

Pantheon Report

Generated at 2018-04-04 10:05:15 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

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

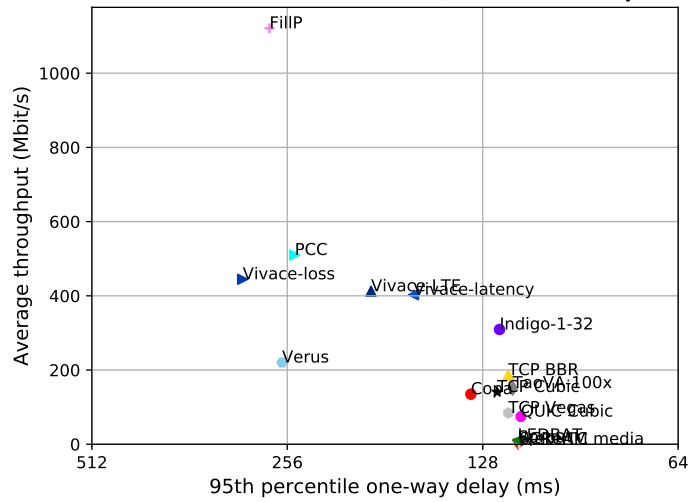
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

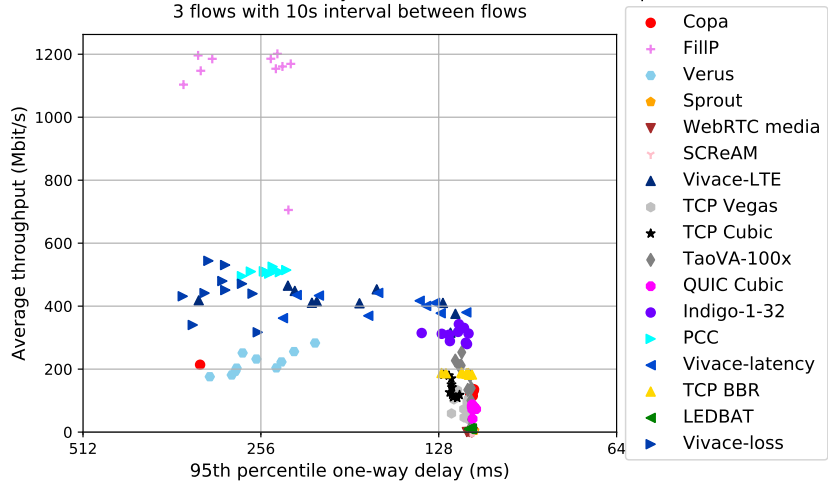
Git summary:

```
branch: master @ eb420b5be9bafccd22cf68b99ff5a2000462fc59
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/fillp @ 11f8c46a2bf1dc797253db7e8ca04076272b2a44
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ 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 @ f271183af822eee5d0031620f4bebf38aedc5581
```

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



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	95.60	92.75	87.39	116.04	117.45	118.05	0.00	0.00	0.01
TCP Cubic	10	79.82	70.48	42.78	121.12	120.53	122.17	0.02	0.02	0.21
LEDBAT	10	6.70	4.67	2.07	113.13	113.10	112.36	0.01	0.00	0.00
PCC	10	469.25	48.74	25.67	251.34	236.20	228.67	1.74	0.72	1.24
QUIC Cubic	10	40.84	40.44	21.40	111.30	111.07	110.94	0.00	0.00	0.01
SCReAM	10	0.22	0.21	0.21	112.28	111.61	111.60	0.00	0.00	0.00
WebRTC media	10	0.06	0.06	0.05	112.35	112.63	112.30	0.01	0.00	0.00
Sprout	10	2.65	2.46	1.89	112.90	112.93	112.49	0.00	0.00	0.00
TaoVA-100x	10	71.27	86.35	76.78	113.64	117.03	115.56	0.00	0.03	0.04
TCP Vegas	10	58.60	22.80	31.47	115.79	114.93	116.44	0.01	0.07	0.13
Verus	10	138.28	92.60	65.38	222.20	282.18	268.01	0.82	2.40	4.26
Copa	10	60.45	85.60	52.94	121.46	133.34	123.90	0.05	4.60	1.16
FillP	10	571.99	589.45	474.00	258.14	262.32	280.20	7.29	7.42	11.97
Indigo-1-32	10	159.83	156.63	142.69	117.52	121.19	124.27	0.00	0.01	0.02
Vivace-latency	10	247.29	172.32	124.70	161.29	166.02	189.93	0.06	0.72	0.09
Vivace-loss	10	262.26	216.64	116.50	283.78	252.72	337.23	2.94	3.23	10.60
Vivace-LTE	10	243.54	188.46	132.38	206.96	119.19	176.05	0.43	0.00	0.05

Run 1: Statistics of TCP BBR

Start at: 2018-04-04 03:18:52

End at: 2018-04-04 03:19:22

Below is generated by plot.py at 2018-04-04 08:28:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.95 Mbit/s

95th percentile per-packet one-way delay: 112.449 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 92.95 Mbit/s

95th percentile per-packet one-way delay: 112.375 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.04 Mbit/s

95th percentile per-packet one-way delay: 112.402 ms

Loss rate: 0.01%

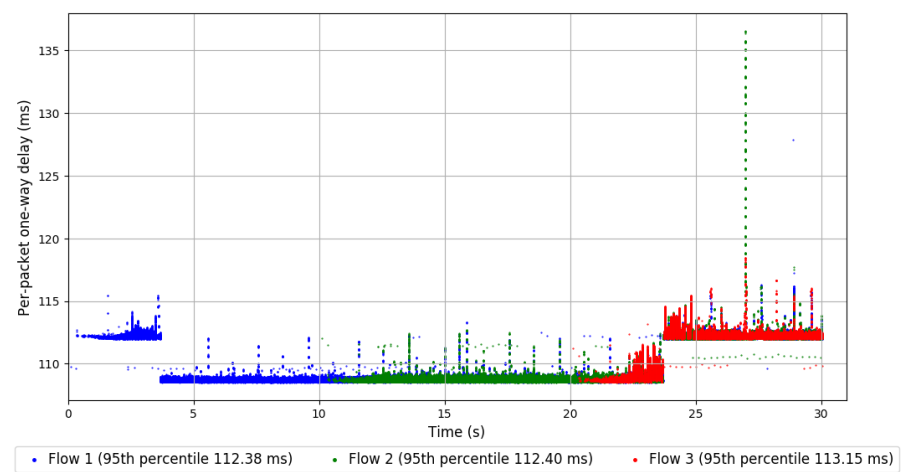
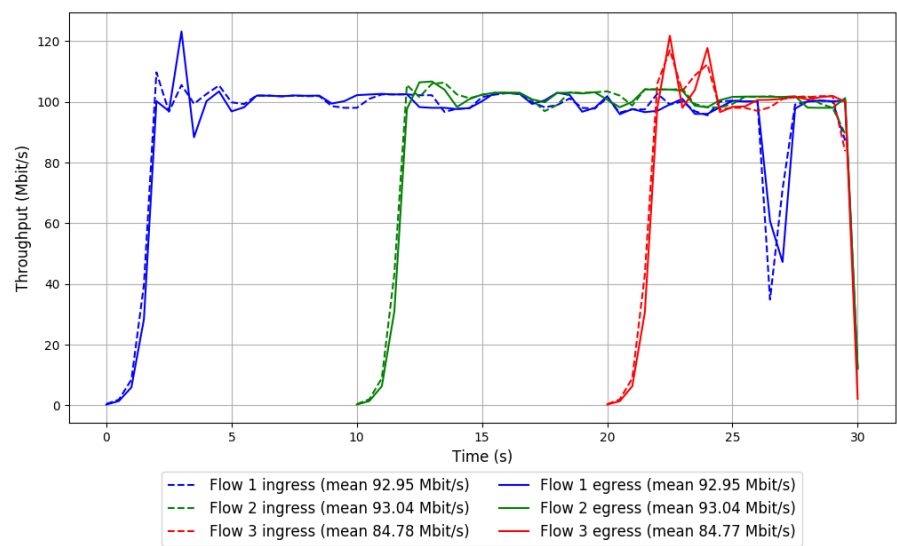
-- Flow 3:

Average throughput: 84.77 Mbit/s

95th percentile per-packet one-way delay: 113.150 ms

Loss rate: 0.02%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-04-04 03:38:08

End at: 2018-04-04 03:38:38

Below is generated by plot.py at 2018-04-04 08:28:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.91 Mbit/s

95th percentile per-packet one-way delay: 124.446 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 92.56 Mbit/s

95th percentile per-packet one-way delay: 123.538 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 97.77 Mbit/s

95th percentile per-packet one-way delay: 127.722 ms

Loss rate: 0.00%

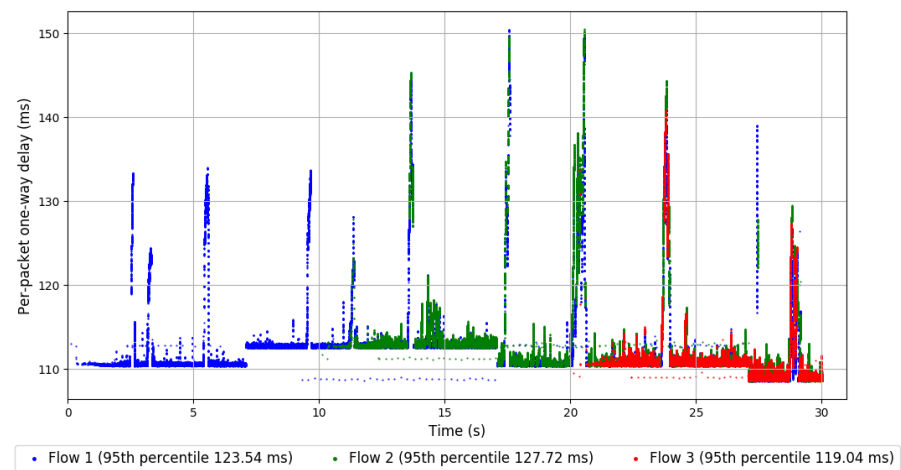
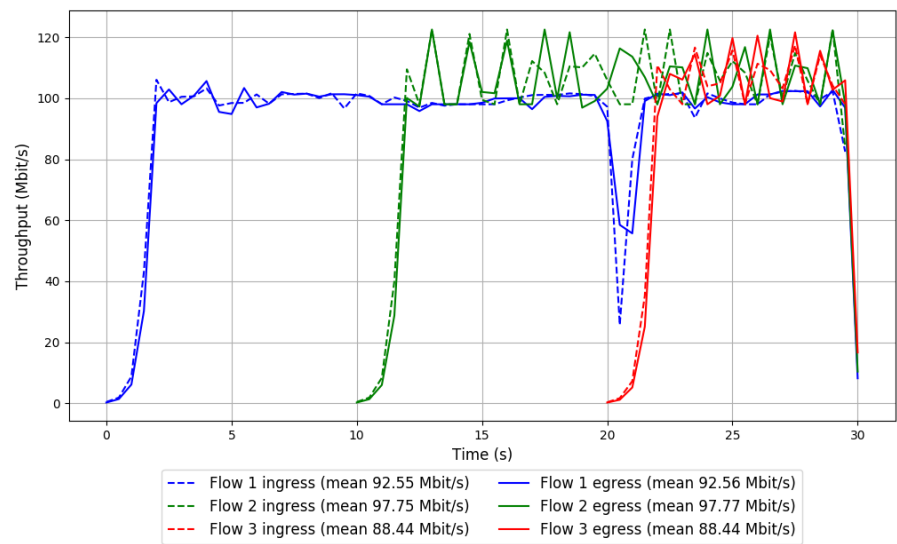
-- Flow 3:

Average throughput: 88.44 Mbit/s

95th percentile per-packet one-way delay: 119.041 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-04-04 03:56:57

End at: 2018-04-04 03:57:27

Below is generated by plot.py at 2018-04-04 08:28:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.23 Mbit/s

95th percentile per-packet one-way delay: 114.780 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 96.83 Mbit/s

95th percentile per-packet one-way delay: 114.171 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 90.47 Mbit/s

95th percentile per-packet one-way delay: 113.557 ms

Loss rate: 0.00%

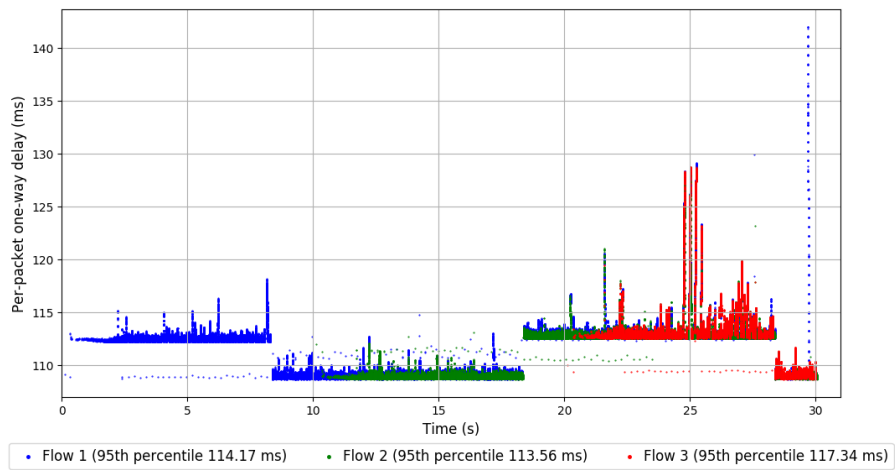
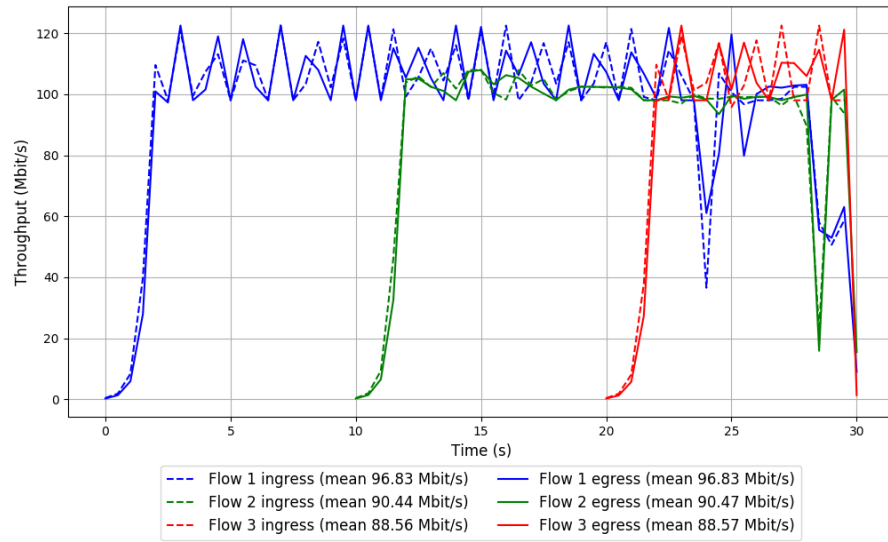
-- Flow 3:

Average throughput: 88.57 Mbit/s

95th percentile per-packet one-way delay: 117.343 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-04-04 04:15:53

End at: 2018-04-04 04:16:23

Below is generated by plot.py at 2018-04-04 08:28:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.69 Mbit/s

95th percentile per-packet one-way delay: 116.698 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 97.77 Mbit/s

95th percentile per-packet one-way delay: 116.936 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 91.82 Mbit/s

95th percentile per-packet one-way delay: 117.024 ms

Loss rate: 0.00%

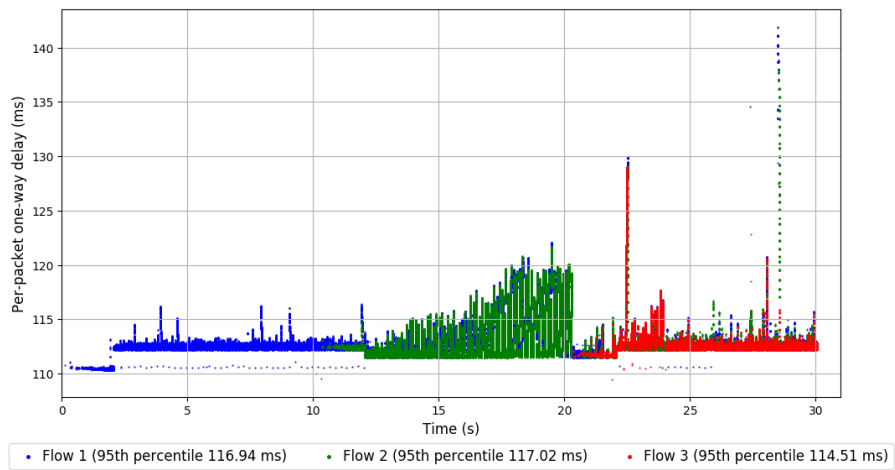
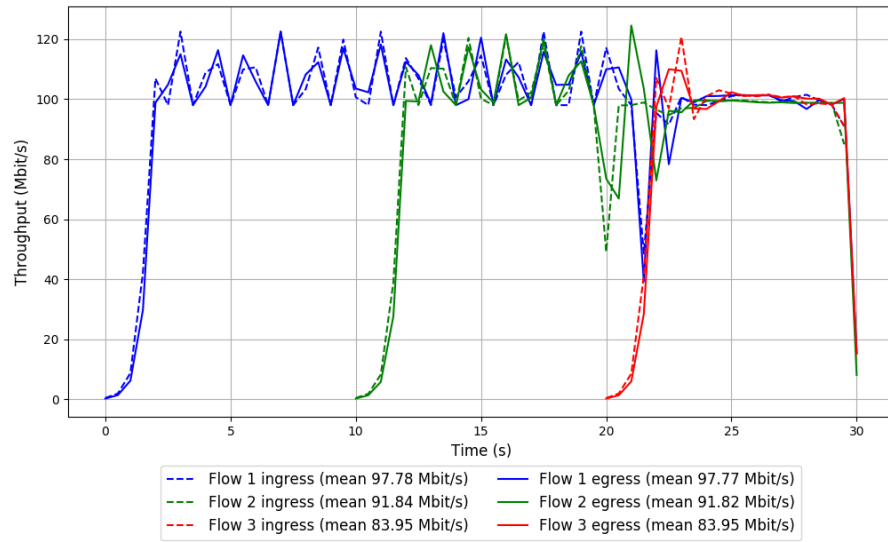
-- Flow 3:

Average throughput: 83.95 Mbit/s

95th percentile per-packet one-way delay: 114.512 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-04-04 04:34:59

End at: 2018-04-04 04:35:29

Below is generated by plot.py at 2018-04-04 08:28:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.71 Mbit/s

95th percentile per-packet one-way delay: 126.609 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 96.58 Mbit/s

95th percentile per-packet one-way delay: 124.886 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 92.93 Mbit/s

95th percentile per-packet one-way delay: 128.634 ms

Loss rate: 0.00%

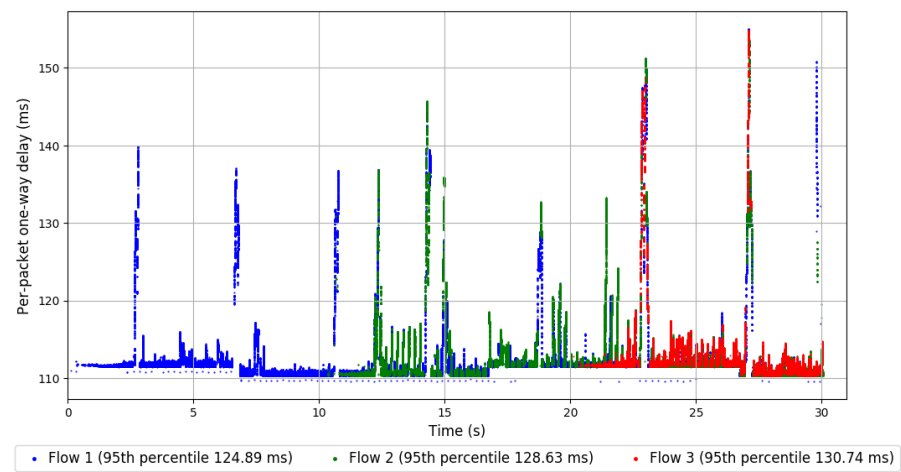
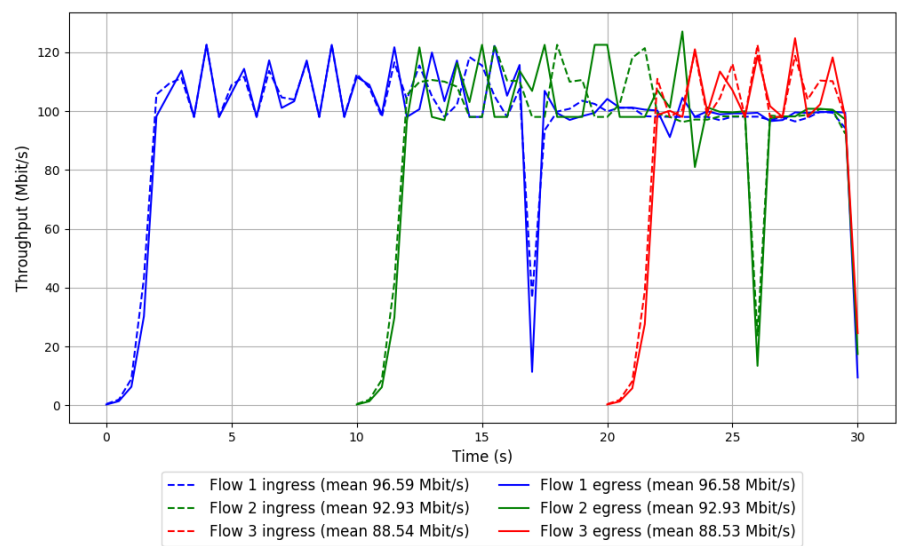
-- Flow 3:

Average throughput: 88.53 Mbit/s

95th percentile per-packet one-way delay: 130.743 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-04-04 04:54:17

End at: 2018-04-04 04:54:47

Below is generated by plot.py at 2018-04-04 08:28:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.77 Mbit/s

95th percentile per-packet one-way delay: 117.189 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 95.96 Mbit/s

95th percentile per-packet one-way delay: 115.224 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 97.31 Mbit/s

95th percentile per-packet one-way delay: 117.945 ms

Loss rate: 0.00%

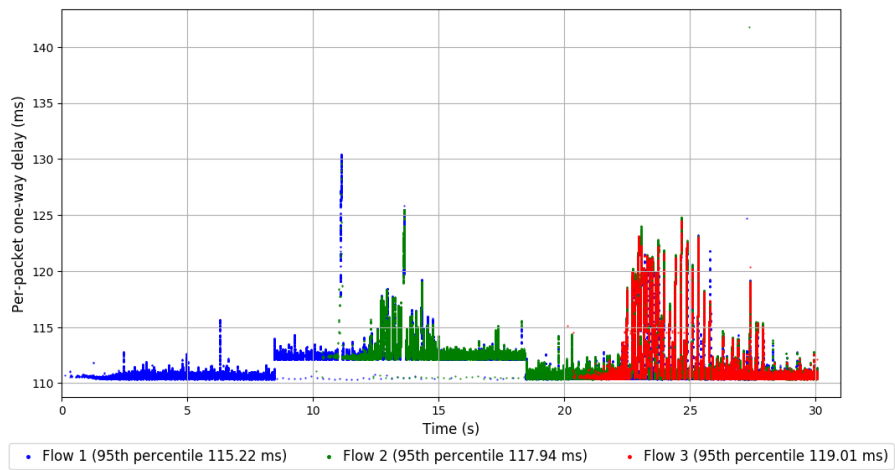
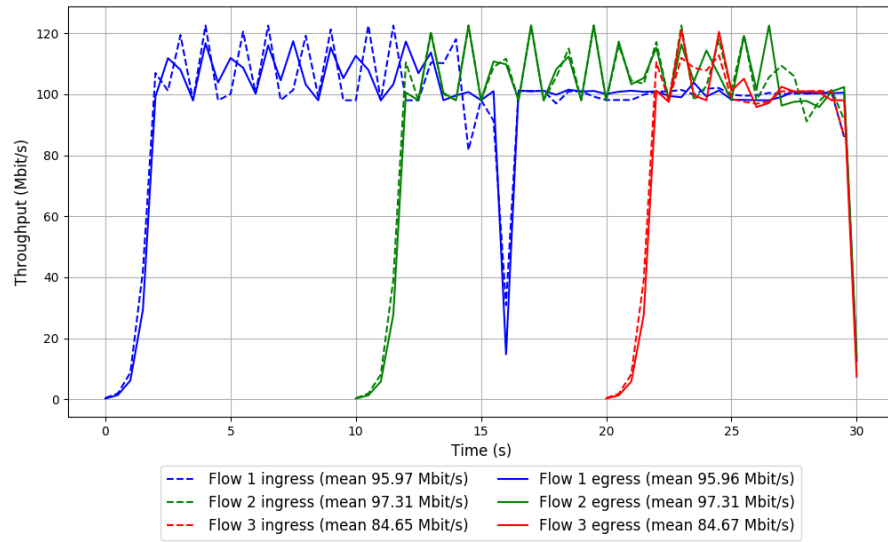
-- Flow 3:

Average throughput: 84.67 Mbit/s

95th percentile per-packet one-way delay: 119.007 ms

Loss rate: 0.03%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-04-04 05:14:17

End at: 2018-04-04 05:14:47

Below is generated by plot.py at 2018-04-04 08:28:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.73 Mbit/s

95th percentile per-packet one-way delay: 114.262 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 97.34 Mbit/s

95th percentile per-packet one-way delay: 113.556 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 90.24 Mbit/s

95th percentile per-packet one-way delay: 114.092 ms

Loss rate: 0.01%

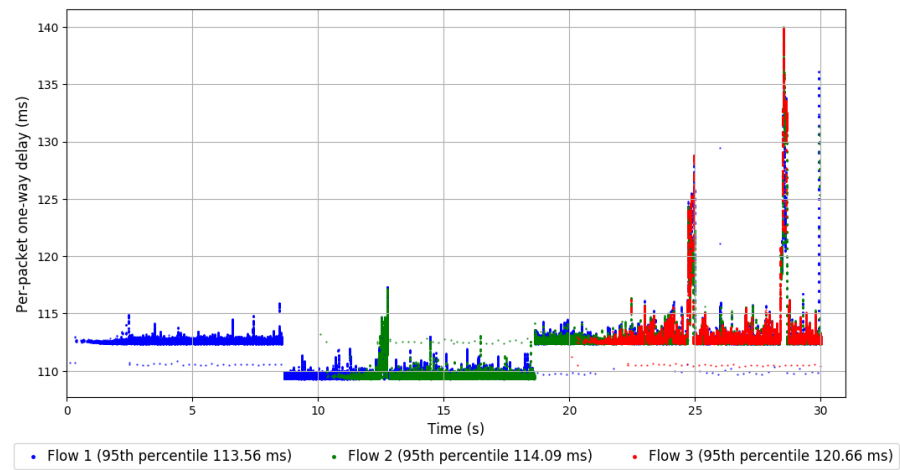
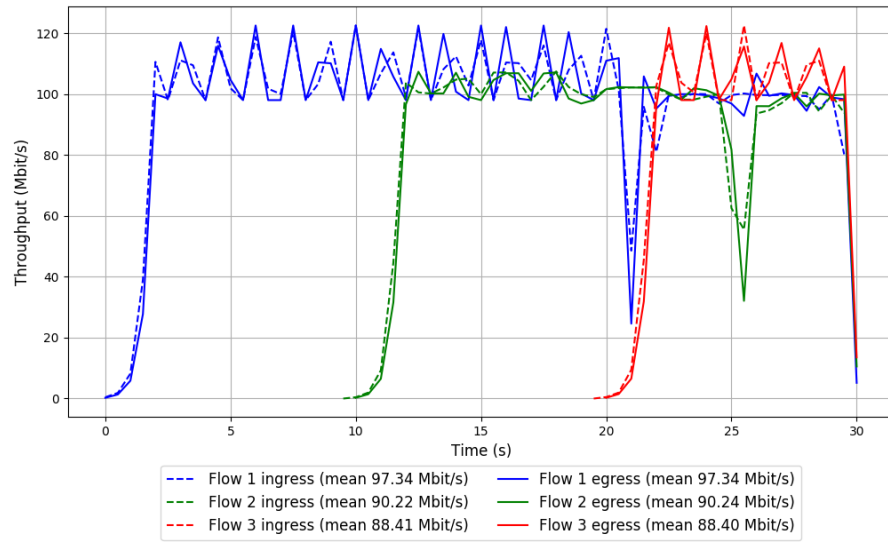
-- Flow 3:

Average throughput: 88.40 Mbit/s

95th percentile per-packet one-way delay: 120.655 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-04-04 05:34:20

End at: 2018-04-04 05:34:50

Below is generated by plot.py at 2018-04-04 08:28:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.35 Mbit/s

95th percentile per-packet one-way delay: 113.771 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 93.62 Mbit/s

95th percentile per-packet one-way delay: 113.169 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 89.30 Mbit/s

95th percentile per-packet one-way delay: 113.484 ms

Loss rate: 0.01%

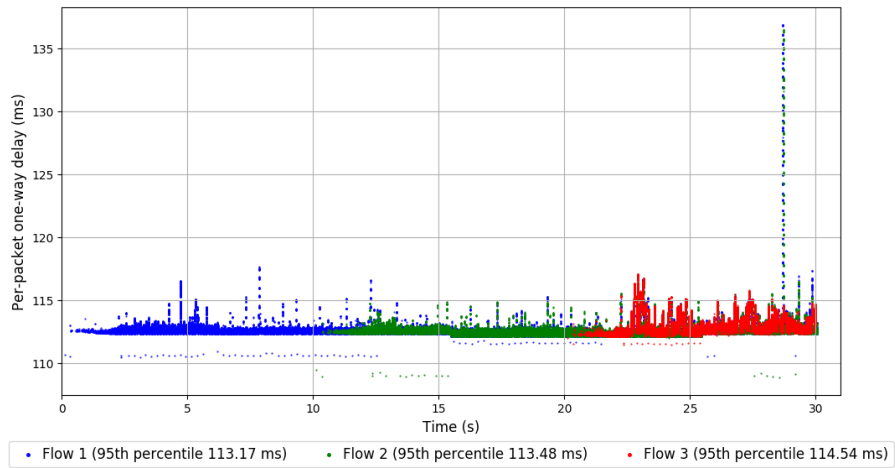
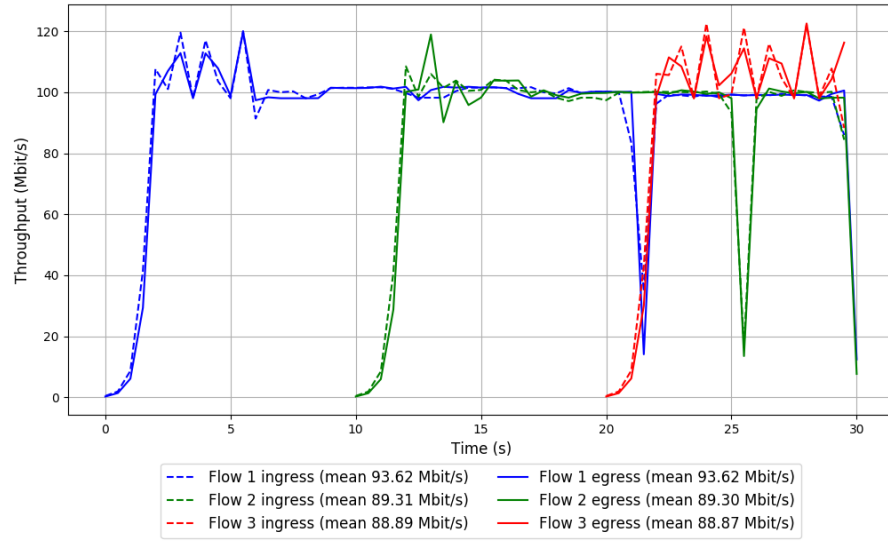
-- Flow 3:

Average throughput: 88.87 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-04-04 05:53:31

End at: 2018-04-04 05:54:01

Below is generated by plot.py at 2018-04-04 08:31:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.65 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 98.04 Mbit/s

95th percentile per-packet one-way delay: 113.268 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 90.75 Mbit/s

95th percentile per-packet one-way delay: 113.628 ms

Loss rate: 0.00%

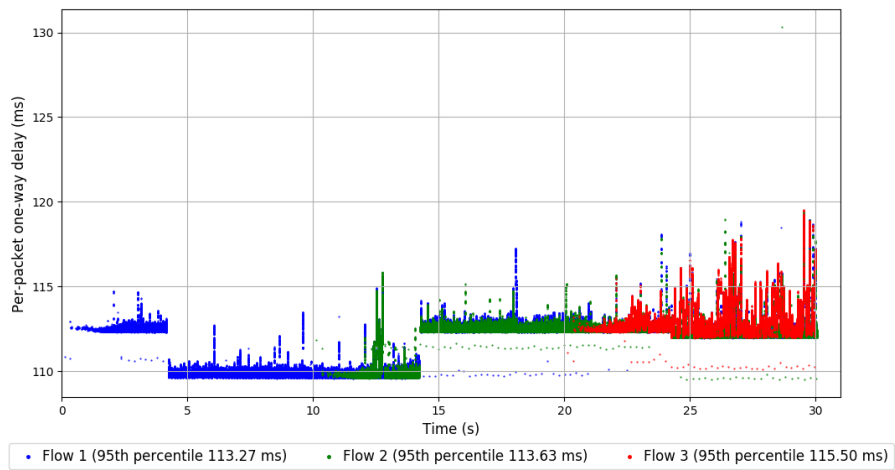
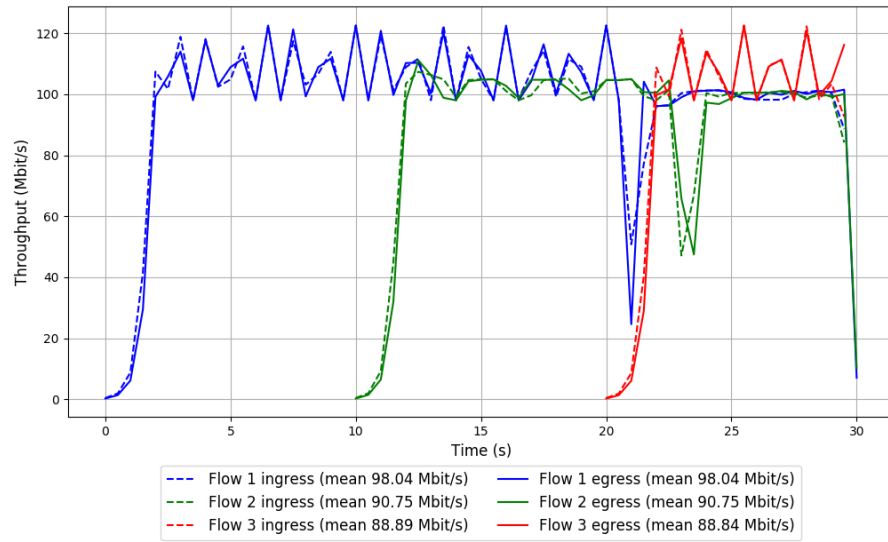
-- Flow 3:

Average throughput: 88.84 Mbit/s

95th percentile per-packet one-way delay: 115.495 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-04-04 06:12:51

End at: 2018-04-04 06:13:21

Below is generated by plot.py at 2018-04-04 08:31:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.24 Mbit/s

95th percentile per-packet one-way delay: 114.898 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 94.39 Mbit/s

95th percentile per-packet one-way delay: 113.322 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.88 Mbit/s

95th percentile per-packet one-way delay: 115.995 ms

Loss rate: 0.00%

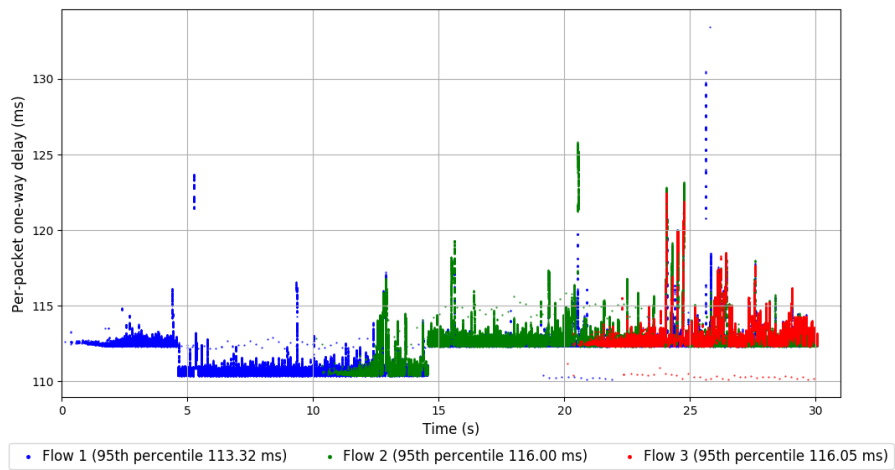
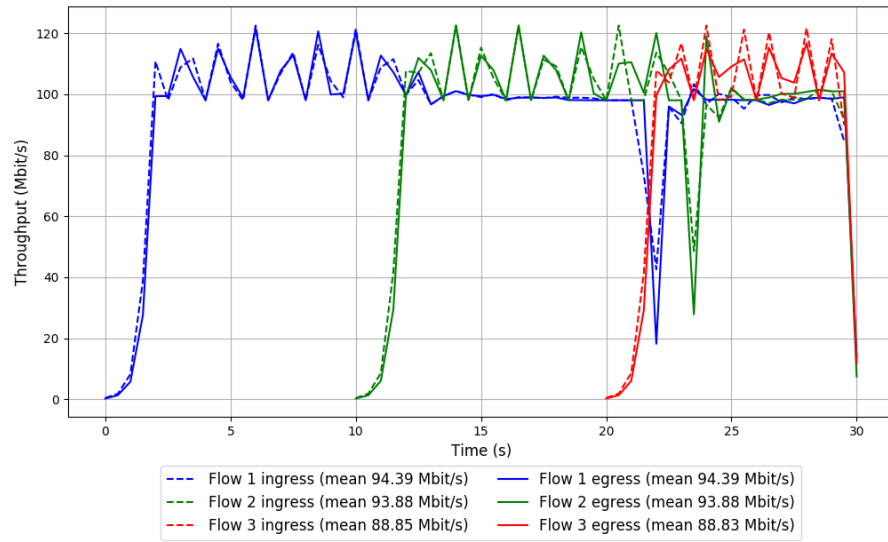
-- Flow 3:

Average throughput: 88.83 Mbit/s

95th percentile per-packet one-way delay: 116.049 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-04-04 03:17:58

End at: 2018-04-04 03:18:28

Below is generated by plot.py at 2018-04-04 08:31:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.76 Mbit/s

95th percentile per-packet one-way delay: 119.103 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.10 Mbit/s

95th percentile per-packet one-way delay: 119.652 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.13 Mbit/s

95th percentile per-packet one-way delay: 114.507 ms

Loss rate: 0.00%

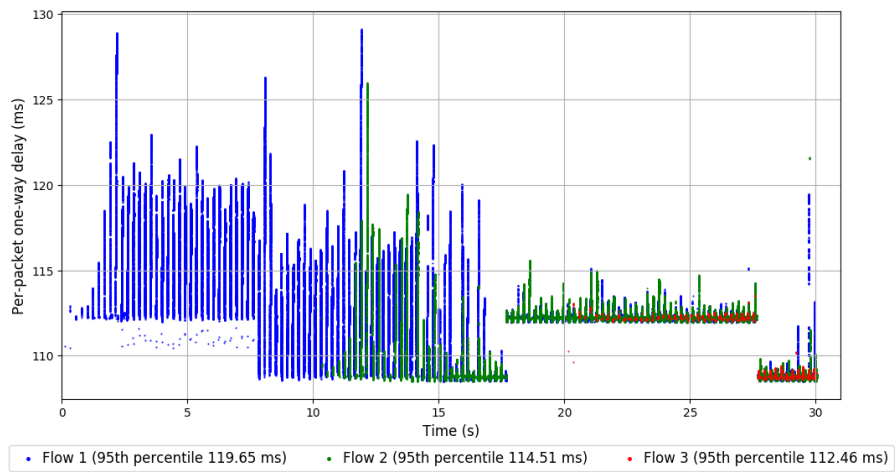
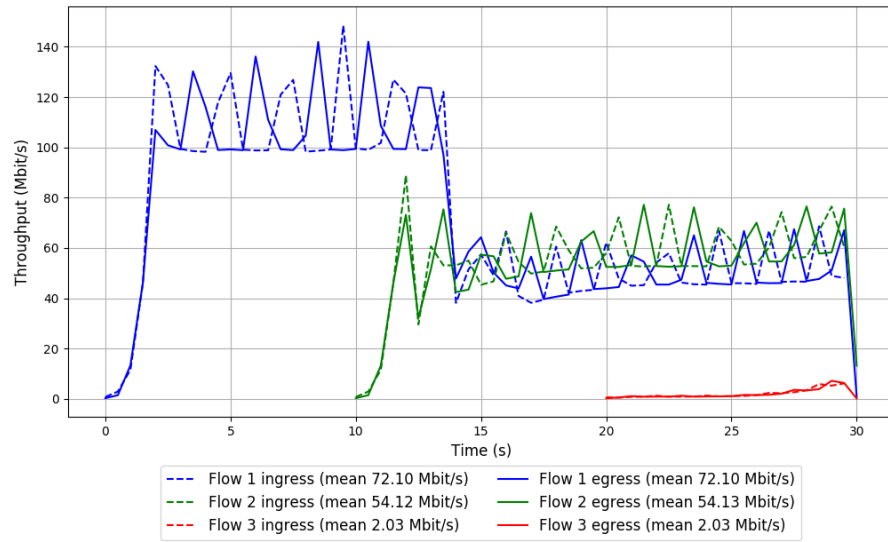
-- Flow 3:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 112.457 ms

Loss rate: 0.12%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-04-04 03:37:14

End at: 2018-04-04 03:37:44

Below is generated by plot.py at 2018-04-04 08:31:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.98 Mbit/s

95th percentile per-packet one-way delay: 118.043 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 57.52 Mbit/s

95th percentile per-packet one-way delay: 117.893 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.88 Mbit/s

95th percentile per-packet one-way delay: 118.499 ms

Loss rate: 0.00%

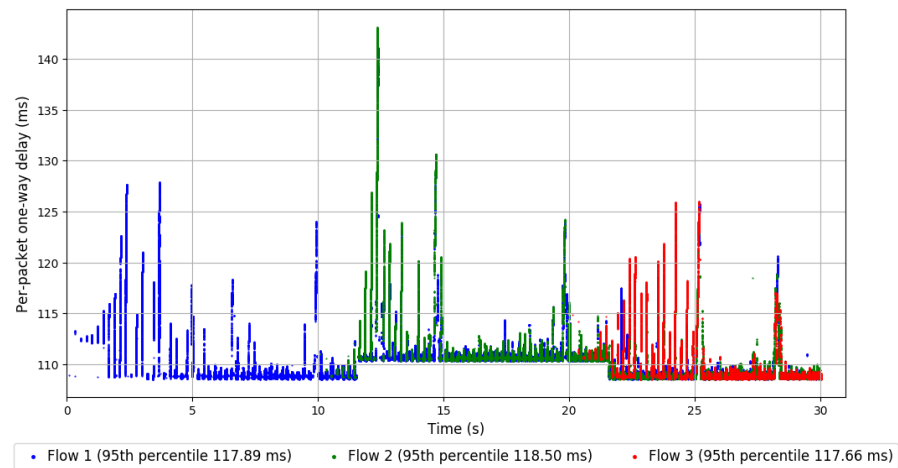
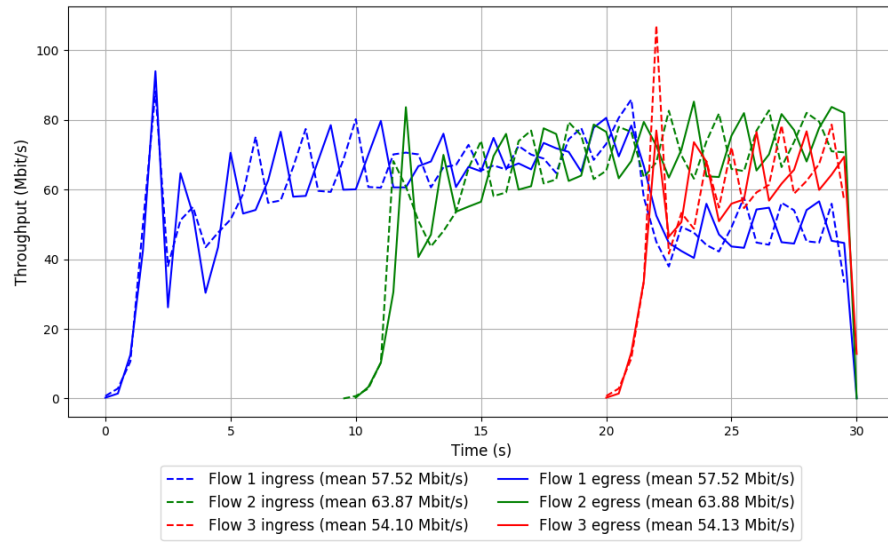
-- Flow 3:

Average throughput: 54.13 Mbit/s

95th percentile per-packet one-way delay: 117.655 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-04-04 03:56:02

End at: 2018-04-04 03:56:32

Below is generated by plot.py at 2018-04-04 08:31:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.17 Mbit/s

95th percentile per-packet one-way delay: 121.566 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 58.48 Mbit/s

95th percentile per-packet one-way delay: 119.154 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 100.98 Mbit/s

95th percentile per-packet one-way delay: 122.016 ms

Loss rate: 0.00%

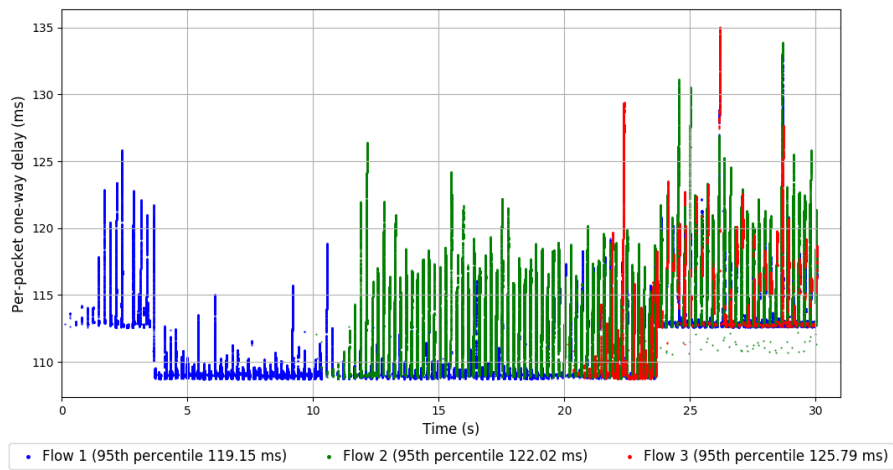
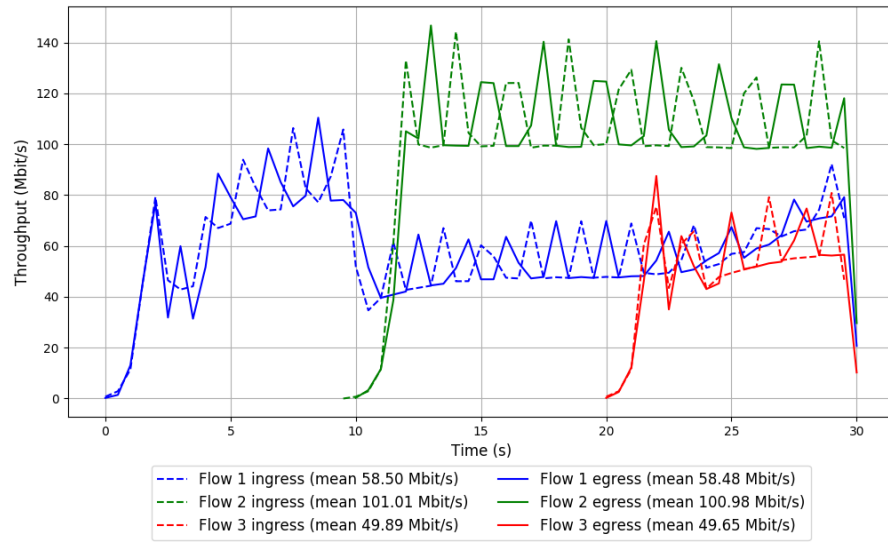
-- Flow 3:

Average throughput: 49.65 Mbit/s

95th percentile per-packet one-way delay: 125.787 ms

Loss rate: 0.46%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-04-04 04:14:59

End at: 2018-04-04 04:15:29

Below is generated by plot.py at 2018-04-04 08:31:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.10 Mbit/s

95th percentile per-packet one-way delay: 121.027 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 81.88 Mbit/s

95th percentile per-packet one-way delay: 121.046 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 19.69 Mbit/s

95th percentile per-packet one-way delay: 114.356 ms

Loss rate: 0.03%

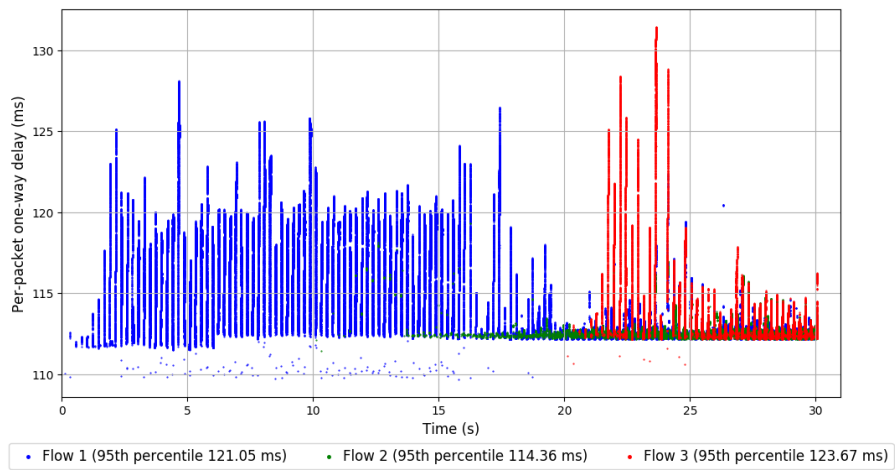
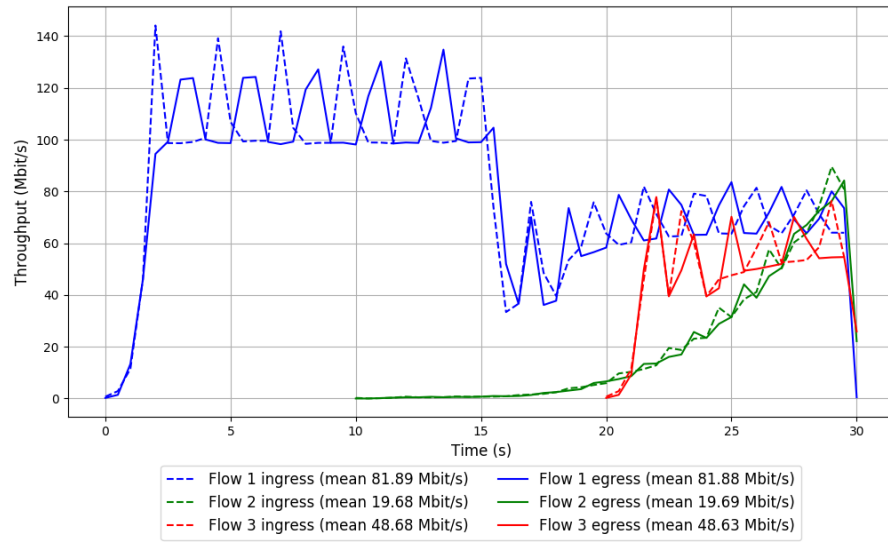
-- Flow 3:

Average throughput: 48.63 Mbit/s

95th percentile per-packet one-way delay: 123.667 ms

Loss rate: 0.07%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-04-04 04:33:58

End at: 2018-04-04 04:34:28

Below is generated by plot.py at 2018-04-04 08:31:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.39 Mbit/s

95th percentile per-packet one-way delay: 125.622 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 97.67 Mbit/s

95th percentile per-packet one-way delay: 122.450 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 82.02 Mbit/s

95th percentile per-packet one-way delay: 128.981 ms

Loss rate: 0.02%

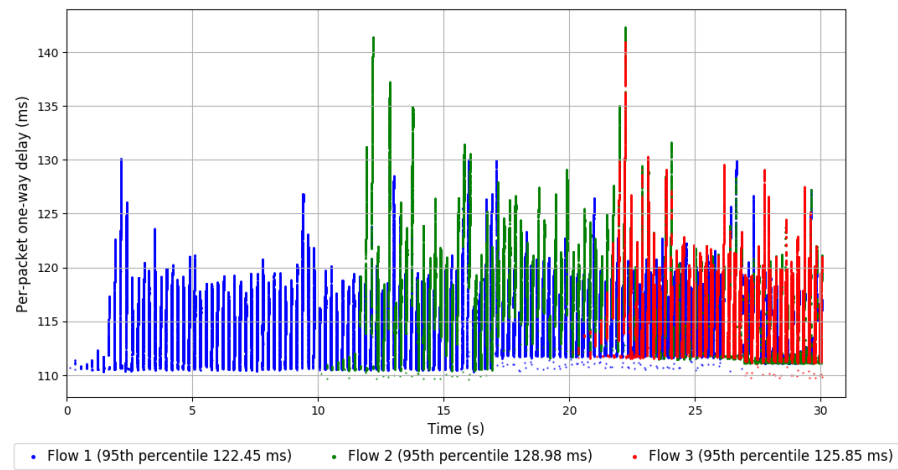
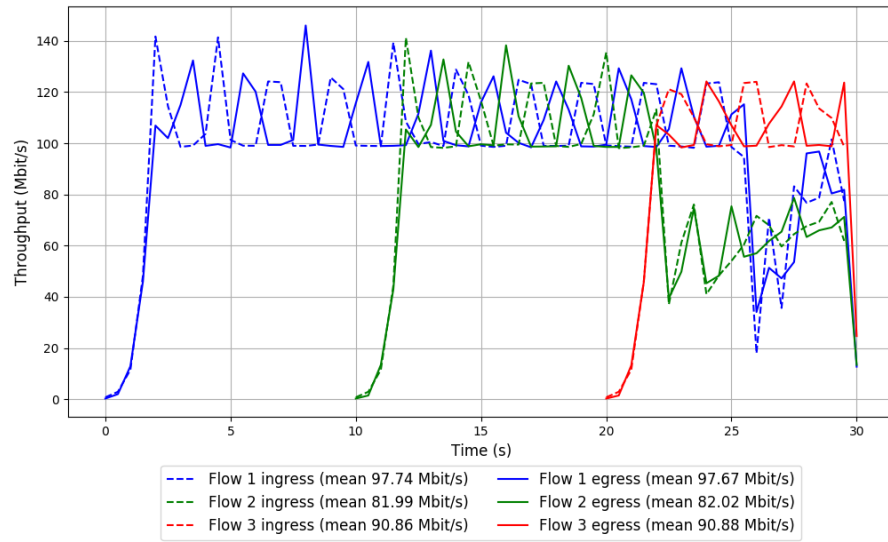
-- Flow 3:

Average throughput: 90.88 Mbit/s

95th percentile per-packet one-way delay: 125.847 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-04-04 04:53:20

End at: 2018-04-04 04:53:50

Below is generated by plot.py at 2018-04-04 08:31:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.01 Mbit/s

95th percentile per-packet one-way delay: 122.632 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 72.83 Mbit/s

95th percentile per-packet one-way delay: 122.675 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.01 Mbit/s

95th percentile per-packet one-way delay: 119.321 ms

Loss rate: 0.03%

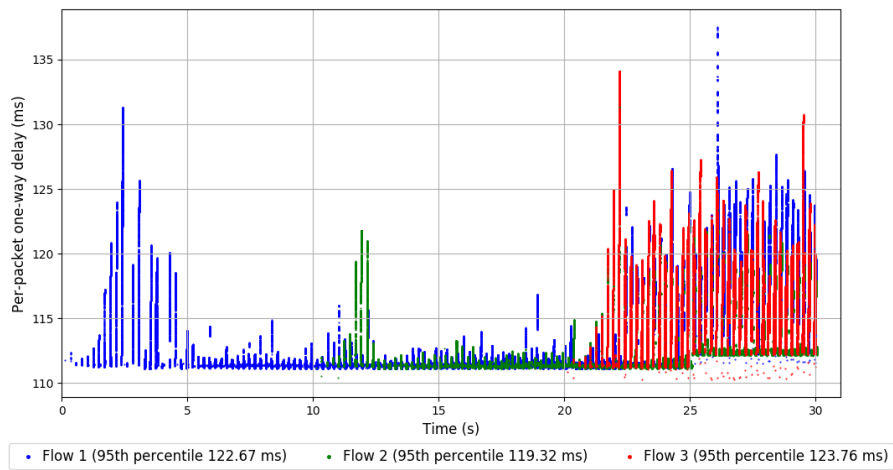
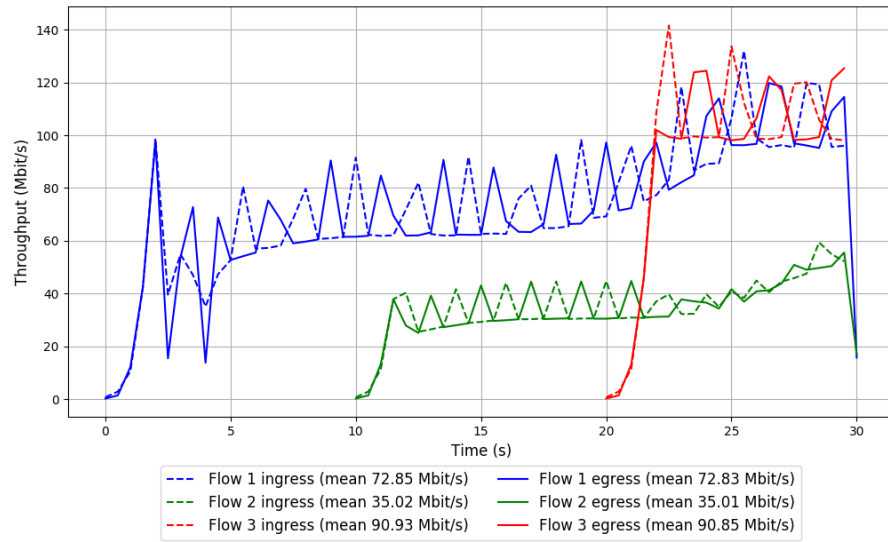
-- Flow 3:

Average throughput: 90.85 Mbit/s

95th percentile per-packet one-way delay: 123.761 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-04-04 05:13:22

End at: 2018-04-04 05:13:52

Below is generated by plot.py at 2018-04-04 08:32:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 119.08 Mbit/s

95th percentile per-packet one-way delay: 121.484 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 81.82 Mbit/s

95th percentile per-packet one-way delay: 121.894 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 55.11 Mbit/s

95th percentile per-packet one-way delay: 120.938 ms

Loss rate: 0.07%

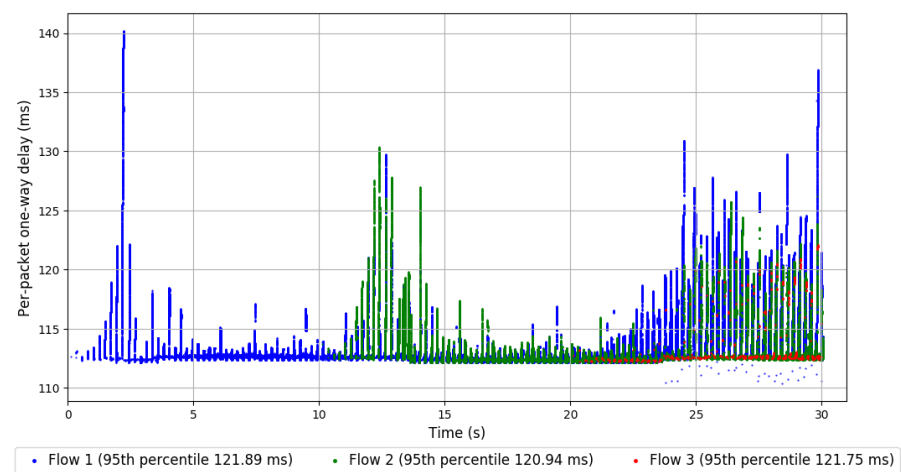
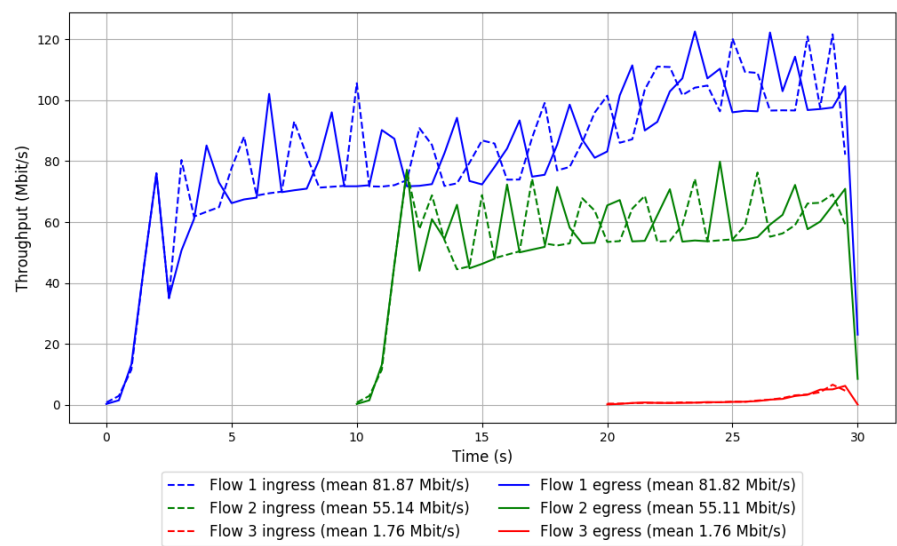
-- Flow 3:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 121.753 ms

Loss rate: 0.48%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-04-04 05:33:09

End at: 2018-04-04 05:33:39

Below is generated by plot.py at 2018-04-04 08:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.58 Mbit/s

95th percentile per-packet one-way delay: 123.041 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 103.31 Mbit/s

95th percentile per-packet one-way delay: 122.502 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.50 Mbit/s

95th percentile per-packet one-way delay: 123.265 ms

Loss rate: 0.00%

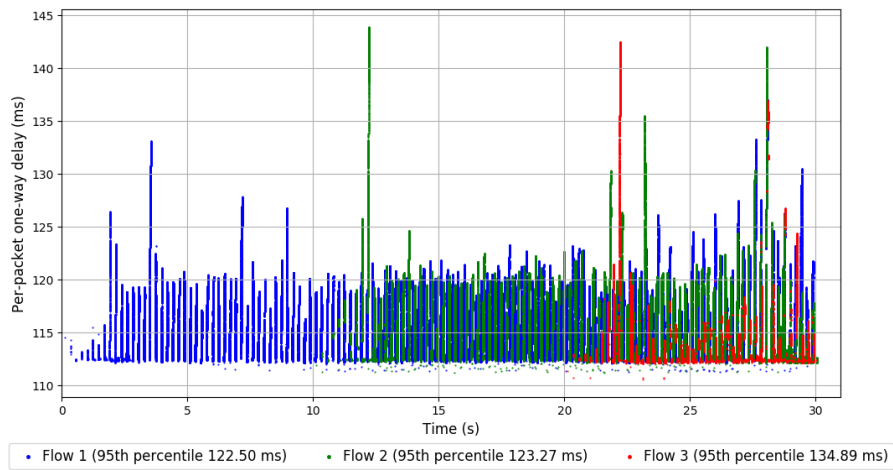
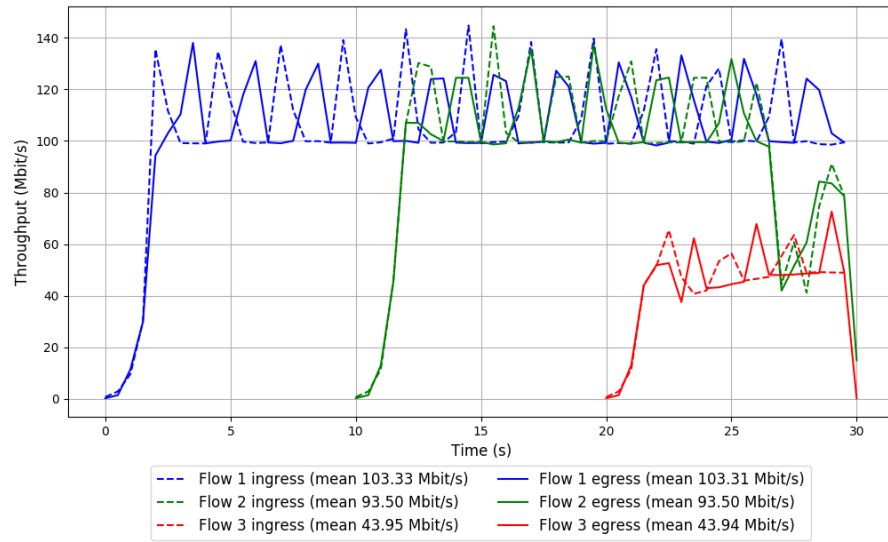
-- Flow 3:

Average throughput: 43.94 Mbit/s

95th percentile per-packet one-way delay: 134.893 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-04-04 05:52:35

End at: 2018-04-04 05:53:05

Below is generated by plot.py at 2018-04-04 08:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.91 Mbit/s

95th percentile per-packet one-way delay: 121.802 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 69.77 Mbit/s

95th percentile per-packet one-way delay: 121.835 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 99.83 Mbit/s

95th percentile per-packet one-way delay: 121.869 ms

Loss rate: 0.00%

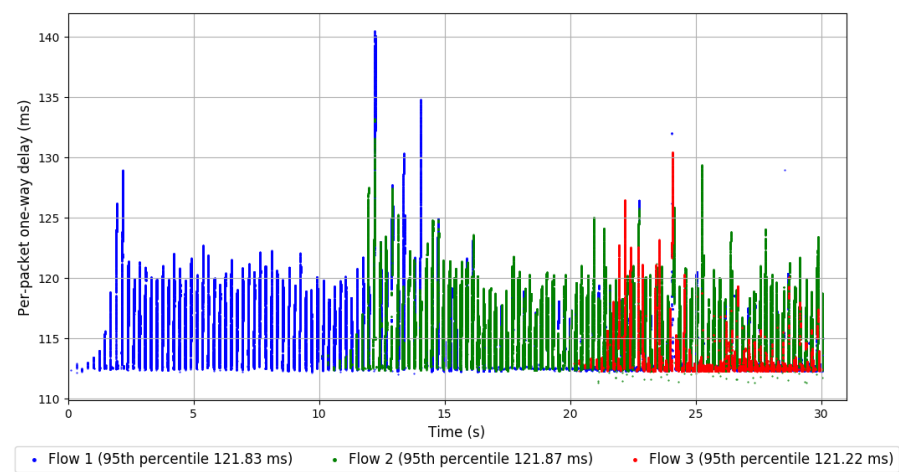
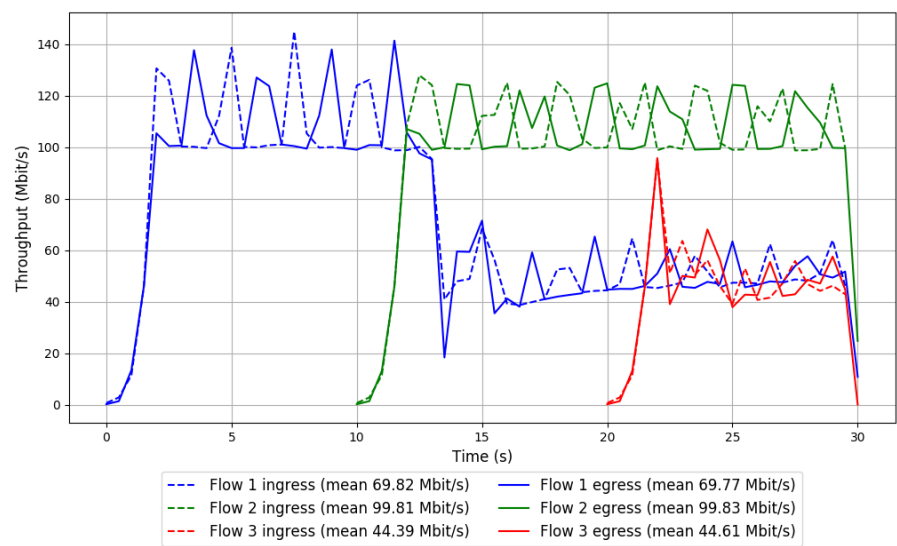
-- Flow 3:

Average throughput: 44.61 Mbit/s

95th percentile per-packet one-way delay: 121.224 ms

Loss rate: 0.03%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-04-04 06:11:53

End at: 2018-04-04 06:12:23

Below is generated by plot.py at 2018-04-04 08:33:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 170.08 Mbit/s

95th percentile per-packet one-way delay: 121.859 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 102.85 Mbit/s

95th percentile per-packet one-way delay: 122.095 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.67 Mbit/s

95th percentile per-packet one-way delay: 121.532 ms

Loss rate: 0.00%

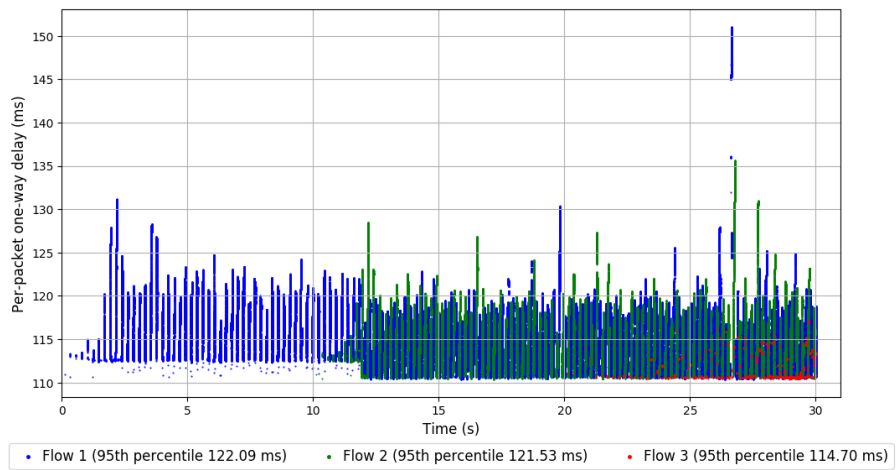
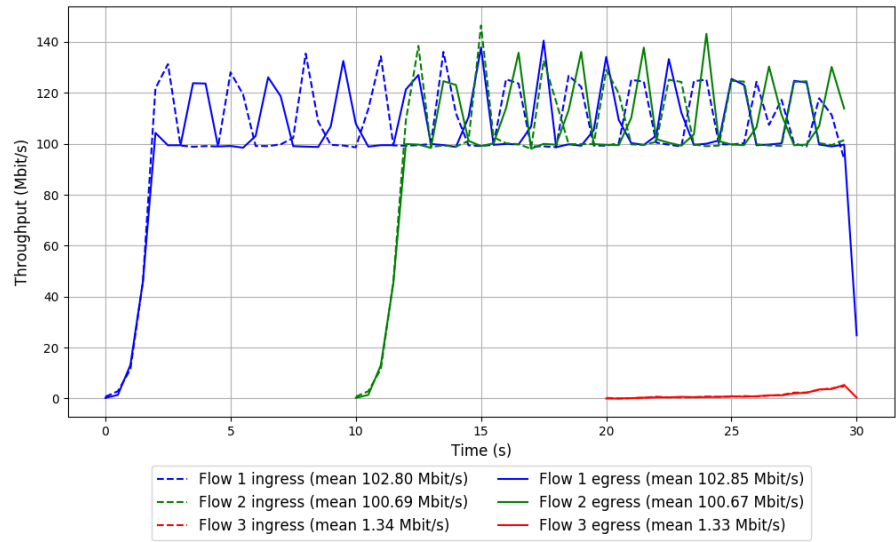
-- Flow 3:

