

Pantheon Report

Generated at 2018-02-17 09:26:48 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

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

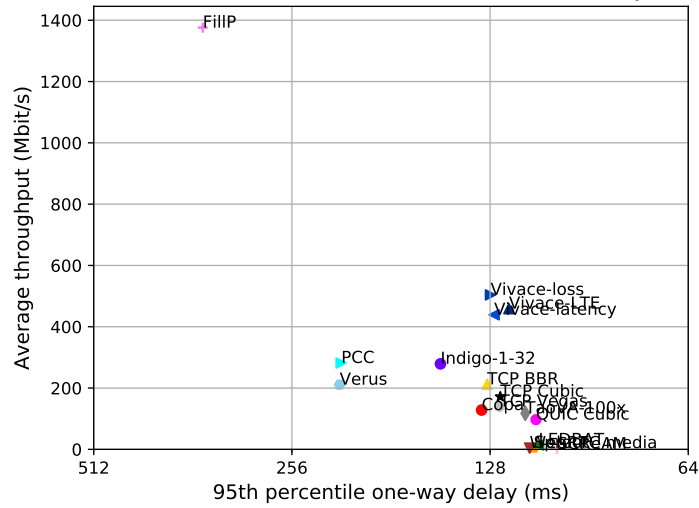
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

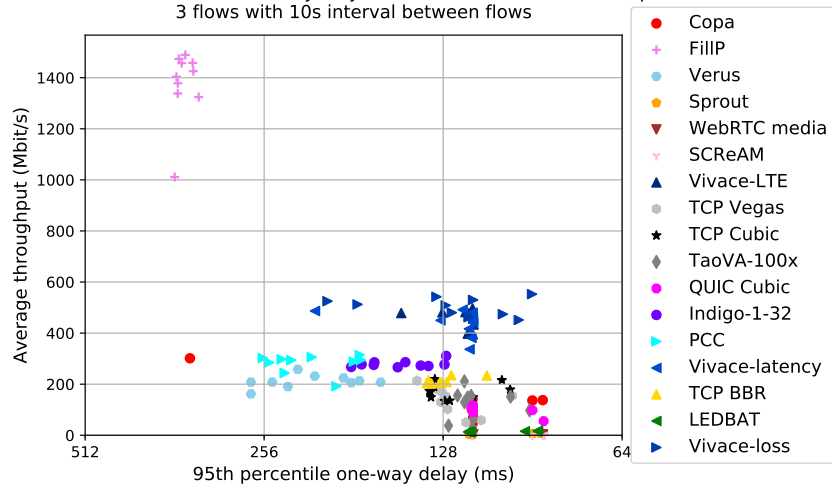
Git summary:

```
branch: master @ cccb2d77344969a7bac1df6edf6c0cfb6c77a6f8
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 8400b8926887fc4cf8c795a1d7ce2c8ac041ec72
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	109.14	106.71	96.47	125.26	129.61	137.11	0.06	0.07	0.15
TCP Cubic	10	90.60	87.86	68.69	121.95	122.97	123.89	0.07	0.23	0.03
LEDBAT	10	9.31	5.90	2.94	108.10	108.04	107.81	0.00	0.21	0.00
PCC	10	246.74	42.44	20.64	213.35	212.25	219.47	0.69	0.41	0.73
QUIC Cubic	10	51.41	55.13	28.19	101.02	106.37	100.18	0.01	0.04	0.01
SCReAM	10	0.22	0.22	0.22	95.72	100.77	94.67	0.01	0.00	0.00
WebRTC media	10	2.10	1.37	0.51	108.73	97.99	111.85	0.01	0.00	0.04
Sprout	10	2.89	2.45	1.35	114.85	107.28	109.79	0.00	0.04	0.27
TaoVA-100x	10	45.00	92.10	34.55	117.11	112.35	120.23	0.05	0.21	0.09
TCP Vegas	10	74.67	68.11	60.01	123.60	122.00	121.48	0.07	0.10	0.22
Verus	10	126.86	99.86	55.95	227.59	201.30	229.25	1.41	0.25	0.71
Copa	10	83.24	38.04	59.09	131.43	125.85	122.41	4.00	2.39	2.30
FillP	10	704.65	682.40	655.10	347.60	350.03	335.62	7.68	10.68	10.74
Indigo-1-32	10	164.37	131.75	85.93	143.08	154.26	164.14	0.05	0.08	0.46
Vivace-latency	10	260.60	201.70	134.97	128.18	108.00	113.04	0.06	0.01	0.08
Vivace-loss	10	302.97	224.57	158.04	131.09	124.74	133.09	0.08	0.53	0.10
Vivace-LTE	10	279.99	193.19	153.98	113.47	105.47	130.78	0.02	0.00	0.11

Run 1: Statistics of TCP BBR

Start at: 2018-02-17 02:00:55

End at: 2018-02-17 02:01:25

Below is generated by plot.py at 2018-02-17 07:34:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 208.89 Mbit/s

95th percentile per-packet one-way delay: 126.297 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 108.98 Mbit/s

95th percentile per-packet one-way delay: 124.346 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 102.80 Mbit/s

95th percentile per-packet one-way delay: 126.729 ms

Loss rate: 0.21%

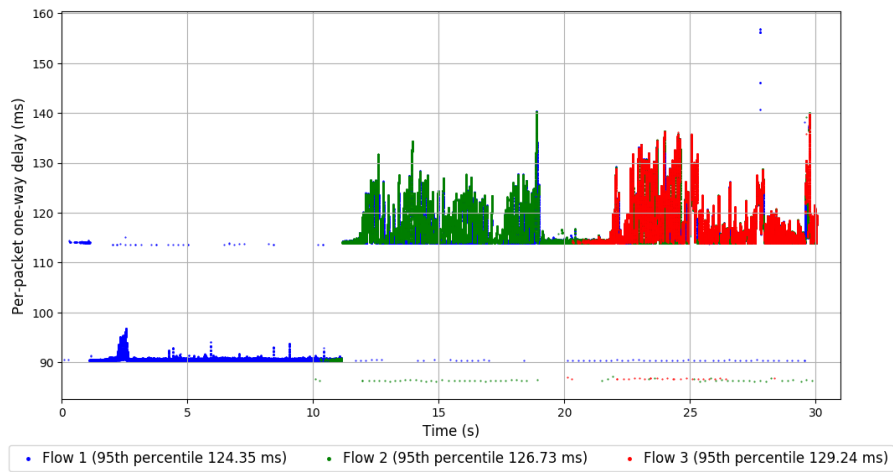
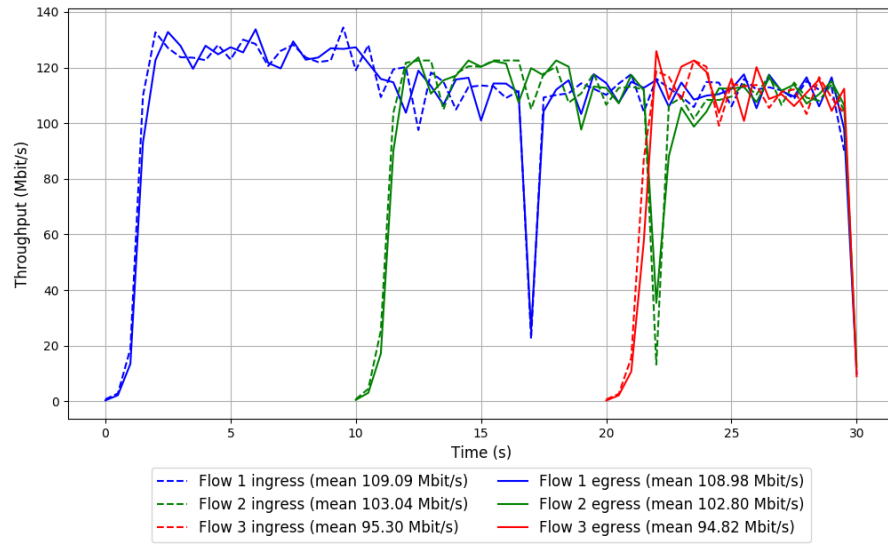
-- Flow 3:

Average throughput: 94.82 Mbit/s

95th percentile per-packet one-way delay: 129.237 ms

Loss rate: 0.51%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-17 02:18:42

End at: 2018-02-17 02:19:12

Below is generated by plot.py at 2018-02-17 07:34:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 202.77 Mbit/s

95th percentile per-packet one-way delay: 133.881 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 103.57 Mbit/s

95th percentile per-packet one-way delay: 131.000 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 103.76 Mbit/s

95th percentile per-packet one-way delay: 133.652 ms

Loss rate: 0.16%

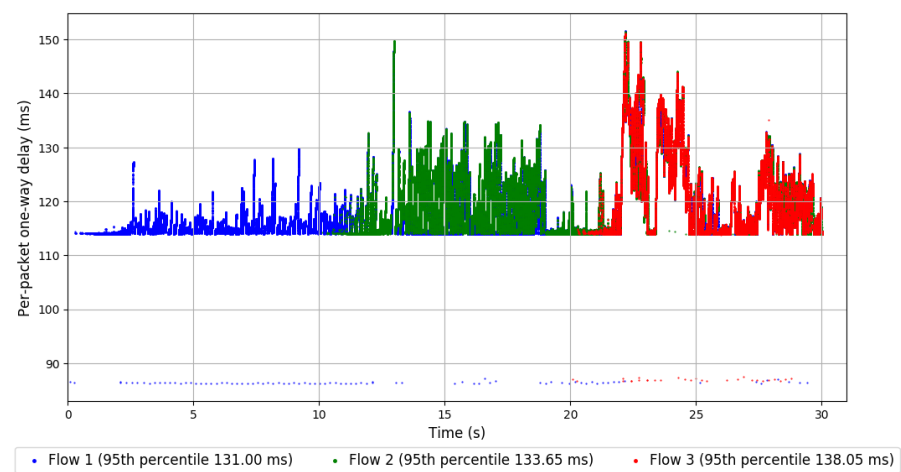
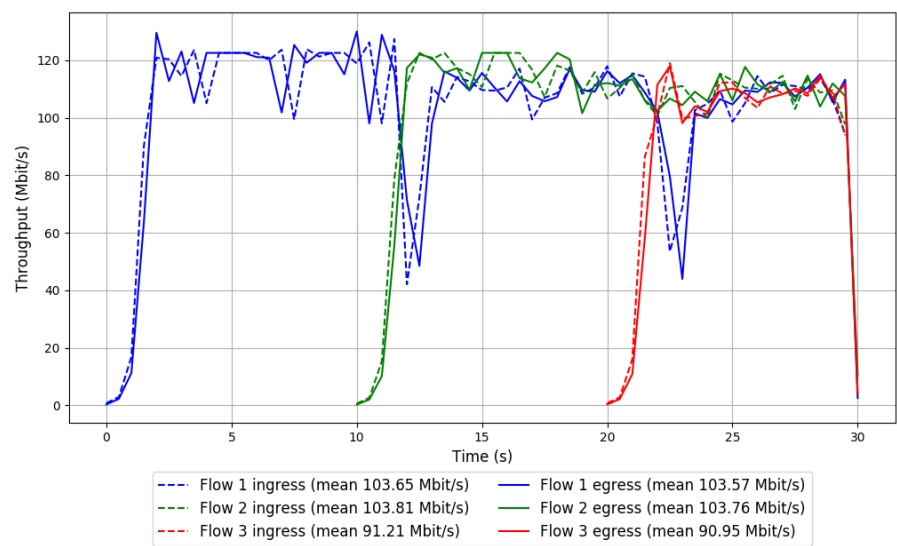
-- Flow 3:

Average throughput: 90.95 Mbit/s

95th percentile per-packet one-way delay: 138.051 ms

Loss rate: 0.29%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-17 02:36:56

End at: 2018-02-17 02:37:26

Below is generated by plot.py at 2018-02-17 07:34:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 208.18 Mbit/s

