

Pantheon Report

Generated at 2018-01-31 16:10:42 (UTC).

Data path: GCE Iowa Ethernet (*local*) → GCE Sydney Ethernet (*remote*).

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.

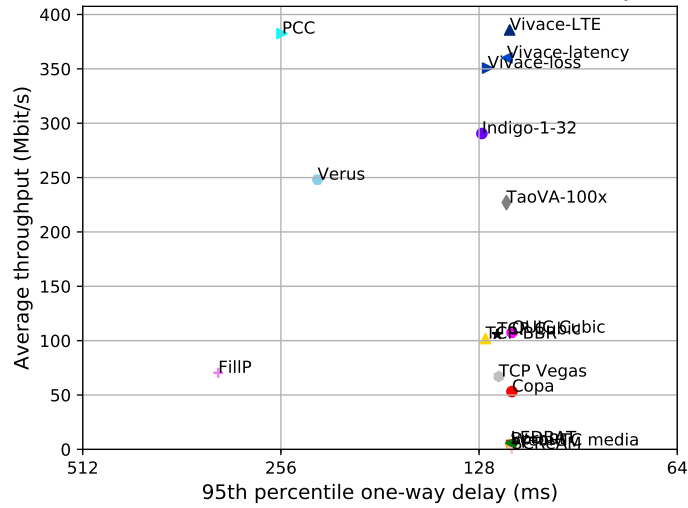
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

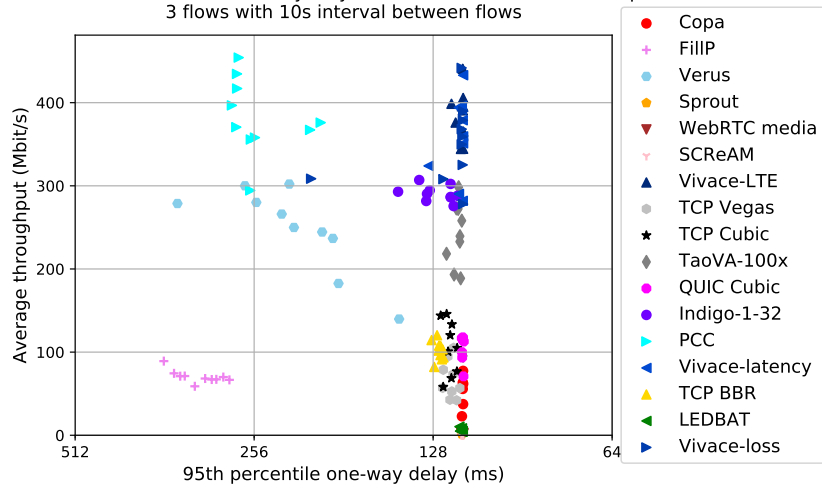
Git summary:

```
branch: master @ 70217998b3c9a7166a95460a70c0854d1326e100
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ fb9c9ab842e5614ad52911a76fb9bd1c1b0dca86
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
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
```

test from GCE Iowa Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE Iowa Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme
 3 flows with 10s interval between flows



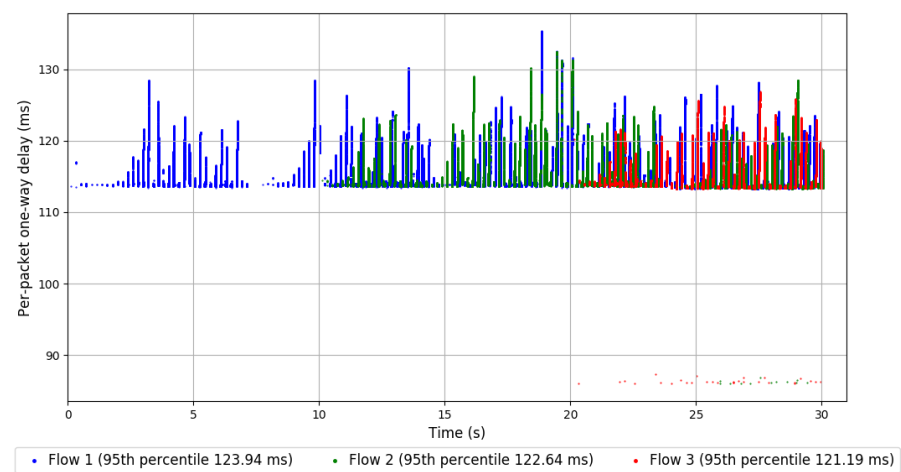
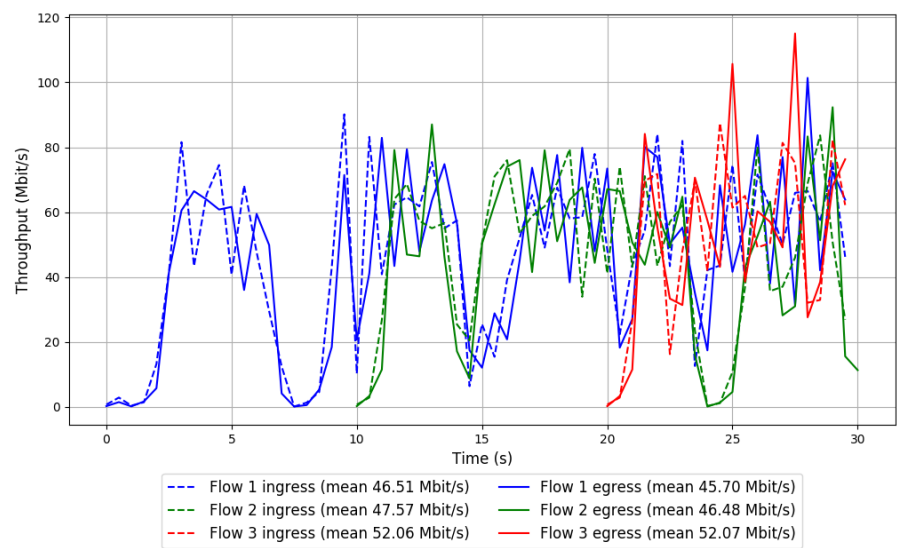
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	48.94	52.52	55.08	124.20	124.98	127.72	0.69	1.06	0.54
TCP Cubic	9	55.67	49.48	51.95	119.08	120.28	119.11	0.24	0.64	0.10
LEDBAT	10	3.40	3.06	1.23	114.66	114.64	114.45	1.13	0.57	0.85
PCC	10	321.53	83.51	16.58	254.46	245.40	225.78	1.60	1.20	1.18
QUIC Cubic	10	51.80	58.25	52.33	114.13	113.96	114.95	0.00	0.00	0.00
SCReAM	10	0.21	0.22	0.22	114.12	114.13	111.29	0.00	0.00	0.00
WebRTC media	10	1.98	1.21	0.44	108.67	114.19	114.10	0.00	0.00	0.01
Sprout	5	2.29	2.46	1.82	114.69	114.66	115.00	0.36	0.36	1.02
TaoVA-100x	10	133.97	99.80	97.20	114.85	117.96	120.40	0.05	0.11	0.01
TCP Vegas	9	27.82	32.96	52.08	117.76	119.04	120.25	0.84	0.72	0.57
Verus	10	178.33	72.30	66.68	219.38	211.19	230.87	1.41	0.89	2.40
Copa	6	18.76	33.53	32.15	982.26	114.09	113.99	0.00	0.00	0.00
FillP	10	24.24	34.76	69.70	316.47	300.55	305.95	3.22	4.98	4.25
Indigo-1-32	10	159.71	141.18	116.24	123.73	127.31	132.65	0.02	0.01	0.04
Vivace-latency	10	202.07	183.00	110.53	114.60	123.10	112.23	0.00	0.12	0.00
Vivace-loss	10	203.38	145.54	154.09	122.72	117.85	123.31	0.00	0.00	0.00
Vivace-LTE	10	209.01	192.90	147.20	115.95	108.45	115.14	0.02	0.00	0.05

```
Run 1: Statistics of TCP BBR

Start at: 2018-01-31 10:27:50
End at: 2018-01-31 10:28:20

# Below is generated by plot.py at 2018-01-31 14:55:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.59 Mbit/s
95th percentile per-packet one-way delay: 123.011 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 45.70 Mbit/s
95th percentile per-packet one-way delay: 123.945 ms
Loss rate: 1.71%
-- Flow 2:
Average throughput: 46.48 Mbit/s
95th percentile per-packet one-way delay: 122.635 ms
Loss rate: 2.27%
-- Flow 3:
Average throughput: 52.07 Mbit/s
95th percentile per-packet one-way delay: 121.192 ms
Loss rate: 0.00%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-31 10:45:01

End at: 2018-01-31 10:45:32

Below is generated by plot.py at 2018-01-31 14:56:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.20 Mbit/s

95th percentile per-packet one-way delay: 124.301 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 54.77 Mbit/s

95th percentile per-packet one-way delay: 124.705 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.47 Mbit/s

95th percentile per-packet one-way delay: 122.832 ms

Loss rate: 0.00%

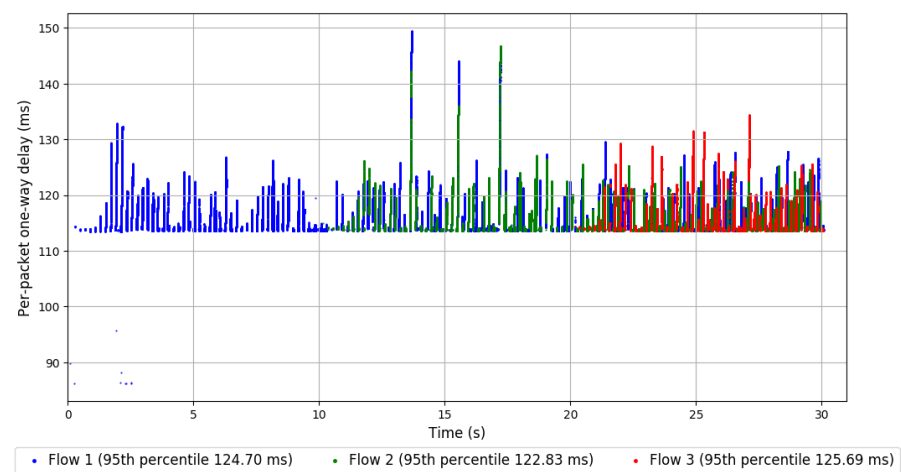
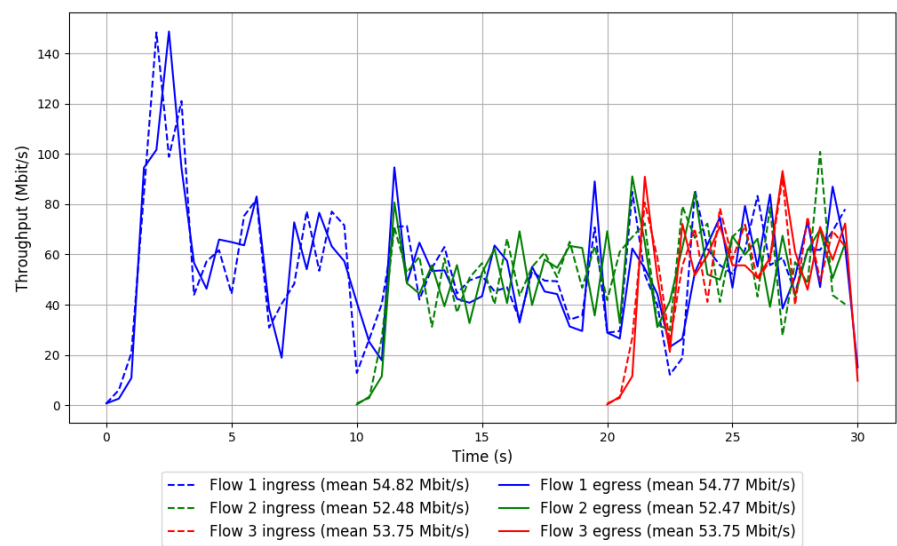
-- Flow 3:

Average throughput: 53.75 Mbit/s

95th percentile per-packet one-way delay: 125.695 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-31 11:02:17

End at: 2018-01-31 11:02:47

Below is generated by plot.py at 2018-01-31 14:56:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.83 Mbit/s

95th percentile per-packet one-way delay: 125.086 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 50.58 Mbit/s

95th percentile per-packet one-way delay: 124.393 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 59.28 Mbit/s

95th percentile per-packet one-way delay: 124.610 ms

Loss rate: 0.00%

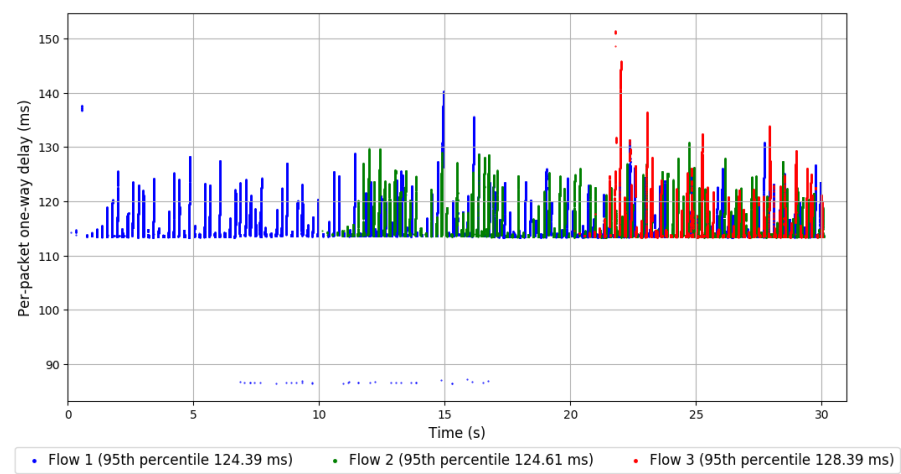
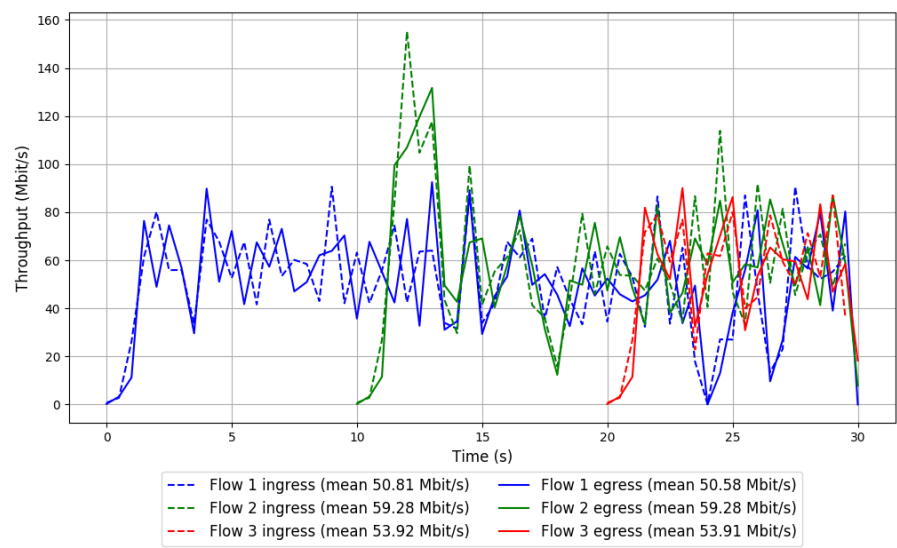
-- Flow 3:

Average throughput: 53.91 Mbit/s

95th percentile per-packet one-way delay: 128.391 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-31 11:19:45

End at: 2018-01-31 11:20:15

Below is generated by plot.py at 2018-01-31 14:56:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.43 Mbit/s

95th percentile per-packet one-way delay: 124.395 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 42.71 Mbit/s

95th percentile per-packet one-way delay: 122.596 ms

Loss rate: 2.17%

-- Flow 2:

Average throughput: 54.87 Mbit/s

95th percentile per-packet one-way delay: 124.410 ms

Loss rate: 0.03%

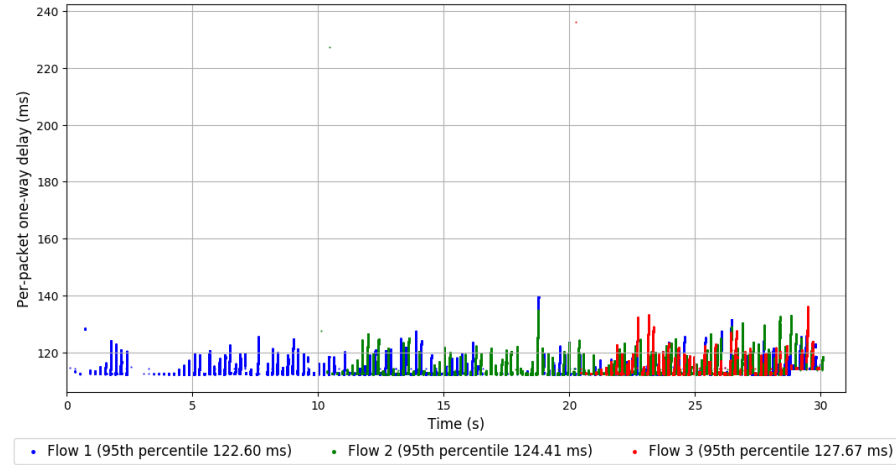
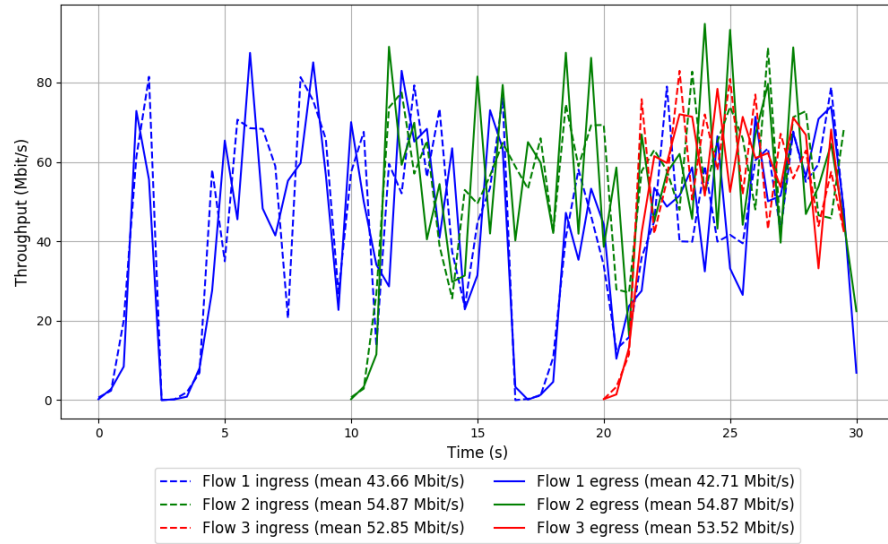
-- Flow 3:

Average throughput: 53.52 Mbit/s

95th percentile per-packet one-way delay: 127.675 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-31 11:37:13

End at: 2018-01-31 11:37:43

Below is generated by plot.py at 2018-01-31 14:56:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.20 Mbit/s

95th percentile per-packet one-way delay: 127.437 ms

Loss rate: 2.90%

-- Flow 1:

Average throughput: 38.72 Mbit/s

95th percentile per-packet one-way delay: 125.338 ms

Loss rate: 2.20%

-- Flow 2:

Average throughput: 42.12 Mbit/s

95th percentile per-packet one-way delay: 128.341 ms

Loss rate: 3.80%

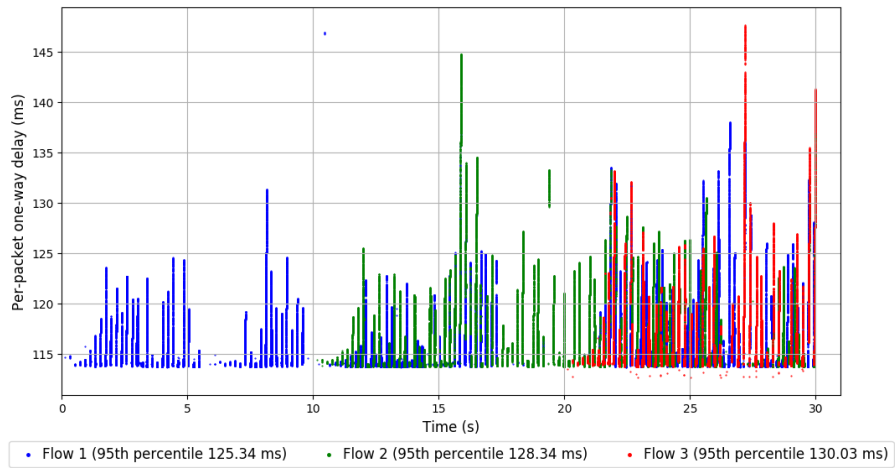
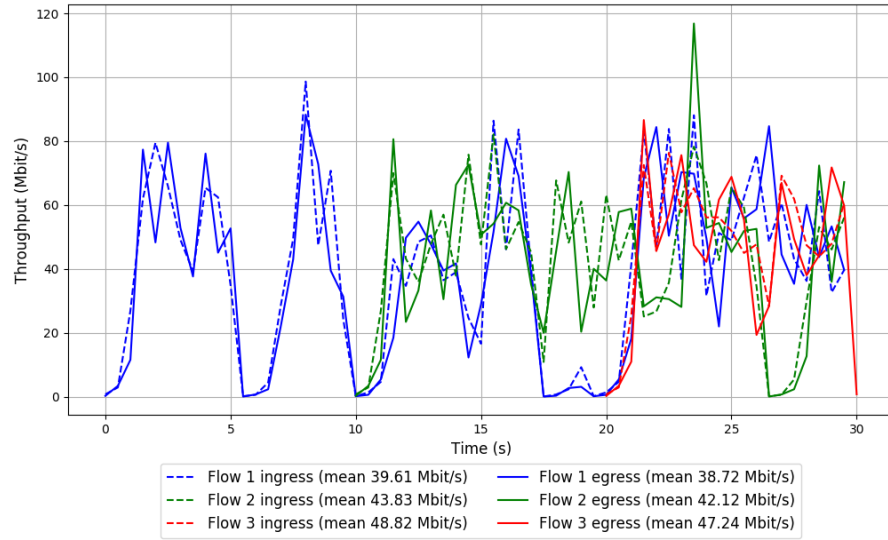
-- Flow 3:

Average throughput: 47.24 Mbit/s

95th percentile per-packet one-way delay: 130.029 ms

Loss rate: 3.01%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-31 11:54:42

End at: 2018-01-31 11:55:12

Below is generated by plot.py at 2018-01-31 14:56:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.29 Mbit/s

95th percentile per-packet one-way delay: 126.068 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 56.03 Mbit/s

95th percentile per-packet one-way delay: 123.438 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.43 Mbit/s

95th percentile per-packet one-way delay: 126.198 ms

Loss rate: 0.63%

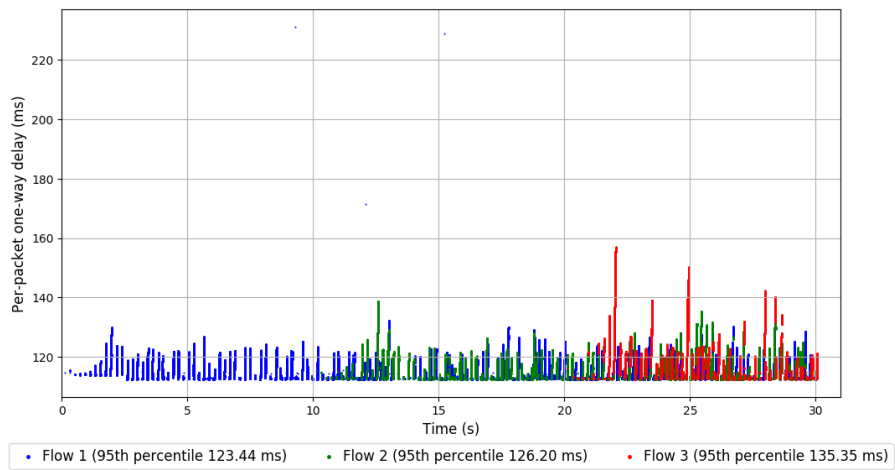
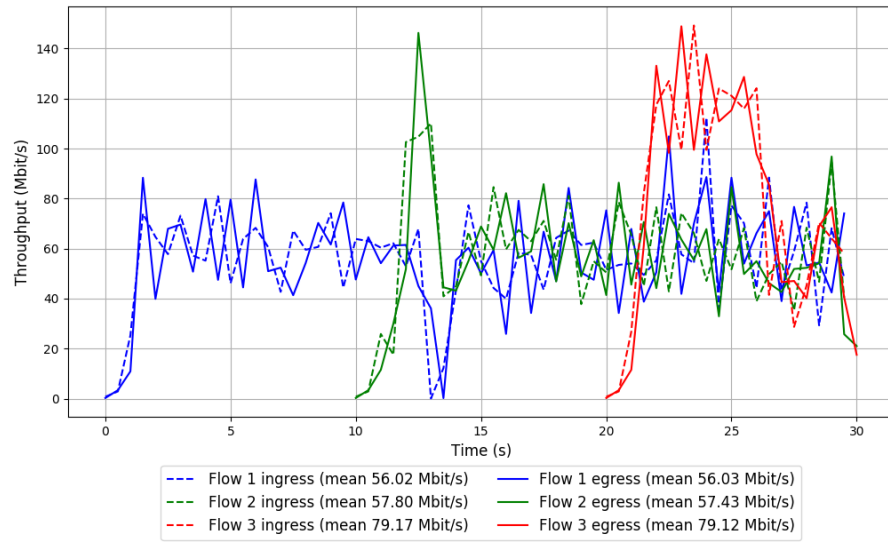
-- Flow 3:

Average throughput: 79.12 Mbit/s

95th percentile per-packet one-way delay: 135.346 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-31 12:12:06

End at: 2018-01-31 12:12:36

Below is generated by plot.py at 2018-01-31 14:56:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.48 Mbit/s

95th percentile per-packet one-way delay: 128.774 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 52.68 Mbit/s

95th percentile per-packet one-way delay: 126.701 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 66.89 Mbit/s

95th percentile per-packet one-way delay: 130.991 ms

Loss rate: 0.00%

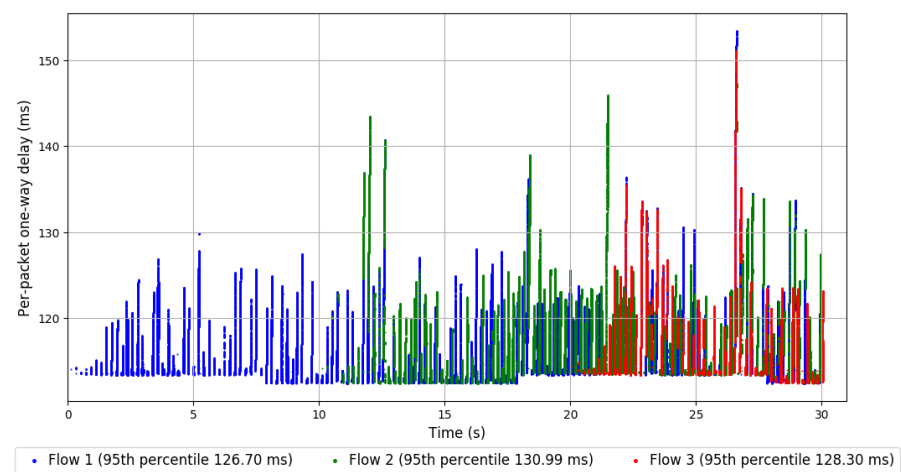
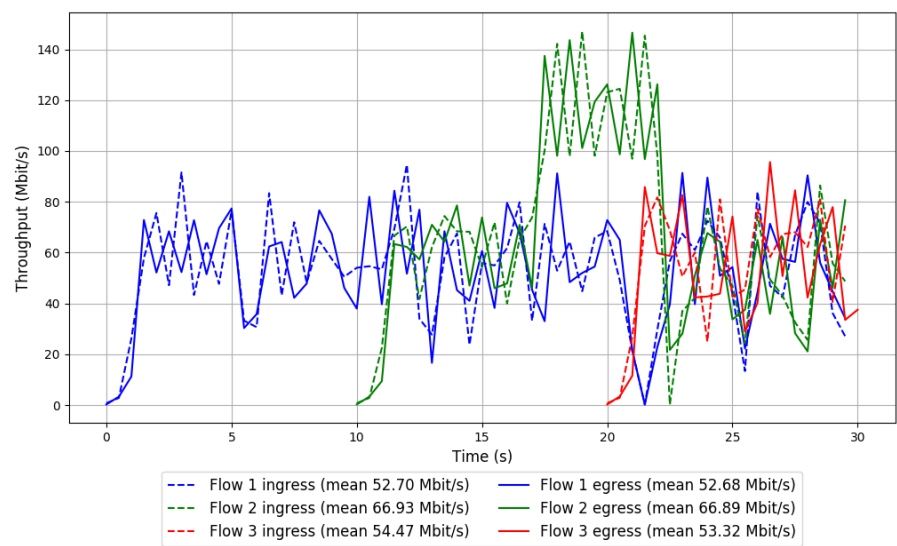
-- Flow 3:

Average throughput: 53.32 Mbit/s

95th percentile per-packet one-way delay: 128.301 ms

Loss rate: 2.02%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-31 12:29:42

End at: 2018-01-31 12:30:12

Below is generated by plot.py at 2018-01-31 14:56:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.39 Mbit/s

95th percentile per-packet one-way delay: 123.703 ms

Loss rate: 1.40%

-- Flow 1:

Average throughput: 42.44 Mbit/s

95th percentile per-packet one-way delay: 123.278 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 48.83 Mbit/s

95th percentile per-packet one-way delay: 122.877 ms

Loss rate: 3.19%

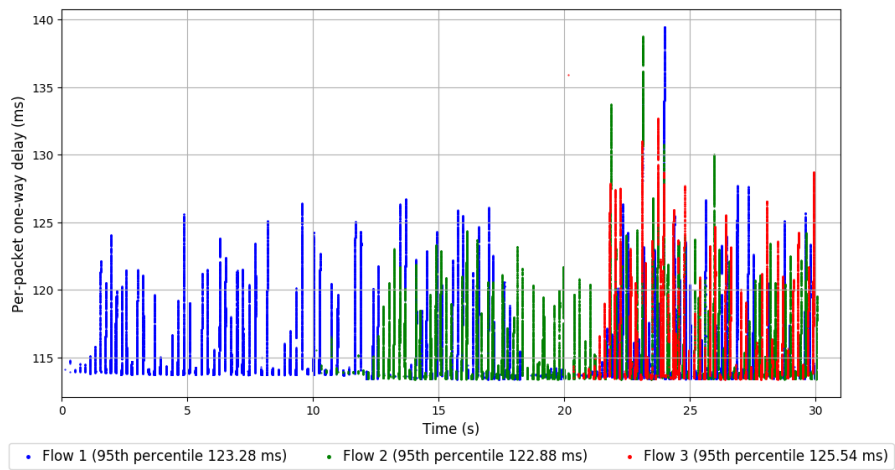
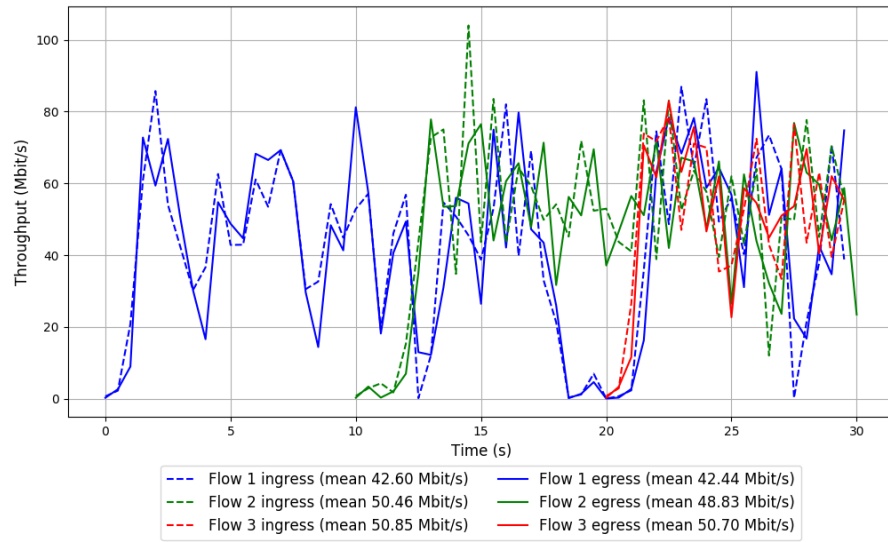
-- Flow 3:

Average throughput: 50.70 Mbit/s

95th percentile per-packet one-way delay: 125.538 ms

Loss rate: 0.36%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-31 12:47:05

End at: 2018-01-31 12:47:35

Below is generated by plot.py at 2018-01-31 14:57:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.41 Mbit/s

95th percentile per-packet one-way delay: 123.419 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 53.31 Mbit/s

95th percentile per-packet one-way delay: 123.596 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.97 Mbit/s

95th percentile per-packet one-way delay: 121.510 ms

Loss rate: 0.69%

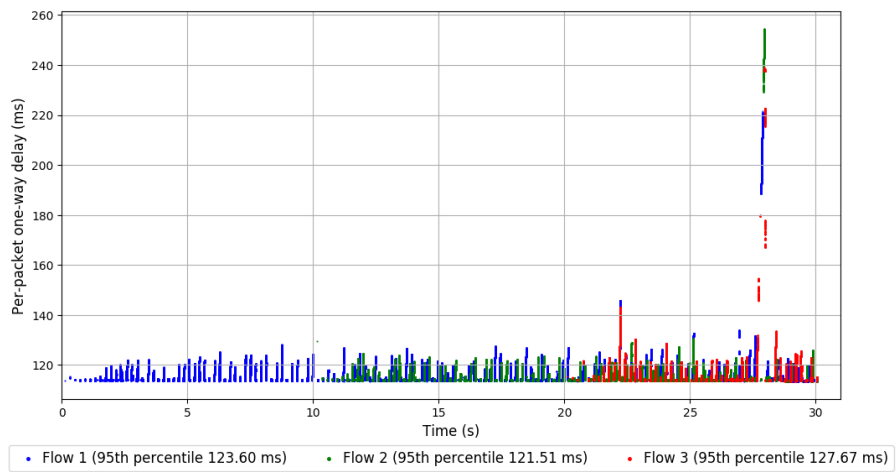
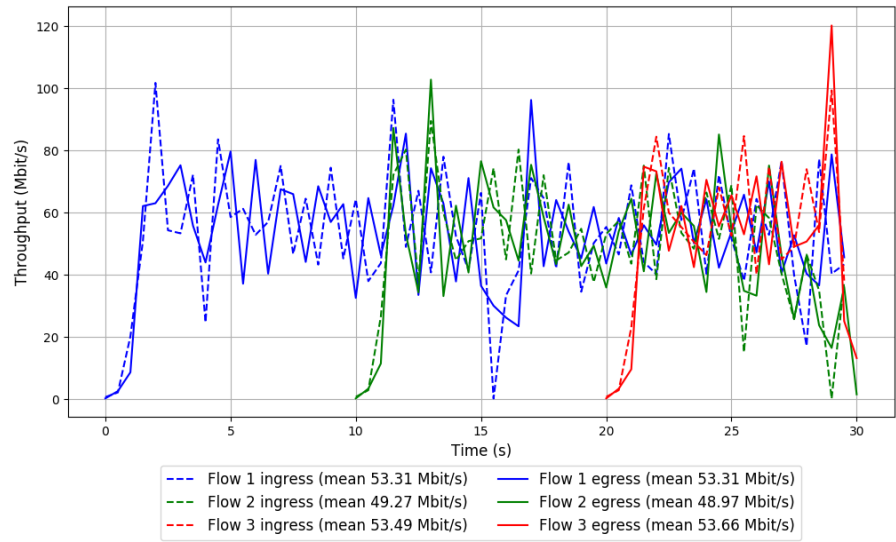
-- Flow 3:

Average throughput: 53.66 Mbit/s

95th percentile per-packet one-way delay: 127.674 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-31 13:04:49

End at: 2018-01-31 13:05:19

Below is generated by plot.py at 2018-01-31 14:57:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.83 Mbit/s

95th percentile per-packet one-way delay: 125.315 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 52.46 Mbit/s

95th percentile per-packet one-way delay: 124.018 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.85 Mbit/s

95th percentile per-packet one-way delay: 125.418 ms

Loss rate: 0.00%

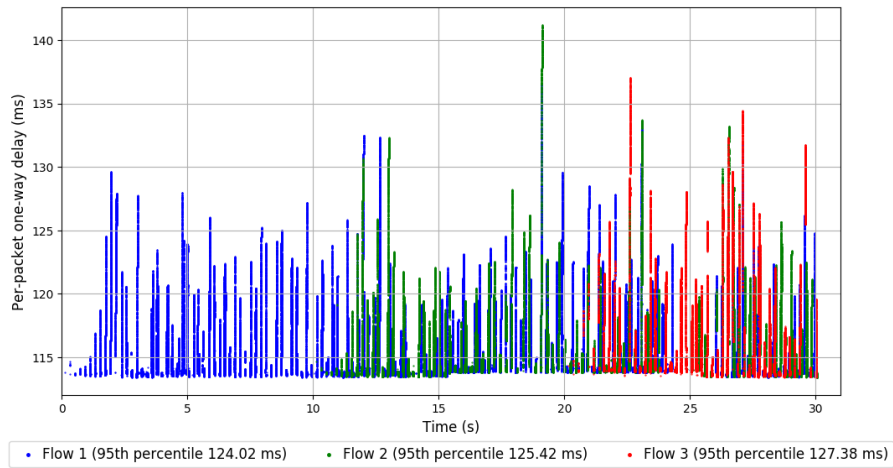
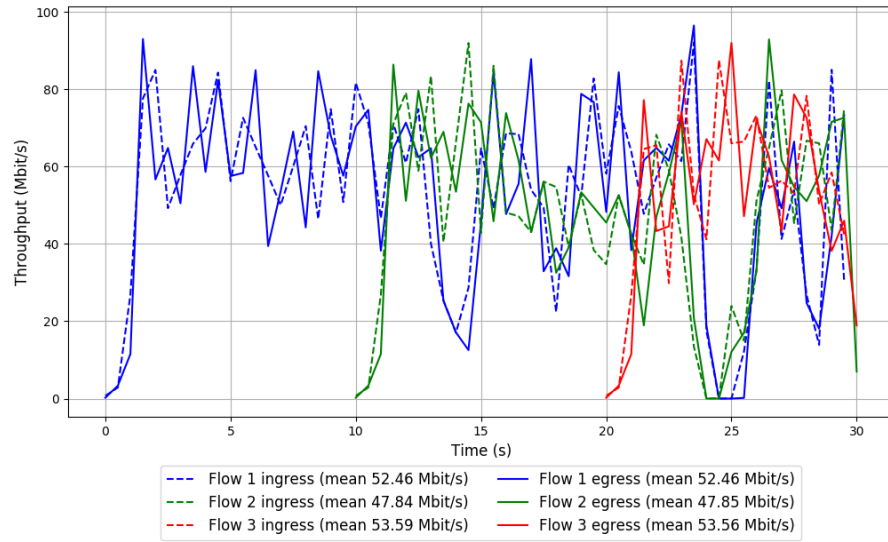
-- Flow 3:

Average throughput: 53.56 Mbit/s

95th percentile per-packet one-way delay: 127.376 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-31 10:13:54

End at: 2018-01-31 10:14:24

Below is generated by plot.py at 2018-01-31 14:57:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 58.09 Mbit/s

95th percentile per-packet one-way delay: 123.096 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 28.65 Mbit/s

95th percentile per-packet one-way delay: 119.746 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 7.22 Mbit/s

95th percentile per-packet one-way delay: 121.256 ms

Loss rate: 0.17%

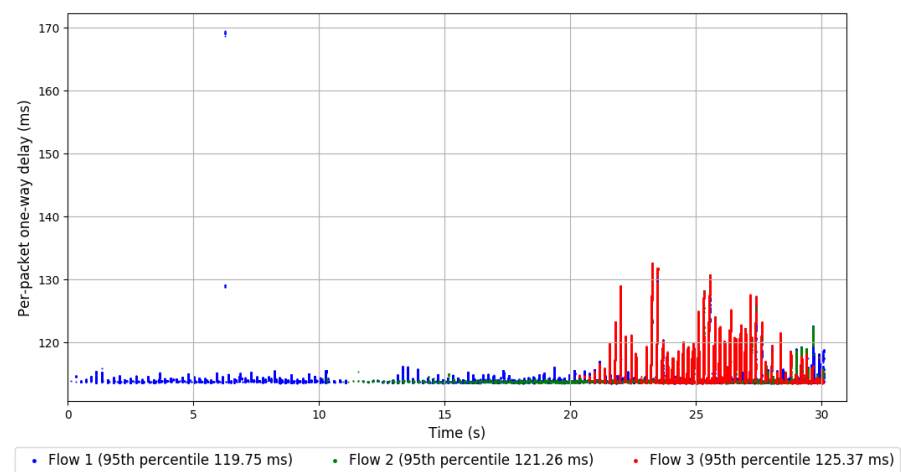
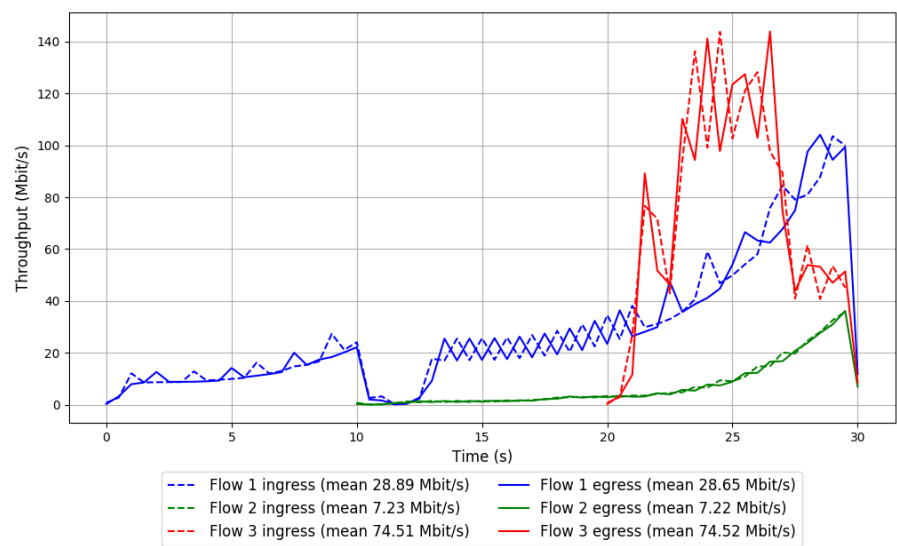
-- Flow 3:

Average throughput: 74.52 Mbit/s

95th percentile per-packet one-way delay: 125.370 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-31 10:31:23

End at: 2018-01-31 10:31:53

Below is generated by plot.py at 2018-01-31 14:58:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 145.77 Mbit/s

95th percentile per-packet one-way delay: 121.490 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 82.10 Mbit/s

95th percentile per-packet one-way delay: 120.875 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.03 Mbit/s

95th percentile per-packet one-way delay: 123.035 ms

Loss rate: 0.00%

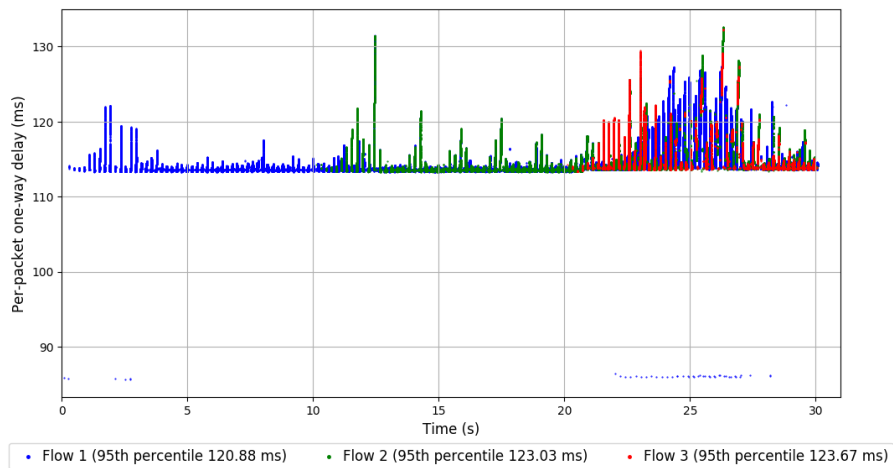
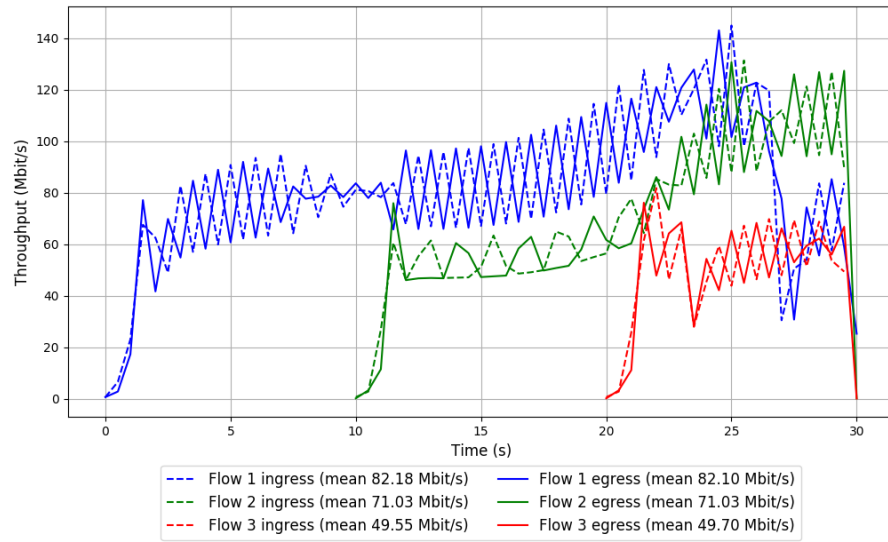
-- Flow 3:

Average throughput: 49.70 Mbit/s

95th percentile per-packet one-way delay: 123.671 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-31 10:48:37

End at: 2018-01-31 10:49:07

Below is generated by plot.py at 2018-01-31 14:58:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.66 Mbit/s

95th percentile per-packet one-way delay: 120.788 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 40.72 Mbit/s

95th percentile per-packet one-way delay: 119.005 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 57.73 Mbit/s

95th percentile per-packet one-way delay: 120.991 ms

Loss rate: 0.00%

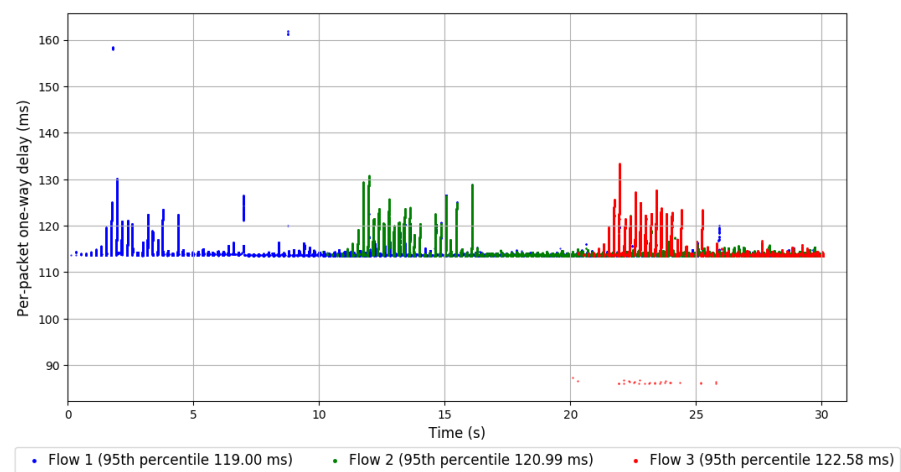
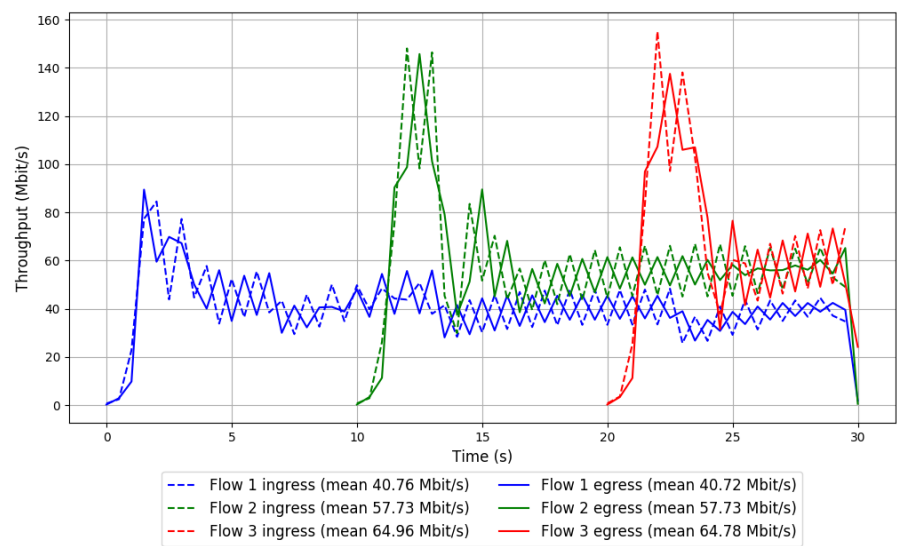
-- Flow 3:

Average throughput: 64.78 Mbit/s

95th percentile per-packet one-way delay: 122.584 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-31 11:05:52

End at: 2018-01-31 11:06:22

Below is generated by plot.py at 2018-01-31 14:58:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.31 Mbit/s

95th percentile per-packet one-way delay: 119.804 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.20 Mbit/s

95th percentile per-packet one-way delay: 119.387 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 64.94 Mbit/s

95th percentile per-packet one-way delay: 120.515 ms

Loss rate: 0.00%

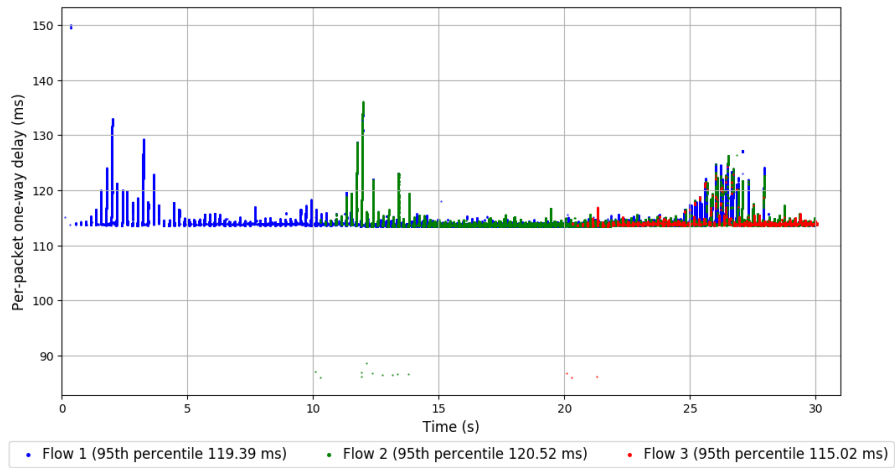
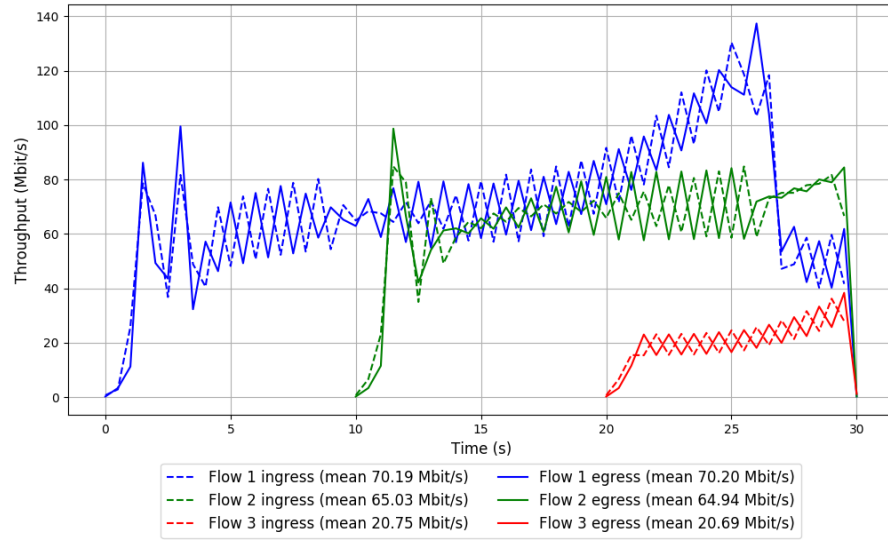
-- Flow 3:

Average throughput: 20.69 Mbit/s

95th percentile per-packet one-way delay: 115.023 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link

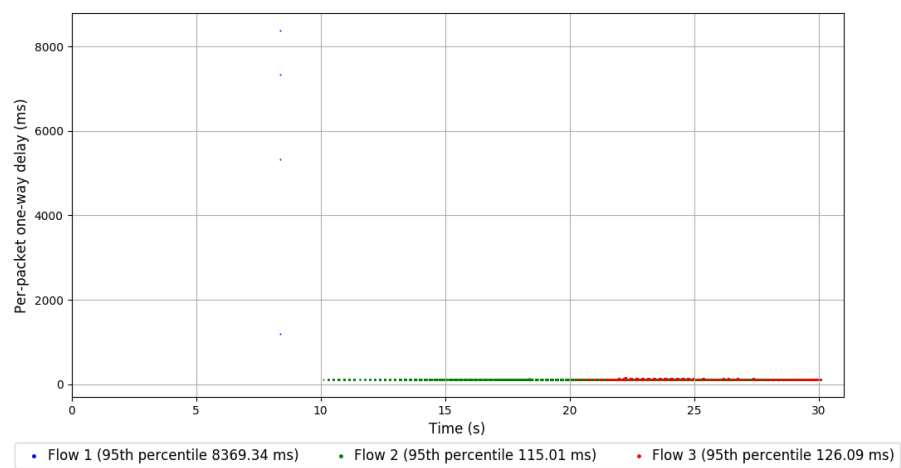
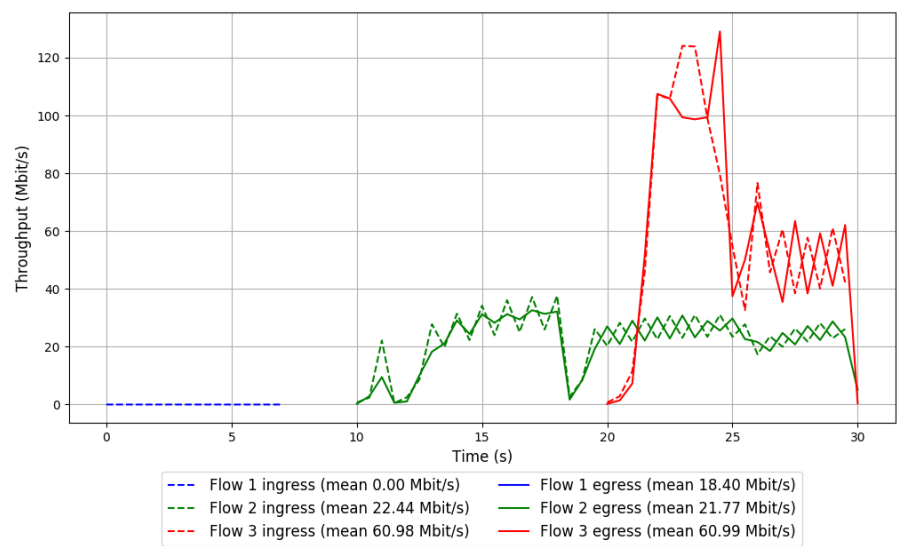


Run 5: Statistics of TCP Cubic

Start at: 2018-01-31 11:23:20

End at: 2018-01-31 11:23:50

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-31 11:40:48

End at: 2018-01-31 11:41:18

Below is generated by plot.py at 2018-01-31 14:58:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.68 Mbit/s

95th percentile per-packet one-way delay: 119.261 ms

Loss rate: 0.88%

-- Flow 1:

Average throughput: 45.25 Mbit/s

95th percentile per-packet one-way delay: 119.588 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 3.33 Mbit/s

95th percentile per-packet one-way delay: 116.199 ms

Loss rate: 4.01%

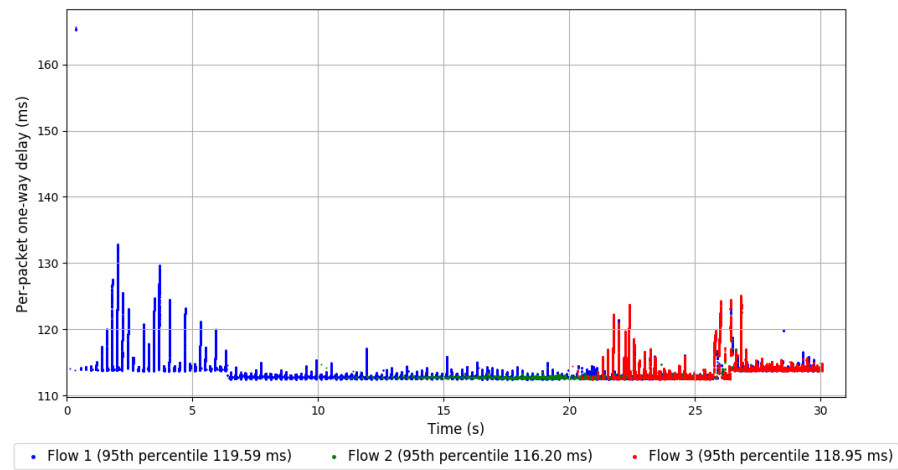
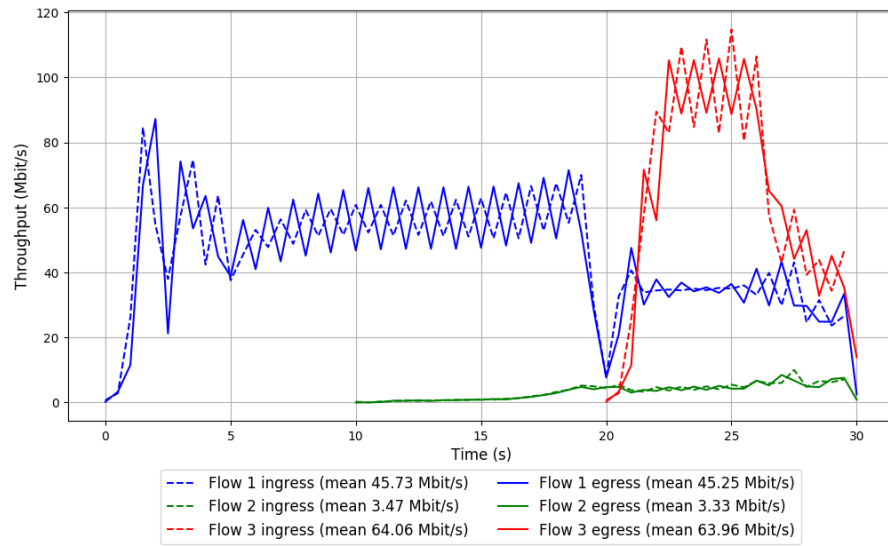
-- Flow 3:

Average throughput: 63.96 Mbit/s

95th percentile per-packet one-way delay: 118.951 ms

Loss rate: 0.16%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-31 11:58:21

End at: 2018-01-31 11:58:51

Below is generated by plot.py at 2018-01-31 14:59:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.87 Mbit/s

95th percentile per-packet one-way delay: 116.613 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 58.26 Mbit/s

95th percentile per-packet one-way delay: 117.036 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 39.59 Mbit/s

95th percentile per-packet one-way delay: 116.688 ms

Loss rate: 0.97%

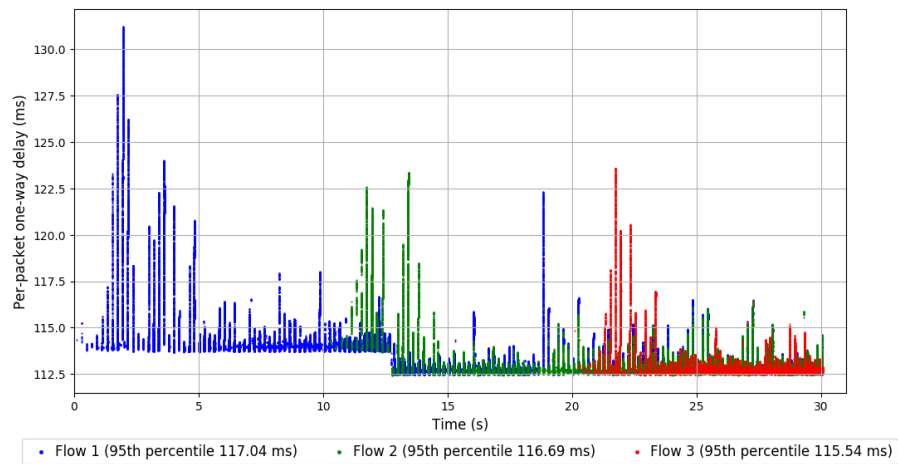
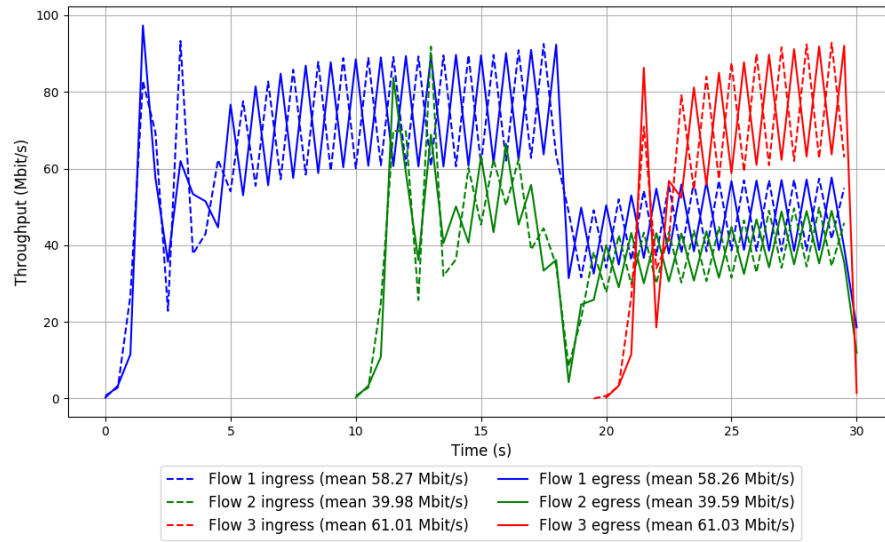
-- Flow 3:

Average throughput: 61.03 Mbit/s

95th percentile per-packet one-way delay: 115.537 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-31 12:15:47

End at: 2018-01-31 12:16:17

Below is generated by plot.py at 2018-01-31 14:59:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.71 Mbit/s

95th percentile per-packet one-way delay: 116.747 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 37.68 Mbit/s

95th percentile per-packet one-way delay: 115.552 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 57.82 Mbit/s

95th percentile per-packet one-way delay: 118.044 ms

Loss rate: 0.04%

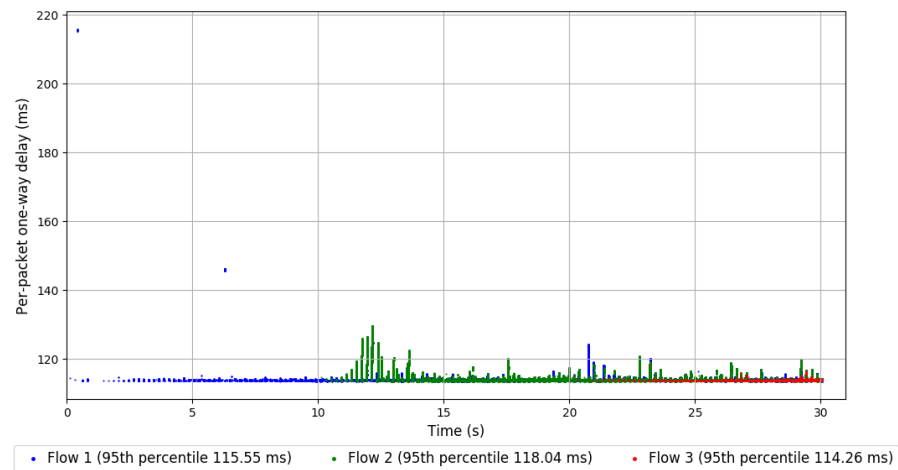
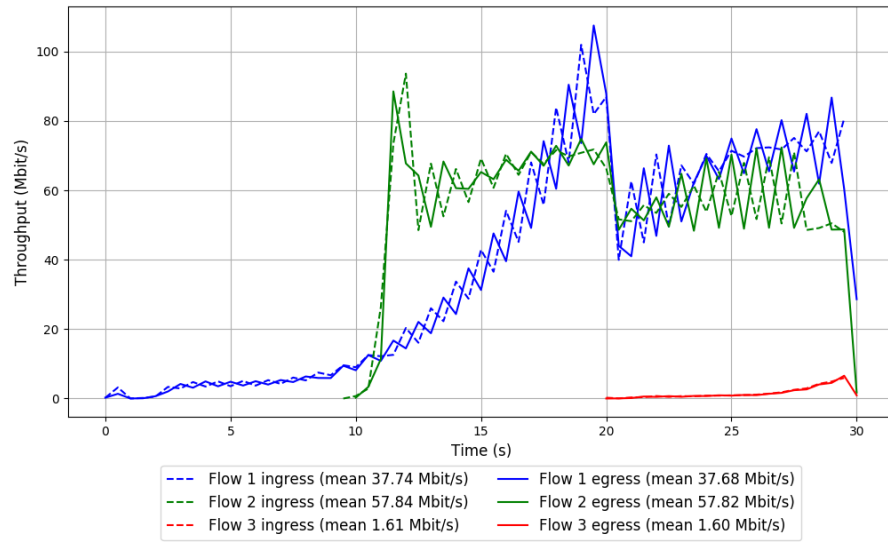
-- Flow 3:

Average throughput: 1.60 Mbit/s

95th percentile per-packet one-way delay: 114.256 ms

Loss rate: 0.75%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-31 12:33:19

End at: 2018-01-31 12:33:49

Below is generated by plot.py at 2018-01-31 15:00:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.87 Mbit/s

95th percentile per-packet one-way delay: 124.314 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 70.44 Mbit/s

95th percentile per-packet one-way delay: 121.360 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 77.77 Mbit/s

95th percentile per-packet one-way delay: 126.367 ms

Loss rate: 0.57%

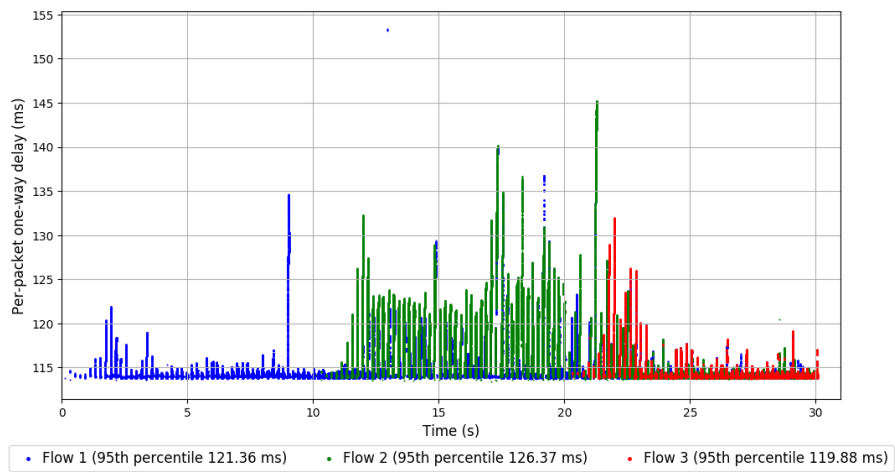
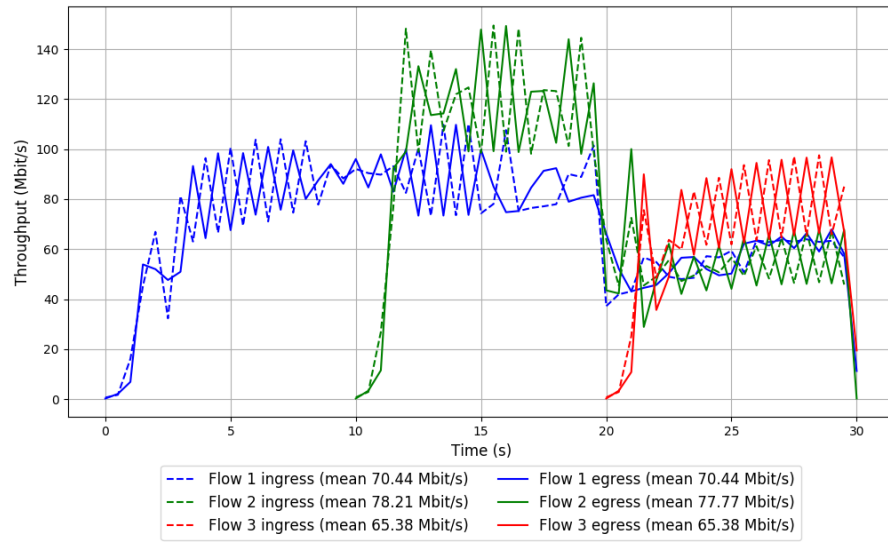
-- Flow 3:

Average throughput: 65.38 Mbit/s

95th percentile per-packet one-way delay: 119.883 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-31 12:50:37

End at: 2018-01-31 12:51:07

Below is generated by plot.py at 2018-01-31 15:00:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 133.36 Mbit/s

95th percentile per-packet one-way delay: 119.018 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.73 Mbit/s

95th percentile per-packet one-way delay: 119.207 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 65.86 Mbit/s

95th percentile per-packet one-way delay: 119.411 ms

Loss rate: 0.00%

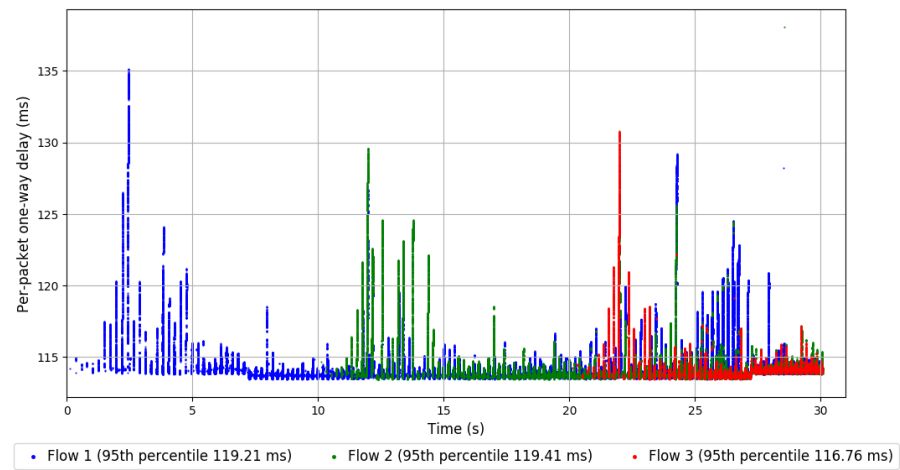
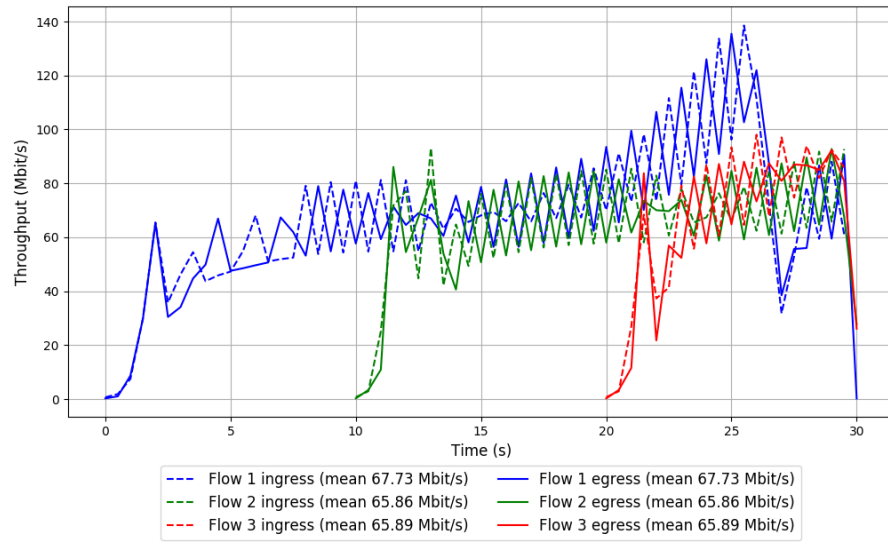
-- Flow 3:

Average throughput: 65.89 Mbit/s

95th percentile per-packet one-way delay: 116.759 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

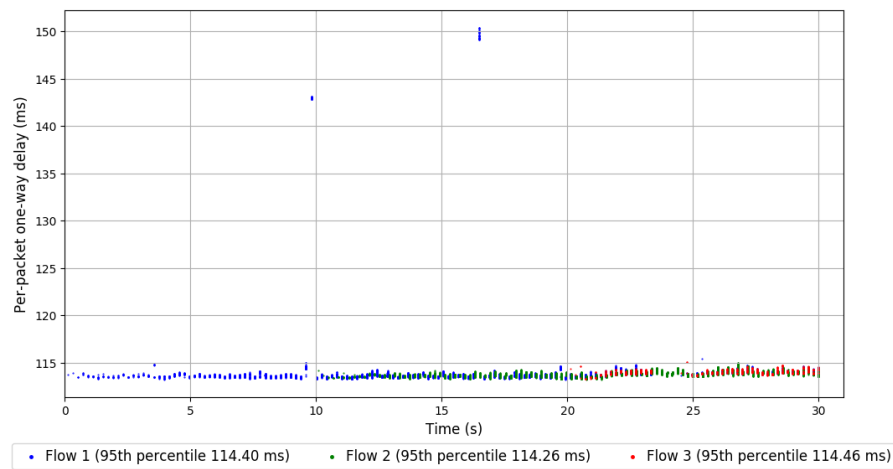
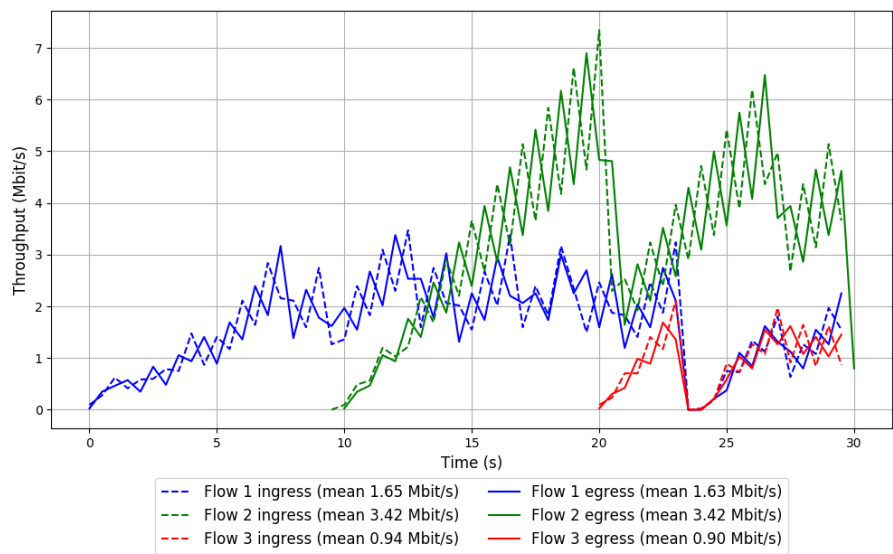


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-31 10:12:12
End at: 2018-01-31 10:12:42

# Below is generated by plot.py at 2018-01-31 15:00:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 114.347 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 114.401 ms
Loss rate: 1.26%
-- Flow 2:
Average throughput: 3.42 Mbit/s
95th percentile per-packet one-way delay: 114.264 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.90 Mbit/s
95th percentile per-packet one-way delay: 114.457 ms
Loss rate: 4.07%
```


