

Pantheon Report

Generated at 2018-02-27 19:51:28 (UTC).

Tested in mahimahi: mm-delay 30 mm-link 12mbps.trace 12mbps.trace
--uplink-queue=droptail --uplink-queue-args=bytes=30000

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.

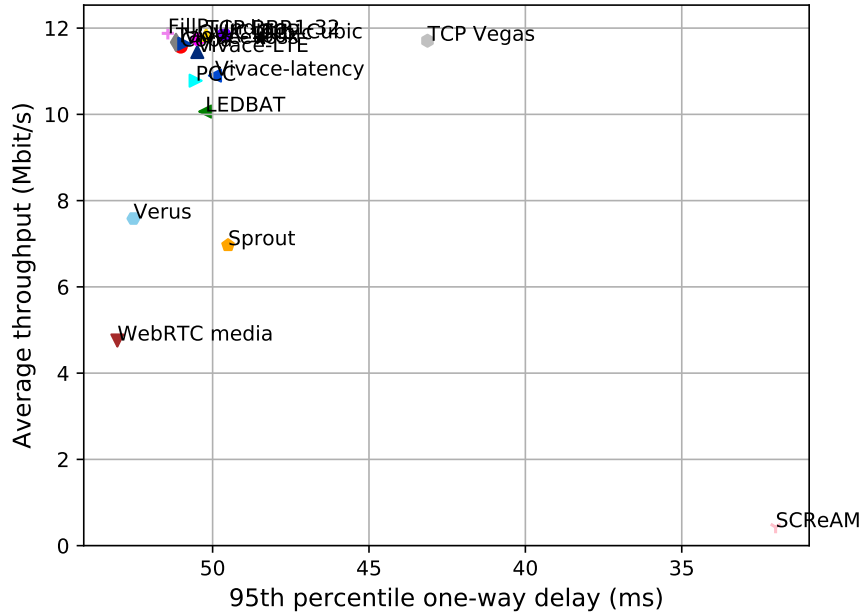
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

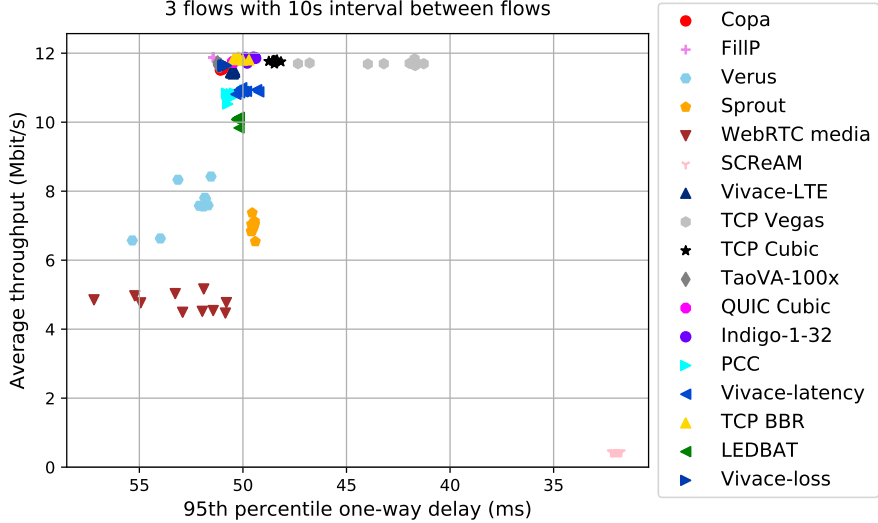
Git summary:

```
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5ce90f281d1c69ae1a5c6
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-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eae30b267cde681
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	7.49	4.27	4.58	50.09	50.29	50.33	9.55	17.44	19.78
TCP Cubic	10	7.98	3.93	3.54	48.38	48.58	48.61	0.31	0.70	1.24
LEDBAT	10	5.96	4.49	3.44	50.08	50.36	50.52	1.07	0.88	1.46
PCC	10	8.39	2.68	1.87	50.44	50.67	50.98	3.84	6.62	12.58
QUIC Cubic	10	7.39	4.66	3.89	50.31	50.60	50.78	0.77	1.52	2.52
SCReAM	10	0.21	0.21	0.22	31.96	31.67	31.74	0.05	0.17	0.36
WebRTC media	10	2.69	1.60	0.48	51.57	53.39	57.29	6.28	8.70	14.00
Sprout	10	3.76	3.40	2.89	49.41	49.56	49.74	10.09	11.58	12.90
TaoVA-100x	10	7.03	5.01	3.94	50.98	51.18	51.39	4.40	7.79	19.43
TCP Vegas	10	7.40	4.58	3.81	42.59	43.29	43.35	0.21	0.38	0.84
Verus	10	4.84	2.90	2.74	52.57	51.68	52.16	90.51	79.09	83.23
Copa	10	7.24	4.64	3.78	50.89	51.13	51.21	2.23	4.60	6.43
FillP	10	7.24	4.97	4.09	51.47	51.40	51.34	45.64	59.72	77.17
Indigo-1-32	10	6.55	5.22	5.69	49.27	49.68	50.12	11.37	32.81	56.94
Vivace-latency	10	7.60	3.32	3.32	49.94	49.81	49.19	1.12	2.50	1.78
Vivace-loss	10	9.46	1.93	2.72	50.88	51.02	50.95	4.95	11.76	8.40
Vivace-LTE	10	7.66	4.21	3.02	50.44	50.56	50.63	2.90	3.56	4.57

Run 1: Statistics of TCP BBR

Start at: 2018-02-27 18:00:38

End at: 2018-02-27 18:01:08

Below is generated by plot.py at 2018-02-27 19:41:24

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 50.251 ms

Loss rate: 14.33%

-- Flow 1:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 50.021 ms

Loss rate: 10.37%

-- Flow 2:

Average throughput: 5.79 Mbit/s

95th percentile per-packet one-way delay: 50.382 ms

Loss rate: 18.10%

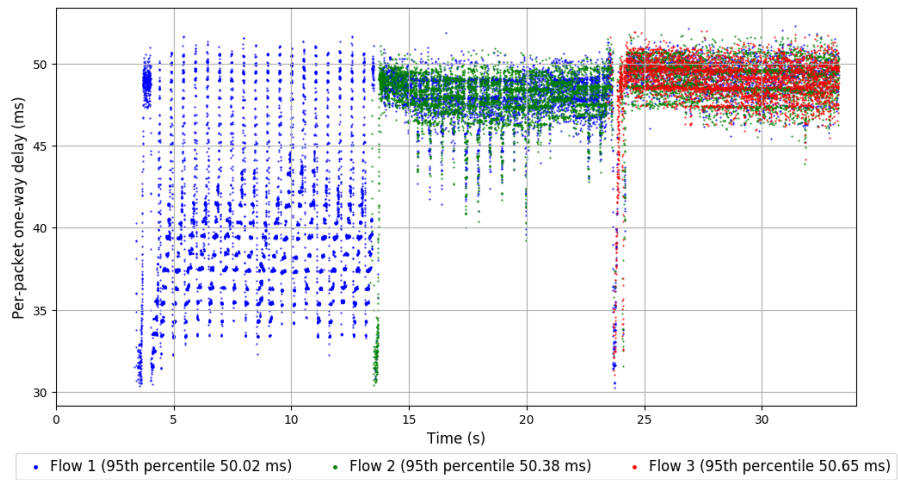
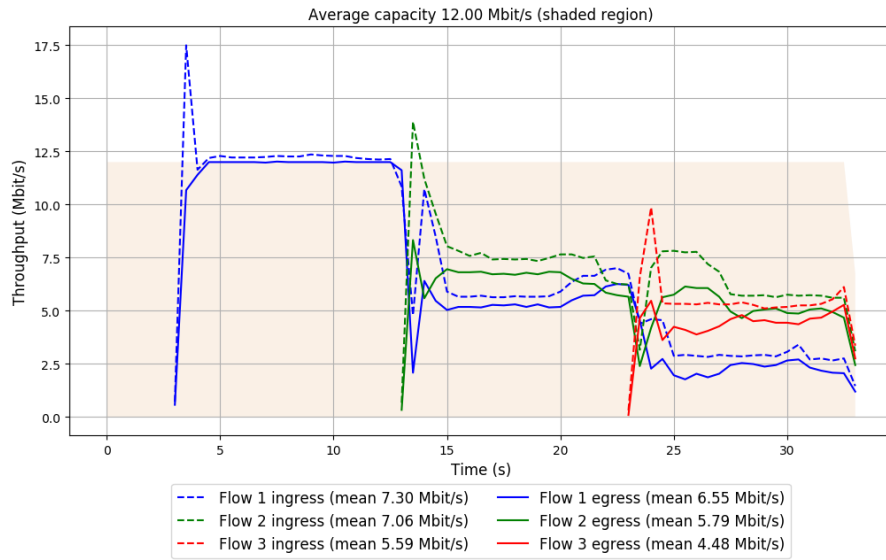
-- Flow 3:

Average throughput: 4.48 Mbit/s

95th percentile per-packet one-way delay: 50.648 ms

Loss rate: 20.34%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-27 18:11:03

End at: 2018-02-27 18:11:33

Below is generated by plot.py at 2018-02-27 19:41:24

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 50.236 ms

Loss rate: 13.44%

-- Flow 1:

Average throughput: 6.81 Mbit/s

95th percentile per-packet one-way delay: 50.023 ms

Loss rate: 10.23%

-- Flow 2:

Average throughput: 4.87 Mbit/s

95th percentile per-packet one-way delay: 50.331 ms

Loss rate: 16.56%

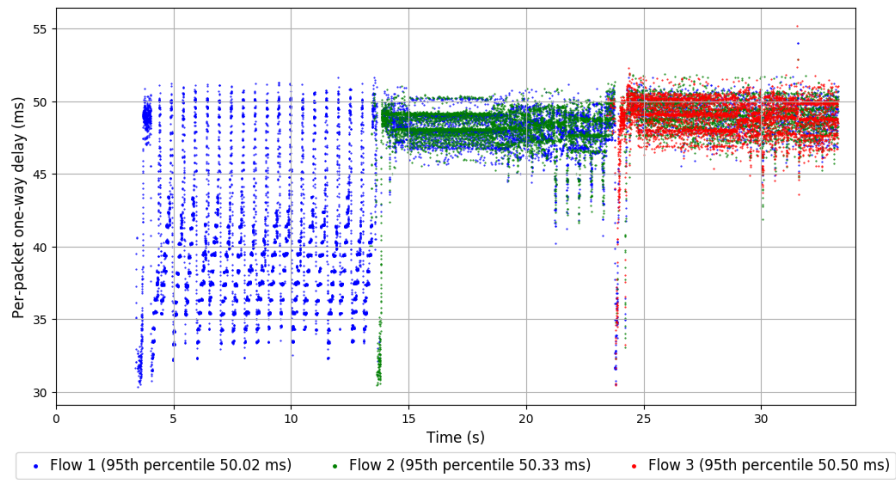
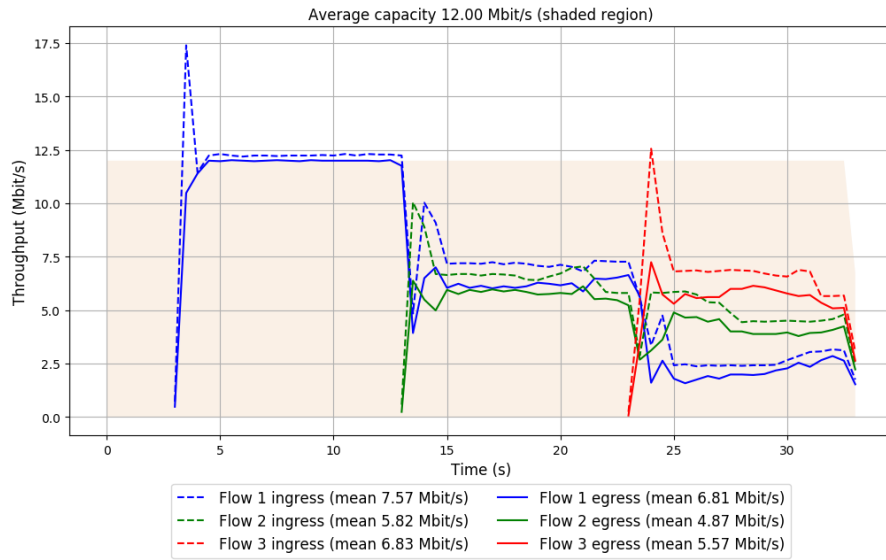
-- Flow 3:

Average throughput: 5.57 Mbit/s

95th percentile per-packet one-way delay: 50.503 ms

Loss rate: 18.81%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-27 18:21:28

End at: 2018-02-27 18:21:58

Below is generated by plot.py at 2018-02-27 19:41:24

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.82 Mbit/s (98.5% utilization)

95th percentile per-packet one-way delay: 50.370 ms

Loss rate: 11.84%

-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 50.315 ms

Loss rate: 9.49%

-- Flow 2:

Average throughput: 5.43 Mbit/s

95th percentile per-packet one-way delay: 50.479 ms

Loss rate: 15.61%

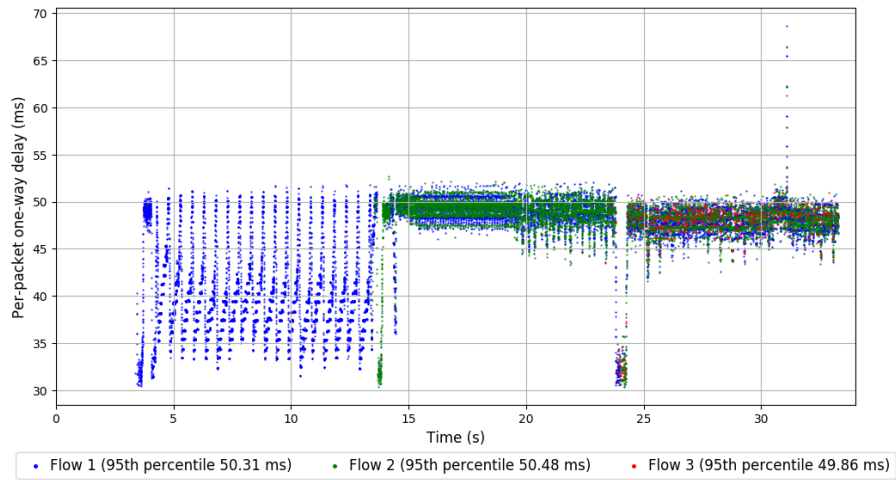
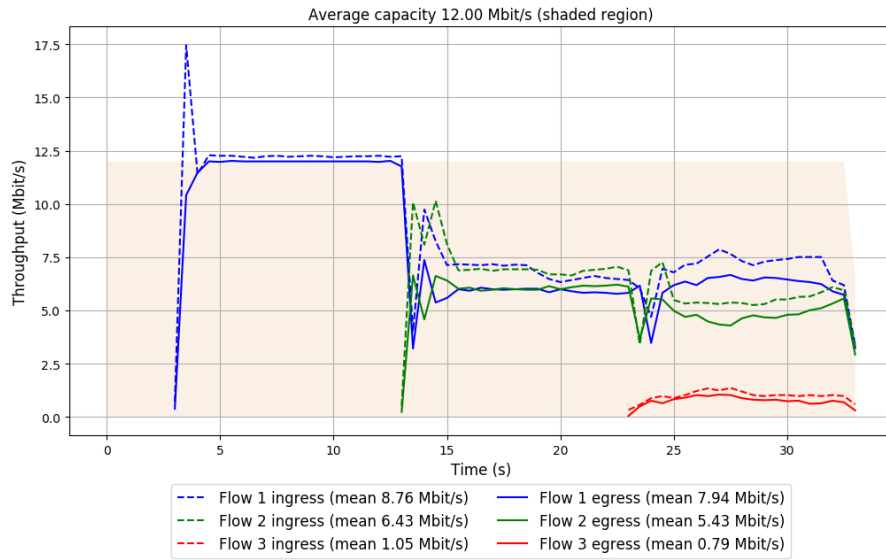
-- Flow 3:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 49.861 ms

Loss rate: 24.48%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-27 18:31:54

End at: 2018-02-27 18:32:24

Below is generated by plot.py at 2018-02-27 19:41:24

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.80 Mbit/s (98.3% utilization)

95th percentile per-packet one-way delay: 50.009 ms

Loss rate: 10.86%

-- Flow 1:

Average throughput: 9.09 Mbit/s

95th percentile per-packet one-way delay: 49.932 ms

Loss rate: 7.81%

-- Flow 2:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 50.163 ms

Loss rate: 21.80%

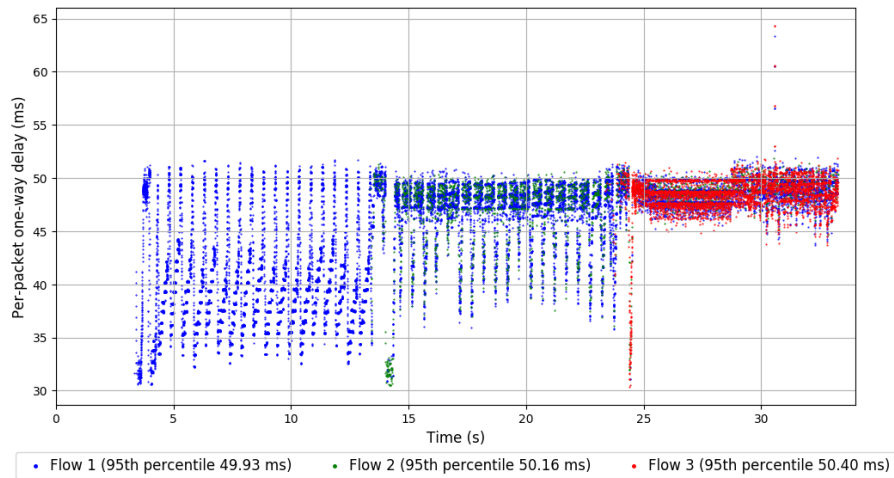
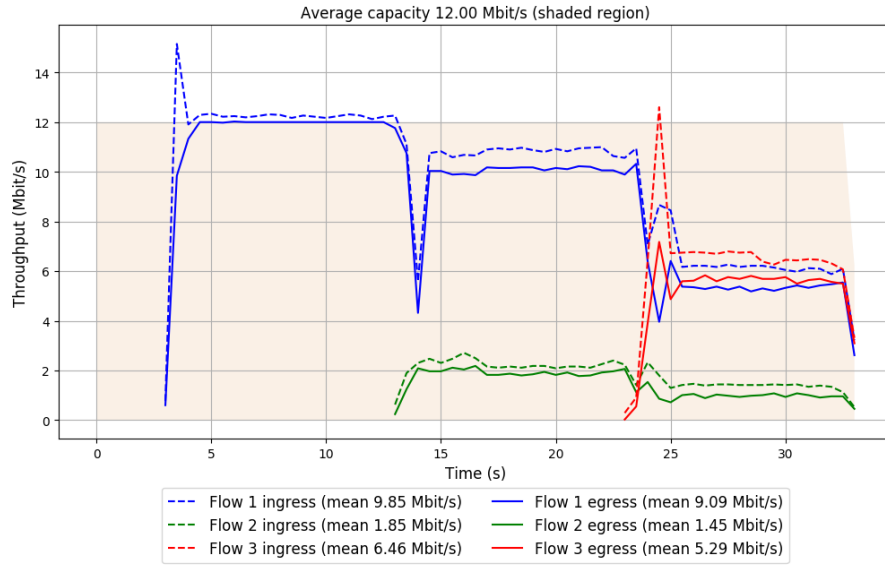
-- Flow 3:

Average throughput: 5.29 Mbit/s

95th percentile per-packet one-way delay: 50.402 ms

Loss rate: 18.56%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-27 18:42:19

End at: 2018-02-27 18:42:49

Below is generated by plot.py at 2018-02-27 19:41:24

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: 50.439 ms

Loss rate: 13.86%

-- Flow 1:

Average throughput: 6.79 Mbit/s

95th percentile per-packet one-way delay: 50.230 ms

Loss rate: 10.89%

-- Flow 2:

Average throughput: 5.27 Mbit/s

95th percentile per-packet one-way delay: 50.482 ms

Loss rate: 16.14%

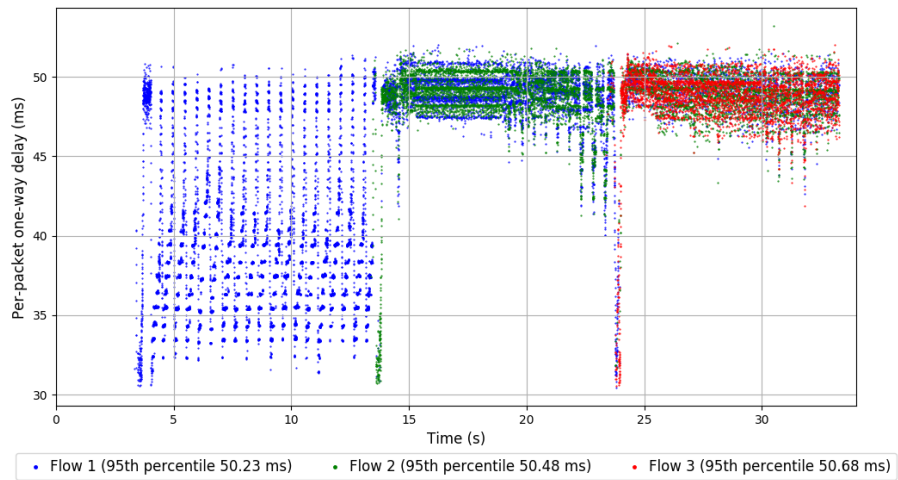
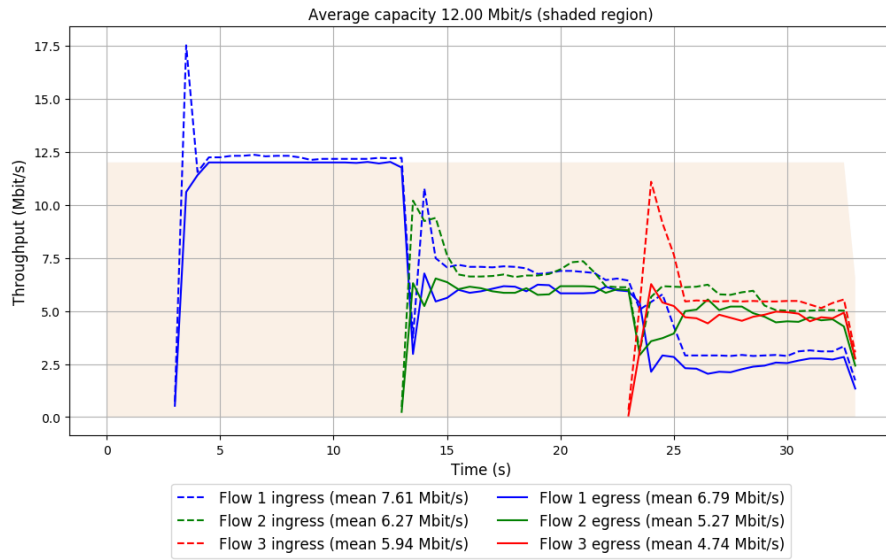
-- Flow 3:

Average throughput: 4.74 Mbit/s

95th percentile per-packet one-way delay: 50.682 ms

Loss rate: 20.52%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

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

End at: 2018-02-27 18:53:14

Below is generated by plot.py at 2018-02-27 19:41:24

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.83 Mbit/s (98.6% utilization)

95th percentile per-packet one-way delay: 50.275 ms

Loss rate: 13.71%

-- Flow 1:

Average throughput: 6.75 Mbit/s

95th percentile per-packet one-way delay: 50.181 ms

Loss rate: 10.05%

-- Flow 2:

Average throughput: 5.61 Mbit/s

95th percentile per-packet one-way delay: 50.322 ms

Loss rate: 17.07%

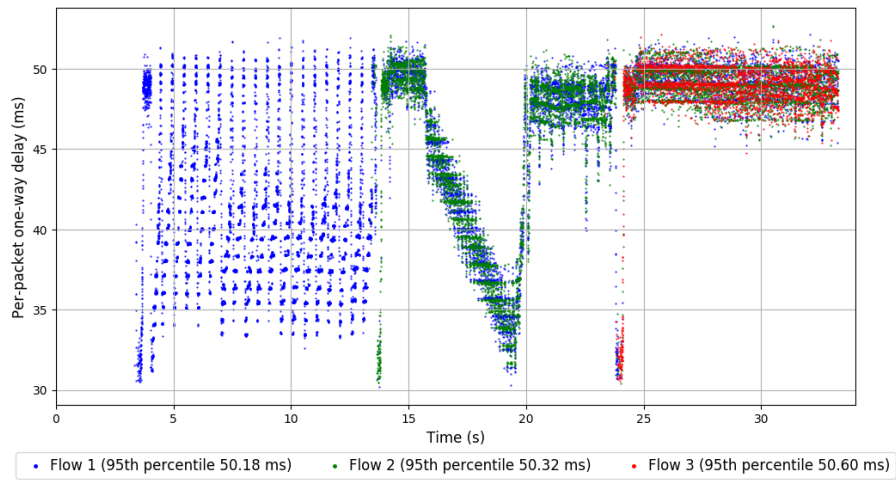
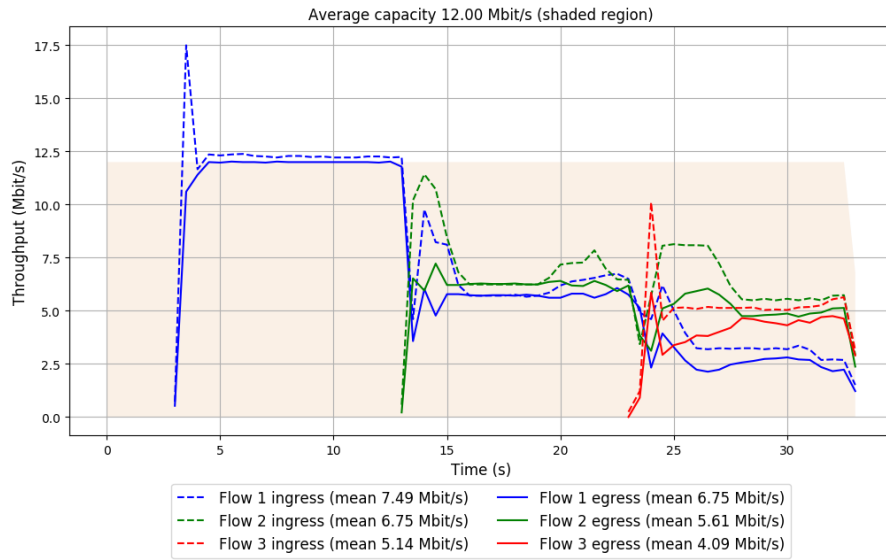
-- Flow 3:

Average throughput: 4.09 Mbit/s

95th percentile per-packet one-way delay: 50.605 ms

Loss rate: 20.88%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-27 19:03:10

End at: 2018-02-27 19:03:40

Below is generated by plot.py at 2018-02-27 19:41:24

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 50.173 ms

Loss rate: 12.90%

-- Flow 1:

Average throughput: 7.47 Mbit/s

95th percentile per-packet one-way delay: 50.081 ms

Loss rate: 9.09%

-- Flow 2:

Average throughput: 3.76 Mbit/s

95th percentile per-packet one-way delay: 50.335 ms

Loss rate: 17.56%

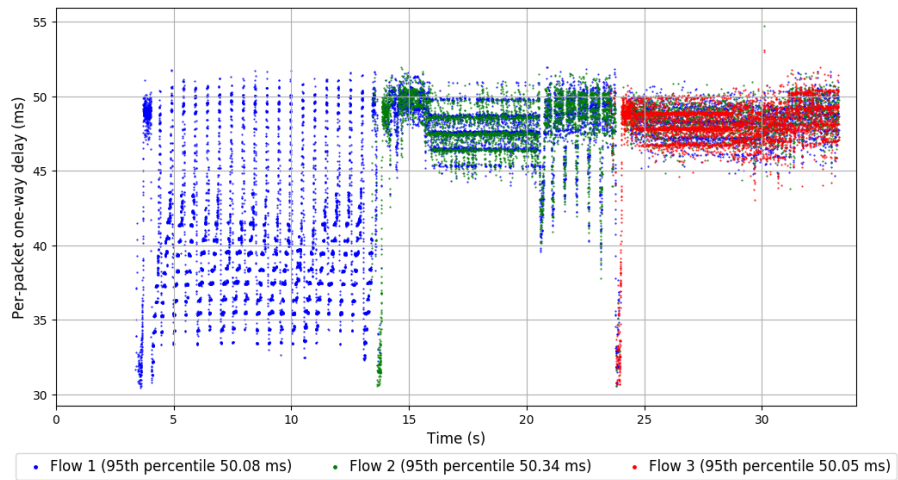
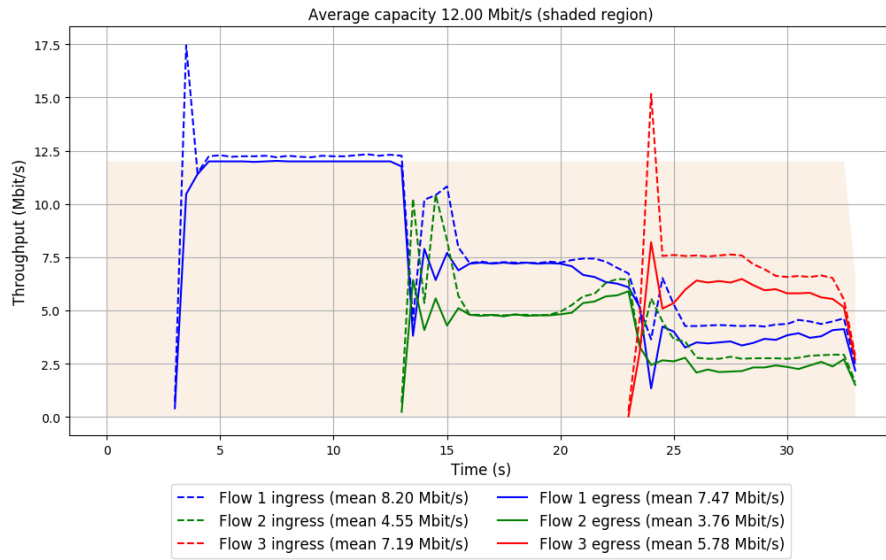
-- Flow 3:

Average throughput: 5.78 Mbit/s

95th percentile per-packet one-way delay: 50.052 ms

Loss rate: 20.10%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-27 19:13:38

End at: 2018-02-27 19:14:08

Below is generated by plot.py at 2018-02-27 19:41:24

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.81 Mbit/s (98.4% utilization)

95th percentile per-packet one-way delay: 49.708 ms

Loss rate: 10.70%

-- Flow 1:

Average throughput: 8.90 Mbit/s

95th percentile per-packet one-way delay: 49.712 ms

Loss rate: 7.87%

-- Flow 2:

Average throughput: 1.62 Mbit/s

95th percentile per-packet one-way delay: 49.772 ms

Loss rate: 18.36%

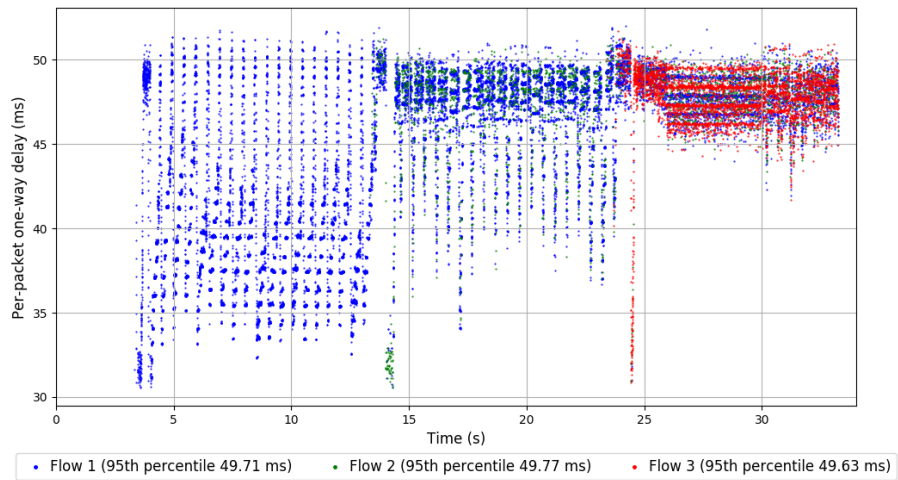
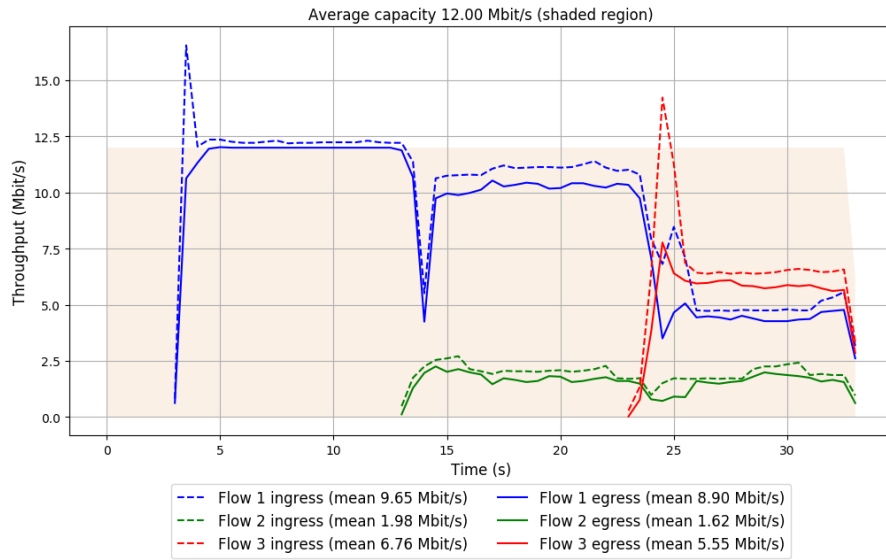
-- Flow 3:

Average throughput: 5.55 Mbit/s

95th percentile per-packet one-way delay: 49.634 ms

Loss rate: 18.36%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-27 19:24:04

End at: 2018-02-27 19:24:34

Below is generated by plot.py at 2018-02-27 19:41:44

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.82 Mbit/s (98.5% utilization)

95th percentile per-packet one-way delay: 50.428 ms

Loss rate: 13.03%

-- Flow 1:

Average throughput: 7.28 Mbit/s

95th percentile per-packet one-way delay: 50.377 ms

Loss rate: 9.90%

-- Flow 2:

Average throughput: 4.76 Mbit/s

95th percentile per-packet one-way delay: 50.483 ms

Loss rate: 17.27%

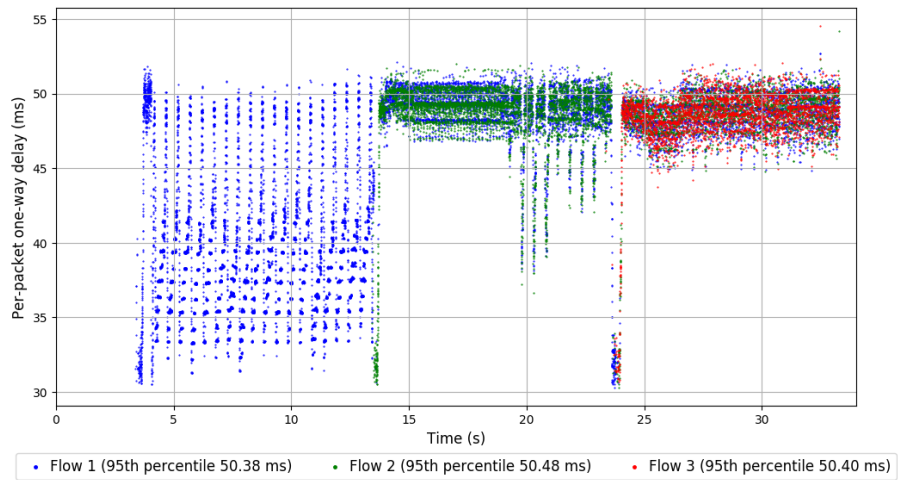
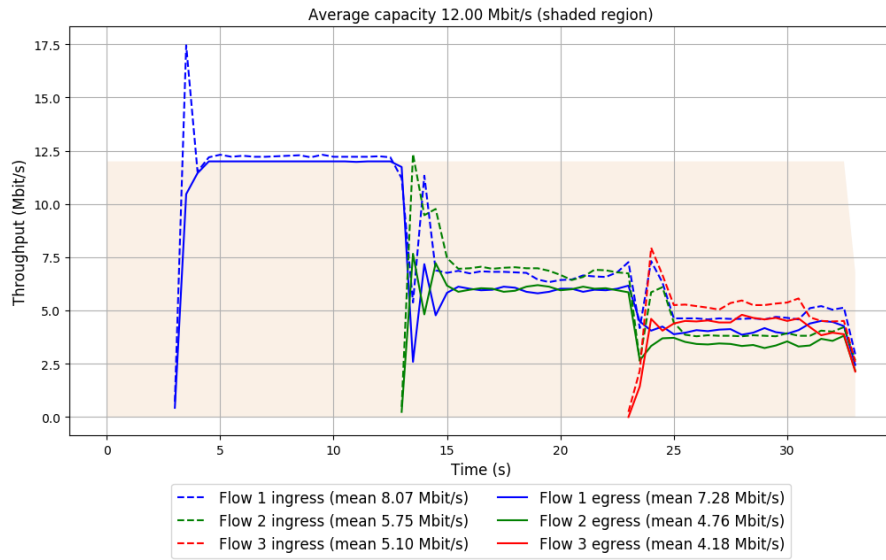
-- Flow 3:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 50.396 ms

Loss rate: 18.30%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-27 19:34:32

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

Below is generated by plot.py at 2018-02-27 19:41:48

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.85 Mbit/s (98.8% utilization)

95th percentile per-packet one-way delay: 50.180 ms

Loss rate: 12.54%

-- Flow 1:

Average throughput: 7.30 Mbit/s

95th percentile per-packet one-way delay: 50.023 ms

Loss rate: 9.84%

-- Flow 2:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 50.125 ms

Loss rate: 15.95%

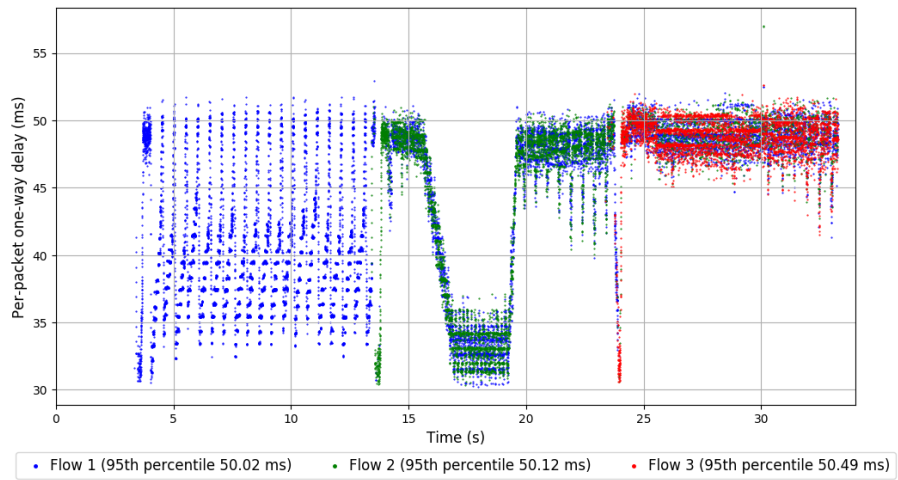
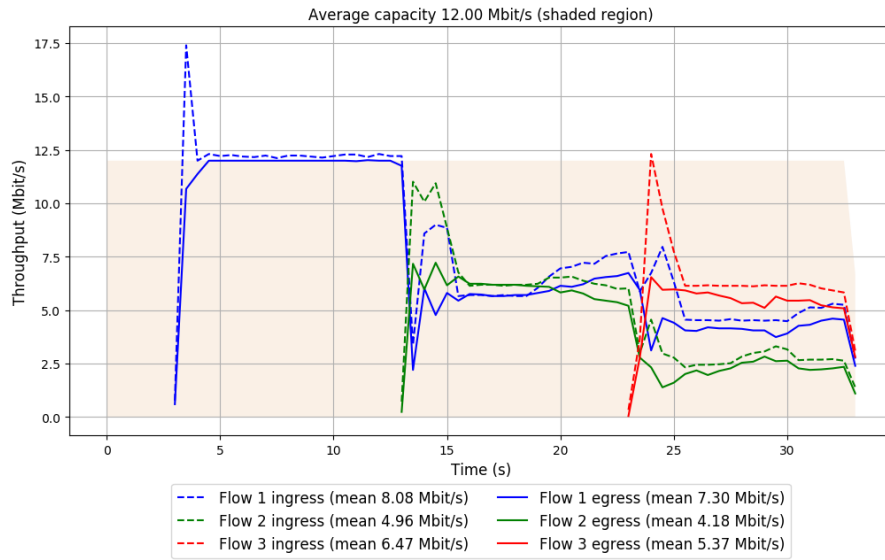
-- Flow 3:

Average throughput: 5.37 Mbit/s

95th percentile per-packet one-way delay: 50.486 ms

Loss rate: 17.45%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-27 17:58:20

End at: 2018-02-27 17:58:50

Below is generated by plot.py at 2018-02-27 19:41:48

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.75 Mbit/s (97.9% utilization)

95th percentile per-packet one-way delay: 48.165 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 8.04 Mbit/s

95th percentile per-packet one-way delay: 48.094 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 3.68 Mbit/s

95th percentile per-packet one-way delay: 48.313 ms

Loss rate: 0.73%

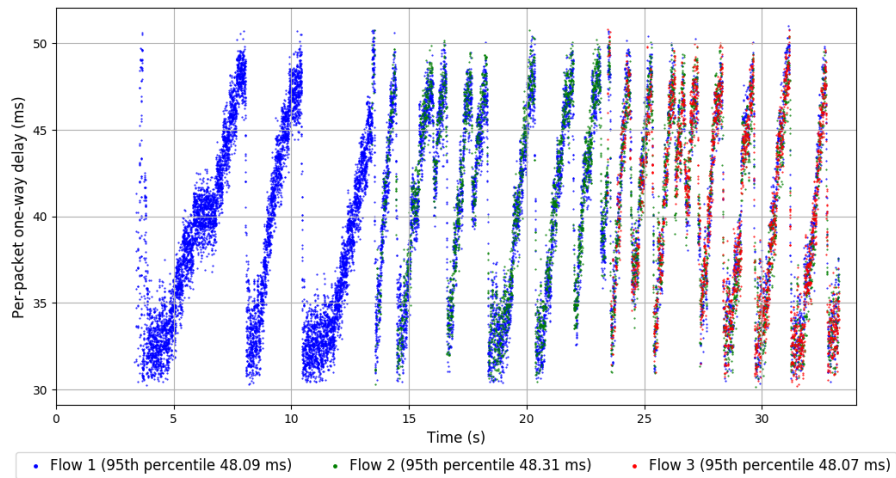
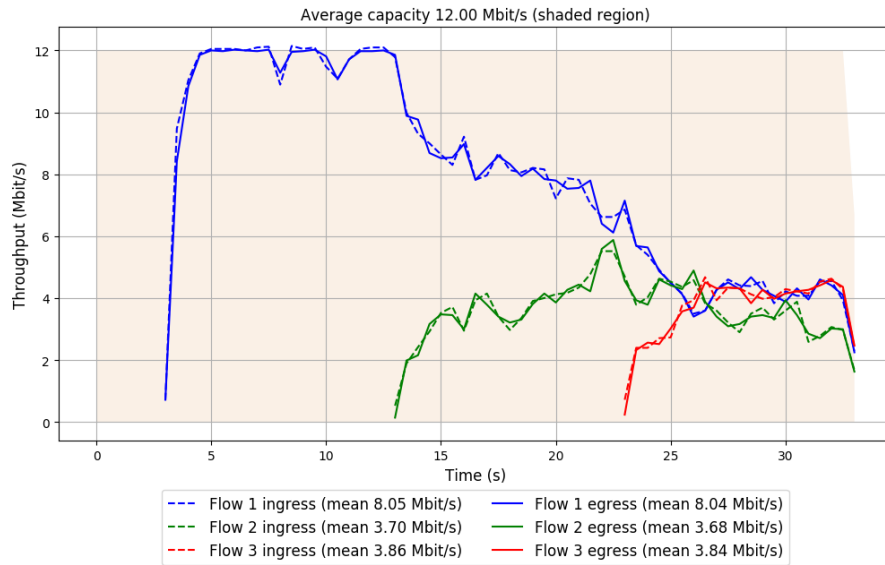
-- Flow 3:

Average throughput: 3.84 Mbit/s

95th percentile per-packet one-way delay: 48.066 ms

Loss rate: 0.81%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-27 18:08:44

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

Below is generated by plot.py at 2018-02-27 19:41:48

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.76 Mbit/s (98.0% utilization)

95th percentile per-packet one-way delay: 48.751 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 48.633 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 48.819 ms

Loss rate: 0.44%

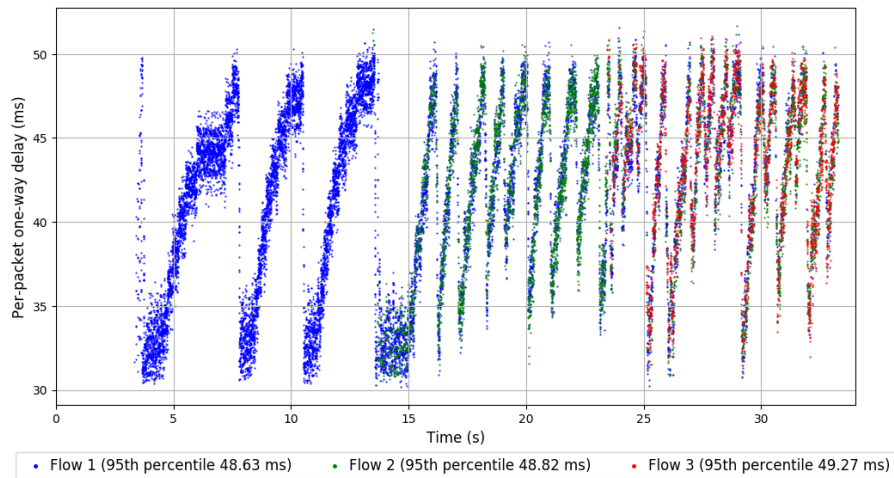
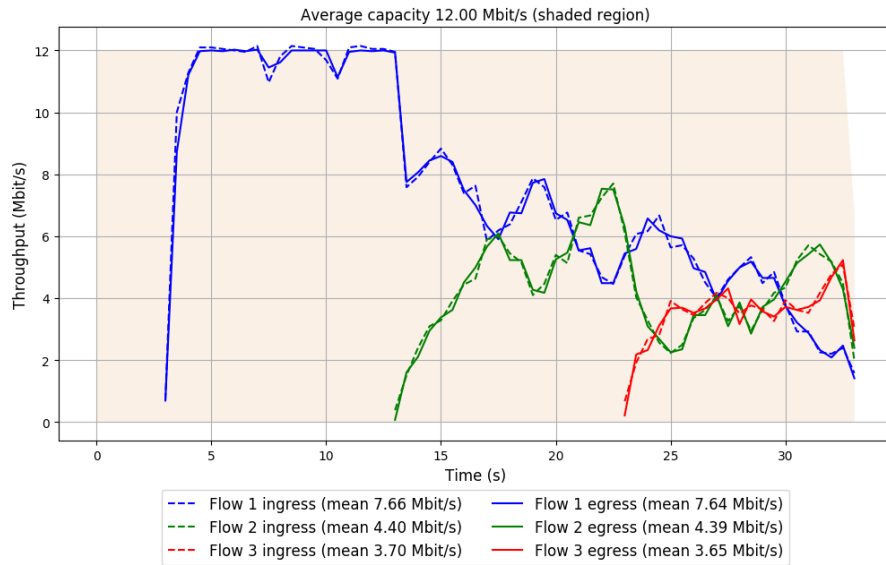
-- Flow 3:

Average throughput: 3.65 Mbit/s

95th percentile per-packet one-way delay: 49.272 ms

Loss rate: 1.50%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-27 18:19:09

End at: 2018-02-27 18:19:39

Below is generated by plot.py at 2018-02-27 19:41:48

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.81 Mbit/s (98.4% utilization)

95th percentile per-packet one-way delay: 48.354 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 7.99 Mbit/s

95th percentile per-packet one-way delay: 48.287 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 48.493 ms

Loss rate: 0.83%

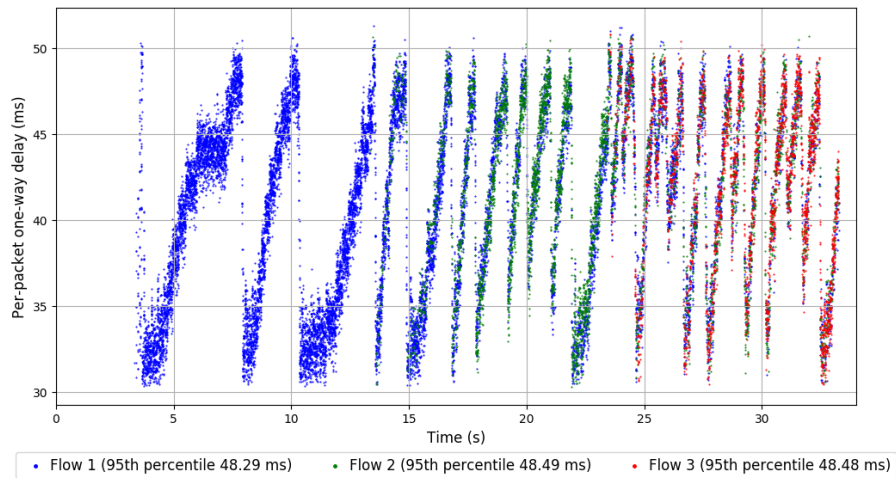
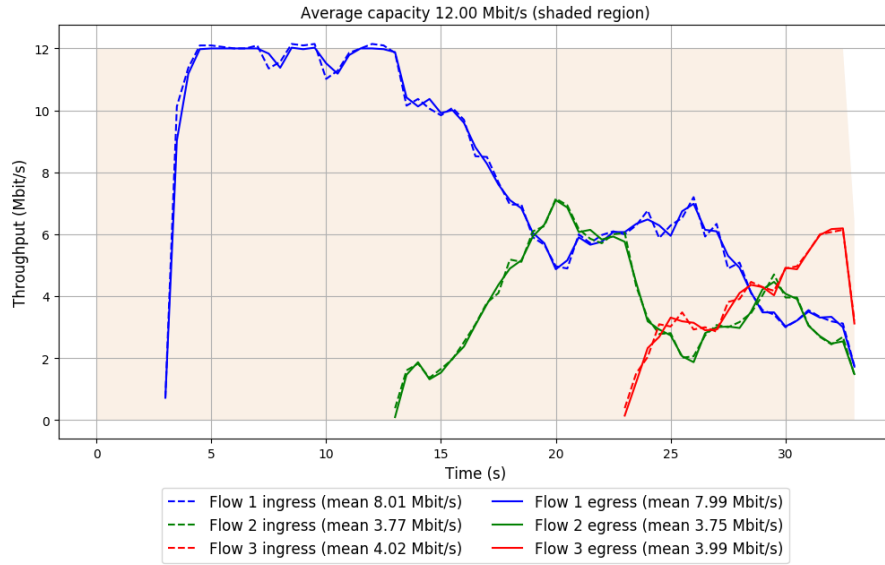
-- Flow 3:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 48.480 ms

Loss rate: 1.05%

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 19:41:49

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.78 Mbit/s (98.2% utilization)

95th percentile per-packet one-way delay: 48.575 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 8.53 Mbit/s

95th percentile per-packet one-way delay: 48.580 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 3.12 Mbit/s

95th percentile per-packet one-way delay: 48.598 ms

Loss rate: 0.84%

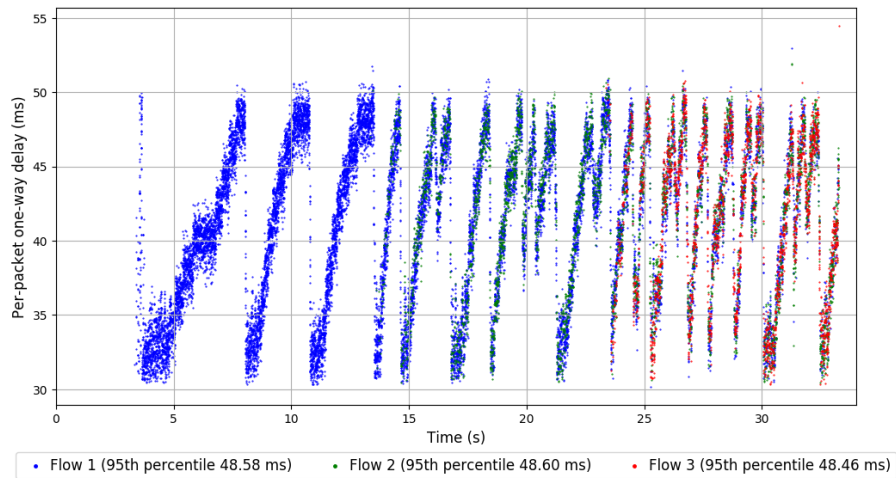
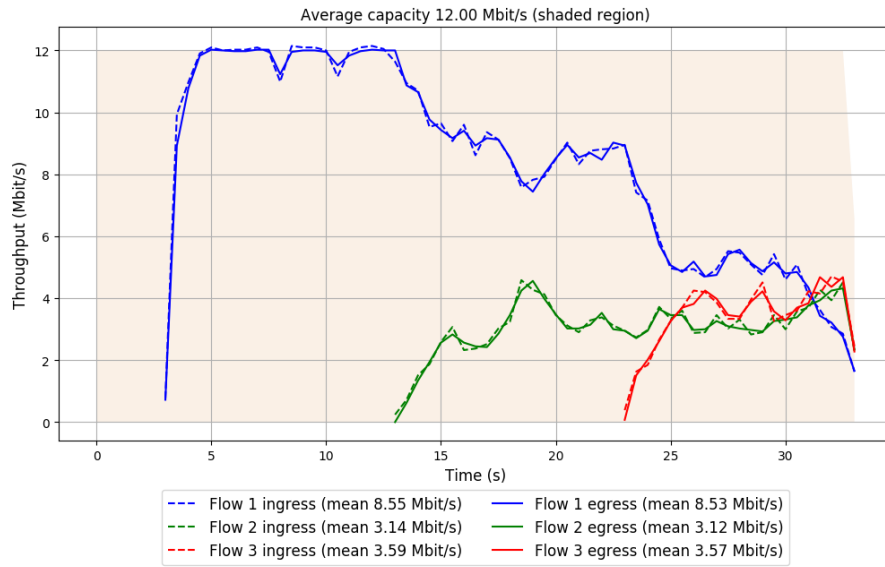
-- Flow 3:

Average throughput: 3.57 Mbit/s

95th percentile per-packet one-way delay: 48.456 ms

Loss rate: 1.01%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-27 18:40:00

End at: 2018-02-27 18:40:30

Below is generated by plot.py at 2018-02-27 19:41:49

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.79 Mbit/s (98.3% utilization)

95th percentile per-packet one-way delay: 48.505 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 48.478 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 48.595 ms

Loss rate: 0.53%

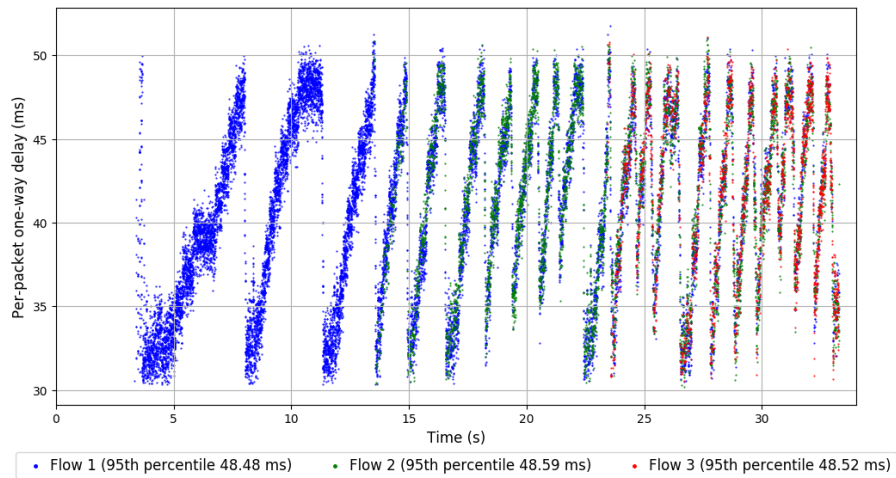
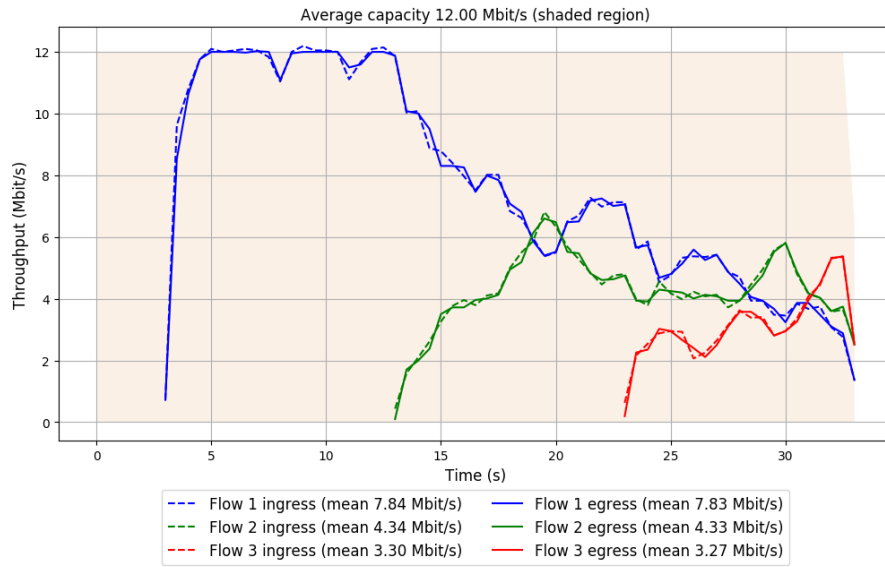
-- Flow 3:

Average throughput: 3.27 Mbit/s

95th percentile per-packet one-way delay: 48.520 ms

Loss rate: 1.25%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-27 18:50:24

End at: 2018-02-27 18:50:54

Below is generated by plot.py at 2018-02-27 19:41:49

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.78 Mbit/s (98.1% utilization)

95th percentile per-packet one-way delay: 48.519 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 8.70 Mbit/s

95th percentile per-packet one-way delay: 48.472 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 3.10 Mbit/s

95th percentile per-packet one-way delay: 48.644 ms

Loss rate: 0.83%

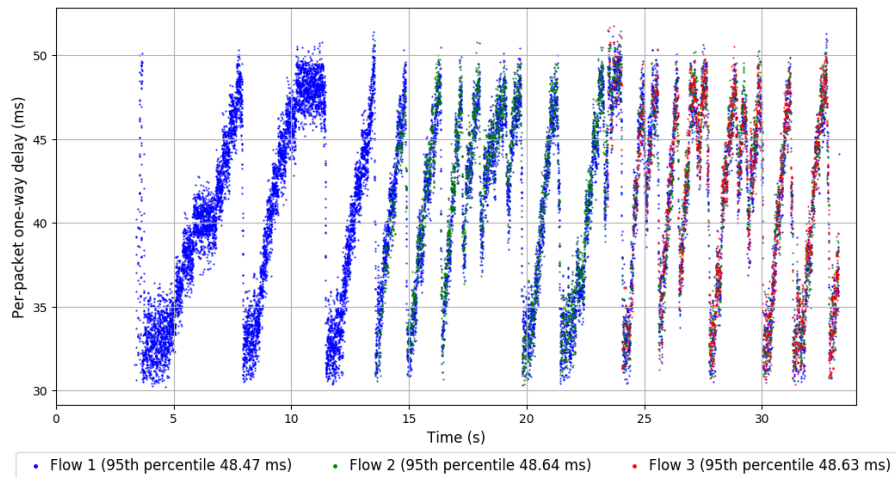
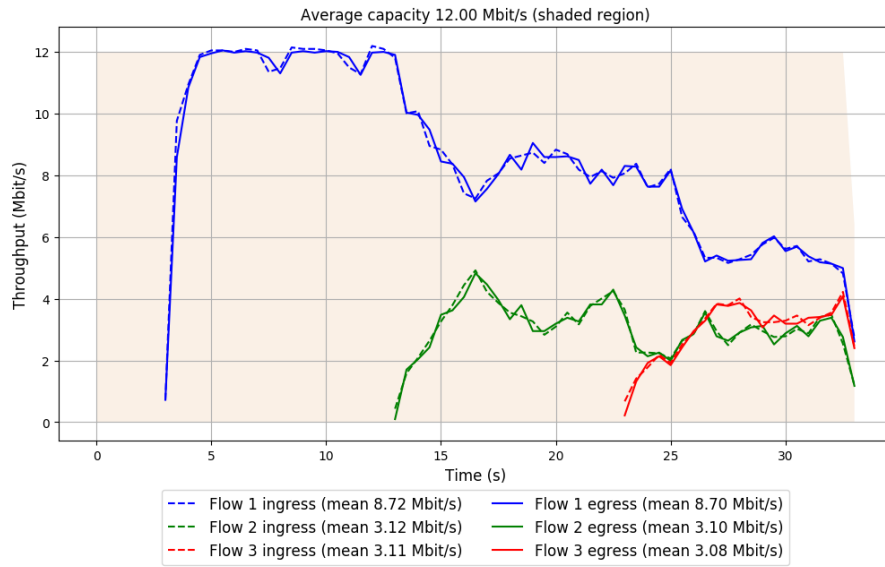
-- Flow 3:

Average throughput: 3.08 Mbit/s

95th percentile per-packet one-way delay: 48.628 ms

Loss rate: 1.52%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-27 19:00:50

End at: 2018-02-27 19:01:20

Below is generated by plot.py at 2018-02-27 19:42:08

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.78 Mbit/s (98.2% utilization)

95th percentile per-packet one-way delay: 48.402 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 8.41 Mbit/s

95th percentile per-packet one-way delay: 48.246 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 3.36 Mbit/s

95th percentile per-packet one-way delay: 48.742 ms

Loss rate: 0.91%

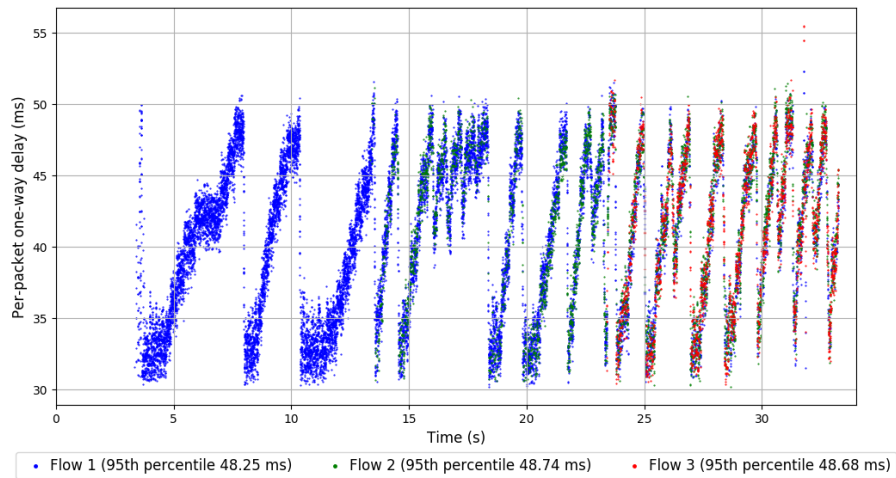
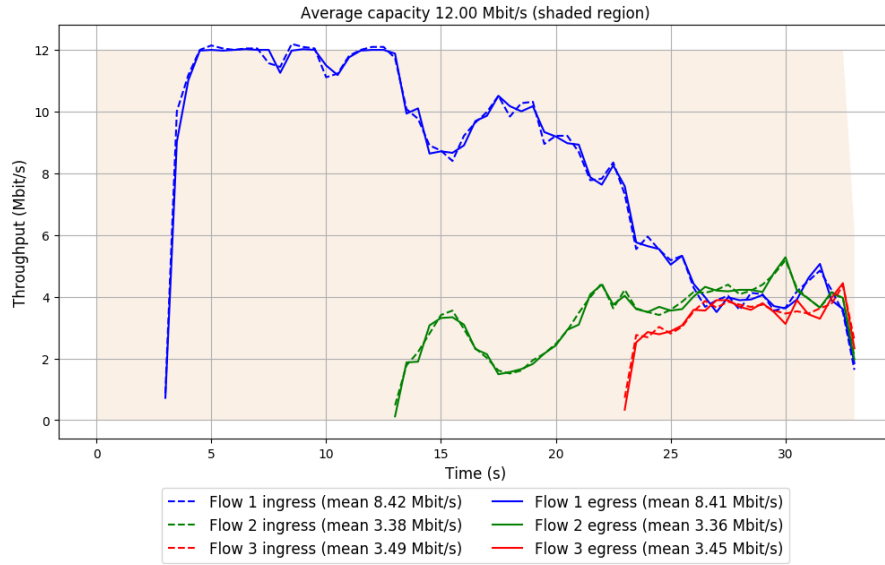
-- Flow 3:

Average throughput: 3.45 Mbit/s

95th percentile per-packet one-way delay: 48.679 ms

Loss rate: 1.52%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-27 19:11:16

End at: 2018-02-27 19:11:46

Below is generated by plot.py at 2018-02-27 19:42:10

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.69 Mbit/s (97.4% utilization)

95th percentile per-packet one-way delay: 48.486 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 6.87 Mbit/s

95th percentile per-packet one-way delay: 48.239 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 5.70 Mbit/s

95th percentile per-packet one-way delay: 48.626 ms

Loss rate: 0.32%

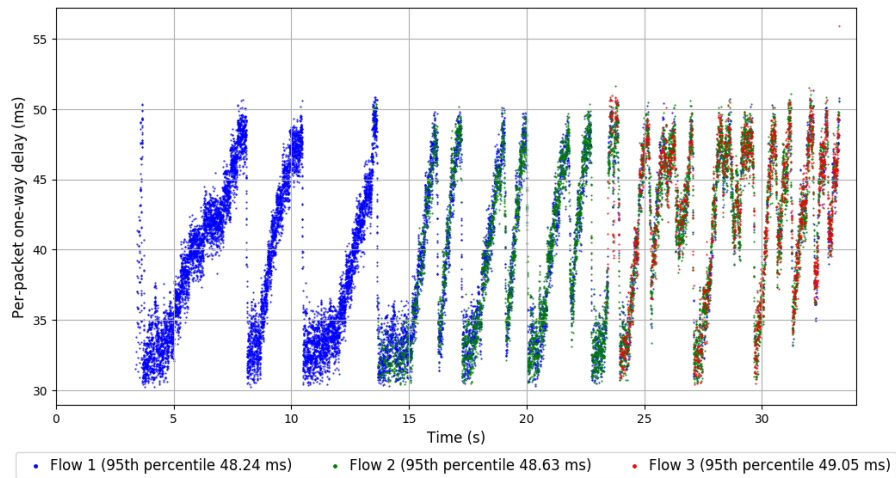
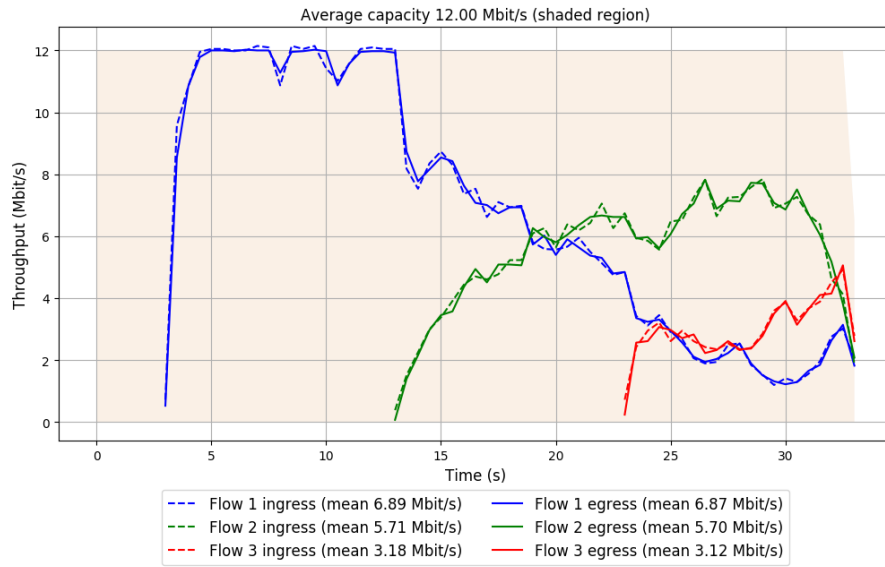
-- Flow 3:

Average throughput: 3.12 Mbit/s

95th percentile per-packet one-way delay: 49.050 ms

Loss rate: 1.72%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-27 19:21:44

End at: 2018-02-27 19:22:14

Below is generated by plot.py at 2018-02-27 19:42:11

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.78 Mbit/s (98.1% utilization)

95th percentile per-packet one-way delay: 48.398 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 8.22 Mbit/s

95th percentile per-packet one-way delay: 48.369 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 3.64 Mbit/s

95th percentile per-packet one-way delay: 48.568 ms

Loss rate: 0.71%

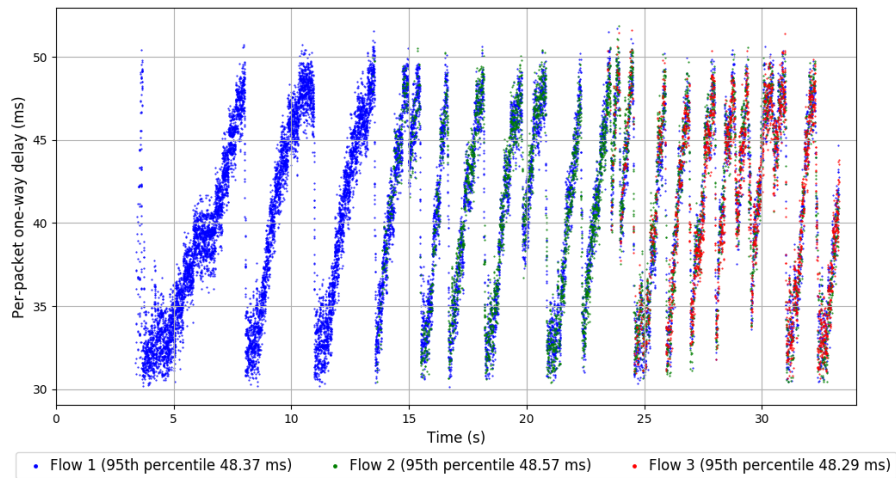
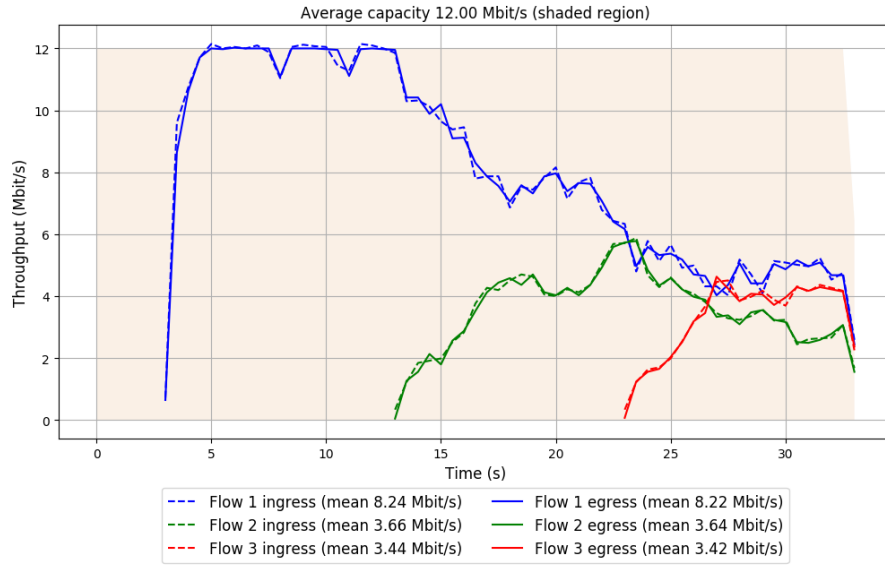
-- Flow 3:

Average throughput: 3.42 Mbit/s

95th percentile per-packet one-way delay: 48.288 ms

Loss rate: 0.88%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-27 19:32:10

End at: 2018-02-27 19:32:40

Below is generated by plot.py at 2018-02-27 19:42:13

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.71 Mbit/s (97.6% utilization)

