

Pantheon Report

Generated at 2018-02-01 01:03:26 (UTC).

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

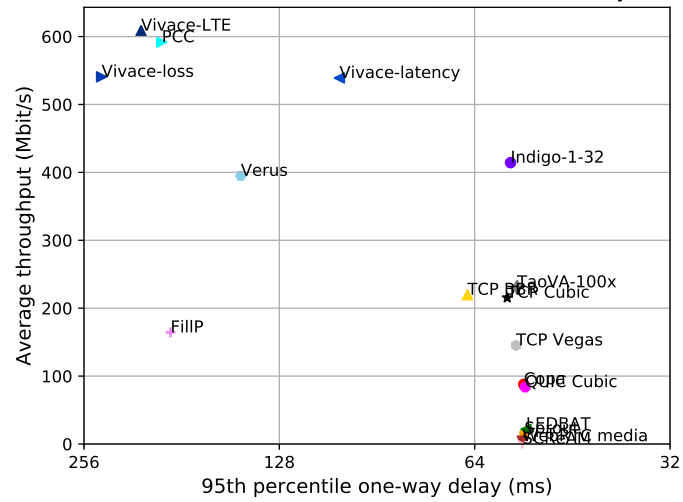
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

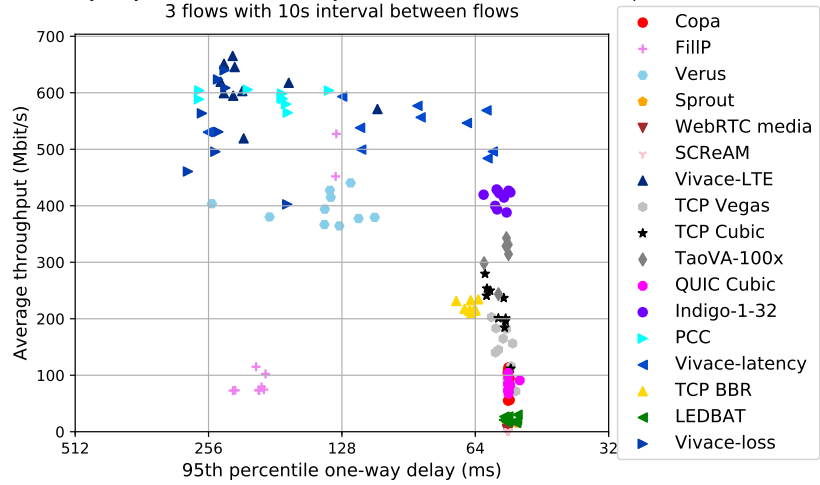
Git summary:

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



test from GCE Sydney Ethernet to GCE Tokyo 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	113.02	107.36	106.95	64.85	66.11	66.96	0.19	0.09	0.08
TCP Cubic	10	116.40	100.55	96.97	56.30	56.39	57.66	0.05	0.02	0.03
LEDBAT	10	11.21	12.17	7.41	53.39	53.30	52.73	0.44	0.27	0.78
PCC	9	541.43	58.31	35.02	195.23	154.61	151.88	1.83	0.72	1.12
QUIC Cubic	10	52.37	36.90	21.29	53.04	53.13	52.20	0.00	0.01	0.01
SCReAM	10	0.21	0.21	0.22	53.76	53.65	52.95	0.00	0.00	0.00
WebRTC media	10	2.24	1.41	0.58	53.70	53.03	53.68	0.00	0.00	0.02
Sprout	10	7.79	7.70	7.45	53.68	53.17	52.90	0.20	0.10	0.11
TaoVA-100x	9	125.08	118.48	112.04	54.37	54.54	57.09	0.00	0.00	0.00
TCP Vegas	10	75.97	71.61	65.27	55.34	55.21	54.40	0.03	0.01	0.03
Verus	10	222.66	189.72	141.86	134.07	170.48	127.53	0.86	1.84	0.53
Copa	9	51.21	40.42	29.64	53.53	53.38	52.72	0.00	0.00	0.00
FillP	10	91.05	74.93	69.90	184.33	212.52	206.34	8.71	10.02	9.73
Indigo-1-32	10	216.68	209.57	181.40	55.33	57.12	59.96	0.01	0.04	0.03
Vivace-latency	10	324.80	265.28	115.07	102.03	110.43	75.05	0.17	0.18	0.34
Vivace-loss	8	288.55	289.93	173.99	793.95	228.22	253.58	3.18	4.96	13.12
Vivace-LTE	10	341.42	301.47	203.97	193.81	179.90	89.43	1.25	1.42	0.33

Run 1: Statistics of TCP BBR

Start at: 2018-01-31 19:07:24

End at: 2018-01-31 19:07:54

Below is generated by plot.py at 2018-01-31 23:35:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 231.56 Mbit/s

95th percentile per-packet one-way delay: 70.647 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 122.07 Mbit/s

95th percentile per-packet one-way delay: 68.235 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 107.32 Mbit/s

95th percentile per-packet one-way delay: 72.396 ms

Loss rate: 0.00%

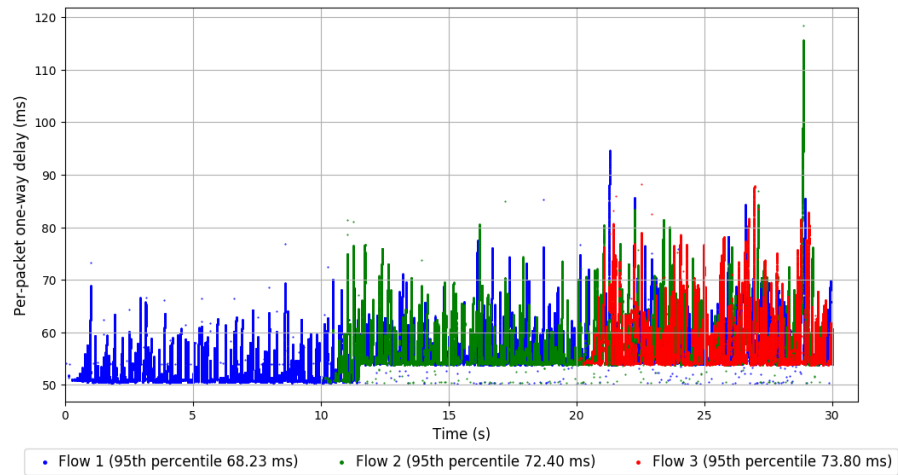
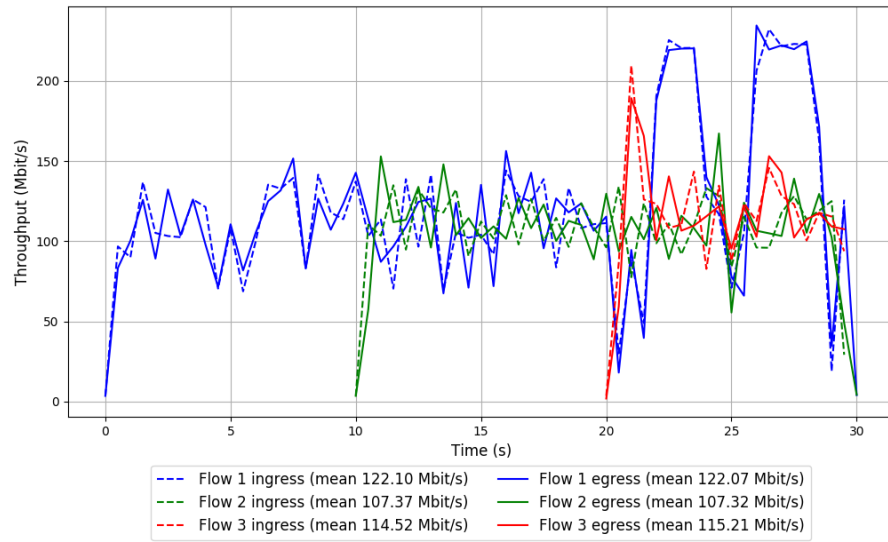
-- Flow 3:

Average throughput: 115.21 Mbit/s

95th percentile per-packet one-way delay: 73.795 ms

Loss rate: 0.01%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-31 19:24:09

End at: 2018-01-31 19:24:39

Below is generated by plot.py at 2018-01-31 23:35:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 214.21 Mbit/s

95th percentile per-packet one-way delay: 65.650 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 109.74 Mbit/s

95th percentile per-packet one-way delay: 65.697 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 106.95 Mbit/s

95th percentile per-packet one-way delay: 65.350 ms

Loss rate: 0.00%

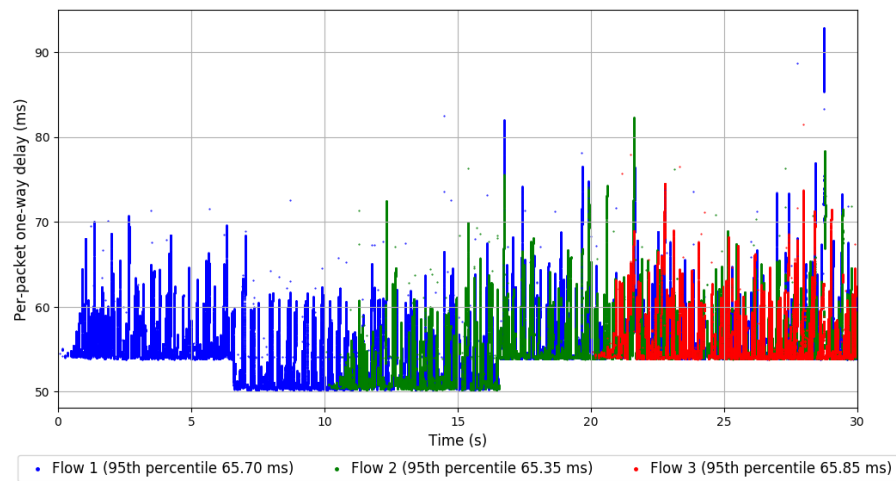
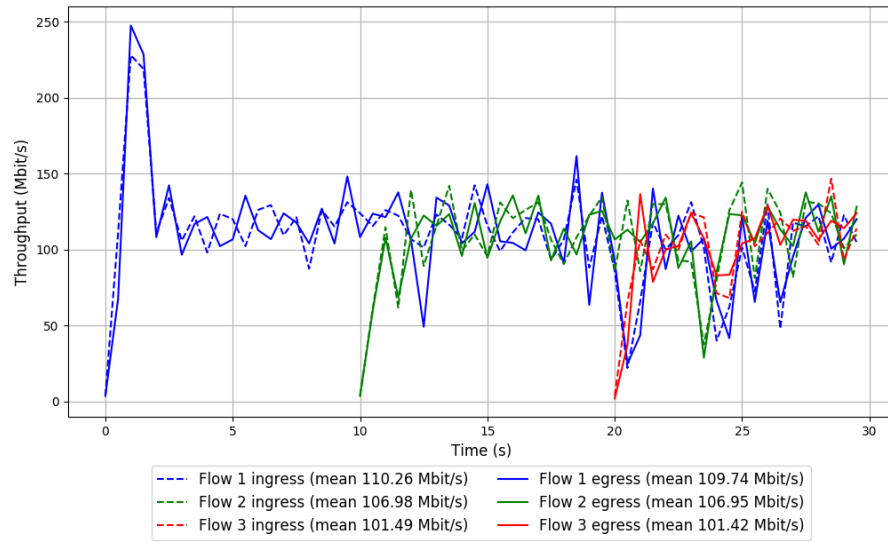
-- Flow 3:

Average throughput: 101.42 Mbit/s

95th percentile per-packet one-way delay: 65.850 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-31 19:40:49

End at: 2018-01-31 19:41:19

Below is generated by plot.py at 2018-01-31 23:35:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 234.39 Mbit/s

95th percentile per-packet one-way delay: 63.018 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 128.58 Mbit/s

95th percentile per-packet one-way delay: 62.491 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 104.87 Mbit/s

95th percentile per-packet one-way delay: 64.302 ms

Loss rate: 0.06%

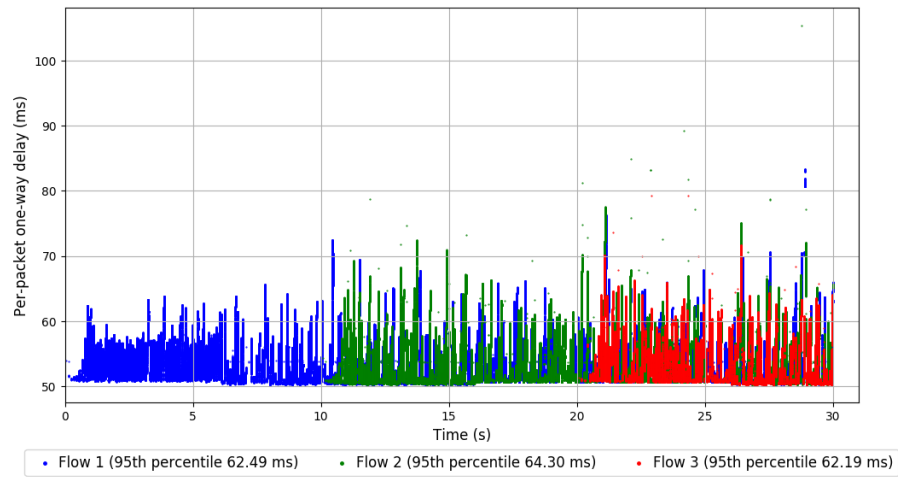
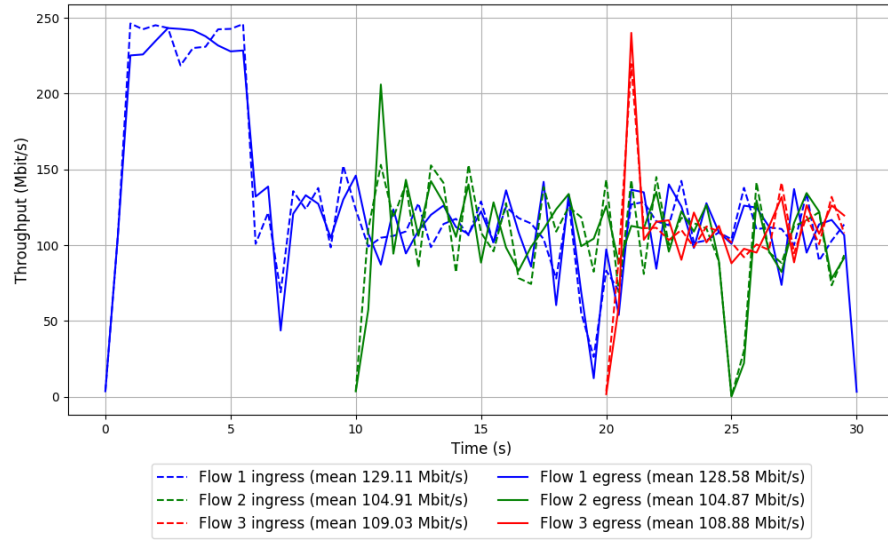
-- Flow 3:

Average throughput: 108.88 Mbit/s

95th percentile per-packet one-way delay: 62.189 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-31 19:57:24

End at: 2018-01-31 19:57:54

Below is generated by plot.py at 2018-01-31 23:35:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 214.91 Mbit/s

95th percentile per-packet one-way delay: 64.342 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 112.39 Mbit/s

95th percentile per-packet one-way delay: 63.201 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 104.04 Mbit/s

95th percentile per-packet one-way delay: 64.865 ms

Loss rate: 0.00%

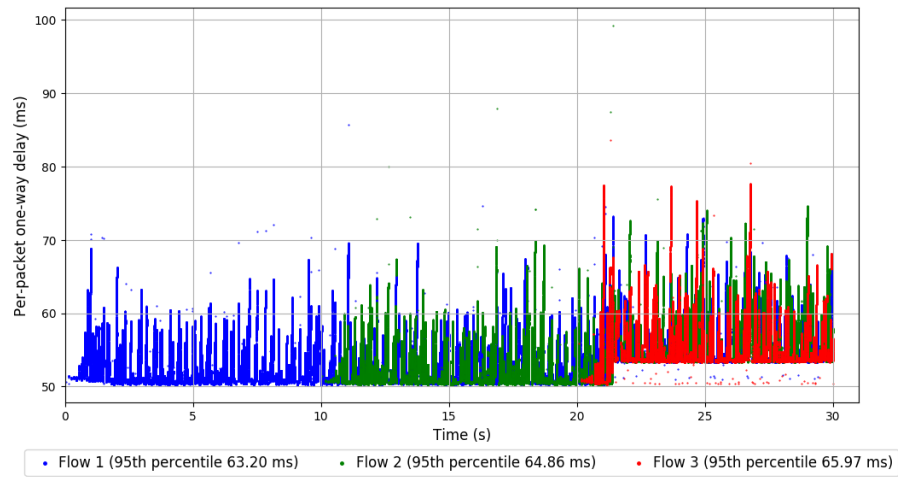
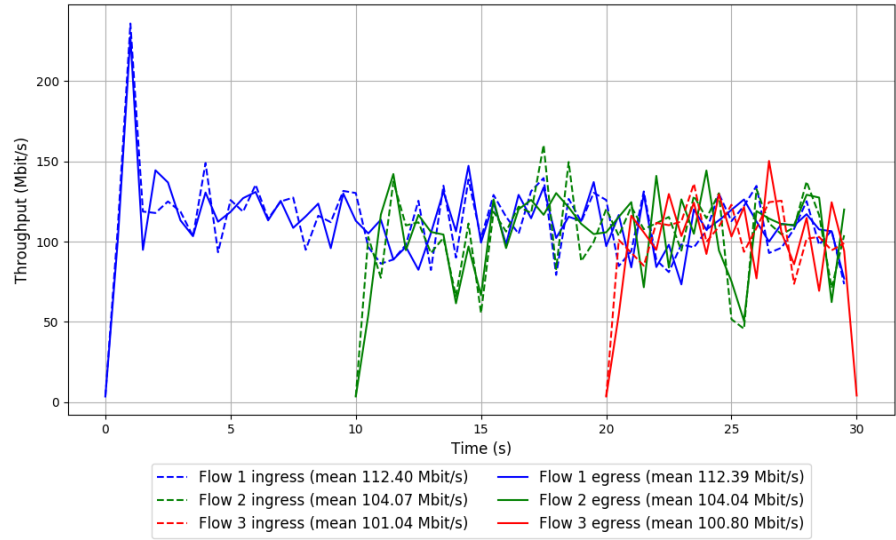
-- Flow 3:

Average throughput: 100.80 Mbit/s

95th percentile per-packet one-way delay: 65.967 ms

Loss rate: 0.24%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-31 20:14:38

End at: 2018-01-31 20:15:08

Below is generated by plot.py at 2018-01-31 23:35:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 213.84 Mbit/s

95th percentile per-packet one-way delay: 64.578 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 106.46 Mbit/s

95th percentile per-packet one-way delay: 63.896 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 107.79 Mbit/s

95th percentile per-packet one-way delay: 65.505 ms

Loss rate: 0.01%

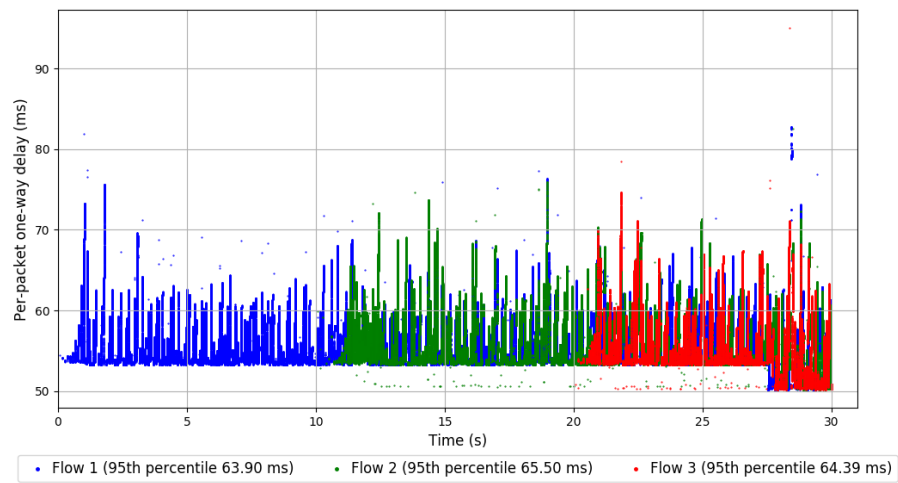
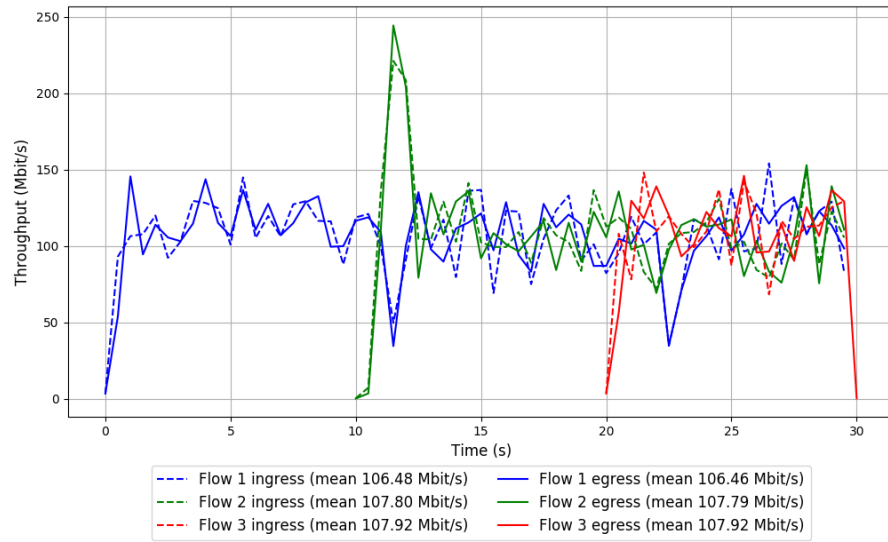
-- Flow 3:

Average throughput: 107.92 Mbit/s

95th percentile per-packet one-way delay: 64.387 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-31 20:30:51

End at: 2018-01-31 20:31:21

Below is generated by plot.py at 2018-01-31 23:35:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 232.78 Mbit/s

95th percentile per-packet one-way delay: 65.527 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 118.23 Mbit/s

95th percentile per-packet one-way delay: 65.292 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 115.02 Mbit/s

95th percentile per-packet one-way delay: 65.783 ms

Loss rate: 0.33%

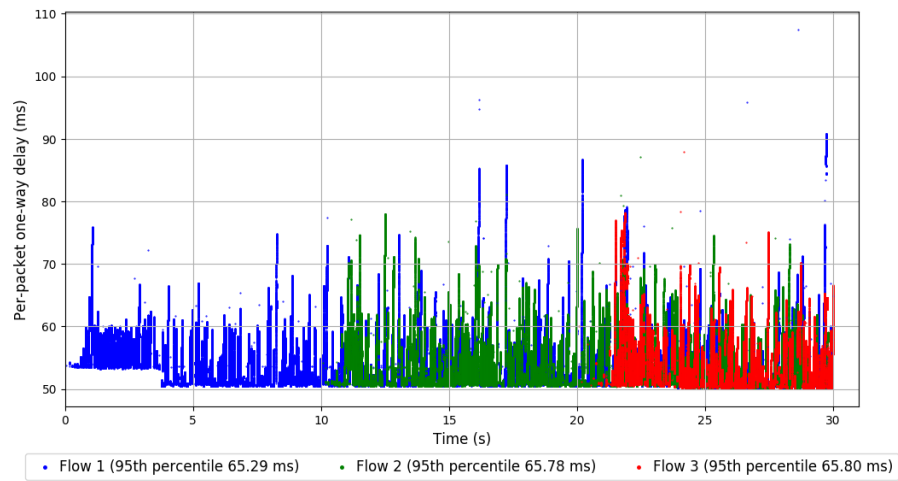
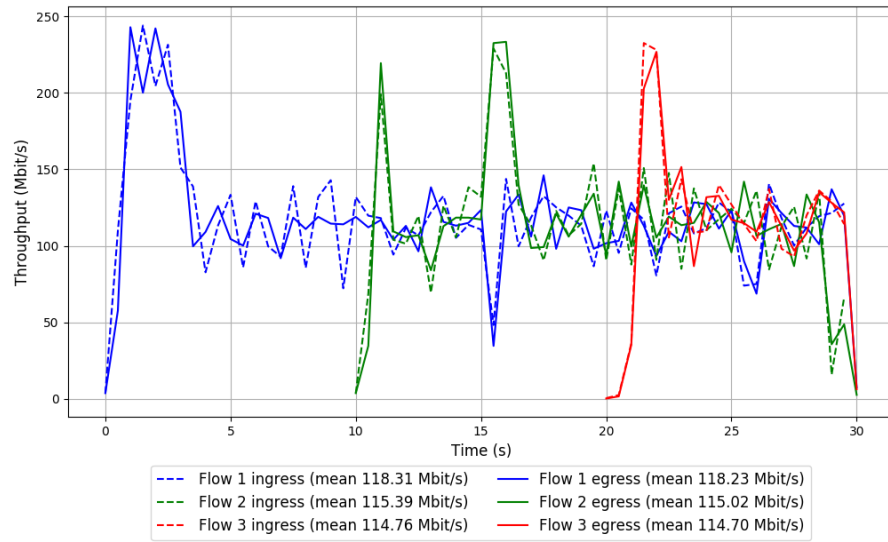
-- Flow 3:

Average throughput: 114.70 Mbit/s

95th percentile per-packet one-way delay: 65.795 ms

Loss rate: 0.01%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-31 20:47:45

End at: 2018-01-31 20:48:15

Below is generated by plot.py at 2018-01-31 23:35:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 209.53 Mbit/s

95th percentile per-packet one-way delay: 65.333 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 103.10 Mbit/s

95th percentile per-packet one-way delay: 65.373 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 110.82 Mbit/s

95th percentile per-packet one-way delay: 65.296 ms

Loss rate: 0.06%

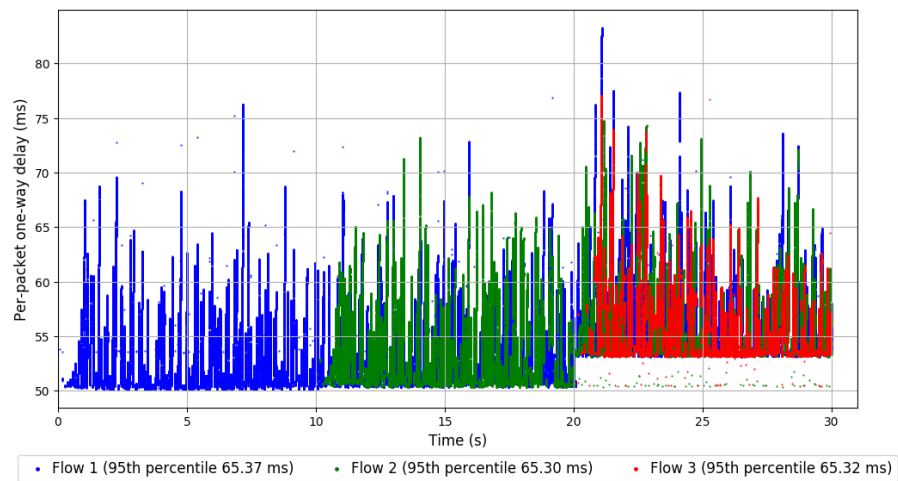
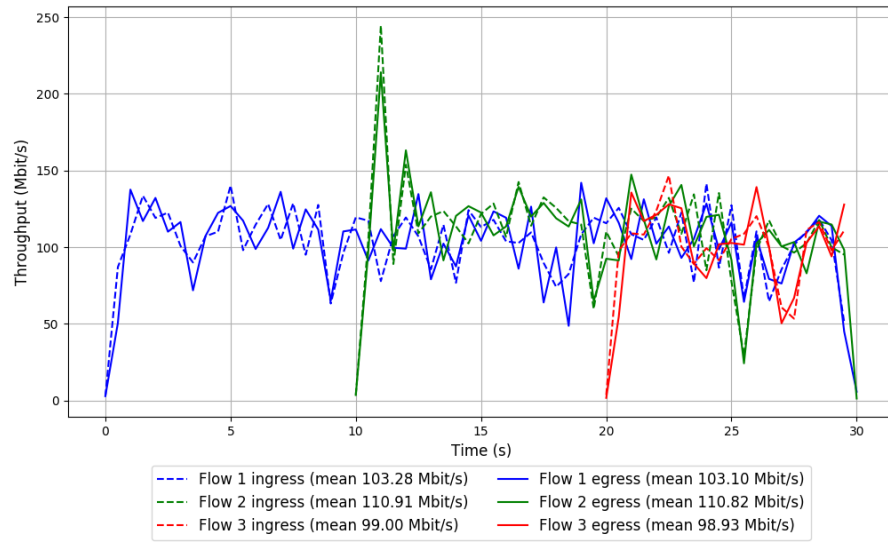
-- Flow 3:

Average throughput: 98.93 Mbit/s

95th percentile per-packet one-way delay: 65.324 ms

Loss rate: 0.01%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-31 21:03:56

End at: 2018-01-31 21:04:26

Below is generated by plot.py at 2018-01-31 23:35:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 217.46 Mbit/s

95th percentile per-packet one-way delay: 67.662 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 109.91 Mbit/s

95th percentile per-packet one-way delay: 65.325 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 107.98 Mbit/s

95th percentile per-packet one-way delay: 67.635 ms

Loss rate: 0.00%

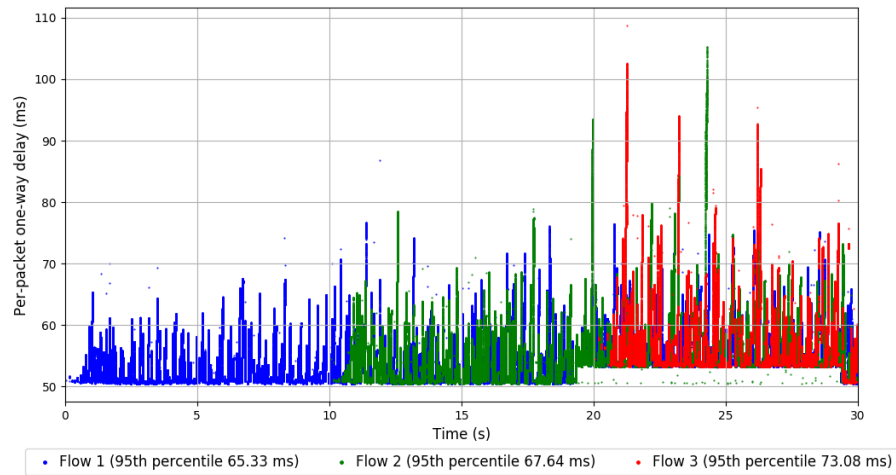
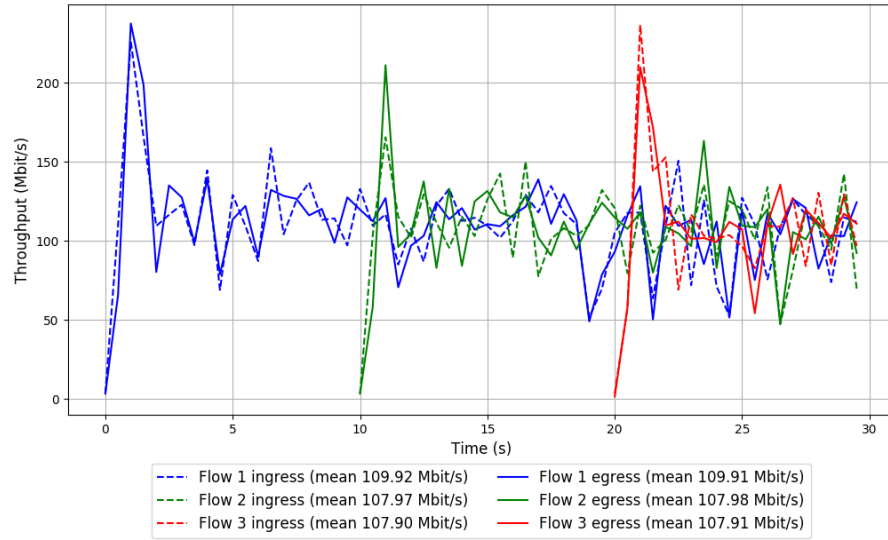
-- Flow 3:

Average throughput: 107.91 Mbit/s

95th percentile per-packet one-way delay: 73.076 ms

Loss rate: 0.01%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-31 21:20:02

End at: 2018-01-31 21:20:32

Below is generated by plot.py at 2018-01-31 23:38:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 214.27 Mbit/s

95th percentile per-packet one-way delay: 66.031 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 108.39 Mbit/s

95th percentile per-packet one-way delay: 65.892 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 106.93 Mbit/s

95th percentile per-packet one-way delay: 65.218 ms

Loss rate: 0.45%

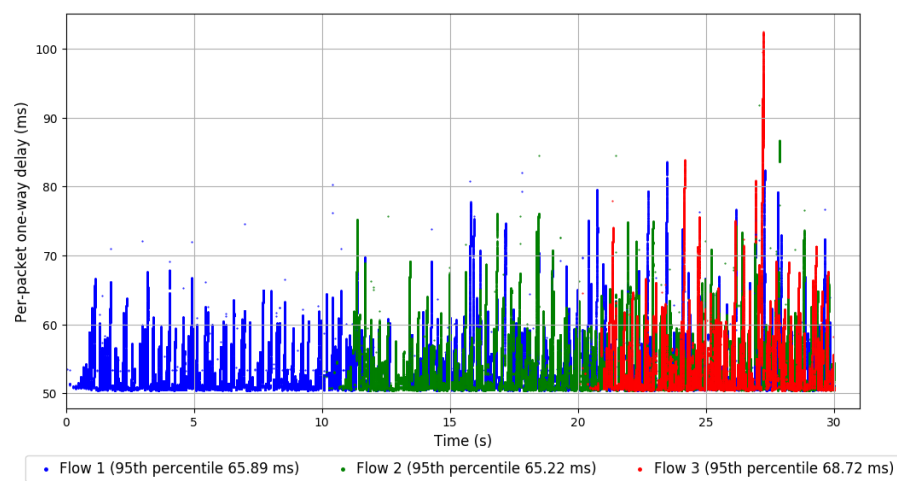
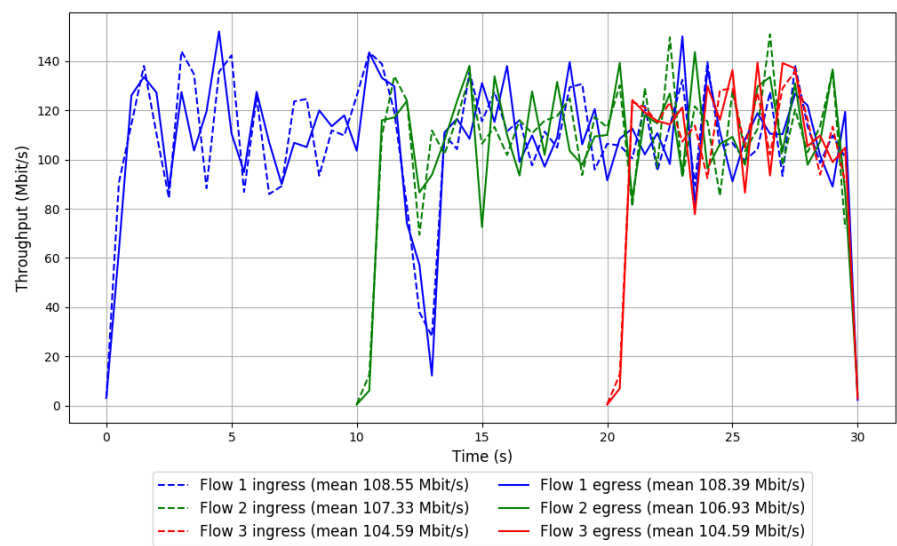
-- Flow 3:

Average throughput: 104.59 Mbit/s

95th percentile per-packet one-way delay: 68.719 ms

Loss rate: 0.01%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-31 21:36:24

End at: 2018-01-31 21:36:54

Below is generated by plot.py at 2018-01-31 23:38:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 215.10 Mbit/s

95th percentile per-packet one-way delay: 63.897 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 111.33 Mbit/s

95th percentile per-packet one-way delay: 63.086 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 101.89 Mbit/s

95th percentile per-packet one-way delay: 64.732 ms

Loss rate: 0.02%

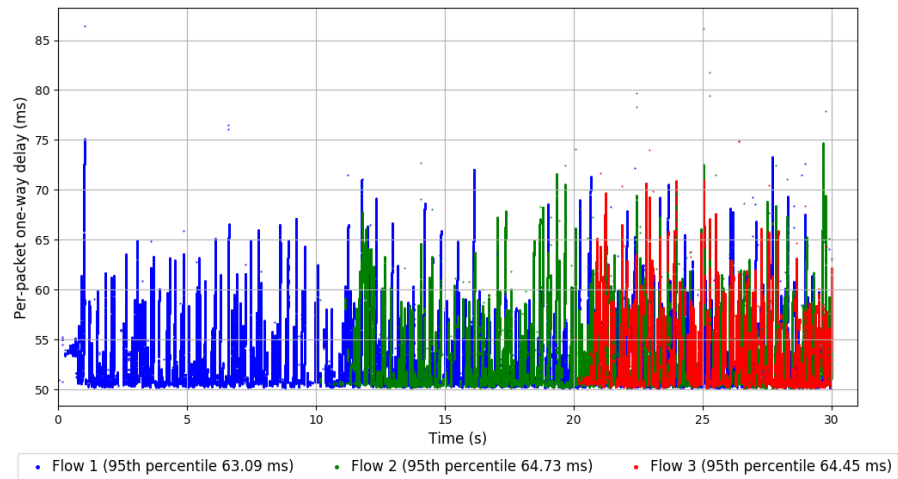
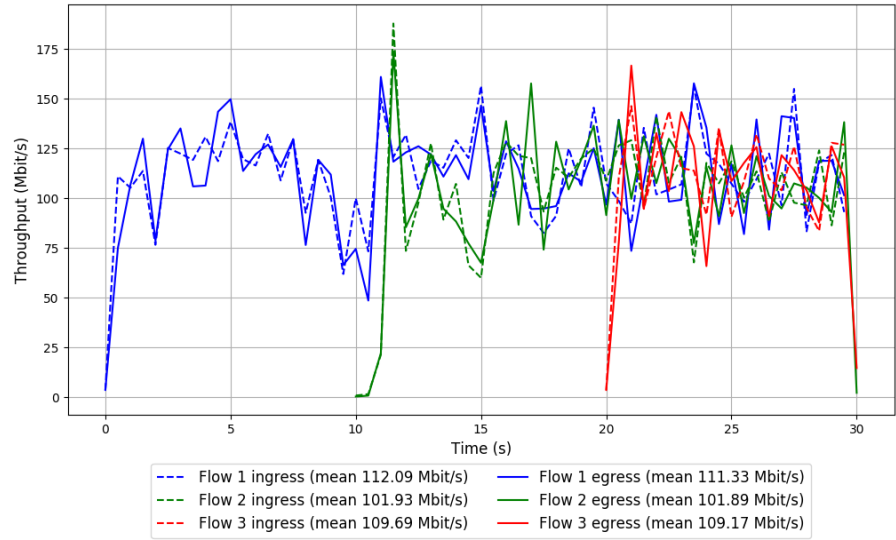
-- Flow 3:

Average throughput: 109.17 Mbit/s

95th percentile per-packet one-way delay: 64.452 ms

Loss rate: 0.47%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-31 18:58:21

End at: 2018-01-31 18:58:51

Below is generated by plot.py at 2018-01-31 23:38:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 200.53 Mbit/s

95th percentile per-packet one-way delay: 54.666 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 145.55 Mbit/s

95th percentile per-packet one-way delay: 54.564 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 18.27 Mbit/s

95th percentile per-packet one-way delay: 52.267 ms

Loss rate: 0.01%

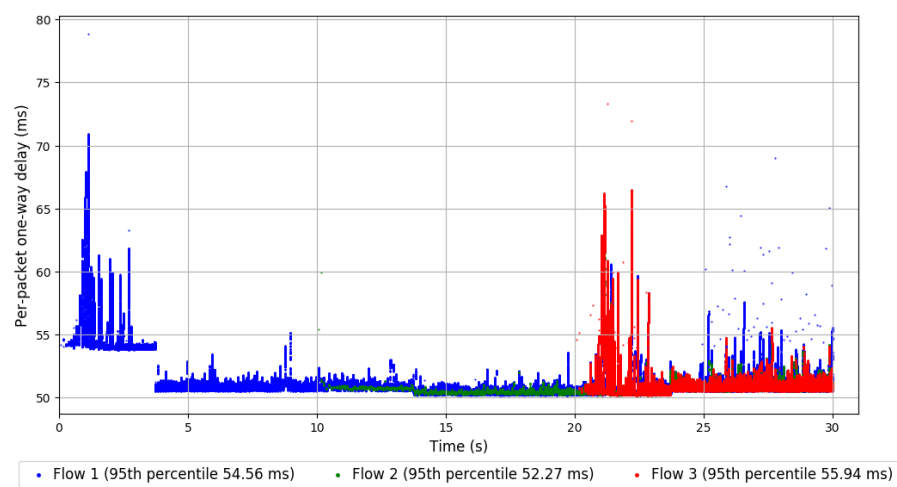
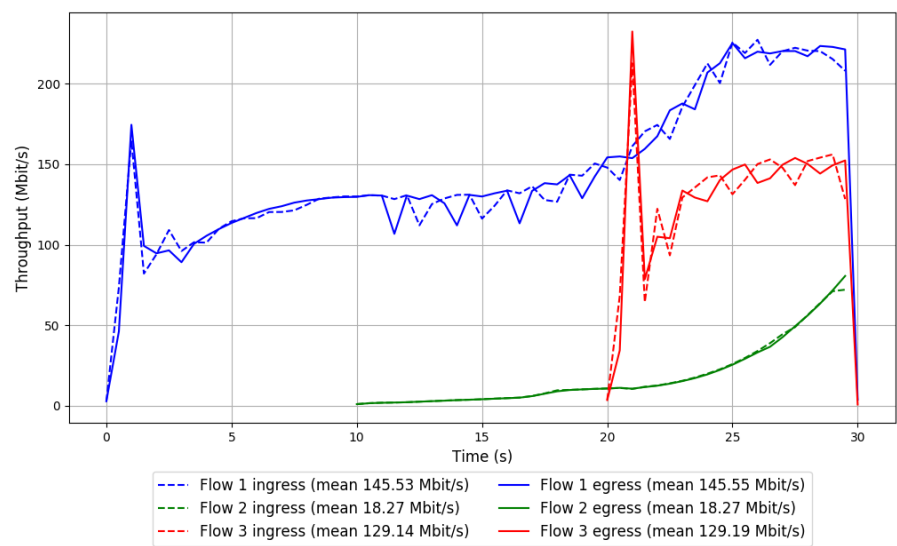
-- Flow 3:

Average throughput: 129.19 Mbit/s

95th percentile per-packet one-way delay: 55.939 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-31 19:15:10

End at: 2018-01-31 19:15:40

Below is generated by plot.py at 2018-01-31 23:38:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 253.47 Mbit/s

95th percentile per-packet one-way delay: 60.249 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 112.75 Mbit/s

95th percentile per-packet one-way delay: 57.941 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 105.62 Mbit/s

95th percentile per-packet one-way delay: 59.388 ms

Loss rate: 0.00%

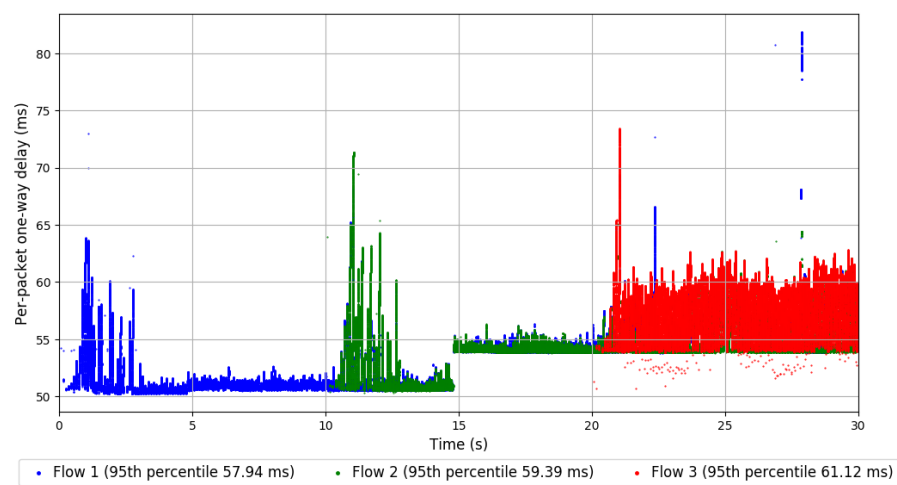
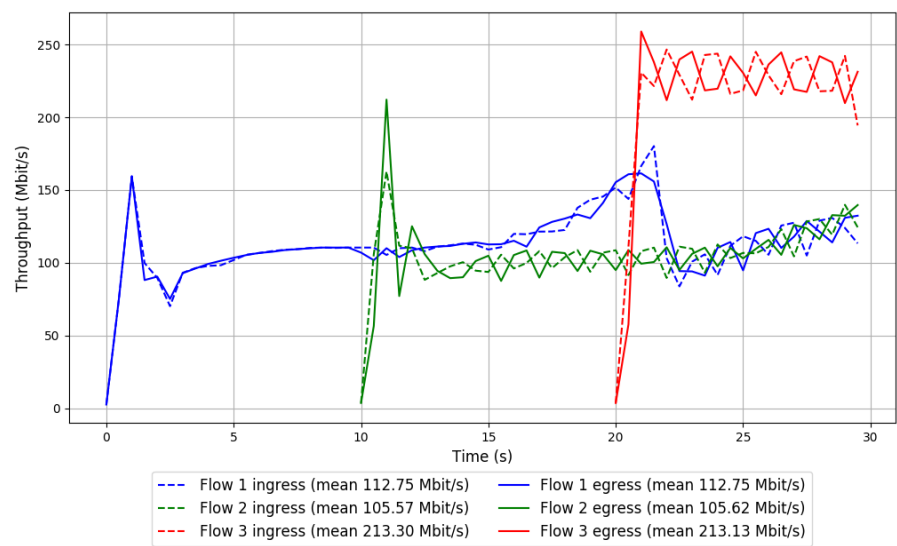
-- Flow 3:

Average throughput: 213.13 Mbit/s

95th percentile per-packet one-way delay: 61.125 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-31 19:31:53

End at: 2018-01-31 19:32:23

Below is generated by plot.py at 2018-01-31 23:38:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.64 Mbit/s

95th percentile per-packet one-way delay: 53.243 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 30.69 Mbit/s

95th percentile per-packet one-way delay: 51.900 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 71.56 Mbit/s

95th percentile per-packet one-way delay: 53.307 ms

Loss rate: 0.13%

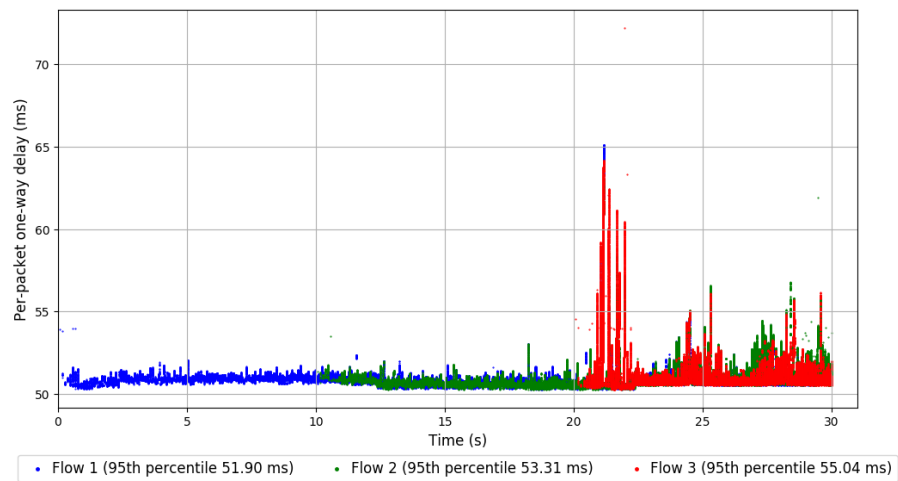
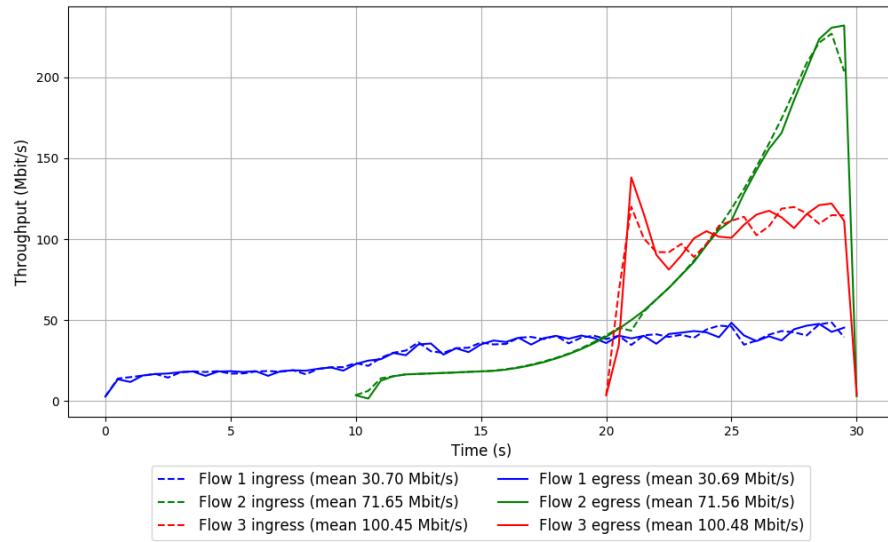
-- Flow 3:

Average throughput: 100.48 Mbit/s

95th percentile per-packet one-way delay: 55.039 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-31 19:48:35

End at: 2018-01-31 19:49:05

Below is generated by plot.py at 2018-01-31 23:39:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 240.77 Mbit/s

95th percentile per-packet one-way delay: 60.365 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 120.74 Mbit/s

95th percentile per-packet one-way delay: 55.768 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 128.48 Mbit/s

95th percentile per-packet one-way delay: 64.107 ms

Loss rate: 0.00%

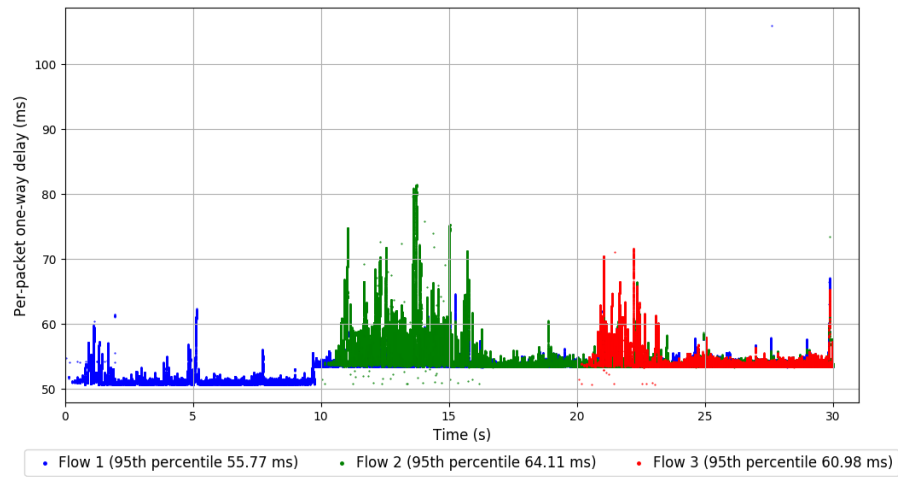
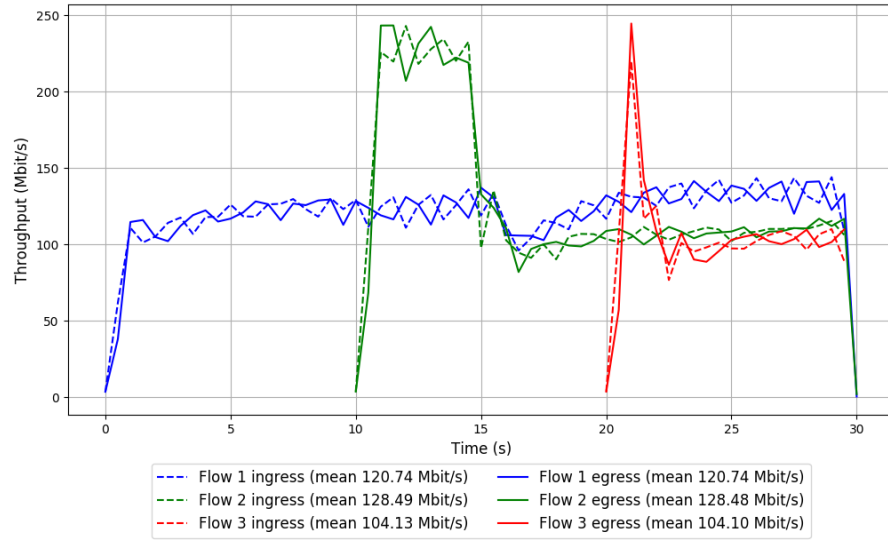
-- Flow 3:

Average throughput: 104.10 Mbit/s

95th percentile per-packet one-way delay: 60.985 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-31 20:05:33

End at: 2018-01-31 20:06:03

Below is generated by plot.py at 2018-01-31 23:39:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 236.77 Mbit/s

95th percentile per-packet one-way delay: 55.204 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 127.70 Mbit/s

95th percentile per-packet one-way delay: 56.297 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 111.35 Mbit/s

95th percentile per-packet one-way delay: 52.928 ms

Loss rate: 0.00%

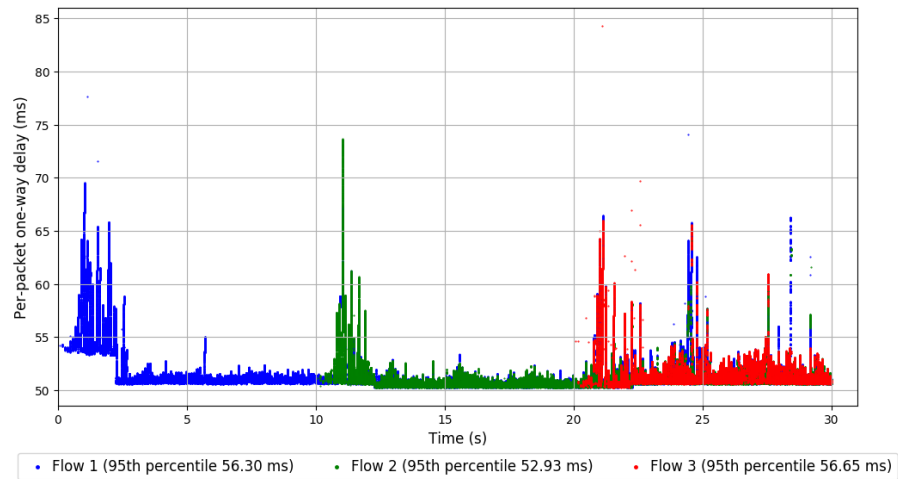
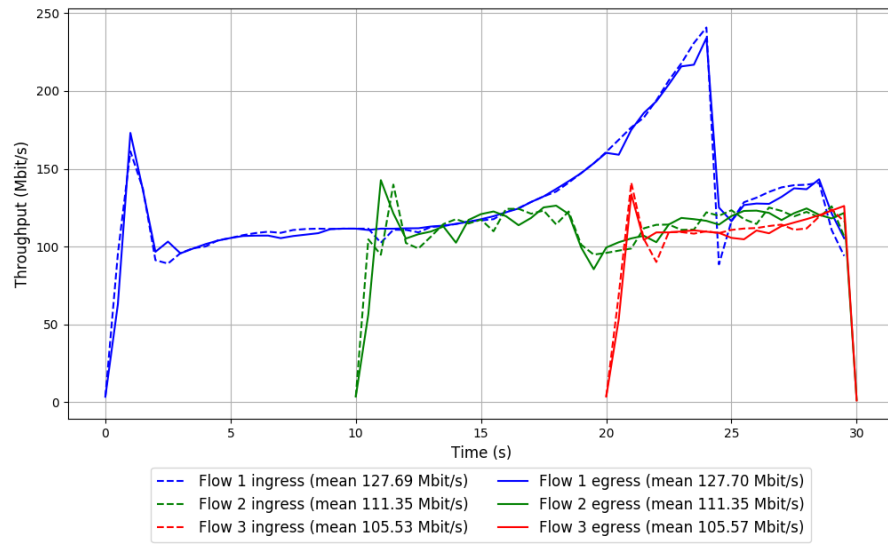
-- Flow 3:

Average throughput: 105.57 Mbit/s

95th percentile per-packet one-way delay: 56.645 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-31 20:21:59

End at: 2018-01-31 20:22:29

Below is generated by plot.py at 2018-01-31 23:39:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 196.28 Mbit/s

95th percentile per-packet one-way delay: 54.718 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 131.25 Mbit/s

95th percentile per-packet one-way delay: 54.481 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 95.03 Mbit/s

95th percentile per-packet one-way delay: 55.054 ms

Loss rate: 0.00%

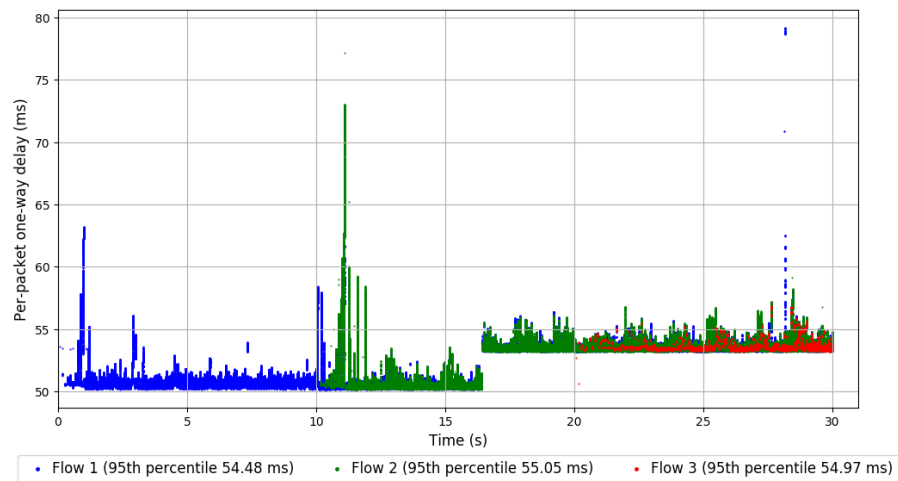
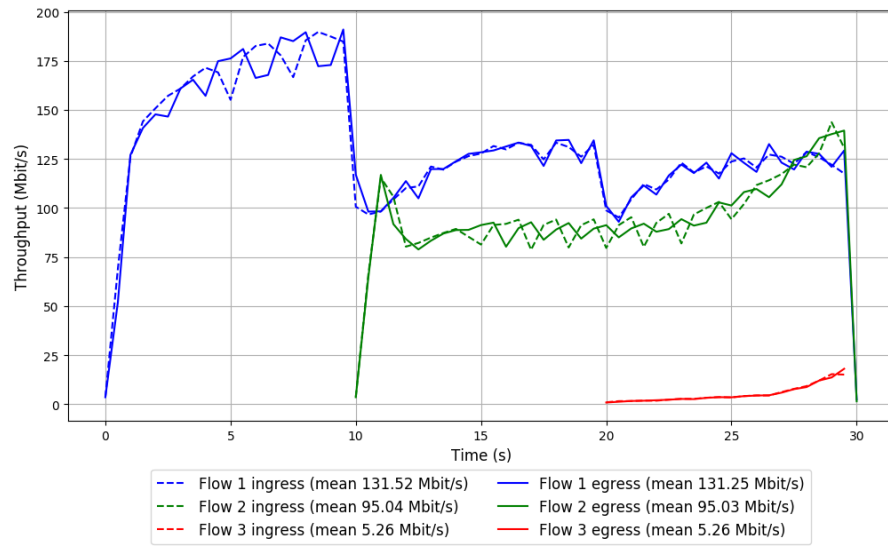
-- Flow 3:

Average throughput: 5.26 Mbit/s

95th percentile per-packet one-way delay: 54.970 ms

Loss rate: 0.14%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-31 20:38:34

End at: 2018-01-31 20:39:04

Below is generated by plot.py at 2018-01-31 23:41:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 279.59 Mbit/s

95th percentile per-packet one-way delay: 60.836 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 101.55 Mbit/s

95th percentile per-packet one-way delay: 59.348 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 219.01 Mbit/s

95th percentile per-packet one-way delay: 61.399 ms

Loss rate: 0.00%

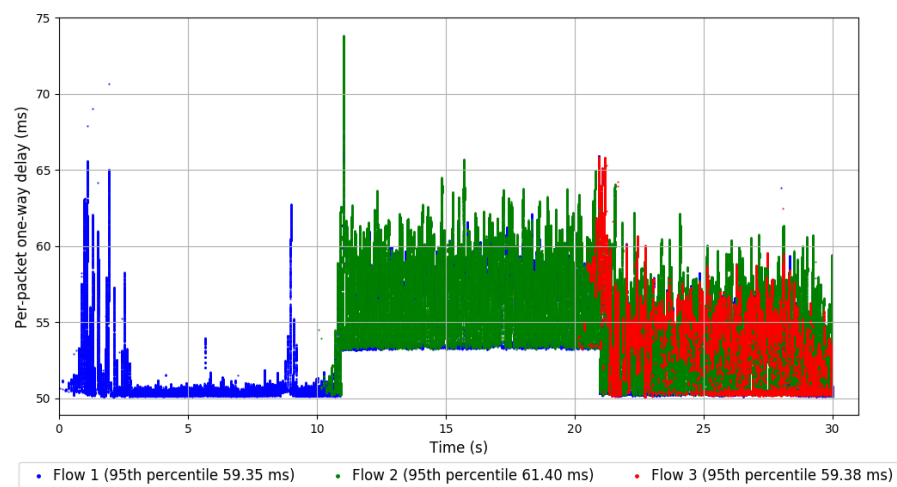
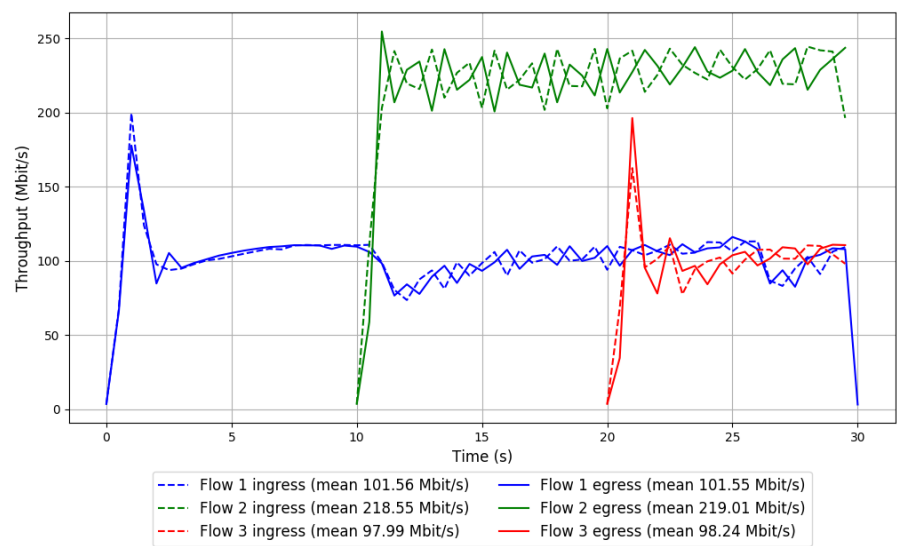
-- Flow 3:

Average throughput: 98.24 Mbit/s

95th percentile per-packet one-way delay: 59.376 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-31 20:55:21

End at: 2018-01-31 20:55:51

Below is generated by plot.py at 2018-01-31 23:41:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 249.76 Mbit/s

95th percentile per-packet one-way delay: 59.255 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 136.00 Mbit/s

95th percentile per-packet one-way delay: 59.987 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 116.38 Mbit/s

95th percentile per-packet one-way delay: 57.175 ms

Loss rate: 0.00%

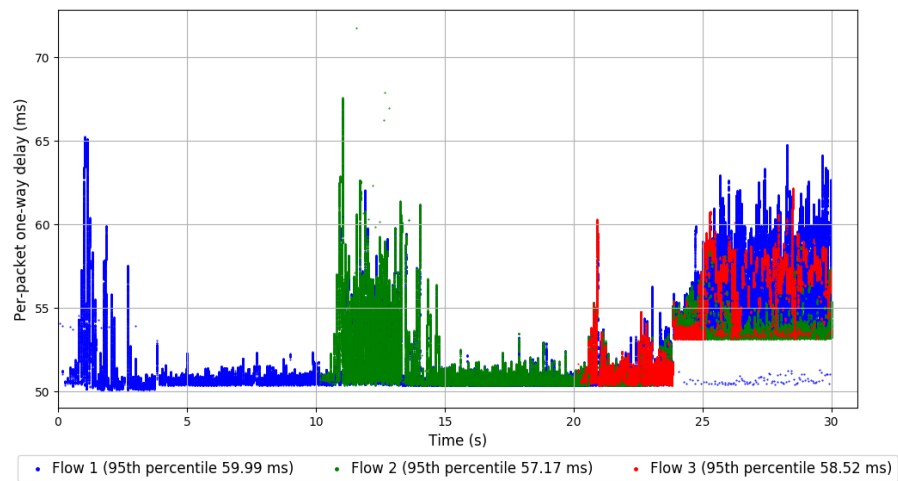
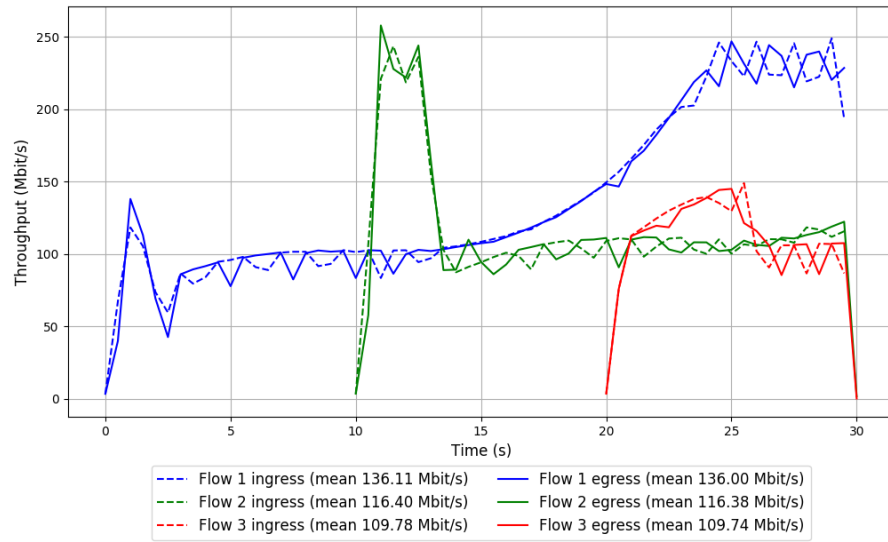
-- Flow 3:

Average throughput: 109.74 Mbit/s

95th percentile per-packet one-way delay: 58.525 ms

Loss rate: 0.01%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-31 21:11:13

End at: 2018-01-31 21:11:43

Below is generated by plot.py at 2018-01-31 23:41:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.40 Mbit/s

95th percentile per-packet one-way delay: 54.943 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 137.47 Mbit/s

95th percentile per-packet one-way delay: 54.265 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 21.25 Mbit/s

95th percentile per-packet one-way delay: 53.596 ms

Loss rate: 0.01%

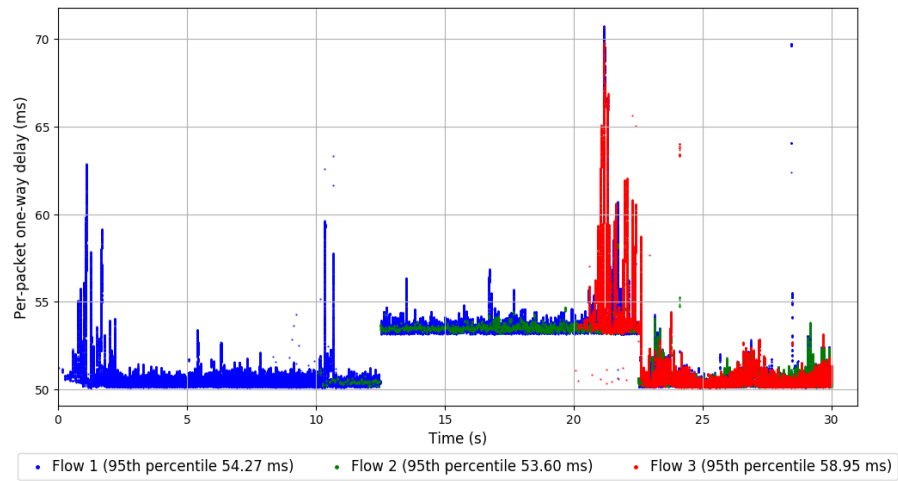
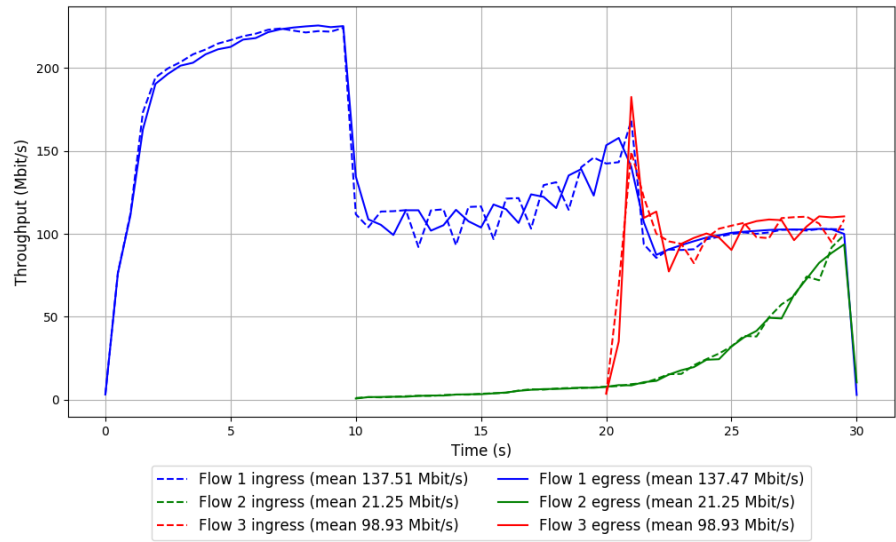
-- Flow 3:

Average throughput: 98.93 Mbit/s

95th percentile per-packet one-way delay: 58.948 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-31 21:27:23

End at: 2018-01-31 21:27:53

Below is generated by plot.py at 2018-01-31 23:41:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 200.89 Mbit/s

95th percentile per-packet one-way delay: 56.763 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 120.28 Mbit/s

95th percentile per-packet one-way delay: 58.449 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 118.54 Mbit/s

95th percentile per-packet one-way delay: 54.704 ms

Loss rate: 0.02%

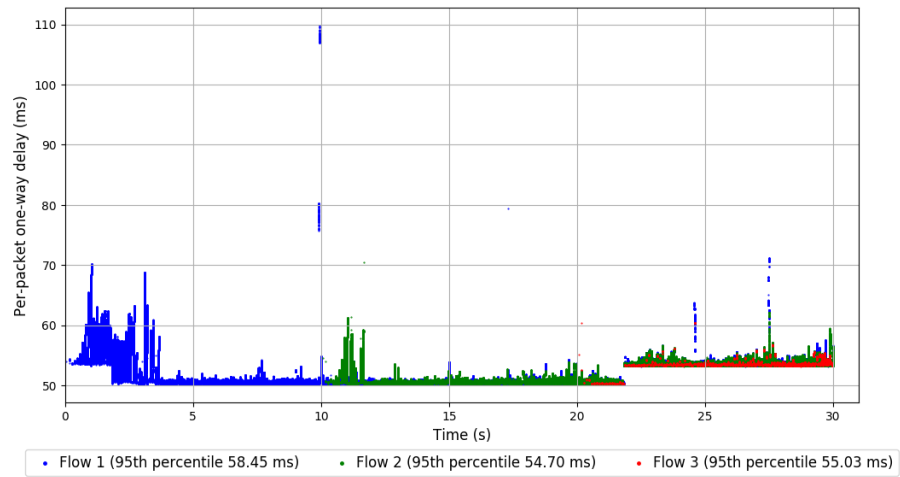
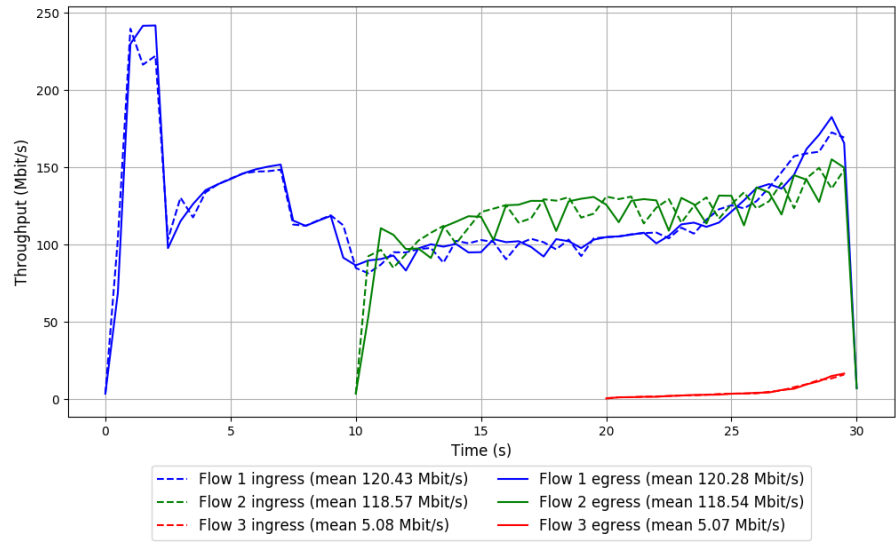
-- Flow 3:

Average throughput: 5.07 Mbit/s

95th percentile per-packet one-way delay: 55.026 ms

Loss rate: 0.19%

Run 10: Report of TCP Cubic — Data Link

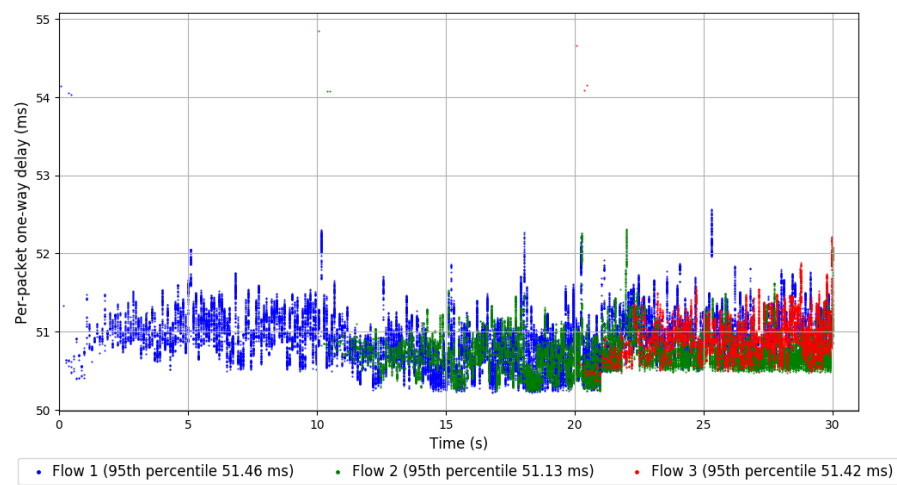
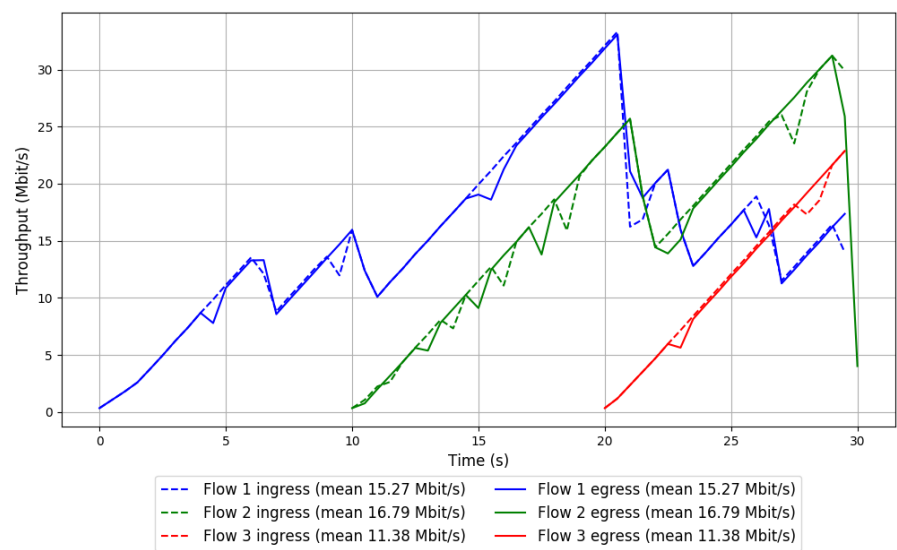


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-31 19:09:24
End at: 2018-01-31 19:09:54

# Below is generated by plot.py at 2018-01-31 23:41:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.16 Mbit/s
95th percentile per-packet one-way delay: 51.384 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 15.27 Mbit/s
95th percentile per-packet one-way delay: 51.462 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 16.79 Mbit/s
95th percentile per-packet one-way delay: 51.134 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 11.38 Mbit/s
95th percentile per-packet one-way delay: 51.421 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

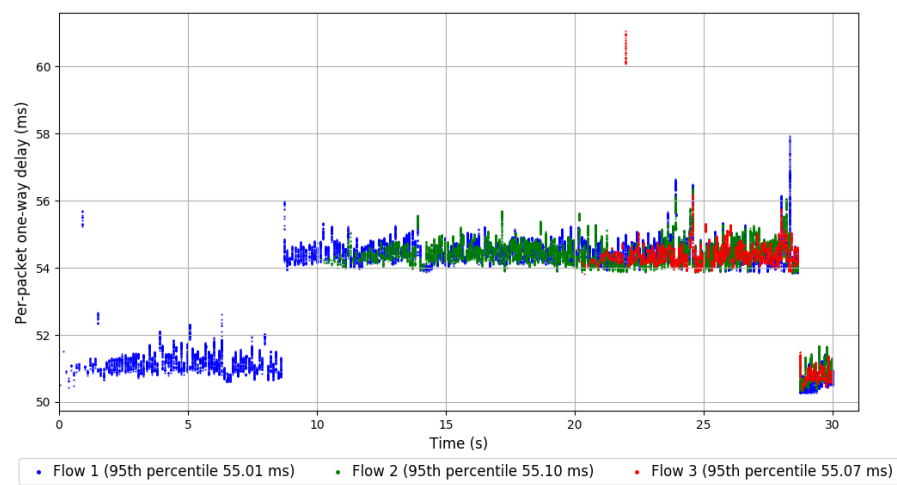
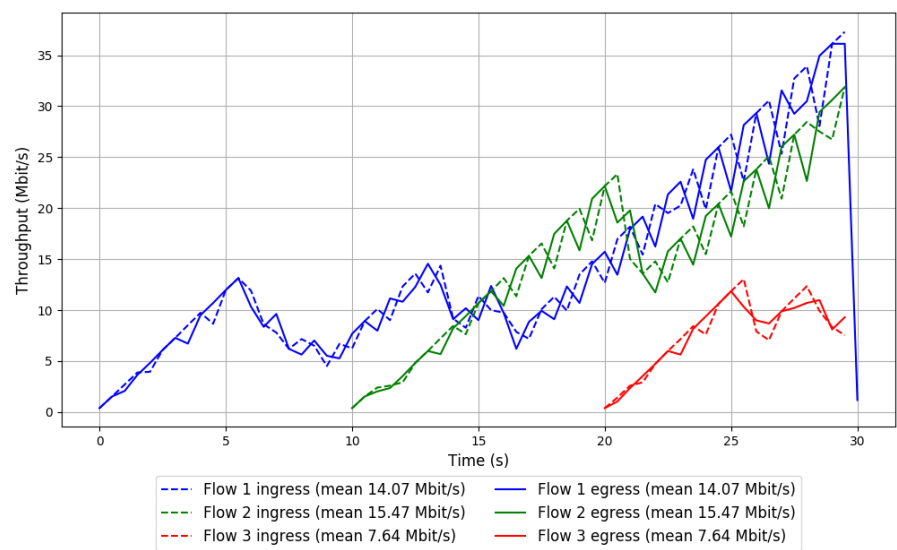


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-31 19:26:06
End at: 2018-01-31 19:26:36

# Below is generated by plot.py at 2018-01-31 23:41:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 26.88 Mbit/s
95th percentile per-packet one-way delay: 55.045 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 14.07 Mbit/s
95th percentile per-packet one-way delay: 55.006 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.47 Mbit/s
95th percentile per-packet one-way delay: 55.097 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.64 Mbit/s
95th percentile per-packet one-way delay: 55.072 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-31 19:42:48

End at: 2018-01-31 19:43:18

Below is generated by plot.py at 2018-01-31 23:41:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.85 Mbit/s

95th percentile per-packet one-way delay: 55.153 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 9.79 Mbit/s

95th percentile per-packet one-way delay: 55.179 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 11.32 Mbit/s

95th percentile per-packet one-way delay: 55.163 ms

Loss rate: 0.05%

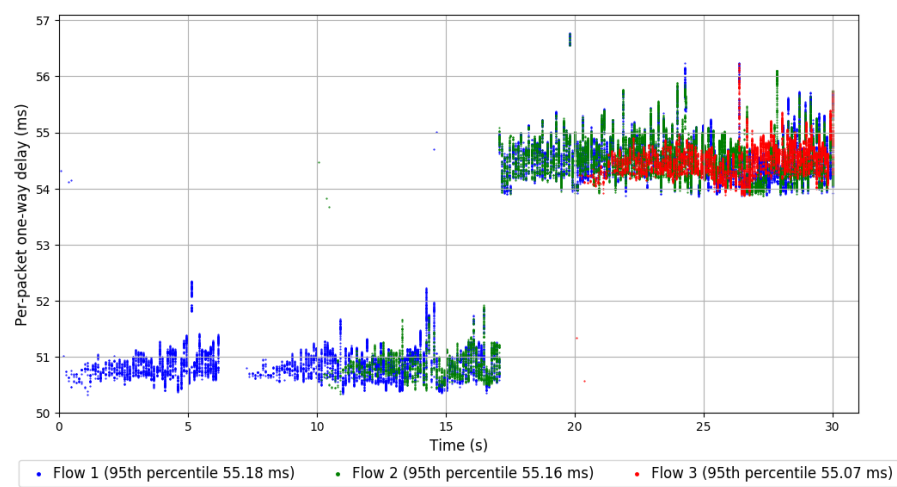
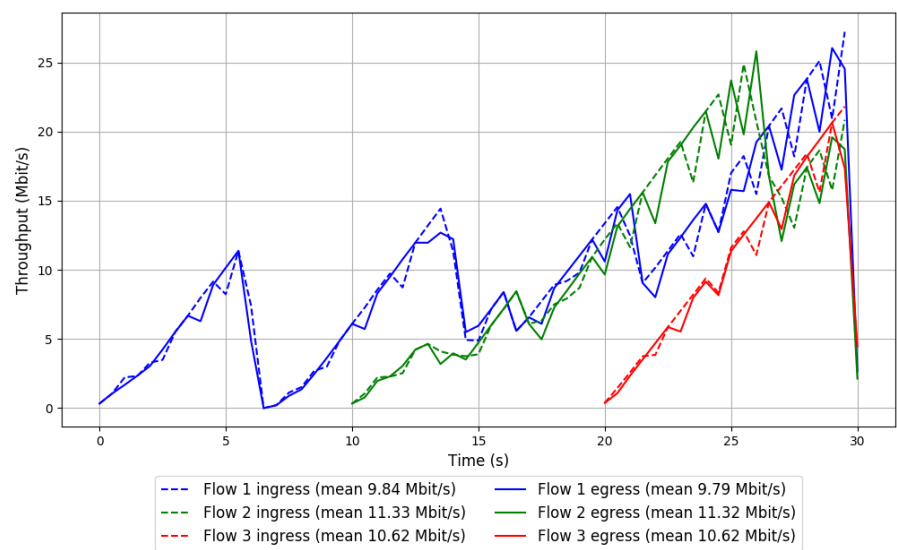
-- Flow 3:

Average throughput: 10.62 Mbit/s

95th percentile per-packet one-way delay: 55.073 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-31 19:59:21

End at: 2018-01-31 19:59:51

Below is generated by plot.py at 2018-01-31 23:41:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.85 Mbit/s

95th percentile per-packet one-way delay: 51.769 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 7.73 Mbit/s

95th percentile per-packet one-way delay: 51.864 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 9.19 Mbit/s

95th percentile per-packet one-way delay: 51.739 ms

Loss rate: 0.02%

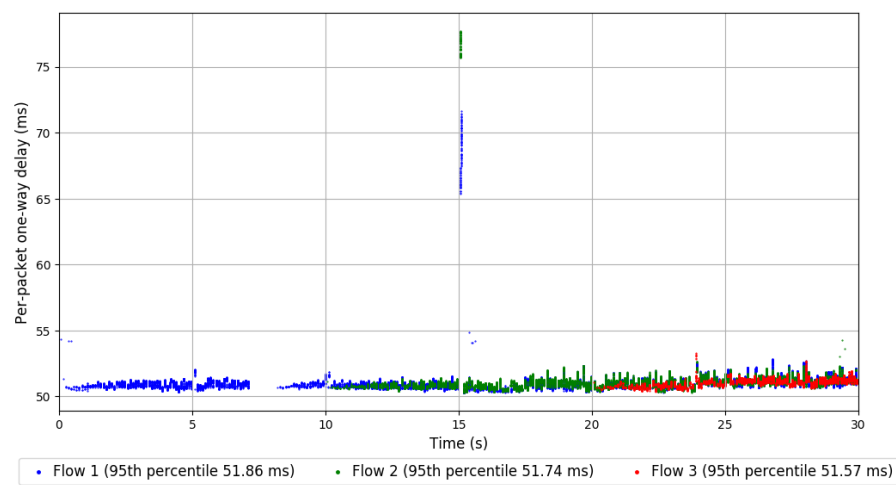
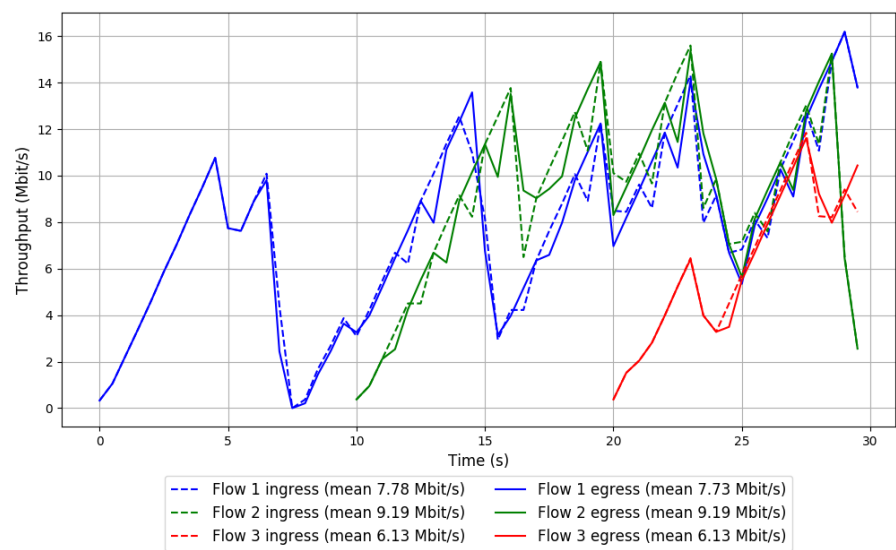
-- Flow 3:

Average throughput: 6.13 Mbit/s

95th percentile per-packet one-way delay: 51.569 ms

Loss rate: 0.04%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-31 20:16:37

End at: 2018-01-31 20:17:07

Below is generated by plot.py at 2018-01-31 23:41:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.46 Mbit/s

95th percentile per-packet one-way delay: 51.554 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 11.03 Mbit/s

95th percentile per-packet one-way delay: 51.639 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 9.96 Mbit/s

95th percentile per-packet one-way delay: 51.348 ms

Loss rate: 0.04%

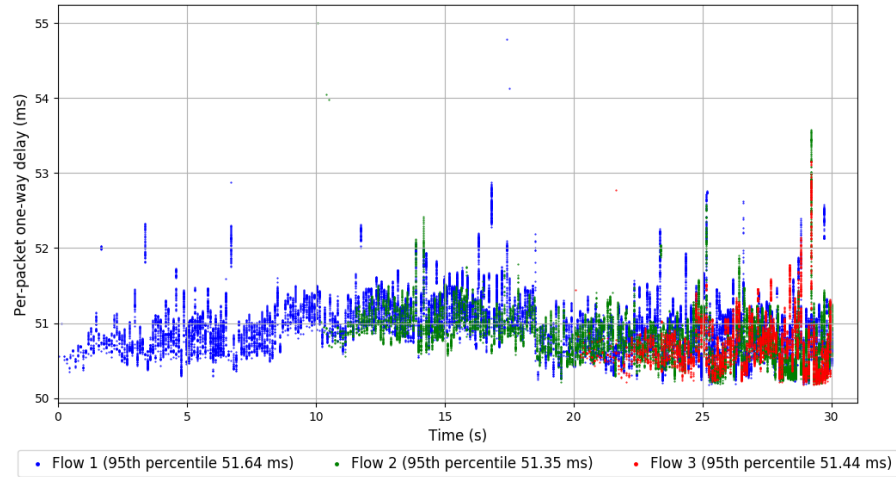
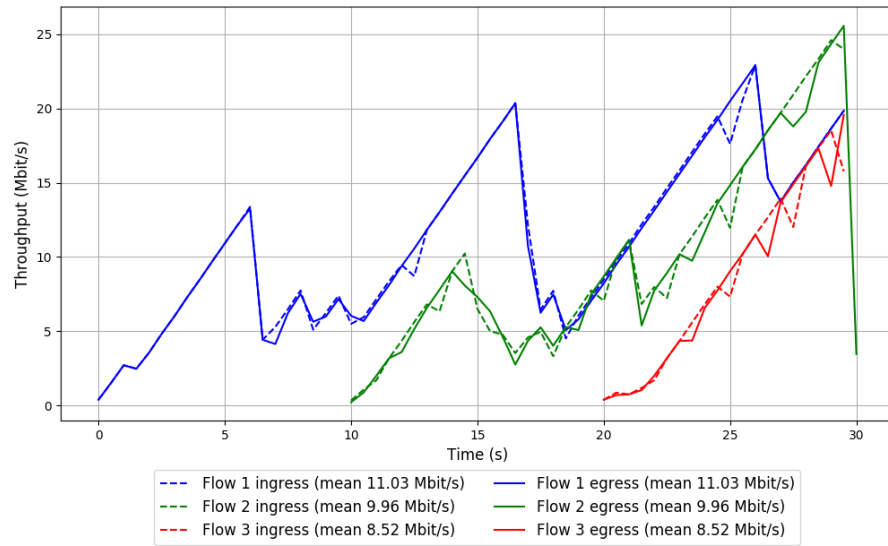
-- Flow 3:

Average throughput: 8.52 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link

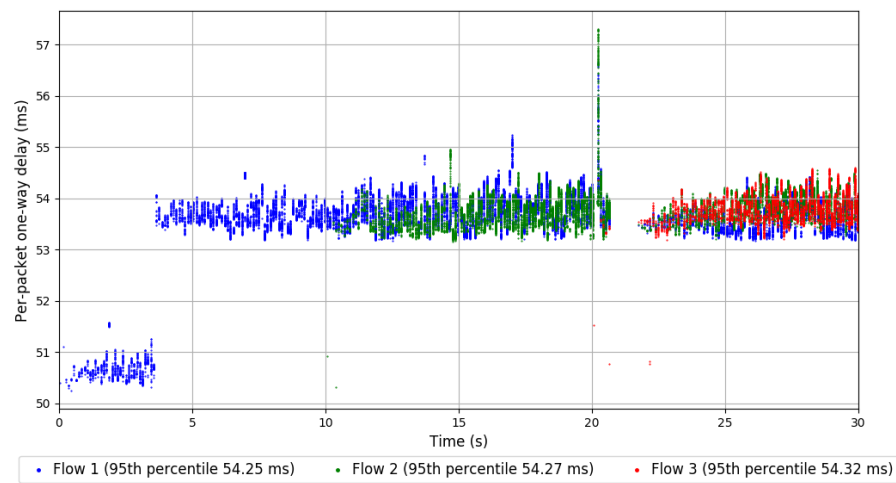
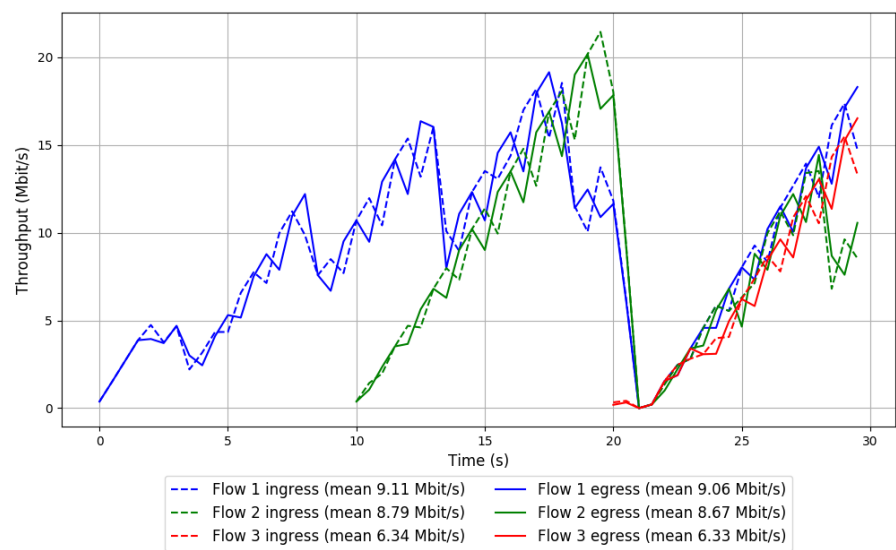


```
Run 6: Statistics of LEDBAT

Start at: 2018-01-31 20:32:52
End at: 2018-01-31 20:33:22

# Below is generated by plot.py at 2018-01-31 23:41:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.91 Mbit/s
95th percentile per-packet one-way delay: 54.270 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 9.06 Mbit/s
95th percentile per-packet one-way delay: 54.251 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 8.67 Mbit/s
95th percentile per-packet one-way delay: 54.272 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 6.33 Mbit/s
95th percentile per-packet one-way delay: 54.319 ms
Loss rate: 0.19%
```

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-31 20:49:45

End at: 2018-01-31 20:50:15

Below is generated by plot.py at 2018-01-31 23:41:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 25.35 Mbit/s

95th percentile per-packet one-way delay: 54.505 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 18.90 Mbit/s

95th percentile per-packet one-way delay: 54.576 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 7.34 Mbit/s

95th percentile per-packet one-way delay: 54.316 ms

Loss rate: 0.94%

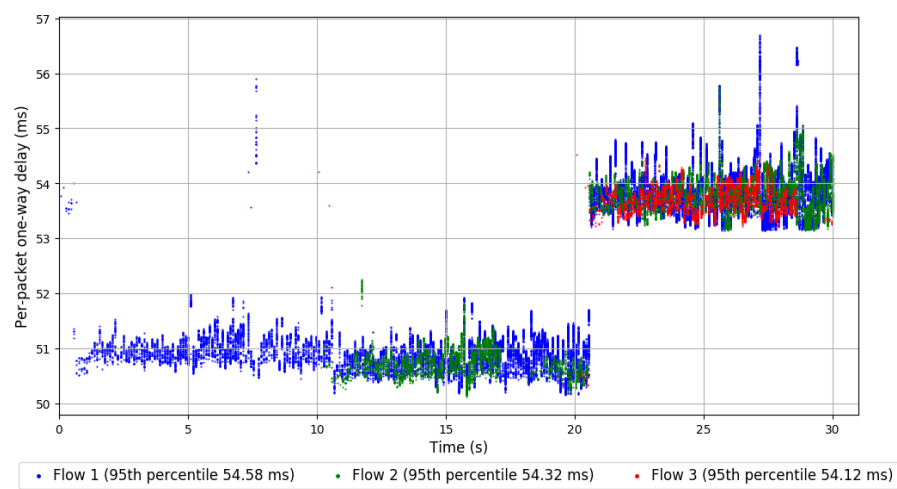
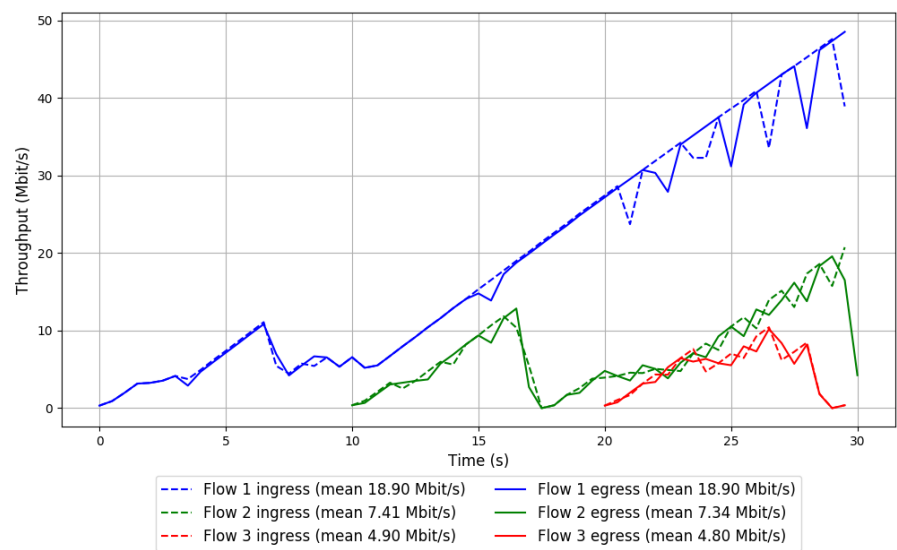
-- Flow 3:

Average throughput: 4.80 Mbit/s

95th percentile per-packet one-way delay: 54.122 ms

Loss rate: 1.91%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-31 21:05:55

End at: 2018-01-31 21:06:25

Below is generated by plot.py at 2018-01-31 23:41:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.97 Mbit/s

95th percentile per-packet one-way delay: 54.096 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 54.128 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 12.74 Mbit/s

95th percentile per-packet one-way delay: 54.117 ms

Loss rate: 0.00%

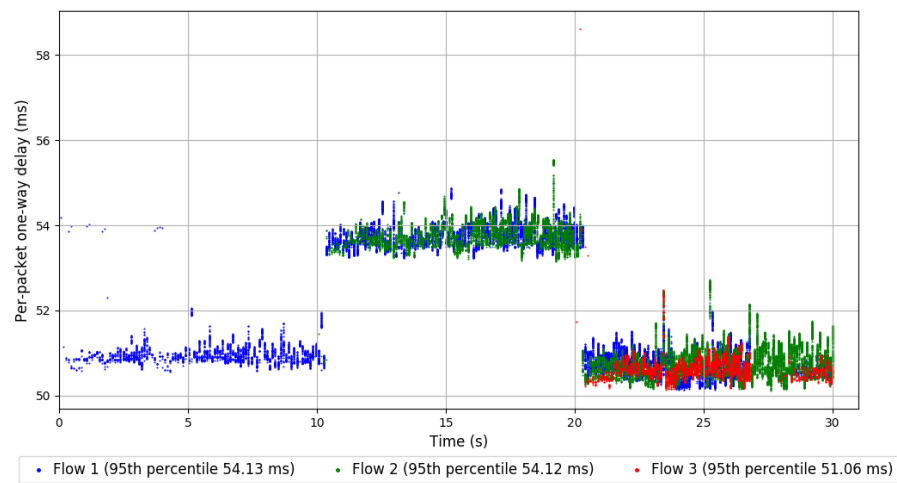
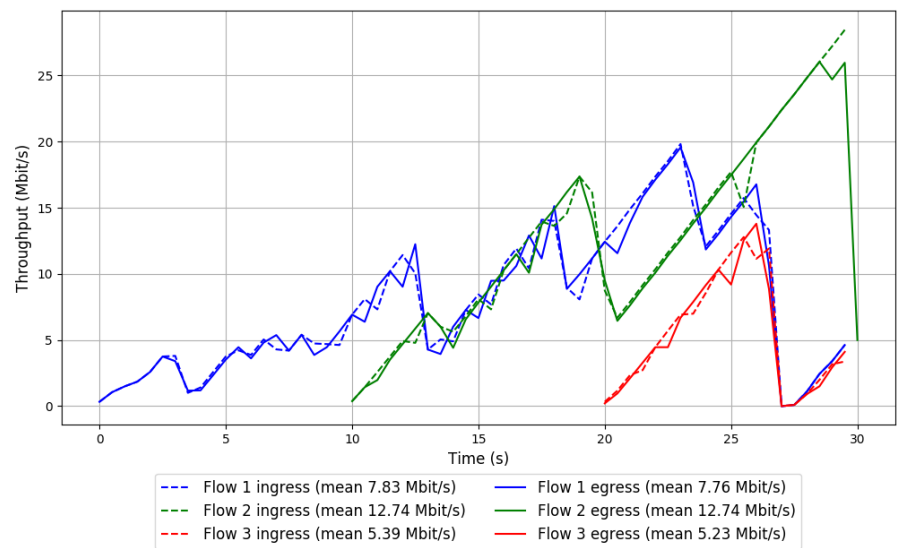
-- Flow 3:

Average throughput: 5.23 Mbit/s

95th percentile per-packet one-way delay: 51.065 ms

Loss rate: 2.86%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-31 21:22:00

End at: 2018-01-31 21:22:30

Below is generated by plot.py at 2018-01-31 23:41:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 26.95 Mbit/s

95th percentile per-packet one-way delay: 53.898 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 11.10 Mbit/s

95th percentile per-packet one-way delay: 54.052 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 21.76 Mbit/s

95th percentile per-packet one-way delay: 53.575 ms

Loss rate: 0.00%

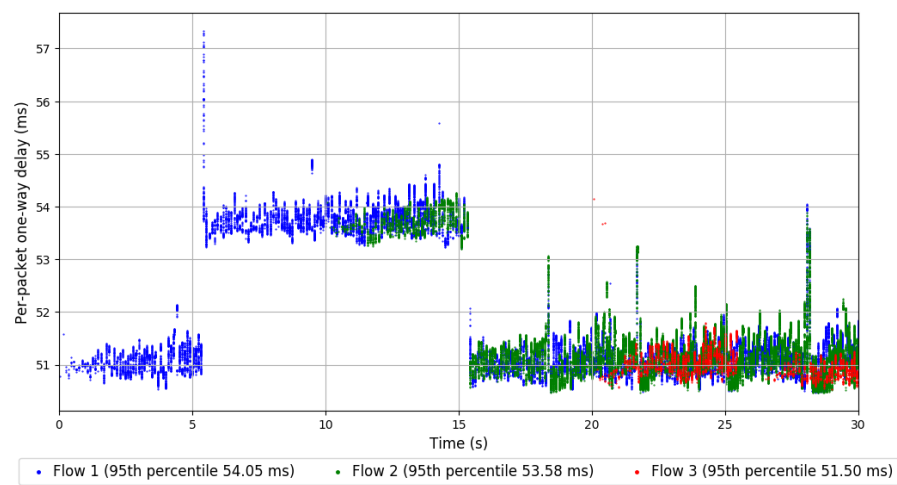
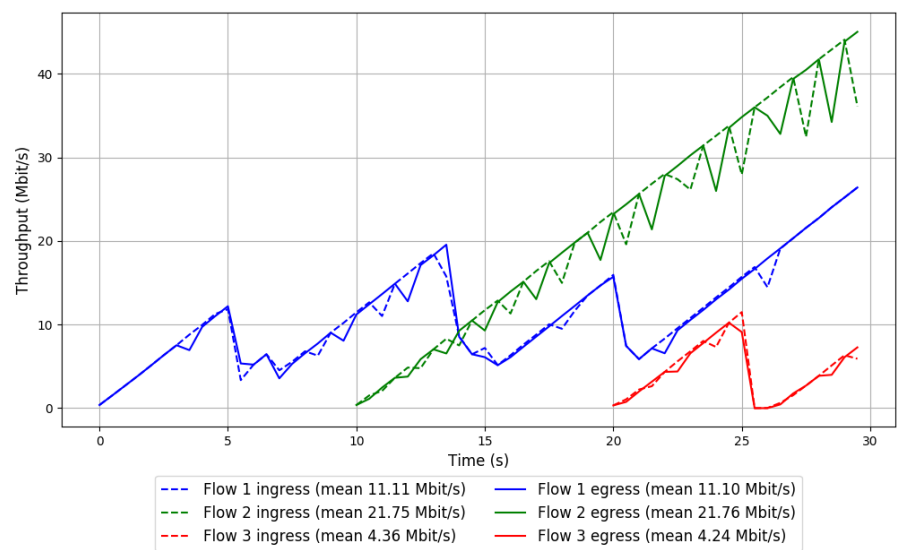
-- Flow 3:

Average throughput: 4.24 Mbit/s

95th percentile per-packet one-way delay: 51.502 ms

Loss rate: 2.78%

Run 9: Report of LEDBAT — Data Link

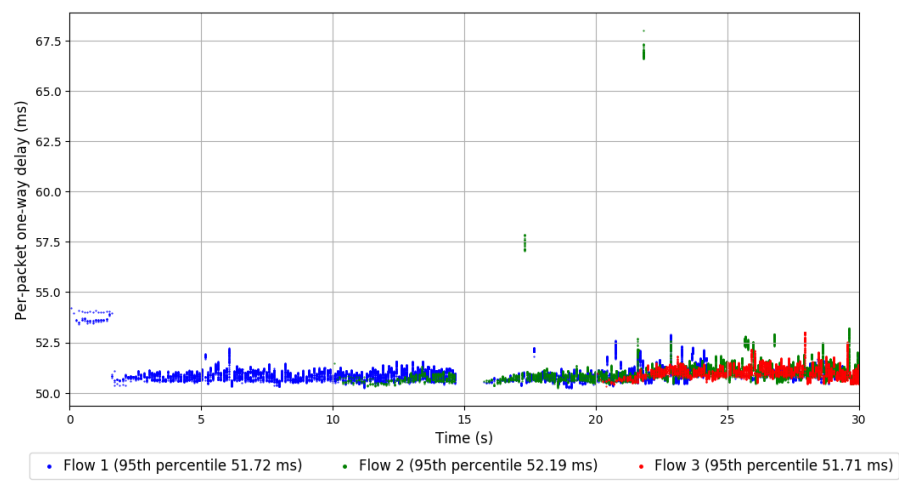
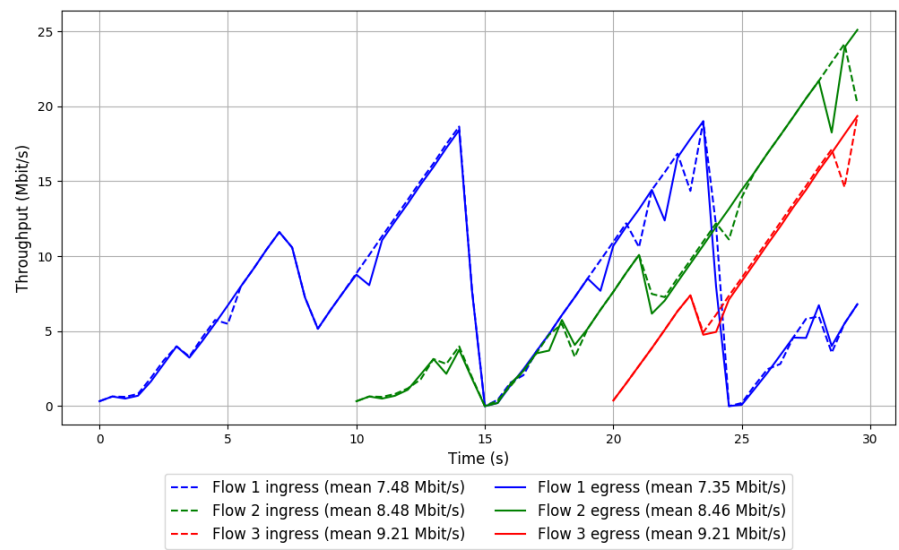


```
Run 10: Statistics of LEDBAT

Start at: 2018-01-31 21:38:24
End at: 2018-01-31 21:38:54

# Below is generated by plot.py at 2018-01-31 23:41:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.01 Mbit/s
95th percentile per-packet one-way delay: 51.824 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 7.35 Mbit/s
95th percentile per-packet one-way delay: 51.716 ms
Loss rate: 1.80%
-- Flow 2:
Average throughput: 8.46 Mbit/s
95th percentile per-packet one-way delay: 52.194 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 9.21 Mbit/s
95th percentile per-packet one-way delay: 51.707 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

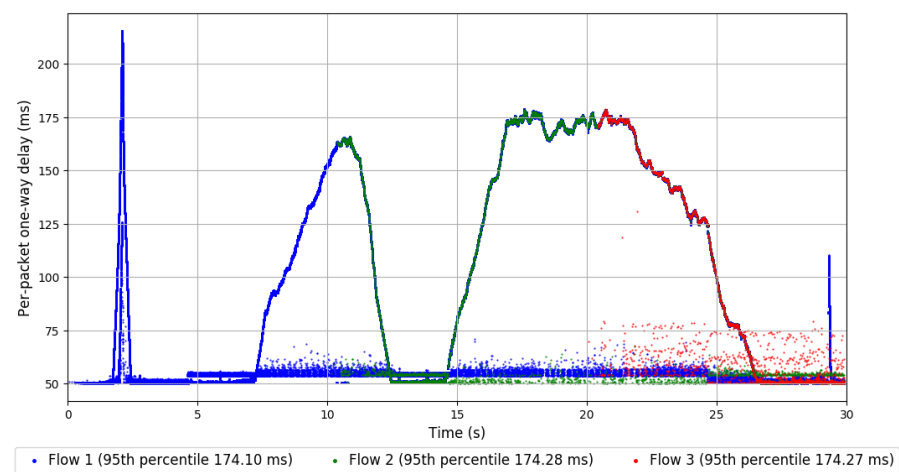
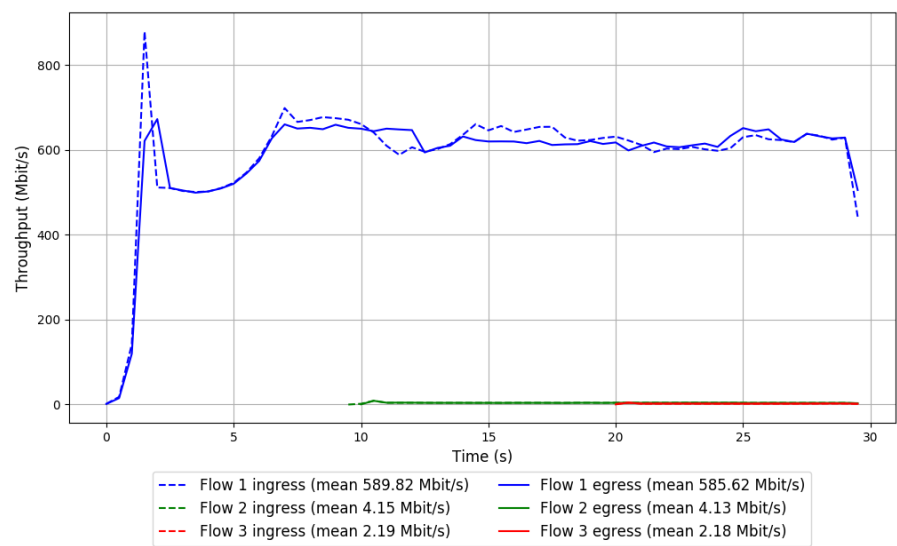


```
Run 1: Statistics of PCC

Start at: 2018-01-31 19:00:10
End at: 2018-01-31 19:00:40

# Below is generated by plot.py at 2018-01-31 23:48:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 589.08 Mbit/s
95th percentile per-packet one-way delay: 174.103 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 585.62 Mbit/s
95th percentile per-packet one-way delay: 174.102 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 4.13 Mbit/s
95th percentile per-packet one-way delay: 174.280 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 174.272 ms
Loss rate: 0.28%
```

Run 1: Report of PCC — Data Link

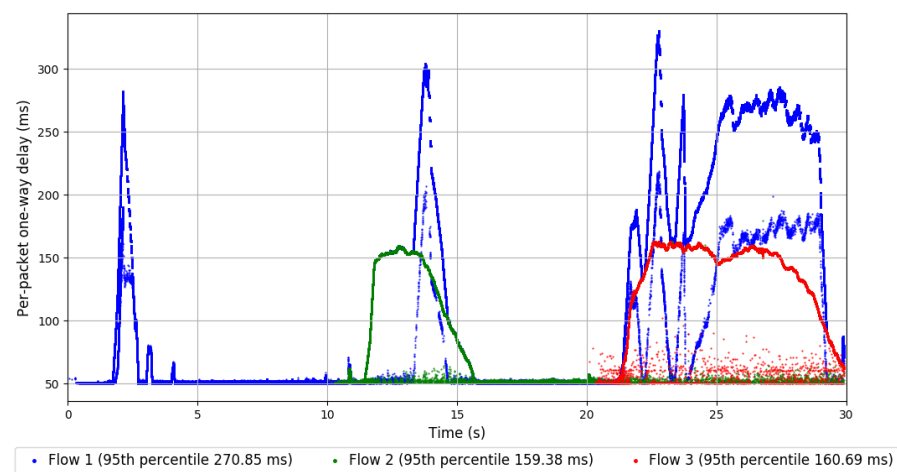
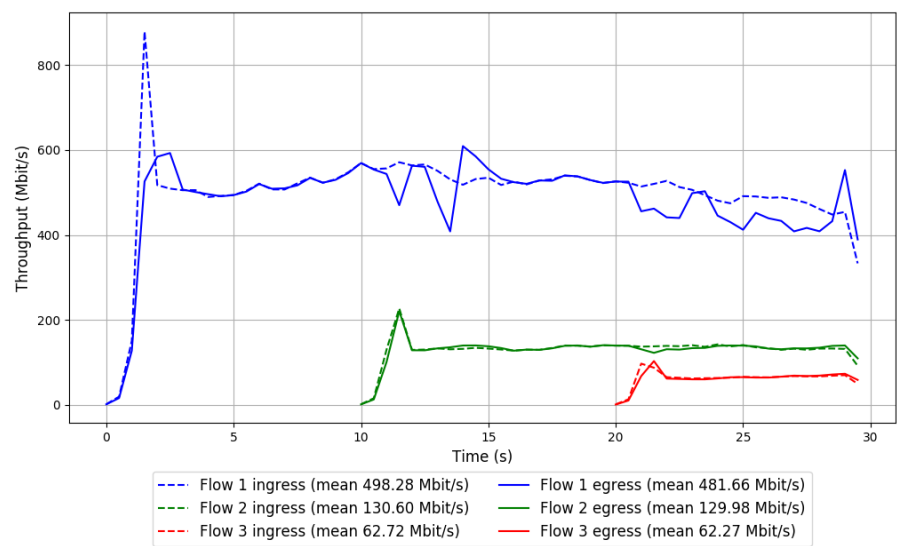


```
Run 2: Statistics of PCC

Start at: 2018-01-31 19:17:05
End at: 2018-01-31 19:17:35

# Below is generated by plot.py at 2018-01-31 23:48:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 588.51 Mbit/s
95th percentile per-packet one-way delay: 269.093 ms
Loss rate: 2.84%
-- Flow 1:
Average throughput: 481.66 Mbit/s
95th percentile per-packet one-way delay: 270.848 ms
Loss rate: 3.33%
-- Flow 2:
Average throughput: 129.98 Mbit/s
95th percentile per-packet one-way delay: 159.381 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 62.27 Mbit/s
95th percentile per-packet one-way delay: 160.688 ms
Loss rate: 0.84%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-31 19:33:38

End at: 2018-01-31 19:34:08

Below is generated by plot.py at 2018-01-31 23:49:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 598.58 Mbit/s

95th percentile per-packet one-way delay: 174.551 ms

Loss rate: 2.96%

-- Flow 1:

Average throughput: 570.52 Mbit/s

95th percentile per-packet one-way delay: 174.587 ms

Loss rate: 2.90%

-- Flow 2:

Average throughput: 27.51 Mbit/s

95th percentile per-packet one-way delay: 173.104 ms

Loss rate: 3.00%

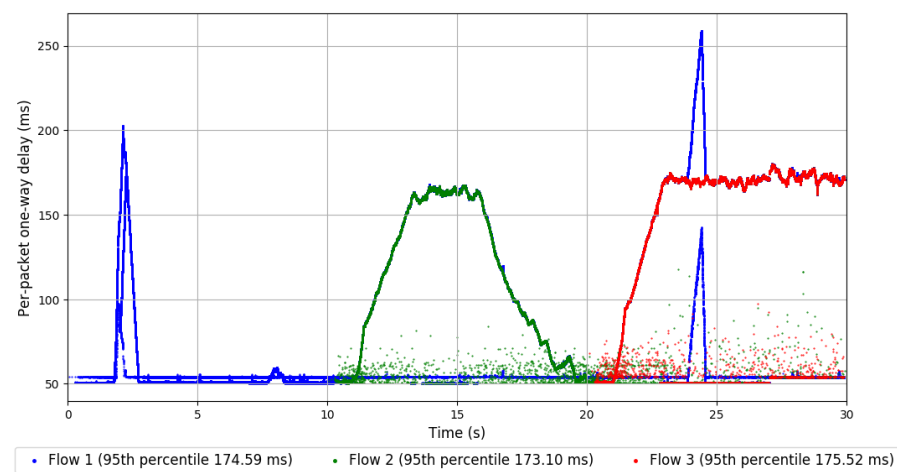
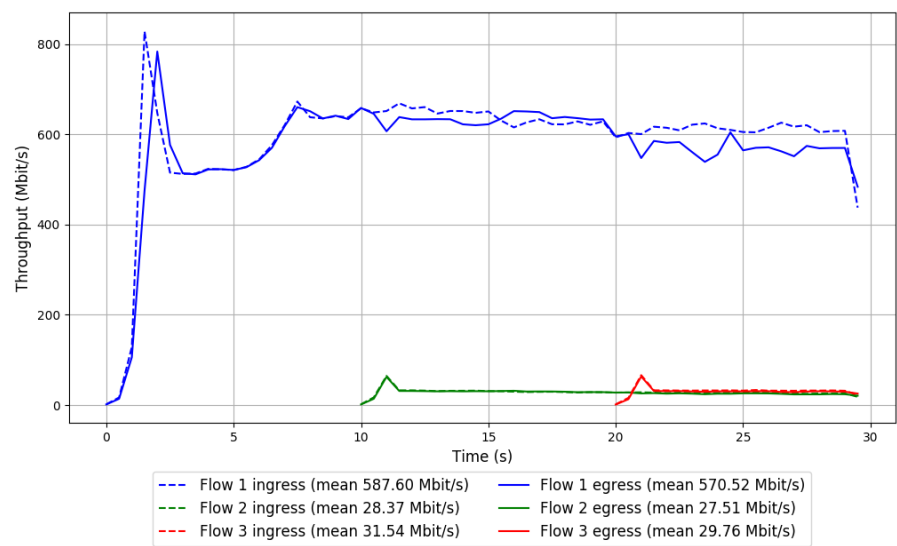
-- Flow 3:

Average throughput: 29.76 Mbit/s

95th percentile per-packet one-way delay: 175.520 ms

Loss rate: 5.77%

Run 3: Report of PCC — Data Link

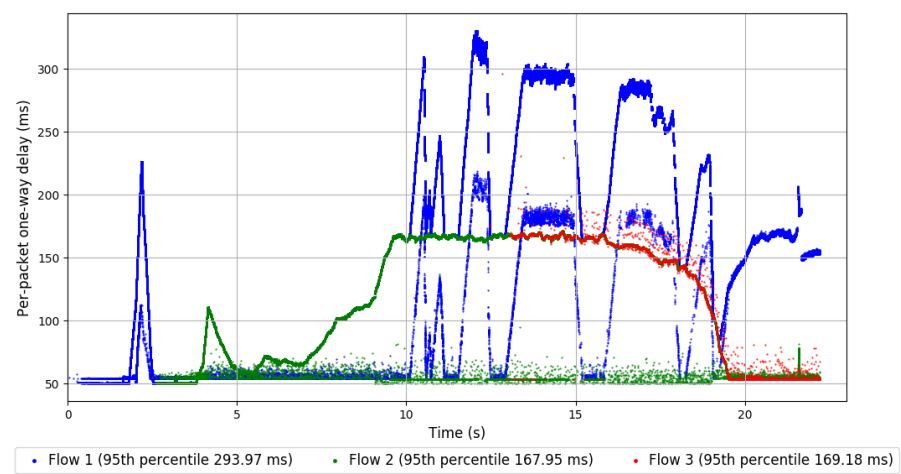
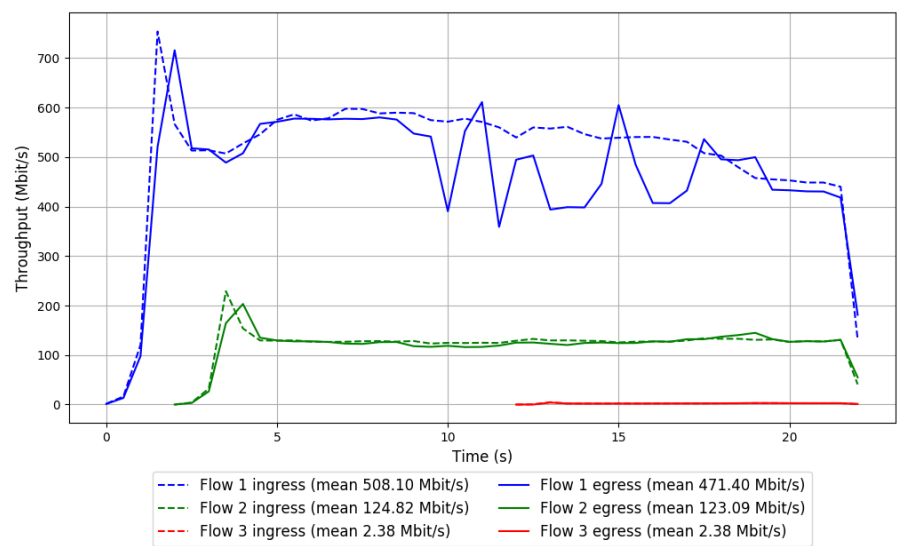


Run 4: Statistics of PCC

Start at: 2018-01-31 19:50:28

End at: 2018-01-31 19:50:58

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-31 20:07:24

End at: 2018-01-31 20:07:54

Below is generated by plot.py at 2018-01-31 23:49:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 564.77 Mbit/s

95th percentile per-packet one-way delay: 169.609 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 508.62 Mbit/s

95th percentile per-packet one-way delay: 169.532 ms

Loss rate: 1.18%

-- Flow 2:

Average throughput: 68.92 Mbit/s

95th percentile per-packet one-way delay: 169.683 ms

Loss rate: 0.72%

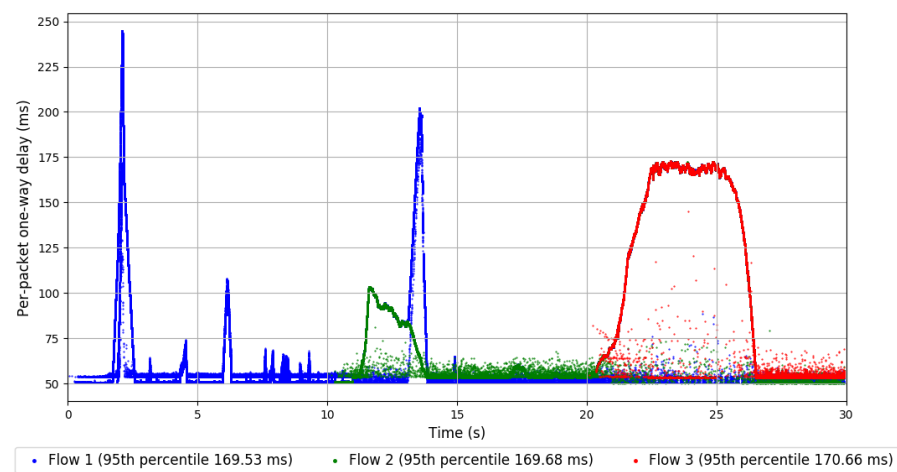
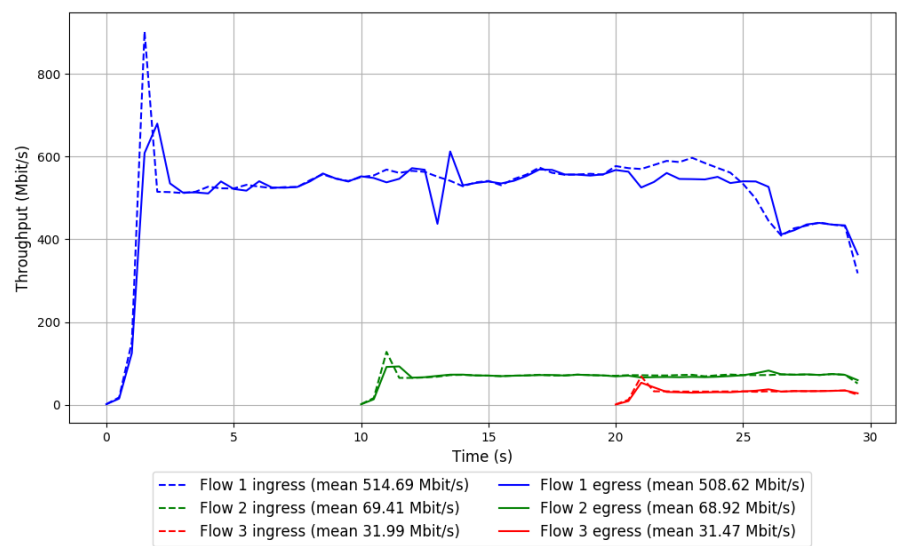
-- Flow 3:

Average throughput: 31.47 Mbit/s

95th percentile per-packet one-way delay: 170.665 ms

Loss rate: 1.63%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-31 20:23:48

End at: 2018-01-31 20:24:18

Below is generated by plot.py at 2018-01-31 23:50:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 579.88 Mbit/s

95th percentile per-packet one-way delay: 171.048 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 528.39 Mbit/s

95th percentile per-packet one-way delay: 170.966 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 63.95 Mbit/s

95th percentile per-packet one-way delay: 171.641 ms

Loss rate: 0.46%

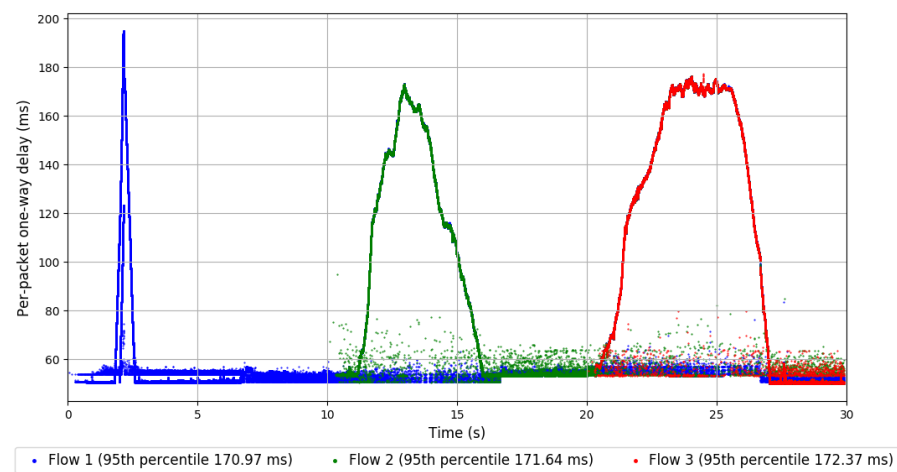
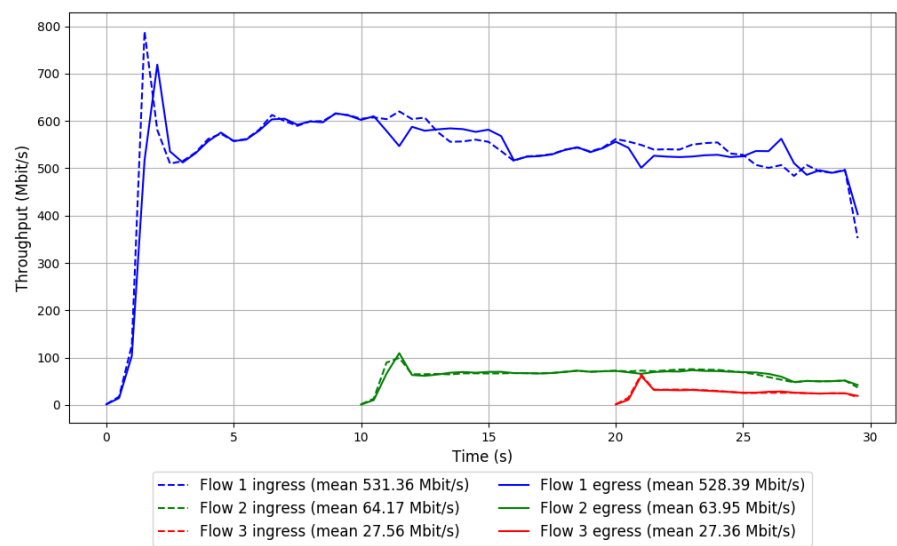
-- Flow 3:

Average throughput: 27.36 Mbit/s

95th percentile per-packet one-way delay: 172.367 ms

Loss rate: 0.79%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-31 20:40:28

End at: 2018-01-31 20:40:58

Below is generated by plot.py at 2018-01-31 23:50:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 605.57 Mbit/s

95th percentile per-packet one-way delay: 208.839 ms

Loss rate: 1.50%

-- Flow 1:

Average throughput: 541.64 Mbit/s

95th percentile per-packet one-way delay: 210.027 ms

Loss rate: 1.68%

-- Flow 2:

Average throughput: 65.76 Mbit/s

95th percentile per-packet one-way delay: 133.997 ms

Loss rate: 0.01%

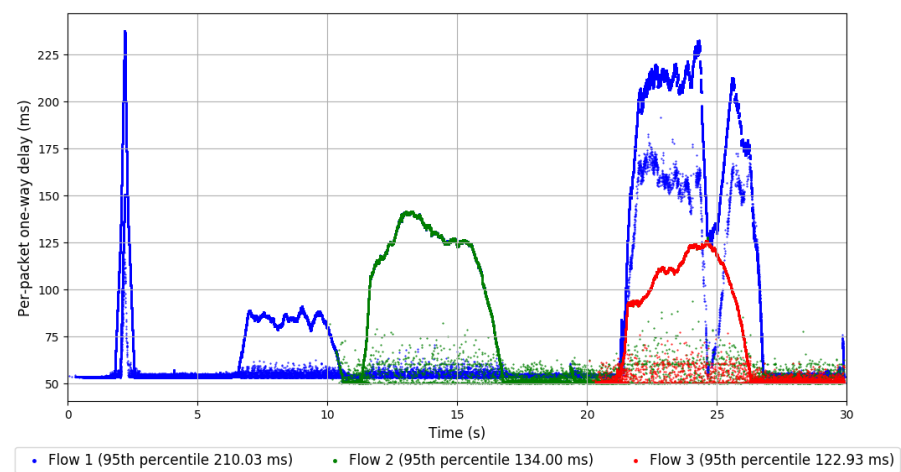
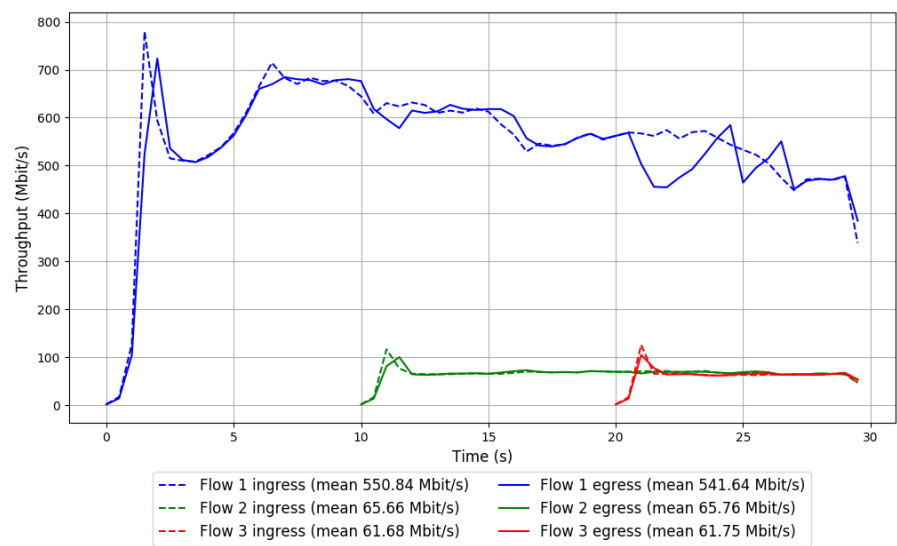
-- Flow 3:

Average throughput: 61.75 Mbit/s

95th percentile per-packet one-way delay: 122.933 ms

Loss rate: 0.01%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-31 20:57:13

End at: 2018-01-31 20:57:43

Below is generated by plot.py at 2018-01-31 23:51:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 604.19 Mbit/s

95th percentile per-packet one-way delay: 268.796 ms

Loss rate: 3.84%

-- Flow 1:

Average throughput: 540.95 Mbit/s

95th percentile per-packet one-way delay: 270.612 ms

Loss rate: 4.20%

-- Flow 2:

Average throughput: 79.28 Mbit/s

95th percentile per-packet one-way delay: 160.573 ms

Loss rate: 0.69%

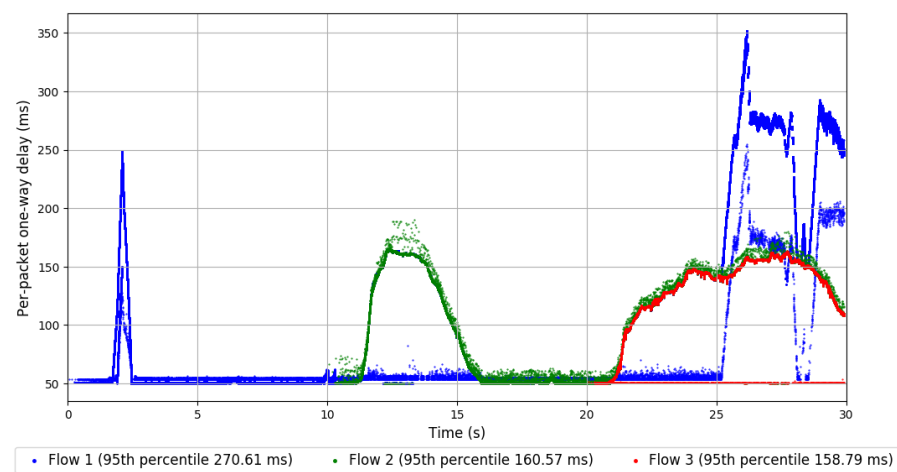
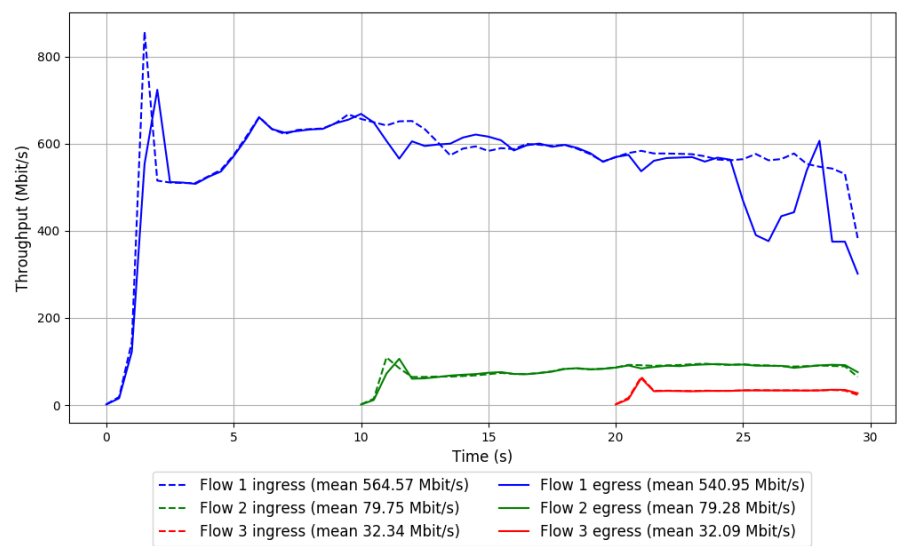
-- Flow 3:

Average throughput: 32.09 Mbit/s

95th percentile per-packet one-way delay: 158.786 ms

Loss rate: 0.80%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-31 21:13:02

End at: 2018-01-31 21:13:32

Below is generated by plot.py at 2018-01-31 23:56:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 603.97 Mbit/s

95th percentile per-packet one-way delay: 136.886 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 568.76 Mbit/s

95th percentile per-packet one-way delay: 138.832 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 21.33 Mbit/s

95th percentile per-packet one-way delay: 81.253 ms

Loss rate: 0.00%

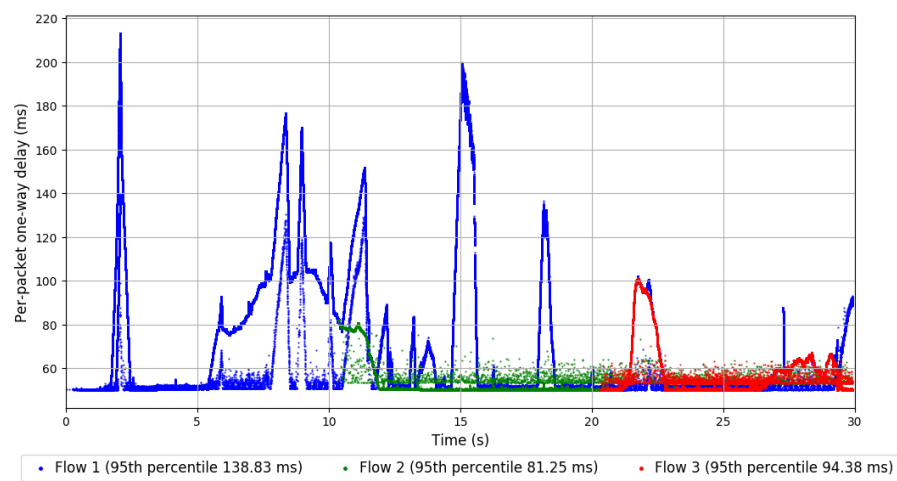
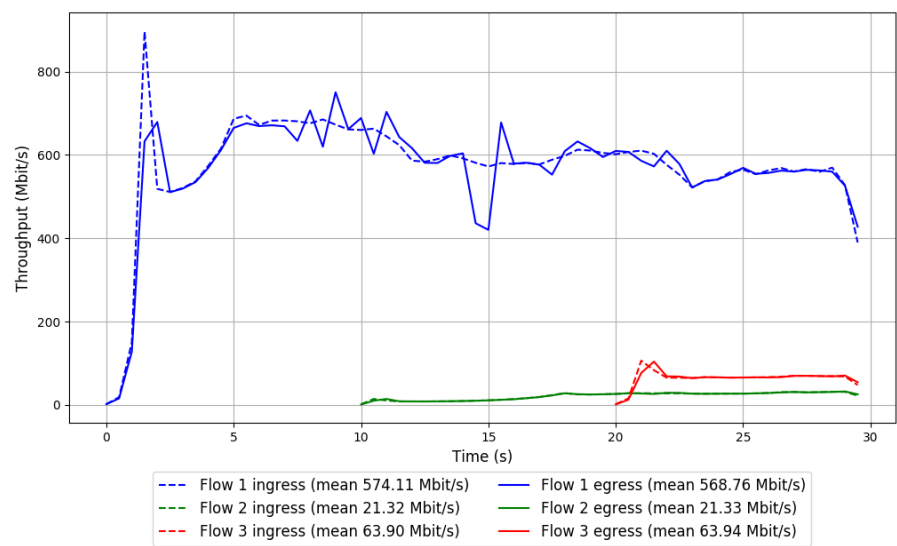
-- Flow 3:

Average throughput: 63.94 Mbit/s

95th percentile per-packet one-way delay: 94.382 ms

Loss rate: 0.00%

Run 9: Report of PCC — Data Link

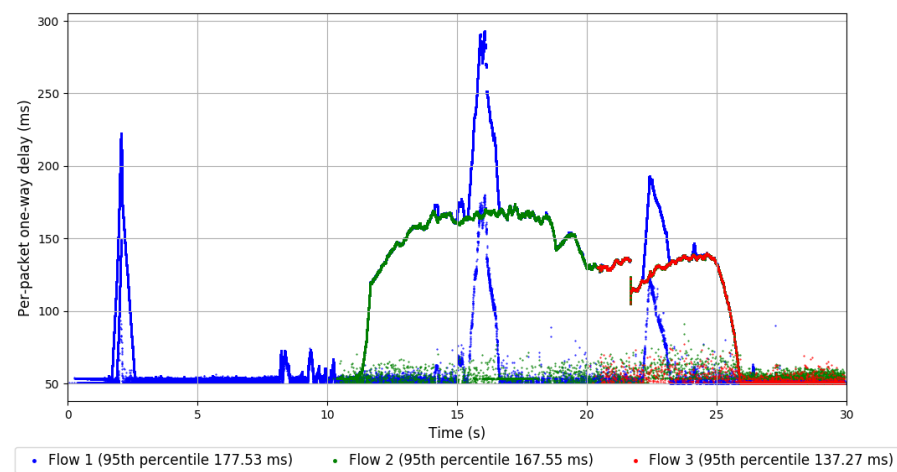
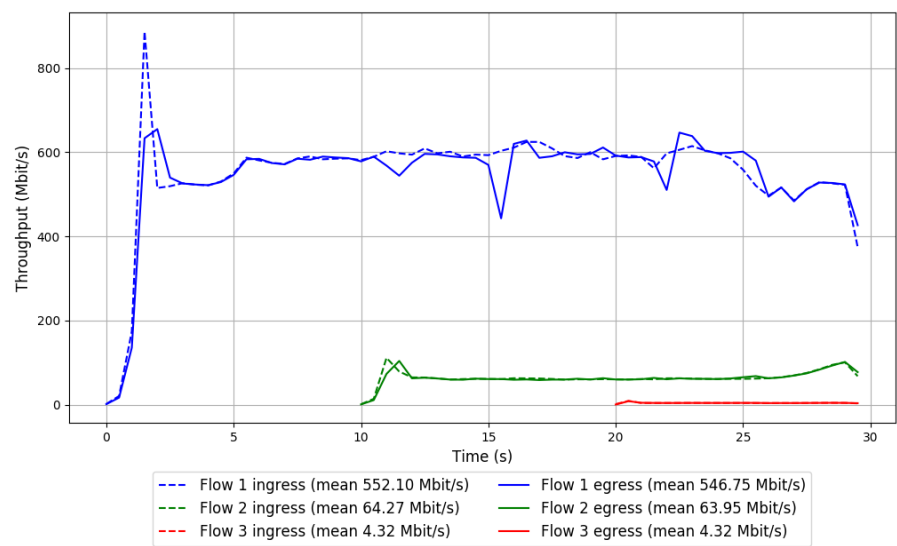


```
Run 10: Statistics of PCC

Start at: 2018-01-31 21:29:13
End at: 2018-01-31 21:29:43

# Below is generated by plot.py at 2018-01-31 23:57:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 590.67 Mbit/s
95th percentile per-packet one-way delay: 175.193 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 546.75 Mbit/s
95th percentile per-packet one-way delay: 177.528 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 63.95 Mbit/s
95th percentile per-packet one-way delay: 167.547 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 137.274 ms
Loss rate: 0.00%
```

Run 10: Report of PCC — Data Link

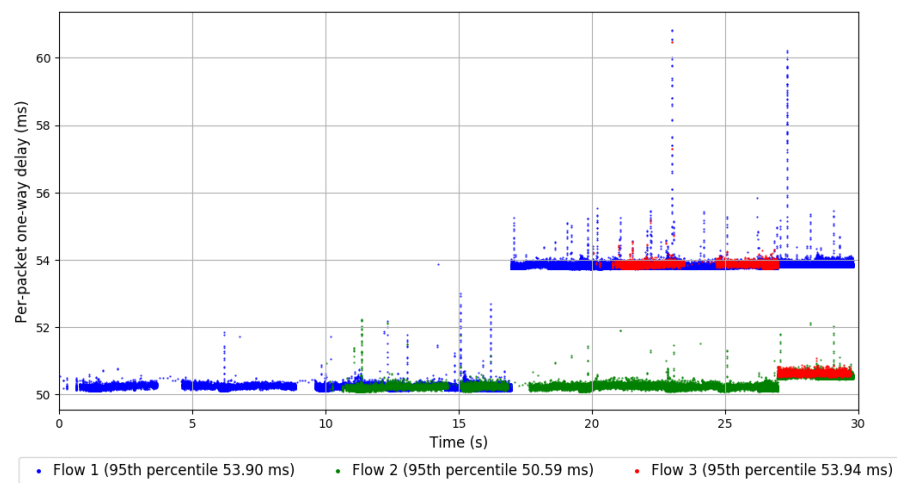
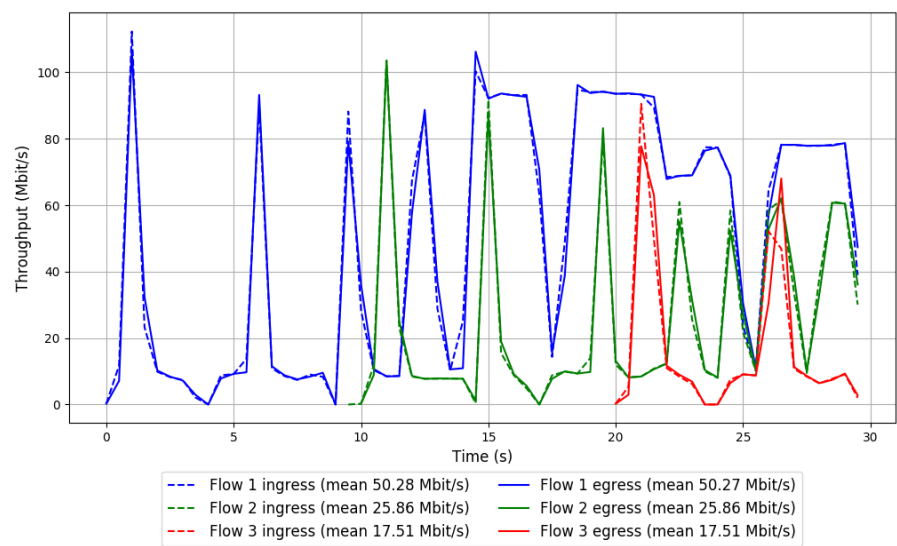


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-31 18:57:38
End at: 2018-01-31 18:58:08

# Below is generated by plot.py at 2018-01-31 23:57:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.15 Mbit/s
95th percentile per-packet one-way delay: 53.894 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.27 Mbit/s
95th percentile per-packet one-way delay: 53.901 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 25.86 Mbit/s
95th percentile per-packet one-way delay: 50.591 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.51 Mbit/s
95th percentile per-packet one-way delay: 53.935 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-31 19:14:27

End at: 2018-01-31 19:14:57

Below is generated by plot.py at 2018-01-31 23:57:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.27 Mbit/s

95th percentile per-packet one-way delay: 53.993 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 41.87 Mbit/s

95th percentile per-packet one-way delay: 53.911 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 37.10 Mbit/s