Run 1: Report of LEDBAT — Data Link

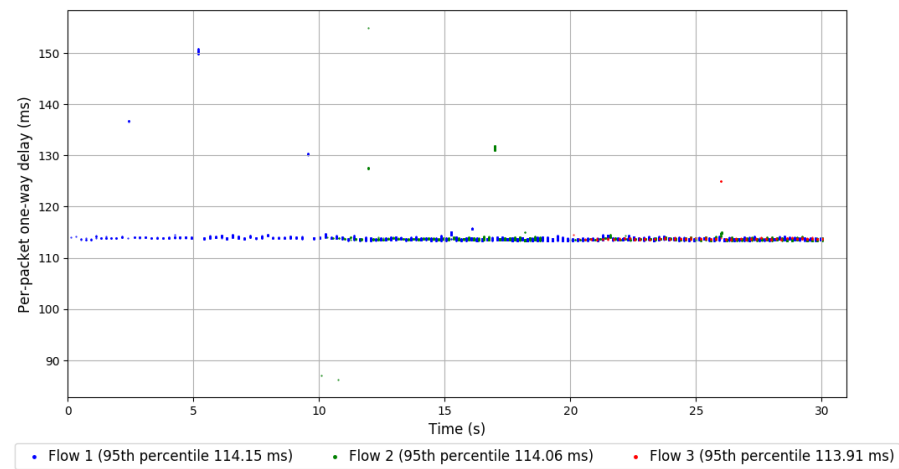
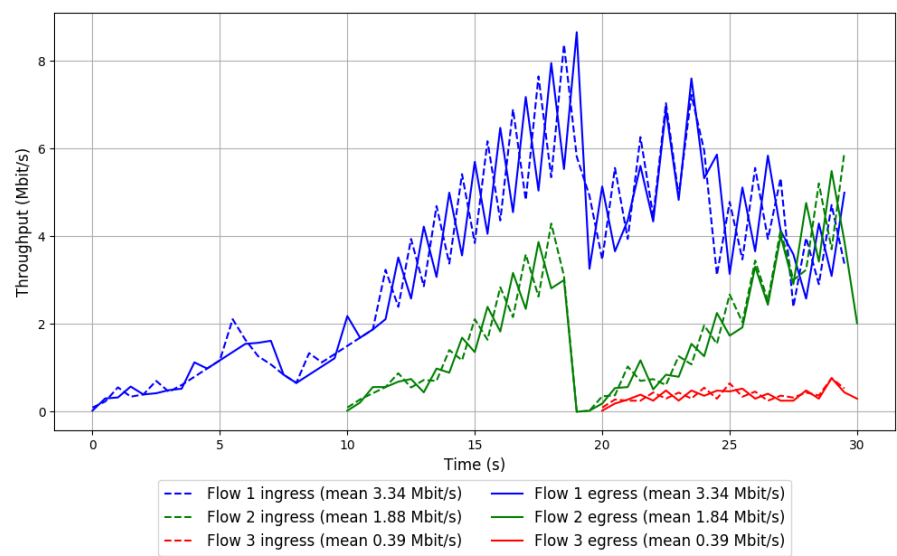


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-31 10:29:33
End at: 2018-01-31 10:30:03

# Below is generated by plot.py at 2018-01-31 15:00:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.68 Mbit/s
95th percentile per-packet one-way delay: 114.110 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 3.34 Mbit/s
95th percentile per-packet one-way delay: 114.147 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.84 Mbit/s
95th percentile per-packet one-way delay: 114.059 ms
Loss rate: 2.10%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 113.908 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-31 10:46:47

End at: 2018-01-31 10:47:17

Below is generated by plot.py at 2018-01-31 15:00:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.83 Mbit/s

95th percentile per-packet one-way delay: 114.211 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 114.273 ms

Loss rate: 1.75%

-- Flow 2:

Average throughput: 2.98 Mbit/s

95th percentile per-packet one-way delay: 114.074 ms

Loss rate: 0.04%

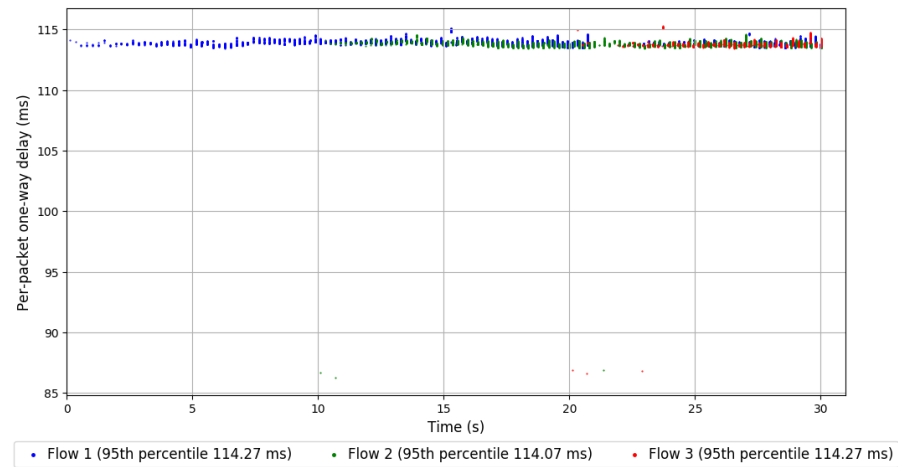
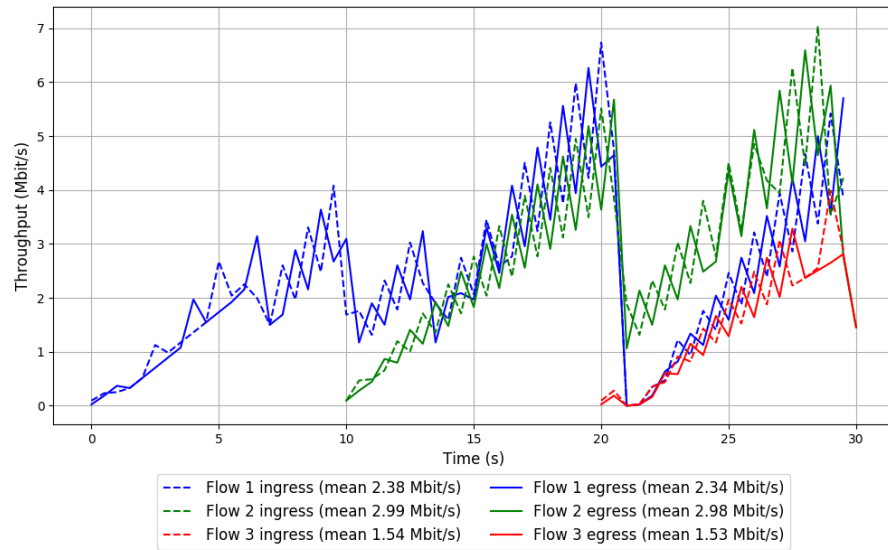
-- Flow 3:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 114.266 ms

Loss rate: 0.54%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-31 11:04:03

End at: 2018-01-31 11:04:33

Below is generated by plot.py at 2018-01-31 15:00:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.02 Mbit/s

95th percentile per-packet one-way delay: 114.494 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 2.85 Mbit/s

95th percentile per-packet one-way delay: 114.656 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 2.98 Mbit/s

95th percentile per-packet one-way delay: 114.408 ms

Loss rate: 0.00%

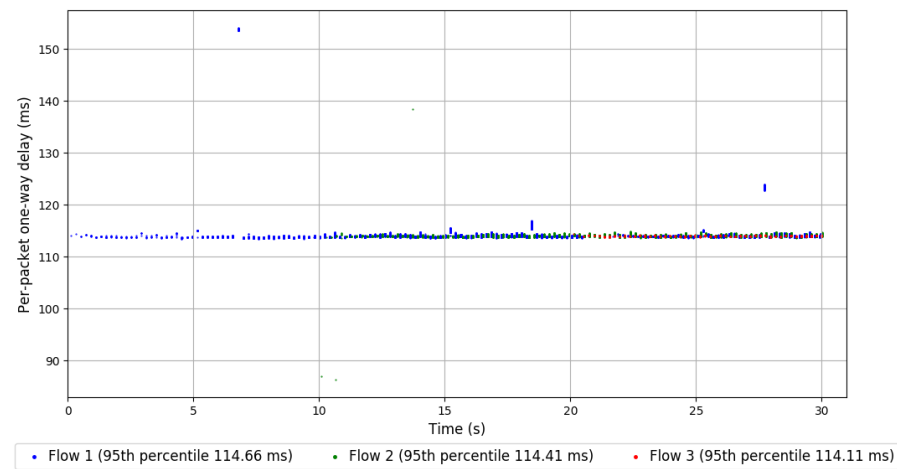
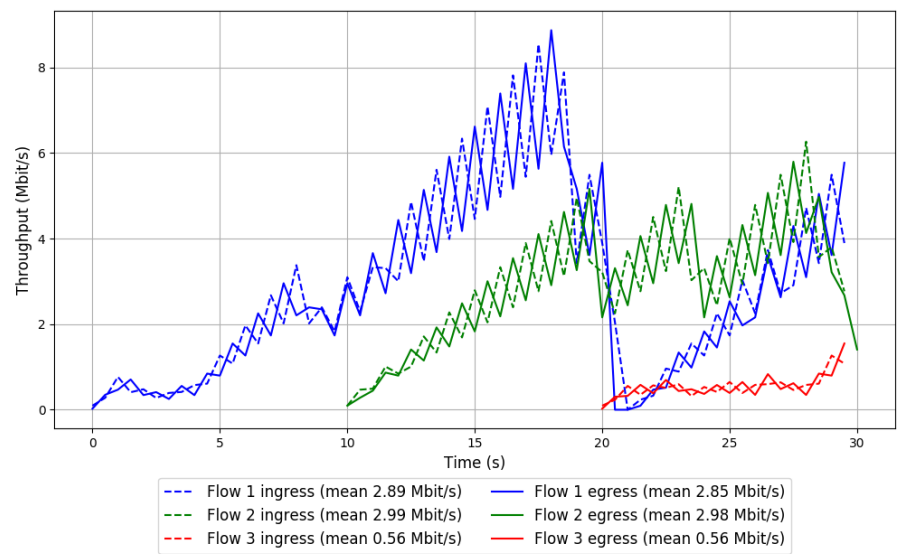
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 114.106 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-31 11:21:31

End at: 2018-01-31 11:22:01

Below is generated by plot.py at 2018-01-31 15:00:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.02 Mbit/s

95th percentile per-packet one-way delay: 115.360 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 3.45 Mbit/s

95th percentile per-packet one-way delay: 115.345 ms

Loss rate: 1.58%

-- Flow 2:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 115.638 ms

Loss rate: 0.19%

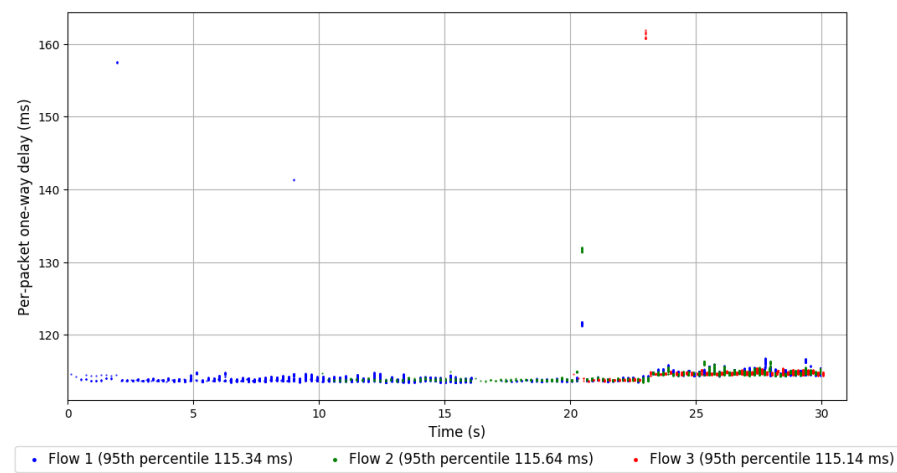
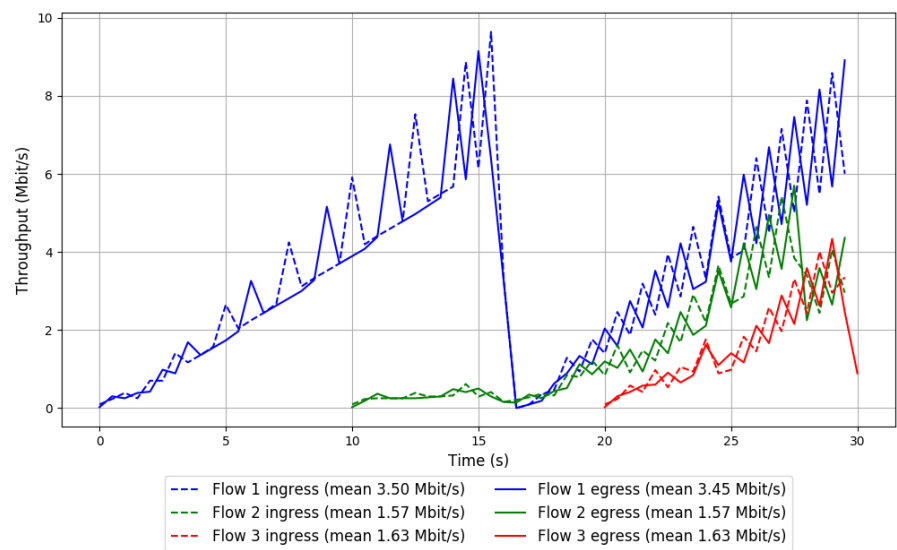
-- Flow 3:

Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 115.144 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-31 11:38:55

End at: 2018-01-31 11:39:25

Below is generated by plot.py at 2018-01-31 15:00:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.38 Mbit/s

95th percentile per-packet one-way delay: 115.616 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 5.52 Mbit/s

95th percentile per-packet one-way delay: 115.469 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 5.90 Mbit/s

95th percentile per-packet one-way delay: 116.014 ms

Loss rate: 0.00%

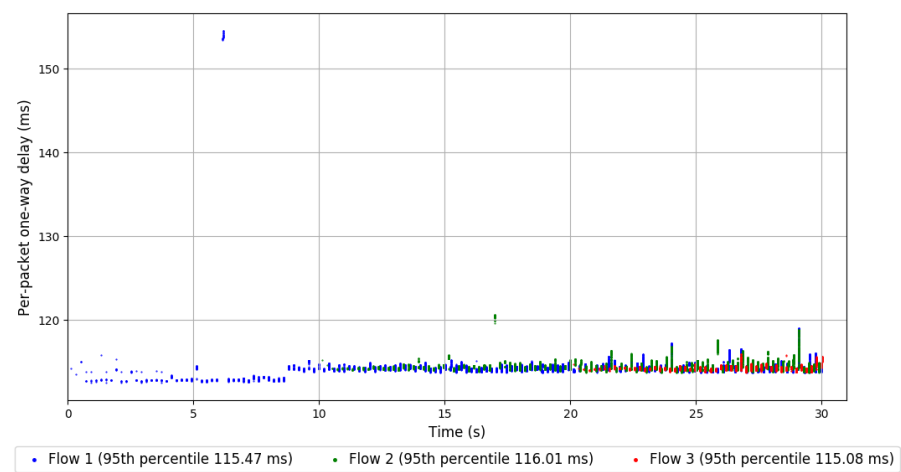
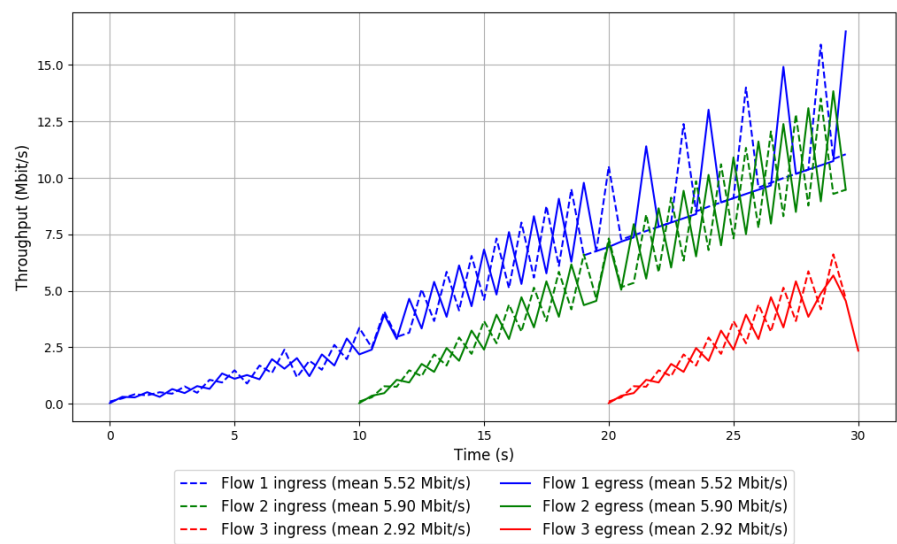
-- Flow 3:

Average throughput: 2.92 Mbit/s

95th percentile per-packet one-way delay: 115.084 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-31 11:56:29

End at: 2018-01-31 11:56:59

Below is generated by plot.py at 2018-01-31 15:00:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.47 Mbit/s

95th percentile per-packet one-way delay: 114.541 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 114.553 ms

Loss rate: 1.26%

-- Flow 2:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 114.524 ms

Loss rate: 1.33%

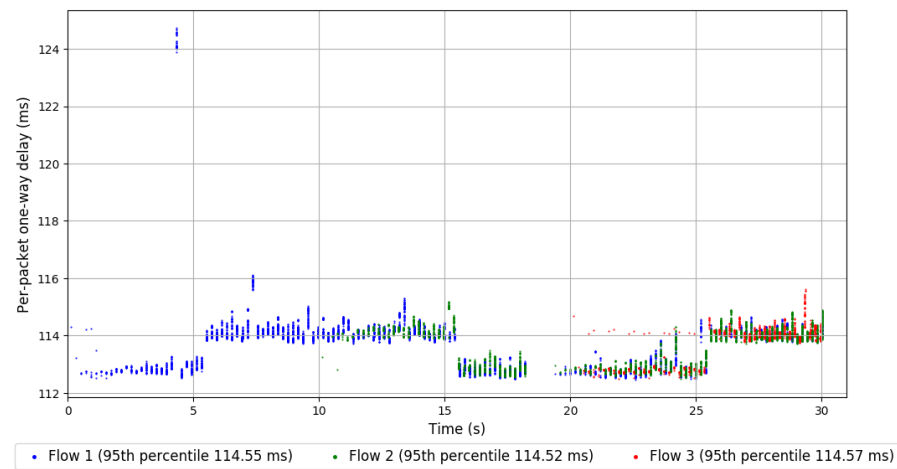
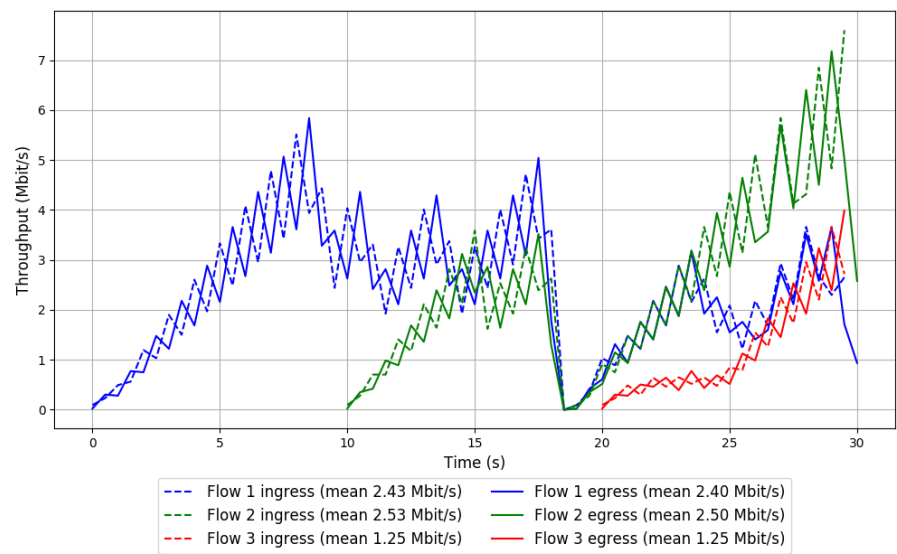
-- Flow 3:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 114.570 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-31 12:13:51

End at: 2018-01-31 12:14:21

Below is generated by plot.py at 2018-01-31 15:00:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.37 Mbit/s

95th percentile per-packet one-way delay: 114.472 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 114.508 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 114.351 ms

Loss rate: 1.66%

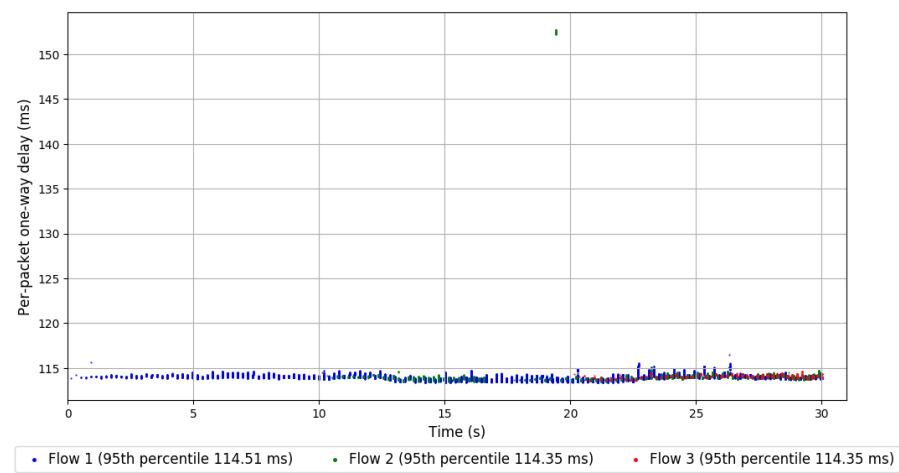
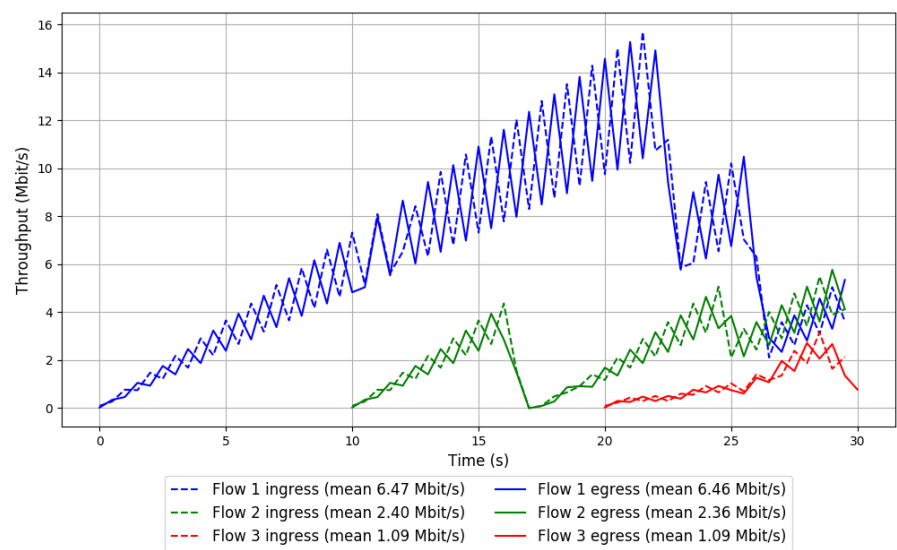
-- Flow 3:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 114.353 ms

Loss rate: 0.33%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-31 12:31:27

End at: 2018-01-31 12:31:57

Below is generated by plot.py at 2018-01-31 15:00:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.38 Mbit/s

95th percentile per-packet one-way delay: 114.697 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 3.69 Mbit/s

95th percentile per-packet one-way delay: 114.754 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 3.43 Mbit/s

95th percentile per-packet one-way delay: 114.635 ms

Loss rate: 0.36%

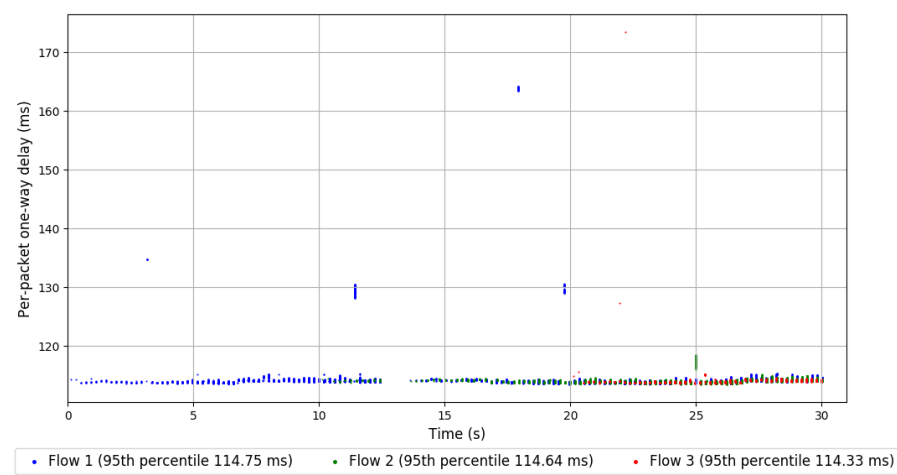
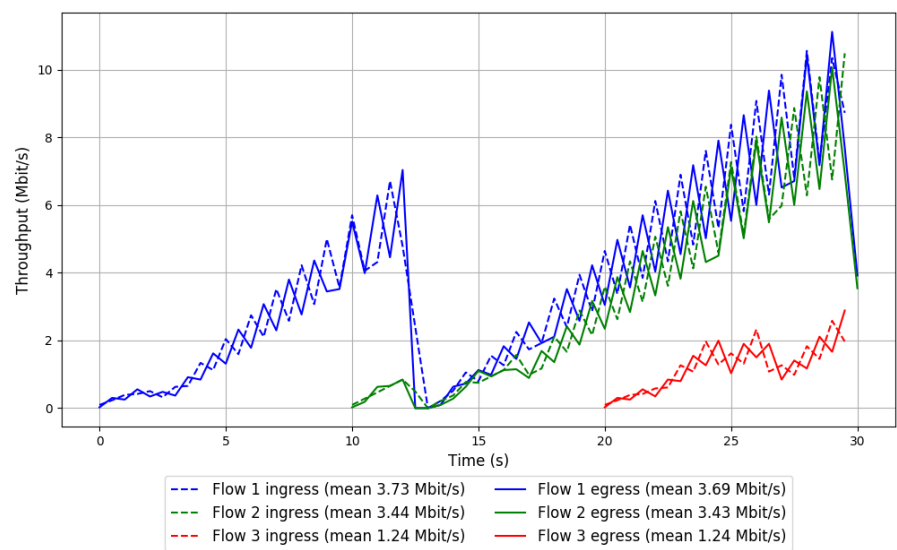
-- Flow 3:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 114.329 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

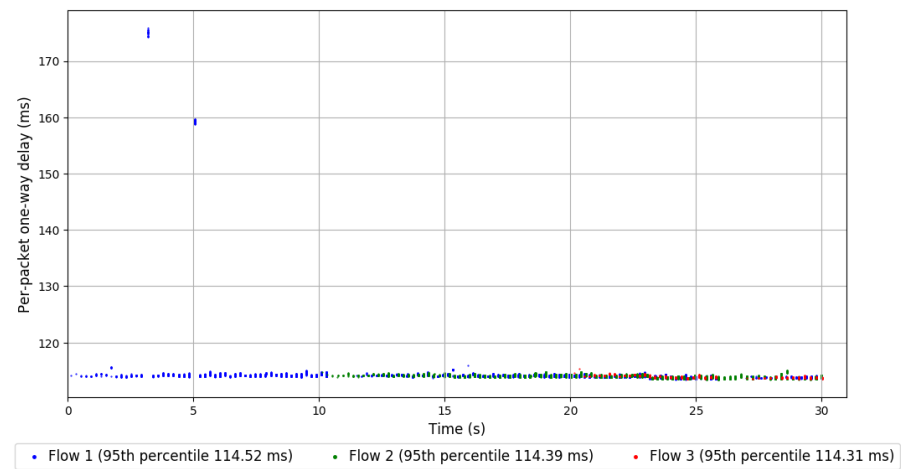
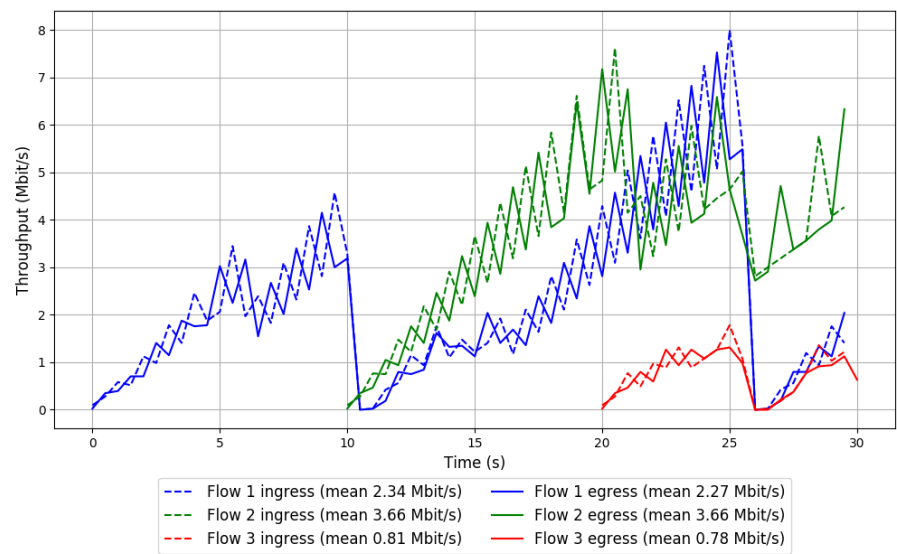


```
Run 10: Statistics of LEDBAT

Start at: 2018-01-31 12:48:51
End at: 2018-01-31 12:49:21

# Below is generated by plot.py at 2018-01-31 15:00:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.95 Mbit/s
95th percentile per-packet one-way delay: 114.436 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 114.521 ms
Loss rate: 3.20%
-- Flow 2:
Average throughput: 3.66 Mbit/s
95th percentile per-packet one-way delay: 114.393 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.78 Mbit/s
95th percentile per-packet one-way delay: 114.314 ms
Loss rate: 3.54%
```

Run 10: Report of LEDBAT — Data Link

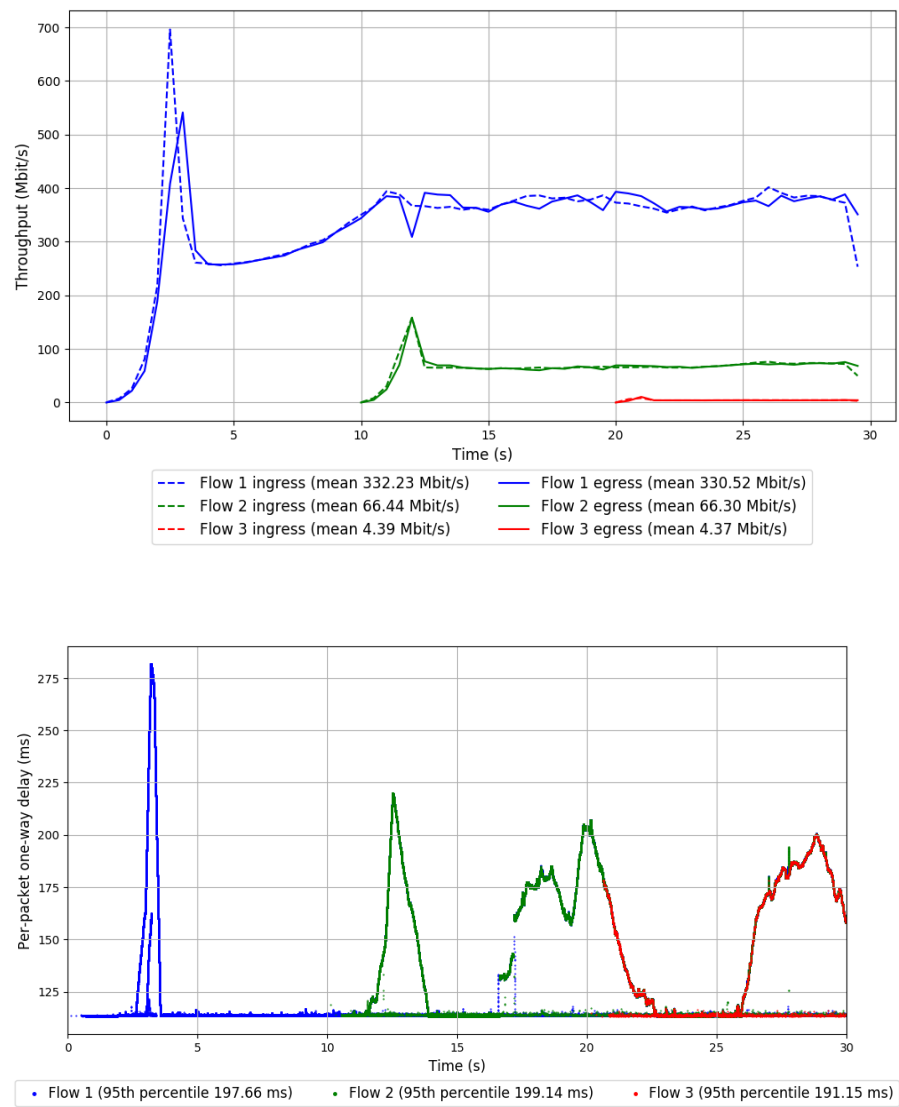


```
Run 1: Statistics of PCC

Start at: 2018-01-31 10:23:22
End at: 2018-01-31 10:23:52

# Below is generated by plot.py at 2018-01-31 15:06:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 376.03 Mbit/s
95th percentile per-packet one-way delay: 197.810 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 330.52 Mbit/s
95th percentile per-packet one-way delay: 197.659 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 66.30 Mbit/s
95th percentile per-packet one-way delay: 199.138 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 191.149 ms
Loss rate: 0.45%
```

Run 1: Report of PCC — Data Link

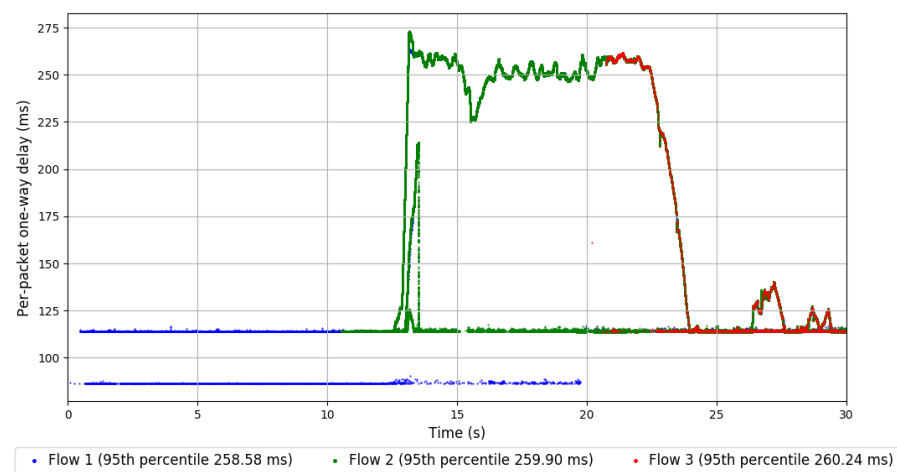
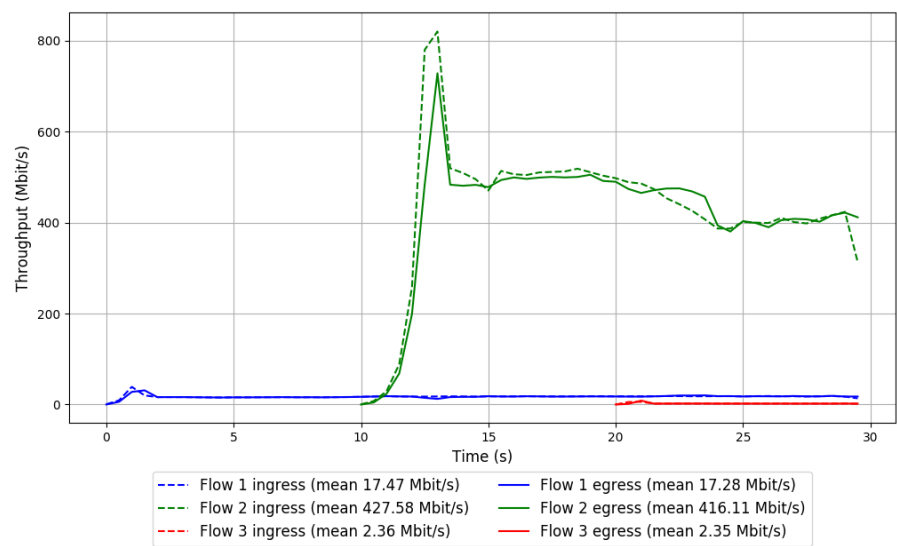


```
Run 2: Statistics of PCC

Start at: 2018-01-31 10:40:44
End at: 2018-01-31 10:41:14

# Below is generated by plot.py at 2018-01-31 15:06:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 294.46 Mbit/s
95th percentile per-packet one-way delay: 259.837 ms
Loss rate: 2.58%
-- Flow 1:
Average throughput: 17.28 Mbit/s
95th percentile per-packet one-way delay: 258.582 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 416.11 Mbit/s
95th percentile per-packet one-way delay: 259.896 ms
Loss rate: 2.68%
-- Flow 3:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 260.244 ms
Loss rate: 1.03%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-31 10:58:02

End at: 2018-01-31 10:58:32

Below is generated by plot.py at 2018-01-31 15:06:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 358.00 Mbit/s

95th percentile per-packet one-way delay: 255.158 ms

Loss rate: 1.32%

-- Flow 1:

Average throughput: 351.32 Mbit/s

95th percentile per-packet one-way delay: 255.195 ms

Loss rate: 1.35%

-- Flow 2:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 154.282 ms

Loss rate: 0.02%

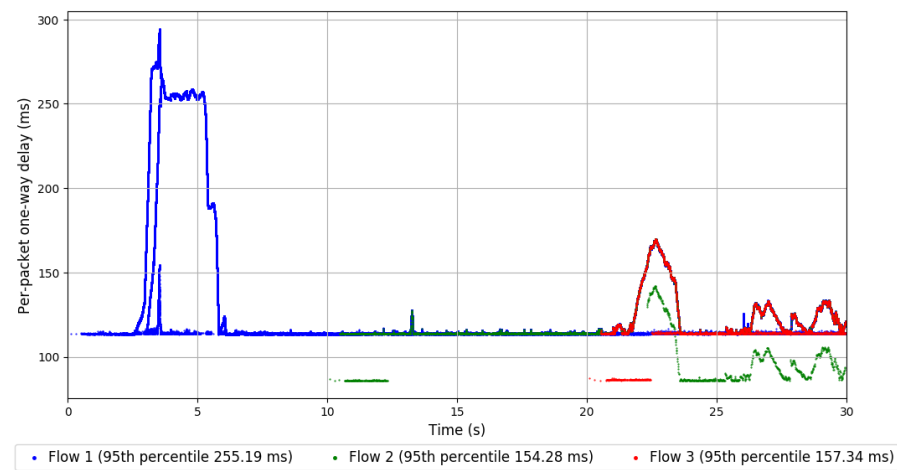
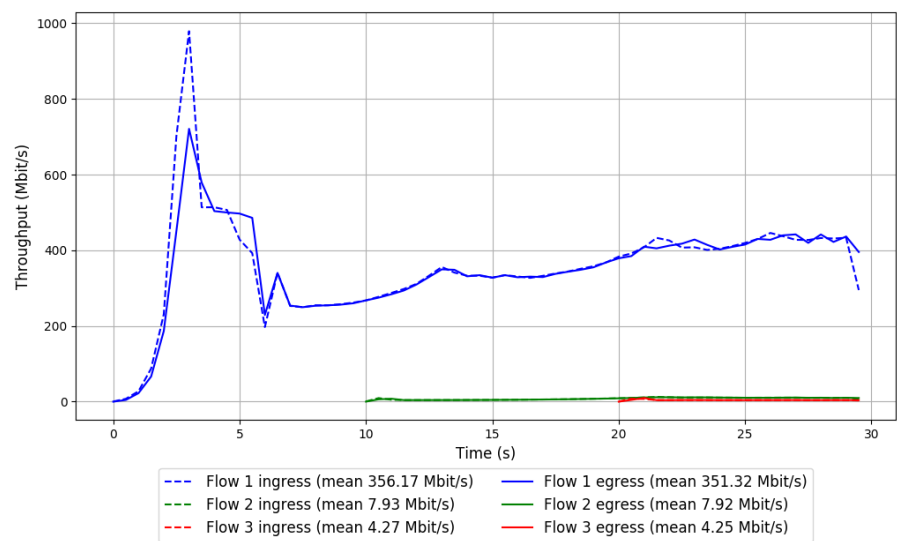
-- Flow 3:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 157.345 ms

Loss rate: 0.06%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-31 11:15:21

End at: 2018-01-31 11:15:51

Below is generated by plot.py at 2018-01-31 15:06:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 396.74 Mbit/s

95th percentile per-packet one-way delay: 278.992 ms

Loss rate: 3.26%

-- Flow 1:

Average throughput: 309.28 Mbit/s

95th percentile per-packet one-way delay: 278.180 ms

Loss rate: 3.08%

-- Flow 2:

Average throughput: 130.61 Mbit/s

95th percentile per-packet one-way delay: 280.093 ms

Loss rate: 3.90%

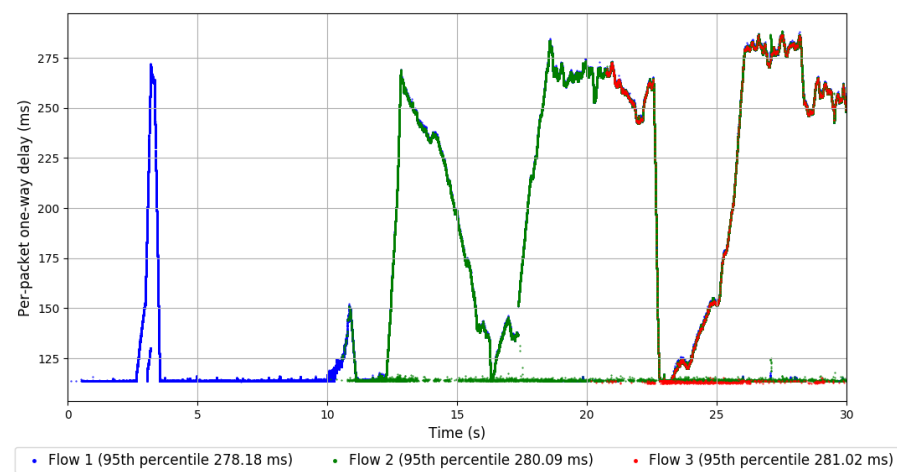
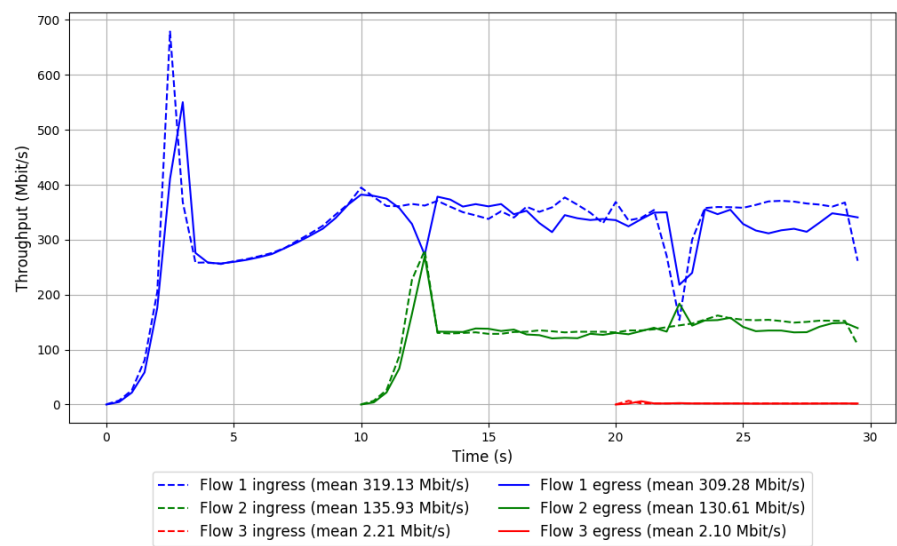
-- Flow 3:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 281.021 ms

Loss rate: 4.92%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-31 11:32:52

End at: 2018-01-31 11:33:22

Below is generated by plot.py at 2018-01-31 15:06:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 367.27 Mbit/s

95th percentile per-packet one-way delay: 206.103 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 312.89 Mbit/s

95th percentile per-packet one-way delay: 205.780 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 73.67 Mbit/s

95th percentile per-packet one-way delay: 206.710 ms

Loss rate: 0.00%

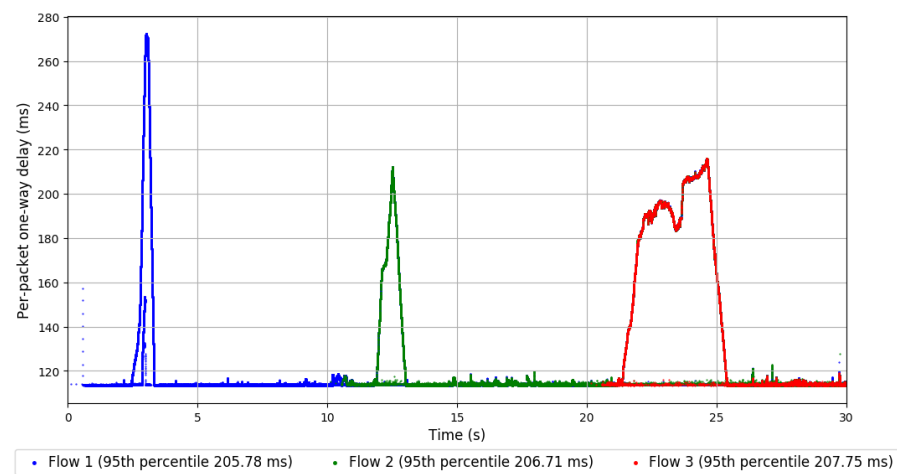
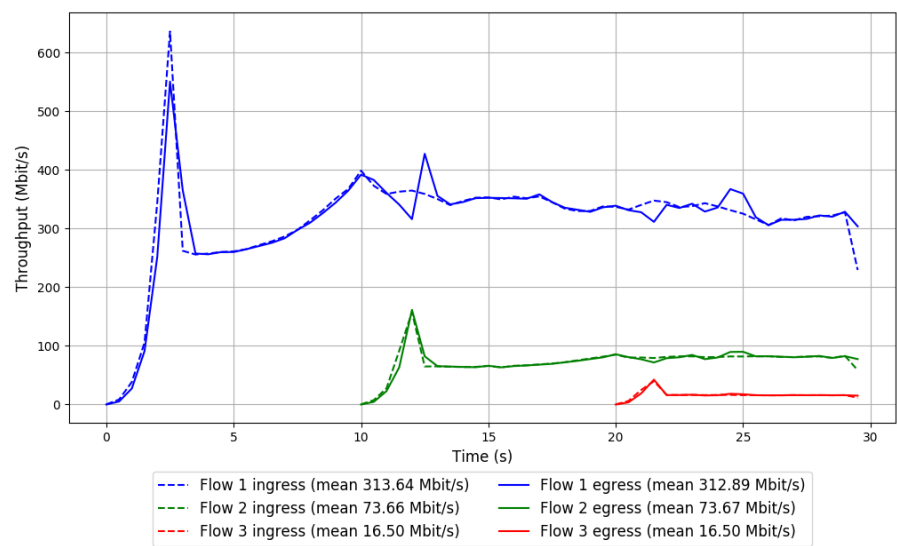
-- Flow 3:

Average throughput: 16.50 Mbit/s

95th percentile per-packet one-way delay: 207.751 ms

Loss rate: 0.00%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-31 11:50:17

End at: 2018-01-31 11:50:47

Below is generated by plot.py at 2018-01-31 15:07:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 434.62 Mbit/s

95th percentile per-packet one-way delay: 273.528 ms

Loss rate: 2.50%

-- Flow 1:

Average throughput: 422.28 Mbit/s

95th percentile per-packet one-way delay: 273.498 ms

Loss rate: 2.53%

-- Flow 2:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 273.768 ms

Loss rate: 1.45%

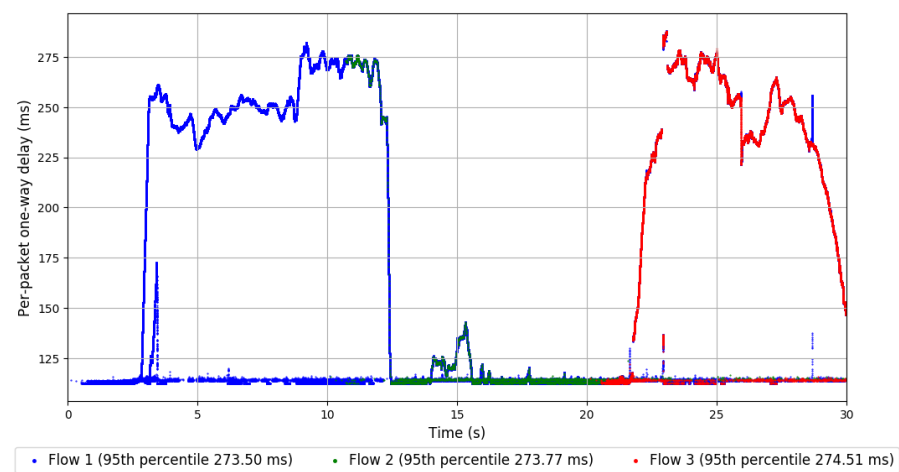
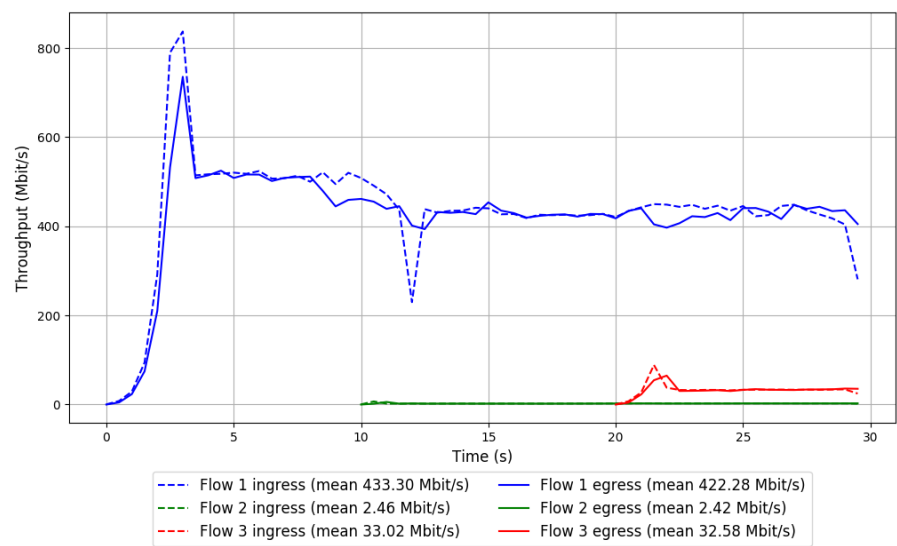
-- Flow 3:

Average throughput: 32.58 Mbit/s

95th percentile per-packet one-way delay: 274.512 ms

Loss rate: 1.34%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-31 12:07:50

End at: 2018-01-31 12:08:20

Below is generated by plot.py at 2018-01-31 15:08:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 417.04 Mbit/s

95th percentile per-packet one-way delay: 273.381 ms

Loss rate: 3.05%

-- Flow 1:

Average throughput: 403.43 Mbit/s

95th percentile per-packet one-way delay: 273.605 ms

Loss rate: 3.14%

-- Flow 2:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 253.312 ms

Loss rate: 0.67%

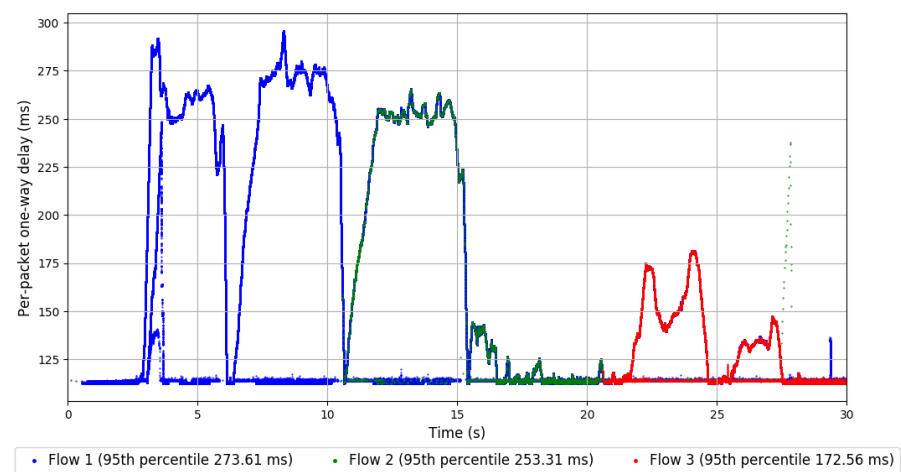
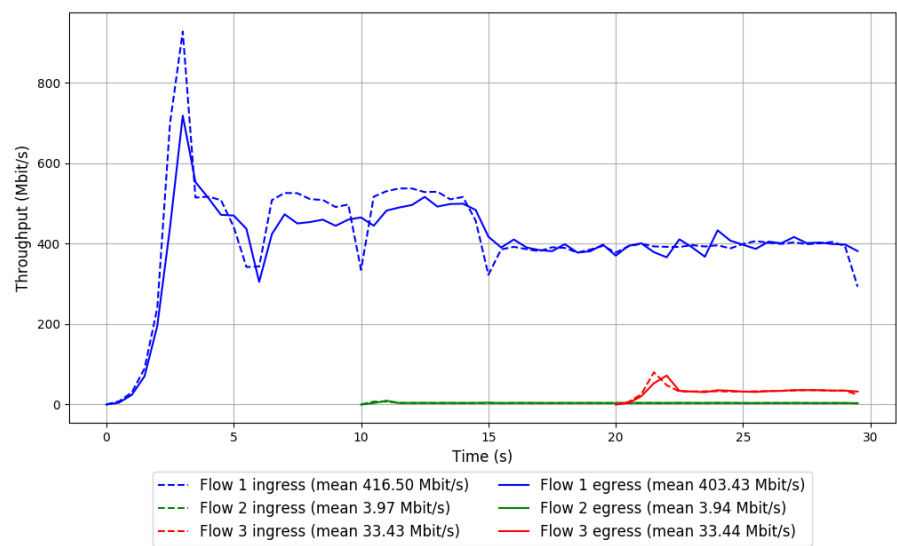
-- Flow 3:

Average throughput: 33.44 Mbit/s

95th percentile per-packet one-way delay: 172.561 ms

Loss rate: 0.00%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-31 12:25:17

End at: 2018-01-31 12:25:47

Below is generated by plot.py at 2018-01-31 15:08:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 355.71 Mbit/s

95th percentile per-packet one-way delay: 259.262 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 311.82 Mbit/s

95th percentile per-packet one-way delay: 256.830 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 63.95 Mbit/s

95th percentile per-packet one-way delay: 280.382 ms

Loss rate: 0.28%

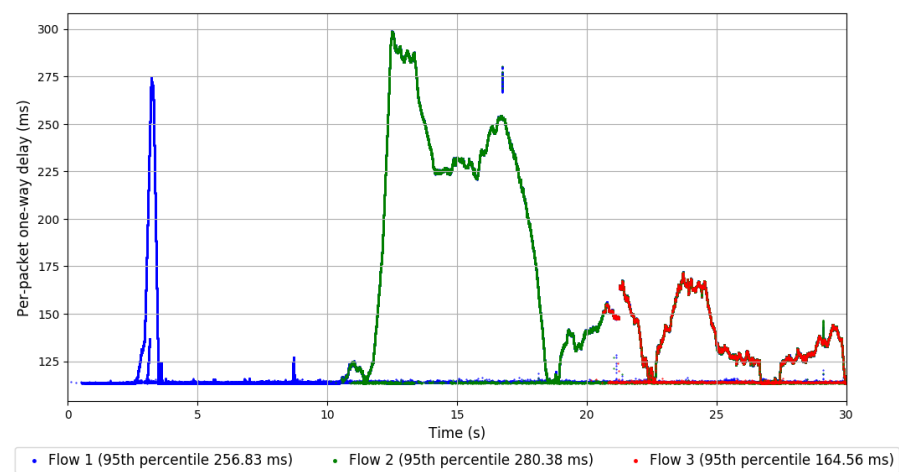
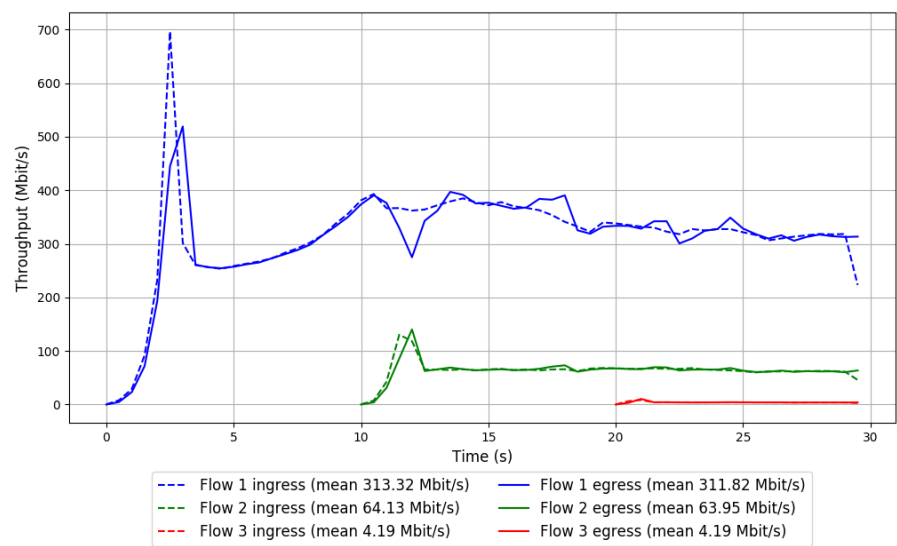
-- Flow 3:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 164.560 ms

Loss rate: 0.00%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-31 12:42:54

End at: 2018-01-31 12:43:24

Below is generated by plot.py at 2018-01-31 15:12:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 370.55 Mbit/s

95th percentile per-packet one-way delay: 274.266 ms

Loss rate: 1.41%

-- Flow 1:

Average throughput: 305.18 Mbit/s

95th percentile per-packet one-way delay: 273.606 ms

Loss rate: 1.30%

-- Flow 2:

Average throughput: 67.90 Mbit/s

95th percentile per-packet one-way delay: 275.019 ms

Loss rate: 1.50%

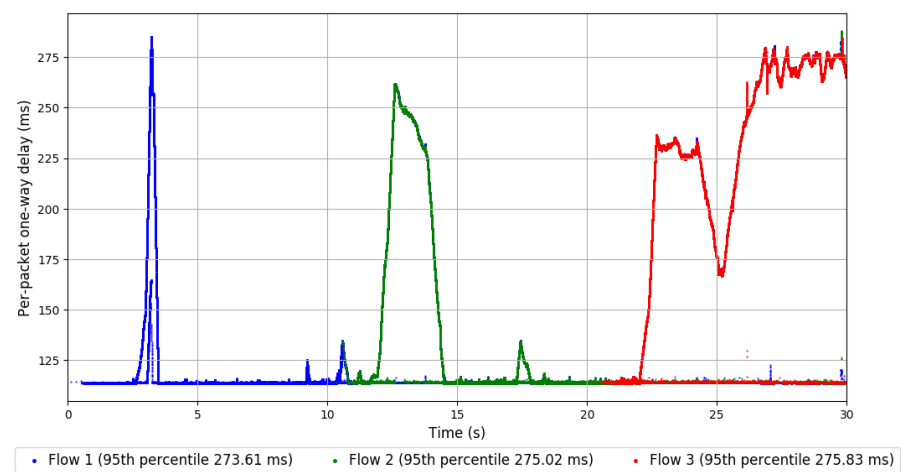
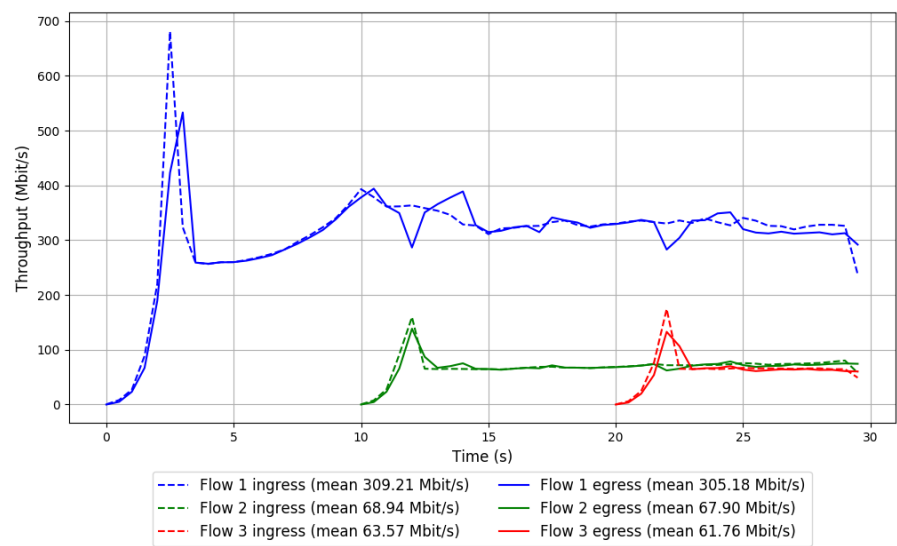
-- Flow 3:

Average throughput: 61.76 Mbit/s

95th percentile per-packet one-way delay: 275.832 ms

Loss rate: 2.80%

Run 9: Report of PCC — Data Link

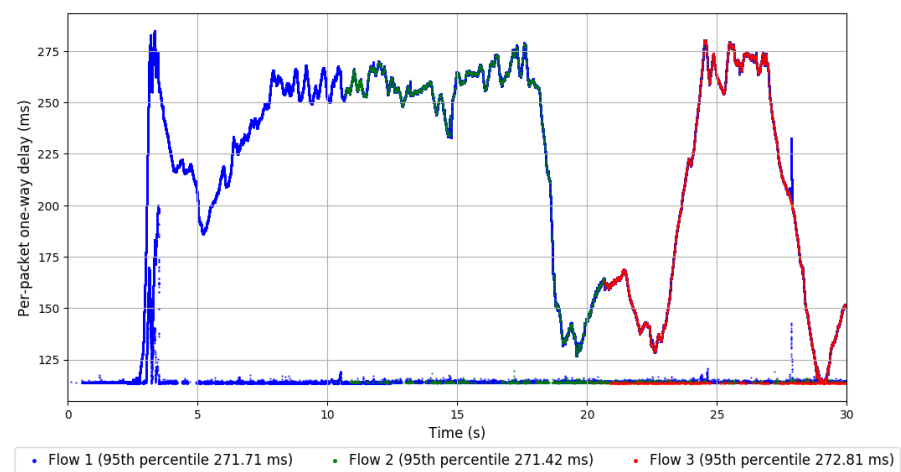
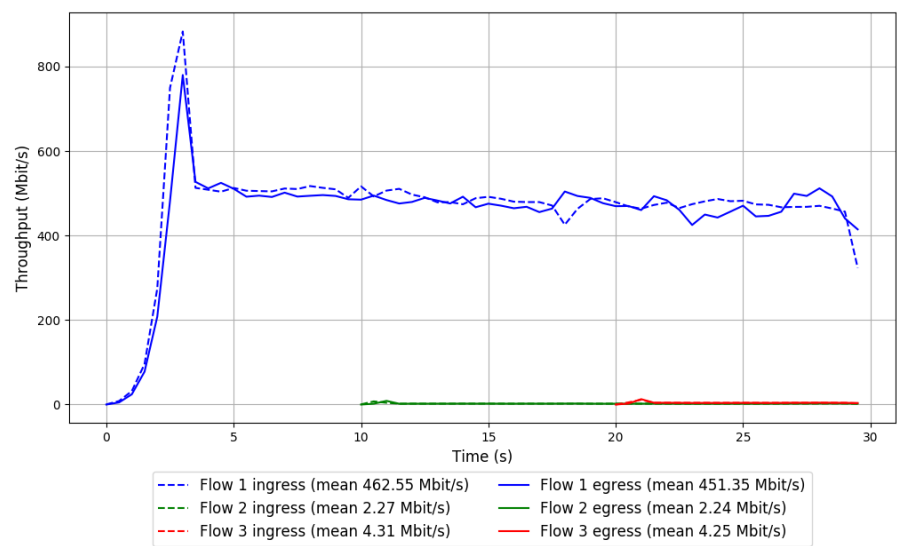


