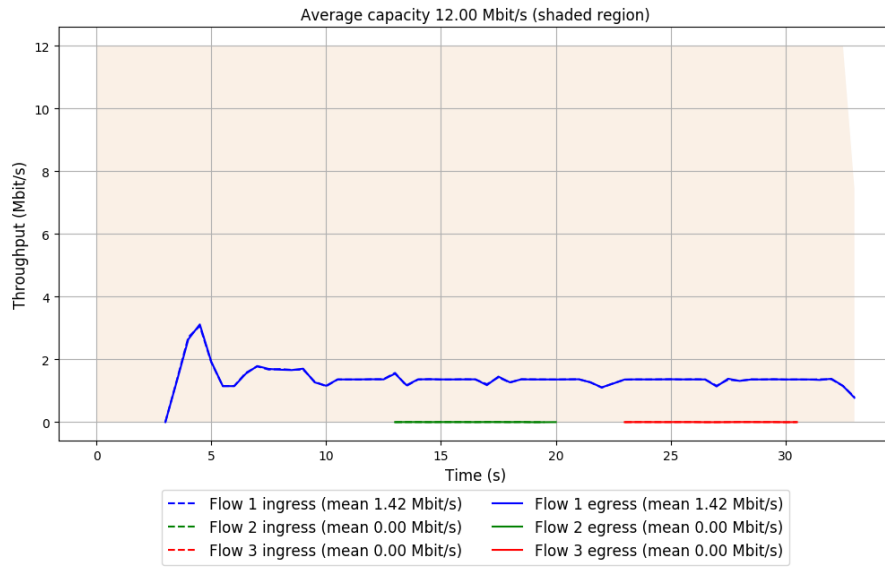
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.063 ms

Loss rate: 0.00%

### Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-27 19:11:07

End at: 2018-02-27 19:11:37

# Below is generated by plot.py at 2018-02-27 19:43:51

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.42 Mbit/s (11.9% utilization)

95th percentile per-packet one-way delay: 12.192 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 12.191 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.212 ms

Loss rate: 0.00%

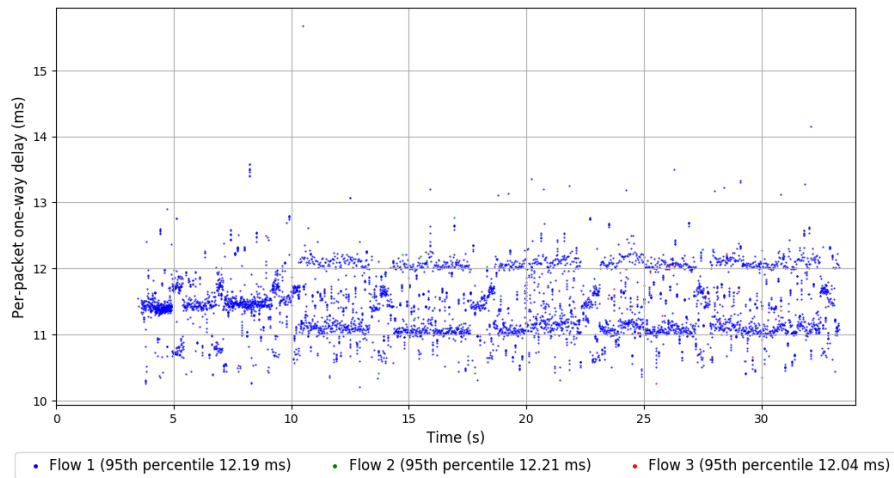
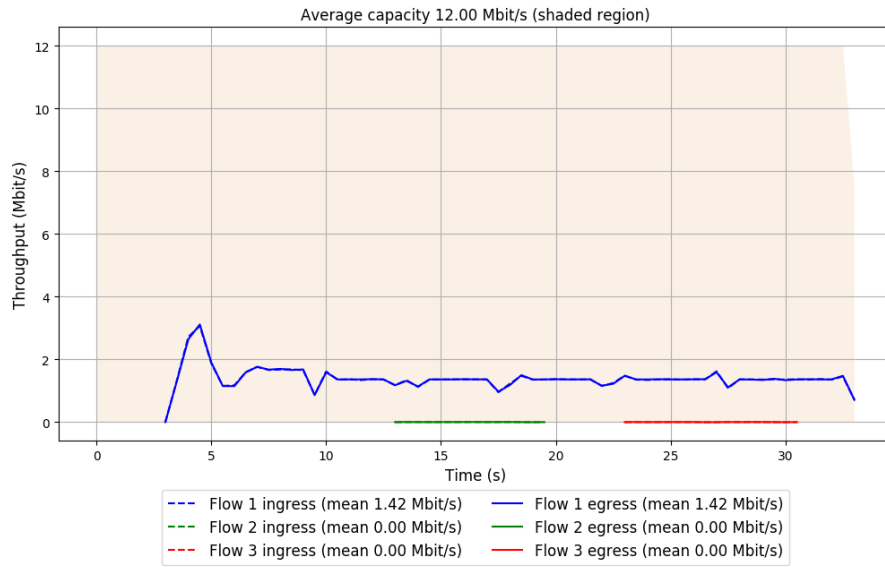
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.036 ms

