

Pantheon Report

Generated at 2018-02-14 14:19:55 (UTC).

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

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.

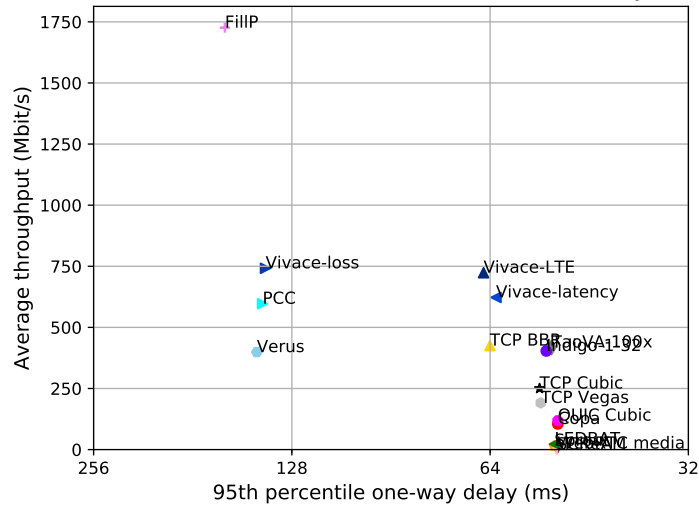
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

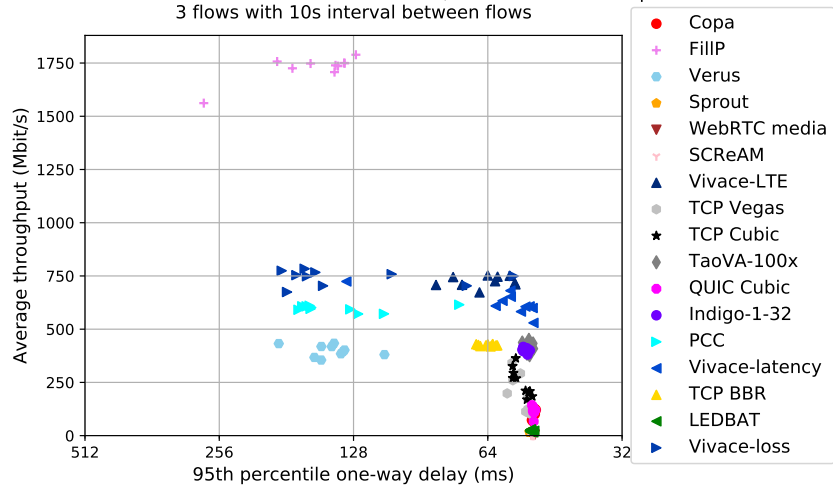
Git summary:

```
branch: master @ 2efdad57c2c56a9458b0d01ff33345e11732665
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
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 London Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE London Ethernet to GCE Iowa 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	217.91	212.87	200.58	62.08	63.96	66.61	0.37	0.56	1.14
TCP Cubic	10	127.95	128.50	111.43	53.47	53.77	54.00	0.40	0.70	1.60
LEDBAT	10	11.74	11.90	8.03	51.12	50.97	51.05	0.75	1.24	1.53
PCC	10	550.80	60.62	16.86	141.82	142.63	137.27	1.47	1.63	1.82
QUIC Cubic	10	60.59	60.21	53.19	50.39	50.41	50.26	0.40	0.54	0.74
SCReAM	10	0.22	0.22	0.22	50.66	50.49	50.14	0.26	0.53	1.11
WebRTC media	10	2.19	1.47	0.64	50.48	50.37	50.41	0.42	0.61	1.22
Sprout	10	7.94	7.88	7.59	51.11	51.13	51.14	0.36	0.41	1.29
TaoVA-100x	10	220.33	205.64	185.99	51.27	51.46	52.93	0.21	0.47	1.24
TCP Vegas	10	92.41	118.81	59.61	53.36	53.71	52.96	0.30	0.46	1.37
Verus	10	251.91	155.71	134.81	134.94	152.37	146.09	0.88	1.61	2.88
Copa	10	59.43	43.01	51.10	50.49	50.54	50.44	0.27	0.33	0.82
FillP	10	901.13	851.87	787.93	157.35	151.36	157.97	3.88	6.56	9.21
Indigo-1-32	10	215.41	199.55	171.61	52.08	52.74	53.53	0.35	0.54	1.20
Vivace-latency	10	362.62	335.31	114.25	55.35	61.92	73.81	0.28	0.57	1.56
Vivace-loss	10	414.33	347.48	296.23	134.15	125.99	130.52	1.58	1.22	2.32
Vivace-LTE	10	397.56	354.81	277.44	61.31	66.48	82.28	0.43	0.50	1.26

Run 1: Statistics of TCP BBR

Start at: 2018-02-14 05:42:22

End at: 2018-02-14 05:42:52

Below is generated by plot.py at 2018-02-14 12:01:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 425.89 Mbit/s

95th percentile per-packet one-way delay: 67.192 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 217.28 Mbit/s

95th percentile per-packet one-way delay: 65.062 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 218.29 Mbit/s

95th percentile per-packet one-way delay: 66.624 ms

Loss rate: 0.53%

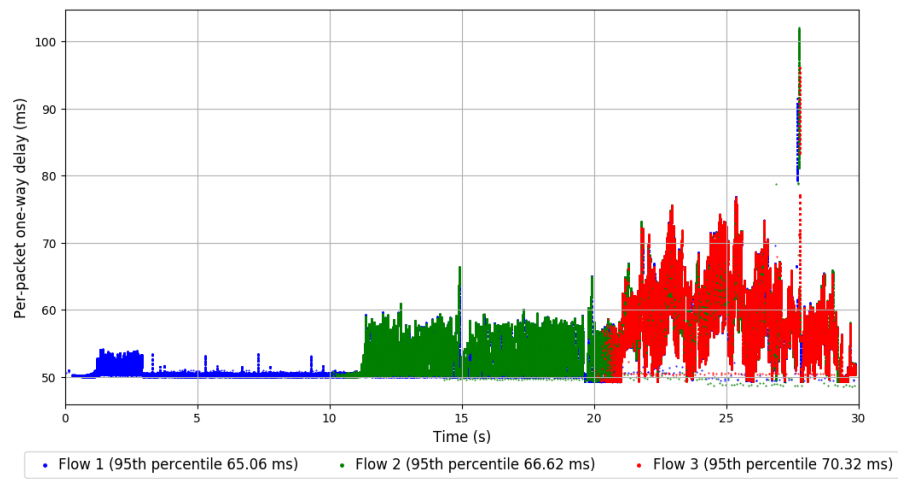
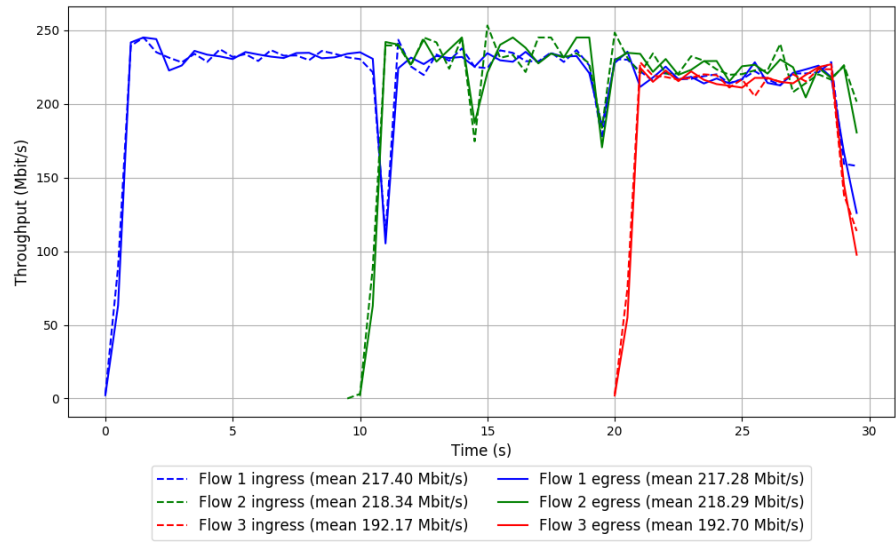
-- Flow 3:

Average throughput: 192.70 Mbit/s

95th percentile per-packet one-way delay: 70.322 ms

Loss rate: 0.75%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-14 06:00:47

End at: 2018-02-14 06:01:17

Below is generated by plot.py at 2018-02-14 12:01:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 430.17 Mbit/s

95th percentile per-packet one-way delay: 62.404 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 219.82 Mbit/s

95th percentile per-packet one-way delay: 61.084 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 212.65 Mbit/s

95th percentile per-packet one-way delay: 62.612 ms

Loss rate: 0.56%

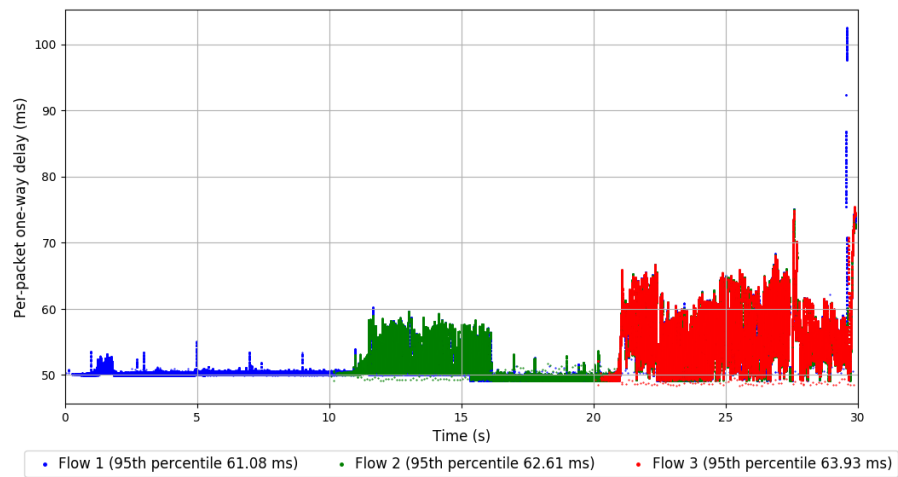
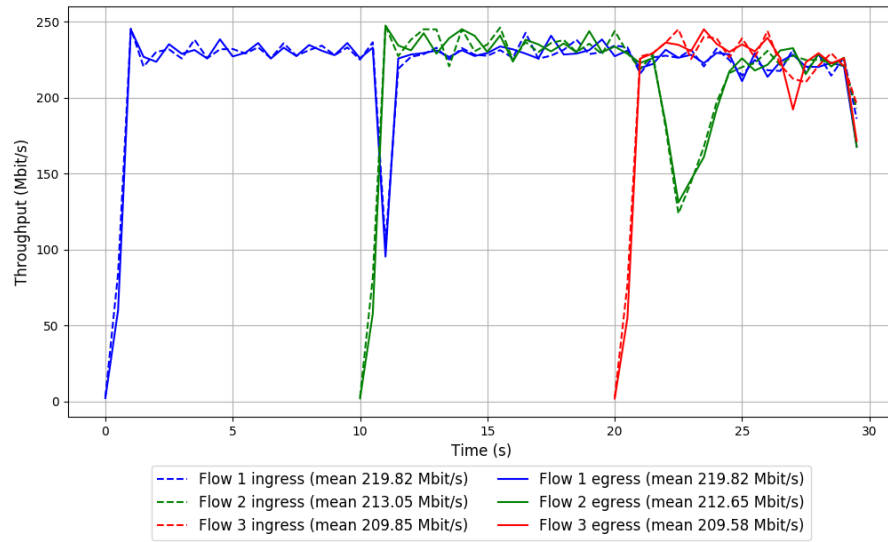
-- Flow 3:

Average throughput: 209.58 Mbit/s

95th percentile per-packet one-way delay: 63.933 ms

Loss rate: 1.18%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-14 06:19:03

End at: 2018-02-14 06:19:33

Below is generated by plot.py at 2018-02-14 12:01:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 423.83 Mbit/s

95th percentile per-packet one-way delay: 60.949 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 216.17 Mbit/s

95th percentile per-packet one-way delay: 60.595 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 213.47 Mbit/s

95th percentile per-packet one-way delay: 60.352 ms

Loss rate: 0.57%

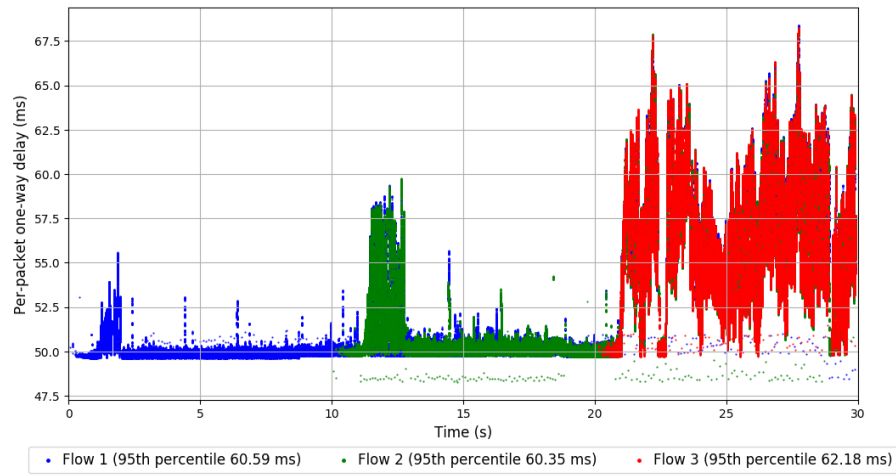
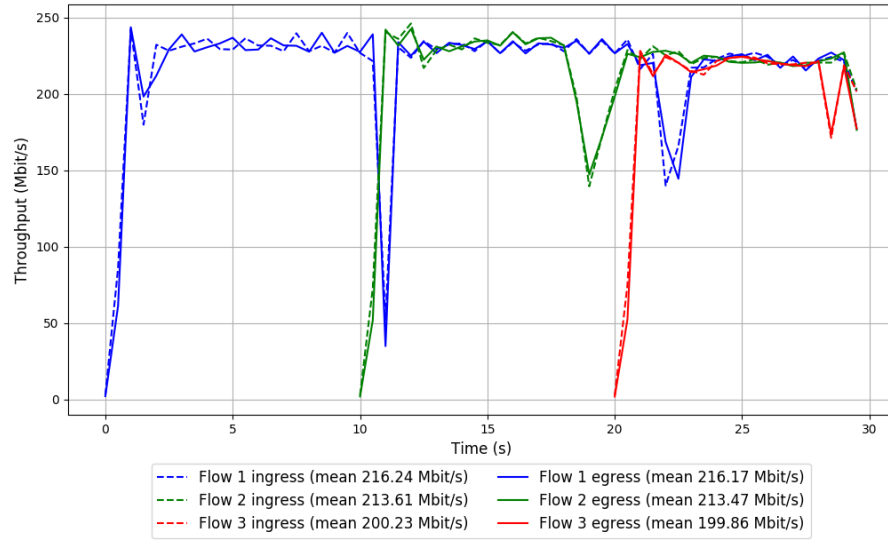
-- Flow 3:

Average throughput: 199.86 Mbit/s

95th percentile per-packet one-way delay: 62.183 ms

Loss rate: 1.22%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-14 06:37:18

End at: 2018-02-14 06:37:48

Below is generated by plot.py at 2018-02-14 12:01:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 420.44 Mbit/s

95th percentile per-packet one-way delay: 66.514 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 210.99 Mbit/s

95th percentile per-packet one-way delay: 61.333 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 213.74 Mbit/s

95th percentile per-packet one-way delay: 67.193 ms

Loss rate: 0.55%

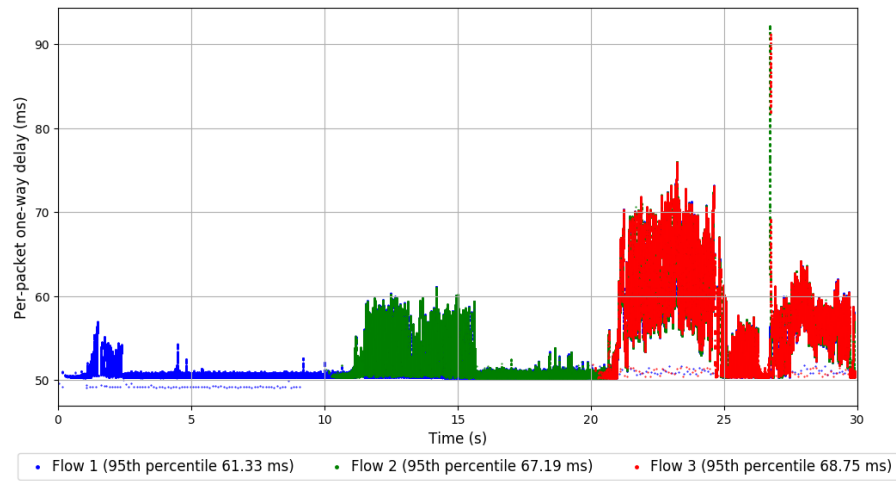
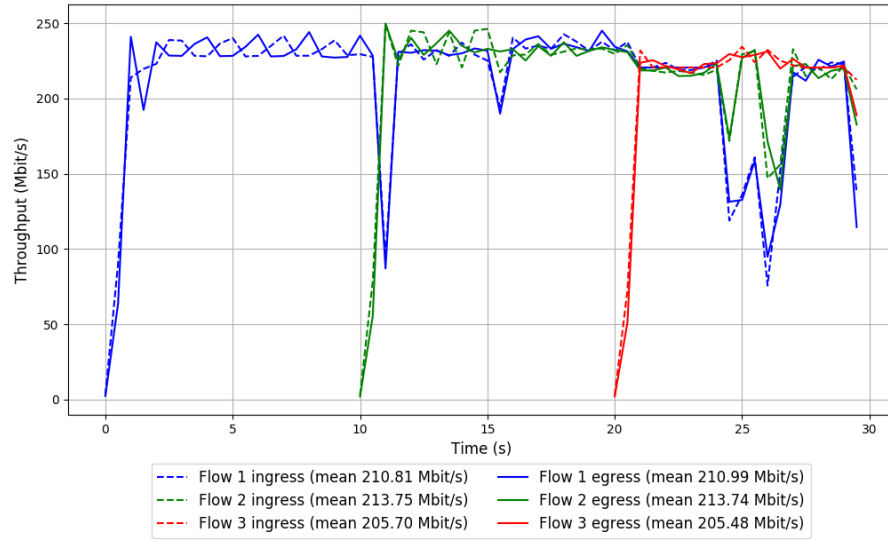
-- Flow 3:

Average throughput: 205.48 Mbit/s

95th percentile per-packet one-way delay: 68.747 ms

Loss rate: 1.14%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-14 06:55:31

End at: 2018-02-14 06:56:01

Below is generated by plot.py at 2018-02-14 12:01:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 424.14 Mbit/s

95th percentile per-packet one-way delay: 61.331 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 217.85 Mbit/s

95th percentile per-packet one-way delay: 59.932 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 216.09 Mbit/s

95th percentile per-packet one-way delay: 60.726 ms

Loss rate: 0.57%

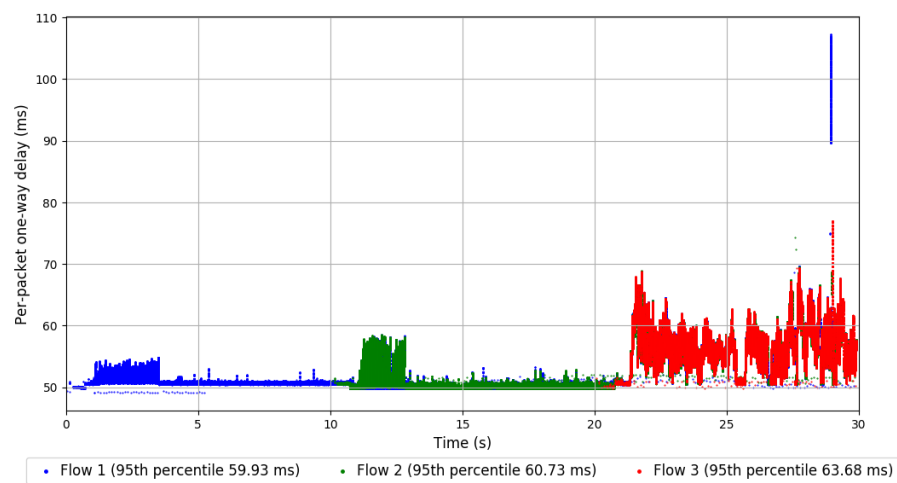
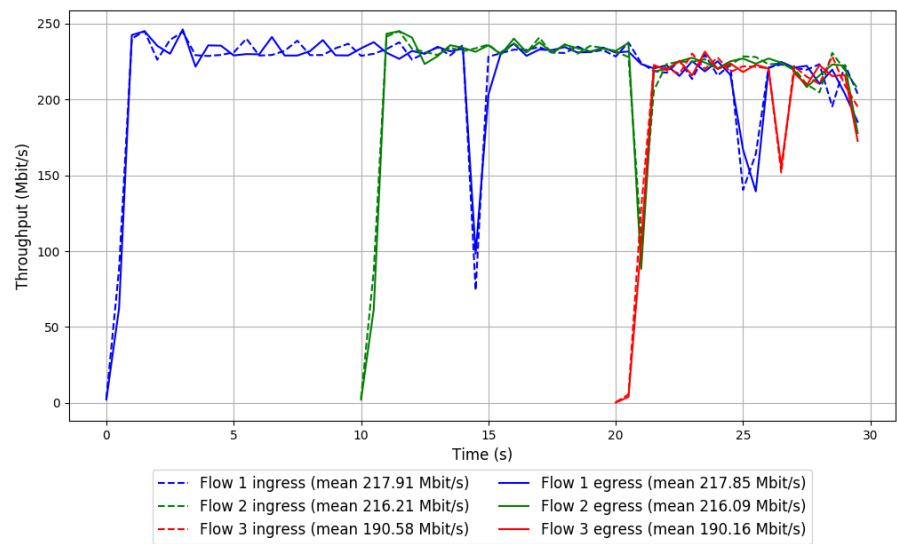
-- Flow 3:

Average throughput: 190.16 Mbit/s

95th percentile per-packet one-way delay: 63.684 ms

Loss rate: 1.25%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-14 07:13:51

End at: 2018-02-14 07:14:21

Below is generated by plot.py at 2018-02-14 12:01:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 428.42 Mbit/s

95th percentile per-packet one-way delay: 62.445 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 219.71 Mbit/s

95th percentile per-packet one-way delay: 61.535 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 215.32 Mbit/s

95th percentile per-packet one-way delay: 62.144 ms

Loss rate: 0.59%

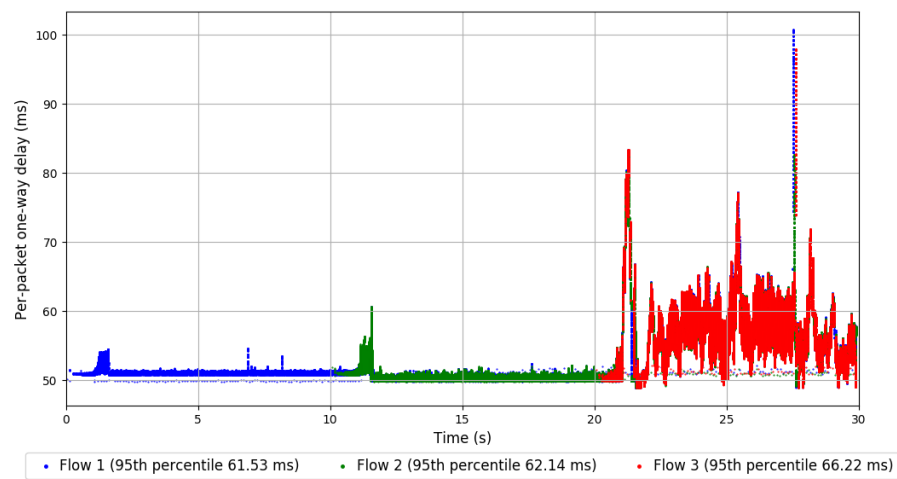
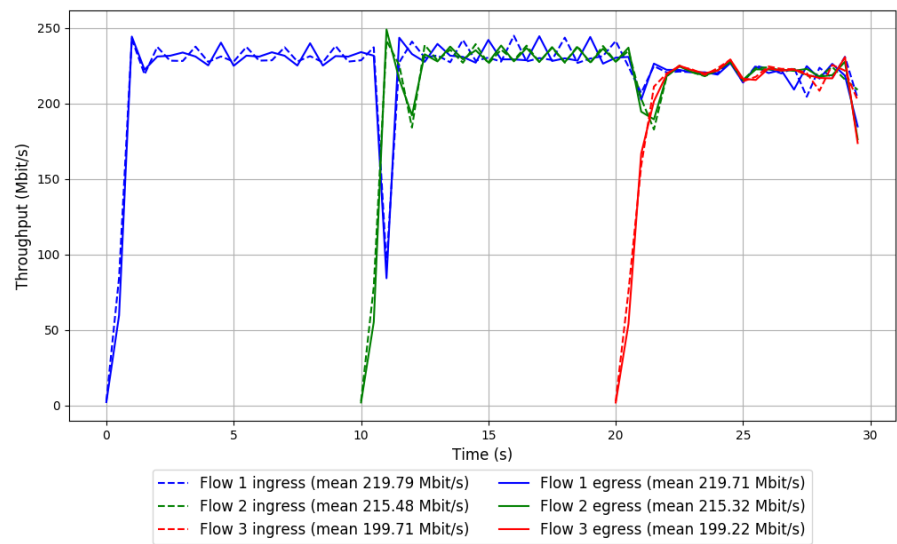
-- Flow 3:

Average throughput: 199.22 Mbit/s

95th percentile per-packet one-way delay: 66.219 ms

Loss rate: 1.24%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-14 07:32:19

End at: 2018-02-14 07:32:49

Below is generated by plot.py at 2018-02-14 12:01:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 418.97 Mbit/s

95th percentile per-packet one-way delay: 63.095 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 217.26 Mbit/s

95th percentile per-packet one-way delay: 60.175 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 200.98 Mbit/s

95th percentile per-packet one-way delay: 63.853 ms

Loss rate: 0.58%

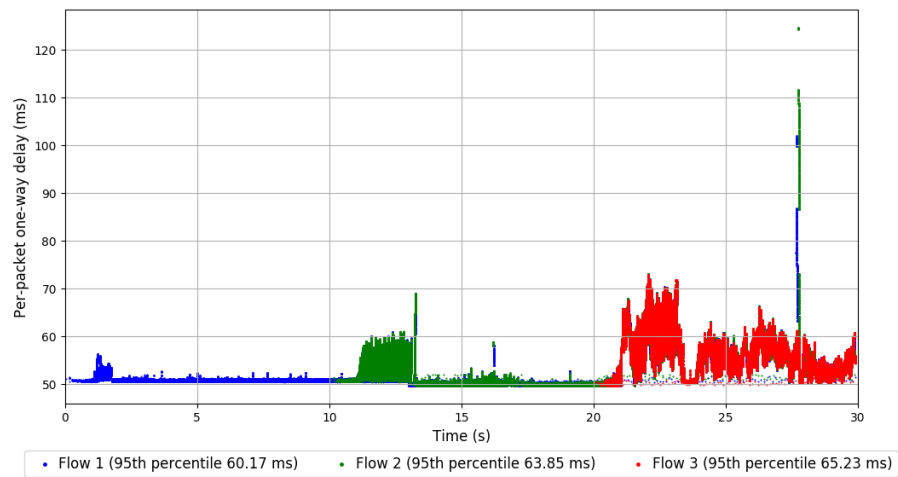
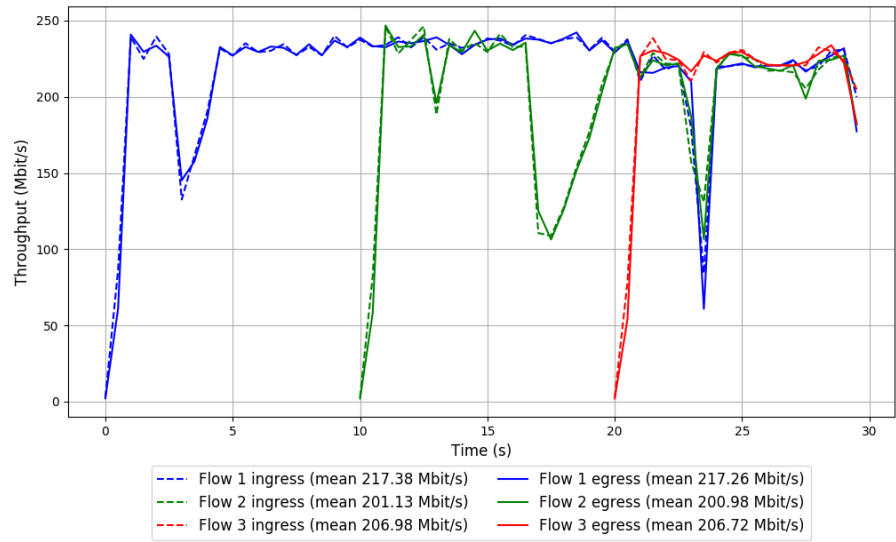
-- Flow 3:

Average throughput: 206.72 Mbit/s

95th percentile per-packet one-way delay: 65.231 ms

Loss rate: 1.14%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-14 07:50:47

End at: 2018-02-14 07:51:17

Below is generated by plot.py at 2018-02-14 12:01:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 429.18 Mbit/s

95th percentile per-packet one-way delay: 64.025 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 218.94 Mbit/s

95th percentile per-packet one-way delay: 62.244 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 214.70 Mbit/s

95th percentile per-packet one-way delay: 64.035 ms

Loss rate: 0.57%

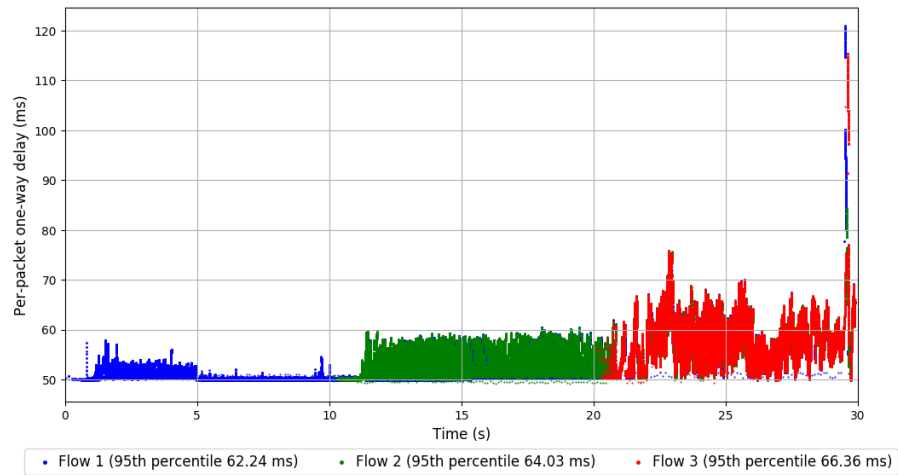
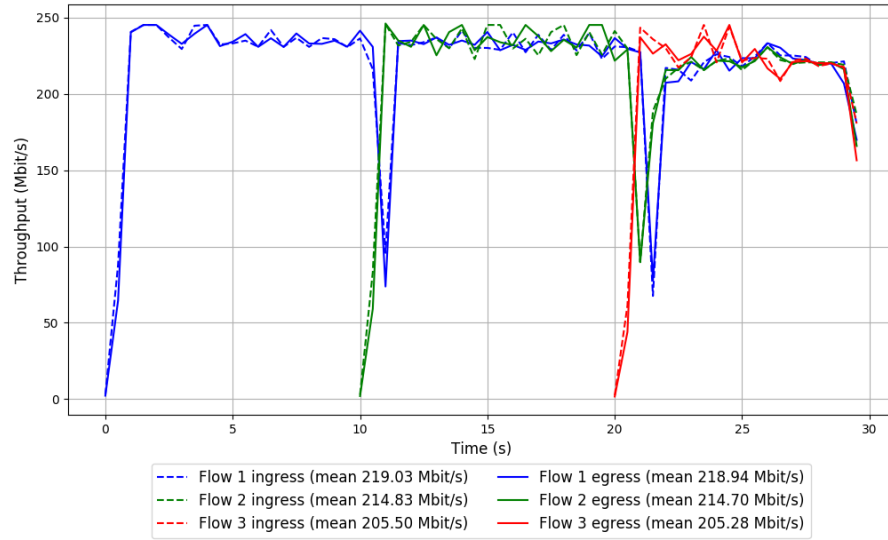
-- Flow 3:

Average throughput: 205.28 Mbit/s

95th percentile per-packet one-way delay: 66.362 ms

Loss rate: 1.19%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-14 08:08:56

End at: 2018-02-14 08:09:26

Below is generated by plot.py at 2018-02-14 12:07:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 424.00 Mbit/s

95th percentile per-packet one-way delay: 64.613 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 217.98 Mbit/s

95th percentile per-packet one-way delay: 62.450 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 214.87 Mbit/s

95th percentile per-packet one-way delay: 64.261 ms

Loss rate: 0.54%

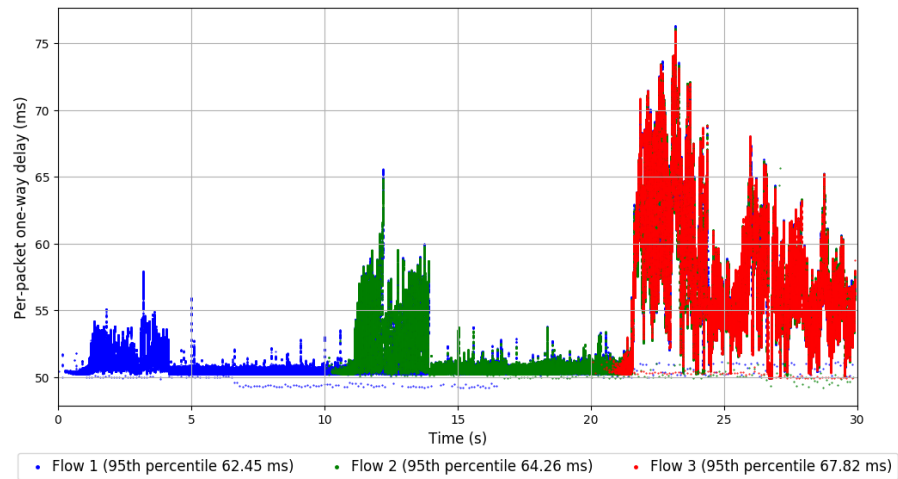
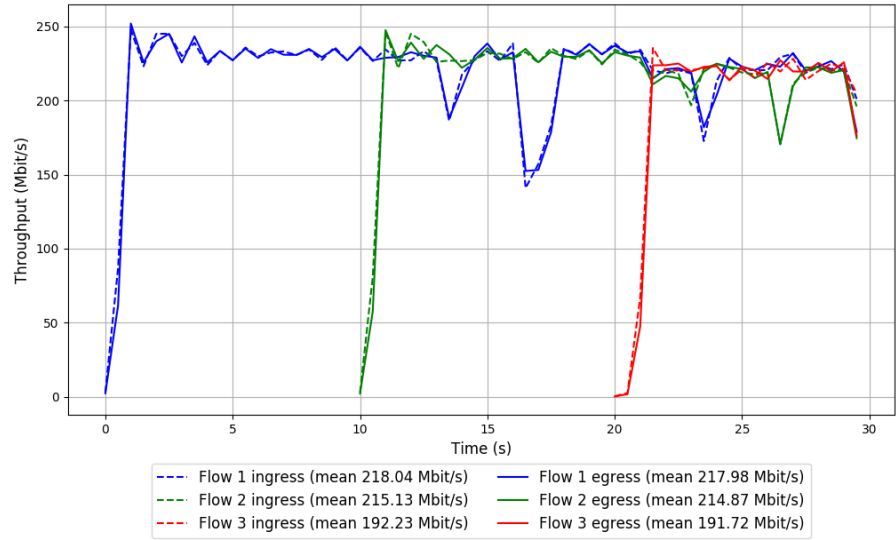
-- Flow 3:

Average throughput: 191.72 Mbit/s

95th percentile per-packet one-way delay: 67.818 ms

Loss rate: 1.29%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-14 08:26:57

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

Below is generated by plot.py at 2018-02-14 12:07:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 429.33 Mbit/s

95th percentile per-packet one-way delay: 67.941 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 223.11 Mbit/s

95th percentile per-packet one-way delay: 66.381 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 208.63 Mbit/s

95th percentile per-packet one-way delay: 67.751 ms

Loss rate: 0.55%

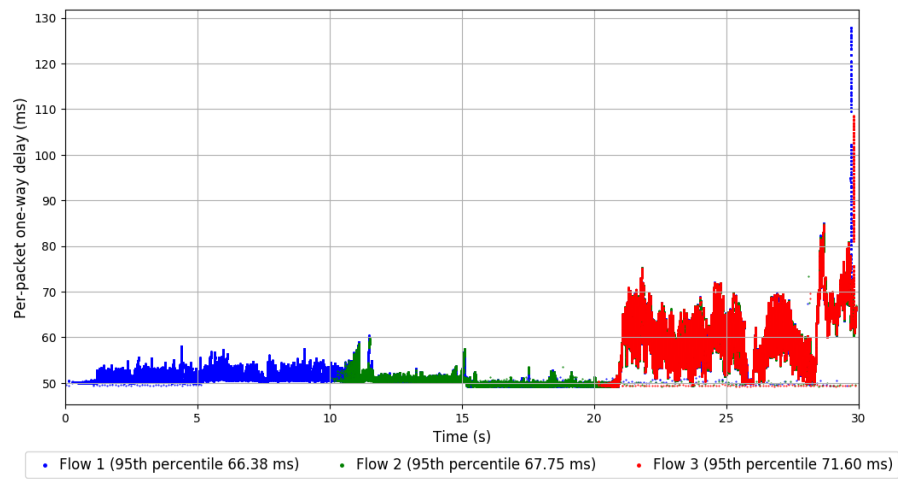
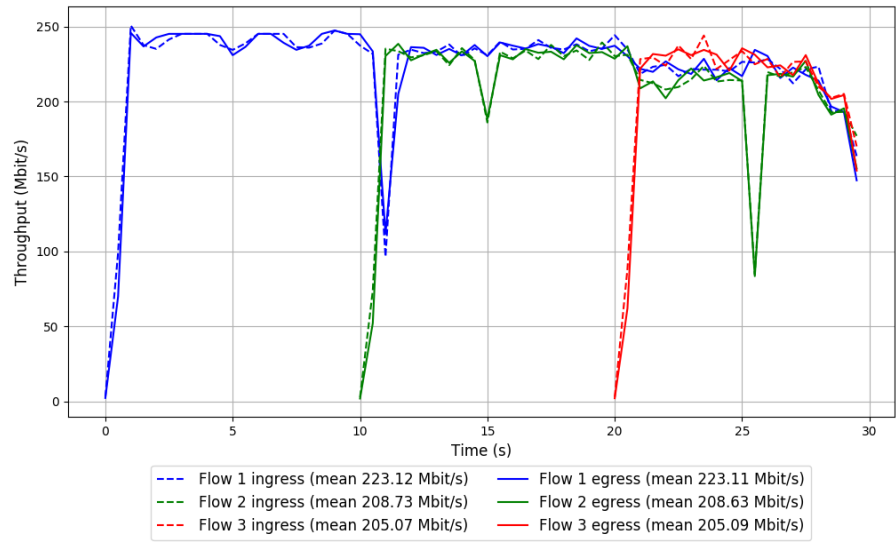
-- Flow 3:

Average throughput: 205.09 Mbit/s

95th percentile per-packet one-way delay: 71.598 ms

Loss rate: 1.01%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-14 05:45:05

End at: 2018-02-14 05:45:35

Below is generated by plot.py at 2018-02-14 12:07:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 363.33 Mbit/s

95th percentile per-packet one-way delay: 55.388 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 176.03 Mbit/s

95th percentile per-packet one-way delay: 55.522 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 172.27 Mbit/s

95th percentile per-packet one-way delay: 55.280 ms

Loss rate: 0.26%

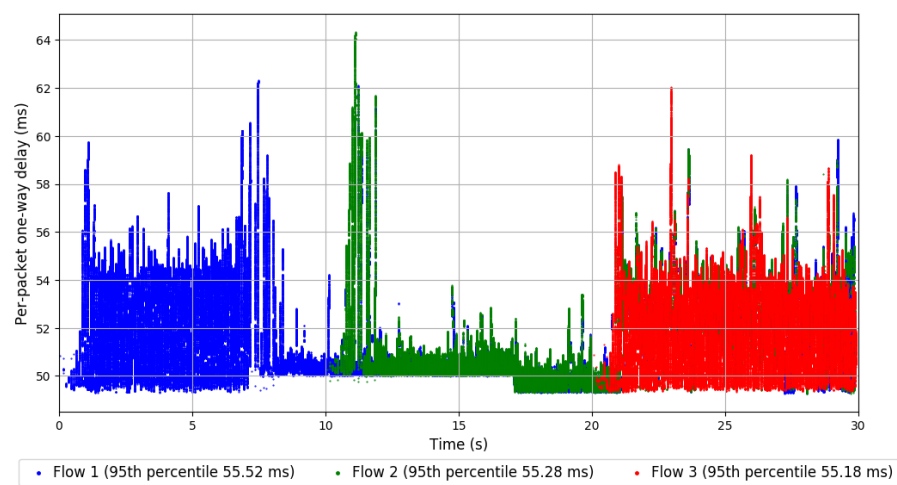
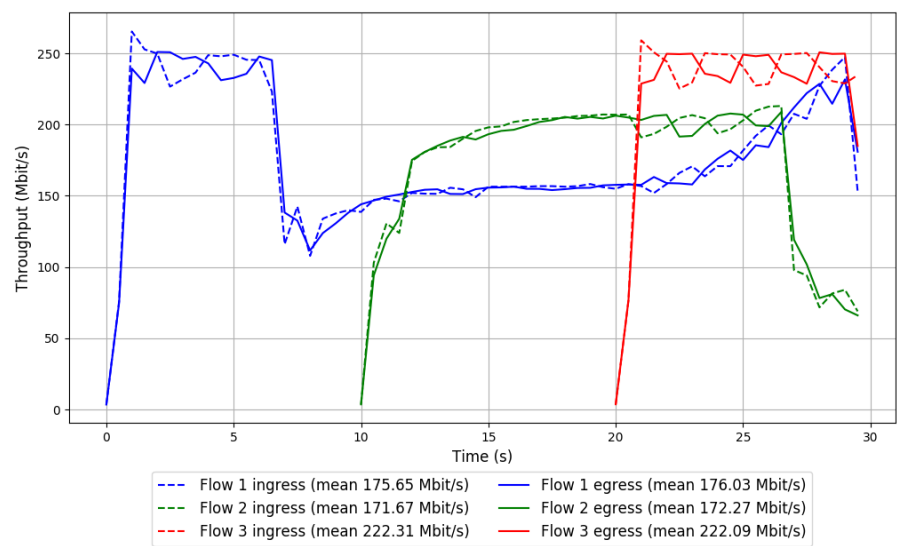
-- Flow 3:

Average throughput: 222.09 Mbit/s

95th percentile per-packet one-way delay: 55.183 ms

Loss rate: 1.13%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-14 06:03:33

End at: 2018-02-14 06:04:03

Below is generated by plot.py at 2018-02-14 12:07:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 169.34 Mbit/s

95th percentile per-packet one-way delay: 52.272 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 122.16 Mbit/s

95th percentile per-packet one-way delay: 51.854 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 14.61 Mbit/s

95th percentile per-packet one-way delay: 50.537 ms

Loss rate: 1.91%

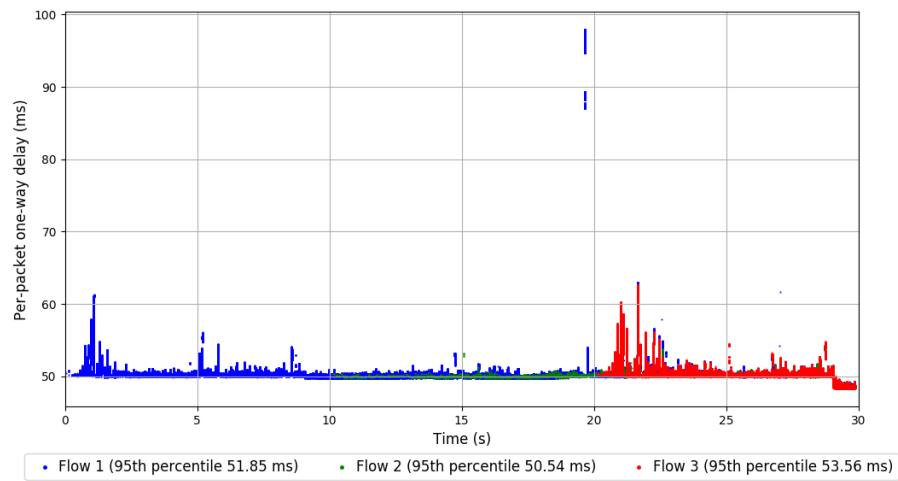
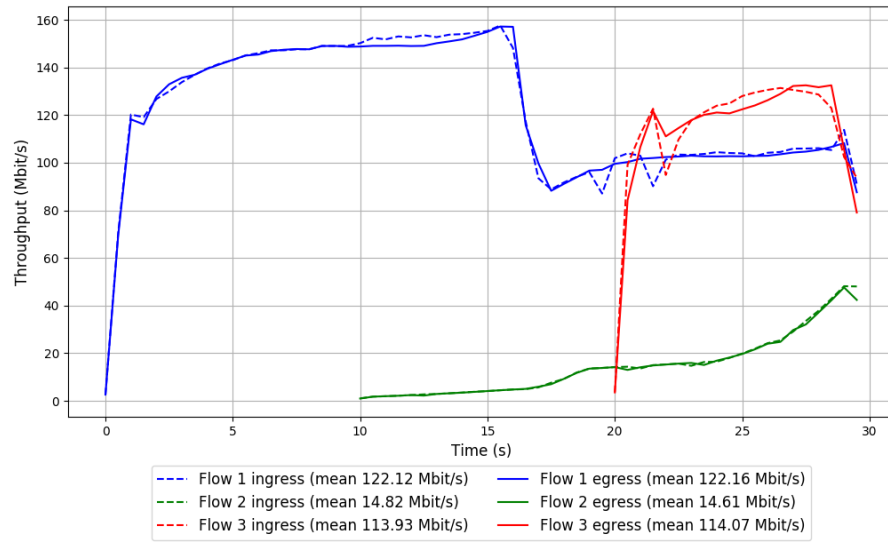
-- Flow 3:

Average throughput: 114.07 Mbit/s

95th percentile per-packet one-way delay: 53.560 ms

Loss rate: 0.90%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-14 06:21:50

End at: 2018-02-14 06:22:20

Below is generated by plot.py at 2018-02-14 12:07:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.07 Mbit/s

95th percentile per-packet one-way delay: 50.877 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 83.79 Mbit/s

95th percentile per-packet one-way delay: 50.814 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 148.32 Mbit/s

95th percentile per-packet one-way delay: 50.955 ms

Loss rate: 0.45%

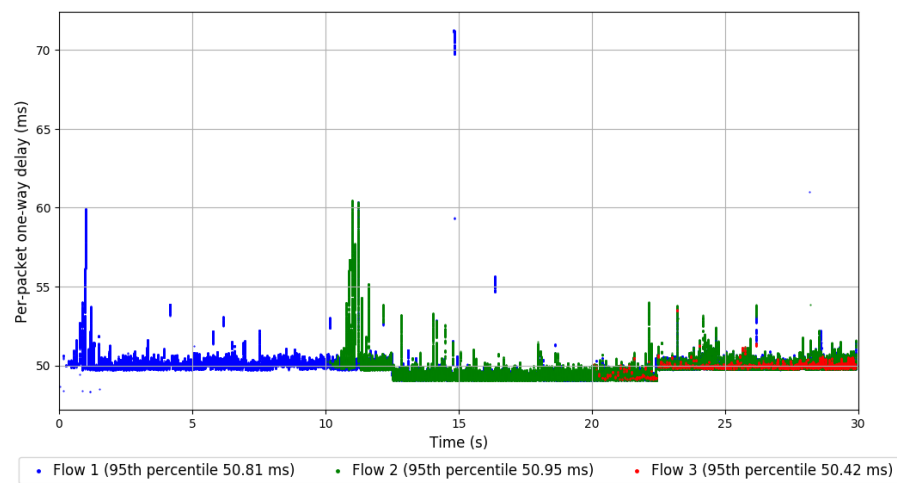
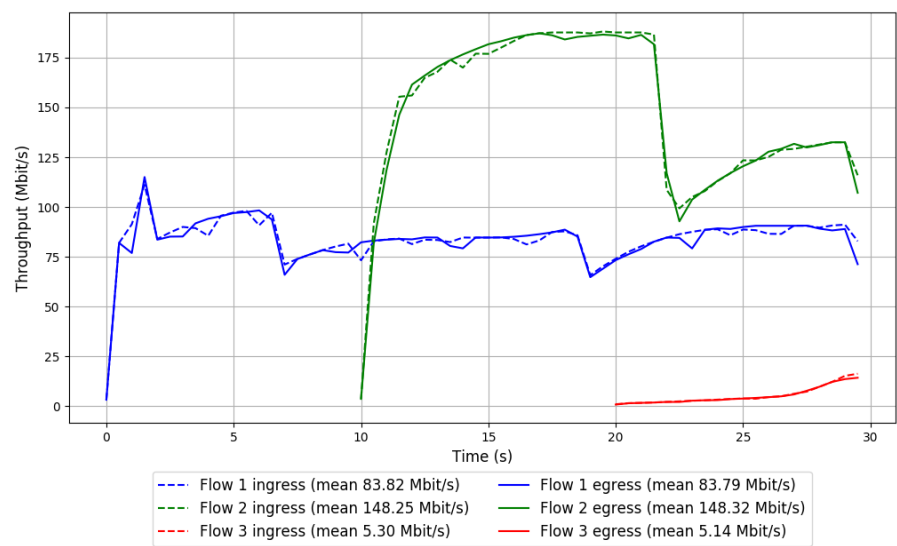
-- Flow 3:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 50.421 ms

Loss rate: 3.84%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-14 06:40:03

End at: 2018-02-14 06:40:33

Below is generated by plot.py at 2018-02-14 12:07:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 210.85 Mbit/s

95th percentile per-packet one-way delay: 52.671 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 103.13 Mbit/s

95th percentile per-packet one-way delay: 52.779 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 106.02 Mbit/s

95th percentile per-packet one-way delay: 52.240 ms

Loss rate: 0.57%

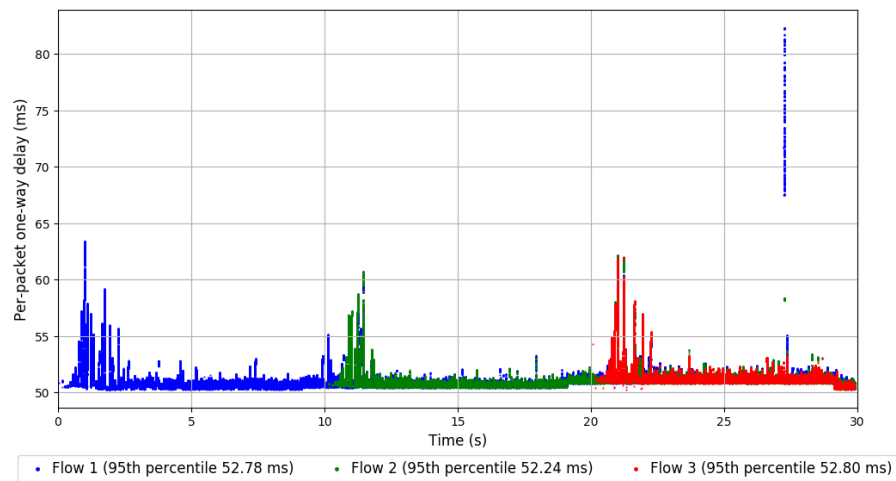
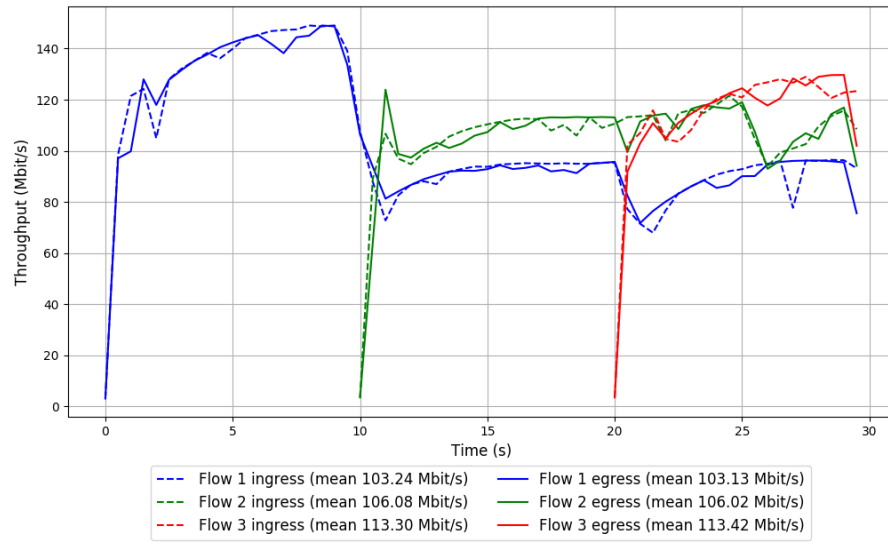
-- Flow 3:

Average throughput: 113.42 Mbit/s

95th percentile per-packet one-way delay: 52.800 ms

Loss rate: 1.15%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-14 06:58:18

End at: 2018-02-14 06:58:48

Below is generated by plot.py at 2018-02-14 12:07:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 268.55 Mbit/s

95th percentile per-packet one-way delay: 55.296 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 144.48 Mbit/s

95th percentile per-packet one-way delay: 52.769 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 122.13 Mbit/s

95th percentile per-packet one-way delay: 56.659 ms

Loss rate: 0.75%

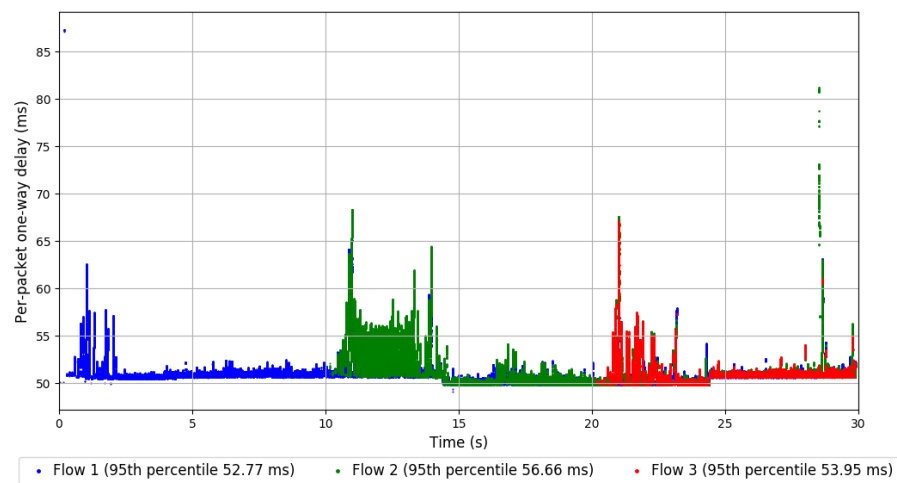
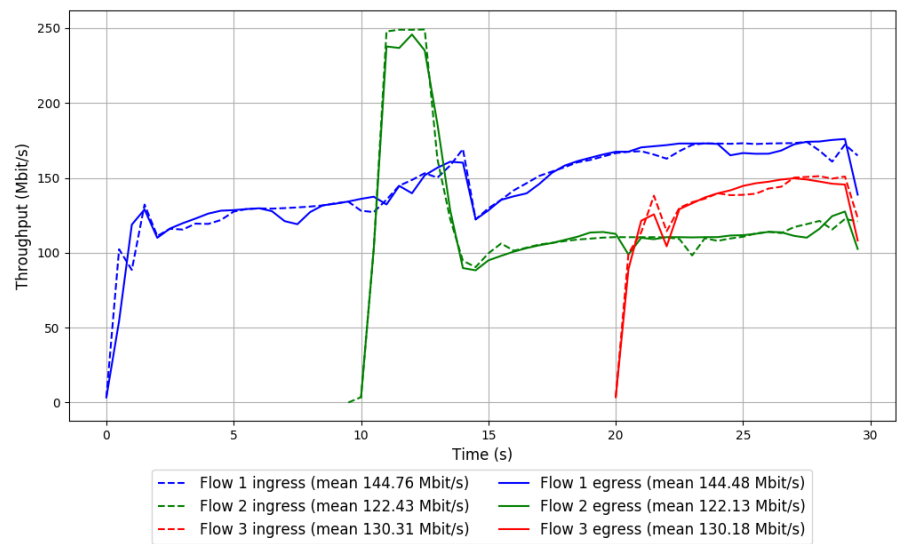
-- Flow 3:

Average throughput: 130.18 Mbit/s

95th percentile per-packet one-way delay: 53.949 ms

Loss rate: 1.17%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-14 07:16:38

End at: 2018-02-14 07:17:08

Below is generated by plot.py at 2018-02-14 12:07:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 326.64 Mbit/s

95th percentile per-packet one-way delay: 56.294 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 172.80 Mbit/s

95th percentile per-packet one-way delay: 56.307 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 155.20 Mbit/s

95th percentile per-packet one-way delay: 56.383 ms

Loss rate: 0.68%

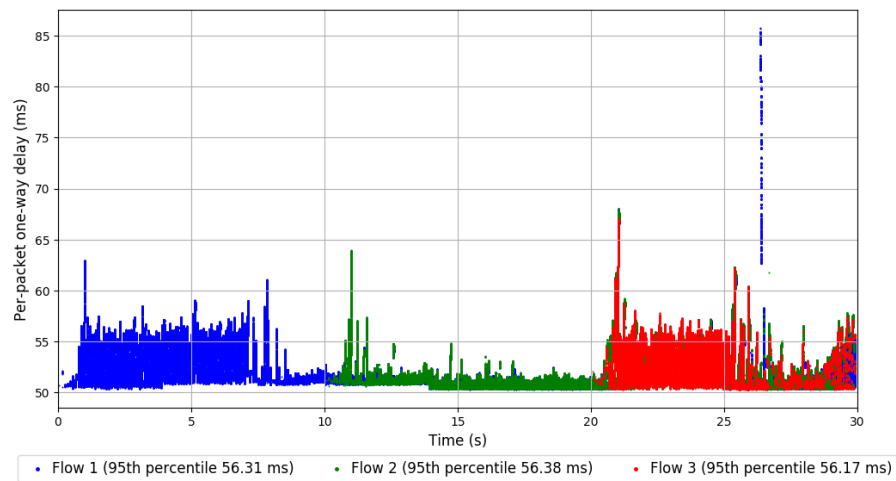
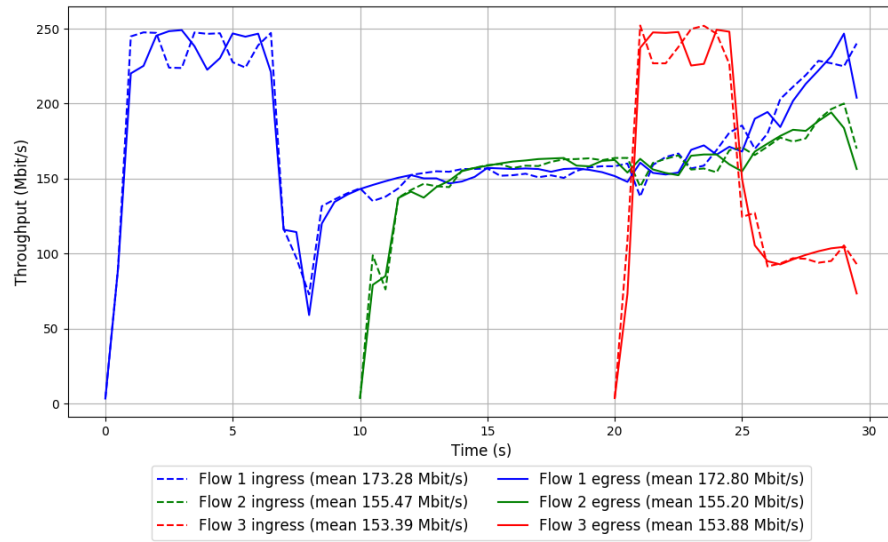
-- Flow 3:

Average throughput: 153.88 Mbit/s

95th percentile per-packet one-way delay: 56.169 ms

Loss rate: 0.71%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-14 07:35:04

End at: 2018-02-14 07:35:34

Below is generated by plot.py at 2018-02-14 12:08:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 293.88 Mbit/s

95th percentile per-packet one-way delay: 56.073 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 132.95 Mbit/s

95th percentile per-packet one-way delay: 55.158 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 185.64 Mbit/s

95th percentile per-packet one-way delay: 56.600 ms

Loss rate: 0.41%

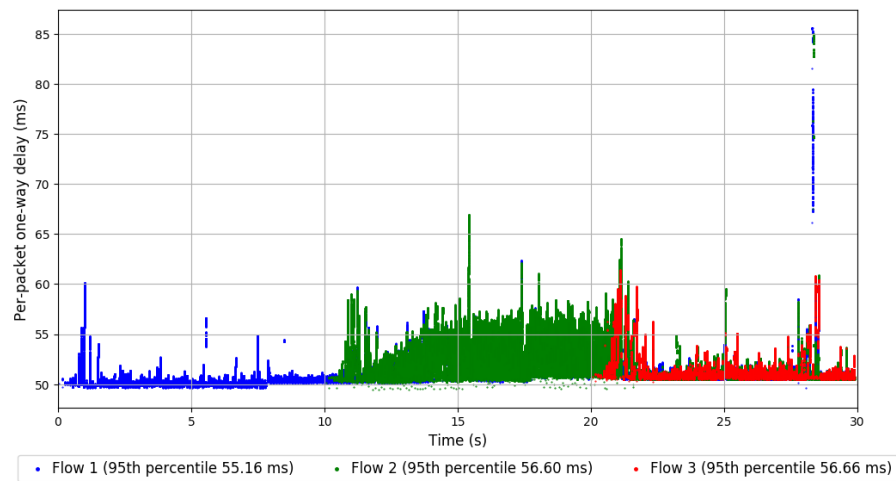
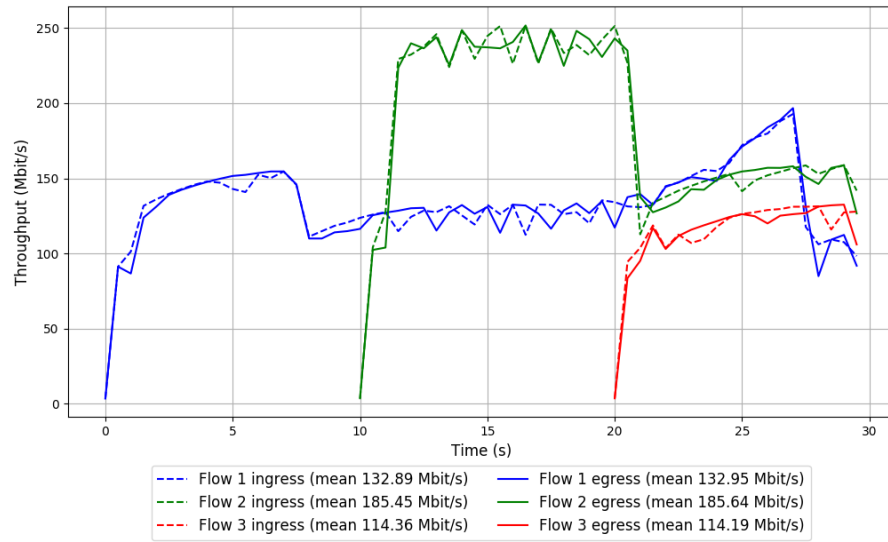
-- Flow 3:

Average throughput: 114.19 Mbit/s

95th percentile per-packet one-way delay: 56.656 ms

Loss rate: 1.17%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-14 07:53:32

End at: 2018-02-14 07:54:02

Below is generated by plot.py at 2018-02-14 12:08:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 204.45 Mbit/s

95th percentile per-packet one-way delay: 51.844 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 121.11 Mbit/s

95th percentile per-packet one-way delay: 51.733 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 122.87 Mbit/s

95th percentile per-packet one-way delay: 51.915 ms

Loss rate: 0.57%

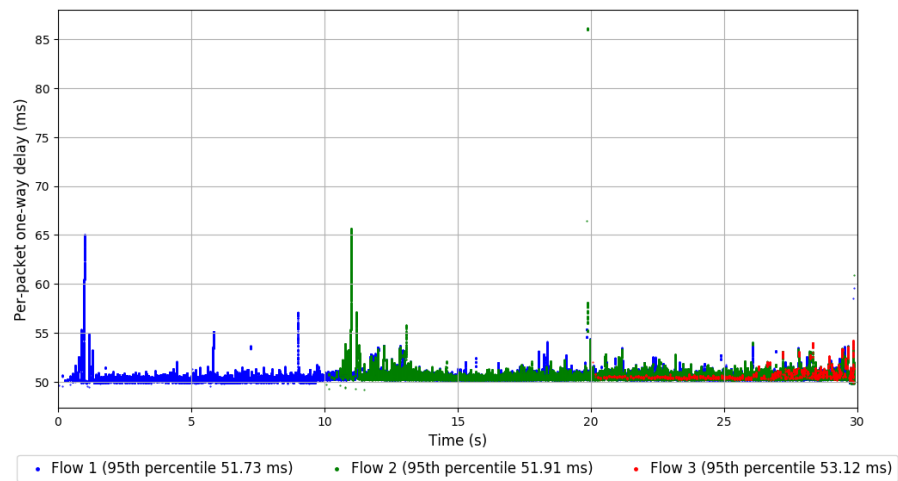
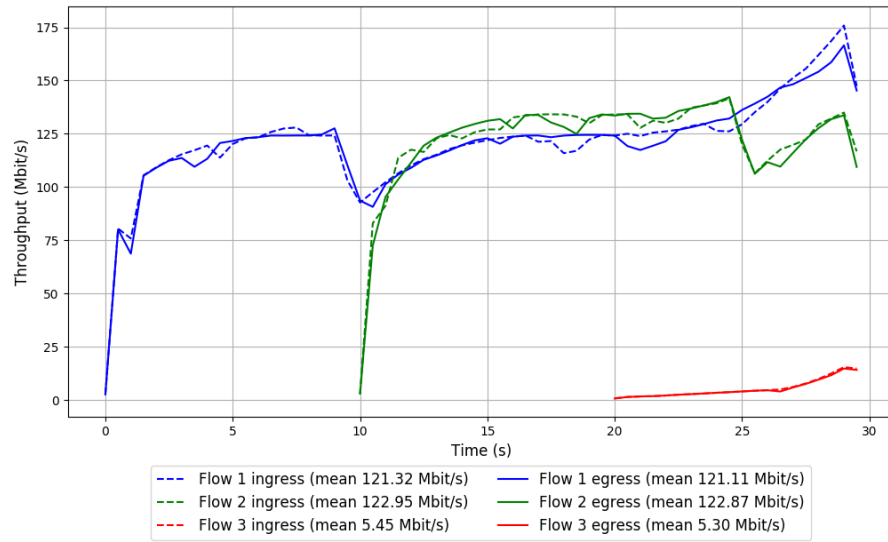
-- Flow 3:

Average throughput: 5.30 Mbit/s

95th percentile per-packet one-way delay: 53.124 ms

Loss rate: 3.74%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-14 08:11:42

End at: 2018-02-14 08:12:12

Below is generated by plot.py at 2018-02-14 12:08:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 208.51 Mbit/s

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

Loss rate: 0.60%

-- Flow 1:

Average throughput: 107.91 Mbit/s

95th percentile per-packet one-way delay: 51.608 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 118.87 Mbit/s

95th percentile per-packet one-way delay: 51.524 ms

Loss rate: 0.72%

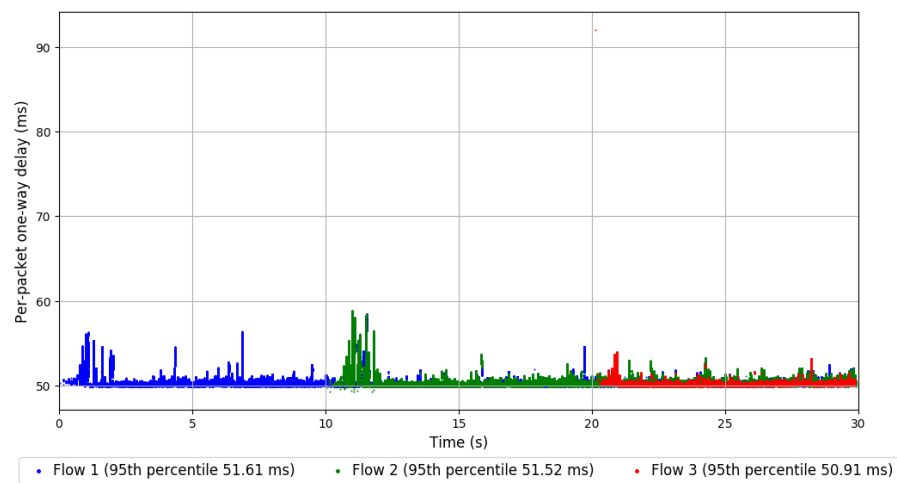
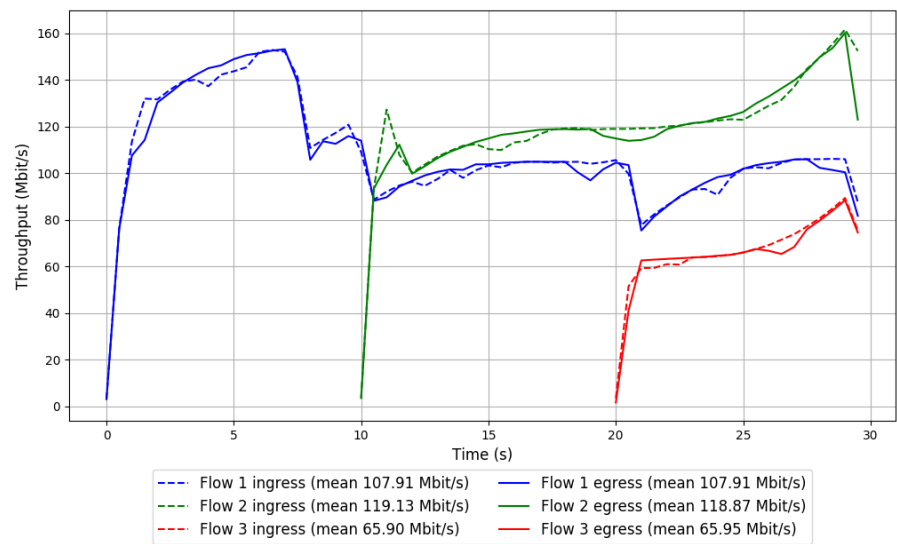
-- Flow 3:

Average throughput: 65.95 Mbit/s

95th percentile per-packet one-way delay: 50.907 ms

Loss rate: 1.48%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-14 08:29:41

End at: 2018-02-14 08:30:11

Below is generated by plot.py at 2018-02-14 12:09:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 270.11 Mbit/s

95th percentile per-packet one-way delay: 56.231 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 115.19 Mbit/s

95th percentile per-packet one-way delay: 56.184 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 139.05 Mbit/s

95th percentile per-packet one-way delay: 55.629 ms

Loss rate: 0.71%

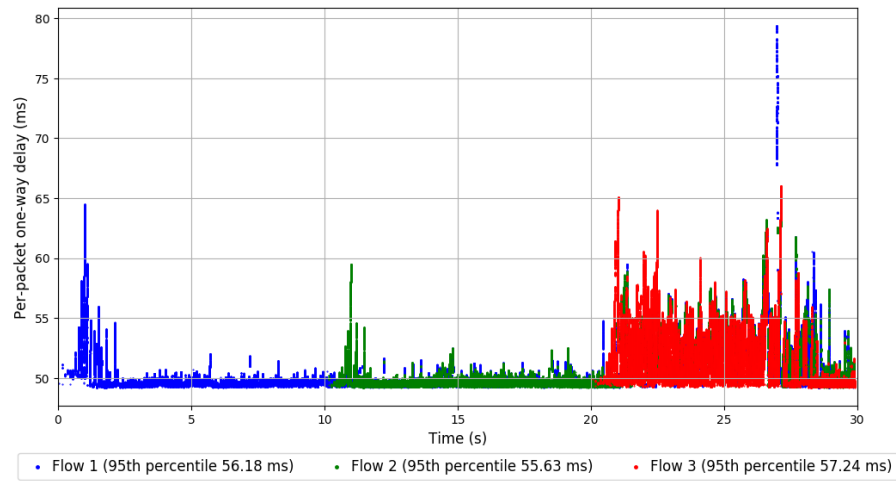
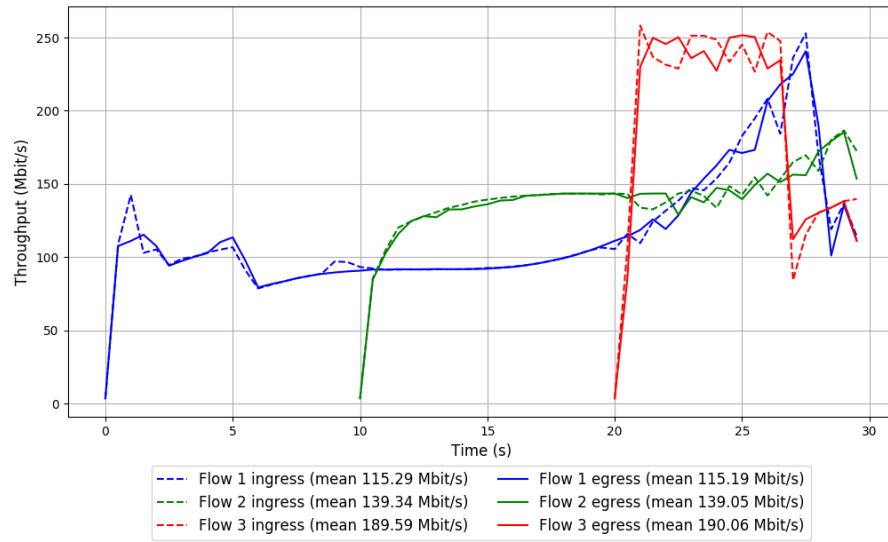
-- Flow 3:

Average throughput: 190.06 Mbit/s

95th percentile per-packet one-way delay: 57.245 ms

Loss rate: 0.76%

Run 10: Report of TCP Cubic — Data Link

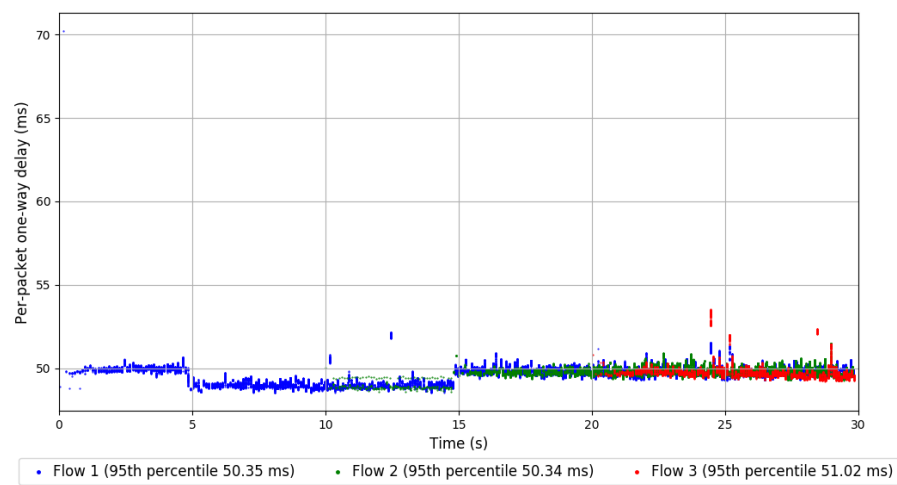
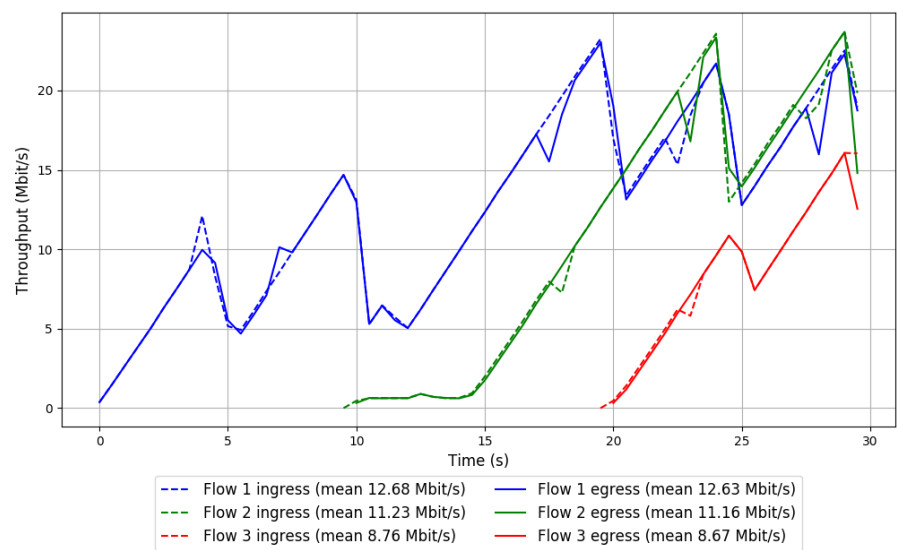


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-14 05:47:17
End at: 2018-02-14 05:47:47

# Below is generated by plot.py at 2018-02-14 12:09:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.87 Mbit/s
95th percentile per-packet one-way delay: 50.348 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 12.63 Mbit/s
95th percentile per-packet one-way delay: 50.347 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 11.16 Mbit/s
95th percentile per-packet one-way delay: 50.335 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 8.67 Mbit/s
95th percentile per-packet one-way delay: 51.019 ms
Loss rate: 2.01%
```