95th percentile per-packet one-way delay: 48.465 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 7.57 Mbit/s

95th percentile per-packet one-way delay: 48.445 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 48.418 ms

Loss rate: 0.85%

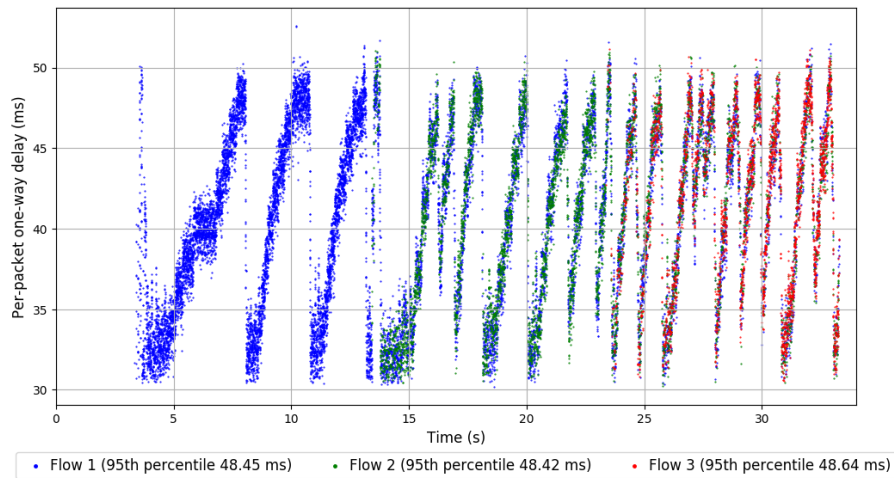
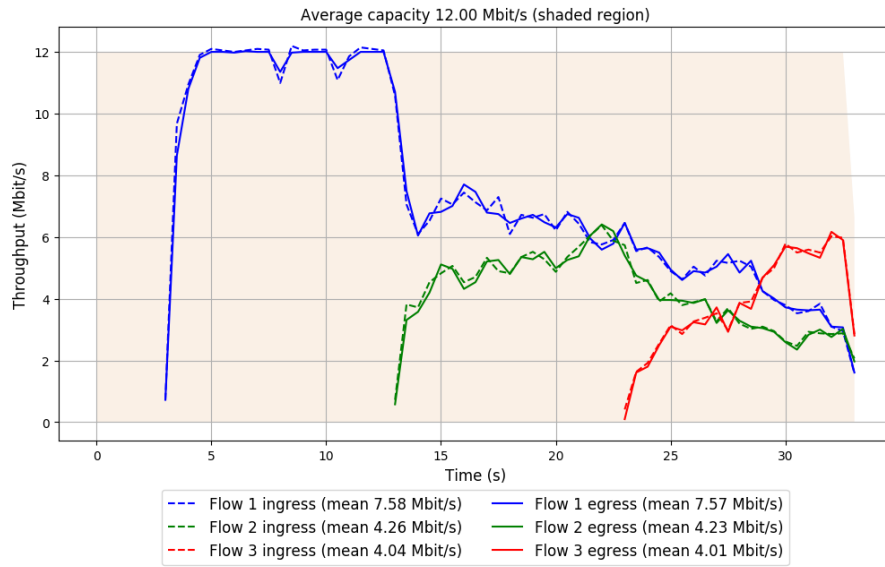
-- Flow 3:

Average throughput: 4.01 Mbit/s

95th percentile per-packet one-way delay: 48.638 ms

Loss rate: 1.11%

Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of LEDBAT

Start at: 2018-02-27 18:04:08

End at: 2018-02-27 18:04:38

Below is generated by plot.py at 2018-02-27 19:42:13

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.07 Mbit/s (83.9% utilization)

95th percentile per-packet one-way delay: 50.203 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 5.94 Mbit/s

95th percentile per-packet one-way delay: 50.008 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 4.54 Mbit/s

95th percentile per-packet one-way delay: 50.386 ms

Loss rate: 0.82%

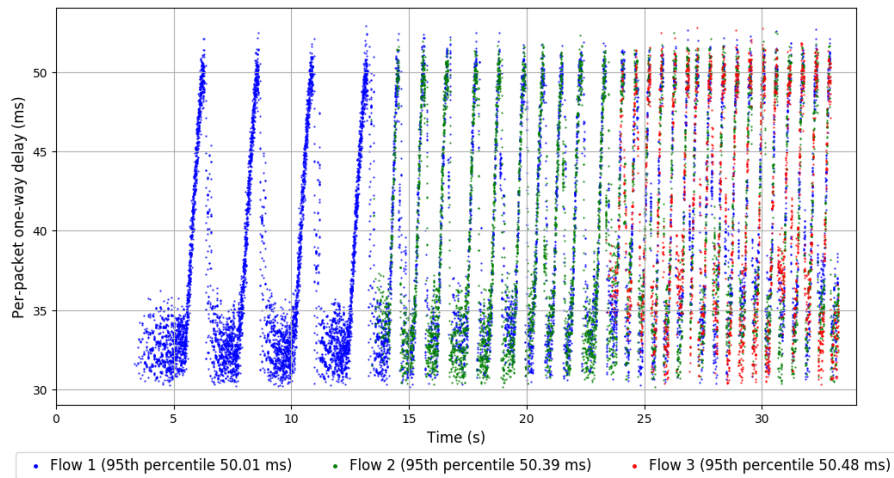
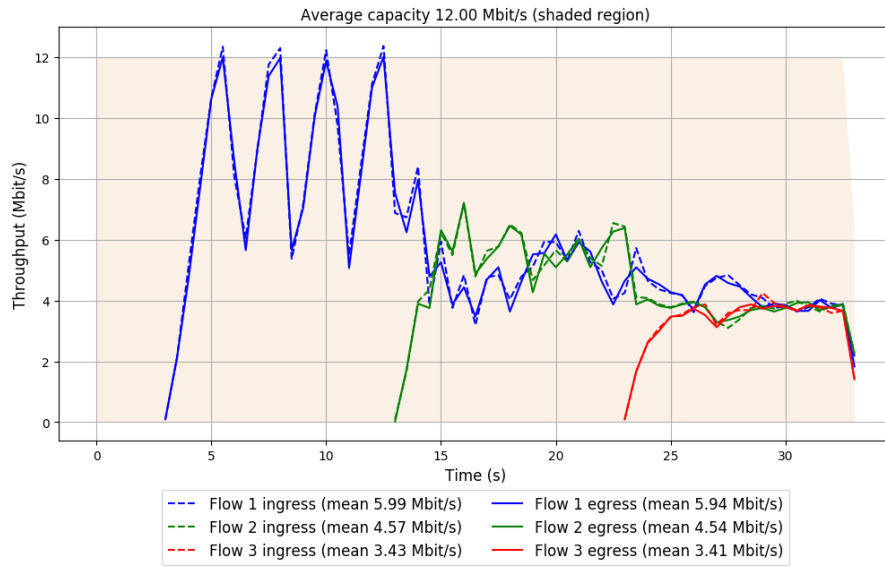
-- Flow 3:

Average throughput: 3.41 Mbit/s

95th percentile per-packet one-way delay: 50.483 ms

Loss rate: 1.34%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-02-27 18:14:32

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

Below is generated by plot.py at 2018-02-27 19:42:13

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.05 Mbit/s (83.8% utilization)

95th percentile per-packet one-way delay: 50.236 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 5.90 Mbit/s

95th percentile per-packet one-way delay: 50.047 ms

Loss rate: 1.13%

-- Flow 2:

Average throughput: 4.52 Mbit/s

95th percentile per-packet one-way delay: 50.424 ms

Loss rate: 0.70%

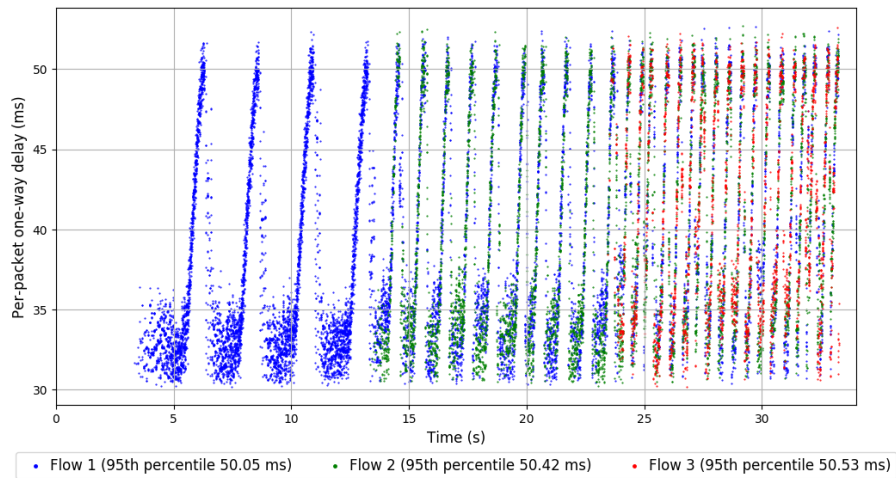
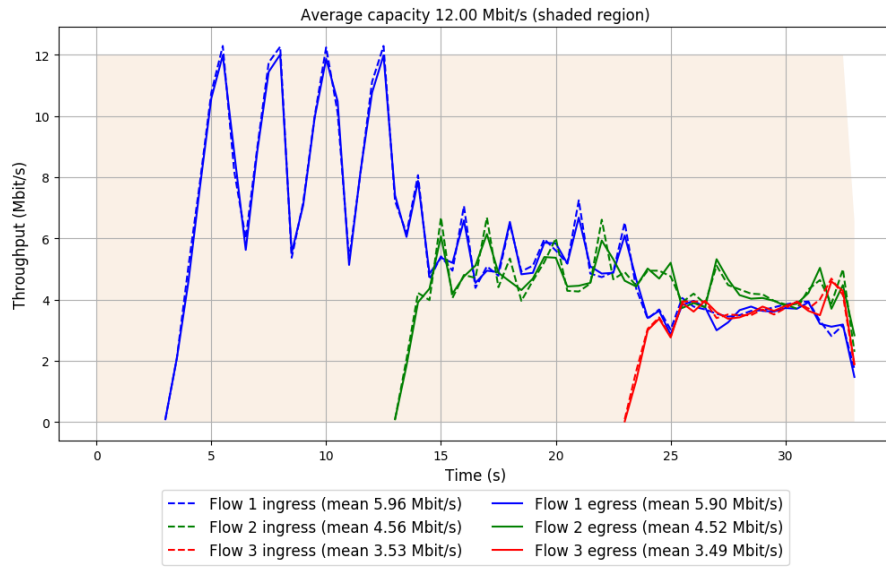
-- Flow 3:

Average throughput: 3.49 Mbit/s

95th percentile per-packet one-way delay: 50.530 ms

Loss rate: 1.44%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-27 18:24:58

End at: 2018-02-27 18:25:28

Below is generated by plot.py at 2018-02-27 19:42:13

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.09 Mbit/s (84.1% utilization)

95th percentile per-packet one-way delay: 50.249 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 6.04 Mbit/s

95th percentile per-packet one-way delay: 50.112 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 50.428 ms

Loss rate: 0.97%

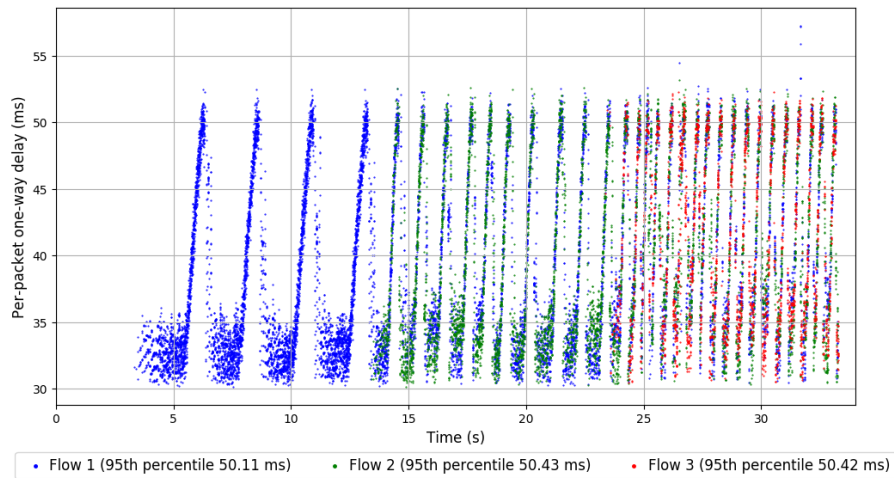
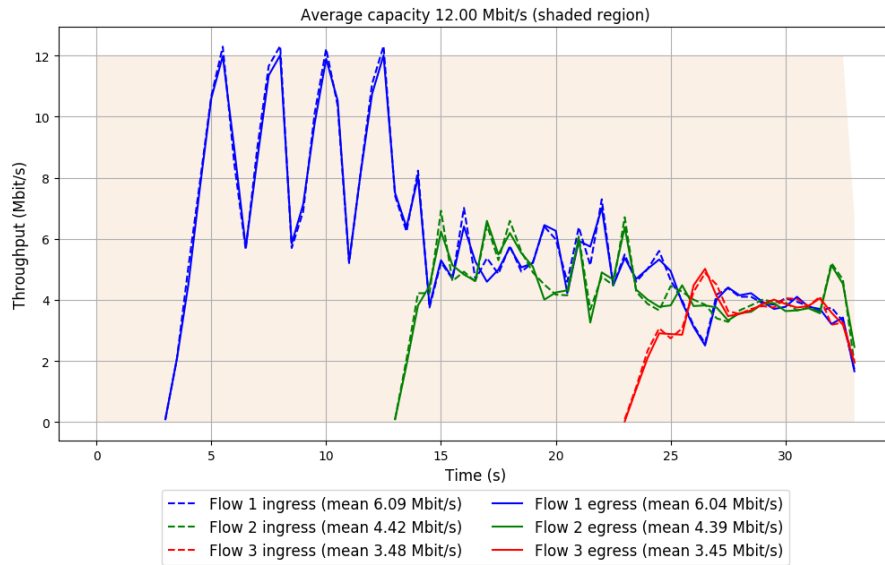
-- Flow 3:

Average throughput: 3.45 Mbit/s

95th percentile per-packet one-way delay: 50.424 ms

Loss rate: 1.12%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-27 18:35:23

End at: 2018-02-27 18:35:53

Below is generated by plot.py at 2018-02-27 19:42:13

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.12 Mbit/s (84.3% utilization)

95th percentile per-packet one-way delay: 50.243 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 6.11 Mbit/s

95th percentile per-packet one-way delay: 50.076 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 4.08 Mbit/s

95th percentile per-packet one-way delay: 50.399 ms

Loss rate: 0.76%

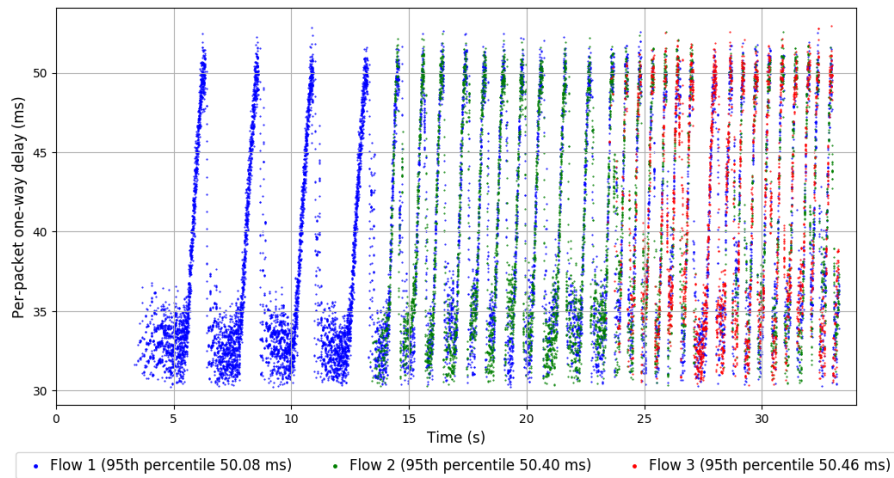
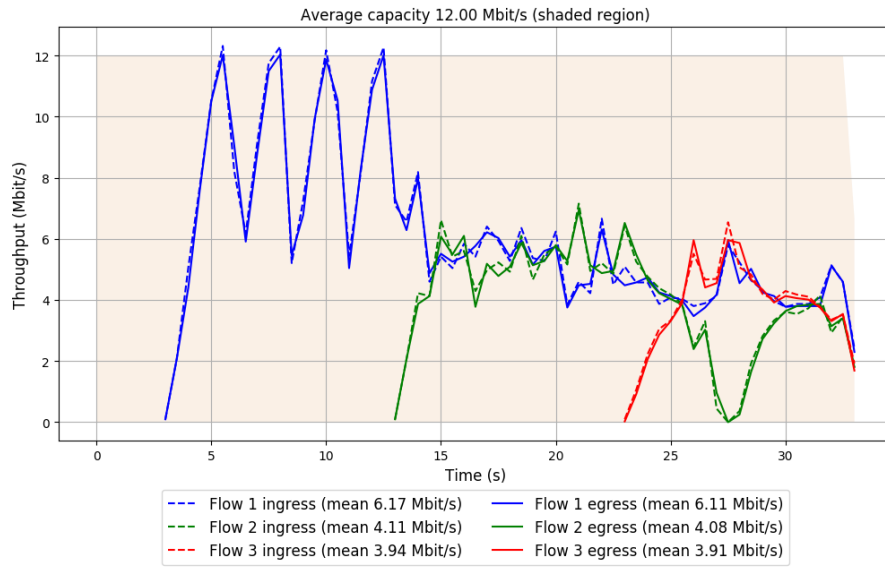
-- Flow 3:

Average throughput: 3.91 Mbit/s

95th percentile per-packet one-way delay: 50.461 ms

Loss rate: 1.55%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-27 18:45:48

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

Below is generated by plot.py at 2018-02-27 19:42:31

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.08 Mbit/s (84.0% utilization)

95th percentile per-packet one-way delay: 50.310 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 5.92 Mbit/s

95th percentile per-packet one-way delay: 50.177 ms

Loss rate: 1.22%

-- Flow 2:

Average throughput: 4.56 Mbit/s

95th percentile per-packet one-way delay: 50.373 ms

Loss rate: 0.96%

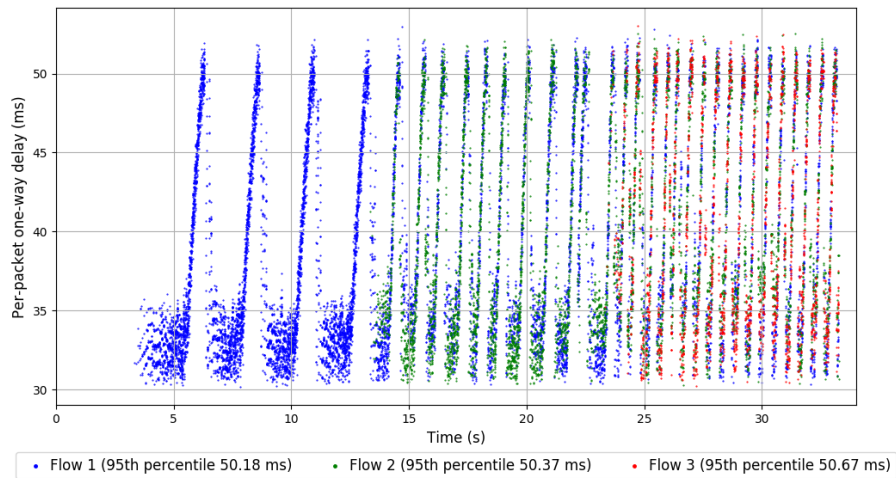
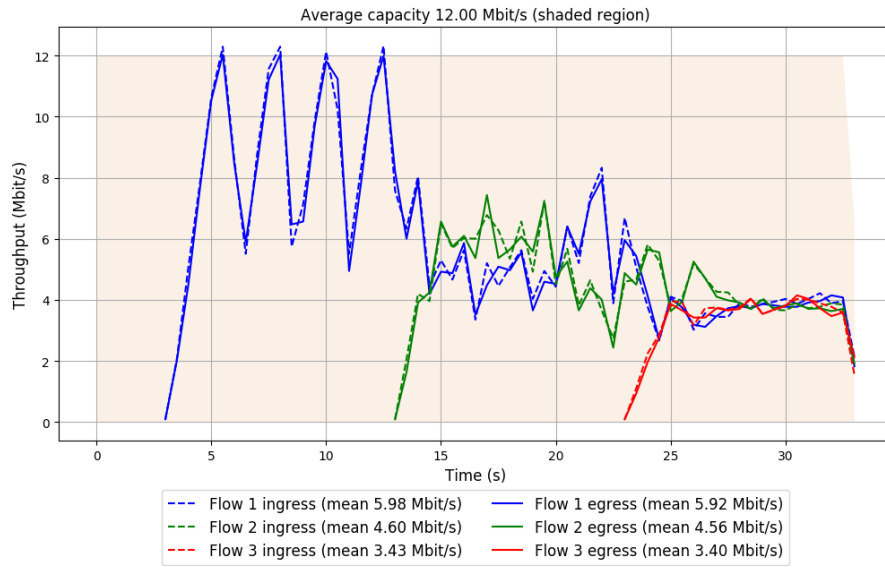
-- Flow 3:

Average throughput: 3.40 Mbit/s

95th percentile per-packet one-way delay: 50.671 ms

Loss rate: 1.20%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-27 18:56:14

End at: 2018-02-27 18:56:44

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: 10.07 Mbit/s (83.9% utilization)

95th percentile per-packet one-way delay: 50.264 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 5.90 Mbit/s

95th percentile per-packet one-way delay: 50.090 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 4.75 Mbit/s

95th percentile per-packet one-way delay: 50.383 ms

Loss rate: 0.92%

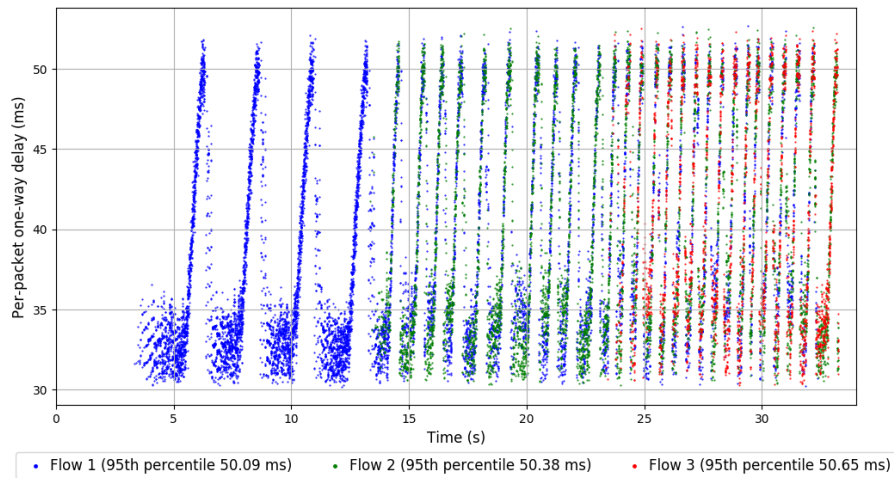
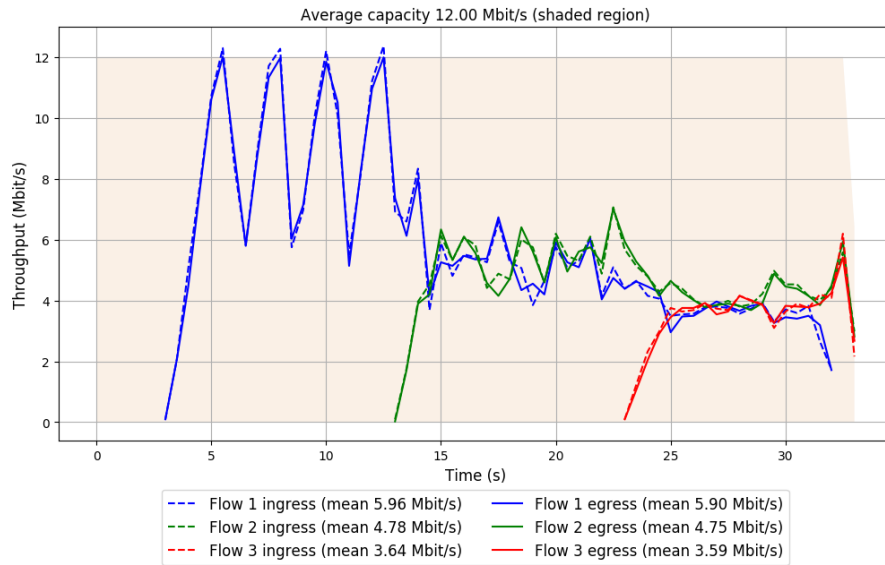
-- Flow 3:

Average throughput: 3.59 Mbit/s

95th percentile per-packet one-way delay: 50.653 ms

Loss rate: 1.40%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-02-27 19:06:39

End at: 2018-02-27 19:07:09

Below is generated by plot.py at 2018-02-27 19:42:34

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.09 Mbit/s (84.1% utilization)

95th percentile per-packet one-way delay: 50.242 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 5.98 Mbit/s

95th percentile per-packet one-way delay: 50.119 ms

Loss rate: 1.08%

-- Flow 2:

Average throughput: 4.51 Mbit/s

95th percentile per-packet one-way delay: 50.285 ms

Loss rate: 1.12%

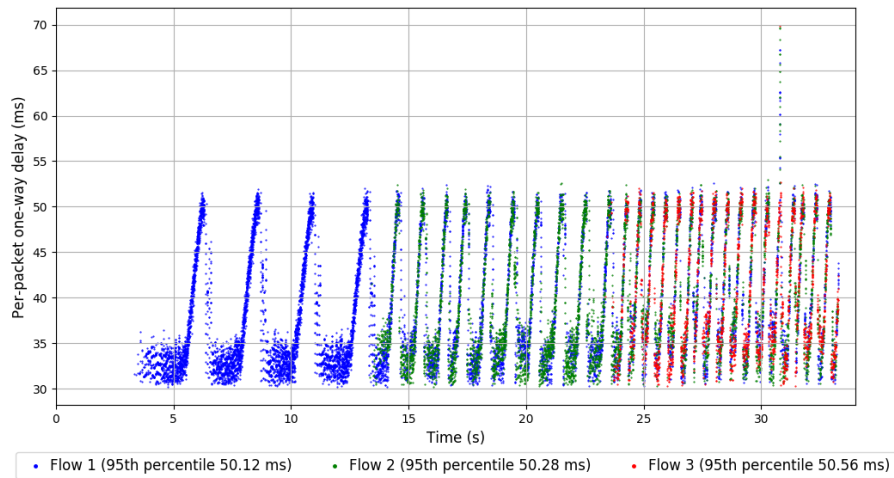
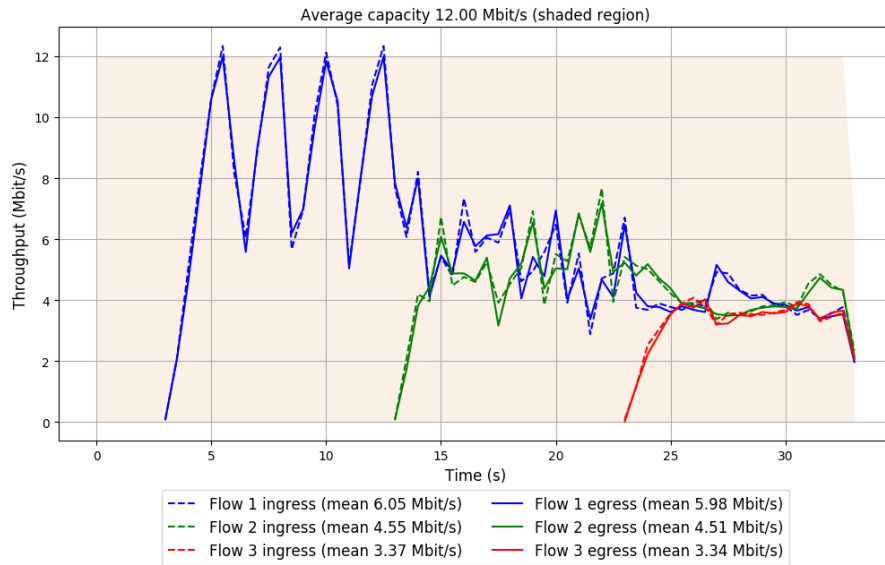
-- Flow 3:

Average throughput: 3.34 Mbit/s

95th percentile per-packet one-way delay: 50.563 ms

Loss rate: 1.40%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-27 19:17:08

End at: 2018-02-27 19:17:38

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: 10.11 Mbit/s (84.2% utilization)

95th percentile per-packet one-way delay: 50.248 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 6.10 Mbit/s

95th percentile per-packet one-way delay: 50.093 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 50.364 ms

Loss rate: 0.97%

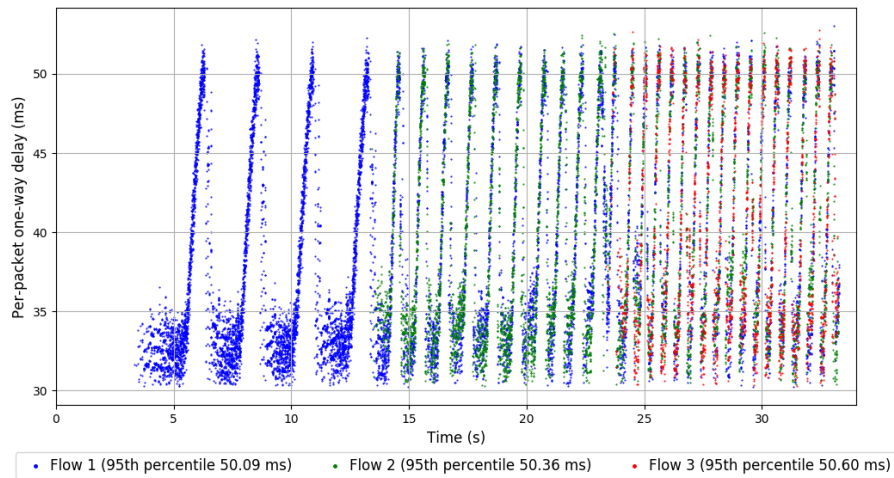
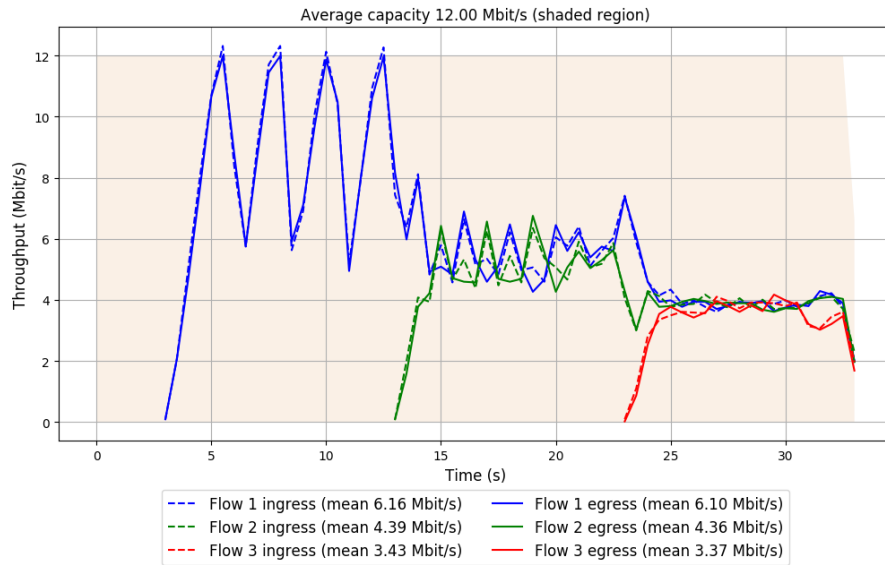
-- Flow 3:

Average throughput: 3.37 Mbit/s

95th percentile per-packet one-way delay: 50.600 ms

Loss rate: 1.93%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

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

End at: 2018-02-27 19:28:04

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: 9.83 Mbit/s (81.9% utilization)

95th percentile per-packet one-way delay: 50.190 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 5.77 Mbit/s

95th percentile per-packet one-way delay: 50.001 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 4.46 Mbit/s

95th percentile per-packet one-way delay: 50.325 ms

Loss rate: 0.70%

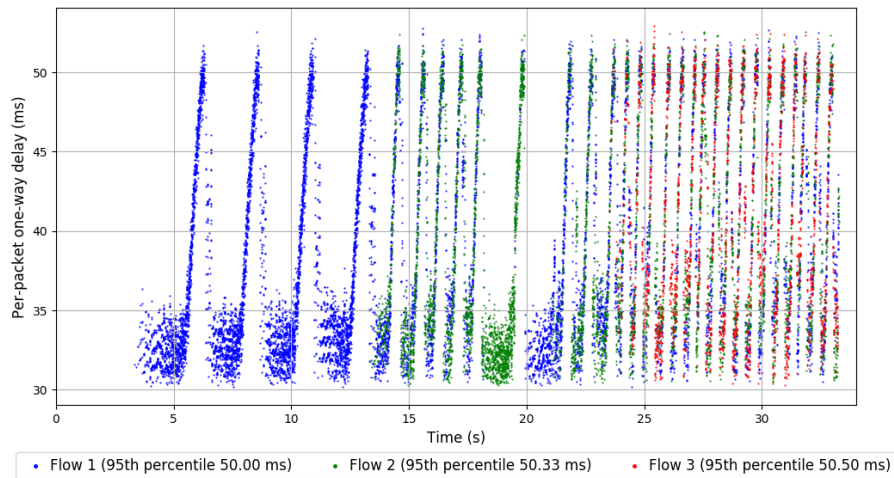
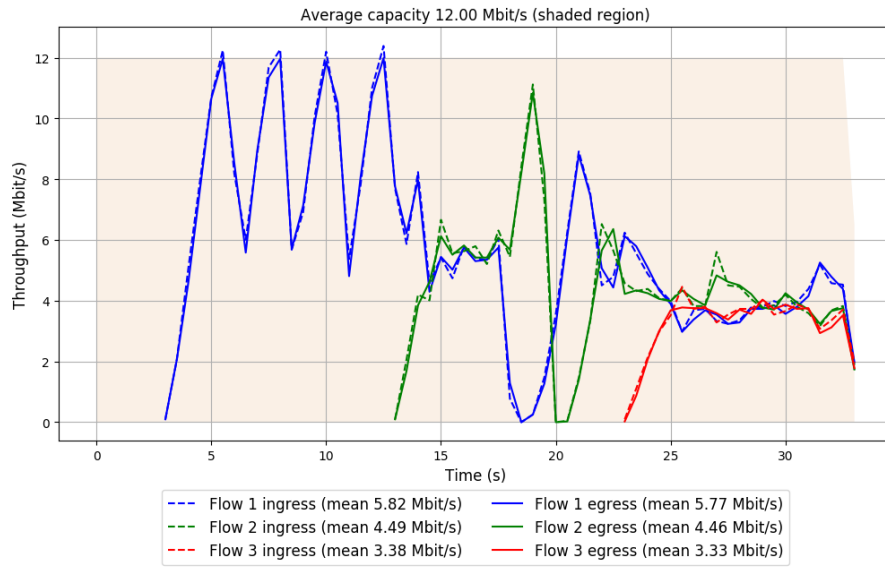
-- Flow 3:

Average throughput: 3.33 Mbit/s

95th percentile per-packet one-way delay: 50.501 ms

Loss rate: 2.07%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-02-27 19:38:02

End at: 2018-02-27 19:38:32

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: 10.14 Mbit/s (84.5% utilization)

95th percentile per-packet one-way delay: 50.177 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 5.96 Mbit/s

95th percentile per-packet one-way delay: 50.090 ms

Loss rate: 1.13%

-- Flow 2:

Average throughput: 4.77 Mbit/s

95th percentile per-packet one-way delay: 50.274 ms

Loss rate: 0.86%

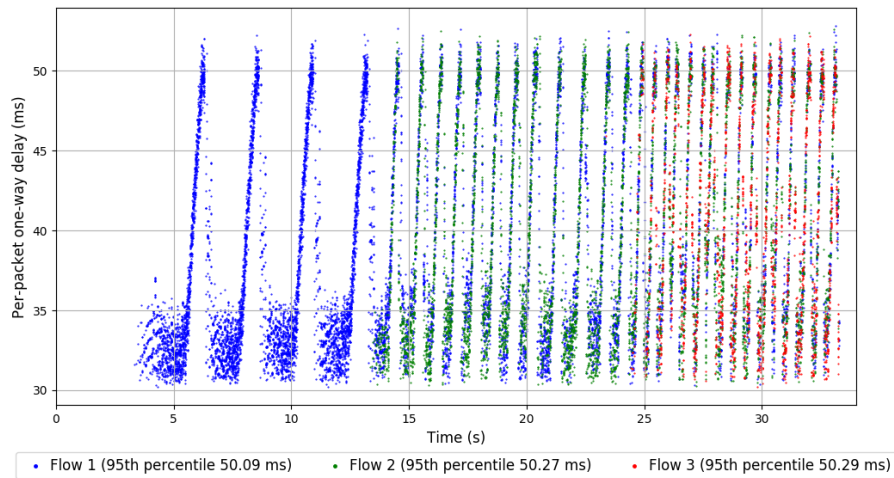
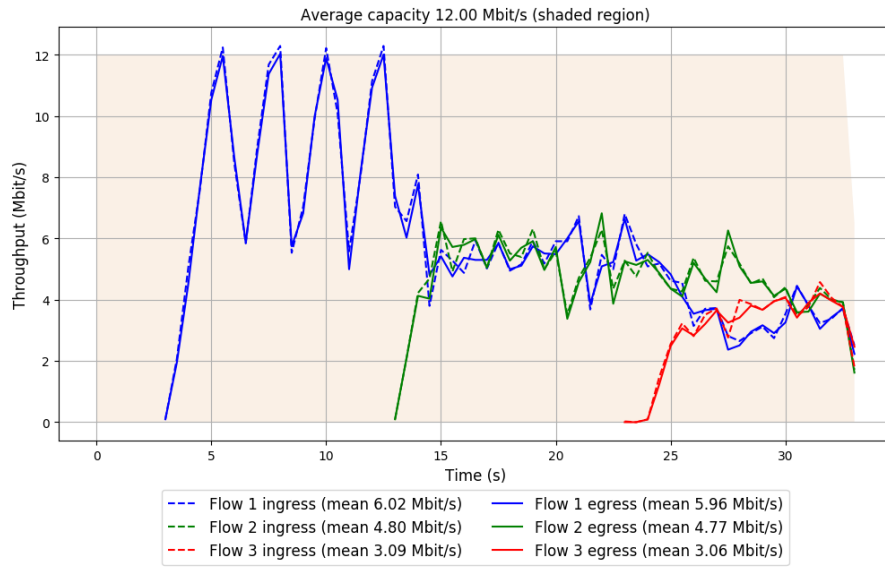
-- Flow 3:

Average throughput: 3.06 Mbit/s

95th percentile per-packet one-way delay: 50.292 ms

Loss rate: 1.18%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC

Start at: 2018-02-27 17:57:45

End at: 2018-02-27 17:58:15

Below is generated by plot.py at 2018-02-27 19:42:37

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.80 Mbit/s (90.0% utilization)

95th percentile per-packet one-way delay: 50.763 ms

Loss rate: 4.98%

-- Flow 1:

Average throughput: 8.87 Mbit/s

95th percentile per-packet one-way delay: 50.689 ms

Loss rate: 3.71%

-- Flow 2:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 50.882 ms

Loss rate: 8.19%

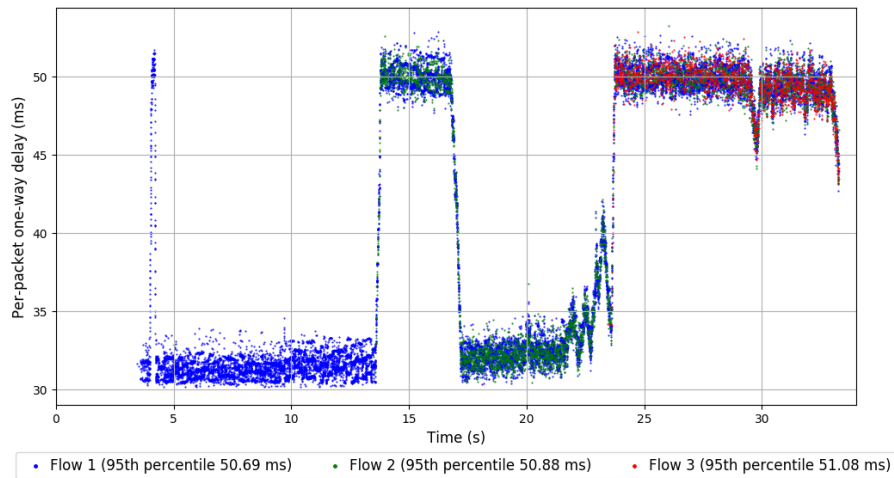
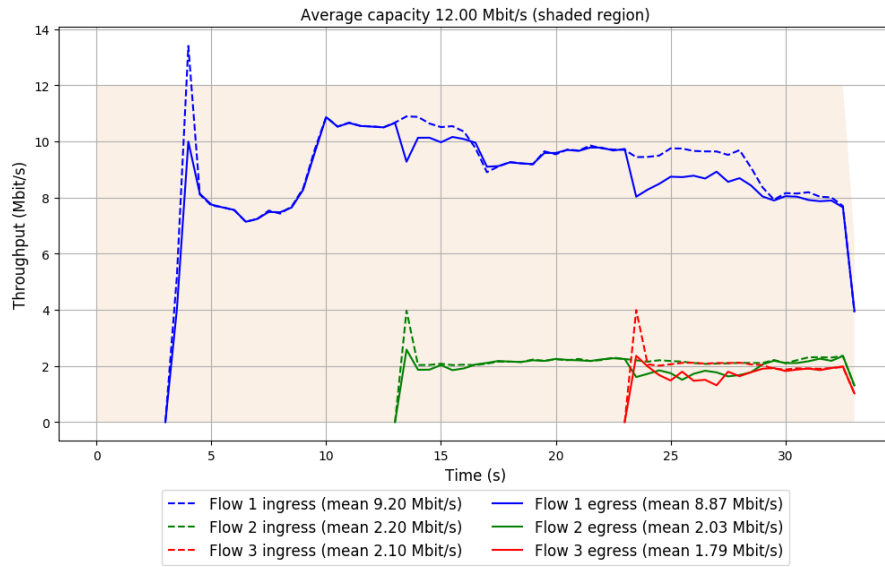
-- Flow 3:

Average throughput: 1.79 Mbit/s

95th percentile per-packet one-way delay: 51.084 ms

Loss rate: 15.12%

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-02-27 18:08:10

End at: 2018-02-27 18:08:40

Below is generated by plot.py at 2018-02-27 19:42:38

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.93 Mbit/s (91.1% utilization)

95th percentile per-packet one-way delay: 49.913 ms

Loss rate: 2.03%

-- Flow 1:

Average throughput: 9.00 Mbit/s

95th percentile per-packet one-way delay: 49.839 ms

Loss rate: 1.74%

-- Flow 2:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 50.066 ms

Loss rate: 2.61%

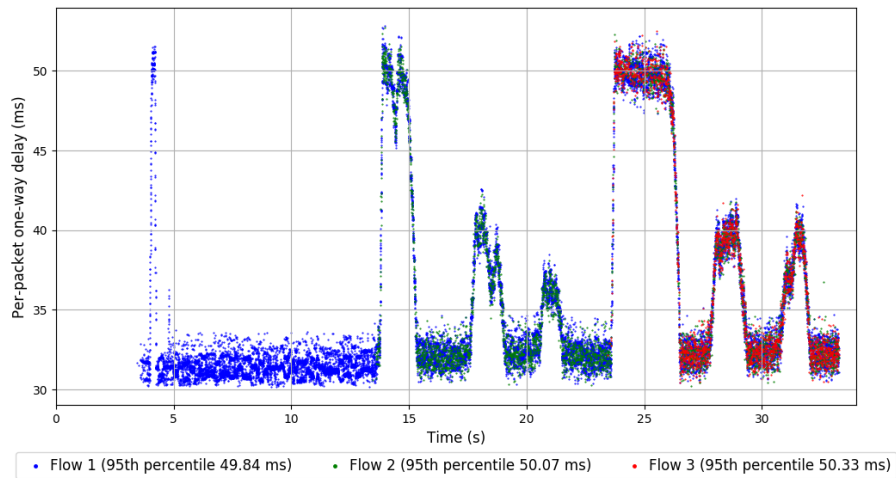
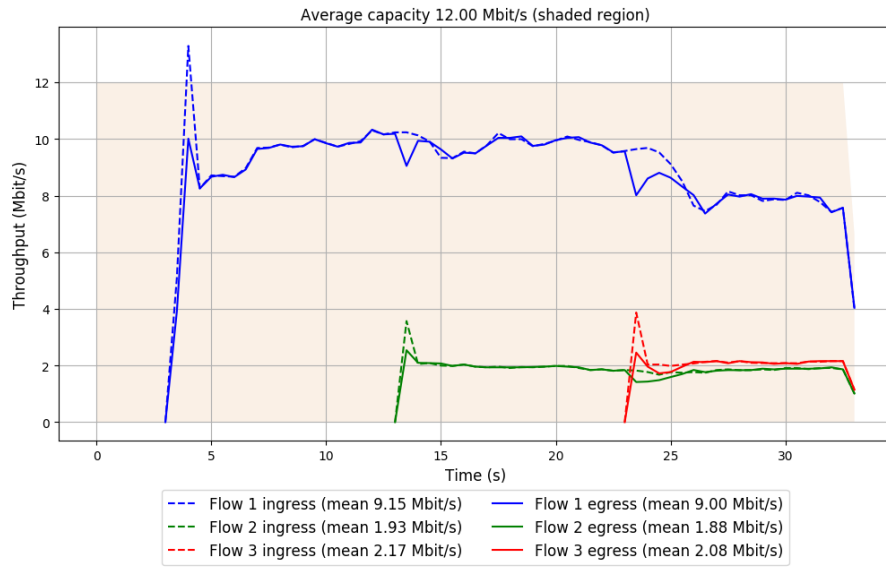
-- Flow 3:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 50.325 ms

Loss rate: 4.78%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

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

End at: 2018-02-27 18:19:04

Below is generated by plot.py at 2018-02-27 19:42:56

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.81 Mbit/s (90.1% utilization)

95th percentile per-packet one-way delay: 50.370 ms

Loss rate: 3.73%

-- Flow 1:

Average throughput: 8.83 Mbit/s

95th percentile per-packet one-way delay: 50.286 ms

Loss rate: 2.88%

-- Flow 2:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 50.519 ms

Loss rate: 5.58%

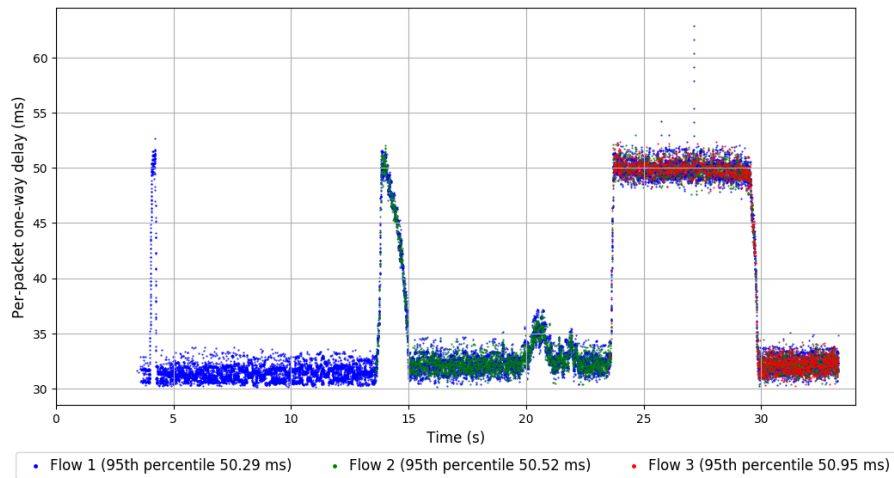
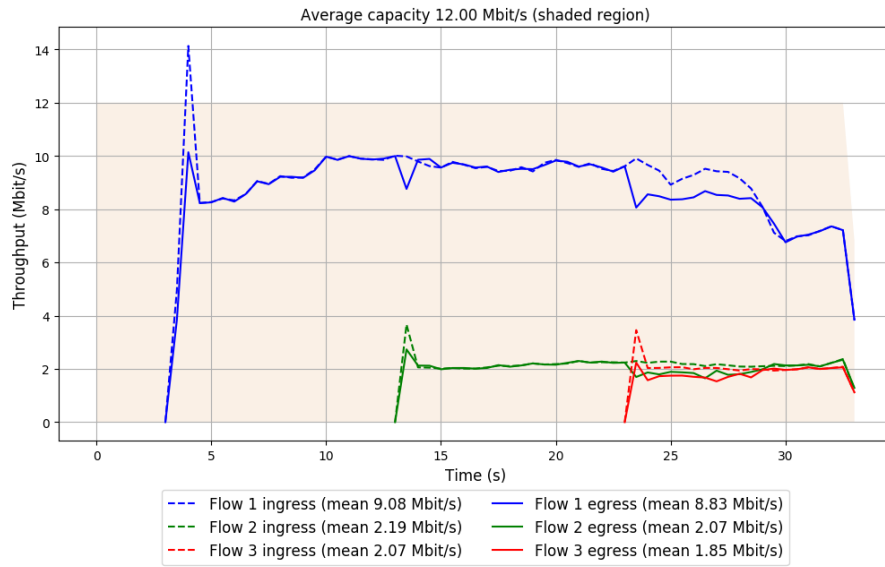
-- Flow 3:

Average throughput: 1.85 Mbit/s

95th percentile per-packet one-way delay: 50.954 ms

Loss rate: 10.95%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-02-27 18:29:00

End at: 2018-02-27 18:29:30

Below is generated by plot.py at 2018-02-27 19:42:57

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.82 Mbit/s (90.2% utilization)

95th percentile per-packet one-way delay: 50.571 ms

Loss rate: 4.99%

-- Flow 1:

Average throughput: 7.73 Mbit/s

95th percentile per-packet one-way delay: 50.432 ms

Loss rate: 4.12%

-- Flow 2:

Average throughput: 3.68 Mbit/s

95th percentile per-packet one-way delay: 50.738 ms

Loss rate: 5.93%

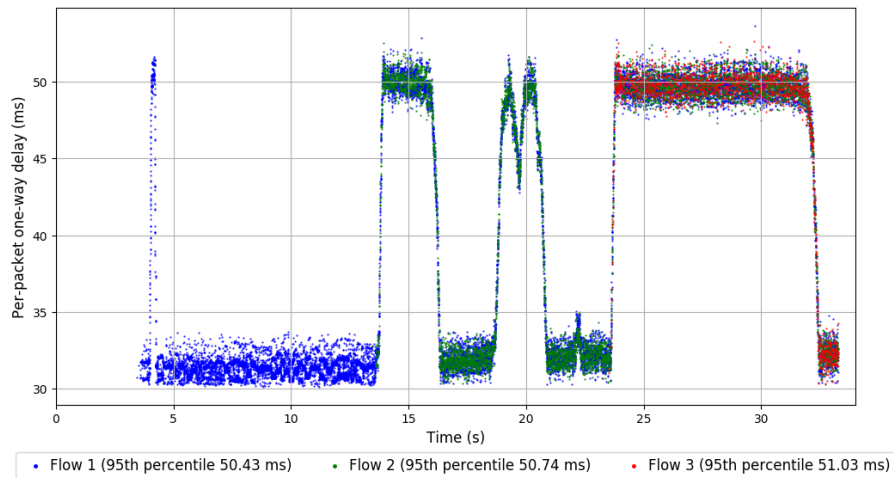
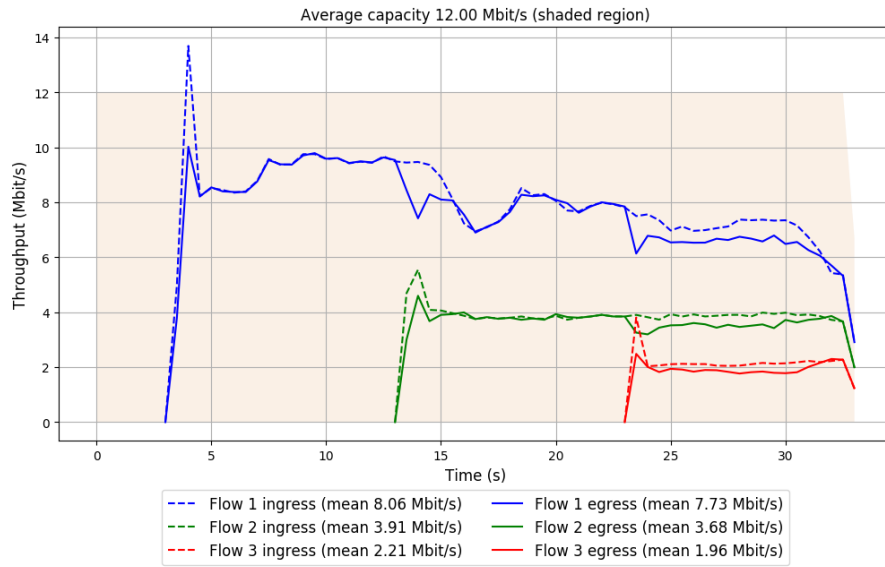
-- Flow 3:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 51.026 ms

Loss rate: 11.35%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-27 18:39:25

End at: 2018-02-27 18:39:55

Below is generated by plot.py at 2018-02-27 19:43:00

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.75 Mbit/s (89.6% utilization)

95th percentile per-packet one-way delay: 50.654 ms

Loss rate: 7.01%

-- Flow 1:

Average throughput: 7.51 Mbit/s

95th percentile per-packet one-way delay: 50.507 ms

Loss rate: 5.42%

-- Flow 2:

Average throughput: 4.08 Mbit/s

95th percentile per-packet one-way delay: 50.803 ms

Loss rate: 8.13%

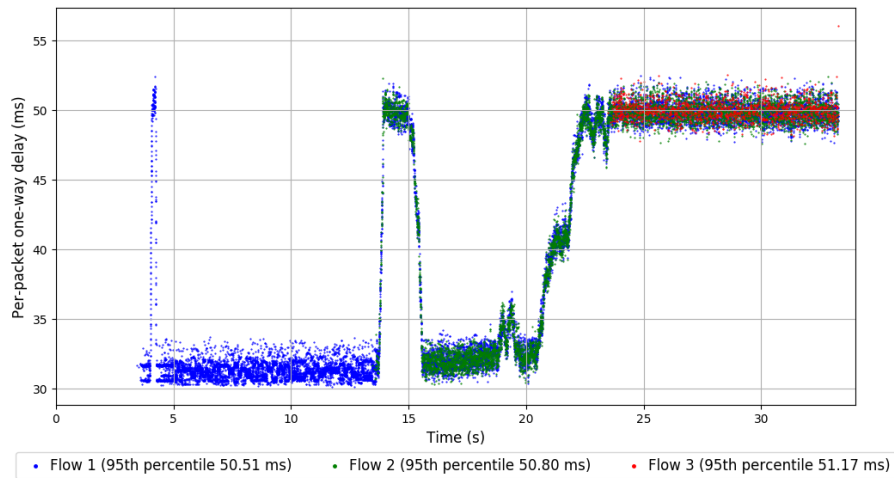
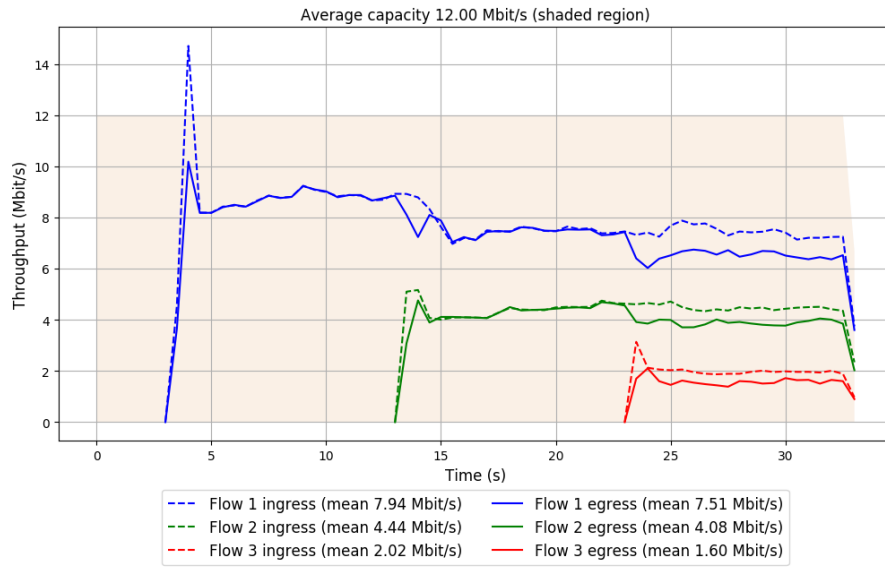
-- Flow 3:

Average throughput: 1.60 Mbit/s

95th percentile per-packet one-way delay: 51.169 ms

Loss rate: 21.06%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-27 18:49:50

End at: 2018-02-27 18:50:20

Below is generated by plot.py at 2018-02-27 19:43:01

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.72 Mbit/s (89.3% utilization)

95th percentile per-packet one-way delay: 50.547 ms

Loss rate: 4.27%

-- Flow 1:

Average throughput: 8.82 Mbit/s

95th percentile per-packet one-way delay: 50.455 ms

Loss rate: 3.37%

-- Flow 2:

Average throughput: 1.92 Mbit/s

95th percentile per-packet one-way delay: 50.639 ms

Loss rate: 6.25%

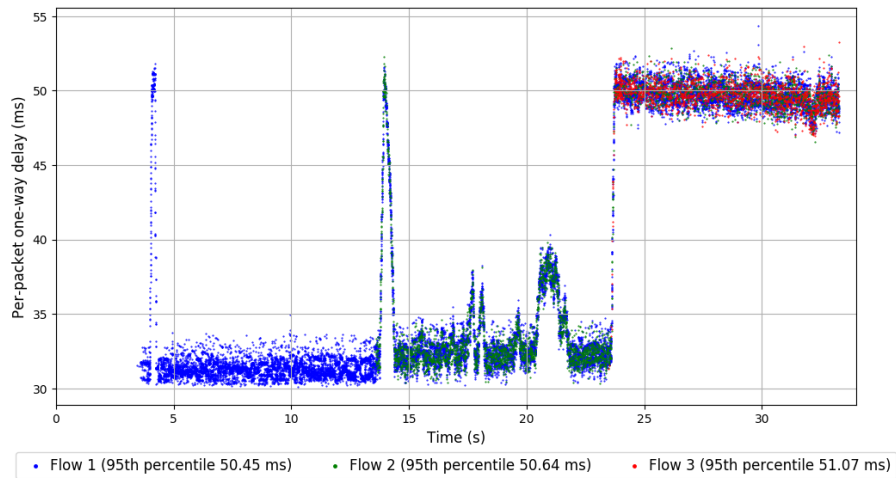
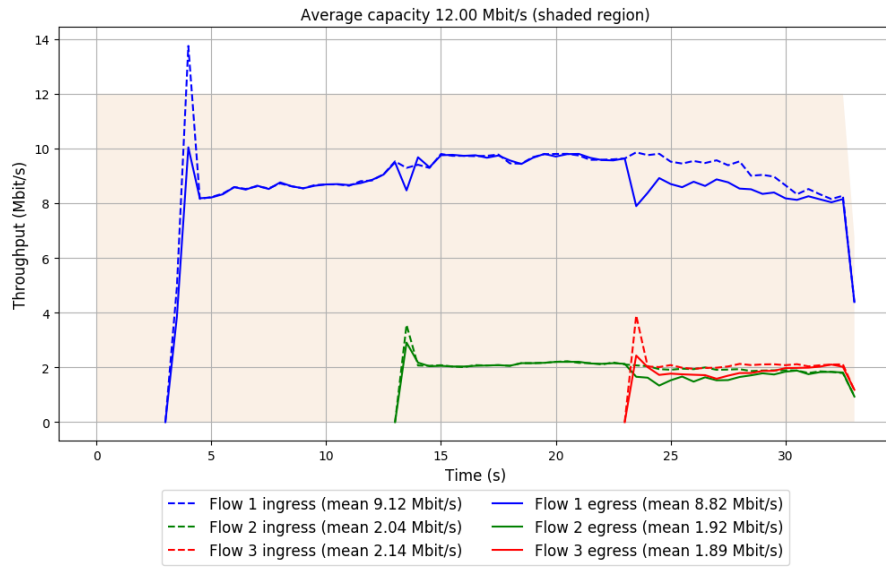
-- Flow 3:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 51.069 ms

Loss rate: 12.03%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

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

End at: 2018-02-27 19:00:45

Below is generated by plot.py at 2018-02-27 19:43:01

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.84 Mbit/s (90.3% utilization)

95th percentile per-packet one-way delay: 50.792 ms

Loss rate: 5.38%

-- Flow 1:

Average throughput: 8.94 Mbit/s

95th percentile per-packet one-way delay: 50.707 ms

Loss rate: 4.27%

-- Flow 2:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 50.886 ms

Loss rate: 8.32%

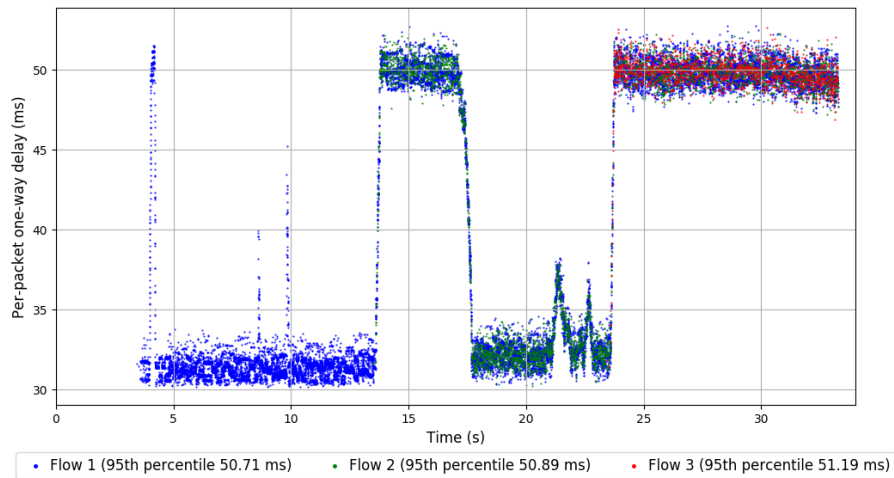
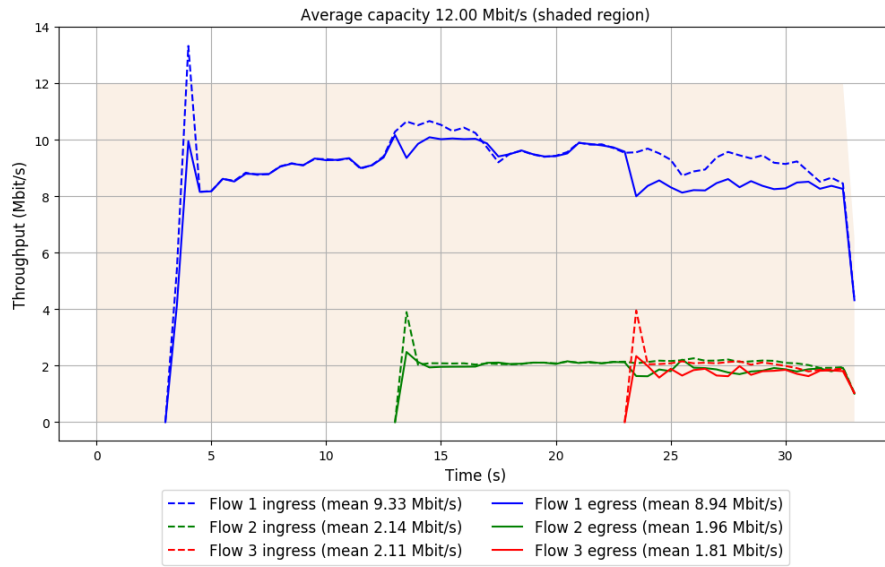
-- Flow 3:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 51.190 ms

Loss rate: 14.39%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-27 19:10:41

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

Below is generated by plot.py at 2018-02-27 19:43:01

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.77 Mbit/s (89.7% utilization)

95th percentile per-packet one-way delay: 50.677 ms

Loss rate: 6.30%

-- Flow 1:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 50.583 ms

Loss rate: 4.99%

-- Flow 2:

Average throughput: 3.77 Mbit/s

95th percentile per-packet one-way delay: 50.784 ms

Loss rate: 7.99%

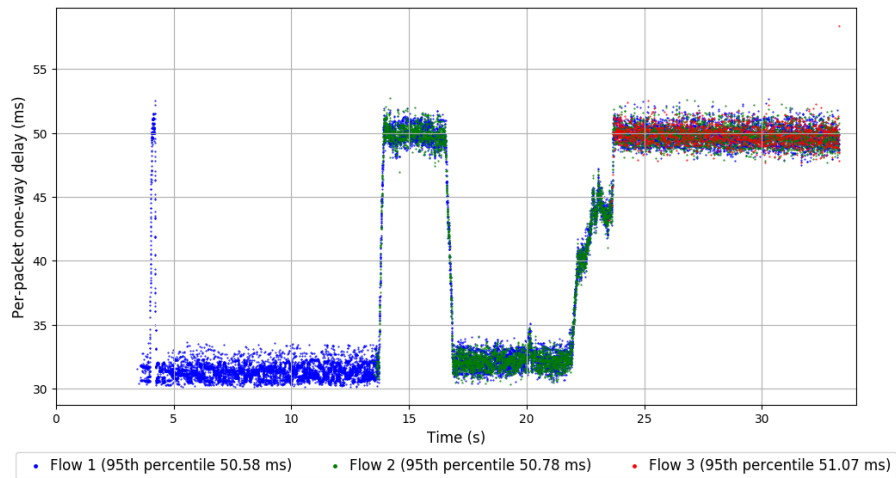
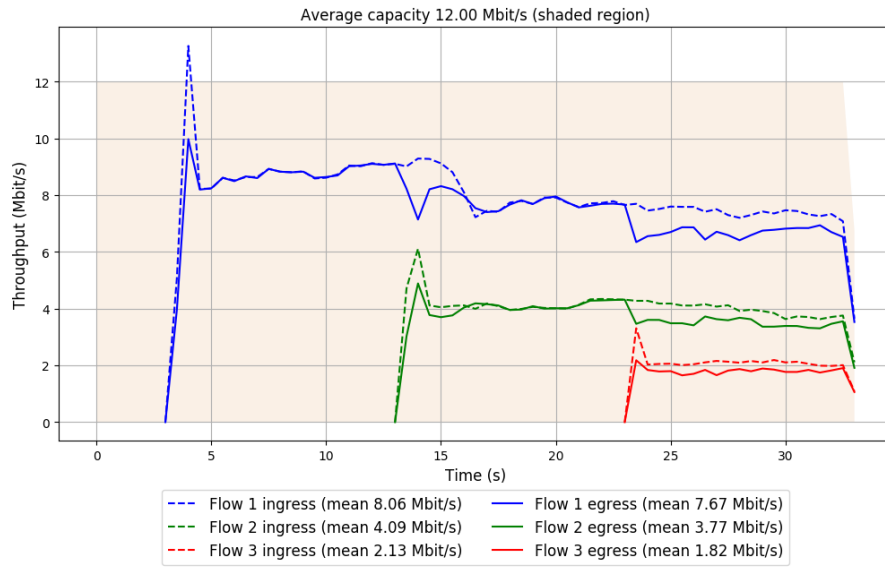
-- Flow 3:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 51.066 ms

Loss rate: 14.84%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-27 19:21:10

End at: 2018-02-27 19:21:40

Below is generated by plot.py at 2018-02-27 19:43:03

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.53 Mbit/s (87.7% utilization)

95th percentile per-packet one-way delay: 50.733 ms

Loss rate: 5.61%

-- Flow 1:

Average throughput: 8.66 Mbit/s

95th percentile per-packet one-way delay: 50.629 ms

Loss rate: 4.38%

-- Flow 2:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 50.827 ms

Loss rate: 8.43%

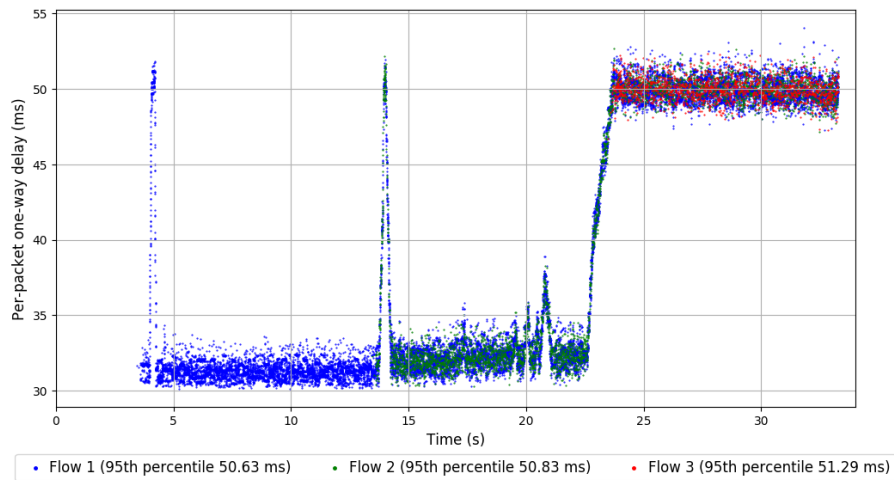
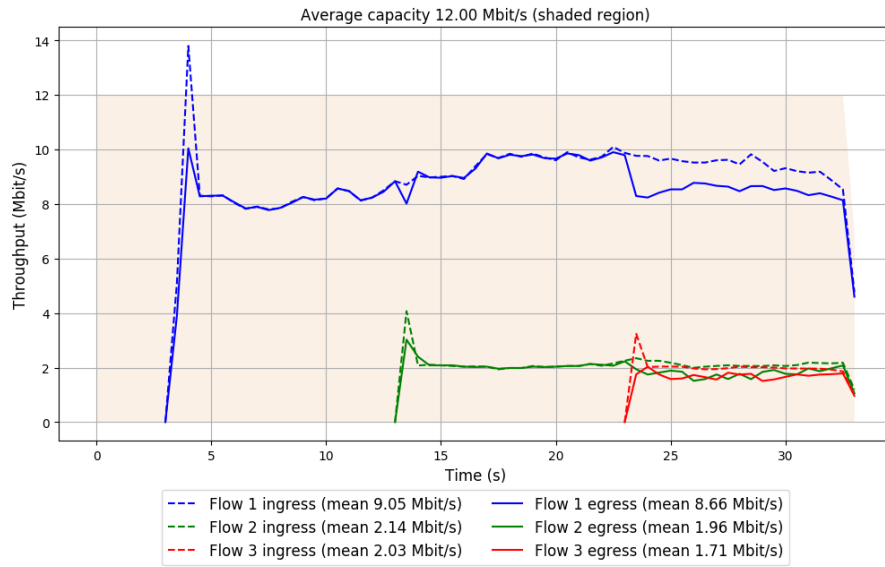
-- Flow 3:

Average throughput: 1.71 Mbit/s

95th percentile per-packet one-way delay: 51.291 ms

Loss rate: 16.21%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-02-27 19:31:36

End at: 2018-02-27 19:32:06

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: 10.84 Mbit/s (90.3% utilization)

95th percentile per-packet one-way delay: 50.404 ms

Loss rate: 3.91%

-- Flow 1:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 50.317 ms

Loss rate: 3.55%

-- Flow 2:

Average throughput: 3.43 Mbit/s

95th percentile per-packet one-way delay: 50.586 ms

Loss rate: 4.77%

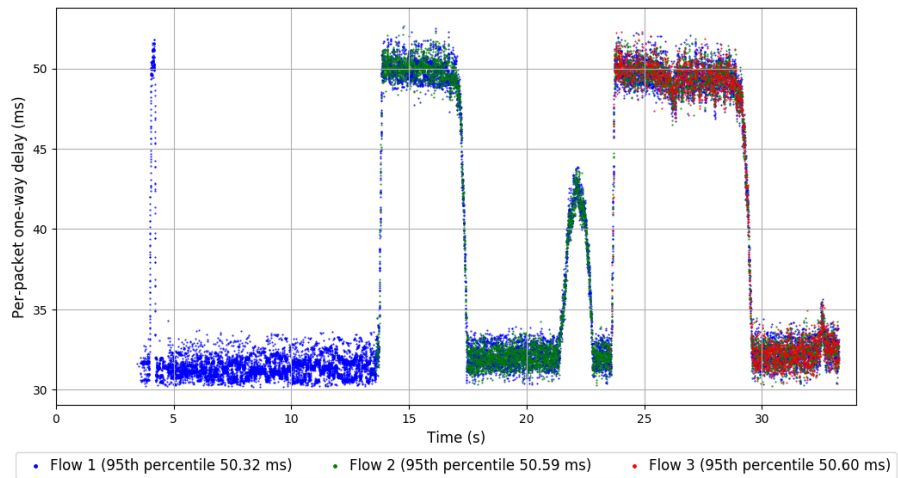
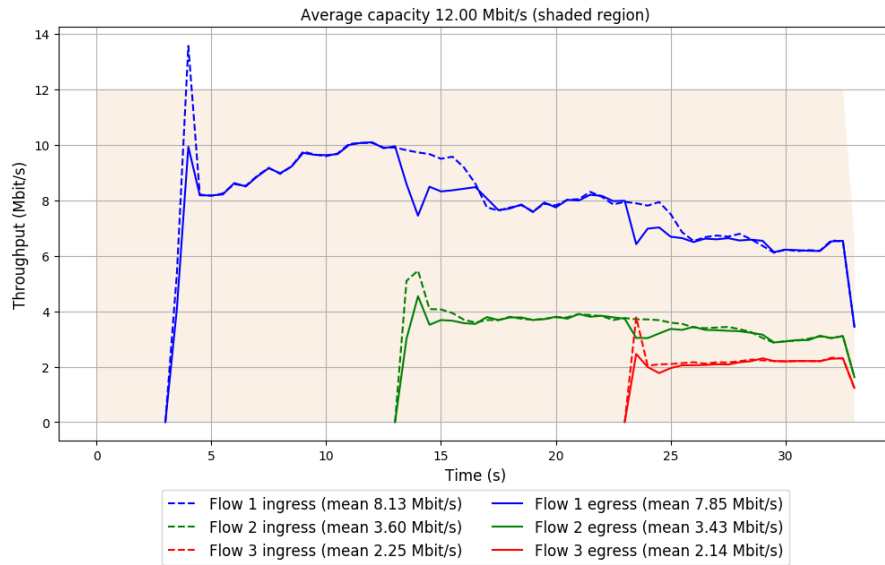
-- Flow 3:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 50.603 ms

Loss rate: 5.06%

Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-02-27 18:04:42

End at: 2018-02-27 18:05:12

Below is generated by plot.py at 2018-02-27 19:43:26

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.75 Mbit/s (97.9% utilization)

95th percentile per-packet one-way delay: 50.463 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 50.268 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 50.614 ms