```
Run 10: Statistics of PCC

Start at: 2018-01-31 13:00:12
End at: 2018-01-31 13:00:42

# Below is generated by plot.py at 2018-01-31 15:14:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 454.23 Mbit/s
95th percentile per-packet one-way delay: 271.714 ms
Loss rate: 2.41%
-- Flow 1:
Average throughput: 451.35 Mbit/s
95th percentile per-packet one-way delay: 271.709 ms
Loss rate: 2.41%
-- Flow 2:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 271.423 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 4.25 Mbit/s
95th percentile per-packet one-way delay: 272.812 ms
Loss rate: 1.22%
```

Run 10: Report of PCC — Data Link

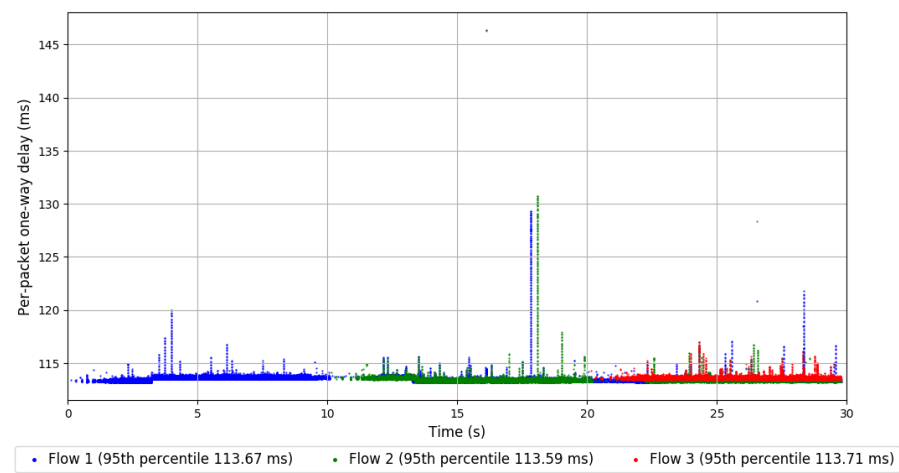
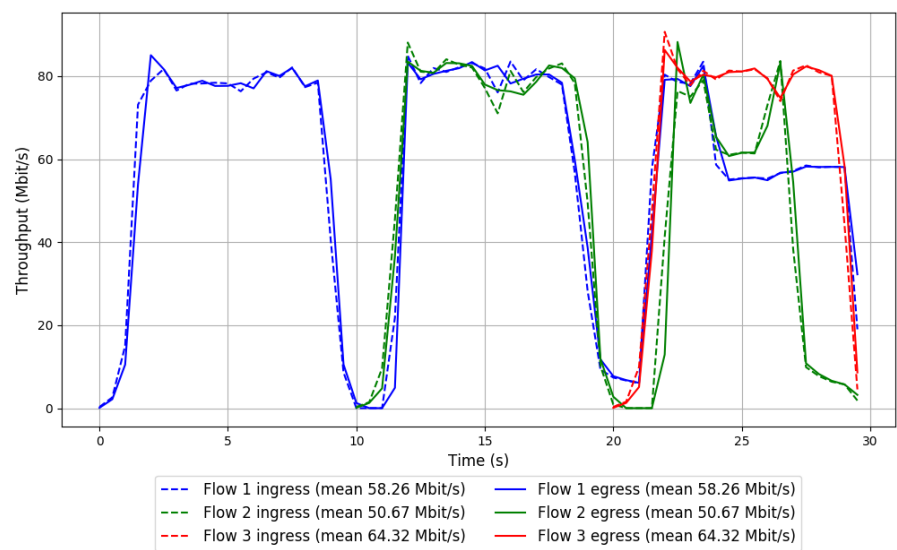


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-31 10:11:20
End at: 2018-01-31 10:11:51

# Below is generated by plot.py at 2018-01-31 15:14:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 112.71 Mbit/s
95th percentile per-packet one-way delay: 113.667 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.26 Mbit/s
95th percentile per-packet one-way delay: 113.673 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.67 Mbit/s
95th percentile per-packet one-way delay: 113.589 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 64.32 Mbit/s
95th percentile per-packet one-way delay: 113.706 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-31 10:28:43

End at: 2018-01-31 10:29:13

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.84 Mbit/s

95th percentile per-packet one-way delay: 113.813 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 11.33 Mbit/s

95th percentile per-packet one-way delay: 113.740 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.65 Mbit/s

95th percentile per-packet one-way delay: 113.787 ms

Loss rate: 0.00%

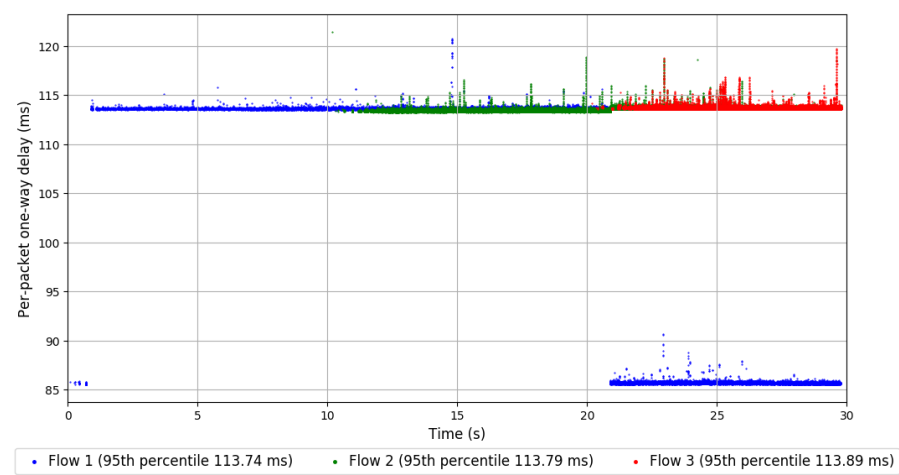
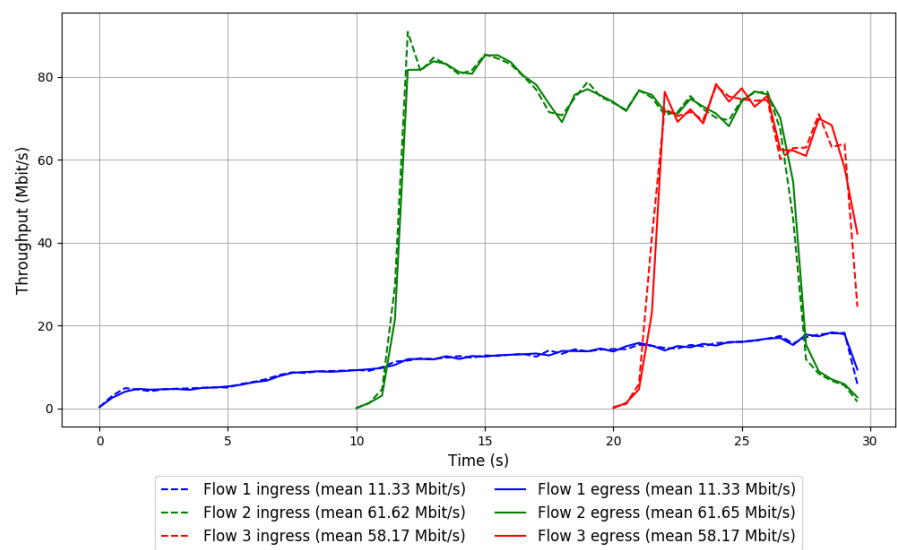
-- Flow 3:

Average throughput: 58.17 Mbit/s

95th percentile per-packet one-way delay: 113.891 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-31 10:45:55

End at: 2018-01-31 10:46:25

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.16 Mbit/s

95th percentile per-packet one-way delay: 113.948 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 56.75 Mbit/s

95th percentile per-packet one-way delay: 113.887 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.46 Mbit/s

95th percentile per-packet one-way delay: 113.967 ms

Loss rate: 0.00%

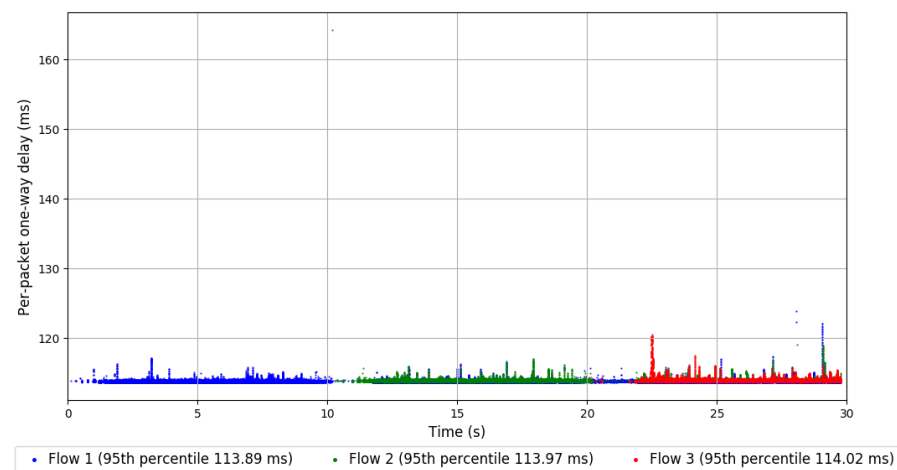
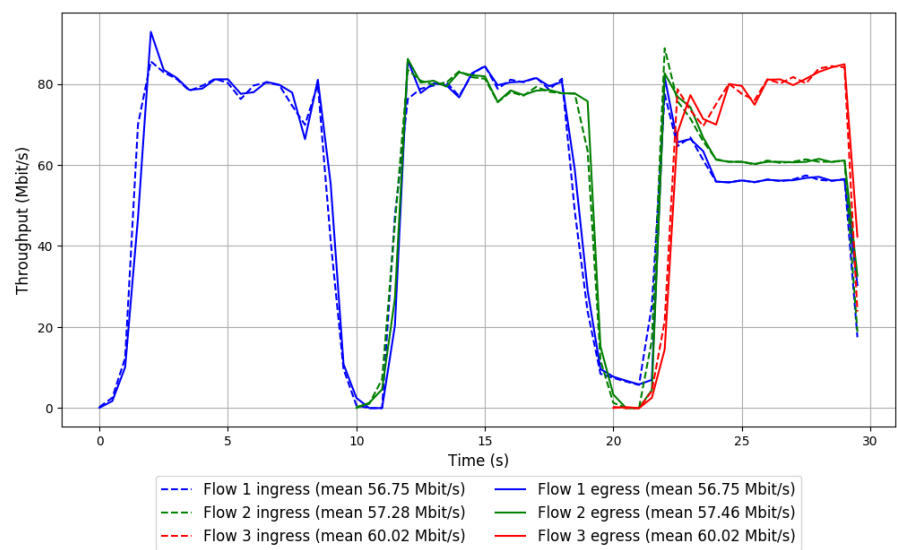
-- Flow 3:

Average throughput: 60.02 Mbit/s

95th percentile per-packet one-way delay: 114.019 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-31 11:03:11

End at: 2018-01-31 11:03:41

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 116.23 Mbit/s

95th percentile per-packet one-way delay: 113.979 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.94 Mbit/s

95th percentile per-packet one-way delay: 114.014 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 59.36 Mbit/s

95th percentile per-packet one-way delay: 113.882 ms

Loss rate: 0.00%

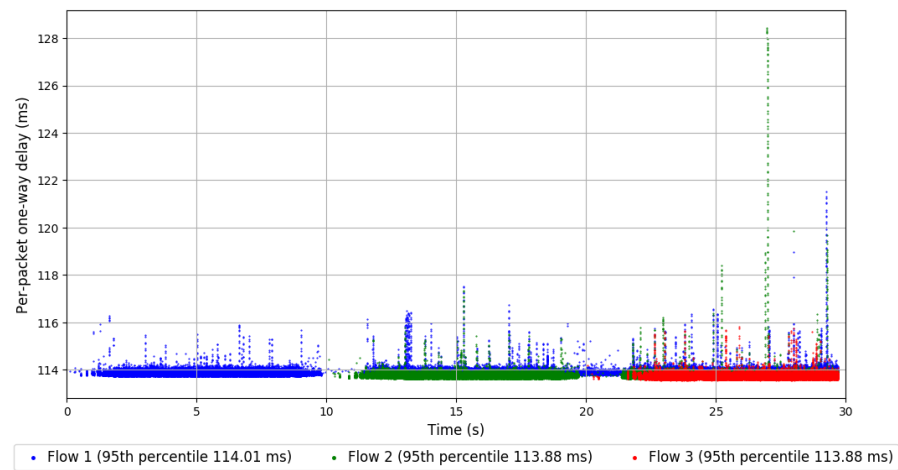
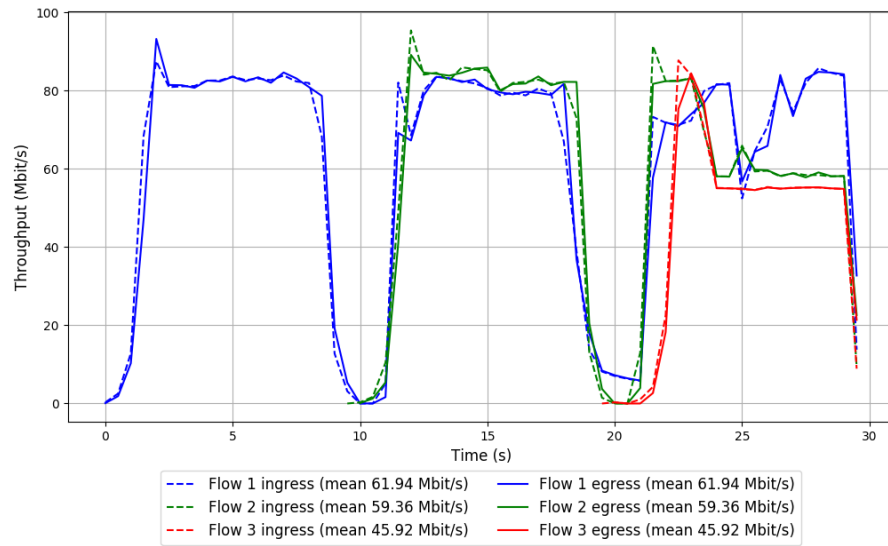
-- Flow 3:

Average throughput: 45.92 Mbit/s

95th percentile per-packet one-way delay: 113.880 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-31 11:20:38

End at: 2018-01-31 11:21:08

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.17 Mbit/s

95th percentile per-packet one-way delay: 114.251 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 63.13 Mbit/s

95th percentile per-packet one-way delay: 114.277 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.42 Mbit/s

95th percentile per-packet one-way delay: 114.232 ms

Loss rate: 0.00%

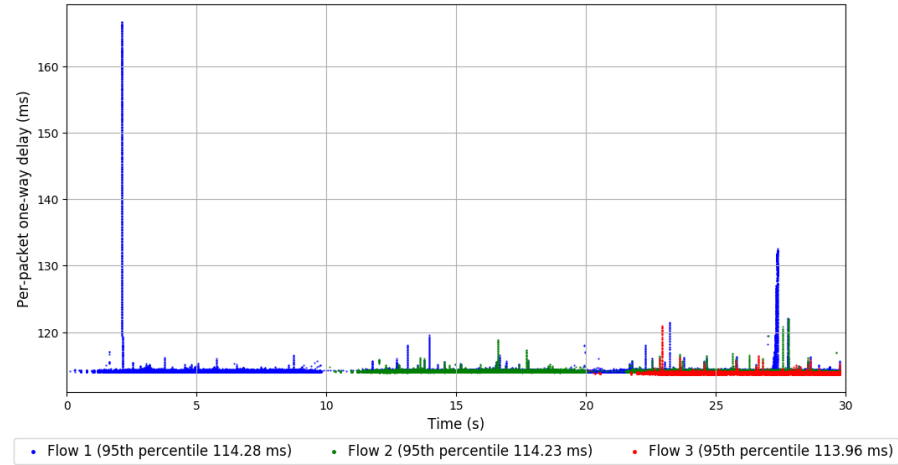
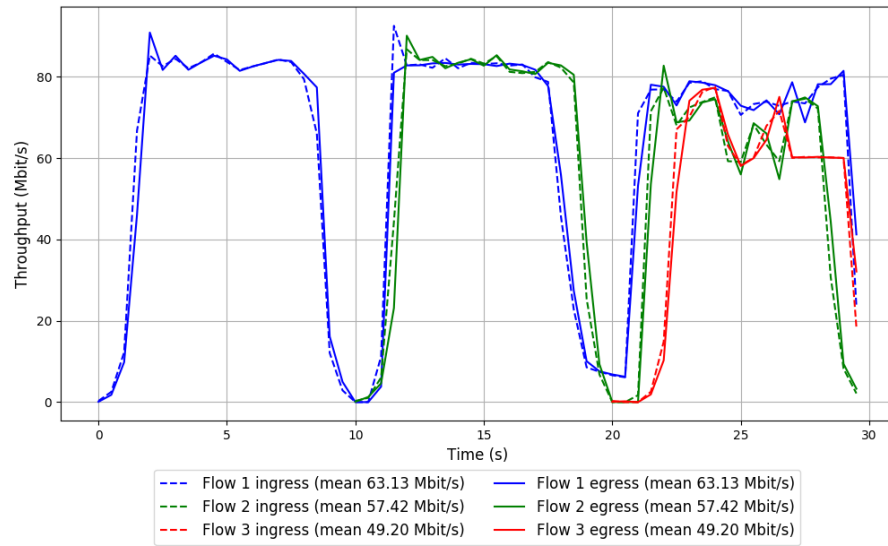
-- Flow 3:

Average throughput: 49.20 Mbit/s

95th percentile per-packet one-way delay: 113.960 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-31 11:38:04

End at: 2018-01-31 11:38:34

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.46 Mbit/s

95th percentile per-packet one-way delay: 114.386 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 41.24 Mbit/s

95th percentile per-packet one-way delay: 114.438 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.02 Mbit/s

95th percentile per-packet one-way delay: 114.299 ms

Loss rate: 0.00%

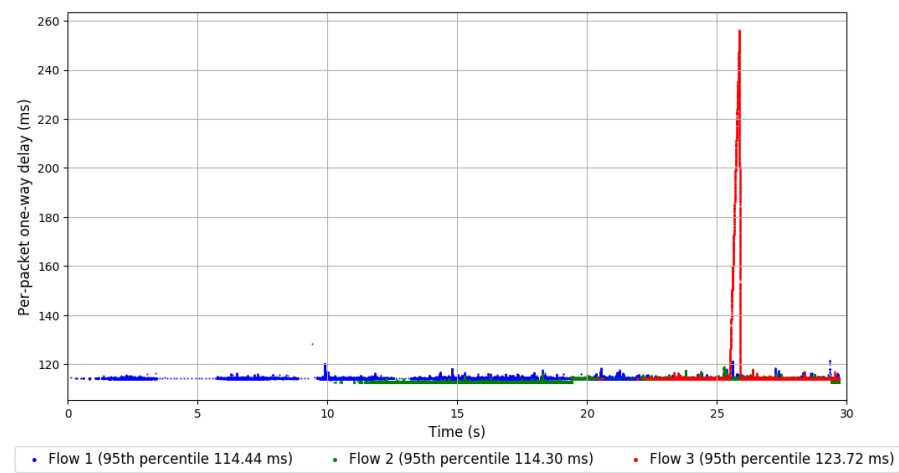
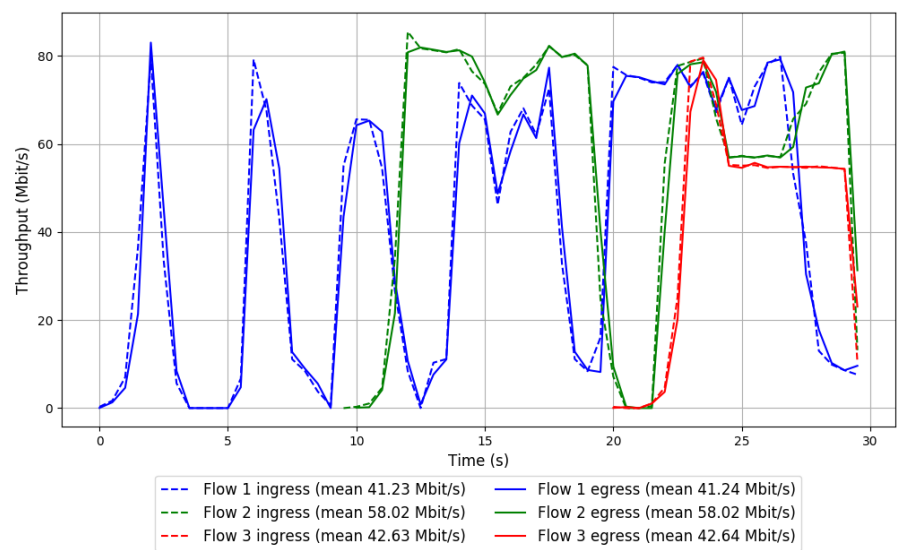
-- Flow 3:

Average throughput: 42.64 Mbit/s

95th percentile per-packet one-way delay: 123.722 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-31 11:55:36

End at: 2018-01-31 11:56:06

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 116.76 Mbit/s

95th percentile per-packet one-way delay: 114.564 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 63.73 Mbit/s

95th percentile per-packet one-way delay: 114.588 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.86 Mbit/s

95th percentile per-packet one-way delay: 113.915 ms

Loss rate: 0.00%

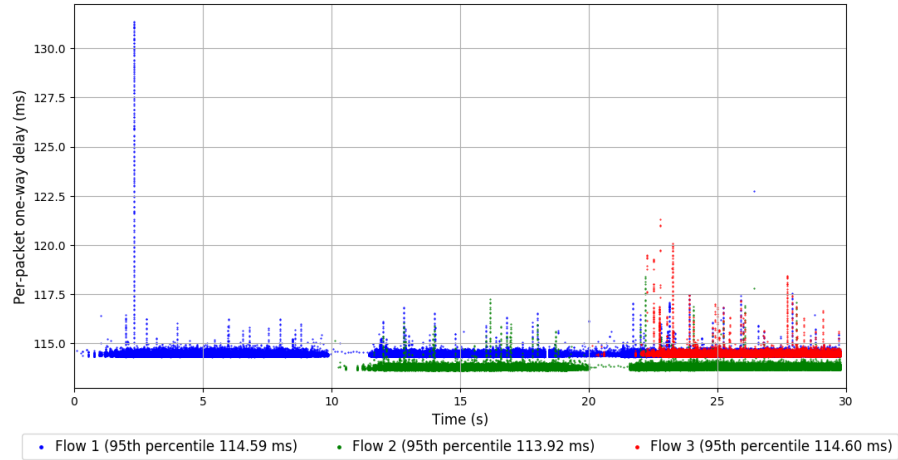
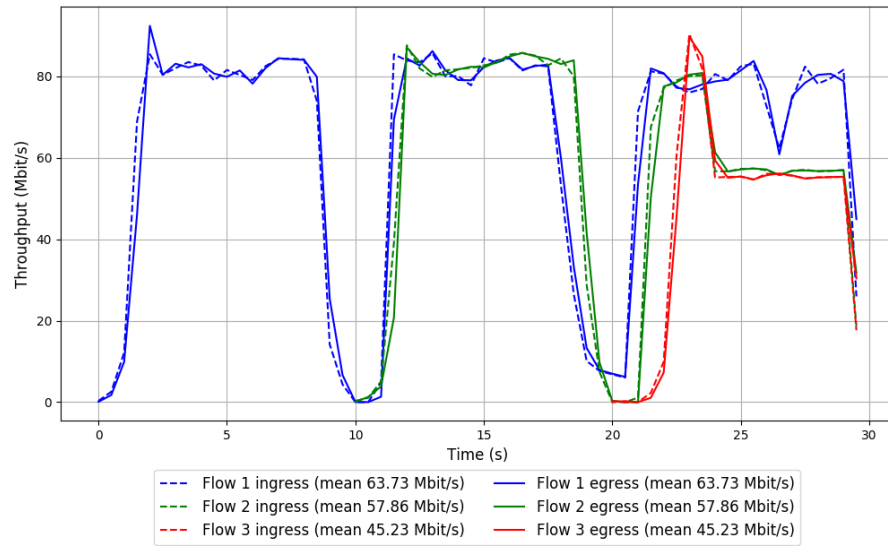
-- Flow 3:

Average throughput: 45.23 Mbit/s

95th percentile per-packet one-way delay: 114.604 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-31 12:13:00

End at: 2018-01-31 12:13:30

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.98 Mbit/s

95th percentile per-packet one-way delay: 114.463 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.19 Mbit/s

95th percentile per-packet one-way delay: 114.524 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 57.80 Mbit/s

95th percentile per-packet one-way delay: 113.931 ms

Loss rate: 0.00%

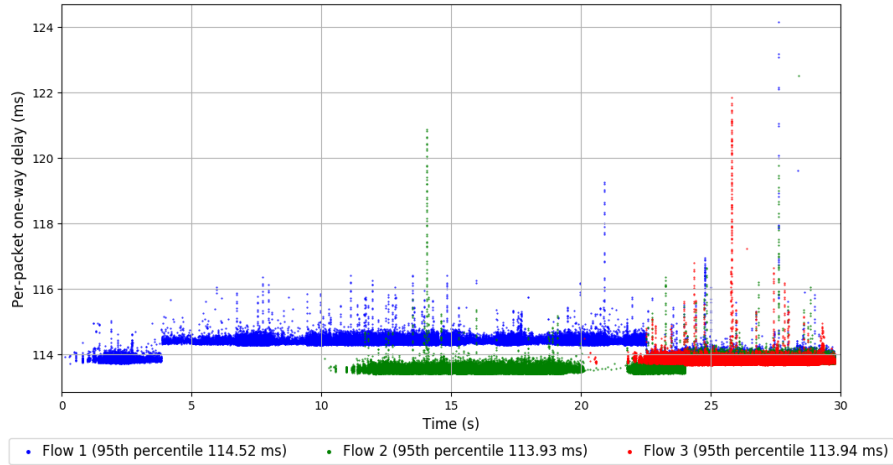
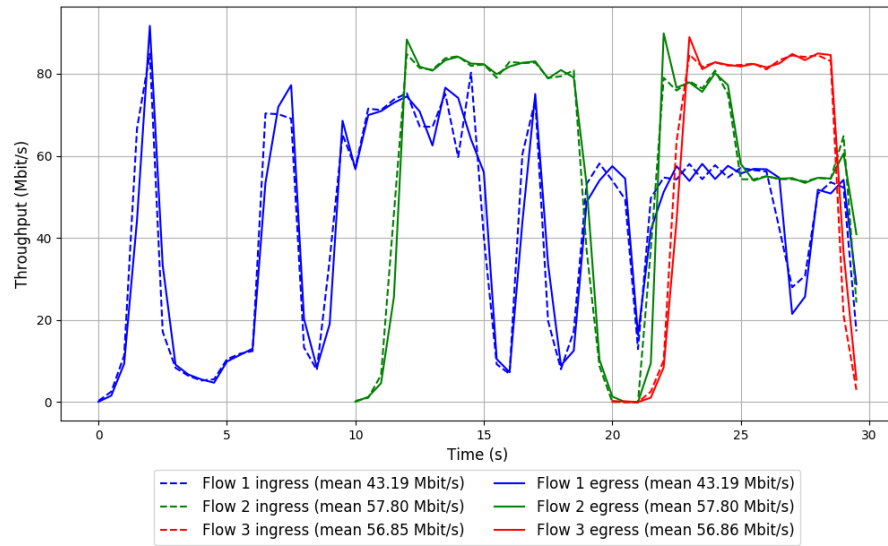
-- Flow 3:

Average throughput: 56.86 Mbit/s

95th percentile per-packet one-way delay: 113.944 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-31 12:30:35

End at: 2018-01-31 12:31:05

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.35 Mbit/s

95th percentile per-packet one-way delay: 114.031 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.97 Mbit/s

95th percentile per-packet one-way delay: 114.071 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.95 Mbit/s

95th percentile per-packet one-way delay: 114.003 ms

Loss rate: 0.00%

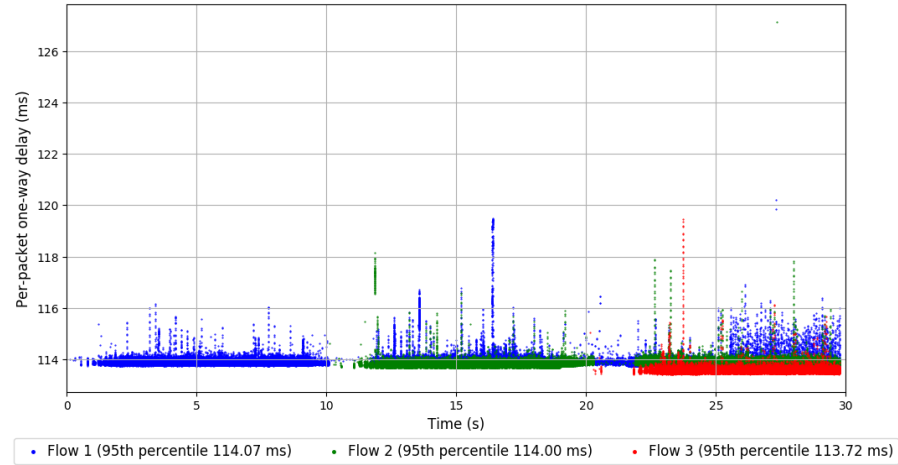
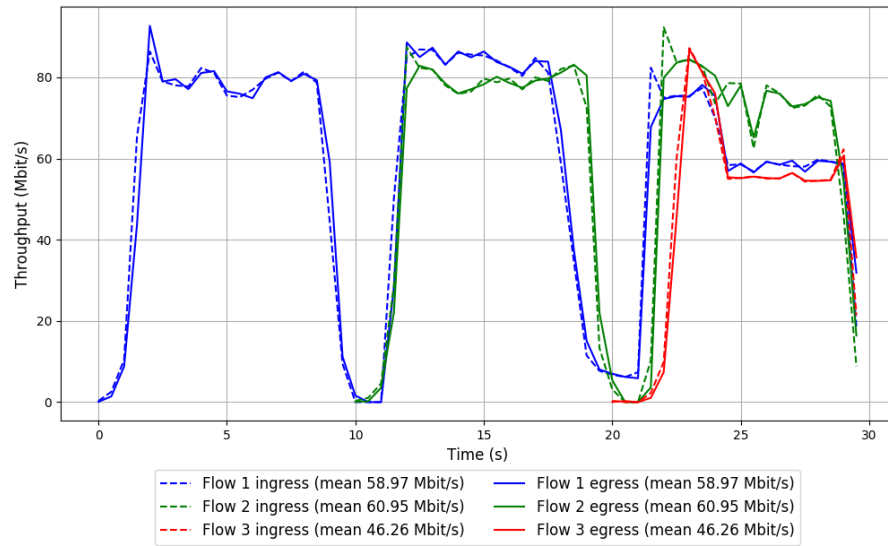
-- Flow 3:

Average throughput: 46.26 Mbit/s

95th percentile per-packet one-way delay: 113.717 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

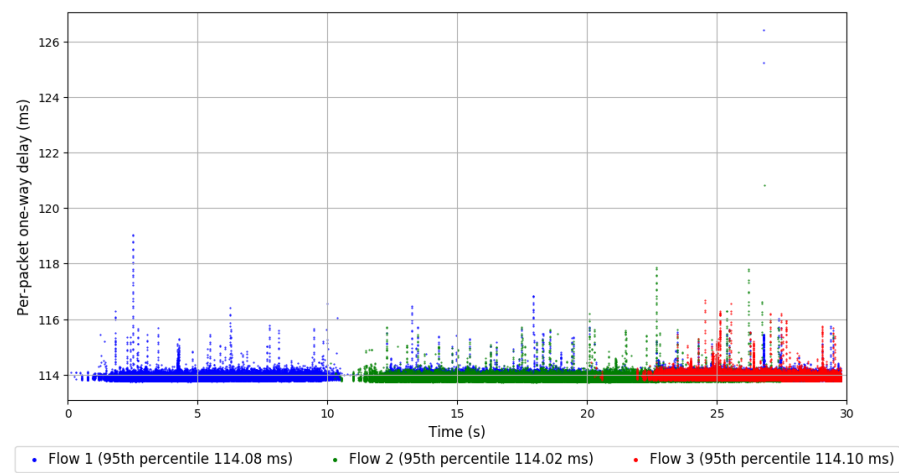
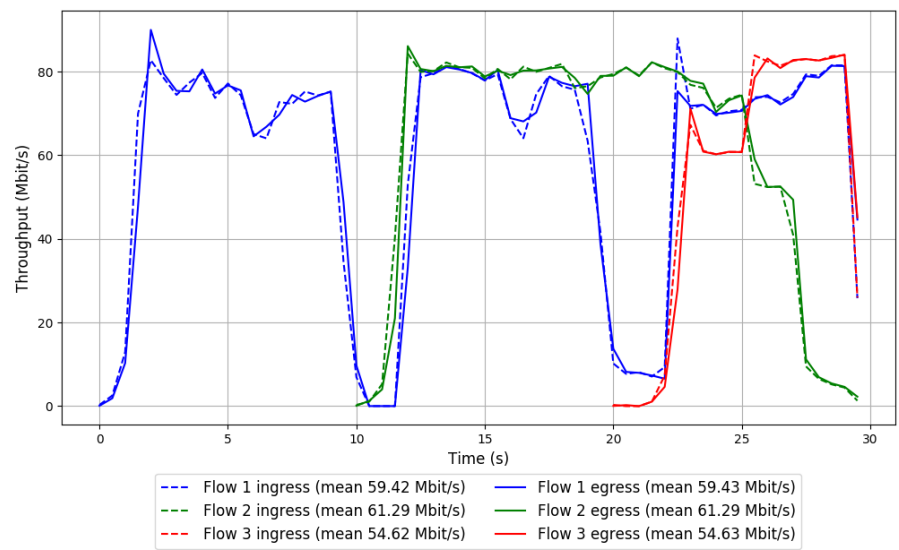


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-31 12:47:59
End at: 2018-01-31 12:48:29

# Below is generated by plot.py at 2018-01-31 15:14:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 117.76 Mbit/s
95th percentile per-packet one-way delay: 114.069 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.43 Mbit/s
95th percentile per-packet one-way delay: 114.085 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.29 Mbit/s
95th percentile per-packet one-way delay: 114.016 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 54.63 Mbit/s
95th percentile per-packet one-way delay: 114.100 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

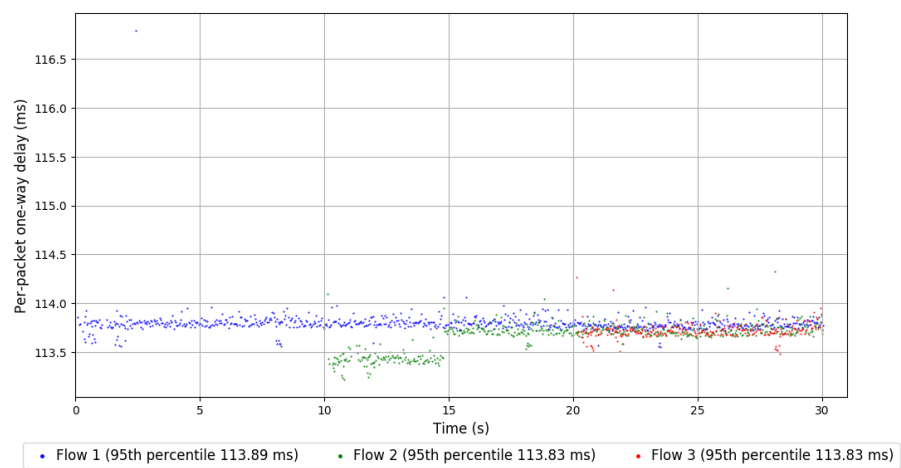
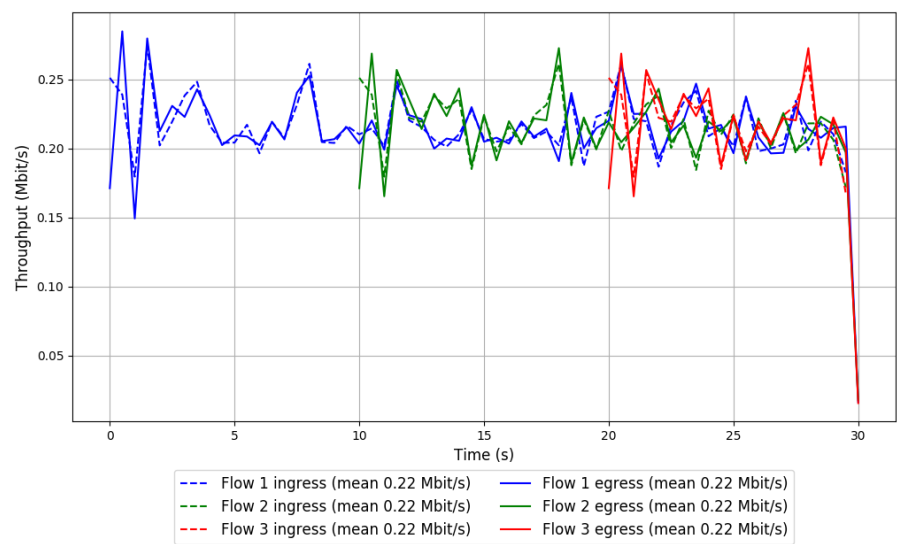


```
Run 1: Statistics of SCReAM

Start at: 2018-01-31 10:19:29
End at: 2018-01-31 10:19:59

# Below is generated by plot.py at 2018-01-31 15:14:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 113.870 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.891 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.835 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.828 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

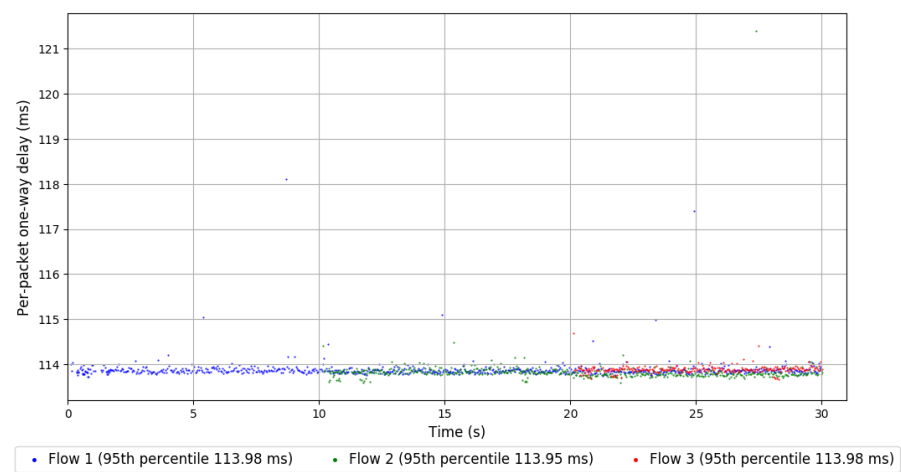
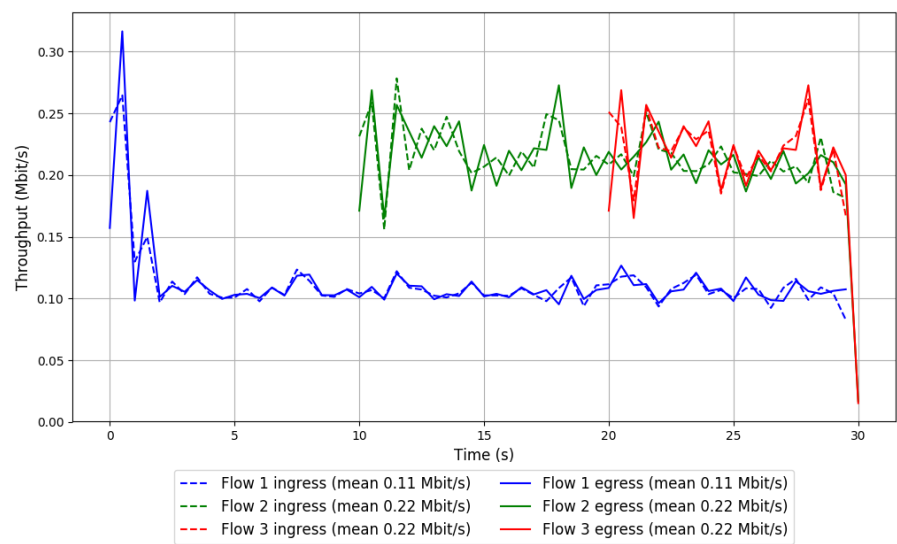


```
Run 2: Statistics of SCReAM

Start at: 2018-01-31 10:37:11
End at: 2018-01-31 10:37:41

# Below is generated by plot.py at 2018-01-31 15:14:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 113.980 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 113.984 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.951 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.983 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

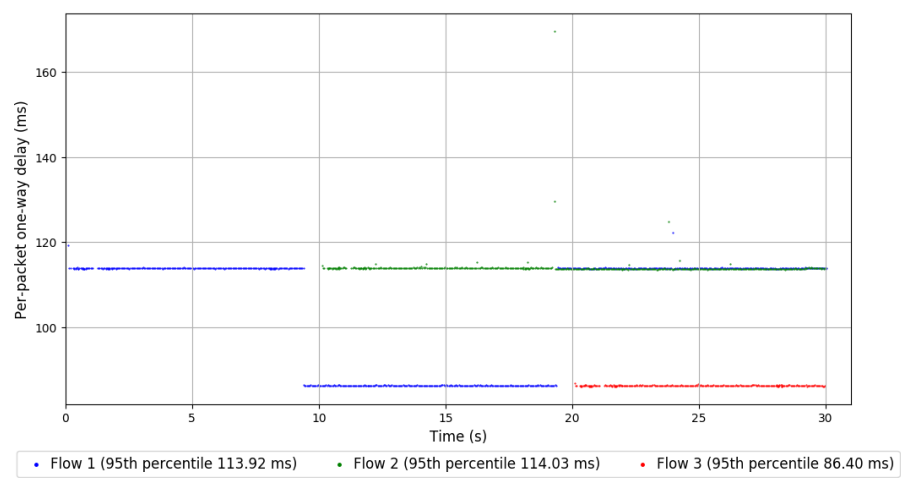
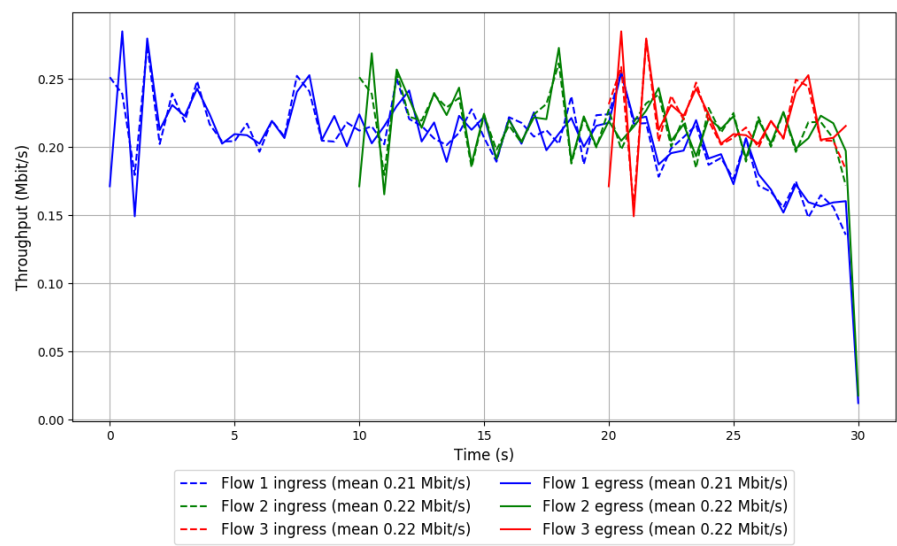


```
Run 3: Statistics of SCReAM

Start at: 2018-01-31 10:54:15
End at: 2018-01-31 10:54:45

# Below is generated by plot.py at 2018-01-31 15:14:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.975 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.925 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.030 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.398 ms
Loss rate: 0.00%
```


Run 3: Report of SReAM — Data Link

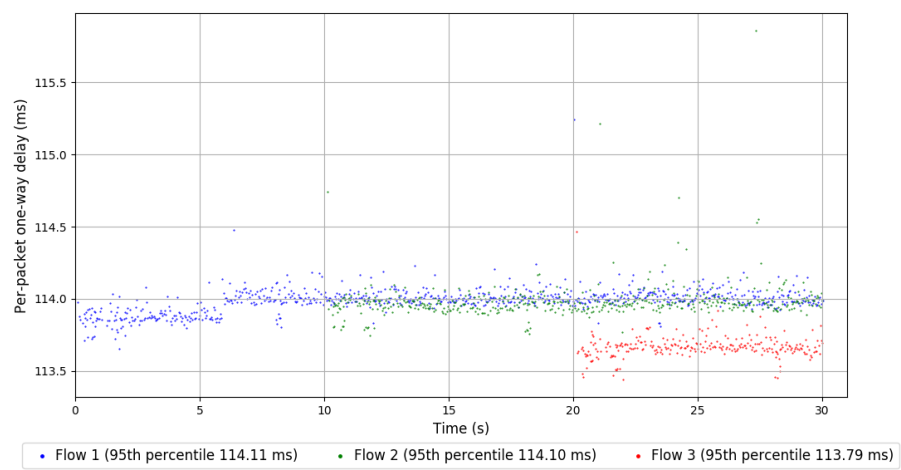
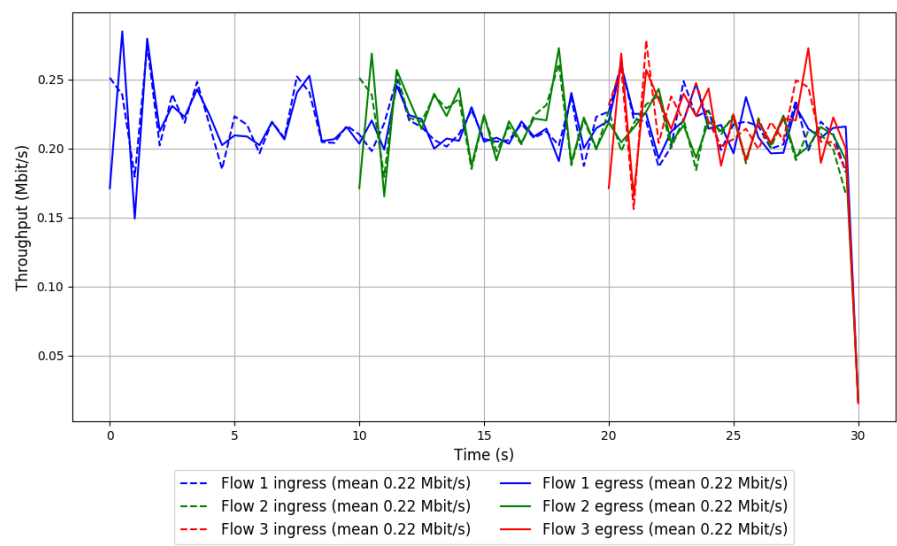


```
Run 4: Statistics of SCReAM

Start at: 2018-01-31 11:11:38
End at: 2018-01-31 11:12:08

# Below is generated by plot.py at 2018-01-31 15:14:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 114.085 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.107 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.099 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.792 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link

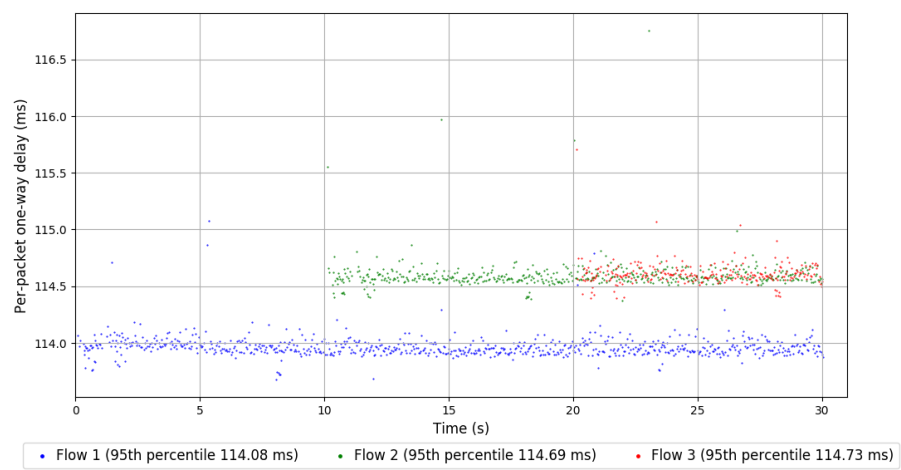
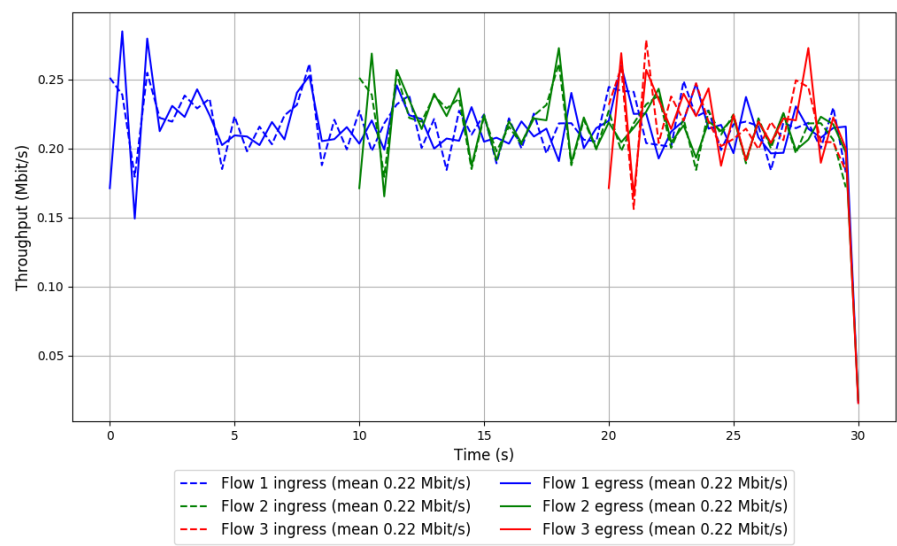


```
Run 5: Statistics of SReAM

Start at: 2018-01-31 11:28:59
End at: 2018-01-31 11:29:29

# Below is generated by plot.py at 2018-01-31 15:14:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 114.679 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.081 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.690 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.726 ms
Loss rate: 0.00%
```

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-31 11:46:27

End at: 2018-01-31 11:46:57

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.347 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.379 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.283 ms

Loss rate: 0.00%

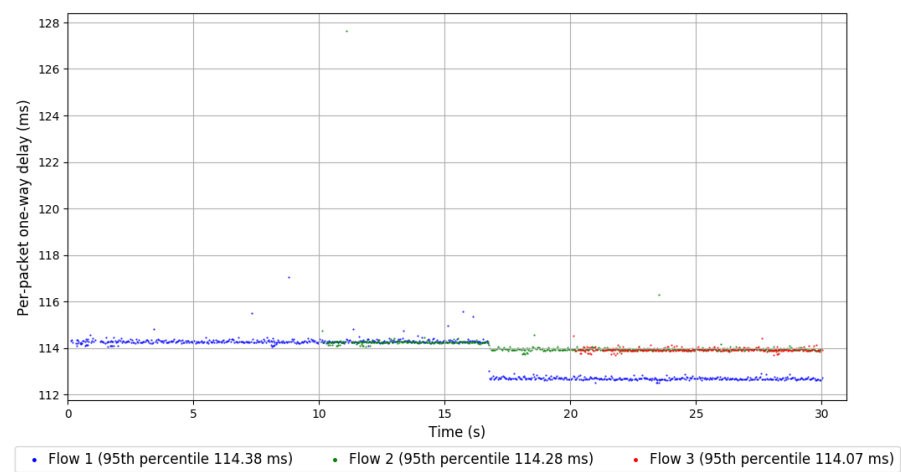
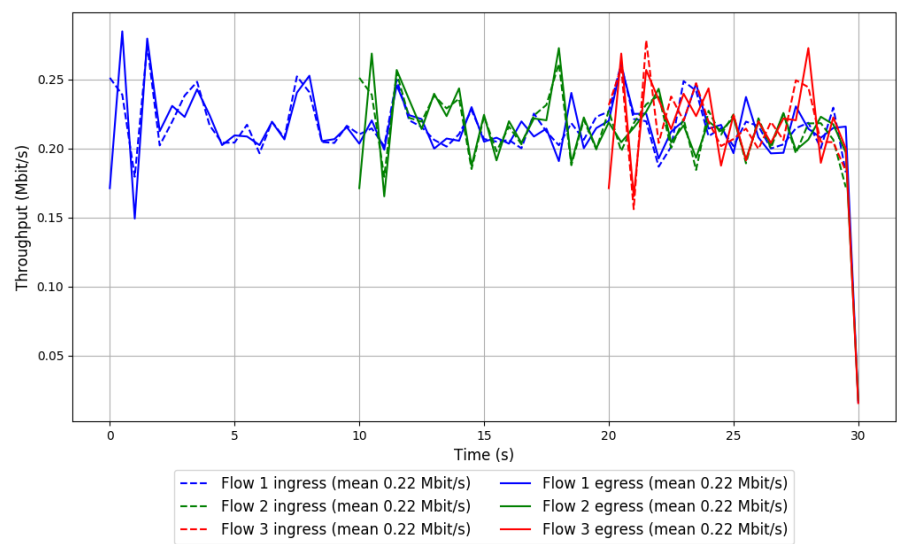
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.068 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

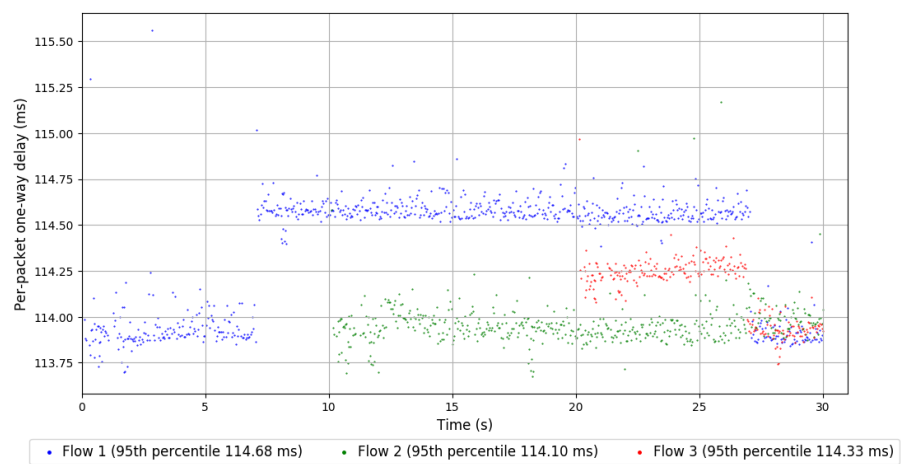
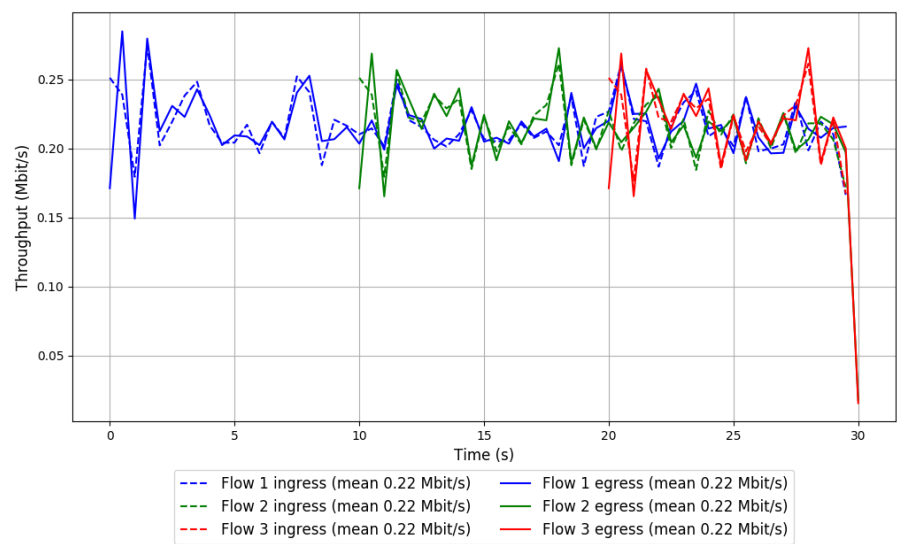


```
Run 7: Statistics of SReAM

Start at: 2018-01-31 12:04:07
End at: 2018-01-31 12:04:37

# Below is generated by plot.py at 2018-01-31 15:14:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 114.635 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.677 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.097 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.328 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link

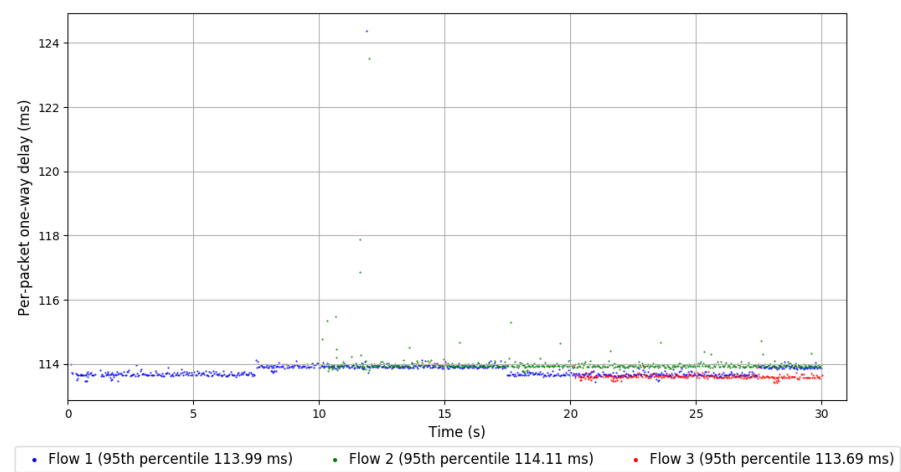
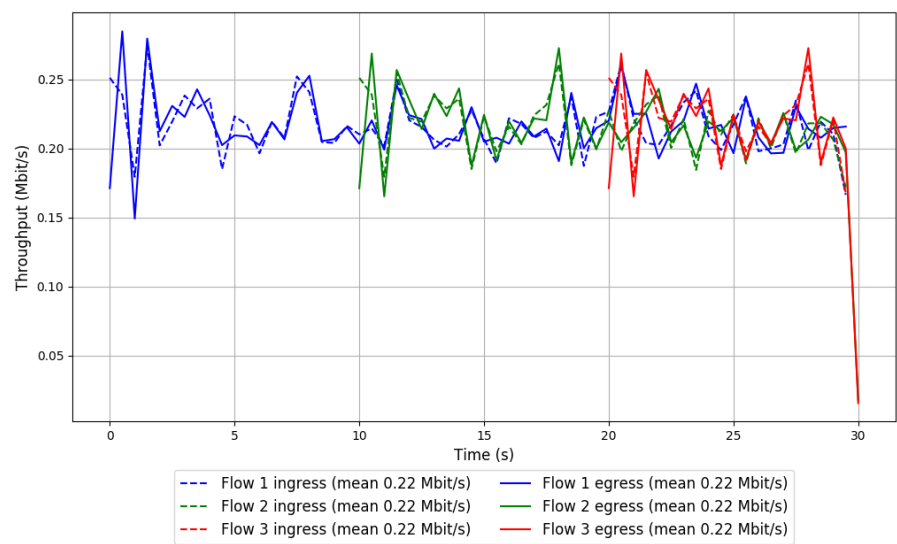


```
Run 8: Statistics of SCReAM

Start at: 2018-01-31 12:21:27
End at: 2018-01-31 12:21:57

# Below is generated by plot.py at 2018-01-31 15:14:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 114.021 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.988 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.109 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.692 ms
Loss rate: 0.00%
```

Run 8: Report of SReAM — Data Link

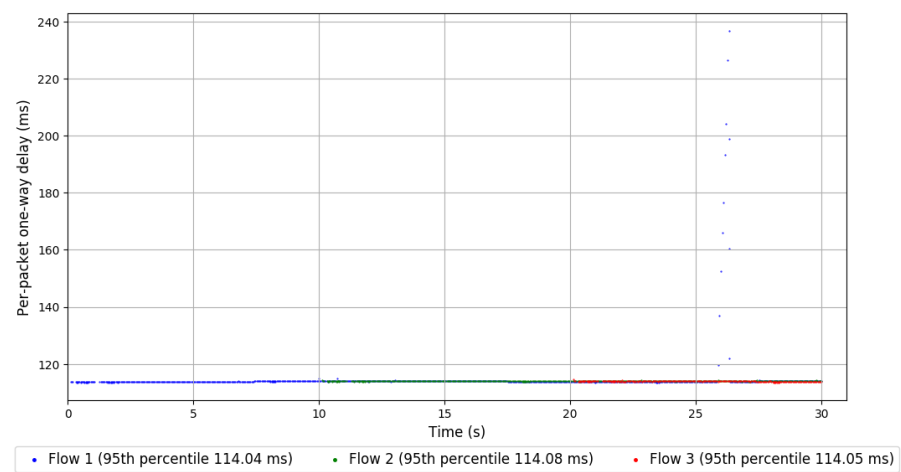
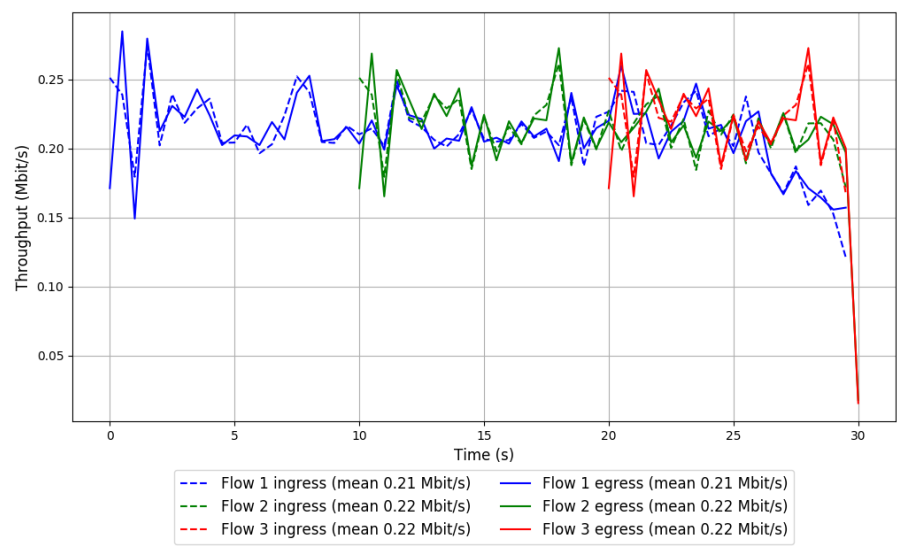


```
Run 9: Statistics of SCReAM

Start at: 2018-01-31 12:39:07
End at: 2018-01-31 12:39:37

# Below is generated by plot.py at 2018-01-31 15:14:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 114.062 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 114.036 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.077 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.048 ms
Loss rate: 0.00%
```

Run 9: Report of SCReAM — Data Link

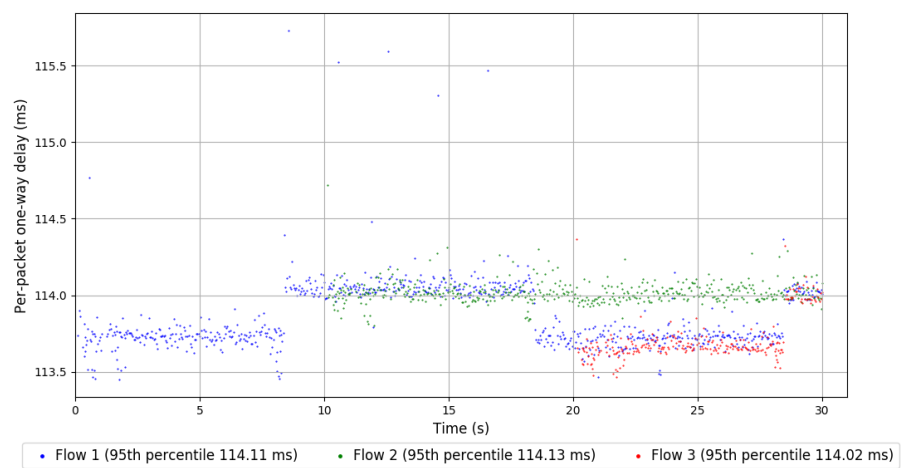
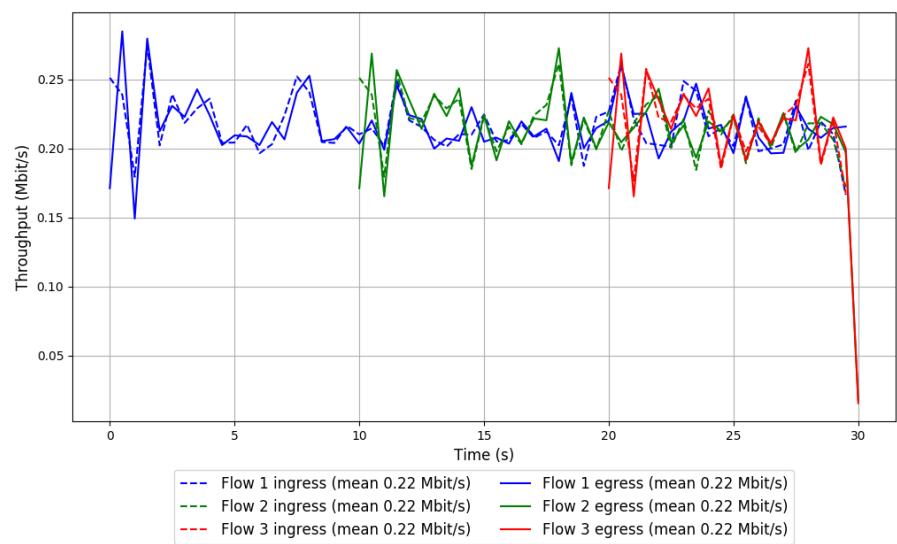


```
Run 10: Statistics of SReAM

Start at: 2018-01-31 12:56:26
End at: 2018-01-31 12:56:56

# Below is generated by plot.py at 2018-01-31 15:14:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 114.112 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.113 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.130 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.023 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

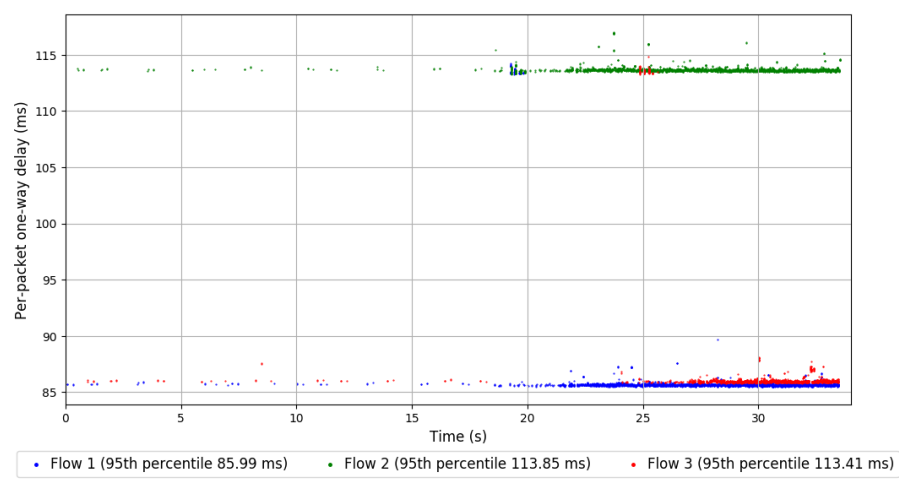
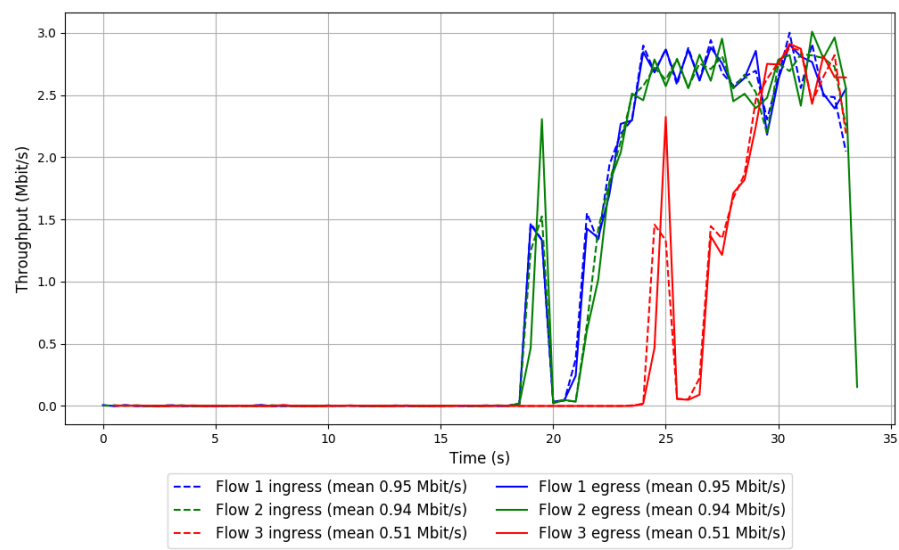


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-31 10:21:29
End at: 2018-01-31 10:21:59

# Below is generated by plot.py at 2018-01-31 15:14:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 113.748 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.95 Mbit/s
95th percentile per-packet one-way delay: 85.990 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 113.854 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 113.410 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link