Run 1: Report of LEDBAT — Data Link

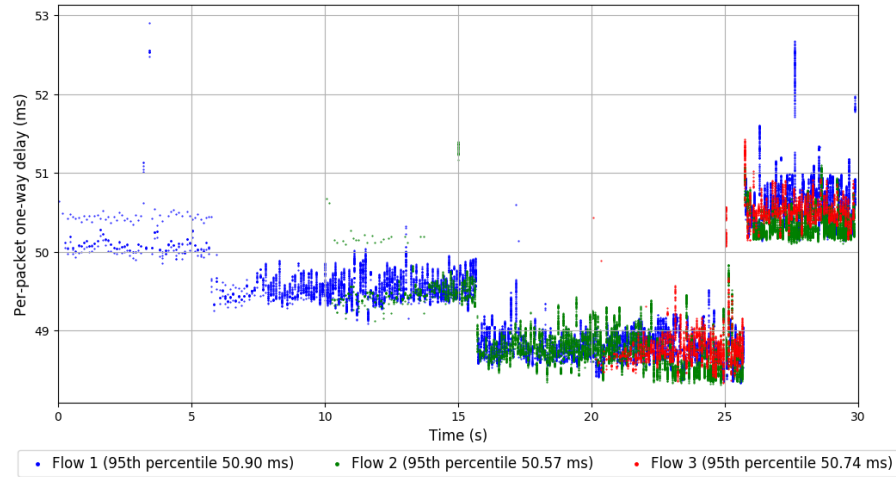
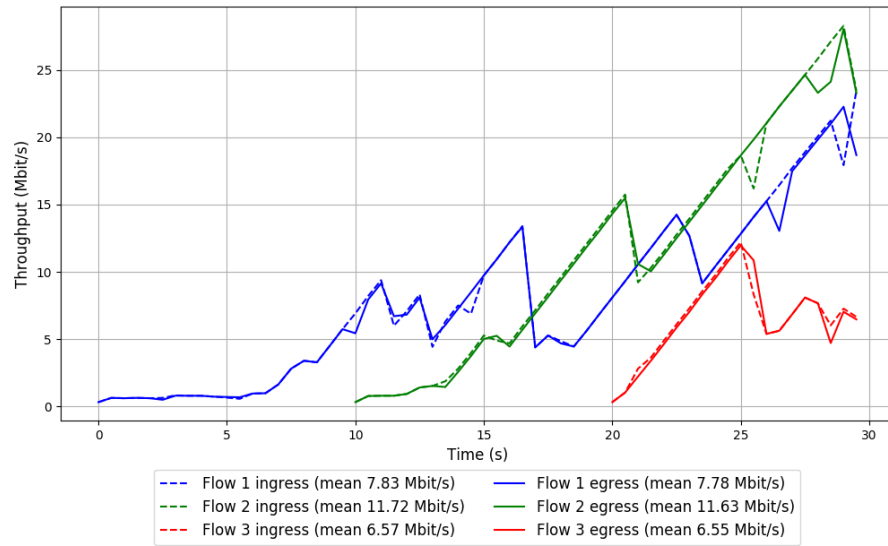


```
Run 2: Statistics of LEDBAT

Start at: 2018-02-14 06:05:36
End at: 2018-02-14 06:06:06

# Below is generated by plot.py at 2018-02-14 12:09:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.63 Mbit/s
95th percentile per-packet one-way delay: 50.798 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 7.78 Mbit/s
95th percentile per-packet one-way delay: 50.903 ms
Loss rate: 1.09%
-- Flow 2:
Average throughput: 11.63 Mbit/s
95th percentile per-packet one-way delay: 50.566 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 6.55 Mbit/s
95th percentile per-packet one-way delay: 50.740 ms
Loss rate: 1.34%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-14 06:23:52

End at: 2018-02-14 06:24:22

Below is generated by plot.py at 2018-02-14 12:09:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 23.99 Mbit/s

95th percentile per-packet one-way delay: 51.404 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 9.32 Mbit/s

95th percentile per-packet one-way delay: 51.117 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 18.32 Mbit/s

95th percentile per-packet one-way delay: 51.578 ms

Loss rate: 0.65%

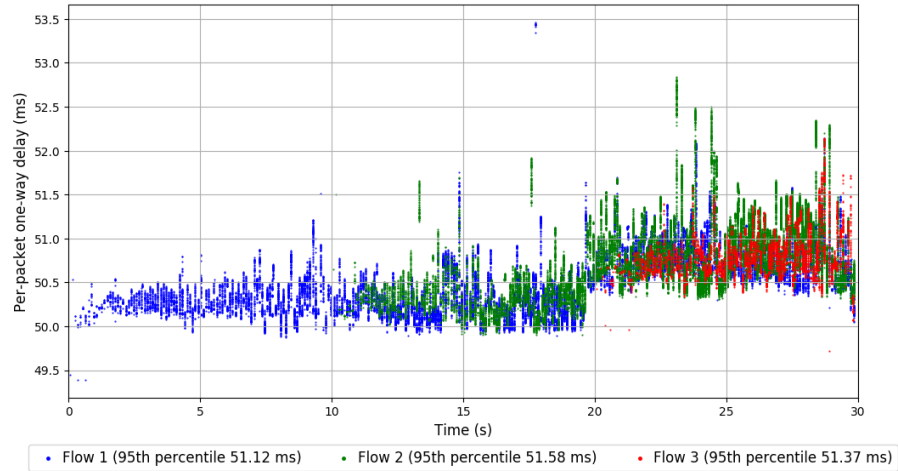
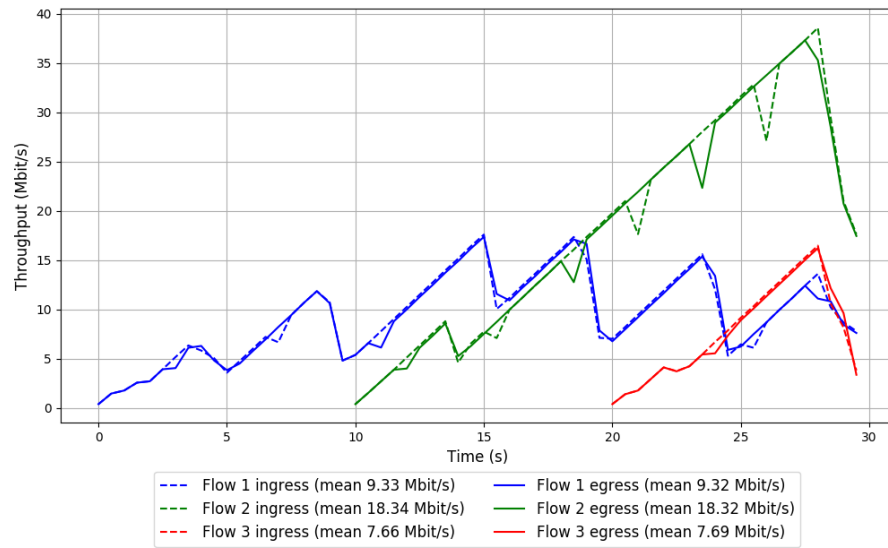
-- Flow 3:

Average throughput: 7.69 Mbit/s

95th percentile per-packet one-way delay: 51.366 ms

Loss rate: 0.58%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-14 06:42:09

End at: 2018-02-14 06:42:39

Below is generated by plot.py at 2018-02-14 12:09:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 23.09 Mbit/s

95th percentile per-packet one-way delay: 51.521 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 11.14 Mbit/s

95th percentile per-packet one-way delay: 51.598 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 12.48 Mbit/s

95th percentile per-packet one-way delay: 51.306 ms

Loss rate: 0.89%

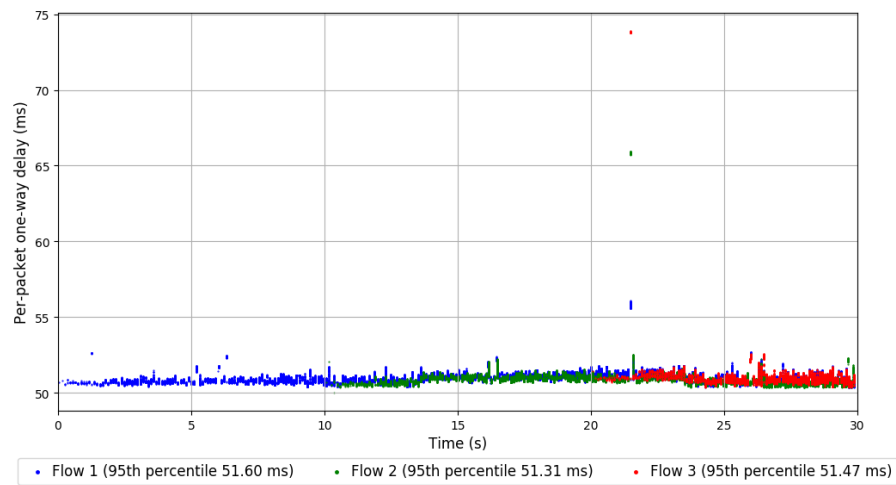
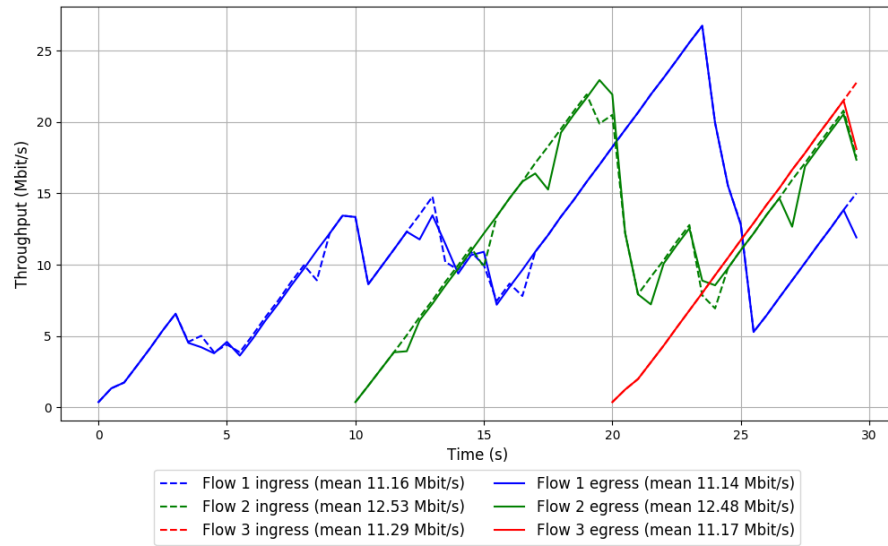
-- Flow 3:

Average throughput: 11.17 Mbit/s

95th percentile per-packet one-way delay: 51.474 ms

Loss rate: 2.08%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-14 07:00:22

End at: 2018-02-14 07:00:52

Below is generated by plot.py at 2018-02-14 12:09:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.20 Mbit/s

95th percentile per-packet one-way delay: 51.360 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 8.06 Mbit/s

95th percentile per-packet one-way delay: 51.413 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 9.80 Mbit/s

95th percentile per-packet one-way delay: 51.338 ms

Loss rate: 1.77%

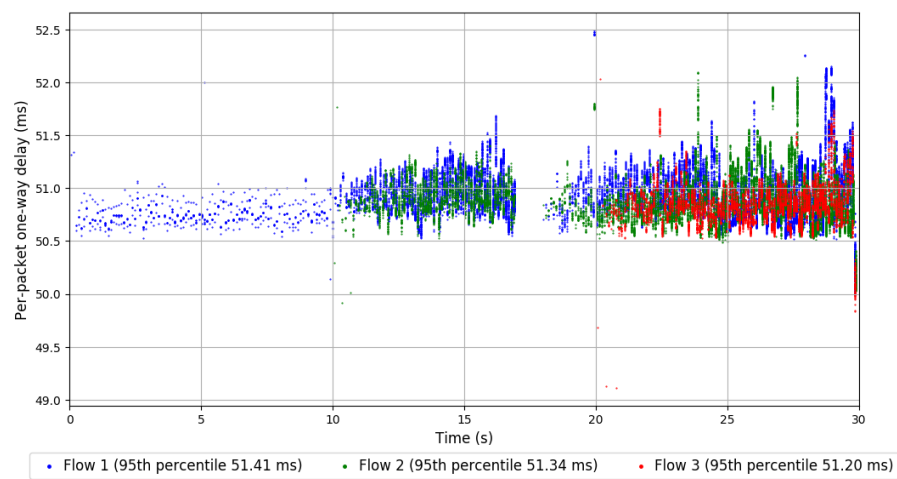
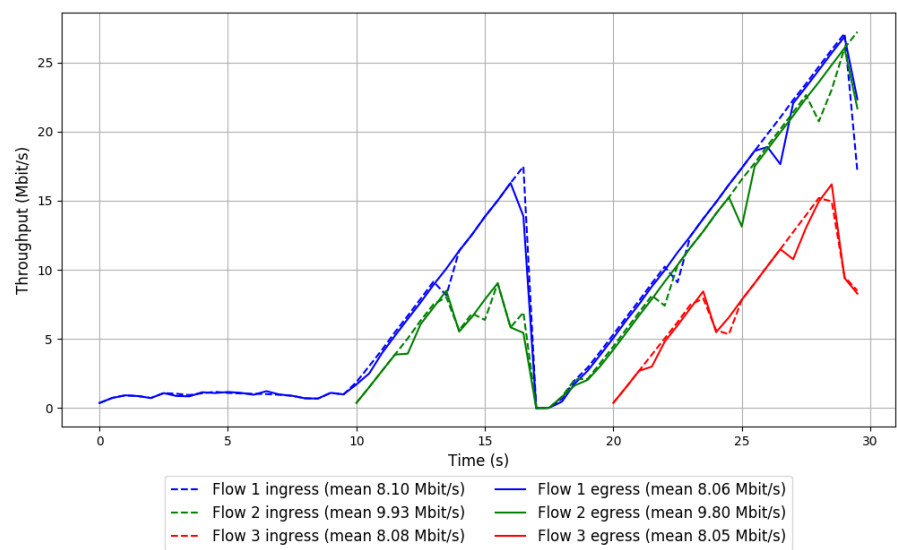
-- Flow 3:

Average throughput: 8.05 Mbit/s

95th percentile per-packet one-way delay: 51.204 ms

Loss rate: 1.38%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-14 07:18:52

End at: 2018-02-14 07:19:22

Below is generated by plot.py at 2018-02-14 12:09:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 25.16 Mbit/s

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

Loss rate: 0.42%

-- Flow 1:

Average throughput: 22.90 Mbit/s

95th percentile per-packet one-way delay: 51.416 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 50.540 ms

Loss rate: 0.44%

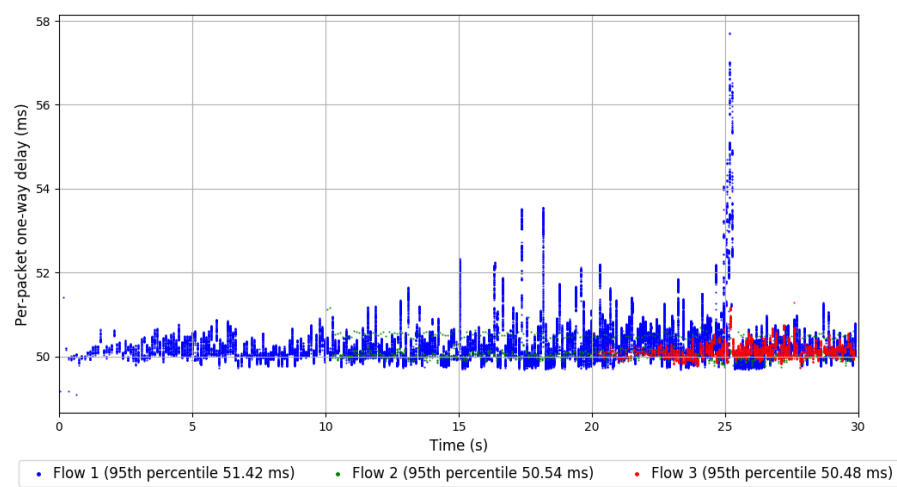
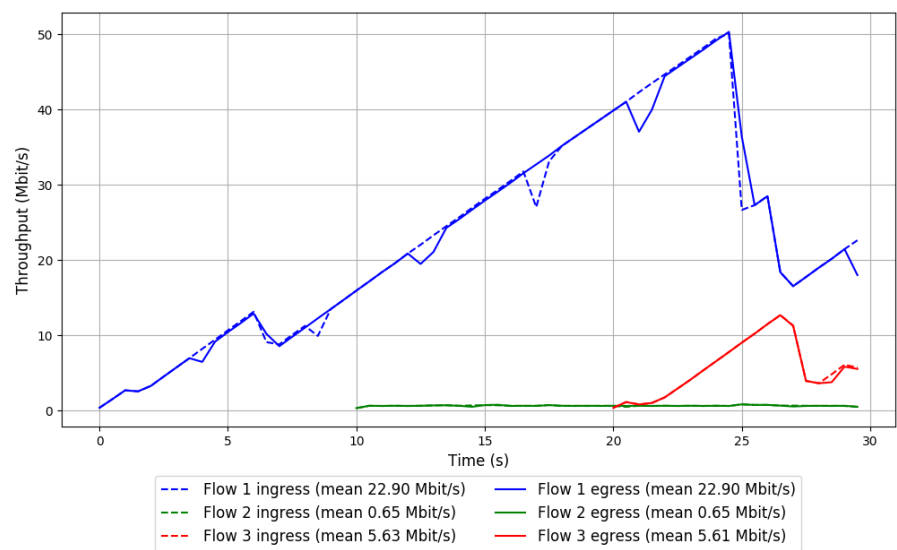
-- Flow 3:

Average throughput: 5.61 Mbit/s

95th percentile per-packet one-way delay: 50.478 ms

Loss rate: 1.40%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-02-14 07:37:16

End at: 2018-02-14 07:37:46

Below is generated by plot.py at 2018-02-14 12:09:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 27.12 Mbit/s

95th percentile per-packet one-way delay: 51.438 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 13.55 Mbit/s

95th percentile per-packet one-way delay: 51.487 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 17.36 Mbit/s

95th percentile per-packet one-way delay: 51.296 ms

Loss rate: 1.05%

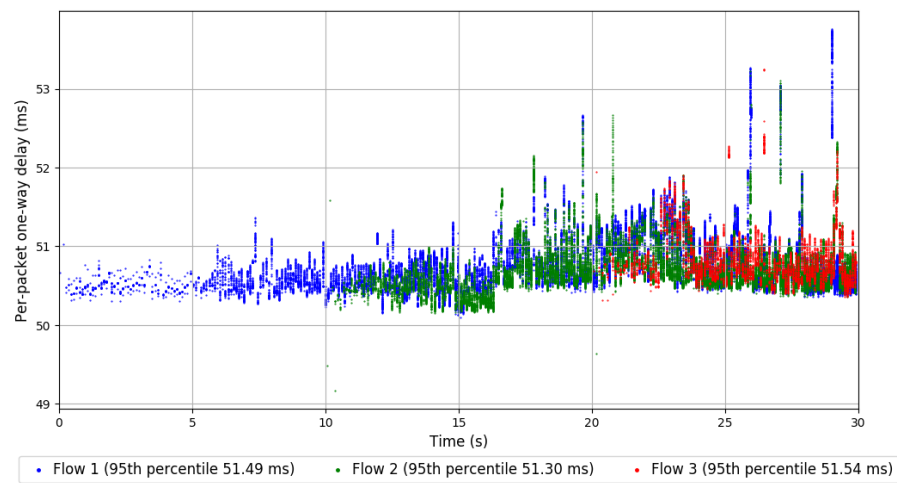
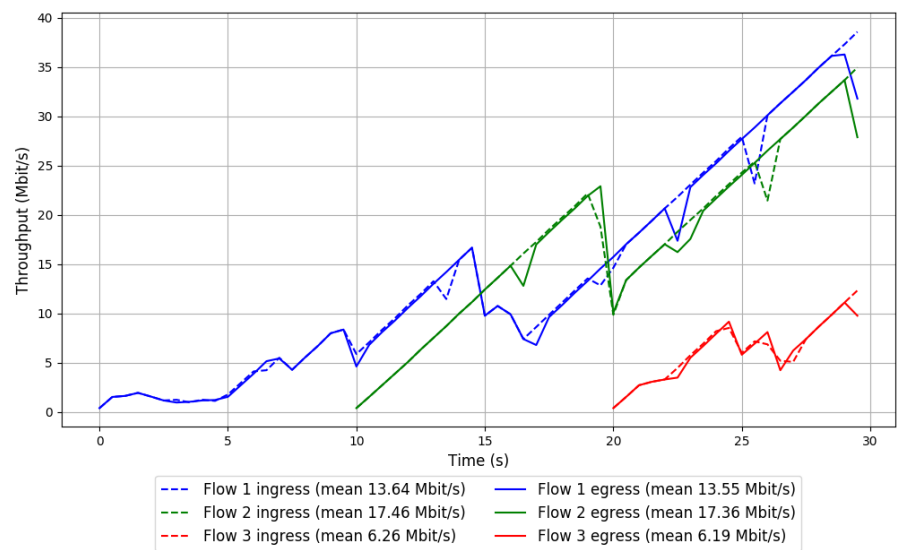
-- Flow 3:

Average throughput: 6.19 Mbit/s

95th percentile per-packet one-way delay: 51.544 ms

Loss rate: 2.13%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-14 07:55:37

End at: 2018-02-14 07:56:07

Below is generated by plot.py at 2018-02-14 12:09:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.47 Mbit/s

95th percentile per-packet one-way delay: 51.007 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 9.05 Mbit/s

95th percentile per-packet one-way delay: 50.996 ms

Loss rate: 1.18%

-- Flow 2:

Average throughput: 11.99 Mbit/s

95th percentile per-packet one-way delay: 51.068 ms

Loss rate: 1.43%

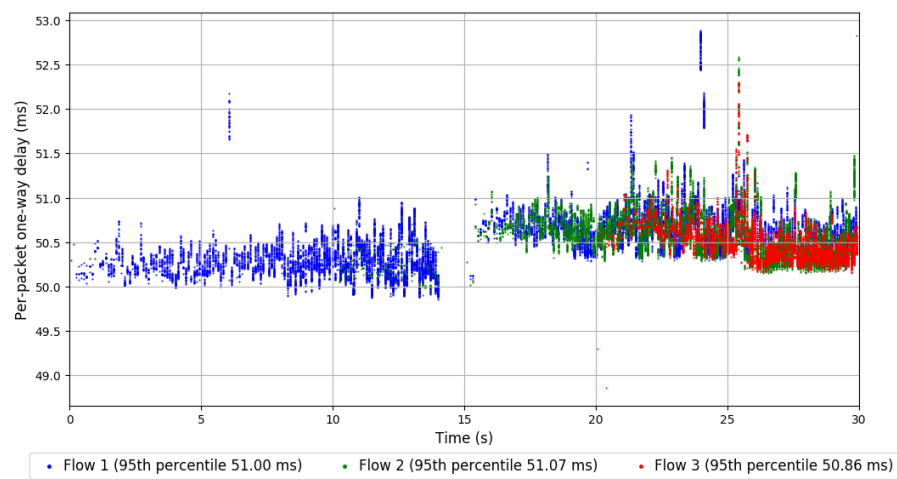
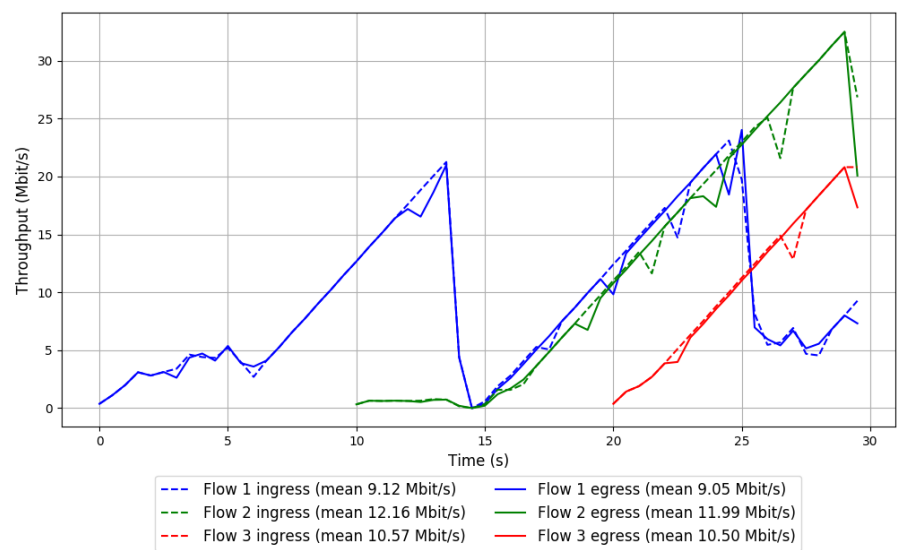
-- Flow 3:

Average throughput: 10.50 Mbit/s

95th percentile per-packet one-way delay: 50.864 ms

Loss rate: 1.65%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-14 08:13:44

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

Below is generated by plot.py at 2018-02-14 12:09:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.60 Mbit/s

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

Loss rate: 0.96%

-- Flow 1:

Average throughput: 11.57 Mbit/s

95th percentile per-packet one-way delay: 51.277 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 23.05 Mbit/s

95th percentile per-packet one-way delay: 51.136 ms

Loss rate: 1.01%

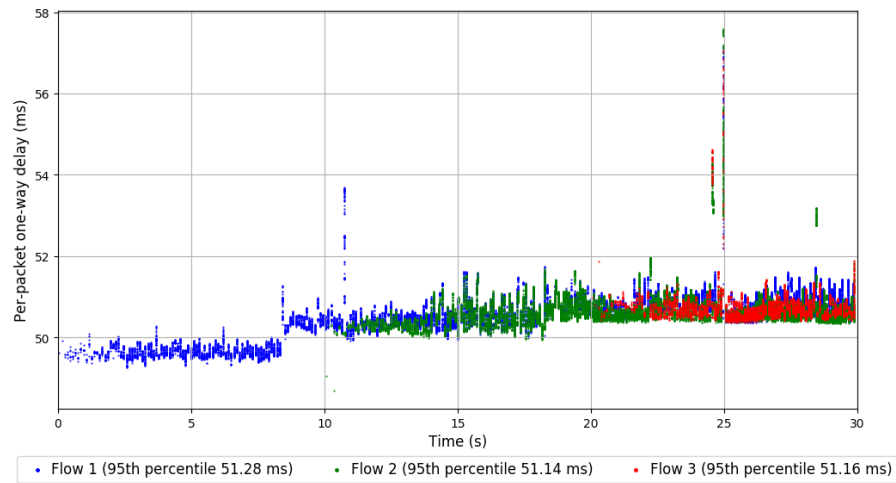
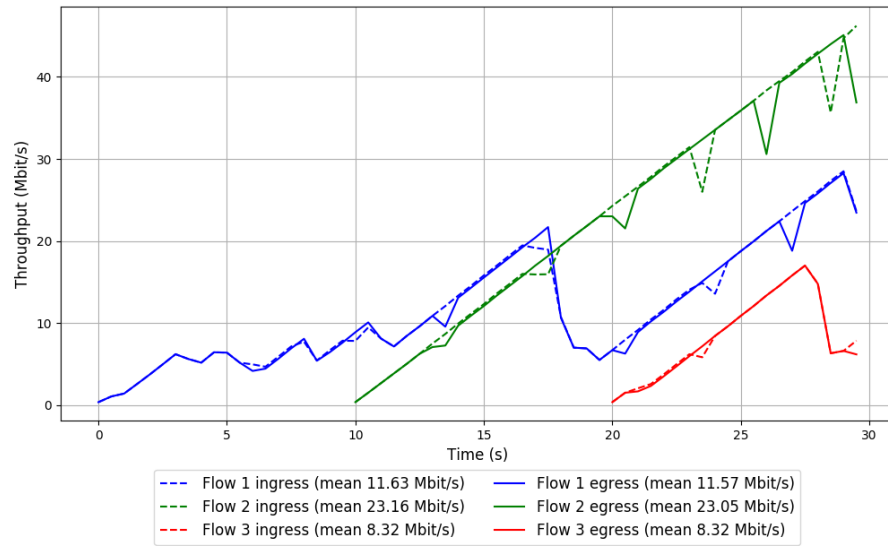
-- Flow 3:

Average throughput: 8.32 Mbit/s

95th percentile per-packet one-way delay: 51.156 ms

Loss rate: 1.03%

Run 9: Report of LEDBAT — Data Link

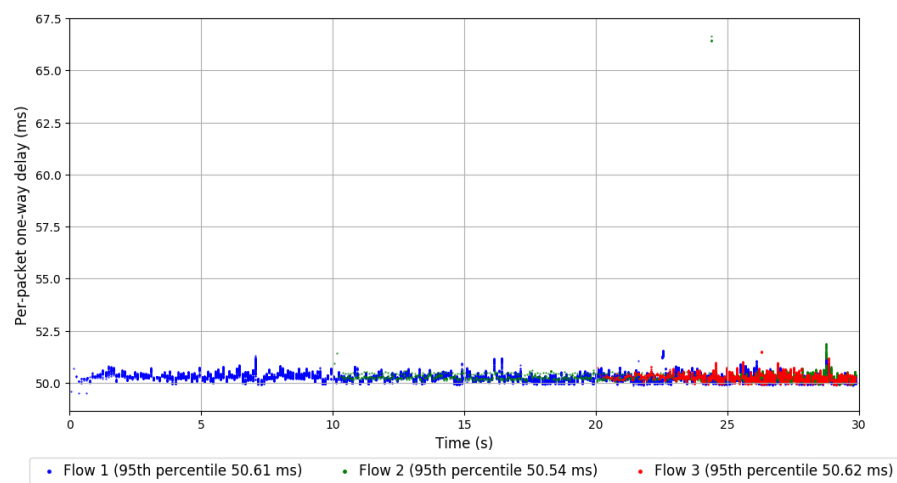
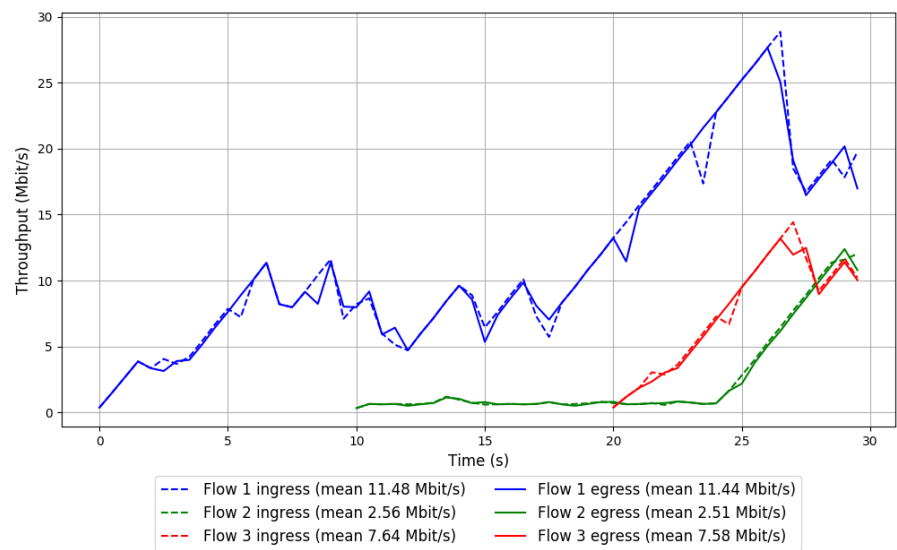


```
Run 10: Statistics of LEDBAT

Start at: 2018-02-14 08:31:50
End at: 2018-02-14 08:32:20

# Below is generated by plot.py at 2018-02-14 12:09:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.59 Mbit/s
95th percentile per-packet one-way delay: 50.606 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 11.44 Mbit/s
95th percentile per-packet one-way delay: 50.610 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 2.51 Mbit/s
95th percentile per-packet one-way delay: 50.538 ms
Loss rate: 2.76%
-- Flow 3:
Average throughput: 7.58 Mbit/s
95th percentile per-packet one-way delay: 50.625 ms
Loss rate: 1.74%
```

Run 10: Report of LEDBAT — Data Link

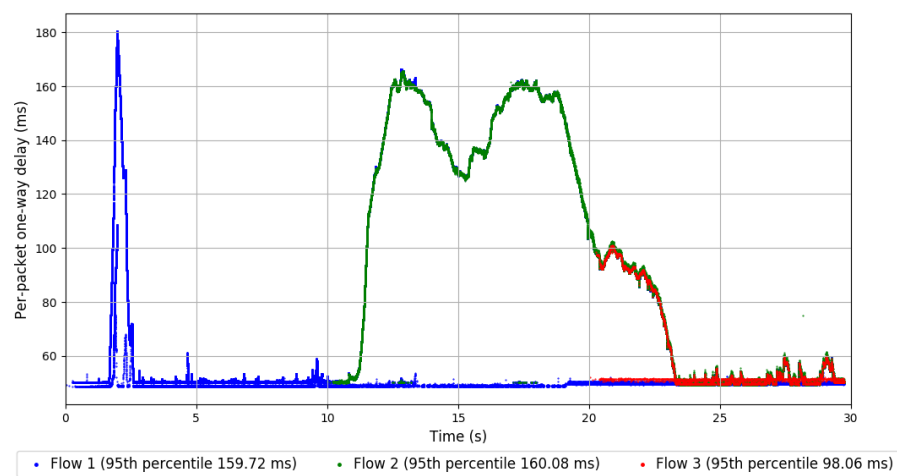
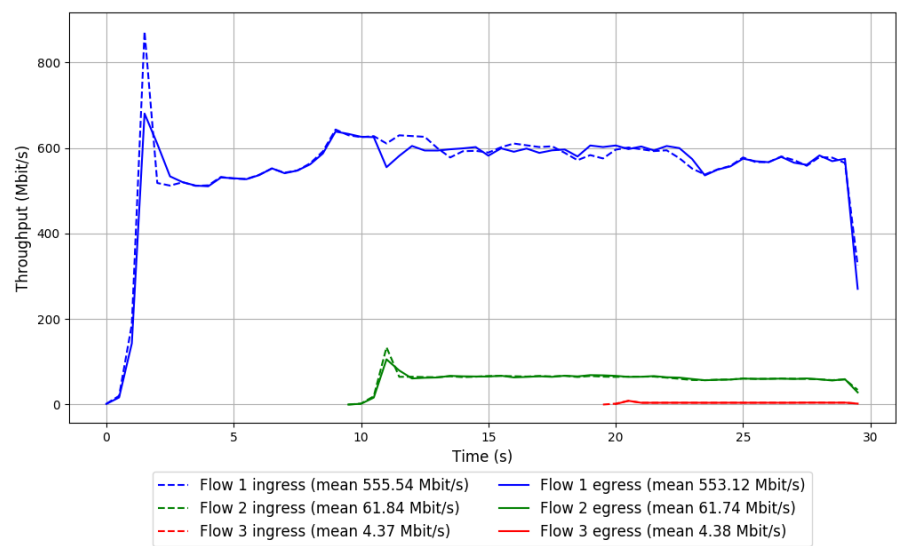


```
Run 1: Statistics of PCC

Start at: 2018-02-14 05:43:23
End at: 2018-02-14 05:43:53

# Below is generated by plot.py at 2018-02-14 12:16:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 595.61 Mbit/s
95th percentile per-packet one-way delay: 159.759 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 553.12 Mbit/s
95th percentile per-packet one-way delay: 159.724 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 61.74 Mbit/s
95th percentile per-packet one-way delay: 160.081 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 4.38 Mbit/s
95th percentile per-packet one-way delay: 98.063 ms
Loss rate: 1.03%
```

Run 1: Report of PCC — Data Link

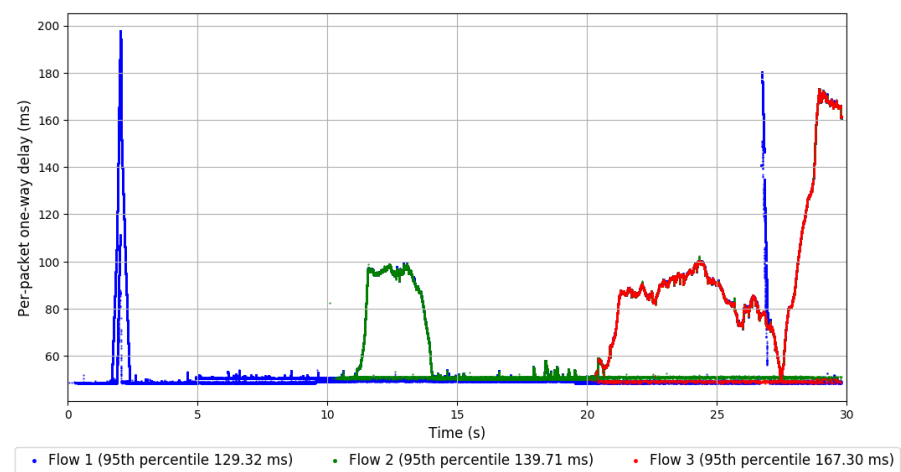
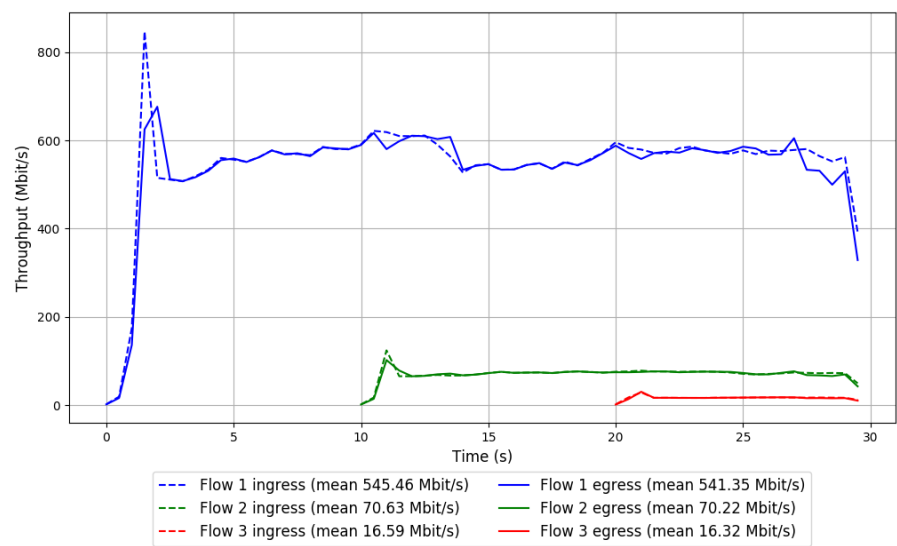


```
Run 2: Statistics of PCC

Start at: 2018-02-14 06:01:47
End at: 2018-02-14 06:02:17

# Below is generated by plot.py at 2018-02-14 12:16:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 593.19 Mbit/s
95th percentile per-packet one-way delay: 130.176 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 541.35 Mbit/s
95th percentile per-packet one-way delay: 129.323 ms
Loss rate: 1.09%
-- Flow 2:
Average throughput: 70.22 Mbit/s
95th percentile per-packet one-way delay: 139.711 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 16.32 Mbit/s
95th percentile per-packet one-way delay: 167.303 ms
Loss rate: 2.62%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-14 06:20:03

End at: 2018-02-14 06:20:33

Below is generated by plot.py at 2018-02-14 12:16:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 607.51 Mbit/s

95th percentile per-packet one-way delay: 166.772 ms

Loss rate: 4.82%

-- Flow 1:

Average throughput: 546.36 Mbit/s

95th percentile per-packet one-way delay: 167.461 ms

Loss rate: 4.75%

-- Flow 2:

Average throughput: 90.99 Mbit/s

95th percentile per-packet one-way delay: 163.147 ms

Loss rate: 5.41%

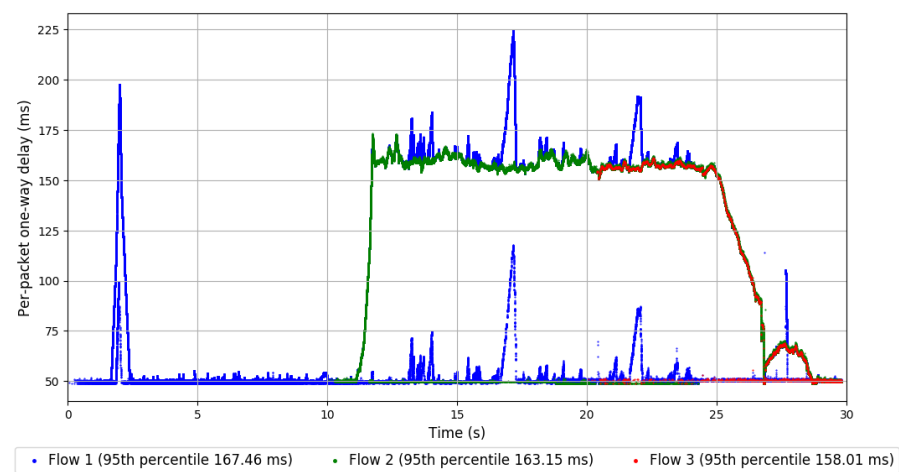
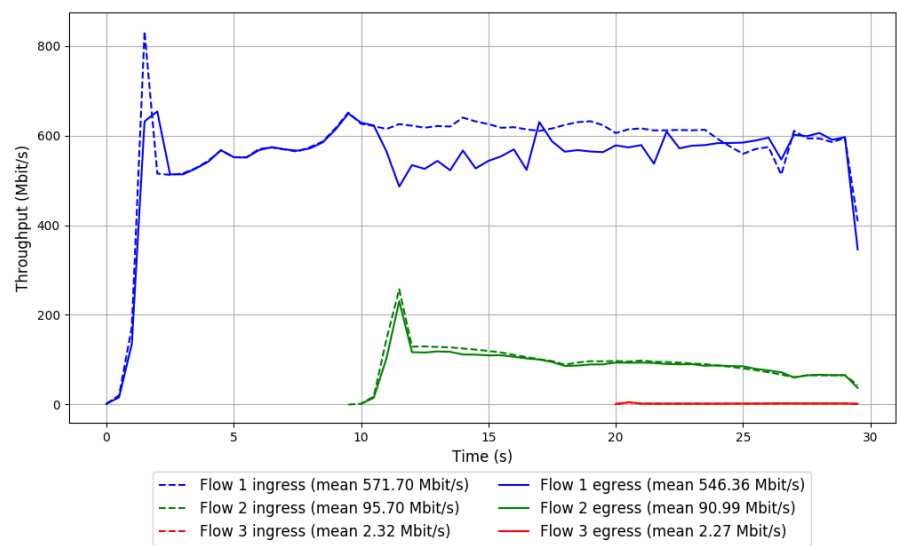
-- Flow 3:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 158.013 ms

Loss rate: 2.93%

Run 3: Report of PCC — Data Link

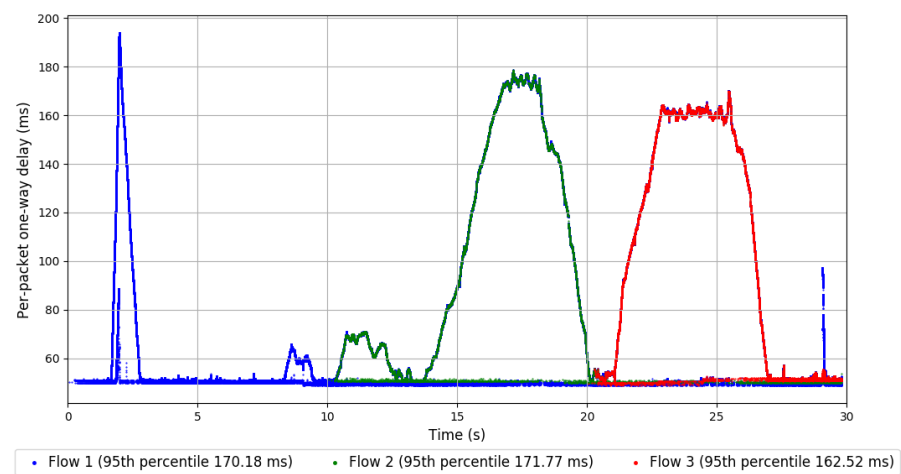
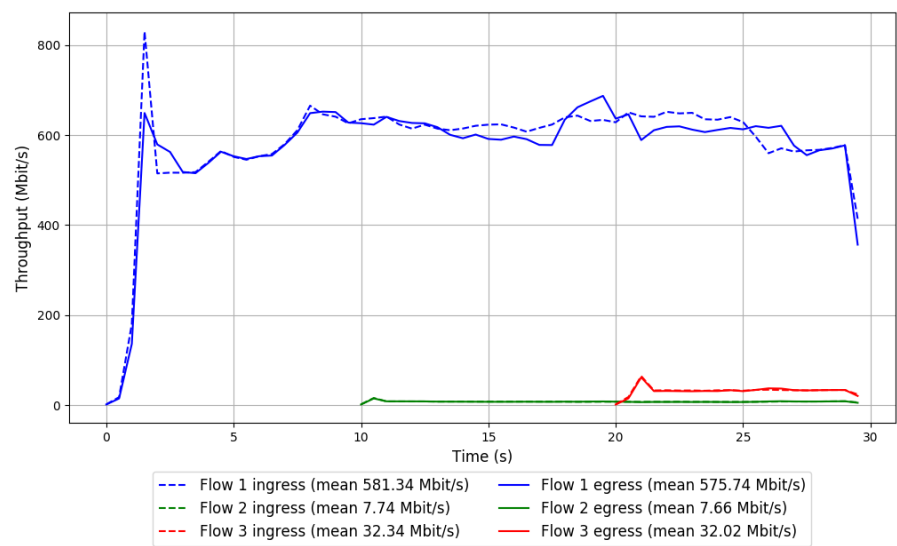


```
Run 4: Statistics of PCC

Start at: 2018-02-14 06:38:18
End at: 2018-02-14 06:38:48

# Below is generated by plot.py at 2018-02-14 12:16:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 591.23 Mbit/s
95th percentile per-packet one-way delay: 170.054 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 575.74 Mbit/s
95th percentile per-packet one-way delay: 170.181 ms
Loss rate: 1.30%
-- Flow 2:
Average throughput: 7.66 Mbit/s
95th percentile per-packet one-way delay: 171.771 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 32.02 Mbit/s
95th percentile per-packet one-way delay: 162.524 ms
Loss rate: 2.00%
```

Run 4: Report of PCC — Data Link

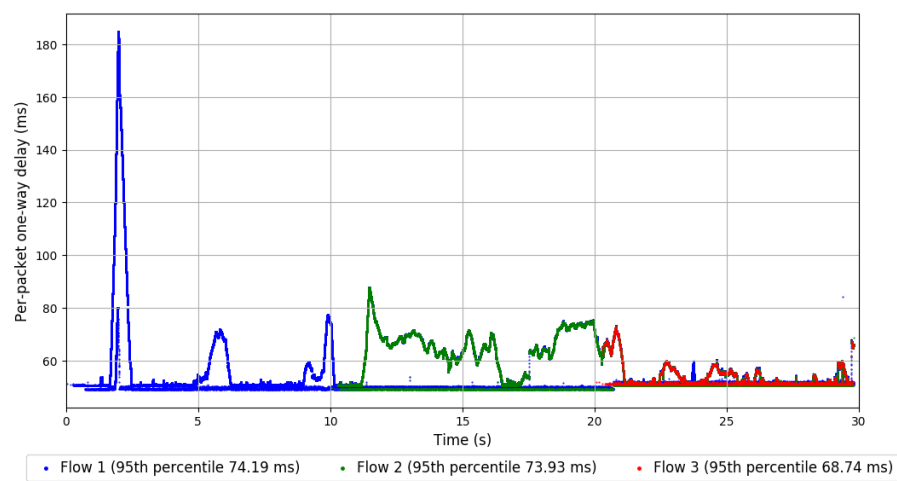
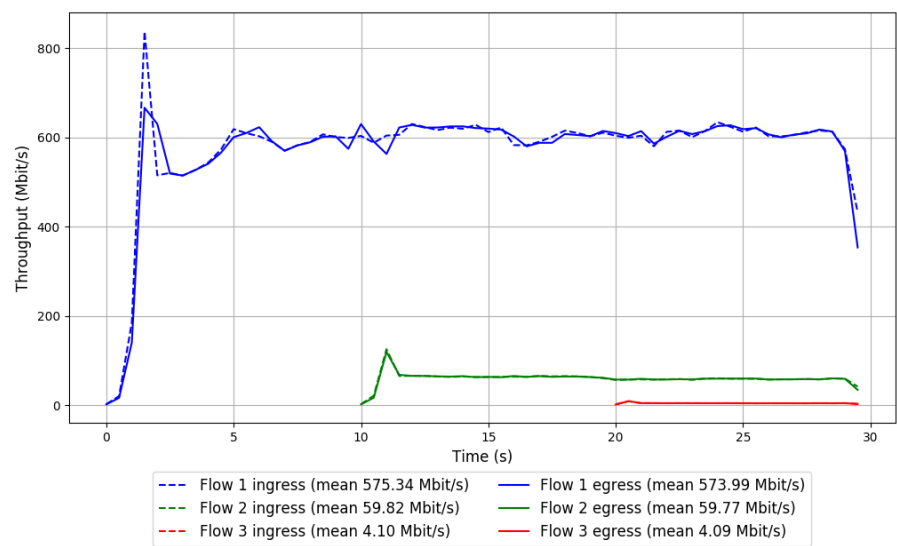


```
Run 5: Statistics of PCC

Start at: 2018-02-14 06:56:31
End at: 2018-02-14 06:57:01

# Below is generated by plot.py at 2018-02-14 12:17:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 614.94 Mbit/s
95th percentile per-packet one-way delay: 74.157 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 573.99 Mbit/s
95th percentile per-packet one-way delay: 74.188 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 59.77 Mbit/s
95th percentile per-packet one-way delay: 73.928 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 68.741 ms
Loss rate: 1.13%
```

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-14 07:14:51

End at: 2018-02-14 07:15:21

Below is generated by plot.py at 2018-02-14 12:17:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 607.29 Mbit/s

95th percentile per-packet one-way delay: 163.088 ms

Loss rate: 2.81%

-- Flow 1:

Average throughput: 525.07 Mbit/s

95th percentile per-packet one-way delay: 163.194 ms

Loss rate: 2.75%

-- Flow 2:

Average throughput: 122.88 Mbit/s

95th percentile per-packet one-way delay: 162.629 ms

Loss rate: 3.19%

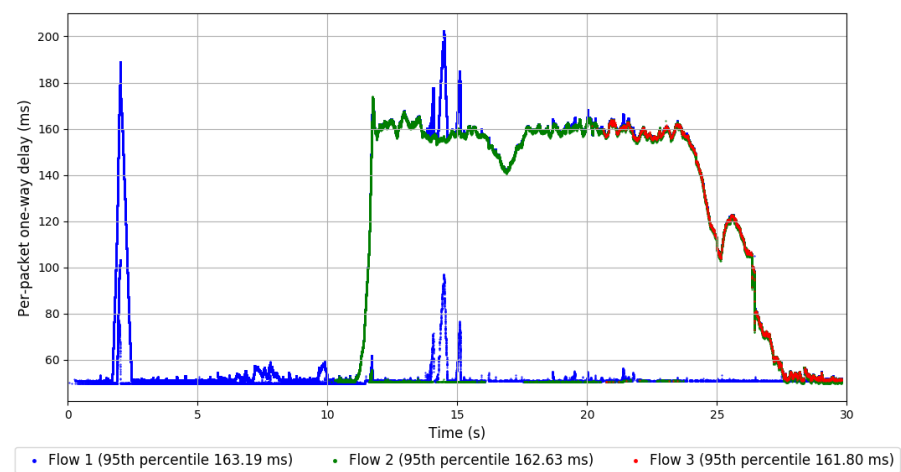
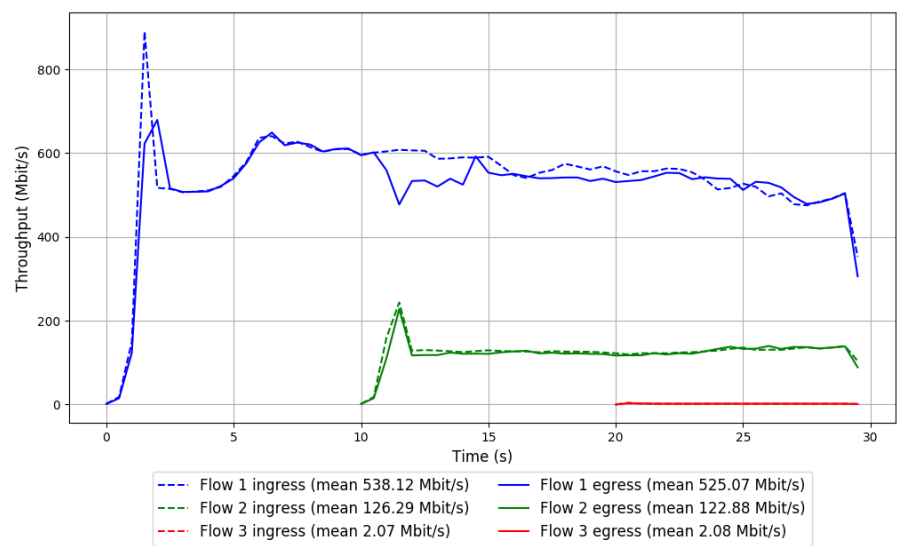
-- Flow 3:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 161.803 ms

Loss rate: 1.79%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-02-14 07:33:19

End at: 2018-02-14 07:33:49

Below is generated by plot.py at 2018-02-14 12:17:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 571.98 Mbit/s

95th percentile per-packet one-way delay: 109.385 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 530.18 Mbit/s

95th percentile per-packet one-way delay: 109.488 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 58.87 Mbit/s

95th percentile per-packet one-way delay: 108.802 ms

Loss rate: 0.71%

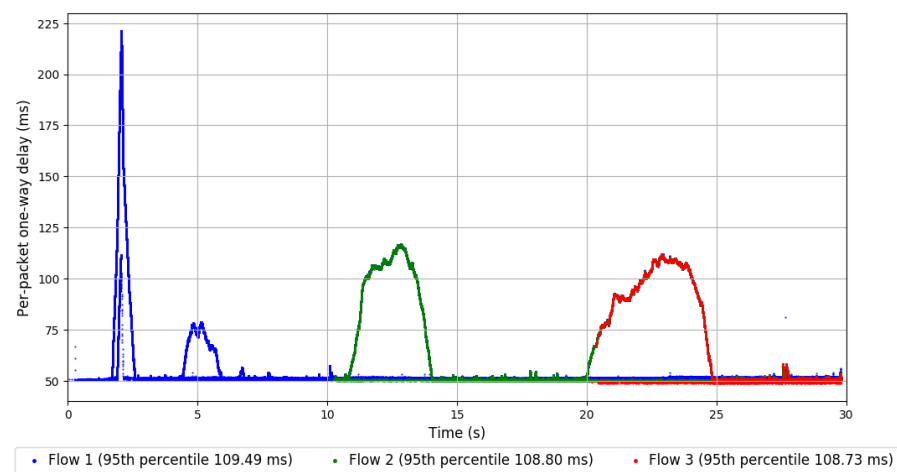
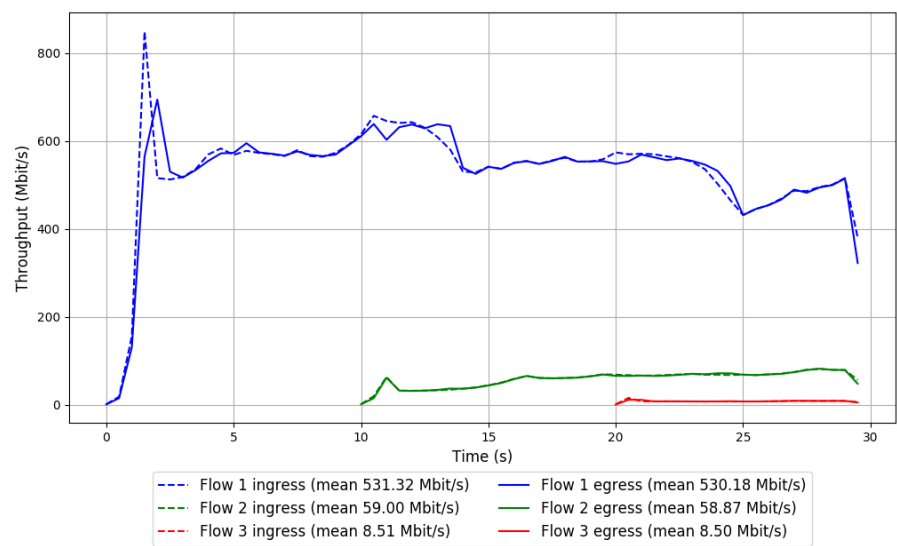
-- Flow 3:

Average throughput: 8.50 Mbit/s

95th percentile per-packet one-way delay: 108.732 ms

Loss rate: 1.12%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-14 07:51:47

End at: 2018-02-14 07:52:17

Below is generated by plot.py at 2018-02-14 12:19:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 610.12 Mbit/s

95th percentile per-packet one-way delay: 160.559 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 567.88 Mbit/s

95th percentile per-packet one-way delay: 160.459 ms

Loss rate: 1.50%

-- Flow 2:

Average throughput: 32.96 Mbit/s

95th percentile per-packet one-way delay: 160.850 ms

Loss rate: 1.70%

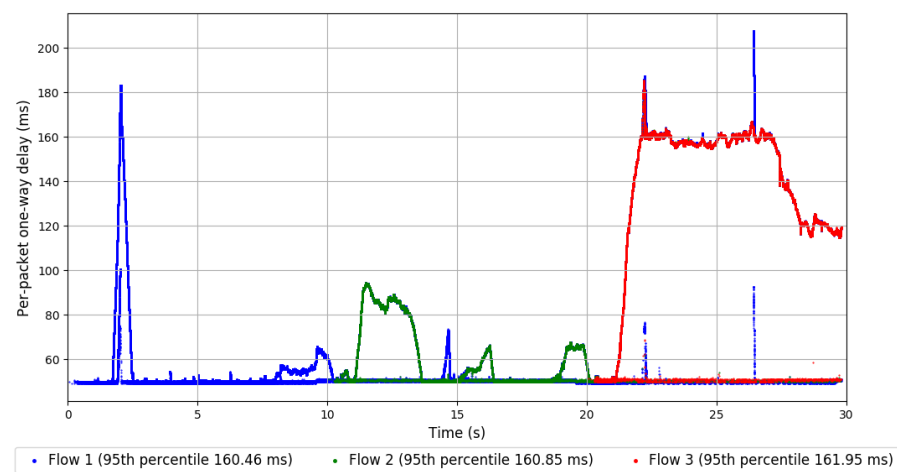
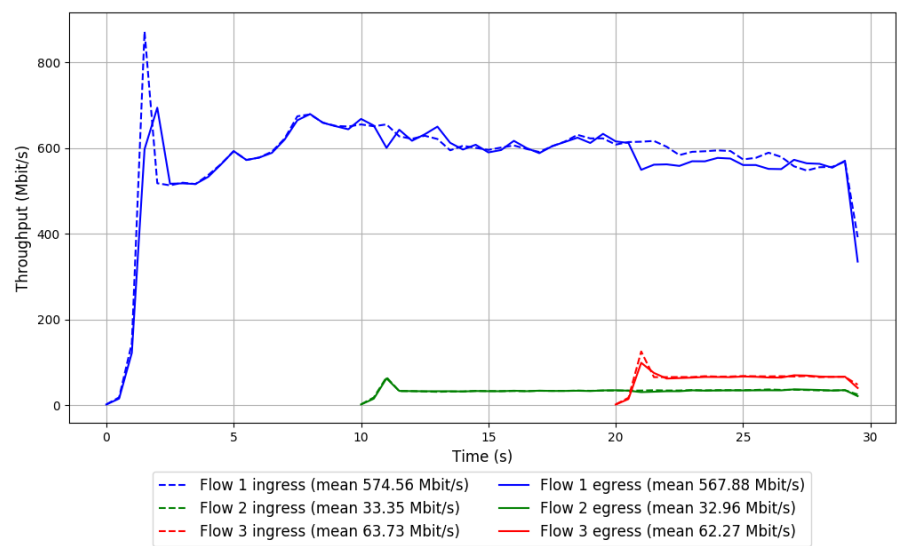
-- Flow 3:

Average throughput: 62.27 Mbit/s

95th percentile per-packet one-way delay: 161.949 ms

Loss rate: 3.33%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-14 08:09:56

End at: 2018-02-14 08:10:26

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 601.82 Mbit/s

95th percentile per-packet one-way delay: 159.196 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 556.25 Mbit/s

95th percentile per-packet one-way delay: 159.061 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 66.72 Mbit/s

95th percentile per-packet one-way delay: 161.508 ms

Loss rate: 0.70%

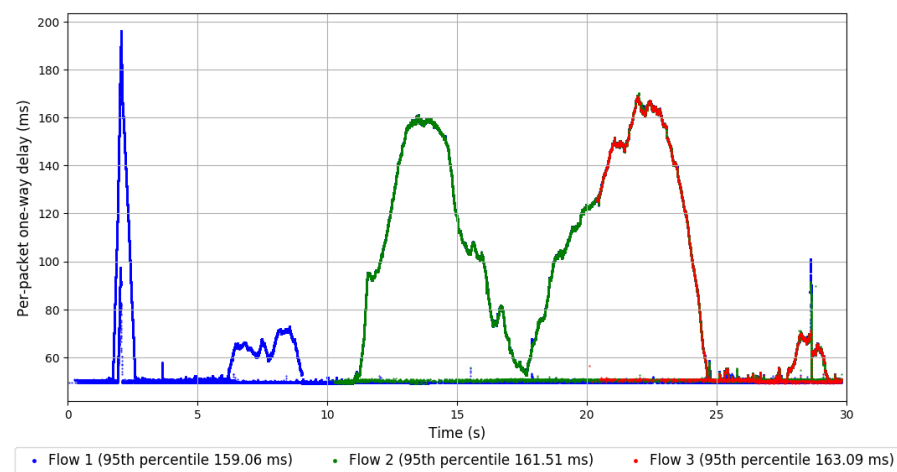
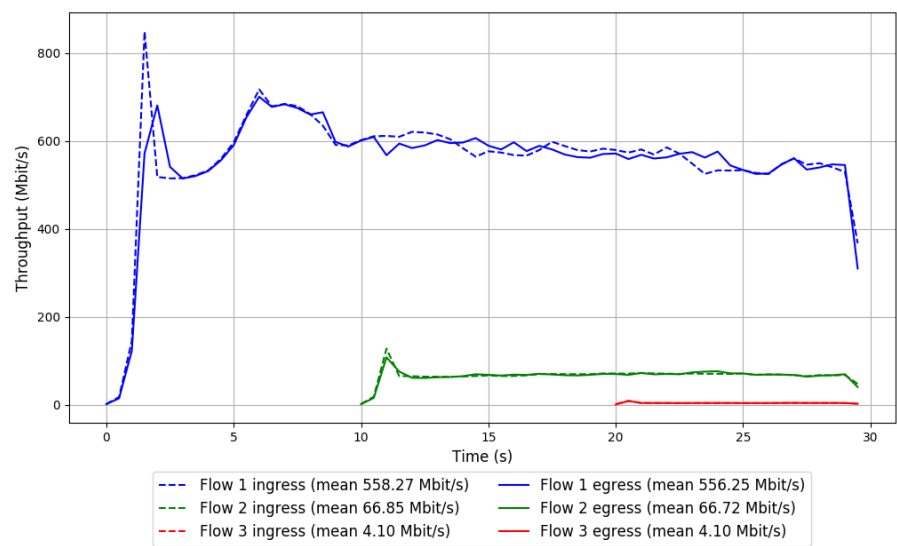
-- Flow 3:

Average throughput: 4.10 Mbit/s

95th percentile per-packet one-way delay: 163.086 ms

Loss rate: 1.13%

Run 9: Report of PCC — Data Link

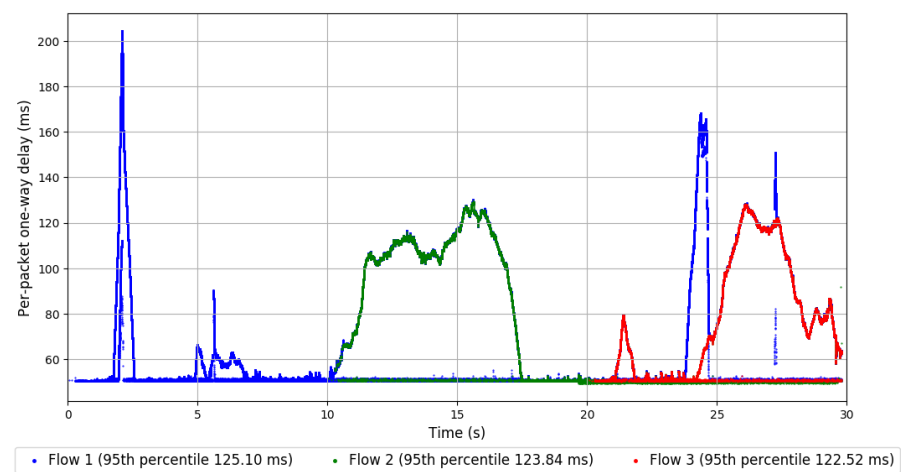
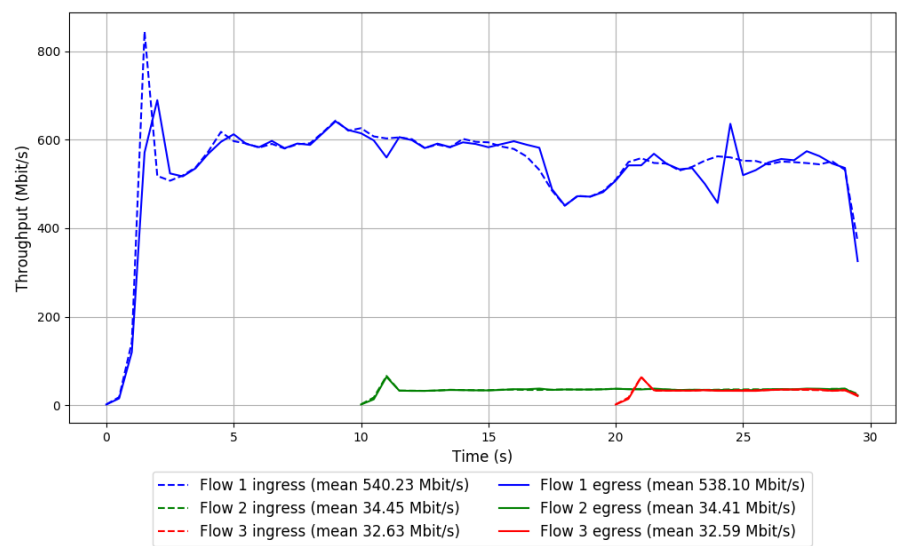


```
Run 10: Statistics of PCC

Start at: 2018-02-14 08:27:57
End at: 2018-02-14 08:28:27

# Below is generated by plot.py at 2018-02-14 12:25:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 571.51 Mbit/s
95th percentile per-packet one-way delay: 124.989 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 538.10 Mbit/s
95th percentile per-packet one-way delay: 125.102 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 34.41 Mbit/s
95th percentile per-packet one-way delay: 123.837 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 32.59 Mbit/s
95th percentile per-packet one-way delay: 122.517 ms
Loss rate: 1.16%
```

Run 10: Report of PCC — Data Link

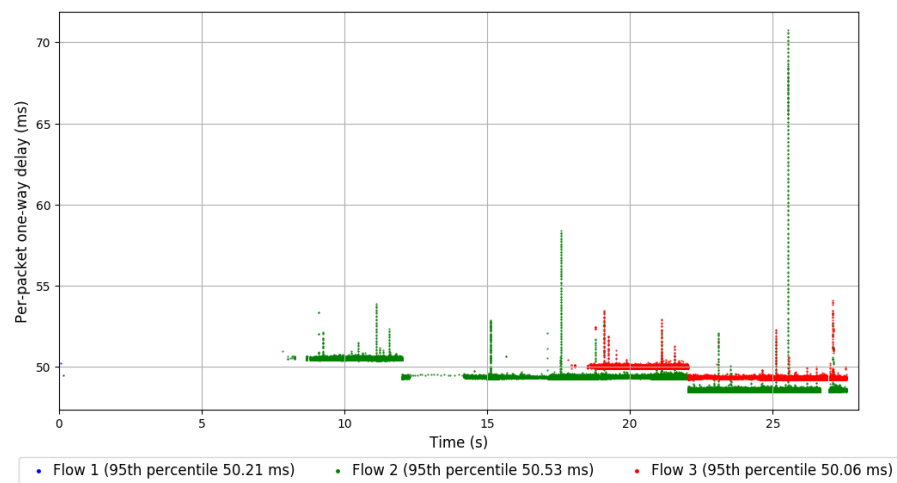
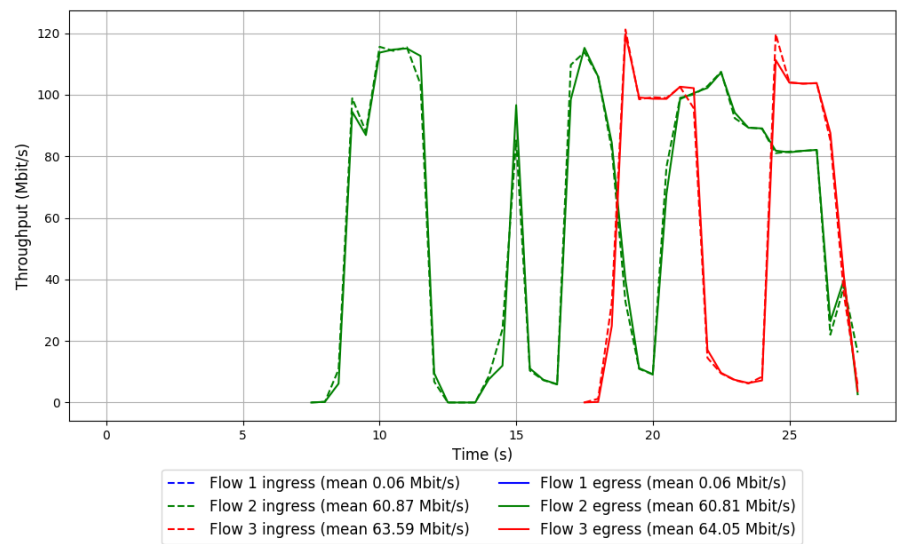


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-14 05:44:22
End at: 2018-02-14 05:44:52

# Below is generated by plot.py at 2018-02-14 12:25:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.29 Mbit/s
95th percentile per-packet one-way delay: 50.505 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 50.211 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 60.81 Mbit/s
95th percentile per-packet one-way delay: 50.531 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 64.05 Mbit/s
95th percentile per-packet one-way delay: 50.058 ms
Loss rate: 0.34%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-14 06:02:47

End at: 2018-02-14 06:03:17

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.06 Mbit/s

95th percentile per-packet one-way delay: 50.339 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 69.18 Mbit/s

95th percentile per-packet one-way delay: 50.032 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 55.16 Mbit/s