Loss rate: 1.52%

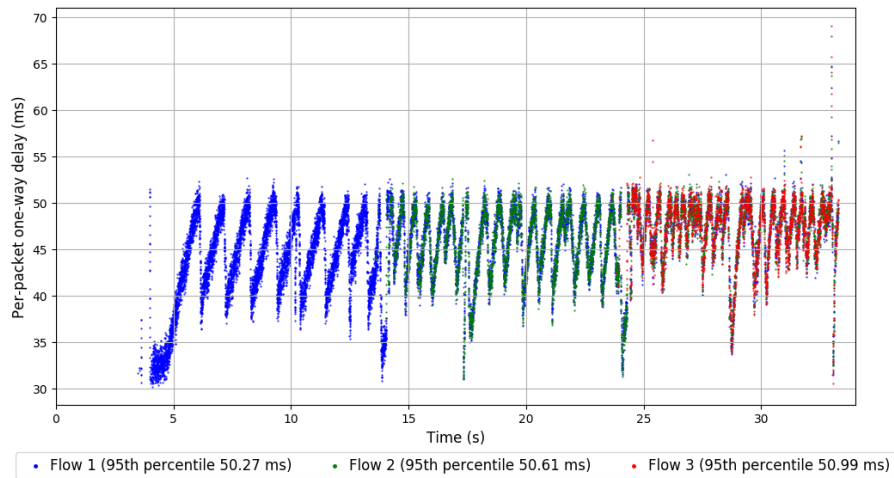
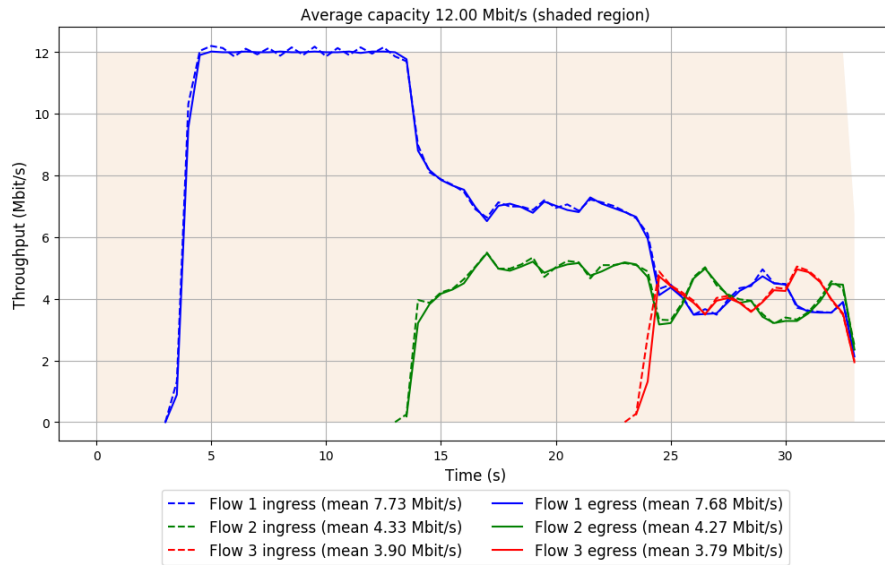
-- Flow 3:

Average throughput: 3.79 Mbit/s

95th percentile per-packet one-way delay: 50.987 ms

Loss rate: 3.06%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-27 18:15:07

End at: 2018-02-27 18:15:37

Below is generated by plot.py at 2018-02-27 19:43:26

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.74 Mbit/s (97.8% utilization)

95th percentile per-packet one-way delay: 50.436 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 7.43 Mbit/s

95th percentile per-packet one-way delay: 50.252 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 4.67 Mbit/s

95th percentile per-packet one-way delay: 50.604 ms

Loss rate: 1.37%

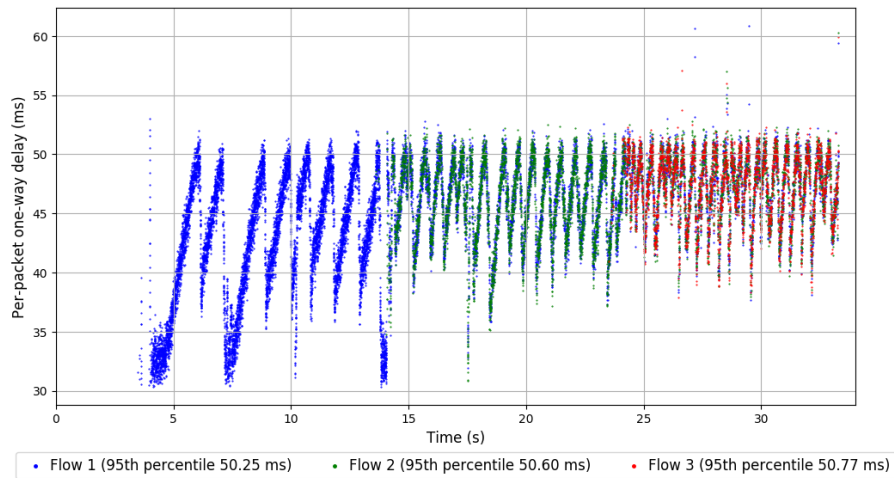
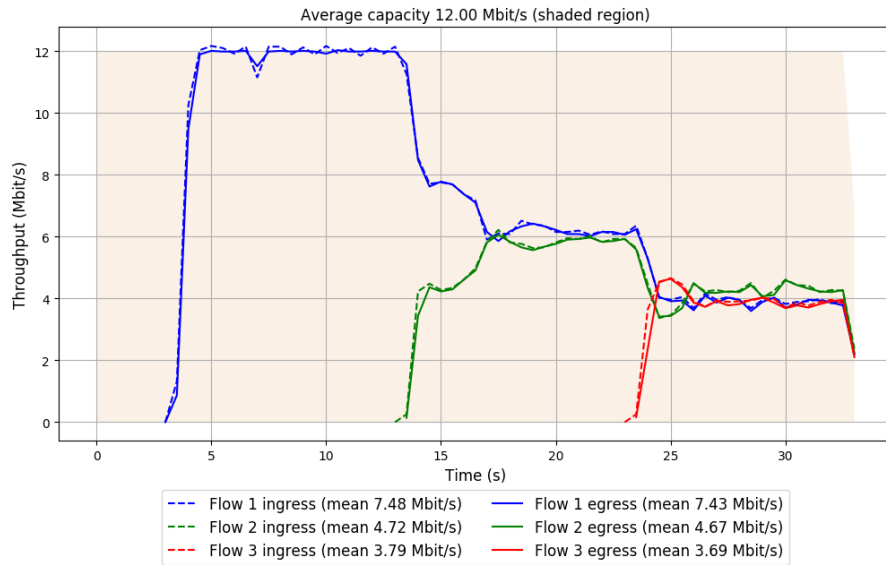
-- Flow 3:

Average throughput: 3.69 Mbit/s

95th percentile per-packet one-way delay: 50.770 ms

Loss rate: 2.81%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-27 18:25:32

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

Below is generated by plot.py at 2018-02-27 19:43:28

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.74 Mbit/s (97.8% utilization)

95th percentile per-packet one-way delay: 50.472 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 7.40 Mbit/s

95th percentile per-packet one-way delay: 50.362 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 4.79 Mbit/s

95th percentile per-packet one-way delay: 50.607 ms

Loss rate: 1.59%

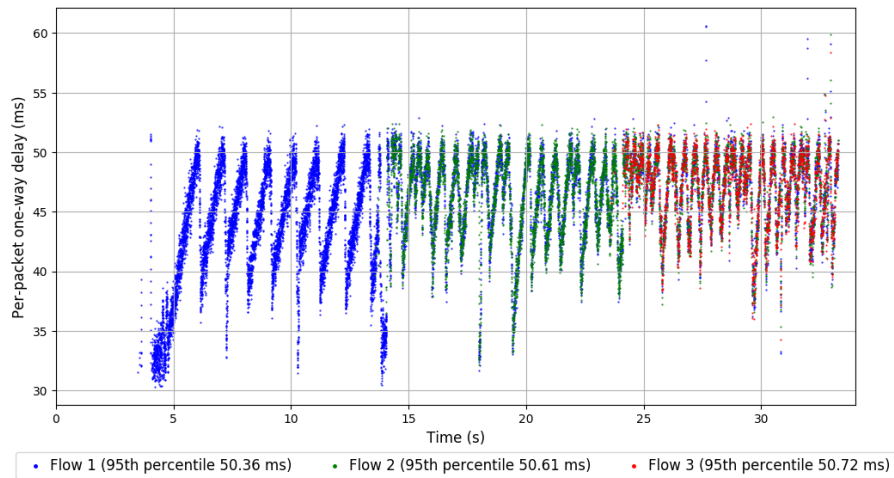
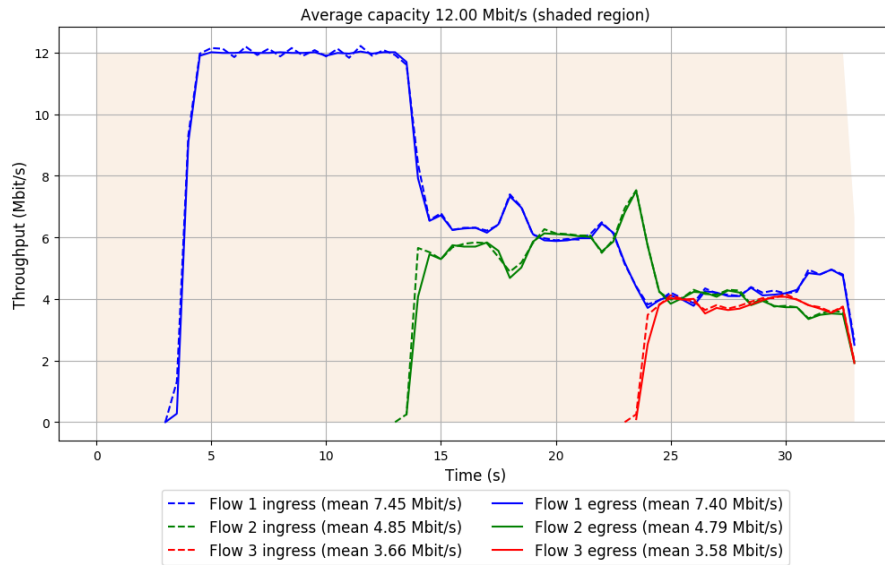
-- Flow 3:

Average throughput: 3.58 Mbit/s

95th percentile per-packet one-way delay: 50.724 ms

Loss rate: 2.50%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-27 18:35:58

End at: 2018-02-27 18:36:28

Below is generated by plot.py at 2018-02-27 19:43:31

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.74 Mbit/s (97.8% utilization)

95th percentile per-packet one-way delay: 50.482 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 7.44 Mbit/s

95th percentile per-packet one-way delay: 50.360 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 4.67 Mbit/s

95th percentile per-packet one-way delay: 50.607 ms

Loss rate: 1.74%

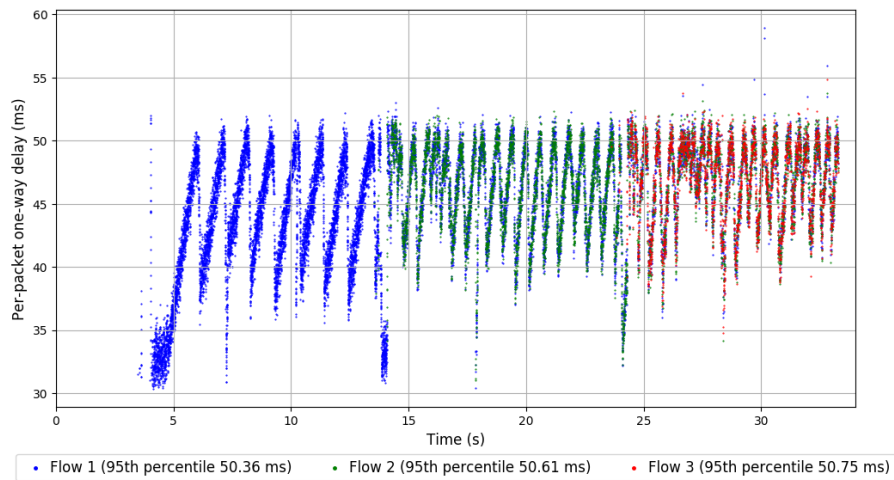
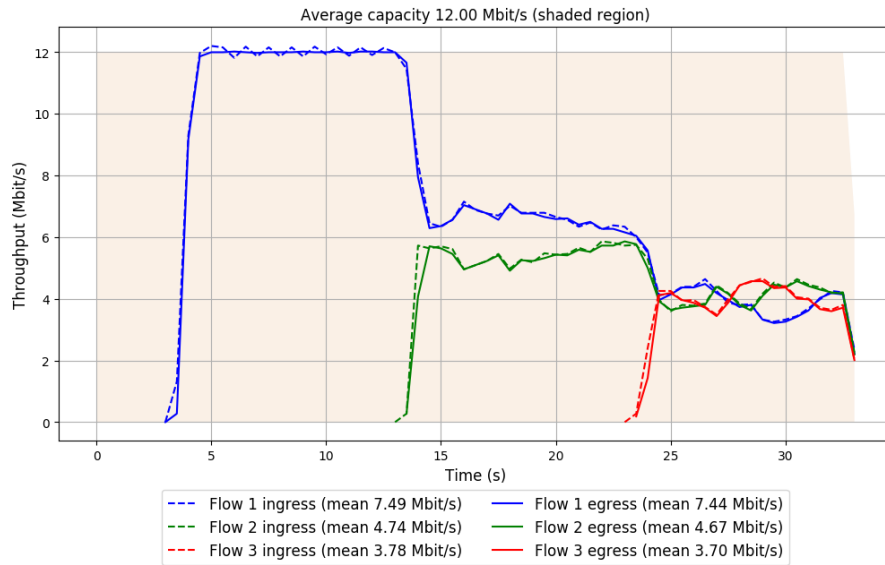
-- Flow 3:

Average throughput: 3.70 Mbit/s

95th percentile per-packet one-way delay: 50.747 ms

Loss rate: 2.63%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-27 18:46:23

End at: 2018-02-27 18:46:53

Below is generated by plot.py at 2018-02-27 19:43:31

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.73 Mbit/s (97.8% utilization)

95th percentile per-packet one-way delay: 50.437 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 7.29 Mbit/s

95th percentile per-packet one-way delay: 50.271 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 4.59 Mbit/s

95th percentile per-packet one-way delay: 50.576 ms

Loss rate: 1.49%

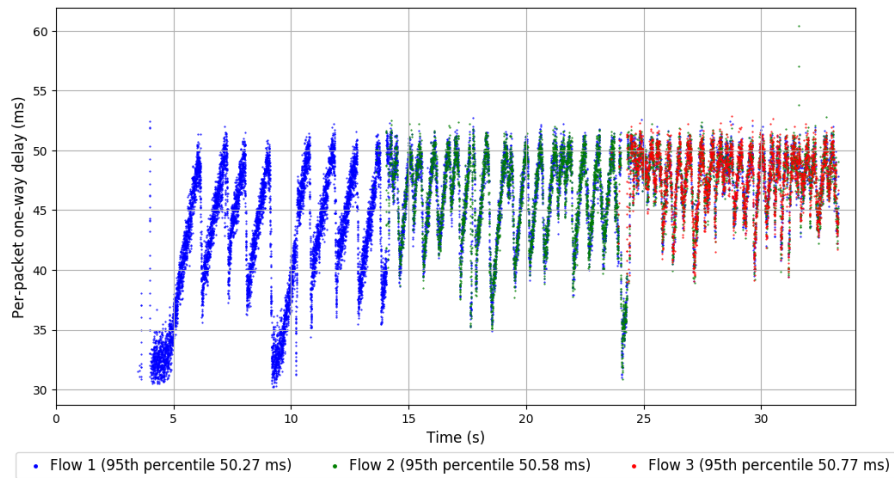
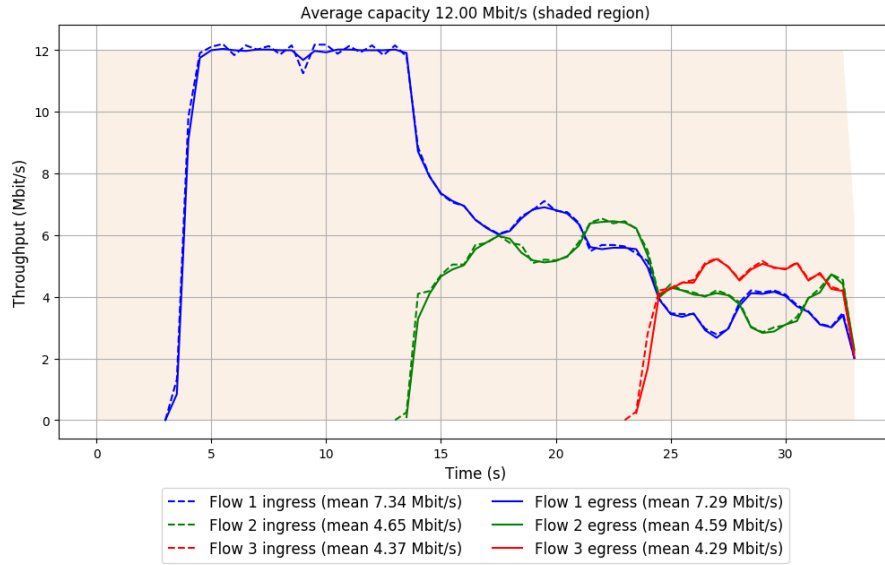
-- Flow 3:

Average throughput: 4.29 Mbit/s

95th percentile per-packet one-way delay: 50.766 ms

Loss rate: 2.09%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

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

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

Below is generated by plot.py at 2018-02-27 19:43:31

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.75 Mbit/s (97.9% utilization)

95th percentile per-packet one-way delay: 50.508 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 7.00 Mbit/s

95th percentile per-packet one-way delay: 50.341 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 5.01 Mbit/s

95th percentile per-packet one-way delay: 50.637 ms

Loss rate: 1.60%

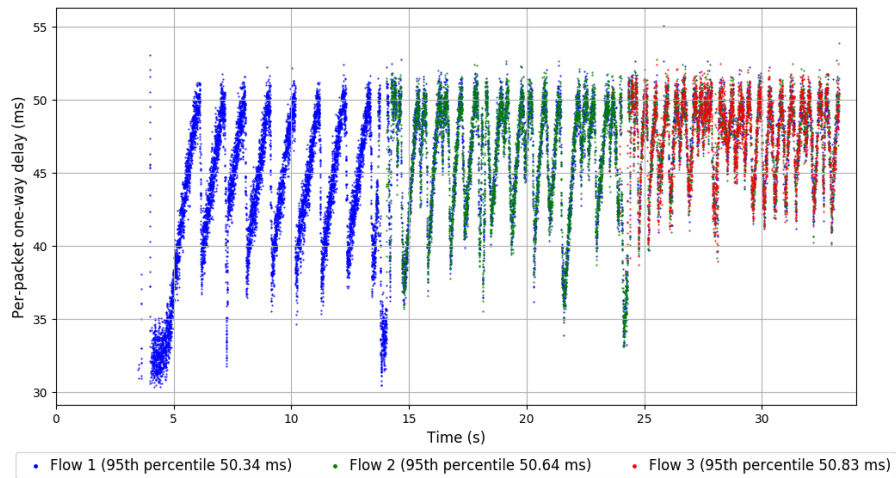
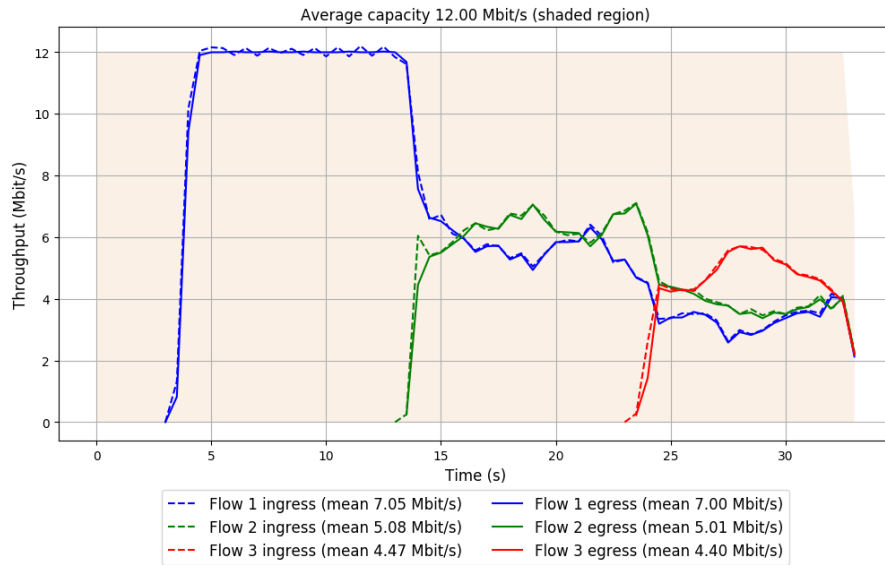
-- Flow 3:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 50.829 ms

Loss rate: 2.15%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-27 19:07:14

End at: 2018-02-27 19:07:44

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: 11.75 Mbit/s (97.9% utilization)

95th percentile per-packet one-way delay: 50.465 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 7.39 Mbit/s

95th percentile per-packet one-way delay: 50.316 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 4.60 Mbit/s

95th percentile per-packet one-way delay: 50.603 ms

Loss rate: 1.47%

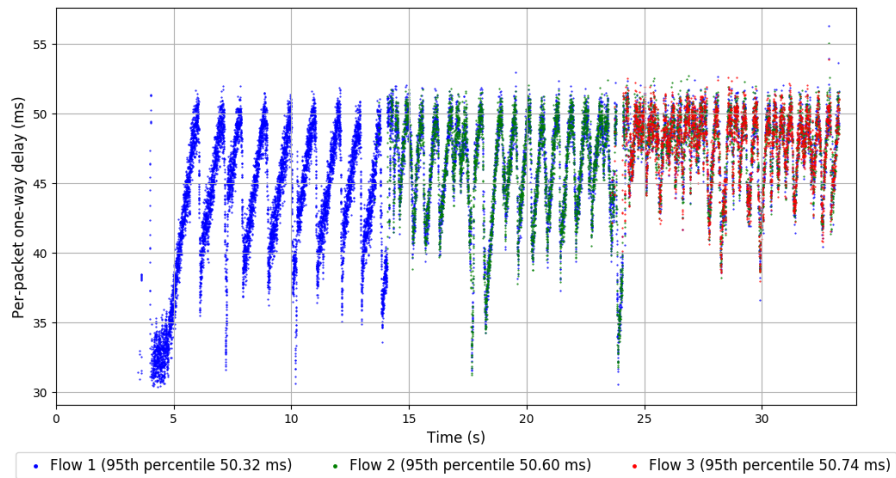
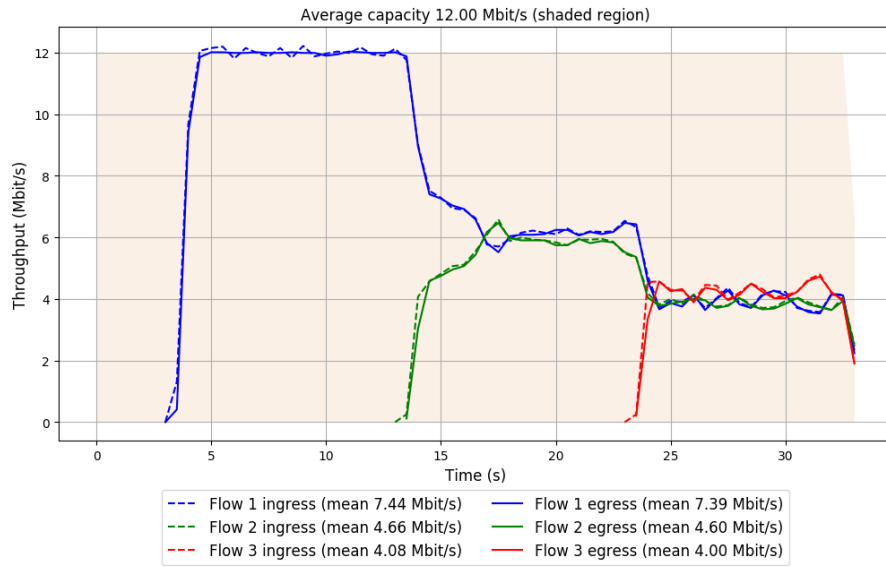
-- Flow 3:

Average throughput: 4.00 Mbit/s

95th percentile per-packet one-way delay: 50.740 ms

Loss rate: 2.44%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-27 19:17:43

End at: 2018-02-27 19:18:13

Below is generated by plot.py at 2018-02-27 19:43:35

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.75 Mbit/s (97.9% utilization)

95th percentile per-packet one-way delay: 50.431 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 7.31 Mbit/s

95th percentile per-packet one-way delay: 50.326 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 4.81 Mbit/s

95th percentile per-packet one-way delay: 50.535 ms

Loss rate: 1.52%

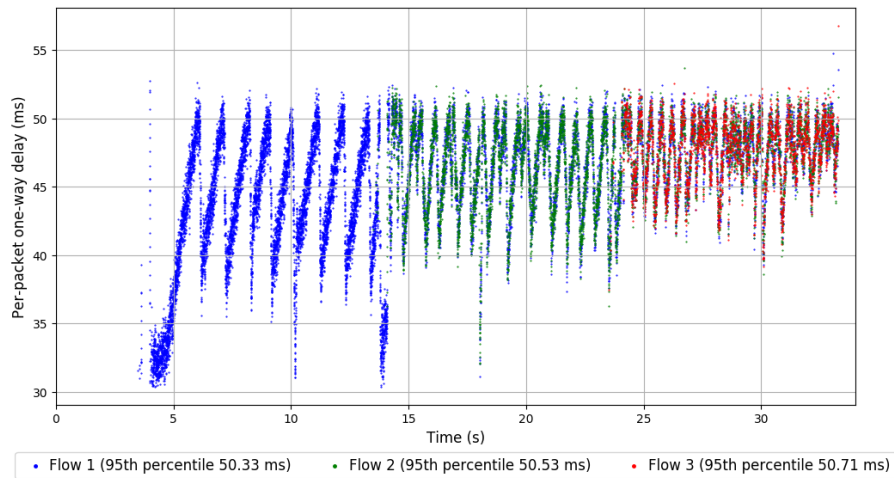
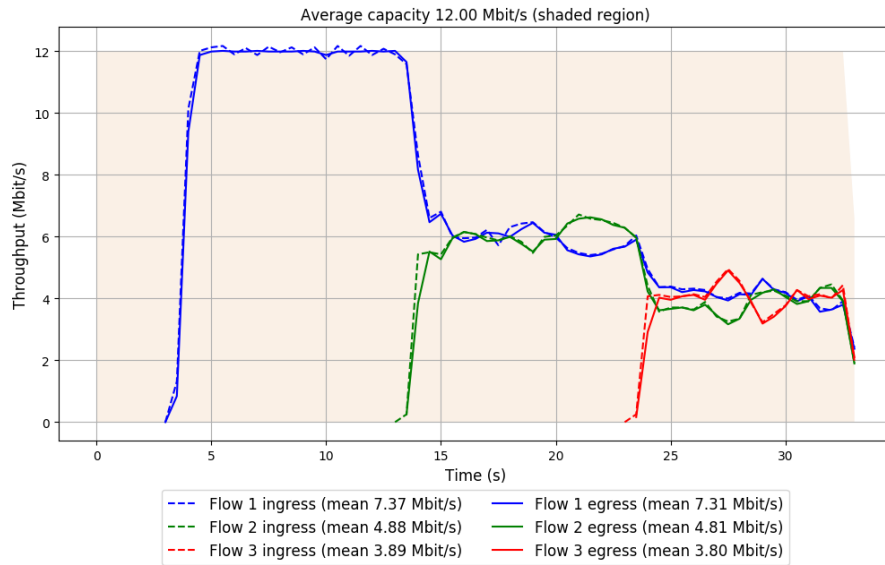
-- Flow 3:

Average throughput: 3.80 Mbit/s

95th percentile per-packet one-way delay: 50.706 ms

Loss rate: 2.61%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-27 19:28:09

End at: 2018-02-27 19:28:39

Below is generated by plot.py at 2018-02-27 19:43:58

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.75 Mbit/s (97.9% utilization)

95th percentile per-packet one-way delay: 50.484 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 7.47 Mbit/s

95th percentile per-packet one-way delay: 50.332 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 4.65 Mbit/s

95th percentile per-packet one-way delay: 50.616 ms

Loss rate: 1.41%

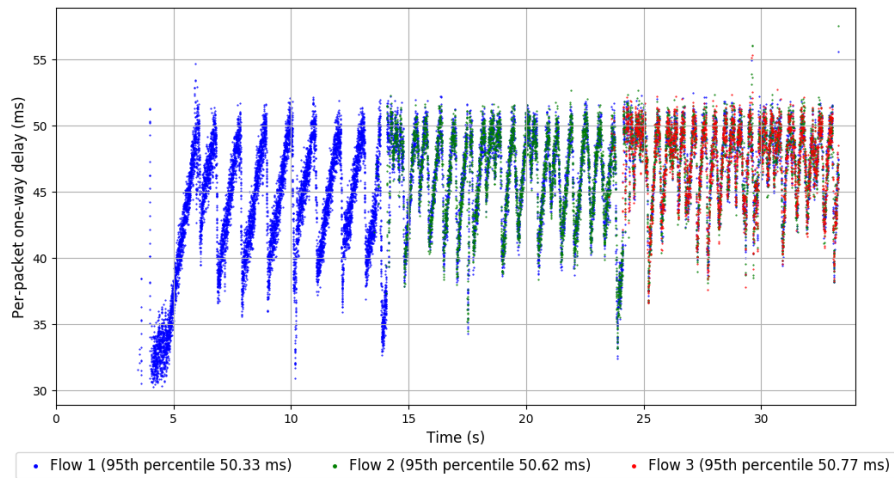
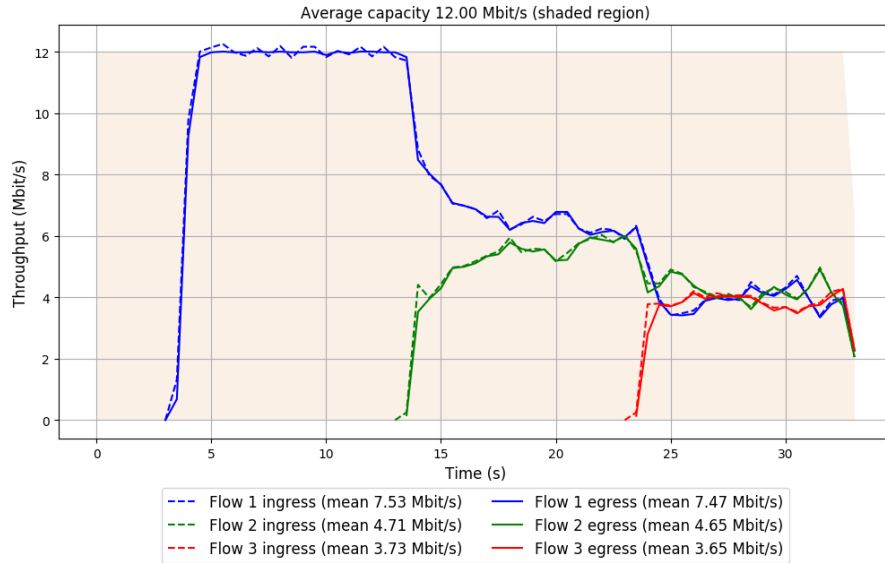
-- Flow 3:

Average throughput: 3.65 Mbit/s

95th percentile per-packet one-way delay: 50.770 ms

Loss rate: 2.63%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-02-27 19:38:36

End at: 2018-02-27 19:39:06

Below is generated by plot.py at 2018-02-27 19:43:59

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.74 Mbit/s (97.8% utilization)

95th percentile per-packet one-way delay: 50.481 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 7.46 Mbit/s

95th percentile per-packet one-way delay: 50.312 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 4.51 Mbit/s

95th percentile per-packet one-way delay: 50.648 ms

Loss rate: 1.54%

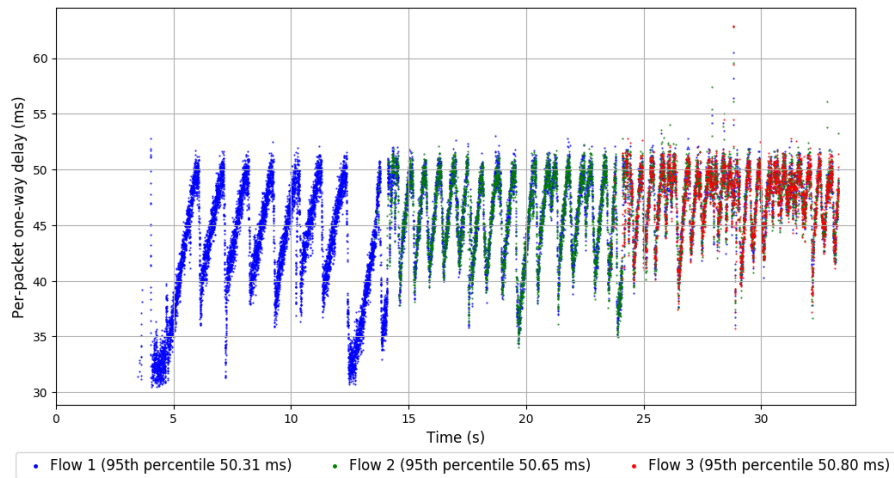
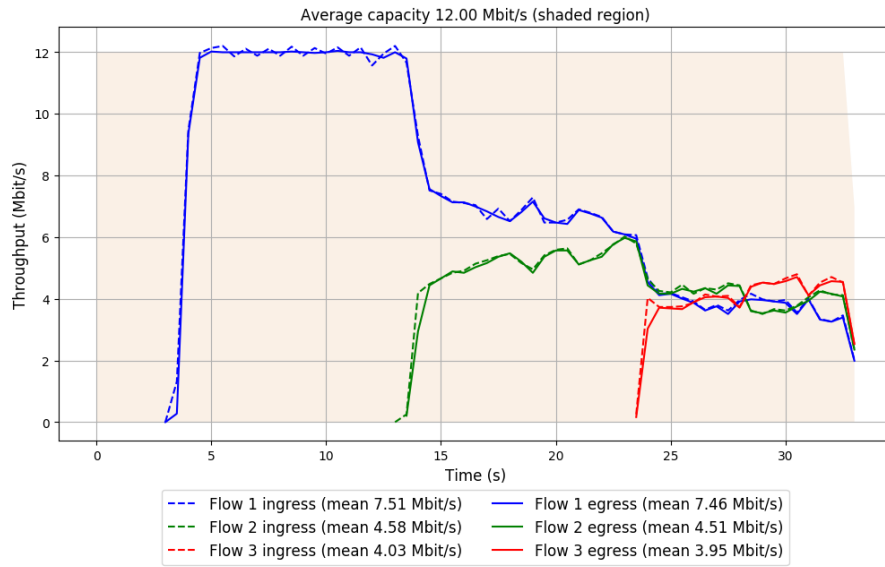
-- Flow 3:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 50.802 ms

Loss rate: 2.27%

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2018-02-27 17:58:54

End at: 2018-02-27 17:59:24

Below is generated by plot.py at 2018-02-27 19:43:59

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: 32.144 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 31.722 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 32.188 ms

Loss rate: 0.21%

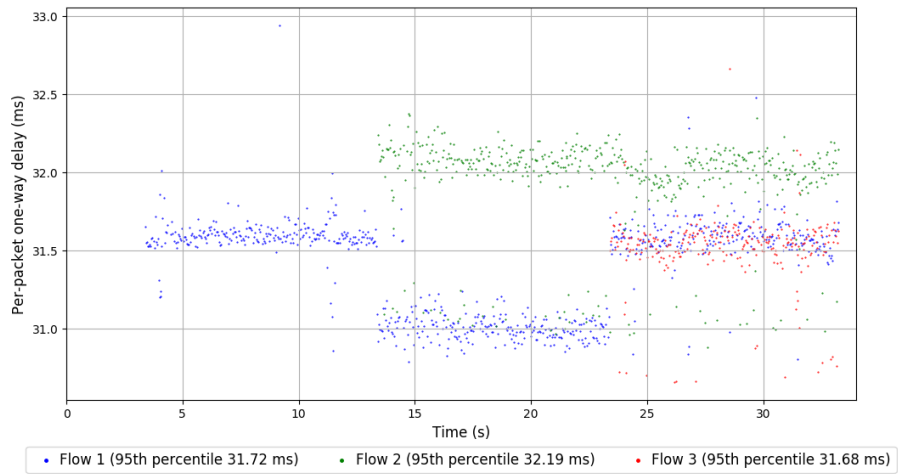
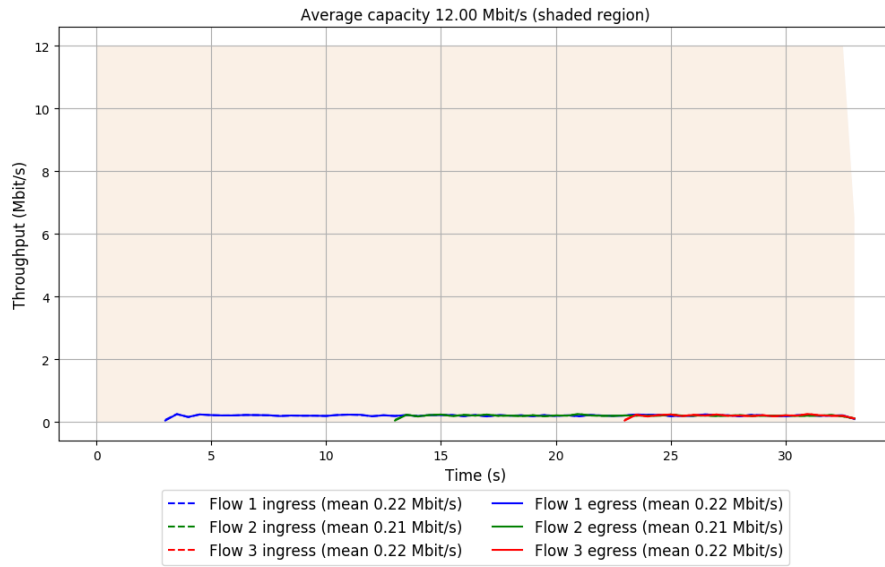
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 31.679 ms

Loss rate: 0.36%

Run 1: Report of SCReAM — Data Link



Run 2: Statistics of SCReAM

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

End at: 2018-02-27 18:09:49

Below is generated by plot.py at 2018-02-27 19:43:59

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: 31.870 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.860 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.906 ms

Loss rate: 0.00%

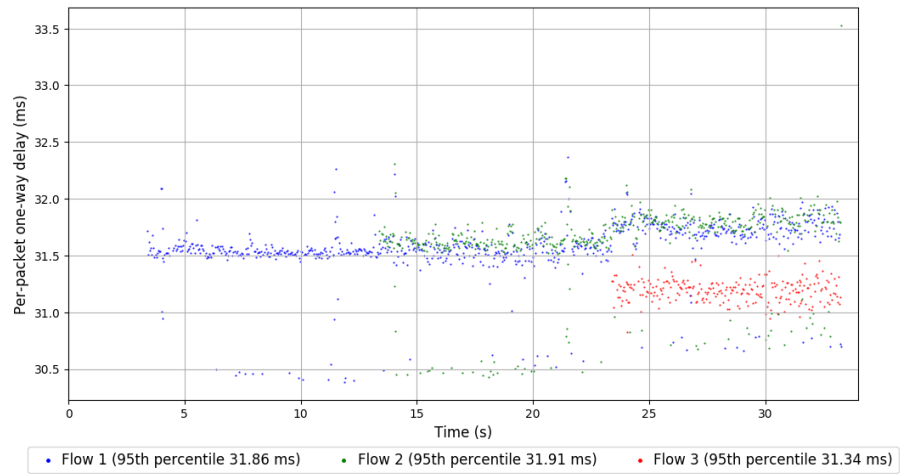
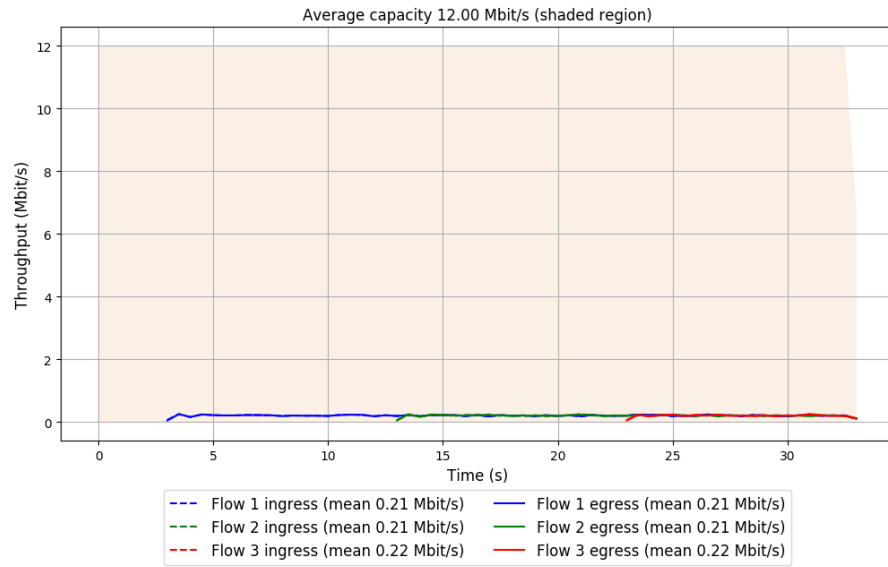
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 31.337 ms

Loss rate: 0.36%

Run 2: Report of SCReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-02-27 18:19:43

End at: 2018-02-27 18:20:13

Below is generated by plot.py at 2018-02-27 19:43:59

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: 32.105 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 32.148 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.045 ms

Loss rate: 0.21%

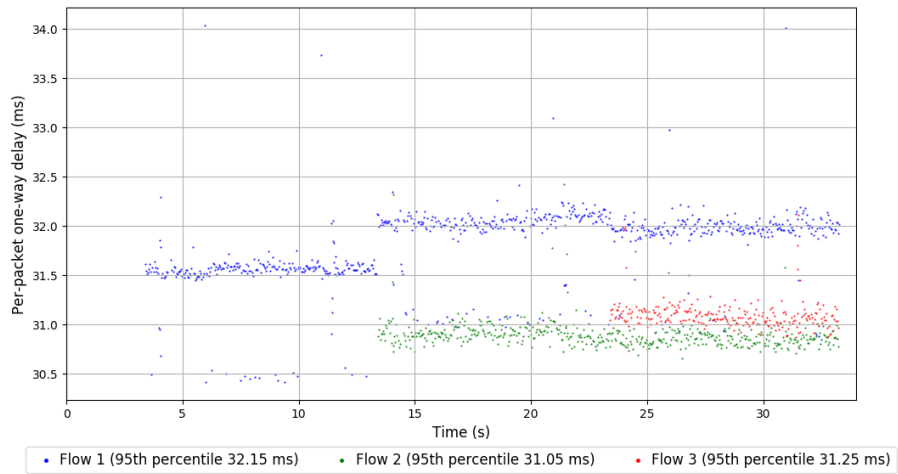
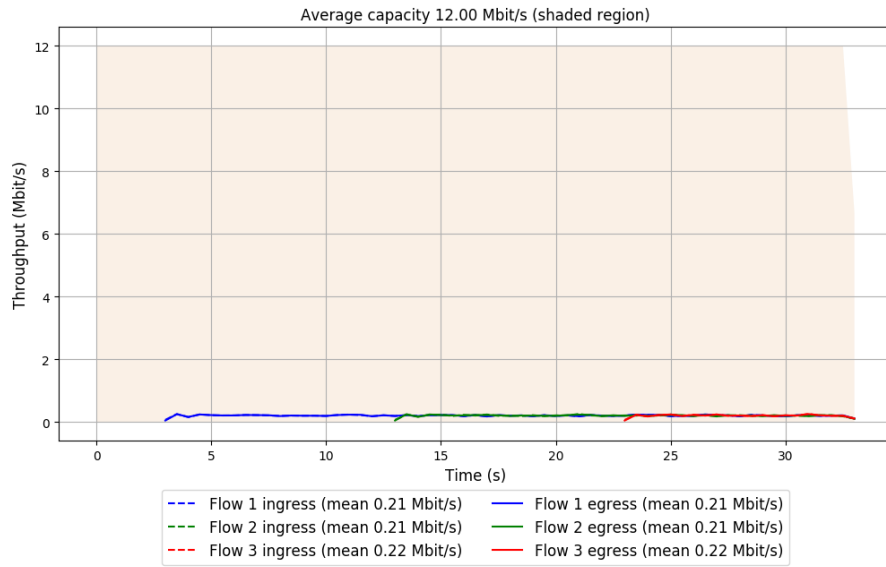
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 31.246 ms

Loss rate: 0.36%

Run 3: Report of SCReAM — Data Link



Run 4: Statistics of SCReAM

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 19:43:59

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: 31.734 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.602 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.667 ms

Loss rate: 0.21%

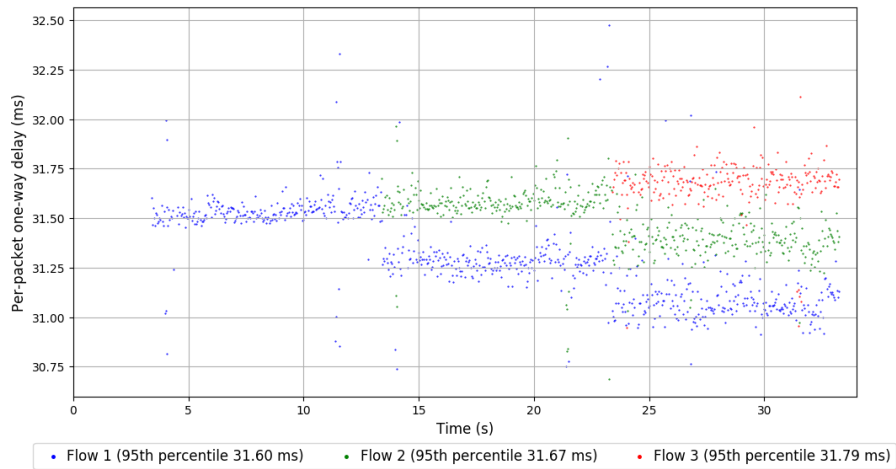
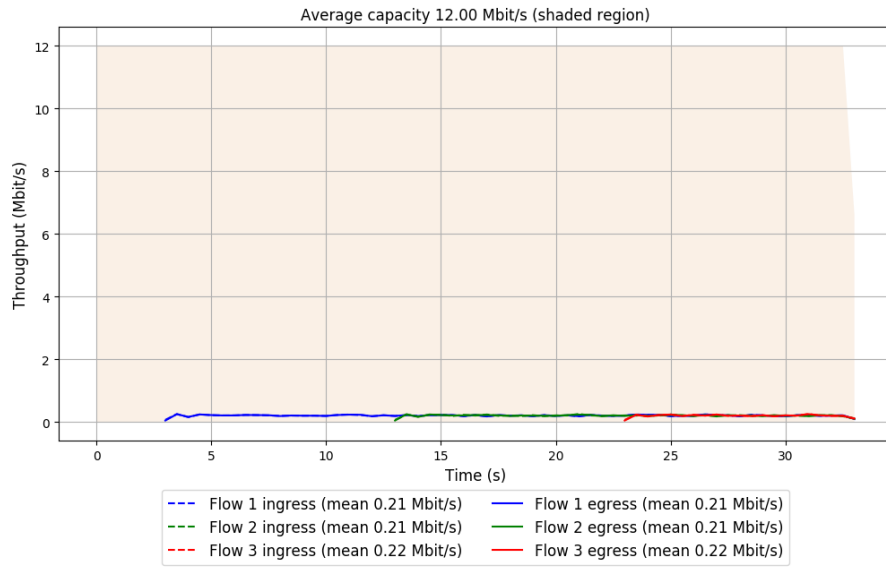
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 31.794 ms

Loss rate: 0.36%

Run 4: Report of SCReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-02-27 18:40:34

End at: 2018-02-27 18:41:04

Below is generated by plot.py at 2018-02-27 19:43:59

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: 32.223 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 32.266 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.791 ms

Loss rate: 0.21%

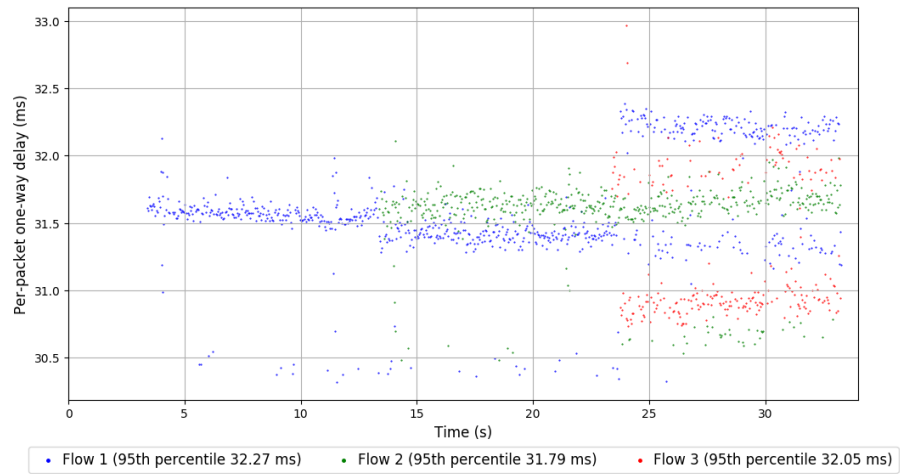
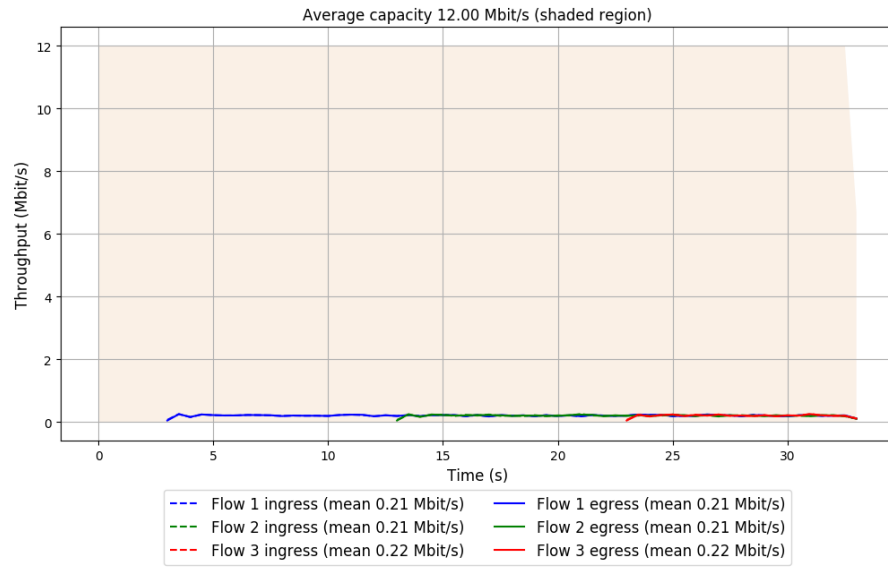
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 32.055 ms

Loss rate: 0.36%

Run 5: Report of SCReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-02-27 18:50:59

End at: 2018-02-27 18:51:29

Below is generated by plot.py at 2018-02-27 19:43:59

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: 31.810 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.839 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.767 ms

Loss rate: 0.21%

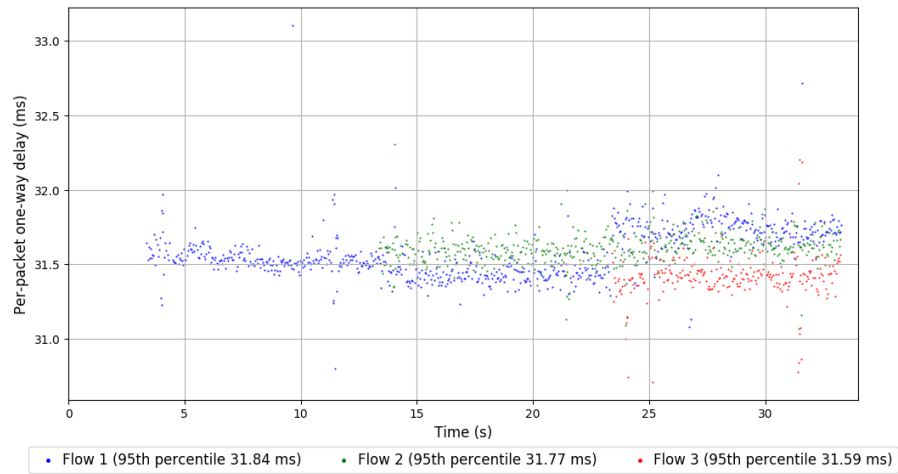
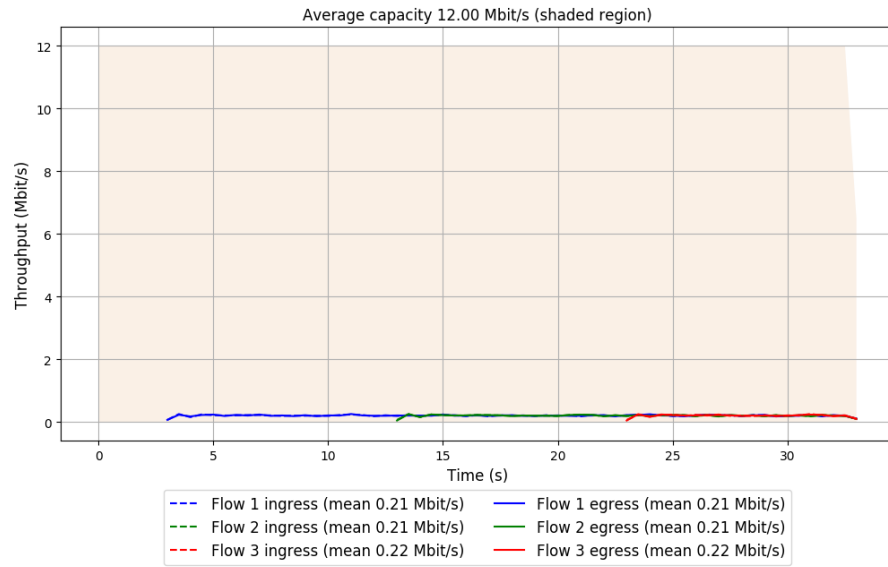
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 31.594 ms

Loss rate: 0.36%

Run 6: Report of SCReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-02-27 19:01:24

End at: 2018-02-27 19:01:54

Below is generated by plot.py at 2018-02-27 19:43:59

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: 32.141 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 32.178 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 31.352 ms

Loss rate: 0.21%

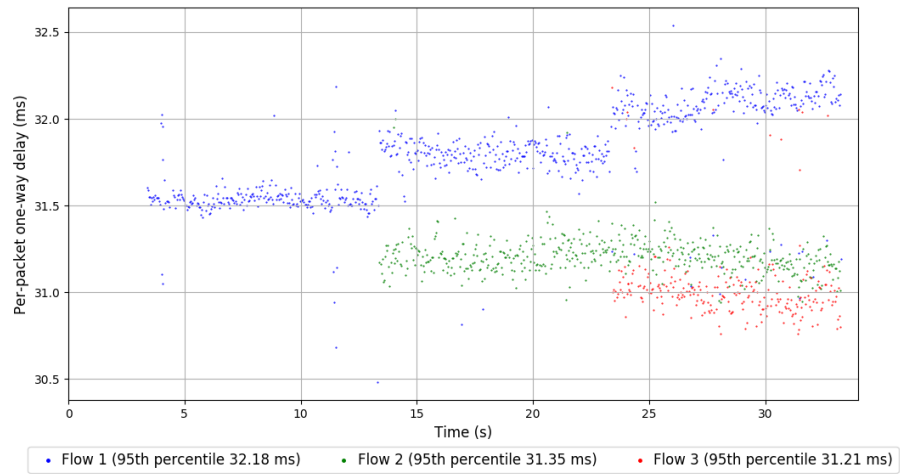
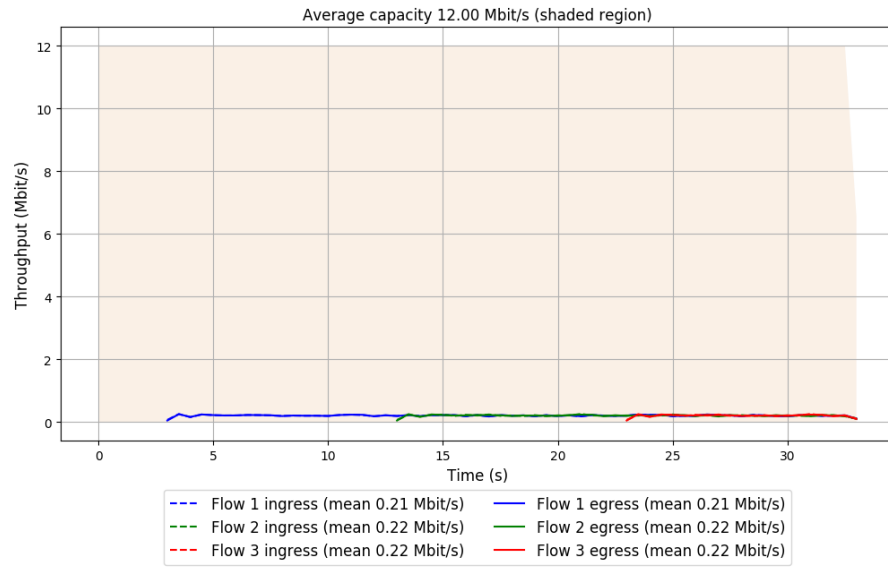
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 31.208 ms

Loss rate: 0.36%

Run 7: Report of SCReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-02-27 19:11:50

End at: 2018-02-27 19:12:20

Below is generated by plot.py at 2018-02-27 19:43:59

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: 31.967 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 32.008 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.431 ms

Loss rate: 0.21%

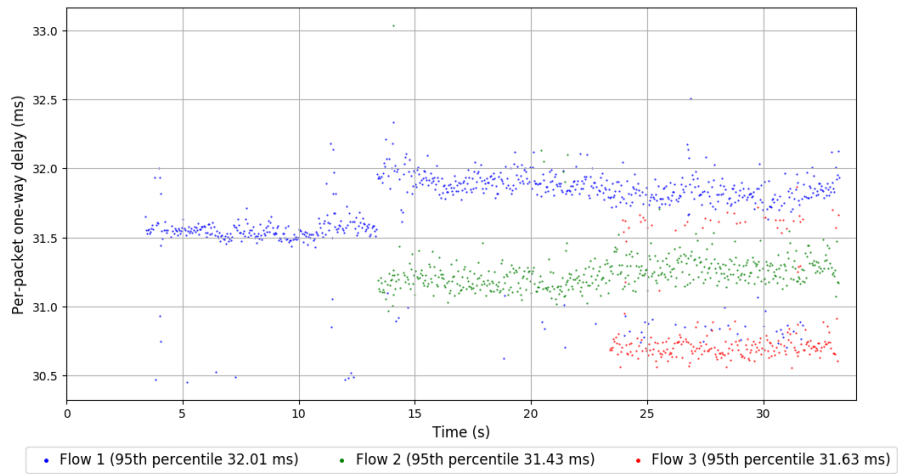
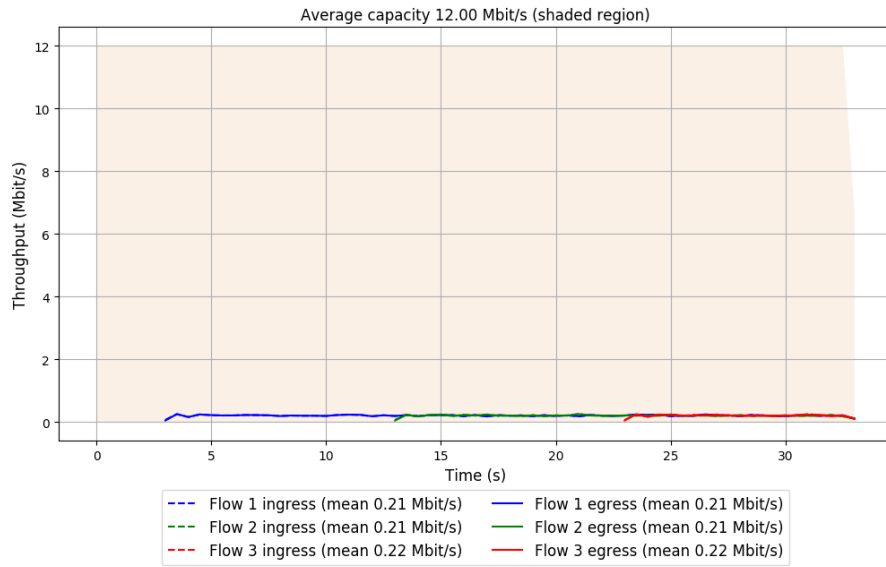
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 31.629 ms

Loss rate: 0.36%

Run 8: Report of SCReAM — Data Link



Run 9: Statistics of SCReAM

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

End at: 2018-02-27 19:22:49

Below is generated by plot.py at 2018-02-27 19:43:59

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: 31.943 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.879 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.724 ms

Loss rate: 0.00%

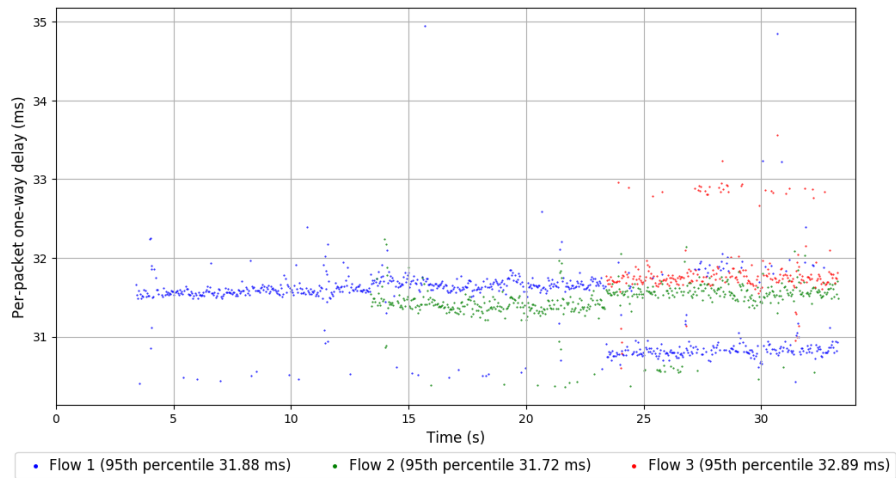
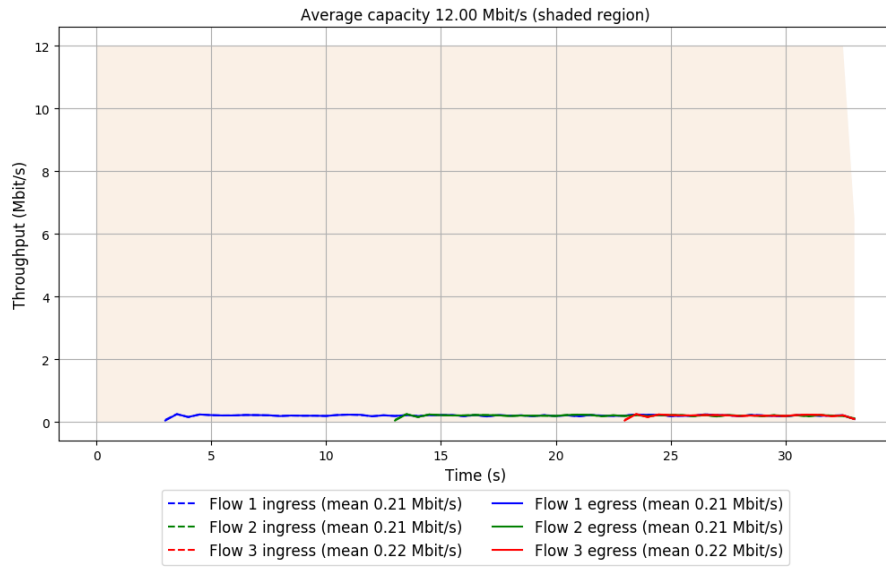
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 32.887 ms

Loss rate: 0.36%

Run 9: Report of SCReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-02-27 19:32:45

End at: 2018-02-27 19:33:15

Below is generated by plot.py at 2018-02-27 19:43:59

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: 32.056 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 32.101 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.856 ms

Loss rate: 0.21%

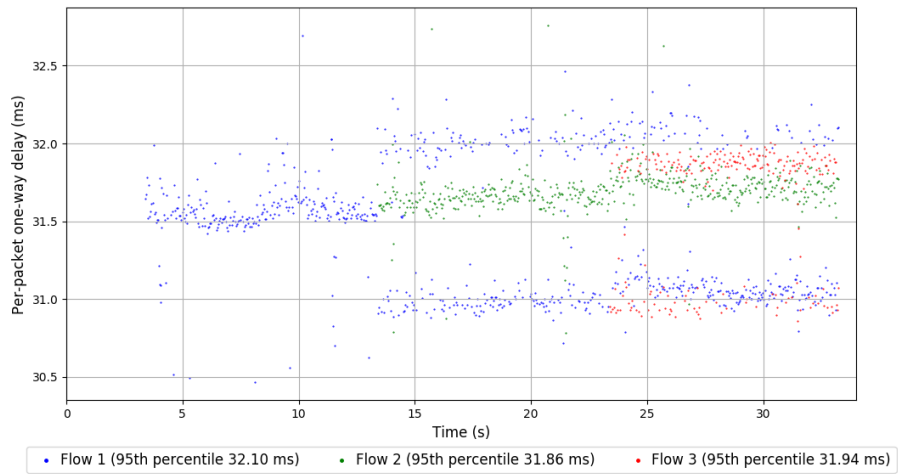
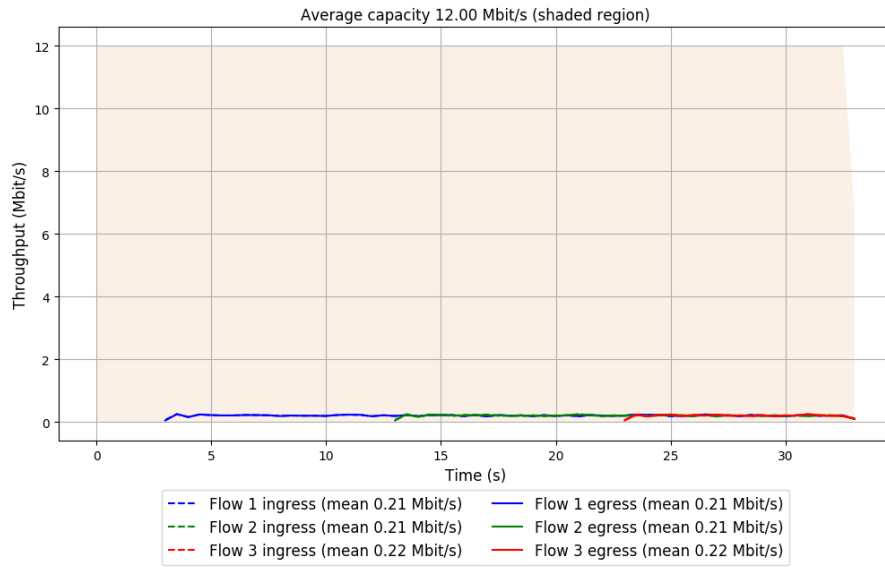
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 31.944 ms

Loss rate: 0.36%

Run 10: Report of SCReAM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-02-27 17:56:02

End at: 2018-02-27 17:56:32

Below is generated by plot.py at 2018-02-27 19:44:04

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 5.17 Mbit/s (43.0% utilization)

95th percentile per-packet one-way delay: 51.891 ms

Loss rate: 5.87%

-- Flow 1:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 51.164 ms

Loss rate: 5.60%

-- Flow 2:

Average throughput: 1.70 Mbit/s

95th percentile per-packet one-way delay: 51.953 ms

Loss rate: 6.20%

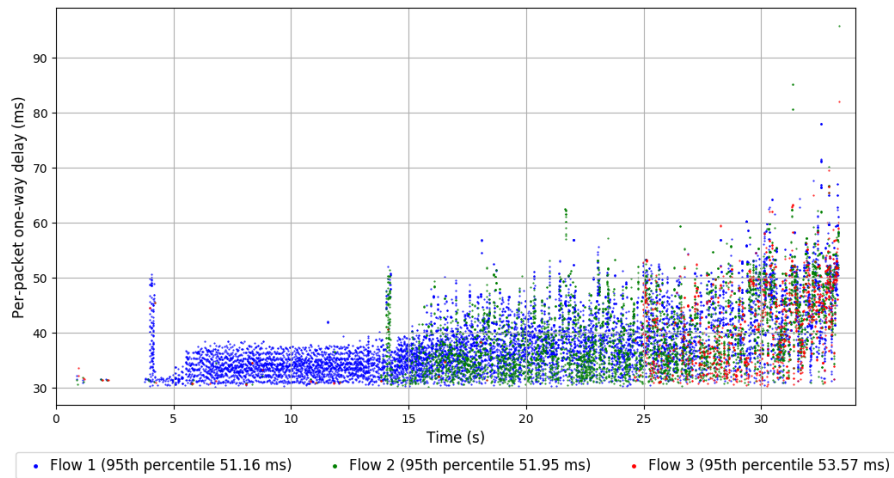
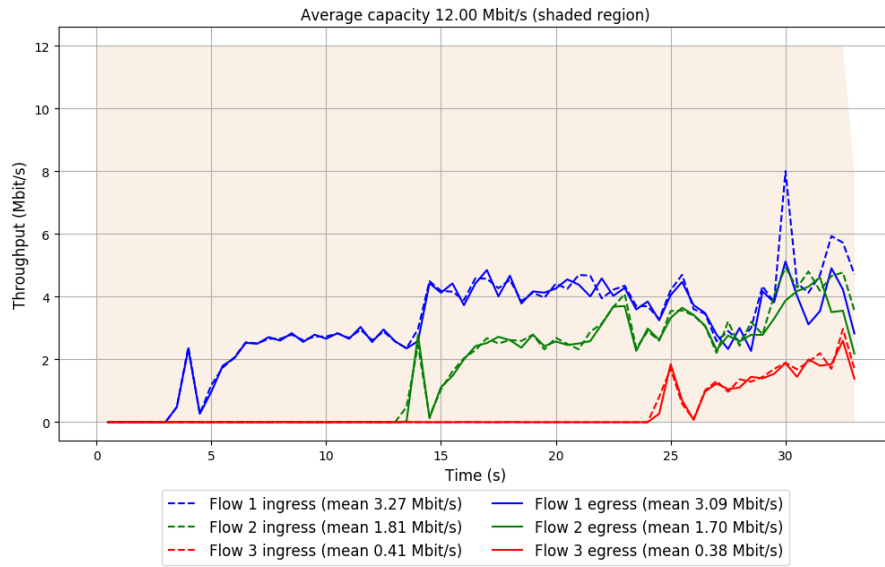
-- Flow 3:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 53.566 ms

Loss rate: 6.60%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-02-27 18:06:26

End at: 2018-02-27 18:06:56

Below is generated by plot.py at 2018-02-27 19:44:09

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 5.03 Mbit/s (41.9% utilization)

95th percentile per-packet one-way delay: 53.268 ms

Loss rate: 9.57%

-- Flow 1:

Average throughput: 2.79 Mbit/s

95th percentile per-packet one-way delay: 51.539 ms

Loss rate: 6.44%

-- Flow 2:

Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 54.461 ms

Loss rate: 11.64%

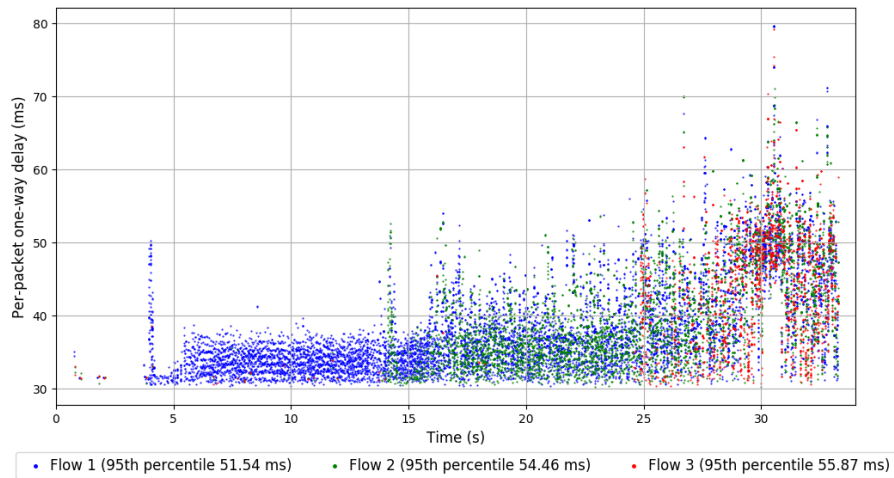
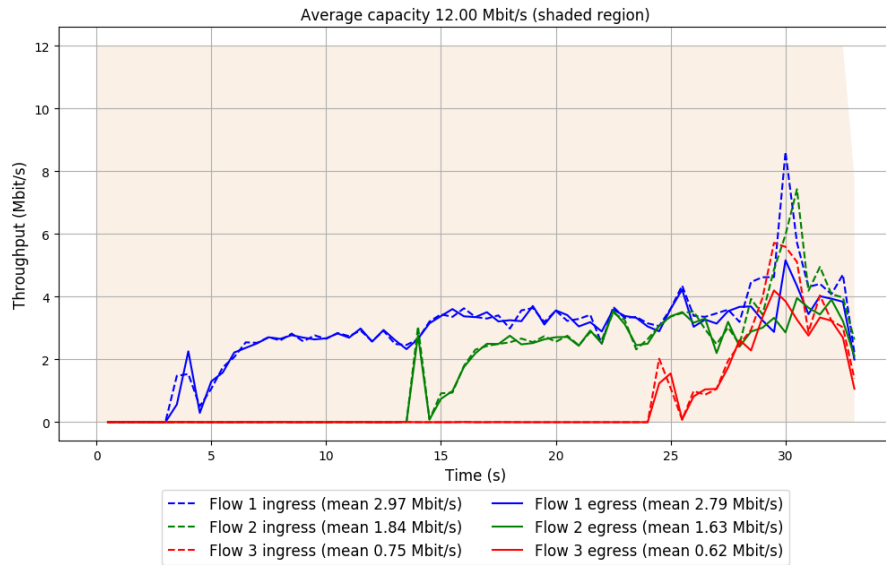
-- Flow 3:

Average throughput: 0.62 Mbit/s

95th percentile per-packet one-way delay: 55.873 ms

Loss rate: 16.96%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-27 18:16:51

End at: 2018-02-27 18:17:21

Below is generated by plot.py at 2018-02-27 19:44:11

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.77 Mbit/s (39.7% utilization)

95th percentile per-packet one-way delay: 50.799 ms

Loss rate: 3.63%

-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 50.655 ms

Loss rate: 3.10%

-- Flow 2:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 51.229 ms

Loss rate: 4.26%

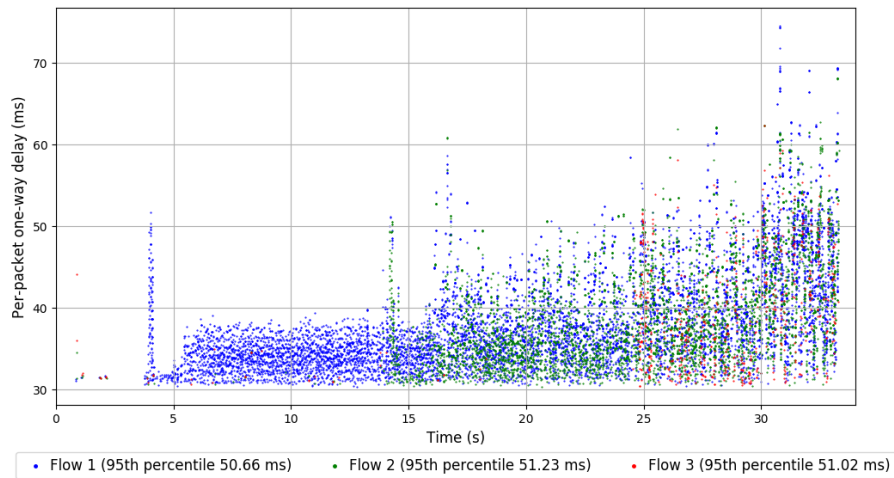
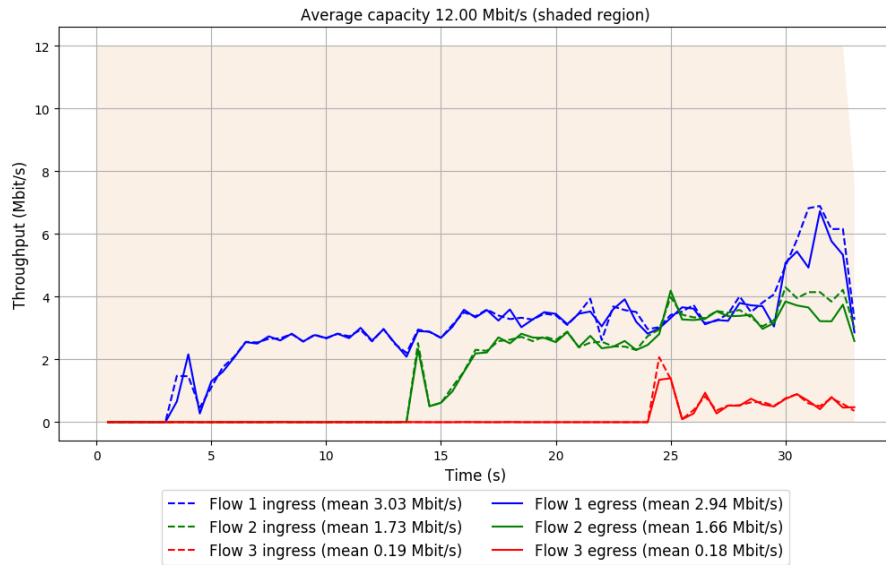
-- Flow 3:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 51.017 ms

Loss rate: 6.33%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

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

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

Below is generated by plot.py at 2018-02-27 19:44:14

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.97 Mbit/s (41.4% utilization)

95th percentile per-packet one-way delay: 55.221 ms

Loss rate: 12.11%

-- Flow 1:

Average throughput: 2.73 Mbit/s

95th percentile per-packet one-way delay: 52.401 ms

Loss rate: 8.93%

-- Flow 2:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 55.240 ms

Loss rate: 12.18%

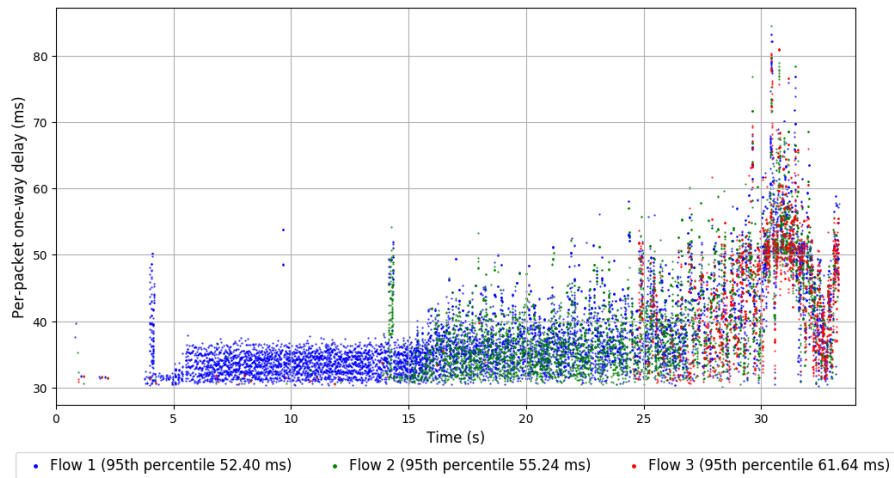
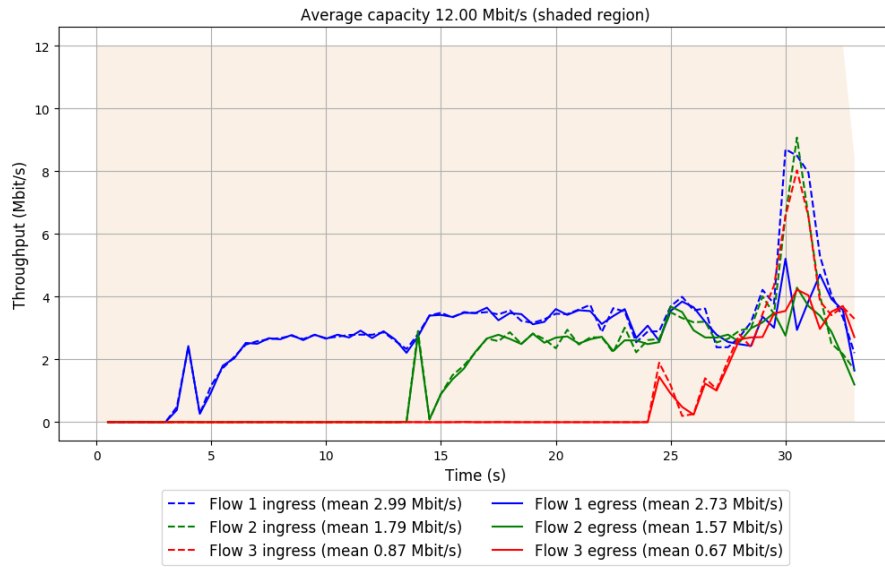
-- Flow 3:

Average throughput: 0.67 Mbit/s

95th percentile per-packet one-way delay: 61.642 ms