95th percentile per-packet one-way delay: 129.621 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 108.82 Mbit/s

95th percentile per-packet one-way delay: 124.799 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 102.83 Mbit/s

95th percentile per-packet one-way delay: 129.547 ms

Loss rate: 0.11%

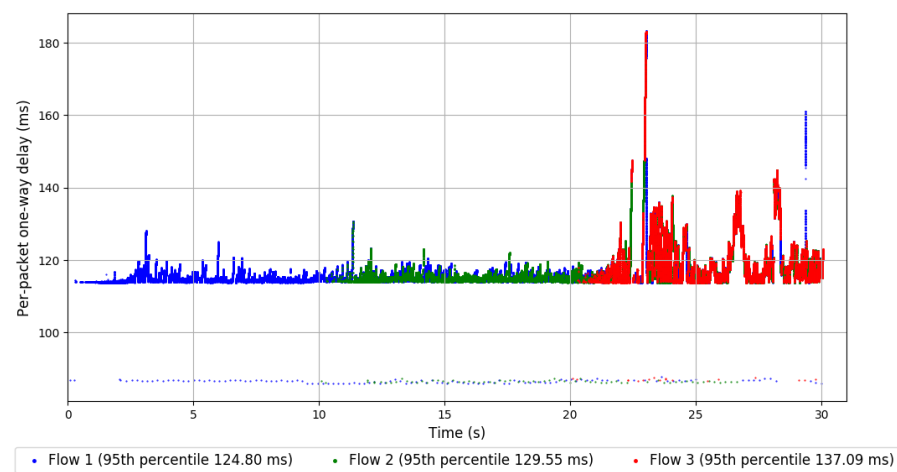
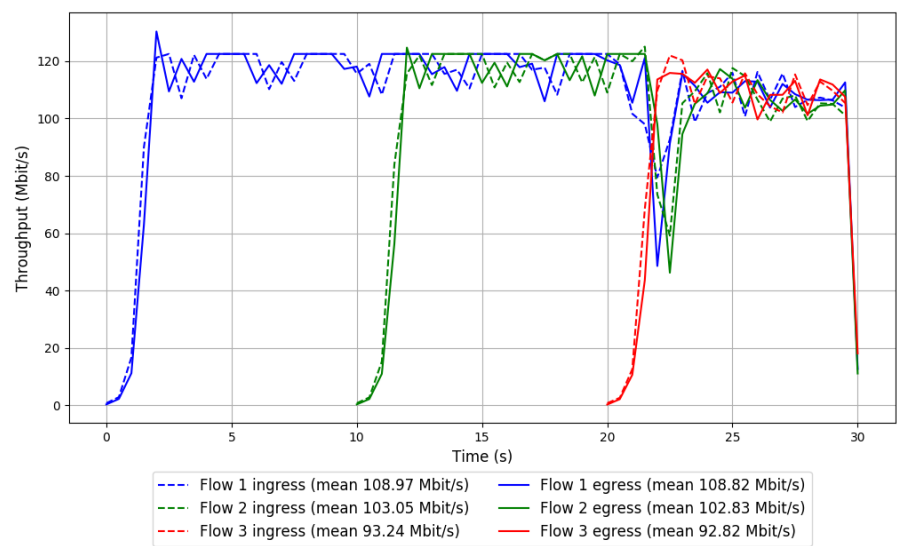
-- Flow 3:

Average throughput: 92.82 Mbit/s

95th percentile per-packet one-way delay: 137.095 ms

Loss rate: 0.26%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-17 02:54:35

End at: 2018-02-17 02:55:05

Below is generated by plot.py at 2018-02-17 07:35:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 234.88 Mbit/s

95th percentile per-packet one-way delay: 124.007 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 123.68 Mbit/s

95th percentile per-packet one-way delay: 119.741 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 116.47 Mbit/s

95th percentile per-packet one-way delay: 124.405 ms

Loss rate: 0.18%

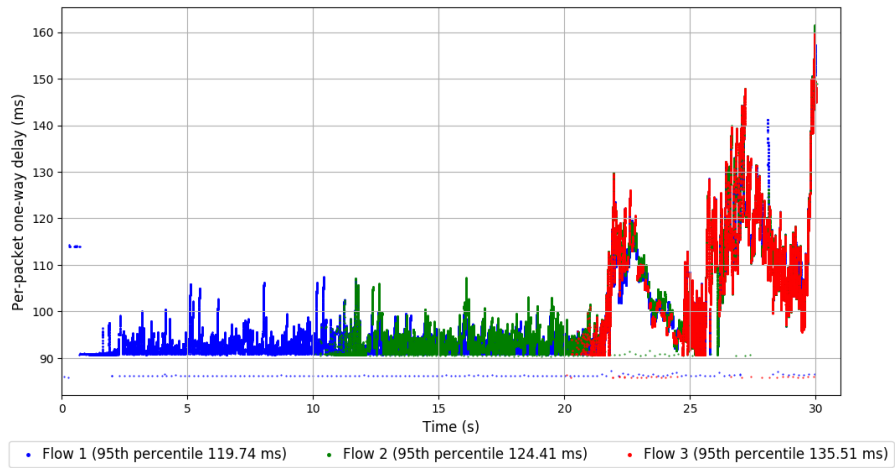
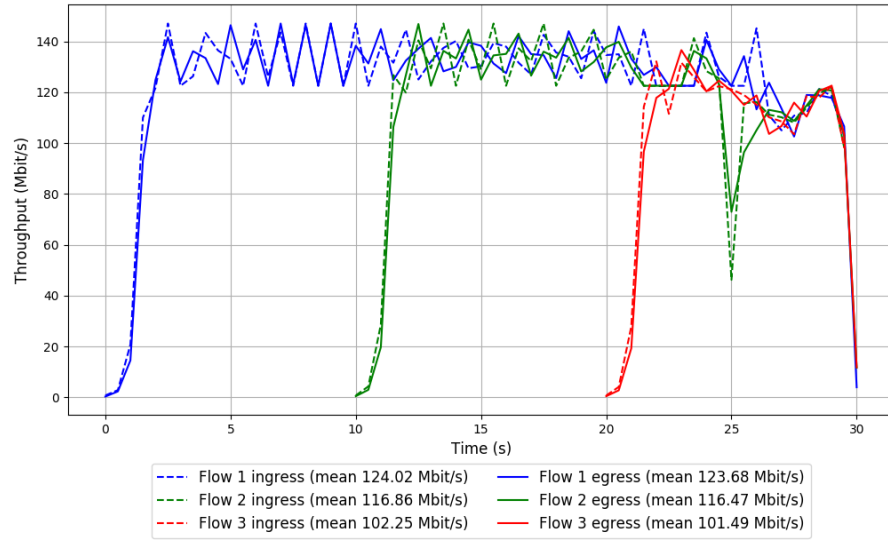
-- Flow 3:

Average throughput: 101.49 Mbit/s

95th percentile per-packet one-way delay: 135.509 ms

Loss rate: 0.36%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-17 03:12:55

End at: 2018-02-17 03:13:25

Below is generated by plot.py at 2018-02-17 07:35:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 214.52 Mbit/s

95th percentile per-packet one-way delay: 135.508 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 107.25 Mbit/s

95th percentile per-packet one-way delay: 128.254 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 110.98 Mbit/s

95th percentile per-packet one-way delay: 136.916 ms

Loss rate: 0.00%

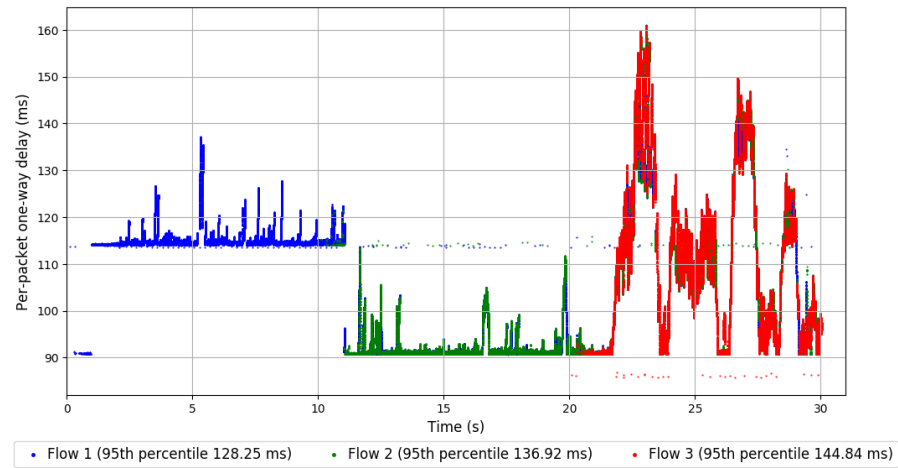
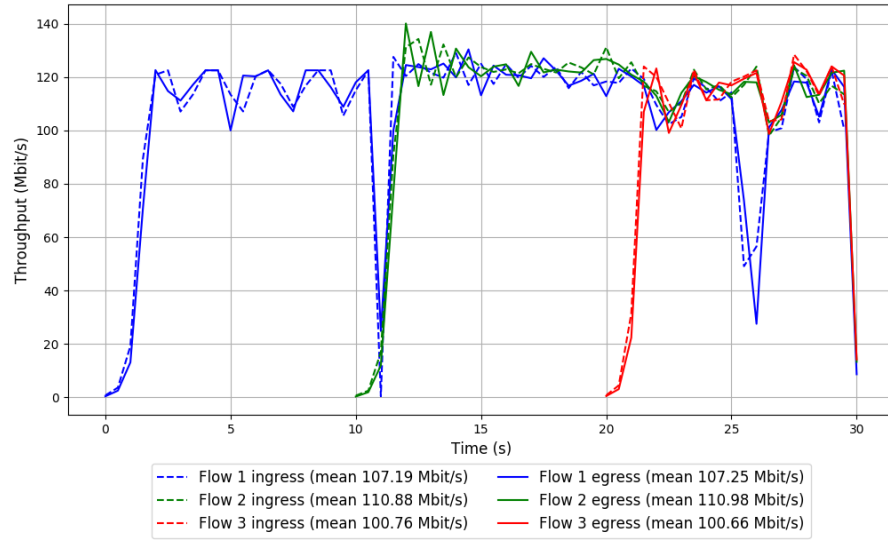
-- Flow 3:

Average throughput: 100.66 Mbit/s

95th percentile per-packet one-way delay: 144.845 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-17 03:31:05

End at: 2018-02-17 03:31:35

Below is generated by plot.py at 2018-02-17 07:35:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 204.56 Mbit/s

95th percentile per-packet one-way delay: 135.826 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 103.80 Mbit/s

95th percentile per-packet one-way delay: 132.412 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 104.94 Mbit/s

95th percentile per-packet one-way delay: 136.654 ms

Loss rate: 0.03%

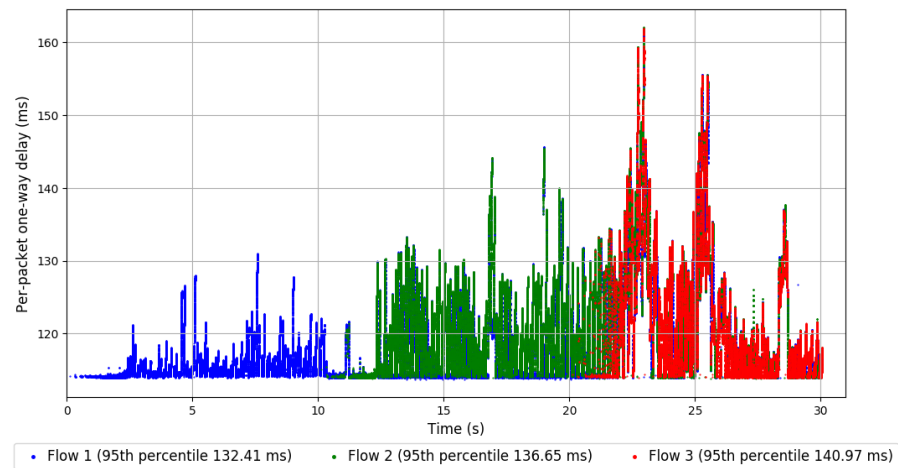
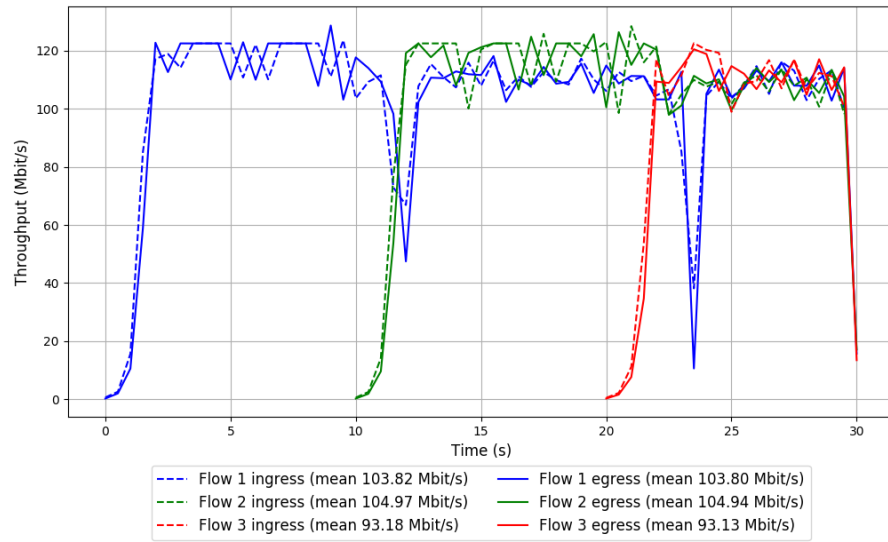
-- Flow 3:

Average throughput: 93.13 Mbit/s

95th percentile per-packet one-way delay: 140.967 ms

Loss rate: 0.05%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-17 03:49:54

End at: 2018-02-17 03:50:24

Below is generated by plot.py at 2018-02-17 07:35:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 204.65 Mbit/s

95th percentile per-packet one-way delay: 136.289 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 105.16 Mbit/s

95th percentile per-packet one-way delay: 131.580 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 103.21 Mbit/s

95th percentile per-packet one-way delay: 136.235 ms

Loss rate: 0.00%

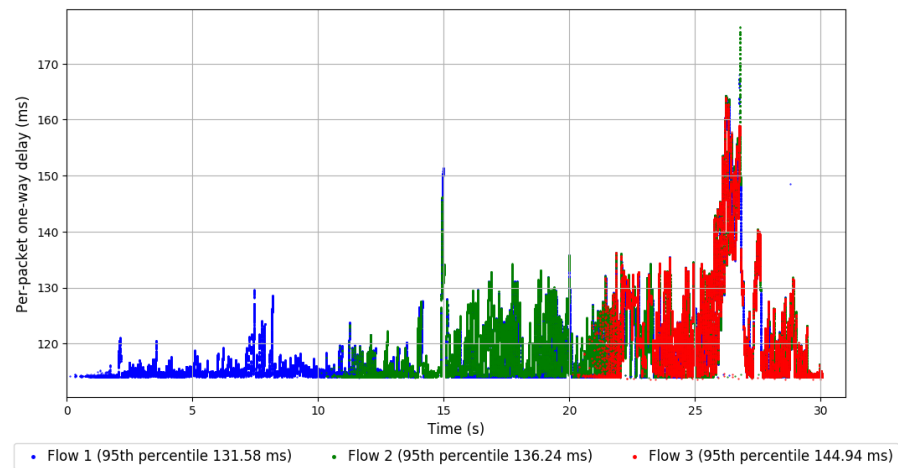
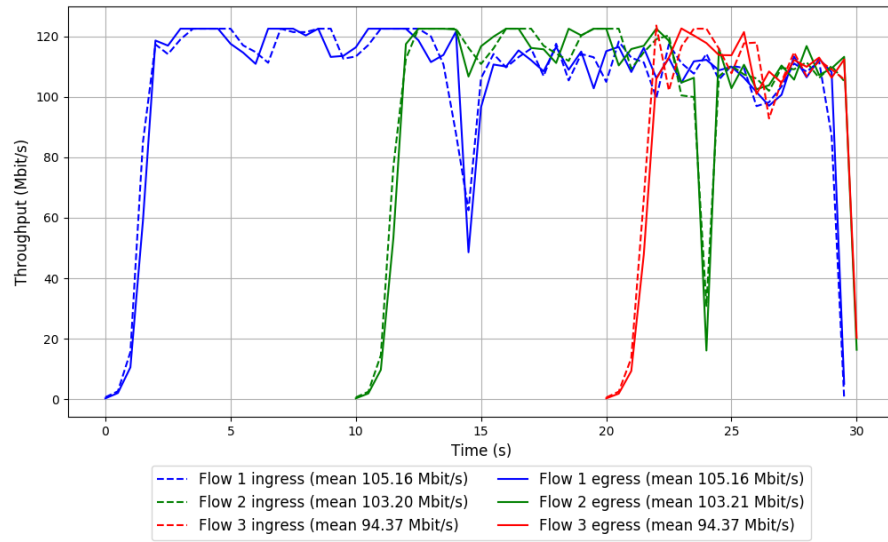
-- Flow 3:

Average throughput: 94.37 Mbit/s