Average throughput: 1.33 Mbit/s

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

Loss rate: 0.91%

Run 10: Report of TCP Cubic — Data Link

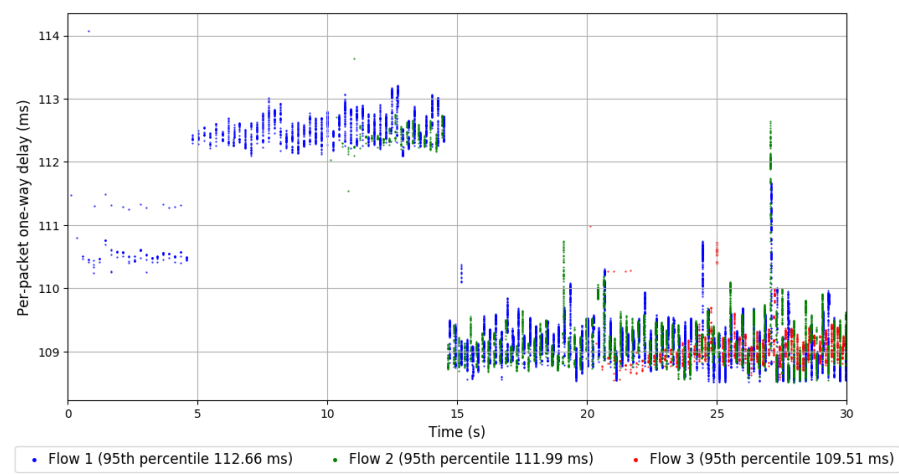
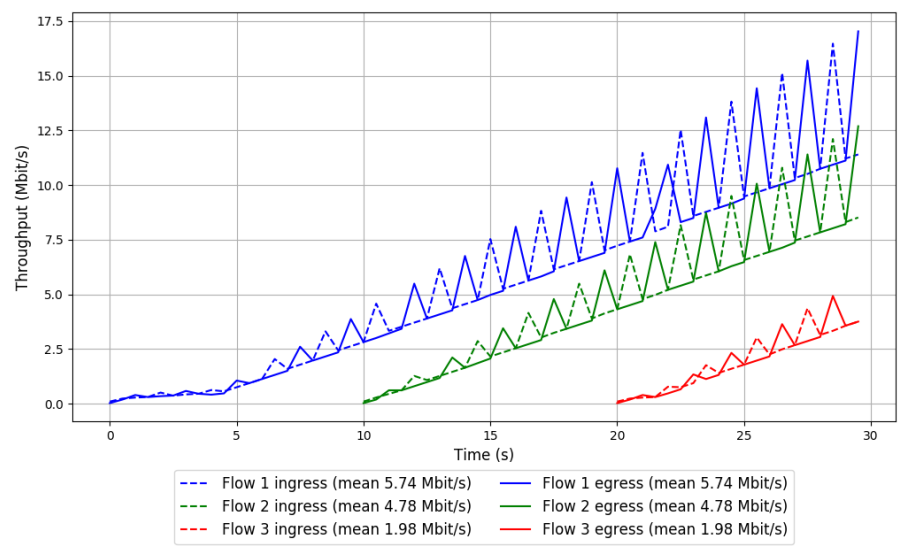


```
Run 1: Statistics of LEDBAT

Start at: 2018-04-04 03:17:11
End at: 2018-04-04 03:17:41

# Below is generated by plot.py at 2018-04-04 08:33:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.56 Mbit/s
95th percentile per-packet one-way delay: 112.560 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.74 Mbit/s
95th percentile per-packet one-way delay: 112.664 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.78 Mbit/s
95th percentile per-packet one-way delay: 111.986 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 109.512 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

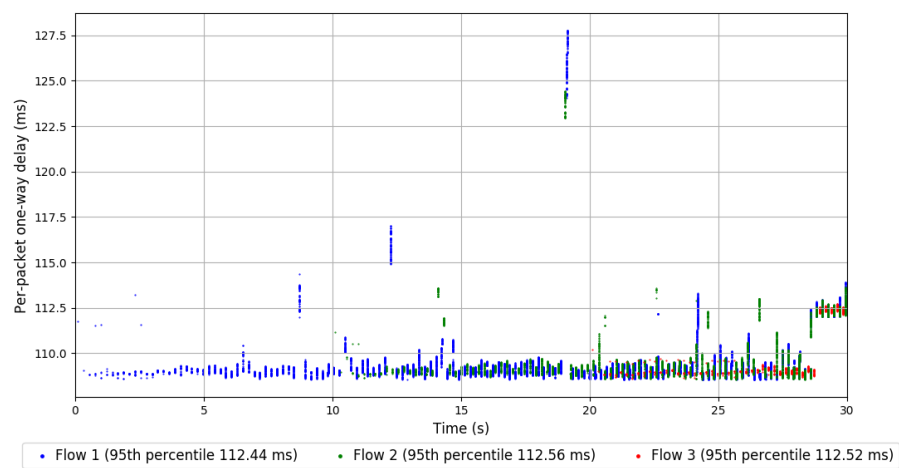
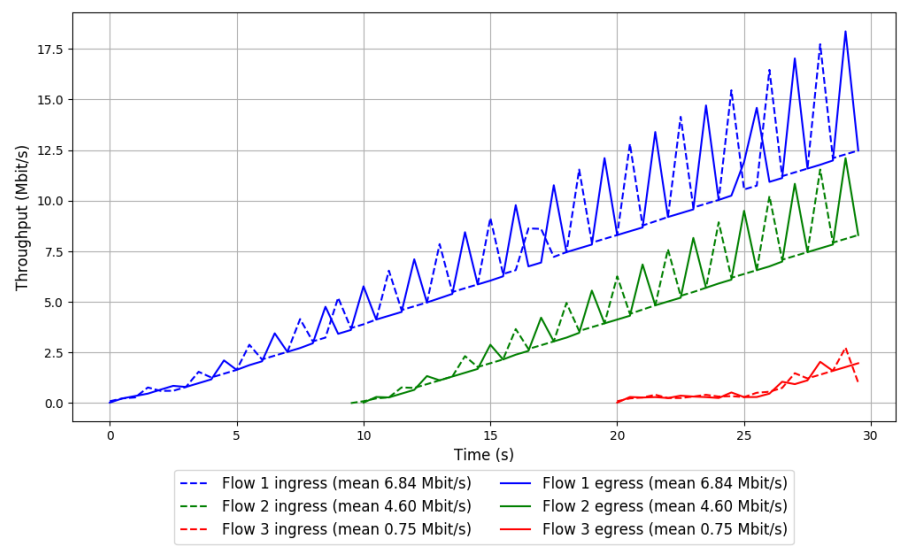


```
Run 2: Statistics of LEDBAT

Start at: 2018-04-04 03:36:27
End at: 2018-04-04 03:36:57

# Below is generated by plot.py at 2018-04-04 08:33:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.13 Mbit/s
95th percentile per-packet one-way delay: 112.495 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.84 Mbit/s
95th percentile per-packet one-way delay: 112.443 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.60 Mbit/s
95th percentile per-packet one-way delay: 112.565 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 112.519 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-04-04 03:55:14

End at: 2018-04-04 03:55:44

Below is generated by plot.py at 2018-04-04 08:33:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.86 Mbit/s

95th percentile per-packet one-way delay: 113.539 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.94 Mbit/s

95th percentile per-packet one-way delay: 113.611 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.76 Mbit/s

95th percentile per-packet one-way delay: 113.387 ms

Loss rate: 0.00%

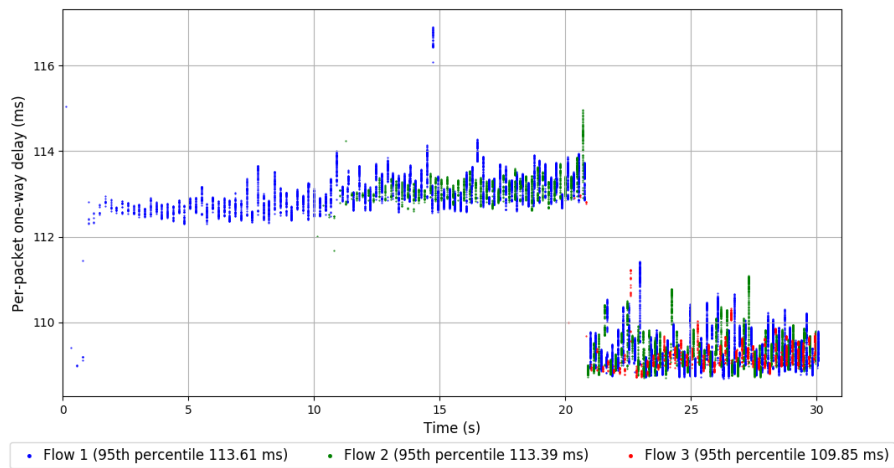
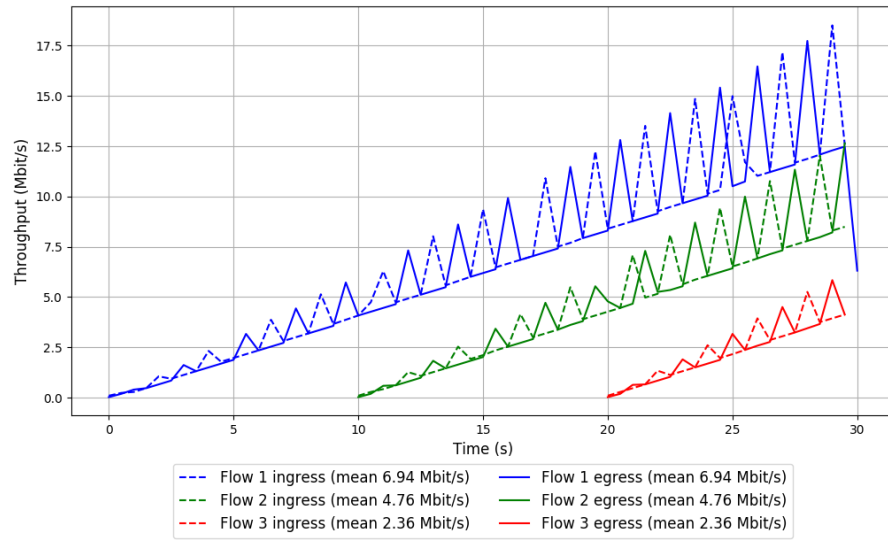
-- Flow 3:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 109.853 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-04-04 04:14:12

End at: 2018-04-04 04:14:42

Below is generated by plot.py at 2018-04-04 08:33:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.13 Mbit/s

95th percentile per-packet one-way delay: 113.195 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.17 Mbit/s

95th percentile per-packet one-way delay: 113.172 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.80 Mbit/s

95th percentile per-packet one-way delay: 113.311 ms

Loss rate: 0.00%

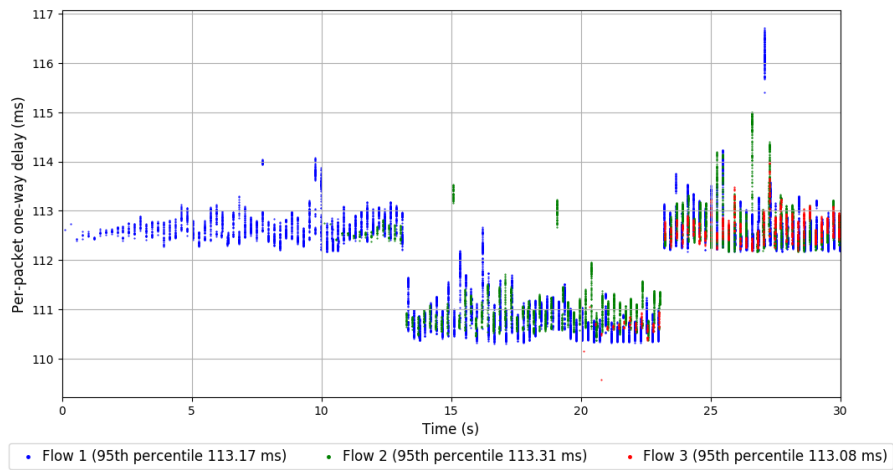
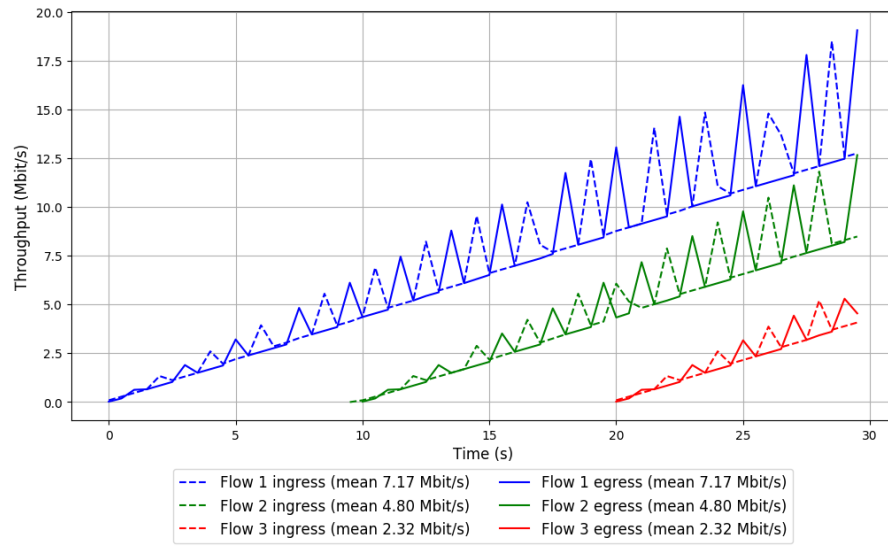
-- Flow 3:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 113.078 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-04-04 04:33:11

End at: 2018-04-04 04:33:41

Below is generated by plot.py at 2018-04-04 08:33:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.21 Mbit/s

95th percentile per-packet one-way delay: 112.538 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.27 Mbit/s

95th percentile per-packet one-way delay: 112.533 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.83 Mbit/s

95th percentile per-packet one-way delay: 112.617 ms

Loss rate: 0.00%

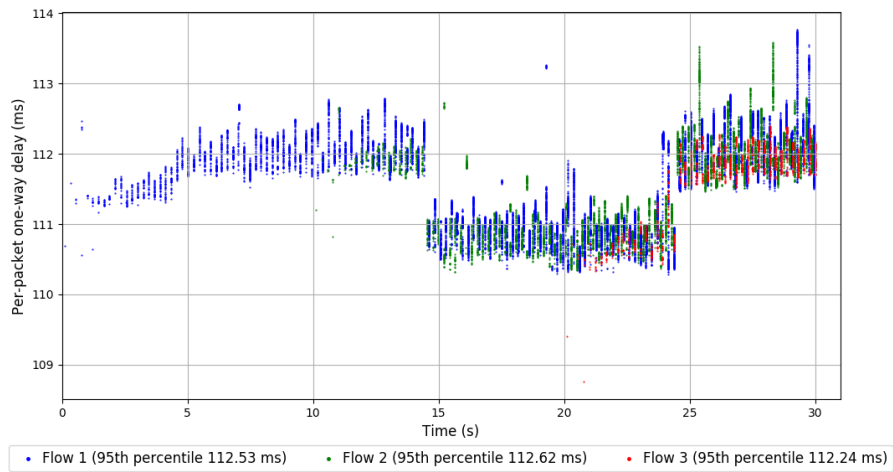
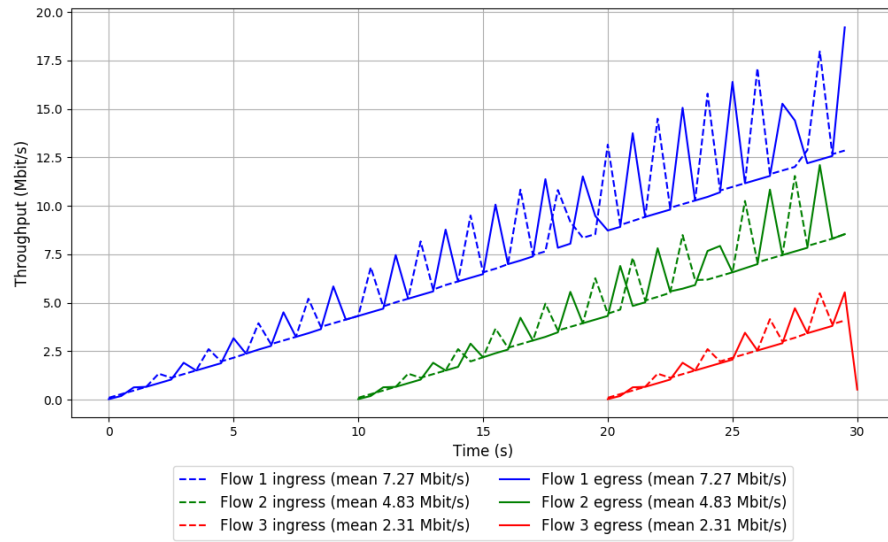
-- Flow 3:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 112.243 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-04-04 04:52:33

End at: 2018-04-04 04:53:03

Below is generated by plot.py at 2018-04-04 08:33:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.64 Mbit/s

95th percentile per-packet one-way delay: 113.228 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 5.85 Mbit/s

95th percentile per-packet one-way delay: 113.257 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.59 Mbit/s

95th percentile per-packet one-way delay: 113.199 ms

Loss rate: 0.00%

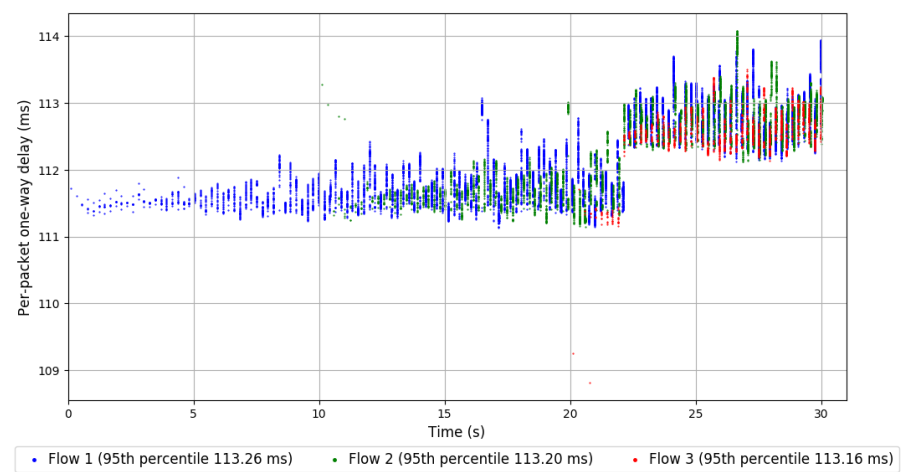
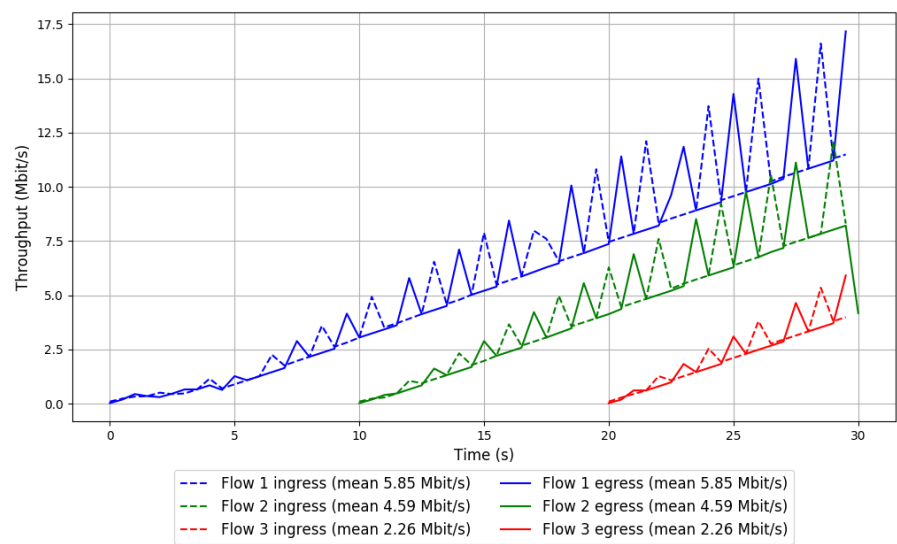
-- Flow 3:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 113.160 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-04-04 05:12:34

End at: 2018-04-04 05:13:04

Below is generated by plot.py at 2018-04-04 08:33:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.64 Mbit/s

95th percentile per-packet one-way delay: 113.326 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 6.95 Mbit/s

95th percentile per-packet one-way delay: 113.415 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 113.182 ms

Loss rate: 0.00%

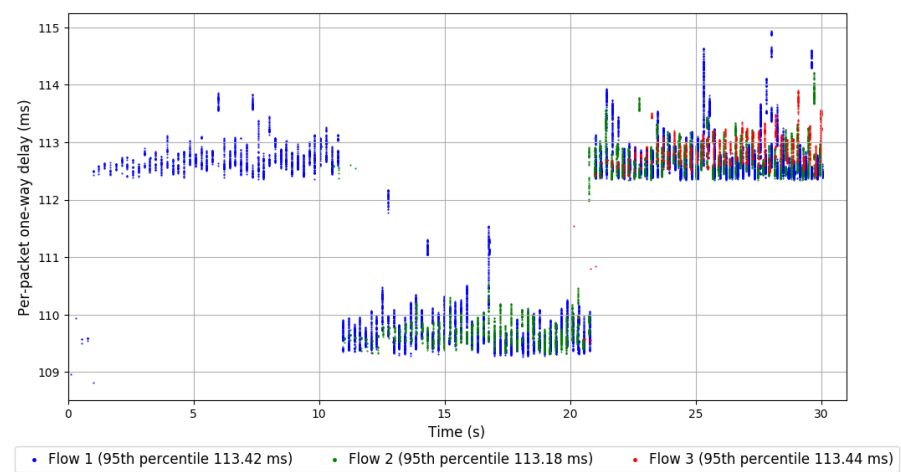
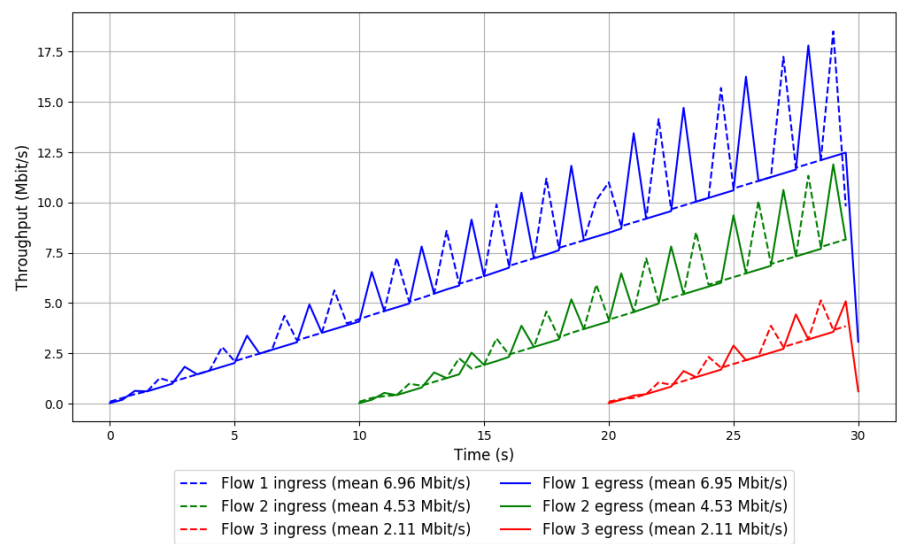
-- Flow 3:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 113.438 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-04-04 05:32:22

End at: 2018-04-04 05:32:52

Below is generated by plot.py at 2018-04-04 08:33:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.00 Mbit/s

95th percentile per-packet one-way delay: 113.565 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.12 Mbit/s

95th percentile per-packet one-way delay: 113.483 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.71 Mbit/s

95th percentile per-packet one-way delay: 113.726 ms

Loss rate: 0.00%

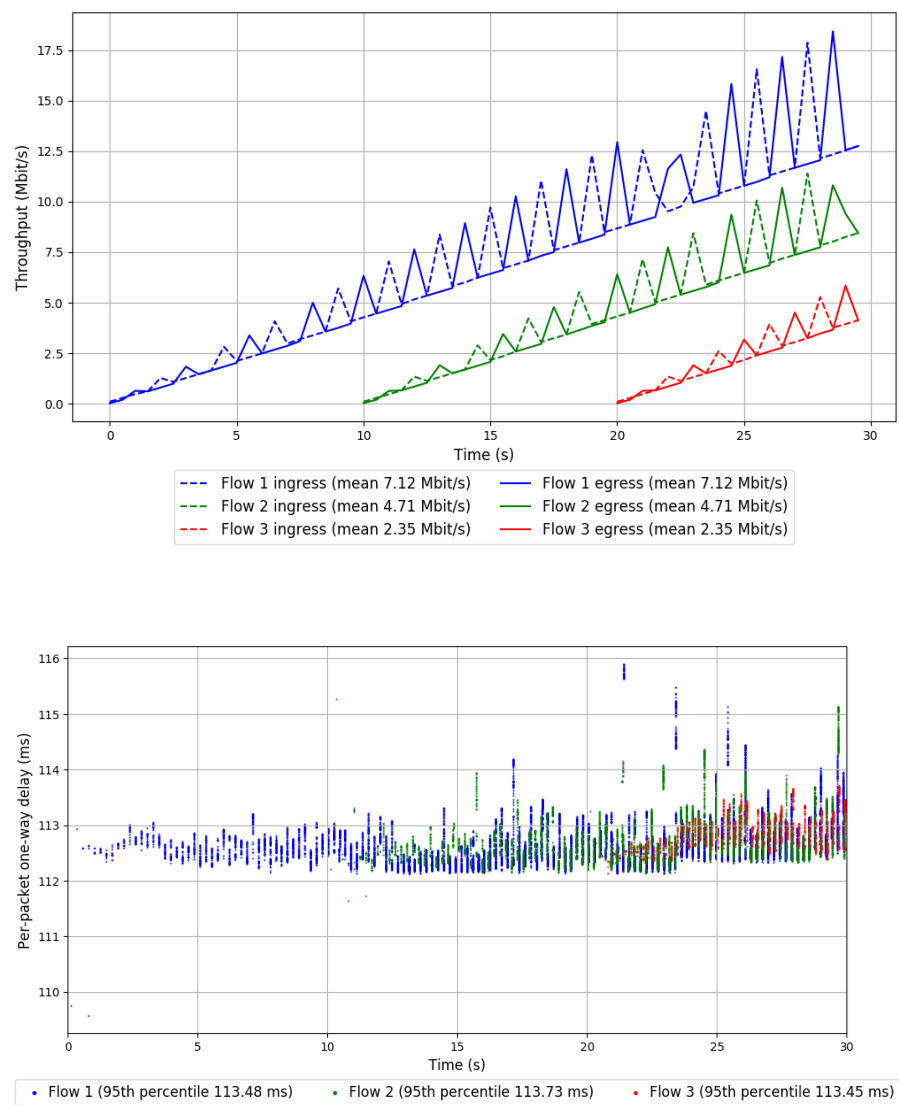
-- Flow 3:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 113.449 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-04-04 05:51:47

End at: 2018-04-04 05:52:17

Below is generated by plot.py at 2018-04-04 08:33:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.97 Mbit/s

95th percentile per-packet one-way delay: 112.924 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.15 Mbit/s

95th percentile per-packet one-way delay: 112.879 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.79 Mbit/s

95th percentile per-packet one-way delay: 112.903 ms

Loss rate: 0.00%

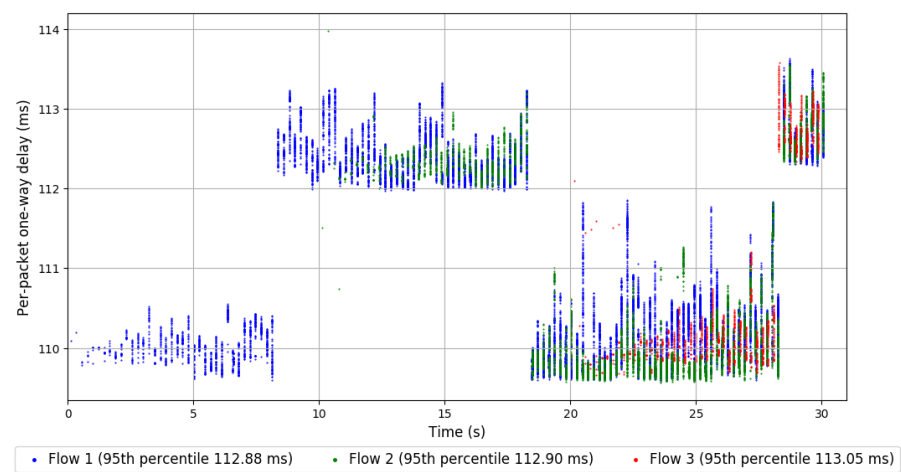
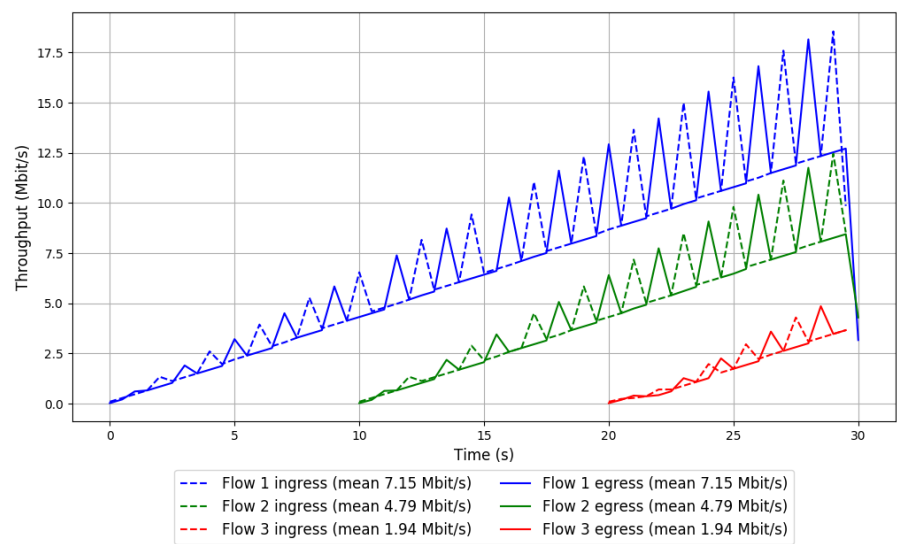
-- Flow 3:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 113.049 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

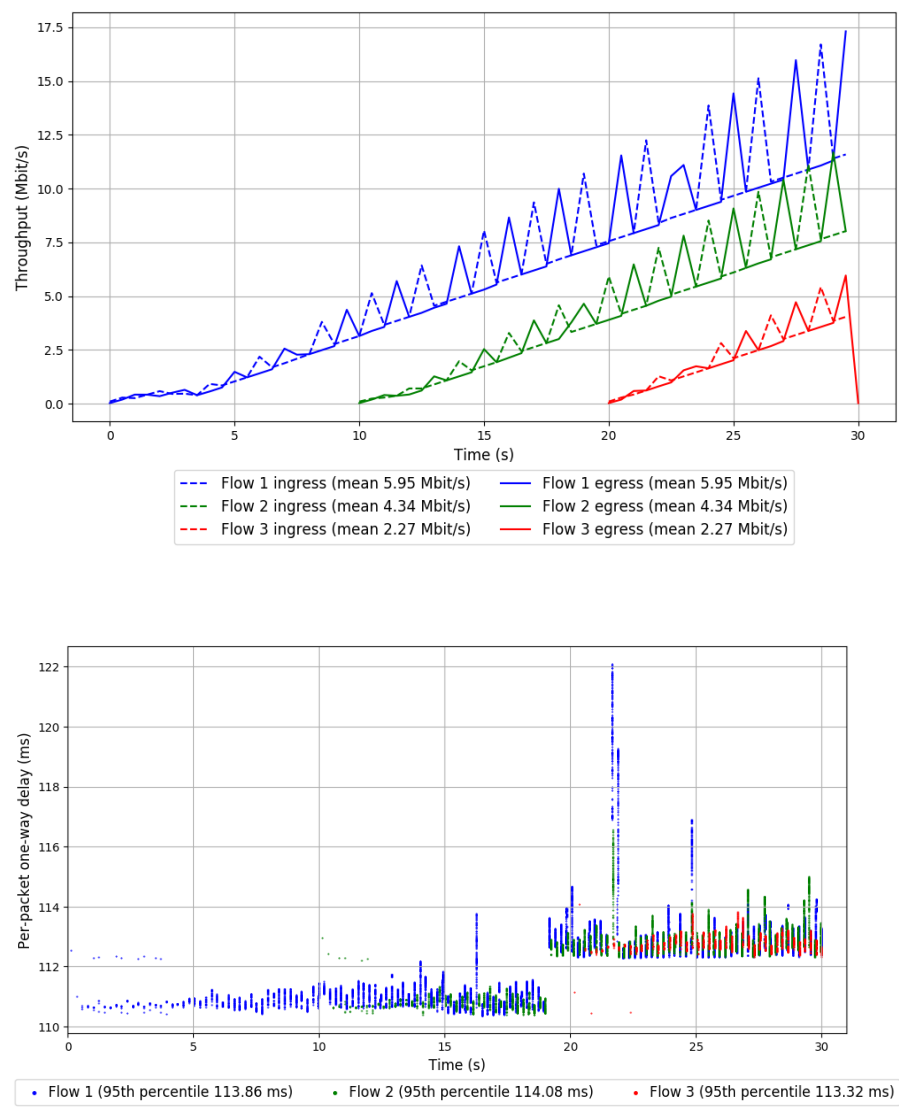


```
Run 10: Statistics of LEDBAT

Start at: 2018-04-04 06:11:06
End at: 2018-04-04 06:11:36

# Below is generated by plot.py at 2018-04-04 08:33:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.58 Mbit/s
95th percentile per-packet one-way delay: 113.852 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.95 Mbit/s
95th percentile per-packet one-way delay: 113.856 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.34 Mbit/s
95th percentile per-packet one-way delay: 114.084 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 113.317 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

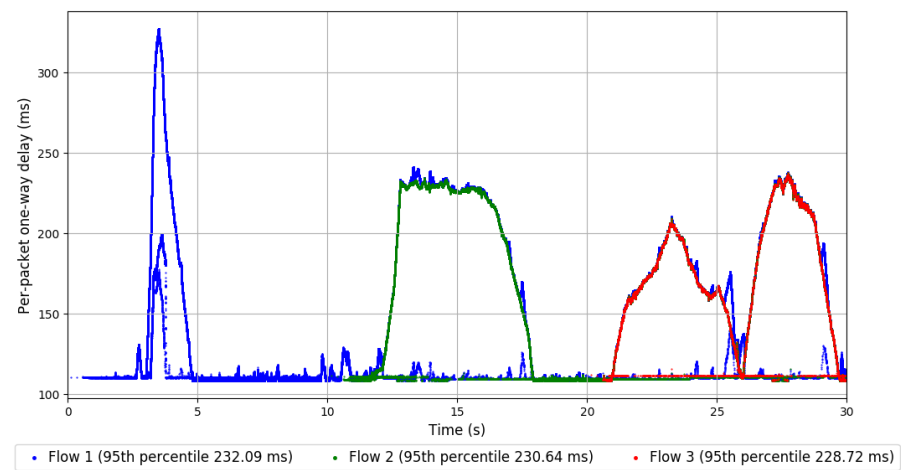
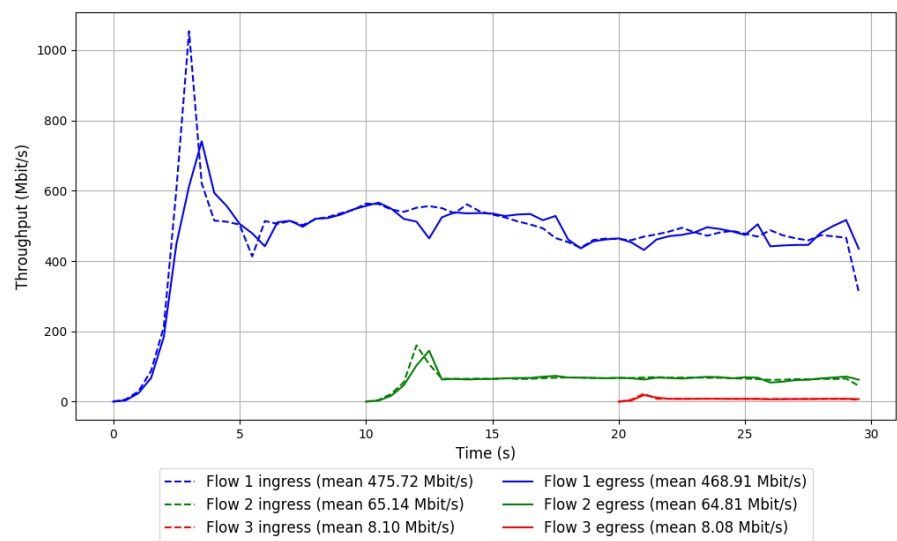


```
Run 1: Statistics of PCC

Start at: 2018-04-04 03:30:51
End at: 2018-04-04 03:31:21

# Below is generated by plot.py at 2018-04-04 08:41:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 514.55 Mbit/s
95th percentile per-packet one-way delay: 231.894 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 468.91 Mbit/s
95th percentile per-packet one-way delay: 232.088 ms
Loss rate: 1.43%
-- Flow 2:
Average throughput: 64.81 Mbit/s
95th percentile per-packet one-way delay: 230.644 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 8.08 Mbit/s
95th percentile per-packet one-way delay: 228.719 ms
Loss rate: 0.26%
```

Run 1: Report of PCC — Data Link

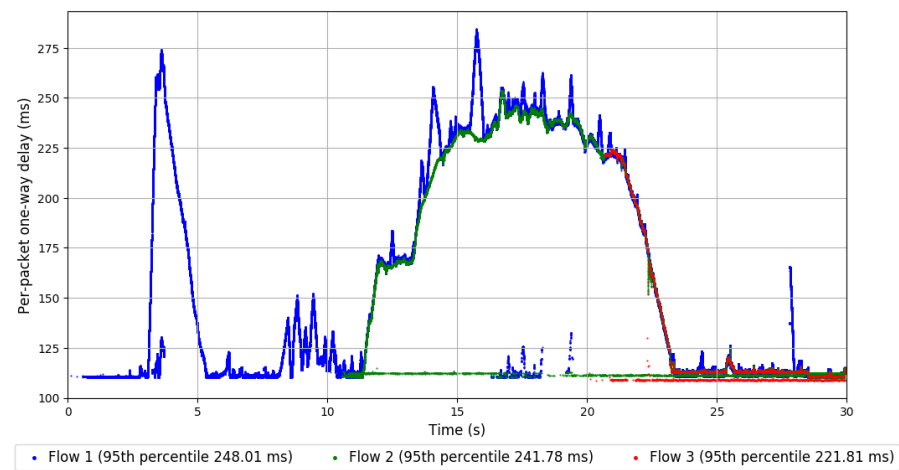
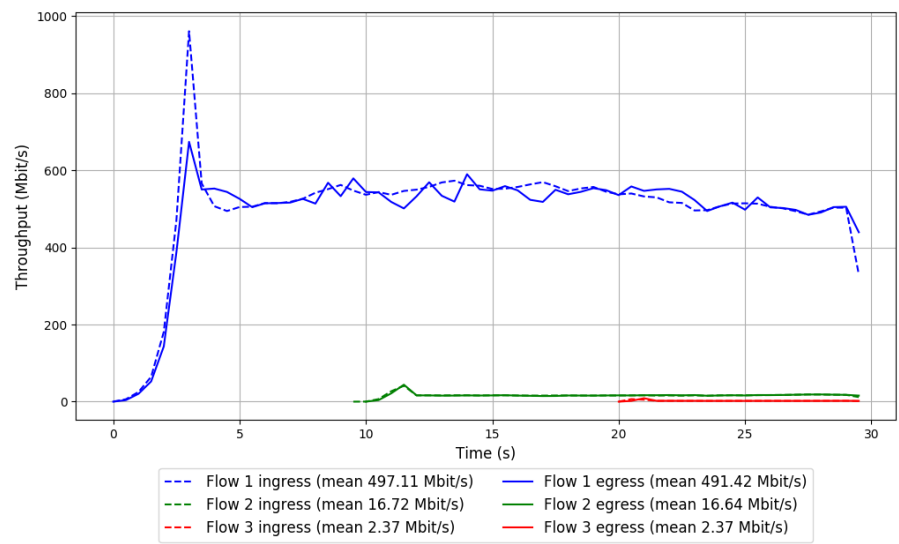


```
Run 2: Statistics of PCC

Start at: 2018-04-04 03:49:57
End at: 2018-04-04 03:50:27

# Below is generated by plot.py at 2018-04-04 08:41:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 503.26 Mbit/s
95th percentile per-packet one-way delay: 247.804 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 491.42 Mbit/s
95th percentile per-packet one-way delay: 248.013 ms
Loss rate: 1.14%
-- Flow 2:
Average throughput: 16.64 Mbit/s
95th percentile per-packet one-way delay: 241.782 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 221.808 ms
Loss rate: 0.00%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-04-04 04:08:51

End at: 2018-04-04 04:09:21

Below is generated by plot.py at 2018-04-04 08:41:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 509.79 Mbit/s

95th percentile per-packet one-way delay: 266.196 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 462.05 Mbit/s

95th percentile per-packet one-way delay: 270.693 ms

Loss rate: 1.26%

-- Flow 2:

Average throughput: 63.51 Mbit/s

95th percentile per-packet one-way delay: 232.390 ms

Loss rate: 0.08%

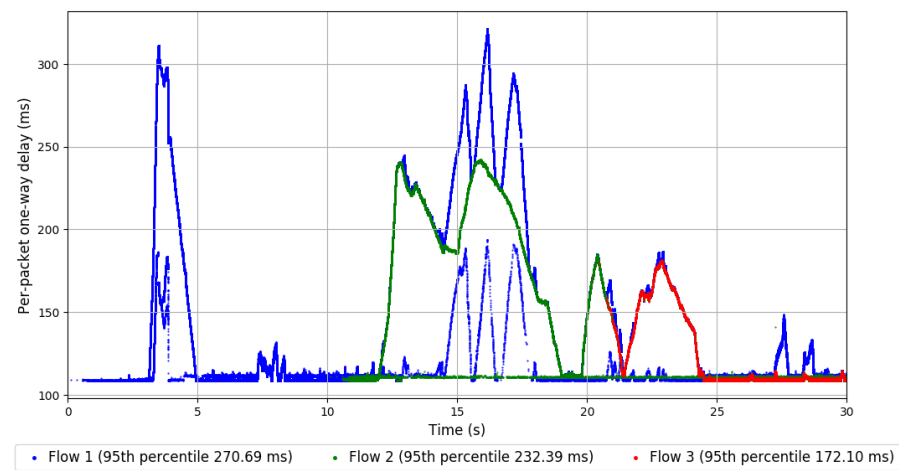
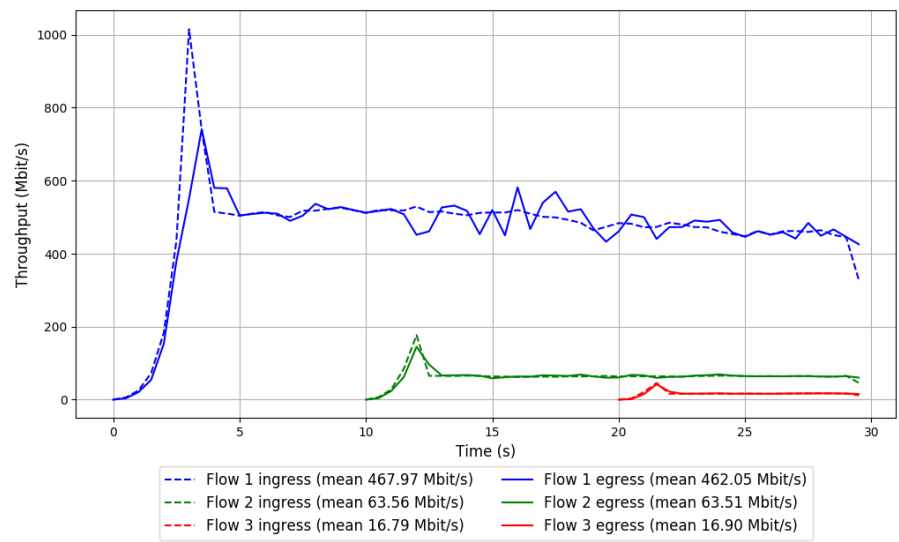
-- Flow 3:

Average throughput: 16.90 Mbit/s

95th percentile per-packet one-way delay: 172.102 ms

Loss rate: 0.00%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

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

End at: 2018-04-04 04:28:21

Below is generated by plot.py at 2018-04-04 08:41:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 511.36 Mbit/s

95th percentile per-packet one-way delay: 242.986 ms

Loss rate: 1.66%

-- Flow 1:

Average throughput: 469.11 Mbit/s

95th percentile per-packet one-way delay: 243.020 ms

Loss rate: 1.65%

-- Flow 2:

Average throughput: 31.82 Mbit/s

95th percentile per-packet one-way delay: 242.222 ms

Loss rate: 0.99%

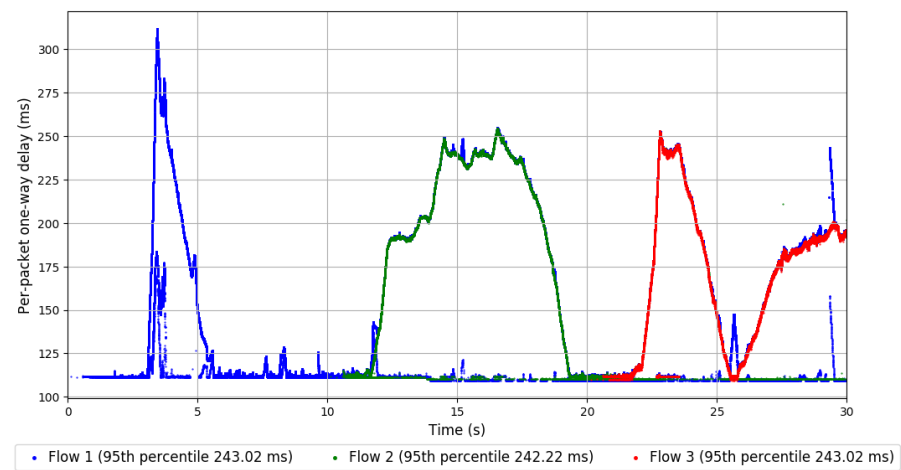
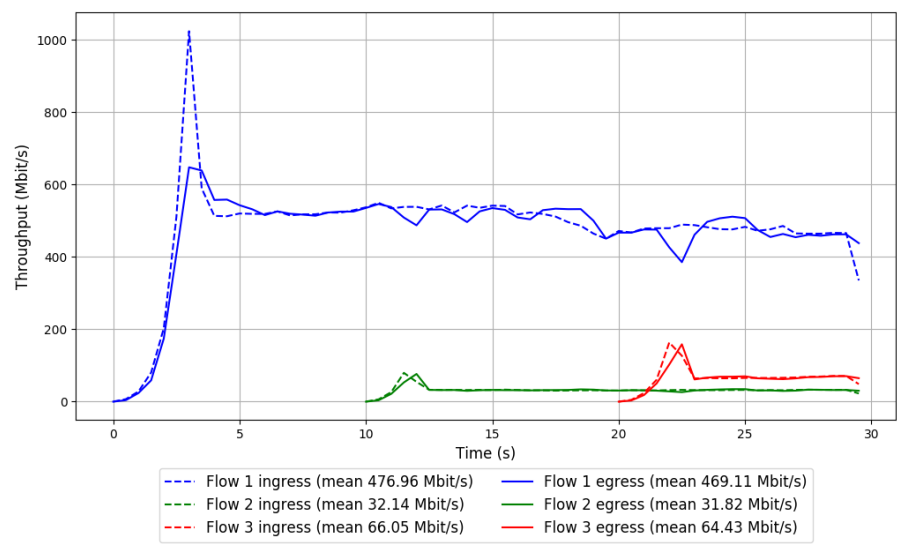
-- Flow 3:

Average throughput: 64.43 Mbit/s

95th percentile per-packet one-way delay: 243.022 ms

Loss rate: 2.45%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-04-04 04:46:56

End at: 2018-04-04 04:47:26

Below is generated by plot.py at 2018-04-04 08:41:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 508.63 Mbit/s

95th percentile per-packet one-way delay: 250.842 ms

Loss rate: 1.41%

-- Flow 1:

Average throughput: 465.75 Mbit/s

95th percentile per-packet one-way delay: 255.658 ms

Loss rate: 1.49%

-- Flow 2:

Average throughput: 33.12 Mbit/s

95th percentile per-packet one-way delay: 219.617 ms

Loss rate: 0.29%

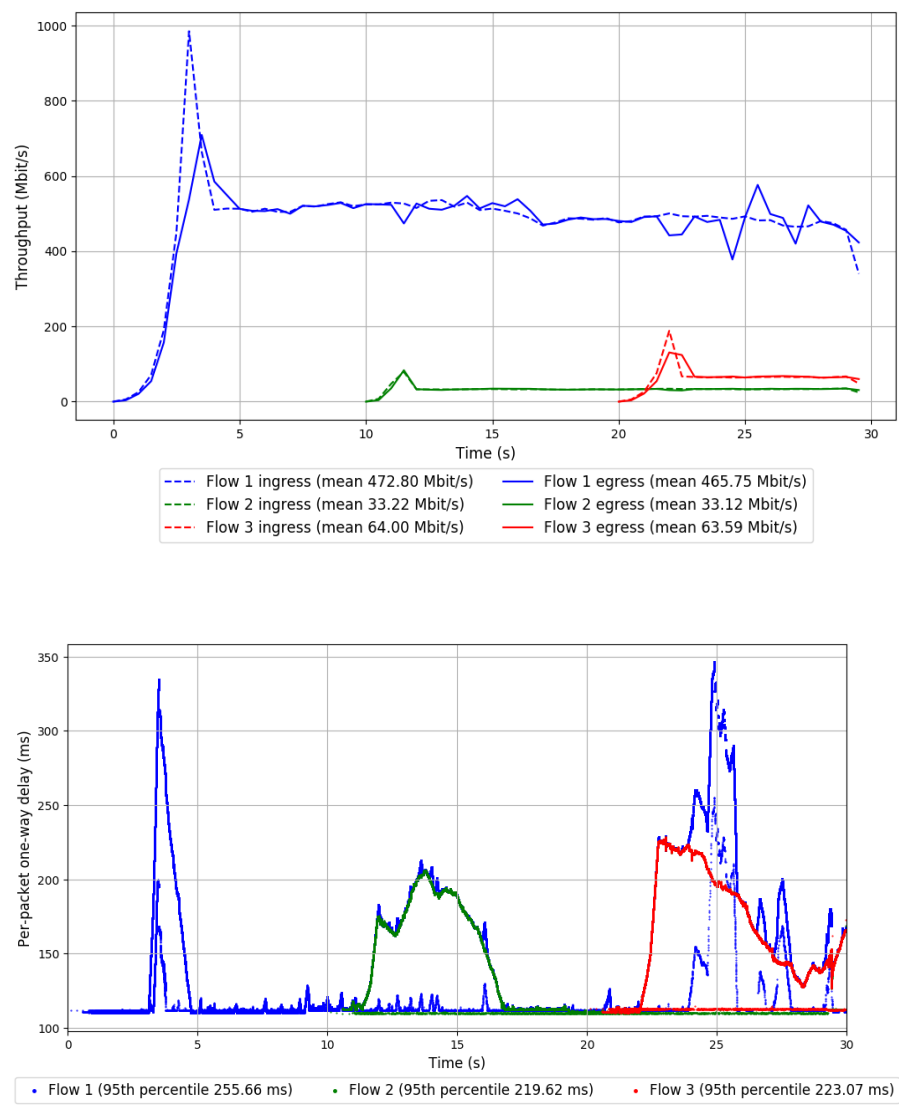
-- Flow 3:

Average throughput: 63.59 Mbit/s

95th percentile per-packet one-way delay: 223.072 ms

Loss rate: 0.60%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-04-04 05:07:19

End at: 2018-04-04 05:07:49

Below is generated by plot.py at 2018-04-04 08:41:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 495.21 Mbit/s

95th percentile per-packet one-way delay: 275.590 ms

Loss rate: 2.30%

-- Flow 1:

Average throughput: 453.69 Mbit/s

95th percentile per-packet one-way delay: 282.751 ms

Loss rate: 2.46%

-- Flow 2:

Average throughput: 61.26 Mbit/s

95th percentile per-packet one-way delay: 240.529 ms

Loss rate: 0.59%

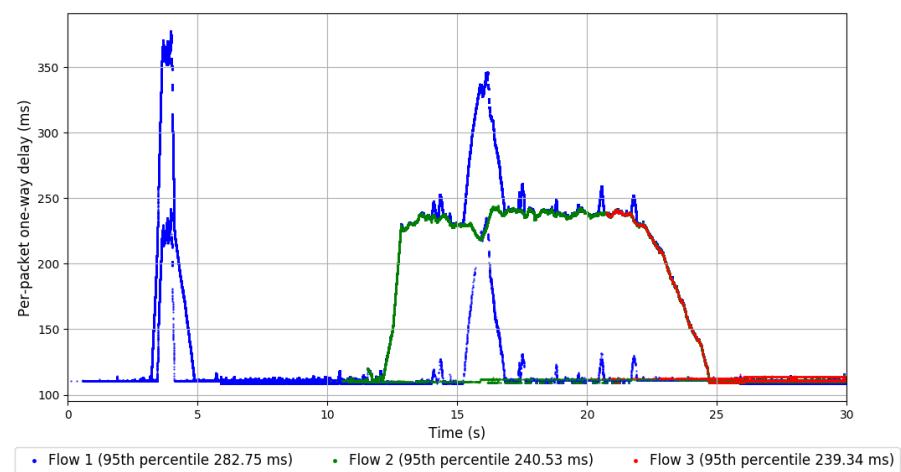
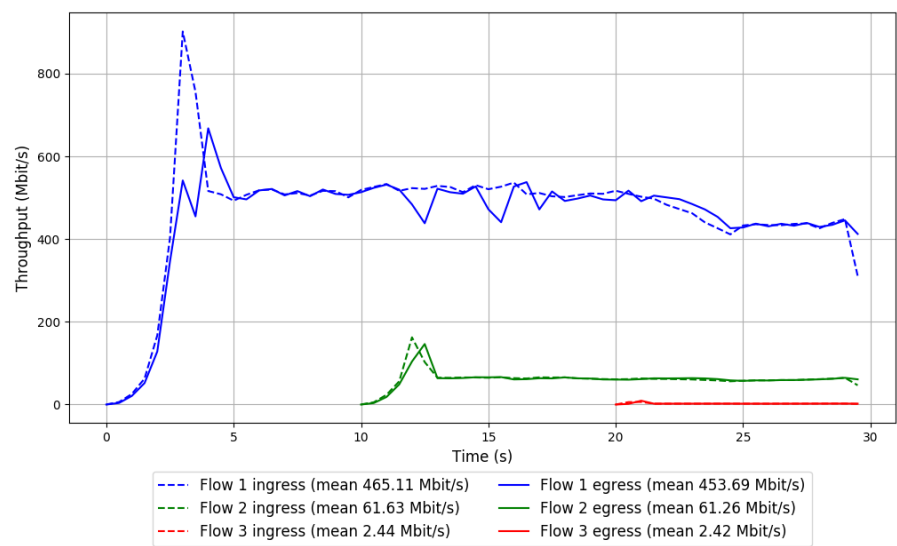
-- Flow 3:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 239.345 ms

Loss rate: 0.70%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-04-04 05:26:46

End at: 2018-04-04 05:27:17

Below is generated by plot.py at 2018-04-04 08:42:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 507.93 Mbit/s

95th percentile per-packet one-way delay: 237.774 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 466.93 Mbit/s

95th percentile per-packet one-way delay: 237.954 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 60.67 Mbit/s

95th percentile per-packet one-way delay: 237.034 ms

Loss rate: 0.52%

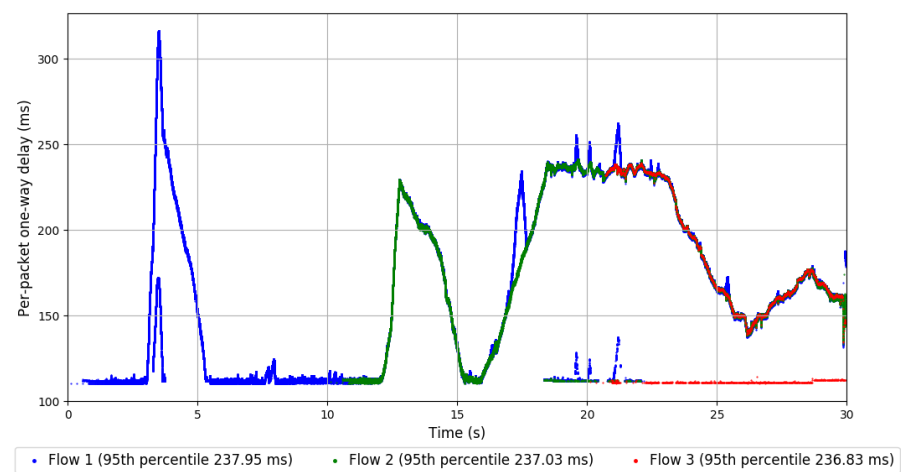
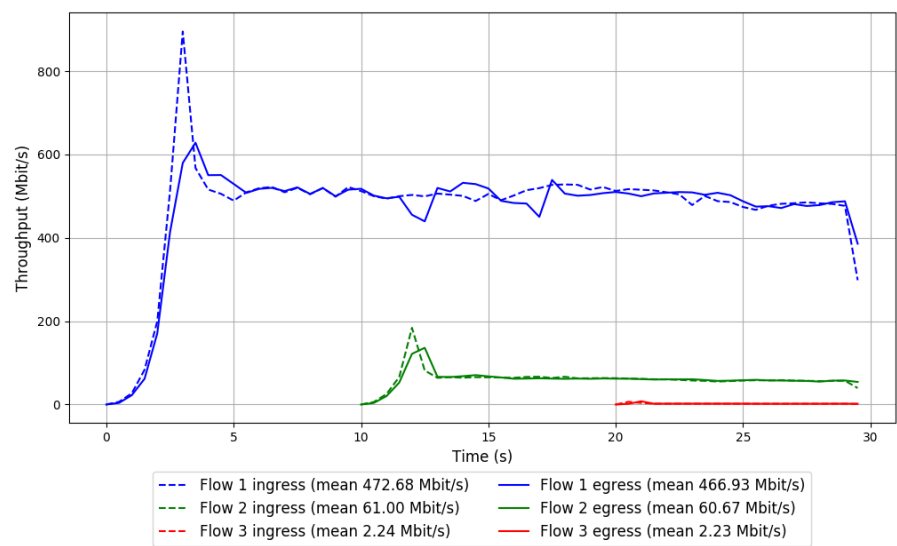
-- Flow 3:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 236.828 ms

Loss rate: 0.55%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-04-04 05:46:20

End at: 2018-04-04 05:46:50

Below is generated by plot.py at 2018-04-04 08:43:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 525.31 Mbit/s

95th percentile per-packet one-way delay: 244.508 ms

Loss rate: 2.57%

-- Flow 1:

Average throughput: 483.44 Mbit/s

95th percentile per-packet one-way delay: 245.109 ms

Loss rate: 2.63%

-- Flow 2:

Average throughput: 61.99 Mbit/s

95th percentile per-packet one-way delay: 240.435 ms

Loss rate: 1.88%

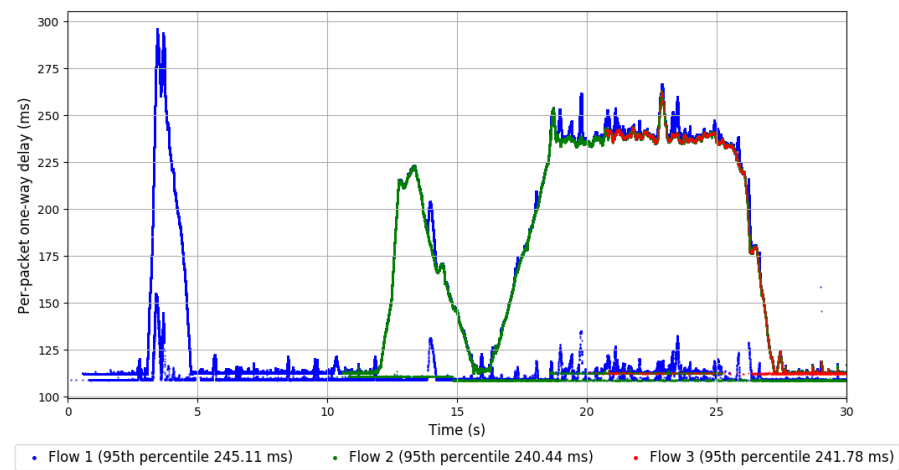
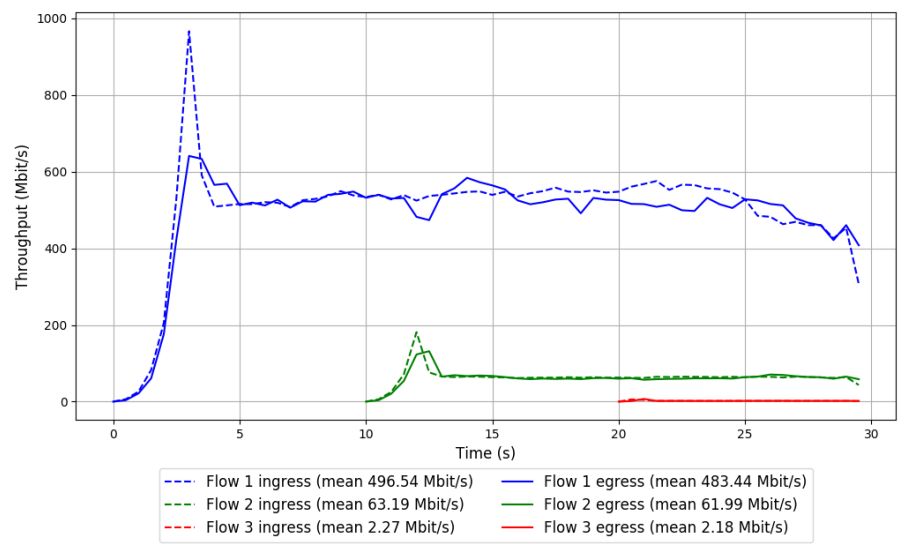
-- Flow 3:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 241.778 ms

Loss rate: 3.93%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-04-04 06:05:43

End at: 2018-04-04 06:06:13

Below is generated by plot.py at 2018-04-04 08:49:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 510.63 Mbit/s

95th percentile per-packet one-way delay: 253.011 ms

Loss rate: 2.15%

-- Flow 1:

Average throughput: 458.84 Mbit/s

95th percentile per-packet one-way delay: 255.017 ms

Loss rate: 2.31%

-- Flow 2:

Average throughput: 61.84 Mbit/s

95th percentile per-packet one-way delay: 237.713 ms

Loss rate: 0.64%

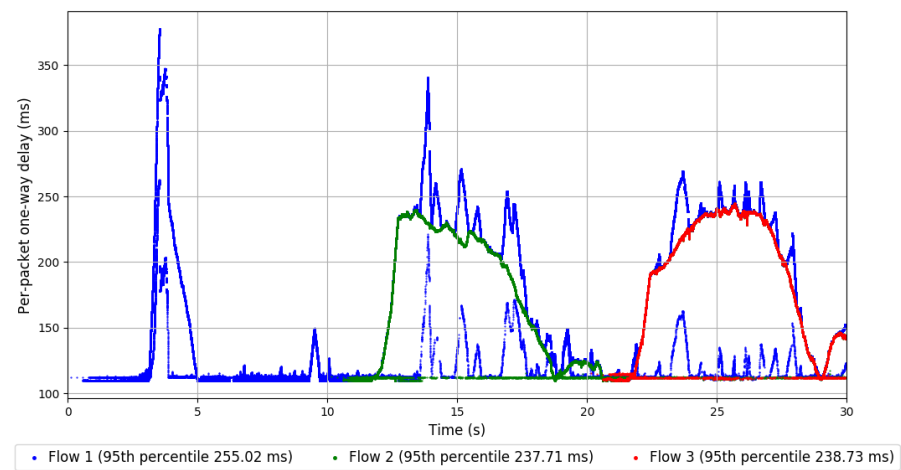
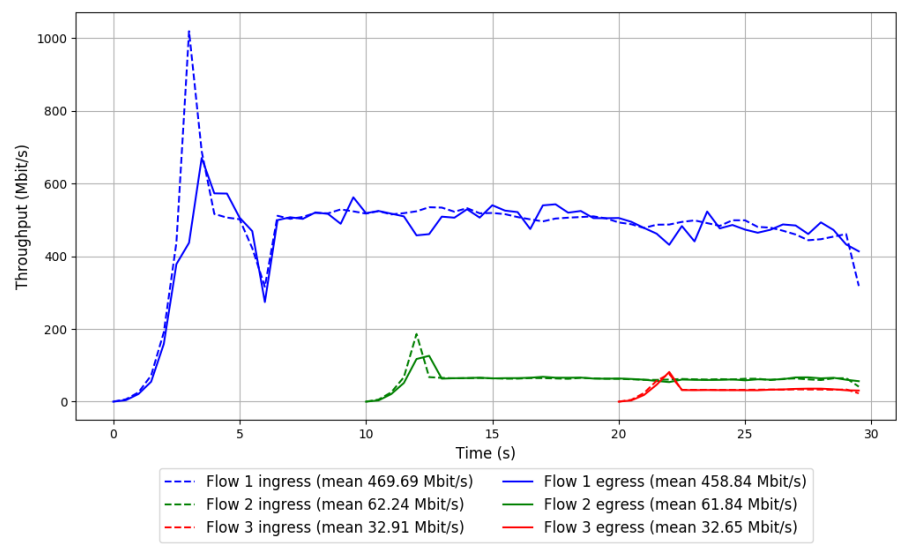
-- Flow 3:

Average throughput: 32.65 Mbit/s

95th percentile per-packet one-way delay: 238.727 ms

Loss rate: 0.79%

Run 9: Report of PCC — Data Link

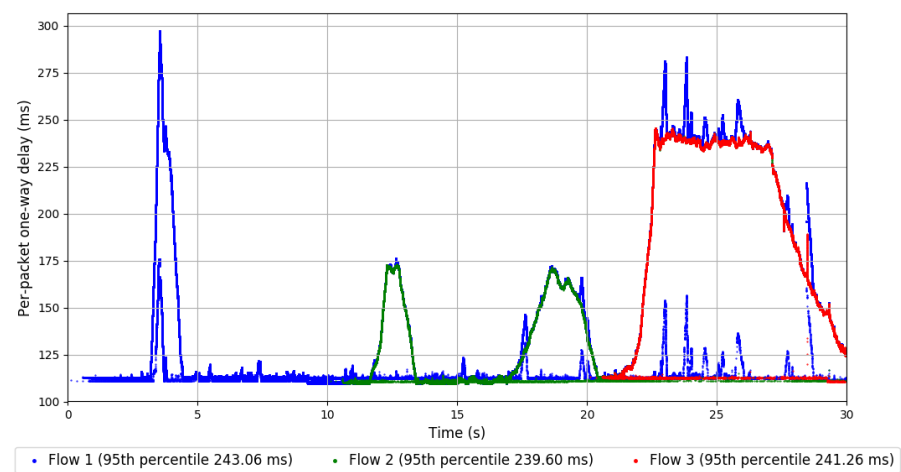
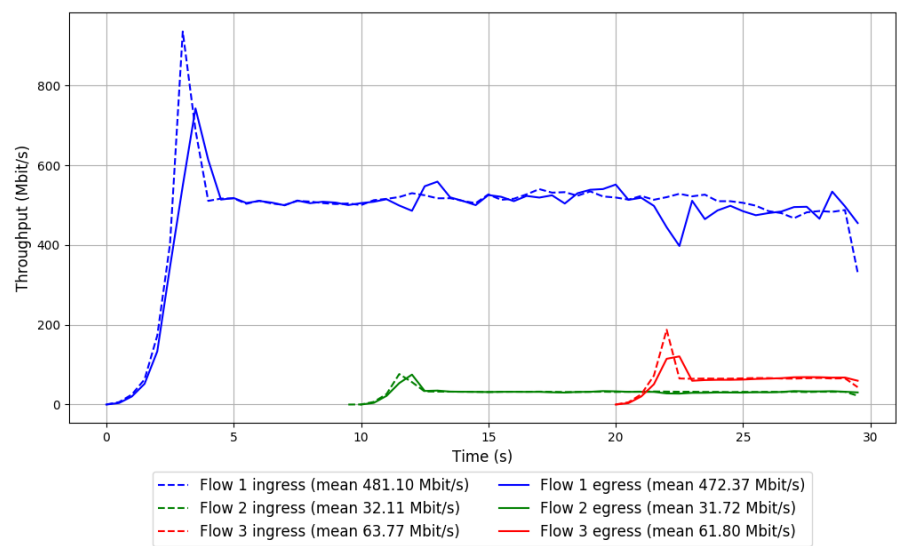


```
Run 10: Statistics of PCC

Start at: 2018-04-04 06:25:06
End at: 2018-04-04 06:25:36

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 513.81 Mbit/s
95th percentile per-packet one-way delay: 242.589 ms
Loss rate: 1.84%
-- Flow 1:
Average throughput: 472.37 Mbit/s
95th percentile per-packet one-way delay: 243.056 ms
Loss rate: 1.81%
-- Flow 2:
Average throughput: 31.72 Mbit/s
95th percentile per-packet one-way delay: 239.598 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 61.80 Mbit/s
95th percentile per-packet one-way delay: 241.262 ms
Loss rate: 3.10%
```

Run 10: Report of PCC — Data Link

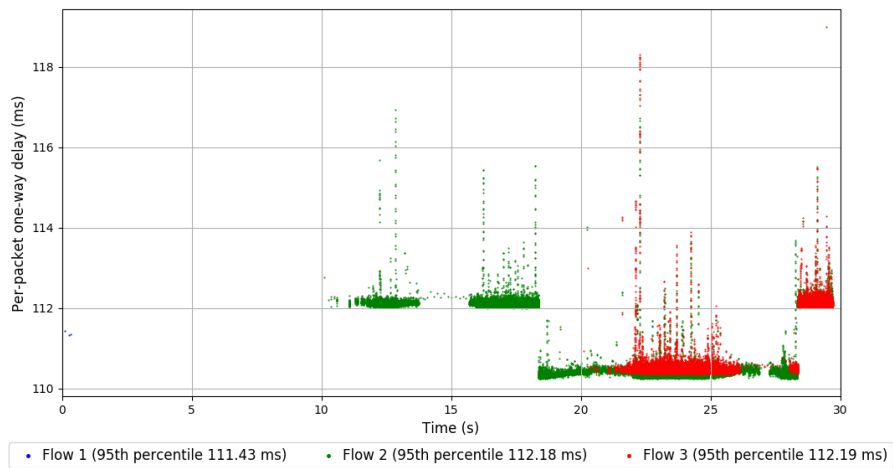
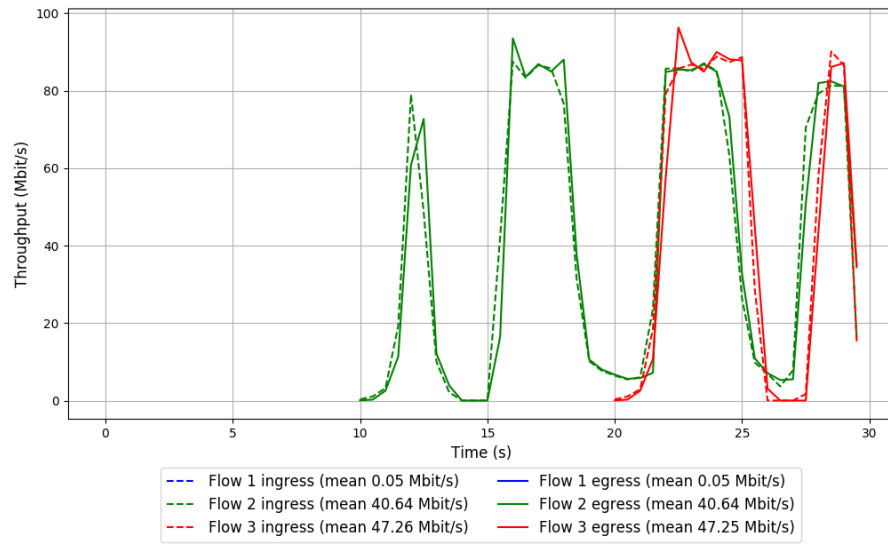


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-04-04 03:34:27
End at: 2018-04-04 03:34:57

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.19 Mbit/s
95th percentile per-packet one-way delay: 112.182 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 111.429 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.64 Mbit/s
95th percentile per-packet one-way delay: 112.180 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 47.25 Mbit/s
95th percentile per-packet one-way delay: 112.188 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link