Loss rate: 22.97%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-27 18:37:42

End at: 2018-02-27 18:38:12

Below is generated by plot.py at 2018-02-27 19:44:14

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.52 Mbit/s (37.6% utilization)

95th percentile per-packet one-way delay: 51.959 ms

Loss rate: 6.39%

-- Flow 1:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 51.301 ms

Loss rate: 4.81%

-- Flow 2:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 52.184 ms

Loss rate: 7.69%

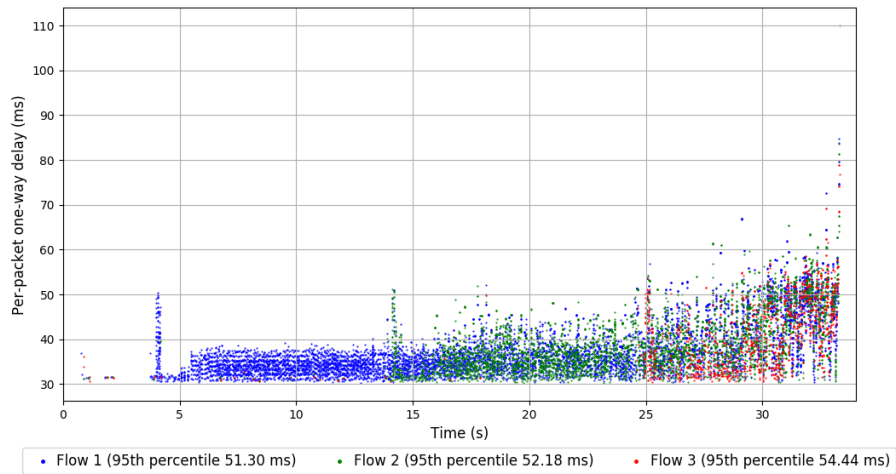
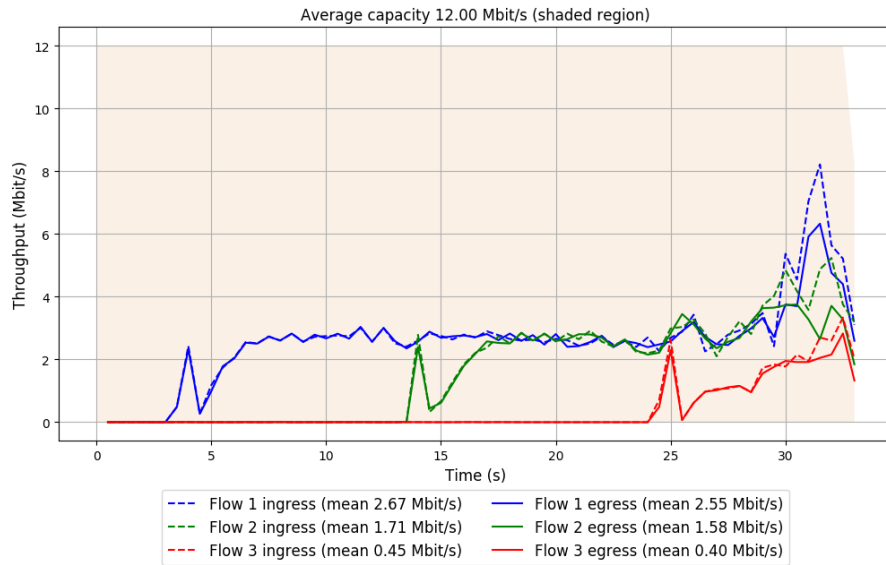
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 54.437 ms

Loss rate: 10.83%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-27 18:48:07

End at: 2018-02-27 18:48:37

Below is generated by plot.py at 2018-02-27 19:44:14

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.54 Mbit/s (37.8% utilization)

95th percentile per-packet one-way delay: 51.435 ms

Loss rate: 5.31%

-- Flow 1:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 50.712 ms

Loss rate: 4.59%

-- Flow 2:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 51.710 ms

Loss rate: 6.33%

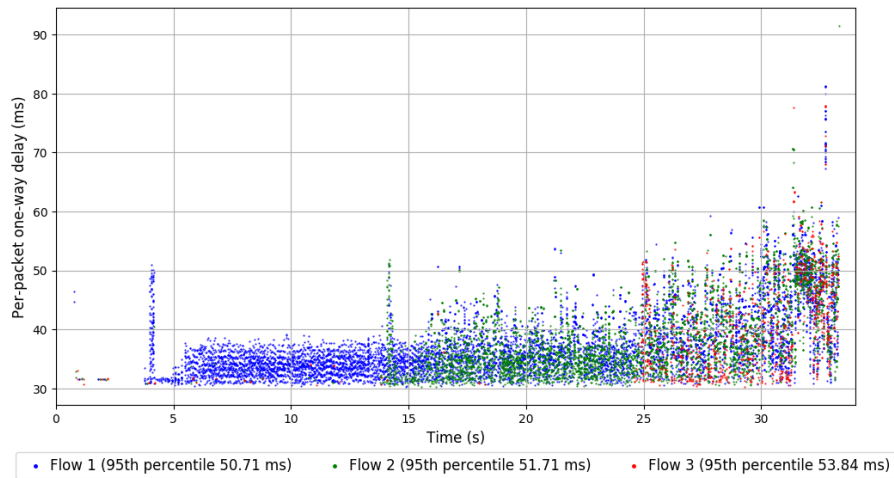
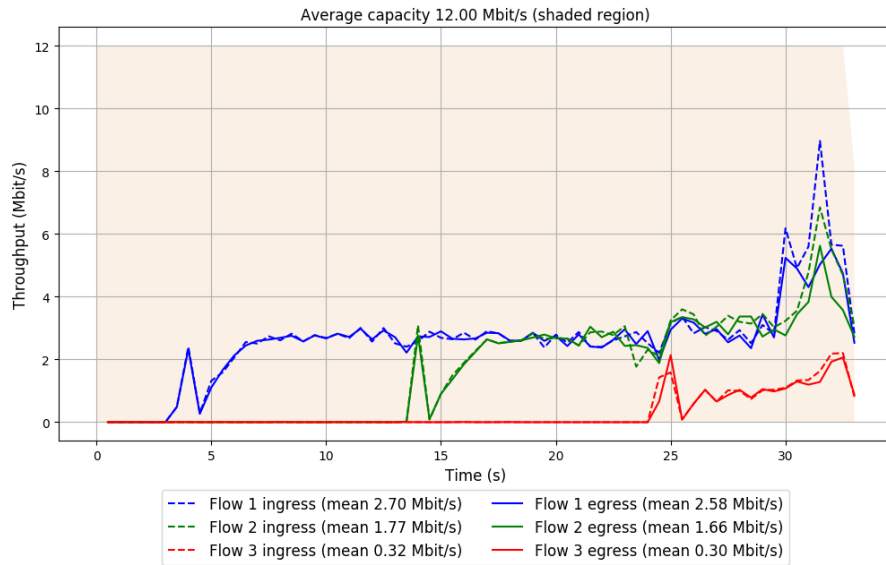
-- Flow 3:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 53.839 ms

Loss rate: 5.69%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-27 18:58:32

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

Below is generated by plot.py at 2018-02-27 19:44:20

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.85 Mbit/s (40.4% utilization)

95th percentile per-packet one-way delay: 57.189 ms

Loss rate: 14.33%

-- Flow 1:

Average throughput: 2.69 Mbit/s

95th percentile per-packet one-way delay: 53.602 ms

Loss rate: 11.17%

-- Flow 2:

Average throughput: 1.52 Mbit/s

95th percentile per-packet one-way delay: 56.941 ms

Loss rate: 13.77%

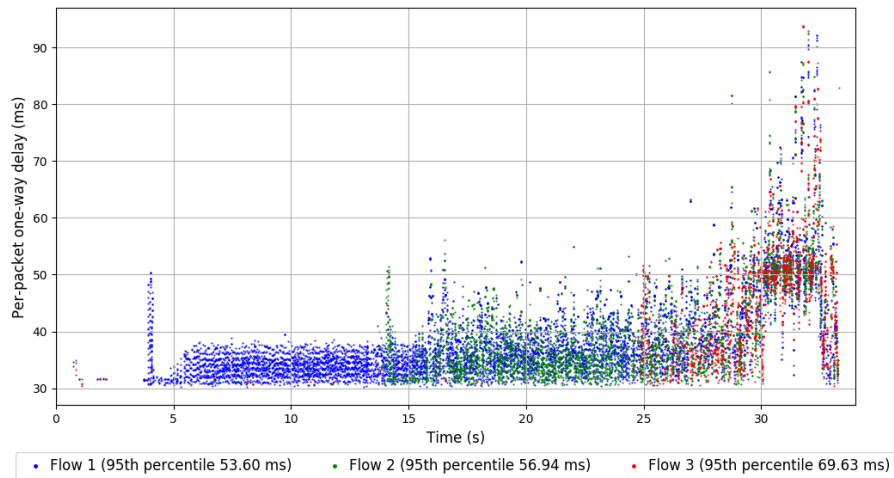
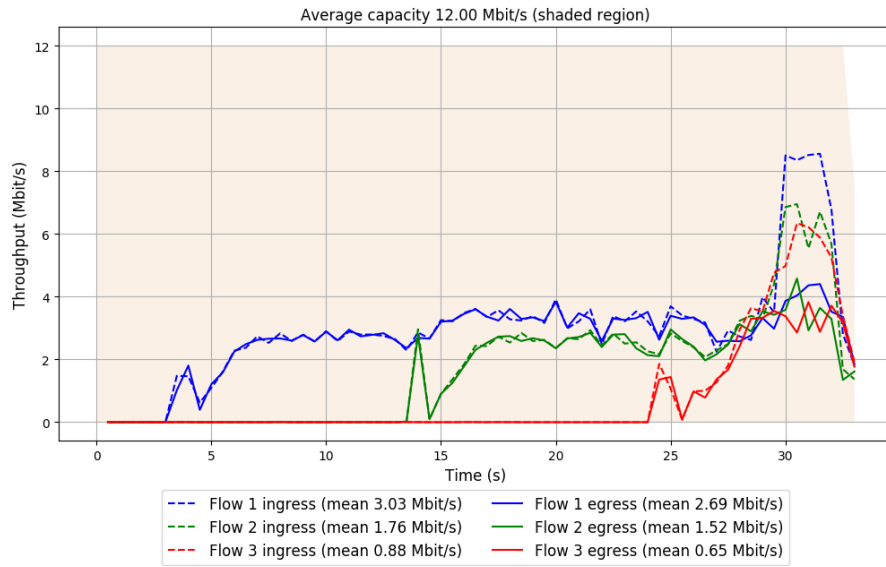
-- Flow 3:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 69.630 ms

Loss rate: 26.39%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-27 19:08:58

End at: 2018-02-27 19:09:28

Below is generated by plot.py at 2018-02-27 19:44:20

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.47 Mbit/s (37.2% utilization)

95th percentile per-packet one-way delay: 50.845 ms

Loss rate: 5.69%

-- Flow 1:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 50.328 ms

Loss rate: 4.80%

-- Flow 2:

Average throughput: 1.60 Mbit/s

95th percentile per-packet one-way delay: 50.920 ms

Loss rate: 6.58%

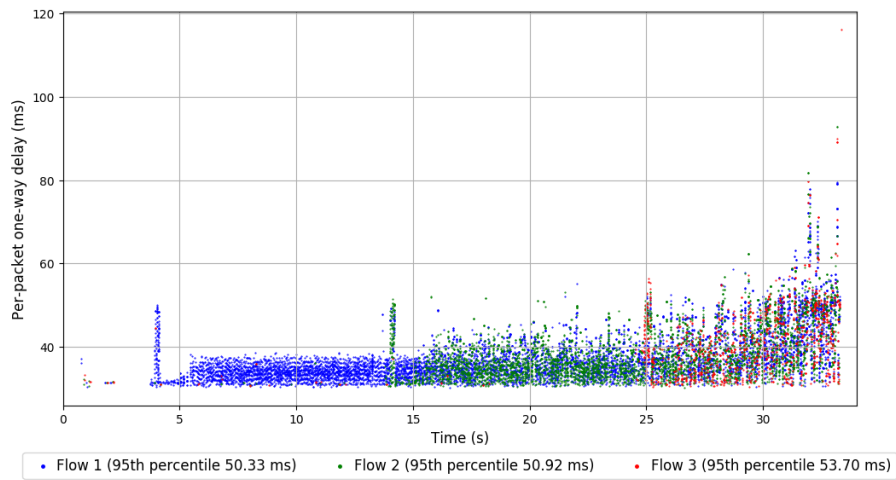
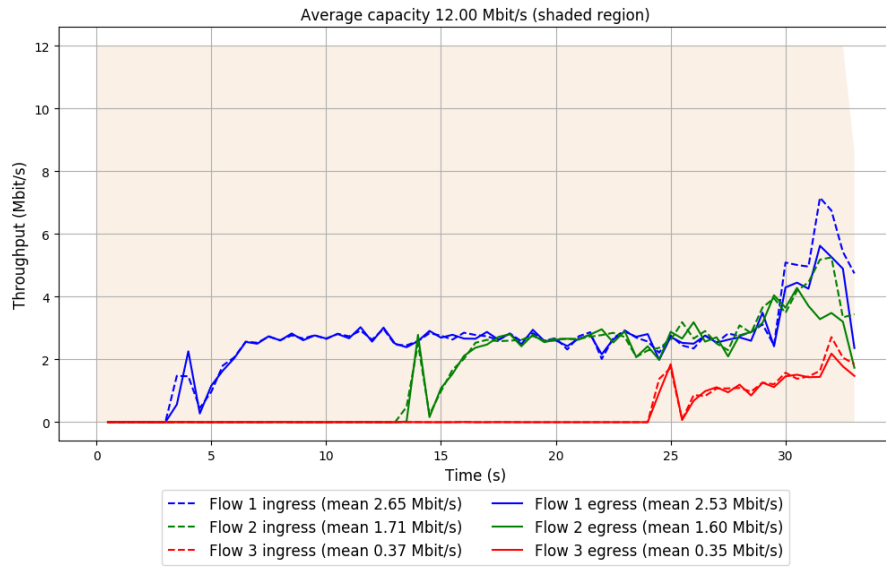
-- Flow 3:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 53.699 ms

Loss rate: 7.95%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

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

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

Below is generated by plot.py at 2018-02-27 19:44:26

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.49 Mbit/s (37.4% utilization)

95th percentile per-packet one-way delay: 52.911 ms

Loss rate: 8.49%

-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 51.003 ms

Loss rate: 5.60%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 52.943 ms

Loss rate: 7.87%

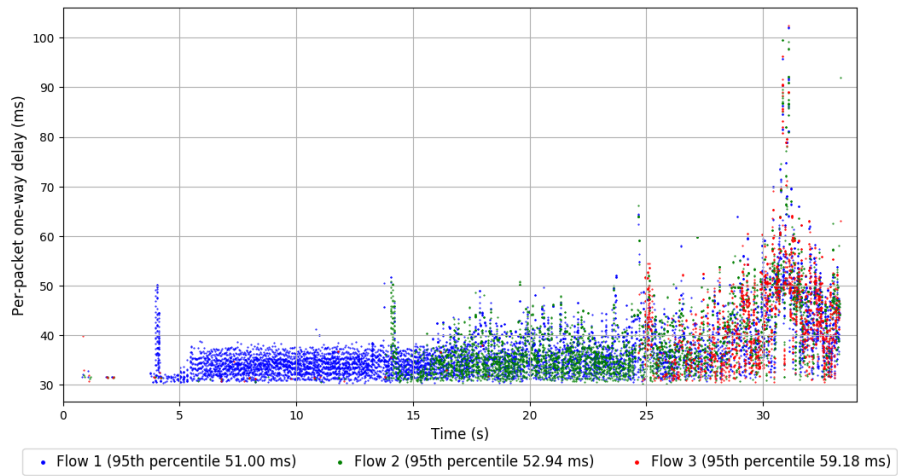
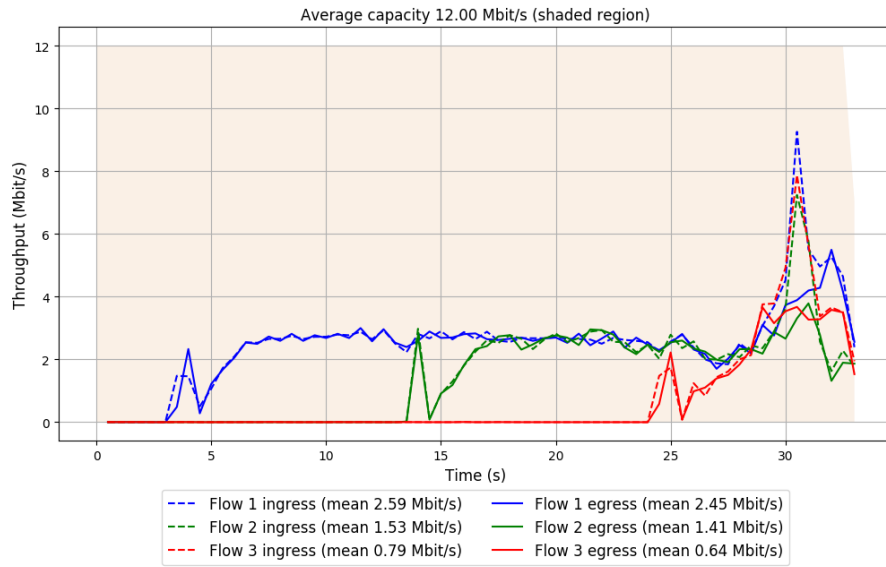
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 59.181 ms

Loss rate: 19.21%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-27 19:29:52

End at: 2018-02-27 19:30:22

Below is generated by plot.py at 2018-02-27 19:44:29

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 4.76 Mbit/s (39.7% utilization)

95th percentile per-packet one-way delay: 54.937 ms

Loss rate: 9.92%

-- Flow 1:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 52.968 ms

Loss rate: 7.73%

-- Flow 2:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 56.279 ms

Loss rate: 10.50%

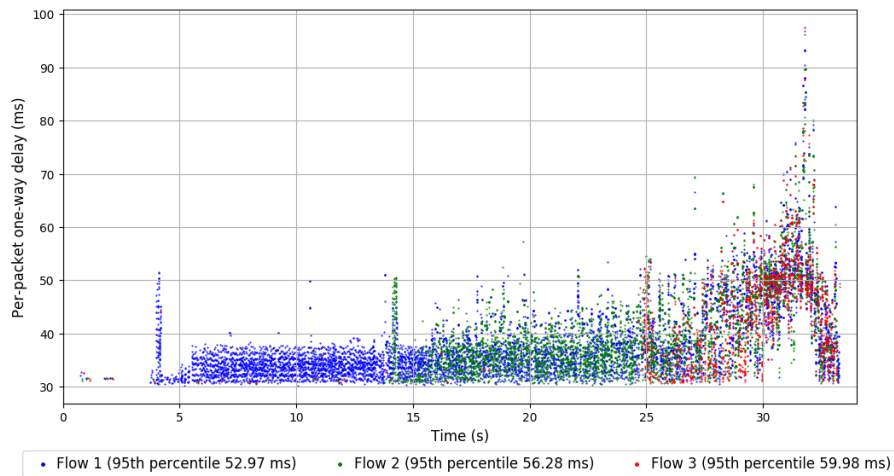
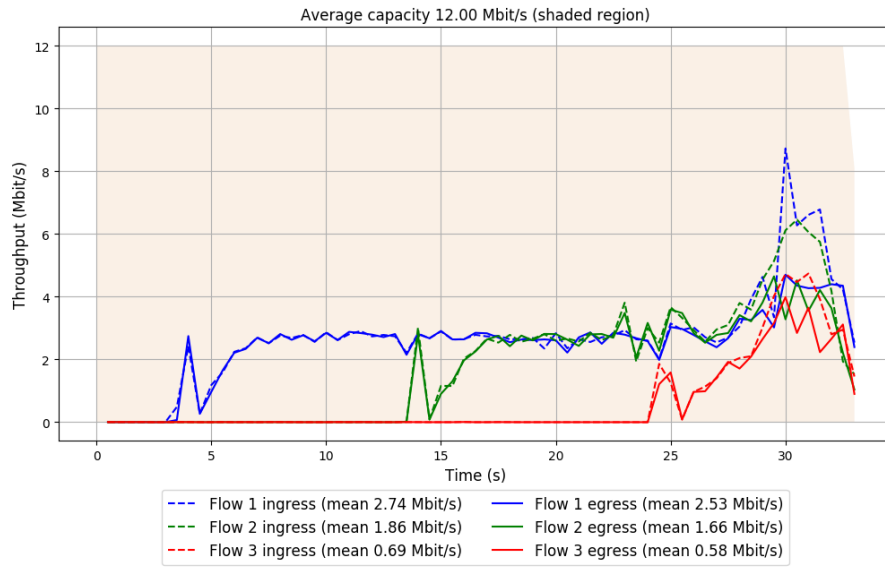
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 59.975 ms

Loss rate: 17.03%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-02-27 18:05:17

End at: 2018-02-27 18:05:47

Below is generated by plot.py at 2018-02-27 19:44:33

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 6.86 Mbit/s (57.2% utilization)

95th percentile per-packet one-way delay: 49.551 ms

Loss rate: 11.14%

-- Flow 1:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 49.473 ms

Loss rate: 10.08%

-- Flow 2:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 49.559 ms

Loss rate: 11.10%

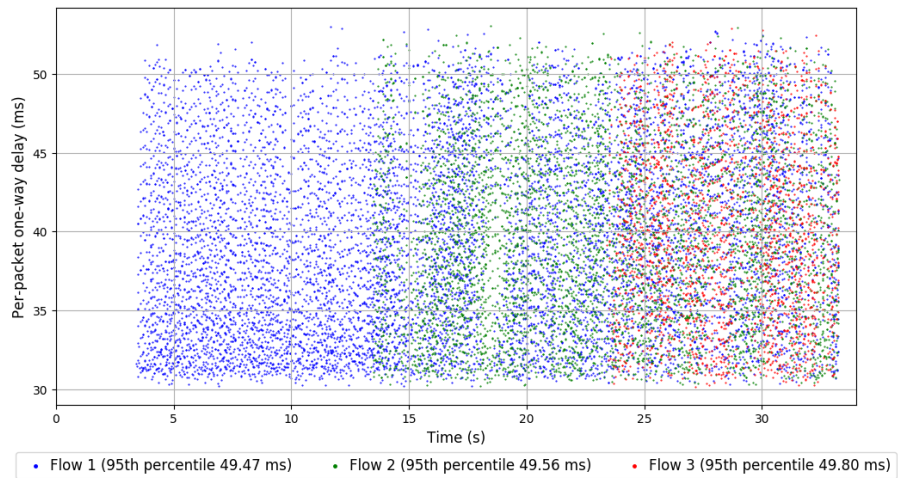
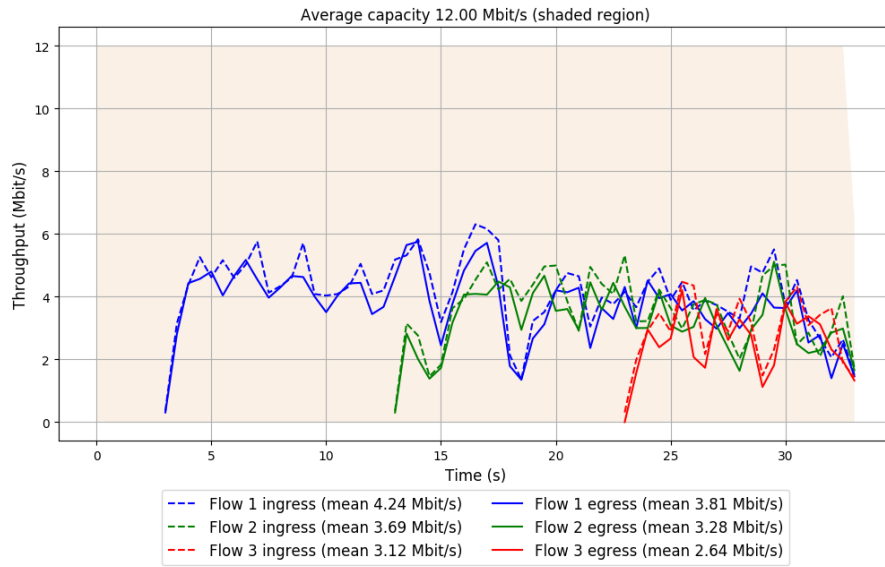
-- Flow 3:

Average throughput: 2.64 Mbit/s

95th percentile per-packet one-way delay: 49.796 ms

Loss rate: 15.63%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-27 18:15:42

End at: 2018-02-27 18:16:12

Below is generated by plot.py at 2018-02-27 19:44:36

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 7.04 Mbit/s (58.7% utilization)

95th percentile per-packet one-way delay: 49.585 ms

Loss rate: 10.96%

-- Flow 1:

Average throughput: 3.91 Mbit/s

95th percentile per-packet one-way delay: 49.395 ms

Loss rate: 10.22%

-- Flow 2:

Average throughput: 3.12 Mbit/s

95th percentile per-packet one-way delay: 49.828 ms

Loss rate: 12.14%

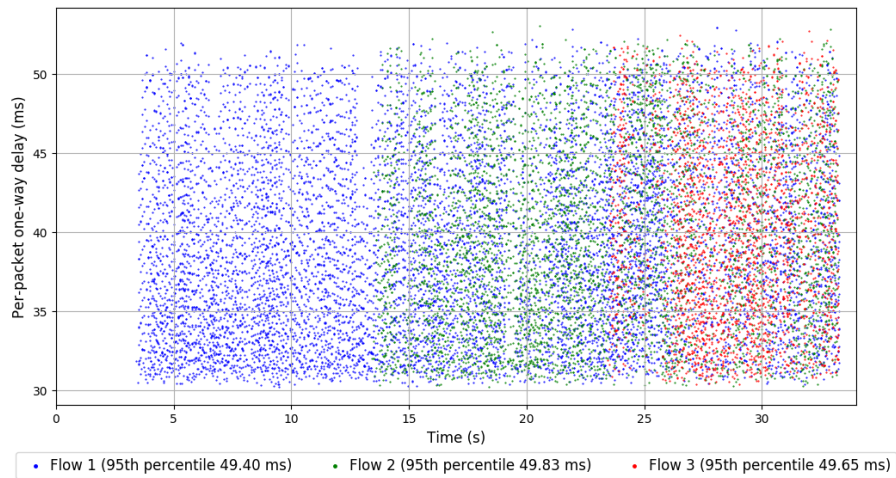
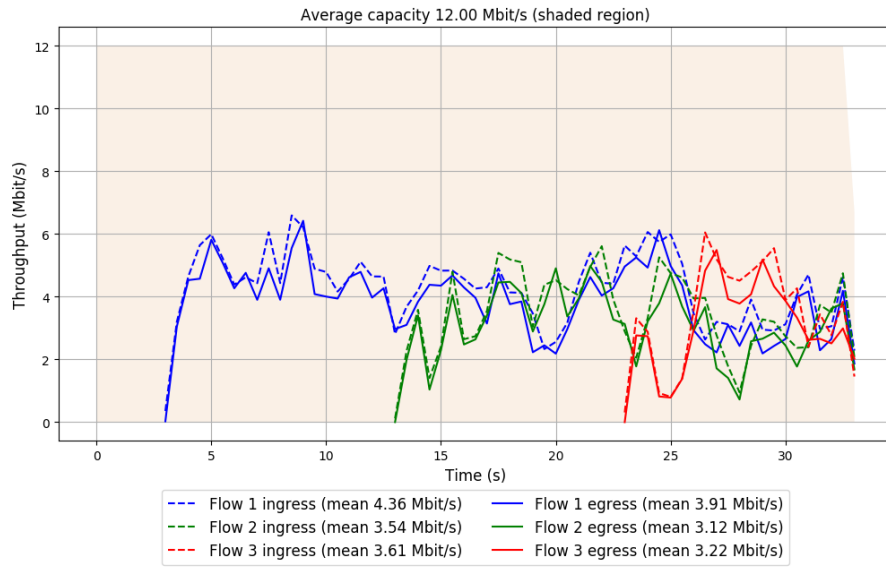
-- Flow 3:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 49.653 ms

Loss rate: 11.36%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-27 18:26:07

End at: 2018-02-27 18:26:37

Below is generated by plot.py at 2018-02-27 19:44:36

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 6.86 Mbit/s (57.2% utilization)

95th percentile per-packet one-way delay: 49.565 ms

Loss rate: 11.43%

-- Flow 1:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 49.367 ms

Loss rate: 10.36%

-- Flow 2:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 49.636 ms

Loss rate: 12.46%

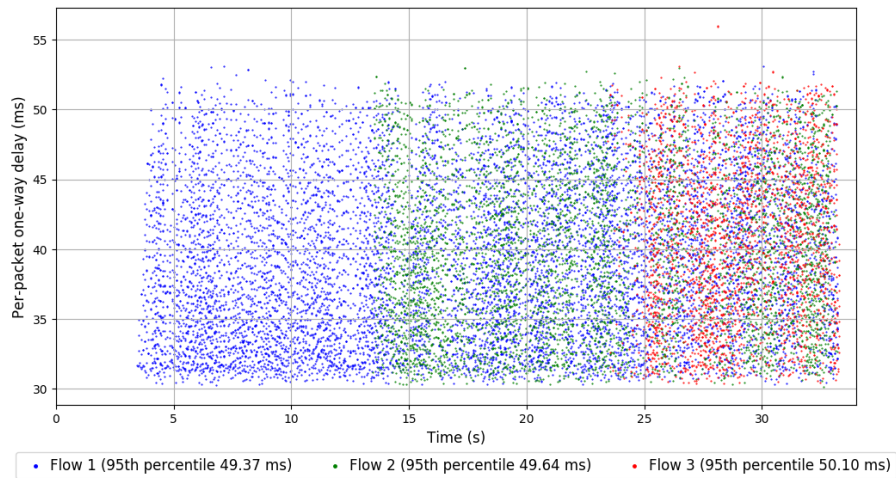
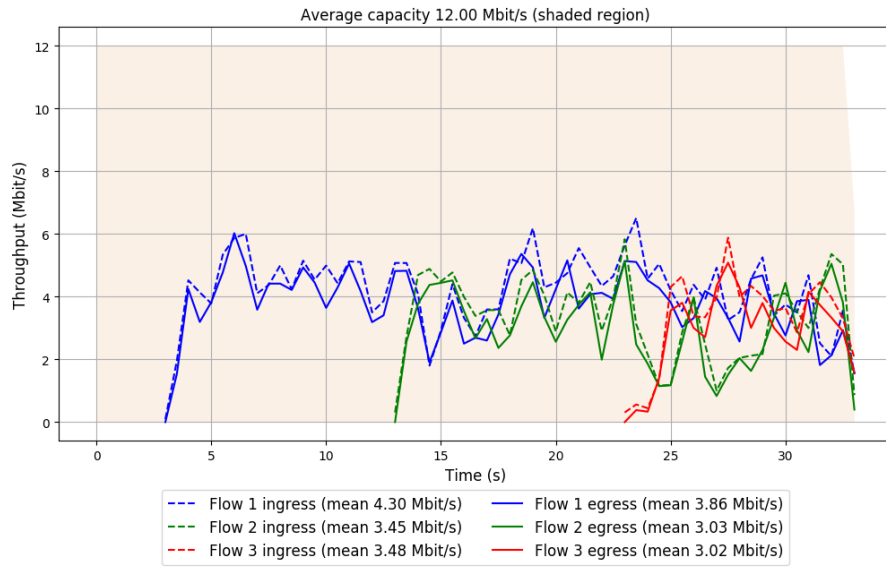
-- Flow 3:

Average throughput: 3.02 Mbit/s

95th percentile per-packet one-way delay: 50.099 ms

Loss rate: 13.38%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-27 18:36:32

End at: 2018-02-27 18:37:02

Below is generated by plot.py at 2018-02-27 19:44:37

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 6.83 Mbit/s (56.9% utilization)

95th percentile per-packet one-way delay: 49.601 ms

Loss rate: 11.75%

-- Flow 1:

Average throughput: 3.56 Mbit/s

95th percentile per-packet one-way delay: 49.424 ms

Loss rate: 10.14%

-- Flow 2:

Average throughput: 3.53 Mbit/s

95th percentile per-packet one-way delay: 49.586 ms

Loss rate: 12.28%

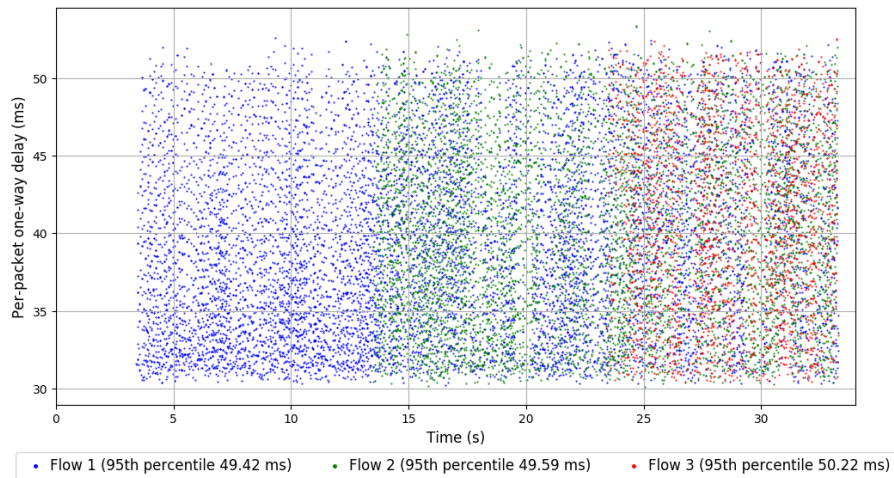
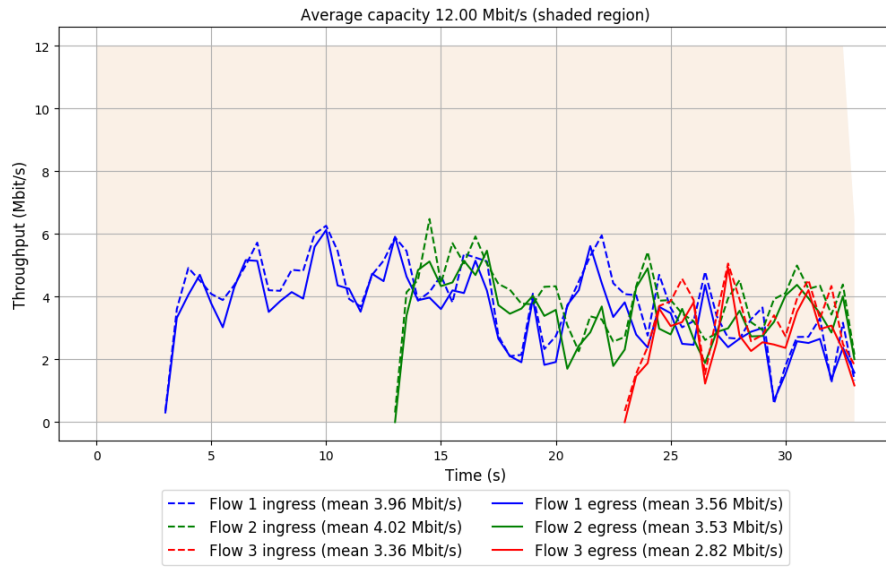
-- Flow 3:

Average throughput: 2.82 Mbit/s

95th percentile per-packet one-way delay: 50.219 ms

Loss rate: 16.22%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-27 18:46:57

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

Below is generated by plot.py at 2018-02-27 19:44:42

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 6.54 Mbit/s (54.5% utilization)

95th percentile per-packet one-way delay: 49.401 ms

Loss rate: 11.09%

-- Flow 1:

Average throughput: 3.59 Mbit/s

95th percentile per-packet one-way delay: 49.158 ms

Loss rate: 9.30%

-- Flow 2:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 49.701 ms

Loss rate: 13.62%

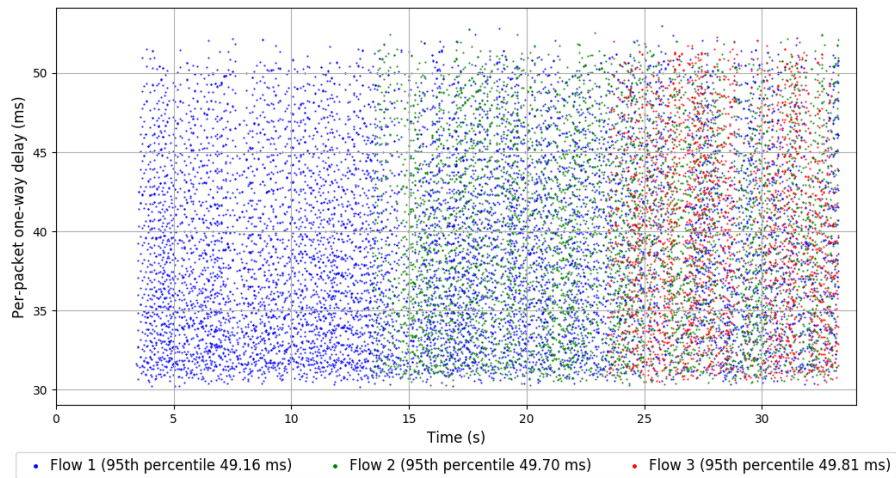
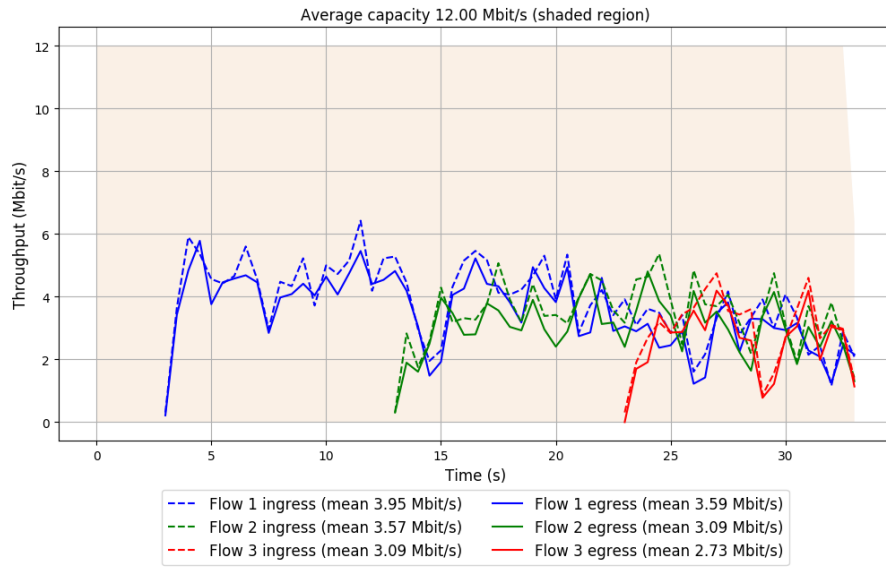
-- Flow 3:

Average throughput: 2.73 Mbit/s

95th percentile per-packet one-way delay: 49.810 ms

Loss rate: 12.18%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

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

End at: 2018-02-27 18:57:53

Below is generated by plot.py at 2018-02-27 19:44:43

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 7.04 Mbit/s (58.6% utilization)

95th percentile per-packet one-way delay: 49.452 ms

Loss rate: 10.94%

-- Flow 1:

Average throughput: 3.64 Mbit/s

95th percentile per-packet one-way delay: 49.391 ms

Loss rate: 10.10%

-- Flow 2:

Average throughput: 3.57 Mbit/s

95th percentile per-packet one-way delay: 49.460 ms

Loss rate: 11.70%

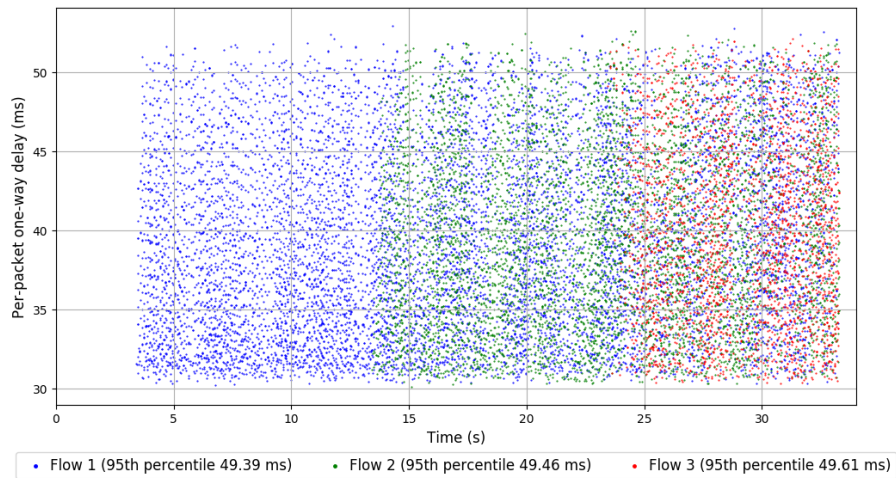
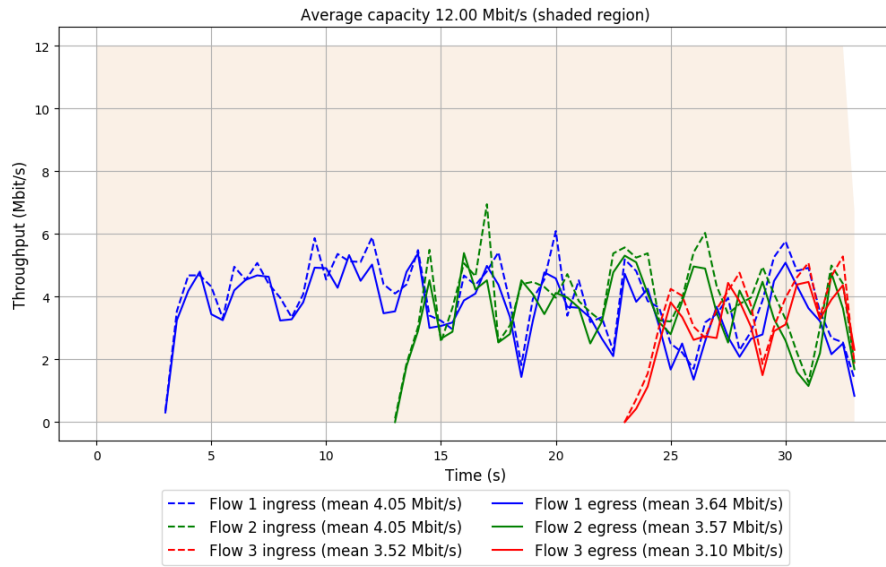
-- Flow 3:

Average throughput: 3.10 Mbit/s

95th percentile per-packet one-way delay: 49.611 ms

Loss rate: 12.16%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-27 19:07:49

End at: 2018-02-27 19:08:19

Below is generated by plot.py at 2018-02-27 19:44:48

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 7.05 Mbit/s (58.7% utilization)

95th percentile per-packet one-way delay: 49.432 ms

Loss rate: 10.35%

-- Flow 1:

Average throughput: 3.62 Mbit/s

95th percentile per-packet one-way delay: 49.468 ms

Loss rate: 10.19%

-- Flow 2:

Average throughput: 3.41 Mbit/s

95th percentile per-packet one-way delay: 49.415 ms

Loss rate: 10.76%

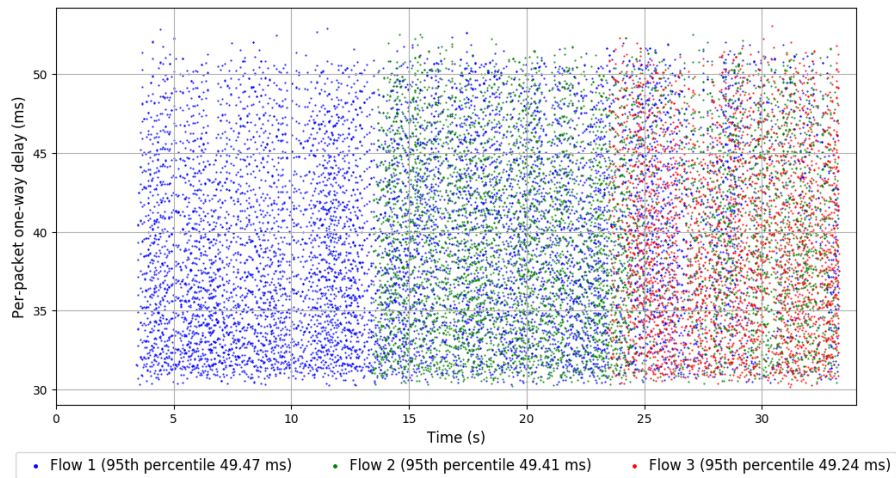
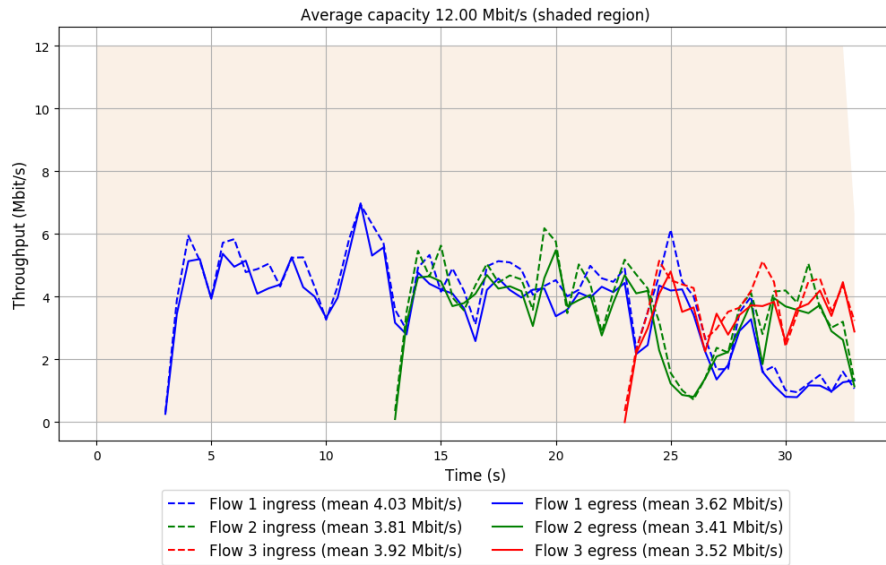
-- Flow 3:

Average throughput: 3.52 Mbit/s

95th percentile per-packet one-way delay: 49.241 ms

Loss rate: 10.06%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-27 19:18:17

End at: 2018-02-27 19:18:47

Below is generated by plot.py at 2018-02-27 19:44:52

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 7.37 Mbit/s (61.4% utilization)

95th percentile per-packet one-way delay: 49.550 ms

Loss rate: 10.79%

-- Flow 1:

Average throughput: 3.90 Mbit/s

95th percentile per-packet one-way delay: 49.519 ms

Loss rate: 10.68%

-- Flow 2:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 49.498 ms

Loss rate: 9.77%

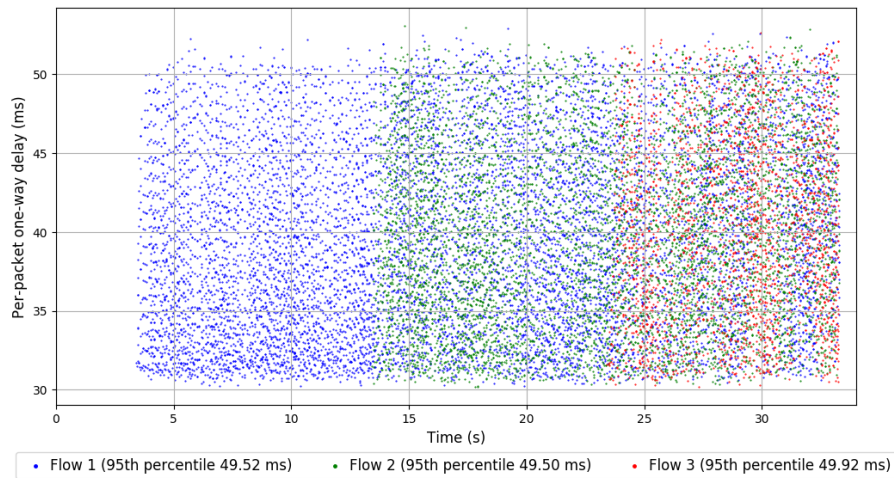
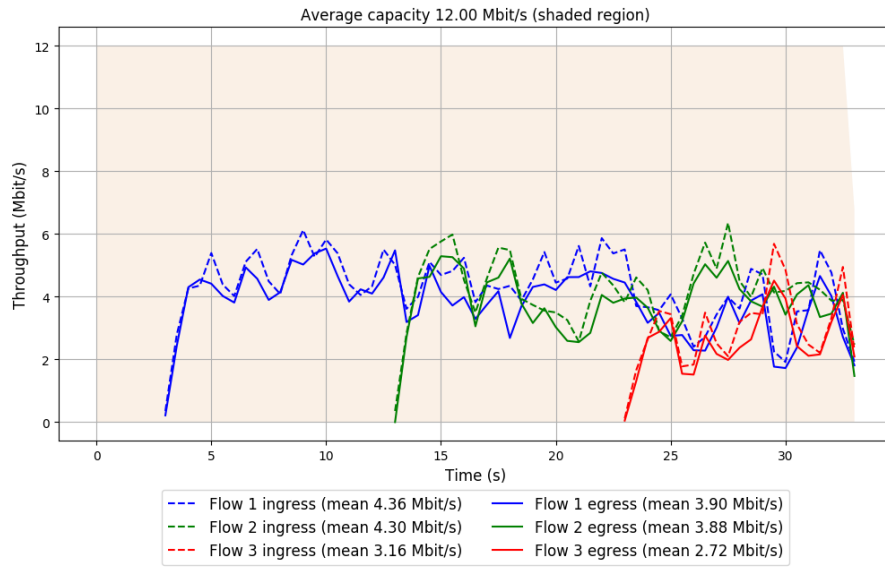
-- Flow 3:

Average throughput: 2.72 Mbit/s

95th percentile per-packet one-way delay: 49.916 ms

Loss rate: 14.04%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-27 19:28:43

End at: 2018-02-27 19:29:13

Below is generated by plot.py at 2018-02-27 19:44:55

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 7.13 Mbit/s (59.4% utilization)

95th percentile per-packet one-way delay: 49.439 ms

Loss rate: 10.65%

-- Flow 1:

Average throughput: 3.85 Mbit/s

95th percentile per-packet one-way delay: 49.416 ms

Loss rate: 9.75%

-- Flow 2:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 49.447 ms

Loss rate: 11.65%

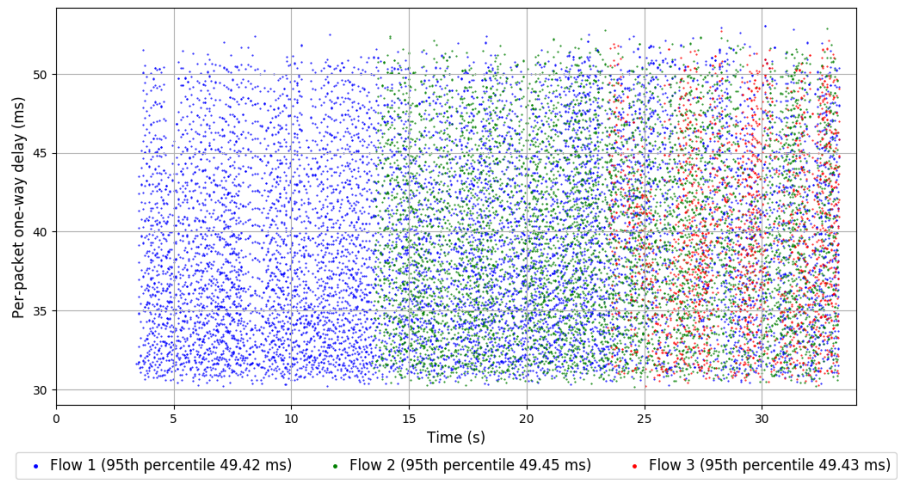
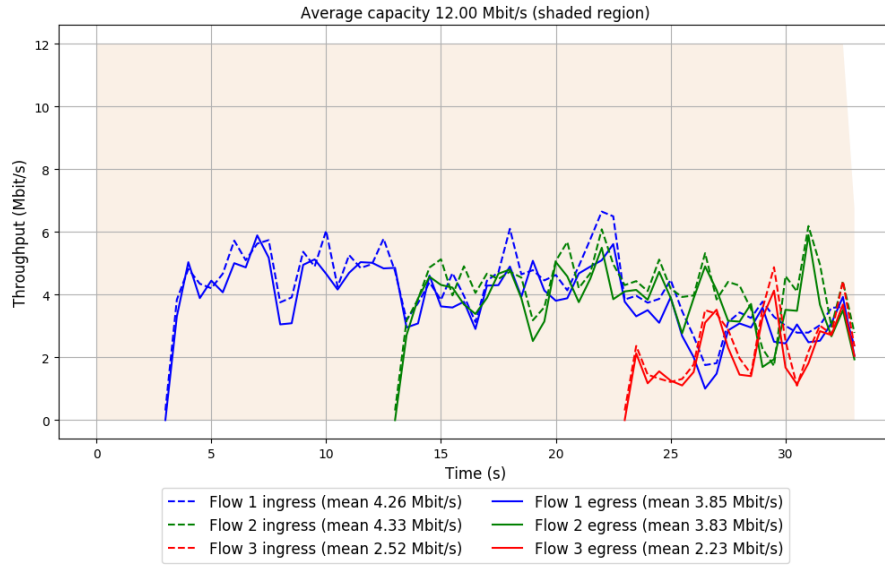
-- Flow 3:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 49.427 ms

Loss rate: 11.83%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-27 19:39:11

End at: 2018-02-27 19:39:41

Below is generated by plot.py at 2018-02-27 19:44:57

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 6.95 Mbit/s (57.9% utilization)

95th percentile per-packet one-way delay: 49.488 ms

Loss rate: 10.42%

-- Flow 1:

Average throughput: 3.84 Mbit/s

95th percentile per-packet one-way delay: 49.440 ms

Loss rate: 10.04%

-- Flow 2:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 49.491 ms

Loss rate: 10.33%

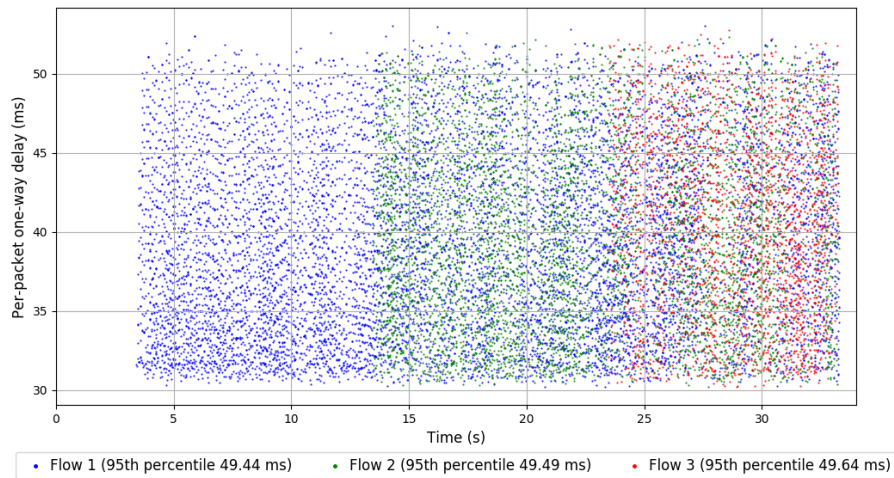
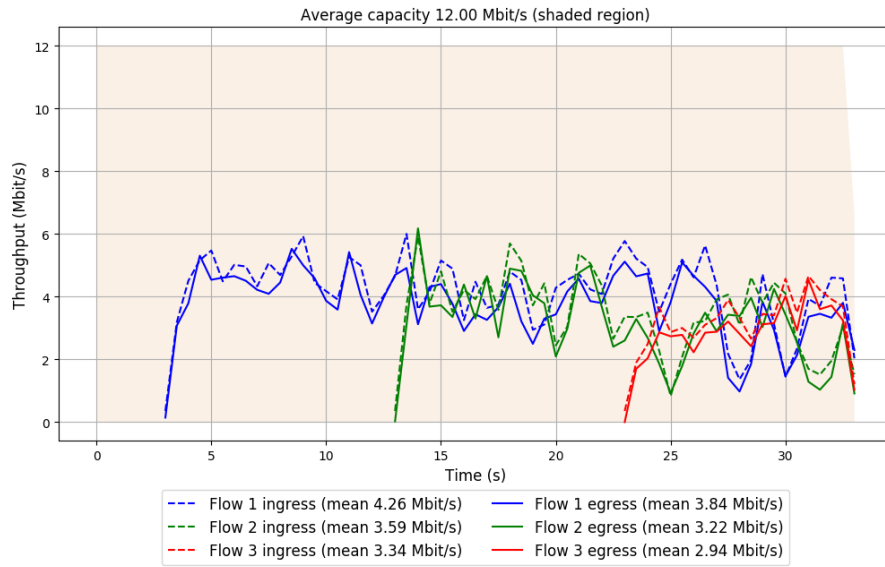
-- Flow 3:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 49.638 ms

Loss rate: 12.12%

Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-02-27 18:01:48

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

Below is generated by plot.py at 2018-02-27 19:45:18

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.67 Mbit/s (97.2% utilization)

95th percentile per-packet one-way delay: 51.167 ms

Loss rate: 7.09%

-- Flow 1:

Average throughput: 7.11 Mbit/s

95th percentile per-packet one-way delay: 50.980 ms

Loss rate: 2.35%

-- Flow 2:

Average throughput: 5.19 Mbit/s

95th percentile per-packet one-way delay: 51.198 ms

Loss rate: 5.41%

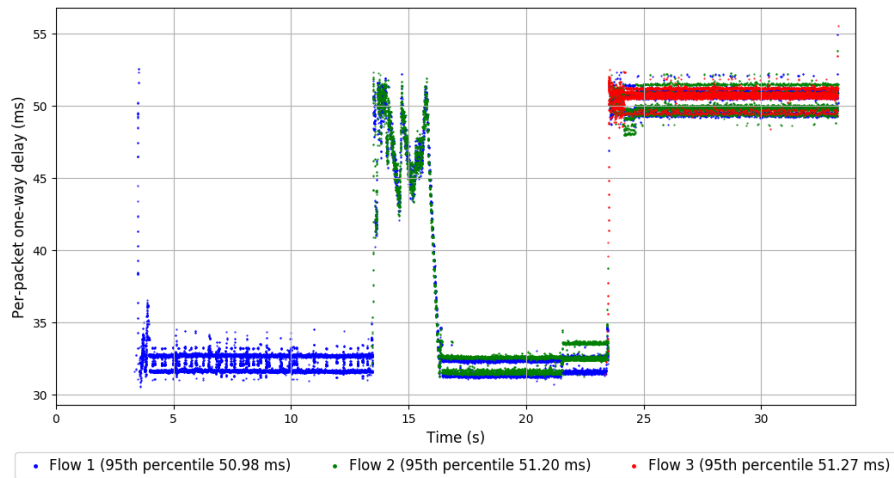
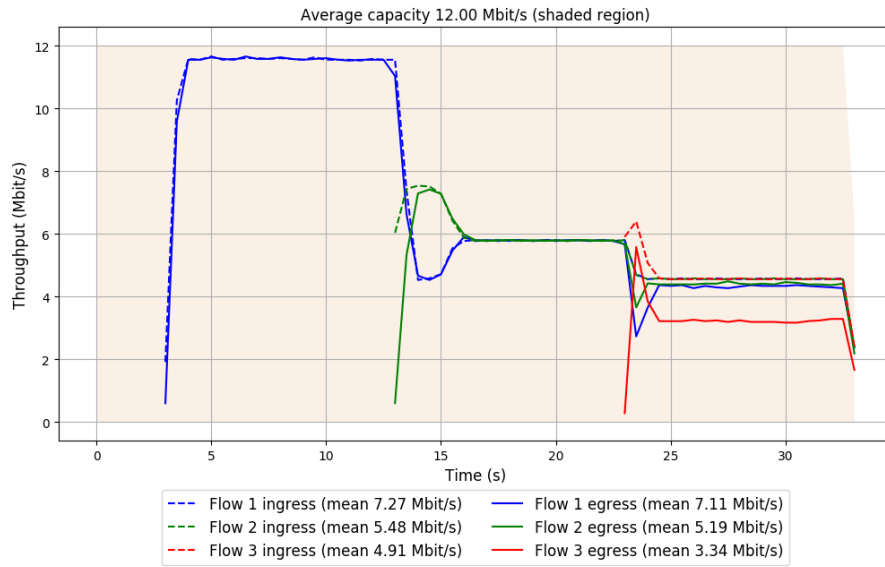
-- Flow 3:

Average throughput: 3.34 Mbit/s

95th percentile per-packet one-way delay: 51.269 ms

Loss rate: 32.03%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-02-27 18:12:13

End at: 2018-02-27 18:12:43

Below is generated by plot.py at 2018-02-27 19:45:19

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.67 Mbit/s (97.2% utilization)

95th percentile per-packet one-way delay: 51.216 ms

Loss rate: 7.46%

-- Flow 1:

Average throughput: 7.08 Mbit/s

95th percentile per-packet one-way delay: 50.937 ms

Loss rate: 4.50%

-- Flow 2:

Average throughput: 5.00 Mbit/s

95th percentile per-packet one-way delay: 51.281 ms

Loss rate: 6.63%

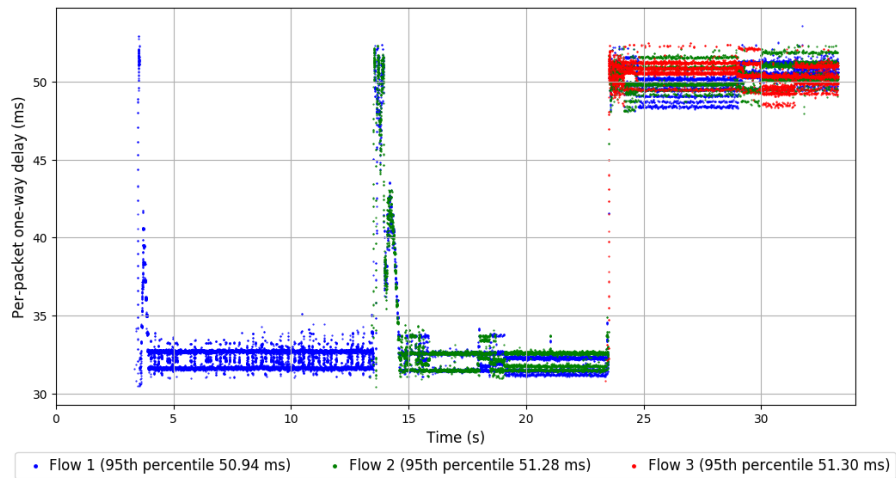
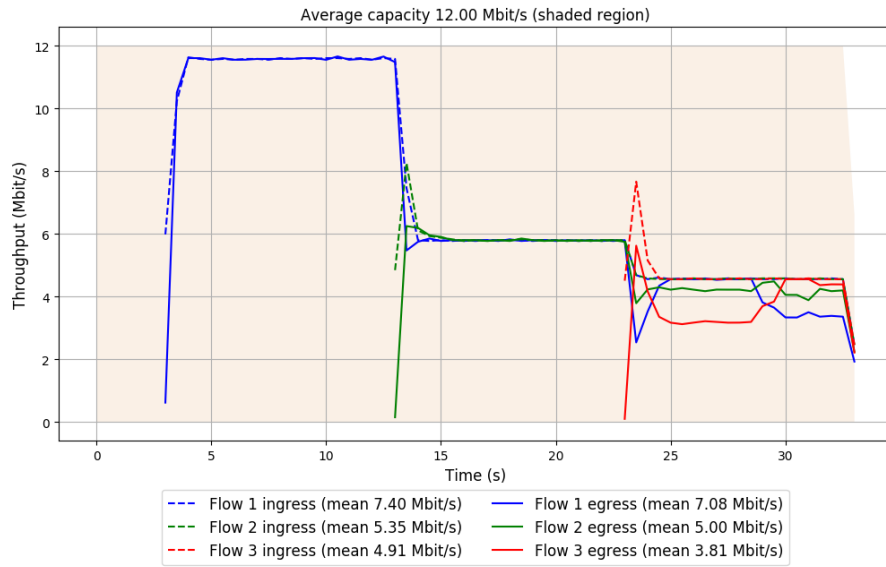
-- Flow 3:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 51.299 ms

Loss rate: 22.74%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-02-27 18:22:38

End at: 2018-02-27 18:23:08

Below is generated by plot.py at 2018-02-27 19:45:23

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.66 Mbit/s (97.2% utilization)

95th percentile per-packet one-way delay: 51.130 ms

Loss rate: 7.51%

-- Flow 1:

Average throughput: 7.12 Mbit/s

95th percentile per-packet one-way delay: 50.724 ms

Loss rate: 3.66%

-- Flow 2:

Average throughput: 4.69 Mbit/s

95th percentile per-packet one-way delay: 51.225 ms

Loss rate: 13.07%

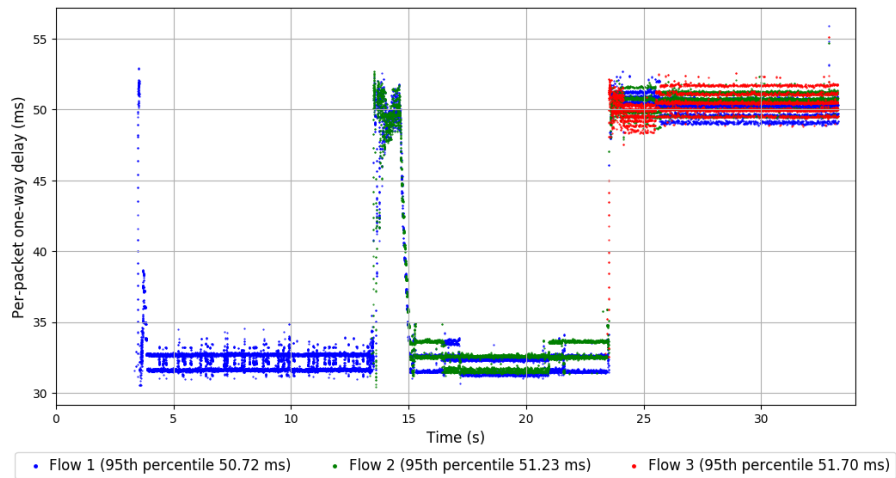
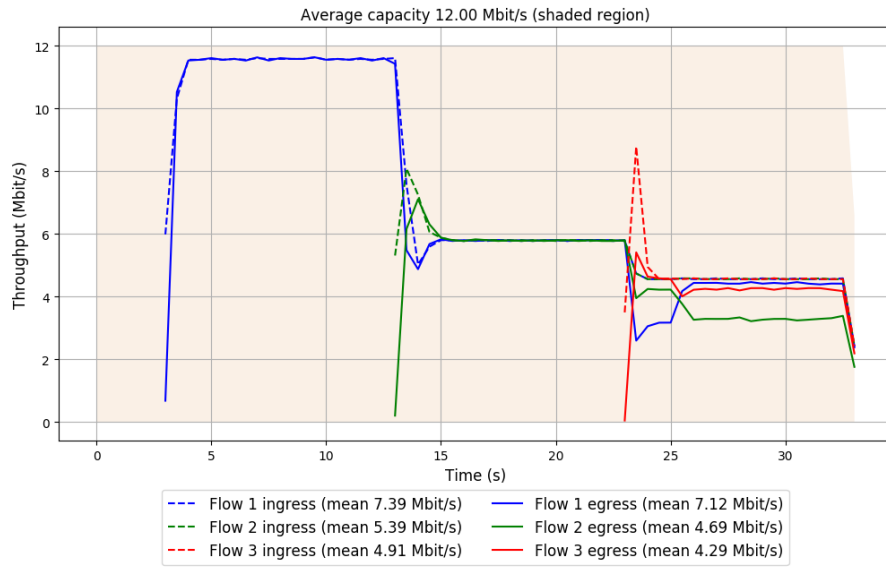
-- Flow 3:

Average throughput: 4.29 Mbit/s

95th percentile per-packet one-way delay: 51.699 ms

Loss rate: 12.78%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-02-27 18:33:04

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

Below is generated by plot.py at 2018-02-27 19:45:25

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.66 Mbit/s (97.1% utilization)

95th percentile per-packet one-way delay: 51.120 ms

Loss rate: 7.57%

-- Flow 1:

Average throughput: 6.91 Mbit/s

95th percentile per-packet one-way delay: 50.947 ms

Loss rate: 6.29%

-- Flow 2:

Average throughput: 4.94 Mbit/s

95th percentile per-packet one-way delay: 51.194 ms

Loss rate: 8.74%

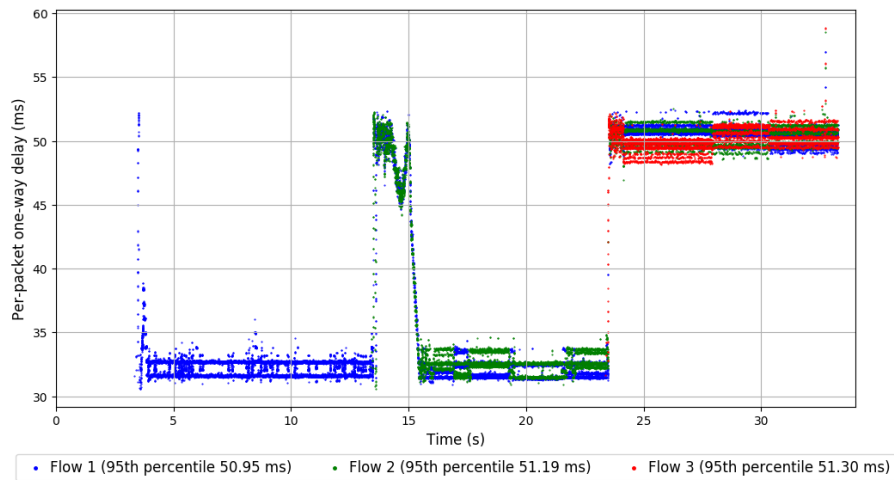
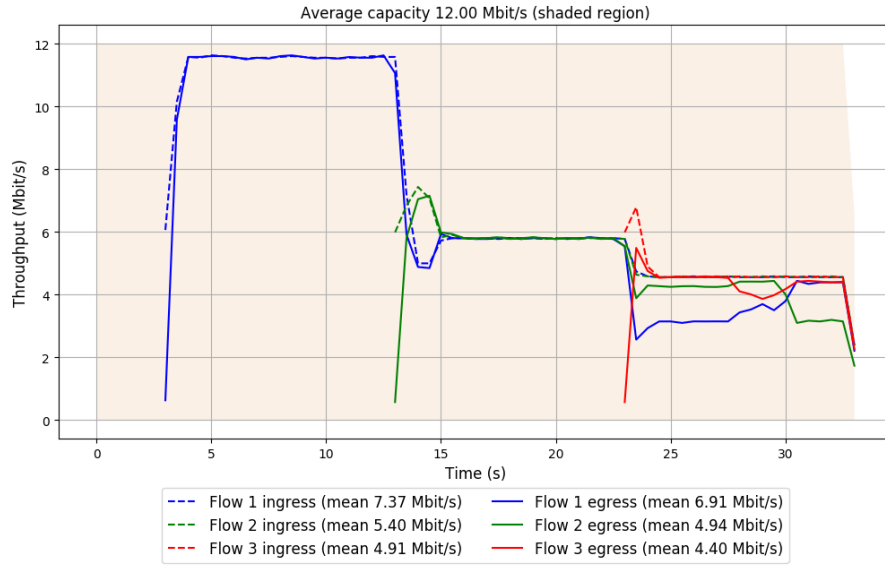
-- Flow 3:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 51.303 ms

Loss rate: 10.73%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-27 18:43:29

End at: 2018-02-27 18:43:59

Below is generated by plot.py at 2018-02-27 19:45:31

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.65 Mbit/s (97.1% utilization)

95th percentile per-packet one-way delay: 51.070 ms

Loss rate: 7.49%

-- Flow 1:

Average throughput: 6.87 Mbit/s

95th percentile per-packet one-way delay: 50.965 ms

Loss rate: 7.19%

-- Flow 2:

Average throughput: 5.08 Mbit/s

95th percentile per-packet one-way delay: 51.217 ms

Loss rate: 5.03%

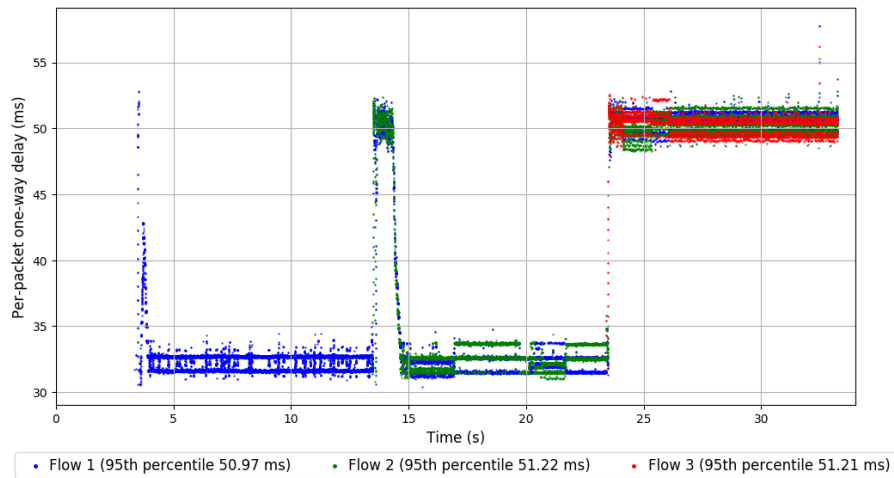
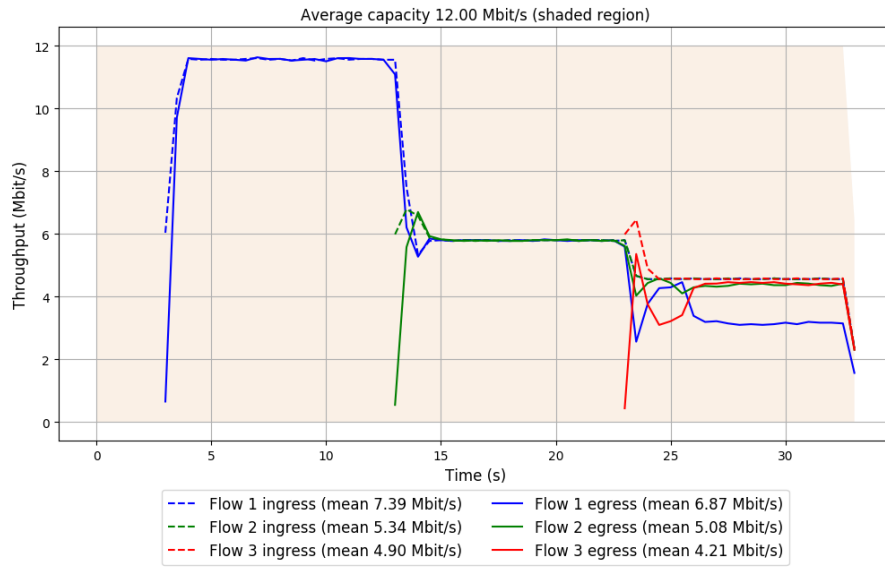
-- Flow 3:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 51.212 ms

Loss rate: 14.31%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-27 18:53:54

End at: 2018-02-27 18:54:24