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

Loss rate: 0.99%

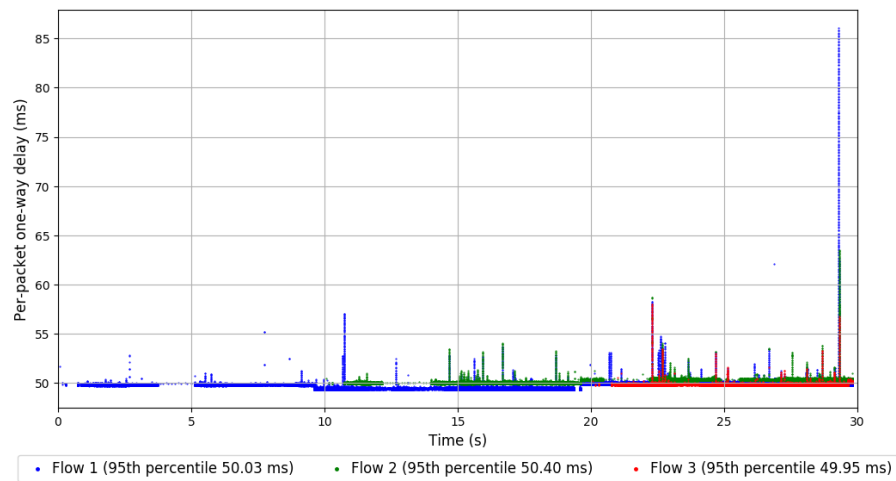
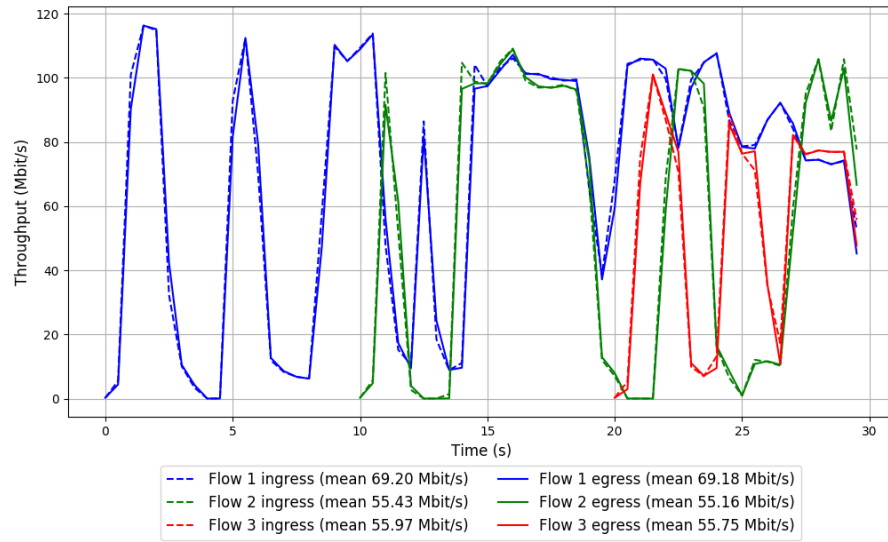
-- Flow 3:

Average throughput: 55.75 Mbit/s

95th percentile per-packet one-way delay: 49.950 ms

Loss rate: 1.42%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-14 06:21:04

End at: 2018-02-14 06:21:34

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.12 Mbit/s

95th percentile per-packet one-way delay: 50.063 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 62.17 Mbit/s

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

Loss rate: 0.42%

-- Flow 2:

Average throughput: 65.31 Mbit/s

95th percentile per-packet one-way delay: 49.777 ms

Loss rate: 0.59%

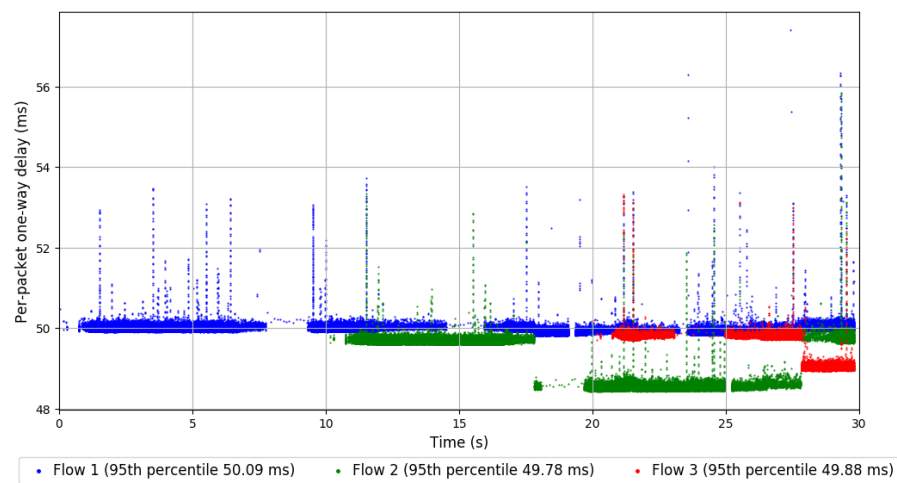
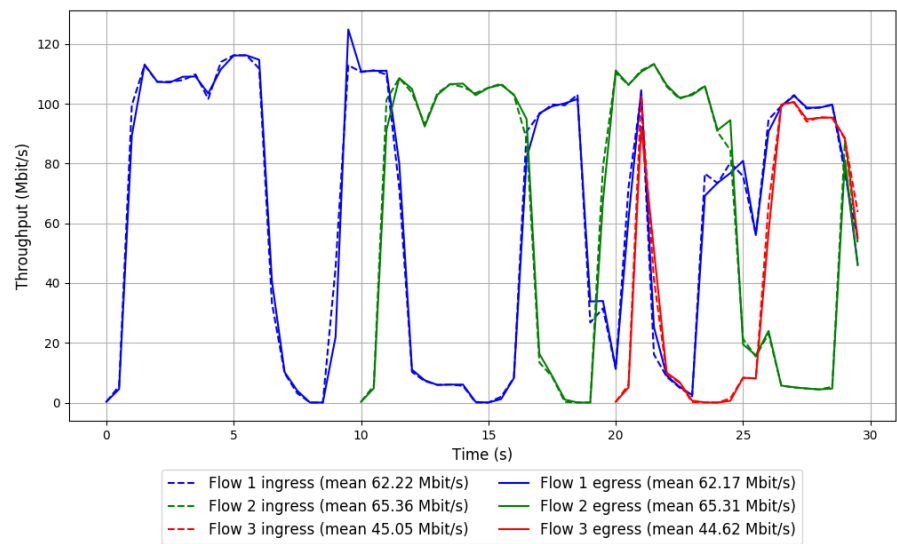
-- Flow 3:

Average throughput: 44.62 Mbit/s

95th percentile per-packet one-way delay: 49.877 ms

Loss rate: 1.98%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-14 06:39:17

End at: 2018-02-14 06:39:47

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.80 Mbit/s

95th percentile per-packet one-way delay: 50.688 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 66.99 Mbit/s

95th percentile per-packet one-way delay: 50.720 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 71.04 Mbit/s

95th percentile per-packet one-way delay: 50.375 ms

Loss rate: 0.72%

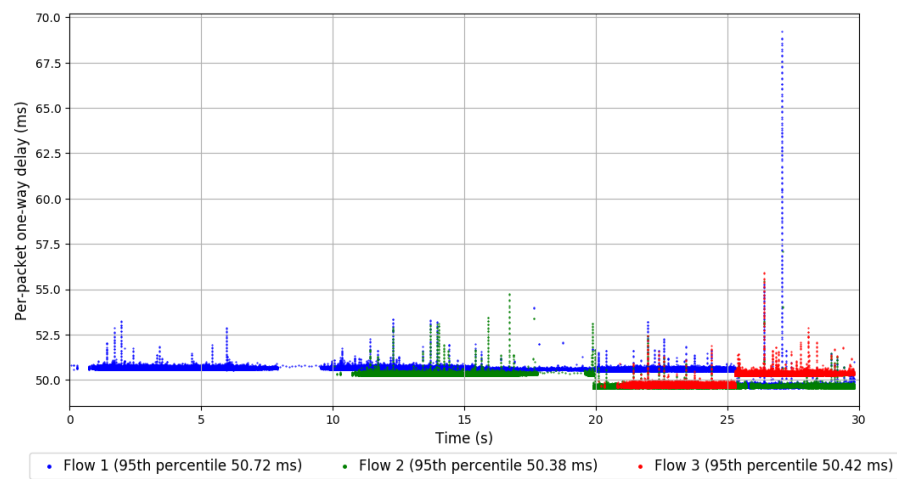
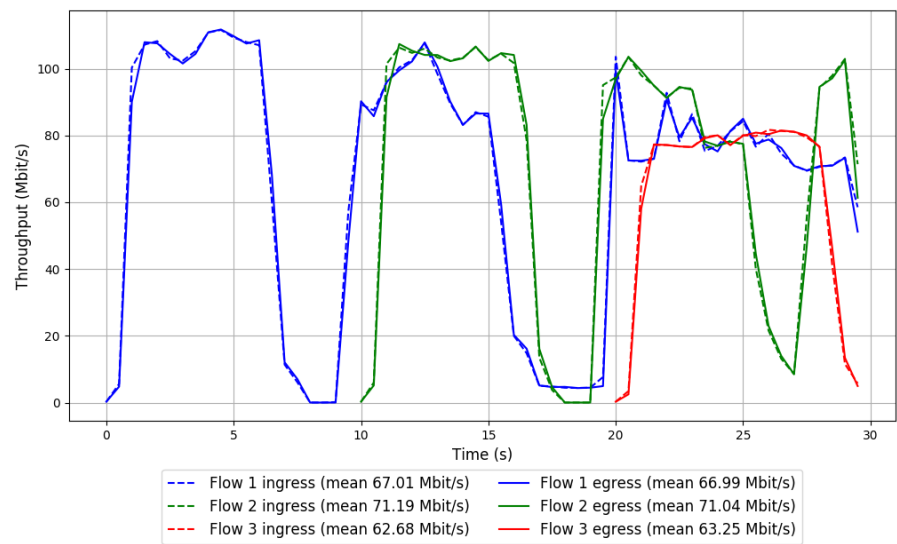
-- Flow 3:

Average throughput: 63.25 Mbit/s

95th percentile per-packet one-way delay: 50.423 ms

Loss rate: 0.13%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-14 06:57:32

End at: 2018-02-14 06:58:02

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.91 Mbit/s

95th percentile per-packet one-way delay: 50.745 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 64.47 Mbit/s

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

Loss rate: 0.45%

-- Flow 2:

Average throughput: 48.53 Mbit/s

95th percentile per-packet one-way delay: 50.681 ms

Loss rate: 0.00%

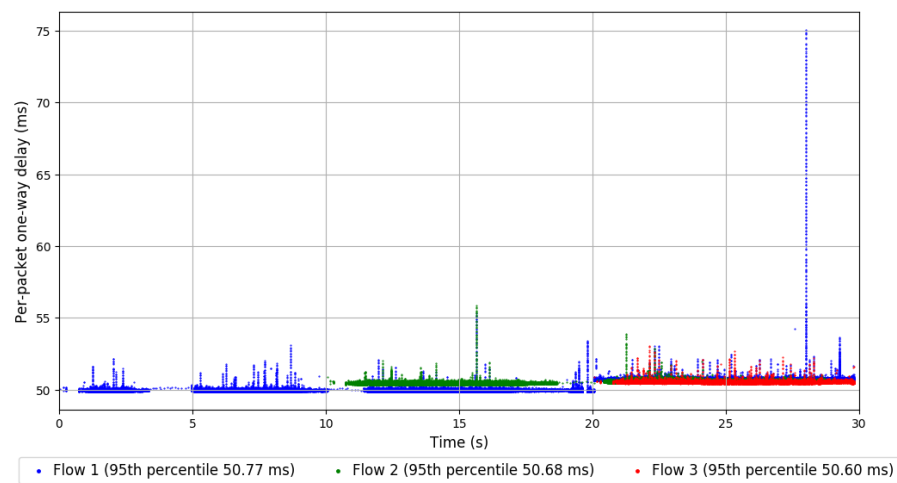
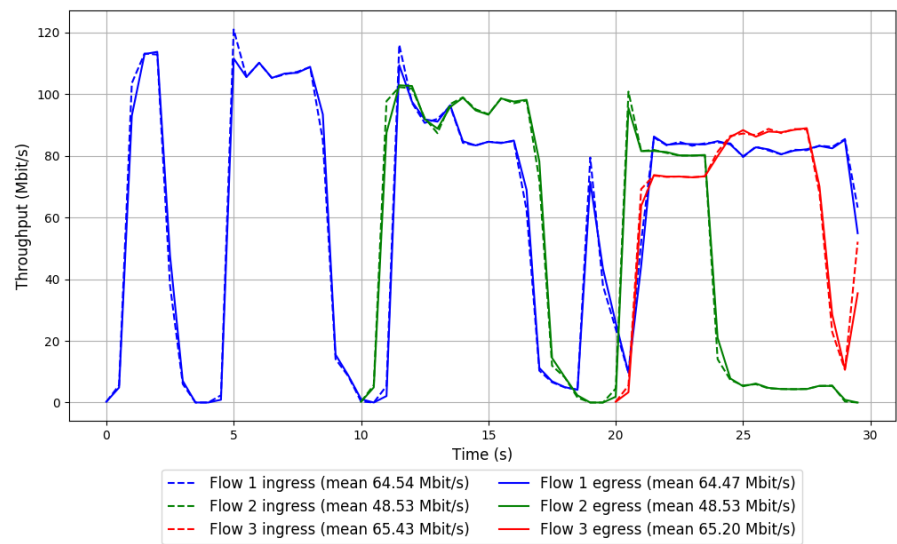
-- Flow 3:

Average throughput: 65.20 Mbit/s

95th percentile per-packet one-way delay: 50.602 ms

Loss rate: 1.37%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-14 07:15:51

End at: 2018-02-14 07:16:21

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.53 Mbit/s

95th percentile per-packet one-way delay: 50.935 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 82.49 Mbit/s

95th percentile per-packet one-way delay: 50.966 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 60.91 Mbit/s

95th percentile per-packet one-way delay: 50.751 ms

Loss rate: 0.12%

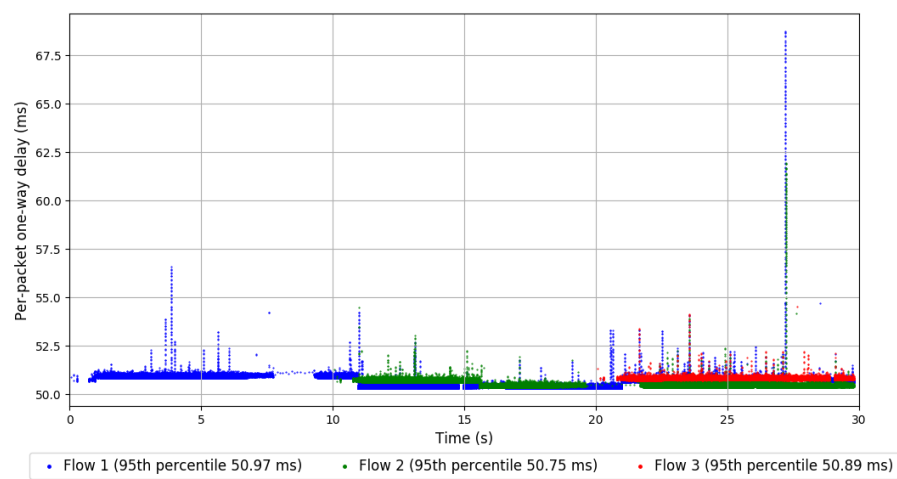
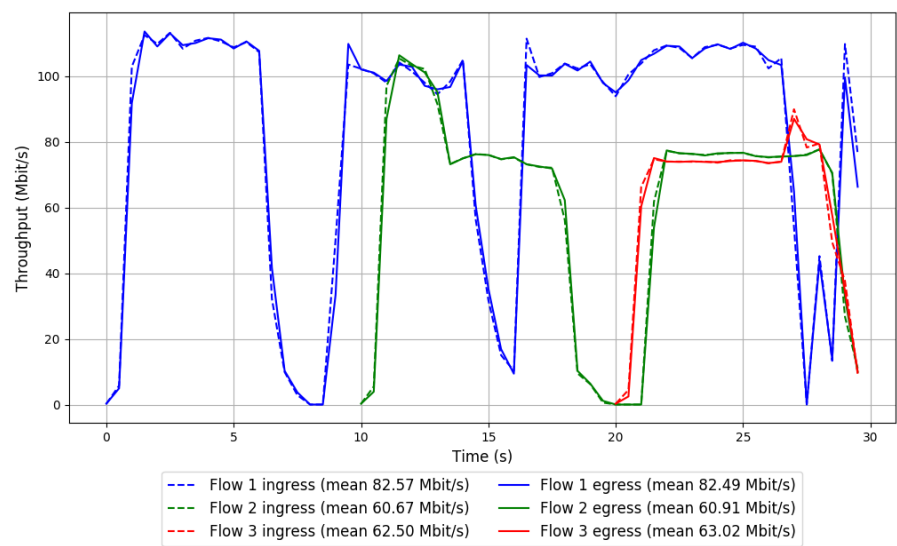
-- Flow 3:

Average throughput: 63.02 Mbit/s

95th percentile per-packet one-way delay: 50.894 ms

Loss rate: 0.20%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-14 07:34:18

End at: 2018-02-14 07:34:48

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.41 Mbit/s

95th percentile per-packet one-way delay: 50.658 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 67.12 Mbit/s

95th percentile per-packet one-way delay: 50.634 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 71.75 Mbit/s

95th percentile per-packet one-way delay: 50.686 ms

Loss rate: 0.74%

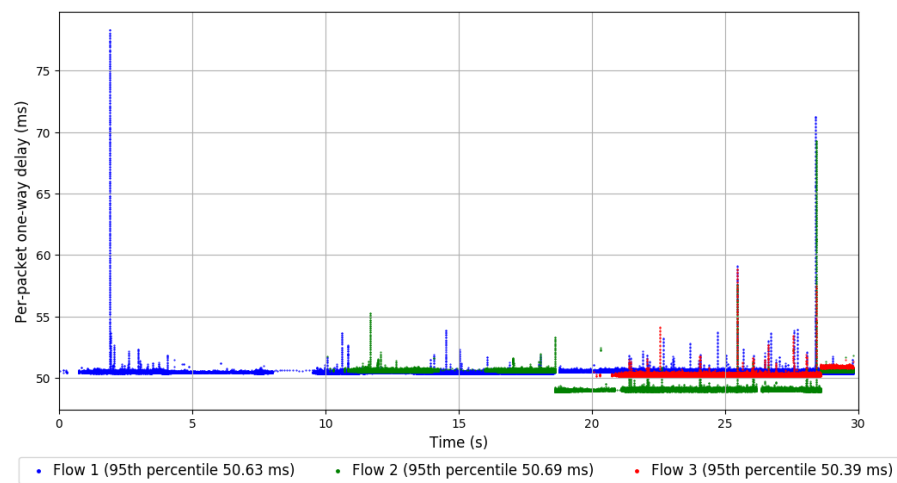
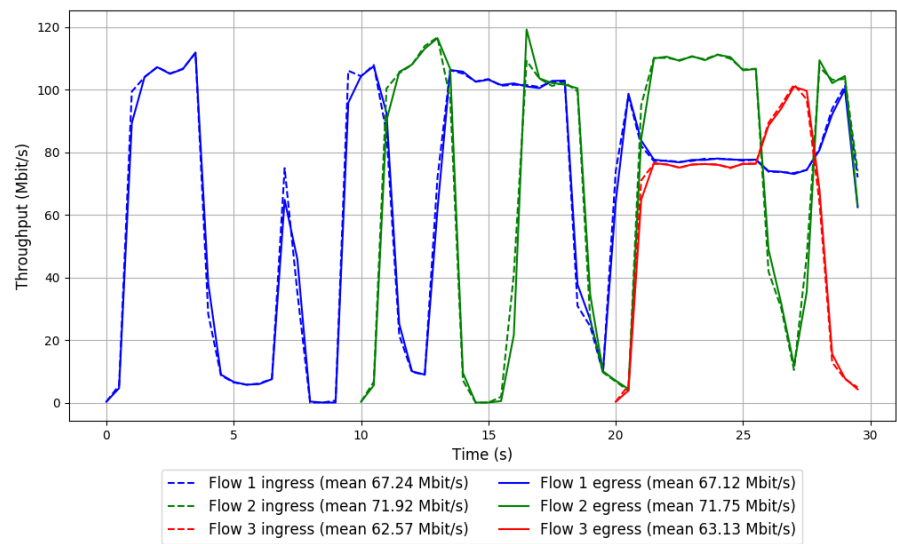
-- Flow 3:

Average throughput: 63.13 Mbit/s

95th percentile per-packet one-way delay: 50.393 ms

Loss rate: 0.11%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-14 07:52:48

End at: 2018-02-14 07:53:18

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.49 Mbit/s

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

Loss rate: 0.32%

-- Flow 1:

Average throughput: 58.07 Mbit/s

95th percentile per-packet one-way delay: 49.575 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 61.70 Mbit/s

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

Loss rate: 0.05%

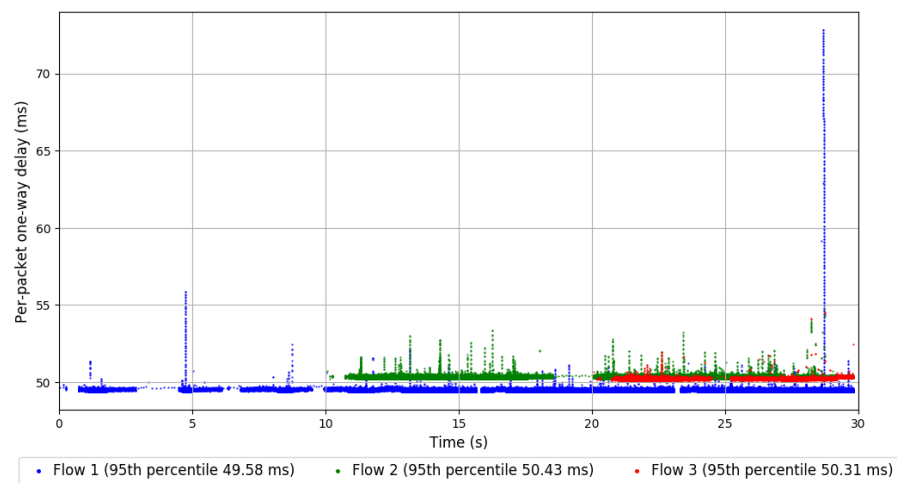
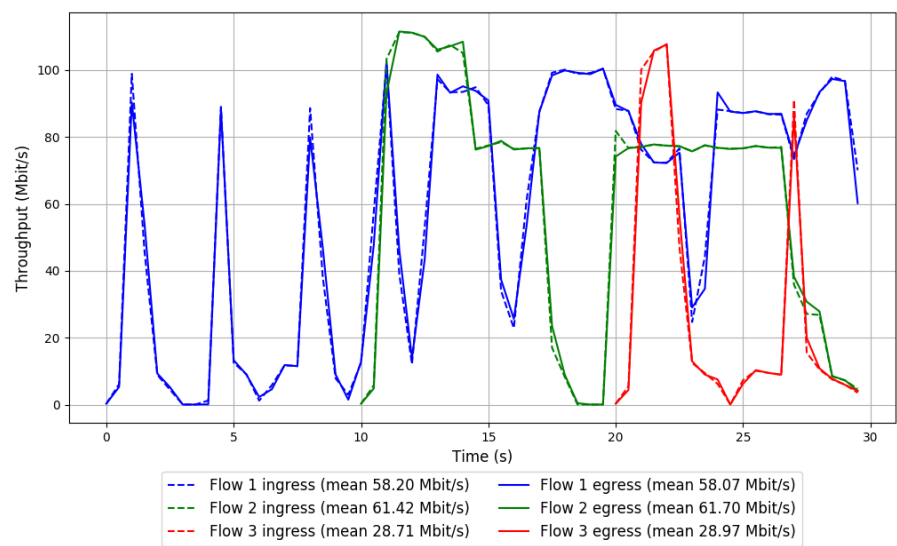
-- Flow 3:

Average throughput: 28.97 Mbit/s

95th percentile per-packet one-way delay: 50.306 ms

Loss rate: 0.03%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-14 08:10:56

End at: 2018-02-14 08:11:26

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.70 Mbit/s

95th percentile per-packet one-way delay: 50.273 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 71.11 Mbit/s

95th percentile per-packet one-way delay: 50.301 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 48.08 Mbit/s

95th percentile per-packet one-way delay: 50.105 ms

Loss rate: 0.96%

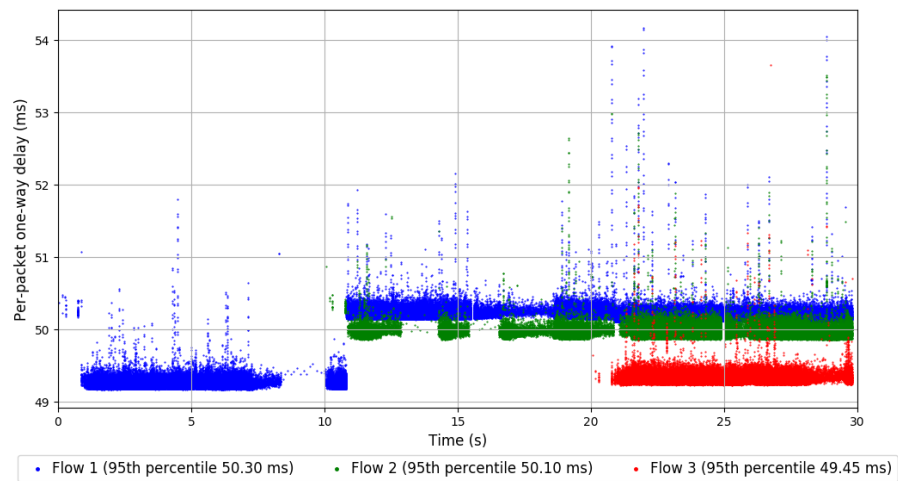
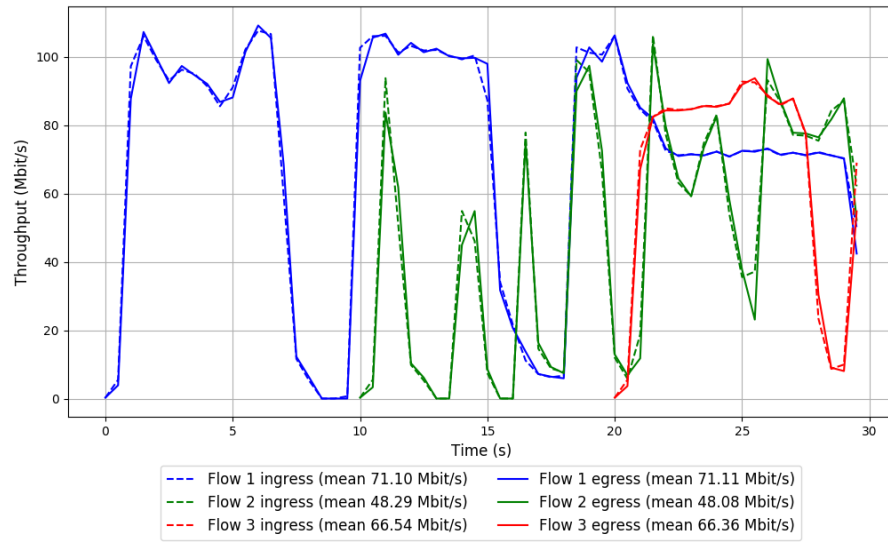
-- Flow 3:

Average throughput: 66.36 Mbit/s

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

Loss rate: 1.29%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-02-14 08:28:56

End at: 2018-02-14 08:29:26

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.65 Mbit/s

95th percentile per-packet one-way delay: 50.596 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 64.20 Mbit/s

95th percentile per-packet one-way delay: 50.612 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 58.79 Mbit/s

95th percentile per-packet one-way delay: 50.393 ms

Loss rate: 0.62%

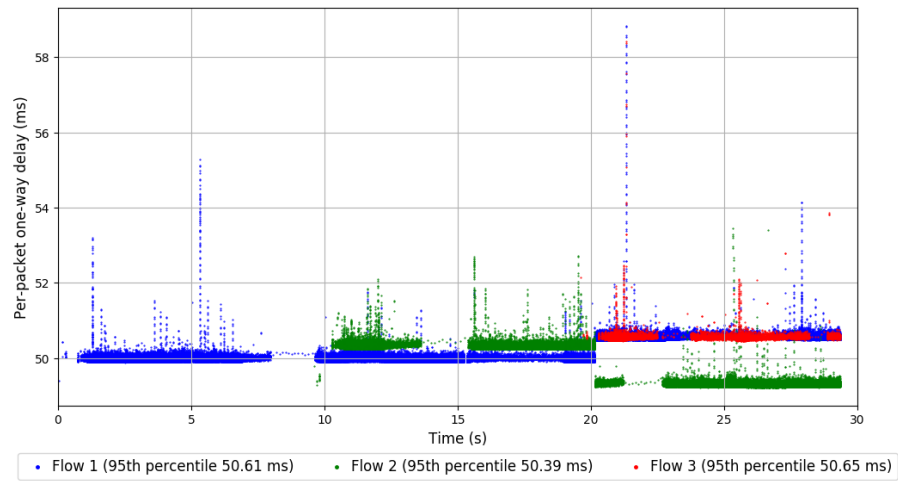
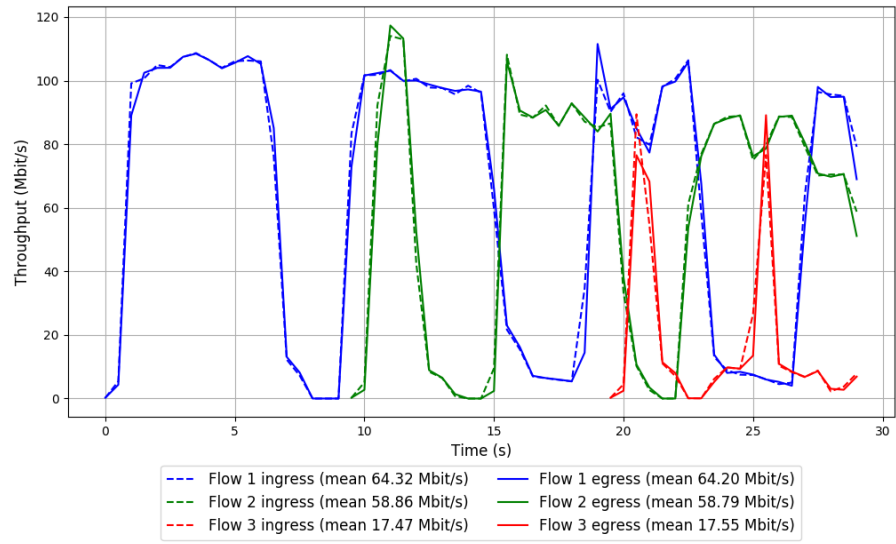
-- Flow 3:

Average throughput: 17.55 Mbit/s

95th percentile per-packet one-way delay: 50.652 ms

Loss rate: 0.57%

Run 10: Report of QUIC Cubic — Data Link

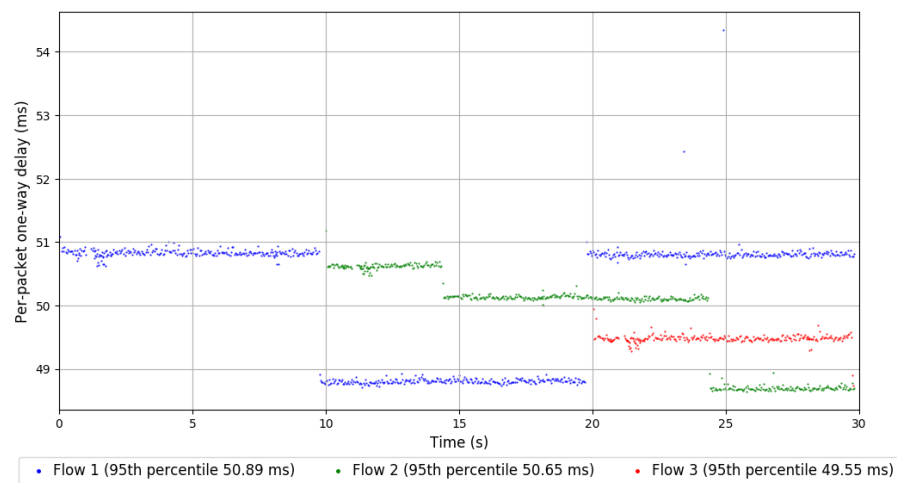
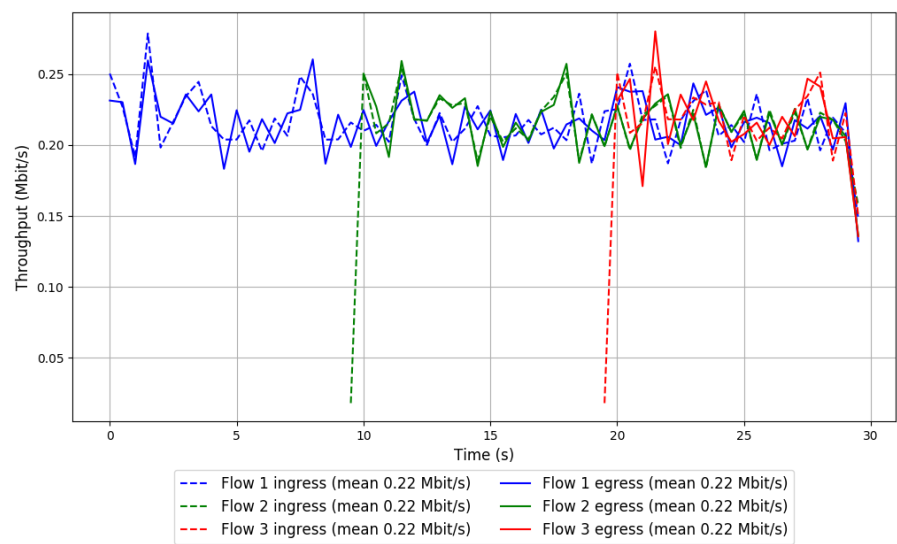


```
Run 1: Statistics of SCReAM

Start at: 2018-02-14 05:39:42
End at: 2018-02-14 05:40:12

# Below is generated by plot.py at 2018-02-14 12:25:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.864 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.887 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.646 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.555 ms
Loss rate: 1.11%
```

Run 1: Report of SReAM — Data Link

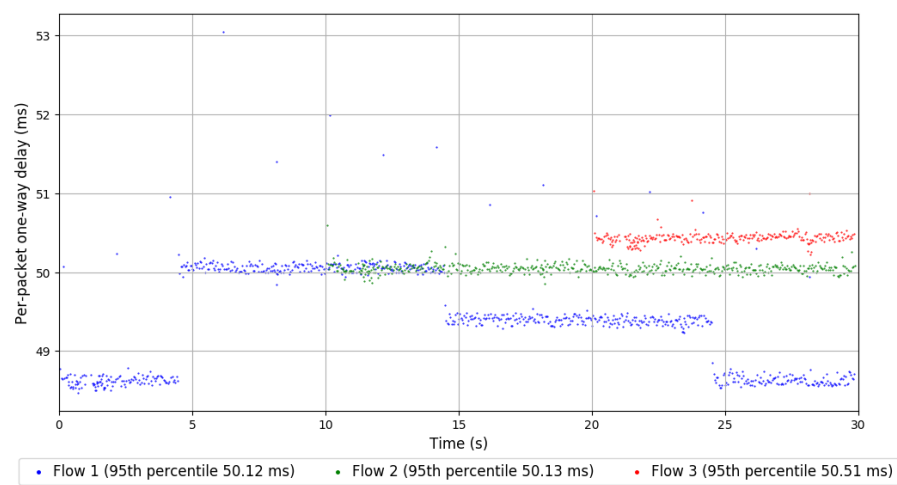
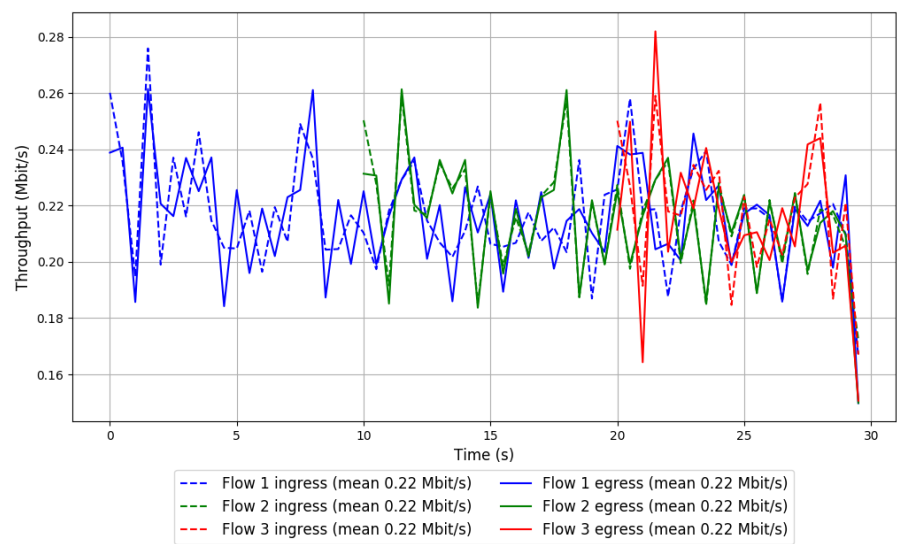


```
Run 2: Statistics of SReAM

Start at: 2018-02-14 05:58:18
End at: 2018-02-14 05:58:48

# Below is generated by plot.py at 2018-02-14 12:25:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.467 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.124 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.132 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.510 ms
Loss rate: 1.11%
```

Run 2: Report of SReAM — Data Link

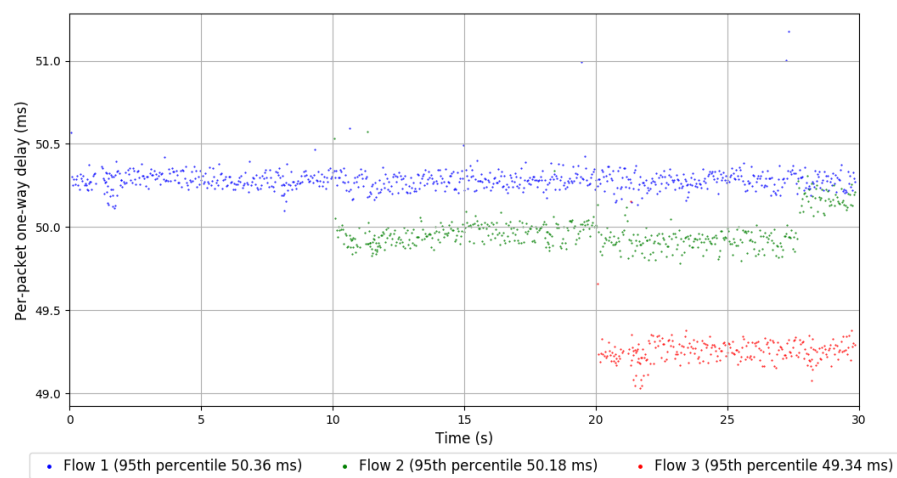
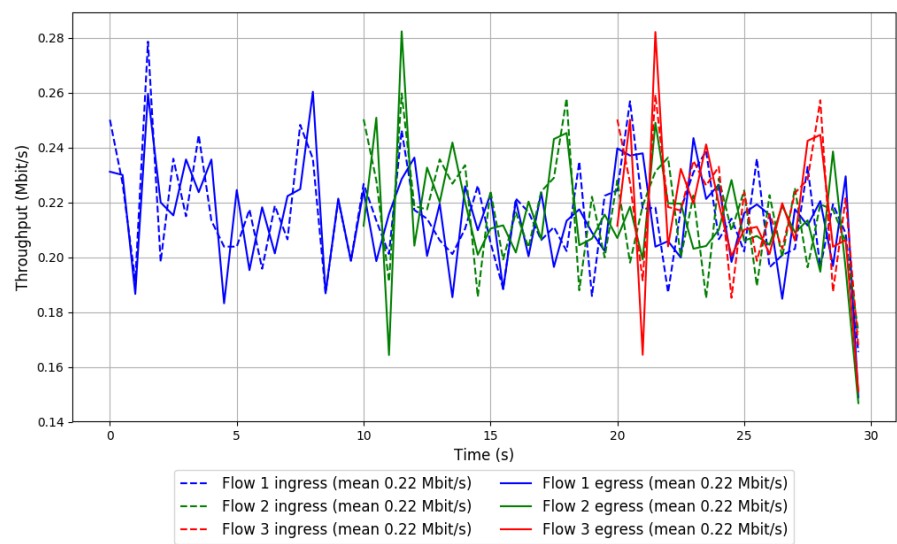


```
Run 3: Statistics of SCReAM

Start at: 2018-02-14 06:16:24
End at: 2018-02-14 06:16:54

# Below is generated by plot.py at 2018-02-14 12:25:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.342 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.358 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.180 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.339 ms
Loss rate: 1.11%
```


Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-02-14 06:34:50

End at: 2018-02-14 06:35:20

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.514 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.516 ms

Loss rate: 0.63%

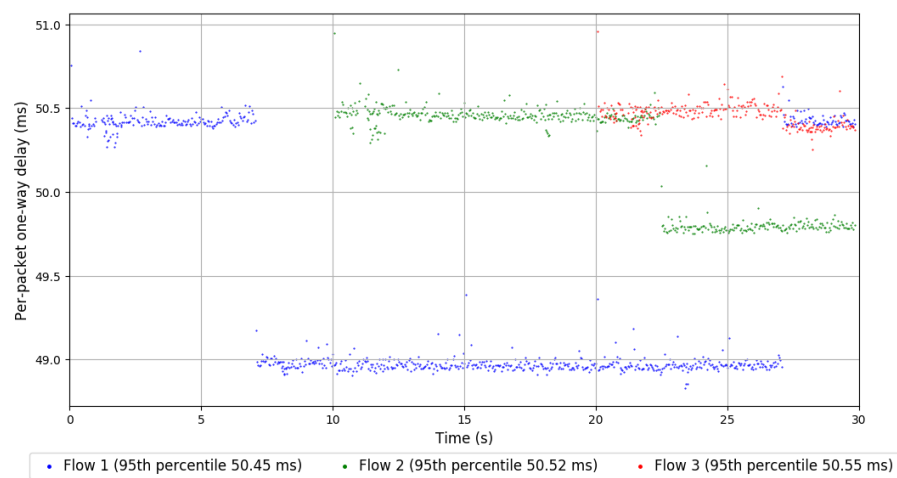
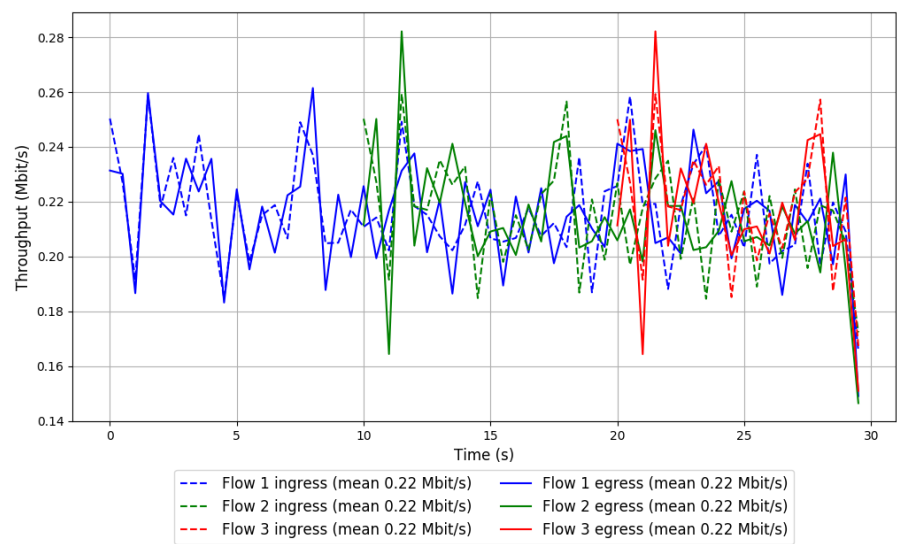
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.549 ms

Loss rate: 1.11%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-02-14 06:52:58

End at: 2018-02-14 06:53:28

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 51.032 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.050 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.701 ms

Loss rate: 0.43%

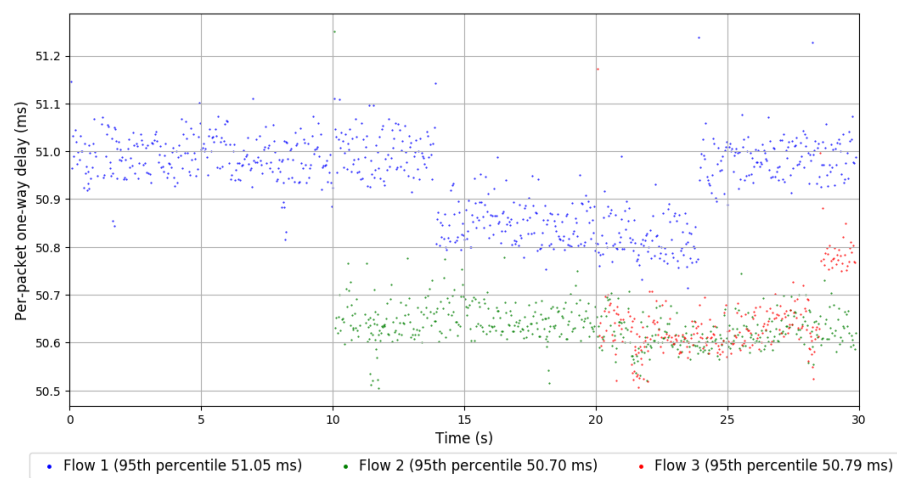
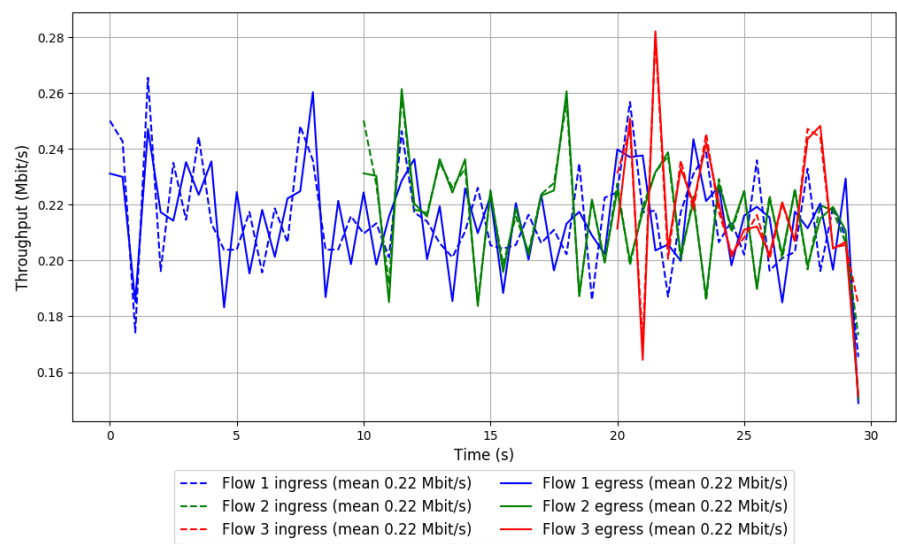
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.787 ms

Loss rate: 1.11%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-02-14 07:11:16

End at: 2018-02-14 07:11:46

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.45%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.149 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.711 ms

Loss rate: 0.42%

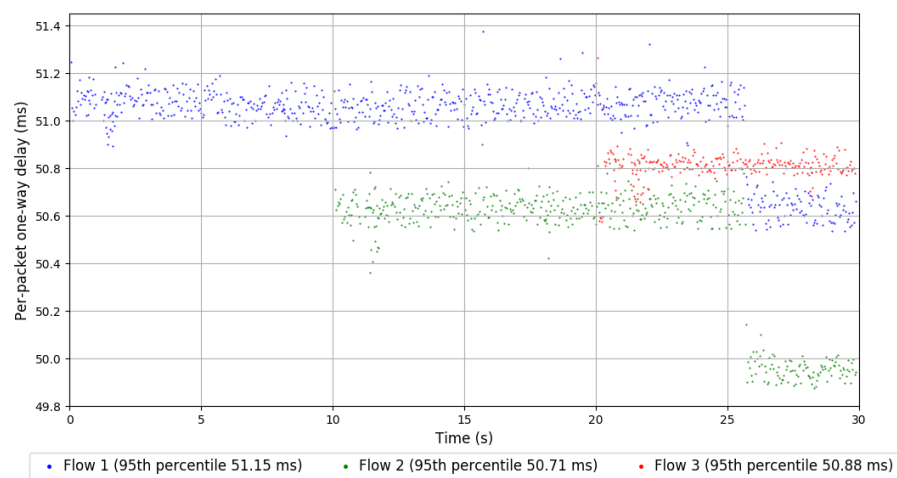
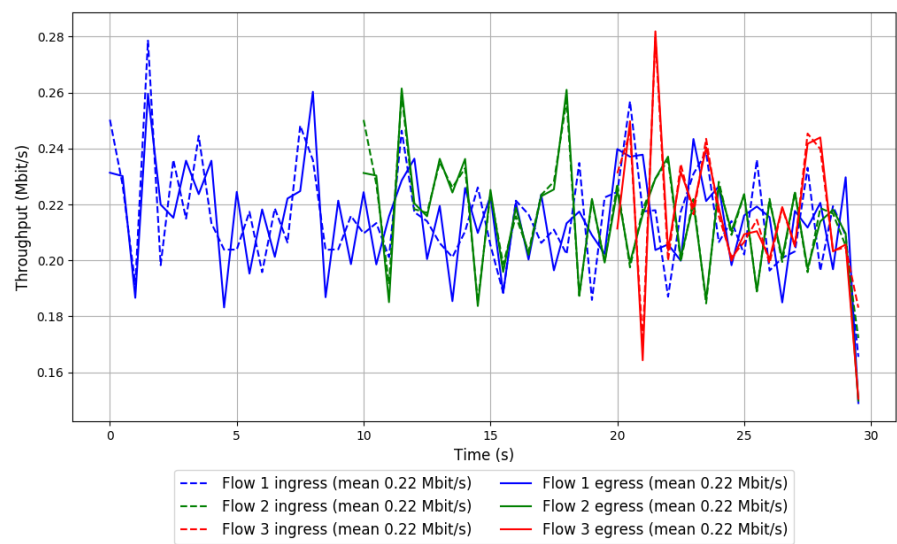
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 1.11%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SReAM

Start at: 2018-02-14 07:29:47

End at: 2018-02-14 07:30:17

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 51.033 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.062 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.056 ms

Loss rate: 0.43%

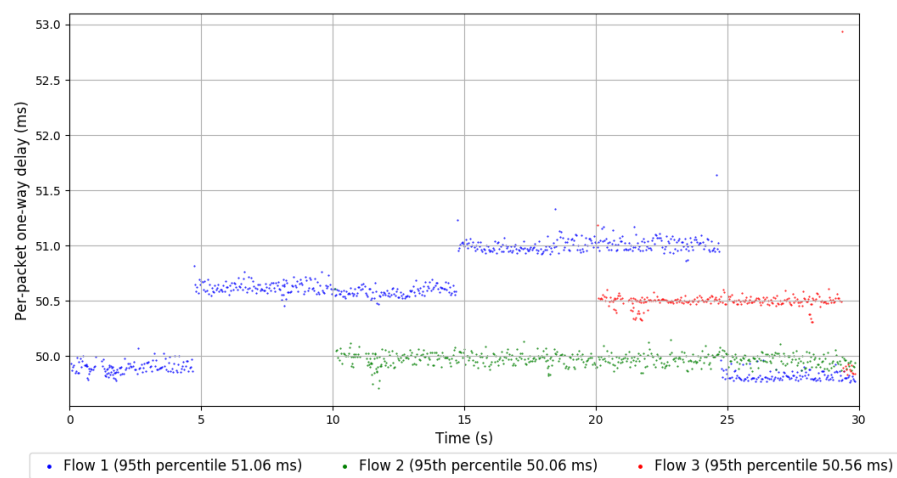
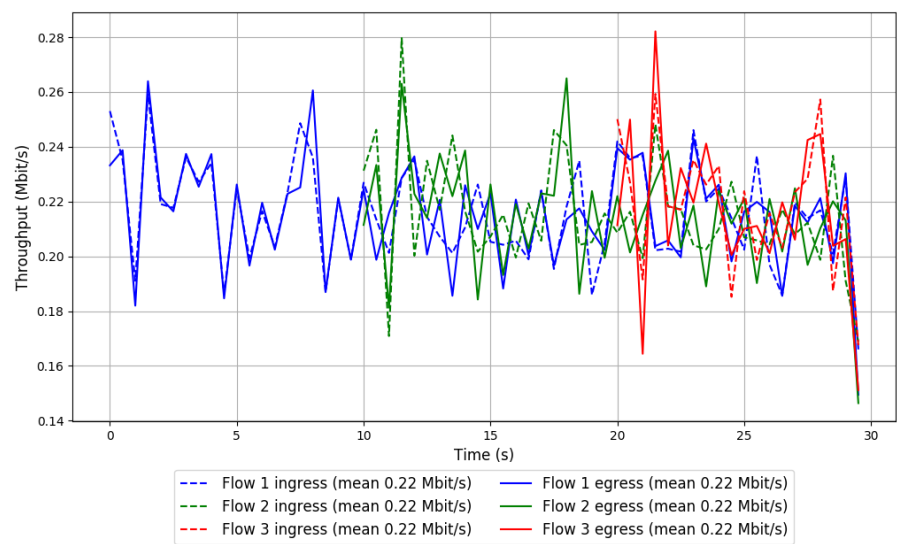
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.560 ms

Loss rate: 1.11%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-02-14 07:48:11

End at: 2018-02-14 07:48:41

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.52%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.515 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.673 ms

Loss rate: 0.63%

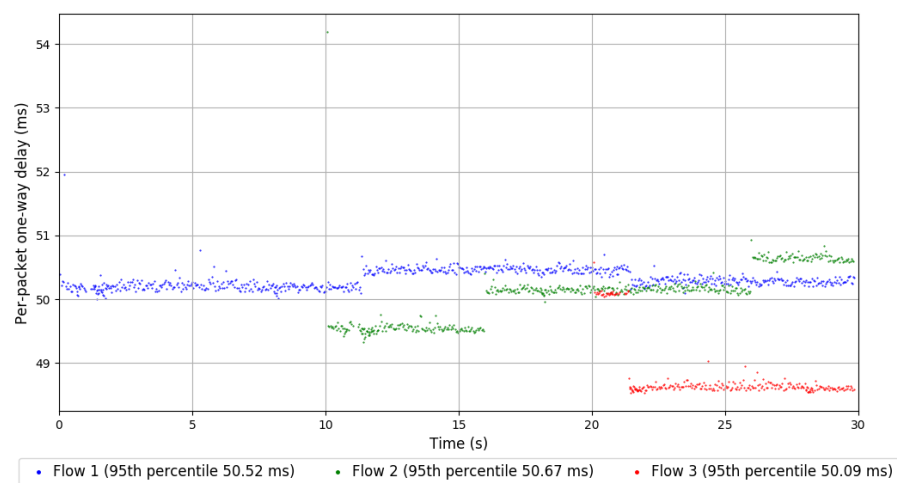
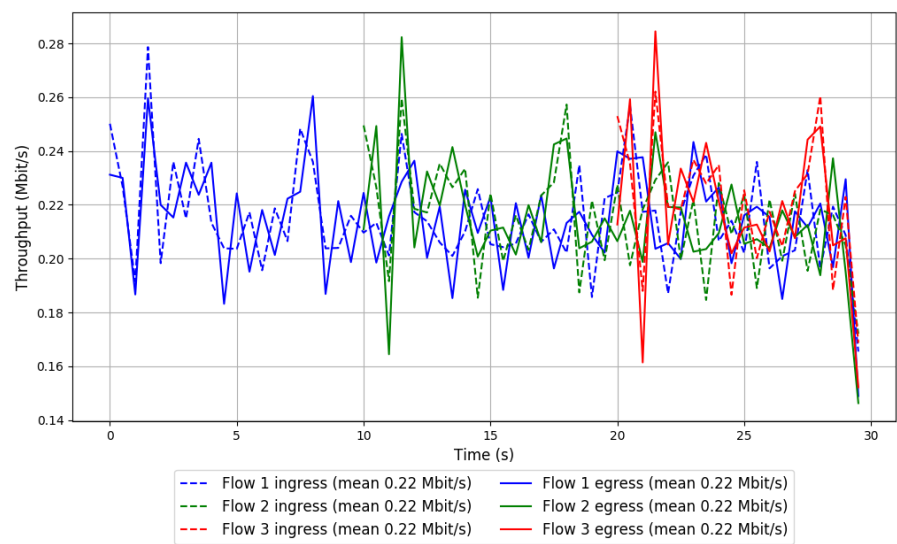
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.091 ms

Loss rate: 1.11%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-02-14 08:06:27

End at: 2018-02-14 08:06:57

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.580 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.363 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.628 ms

Loss rate: 0.63%

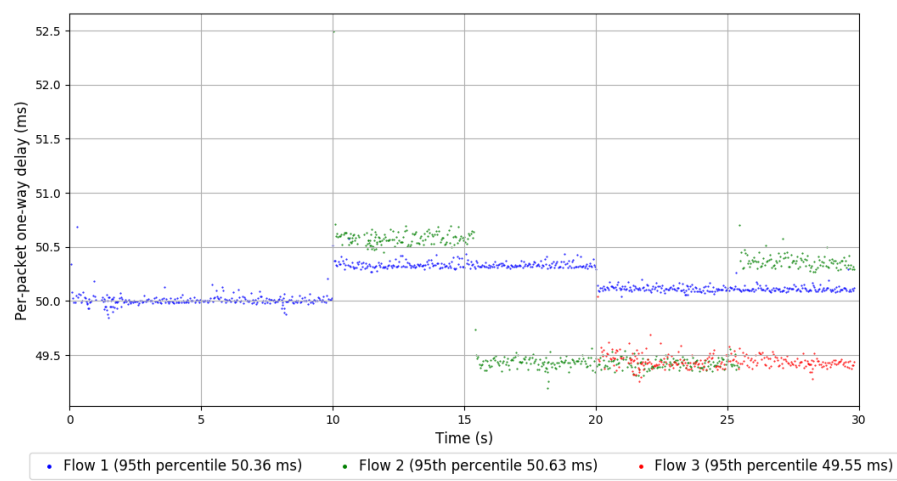
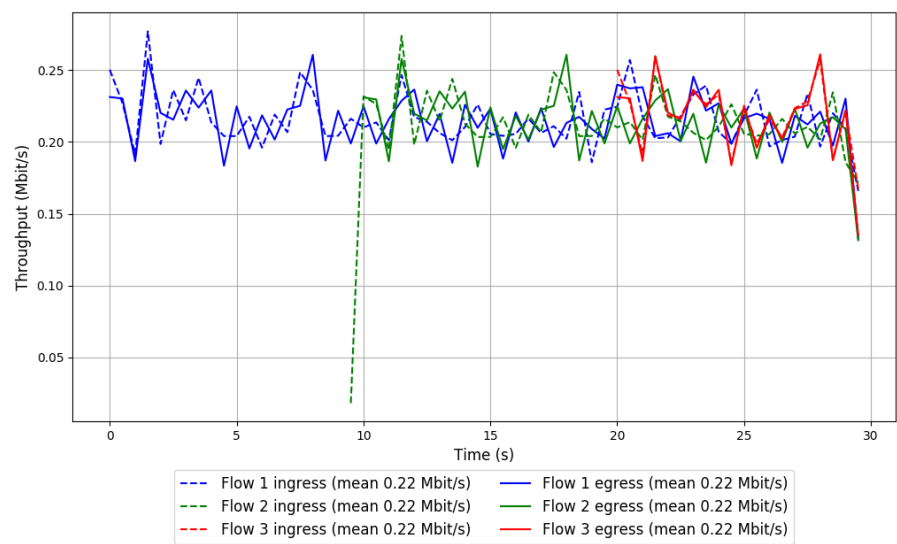
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.548 ms

Loss rate: 1.11%

Run 9: Report of SReAM — Data Link

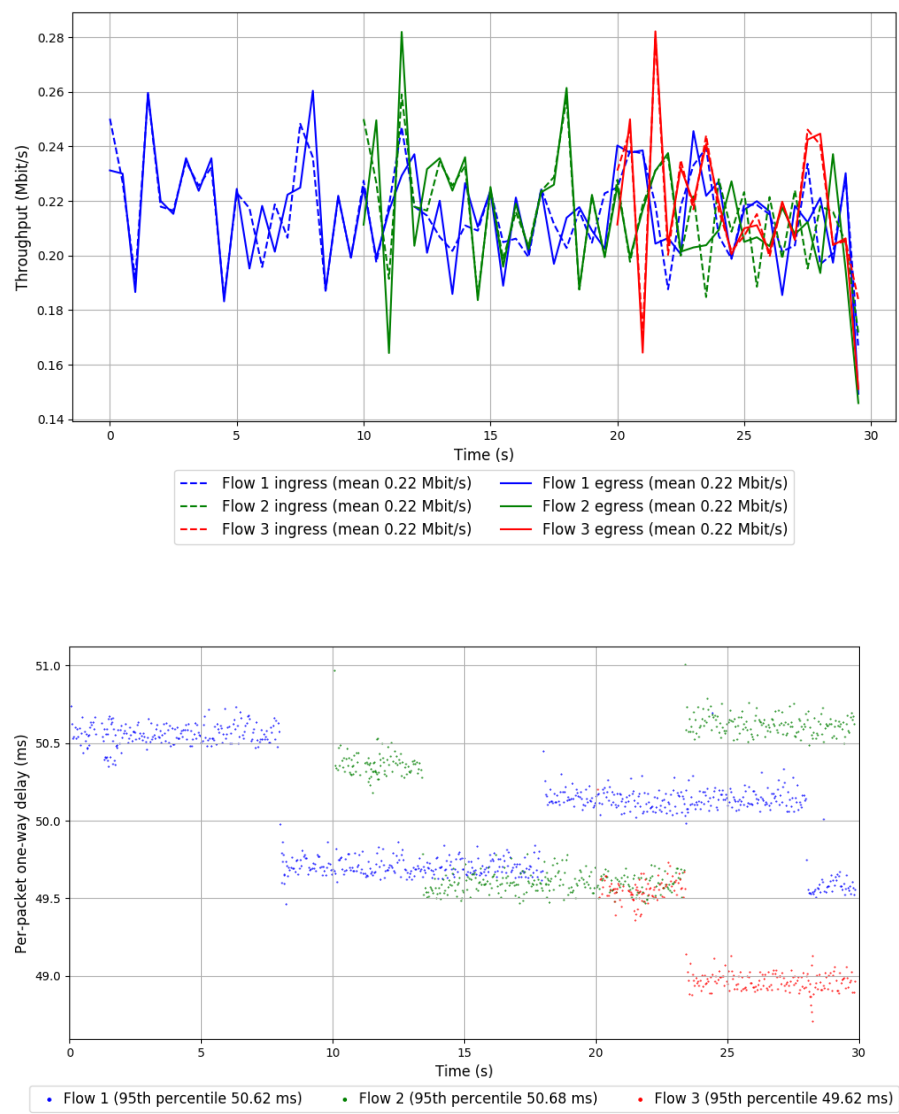


```
Run 10: Statistics of SReAM

Start at: 2018-02-14 08:24:29
End at: 2018-02-14 08:24:59

# Below is generated by plot.py at 2018-02-14 12:25:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.642 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.622 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.679 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.624 ms
Loss rate: 1.11%
```