95th percentile per-packet one-way delay: 144.941 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-17 04:08:25

End at: 2018-02-17 04:08:55

Below is generated by plot.py at 2018-02-17 07:35:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 205.40 Mbit/s

95th percentile per-packet one-way delay: 128.804 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 104.37 Mbit/s

95th percentile per-packet one-way delay: 127.212 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 103.83 Mbit/s

95th percentile per-packet one-way delay: 128.810 ms

Loss rate: 0.00%

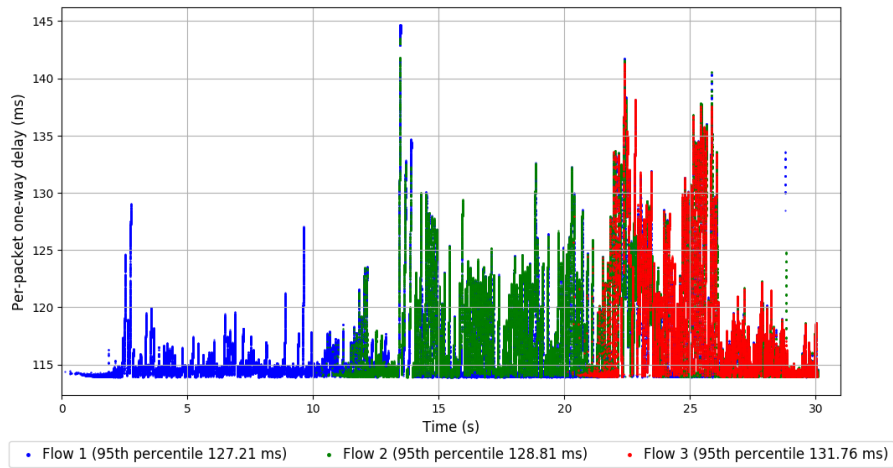
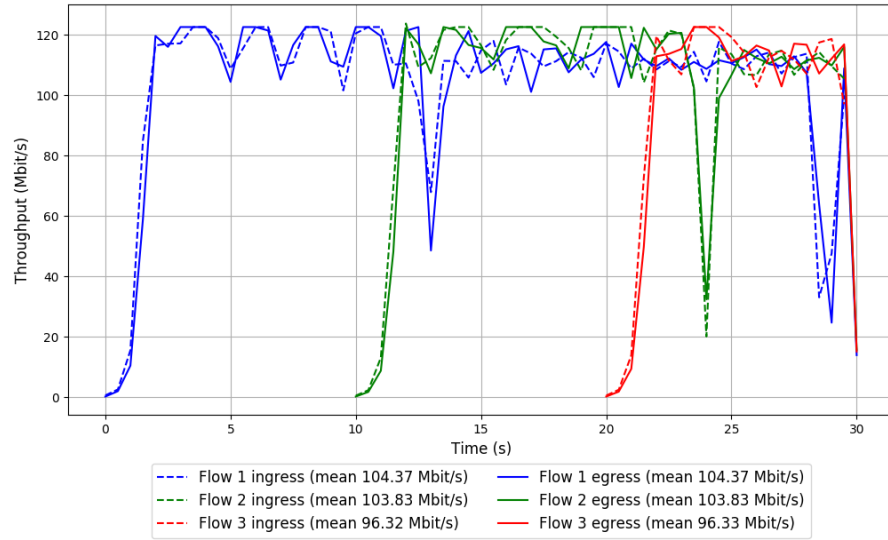
-- Flow 3:

Average throughput: 96.33 Mbit/s

95th percentile per-packet one-way delay: 131.756 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-17 04:27:31

End at: 2018-02-17 04:28:01

Below is generated by plot.py at 2018-02-17 07:38:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 203.64 Mbit/s

95th percentile per-packet one-way delay: 134.665 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 104.53 Mbit/s

95th percentile per-packet one-way delay: 129.585 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 102.11 Mbit/s

95th percentile per-packet one-way delay: 134.667 ms

Loss rate: 0.01%

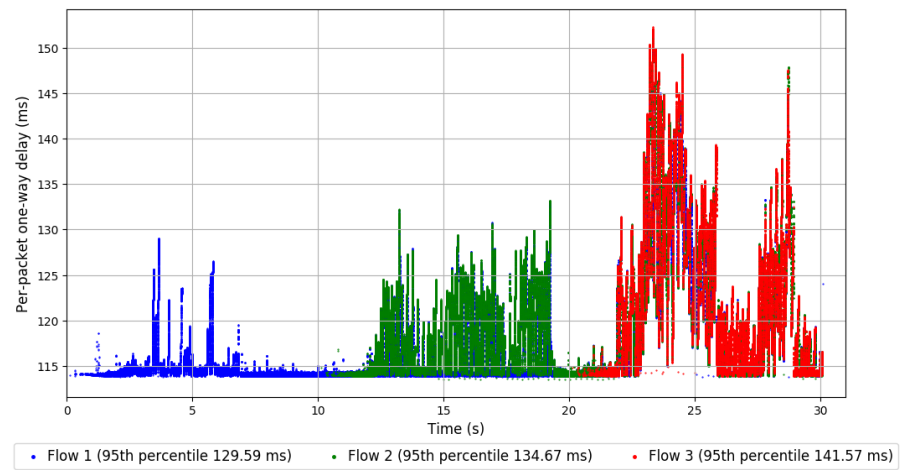
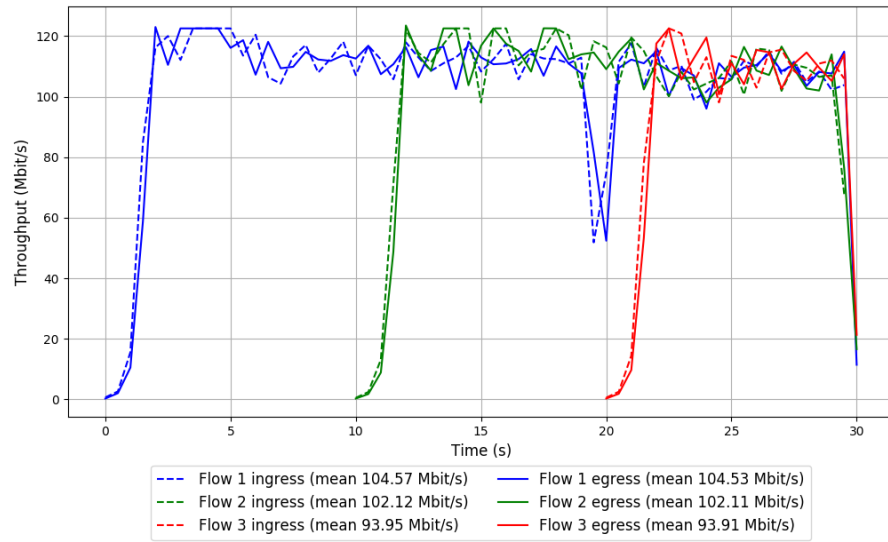
-- Flow 3:

Average throughput: 93.91 Mbit/s

95th percentile per-packet one-way delay: 141.569 ms

Loss rate: 0.03%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-17 04:46:26

End at: 2018-02-17 04:46:56

Below is generated by plot.py at 2018-02-17 07:38:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 233.73 Mbit/s

95th percentile per-packet one-way delay: 108.067 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 121.22 Mbit/s

95th percentile per-packet one-way delay: 103.668 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 116.15 Mbit/s

95th percentile per-packet one-way delay: 108.454 ms

Loss rate: 0.00%

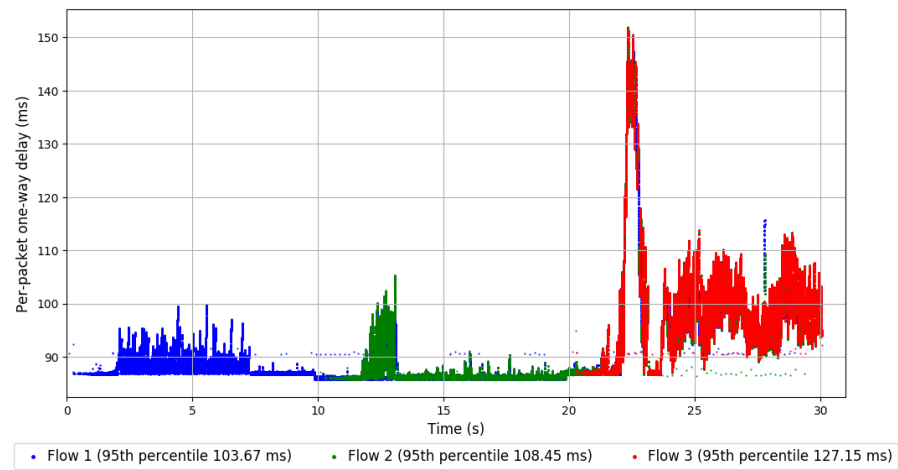
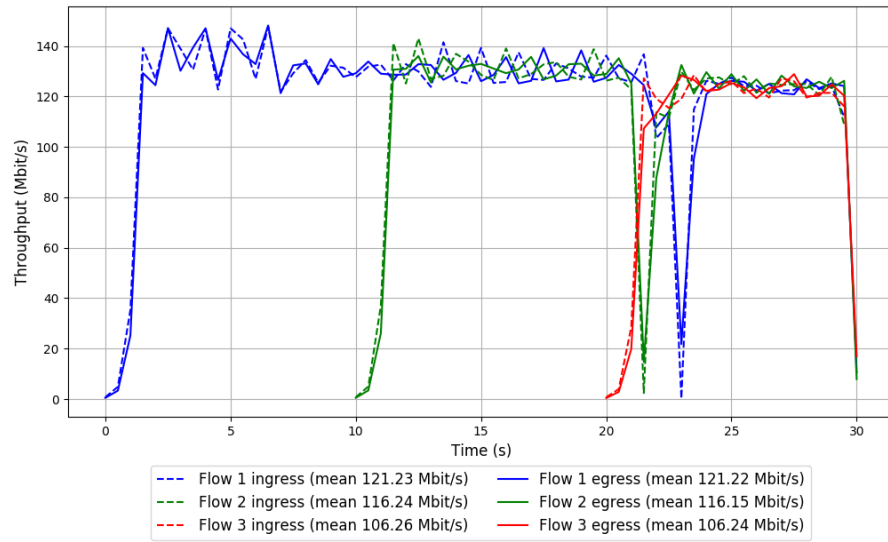
-- Flow 3:

Average throughput: 106.24 Mbit/s

95th percentile per-packet one-way delay: 127.153 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-17 02:09:57

End at: 2018-02-17 02:10:27

Below is generated by plot.py at 2018-02-17 07:38:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.18 Mbit/s

95th percentile per-packet one-way delay: 127.200 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 88.61 Mbit/s

95th percentile per-packet one-way delay: 127.563 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.78 Mbit/s

95th percentile per-packet one-way delay: 126.186 ms

Loss rate: 0.94%

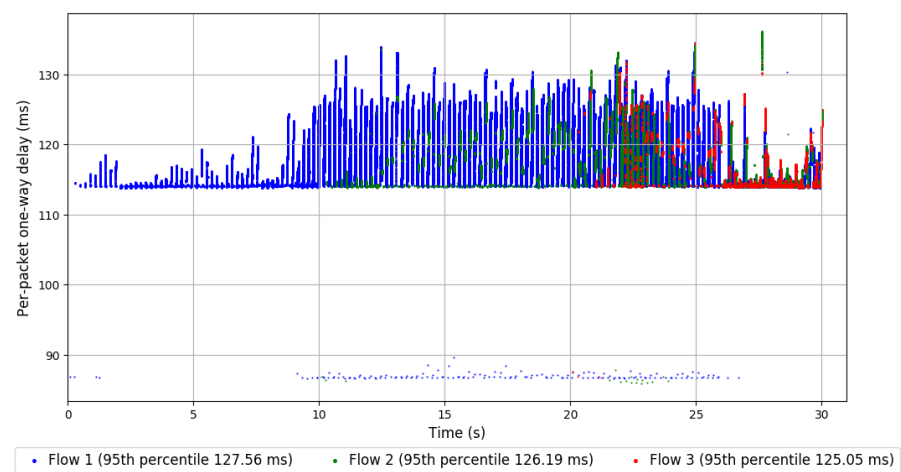
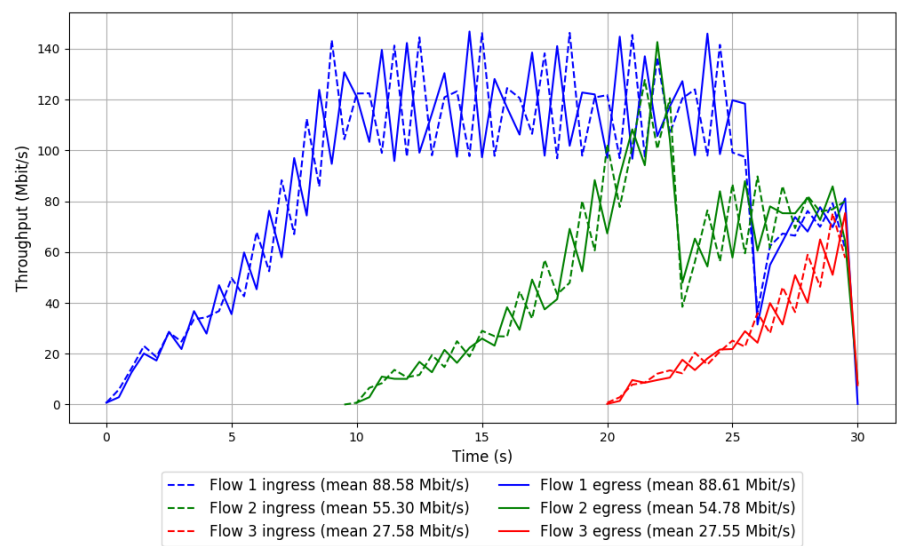
-- Flow 3:

Average throughput: 27.55 Mbit/s

95th percentile per-packet one-way delay: 125.054 ms

Loss rate: 0.04%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-17 02:27:51

End at: 2018-02-17 02:28:21

Below is generated by plot.py at 2018-02-17 07:38:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 148.83 Mbit/s

95th percentile per-packet one-way delay: 134.185 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 66.97 Mbit/s

95th percentile per-packet one-way delay: 130.684 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 103.01 Mbit/s