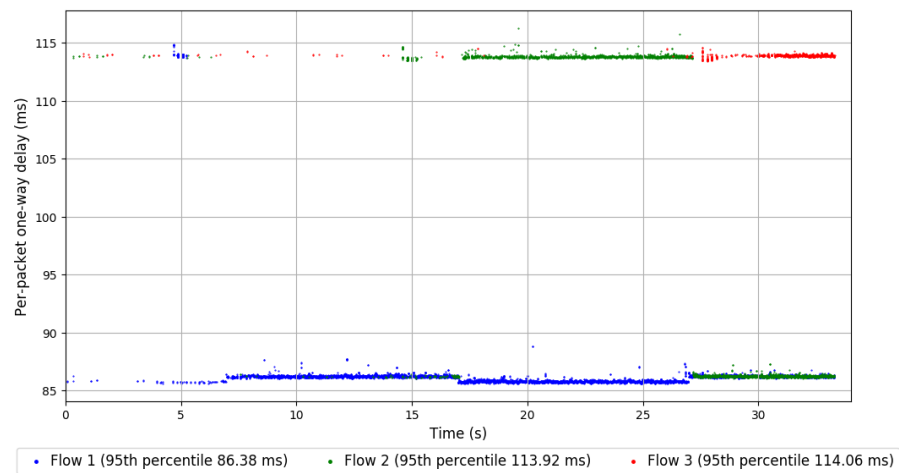
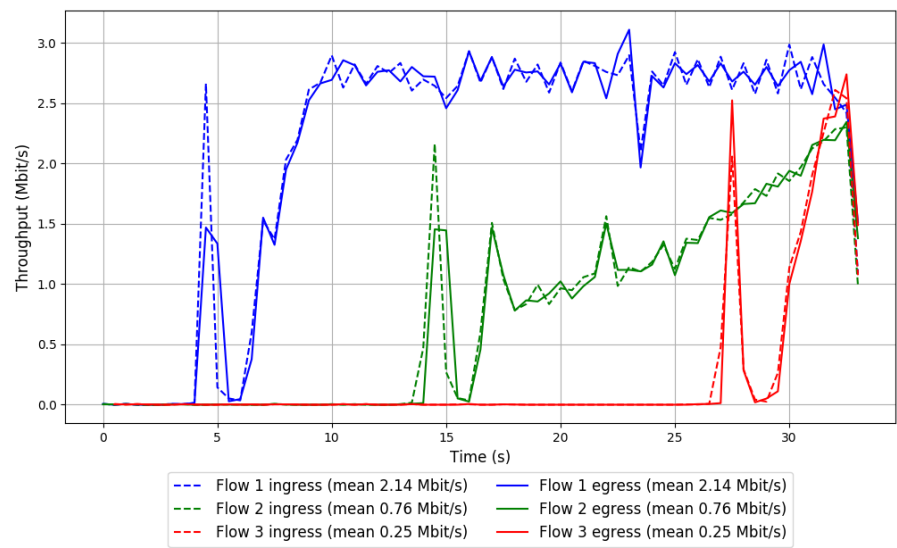


```
Run 2: Statistics of WebRTC media

Start at: 2018-01-31 10:38:50
End at: 2018-01-31 10:39:20

# Below is generated by plot.py at 2018-01-31 15:14:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.14 Mbit/s
95th percentile per-packet one-way delay: 113.925 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 86.384 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 113.917 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 114.063 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-31 10:56:09

End at: 2018-01-31 10:56:39

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 114.158 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 114.227 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 114.061 ms

Loss rate: 0.00%

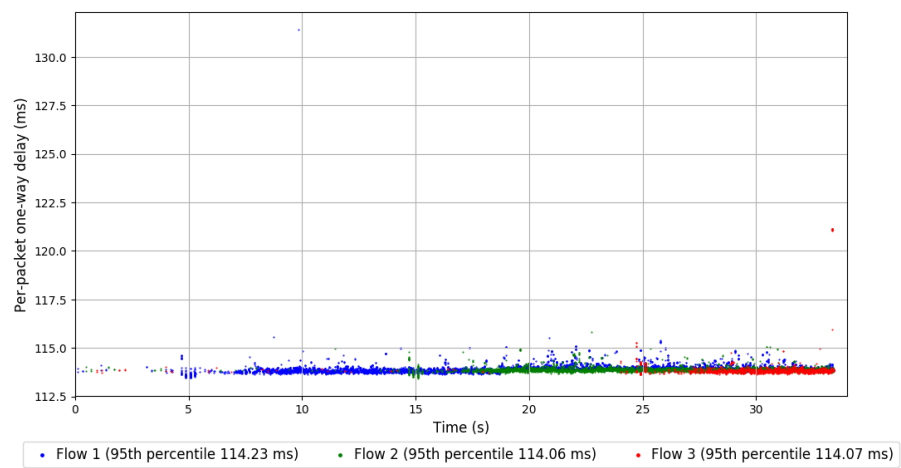
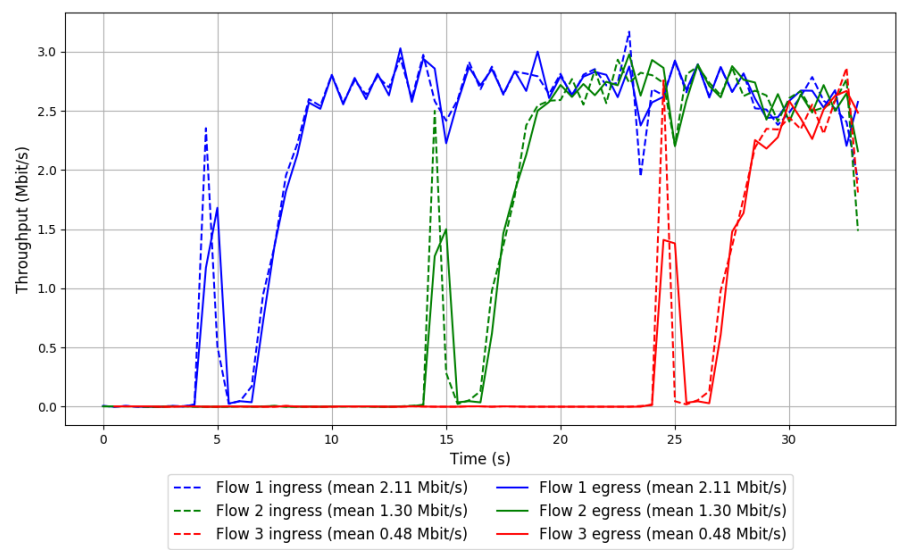
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 114.073 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-31 11:13:28

End at: 2018-01-31 11:13:58

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.84 Mbit/s

95th percentile per-packet one-way delay: 114.553 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 114.023 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 114.622 ms

Loss rate: 0.00%

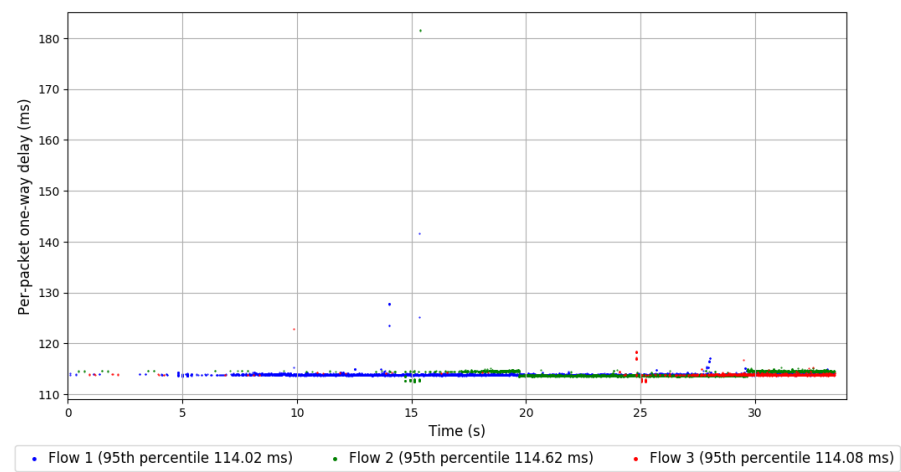
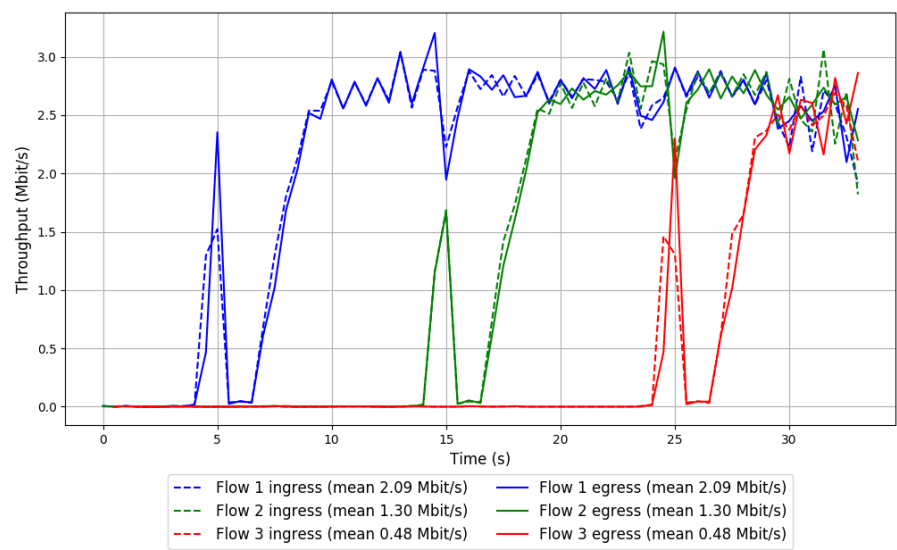
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 114.077 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-31 11:30:58

End at: 2018-01-31 11:31:28

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 114.904 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 115.072 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 114.106 ms

Loss rate: 0.00%

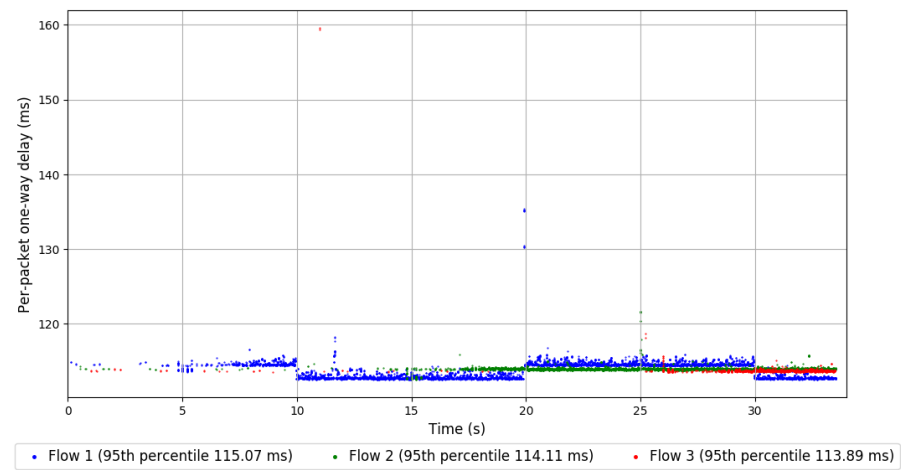
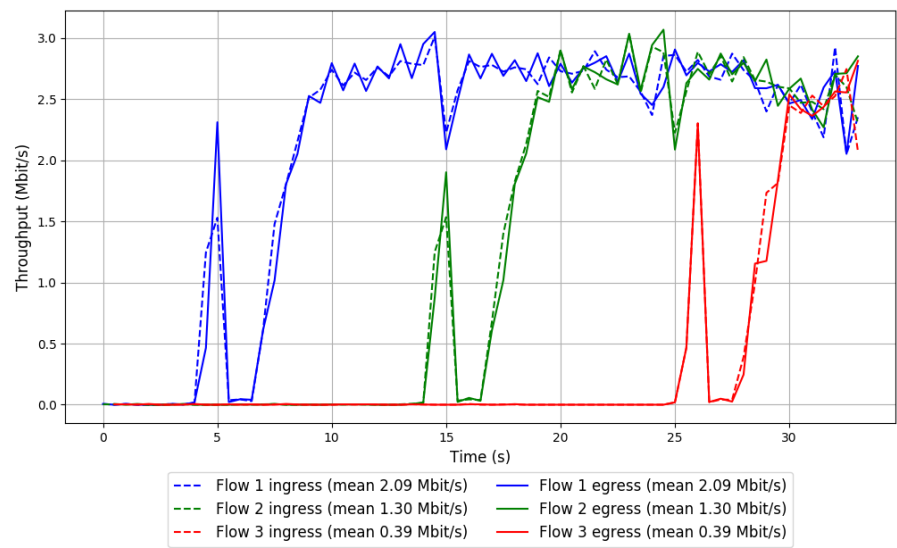
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 113.890 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-31 11:48:24

End at: 2018-01-31 11:48:54

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 114.754 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 114.514 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 114.866 ms

Loss rate: 0.00%

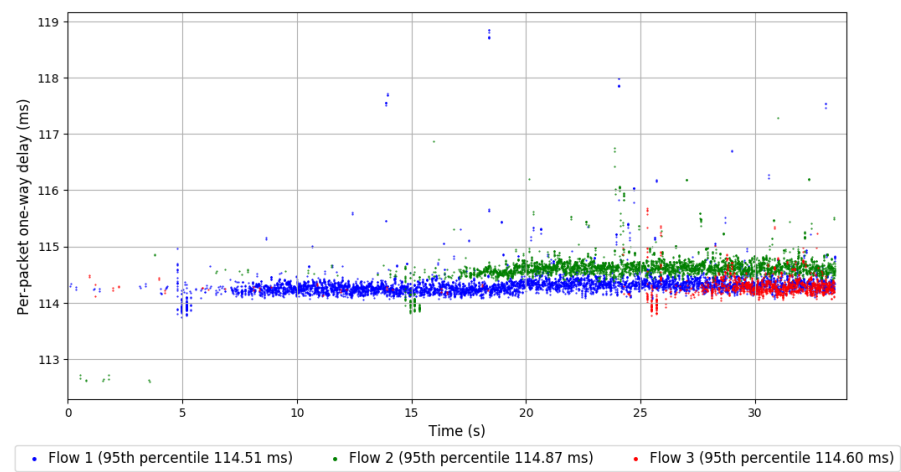
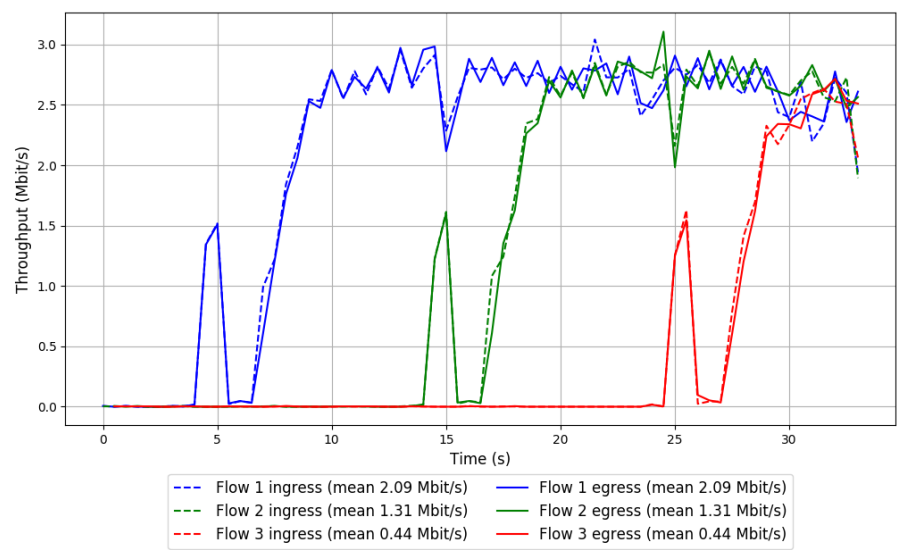
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.597 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-31 12:05:57

End at: 2018-01-31 12:06:27

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 114.323 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 114.100 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 114.378 ms

Loss rate: 0.00%

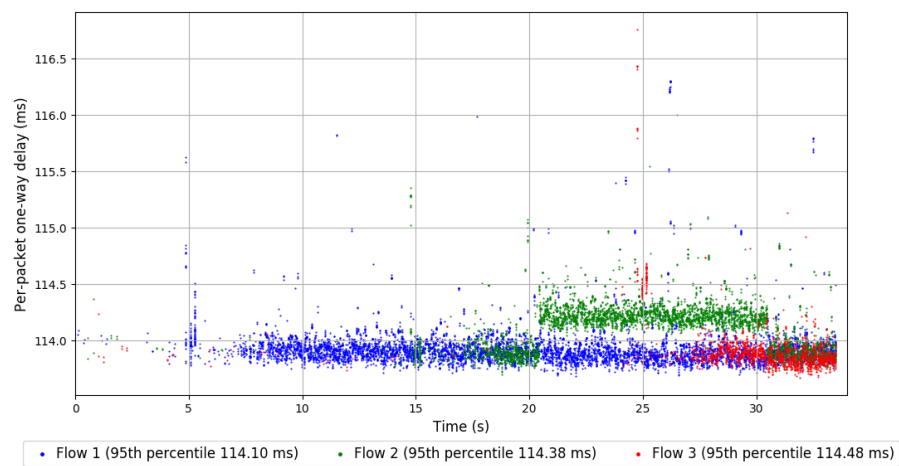
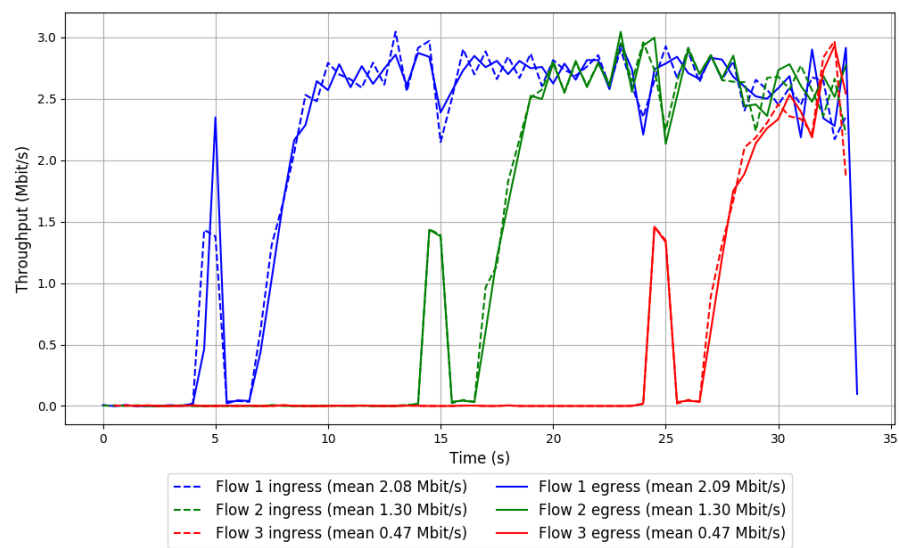
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 114.480 ms

Loss rate: 0.06%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-31 12:23:24

End at: 2018-01-31 12:23:54

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 114.123 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 114.142 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 113.855 ms

Loss rate: 0.00%

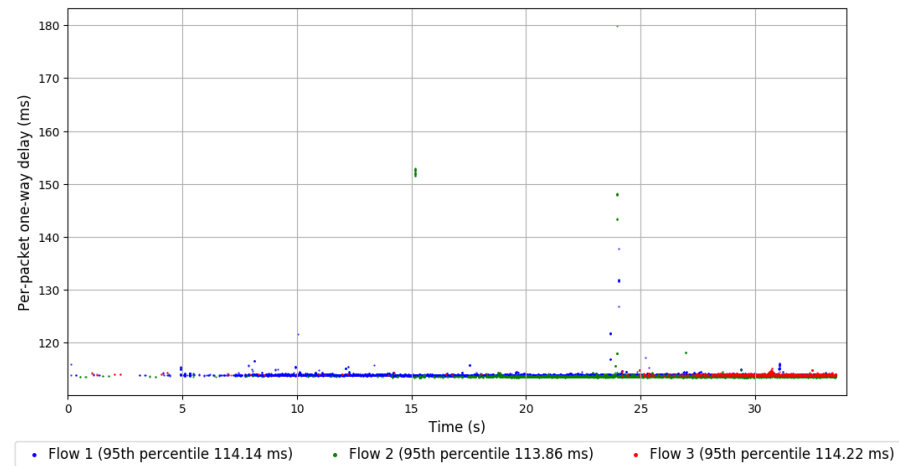
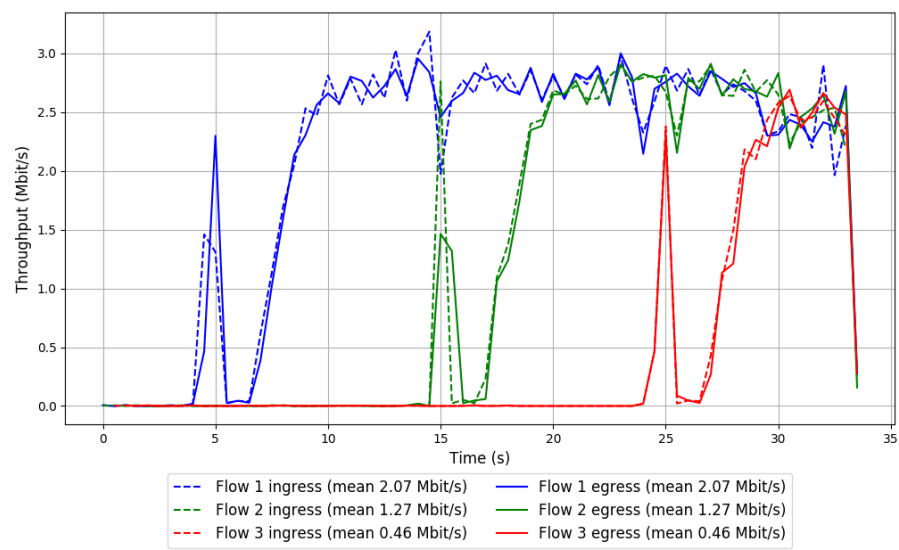
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 114.215 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-31 12:41:01

End at: 2018-01-31 12:41:31

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 114.113 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 114.107 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 114.122 ms

Loss rate: 0.00%

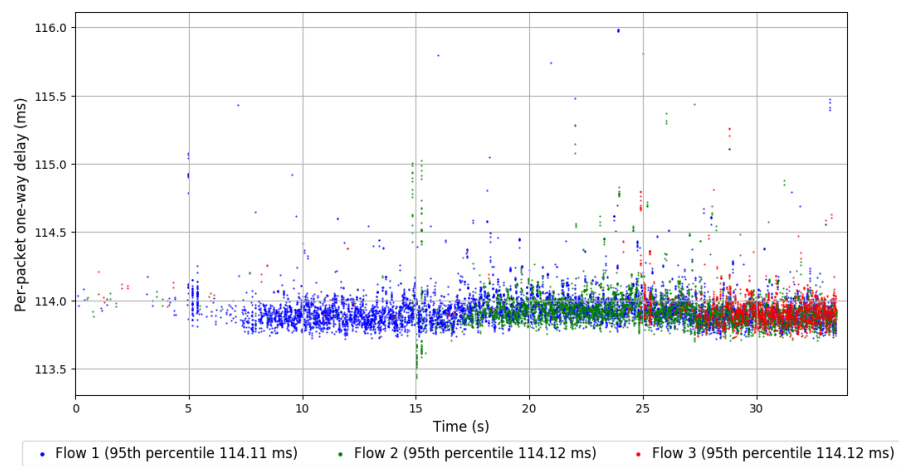
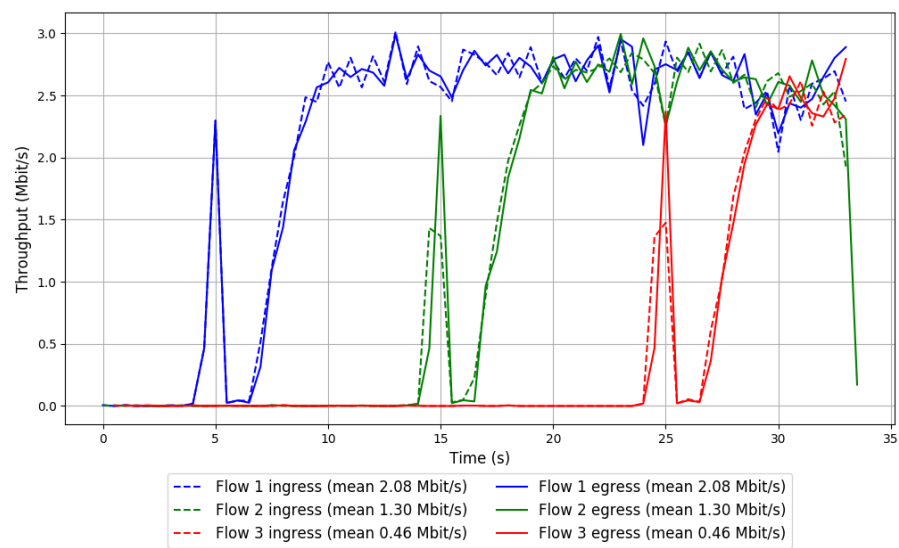
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 114.116 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-31 12:58:19

End at: 2018-01-31 12:58:49

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 114.111 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 114.108 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 114.117 ms

Loss rate: 0.00%

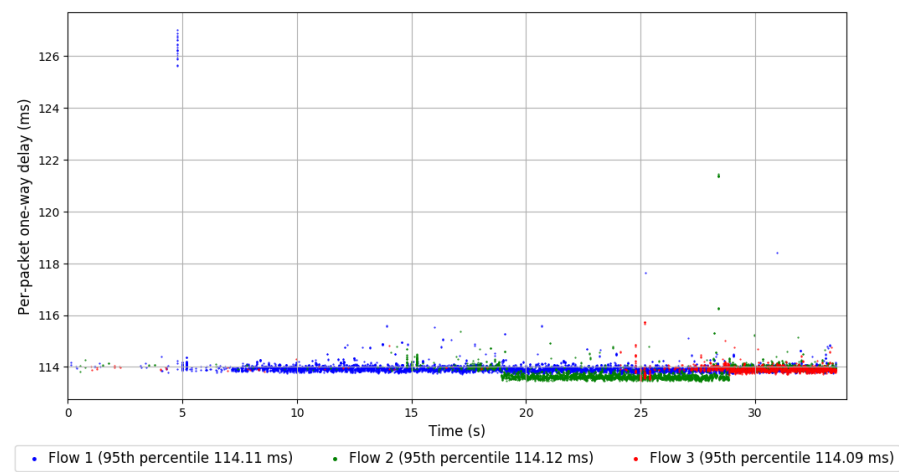
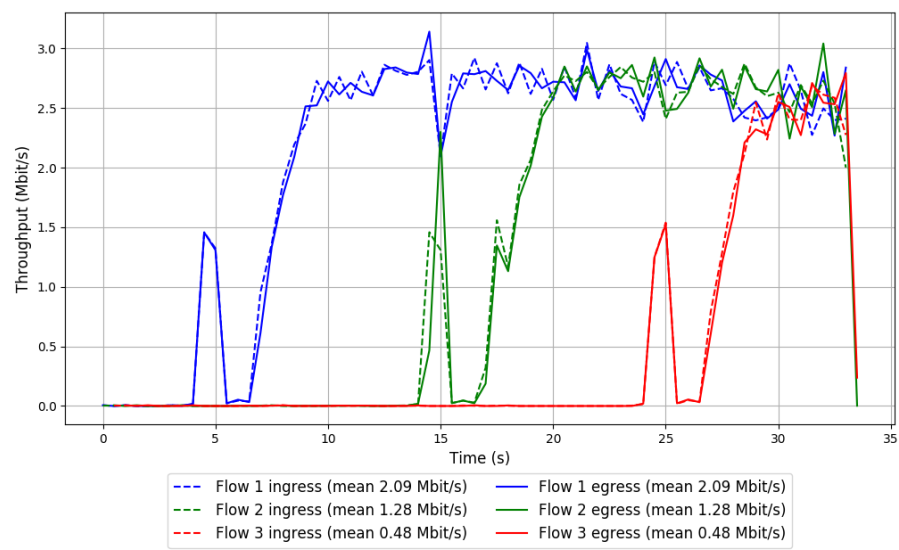
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 114.089 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

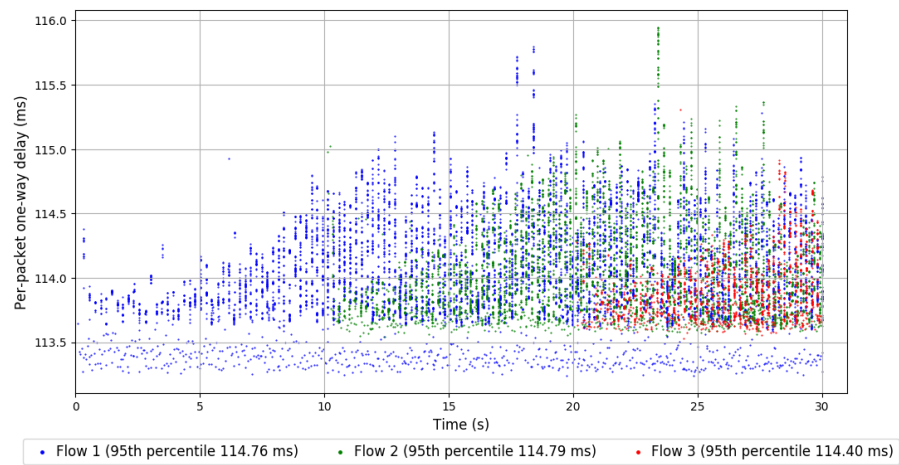
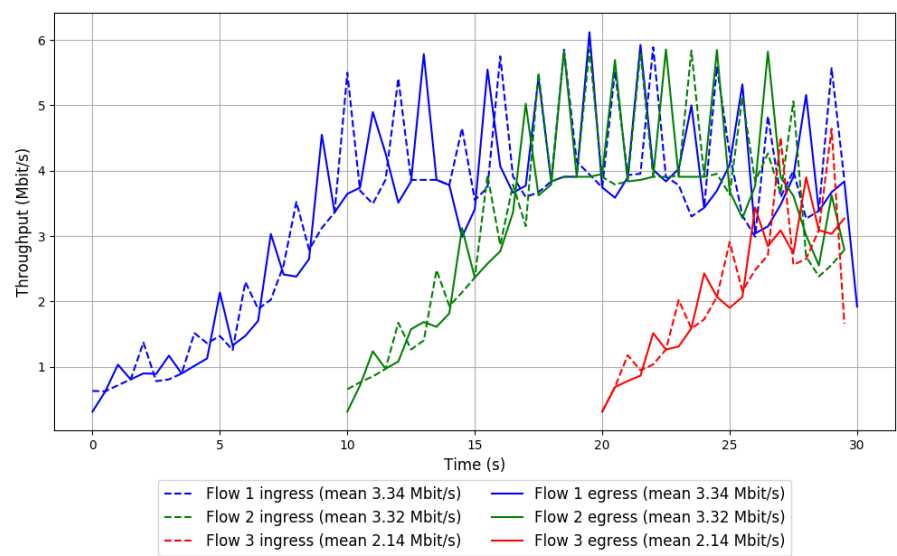


```
Run 1: Statistics of Sprout

Start at: 2018-01-31 10:17:04
End at: 2018-01-31 10:17:34

# Below is generated by plot.py at 2018-01-31 15:14:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.26 Mbit/s
95th percentile per-packet one-way delay: 114.749 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.34 Mbit/s
95th percentile per-packet one-way delay: 114.763 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.32 Mbit/s
95th percentile per-packet one-way delay: 114.792 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 114.404 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-31 10:34:46

End at: 2018-01-31 10:35:16

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 114.531 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 114.181 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 114.123 ms

Loss rate: 0.00%

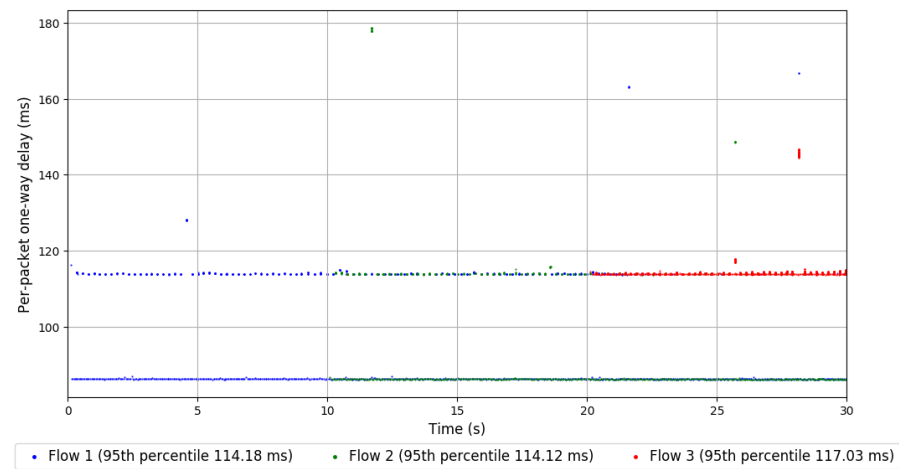
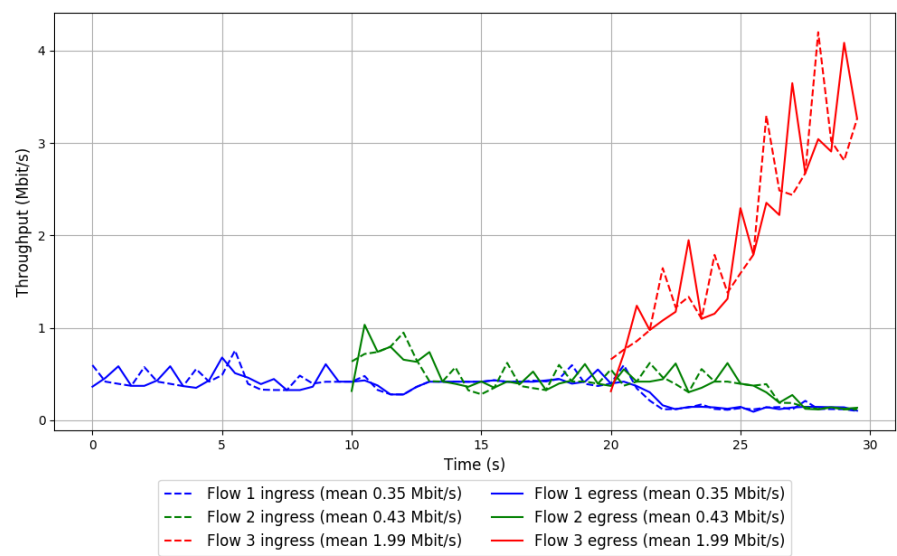
-- Flow 3:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 117.031 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-31 10:51:53

End at: 2018-01-31 10:52:23

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.00 Mbit/s

95th percentile per-packet one-way delay: 114.884 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 114.904 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 3.01 Mbit/s

95th percentile per-packet one-way delay: 114.877 ms

Loss rate: 0.00%

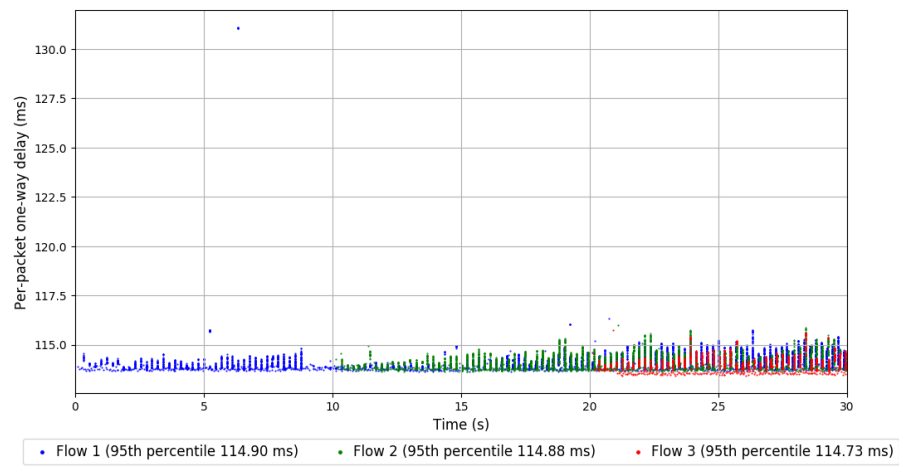
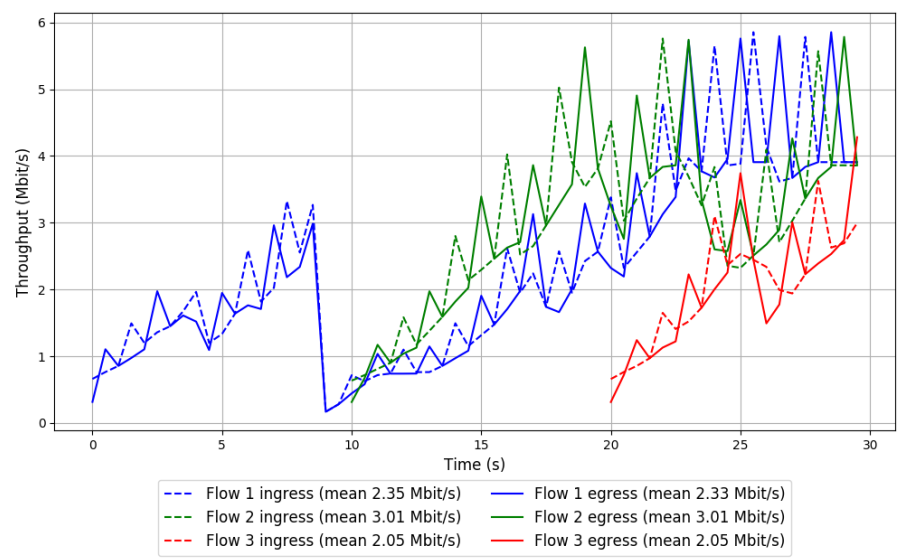
-- Flow 3:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 114.734 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-31 11:09:12

End at: 2018-01-31 11:09:42

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.62 Mbit/s

95th percentile per-packet one-way delay: 114.715 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 2.78 Mbit/s

95th percentile per-packet one-way delay: 114.820 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 114.631 ms

Loss rate: 1.80%

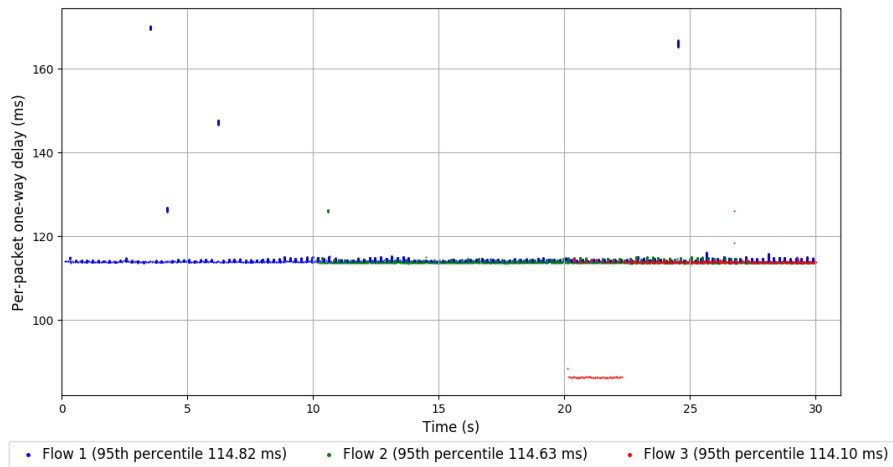
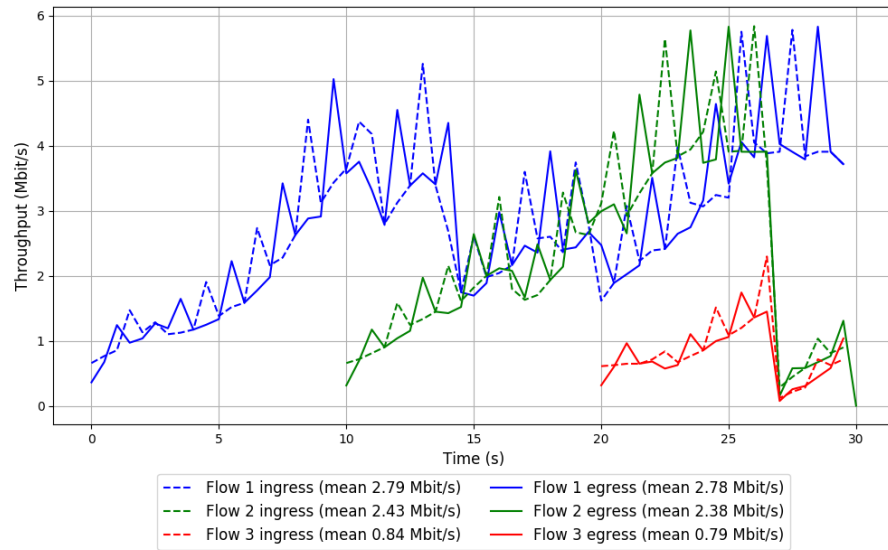
-- Flow 3:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 114.099 ms

Loss rate: 5.03%

Run 4: Report of Sprout — Data Link

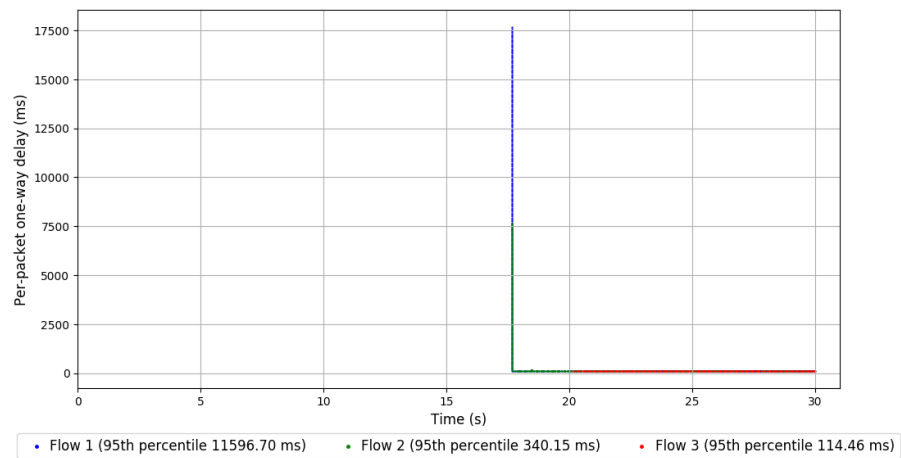
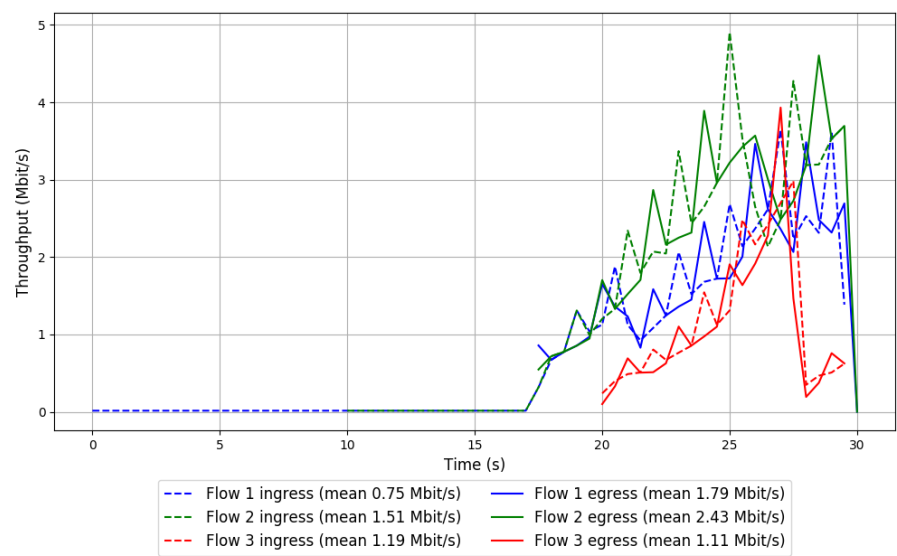


Run 5: Statistics of Sprout

Start at: 2018-01-31 11:26:34

End at: 2018-01-31 11:27:04

Run 5: Report of Sprout — Data Link

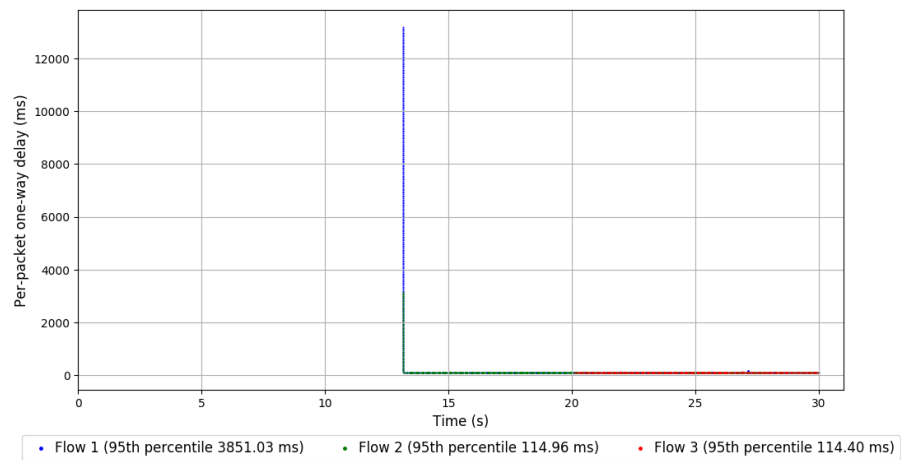
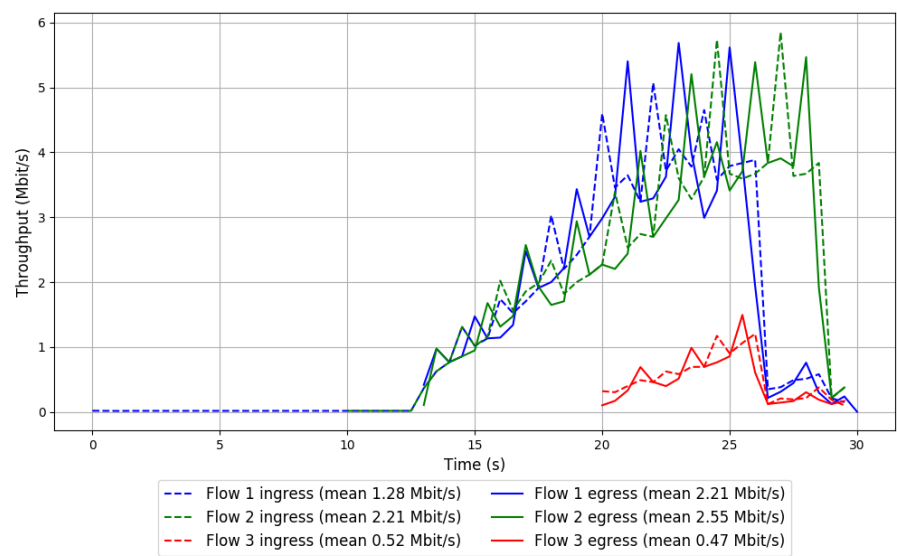


Run 6: Statistics of Sprout

Start at: 2018-01-31 11:44:03

End at: 2018-01-31 11:44:33

Run 6: Report of Sprout — Data Link

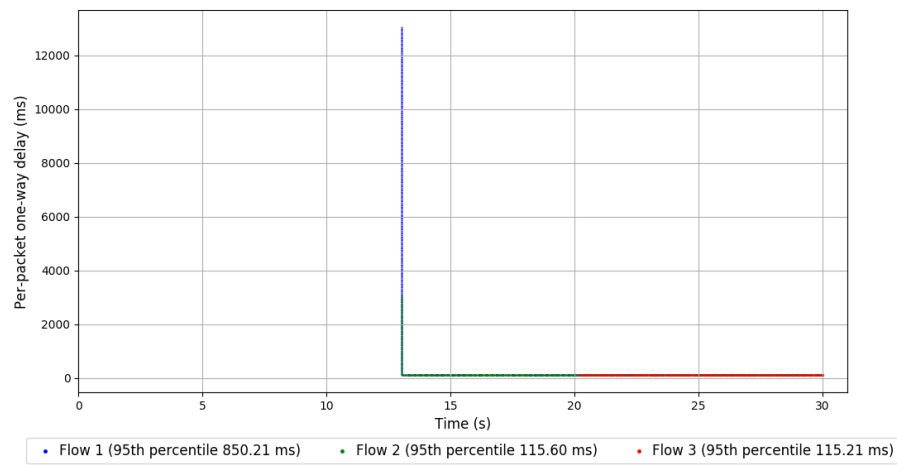
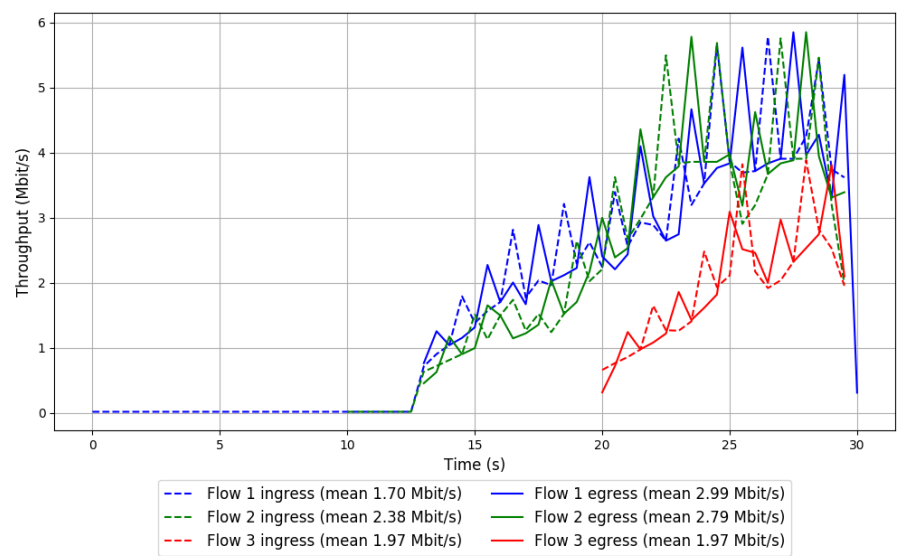


Run 7: Statistics of Sprout

Start at: 2018-01-31 12:01:40

End at: 2018-01-31 12:02:10

Run 7: Report of Sprout — Data Link

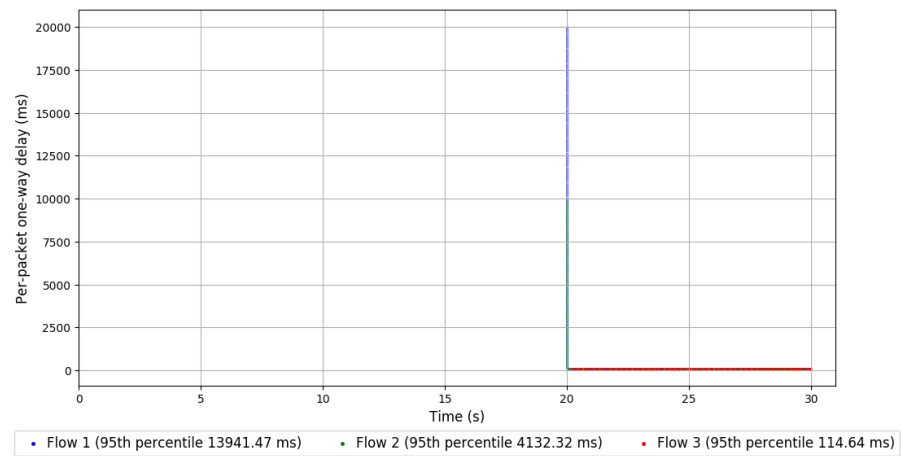
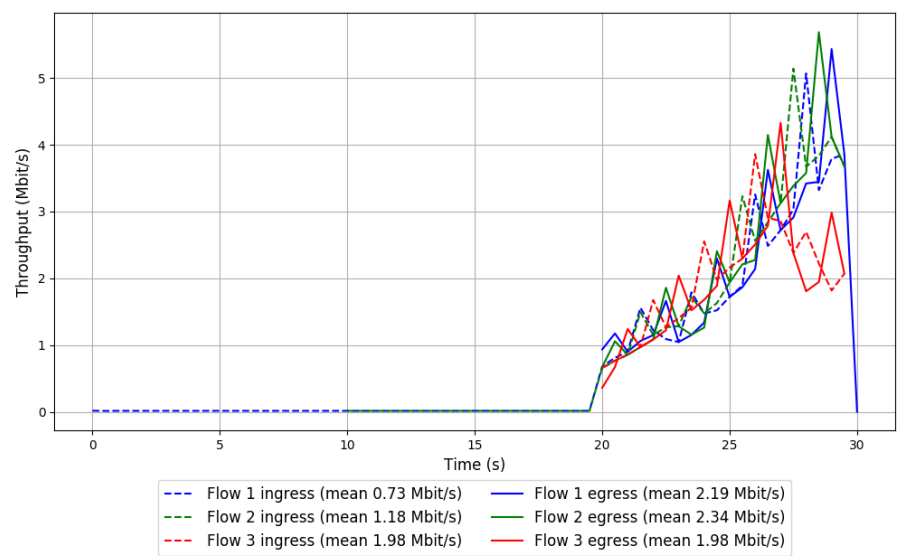


Run 8: Statistics of Sprout

Start at: 2018-01-31 12:19:00

End at: 2018-01-31 12:19:30

Run 8: Report of Sprout — Data Link

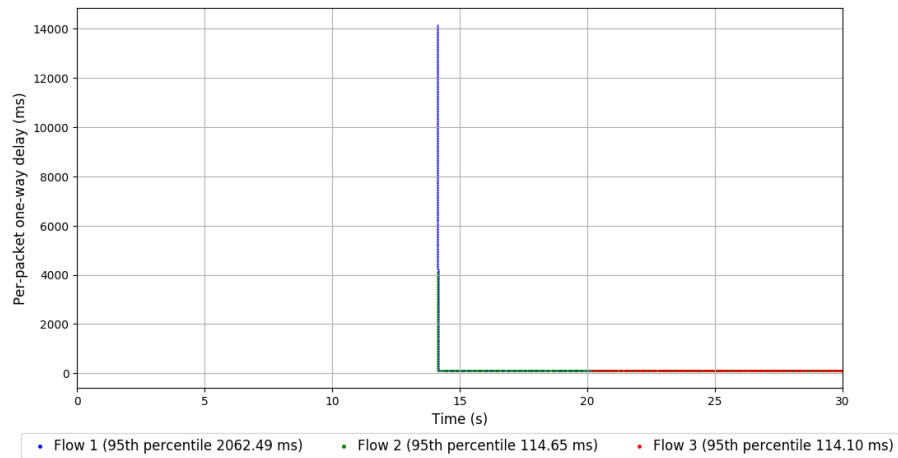
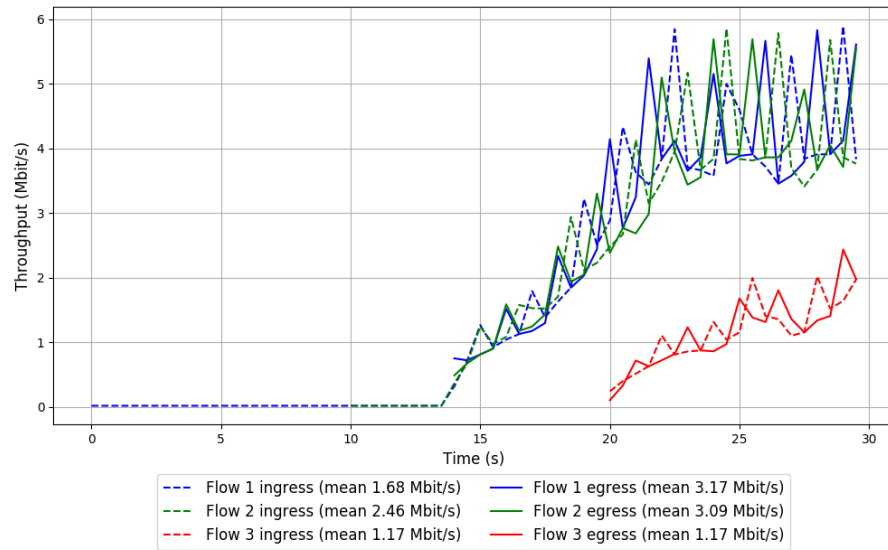


Run 9: Statistics of Sprout

Start at: 2018-01-31 12:36:38

End at: 2018-01-31 12:37:08

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-31 12:54:00

End at: 2018-01-31 12:54:30

Below is generated by plot.py at 2018-01-31 15:14:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.97 Mbit/s

95th percentile per-packet one-way delay: 114.806 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.66 Mbit/s

95th percentile per-packet one-way delay: 114.791 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.17 Mbit/s

95th percentile per-packet one-way delay: 114.865 ms

Loss rate: 0.00%

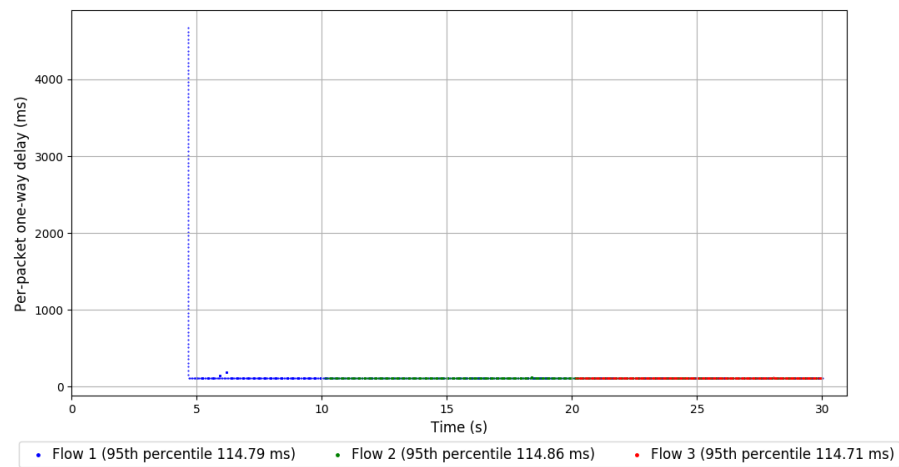
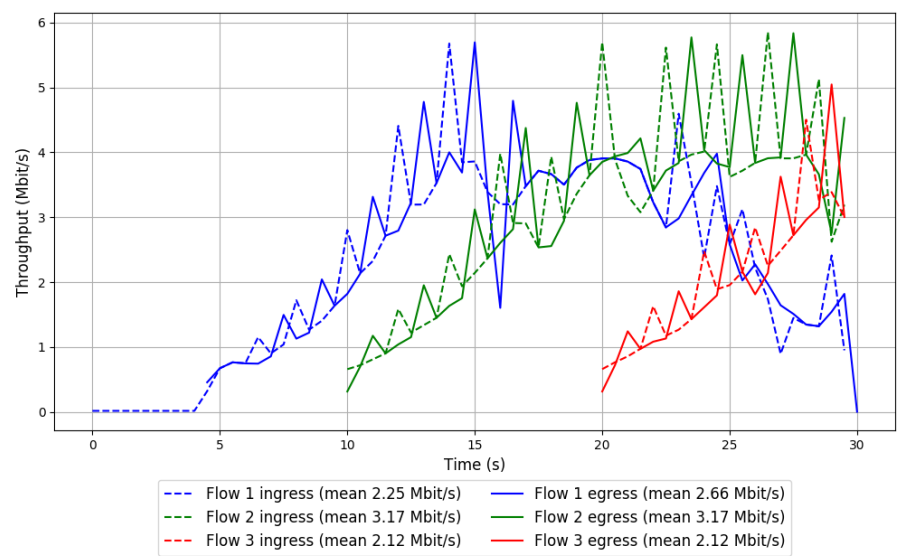
-- Flow 3:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 114.708 ms

Loss rate: 0.06%

Run 10: Report of Sprout — Data Link

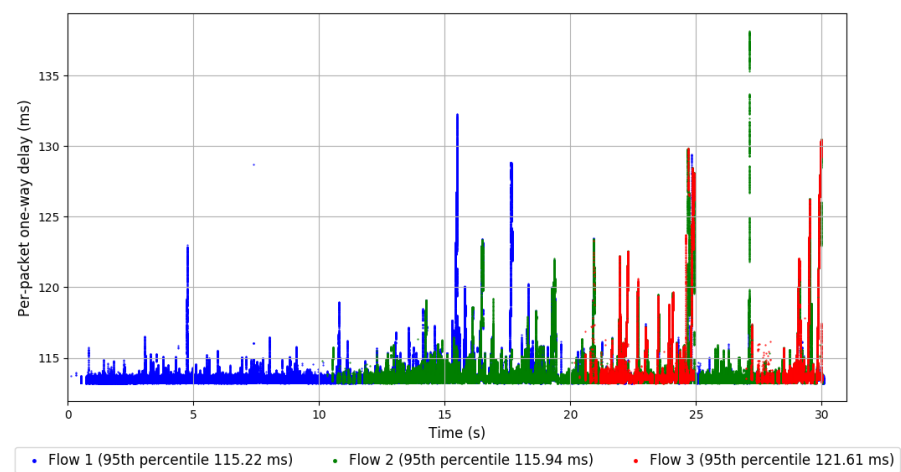
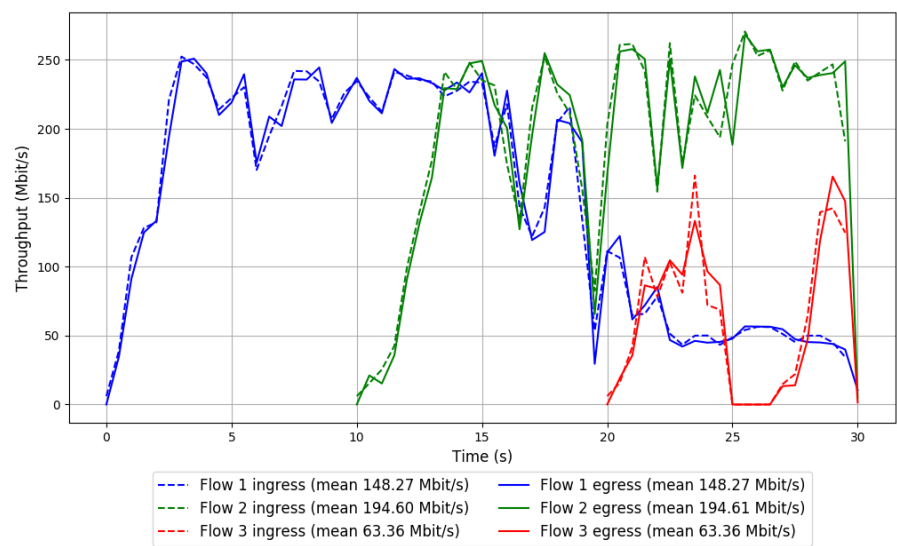


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-31 10:20:14
End at: 2018-01-31 10:20:44

# Below is generated by plot.py at 2018-01-31 15:22:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 298.32 Mbit/s
95th percentile per-packet one-way delay: 115.967 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 148.27 Mbit/s
95th percentile per-packet one-way delay: 115.225 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 194.61 Mbit/s
95th percentile per-packet one-way delay: 115.940 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 63.36 Mbit/s
95th percentile per-packet one-way delay: 121.606 ms
Loss rate: 0.00%
```


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

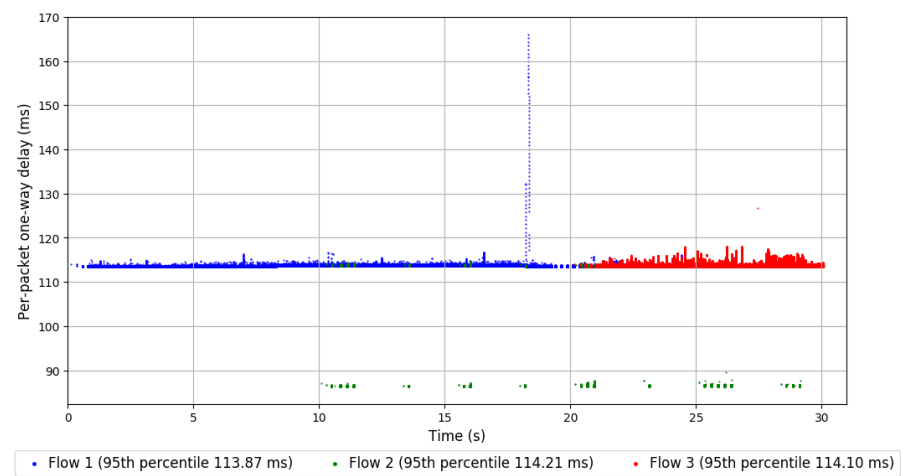
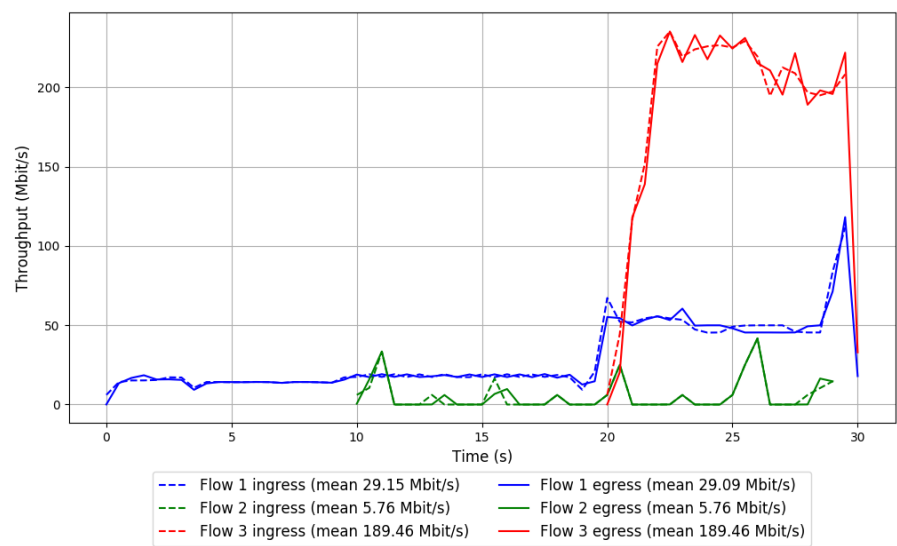


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-31 10:37:56
End at: 2018-01-31 10:38:26

# Below is generated by plot.py at 2018-01-31 15:22:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.56 Mbit/s
95th percentile per-packet one-way delay: 113.989 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 29.09 Mbit/s
95th percentile per-packet one-way delay: 113.866 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 5.76 Mbit/s
95th percentile per-packet one-way delay: 114.213 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 189.46 Mbit/s
95th percentile per-packet one-way delay: 114.104 ms
Loss rate: 0.00%
```

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

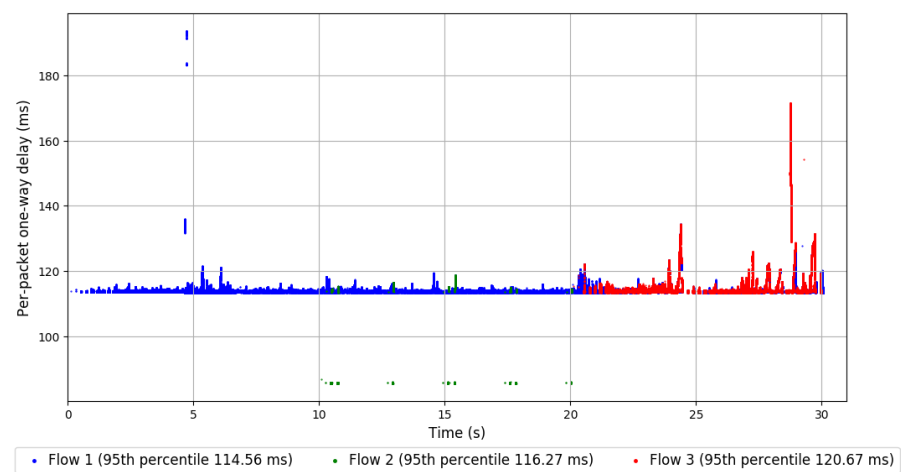
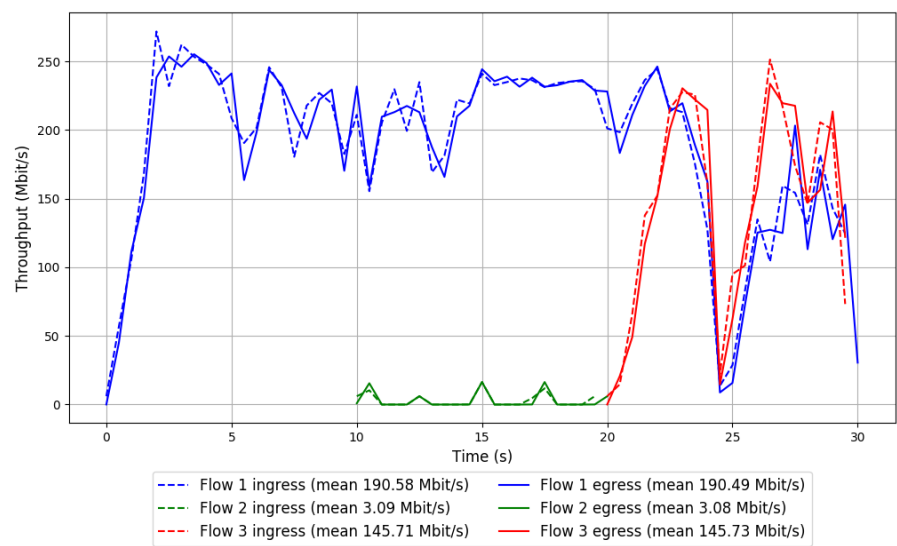


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-31 10:54:59
End at: 2018-01-31 10:55:29

# Below is generated by plot.py at 2018-01-31 15:22:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 239.42 Mbit/s
95th percentile per-packet one-way delay: 115.367 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 190.49 Mbit/s
95th percentile per-packet one-way delay: 114.560 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 3.08 Mbit/s
95th percentile per-packet one-way delay: 116.271 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 145.73 Mbit/s
95th percentile per-packet one-way delay: 120.669 ms
Loss rate: 0.00%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-01-31 11:12:23

End at: 2018-01-31 11:12:53

Below is generated by plot.py at 2018-01-31 15:22:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 193.31 Mbit/s

95th percentile per-packet one-way delay: 118.019 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 120.73 Mbit/s

95th percentile per-packet one-way delay: 115.291 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 64.35 Mbit/s

95th percentile per-packet one-way delay: 121.213 ms

Loss rate: 0.53%

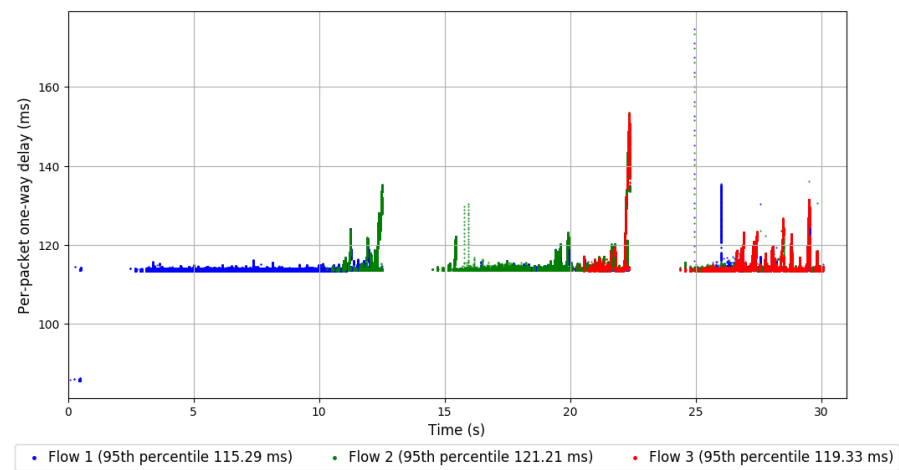
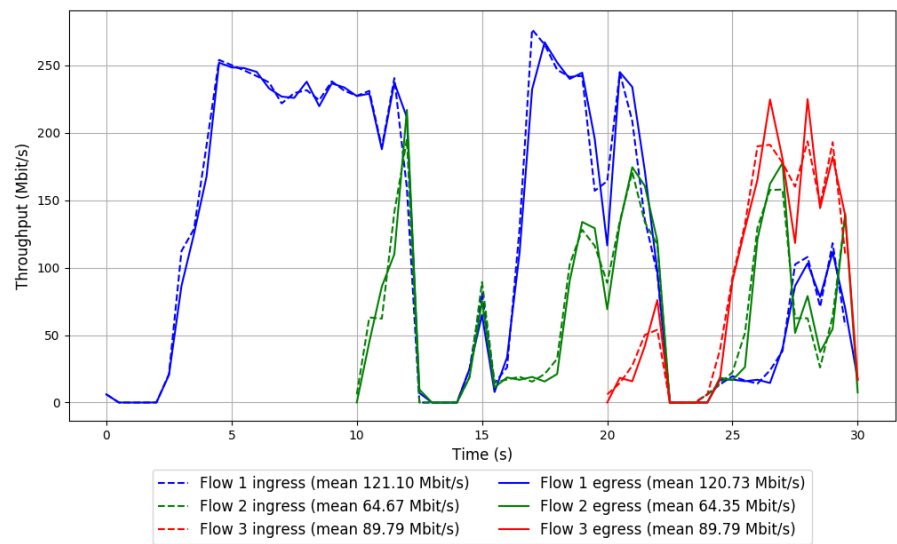
-- Flow 3:

Average throughput: 89.79 Mbit/s

95th percentile per-packet one-way delay: 119.332 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-31 11:29:44

End at: 2018-01-31 11:30:14

Below is generated by plot.py at 2018-01-31 15:22:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 272.84 Mbit/s

95th percentile per-packet one-way delay: 116.968 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 155.24 Mbit/s

95th percentile per-packet one-way delay: 115.606 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 123.59 Mbit/s

95th percentile per-packet one-way delay: 118.164 ms

Loss rate: 0.00%

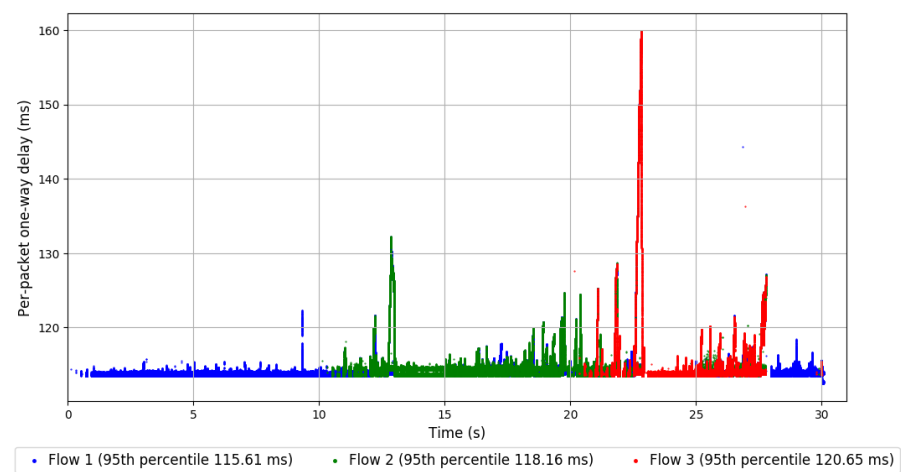
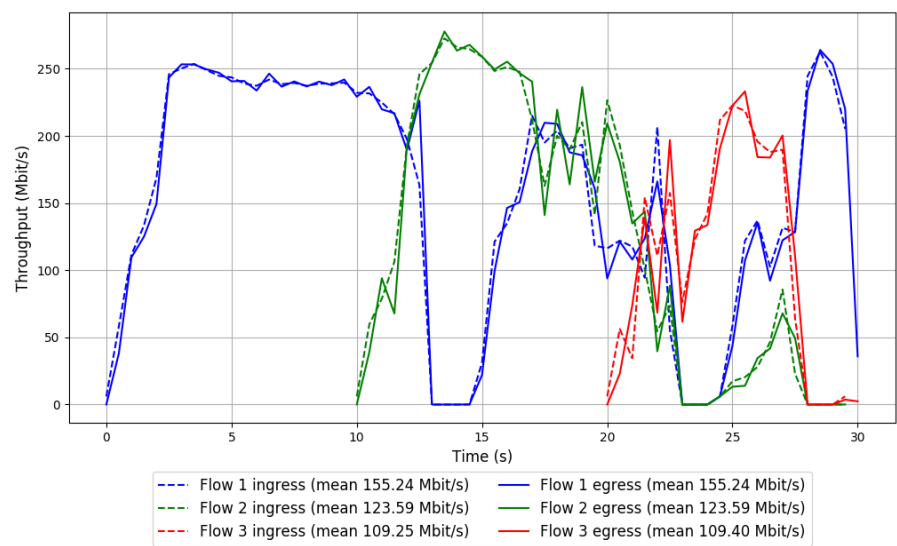
-- Flow 3:

Average throughput: 109.40 Mbit/s

95th percentile per-packet one-way delay: 120.647 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-31 11:47:12

End at: 2018-01-31 11:47:42

Below is generated by plot.py at 2018-01-31 15:22:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 258.10 Mbit/s

95th percentile per-packet one-way delay: 114.561 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 145.60 Mbit/s

95th percentile per-packet one-way delay: 114.278 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 148.27 Mbit/s

95th percentile per-packet one-way delay: 114.718 ms

Loss rate: 0.00%

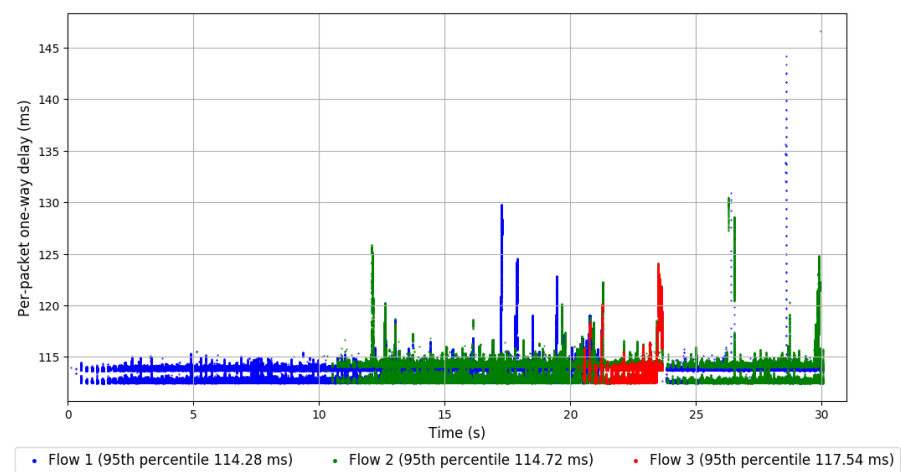
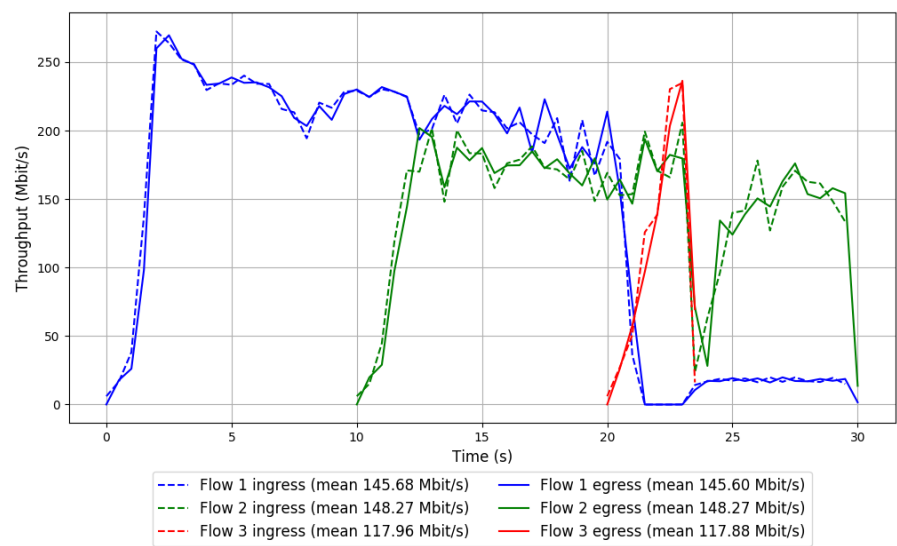
-- Flow 3:

Average throughput: 117.88 Mbit/s

95th percentile per-packet one-way delay: 117.540 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-31 12:04:53

End at: 2018-01-31 12:05:23

Below is generated by plot.py at 2018-01-31 15:22:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.75 Mbit/s

95th percentile per-packet one-way delay: 115.062 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 142.11 Mbit/s

95th percentile per-packet one-way delay: 114.449 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.09 Mbit/s

95th percentile per-packet one-way delay: 115.551 ms

Loss rate: 0.00%

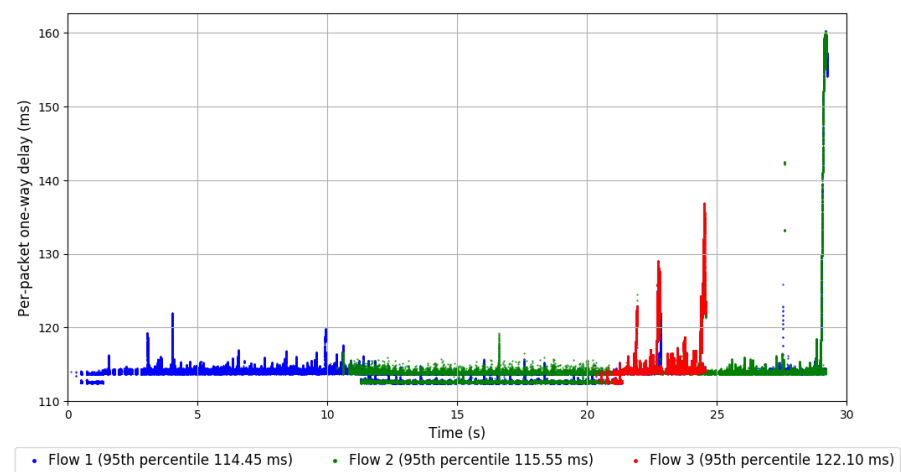
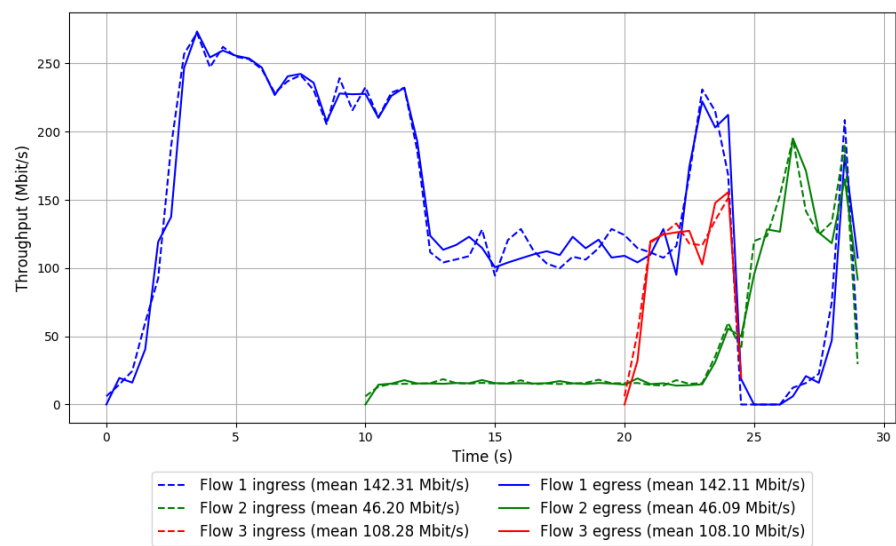
-- Flow 3:

Average throughput: 108.10 Mbit/s

95th percentile per-packet one-way delay: 122.102 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-31 12:22:11

End at: 2018-01-31 12:22:41

Below is generated by plot.py at 2018-01-31 15:24:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 272.25 Mbit/s

95th percentile per-packet one-way delay: 116.185 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 180.96 Mbit/s

95th percentile per-packet one-way delay: 115.435 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 147.02 Mbit/s

95th percentile per-packet one-way delay: 117.936 ms

Loss rate: 0.00%

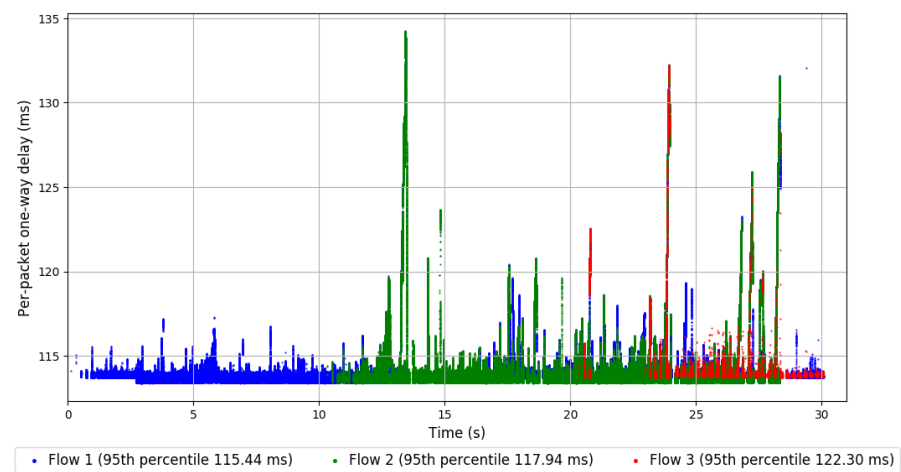
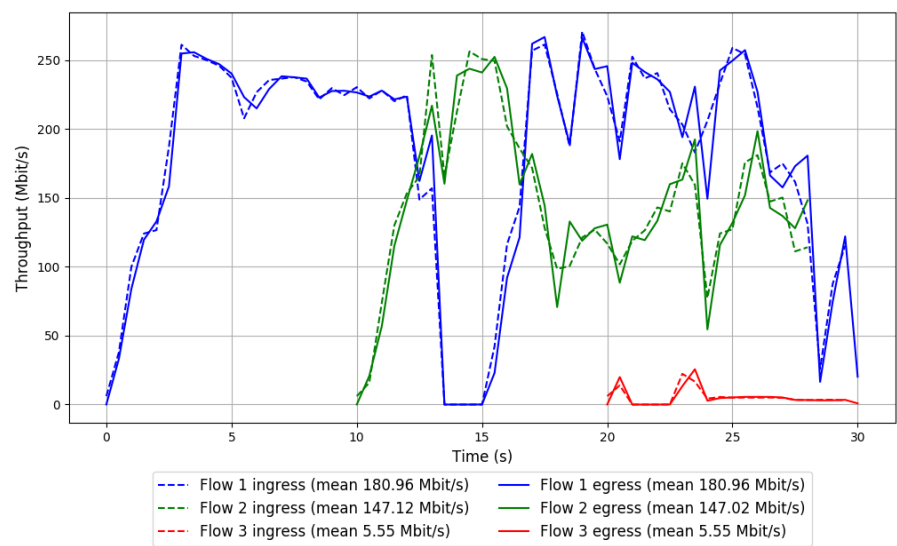
-- Flow 3:

Average throughput: 5.55 Mbit/s

95th percentile per-packet one-way delay: 122.303 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-01-31 12:39:51

End at: 2018-01-31 12:40:21

Below is generated by plot.py at 2018-01-31 15:24:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 232.86 Mbit/s

95th percentile per-packet one-way delay: 115.441 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 130.29 Mbit/s

95th percentile per-packet one-way delay: 114.365 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 92.21 Mbit/s

95th percentile per-packet one-way delay: 120.004 ms

Loss rate: 0.60%

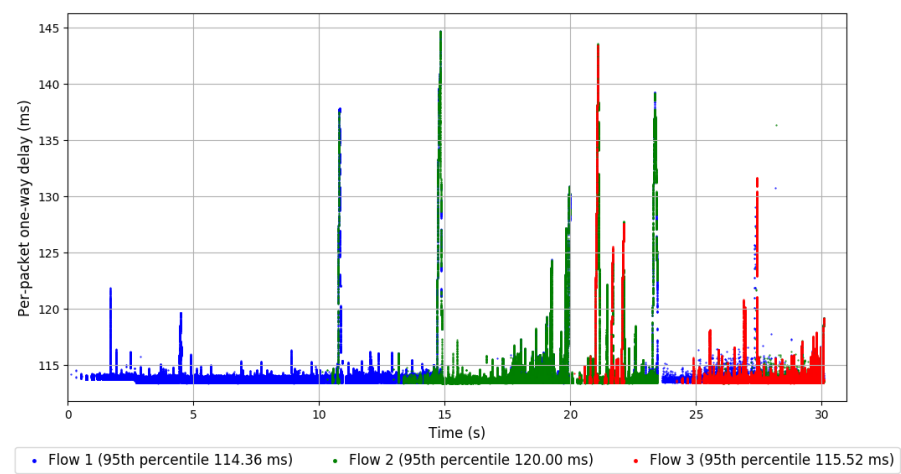
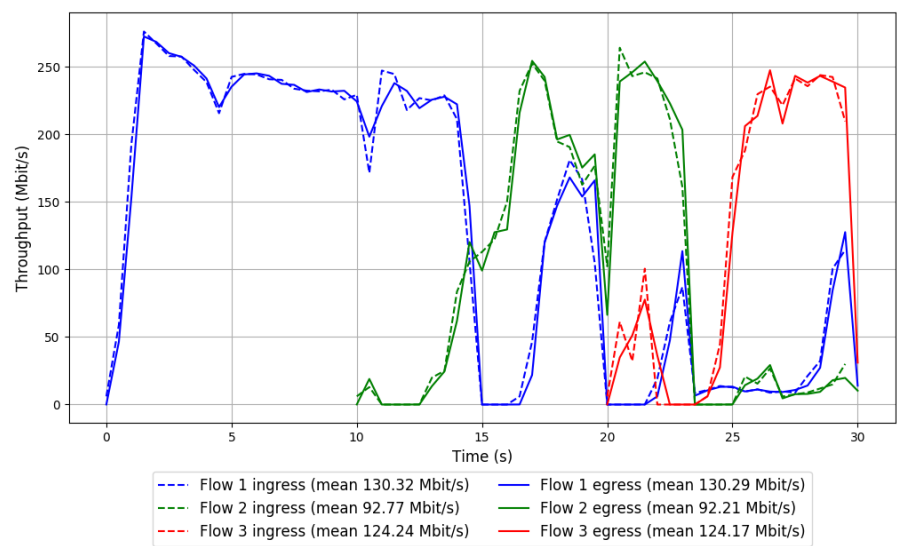
-- Flow 3:

Average throughput: 124.17 Mbit/s

95th percentile per-packet one-way delay: 115.519 ms

Loss rate: 0.05%

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

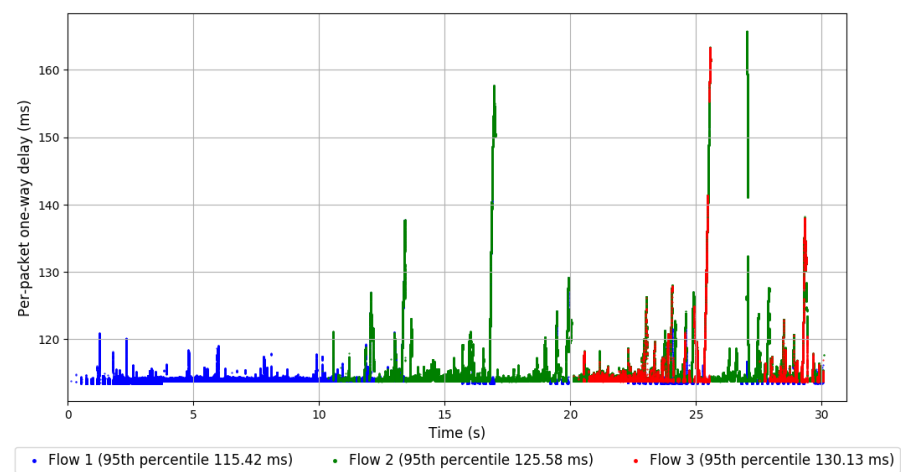
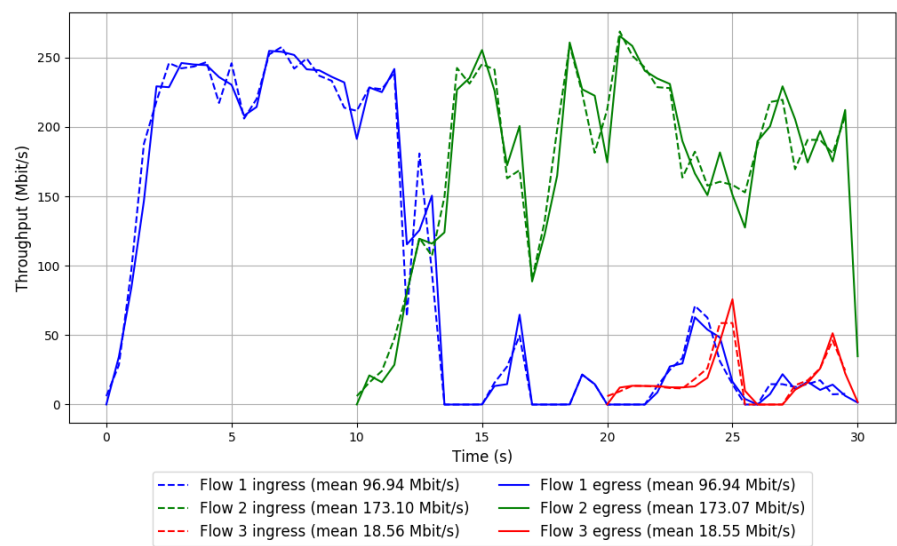


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-31 12:57:10
End at: 2018-01-31 12:57:40

# Below is generated by plot.py at 2018-01-31 15:26:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 218.25 Mbit/s
95th percentile per-packet one-way delay: 121.533 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 96.94 Mbit/s
95th percentile per-packet one-way delay: 115.419 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 173.07 Mbit/s
95th percentile per-packet one-way delay: 125.577 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 18.55 Mbit/s
95th percentile per-packet one-way delay: 130.129 ms
Loss rate: 0.06%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-31 10:18:40

End at: 2018-01-31 10:19:10

Below is generated by plot.py at 2018-01-31 15:26:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.75 Mbit/s

95th percentile per-packet one-way delay: 123.064 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 28.97 Mbit/s

95th percentile per-packet one-way delay: 117.808 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 24.23 Mbit/s

95th percentile per-packet one-way delay: 119.516 ms

Loss rate: 0.00%

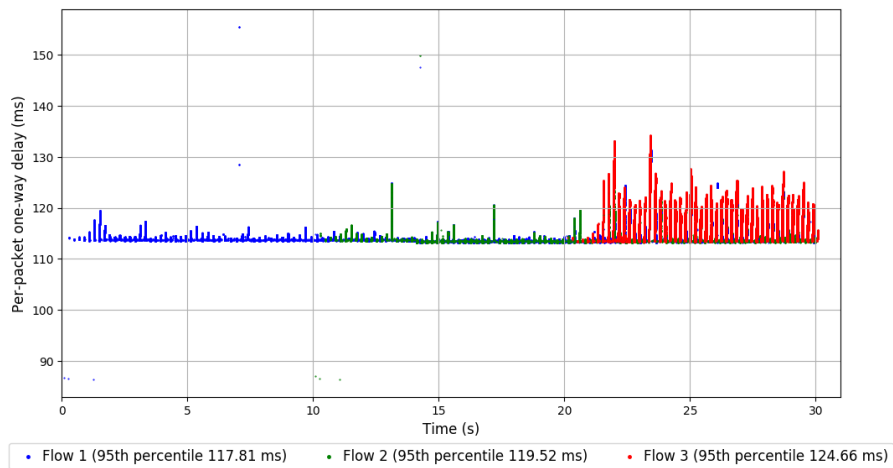
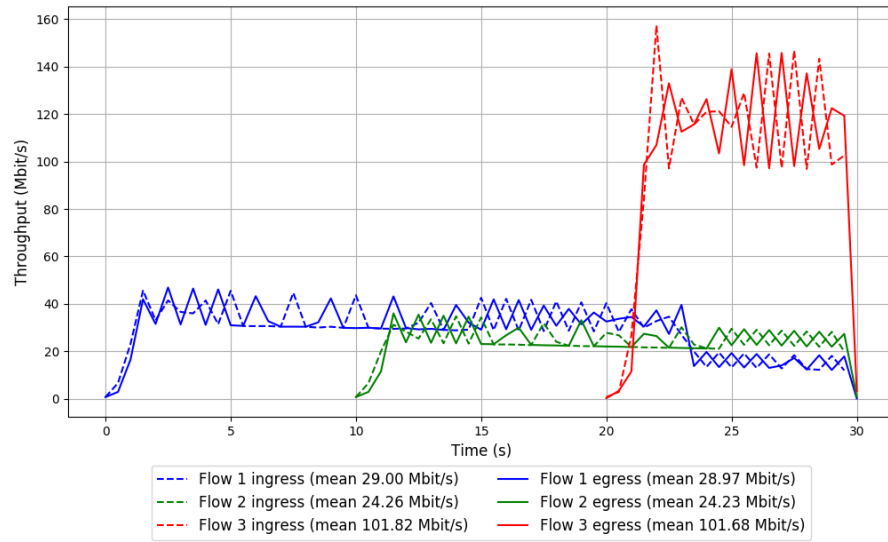
-- Flow 3:

Average throughput: 101.68 Mbit/s

95th percentile per-packet one-way delay: 124.662 ms

Loss rate: 0.14%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-31 10:36:22

End at: 2018-01-31 10:36:52

Below is generated by plot.py at 2018-01-31 15:26:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 56.71 Mbit/s

95th percentile per-packet one-way delay: 115.422 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 48.01 Mbit/s

95th percentile per-packet one-way delay: 115.441 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 12.40 Mbit/s

95th percentile per-packet one-way delay: 115.446 ms

Loss rate: 0.61%

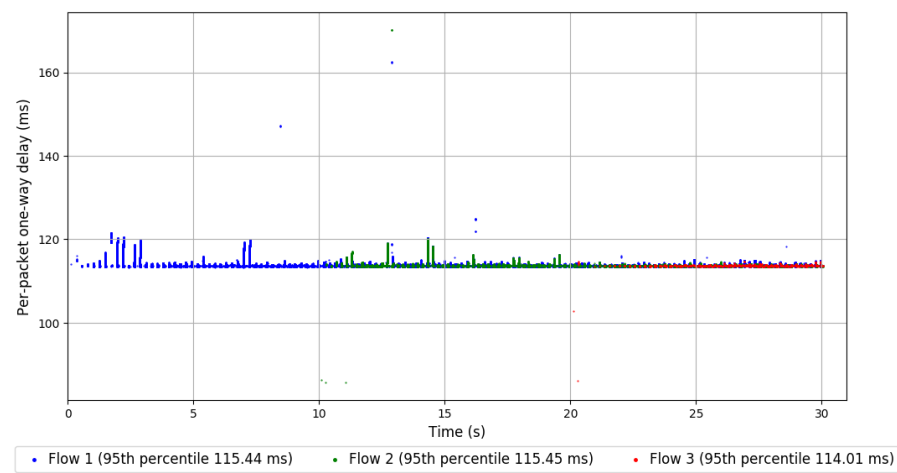
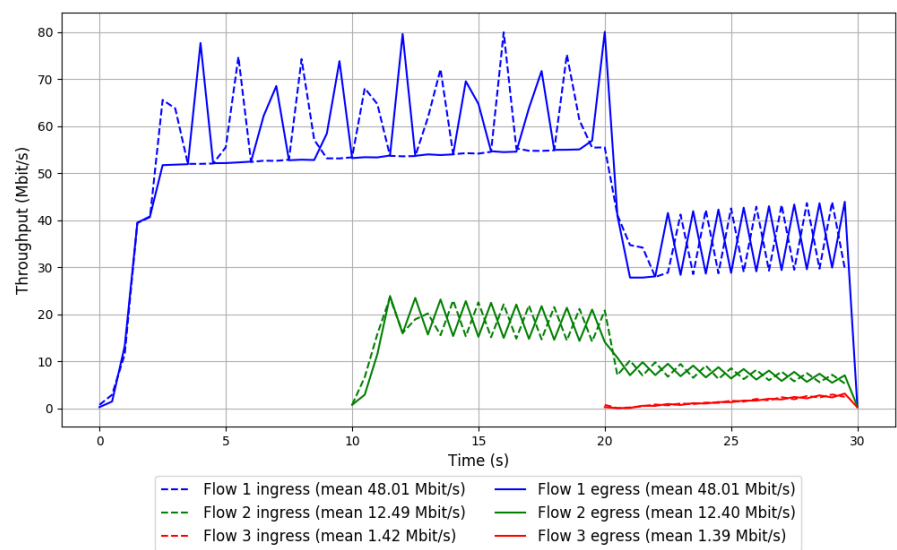
-- Flow 3:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 114.009 ms

Loss rate: 1.70%

Run 2: Report of TCP Vegas — Data Link

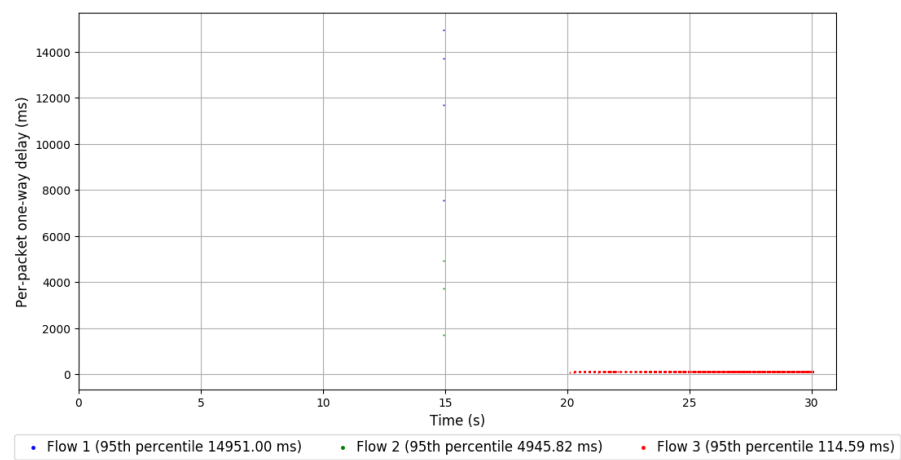
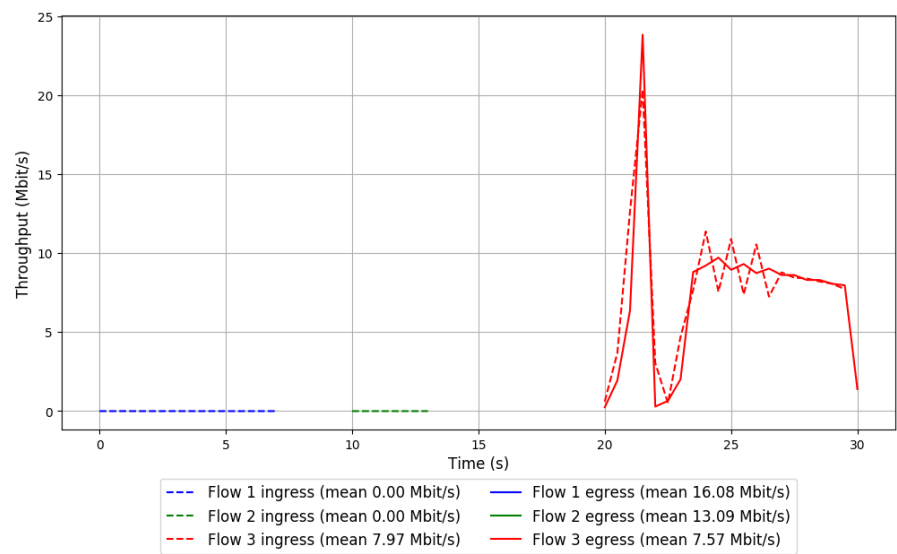


Run 3: Statistics of TCP Vegas

Start at: 2018-01-31 10:53:30

End at: 2018-01-31 10:54:00

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-31 11:10:51

End at: 2018-01-31 11:11:21

Below is generated by plot.py at 2018-01-31 15:26:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 42.72 Mbit/s

95th percentile per-packet one-way delay: 119.920 ms

Loss rate: 1.85%

-- Flow 1:

Average throughput: 8.93 Mbit/s

95th percentile per-packet one-way delay: 123.333 ms

Loss rate: 3.15%

-- Flow 2:

Average throughput: 32.04 Mbit/s

95th percentile per-packet one-way delay: 117.743 ms

Loss rate: 0.43%

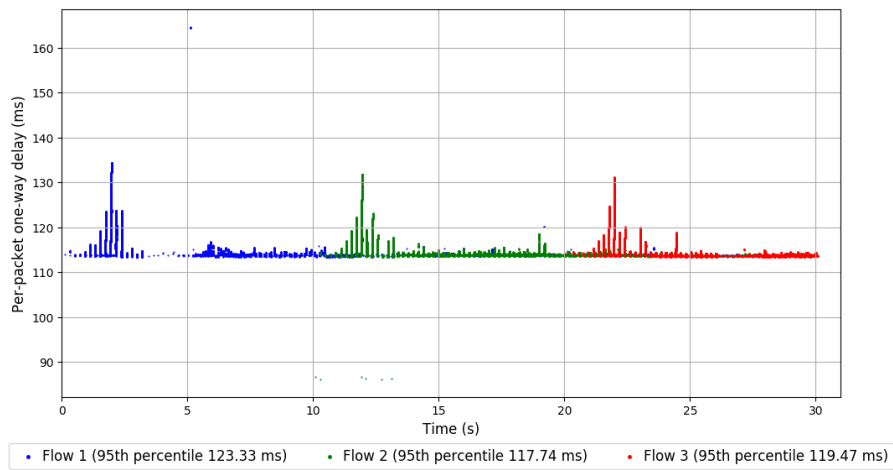
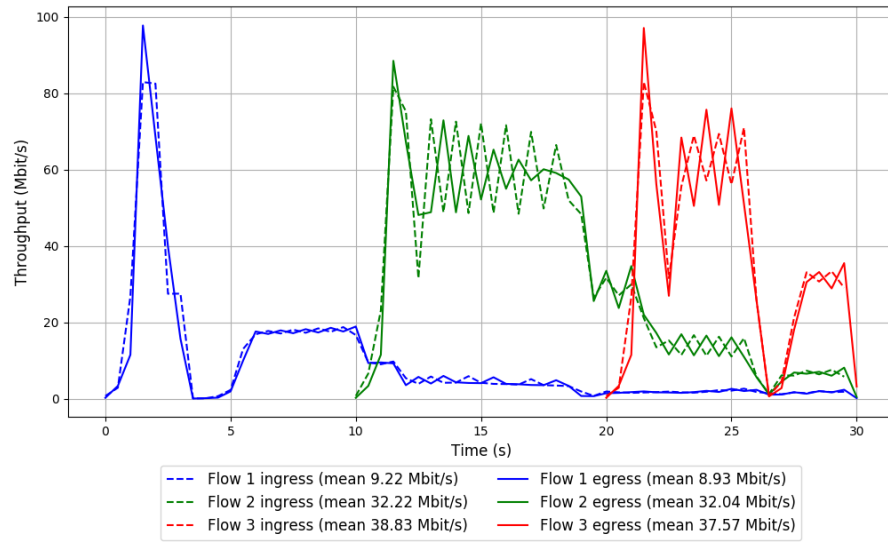
-- Flow 3:

Average throughput: 37.57 Mbit/s

95th percentile per-packet one-way delay: 119.466 ms

Loss rate: 3.28%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-31 11:28:11

End at: 2018-01-31 11:28:41

Below is generated by plot.py at 2018-01-31 15:26:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 52.74 Mbit/s

95th percentile per-packet one-way delay: 119.061 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 6.01 Mbit/s

95th percentile per-packet one-way delay: 113.697 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 49.52 Mbit/s

95th percentile per-packet one-way delay: 117.369 ms

Loss rate: 0.00%

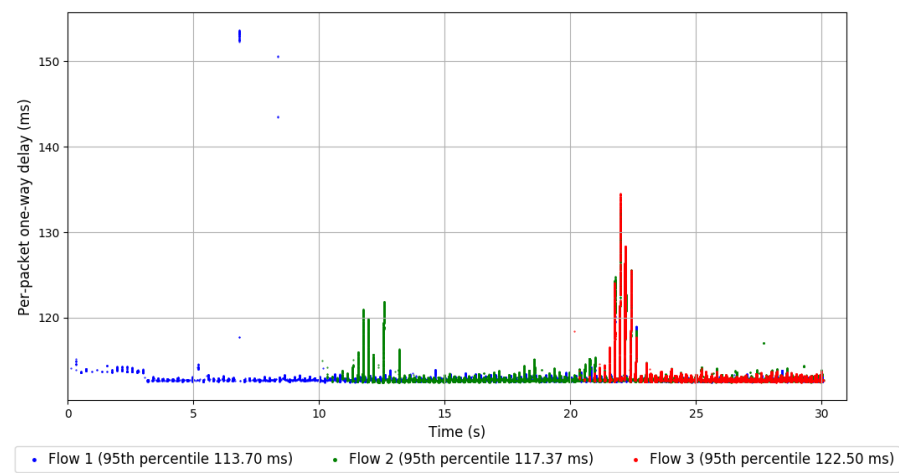
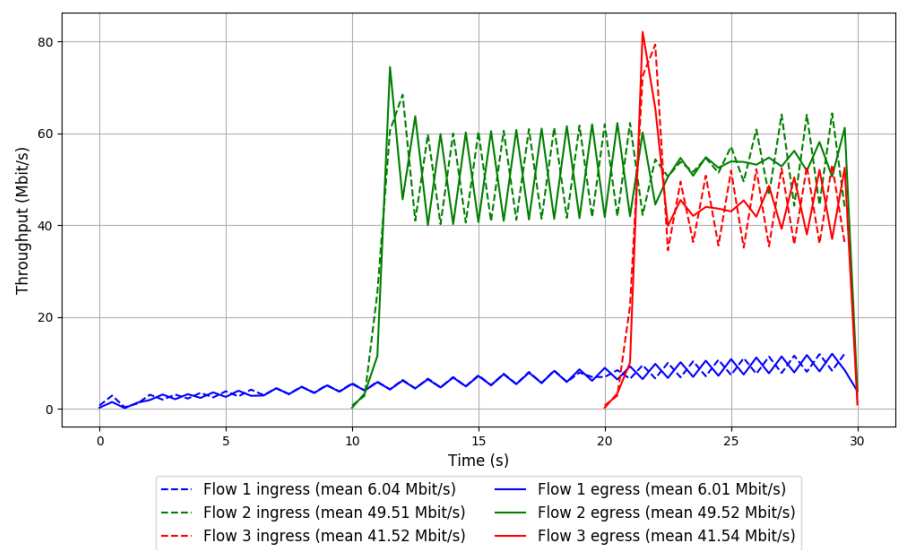
-- Flow 3:

Average throughput: 41.54 Mbit/s

95th percentile per-packet one-way delay: 122.505 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-31 11:45:40

End at: 2018-01-31 11:46:10

Below is generated by plot.py at 2018-01-31 15:26:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 42.08 Mbit/s

95th percentile per-packet one-way delay: 116.883 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 22.85 Mbit/s

95th percentile per-packet one-way delay: 115.904 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 7.43 Mbit/s

95th percentile per-packet one-way delay: 113.476 ms

Loss rate: 0.05%

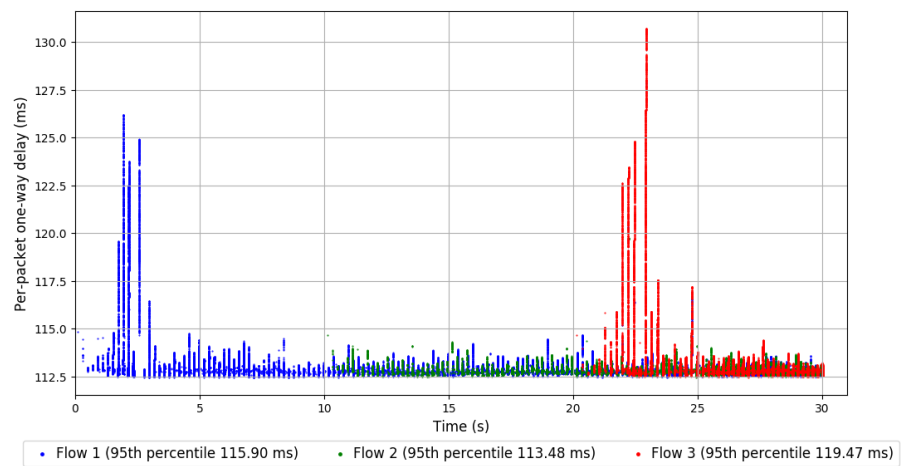
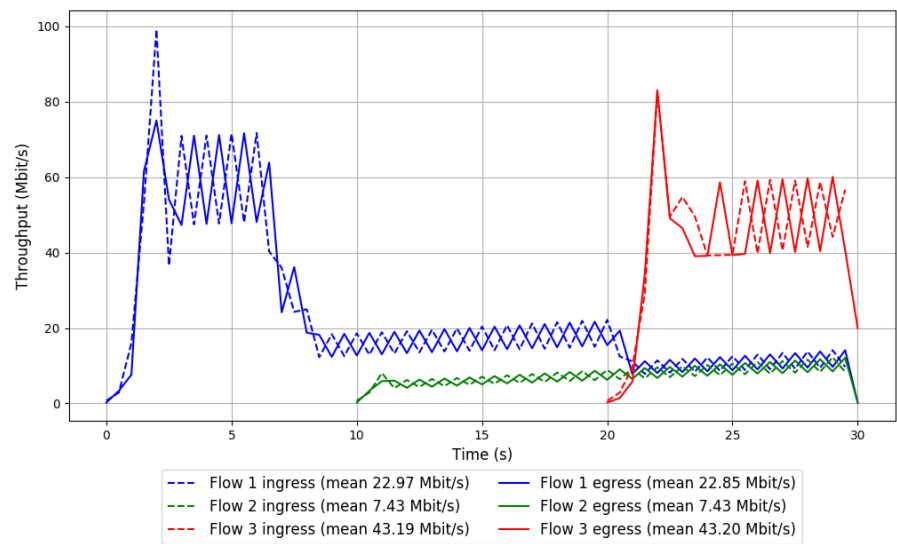
-- Flow 3:

Average throughput: 43.20 Mbit/s

95th percentile per-packet one-way delay: 119.466 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-31 12:03:16

End at: 2018-01-31 12:03:46

Below is generated by plot.py at 2018-01-31 15:26:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.64 Mbit/s

95th percentile per-packet one-way delay: 120.915 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.40 Mbit/s

95th percentile per-packet one-way delay: 117.899 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.76 Mbit/s

95th percentile per-packet one-way delay: 123.955 ms

Loss rate: 0.00%

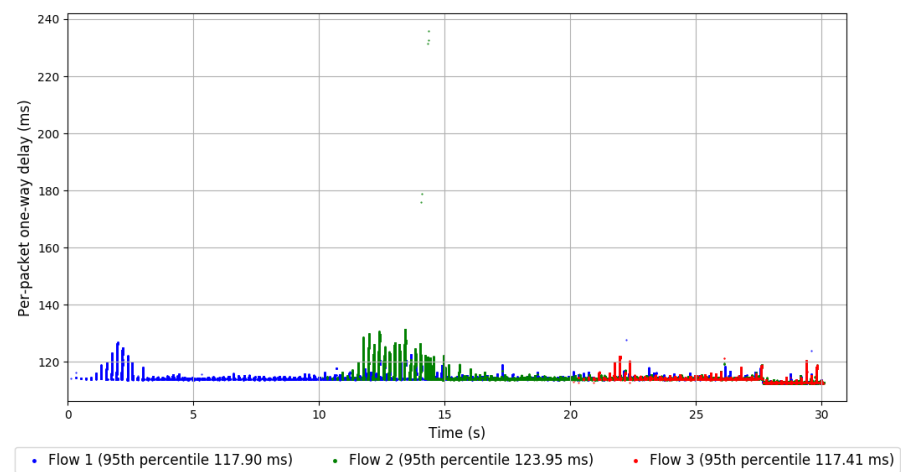
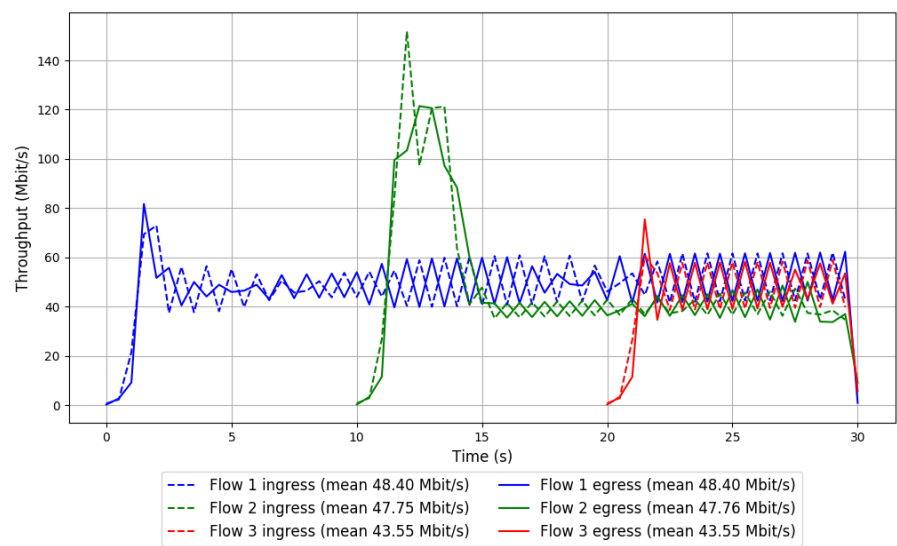
-- Flow 3:

Average throughput: 43.55 Mbit/s

95th percentile per-packet one-way delay: 117.412 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-31 12:20:36

End at: 2018-01-31 12:21:06

Below is generated by plot.py at 2018-01-31 15:26:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.12 Mbit/s

95th percentile per-packet one-way delay: 118.524 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 48.43 Mbit/s

95th percentile per-packet one-way delay: 116.207 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 21.14 Mbit/s

95th percentile per-packet one-way delay: 121.440 ms

Loss rate: 0.71%

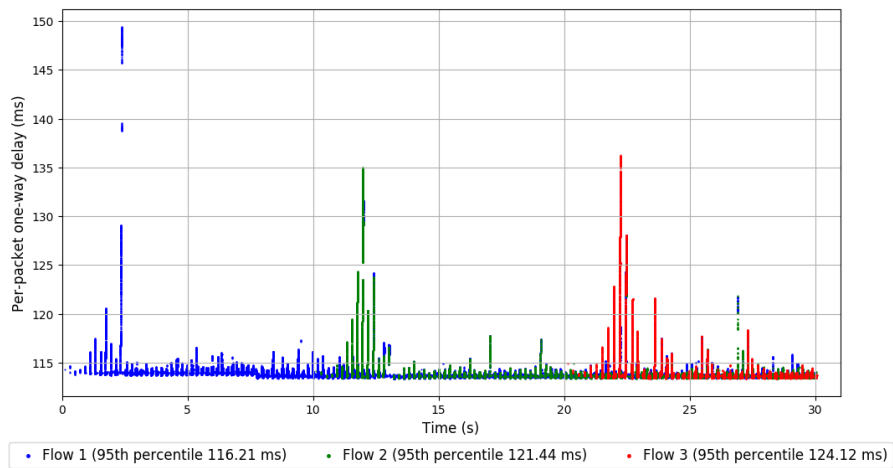
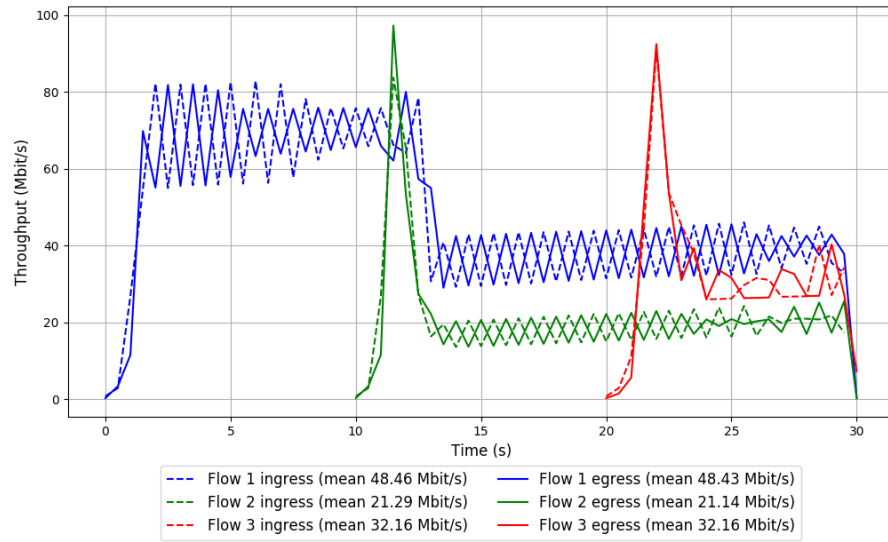
-- Flow 3:

Average throughput: 32.16 Mbit/s

95th percentile per-packet one-way delay: 124.119 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-31 12:38:15

End at: 2018-01-31 12:38:45

Below is generated by plot.py at 2018-01-31 15:26:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 105.15 Mbit/s

95th percentile per-packet one-way delay: 118.258 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 26.00 Mbit/s

95th percentile per-packet one-way delay: 118.834 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 87.08 Mbit/s

95th percentile per-packet one-way delay: 118.564 ms

Loss rate: 0.00%

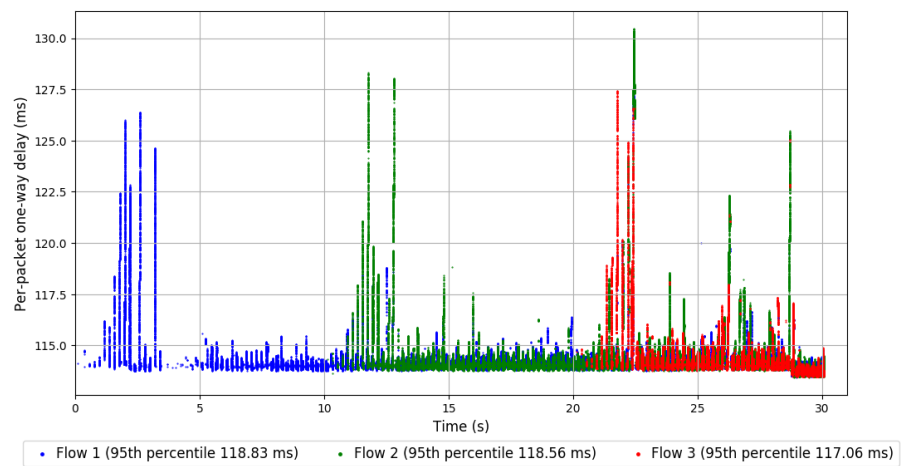
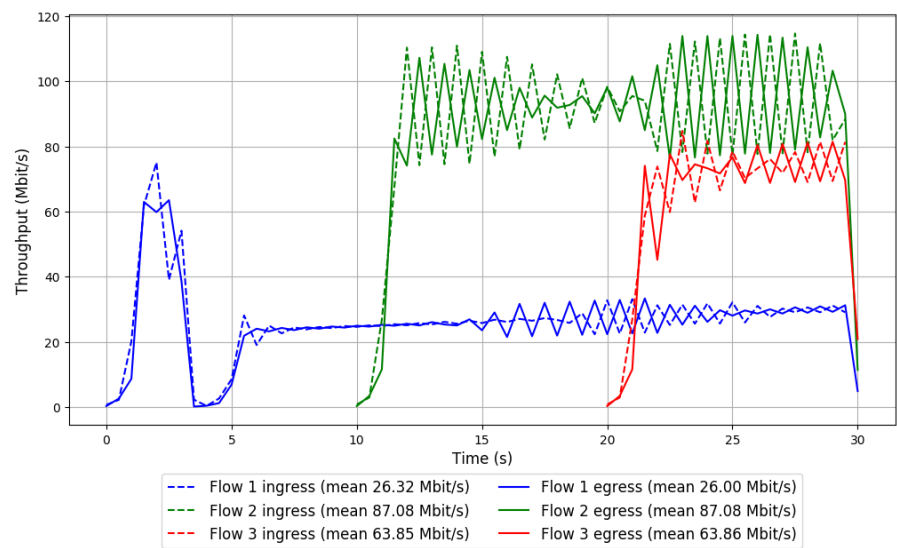
-- Flow 3:

Average throughput: 63.86 Mbit/s

95th percentile per-packet one-way delay: 117.057 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-31 12:55:37

End at: 2018-01-31 12:56:07

Below is generated by plot.py at 2018-01-31 15:26:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 56.93 Mbit/s

95th percentile per-packet one-way delay: 123.369 ms

Loss rate: 1.32%

-- Flow 1:

Average throughput: 12.80 Mbit/s

95th percentile per-packet one-way delay: 120.724 ms

Loss rate: 2.08%

-- Flow 2:

Average throughput: 15.07 Mbit/s

95th percentile per-packet one-way delay: 123.889 ms

Loss rate: 4.65%

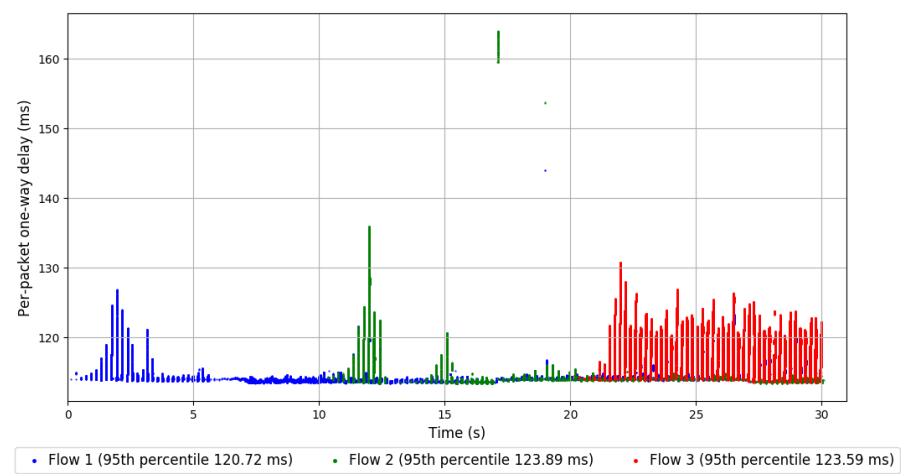
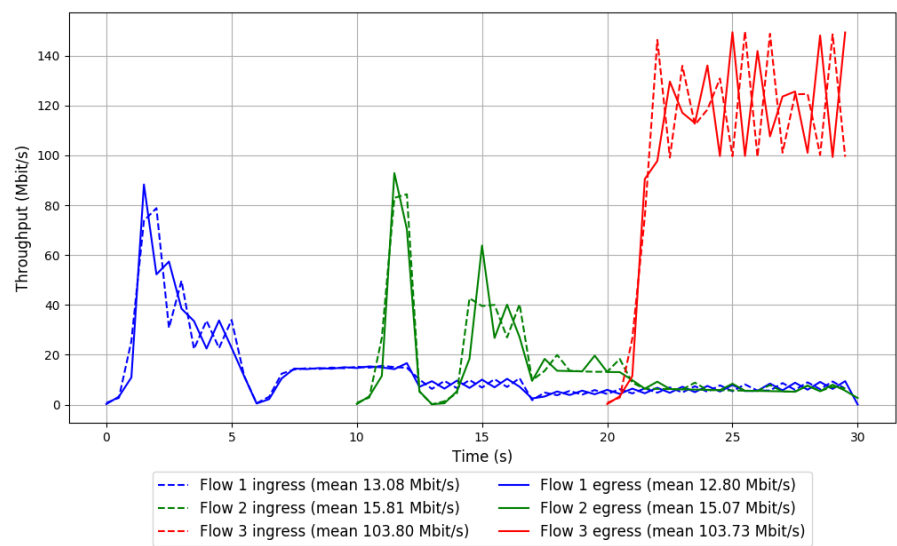
-- Flow 3:

Average throughput: 103.73 Mbit/s

95th percentile per-packet one-way delay: 123.587 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