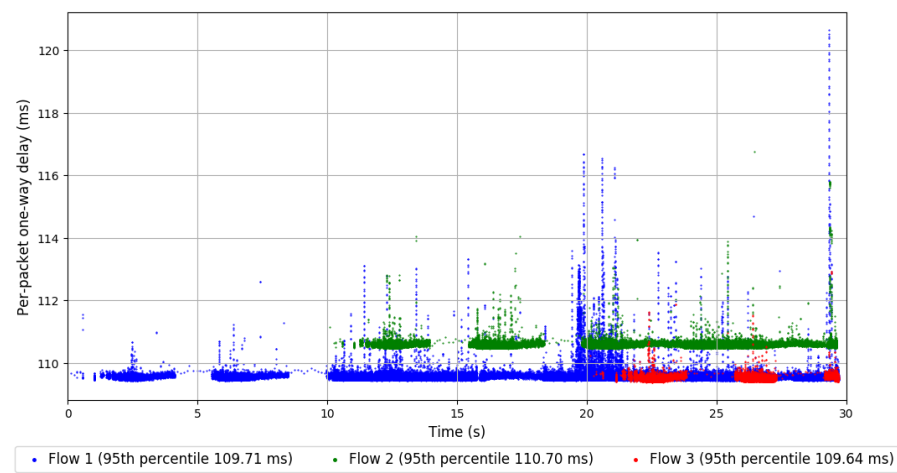
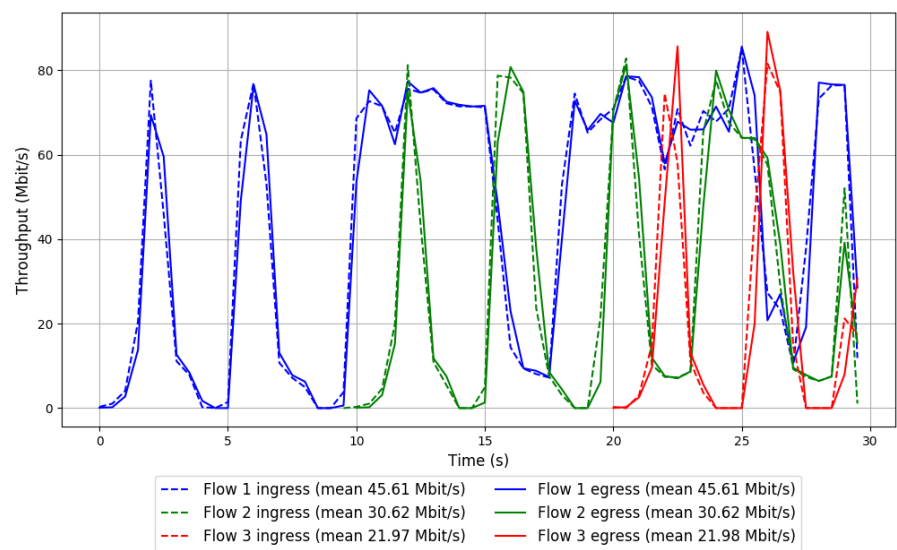


```
Run 2: Statistics of QUIC Cubic

Start at: 2018-04-04 03:53:11
End at: 2018-04-04 03:53:41

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.93 Mbit/s
95th percentile per-packet one-way delay: 110.634 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.61 Mbit/s
95th percentile per-packet one-way delay: 109.706 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 30.62 Mbit/s
95th percentile per-packet one-way delay: 110.697 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.98 Mbit/s
95th percentile per-packet one-way delay: 109.642 ms
Loss rate: 0.01%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-04-04 04:12:09

End at: 2018-04-04 04:12:39

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.44 Mbit/s

95th percentile per-packet one-way delay: 112.578 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.84 Mbit/s

95th percentile per-packet one-way delay: 112.606 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.31 Mbit/s

95th percentile per-packet one-way delay: 110.564 ms

Loss rate: 0.00%

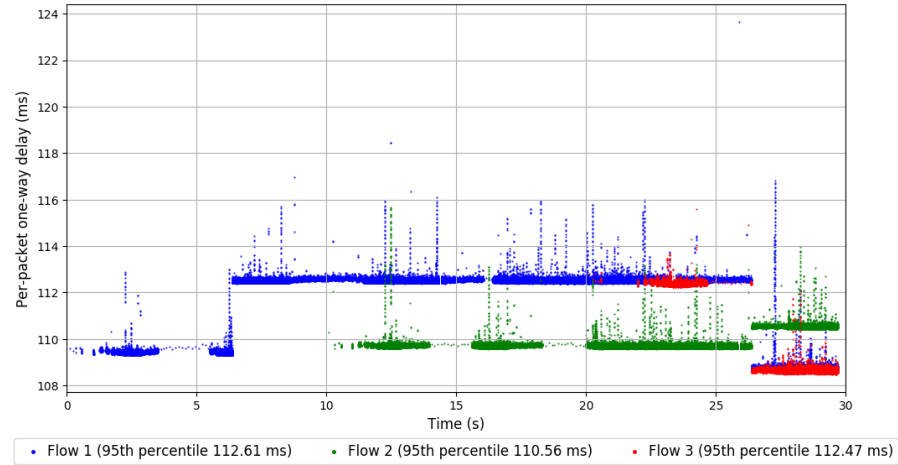
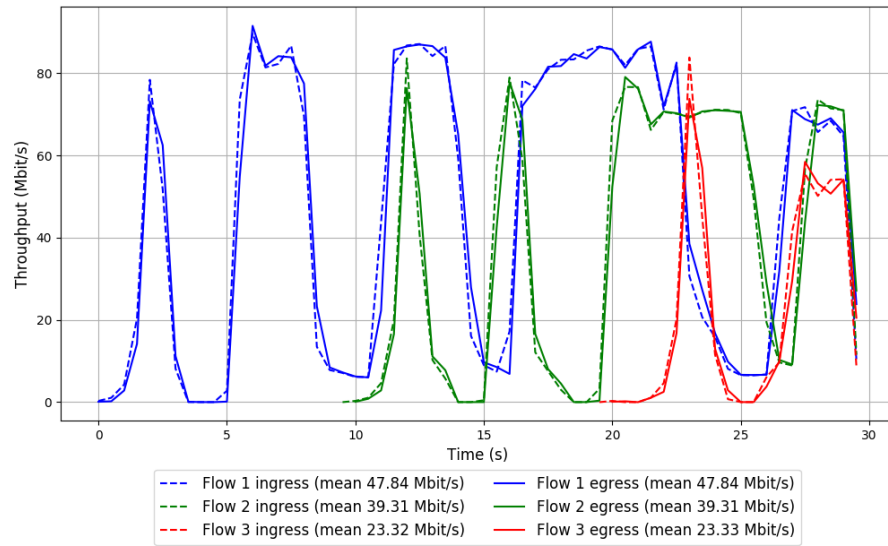
-- Flow 3:

Average throughput: 23.33 Mbit/s

95th percentile per-packet one-way delay: 112.465 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-04-04 04:31:07

End at: 2018-04-04 04:31:37

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.32 Mbit/s

95th percentile per-packet one-way delay: 111.342 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.75 Mbit/s

95th percentile per-packet one-way delay: 111.367 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.35 Mbit/s

95th percentile per-packet one-way delay: 110.301 ms

Loss rate: 0.00%

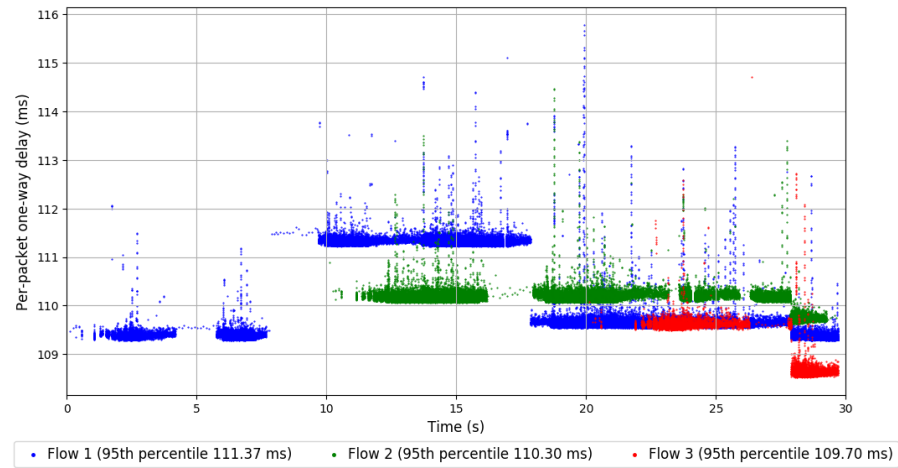
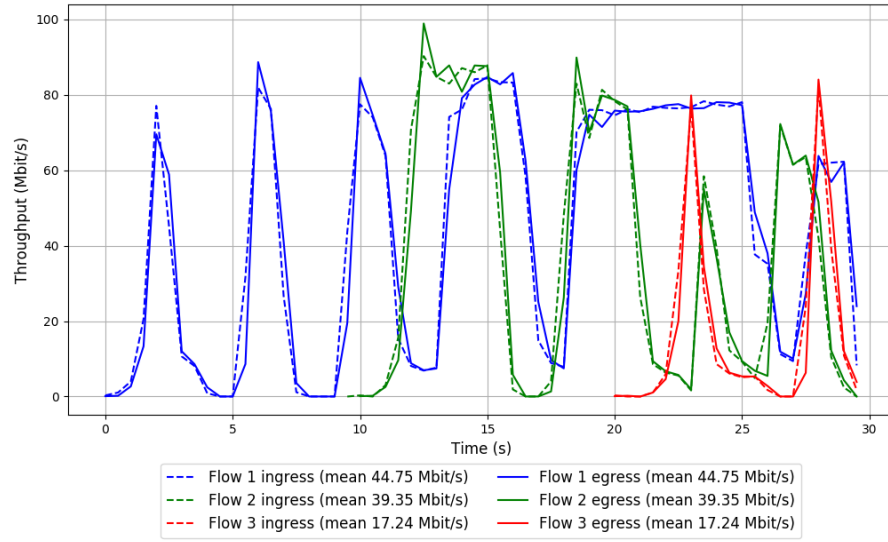
-- Flow 3:

Average throughput: 17.24 Mbit/s

95th percentile per-packet one-way delay: 109.700 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-04-04 04:50:22

End at: 2018-04-04 04:50:52

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.27 Mbit/s

95th percentile per-packet one-way delay: 111.465 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 52.91 Mbit/s

95th percentile per-packet one-way delay: 110.590 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 31.85 Mbit/s

95th percentile per-packet one-way delay: 111.271 ms

Loss rate: 0.00%

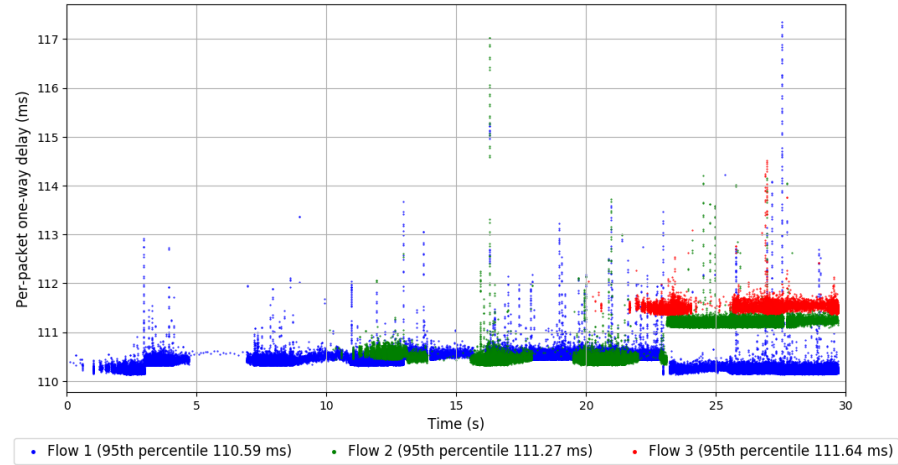
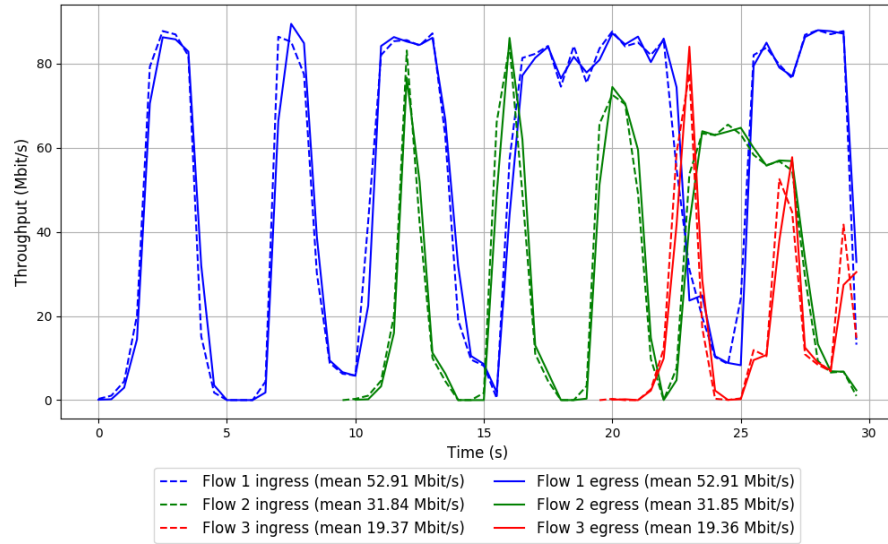
-- Flow 3:

Average throughput: 19.36 Mbit/s

95th percentile per-packet one-way delay: 111.637 ms

Loss rate: 0.05%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-04-04 05:10:29

End at: 2018-04-04 05:10:59

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.18 Mbit/s

95th percentile per-packet one-way delay: 112.346 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.72 Mbit/s

95th percentile per-packet one-way delay: 112.374 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.07 Mbit/s

95th percentile per-packet one-way delay: 112.281 ms

Loss rate: 0.00%

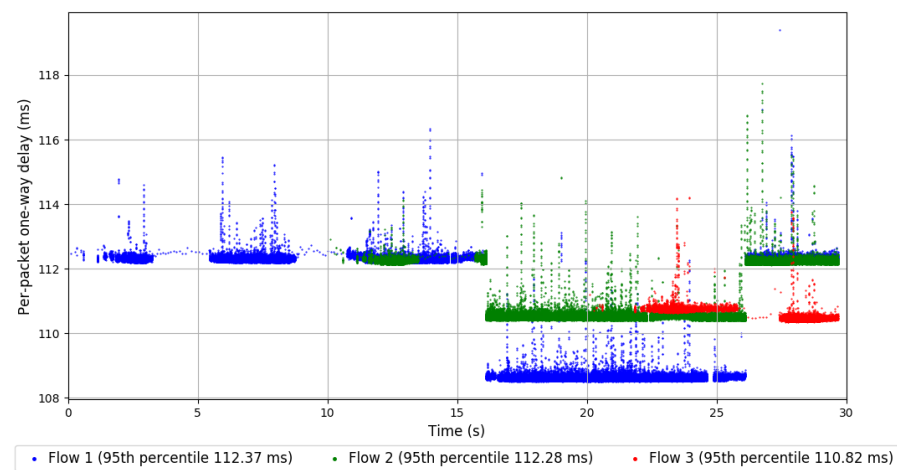
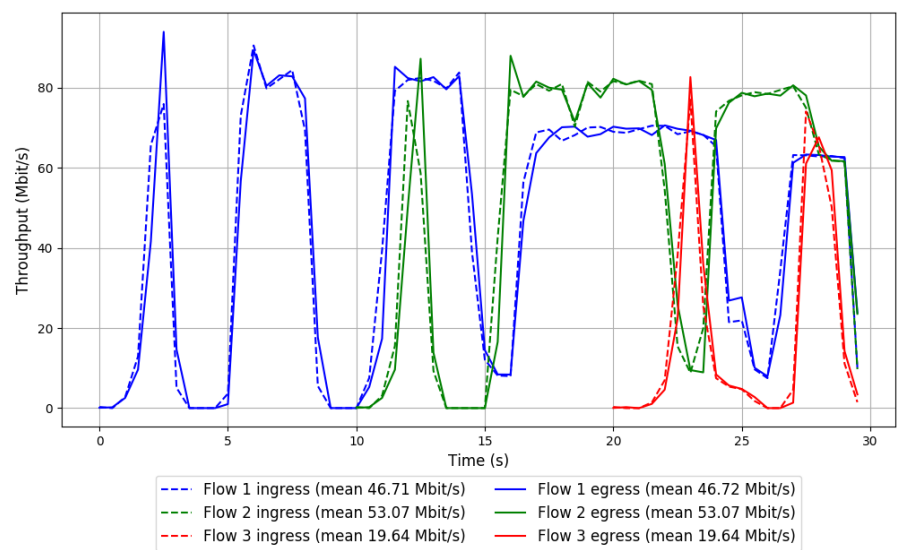
-- Flow 3:

Average throughput: 19.64 Mbit/s

95th percentile per-packet one-way delay: 110.820 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-04-04 05:30:12

End at: 2018-04-04 05:30:42

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.69 Mbit/s

95th percentile per-packet one-way delay: 111.560 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.37 Mbit/s

95th percentile per-packet one-way delay: 110.526 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.89 Mbit/s

95th percentile per-packet one-way delay: 111.630 ms

Loss rate: 0.00%

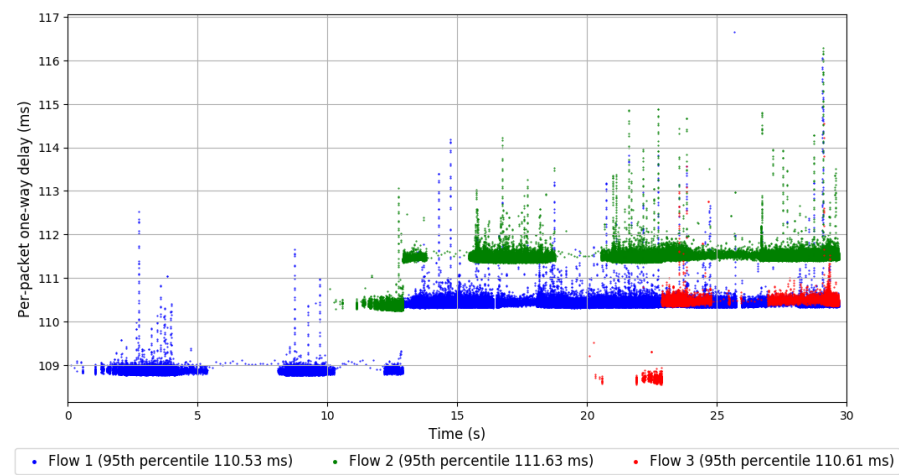
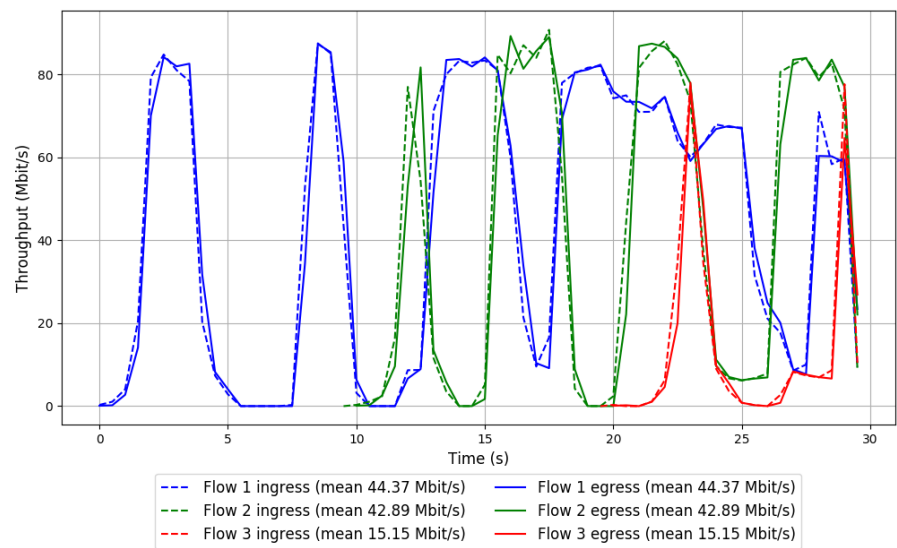
-- Flow 3:

Average throughput: 15.15 Mbit/s

95th percentile per-packet one-way delay: 110.614 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-04-04 05:49:42

End at: 2018-04-04 05:50:12

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.84 Mbit/s

95th percentile per-packet one-way delay: 111.338 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.59 Mbit/s

95th percentile per-packet one-way delay: 109.859 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.47 Mbit/s

95th percentile per-packet one-way delay: 110.509 ms

Loss rate: 0.00%

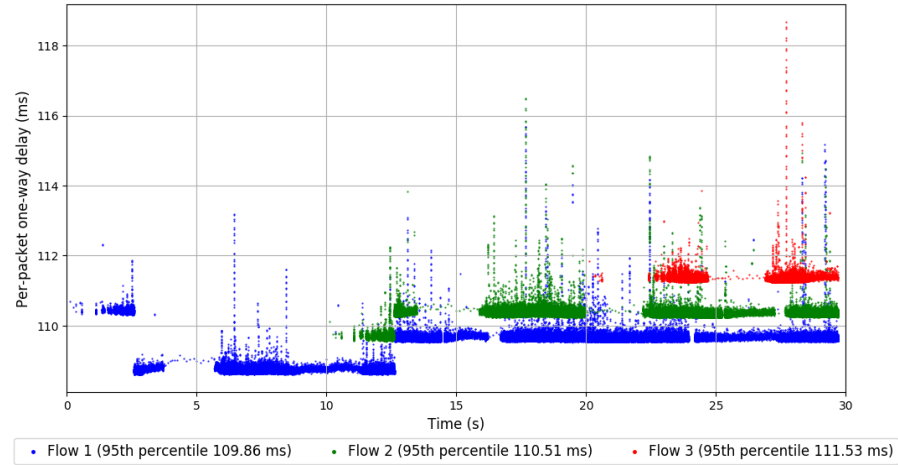
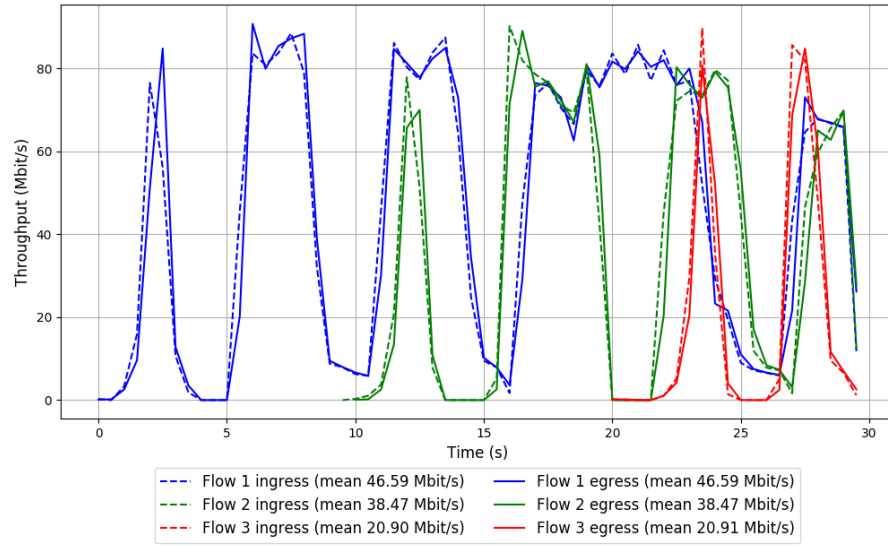
-- Flow 3:

Average throughput: 20.91 Mbit/s

95th percentile per-packet one-way delay: 111.529 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-04-04 06:09:03

End at: 2018-04-04 06:09:33

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.91 Mbit/s

95th percentile per-packet one-way delay: 112.292 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 38.67 Mbit/s

95th percentile per-packet one-way delay: 112.332 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.52 Mbit/s

95th percentile per-packet one-way delay: 110.377 ms

Loss rate: 0.00%

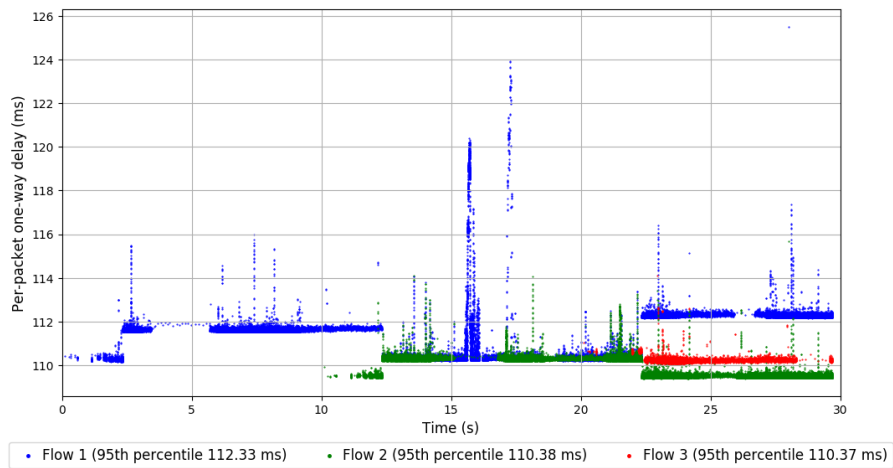
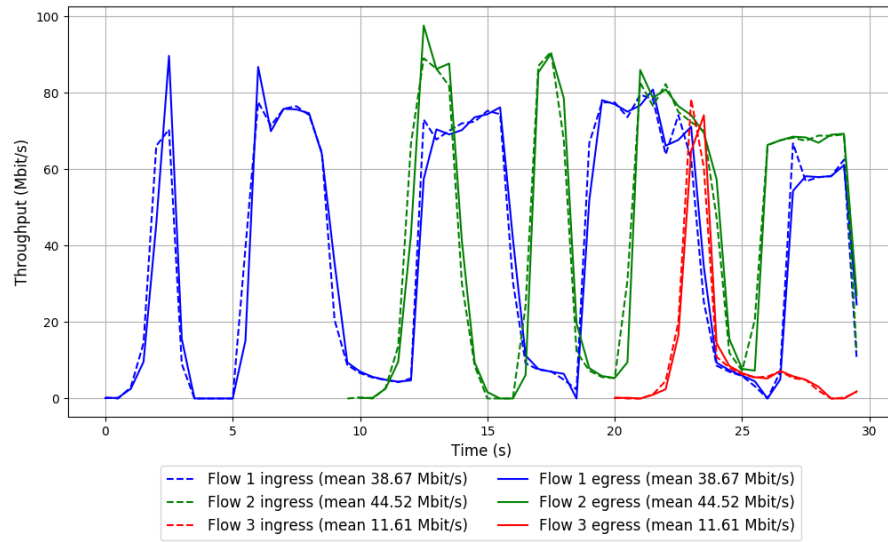
-- Flow 3:

Average throughput: 11.61 Mbit/s

95th percentile per-packet one-way delay: 110.366 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

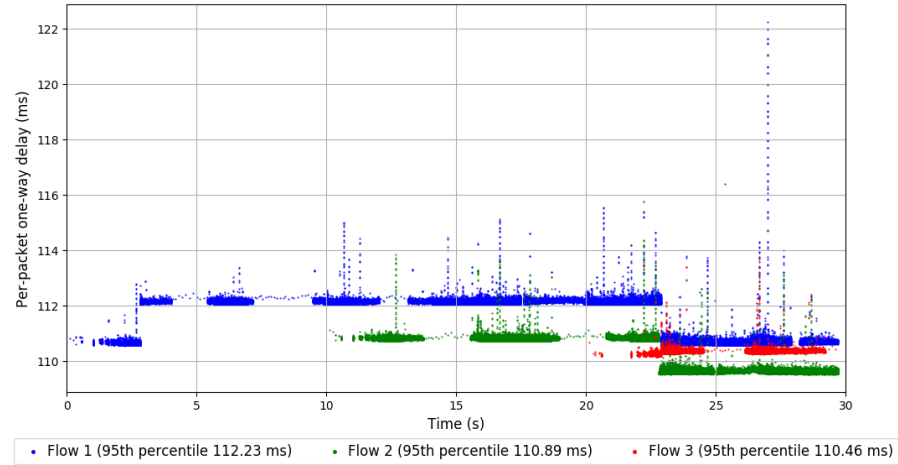
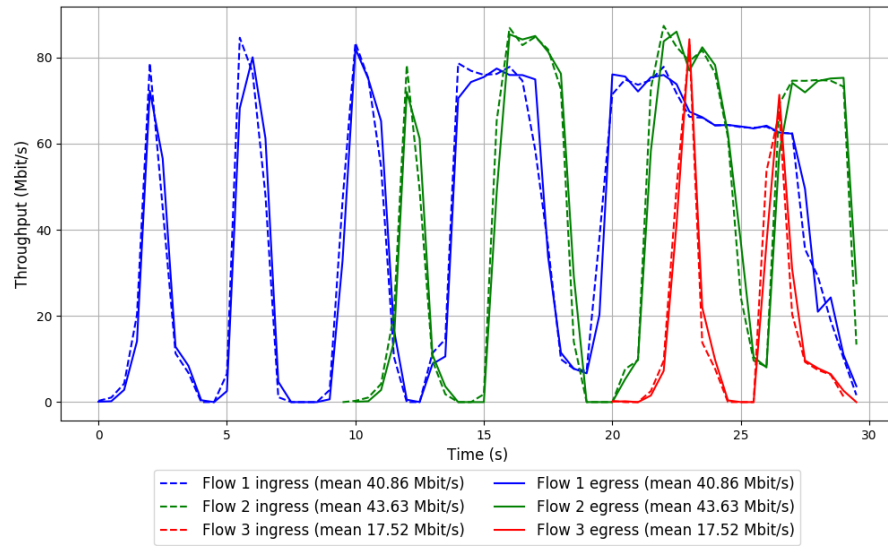


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-04-04 06:28:22
End at: 2018-04-04 06:28:52

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.38 Mbit/s
95th percentile per-packet one-way delay: 112.198 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.86 Mbit/s
95th percentile per-packet one-way delay: 112.227 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 43.63 Mbit/s
95th percentile per-packet one-way delay: 110.886 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.52 Mbit/s
95th percentile per-packet one-way delay: 110.462 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

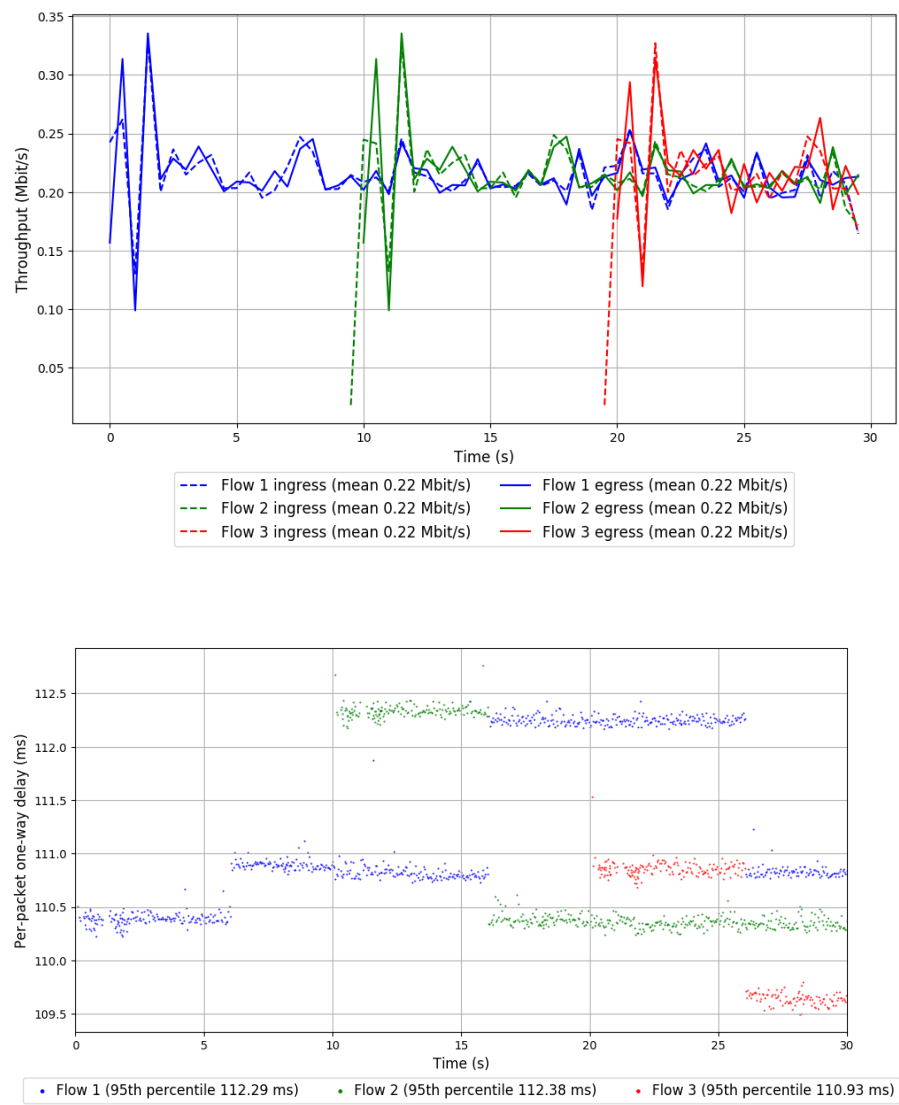


```
Run 1: Statistics of SCReAM

Start at: 2018-04-04 03:19:49
End at: 2018-04-04 03:20:19

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.338 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.291 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.379 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.926 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

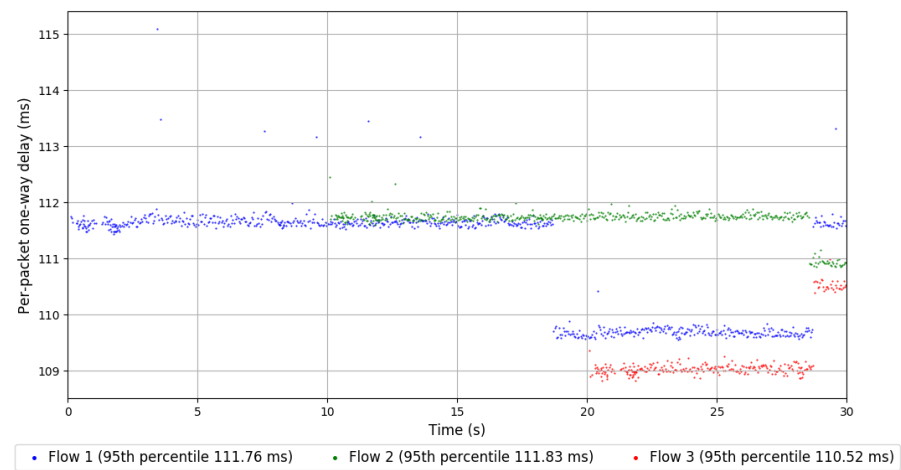
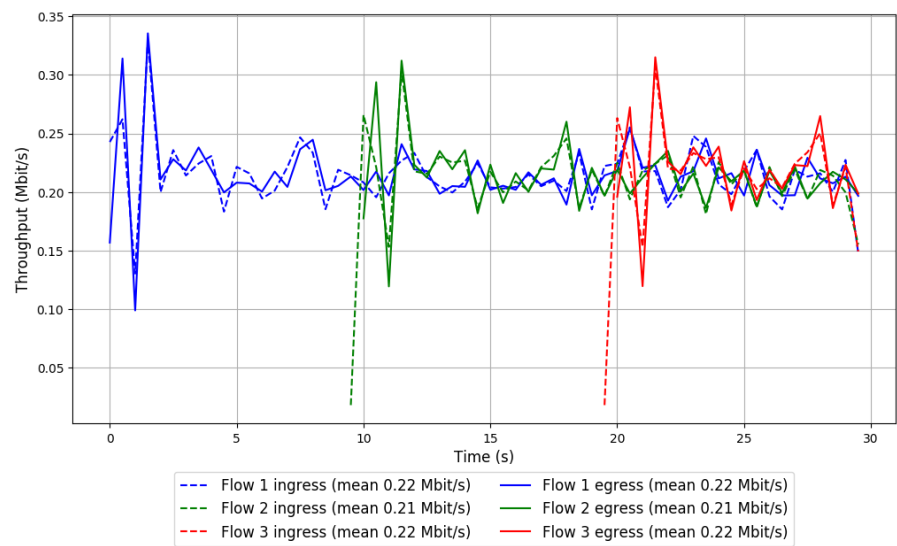


```
Run 2: Statistics of SCReAM

Start at: 2018-04-04 03:39:06
End at: 2018-04-04 03:39:36

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 111.798 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.762 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 111.827 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.520 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

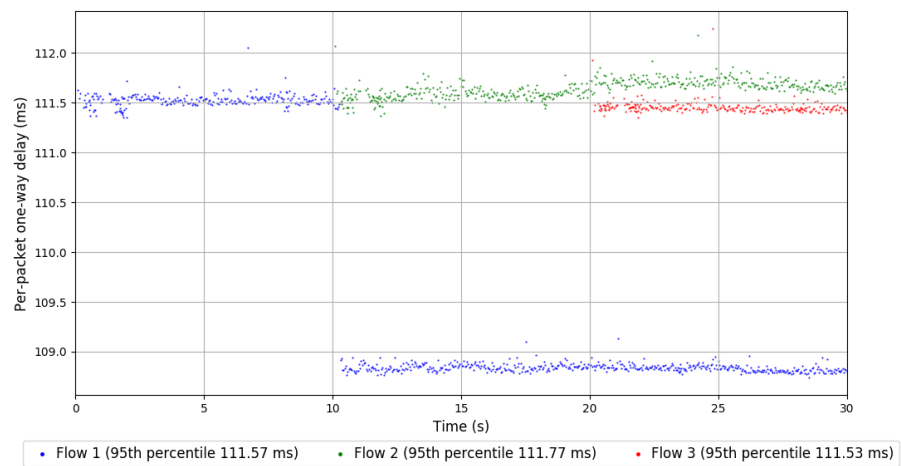
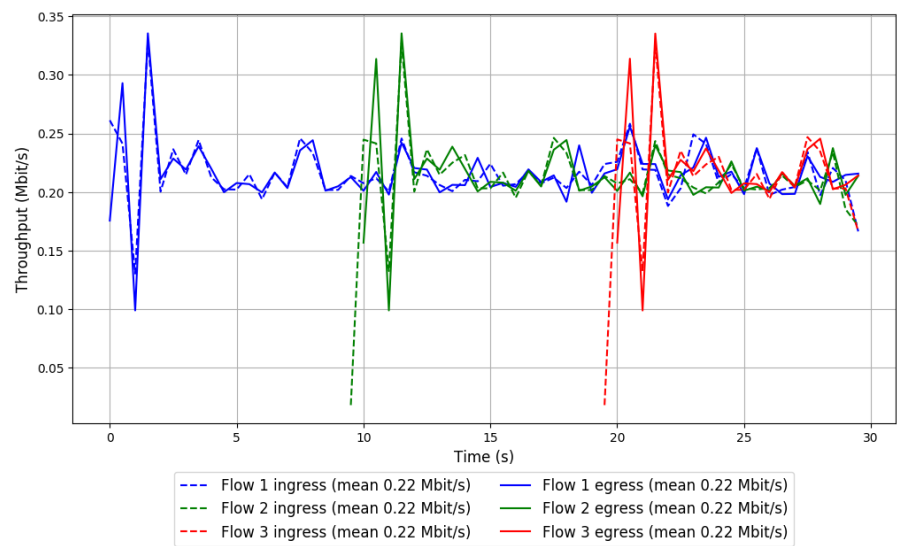


```
Run 3: Statistics of SCReAM

Start at: 2018-04-04 03:57:55
End at: 2018-04-04 03:58:25

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 111.731 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.573 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.771 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.534 ms
Loss rate: 0.00%
```


Run 3: Report of SReAM — Data Link

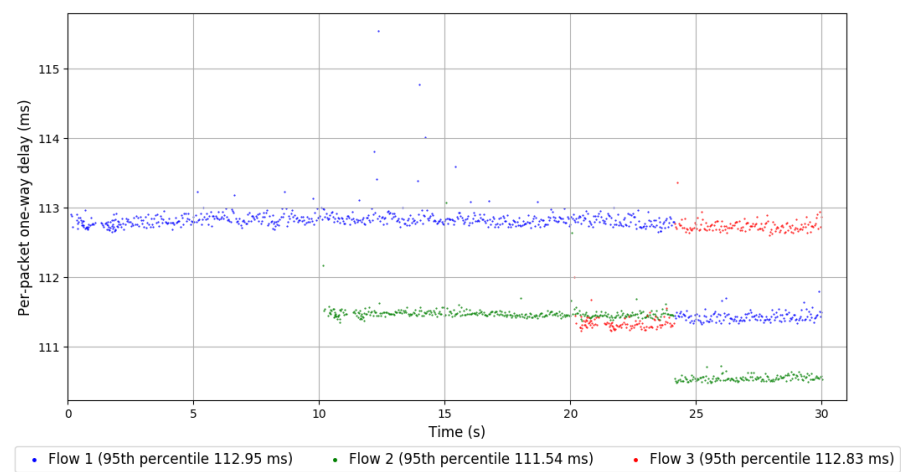
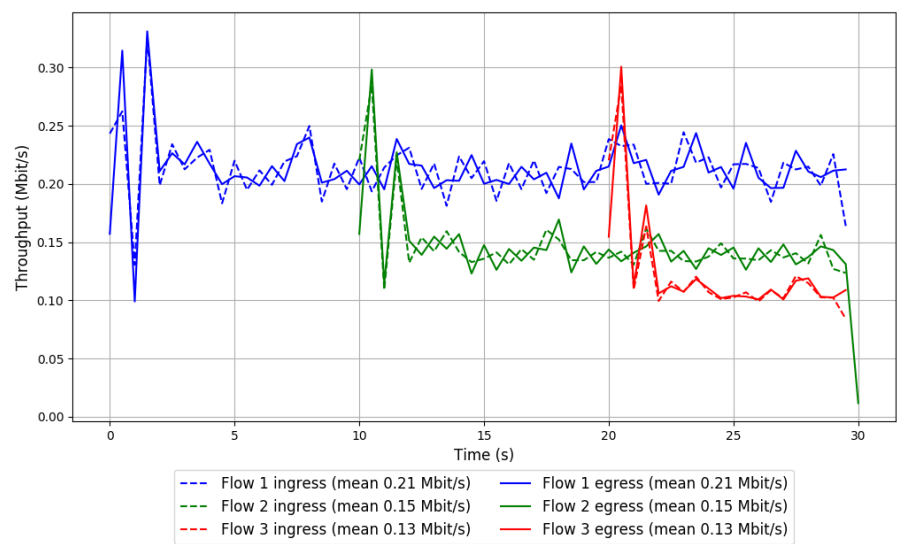


```
Run 4: Statistics of SCReAM

Start at: 2018-04-04 04:16:51
End at: 2018-04-04 04:17:21

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 112.914 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.952 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 111.538 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 112.833 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-04-04 04:36:00

End at: 2018-04-04 04:36:30

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.787 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.456 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.830 ms

Loss rate: 0.00%

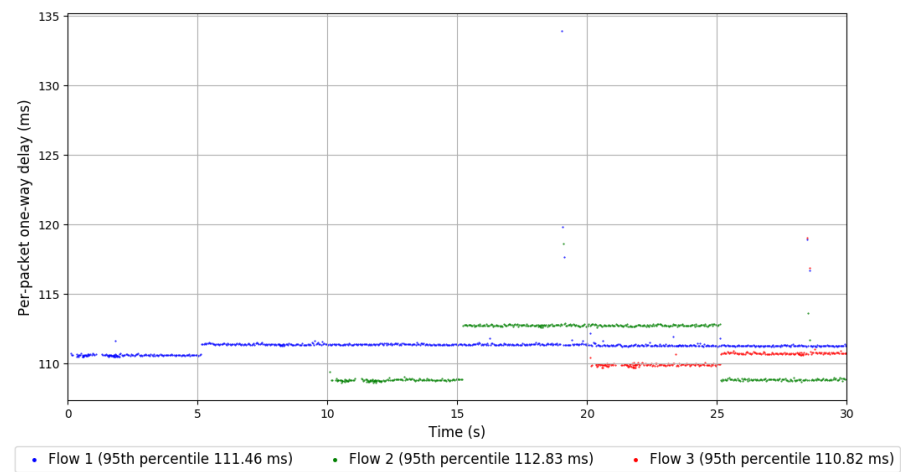
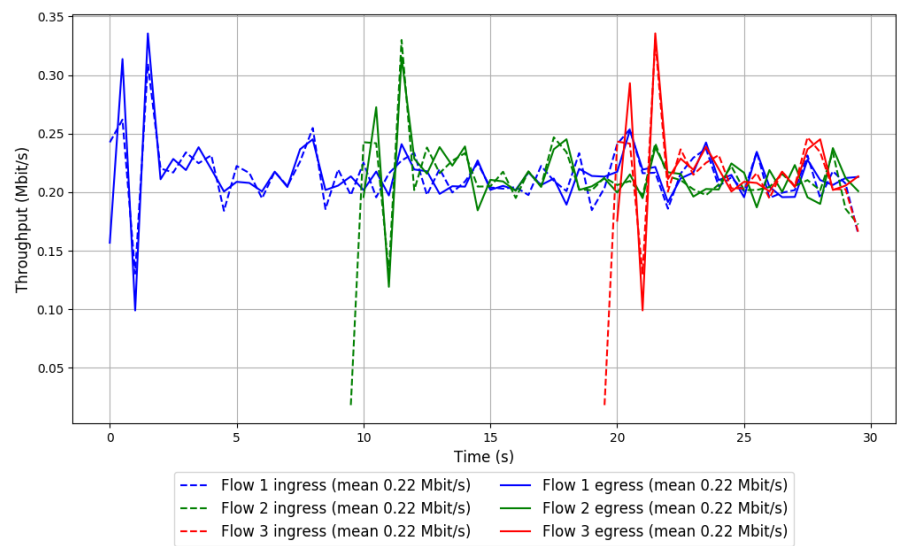
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.819 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

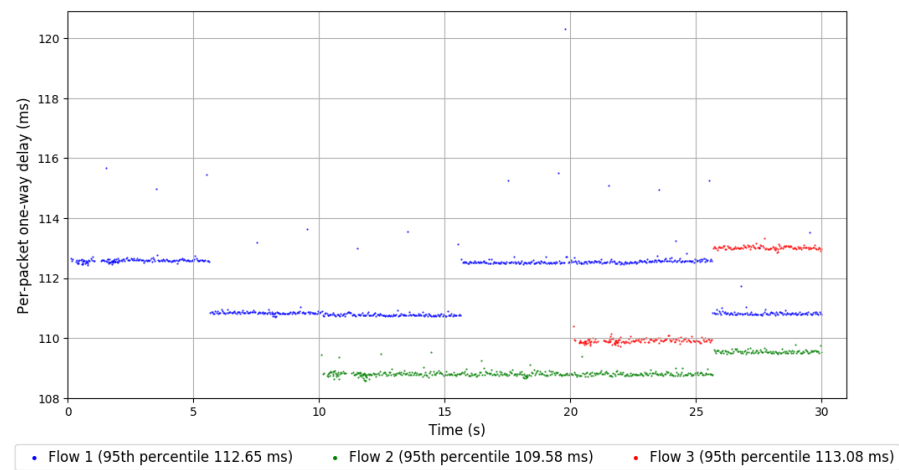
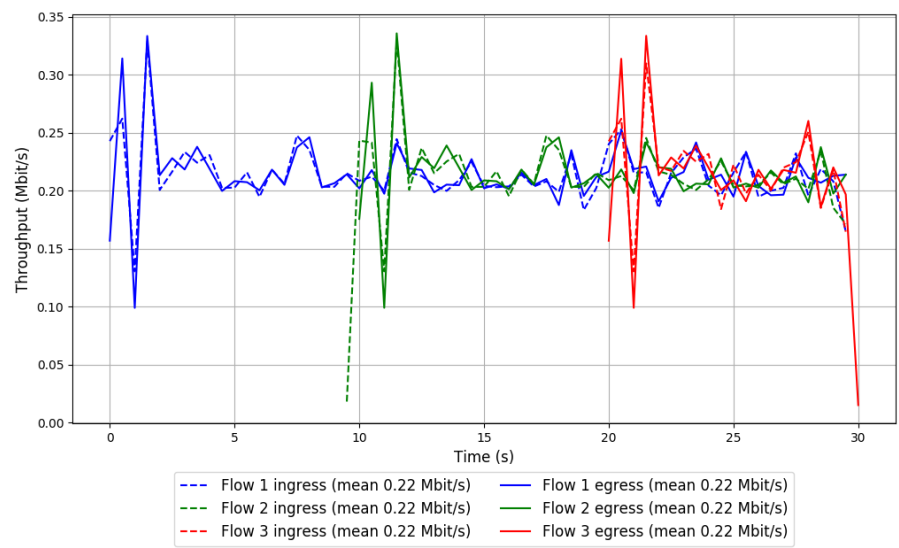


```
Run 6: Statistics of SCReAM

Start at: 2018-04-04 04:55:20
End at: 2018-04-04 04:55:50

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.010 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.652 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.576 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.078 ms
Loss rate: 0.00%
```

Run 6: Report of SCReAM — Data Link

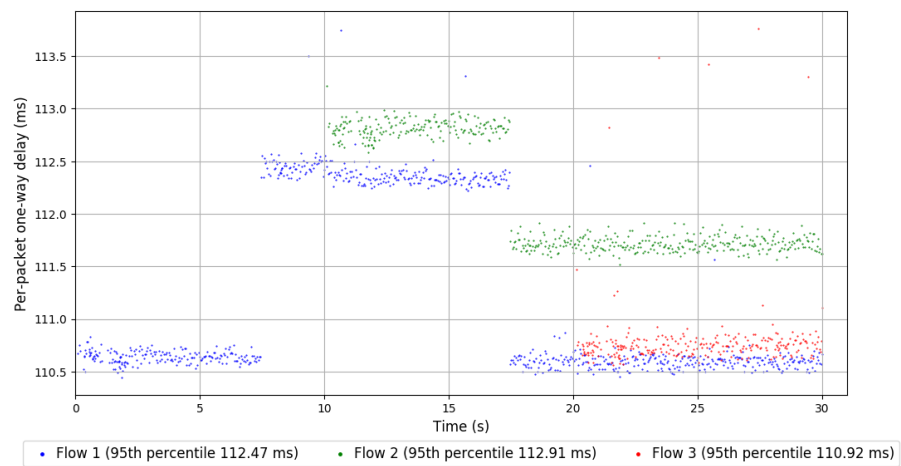
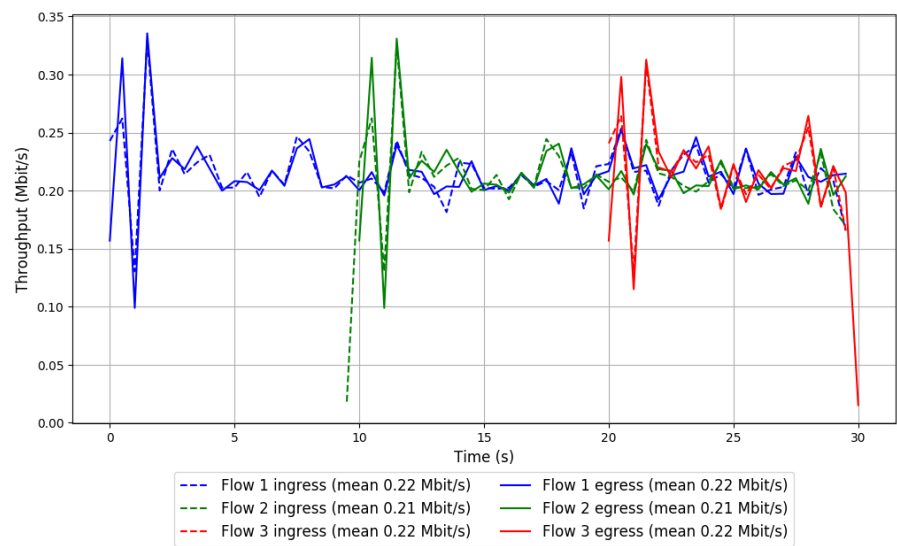


```
Run 7: Statistics of SReAM

Start at: 2018-04-04 05:15:18
End at: 2018-04-04 05:15:48

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.843 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.465 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.914 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.924 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-04-04 05:35:18

End at: 2018-04-04 05:35:48

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.492 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.515 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 109.847 ms

Loss rate: 0.00%

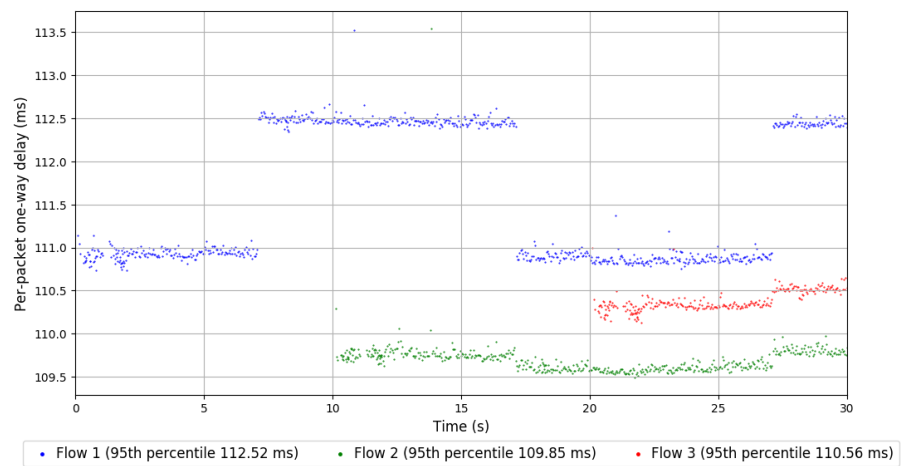
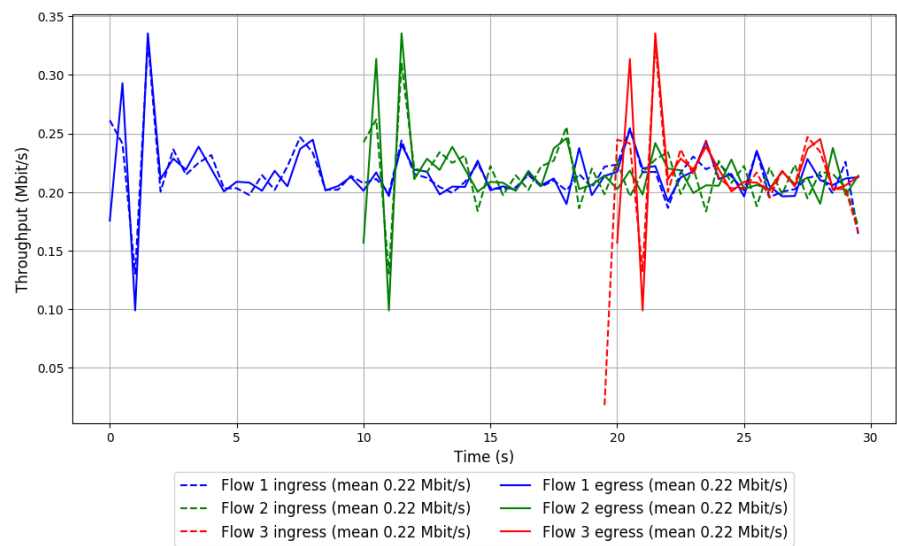
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.563 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link

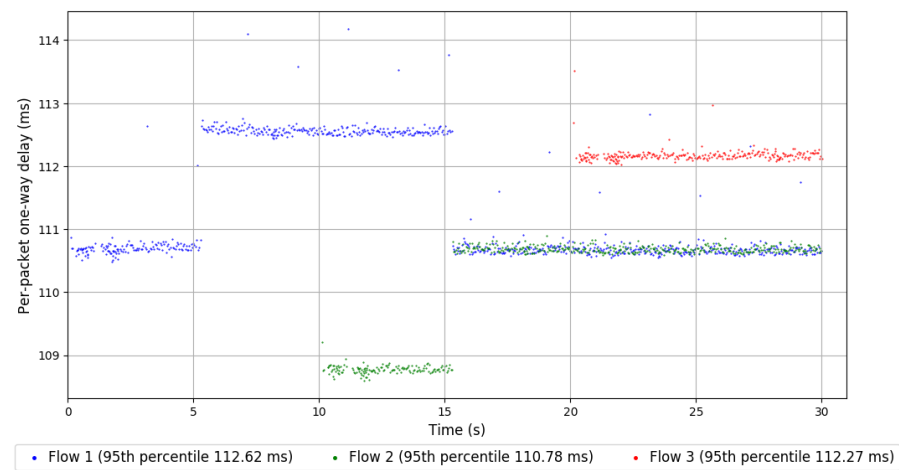
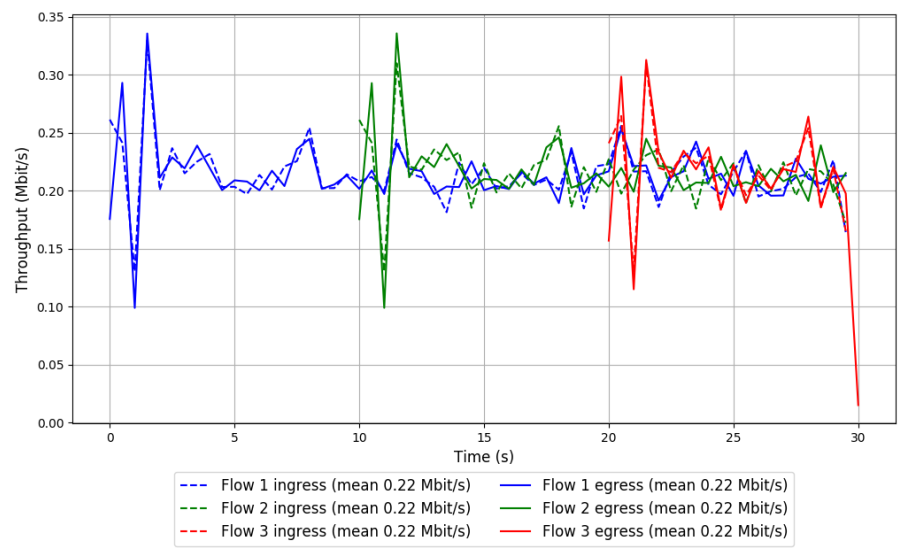


```
Run 9: Statistics of SReAM

Start at: 2018-04-04 05:54:30
End at: 2018-04-04 05:55:00

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.588 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.621 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.775 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.267 ms
Loss rate: 0.00%
```

Run 9: Report of SReAM — Data Link

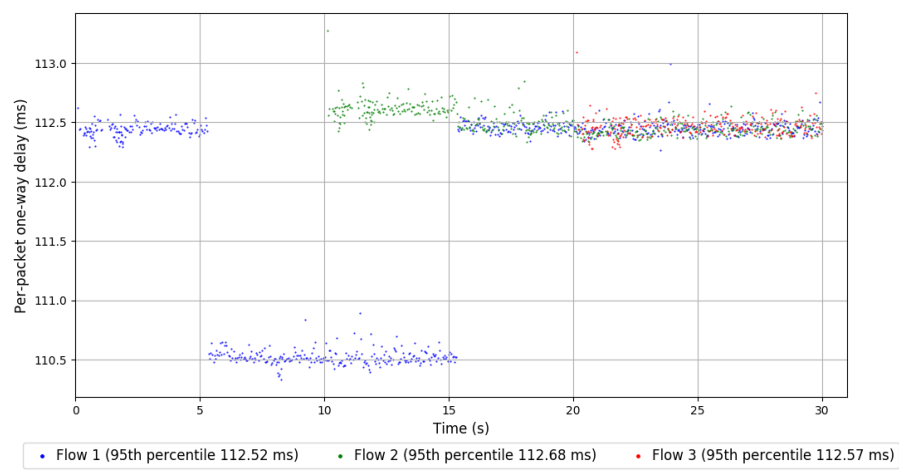
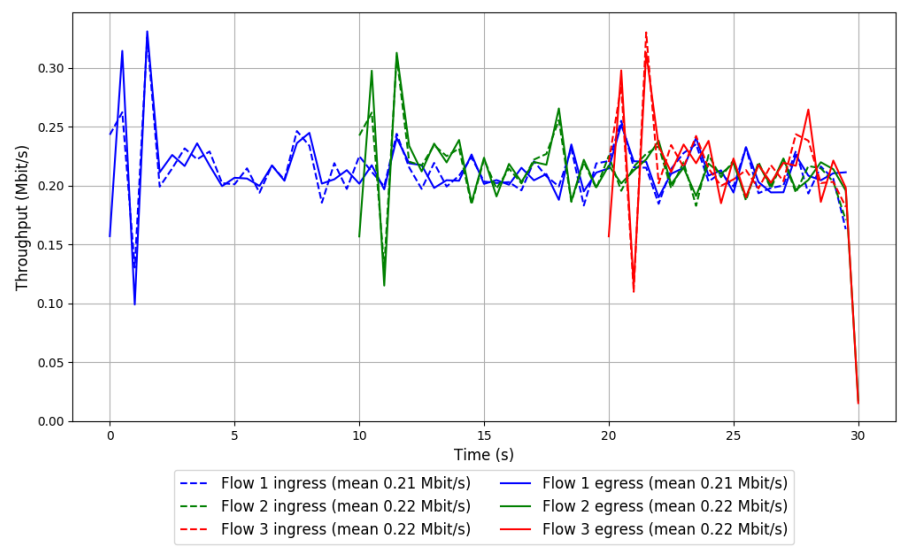


```
Run 10: Statistics of SReAM

Start at: 2018-04-04 06:13:50
End at: 2018-04-04 06:14:20

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.622 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.524 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.676 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.572 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

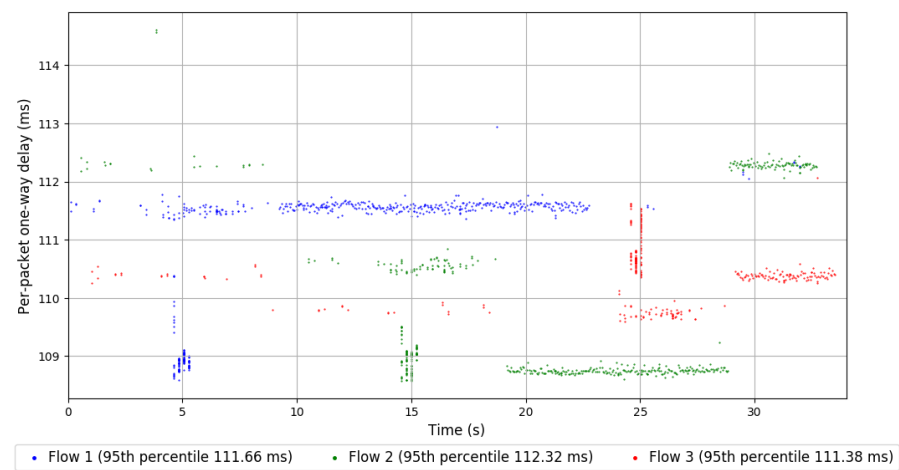
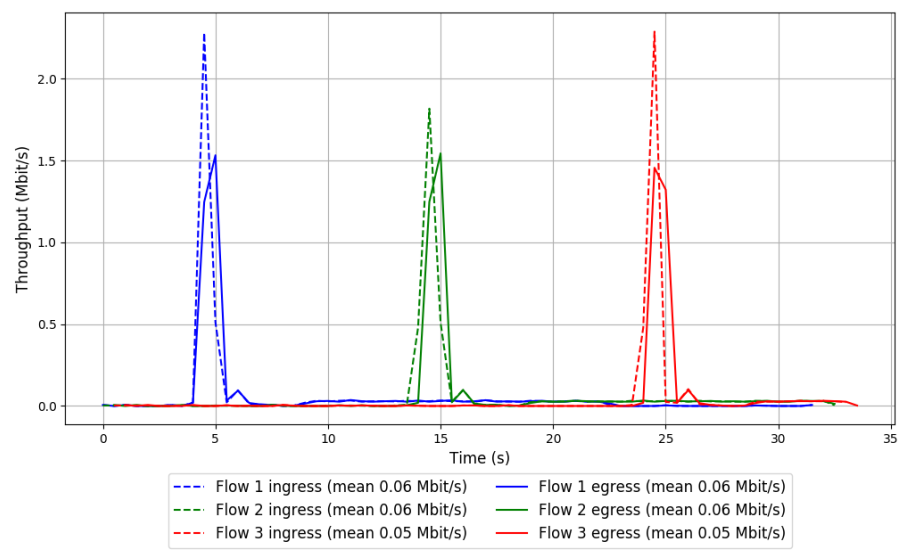


```
Run 1: Statistics of WebRTC media

Start at: 2018-04-04 03:32:00
End at: 2018-04-04 03:32:30

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 112.277 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 111.659 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 112.317 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 111.383 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link

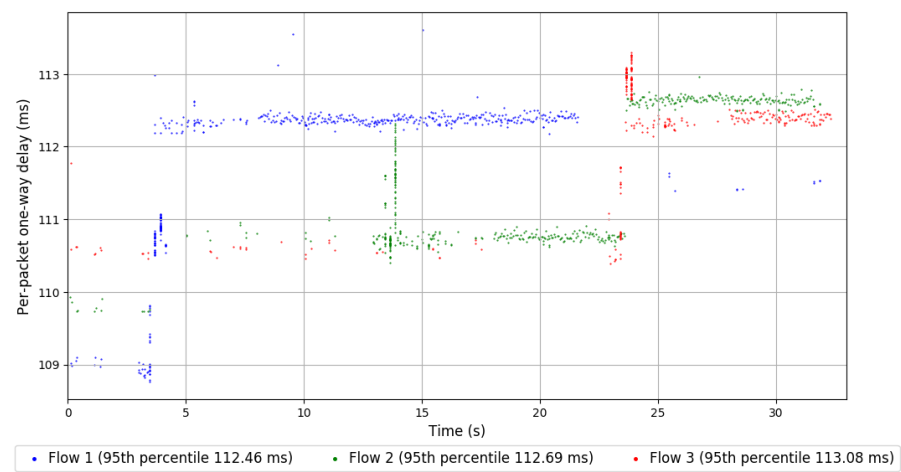
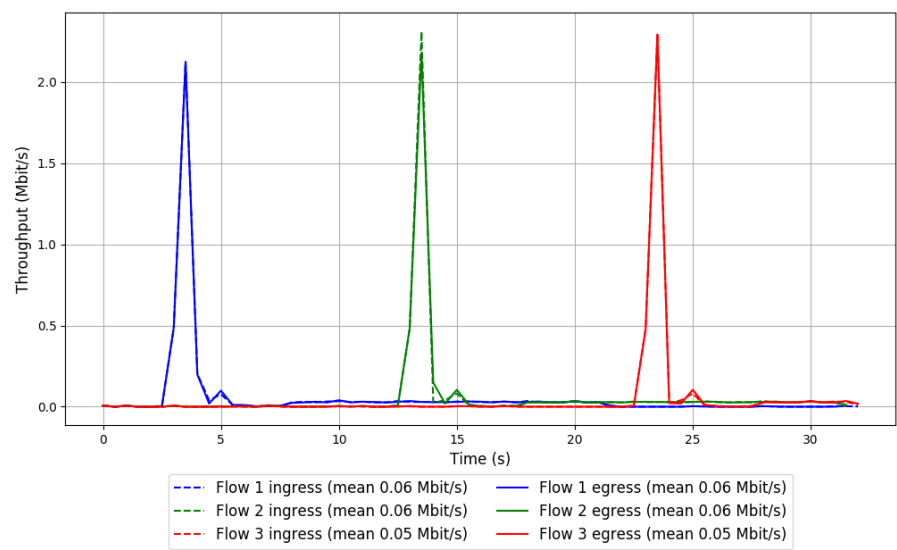


```
Run 2: Statistics of WebRTC media

Start at: 2018-04-04 03:51:04
End at: 2018-04-04 03:51:34

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 112.927 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 112.464 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 112.694 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 113.080 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-04-04 04:09:58

End at: 2018-04-04 04:10:28

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 112.624 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.356 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.631 ms

Loss rate: 0.00%

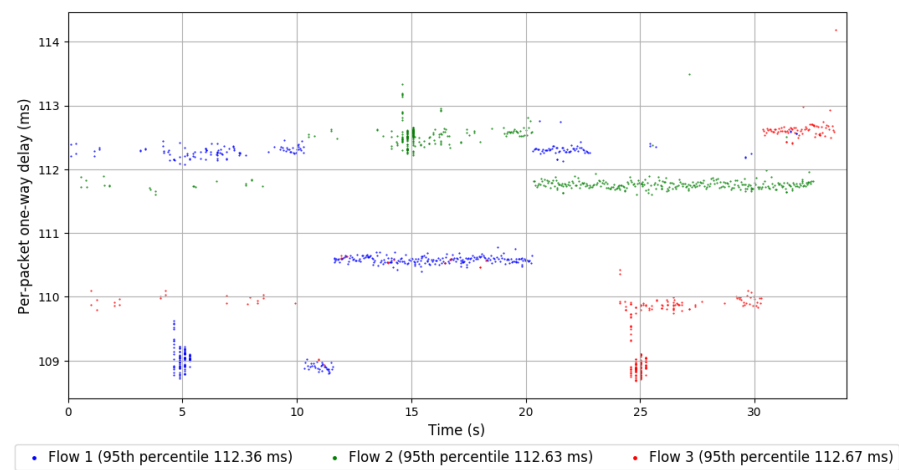
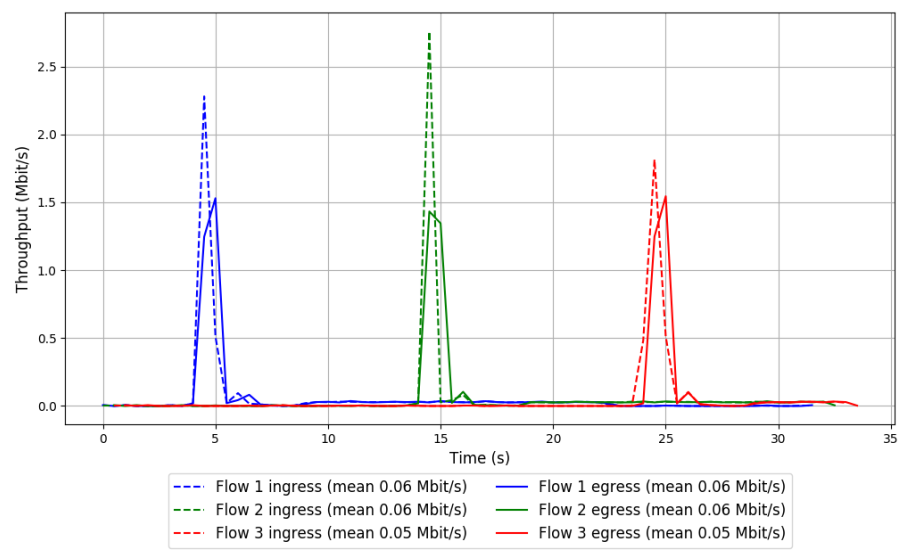
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 112.667 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-04-04 04:28:59

End at: 2018-04-04 04:29:29

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 112.165 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.068 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 111.804 ms

Loss rate: 0.00%

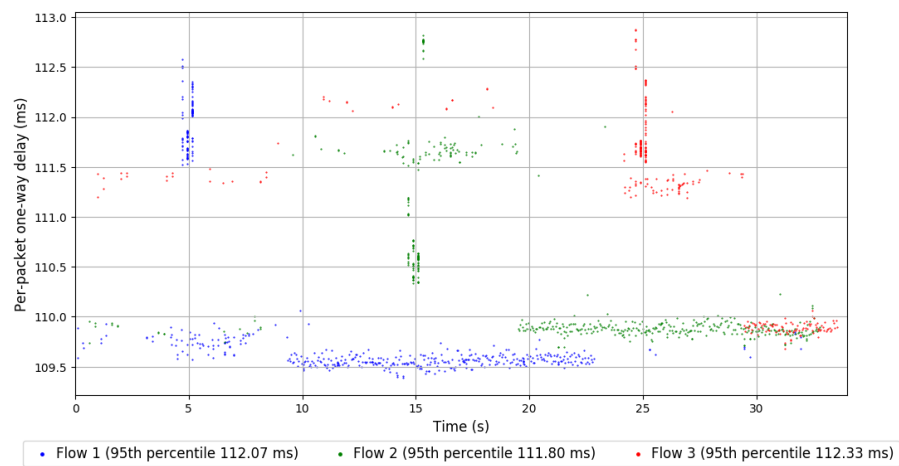
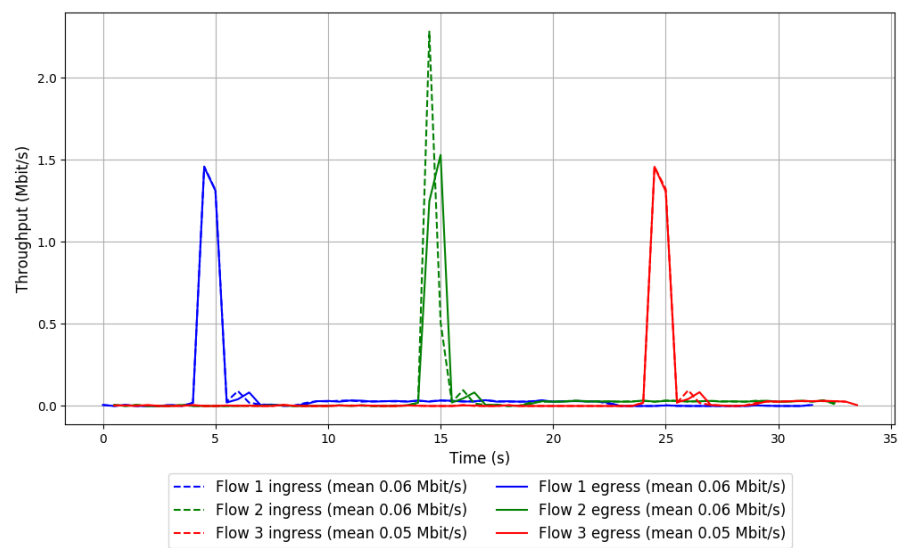
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 112.334 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-04-04 04:48:05