95th percentile per-packet one-way delay: 134.673 ms

Loss rate: 0.40%

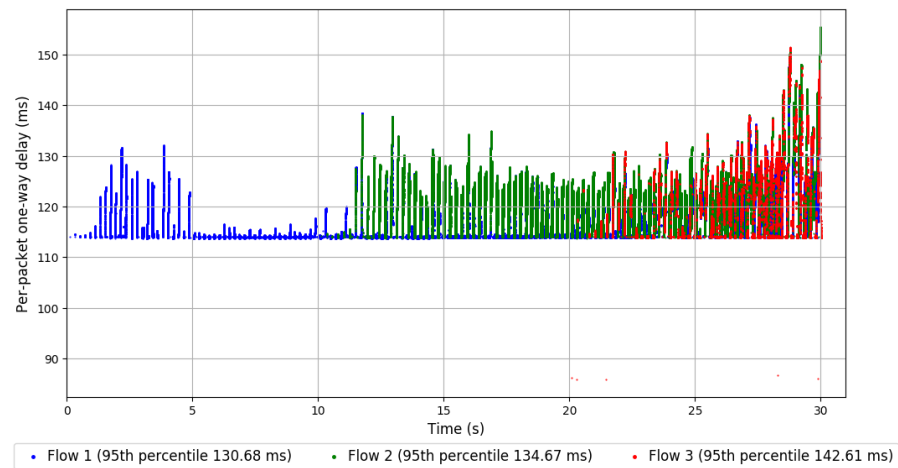
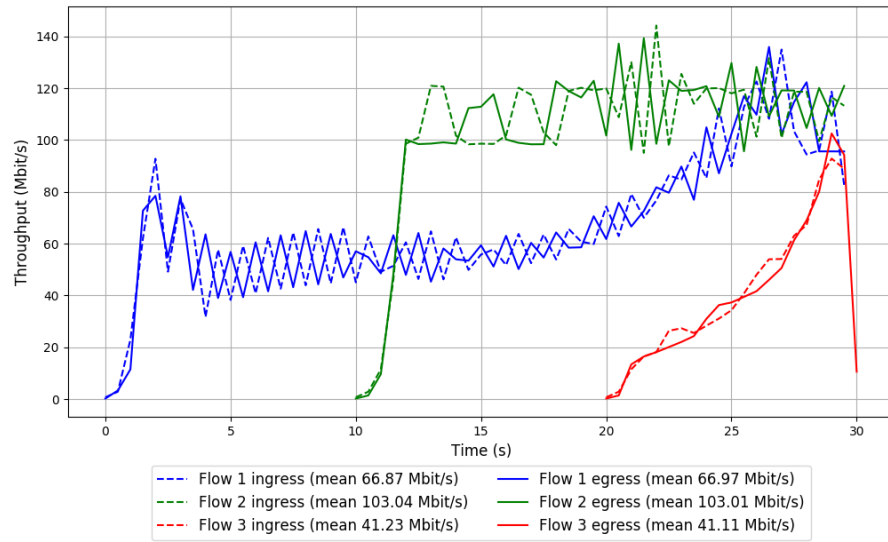
-- Flow 3:

Average throughput: 41.11 Mbit/s

95th percentile per-packet one-way delay: 142.614 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-17 02:45:54

End at: 2018-02-17 02:46:24

Below is generated by plot.py at 2018-02-17 07:38:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.47 Mbit/s

95th percentile per-packet one-way delay: 124.790 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 53.16 Mbit/s

95th percentile per-packet one-way delay: 121.759 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 72.74 Mbit/s

95th percentile per-packet one-way delay: 124.226 ms

Loss rate: 0.17%

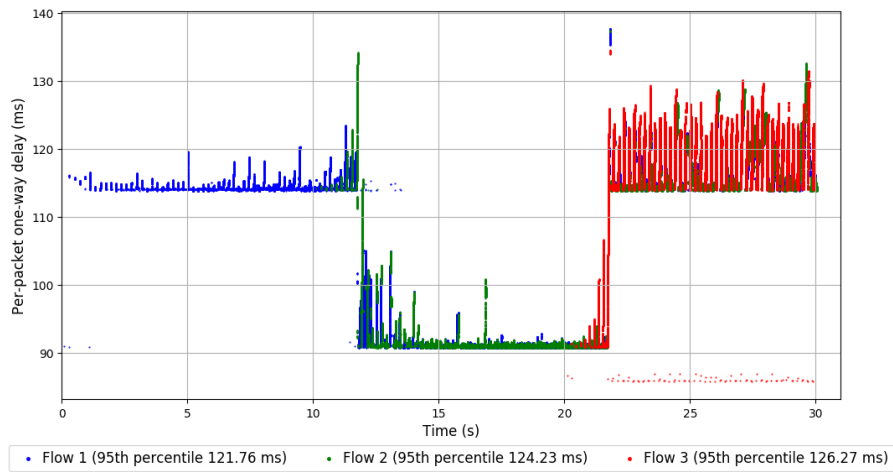
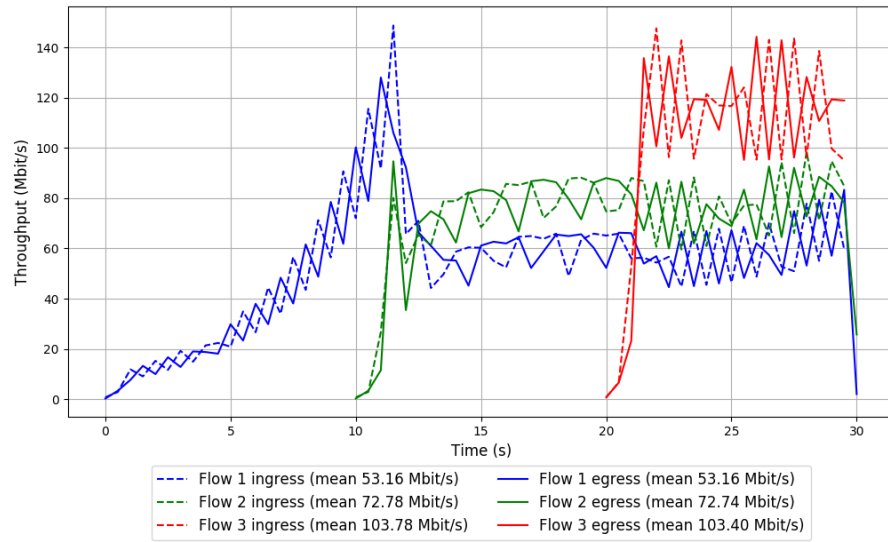
-- Flow 3:

Average throughput: 103.40 Mbit/s

95th percentile per-packet one-way delay: 126.266 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-17 03:03:56

End at: 2018-02-17 03:04:26

Below is generated by plot.py at 2018-02-17 07:38:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 148.71 Mbit/s

95th percentile per-packet one-way delay: 114.000 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.43 Mbit/s

95th percentile per-packet one-way delay: 114.519 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 125.25 Mbit/s

95th percentile per-packet one-way delay: 105.518 ms

Loss rate: 0.00%

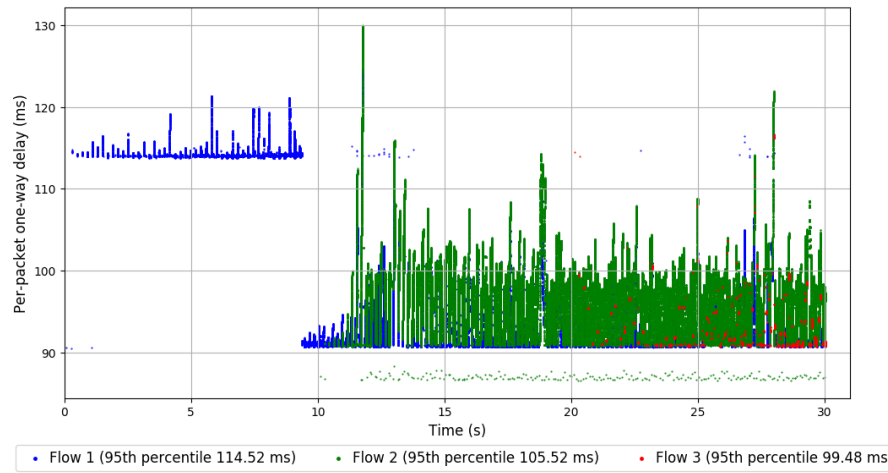
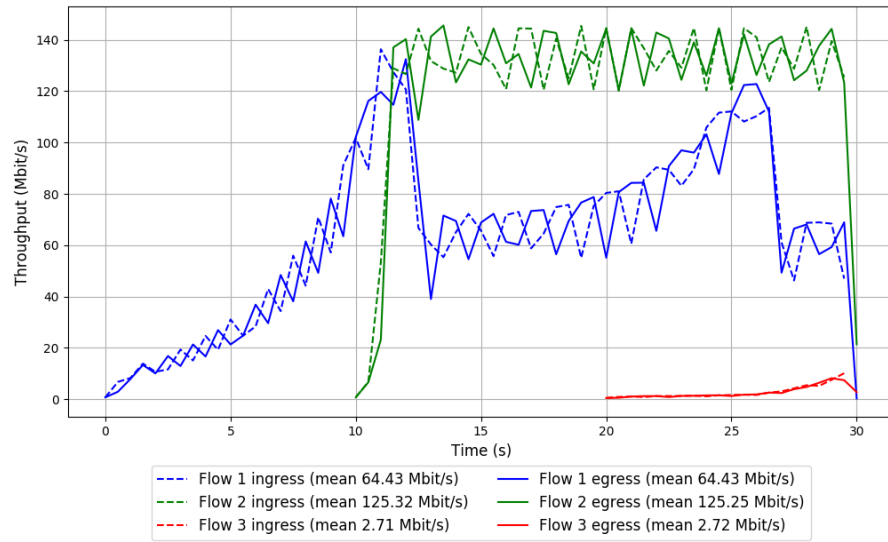
-- Flow 3:

Average throughput: 2.72 Mbit/s

95th percentile per-packet one-way delay: 99.476 ms

Loss rate: 0.22%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-17 03:22:05

End at: 2018-02-17 03:22:35

Below is generated by plot.py at 2018-02-17 07:38:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 170.86 Mbit/s

95th percentile per-packet one-way delay: 134.436 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 67.95 Mbit/s

95th percentile per-packet one-way delay: 133.280 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 111.96 Mbit/s

95th percentile per-packet one-way delay: 135.753 ms

Loss rate: 0.00%

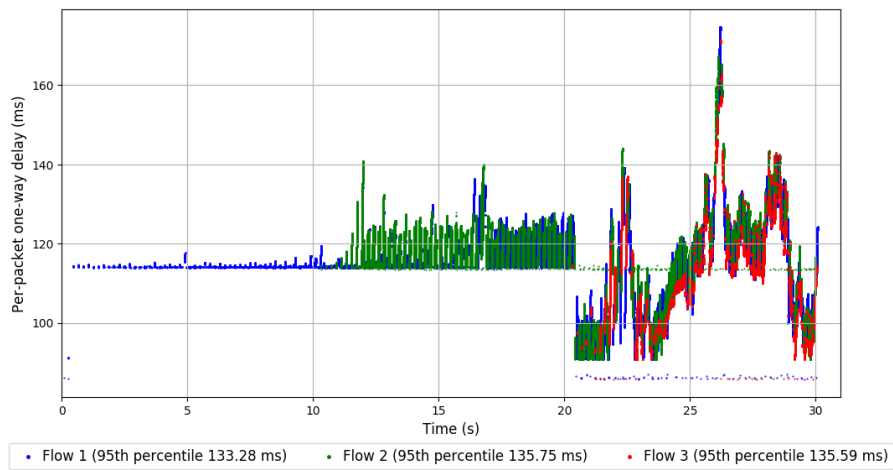
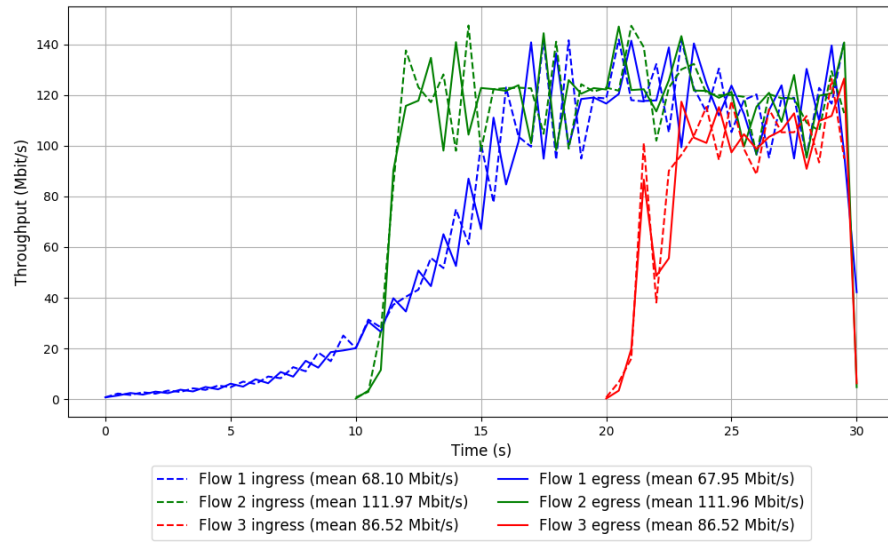
-- Flow 3:

Average throughput: 86.52 Mbit/s

95th percentile per-packet one-way delay: 135.585 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-17 03:40:38

End at: 2018-02-17 03:41:08

Below is generated by plot.py at 2018-02-17 07:38:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 174.23 Mbit/s

95th percentile per-packet one-way delay: 134.943 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 105.93 Mbit/s

95th percentile per-packet one-way delay: 129.051 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.94 Mbit/s

95th percentile per-packet one-way delay: 140.061 ms

Loss rate: 0.58%

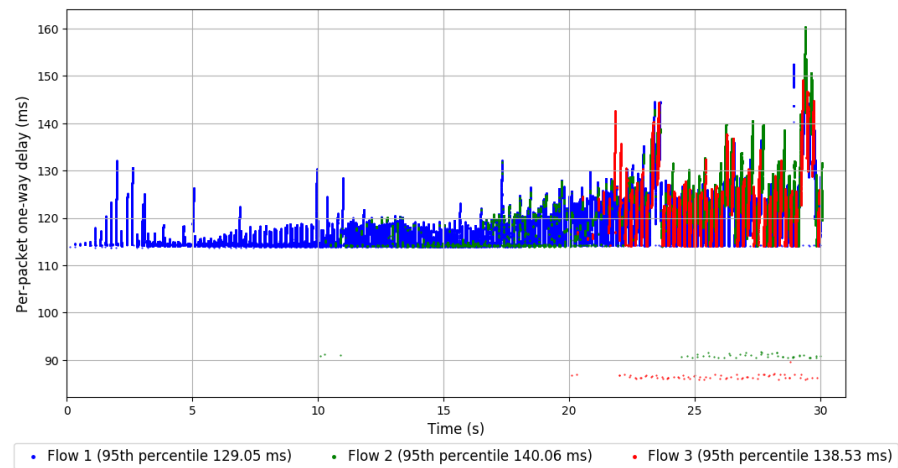
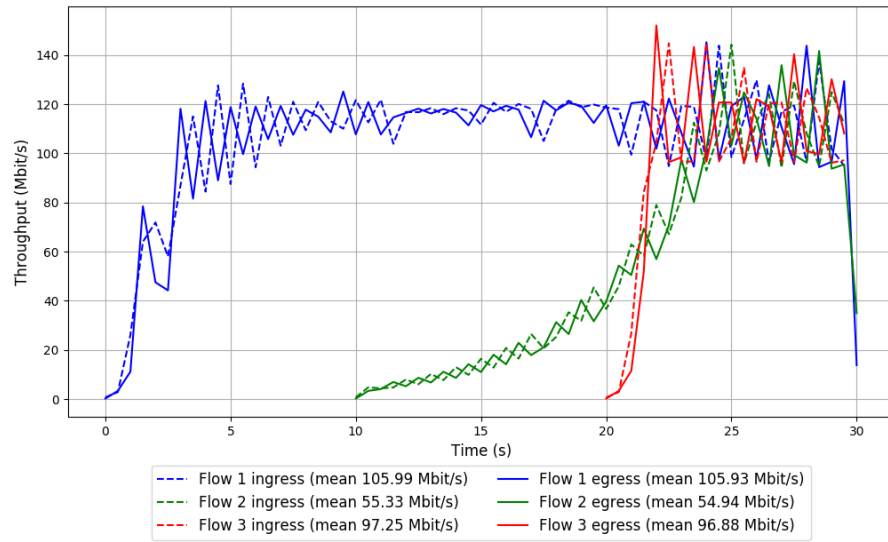
-- Flow 3:

Average throughput: 96.88 Mbit/s

95th percentile per-packet one-way delay: 138.532 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-17 03:59:23

End at: 2018-02-17 03:59:53

Below is generated by plot.py at 2018-02-17 07:40:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.67 Mbit/s