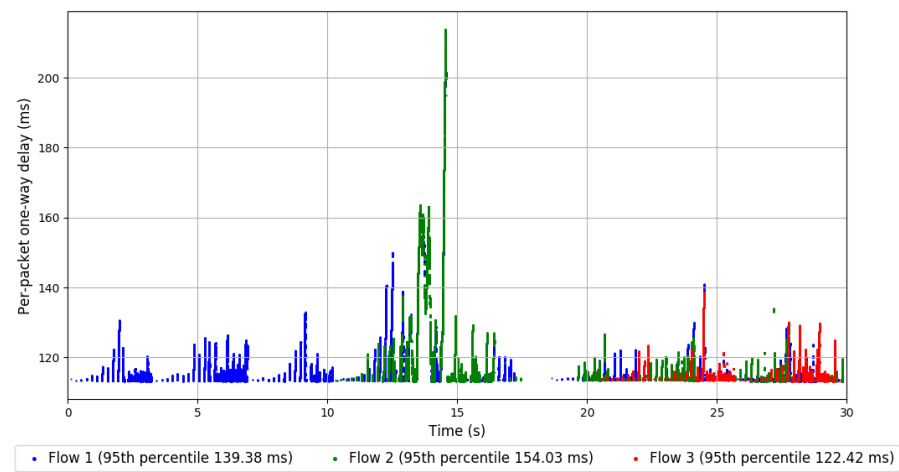
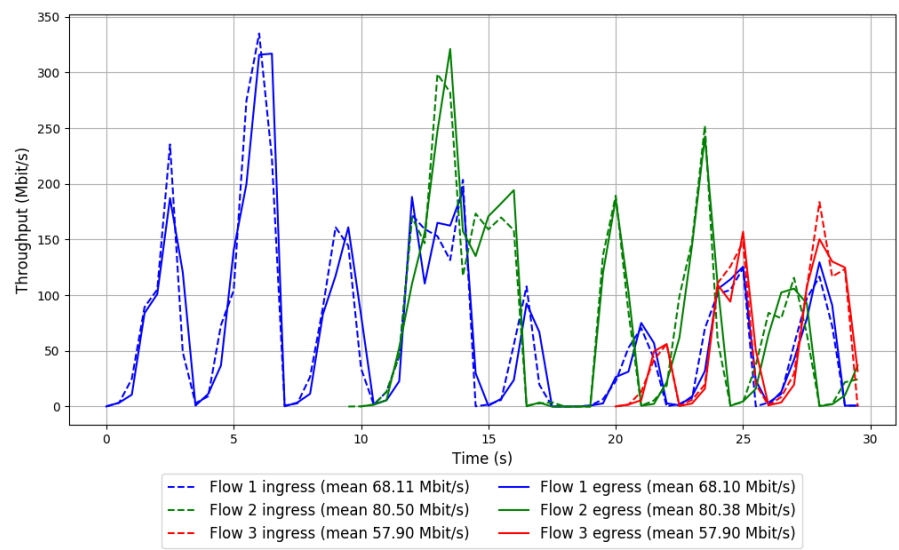


```
Run 1: Statistics of Verus

Start at: 2018-01-31 10:12:57
End at: 2018-01-31 10:13:28

# Below is generated by plot.py at 2018-01-31 15:26:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 139.77 Mbit/s
95th percentile per-packet one-way delay: 146.004 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 68.10 Mbit/s
95th percentile per-packet one-way delay: 139.379 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 80.38 Mbit/s
95th percentile per-packet one-way delay: 154.030 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 57.90 Mbit/s
95th percentile per-packet one-way delay: 122.425 ms
Loss rate: 0.00%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-31 10:30:18

End at: 2018-01-31 10:30:48

Below is generated by plot.py at 2018-01-31 15:28:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 266.03 Mbit/s

95th percentile per-packet one-way delay: 230.044 ms

Loss rate: 2.78%

-- Flow 1:

Average throughput: 185.92 Mbit/s

95th percentile per-packet one-way delay: 182.005 ms

Loss rate: 1.62%

-- Flow 2:

Average throughput: 44.15 Mbit/s

95th percentile per-packet one-way delay: 203.038 ms

Loss rate: 0.37%

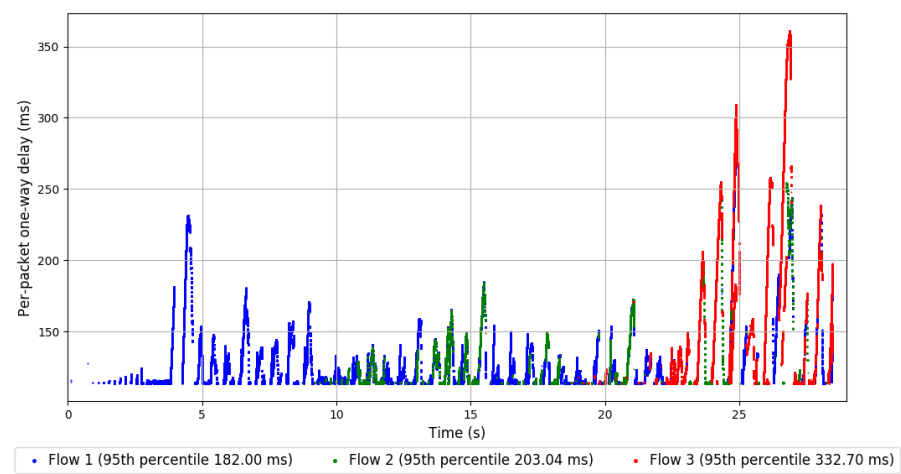
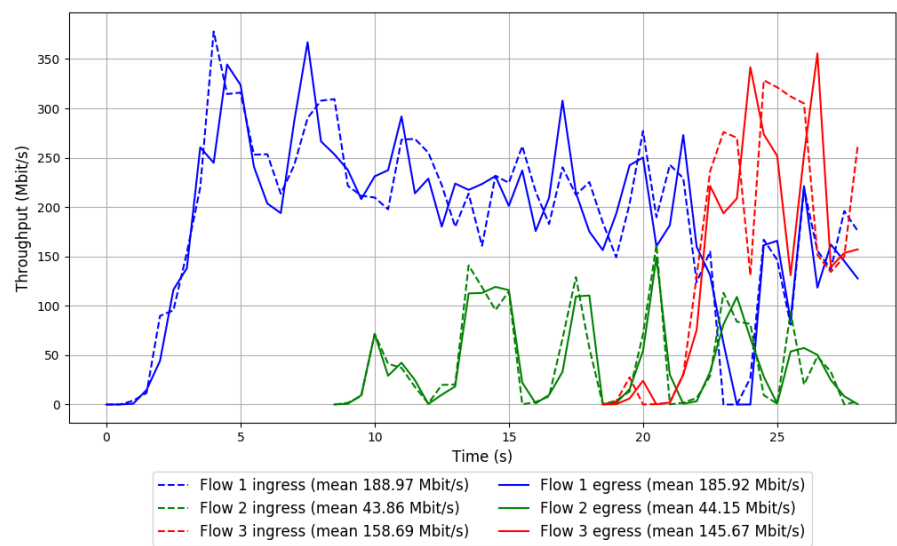
-- Flow 3:

Average throughput: 145.67 Mbit/s

95th percentile per-packet one-way delay: 332.704 ms

Loss rate: 8.19%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-31 10:47:33

End at: 2018-01-31 10:48:03

Below is generated by plot.py at 2018-01-31 15:28:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 249.91 Mbit/s

95th percentile per-packet one-way delay: 219.419 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 181.54 Mbit/s

95th percentile per-packet one-way delay: 219.483 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 65.51 Mbit/s

95th percentile per-packet one-way delay: 212.369 ms

Loss rate: 0.15%

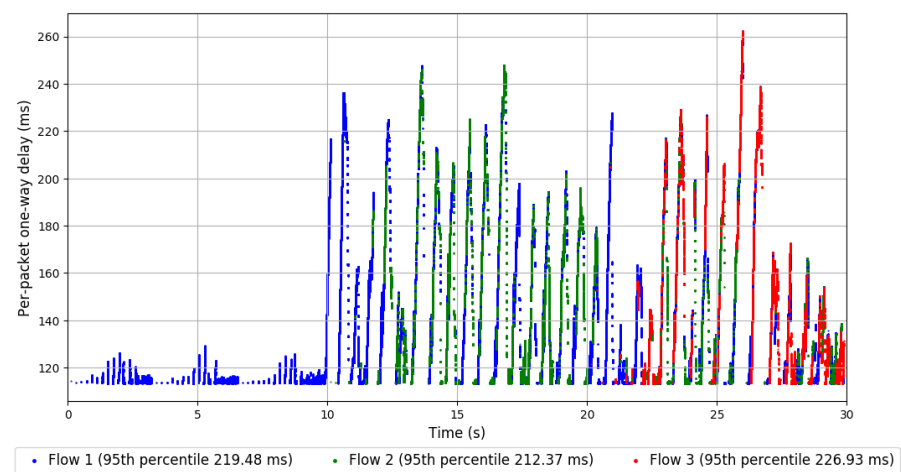
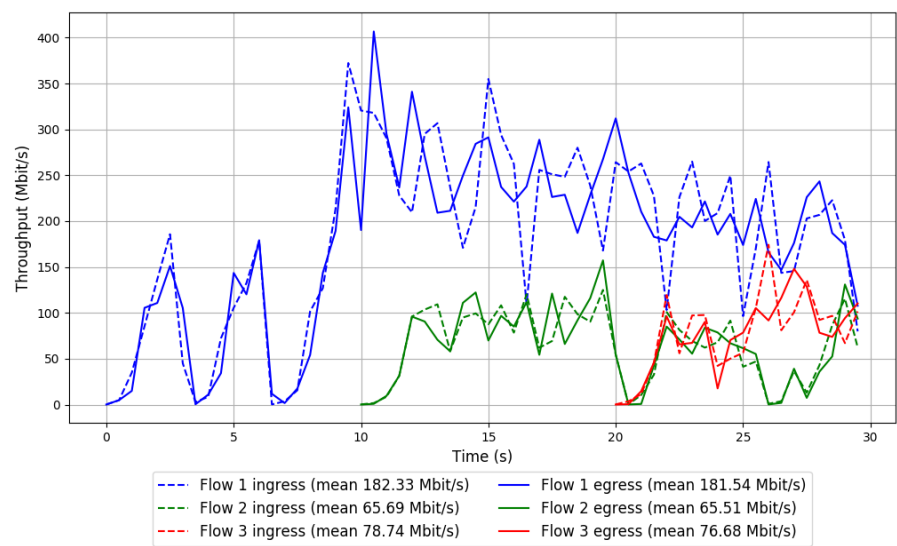
-- Flow 3:

Average throughput: 76.68 Mbit/s

95th percentile per-packet one-way delay: 226.926 ms

Loss rate: 2.71%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-31 11:04:48

End at: 2018-01-31 11:05:18

Below is generated by plot.py at 2018-01-31 15:28:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 244.45 Mbit/s

95th percentile per-packet one-way delay: 196.727 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 188.84 Mbit/s

95th percentile per-packet one-way delay: 189.269 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 56.30 Mbit/s

95th percentile per-packet one-way delay: 230.354 ms

Loss rate: 0.00%

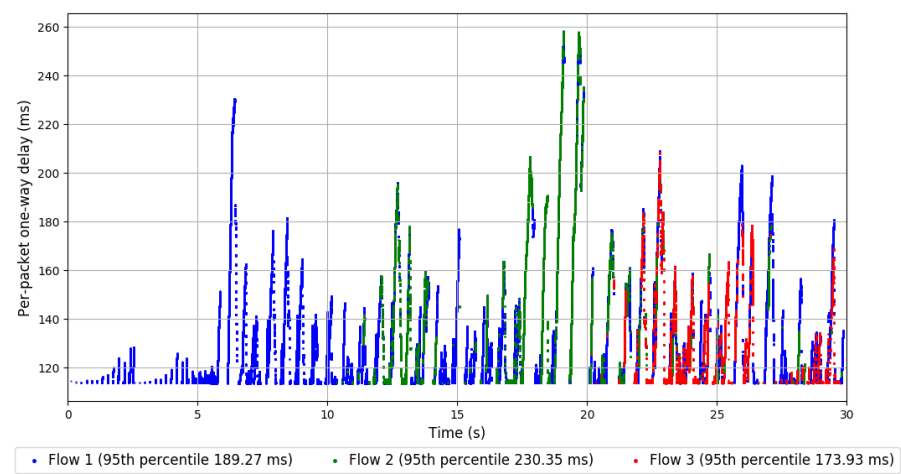
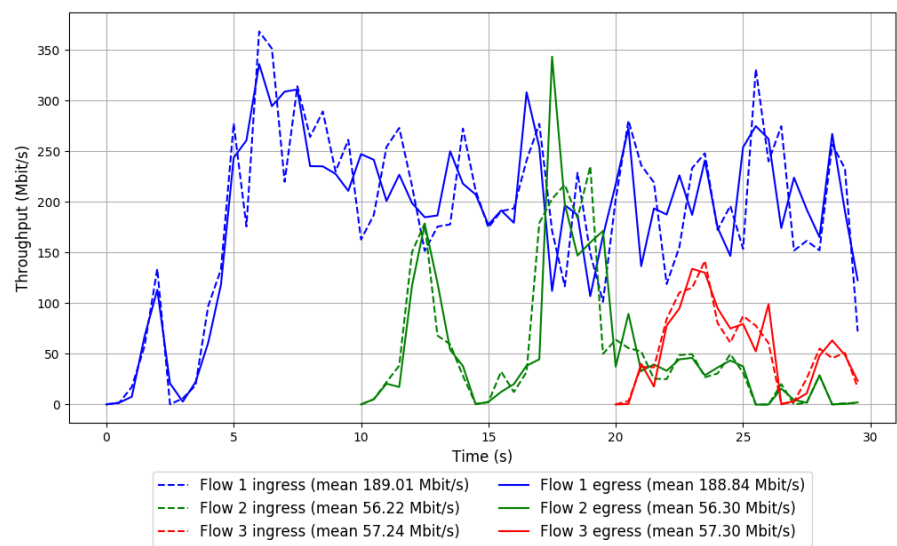
-- Flow 3:

Average throughput: 57.30 Mbit/s

95th percentile per-packet one-way delay: 173.934 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-31 11:22:16

End at: 2018-01-31 11:22:46

Below is generated by plot.py at 2018-01-31 15:28:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 236.76 Mbit/s

95th percentile per-packet one-way delay: 188.710 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 154.82 Mbit/s

95th percentile per-packet one-way delay: 190.371 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 114.40 Mbit/s

95th percentile per-packet one-way delay: 186.169 ms

Loss rate: 0.69%

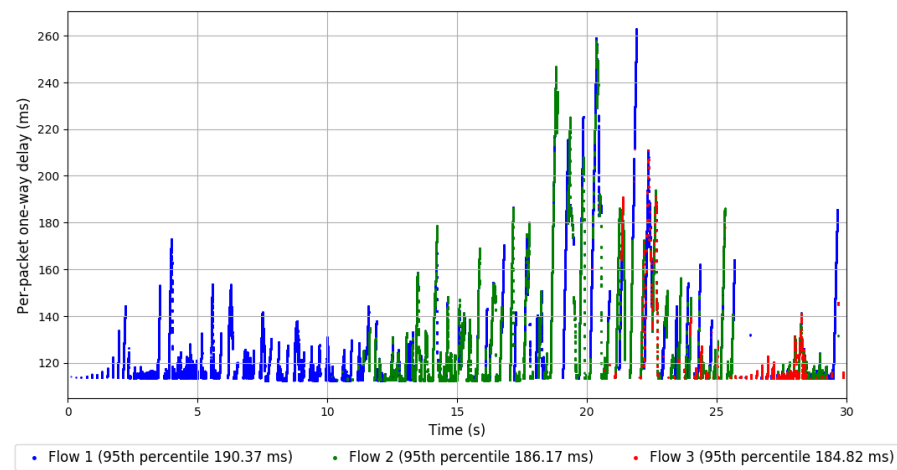
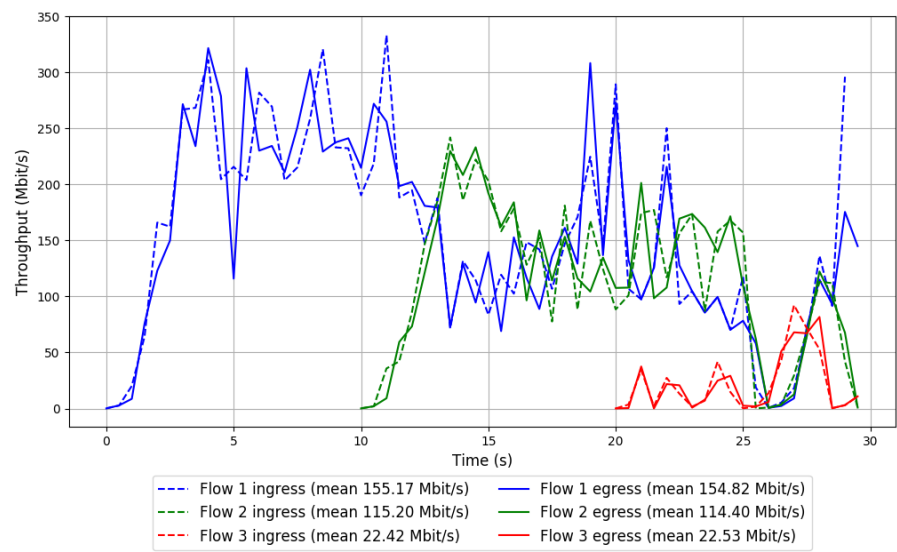
-- Flow 3:

Average throughput: 22.53 Mbit/s

95th percentile per-packet one-way delay: 184.816 ms

Loss rate: 0.00%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-31 11:39:41

End at: 2018-01-31 11:40:11

Below is generated by plot.py at 2018-01-31 15:29:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 278.72 Mbit/s

95th percentile per-packet one-way delay: 344.503 ms

Loss rate: 6.08%

-- Flow 1:

Average throughput: 239.22 Mbit/s

95th percentile per-packet one-way delay: 348.392 ms

Loss rate: 6.63%

-- Flow 2:

Average throughput: 32.00 Mbit/s

95th percentile per-packet one-way delay: 260.813 ms

Loss rate: 3.37%

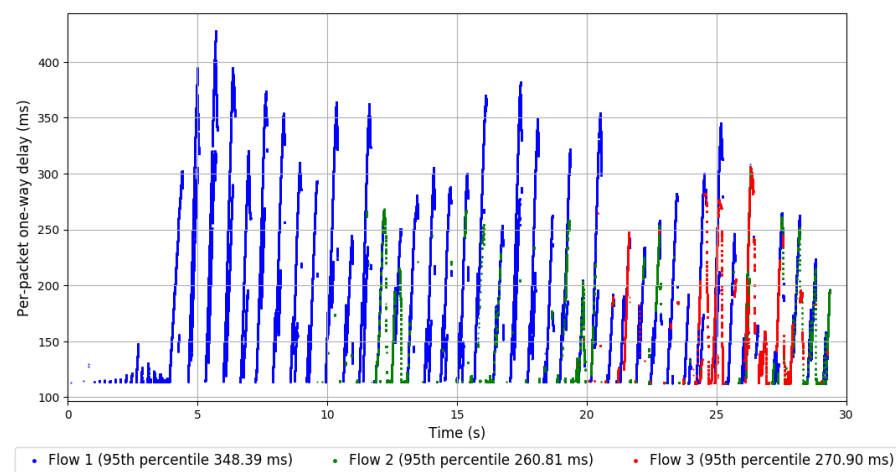
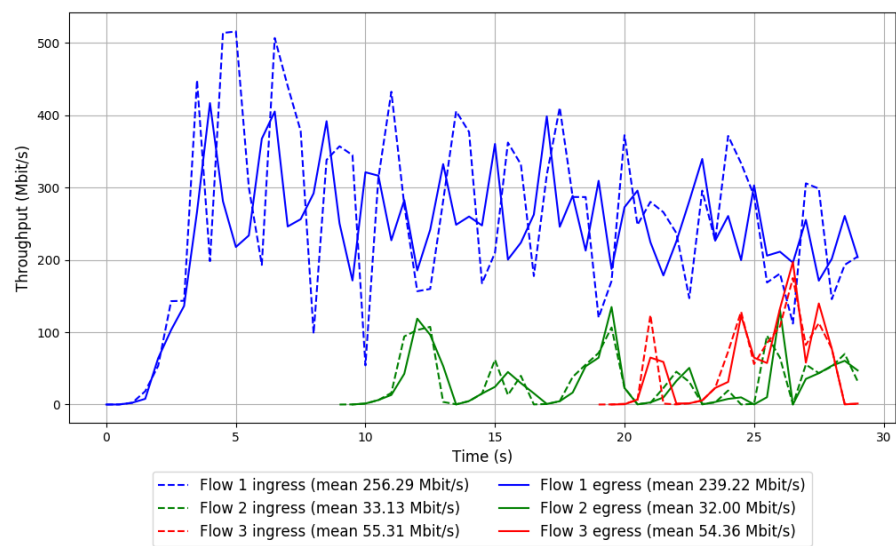
-- Flow 3:

Average throughput: 54.36 Mbit/s

95th percentile per-packet one-way delay: 270.904 ms

Loss rate: 1.60%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-31 11:57:14

End at: 2018-01-31 11:57:44

Below is generated by plot.py at 2018-01-31 15:30:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 300.04 Mbit/s

95th percentile per-packet one-way delay: 265.273 ms

Loss rate: 2.49%

-- Flow 1:

Average throughput: 258.47 Mbit/s

95th percentile per-packet one-way delay: 269.088 ms

Loss rate: 2.53%

-- Flow 2:

Average throughput: 40.01 Mbit/s

95th percentile per-packet one-way delay: 249.275 ms

Loss rate: 2.22%

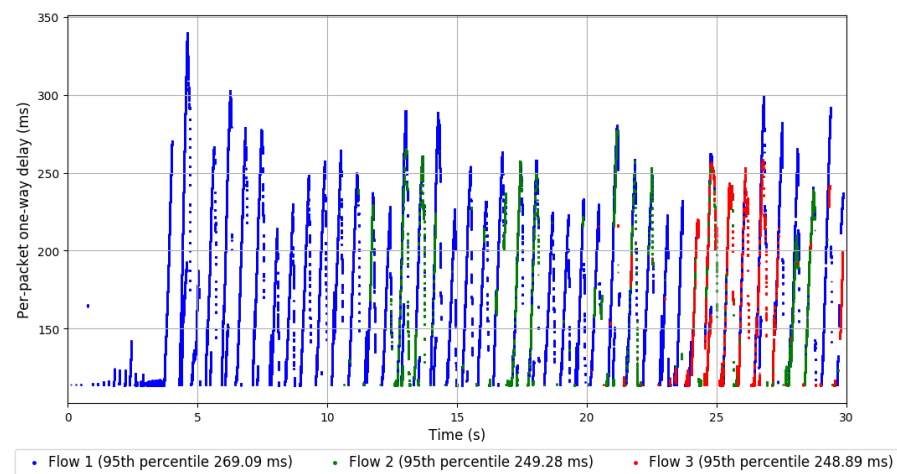
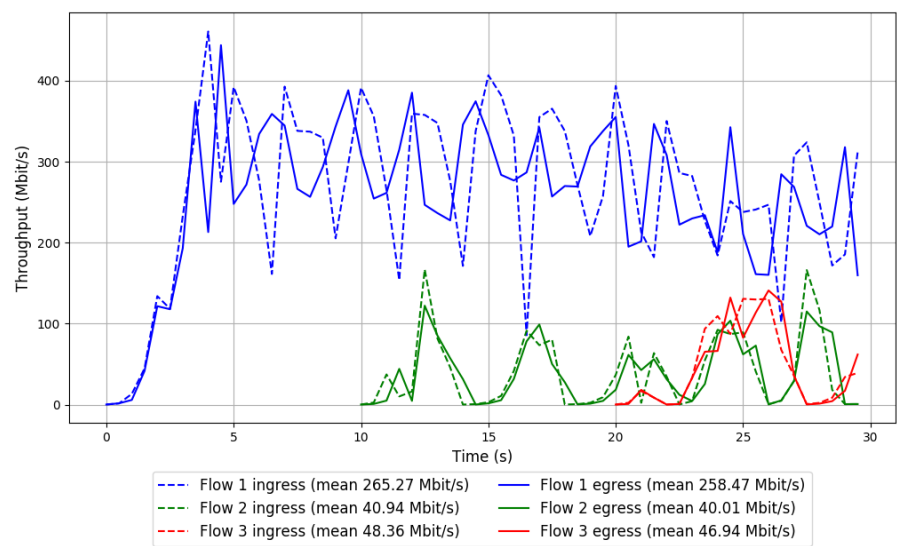
-- Flow 3:

Average throughput: 46.94 Mbit/s

95th percentile per-packet one-way delay: 248.894 ms

Loss rate: 2.18%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-31 12:14:37

End at: 2018-01-31 12:15:07

Below is generated by plot.py at 2018-01-31 15:31:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 302.13 Mbit/s

95th percentile per-packet one-way delay: 223.401 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 192.30 Mbit/s

95th percentile per-packet one-way delay: 212.954 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 124.27 Mbit/s

95th percentile per-packet one-way delay: 219.795 ms

Loss rate: 0.79%

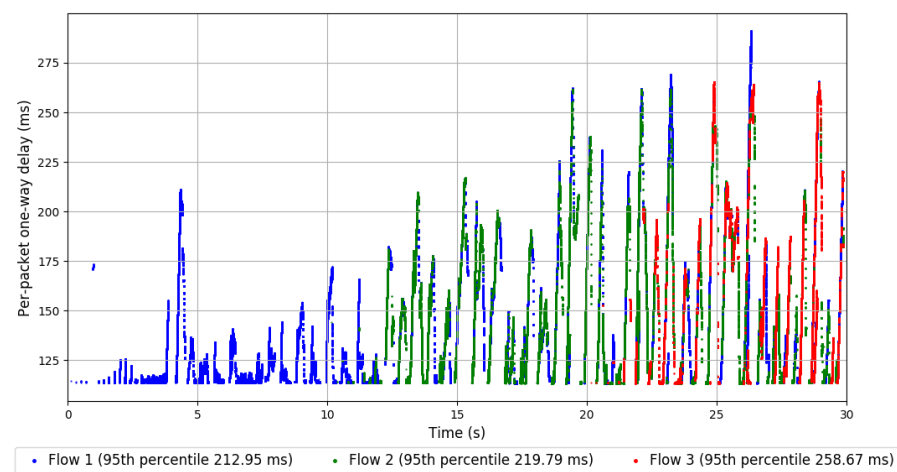
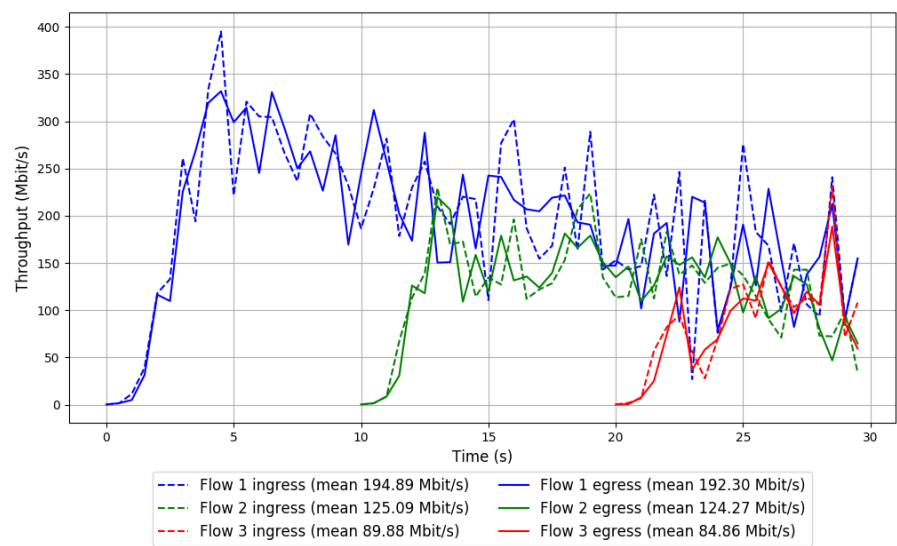
-- Flow 3:

Average throughput: 84.86 Mbit/s

95th percentile per-packet one-way delay: 258.669 ms

Loss rate: 5.61%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-31 12:32:13

End at: 2018-01-31 12:32:43

Below is generated by plot.py at 2018-01-31 15:32:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 280.07 Mbit/s

95th percentile per-packet one-way delay: 253.850 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 229.27 Mbit/s

95th percentile per-packet one-way delay: 245.854 ms

Loss rate: 1.28%

-- Flow 2:

Average throughput: 33.13 Mbit/s

95th percentile per-packet one-way delay: 231.292 ms

Loss rate: 0.47%

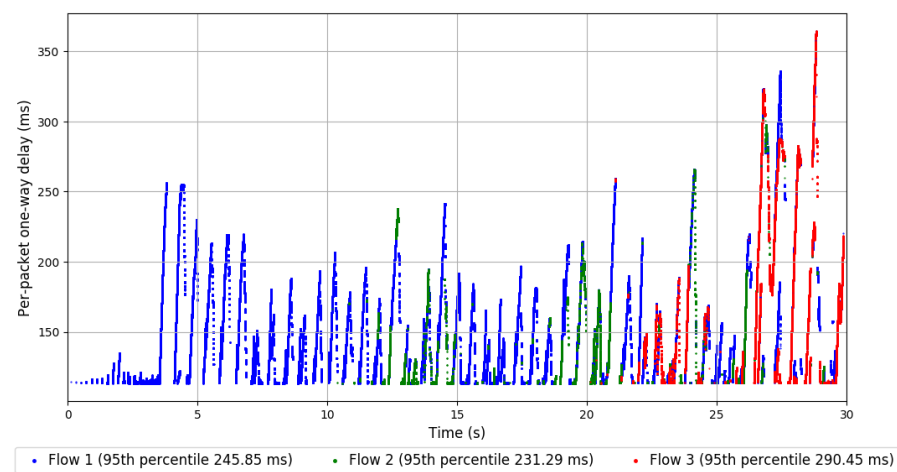
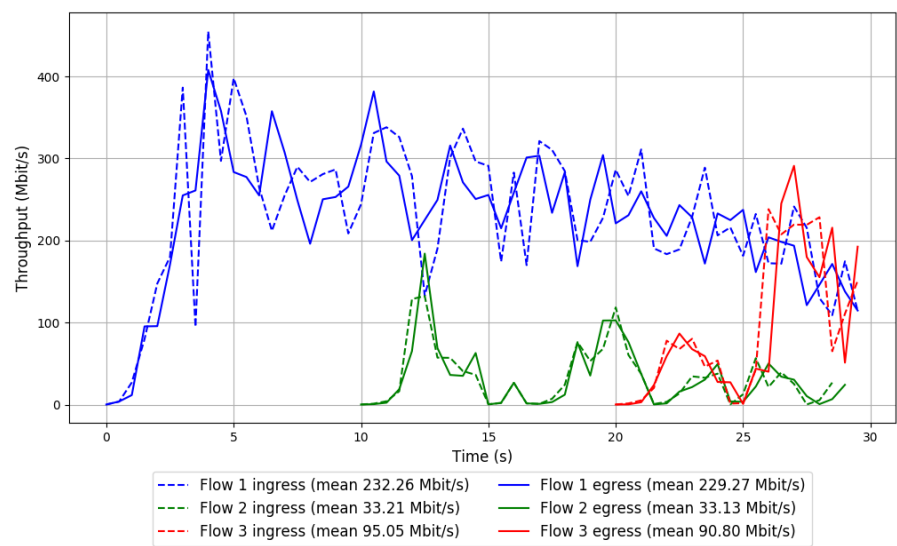
-- Flow 3:

Average throughput: 90.80 Mbit/s

95th percentile per-packet one-way delay: 290.448 ms

Loss rate: 3.74%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-31 12:49:36

End at: 2018-01-31 12:50:06

Below is generated by plot.py at 2018-01-31 15:32:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.57 Mbit/s

95th percentile per-packet one-way delay: 184.647 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 84.83 Mbit/s

95th percentile per-packet one-way delay: 196.997 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 132.89 Mbit/s

95th percentile per-packet one-way delay: 164.788 ms

Loss rate: 0.72%

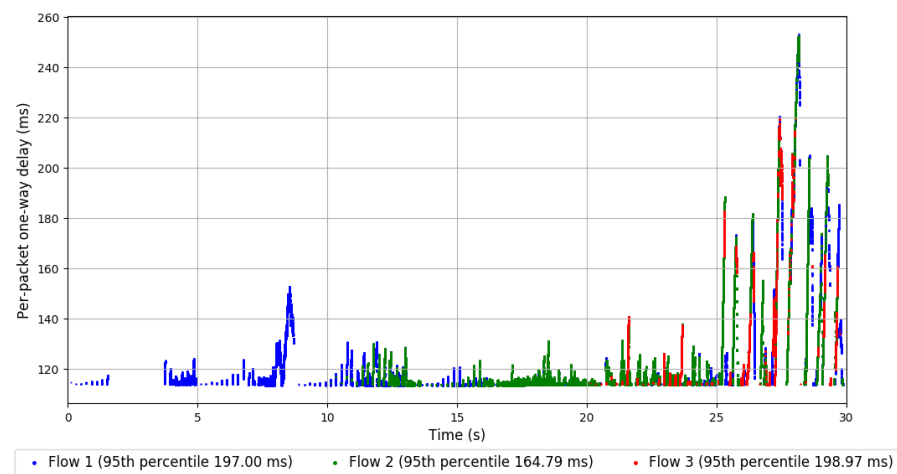
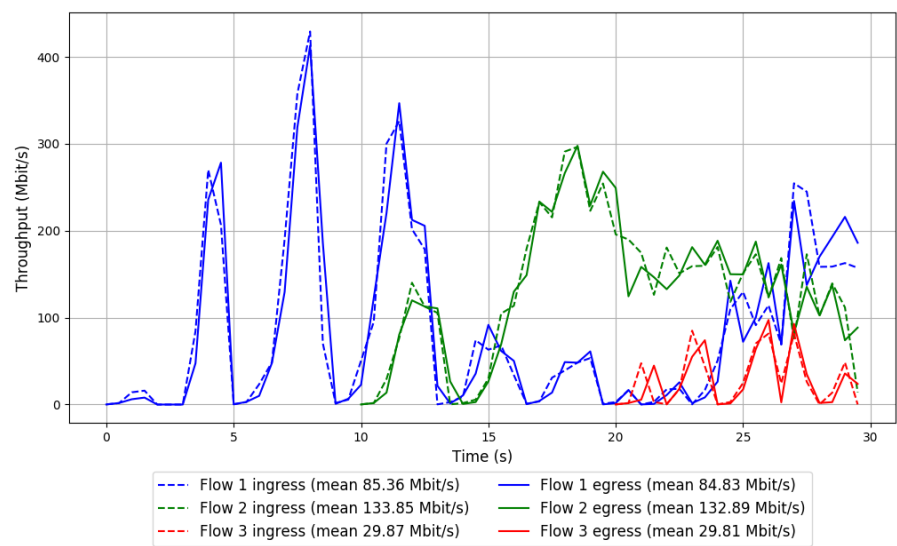
-- Flow 3:

Average throughput: 29.81 Mbit/s

95th percentile per-packet one-way delay: 198.972 ms

Loss rate: 0.00%

Run 10: Report of Verus — Data Link

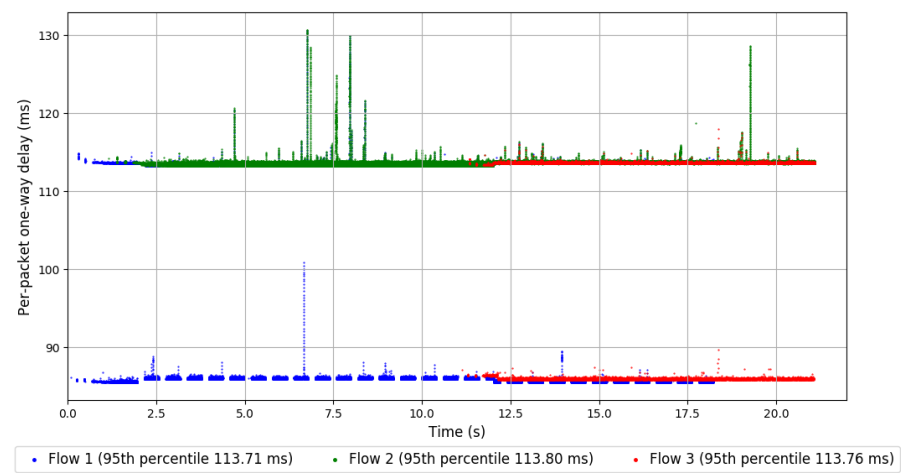
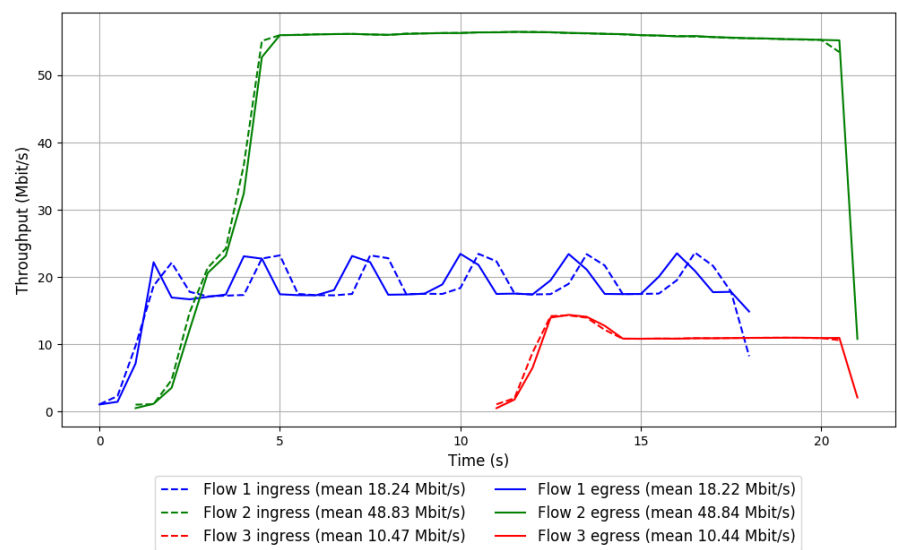


Run 1: Statistics of Copa

Start at: 2018-01-31 10:24:23

End at: 2018-01-31 10:24:53

Run 1: Report of Copa — Data Link

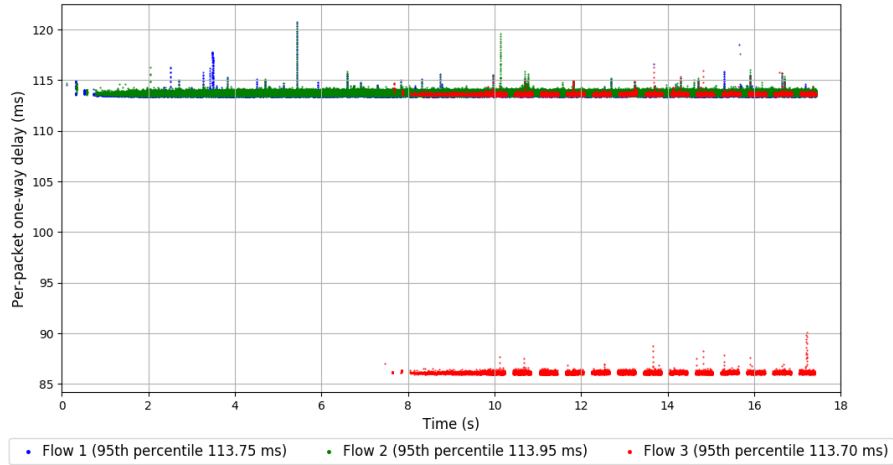
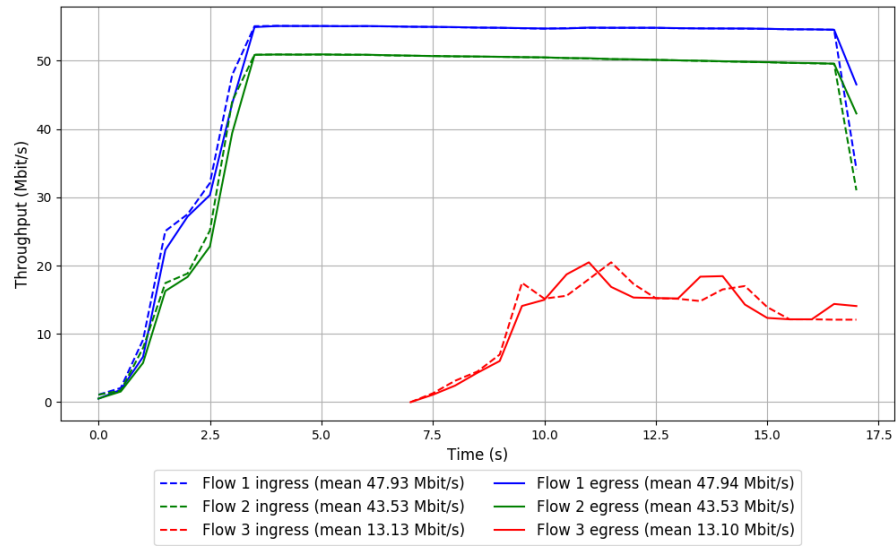


Run 2: Statistics of Copa

Start at: 2018-01-31 10:41:42

End at: 2018-01-31 10:42:12

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-31 10:59:02

End at: 2018-01-31 10:59:32

Below is generated by plot.py at 2018-01-31 15:32:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.87 Mbit/s

95th percentile per-packet one-way delay: 113.936 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 17.05 Mbit/s

95th percentile per-packet one-way delay: 114.003 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.39 Mbit/s

95th percentile per-packet one-way delay: 113.848 ms

Loss rate: 0.00%

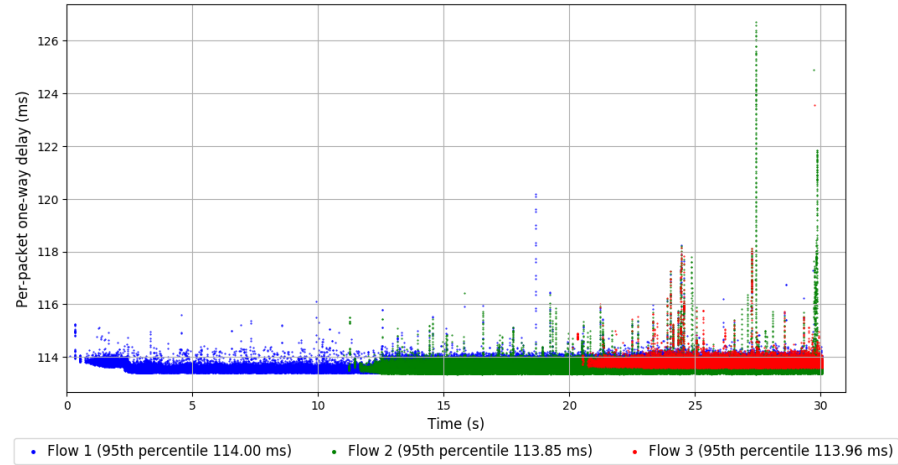
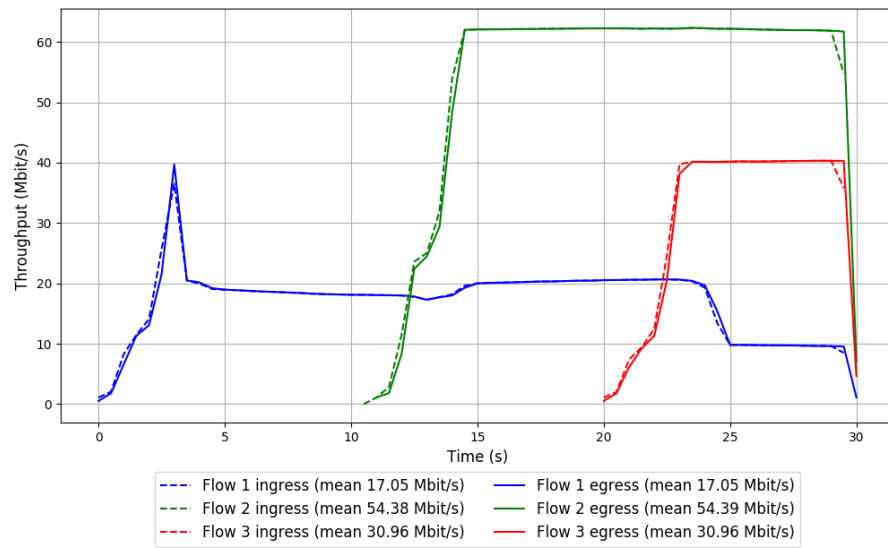
-- Flow 3:

Average throughput: 30.96 Mbit/s

95th percentile per-packet one-way delay: 113.963 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link

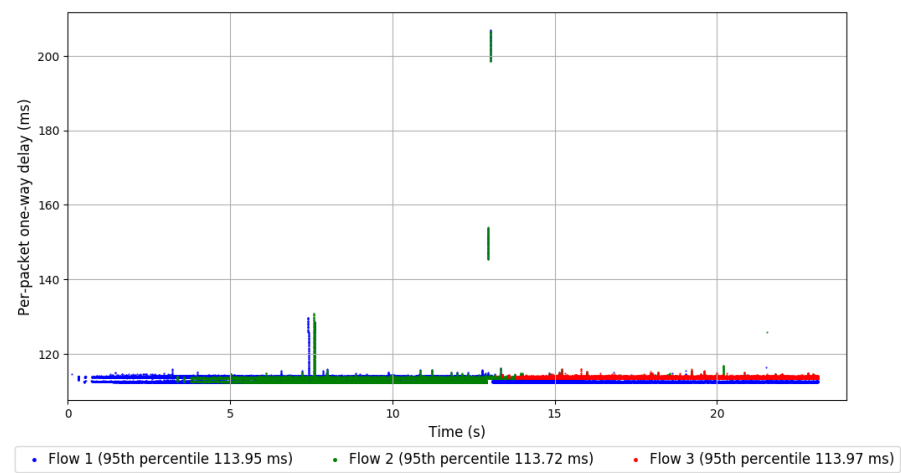
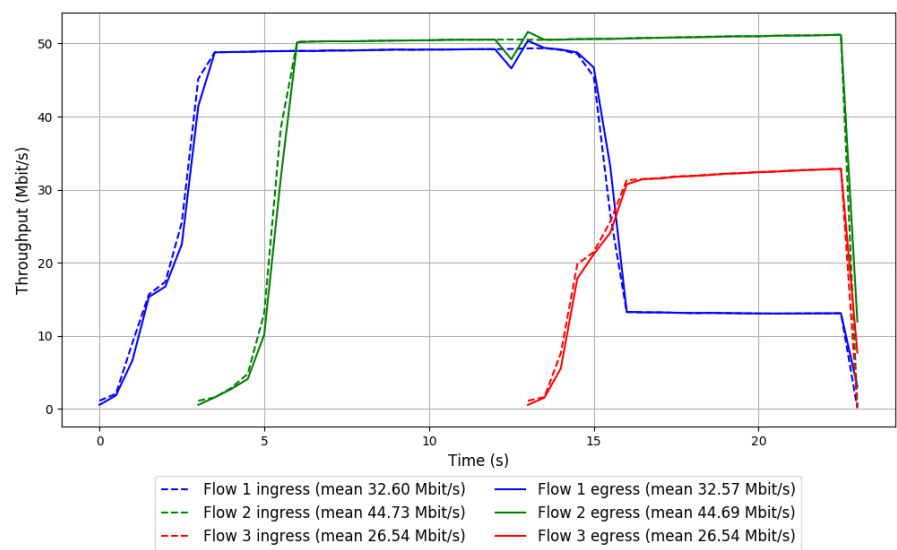


Run 4: Statistics of Copa

Start at: 2018-01-31 11:16:24

End at: 2018-01-31 11:16:54

Run 4: Report of Copa — Data Link

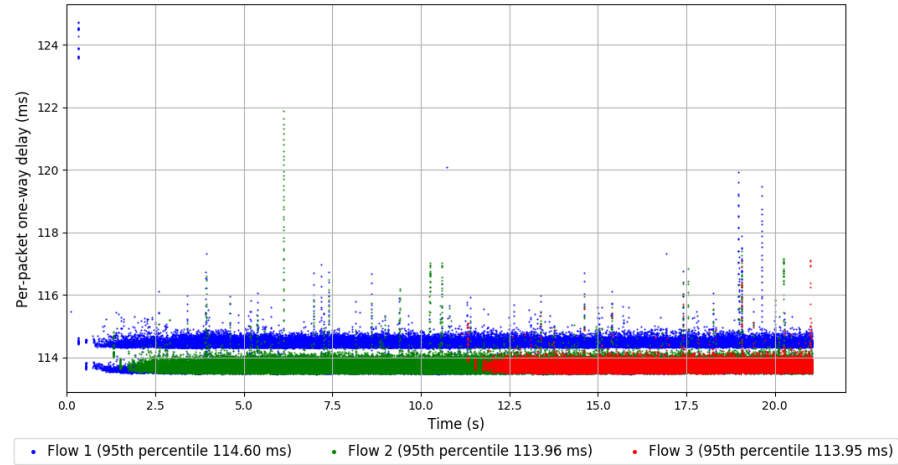
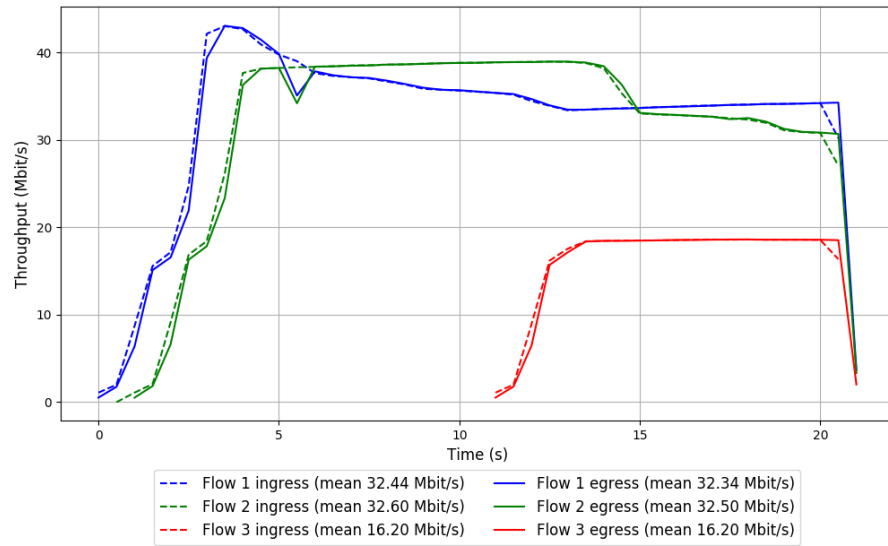


Run 5: Statistics of Copa

Start at: 2018-01-31 11:33:53

End at: 2018-01-31 11:34:23

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-31 11:51:20

End at: 2018-01-31 11:51:50

Below is generated by plot.py at 2018-01-31 15:32:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 55.75 Mbit/s

95th percentile per-packet one-way delay: 114.131 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.82 Mbit/s

95th percentile per-packet one-way delay: 114.538 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.16 Mbit/s

95th percentile per-packet one-way delay: 114.024 ms

Loss rate: 0.00%

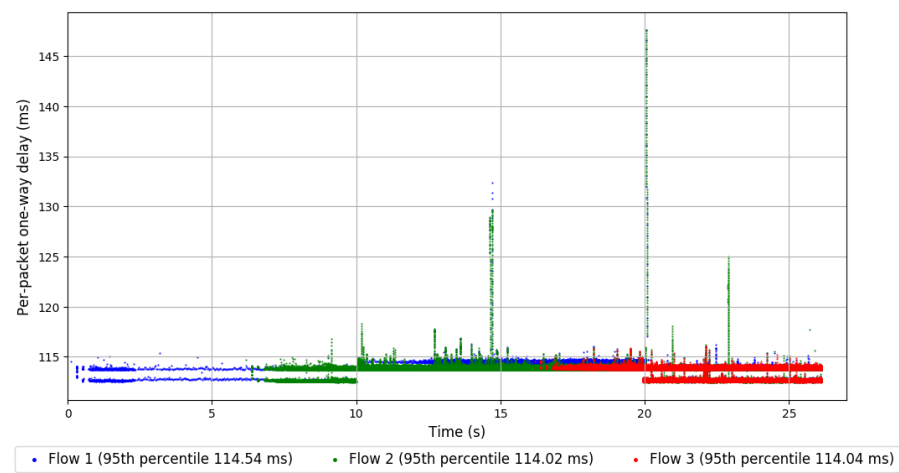
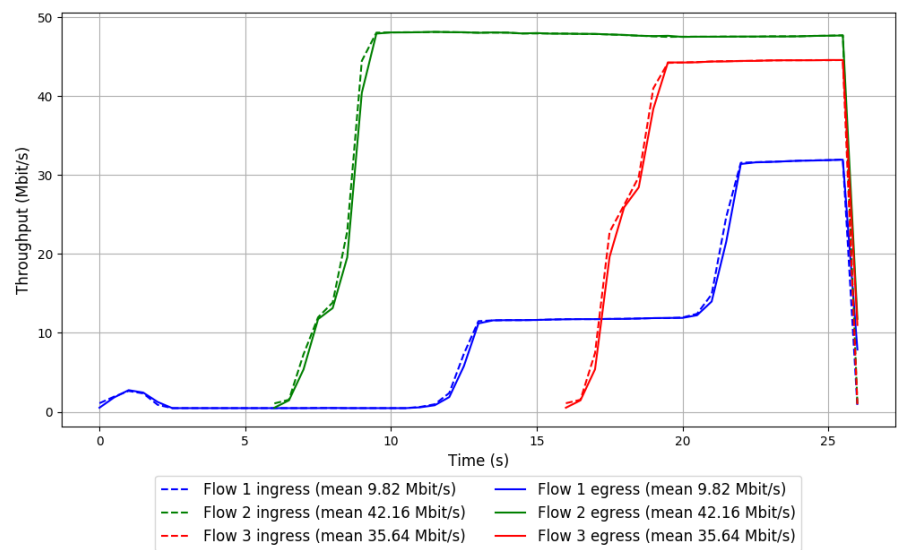
-- Flow 3:

Average throughput: 35.64 Mbit/s

95th percentile per-packet one-way delay: 114.038 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-31 12:08:53

End at: 2018-01-31 12:09:23

Below is generated by plot.py at 2018-01-31 15:32:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 22.84 Mbit/s

95th percentile per-packet one-way delay: 114.492 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 5322.936 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 10.42 Mbit/s

95th percentile per-packet one-way delay: 114.583 ms

Loss rate: 0.00%

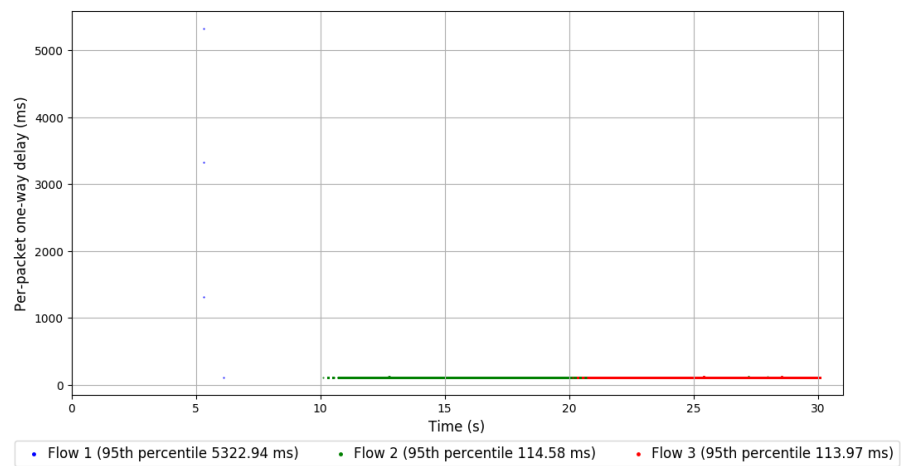
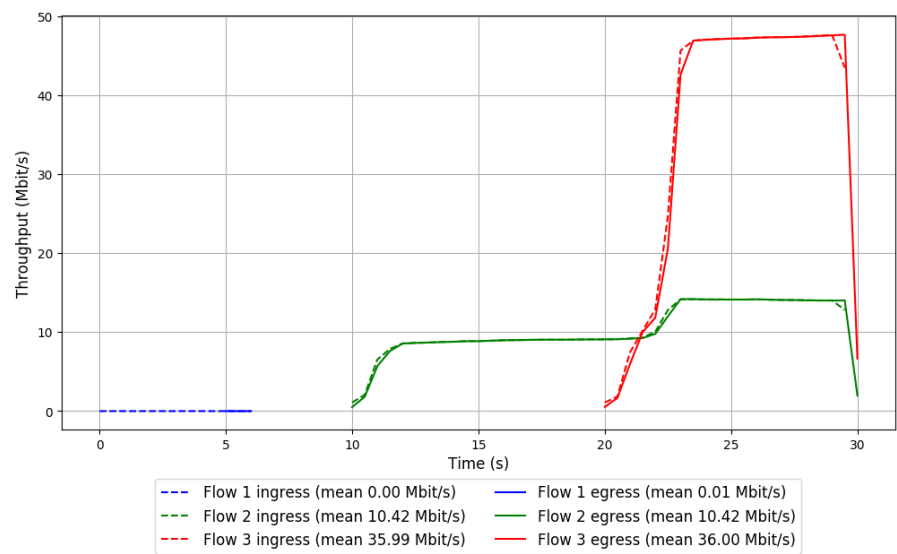
-- Flow 3:

Average throughput: 36.00 Mbit/s

95th percentile per-packet one-way delay: 113.968 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-31 12:26:18

End at: 2018-01-31 12:26:48

Below is generated by plot.py at 2018-01-31 15:33:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.44 Mbit/s

95th percentile per-packet one-way delay: 113.986 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 38.17 Mbit/s

95th percentile per-packet one-way delay: 113.967 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.62 Mbit/s

95th percentile per-packet one-way delay: 113.999 ms

Loss rate: 0.00%

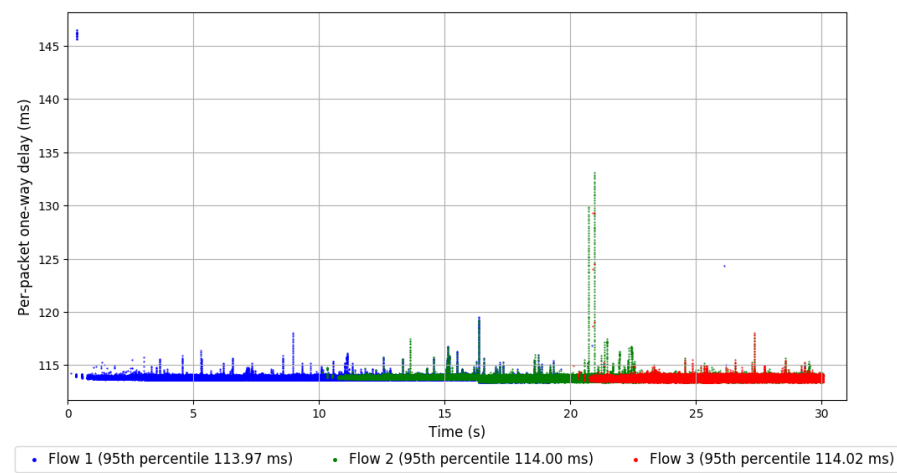
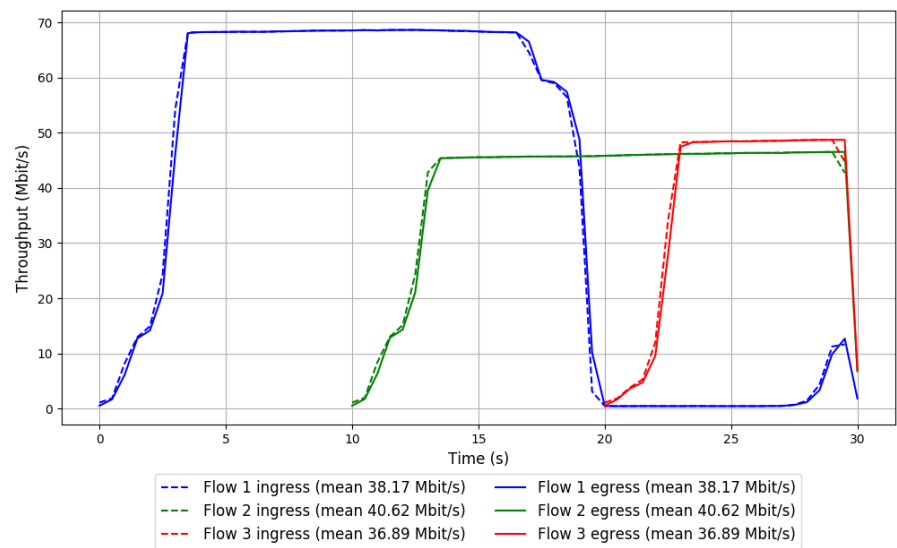
-- Flow 3:

Average throughput: 36.89 Mbit/s

95th percentile per-packet one-way delay: 114.024 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-31 12:43:55

End at: 2018-01-31 12:44:25

Below is generated by plot.py at 2018-01-31 15:33:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 37.45 Mbit/s

95th percentile per-packet one-way delay: 113.976 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 19.25 Mbit/s

95th percentile per-packet one-way delay: 114.016 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 13.23 Mbit/s

95th percentile per-packet one-way delay: 113.954 ms

Loss rate: 0.00%

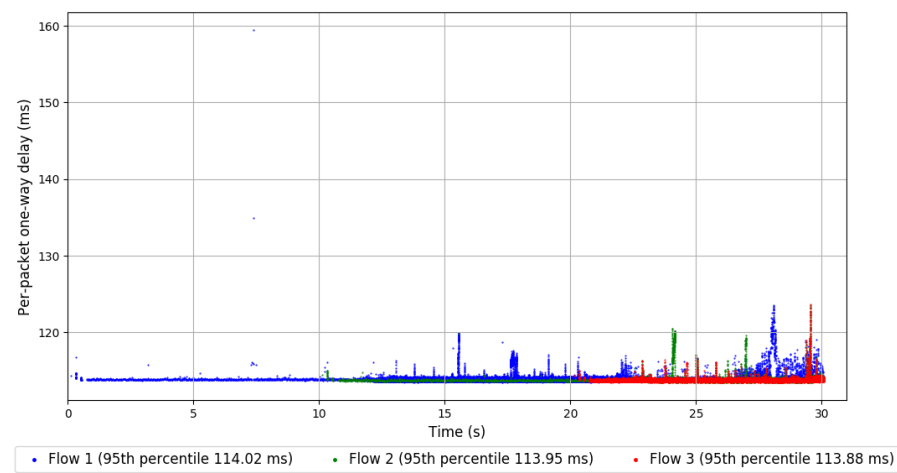
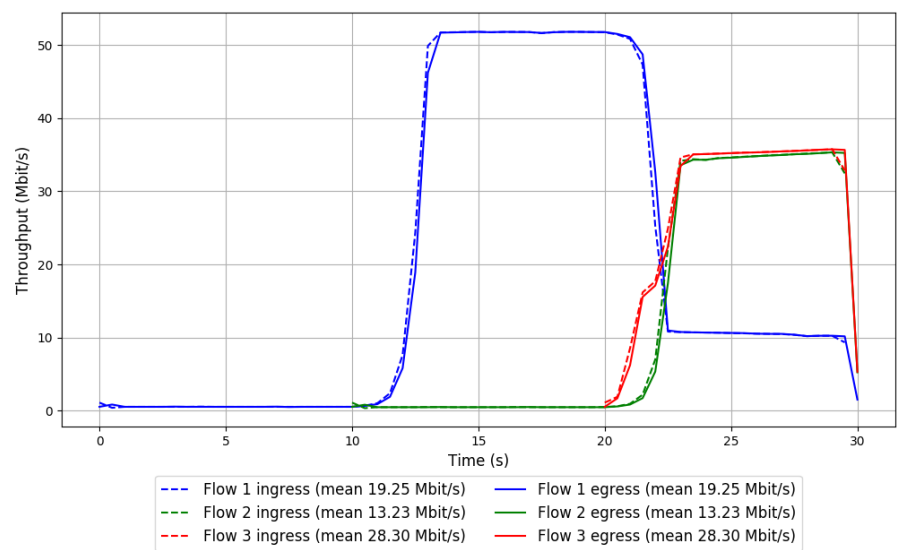
-- Flow 3:

Average throughput: 28.30 Mbit/s

95th percentile per-packet one-way delay: 113.881 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-31 13:01:17

End at: 2018-01-31 13:01:47

Below is generated by plot.py at 2018-01-31 15:33:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 63.44 Mbit/s

95th percentile per-packet one-way delay: 114.112 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 28.24 Mbit/s

95th percentile per-packet one-way delay: 114.084 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.37 Mbit/s

95th percentile per-packet one-way delay: 114.148 ms

Loss rate: 0.00%

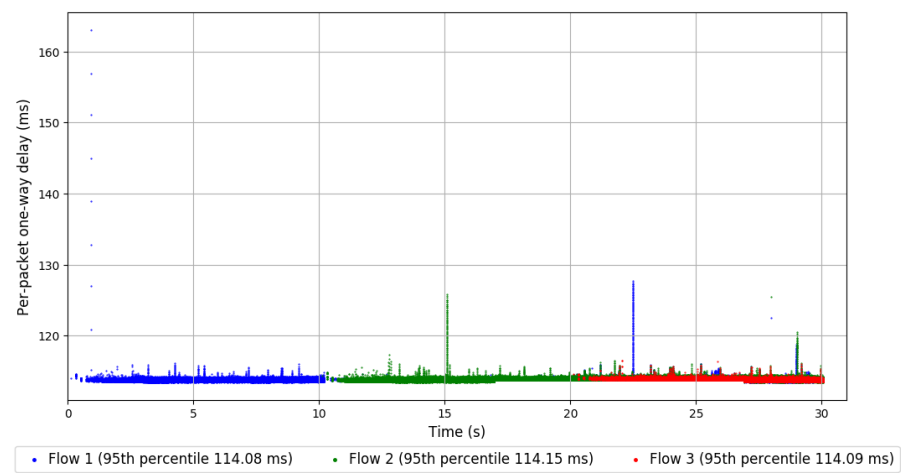
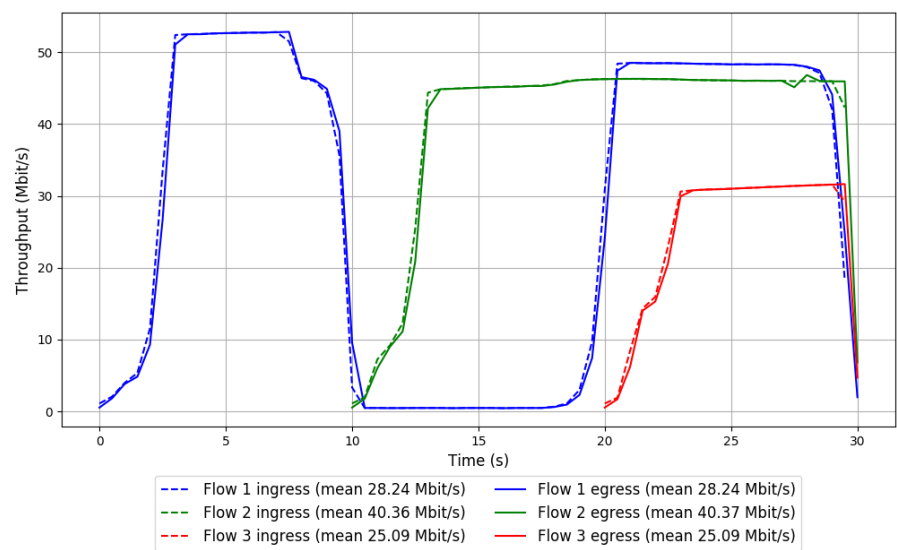
-- Flow 3:

Average throughput: 25.09 Mbit/s

95th percentile per-packet one-way delay: 114.088 ms

Loss rate: 0.01%

Run 10: Report of Copa — Data Link



Run 1: Statistics of FillP

Start at: 2018-01-31 10:17:49

End at: 2018-01-31 10:18:19

Below is generated by plot.py at 2018-01-31 15:34:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 58.90 Mbit/s

95th percentile per-packet one-way delay: 322.100 ms

Loss rate: 8.41%

-- Flow 1:

Average throughput: 17.19 Mbit/s

95th percentile per-packet one-way delay: 358.829 ms

Loss rate: 5.85%

-- Flow 2:

Average throughput: 31.74 Mbit/s

95th percentile per-packet one-way delay: 256.854 ms

Loss rate: 6.22%

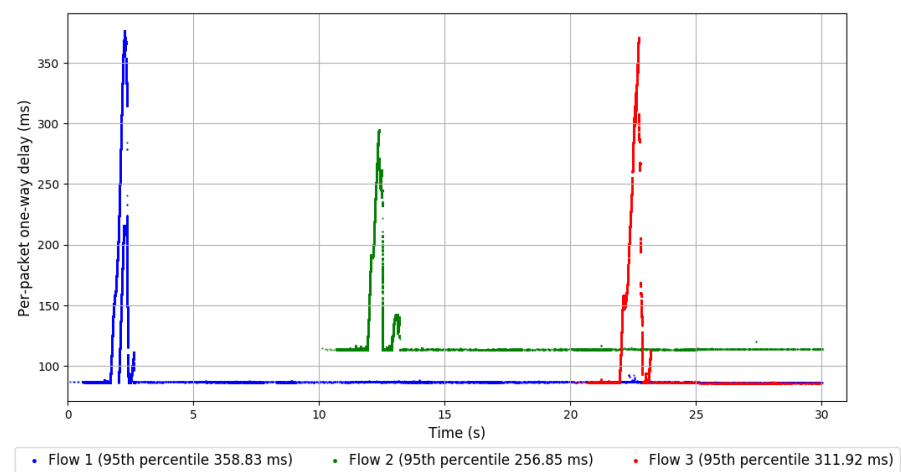
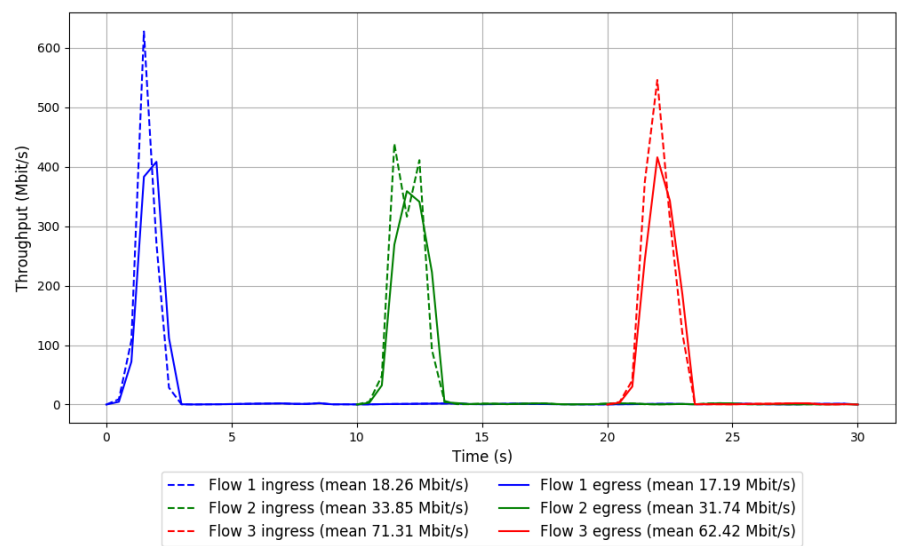
-- Flow 3:

Average throughput: 62.42 Mbit/s

95th percentile per-packet one-way delay: 311.923 ms

Loss rate: 12.48%

Run 1: Report of FillP — Data Link

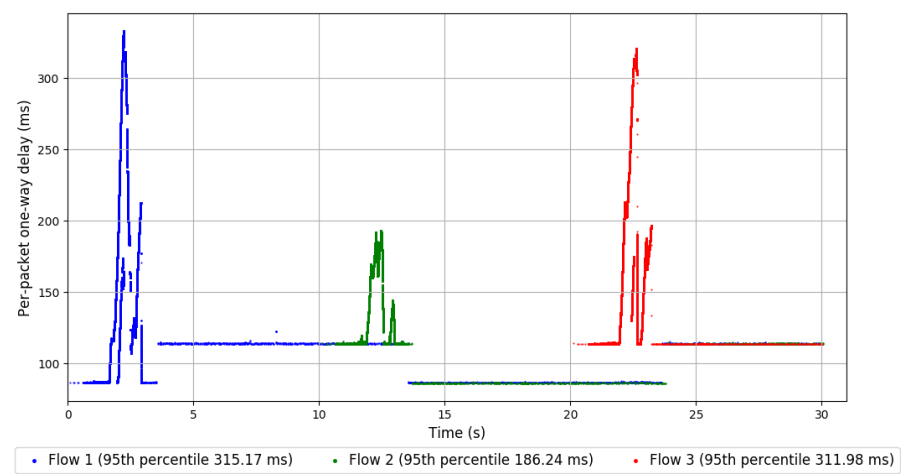
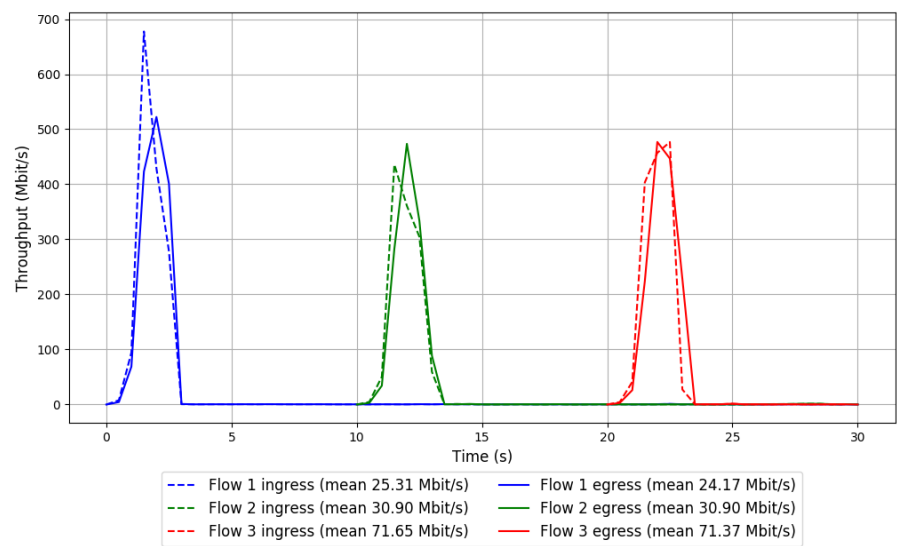


```
Run 2: Statistics of FillP

Start at: 2018-01-31 10:35:30
End at: 2018-01-31 10:36:00

# Below is generated by plot.py at 2018-01-31 15:34:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.24 Mbit/s
95th percentile per-packet one-way delay: 309.468 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 24.17 Mbit/s
95th percentile per-packet one-way delay: 315.166 ms
Loss rate: 4.41%
-- Flow 2:
Average throughput: 30.90 Mbit/s
95th percentile per-packet one-way delay: 186.240 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 71.37 Mbit/s
95th percentile per-packet one-way delay: 311.984 ms
Loss rate: 0.39%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-31 10:52:38

End at: 2018-01-31 10:53:08

Below is generated by plot.py at 2018-01-31 15:34:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.01 Mbit/s

95th percentile per-packet one-way delay: 288.449 ms

Loss rate: 5.84%

-- Flow 1:

Average throughput: 26.02 Mbit/s

95th percentile per-packet one-way delay: 281.938 ms

Loss rate: 5.90%

-- Flow 2:

Average throughput: 31.30 Mbit/s

95th percentile per-packet one-way delay: 263.541 ms

Loss rate: 4.67%

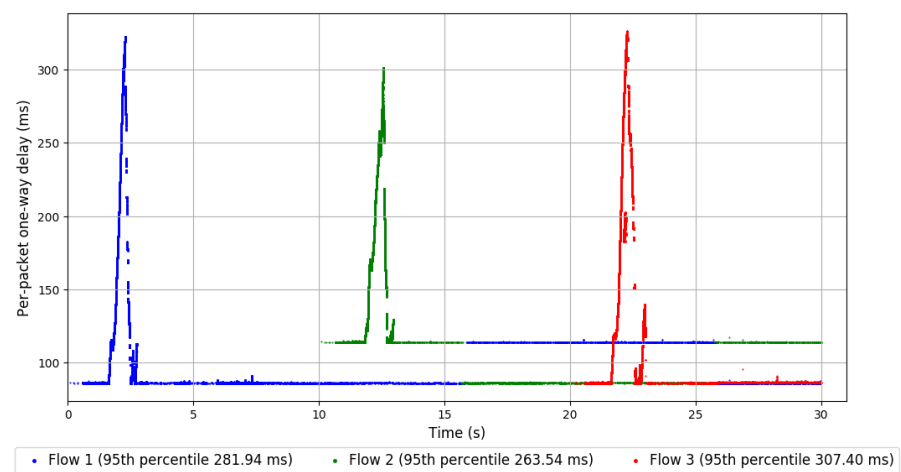
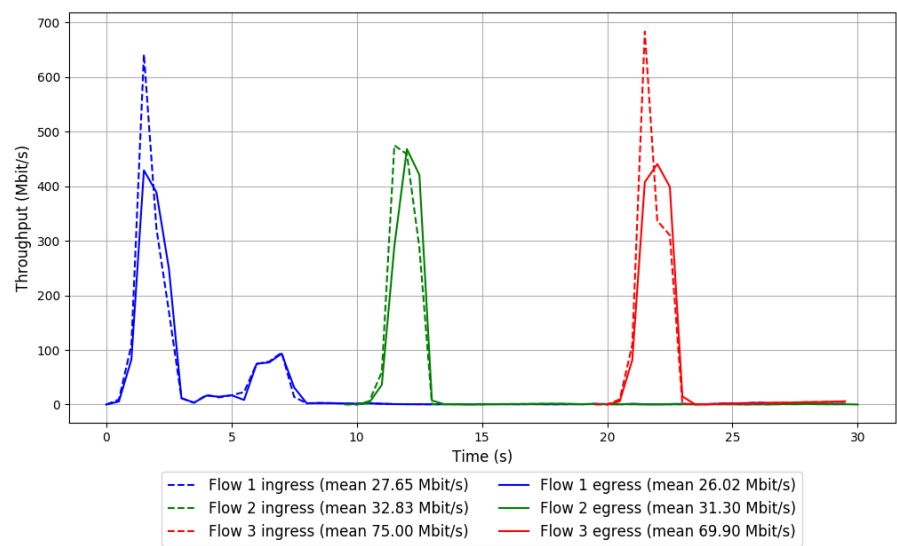
-- Flow 3:

Average throughput: 69.90 Mbit/s

95th percentile per-packet one-way delay: 307.397 ms

Loss rate: 6.80%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-31 11:09:57

End at: 2018-01-31 11:10:27

Below is generated by plot.py at 2018-01-31 15:35:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.17 Mbit/s

95th percentile per-packet one-way delay: 363.188 ms

Loss rate: 6.53%

-- Flow 1:

Average throughput: 25.90 Mbit/s

95th percentile per-packet one-way delay: 301.689 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 41.34 Mbit/s

95th percentile per-packet one-way delay: 332.493 ms

Loss rate: 17.31%

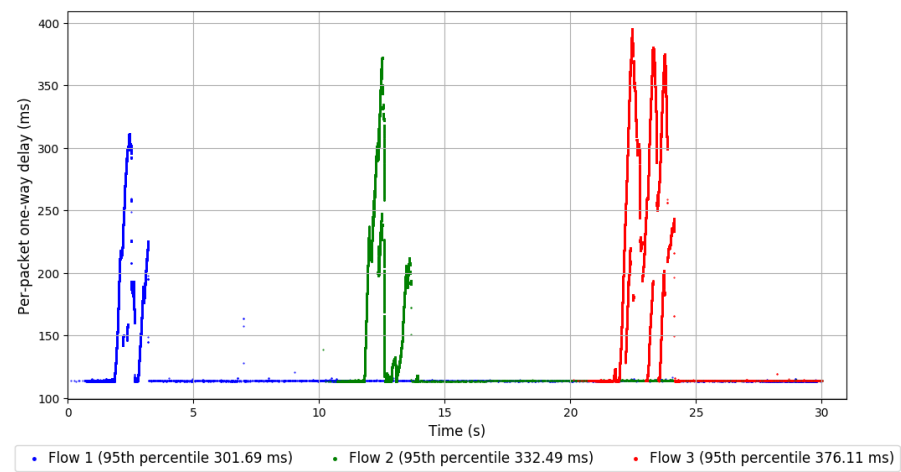
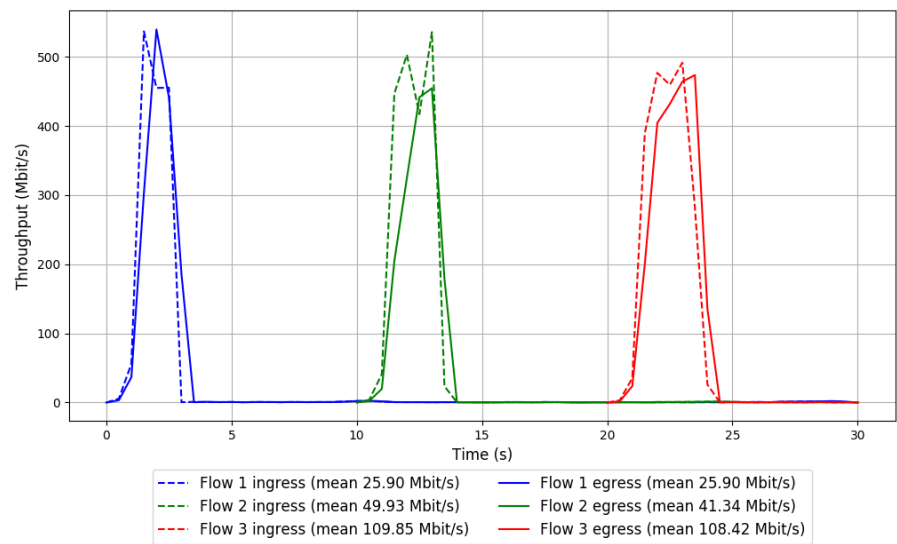
-- Flow 3:

Average throughput: 108.42 Mbit/s

95th percentile per-packet one-way delay: 376.113 ms

Loss rate: 1.31%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-31 11:27:19

End at: 2018-01-31 11:27:49

Below is generated by plot.py at 2018-01-31 15:35:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.47 Mbit/s

95th percentile per-packet one-way delay: 349.097 ms

Loss rate: 2.91%

-- Flow 1:

Average throughput: 24.19 Mbit/s

95th percentile per-packet one-way delay: 285.026 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 41.11 Mbit/s

95th percentile per-packet one-way delay: 362.952 ms

Loss rate: 4.43%

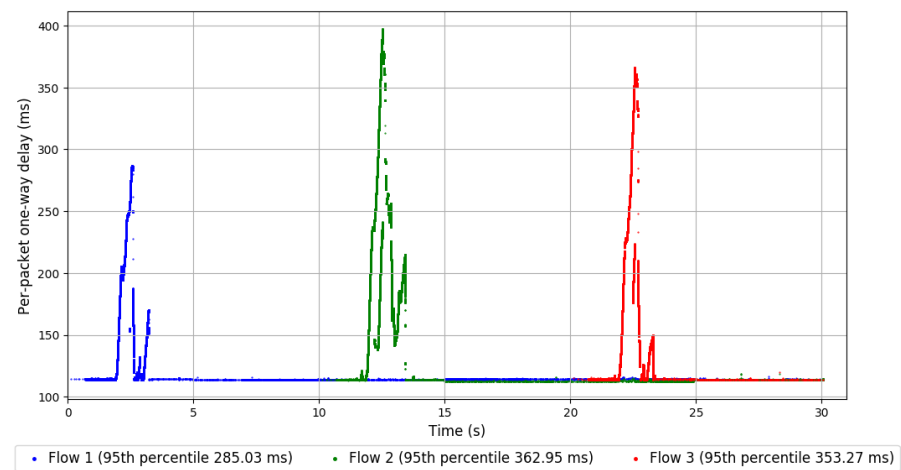
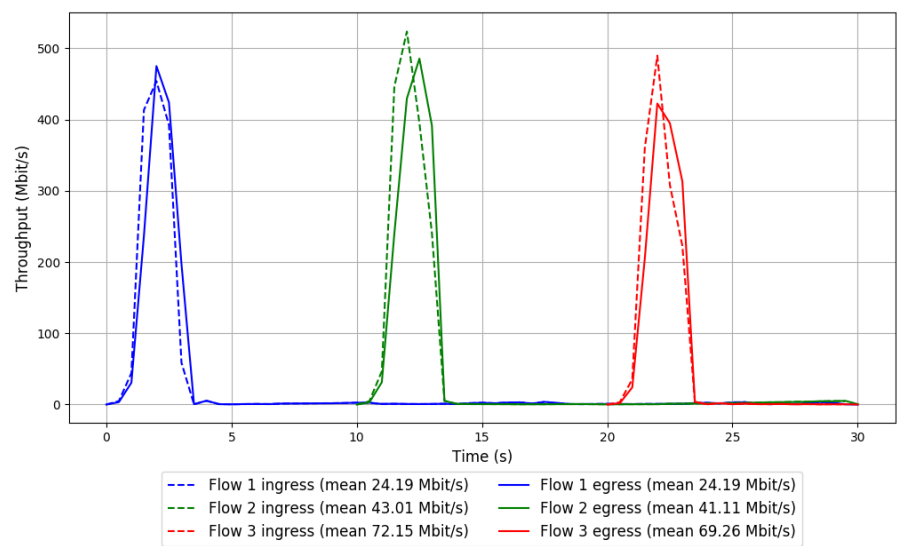
-- Flow 3:

Average throughput: 69.26 Mbit/s

95th percentile per-packet one-way delay: 353.268 ms

Loss rate: 4.02%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-31 11:44:48

End at: 2018-01-31 11:45:18

Below is generated by plot.py at 2018-01-31 15:35:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.05 Mbit/s

95th percentile per-packet one-way delay: 340.835 ms

Loss rate: 4.33%

-- Flow 1:

Average throughput: 26.78 Mbit/s

95th percentile per-packet one-way delay: 361.030 ms

Loss rate: 5.88%

-- Flow 2:

Average throughput: 35.58 Mbit/s

95th percentile per-packet one-way delay: 343.678 ms

Loss rate: 3.75%

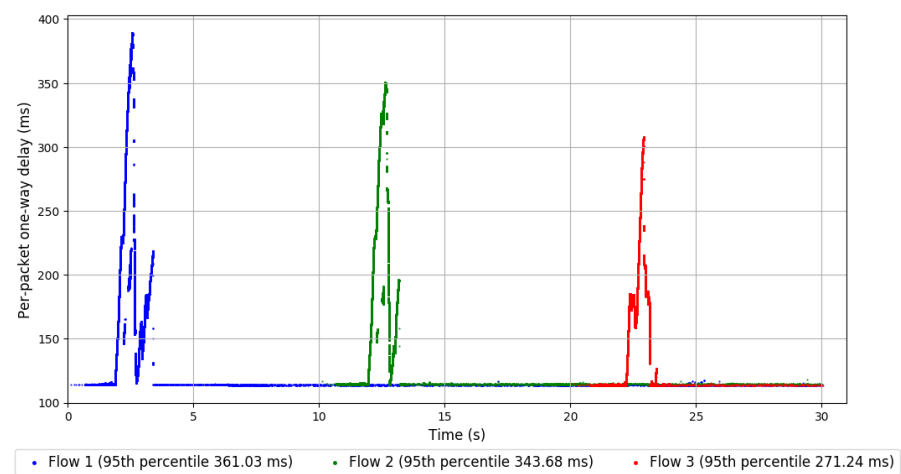
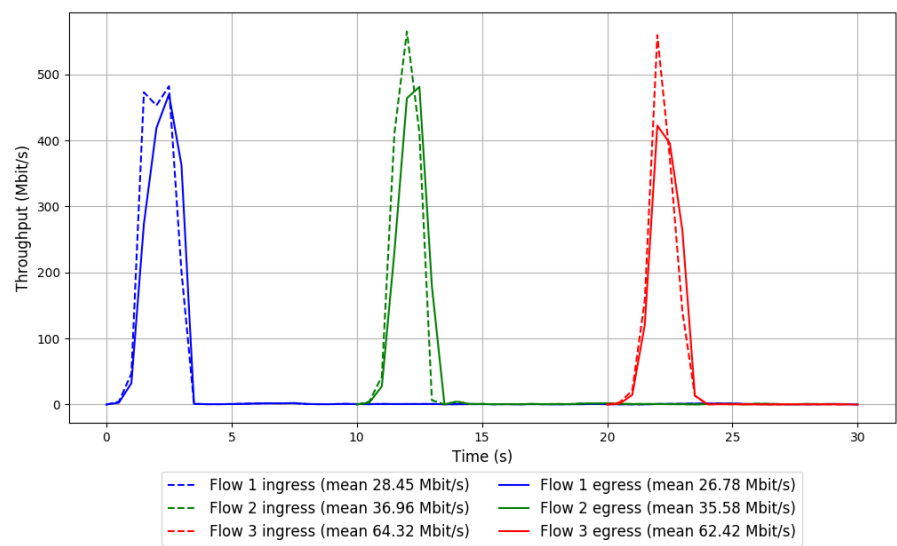
-- Flow 3:

Average throughput: 62.42 Mbit/s

95th percentile per-packet one-way delay: 271.237 ms

Loss rate: 2.95%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-31 12:02:25

End at: 2018-01-31 12:02:55

Below is generated by plot.py at 2018-01-31 15:36:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.63 Mbit/s

95th percentile per-packet one-way delay: 281.727 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 23.95 Mbit/s

95th percentile per-packet one-way delay: 264.439 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.09 Mbit/s

95th percentile per-packet one-way delay: 315.417 ms

Loss rate: 2.63%

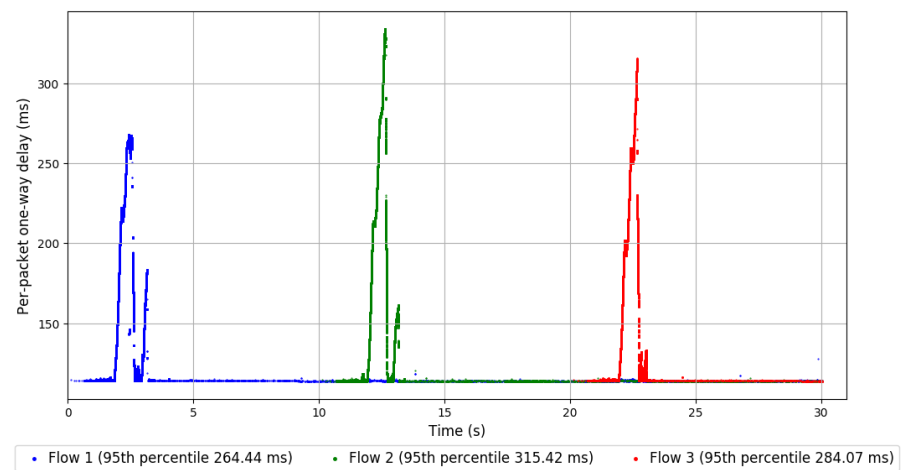
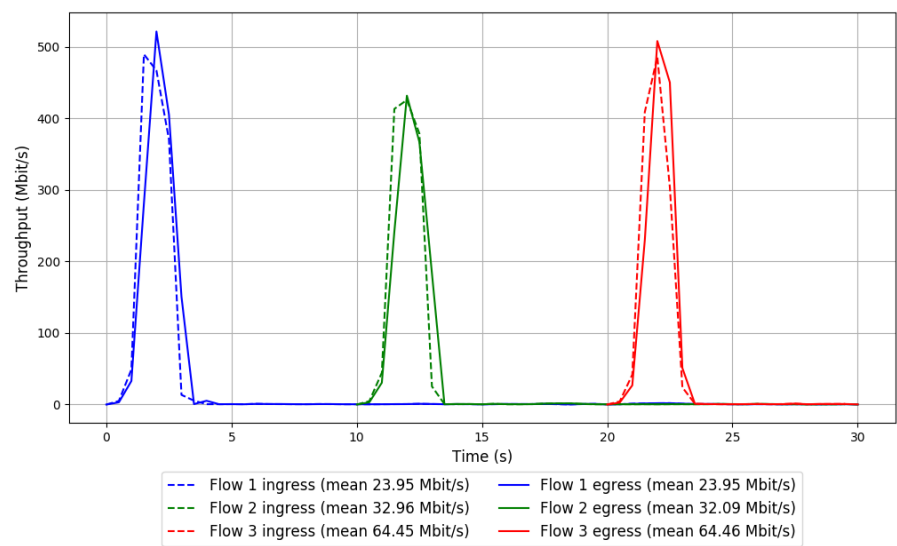
-- Flow 3:

Average throughput: 64.46 Mbit/s

95th percentile per-packet one-way delay: 284.074 ms

Loss rate: 0.00%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-31 12:19:44

End at: 2018-01-31 12:20:14

Below is generated by plot.py at 2018-01-31 15:36:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.24 Mbit/s

95th percentile per-packet one-way delay: 296.377 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 24.38 Mbit/s

95th percentile per-packet one-way delay: 334.256 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 34.45 Mbit/s

95th percentile per-packet one-way delay: 293.296 ms

Loss rate: 1.11%

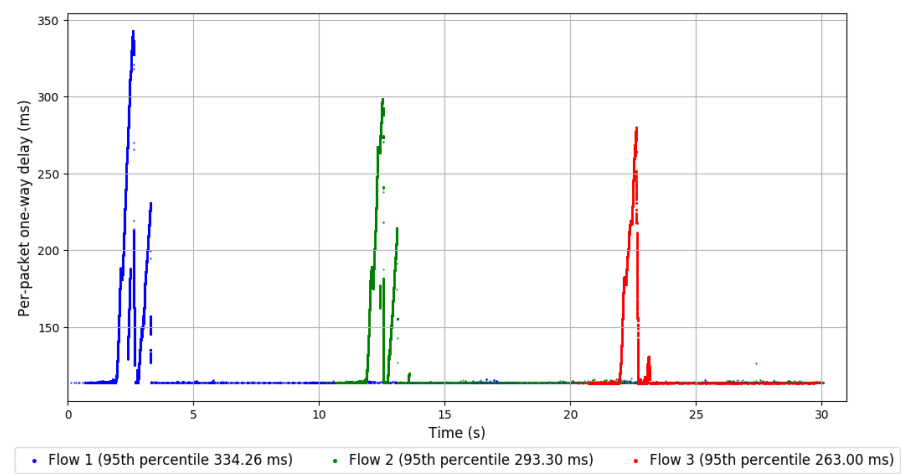
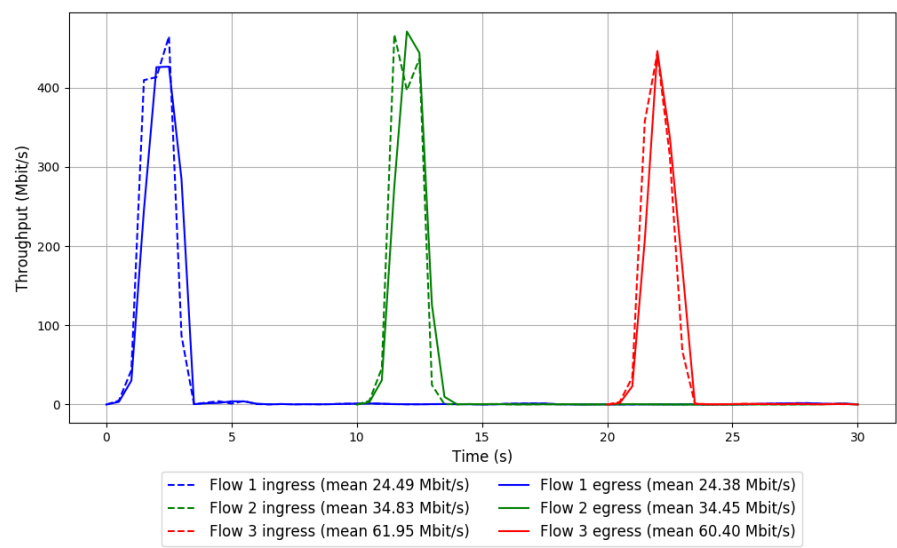
-- Flow 3:

Average throughput: 60.40 Mbit/s

95th percentile per-packet one-way delay: 262.996 ms

Loss rate: 2.51%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-31 12:37:23

End at: 2018-01-31 12:37:53

Below is generated by plot.py at 2018-01-31 15:36:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.23 Mbit/s

95th percentile per-packet one-way delay: 334.923 ms

Loss rate: 7.10%

-- Flow 1:

Average throughput: 27.01 Mbit/s

95th percentile per-packet one-way delay: 354.960 ms

Loss rate: 3.44%

-- Flow 2:

Average throughput: 34.14 Mbit/s

95th percentile per-packet one-way delay: 349.228 ms

Loss rate: 9.71%

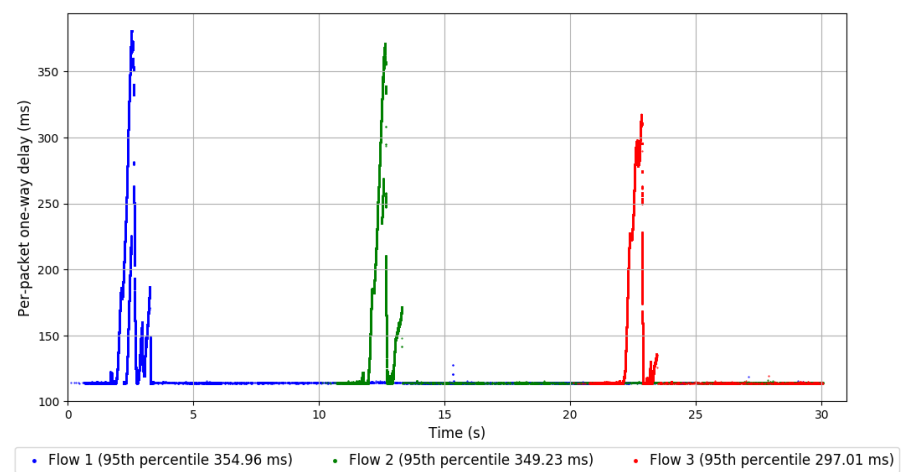
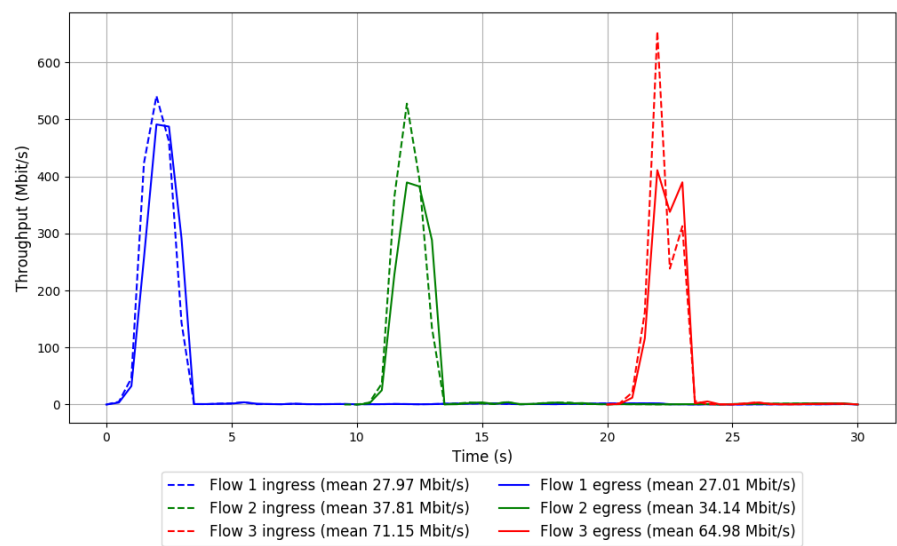
-- Flow 3:

Average throughput: 64.98 Mbit/s

95th percentile per-packet one-way delay: 297.012 ms

Loss rate: 8.67%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-31 12:54:46

End at: 2018-01-31 12:55:16

Below is generated by plot.py at 2018-01-31 15:37:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.04 Mbit/s

95th percentile per-packet one-way delay: 301.667 ms

Loss rate: 3.25%

-- Flow 1:

Average throughput: 22.82 Mbit/s

95th percentile per-packet one-way delay: 307.347 ms

Loss rate: 6.29%

-- Flow 2:

Average throughput: 34.99 Mbit/s

95th percentile per-packet one-way delay: 301.763 ms

Loss rate: 0.00%

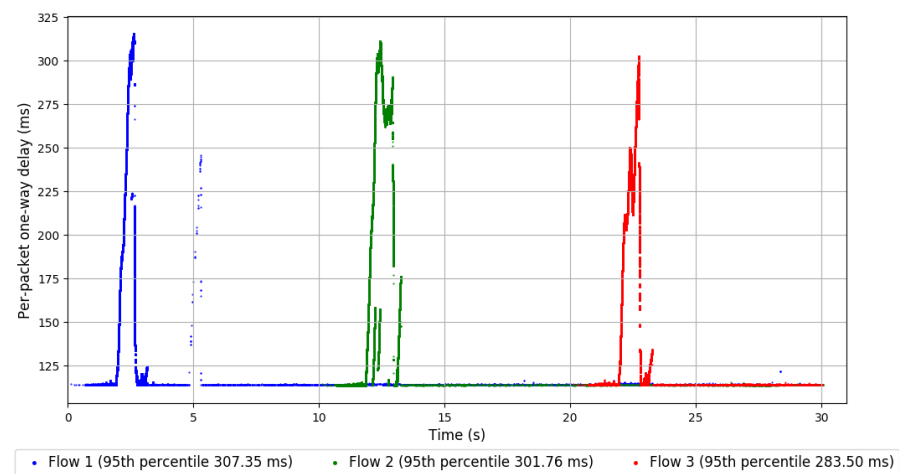
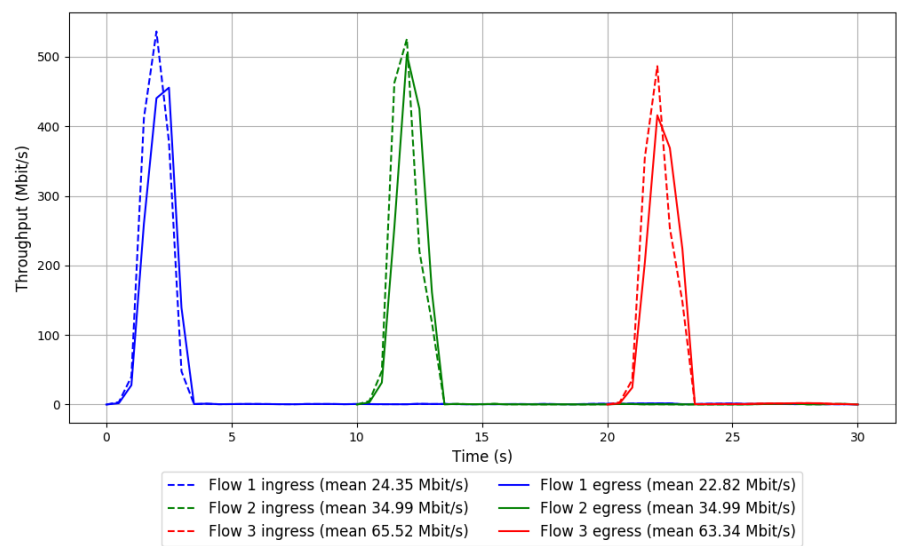
-- Flow 3:

Average throughput: 63.34 Mbit/s

95th percentile per-packet one-way delay: 283.500 ms

Loss rate: 3.32%

Run 10: Report of FillP — Data Link

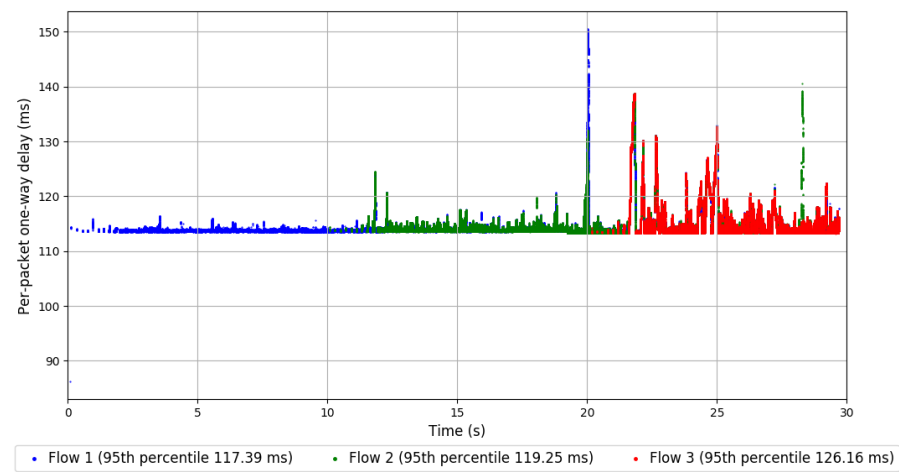
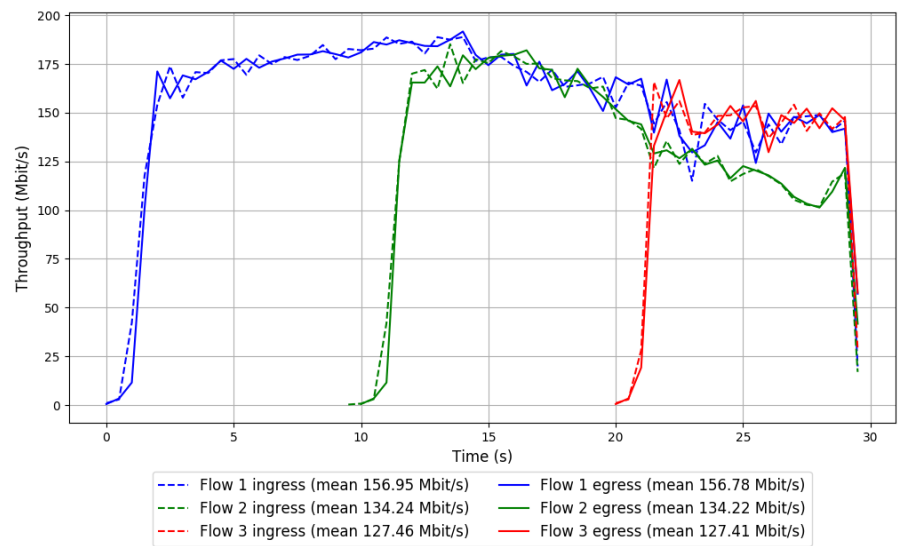


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-01-31 10:22:14
End at: 2018-01-31 10:22:44

# Below is generated by plot.py at 2018-01-31 15:40:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 286.61 Mbit/s
95th percentile per-packet one-way delay: 119.602 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 156.78 Mbit/s
95th percentile per-packet one-way delay: 117.394 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 134.22 Mbit/s
95th percentile per-packet one-way delay: 119.250 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 127.41 Mbit/s
95th percentile per-packet one-way delay: 126.159 ms
Loss rate: 0.03%
```

Run 1: Report of Indigo-1-32 — Data Link

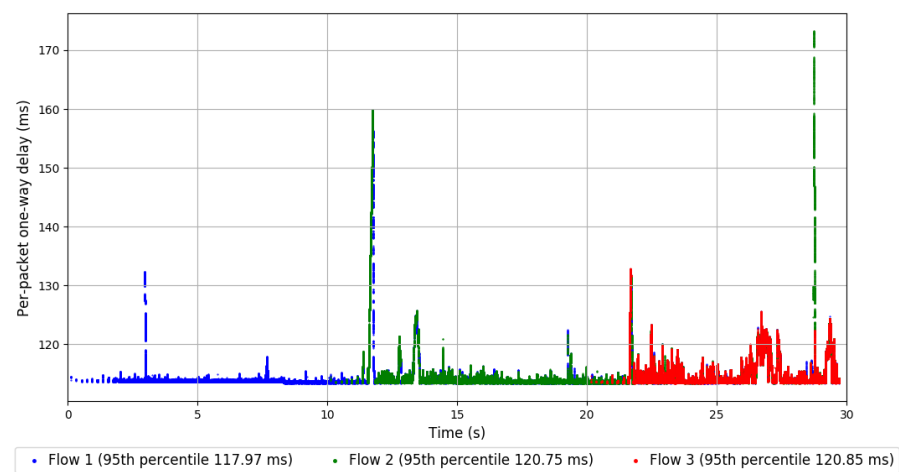
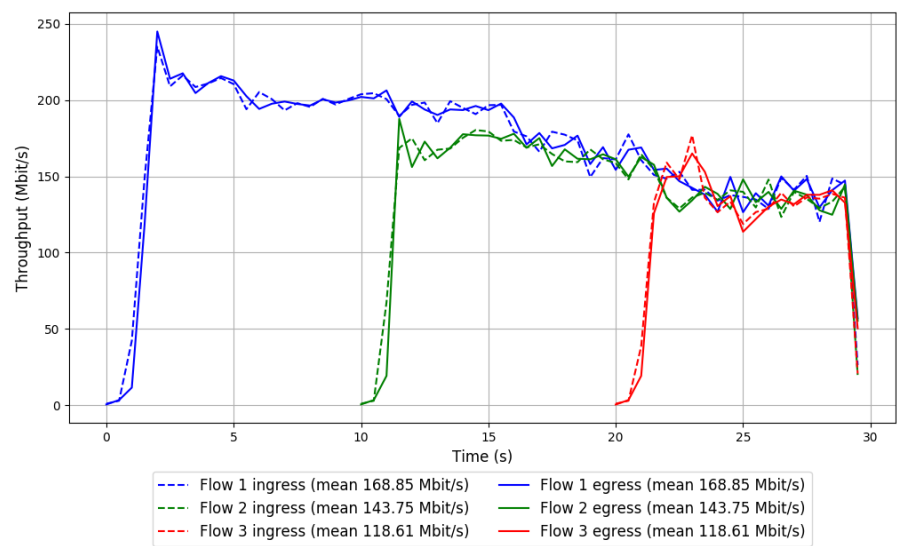


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-01-31 10:39:35
End at: 2018-01-31 10:40:05

# Below is generated by plot.py at 2018-01-31 15:40:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 302.27 Mbit/s
95th percentile per-packet one-way delay: 119.639 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 168.85 Mbit/s
95th percentile per-packet one-way delay: 117.975 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 143.75 Mbit/s
95th percentile per-packet one-way delay: 120.748 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 118.61 Mbit/s
95th percentile per-packet one-way delay: 120.852 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-1-32 — Data Link

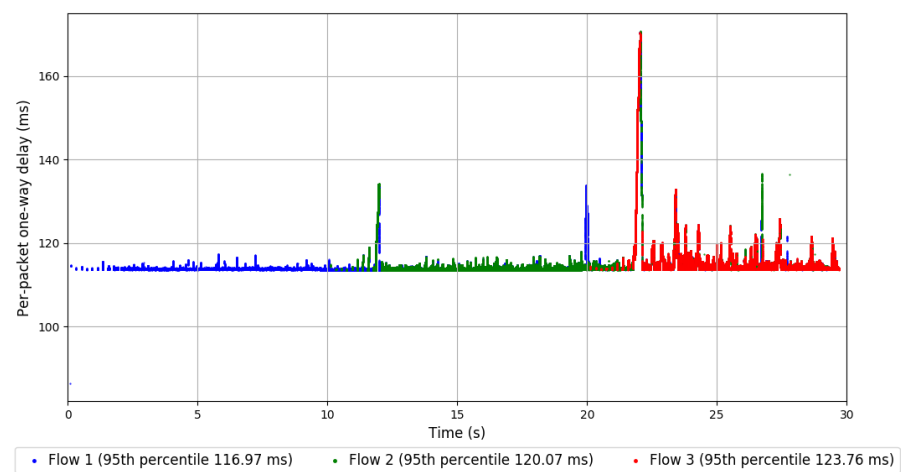
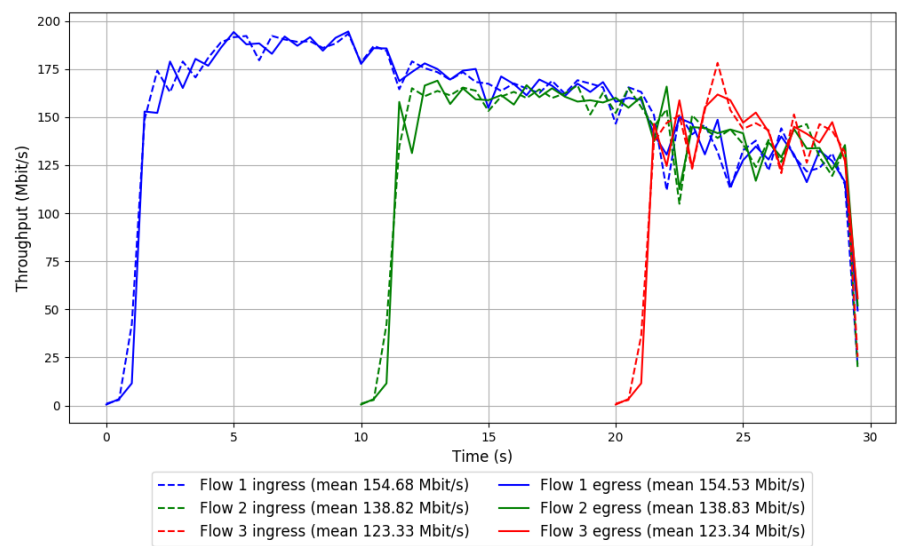


```
Run 3: Statistics of Indigo-1-32

Start at: 2018-01-31 10:56:54
End at: 2018-01-31 10:57:24

# Below is generated by plot.py at 2018-01-31 15:41:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 286.13 Mbit/s
95th percentile per-packet one-way delay: 119.568 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 154.53 Mbit/s
95th percentile per-packet one-way delay: 116.971 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 138.83 Mbit/s
95th percentile per-packet one-way delay: 120.068 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 123.34 Mbit/s
95th percentile per-packet one-way delay: 123.761 ms
Loss rate: 0.00%
```


Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-01-31 11:14:13

End at: 2018-01-31 11:14:43

Below is generated by plot.py at 2018-01-31 15:41:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 290.37 Mbit/s

95th percentile per-packet one-way delay: 131.070 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 159.33 Mbit/s

95th percentile per-packet one-way delay: 126.680 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 142.01 Mbit/s

95th percentile per-packet one-way delay: 131.516 ms

Loss rate: 0.00%

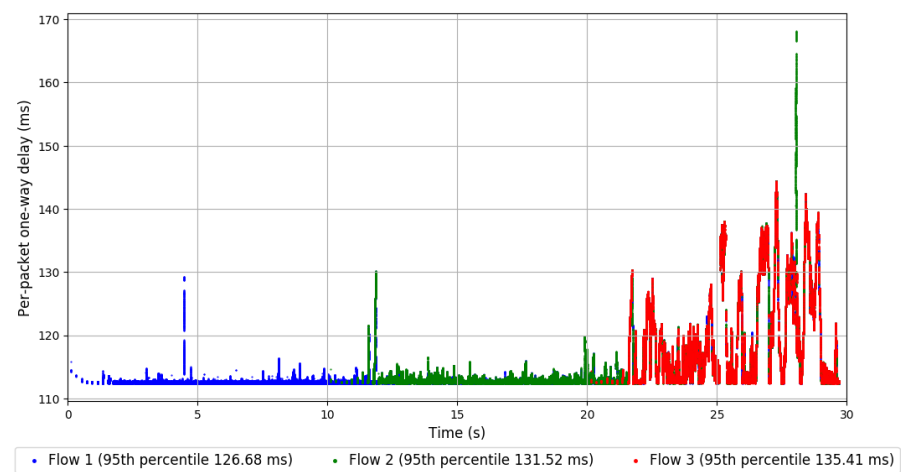
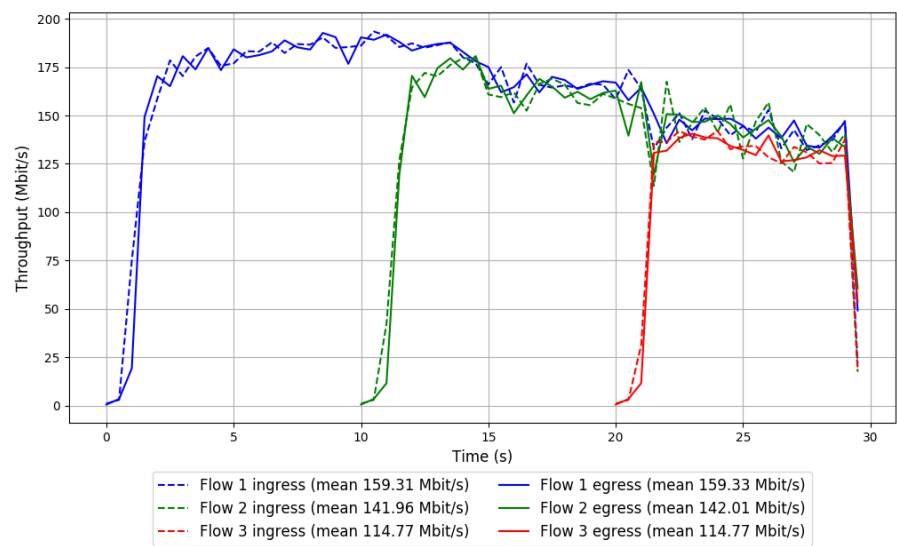
-- Flow 3:

Average throughput: 114.77 Mbit/s

95th percentile per-packet one-way delay: 135.415 ms

Loss rate: 0.00%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-01-31 11:31:43

End at: 2018-01-31 11:32:13

Below is generated by plot.py at 2018-01-31 15:41:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 306.98 Mbit/s

95th percentile per-packet one-way delay: 135.089 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 165.83 Mbit/s

95th percentile per-packet one-way delay: 129.403 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 155.27 Mbit/s

95th percentile per-packet one-way delay: 135.783 ms

Loss rate: 0.00%

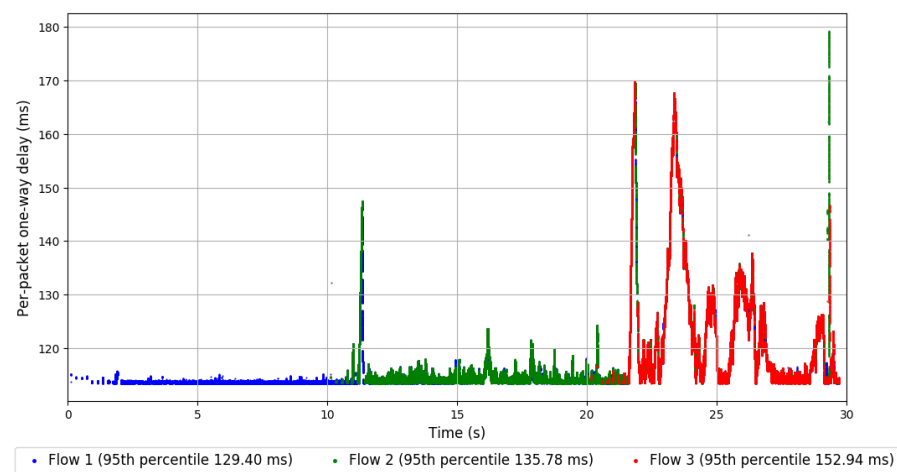
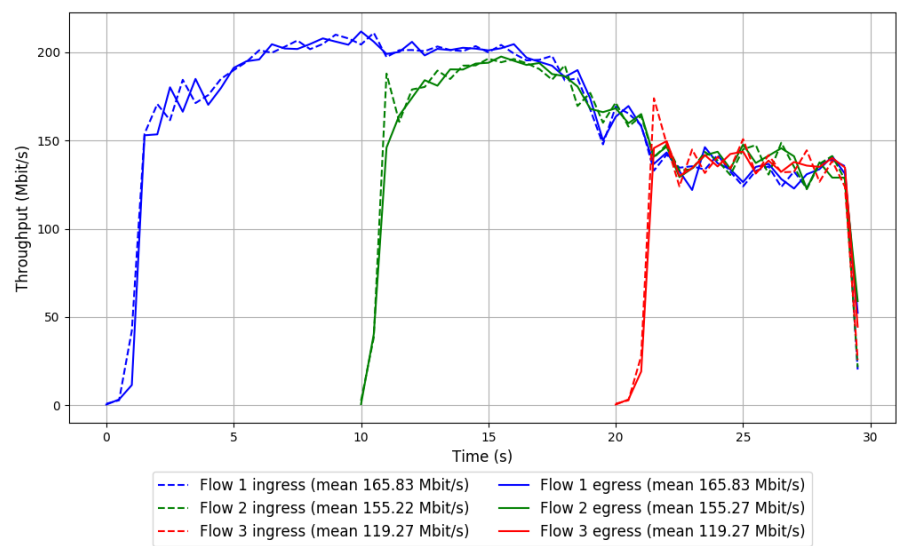
-- Flow 3:

Average throughput: 119.27 Mbit/s

95th percentile per-packet one-way delay: 152.935 ms

Loss rate: 0.00%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-01-31 11:49:09

End at: 2018-01-31 11:49:39

Below is generated by plot.py at 2018-01-31 15:41:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 292.95 Mbit/s

95th percentile per-packet one-way delay: 146.612 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 154.90 Mbit/s

95th percentile per-packet one-way delay: 141.478 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 151.04 Mbit/s

95th percentile per-packet one-way delay: 146.698 ms

Loss rate: 0.10%

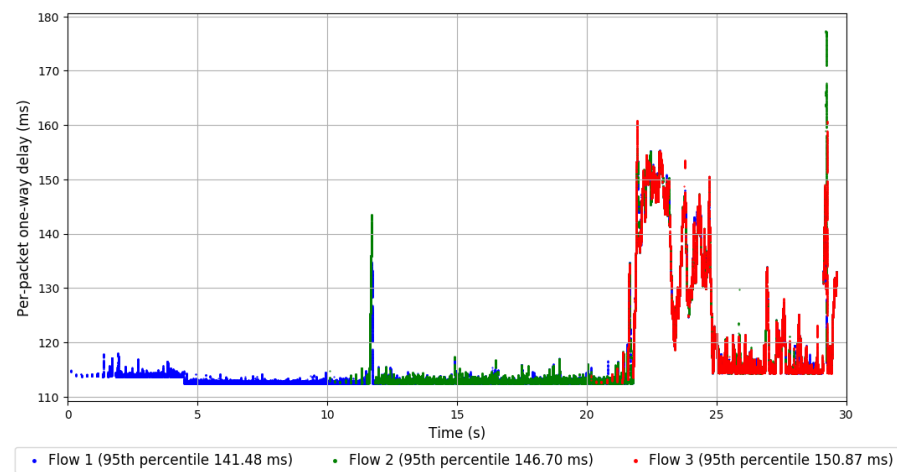
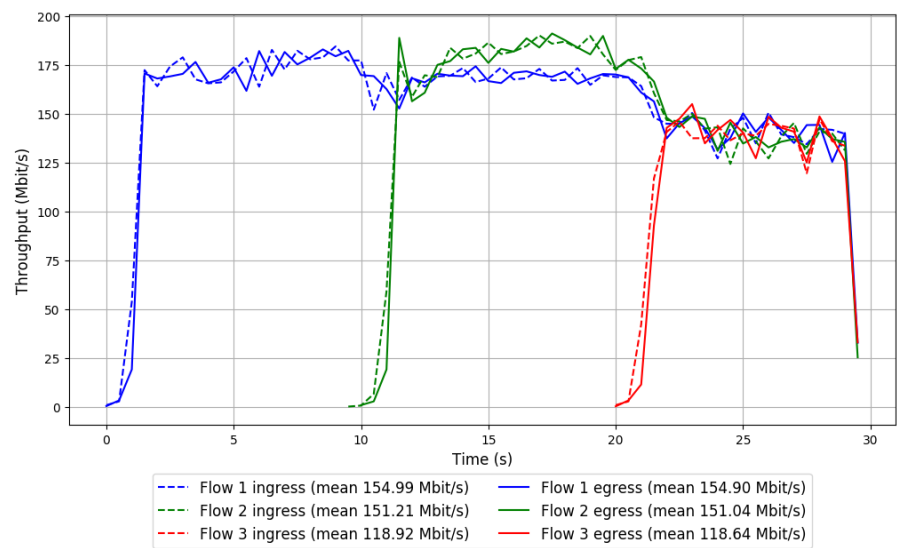
-- Flow 3:

Average throughput: 118.64 Mbit/s

95th percentile per-packet one-way delay: 150.866 ms

Loss rate: 0.20%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-01-31 12:06:43

End at: 2018-01-31 12:07:13

Below is generated by plot.py at 2018-01-31 15:42:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 287.98 Mbit/s

95th percentile per-packet one-way delay: 116.496 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 173.95 Mbit/s

95th percentile per-packet one-way delay: 115.270 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 127.11 Mbit/s

95th percentile per-packet one-way delay: 116.991 ms

Loss rate: 0.00%

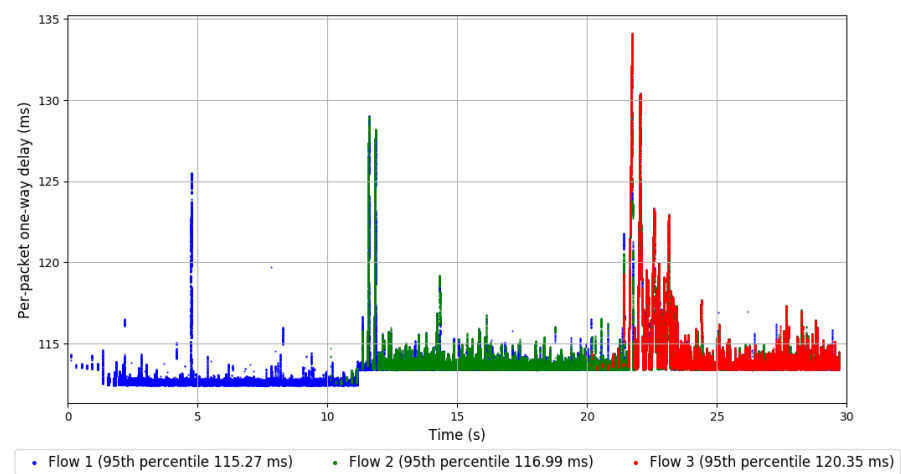
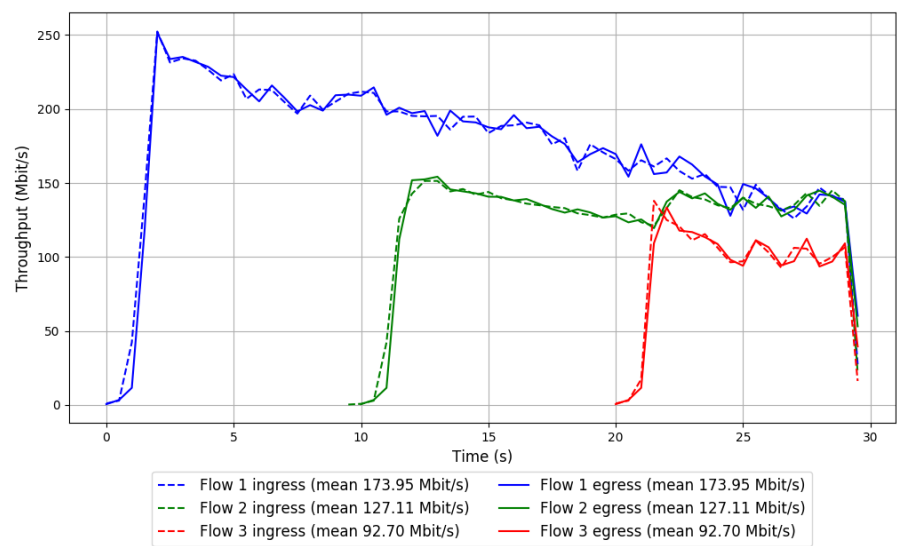
-- Flow 3:

Average throughput: 92.70 Mbit/s

95th percentile per-packet one-way delay: 120.347 ms

Loss rate: 0.00%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-01-31 12:24:09

End at: 2018-01-31 12:24:39

Below is generated by plot.py at 2018-01-31 15:42:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 294.65 Mbit/s

95th percentile per-packet one-way delay: 129.670 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 159.64 Mbit/s

95th percentile per-packet one-way delay: 126.419 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 145.12 Mbit/s

95th percentile per-packet one-way delay: 130.396 ms

Loss rate: 0.02%

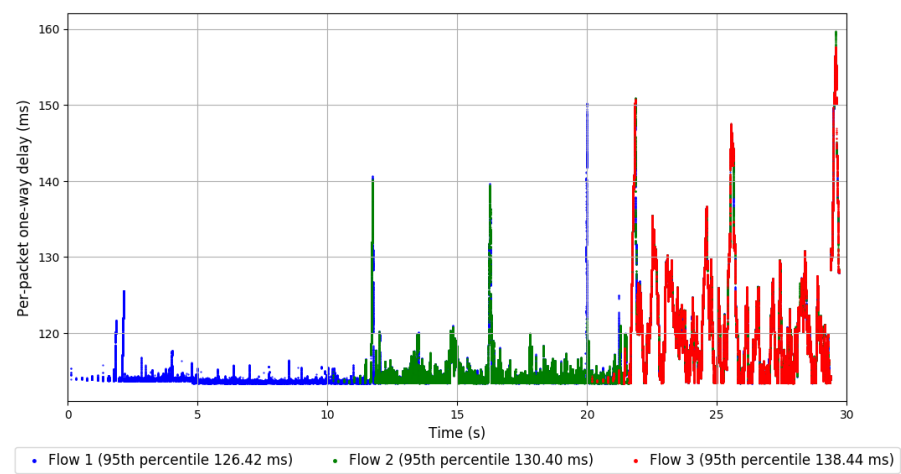
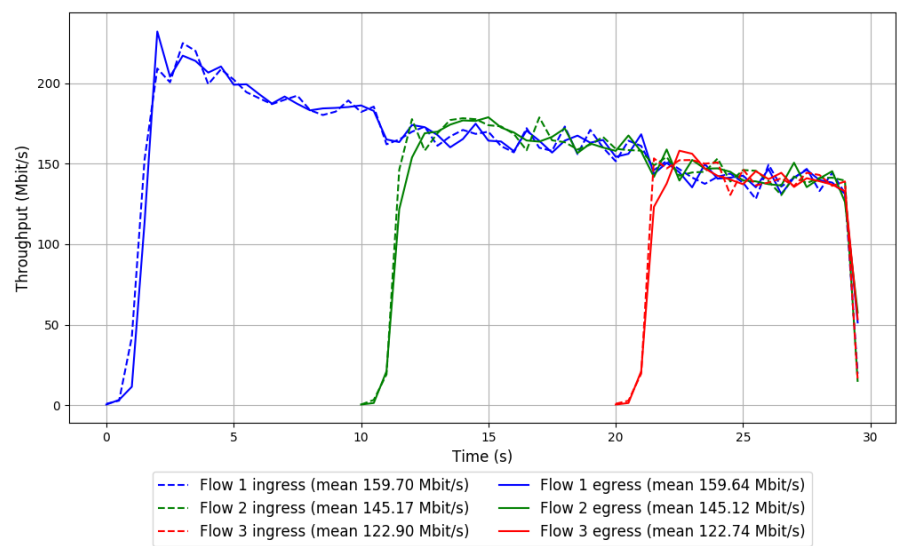
-- Flow 3:

Average throughput: 122.74 Mbit/s

95th percentile per-packet one-way delay: 138.443 ms

Loss rate: 0.10%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-01-31 12:41:46

End at: 2018-01-31 12:42:16

Below is generated by plot.py at 2018-01-31 15:45:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 281.75 Mbit/s

95th percentile per-packet one-way delay: 131.460 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 154.32 Mbit/s

95th percentile per-packet one-way delay: 128.431 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 138.37 Mbit/s

95th percentile per-packet one-way delay: 132.419 ms

Loss rate: 0.00%

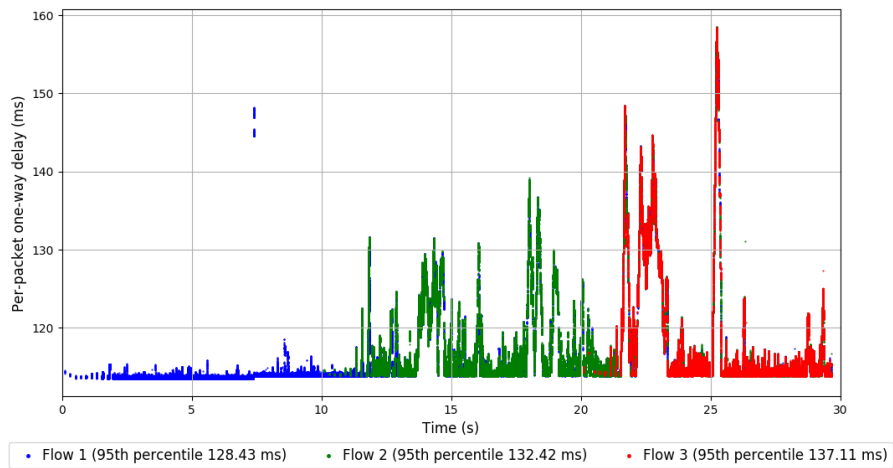
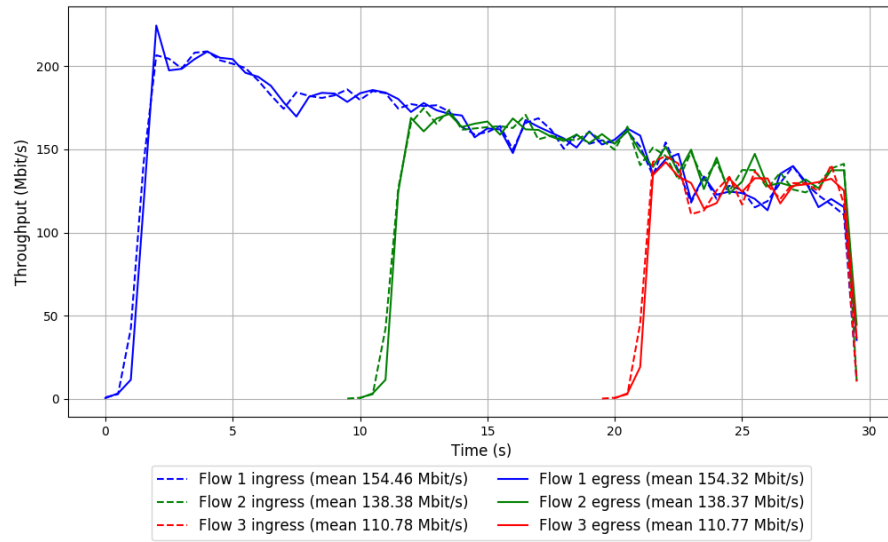
-- Flow 3:

Average throughput: 110.77 Mbit/s

95th percentile per-packet one-way delay: 137.114 ms

Loss rate: 0.00%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-01-31 12:59:04

End at: 2018-01-31 12:59:34

Below is generated by plot.py at 2018-01-31 15:45:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 275.66 Mbit/s

95th percentile per-packet one-way delay: 118.244 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 148.94 Mbit/s

95th percentile per-packet one-way delay: 117.296 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 136.04 Mbit/s

95th percentile per-packet one-way delay: 119.245 ms

Loss rate: 0.01%

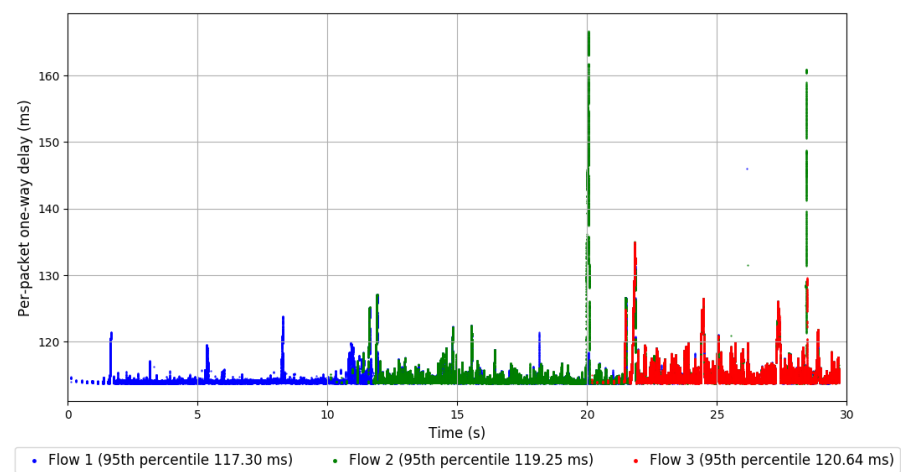
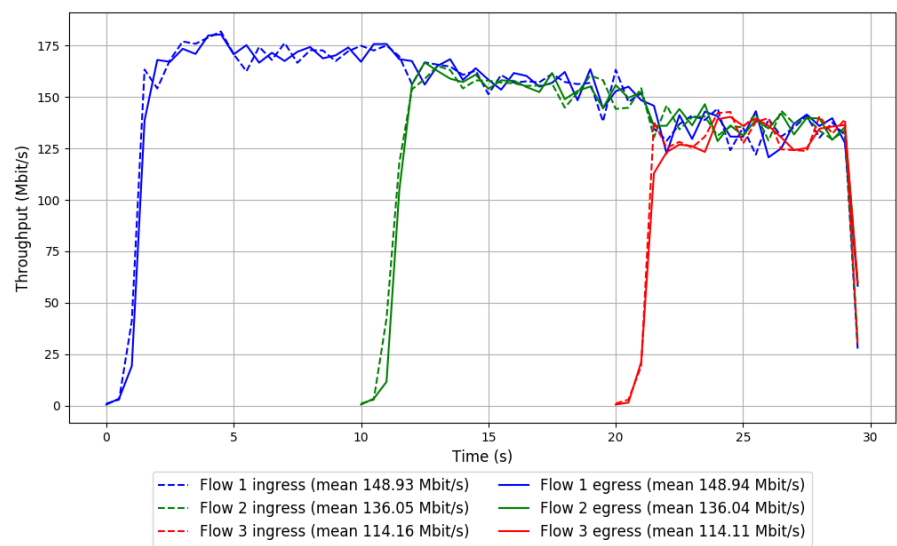
-- Flow 3:

Average throughput: 114.11 Mbit/s

95th percentile per-packet one-way delay: 120.635 ms

Loss rate: 0.05%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-01-31 10:26:30

End at: 2018-01-31 10:27:00

Below is generated by plot.py at 2018-01-31 15:49:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 433.01 Mbit/s

95th percentile per-packet one-way delay: 113.962 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 275.54 Mbit/s

95th percentile per-packet one-way delay: 113.926 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 194.73 Mbit/s

95th percentile per-packet one-way delay: 113.974 ms

Loss rate: 0.00%

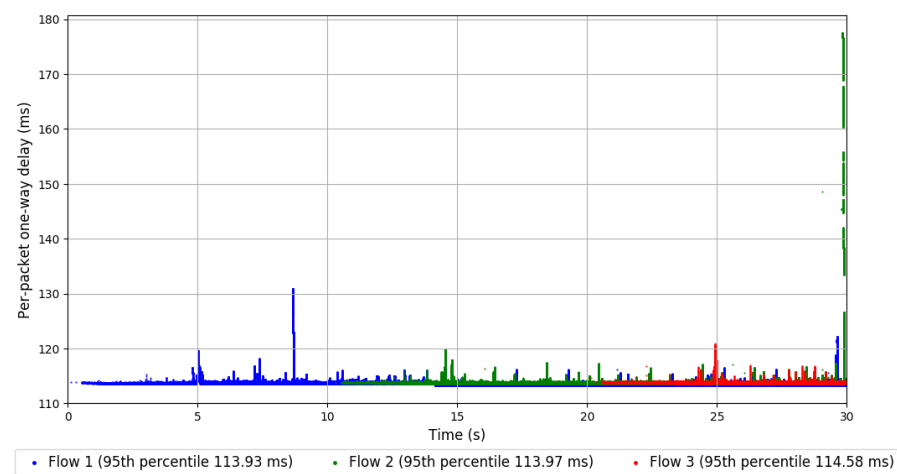
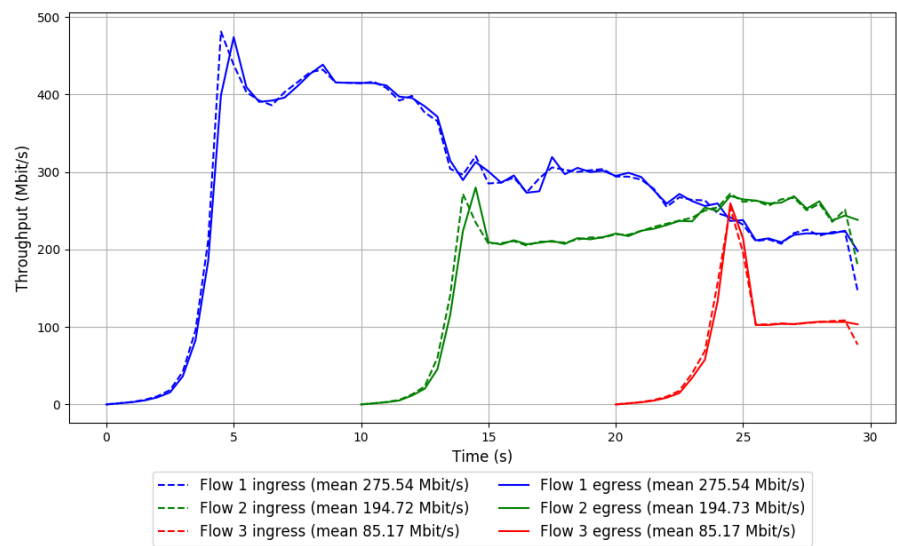
-- Flow 3:

Average throughput: 85.17 Mbit/s

95th percentile per-packet one-way delay: 114.575 ms

Loss rate: 0.00%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-01-31 10:43:48

End at: 2018-01-31 10:44:18

Below is generated by plot.py at 2018-01-31 15:49:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 359.45 Mbit/s

95th percentile per-packet one-way delay: 113.980 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 216.22 Mbit/s

95th percentile per-packet one-way delay: 114.094 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 206.65 Mbit/s

95th percentile per-packet one-way delay: 86.950 ms

Loss rate: 0.00%

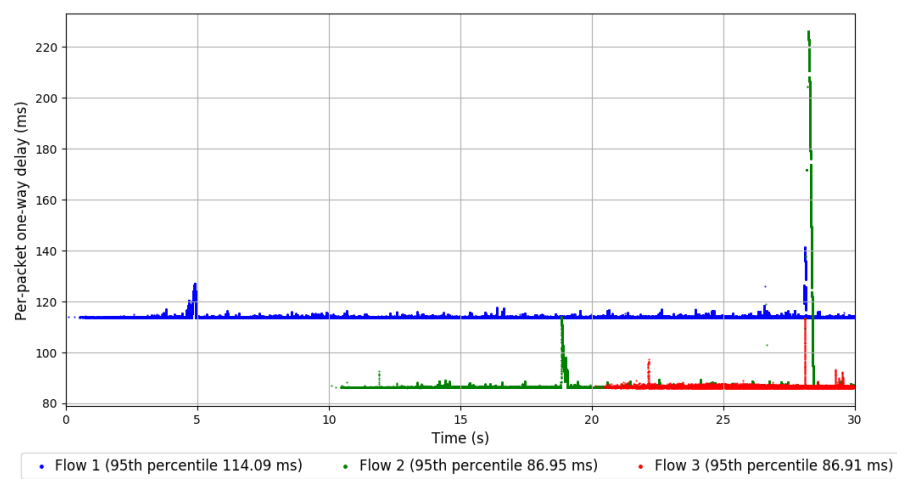
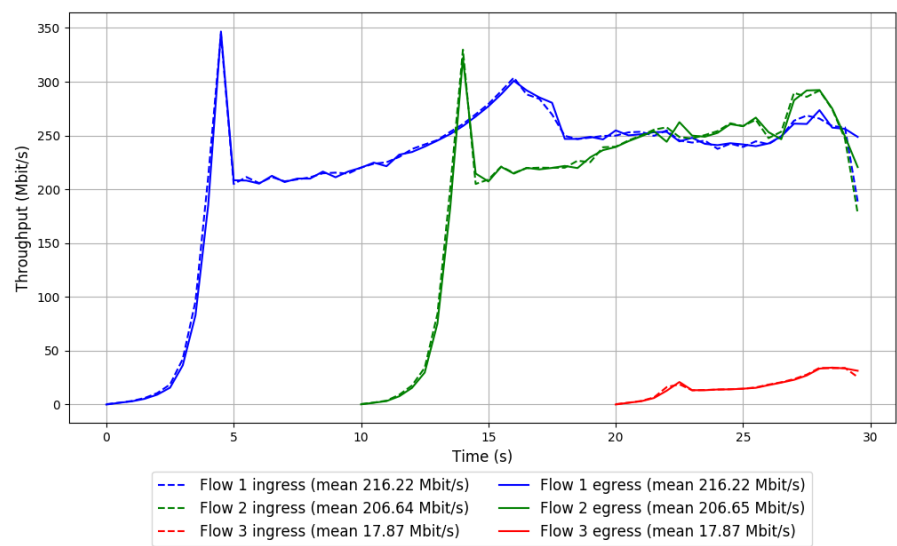
-- Flow 3:

Average throughput: 17.87 Mbit/s

95th percentile per-packet one-way delay: 86.914 ms

Loss rate: 0.00%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-01-31 11:01:03

End at: 2018-01-31 11:01:33

Below is generated by plot.py at 2018-01-31 15:49:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 351.06 Mbit/s

95th percentile per-packet one-way delay: 113.998 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 175.67 Mbit/s

95th percentile per-packet one-way delay: 113.917 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 187.72 Mbit/s

95th percentile per-packet one-way delay: 114.133 ms

Loss rate: 0.00%

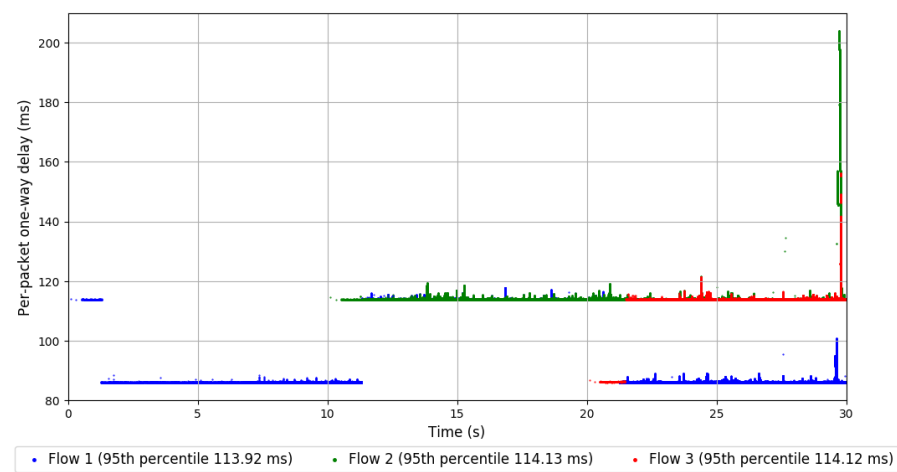
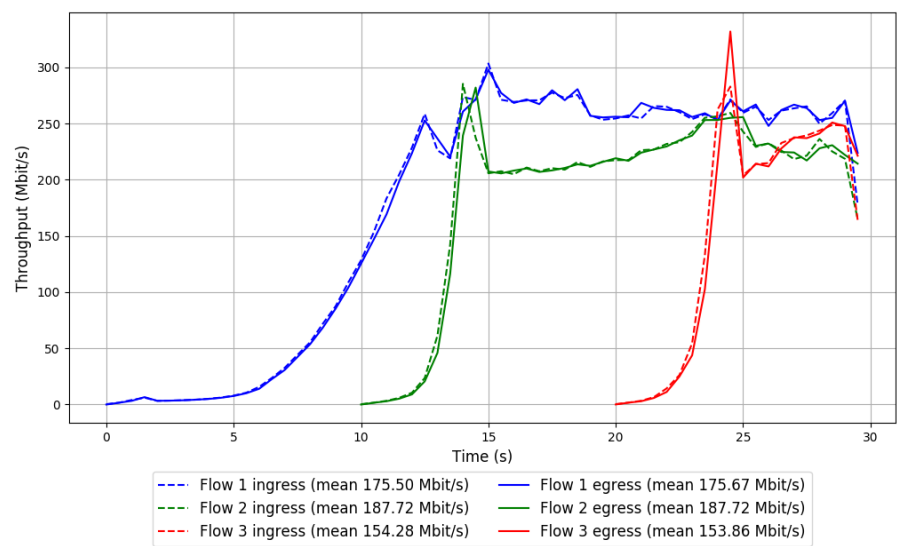
-- Flow 3:

Average throughput: 153.86 Mbit/s

95th percentile per-packet one-way delay: 114.123 ms

Loss rate: 0.00%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-01-31 11:18:28

End at: 2018-01-31 11:18:58

Below is generated by plot.py at 2018-01-31 15:49:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 394.12 Mbit/s

95th percentile per-packet one-way delay: 115.932 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 239.94 Mbit/s

95th percentile per-packet one-way delay: 116.092 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 162.36 Mbit/s

95th percentile per-packet one-way delay: 115.216 ms

Loss rate: 0.01%

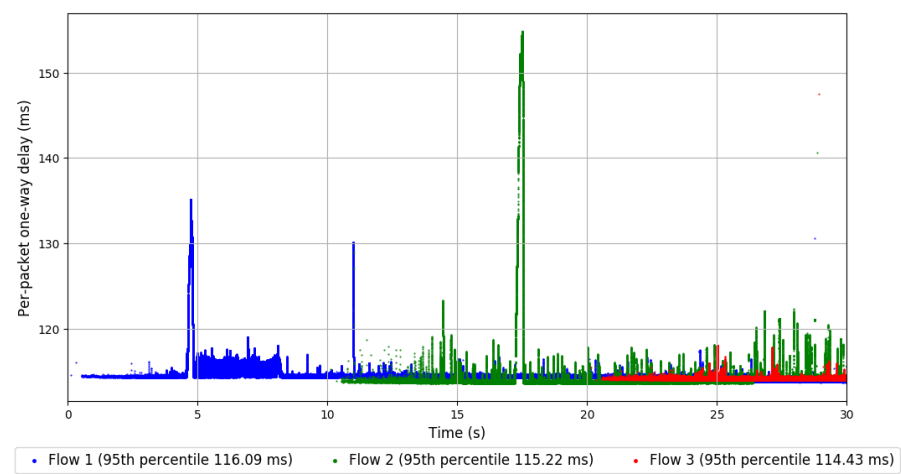
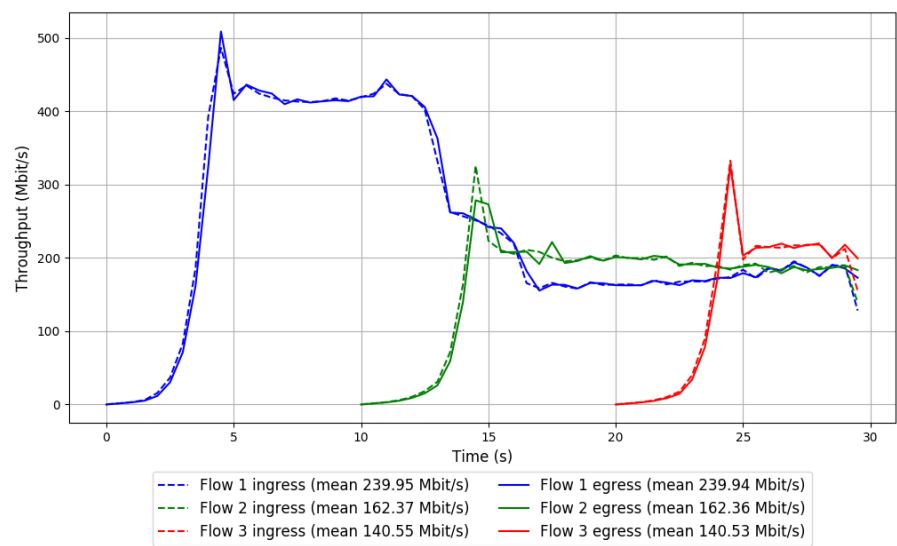
-- Flow 3:

Average throughput: 140.53 Mbit/s

95th percentile per-packet one-way delay: 114.431 ms

Loss rate: 0.03%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-01-31 11:35:55

End at: 2018-01-31 11:36:25

Below is generated by plot.py at 2018-01-31 15:50:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 391.62 Mbit/s

95th percentile per-packet one-way delay: 114.599 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 223.67 Mbit/s

95th percentile per-packet one-way delay: 114.072 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 183.22 Mbit/s

95th percentile per-packet one-way delay: 114.710 ms

Loss rate: 0.01%

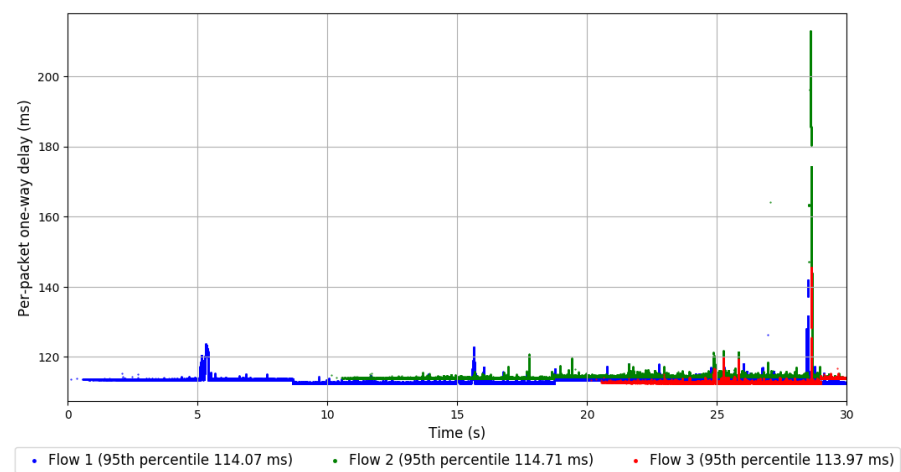
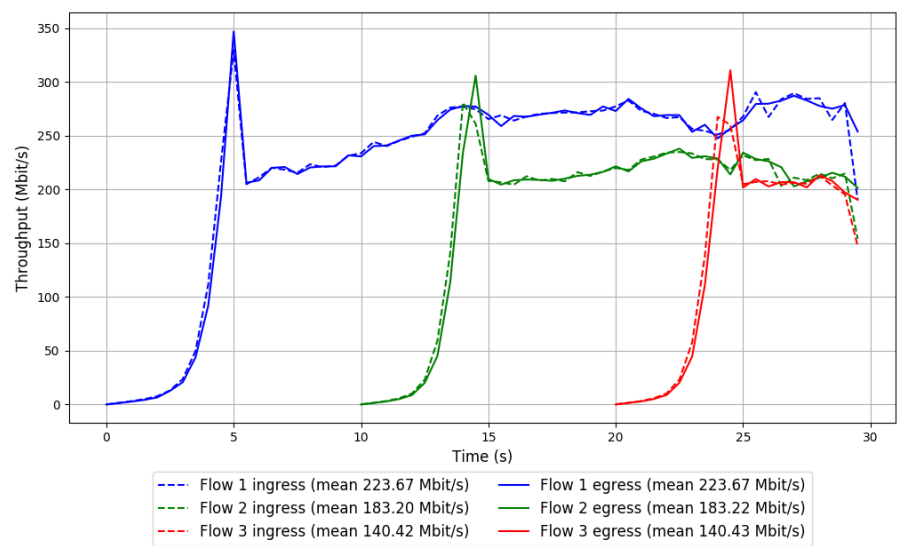
-- Flow 3:

Average throughput: 140.43 Mbit/s

95th percentile per-packet one-way delay: 113.974 ms

Loss rate: 0.01%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-01-31 11:53:24

End at: 2018-01-31 11:53:54

Below is generated by plot.py at 2018-01-31 15:51:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 396.30 Mbit/s

95th percentile per-packet one-way delay: 114.559 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 251.84 Mbit/s

95th percentile per-packet one-way delay: 114.065 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 175.22 Mbit/s

95th percentile per-packet one-way delay: 114.647 ms

Loss rate: 0.00%

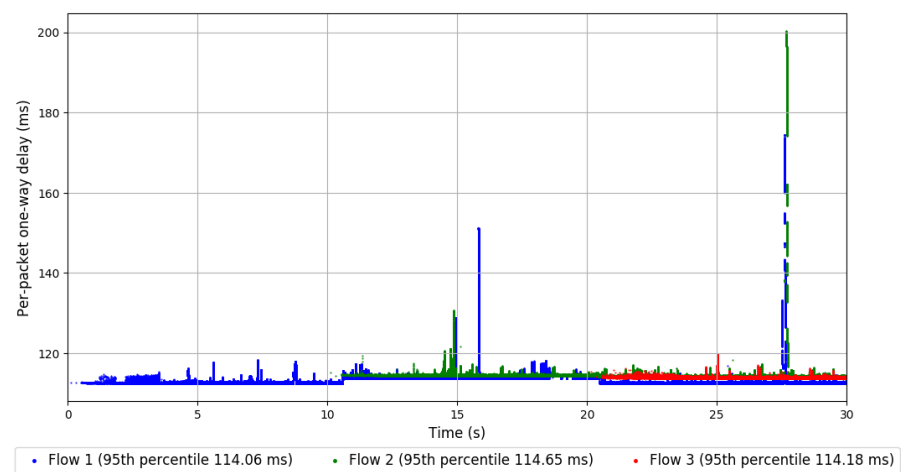
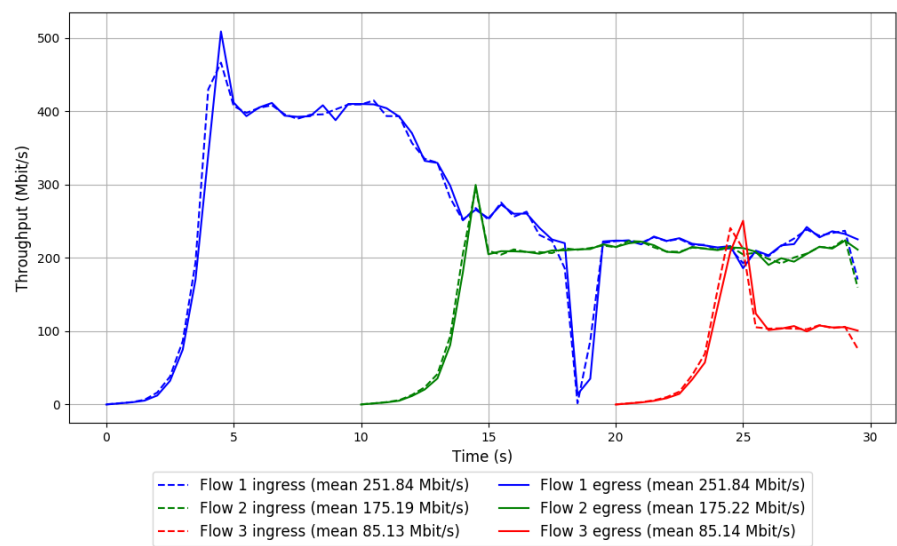
-- Flow 3:

Average throughput: 85.14 Mbit/s

95th percentile per-packet one-way delay: 114.180 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-01-31 12:10:57

End at: 2018-01-31 12:11:27

Below is generated by plot.py at 2018-01-31 15:51:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 290.29 Mbit/s

95th percentile per-packet one-way delay: 115.825 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 115.75 Mbit/s

95th percentile per-packet one-way delay: 117.603 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 187.89 Mbit/s

95th percentile per-packet one-way delay: 114.046 ms

Loss rate: 0.00%

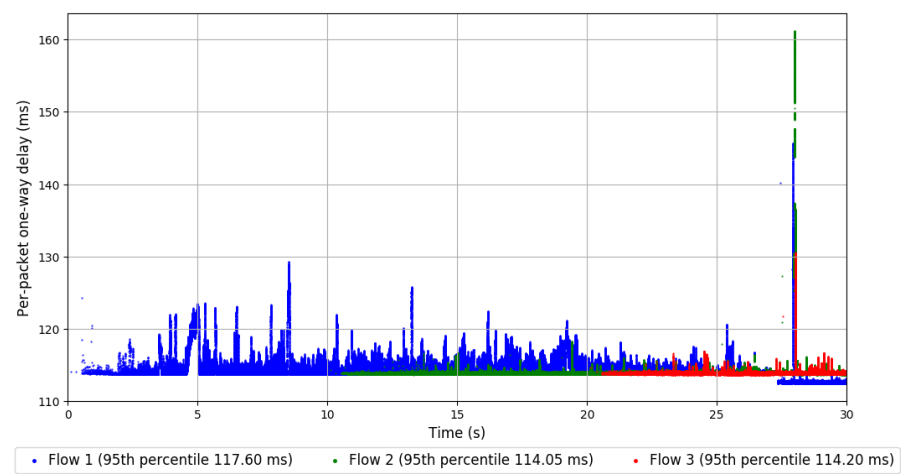
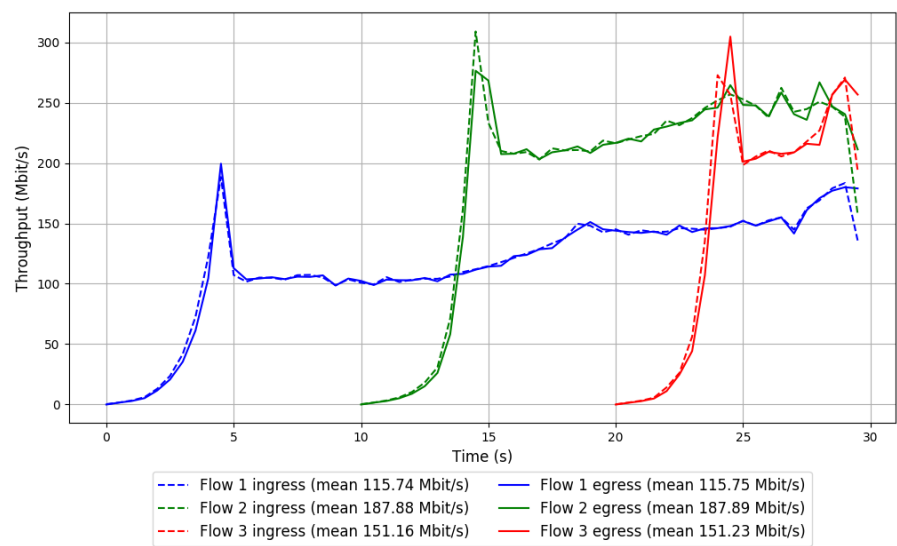
-- Flow 3:

Average throughput: 151.23 Mbit/s

95th percentile per-packet one-way delay: 114.197 ms

Loss rate: 0.00%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-01-31 12:28:29

End at: 2018-01-31 12:28:59

Below is generated by plot.py at 2018-01-31 15:52:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 323.99 Mbit/s

95th percentile per-packet one-way delay: 130.305 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 178.53 Mbit/s

95th percentile per-packet one-way delay: 114.023 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 143.55 Mbit/s

95th percentile per-packet one-way delay: 228.564 ms

Loss rate: 1.20%

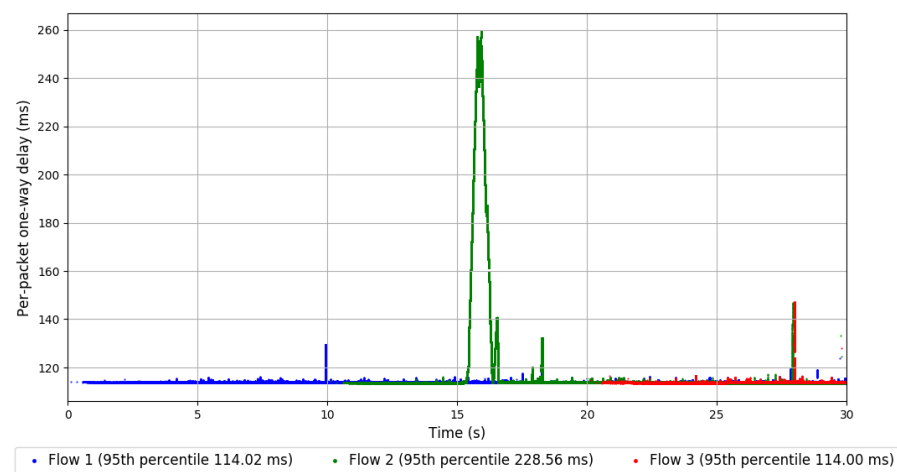
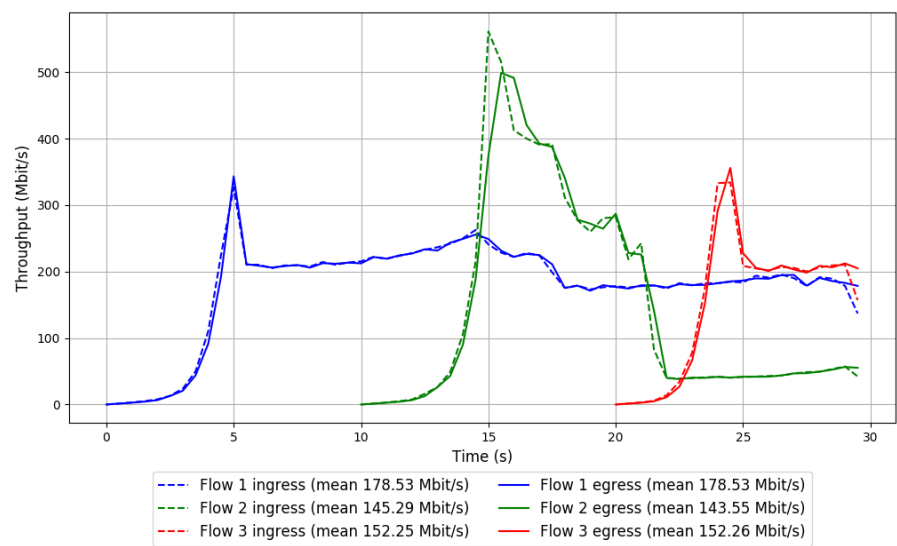
-- Flow 3:

Average throughput: 152.26 Mbit/s

95th percentile per-packet one-way delay: 113.998 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-01-31 12:45:56

End at: 2018-01-31 12:46:26

Below is generated by plot.py at 2018-01-31 15:54:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 281.95 Mbit/s

95th percentile per-packet one-way delay: 114.146 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 104.22 Mbit/s

95th percentile per-packet one-way delay: 114.080 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 199.14 Mbit/s

95th percentile per-packet one-way delay: 114.204 ms

Loss rate: 0.00%

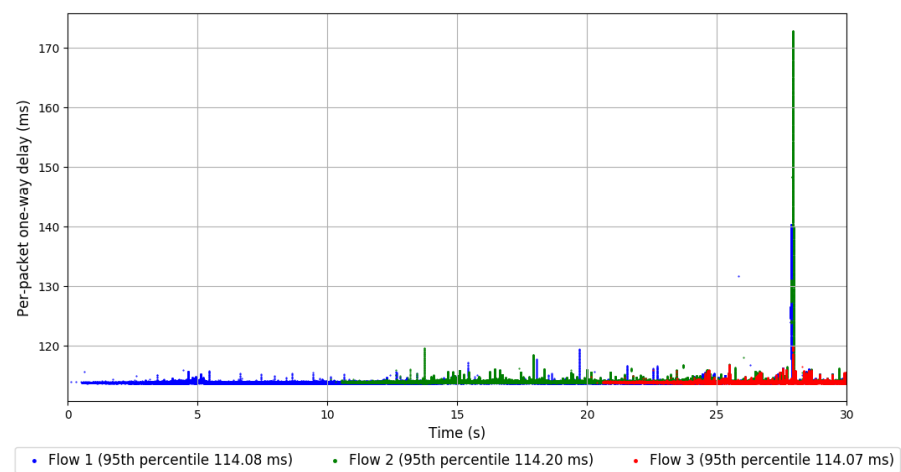
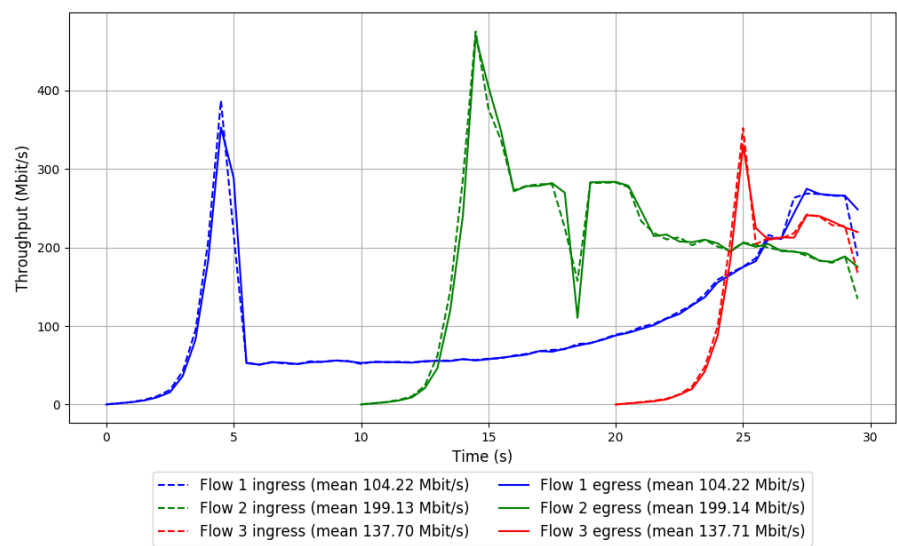
-- Flow 3:

Average throughput: 137.71 Mbit/s

95th percentile per-packet one-way delay: 114.072 ms

Loss rate: 0.00%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-01-31 13:03:31

End at: 2018-01-31 13:04:01

Below is generated by plot.py at 2018-01-31 15:56:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 378.86 Mbit/s

95th percentile per-packet one-way delay: 114.167 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 239.33 Mbit/s

95th percentile per-packet one-way delay: 114.100 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 189.56 Mbit/s

95th percentile per-packet one-way delay: 114.558 ms

Loss rate: 0.00%

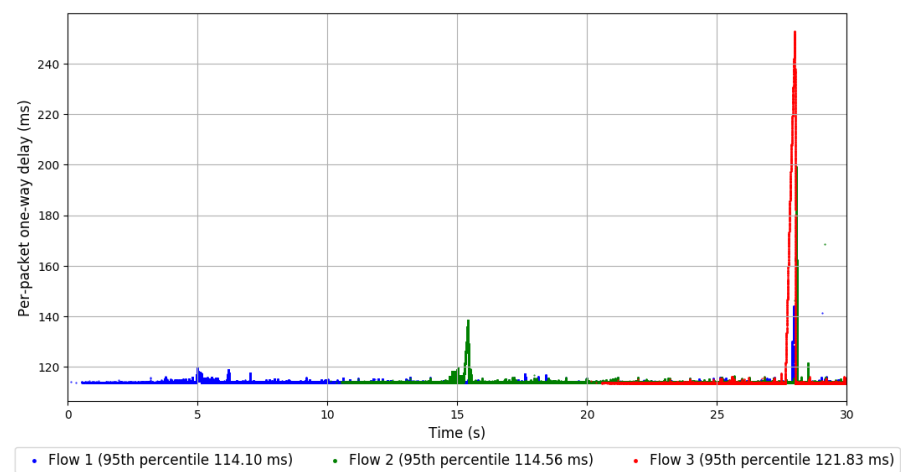
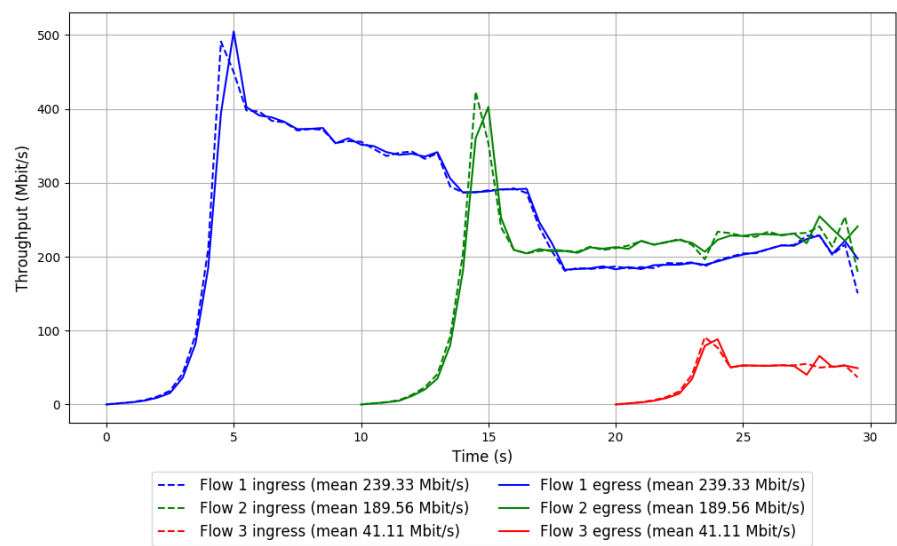
-- Flow 3:

Average throughput: 41.11 Mbit/s

95th percentile per-packet one-way delay: 121.826 ms

Loss rate: 0.00%

Run 10: Report of Vivace-latency — Data Link

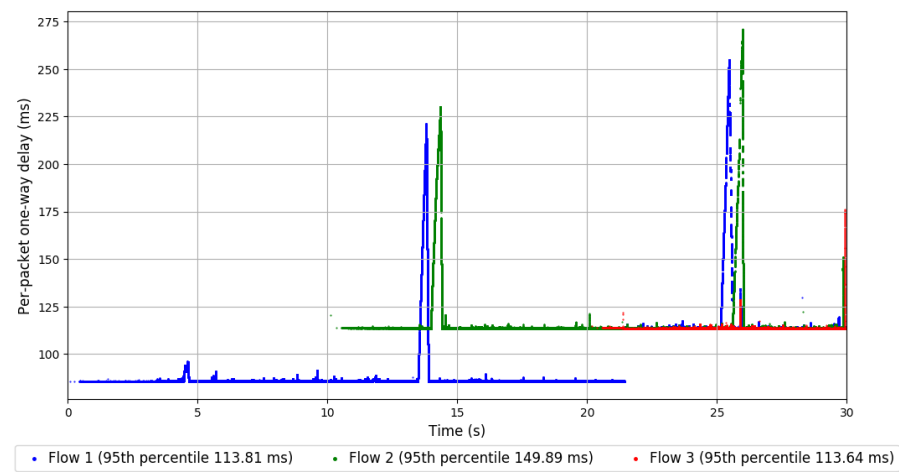
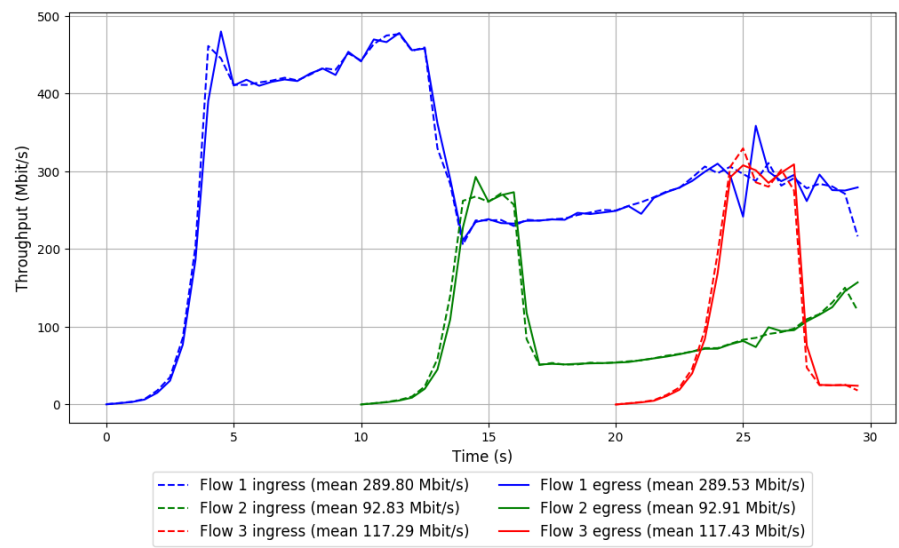