95th percentile per-packet one-way delay: 54.008 ms

Loss rate: 0.02%

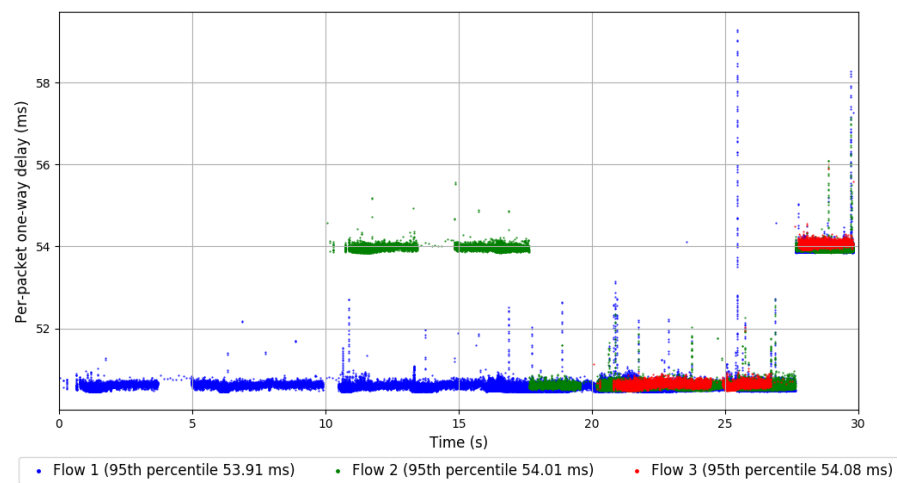
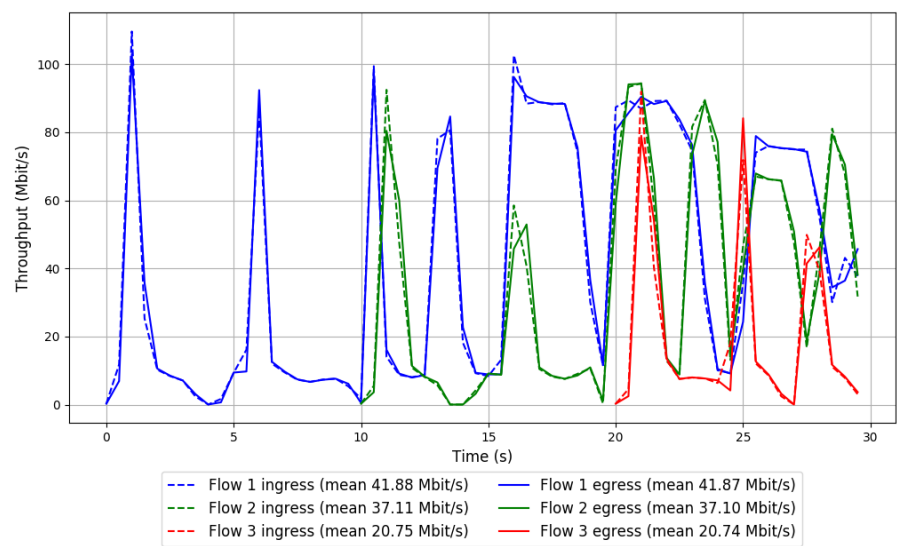
-- Flow 3:

Average throughput: 20.74 Mbit/s

95th percentile per-packet one-way delay: 54.080 ms

Loss rate: 0.01%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-31 19:31:09

End at: 2018-01-31 19:31:39

Below is generated by plot.py at 2018-01-31 23:57:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.25 Mbit/s

95th percentile per-packet one-way delay: 53.996 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 44.22 Mbit/s

95th percentile per-packet one-way delay: 54.026 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.55 Mbit/s

95th percentile per-packet one-way delay: 53.952 ms

Loss rate: 0.02%

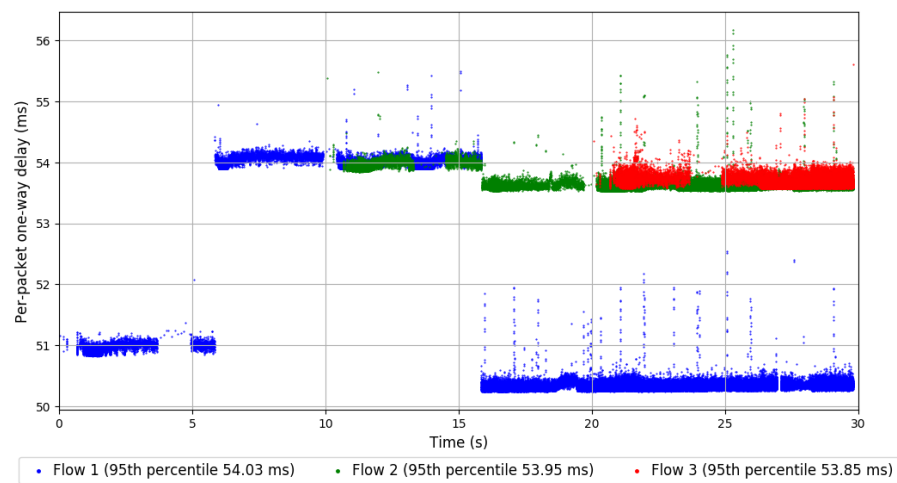
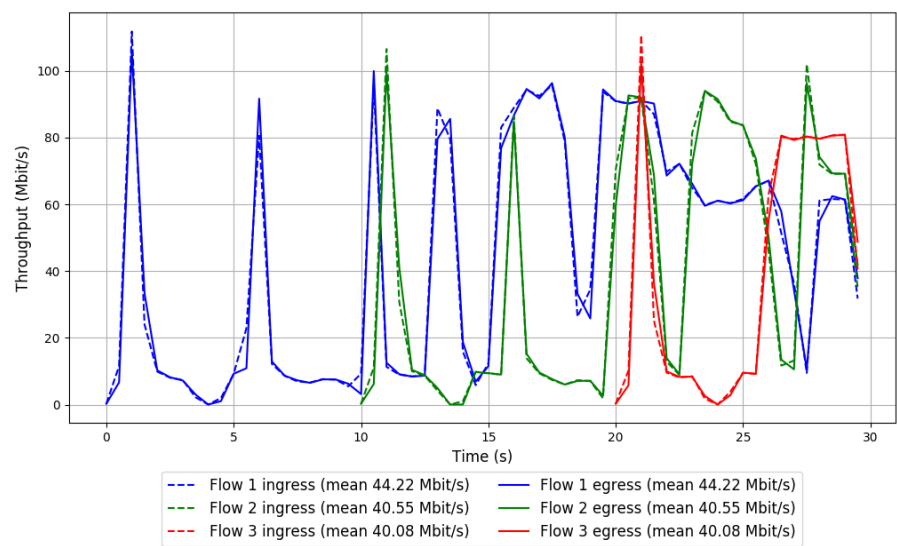
-- Flow 3:

Average throughput: 40.08 Mbit/s

95th percentile per-packet one-way delay: 53.850 ms

Loss rate: 0.05%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-31 19:47:51

End at: 2018-01-31 19:48:21

Below is generated by plot.py at 2018-01-31 23:57:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.92 Mbit/s

95th percentile per-packet one-way delay: 50.801 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 55.88 Mbit/s

95th percentile per-packet one-way delay: 50.791 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.03 Mbit/s

95th percentile per-packet one-way delay: 50.805 ms

Loss rate: 0.00%

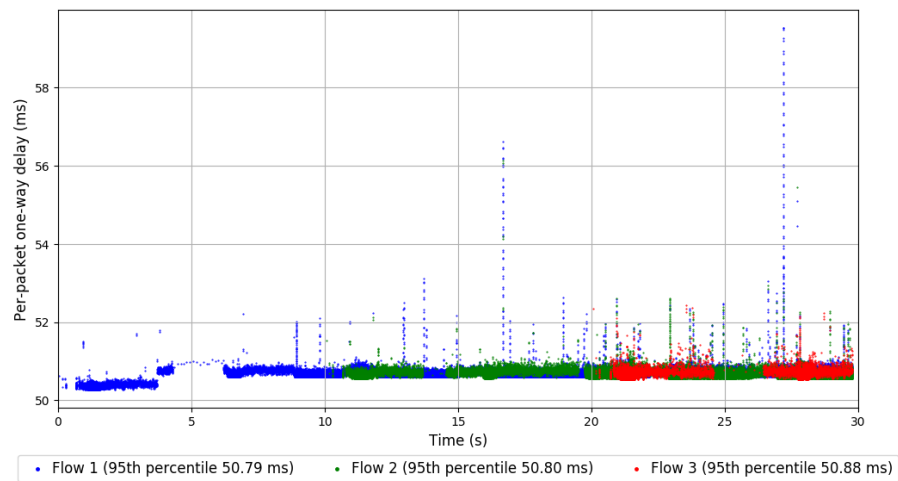
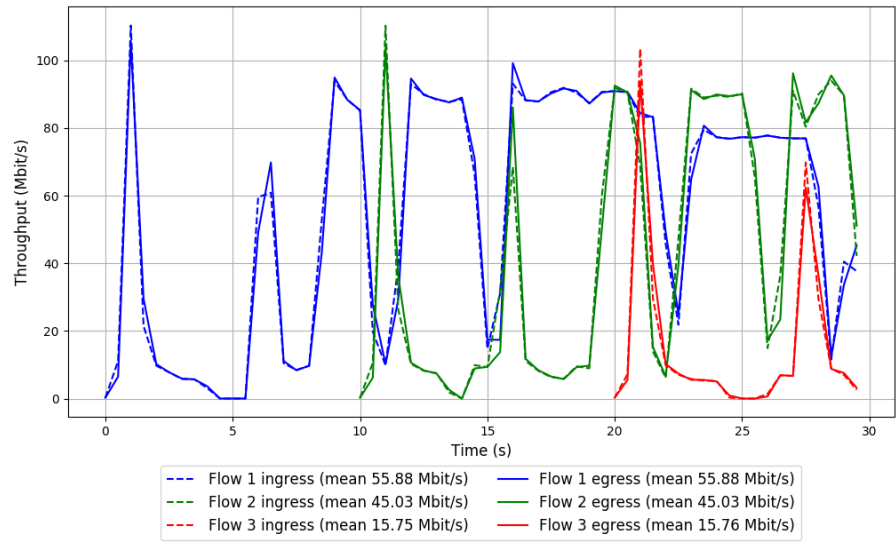
-- Flow 3:

Average throughput: 15.76 Mbit/s

95th percentile per-packet one-way delay: 50.876 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-31 20:04:48

End at: 2018-01-31 20:05:18

Below is generated by plot.py at 2018-01-31 23:57:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.81 Mbit/s

95th percentile per-packet one-way delay: 53.957 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 63.16 Mbit/s

95th percentile per-packet one-way delay: 50.400 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.11 Mbit/s

95th percentile per-packet one-way delay: 54.033 ms

Loss rate: 0.03%

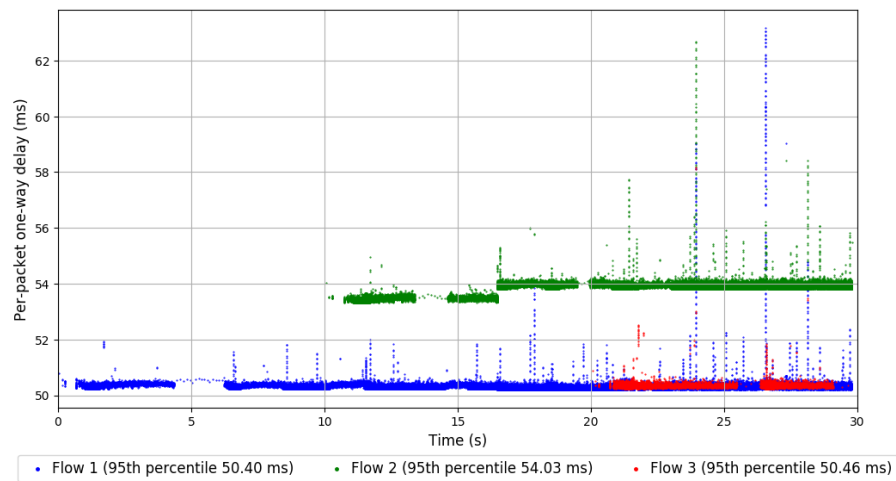
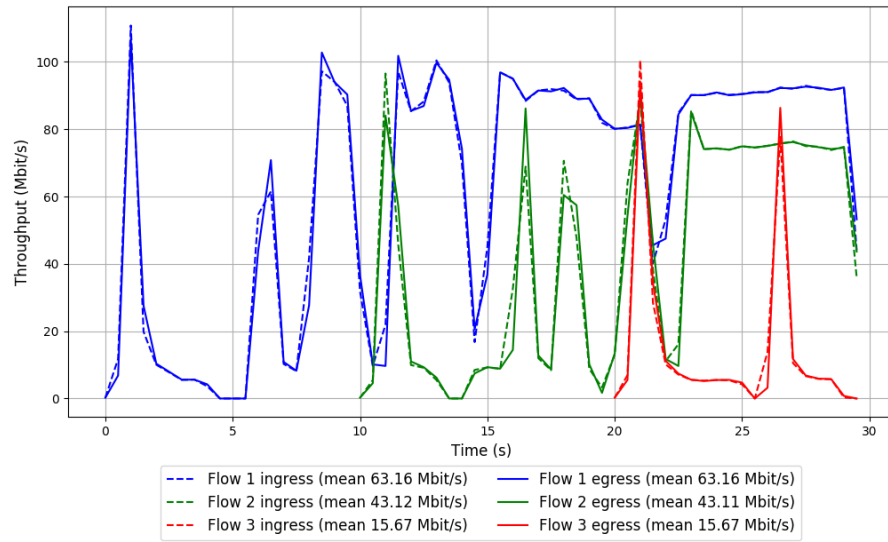
-- Flow 3:

Average throughput: 15.67 Mbit/s

95th percentile per-packet one-way delay: 50.458 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-31 20:21:16

End at: 2018-01-31 20:21:46

Below is generated by plot.py at 2018-01-31 23:57:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.30 Mbit/s

95th percentile per-packet one-way delay: 53.851 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 39.89 Mbit/s

95th percentile per-packet one-way delay: 53.336 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 30.87 Mbit/s

95th percentile per-packet one-way delay: 53.340 ms

Loss rate: 0.00%

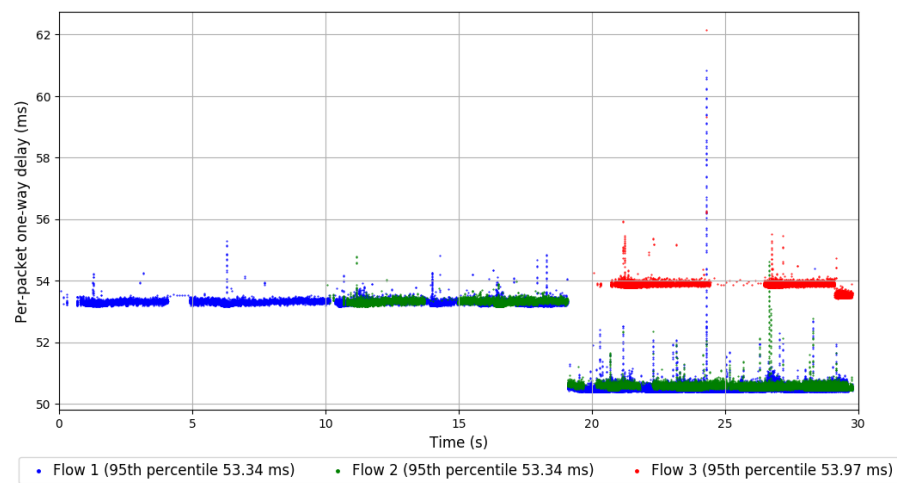
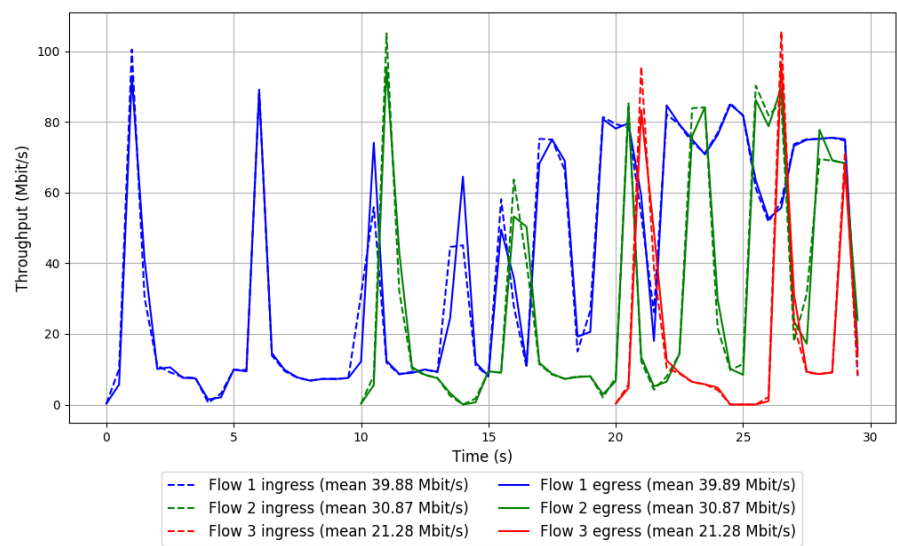
-- Flow 3:

Average throughput: 21.28 Mbit/s

95th percentile per-packet one-way delay: 53.967 ms

Loss rate: 0.02%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-31 20:37:50

End at: 2018-01-31 20:38:20

Below is generated by plot.py at 2018-01-31 23:57:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.33 Mbit/s

95th percentile per-packet one-way delay: 53.541 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 54.04 Mbit/s

95th percentile per-packet one-way delay: 53.576 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 35.80 Mbit/s

95th percentile per-packet one-way delay: 53.377 ms

Loss rate: 0.02%

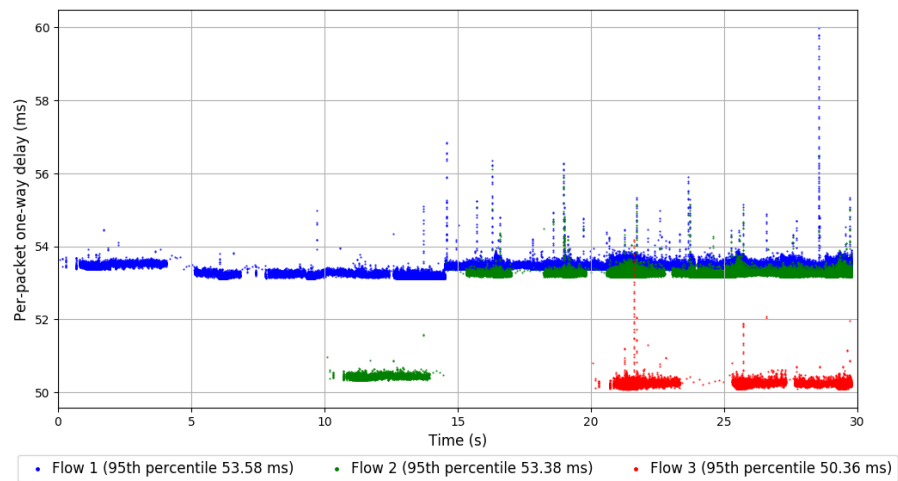
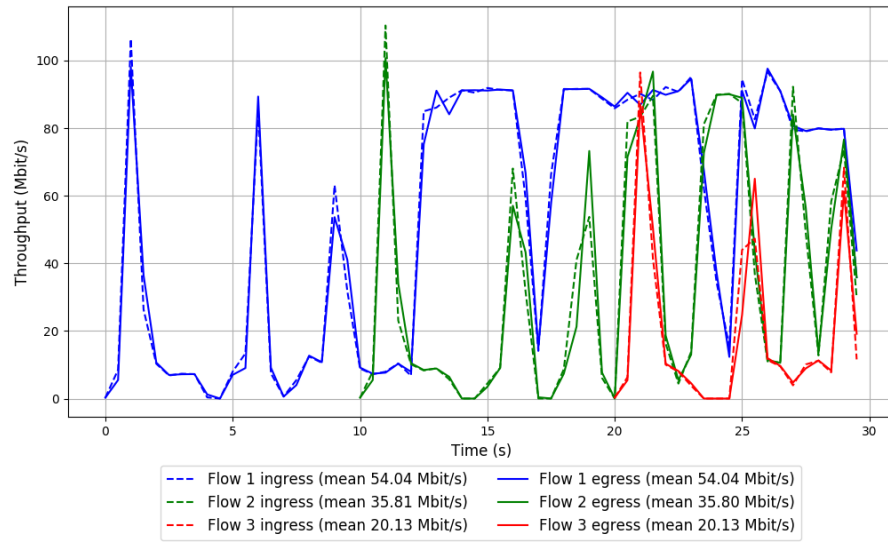
-- Flow 3:

Average throughput: 20.13 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-31 20:54:38

End at: 2018-01-31 20:55:08

Below is generated by plot.py at 2018-01-31 23:57:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.96 Mbit/s

95th percentile per-packet one-way delay: 53.603 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.46 Mbit/s

95th percentile per-packet one-way delay: 53.573 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.27 Mbit/s

95th percentile per-packet one-way delay: 53.647 ms

Loss rate: 0.00%

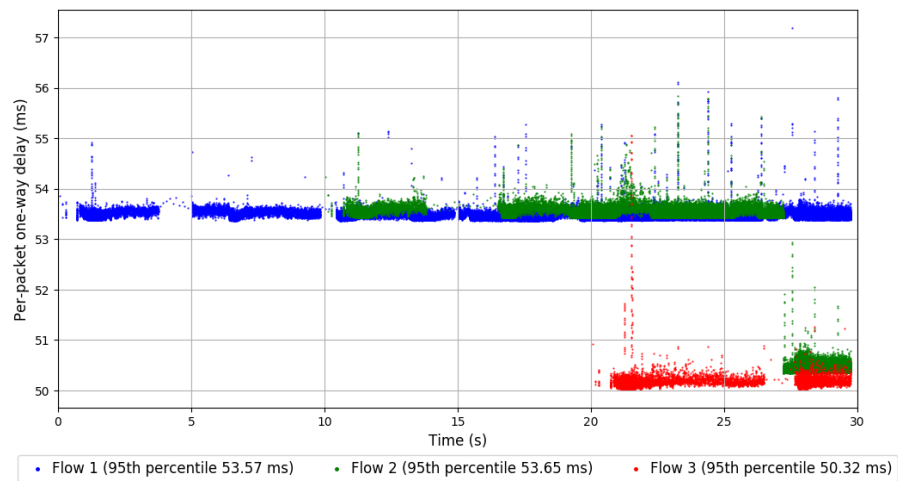
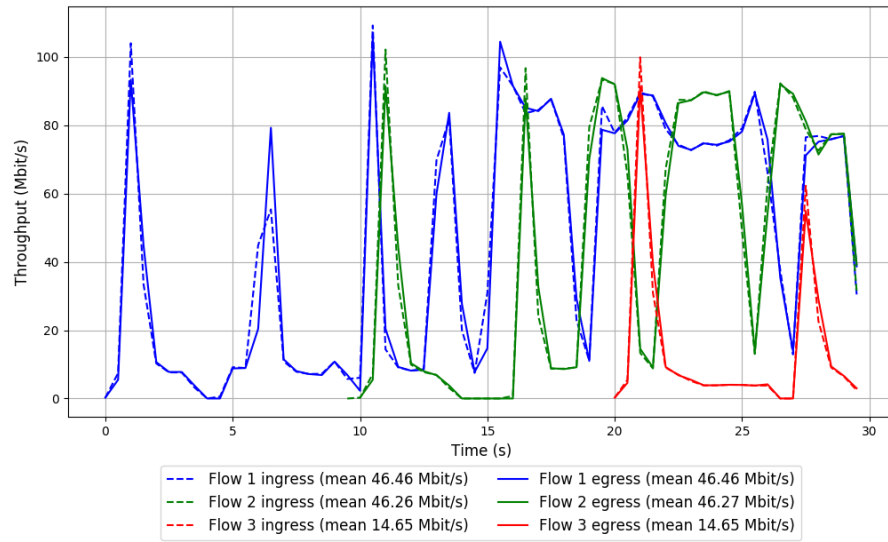
-- Flow 3:

Average throughput: 14.65 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

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

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

Below is generated by plot.py at 2018-01-31 23:57:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.76 Mbit/s

95th percentile per-packet one-way delay: 53.441 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 51.54 Mbit/s

95th percentile per-packet one-way delay: 53.366 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.74 Mbit/s

95th percentile per-packet one-way delay: 53.519 ms

Loss rate: 0.00%

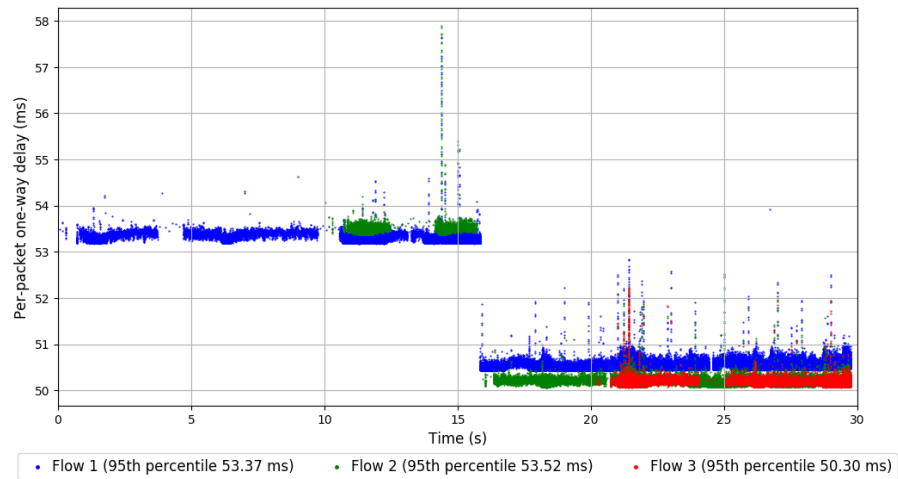
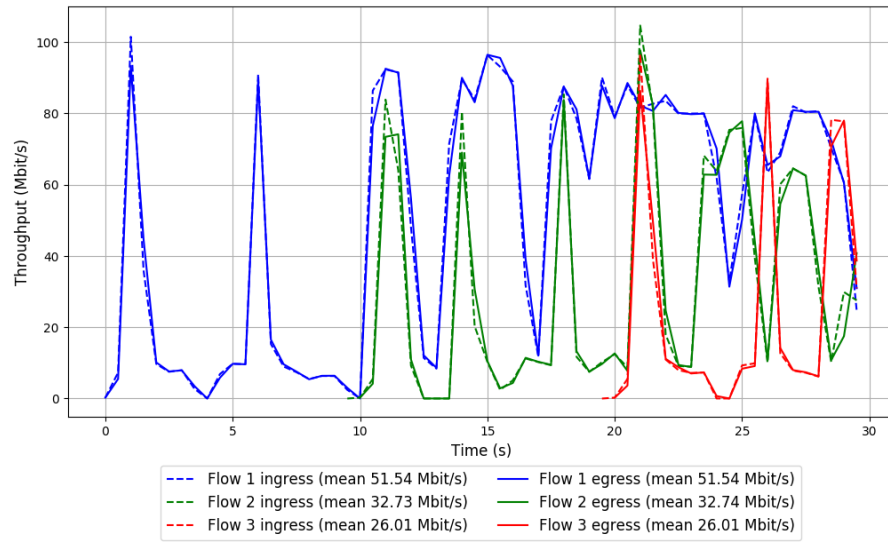
-- Flow 3:

Average throughput: 26.01 Mbit/s

95th percentile per-packet one-way delay: 50.299 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

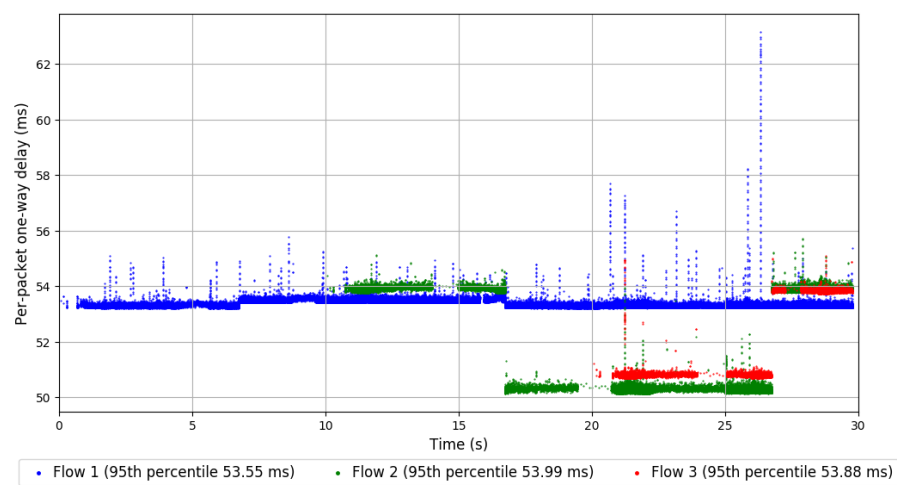
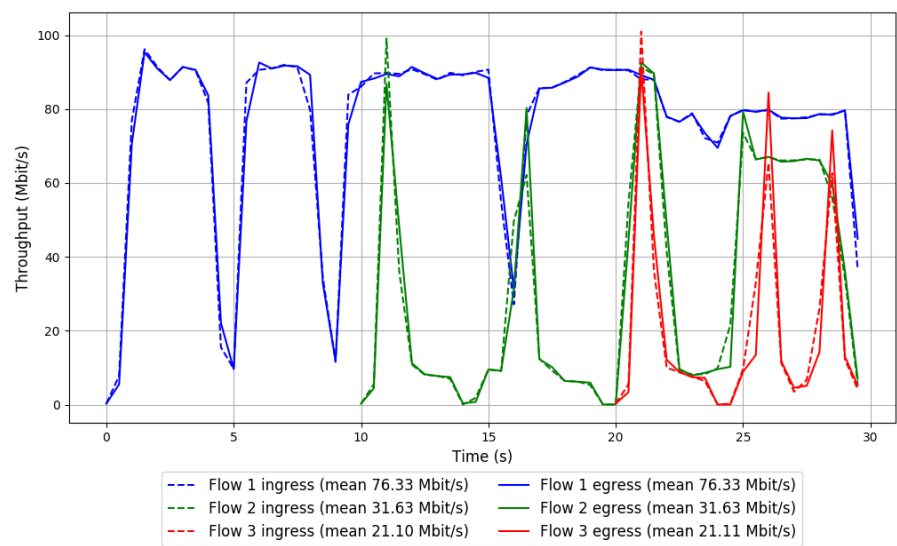


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-31 21:26:38
End at: 2018-01-31 21:27:08

# Below is generated by plot.py at 2018-01-31 23:57:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 104.21 Mbit/s
95th percentile per-packet one-way delay: 53.885 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 76.33 Mbit/s
95th percentile per-packet one-way delay: 53.554 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 31.63 Mbit/s
95th percentile per-packet one-way delay: 53.992 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.11 Mbit/s
95th percentile per-packet one-way delay: 53.884 ms
Loss rate: 0.02%
```

Run 10: Report of QUIC Cubic — Data Link

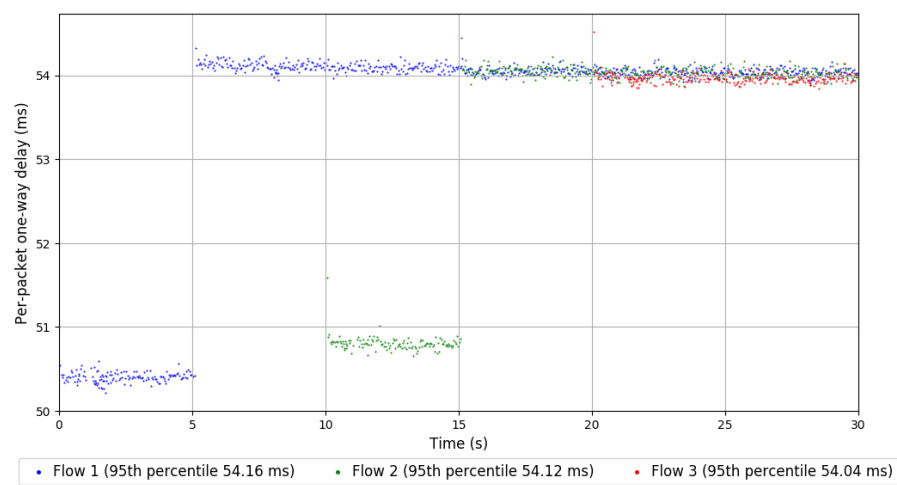
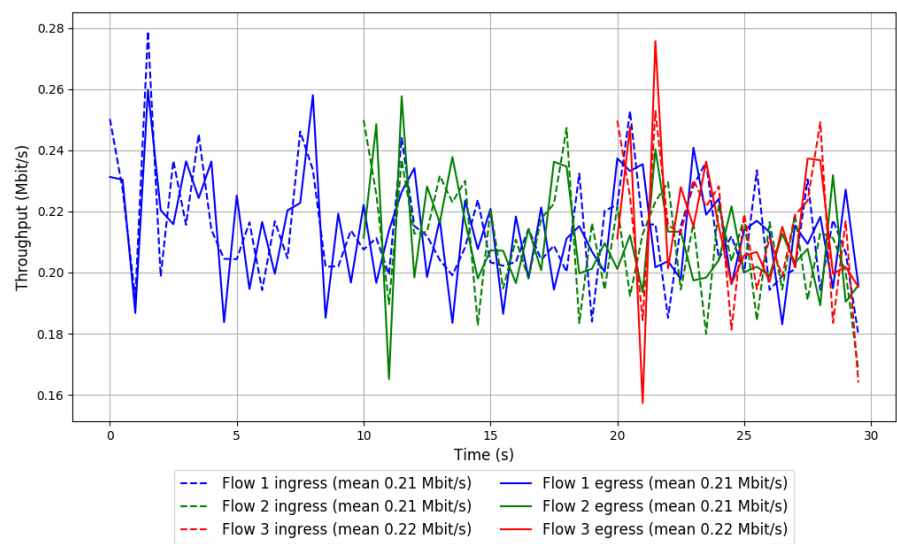


```
Run 1: Statistics of SCReAM

Start at: 2018-01-31 19:02:00
End at: 2018-01-31 19:02:30

# Below is generated by plot.py at 2018-01-31 23:57:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 54.142 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.164 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.117 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 54.038 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

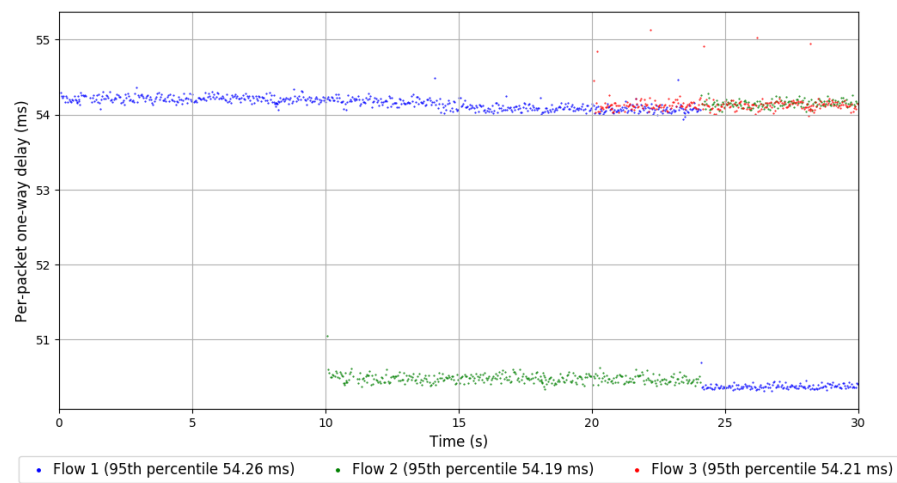
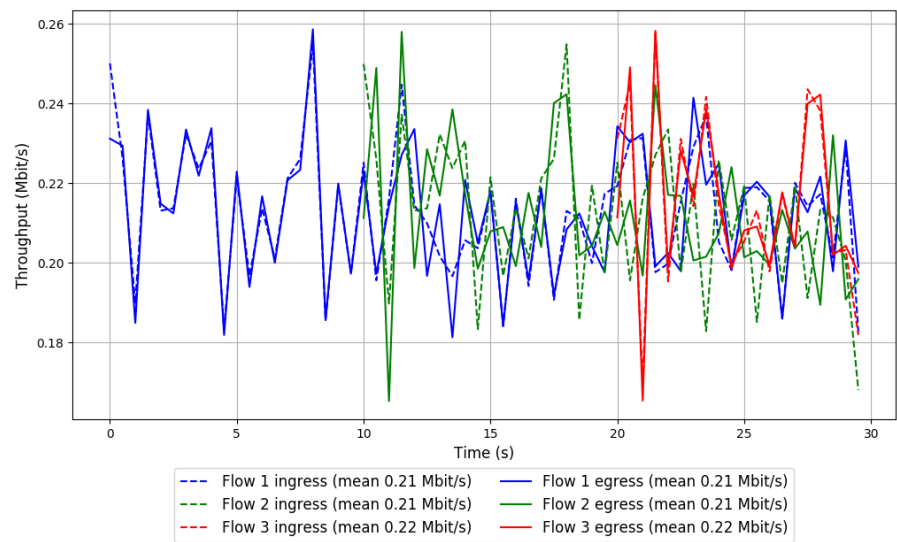


```
Run 2: Statistics of SCReAM

Start at: 2018-01-31 19:18:51
End at: 2018-01-31 19:19:21

# Below is generated by plot.py at 2018-01-31 23:57:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 54.248 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.264 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.190 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 54.214 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-01-31 19:35:27

End at: 2018-01-31 19:35:57

Below is generated by plot.py at 2018-01-31 23:57:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 54.255 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 54.274 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.867 ms

Loss rate: 0.00%

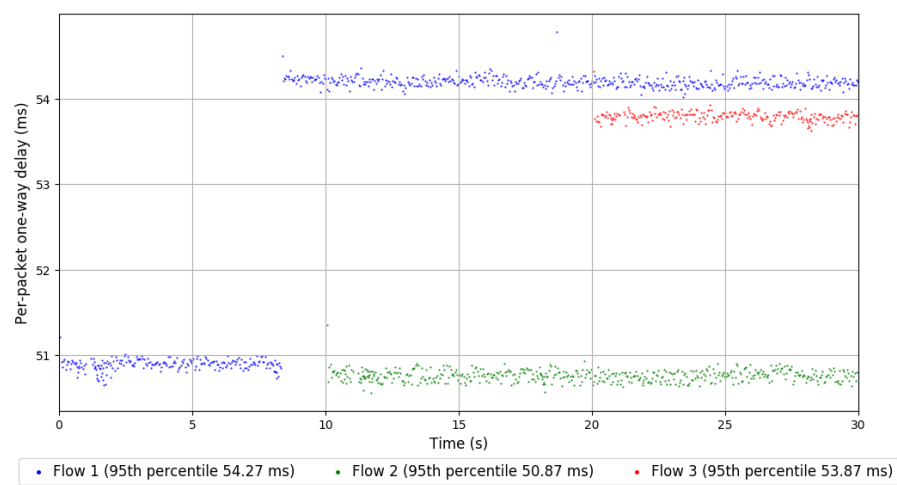
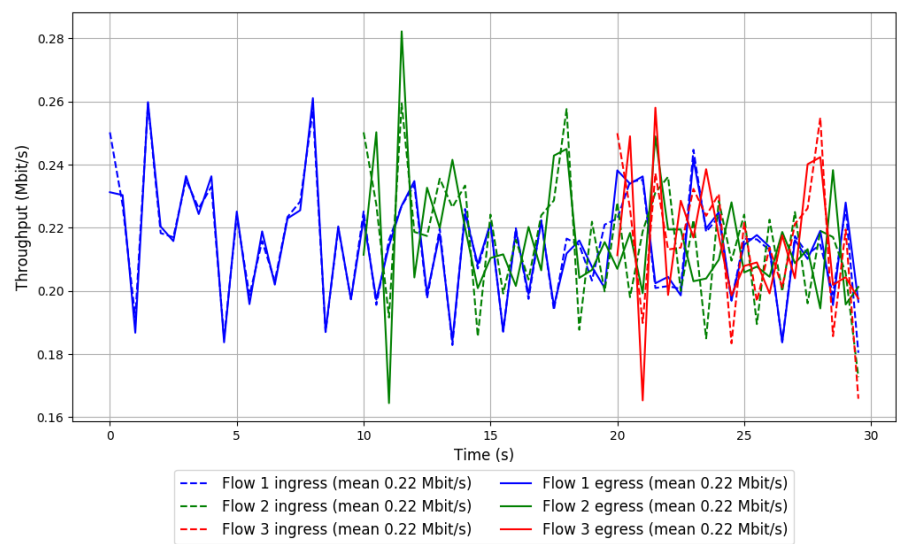
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.872 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

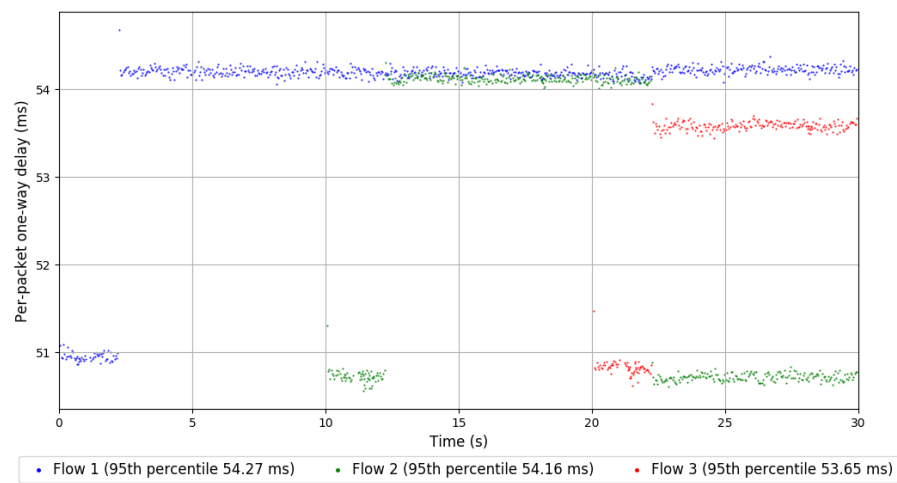
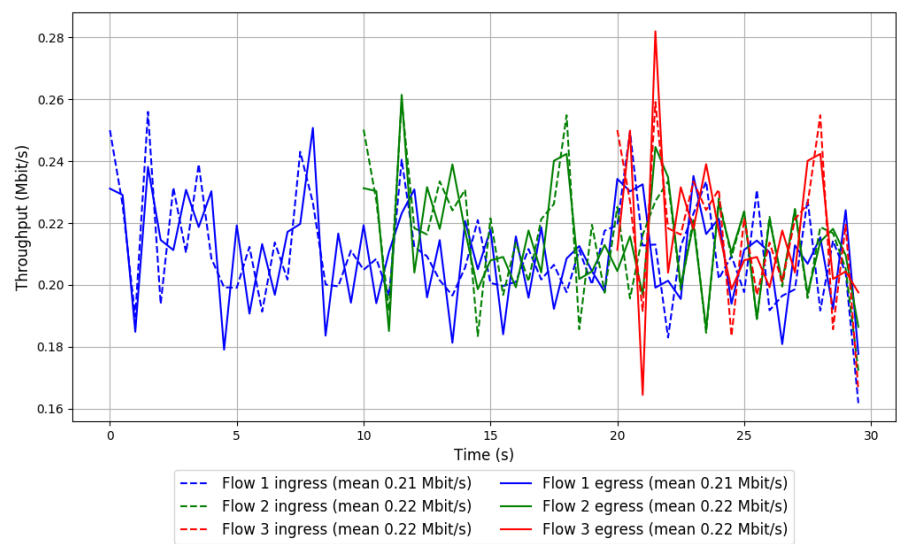


```
Run 4: Statistics of SReAM

Start at: 2018-01-31 19:52:13
End at: 2018-01-31 19:52:43

# Below is generated by plot.py at 2018-01-31 23:57:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 54.257 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.273 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 54.164 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.652 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-01-31 20:09:11

End at: 2018-01-31 20:09:41

Below is generated by plot.py at 2018-01-31 23:57:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 54.184 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 54.168 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 54.188 ms

Loss rate: 0.00%

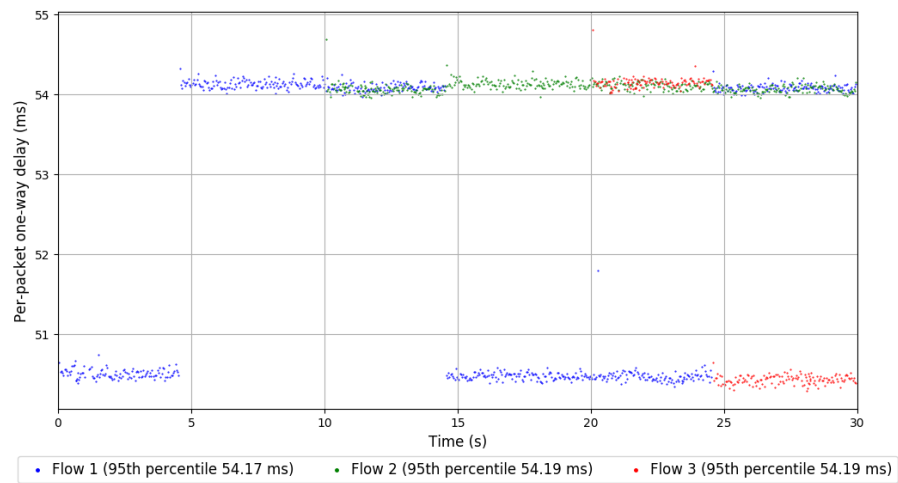
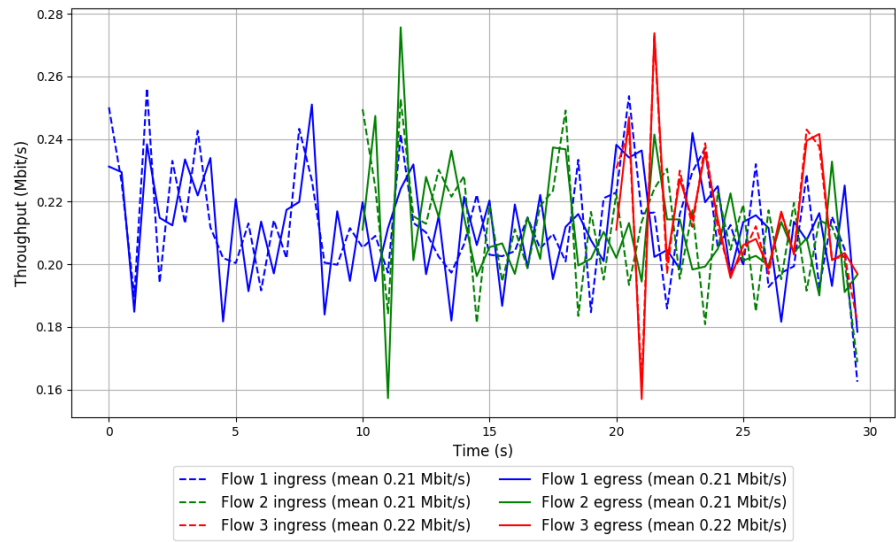
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 54.191 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-01-31 20:25:36

End at: 2018-01-31 20:26:06

Below is generated by plot.py at 2018-01-31 23:57:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.727 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.589 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.753 ms

Loss rate: 0.00%

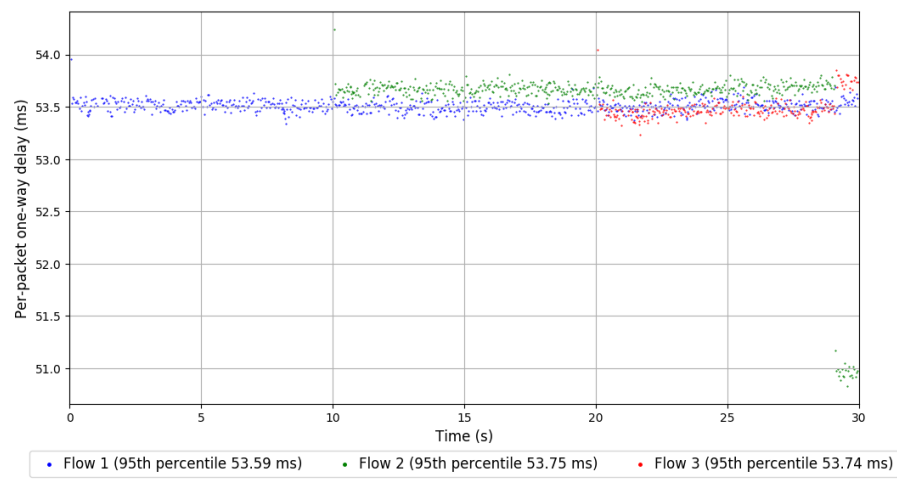
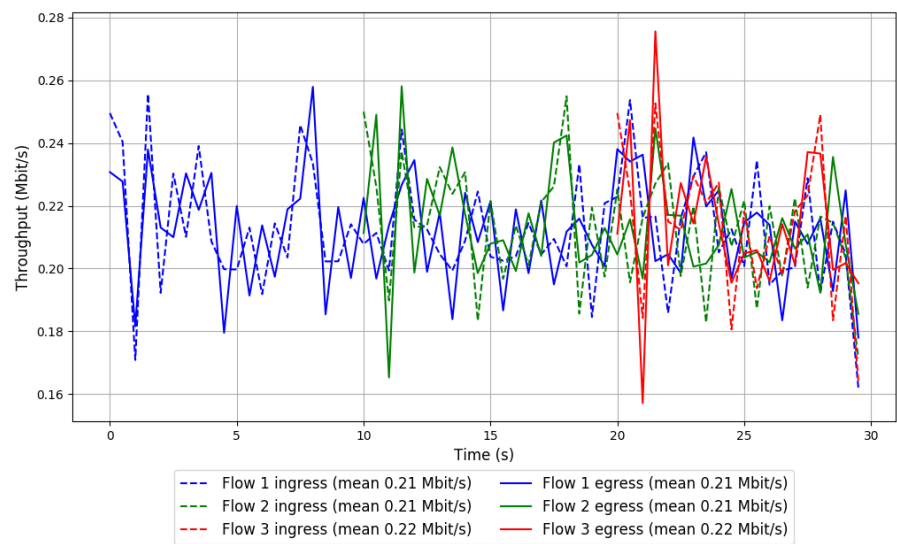
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.743 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

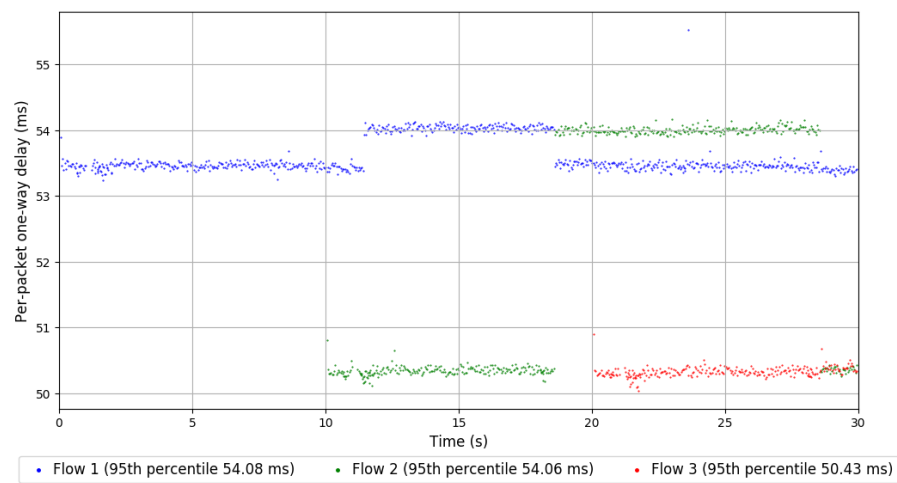
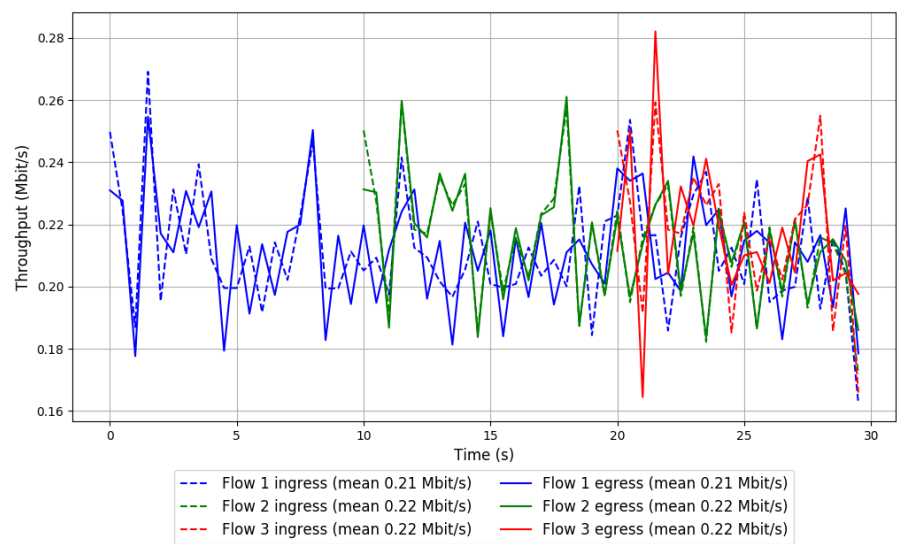


```
Run 7: Statistics of SCReAM

Start at: 2018-01-31 20:42:17
End at: 2018-01-31 20:42:47

# Below is generated by plot.py at 2018-01-31 23:57:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 54.065 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.077 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 54.065 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.429 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-31 20:58:58

End at: 2018-01-31 20:59:28

Below is generated by plot.py at 2018-01-31 23:57:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.946 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.842 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.522 ms

Loss rate: 0.00%

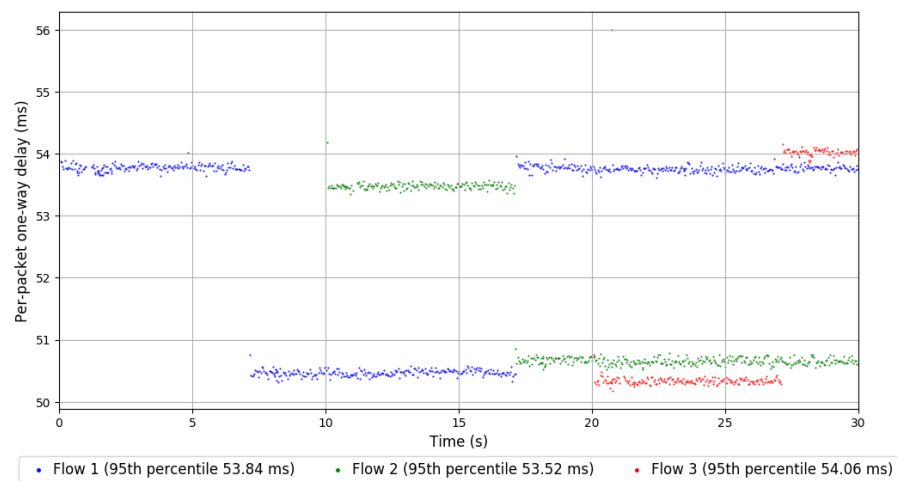
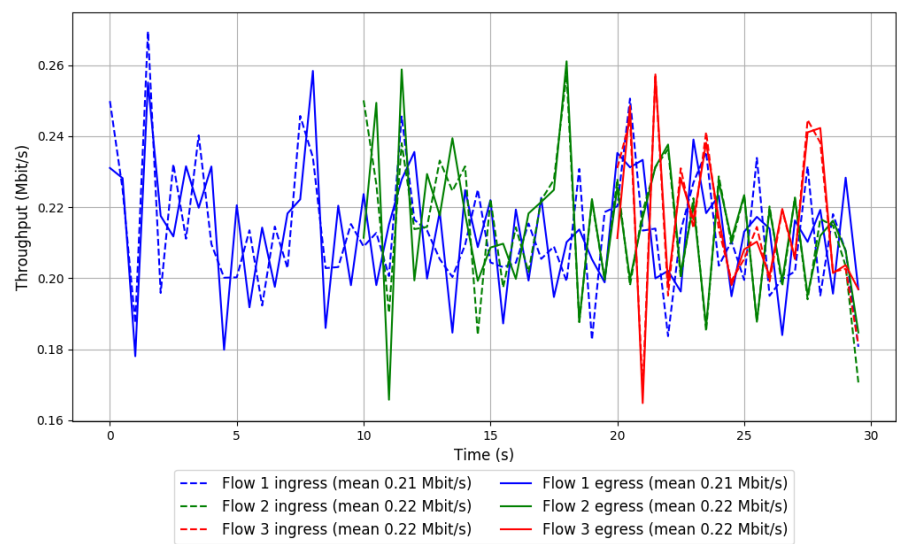
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 54.064 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-01-31 21:14:46

End at: 2018-01-31 21:15:16

Below is generated by plot.py at 2018-01-31 23:57:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.792 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.809 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.778 ms

Loss rate: 0.00%

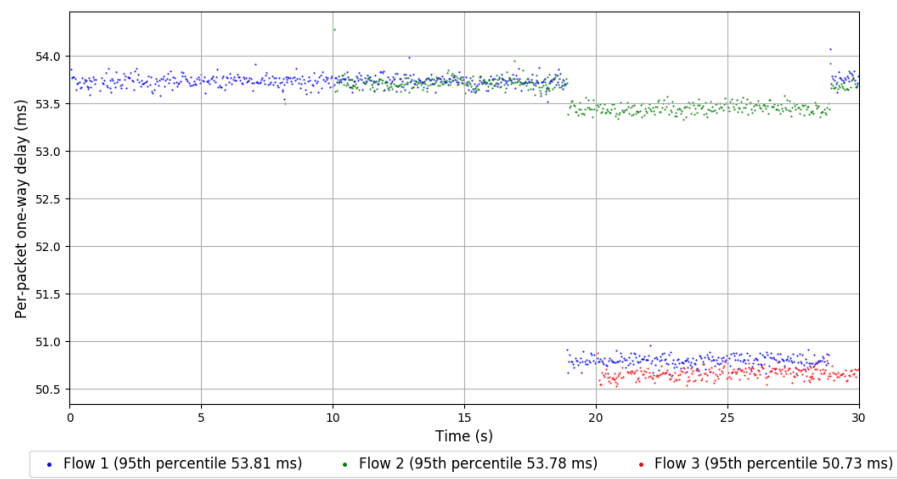
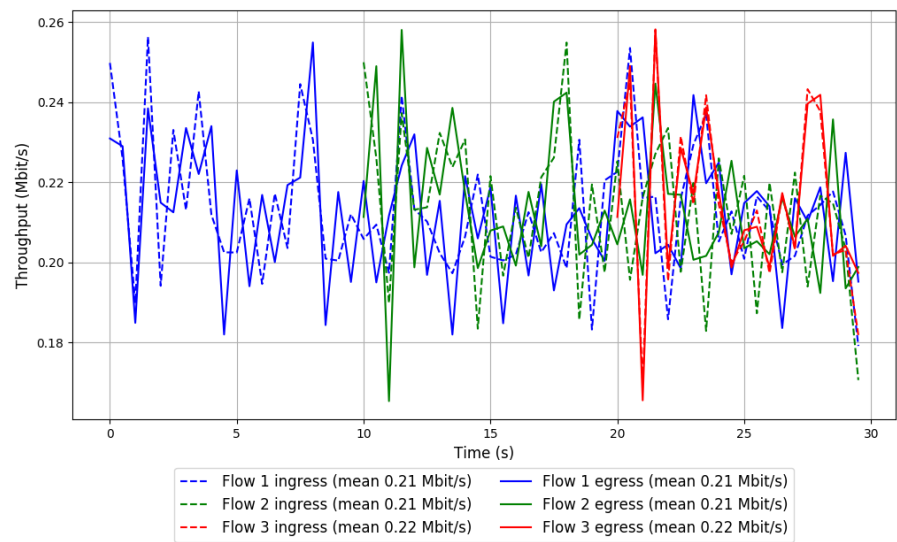
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.727 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

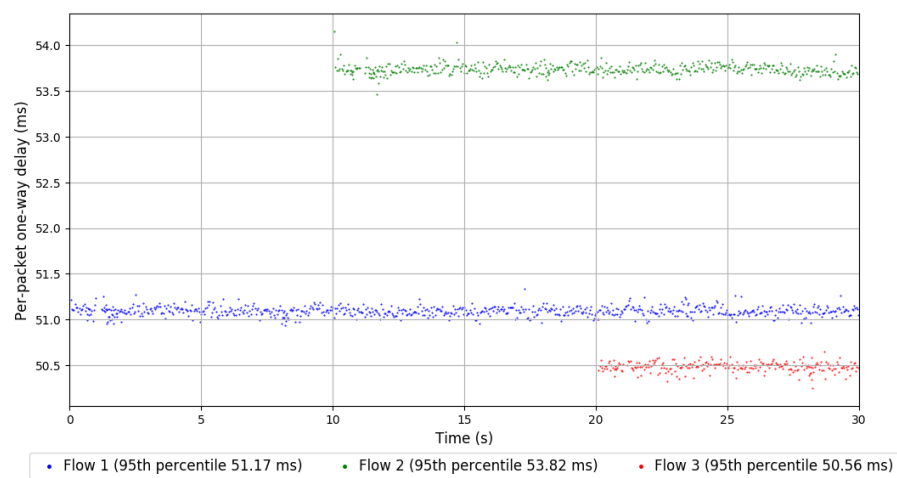
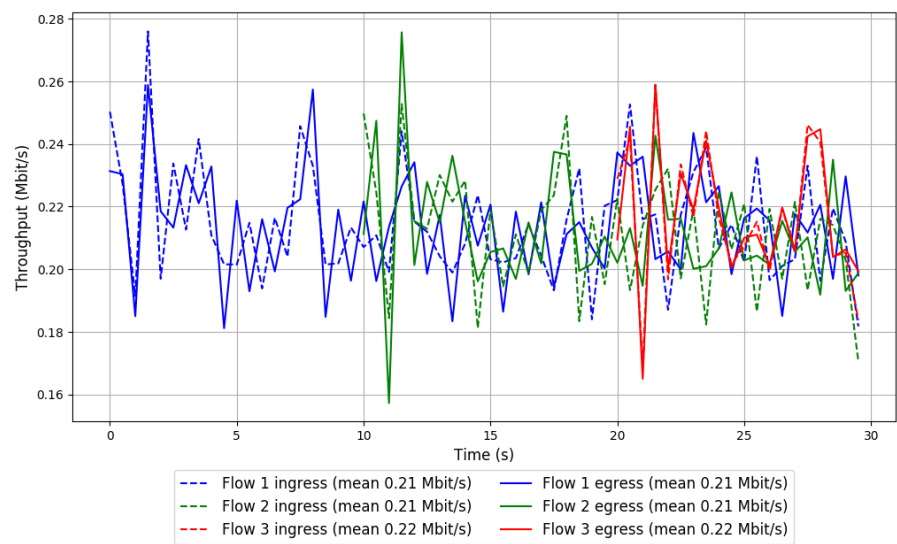


```
Run 10: Statistics of SReAM

Start at: 2018-01-31 21:31:02
End at: 2018-01-31 21:31:32

# Below is generated by plot.py at 2018-01-31 23:57:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.786 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 51.171 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.822 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.565 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

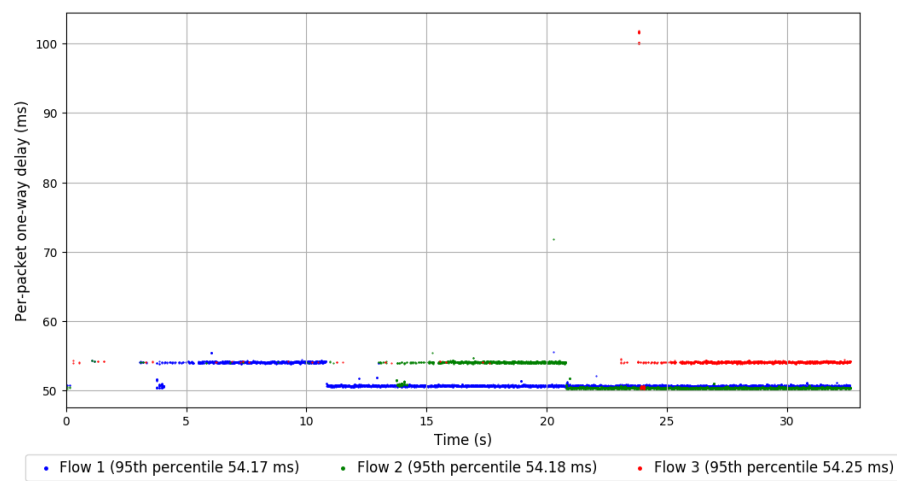
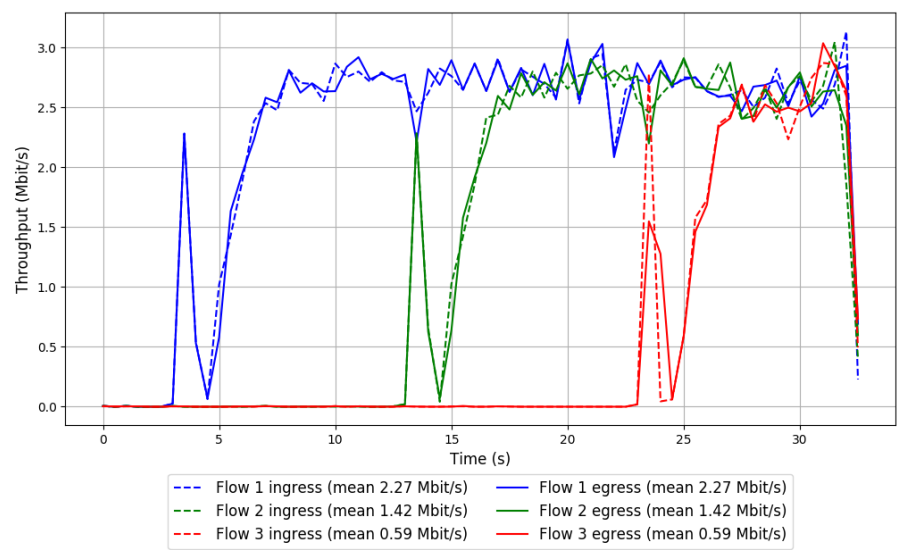


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-31 19:13:47
End at: 2018-01-31 19:14:17

# Below is generated by plot.py at 2018-01-31 23:57:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.27 Mbit/s
95th percentile per-packet one-way delay: 54.196 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 54.168 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 54.180 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 54.250 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link