95th percentile per-packet one-way delay: 132.591 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 112.89 Mbit/s

95th percentile per-packet one-way delay: 129.072 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 65.56 Mbit/s

95th percentile per-packet one-way delay: 134.024 ms

Loss rate: 0.01%

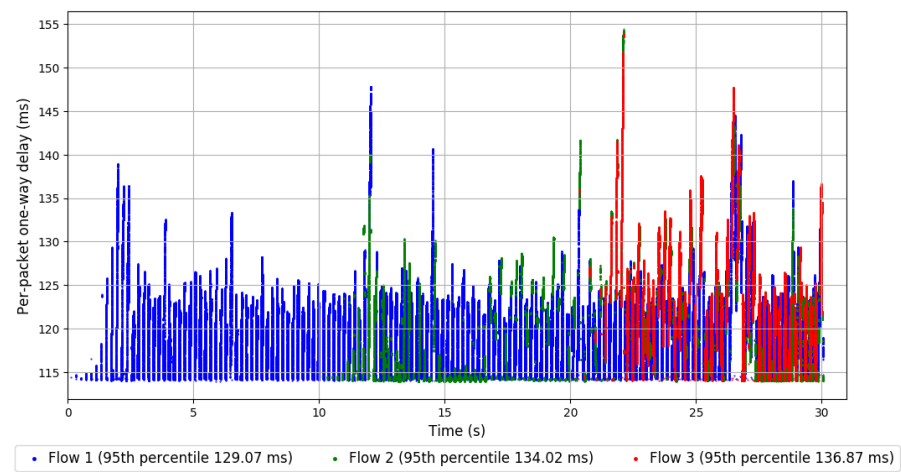
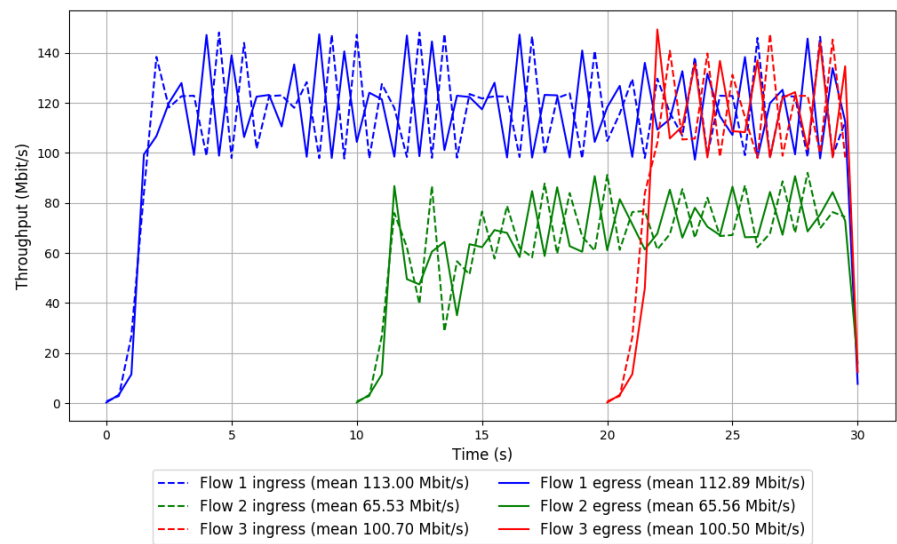
-- Flow 3:

Average throughput: 100.50 Mbit/s

95th percentile per-packet one-way delay: 136.867 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-17 04:18:12

End at: 2018-02-17 04:18:42

Below is generated by plot.py at 2018-02-17 07:41:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 219.81 Mbit/s

95th percentile per-packet one-way delay: 132.197 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 113.54 Mbit/s

95th percentile per-packet one-way delay: 131.948 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 110.35 Mbit/s

95th percentile per-packet one-way delay: 132.015 ms

Loss rate: 0.00%

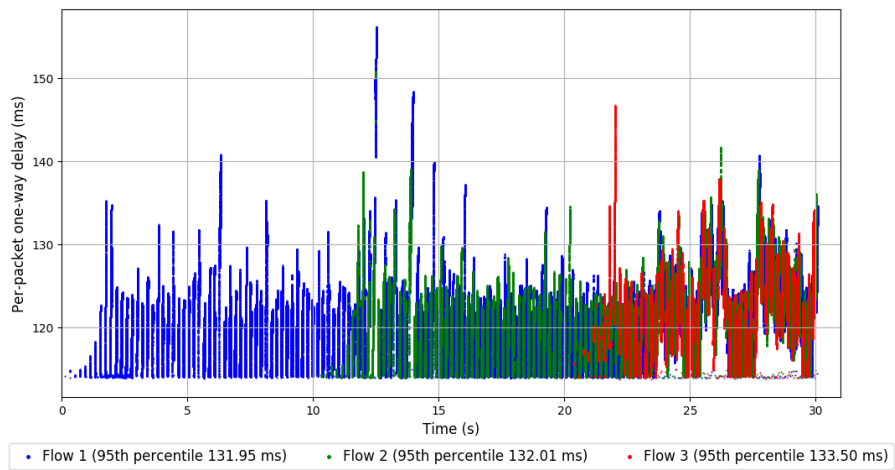
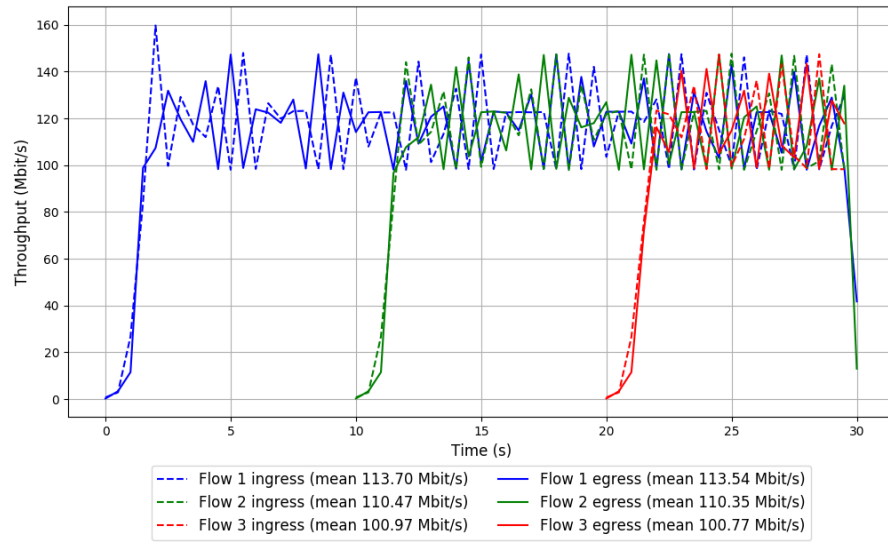
-- Flow 3:

Average throughput: 100.77 Mbit/s

95th percentile per-packet one-way delay: 133.505 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-17 04:37:17

End at: 2018-02-17 04:37:47

Below is generated by plot.py at 2018-02-17 07:41:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 178.78 Mbit/s

95th percentile per-packet one-way delay: 98.737 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 104.01 Mbit/s

95th percentile per-packet one-way delay: 99.904 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 83.24 Mbit/s

95th percentile per-packet one-way delay: 95.935 ms

Loss rate: 0.04%

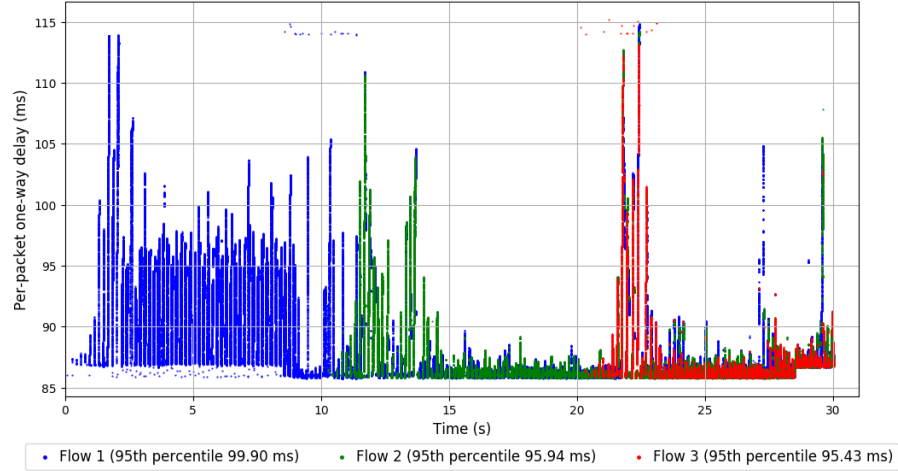
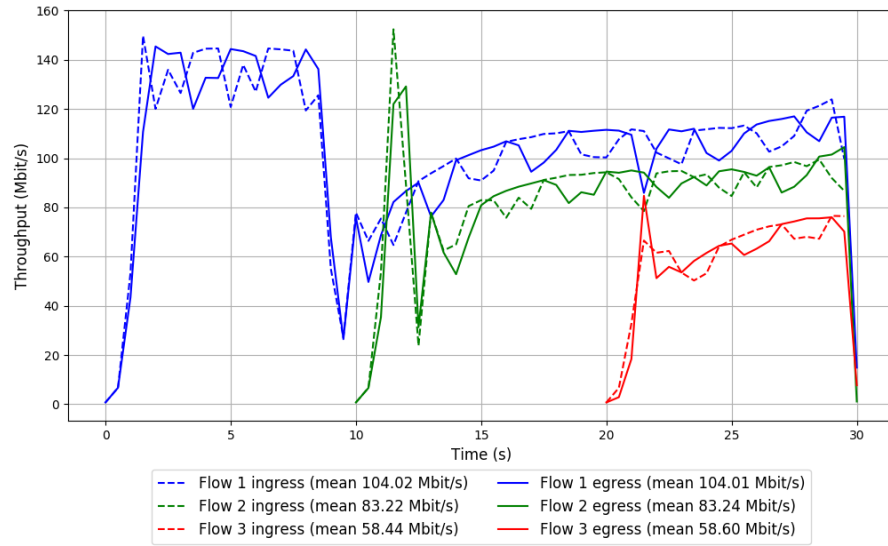
-- Flow 3:

Average throughput: 58.60 Mbit/s

95th percentile per-packet one-way delay: 95.431 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-17 04:55:57

End at: 2018-02-17 04:56:27

Below is generated by plot.py at 2018-02-17 07:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 215.68 Mbit/s

95th percentile per-packet one-way delay: 101.948 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 128.49 Mbit/s

95th percentile per-packet one-way delay: 101.761 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 96.74 Mbit/s

95th percentile per-packet one-way delay: 101.326 ms

Loss rate: 0.19%

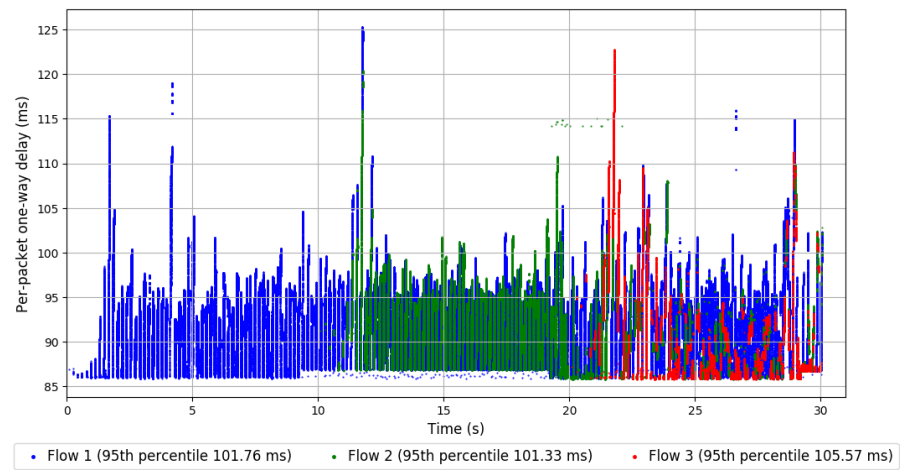
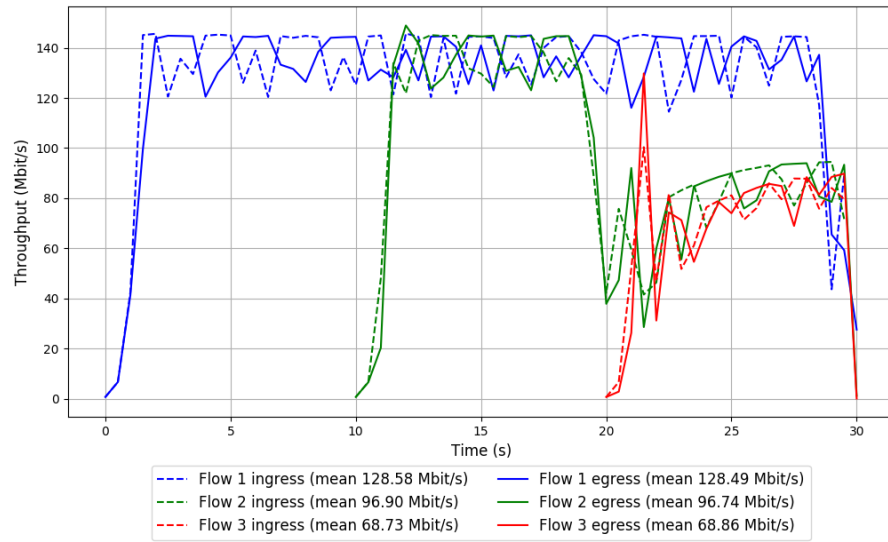
-- Flow 3:

Average throughput: 68.86 Mbit/s

95th percentile per-packet one-way delay: 105.572 ms

Loss rate: 0.06%

Run 10: Report of TCP Cubic — Data Link

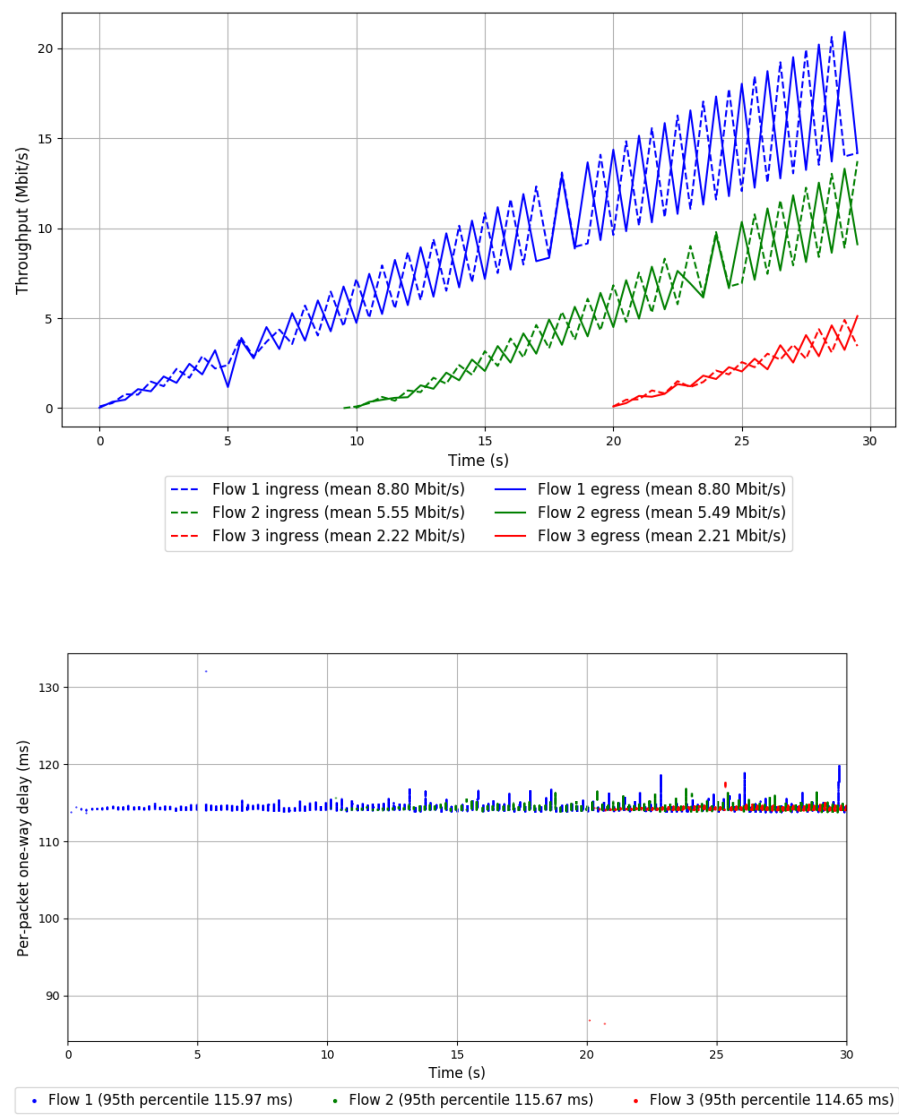


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-17 02:13:59
End at: 2018-02-17 02:14:29

# Below is generated by plot.py at 2018-02-17 07:41:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.15 Mbit/s
95th percentile per-packet one-way delay: 115.847 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 115.975 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.49 Mbit/s
95th percentile per-packet one-way delay: 115.667 ms
Loss rate: 2.09%
-- Flow 3:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 114.646 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

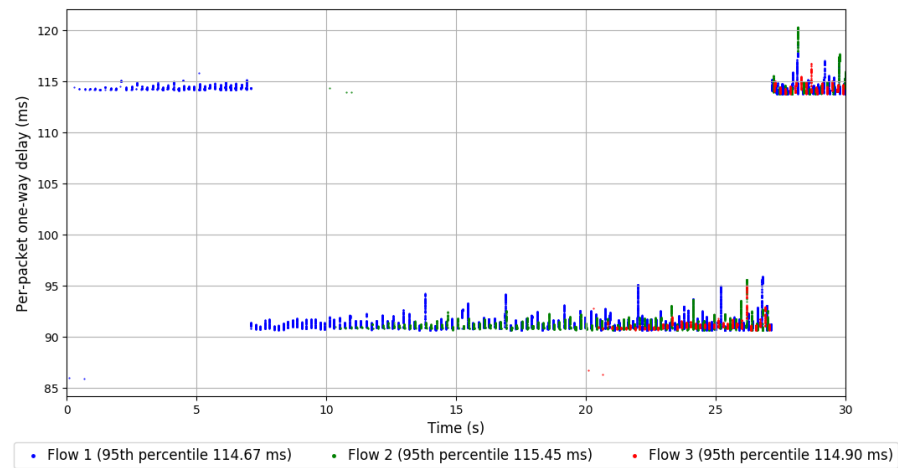
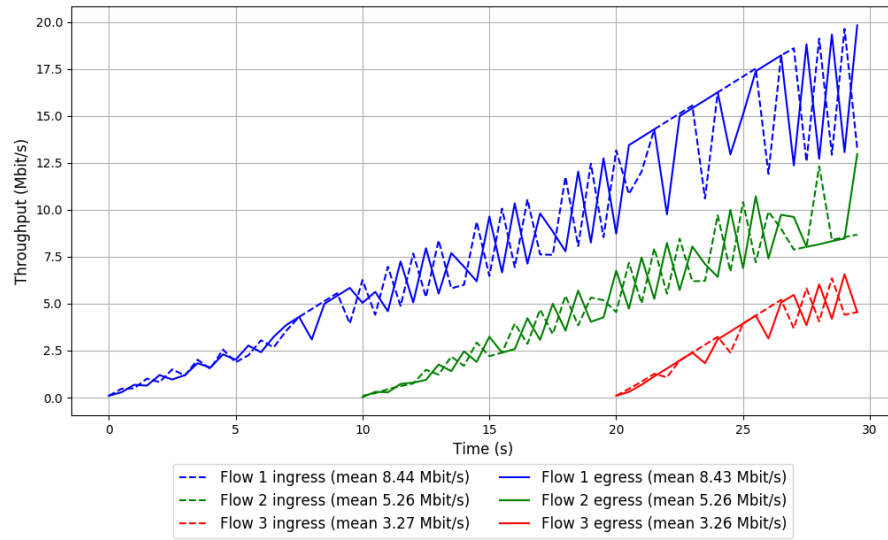