End at: 2018-04-04 04:48:35

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 113.672 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 111.736 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 113.704 ms

Loss rate: 0.00%

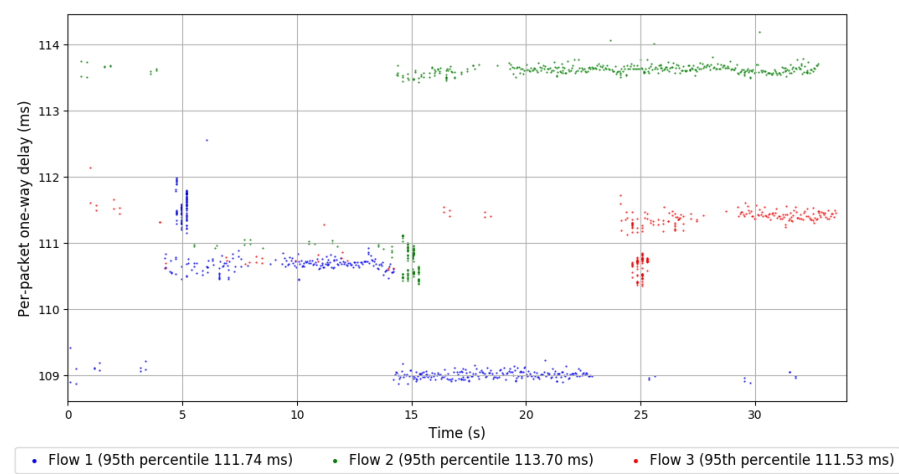
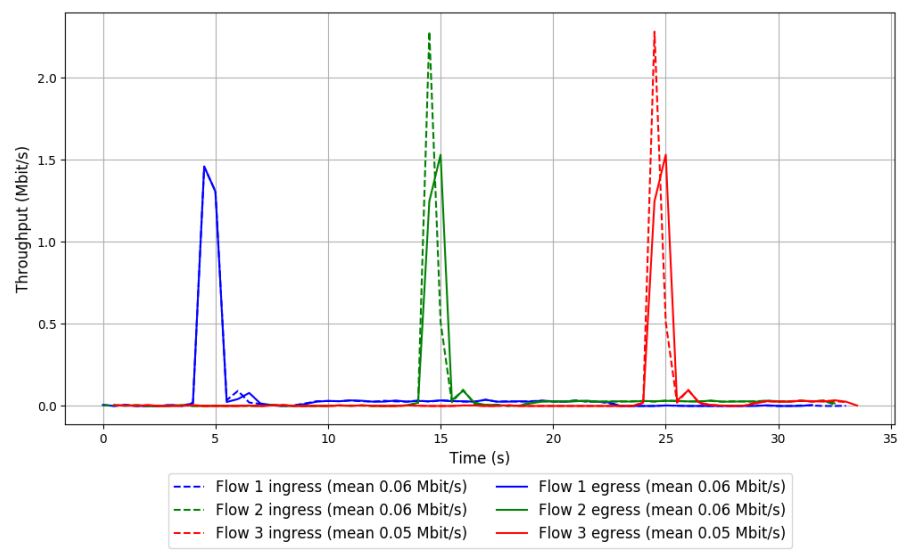
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 111.530 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-04-04 05:08:27

End at: 2018-04-04 05:08:57

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 112.442 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 111.412 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.495 ms

Loss rate: 0.00%

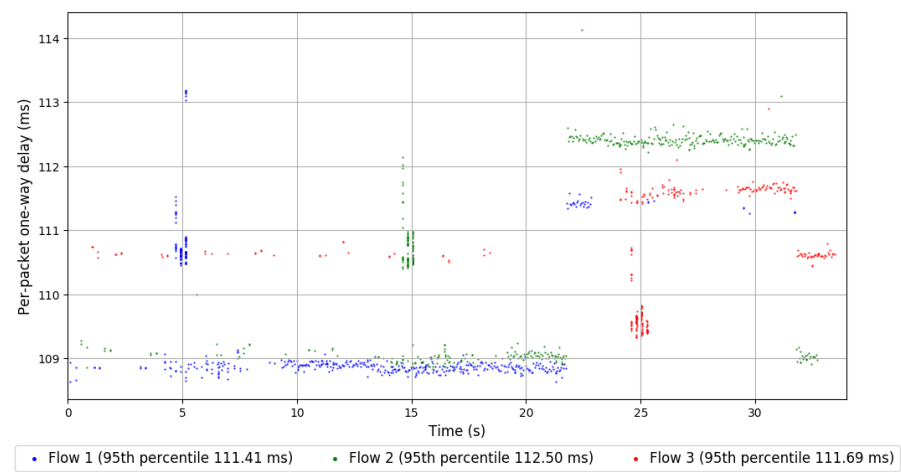
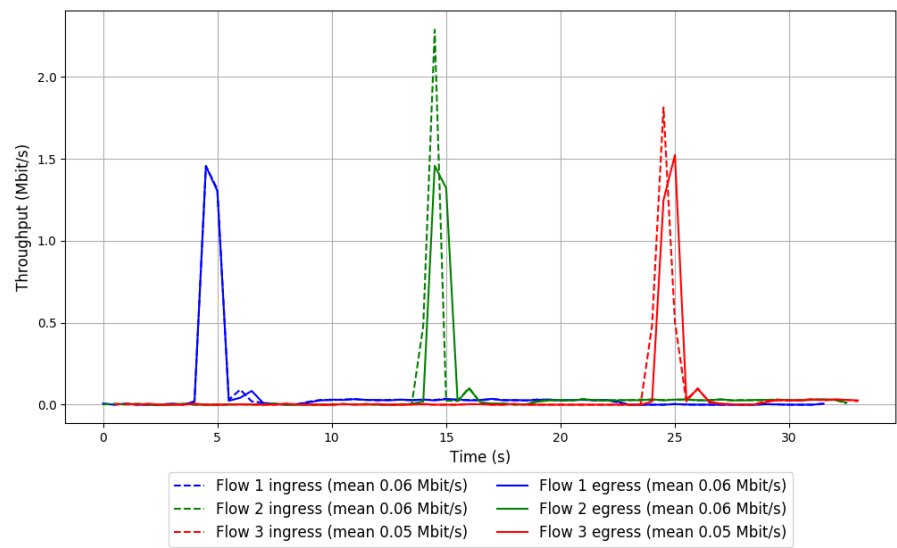
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 111.690 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-04-04 05:28:08

End at: 2018-04-04 05:28:38

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 112.669 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.465 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.704 ms

Loss rate: 0.00%

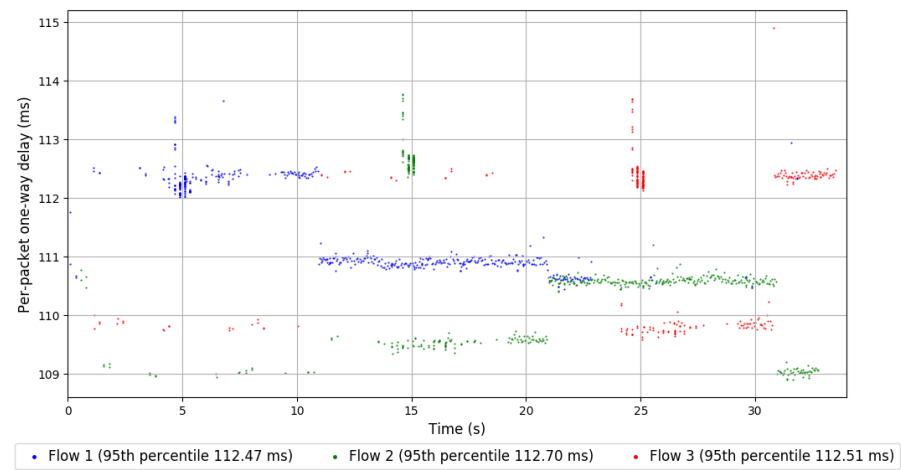
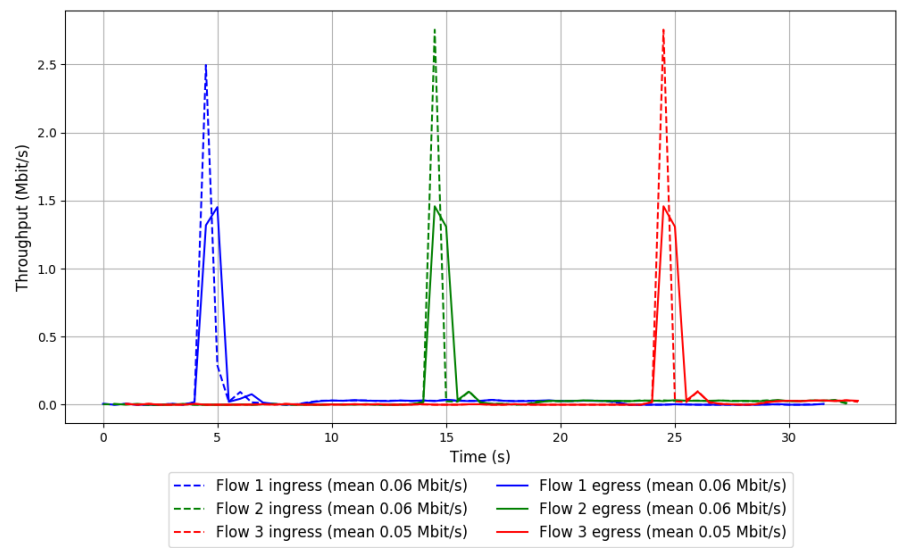
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 112.512 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-04-04 05:47:29

End at: 2018-04-04 05:47:59

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 112.603 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.556 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.647 ms

Loss rate: 0.00%

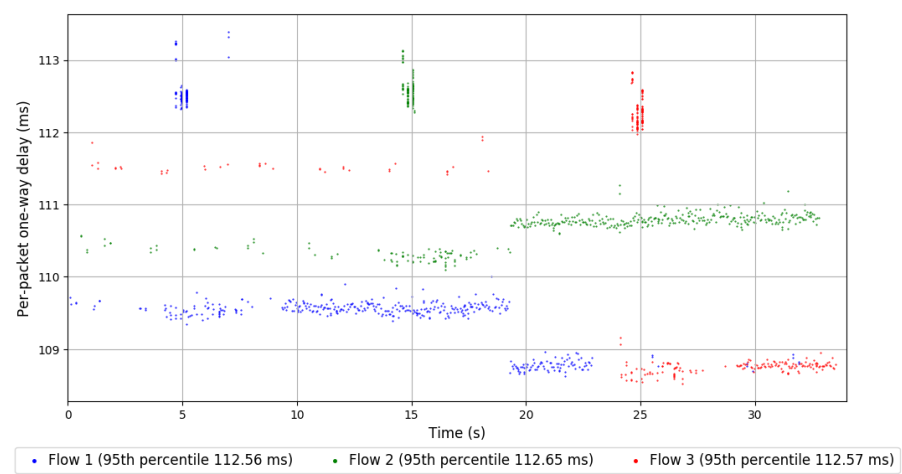
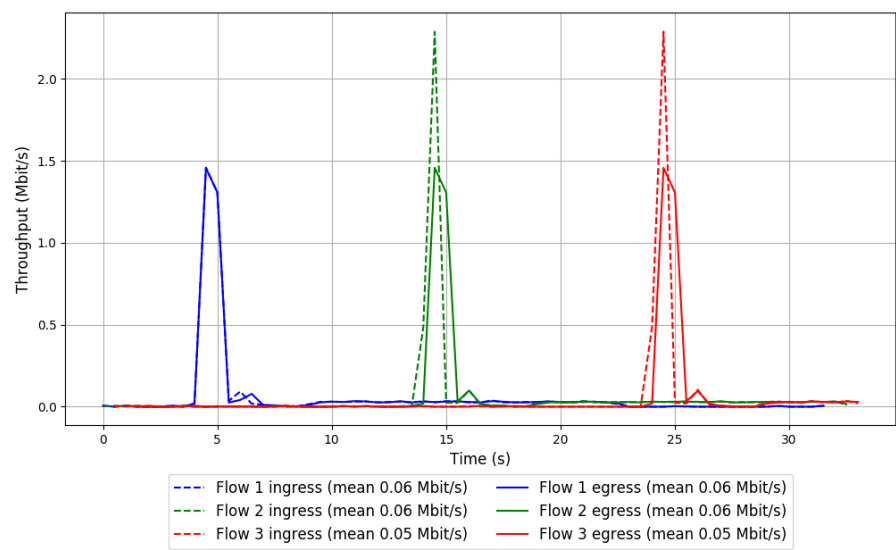
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 112.573 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-04-04 06:06:52

End at: 2018-04-04 06:07:22

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 114.711 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 114.750 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.656 ms

Loss rate: 0.00%

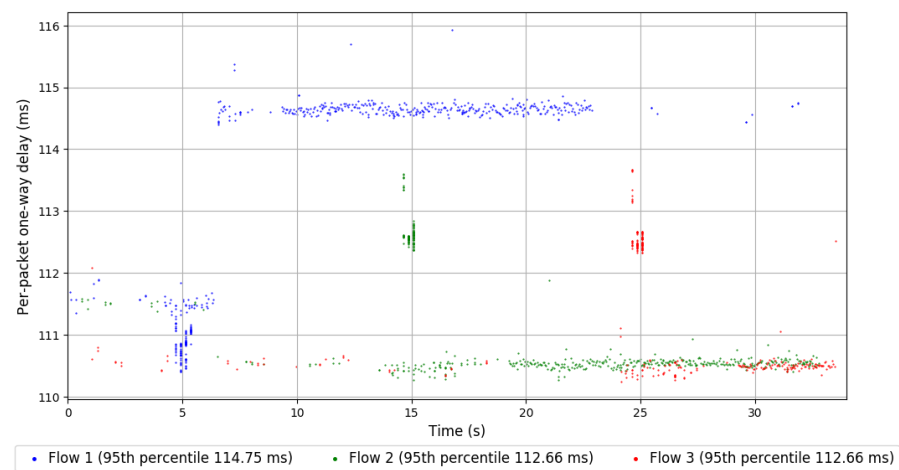
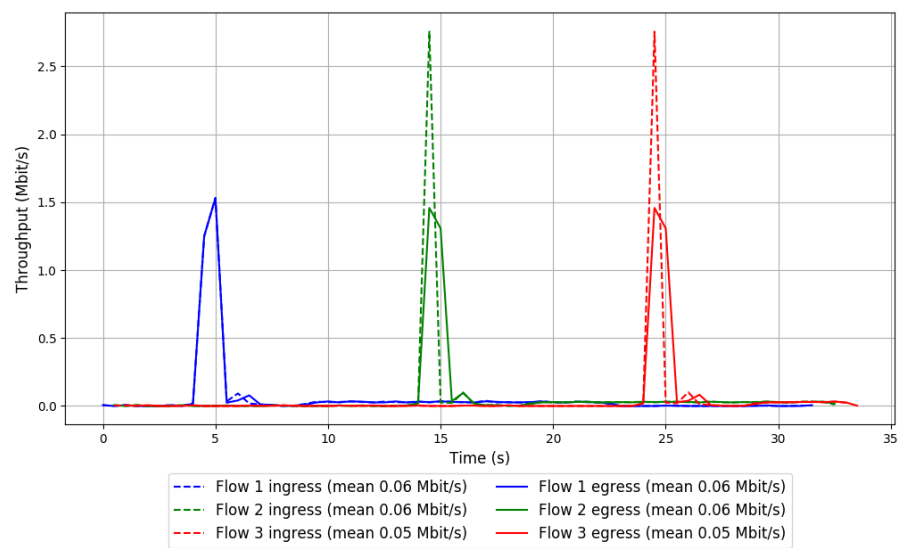
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 112.661 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

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

End at: 2018-04-04 06:26:44

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 112.589 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 111.986 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.644 ms

Loss rate: 0.00%

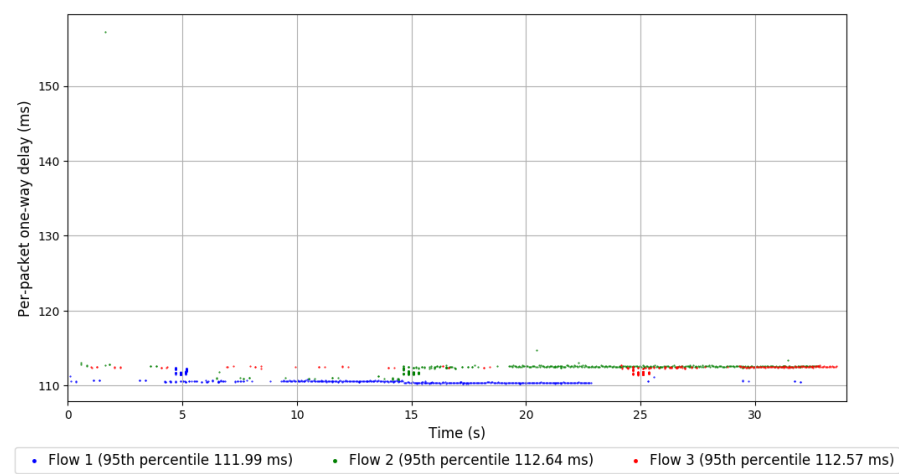
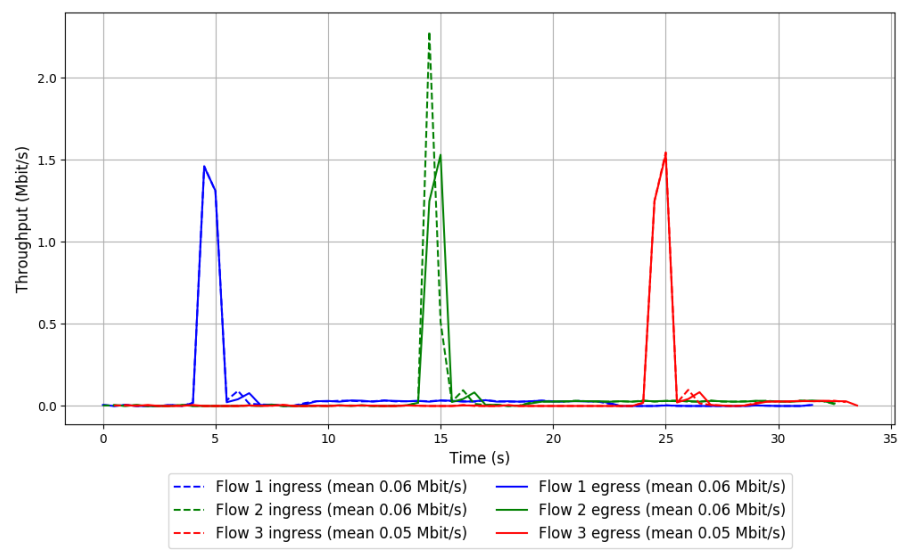
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 112.573 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

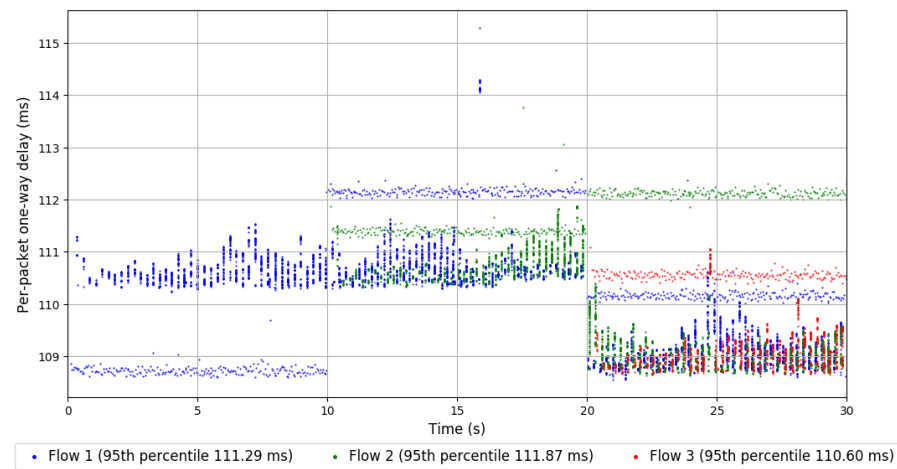
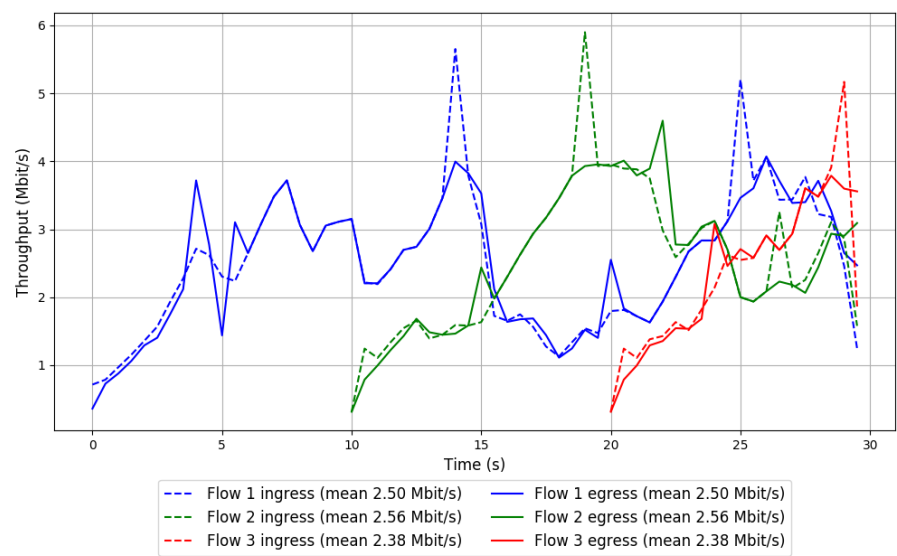


```
Run 1: Statistics of Sprout

Start at: 2018-04-04 03:24:55
End at: 2018-04-04 03:25:25

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.99 Mbit/s
95th percentile per-packet one-way delay: 111.398 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.50 Mbit/s
95th percentile per-packet one-way delay: 111.289 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.56 Mbit/s
95th percentile per-packet one-way delay: 111.867 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.38 Mbit/s
95th percentile per-packet one-way delay: 110.597 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-04-04 03:44:08

End at: 2018-04-04 03:44:38

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 113.528 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 113.585 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 113.405 ms

Loss rate: 0.00%

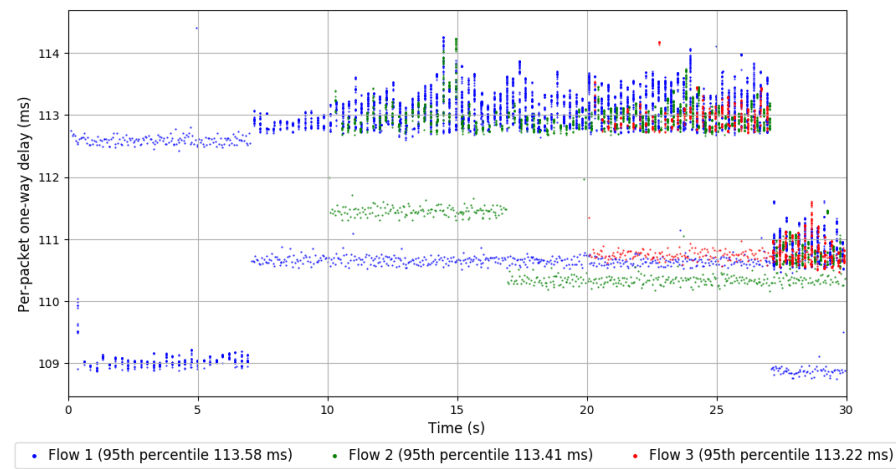
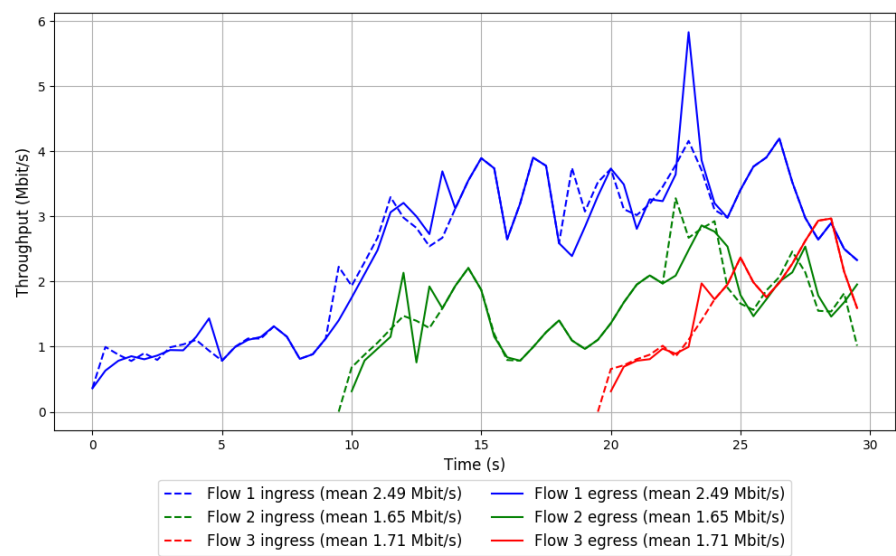
-- Flow 3:

Average throughput: 1.71 Mbit/s

95th percentile per-packet one-way delay: 113.219 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-04-04 04:03:09

End at: 2018-04-04 04:03:39

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.78 Mbit/s

95th percentile per-packet one-way delay: 113.041 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.04 Mbit/s

95th percentile per-packet one-way delay: 113.026 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 112.985 ms

Loss rate: 0.00%

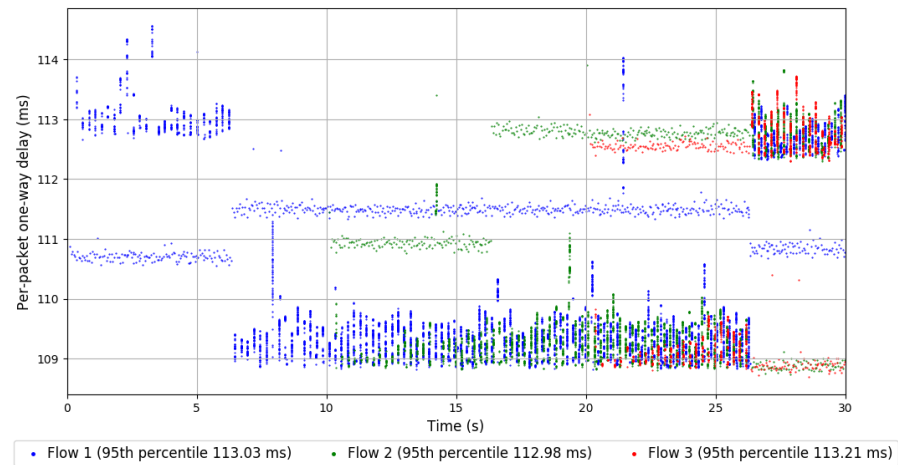
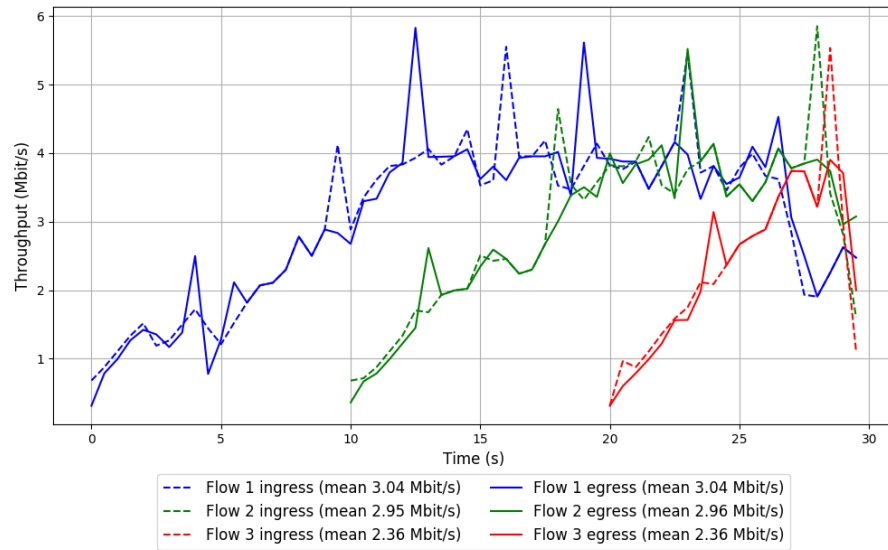
-- Flow 3:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 113.209 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-04-04 04:21:52

End at: 2018-04-04 04:22:22

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.49 Mbit/s

95th percentile per-packet one-way delay: 112.982 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 113.048 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 112.854 ms

Loss rate: 0.00%

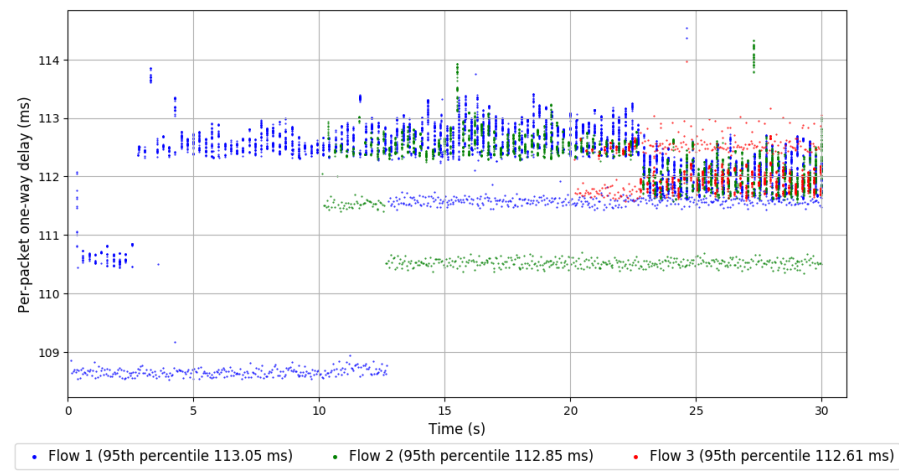
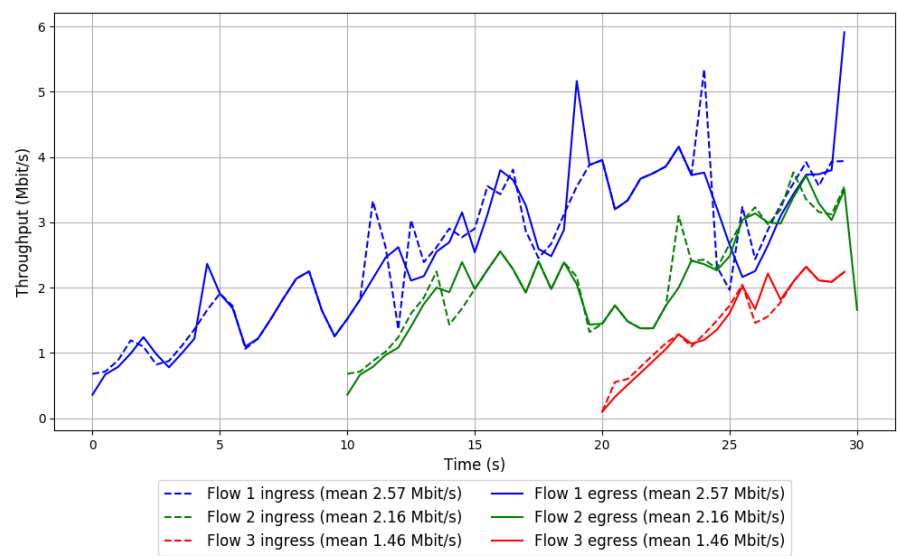
-- Flow 3:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 112.614 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-04-04 04:40:48

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

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.06 Mbit/s

95th percentile per-packet one-way delay: 113.016 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.72 Mbit/s

95th percentile per-packet one-way delay: 112.915 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 113.177 ms

Loss rate: 0.00%

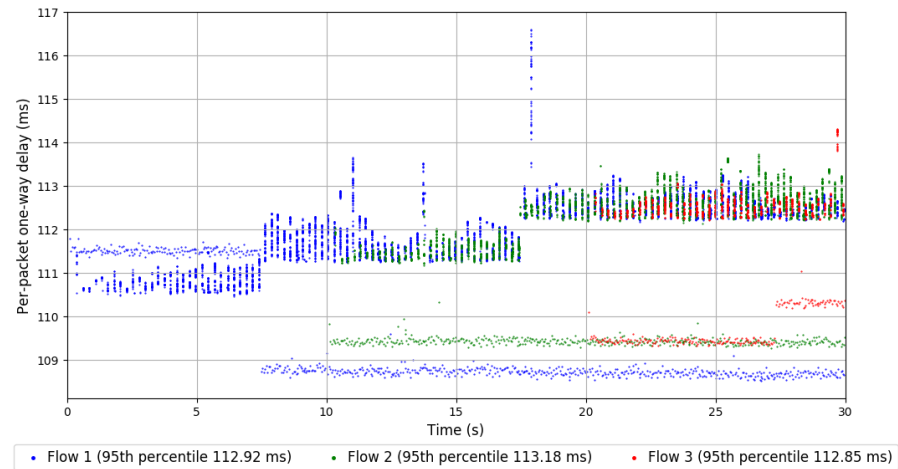
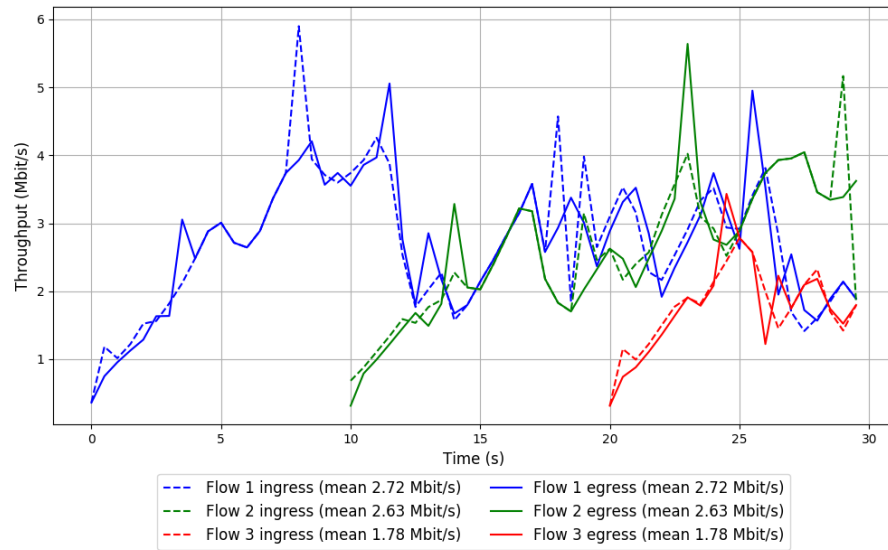
-- Flow 3:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 112.852 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-04-04 05:00:56

End at: 2018-04-04 05:01:26

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.18 Mbit/s

95th percentile per-packet one-way delay: 112.860 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.81 Mbit/s

95th percentile per-packet one-way delay: 112.952 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 112.787 ms

Loss rate: 0.00%

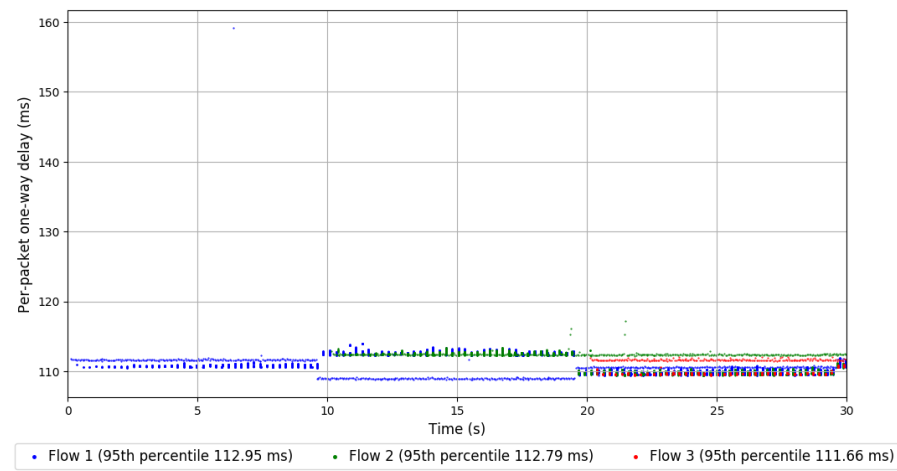
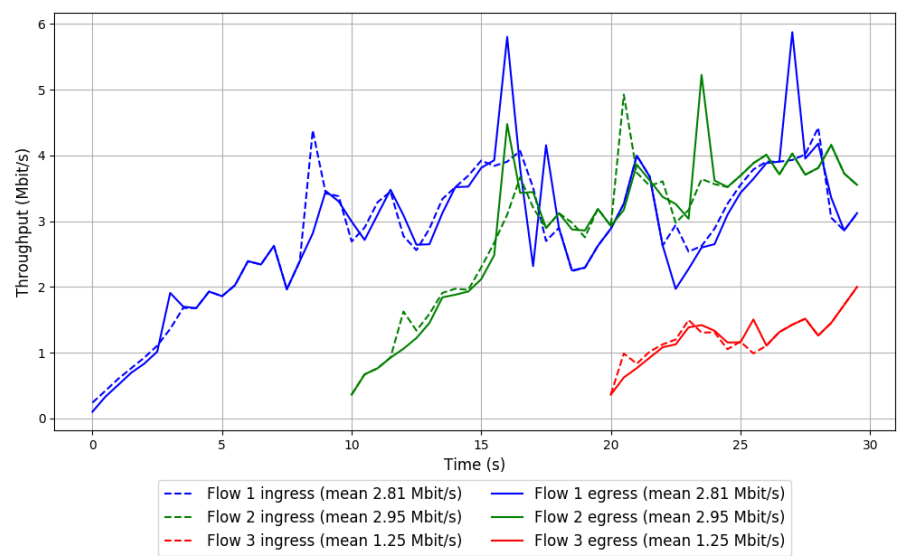
-- Flow 3:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 111.658 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-04-04 05:20:34

End at: 2018-04-04 05:21:04

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.82 Mbit/s

95th percentile per-packet one-way delay: 112.921 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.04 Mbit/s

95th percentile per-packet one-way delay: 113.014 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 112.795 ms

Loss rate: 0.00%

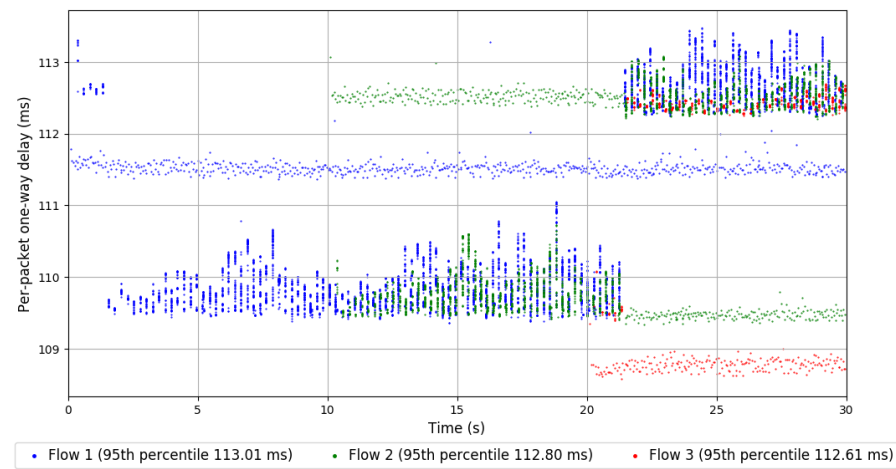
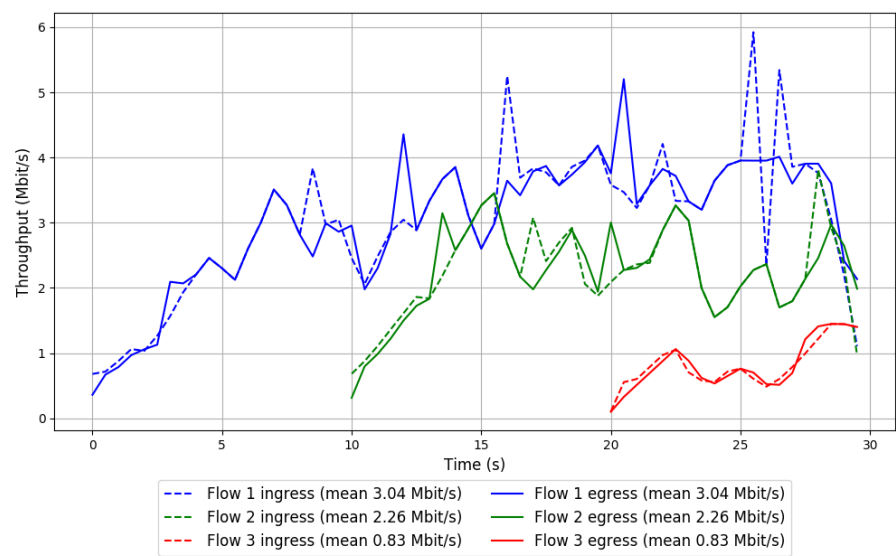
-- Flow 3:

Average throughput: 0.83 Mbit/s

95th percentile per-packet one-way delay: 112.615 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-04-04 05:40:21

End at: 2018-04-04 05:40:51

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.94 Mbit/s

95th percentile per-packet one-way delay: 113.551 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 113.465 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.82 Mbit/s

95th percentile per-packet one-way delay: 113.842 ms

Loss rate: 0.00%

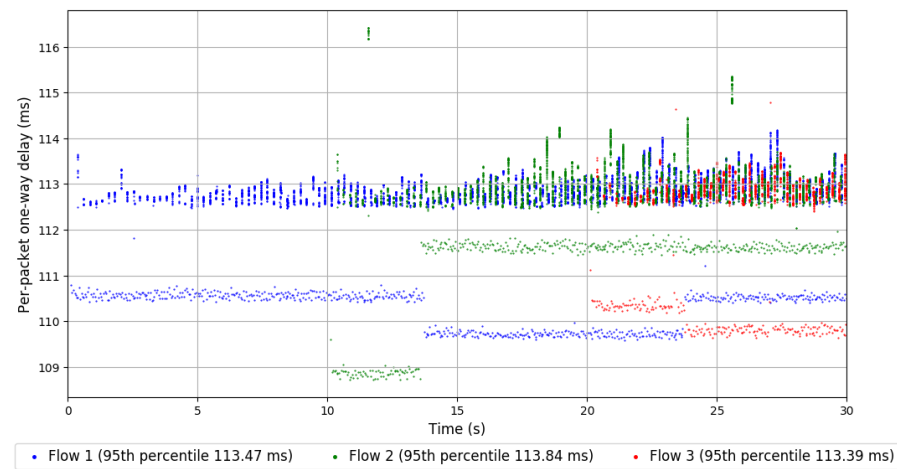
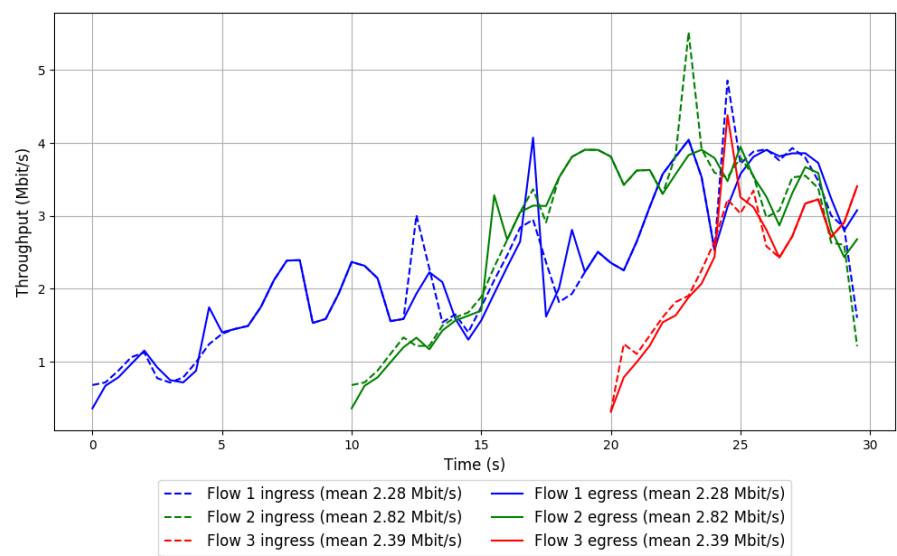
-- Flow 3:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 113.387 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-04-04 05:59:34

End at: 2018-04-04 06:00:04

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.28 Mbit/s

95th percentile per-packet one-way delay: 113.078 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.77 Mbit/s

95th percentile per-packet one-way delay: 113.084 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.60 Mbit/s

95th percentile per-packet one-way delay: 112.988 ms

Loss rate: 0.00%

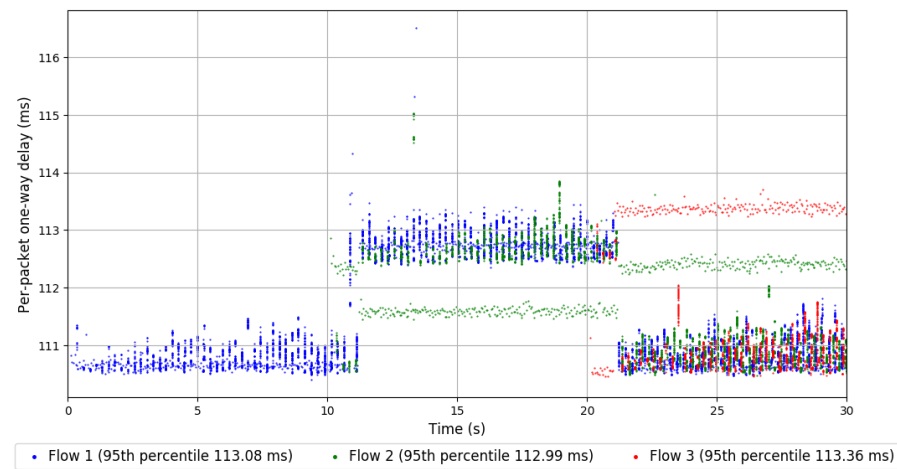
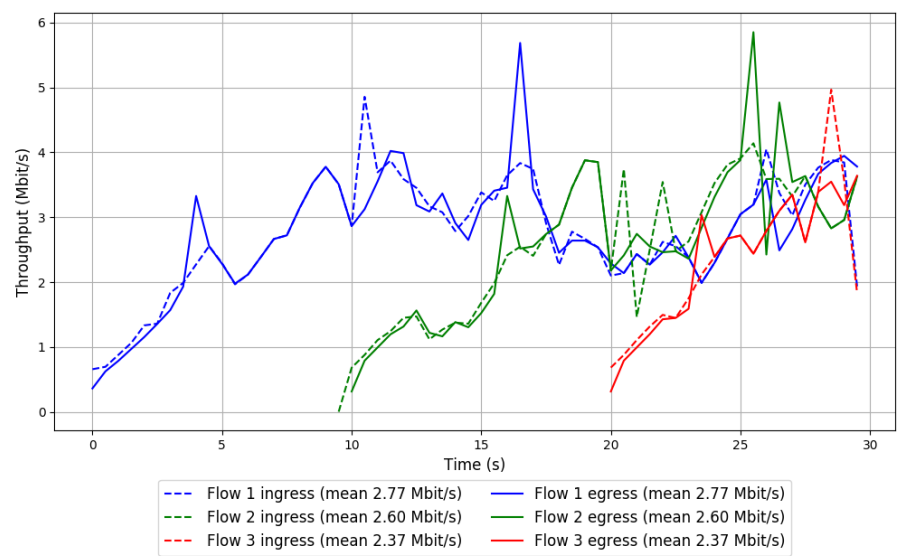
-- Flow 3:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 113.362 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-04-04 06:18:59

End at: 2018-04-04 06:19:29

Below is generated by plot.py at 2018-04-04 08:50:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.42 Mbit/s

95th percentile per-packet one-way delay: 112.618 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 112.665 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 112.626 ms

Loss rate: 0.00%

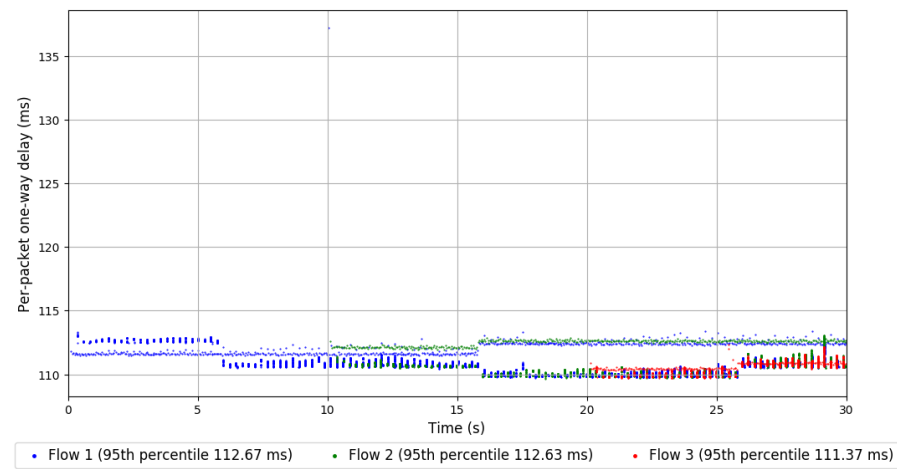
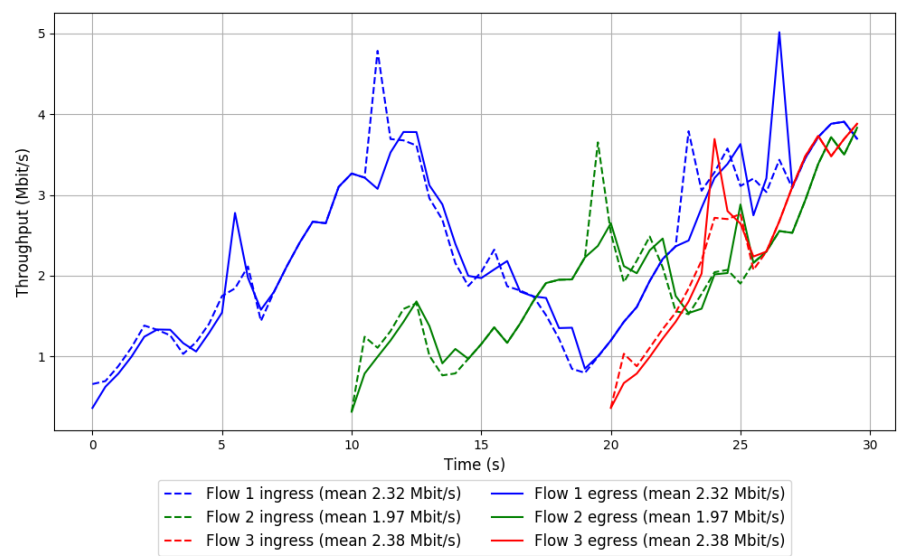
-- Flow 3:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 111.368 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

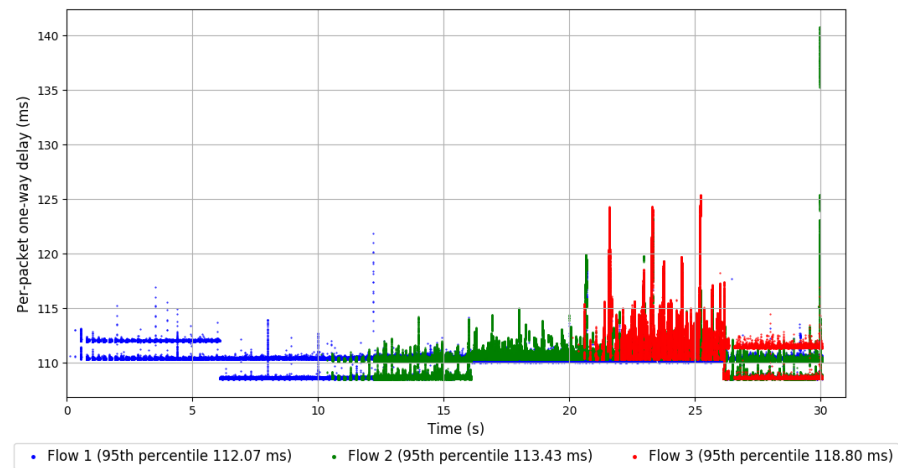
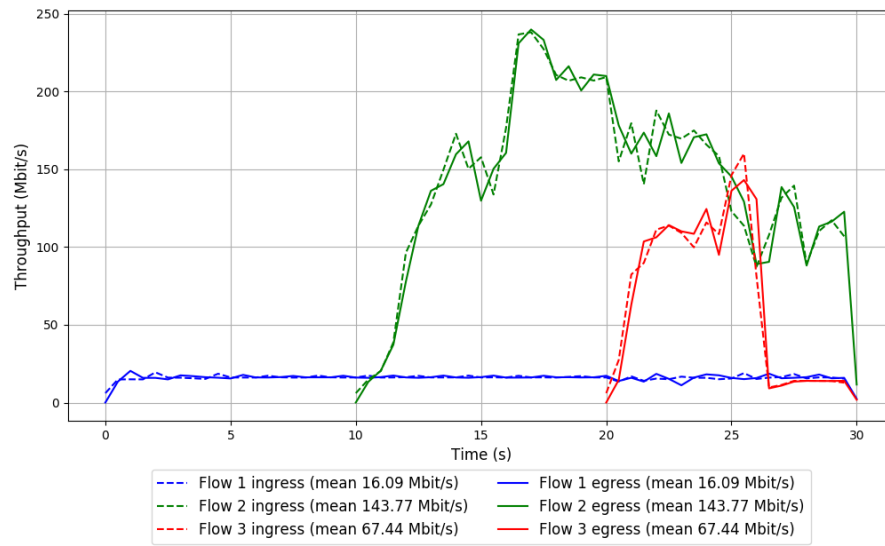


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-04-04 03:28:49
End at: 2018-04-04 03:29:19

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 134.12 Mbit/s
95th percentile per-packet one-way delay: 114.314 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 16.09 Mbit/s
95th percentile per-packet one-way delay: 112.067 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 143.77 Mbit/s
95th percentile per-packet one-way delay: 113.428 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 67.44 Mbit/s
95th percentile per-packet one-way delay: 118.802 ms
Loss rate: 0.00%
```


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

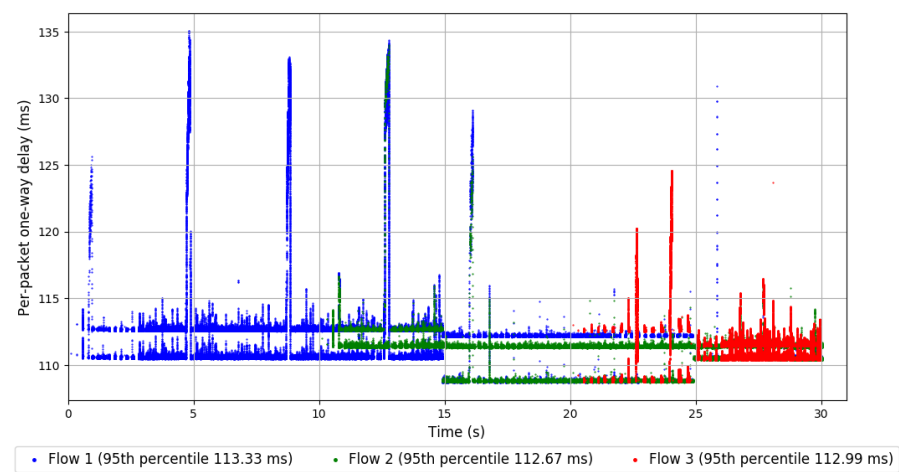
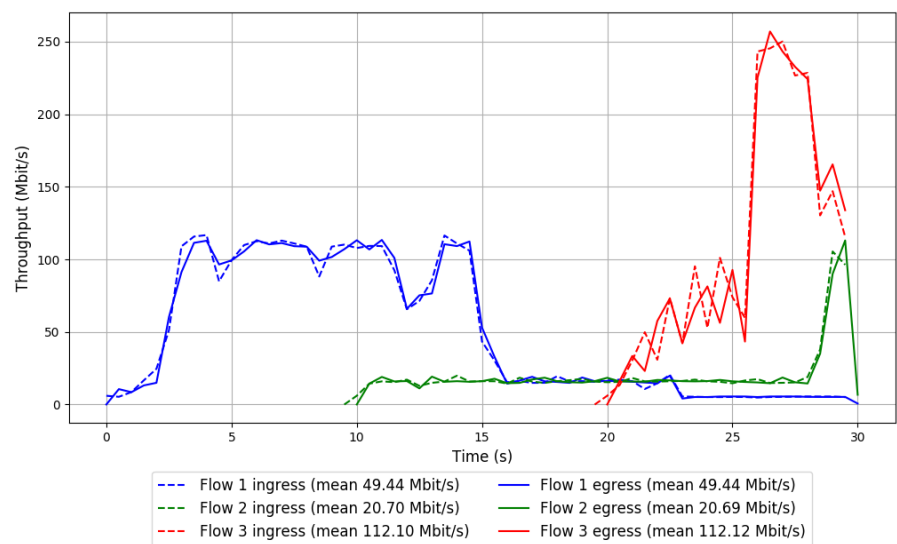


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-04-04 03:48:00
End at: 2018-04-04 03:48:30

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.25 Mbit/s
95th percentile per-packet one-way delay: 112.930 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 49.44 Mbit/s
95th percentile per-packet one-way delay: 113.332 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.69 Mbit/s
95th percentile per-packet one-way delay: 112.667 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 112.12 Mbit/s
95th percentile per-packet one-way delay: 112.989 ms
Loss rate: 0.00%
```

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

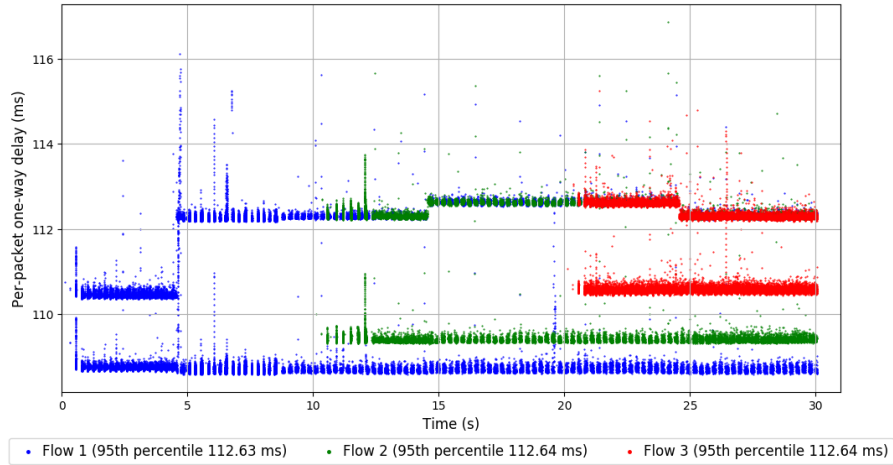
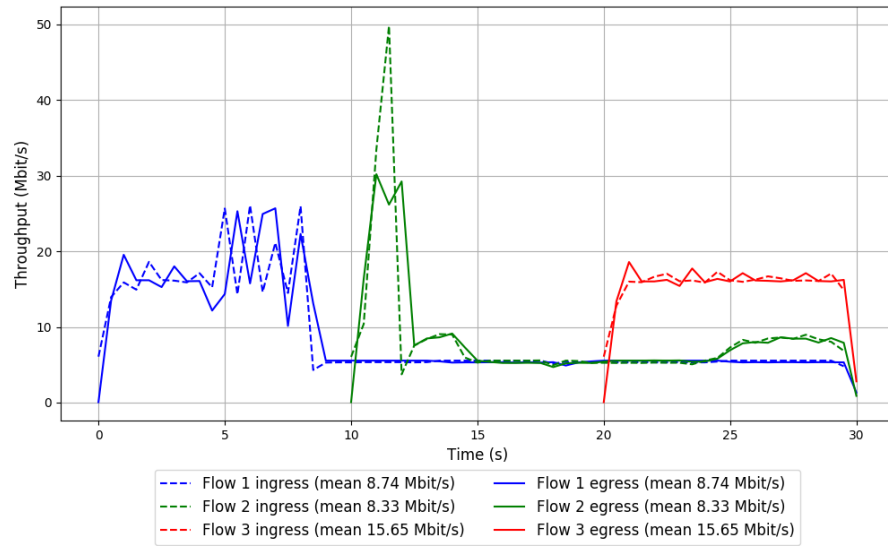


```
Run 3: Statistics of TaoVA-100x

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

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.48 Mbit/s
95th percentile per-packet one-way delay: 112.639 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 8.74 Mbit/s
95th percentile per-packet one-way delay: 112.630 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 8.33 Mbit/s
95th percentile per-packet one-way delay: 112.645 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.65 Mbit/s
95th percentile per-packet one-way delay: 112.643 ms
Loss rate: 0.02%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-04-04 04:25:39

End at: 2018-04-04 04:26:09

Below is generated by plot.py at 2018-04-04 08:51:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 227.10 Mbit/s

95th percentile per-packet one-way delay: 119.988 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 57.58 Mbit/s

95th percentile per-packet one-way delay: 112.041 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 161.93 Mbit/s

95th percentile per-packet one-way delay: 127.689 ms

Loss rate: 0.00%

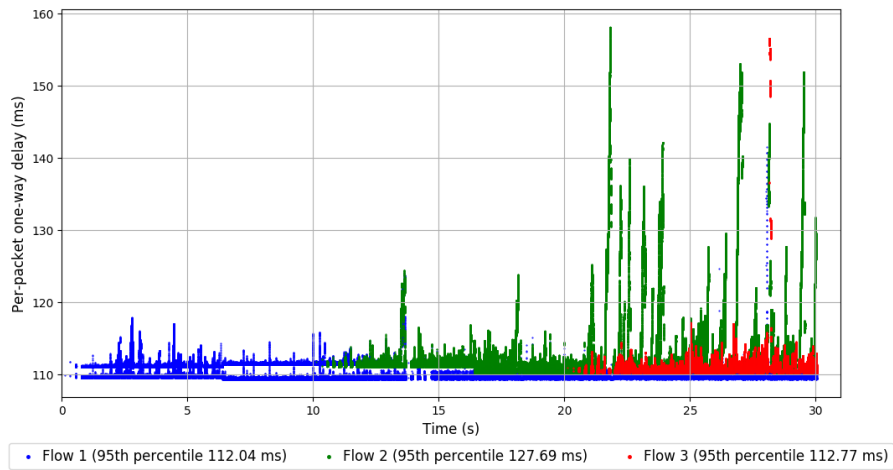
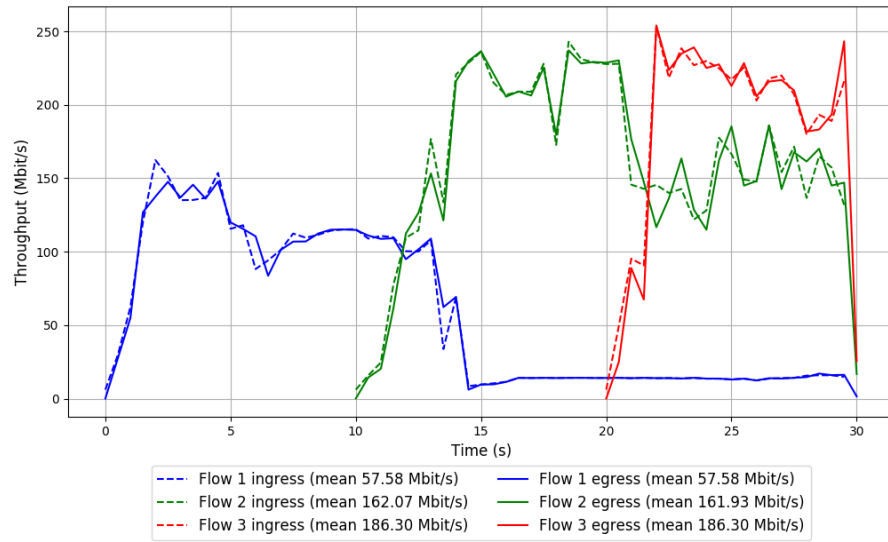
-- Flow 3:

Average throughput: 186.30 Mbit/s

95th percentile per-packet one-way delay: 112.767 ms

Loss rate: 0.01%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-04-04 04:44:42

End at: 2018-04-04 04:45:12

Below is generated by plot.py at 2018-04-04 08:52:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 253.41 Mbit/s

95th percentile per-packet one-way delay: 117.029 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 155.39 Mbit/s

95th percentile per-packet one-way delay: 114.805 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 94.97 Mbit/s

95th percentile per-packet one-way delay: 119.932 ms

Loss rate: 0.00%

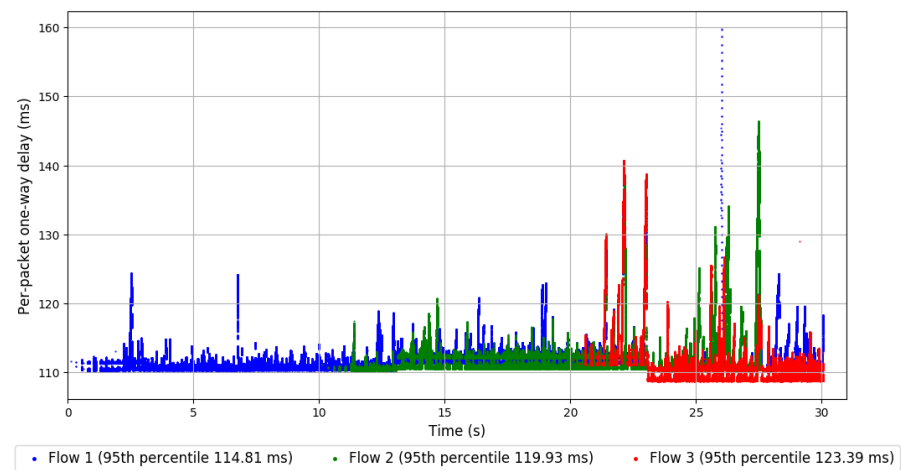
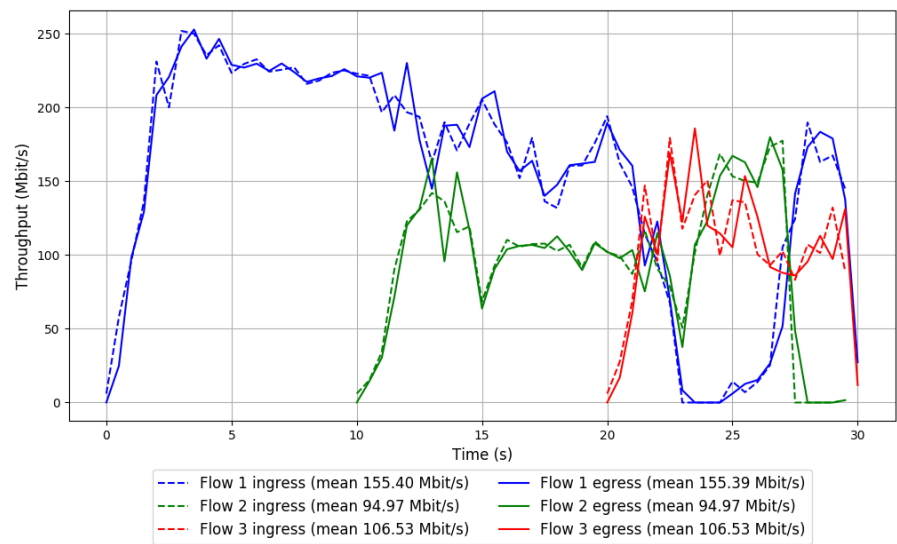
-- Flow 3:

Average throughput: 106.53 Mbit/s

95th percentile per-packet one-way delay: 123.389 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-04-04 05:05:06

End at: 2018-04-04 05:05:36

Below is generated by plot.py at 2018-04-04 08:52:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 211.63 Mbit/s

95th percentile per-packet one-way delay: 117.268 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 125.42 Mbit/s

95th percentile per-packet one-way delay: 115.823 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 76.21 Mbit/s

95th percentile per-packet one-way delay: 120.122 ms

Loss rate: 0.00%

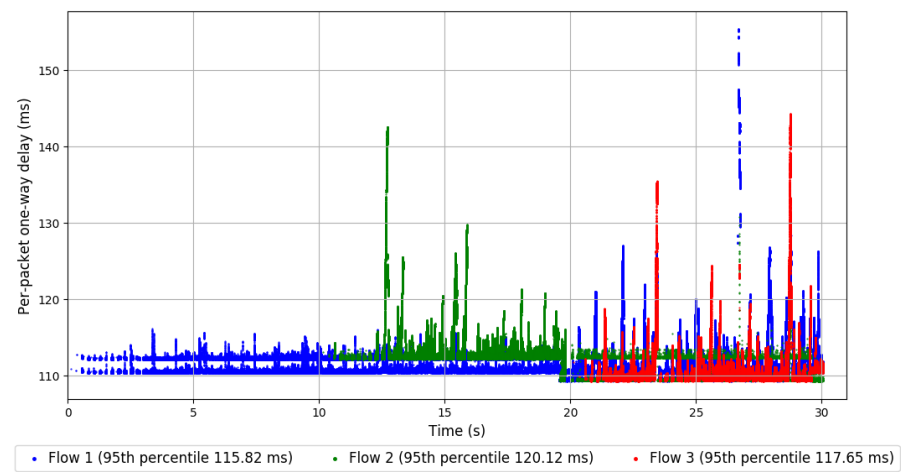
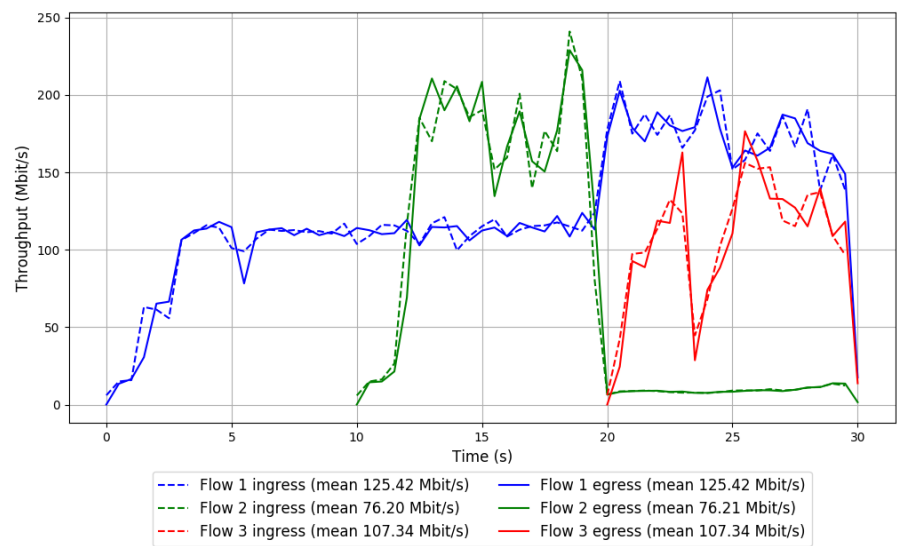
-- Flow 3:

Average throughput: 107.34 Mbit/s

95th percentile per-packet one-way delay: 117.648 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-04-04 05:24:41

End at: 2018-04-04 05:25:11

Below is generated by plot.py at 2018-04-04 08:52:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 39.86 Mbit/s

95th percentile per-packet one-way delay: 112.674 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.97 Mbit/s

95th percentile per-packet one-way delay: 112.717 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 15.83 Mbit/s