```
Run 1: Statistics of Vivace-loss

Start at: 2018-01-31 10:25:13
End at: 2018-01-31 10:25:43

# Below is generated by plot.py at 2018-01-31 15:57:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 389.72 Mbit/s
95th percentile per-packet one-way delay: 113.896 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 289.53 Mbit/s
95th percentile per-packet one-way delay: 113.810 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 92.91 Mbit/s
95th percentile per-packet one-way delay: 149.890 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 117.43 Mbit/s
95th percentile per-packet one-way delay: 113.636 ms
Loss rate: 0.00%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-01-31 10:42:33

End at: 2018-01-31 10:43:03

Below is generated by plot.py at 2018-01-31 15:57:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 359.07 Mbit/s

95th percentile per-packet one-way delay: 114.259 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 169.99 Mbit/s

95th percentile per-packet one-way delay: 117.771 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 214.05 Mbit/s

95th percentile per-packet one-way delay: 86.239 ms

Loss rate: 0.00%

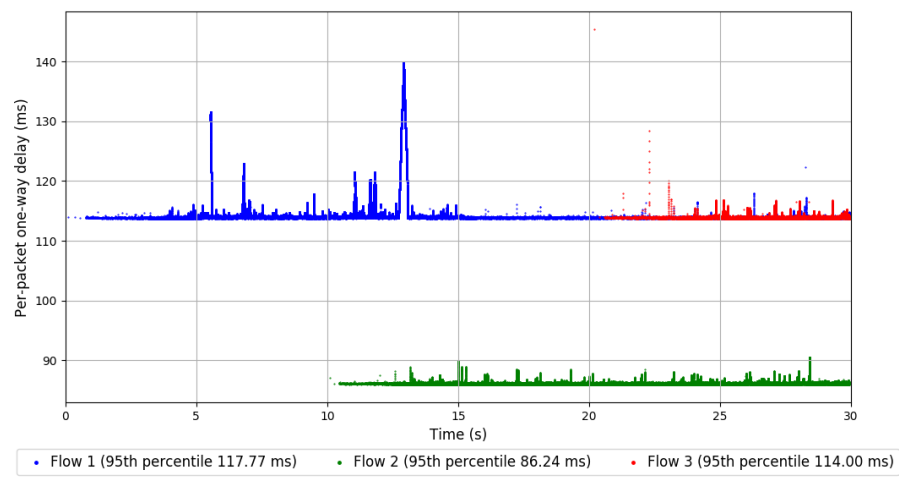
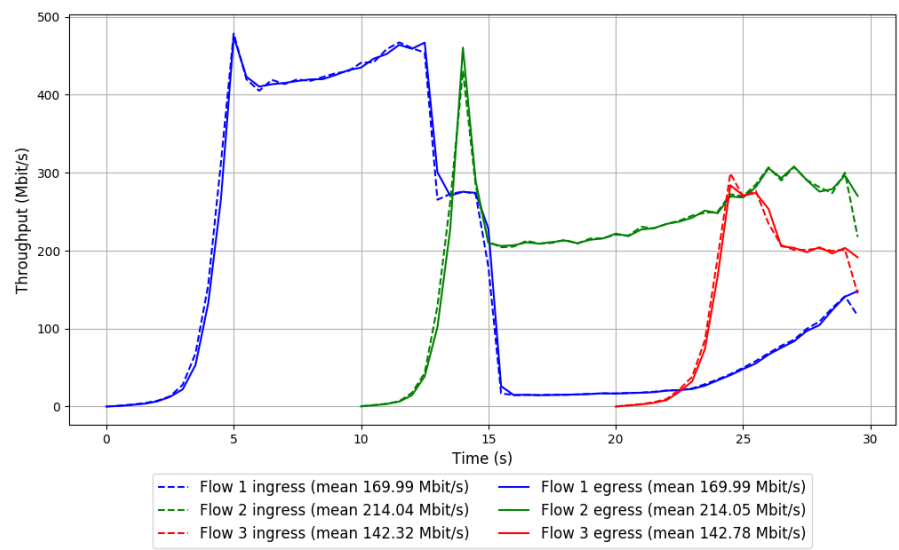
-- Flow 3:

Average throughput: 142.78 Mbit/s

95th percentile per-packet one-way delay: 113.997 ms

Loss rate: 0.00%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-01-31 10:59:53

End at: 2018-01-31 11:00:23

Below is generated by plot.py at 2018-01-31 15:57:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 278.04 Mbit/s

95th percentile per-packet one-way delay: 113.968 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 125.40 Mbit/s

95th percentile per-packet one-way delay: 86.737 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 136.58 Mbit/s

95th percentile per-packet one-way delay: 113.826 ms

Loss rate: 0.00%

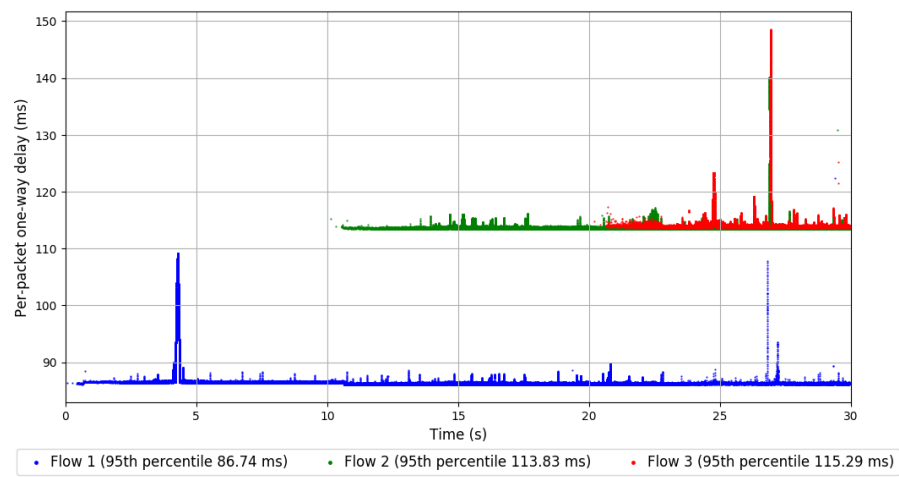
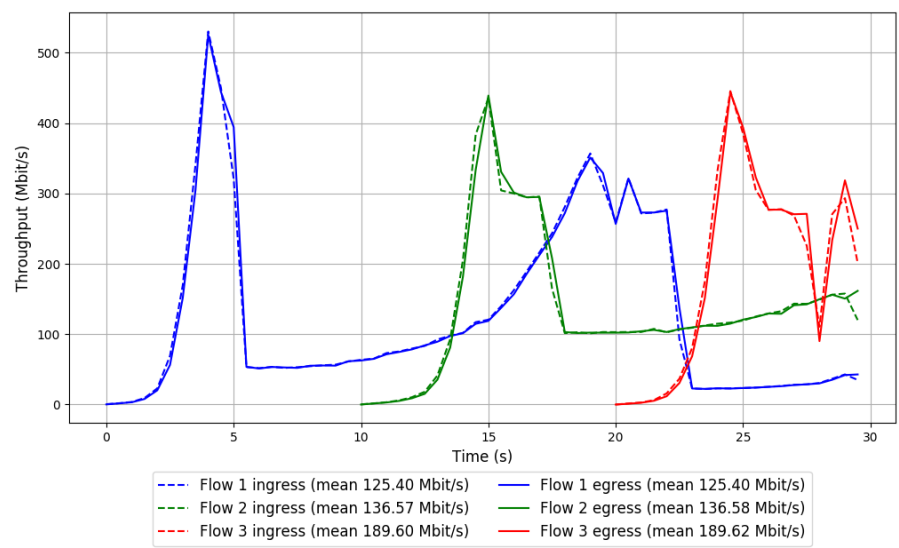
-- Flow 3:

Average throughput: 189.62 Mbit/s

95th percentile per-packet one-way delay: 115.294 ms

Loss rate: 0.00%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-01-31 11:17:17

End at: 2018-01-31 11:17:47

Below is generated by plot.py at 2018-01-31 15:57:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 308.57 Mbit/s

95th percentile per-packet one-way delay: 205.278 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 197.99 Mbit/s

95th percentile per-packet one-way delay: 213.667 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 92.78 Mbit/s

95th percentile per-packet one-way delay: 114.093 ms

Loss rate: 0.00%

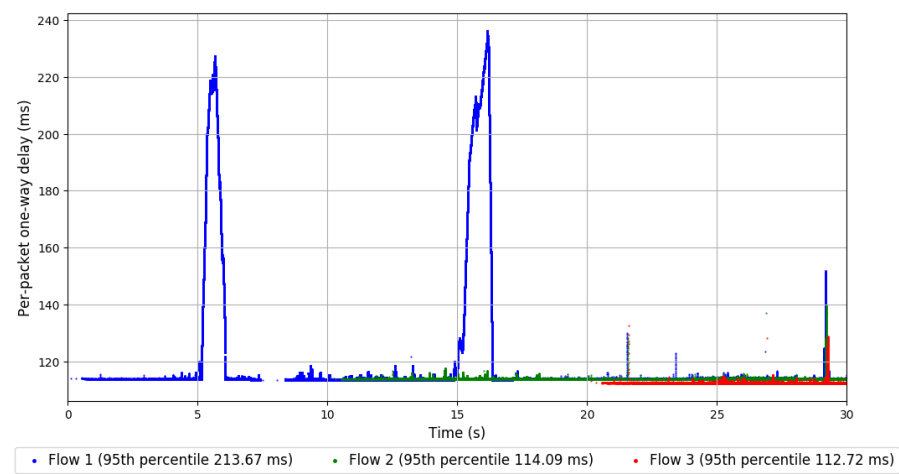
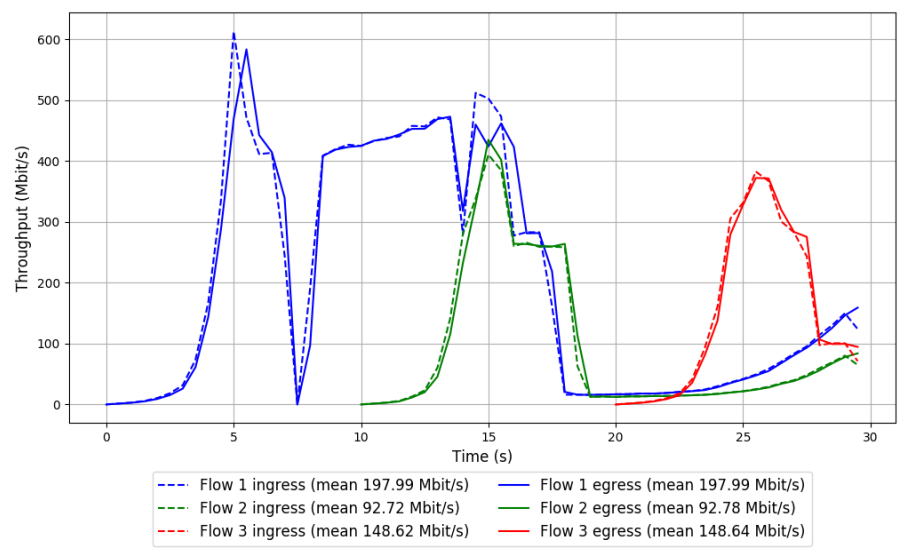
-- Flow 3:

Average throughput: 148.64 Mbit/s

95th percentile per-packet one-way delay: 112.715 ms

Loss rate: 0.00%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-01-31 11:34:43

End at: 2018-01-31 11:35:13

Below is generated by plot.py at 2018-01-31 15:58:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 308.02 Mbit/s

95th percentile per-packet one-way delay: 122.990 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 165.44 Mbit/s

95th percentile per-packet one-way delay: 123.834 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 108.28 Mbit/s

95th percentile per-packet one-way delay: 142.906 ms

Loss rate: 0.00%

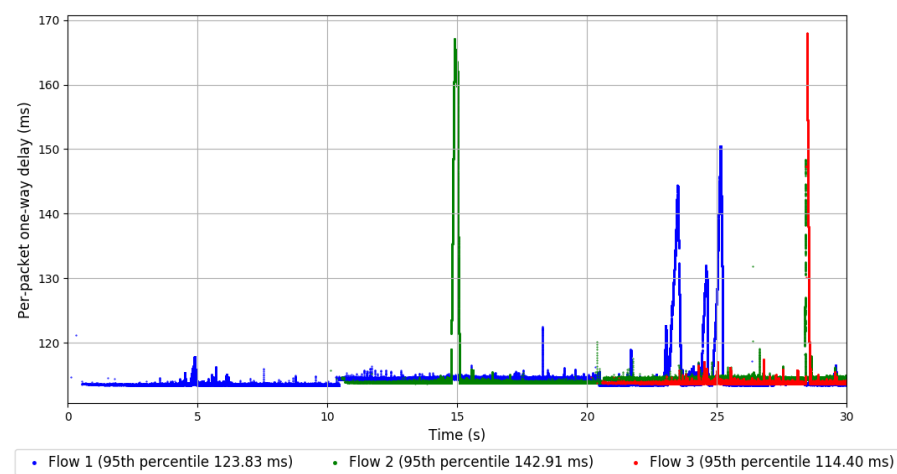
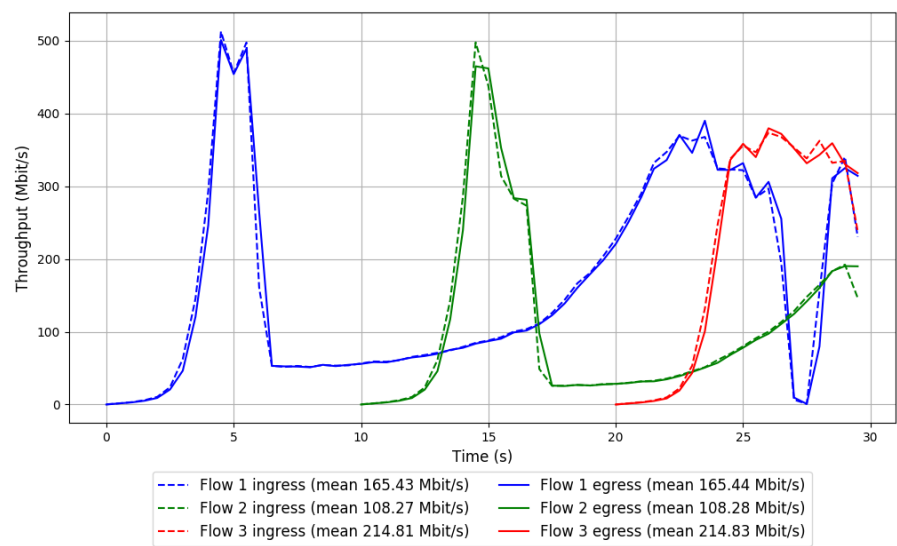
-- Flow 3:

Average throughput: 214.83 Mbit/s

95th percentile per-packet one-way delay: 114.398 ms

Loss rate: 0.00%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-01-31 11:52:10

End at: 2018-01-31 11:52:40

Below is generated by plot.py at 2018-01-31 15:59:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 349.81 Mbit/s

95th percentile per-packet one-way delay: 114.579 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 241.11 Mbit/s

95th percentile per-packet one-way delay: 114.519 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 90.38 Mbit/s

95th percentile per-packet one-way delay: 114.619 ms

Loss rate: 0.00%

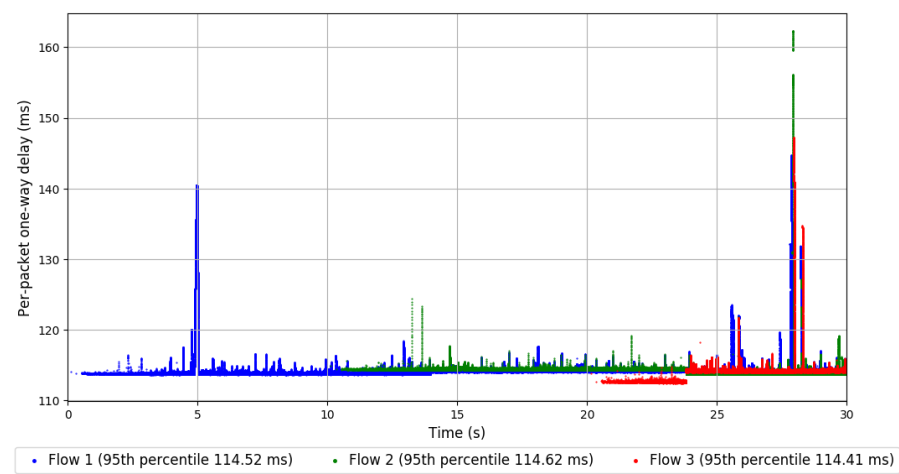
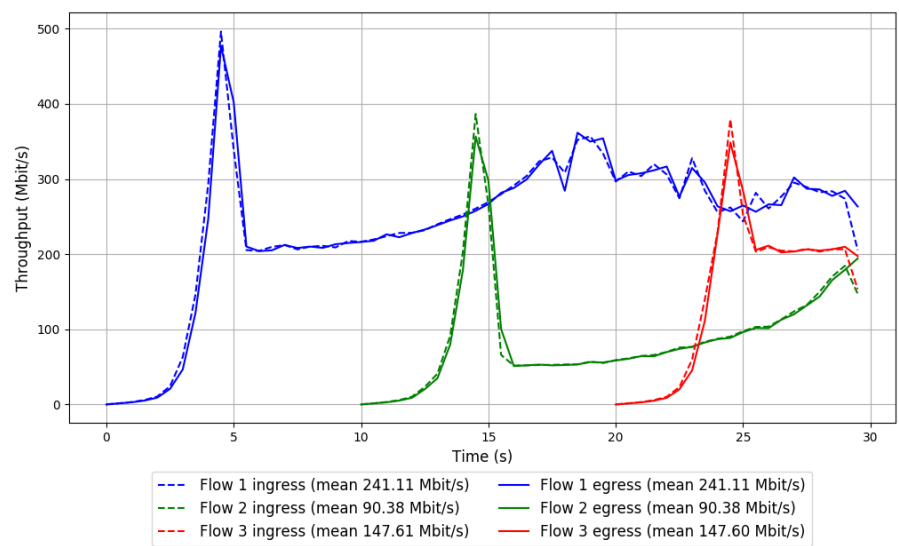
-- Flow 3:

Average throughput: 147.60 Mbit/s

95th percentile per-packet one-way delay: 114.407 ms

Loss rate: 0.00%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-01-31 12:09:41

End at: 2018-01-31 12:10:11

Below is generated by plot.py at 2018-01-31 16:01:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 368.17 Mbit/s

95th percentile per-packet one-way delay: 114.564 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 182.12 Mbit/s

95th percentile per-packet one-way delay: 114.597 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 193.53 Mbit/s

95th percentile per-packet one-way delay: 114.023 ms

Loss rate: 0.00%

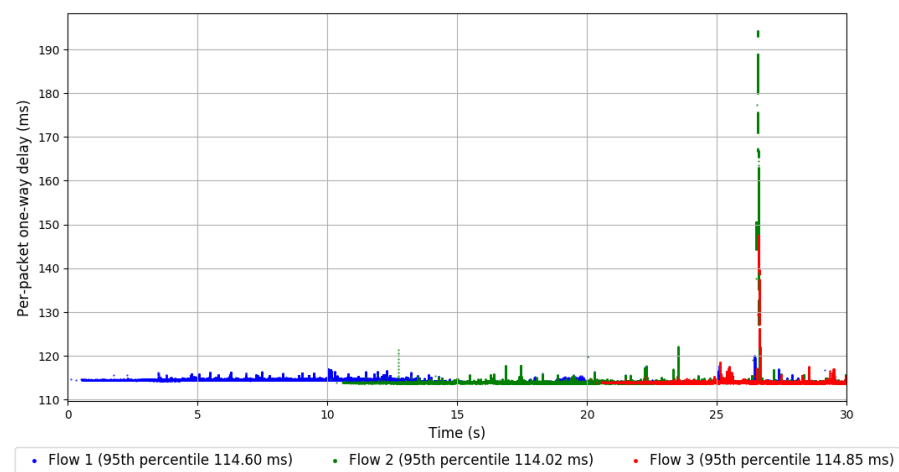
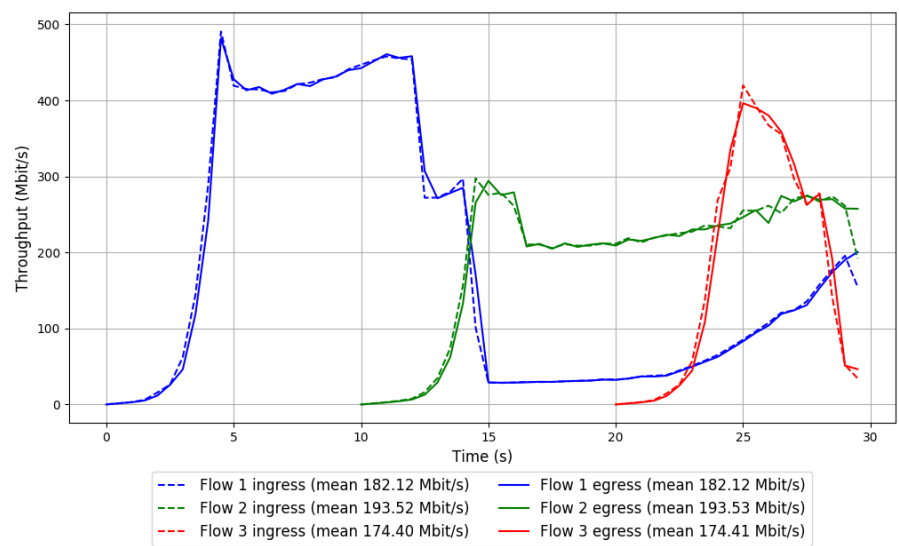
-- Flow 3:

Average throughput: 174.41 Mbit/s

95th percentile per-packet one-way delay: 114.849 ms

Loss rate: 0.00%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-01-31 12:27:12

End at: 2018-01-31 12:27:42

Below is generated by plot.py at 2018-01-31 16:03:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 378.79 Mbit/s

95th percentile per-packet one-way delay: 114.048 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 197.50 Mbit/s

95th percentile per-packet one-way delay: 114.008 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 193.20 Mbit/s

95th percentile per-packet one-way delay: 114.082 ms

Loss rate: 0.00%

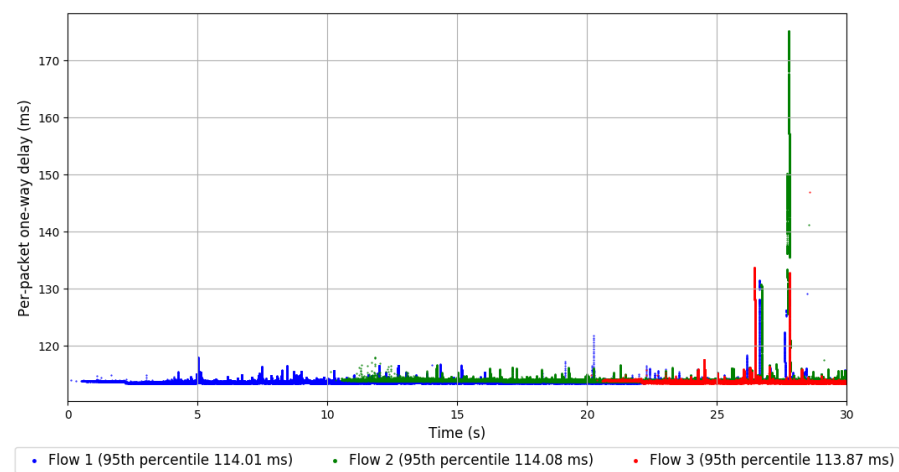
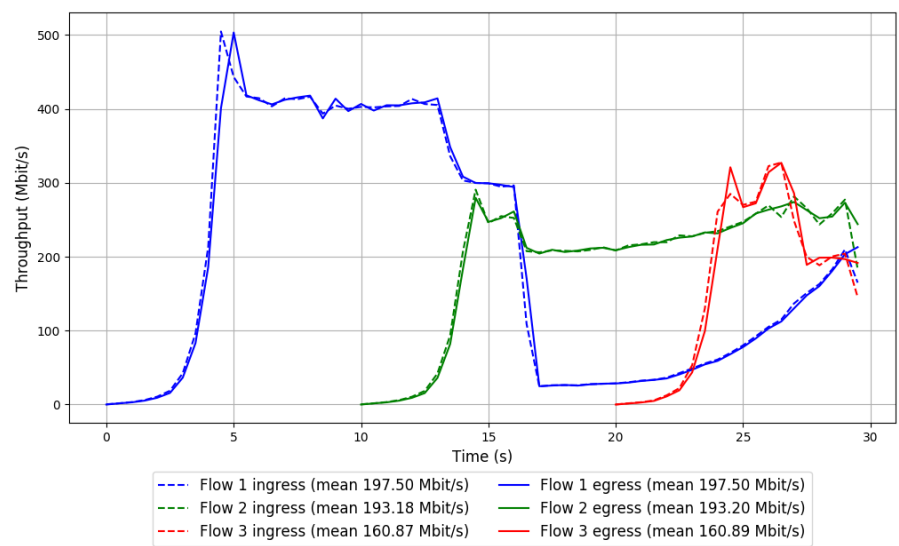
-- Flow 3:

Average throughput: 160.89 Mbit/s

95th percentile per-packet one-way delay: 113.871 ms

Loss rate: 0.00%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-01-31 12:44:44

End at: 2018-01-31 12:45:14

Below is generated by plot.py at 2018-01-31 16:03:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 325.16 Mbit/s

95th percentile per-packet one-way delay: 114.132 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 234.29 Mbit/s

95th percentile per-packet one-way delay: 113.814 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 86.46 Mbit/s

95th percentile per-packet one-way delay: 114.442 ms

Loss rate: 0.00%

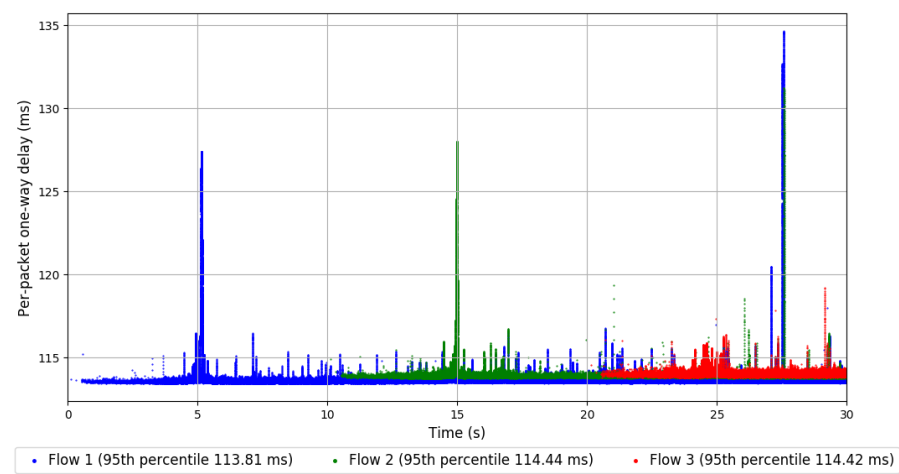
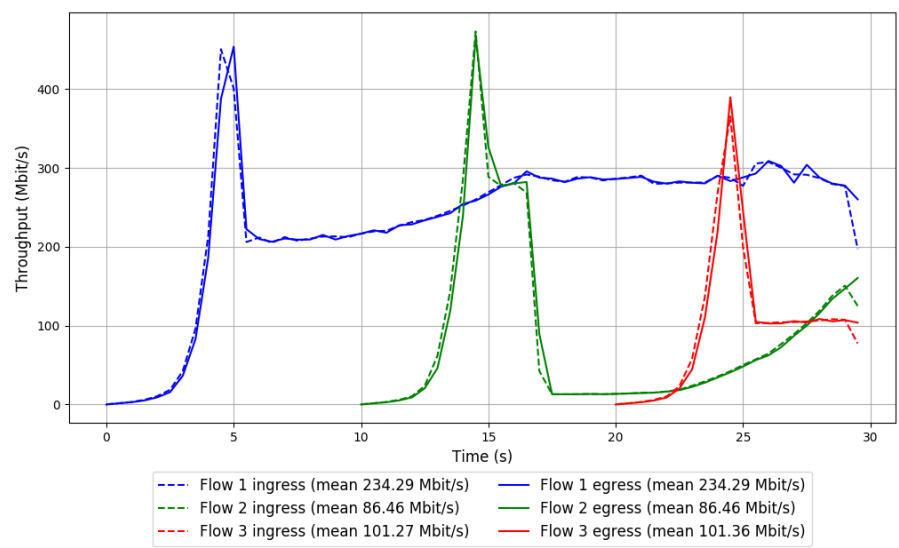
-- Flow 3:

Average throughput: 101.36 Mbit/s

95th percentile per-packet one-way delay: 114.418 ms

Loss rate: 0.00%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-01-31 13:02:09

End at: 2018-01-31 13:02:39

Below is generated by plot.py at 2018-01-31 16:06:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 441.82 Mbit/s

95th percentile per-packet one-way delay: 114.605 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 230.39 Mbit/s

95th percentile per-packet one-way delay: 114.446 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 247.18 Mbit/s

95th percentile per-packet one-way delay: 114.361 ms

Loss rate: 0.00%

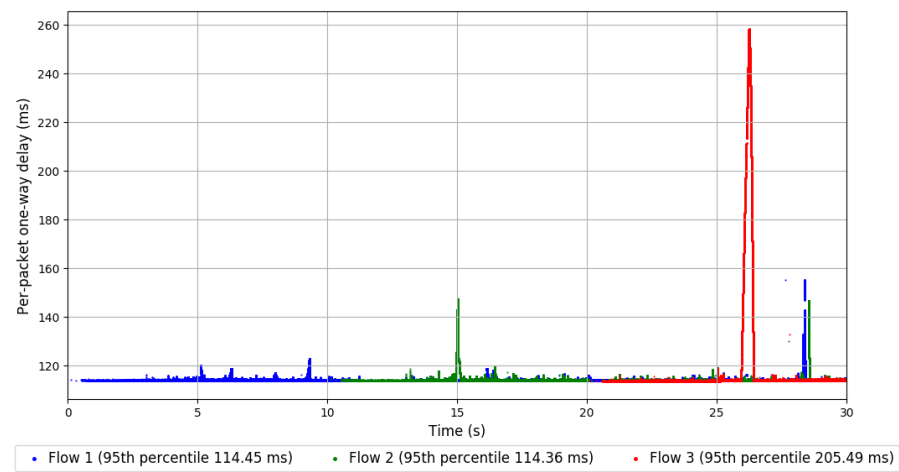
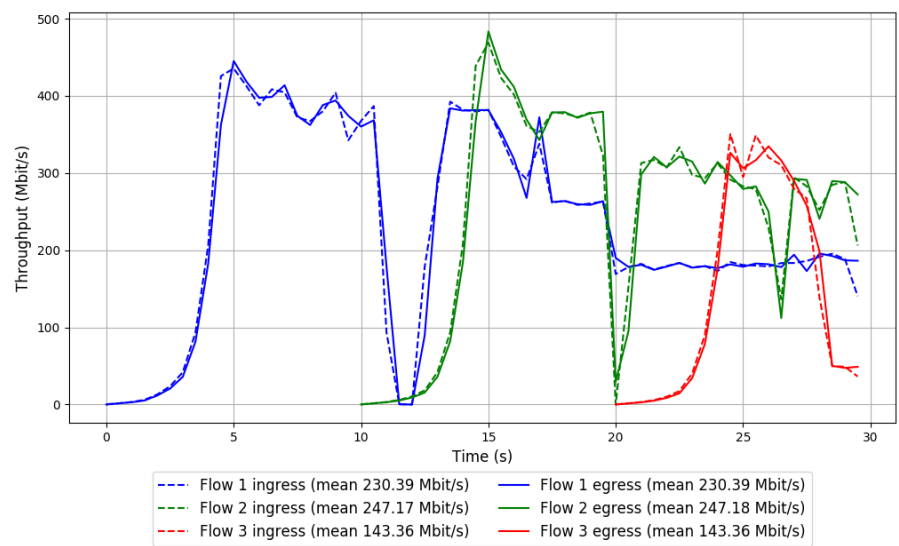
-- Flow 3:

Average throughput: 143.36 Mbit/s

95th percentile per-packet one-way delay: 205.493 ms

Loss rate: 0.00%

Run 10: Report of Vivace-loss — Data Link

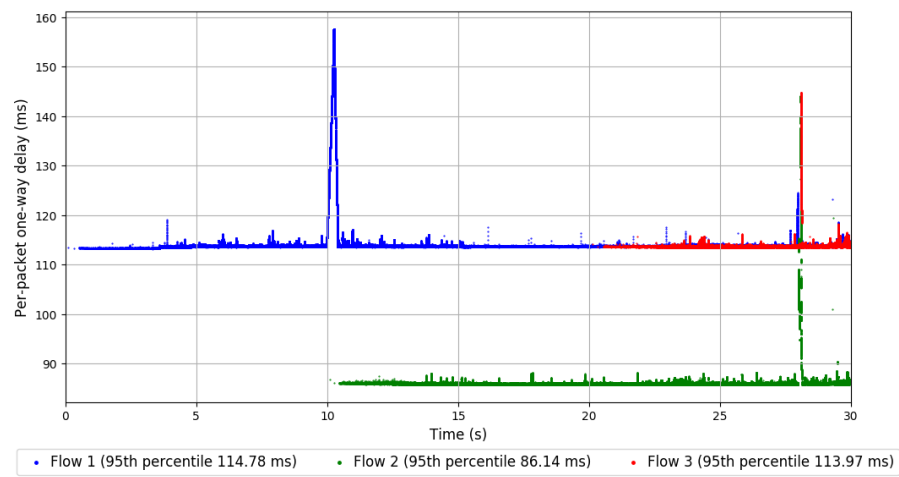
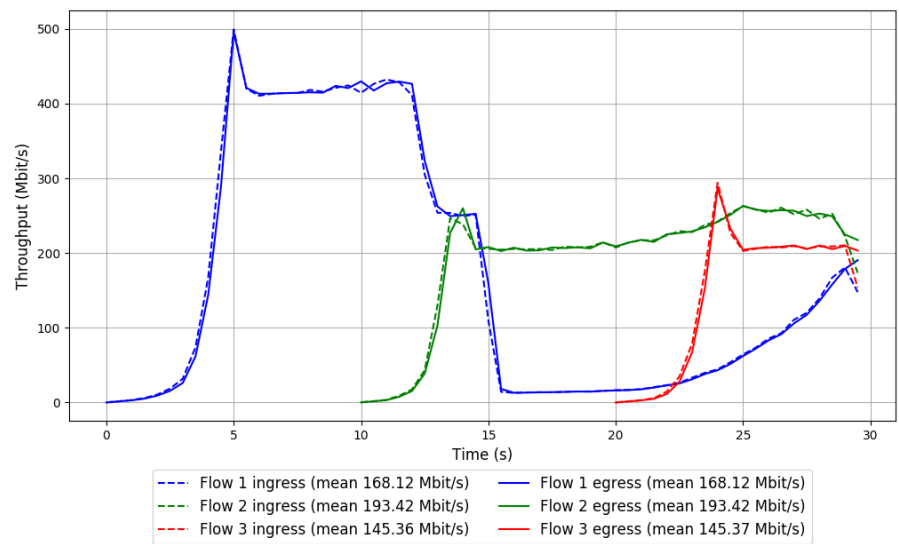


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-01-31 10:15:50
End at: 2018-01-31 10:16:20

# Below is generated by plot.py at 2018-01-31 16:06:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 344.57 Mbit/s
95th percentile per-packet one-way delay: 113.974 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 168.12 Mbit/s
95th percentile per-packet one-way delay: 114.780 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 193.42 Mbit/s
95th percentile per-packet one-way delay: 86.135 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 145.37 Mbit/s
95th percentile per-packet one-way delay: 113.972 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-01-31 10:33:27

End at: 2018-01-31 10:33:57

Below is generated by plot.py at 2018-01-31 16:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 405.67 Mbit/s

95th percentile per-packet one-way delay: 113.949 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 218.28 Mbit/s

95th percentile per-packet one-way delay: 114.017 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 212.71 Mbit/s

95th percentile per-packet one-way delay: 86.657 ms

Loss rate: 0.00%

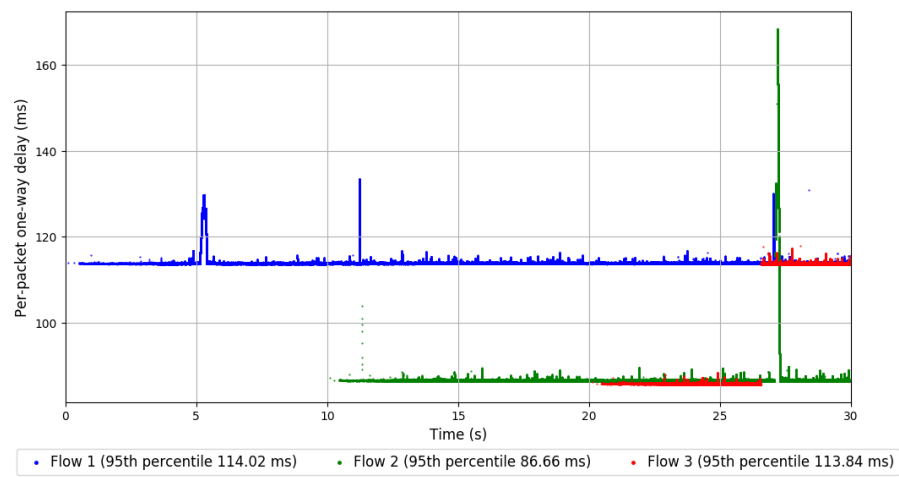
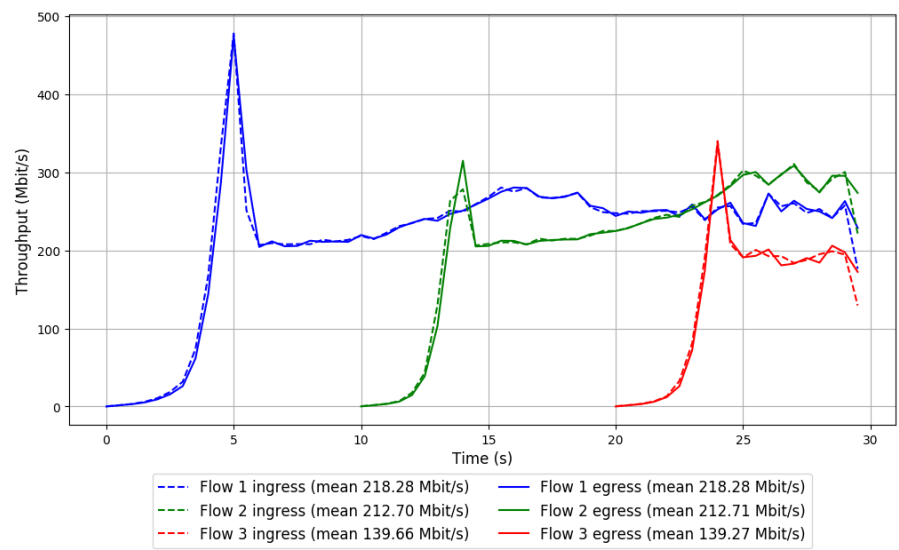
-- Flow 3:

Average throughput: 139.27 Mbit/s

95th percentile per-packet one-way delay: 113.838 ms

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-01-31 10:50:38

End at: 2018-01-31 10:51:08

Below is generated by plot.py at 2018-01-31 16:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 365.25 Mbit/s

95th percentile per-packet one-way delay: 113.901 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 183.89 Mbit/s

95th percentile per-packet one-way delay: 113.929 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 198.62 Mbit/s

95th percentile per-packet one-way delay: 113.761 ms

Loss rate: 0.00%

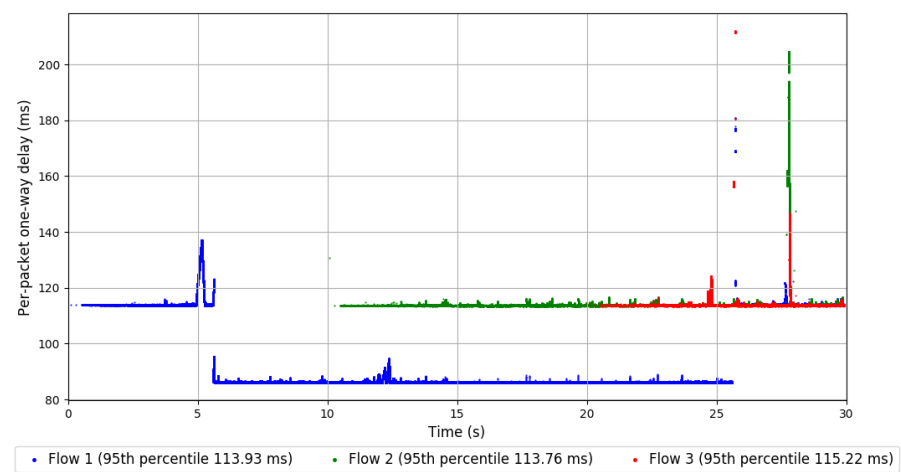
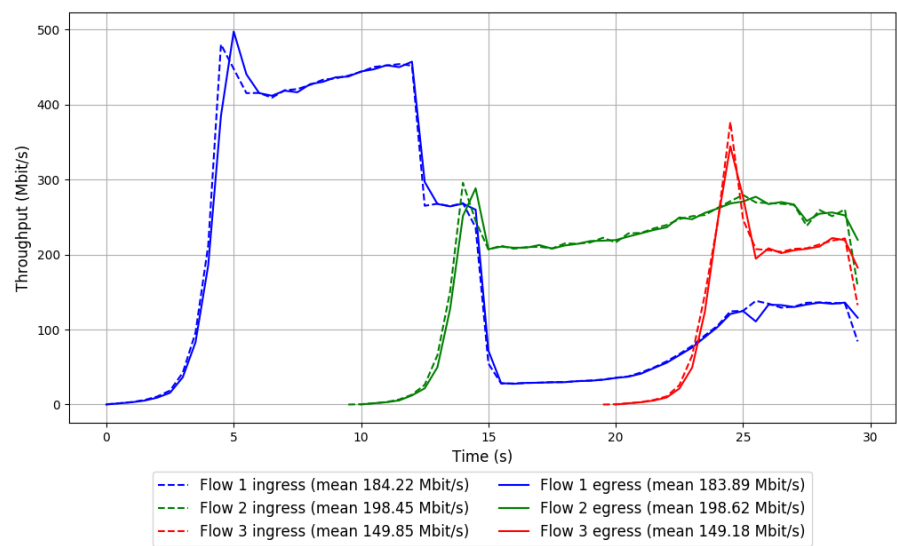
-- Flow 3:

Average throughput: 149.18 Mbit/s

95th percentile per-packet one-way delay: 115.223 ms

Loss rate: 0.45%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-01-31 11:07:54

End at: 2018-01-31 11:08:24

Below is generated by plot.py at 2018-01-31 16:08:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 398.67 Mbit/s

95th percentile per-packet one-way delay: 119.223 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 225.79 Mbit/s

95th percentile per-packet one-way delay: 124.653 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 191.71 Mbit/s

95th percentile per-packet one-way delay: 113.906 ms

Loss rate: 0.00%

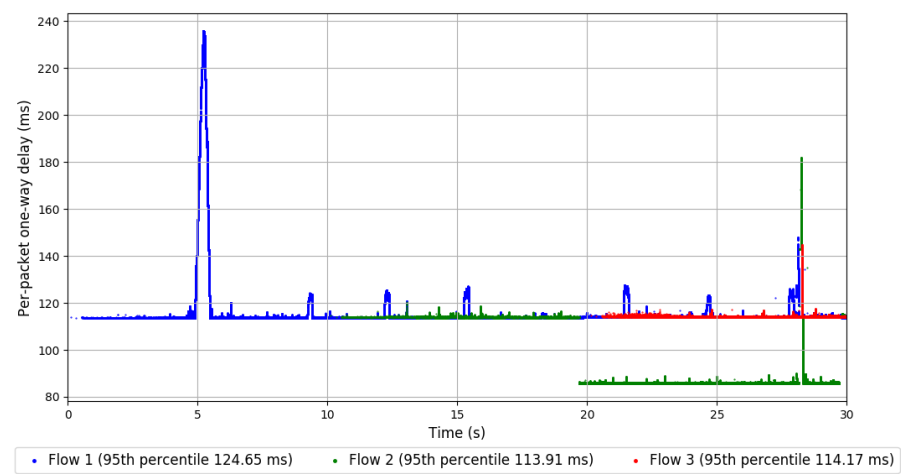
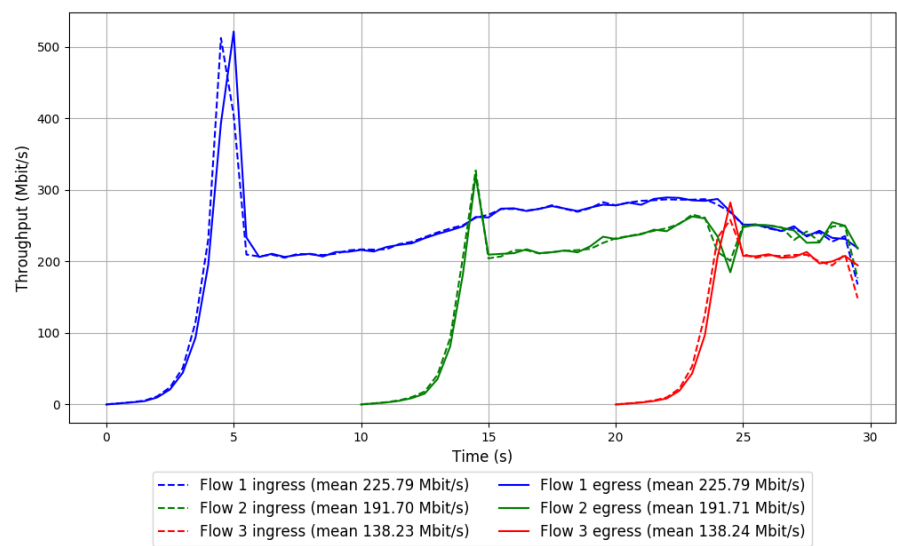
-- Flow 3:

Average throughput: 138.24 Mbit/s

95th percentile per-packet one-way delay: 114.170 ms

Loss rate: 0.00%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-01-31 11:25:17

End at: 2018-01-31 11:25:47

Below is generated by plot.py at 2018-01-31 16:09:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 395.58 Mbit/s

95th percentile per-packet one-way delay: 114.502 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 221.79 Mbit/s

95th percentile per-packet one-way delay: 114.557 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 191.14 Mbit/s

95th percentile per-packet one-way delay: 113.959 ms

Loss rate: 0.01%

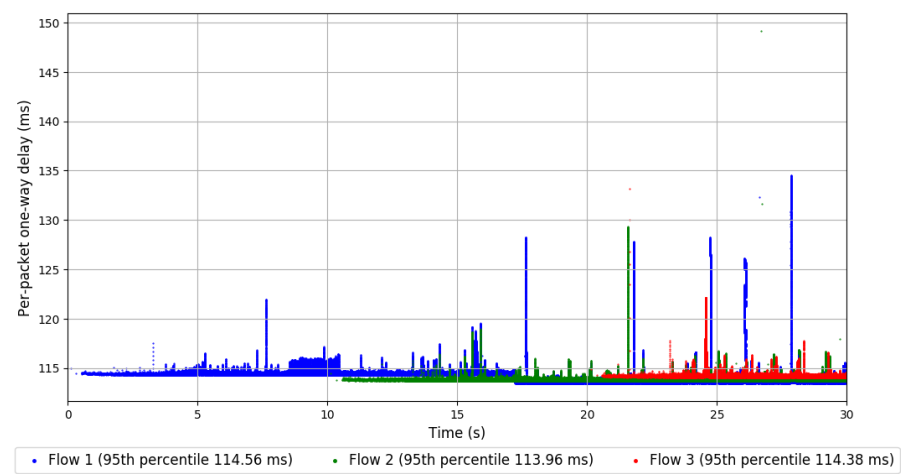
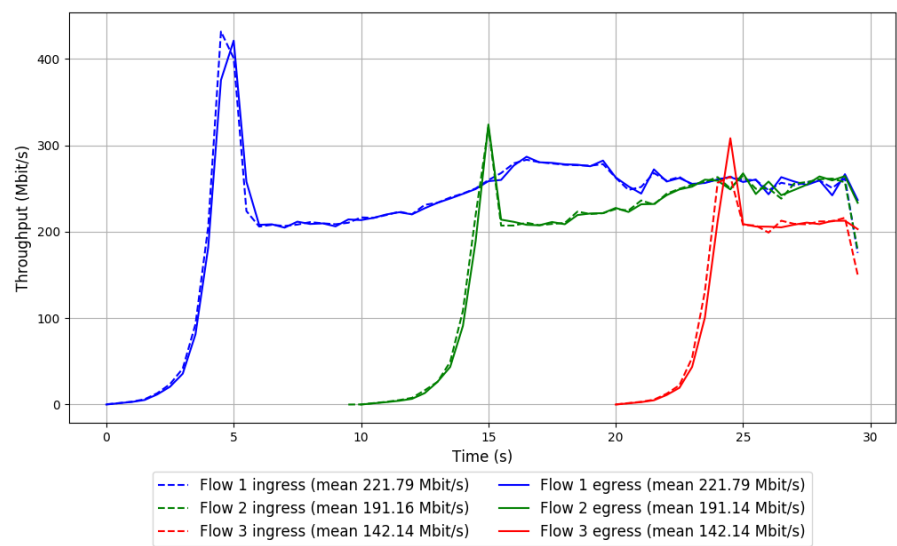
-- Flow 3:

Average throughput: 142.14 Mbit/s

95th percentile per-packet one-way delay: 114.377 ms

Loss rate: 0.01%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-01-31 11:42:48

End at: 2018-01-31 11:43:18

Below is generated by plot.py at 2018-01-31 16:09:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 376.11 Mbit/s

95th percentile per-packet one-way delay: 117.325 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 170.29 Mbit/s

95th percentile per-packet one-way delay: 120.244 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 194.68 Mbit/s

95th percentile per-packet one-way delay: 114.905 ms

Loss rate: 0.01%

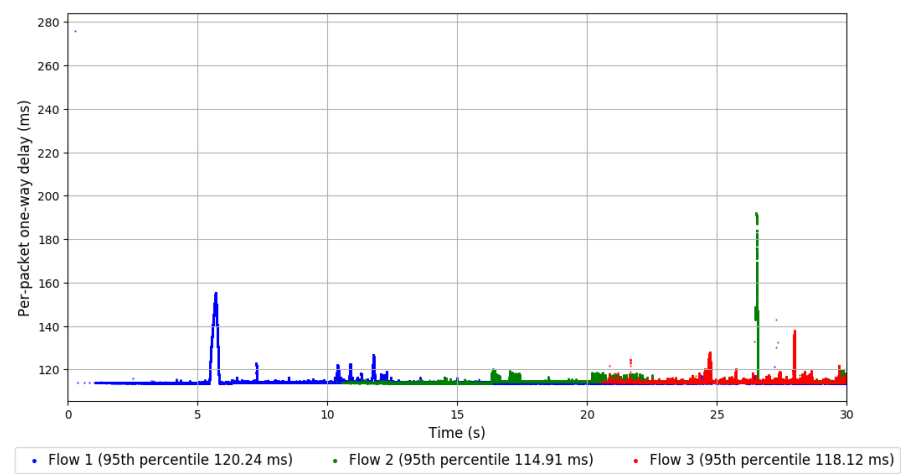
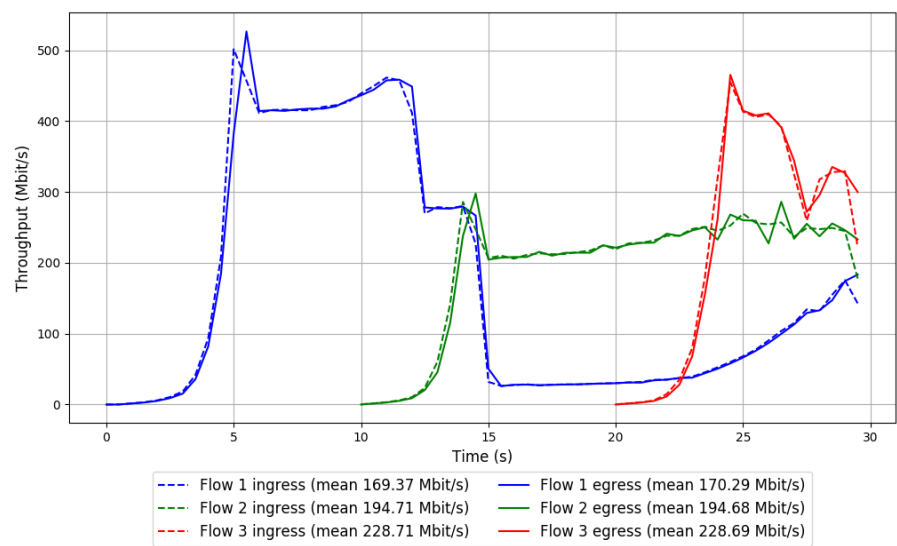
-- Flow 3:

Average throughput: 228.69 Mbit/s

95th percentile per-packet one-way delay: 118.125 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-01-31 12:00:22

End at: 2018-01-31 12:00:52

Below is generated by plot.py at 2018-01-31 16:10:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 395.97 Mbit/s

95th percentile per-packet one-way delay: 114.041 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 223.91 Mbit/s

95th percentile per-packet one-way delay: 114.009 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 188.21 Mbit/s

95th percentile per-packet one-way delay: 112.760 ms

Loss rate: 0.00%

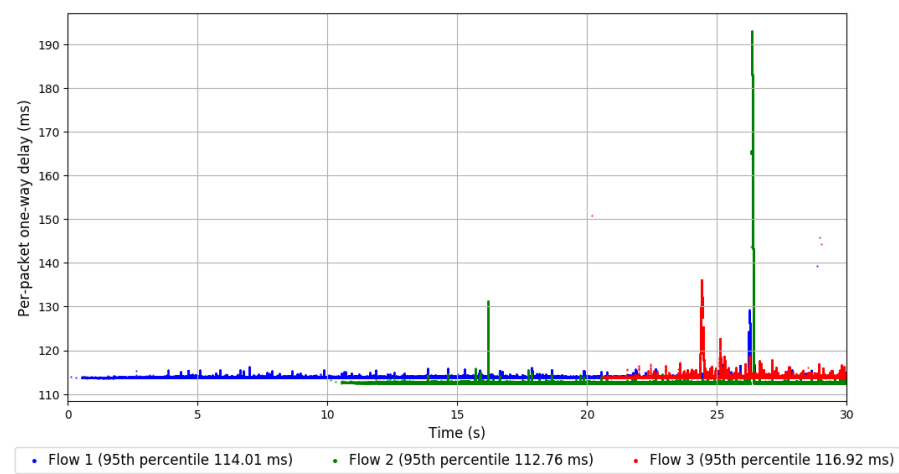
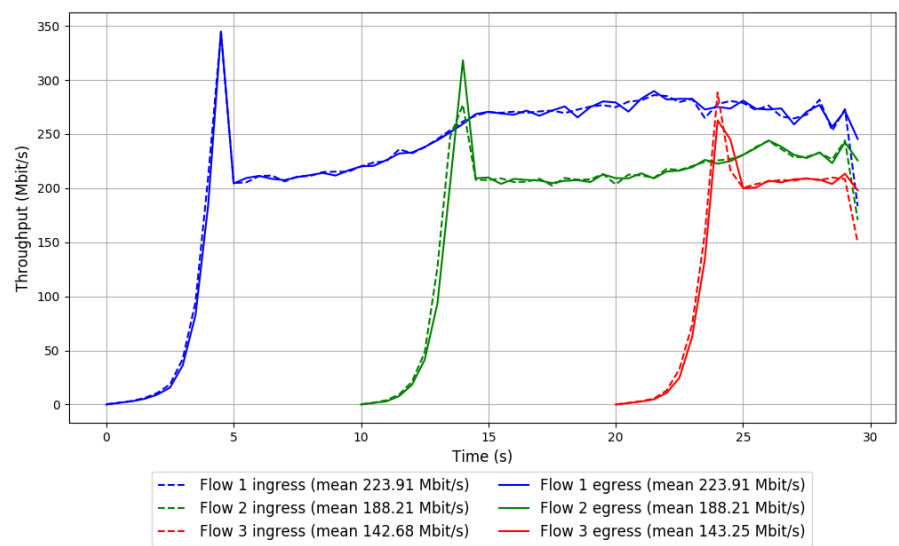
-- Flow 3:

Average throughput: 143.25 Mbit/s

95th percentile per-packet one-way delay: 116.923 ms

Loss rate: 0.01%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-01-31 12:17:46

End at: 2018-01-31 12:18:16

Below is generated by plot.py at 2018-01-31 16:10:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 344.40 Mbit/s

95th percentile per-packet one-way delay: 114.913 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 185.28 Mbit/s

95th percentile per-packet one-way delay: 115.097 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 190.92 Mbit/s

95th percentile per-packet one-way delay: 114.219 ms

Loss rate: 0.00%

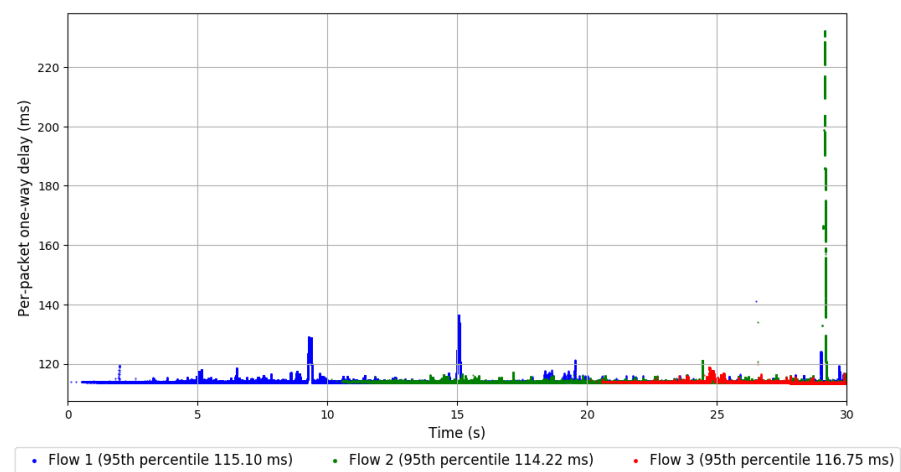
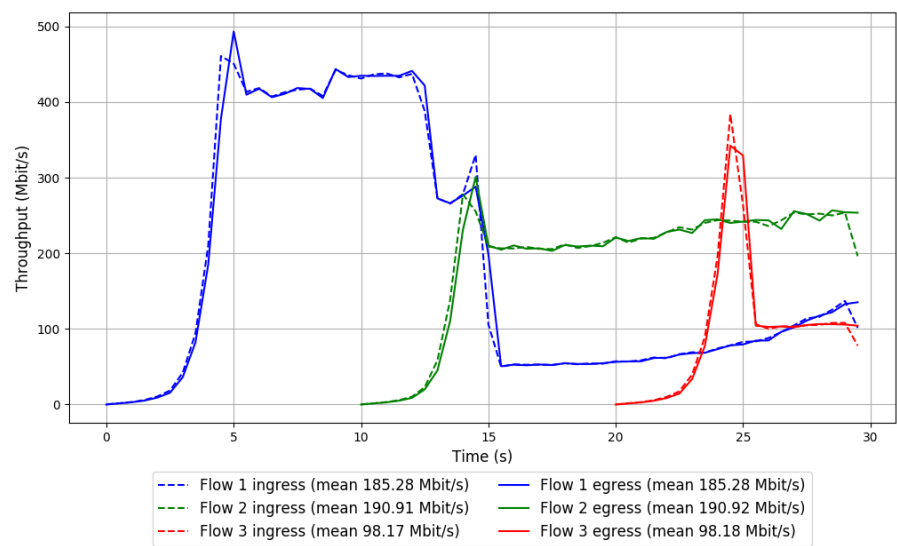
-- Flow 3:

Average throughput: 98.18 Mbit/s

95th percentile per-packet one-way delay: 116.745 ms

Loss rate: 0.00%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-01-31 12:35:22

End at: 2018-01-31 12:35:52

Below is generated by plot.py at 2018-01-31 16:10:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 390.81 Mbit/s

95th percentile per-packet one-way delay: 114.098 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 223.81 Mbit/s

95th percentile per-packet one-way delay: 114.114 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 180.69 Mbit/s

95th percentile per-packet one-way delay: 114.083 ms

Loss rate: 0.00%

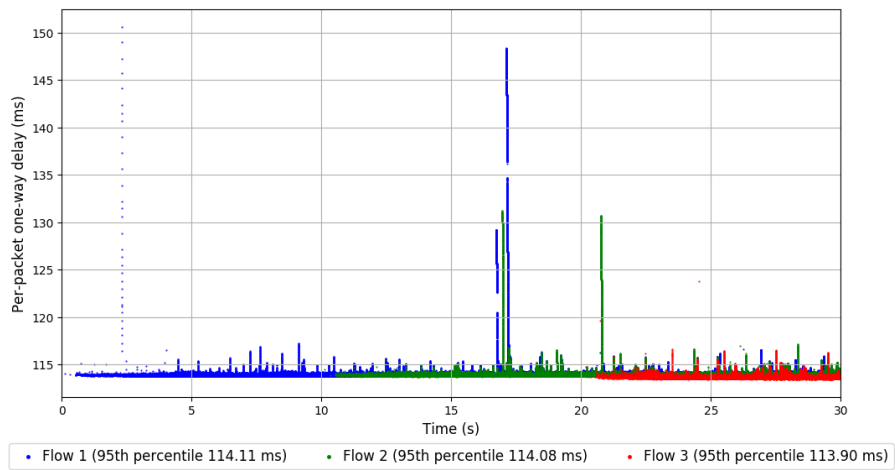
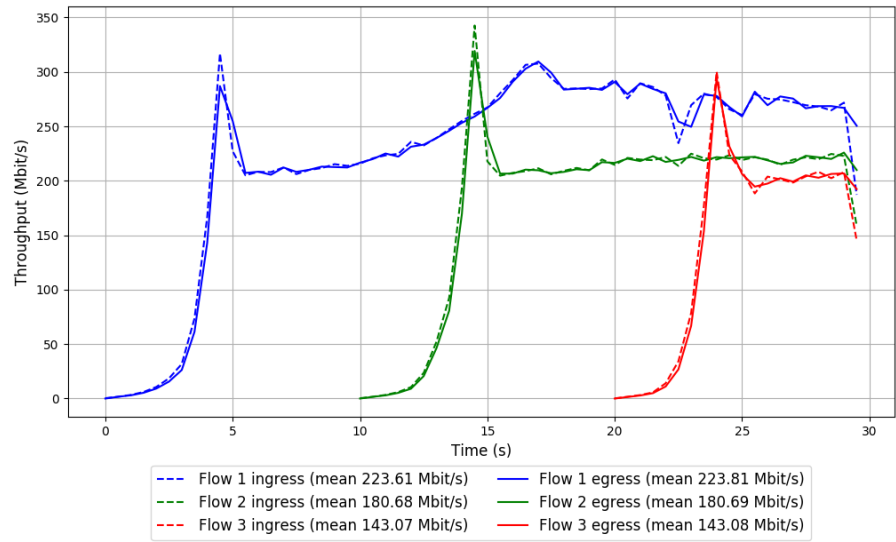
-- Flow 3:

Average throughput: 143.08 Mbit/s

95th percentile per-packet one-way delay: 113.899 ms

Loss rate: 0.00%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-01-31 12:52:39

End at: 2018-01-31 12:53:09

Below is generated by plot.py at 2018-01-31 16:10:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 440.76 Mbit/s

95th percentile per-packet one-way delay: 114.136 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 268.95 Mbit/s

95th percentile per-packet one-way delay: 114.137 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 186.94 Mbit/s

95th percentile per-packet one-way delay: 114.147 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 144.58 Mbit/s

95th percentile per-packet one-way delay: 114.103 ms

Loss rate: 0.01%

Run 10: Report of Vivace-LTE — Data Link