Run 10: Report of SReAM — Data Link

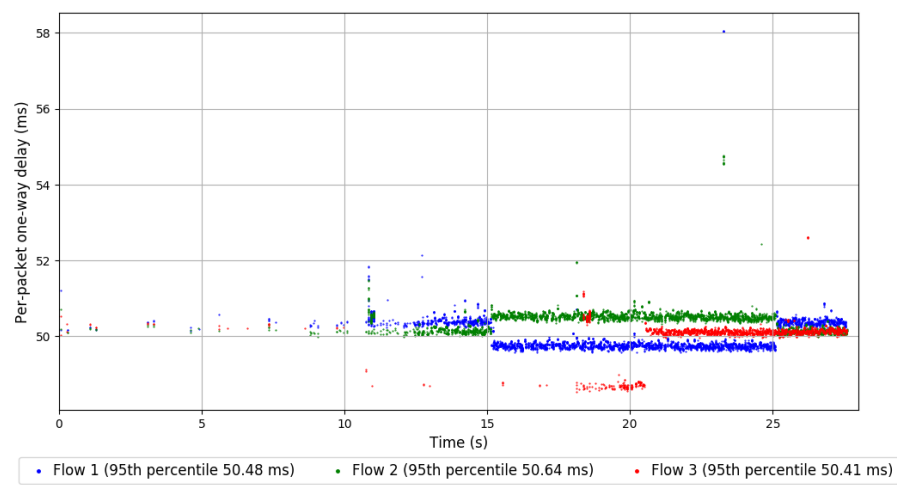
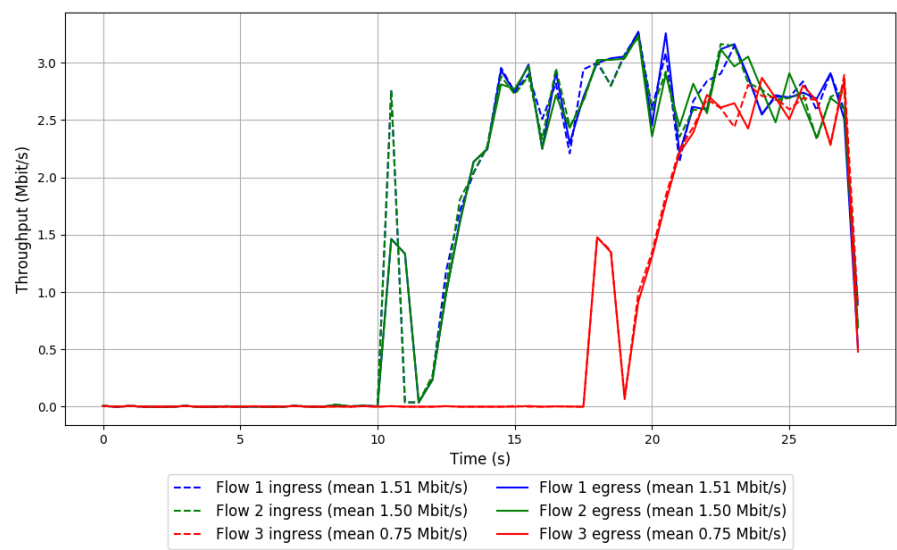


```
Run 1: Statistics of WebRTC media

Start at: 2018-02-14 05:35:29
End at: 2018-02-14 05:35:59

# Below is generated by plot.py at 2018-02-14 12:25:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.75 Mbit/s
95th percentile per-packet one-way delay: 50.601 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 50.475 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 50.642 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 50.407 ms
Loss rate: 1.56%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-02-14 05:53:56

End at: 2018-02-14 05:54:26

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 50.357 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 2.28 Mbit/s

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

Loss rate: 0.45%

-- Flow 2:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 50.033 ms

Loss rate: 0.53%

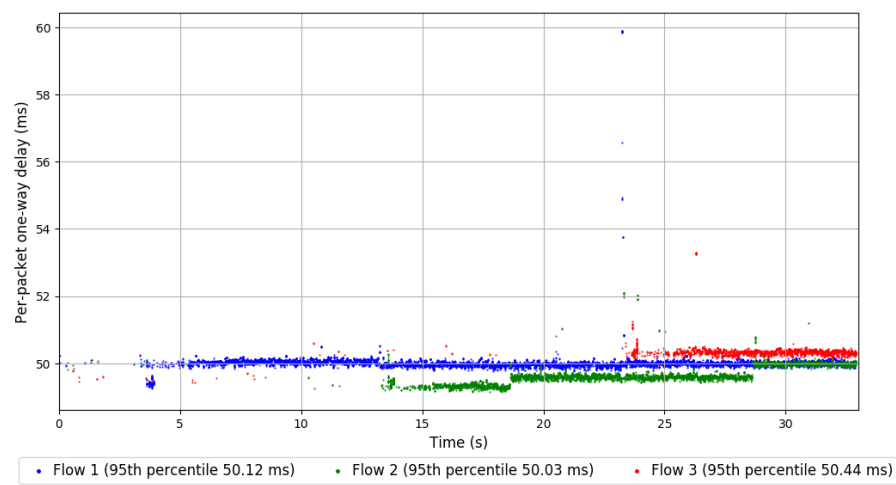
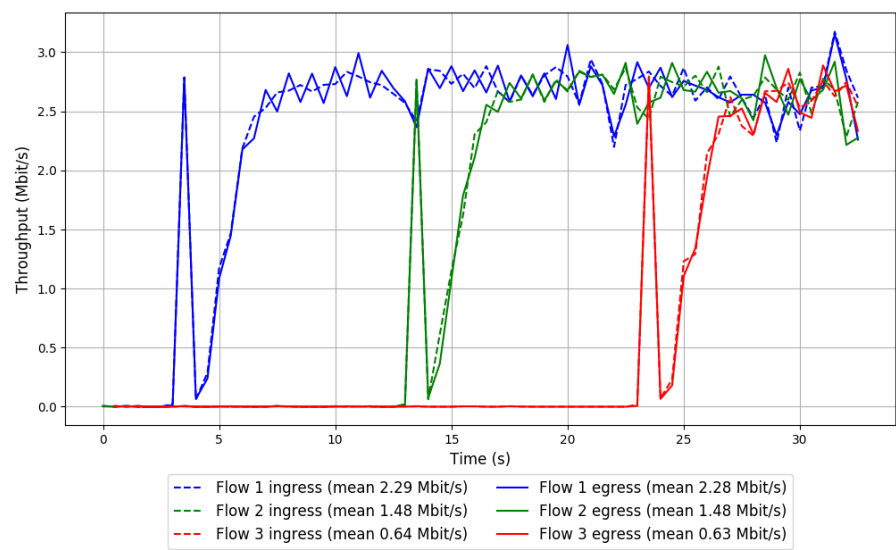
-- Flow 3:

Average throughput: 0.63 Mbit/s

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

Loss rate: 1.07%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-14 06:12:09

End at: 2018-02-14 06:12:40

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.38 Mbit/s

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

Loss rate: 0.57%

-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.406 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 50.413 ms

Loss rate: 0.74%

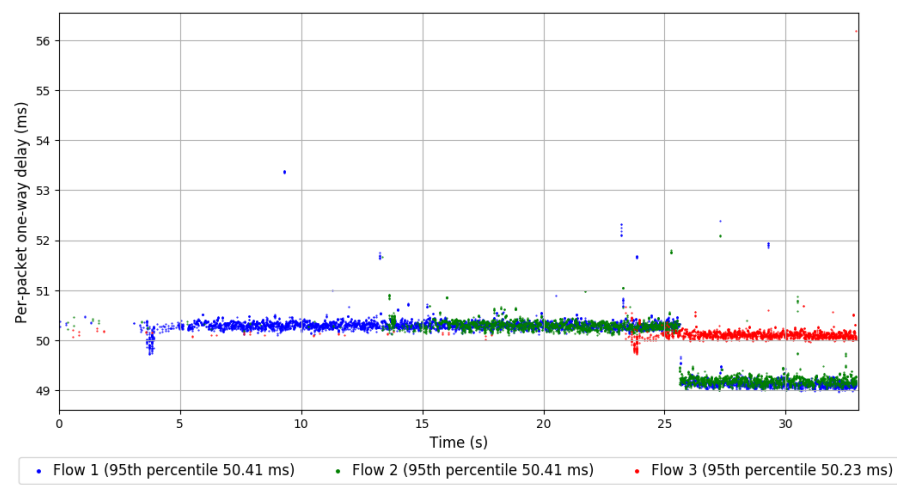
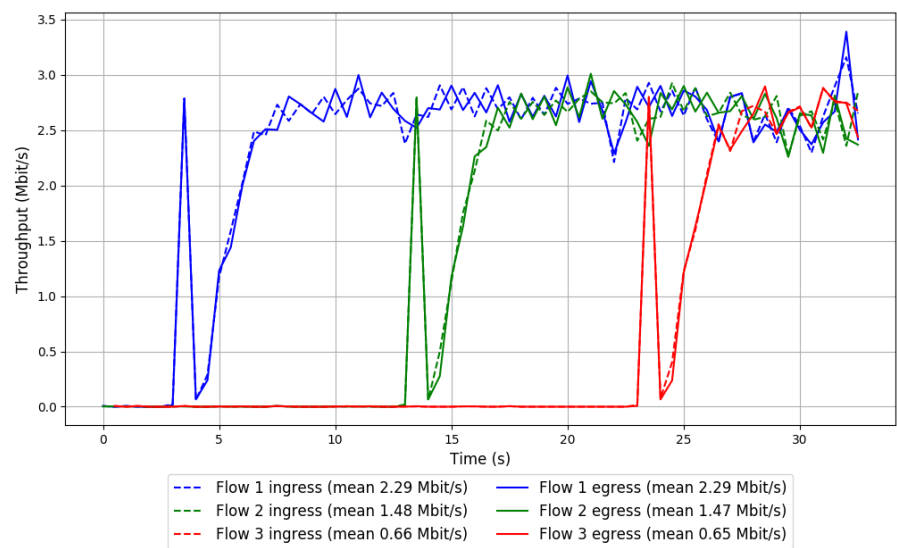
-- Flow 3:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 50.225 ms

Loss rate: 1.09%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-14 06:30:31

End at: 2018-02-14 06:31:01

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 50.771 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.796 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 50.459 ms

Loss rate: 0.59%

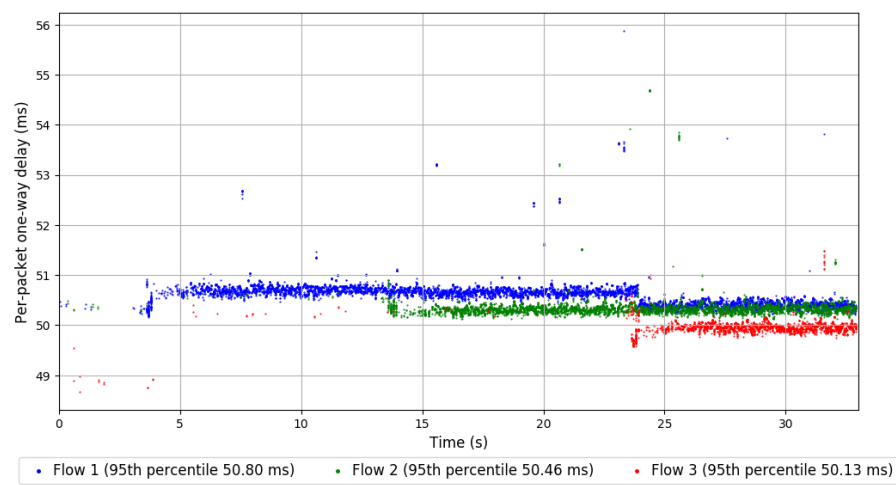
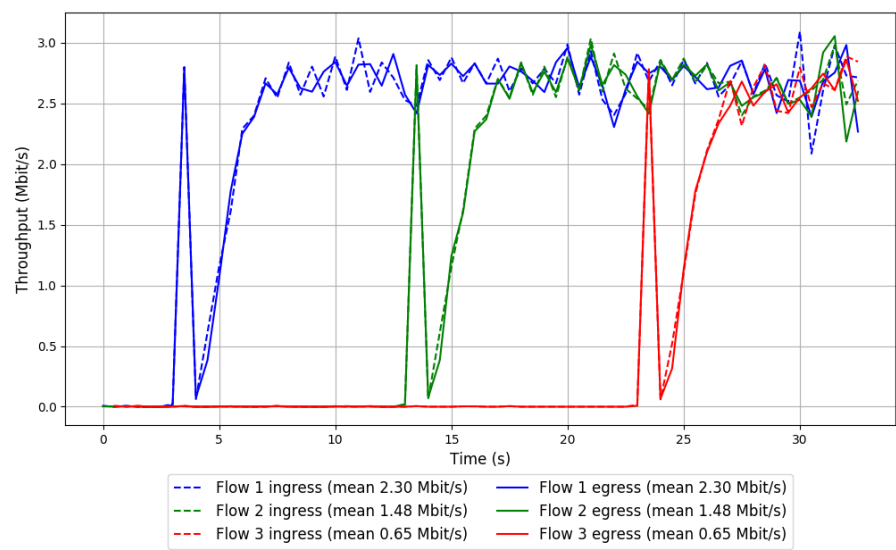
-- Flow 3:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 50.130 ms

Loss rate: 1.36%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-14 06:48:46

End at: 2018-02-14 06:49:16

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 50.973 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.734 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 1.47 Mbit/s

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

Loss rate: 0.51%

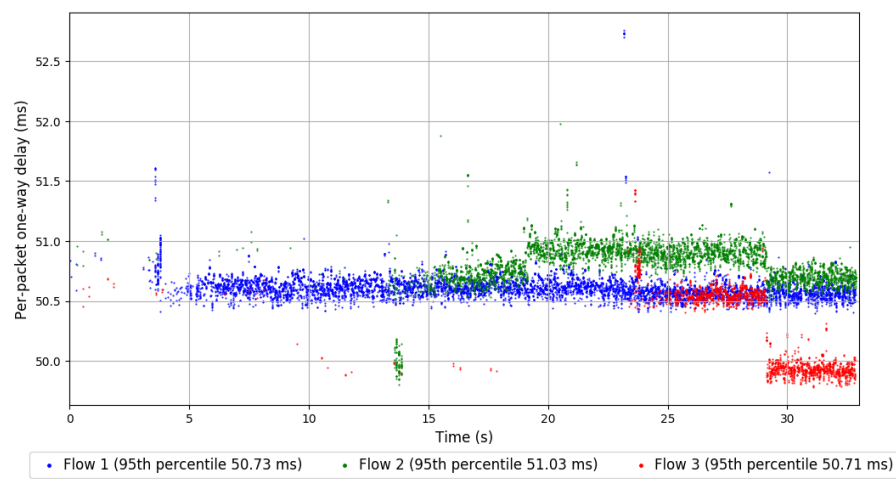
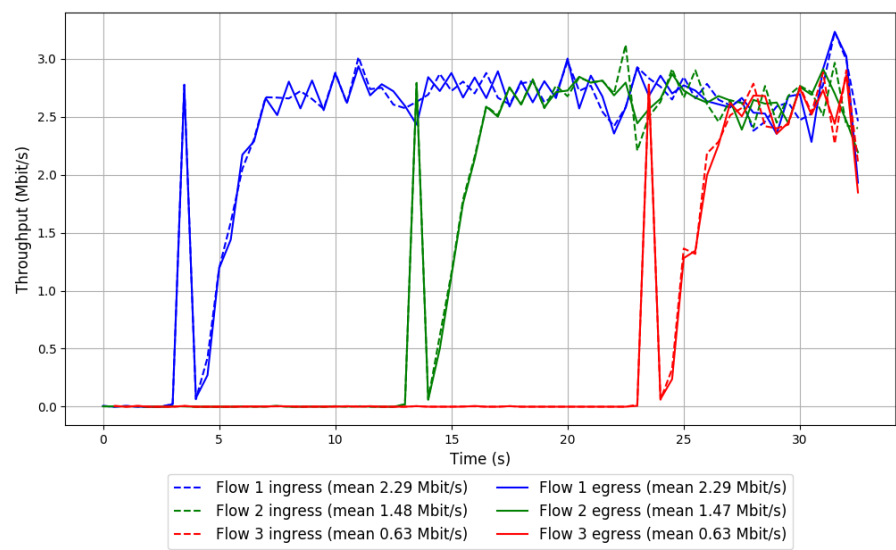
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 50.710 ms

Loss rate: 1.29%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-14 07:07:01

End at: 2018-02-14 07:07:31

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 50.935 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.878 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 50.943 ms

Loss rate: 0.57%

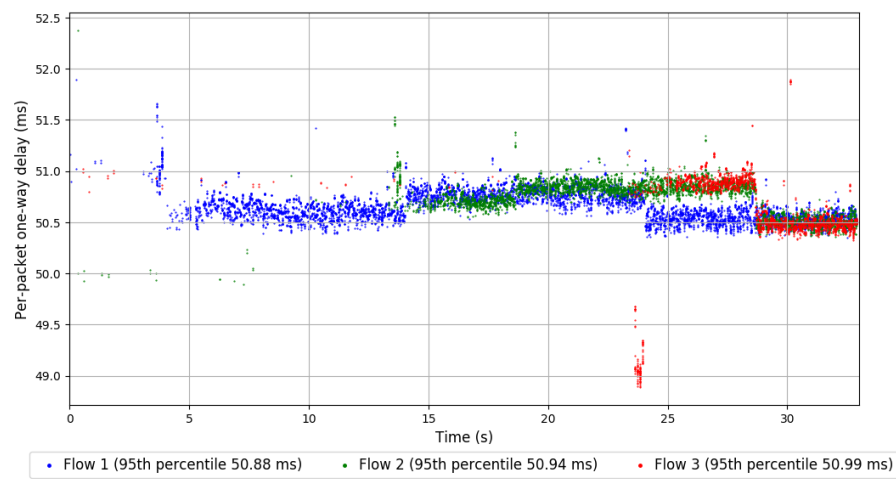
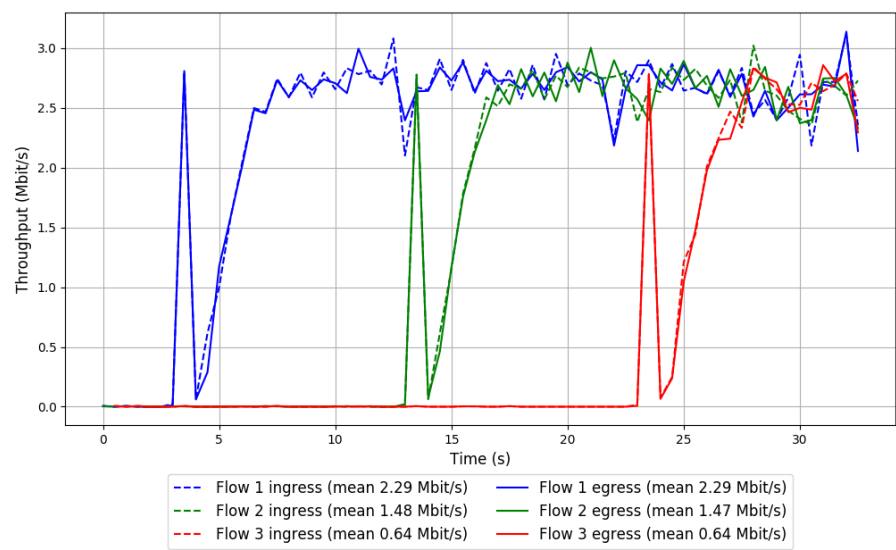
-- Flow 3:

Average throughput: 0.64 Mbit/s

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

Loss rate: 1.17%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-14 07:25:30

End at: 2018-02-14 07:26:00

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.38 Mbit/s

95th percentile per-packet one-way delay: 50.941 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 2.30 Mbit/s

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

Loss rate: 0.35%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 50.991 ms

Loss rate: 0.88%

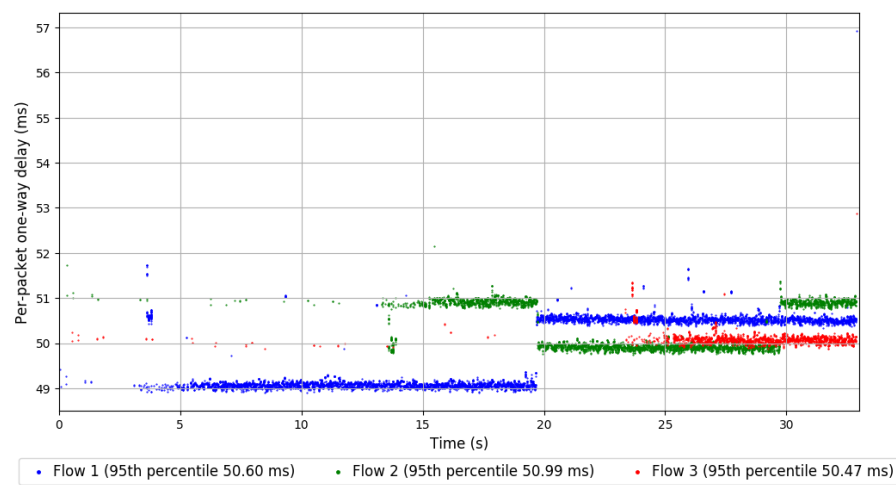
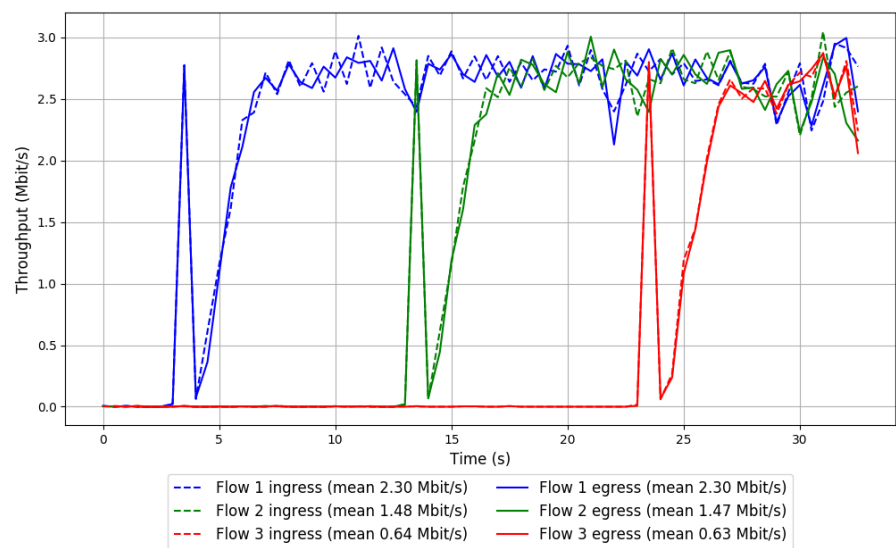
-- Flow 3:

Average throughput: 0.63 Mbit/s

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

Loss rate: 1.04%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-14 07:43:52

End at: 2018-02-14 07:44:22

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 50.232 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 49.705 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 49.617 ms

Loss rate: 0.56%

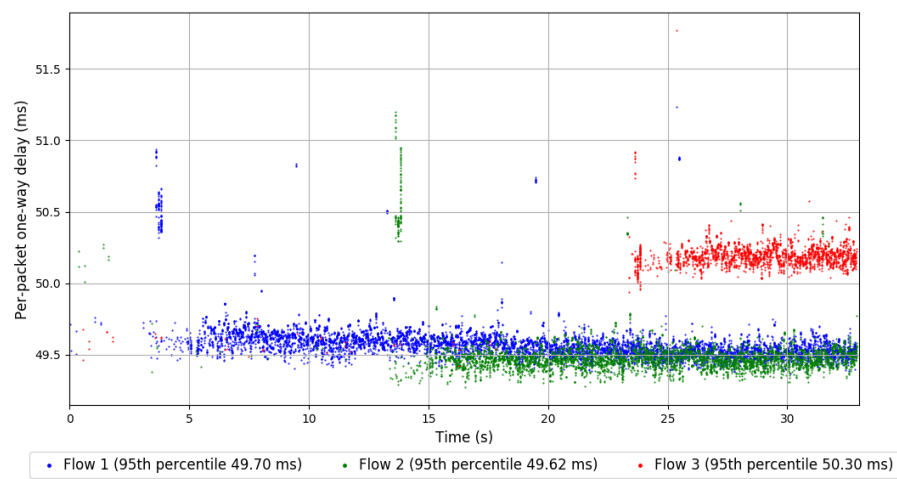
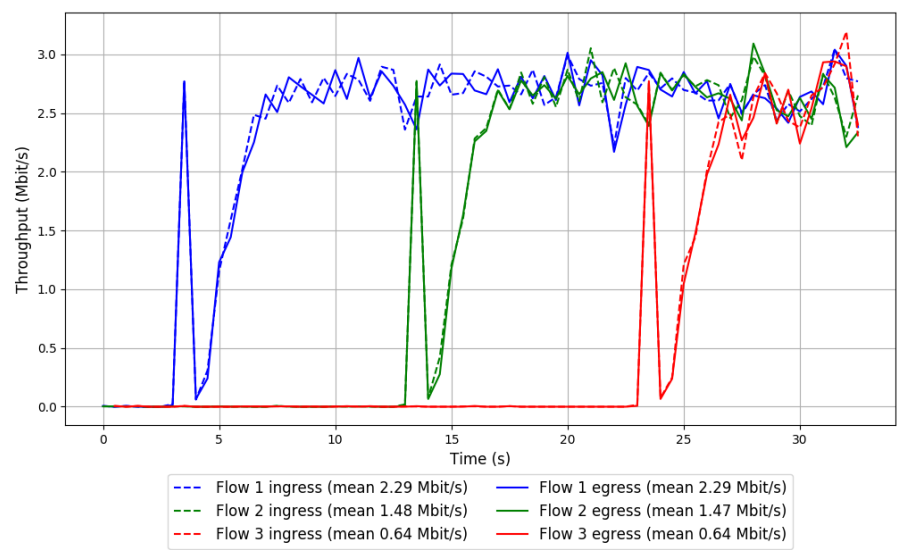
-- Flow 3:

Average throughput: 0.64 Mbit/s

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

Loss rate: 1.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-14 08:02:16

End at: 2018-02-14 08:02:46

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 50.371 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 2.27 Mbit/s

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

Loss rate: 0.49%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 50.074 ms

Loss rate: 0.52%

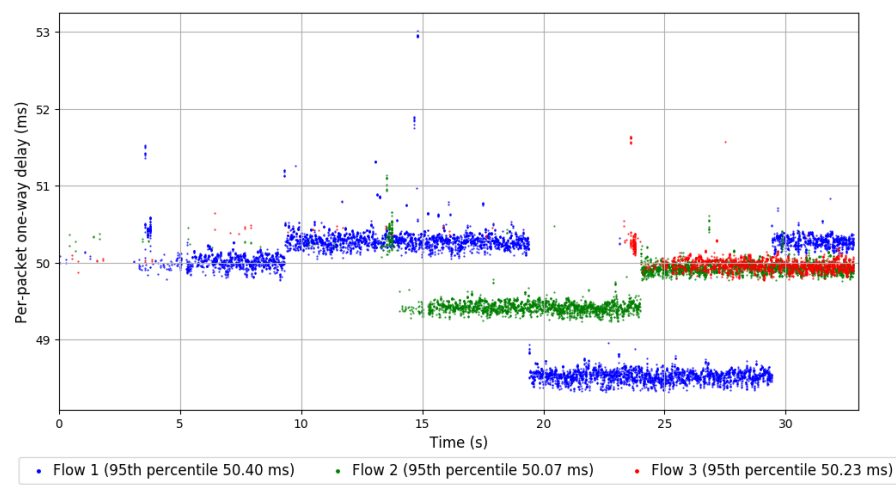
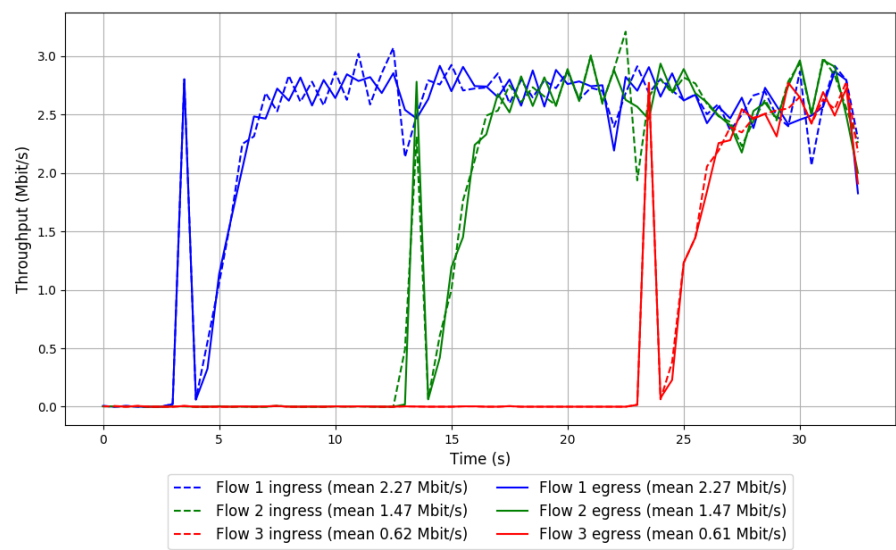
-- Flow 3:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 50.231 ms

Loss rate: 1.38%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-14 08:20:16

End at: 2018-02-14 08:20:46

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.12 Mbit/s

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

Loss rate: 0.53%

-- Flow 1:

Average throughput: 2.08 Mbit/s

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

Loss rate: 0.22%

-- Flow 2:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 49.540 ms

Loss rate: 0.68%

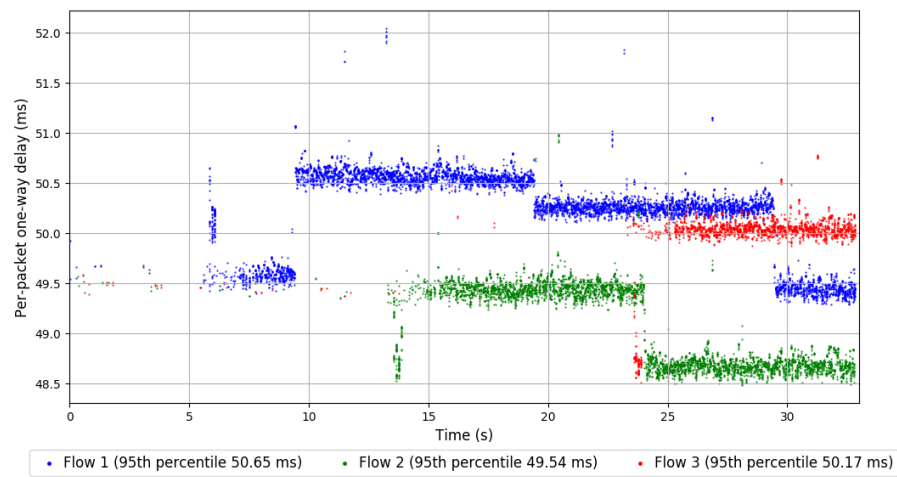
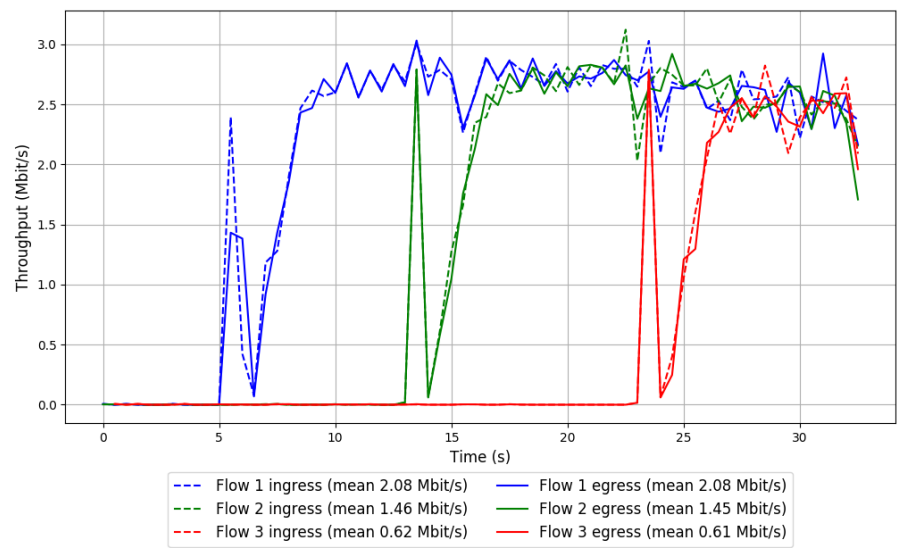
-- Flow 3:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 50.175 ms

Loss rate: 1.21%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-02-14 05:34:49

End at: 2018-02-14 05:35:19

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.56 Mbit/s

95th percentile per-packet one-way delay: 51.325 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 51.331 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 51.315 ms

Loss rate: 0.30%

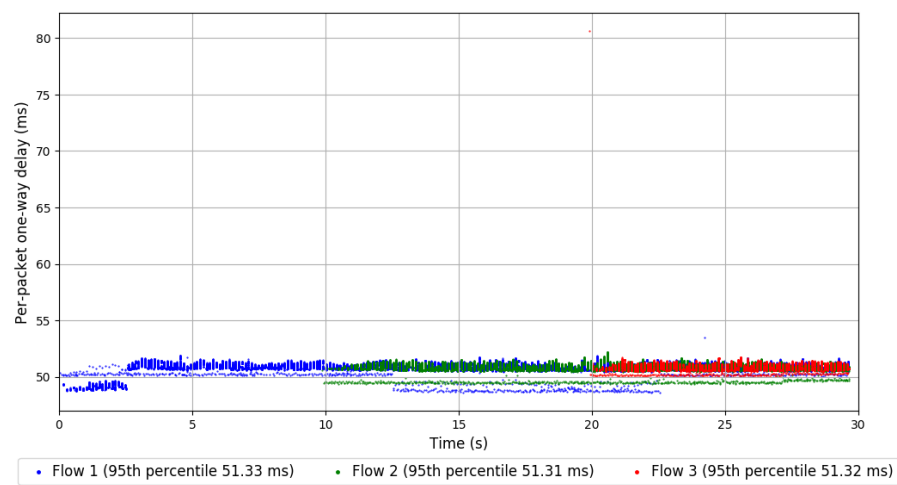
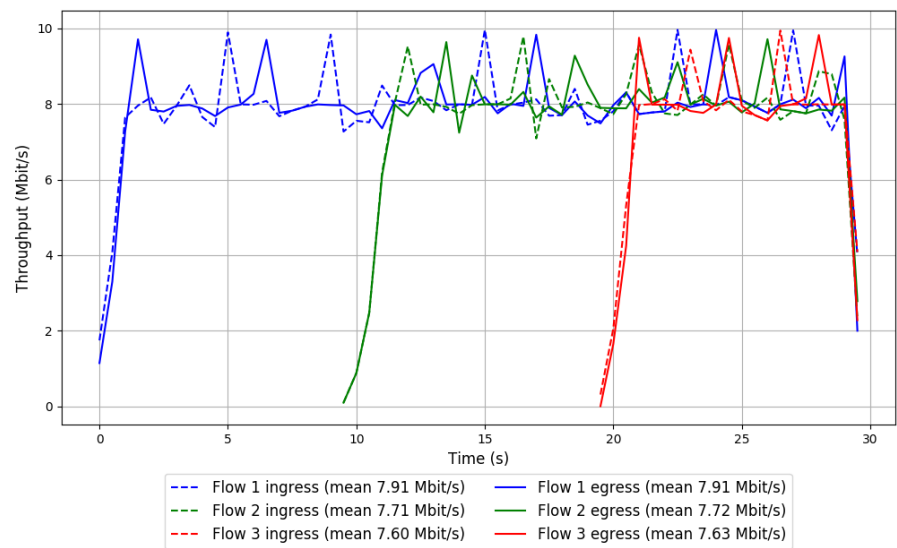
-- Flow 3:

Average throughput: 7.63 Mbit/s

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

Loss rate: 1.20%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-14 05:53:17

End at: 2018-02-14 05:53:47

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.64 Mbit/s

95th percentile per-packet one-way delay: 50.820 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 50.826 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 50.781 ms

Loss rate: 0.09%

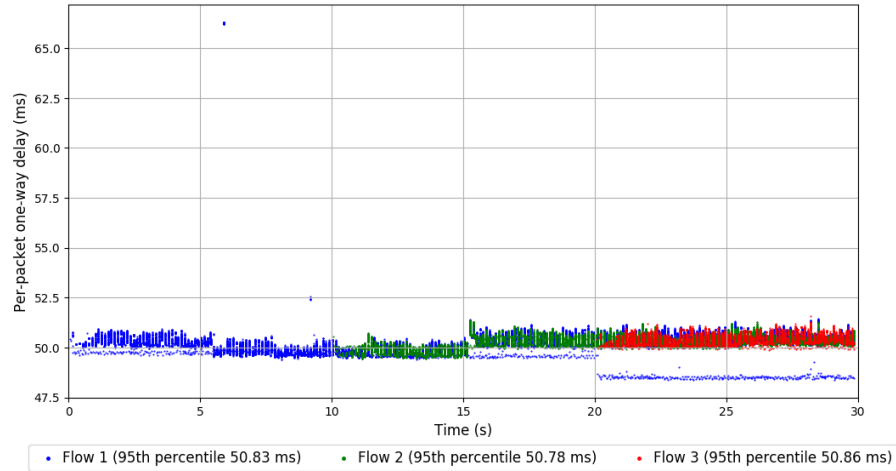
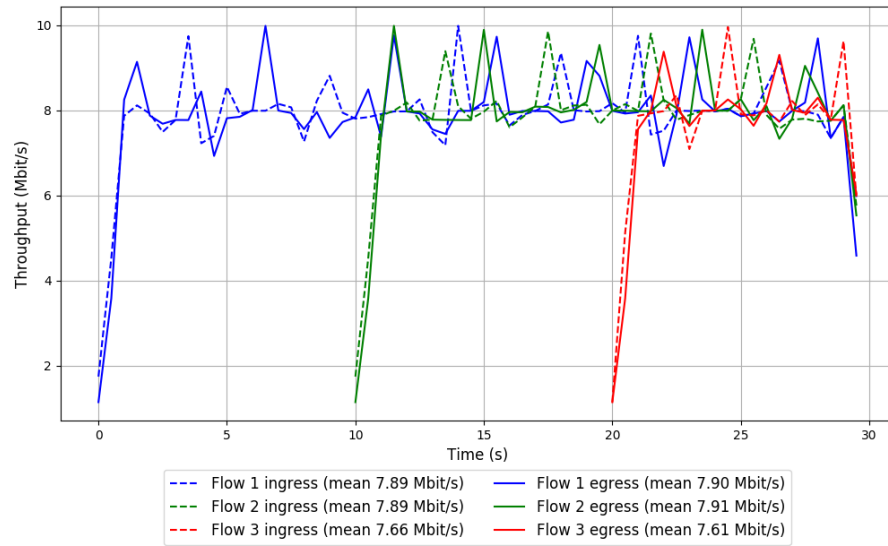
-- Flow 3:

Average throughput: 7.61 Mbit/s

95th percentile per-packet one-way delay: 50.859 ms

Loss rate: 1.33%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-14 06:11:29

End at: 2018-02-14 06:11:59

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.61 Mbit/s

95th percentile per-packet one-way delay: 50.719 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 50.688 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 50.687 ms

Loss rate: 0.62%

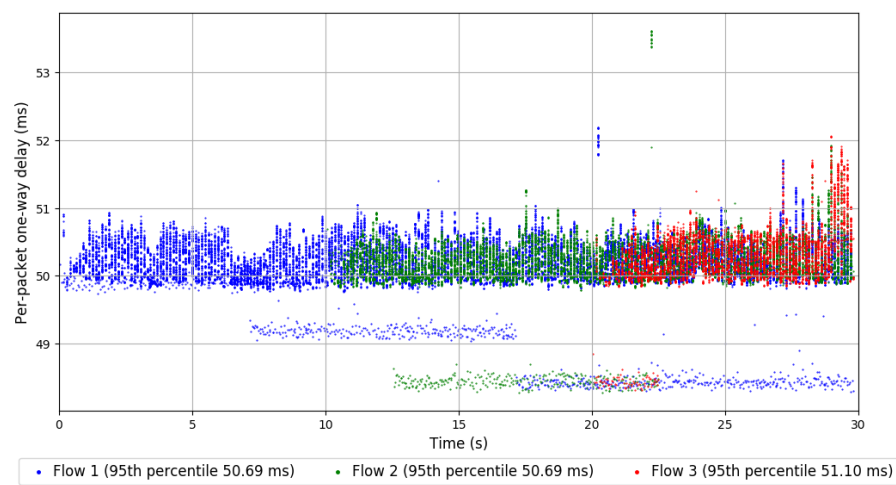
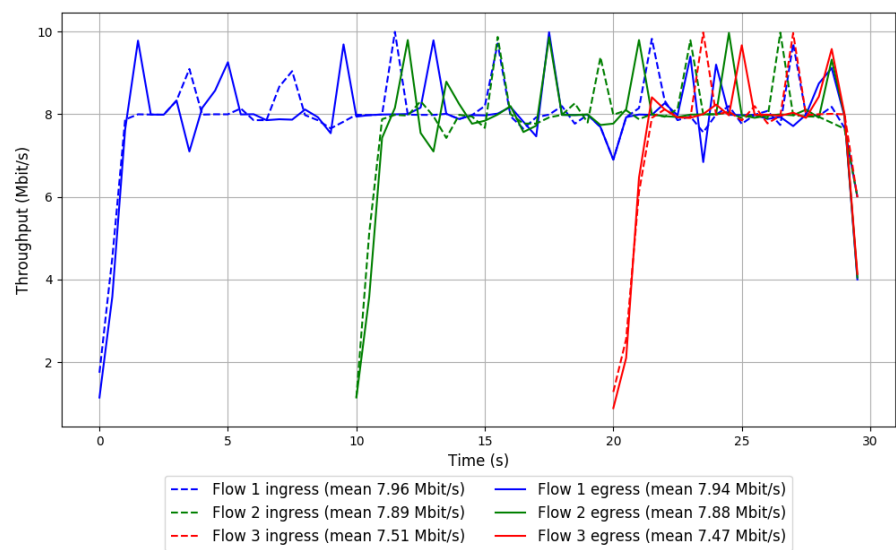
-- Flow 3:

Average throughput: 7.47 Mbit/s

95th percentile per-packet one-way delay: 51.096 ms

Loss rate: 1.26%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-14 06:29:51

End at: 2018-02-14 06:30:21

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.63 Mbit/s

95th percentile per-packet one-way delay: 51.125 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 51.113 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 7.89 Mbit/s

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

Loss rate: 0.64%

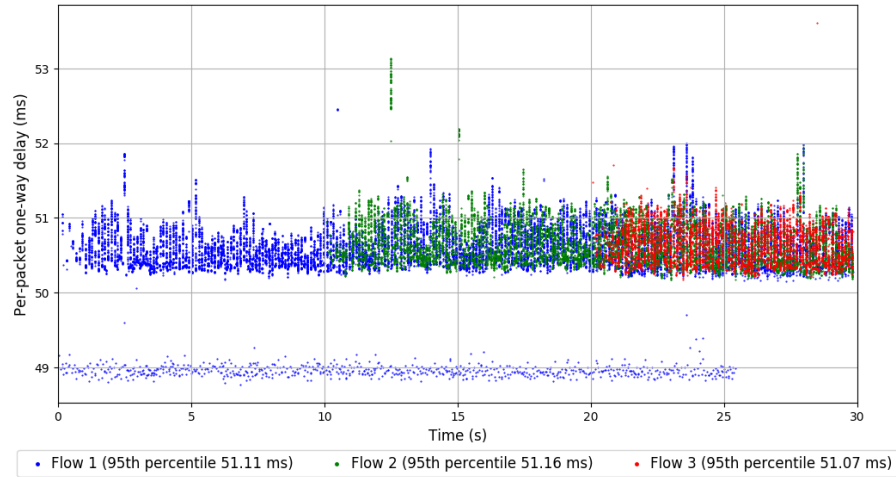
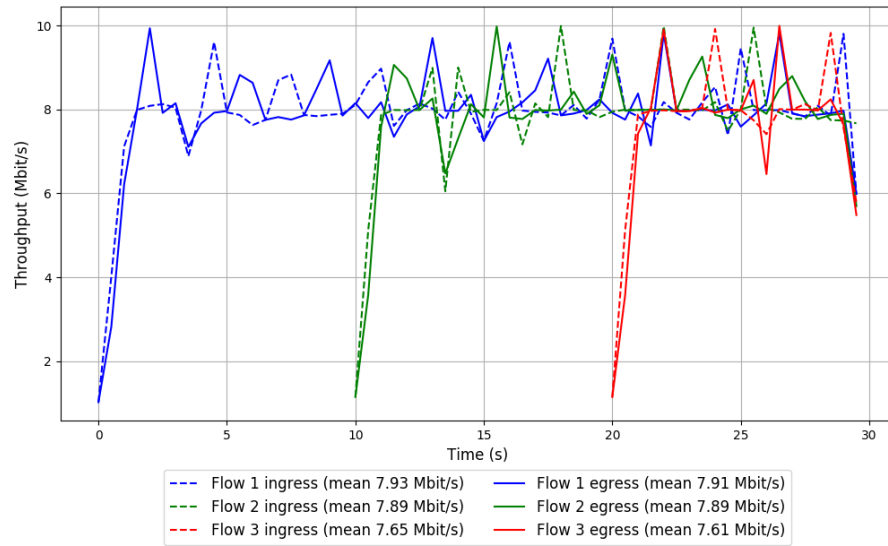
-- Flow 3:

Average throughput: 7.61 Mbit/s

95th percentile per-packet one-way delay: 51.072 ms

Loss rate: 1.29%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-14 06:48:06

End at: 2018-02-14 06:48:36

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.58 Mbit/s

95th percentile per-packet one-way delay: 51.328 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 51.255 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 51.382 ms

Loss rate: 0.00%

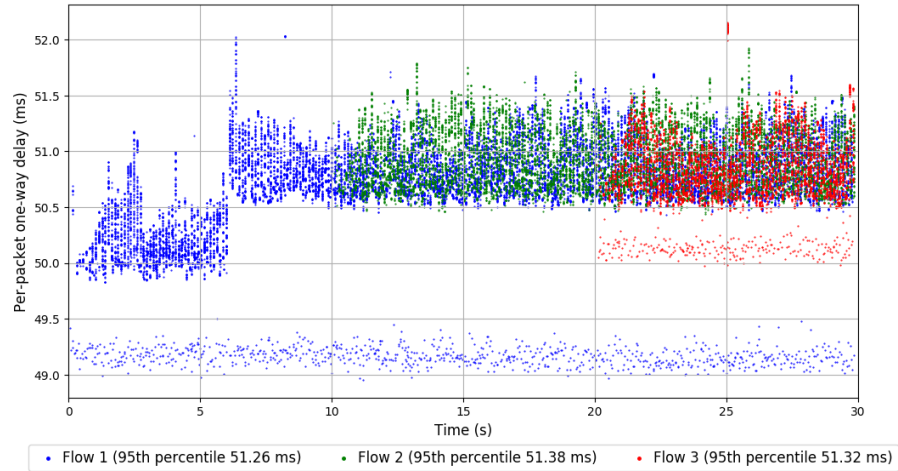
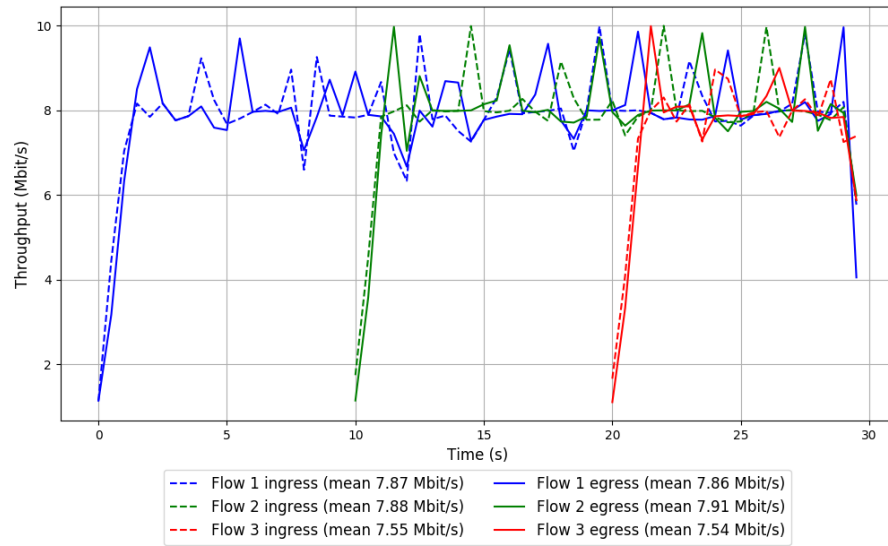
-- Flow 3:

Average throughput: 7.54 Mbit/s

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

Loss rate: 1.34%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-14 07:06:21

End at: 2018-02-14 07:06:51

Below is generated by plot.py at 2018-02-14 12:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.69 Mbit/s

95th percentile per-packet one-way delay: 51.561 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 51.551 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 51.518 ms

Loss rate: 0.64%

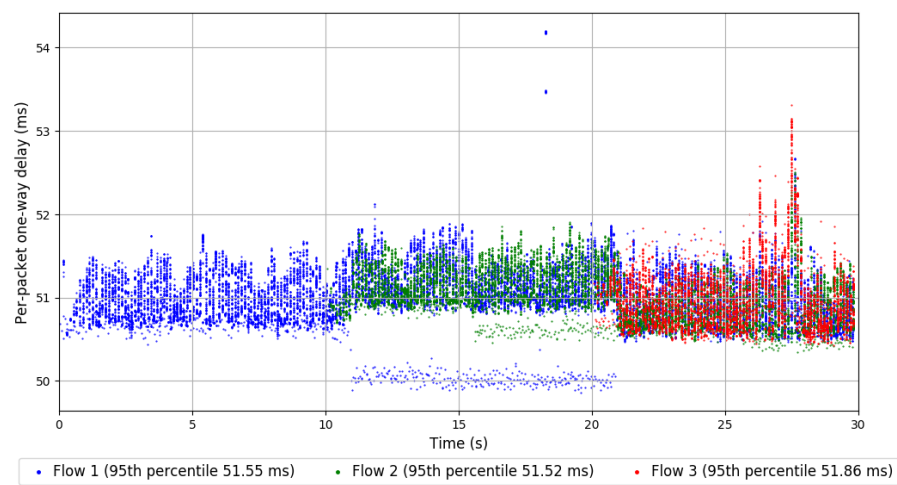
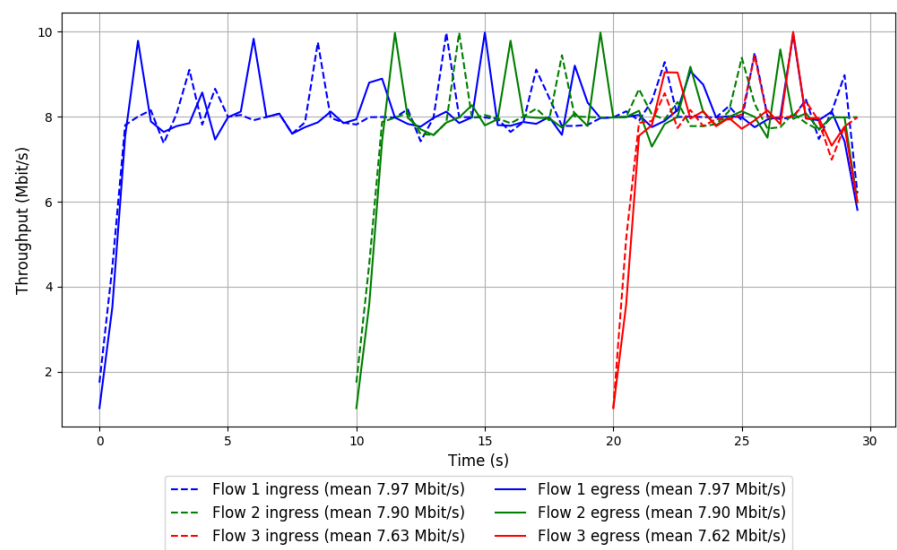
-- Flow 3:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 51.862 ms

Loss rate: 1.33%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-14 07:24:50

End at: 2018-02-14 07:25:20

Below is generated by plot.py at 2018-02-14 12:25:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.68 Mbit/s

95th percentile per-packet one-way delay: 51.644 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 7.96 Mbit/s

95th percentile per-packet one-way delay: 51.583 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 51.729 ms

Loss rate: 0.06%

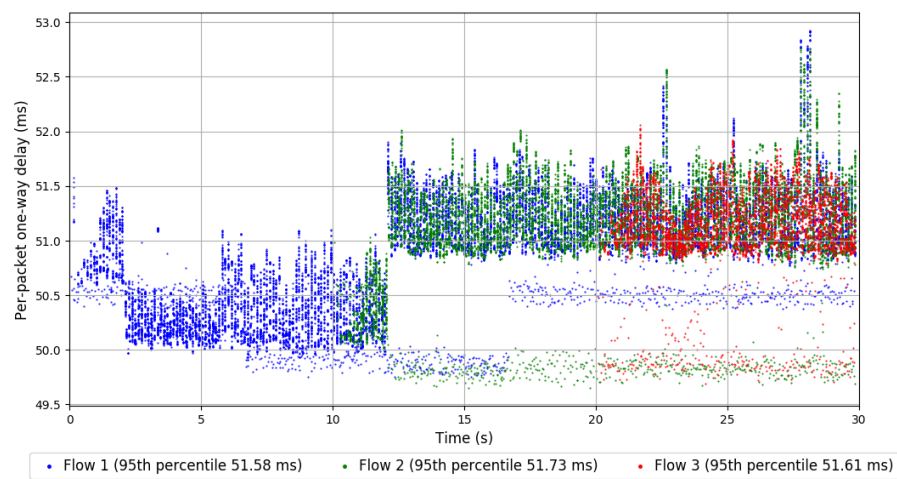
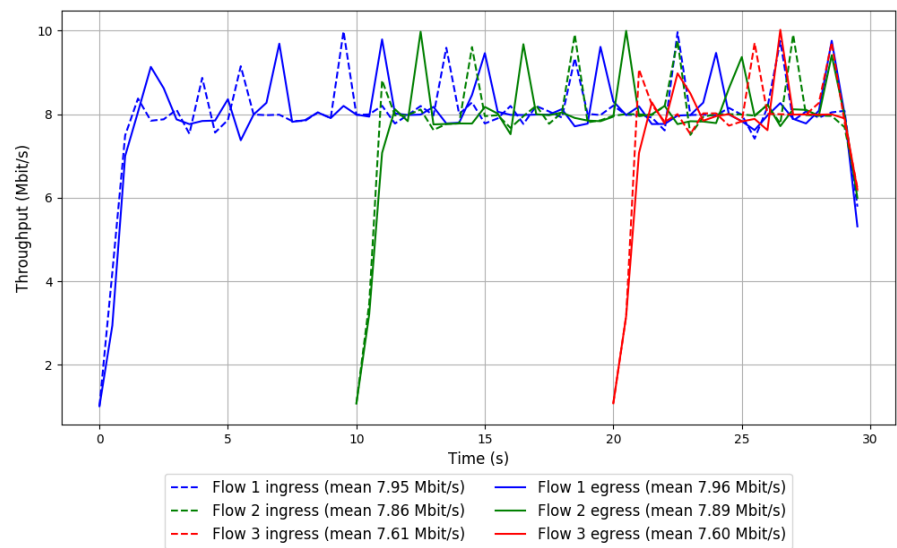
-- Flow 3:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 51.612 ms

Loss rate: 1.42%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-14 07:43:12

End at: 2018-02-14 07:43:42

Below is generated by plot.py at 2018-02-14 12:25:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.70 Mbit/s

95th percentile per-packet one-way delay: 50.366 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 7.98 Mbit/s

95th percentile per-packet one-way delay: 50.440 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 50.276 ms

Loss rate: 0.66%

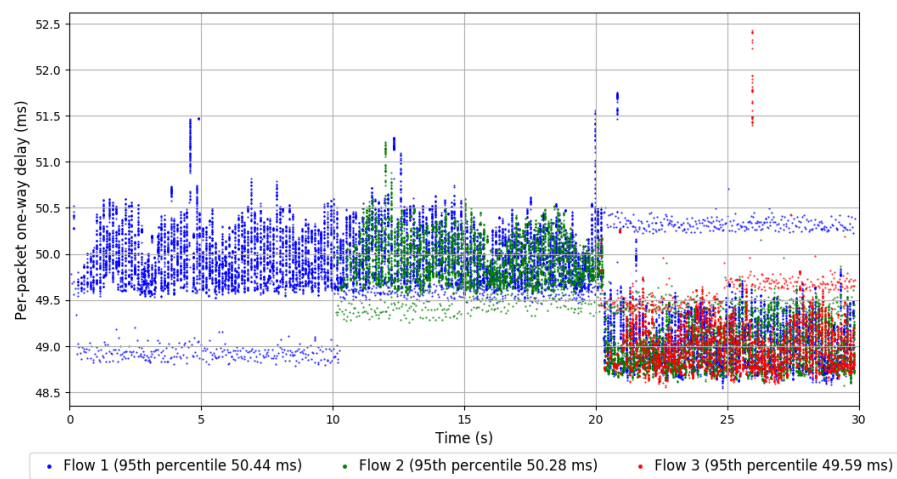
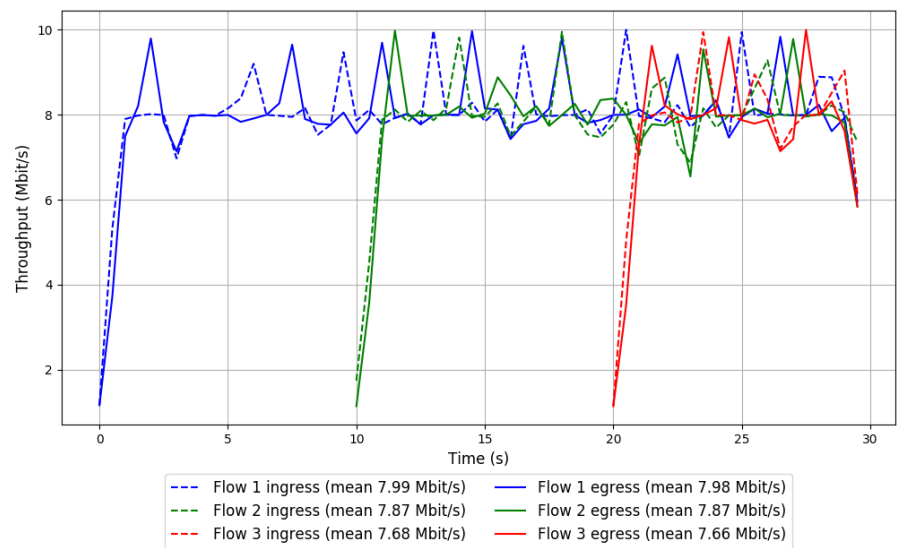
-- Flow 3:

Average throughput: 7.66 Mbit/s

95th percentile per-packet one-way delay: 49.589 ms

Loss rate: 1.27%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-14 08:01:36

End at: 2018-02-14 08:02:06

Below is generated by plot.py at 2018-02-14 12:25:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.70 Mbit/s

95th percentile per-packet one-way delay: 51.144 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 51.125 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 51.168 ms

Loss rate: 0.48%

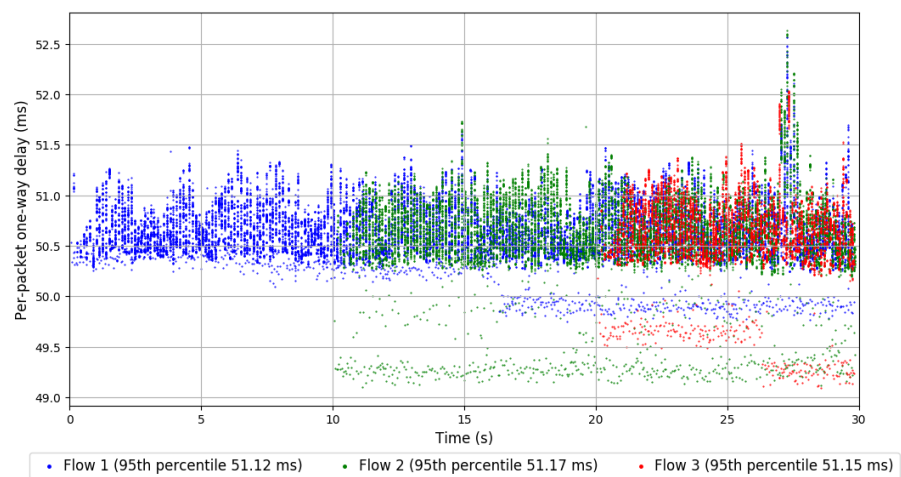
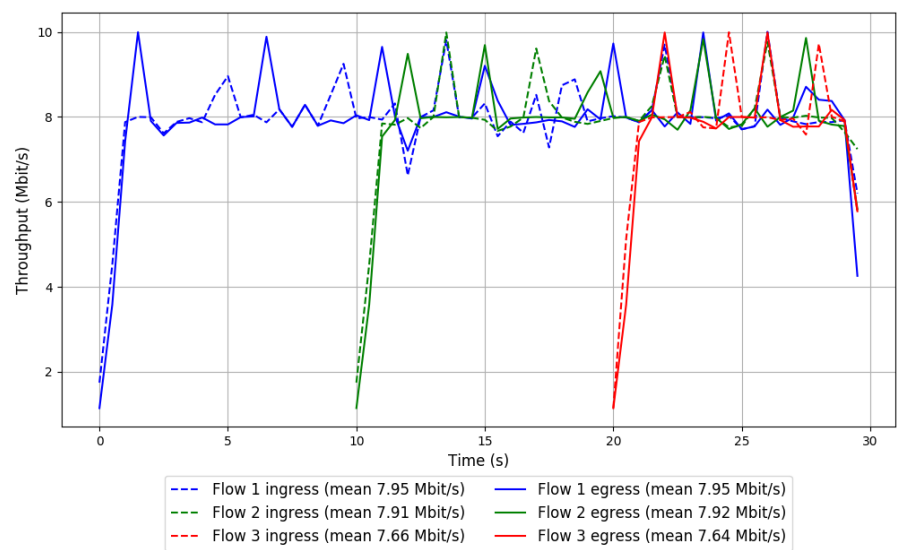
-- Flow 3:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 51.152 ms

Loss rate: 1.16%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-14 08:19:36

End at: 2018-02-14 08:20:06

Below is generated by plot.py at 2018-02-14 12:25:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.67 Mbit/s

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

Loss rate: 0.45%

-- Flow 1:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 51.204 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 51.290 ms

Loss rate: 0.64%

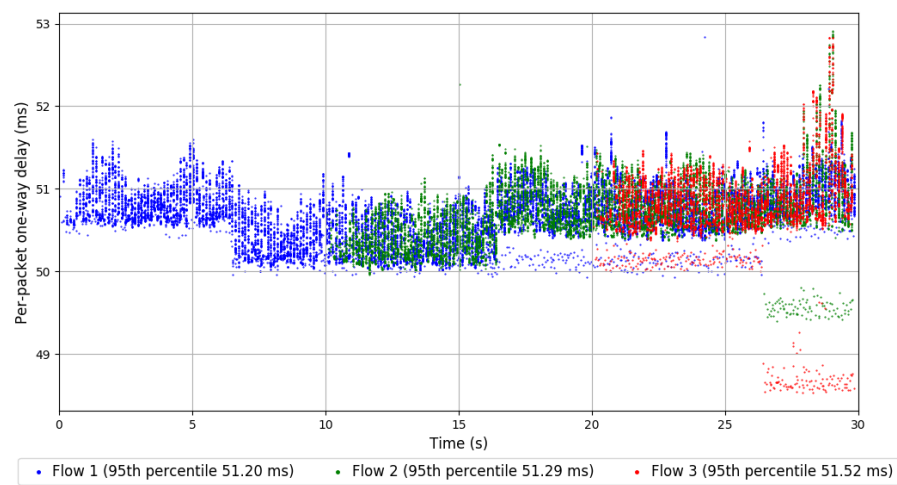
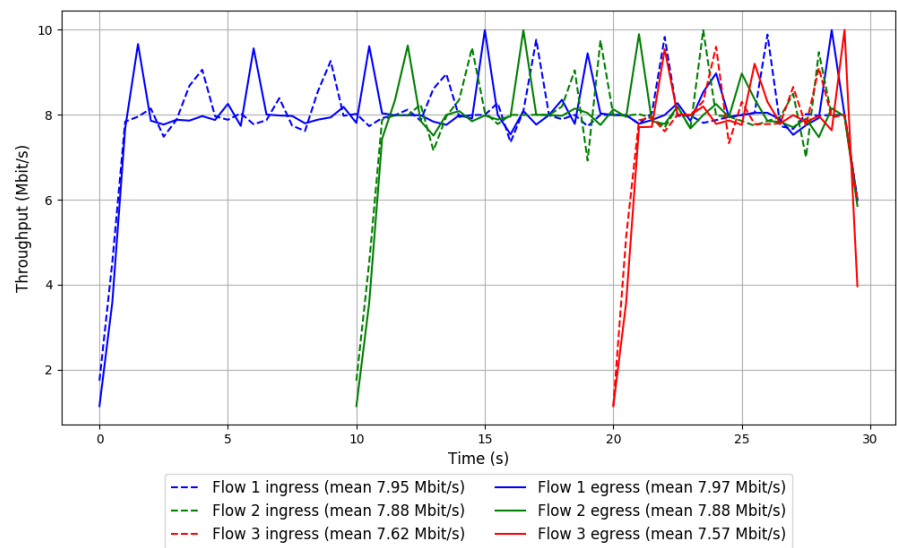
-- Flow 3:

Average throughput: 7.57 Mbit/s

95th percentile per-packet one-way delay: 51.516 ms

Loss rate: 1.33%

Run 10: Report of Sprout — Data Link

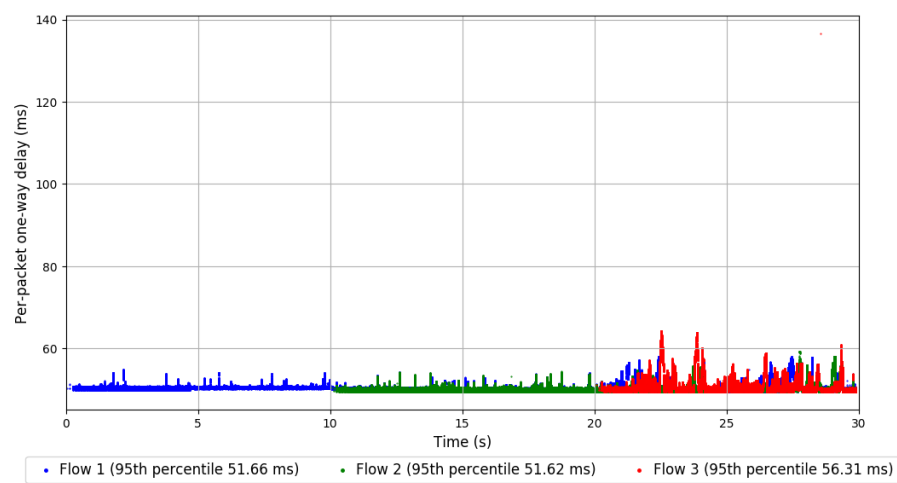
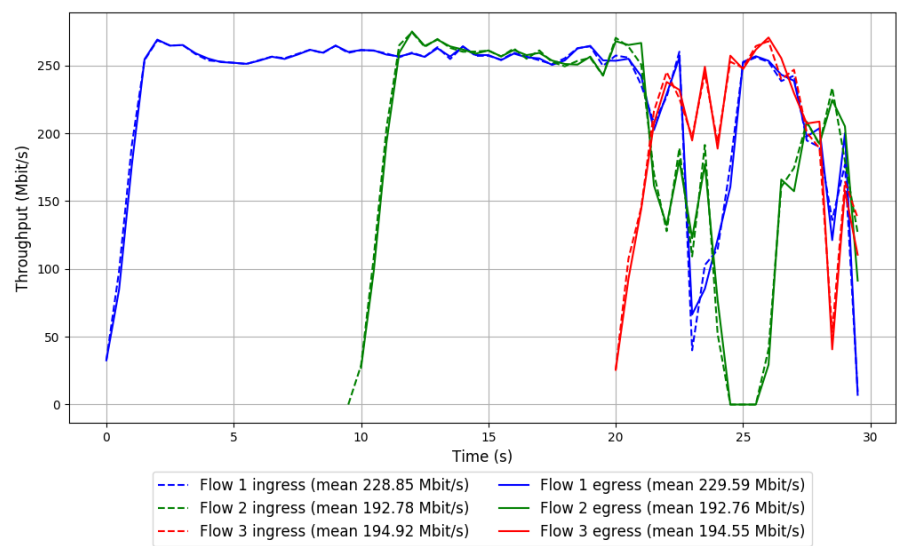


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-14 05:46:02
End at: 2018-02-14 05:46:32

# Below is generated by plot.py at 2018-02-14 12:32:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 421.81 Mbit/s
95th percentile per-packet one-way delay: 52.648 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 229.59 Mbit/s
95th percentile per-packet one-way delay: 51.655 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 192.76 Mbit/s
95th percentile per-packet one-way delay: 51.621 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 194.55 Mbit/s
95th percentile per-packet one-way delay: 56.315 ms
Loss rate: 1.21%
```


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

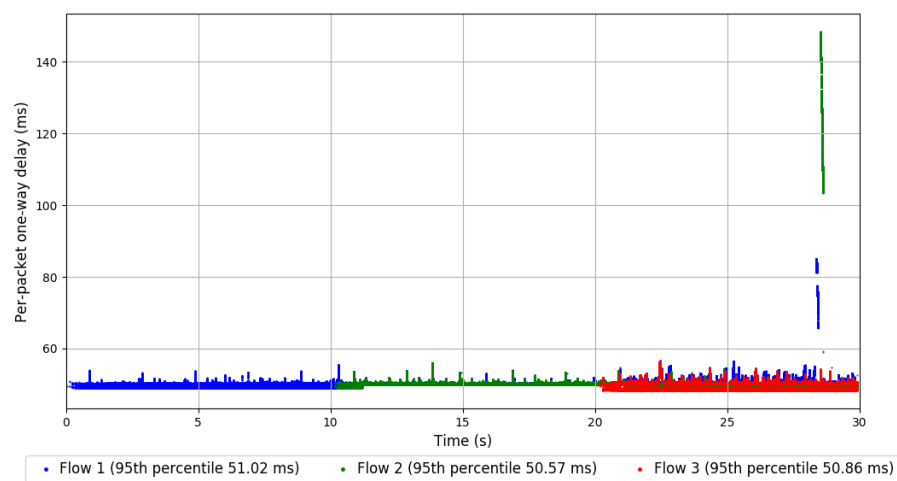
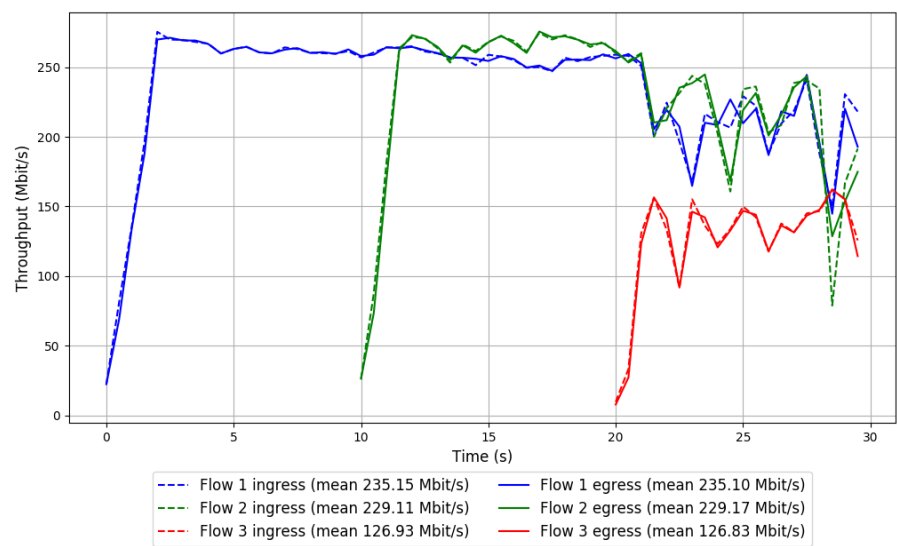


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-14 06:04:21
End at: 2018-02-14 06:04:51