95th percentile per-packet one-way delay: 112.517 ms

Loss rate: 0.00%

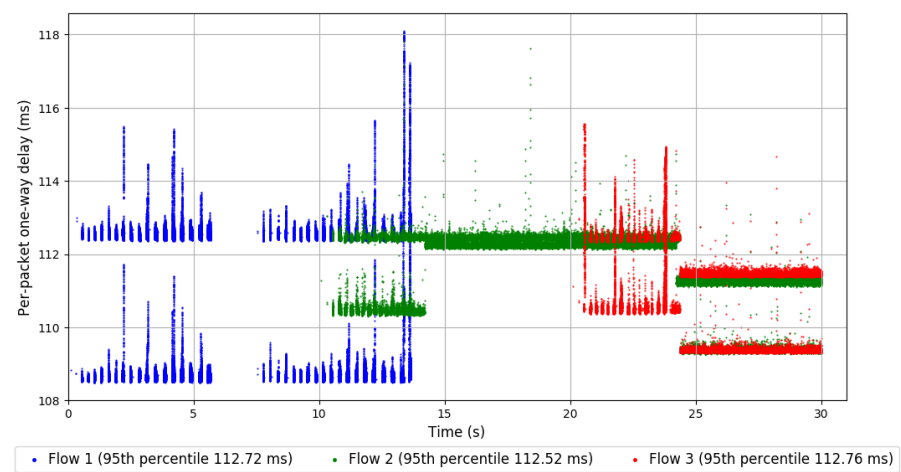
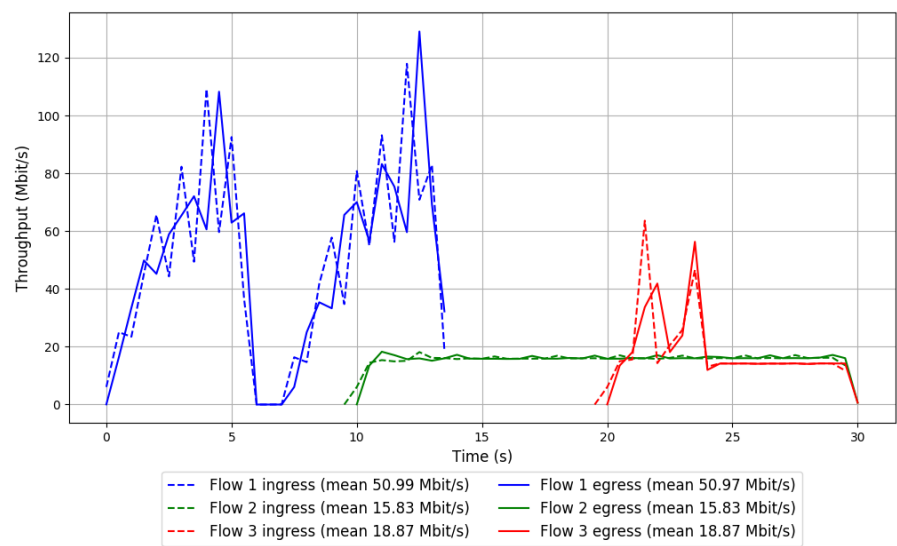
-- Flow 3:

Average throughput: 18.87 Mbit/s

95th percentile per-packet one-way delay: 112.758 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-04-04 05:44:17

End at: 2018-04-04 05:44:47

Below is generated by plot.py at 2018-04-04 08:52:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.51 Mbit/s

95th percentile per-packet one-way delay: 112.766 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 10.43 Mbit/s

95th percentile per-packet one-way delay: 112.531 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 186.31 Mbit/s

95th percentile per-packet one-way delay: 112.794 ms

Loss rate: 0.00%

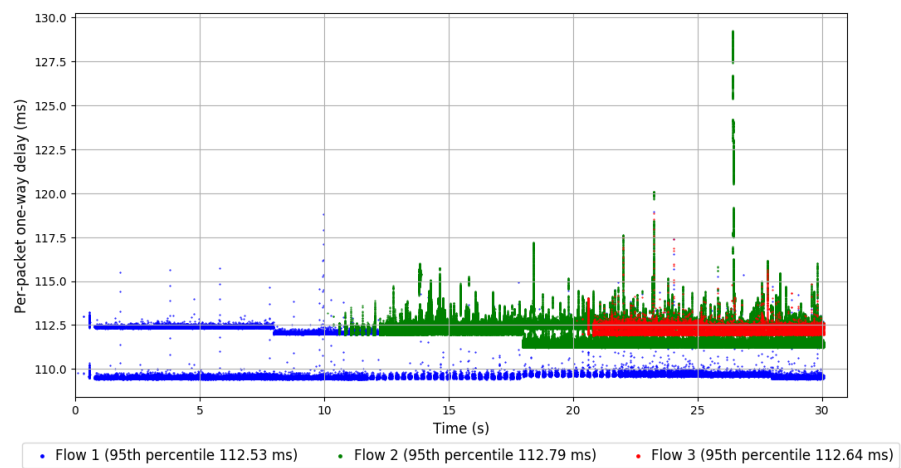
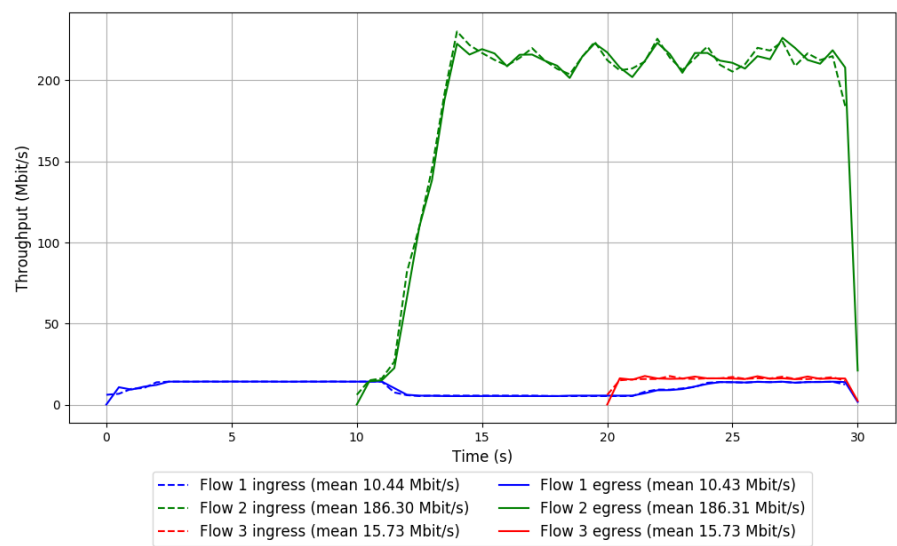
-- Flow 3:

Average throughput: 15.73 Mbit/s

95th percentile per-packet one-way delay: 112.635 ms

Loss rate: 0.00%

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

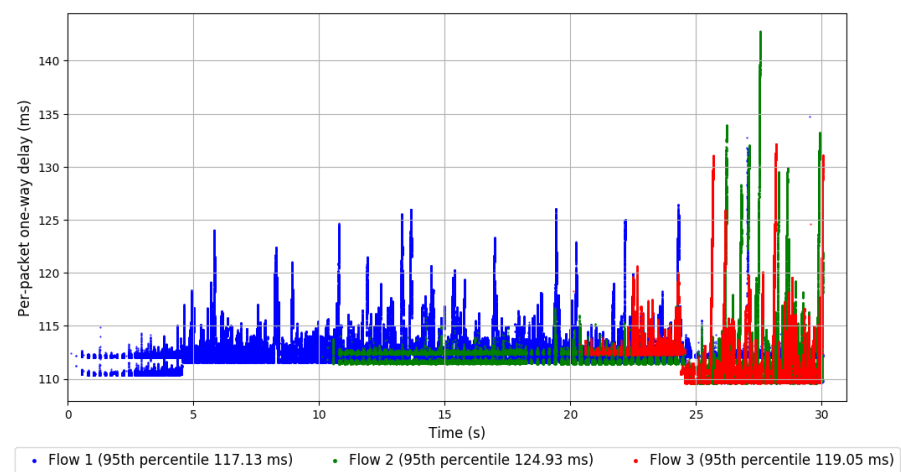
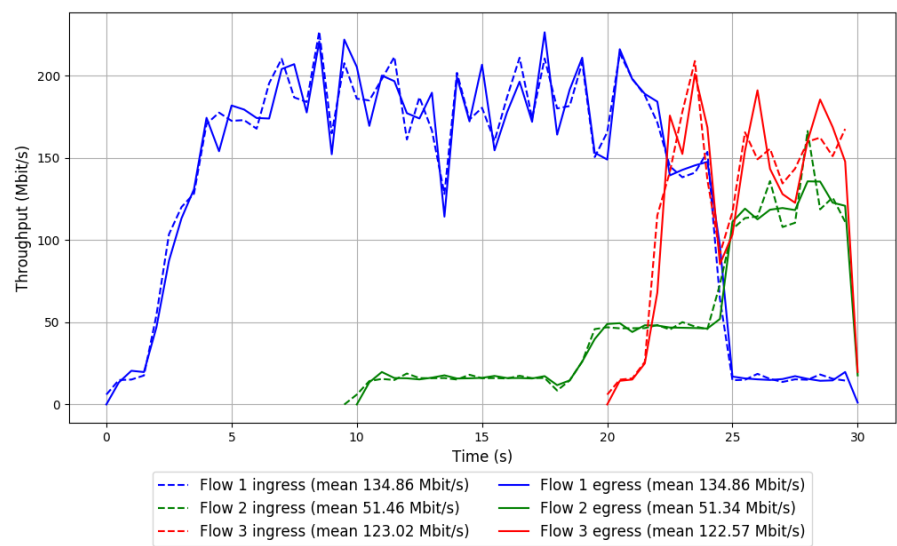


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-04-04 06:03:31
End at: 2018-04-04 06:04:01

# Below is generated by plot.py at 2018-04-04 08:54:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 209.64 Mbit/s
95th percentile per-packet one-way delay: 118.154 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 134.86 Mbit/s
95th percentile per-packet one-way delay: 117.134 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 51.34 Mbit/s
95th percentile per-packet one-way delay: 124.929 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 122.57 Mbit/s
95th percentile per-packet one-way delay: 119.051 ms
Loss rate: 0.42%
```


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

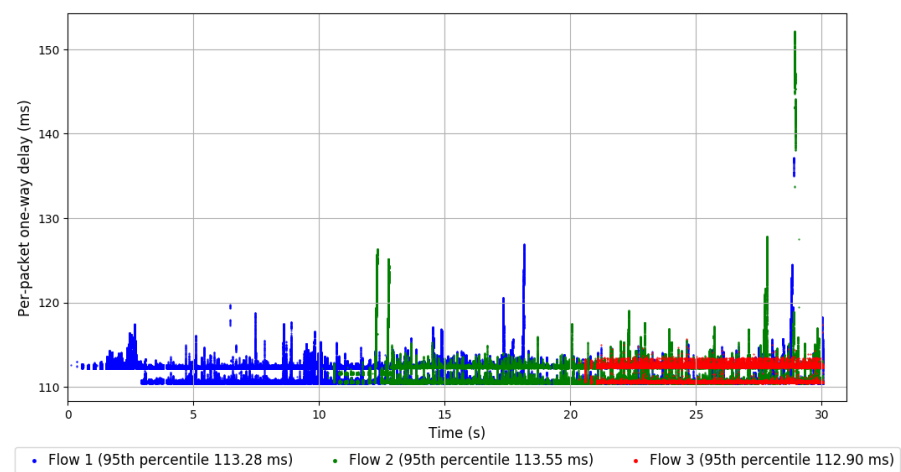
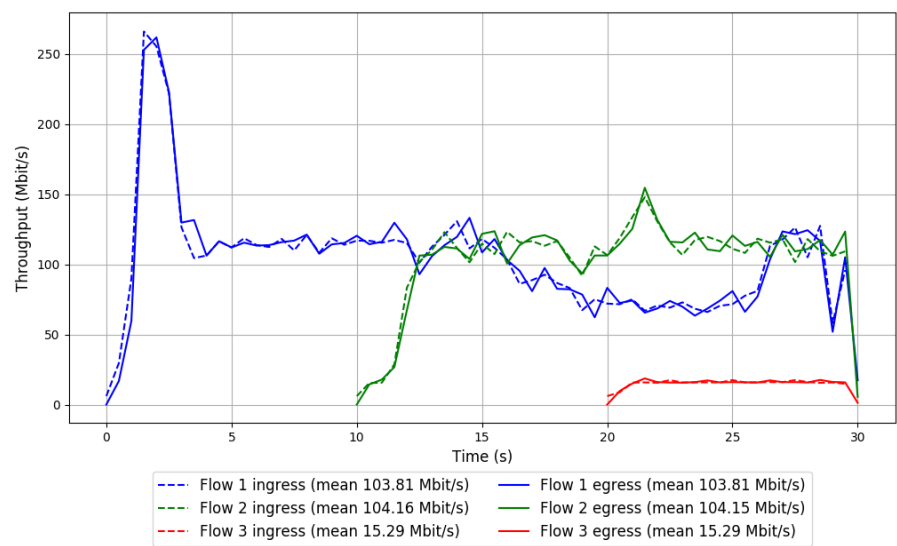


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-04-04 06:22:52
End at: 2018-04-04 06:23:22

# Below is generated by plot.py at 2018-04-04 08:54:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 178.04 Mbit/s
95th percentile per-packet one-way delay: 113.336 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 103.81 Mbit/s
95th percentile per-packet one-way delay: 113.275 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 104.15 Mbit/s
95th percentile per-packet one-way delay: 113.549 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.29 Mbit/s
95th percentile per-packet one-way delay: 112.897 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-04-04 03:26:54

End at: 2018-04-04 03:27:24

Below is generated by plot.py at 2018-04-04 08:54:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 133.23 Mbit/s

95th percentile per-packet one-way delay: 119.106 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 103.14 Mbit/s

95th percentile per-packet one-way delay: 119.930 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.56 Mbit/s

95th percentile per-packet one-way delay: 116.648 ms

Loss rate: 0.00%

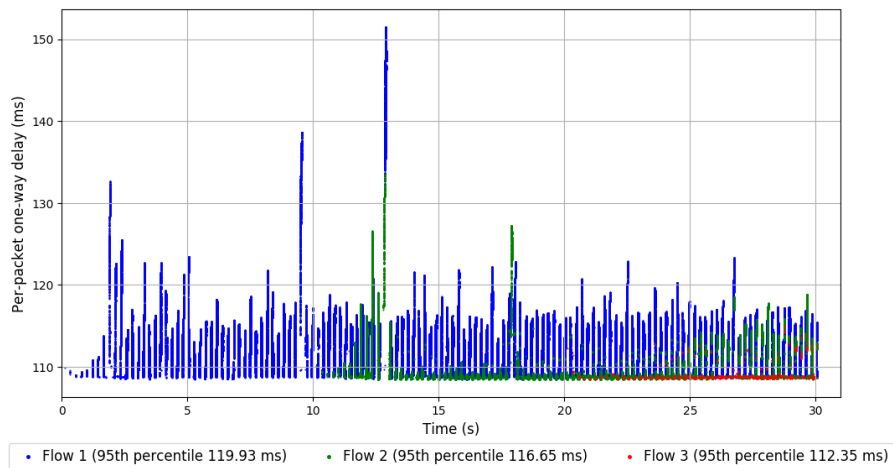
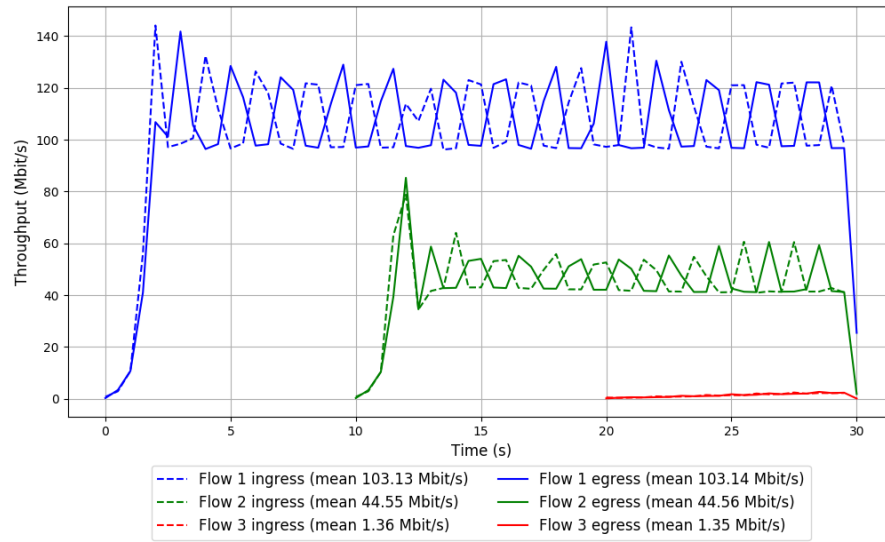
-- Flow 3:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 112.351 ms

Loss rate: 0.45%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-04-04 03:46:06

End at: 2018-04-04 03:46:36

Below is generated by plot.py at 2018-04-04 08:54:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.63 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.77 Mbit/s

95th percentile per-packet one-way delay: 114.319 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.27 Mbit/s

95th percentile per-packet one-way delay: 114.993 ms

Loss rate: 0.00%

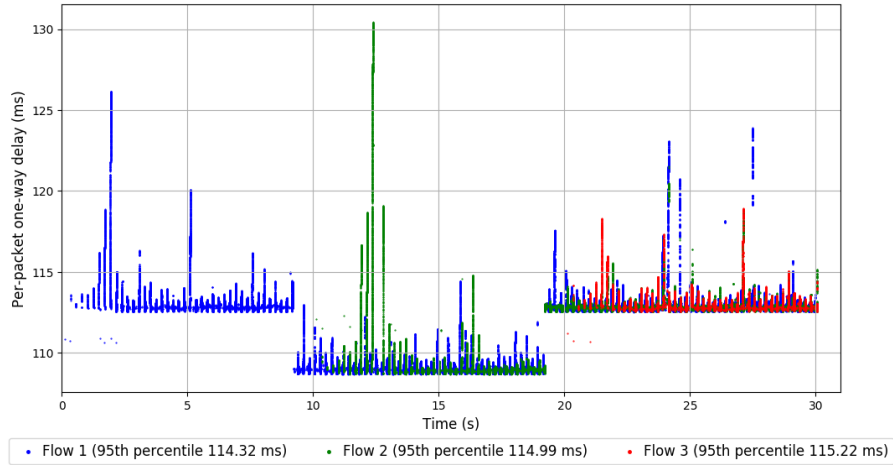
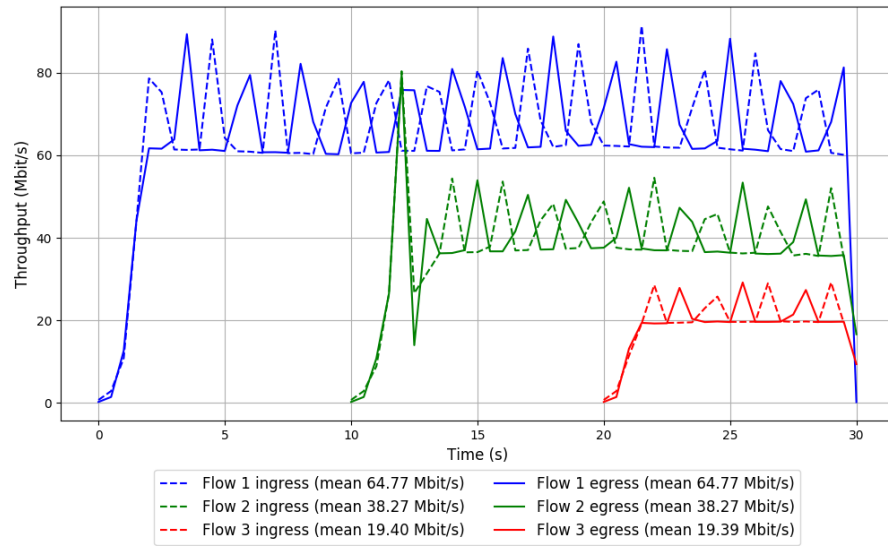
-- Flow 3:

Average throughput: 19.39 Mbit/s

95th percentile per-packet one-way delay: 115.218 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-04-04 04:05:06

End at: 2018-04-04 04:05:36

Below is generated by plot.py at 2018-04-04 08:54:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.12 Mbit/s

95th percentile per-packet one-way delay: 116.085 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 42.75 Mbit/s

95th percentile per-packet one-way delay: 114.134 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 112.449 ms

Loss rate: 0.09%

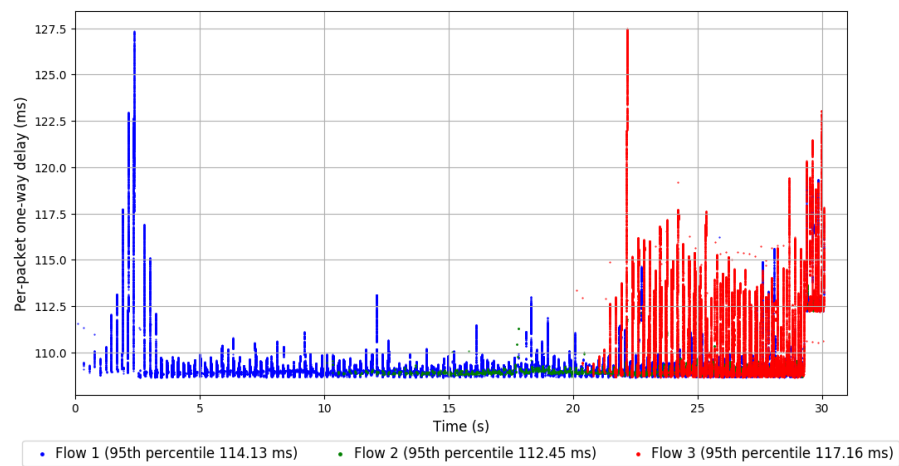
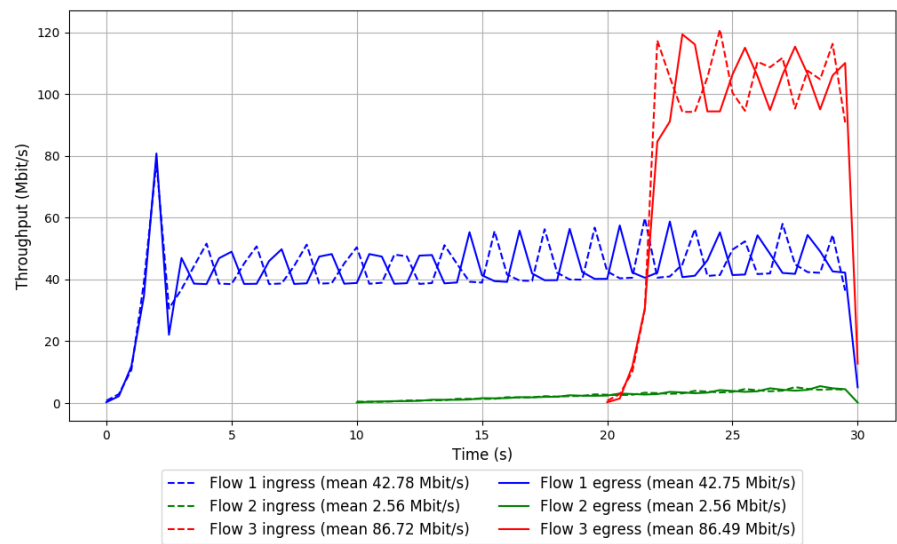
-- Flow 3:

Average throughput: 86.49 Mbit/s

95th percentile per-packet one-way delay: 117.161 ms

Loss rate: 0.26%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-04-04 04:23:48

End at: 2018-04-04 04:24:18

Below is generated by plot.py at 2018-04-04 08:54:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 46.42 Mbit/s

95th percentile per-packet one-way delay: 115.953 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 20.91 Mbit/s

95th percentile per-packet one-way delay: 113.253 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.25 Mbit/s

95th percentile per-packet one-way delay: 113.091 ms

Loss rate: 0.00%

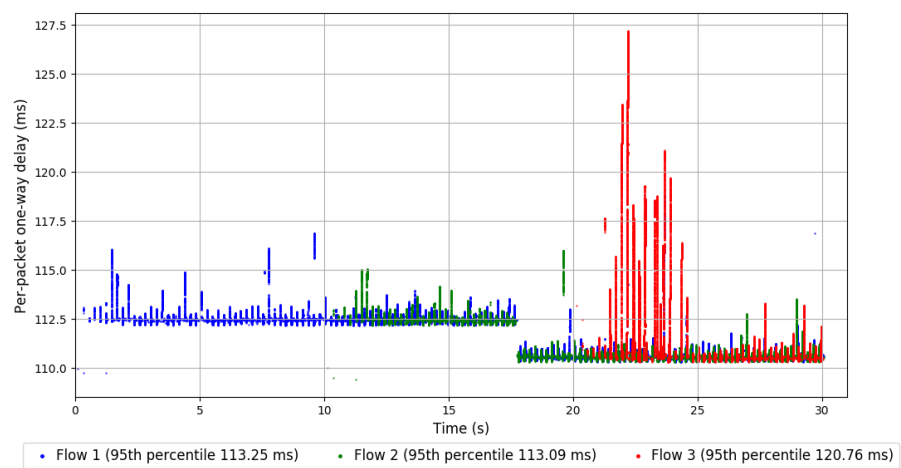
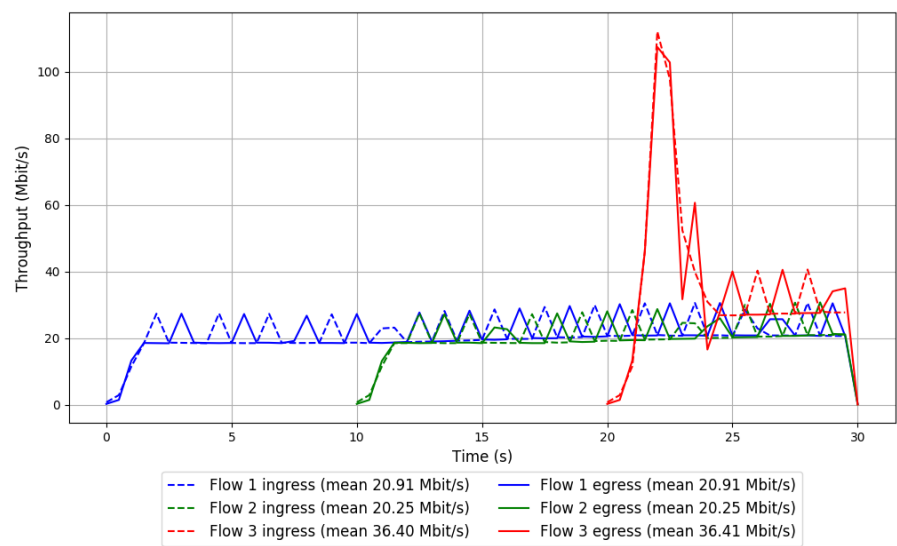
-- Flow 3:

Average throughput: 36.41 Mbit/s

95th percentile per-packet one-way delay: 120.757 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-04-04 04:42:43

End at: 2018-04-04 04:43:13

Below is generated by plot.py at 2018-04-04 08:54:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.89 Mbit/s

95th percentile per-packet one-way delay: 120.666 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 102.01 Mbit/s

95th percentile per-packet one-way delay: 120.695 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 117.256 ms

Loss rate: 0.17%

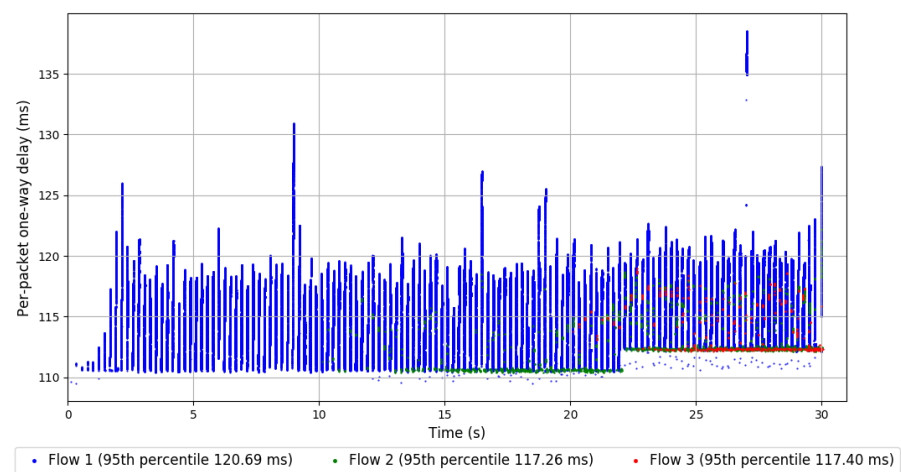
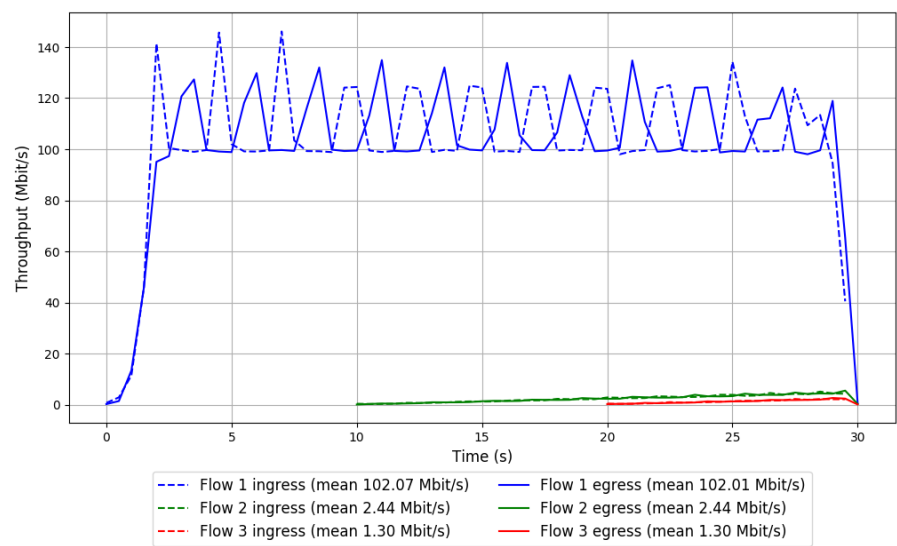
-- Flow 3:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 117.398 ms

Loss rate: 0.09%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-04-04 05:03:02

End at: 2018-04-04 05:03:32

Below is generated by plot.py at 2018-04-04 08:54:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 57.09 Mbit/s

95th percentile per-packet one-way delay: 114.270 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 27.92 Mbit/s

95th percentile per-packet one-way delay: 115.142 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.15 Mbit/s

95th percentile per-packet one-way delay: 113.800 ms

Loss rate: 0.00%

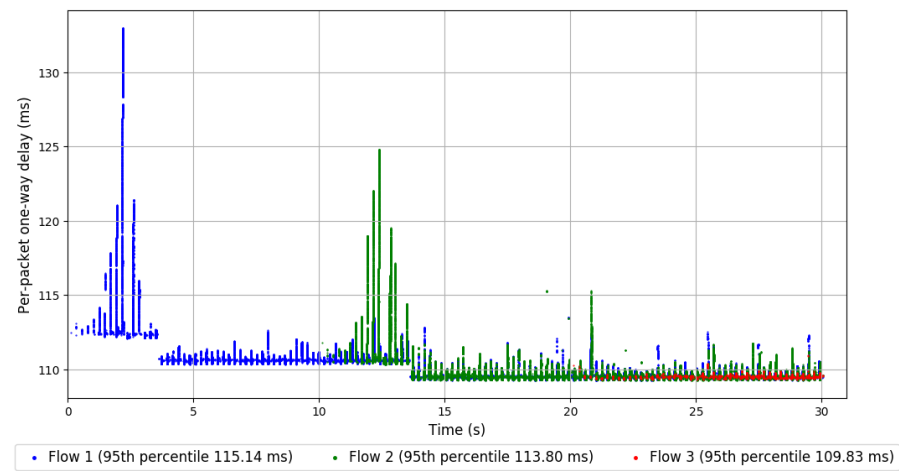
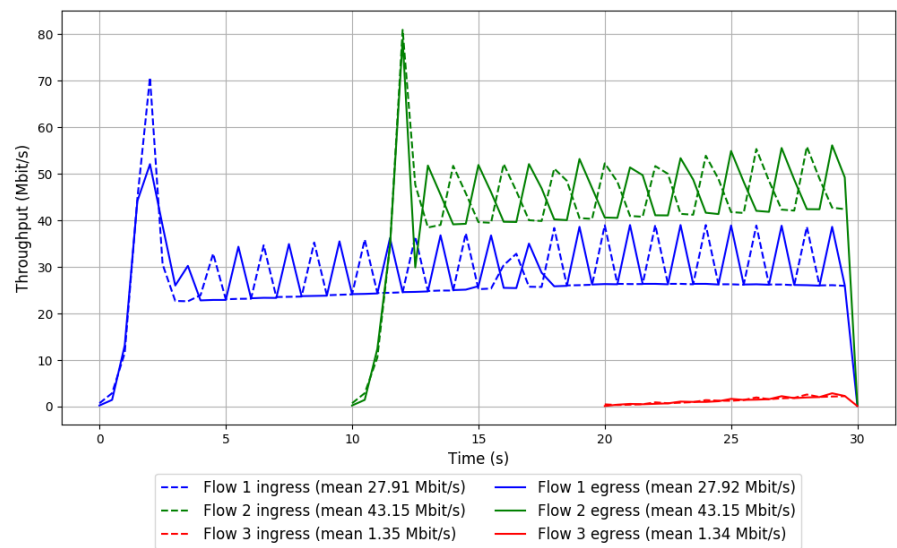
-- Flow 3:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 109.835 ms

Loss rate: 0.45%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-04-04 05:22:34

End at: 2018-04-04 05:23:04

Below is generated by plot.py at 2018-04-04 08:54:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.21 Mbit/s

95th percentile per-packet one-way delay: 121.804 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 20.67 Mbit/s

95th percentile per-packet one-way delay: 114.197 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 31.75 Mbit/s

95th percentile per-packet one-way delay: 118.017 ms

Loss rate: 0.03%

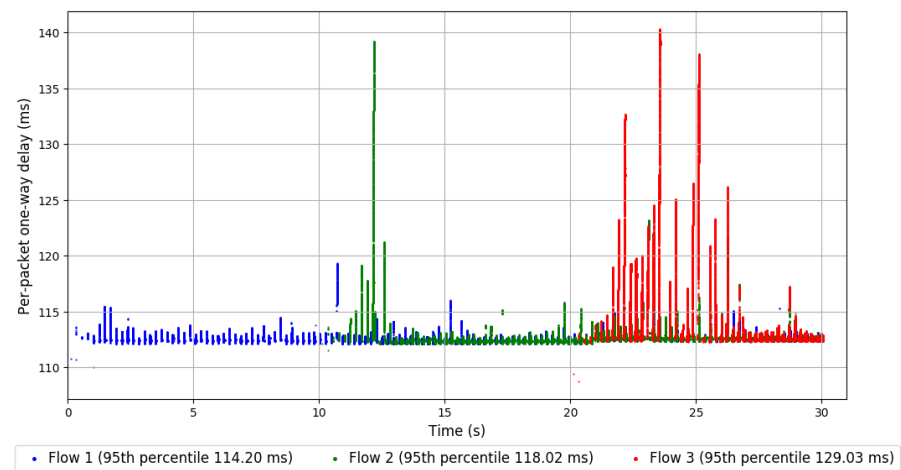
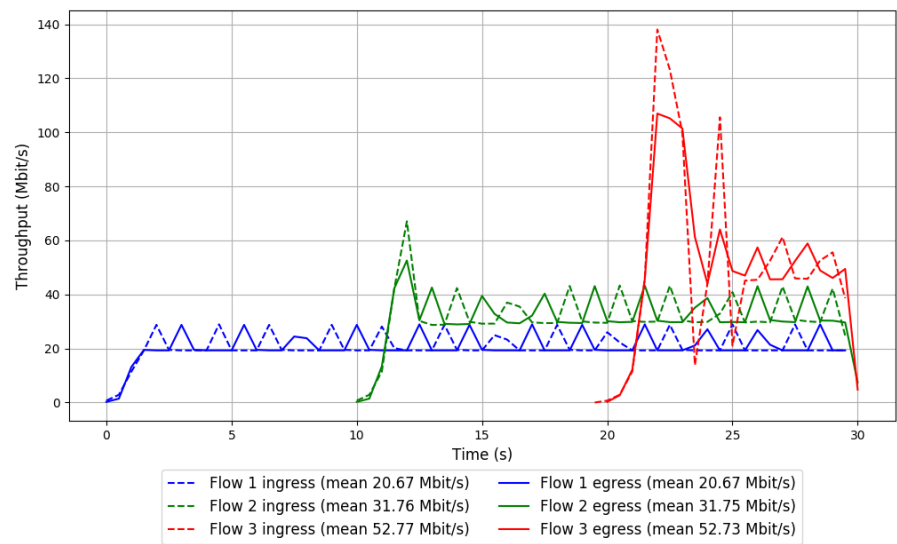
-- Flow 3:

Average throughput: 52.73 Mbit/s

95th percentile per-packet one-way delay: 129.033 ms

Loss rate: 0.06%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-04-04 05:42:20

End at: 2018-04-04 05:42:50

Below is generated by plot.py at 2018-04-04 08:54:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 105.40 Mbit/s

95th percentile per-packet one-way delay: 114.007 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 69.69 Mbit/s

95th percentile per-packet one-way delay: 113.602 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.28 Mbit/s

95th percentile per-packet one-way delay: 115.173 ms

Loss rate: 0.00%

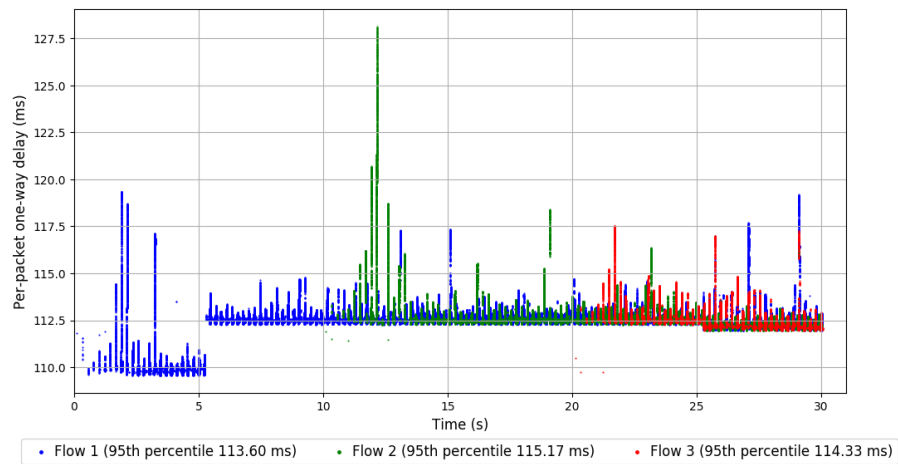
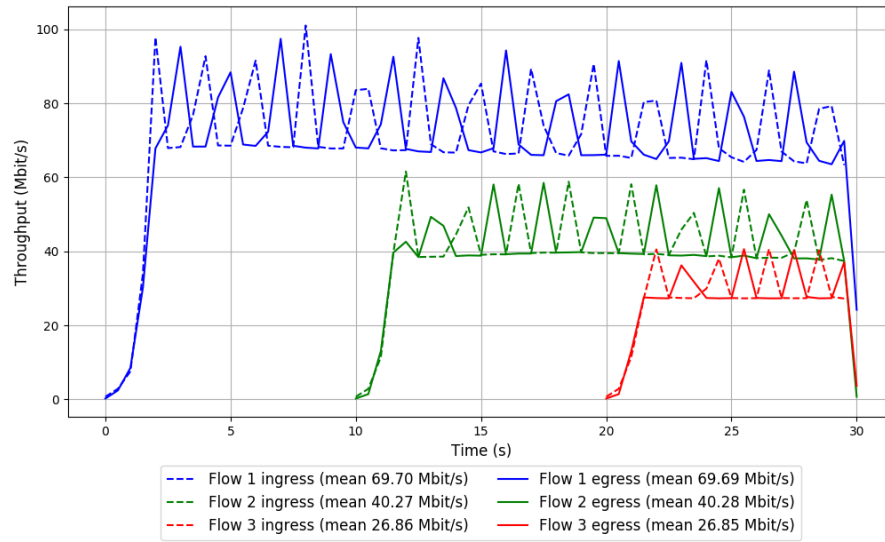
-- Flow 3:

Average throughput: 26.85 Mbit/s

95th percentile per-packet one-way delay: 114.333 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-04-04 06:01:35

End at: 2018-04-04 06:02:05

Below is generated by plot.py at 2018-04-04 08:54:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 38.17 Mbit/s

95th percentile per-packet one-way delay: 113.466 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 31.41 Mbit/s

95th percentile per-packet one-way delay: 113.500 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 112.725 ms

Loss rate: 0.14%

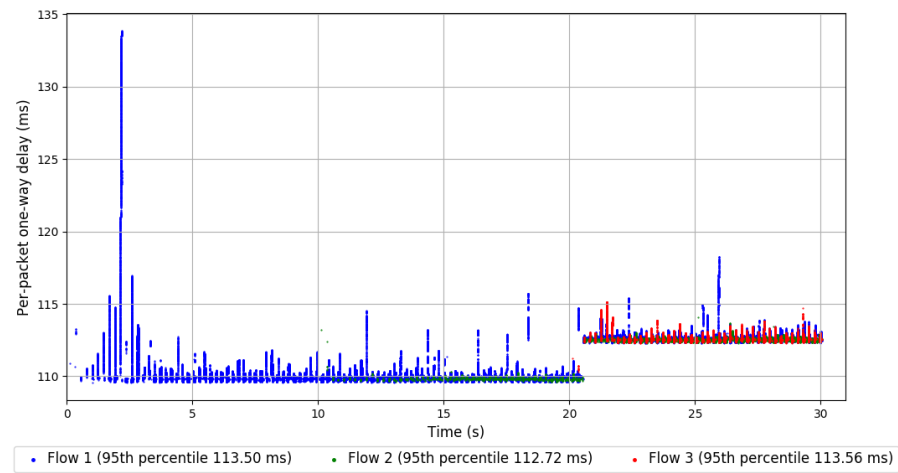
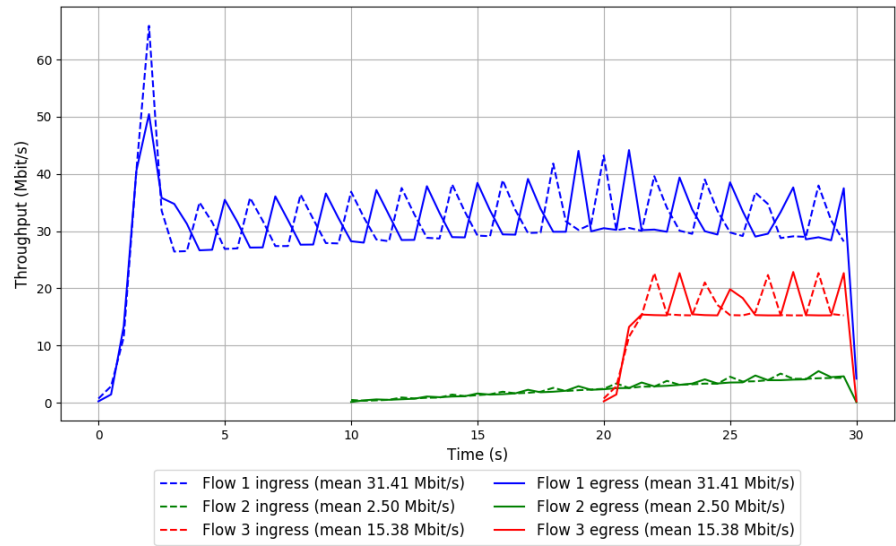
-- Flow 3:

Average throughput: 15.38 Mbit/s

95th percentile per-packet one-way delay: 113.562 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-04-04 06:20:57

End at: 2018-04-04 06:21:27

Below is generated by plot.py at 2018-04-04 08:55:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 128.44 Mbit/s

95th percentile per-packet one-way delay: 118.924 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 102.70 Mbit/s

95th percentile per-packet one-way delay: 119.129 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 115.120 ms

Loss rate: 0.27%

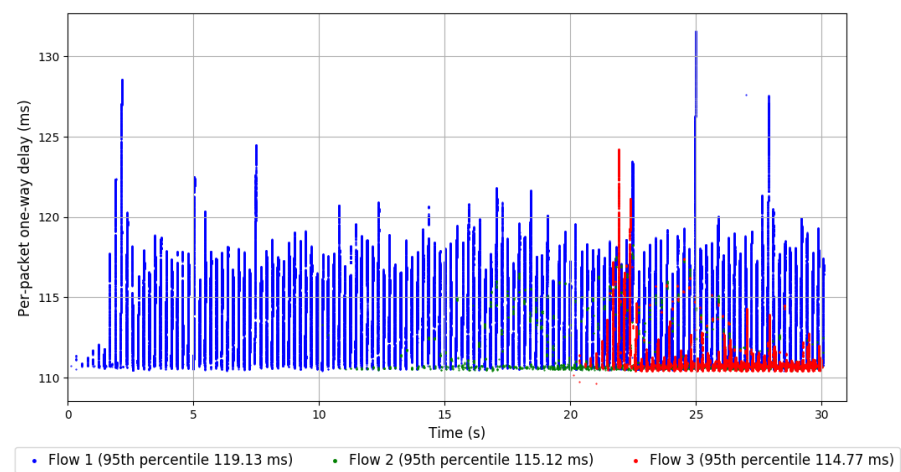
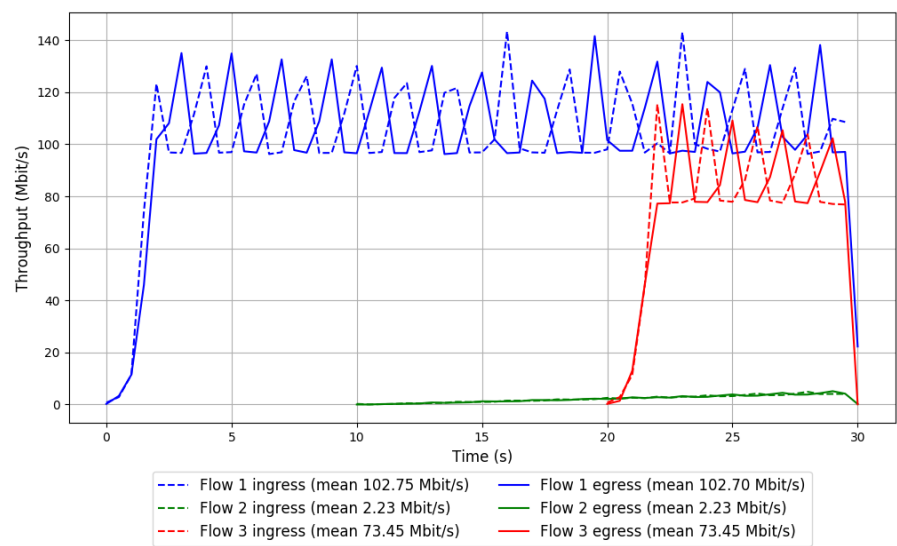
-- Flow 3:

Average throughput: 73.45 Mbit/s

95th percentile per-packet one-way delay: 114.765 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

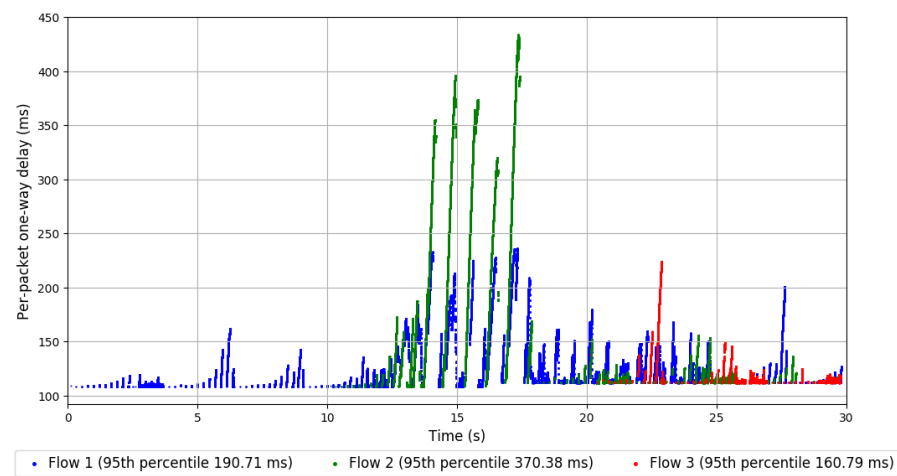
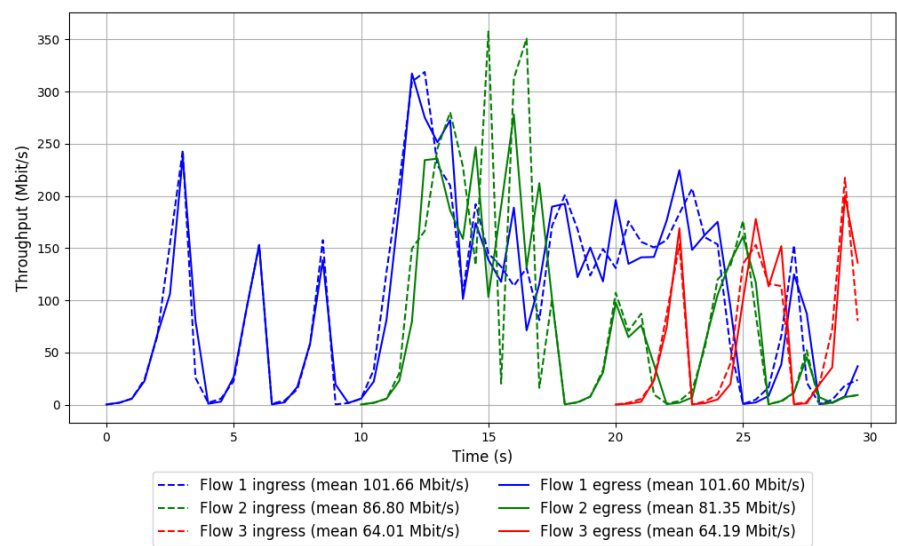


```
Run 1: Statistics of Verus

Start at: 2018-04-04 03:27:48
End at: 2018-04-04 03:28:18

# Below is generated by plot.py at 2018-04-04 08:56:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 175.88 Mbit/s
95th percentile per-packet one-way delay: 312.391 ms
Loss rate: 1.98%
-- Flow 1:
Average throughput: 101.60 Mbit/s
95th percentile per-packet one-way delay: 190.709 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 81.35 Mbit/s
95th percentile per-packet one-way delay: 370.382 ms
Loss rate: 6.23%
-- Flow 3:
Average throughput: 64.19 Mbit/s
95th percentile per-packet one-way delay: 160.793 ms
Loss rate: 0.00%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-04-04 03:46:58

End at: 2018-04-04 03:47:28

Below is generated by plot.py at 2018-04-04 08:56:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 203.18 Mbit/s

95th percentile per-packet one-way delay: 281.357 ms

Loss rate: 2.33%

-- Flow 1:

Average throughput: 159.18 Mbit/s

95th percentile per-packet one-way delay: 301.031 ms

Loss rate: 2.71%

-- Flow 2:

Average throughput: 41.38 Mbit/s

95th percentile per-packet one-way delay: 209.000 ms

Loss rate: 1.42%

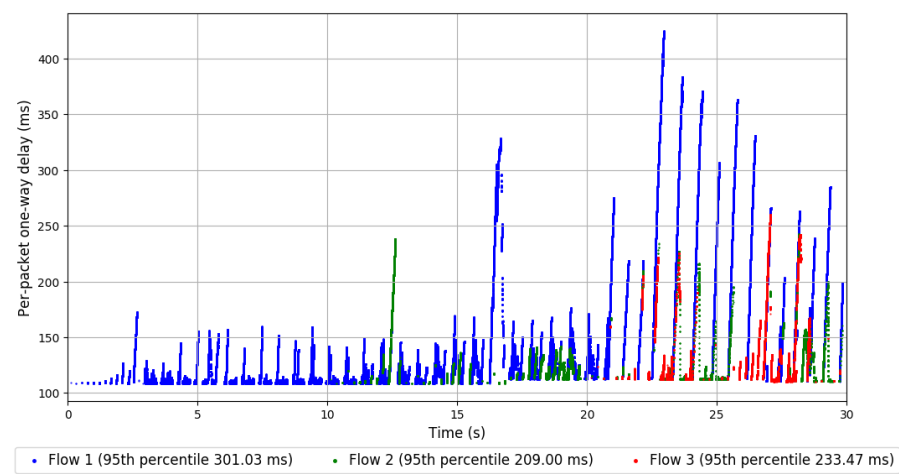
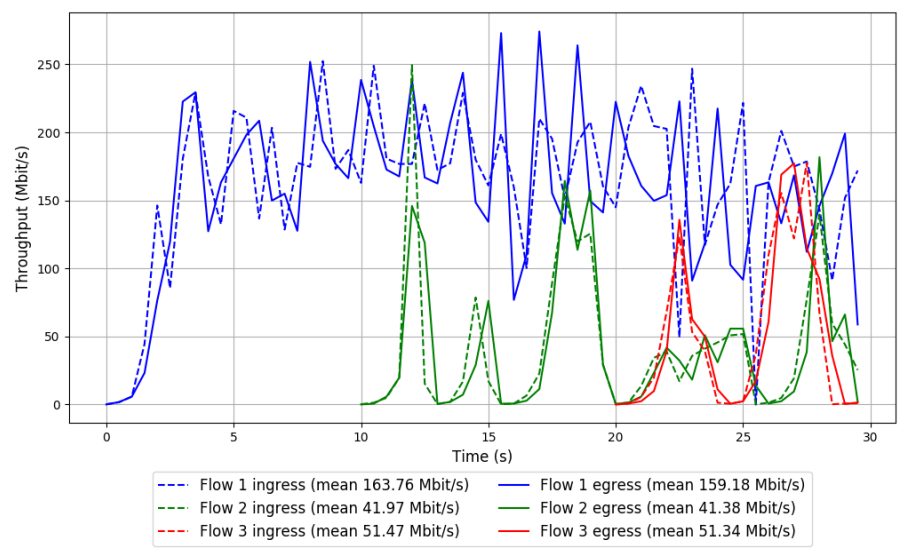
-- Flow 3:

Average throughput: 51.34 Mbit/s

95th percentile per-packet one-way delay: 233.474 ms

Loss rate: 0.18%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-04-04 04:05:57

End at: 2018-04-04 04:06:27

Below is generated by plot.py at 2018-04-04 08:56:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 222.82 Mbit/s

95th percentile per-packet one-way delay: 236.255 ms

Loss rate: 1.27%

-- Flow 1:

Average throughput: 156.57 Mbit/s

95th percentile per-packet one-way delay: 216.455 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 63.87 Mbit/s

95th percentile per-packet one-way delay: 341.787 ms

Loss rate: 5.12%

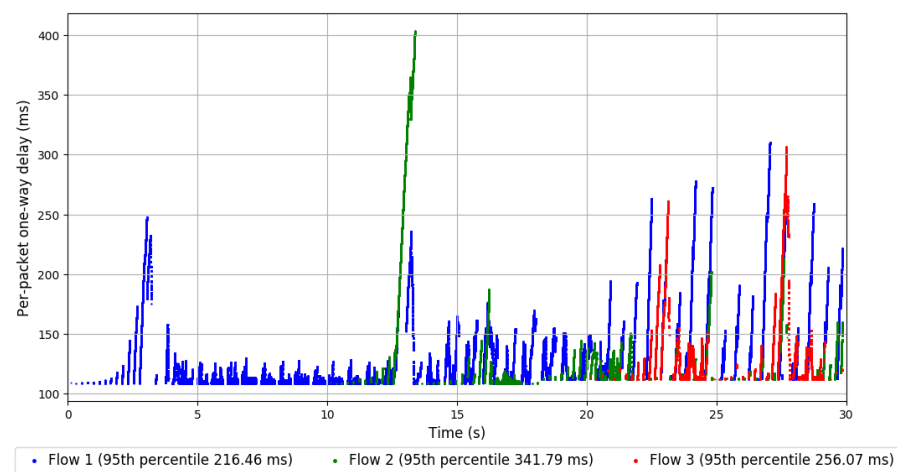
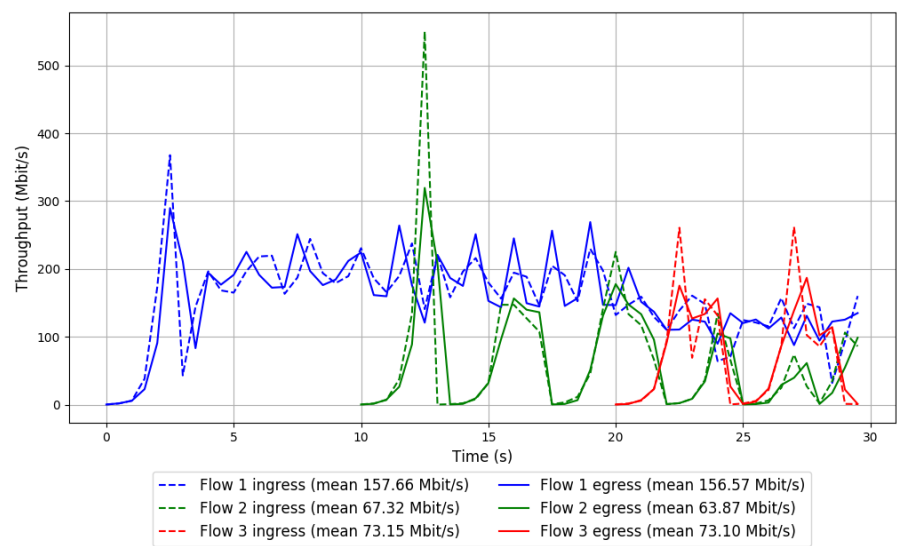
-- Flow 3:

Average throughput: 73.10 Mbit/s

95th percentile per-packet one-way delay: 256.068 ms

Loss rate: 0.00%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-04-04 04:24:37

End at: 2018-04-04 04:25:07

Below is generated by plot.py at 2018-04-04 08:56:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 193.26 Mbit/s

95th percentile per-packet one-way delay: 282.720 ms

Loss rate: 1.76%

-- Flow 1:

Average throughput: 100.59 Mbit/s

95th percentile per-packet one-way delay: 236.699 ms

Loss rate: 2.26%

-- Flow 2:

Average throughput: 57.80 Mbit/s

95th percentile per-packet one-way delay: 300.823 ms

Loss rate: 1.12%

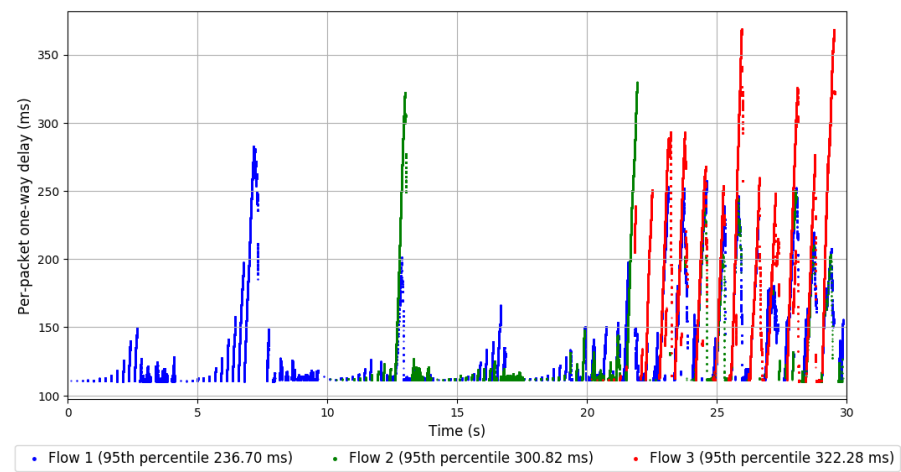
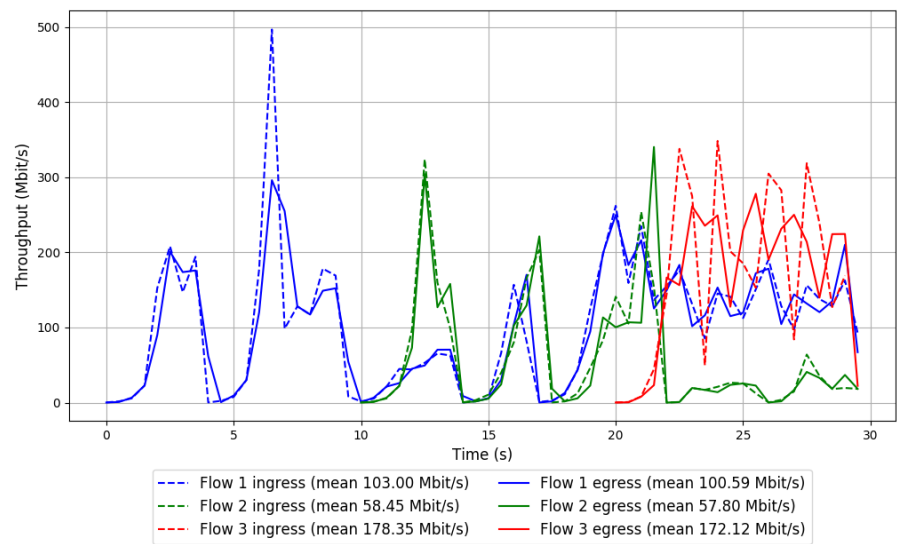
-- Flow 3:

Average throughput: 172.12 Mbit/s

95th percentile per-packet one-way delay: 322.282 ms

Loss rate: 1.28%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-04-04 04:43:36

End at: 2018-04-04 04:44:06

Below is generated by plot.py at 2018-04-04 08:58:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 232.04 Mbit/s

95th percentile per-packet one-way delay: 260.503 ms

Loss rate: 1.90%

-- Flow 1:

Average throughput: 133.30 Mbit/s

95th percentile per-packet one-way delay: 181.437 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 119.86 Mbit/s

95th percentile per-packet one-way delay: 272.971 ms

Loss rate: 1.53%

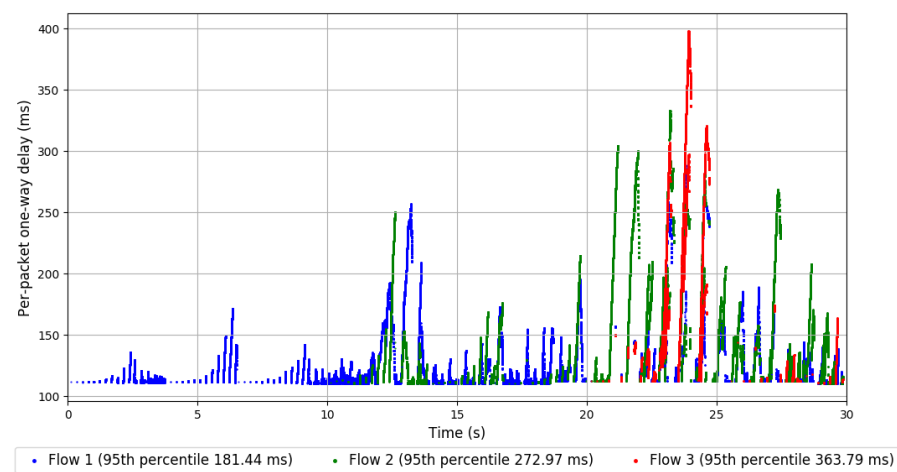
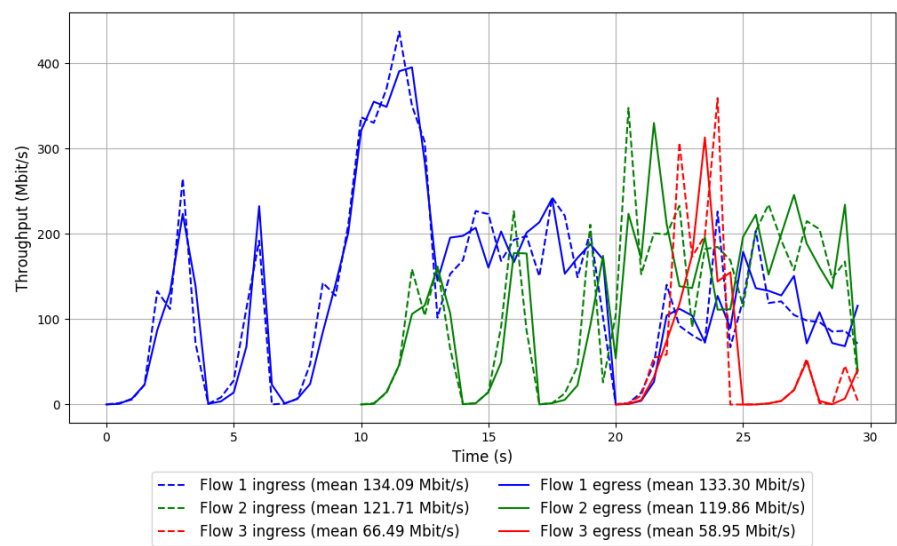
-- Flow 3:

Average throughput: 58.95 Mbit/s

95th percentile per-packet one-way delay: 363.790 ms

Loss rate: 11.36%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-04-04 05:03:52

End at: 2018-04-04 05:04:22

Below is generated by plot.py at 2018-04-04 08:59:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 282.97 Mbit/s

95th percentile per-packet one-way delay: 207.281 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 153.56 Mbit/s

95th percentile per-packet one-way delay: 192.752 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 169.39 Mbit/s

95th percentile per-packet one-way delay: 261.293 ms

Loss rate: 1.77%

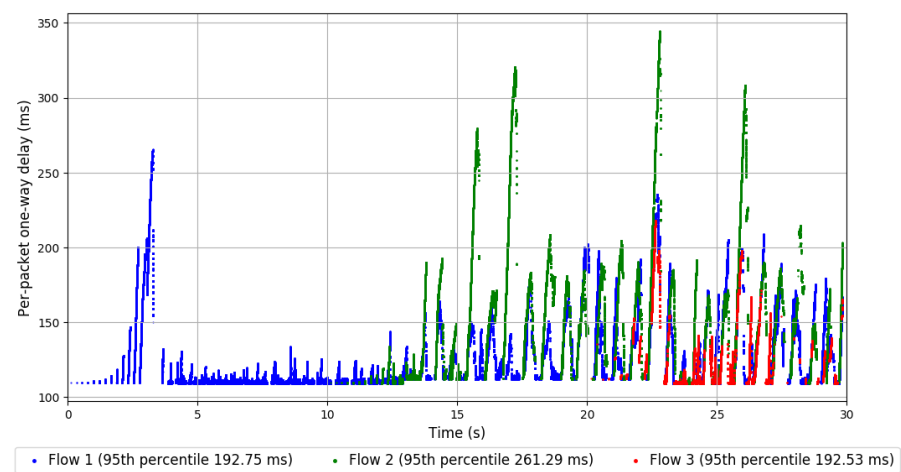
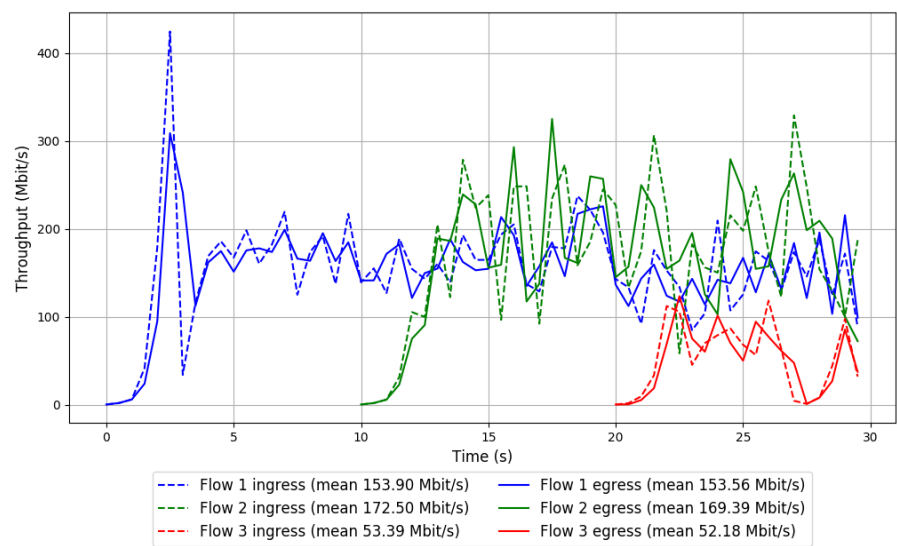
-- Flow 3:

Average throughput: 52.18 Mbit/s

95th percentile per-packet one-way delay: 192.533 ms

Loss rate: 2.31%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-04-04 05:23:25

End at: 2018-04-04 05:23:55

Below is generated by plot.py at 2018-04-04 08:59:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 255.70 Mbit/s

95th percentile per-packet one-way delay: 224.936 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 172.65 Mbit/s

95th percentile per-packet one-way delay: 201.189 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 103.48 Mbit/s

95th percentile per-packet one-way delay: 224.596 ms

Loss rate: 1.07%

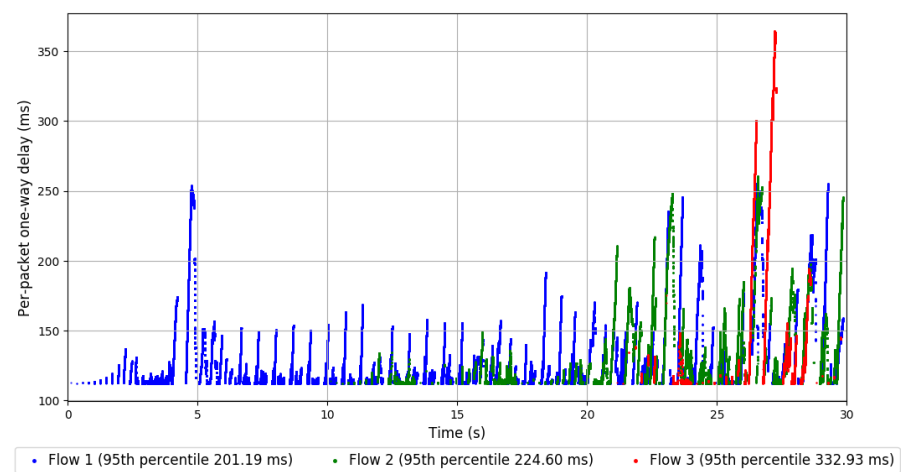
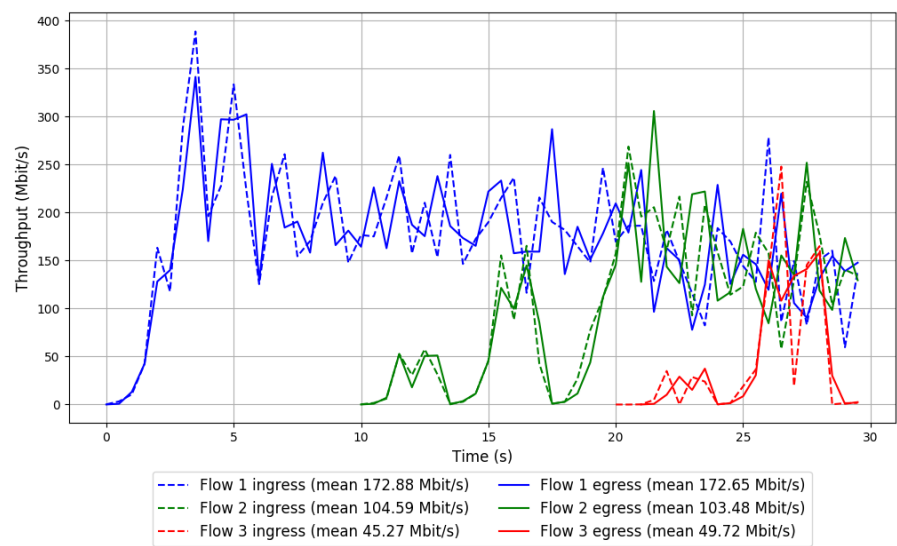
-- Flow 3:

Average throughput: 49.72 Mbit/s

95th percentile per-packet one-way delay: 332.925 ms

Loss rate: 1.25%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-04-04 05:43:13

End at: 2018-04-04 05:43:43

Below is generated by plot.py at 2018-04-04 08:59:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 203.96 Mbit/s

95th percentile per-packet one-way delay: 241.000 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 122.02 Mbit/s

95th percentile per-packet one-way delay: 197.858 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 106.28 Mbit/s

95th percentile per-packet one-way delay: 353.292 ms

Loss rate: 2.25%

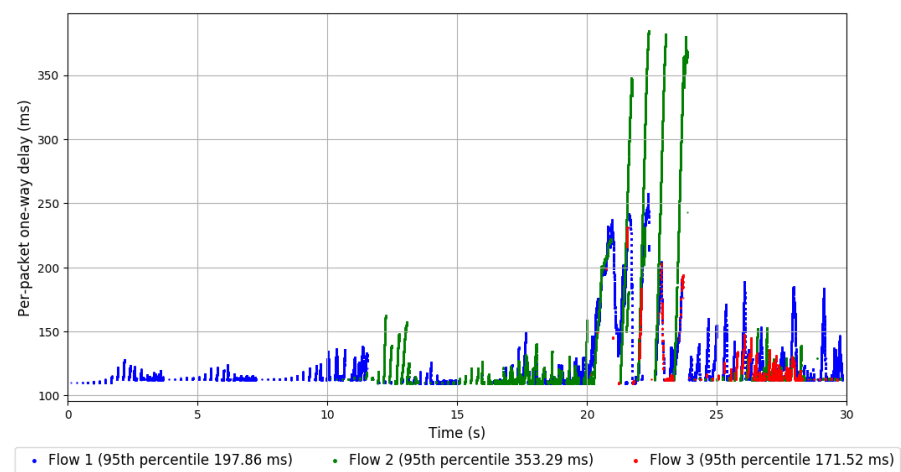
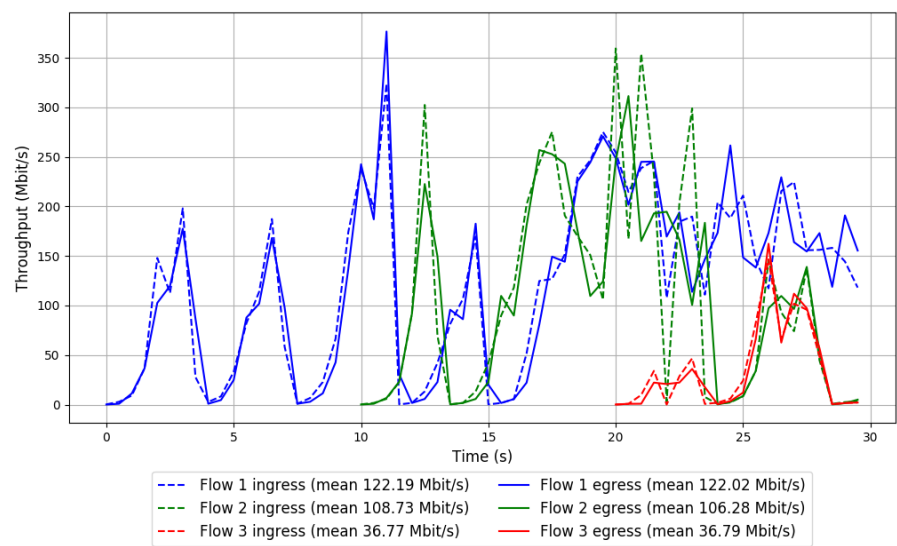
-- Flow 3:

Average throughput: 36.79 Mbit/s

95th percentile per-packet one-way delay: 171.522 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-04-04 06:02:24

End at: 2018-04-04 06:02:54

Below is generated by plot.py at 2018-04-04 09:00:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 251.30 Mbit/s

95th percentile per-packet one-way delay: 274.896 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 179.07 Mbit/s

95th percentile per-packet one-way delay: 280.490 ms

Loss rate: 1.73%

-- Flow 2:

Average throughput: 92.09 Mbit/s

95th percentile per-packet one-way delay: 221.901 ms

Loss rate: 0.67%

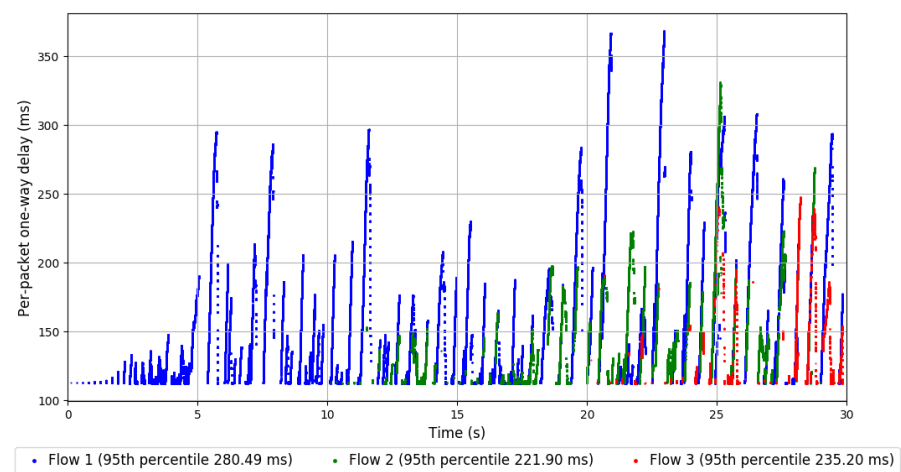
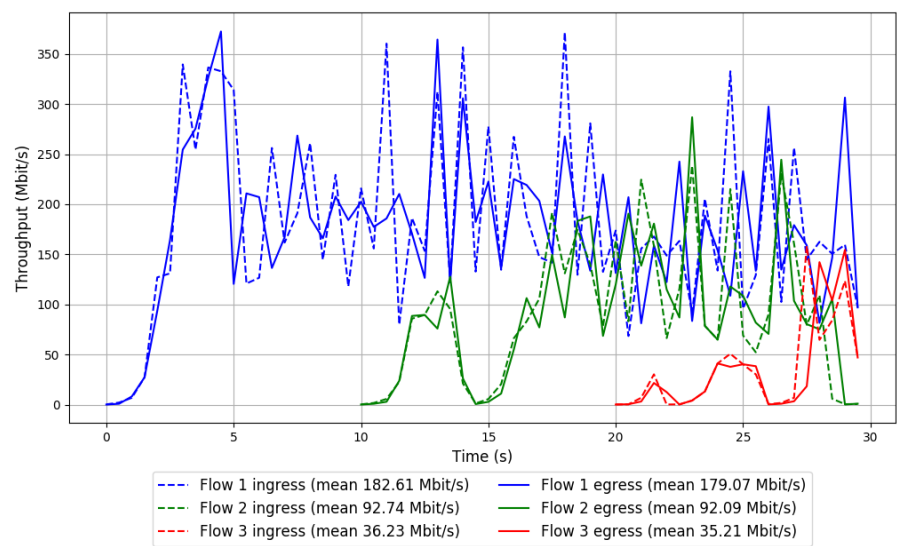
-- Flow 3:

Average throughput: 35.21 Mbit/s

95th percentile per-packet one-way delay: 235.200 ms

Loss rate: 2.99%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-04-04 06:21:51

End at: 2018-04-04 06:22:21

Below is generated by plot.py at 2018-04-04 09:00:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.33 Mbit/s

95th percentile per-packet one-way delay: 286.767 ms

Loss rate: 3.73%

-- Flow 1:

Average throughput: 104.24 Mbit/s

95th percentile per-packet one-way delay: 223.398 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 90.48 Mbit/s

95th percentile per-packet one-way delay: 265.739 ms

Loss rate: 2.80%

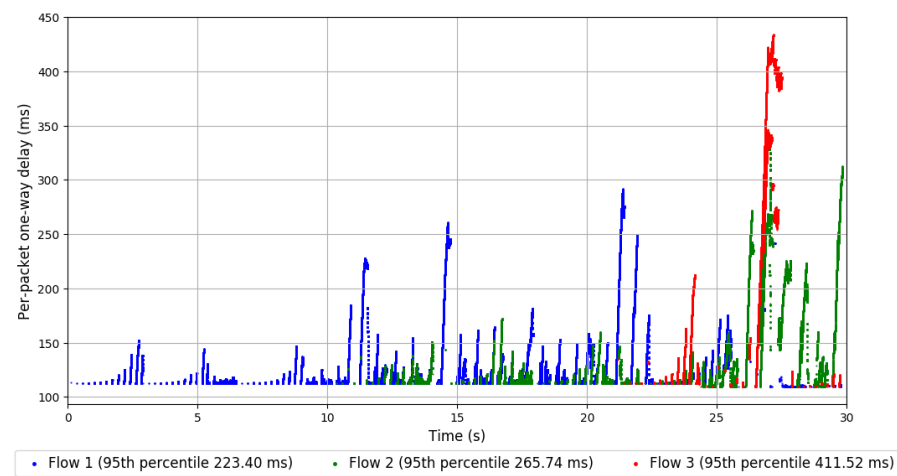
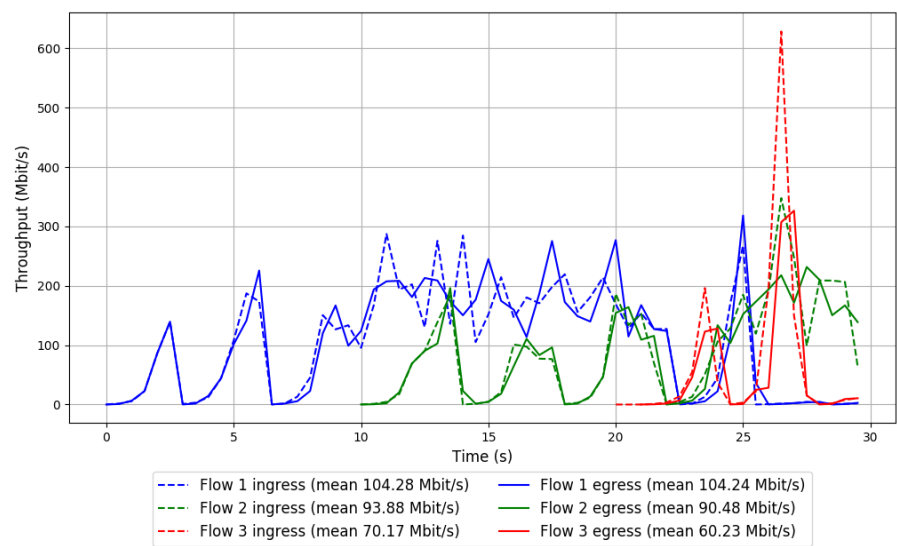
-- Flow 3:

Average throughput: 60.23 Mbit/s

95th percentile per-packet one-way delay: 411.517 ms

Loss rate: 23.28%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-04-04 03:29:50

End at: 2018-04-04 03:30:20

Below is generated by plot.py at 2018-04-04 09:00:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.34 Mbit/s

95th percentile per-packet one-way delay: 112.221 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.34 Mbit/s

95th percentile per-packet one-way delay: 112.098 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 69.81 Mbit/s

95th percentile per-packet one-way delay: 112.264 ms

Loss rate: 0.00%

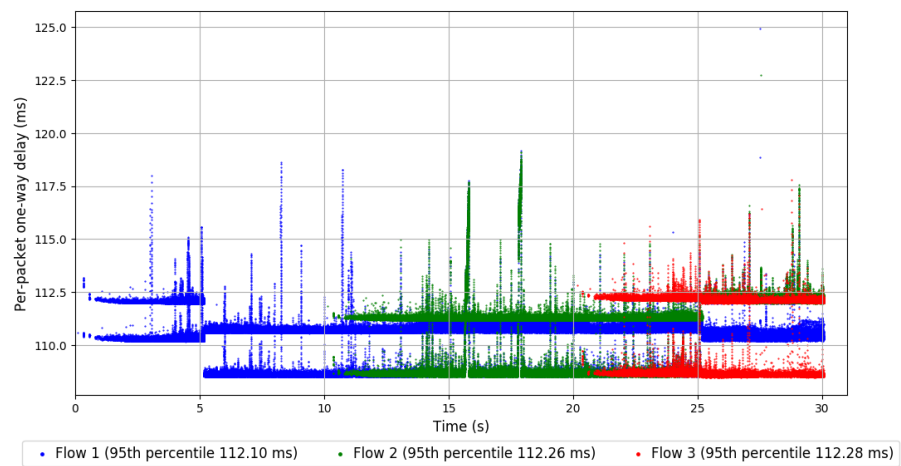
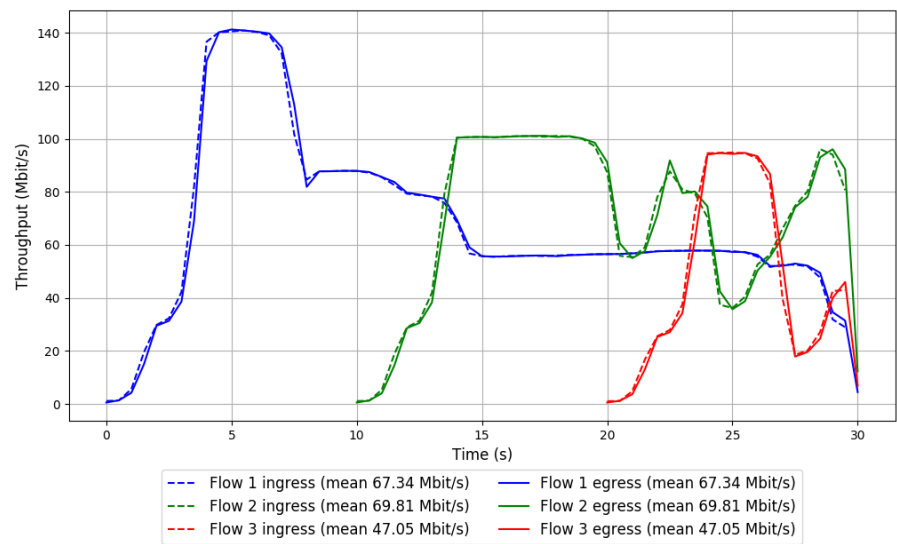
-- Flow 3:

Average throughput: 47.05 Mbit/s

95th percentile per-packet one-way delay: 112.279 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-04-04 03:48:57

End at: 2018-04-04 03:49:27

Below is generated by plot.py at 2018-04-04 09:00:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.09 Mbit/s

95th percentile per-packet one-way delay: 113.215 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 52.01 Mbit/s

95th percentile per-packet one-way delay: 113.269 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 65.43 Mbit/s

95th percentile per-packet one-way delay: 110.709 ms

Loss rate: 0.00%

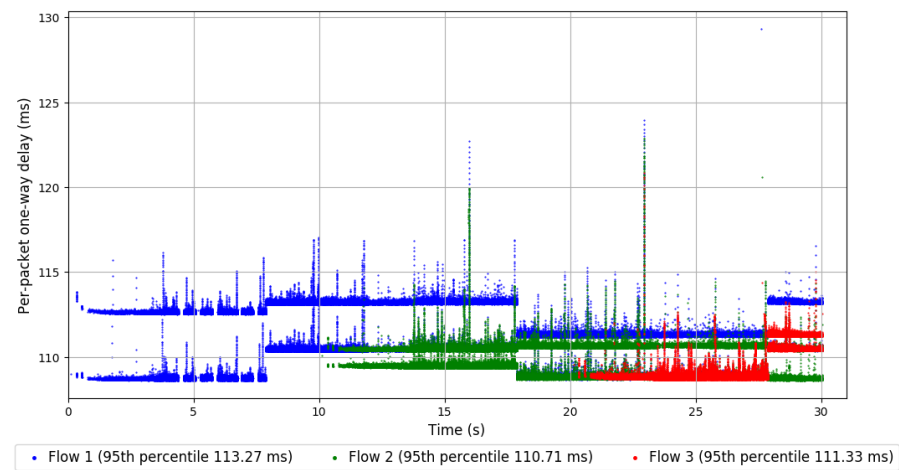
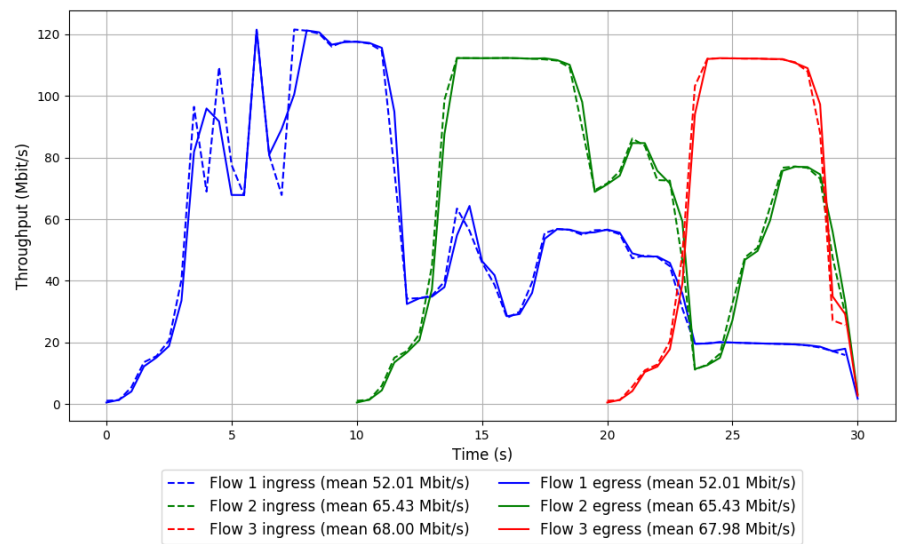
-- Flow 3:

Average throughput: 67.98 Mbit/s

95th percentile per-packet one-way delay: 111.332 ms

Loss rate: 0.01%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-04-04 04:07:49

End at: 2018-04-04 04:08:19

Below is generated by plot.py at 2018-04-04 09:02:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 131.81 Mbit/s

95th percentile per-packet one-way delay: 111.692 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.89 Mbit/s

95th percentile per-packet one-way delay: 111.685 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.59 Mbit/s

95th percentile per-packet one-way delay: 111.704 ms

Loss rate: 0.00%

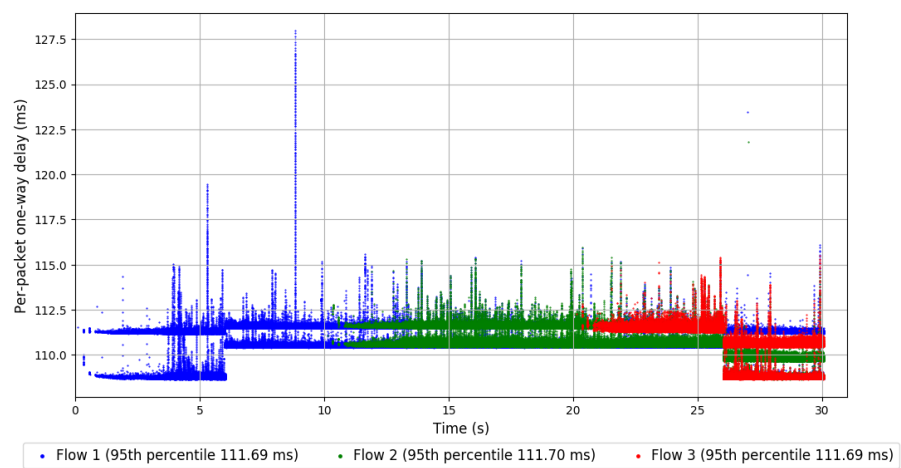
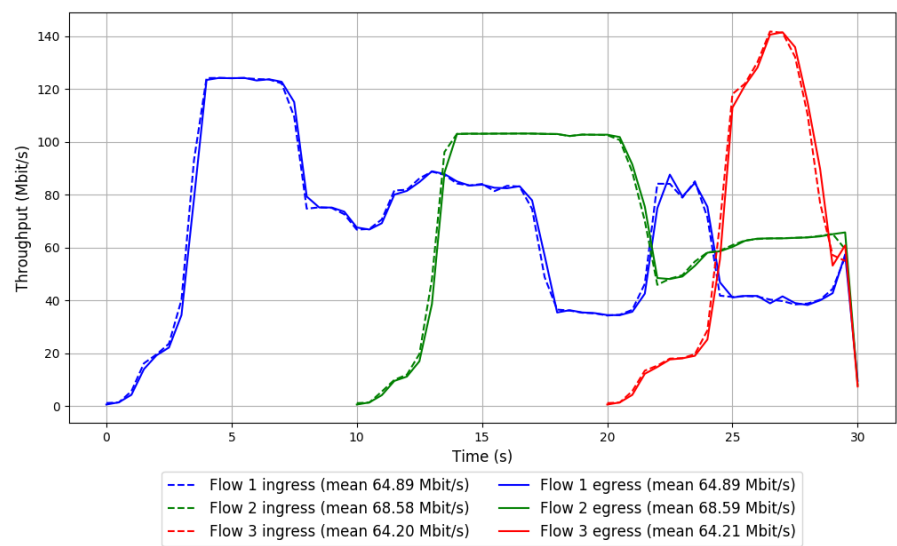
-- Flow 3:

Average throughput: 64.21 Mbit/s

95th percentile per-packet one-way delay: 111.685 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-04-04 04:26:49

End at: 2018-04-04 04:27:20

Below is generated by plot.py at 2018-04-04 09:02:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.72 Mbit/s

95th percentile per-packet one-way delay: 111.549 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.97 Mbit/s

95th percentile per-packet one-way delay: 111.557 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.39 Mbit/s

95th percentile per-packet one-way delay: 111.537 ms

Loss rate: 0.00%

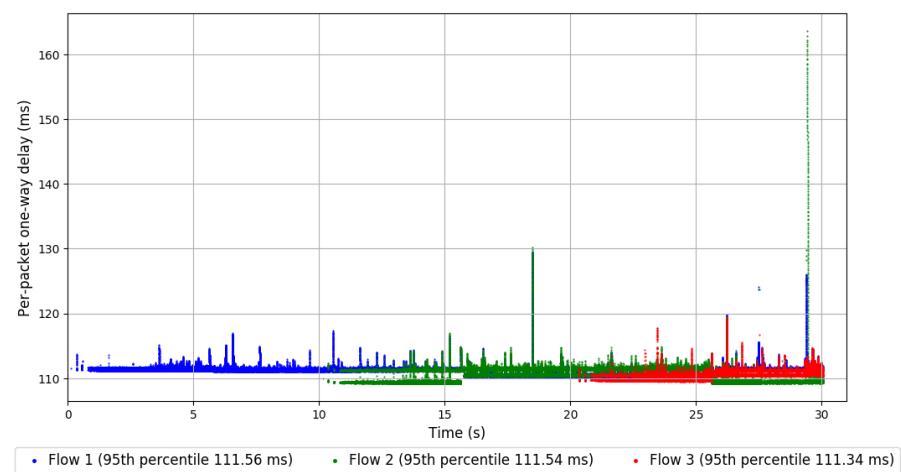
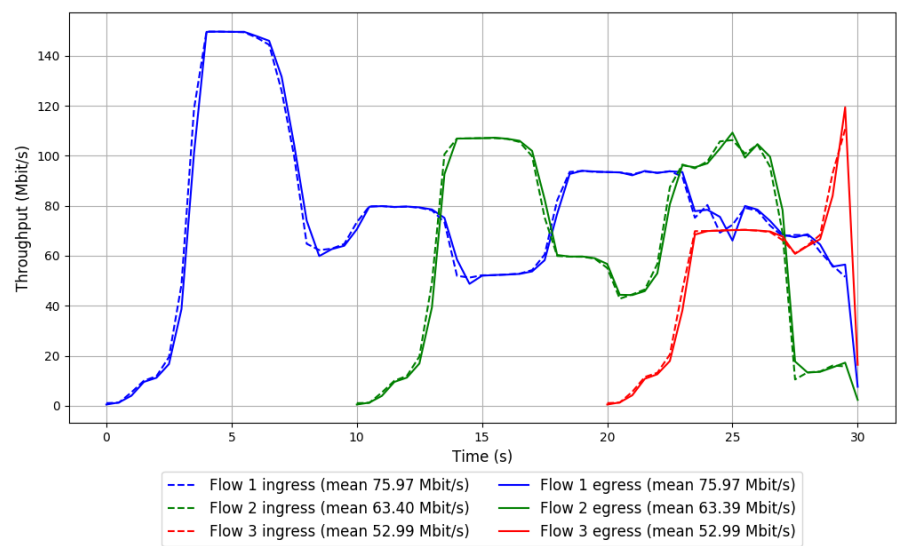
-- Flow 3:

Average throughput: 52.99 Mbit/s

95th percentile per-packet one-way delay: 111.342 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-04-04 04:45:56

End at: 2018-04-04 04:46:26

Below is generated by plot.py at 2018-04-04 09:02:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 115.08 Mbit/s

95th percentile per-packet one-way delay: 112.100 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 41.35 Mbit/s

95th percentile per-packet one-way delay: 110.559 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 72.65 Mbit/s

95th percentile per-packet one-way delay: 112.154 ms

Loss rate: 0.00%

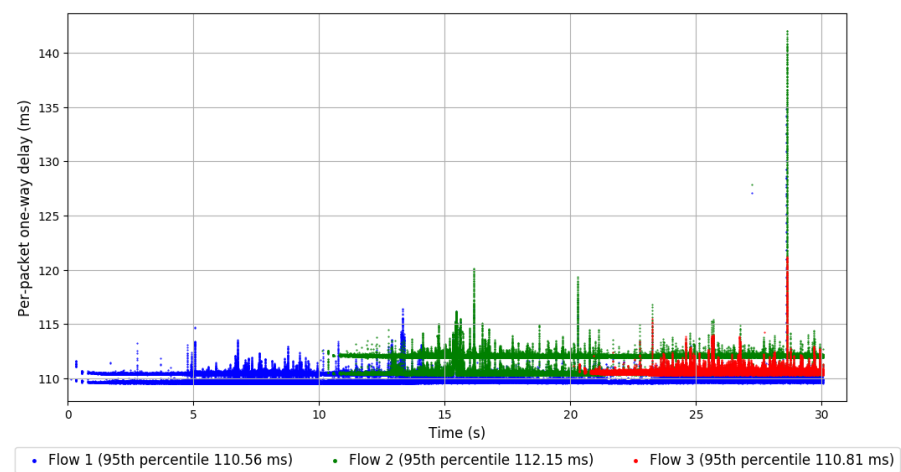
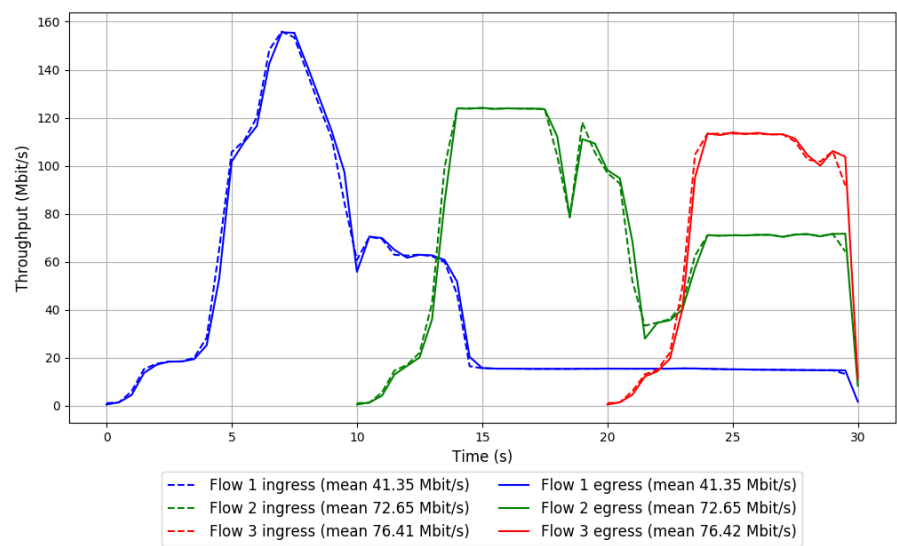
-- Flow 3:

Average throughput: 76.42 Mbit/s

95th percentile per-packet one-way delay: 110.815 ms

Loss rate: 0.01%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-04-04 05:06:18

End at: 2018-04-04 05:06:48

Below is generated by plot.py at 2018-04-04 09:03:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 127.06 Mbit/s

95th percentile per-packet one-way delay: 112.335 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.50 Mbit/s

95th percentile per-packet one-way delay: 112.267 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.63 Mbit/s

95th percentile per-packet one-way delay: 112.396 ms

Loss rate: 0.00%

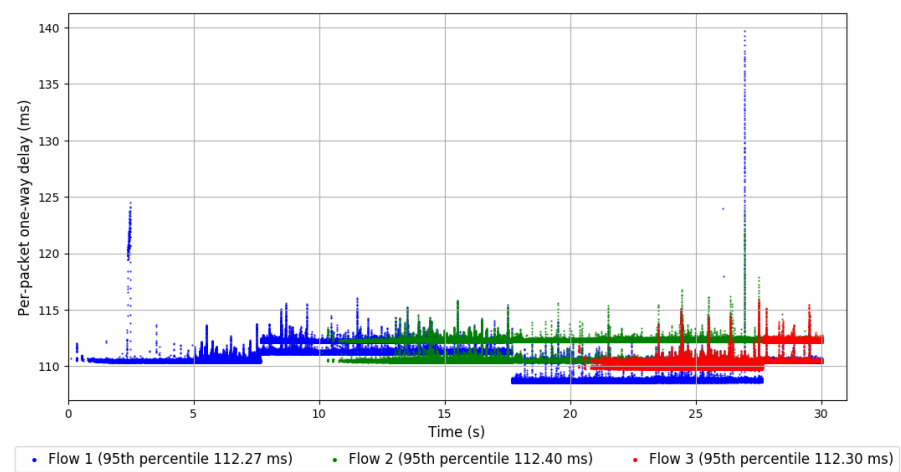
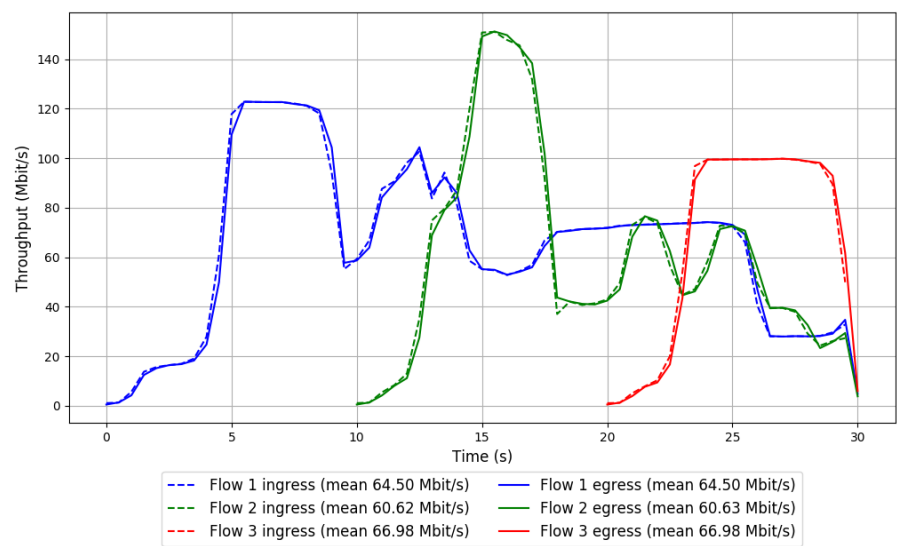
-- Flow 3:

Average throughput: 66.98 Mbit/s

95th percentile per-packet one-way delay: 112.303 ms

Loss rate: 0.01%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-04-04 05:25:33

End at: 2018-04-04 05:26:03

Below is generated by plot.py at 2018-04-04 09:03:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 119.31 Mbit/s

95th percentile per-packet one-way delay: 112.506 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 59.06 Mbit/s

95th percentile per-packet one-way delay: 112.503 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.54 Mbit/s

95th percentile per-packet one-way delay: 112.490 ms

Loss rate: 0.00%

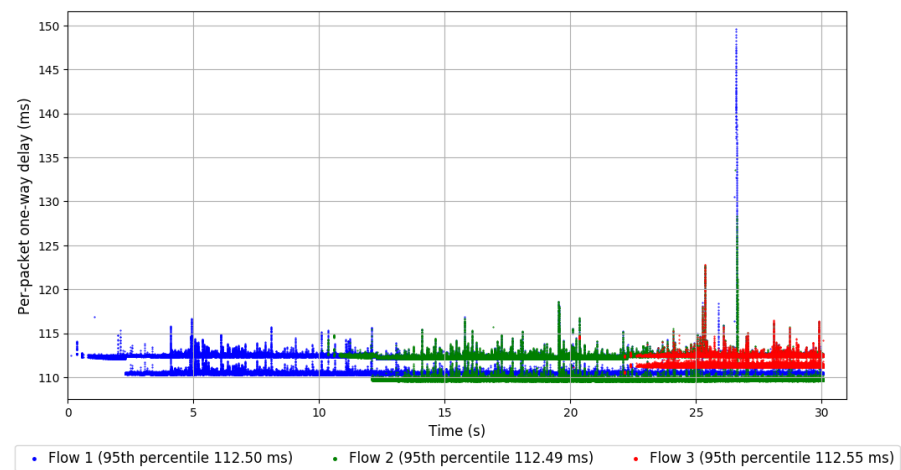
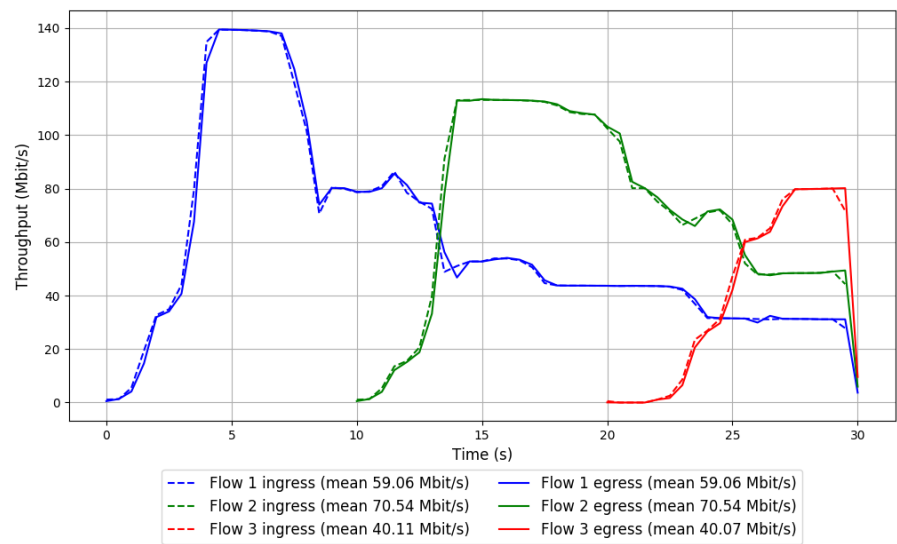
-- Flow 3:

Average throughput: 40.07 Mbit/s

95th percentile per-packet one-way delay: 112.551 ms

Loss rate: 0.06%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-04-04 05:45:20

End at: 2018-04-04 05:45:50

Below is generated by plot.py at 2018-04-04 09:04:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.59 Mbit/s

95th percentile per-packet one-way delay: 112.397 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.97 Mbit/s

95th percentile per-packet one-way delay: 112.447 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.73 Mbit/s

95th percentile per-packet one-way delay: 112.001 ms

Loss rate: 0.00%

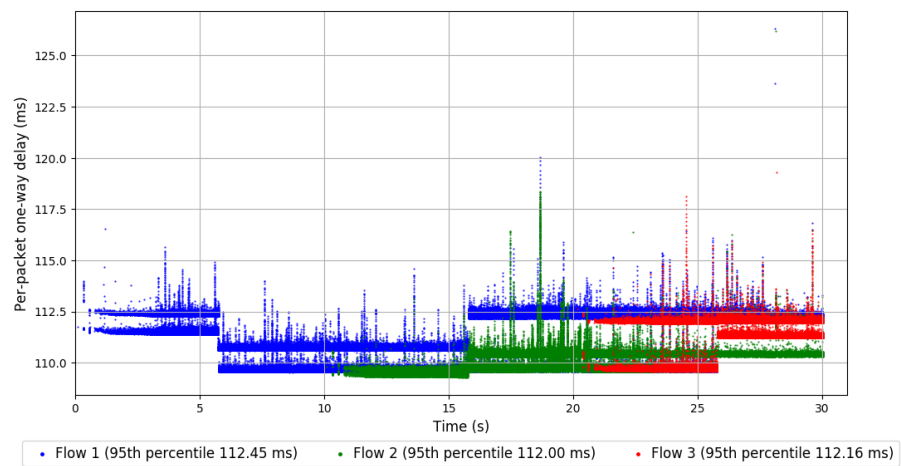
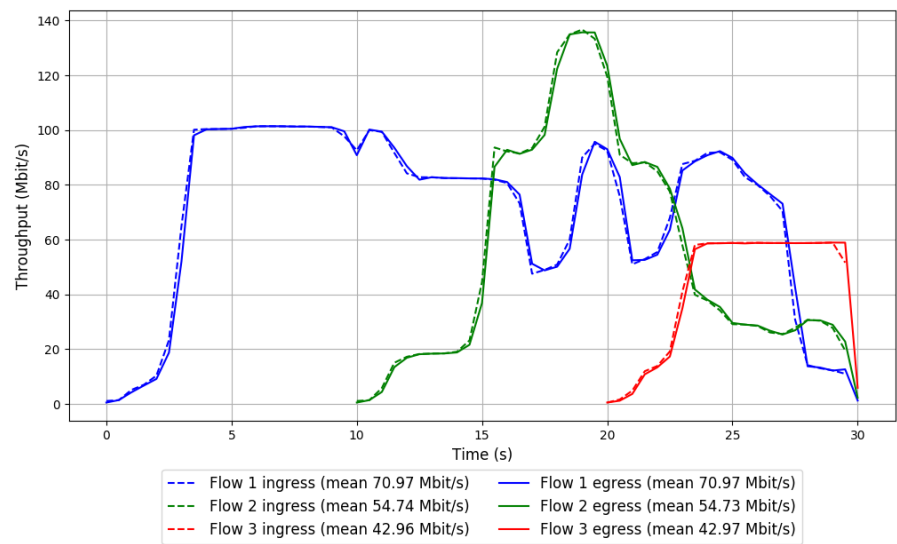
-- Flow 3:

Average throughput: 42.97 Mbit/s

95th percentile per-packet one-way delay: 112.158 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-04-04 06:04:40

End at: 2018-04-04 06:05:10

Below is generated by plot.py at 2018-04-04 09:05:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 137.88 Mbit/s

95th percentile per-packet one-way delay: 112.564 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.61 Mbit/s

95th percentile per-packet one-way delay: 112.549 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.98 Mbit/s

95th percentile per-packet one-way delay: 112.595 ms

Loss rate: 0.00%

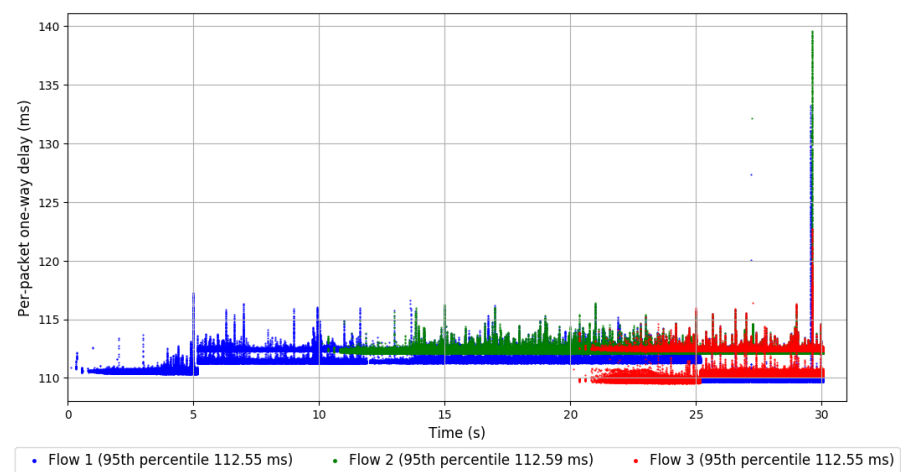
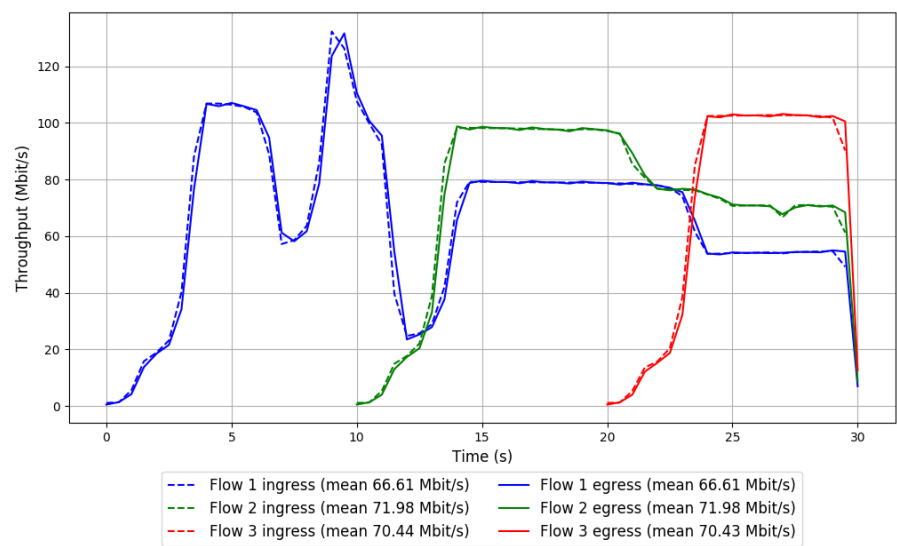
-- Flow 3:

Average throughput: 70.43 Mbit/s

95th percentile per-packet one-way delay: 112.547 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-04-04 06:23:58

End at: 2018-04-04 06:24:28

Below is generated by plot.py at 2018-04-04 09:08:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 213.90 Mbit/s

95th percentile per-packet one-way delay: 324.424 ms

Loss rate: 40.66%

-- Flow 1:

Average throughput: 41.81 Mbit/s

95th percentile per-packet one-way delay: 205.656 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 258.30 Mbit/s

95th percentile per-packet one-way delay: 325.552 ms

Loss rate: 45.97%

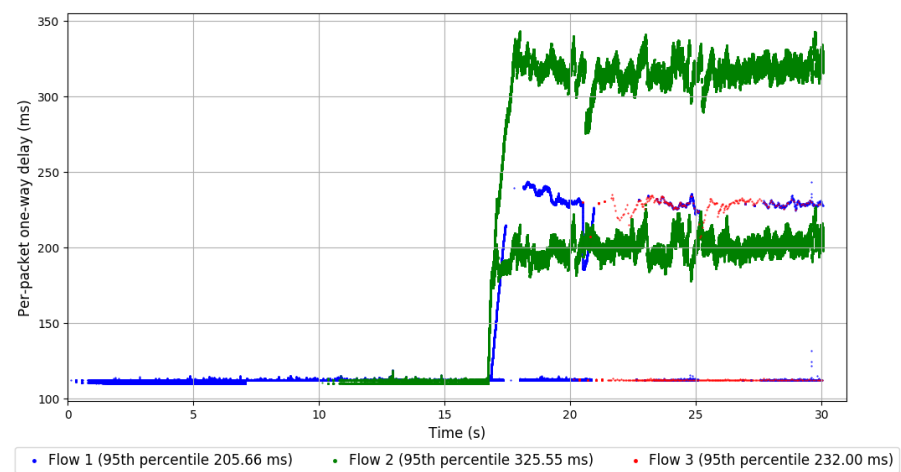
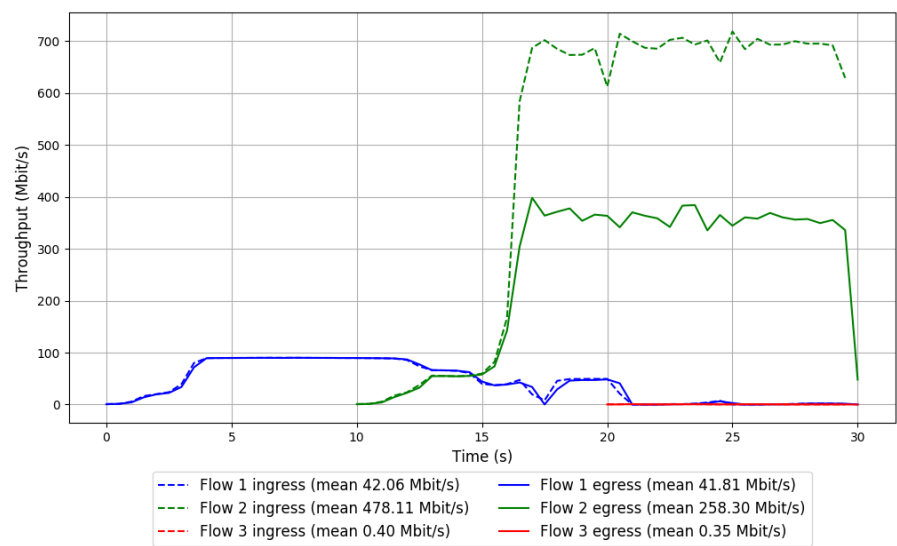
-- Flow 3:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 232.003 ms

Loss rate: 11.46%

Run 10: Report of Copa — Data Link

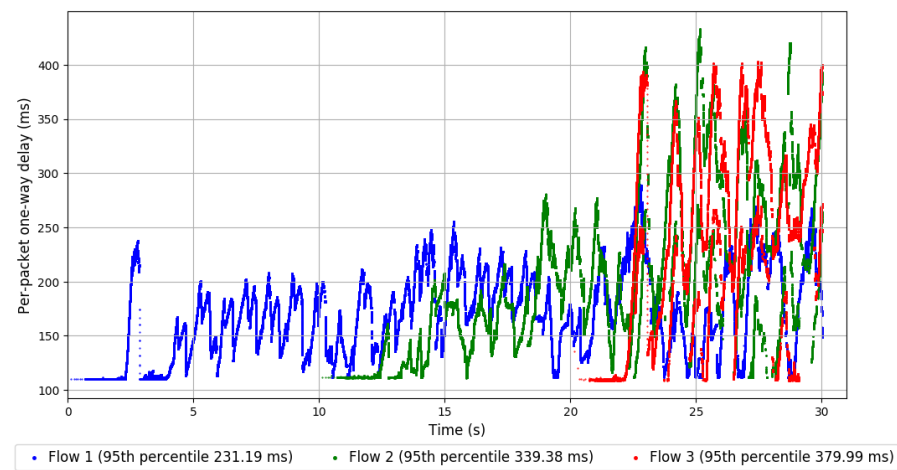
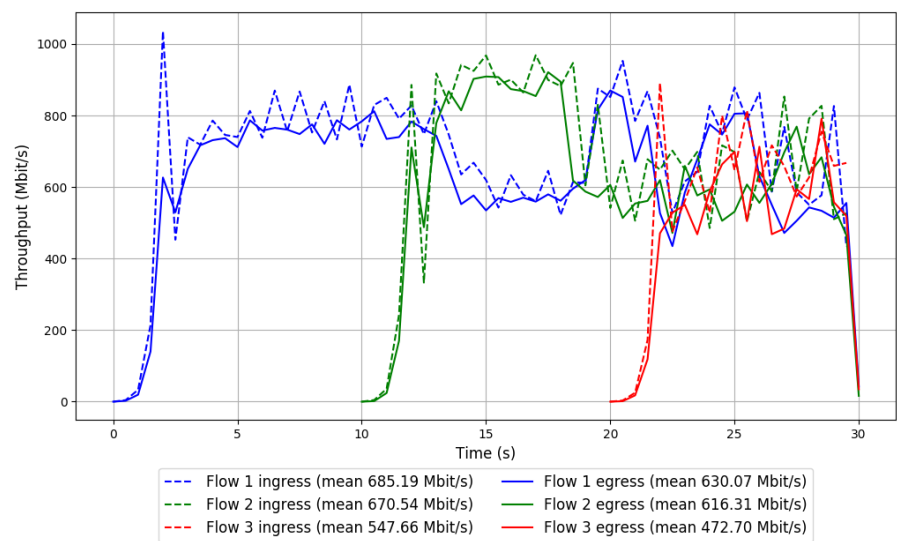


```
Run 1: Statistics of FillP

Start at: 2018-04-04 03:23:17
End at: 2018-04-04 03:23:47

# Below is generated by plot.py at 2018-04-04 09:23:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1196.29 Mbit/s
95th percentile per-packet one-way delay: 326.948 ms
Loss rate: 8.87%
-- Flow 1:
Average throughput: 630.07 Mbit/s
95th percentile per-packet one-way delay: 231.185 ms
Loss rate: 8.04%
-- Flow 2:
Average throughput: 616.31 Mbit/s
95th percentile per-packet one-way delay: 339.379 ms
Loss rate: 8.09%
-- Flow 3:
Average throughput: 472.70 Mbit/s
95th percentile per-packet one-way delay: 379.990 ms
Loss rate: 13.90%
```


Run 1: Report of FillP — Data Link

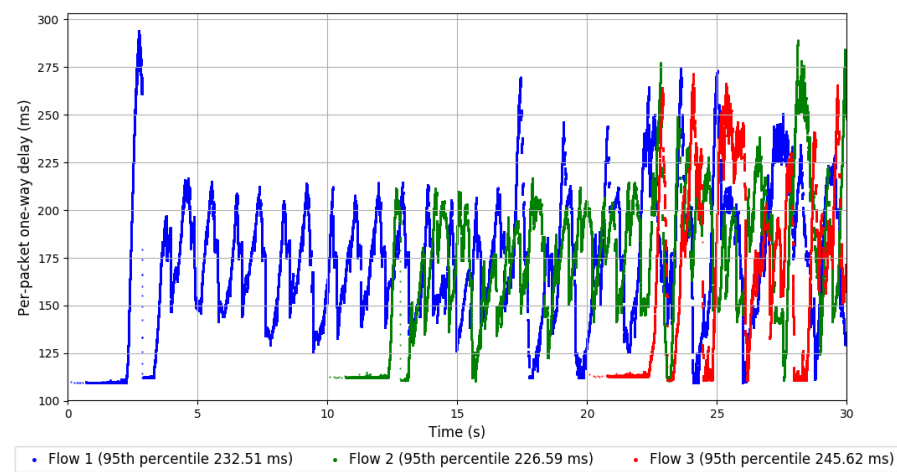
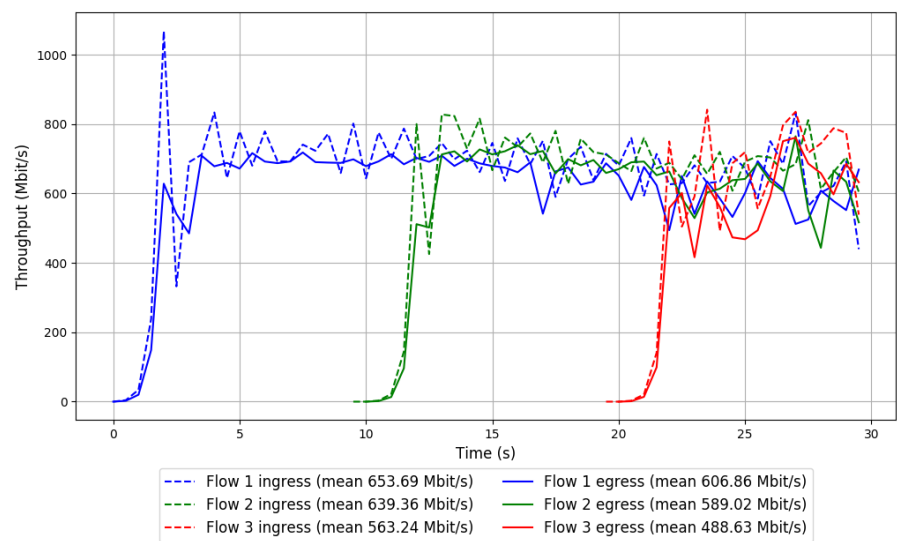


```
Run 2: Statistics of FillP

Start at: 2018-04-04 03:42:32
End at: 2018-04-04 03:43:02

# Below is generated by plot.py at 2018-04-04 09:23:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1161.15 Mbit/s
95th percentile per-packet one-way delay: 235.374 ms
Loss rate: 8.29%
-- Flow 1:
Average throughput: 606.86 Mbit/s
95th percentile per-packet one-way delay: 232.514 ms
Loss rate: 7.15%
-- Flow 2:
Average throughput: 589.02 Mbit/s
95th percentile per-packet one-way delay: 226.590 ms
Loss rate: 7.87%
-- Flow 3:
Average throughput: 488.63 Mbit/s
95th percentile per-packet one-way delay: 245.619 ms
Loss rate: 13.25%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-04-04 04:01:22

End at: 2018-04-04 04:01:52

Below is generated by plot.py at 2018-04-04 09:23:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 1185.74 Mbit/s

95th percentile per-packet one-way delay: 246.286 ms

Loss rate: 8.95%

-- Flow 1:

Average throughput: 640.26 Mbit/s

95th percentile per-packet one-way delay: 238.428 ms

Loss rate: 7.97%

-- Flow 2:

Average throughput: 589.52 Mbit/s

95th percentile per-packet one-way delay: 224.952 ms

Loss rate: 6.86%

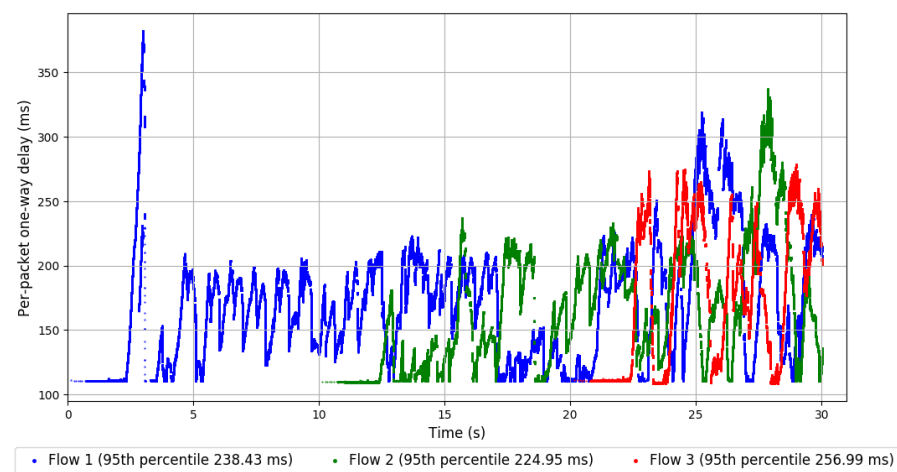
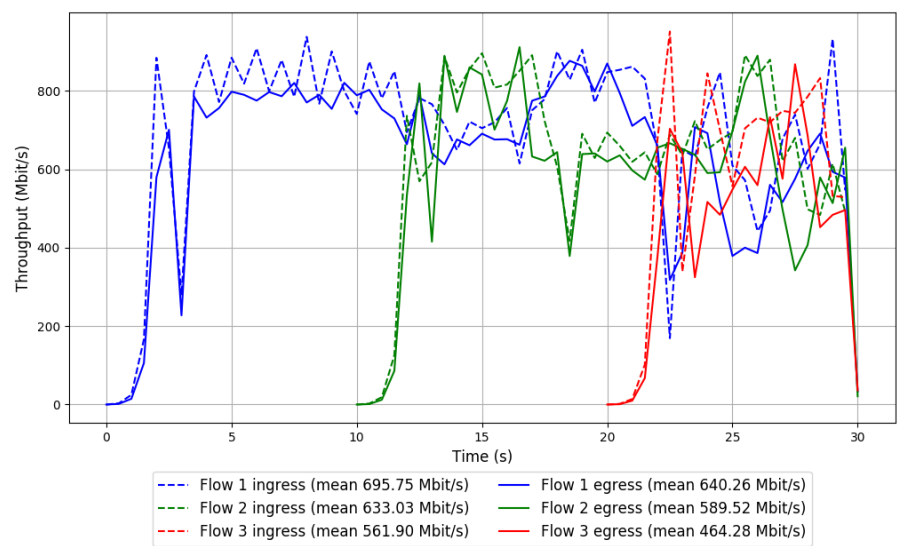
-- Flow 3:

Average throughput: 464.28 Mbit/s

95th percentile per-packet one-way delay: 256.985 ms

Loss rate: 17.36%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-04-04 04:20:15

End at: 2018-04-04 04:20:45

Below is generated by plot.py at 2018-04-04 09:24:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 1201.22 Mbit/s

95th percentile per-packet one-way delay: 240.033 ms

Loss rate: 8.27%

-- Flow 1:

Average throughput: 634.73 Mbit/s

95th percentile per-packet one-way delay: 246.131 ms

Loss rate: 8.04%

-- Flow 2:

Average throughput: 631.55 Mbit/s

95th percentile per-packet one-way delay: 216.989 ms

Loss rate: 7.10%

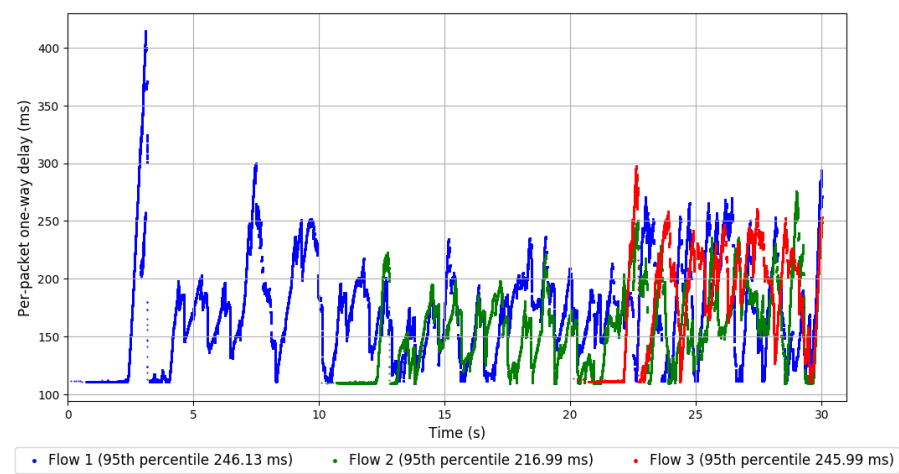
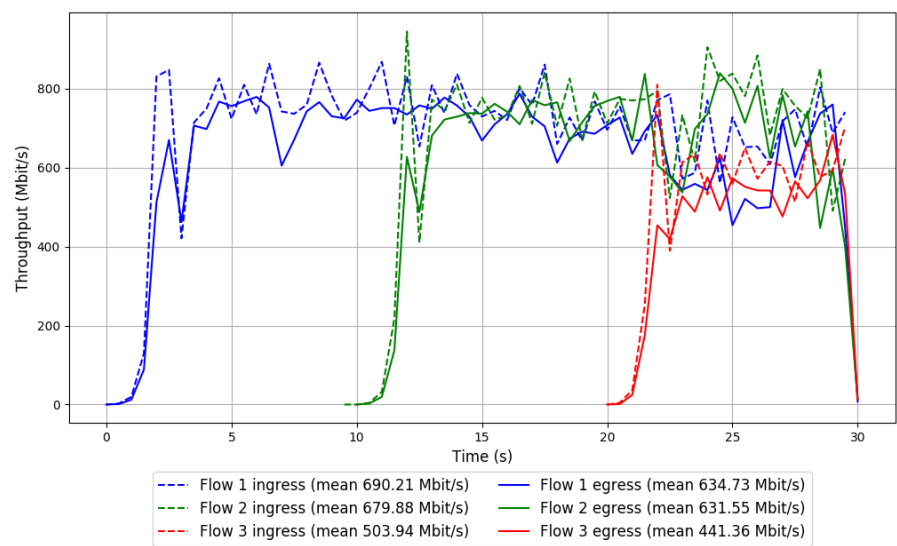
-- Flow 3:

Average throughput: 441.36 Mbit/s

95th percentile per-packet one-way delay: 245.985 ms

Loss rate: 12.43%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-04-04 04:39:30

End at: 2018-04-04 04:40:00

Below is generated by plot.py at 2018-04-04 09:24:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 705.41 Mbit/s

95th percentile per-packet one-way delay: 229.962 ms

Loss rate: 7.72%

-- Flow 1:

Average throughput: 93.44 Mbit/s

95th percentile per-packet one-way delay: 304.380 ms

Loss rate: 12.79%

-- Flow 2:

Average throughput: 634.54 Mbit/s

95th percentile per-packet one-way delay: 223.571 ms

Loss rate: 7.73%

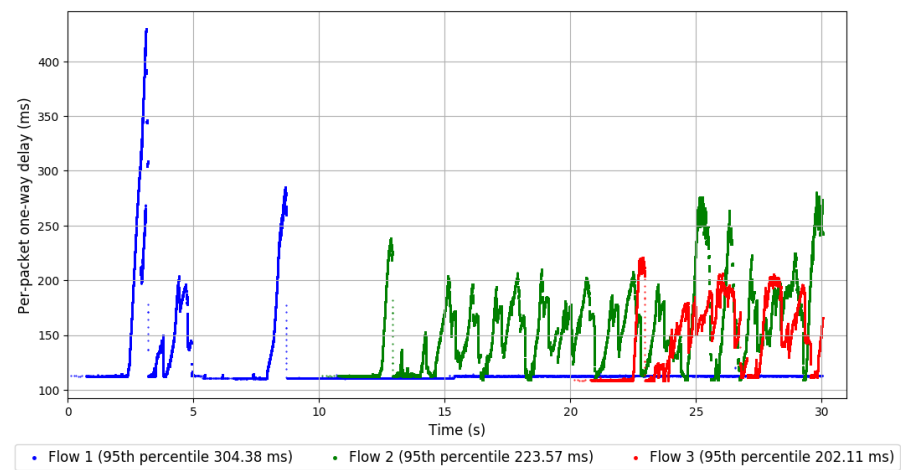
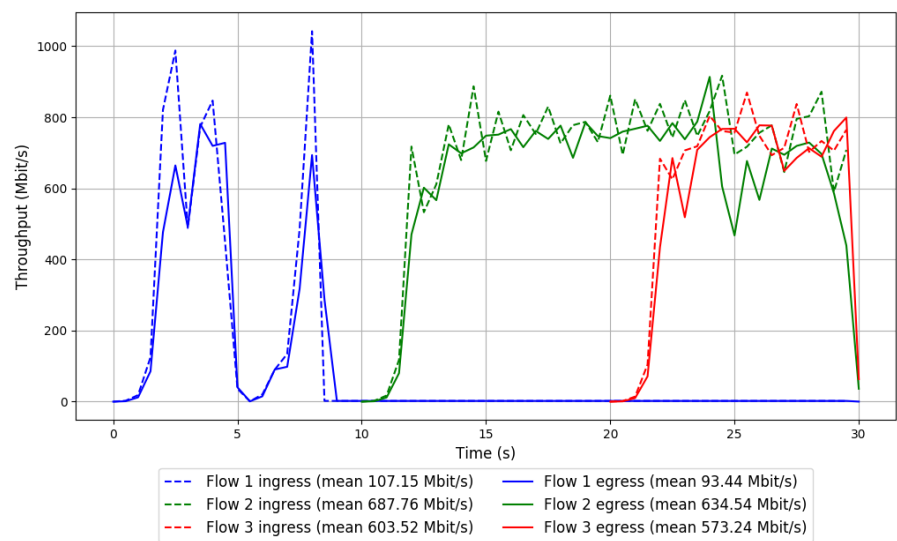
-- Flow 3:

Average throughput: 573.24 Mbit/s

95th percentile per-packet one-way delay: 202.111 ms

Loss rate: 4.97%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-04-04 04:59:09

End at: 2018-04-04 04:59:39

Below is generated by plot.py at 2018-04-04 09:24:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 1153.91 Mbit/s

95th percentile per-packet one-way delay: 241.485 ms

Loss rate: 8.63%

-- Flow 1:

Average throughput: 643.26 Mbit/s

95th percentile per-packet one-way delay: 229.702 ms

Loss rate: 5.82%

-- Flow 2:

Average throughput: 545.86 Mbit/s

95th percentile per-packet one-way delay: 241.592 ms

Loss rate: 10.27%

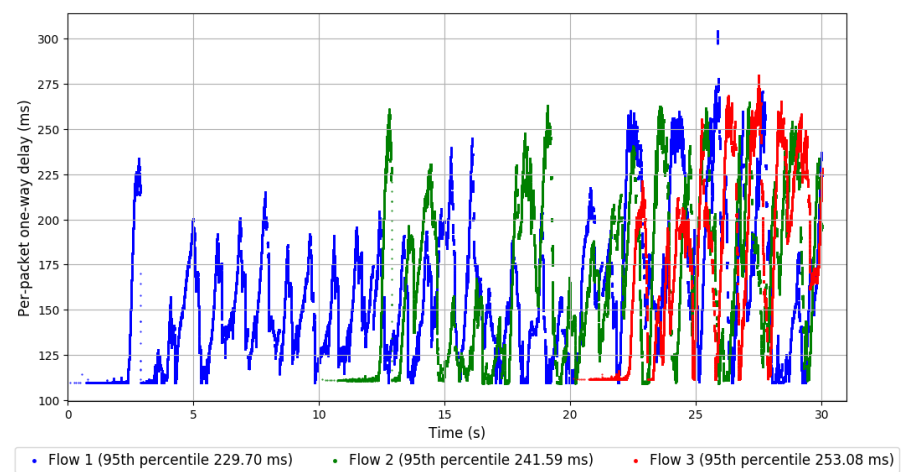
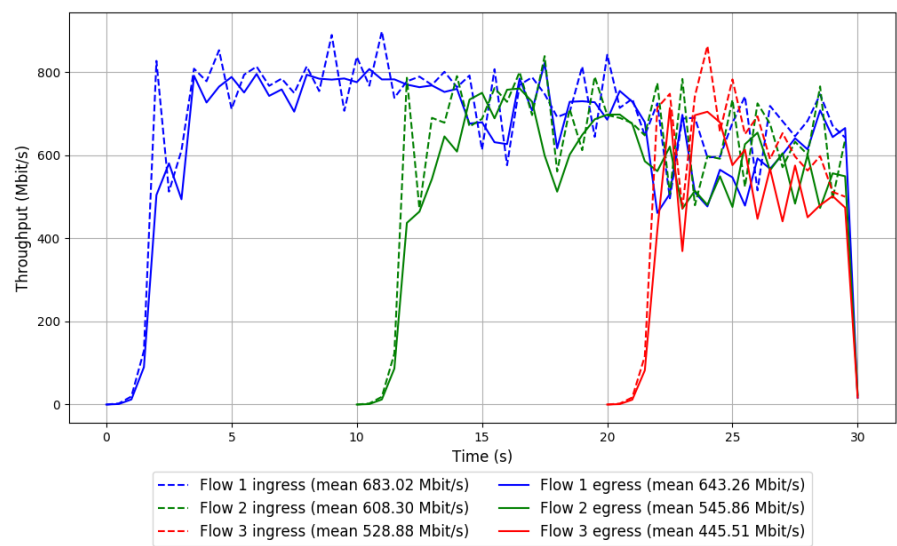
-- Flow 3:

Average throughput: 445.51 Mbit/s

95th percentile per-packet one-way delay: 253.079 ms

Loss rate: 15.79%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-04-04 05:18:54

End at: 2018-04-04 05:19:24

Below is generated by plot.py at 2018-04-04 09:24:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 1103.52 Mbit/s

95th percentile per-packet one-way delay: 346.121 ms

Loss rate: 7.23%

-- Flow 1:

Average throughput: 595.05 Mbit/s

95th percentile per-packet one-way delay: 344.072 ms

Loss rate: 6.00%

-- Flow 2:

Average throughput: 527.82 Mbit/s

95th percentile per-packet one-way delay: 368.301 ms

Loss rate: 7.87%

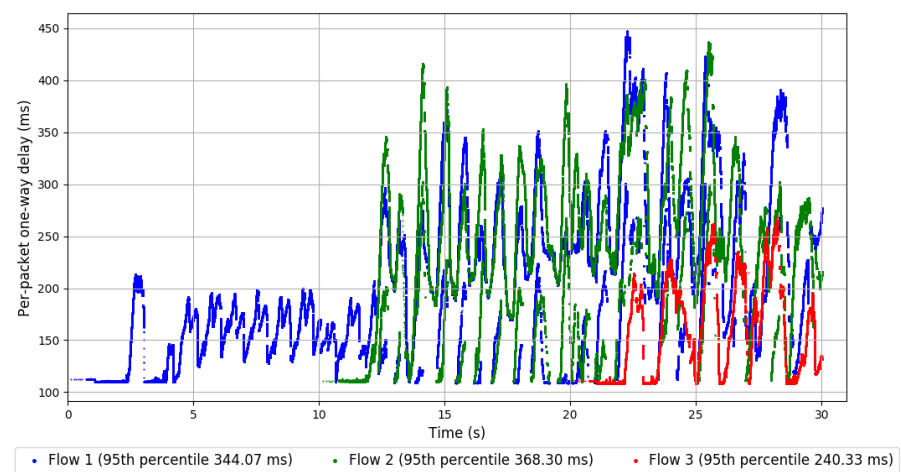
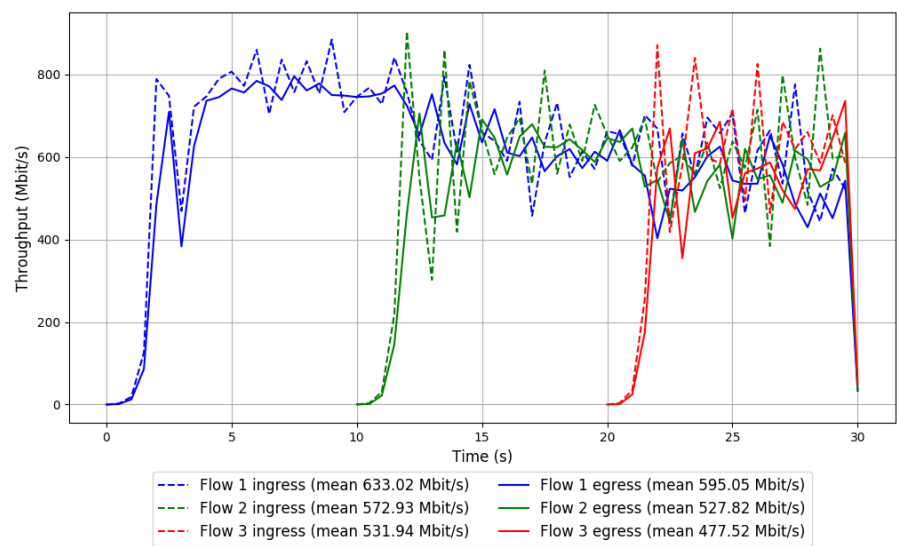
-- Flow 3:

Average throughput: 477.52 Mbit/s

95th percentile per-packet one-way delay: 240.329 ms

Loss rate: 10.23%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-04-04 05:38:41

End at: 2018-04-04 05:39:12

Below is generated by plot.py at 2018-04-04 09:31:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 1185.35 Mbit/s

95th percentile per-packet one-way delay: 309.411 ms

Loss rate: 5.65%

-- Flow 1:

Average throughput: 631.38 Mbit/s

95th percentile per-packet one-way delay: 304.499 ms

Loss rate: 5.26%

-- Flow 2:

Average throughput: 609.33 Mbit/s

95th percentile per-packet one-way delay: 219.770 ms

Loss rate: 4.83%

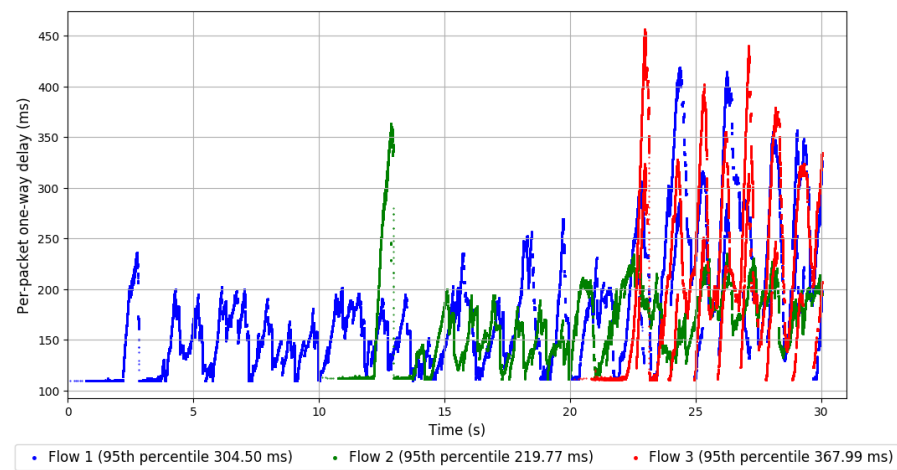
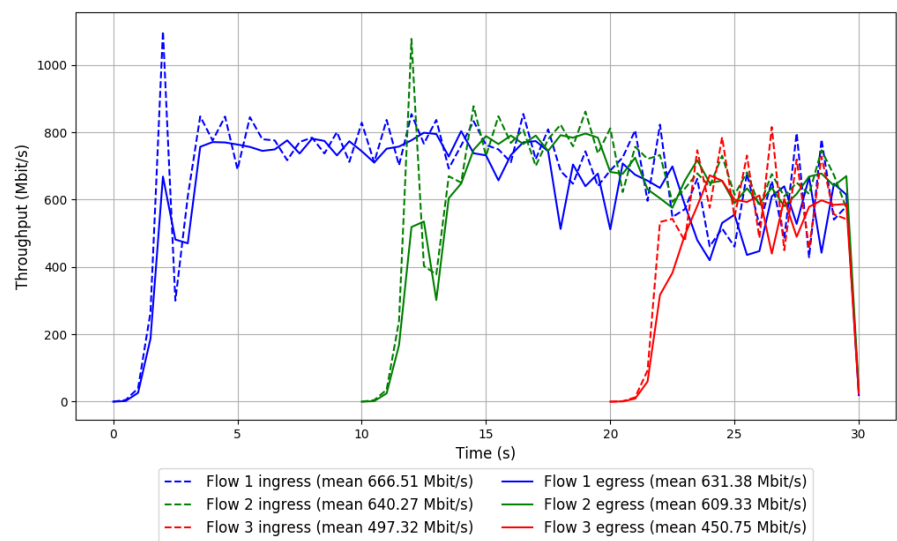
-- Flow 3:

Average throughput: 450.75 Mbit/s

95th percentile per-packet one-way delay: 367.993 ms

Loss rate: 9.35%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-04-04 05:57:56

End at: 2018-04-04 05:58:26

Below is generated by plot.py at 2018-04-04 09:39:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 1147.45 Mbit/s

95th percentile per-packet one-way delay: 323.620 ms

Loss rate: 7.38%

-- Flow 1:

Average throughput: 623.69 Mbit/s

95th percentile per-packet one-way delay: 224.319 ms

Loss rate: 6.02%

-- Flow 2:

Average throughput: 563.12 Mbit/s

95th percentile per-packet one-way delay: 333.809 ms

Loss rate: 6.85%

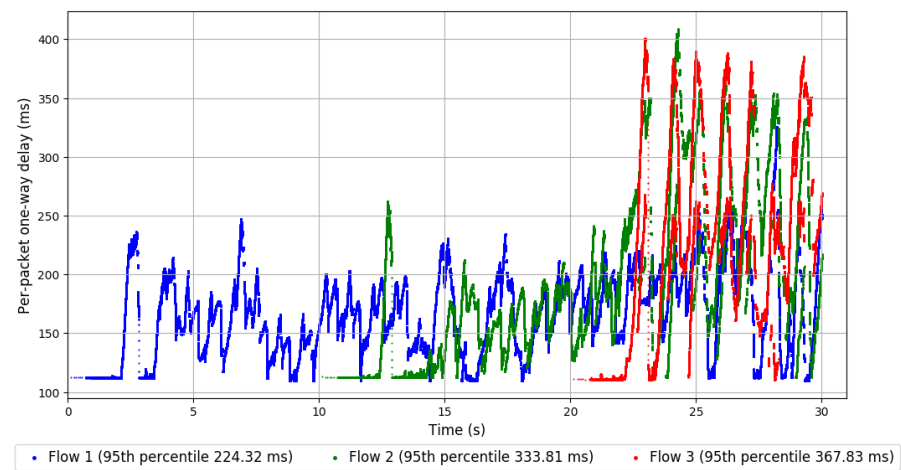
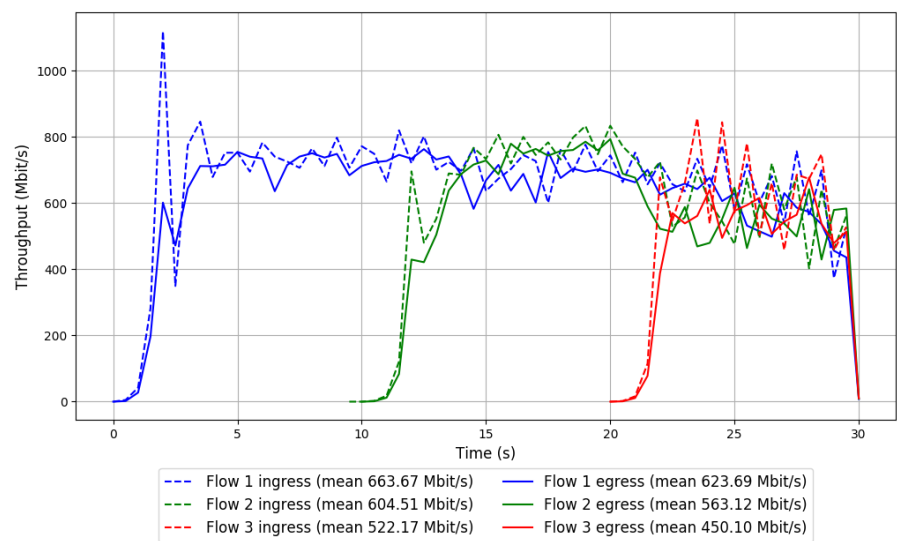
-- Flow 3:

Average throughput: 450.10 Mbit/s

95th percentile per-packet one-way delay: 367.829 ms

Loss rate: 13.79%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-04-04 06:17:21

End at: 2018-04-04 06:17:51

Below is generated by plot.py at 2018-04-04 09:45:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 1169.39 Mbit/s

95th percentile per-packet one-way delay: 227.868 ms

Loss rate: 6.52%

-- Flow 1:

Average throughput: 621.12 Mbit/s

95th percentile per-packet one-way delay: 226.142 ms

Loss rate: 5.85%

-- Flow 2:

Average throughput: 587.42 Mbit/s

95th percentile per-packet one-way delay: 228.282 ms

Loss rate: 6.72%

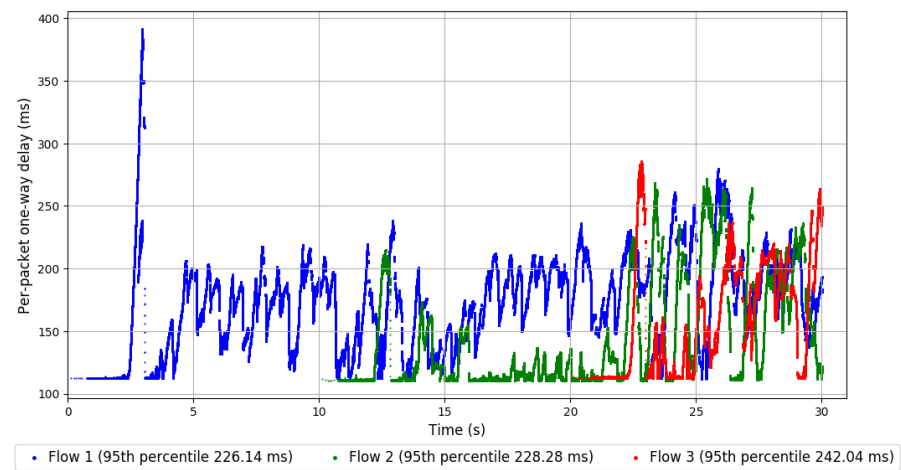
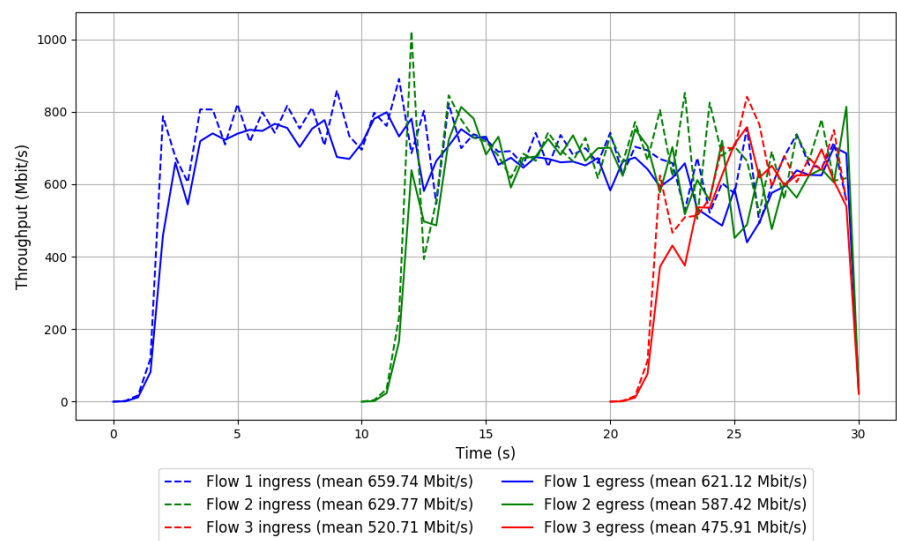
-- Flow 3:

Average throughput: 475.91 Mbit/s

95th percentile per-packet one-way delay: 242.045 ms

Loss rate: 8.61%

Run 10: Report of FillP — Data Link

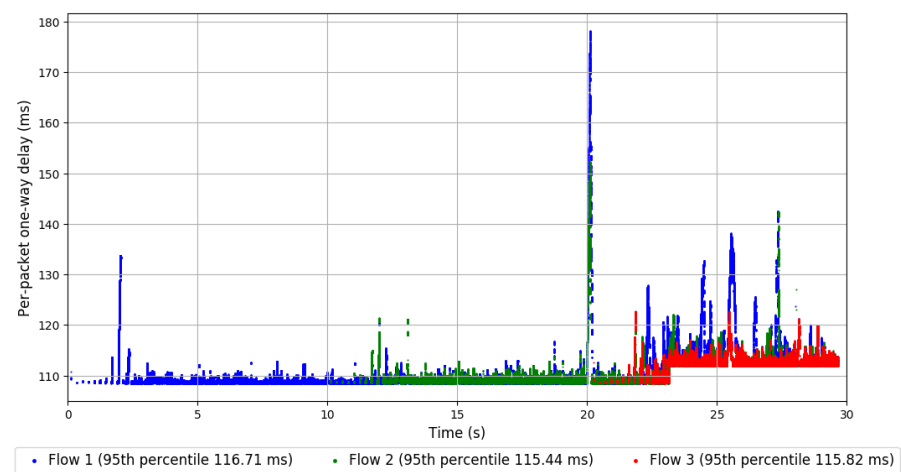
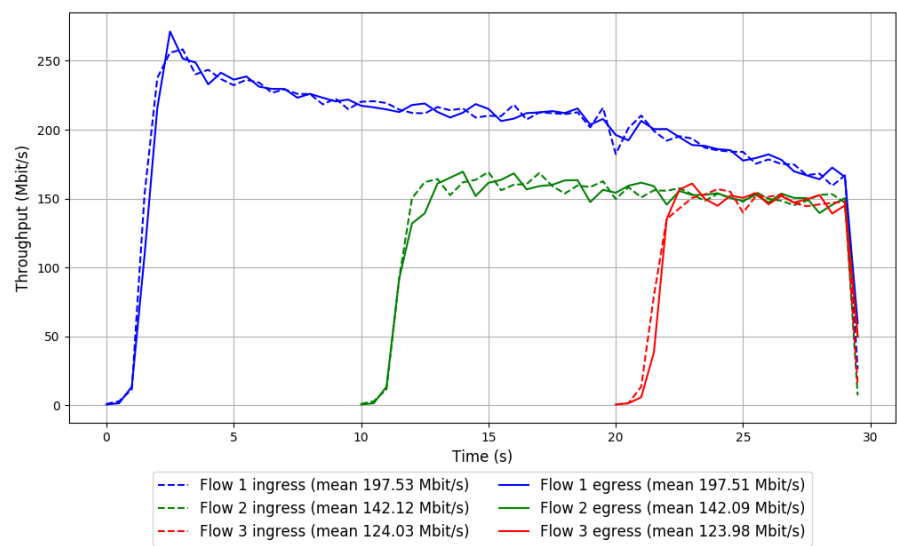


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-04-04 03:25:42
End at: 2018-04-04 03:26:12

# Below is generated by plot.py at 2018-04-04 09:45:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.94 Mbit/s
95th percentile per-packet one-way delay: 116.010 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 197.51 Mbit/s
95th percentile per-packet one-way delay: 116.709 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 142.09 Mbit/s
95th percentile per-packet one-way delay: 115.436 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 123.98 Mbit/s
95th percentile per-packet one-way delay: 115.816 ms
Loss rate: 0.00%
```