Below is generated by plot.py at 2018-02-27 19:45:34

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.66 Mbit/s (97.2% utilization)

95th percentile per-packet one-way delay: 51.171 ms

Loss rate: 7.42%

-- Flow 1:

Average throughput: 7.02 Mbit/s

95th percentile per-packet one-way delay: 51.002 ms

Loss rate: 5.18%

-- Flow 2:

Average throughput: 5.07 Mbit/s

95th percentile per-packet one-way delay: 51.203 ms

Loss rate: 5.31%

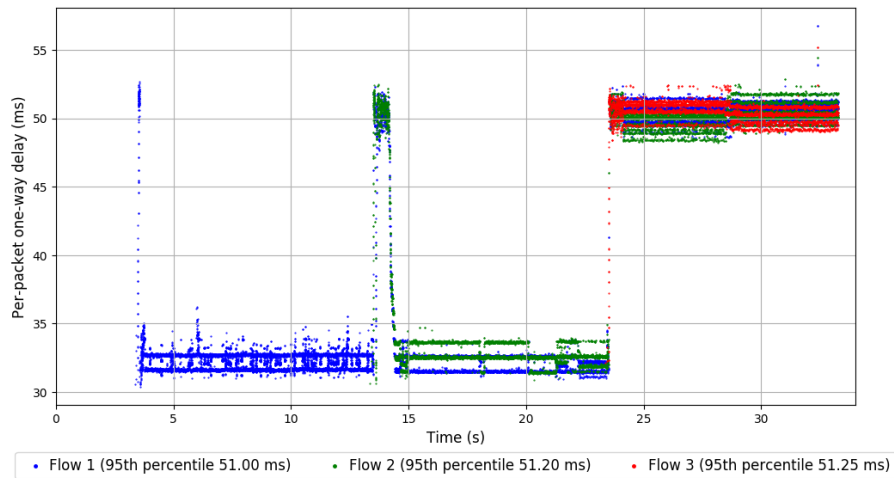
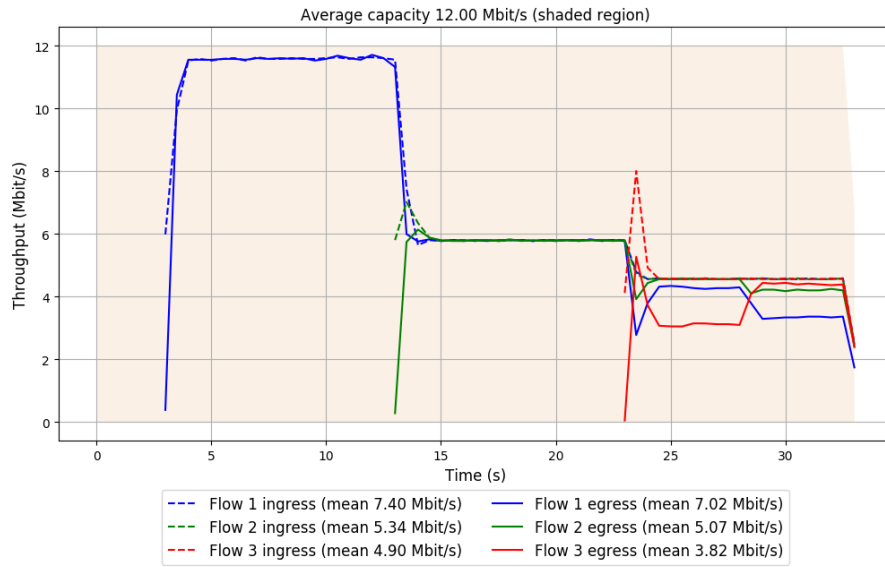
-- Flow 3:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 51.254 ms

Loss rate: 22.21%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-02-27 19:04:20

End at: 2018-02-27 19:04:50

Below is generated by plot.py at 2018-02-27 19:45:36

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.72 Mbit/s (97.7% utilization)

95th percentile per-packet one-way delay: 51.227 ms

Loss rate: 7.39%

-- Flow 1:

Average throughput: 6.95 Mbit/s

95th percentile per-packet one-way delay: 51.027 ms

Loss rate: 3.56%

-- Flow 2:

Average throughput: 5.18 Mbit/s

95th percentile per-packet one-way delay: 51.254 ms

Loss rate: 9.84%

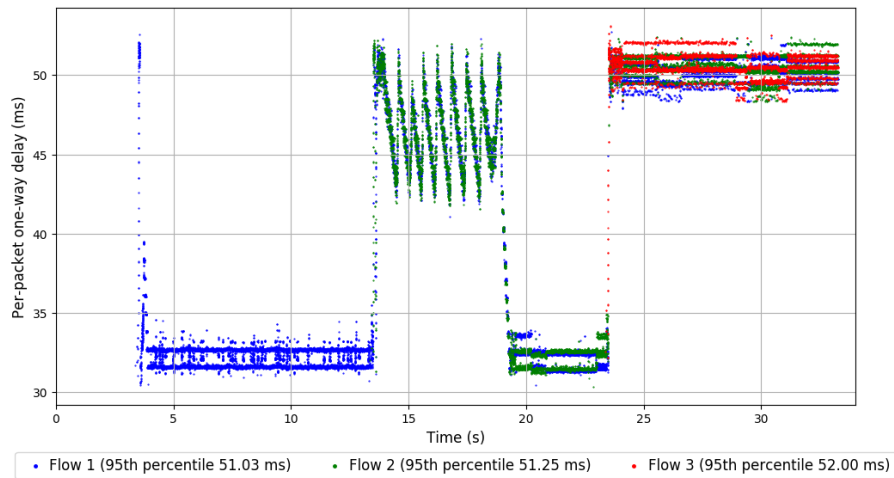
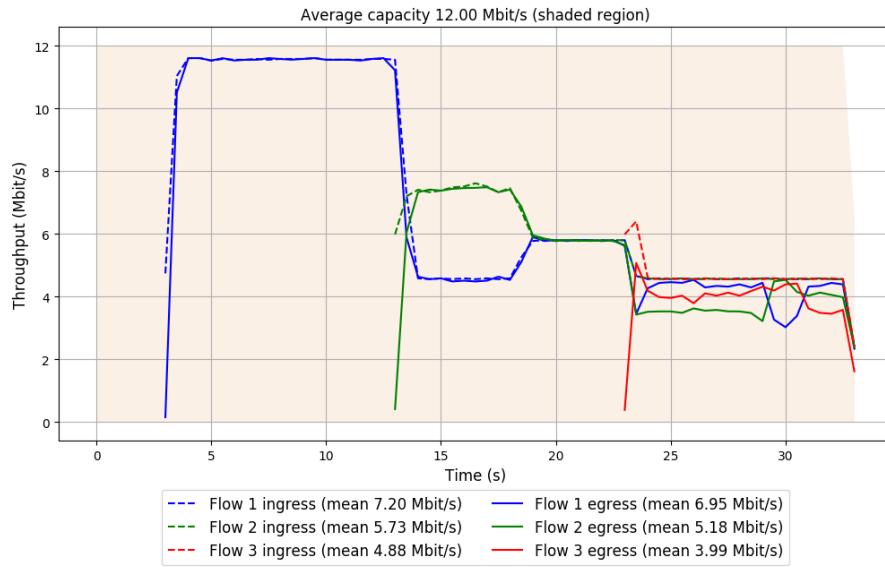
-- Flow 3:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 52.004 ms

Loss rate: 18.61%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-27 19:14:48

End at: 2018-02-27 19:15:18

Below is generated by plot.py at 2018-02-27 19:45:38

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.68 Mbit/s (97.3% utilization)

95th percentile per-packet one-way delay: 51.199 ms

Loss rate: 6.84%

-- Flow 1:

Average throughput: 7.12 Mbit/s

95th percentile per-packet one-way delay: 51.170 ms

Loss rate: 3.36%

-- Flow 2:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 50.832 ms

Loss rate: 3.27%

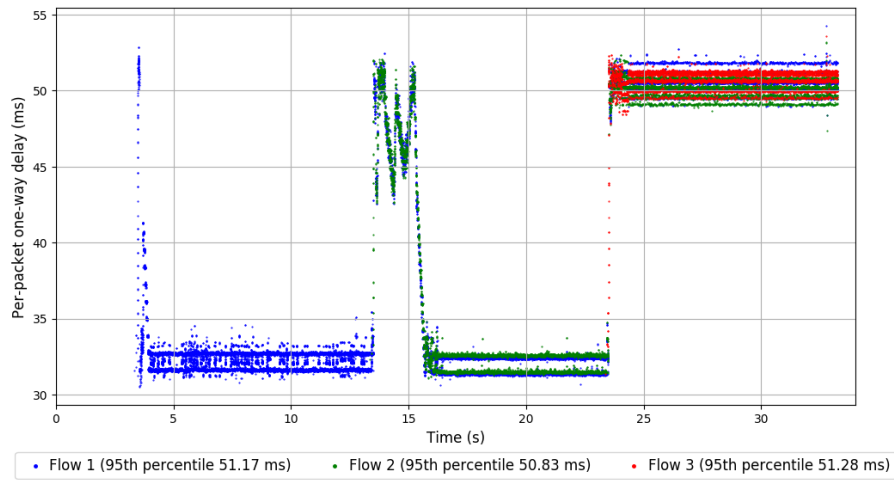
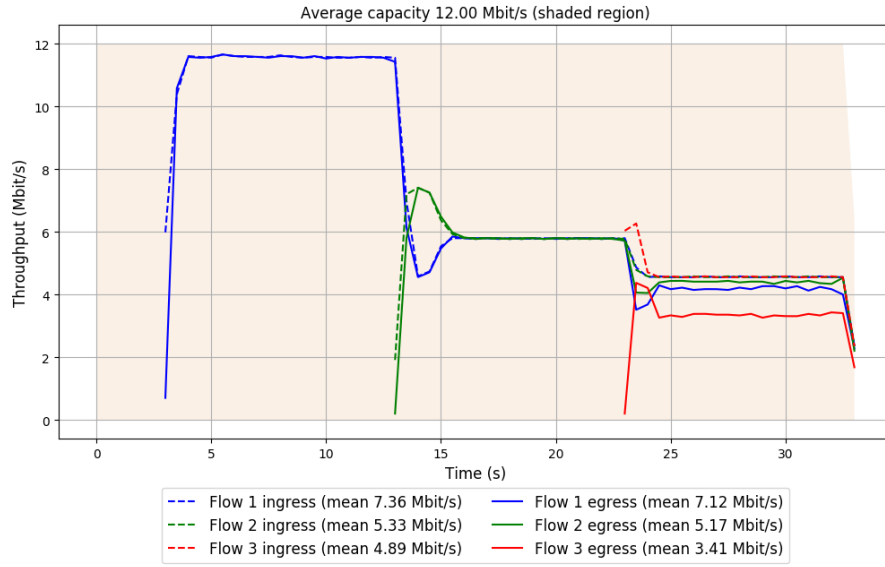
-- Flow 3:

Average throughput: 3.41 Mbit/s

95th percentile per-packet one-way delay: 51.279 ms

Loss rate: 30.49%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-02-27 19:25:14

End at: 2018-02-27 19:25:44

Below is generated by plot.py at 2018-02-27 19:46:05

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.69 Mbit/s (97.4% utilization)

95th percentile per-packet one-way delay: 51.190 ms

Loss rate: 7.39%

-- Flow 1:

Average throughput: 7.06 Mbit/s

95th percentile per-packet one-way delay: 51.084 ms

Loss rate: 4.14%

-- Flow 2:

Average throughput: 5.02 Mbit/s

95th percentile per-packet one-way delay: 51.143 ms

Loss rate: 7.90%

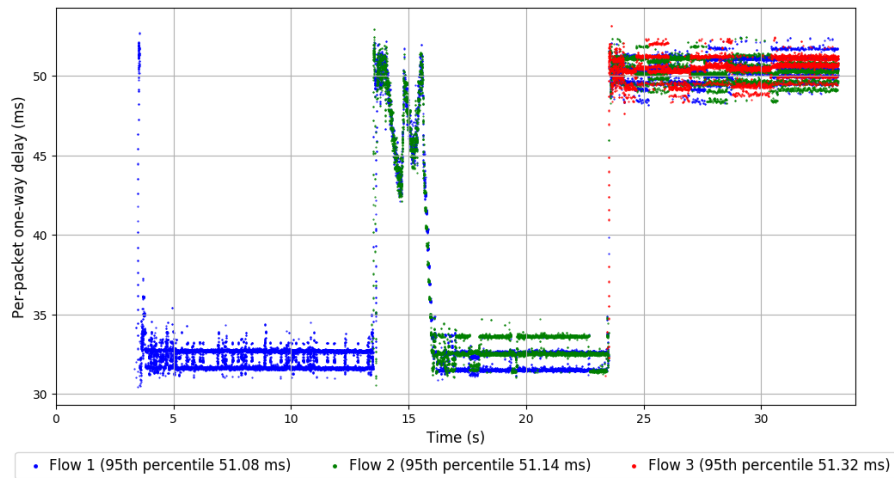
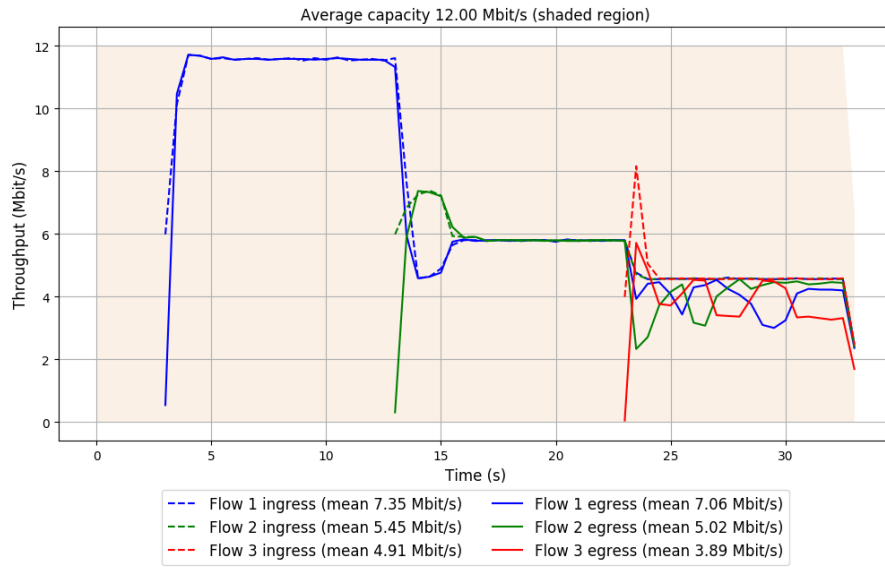
-- Flow 3:

Average throughput: 3.89 Mbit/s

95th percentile per-packet one-way delay: 51.316 ms

Loss rate: 20.98%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-02-27 19:35:42

End at: 2018-02-27 19:36:12

Below is generated by plot.py at 2018-02-27 19:46:05

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.66 Mbit/s (97.2% utilization)

95th percentile per-packet one-way delay: 51.218 ms

Loss rate: 7.05%

-- Flow 1:

Average throughput: 7.09 Mbit/s

95th percentile per-packet one-way delay: 51.013 ms

Loss rate: 3.75%

-- Flow 2:

Average throughput: 4.75 Mbit/s

95th percentile per-packet one-way delay: 51.245 ms

Loss rate: 12.74%

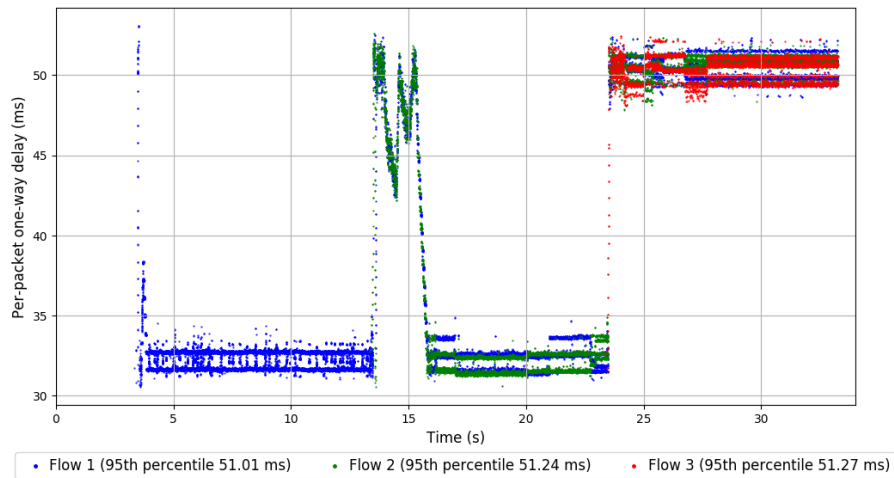
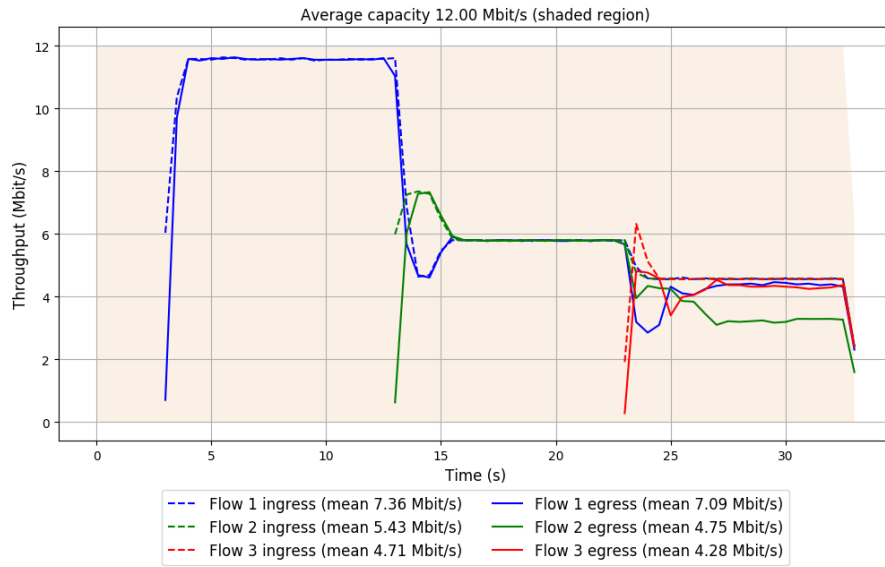
-- Flow 3:

Average throughput: 4.28 Mbit/s

95th percentile per-packet one-way delay: 51.265 ms

Loss rate: 9.43%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-27 17:57:11

End at: 2018-02-27 17:57:41

Below is generated by plot.py at 2018-02-27 19:46:05

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.69 Mbit/s (97.4% utilization)

95th percentile per-packet one-way delay: 43.969 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 6.70 Mbit/s

95th percentile per-packet one-way delay: 44.029 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 5.83 Mbit/s

95th percentile per-packet one-way delay: 44.181 ms

Loss rate: 0.47%

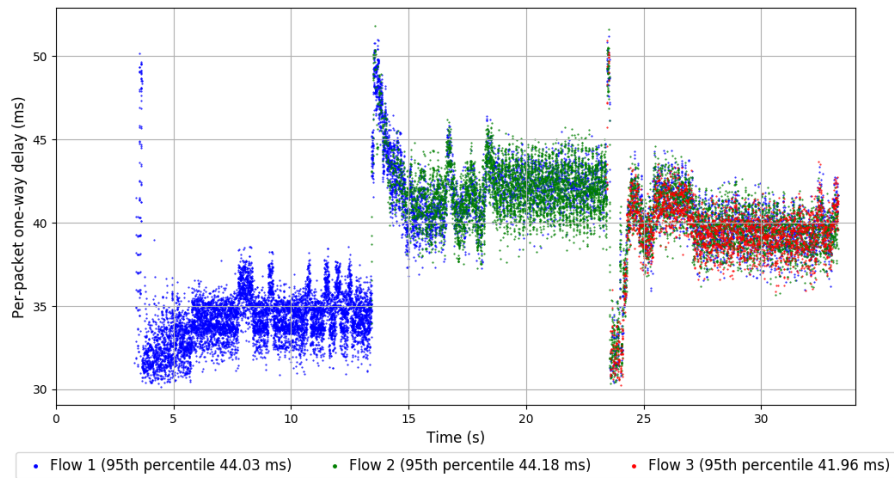
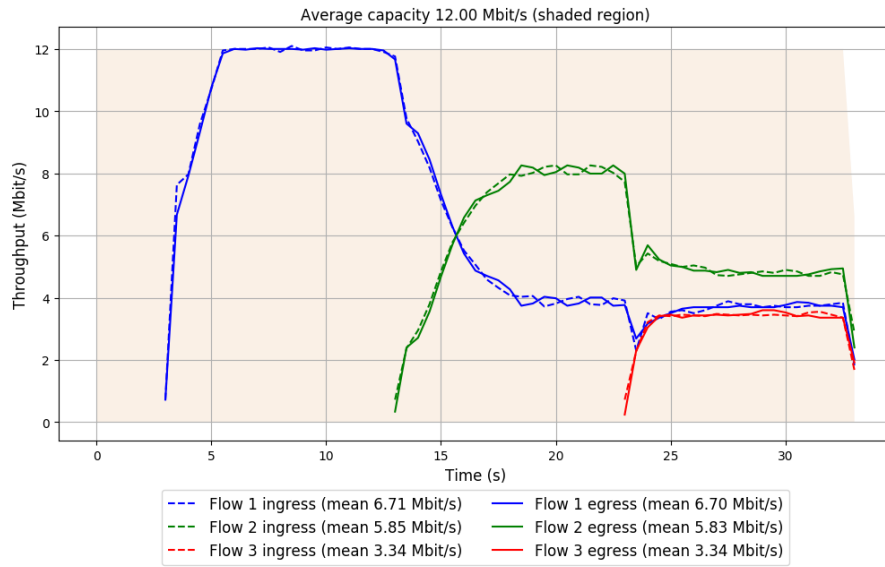
-- Flow 3:

Average throughput: 3.34 Mbit/s

95th percentile per-packet one-way delay: 41.956 ms

Loss rate: 0.61%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-27 18:07:35

End at: 2018-02-27 18:08:05

Below is generated by plot.py at 2018-02-27 19:46:05

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.83 Mbit/s (98.6% utilization)

95th percentile per-packet one-way delay: 41.711 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 41.062 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 4.34 Mbit/s

95th percentile per-packet one-way delay: 41.461 ms

Loss rate: 0.43%

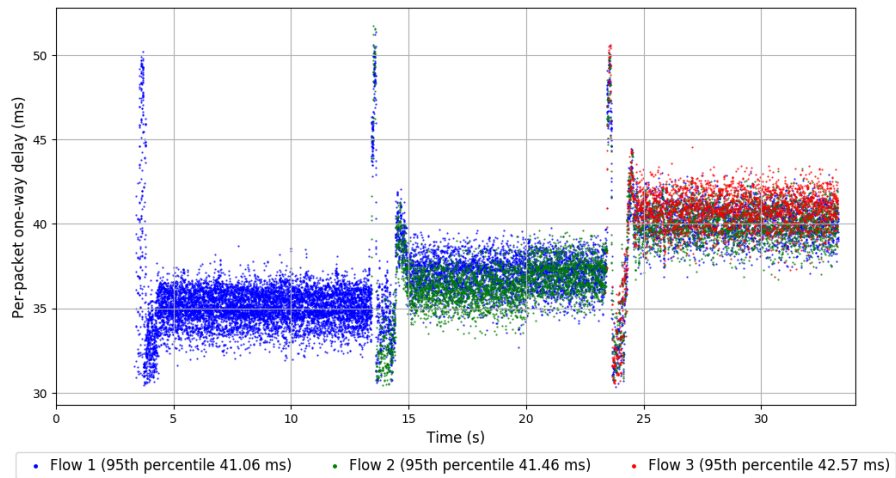
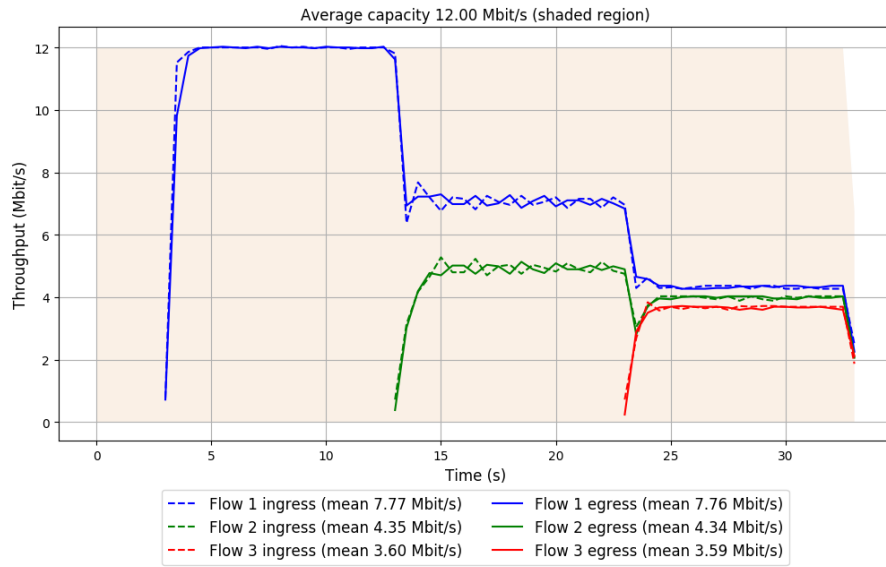
-- Flow 3:

Average throughput: 3.59 Mbit/s

95th percentile per-packet one-way delay: 42.574 ms

Loss rate: 0.77%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

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

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

Below is generated by plot.py at 2018-02-27 19:46:05

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.70 Mbit/s (97.5% utilization)

95th percentile per-packet one-way delay: 43.199 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 6.73 Mbit/s

95th percentile per-packet one-way delay: 43.232 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 5.75 Mbit/s

95th percentile per-packet one-way delay: 43.267 ms

Loss rate: 0.34%

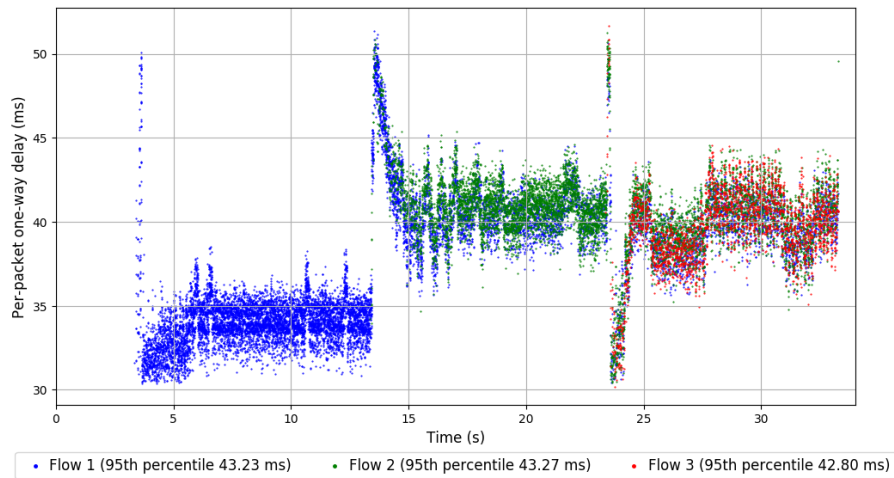
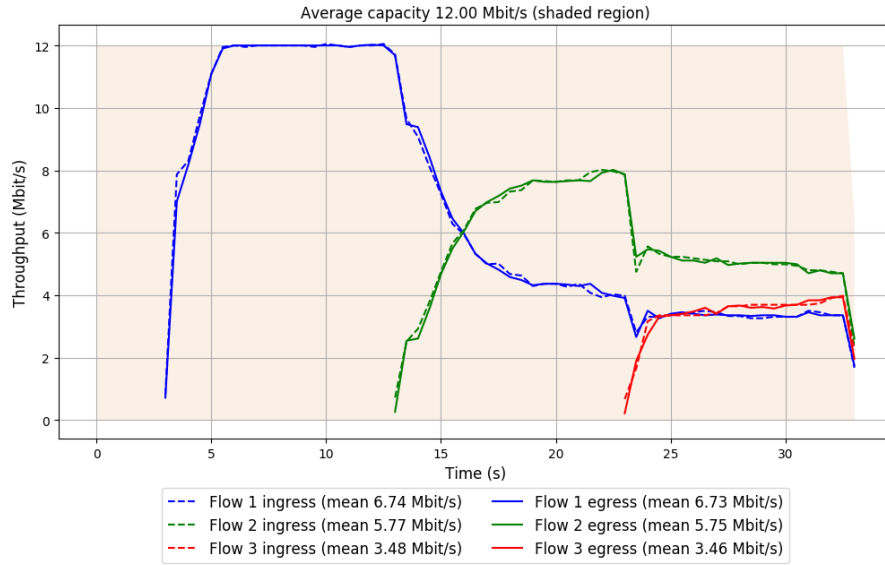
-- Flow 3:

Average throughput: 3.46 Mbit/s

95th percentile per-packet one-way delay: 42.802 ms

Loss rate: 0.97%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

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 19:46:05

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.64 Mbit/s (97.0% utilization)

95th percentile per-packet one-way delay: 41.684 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 7.46 Mbit/s

95th percentile per-packet one-way delay: 41.008 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 42.259 ms

Loss rate: 0.34%

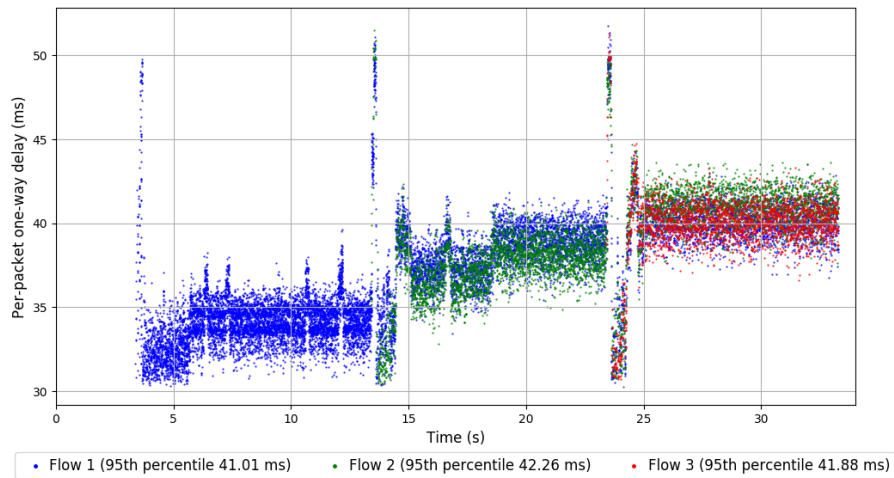
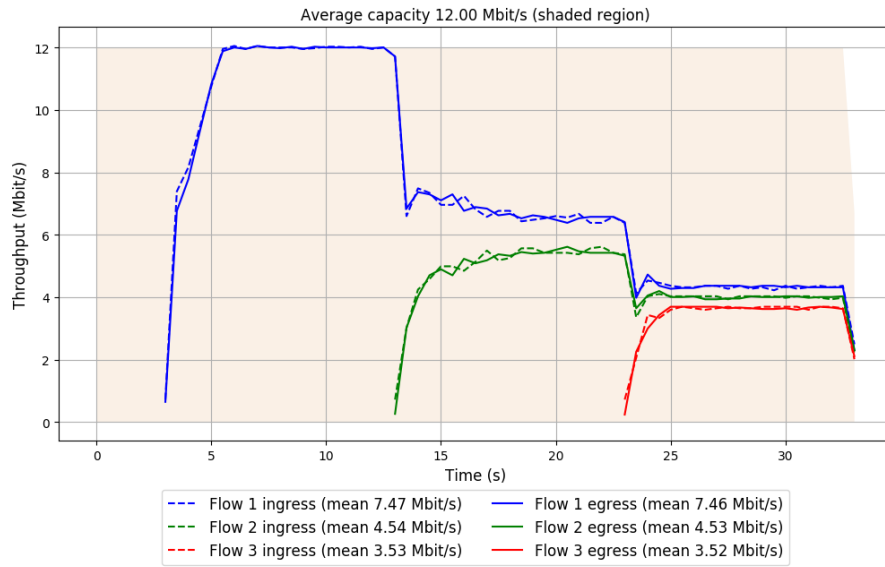
-- Flow 3:

Average throughput: 3.52 Mbit/s

95th percentile per-packet one-way delay: 41.883 ms

Loss rate: 0.75%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-27 18:38:51

End at: 2018-02-27 18:39:21

Below is generated by plot.py at 2018-02-27 19:46:05

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.70 Mbit/s (97.5% utilization)

95th percentile per-packet one-way delay: 47.342 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 7.23 Mbit/s

95th percentile per-packet one-way delay: 45.815 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 4.01 Mbit/s

95th percentile per-packet one-way delay: 47.407 ms

Loss rate: 0.40%

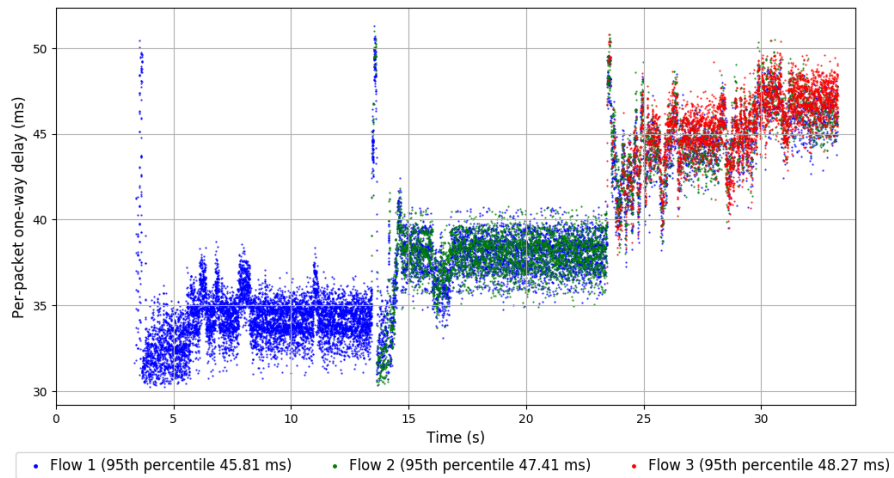
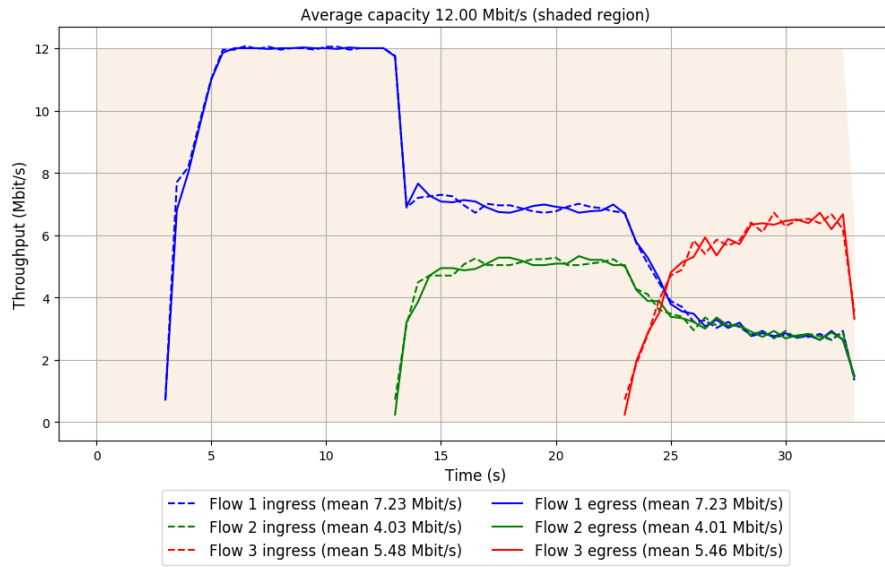
-- Flow 3:

Average throughput: 5.46 Mbit/s

95th percentile per-packet one-way delay: 48.275 ms

Loss rate: 0.79%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-27 18:49:16

End at: 2018-02-27 18:49:46

Below is generated by plot.py at 2018-02-27 19:46:07

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.71 Mbit/s (97.6% utilization)

95th percentile per-packet one-way delay: 41.587 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 40.938 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 4.61 Mbit/s

95th percentile per-packet one-way delay: 41.881 ms

Loss rate: 0.34%

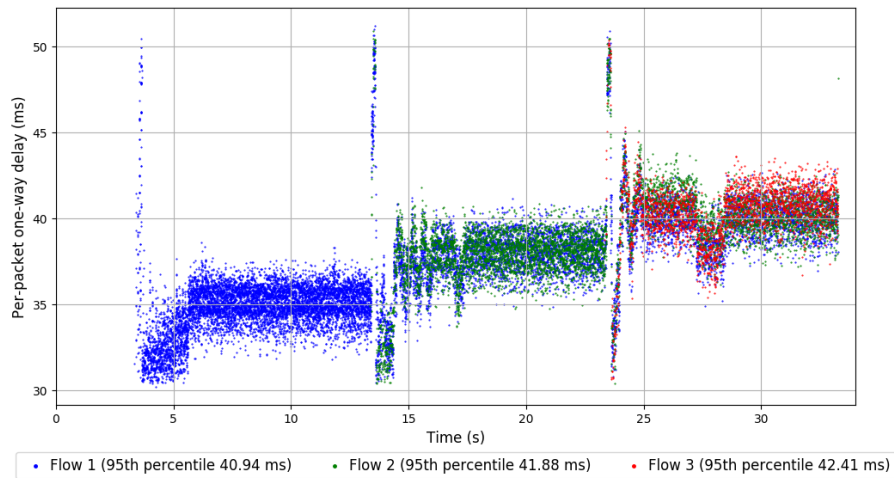
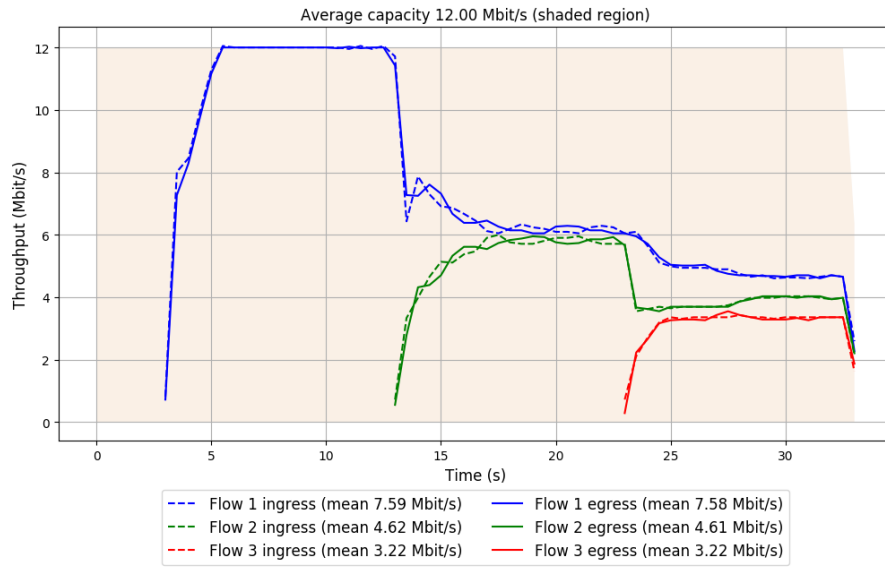
-- Flow 3:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 42.411 ms

Loss rate: 0.71%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-27 18:59:41

End at: 2018-02-27 19:00:11

Below is generated by plot.py at 2018-02-27 19:46:17

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.72 Mbit/s (97.6% utilization)

95th percentile per-packet one-way delay: 46.779 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 7.19 Mbit/s

95th percentile per-packet one-way delay: 45.704 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 3.97 Mbit/s

95th percentile per-packet one-way delay: 47.096 ms

Loss rate: 0.32%

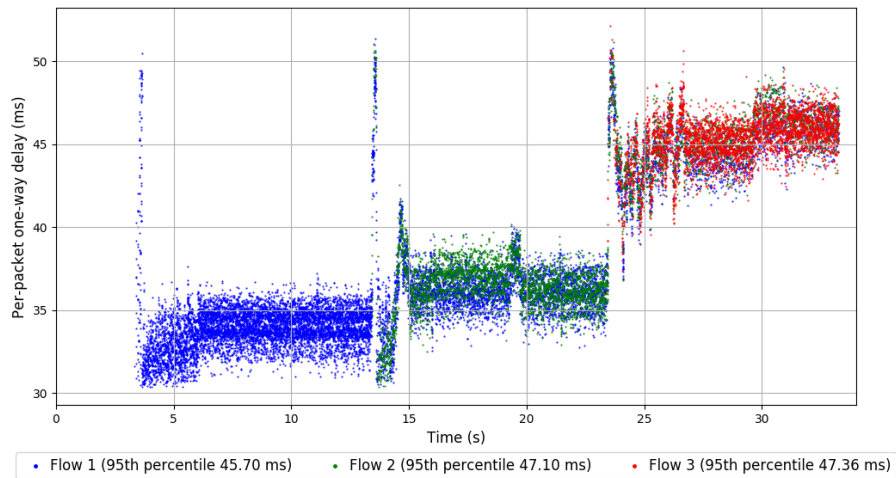
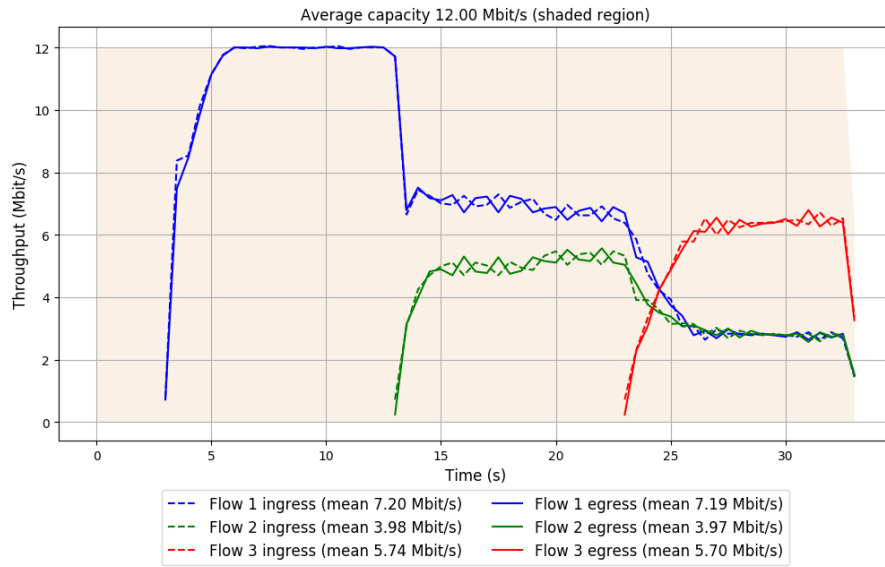
-- Flow 3:

Average throughput: 5.70 Mbit/s

95th percentile per-packet one-way delay: 47.361 ms

Loss rate: 0.95%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-27 19:10:07

End at: 2018-02-27 19:10:37

Below is generated by plot.py at 2018-02-27 19:46:18

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.70 Mbit/s (97.5% utilization)

95th percentile per-packet one-way delay: 41.272 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 40.963 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 4.32 Mbit/s

95th percentile per-packet one-way delay: 41.409 ms

Loss rate: 0.36%

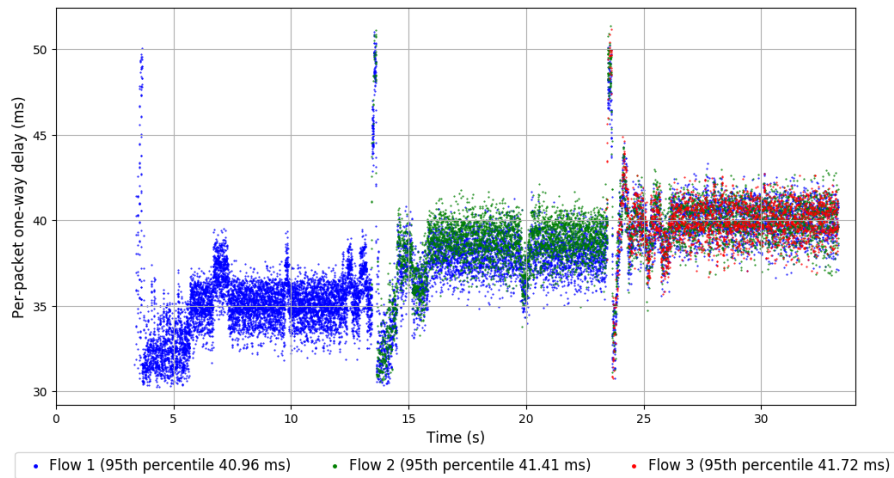
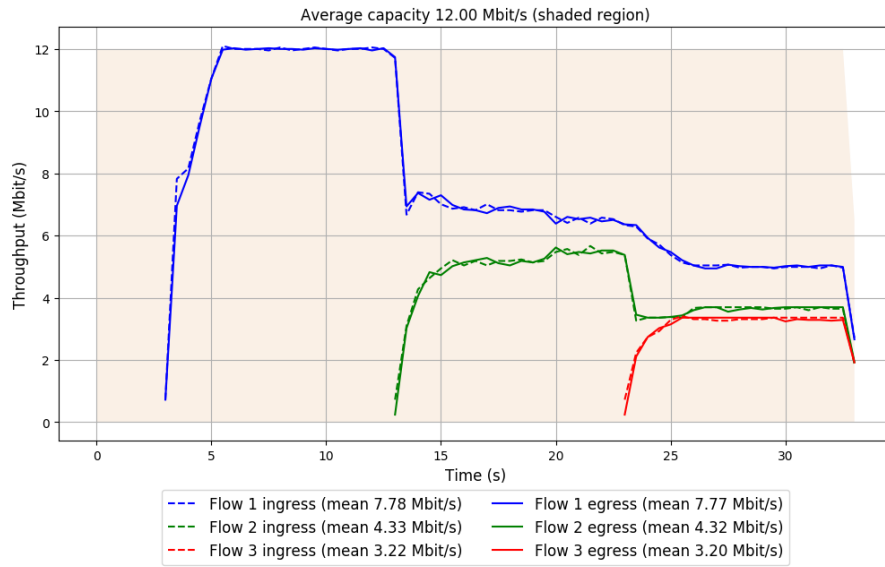
-- Flow 3:

Average throughput: 3.20 Mbit/s

95th percentile per-packet one-way delay: 41.723 ms

Loss rate: 1.17%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-27 19:20:35

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

Below is generated by plot.py at 2018-02-27 19:46:23

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.71 Mbit/s (97.5% utilization)

95th percentile per-packet one-way delay: 41.952 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 7.80 Mbit/s

95th percentile per-packet one-way delay: 41.870 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 41.526 ms

Loss rate: 0.41%

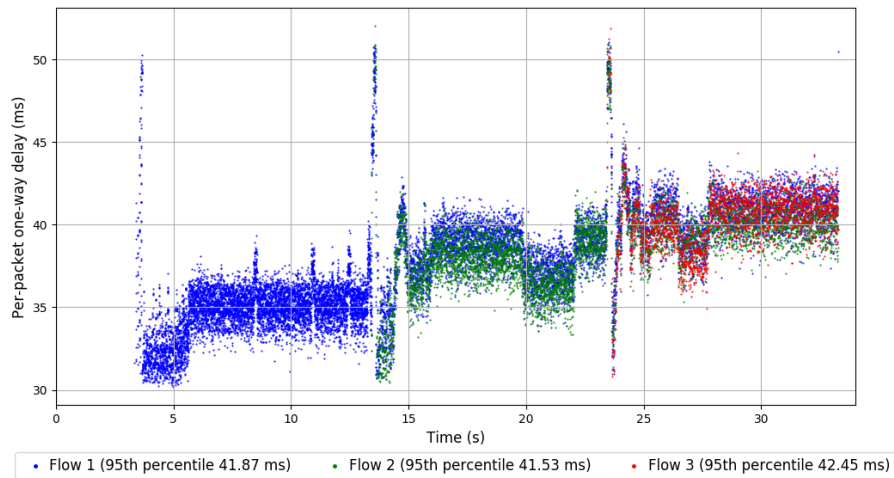
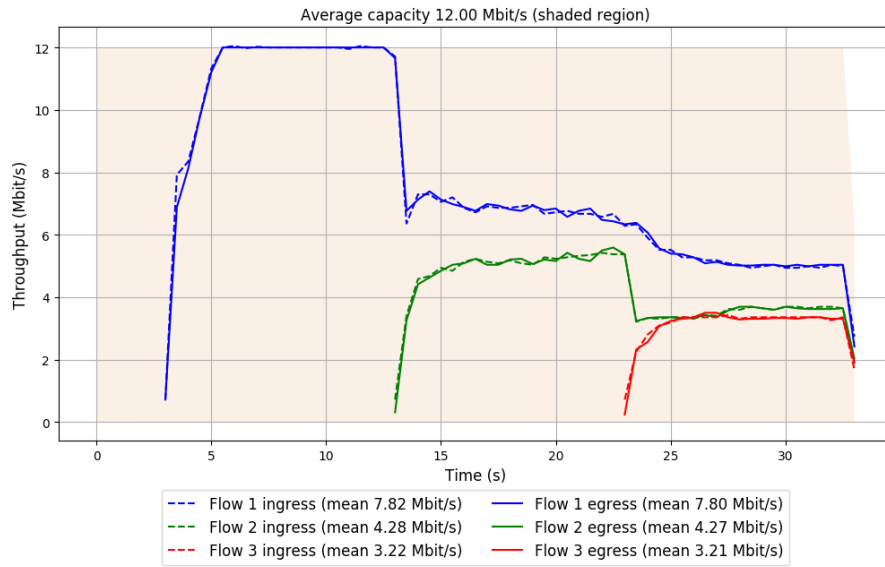
-- Flow 3:

Average throughput: 3.21 Mbit/s

95th percentile per-packet one-way delay: 42.446 ms

Loss rate: 0.71%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

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 19:46:25

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.69 Mbit/s (97.4% utilization)

95th percentile per-packet one-way delay: 41.799 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 41.255 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 42.414 ms

Loss rate: 0.42%

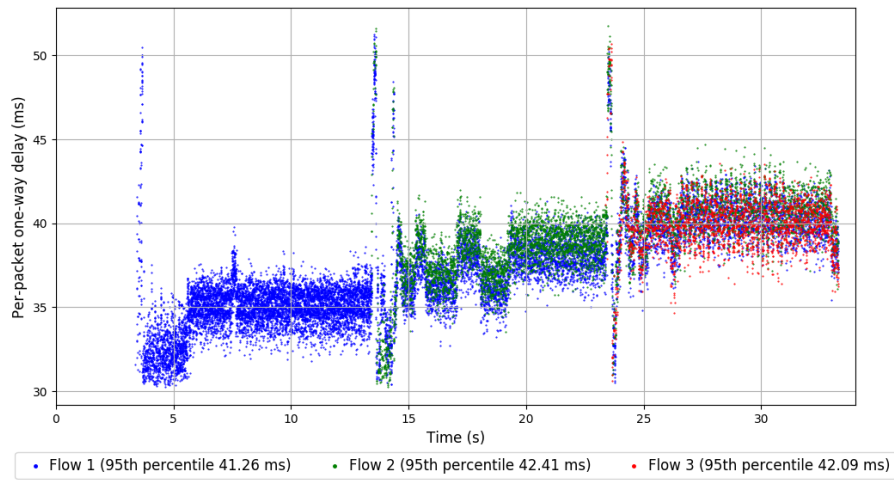
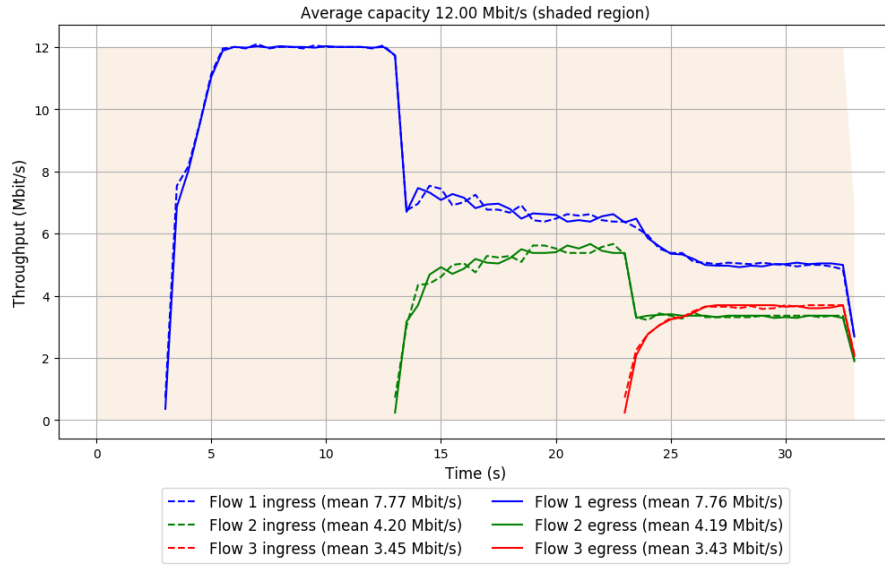
-- Flow 3:

Average throughput: 3.43 Mbit/s

95th percentile per-packet one-way delay: 42.090 ms

Loss rate: 0.95%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-02-27 17:59:28

End at: 2018-02-27 17:59:58

Below is generated by plot.py at 2018-02-27 19:46:36

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 8.42 Mbit/s (70.2% utilization)

95th percentile per-packet one-way delay: 51.541 ms

Loss rate: 82.06%

-- Flow 1:

Average throughput: 4.93 Mbit/s

95th percentile per-packet one-way delay: 51.630 ms

Loss rate: 85.49%

-- Flow 2:

Average throughput: 4.09 Mbit/s

95th percentile per-packet one-way delay: 51.389 ms

Loss rate: 74.06%

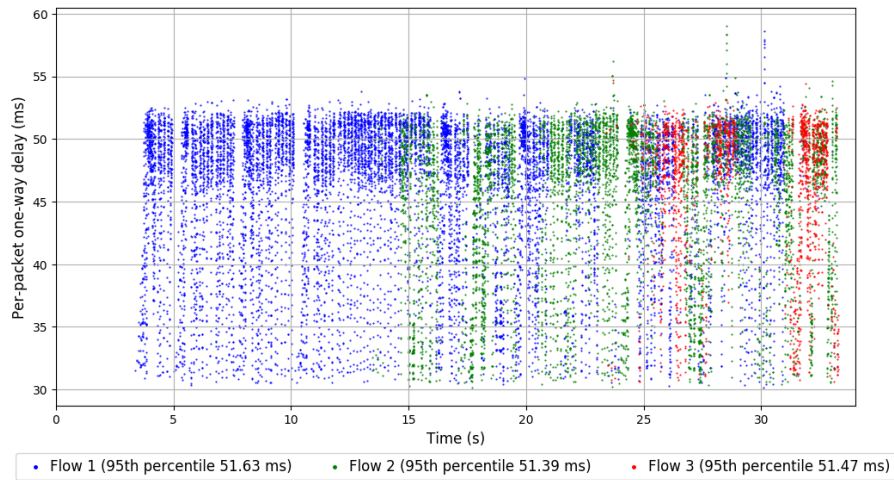
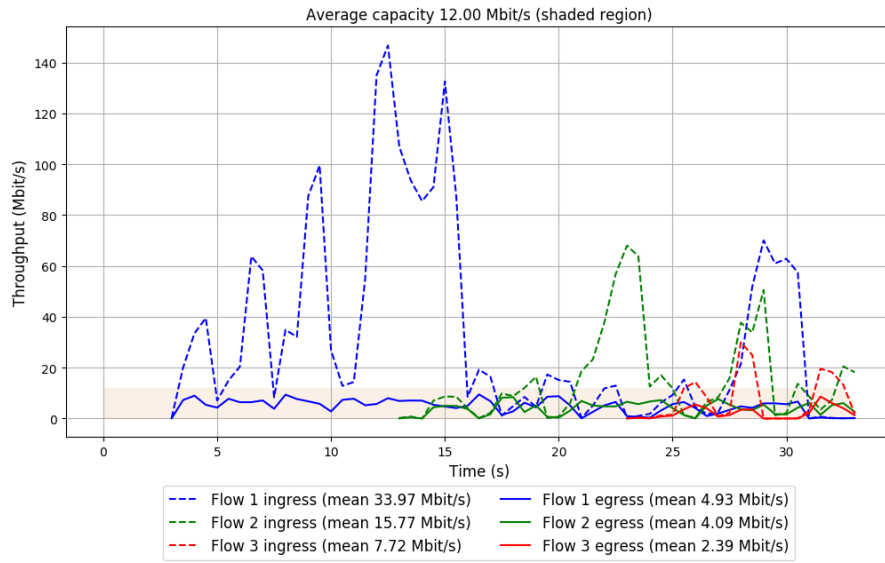
-- Flow 3:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 51.466 ms

Loss rate: 69.14%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-27 18:09:52

End at: 2018-02-27 18:10:22

Below is generated by plot.py at 2018-02-27 19:46:43

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 7.59 Mbit/s (63.2% utilization)

95th percentile per-packet one-way delay: 51.684 ms

Loss rate: 88.48%

-- Flow 1:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 51.783 ms

Loss rate: 91.55%

-- Flow 2:

Average throughput: 2.64 Mbit/s

95th percentile per-packet one-way delay: 51.396 ms

Loss rate: 64.34%

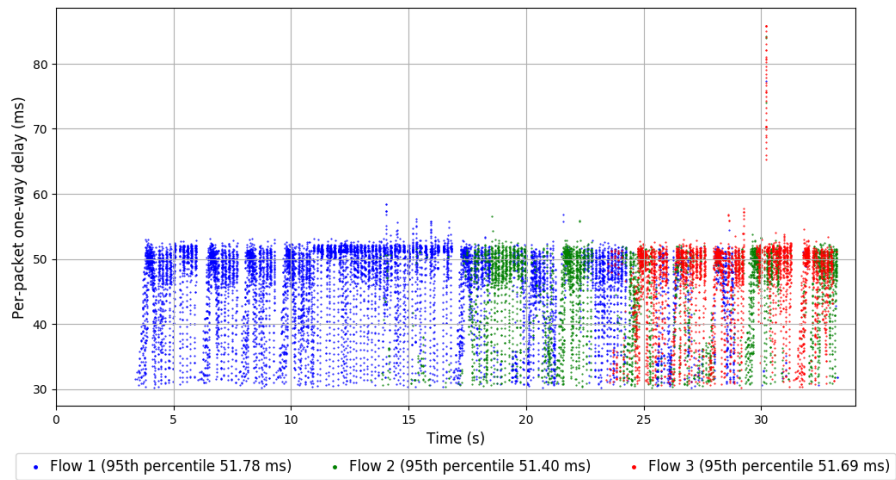
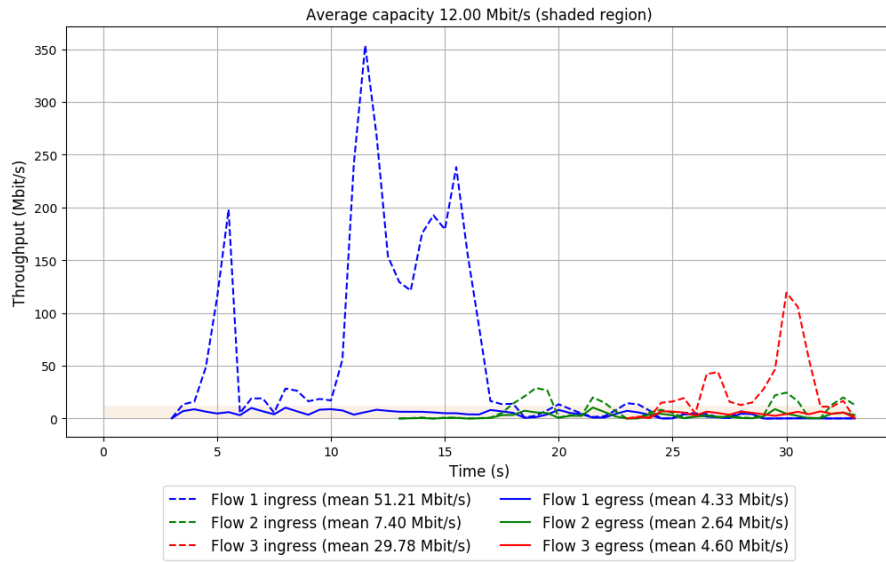
-- Flow 3:

Average throughput: 4.60 Mbit/s

95th percentile per-packet one-way delay: 51.691 ms

Loss rate: 84.54%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-27 18:20:17

End at: 2018-02-27 18:20:47

Below is generated by plot.py at 2018-02-27 19:46:46

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 7.57 Mbit/s (63.1% utilization)

95th percentile per-packet one-way delay: 51.951 ms

Loss rate: 89.79%

-- Flow 1:

Average throughput: 4.64 Mbit/s

95th percentile per-packet one-way delay: 51.892 ms

Loss rate: 89.20%

-- Flow 2:

Average throughput: 3.59 Mbit/s

95th percentile per-packet one-way delay: 52.106 ms

Loss rate: 91.44%

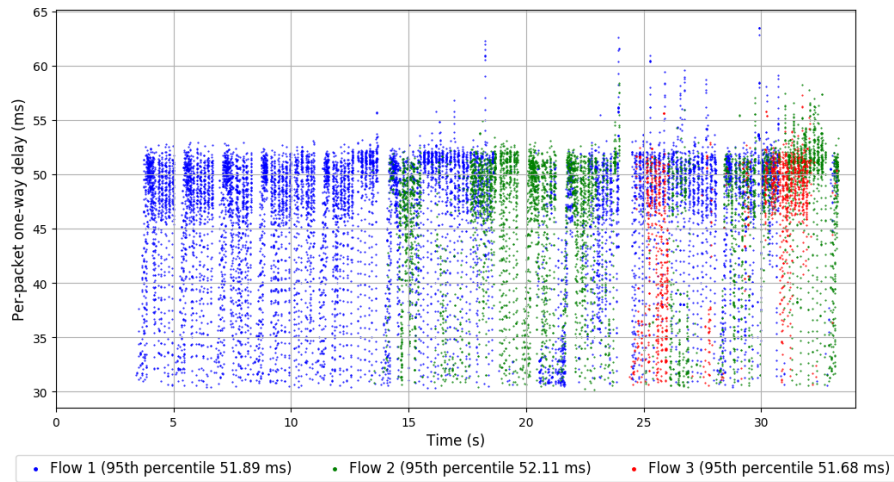
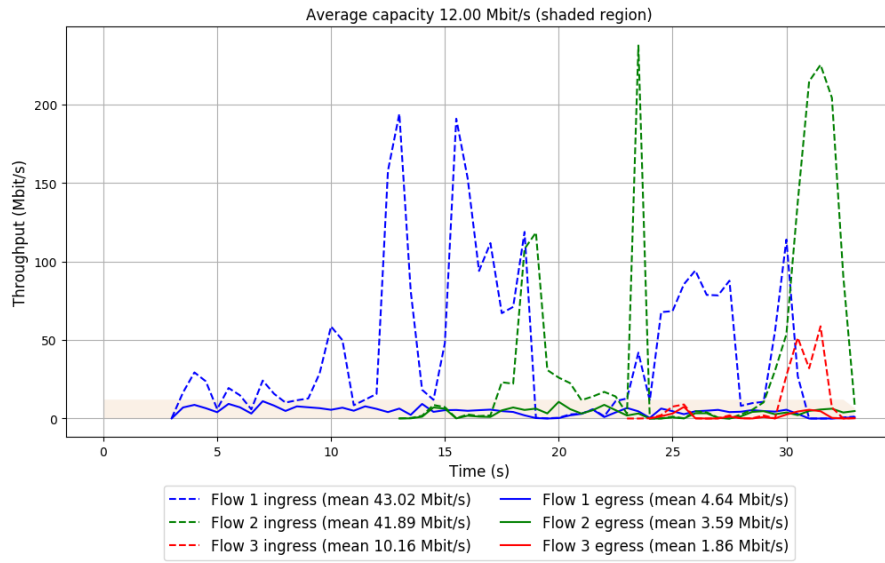
-- Flow 3:

Average throughput: 1.86 Mbit/s

95th percentile per-packet one-way delay: 51.678 ms

Loss rate: 83.68%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

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 19:46:51

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 7.81 Mbit/s (65.1% utilization)

95th percentile per-packet one-way delay: 51.845 ms

Loss rate: 90.41%

-- Flow 1:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 51.422 ms

Loss rate: 72.91%

-- Flow 2:

Average throughput: 4.89 Mbit/s

95th percentile per-packet one-way delay: 52.066 ms

Loss rate: 93.99%

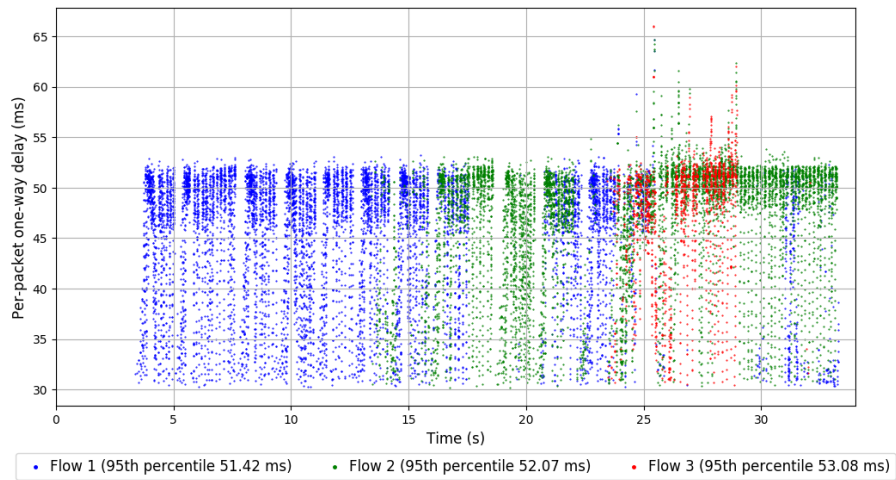
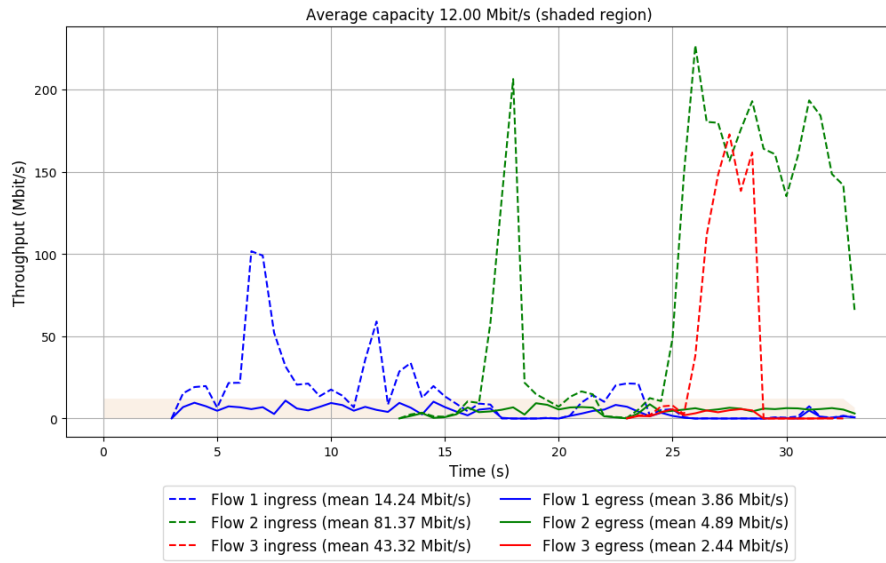
-- Flow 3:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 53.080 ms

Loss rate: 94.68%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-27 18:41:08

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

Below is generated by plot.py at 2018-02-27 19:47:01

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 7.79 Mbit/s (64.9% utilization)

95th percentile per-packet one-way delay: 51.807 ms

Loss rate: 91.30%

-- Flow 1:

Average throughput: 5.06 Mbit/s

95th percentile per-packet one-way delay: 51.884 ms

Loss rate: 93.41%

-- Flow 2:

Average throughput: 2.88 Mbit/s

95th percentile per-packet one-way delay: 51.525 ms

Loss rate: 75.29%

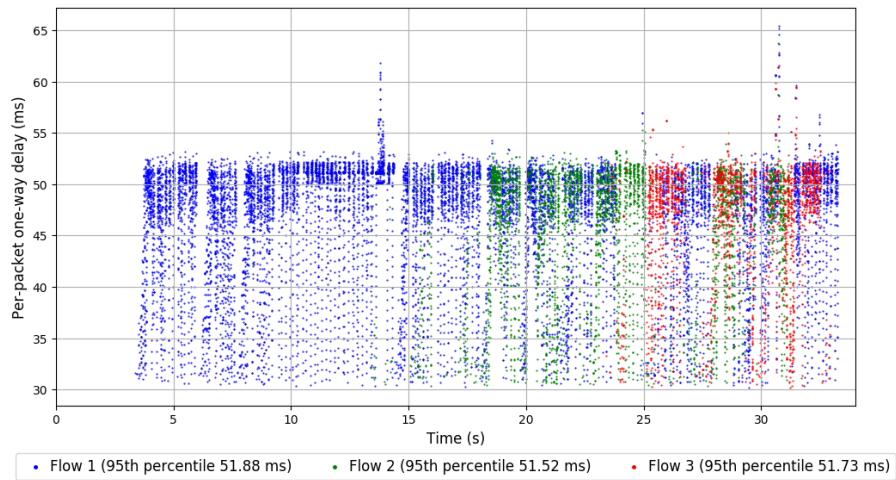
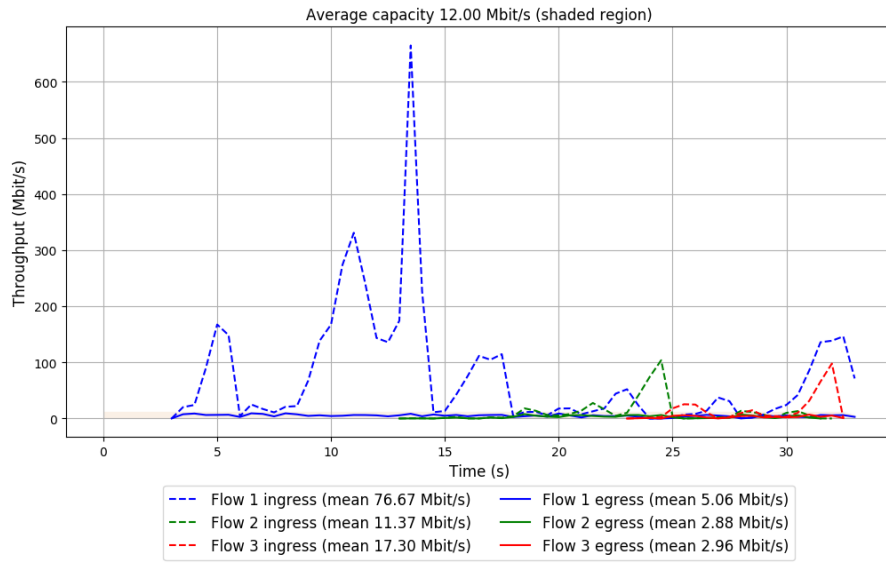
-- Flow 3:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 51.726 ms

Loss rate: 82.89%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-27 18:51:33

End at: 2018-02-27 18:52:03

Below is generated by plot.py at 2018-02-27 19:47:11

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 7.56 Mbit/s (63.0% utilization)

95th percentile per-packet one-way delay: 51.905 ms

Loss rate: 93.44%

-- Flow 1:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 51.855 ms

Loss rate: 92.29%

-- Flow 2:

Average throughput: 3.42 Mbit/s

95th percentile per-packet one-way delay: 52.034 ms

Loss rate: 95.72%

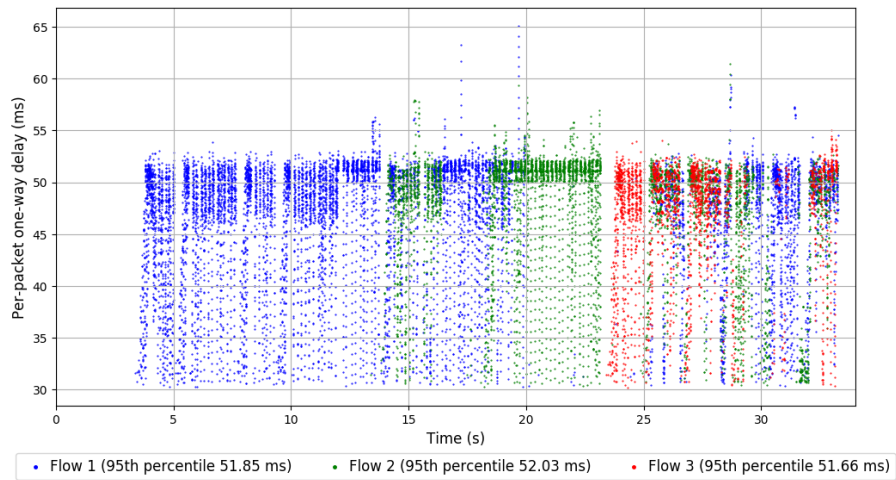
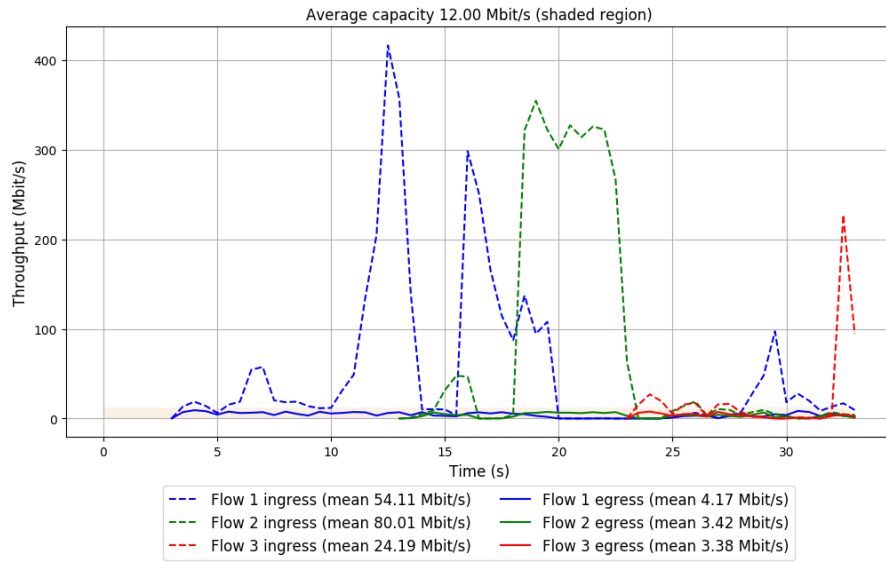
-- Flow 3:

Average throughput: 3.38 Mbit/s

95th percentile per-packet one-way delay: 51.655 ms

Loss rate: 86.12%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-27 19:01:58

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

Below is generated by plot.py at 2018-02-27 19:47:29

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 8.33 Mbit/s (69.4% utilization)

95th percentile per-packet one-way delay: 53.136 ms

Loss rate: 94.27%

-- Flow 1:

Average throughput: 4.86 Mbit/s

95th percentile per-packet one-way delay: 52.507 ms

Loss rate: 90.78%

-- Flow 2:

Average throughput: 3.15 Mbit/s

95th percentile per-packet one-way delay: 51.996 ms

Loss rate: 94.55%

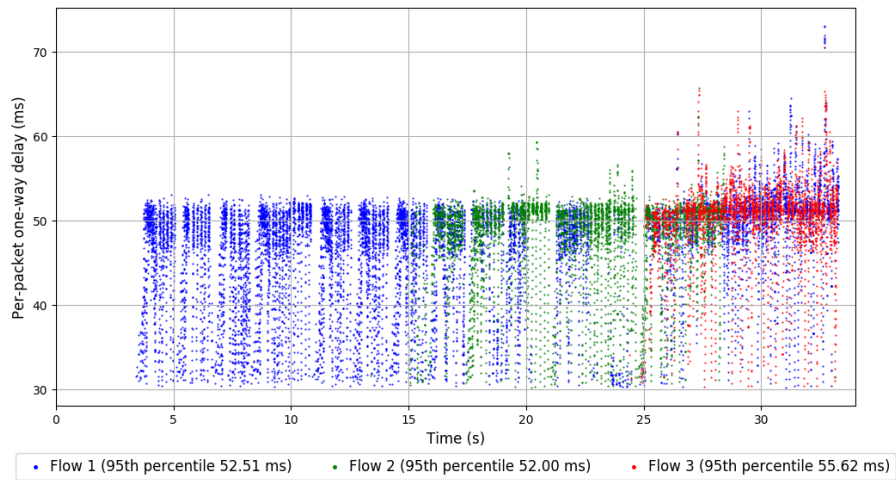
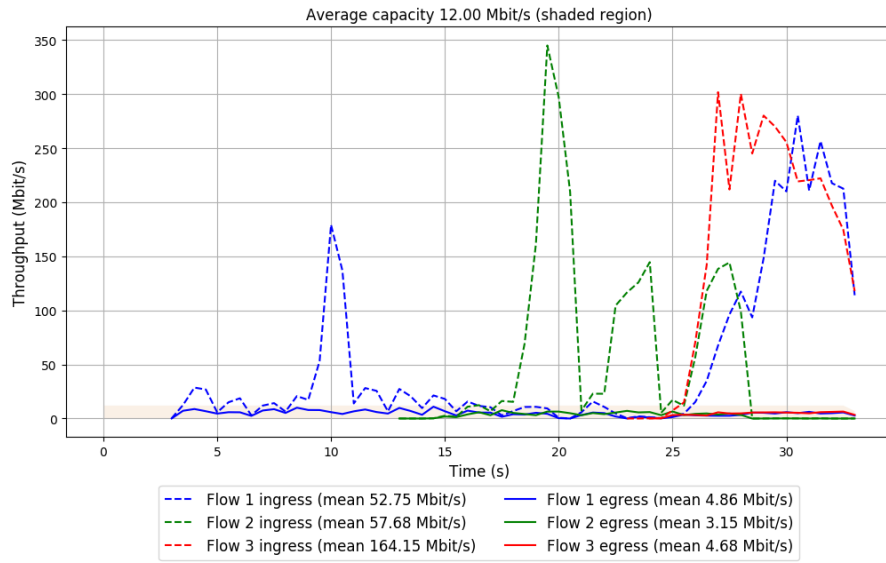
-- Flow 3:

Average throughput: 4.68 Mbit/s

95th percentile per-packet one-way delay: 55.624 ms

Loss rate: 97.46%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-27 19:12:24

End at: 2018-02-27 19:12:54

Below is generated by plot.py at 2018-02-27 19:48:17

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 6.63 Mbit/s (55.2% utilization)

95th percentile per-packet one-way delay: 53.988 ms

Loss rate: 97.45%

-- Flow 1:

Average throughput: 5.12 Mbit/s

95th percentile per-packet one-way delay: 54.855 ms

Loss rate: 98.01%

-- Flow 2:

Average throughput: 1.67 Mbit/s

95th percentile per-packet one-way delay: 51.264 ms

Loss rate: 49.02%

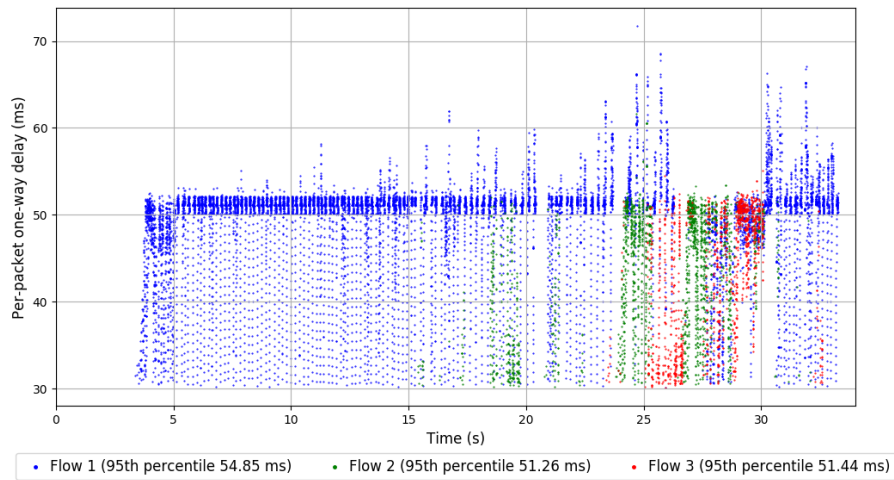
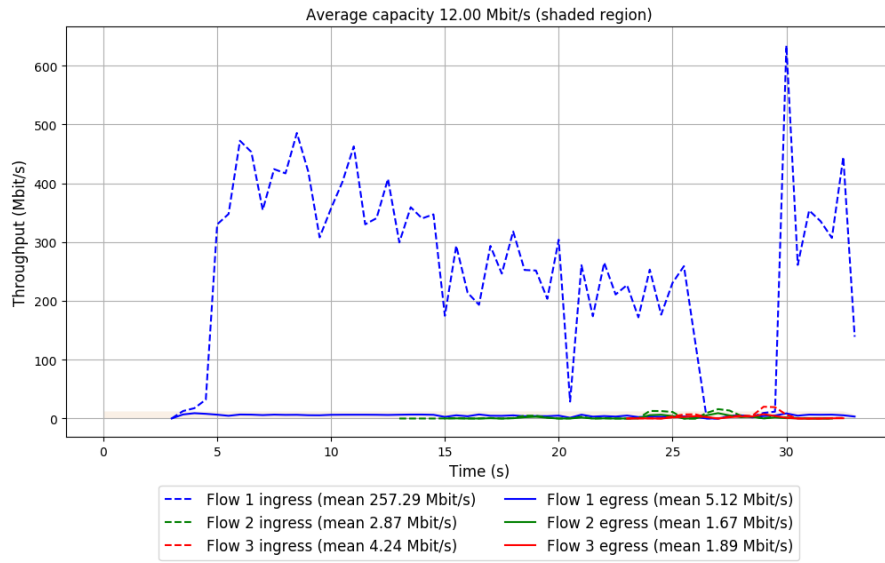
-- Flow 3:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 51.440 ms

Loss rate: 57.35%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-27 19:22:53

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

Below is generated by plot.py at 2018-02-27 19:48:17

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 7.58 Mbit/s (63.1% utilization)

95th percentile per-packet one-way delay: 52.104 ms

Loss rate: 92.93%

-- Flow 1:

Average throughput: 5.38 Mbit/s

95th percentile per-packet one-way delay: 52.245 ms

Loss rate: 94.17%

-- Flow 2:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 51.412 ms

Loss rate: 66.83%

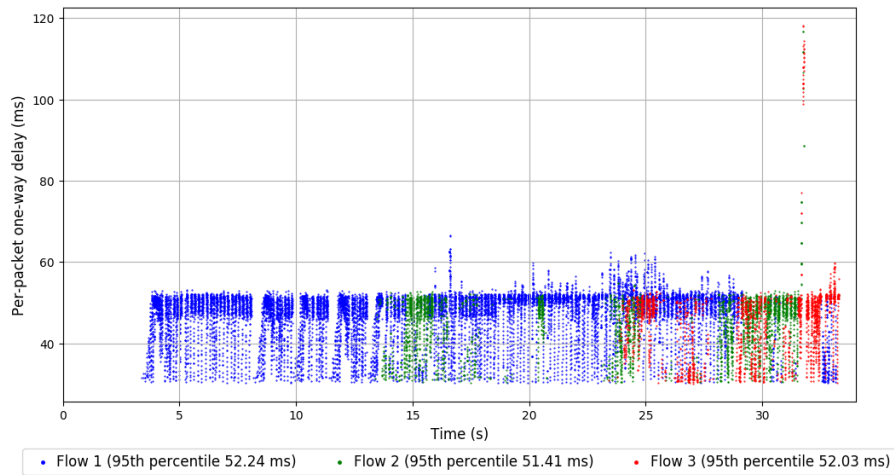
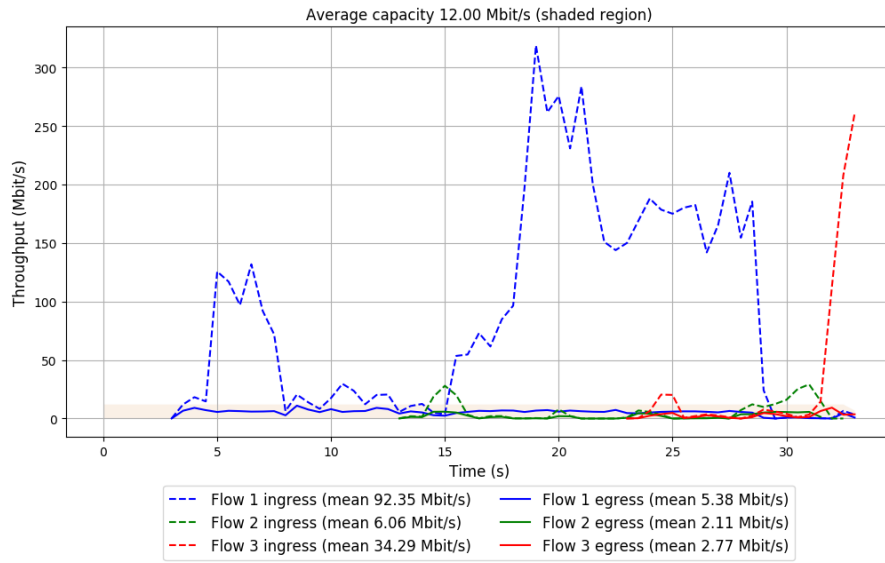
-- Flow 3:

Average throughput: 2.77 Mbit/s

95th percentile per-packet one-way delay: 52.033 ms

Loss rate: 91.93%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

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

End at: 2018-02-27 19:33:49

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

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 6.57 Mbit/s (54.8% utilization)

95th percentile per-packet one-way delay: 55.341 ms

Loss rate: 97.14%

-- Flow 1:

Average throughput: 6.08 Mbit/s

95th percentile per-packet one-way delay: 55.616 ms

Loss rate: 97.32%

-- Flow 2:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 51.660 ms

Loss rate: 85.69%

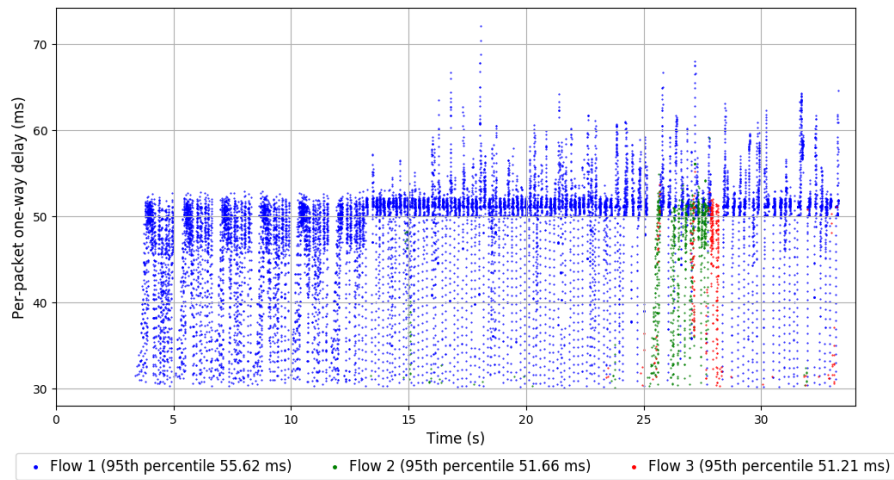
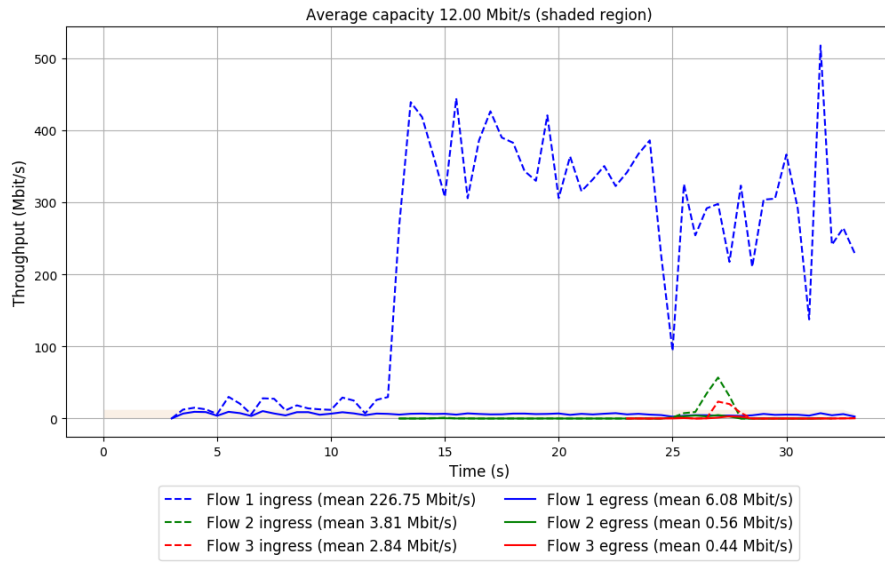
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 51.210 ms

Loss rate: 84.51%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

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

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

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

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.63 Mbit/s (96.9% utilization)

95th percentile per-packet one-way delay: 51.043 ms

Loss rate: 3.33%

-- Flow 1:

Average throughput: 7.63 Mbit/s

95th percentile per-packet one-way delay: 50.934 ms

Loss rate: 2.13%

-- Flow 2:

Average throughput: 4.08 Mbit/s

95th percentile per-packet one-way delay: 51.182 ms

Loss rate: 5.37%

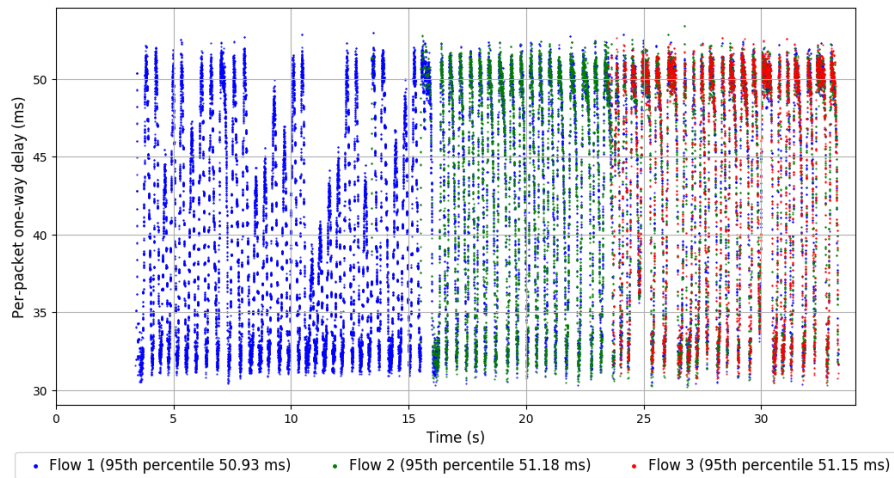
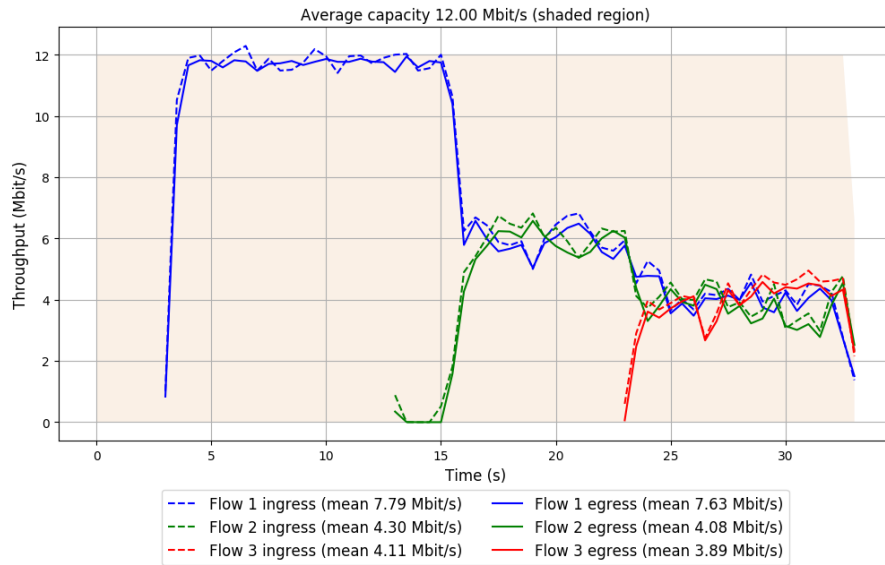
-- Flow 3:

Average throughput: 3.89 Mbit/s

95th percentile per-packet one-way delay: 51.151 ms

Loss rate: 5.90%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-27 18:12:48

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

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

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.53 Mbit/s (96.0% utilization)

95th percentile per-packet one-way delay: 51.079 ms

Loss rate: 3.75%

-- Flow 1:

Average throughput: 7.15 Mbit/s

95th percentile per-packet one-way delay: 50.920 ms

Loss rate: 2.54%

-- Flow 2:

Average throughput: 4.70 Mbit/s

95th percentile per-packet one-way delay: 51.229 ms

Loss rate: 5.49%

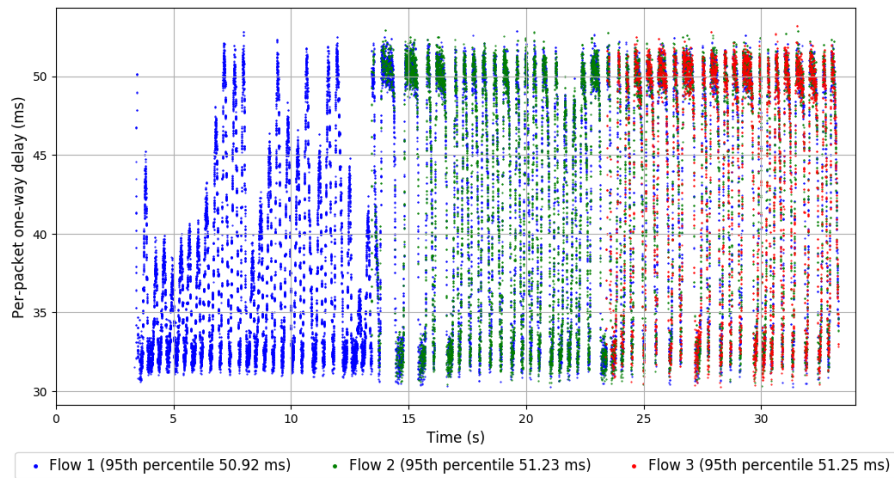
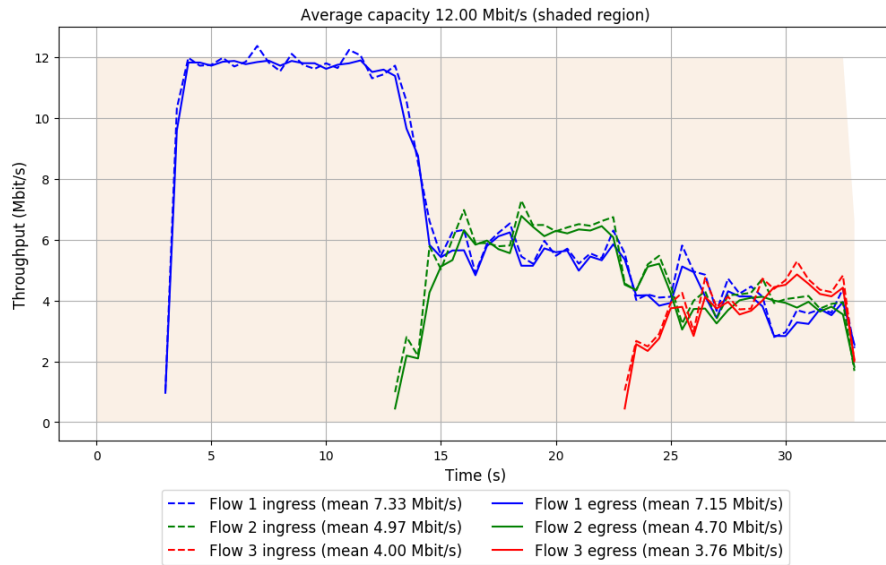
-- Flow 3:

Average throughput: 3.76 Mbit/s

95th percentile per-packet one-way delay: 51.248 ms

Loss rate: 6.09%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-27 18:23:13

End at: 2018-02-27 18:23:43

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

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.60 Mbit/s (96.7% utilization)

95th percentile per-packet one-way delay: 50.923 ms

Loss rate: 2.65%

-- Flow 1:

Average throughput: 7.35 Mbit/s

95th percentile per-packet one-way delay: 50.761 ms

Loss rate: 1.82%

-- Flow 2:

Average throughput: 4.54 Mbit/s

95th percentile per-packet one-way delay: 51.063 ms

Loss rate: 3.23%

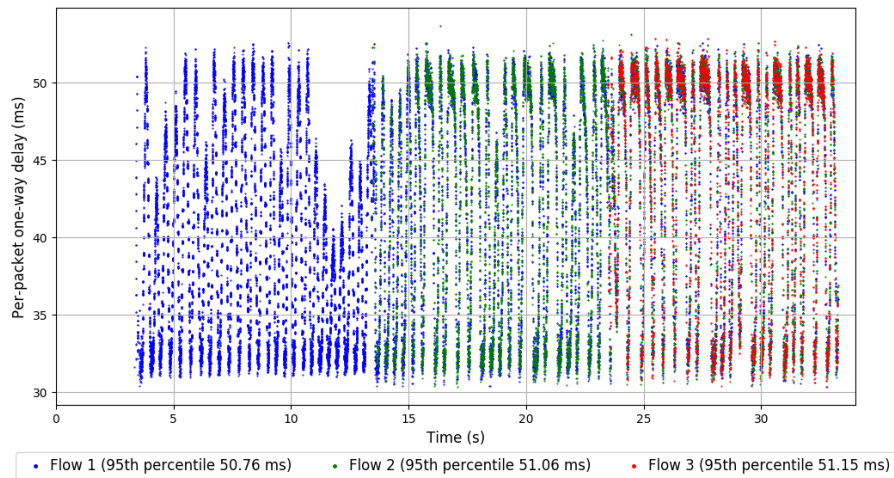
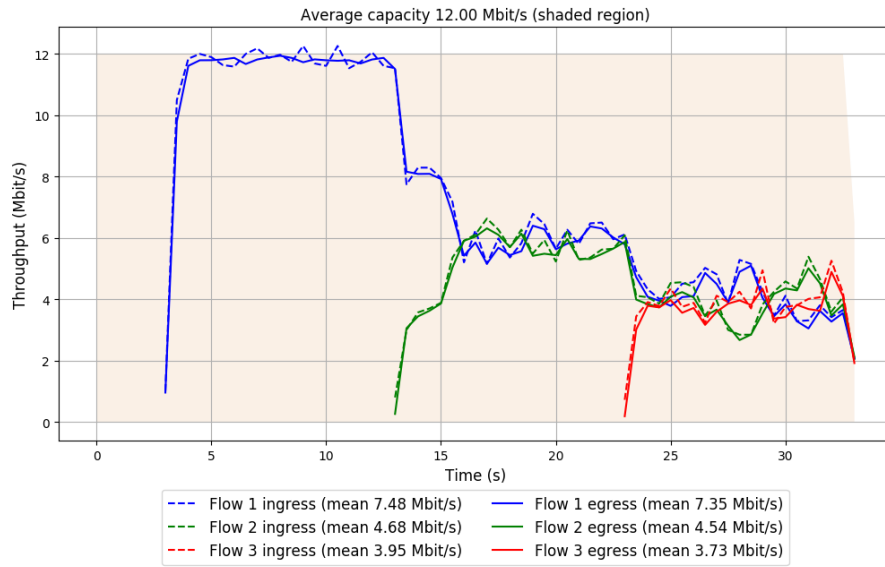
-- Flow 3:

Average throughput: 3.73 Mbit/s

95th percentile per-packet one-way delay: 51.152 ms

Loss rate: 6.04%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-27 18:33:39

End at: 2018-02-27 18:34:09

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

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.61 Mbit/s (96.8% utilization)

95th percentile per-packet one-way delay: 51.051 ms

Loss rate: 3.34%

-- Flow 1:

Average throughput: 7.10 Mbit/s

95th percentile per-packet one-way delay: 50.957 ms

Loss rate: 2.18%

-- Flow 2:

Average throughput: 5.27 Mbit/s

95th percentile per-packet one-way delay: 51.112 ms

Loss rate: 4.34%

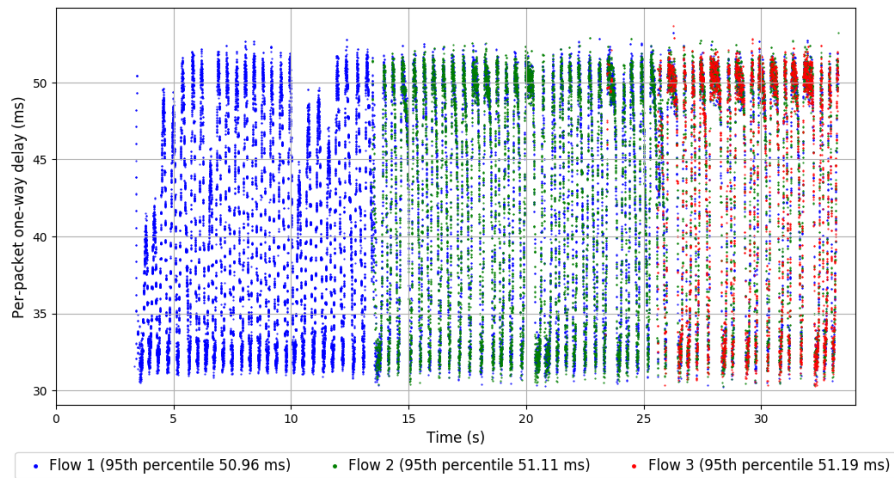
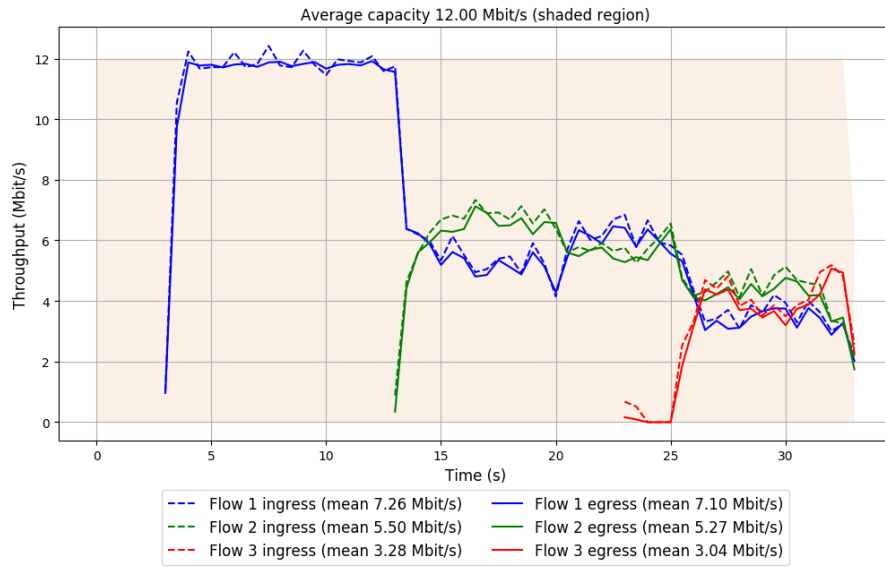
-- Flow 3:

Average throughput: 3.04 Mbit/s

95th percentile per-packet one-way delay: 51.189 ms

Loss rate: 7.72%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-27 18:44:04

End at: 2018-02-27 18:44:34

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

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.61 Mbit/s (96.8% utilization)

95th percentile per-packet one-way delay: 51.001 ms

Loss rate: 3.22%

-- Flow 1:

Average throughput: 7.20 Mbit/s

95th percentile per-packet one-way delay: 50.893 ms

Loss rate: 2.11%

-- Flow 2:

Average throughput: 4.62 Mbit/s

95th percentile per-packet one-way delay: 51.068 ms

Loss rate: 4.48%

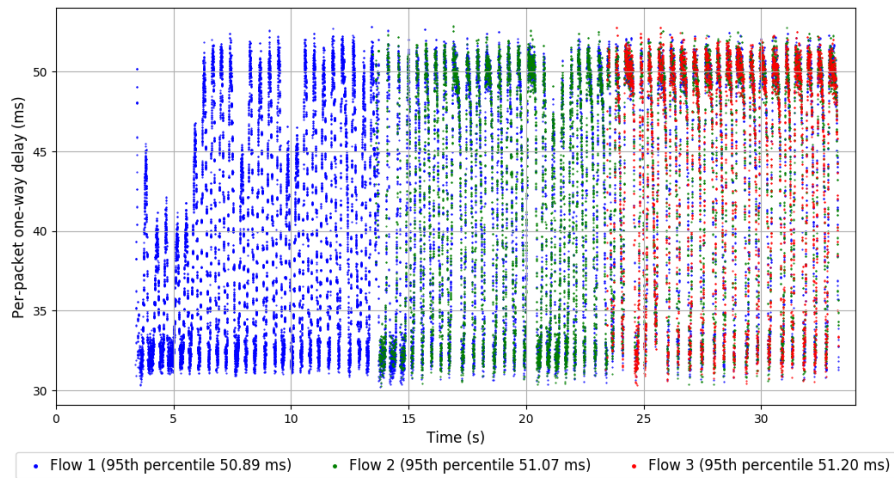
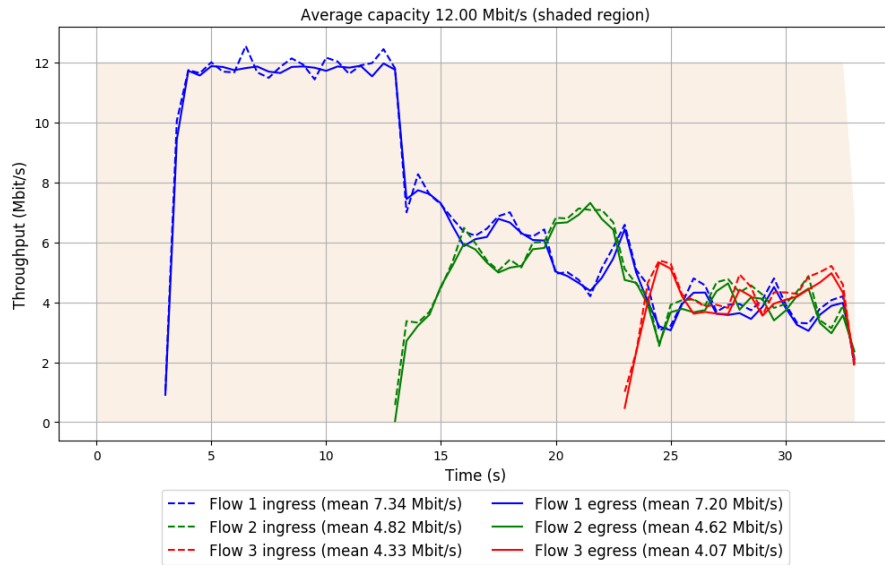
-- Flow 3:

Average throughput: 4.07 Mbit/s

95th percentile per-packet one-way delay: 51.205 ms

Loss rate: 6.10%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-27 18:54:29

End at: 2018-02-27 18:54:59

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

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.57 Mbit/s (96.4% utilization)

95th percentile per-packet one-way delay: 51.037 ms

Loss rate: 3.62%

-- Flow 1:

Average throughput: 7.20 Mbit/s

95th percentile per-packet one-way delay: 50.929 ms

Loss rate: 2.45%

-- Flow 2:

Average throughput: 4.60 Mbit/s

95th percentile per-packet one-way delay: 51.114 ms

Loss rate: 4.56%

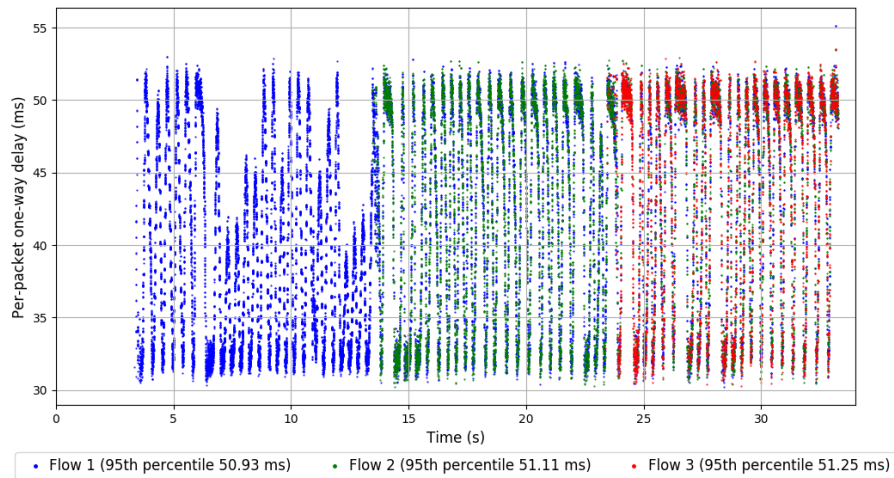
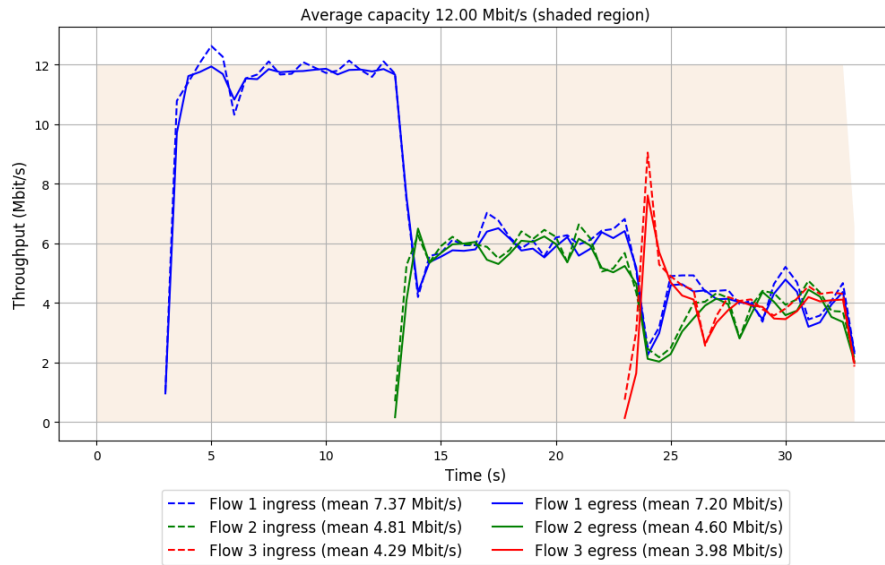
-- Flow 3:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 51.248 ms

Loss rate: 7.57%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-27 19:04:55

End at: 2018-02-27 19:05:25

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

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.53 Mbit/s (96.1% utilization)

95th percentile per-packet one-way delay: 50.997 ms

Loss rate: 3.24%

-- Flow 1:

Average throughput: 7.08 Mbit/s

95th percentile per-packet one-way delay: 50.884 ms

Loss rate: 2.13%

-- Flow 2:

Average throughput: 4.79 Mbit/s

95th percentile per-packet one-way delay: 51.073 ms

Loss rate: 4.48%

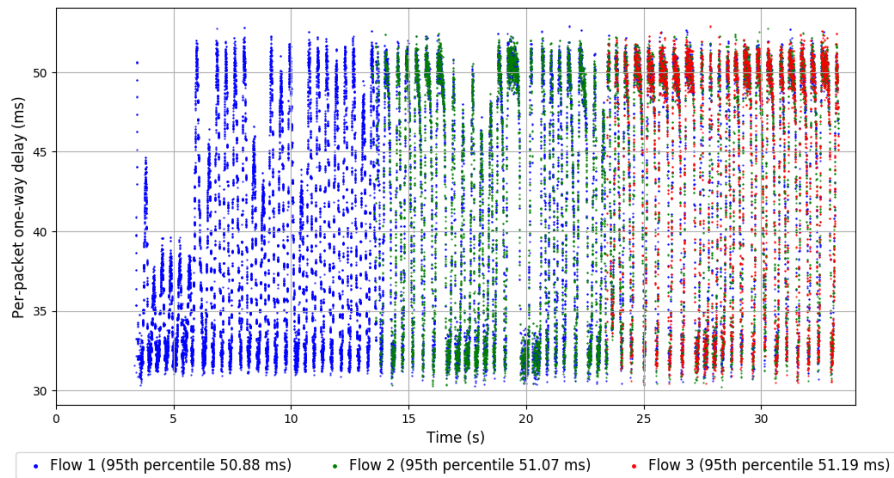
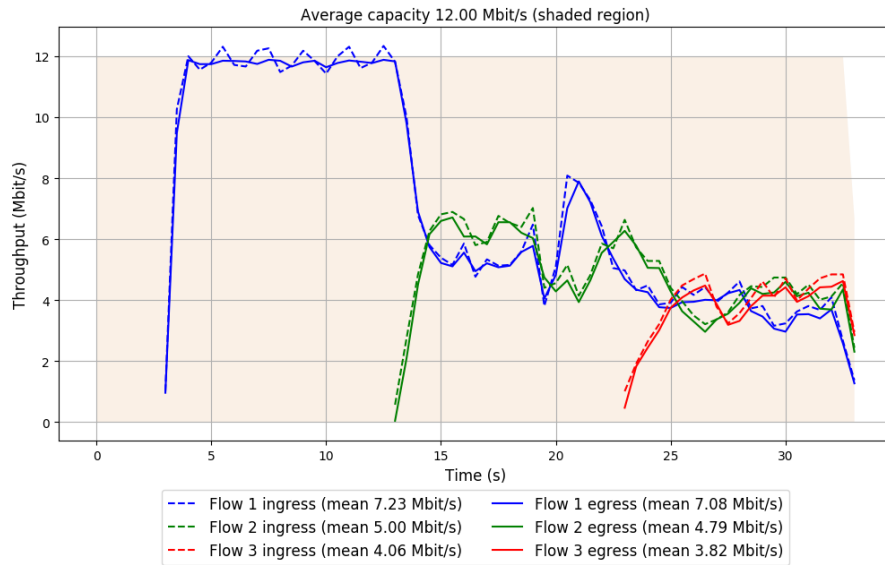
-- Flow 3:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 51.190 ms

Loss rate: 6.13%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-27 19:15:23

End at: 2018-02-27 19:15:53

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

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.58 Mbit/s (96.5% utilization)

95th percentile per-packet one-way delay: 50.976 ms

Loss rate: 3.08%

-- Flow 1:

Average throughput: 7.28 Mbit/s

95th percentile per-packet one-way delay: 50.811 ms

Loss rate: 1.97%

-- Flow 2:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 51.093 ms

Loss rate: 4.52%

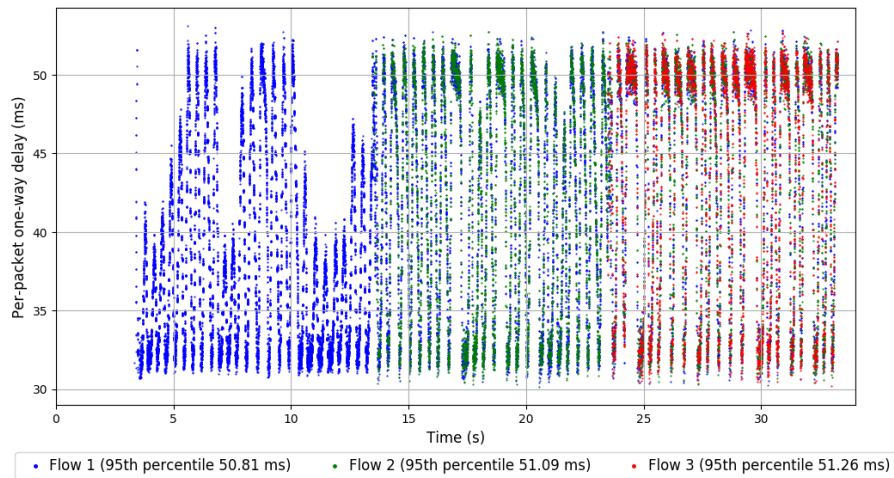
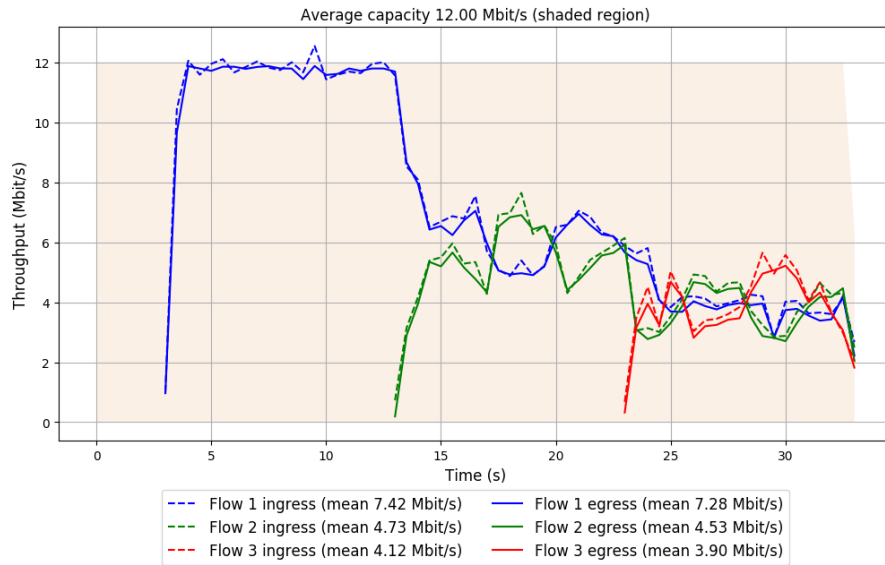
-- Flow 3:

Average throughput: 3.90 Mbit/s

95th percentile per-packet one-way delay: 51.256 ms

Loss rate: 5.75%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

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

End at: 2018-02-27 19:26:19

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

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.56 Mbit/s (96.3% utilization)

95th percentile per-packet one-way delay: 51.007 ms

Loss rate: 3.26%

-- Flow 1:

Average throughput: 7.37 Mbit/s

95th percentile per-packet one-way delay: 50.884 ms

Loss rate: 2.37%

-- Flow 2:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 51.135 ms

Loss rate: 4.31%

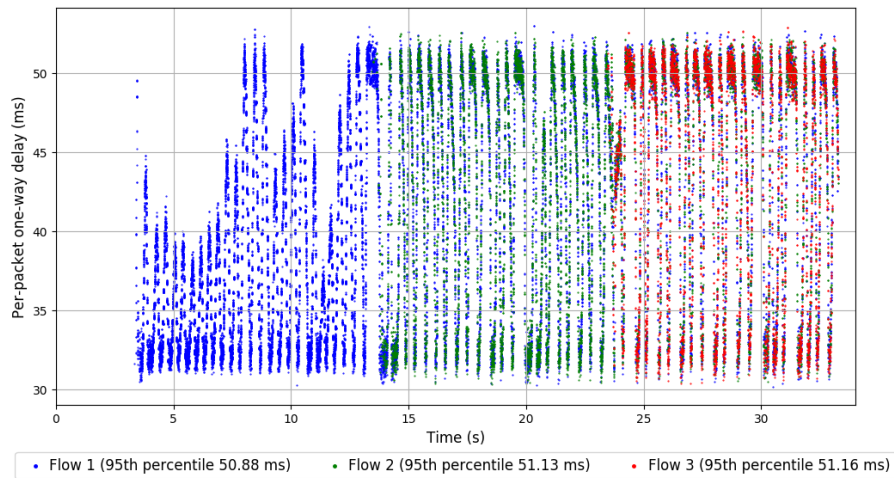
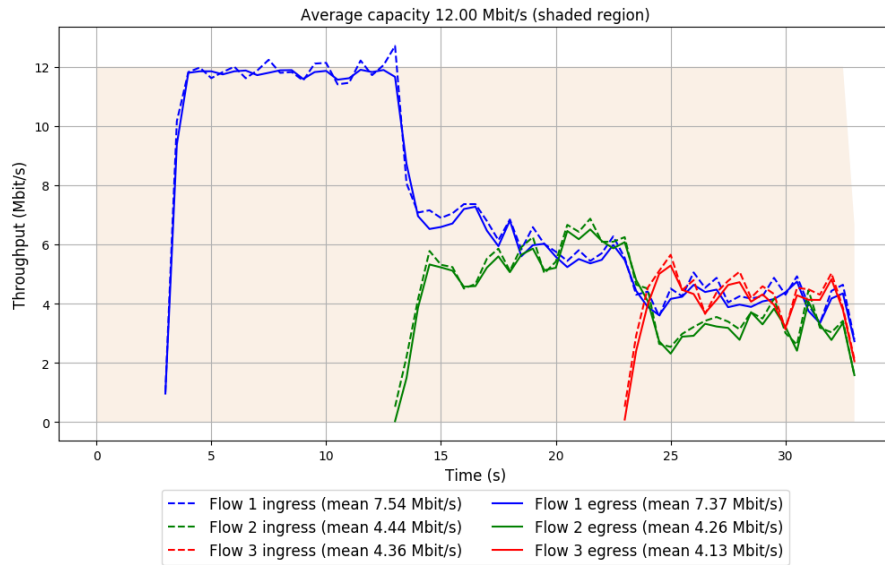
-- Flow 3:

Average throughput: 4.13 Mbit/s

95th percentile per-packet one-way delay: 51.158 ms

Loss rate: 5.77%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-27 19:36:17

End at: 2018-02-27 19:36:47

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

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.51 Mbit/s (95.9% utilization)

95th percentile per-packet one-way delay: 51.087 ms

Loss rate: 3.84%

-- Flow 1:

Average throughput: 7.01 Mbit/s

95th percentile per-packet one-way delay: 50.974 ms

Loss rate: 2.59%

-- Flow 2:

Average throughput: 5.02 Mbit/s

95th percentile per-packet one-way delay: 51.184 ms

Loss rate: 5.19%

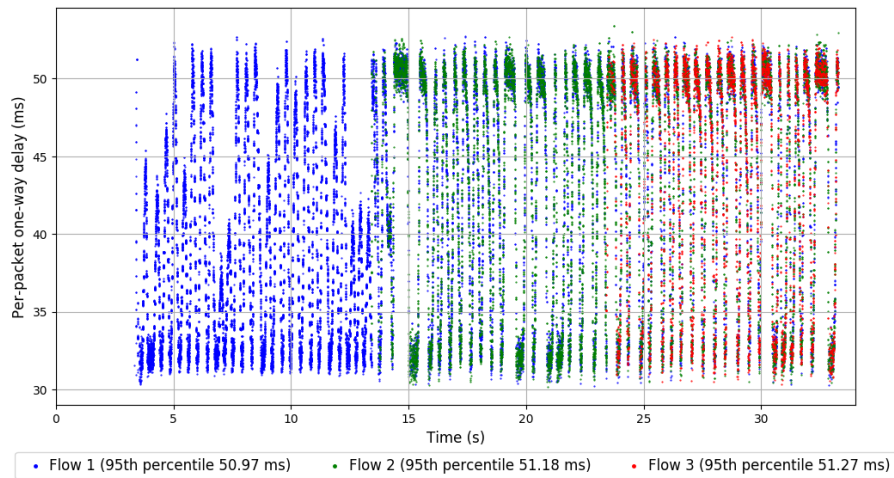
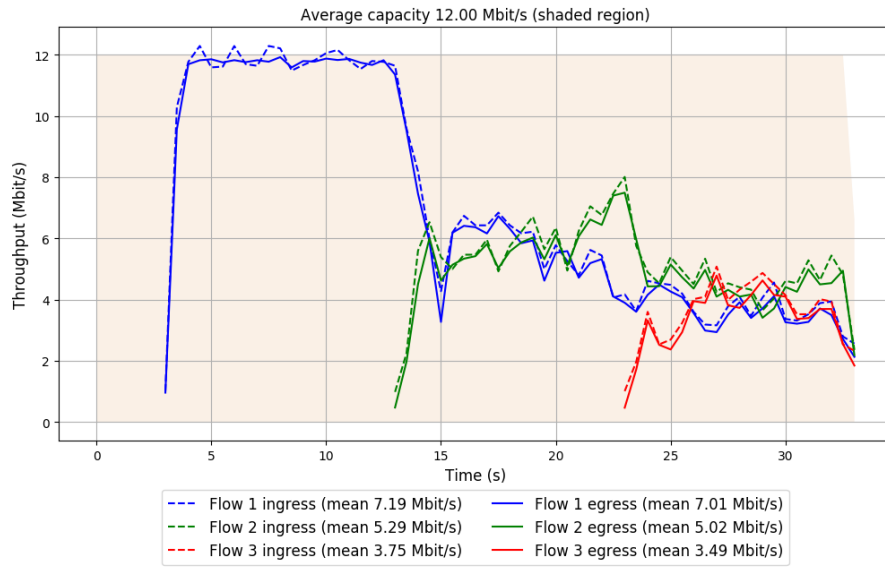
-- Flow 3:

Average throughput: 3.49 Mbit/s

95th percentile per-packet one-way delay: 51.271 ms

Loss rate: 7.28%

Run 10: Report of Copa — Data Link



Run 1: Statistics of FillP

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

End at: 2018-02-27 18:01:43

Below is generated by plot.py at 2018-02-27 19:48:29

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.87 Mbit/s (98.9% utilization)

95th percentile per-packet one-way delay: 51.428 ms

Loss rate: 55.77%

-- Flow 1:

Average throughput: 6.93 Mbit/s

95th percentile per-packet one-way delay: 51.479 ms

Loss rate: 45.70%

-- Flow 2:

Average throughput: 4.67 Mbit/s

95th percentile per-packet one-way delay: 51.385 ms

Loss rate: 60.24%

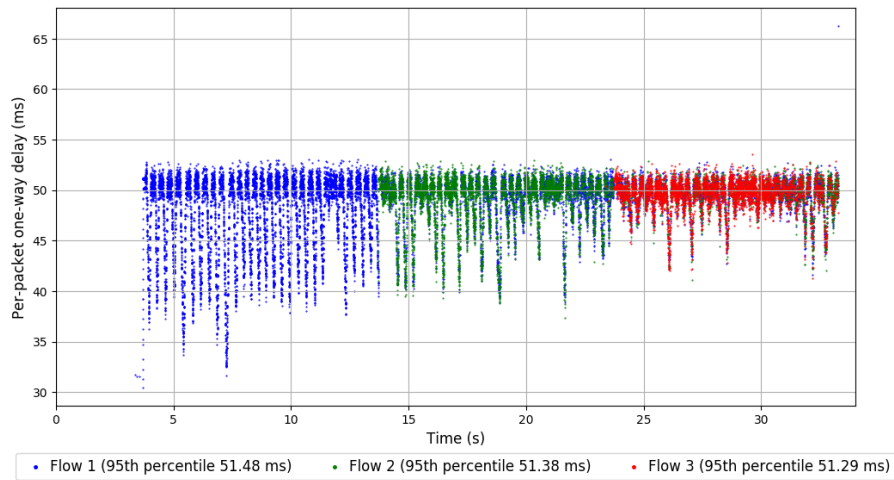
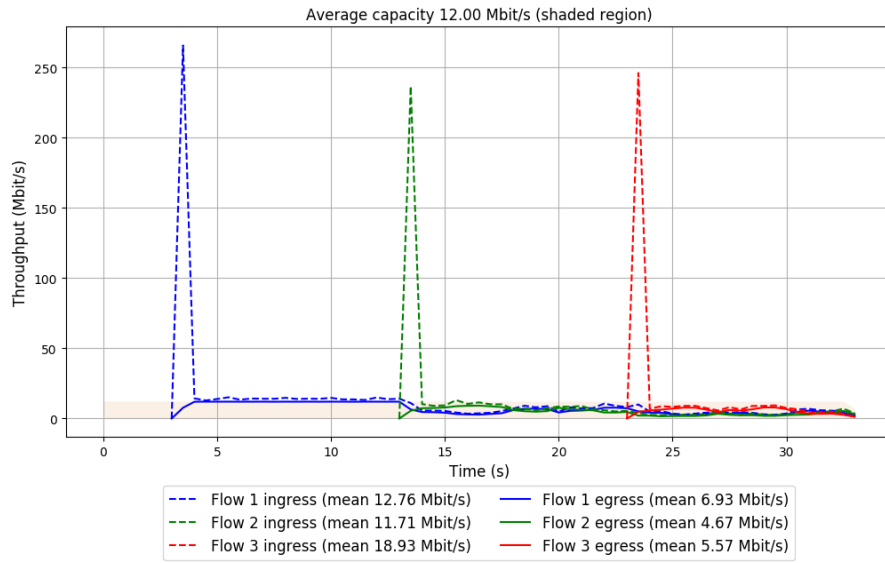
-- Flow 3:

Average throughput: 5.57 Mbit/s

95th percentile per-packet one-way delay: 51.286 ms

Loss rate: 70.71%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-02-27 18:11:37

End at: 2018-02-27 18:12:07

Below is generated by plot.py at 2018-02-27 19:48:35

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 51.442 ms

Loss rate: 55.05%

-- Flow 1:

Average throughput: 7.03 Mbit/s

95th percentile per-packet one-way delay: 51.470 ms

Loss rate: 43.63%

-- Flow 2:

Average throughput: 5.86 Mbit/s

95th percentile per-packet one-way delay: 51.420 ms

Loss rate: 54.73%

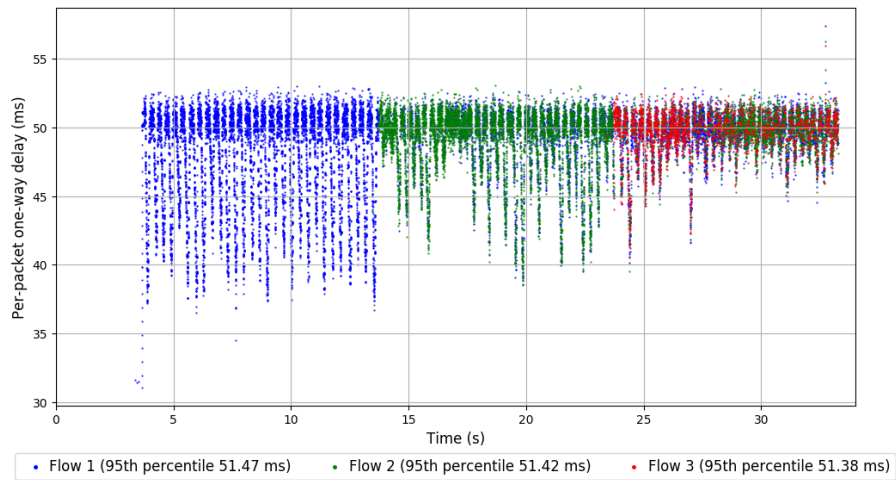
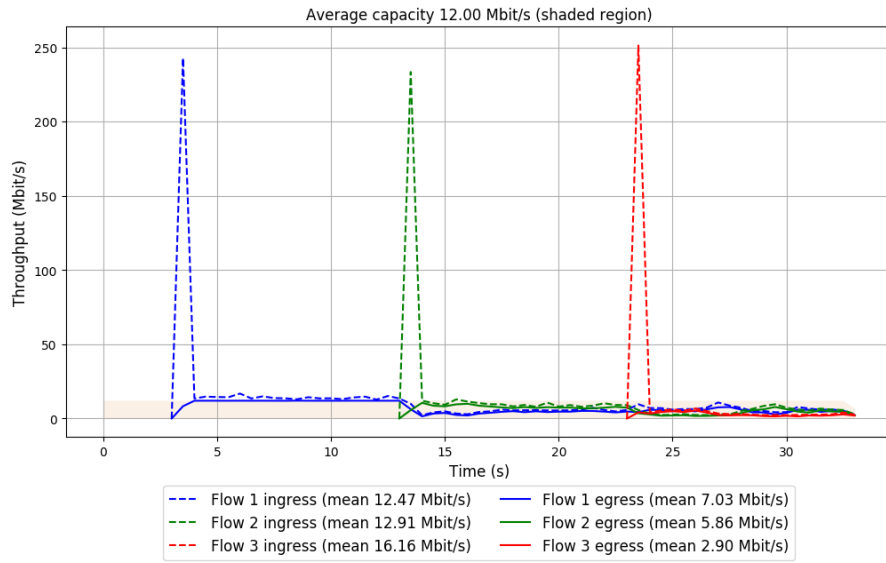
-- Flow 3:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 51.375 ms

Loss rate: 82.17%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-27 18:22:03

End at: 2018-02-27 18:22:33

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

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 51.422 ms

Loss rate: 58.19%

-- Flow 1:

Average throughput: 6.91 Mbit/s

95th percentile per-packet one-way delay: 51.448 ms

Loss rate: 47.63%

-- Flow 2:

Average throughput: 5.82 Mbit/s

95th percentile per-packet one-way delay: 51.395 ms

Loss rate: 57.37%

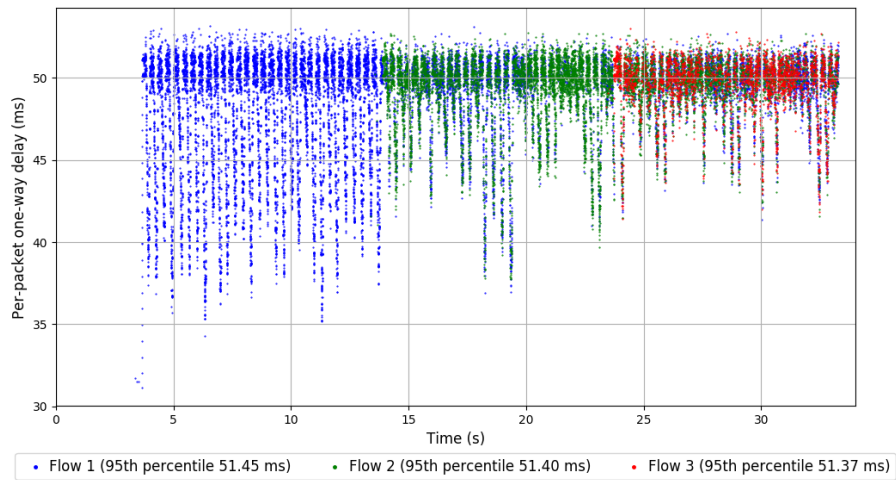
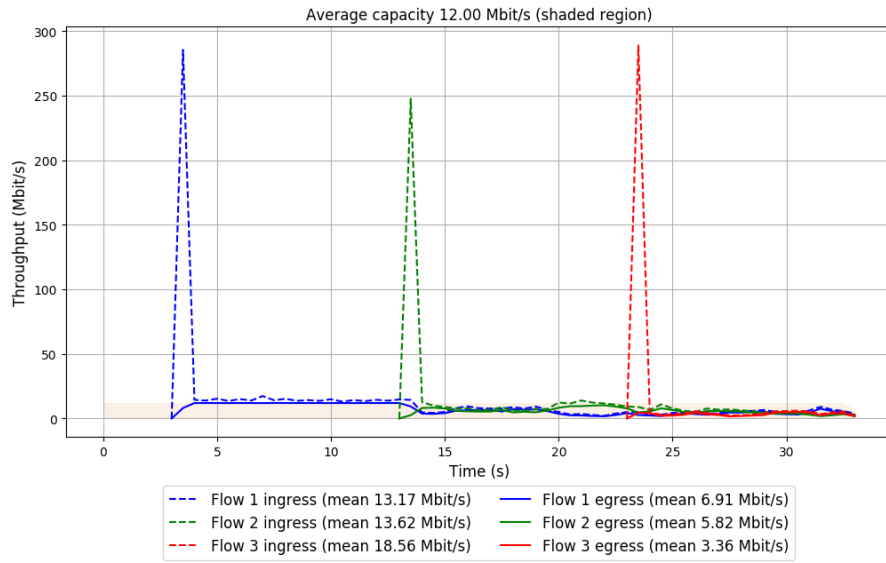
-- Flow 3:

Average throughput: 3.36 Mbit/s

95th percentile per-packet one-way delay: 51.373 ms

Loss rate: 82.00%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-27 18:32:29

End at: 2018-02-27 18:32:59

Below is generated by plot.py at 2018-02-27 19:48:39

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 51.428 ms

Loss rate: 56.10%

-- Flow 1:

Average throughput: 6.66 Mbit/s

95th percentile per-packet one-way delay: 51.473 ms

Loss rate: 47.22%

-- Flow 2:

Average throughput: 5.46 Mbit/s

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

Loss rate: 57.82%

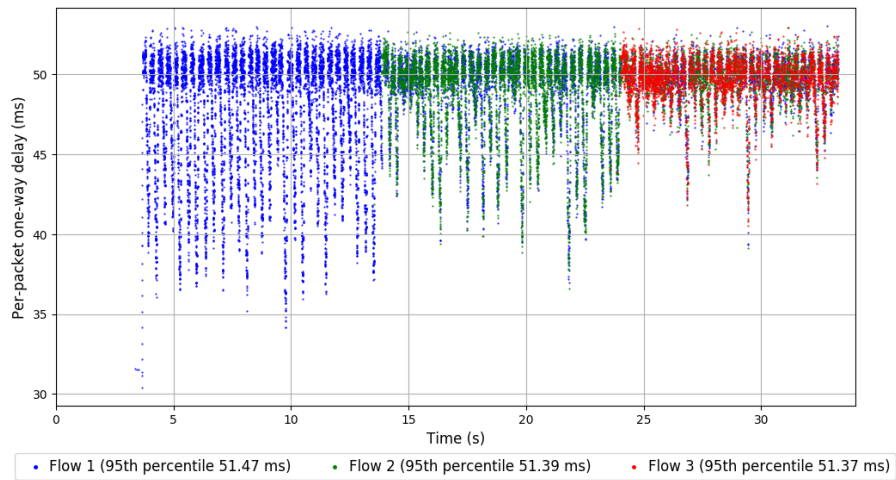
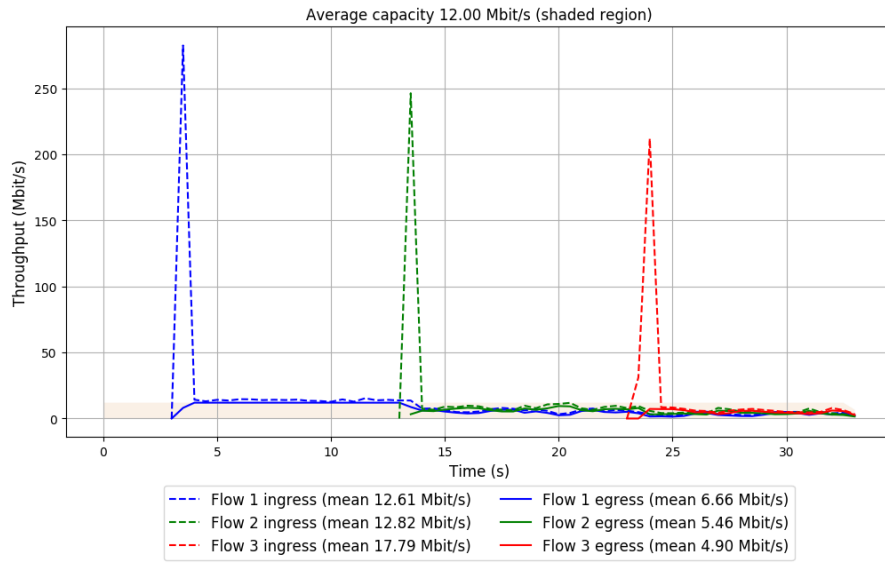
-- Flow 3:

Average throughput: 4.90 Mbit/s

95th percentile per-packet one-way delay: 51.369 ms

Loss rate: 72.60%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-27 18:42:54

End at: 2018-02-27 18:43:24

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

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 51.450 ms

Loss rate: 56.29%

-- Flow 1:

Average throughput: 8.24 Mbit/s

95th percentile per-packet one-way delay: 51.473 ms

Loss rate: 43.52%

-- Flow 2:

Average throughput: 3.85 Mbit/s

95th percentile per-packet one-way delay: 51.425 ms

Loss rate: 65.25%

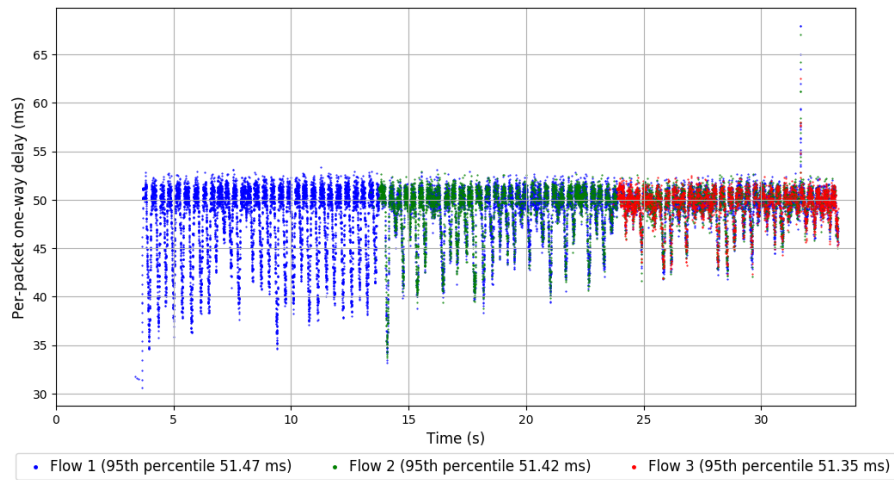
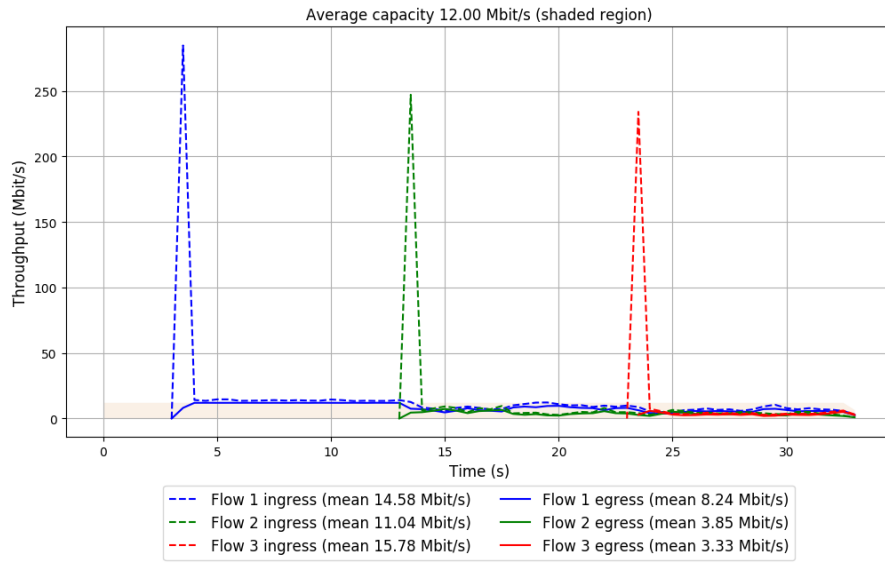
-- Flow 3:

Average throughput: 3.33 Mbit/s

95th percentile per-packet one-way delay: 51.352 ms

Loss rate: 79.32%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-27 18:53:19

End at: 2018-02-27 18:53:49

Below is generated by plot.py at 2018-02-27 19:48:50

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 51.416 ms

Loss rate: 55.80%

-- Flow 1:

Average throughput: 7.02 Mbit/s

95th percentile per-packet one-way delay: 51.460 ms

Loss rate: 45.68%

-- Flow 2:

Average throughput: 4.66 Mbit/s

95th percentile per-packet one-way delay: 51.379 ms

Loss rate: 60.68%

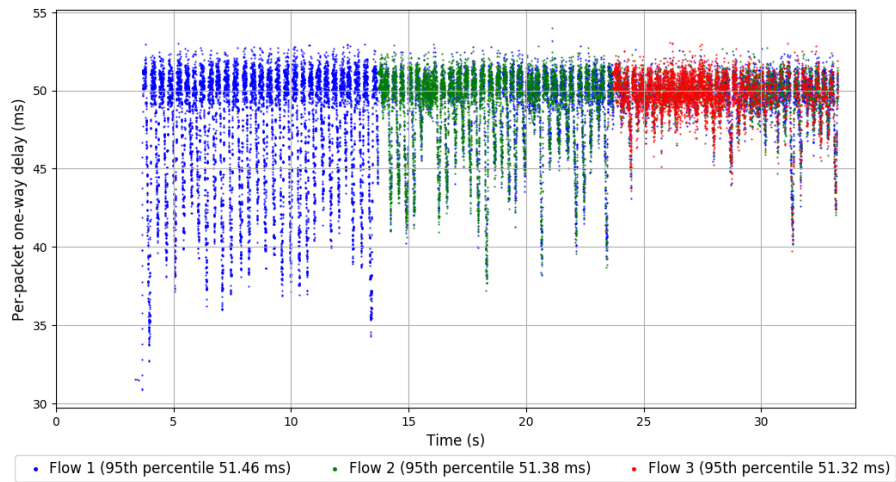
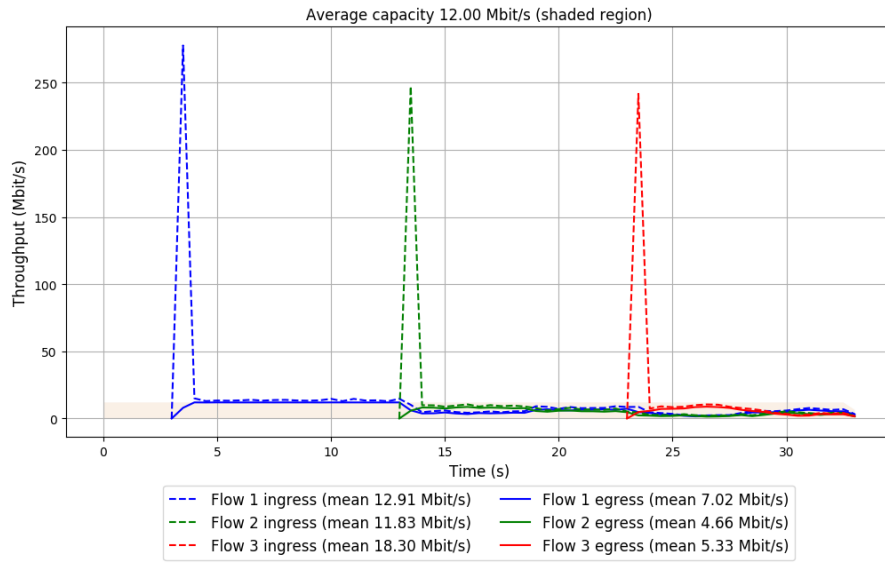
-- Flow 3:

Average throughput: 5.33 Mbit/s

95th percentile per-packet one-way delay: 51.317 ms

Loss rate: 70.98%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-27 19:03:45

End at: 2018-02-27 19:04:15

Below is generated by plot.py at 2018-02-27 19:49:01

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.87 Mbit/s (98.9% utilization)

95th percentile per-packet one-way delay: 51.433 ms

Loss rate: 56.96%

-- Flow 1:

Average throughput: 6.98 Mbit/s

95th percentile per-packet one-way delay: 51.476 ms

Loss rate: 47.24%

-- Flow 2:

Average throughput: 5.39 Mbit/s

95th percentile per-packet one-way delay: 51.383 ms

Loss rate: 58.58%

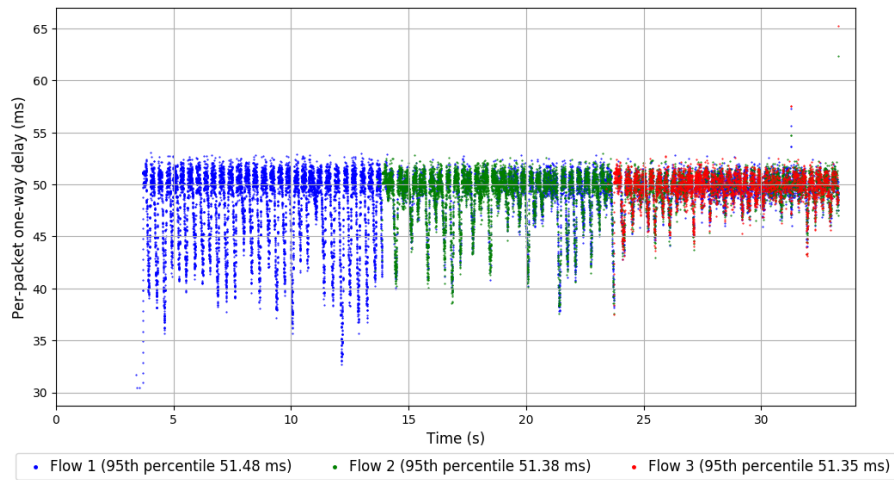
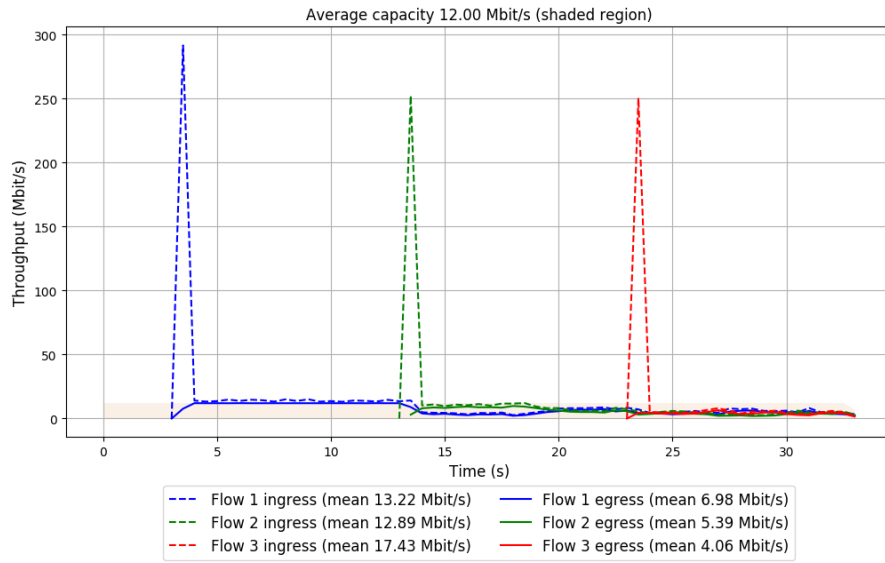
-- Flow 3:

Average throughput: 4.06 Mbit/s

95th percentile per-packet one-way delay: 51.347 ms

Loss rate: 76.81%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-27 19:14:13

End at: 2018-02-27 19:14:43

Below is generated by plot.py at 2018-02-27 19:49:04

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 51.440 ms

Loss rate: 57.27%

-- Flow 1:

Average throughput: 7.29 Mbit/s