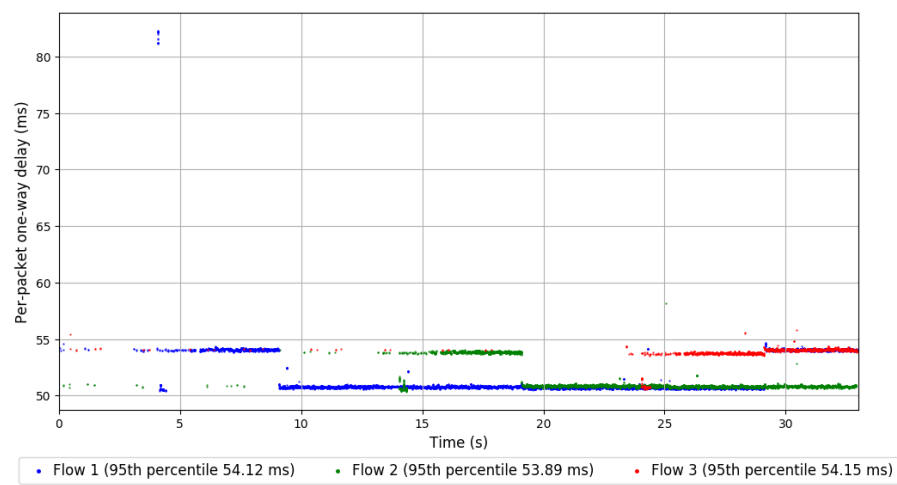
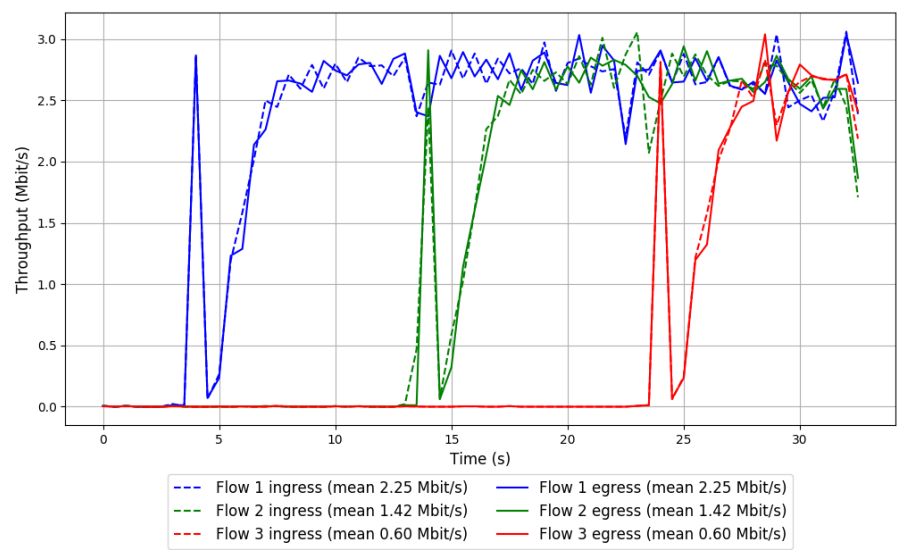


```
Run 2: Statistics of WebRTC media

Start at: 2018-01-31 19:30:29
End at: 2018-01-31 19:30:59

# Below is generated by plot.py at 2018-01-31 23:57:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.25 Mbit/s
95th percentile per-packet one-way delay: 54.111 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 54.122 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 53.892 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 54.152 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-31 19:47:11

End at: 2018-01-31 19:47:41

Below is generated by plot.py at 2018-01-31 23:57:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 53.836 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 51.020 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 53.856 ms

Loss rate: 0.00%

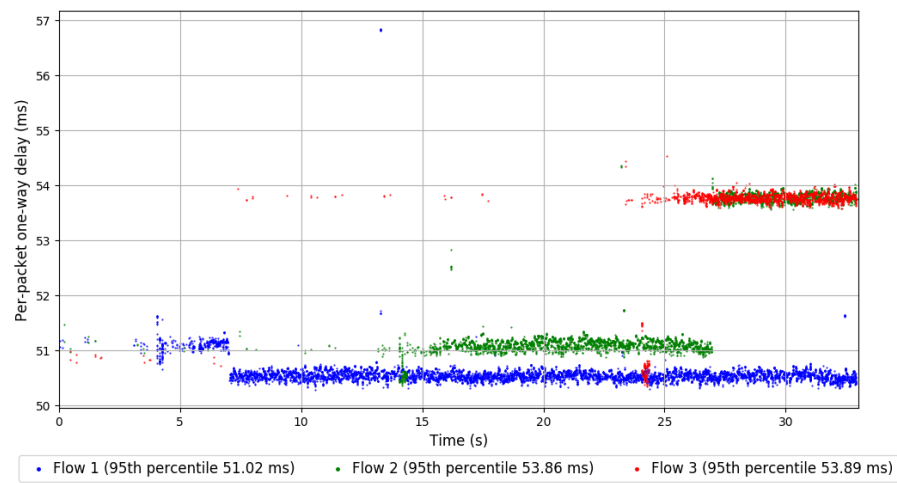
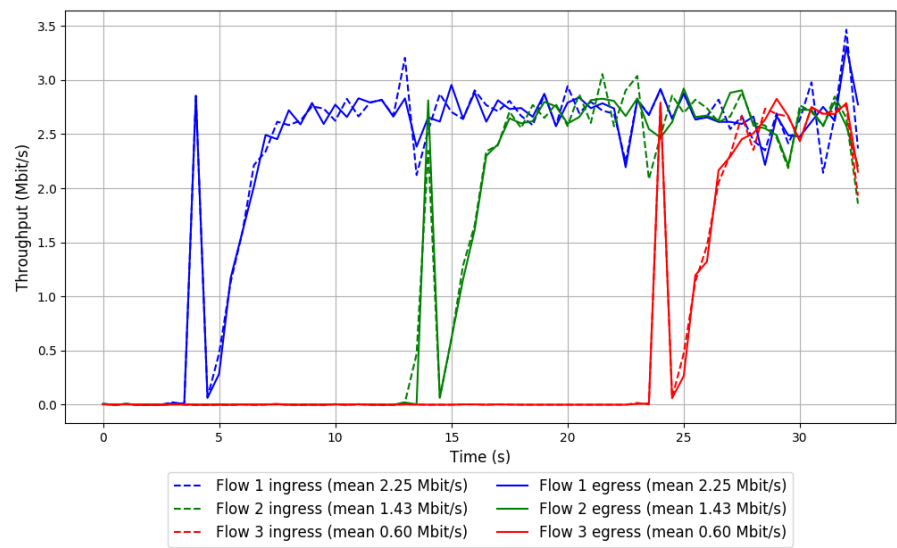
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 53.890 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-31 20:04:08

End at: 2018-01-31 20:04:38

Below is generated by plot.py at 2018-01-31 23:57:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.24 Mbit/s

95th percentile per-packet one-way delay: 54.211 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 54.212 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 54.209 ms

Loss rate: 0.00%

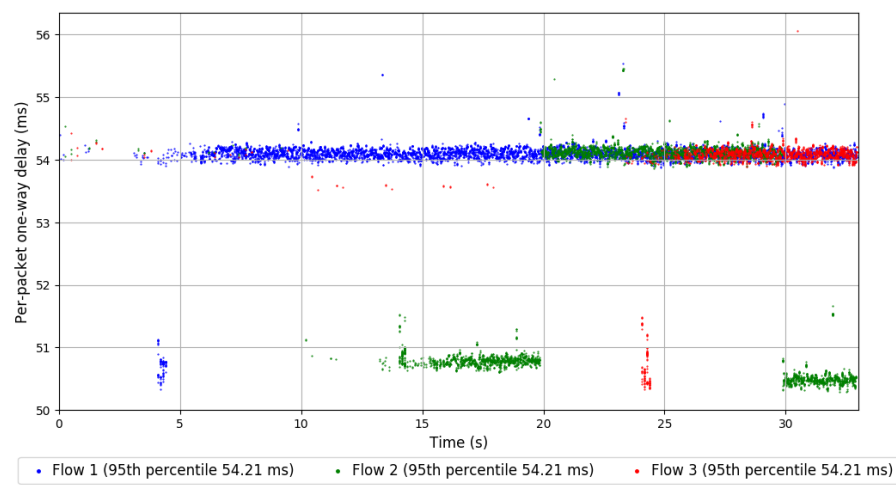
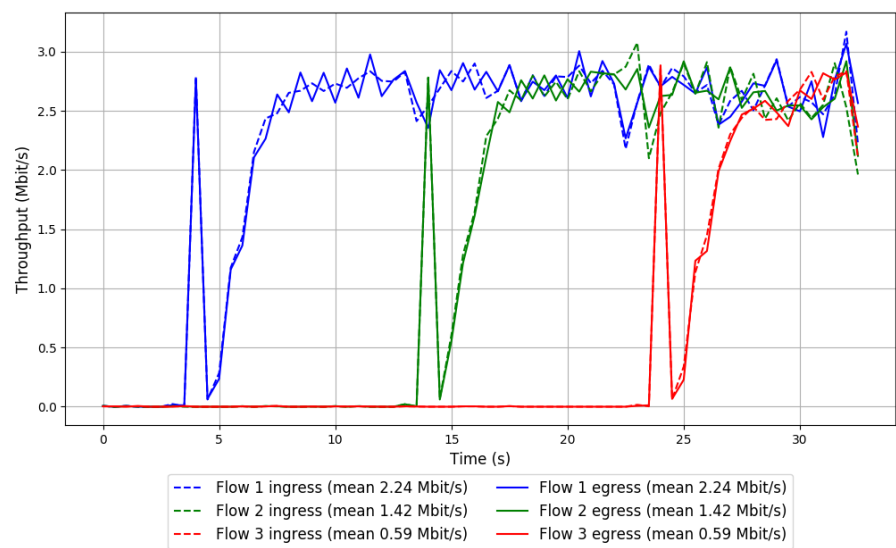
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 54.207 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

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

End at: 2018-01-31 20:21:06

Below is generated by plot.py at 2018-01-31 23:57:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 54.151 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 53.890 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 54.207 ms

Loss rate: 0.00%

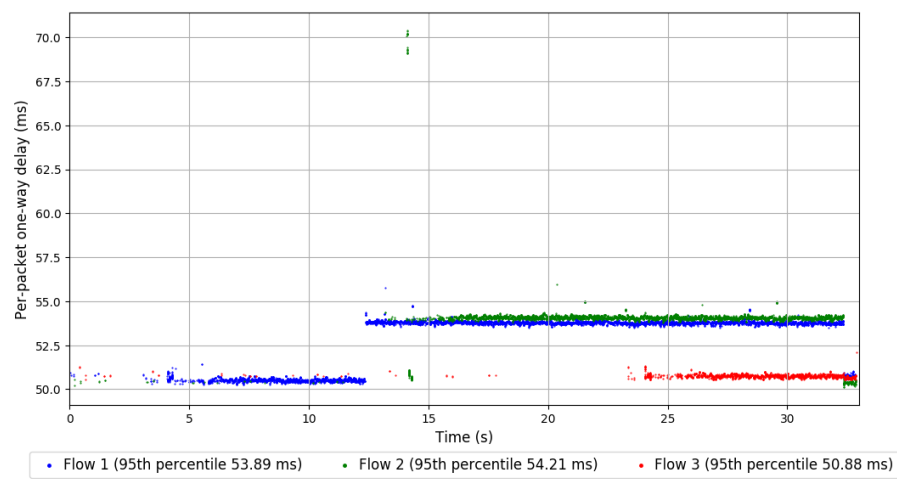
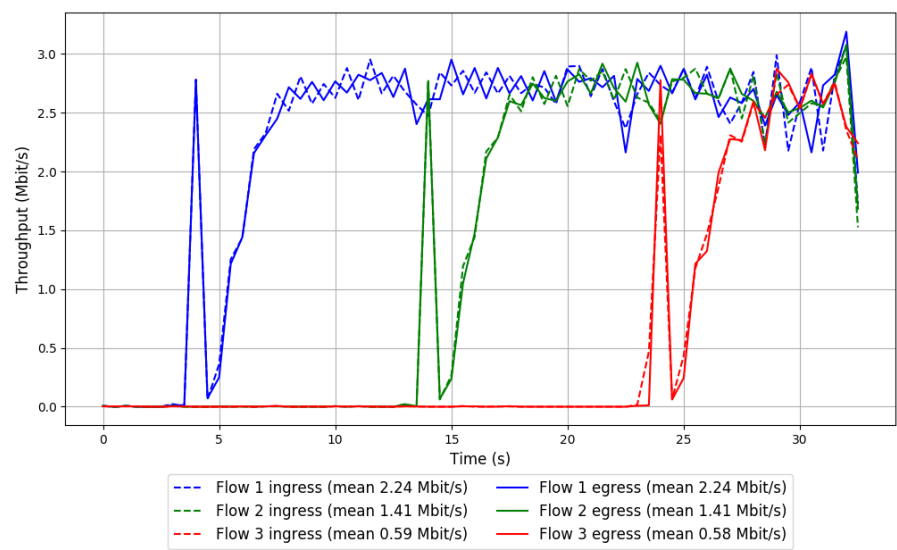
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 50.880 ms

Loss rate: 0.20%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-31 20:37:10

End at: 2018-01-31 20:37:40

Below is generated by plot.py at 2018-01-31 23:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 53.840 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 53.719 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 53.792 ms

Loss rate: 0.00%

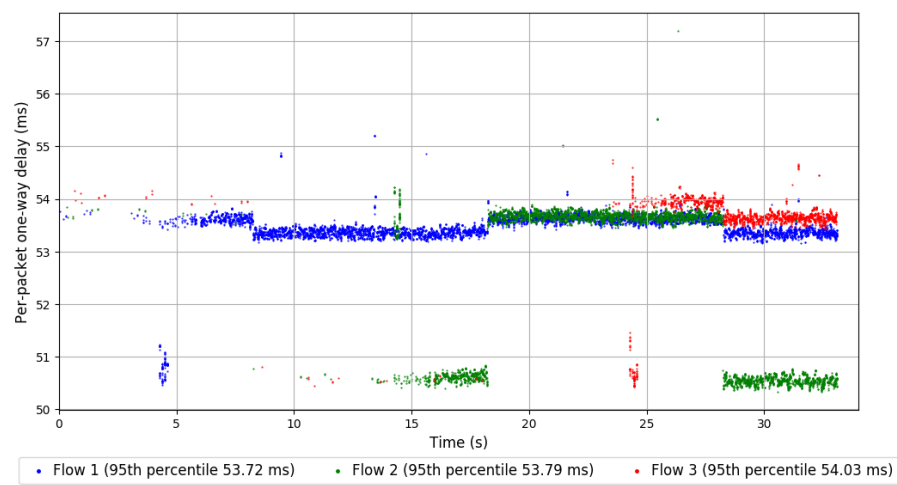
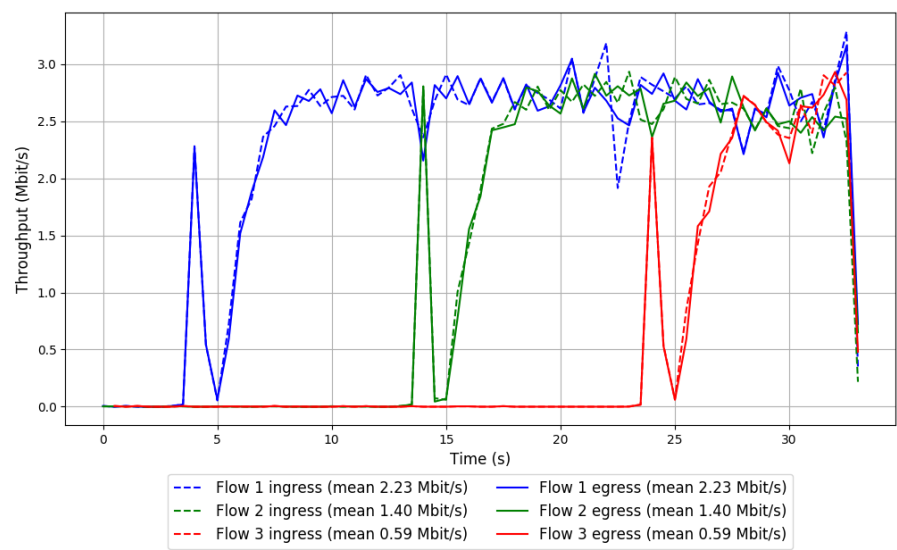
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 54.034 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-31 20:53:57

End at: 2018-01-31 20:54:27

Below is generated by plot.py at 2018-01-31 23:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 53.953 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 53.725 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 50.715 ms

Loss rate: 0.00%

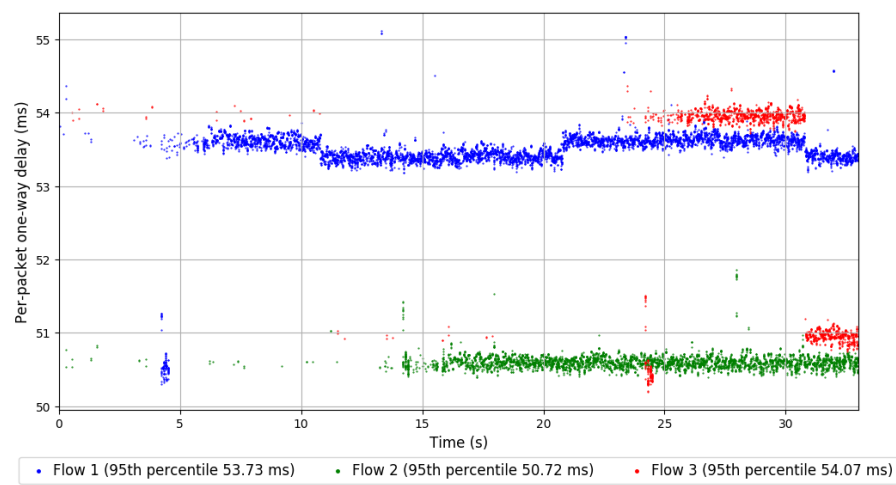
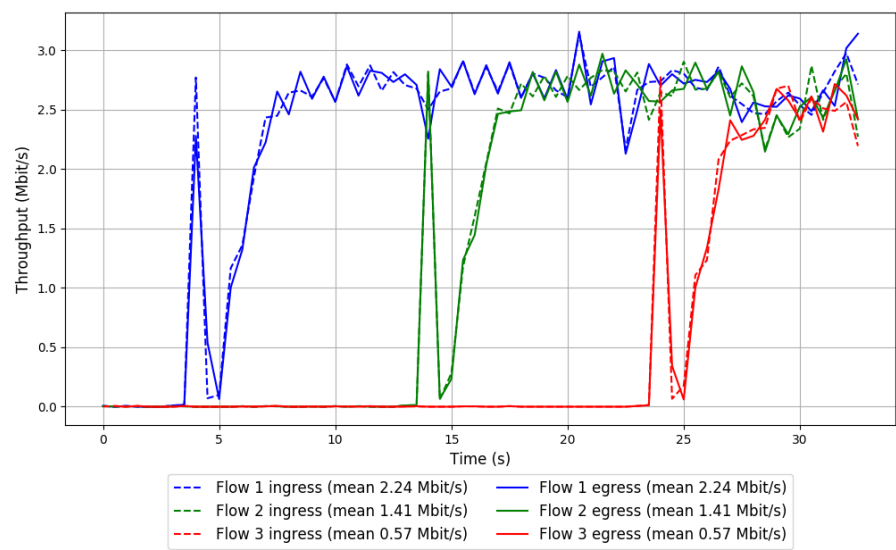
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 54.071 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-31 21:09:49

End at: 2018-01-31 21:10:19

Below is generated by plot.py at 2018-01-31 23:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 54.009 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 53.698 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 54.030 ms

Loss rate: 0.00%

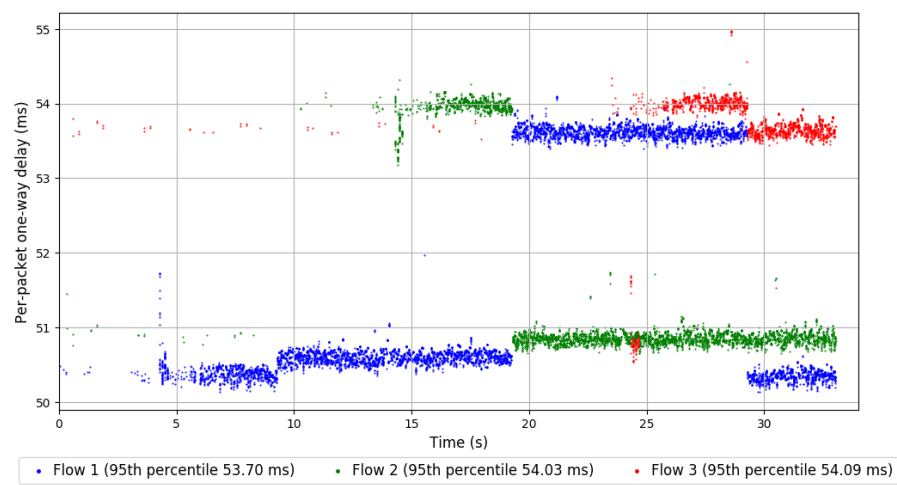
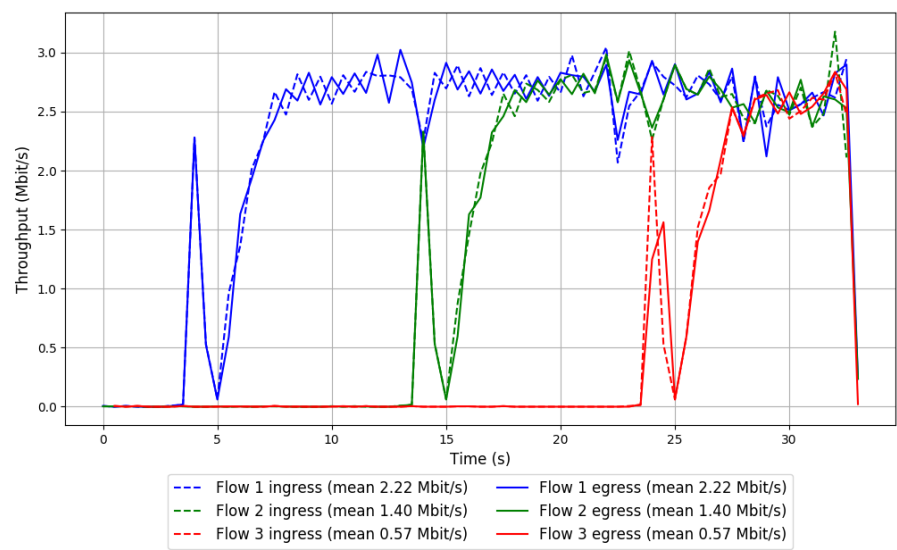
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 54.090 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-31 21:25:58

End at: 2018-01-31 21:26:28

Below is generated by plot.py at 2018-01-31 23:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 54.143 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 54.174 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 50.922 ms

Loss rate: 0.00%

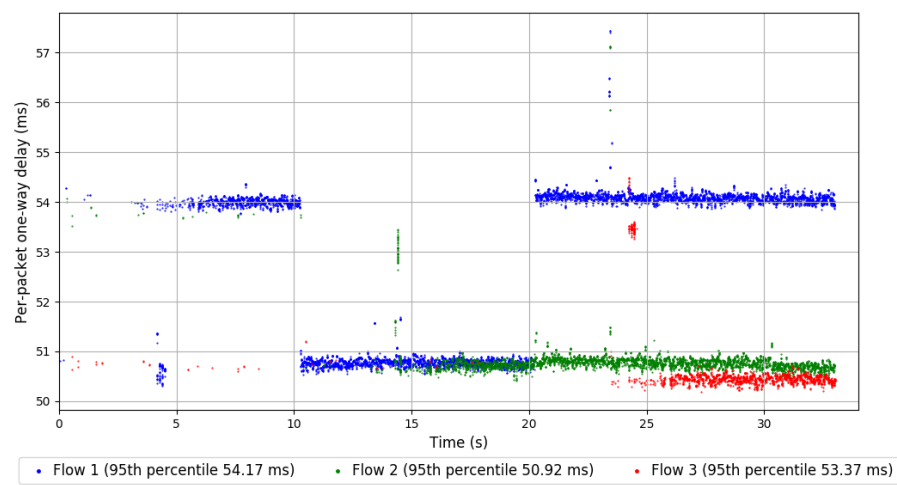
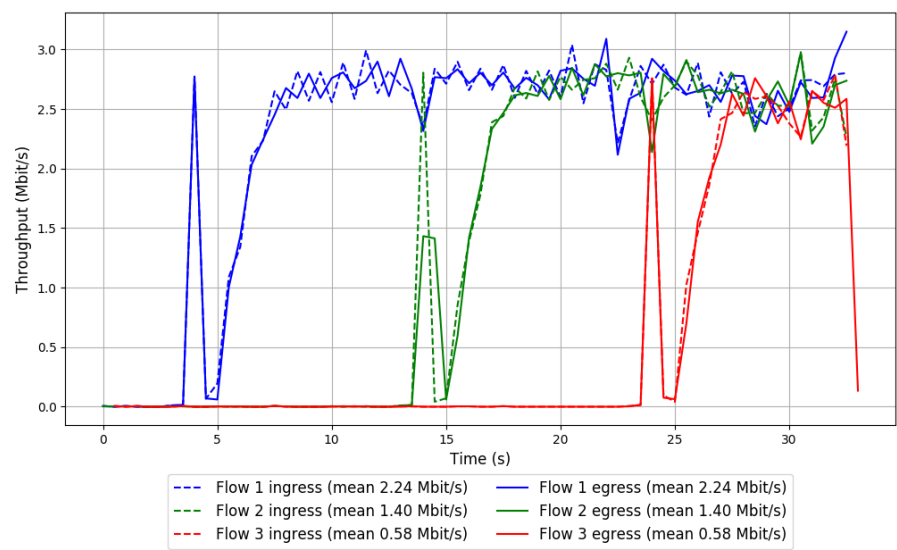
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 53.368 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-31 21:42:40

End at: 2018-01-31 21:43:10

Below is generated by plot.py at 2018-01-31 23:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 54.199 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 54.232 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 50.511 ms

Loss rate: 0.00%

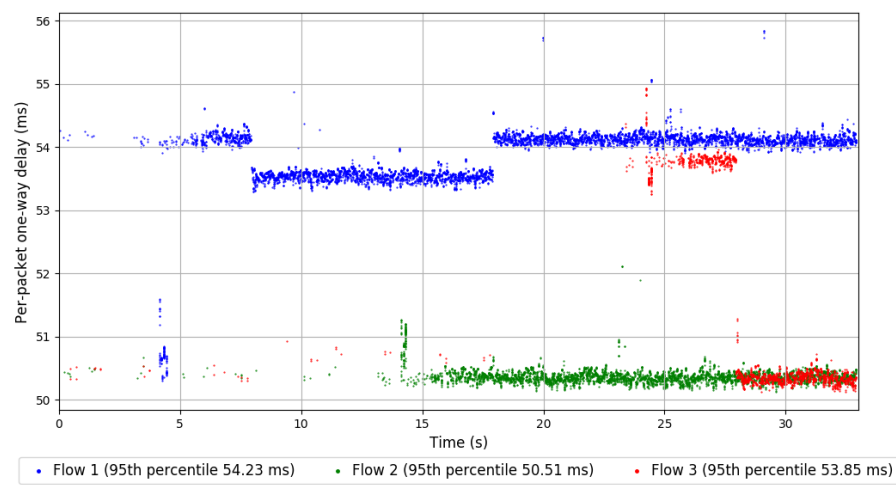
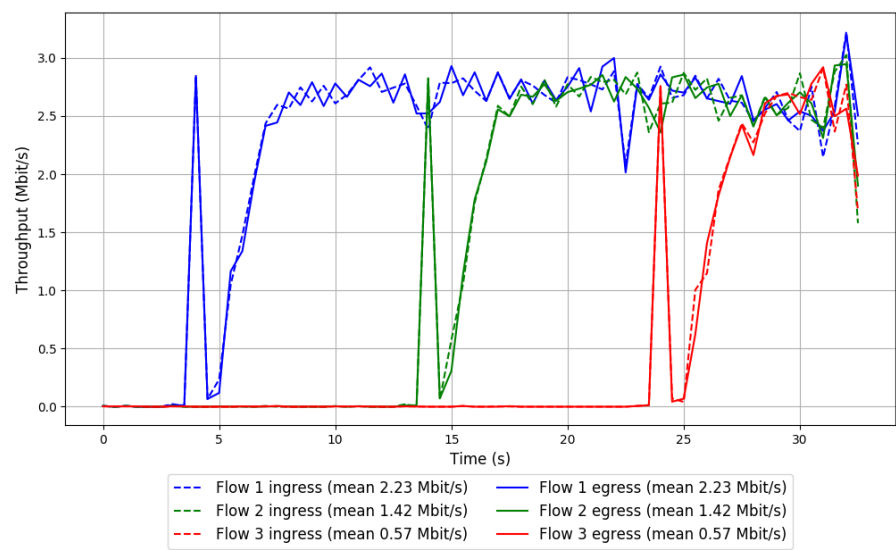
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 53.846 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

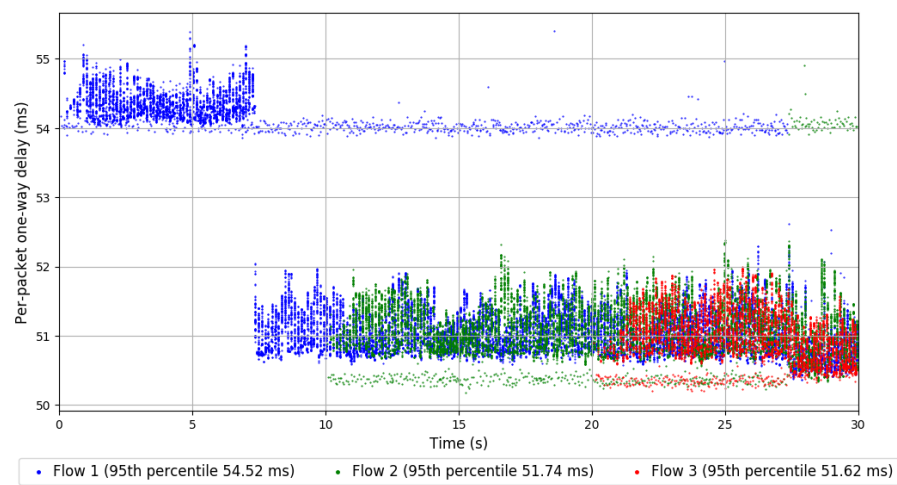
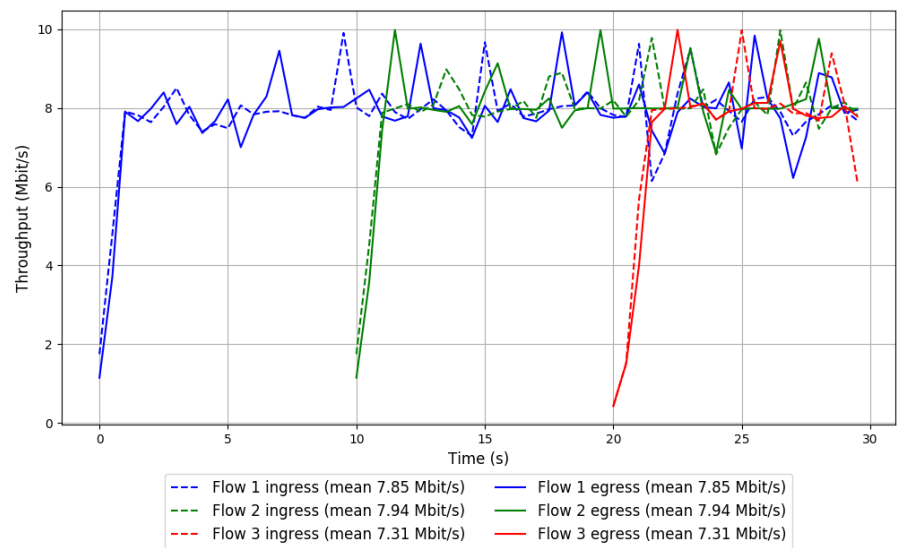


```
Run 1: Statistics of Sprout

Start at: 2018-01-31 19:11:58
End at: 2018-01-31 19:12:28

# Below is generated by plot.py at 2018-01-31 23:57:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.54 Mbit/s
95th percentile per-packet one-way delay: 54.357 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 7.85 Mbit/s
95th percentile per-packet one-way delay: 54.519 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 7.94 Mbit/s
95th percentile per-packet one-way delay: 51.740 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.31 Mbit/s
95th percentile per-packet one-way delay: 51.616 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-31 19:28:40

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

Below is generated by plot.py at 2018-01-31 23:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.46 Mbit/s

95th percentile per-packet one-way delay: 54.221 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 54.546 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 52.037 ms

Loss rate: 0.00%

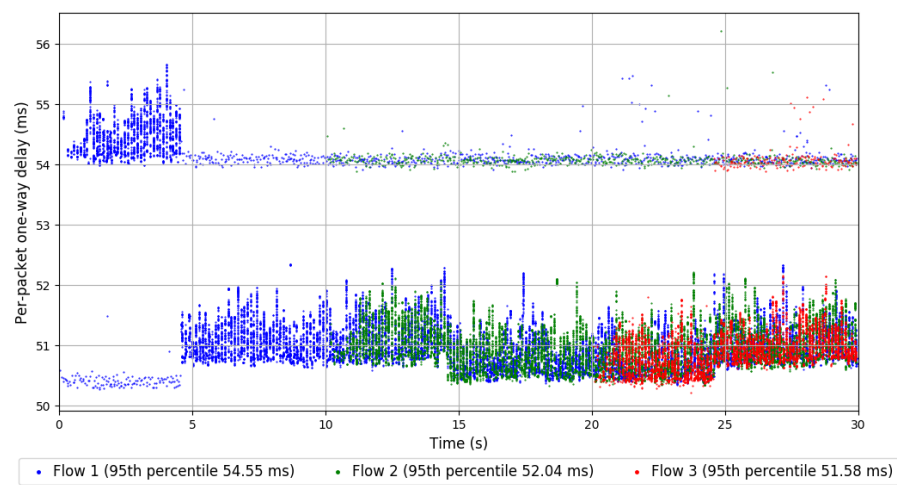
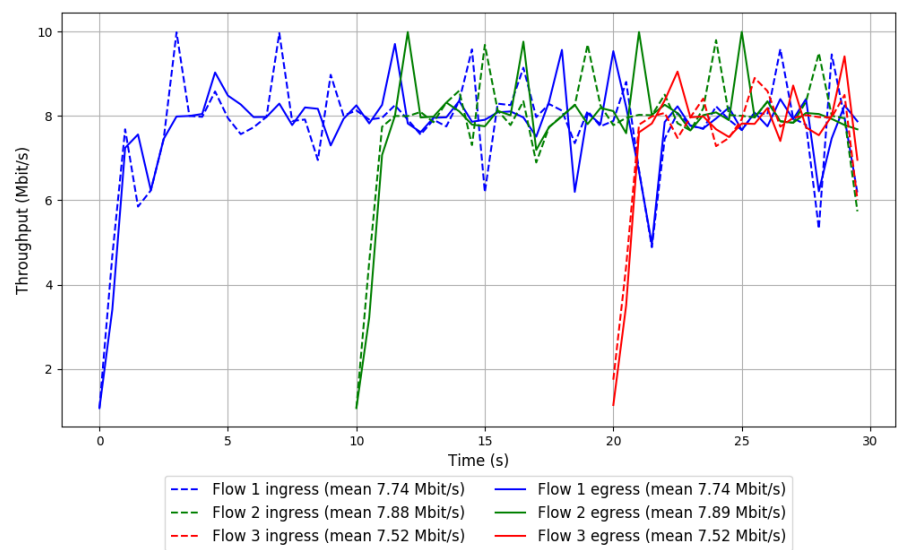
-- Flow 3:

Average throughput: 7.52 Mbit/s

95th percentile per-packet one-way delay: 51.579 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-31 19:45:43

End at: 2018-01-31 19:46:13

Below is generated by plot.py at 2018-01-31 23:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.17 Mbit/s

95th percentile per-packet one-way delay: 54.249 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 54.282 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 54.206 ms

Loss rate: 0.01%

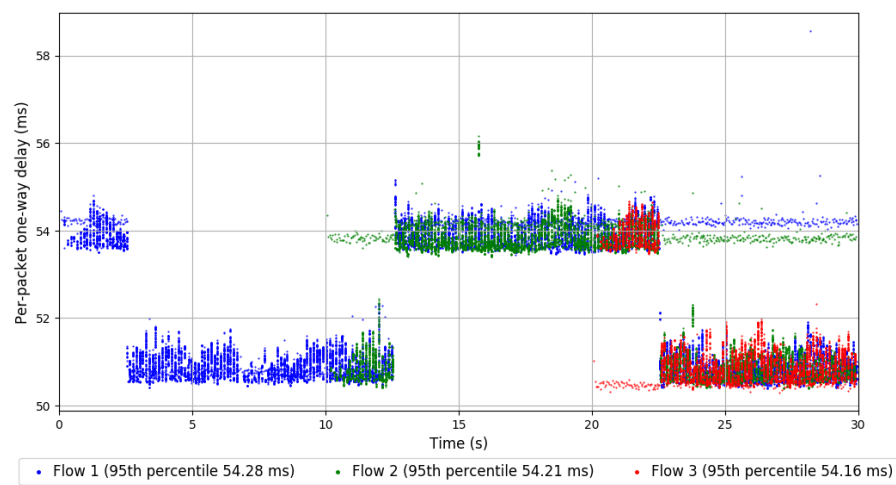
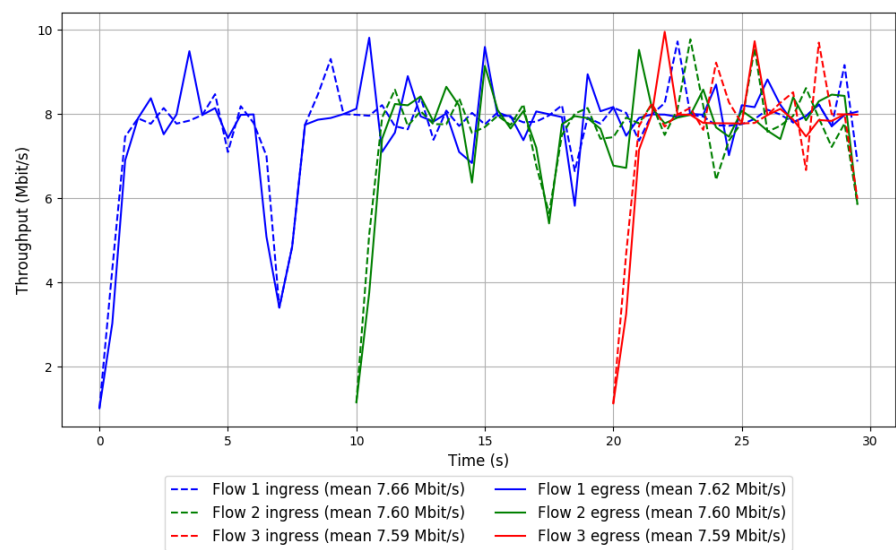
-- Flow 3:

Average throughput: 7.59 Mbit/s

95th percentile per-packet one-way delay: 54.163 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-31 20:02:22

End at: 2018-01-31 20:02:52

Below is generated by plot.py at 2018-01-31 23:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.58 Mbit/s

95th percentile per-packet one-way delay: 51.415 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 51.407 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 7.84 Mbit/s

95th percentile per-packet one-way delay: 51.398 ms

Loss rate: 0.05%

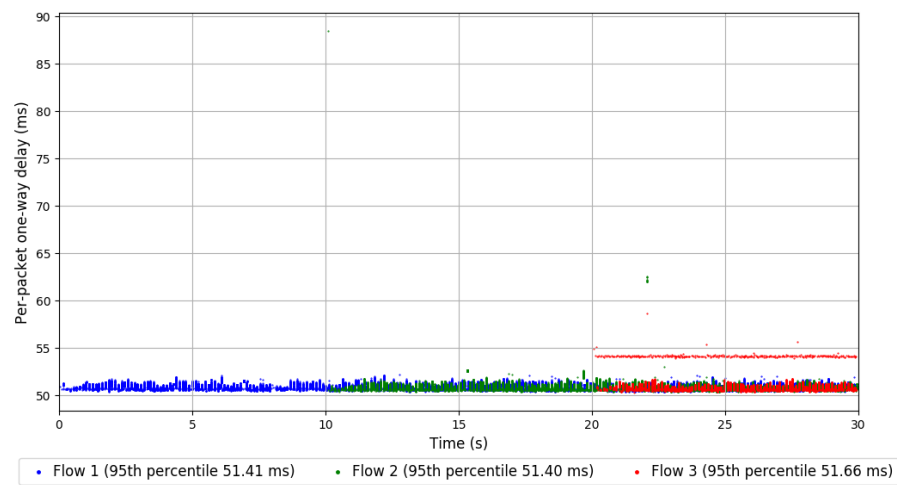
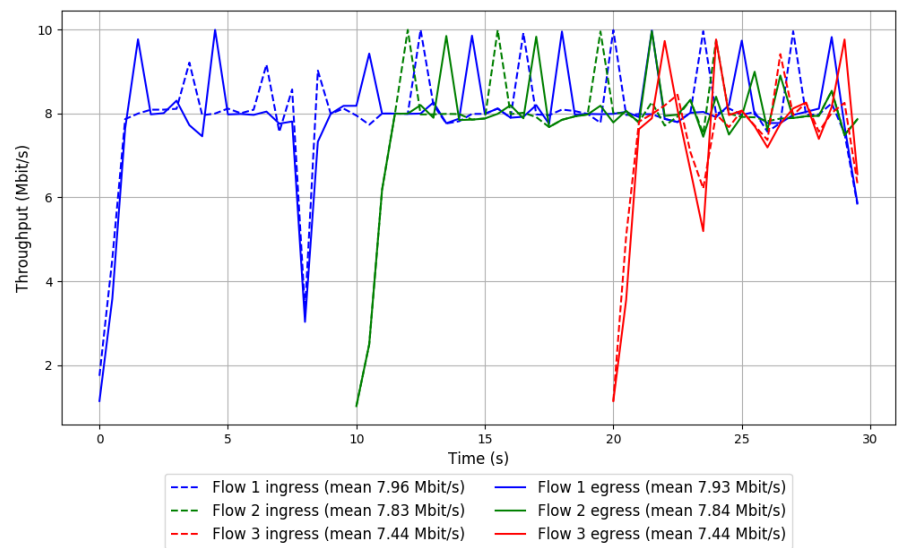
-- Flow 3:

Average throughput: 7.44 Mbit/s

95th percentile per-packet one-way delay: 51.663 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-31 20:19:09

End at: 2018-01-31 20:19:39

Below is generated by plot.py at 2018-01-31 23:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.34 Mbit/s

95th percentile per-packet one-way delay: 54.087 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 54.162 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 7.65 Mbit/s

95th percentile per-packet one-way delay: 54.076 ms

Loss rate: 0.00%

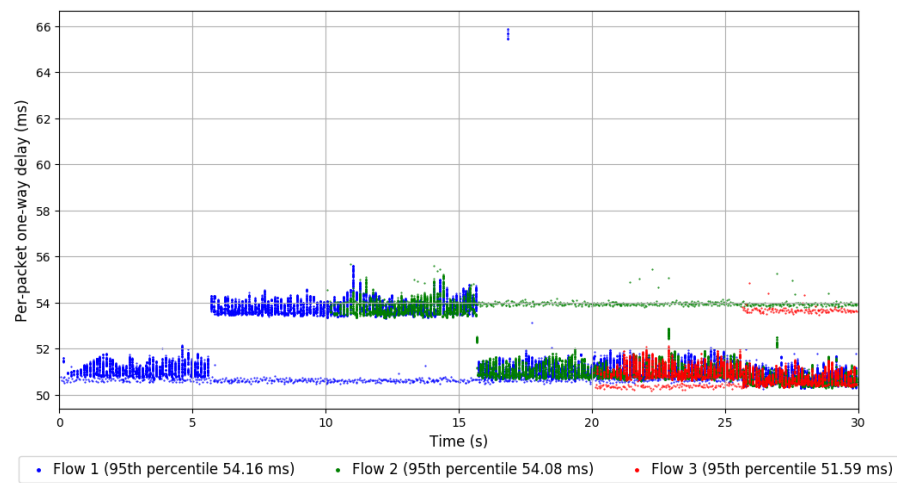
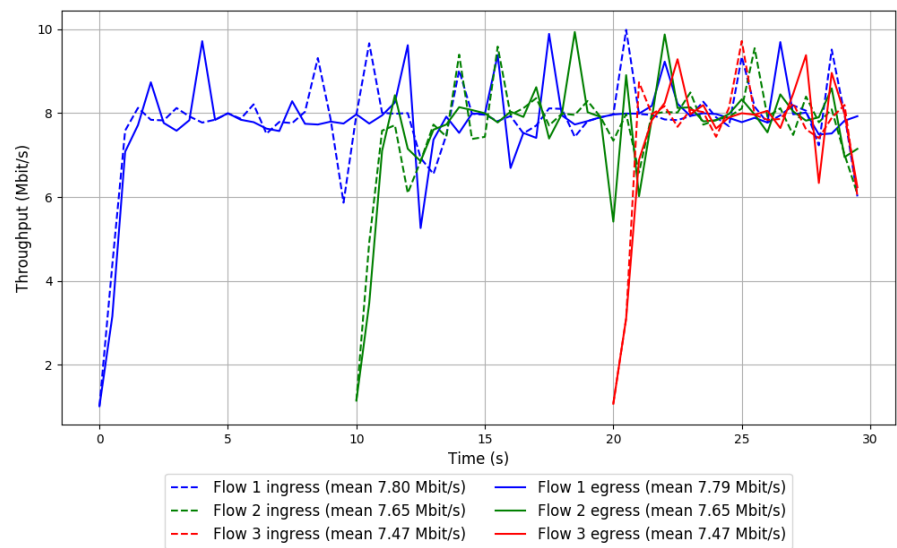
-- Flow 3:

Average throughput: 7.47 Mbit/s

95th percentile per-packet one-way delay: 51.586 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-31 20:35:24

End at: 2018-01-31 20:35:54

Below is generated by plot.py at 2018-01-31 23:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.53 Mbit/s

95th percentile per-packet one-way delay: 54.172 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 54.091 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 54.133 ms

Loss rate: 0.00%

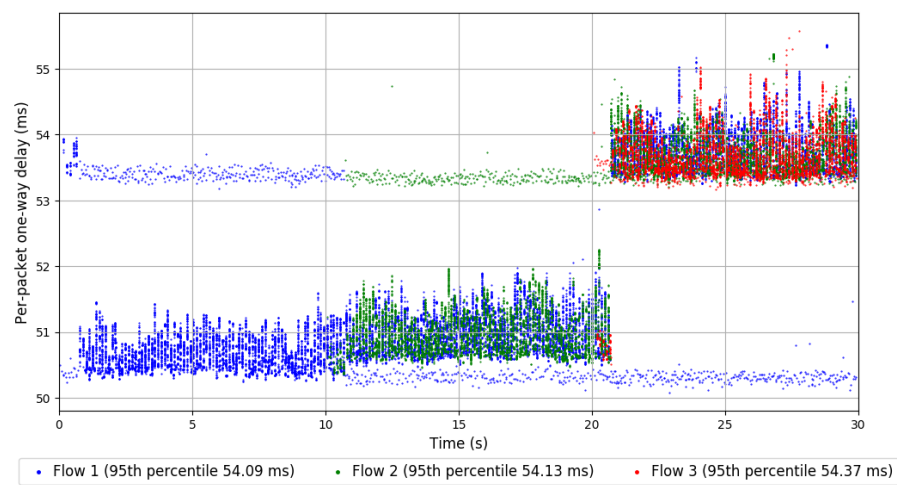
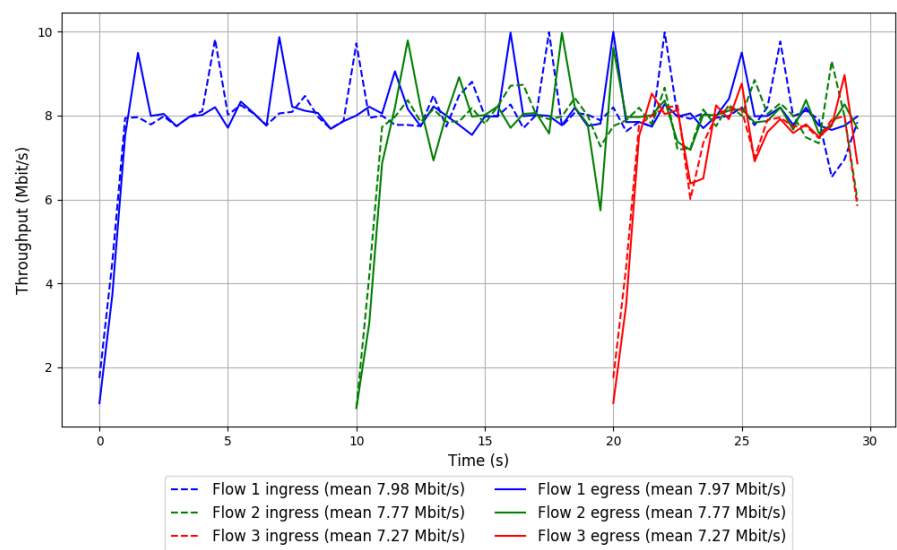
-- Flow 3:

Average throughput: 7.27 Mbit/s

95th percentile per-packet one-way delay: 54.374 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-31 20:52:17

End at: 2018-01-31 20:52:47

Below is generated by plot.py at 2018-01-31 23:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.23 Mbit/s

95th percentile per-packet one-way delay: 54.142 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 54.149 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.24 Mbit/s

95th percentile per-packet one-way delay: 54.150 ms

Loss rate: 0.23%

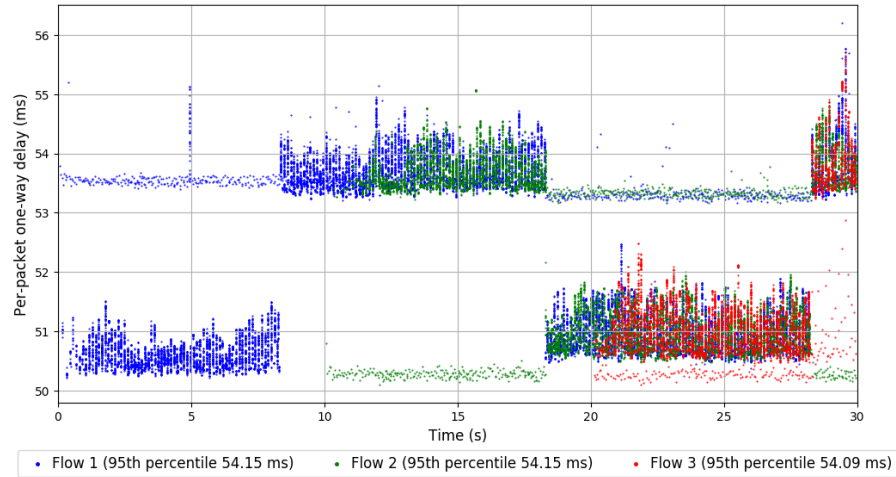
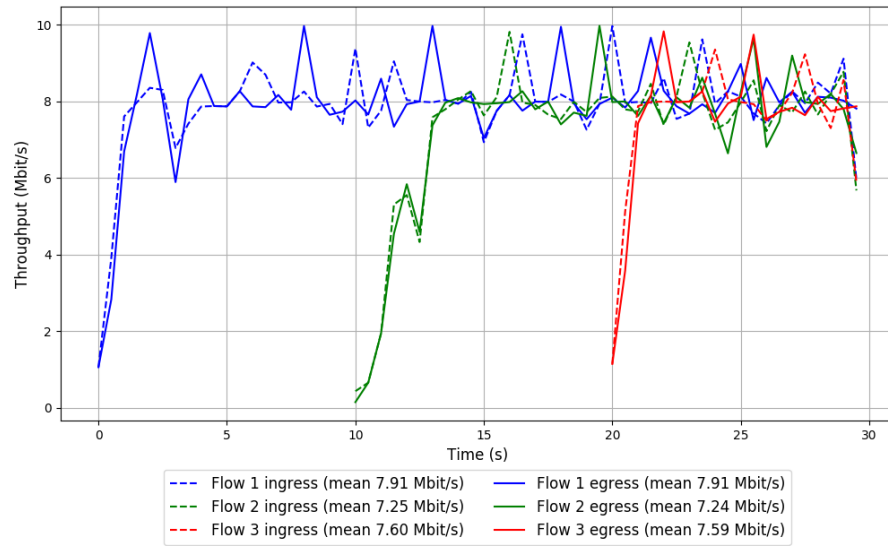
-- Flow 3:

Average throughput: 7.59 Mbit/s

95th percentile per-packet one-way delay: 54.095 ms

Loss rate: 0.09%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-31 21:08:24

End at: 2018-01-31 21:08:54

Below is generated by plot.py at 2018-01-31 23:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.45 Mbit/s

95th percentile per-packet one-way delay: 51.349 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 51.397 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 51.409 ms

Loss rate: 0.00%

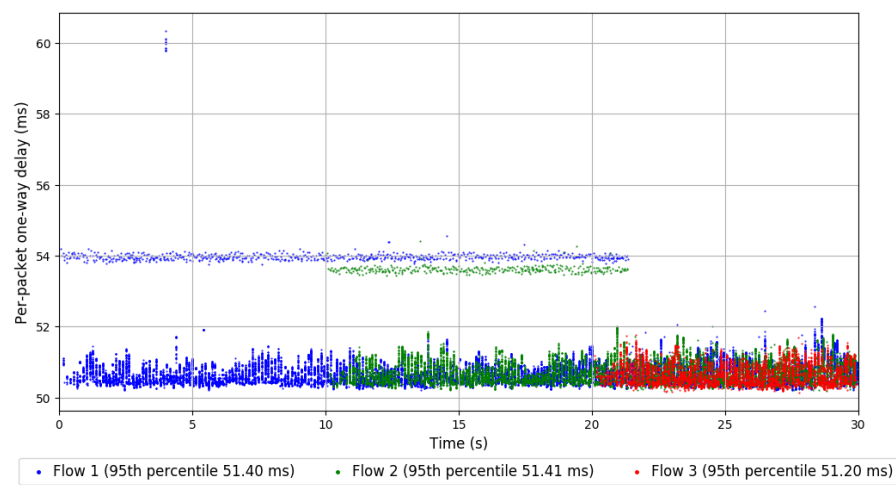
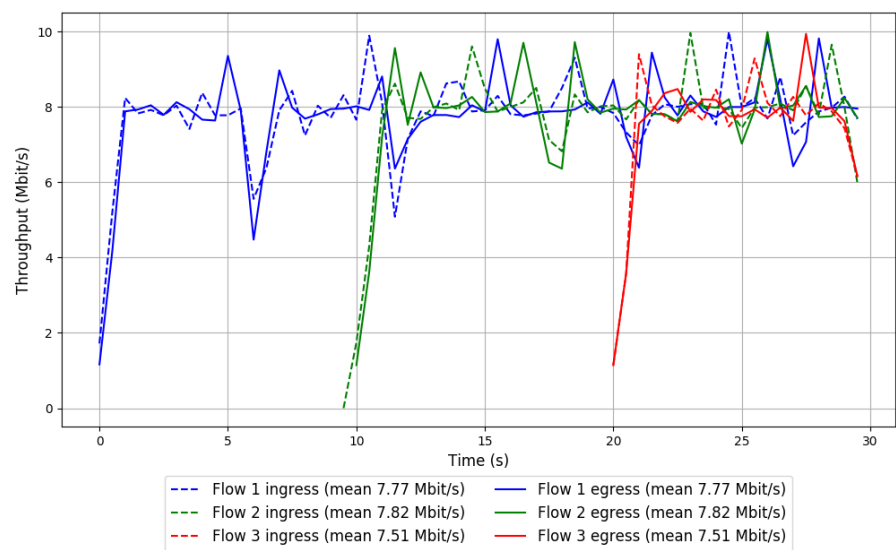
-- Flow 3:

Average throughput: 7.51 Mbit/s

95th percentile per-packet one-way delay: 51.195 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-31 21:24:32

End at: 2018-01-31 21:25:02

Below is generated by plot.py at 2018-01-31 23:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.18 Mbit/s

95th percentile per-packet one-way delay: 54.136 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 53.943 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 7.57 Mbit/s

95th percentile per-packet one-way delay: 54.071 ms

Loss rate: 0.63%

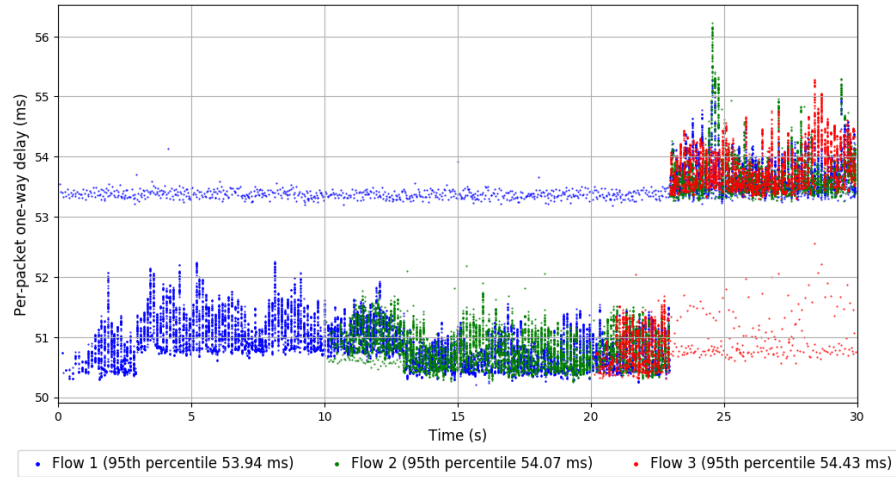
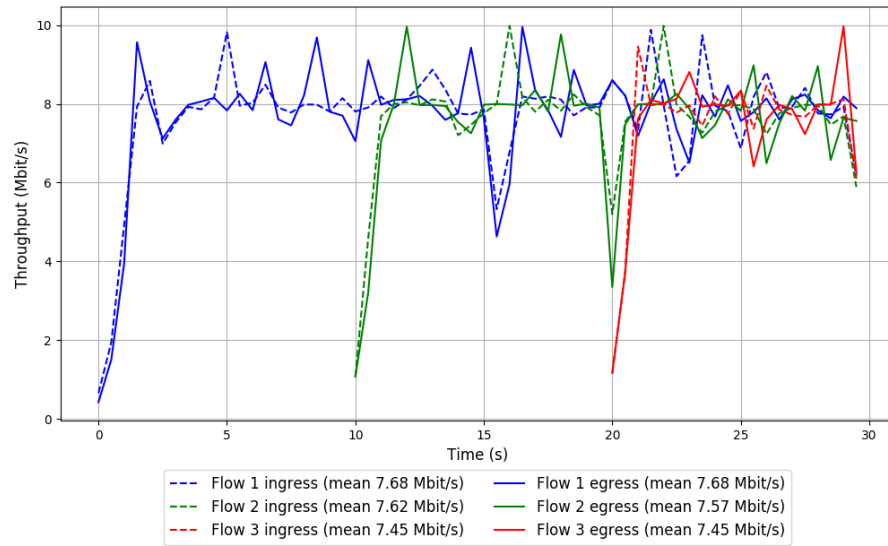
-- Flow 3:

Average throughput: 7.45 Mbit/s

95th percentile per-packet one-way delay: 54.426 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-31 21:40:53

End at: 2018-01-31 21:41:23

Below is generated by plot.py at 2018-01-31 23:57:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.13 Mbit/s

95th percentile per-packet one-way delay: 54.355 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 7.63 Mbit/s

95th percentile per-packet one-way delay: 54.331 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 7.66 Mbit/s

95th percentile per-packet one-way delay: 54.471 ms

Loss rate: 0.04%

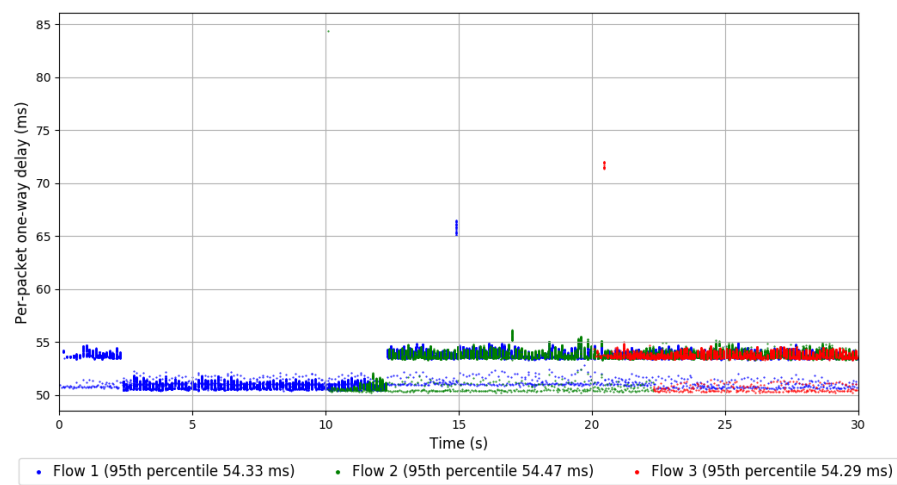
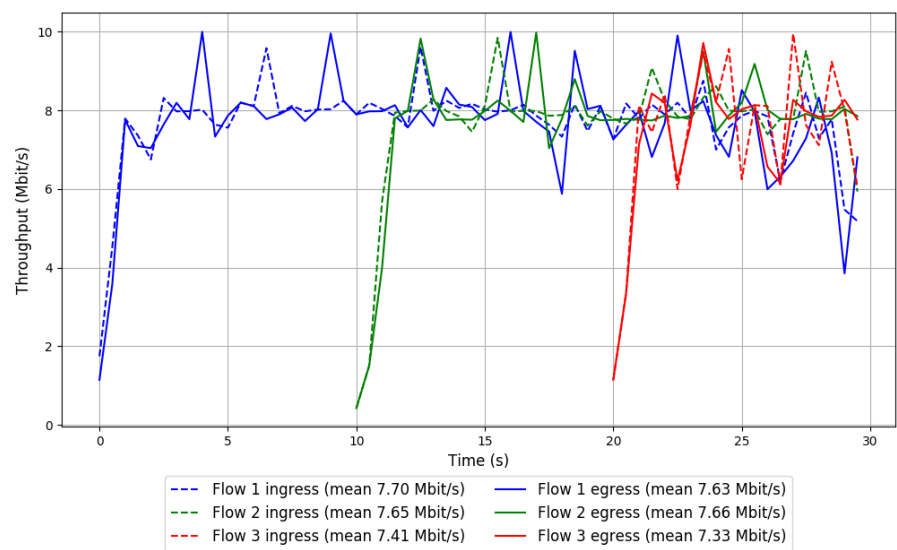
-- Flow 3:

Average throughput: 7.33 Mbit/s

95th percentile per-packet one-way delay: 54.286 ms

Loss rate: 1.02%

Run 10: Report of Sprout — Data Link

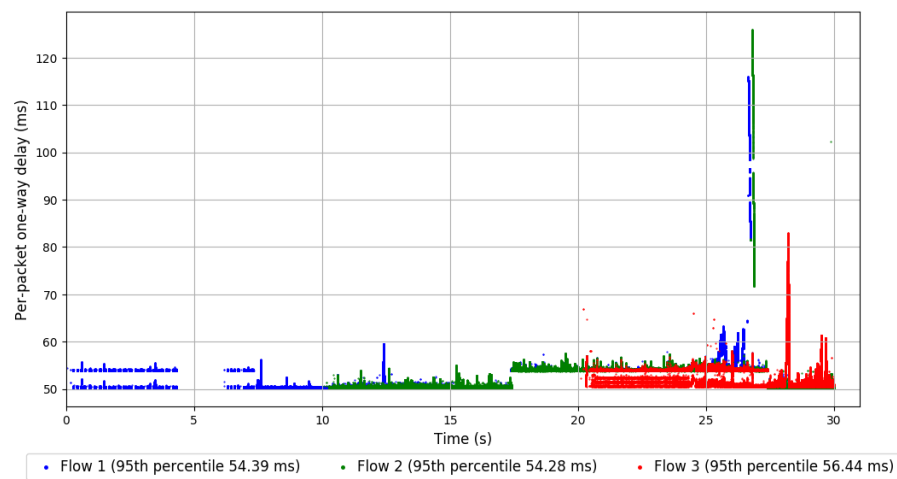
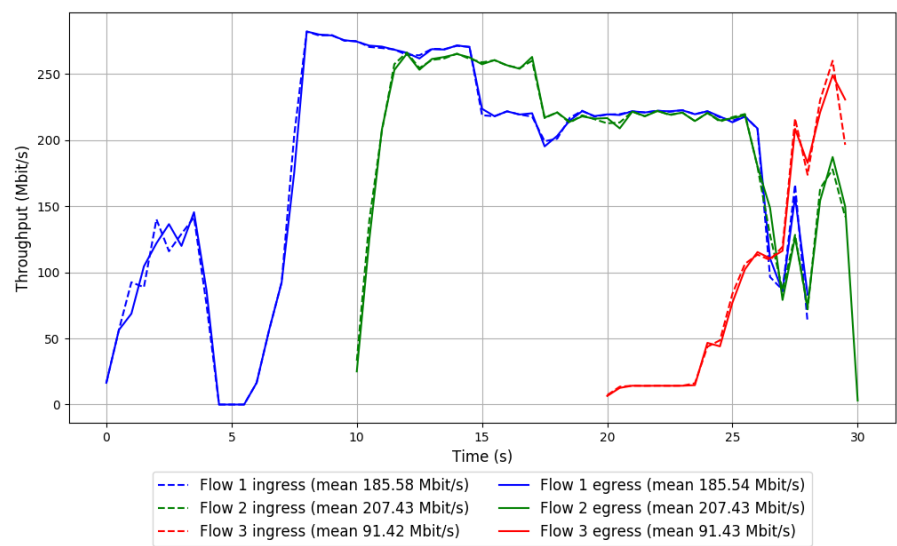


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-31 19:12:38
End at: 2018-01-31 19:13:08

# Below is generated by plot.py at 2018-02-01 00:02:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 342.67 Mbit/s
95th percentile per-packet one-way delay: 54.422 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.54 Mbit/s
95th percentile per-packet one-way delay: 54.388 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 207.43 Mbit/s
95th percentile per-packet one-way delay: 54.280 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 91.43 Mbit/s
95th percentile per-packet one-way delay: 56.443 ms
Loss rate: 0.00%
```


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

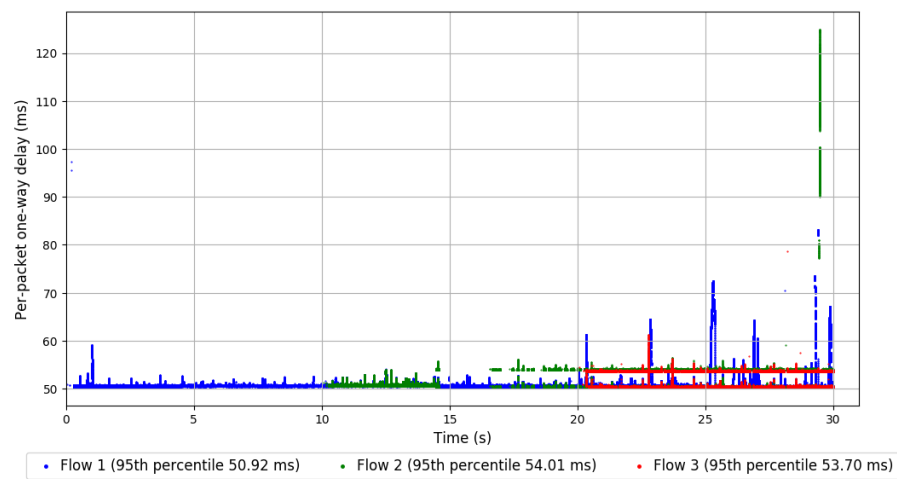
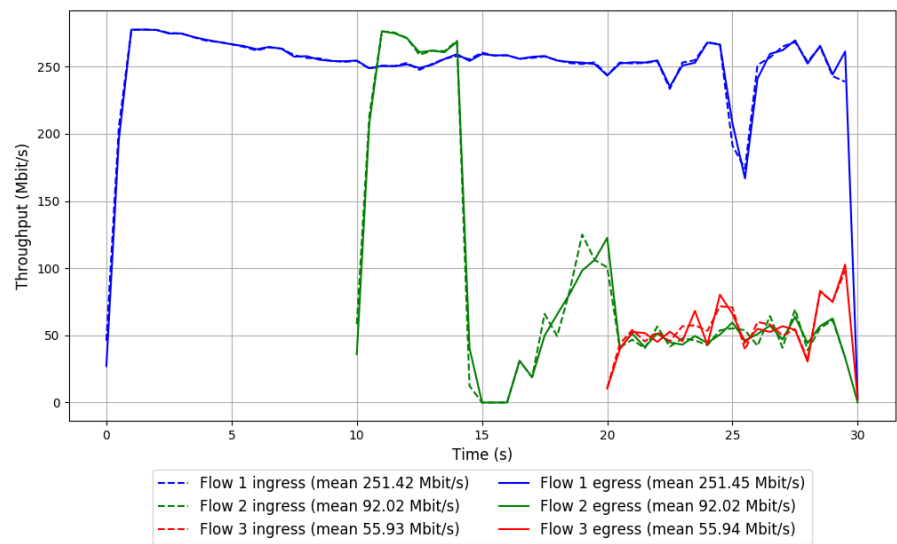


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-31 19:29:21
End at: 2018-01-31 19:29:51

# Below is generated by plot.py at 2018-02-01 00:02:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 331.25 Mbit/s
95th percentile per-packet one-way delay: 53.916 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 251.45 Mbit/s
95th percentile per-packet one-way delay: 50.923 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 92.02 Mbit/s
95th percentile per-packet one-way delay: 54.006 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 55.94 Mbit/s
95th percentile per-packet one-way delay: 53.703 ms
Loss rate: 0.00%
```

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

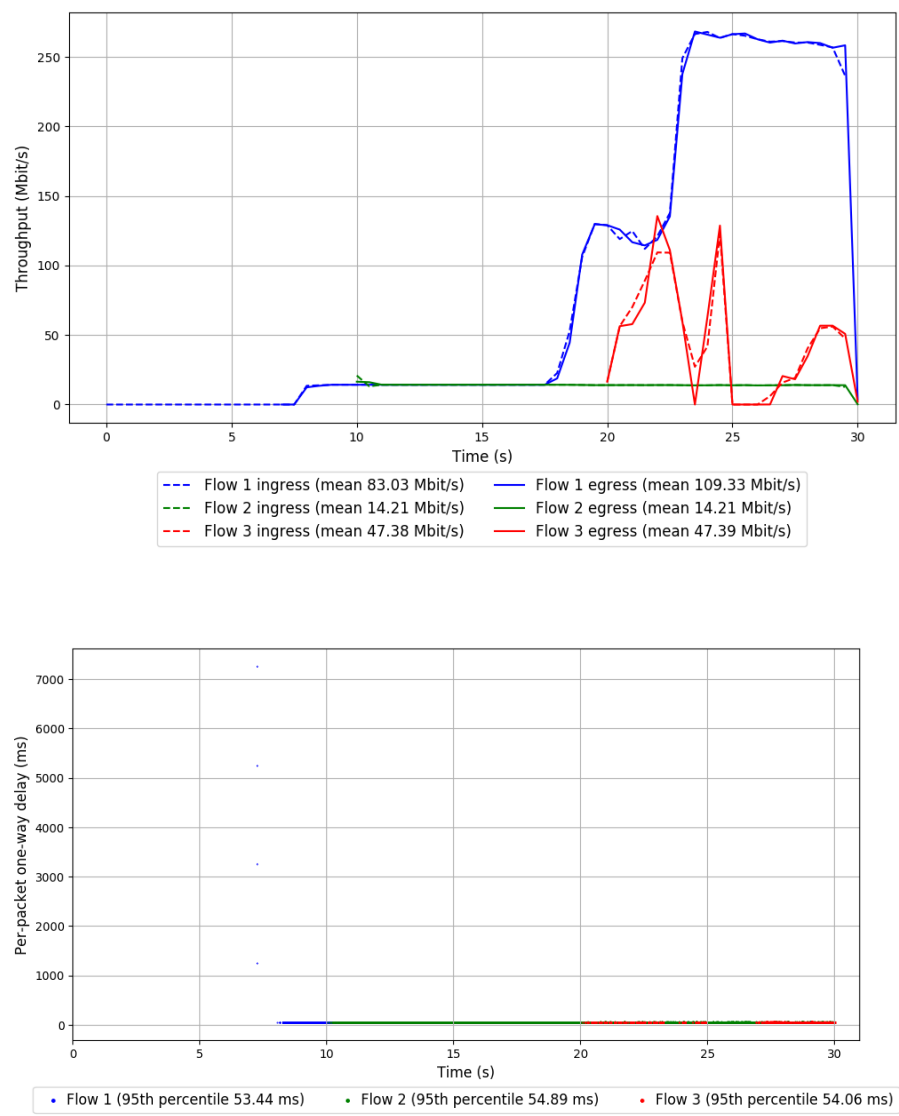


Run 3: Statistics of TaoVA-100x

Start at: 2018-01-31 19:46:22

End at: 2018-01-31 19:46:53

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

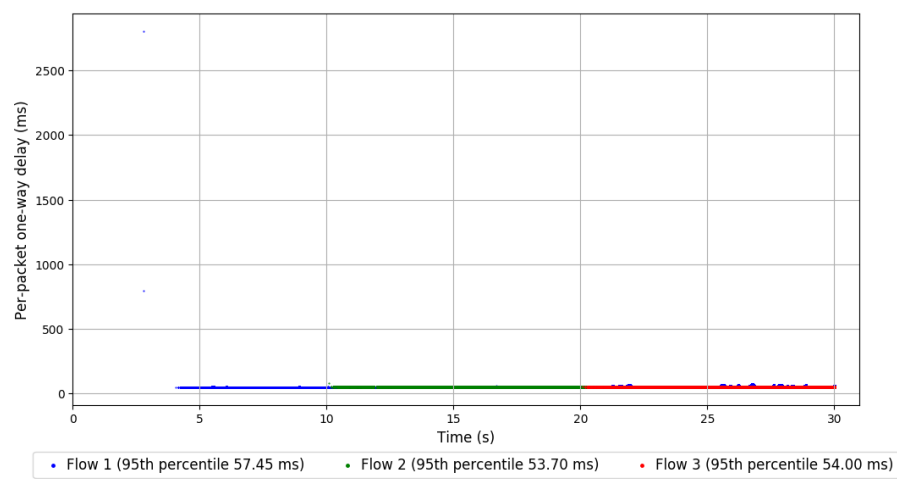
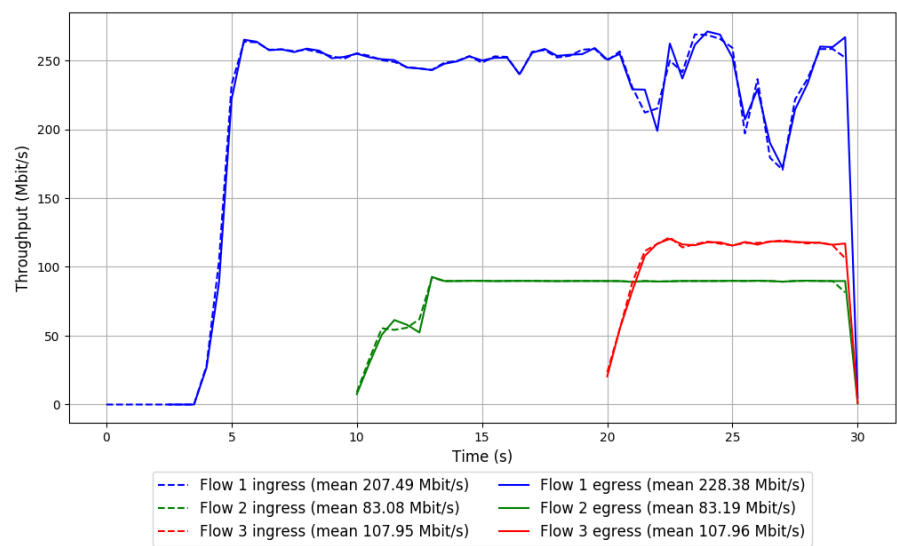


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-01-31 20:03:02
End at: 2018-01-31 20:03:32

# Below is generated by plot.py at 2018-02-01 00:02:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 328.71 Mbit/s
95th percentile per-packet one-way delay: 54.553 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 228.38 Mbit/s
95th percentile per-packet one-way delay: 57.449 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 83.19 Mbit/s
95th percentile per-packet one-way delay: 53.698 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 107.96 Mbit/s
95th percentile per-packet one-way delay: 53.998 ms
Loss rate: 0.00%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-31 20:19:49

End at: 2018-01-31 20:20:19

Below is generated by plot.py at 2018-02-01 00:02:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.58 Mbit/s

95th percentile per-packet one-way delay: 53.544 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 14.07 Mbit/s

95th percentile per-packet one-way delay: 53.642 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 73.76 Mbit/s

95th percentile per-packet one-way delay: 53.197 ms

Loss rate: 0.00%

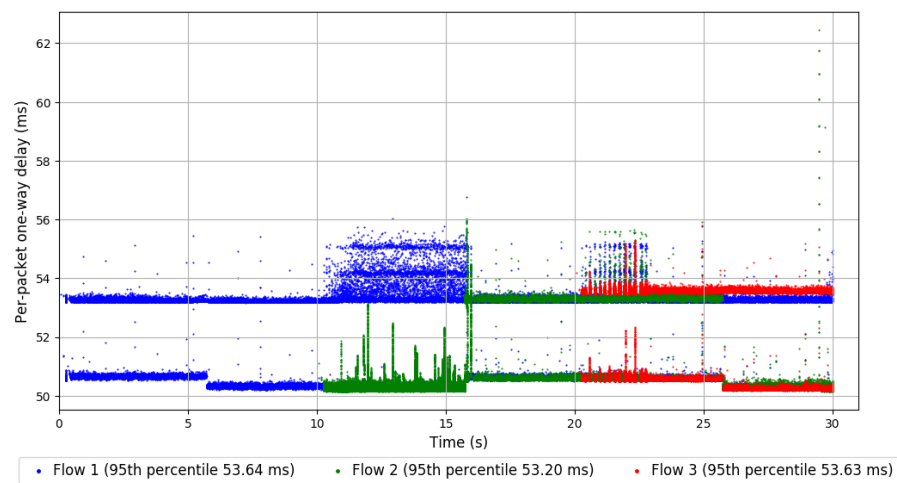
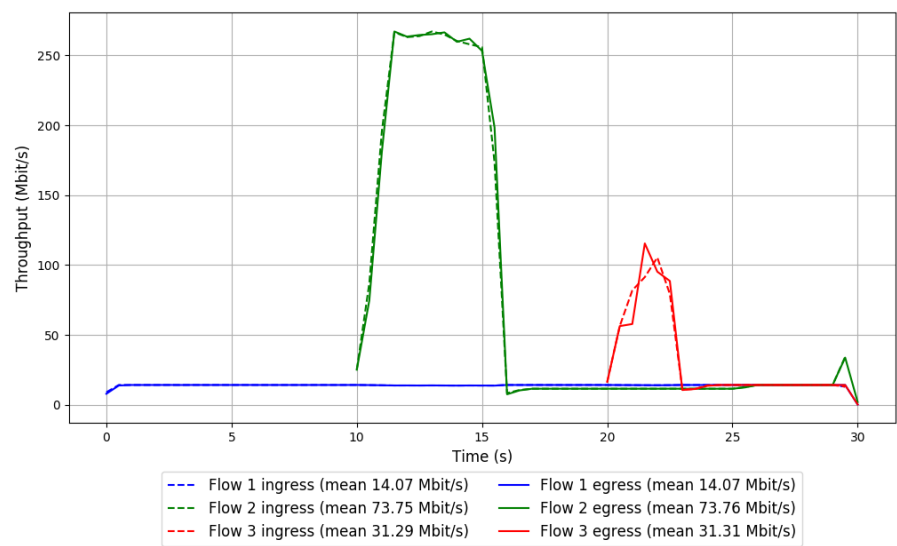
-- Flow 3:

Average throughput: 31.31 Mbit/s

95th percentile per-packet one-way delay: 53.631 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-31 20:36:05

End at: 2018-01-31 20:36:35

Below is generated by plot.py at 2018-02-01 00:02:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 298.31 Mbit/s

95th percentile per-packet one-way delay: 61.143 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 172.28 Mbit/s

95th percentile per-packet one-way delay: 59.479 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 97.28 Mbit/s

95th percentile per-packet one-way delay: 54.262 ms

Loss rate: 0.00%

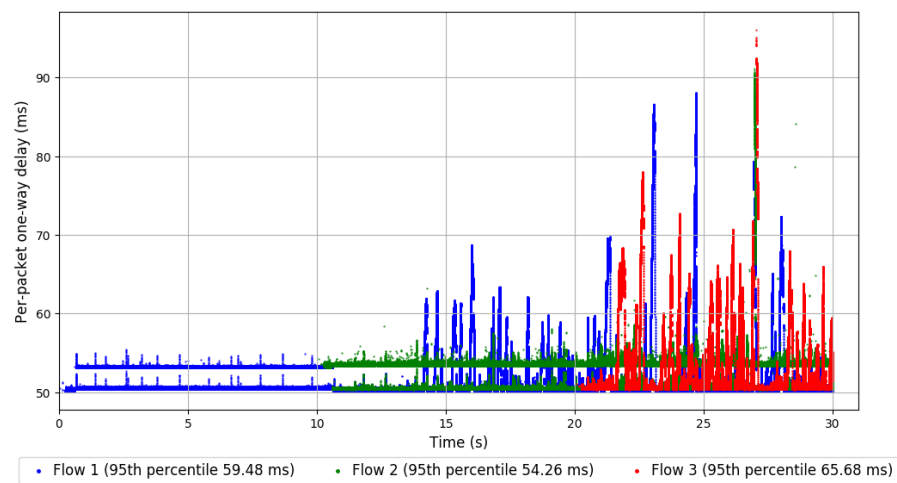
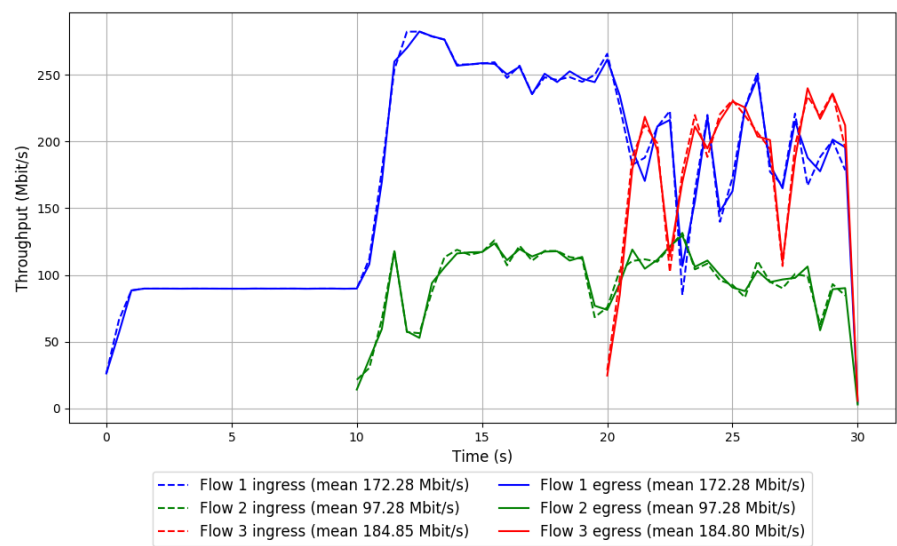
-- Flow 3:

Average throughput: 184.80 Mbit/s

95th percentile per-packet one-way delay: 65.683 ms

Loss rate: 0.00%

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

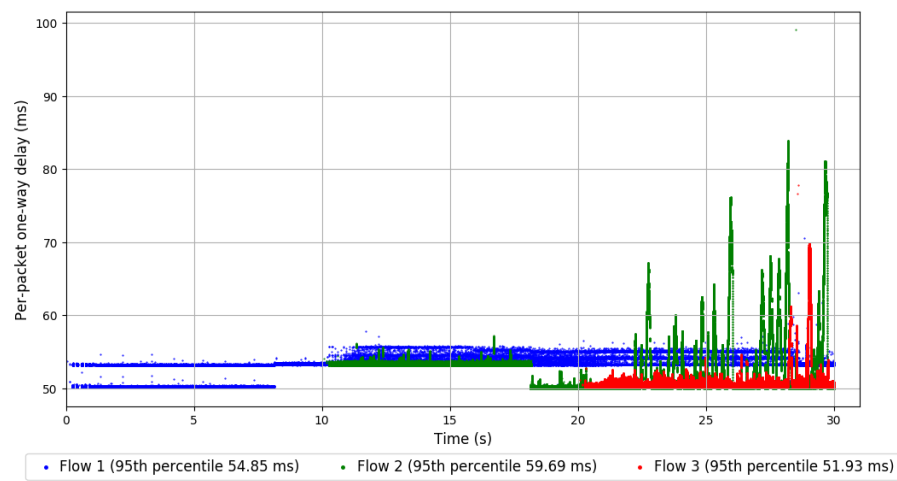
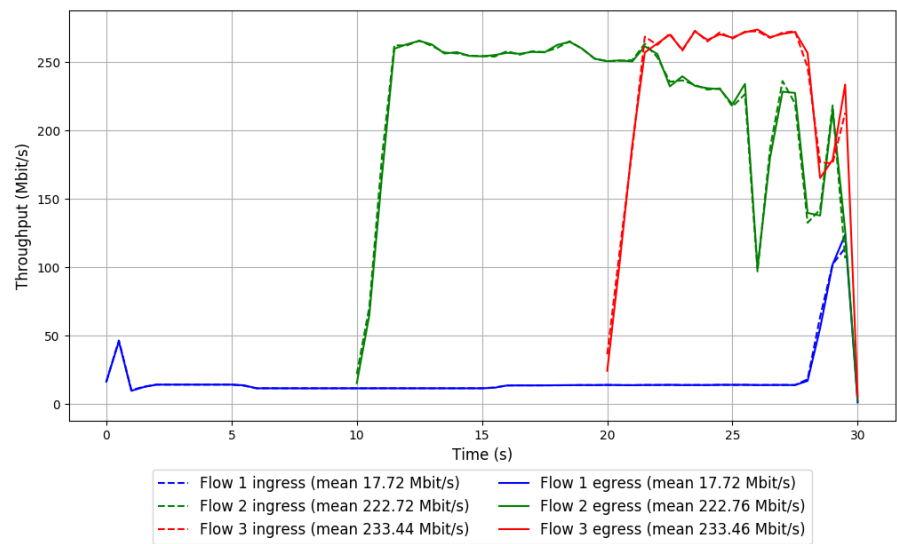


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-01-31 20:52:57
End at: 2018-01-31 20:53:27

# Below is generated by plot.py at 2018-02-01 00:02:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 243.49 Mbit/s
95th percentile per-packet one-way delay: 56.737 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 17.72 Mbit/s
95th percentile per-packet one-way delay: 54.849 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 222.76 Mbit/s
95th percentile per-packet one-way delay: 59.685 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 233.46 Mbit/s
95th percentile per-packet one-way delay: 51.928 ms
Loss rate: 0.00%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-31 21:09:04

End at: 2018-01-31 21:09:34

Below is generated by plot.py at 2018-02-01 00:02:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.94 Mbit/s

95th percentile per-packet one-way delay: 53.812 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 114.08 Mbit/s

95th percentile per-packet one-way delay: 53.696 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 64.49 Mbit/s

95th percentile per-packet one-way delay: 53.843 ms

Loss rate: 0.00%

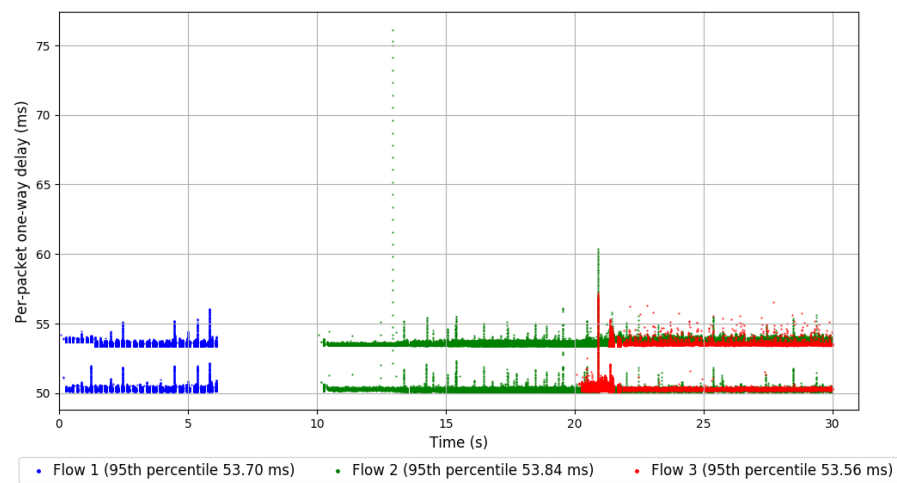
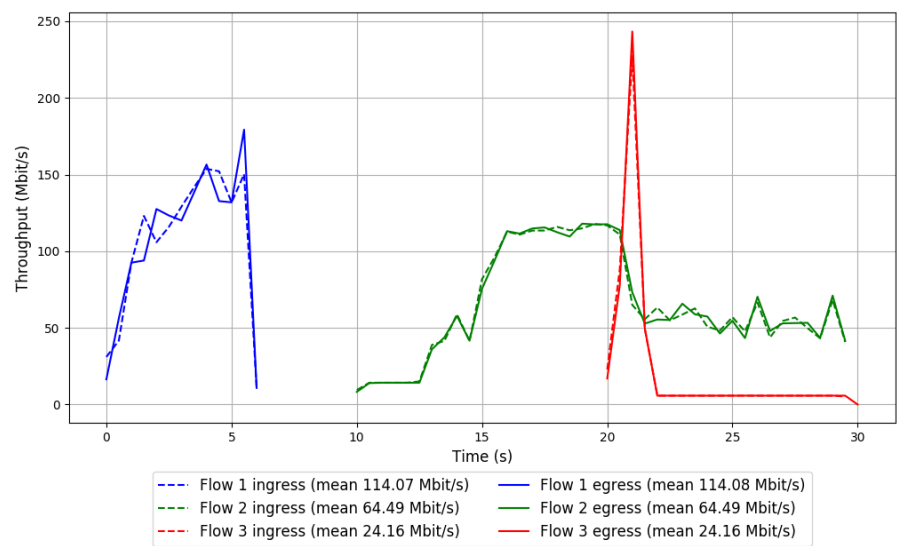
-- Flow 3:

Average throughput: 24.16 Mbit/s

95th percentile per-packet one-way delay: 53.556 ms

Loss rate: 0.00%

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

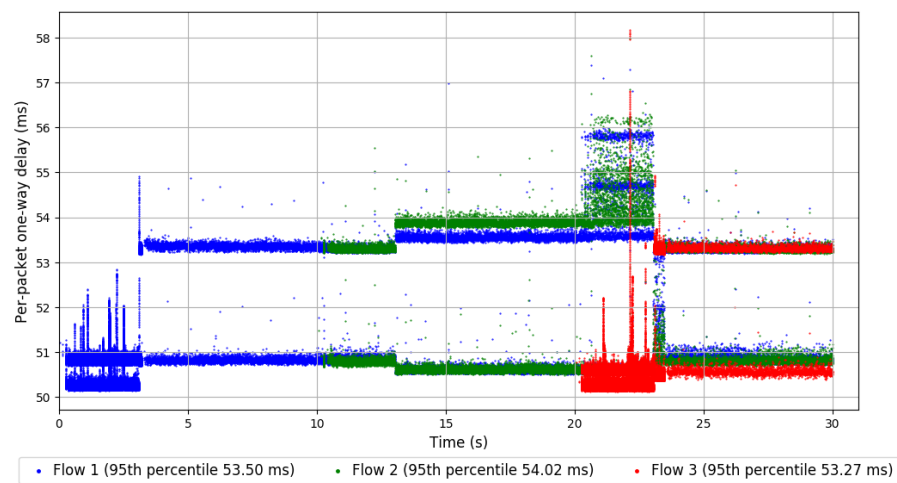
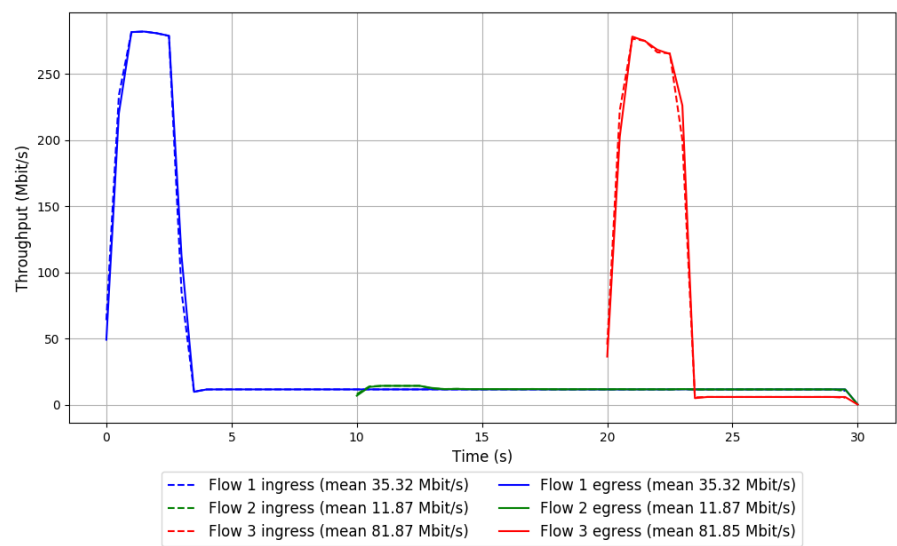


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-01-31 21:25:12
End at: 2018-01-31 21:25:42

# Below is generated by plot.py at 2018-02-01 00:02:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.37 Mbit/s
95th percentile per-packet one-way delay: 53.524 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 35.32 Mbit/s
95th percentile per-packet one-way delay: 53.502 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.87 Mbit/s
95th percentile per-packet one-way delay: 54.019 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 81.85 Mbit/s
95th percentile per-packet one-way delay: 53.266 ms
Loss rate: 0.00%
```


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

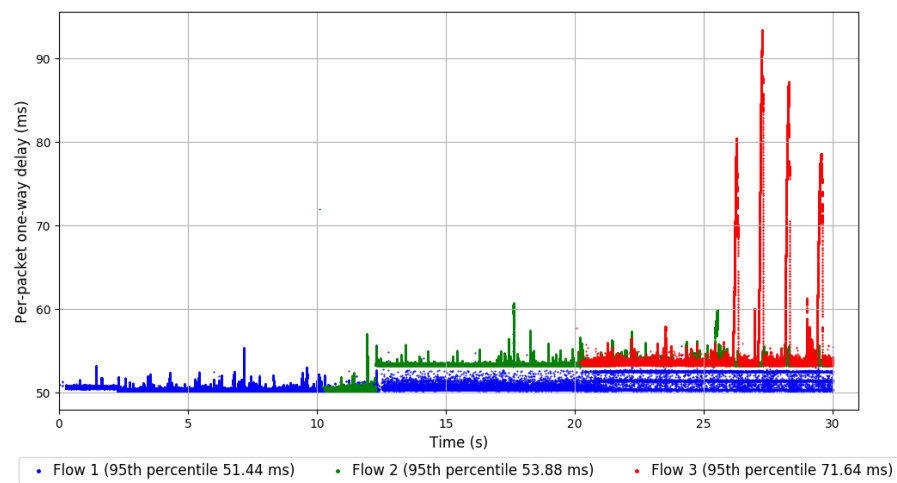
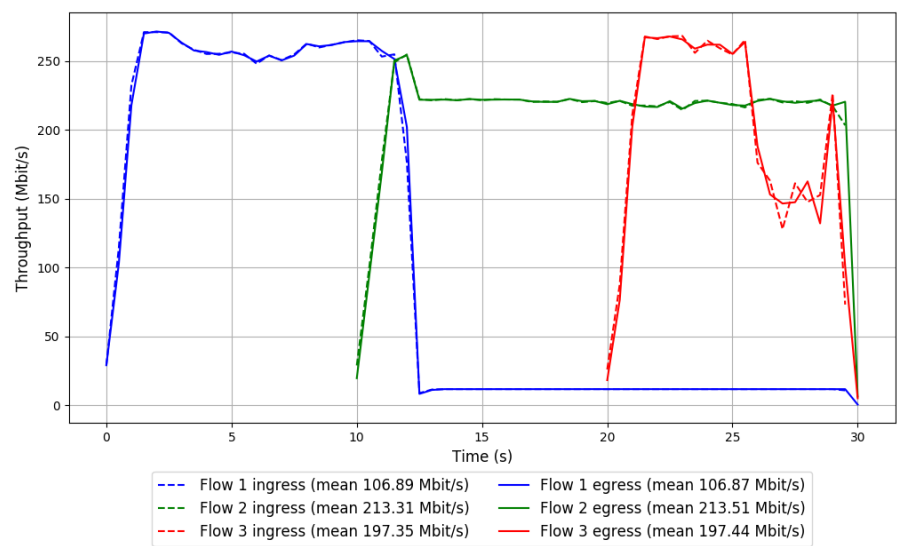


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-31 21:41:33
End at: 2018-01-31 21:42:03

# Below is generated by plot.py at 2018-02-01 00:07:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 314.36 Mbit/s
95th percentile per-packet one-way delay: 53.852 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 106.87 Mbit/s
95th percentile per-packet one-way delay: 51.440 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 213.51 Mbit/s
95th percentile per-packet one-way delay: 53.879 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 197.44 Mbit/s
95th percentile per-packet one-way delay: 71.638 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

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

End at: 2018-01-31 19:01:40

Below is generated by plot.py at 2018-02-01 00:07:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 202.87 Mbit/s

95th percentile per-packet one-way delay: 58.836 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 154.07 Mbit/s

95th percentile per-packet one-way delay: 59.366 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.32 Mbit/s

95th percentile per-packet one-way delay: 52.072 ms

Loss rate: 0.00%

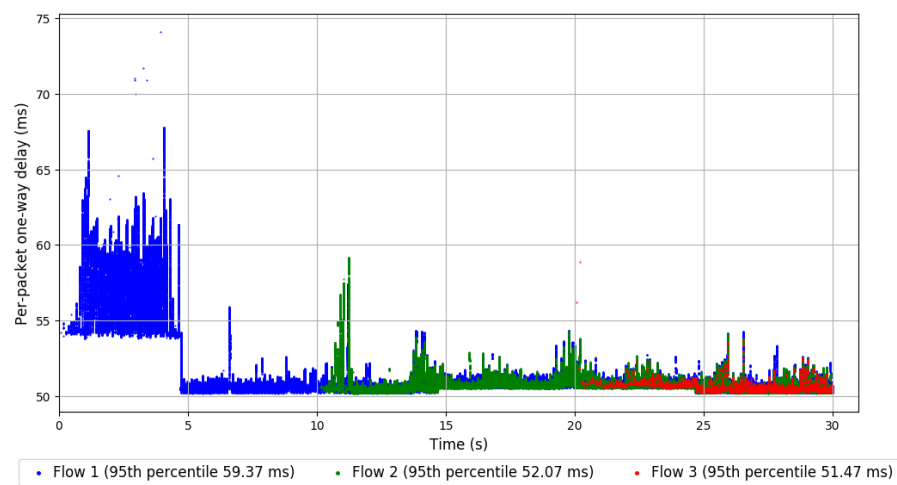
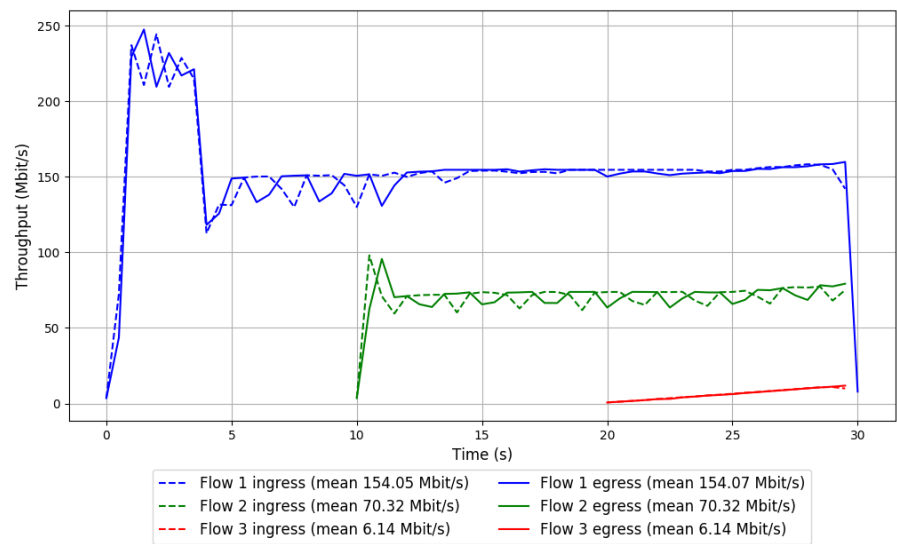
-- Flow 3:

Average throughput: 6.14 Mbit/s

95th percentile per-packet one-way delay: 51.471 ms

Loss rate: 0.12%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-31 19:18:05

End at: 2018-01-31 19:18:35

Below is generated by plot.py at 2018-02-01 00:07:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 115.74 Mbit/s

95th percentile per-packet one-way delay: 53.194 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 91.41 Mbit/s

95th percentile per-packet one-way delay: 54.018 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 51.317 ms

Loss rate: 0.03%

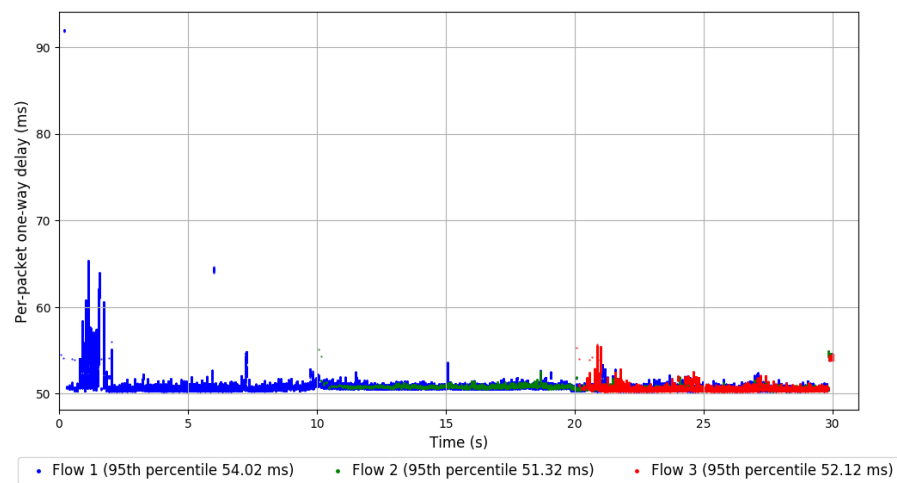
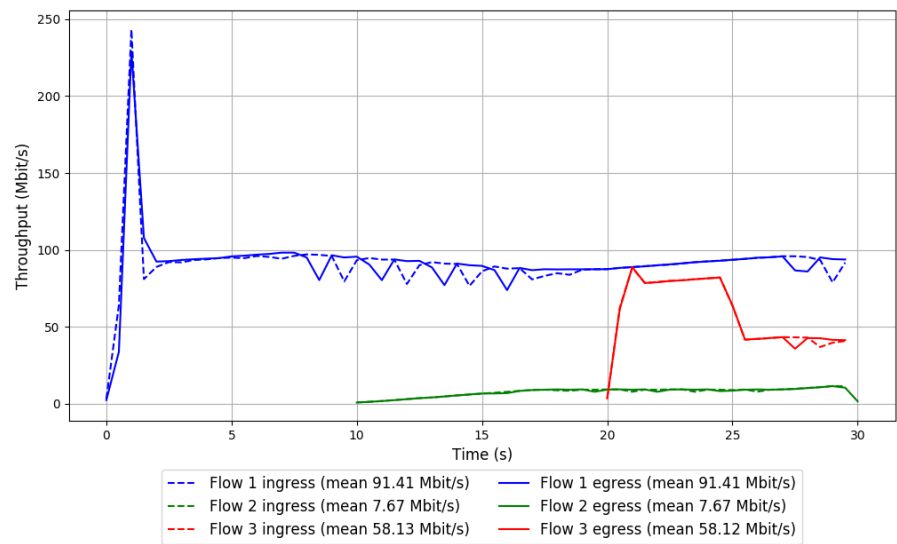
-- Flow 3:

Average throughput: 58.12 Mbit/s

95th percentile per-packet one-way delay: 52.124 ms

Loss rate: 0.03%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-31 19:34:39

End at: 2018-01-31 19:35:09

Below is generated by plot.py at 2018-02-01 00:07:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 164.72 Mbit/s

95th percentile per-packet one-way delay: 55.359 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 101.12 Mbit/s

95th percentile per-packet one-way delay: 53.411 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.76 Mbit/s

95th percentile per-packet one-way delay: 60.962 ms

Loss rate: 0.01%

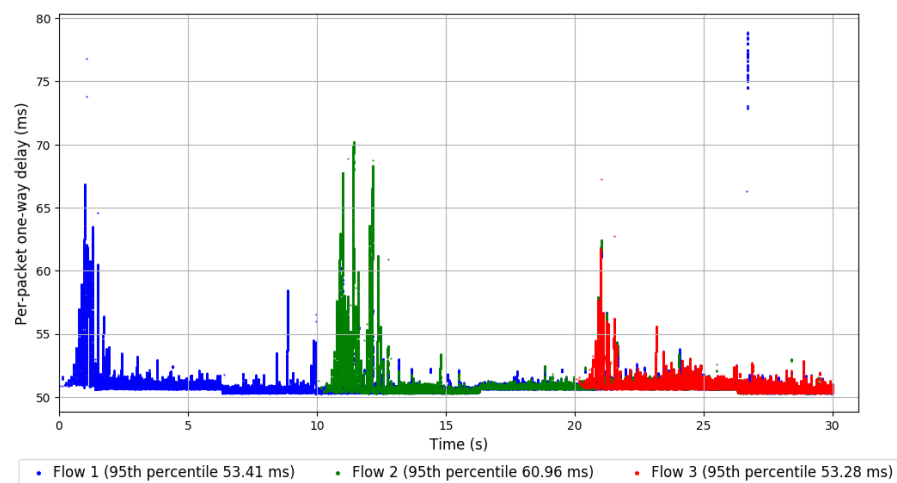
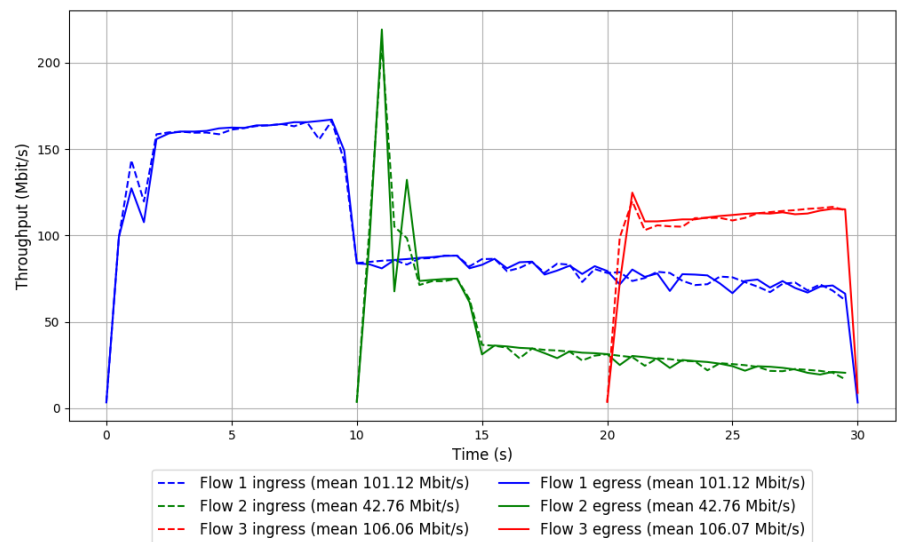
-- Flow 3:

Average throughput: 106.07 Mbit/s

95th percentile per-packet one-way delay: 53.277 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-31 19:51:24

End at: 2018-01-31 19:51:54

Below is generated by plot.py at 2018-02-01 00:07:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 183.19 Mbit/s

95th percentile per-packet one-way delay: 57.469 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.47 Mbit/s

95th percentile per-packet one-way delay: 57.383 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 133.13 Mbit/s

95th percentile per-packet one-way delay: 56.496 ms

Loss rate: 0.00%

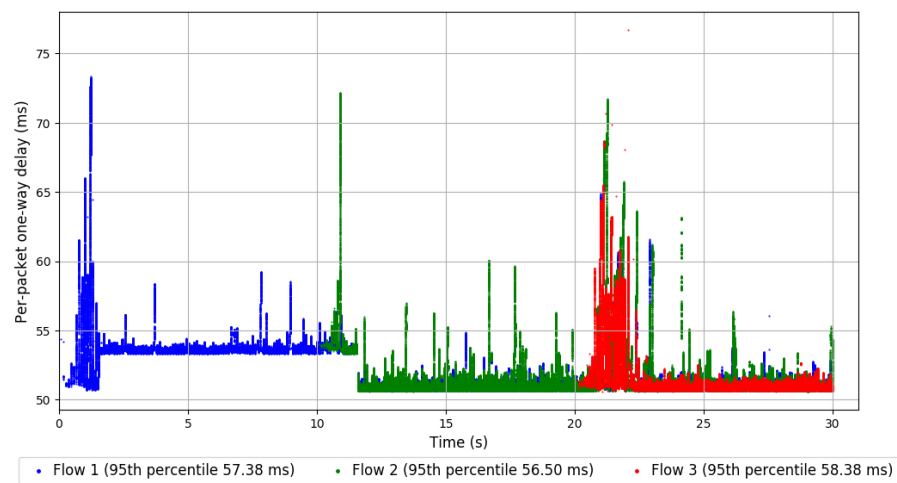
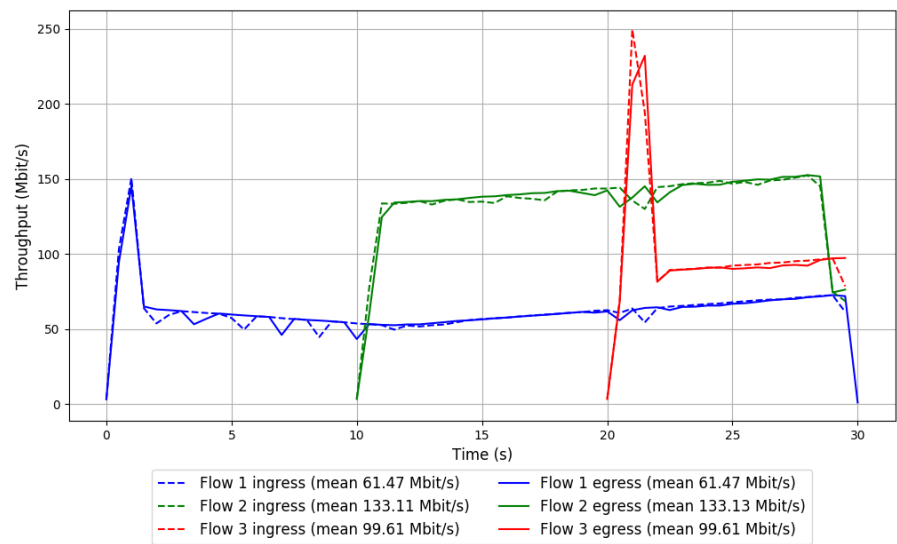
-- Flow 3:

Average throughput: 99.61 Mbit/s

95th percentile per-packet one-way delay: 58.383 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-31 20:08:24

End at: 2018-01-31 20:08:54

Below is generated by plot.py at 2018-02-01 00:07:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.31 Mbit/s

95th percentile per-packet one-way delay: 57.641 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 89.71 Mbit/s

95th percentile per-packet one-way delay: 57.184 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 72.98 Mbit/s

95th percentile per-packet one-way delay: 58.533 ms

Loss rate: 0.00%

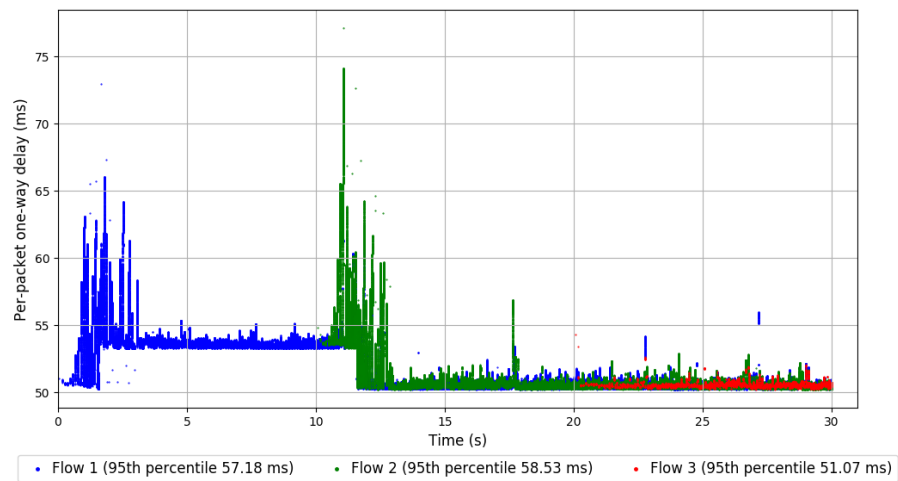
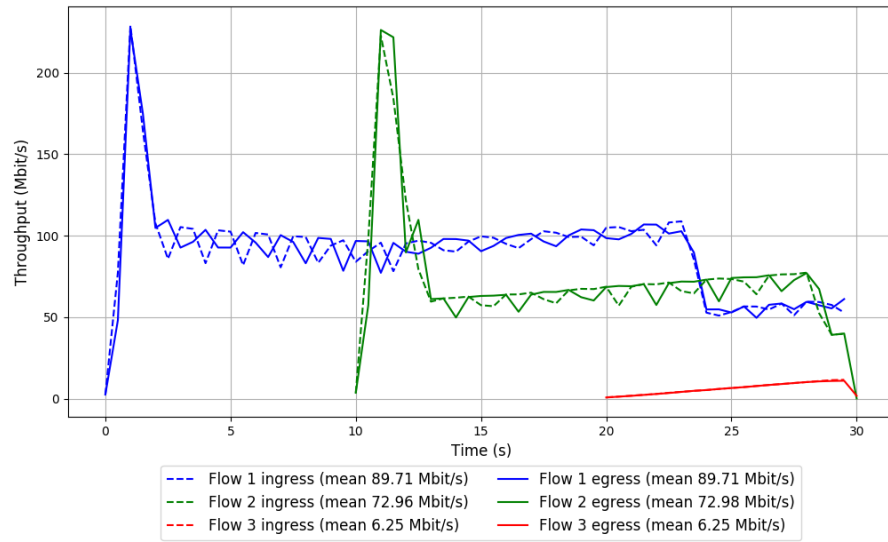
-- Flow 3:

Average throughput: 6.25 Mbit/s

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

Loss rate: 0.10%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-31 20:24:48

End at: 2018-01-31 20:25:18

Below is generated by plot.py at 2018-02-01 00:07:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 156.33 Mbit/s

95th percentile per-packet one-way delay: 52.713 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 40.14 Mbit/s

95th percentile per-packet one-way delay: 55.078 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 150.22 Mbit/s

95th percentile per-packet one-way delay: 51.798 ms

Loss rate: 0.00%

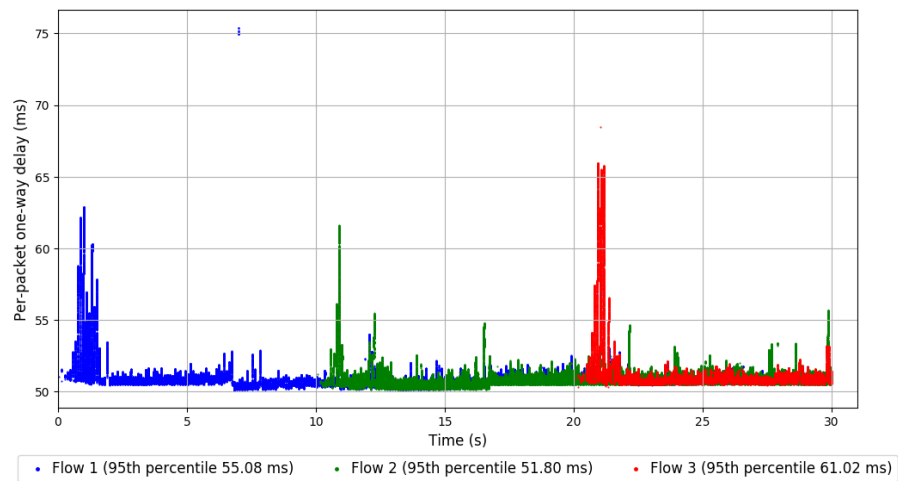
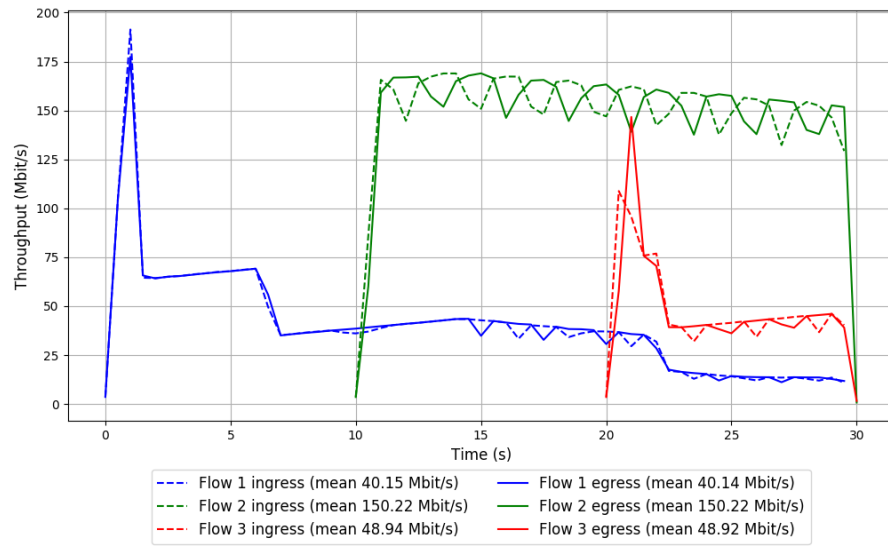
-- Flow 3:

Average throughput: 48.92 Mbit/s

95th percentile per-packet one-way delay: 61.019 ms

Loss rate: 0.04%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-31 20:41:29

End at: 2018-01-31 20:41:59

Below is generated by plot.py at 2018-02-01 00:07:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 144.97 Mbit/s

95th percentile per-packet one-way delay: 56.740 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.11 Mbit/s

95th percentile per-packet one-way delay: 56.341 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 74.82 Mbit/s

95th percentile per-packet one-way delay: 57.819 ms

Loss rate: 0.00%

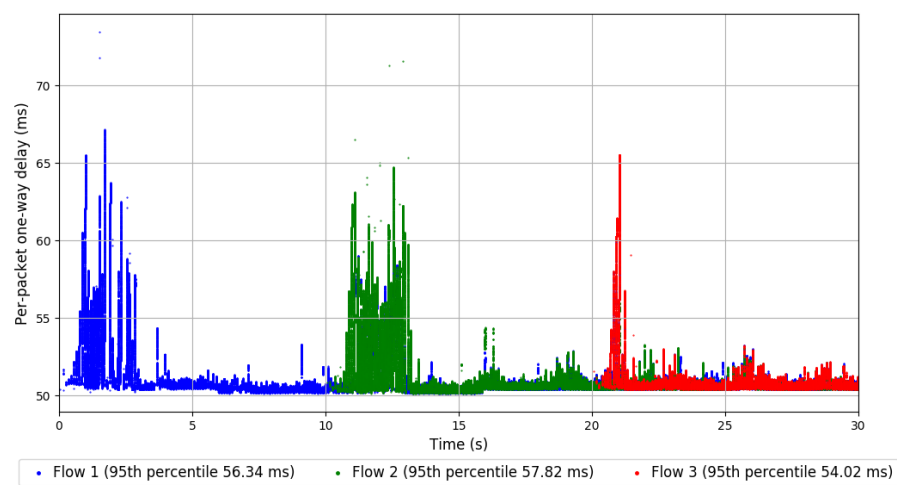
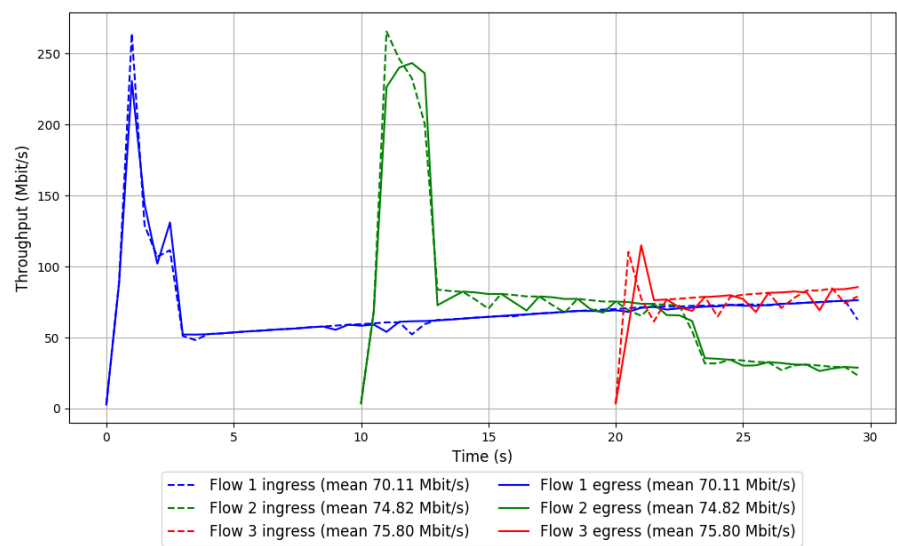
-- Flow 3:

Average throughput: 75.80 Mbit/s

95th percentile per-packet one-way delay: 54.021 ms

Loss rate: 0.01%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-31 20:58:15

End at: 2018-01-31 20:58:45

Below is generated by plot.py at 2018-02-01 00:07:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.82 Mbit/s

95th percentile per-packet one-way delay: 51.874 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 31.80 Mbit/s

95th percentile per-packet one-way delay: 51.628 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 10.14 Mbit/s

95th percentile per-packet one-way delay: 51.067 ms

Loss rate: 0.09%

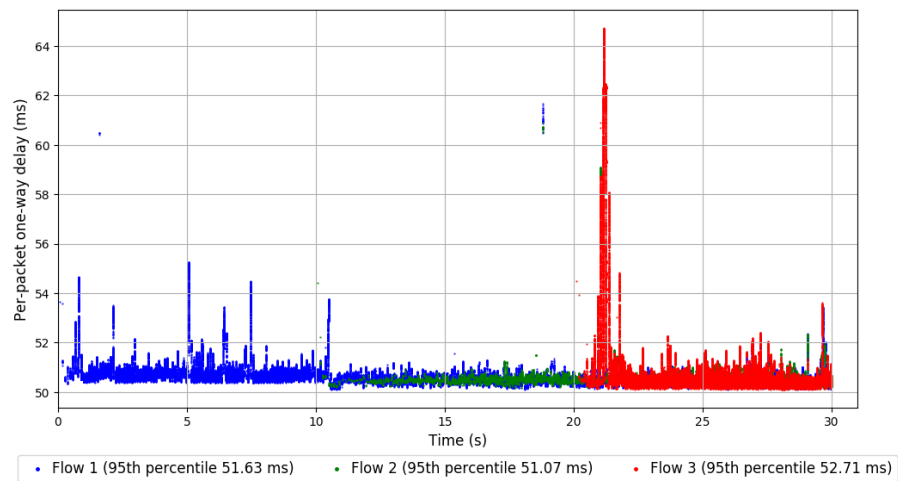
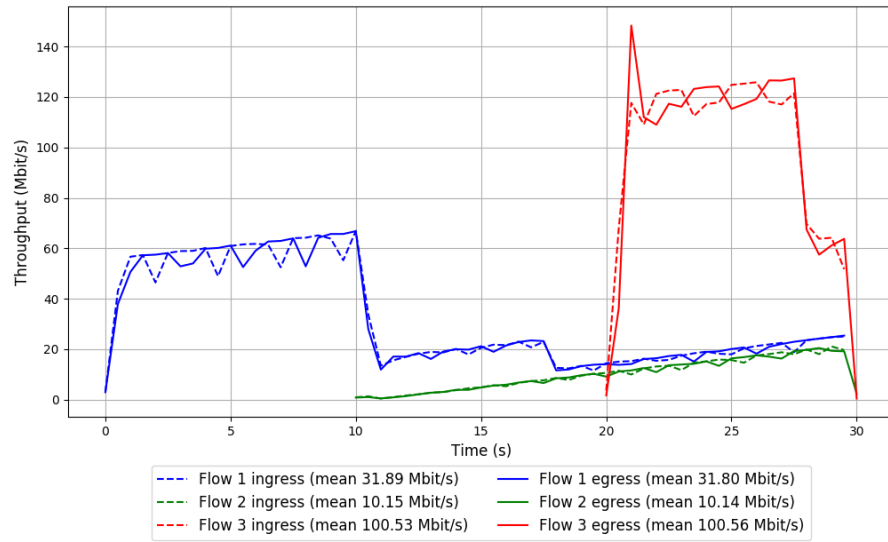
-- Flow 3:

Average throughput: 100.56 Mbit/s

95th percentile per-packet one-way delay: 52.711 ms

Loss rate: 0.01%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-31 21:14:02

End at: 2018-01-31 21:14:32

Below is generated by plot.py at 2018-02-01 00:07:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.83 Mbit/s

95th percentile per-packet one-way delay: 54.288 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 39.43 Mbit/s

95th percentile per-packet one-way delay: 53.870 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 43.81 Mbit/s

95th percentile per-packet one-way delay: 58.047 ms

Loss rate: 0.01%

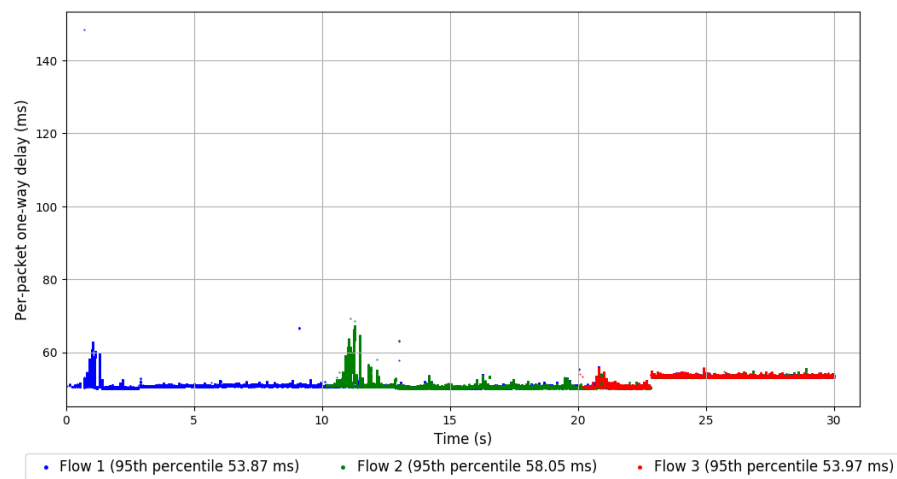
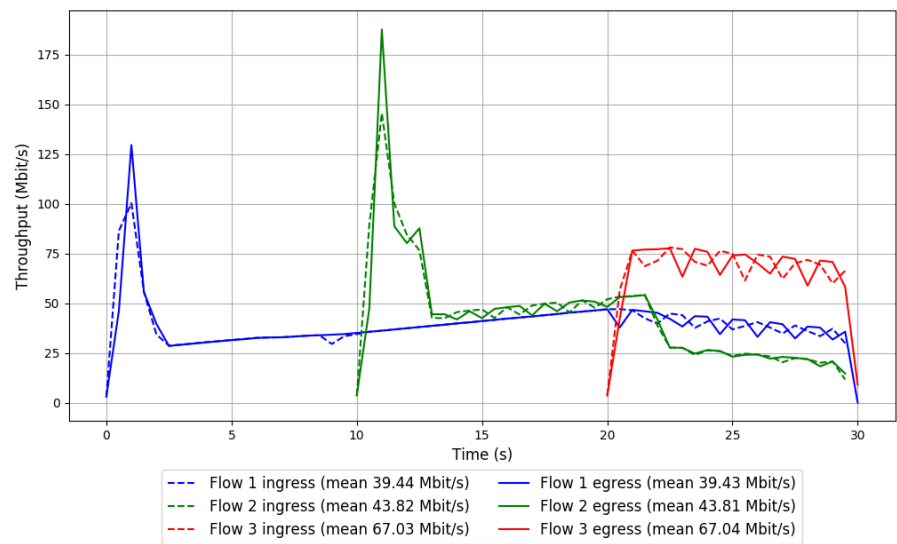
-- Flow 3:

Average throughput: 67.04 Mbit/s

95th percentile per-packet one-way delay: 53.968 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-31 21:30:13

End at: 2018-01-31 21:30:43

Below is generated by plot.py at 2018-02-01 00:07:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.69 Mbit/s

95th percentile per-packet one-way delay: 54.484 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 80.49 Mbit/s

95th percentile per-packet one-way delay: 55.072 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 110.22 Mbit/s

95th percentile per-packet one-way delay: 53.969 ms

Loss rate: 0.00%

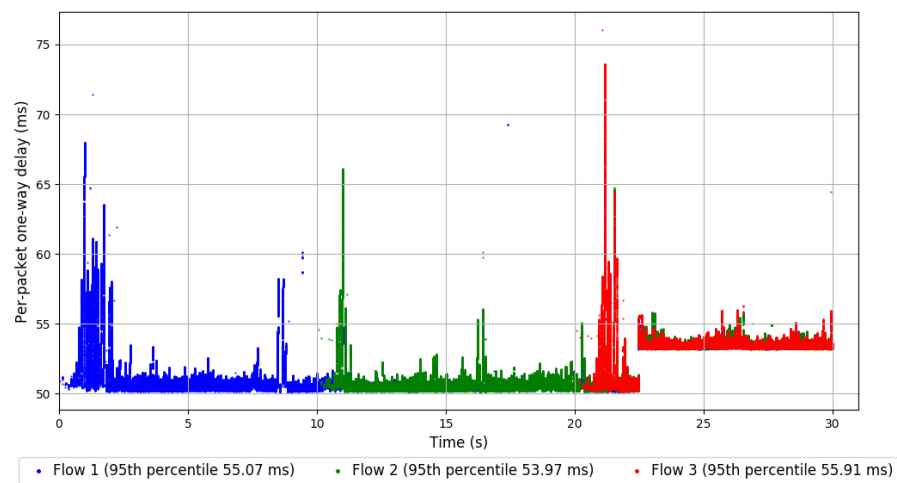
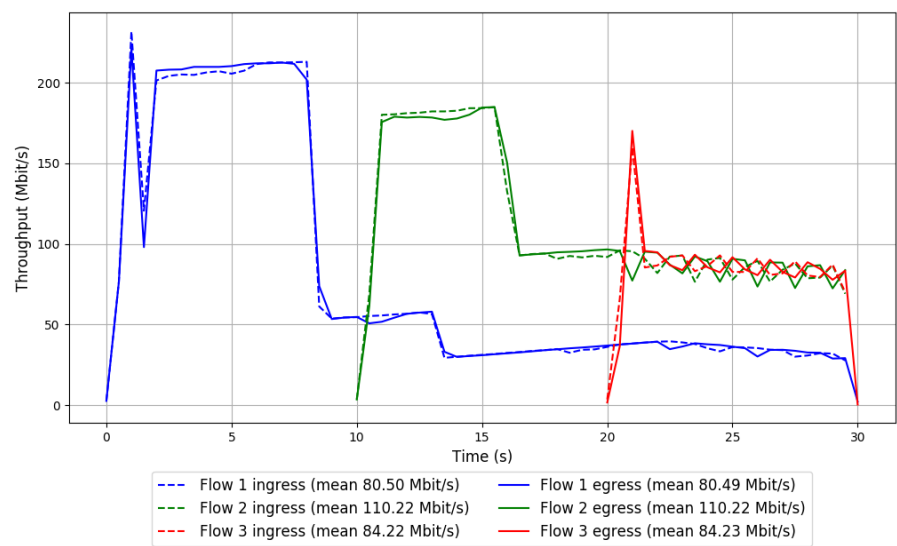
-- Flow 3:

Average throughput: 84.23 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

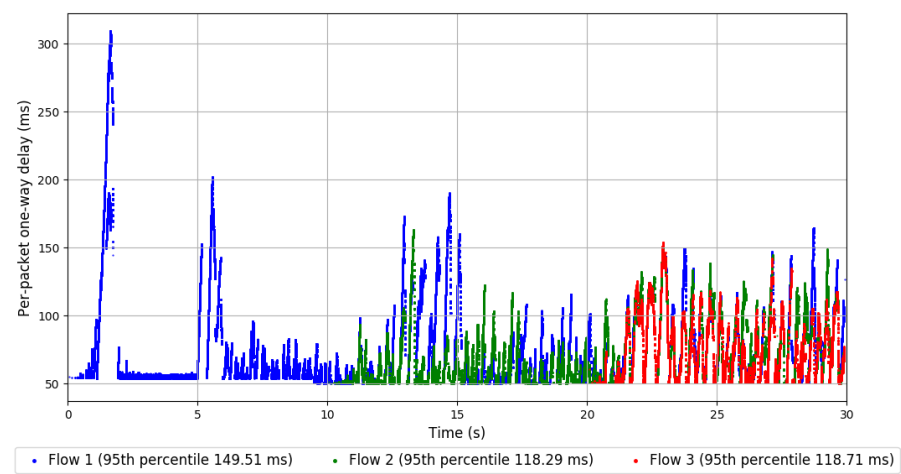
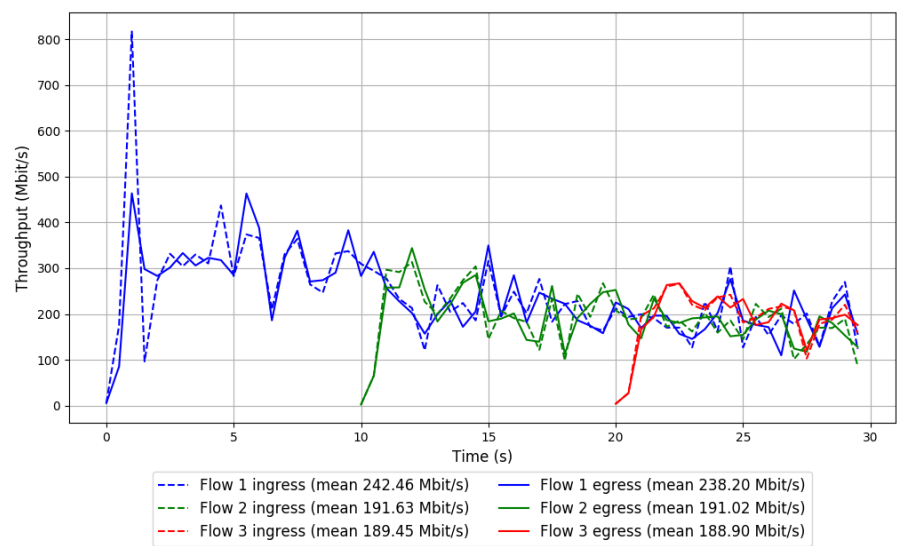


```
Run 1: Statistics of Verus

Start at: 2018-01-31 19:10:06
End at: 2018-01-31 19:10:36

# Below is generated by plot.py at 2018-02-01 00:10:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 427.32 Mbit/s
95th percentile per-packet one-way delay: 136.255 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 238.20 Mbit/s
95th percentile per-packet one-way delay: 149.512 ms
Loss rate: 1.72%
-- Flow 2:
Average throughput: 191.02 Mbit/s
95th percentile per-packet one-way delay: 118.294 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 188.90 Mbit/s
95th percentile per-packet one-way delay: 118.711 ms
Loss rate: 0.46%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-31 19:26:48

End at: 2018-01-31 19:27:18

Below is generated by plot.py at 2018-02-01 00:10:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 440.46 Mbit/s

95th percentile per-packet one-way delay: 122.348 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 253.36 Mbit/s

95th percentile per-packet one-way delay: 113.769 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 187.03 Mbit/s

95th percentile per-packet one-way delay: 132.087 ms

Loss rate: 0.00%

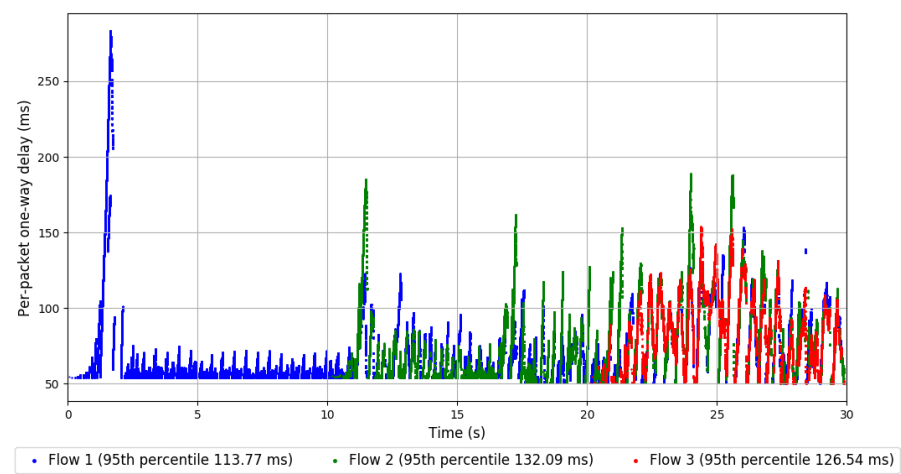
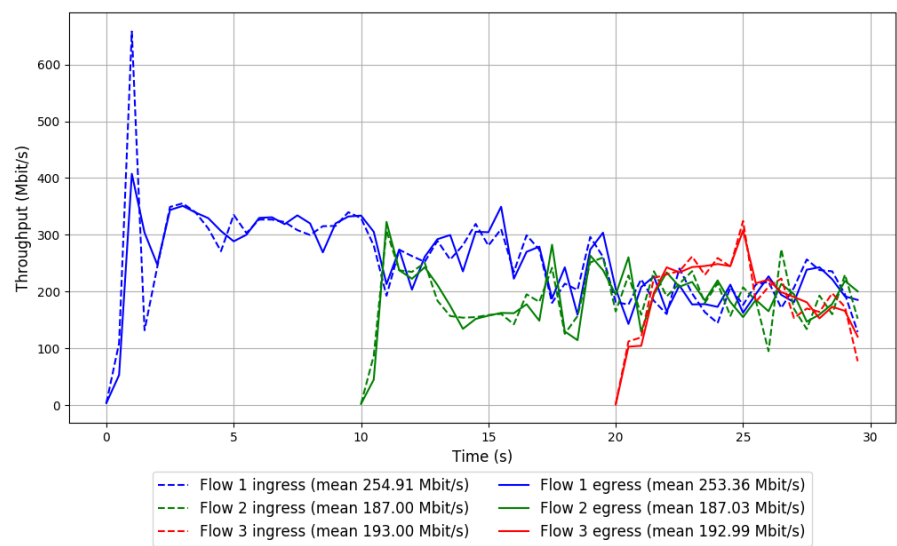
-- Flow 3:

Average throughput: 192.99 Mbit/s

95th percentile per-packet one-way delay: 126.540 ms

Loss rate: 0.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-31 19:43:29

End at: 2018-01-31 19:43:59

Below is generated by plot.py at 2018-02-01 00:10:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 394.01 Mbit/s

95th percentile per-packet one-way delay: 139.907 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 232.22 Mbit/s

95th percentile per-packet one-way delay: 137.514 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 215.64 Mbit/s

95th percentile per-packet one-way delay: 153.281 ms

Loss rate: 0.10%

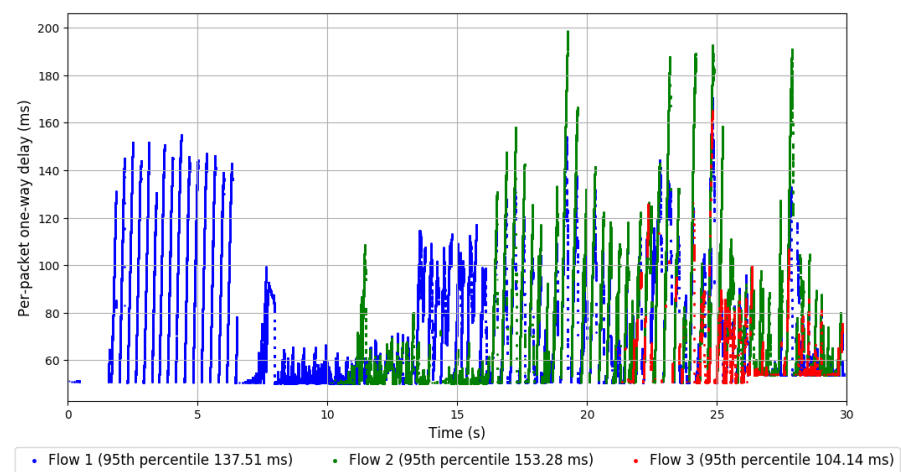
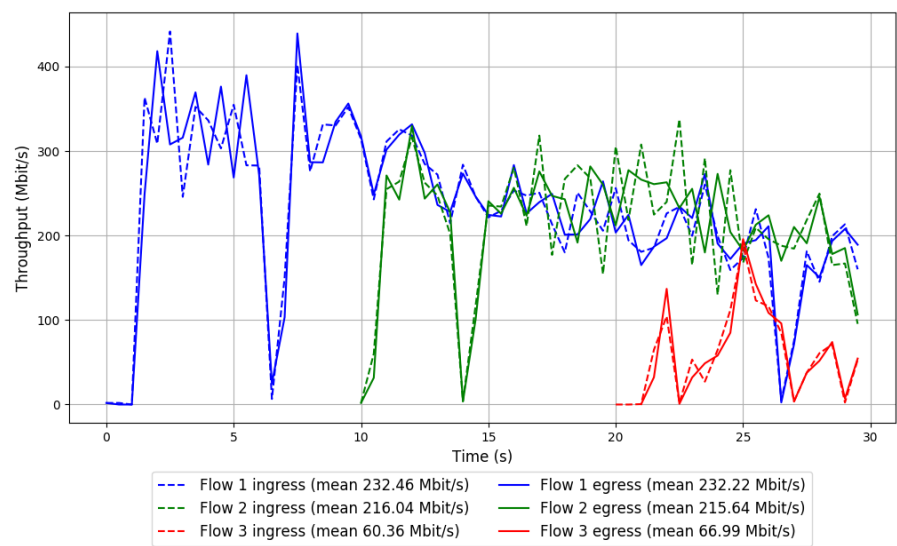
-- Flow 3:

Average throughput: 66.99 Mbit/s

95th percentile per-packet one-way delay: 104.144 ms

Loss rate: 0.40%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-31 20:00:02

End at: 2018-01-31 20:00:32

Below is generated by plot.py at 2018-02-01 00:10:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 415.11 Mbit/s

95th percentile per-packet one-way delay: 135.645 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 233.95 Mbit/s

95th percentile per-packet one-way delay: 134.859 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 185.30 Mbit/s

95th percentile per-packet one-way delay: 144.789 ms

Loss rate: 0.00%

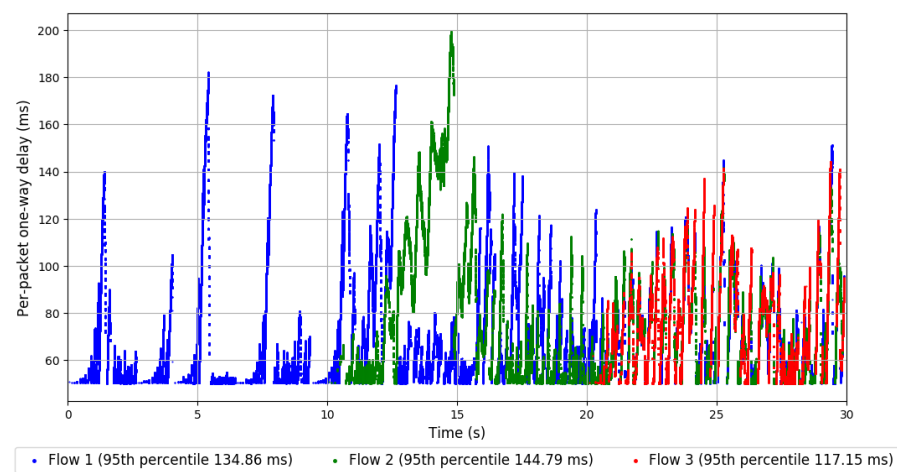
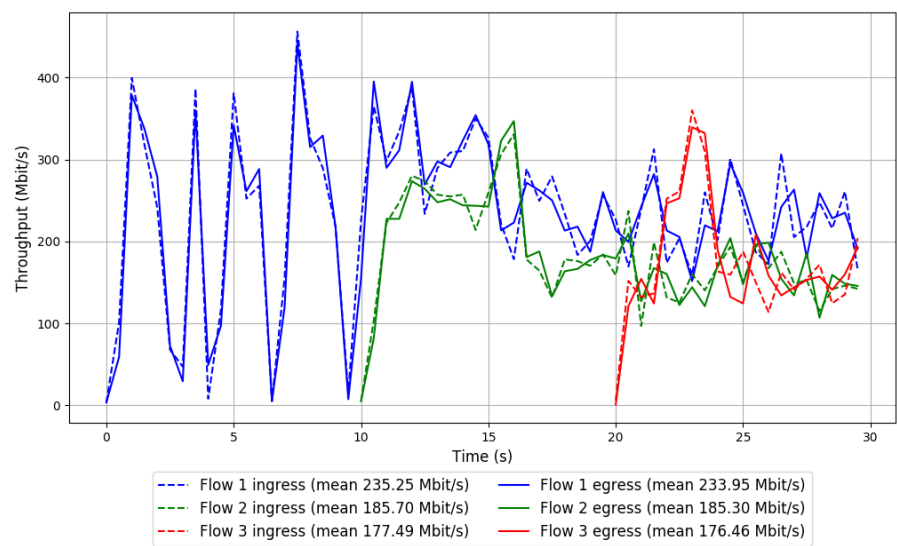
-- Flow 3:

Average throughput: 176.46 Mbit/s

95th percentile per-packet one-way delay: 117.149 ms

Loss rate: 0.33%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-31 20:17:17

End at: 2018-01-31 20:17:47

Below is generated by plot.py at 2018-02-01 00:10:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 380.24 Mbit/s

95th percentile per-packet one-way delay: 186.442 ms

Loss rate: 2.01%

-- Flow 1:

Average throughput: 201.82 Mbit/s

95th percentile per-packet one-way delay: 158.854 ms

Loss rate: 1.78%

-- Flow 2:

Average throughput: 205.48 Mbit/s

95th percentile per-packet one-way delay: 229.430 ms

Loss rate: 2.79%

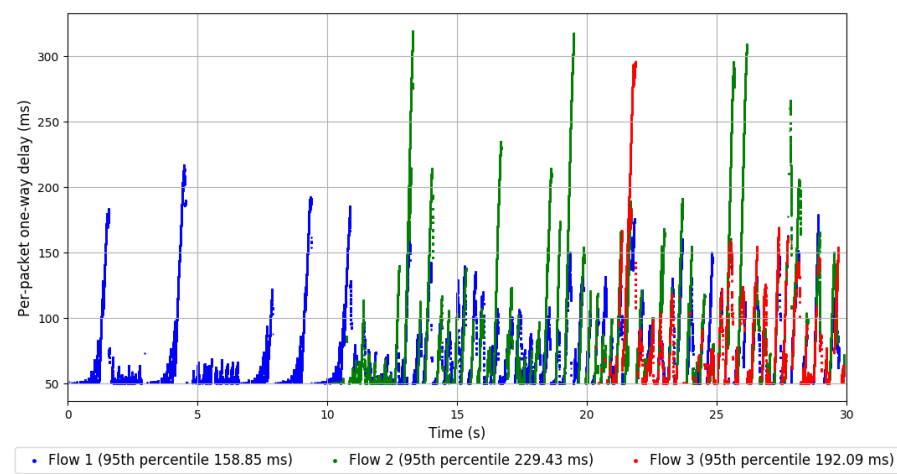
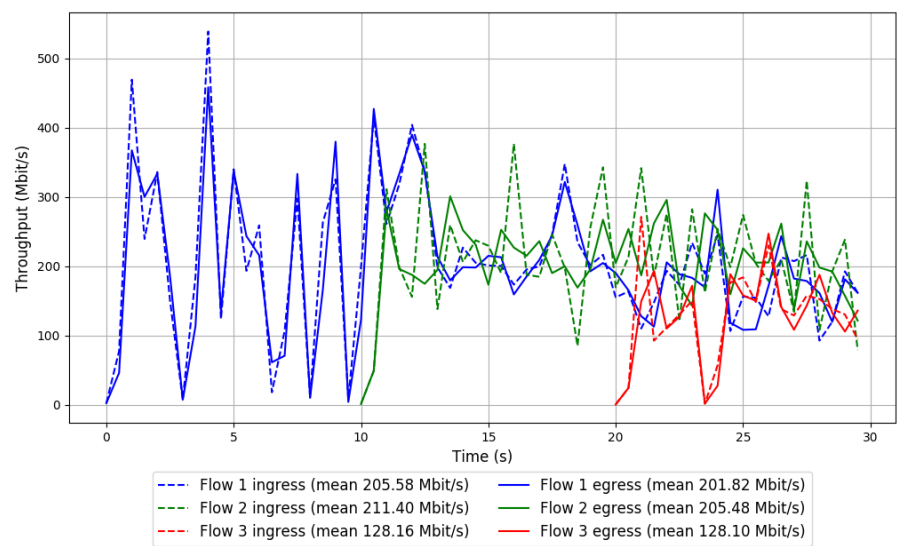
-- Flow 3:

Average throughput: 128.10 Mbit/s

95th percentile per-packet one-way delay: 192.094 ms

Loss rate: 0.57%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-31 20:33:34

End at: 2018-01-31 20:34:04

Below is generated by plot.py at 2018-02-01 00:10:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 379.52 Mbit/s

95th percentile per-packet one-way delay: 107.944 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 210.55 Mbit/s

95th percentile per-packet one-way delay: 91.165 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 182.17 Mbit/s

95th percentile per-packet one-way delay: 160.993 ms

Loss rate: 3.38%

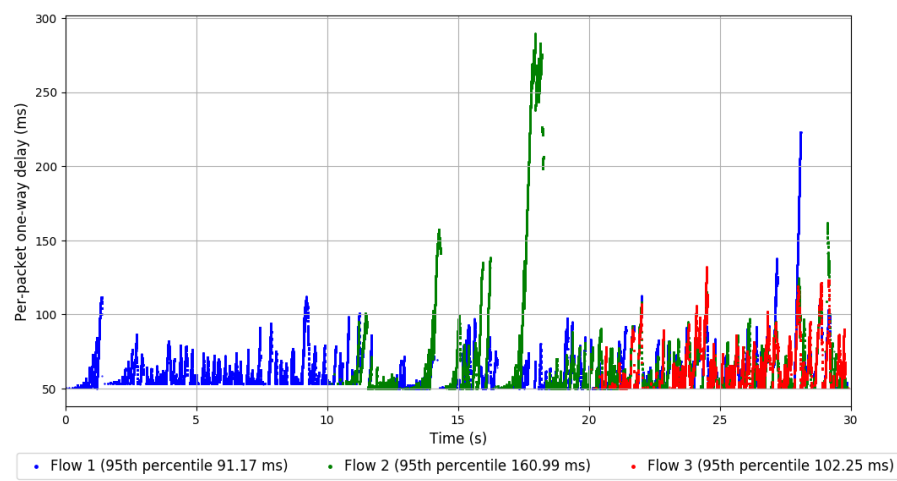
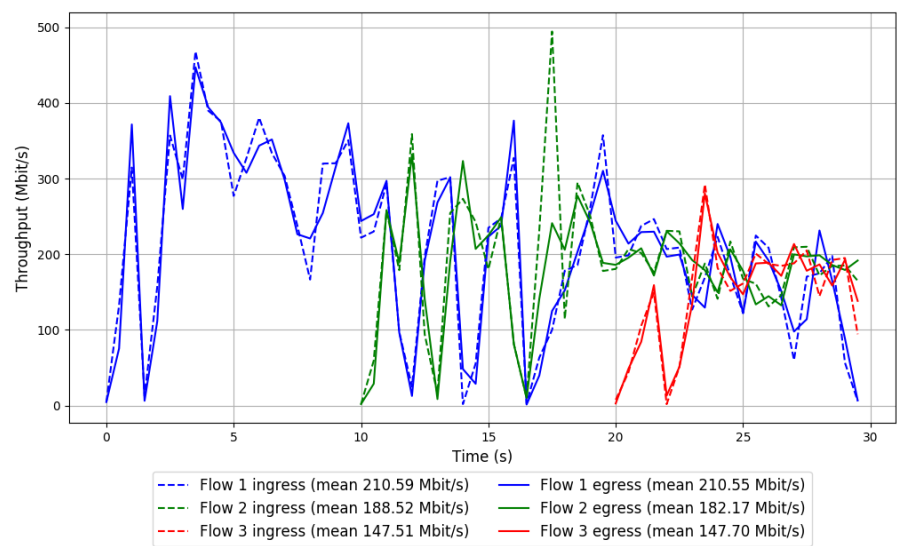
-- Flow 3:

Average throughput: 147.70 Mbit/s

95th percentile per-packet one-way delay: 102.252 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-31 20:50:26

End at: 2018-01-31 20:50:56

Below is generated by plot.py at 2018-02-01 00:12:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 366.80 Mbit/s

95th percentile per-packet one-way delay: 140.172 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 205.43 Mbit/s

95th percentile per-packet one-way delay: 139.258 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 157.14 Mbit/s

95th percentile per-packet one-way delay: 151.932 ms

Loss rate: 0.79%

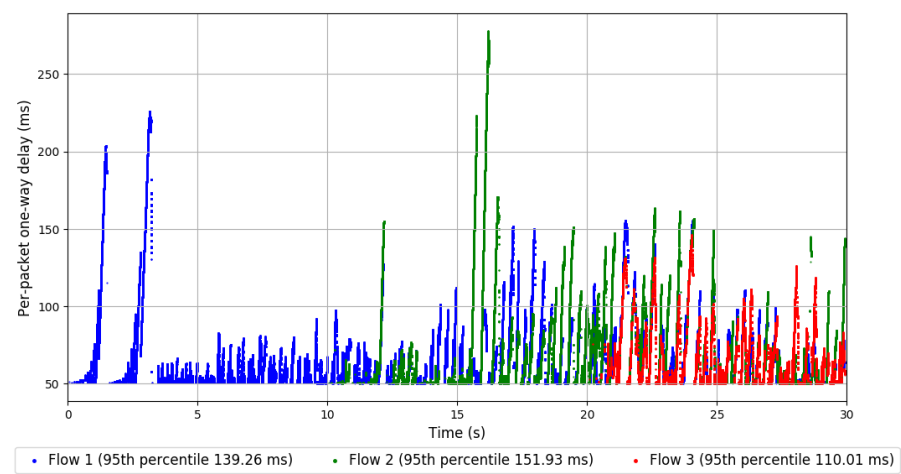
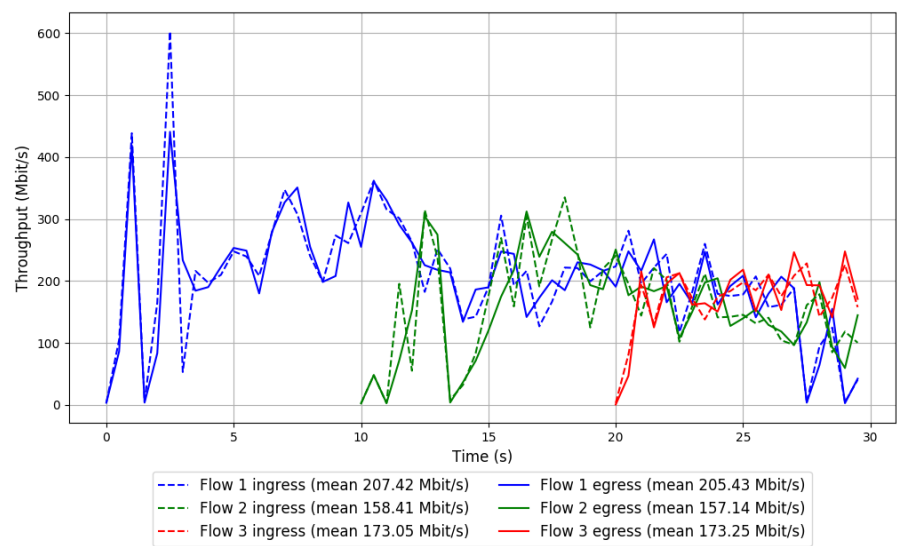
-- Flow 3:

Average throughput: 173.25 Mbit/s

95th percentile per-packet one-way delay: 110.009 ms

Loss rate: 0.01%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-31 21:06:35

End at: 2018-01-31 21:07:05

Below is generated by plot.py at 2018-02-01 00:14:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 364.36 Mbit/s

95th percentile per-packet one-way delay: 129.717 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 220.14 Mbit/s

95th percentile per-packet one-way delay: 103.439 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 146.50 Mbit/s

95th percentile per-packet one-way delay: 197.934 ms

Loss rate: 0.24%

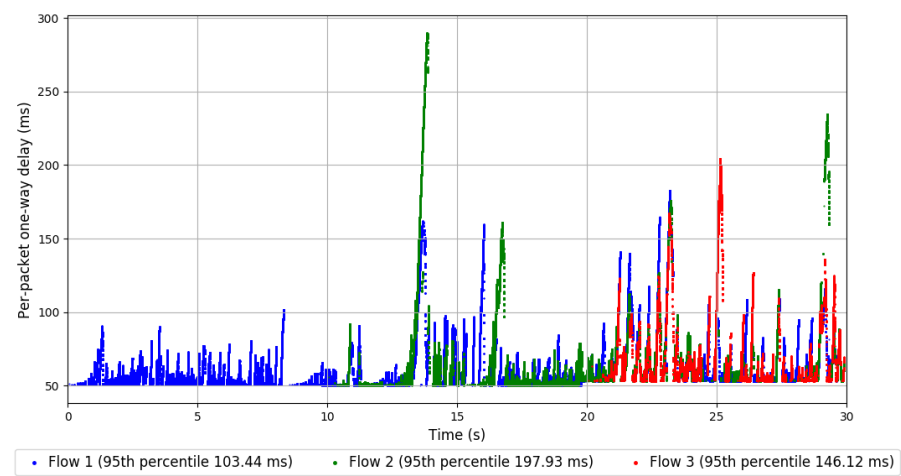
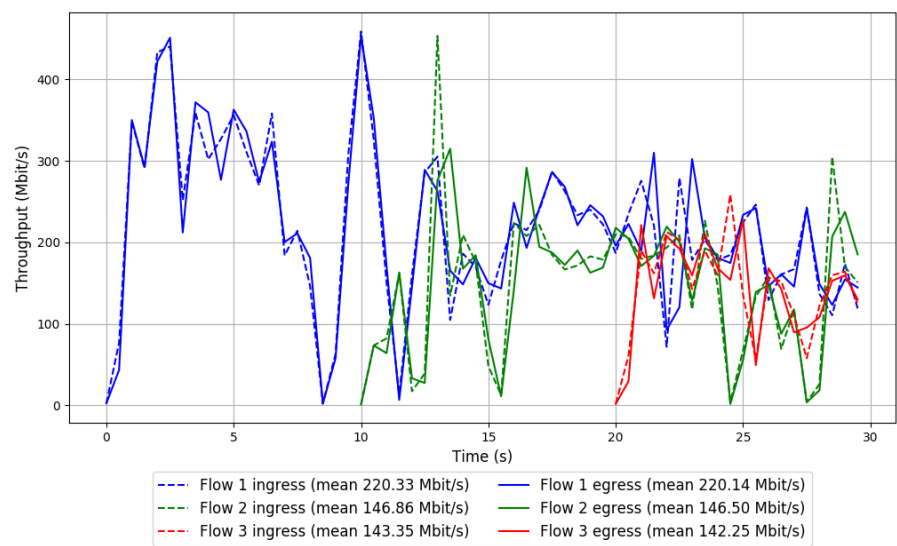
-- Flow 3:

Average throughput: 142.25 Mbit/s

95th percentile per-packet one-way delay: 146.125 ms

Loss rate: 0.75%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-31 21:22:41

End at: 2018-01-31 21:23:11

Below is generated by plot.py at 2018-02-01 00:16:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 403.62 Mbit/s

95th percentile per-packet one-way delay: 251.631 ms

Loss rate: 6.05%

-- Flow 1:

Average throughput: 209.67 Mbit/s

95th percentile per-packet one-way delay: 193.796 ms

Loss rate: 2.66%

-- Flow 2:

Average throughput: 249.72 Mbit/s

95th percentile per-packet one-way delay: 294.637 ms

Loss rate: 10.51%

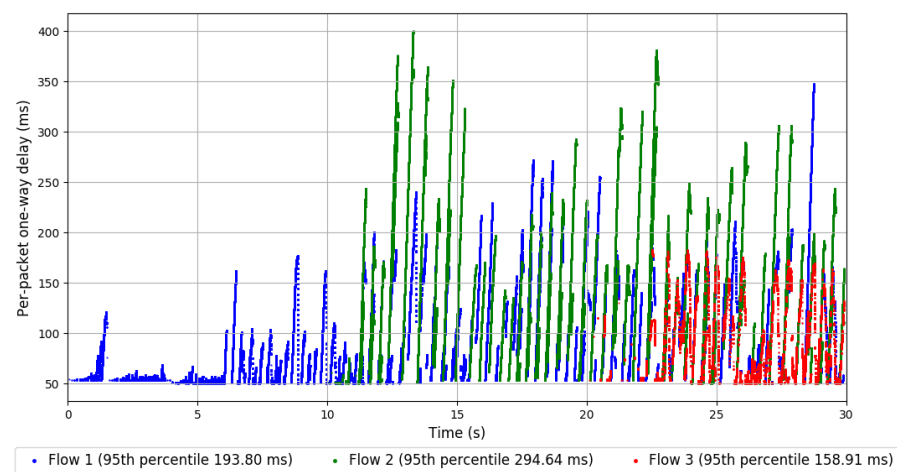
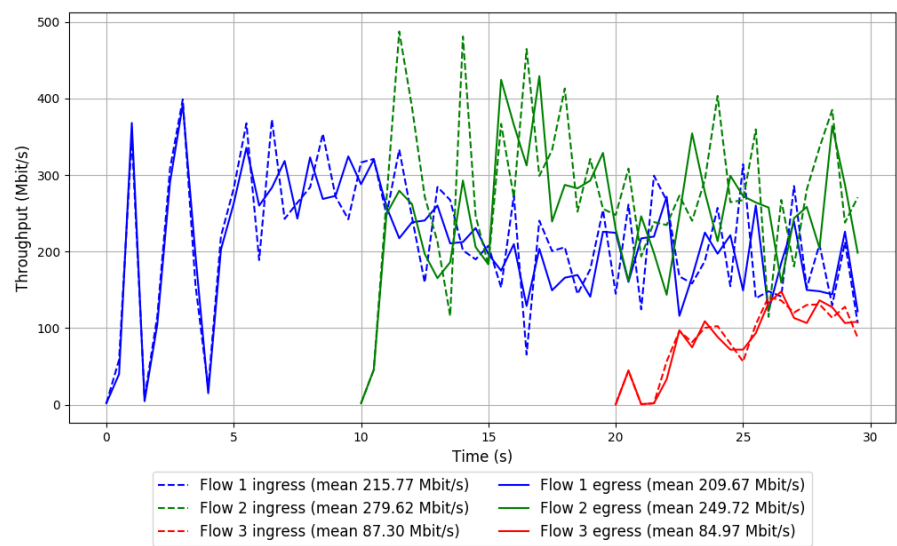
-- Flow 3:

Average throughput: 84.97 Mbit/s

95th percentile per-packet one-way delay: 158.906 ms

Loss rate: 2.68%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-31 21:39:04

End at: 2018-01-31 21:39:34

Below is generated by plot.py at 2018-02-01 00:16:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 377.43 Mbit/s

95th percentile per-packet one-way delay: 117.367 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 221.21 Mbit/s

95th percentile per-packet one-way delay: 118.516 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 177.23 Mbit/s

95th percentile per-packet one-way delay: 121.402 ms

Loss rate: 0.22%

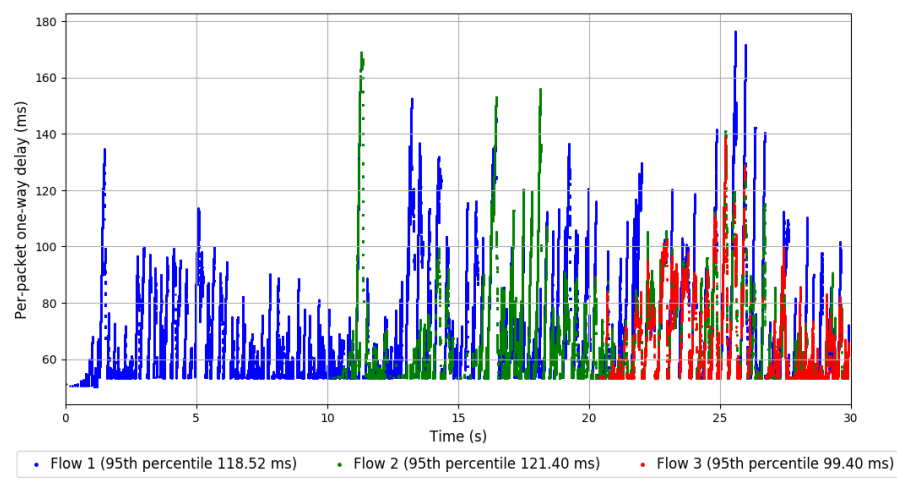
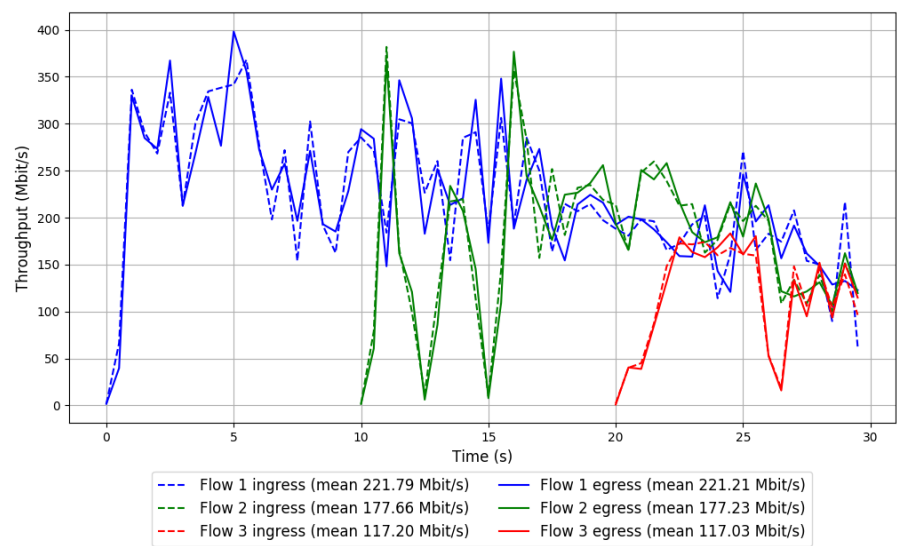
-- Flow 3:

Average throughput: 117.03 Mbit/s

95th percentile per-packet one-way delay: 99.396 ms

Loss rate: 0.14%

Run 10: Report of Verus — Data Link

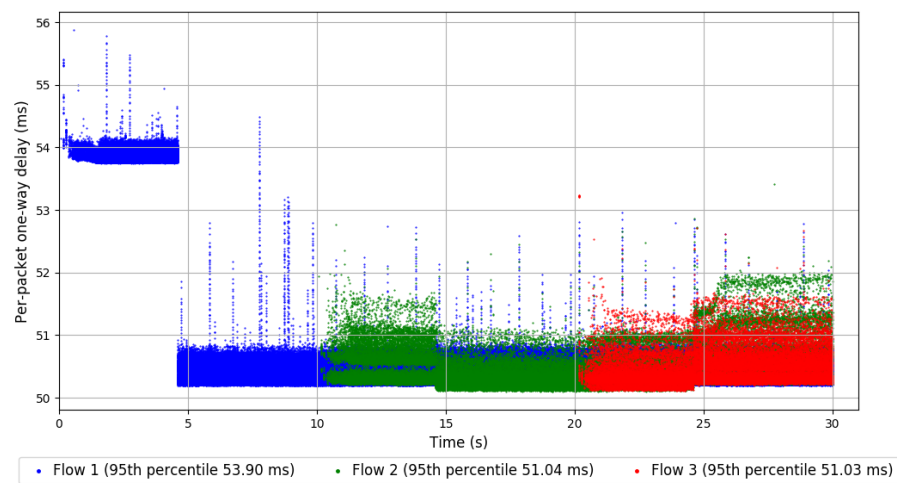
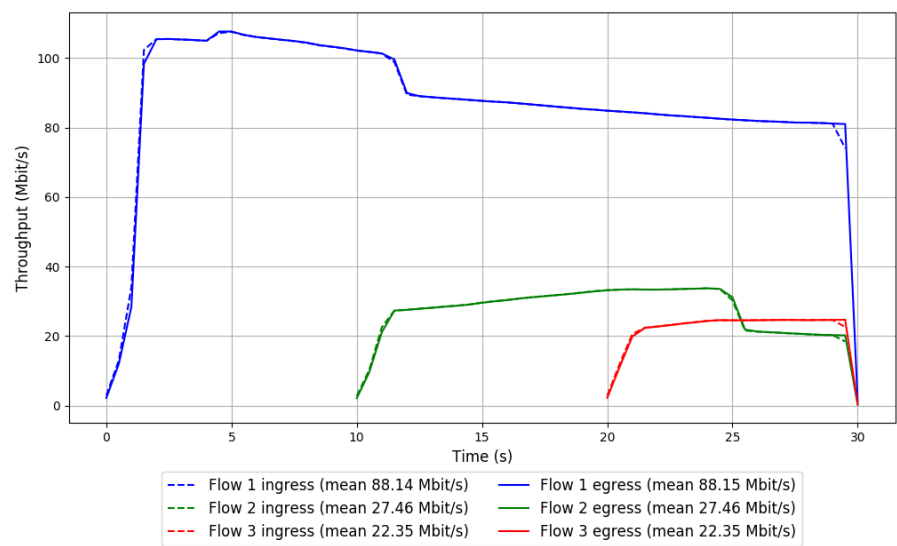


```
Run 1: Statistics of Copa

Start at: 2018-01-31 19:04:01
End at: 2018-01-31 19:04:31

# Below is generated by plot.py at 2018-02-01 00:16:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 113.85 Mbit/s
95th percentile per-packet one-way delay: 53.882 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 88.15 Mbit/s
95th percentile per-packet one-way delay: 53.901 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.46 Mbit/s
95th percentile per-packet one-way delay: 51.042 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 22.35 Mbit/s
95th percentile per-packet one-way delay: 51.027 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-31 19:20:52

End at: 2018-01-31 19:21:22

Below is generated by plot.py at 2018-02-01 00:16:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 55.11 Mbit/s

95th percentile per-packet one-way delay: 53.975 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.07 Mbit/s

95th percentile per-packet one-way delay: 53.957 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.99 Mbit/s

95th percentile per-packet one-way delay: 54.071 ms

Loss rate: 0.00%

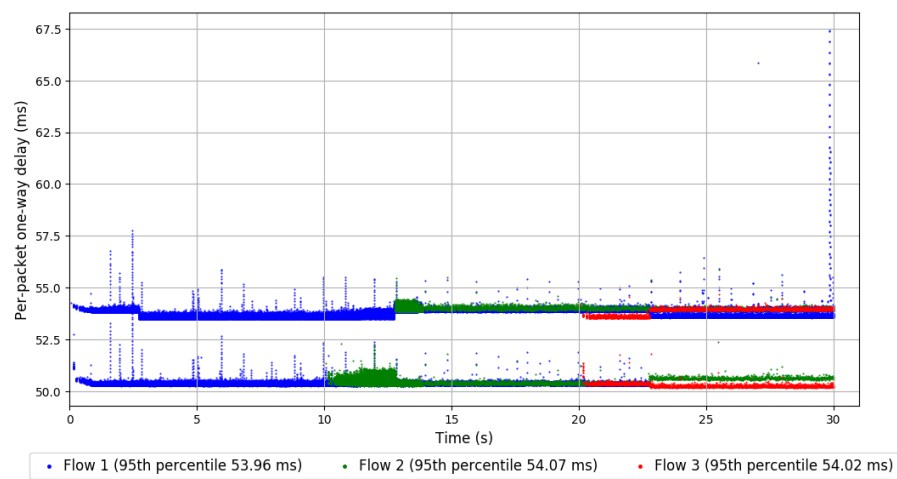
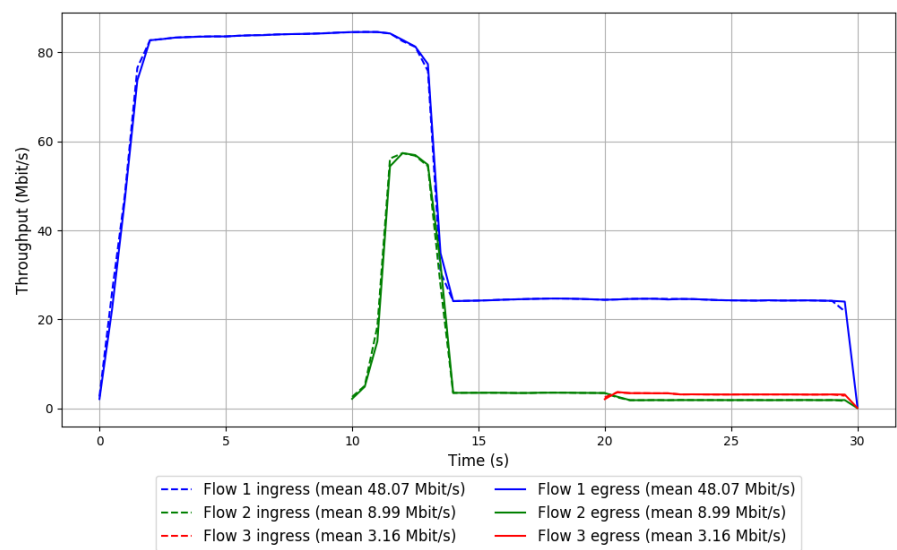
-- Flow 3:

Average throughput: 3.16 Mbit/s

95th percentile per-packet one-way delay: 54.015 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-31 19:37:24

End at: 2018-01-31 19:37:54

Below is generated by plot.py at 2018-02-01 00:16:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.68 Mbit/s

95th percentile per-packet one-way delay: 54.043 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.78 Mbit/s

95th percentile per-packet one-way delay: 54.058 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.00 Mbit/s

95th percentile per-packet one-way delay: 53.877 ms

Loss rate: 0.00%

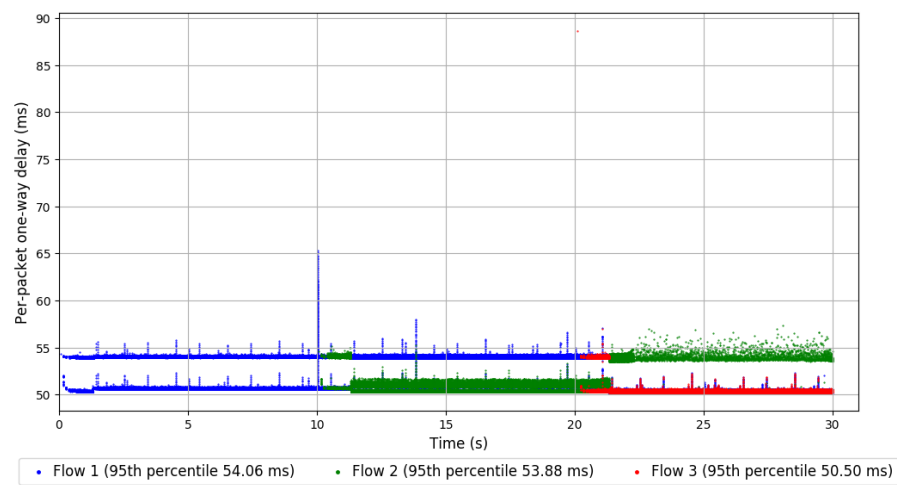
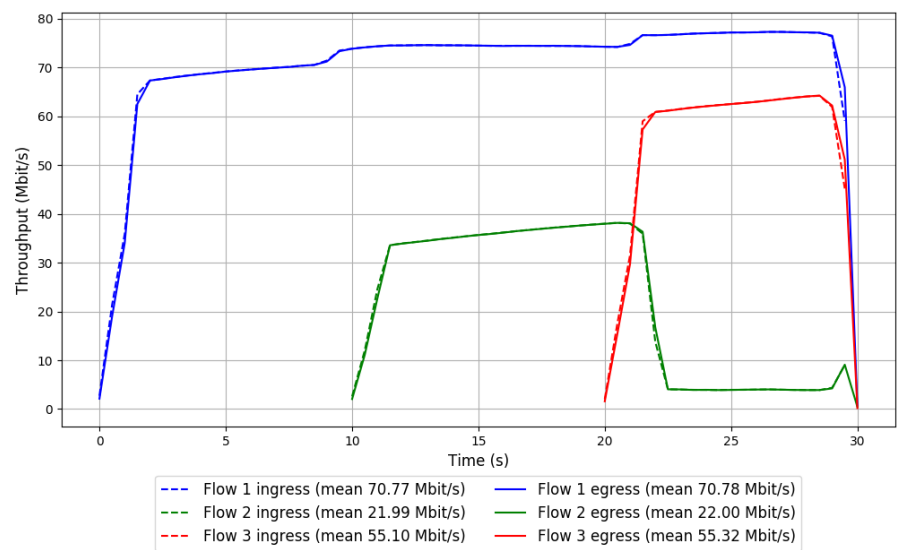
-- Flow 3:

Average throughput: 55.32 Mbit/s

95th percentile per-packet one-way delay: 50.499 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-31 19:54:12

End at: 2018-01-31 19:54:42

Below is generated by plot.py at 2018-02-01 00:16:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 56.09 Mbit/s

95th percentile per-packet one-way delay: 53.533 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 18.82 Mbit/s

95th percentile per-packet one-way delay: 51.503 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.24 Mbit/s

95th percentile per-packet one-way delay: 53.939 ms

Loss rate: 0.00%

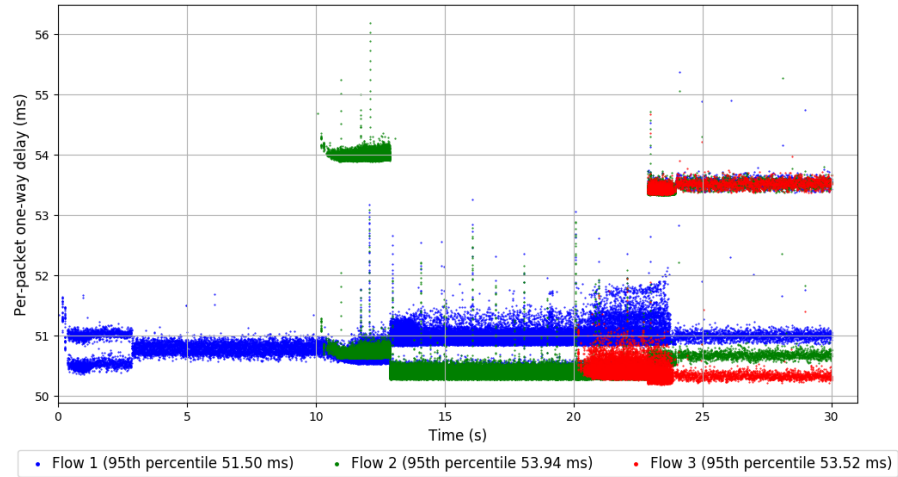
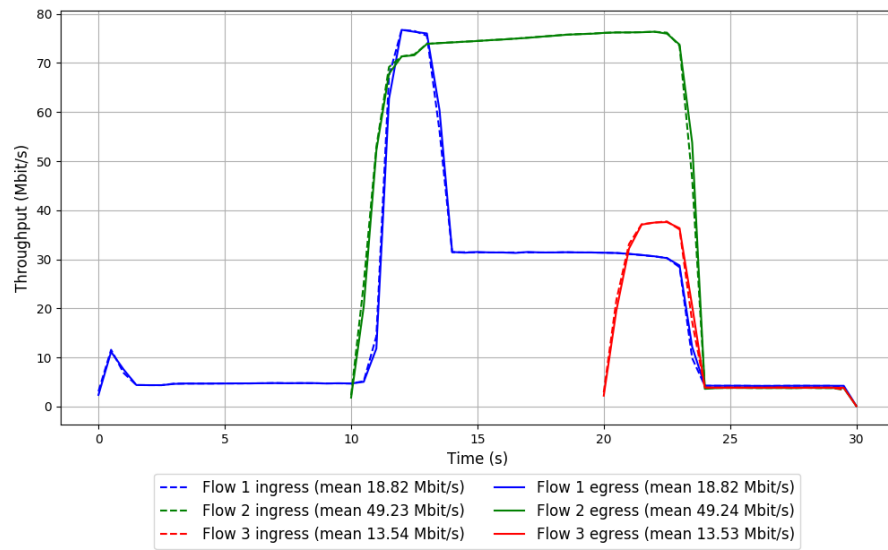
-- Flow 3:

Average throughput: 13.53 Mbit/s

95th percentile per-packet one-way delay: 53.518 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-31 20:11:13

End at: 2018-01-31 20:11:43

Below is generated by plot.py at 2018-02-01 00:16:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.00 Mbit/s

95th percentile per-packet one-way delay: 54.014 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 77.76 Mbit/s

95th percentile per-packet one-way delay: 54.040 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.03 Mbit/s

95th percentile per-packet one-way delay: 53.299 ms

Loss rate: 0.00%

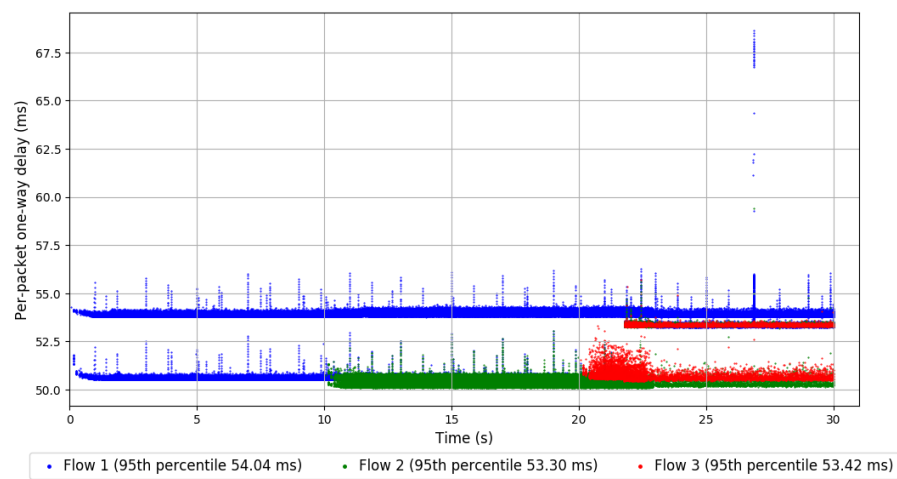
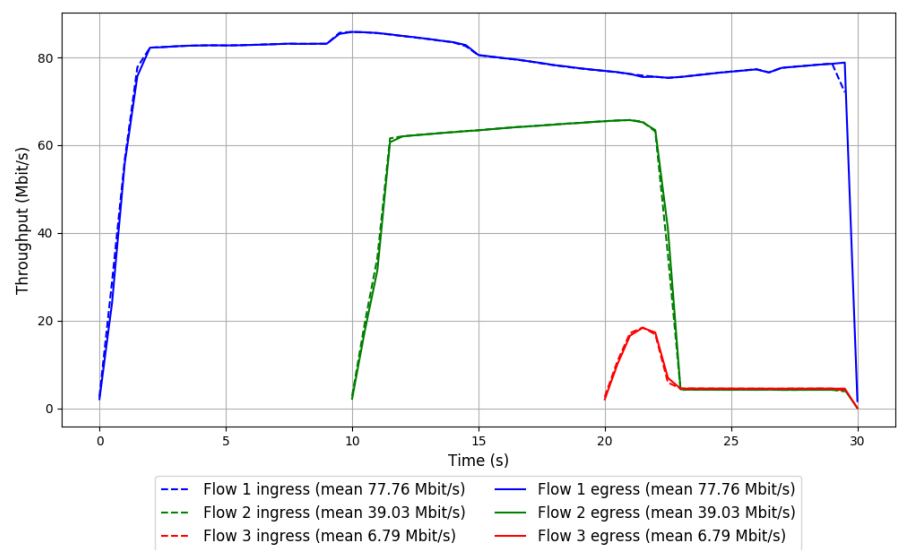
-- Flow 3:

Average throughput: 6.79 Mbit/s

95th percentile per-packet one-way delay: 53.425 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-31 20:27:35

End at: 2018-01-31 20:28:05

Below is generated by plot.py at 2018-02-01 00:16:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.37 Mbit/s

95th percentile per-packet one-way delay: 53.552 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 29.95 Mbit/s

95th percentile per-packet one-way delay: 53.778 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 72.61 Mbit/s

95th percentile per-packet one-way delay: 53.289 ms

Loss rate: 0.00%

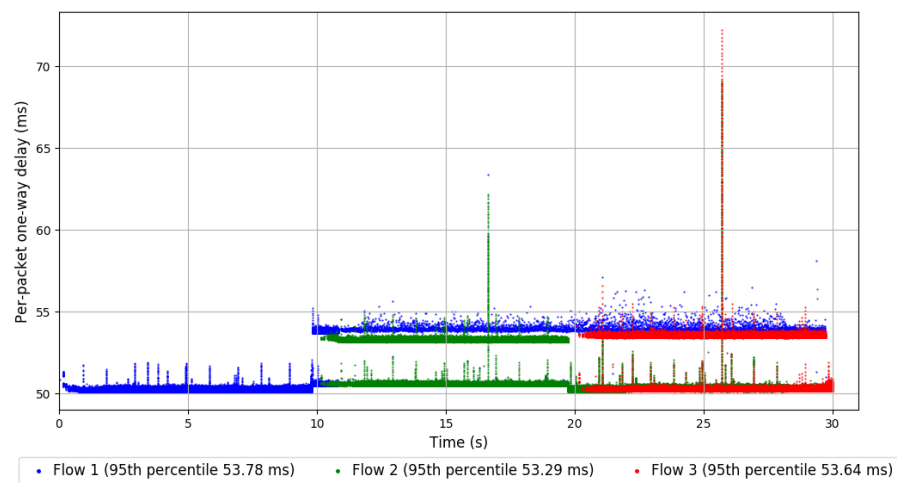
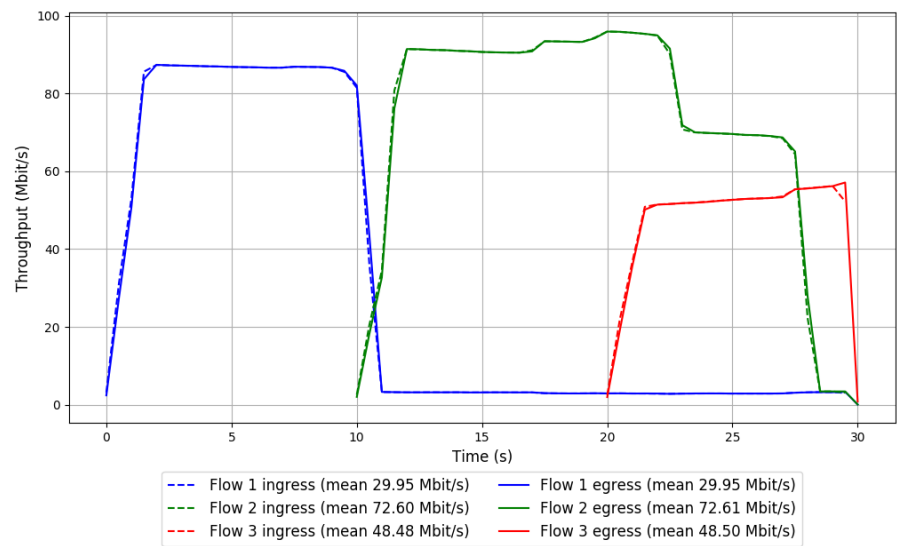
-- Flow 3:

Average throughput: 48.50 Mbit/s

95th percentile per-packet one-way delay: 53.641 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-31 20:44:16

End at: 2018-01-31 20:44:46

Below is generated by plot.py at 2018-02-01 00:16:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.73 Mbit/s

95th percentile per-packet one-way delay: 53.929 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.48 Mbit/s

95th percentile per-packet one-way delay: 53.945 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.35 Mbit/s

95th percentile per-packet one-way delay: 53.913 ms

Loss rate: 0.00%

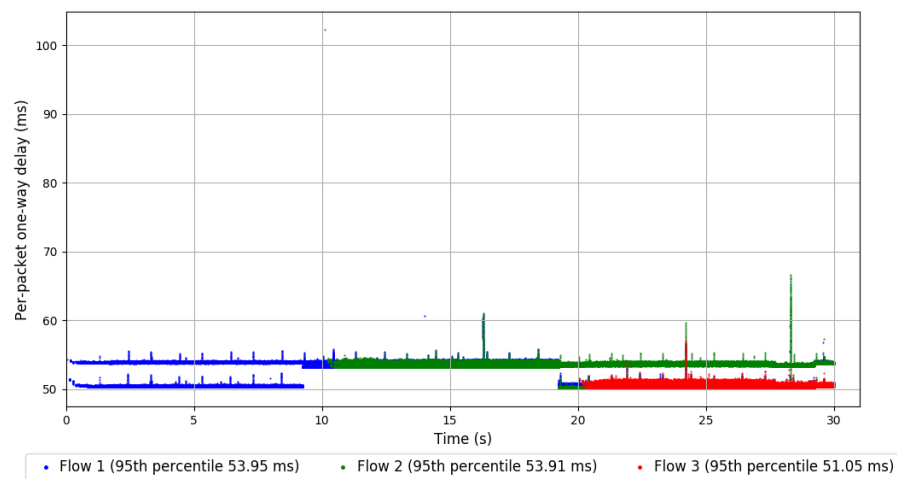
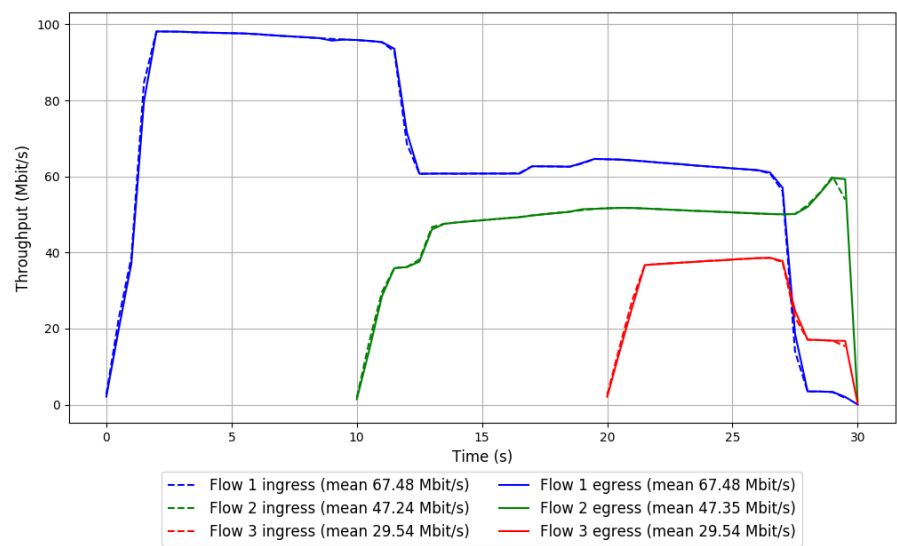
-- Flow 3:

Average throughput: 29.54 Mbit/s

95th percentile per-packet one-way delay: 51.046 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link

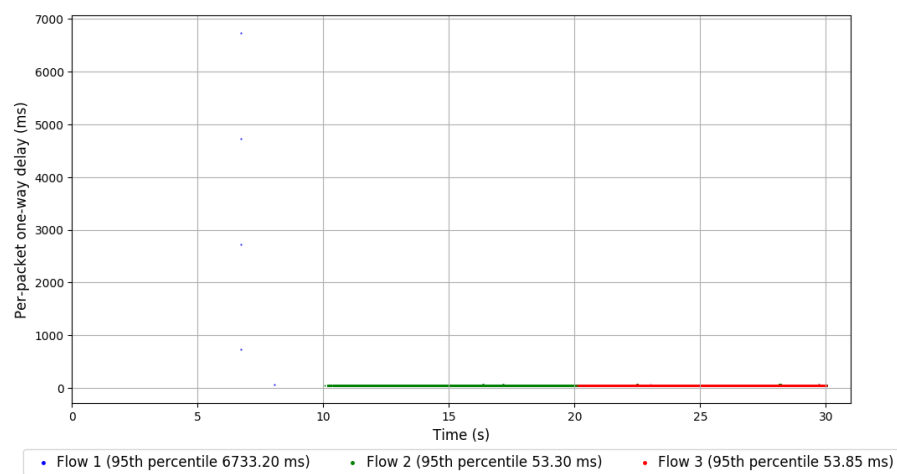
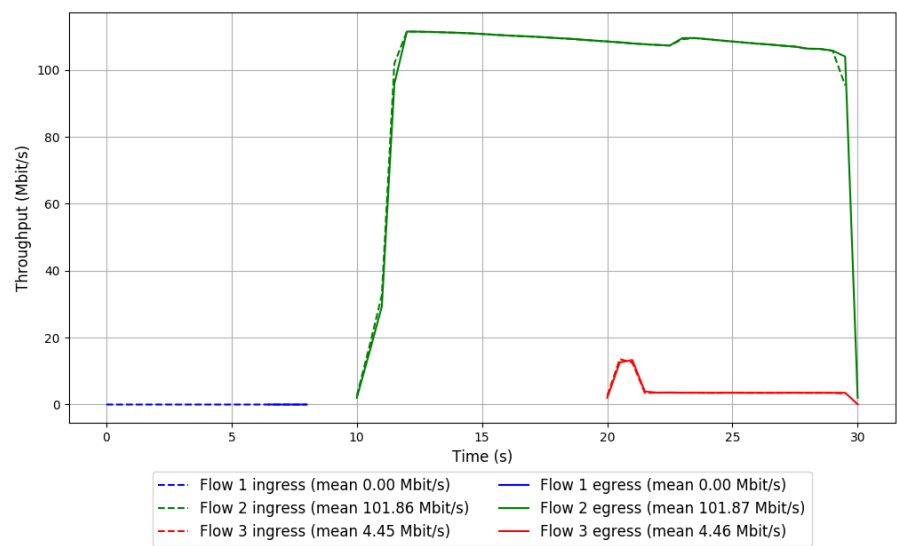


Run 8: Statistics of Copa

Start at: 2018-01-31 21:00:52

End at: 2018-01-31 21:01:22

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-31 21:16:49

End at: 2018-01-31 21:17:19

Below is generated by plot.py at 2018-02-01 00:16:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.78 Mbit/s

95th percentile per-packet one-way delay: 53.518 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 22.82 Mbit/s

95th percentile per-packet one-way delay: 53.348 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.70 Mbit/s

95th percentile per-packet one-way delay: 53.647 ms

Loss rate: 0.00%

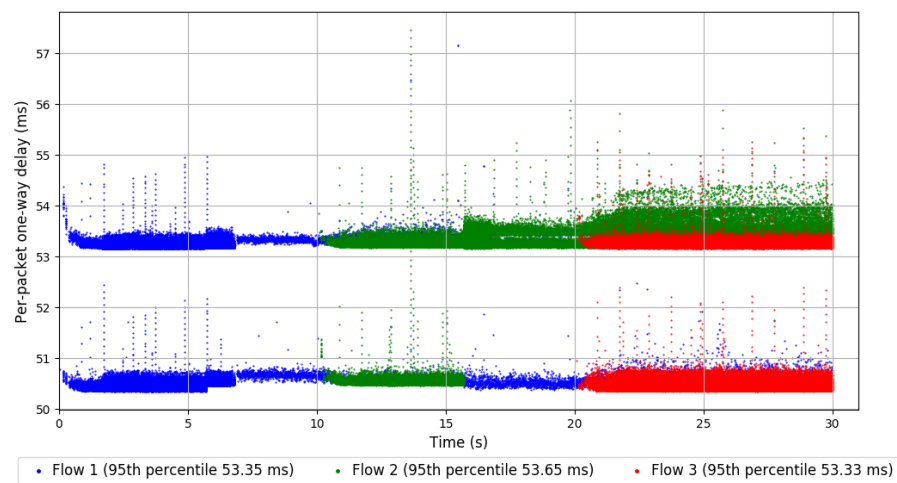
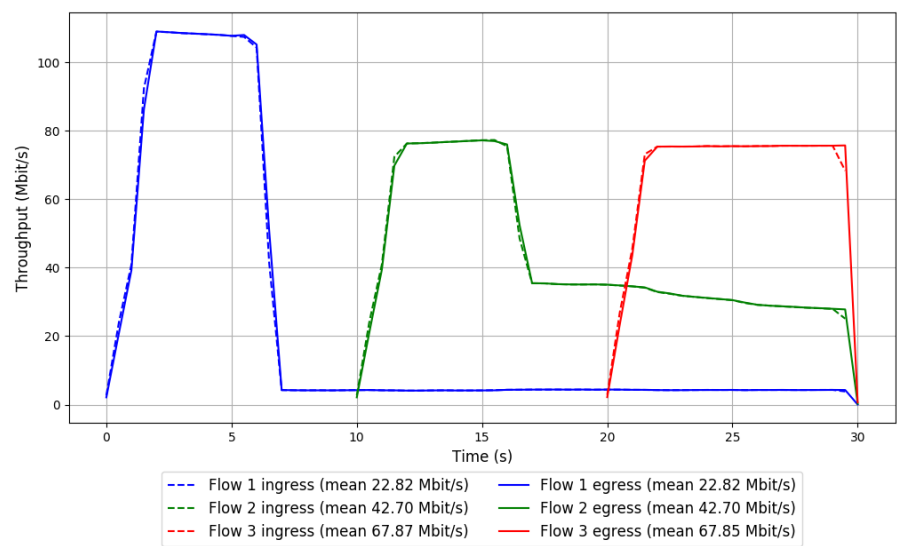
-- Flow 3:

Average throughput: 67.85 Mbit/s

95th percentile per-packet one-way delay: 53.332 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-31 21:33:05

End at: 2018-01-31 21:33:35

Below is generated by plot.py at 2018-02-01 00:16:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.78 Mbit/s

95th percentile per-packet one-way delay: 53.452 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 37.03 Mbit/s

95th percentile per-packet one-way delay: 53.267 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.36 Mbit/s

95th percentile per-packet one-way delay: 53.373 ms

Loss rate: 0.00%

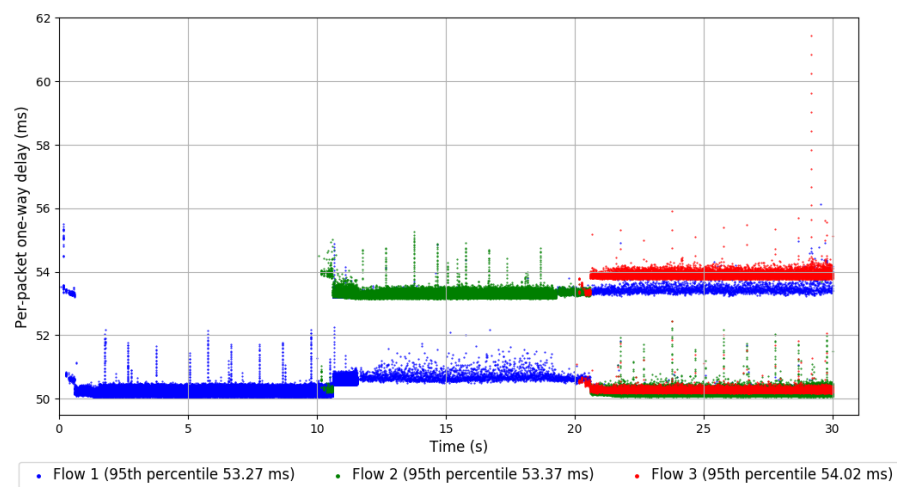
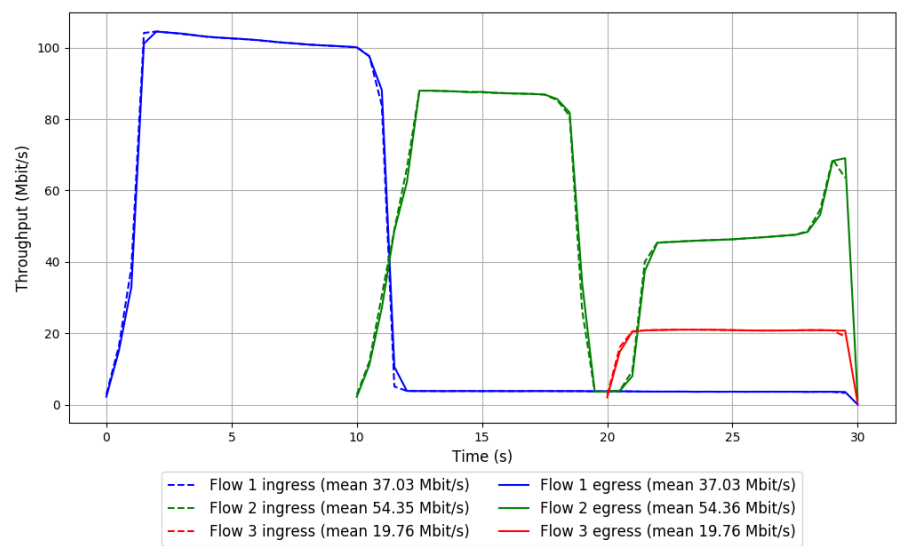
-- Flow 3:

Average throughput: 19.76 Mbit/s

95th percentile per-packet one-way delay: 54.021 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

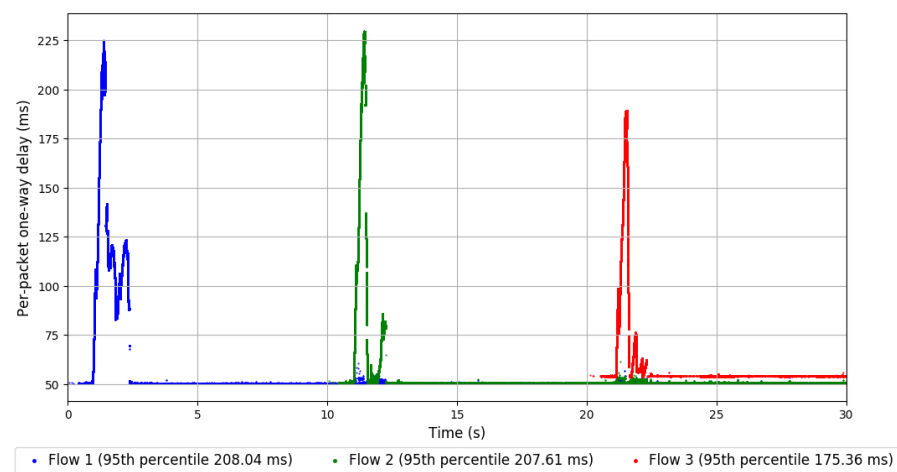
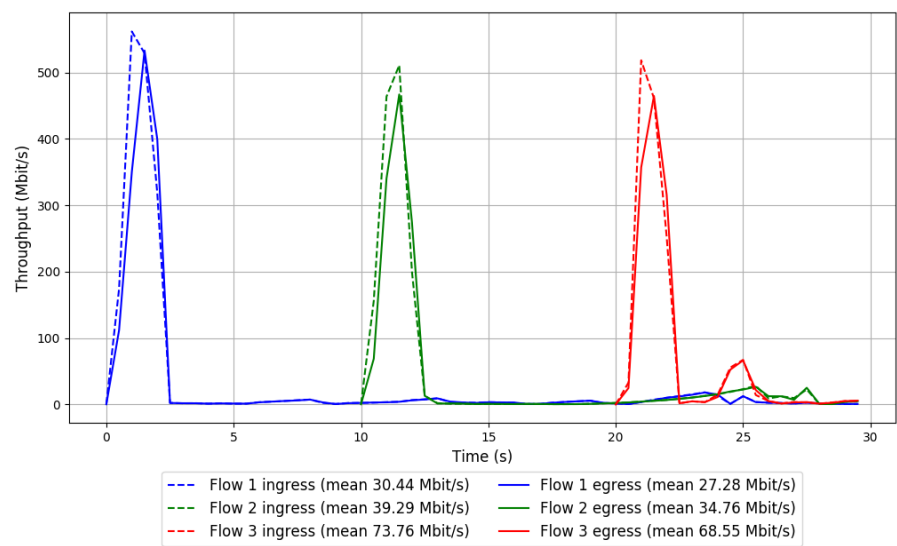


```
Run 1: Statistics of FillP

Start at: 2018-01-31 19:11:13
End at: 2018-01-31 19:11:43

# Below is generated by plot.py at 2018-02-01 00:17:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.02 Mbit/s
95th percentile per-packet one-way delay: 196.830 ms
Loss rate: 9.76%
-- Flow 1:
Average throughput: 27.28 Mbit/s
95th percentile per-packet one-way delay: 208.043 ms
Loss rate: 10.40%
-- Flow 2:
Average throughput: 34.76 Mbit/s
95th percentile per-packet one-way delay: 207.606 ms
Loss rate: 11.53%
-- Flow 3:
Average throughput: 68.55 Mbit/s
95th percentile per-packet one-way delay: 175.356 ms
Loss rate: 7.06%
```


Run 1: Report of FillP — Data Link

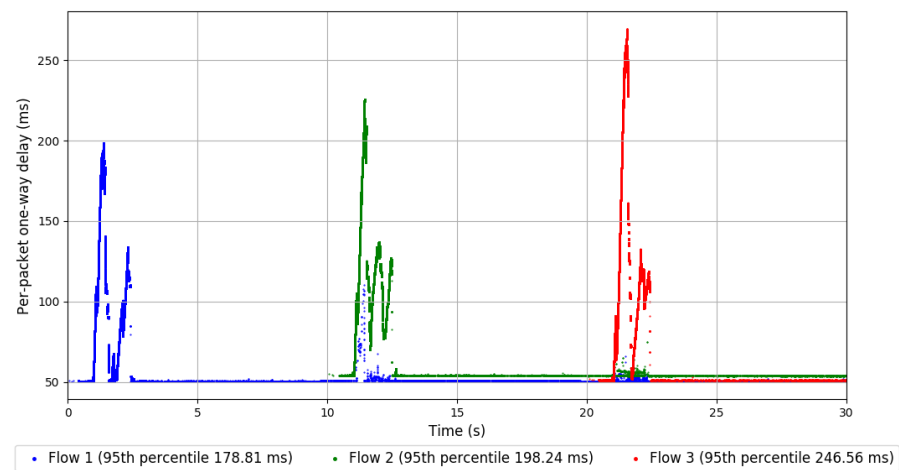
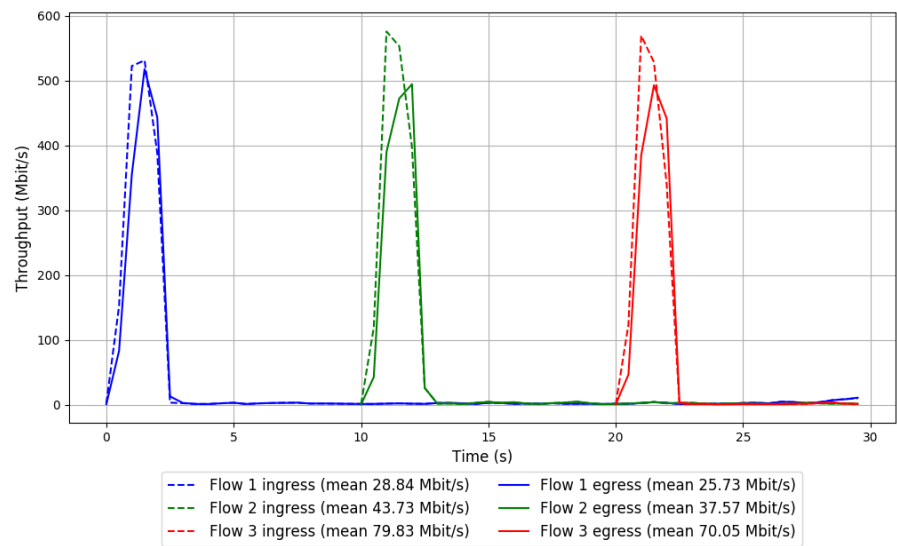


```
Run 2: Statistics of FillP

Start at: 2018-01-31 19:27:55
End at: 2018-01-31 19:28:25

# Below is generated by plot.py at 2018-02-01 00:17:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.89 Mbit/s
95th percentile per-packet one-way delay: 197.272 ms
Loss rate: 12.39%
-- Flow 1:
Average throughput: 25.73 Mbit/s
95th percentile per-packet one-way delay: 178.809 ms
Loss rate: 10.78%
-- Flow 2:
Average throughput: 37.57 Mbit/s
95th percentile per-packet one-way delay: 198.244 ms
Loss rate: 14.11%
-- Flow 3:
Average throughput: 70.05 Mbit/s
95th percentile per-packet one-way delay: 246.557 ms
Loss rate: 12.25%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-31 19:44:34

End at: 2018-01-31 19:45:04

Below is generated by plot.py at 2018-02-01 00:28:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 452.01 Mbit/s

95th percentile per-packet one-way delay: 132.226 ms

Loss rate: 5.21%

-- Flow 1:

Average throughput: 192.85 Mbit/s

95th percentile per-packet one-way delay: 127.423 ms

Loss rate: 6.23%

-- Flow 2:

Average throughput: 354.74 Mbit/s

95th percentile per-packet one-way delay: 131.908 ms

Loss rate: 3.95%

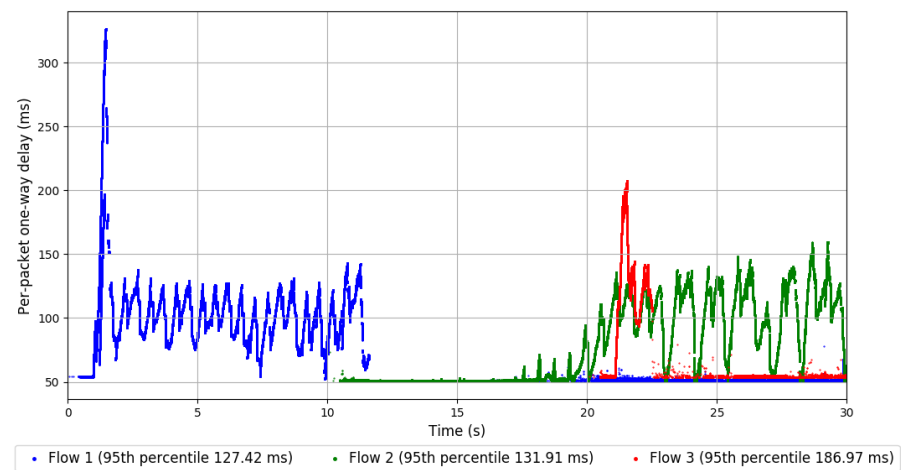
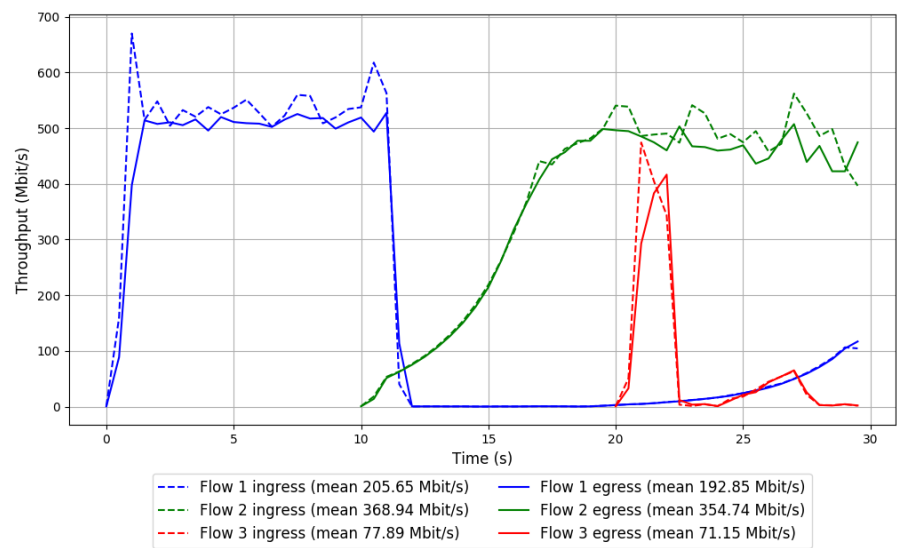
-- Flow 3:

Average throughput: 71.15 Mbit/s

95th percentile per-packet one-way delay: 186.965 ms

Loss rate: 8.92%

Run 3: Report of FillP — Data Link

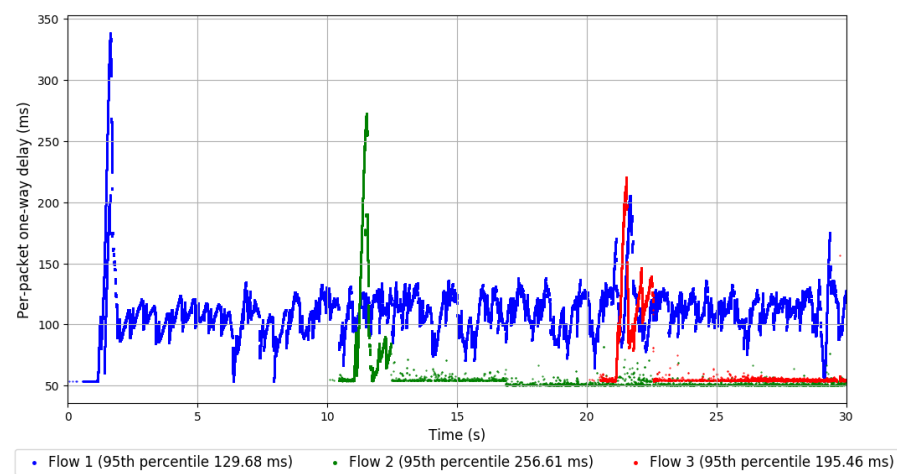
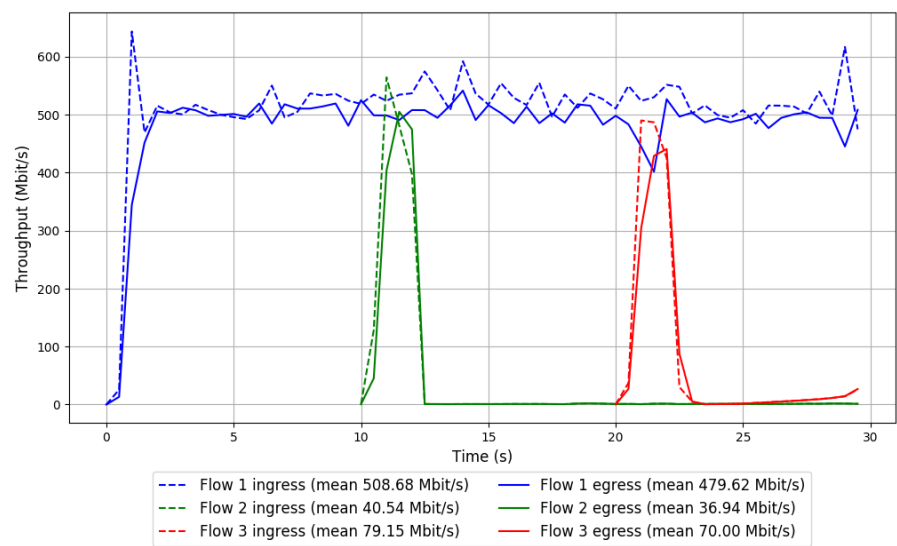


```
Run 4: Statistics of FillP

Start at: 2018-01-31 20:01:08
End at: 2018-01-31 20:01:38

# Below is generated by plot.py at 2018-02-01 00:31:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 527.29 Mbit/s
95th percentile per-packet one-way delay: 131.761 ms
Loss rate: 6.11%
-- Flow 1:
Average throughput: 479.62 Mbit/s
95th percentile per-packet one-way delay: 129.684 ms
Loss rate: 5.68%
-- Flow 2:
Average throughput: 36.94 Mbit/s
95th percentile per-packet one-way delay: 256.606 ms
Loss rate: 8.90%
-- Flow 3:
Average throughput: 70.00 Mbit/s
95th percentile per-packet one-way delay: 195.461 ms
Loss rate: 11.58%
```

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-31 20:18:22

End at: 2018-01-31 20:18:52

Below is generated by plot.py at 2018-02-01 00:31:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.30 Mbit/s

95th percentile per-packet one-way delay: 190.364 ms

Loss rate: 8.15%

-- Flow 1:

Average throughput: 56.24 Mbit/s

95th percentile per-packet one-way delay: 122.838 ms

Loss rate: 4.05%

-- Flow 2:

Average throughput: 37.66 Mbit/s

95th percentile per-packet one-way delay: 234.441 ms

Loss rate: 13.04%

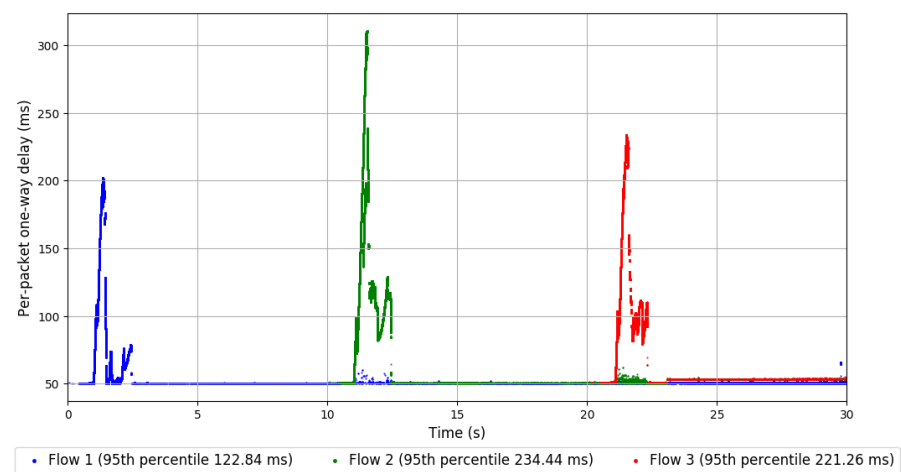
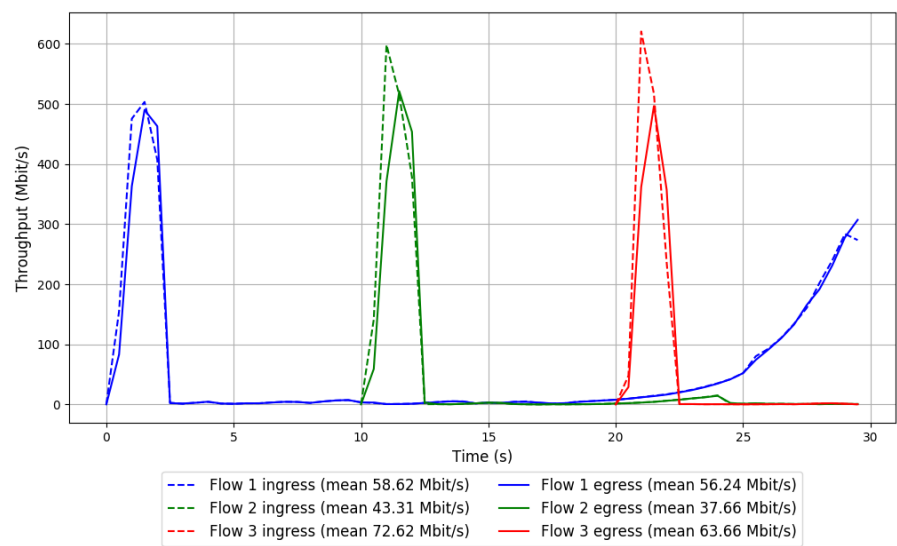
-- Flow 3:

Average throughput: 63.66 Mbit/s

95th percentile per-packet one-way delay: 221.257 ms

Loss rate: 12.32%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-31 20:34:39

End at: 2018-01-31 20:35:09

Below is generated by plot.py at 2018-02-01 00:31:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.80 Mbit/s

95th percentile per-packet one-way delay: 225.462 ms

Loss rate: 9.86%

-- Flow 1:

Average throughput: 26.80 Mbit/s

95th percentile per-packet one-way delay: 213.450 ms

Loss rate: 11.40%

-- Flow 2:

Average throughput: 34.38 Mbit/s

95th percentile per-packet one-way delay: 257.435 ms

Loss rate: 9.66%

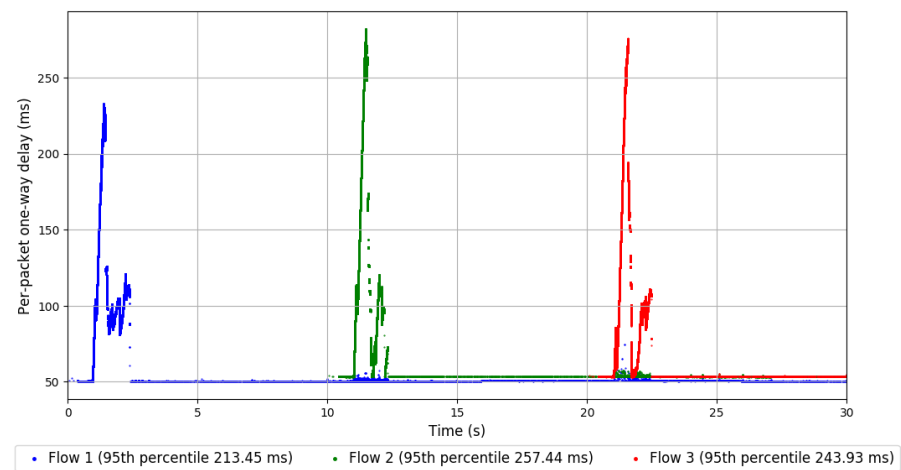
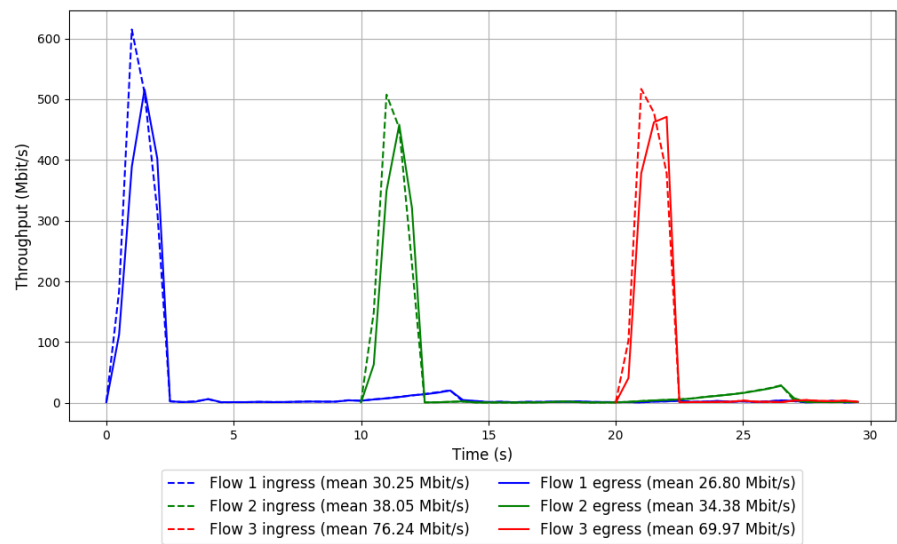
-- Flow 3:

Average throughput: 69.97 Mbit/s

95th percentile per-packet one-way delay: 243.925 ms

Loss rate: 8.22%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-31 20:51:29

End at: 2018-01-31 20:51:59

Below is generated by plot.py at 2018-02-01 00:31:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 115.03 Mbit/s

95th percentile per-packet one-way delay: 199.970 ms

Loss rate: 7.28%

-- Flow 1:

Average throughput: 23.96 Mbit/s

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

Loss rate: 9.98%

-- Flow 2:

Average throughput: 103.62 Mbit/s

95th percentile per-packet one-way delay: 144.441 ms

Loss rate: 5.50%

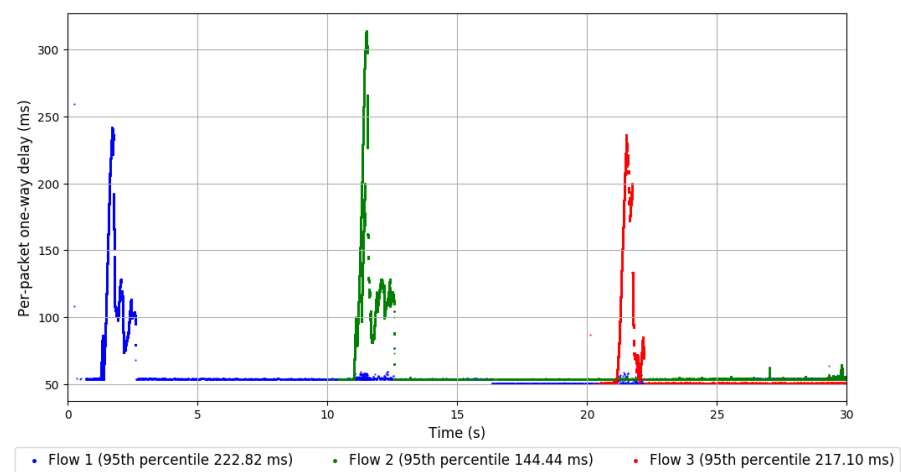
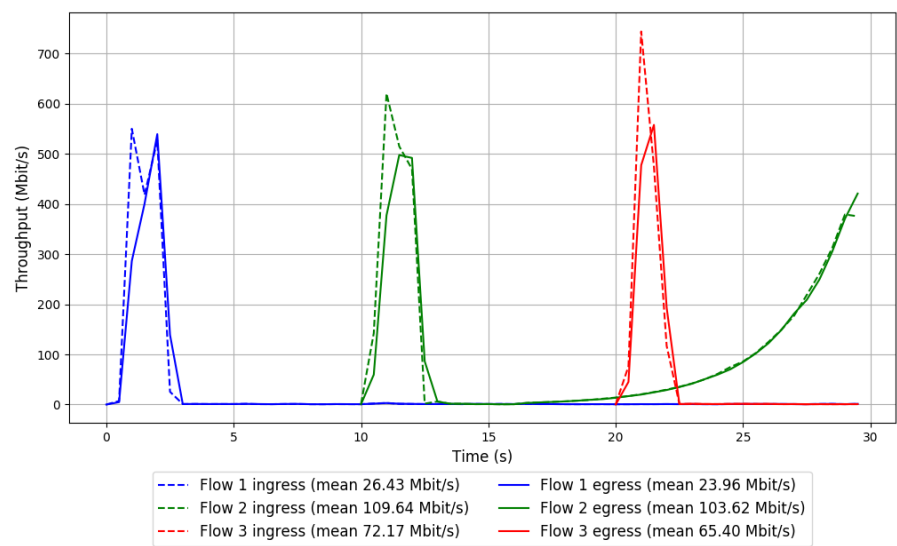
-- Flow 3:

Average throughput: 65.40 Mbit/s

95th percentile per-packet one-way delay: 217.103 ms

Loss rate: 9.71%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-31 21:07:38

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

Below is generated by plot.py at 2018-02-01 00:31:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.27 Mbit/s

95th percentile per-packet one-way delay: 194.438 ms

Loss rate: 9.48%

-- Flow 1:

Average throughput: 26.99 Mbit/s

95th percentile per-packet one-way delay: 227.992 ms

Loss rate: 10.40%

-- Flow 2:

Average throughput: 36.27 Mbit/s

95th percentile per-packet one-way delay: 191.603 ms

Loss rate: 9.05%

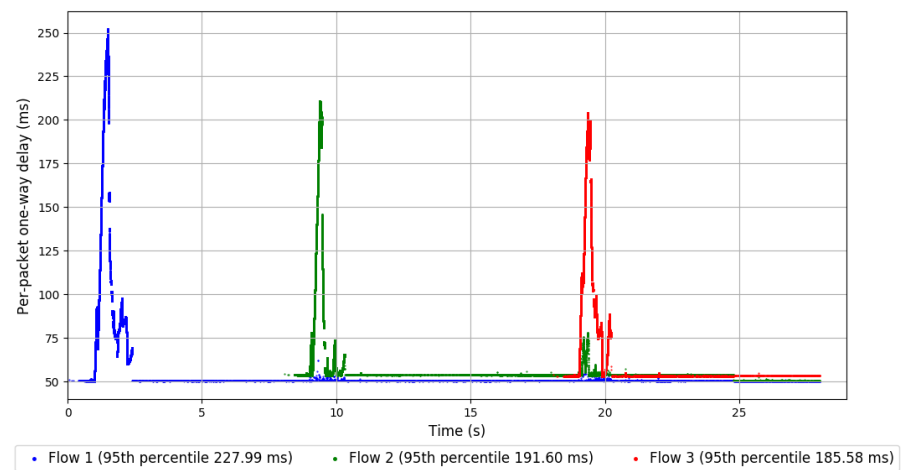
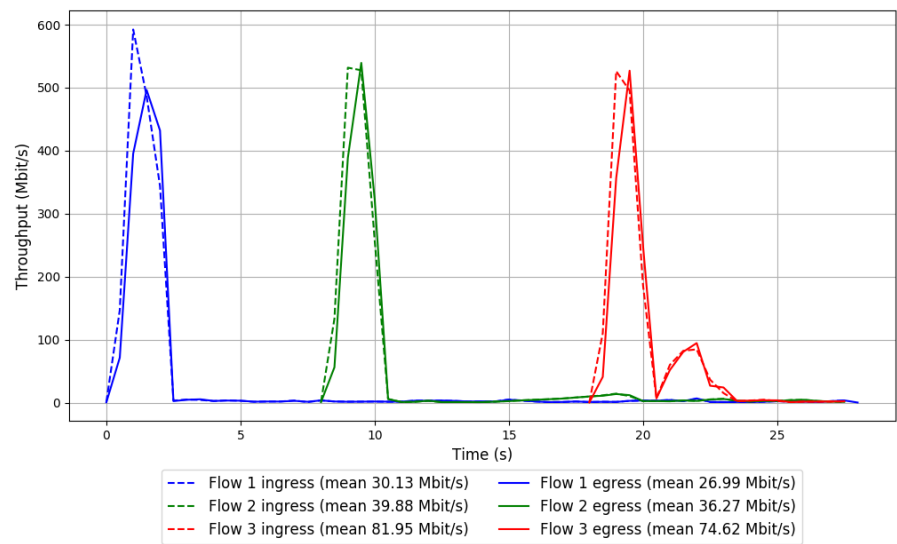
-- Flow 3:

Average throughput: 74.62 Mbit/s

95th percentile per-packet one-way delay: 185.581 ms

Loss rate: 8.95%

Run 8: Report of FillP — Data Link

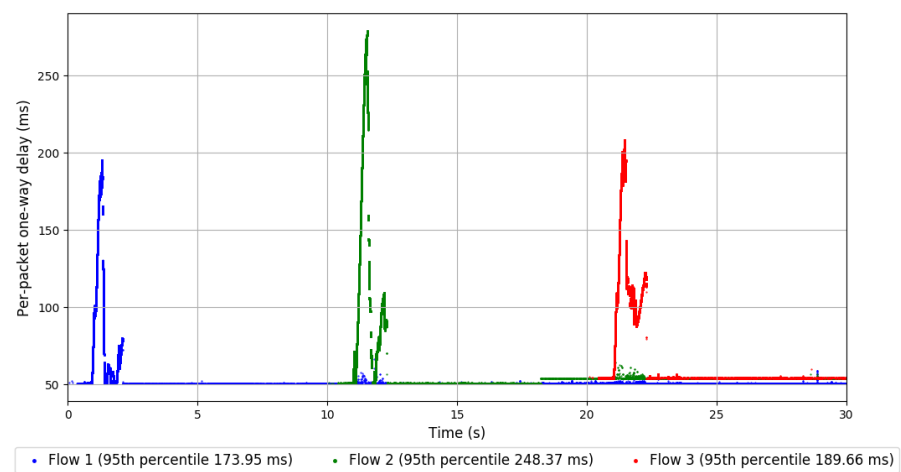
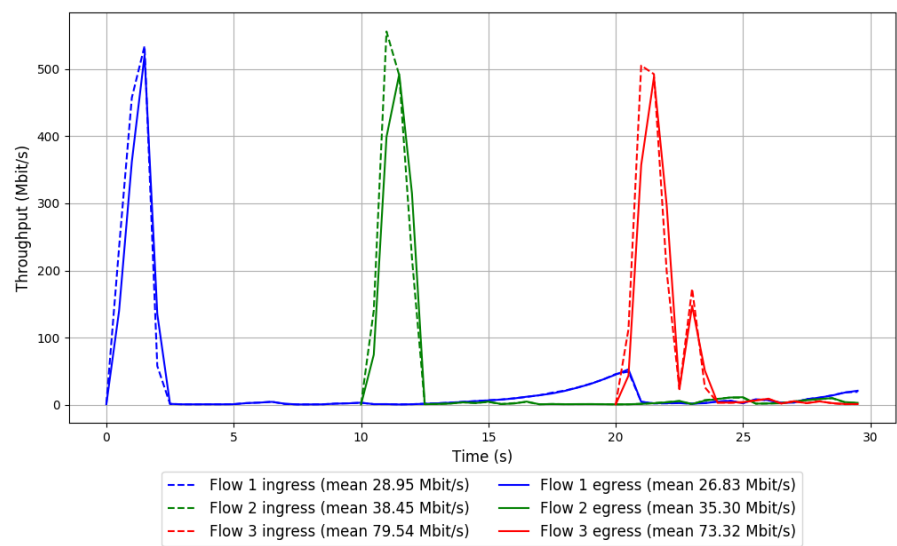


```
Run 9: Statistics of FillP

Start at: 2018-01-31 21:23:47
End at: 2018-01-31 21:24:17

# Below is generated by plot.py at 2018-02-01 00:31:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.57 Mbit/s
95th percentile per-packet one-way delay: 192.001 ms
Loss rate: 7.75%
-- Flow 1:
Average throughput: 26.83 Mbit/s
95th percentile per-packet one-way delay: 173.949 ms
Loss rate: 7.31%
-- Flow 2:
Average throughput: 35.30 Mbit/s
95th percentile per-packet one-way delay: 248.374 ms
Loss rate: 8.18%
-- Flow 3:
Average throughput: 73.32 Mbit/s
95th percentile per-packet one-way delay: 189.661 ms
Loss rate: 7.83%
```


Run 9: Report of FillP — Data Link

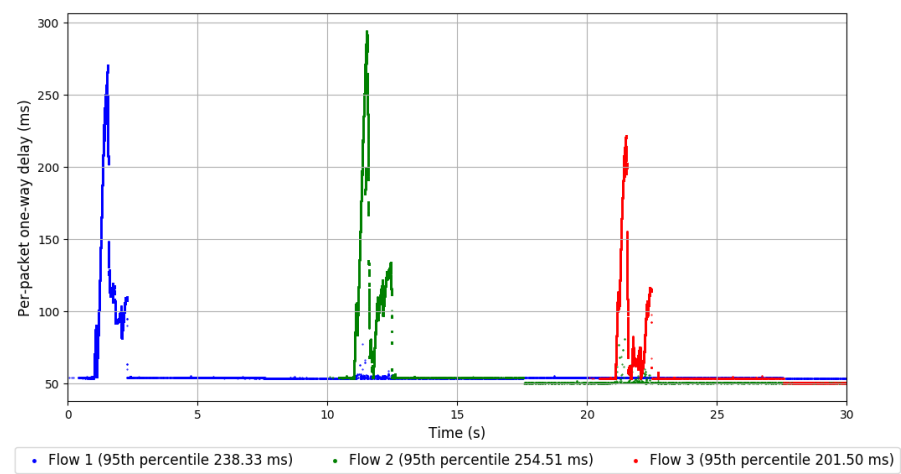
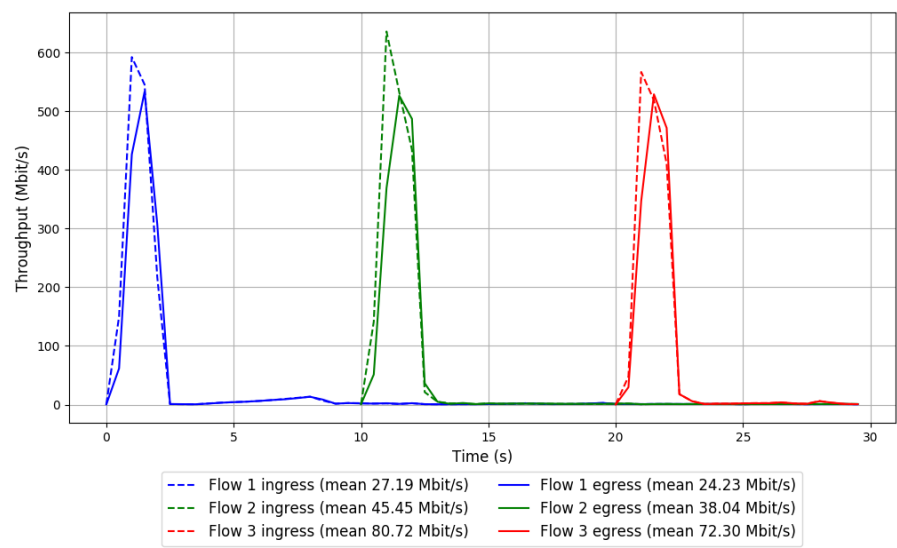


```
Run 10: Statistics of FillP

Start at: 2018-01-31 21:40:08
End at: 2018-01-31 21:40:38

# Below is generated by plot.py at 2018-02-01 00:31:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.43 Mbit/s
95th percentile per-packet one-way delay: 222.805 ms
Loss rate: 12.70%
-- Flow 1:
Average throughput: 24.23 Mbit/s
95th percentile per-packet one-way delay: 238.327 ms
Loss rate: 10.87%
-- Flow 2:
Average throughput: 38.04 Mbit/s
95th percentile per-packet one-way delay: 254.506 ms
Loss rate: 16.32%
-- Flow 3:
Average throughput: 72.30 Mbit/s
95th percentile per-packet one-way delay: 201.497 ms
Loss rate: 10.46%
```

Run 10: Report of FillP — Data Link

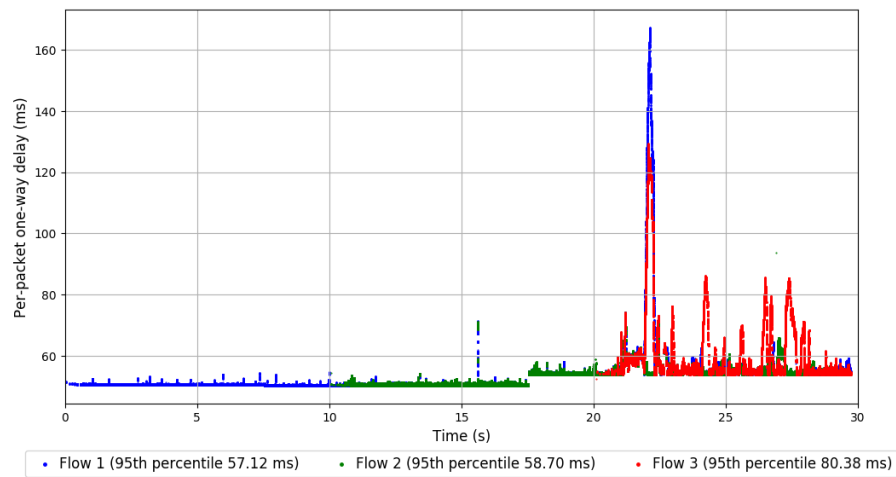
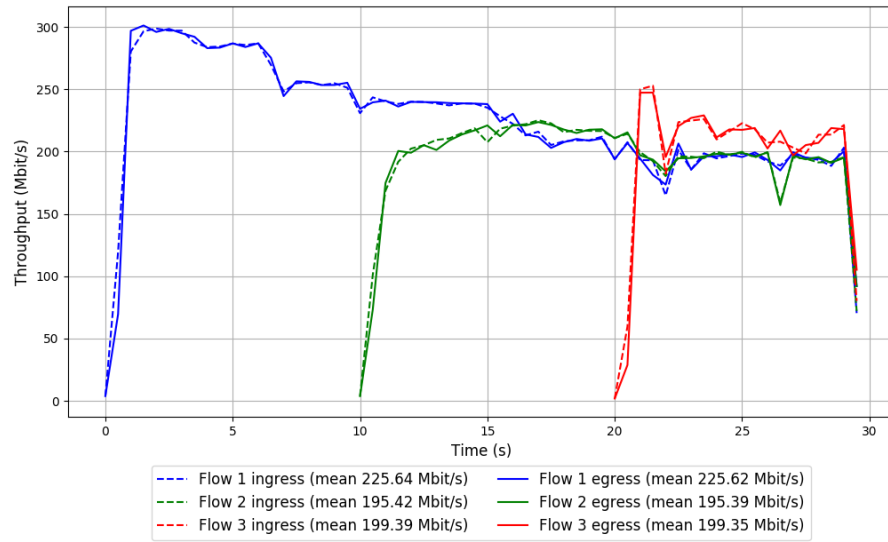


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-01-31 19:08:17
End at: 2018-01-31 19:08:47

# Below is generated by plot.py at 2018-02-01 00:31:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 419.61 Mbit/s
95th percentile per-packet one-way delay: 61.287 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 225.62 Mbit/s
95th percentile per-packet one-way delay: 57.122 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 195.39 Mbit/s
95th percentile per-packet one-way delay: 58.704 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 199.35 Mbit/s
95th percentile per-packet one-way delay: 80.384 ms
Loss rate: 0.00%
```

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

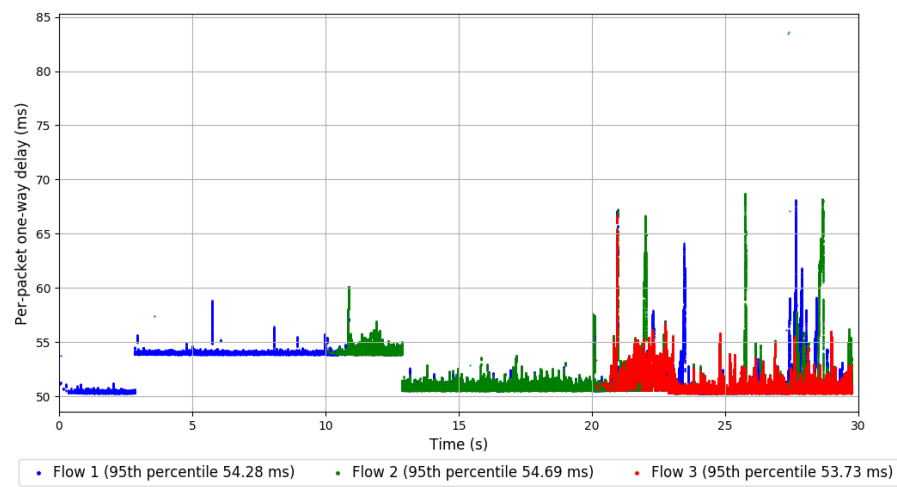
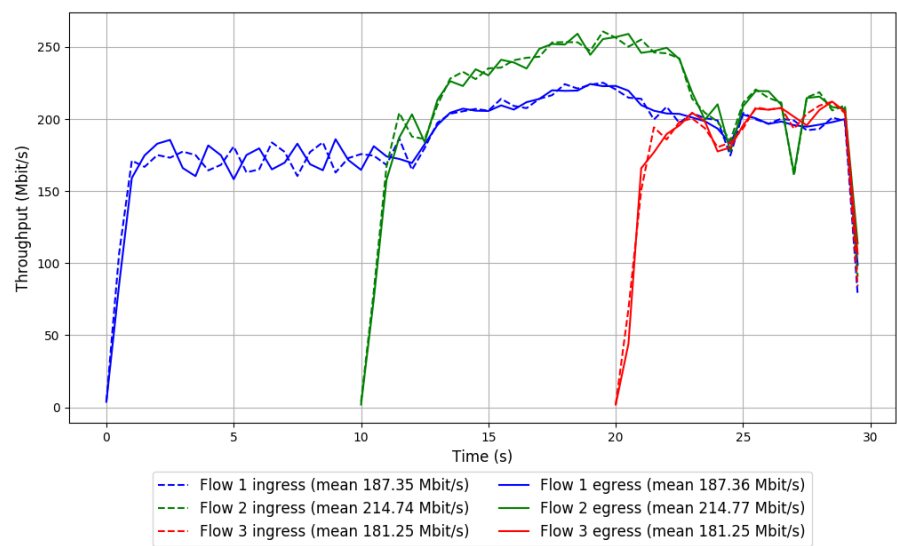


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-01-31 19:25:02
End at: 2018-01-31 19:25:32

# Below is generated by plot.py at 2018-02-01 00:31:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 388.13 Mbit/s
95th percentile per-packet one-way delay: 54.388 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 187.36 Mbit/s
95th percentile per-packet one-way delay: 54.284 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 214.77 Mbit/s
95th percentile per-packet one-way delay: 54.692 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 181.25 Mbit/s
95th percentile per-packet one-way delay: 53.732 ms
Loss rate: 0.00%
```

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

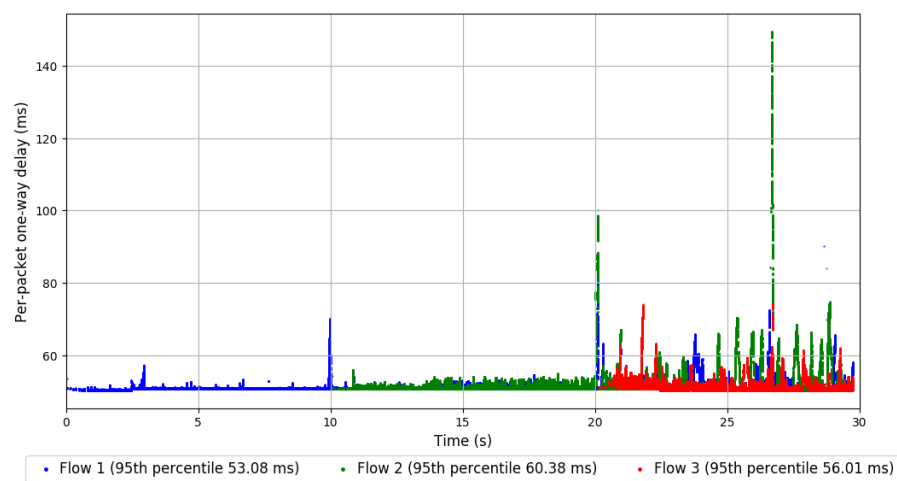
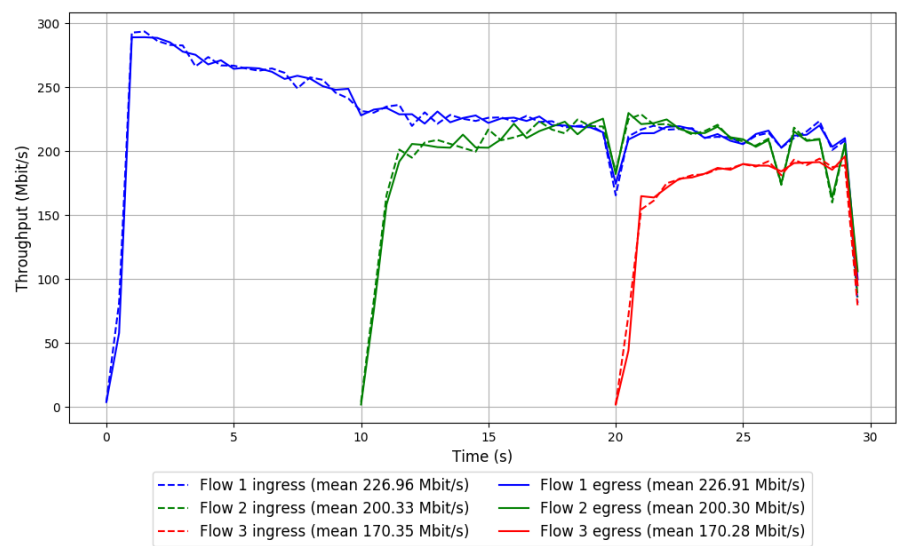


```
Run 3: Statistics of Indigo-1-32

Start at: 2018-01-31 19:41:42
End at: 2018-01-31 19:42:12

# Below is generated by plot.py at 2018-02-01 00:31:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 414.50 Mbit/s
95th percentile per-packet one-way delay: 55.136 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 226.91 Mbit/s
95th percentile per-packet one-way delay: 53.077 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 200.30 Mbit/s
95th percentile per-packet one-way delay: 60.382 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 170.28 Mbit/s
95th percentile per-packet one-way delay: 56.007 ms
Loss rate: 0.02%
```


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



Run 4: Statistics of Indigo-1-32

Start at: 2018-01-31 19:58:17

End at: 2018-01-31 19:58:47

Below is generated by plot.py at 2018-02-01 00:31:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 393.47 Mbit/s

95th percentile per-packet one-way delay: 57.130 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 200.60 Mbit/s

95th percentile per-packet one-way delay: 58.954 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 200.91 Mbit/s

95th percentile per-packet one-way delay: 56.161 ms

Loss rate: 0.34%

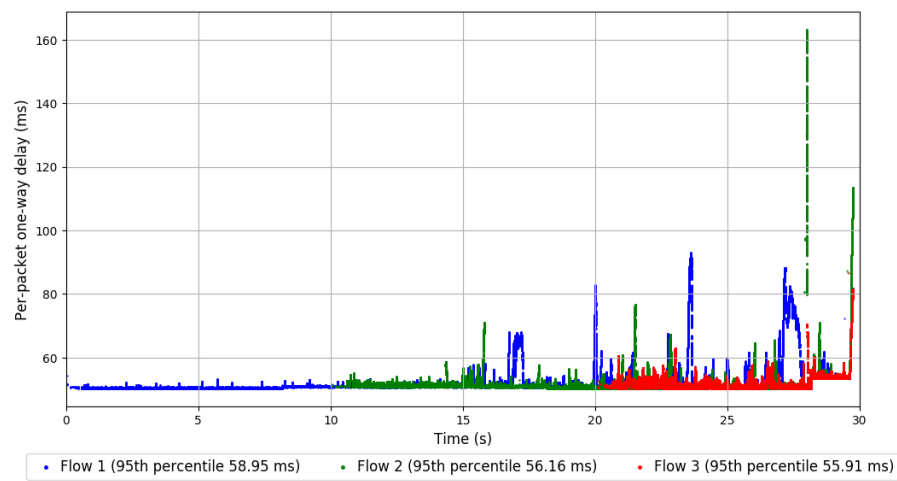
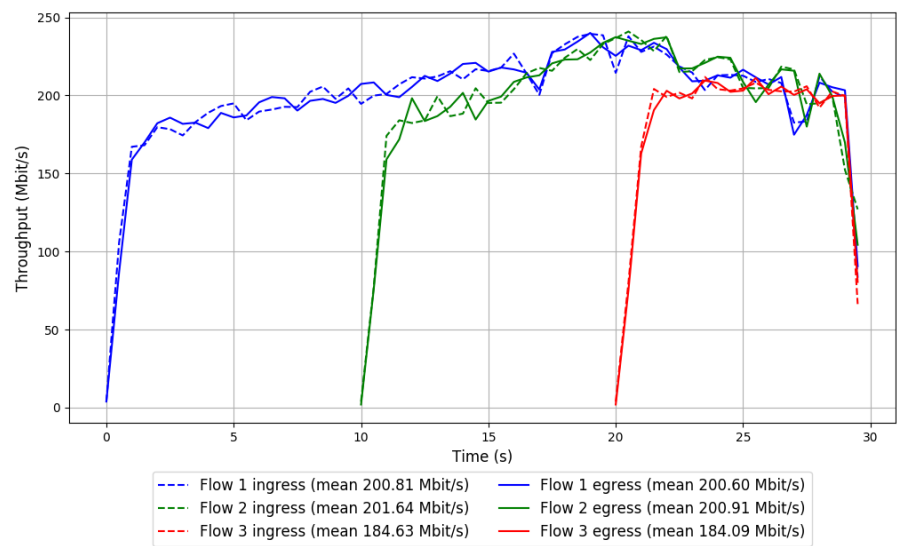
-- Flow 3:

Average throughput: 184.09 Mbit/s

95th percentile per-packet one-way delay: 55.909 ms

Loss rate: 0.23%

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

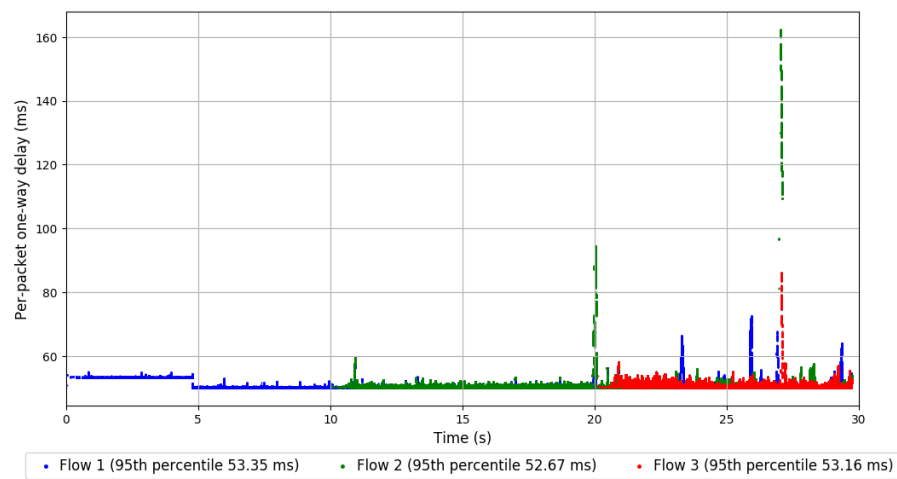
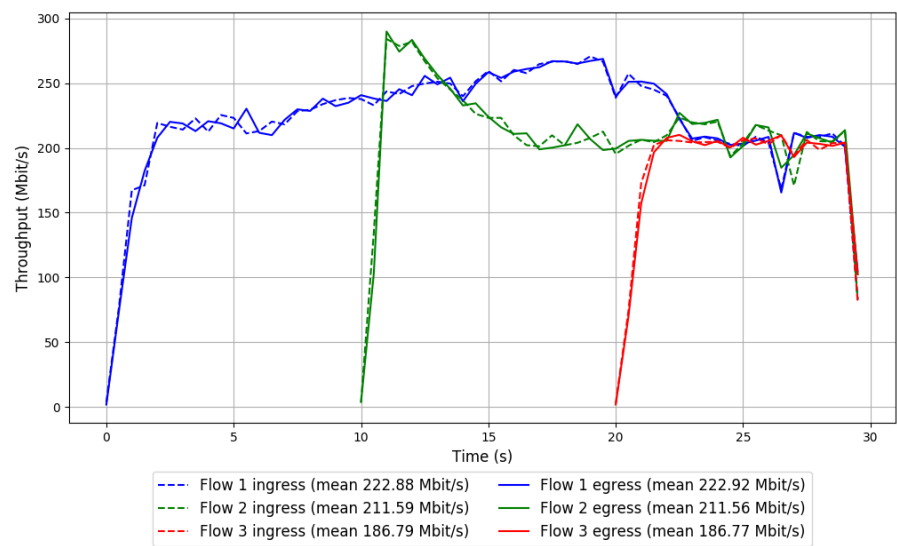


```
Run 5: Statistics of Indigo-1-32

Start at: 2018-01-31 20:15:30
End at: 2018-01-31 20:16:00

# Below is generated by plot.py at 2018-02-01 00:31:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 423.68 Mbit/s
95th percentile per-packet one-way delay: 53.337 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 222.92 Mbit/s
95th percentile per-packet one-way delay: 53.352 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 211.56 Mbit/s
95th percentile per-packet one-way delay: 52.666 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 186.77 Mbit/s
95th percentile per-packet one-way delay: 53.156 ms
Loss rate: 0.01%
```

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



Run 6: Statistics of Indigo-1-32

Start at: 2018-01-31 20:31:45

End at: 2018-01-31 20:32:15

Below is generated by plot.py at 2018-02-01 00:31:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 426.63 Mbit/s

95th percentile per-packet one-way delay: 53.824 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 224.62 Mbit/s

95th percentile per-packet one-way delay: 53.100 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 226.78 Mbit/s

95th percentile per-packet one-way delay: 54.965 ms

Loss rate: 0.00%

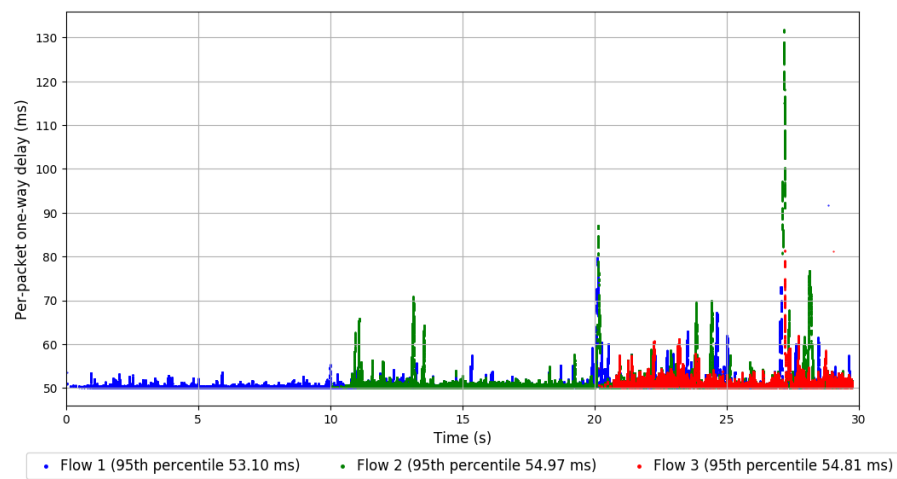
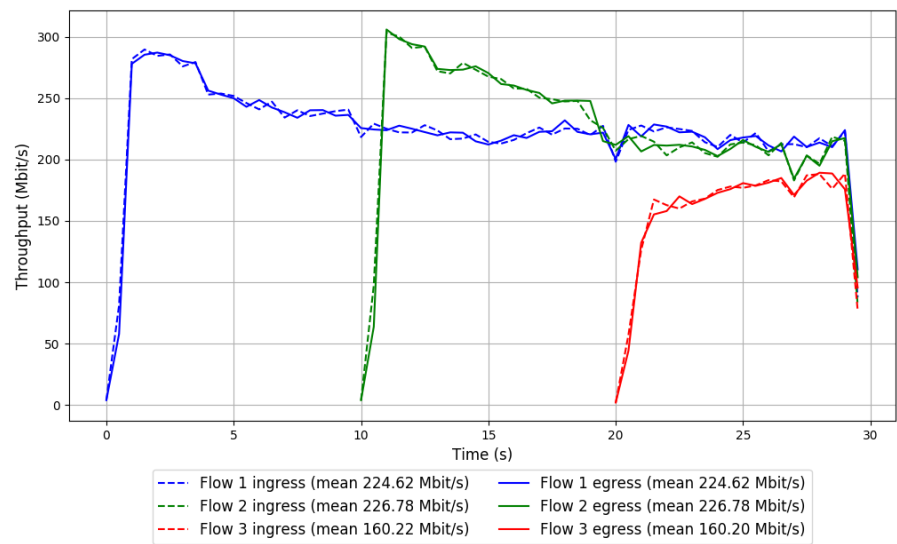
-- Flow 3:

Average throughput: 160.20 Mbit/s

95th percentile per-packet one-way delay: 54.808 ms

Loss rate: 0.00%

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



Run 7: Statistics of Indigo-1-32

Start at: 2018-01-31 20:48:38

End at: 2018-01-31 20:49:08

Below is generated by plot.py at 2018-02-01 00:31:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 426.21 Mbit/s

95th percentile per-packet one-way delay: 56.889 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 227.26 Mbit/s

95th percentile per-packet one-way delay: 53.400 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 206.38 Mbit/s

95th percentile per-packet one-way delay: 56.212 ms

Loss rate: 0.00%

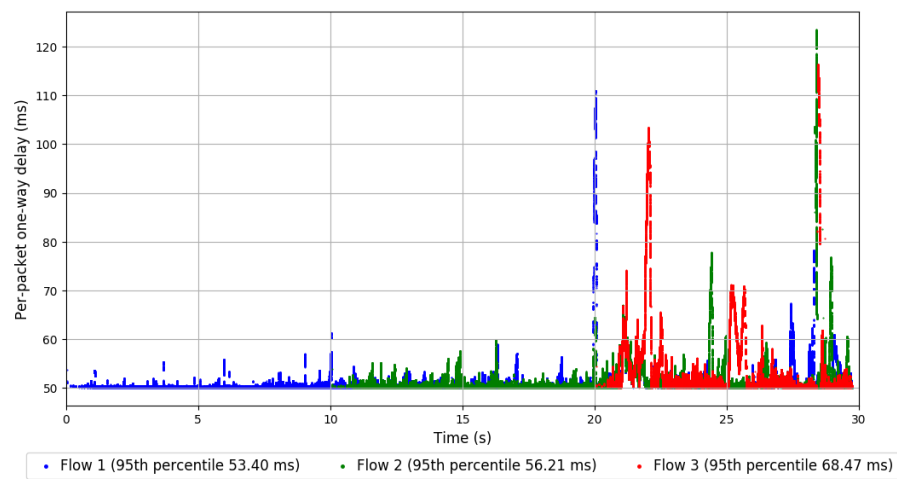
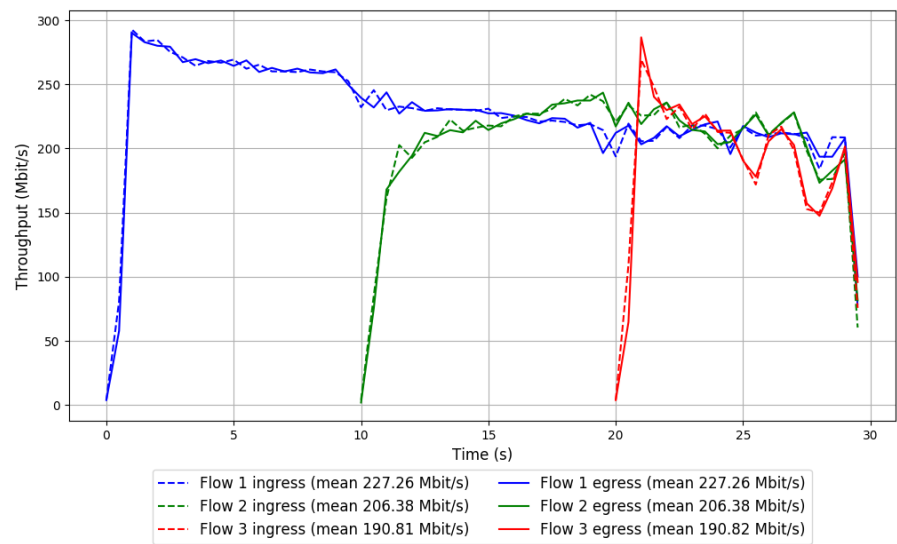
-- Flow 3:

Average throughput: 190.82 Mbit/s

95th percentile per-packet one-way delay: 68.472 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 21:04:49

End at: 2018-01-31 21:05:19

Below is generated by plot.py at 2018-02-01 00:31:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 422.32 Mbit/s

95th percentile per-packet one-way delay: 56.484 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 220.66 Mbit/s

95th percentile per-packet one-way delay: 56.163 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 218.20 Mbit/s

95th percentile per-packet one-way delay: 56.933 ms

Loss rate: 0.00%

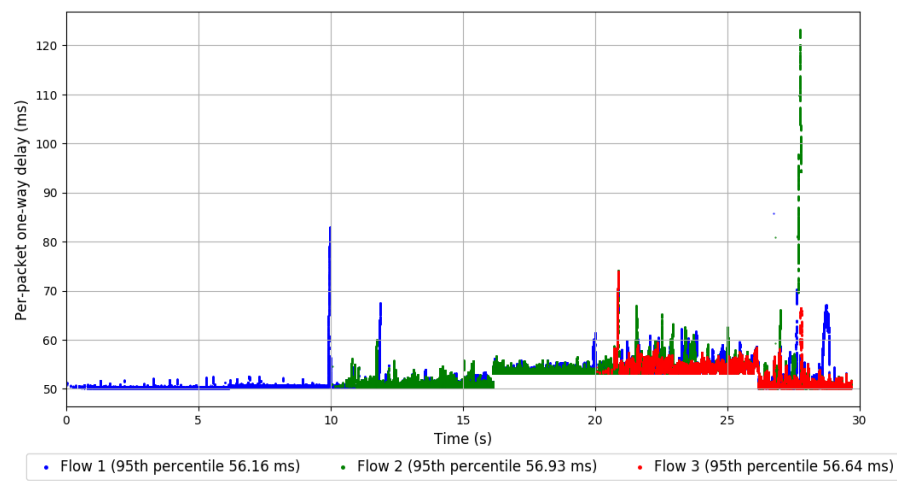
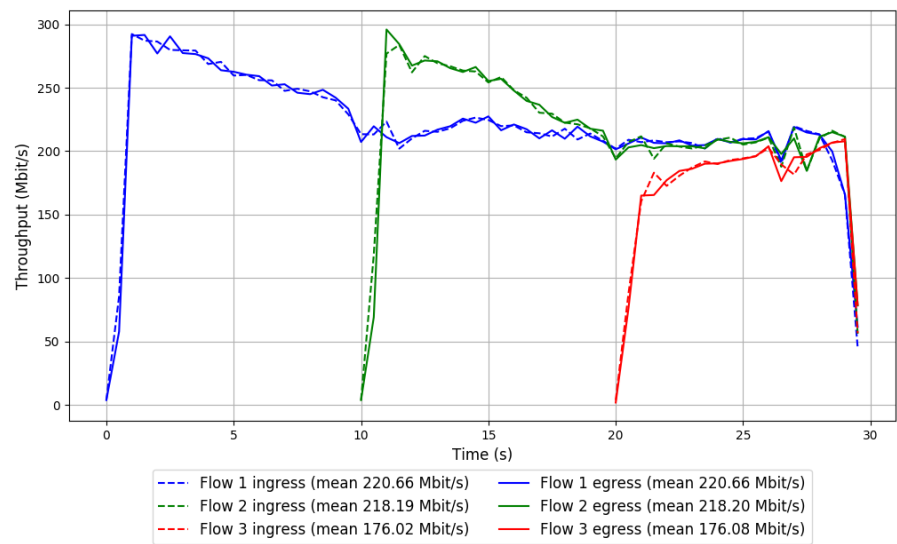
-- Flow 3:

Average throughput: 176.08 Mbit/s

95th percentile per-packet one-way delay: 56.641 ms

Loss rate: 0.00%

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



Run 9: Statistics of Indigo-1-32

Start at: 2018-01-31 21:20:55

End at: 2018-01-31 21:21:25

Below is generated by plot.py at 2018-02-01 00:31:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 399.81 Mbit/s

95th percentile per-packet one-way delay: 57.716 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 204.38 Mbit/s

95th percentile per-packet one-way delay: 57.167 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 201.35 Mbit/s

95th percentile per-packet one-way delay: 56.487 ms

Loss rate: 0.00%

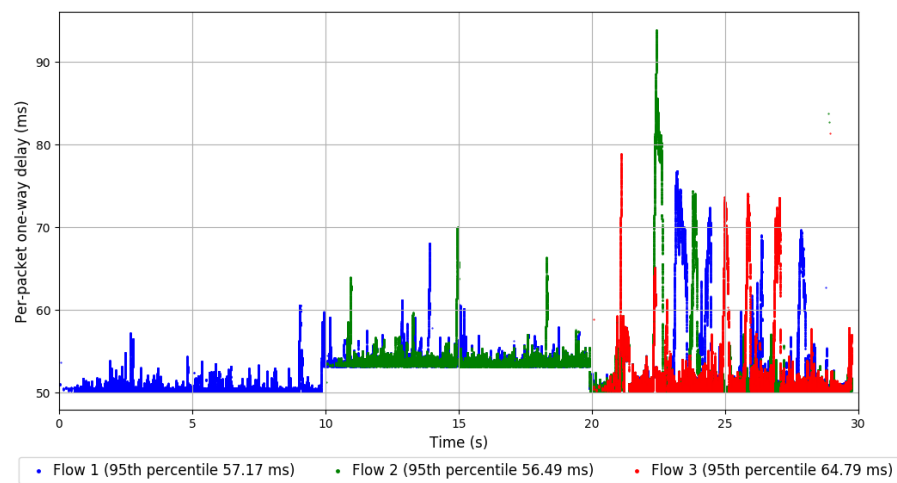
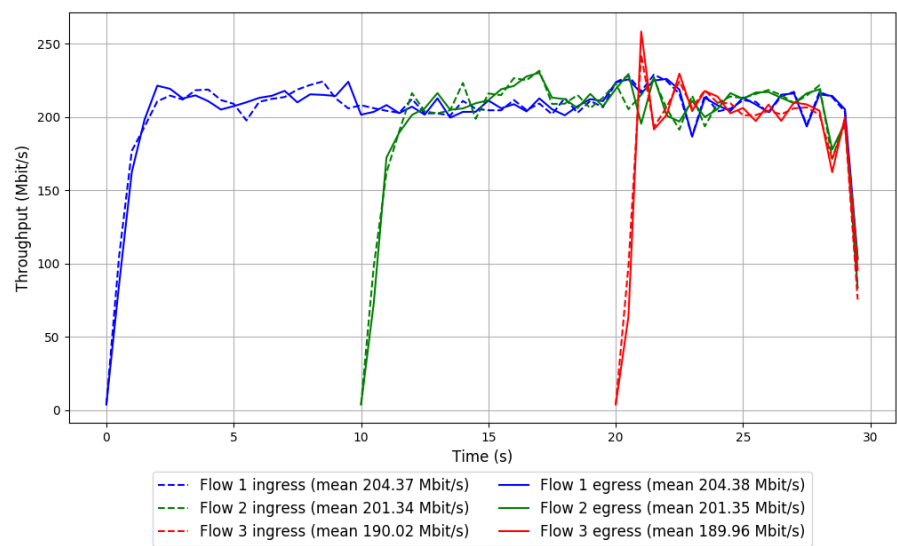
-- Flow 3:

Average throughput: 189.96 Mbit/s

95th percentile per-packet one-way delay: 64.790 ms

Loss rate: 0.02%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-01-31 21:37:17

End at: 2018-01-31 21:37:47

Below is generated by plot.py at 2018-02-01 00:31:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 428.89 Mbit/s

95th percentile per-packet one-way delay: 57.275 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 226.49 Mbit/s

95th percentile per-packet one-way delay: 56.663 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 220.11 Mbit/s

95th percentile per-packet one-way delay: 64.040 ms

Loss rate: 0.00%

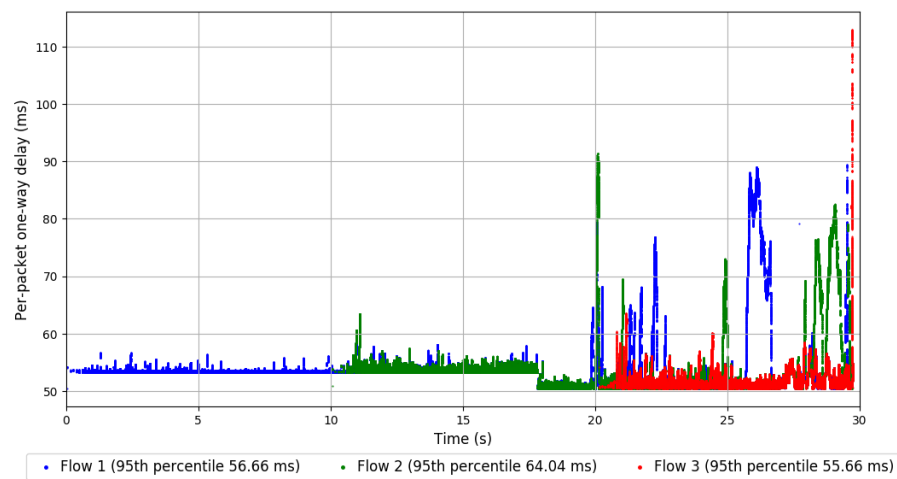
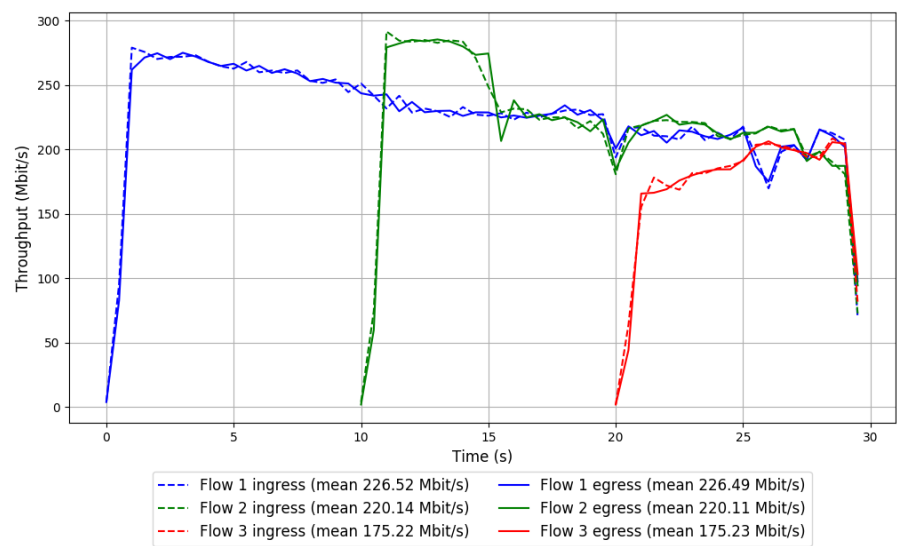
-- Flow 3:

Average throughput: 175.23 Mbit/s

95th percentile per-packet one-way delay: 55.662 ms

Loss rate: 0.00%

Run 10: Report of Indigo-1-32 — Data Link

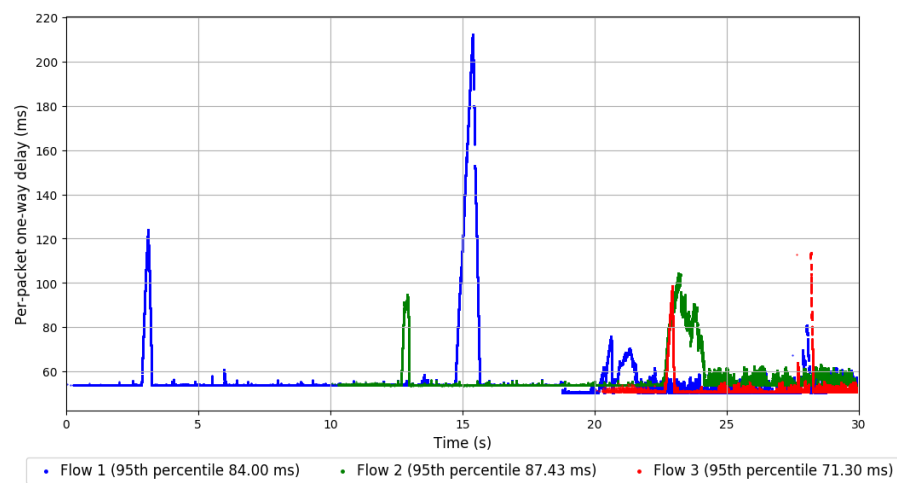
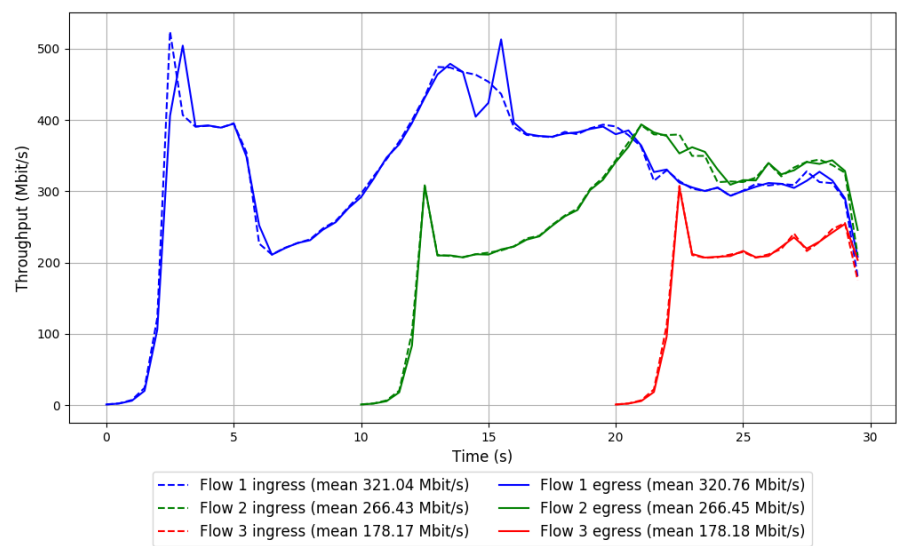


```
Run 1: Statistics of Vivace-latency

Start at: 2018-01-31 19:06:06
End at: 2018-01-31 19:06:36

# Below is generated by plot.py at 2018-02-01 00:34:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 556.55 Mbit/s
95th percentile per-packet one-way delay: 85.054 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 320.76 Mbit/s
95th percentile per-packet one-way delay: 83.996 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 266.45 Mbit/s
95th percentile per-packet one-way delay: 87.430 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 178.18 Mbit/s
95th percentile per-packet one-way delay: 71.303 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-01-31 19:22:49

End at: 2018-01-31 19:23:19

Below is generated by plot.py at 2018-02-01 00:36:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 593.29 Mbit/s

95th percentile per-packet one-way delay: 127.808 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 351.16 Mbit/s

95th percentile per-packet one-way delay: 136.312 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 274.15 Mbit/s

95th percentile per-packet one-way delay: 128.844 ms

Loss rate: 0.00%

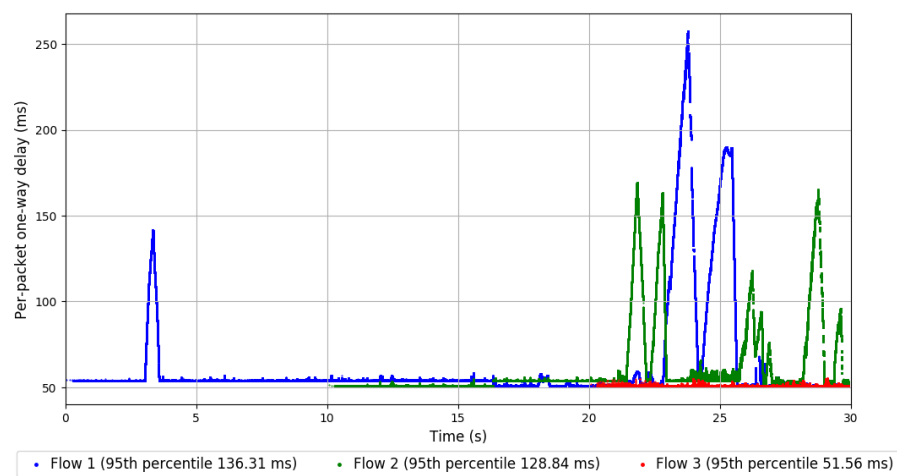
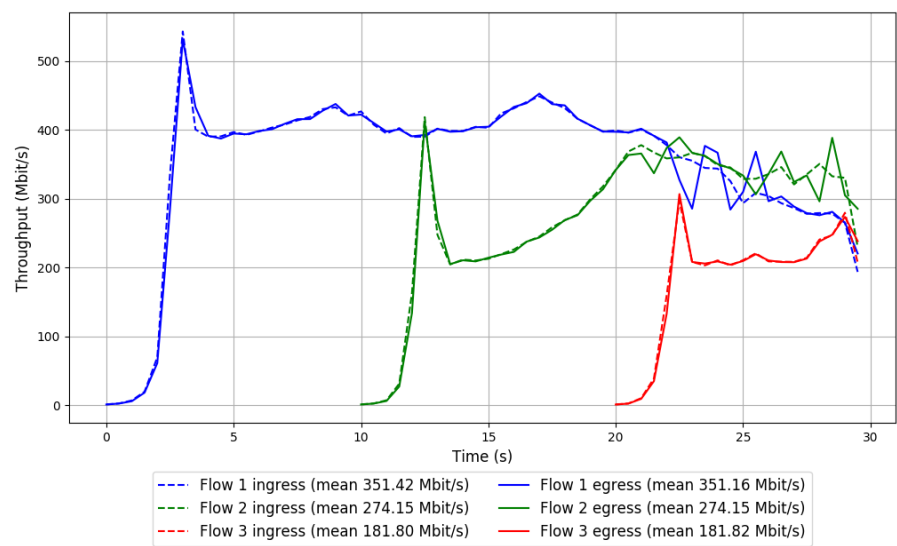
-- Flow 3:

Average throughput: 181.82 Mbit/s

95th percentile per-packet one-way delay: 51.560 ms

Loss rate: 0.00%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-01-31 19:39:30

End at: 2018-01-31 19:40:00

Below is generated by plot.py at 2018-02-01 00:38:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 576.91 Mbit/s

95th percentile per-packet one-way delay: 86.447 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 361.25 Mbit/s

95th percentile per-packet one-way delay: 57.915 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 237.88 Mbit/s

95th percentile per-packet one-way delay: 121.093 ms

Loss rate: 0.14%

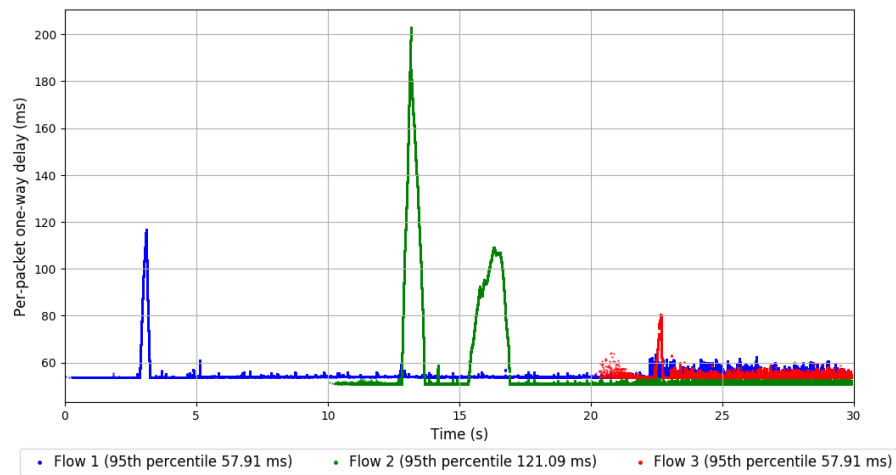
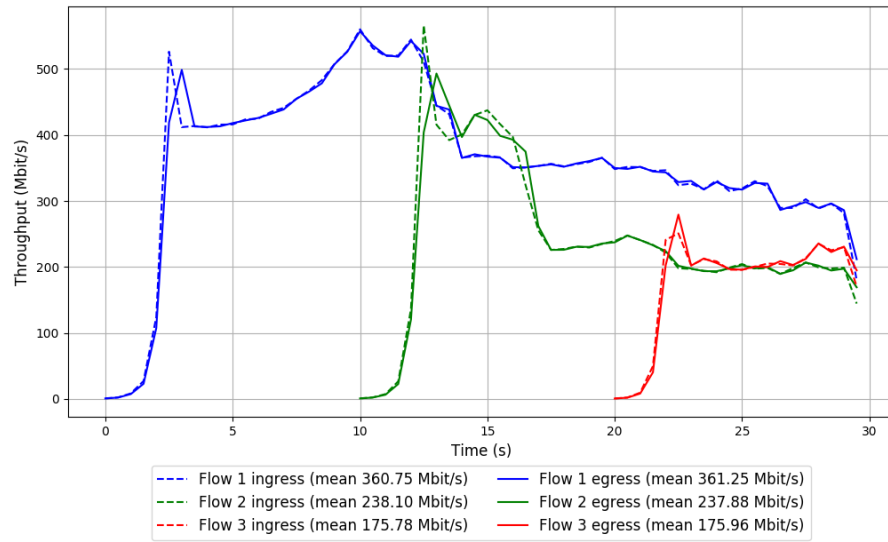
-- Flow 3:

Average throughput: 175.96 Mbit/s

95th percentile per-packet one-way delay: 57.914 ms

Loss rate: 0.00%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-01-31 19:56:11

End at: 2018-01-31 19:56:41

Below is generated by plot.py at 2018-02-01 00:38:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 496.02 Mbit/s

95th percentile per-packet one-way delay: 58.428 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 346.93 Mbit/s

95th percentile per-packet one-way delay: 59.323 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 181.75 Mbit/s

95th percentile per-packet one-way delay: 58.252 ms

Loss rate: 0.02%

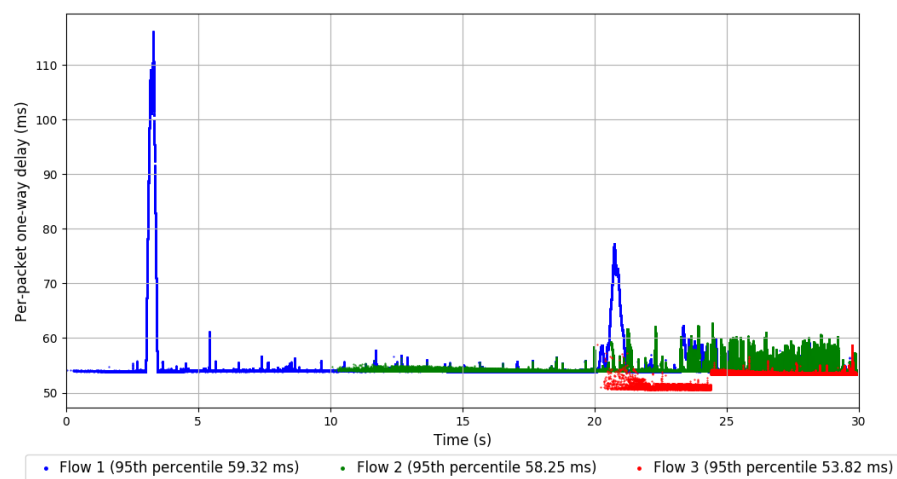
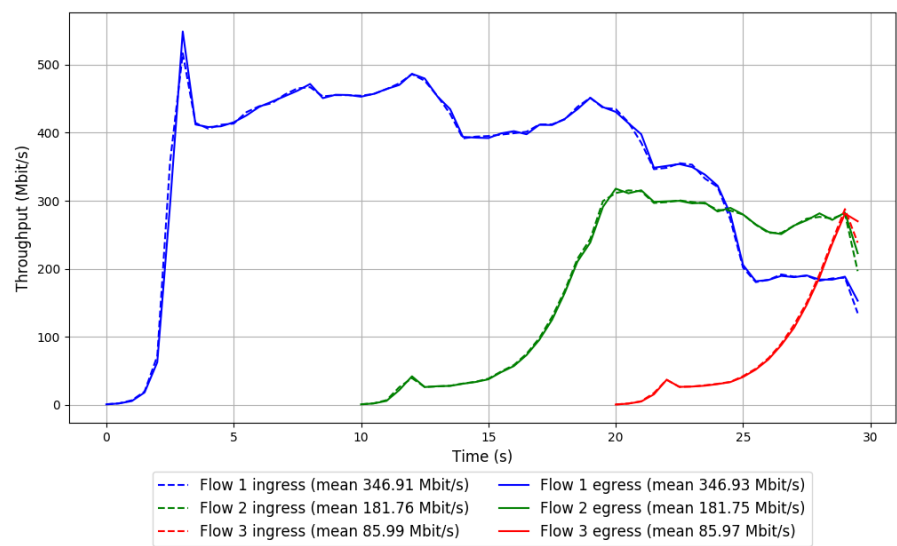
-- Flow 3:

Average throughput: 85.97 Mbit/s

95th percentile per-packet one-way delay: 53.816 ms

Loss rate: 0.10%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-01-31 20:13:24

End at: 2018-01-31 20:13:54

Below is generated by plot.py at 2018-02-01 00:38:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 499.45 Mbit/s

95th percentile per-packet one-way delay: 115.798 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 252.99 Mbit/s

95th percentile per-packet one-way delay: 173.644 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 344.21 Mbit/s

95th percentile per-packet one-way delay: 91.805 ms

Loss rate: 0.06%

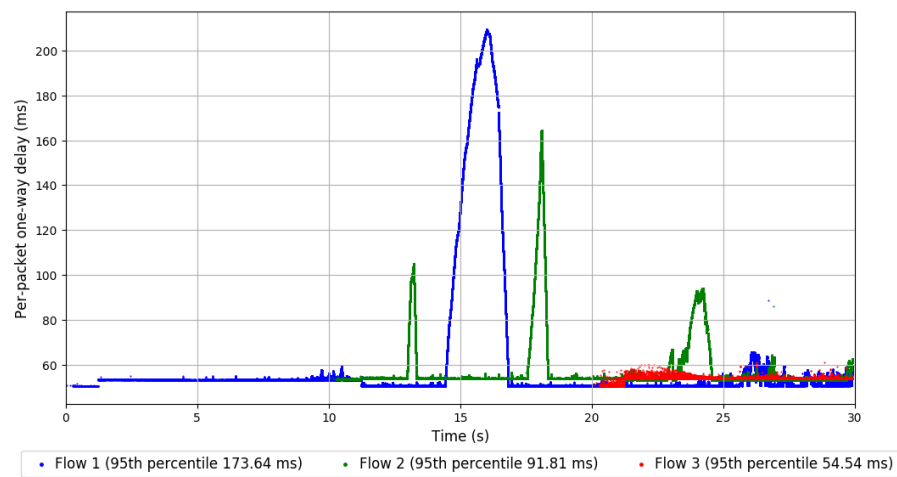
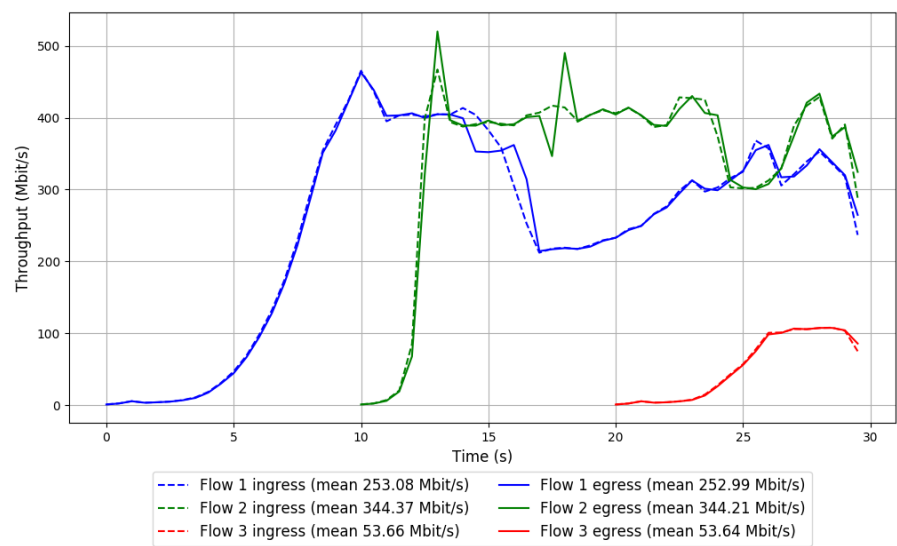
-- Flow 3:

Average throughput: 53.64 Mbit/s

95th percentile per-packet one-way delay: 54.538 ms

Loss rate: 0.03%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-01-31 20:29:34

End at: 2018-01-31 20:30:04

Below is generated by plot.py at 2018-02-01 00:40:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 568.88 Mbit/s

95th percentile per-packet one-way delay: 60.383 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 351.14 Mbit/s

95th percentile per-packet one-way delay: 60.222 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 238.37 Mbit/s

95th percentile per-packet one-way delay: 56.859 ms

Loss rate: 0.01%

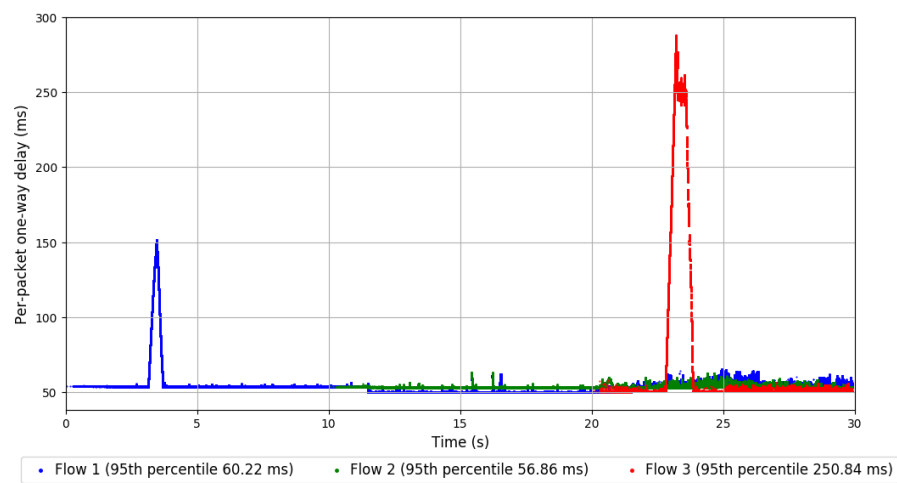
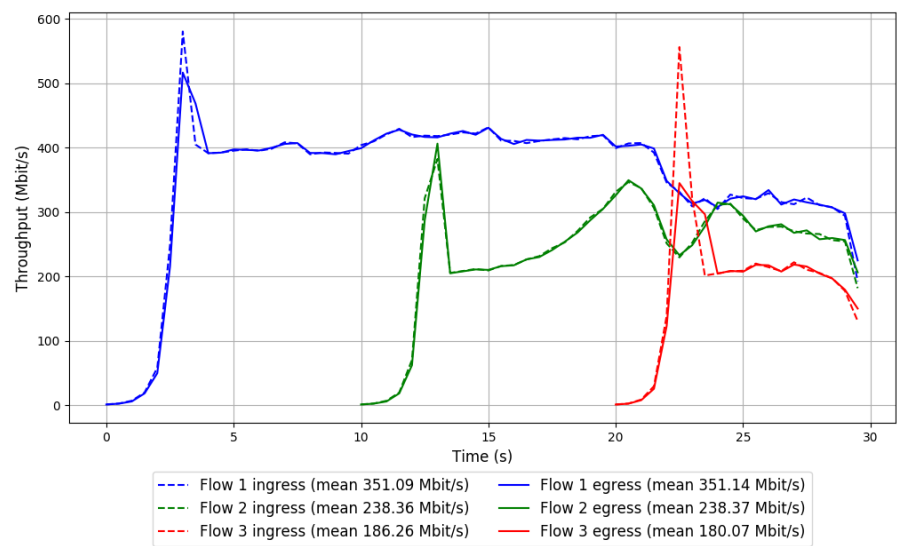
-- Flow 3:

Average throughput: 180.07 Mbit/s

95th percentile per-packet one-way delay: 250.837 ms

Loss rate: 3.32%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-01-31 20:46:28

End at: 2018-01-31 20:46:58

Below is generated by plot.py at 2018-02-01 00:40:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 538.02 Mbit/s

95th percentile per-packet one-way delay: 116.468 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 333.24 Mbit/s

95th percentile per-packet one-way delay: 59.927 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 252.78 Mbit/s

95th percentile per-packet one-way delay: 168.152 ms

Loss rate: 0.00%

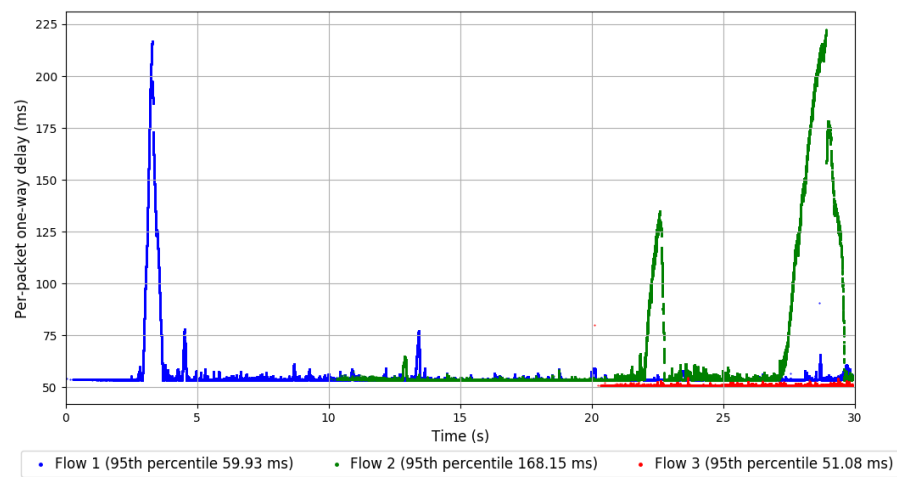
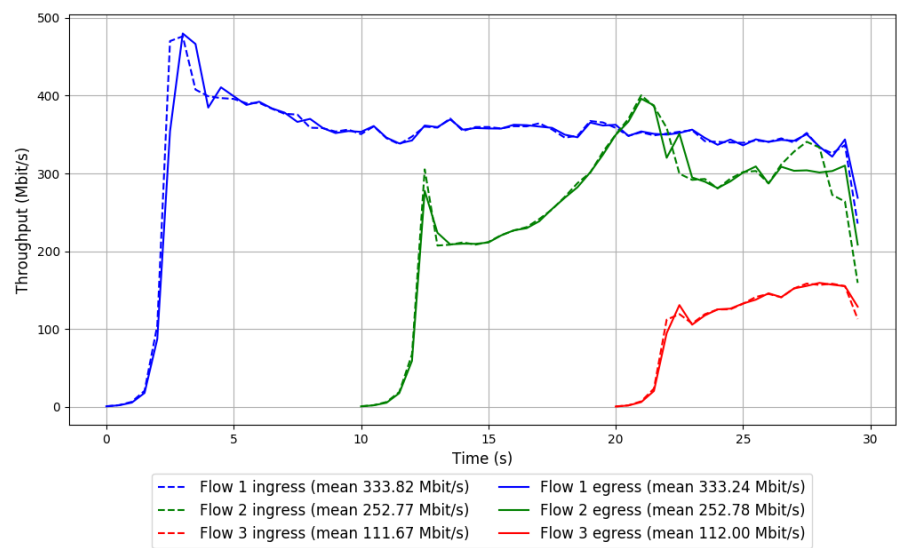
-- Flow 3:

Average throughput: 112.00 Mbit/s

95th percentile per-packet one-way delay: 51.077 ms

Loss rate: 0.00%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-01-31 21:02:40

End at: 2018-01-31 21:03:10

Below is generated by plot.py at 2018-02-01 00:40:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 546.49 Mbit/s

95th percentile per-packet one-way delay: 66.860 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 317.56 Mbit/s

95th percentile per-packet one-way delay: 70.500 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 296.90 Mbit/s

95th percentile per-packet one-way delay: 65.894 ms

Loss rate: 0.00%

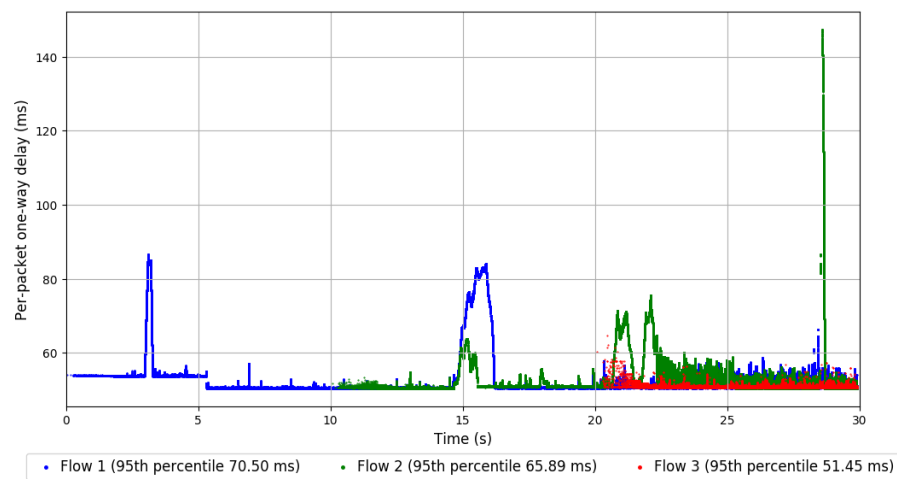
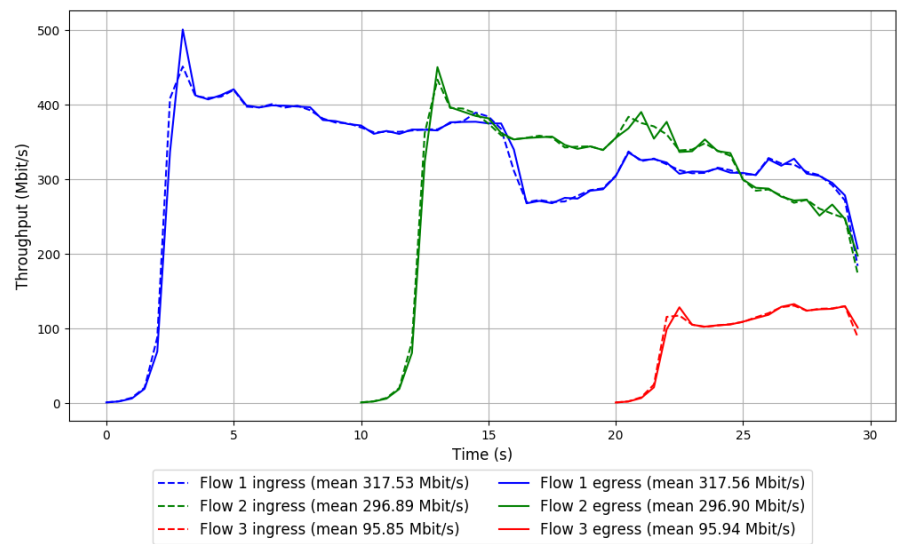
-- Flow 3:

Average throughput: 95.94 Mbit/s

95th percentile per-packet one-way delay: 51.455 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-01-31 21:18:47

End at: 2018-01-31 21:19:17

Below is generated by plot.py at 2018-02-01 00:43:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 530.27 Mbit/s

95th percentile per-packet one-way delay: 256.913 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 330.66 Mbit/s

95th percentile per-packet one-way delay: 263.946 ms

Loss rate: 1.28%

-- Flow 2:

Average throughput: 271.61 Mbit/s

95th percentile per-packet one-way delay: 245.823 ms

Loss rate: 1.13%

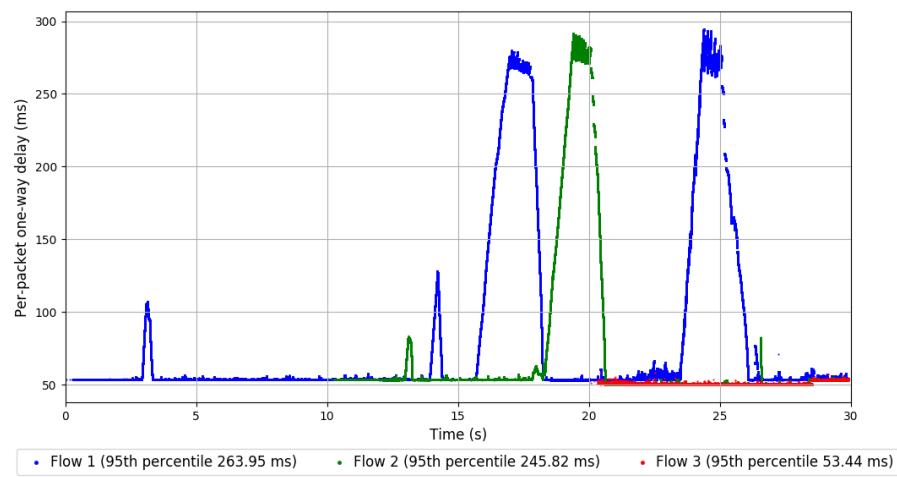
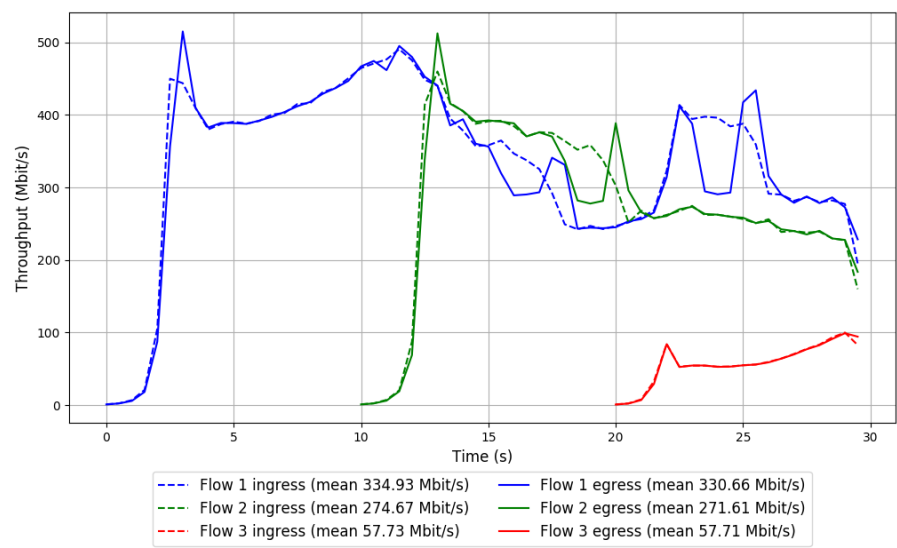
-- Flow 3:

Average throughput: 57.71 Mbit/s

95th percentile per-packet one-way delay: 53.437 ms

Loss rate: 0.00%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-01-31 21:35:13

End at: 2018-01-31 21:35:43

Below is generated by plot.py at 2018-02-01 00:44:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 483.94 Mbit/s

95th percentile per-packet one-way delay: 60.049 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 282.36 Mbit/s

95th percentile per-packet one-way delay: 54.545 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 288.74 Mbit/s

95th percentile per-packet one-way delay: 80.125 ms

Loss rate: 0.49%

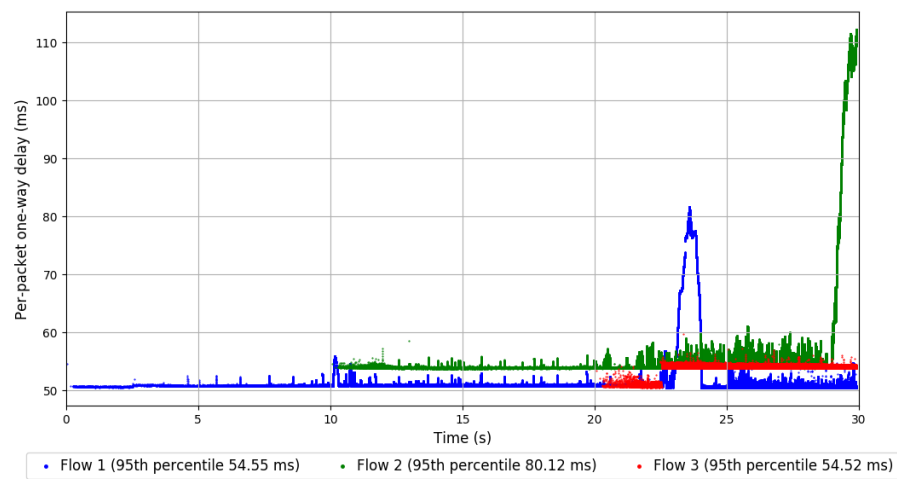
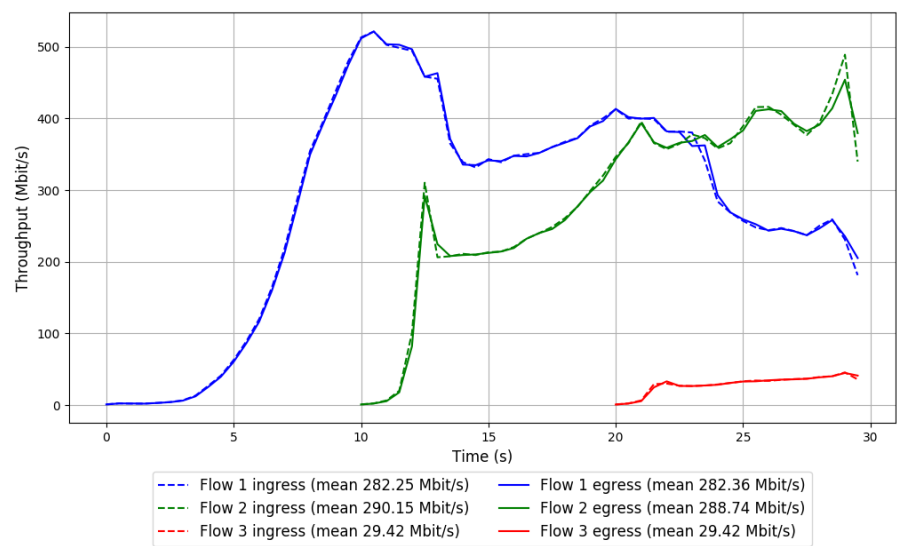
-- Flow 3:

Average throughput: 29.42 Mbit/s

95th percentile per-packet one-way delay: 54.516 ms

Loss rate: 0.00%

Run 10: Report of Vivace-latency — Data Link

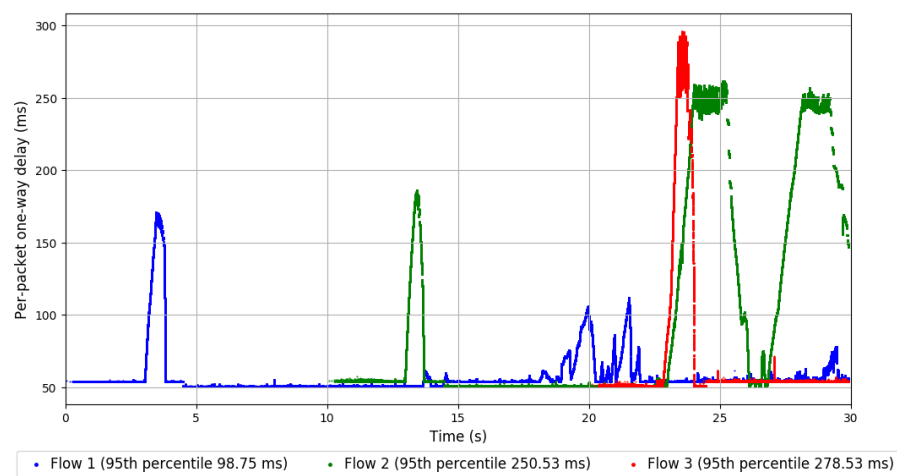
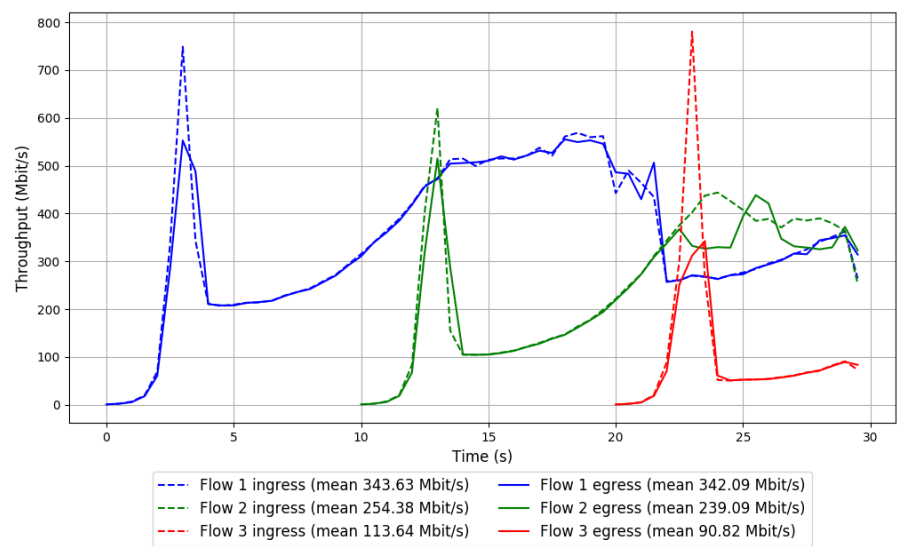