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



Run 2: Statistics of Indigo-1-32

Start at: 2018-04-04 03:44:55

End at: 2018-04-04 03:45:25

Below is generated by plot.py at 2018-04-04 09:45:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 318.25 Mbit/s

95th percentile per-packet one-way delay: 118.712 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 152.21 Mbit/s

95th percentile per-packet one-way delay: 115.476 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 187.38 Mbit/s

95th percentile per-packet one-way delay: 122.714 ms

Loss rate: 0.02%

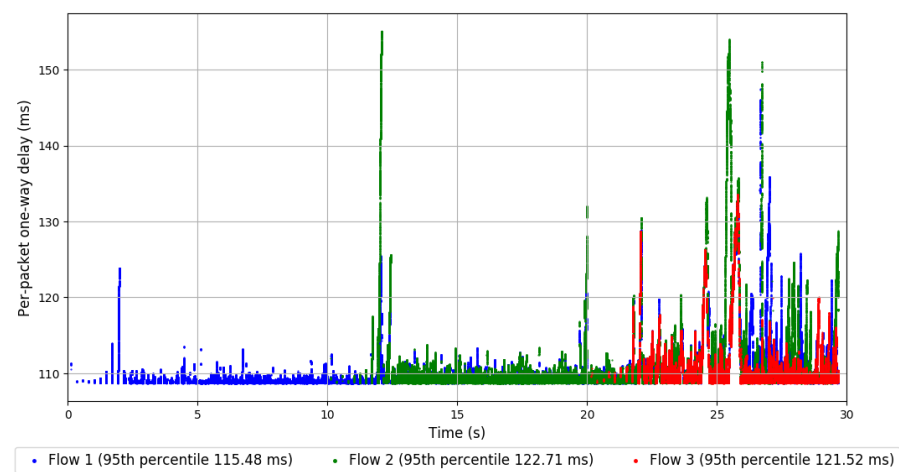
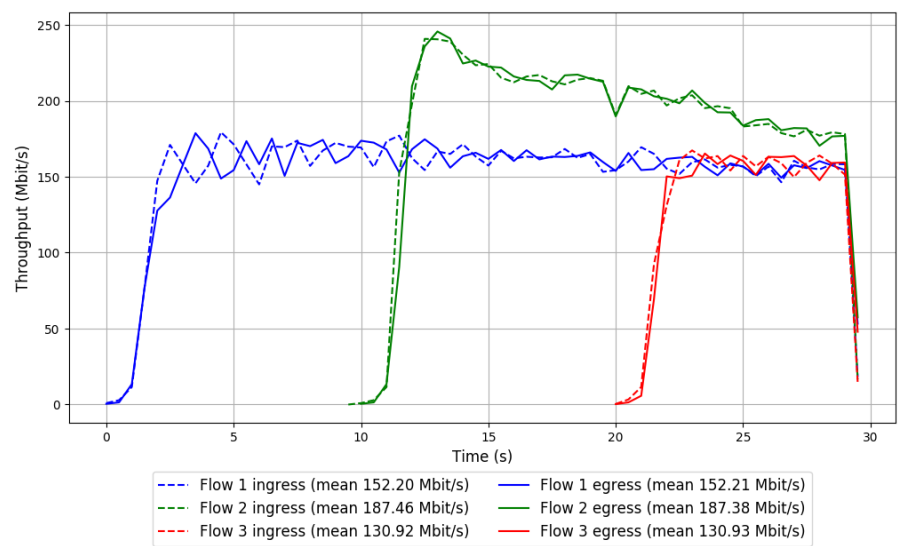
-- Flow 3:

Average throughput: 130.93 Mbit/s

95th percentile per-packet one-way delay: 121.515 ms

Loss rate: 0.00%

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-04-04 04:03:55

End at: 2018-04-04 04:04:25

Below is generated by plot.py at 2018-04-04 09:45:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 314.67 Mbit/s

95th percentile per-packet one-way delay: 136.803 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 138.59 Mbit/s

95th percentile per-packet one-way delay: 123.648 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 183.49 Mbit/s

95th percentile per-packet one-way delay: 135.384 ms

Loss rate: 0.02%

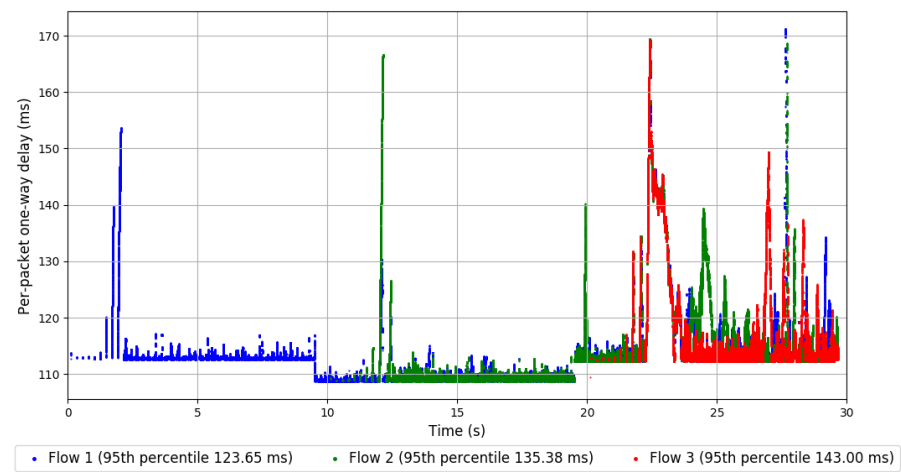
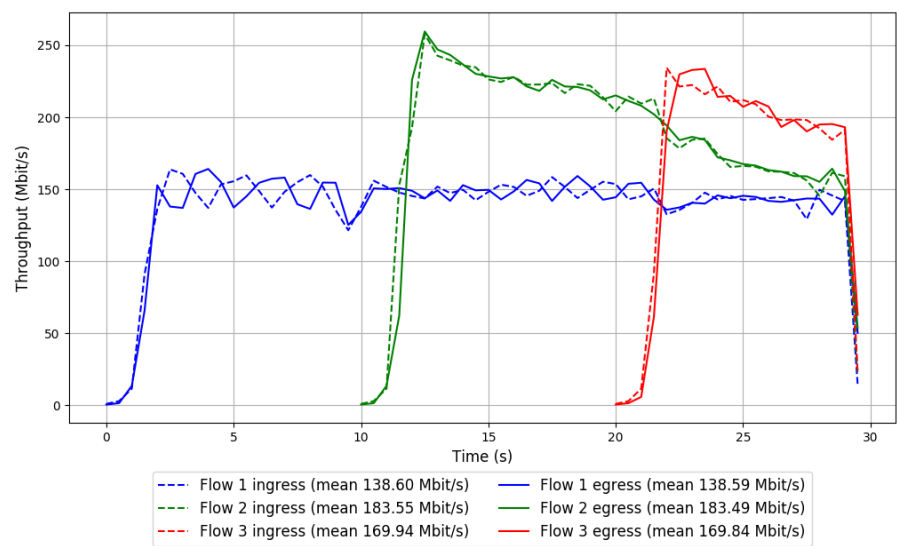
-- Flow 3:

Average throughput: 169.84 Mbit/s

95th percentile per-packet one-way delay: 142.995 ms

Loss rate: 0.03%

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



Run 4: Statistics of Indigo-1-32

Start at: 2018-04-04 04:22:39

End at: 2018-04-04 04:23:09

Below is generated by plot.py at 2018-04-04 09:45:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 283.86 Mbit/s

95th percentile per-packet one-way delay: 115.166 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 147.51 Mbit/s

95th percentile per-packet one-way delay: 114.466 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 144.28 Mbit/s

95th percentile per-packet one-way delay: 115.880 ms

Loss rate: 0.03%

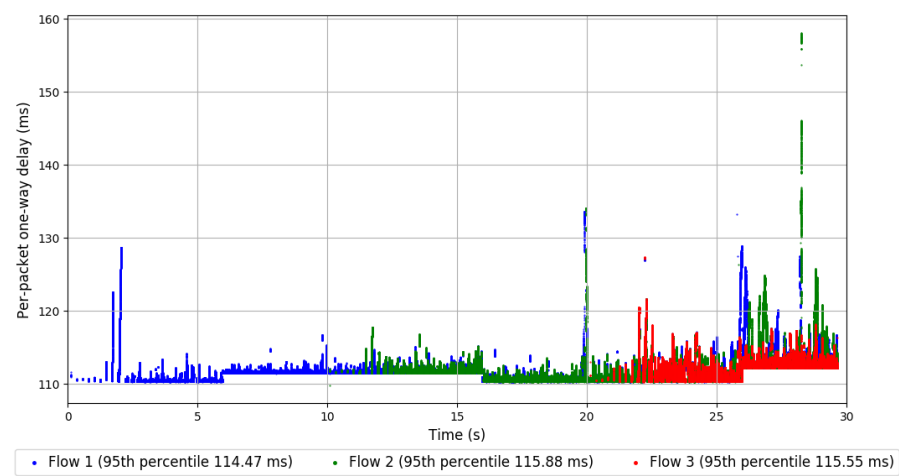
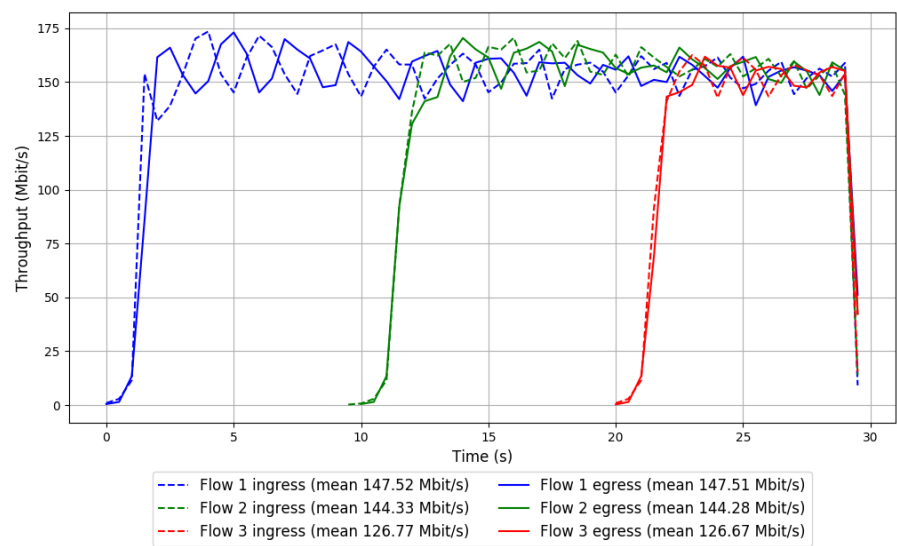
-- Flow 3:

Average throughput: 126.67 Mbit/s

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

Loss rate: 0.04%

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



Run 5: Statistics of Indigo-1-32

Start at: 2018-04-04 04:41:34

End at: 2018-04-04 04:42:04

Below is generated by plot.py at 2018-04-04 09:45:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 289.05 Mbit/s

95th percentile per-packet one-way delay: 122.560 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 151.54 Mbit/s

95th percentile per-packet one-way delay: 117.649 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 143.63 Mbit/s

95th percentile per-packet one-way delay: 125.967 ms

Loss rate: 0.03%

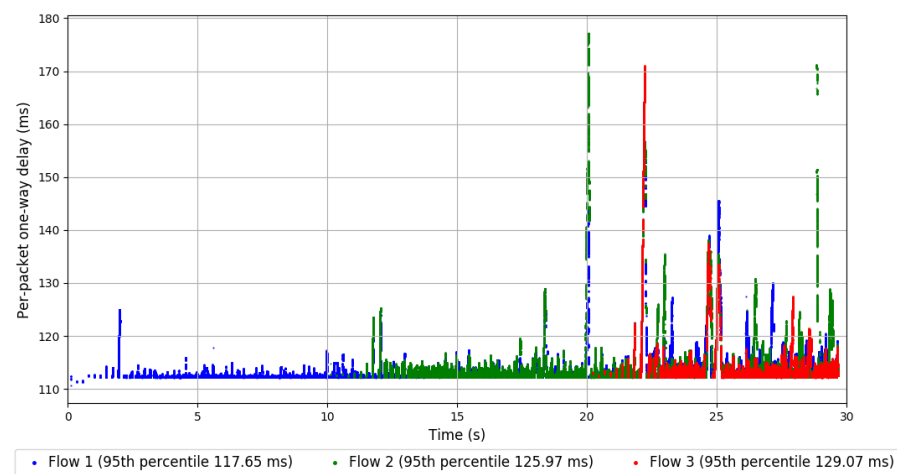
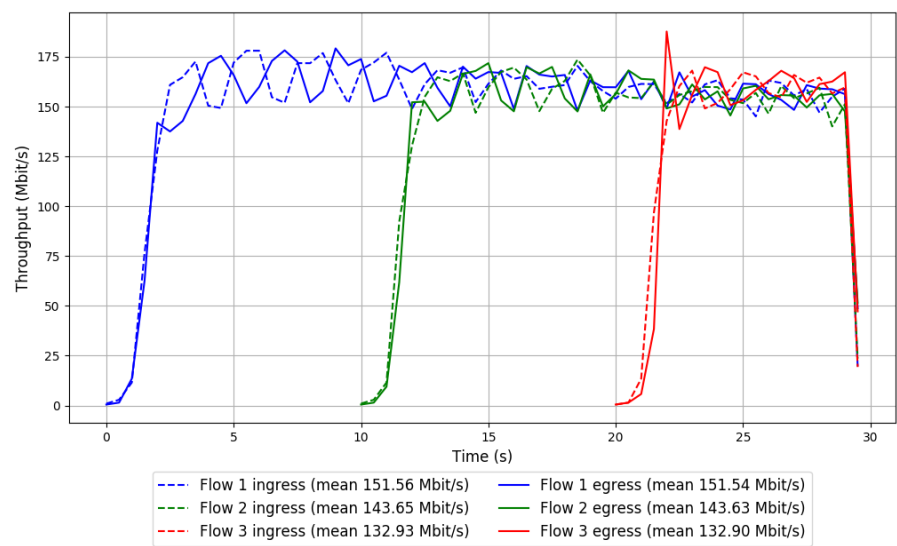
-- Flow 3:

Average throughput: 132.90 Mbit/s

95th percentile per-packet one-way delay: 129.071 ms

Loss rate: 0.05%

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



Run 6: Statistics of Indigo-1-32

Start at: 2018-04-04 05:01:42

End at: 2018-04-04 05:02:12

Below is generated by plot.py at 2018-04-04 09:45:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 312.98 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 176.78 Mbit/s

95th percentile per-packet one-way delay: 113.760 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 142.69 Mbit/s

95th percentile per-packet one-way delay: 114.349 ms

Loss rate: 0.01%

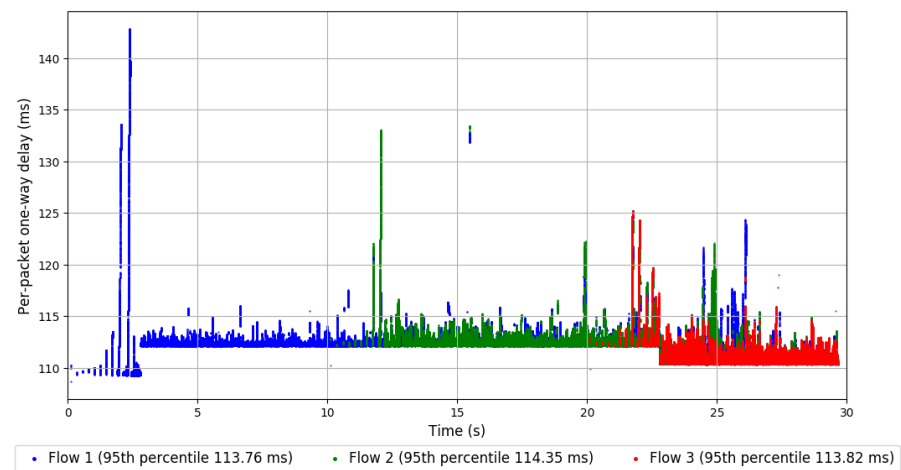
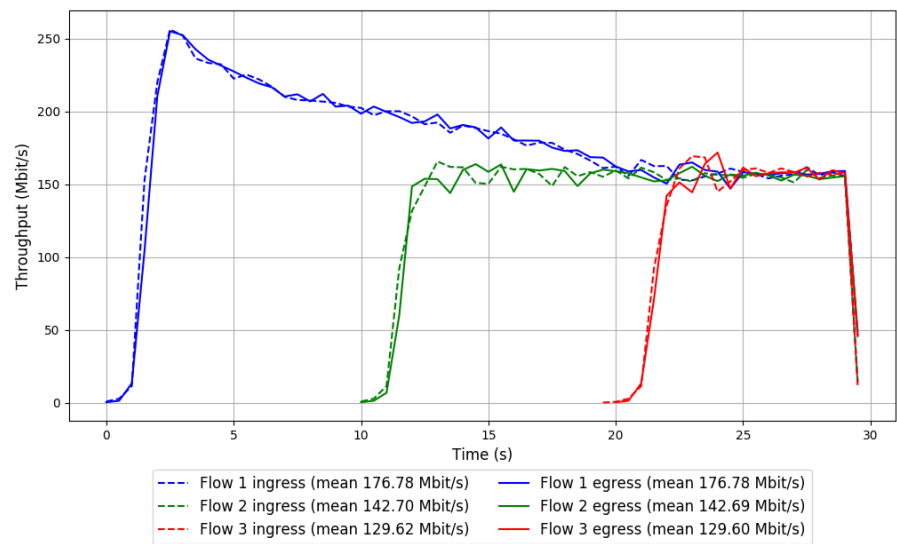
-- Flow 3:

Average throughput: 129.60 Mbit/s

95th percentile per-packet one-way delay: 113.823 ms

Loss rate: 0.03%

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



Run 7: Statistics of Indigo-1-32

Start at: 2018-04-04 05:21:20

End at: 2018-04-04 05:21:50

Below is generated by plot.py at 2018-04-04 09:45:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 279.51 Mbit/s

95th percentile per-packet one-way delay: 114.655 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 146.33 Mbit/s

95th percentile per-packet one-way delay: 114.434 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 138.45 Mbit/s

95th percentile per-packet one-way delay: 115.008 ms

Loss rate: 0.02%

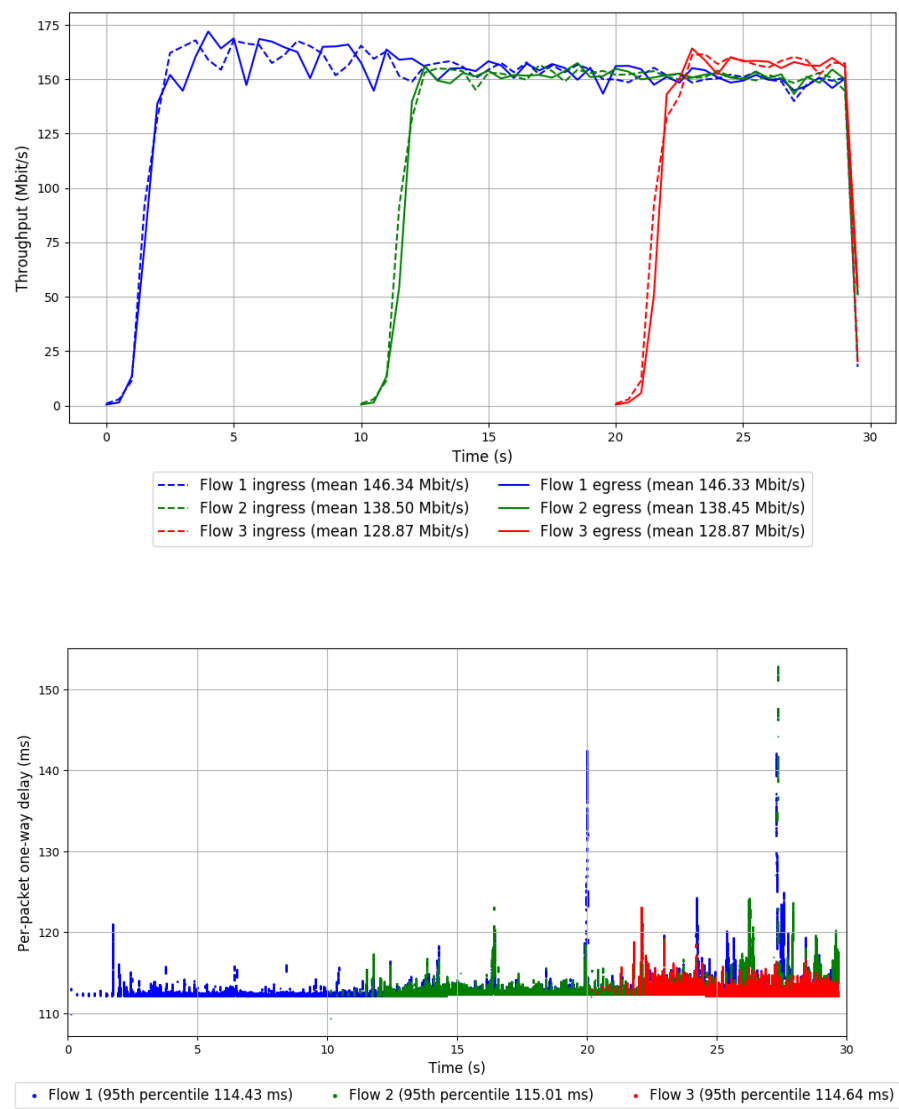
-- Flow 3:

Average throughput: 128.87 Mbit/s

95th percentile per-packet one-way delay: 114.643 ms

Loss rate: 0.00%

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



Run 8: Statistics of Indigo-1-32

Start at: 2018-04-04 05:41:08

End at: 2018-04-04 05:41:38

Below is generated by plot.py at 2018-04-04 09:45:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 312.14 Mbit/s

95th percentile per-packet one-way delay: 126.504 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 147.00 Mbit/s

95th percentile per-packet one-way delay: 120.920 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 173.64 Mbit/s

95th percentile per-packet one-way delay: 126.340 ms

Loss rate: 0.00%

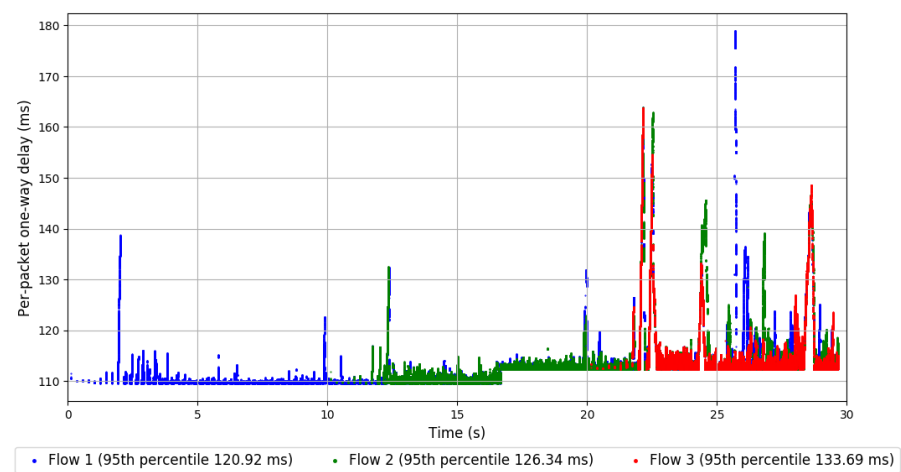
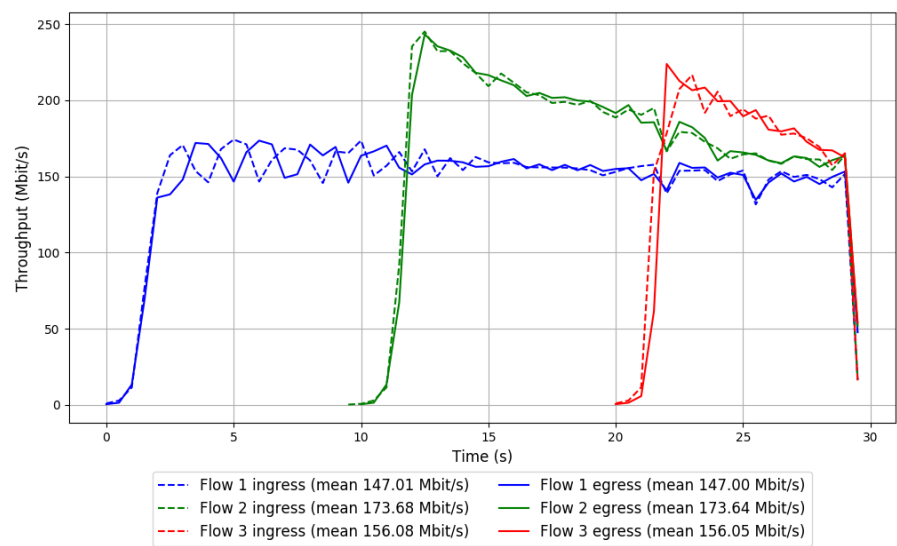
-- Flow 3:

Average throughput: 156.05 Mbit/s

95th percentile per-packet one-way delay: 133.689 ms

Loss rate: 0.00%

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



Run 9: Statistics of Indigo-1-32

Start at: 2018-04-04 06:00:21

End at: 2018-04-04 06:00:51

Below is generated by plot.py at 2018-04-04 09:45:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 342.81 Mbit/s

95th percentile per-packet one-way delay: 118.350 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 187.35 Mbit/s

95th percentile per-packet one-way delay: 115.939 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 162.62 Mbit/s

95th percentile per-packet one-way delay: 121.749 ms

Loss rate: 0.00%

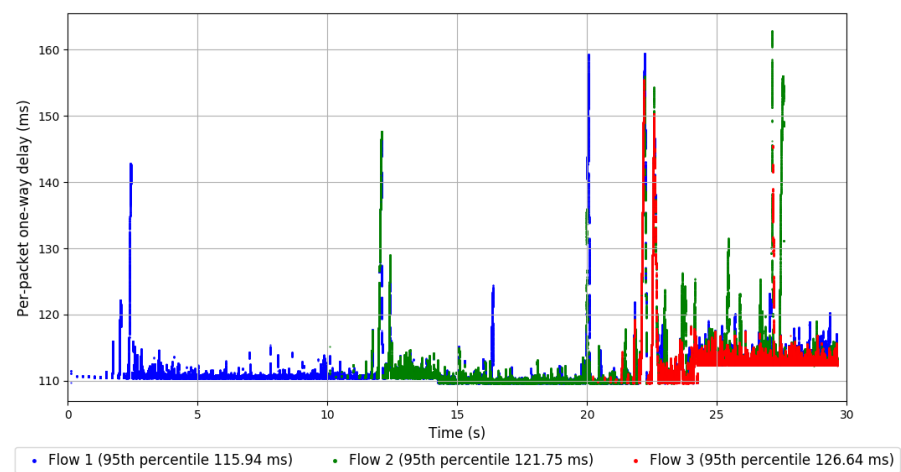
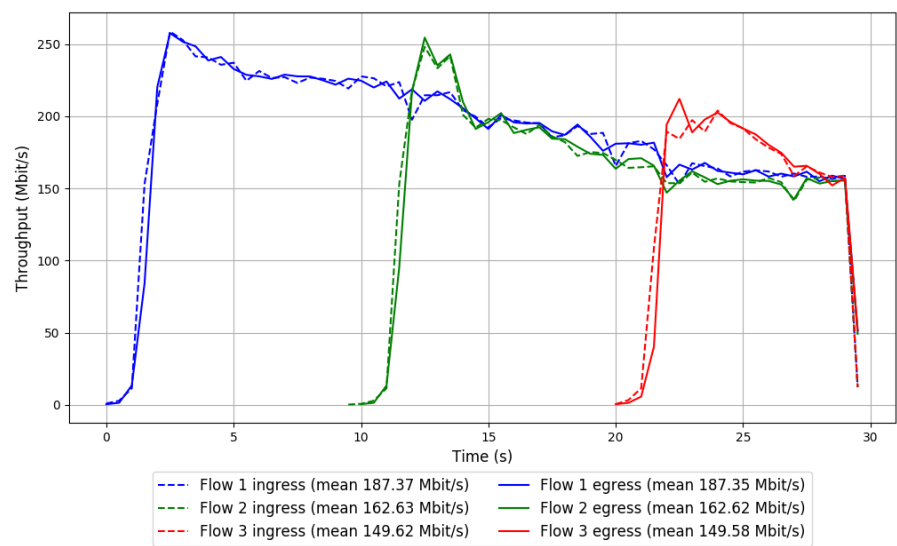
-- Flow 3:

Average throughput: 149.58 Mbit/s

95th percentile per-packet one-way delay: 126.635 ms

Loss rate: 0.00%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-04-04 06:19:46

End at: 2018-04-04 06:20:16

Below is generated by plot.py at 2018-04-04 09:45:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 309.05 Mbit/s

95th percentile per-packet one-way delay: 123.063 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 153.46 Mbit/s

95th percentile per-packet one-way delay: 122.177 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 148.06 Mbit/s

95th percentile per-packet one-way delay: 119.031 ms

Loss rate: 0.00%

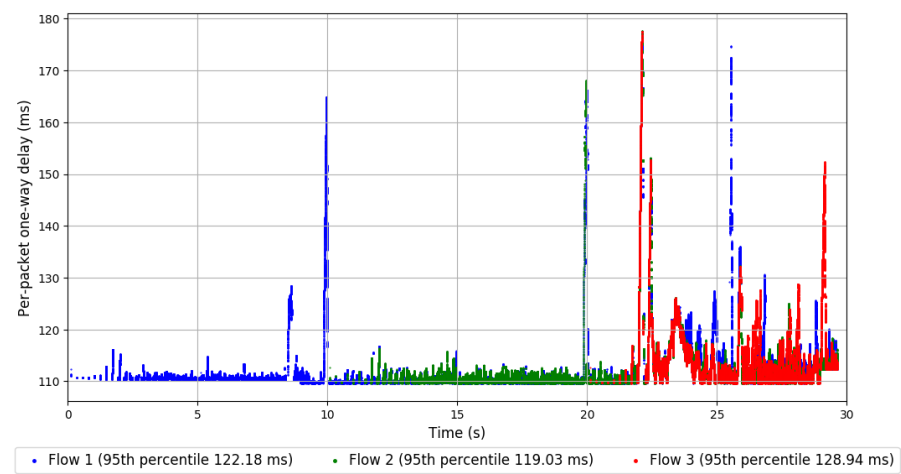
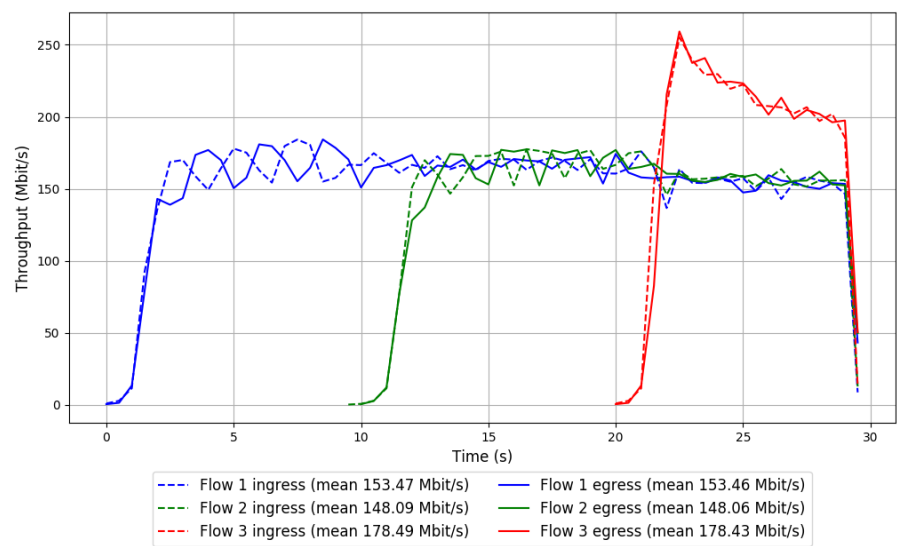
-- Flow 3:

Average throughput: 178.43 Mbit/s

95th percentile per-packet one-way delay: 128.938 ms

Loss rate: 0.01%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-04-04 03:21:55

End at: 2018-04-04 03:22:25

Below is generated by plot.py at 2018-04-04 09:45:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 433.54 Mbit/s

95th percentile per-packet one-way delay: 204.192 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 276.90 Mbit/s

95th percentile per-packet one-way delay: 213.206 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 173.08 Mbit/s

95th percentile per-packet one-way delay: 121.373 ms

Loss rate: 0.00%

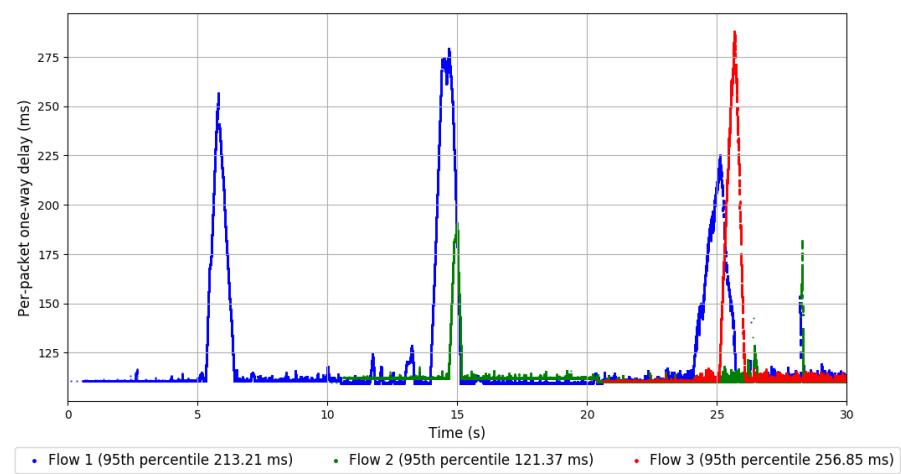
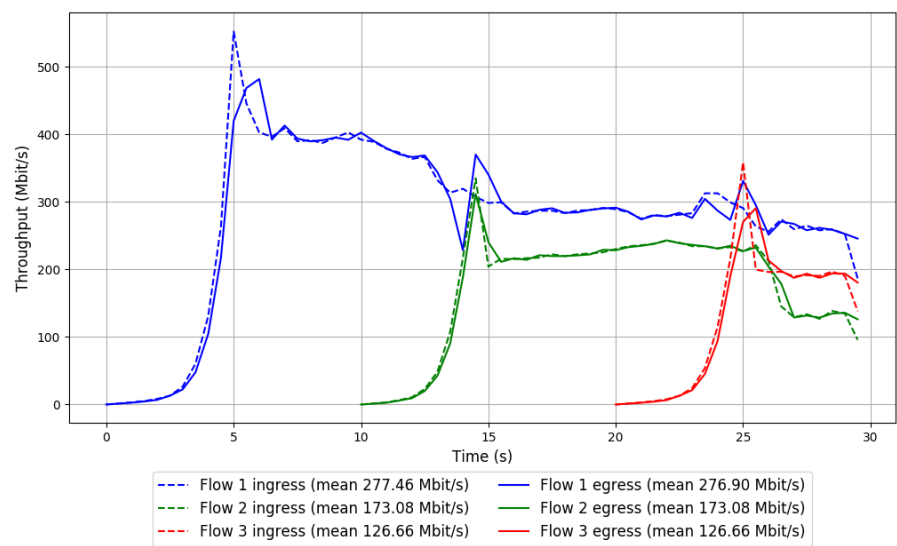
-- Flow 3:

Average throughput: 126.66 Mbit/s

95th percentile per-packet one-way delay: 256.849 ms

Loss rate: 0.00%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-04-04 03:41:15

End at: 2018-04-04 03:41:45

Below is generated by plot.py at 2018-04-04 09:45:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 377.48 Mbit/s

95th percentile per-packet one-way delay: 127.049 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 214.54 Mbit/s

95th percentile per-packet one-way delay: 119.534 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 182.75 Mbit/s

95th percentile per-packet one-way delay: 125.983 ms

Loss rate: 0.00%

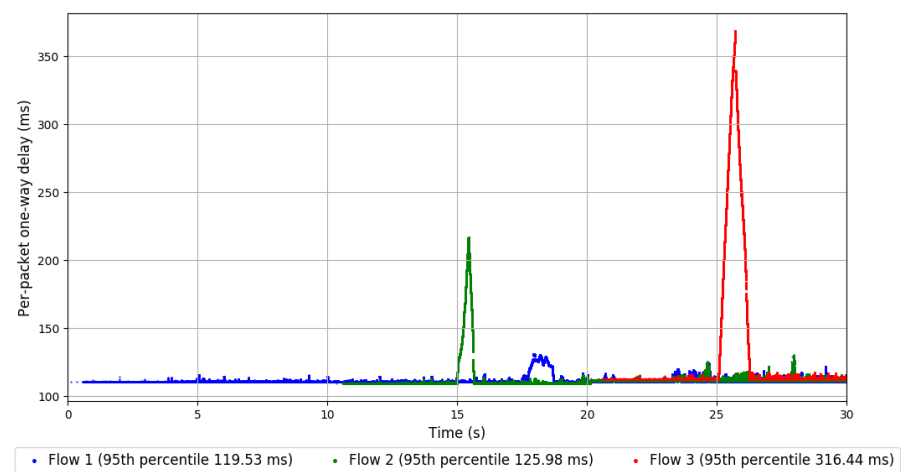
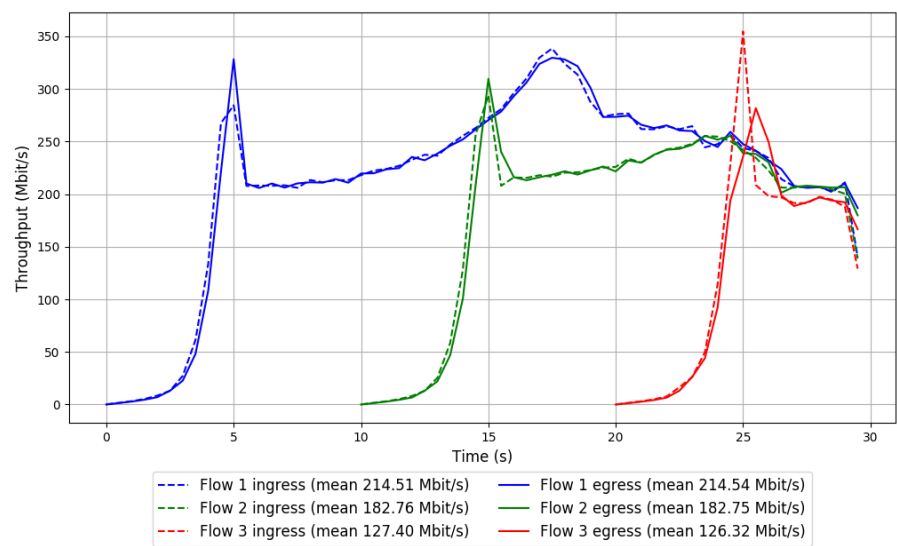
-- Flow 3:

Average throughput: 126.32 Mbit/s

95th percentile per-packet one-way delay: 316.435 ms

Loss rate: 0.85%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-04-04 04:00:01

End at: 2018-04-04 04:00:31

Below is generated by plot.py at 2018-04-04 09:45:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 435.33 Mbit/s

95th percentile per-packet one-way delay: 222.655 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 272.31 Mbit/s

95th percentile per-packet one-way delay: 257.126 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 176.00 Mbit/s

95th percentile per-packet one-way delay: 168.682 ms

Loss rate: 0.00%

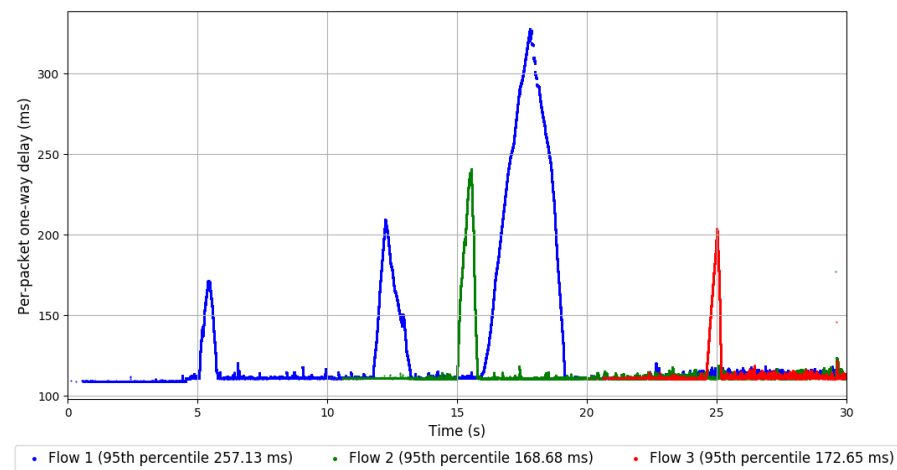
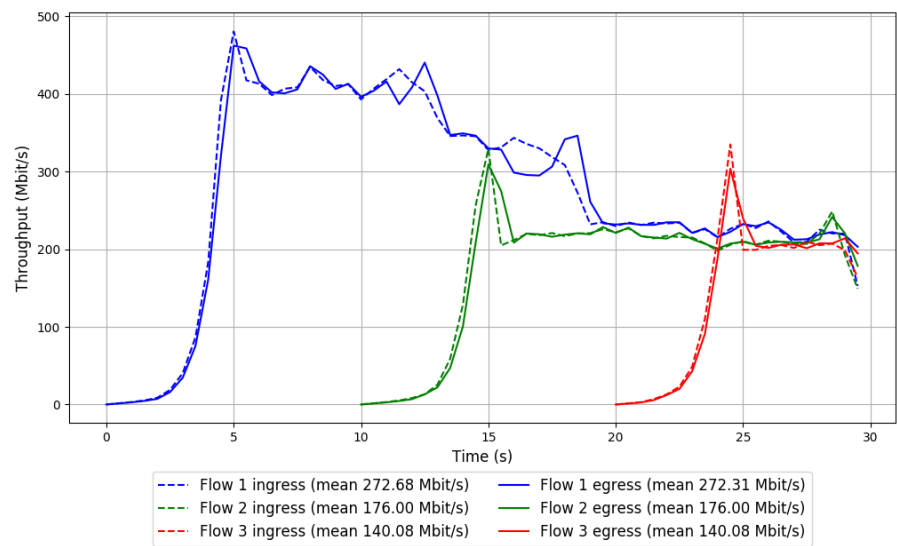
-- Flow 3:

Average throughput: 140.08 Mbit/s

95th percentile per-packet one-way delay: 172.648 ms

Loss rate: 0.00%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-04-04 04:18:57

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

Below is generated by plot.py at 2018-04-04 09:45:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 369.40 Mbit/s

95th percentile per-packet one-way delay: 168.470 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 205.54 Mbit/s

95th percentile per-packet one-way delay: 132.427 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 184.38 Mbit/s

95th percentile per-packet one-way delay: 239.510 ms

Loss rate: 0.00%

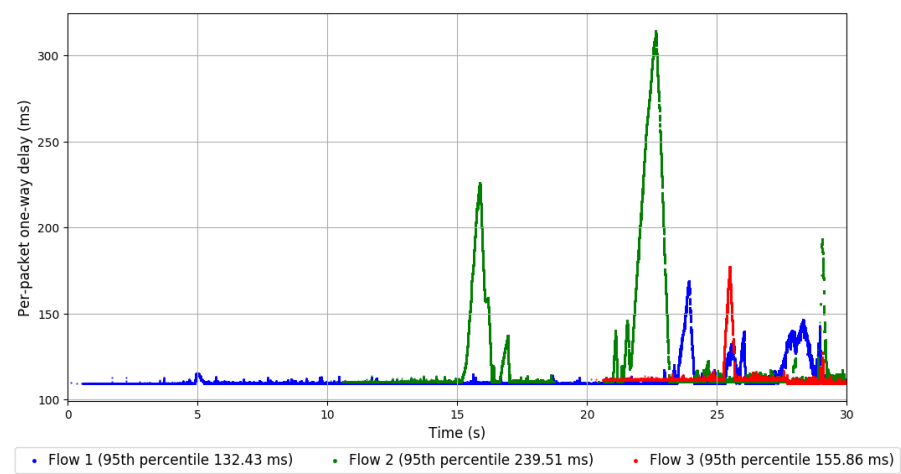
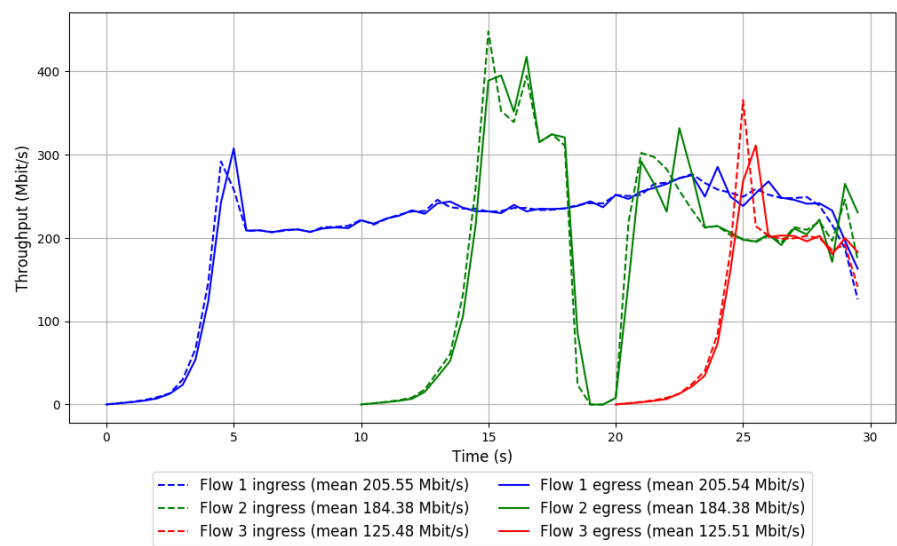
-- Flow 3:

Average throughput: 125.51 Mbit/s

95th percentile per-packet one-way delay: 155.863 ms

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-04-04 04:38:13

End at: 2018-04-04 04:38:43

Below is generated by plot.py at 2018-04-04 09:45:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 361.88 Mbit/s

95th percentile per-packet one-way delay: 234.905 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 261.39 Mbit/s

95th percentile per-packet one-way delay: 195.637 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 85.58 Mbit/s

95th percentile per-packet one-way delay: 288.511 ms

Loss rate: 6.11%

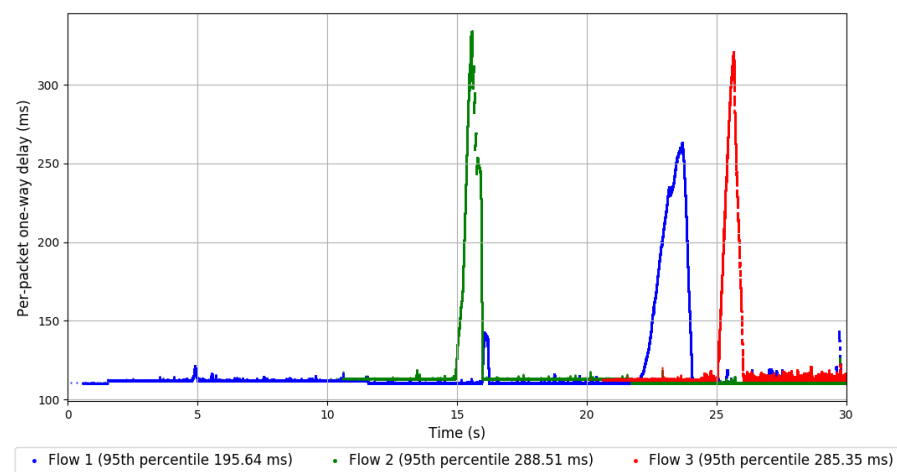
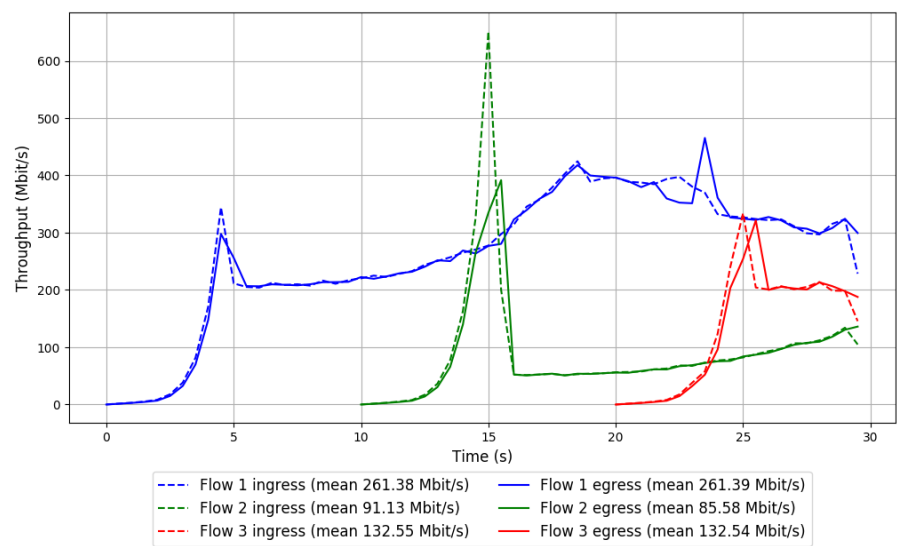
-- Flow 3:

Average throughput: 132.54 Mbit/s

95th percentile per-packet one-way delay: 285.349 ms

Loss rate: 0.03%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-04-04 04:57:30

End at: 2018-04-04 04:58:00

Below is generated by plot.py at 2018-04-04 09:45:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 410.26 Mbit/s

95th percentile per-packet one-way delay: 129.864 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 249.83 Mbit/s

95th percentile per-packet one-way delay: 138.173 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 176.52 Mbit/s

95th percentile per-packet one-way delay: 115.714 ms

Loss rate: 0.00%

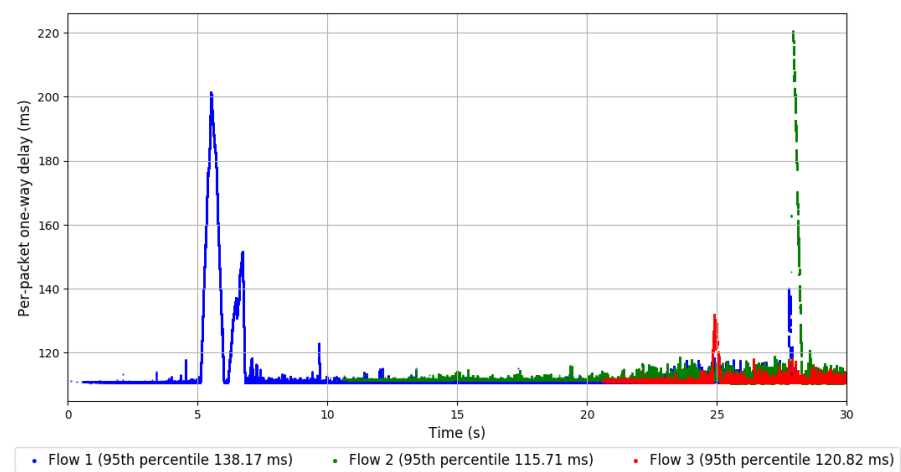
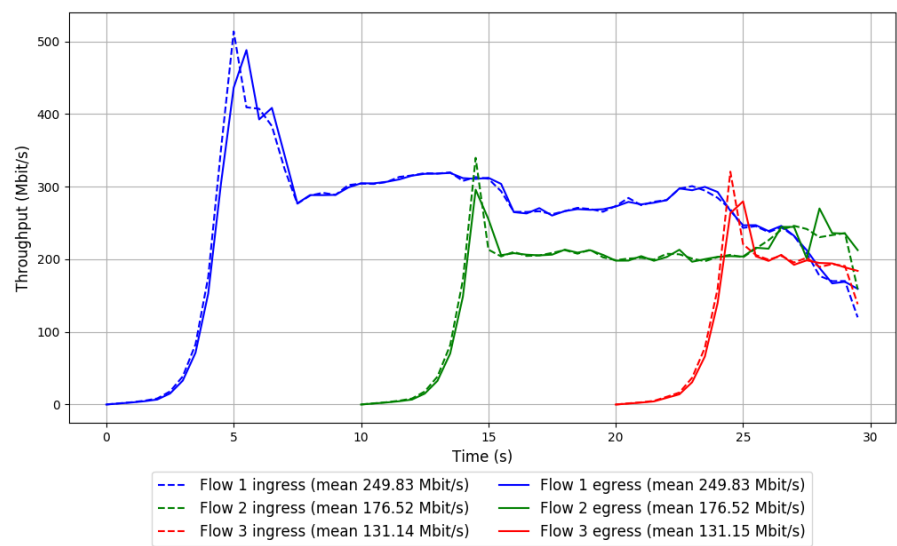
-- Flow 3:

Average throughput: 131.15 Mbit/s

95th percentile per-packet one-way delay: 120.819 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-04-04 05:17:26

End at: 2018-04-04 05:17:56

Below is generated by plot.py at 2018-04-04 09:47:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 417.10 Mbit/s

95th percentile per-packet one-way delay: 137.894 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 250.83 Mbit/s

95th percentile per-packet one-way delay: 151.884 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 184.37 Mbit/s

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

Loss rate: 0.01%

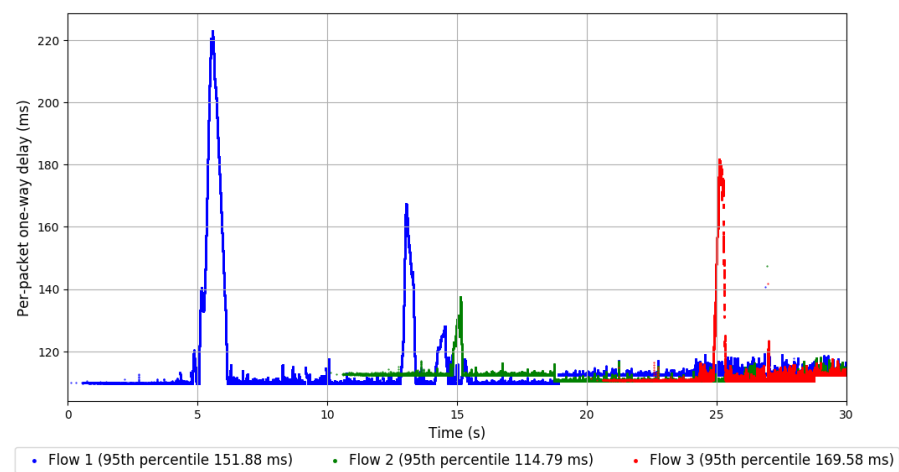
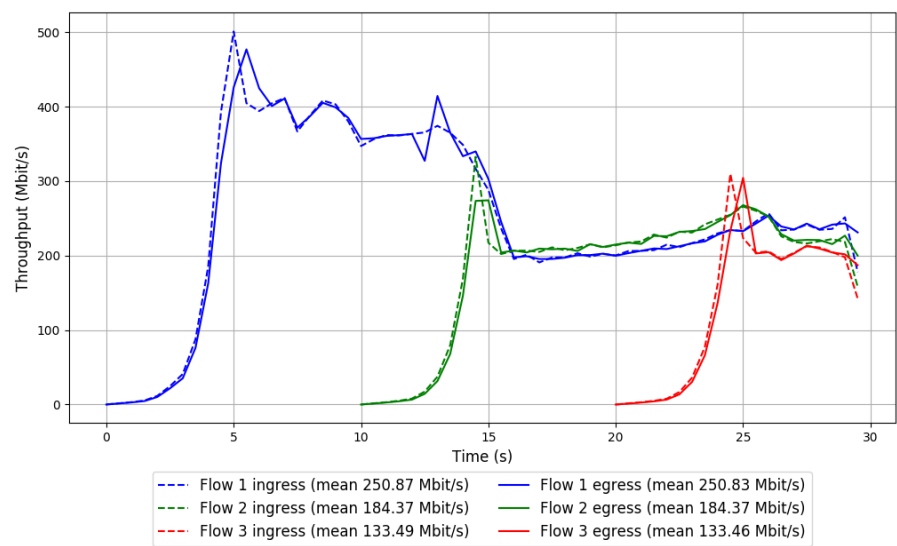
-- Flow 3:

Average throughput: 133.46 Mbit/s

95th percentile per-packet one-way delay: 169.578 ms

Loss rate: 0.00%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-04-04 05:37:18

End at: 2018-04-04 05:37:49

Below is generated by plot.py at 2018-04-04 09:48:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 442.08 Mbit/s

95th percentile per-packet one-way delay: 162.052 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 258.89 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 209.82 Mbit/s

95th percentile per-packet one-way delay: 257.238 ms

Loss rate: 1.03%

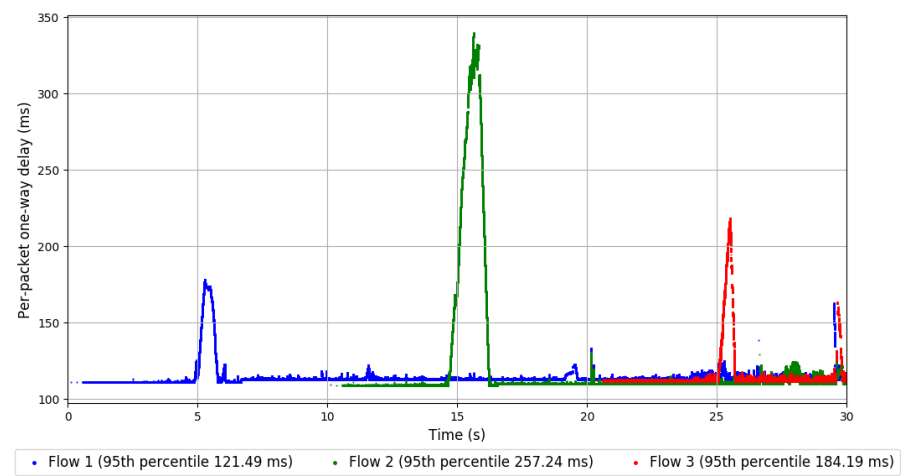
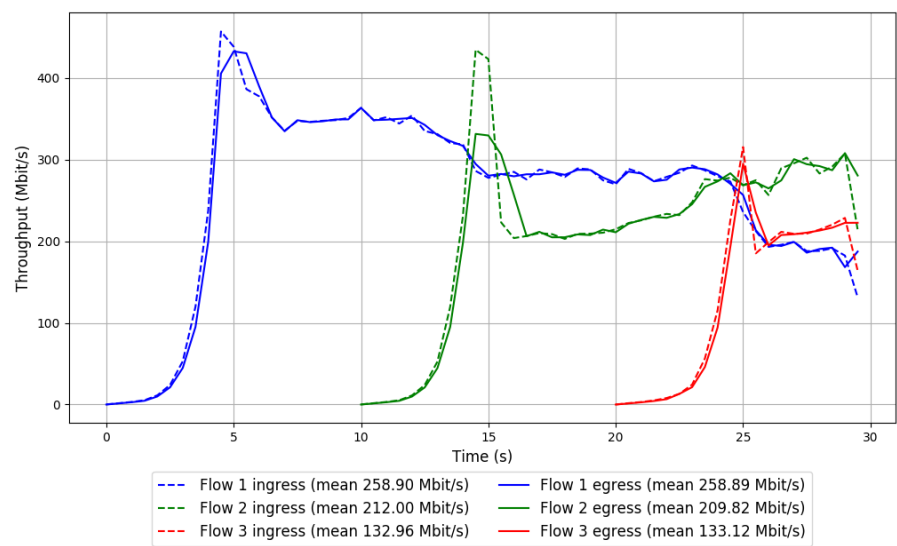
-- Flow 3:

Average throughput: 133.12 Mbit/s

95th percentile per-packet one-way delay: 184.195 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-04-04 05:56:38

End at: 2018-04-04 05:57:08

Below is generated by plot.py at 2018-04-04 09:48:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 380.11 Mbit/s

95th percentile per-packet one-way delay: 114.965 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 221.28 Mbit/s

95th percentile per-packet one-way delay: 115.142 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 177.46 Mbit/s

95th percentile per-packet one-way delay: 113.873 ms

Loss rate: 0.00%

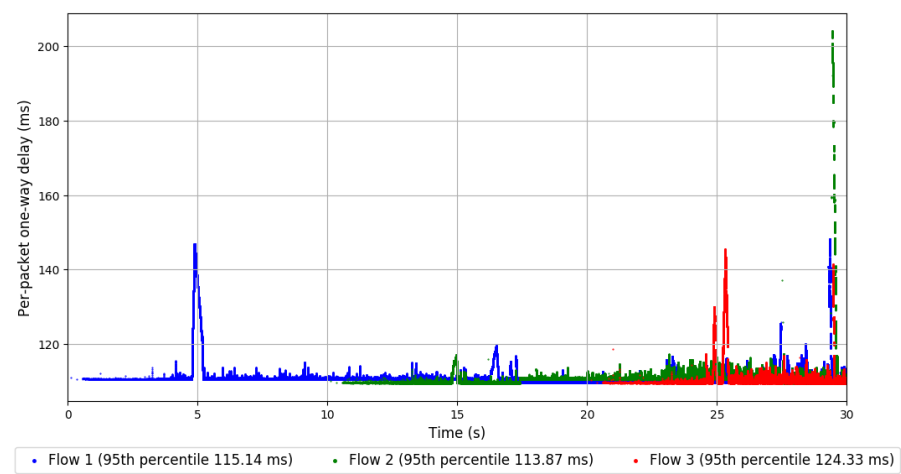
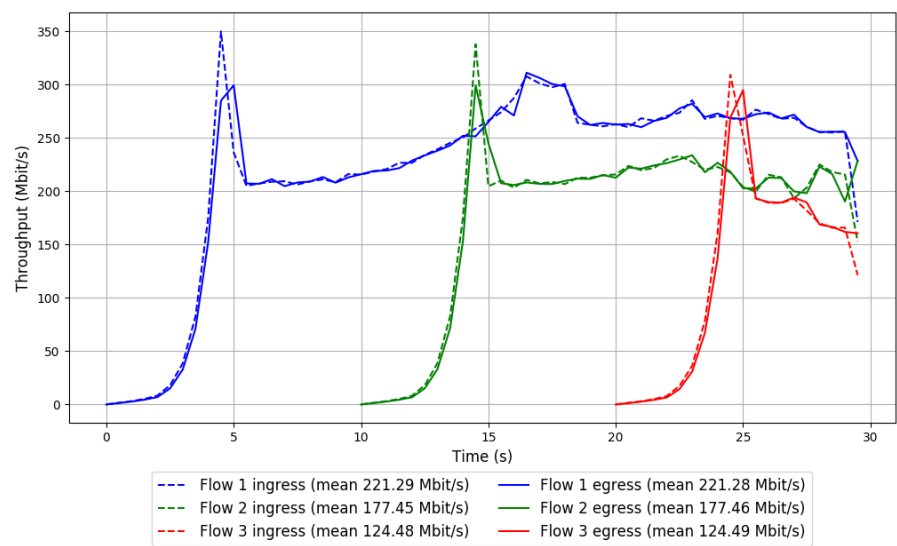
-- Flow 3:

Average throughput: 124.49 Mbit/s

95th percentile per-packet one-way delay: 124.329 ms

Loss rate: 0.00%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-04-04 06:16:00

End at: 2018-04-04 06:16:30

Below is generated by plot.py at 2018-04-04 09:48:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 400.64 Mbit/s

95th percentile per-packet one-way delay: 134.440 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 261.34 Mbit/s

95th percentile per-packet one-way delay: 168.292 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 173.20 Mbit/s

95th percentile per-packet one-way delay: 114.506 ms

Loss rate: 0.00%

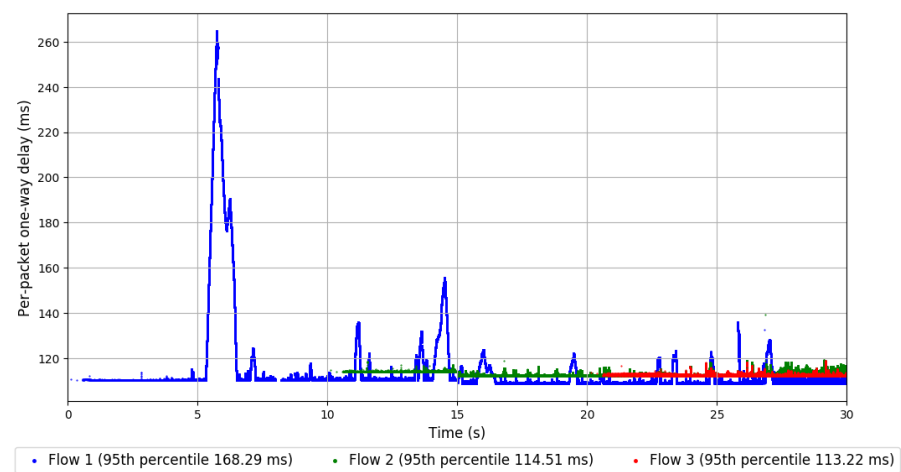
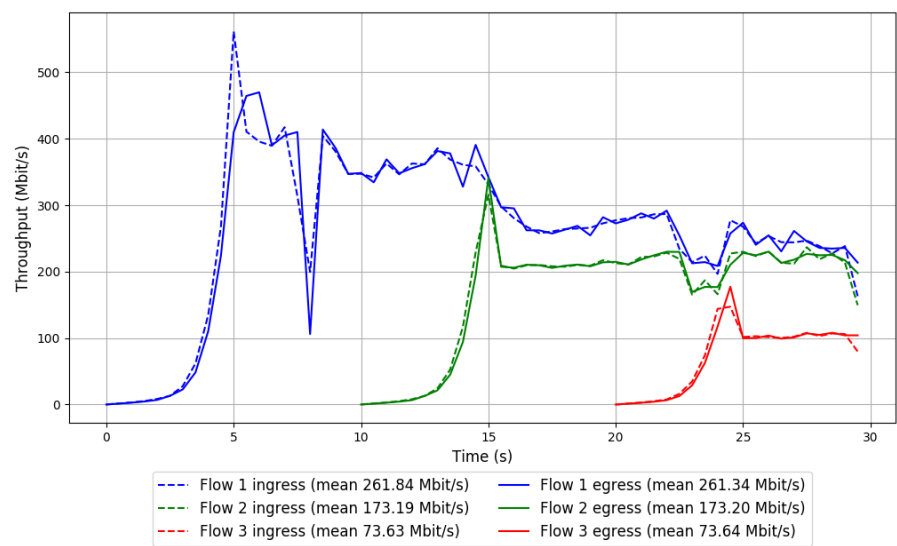
-- Flow 3:

Average throughput: 73.64 Mbit/s

95th percentile per-packet one-way delay: 113.221 ms

Loss rate: 0.00%

Run 10: Report of Vivace-latency — Data Link

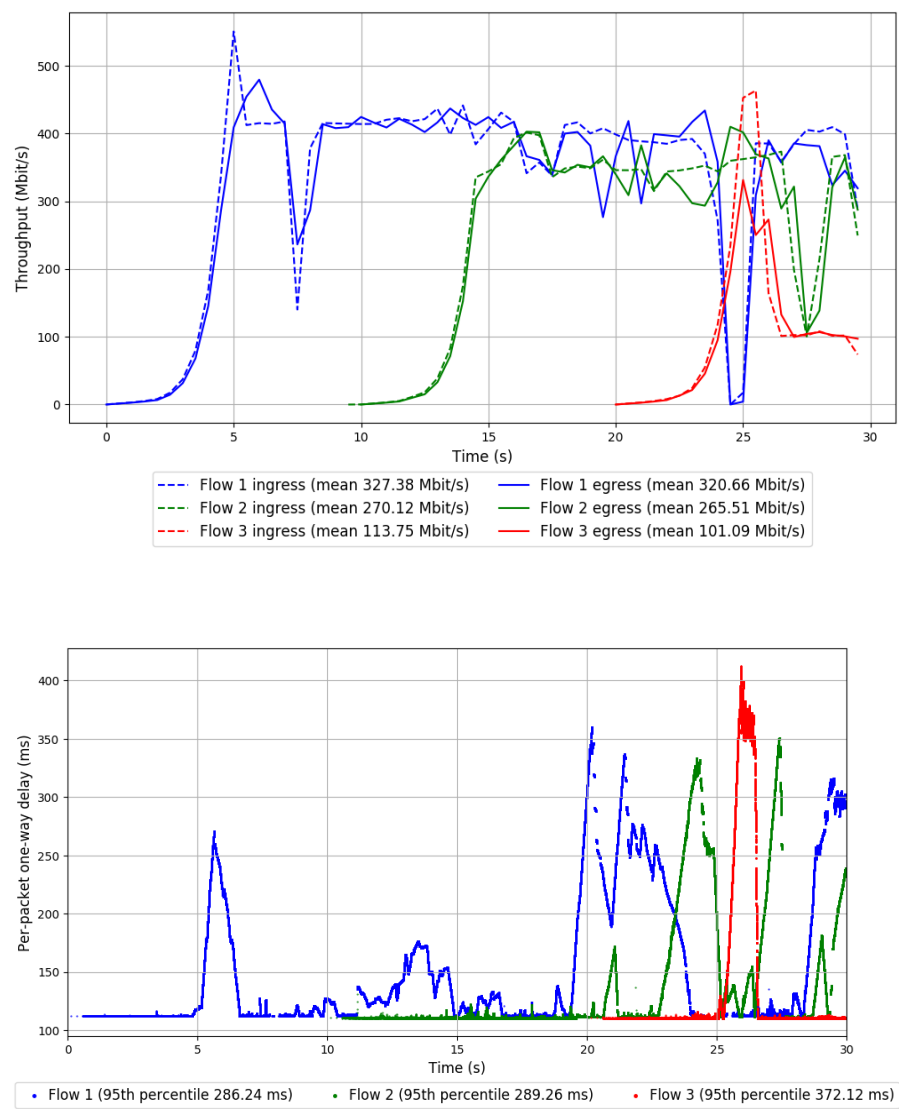


```
Run 1: Statistics of Vivace-loss

Start at: 2018-04-04 03:32:46
End at: 2018-04-04 03:33:16

# Below is generated by plot.py at 2018-04-04 09:51:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 530.49 Mbit/s
95th percentile per-packet one-way delay: 294.279 ms
Loss rate: 2.55%
-- Flow 1:
Average throughput: 320.66 Mbit/s
95th percentile per-packet one-way delay: 286.242 ms
Loss rate: 2.05%
-- Flow 2:
Average throughput: 265.51 Mbit/s
95th percentile per-packet one-way delay: 289.259 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 101.09 Mbit/s
95th percentile per-packet one-way delay: 372.121 ms
Loss rate: 11.14%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-04-04 03:51:50

End at: 2018-04-04 03:52:20

Below is generated by plot.py at 2018-04-04 09:51:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 431.36 Mbit/s

95th percentile per-packet one-way delay: 347.107 ms

Loss rate: 9.05%

-- Flow 1:

Average throughput: 249.51 Mbit/s

95th percentile per-packet one-way delay: 344.272 ms

Loss rate: 5.76%

-- Flow 2:

Average throughput: 224.10 Mbit/s

95th percentile per-packet one-way delay: 341.013 ms

Loss rate: 11.73%

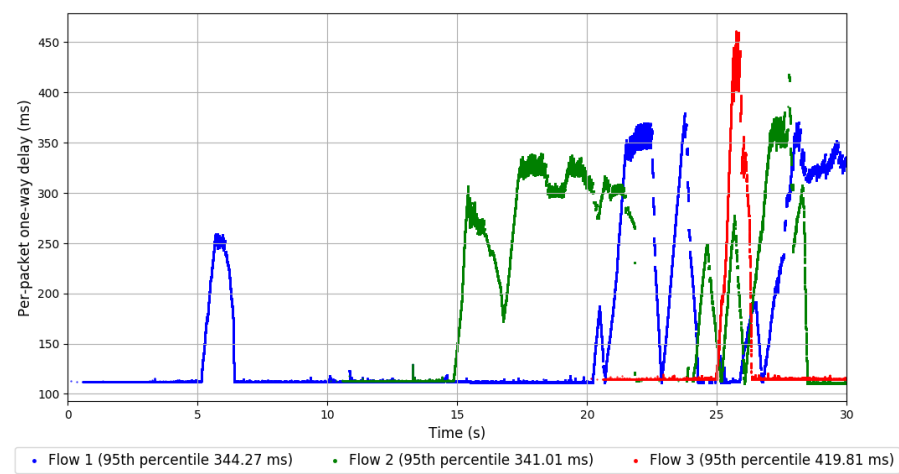
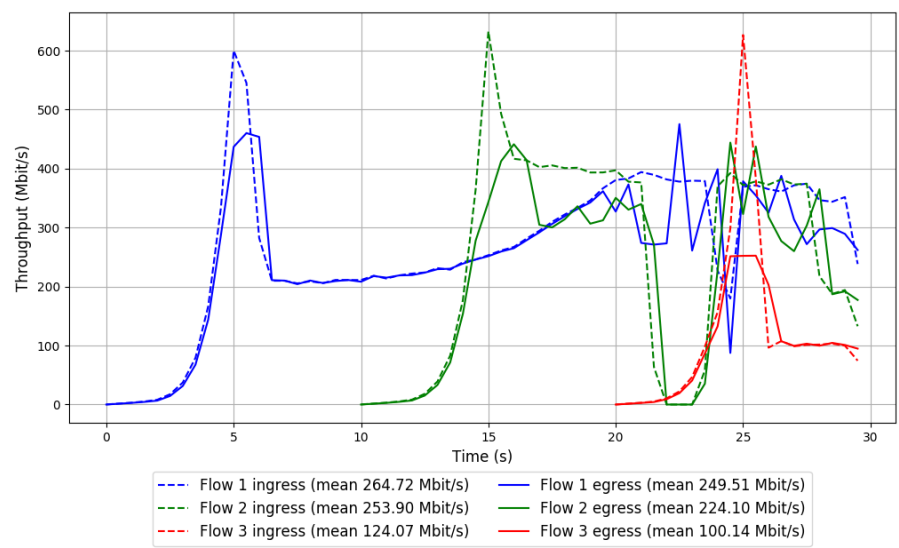
-- Flow 3:

Average throughput: 100.14 Mbit/s

95th percentile per-packet one-way delay: 419.815 ms

Loss rate: 19.32%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-04-04 04:10:44

End at: 2018-04-04 04:11:14

Below is generated by plot.py at 2018-04-04 09:51:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 471.05 Mbit/s

95th percentile per-packet one-way delay: 275.564 ms

Loss rate: 1.99%

-- Flow 1:

Average throughput: 322.79 Mbit/s

95th percentile per-packet one-way delay: 275.837 ms

Loss rate: 1.49%

-- Flow 2:

Average throughput: 181.63 Mbit/s

95th percentile per-packet one-way delay: 116.835 ms

Loss rate: 0.00%

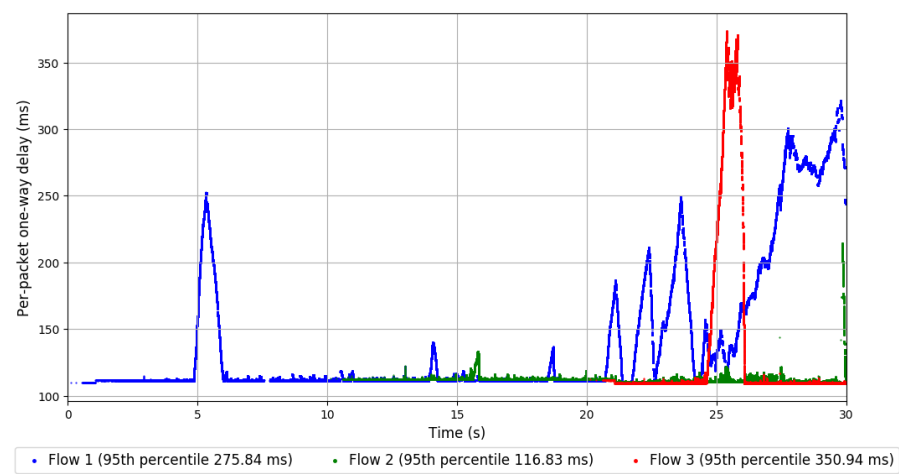
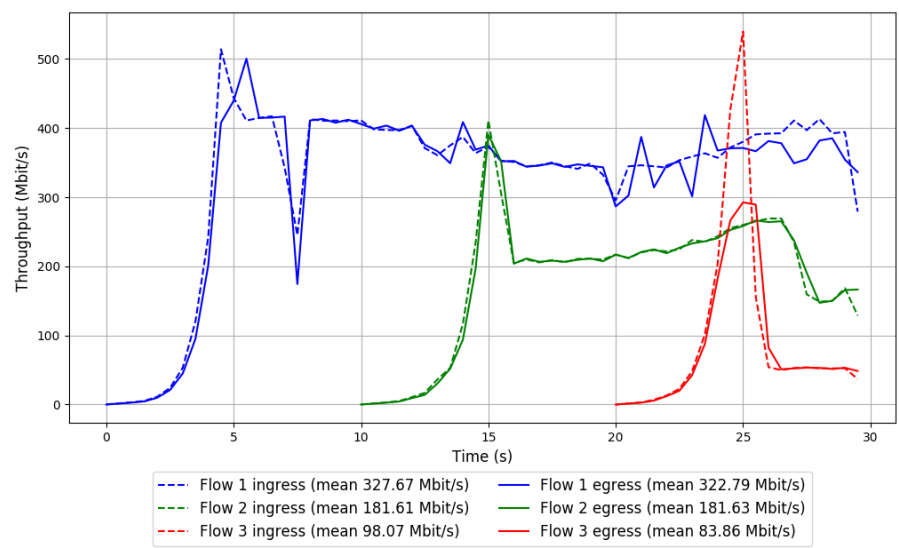
-- Flow 3:

Average throughput: 83.86 Mbit/s

95th percentile per-packet one-way delay: 350.942 ms

Loss rate: 14.51%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-04-04 04:29:45

End at: 2018-04-04 04:30:15

Below is generated by plot.py at 2018-04-04 09:53:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 439.63 Mbit/s

95th percentile per-packet one-way delay: 264.419 ms

Loss rate: 1.56%

-- Flow 1:

Average throughput: 286.95 Mbit/s

95th percentile per-packet one-way delay: 260.366 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 128.25 Mbit/s

95th percentile per-packet one-way delay: 276.754 ms

Loss rate: 5.05%

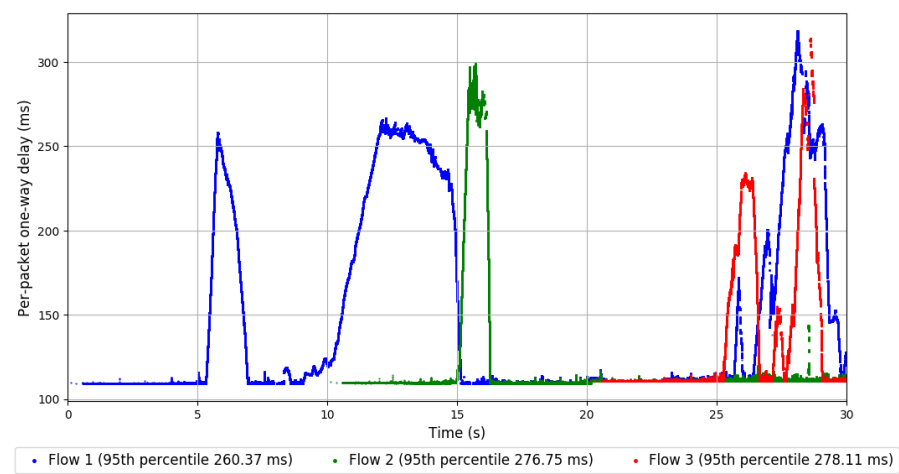
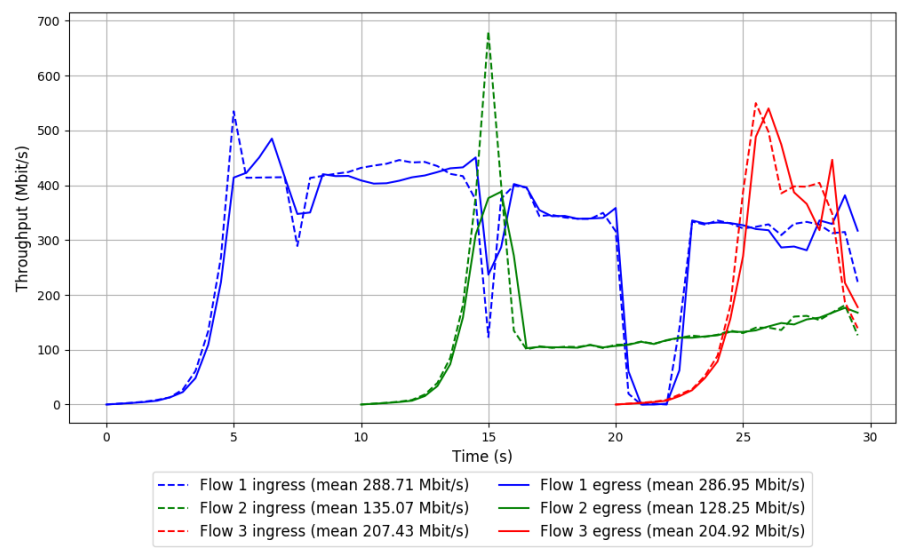
-- Flow 3:

Average throughput: 204.92 Mbit/s

95th percentile per-packet one-way delay: 278.108 ms

Loss rate: 1.22%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-04-04 04:48:50

End at: 2018-04-04 04:49:20

Below is generated by plot.py at 2018-04-04 09:57:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 543.95 Mbit/s

95th percentile per-packet one-way delay: 314.093 ms

Loss rate: 3.01%

-- Flow 1:

Average throughput: 323.89 Mbit/s

95th percentile per-packet one-way delay: 288.612 ms

Loss rate: 1.30%

-- Flow 2:

Average throughput: 261.12 Mbit/s

95th percentile per-packet one-way delay: 317.138 ms

Loss rate: 4.61%

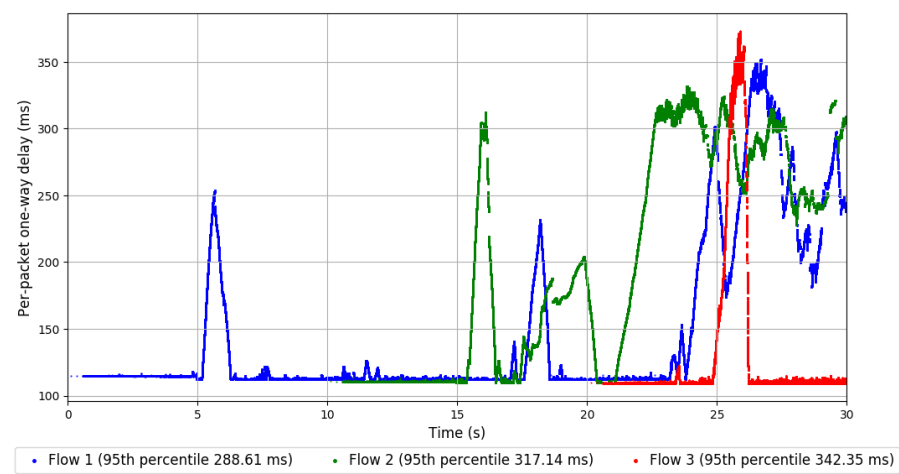
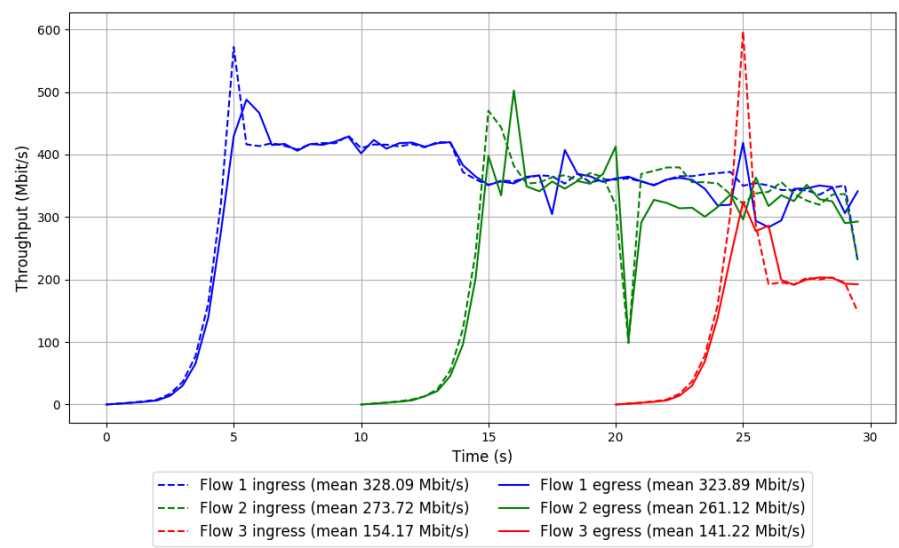
-- Flow 3:

Average throughput: 141.22 Mbit/s

95th percentile per-packet one-way delay: 342.352 ms

Loss rate: 8.41%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-04-04 05:09:13

End at: 2018-04-04 05:09:43

Below is generated by plot.py at 2018-04-04 09:57:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 340.18 Mbit/s

95th percentile per-packet one-way delay: 333.801 ms

Loss rate: 6.22%

-- Flow 1:

Average throughput: 151.62 Mbit/s

95th percentile per-packet one-way delay: 329.193 ms

Loss rate: 8.54%

-- Flow 2:

Average throughput: 233.50 Mbit/s

95th percentile per-packet one-way delay: 329.395 ms

Loss rate: 2.55%

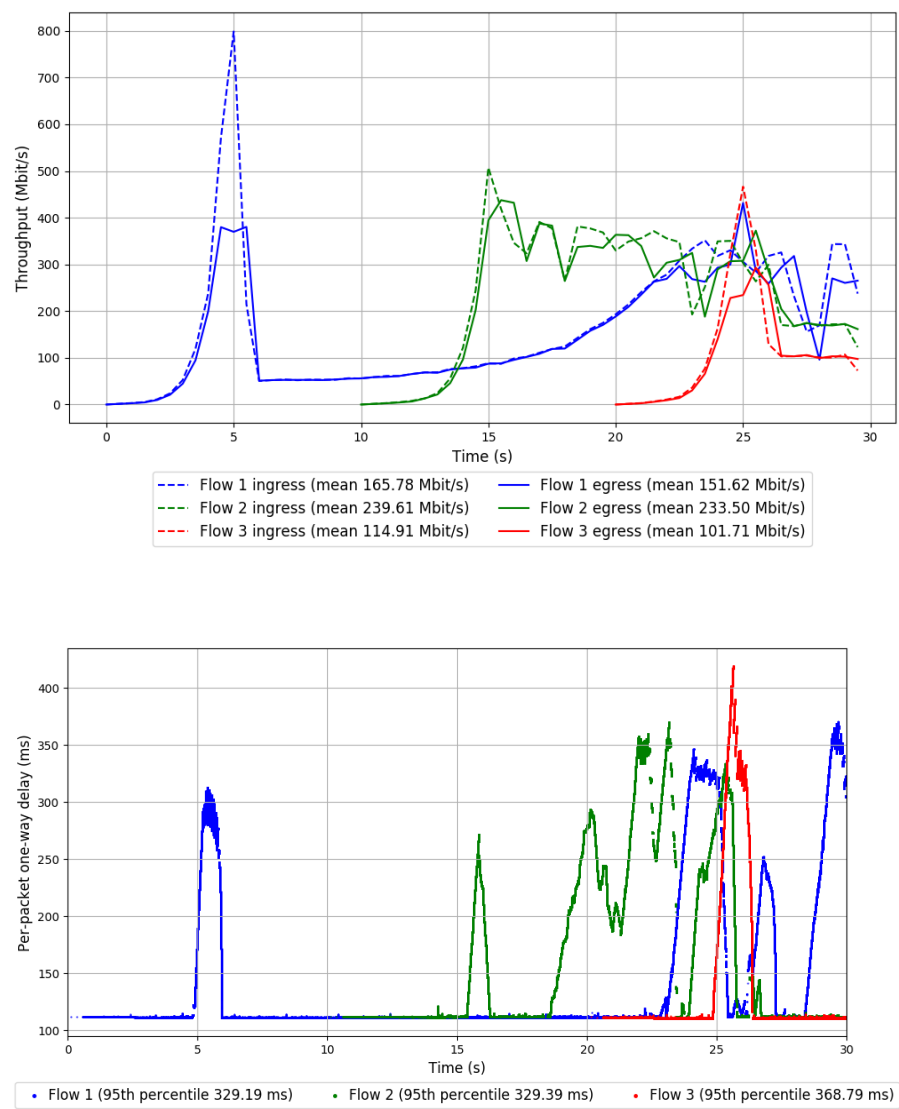
-- Flow 3:

Average throughput: 101.71 Mbit/s

95th percentile per-packet one-way delay: 368.788 ms

Loss rate: 11.49%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-04-04 05:28:53

End at: 2018-04-04 05:29:23

Below is generated by plot.py at 2018-04-04 09:57:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 316.98 Mbit/s

95th percentile per-packet one-way delay: 259.135 ms

Loss rate: 3.45%

-- Flow 1:

Average throughput: 165.66 Mbit/s

95th percentile per-packet one-way delay: 259.060 ms

Loss rate: 2.76%

-- Flow 2:

Average throughput: 194.17 Mbit/s

95th percentile per-packet one-way delay: 116.222 ms

Loss rate: 0.01%

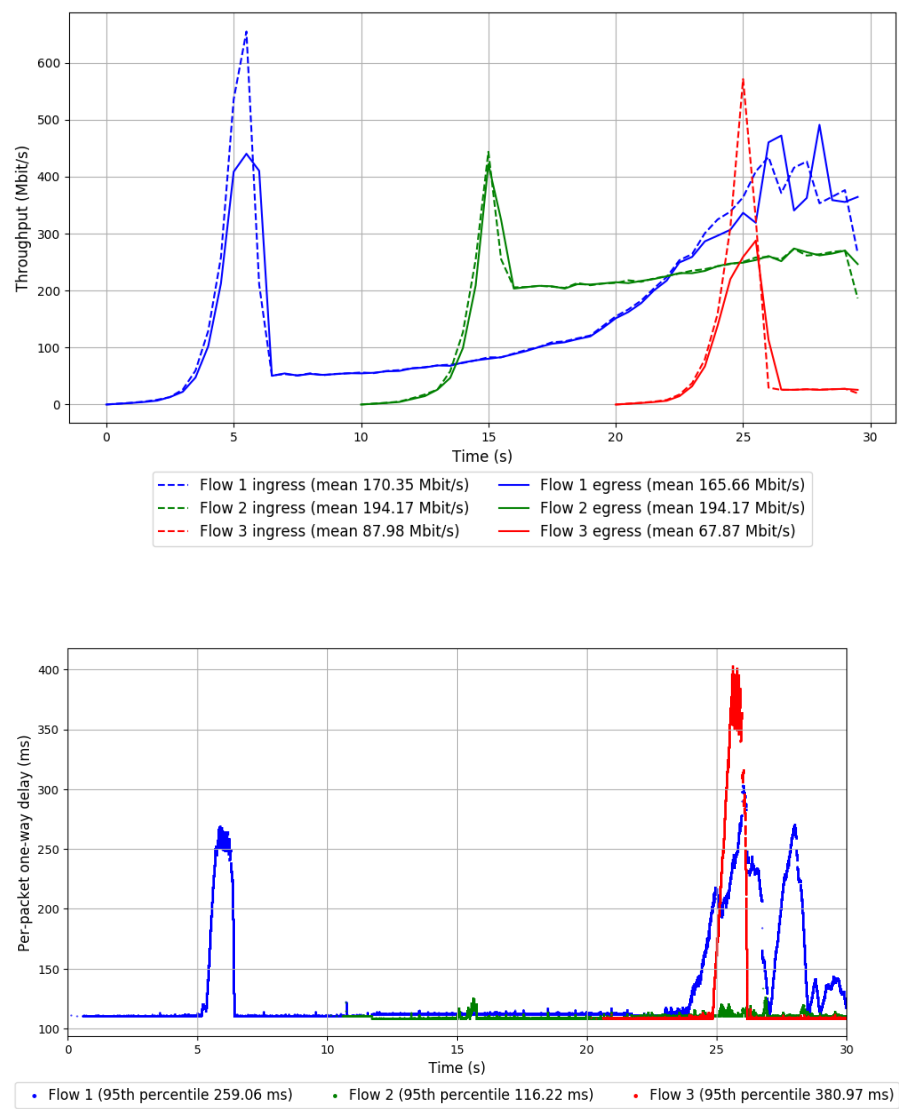
-- Flow 3:

Average throughput: 67.87 Mbit/s

95th percentile per-packet one-way delay: 380.968 ms

Loss rate: 22.87%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-04-04 05:48:15

End at: 2018-04-04 05:48:45

Below is generated by plot.py at 2018-04-04 09:57:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 479.72 Mbit/s

95th percentile per-packet one-way delay: 297.440 ms

Loss rate: 1.60%

-- Flow 1:

Average throughput: 299.86 Mbit/s

95th percentile per-packet one-way delay: 304.368 ms

Loss rate: 1.31%

-- Flow 2:

Average throughput: 198.93 Mbit/s

95th percentile per-packet one-way delay: 220.985 ms

Loss rate: 2.36%

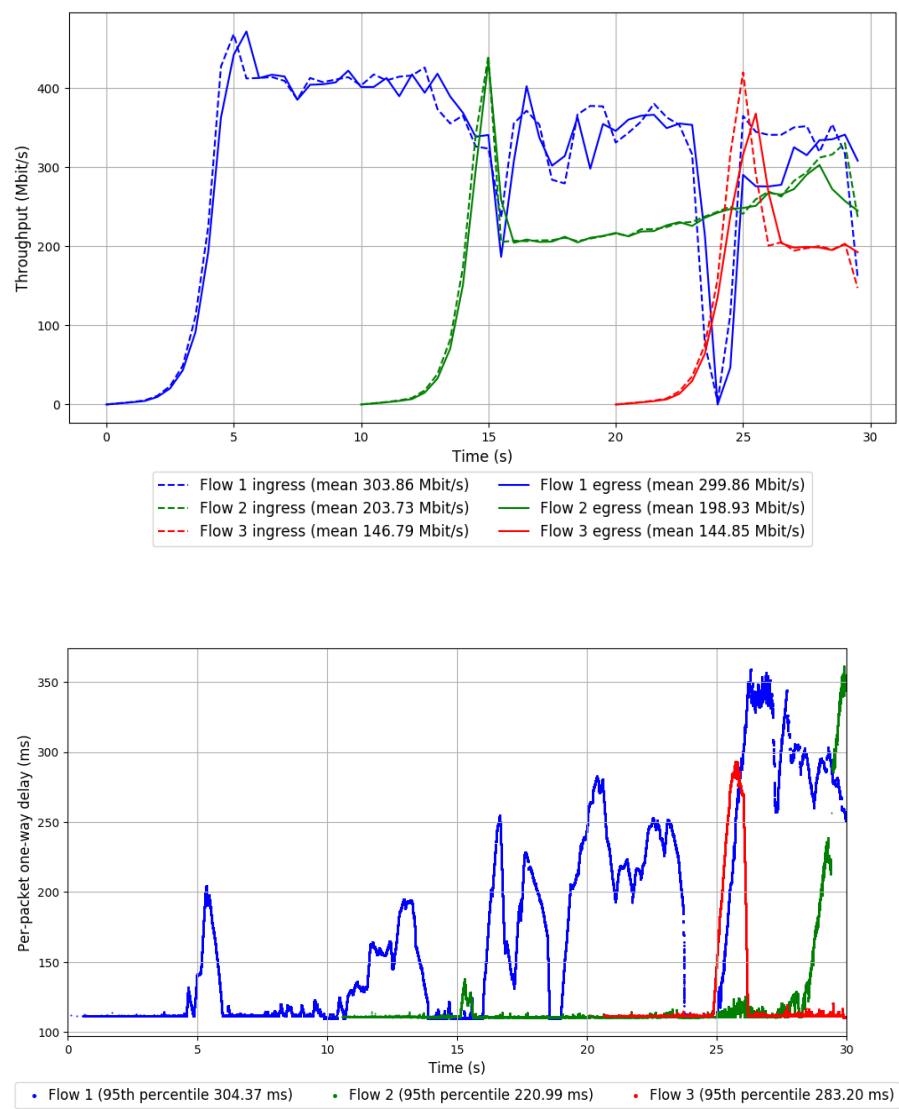
-- Flow 3:

Average throughput: 144.85 Mbit/s

95th percentile per-packet one-way delay: 283.198 ms

Loss rate: 1.34%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-04-04 06:07:38

End at: 2018-04-04 06:08:08

Below is generated by plot.py at 2018-04-04 09:58:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 450.95 Mbit/s

95th percentile per-packet one-way delay: 294.089 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 219.20 Mbit/s

95th percentile per-packet one-way delay: 167.512 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 279.39 Mbit/s

95th percentile per-packet one-way delay: 306.274 ms

Loss rate: 2.01%

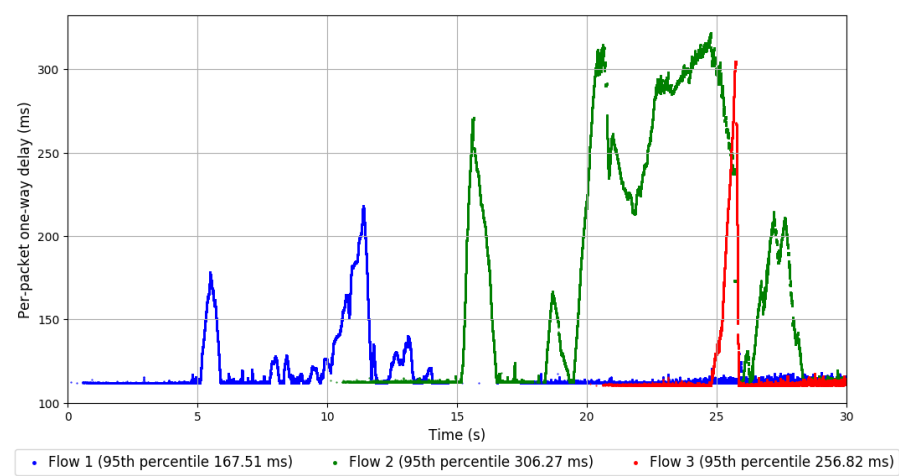
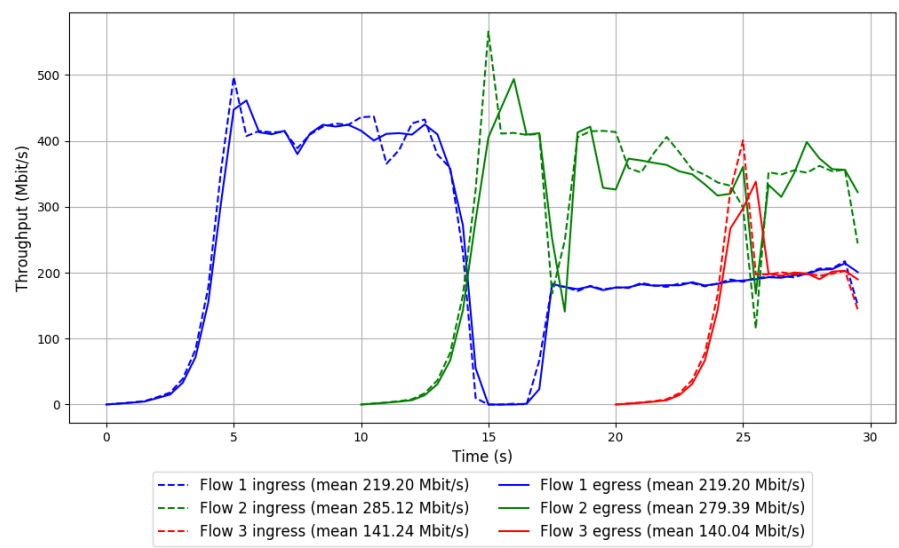
-- Flow 3:

Average throughput: 140.04 Mbit/s

95th percentile per-packet one-way delay: 256.822 ms

Loss rate: 0.83%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-04-04 06:27:00

End at: 2018-04-04 06:27:30

Below is generated by plot.py at 2018-04-04 09:59:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 441.40 Mbit/s

95th percentile per-packet one-way delay: 318.795 ms

Loss rate: 5.25%

-- Flow 1:

Average throughput: 282.47 Mbit/s

95th percentile per-packet one-way delay: 322.339 ms

Loss rate: 5.58%

-- Flow 2:

Average throughput: 199.81 Mbit/s

95th percentile per-packet one-way delay: 213.372 ms

Loss rate: 2.33%

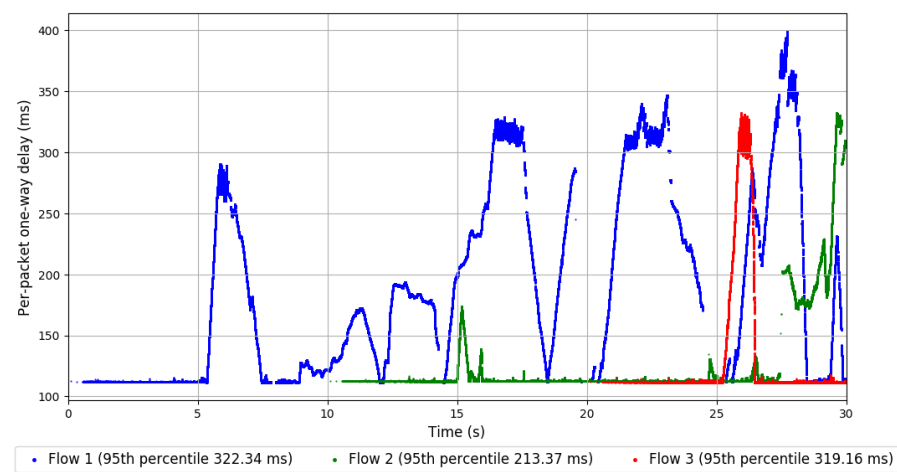
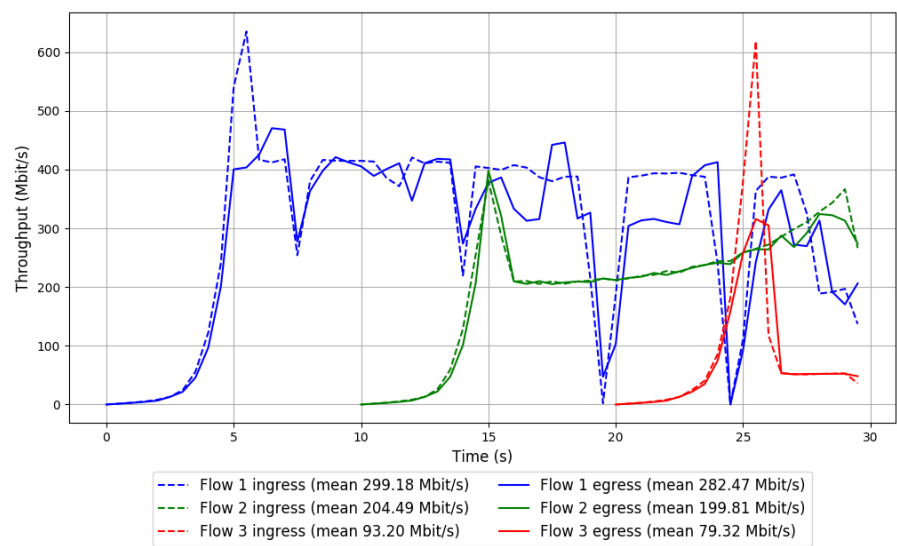
-- Flow 3:

Average throughput: 79.32 Mbit/s

95th percentile per-packet one-way delay: 319.159 ms

Loss rate: 14.89%

Run 10: Report of Vivace-loss — Data Link

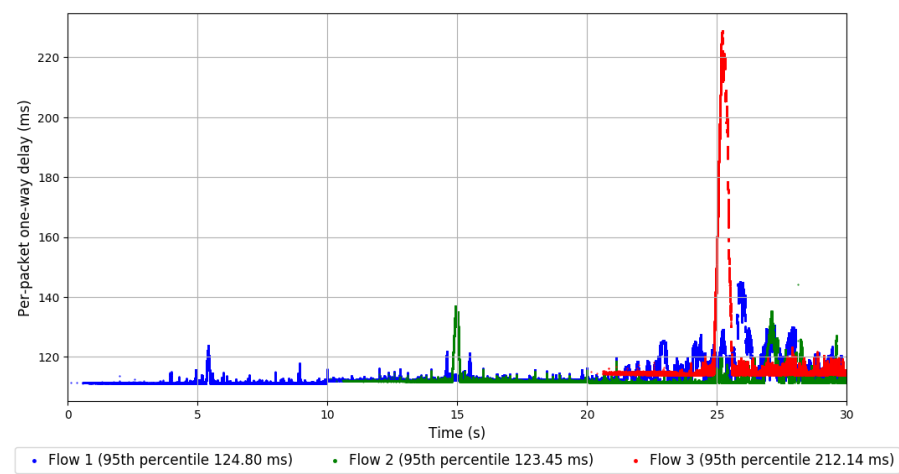
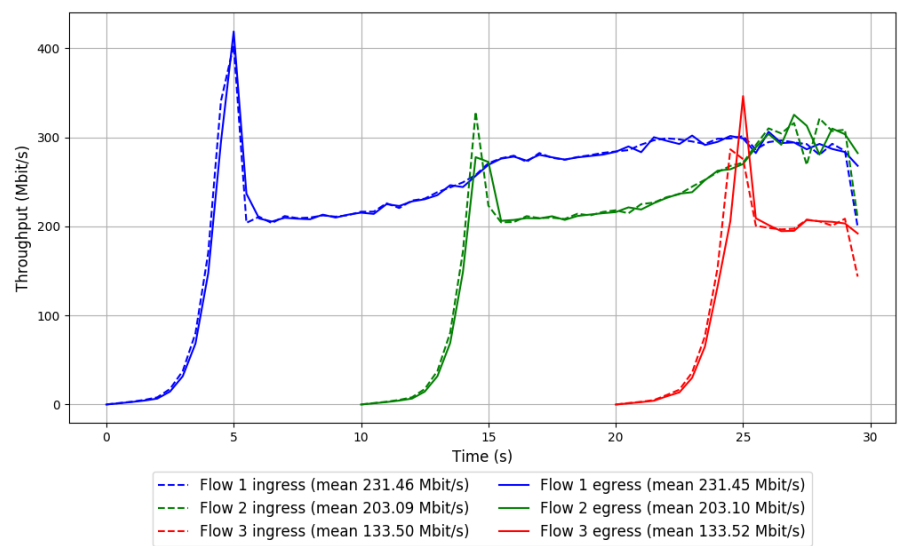


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-04-04 03:20:35
End at: 2018-04-04 03:21:05

# Below is generated by plot.py at 2018-04-04 09:59:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 410.33 Mbit/s
95th percentile per-packet one-way delay: 125.945 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 231.45 Mbit/s
95th percentile per-packet one-way delay: 124.802 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 203.10 Mbit/s
95th percentile per-packet one-way delay: 123.454 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 133.52 Mbit/s
95th percentile per-packet one-way delay: 212.139 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-04-04 03:39:52

End at: 2018-04-04 03:40:22

Below is generated by plot.py at 2018-04-04 10:01:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 448.47 Mbit/s

95th percentile per-packet one-way delay: 224.311 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 282.02 Mbit/s

95th percentile per-packet one-way delay: 236.315 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 187.78 Mbit/s

95th percentile per-packet one-way delay: 114.974 ms

Loss rate: 0.00%

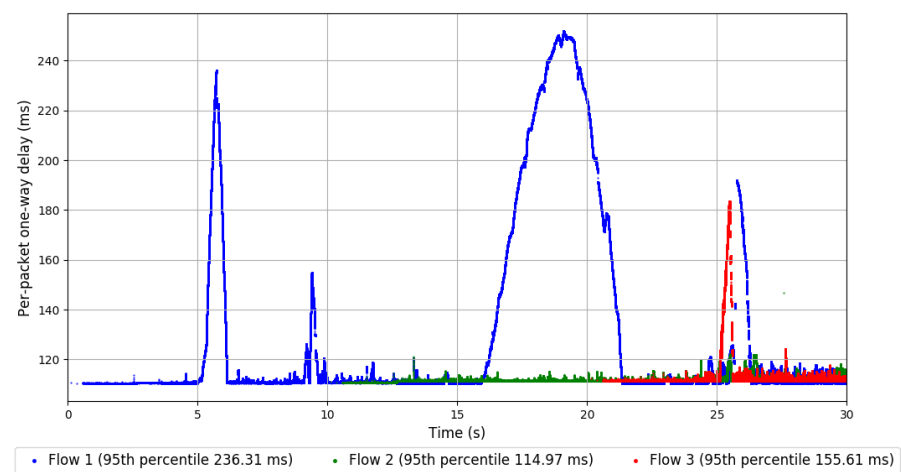
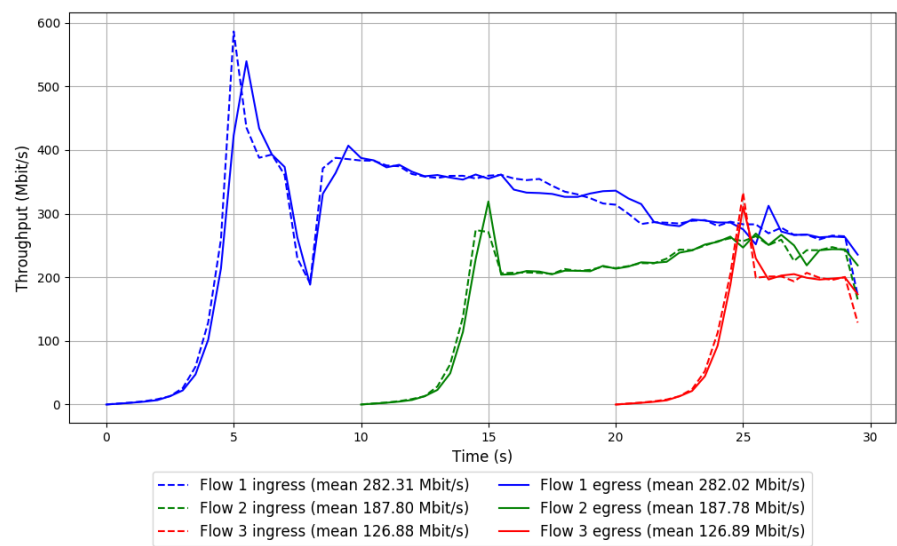
-- Flow 3:

Average throughput: 126.89 Mbit/s

95th percentile per-packet one-way delay: 155.609 ms

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-04-04 03:58:41

End at: 2018-04-04 03:59:11

Below is generated by plot.py at 2018-04-04 10:01:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 410.87 Mbit/s

95th percentile per-packet one-way delay: 209.841 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 235.01 Mbit/s

95th percentile per-packet one-way delay: 230.476 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 200.44 Mbit/s

95th percentile per-packet one-way delay: 116.617 ms

Loss rate: 0.00%

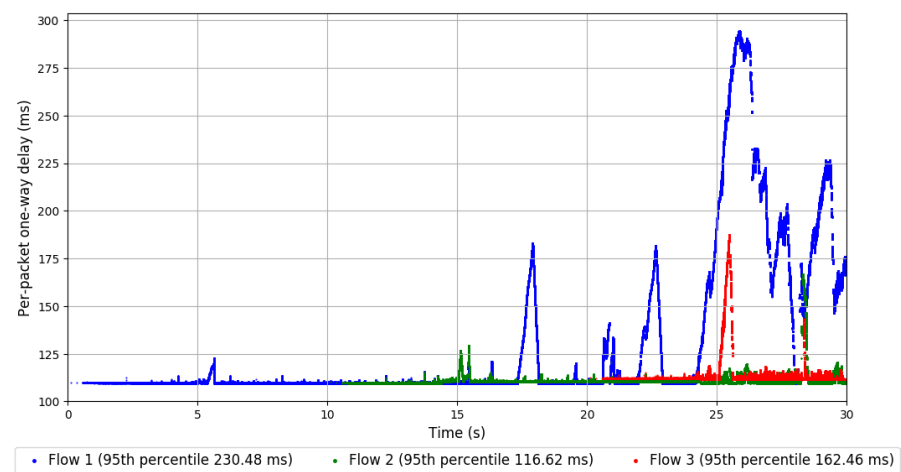
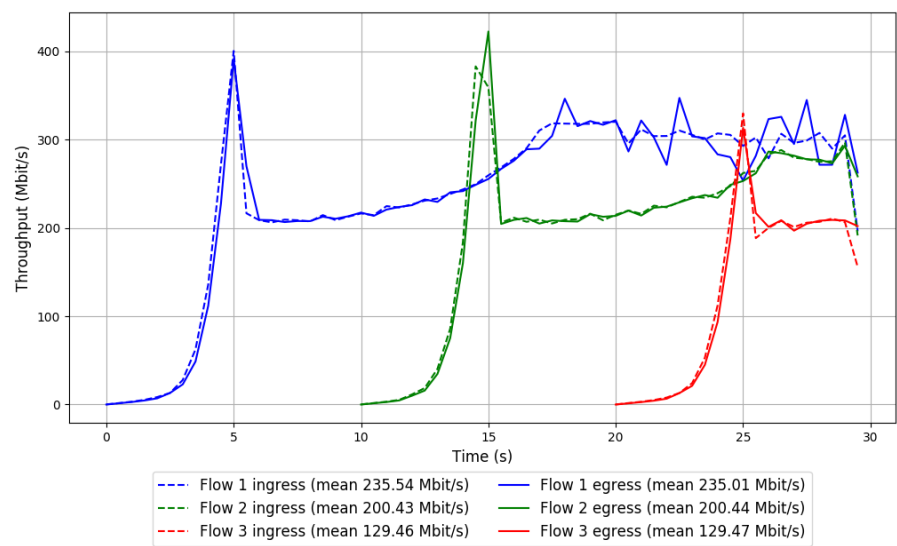
-- Flow 3:

Average throughput: 129.47 Mbit/s

95th percentile per-packet one-way delay: 162.456 ms

Loss rate: 0.01%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-04-04 04:17:37

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

Below is generated by plot.py at 2018-04-04 10:01:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 418.38 Mbit/s

95th percentile per-packet one-way delay: 326.161 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 259.49 Mbit/s

95th percentile per-packet one-way delay: 343.730 ms

Loss rate: 2.18%

-- Flow 2:

Average throughput: 173.85 Mbit/s

95th percentile per-packet one-way delay: 115.266 ms

Loss rate: 0.00%

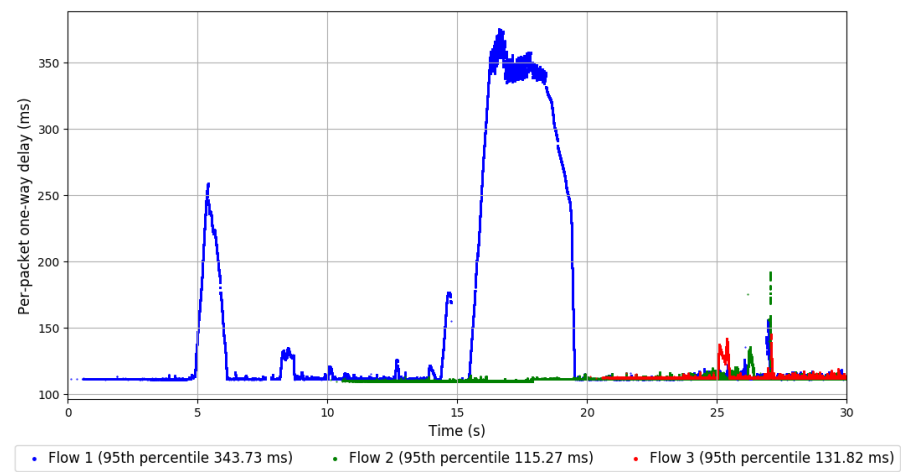
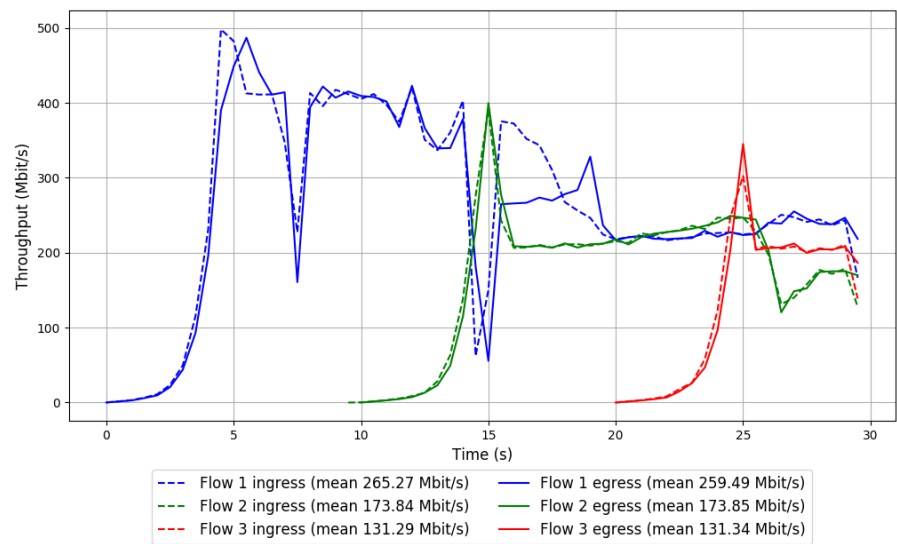
-- Flow 3:

Average throughput: 131.34 Mbit/s

95th percentile per-packet one-way delay: 131.825 ms

Loss rate: 0.00%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-04-04 04:36:46

End at: 2018-04-04 04:37:16

Below is generated by plot.py at 2018-04-04 10:04:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 465.17 Mbit/s

95th percentile per-packet one-way delay: 230.403 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 296.81 Mbit/s

95th percentile per-packet one-way delay: 258.063 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 190.01 Mbit/s

95th percentile per-packet one-way delay: 115.898 ms

Loss rate: 0.02%

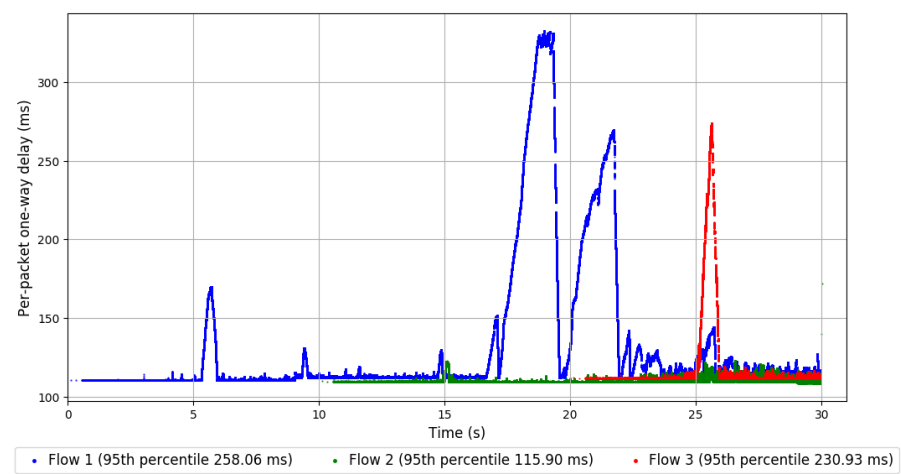
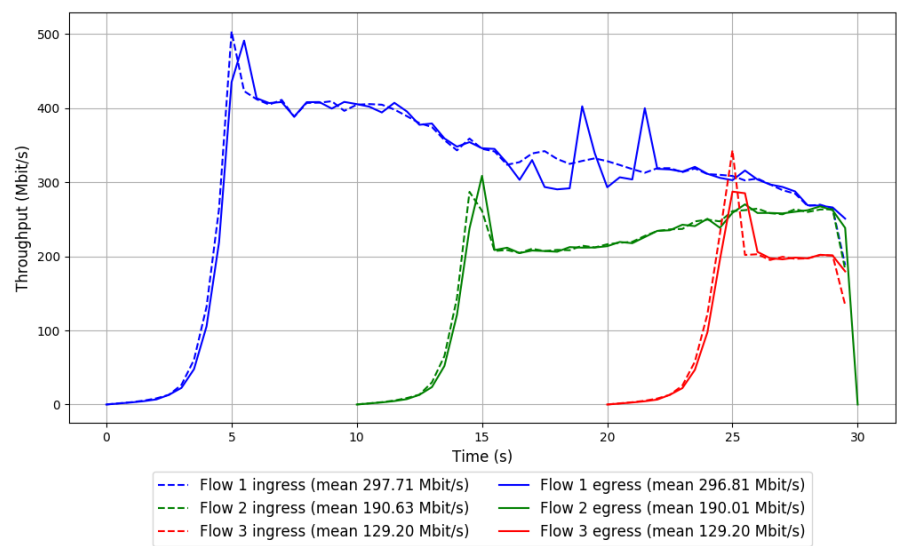
-- Flow 3:

Average throughput: 129.20 Mbit/s

95th percentile per-packet one-way delay: 230.927 ms

Loss rate: 0.00%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-04-04 04:56:06

End at: 2018-04-04 04:56:36

Below is generated by plot.py at 2018-04-04 10:04:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 409.21 Mbit/s

95th percentile per-packet one-way delay: 174.320 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 236.48 Mbit/s

95th percentile per-packet one-way delay: 223.360 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 191.53 Mbit/s

95th percentile per-packet one-way delay: 113.400 ms

Loss rate: 0.00%

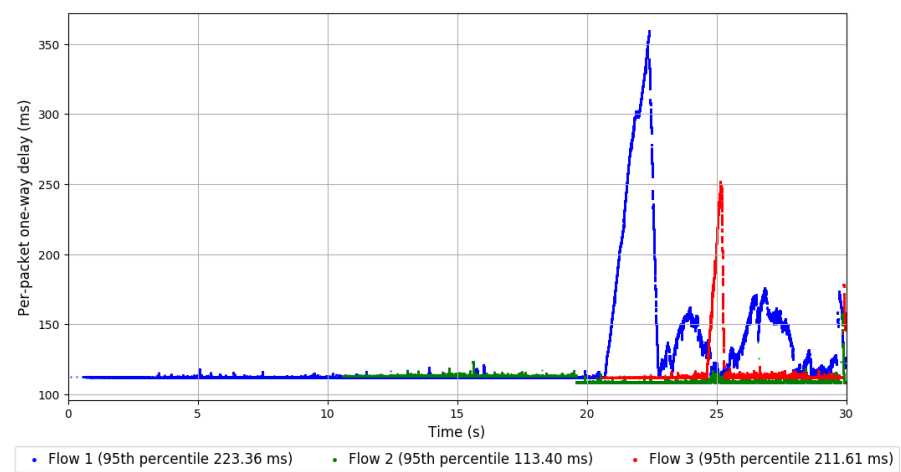
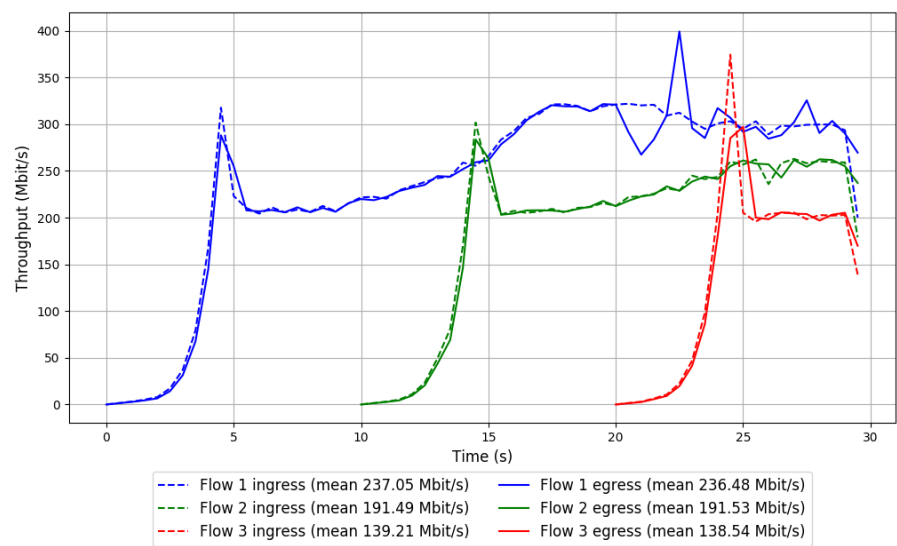
-- Flow 3:

Average throughput: 138.54 Mbit/s

95th percentile per-packet one-way delay: 211.608 ms

Loss rate: 0.50%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-04-04 05:16:04

End at: 2018-04-04 05:16:34

Below is generated by plot.py at 2018-04-04 10:04:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 375.67 Mbit/s

95th percentile per-packet one-way delay: 119.943 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 206.48 Mbit/s

95th percentile per-packet one-way delay: 119.384 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 187.41 Mbit/s

95th percentile per-packet one-way delay: 114.867 ms

Loss rate: 0.01%

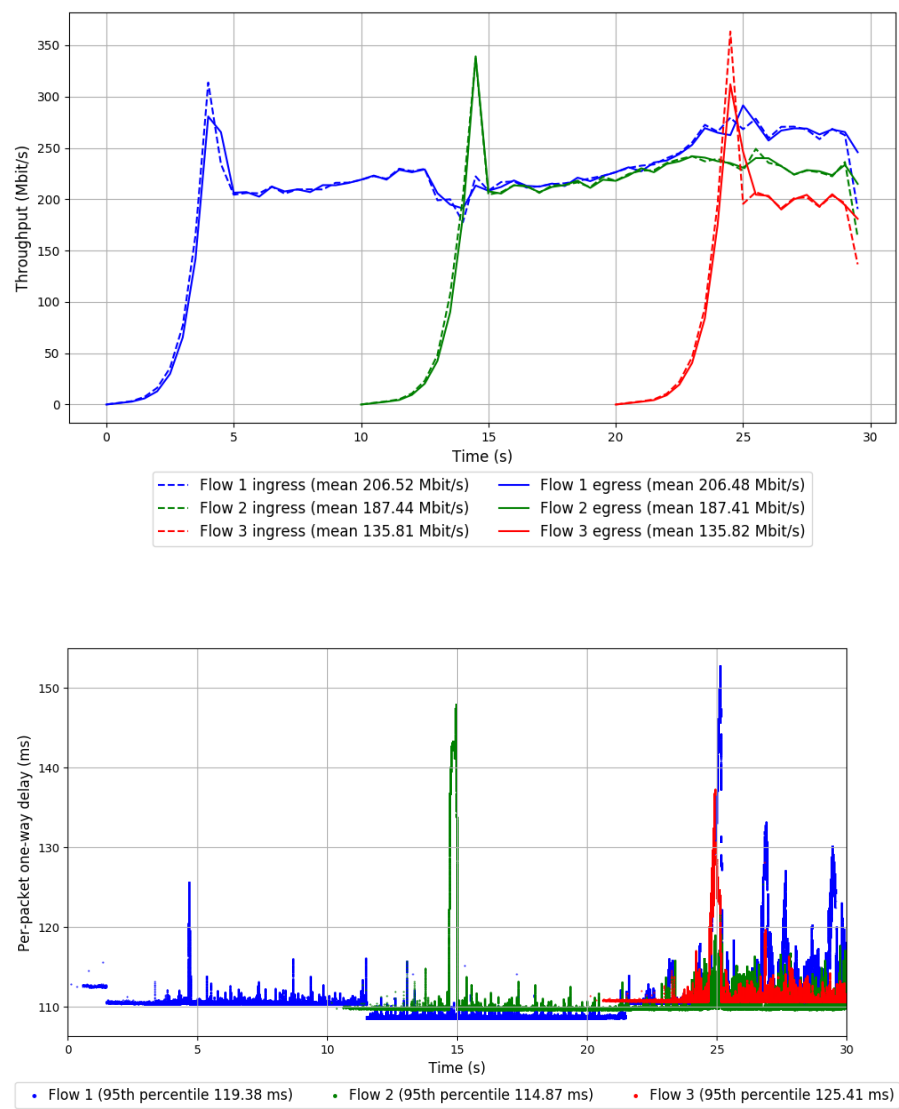
-- Flow 3:

Average throughput: 135.82 Mbit/s

95th percentile per-packet one-way delay: 125.406 ms

Loss rate: 0.00%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-04-04 05:36:04

End at: 2018-04-04 05:36:34

Below is generated by plot.py at 2018-04-04 10:04:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.82 Mbit/s

95th percentile per-packet one-way delay: 122.285 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 154.11 Mbit/s

95th percentile per-packet one-way delay: 121.169 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 179.78 Mbit/s

95th percentile per-packet one-way delay: 114.528 ms

Loss rate: 0.00%

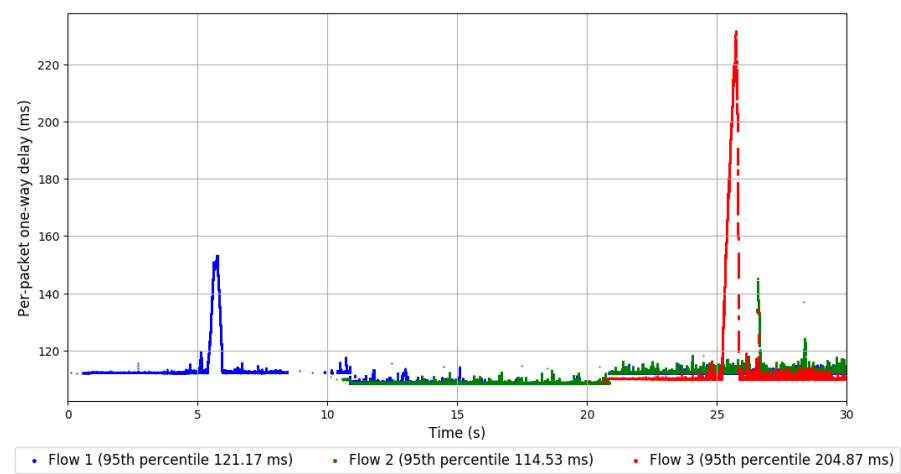
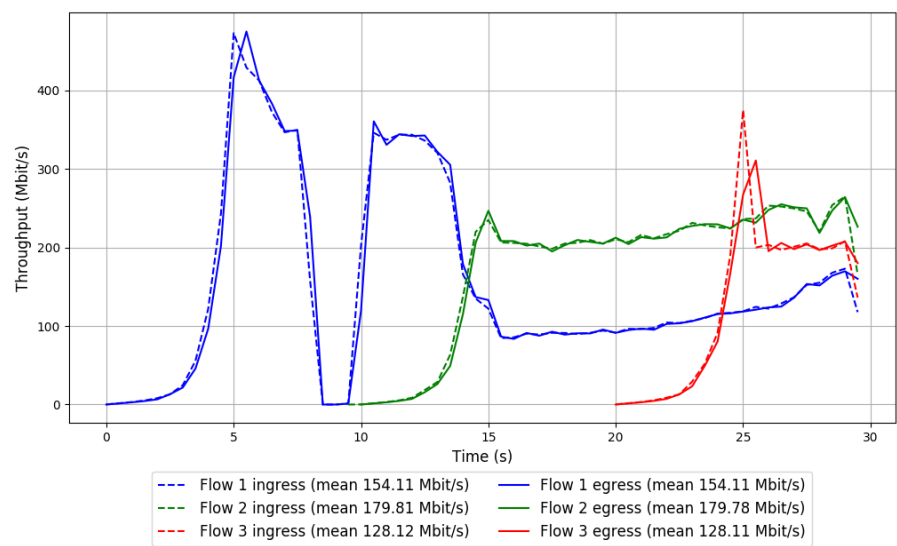
-- Flow 3:

Average throughput: 128.11 Mbit/s

95th percentile per-packet one-way delay: 204.873 ms

Loss rate: 0.01%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-04-04 05:55:16

End at: 2018-04-04 05:55:46

Below is generated by plot.py at 2018-04-04 10:04:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 415.31 Mbit/s

95th percentile per-packet one-way delay: 205.885 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 243.43 Mbit/s

95th percentile per-packet one-way delay: 240.769 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 191.44 Mbit/s

95th percentile per-packet one-way delay: 130.378 ms

Loss rate: 0.00%

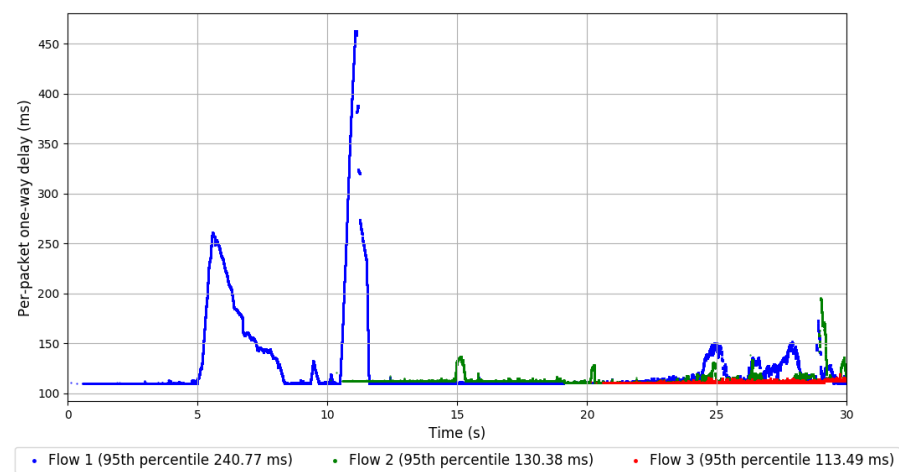
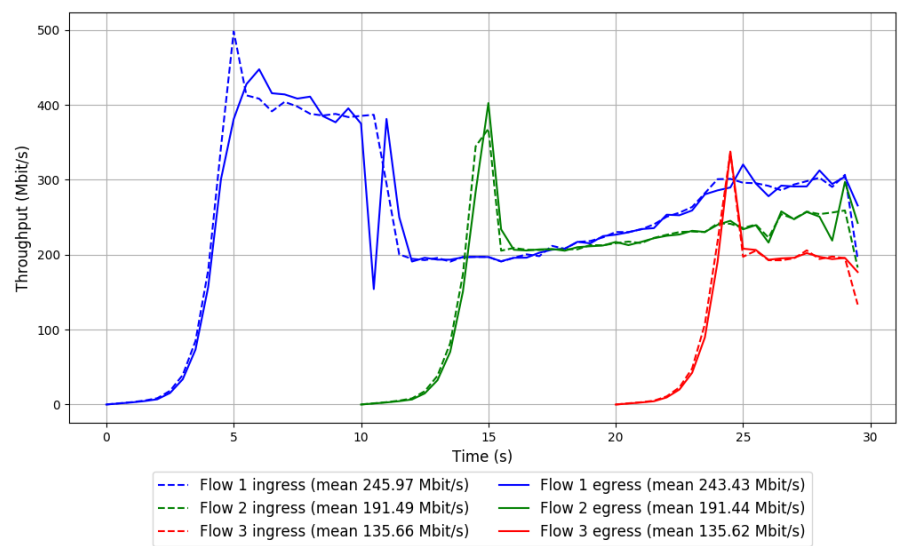
-- Flow 3:

Average throughput: 135.62 Mbit/s

95th percentile per-packet one-way delay: 113.490 ms

Loss rate: 0.00%

Run 9: Report of Vivace-LTE — Data Link



```
Run 10: Statistics of Vivace-LTE

Start at: 2018-04-04 06:14:36
End at: 2018-04-04 06:15:06

# Below is generated by plot.py at 2018-04-04 10:05:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 453.53 Mbit/s
95th percentile per-packet one-way delay: 162.990 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 290.10 Mbit/s
95th percentile per-packet one-way delay: 171.539 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 179.22 Mbit/s
95th percentile per-packet one-way delay: 132.548 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 135.28 Mbit/s
95th percentile per-packet one-way delay: 212.132 ms
Loss rate: 0.00%
```

Run 10: Report of Vivace-LTE — Data Link