95th percentile per-packet one-way delay: 51.469 ms

Loss rate: 45.88%

-- Flow 2:

Average throughput: 5.12 Mbit/s

95th percentile per-packet one-way delay: 51.405 ms

Loss rate: 59.70%

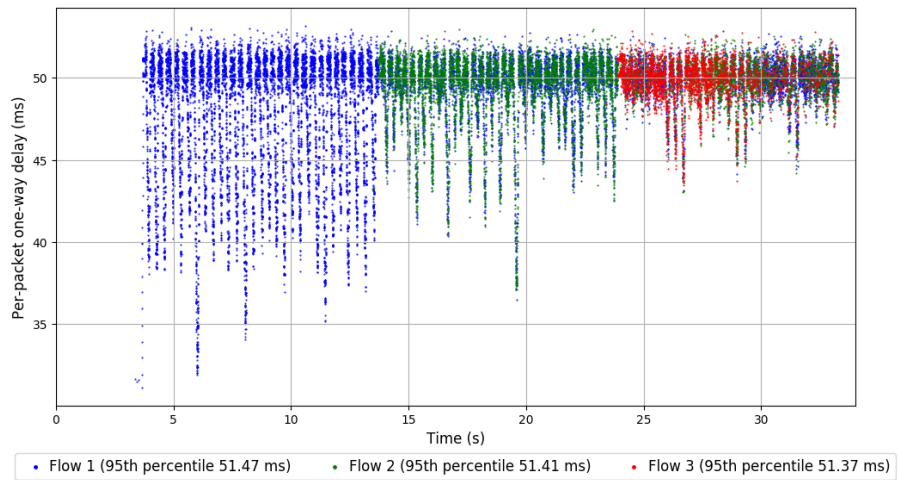
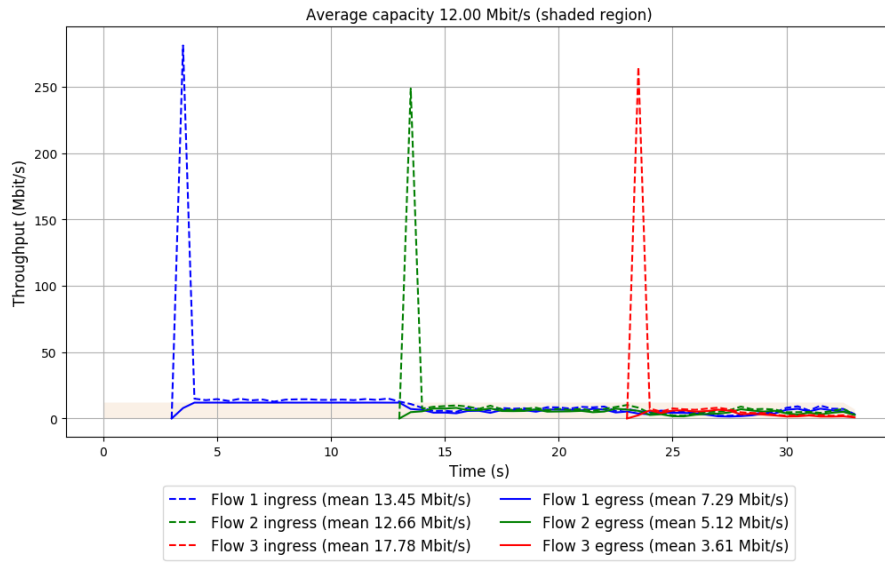
-- Flow 3:

Average throughput: 3.61 Mbit/s

95th percentile per-packet one-way delay: 51.374 ms

Loss rate: 79.78%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-27 19:24:39

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

Below is generated by plot.py at 2018-02-27 19:49:05

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 51.442 ms

Loss rate: 56.16%

-- Flow 1:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 51.467 ms

Loss rate: 43.79%

-- Flow 2:

Average throughput: 3.76 Mbit/s

95th percentile per-packet one-way delay: 51.412 ms

Loss rate: 64.39%

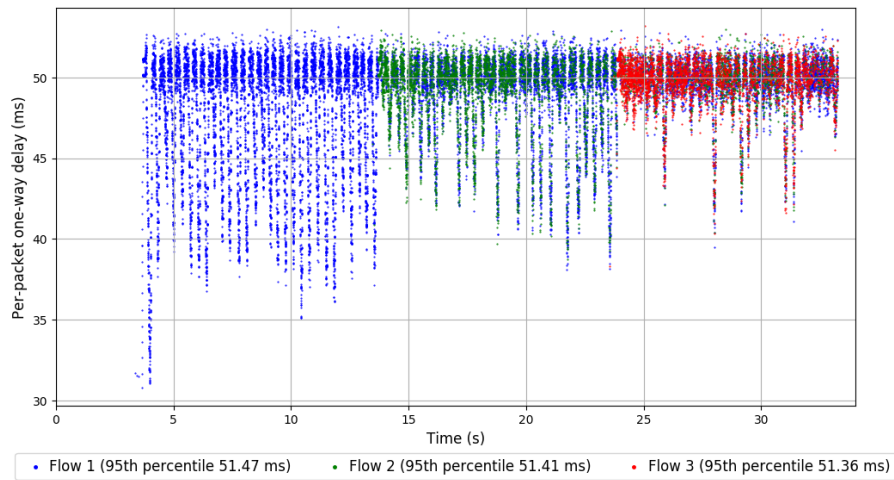
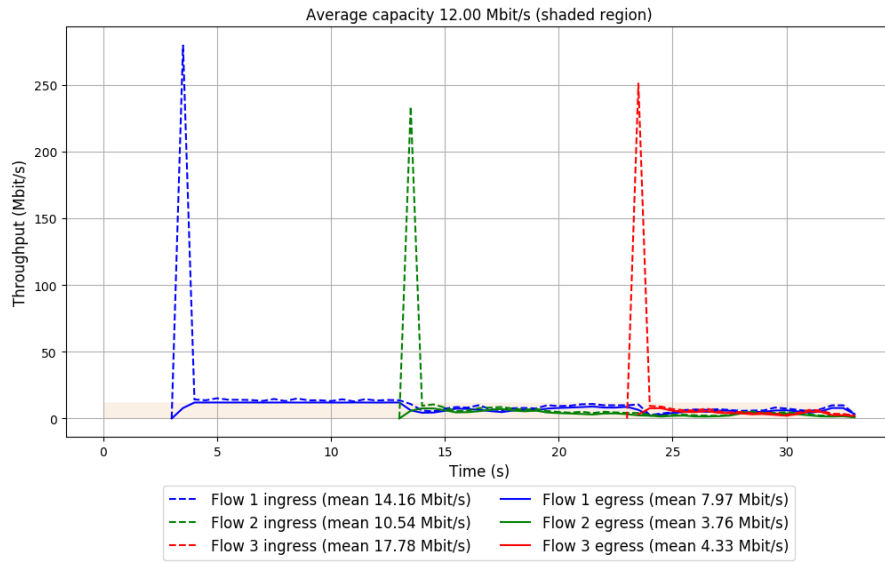
-- Flow 3:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 51.364 ms

Loss rate: 76.12%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-02-27 19:35:07

End at: 2018-02-27 19:35:37

Below is generated by plot.py at 2018-02-27 19:49:11

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 51.414 ms

Loss rate: 57.38%

-- Flow 1:

Average throughput: 7.35 Mbit/s

95th percentile per-packet one-way delay: 51.458 ms

Loss rate: 46.12%

-- Flow 2:

Average throughput: 5.13 Mbit/s

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

Loss rate: 58.40%

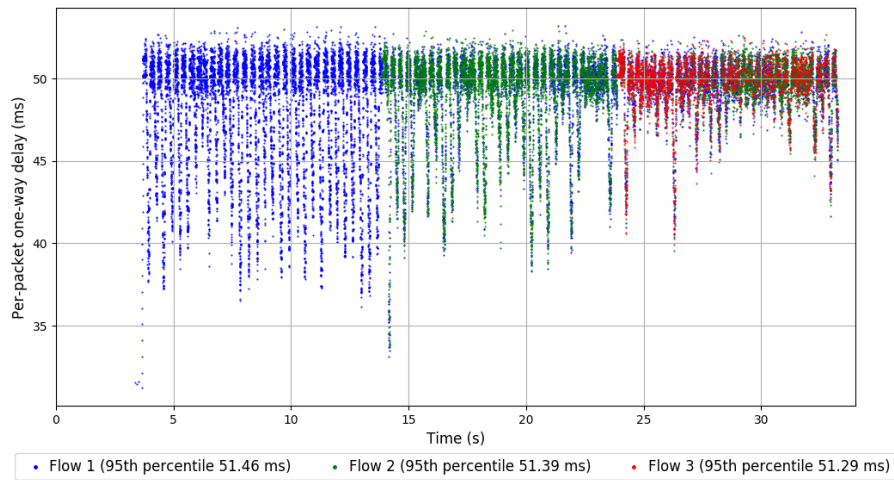
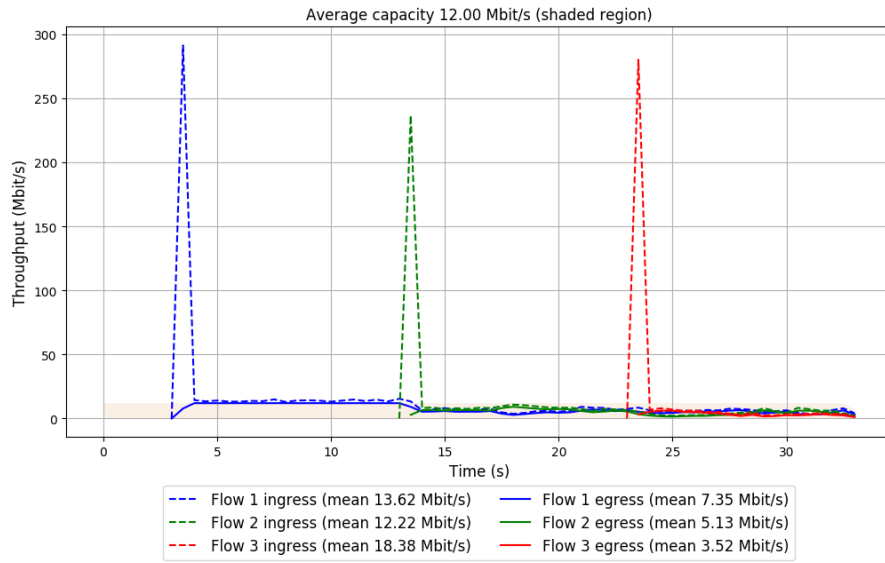
-- Flow 3:

Average throughput: 3.52 Mbit/s

95th percentile per-packet one-way delay: 51.287 ms

Loss rate: 81.20%

Run 10: Report of FillP — Data Link



Run 1: Statistics of Indigo-1-32

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 19:49:11

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.71 Mbit/s (97.6% utilization)

95th percentile per-packet one-way delay: 49.797 ms

Loss rate: 39.69%

-- Flow 1:

Average throughput: 6.37 Mbit/s

95th percentile per-packet one-way delay: 49.310 ms

Loss rate: 13.43%

-- Flow 2:

Average throughput: 4.88 Mbit/s

95th percentile per-packet one-way delay: 49.863 ms

Loss rate: 39.16%

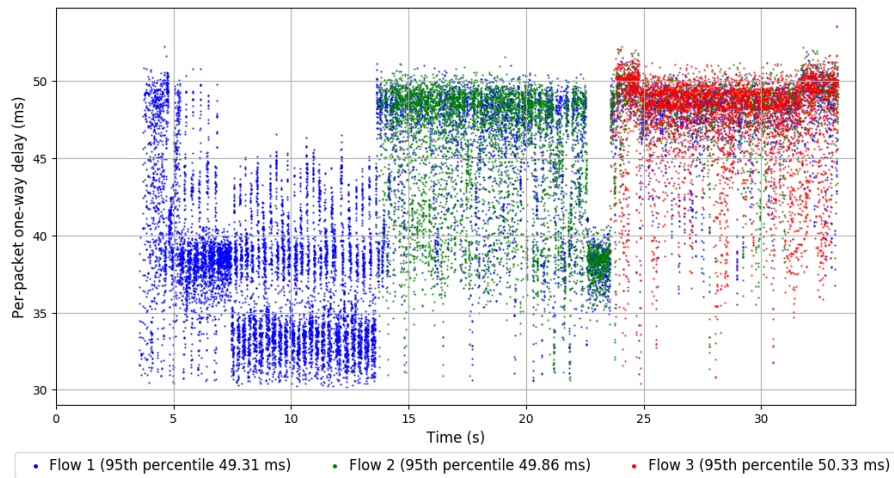
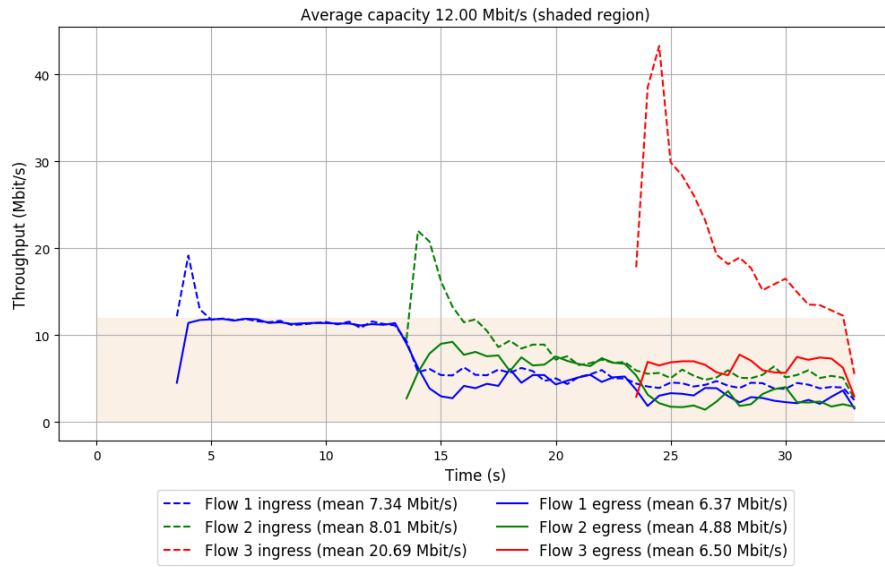
-- Flow 3:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 50.328 ms

Loss rate: 68.65%

Run 1: Report of Indigo-1-32 — Data Link



Run 2: Statistics of Indigo-1-32

Start at: 2018-02-27 18:07:00

End at: 2018-02-27 18:07:30

Below is generated by plot.py at 2018-02-27 19:49:11

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.85 Mbit/s (98.8% utilization)

95th percentile per-packet one-way delay: 49.385 ms

Loss rate: 16.36%

-- Flow 1:

Average throughput: 6.84 Mbit/s

95th percentile per-packet one-way delay: 49.148 ms

Loss rate: 9.75%

-- Flow 2:

Average throughput: 5.30 Mbit/s

95th percentile per-packet one-way delay: 49.454 ms

Loss rate: 20.10%

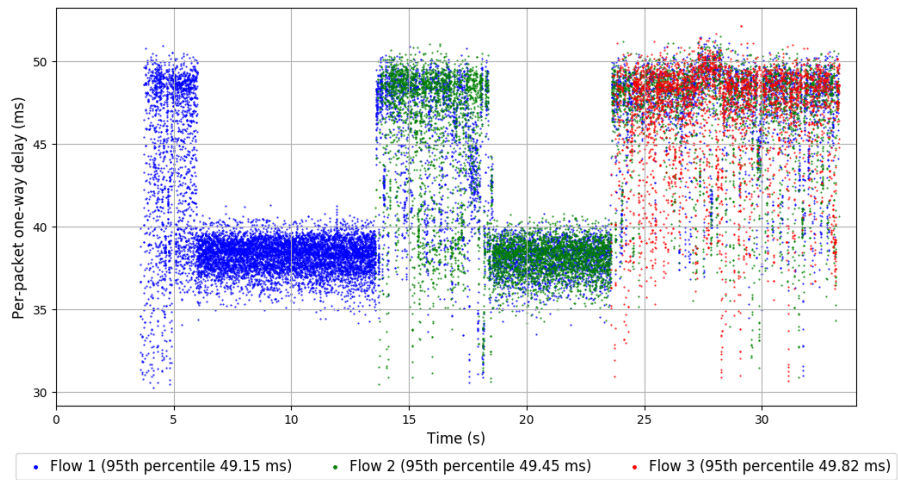
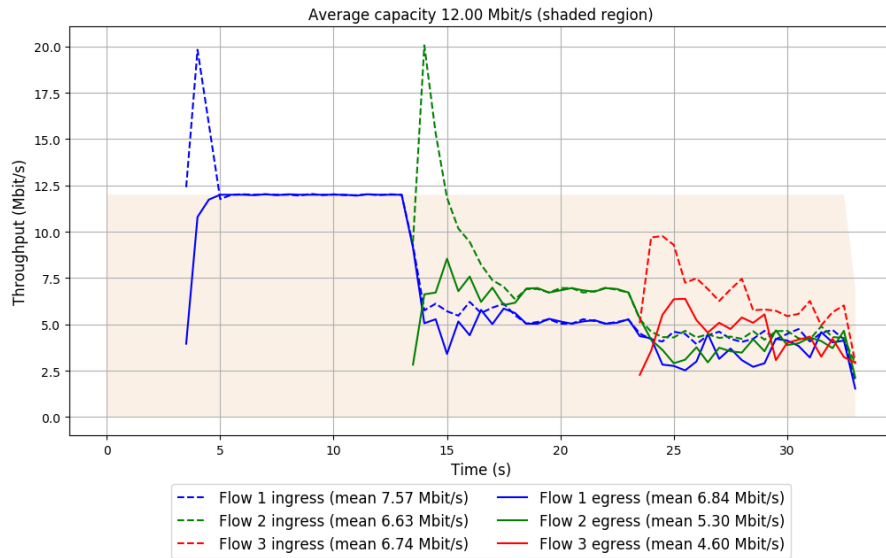
-- Flow 3:

Average throughput: 4.60 Mbit/s

95th percentile per-packet one-way delay: 49.816 ms

Loss rate: 31.66%

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-27 18:17:25

End at: 2018-02-27 18:17:55

Below is generated by plot.py at 2018-02-27 19:49:17

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.87 Mbit/s (98.9% utilization)

95th percentile per-packet one-way delay: 49.405 ms

Loss rate: 22.92%

-- Flow 1:

Average throughput: 6.66 Mbit/s

95th percentile per-packet one-way delay: 49.106 ms

Loss rate: 10.23%

-- Flow 2:

Average throughput: 5.12 Mbit/s

95th percentile per-packet one-way delay: 49.392 ms

Loss rate: 20.76%

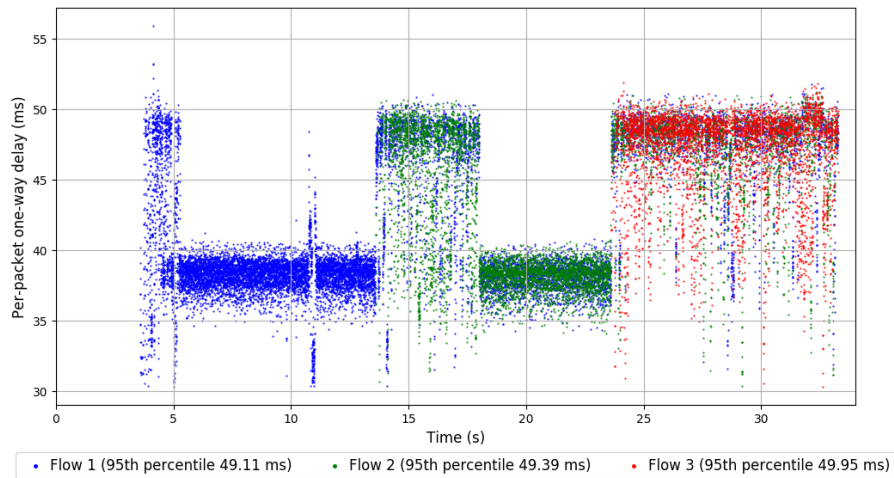
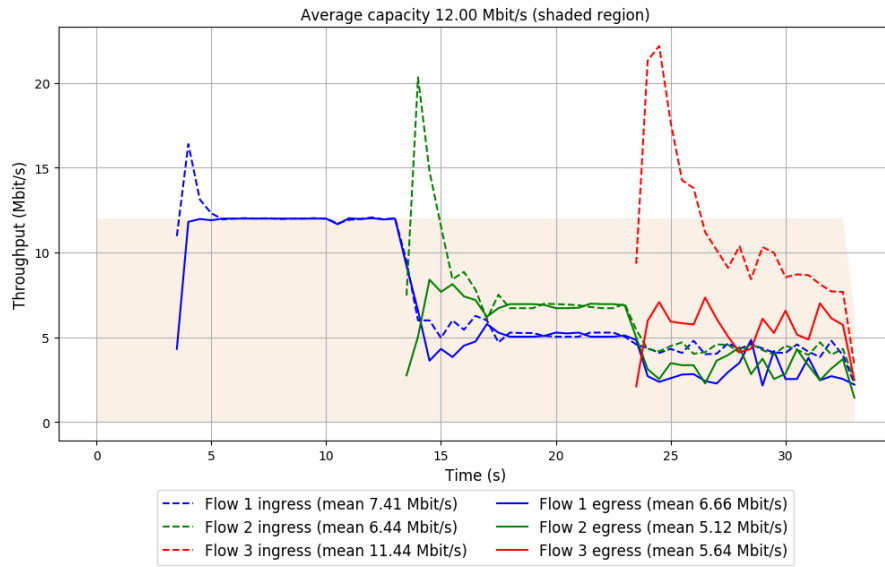
-- Flow 3:

Average throughput: 5.64 Mbit/s

95th percentile per-packet one-way delay: 49.946 ms

Loss rate: 50.69%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

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

End at: 2018-02-27 18:28:21

Below is generated by plot.py at 2018-02-27 19:49:20

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 49.481 ms

Loss rate: 31.20%

-- Flow 1:

Average throughput: 6.53 Mbit/s

95th percentile per-packet one-way delay: 49.136 ms

Loss rate: 10.08%

-- Flow 2:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 49.538 ms

Loss rate: 29.81%

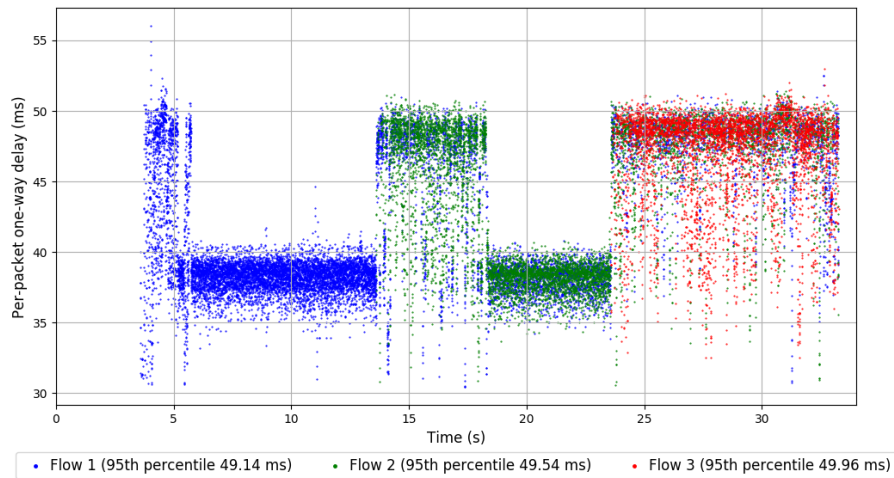
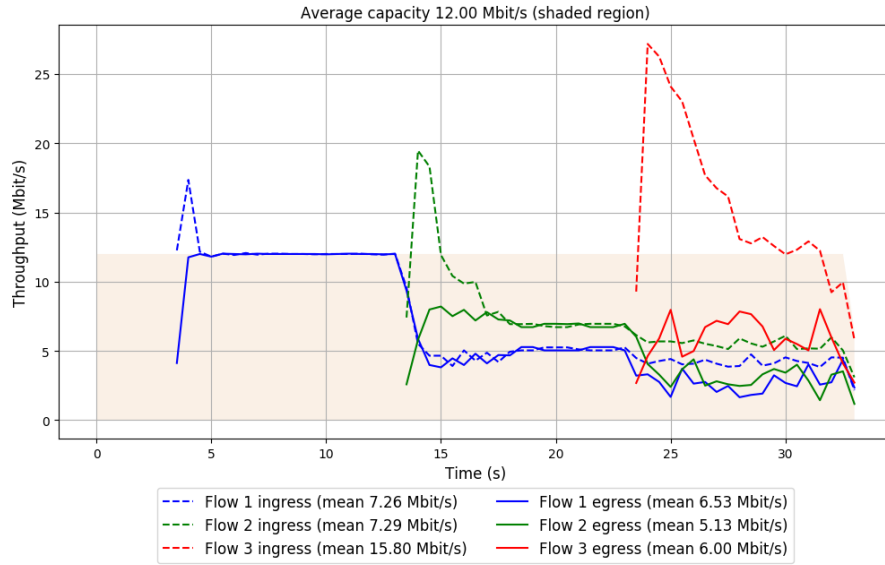
-- Flow 3:

Average throughput: 6.00 Mbit/s

95th percentile per-packet one-way delay: 49.959 ms

Loss rate: 62.14%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-27 18:38:16

End at: 2018-02-27 18:38:46

Below is generated by plot.py at 2018-02-27 19:49:32

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 49.892 ms

Loss rate: 48.89%

-- Flow 1:

Average throughput: 6.35 Mbit/s

95th percentile per-packet one-way delay: 49.407 ms

Loss rate: 13.24%

-- Flow 2:

Average throughput: 5.16 Mbit/s

95th percentile per-packet one-way delay: 49.916 ms

Loss rate: 52.19%

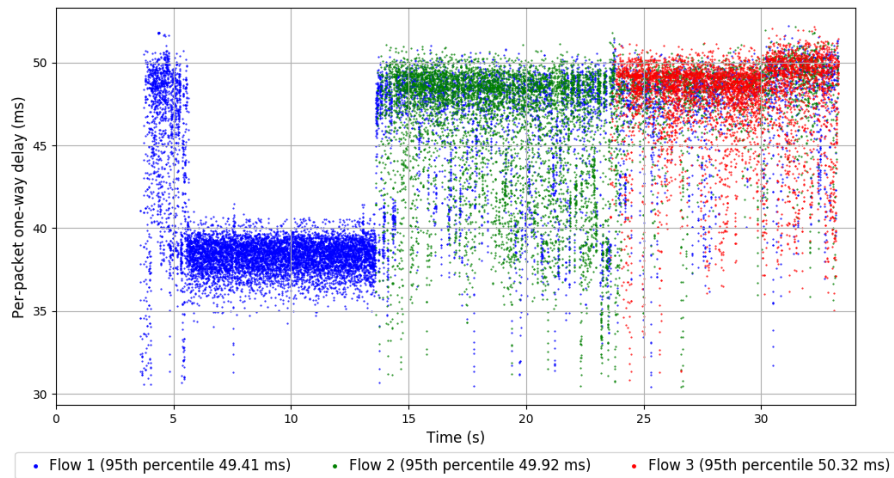
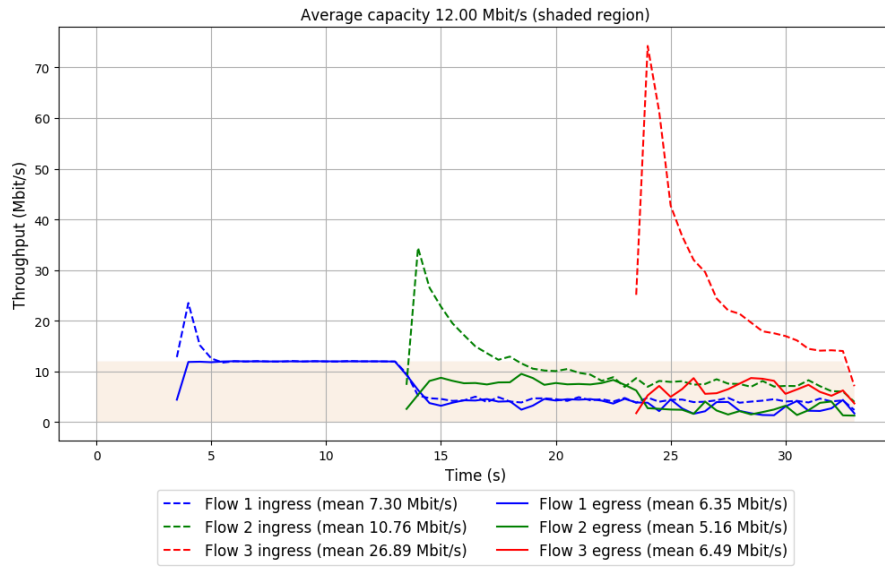
-- Flow 3:

Average throughput: 6.49 Mbit/s

95th percentile per-packet one-way delay: 50.318 ms

Loss rate: 75.88%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-27 18:48:41

End at: 2018-02-27 18:49:11

Below is generated by plot.py at 2018-02-27 19:49:32

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 49.467 ms

Loss rate: 21.00%

-- Flow 1:

Average throughput: 6.73 Mbit/s

95th percentile per-packet one-way delay: 49.156 ms

Loss rate: 6.71%

-- Flow 2:

Average throughput: 5.70 Mbit/s

95th percentile per-packet one-way delay: 49.642 ms

Loss rate: 30.66%

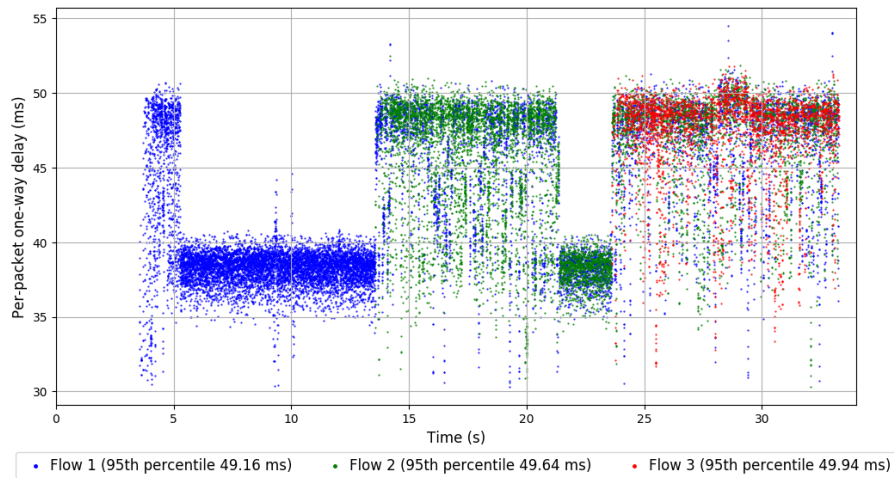
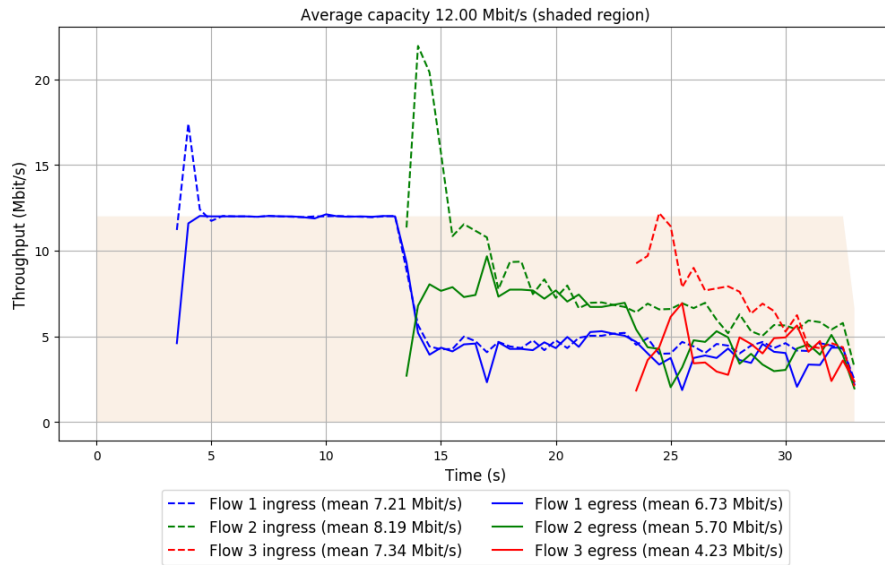
-- Flow 3:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 49.936 ms

Loss rate: 42.23%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-27 18:59:06

End at: 2018-02-27 18:59:36

Below is generated by plot.py at 2018-02-27 19:49:32

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.87 Mbit/s (98.9% utilization)

95th percentile per-packet one-way delay: 49.880 ms

Loss rate: 22.43%

-- Flow 1:

Average throughput: 6.73 Mbit/s

95th percentile per-packet one-way delay: 49.476 ms

Loss rate: 9.63%

-- Flow 2:

Average throughput: 5.20 Mbit/s

95th percentile per-packet one-way delay: 49.858 ms

Loss rate: 22.42%

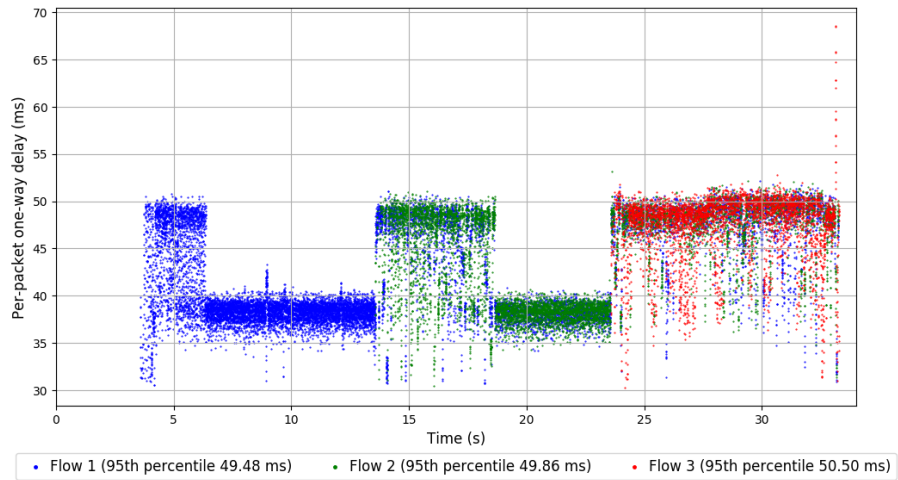
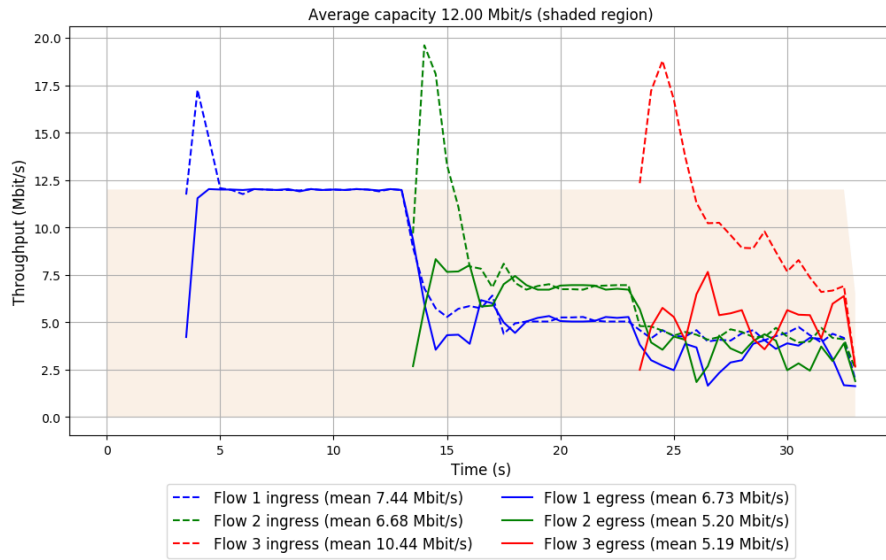
-- Flow 3:

Average throughput: 5.19 Mbit/s

95th percentile per-packet one-way delay: 50.501 ms

Loss rate: 50.37%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

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

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

Below is generated by plot.py at 2018-02-27 19:49:35

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: 49.509 ms

Loss rate: 23.62%

-- Flow 1:

Average throughput: 6.69 Mbit/s

95th percentile per-packet one-way delay: 49.168 ms

Loss rate: 9.34%

-- Flow 2:

Average throughput: 4.90 Mbit/s

95th percentile per-packet one-way delay: 49.534 ms

Loss rate: 24.11%

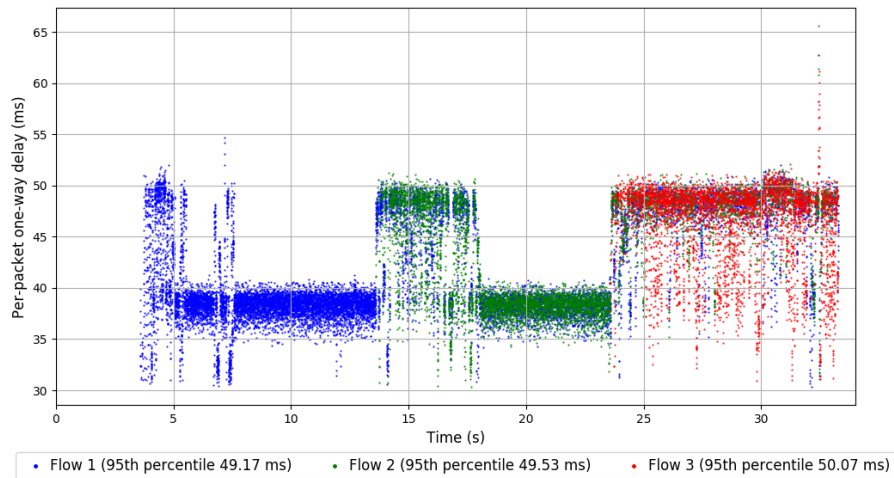
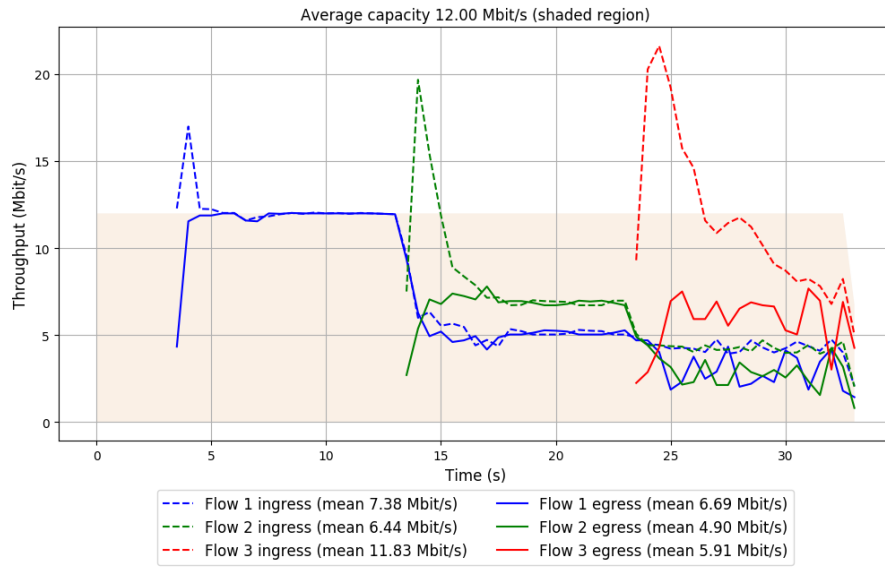
-- Flow 3:

Average throughput: 5.91 Mbit/s

95th percentile per-packet one-way delay: 50.068 ms

Loss rate: 50.31%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-27 19:20:00

End at: 2018-02-27 19:20:30

Below is generated by plot.py at 2018-02-27 19:49:40

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: 49.998 ms

Loss rate: 51.84%

-- Flow 1:

Average throughput: 5.84 Mbit/s

95th percentile per-packet one-way delay: 49.464 ms

Loss rate: 18.76%

-- Flow 2:

Average throughput: 6.05 Mbit/s

95th percentile per-packet one-way delay: 50.096 ms

Loss rate: 60.80%

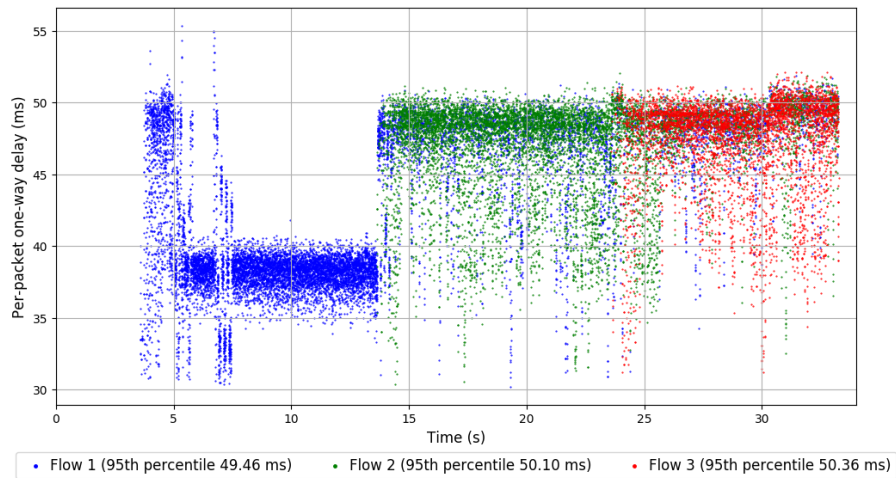
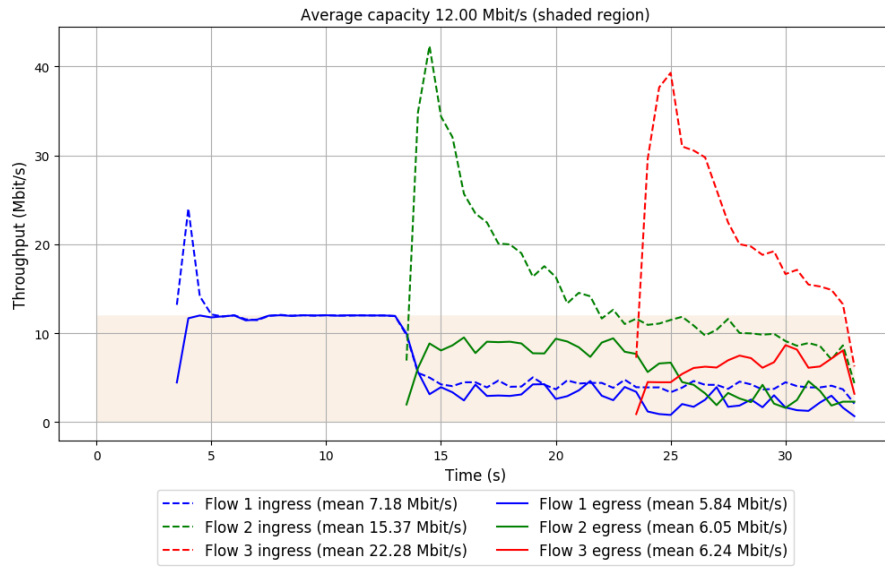
-- Flow 3:

Average throughput: 6.24 Mbit/s

95th percentile per-packet one-way delay: 50.361 ms

Loss rate: 72.02%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

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 19:49:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.88 Mbit/s (99.0% utilization)

95th percentile per-packet one-way delay: 49.542 ms

Loss rate: 33.42%

-- Flow 1:

Average throughput: 6.76 Mbit/s

95th percentile per-packet one-way delay: 49.289 ms

Loss rate: 12.48%

-- Flow 2:

Average throughput: 4.72 Mbit/s

95th percentile per-packet one-way delay: 49.494 ms

Loss rate: 28.12%

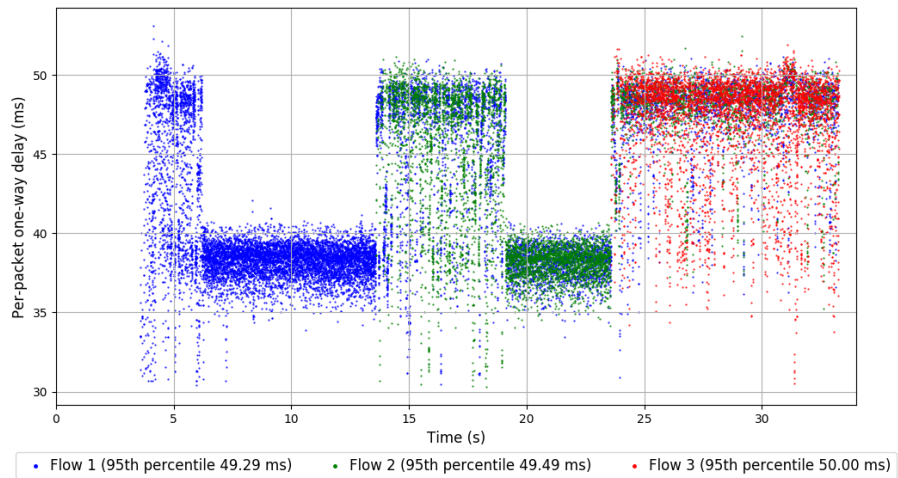
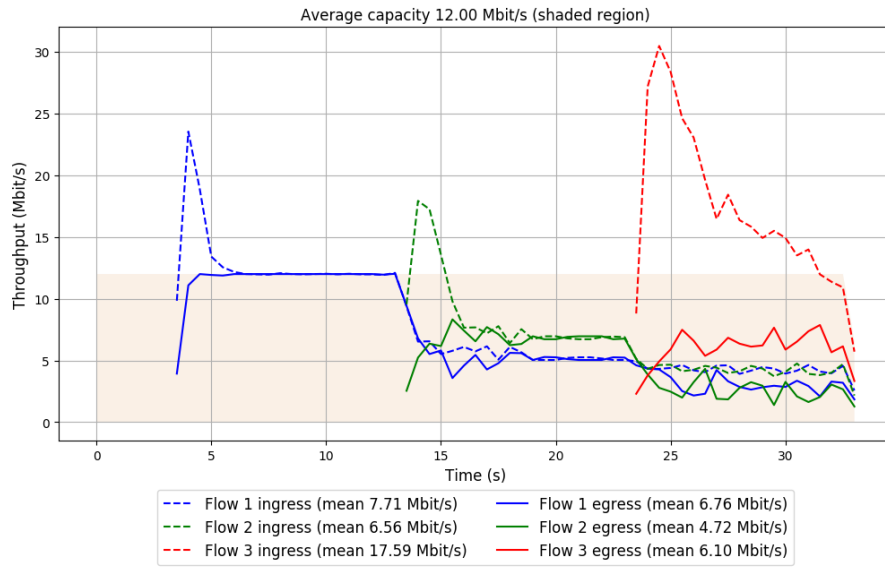
-- Flow 3:

Average throughput: 6.10 Mbit/s

95th percentile per-packet one-way delay: 50.000 ms

Loss rate: 65.44%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-02-27 18:03:33

End at: 2018-02-27 18:04:03

Below is generated by plot.py at 2018-02-27 19:49:46

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.00 Mbit/s (91.7% utilization)

95th percentile per-packet one-way delay: 50.057 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 6.59 Mbit/s

95th percentile per-packet one-way delay: 49.987 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 4.72 Mbit/s

95th percentile per-packet one-way delay: 50.137 ms

Loss rate: 1.61%

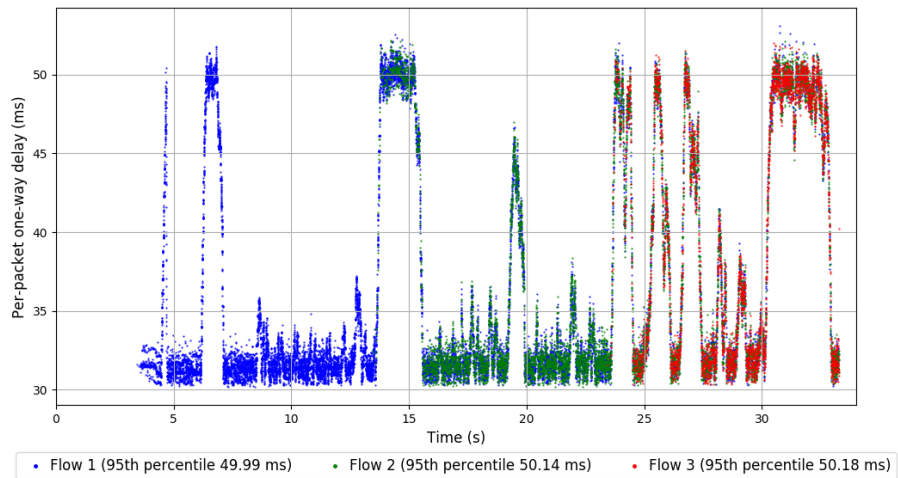
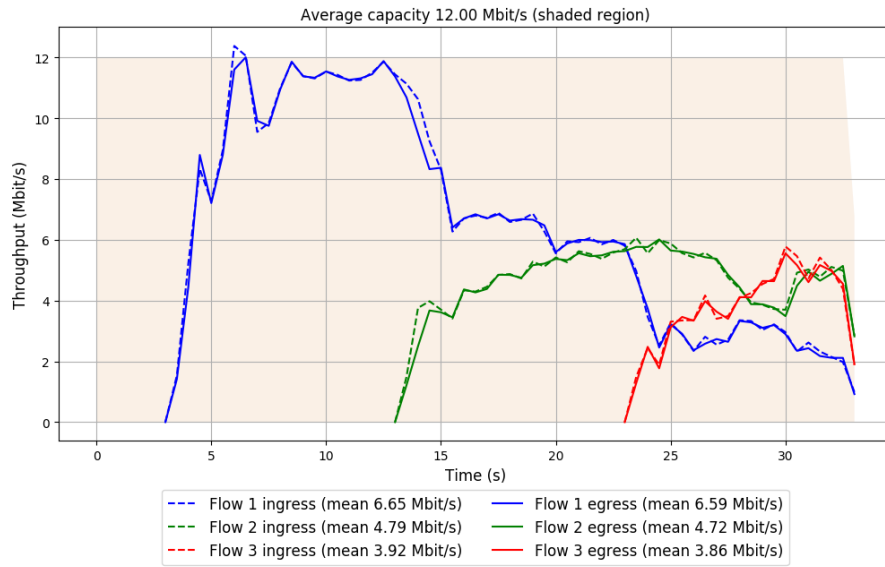
-- Flow 3:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 50.179 ms

Loss rate: 1.60%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-27 18:13:58

End at: 2018-02-27 18:14:28

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

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.94 Mbit/s (91.2% utilization)

95th percentile per-packet one-way delay: 49.338 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 8.29 Mbit/s

95th percentile per-packet one-way delay: 49.273 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 48.848 ms

Loss rate: 1.39%

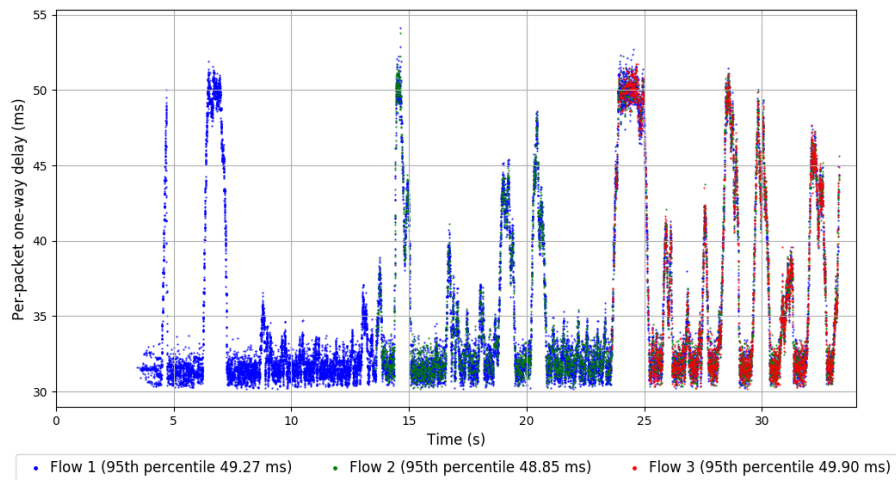
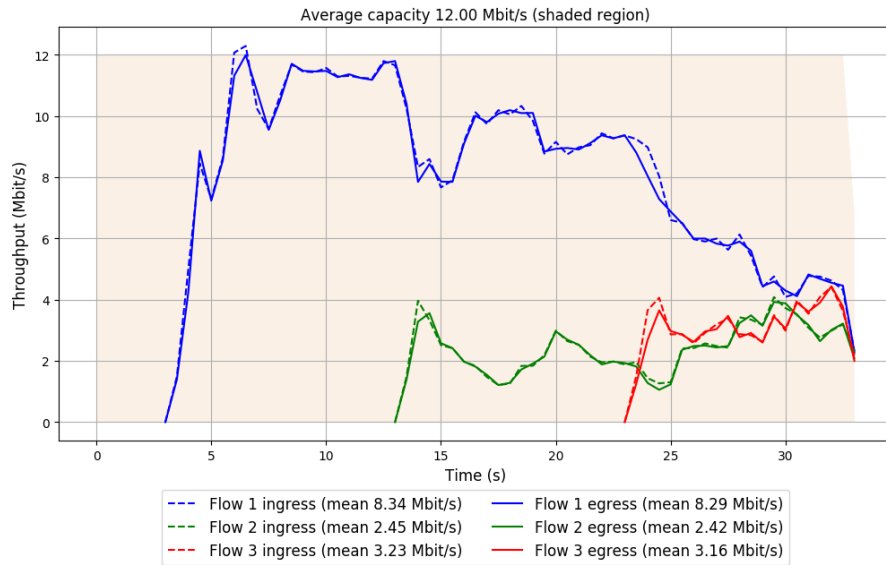
-- Flow 3:

Average throughput: 3.16 Mbit/s

95th percentile per-packet one-way delay: 49.899 ms

Loss rate: 2.74%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

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

End at: 2018-02-27 18:24:53

Below is generated by plot.py at 2018-02-27 19:49:59

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.85 Mbit/s (90.4% utilization)

95th percentile per-packet one-way delay: 50.161 ms

Loss rate: 1.87%

-- Flow 1:

Average throughput: 6.64 Mbit/s

95th percentile per-packet one-way delay: 50.192 ms

Loss rate: 1.61%

-- Flow 2:

Average throughput: 4.64 Mbit/s

95th percentile per-packet one-way delay: 50.180 ms

Loss rate: 2.63%

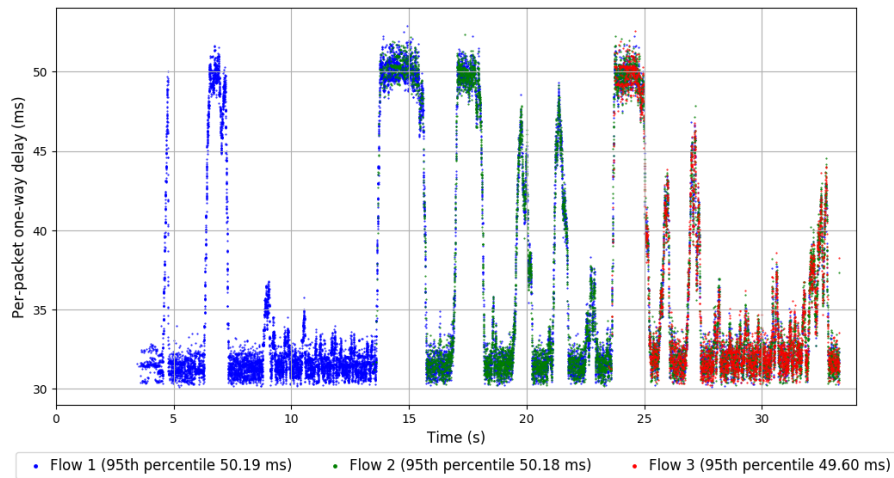
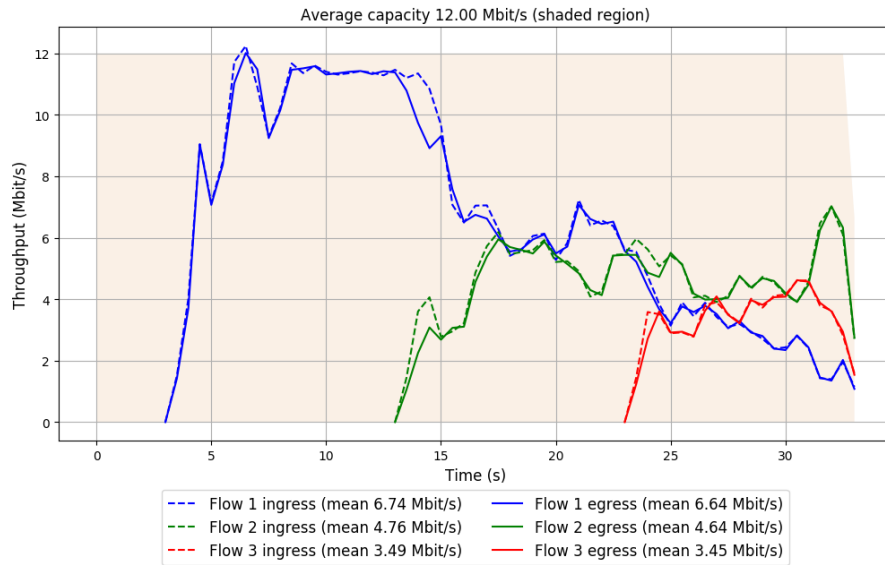
-- Flow 3:

Average throughput: 3.45 Mbit/s

95th percentile per-packet one-way delay: 49.605 ms

Loss rate: 1.34%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-27 18:34:49

End at: 2018-02-27 18:35:19

Below is generated by plot.py at 2018-02-27 19:50:02

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.89 Mbit/s (90.8% utilization)

95th percentile per-packet one-way delay: 49.828 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 8.62 Mbit/s

95th percentile per-packet one-way delay: 49.816 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 49.795 ms

Loss rate: 2.75%

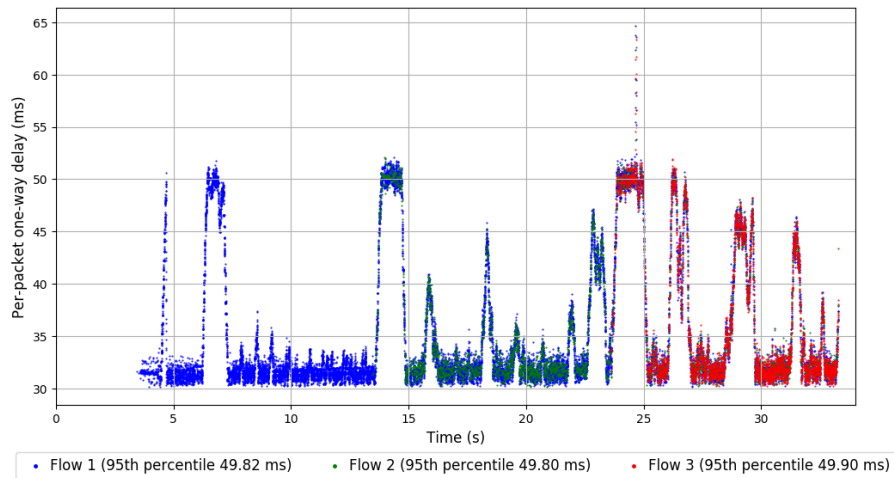
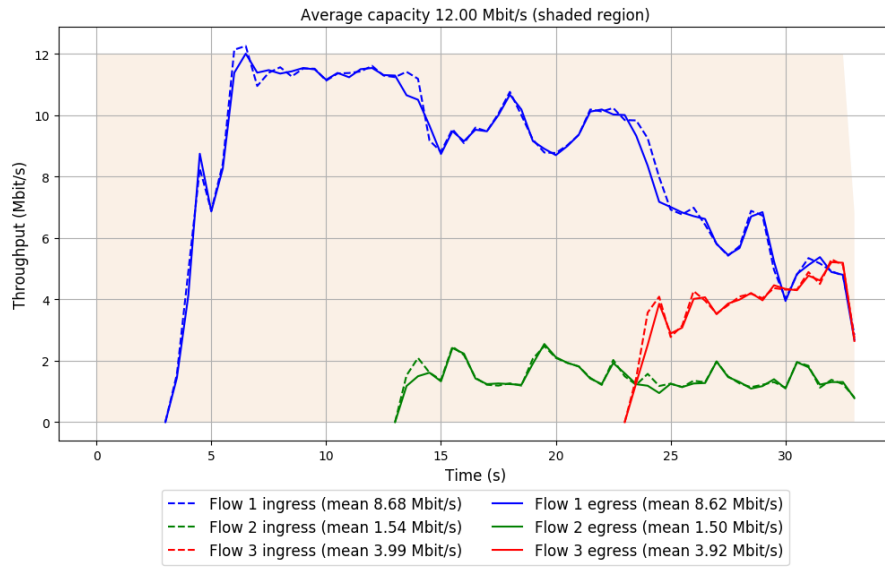
-- Flow 3:

Average throughput: 3.92 Mbit/s

95th percentile per-packet one-way delay: 49.896 ms

Loss rate: 2.16%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-27 18:45:14

End at: 2018-02-27 18:45:44

Below is generated by plot.py at 2018-02-27 19:50:02

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.89 Mbit/s (90.7% utilization)

95th percentile per-packet one-way delay: 49.958 ms

Loss rate: 1.39%

-- Flow 1:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 50.069 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 3.90 Mbit/s

95th percentile per-packet one-way delay: 49.812 ms

Loss rate: 2.22%

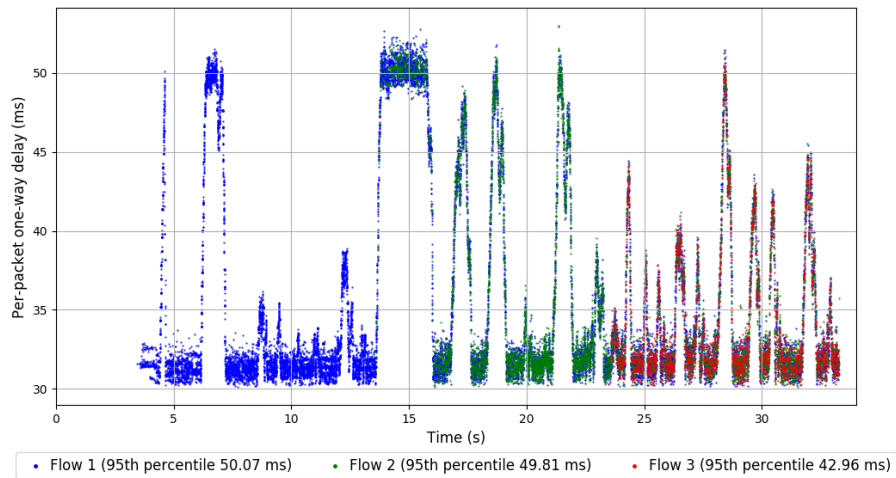
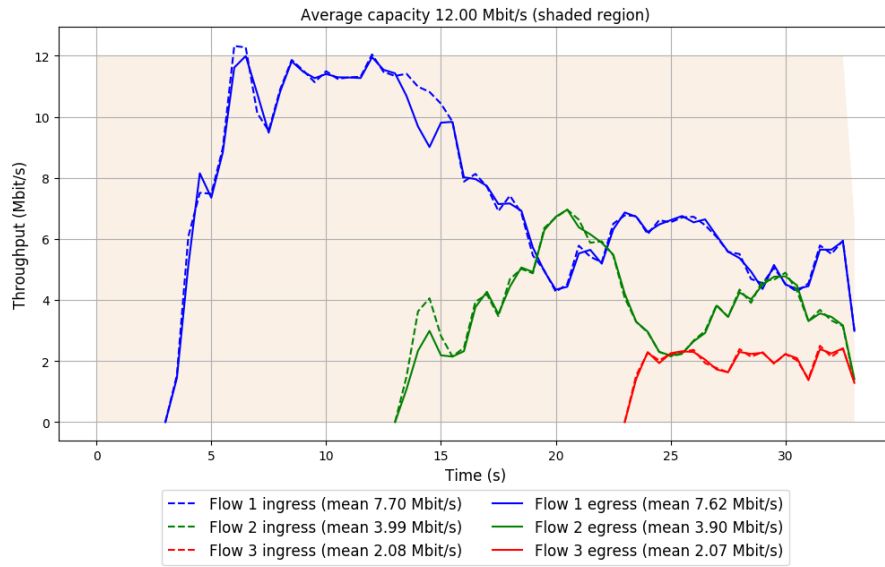
-- Flow 3:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 42.961 ms

Loss rate: 0.35%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-27 18:55:39

End at: 2018-02-27 18:56:09

Below is generated by plot.py at 2018-02-27 19:50:05

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: 50.145 ms

Loss rate: 1.43%

-- Flow 1:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 50.086 ms

Loss rate: 1.20%

-- Flow 2:

Average throughput: 3.56 Mbit/s

95th percentile per-packet one-way delay: 50.285 ms

Loss rate: 2.01%

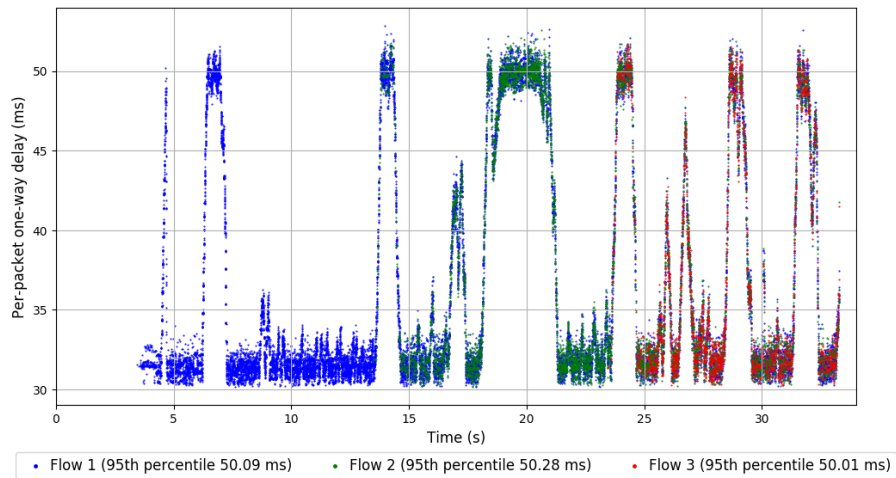
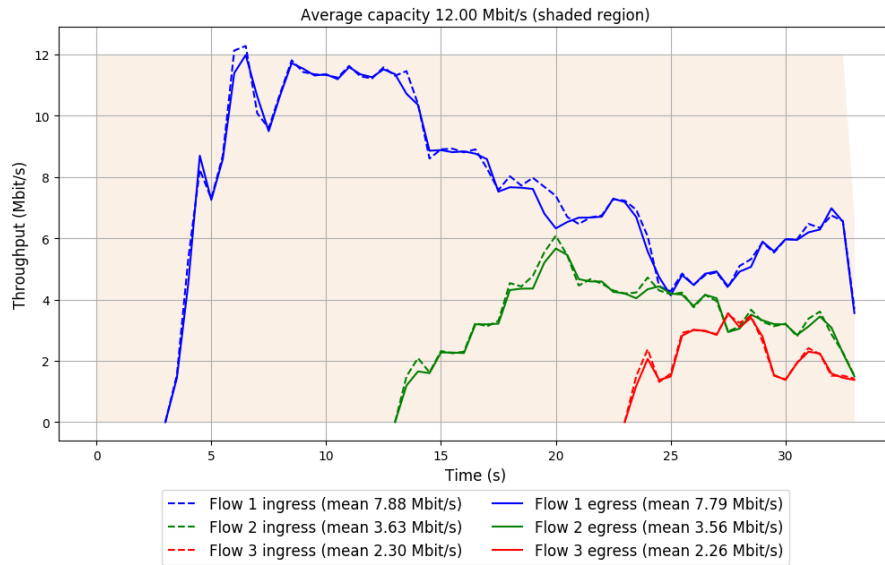
-- Flow 3:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 50.008 ms

Loss rate: 1.97%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-27 19:06:05

End at: 2018-02-27 19:06:35

Below is generated by plot.py at 2018-02-27 19:50:10

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.81 Mbit/s (90.1% utilization)

95th percentile per-packet one-way delay: 50.340 ms

Loss rate: 2.15%

-- Flow 1:

Average throughput: 8.67 Mbit/s

95th percentile per-packet one-way delay: 50.340 ms

Loss rate: 1.62%

-- Flow 2:

Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 50.345 ms

Loss rate: 5.75%

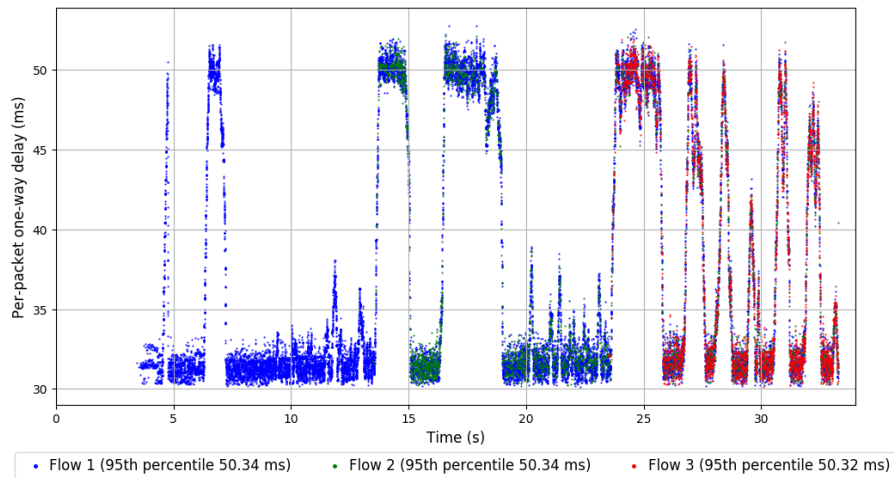
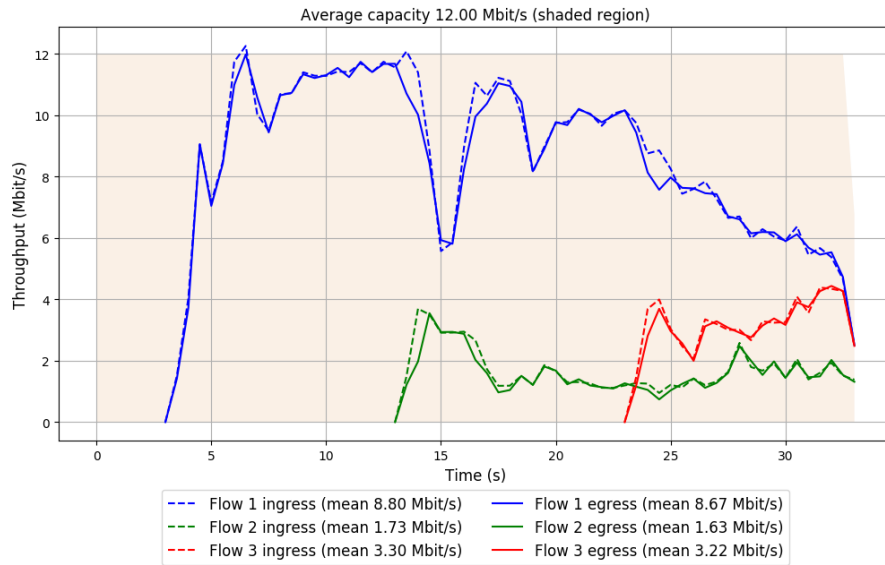
-- Flow 3:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 50.322 ms

Loss rate: 2.62%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-27 19:16:33

End at: 2018-02-27 19:17:03

Below is generated by plot.py at 2018-02-27 19:50:11

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.88 Mbit/s (90.7% utilization)

95th percentile per-packet one-way delay: 49.234 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 7.07 Mbit/s

95th percentile per-packet one-way delay: 49.469 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 3.70 Mbit/s

95th percentile per-packet one-way delay: 48.274 ms

Loss rate: 1.04%

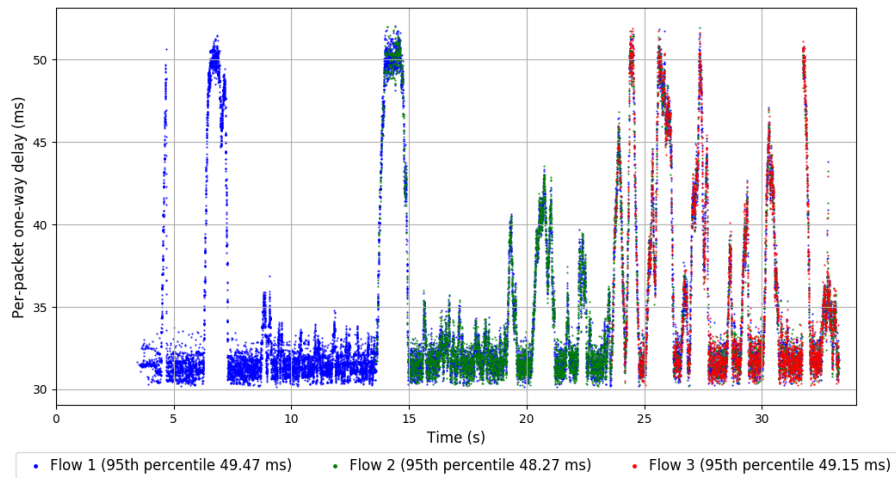
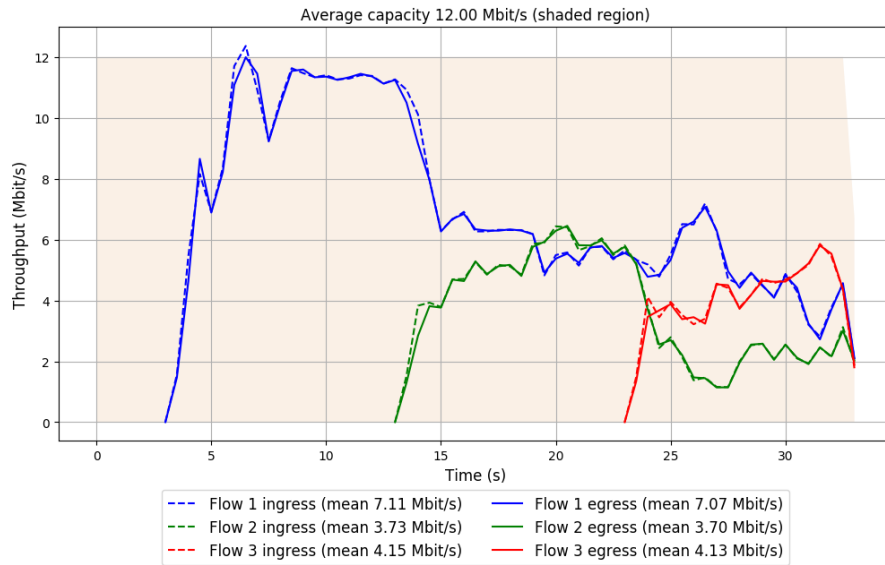
-- Flow 3:

Average throughput: 4.13 Mbit/s

95th percentile per-packet one-way delay: 49.151 ms

Loss rate: 0.70%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-27 19:26:59

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

Below is generated by plot.py at 2018-02-27 19:50:16

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.94 Mbit/s (91.1% utilization)

95th percentile per-packet one-way delay: 50.181 ms

Loss rate: 1.98%

-- Flow 1:

Average throughput: 6.60 Mbit/s

95th percentile per-packet one-way delay: 50.133 ms

Loss rate: 1.38%

-- Flow 2:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 50.264 ms

Loss rate: 2.97%

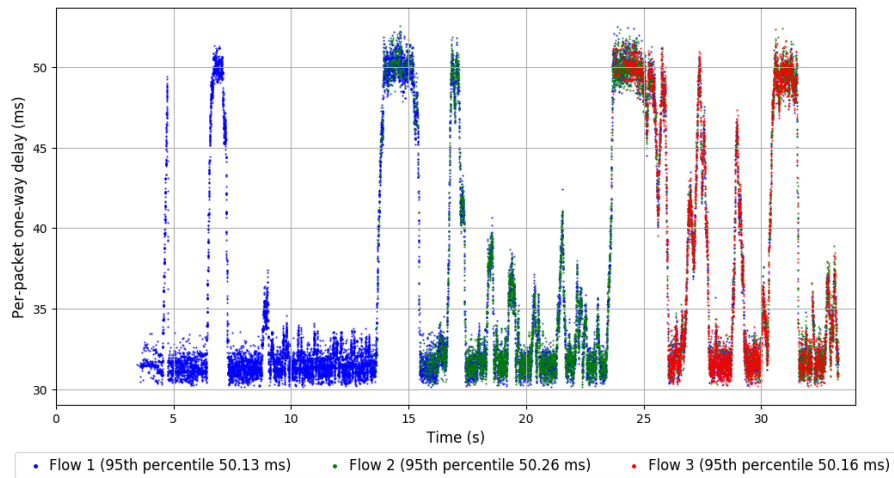
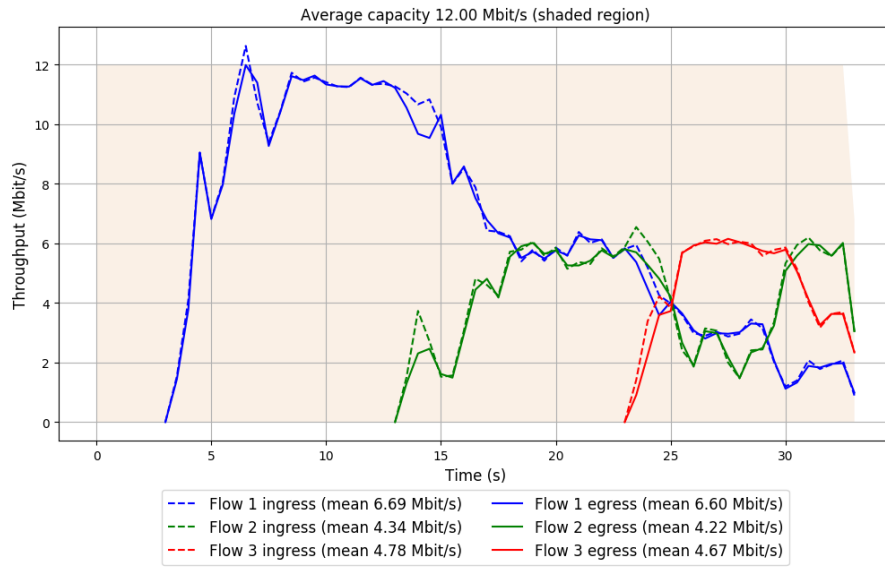
-- Flow 3:

Average throughput: 4.67 Mbit/s

95th percentile per-packet one-way delay: 50.155 ms

Loss rate: 2.69%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

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