```
Run 2: Statistics of LEDBAT

Start at: 2018-02-17 02:31:59
End at: 2018-02-17 02:32:29

# Below is generated by plot.py at 2018-02-17 07:41:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.98 Mbit/s
95th percentile per-packet one-way delay: 114.824 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 8.43 Mbit/s
95th percentile per-packet one-way delay: 114.671 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.26 Mbit/s
95th percentile per-packet one-way delay: 115.451 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.26 Mbit/s
95th percentile per-packet one-way delay: 114.896 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-17 02:49:59

End at: 2018-02-17 02:50:29

Below is generated by plot.py at 2018-02-17 07:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.96 Mbit/s

95th percentile per-packet one-way delay: 115.609 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.50 Mbit/s

95th percentile per-packet one-way delay: 116.001 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 5.58 Mbit/s

95th percentile per-packet one-way delay: 115.303 ms

Loss rate: 0.00%

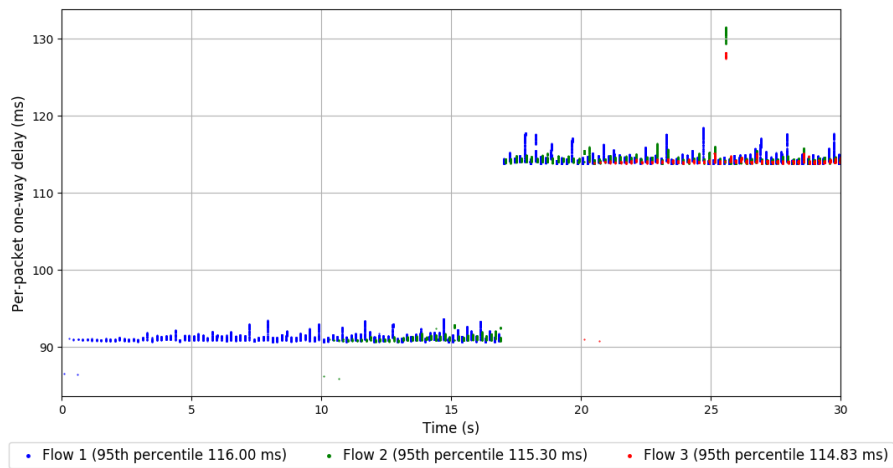
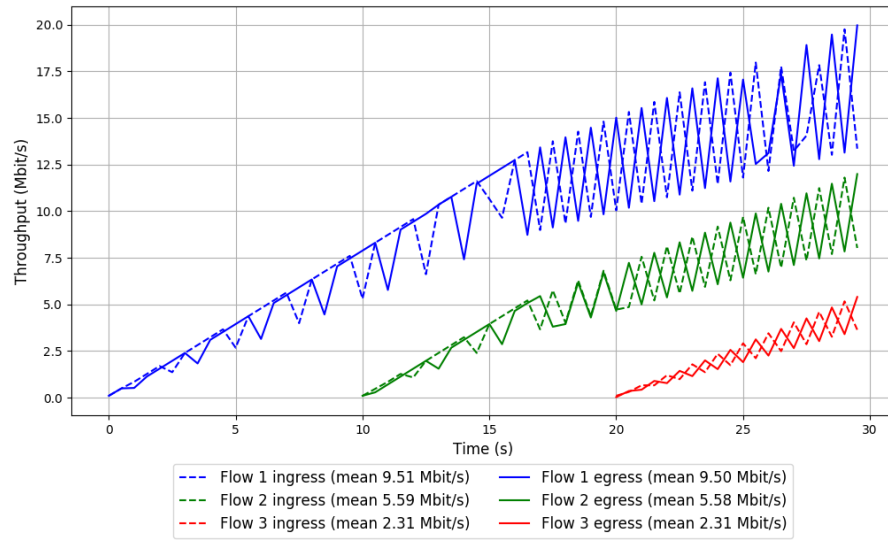
-- Flow 3:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 114.834 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-17 03:08:05