Loss rate: 0.00%

### Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-27 19:21:21

End at: 2018-02-27 19:21:51

# Below is generated by plot.py at 2018-02-27 19:43:51

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.45 Mbit/s (12.1% utilization)

95th percentile per-packet one-way delay: 12.171 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 12.171 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.173 ms

Loss rate: 0.00%

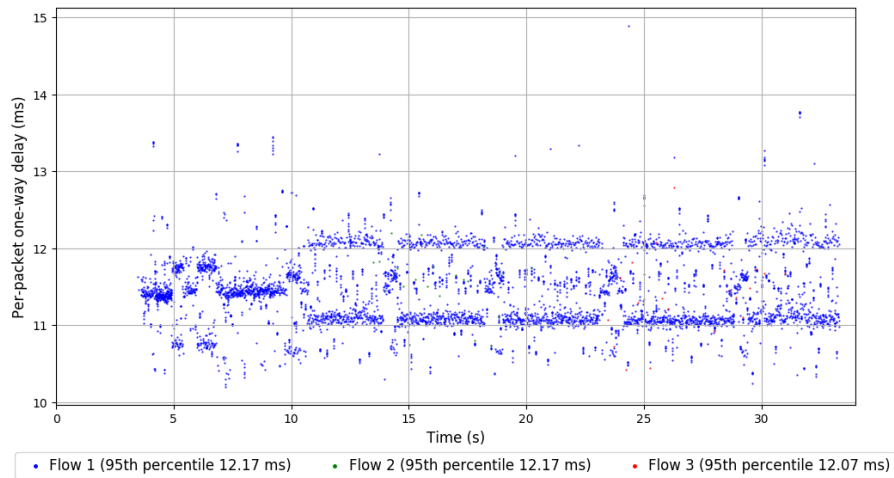
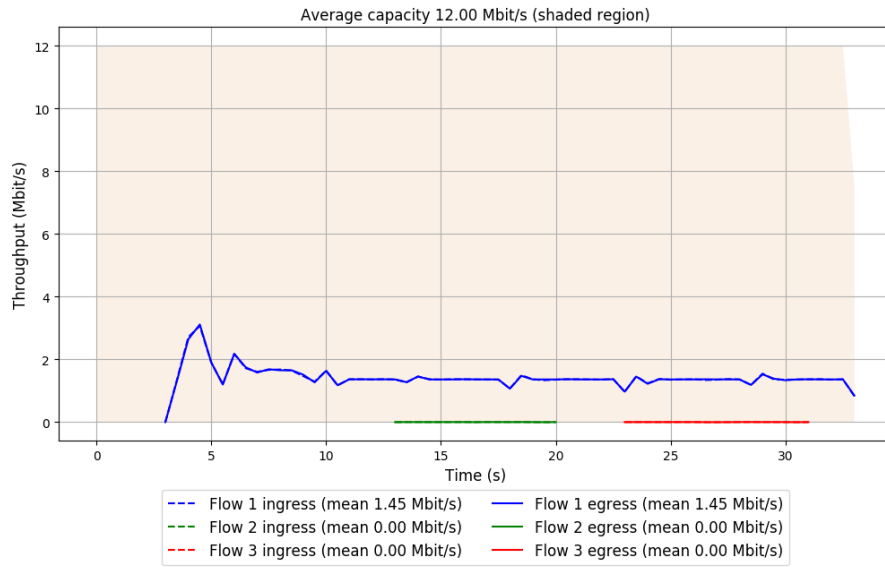
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.070 ms

Loss rate: 0.00%

### Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-02-27 19:31:35

End at: 2018-02-27 19:32:05

# Below is generated by plot.py at 2018-02-27 19:43:51

# Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 1.45 Mbit/s (12.0% utilization)

95th percentile per-packet one-way delay: 12.116 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 12.115 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.381 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 12.188 ms

Loss rate: 0.00%

# Run 10: Report of Vivace-LTE — Data Link