# Below is generated by plot.py at 2018-02-14 12:33:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 429.09 Mbit/s
95th percentile per-packet one-way delay: 50.854 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 235.10 Mbit/s
95th percentile per-packet one-way delay: 51.021 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 229.17 Mbit/s
95th percentile per-packet one-way delay: 50.573 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 126.83 Mbit/s
95th percentile per-packet one-way delay: 50.859 ms
Loss rate: 1.10%
```

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

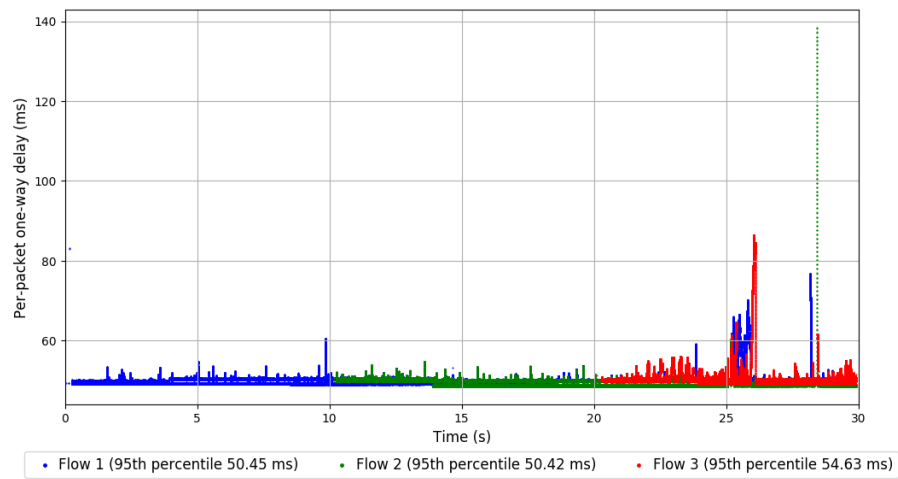
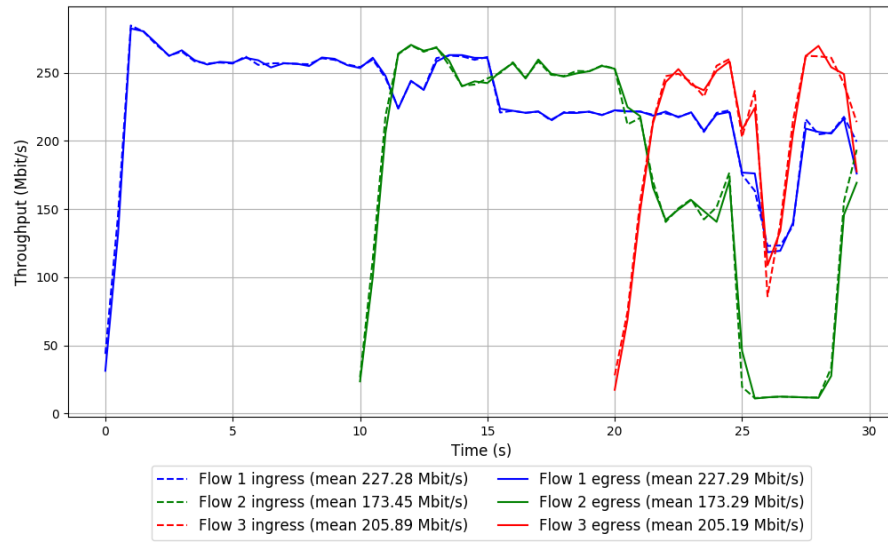


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-14 06:22:38
End at: 2018-02-14 06:23:08

# Below is generated by plot.py at 2018-02-14 12:33:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 409.88 Mbit/s
95th percentile per-packet one-way delay: 51.207 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 227.29 Mbit/s
95th percentile per-packet one-way delay: 50.448 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 173.29 Mbit/s
95th percentile per-packet one-way delay: 50.416 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 205.19 Mbit/s
95th percentile per-packet one-way delay: 54.635 ms
Loss rate: 1.37%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-02-14 06:40:53

End at: 2018-02-14 06:41:23

Below is generated by plot.py at 2018-02-14 12:33:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 426.55 Mbit/s

95th percentile per-packet one-way delay: 51.206 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 188.29 Mbit/s

95th percentile per-packet one-way delay: 50.779 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 250.24 Mbit/s

95th percentile per-packet one-way delay: 51.944 ms

Loss rate: 0.53%

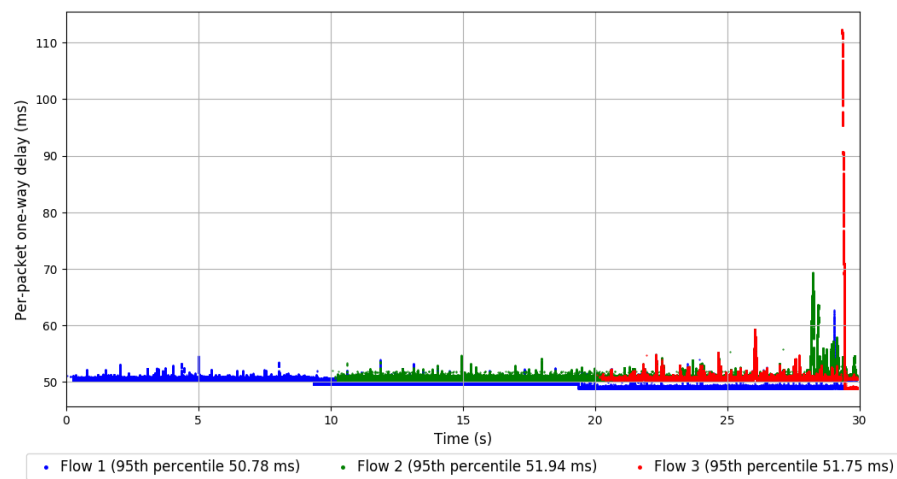
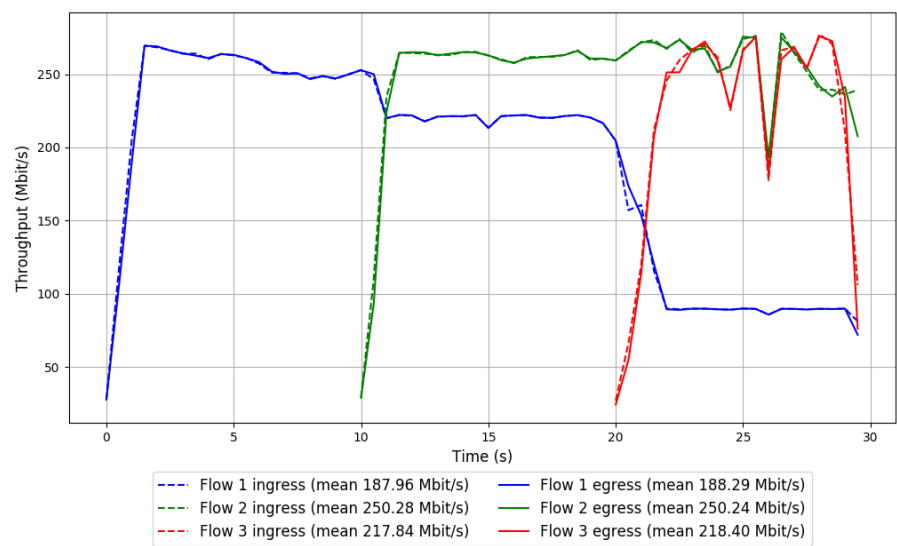
-- Flow 3:

Average throughput: 218.40 Mbit/s

95th percentile per-packet one-way delay: 51.747 ms

Loss rate: 0.77%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-14 06:59:10

End at: 2018-02-14 06:59:40

Below is generated by plot.py at 2018-02-14 12:33:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 377.60 Mbit/s

95th percentile per-packet one-way delay: 51.590 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 200.77 Mbit/s

95th percentile per-packet one-way delay: 50.948 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 155.21 Mbit/s

95th percentile per-packet one-way delay: 51.926 ms

Loss rate: 0.22%

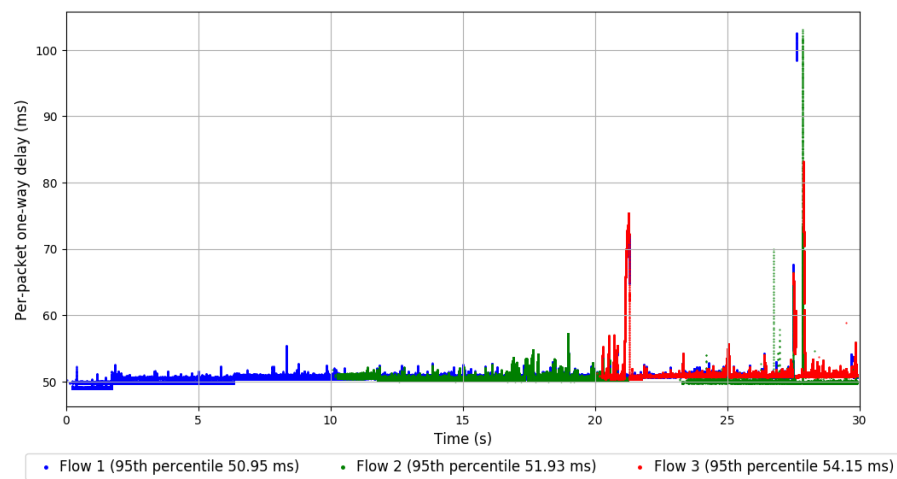
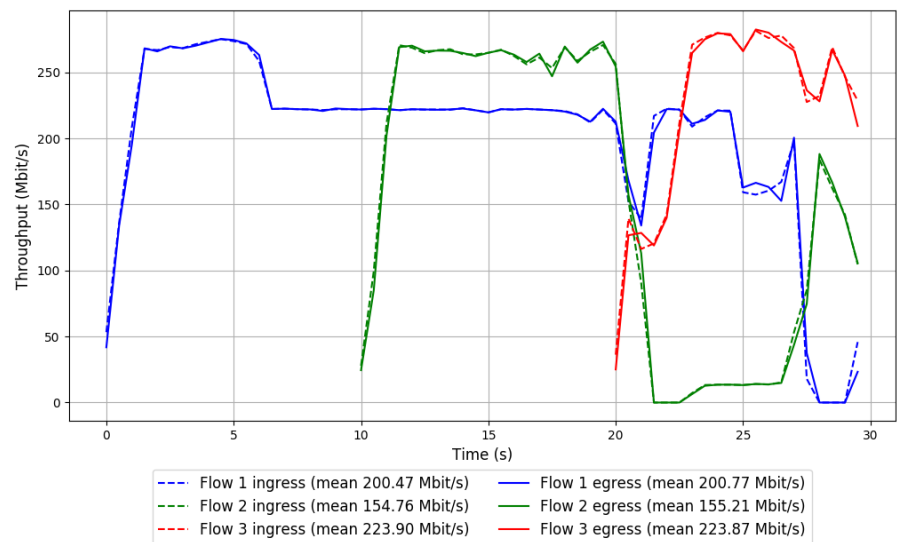
-- Flow 3:

Average throughput: 223.87 Mbit/s

95th percentile per-packet one-way delay: 54.153 ms

Loss rate: 1.04%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-14 07:17:34

End at: 2018-02-14 07:18:04

Below is generated by plot.py at 2018-02-14 12:33:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 450.03 Mbit/s

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

Loss rate: 0.45%

-- Flow 1:

Average throughput: 211.19 Mbit/s

95th percentile per-packet one-way delay: 50.817 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 249.21 Mbit/s

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

Loss rate: 0.45%

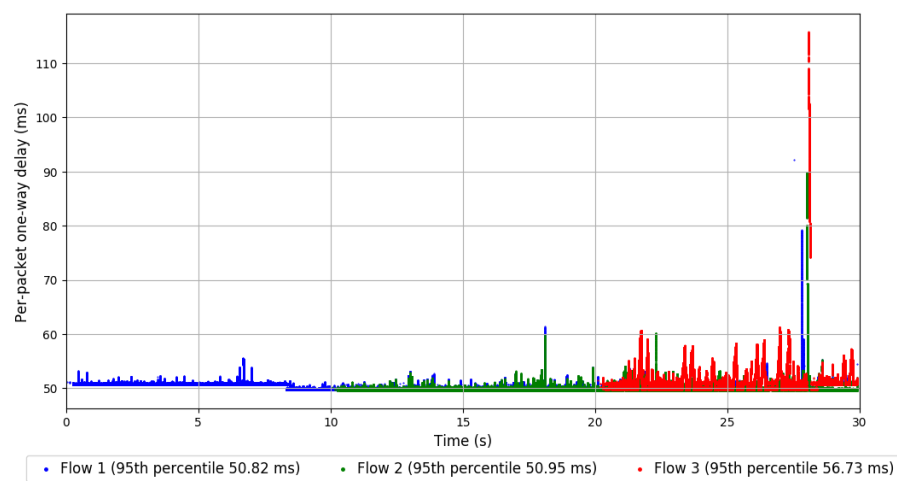
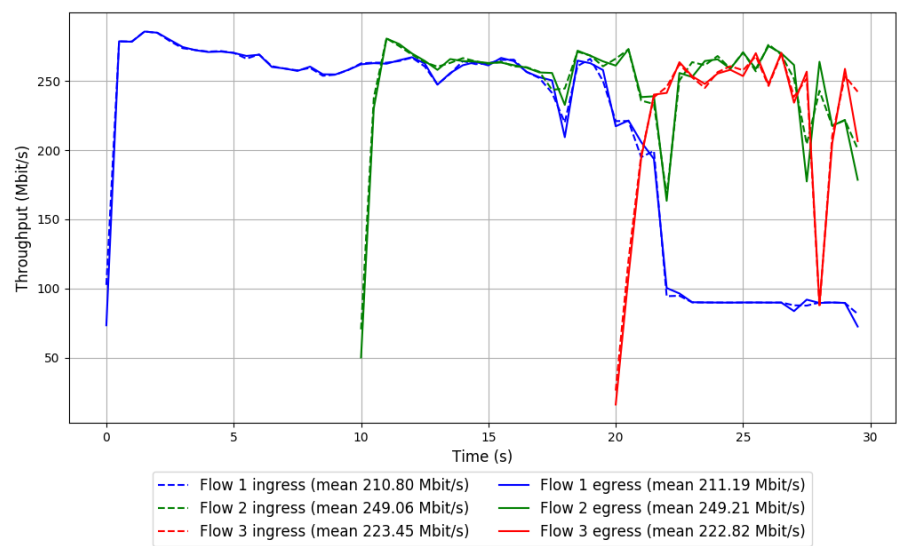
-- Flow 3:

Average throughput: 222.82 Mbit/s

95th percentile per-packet one-way delay: 56.725 ms

Loss rate: 1.31%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-02-14 07:35:58

End at: 2018-02-14 07:36:28

Below is generated by plot.py at 2018-02-14 12:38:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 437.39 Mbit/s

95th percentile per-packet one-way delay: 53.559 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 245.03 Mbit/s

95th percentile per-packet one-way delay: 55.545 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 202.73 Mbit/s

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

Loss rate: 0.23%

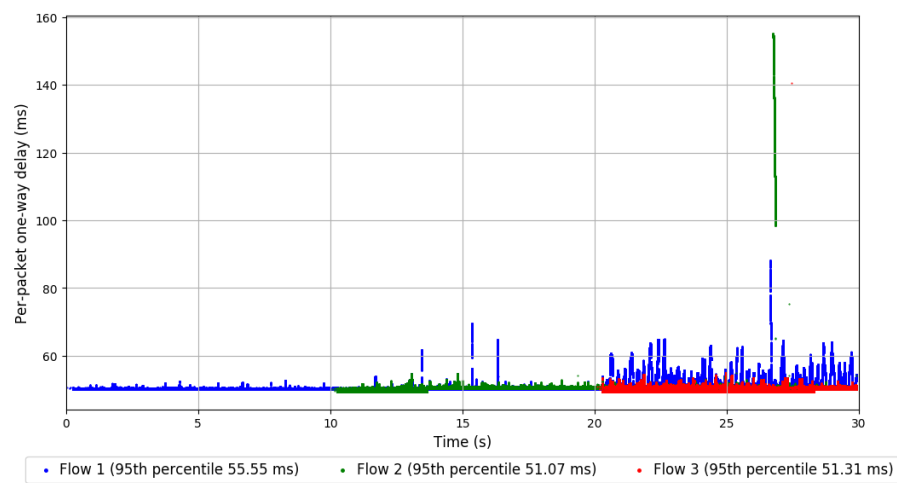
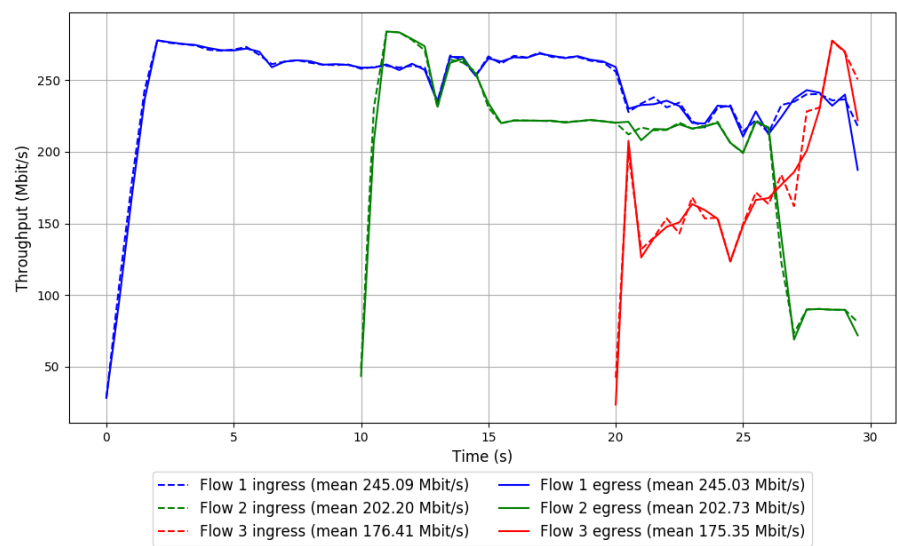
-- Flow 3:

Average throughput: 175.35 Mbit/s

95th percentile per-packet one-way delay: 51.311 ms

Loss rate: 1.61%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-14 07:54:22

End at: 2018-02-14 07:54:52

Below is generated by plot.py at 2018-02-14 12:38:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 408.76 Mbit/s

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

Loss rate: 0.48%

-- Flow 1:

Average throughput: 221.83 Mbit/s

95th percentile per-packet one-way delay: 50.367 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 253.20 Mbit/s

95th percentile per-packet one-way delay: 50.613 ms

Loss rate: 0.47%

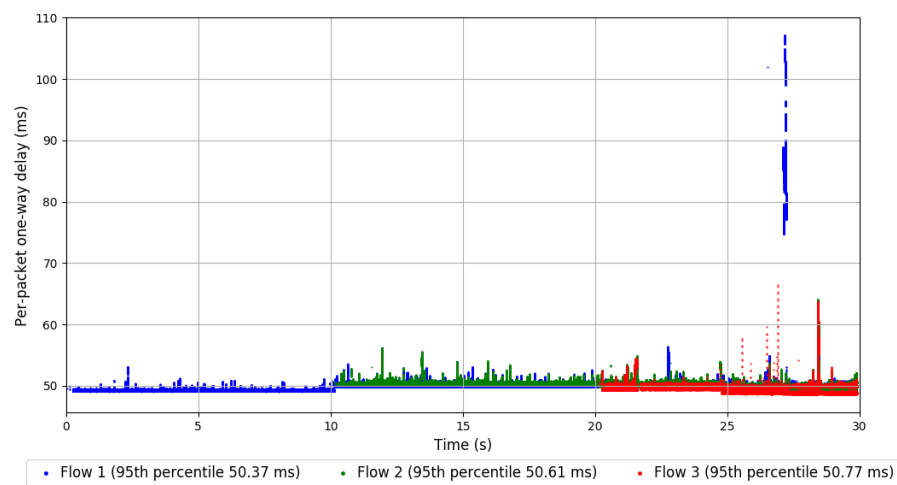
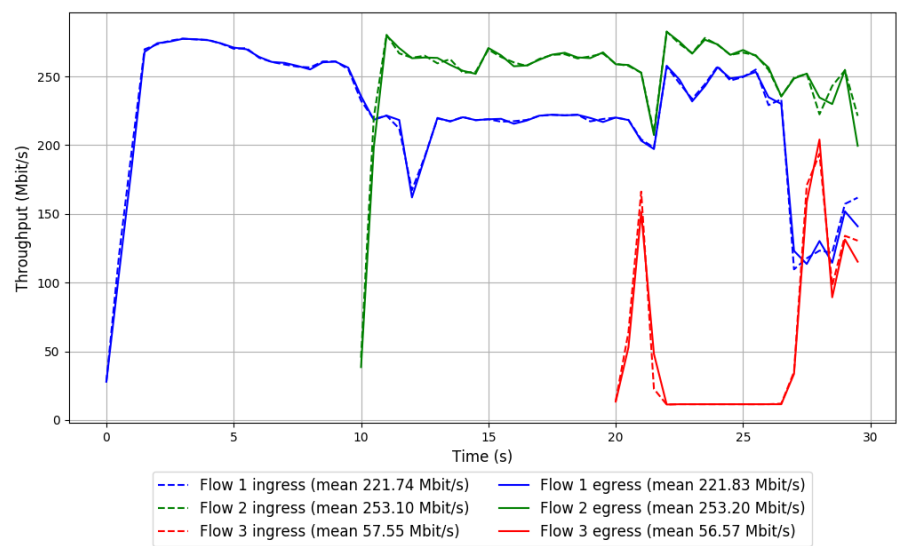
-- Flow 3:

Average throughput: 56.57 Mbit/s

95th percentile per-packet one-way delay: 50.771 ms

Loss rate: 2.73%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-02-14 08:12:32

End at: 2018-02-14 08:13:02

Below is generated by plot.py at 2018-02-14 12:43:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 384.60 Mbit/s

95th percentile per-packet one-way delay: 52.275 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 188.08 Mbit/s

95th percentile per-packet one-way delay: 50.433 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 189.16 Mbit/s

95th percentile per-packet one-way delay: 54.867 ms

Loss rate: 0.71%

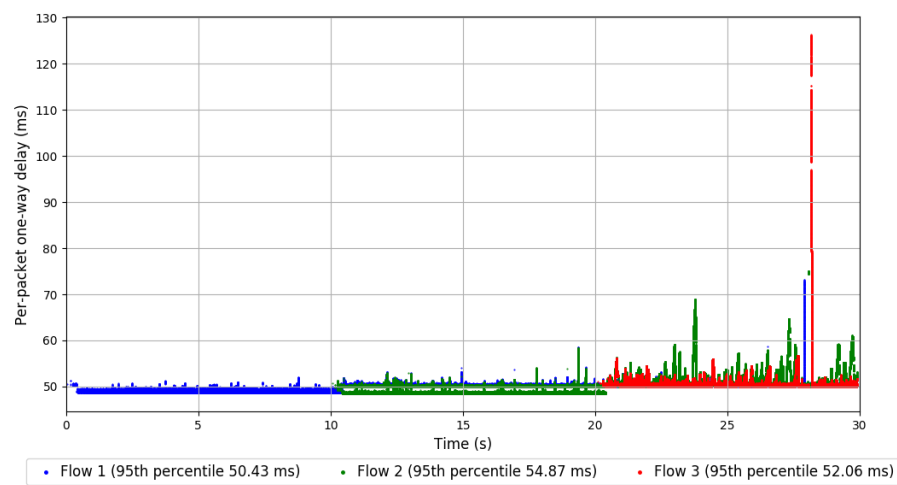
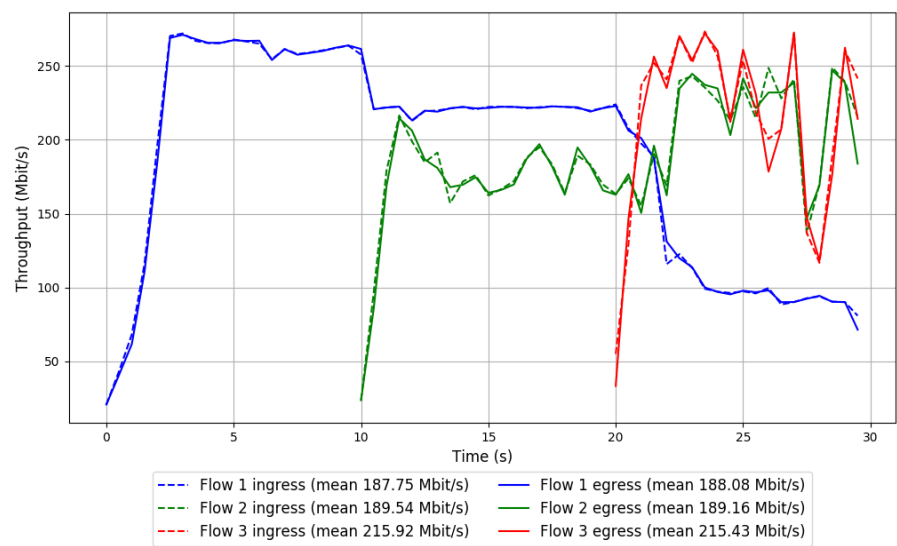
-- Flow 3:

Average throughput: 215.43 Mbit/s

95th percentile per-packet one-way delay: 52.059 ms

Loss rate: 1.26%

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

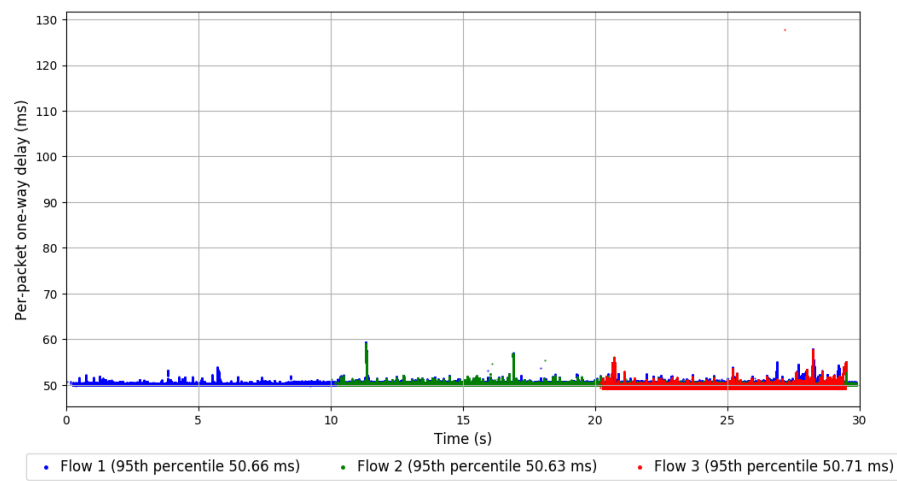
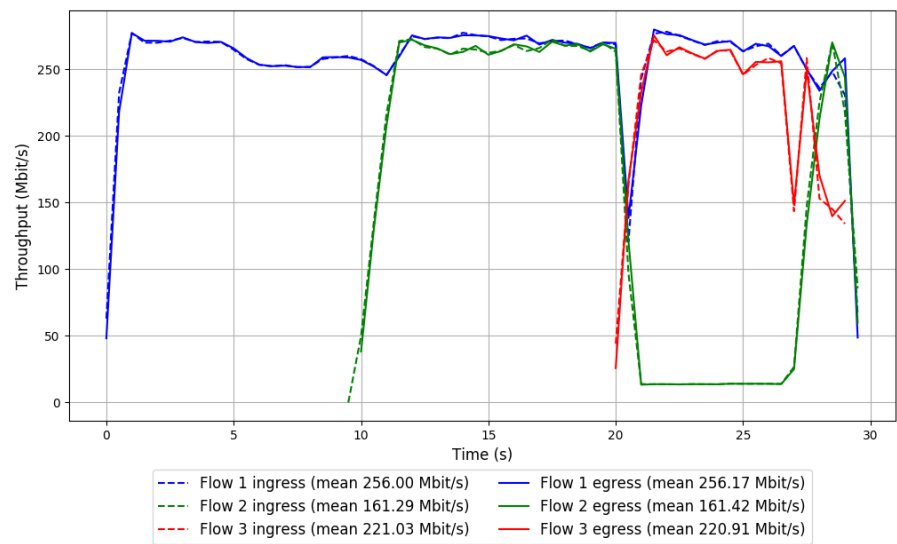


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-14 08:30:34
End at: 2018-02-14 08:31:04

# Below is generated by plot.py at 2018-02-14 12:45:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 433.00 Mbit/s
95th percentile per-packet one-way delay: 50.657 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 256.17 Mbit/s
95th percentile per-packet one-way delay: 50.656 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 161.42 Mbit/s
95th percentile per-packet one-way delay: 50.632 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 220.91 Mbit/s
95th percentile per-packet one-way delay: 50.711 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-14 05:41:26

End at: 2018-02-14 05:41:56

Below is generated by plot.py at 2018-02-14 12:45:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 341.21 Mbit/s

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

Loss rate: 0.21%

-- Flow 1:

Average throughput: 215.99 Mbit/s

95th percentile per-packet one-way delay: 55.853 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 155.30 Mbit/s

95th percentile per-packet one-way delay: 57.620 ms

Loss rate: 0.28%

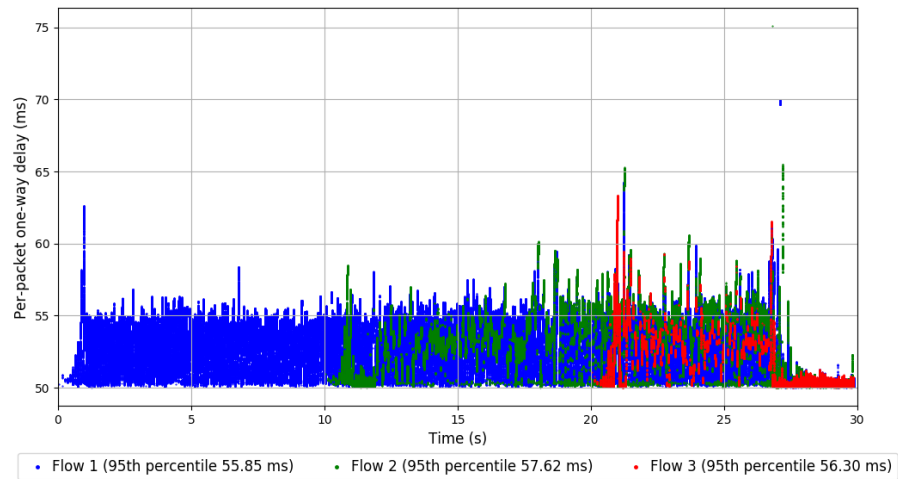
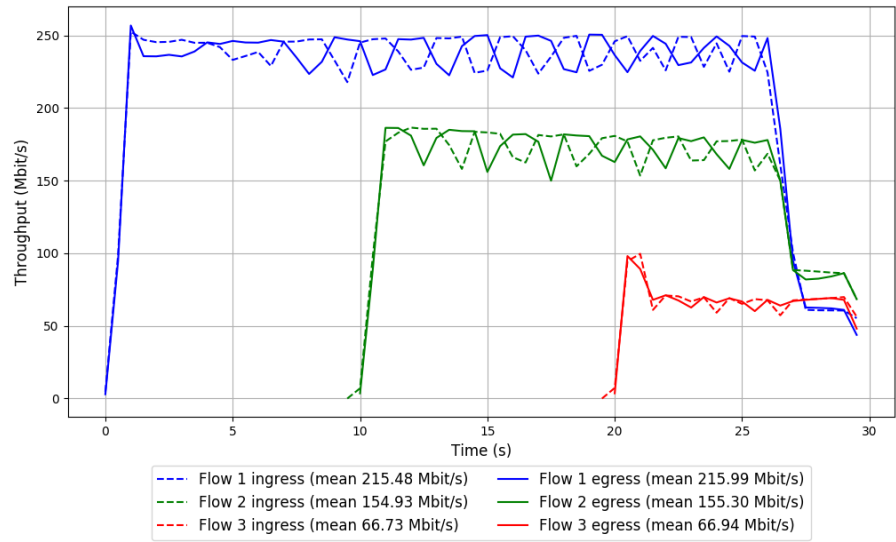
-- Flow 3:

Average throughput: 66.94 Mbit/s

95th percentile per-packet one-way delay: 56.304 ms

Loss rate: 1.06%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-14 06:00:02

End at: 2018-02-14 06:00:32

Below is generated by plot.py at 2018-02-14 12:45:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 113.00 Mbit/s

95th percentile per-packet one-way delay: 52.606 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 35.05 Mbit/s

95th percentile per-packet one-way delay: 52.456 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 68.69 Mbit/s

95th percentile per-packet one-way delay: 52.045 ms

Loss rate: 0.57%

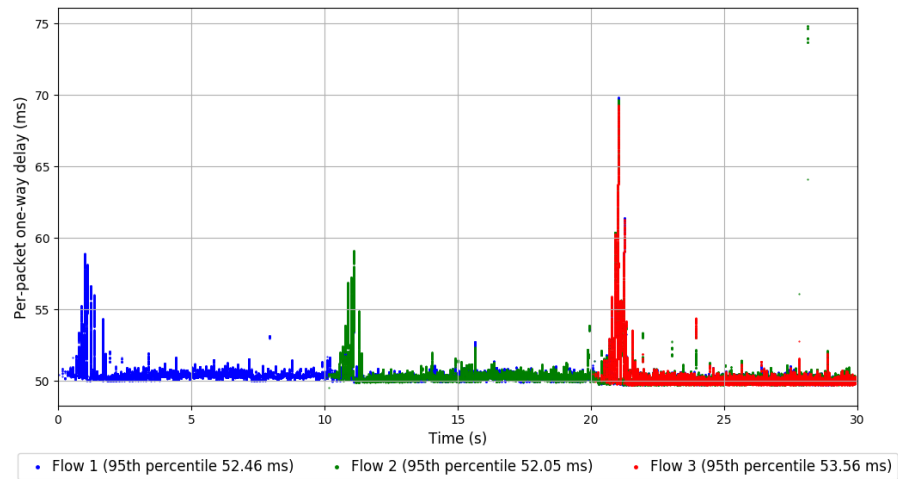
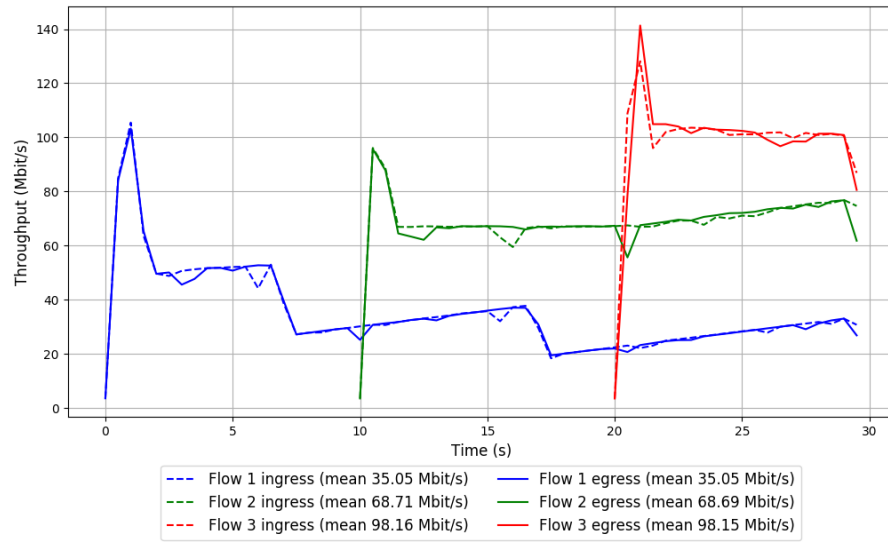
-- Flow 3:

Average throughput: 98.15 Mbit/s

95th percentile per-packet one-way delay: 53.562 ms

Loss rate: 1.03%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-14 06:18:09

End at: 2018-02-14 06:18:39

Below is generated by plot.py at 2018-02-14 12:45:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 292.24 Mbit/s

95th percentile per-packet one-way delay: 54.086 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 138.27 Mbit/s

95th percentile per-packet one-way delay: 51.944 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 152.26 Mbit/s

95th percentile per-packet one-way delay: 54.679 ms

Loss rate: 0.52%

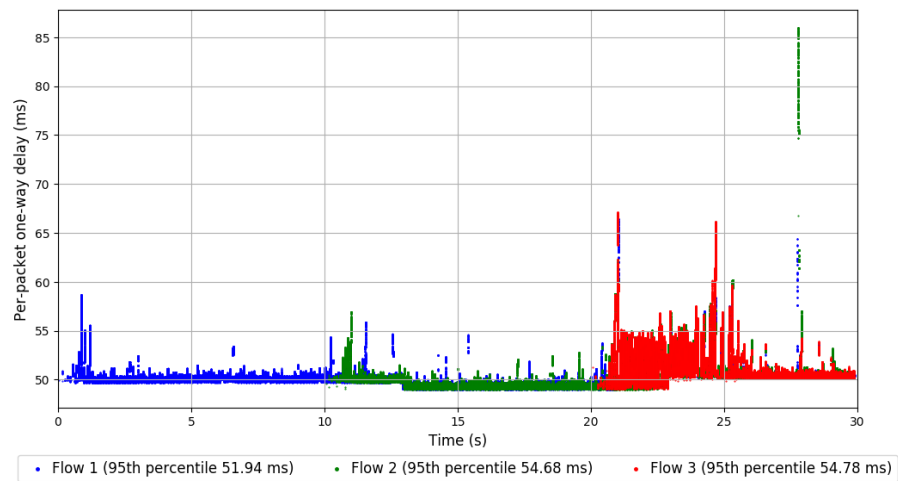
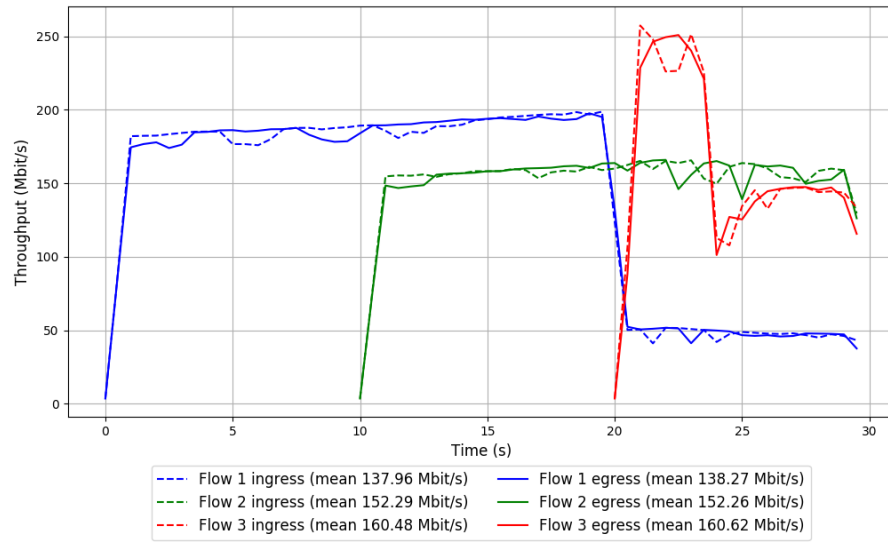
-- Flow 3:

Average throughput: 160.62 Mbit/s

95th percentile per-packet one-way delay: 54.781 ms

Loss rate: 0.94%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-14 06:36:33

End at: 2018-02-14 06:37:03

Below is generated by plot.py at 2018-02-14 12:45:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.47 Mbit/s

95th percentile per-packet one-way delay: 51.427 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 37.92 Mbit/s

95th percentile per-packet one-way delay: 51.515 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 64.29 Mbit/s

95th percentile per-packet one-way delay: 51.553 ms

Loss rate: 0.56%

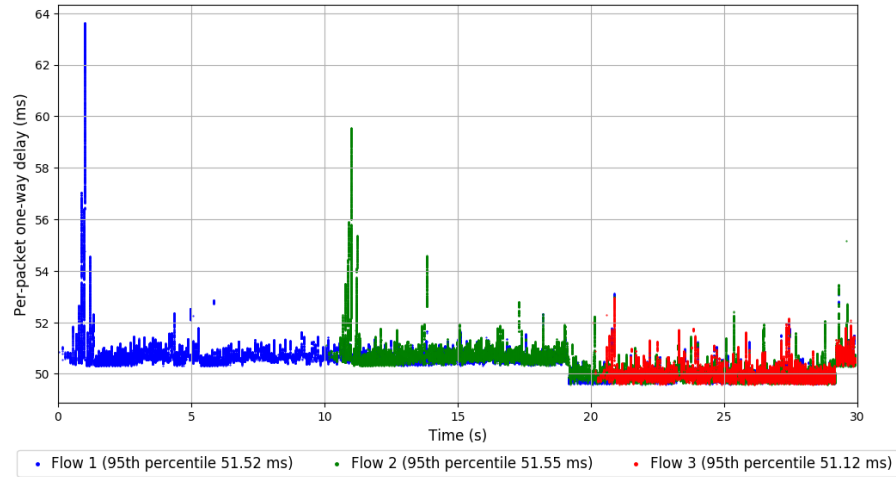
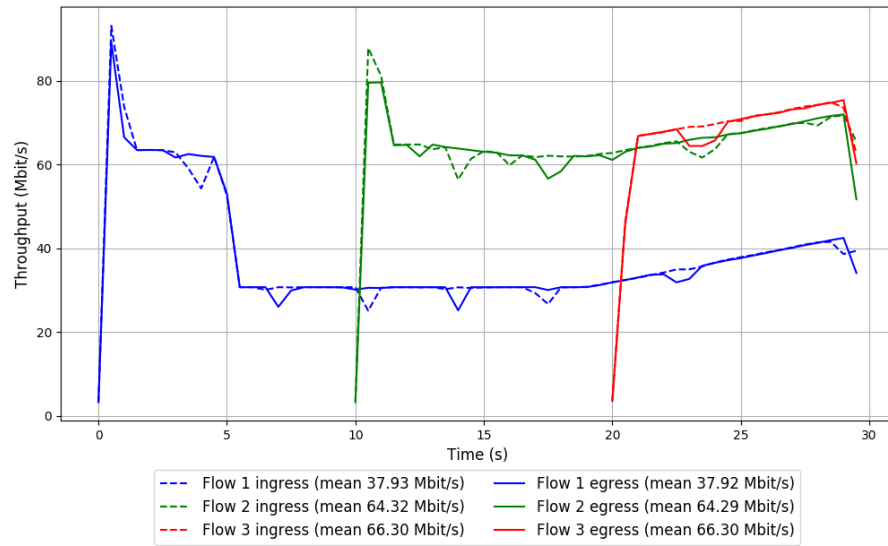
-- Flow 3:

Average throughput: 66.30 Mbit/s

95th percentile per-packet one-way delay: 51.121 ms

Loss rate: 1.14%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-14 06:54:43

End at: 2018-02-14 06:55:13

Below is generated by plot.py at 2018-02-14 12:45:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.88 Mbit/s

95th percentile per-packet one-way delay: 52.115 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 57.82 Mbit/s

95th percentile per-packet one-way delay: 52.278 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 172.38 Mbit/s

95th percentile per-packet one-way delay: 52.003 ms

Loss rate: 0.25%

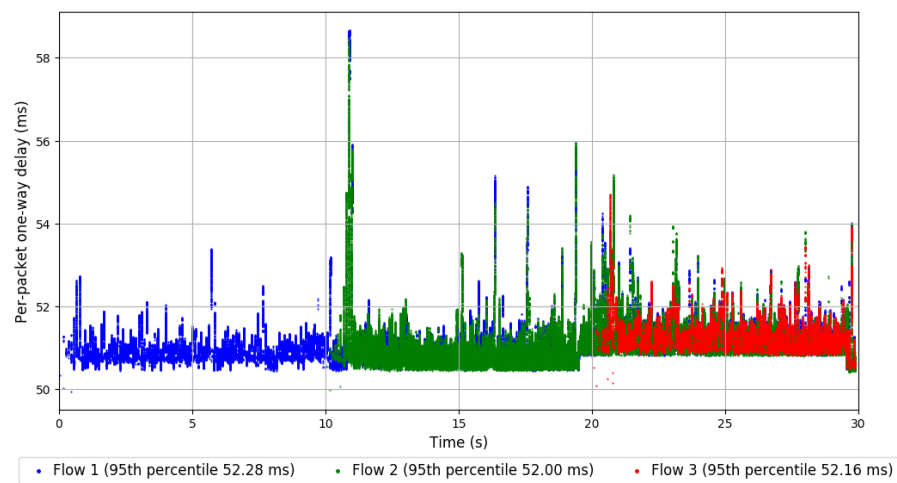
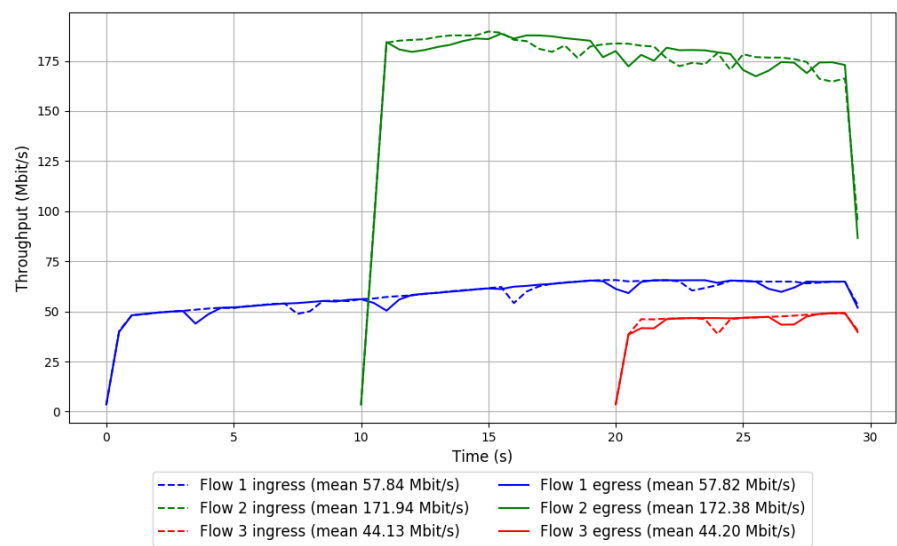
-- Flow 3:

Average throughput: 44.20 Mbit/s

95th percentile per-packet one-way delay: 52.162 ms

Loss rate: 1.14%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-14 07:13:01

End at: 2018-02-14 07:13:31

Below is generated by plot.py at 2018-02-14 12:45:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 198.37 Mbit/s

95th percentile per-packet one-way delay: 57.897 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 117.90 Mbit/s

95th percentile per-packet one-way delay: 57.887 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 118.21 Mbit/s

95th percentile per-packet one-way delay: 58.213 ms

Loss rate: 0.39%

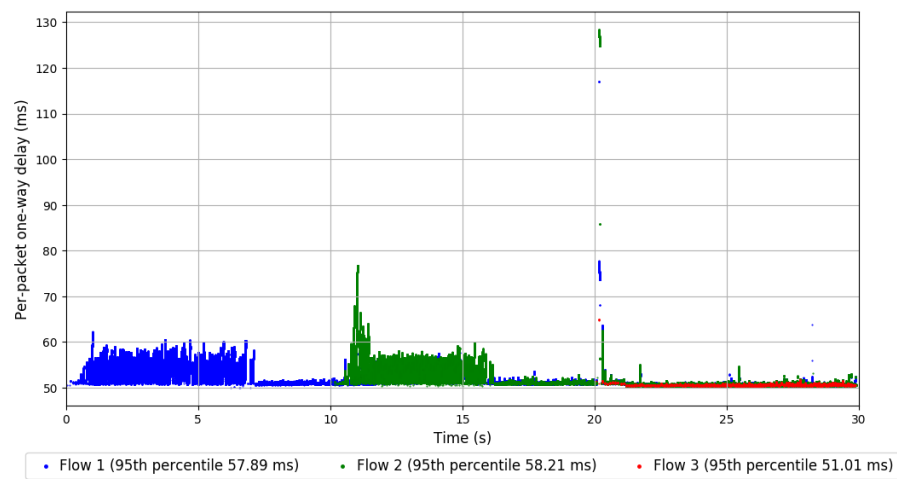
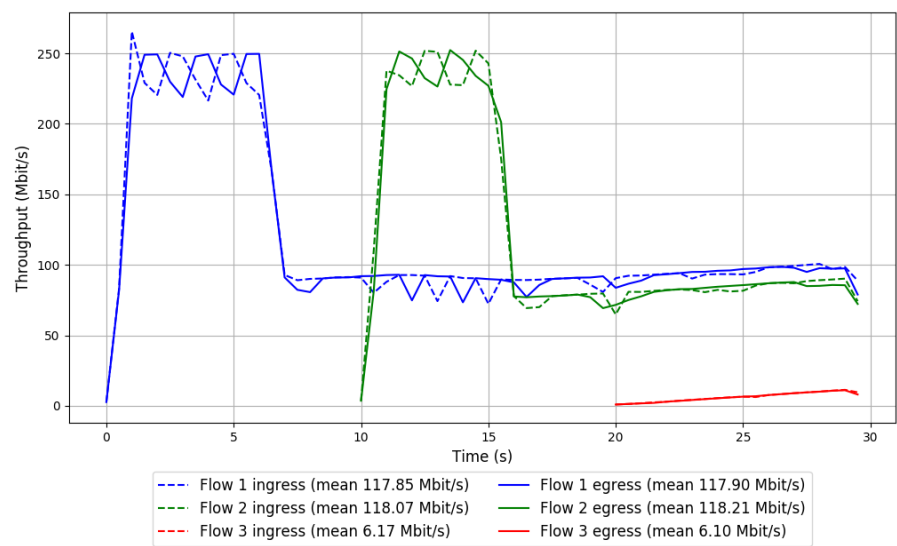
-- Flow 3:

Average throughput: 6.10 Mbit/s

95th percentile per-packet one-way delay: 51.014 ms

Loss rate: 2.04%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-14 07:31:31

End at: 2018-02-14 07:32:01

Below is generated by plot.py at 2018-02-14 12:45:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 173.33 Mbit/s

95th percentile per-packet one-way delay: 52.038 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 93.44 Mbit/s

95th percentile per-packet one-way delay: 51.844 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 77.45 Mbit/s

95th percentile per-packet one-way delay: 51.972 ms

Loss rate: 0.47%

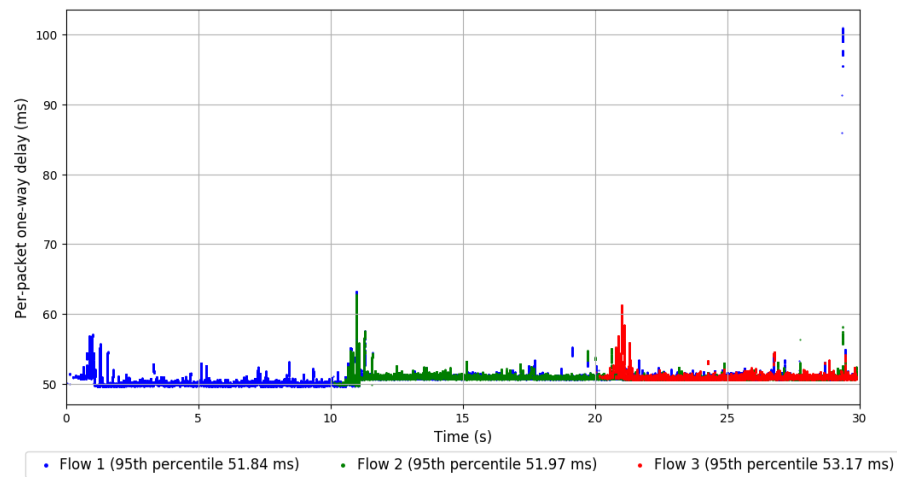
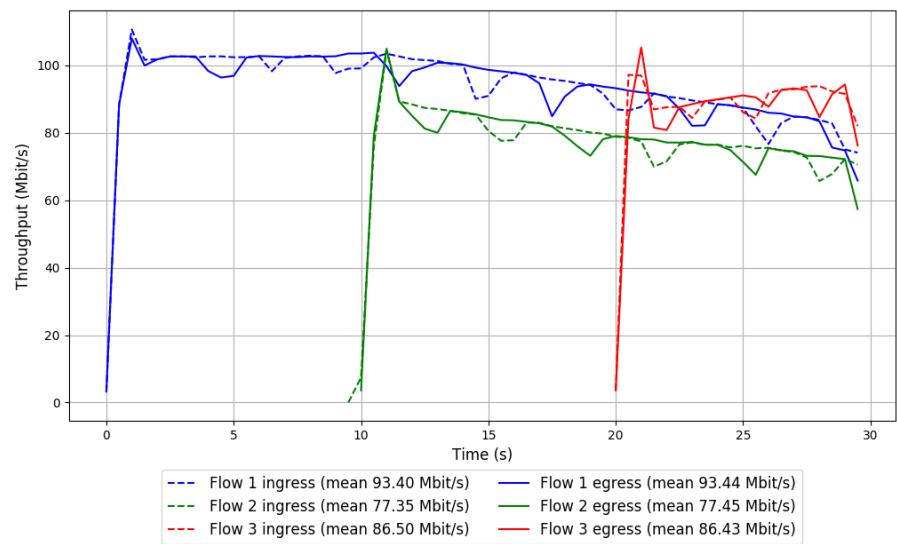
-- Flow 3:

Average throughput: 86.43 Mbit/s

95th percentile per-packet one-way delay: 53.172 ms

Loss rate: 1.12%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-14 07:49:54

End at: 2018-02-14 07:50:24

Below is generated by plot.py at 2018-02-14 12:45:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 260.12 Mbit/s

95th percentile per-packet one-way delay: 56.236 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 102.71 Mbit/s

95th percentile per-packet one-way delay: 56.618 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 233.94 Mbit/s

95th percentile per-packet one-way delay: 55.832 ms

Loss rate: 0.56%

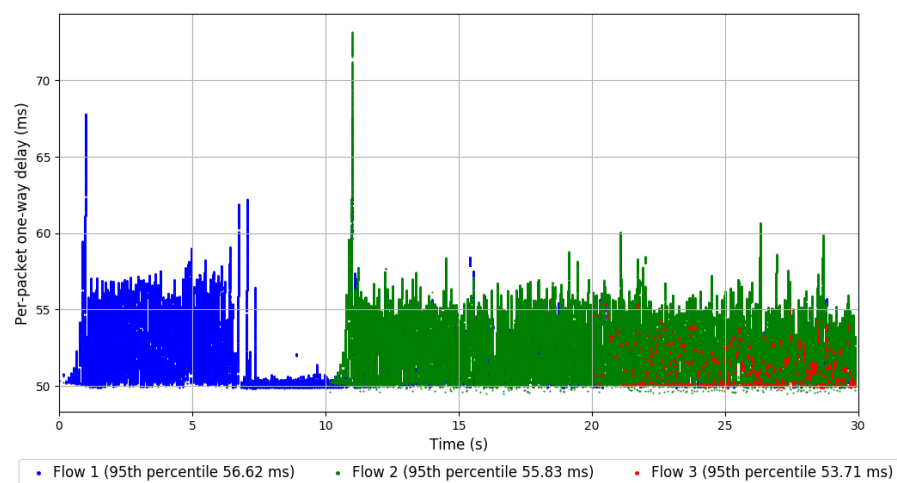
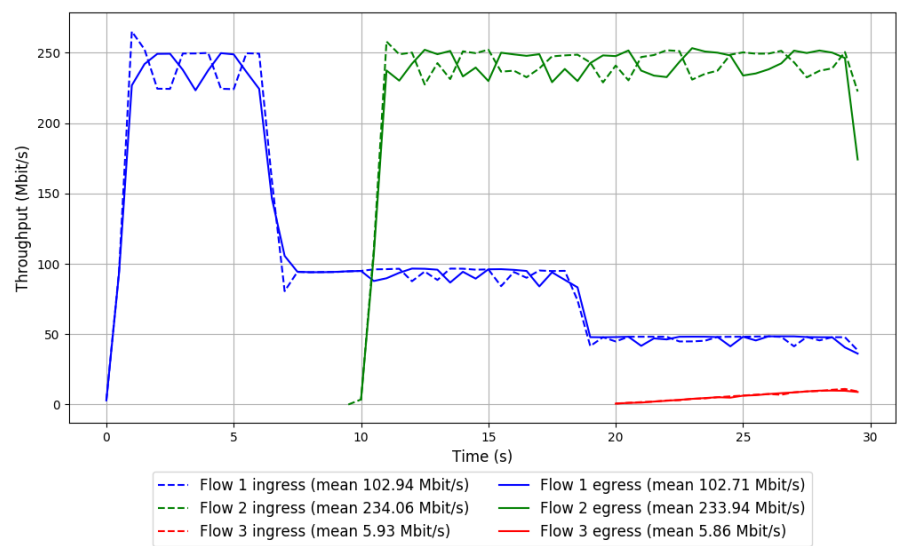
-- Flow 3:

Average throughput: 5.86 Mbit/s

95th percentile per-packet one-way delay: 53.707 ms

Loss rate: 2.12%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-14 08:08:10

End at: 2018-02-14 08:08:40

Below is generated by plot.py at 2018-02-14 12:45:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.37 Mbit/s

95th percentile per-packet one-way delay: 51.345 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 55.50 Mbit/s

95th percentile per-packet one-way delay: 51.369 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 90.27 Mbit/s

95th percentile per-packet one-way delay: 51.319 ms

Loss rate: 0.57%

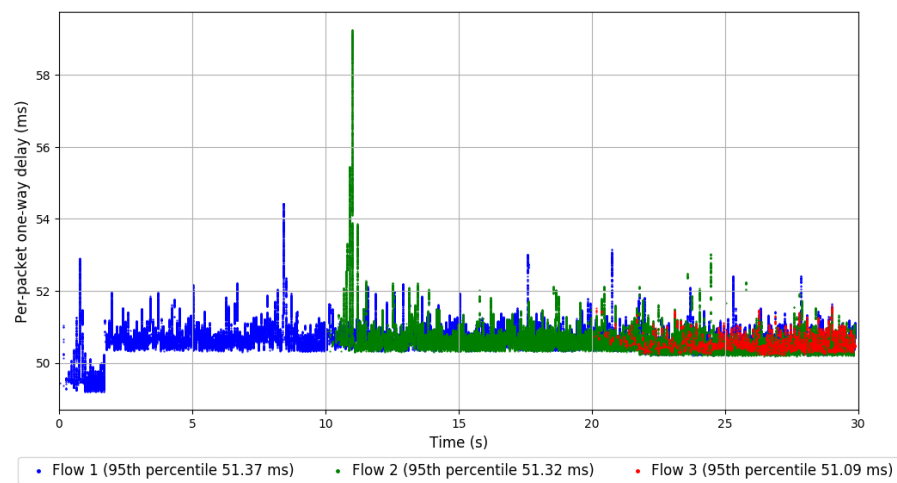
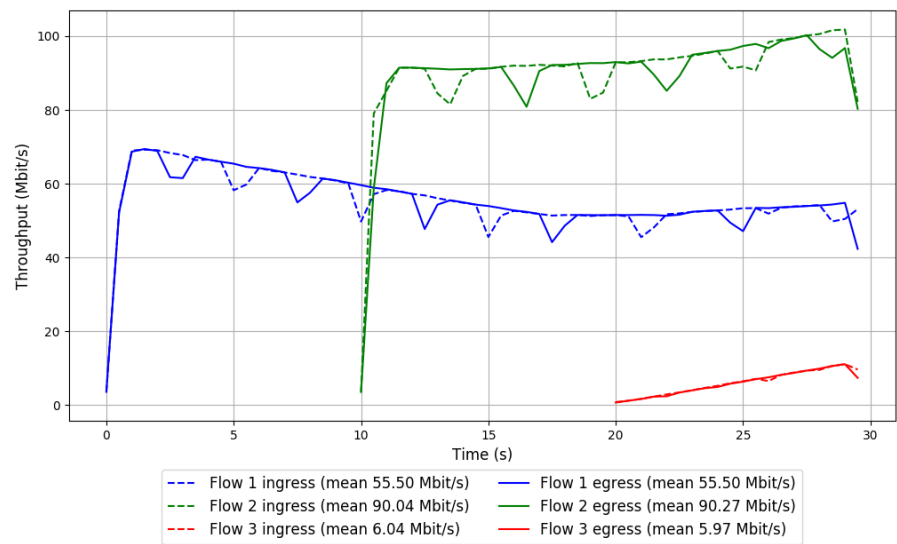
-- Flow 3:

Average throughput: 5.97 Mbit/s

95th percentile per-packet one-way delay: 51.093 ms

Loss rate: 2.07%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-14 08:26:11

End at: 2018-02-14 08:26:41

Below is generated by plot.py at 2018-02-14 12:45:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.44 Mbit/s

95th percentile per-packet one-way delay: 51.976 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 69.47 Mbit/s

95th percentile per-packet one-way delay: 51.825 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 55.34 Mbit/s

95th percentile per-packet one-way delay: 51.886 ms

Loss rate: 0.46%

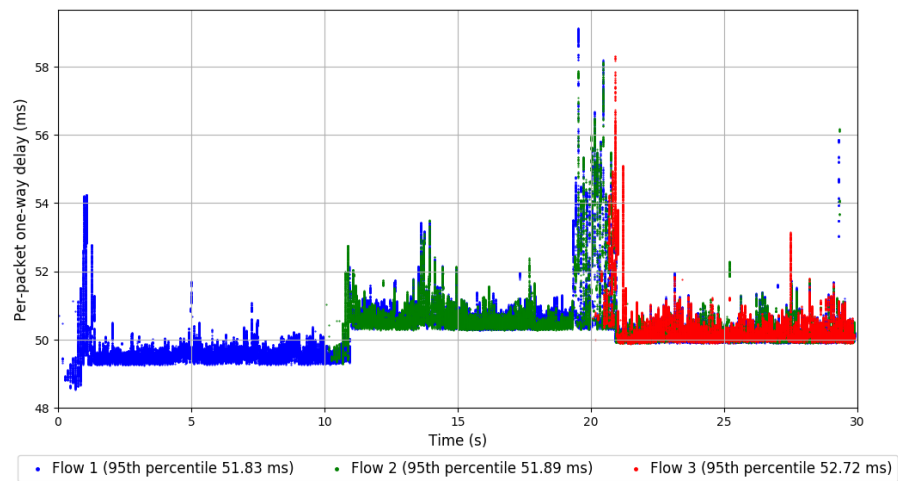
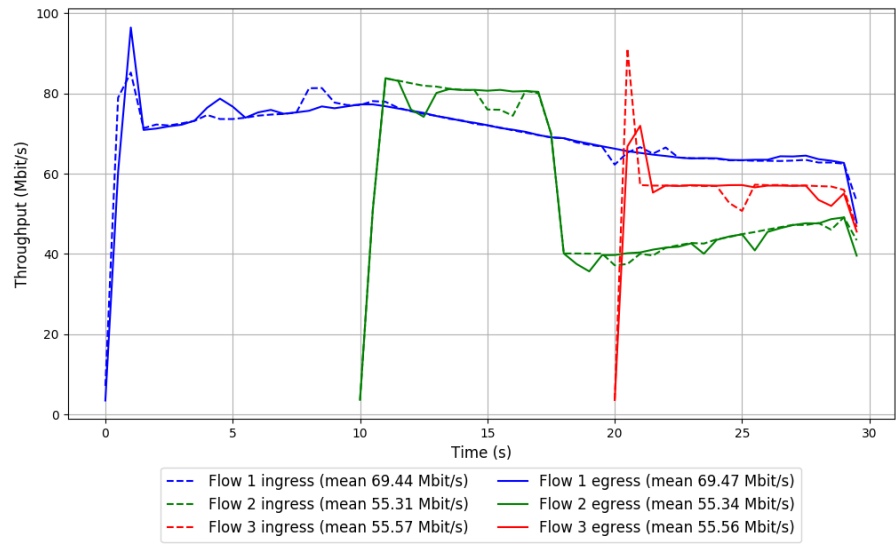
-- Flow 3:

Average throughput: 55.56 Mbit/s

95th percentile per-packet one-way delay: 52.724 ms

Loss rate: 1.05%

Run 10: Report of TCP Vegas — Data Link

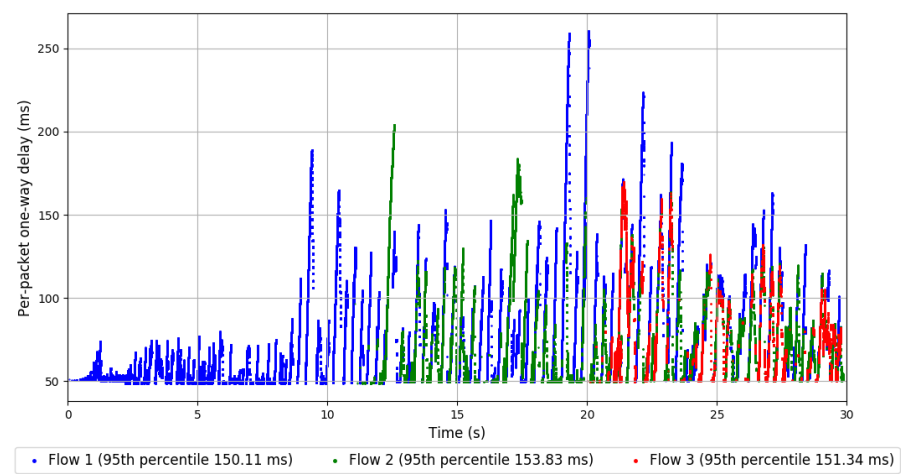
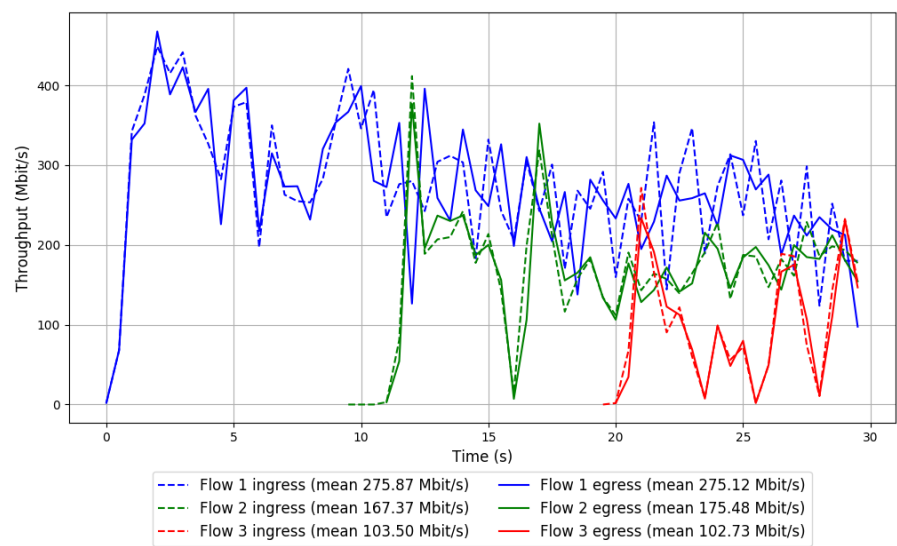


```
Run 1: Statistics of Verus

Start at: 2018-02-14 05:51:10
End at: 2018-02-14 05:51:40

# Below is generated by plot.py at 2018-02-14 12:45:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 418.66 Mbit/s
95th percentile per-packet one-way delay: 151.127 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 275.12 Mbit/s
95th percentile per-packet one-way delay: 150.106 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 175.48 Mbit/s
95th percentile per-packet one-way delay: 153.830 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 102.73 Mbit/s
95th percentile per-packet one-way delay: 151.335 ms
Loss rate: 2.64%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-14 06:09:27

End at: 2018-02-14 06:09:57

Below is generated by plot.py at 2018-02-14 12:45:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 355.02 Mbit/s

95th percentile per-packet one-way delay: 151.241 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 178.84 Mbit/s

95th percentile per-packet one-way delay: 114.130 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 231.51 Mbit/s

95th percentile per-packet one-way delay: 173.620 ms

Loss rate: 1.55%

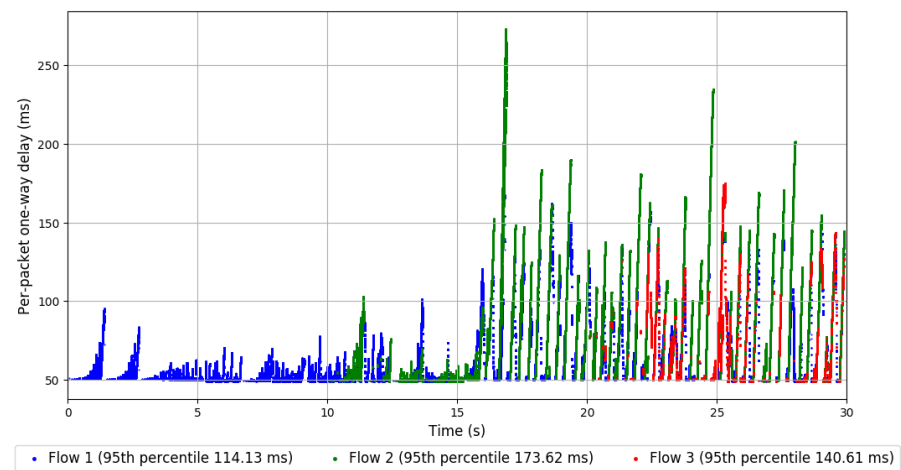
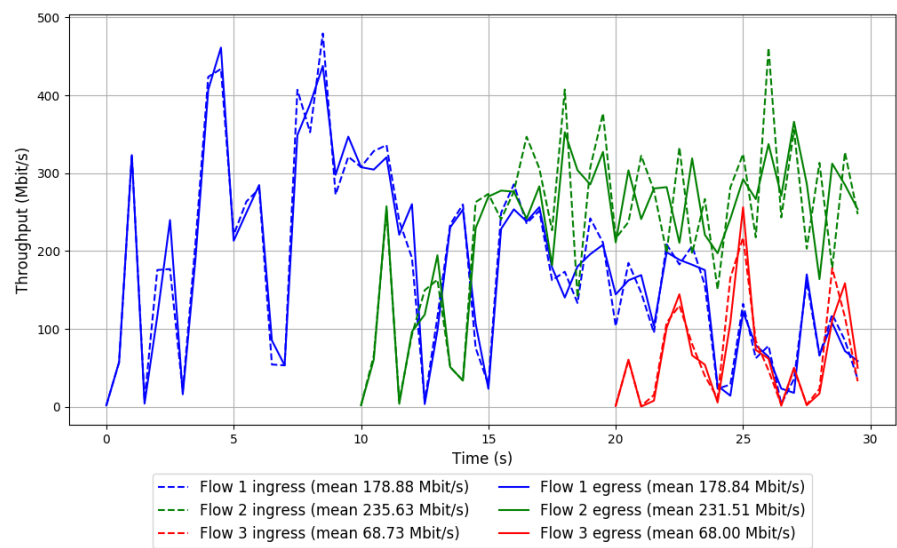
-- Flow 3:

Average throughput: 68.00 Mbit/s

95th percentile per-packet one-way delay: 140.614 ms

Loss rate: 2.44%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-14 06:27:46

End at: 2018-02-14 06:28:16

Below is generated by plot.py at 2018-02-14 12:46:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 395.06 Mbit/s

95th percentile per-packet one-way delay: 135.115 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 230.58 Mbit/s

95th percentile per-packet one-way delay: 118.488 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 174.59 Mbit/s

95th percentile per-packet one-way delay: 135.255 ms

Loss rate: 0.54%

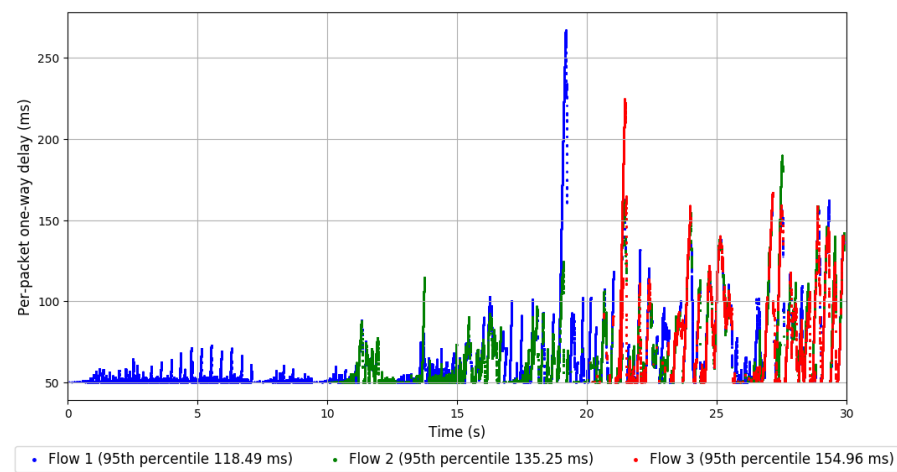
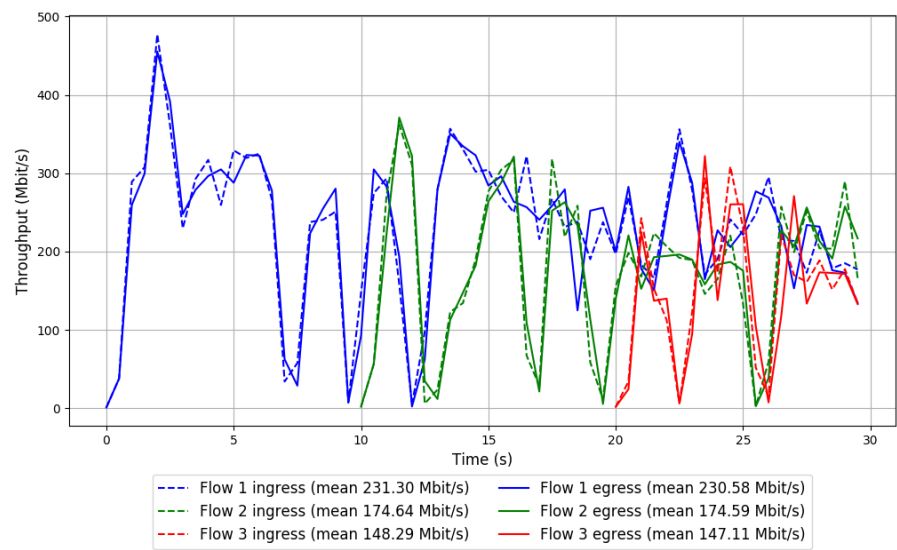
-- Flow 3:

Average throughput: 147.11 Mbit/s

95th percentile per-packet one-way delay: 154.964 ms

Loss rate: 1.89%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-14 06:45:59

End at: 2018-02-14 06:46:29

Below is generated by plot.py at 2018-02-14 12:47:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 432.29 Mbit/s

95th percentile per-packet one-way delay: 188.290 ms

Loss rate: 4.88%

-- Flow 1:

Average throughput: 305.96 Mbit/s

95th percentile per-packet one-way delay: 179.151 ms

Loss rate: 2.63%

-- Flow 2:

Average throughput: 72.19 Mbit/s

95th percentile per-packet one-way delay: 187.580 ms

Loss rate: 4.15%

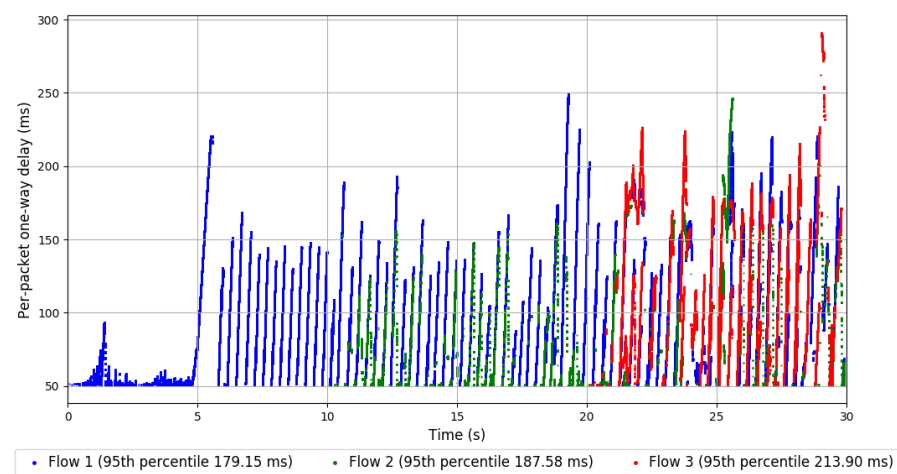
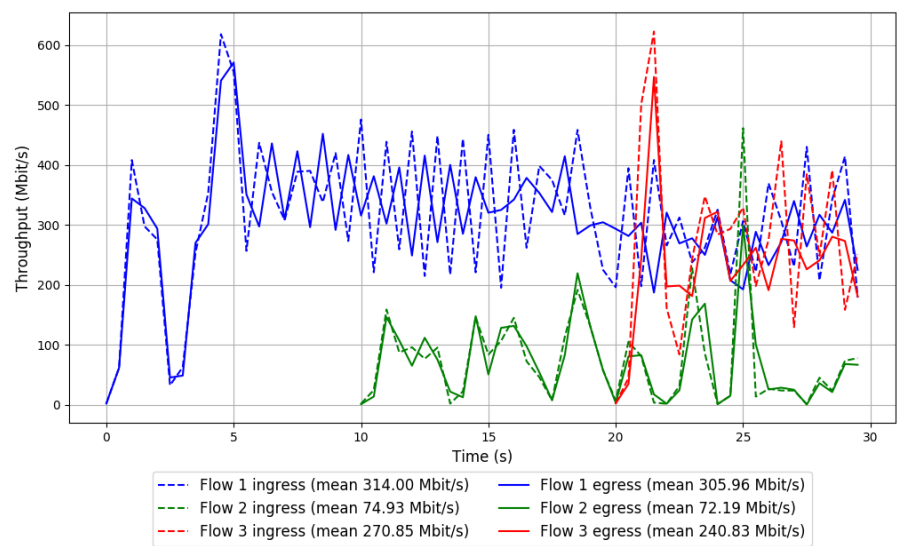
-- Flow 3:

Average throughput: 240.83 Mbit/s

95th percentile per-packet one-way delay: 213.898 ms

Loss rate: 13.11%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-14 07:04:15

End at: 2018-02-14 07:04:45

Below is generated by plot.py at 2018-02-14 12:47:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 418.34 Mbit/s

95th percentile per-packet one-way delay: 143.227 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 286.10 Mbit/s

95th percentile per-packet one-way delay: 142.420 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 140.58 Mbit/s

95th percentile per-packet one-way delay: 161.107 ms

Loss rate: 2.14%

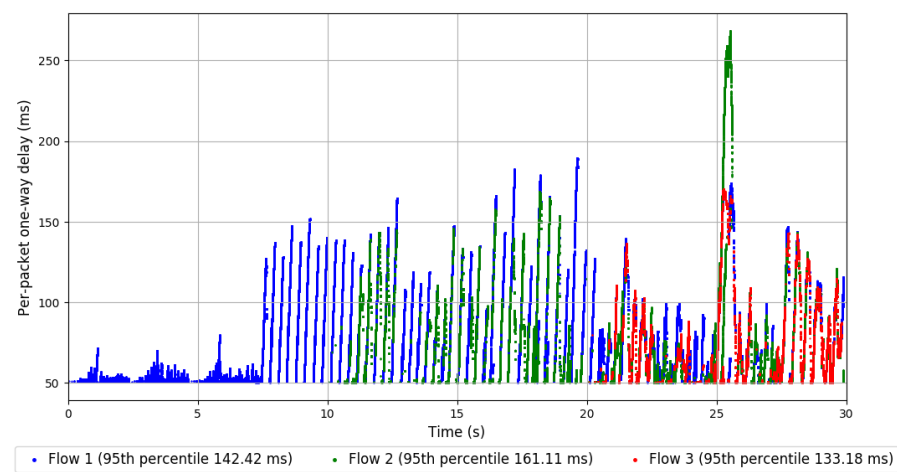
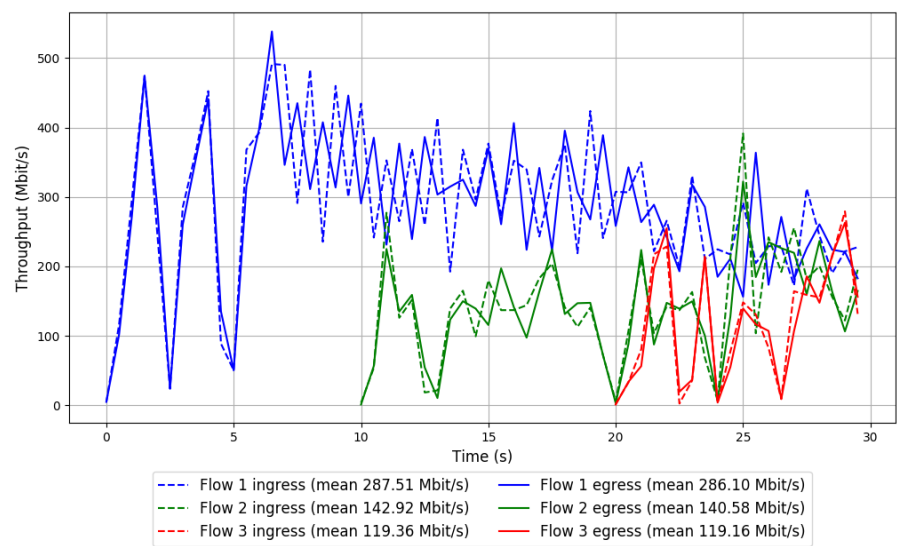
-- Flow 3:

Average throughput: 119.16 Mbit/s

95th percentile per-packet one-way delay: 133.184 ms

Loss rate: 2.10%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-14 07:22:44

End at: 2018-02-14 07:23:14

Below is generated by plot.py at 2018-02-14 12:48:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 401.99 Mbit/s

95th percentile per-packet one-way delay: 134.092 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 287.47 Mbit/s

95th percentile per-packet one-way delay: 135.768 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 113.40 Mbit/s

95th percentile per-packet one-way delay: 112.091 ms

Loss rate: 1.36%

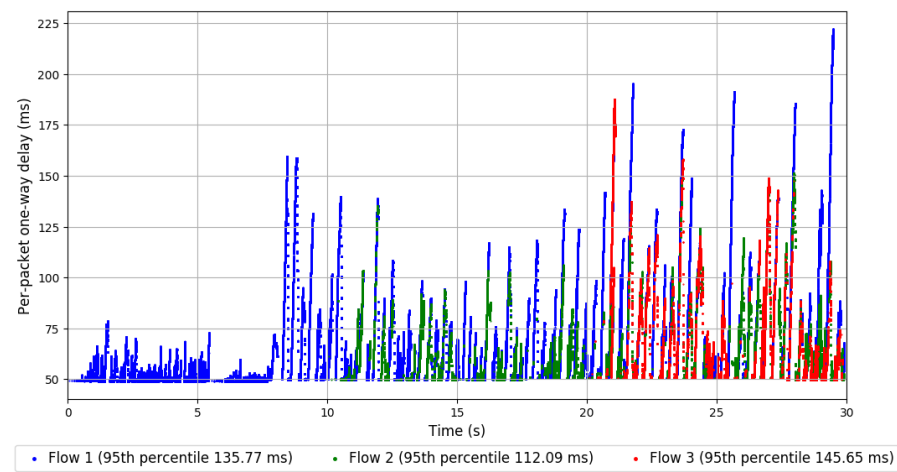
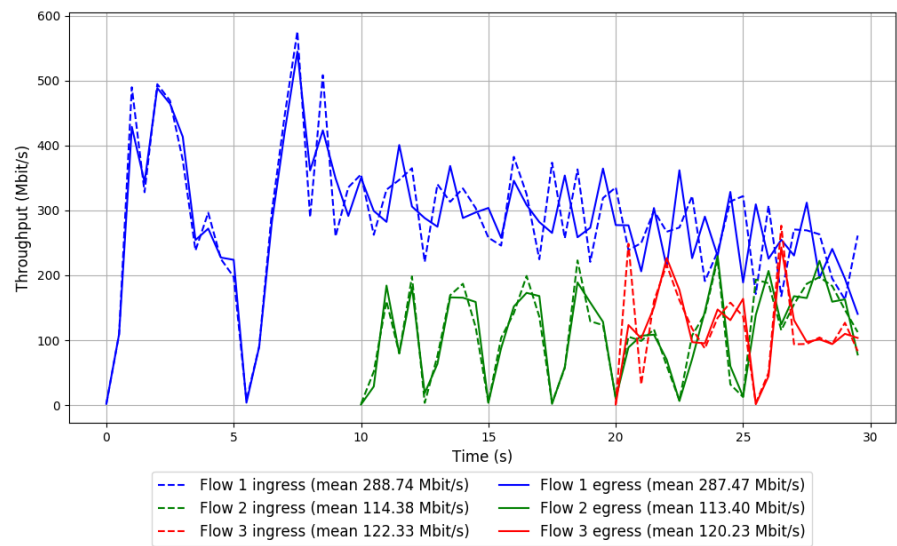
-- Flow 3:

Average throughput: 120.23 Mbit/s

95th percentile per-packet one-way delay: 145.649 ms

Loss rate: 1.63%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-14 07:41:06

End at: 2018-02-14 07:41:36

Below is generated by plot.py at 2018-02-14 12:49:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 380.55 Mbit/s

95th percentile per-packet one-way delay: 109.121 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 224.84 Mbit/s

95th percentile per-packet one-way delay: 117.122 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 191.04 Mbit/s

95th percentile per-packet one-way delay: 100.049 ms

Loss rate: 0.99%

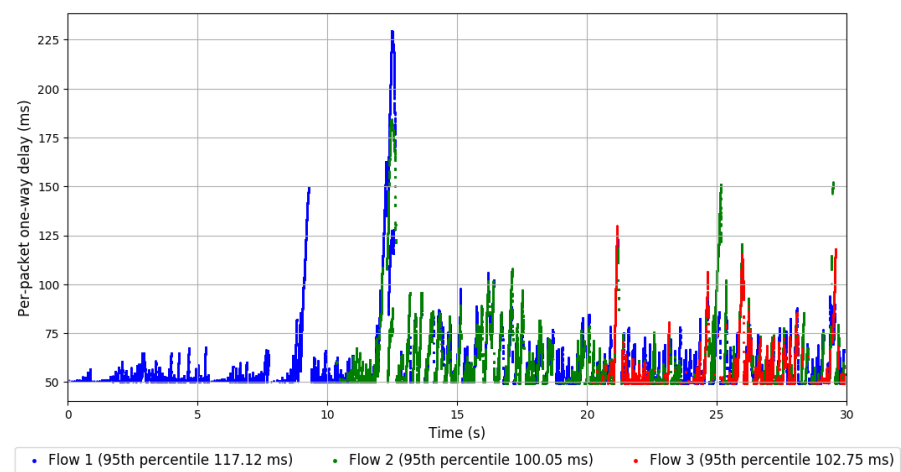
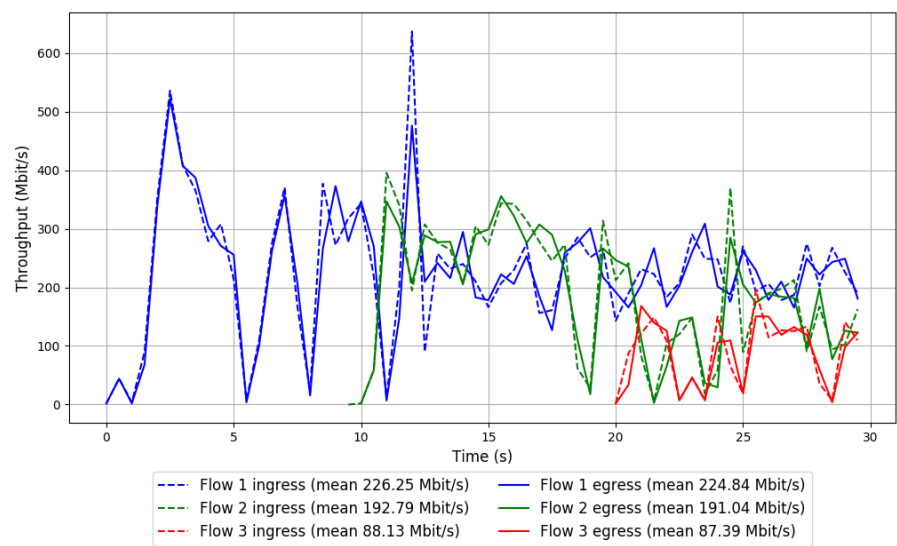
-- Flow 3:

Average throughput: 87.39 Mbit/s

95th percentile per-packet one-way delay: 102.754 ms

Loss rate: 1.91%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-14 07:59:27

End at: 2018-02-14 07:59:57

Below is generated by plot.py at 2018-02-14 12:52:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 433.88 Mbit/s

95th percentile per-packet one-way delay: 141.551 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 259.56 Mbit/s

95th percentile per-packet one-way delay: 143.577 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 155.95 Mbit/s

95th percentile per-packet one-way delay: 135.563 ms

Loss rate: 0.05%

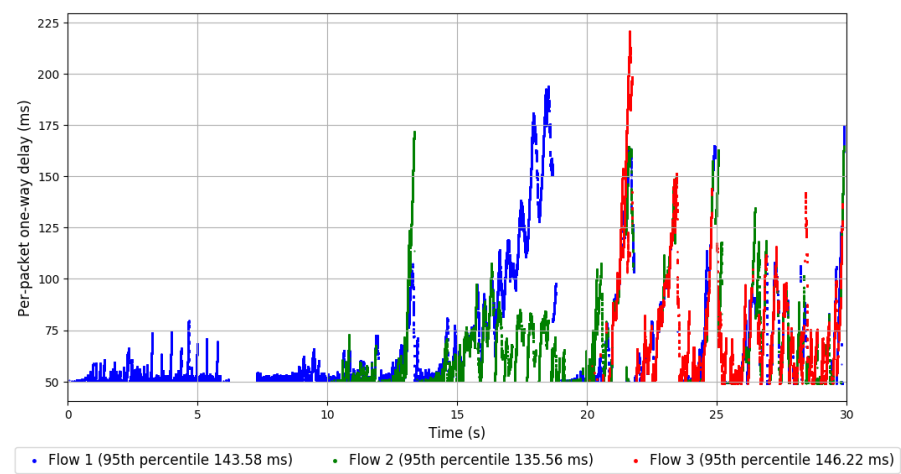
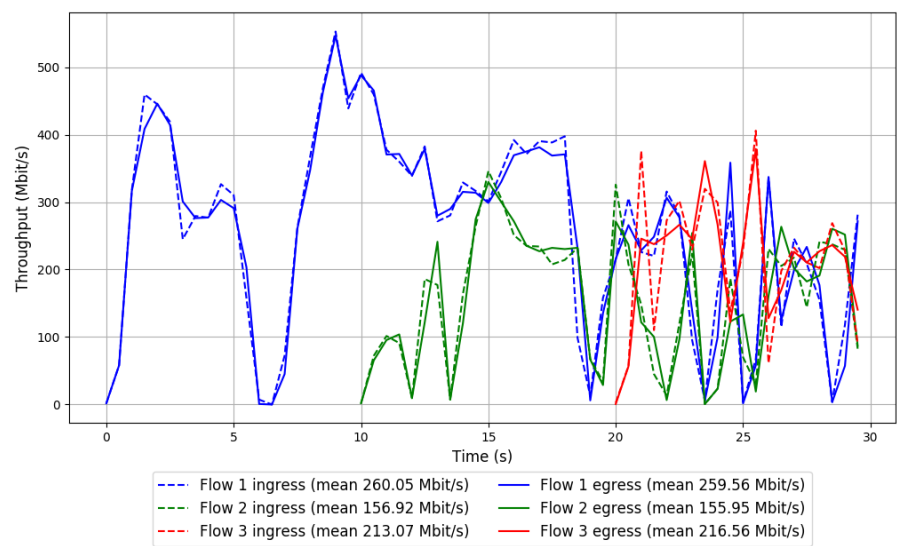
-- Flow 3:

Average throughput: 216.56 Mbit/s

95th percentile per-packet one-way delay: 146.223 ms

Loss rate: 0.14%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-14 08:17:31

End at: 2018-02-14 08:18:01

Below is generated by plot.py at 2018-02-14 12:52:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 384.59 Mbit/s

95th percentile per-packet one-way delay: 136.604 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 265.75 Mbit/s

95th percentile per-packet one-way delay: 143.351 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 126.09 Mbit/s

95th percentile per-packet one-way delay: 119.897 ms

Loss rate: 0.93%

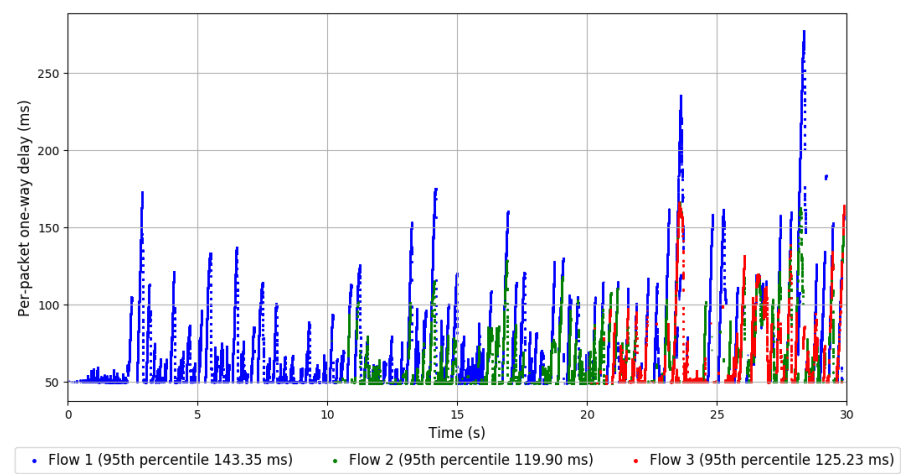
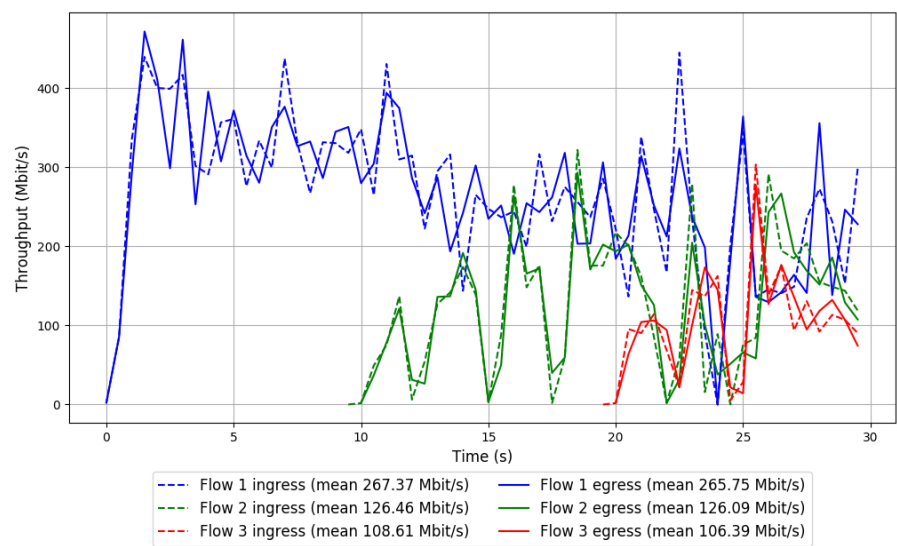
-- Flow 3:

Average throughput: 106.39 Mbit/s

95th percentile per-packet one-way delay: 125.228 ms

Loss rate: 1.12%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-14 08:35:35

End at: 2018-02-14 08:36:05

Below is generated by plot.py at 2018-02-14 12:52:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 367.36 Mbit/s

95th percentile per-packet one-way delay: 156.667 ms

Loss rate: 1.66%

-- Flow 1:

Average throughput: 204.87 Mbit/s

95th percentile per-packet one-way delay: 105.246 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 176.24 Mbit/s

95th percentile per-packet one-way delay: 244.754 ms

Loss rate: 3.23%

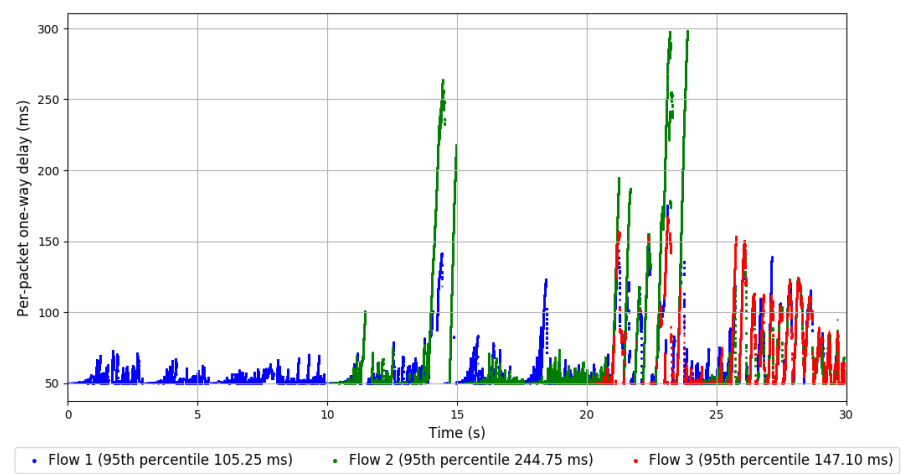
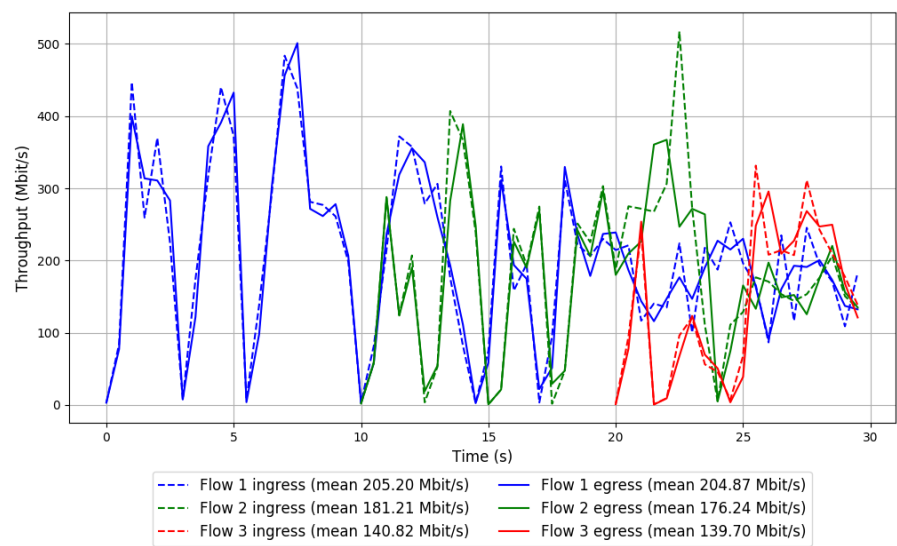
-- Flow 3:

Average throughput: 139.70 Mbit/s

95th percentile per-packet one-way delay: 147.098 ms

Loss rate: 1.82%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-02-14 05:38:54

End at: 2018-02-14 05:39:24

Below is generated by plot.py at 2018-02-14 12:52:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.72 Mbit/s

95th percentile per-packet one-way delay: 50.209 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 63.06 Mbit/s

95th percentile per-packet one-way delay: 50.232 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 22.31 Mbit/s

95th percentile per-packet one-way delay: 50.278 ms

Loss rate: 0.17%

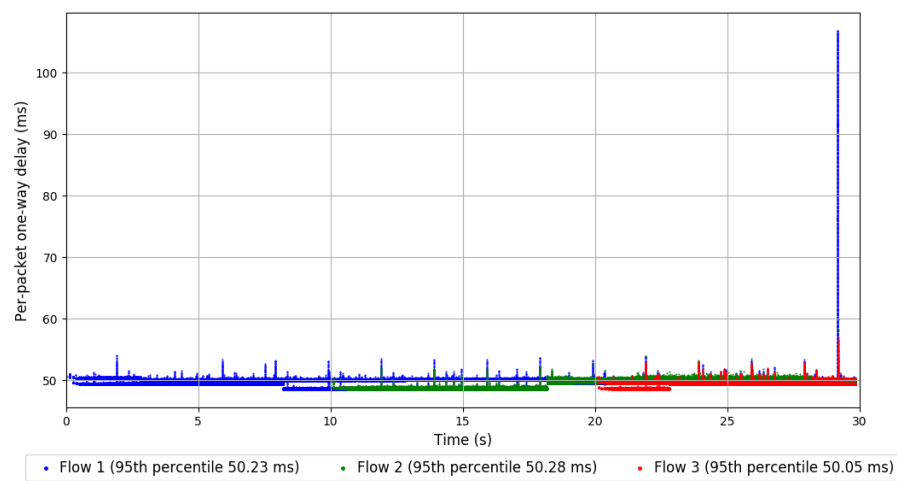
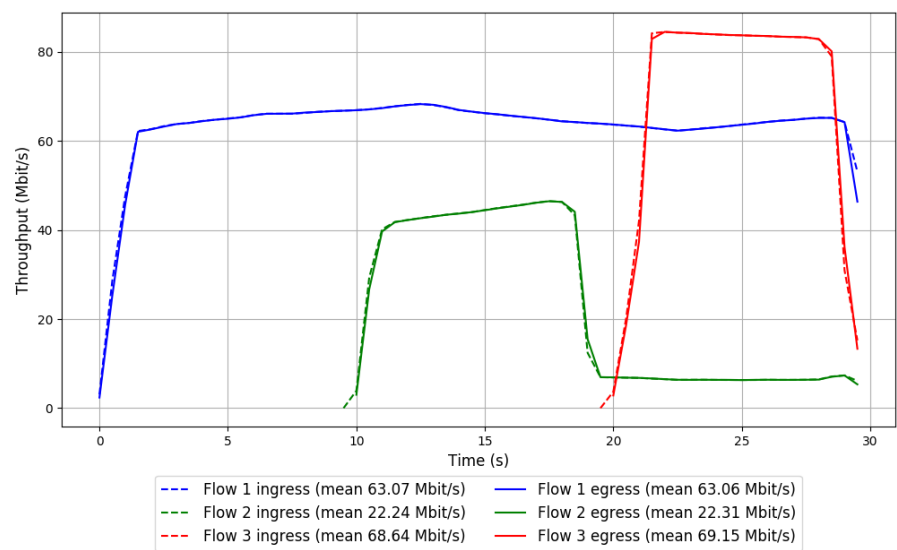
-- Flow 3:

Average throughput: 69.15 Mbit/s

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

Loss rate: 0.28%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-14 05:57:28

End at: 2018-02-14 05:57:58

Below is generated by plot.py at 2018-02-14 12:52:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.71 Mbit/s

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

Loss rate: 0.38%

-- Flow 1:

Average throughput: 66.87 Mbit/s

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

Loss rate: 0.21%

-- Flow 2:

Average throughput: 29.61 Mbit/s

95th percentile per-packet one-way delay: 50.385 ms

Loss rate: 0.36%

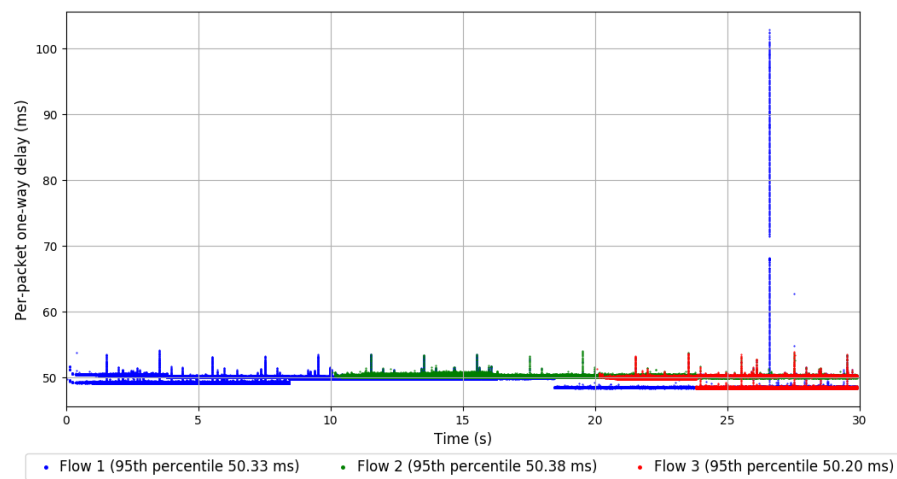
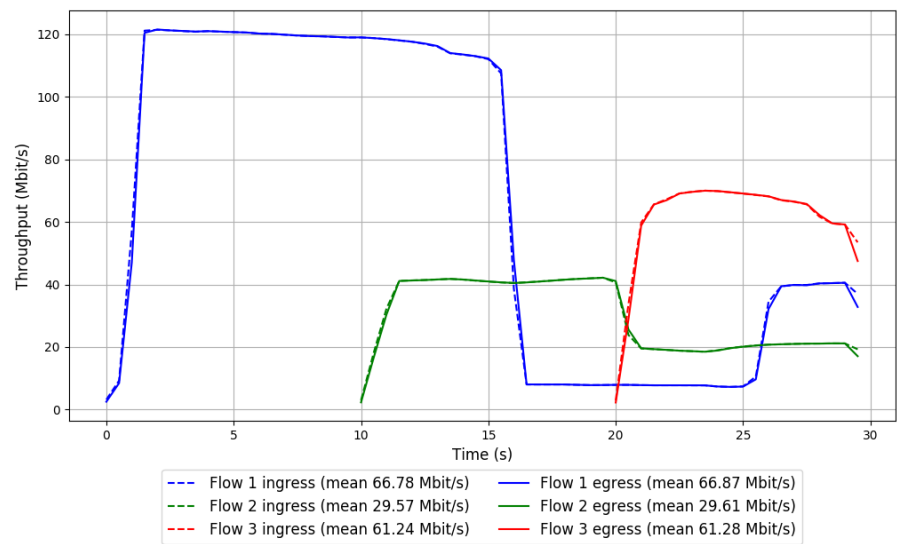
-- Flow 3:

Average throughput: 61.28 Mbit/s

95th percentile per-packet one-way delay: 50.199 ms

Loss rate: 0.98%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-14 06:15:34

End at: 2018-02-14 06:16:04

Below is generated by plot.py at 2018-02-14 12:52:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.12 Mbit/s

95th percentile per-packet one-way delay: 49.950 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 80.51 Mbit/s

95th percentile per-packet one-way delay: 49.944 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 42.26 Mbit/s

95th percentile per-packet one-way delay: 50.063 ms

Loss rate: 0.15%

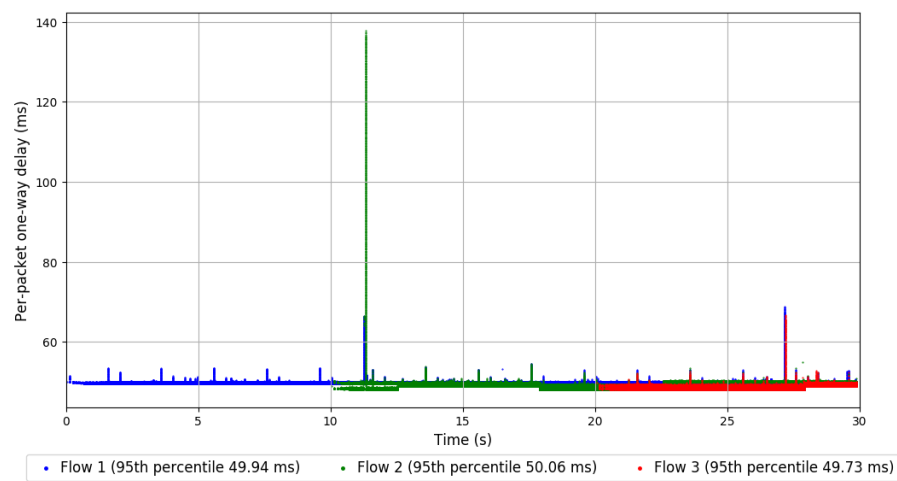
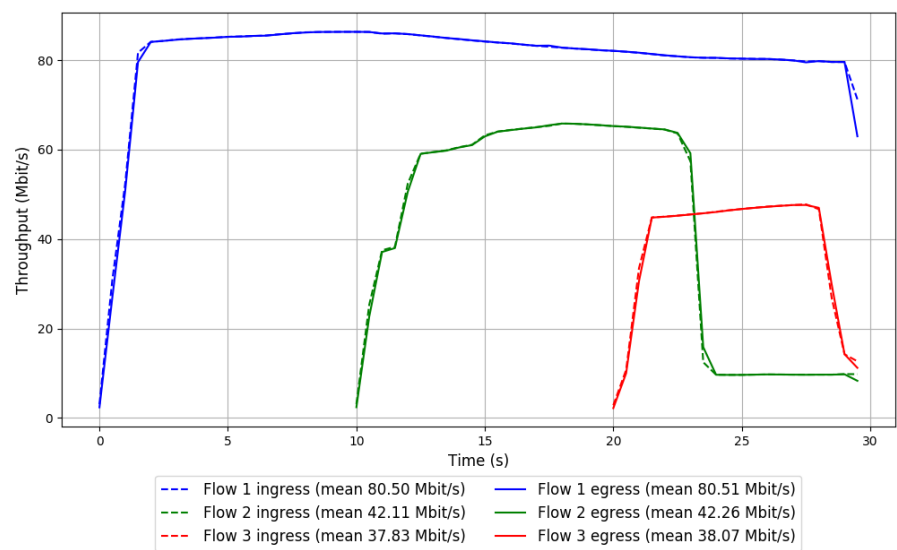
-- Flow 3:

Average throughput: 38.07 Mbit/s

95th percentile per-packet one-way delay: 49.732 ms

Loss rate: 0.38%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-14 06:34:04

End at: 2018-02-14 06:34:34

Below is generated by plot.py at 2018-02-14 12:52:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.56 Mbit/s

95th percentile per-packet one-way delay: 50.701 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 12.61 Mbit/s

95th percentile per-packet one-way delay: 50.620 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 58.60 Mbit/s

95th percentile per-packet one-way delay: 50.536 ms

Loss rate: 0.34%

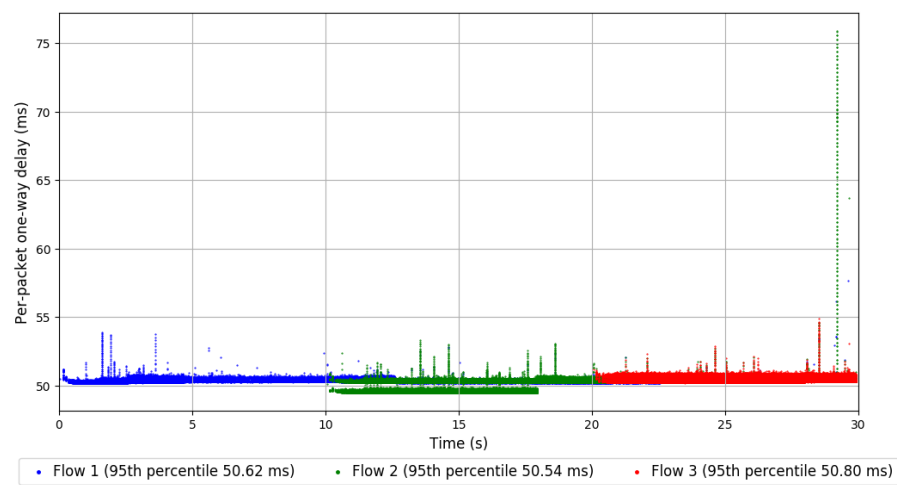
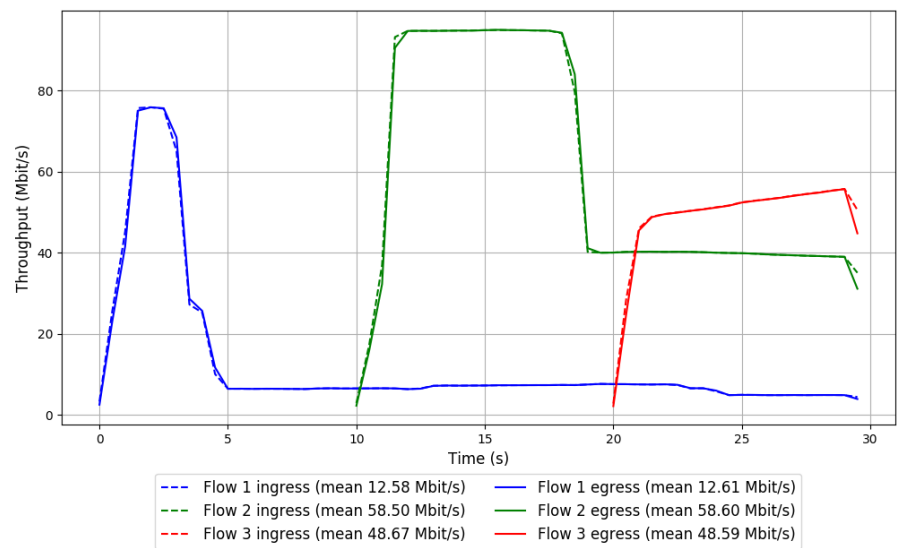
-- Flow 3:

Average throughput: 48.59 Mbit/s

95th percentile per-packet one-way delay: 50.796 ms

Loss rate: 1.18%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-14 06:52:12

End at: 2018-02-14 06:52:42

Below is generated by plot.py at 2018-02-14 12:52:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.21 Mbit/s

95th percentile per-packet one-way delay: 50.963 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 37.35 Mbit/s

95th percentile per-packet one-way delay: 50.888 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 23.13 Mbit/s

95th percentile per-packet one-way delay: 51.057 ms

Loss rate: 0.14%

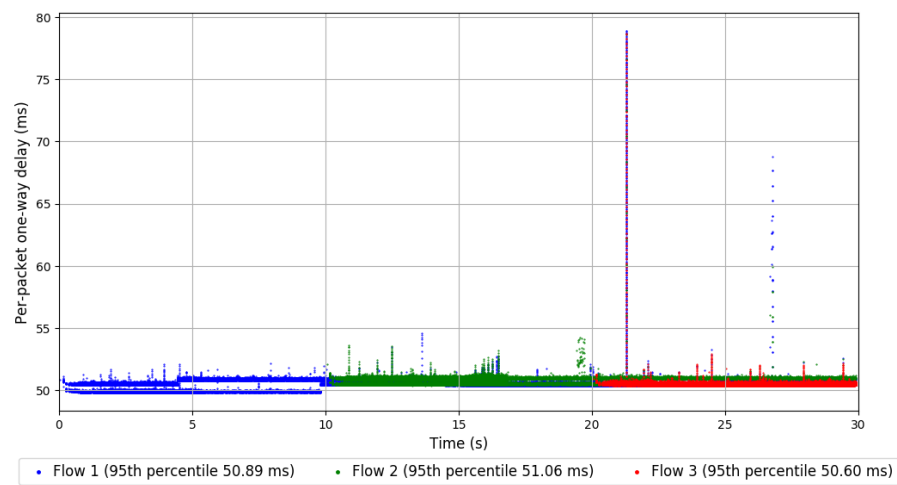
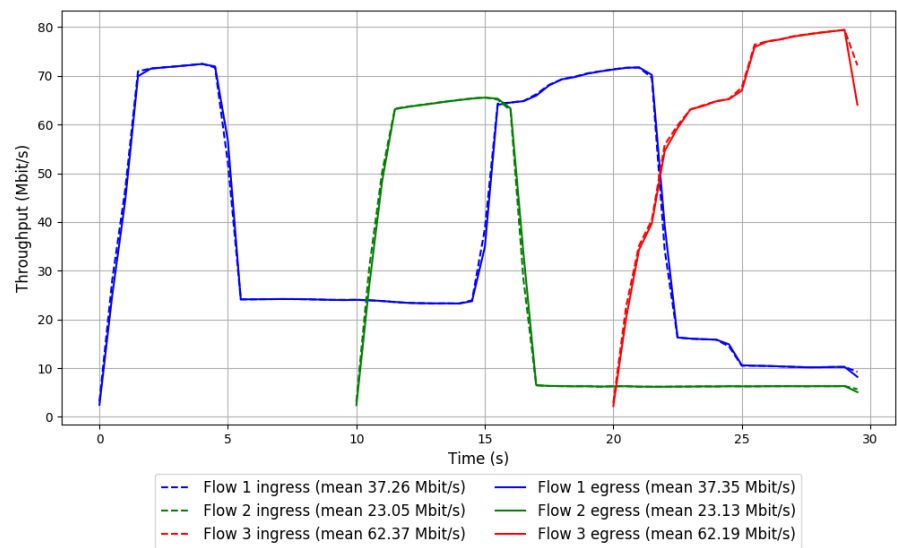
-- Flow 3:

Average throughput: 62.19 Mbit/s

95th percentile per-packet one-way delay: 50.598 ms

Loss rate: 1.30%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-14 07:10:28

End at: 2018-02-14 07:10:58

Below is generated by plot.py at 2018-02-14 12:52:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.90 Mbit/s

95th percentile per-packet one-way delay: 50.887 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 52.40 Mbit/s

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

Loss rate: 0.13%

-- Flow 2:

Average throughput: 39.83 Mbit/s

95th percentile per-packet one-way delay: 50.890 ms

Loss rate: 0.09%

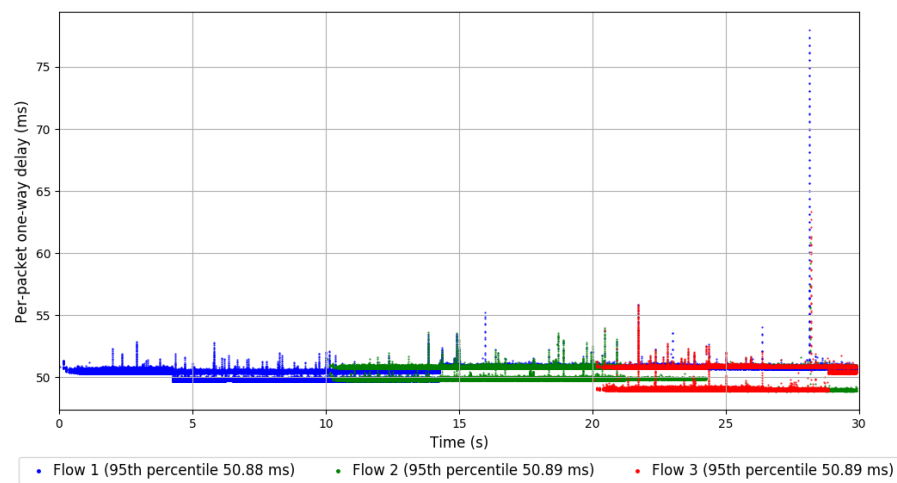
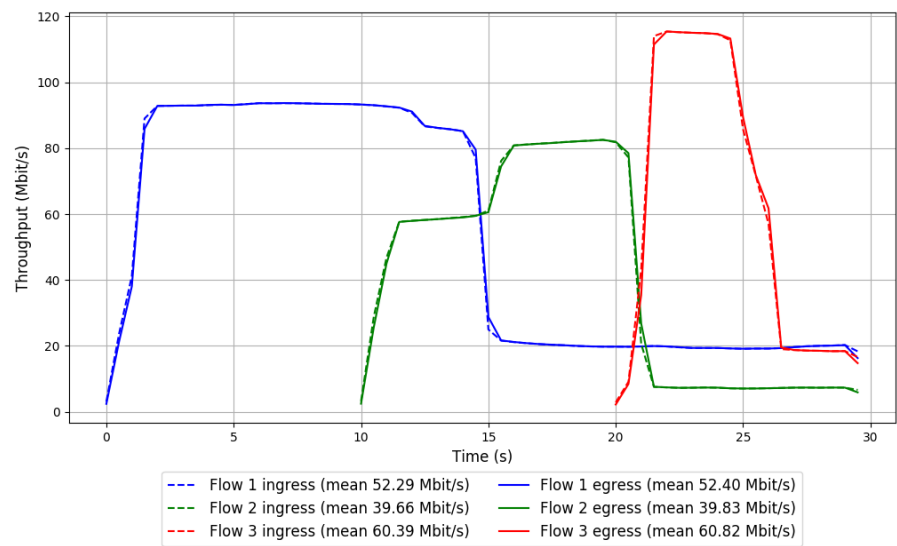
-- Flow 3:

Average throughput: 60.82 Mbit/s

95th percentile per-packet one-way delay: 50.894 ms

Loss rate: 0.31%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-14 07:28:57

End at: 2018-02-14 07:29:27

Below is generated by plot.py at 2018-02-14 12:53:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.94 Mbit/s

95th percentile per-packet one-way delay: 50.878 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 67.81 Mbit/s

95th percentile per-packet one-way delay: 50.912 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 58.77 Mbit/s

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

Loss rate: 0.44%

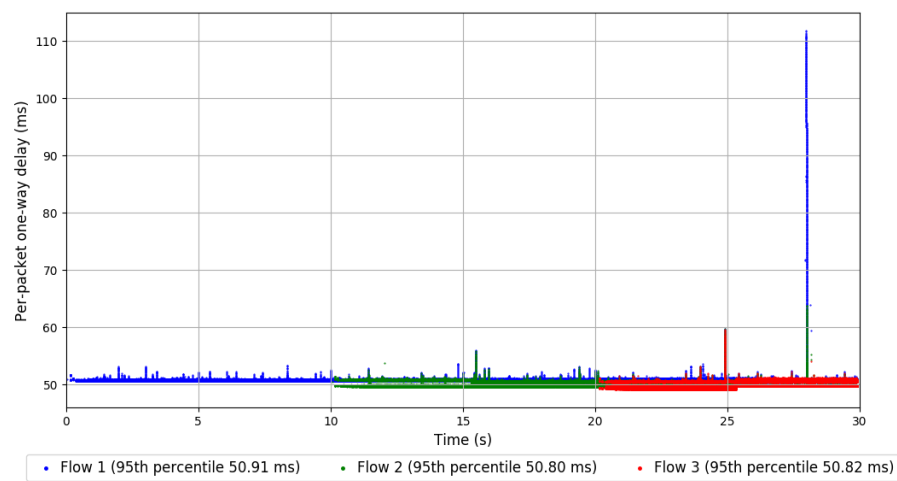
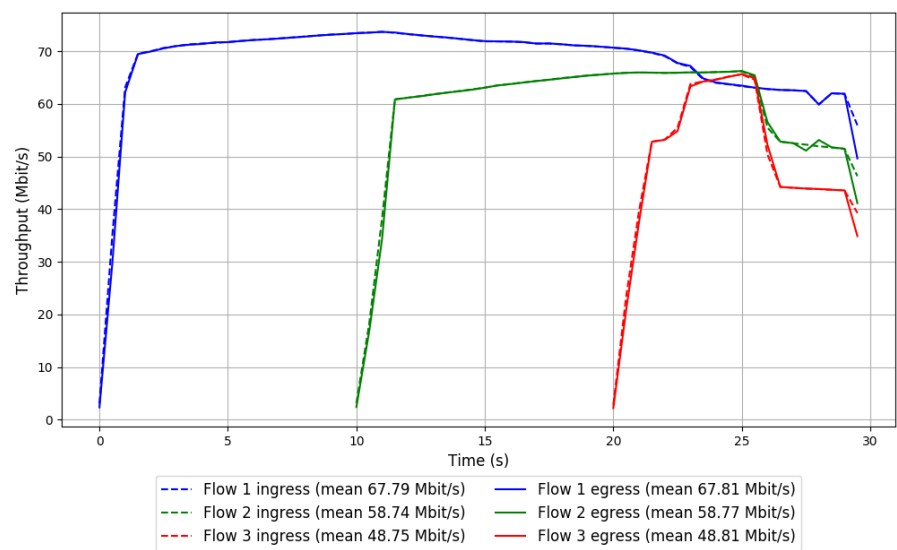
-- Flow 3:

Average throughput: 48.81 Mbit/s

95th percentile per-packet one-way delay: 50.821 ms

Loss rate: 0.90%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-14 07:47:20

End at: 2018-02-14 07:47:50

Below is generated by plot.py at 2018-02-14 12:54:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 127.23 Mbit/s

95th percentile per-packet one-way delay: 50.309 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 83.08 Mbit/s

95th percentile per-packet one-way delay: 50.178 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 53.49 Mbit/s

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

Loss rate: 0.55%

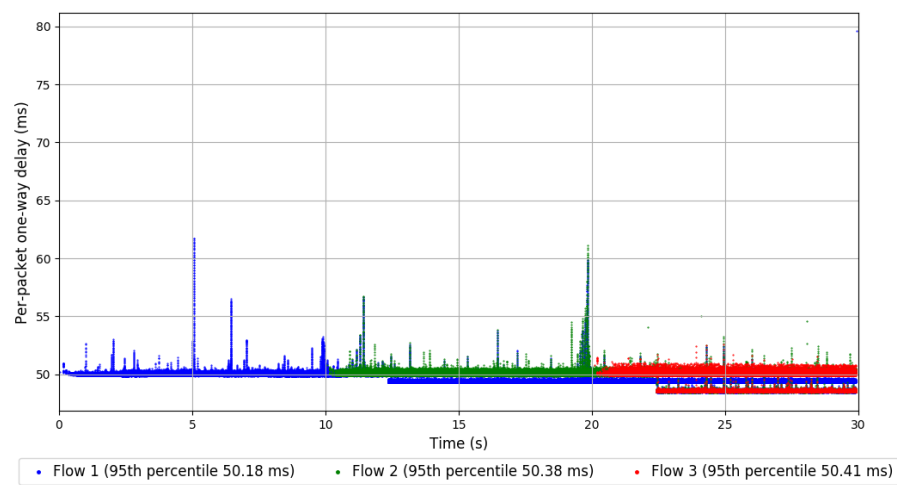
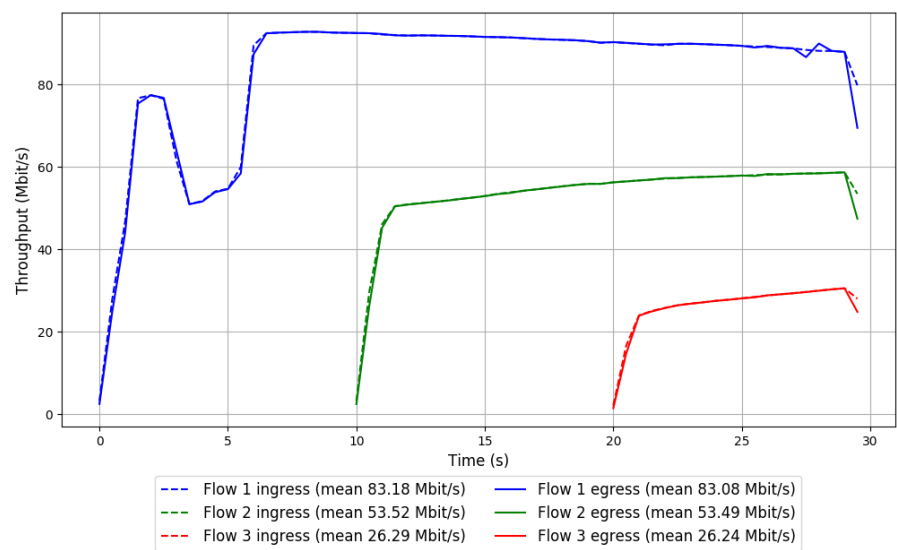
-- Flow 3:

Average throughput: 26.24 Mbit/s

95th percentile per-packet one-way delay: 50.407 ms

Loss rate: 1.23%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-14 08:05:36

End at: 2018-02-14 08:06:06

Below is generated by plot.py at 2018-02-14 12:54:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 125.60 Mbit/s

95th percentile per-packet one-way delay: 50.467 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 77.84 Mbit/s

95th percentile per-packet one-way delay: 50.464 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 48.21 Mbit/s

95th percentile per-packet one-way delay: 50.476 ms

Loss rate: 0.54%

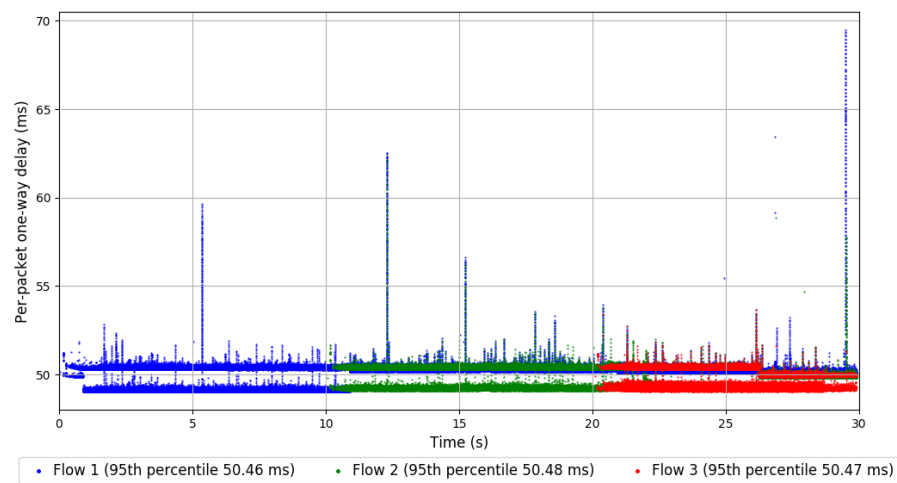
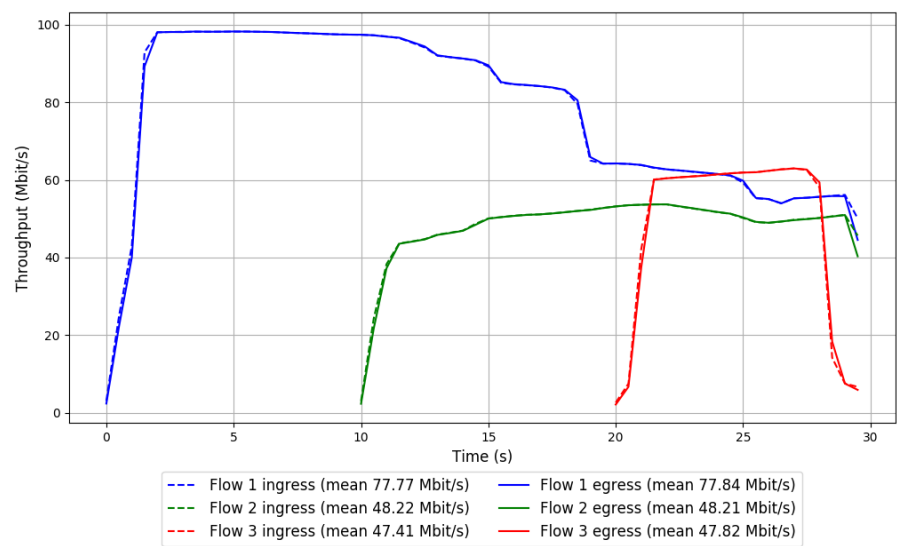
-- Flow 3:

Average throughput: 47.82 Mbit/s

95th percentile per-packet one-way delay: 50.467 ms

Loss rate: 0.16%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-14 08:23:40

End at: 2018-02-14 08:24:10

Below is generated by plot.py at 2018-02-14 12:54:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.37 Mbit/s

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

Loss rate: 0.63%

-- Flow 1:

Average throughput: 52.75 Mbit/s

95th percentile per-packet one-way delay: 50.500 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 53.87 Mbit/s

95th percentile per-packet one-way delay: 50.549 ms

Loss rate: 0.50%

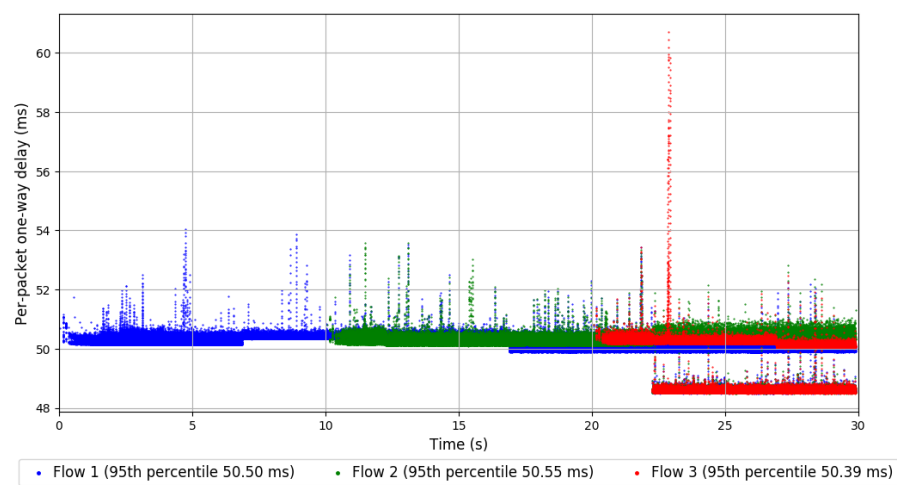
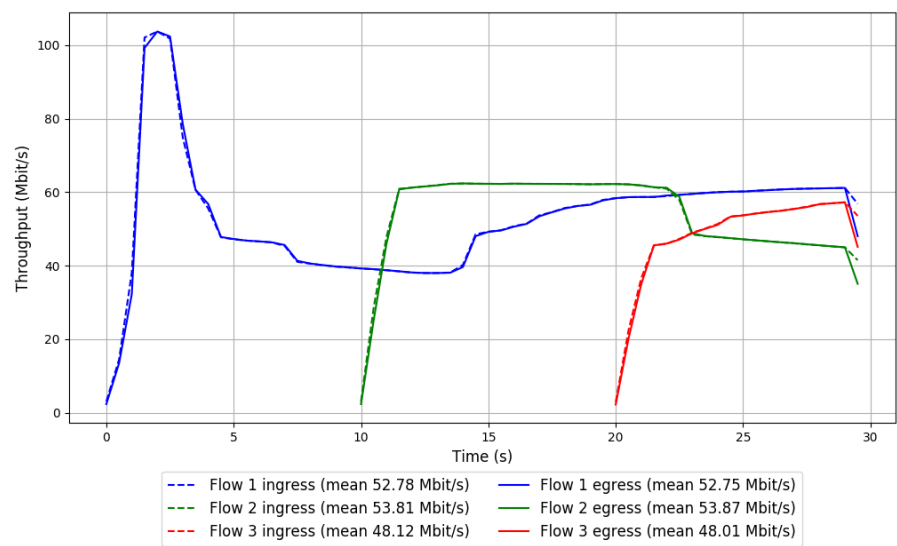
-- Flow 3:

Average throughput: 48.01 Mbit/s

95th percentile per-packet one-way delay: 50.391 ms

Loss rate: 1.47%

Run 10: Report of Copa — Data Link

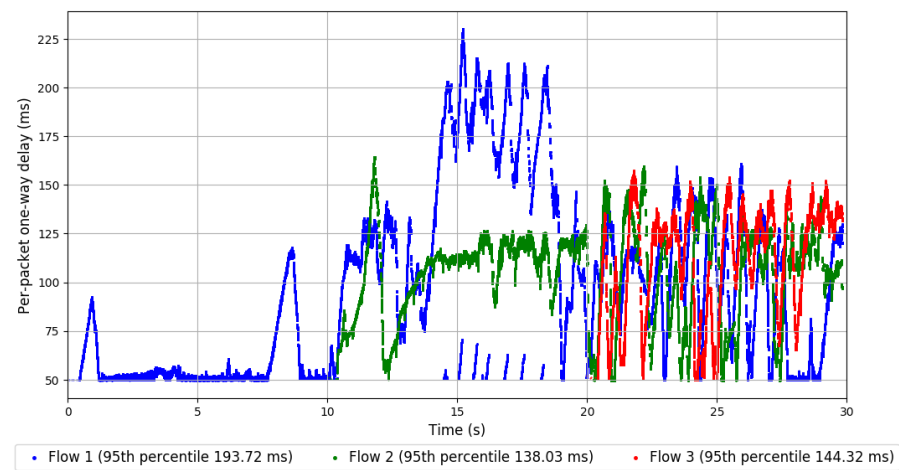
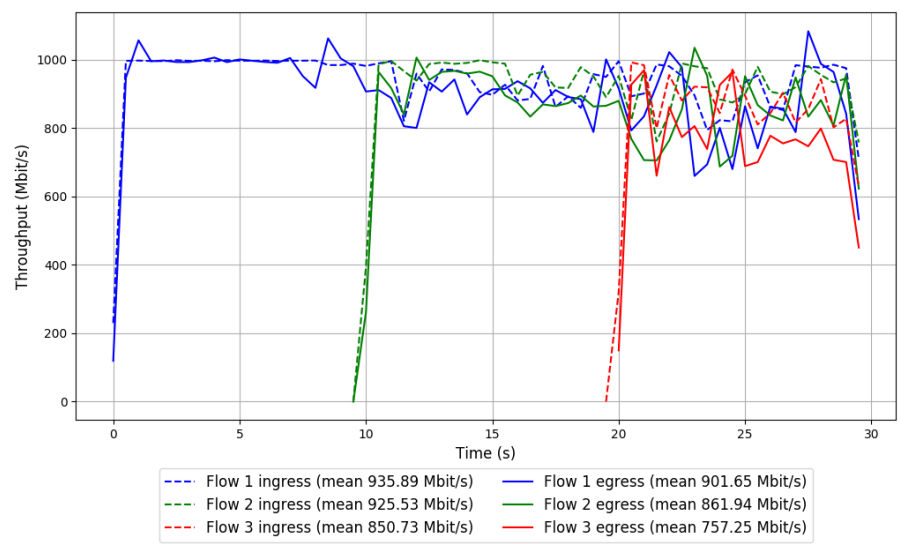


```
Run 1: Statistics of FillP

Start at: 2018-02-14 05:49:28
End at: 2018-02-14 05:49:58

# Below is generated by plot.py at 2018-02-14 13:20:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1725.33 Mbit/s
95th percentile per-packet one-way delay: 175.474 ms
Loss rate: 6.43%
-- Flow 1:
Average throughput: 901.65 Mbit/s
95th percentile per-packet one-way delay: 193.723 ms
Loss rate: 4.05%
-- Flow 2:
Average throughput: 861.94 Mbit/s
95th percentile per-packet one-way delay: 138.027 ms
Loss rate: 7.44%
-- Flow 3:
Average throughput: 757.25 Mbit/s
95th percentile per-packet one-way delay: 144.320 ms
Loss rate: 12.09%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-02-14 06:07:45

End at: 2018-02-14 06:08:15

Below is generated by plot.py at 2018-02-14 13:20:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 1735.55 Mbit/s

95th percentile per-packet one-way delay: 138.715 ms

Loss rate: 6.15%

-- Flow 1:

Average throughput: 927.22 Mbit/s

95th percentile per-packet one-way delay: 123.446 ms

Loss rate: 3.01%

-- Flow 2:

Average throughput: 827.78 Mbit/s

95th percentile per-packet one-way delay: 155.170 ms

Loss rate: 9.04%

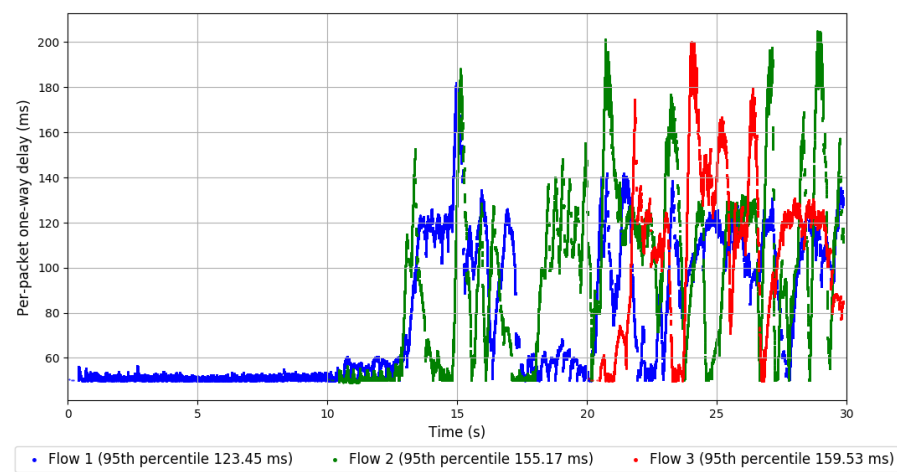
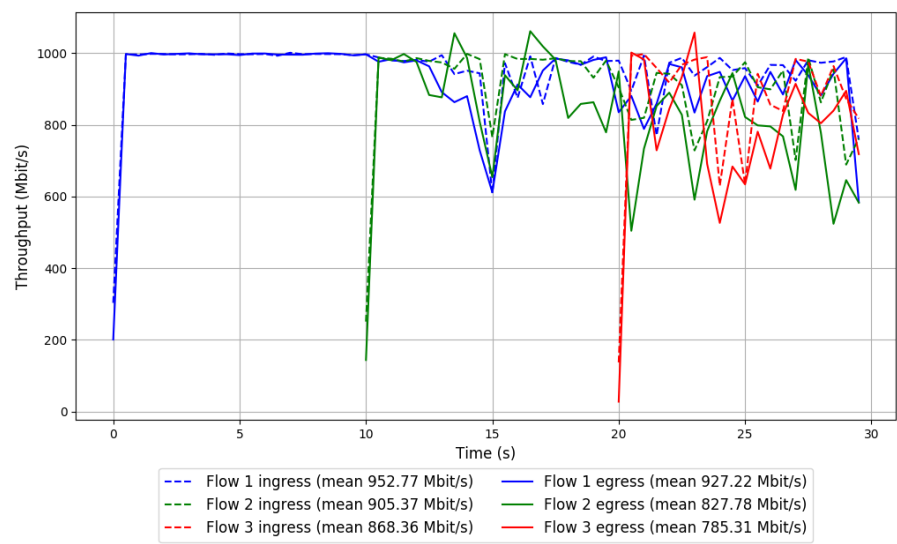
-- Flow 3:

Average throughput: 785.31 Mbit/s

95th percentile per-packet one-way delay: 159.527 ms

Loss rate: 10.50%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-14 06:26:04

End at: 2018-02-14 06:26:34

Below is generated by plot.py at 2018-02-14 13:21:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 1747.65 Mbit/s

95th percentile per-packet one-way delay: 159.796 ms

Loss rate: 5.04%

-- Flow 1:

Average throughput: 901.49 Mbit/s

95th percentile per-packet one-way delay: 137.749 ms

Loss rate: 4.19%

-- Flow 2:

Average throughput: 869.32 Mbit/s

95th percentile per-packet one-way delay: 124.290 ms

Loss rate: 4.92%

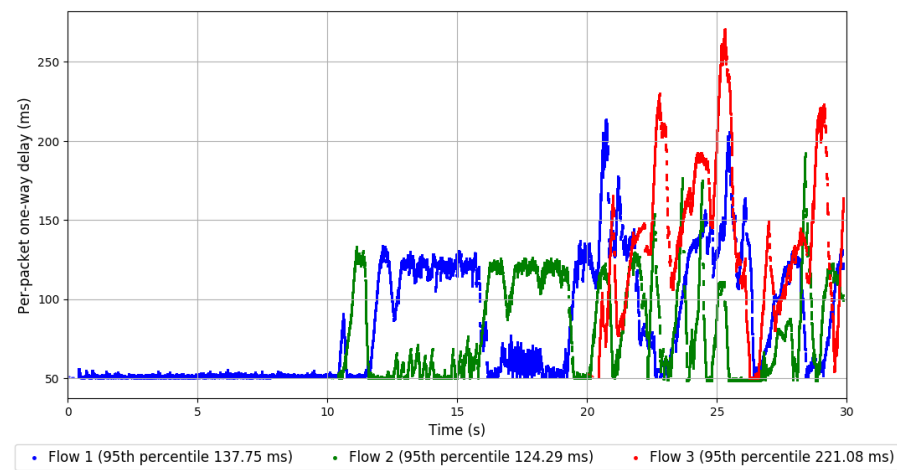
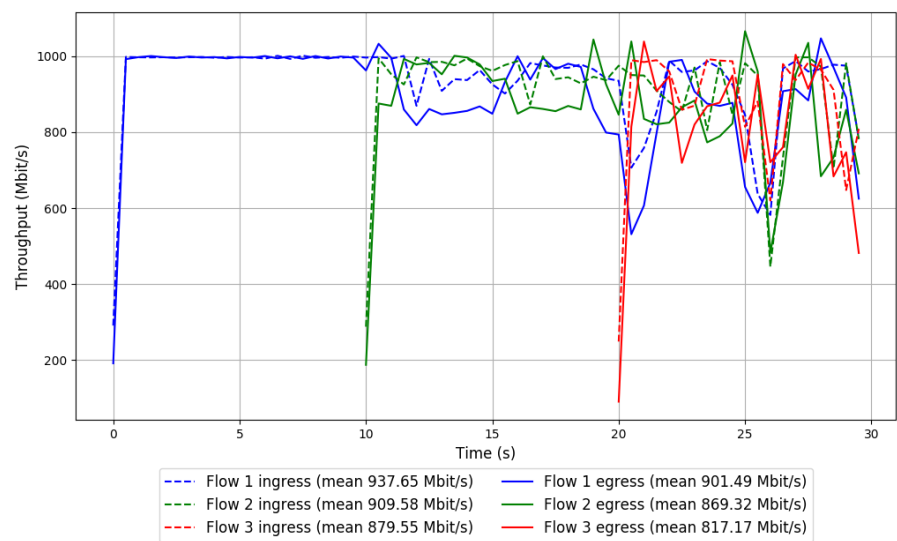
-- Flow 3:

Average throughput: 817.17 Mbit/s

95th percentile per-packet one-way delay: 221.079 ms

Loss rate: 8.07%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-14 06:44:18

End at: 2018-02-14 06:44:48

Below is generated by plot.py at 2018-02-14 13:21:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 1739.14 Mbit/s

95th percentile per-packet one-way delay: 140.489 ms

Loss rate: 6.17%

-- Flow 1:

Average throughput: 921.66 Mbit/s

95th percentile per-packet one-way delay: 131.894 ms

Loss rate: 3.15%

-- Flow 2:

Average throughput: 803.78 Mbit/s

95th percentile per-packet one-way delay: 145.618 ms

Loss rate: 10.98%

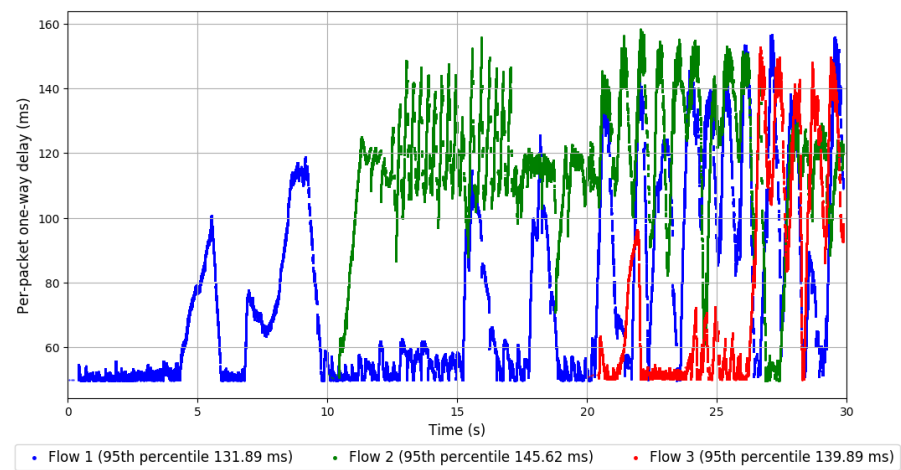
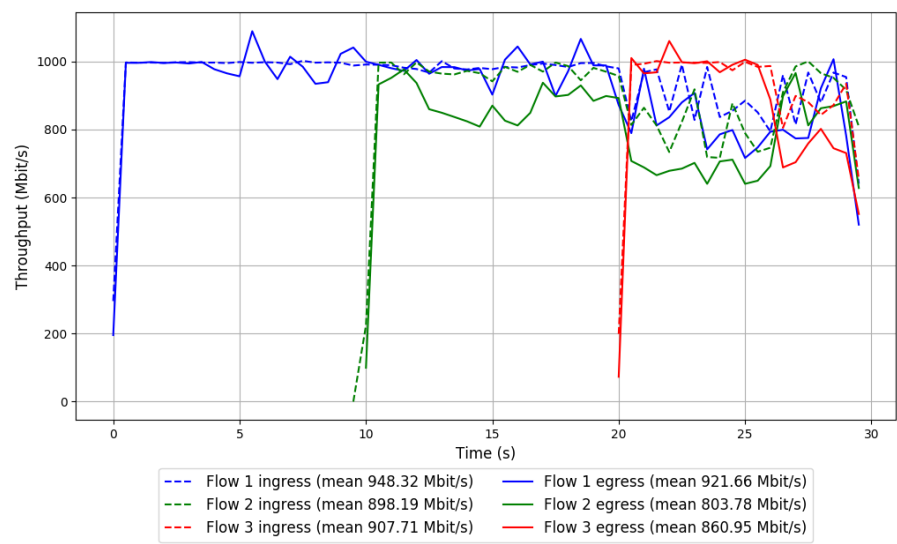
-- Flow 3:

Average throughput: 860.95 Mbit/s

95th percentile per-packet one-way delay: 139.892 ms

Loss rate: 6.15%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-14 07:02:33

End at: 2018-02-14 07:03:03

Below is generated by plot.py at 2018-02-14 13:23:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 1750.27 Mbit/s

95th percentile per-packet one-way delay: 134.351 ms

Loss rate: 5.15%

-- Flow 1:

Average throughput: 918.61 Mbit/s

95th percentile per-packet one-way delay: 126.489 ms

Loss rate: 3.84%

-- Flow 2:

Average throughput: 906.45 Mbit/s

95th percentile per-packet one-way delay: 124.745 ms

Loss rate: 4.30%

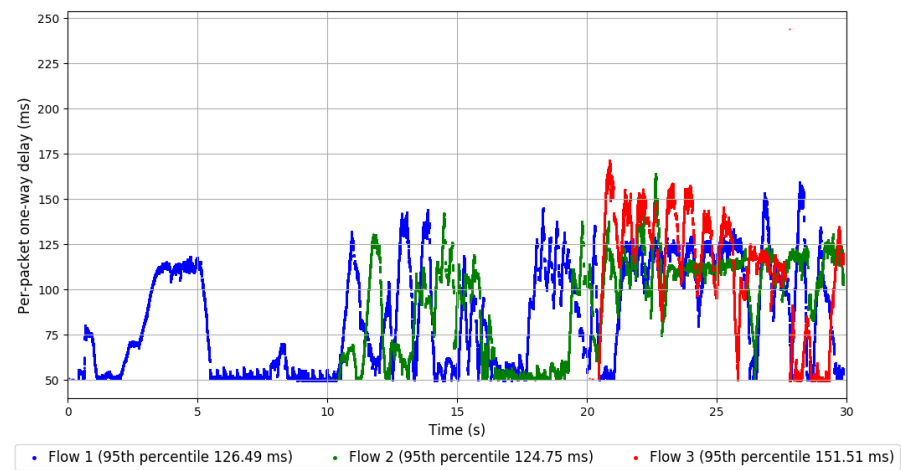
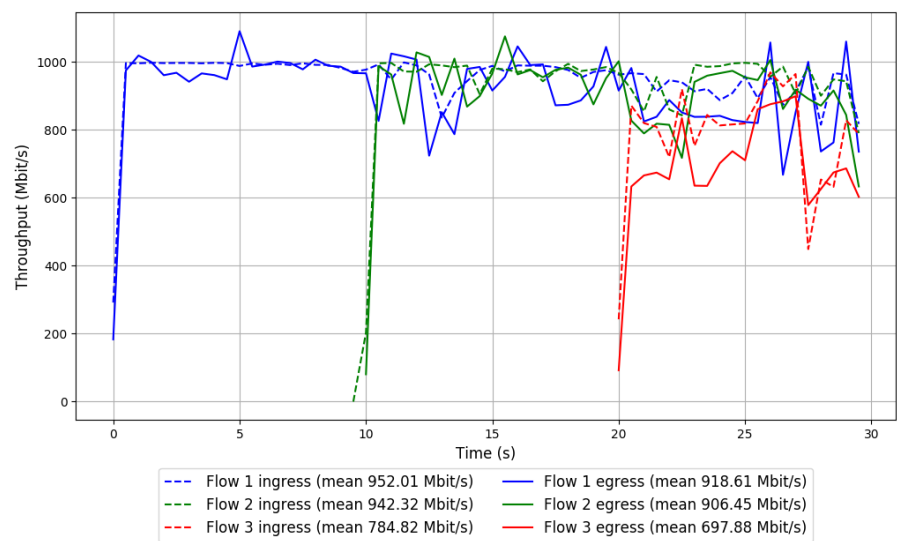
-- Flow 3:

Average throughput: 697.88 Mbit/s

95th percentile per-packet one-way delay: 151.510 ms

Loss rate: 12.00%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-14 07:21:02

End at: 2018-02-14 07:21:32

Below is generated by plot.py at 2018-02-14 13:24:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 1788.92 Mbit/s

95th percentile per-packet one-way delay: 126.455 ms

Loss rate: 4.93%

-- Flow 1:

Average throughput: 928.00 Mbit/s

95th percentile per-packet one-way delay: 123.687 ms

Loss rate: 3.74%

-- Flow 2:

Average throughput: 904.52 Mbit/s

95th percentile per-packet one-way delay: 126.284 ms

Loss rate: 5.02%

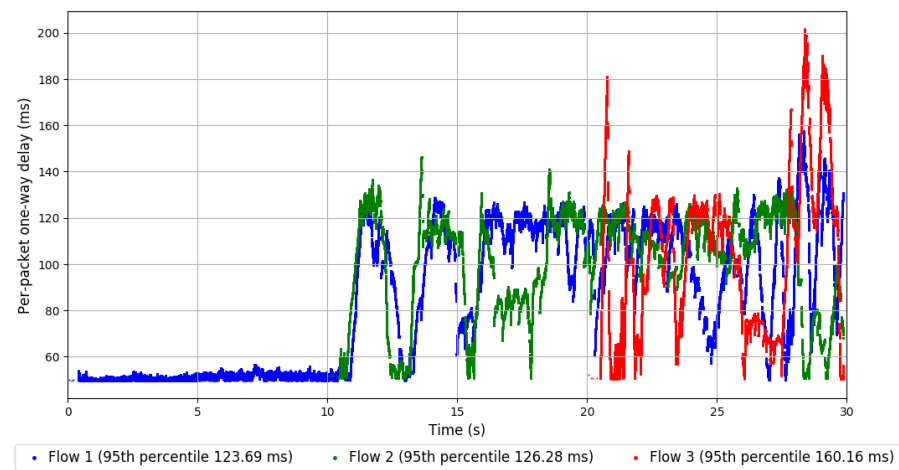
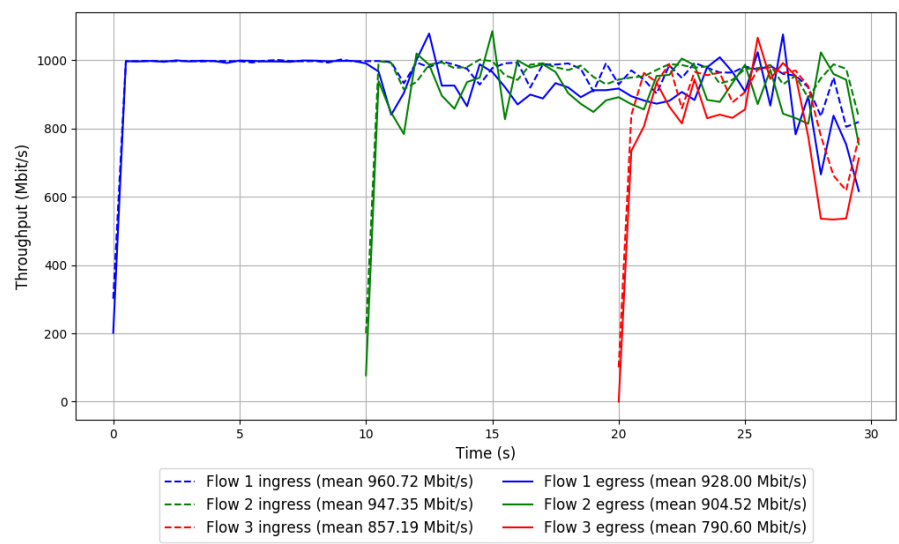
-- Flow 3:

Average throughput: 790.60 Mbit/s

95th percentile per-packet one-way delay: 160.156 ms

Loss rate: 8.74%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-14 07:39:23

End at: 2018-02-14 07:39:53

Below is generated by plot.py at 2018-02-14 13:24:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 1561.69 Mbit/s

95th percentile per-packet one-way delay: 277.296 ms

Loss rate: 6.13%

-- Flow 1:

Average throughput: 823.88 Mbit/s

95th percentile per-packet one-way delay: 274.333 ms

Loss rate: 4.06%

-- Flow 2:

Average throughput: 714.90 Mbit/s

95th percentile per-packet one-way delay: 291.885 ms

Loss rate: 8.38%

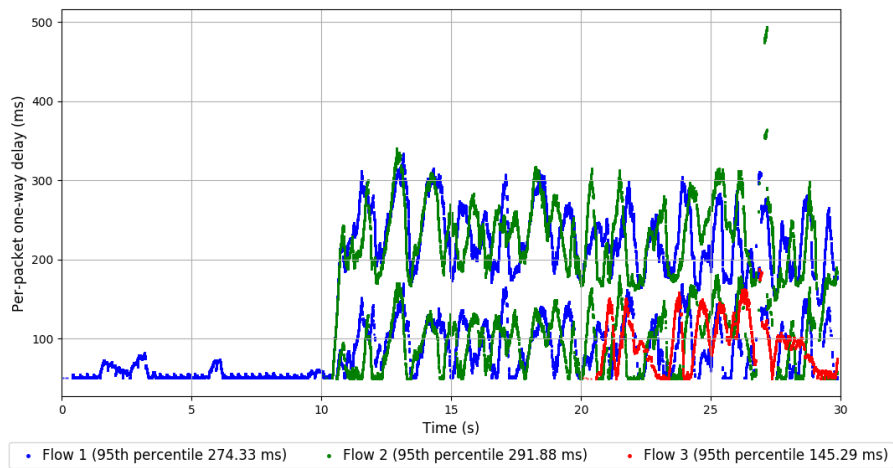
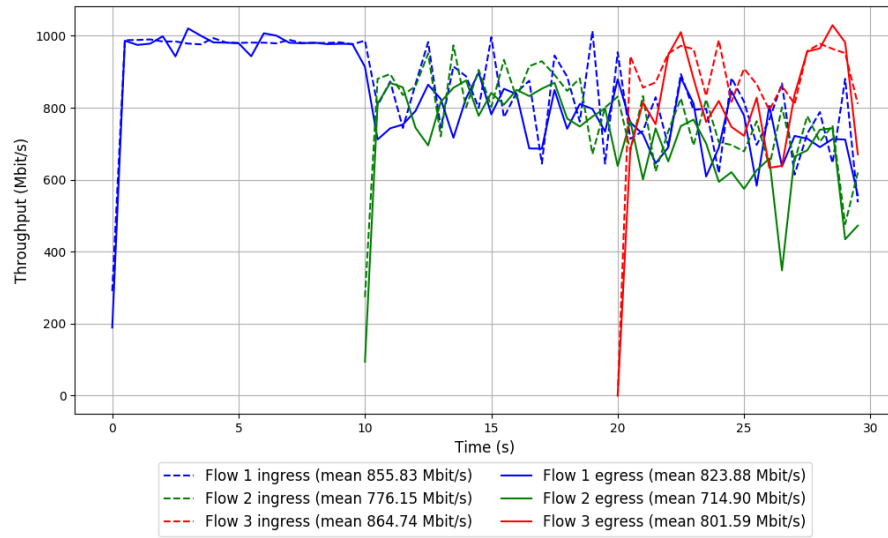
-- Flow 3:

Average throughput: 801.59 Mbit/s

95th percentile per-packet one-way delay: 145.293 ms

Loss rate: 8.26%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-14 07:57:46

End at: 2018-02-14 07:58:16

Below is generated by plot.py at 2018-02-14 13:24:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 1749.01 Mbit/s

95th percentile per-packet one-way delay: 133.998 ms

Loss rate: 5.58%

-- Flow 1:

Average throughput: 917.58 Mbit/s

95th percentile per-packet one-way delay: 122.538 ms

Loss rate: 4.14%

-- Flow 2:

Average throughput: 874.29 Mbit/s

95th percentile per-packet one-way delay: 136.928 ms

Loss rate: 5.71%

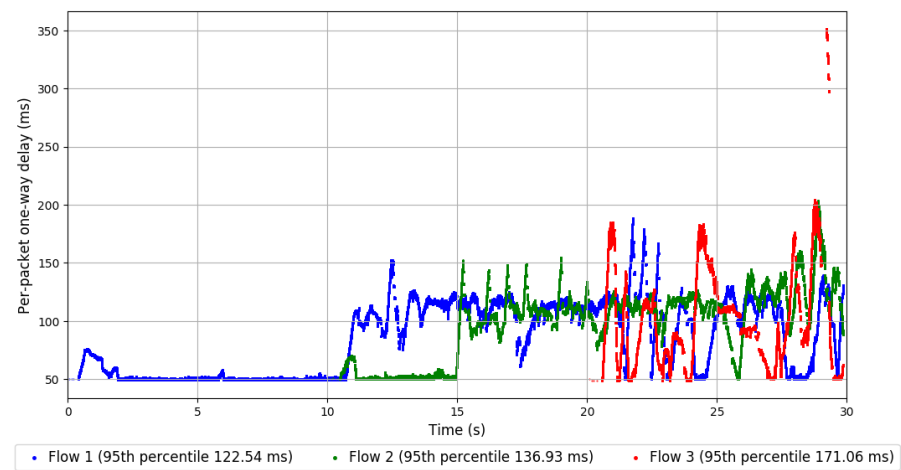
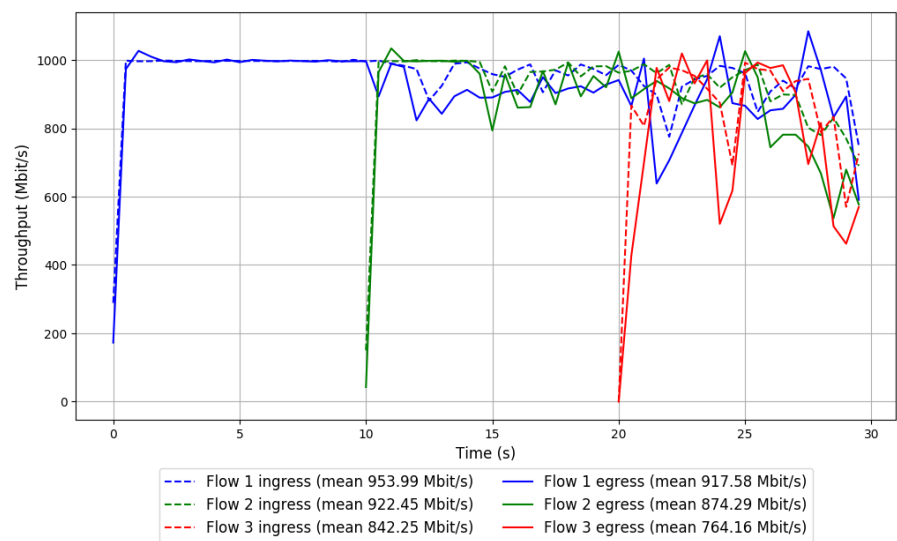
-- Flow 3:

Average throughput: 764.16 Mbit/s

95th percentile per-packet one-way delay: 171.064 ms

Loss rate: 10.20%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-14 08:15:51

End at: 2018-02-14 08:16:21

Below is generated by plot.py at 2018-02-14 13:49:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 1707.38 Mbit/s

95th percentile per-packet one-way delay: 141.208 ms

Loss rate: 5.79%

-- Flow 1:

Average throughput: 860.58 Mbit/s

95th percentile per-packet one-way delay: 140.938 ms

Loss rate: 5.59%

-- Flow 2:

Average throughput: 865.26 Mbit/s

95th percentile per-packet one-way delay: 142.066 ms

Loss rate: 5.29%

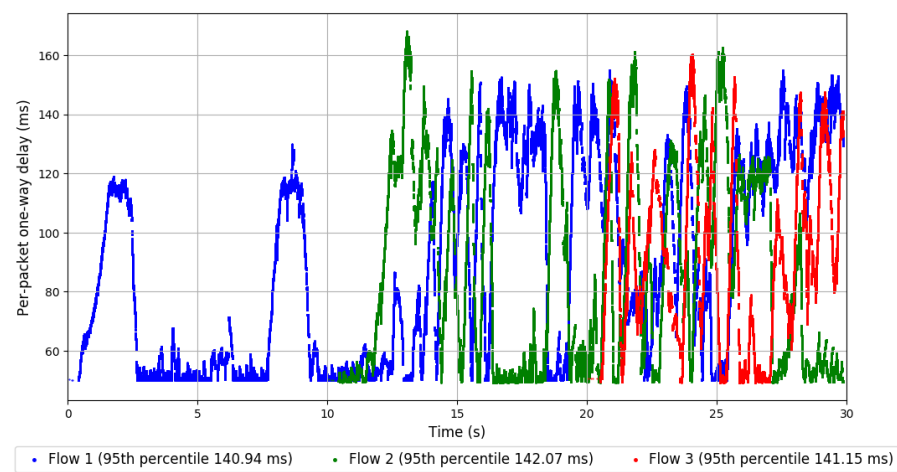
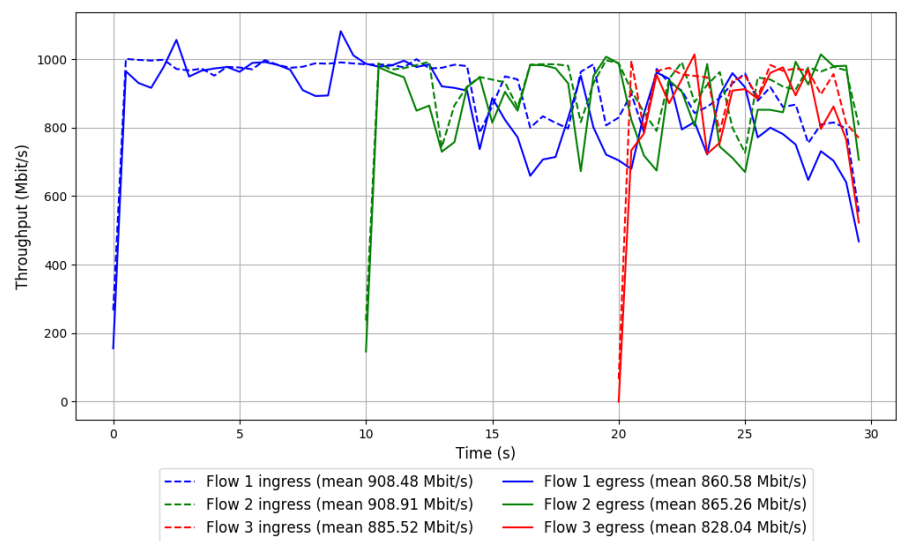
-- Flow 3:

Average throughput: 828.04 Mbit/s

95th percentile per-packet one-way delay: 141.151 ms

Loss rate: 7.46%

Run 9: Report of FillP — Data Link

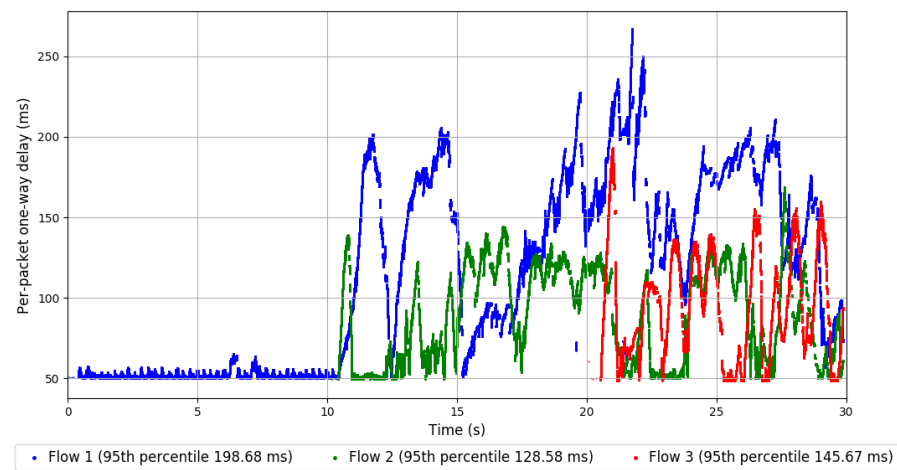
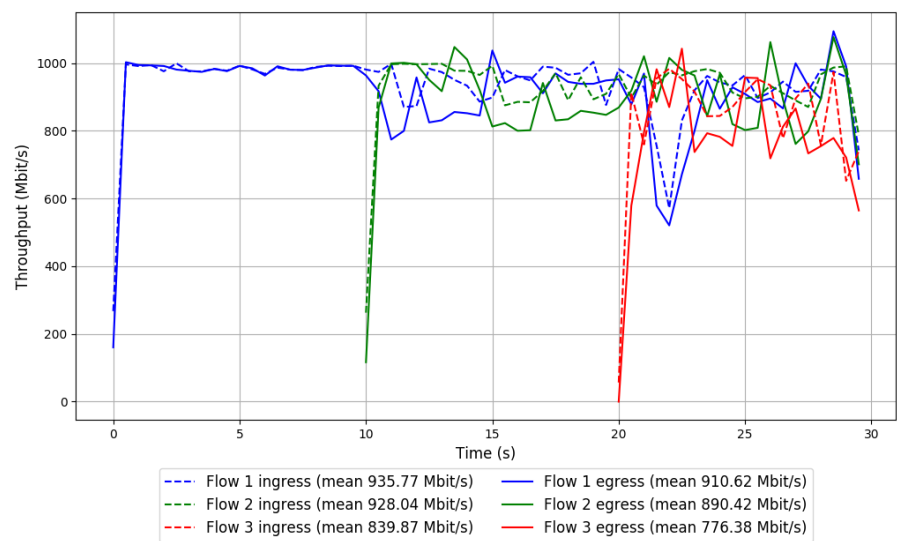