End at: 2018-02-17 03:08:35

Below is generated by plot.py at 2018-02-17 07:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.74 Mbit/s

95th percentile per-packet one-way delay: 115.365 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 115.447 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.08 Mbit/s

95th percentile per-packet one-way delay: 115.177 ms

Loss rate: 0.00%

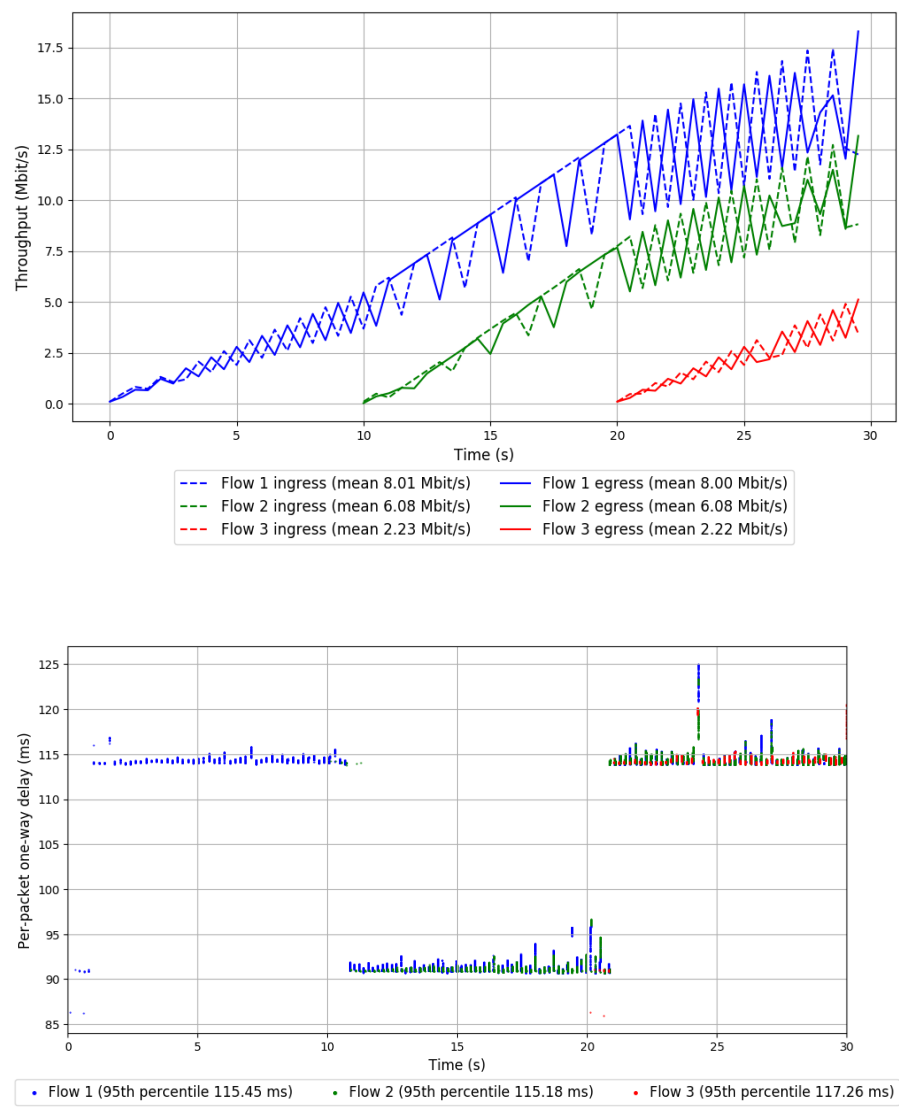
-- Flow 3:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 117.263 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-17 03:26:20

End at: 2018-02-17 03:26:50

Below is generated by plot.py at 2018-02-17 07:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.72 Mbit/s

95th percentile per-packet one-way delay: 93.251 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.73 Mbit/s

95th percentile per-packet one-way delay: 92.948 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.23 Mbit/s

95th percentile per-packet one-way delay: 93.401 ms

Loss rate: 0.00%

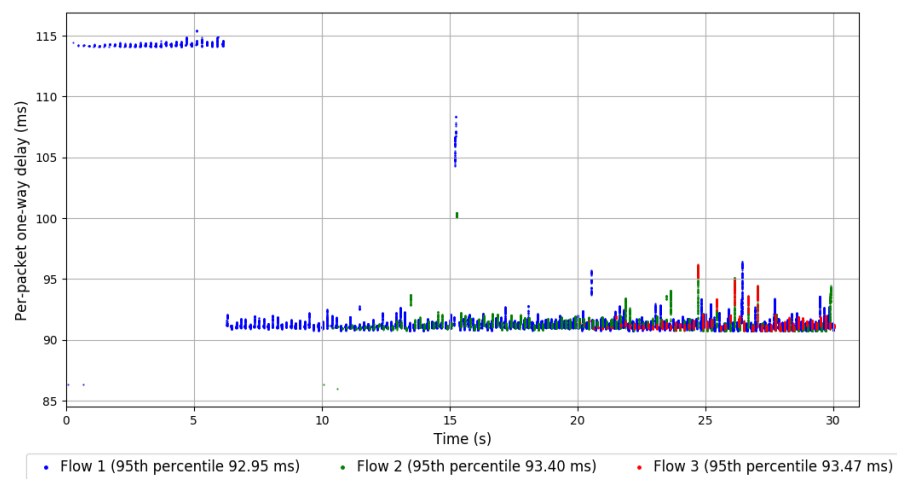
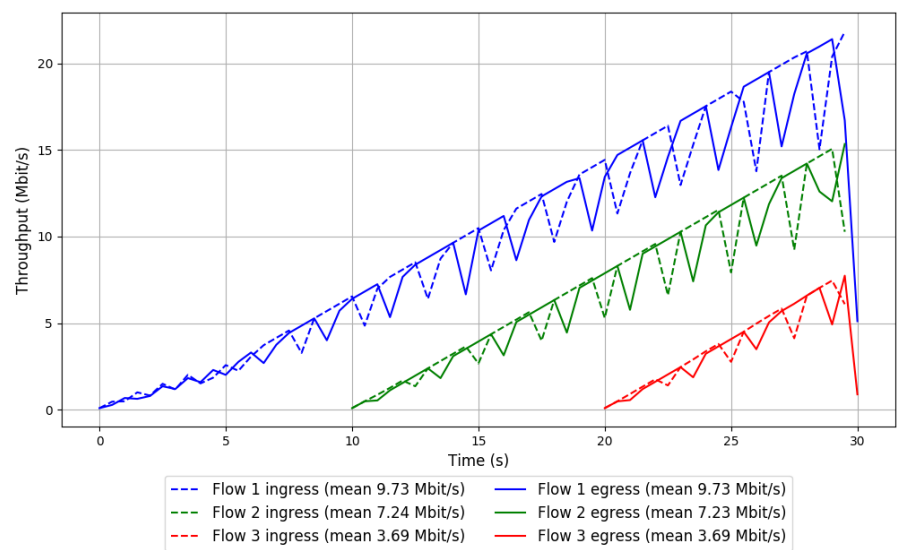
-- Flow 3:

Average throughput: 3.69 Mbit/s

95th percentile per-packet one-way delay: 93.465 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-17 03:44:52

End at: 2018-02-17 03:45:22

Below is generated by plot.py at 2018-02-17 07:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.14 Mbit/s

95th percentile per-packet one-way delay: 116.087 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.44 Mbit/s

95th percentile per-packet one-way delay: 116.136 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 5.75 Mbit/s

95th percentile per-packet one-way delay: 116.045 ms

Loss rate: 0.00%

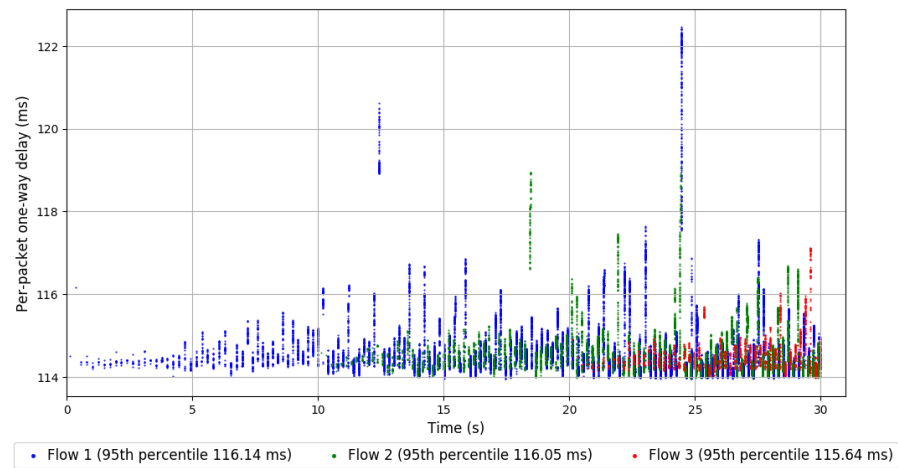
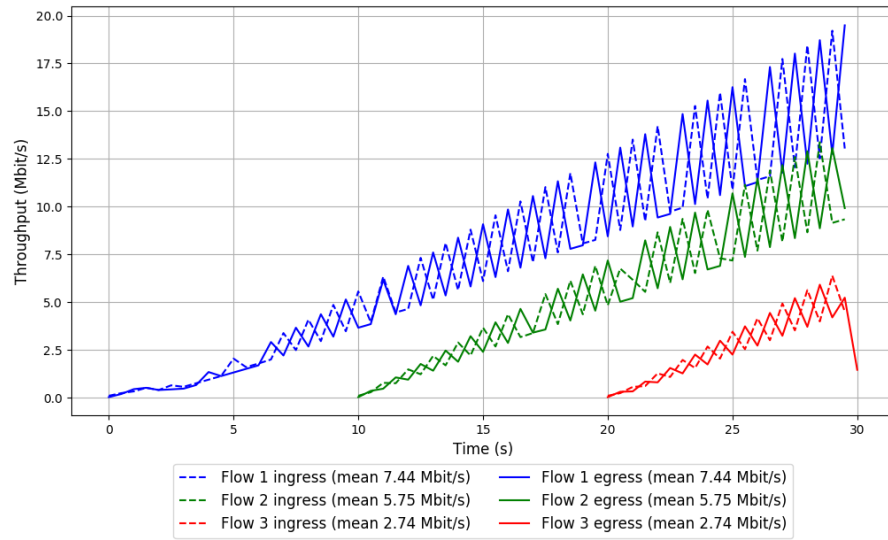
-- Flow 3:

Average throughput: 2.74 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-02-17 04:03:25

End at: 2018-02-17 04:03:55

Below is generated by plot.py at 2018-02-17 07:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.72 Mbit/s

95th percentile per-packet one-way delay: 116.070 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 8.88 Mbit/s

95th percentile per-packet one-way delay: 116.212 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 5.85 Mbit/s