```
Run 1: Statistics of Vivace-loss

Start at: 2018-01-31 19:04:51
End at: 2018-01-31 19:05:21

# Below is generated by plot.py at 2018-02-01 00:47:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 530.88 Mbit/s
95th percentile per-packet one-way delay: 243.309 ms
Loss rate: 3.48%
-- Flow 1:
Average throughput: 342.09 Mbit/s
95th percentile per-packet one-way delay: 98.750 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 239.09 Mbit/s
95th percentile per-packet one-way delay: 250.526 ms
Loss rate: 6.00%
-- Flow 3:
Average throughput: 90.82 Mbit/s
95th percentile per-packet one-way delay: 278.531 ms
Loss rate: 20.06%
```

Run 1: Report of Vivace-loss — Data Link

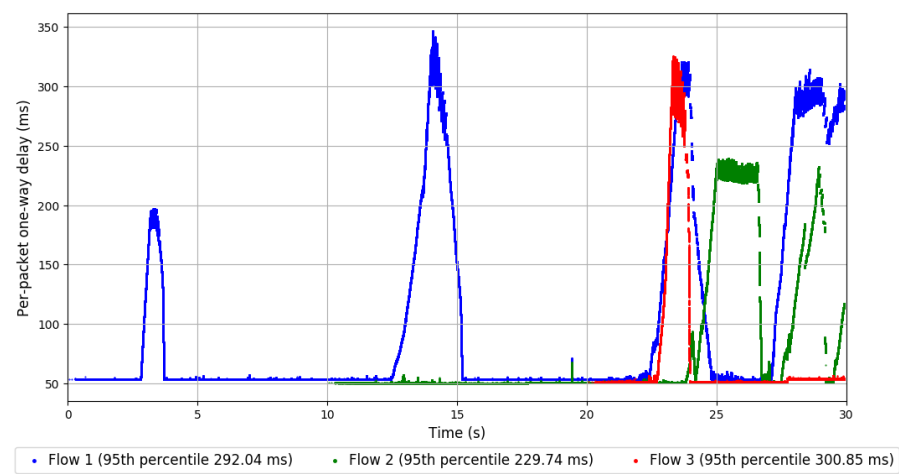
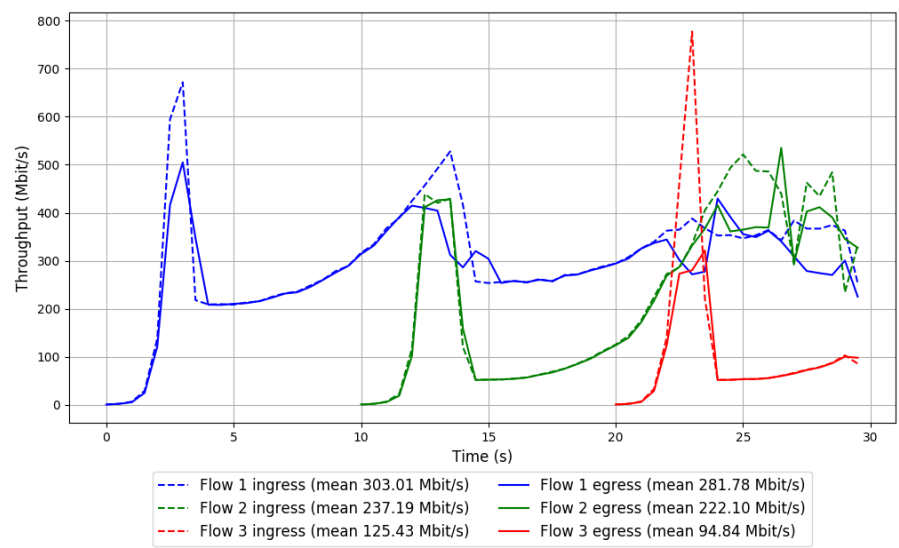


```
Run 2: Statistics of Vivace-loss

Start at: 2018-01-31 19:21:37
End at: 2018-01-31 19:22:07

# Below is generated by plot.py at 2018-02-01 00:47:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 460.68 Mbit/s
95th percentile per-packet one-way delay: 284.935 ms
Loss rate: 8.24%
-- Flow 1:
Average throughput: 281.78 Mbit/s
95th percentile per-packet one-way delay: 292.035 ms
Loss rate: 7.00%
-- Flow 2:
Average throughput: 222.10 Mbit/s
95th percentile per-packet one-way delay: 229.742 ms
Loss rate: 6.35%
-- Flow 3:
Average throughput: 94.84 Mbit/s
95th percentile per-packet one-way delay: 300.853 ms
Loss rate: 24.46%
```

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-01-31 19:38:12

End at: 2018-01-31 19:38:42

Below is generated by plot.py at 2018-02-01 00:47:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 563.62 Mbit/s

95th percentile per-packet one-way delay: 264.939 ms

Loss rate: 5.76%

-- Flow 1:

Average throughput: 296.20 Mbit/s

95th percentile per-packet one-way delay: 273.220 ms

Loss rate: 5.39%

-- Flow 2:

Average throughput: 335.47 Mbit/s

95th percentile per-packet one-way delay: 224.276 ms

Loss rate: 5.06%

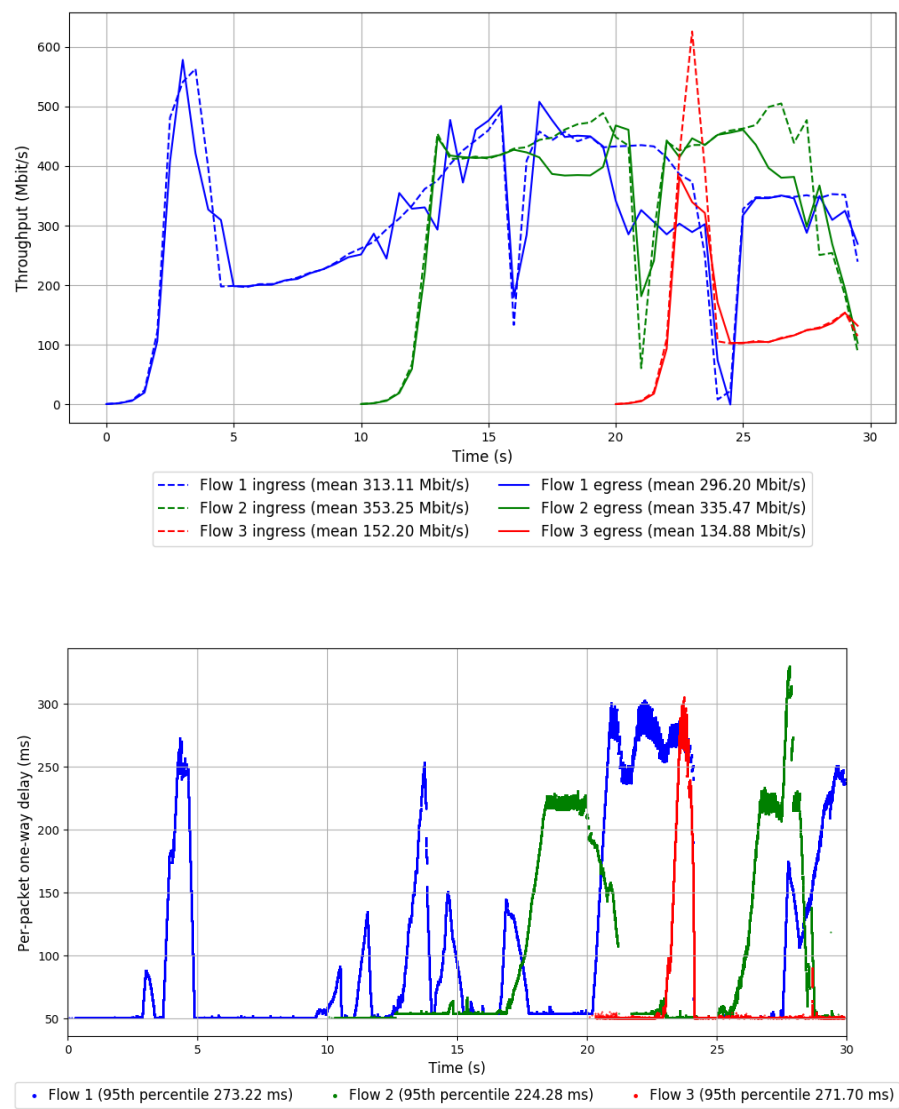
-- Flow 3:

Average throughput: 134.88 Mbit/s

95th percentile per-packet one-way delay: 271.702 ms

Loss rate: 11.39%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-01-31 19:54:57

End at: 2018-01-31 19:55:27

Below is generated by plot.py at 2018-02-01 00:48:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 495.74 Mbit/s

95th percentile per-packet one-way delay: 247.049 ms

Loss rate: 5.61%

-- Flow 1:

Average throughput: 300.39 Mbit/s

95th percentile per-packet one-way delay: 245.858 ms

Loss rate: 3.40%

-- Flow 2:

Average throughput: 228.32 Mbit/s

95th percentile per-packet one-way delay: 249.706 ms

Loss rate: 8.69%

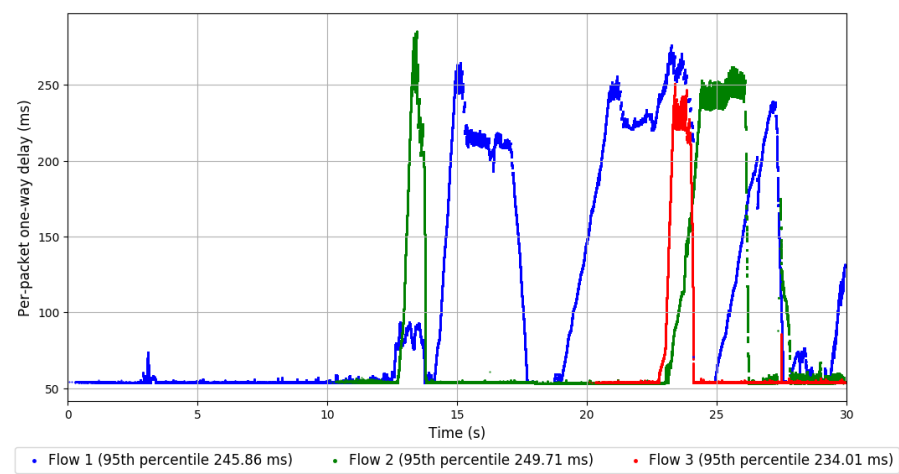
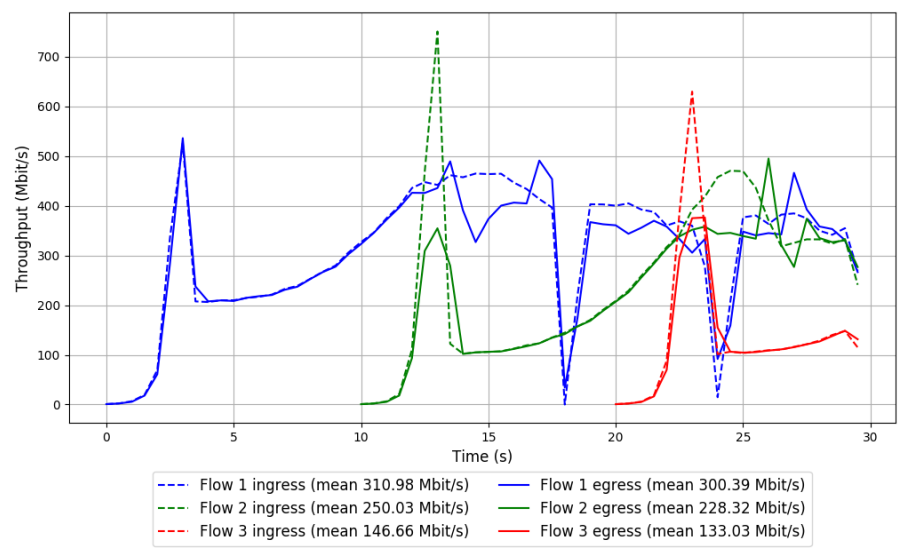
-- Flow 3:

Average throughput: 133.03 Mbit/s

95th percentile per-packet one-way delay: 234.013 ms

Loss rate: 9.30%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-01-31 20:12:03

End at: 2018-01-31 20:12:33

Below is generated by plot.py at 2018-02-01 00:50:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 608.71 Mbit/s

95th percentile per-packet one-way delay: 234.529 ms

Loss rate: 3.15%

-- Flow 1:

Average throughput: 311.72 Mbit/s

95th percentile per-packet one-way delay: 229.362 ms

Loss rate: 2.21%

-- Flow 2:

Average throughput: 320.21 Mbit/s

95th percentile per-packet one-way delay: 242.951 ms

Loss rate: 3.18%

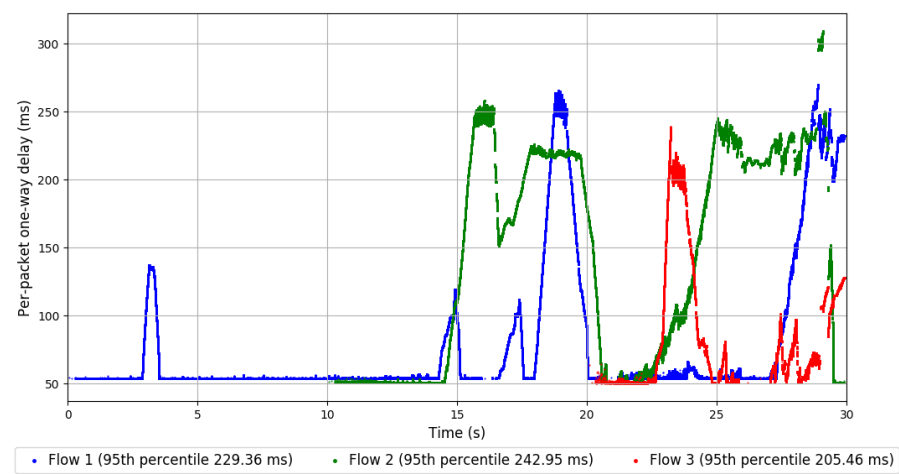
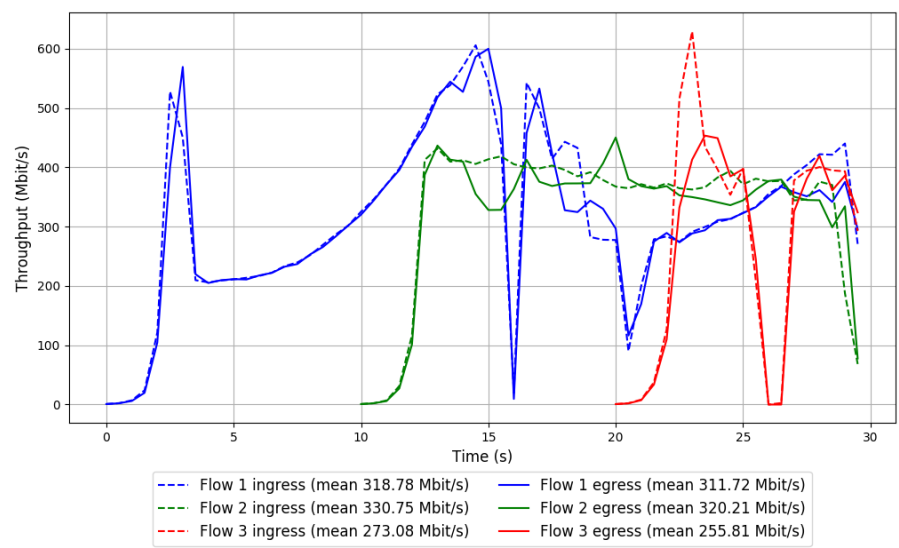
-- Flow 3:

Average throughput: 255.81 Mbit/s

95th percentile per-packet one-way delay: 205.460 ms

Loss rate: 6.40%

Run 5: Report of Vivace-loss — Data Link

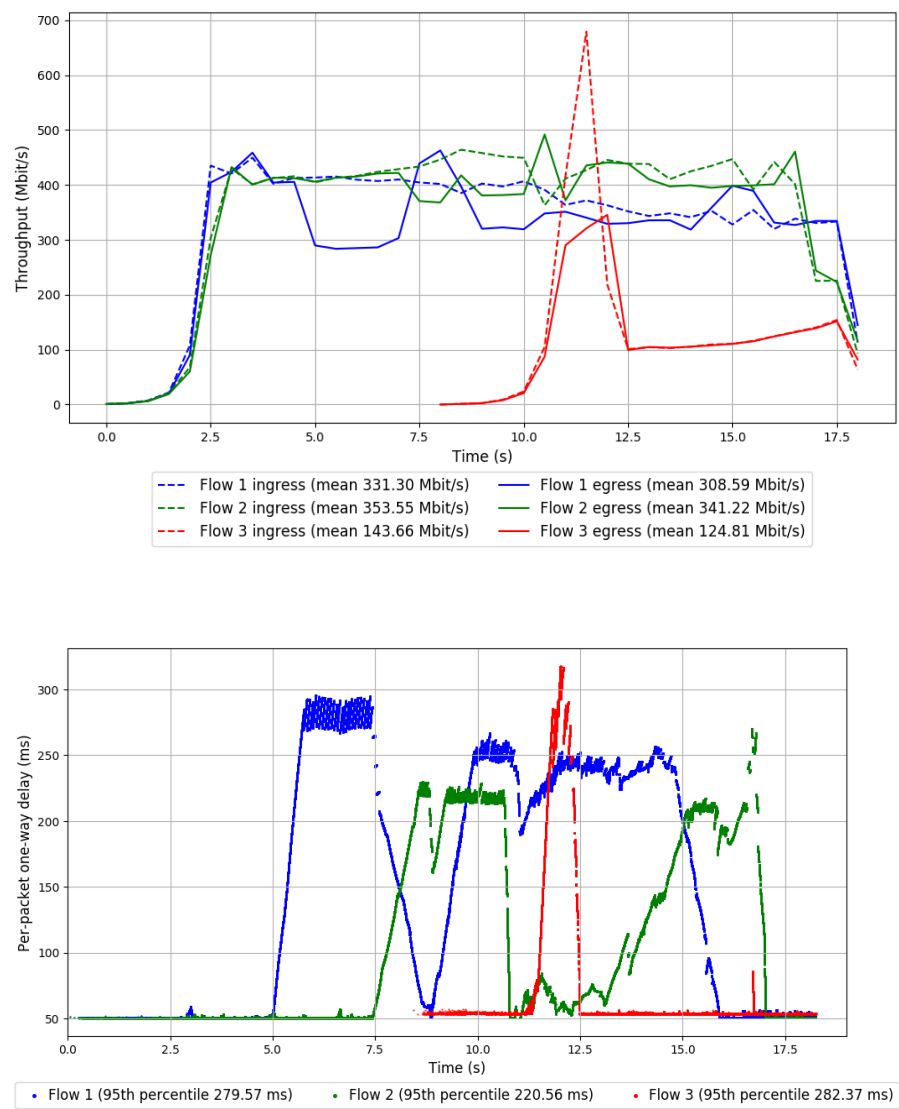


Run 6: Statistics of Vivace-loss

Start at: 2018-01-31 20:28:24

End at: 2018-01-31 20:28:54

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-01-31 20:45:05

End at: 2018-01-31 20:45:35

Below is generated by plot.py at 2018-02-01 00:55:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 639.88 Mbit/s

95th percentile per-packet one-way delay: 235.454 ms

Loss rate: 4.50%

-- Flow 1:

Average throughput: 385.82 Mbit/s

95th percentile per-packet one-way delay: 219.773 ms

Loss rate: 3.55%

-- Flow 2:

Average throughput: 319.36 Mbit/s

95th percentile per-packet one-way delay: 239.195 ms

Loss rate: 3.23%

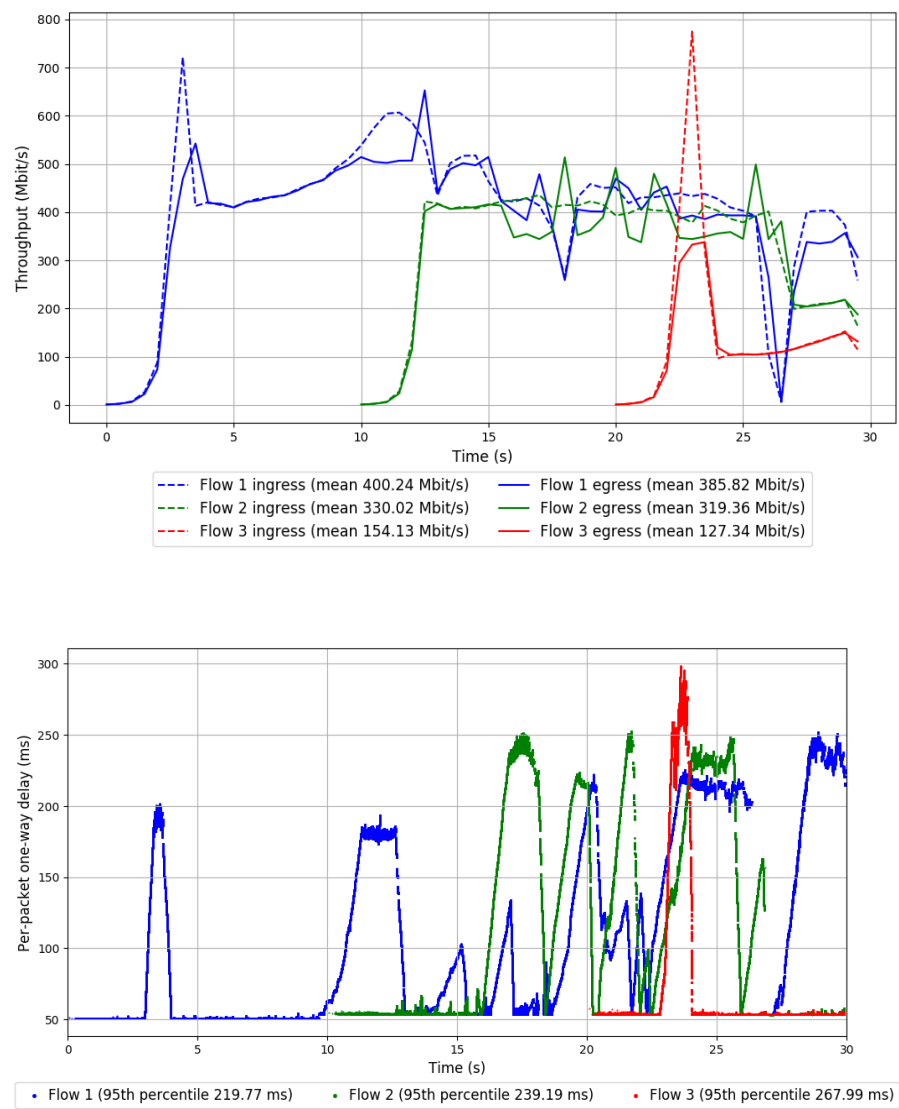
-- Flow 3:

Average throughput: 127.34 Mbit/s

95th percentile per-packet one-way delay: 267.988 ms

Loss rate: 17.41%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-01-31 21:01:38

End at: 2018-01-31 21:02:08

Below is generated by plot.py at 2018-02-01 00:55:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 402.49 Mbit/s

95th percentile per-packet one-way delay: 170.044 ms

Loss rate: 1.65%

-- Flow 1:

Average throughput: 47.26 Mbit/s

95th percentile per-packet one-way delay: 4749.115 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 352.57 Mbit/s

95th percentile per-packet one-way delay: 166.613 ms

Loss rate: 1.99%

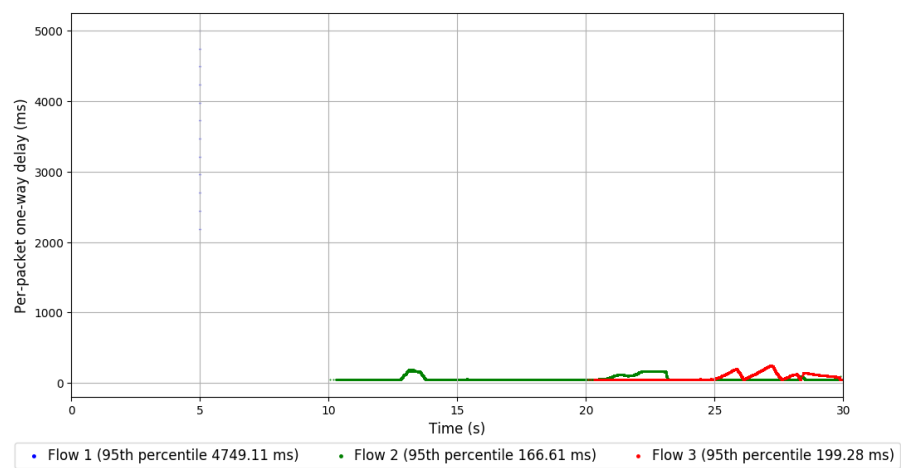
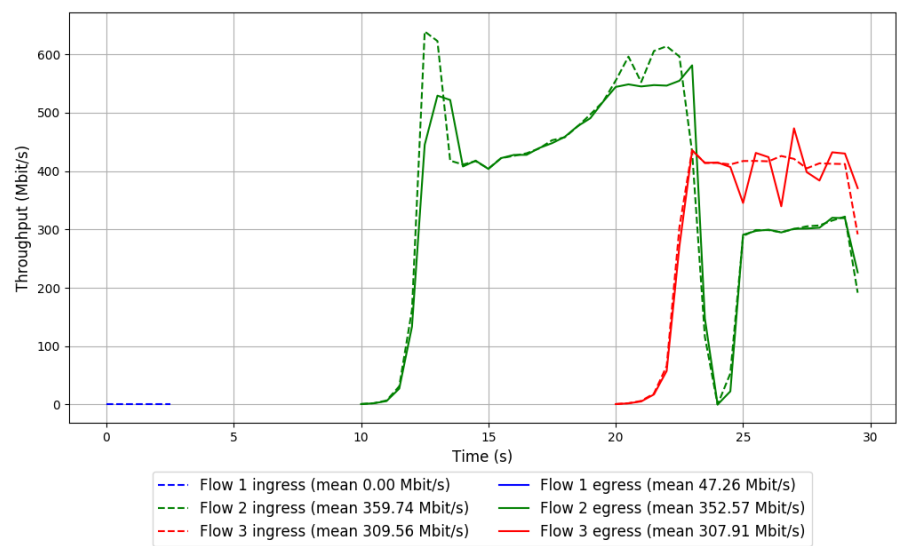
-- Flow 3:

Average throughput: 307.91 Mbit/s

95th percentile per-packet one-way delay: 199.281 ms

Loss rate: 0.85%

Run 8: Report of Vivace-loss — Data Link

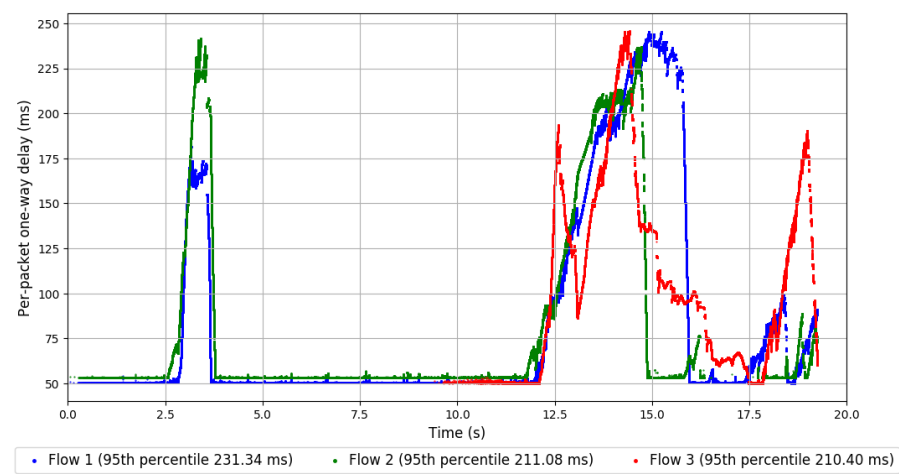
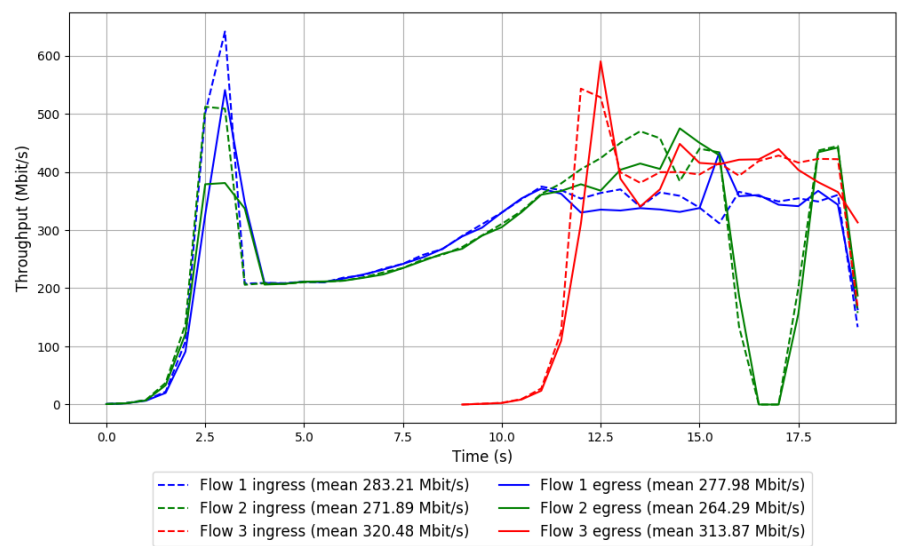


Run 9: Statistics of Vivace-loss

Start at: 2018-01-31 21:17:36

End at: 2018-01-31 21:18:06

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-01-31 21:33:51

End at: 2018-01-31 21:34:21

Below is generated by plot.py at 2018-02-01 00:57:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 623.61 Mbit/s

95th percentile per-packet one-way delay: 243.651 ms

Loss rate: 5.68%

-- Flow 1:

Average throughput: 343.18 Mbit/s

95th percentile per-packet one-way delay: 243.520 ms

Loss rate: 3.48%

-- Flow 2:

Average throughput: 302.35 Mbit/s

95th percentile per-packet one-way delay: 222.763 ms

Loss rate: 5.14%

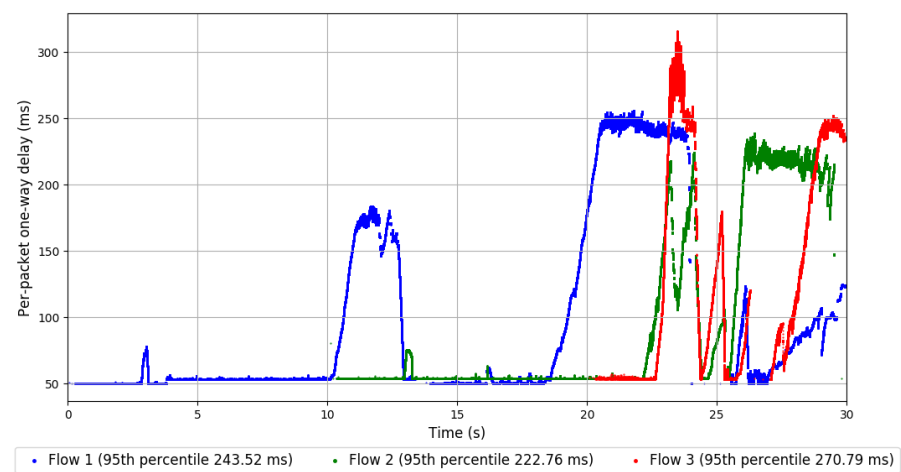
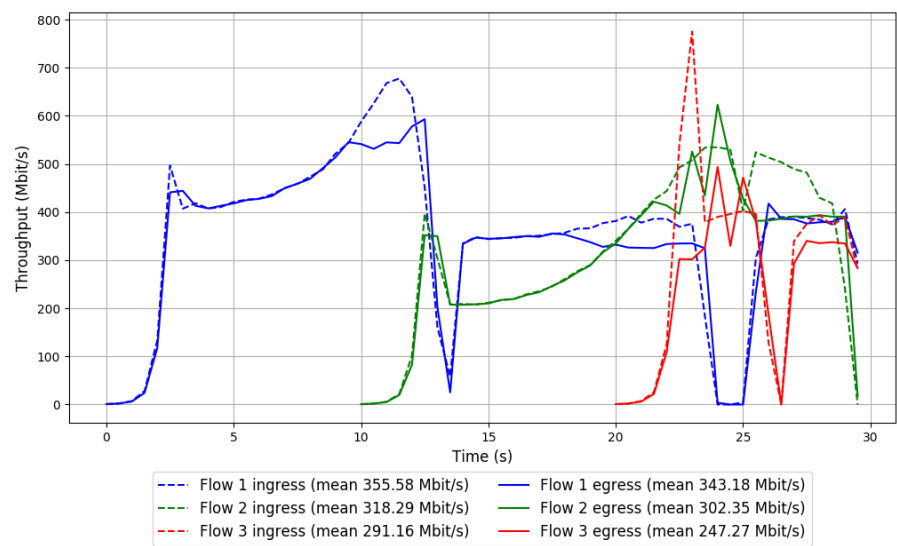
-- Flow 3:

Average throughput: 247.27 Mbit/s

95th percentile per-packet one-way delay: 270.794 ms

Loss rate: 15.07%

Run 10: Report of Vivace-loss — Data Link

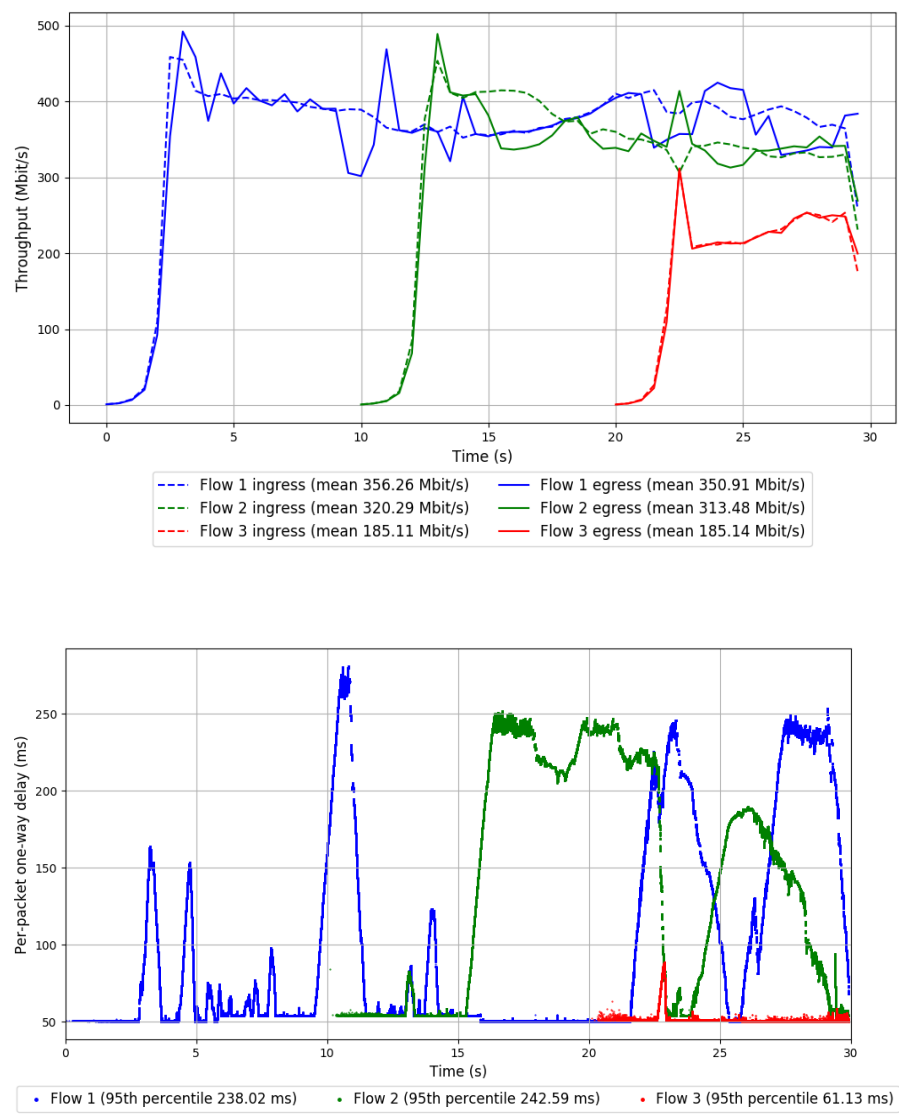


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-01-31 19:02:39
End at: 2018-01-31 19:03:09

# Below is generated by plot.py at 2018-02-01 00:57:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 619.57 Mbit/s
95th percentile per-packet one-way delay: 240.393 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 350.91 Mbit/s
95th percentile per-packet one-way delay: 238.019 ms
Loss rate: 1.48%
-- Flow 2:
Average throughput: 313.48 Mbit/s
95th percentile per-packet one-way delay: 242.590 ms
Loss rate: 2.27%
-- Flow 3:
Average throughput: 185.14 Mbit/s
95th percentile per-packet one-way delay: 61.130 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-LTE — Data Link

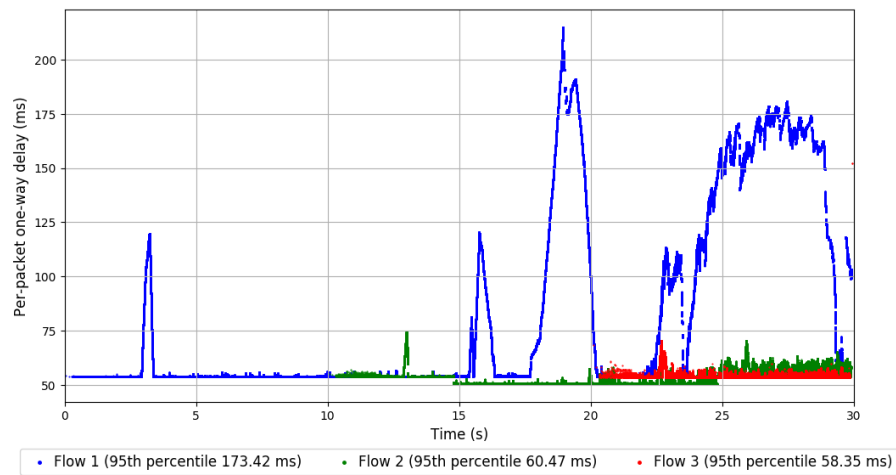
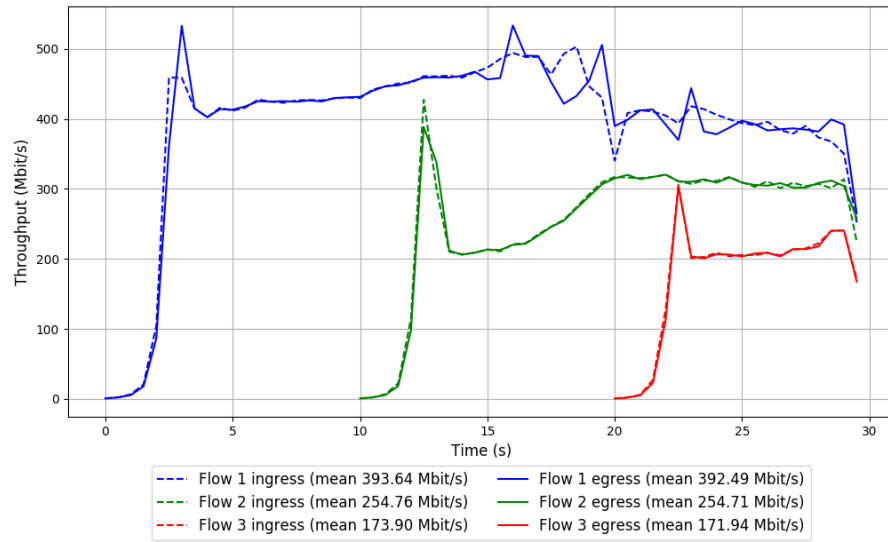


```
Run 2: Statistics of Vivace-LTE

Start at: 2018-01-31 19:19:30
End at: 2018-01-31 19:20:00

# Below is generated by plot.py at 2018-02-01 00:58:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 617.70 Mbit/s
95th percentile per-packet one-way delay: 168.761 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 392.49 Mbit/s
95th percentile per-packet one-way delay: 173.423 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 254.71 Mbit/s
95th percentile per-packet one-way delay: 60.470 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 171.94 Mbit/s
95th percentile per-packet one-way delay: 58.351 ms
Loss rate: 0.94%
```

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-01-31 19:36:06

End at: 2018-01-31 19:36:36

Below is generated by plot.py at 2018-02-01 00:58:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 571.26 Mbit/s

95th percentile per-packet one-way delay: 106.405 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 300.11 Mbit/s

95th percentile per-packet one-way delay: 106.062 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 322.46 Mbit/s

95th percentile per-packet one-way delay: 110.622 ms

Loss rate: 0.00%

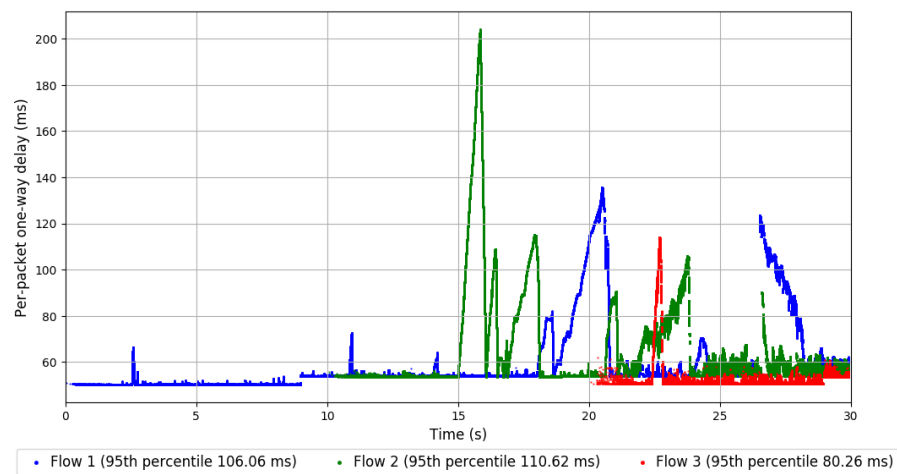
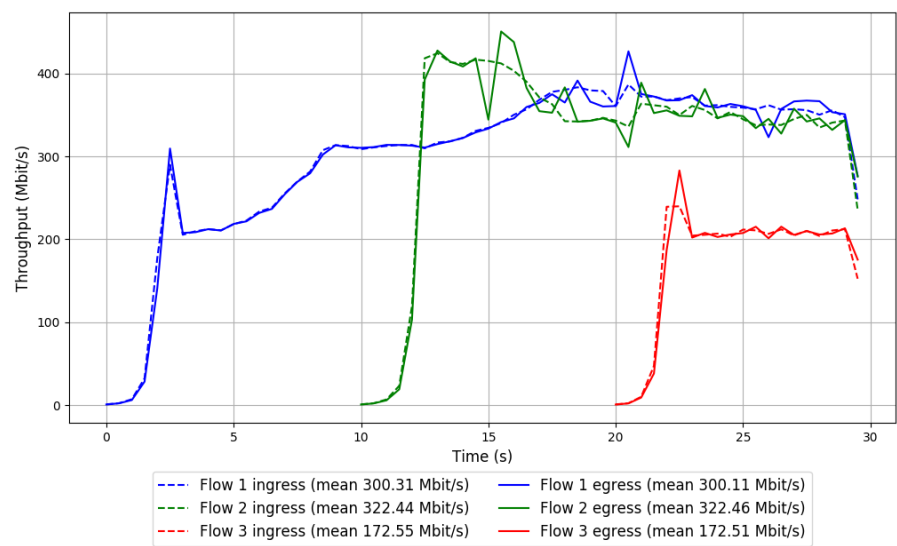
-- Flow 3:

Average throughput: 172.51 Mbit/s

95th percentile per-packet one-way delay: 80.261 ms

Loss rate: 0.00%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-01-31 19:52:52

End at: 2018-01-31 19:53:22

Below is generated by plot.py at 2018-02-01 00:59:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 594.84 Mbit/s

95th percentile per-packet one-way delay: 225.189 ms

Loss rate: 1.65%

-- Flow 1:

Average throughput: 350.07 Mbit/s

95th percentile per-packet one-way delay: 219.961 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 280.57 Mbit/s

95th percentile per-packet one-way delay: 248.812 ms

Loss rate: 4.82%

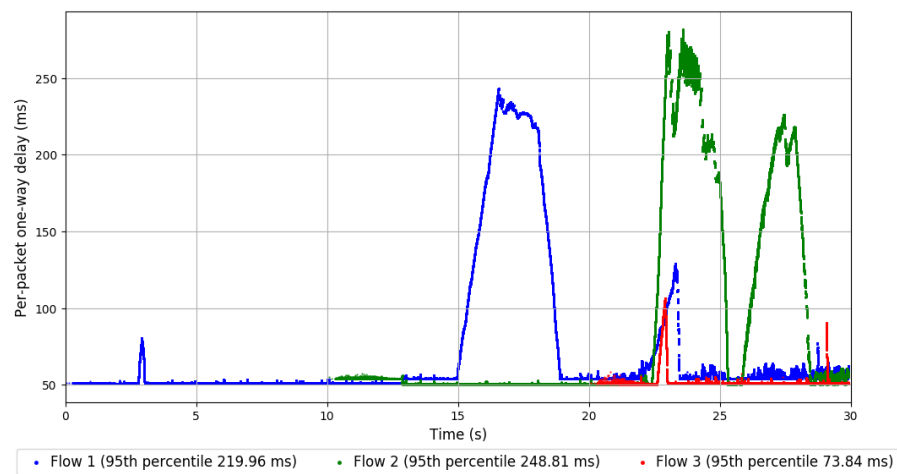
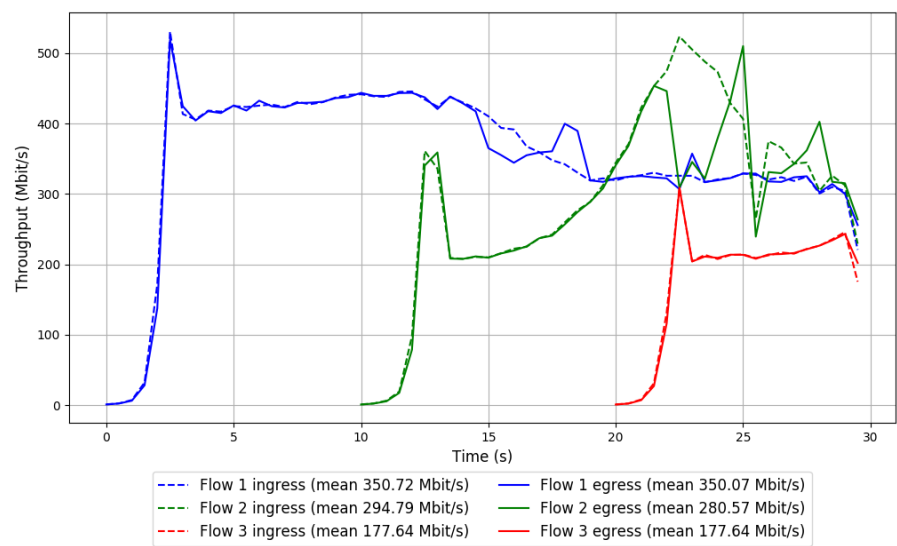
-- Flow 3:

Average throughput: 177.64 Mbit/s

95th percentile per-packet one-way delay: 73.836 ms

Loss rate: 0.00%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-01-31 20:09:50

End at: 2018-01-31 20:10:20

Below is generated by plot.py at 2018-02-01 01:00:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 645.60 Mbit/s

95th percentile per-packet one-way delay: 223.465 ms

Loss rate: 1.66%

-- Flow 1:

Average throughput: 358.57 Mbit/s

95th percentile per-packet one-way delay: 222.019 ms

Loss rate: 2.21%

-- Flow 2:

Average throughput: 287.48 Mbit/s

95th percentile per-packet one-way delay: 148.062 ms

Loss rate: 0.28%

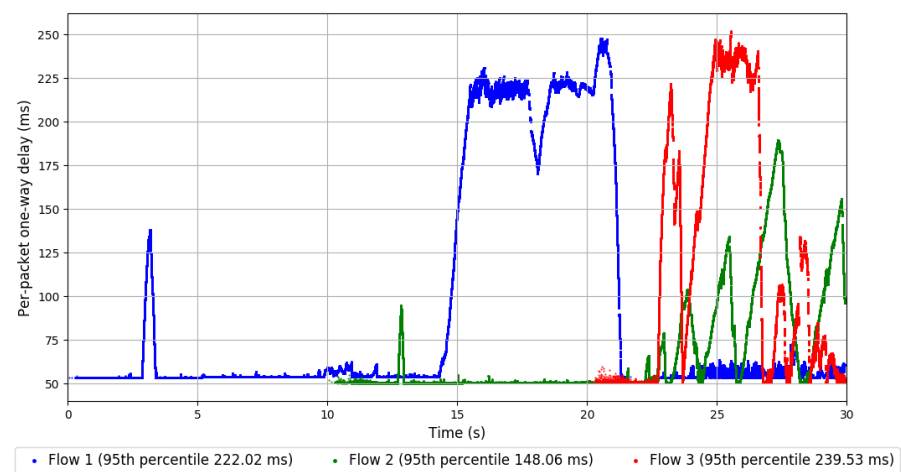
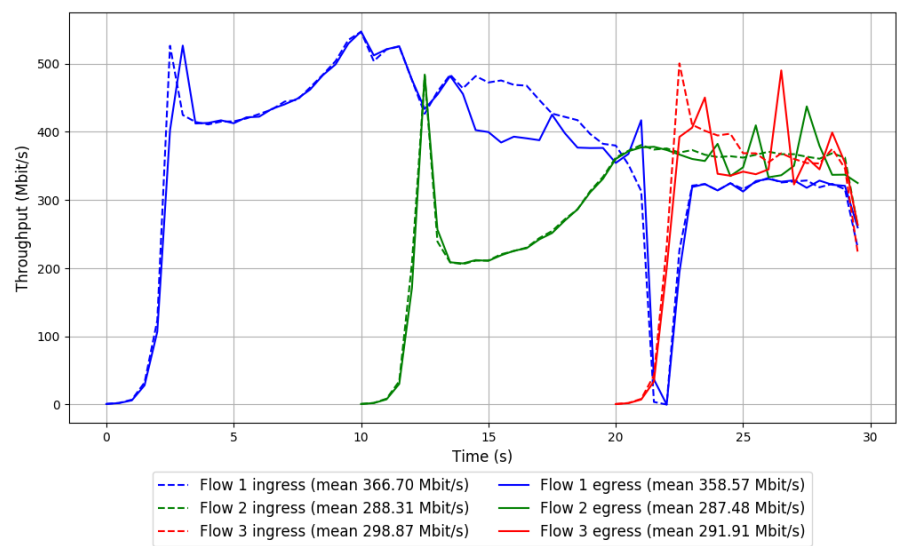
-- Flow 3:

Average throughput: 291.91 Mbit/s

95th percentile per-packet one-way delay: 239.535 ms

Loss rate: 2.32%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-01-31 20:26:15

End at: 2018-01-31 20:26:45

Below is generated by plot.py at 2018-02-01 01:01:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 603.05 Mbit/s

95th percentile per-packet one-way delay: 214.802 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 356.96 Mbit/s

95th percentile per-packet one-way delay: 217.428 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 277.67 Mbit/s

95th percentile per-packet one-way delay: 63.561 ms

Loss rate: 0.02%

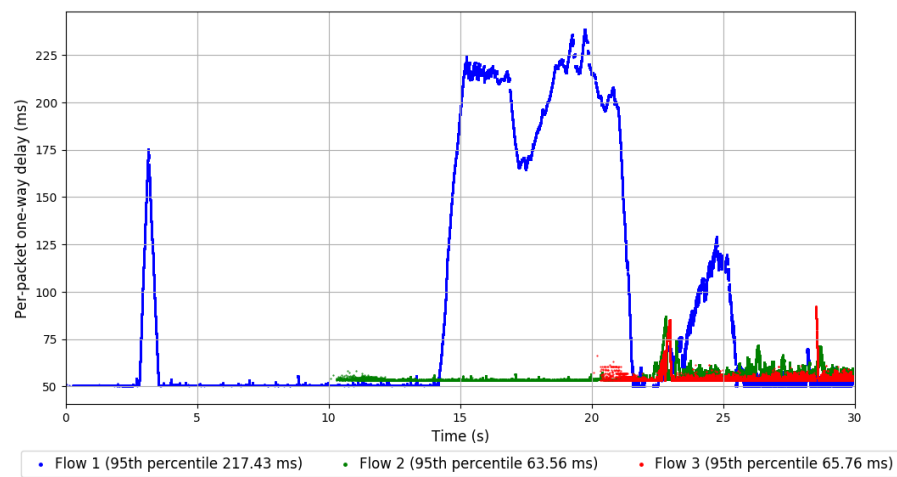
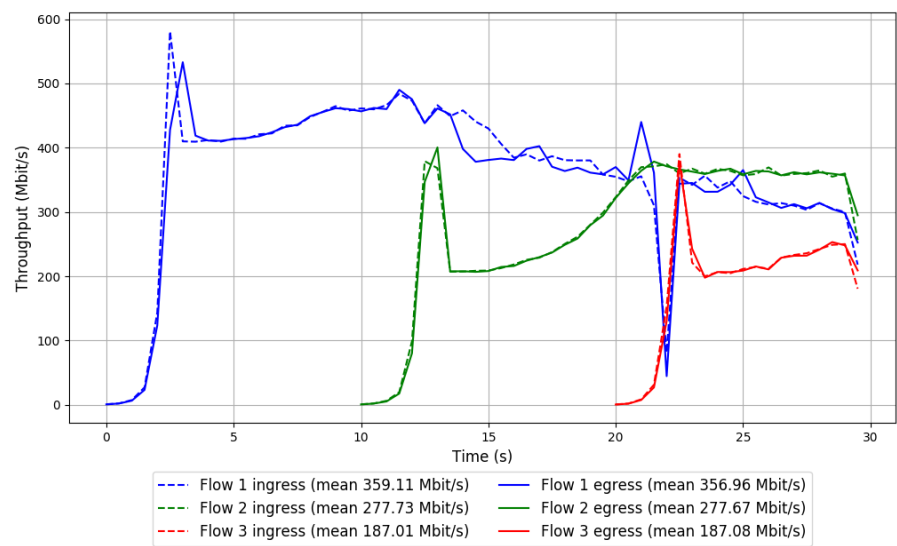
-- Flow 3:

Average throughput: 187.08 Mbit/s

95th percentile per-packet one-way delay: 65.760 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-01-31 20:42:56

End at: 2018-01-31 20:43:26

Below is generated by plot.py at 2018-02-01 01:02:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 599.37 Mbit/s

95th percentile per-packet one-way delay: 236.451 ms

Loss rate: 1.35%

-- Flow 1:

Average throughput: 370.12 Mbit/s

95th percentile per-packet one-way delay: 234.599 ms

Loss rate: 1.86%

-- Flow 2:

Average throughput: 251.92 Mbit/s

95th percentile per-packet one-way delay: 241.362 ms

Loss rate: 0.70%

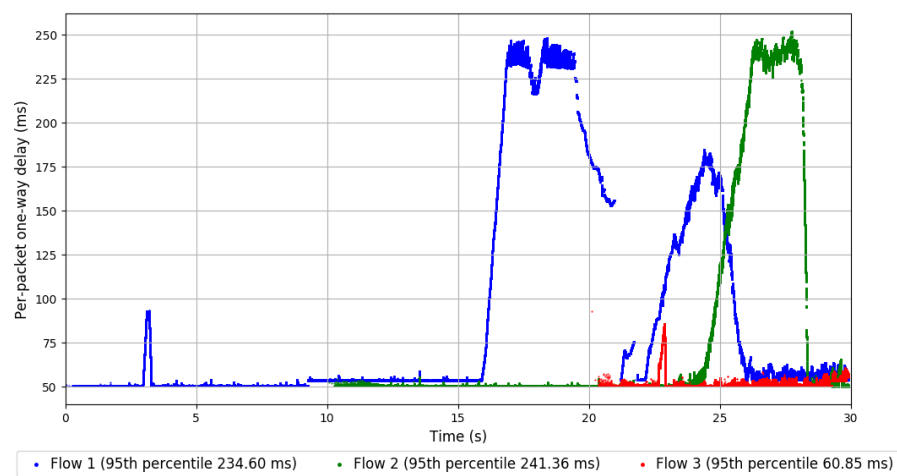
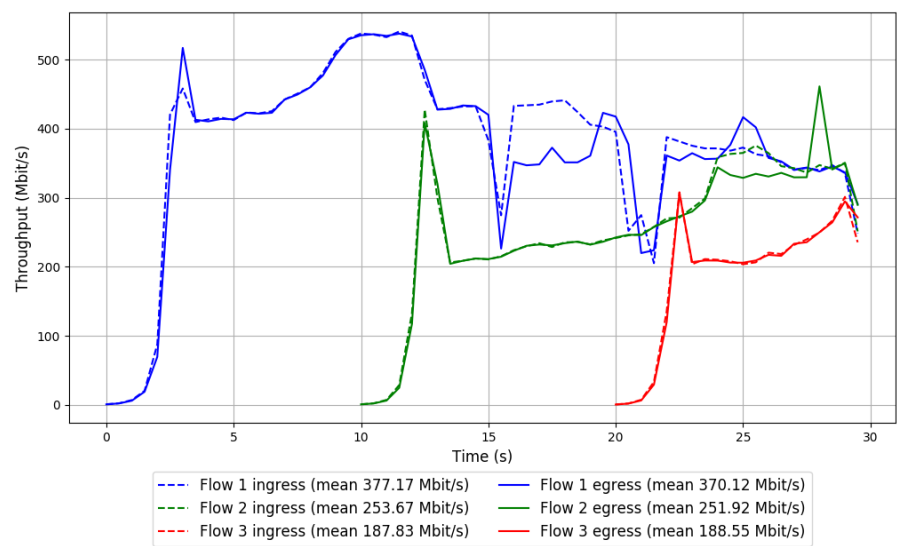
-- Flow 3:

Average throughput: 188.55 Mbit/s

95th percentile per-packet one-way delay: 60.848 ms

Loss rate: 0.00%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-01-31 20:59:37

End at: 2018-01-31 21:00:07

Below is generated by plot.py at 2018-02-01 01:02:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 519.31 Mbit/s

95th percentile per-packet one-way delay: 213.311 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 260.52 Mbit/s

95th percentile per-packet one-way delay: 63.535 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 298.01 Mbit/s

95th percentile per-packet one-way delay: 229.319 ms

Loss rate: 1.18%

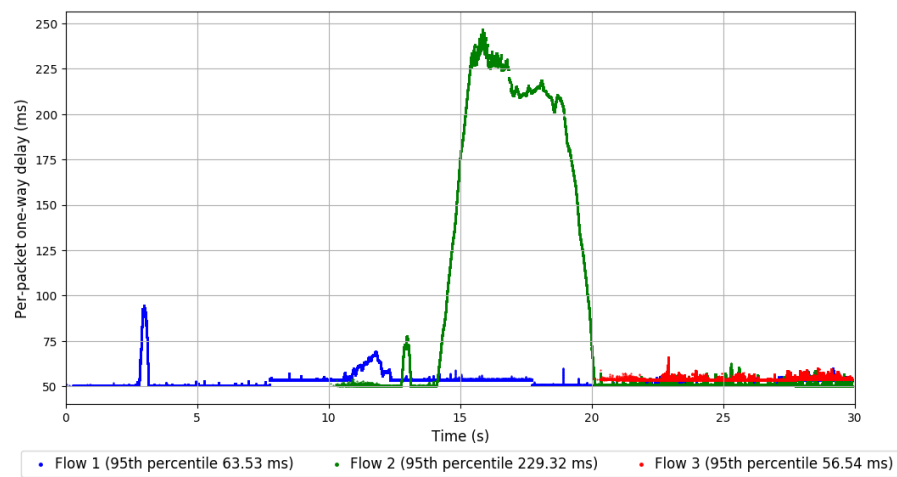
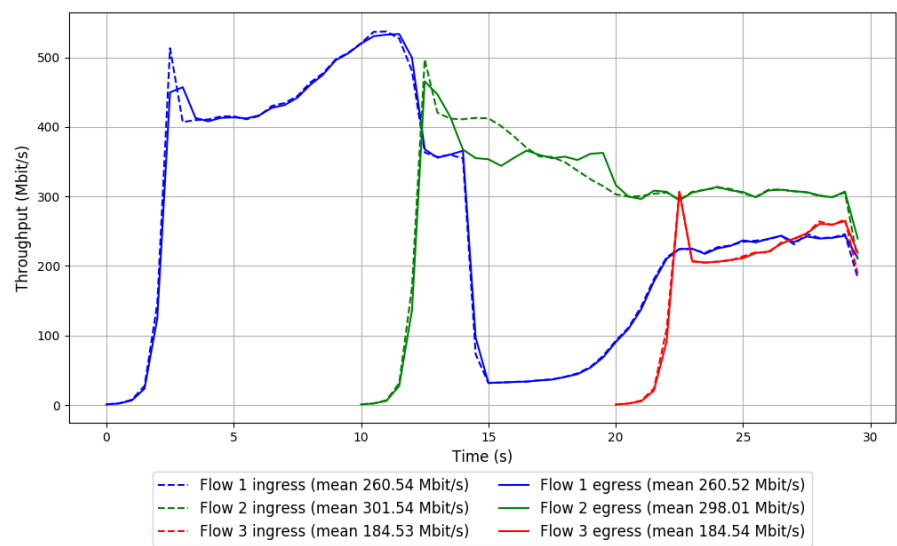
-- Flow 3:

Average throughput: 184.54 Mbit/s

95th percentile per-packet one-way delay: 56.543 ms

Loss rate: 0.00%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-01-31 21:15:26

End at: 2018-01-31 21:15:56

Below is generated by plot.py at 2018-02-01 01:03:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 651.28 Mbit/s

95th percentile per-packet one-way delay: 236.277 ms

Loss rate: 1.99%

-- Flow 1:

Average throughput: 350.69 Mbit/s

95th percentile per-packet one-way delay: 234.021 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 363.51 Mbit/s

95th percentile per-packet one-way delay: 246.756 ms

Loss rate: 3.89%

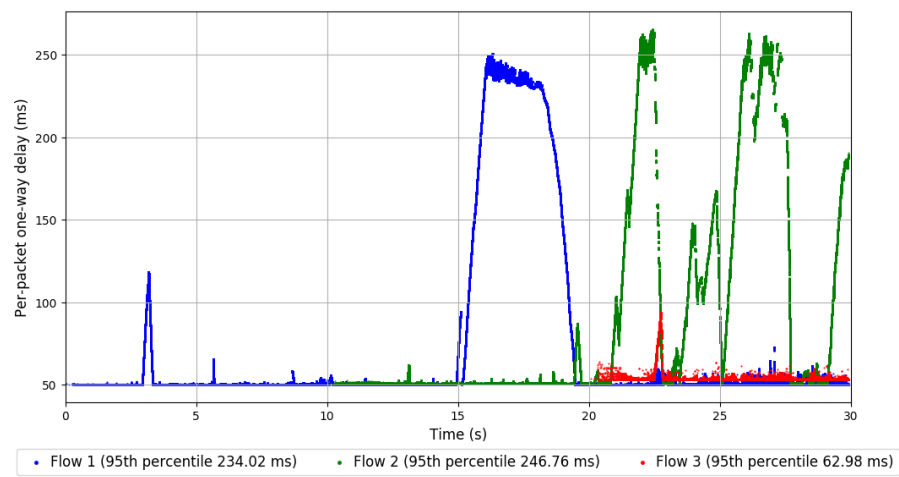
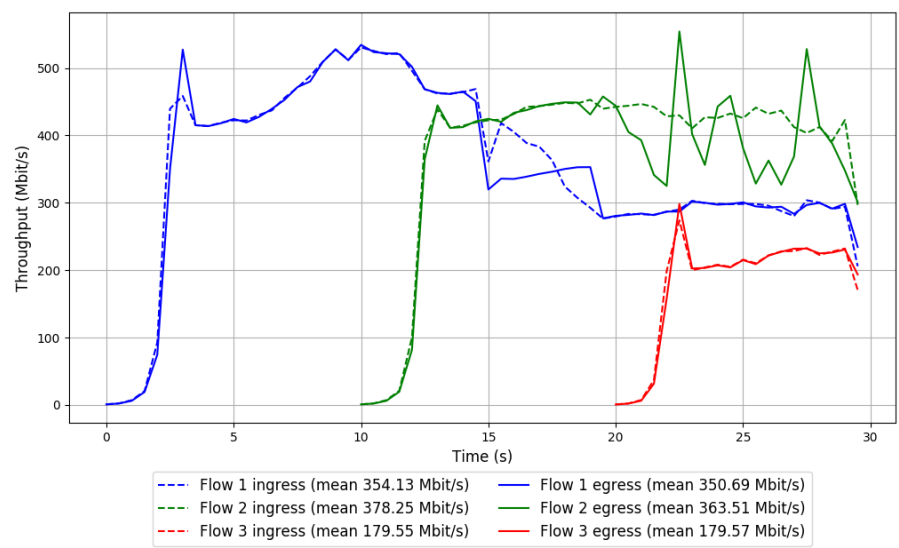
-- Flow 3:

Average throughput: 179.57 Mbit/s

95th percentile per-packet one-way delay: 62.981 ms

Loss rate: 0.03%

Run 9: Report of Vivace-LTE — Data Link



```
Run 10: Statistics of Vivace-LTE

Start at: 2018-01-31 21:31:41
End at: 2018-01-31 21:32:11

# Below is generated by plot.py at 2018-02-01 01:03:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 665.24 Mbit/s
95th percentile per-packet one-way delay: 225.819 ms
Loss rate: 2.77%
-- Flow 1:
Average throughput: 323.73 Mbit/s
95th percentile per-packet one-way delay: 229.033 ms
Loss rate: 4.84%
-- Flow 2:
Average throughput: 364.91 Mbit/s
95th percentile per-packet one-way delay: 207.468 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 300.79 Mbit/s
95th percentile per-packet one-way delay: 135.038 ms
Loss rate: 0.00%
```

Run 10: Report of Vivace-LTE — Data Link