```
Run 10: Statistics of FillP

Start at: 2018-02-14 08:33:55
End at: 2018-02-14 08:34:25

# Below is generated by plot.py at 2018-02-14 13:50:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1757.13 Mbit/s
95th percentile per-packet one-way delay: 189.870 ms
Loss rate: 4.38%
-- Flow 1:
Average throughput: 910.62 Mbit/s
95th percentile per-packet one-way delay: 198.679 ms
Loss rate: 3.02%
-- Flow 2:
Average throughput: 890.42 Mbit/s
95th percentile per-packet one-way delay: 128.579 ms
Loss rate: 4.54%
-- Flow 3:
Average throughput: 776.38 Mbit/s
95th percentile per-packet one-way delay: 145.674 ms
Loss rate: 8.61%
```

Run 10: Report of FillP — Data Link

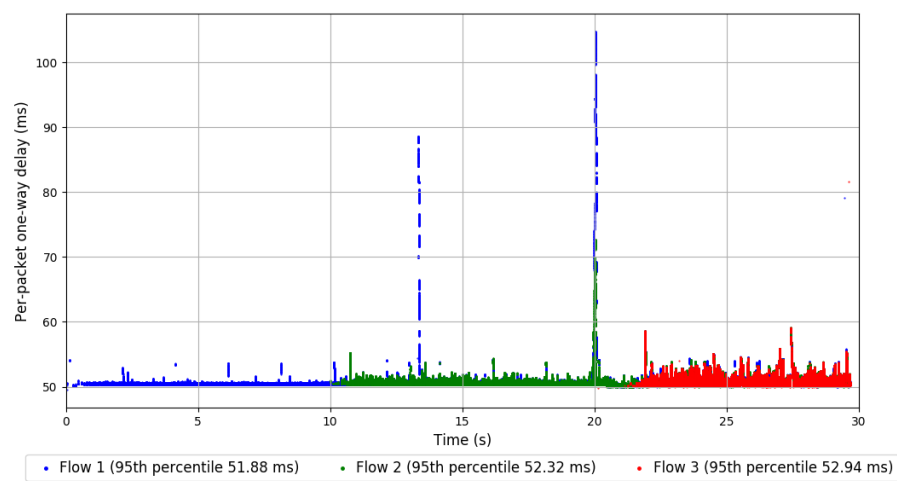
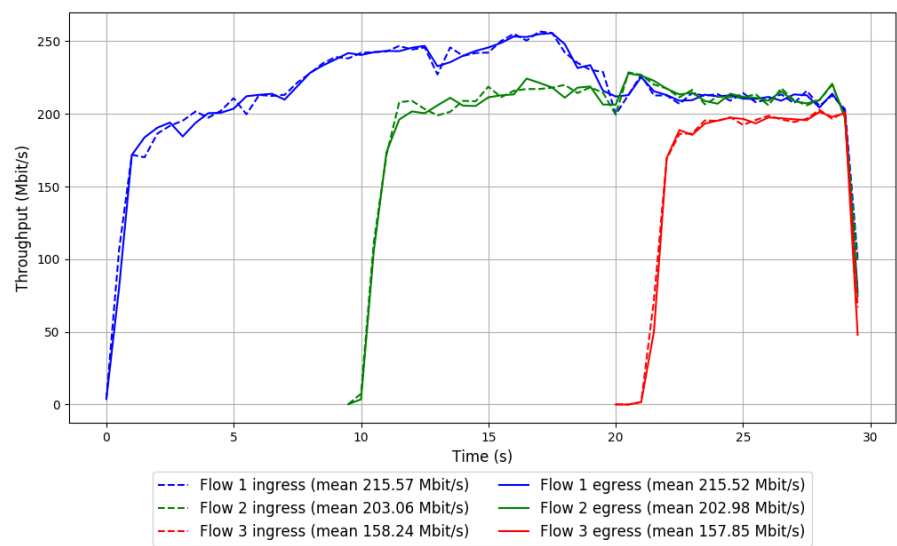


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-14 05:40:21
End at: 2018-02-14 05:40:51

# Below is generated by plot.py at 2018-02-14 13:50:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 401.09 Mbit/s
95th percentile per-packet one-way delay: 52.231 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 215.52 Mbit/s
95th percentile per-packet one-way delay: 51.883 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 202.98 Mbit/s
95th percentile per-packet one-way delay: 52.316 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 157.85 Mbit/s
95th percentile per-packet one-way delay: 52.935 ms
Loss rate: 1.30%
```

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

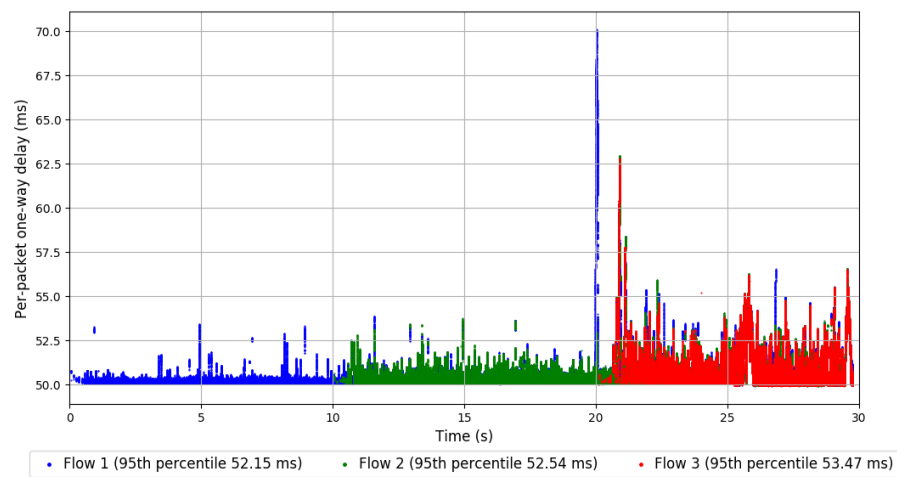
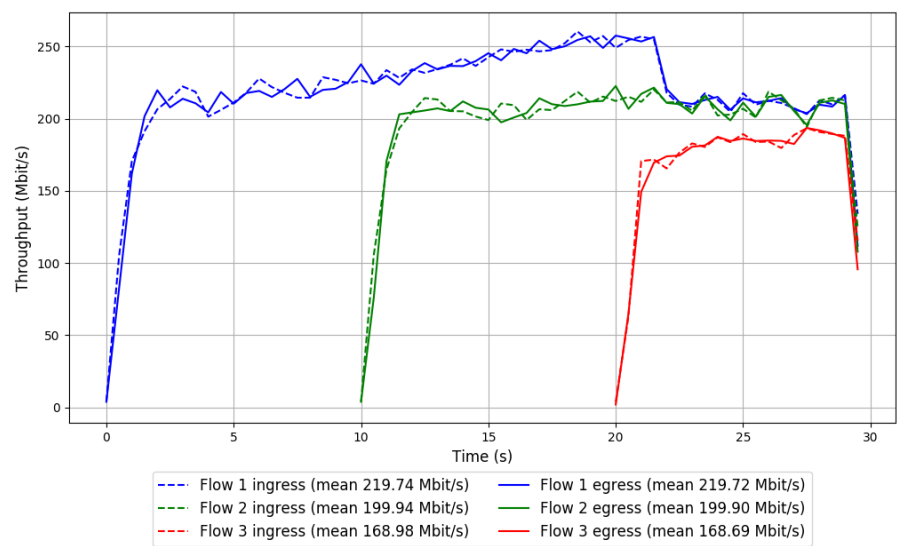


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-14 05:58:57
End at: 2018-02-14 05:59:27

# Below is generated by plot.py at 2018-02-14 13:50:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 406.92 Mbit/s
95th percentile per-packet one-way delay: 52.564 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 219.72 Mbit/s
95th percentile per-packet one-way delay: 52.152 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 199.90 Mbit/s
95th percentile per-packet one-way delay: 52.539 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 168.69 Mbit/s
95th percentile per-packet one-way delay: 53.467 ms
Loss rate: 1.21%
```

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-14 06:17:04

End at: 2018-02-14 06:17:34

Below is generated by plot.py at 2018-02-14 13:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 413.24 Mbit/s

95th percentile per-packet one-way delay: 53.183 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 222.41 Mbit/s

95th percentile per-packet one-way delay: 52.501 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 197.21 Mbit/s

95th percentile per-packet one-way delay: 53.424 ms

Loss rate: 0.52%

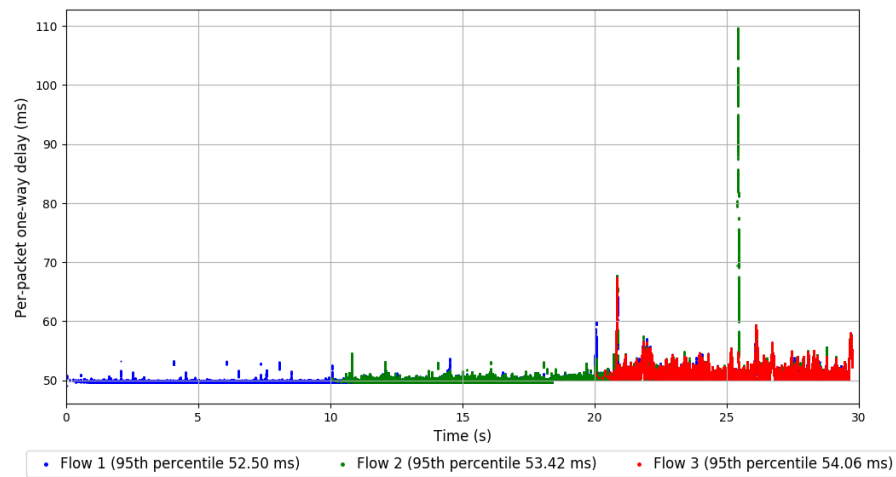
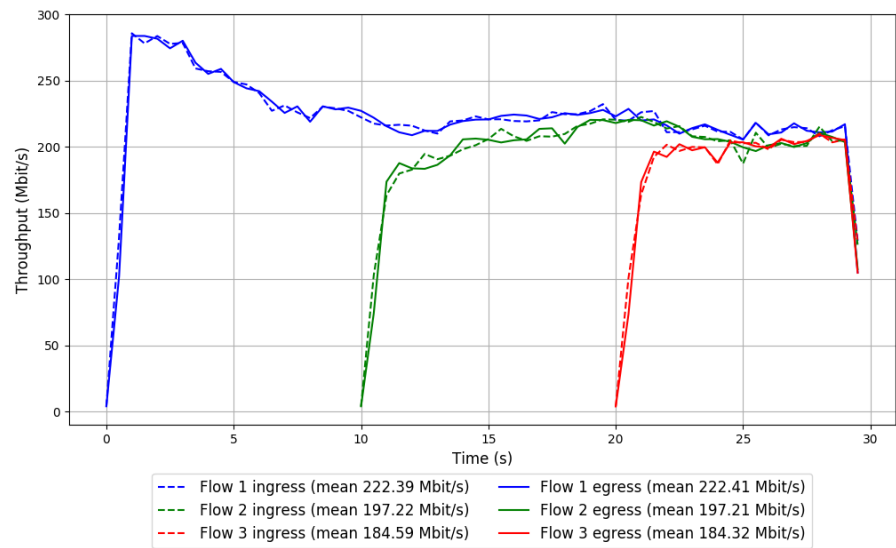
-- Flow 3:

Average throughput: 184.32 Mbit/s

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

Loss rate: 1.19%

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



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-14 06:35:29

End at: 2018-02-14 06:35:59

Below is generated by plot.py at 2018-02-14 13:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 396.81 Mbit/s

95th percentile per-packet one-way delay: 53.297 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 200.75 Mbit/s

95th percentile per-packet one-way delay: 52.314 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 212.04 Mbit/s

95th percentile per-packet one-way delay: 53.363 ms

Loss rate: 0.53%

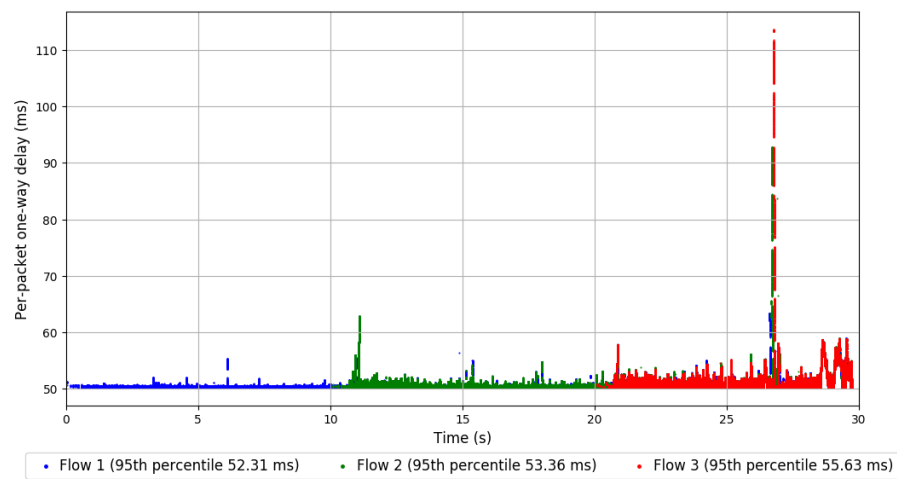
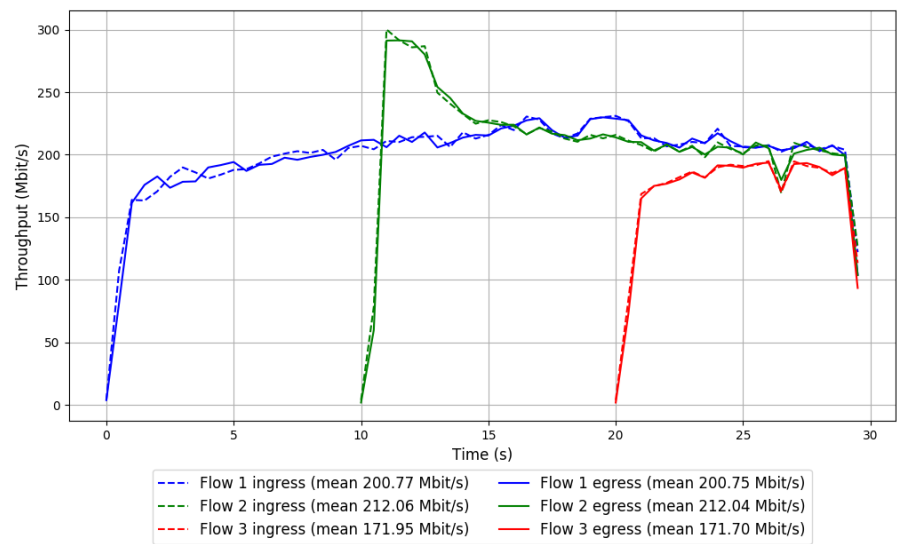
-- Flow 3:

Average throughput: 171.70 Mbit/s

95th percentile per-packet one-way delay: 55.631 ms

Loss rate: 1.17%

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



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-14 06:53:37

End at: 2018-02-14 06:54:07

Below is generated by plot.py at 2018-02-14 13:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 410.62 Mbit/s

95th percentile per-packet one-way delay: 52.332 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 221.67 Mbit/s

95th percentile per-packet one-way delay: 51.907 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 196.50 Mbit/s

95th percentile per-packet one-way delay: 52.506 ms

Loss rate: 0.55%

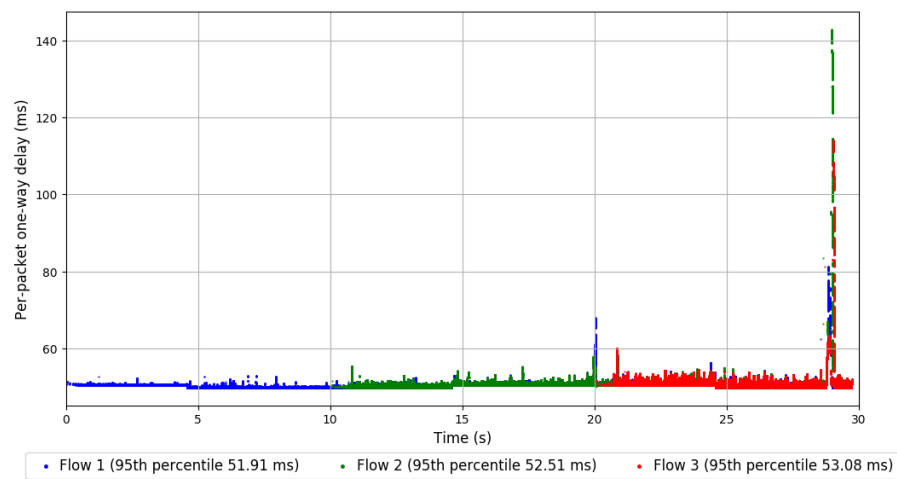
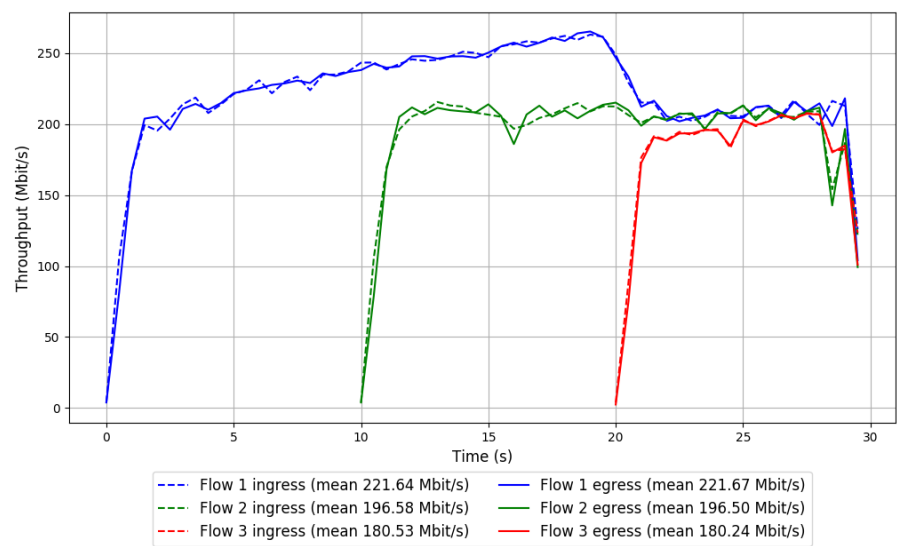
-- Flow 3:

Average throughput: 180.24 Mbit/s

95th percentile per-packet one-way delay: 53.082 ms

Loss rate: 1.19%

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



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-14 07:11:56

End at: 2018-02-14 07:12:26

Below is generated by plot.py at 2018-02-14 13:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 416.70 Mbit/s

95th percentile per-packet one-way delay: 53.288 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 227.74 Mbit/s

95th percentile per-packet one-way delay: 52.697 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 199.55 Mbit/s

95th percentile per-packet one-way delay: 53.527 ms

Loss rate: 0.52%

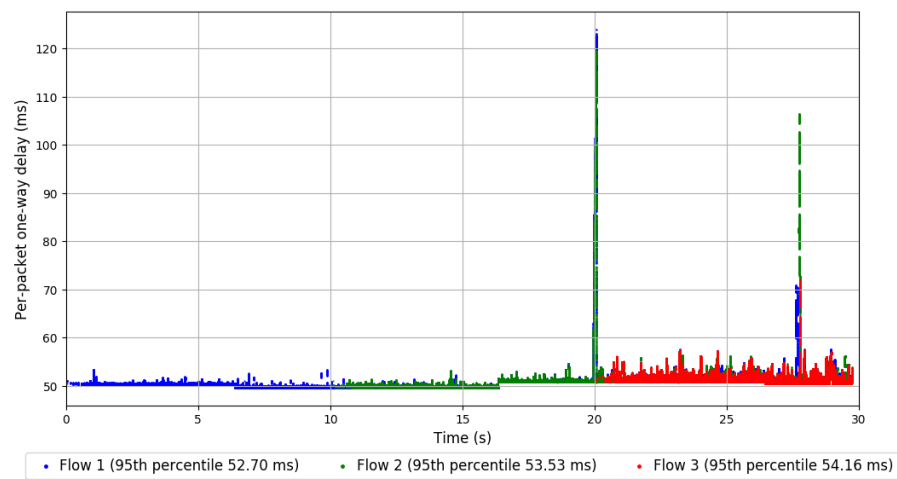
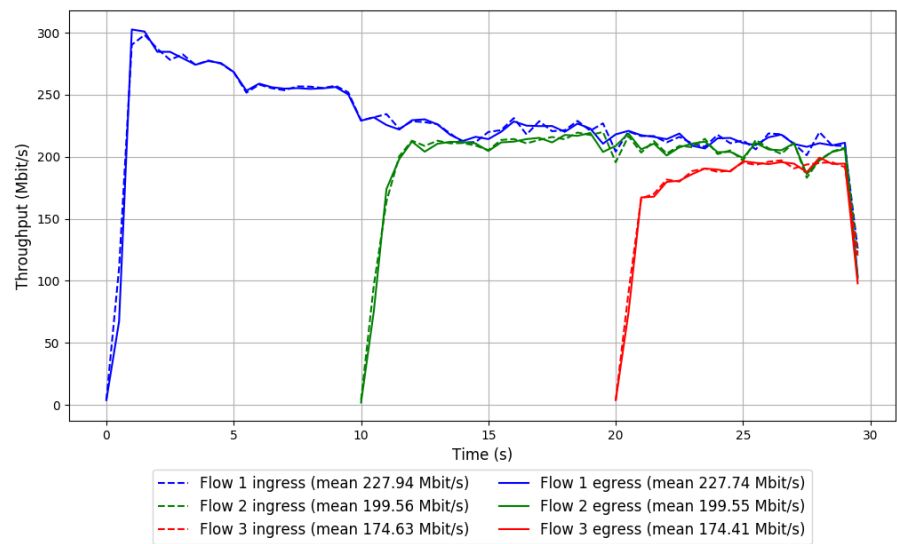
-- Flow 3:

Average throughput: 174.41 Mbit/s

95th percentile per-packet one-way delay: 54.159 ms

Loss rate: 1.17%

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



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-14 07:30:27

End at: 2018-02-14 07:30:57

Below is generated by plot.py at 2018-02-14 13:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 403.64 Mbit/s

95th percentile per-packet one-way delay: 53.538 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 216.28 Mbit/s

95th percentile per-packet one-way delay: 52.993 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 198.50 Mbit/s

95th percentile per-packet one-way delay: 53.649 ms

Loss rate: 0.58%

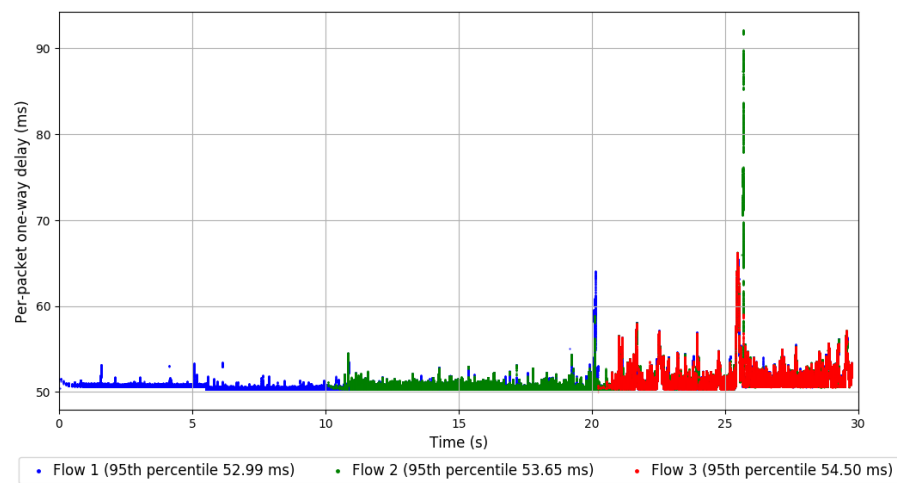
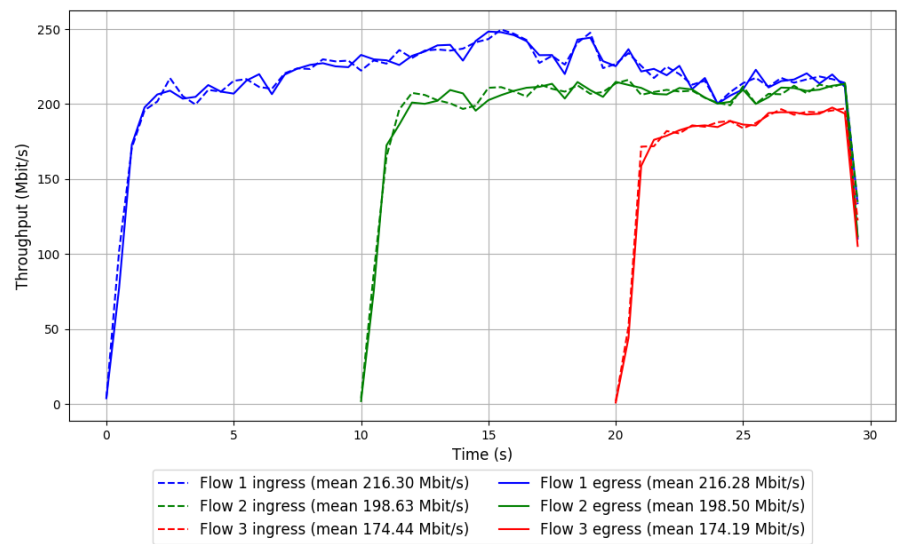
-- Flow 3:

Average throughput: 174.19 Mbit/s

95th percentile per-packet one-way delay: 54.496 ms

Loss rate: 1.20%

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



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-14 07:48:50

End at: 2018-02-14 07:49:20

Below is generated by plot.py at 2018-02-14 13:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 400.61 Mbit/s

95th percentile per-packet one-way delay: 51.518 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 213.31 Mbit/s

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

Loss rate: 0.32%

-- Flow 2:

Average throughput: 197.53 Mbit/s

95th percentile per-packet one-way delay: 51.836 ms

Loss rate: 0.55%

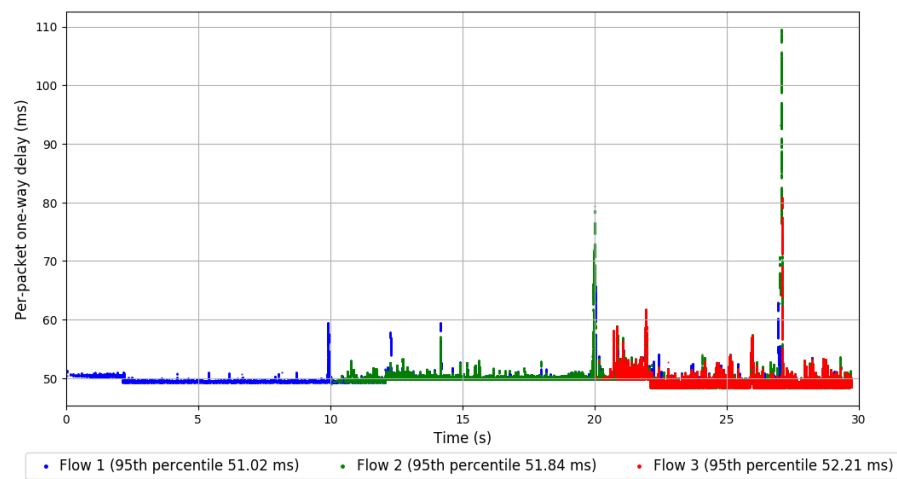
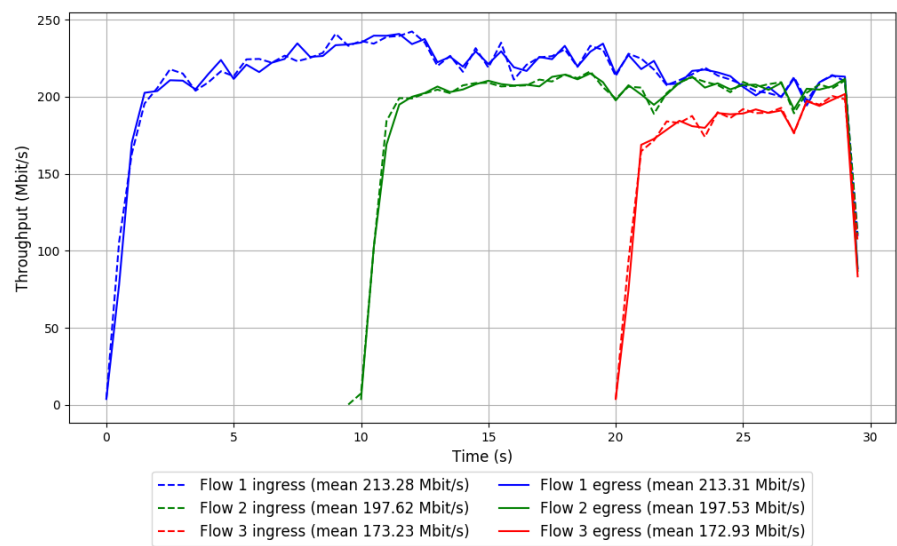
-- Flow 3:

Average throughput: 172.93 Mbit/s

95th percentile per-packet one-way delay: 52.210 ms

Loss rate: 1.21%

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



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-14 08:07:06

End at: 2018-02-14 08:07:36

Below is generated by plot.py at 2018-02-14 13:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 402.60 Mbit/s

95th percentile per-packet one-way delay: 51.884 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 219.72 Mbit/s

95th percentile per-packet one-way delay: 51.564 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 191.94 Mbit/s

95th percentile per-packet one-way delay: 51.998 ms

Loss rate: 0.48%

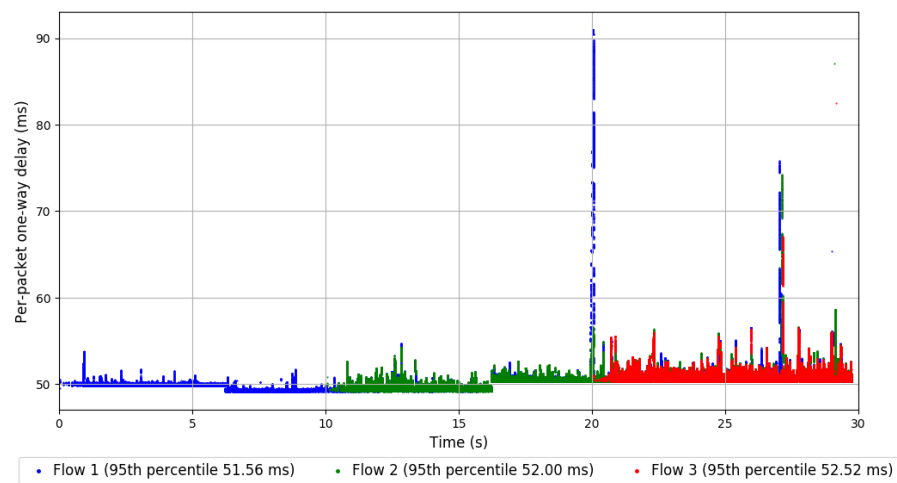
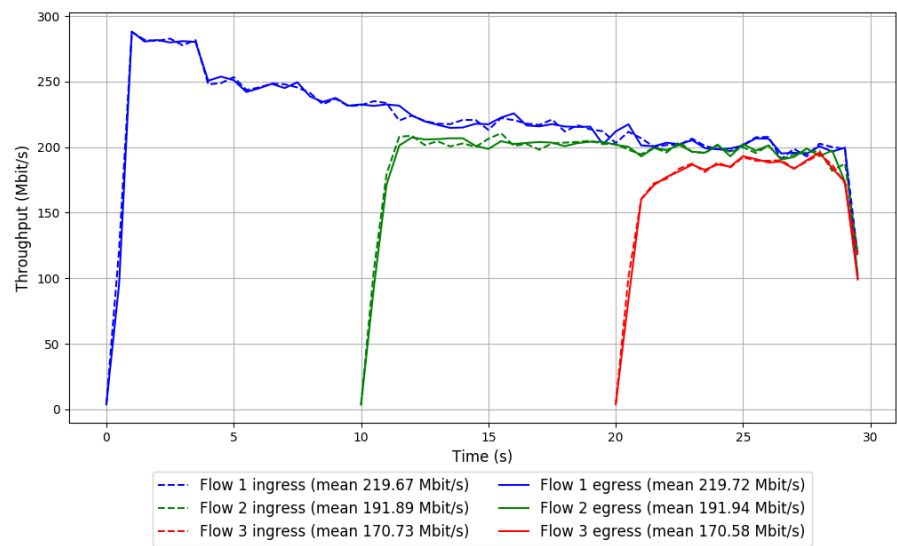
-- Flow 3:

Average throughput: 170.58 Mbit/s

95th percentile per-packet one-way delay: 52.524 ms

Loss rate: 1.10%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-14 08:25:08

End at: 2018-02-14 08:25:38

Below is generated by plot.py at 2018-02-14 13:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 381.00 Mbit/s

95th percentile per-packet one-way delay: 52.123 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 196.95 Mbit/s

95th percentile per-packet one-way delay: 51.753 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 199.36 Mbit/s

95th percentile per-packet one-way delay: 52.247 ms

Loss rate: 0.57%

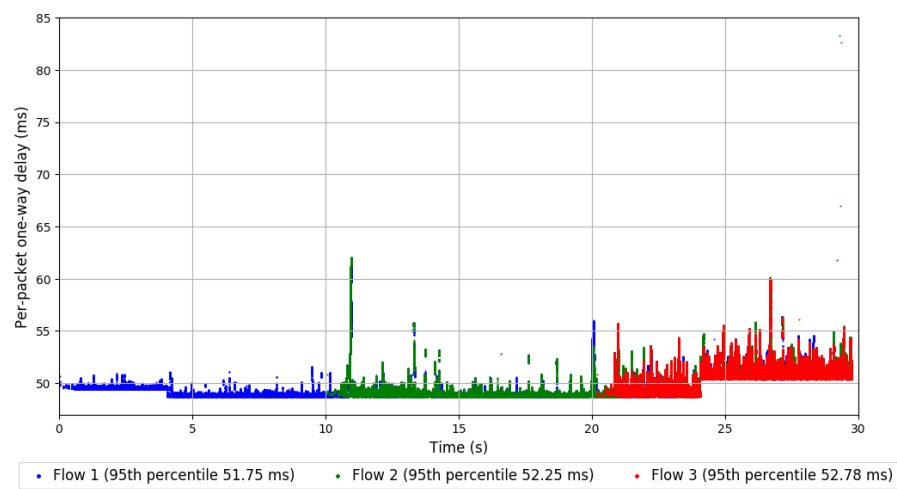
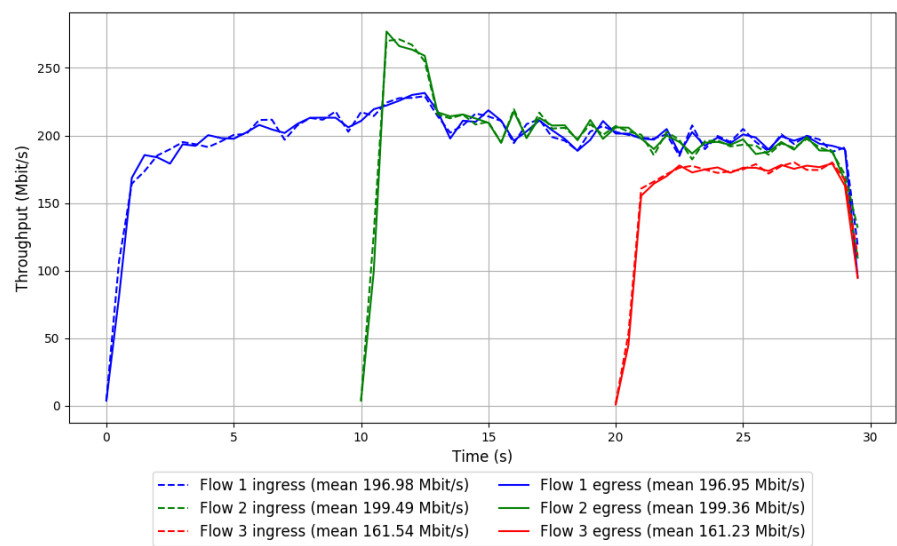
-- Flow 3:

Average throughput: 161.23 Mbit/s

95th percentile per-packet one-way delay: 52.779 ms

Loss rate: 1.22%

Run 10: Report of Indigo-1-32 — Data Link

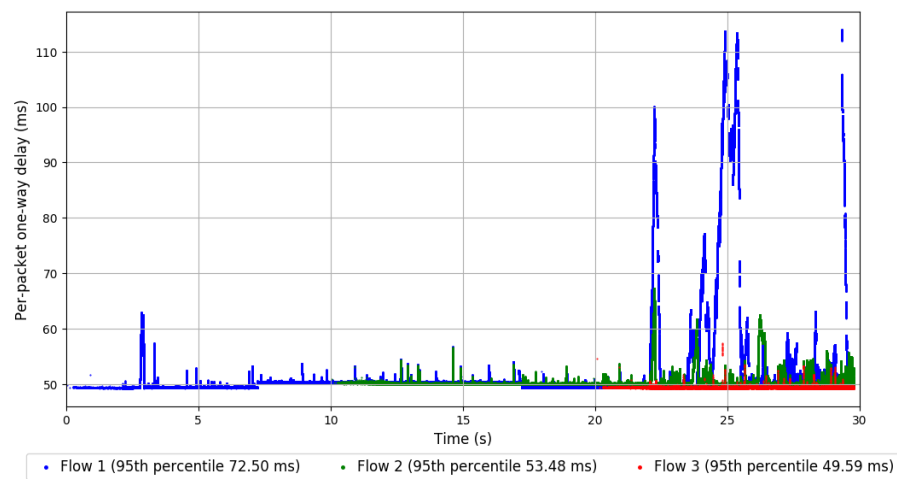
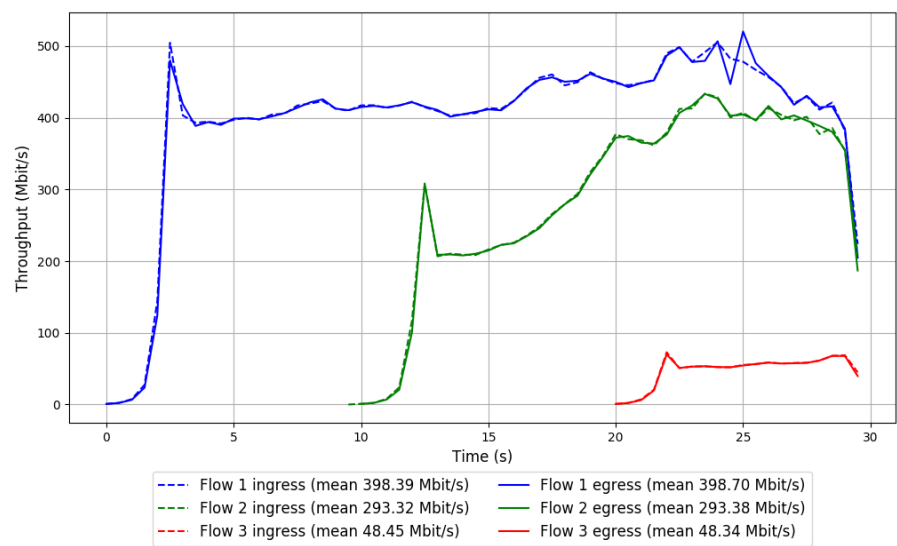


```
Run 1: Statistics of Vivace-latency

Start at: 2018-02-14 05:37:35
End at: 2018-02-14 05:38:05

# Below is generated by plot.py at 2018-02-14 13:50:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 609.29 Mbit/s
95th percentile per-packet one-way delay: 61.481 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 398.70 Mbit/s
95th percentile per-packet one-way delay: 72.504 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 293.38 Mbit/s
95th percentile per-packet one-way delay: 53.477 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 48.34 Mbit/s
95th percentile per-packet one-way delay: 49.589 ms
Loss rate: 1.30%
```


Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-14 05:56:04

End at: 2018-02-14 05:56:34

Below is generated by plot.py at 2018-02-14 13:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 681.00 Mbit/s

95th percentile per-packet one-way delay: 56.963 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 374.03 Mbit/s

95th percentile per-packet one-way delay: 53.379 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 331.15 Mbit/s

95th percentile per-packet one-way delay: 51.361 ms

Loss rate: 0.51%

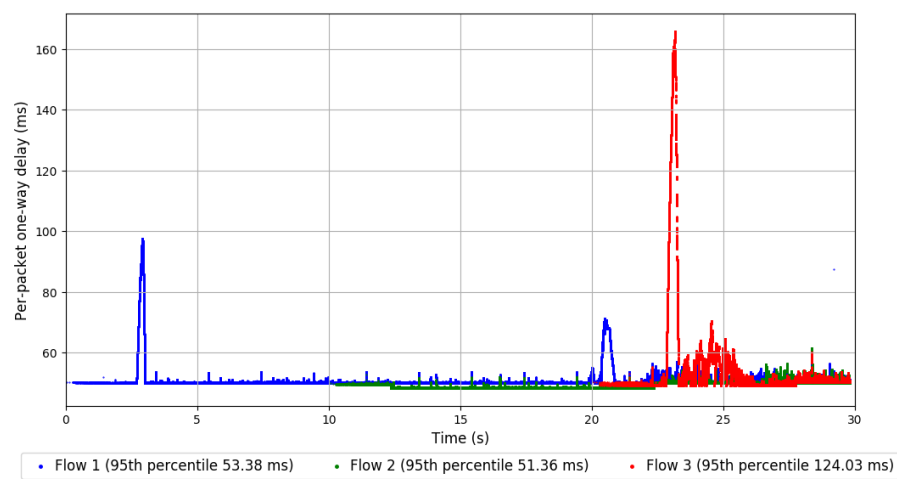
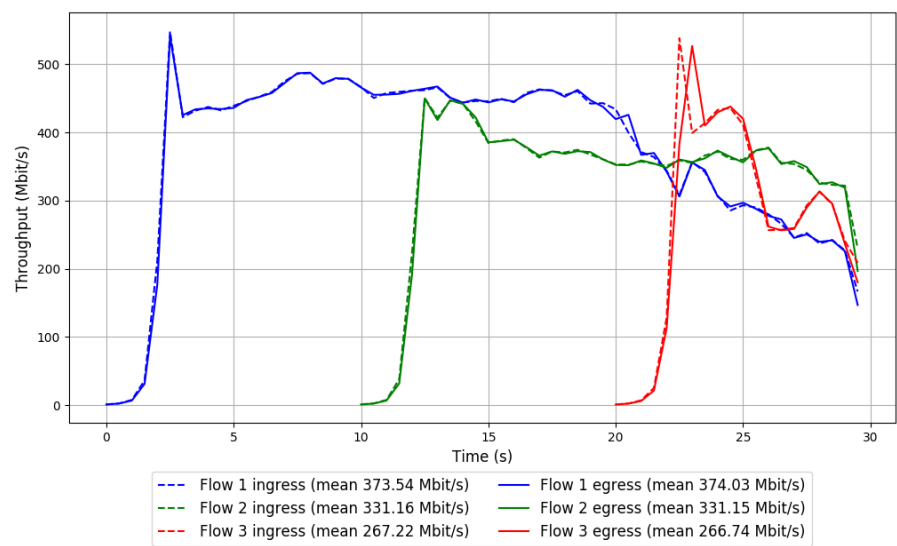
-- Flow 3:

Average throughput: 266.74 Mbit/s

95th percentile per-packet one-way delay: 124.034 ms

Loss rate: 1.21%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-14 06:14:12

End at: 2018-02-14 06:14:42

Below is generated by plot.py at 2018-02-14 13:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 652.36 Mbit/s

95th percentile per-packet one-way delay: 56.847 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 390.52 Mbit/s

95th percentile per-packet one-way delay: 52.012 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 379.23 Mbit/s

95th percentile per-packet one-way delay: 95.345 ms

Loss rate: 0.71%

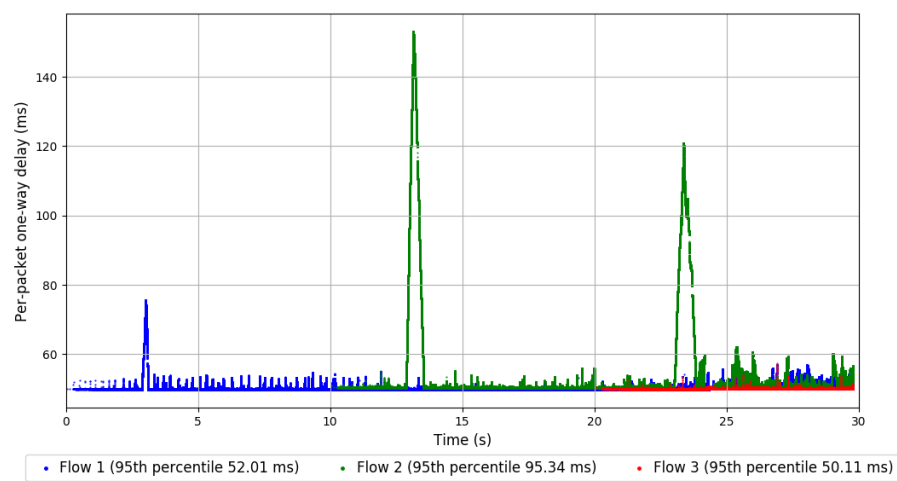
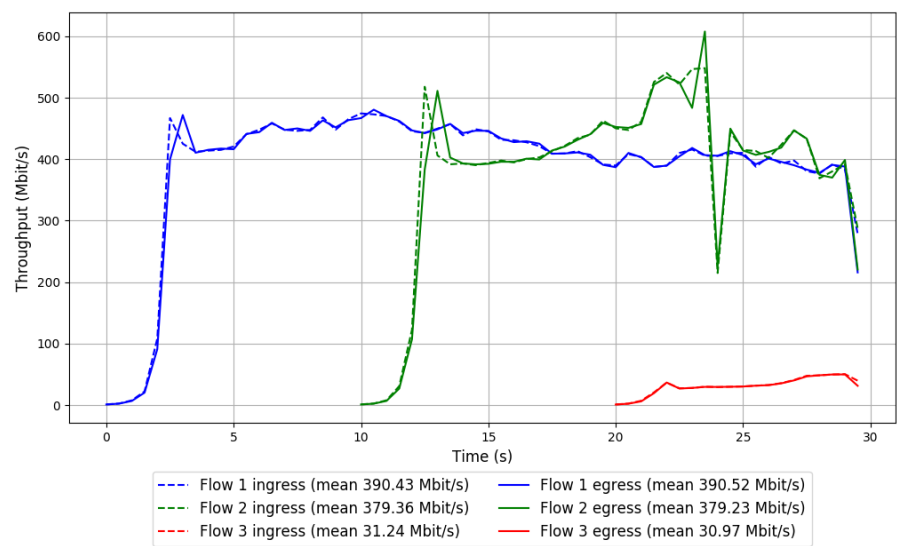
-- Flow 3:

Average throughput: 30.97 Mbit/s

95th percentile per-packet one-way delay: 50.107 ms

Loss rate: 2.23%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-14 06:32:37

End at: 2018-02-14 06:33:07

Below is generated by plot.py at 2018-02-14 13:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 724.09 Mbit/s

95th percentile per-packet one-way delay: 132.845 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 370.93 Mbit/s

95th percentile per-packet one-way delay: 56.905 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 379.20 Mbit/s

95th percentile per-packet one-way delay: 98.766 ms

Loss rate: 1.04%

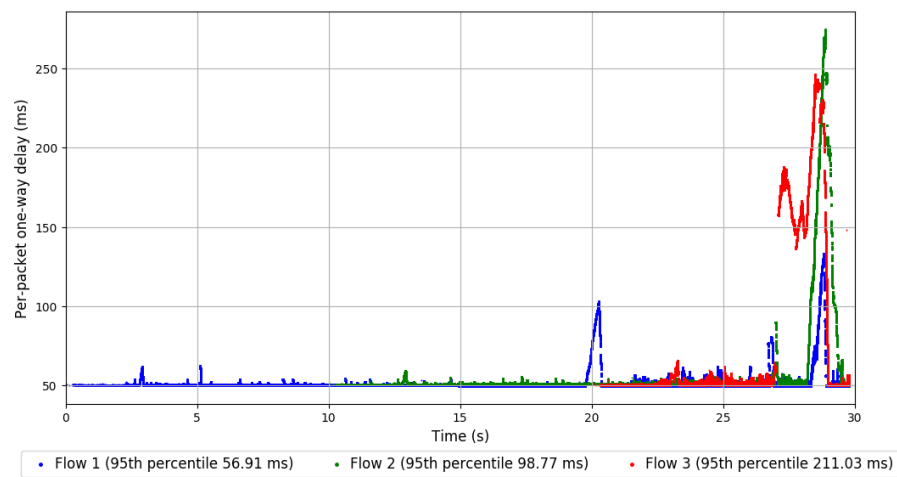
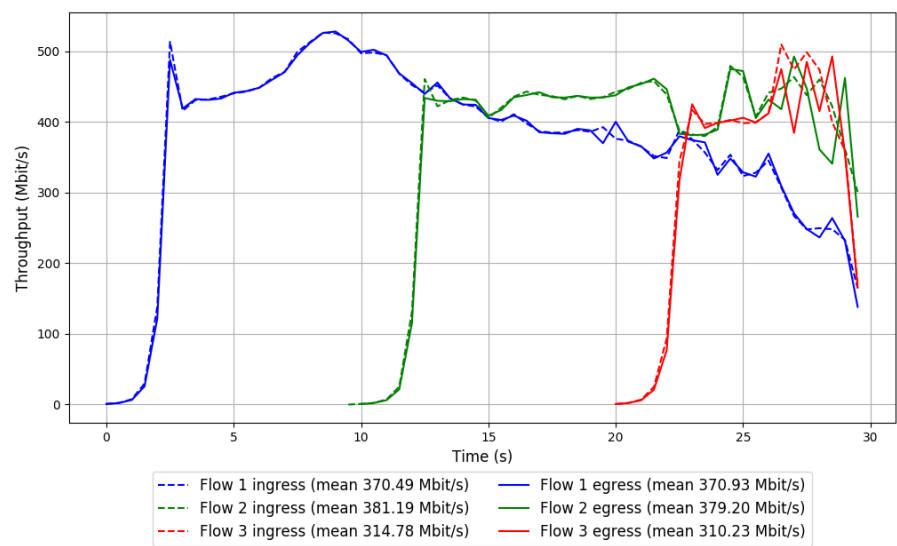
-- Flow 3:

Average throughput: 310.23 Mbit/s

95th percentile per-packet one-way delay: 211.028 ms

Loss rate: 2.47%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-14 06:50:52

End at: 2018-02-14 06:51:22

Below is generated by plot.py at 2018-02-14 13:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 633.26 Mbit/s

95th percentile per-packet one-way delay: 59.323 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 377.53 Mbit/s

95th percentile per-packet one-way delay: 59.962 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 362.90 Mbit/s

95th percentile per-packet one-way delay: 59.644 ms

Loss rate: 0.60%

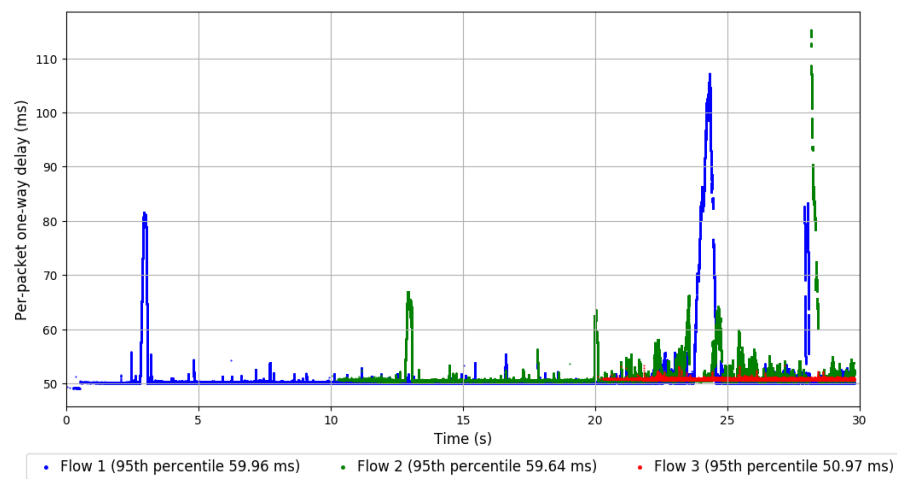
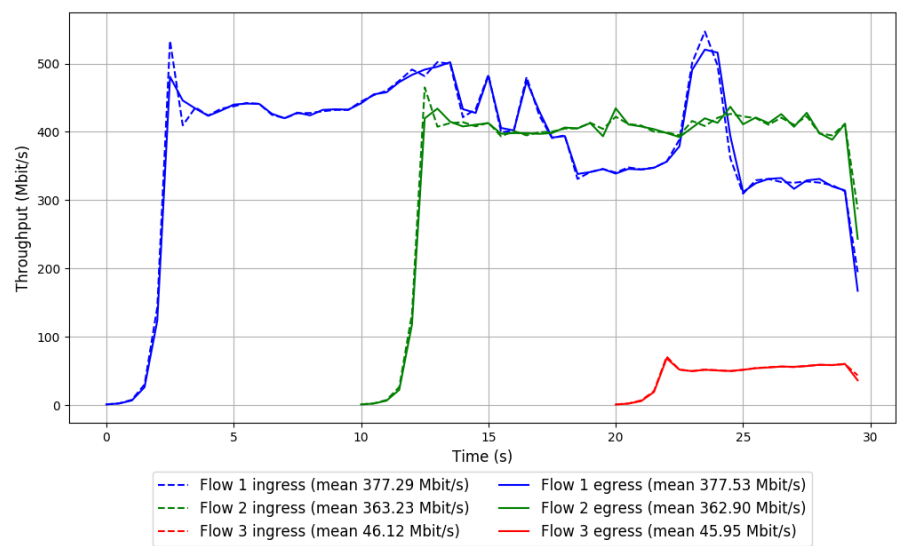
-- Flow 3:

Average throughput: 45.95 Mbit/s

95th percentile per-packet one-way delay: 50.972 ms

Loss rate: 1.41%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-14 07:09:09

End at: 2018-02-14 07:09:39

Below is generated by plot.py at 2018-02-14 13:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 599.38 Mbit/s

95th percentile per-packet one-way delay: 50.786 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 357.48 Mbit/s

95th percentile per-packet one-way delay: 50.941 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 351.27 Mbit/s

95th percentile per-packet one-way delay: 50.029 ms

Loss rate: 0.47%

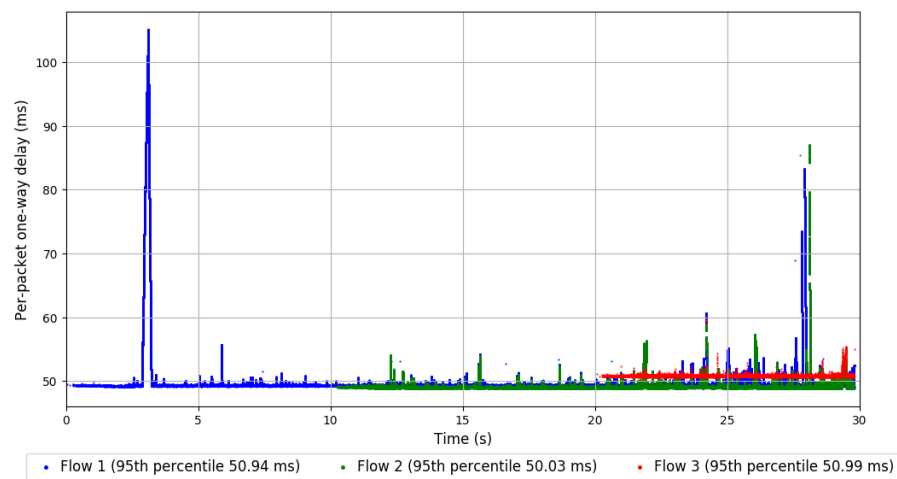
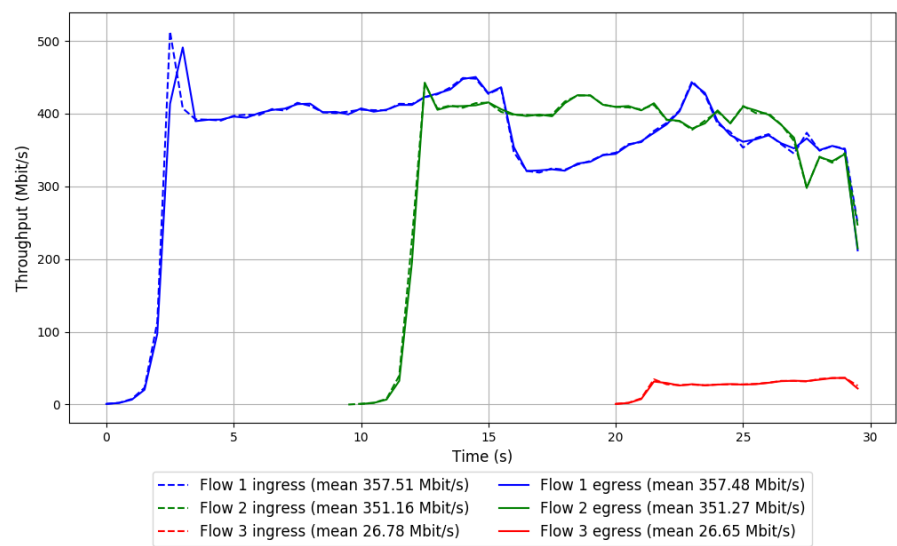
-- Flow 3:

Average throughput: 26.65 Mbit/s

95th percentile per-packet one-way delay: 50.993 ms

Loss rate: 1.45%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-14 07:27:38

End at: 2018-02-14 07:28:08

Below is generated by plot.py at 2018-02-14 13:50:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 605.89 Mbit/s

95th percentile per-packet one-way delay: 52.701 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 347.92 Mbit/s

95th percentile per-packet one-way delay: 52.170 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 343.26 Mbit/s

95th percentile per-packet one-way delay: 53.365 ms

Loss rate: 0.44%

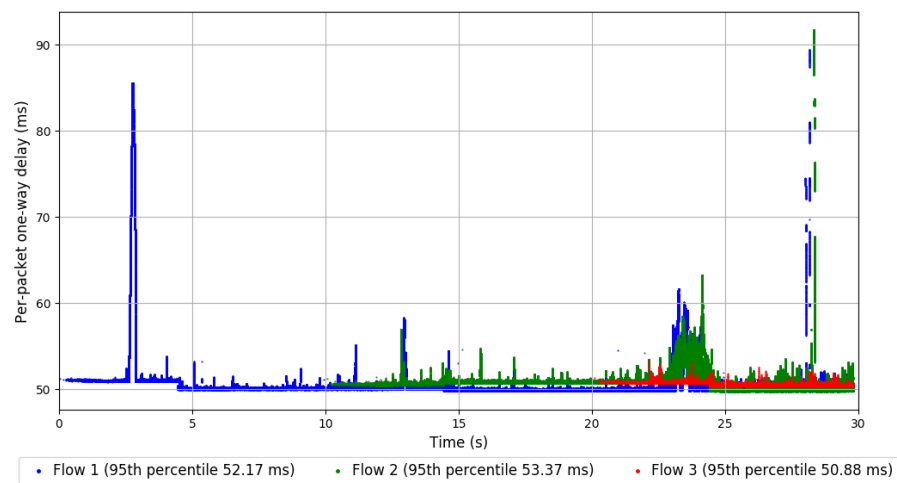
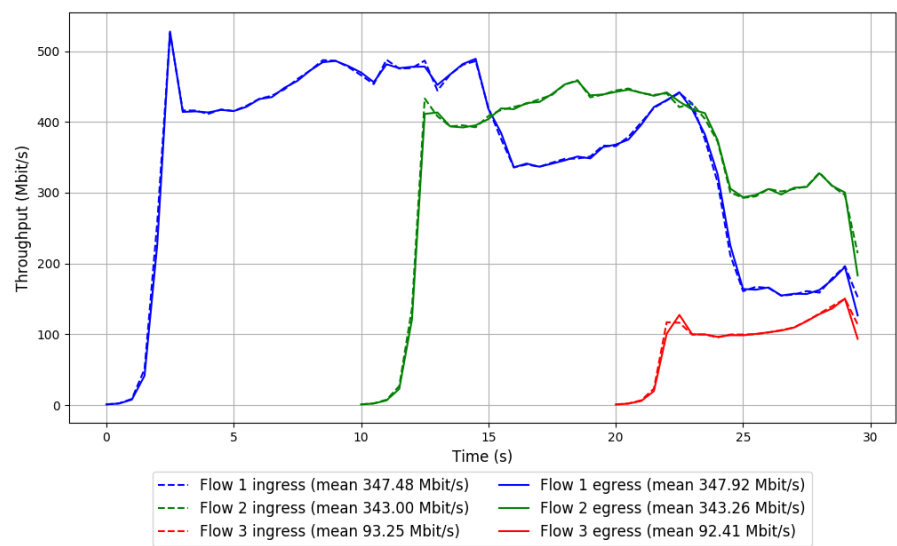
-- Flow 3:

Average throughput: 92.41 Mbit/s

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

Loss rate: 1.93%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-14 07:46:00

End at: 2018-02-14 07:46:30

Below is generated by plot.py at 2018-02-14 13:52:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 607.10 Mbit/s

95th percentile per-packet one-way delay: 51.594 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 350.77 Mbit/s

95th percentile per-packet one-way delay: 51.166 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 344.47 Mbit/s

95th percentile per-packet one-way delay: 52.074 ms

Loss rate: 0.50%

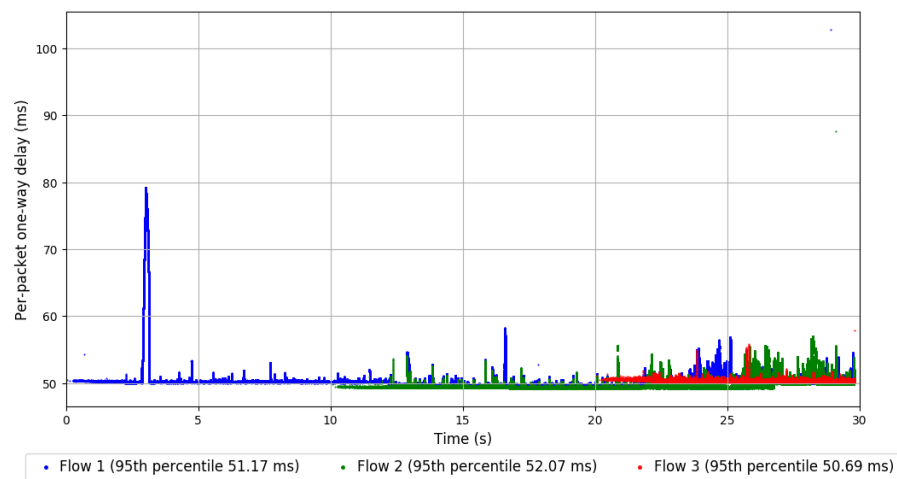
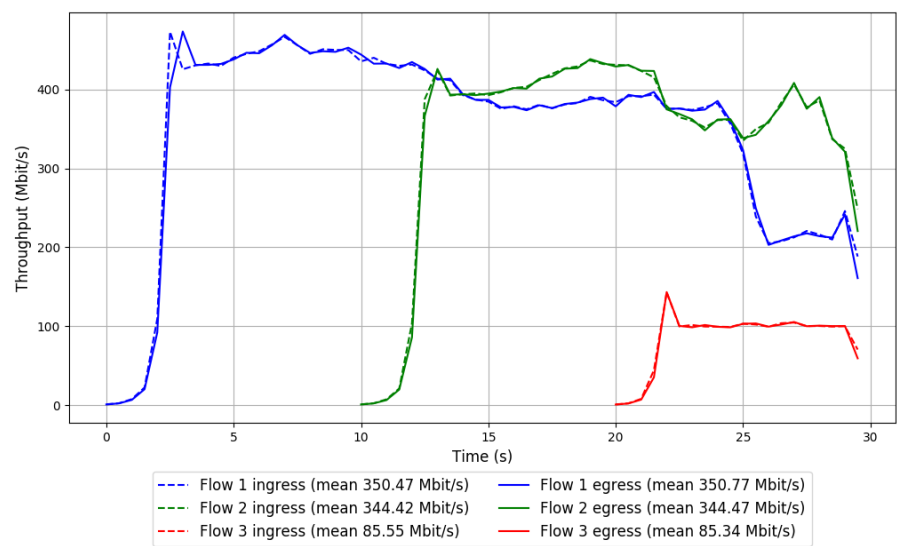
-- Flow 3:

Average throughput: 85.34 Mbit/s

95th percentile per-packet one-way delay: 50.685 ms

Loss rate: 1.21%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-14 08:04:21

End at: 2018-02-14 08:04:51

Below is generated by plot.py at 2018-02-14 13:52:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 529.64 Mbit/s

95th percentile per-packet one-way delay: 50.572 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 325.41 Mbit/s

95th percentile per-packet one-way delay: 50.701 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 237.73 Mbit/s

95th percentile per-packet one-way delay: 50.540 ms

Loss rate: 0.58%

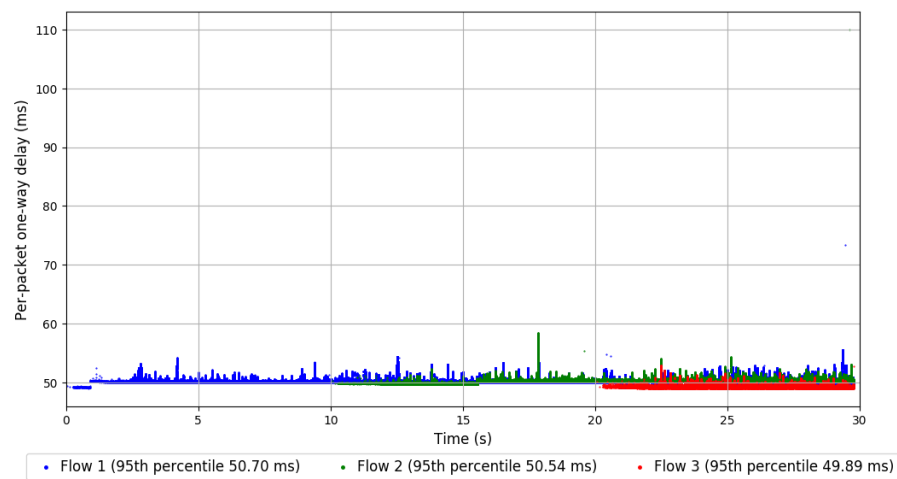
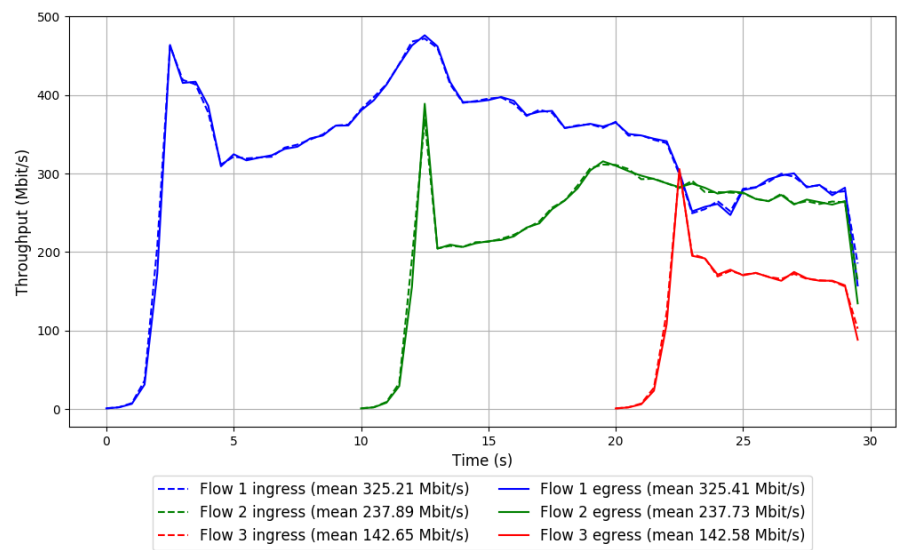
-- Flow 3:

Average throughput: 142.58 Mbit/s

95th percentile per-packet one-way delay: 49.891 ms

Loss rate: 1.05%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-14 08:22:22

End at: 2018-02-14 08:22:52

Below is generated by plot.py at 2018-02-14 13:54:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 582.62 Mbit/s

95th percentile per-packet one-way delay: 53.949 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 332.88 Mbit/s

95th percentile per-packet one-way delay: 53.755 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 330.52 Mbit/s

95th percentile per-packet one-way delay: 54.629 ms

Loss rate: 0.35%

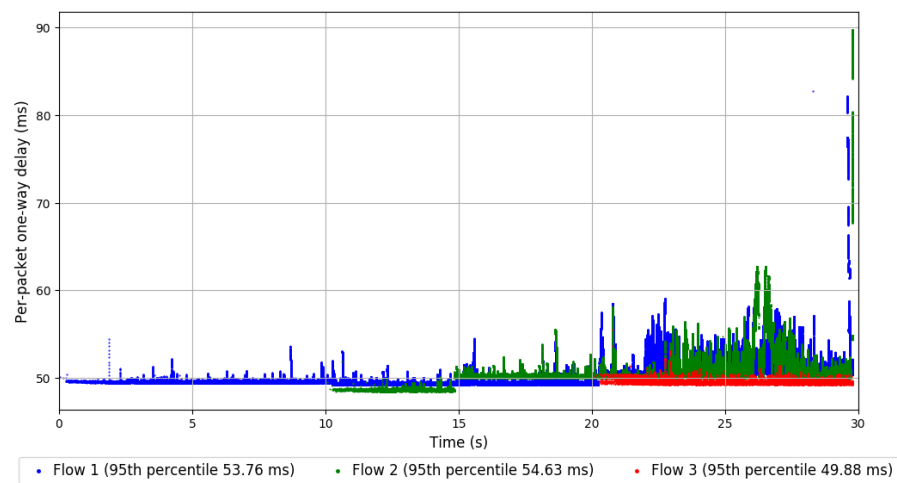
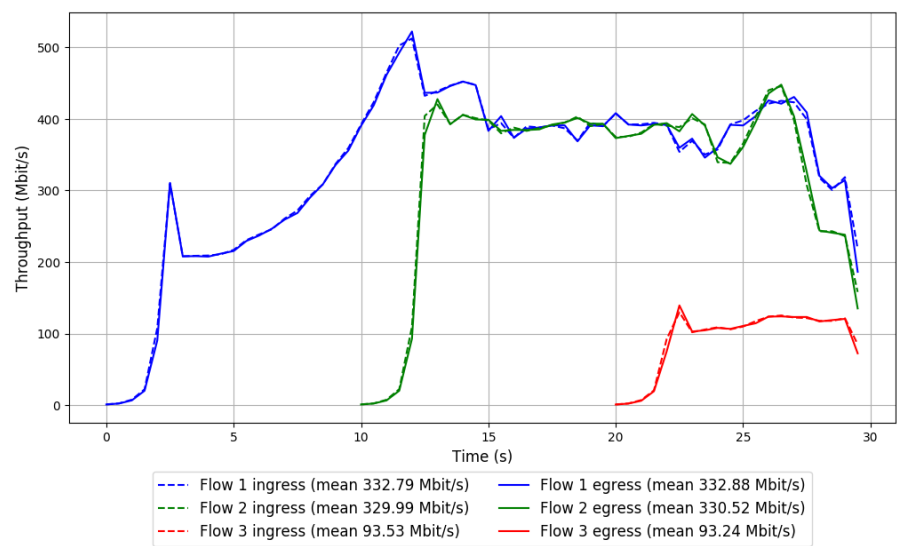
-- Flow 3:

Average throughput: 93.24 Mbit/s

95th percentile per-packet one-way delay: 49.884 ms

Loss rate: 1.34%

Run 10: Report of Vivace-latency — Data Link

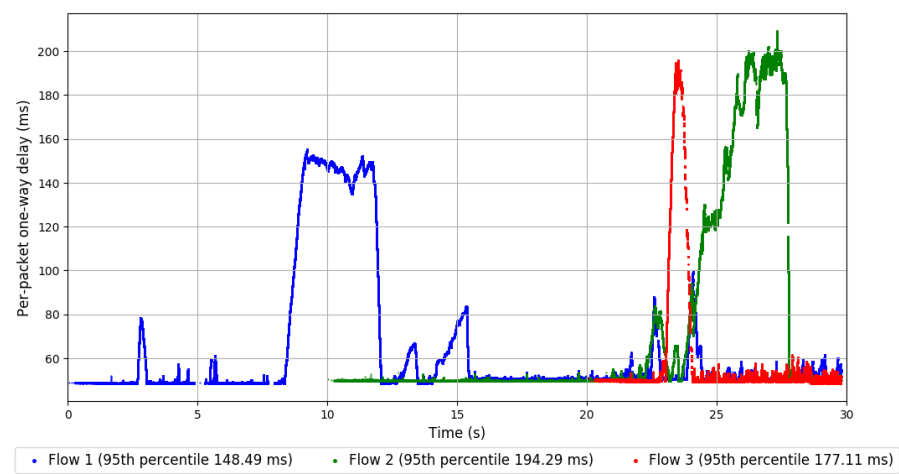
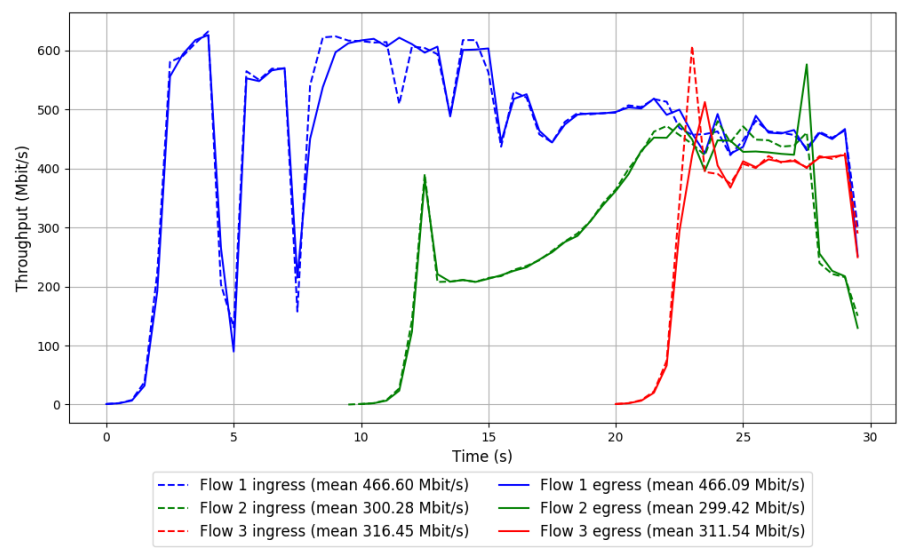


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-14 05:47:58
End at: 2018-02-14 05:48:28

# Below is generated by plot.py at 2018-02-14 13:56:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 766.76 Mbit/s
95th percentile per-packet one-way delay: 155.859 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 466.09 Mbit/s
95th percentile per-packet one-way delay: 148.488 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 299.42 Mbit/s
95th percentile per-packet one-way delay: 194.295 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 311.54 Mbit/s
95th percentile per-packet one-way delay: 177.112 ms
Loss rate: 2.58%
```