End at: 2018-02-27 19:37:57

Below is generated by plot.py at 2018-02-27 19:50:19

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 10.88 Mbit/s (90.7% utilization)

95th percentile per-packet one-way delay: 50.011 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 8.11 Mbit/s

95th percentile per-packet one-way delay: 50.000 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 50.188 ms

Loss rate: 2.64%

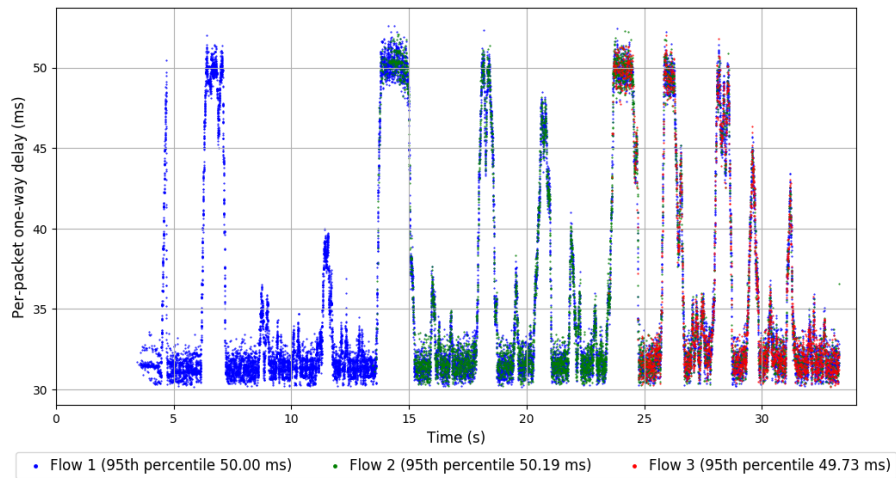
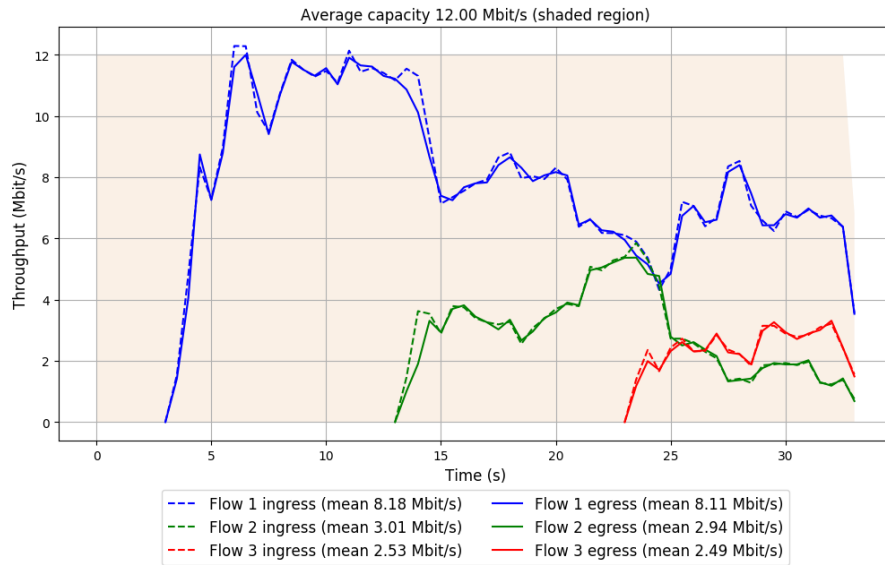
-- Flow 3:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 49.730 ms

Loss rate: 1.63%

Run 10: Report of Vivace-latency — Data Link



Run 1: Statistics of Vivace-loss

Start at: 2018-02-27 18:00:03

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

Below is generated by plot.py at 2018-02-27 19:50:29

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.61 Mbit/s (96.8% utilization)

95th percentile per-packet one-way delay: 50.945 ms

Loss rate: 6.49%

-- Flow 1:

Average throughput: 9.50 Mbit/s

95th percentile per-packet one-way delay: 50.892 ms

Loss rate: 5.31%

-- Flow 2:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 51.091 ms

Loss rate: 12.61%

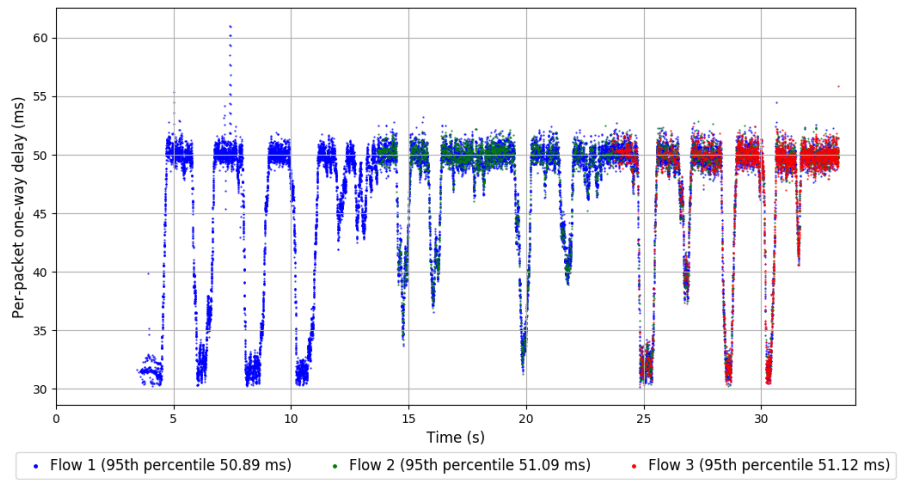
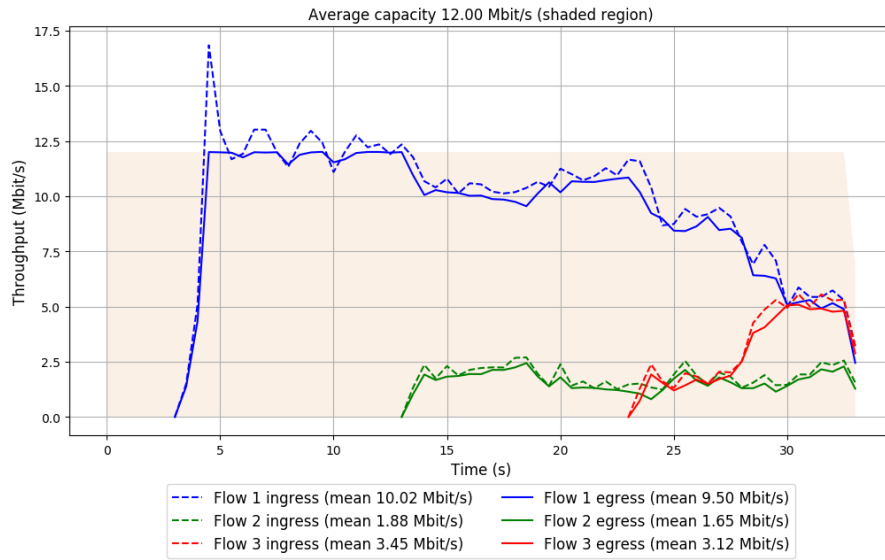
-- Flow 3:

Average throughput: 3.12 Mbit/s

95th percentile per-packet one-way delay: 51.122 ms

Loss rate: 10.07%

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-02-27 18:10:28

End at: 2018-02-27 18:10:58

Below is generated by plot.py at 2018-02-27 19:50:31

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.63 Mbit/s (96.9% utilization)

95th percentile per-packet one-way delay: 50.954 ms

Loss rate: 6.35%

-- Flow 1:

Average throughput: 10.03 Mbit/s

95th percentile per-packet one-way delay: 50.926 ms

Loss rate: 5.18%

-- Flow 2:

Average throughput: 1.60 Mbit/s

95th percentile per-packet one-way delay: 51.039 ms

Loss rate: 14.18%

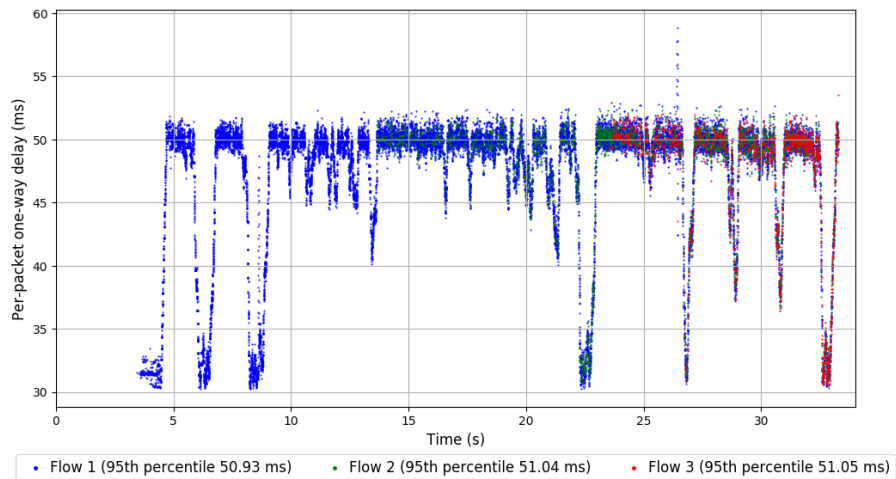
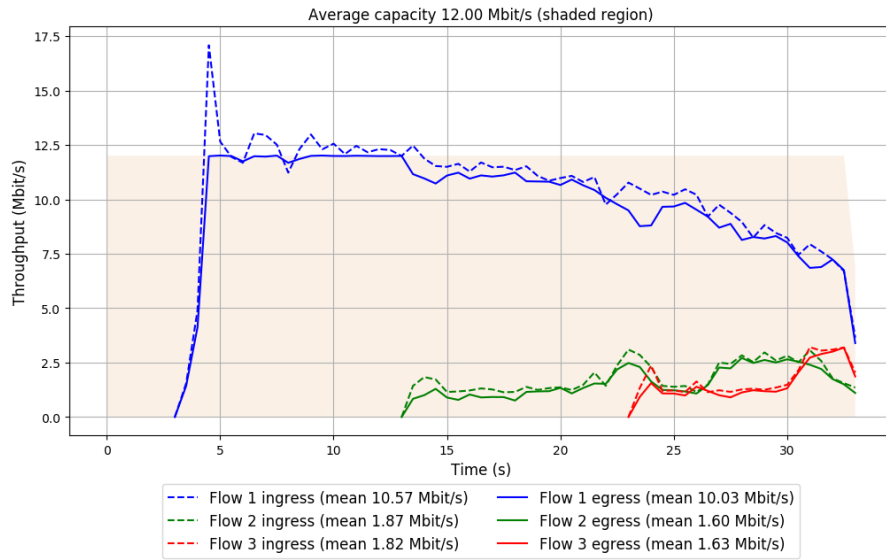
-- Flow 3:

Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 51.048 ms

Loss rate: 10.93%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-27 18:20:53

End at: 2018-02-27 18:21:23

Below is generated by plot.py at 2018-02-27 19:50:31

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.64 Mbit/s (97.0% utilization)

95th percentile per-packet one-way delay: 50.912 ms

Loss rate: 5.75%

-- Flow 1:

Average throughput: 10.07 Mbit/s

95th percentile per-packet one-way delay: 50.868 ms

Loss rate: 4.86%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 51.103 ms

Loss rate: 13.15%

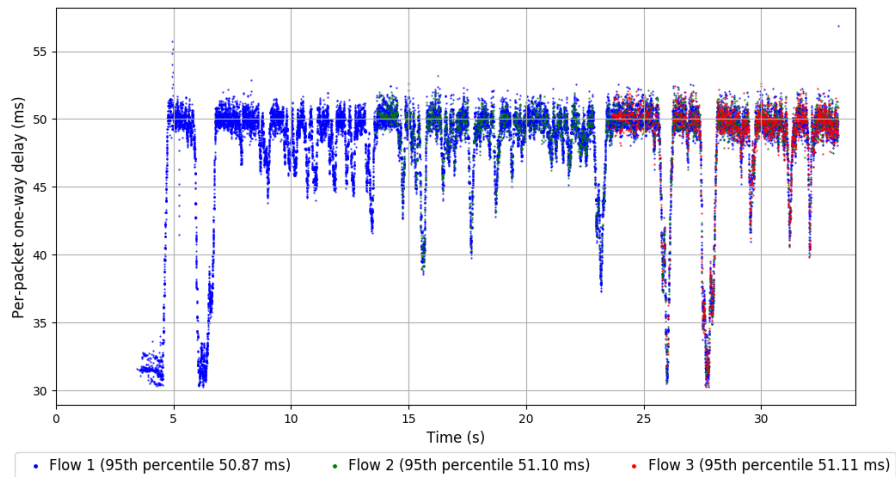
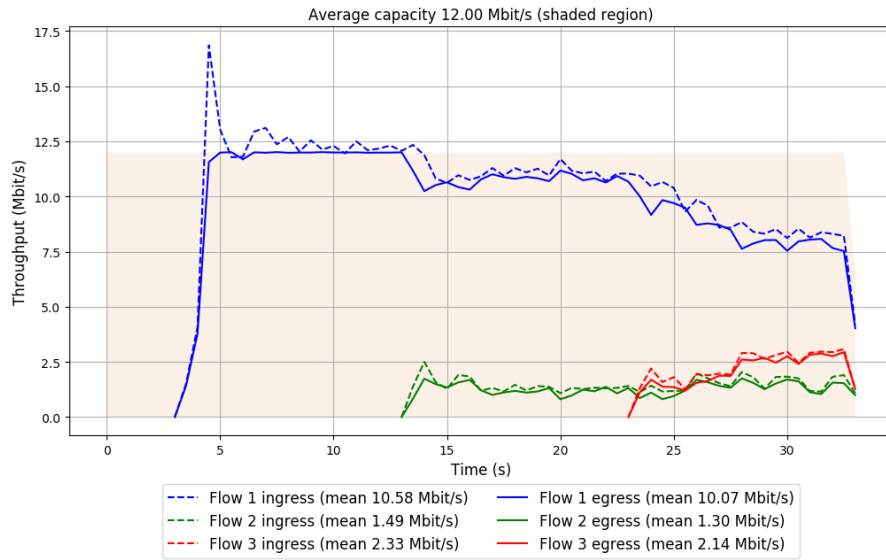
-- Flow 3:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 51.113 ms

Loss rate: 8.54%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-27 18:31:19

End at: 2018-02-27 18:31:49

Below is generated by plot.py at 2018-02-27 19:50:35

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.63 Mbit/s (97.0% utilization)

95th percentile per-packet one-way delay: 50.878 ms

Loss rate: 5.47%

-- Flow 1:

Average throughput: 9.91 Mbit/s

95th percentile per-packet one-way delay: 50.863 ms

Loss rate: 4.47%

-- Flow 2:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 51.026 ms

Loss rate: 13.41%

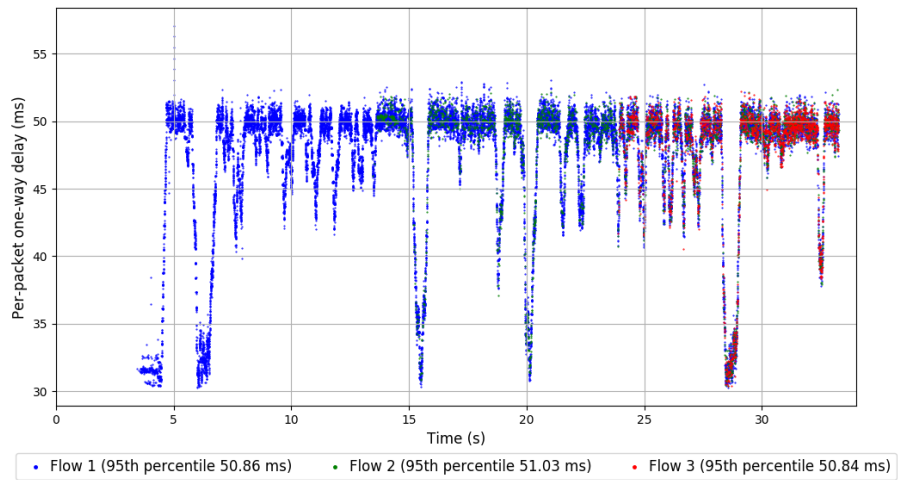
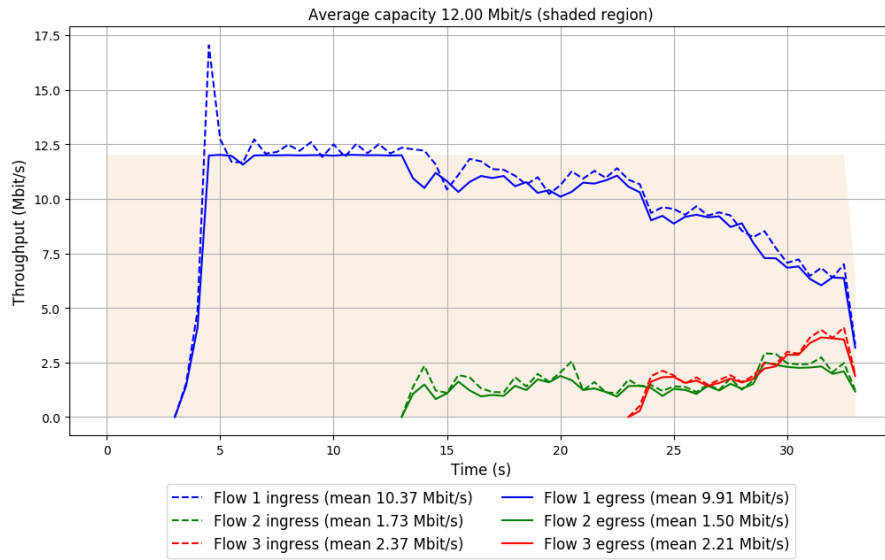
-- Flow 3:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 50.845 ms

Loss rate: 7.02%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-27 18:41:44

End at: 2018-02-27 18:42:14

Below is generated by plot.py at 2018-02-27 19:50:41

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.63 Mbit/s (96.9% utilization)

95th percentile per-packet one-way delay: 50.888 ms

Loss rate: 5.71%

-- Flow 1:

Average throughput: 9.29 Mbit/s

95th percentile per-packet one-way delay: 50.873 ms

Loss rate: 4.77%

-- Flow 2:

Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 50.998 ms

Loss rate: 12.38%

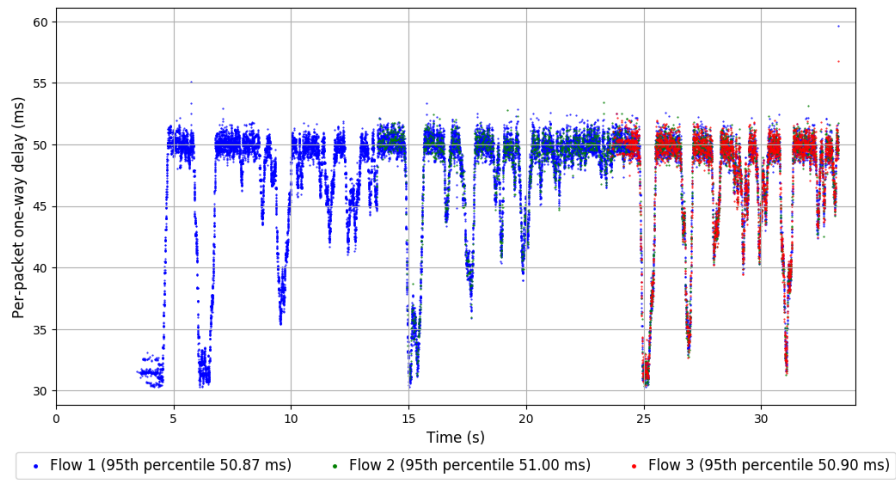
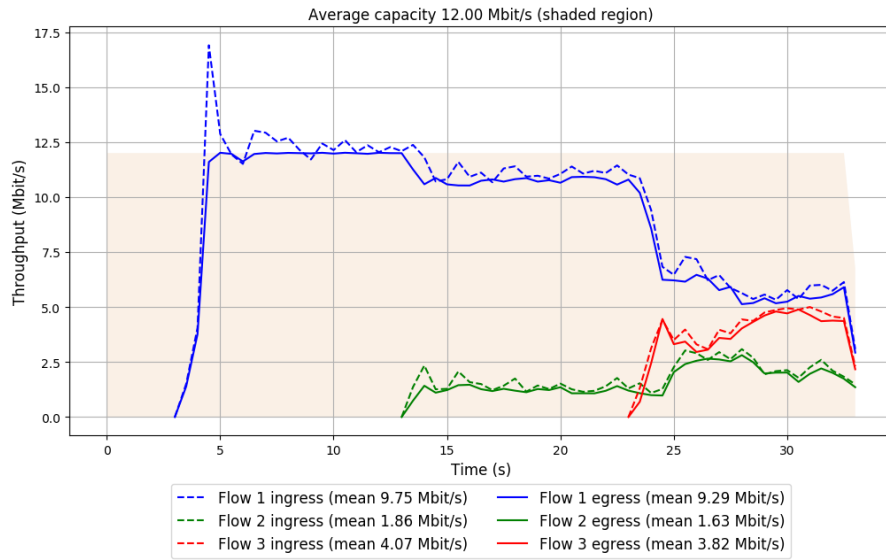
-- Flow 3:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 50.902 ms

Loss rate: 6.43%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-27 18:52:09

End at: 2018-02-27 18:52:39

Below is generated by plot.py at 2018-02-27 19:50:42

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.64 Mbit/s (97.0% utilization)

95th percentile per-packet one-way delay: 50.789 ms

Loss rate: 5.34%

-- Flow 1:

Average throughput: 7.98 Mbit/s

95th percentile per-packet one-way delay: 50.784 ms

Loss rate: 5.14%

-- Flow 2:

Average throughput: 3.76 Mbit/s

95th percentile per-packet one-way delay: 50.842 ms

Loss rate: 5.40%

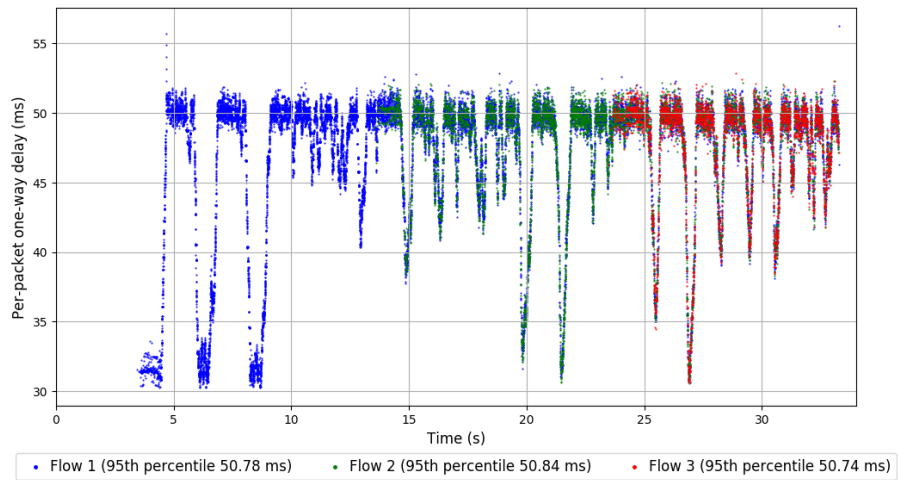
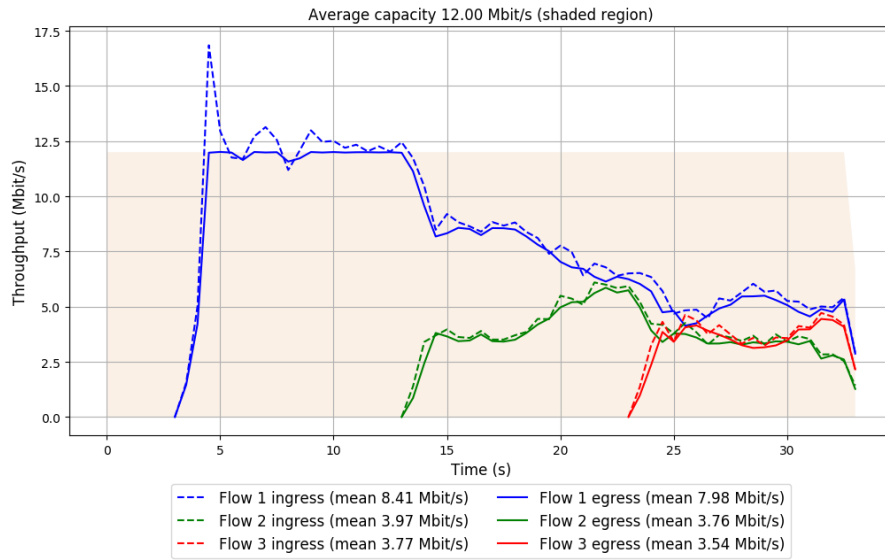
-- Flow 3:

Average throughput: 3.54 Mbit/s

95th percentile per-packet one-way delay: 50.742 ms

Loss rate: 6.54%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

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

End at: 2018-02-27 19:03:05

Below is generated by plot.py at 2018-02-27 19:50:47

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.66 Mbit/s (97.1% utilization)

95th percentile per-packet one-way delay: 50.945 ms

Loss rate: 5.94%

-- Flow 1:

Average throughput: 9.95 Mbit/s

95th percentile per-packet one-way delay: 50.918 ms

Loss rate: 4.70%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 51.117 ms

Loss rate: 15.81%

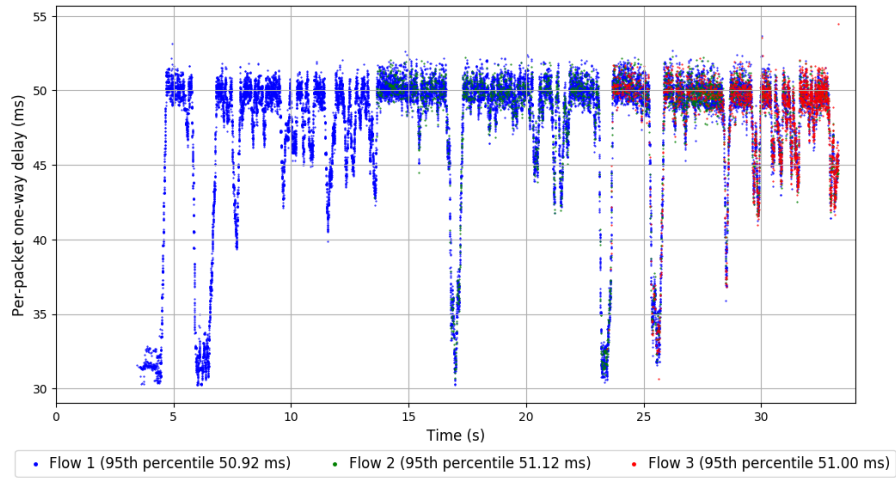
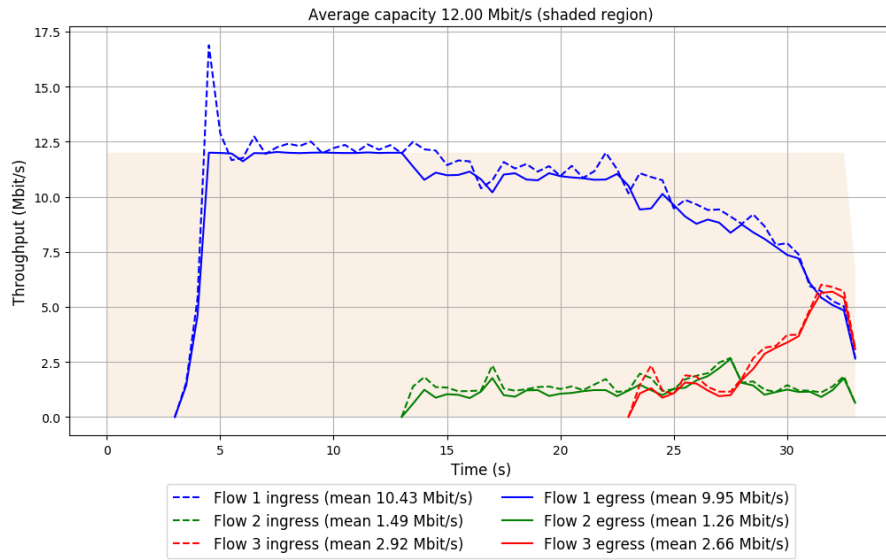
-- Flow 3:

Average throughput: 2.66 Mbit/s

95th percentile per-packet one-way delay: 50.999 ms

Loss rate: 9.18%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

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

End at: 2018-02-27 19:13:34

Below is generated by plot.py at 2018-02-27 19:50:50

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.64 Mbit/s (97.0% utilization)

95th percentile per-packet one-way delay: 50.903 ms

Loss rate: 5.65%

-- Flow 1:

Average throughput: 10.21 Mbit/s

95th percentile per-packet one-way delay: 50.881 ms

Loss rate: 4.63%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 51.054 ms

Loss rate: 14.26%

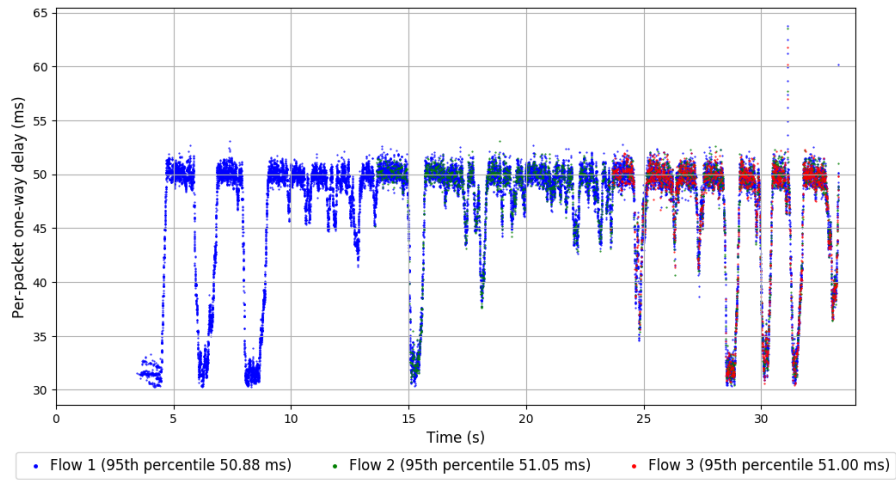
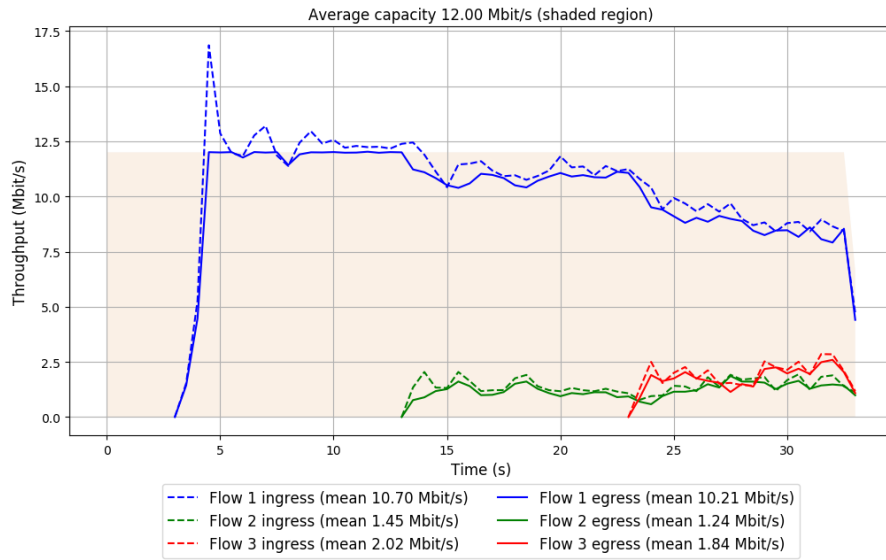
-- Flow 3:

Average throughput: 1.84 Mbit/s

95th percentile per-packet one-way delay: 51.003 ms

Loss rate: 9.57%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-27 19:23:29

End at: 2018-02-27 19:23:59

Below is generated by plot.py at 2018-02-27 19:50:59

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.67 Mbit/s (97.2% utilization)

95th percentile per-packet one-way delay: 50.868 ms

Loss rate: 5.44%

-- Flow 1:

Average throughput: 9.18 Mbit/s

95th percentile per-packet one-way delay: 50.867 ms

Loss rate: 4.90%

-- Flow 2:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.916 ms

Loss rate: 7.75%

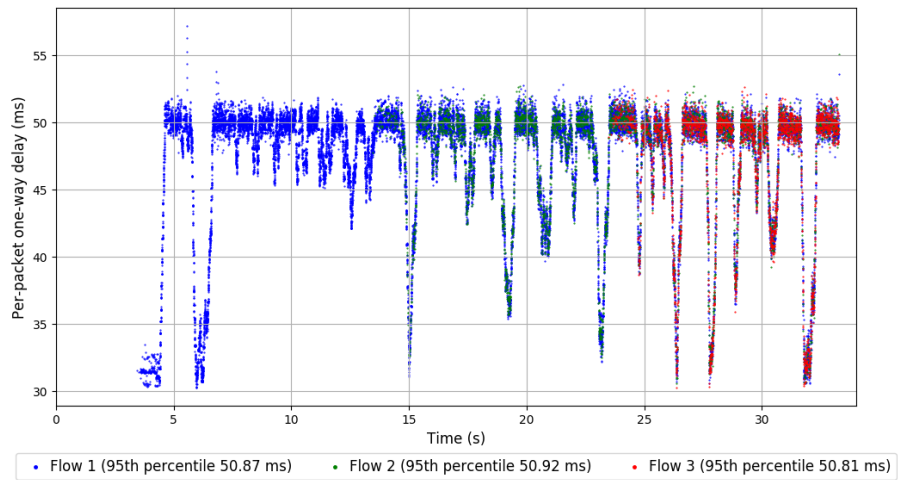
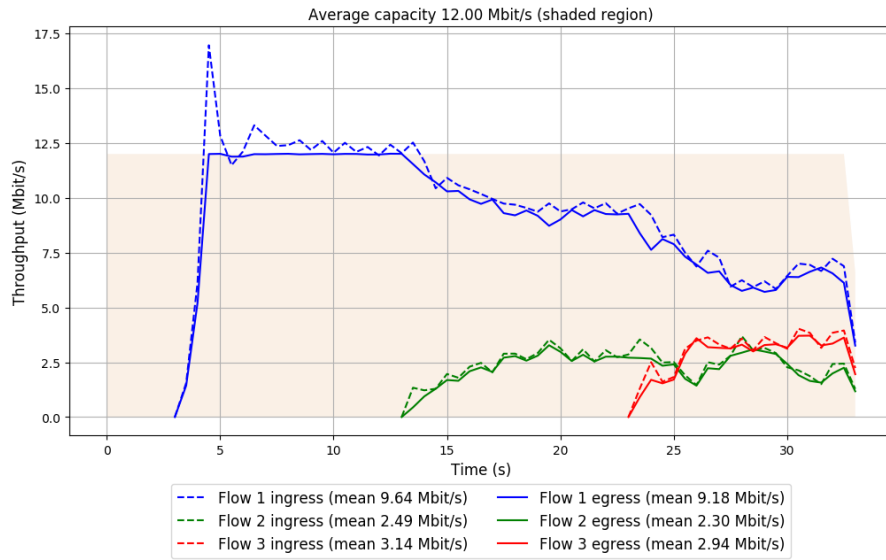
-- Flow 3:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 50.806 ms

Loss rate: 6.82%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-27 19:33:57

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

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

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.63 Mbit/s (96.9% utilization)

95th percentile per-packet one-way delay: 50.955 ms

Loss rate: 6.43%

-- Flow 1:

Average throughput: 8.51 Mbit/s

95th percentile per-packet one-way delay: 50.951 ms

Loss rate: 5.55%

-- Flow 2:

Average throughput: 3.07 Mbit/s

95th percentile per-packet one-way delay: 50.976 ms

Loss rate: 8.68%

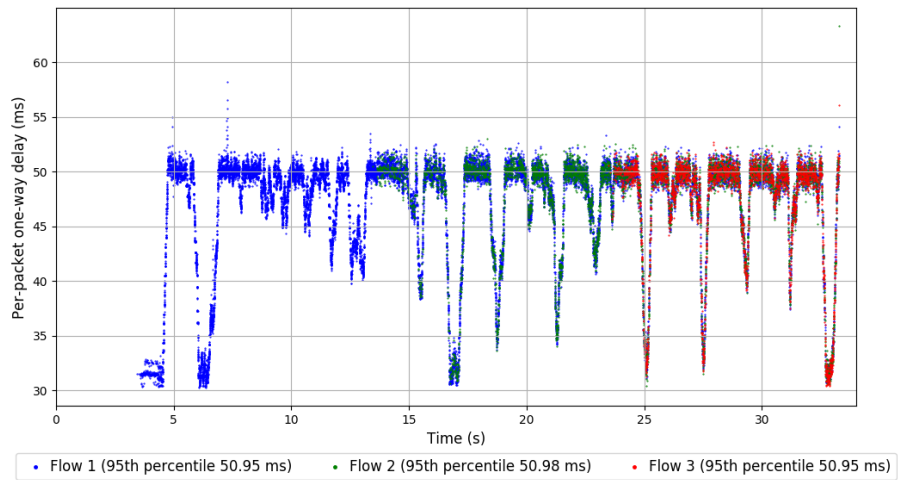
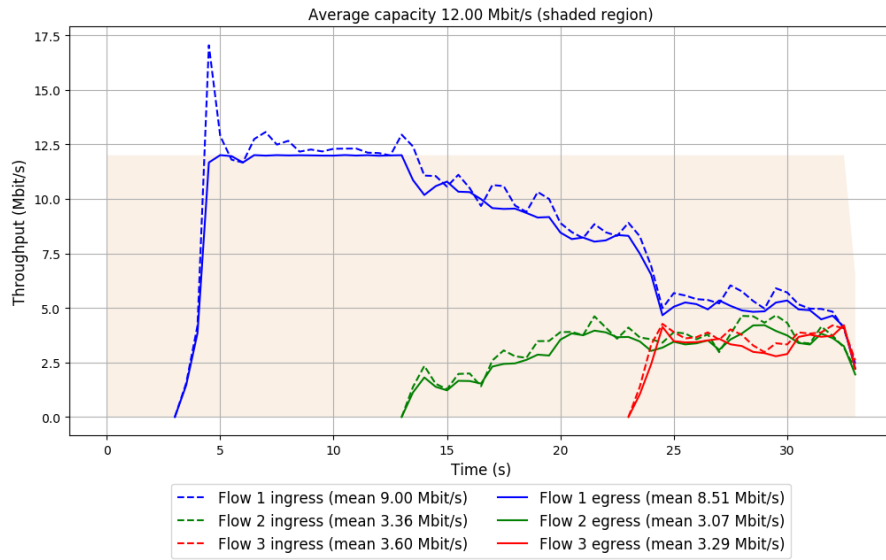
-- Flow 3:

Average throughput: 3.29 Mbit/s

95th percentile per-packet one-way delay: 50.946 ms

Loss rate: 8.87%

Run 10: Report of Vivace-loss — Data Link



Run 1: Statistics of Vivace-LTE

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

End at: 2018-02-27 18:03:28

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

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.46 Mbit/s (95.5% utilization)

95th percentile per-packet one-way delay: 50.404 ms

Loss rate: 3.21%

-- Flow 1:

Average throughput: 6.96 Mbit/s

95th percentile per-packet one-way delay: 50.296 ms

Loss rate: 2.86%

-- Flow 2:

Average throughput: 5.15 Mbit/s

95th percentile per-packet one-way delay: 50.522 ms

Loss rate: 3.40%

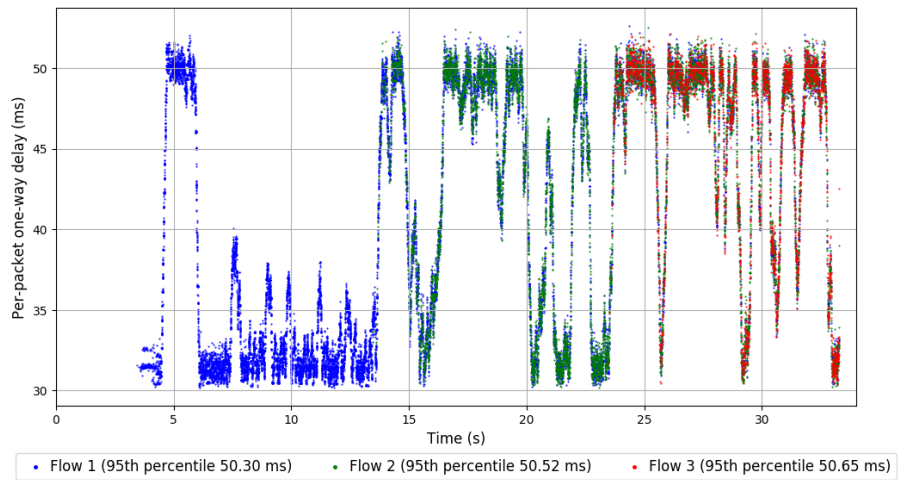
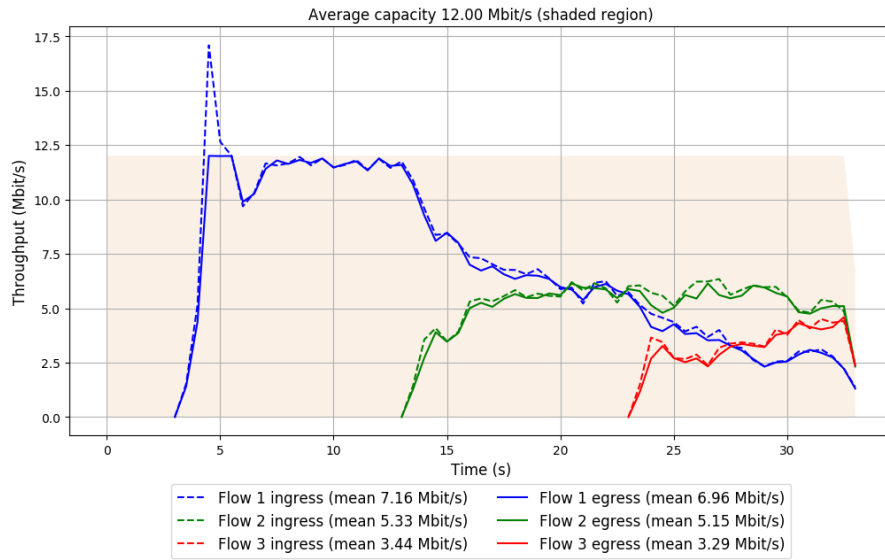
-- Flow 3:

Average throughput: 3.29 Mbit/s

95th percentile per-packet one-way delay: 50.653 ms

Loss rate: 4.75%

Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-27 18:13:23

End at: 2018-02-27 18:13:53

Below is generated by plot.py at 2018-02-27 19:51:05

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.43 Mbit/s (95.3% utilization)

95th percentile per-packet one-way delay: 50.506 ms

Loss rate: 3.04%

-- Flow 1:

Average throughput: 7.80 Mbit/s

95th percentile per-packet one-way delay: 50.476 ms

Loss rate: 2.76%

-- Flow 2:

Average throughput: 4.05 Mbit/s

95th percentile per-packet one-way delay: 50.546 ms

Loss rate: 3.24%

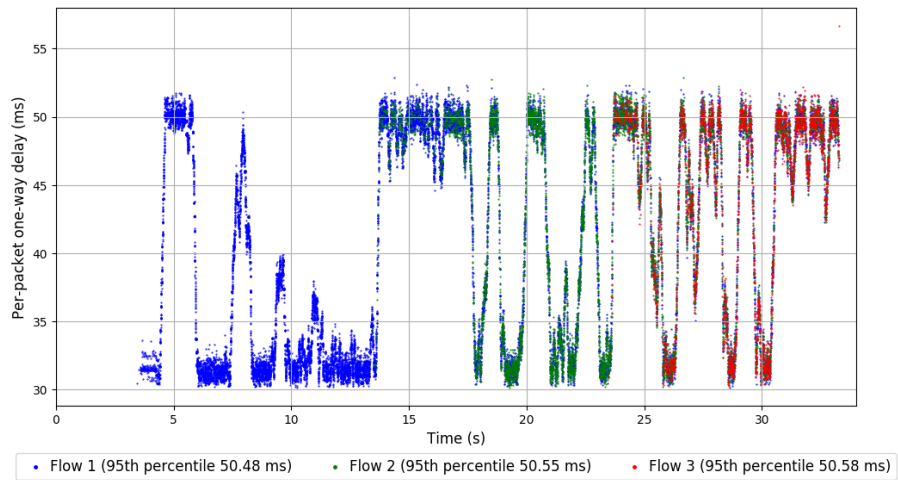
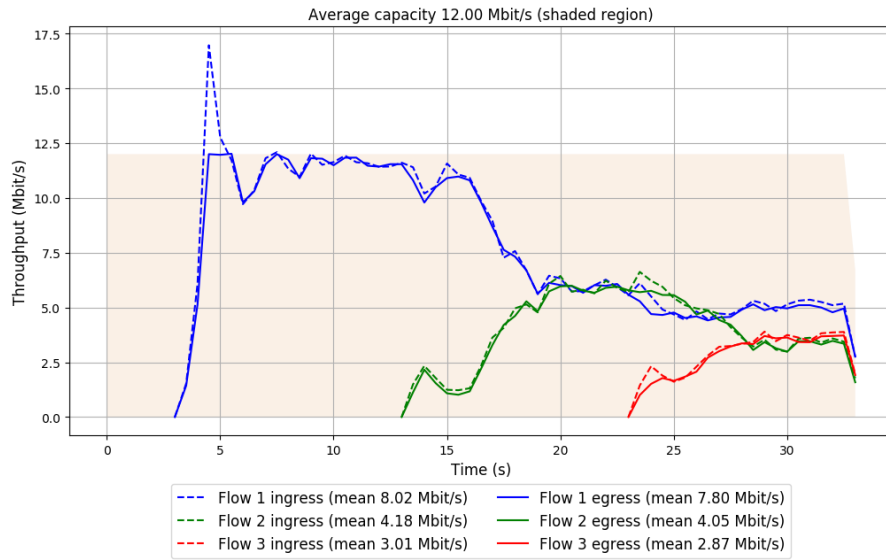
-- Flow 3:

Average throughput: 2.87 Mbit/s

95th percentile per-packet one-way delay: 50.584 ms

Loss rate: 4.81%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-27 18:23:48

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

Below is generated by plot.py at 2018-02-27 19:51:12

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.43 Mbit/s (95.2% utilization)

95th percentile per-packet one-way delay: 50.575 ms

Loss rate: 3.46%

-- Flow 1:

Average throughput: 7.80 Mbit/s

95th percentile per-packet one-way delay: 50.535 ms

Loss rate: 3.21%

-- Flow 2:

Average throughput: 3.69 Mbit/s

95th percentile per-packet one-way delay: 50.672 ms

Loss rate: 4.32%

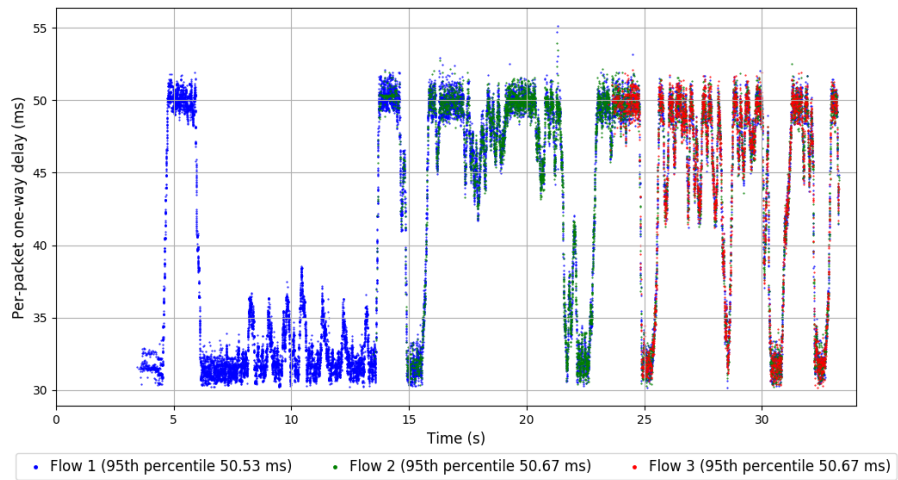
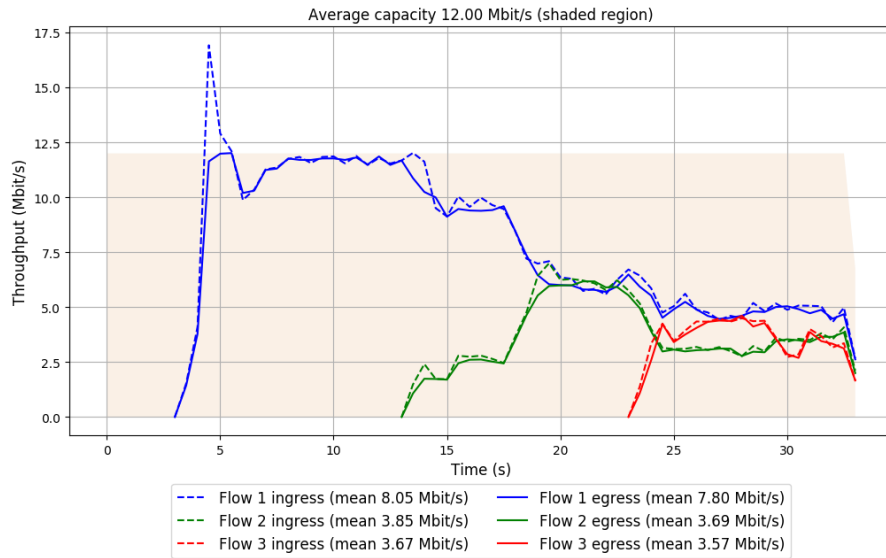
-- Flow 3:

Average throughput: 3.57 Mbit/s

95th percentile per-packet one-way delay: 50.671 ms

Loss rate: 3.37%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-27 18:34:14

End at: 2018-02-27 18:34:44

Below is generated by plot.py at 2018-02-27 19:51:13

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.47 Mbit/s (95.6% utilization)

95th percentile per-packet one-way delay: 50.525 ms

Loss rate: 3.09%

-- Flow 1:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 50.505 ms

Loss rate: 2.64%

-- Flow 2:

Average throughput: 4.58 Mbit/s

95th percentile per-packet one-way delay: 50.571 ms

Loss rate: 3.67%

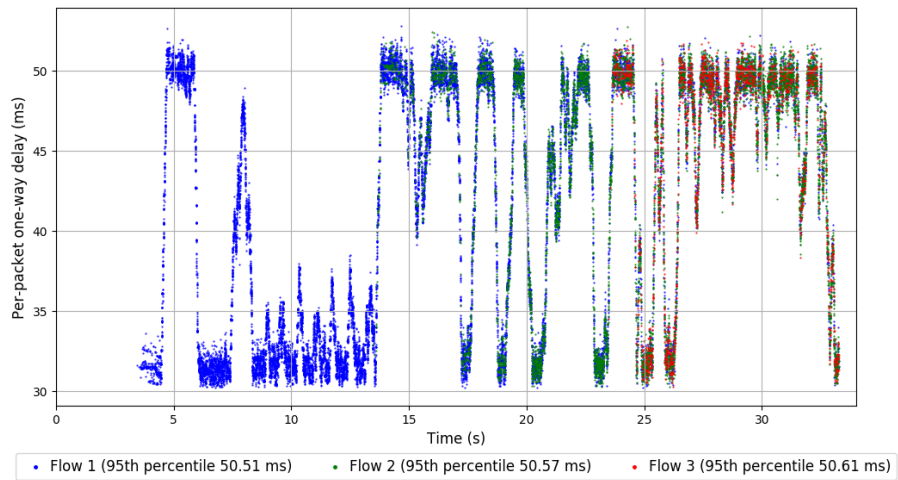
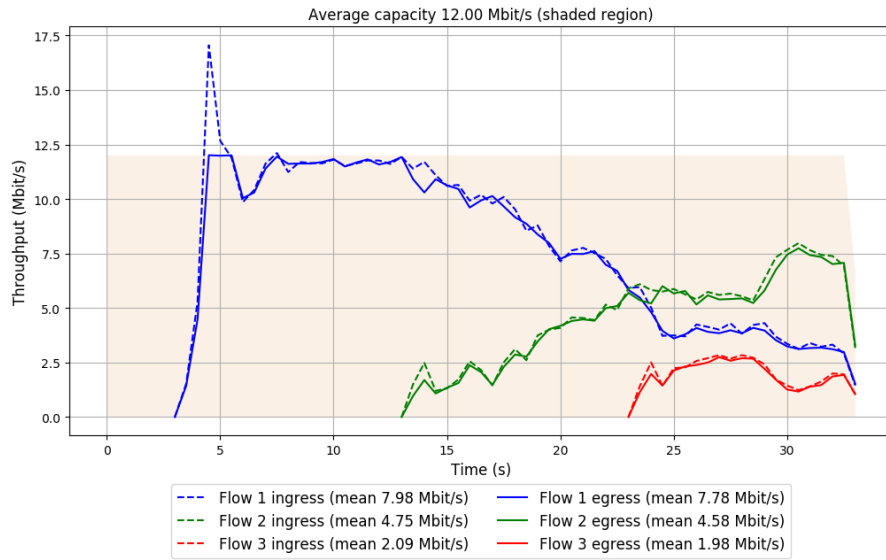
-- Flow 3:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 50.611 ms

Loss rate: 5.77%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-27 18:44:39

End at: 2018-02-27 18:45:09

Below is generated by plot.py at 2018-02-27 19:51:17

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.44 Mbit/s (95.4% utilization)

95th percentile per-packet one-way delay: 50.588 ms

Loss rate: 3.94%

-- Flow 1:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 50.501 ms

Loss rate: 3.43%

-- Flow 2:

Average throughput: 4.44 Mbit/s

95th percentile per-packet one-way delay: 50.716 ms

Loss rate: 4.46%

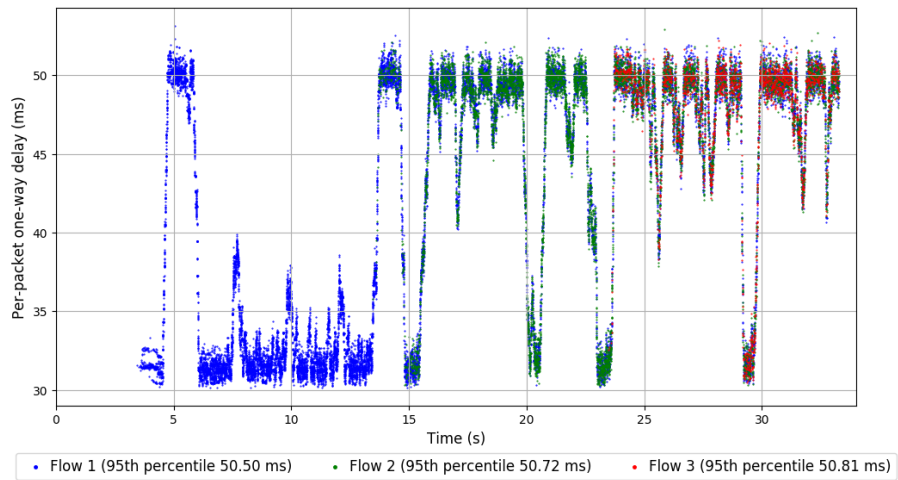
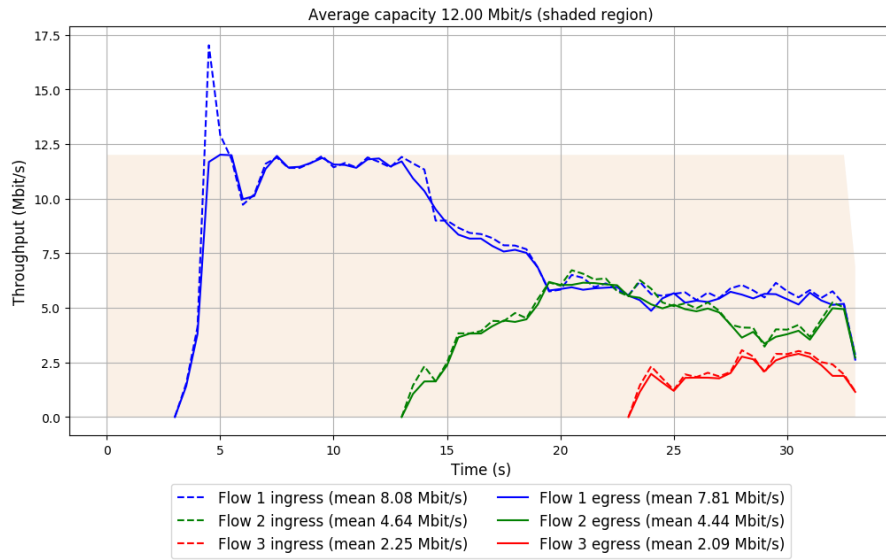
-- Flow 3:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 50.815 ms

Loss rate: 7.33%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-27 18:55:04

End at: 2018-02-27 18:55:34

Below is generated by plot.py at 2018-02-27 19:51:20

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.40 Mbit/s (95.0% utilization)

95th percentile per-packet one-way delay: 50.466 ms

Loss rate: 2.90%

-- Flow 1:

Average throughput: 7.56 Mbit/s

95th percentile per-packet one-way delay: 50.415 ms

Loss rate: 2.68%

-- Flow 2:

Average throughput: 4.30 Mbit/s

95th percentile per-packet one-way delay: 50.513 ms

Loss rate: 2.91%

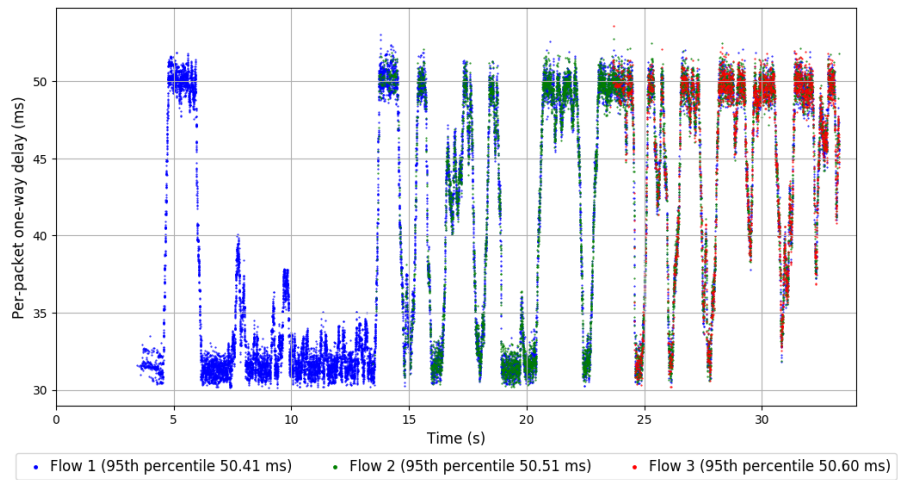
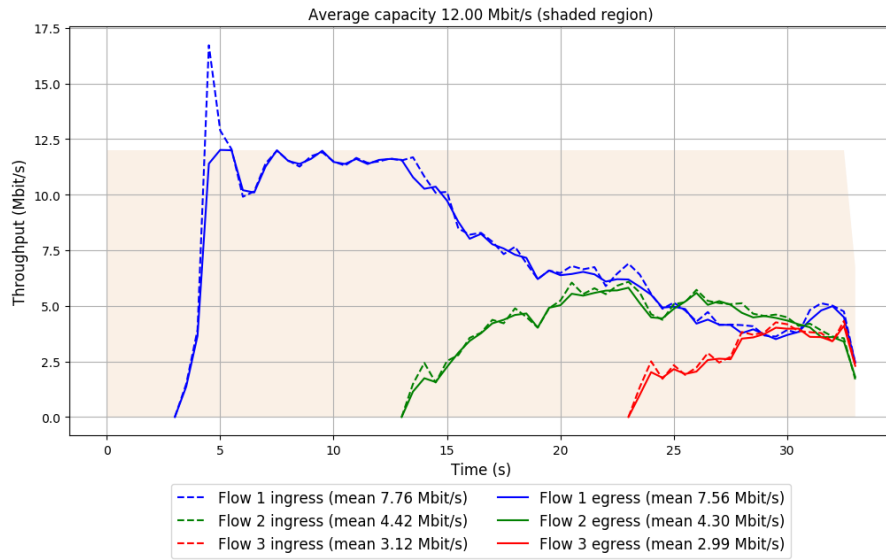
-- Flow 3:

Average throughput: 2.99 Mbit/s

95th percentile per-packet one-way delay: 50.602 ms

Loss rate: 4.61%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-27 19:05:30

End at: 2018-02-27 19:06:00

Below is generated by plot.py at 2018-02-27 19:51:24

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.45 Mbit/s (95.4% utilization)

95th percentile per-packet one-way delay: 50.581 ms

Loss rate: 3.83%

-- Flow 1:

Average throughput: 7.61 Mbit/s

95th percentile per-packet one-way delay: 50.572 ms

Loss rate: 3.47%

-- Flow 2:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 50.650 ms

Loss rate: 4.65%

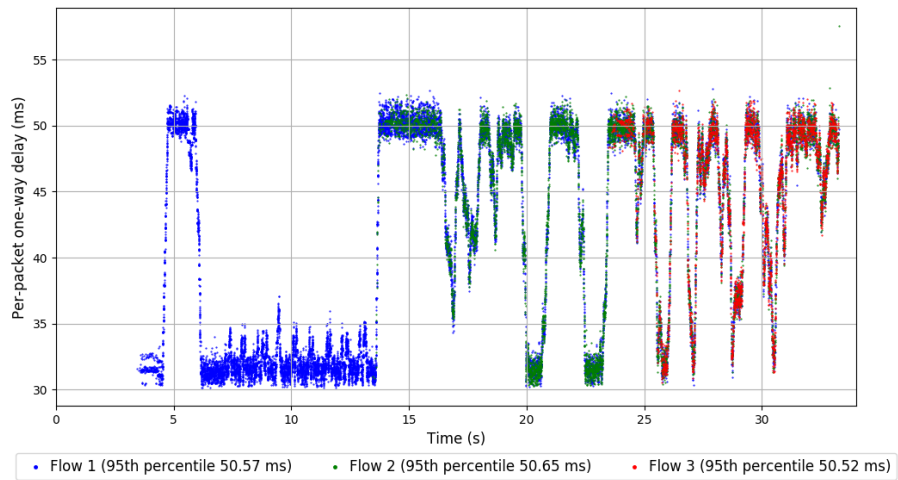
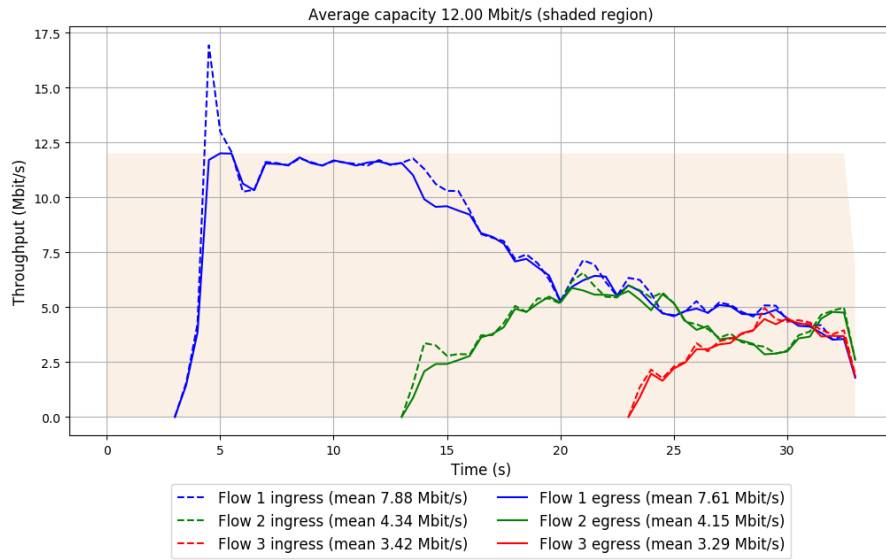
-- Flow 3:

Average throughput: 3.29 Mbit/s

95th percentile per-packet one-way delay: 50.522 ms

Loss rate: 4.28%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-27 19:15:58

End at: 2018-02-27 19:16:28

Below is generated by plot.py at 2018-02-27 19:51:25

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.51 Mbit/s (95.9% utilization)

95th percentile per-packet one-way delay: 50.405 ms

Loss rate: 2.39%

-- Flow 1:

Average throughput: 7.65 Mbit/s

95th percentile per-packet one-way delay: 50.358 ms

Loss rate: 2.37%

-- Flow 2:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 50.471 ms

Loss rate: 2.32%

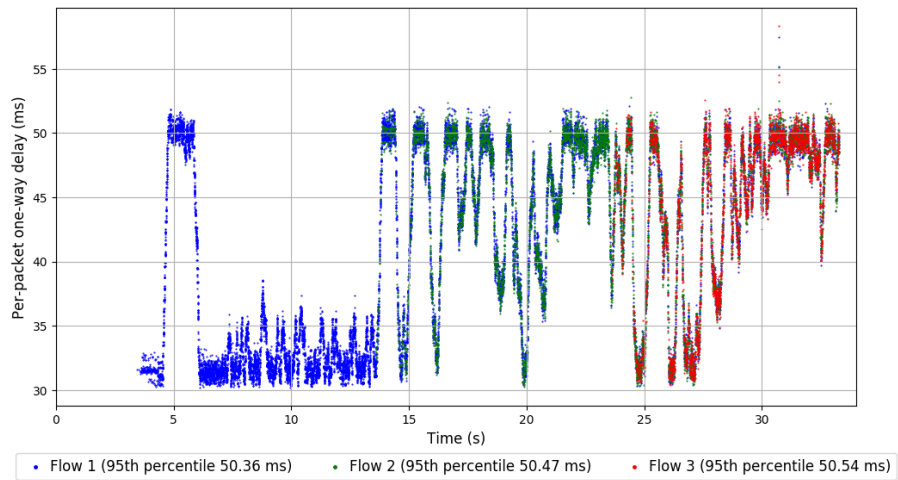
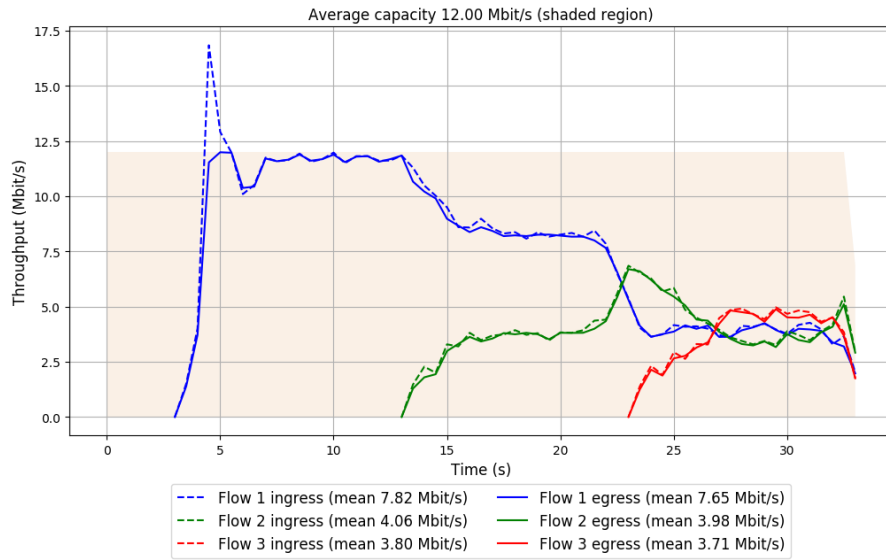
-- Flow 3:

Average throughput: 3.71 Mbit/s

95th percentile per-packet one-way delay: 50.541 ms

Loss rate: 2.65%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-27 19:26:24

End at: 2018-02-27 19:26:54

Below is generated by plot.py at 2018-02-27 19:51:26

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.43 Mbit/s (95.3% utilization)

95th percentile per-packet one-way delay: 50.440 ms

Loss rate: 3.09%

-- Flow 1:

Average throughput: 7.65 Mbit/s

95th percentile per-packet one-way delay: 50.403 ms

Loss rate: 2.95%

-- Flow 2:

Average throughput: 4.03 Mbit/s

95th percentile per-packet one-way delay: 50.462 ms

Loss rate: 3.20%

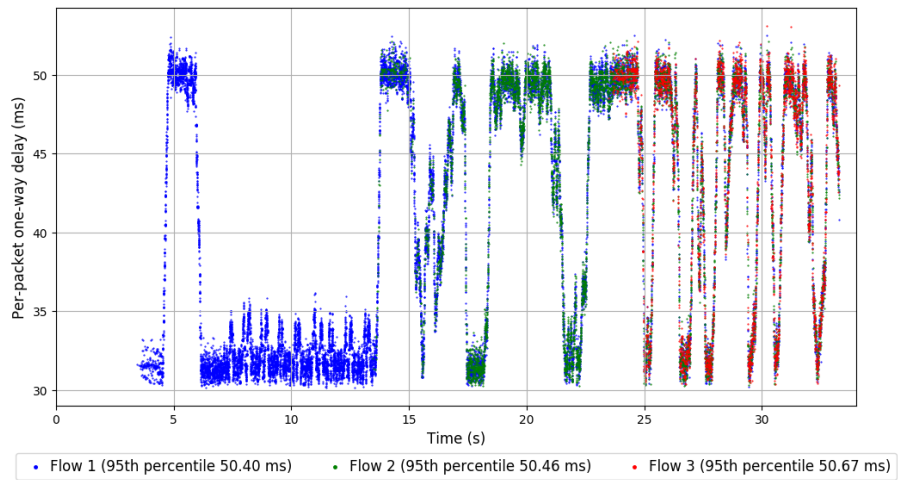
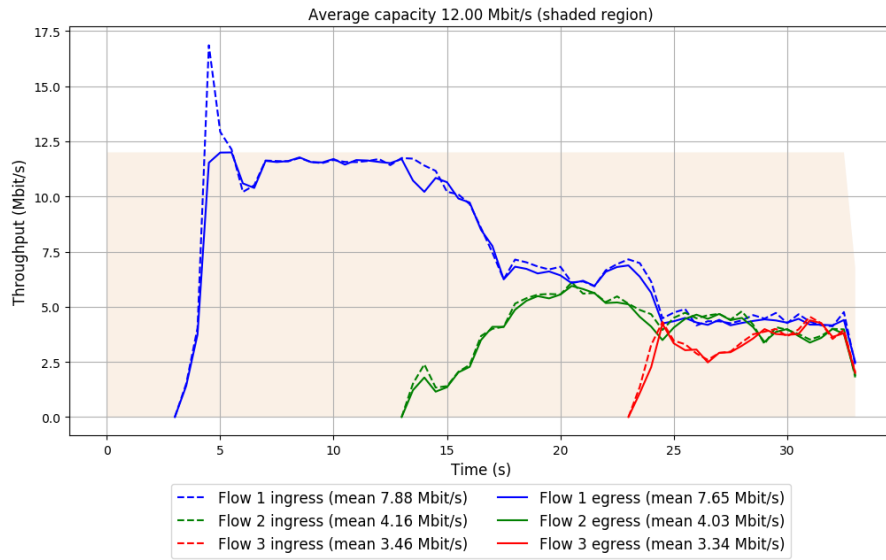
-- Flow 3:

Average throughput: 3.34 Mbit/s

95th percentile per-packet one-way delay: 50.675 ms

Loss rate: 3.79%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-02-27 19:36:52

End at: 2018-02-27 19:37:22

Below is generated by plot.py at 2018-02-27 19:51:26

Datalink statistics

-- Total of 3 flows:

Average capacity: 12.00 Mbit/s

Average throughput: 11.45 Mbit/s (95.4% utilization)

95th percentile per-packet one-way delay: 50.404 ms

Loss rate: 2.95%

-- Flow 1:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 50.345 ms

Loss rate: 2.64%

-- Flow 2:

Average throughput: 3.74 Mbit/s

95th percentile per-packet one-way delay: 50.450 ms

Loss rate: 3.38%

-- Flow 3:

Average throughput: 3.08 Mbit/s

95th percentile per-packet one-way delay: 50.579 ms

Loss rate: 4.34%

Run 10: Report of Vivace-LTE — Data Link