Run 1: Report of Vivace-loss — Data Link

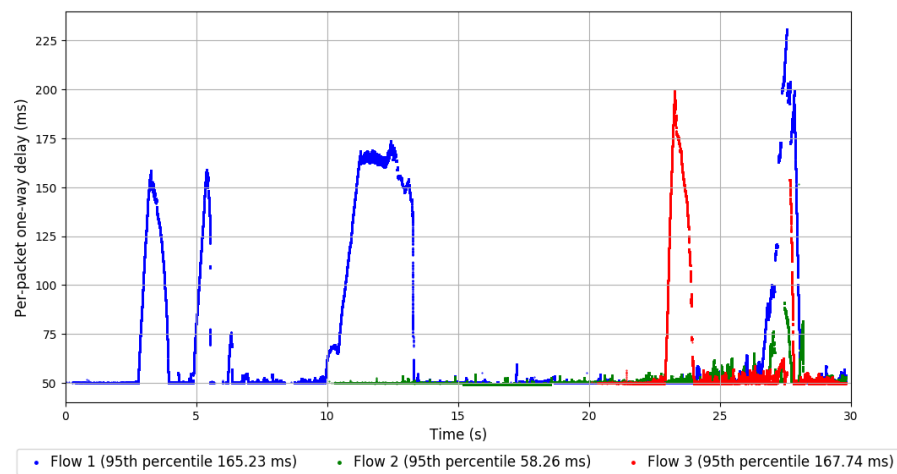
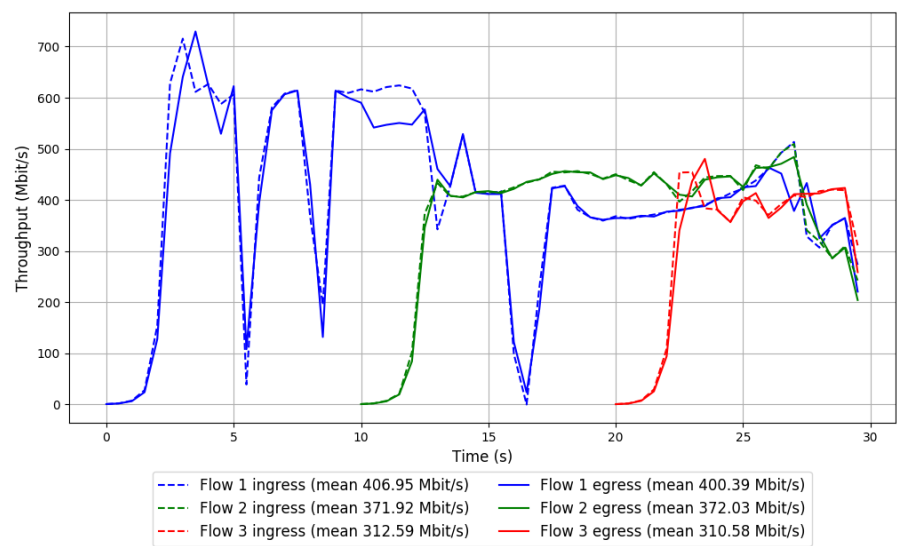


```
Run 2: Statistics of Vivace-loss

Start at: 2018-02-14 06:06:17
End at: 2018-02-14 06:06:47

# Below is generated by plot.py at 2018-02-14 13:56:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 748.53 Mbit/s
95th percentile per-packet one-way delay: 162.758 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 400.39 Mbit/s
95th percentile per-packet one-way delay: 165.229 ms
Loss rate: 1.95%
-- Flow 2:
Average throughput: 372.03 Mbit/s
95th percentile per-packet one-way delay: 58.263 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 310.58 Mbit/s
95th percentile per-packet one-way delay: 167.739 ms
Loss rate: 1.68%
```

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-14 06:24:33

End at: 2018-02-14 06:25:03

Below is generated by plot.py at 2018-02-14 14:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 783.81 Mbit/s

95th percentile per-packet one-way delay: 164.735 ms

Loss rate: 2.34%

-- Flow 1:

Average throughput: 425.68 Mbit/s

95th percentile per-packet one-way delay: 168.288 ms

Loss rate: 3.57%

-- Flow 2:

Average throughput: 388.26 Mbit/s

95th percentile per-packet one-way delay: 157.394 ms

Loss rate: 0.90%

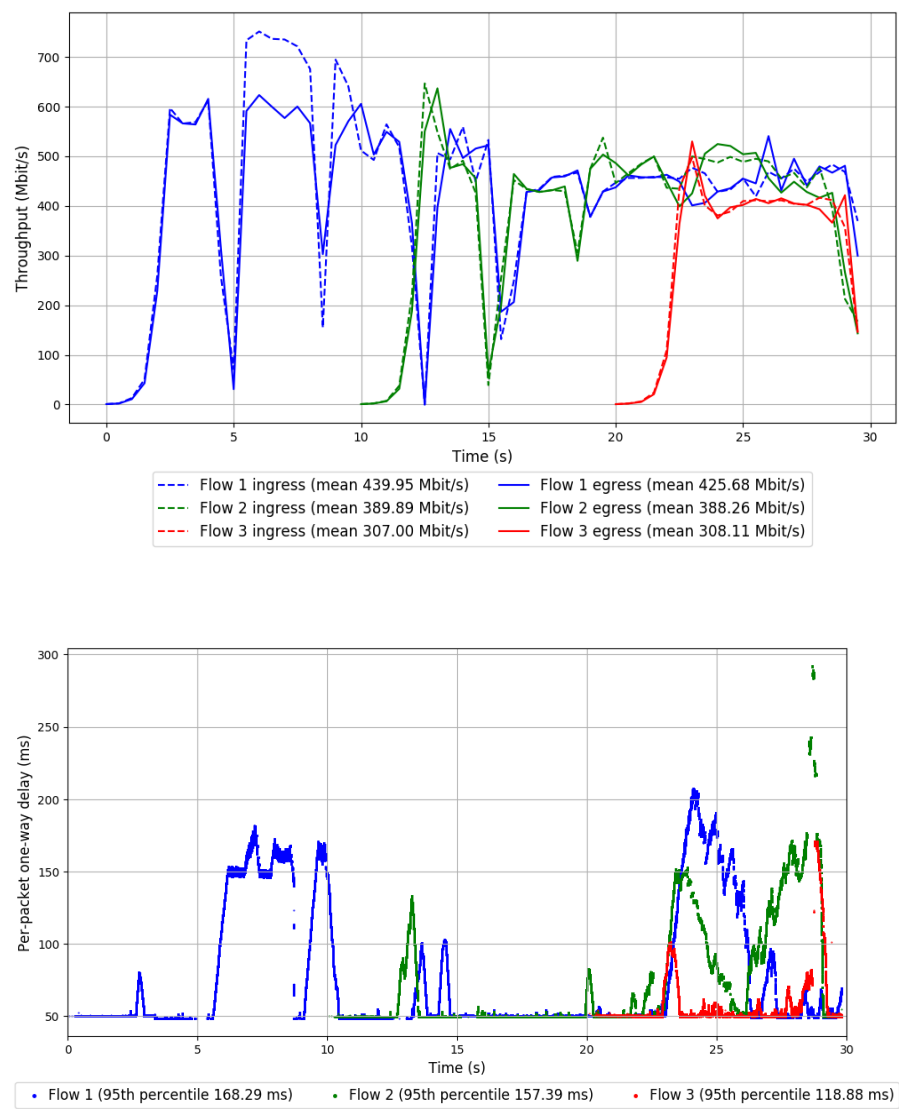
-- Flow 3:

Average throughput: 308.11 Mbit/s

95th percentile per-packet one-way delay: 118.878 ms

Loss rate: 0.69%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-14 06:42:49

End at: 2018-02-14 06:43:19

Below is generated by plot.py at 2018-02-14 14:02:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 753.74 Mbit/s

95th percentile per-packet one-way delay: 171.899 ms

Loss rate: 2.25%

-- Flow 1:

Average throughput: 427.11 Mbit/s

95th percentile per-packet one-way delay: 174.369 ms

Loss rate: 2.76%

-- Flow 2:

Average throughput: 335.86 Mbit/s

95th percentile per-packet one-way delay: 81.248 ms

Loss rate: 0.42%

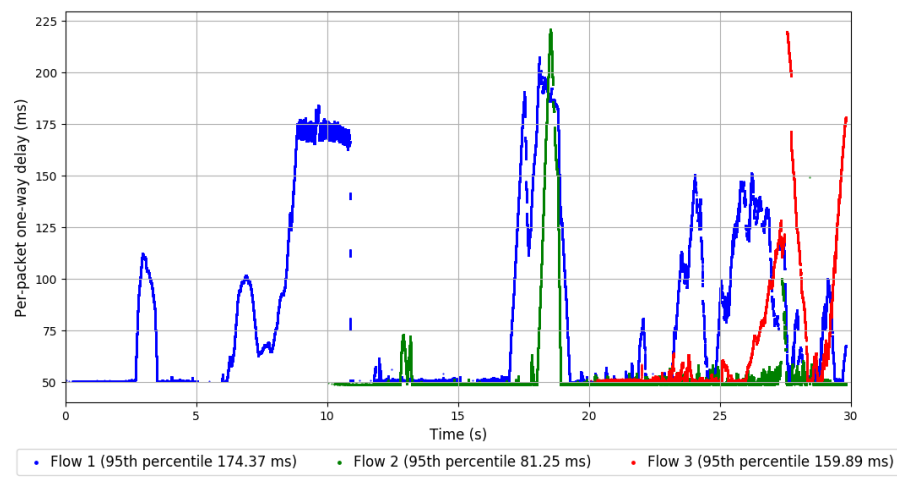
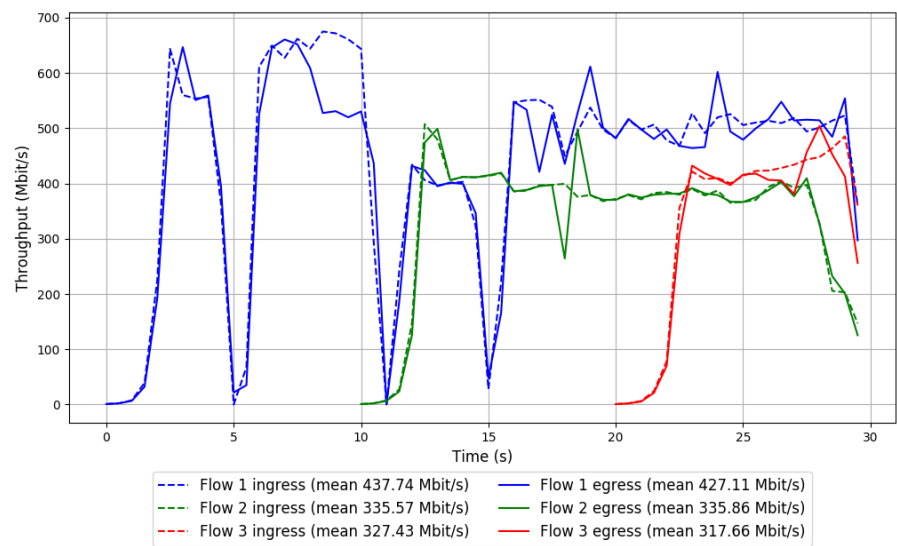
-- Flow 3:

Average throughput: 317.66 Mbit/s

95th percentile per-packet one-way delay: 159.889 ms

Loss rate: 3.99%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-14 07:01:03

End at: 2018-02-14 07:01:33

Below is generated by plot.py at 2018-02-14 14:02:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 774.42 Mbit/s

95th percentile per-packet one-way delay: 185.448 ms

Loss rate: 2.05%

-- Flow 1:

Average throughput: 440.61 Mbit/s

95th percentile per-packet one-way delay: 126.458 ms

Loss rate: 1.18%

-- Flow 2:

Average throughput: 400.59 Mbit/s

95th percentile per-packet one-way delay: 197.847 ms

Loss rate: 2.42%

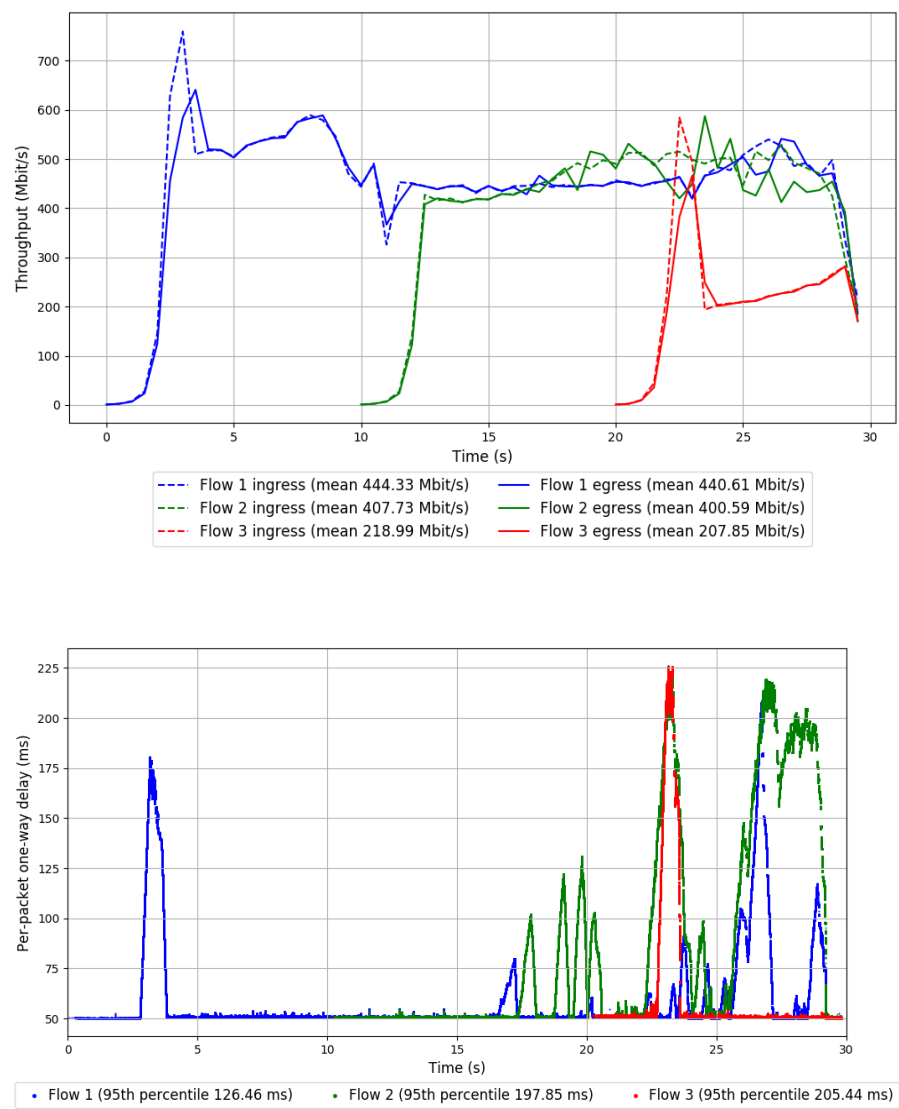
-- Flow 3:

Average throughput: 207.85 Mbit/s

95th percentile per-packet one-way delay: 205.442 ms

Loss rate: 6.08%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-14 07:19:33

End at: 2018-02-14 07:20:03

Below is generated by plot.py at 2018-02-14 14:04:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 758.24 Mbit/s

95th percentile per-packet one-way delay: 105.095 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 401.70 Mbit/s

95th percentile per-packet one-way delay: 100.387 ms

Loss rate: 1.18%

-- Flow 2:

Average throughput: 381.32 Mbit/s

95th percentile per-packet one-way delay: 63.728 ms

Loss rate: 1.22%

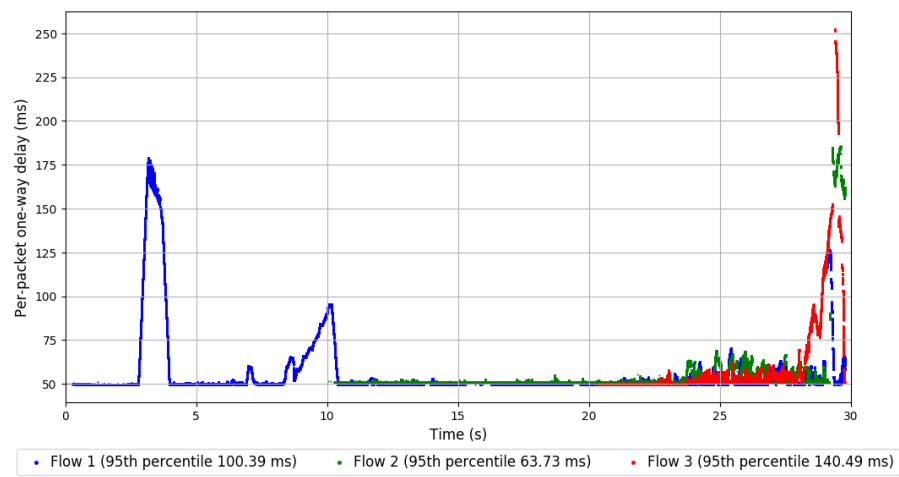
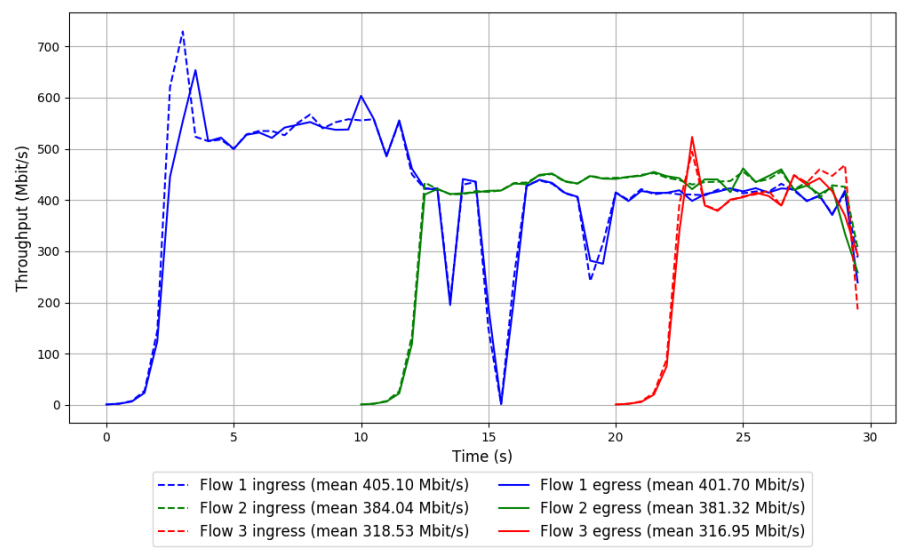
-- Flow 3:

Average throughput: 316.95 Mbit/s

95th percentile per-packet one-way delay: 140.492 ms

Loss rate: 1.52%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-14 07:37:57

End at: 2018-02-14 07:38:27

Below is generated by plot.py at 2018-02-14 14:04:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 703.55 Mbit/s

95th percentile per-packet one-way delay: 149.802 ms

Loss rate: 1.27%

-- Flow 1:

Average throughput: 397.63 Mbit/s

95th percentile per-packet one-way delay: 163.587 ms

Loss rate: 1.65%

-- Flow 2:

Average throughput: 331.63 Mbit/s

95th percentile per-packet one-way delay: 85.946 ms

Loss rate: 0.76%

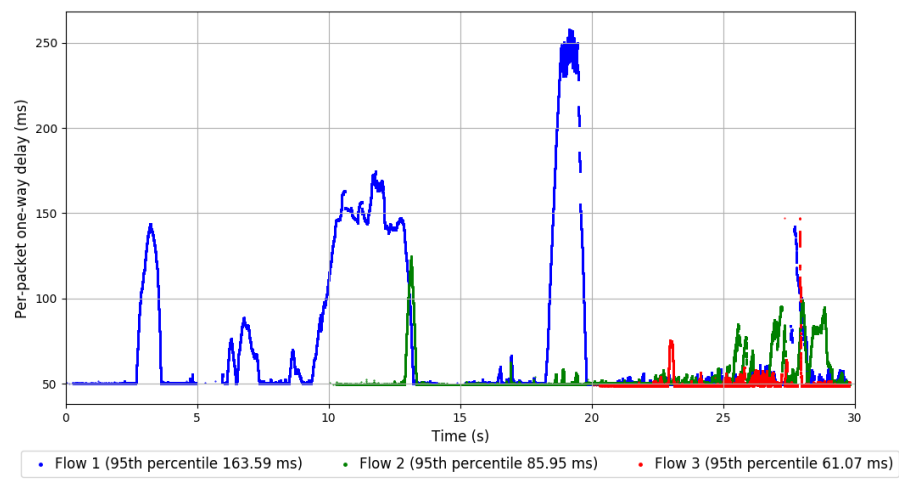
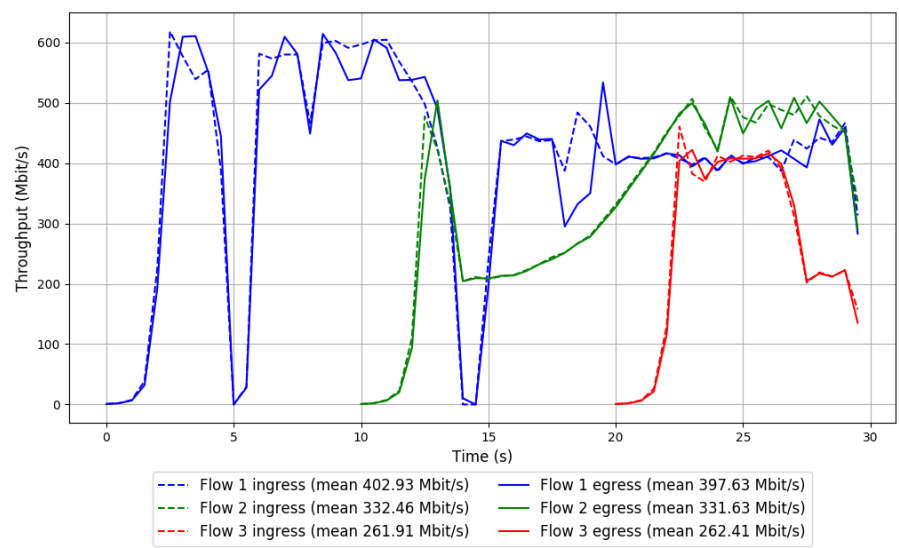
-- Flow 3:

Average throughput: 262.41 Mbit/s

95th percentile per-packet one-way delay: 61.066 ms

Loss rate: 0.83%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-14 07:56:17

End at: 2018-02-14 07:56:47

Below is generated by plot.py at 2018-02-14 14:07:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 749.49 Mbit/s

95th percentile per-packet one-way delay: 55.994 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 425.33 Mbit/s

95th percentile per-packet one-way delay: 54.501 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 335.84 Mbit/s

95th percentile per-packet one-way delay: 106.512 ms

Loss rate: 0.31%

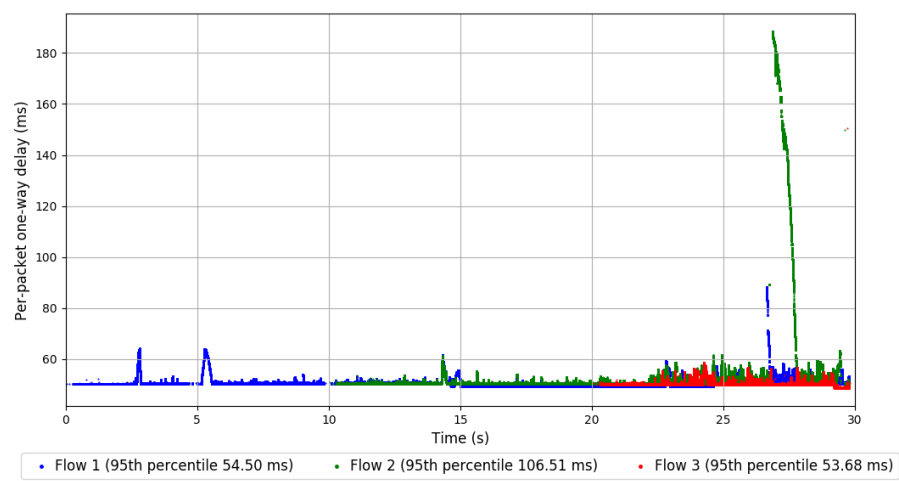
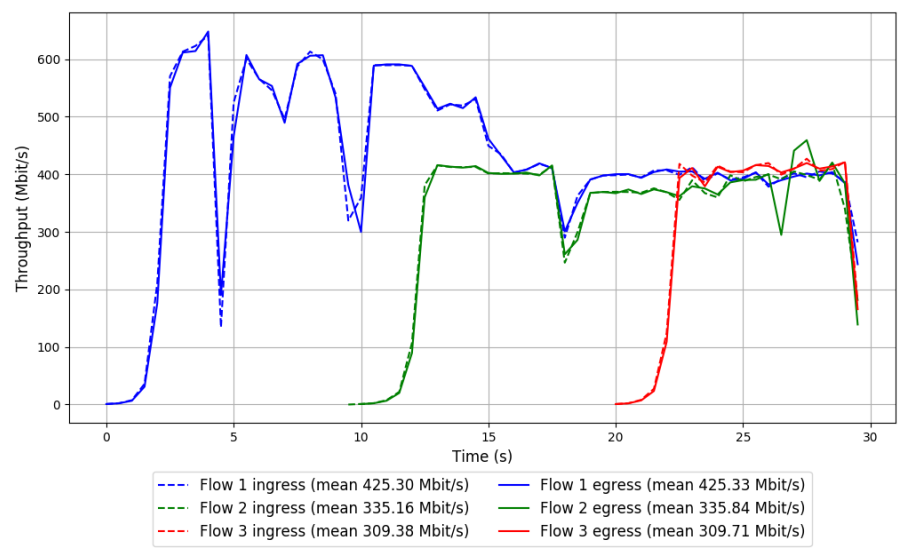
-- Flow 3:

Average throughput: 309.71 Mbit/s

95th percentile per-packet one-way delay: 53.681 ms

Loss rate: 0.90%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-14 08:14:25

End at: 2018-02-14 08:14:55

Below is generated by plot.py at 2018-02-14 14:08:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 703.60 Mbit/s

95th percentile per-packet one-way delay: 71.347 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 386.95 Mbit/s

95th percentile per-packet one-way delay: 61.499 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 318.61 Mbit/s

95th percentile per-packet one-way delay: 89.906 ms

Loss rate: 1.37%

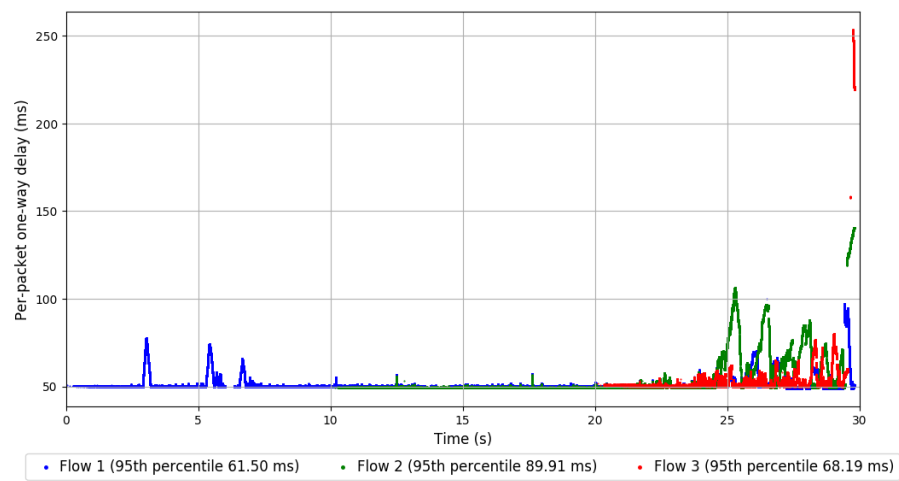
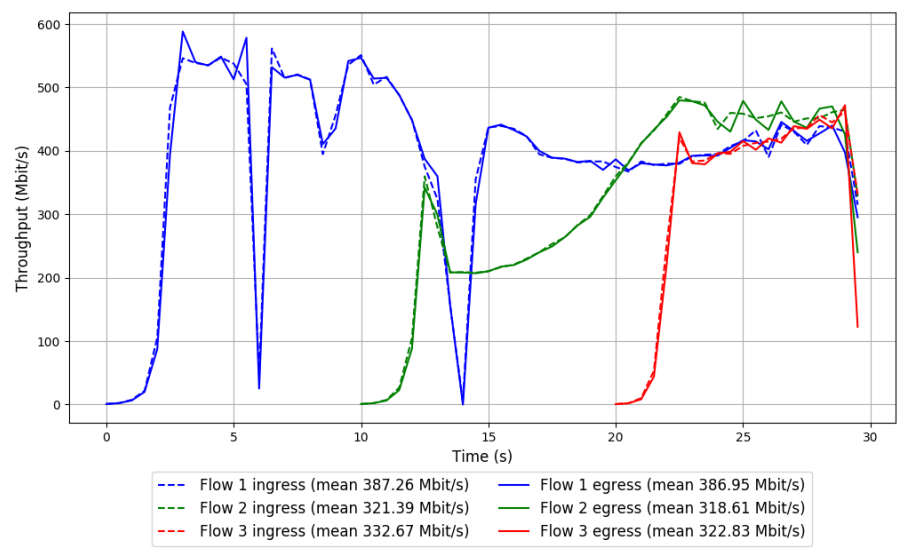
-- Flow 3:

Average throughput: 322.83 Mbit/s

95th percentile per-packet one-way delay: 68.190 ms

Loss rate: 3.97%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-14 08:32:30

End at: 2018-02-14 08:33:00

Below is generated by plot.py at 2018-02-14 14:08:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 674.57 Mbit/s

95th percentile per-packet one-way delay: 180.425 ms

Loss rate: 2.51%

-- Flow 1:

Average throughput: 371.81 Mbit/s

95th percentile per-packet one-way delay: 178.714 ms

Loss rate: 2.34%

-- Flow 2:

Average throughput: 311.23 Mbit/s

95th percentile per-packet one-way delay: 224.744 ms

Loss rate: 3.54%

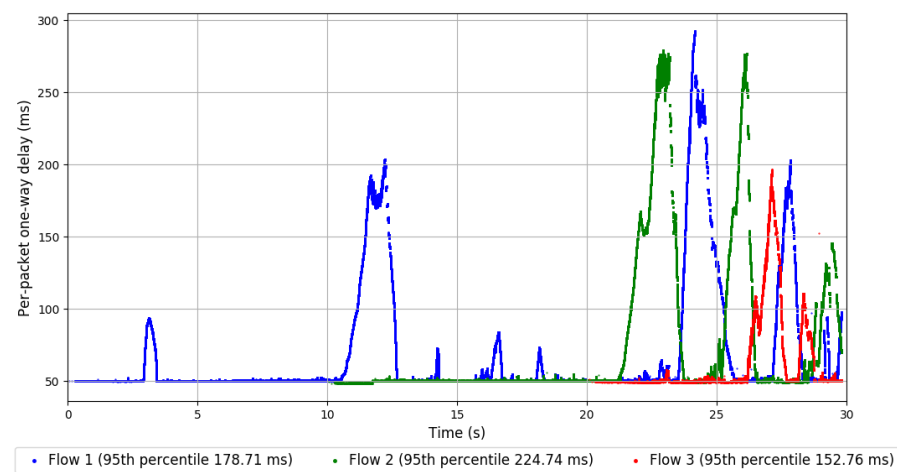
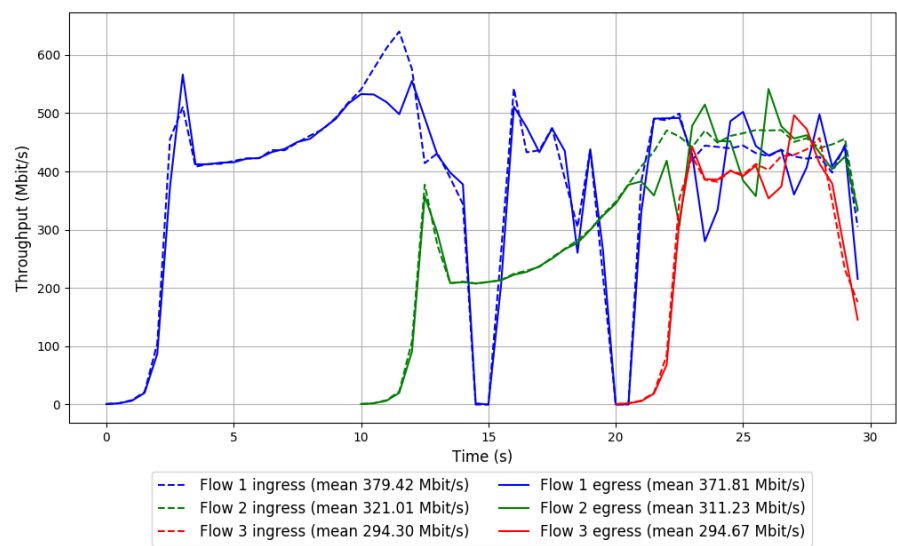
-- Flow 3:

Average throughput: 294.67 Mbit/s

95th percentile per-packet one-way delay: 152.758 ms

Loss rate: 0.92%

Run 10: Report of Vivace-loss — Data Link

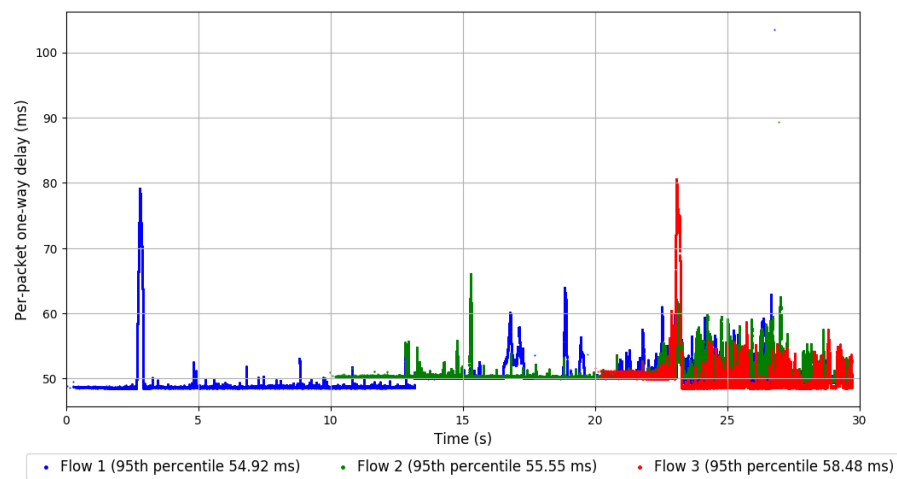
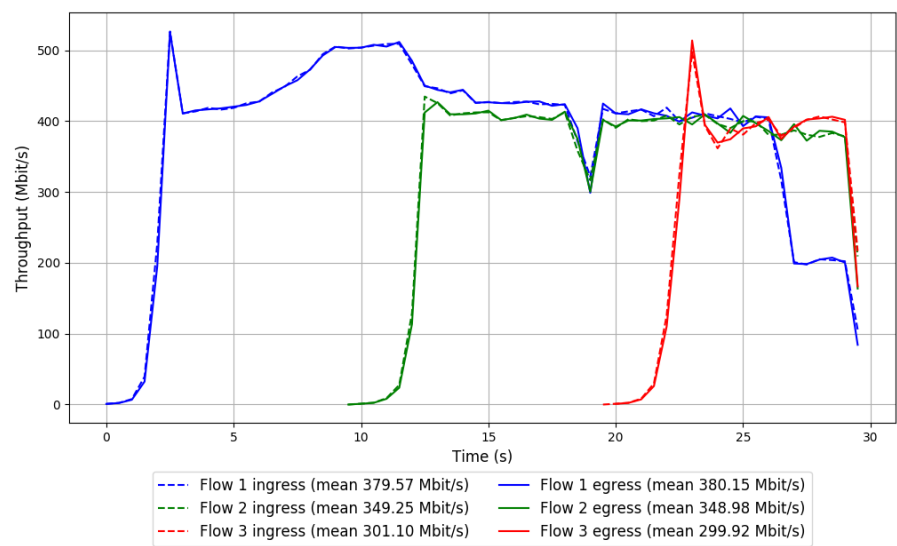


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-14 05:36:09
End at: 2018-02-14 05:36:39

# Below is generated by plot.py at 2018-02-14 14:13:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 710.59 Mbit/s
95th percentile per-packet one-way delay: 55.487 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 380.15 Mbit/s
95th percentile per-packet one-way delay: 54.919 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 348.98 Mbit/s
95th percentile per-packet one-way delay: 55.553 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 299.92 Mbit/s
95th percentile per-packet one-way delay: 58.478 ms
Loss rate: 1.44%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-14 05:54:36

End at: 2018-02-14 05:55:06

Below is generated by plot.py at 2018-02-14 14:14:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 752.23 Mbit/s

95th percentile per-packet one-way delay: 64.013 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 401.64 Mbit/s

95th percentile per-packet one-way delay: 59.023 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 379.53 Mbit/s

95th percentile per-packet one-way delay: 73.737 ms

Loss rate: 0.27%

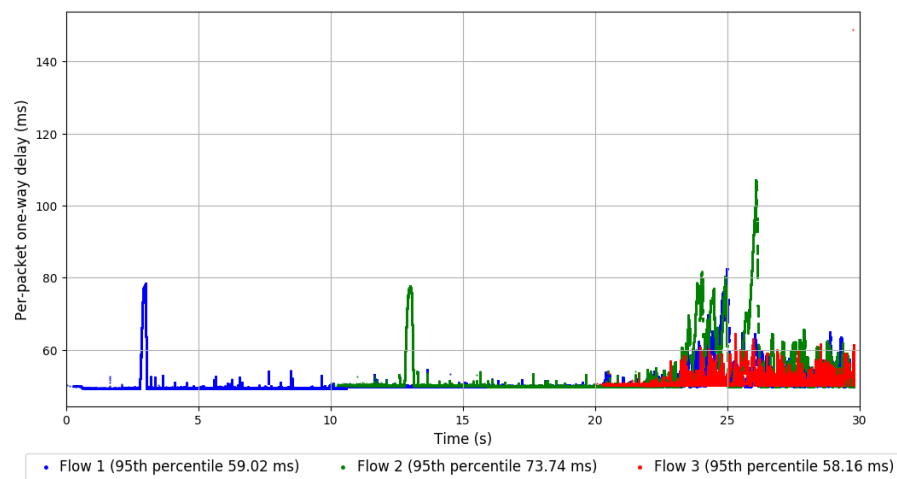
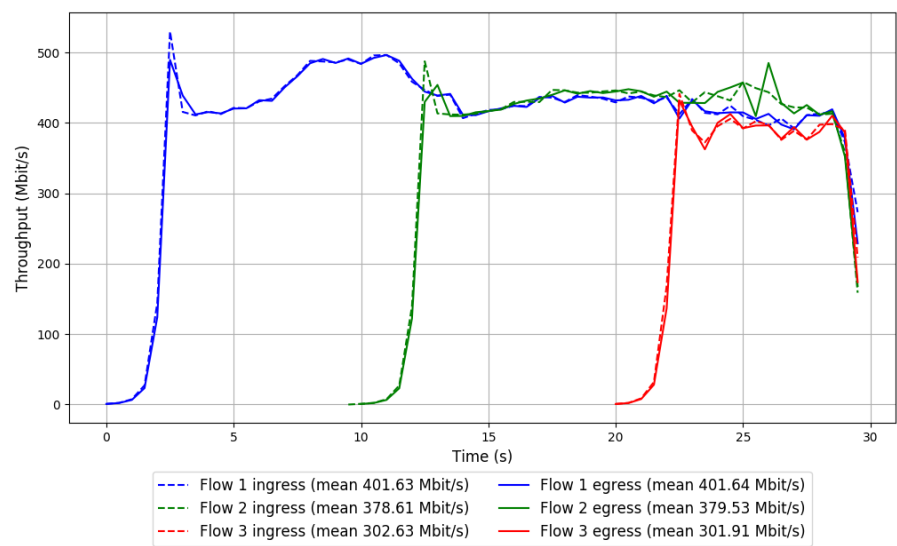
-- Flow 3:

Average throughput: 301.91 Mbit/s

95th percentile per-packet one-way delay: 58.165 ms

Loss rate: 1.28%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-14 06:12:49

End at: 2018-02-14 06:13:19

Below is generated by plot.py at 2018-02-14 14:14:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 672.81 Mbit/s

95th percentile per-packet one-way delay: 66.801 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 403.49 Mbit/s

95th percentile per-packet one-way delay: 71.749 ms

Loss rate: 1.26%

-- Flow 2:

Average throughput: 259.68 Mbit/s

95th percentile per-packet one-way delay: 53.103 ms

Loss rate: 0.67%

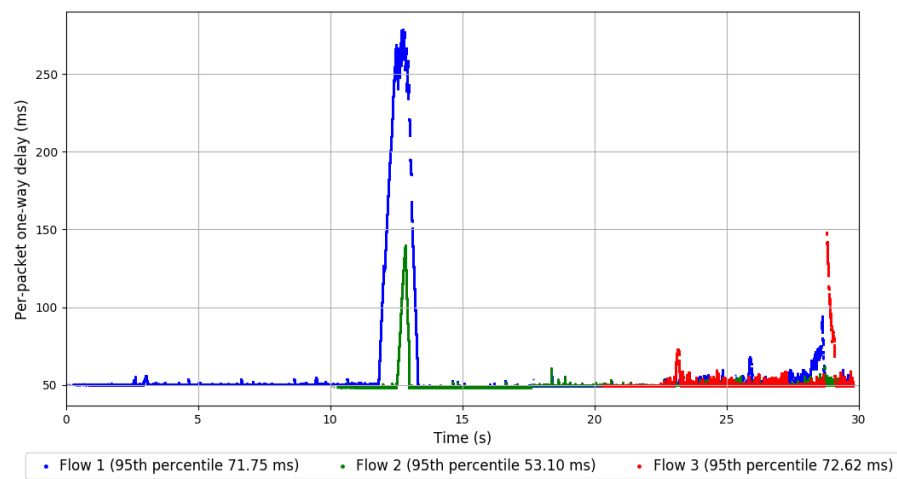
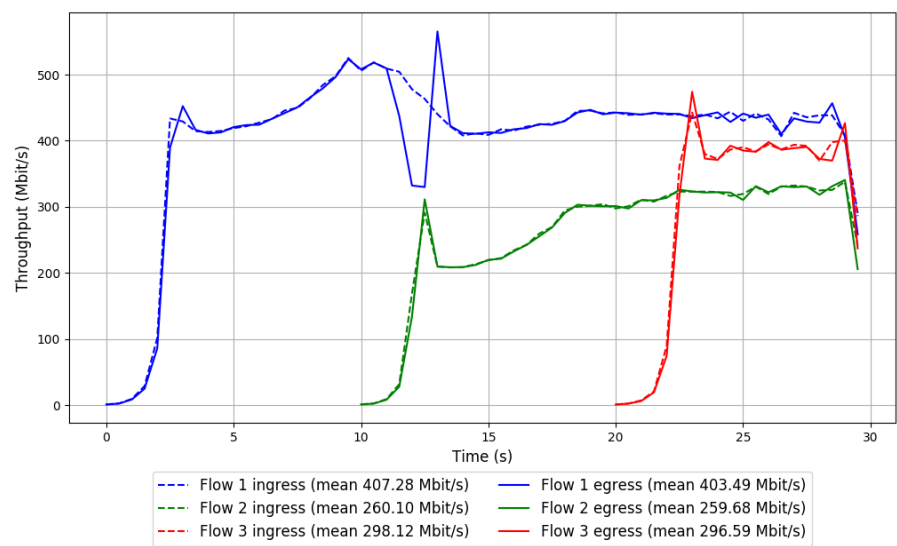
-- Flow 3:

Average throughput: 296.59 Mbit/s

95th percentile per-packet one-way delay: 72.616 ms

Loss rate: 1.54%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-14 06:31:11

End at: 2018-02-14 06:31:41

Below is generated by plot.py at 2018-02-14 14:15:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 717.11 Mbit/s

95th percentile per-packet one-way delay: 55.660 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 391.26 Mbit/s

95th percentile per-packet one-way delay: 53.163 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 358.77 Mbit/s

95th percentile per-packet one-way delay: 57.705 ms

Loss rate: 0.64%

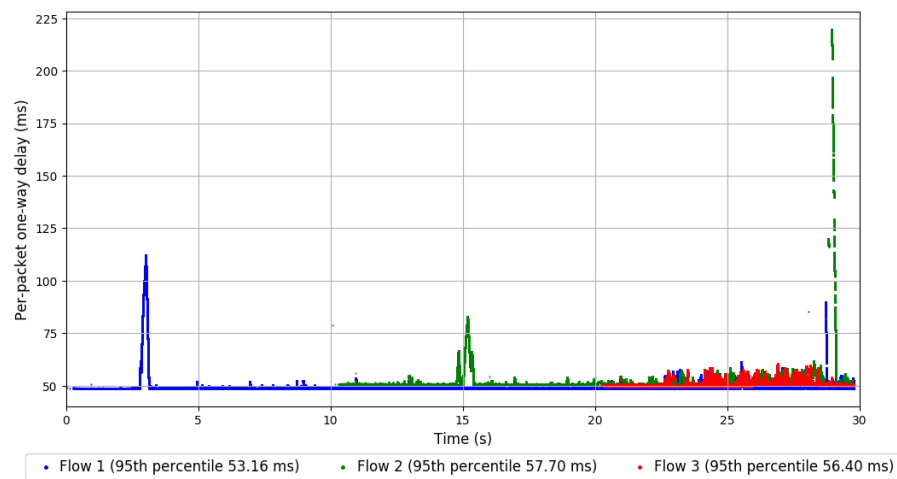
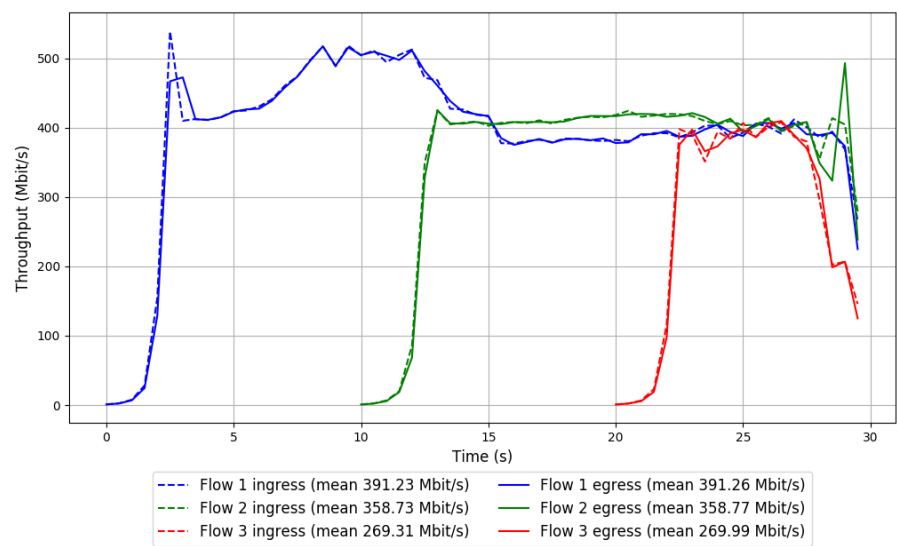
-- Flow 3:

Average throughput: 269.99 Mbit/s

95th percentile per-packet one-way delay: 56.395 ms

Loss rate: 0.79%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-14 06:49:25

End at: 2018-02-14 06:49:56

Below is generated by plot.py at 2018-02-14 14:15:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 708.40 Mbit/s

95th percentile per-packet one-way delay: 73.115 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 409.27 Mbit/s

95th percentile per-packet one-way delay: 56.364 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 365.56 Mbit/s

95th percentile per-packet one-way delay: 85.911 ms

Loss rate: 0.27%

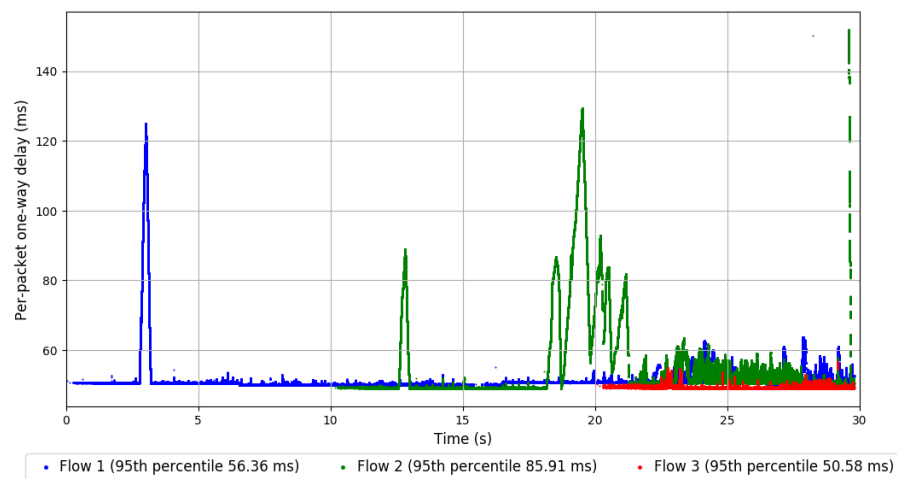
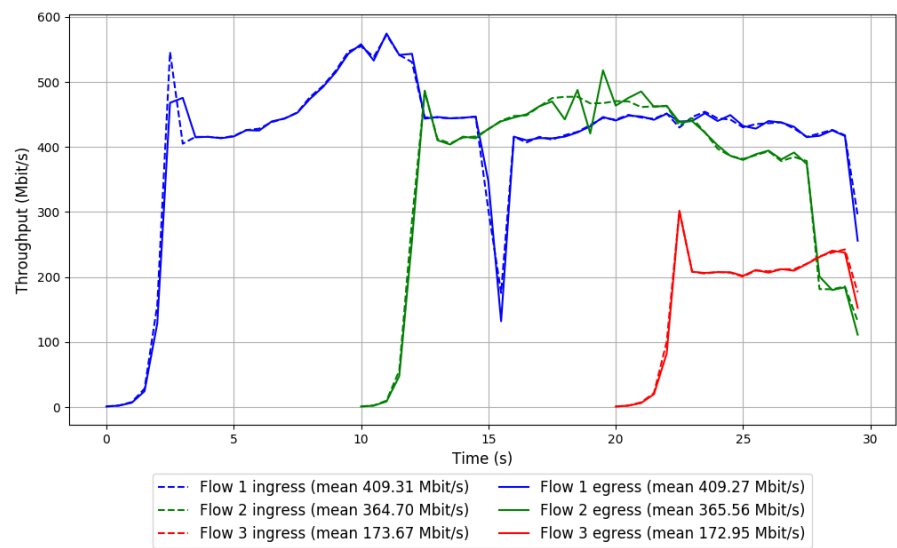
-- Flow 3:

Average throughput: 172.95 Mbit/s

95th percentile per-packet one-way delay: 50.582 ms

Loss rate: 1.44%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-14 07:07:41

End at: 2018-02-14 07:08:11

Below is generated by plot.py at 2018-02-14 14:18:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 750.88 Mbit/s

95th percentile per-packet one-way delay: 57.145 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 420.57 Mbit/s

95th percentile per-packet one-way delay: 55.682 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 361.51 Mbit/s

95th percentile per-packet one-way delay: 58.092 ms

Loss rate: 0.30%

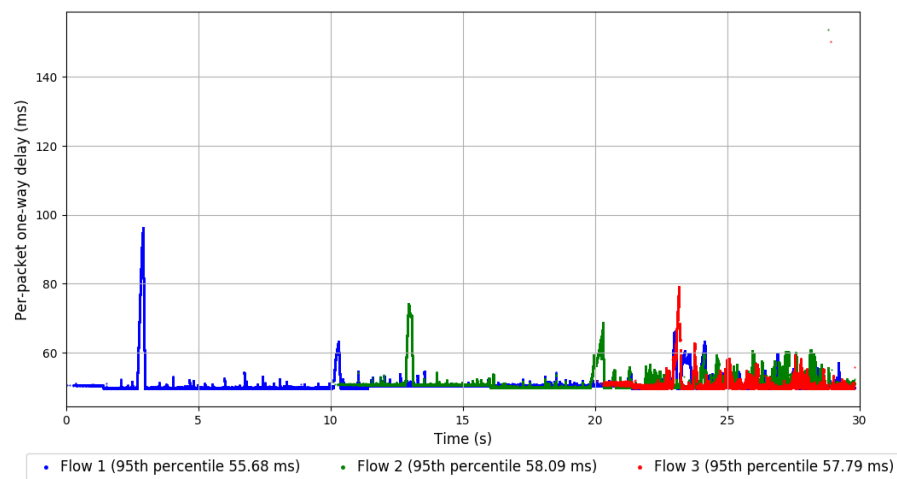
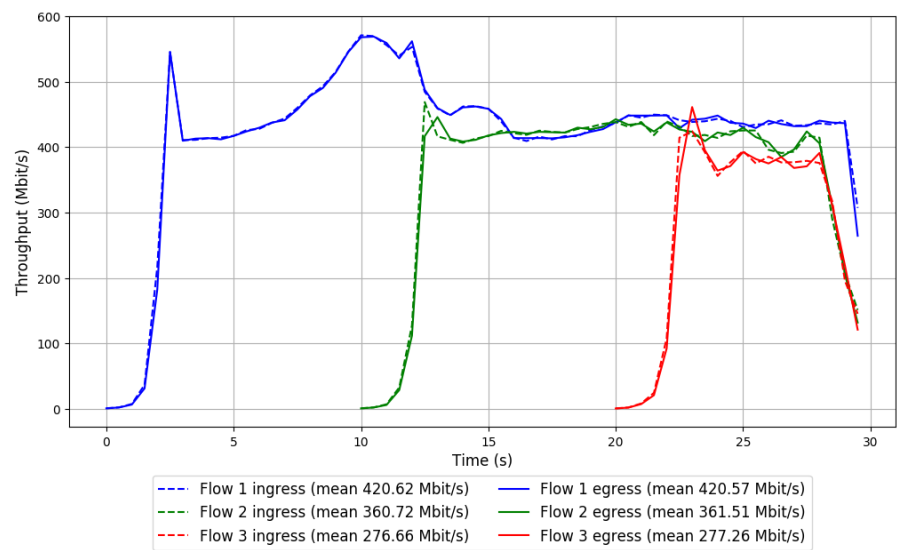
-- Flow 3:

Average throughput: 277.26 Mbit/s

95th percentile per-packet one-way delay: 57.786 ms

Loss rate: 0.78%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-14 07:26:10

End at: 2018-02-14 07:26:40

Below is generated by plot.py at 2018-02-14 14:18:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 744.79 Mbit/s

95th percentile per-packet one-way delay: 76.545 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 406.30 Mbit/s

95th percentile per-packet one-way delay: 93.602 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 372.25 Mbit/s

95th percentile per-packet one-way delay: 76.334 ms

Loss rate: 0.54%

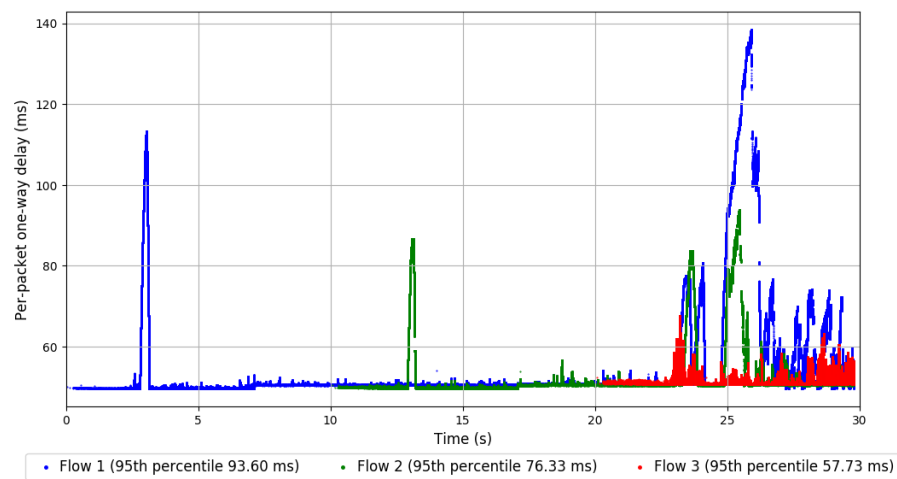
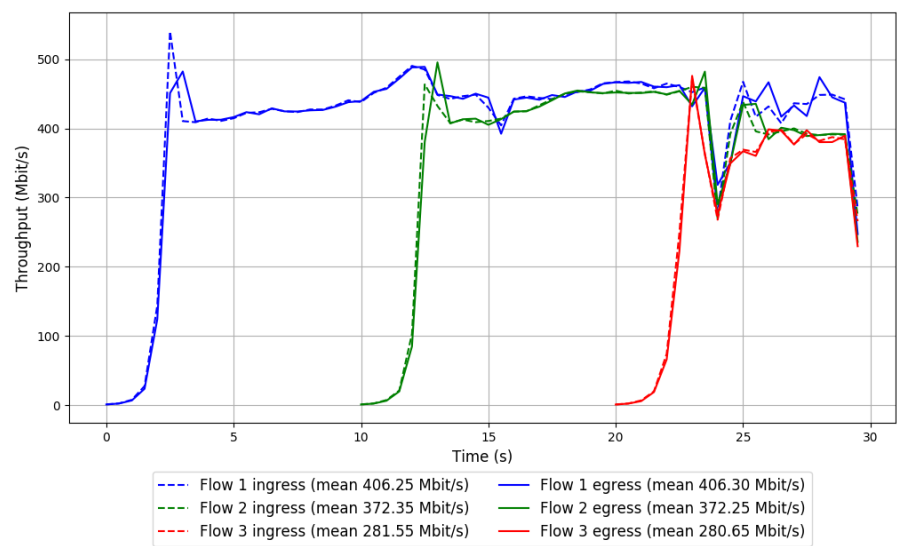
-- Flow 3:

Average throughput: 280.65 Mbit/s

95th percentile per-packet one-way delay: 57.726 ms

Loss rate: 1.37%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-14 07:44:31

End at: 2018-02-14 07:45:01

Below is generated by plot.py at 2018-02-14 14:18:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 746.38 Mbit/s

95th percentile per-packet one-way delay: 60.859 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 408.51 Mbit/s

95th percentile per-packet one-way delay: 57.795 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 361.56 Mbit/s

95th percentile per-packet one-way delay: 55.704 ms

Loss rate: 0.59%

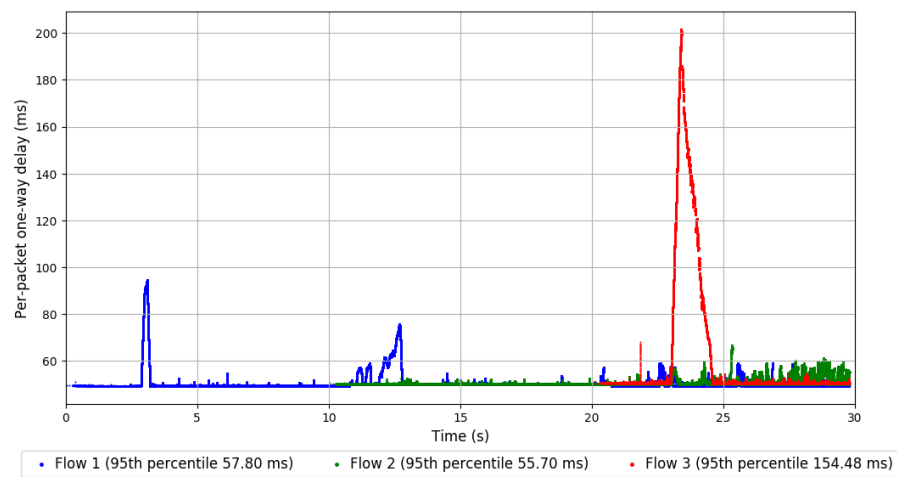
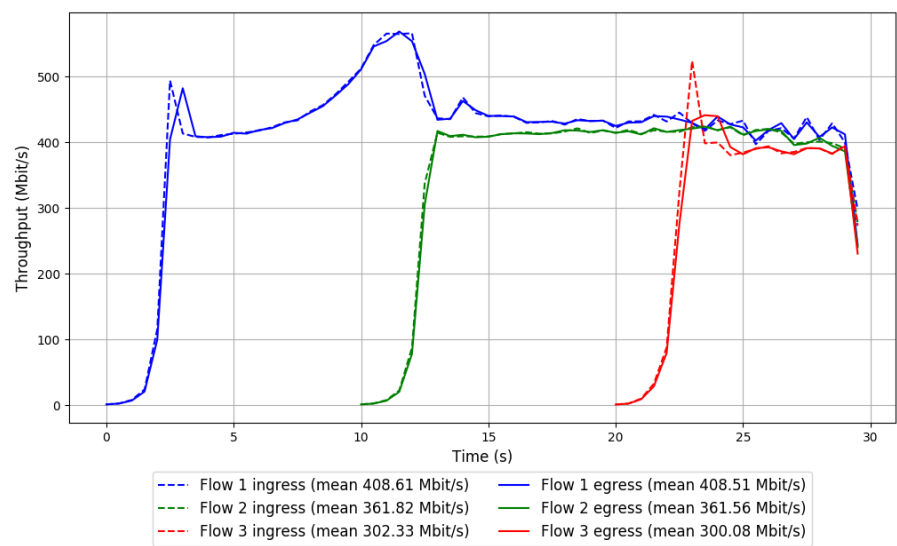
-- Flow 3:

Average throughput: 300.08 Mbit/s

95th percentile per-packet one-way delay: 154.480 ms

Loss rate: 1.79%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-14 08:02:55

End at: 2018-02-14 08:03:25

Below is generated by plot.py at 2018-02-14 14:19:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 707.67 Mbit/s

95th percentile per-packet one-way delay: 83.615 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 375.72 Mbit/s

95th percentile per-packet one-way delay: 52.905 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 365.73 Mbit/s

95th percentile per-packet one-way delay: 87.077 ms

Loss rate: 0.55%

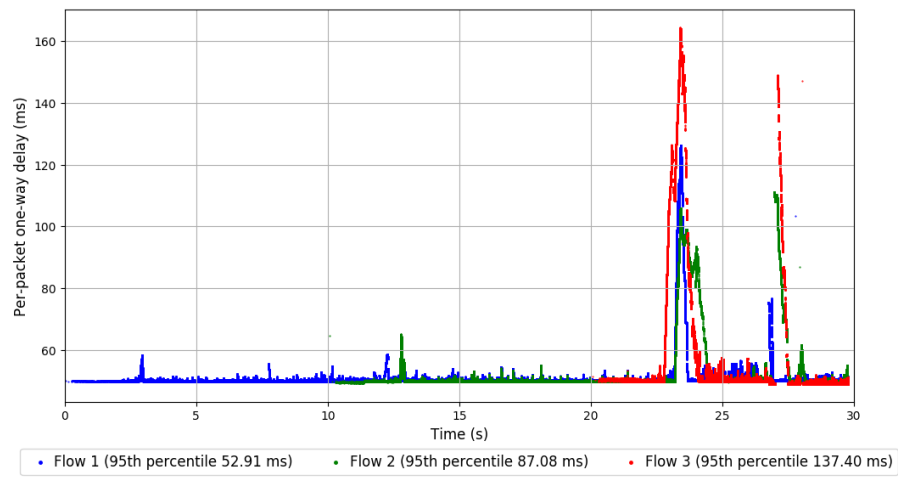
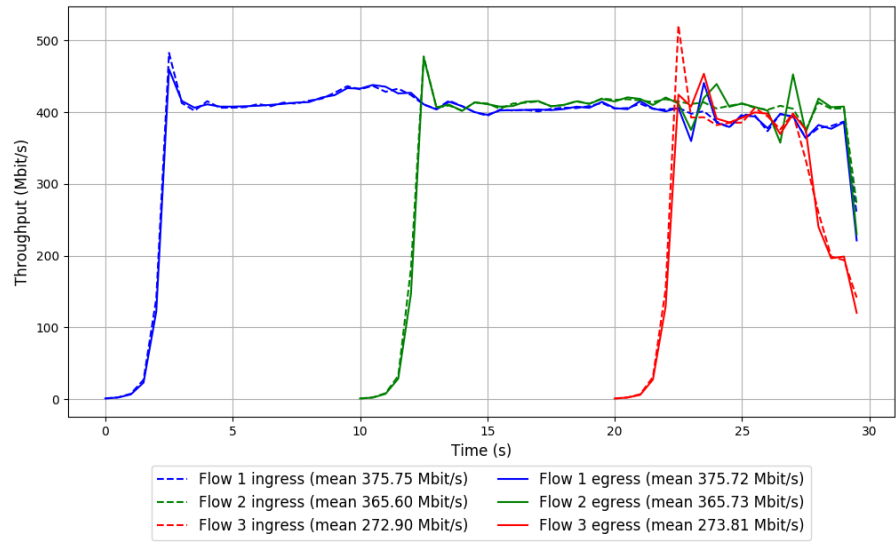
-- Flow 3:

Average throughput: 273.81 Mbit/s

95th percentile per-packet one-way delay: 137.404 ms

Loss rate: 0.72%

Run 9: Report of Vivace-LTE — Data Link



```
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-14 08:20:55
End at: 2018-02-14 08:21:25

# Below is generated by plot.py at 2018-02-14 14:19:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 725.29 Mbit/s
95th percentile per-packet one-way delay: 61.636 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 378.65 Mbit/s
95th percentile per-packet one-way delay: 57.924 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 374.57 Mbit/s
95th percentile per-packet one-way delay: 61.628 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 301.24 Mbit/s
95th percentile per-packet one-way delay: 119.199 ms
Loss rate: 1.40%
```

Run 10: Report of Vivace-LTE — Data Link