95th percentile per-packet one-way delay: 115.964 ms

Loss rate: 0.00%

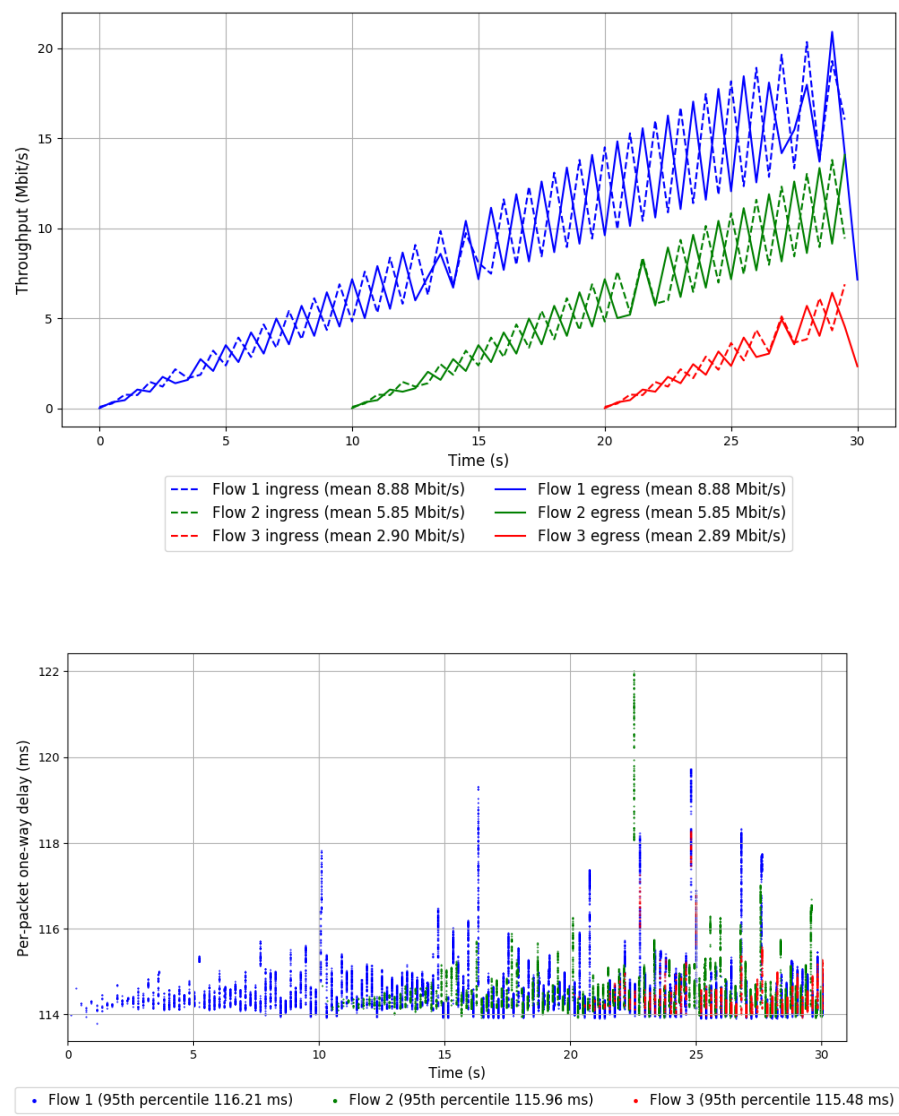
-- Flow 3:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 115.479 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-17 04:22:33

End at: 2018-02-17 04:23:03

Below is generated by plot.py at 2018-02-17 07:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.32 Mbit/s

95th percentile per-packet one-way delay: 116.002 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 8.58 Mbit/s

95th percentile per-packet one-way delay: 116.210 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 5.75 Mbit/s

95th percentile per-packet one-way delay: 115.817 ms

Loss rate: 0.00%

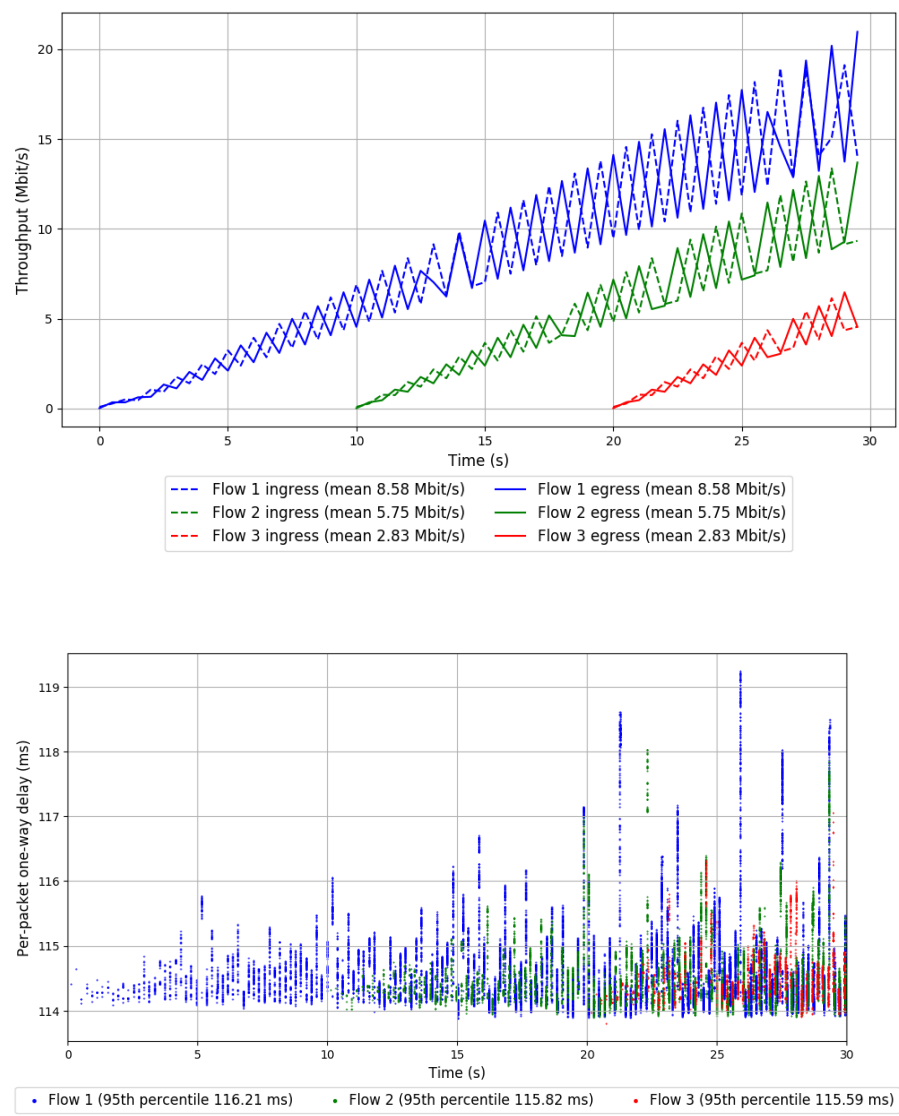
-- Flow 3:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 115.591 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-17 04:41:30

End at: 2018-02-17 04:42:00

Below is generated by plot.py at 2018-02-17 07:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.25 Mbit/s

95th percentile per-packet one-way delay: 88.763 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 11.97 Mbit/s

95th percentile per-packet one-way delay: 89.101 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.64 Mbit/s

95th percentile per-packet one-way delay: 88.152 ms

Loss rate: 0.00%

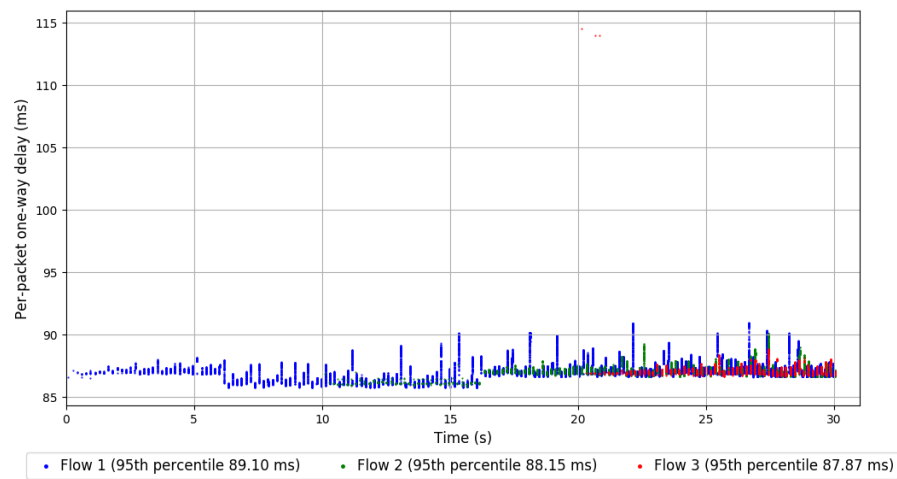
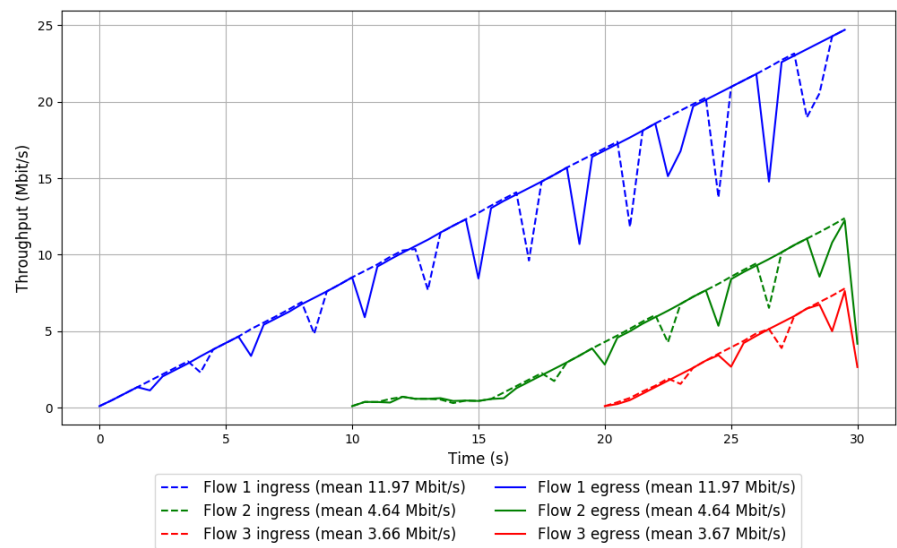
-- Flow 3:

Average throughput: 3.67 Mbit/s

95th percentile per-packet one-way delay: 87.873 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

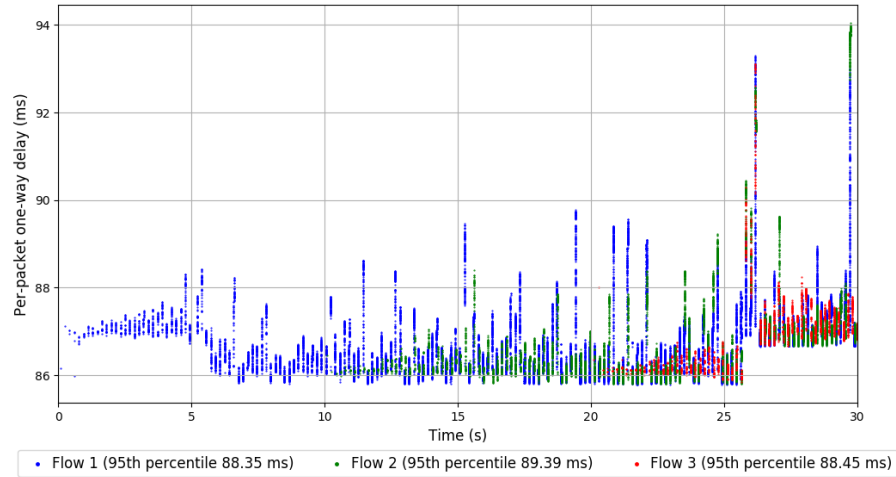
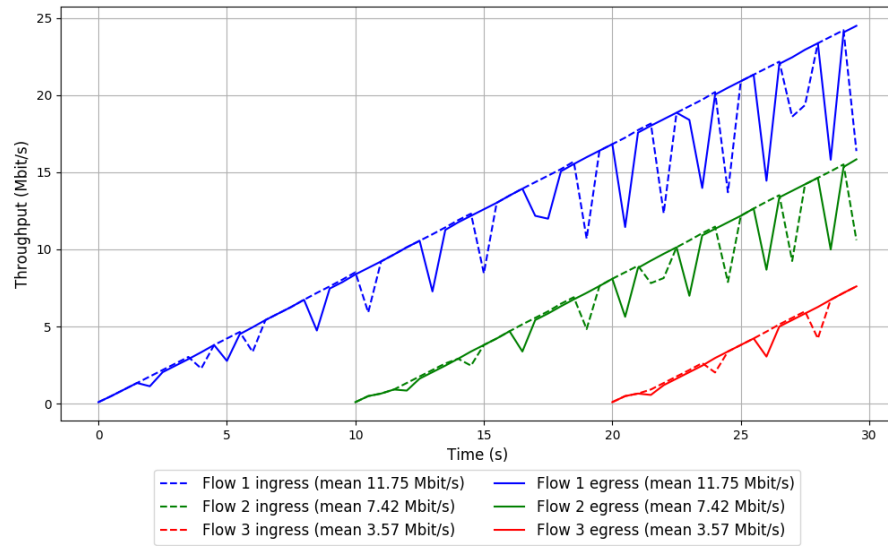


```
Run 10: Statistics of LEDBAT

Start at: 2018-02-17 05:00:10
End at: 2018-02-17 05:00:40

# Below is generated by plot.py at 2018-02-17 07:41:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.80 Mbit/s
95th percentile per-packet one-way delay: 88.610 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.75 Mbit/s
95th percentile per-packet one-way delay: 88.347 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.42 Mbit/s
95th percentile per-packet one-way delay: 89.393 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.57 Mbit/s
95th percentile per-packet one-way delay: 88.450 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

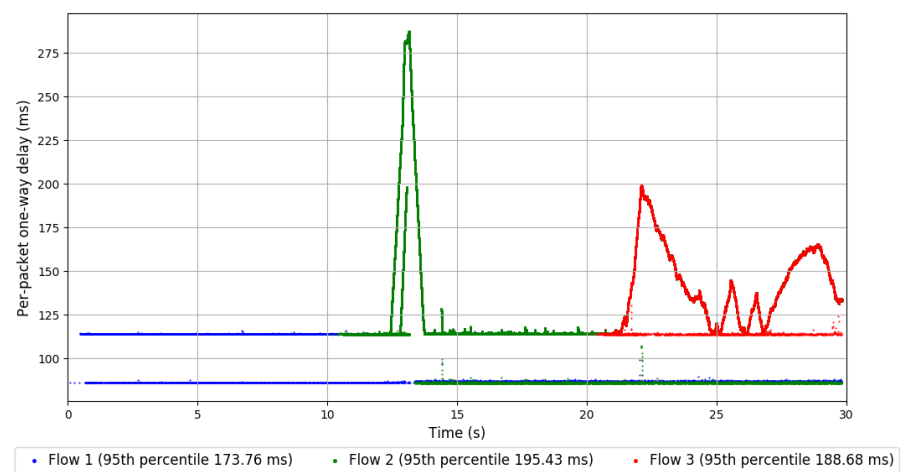
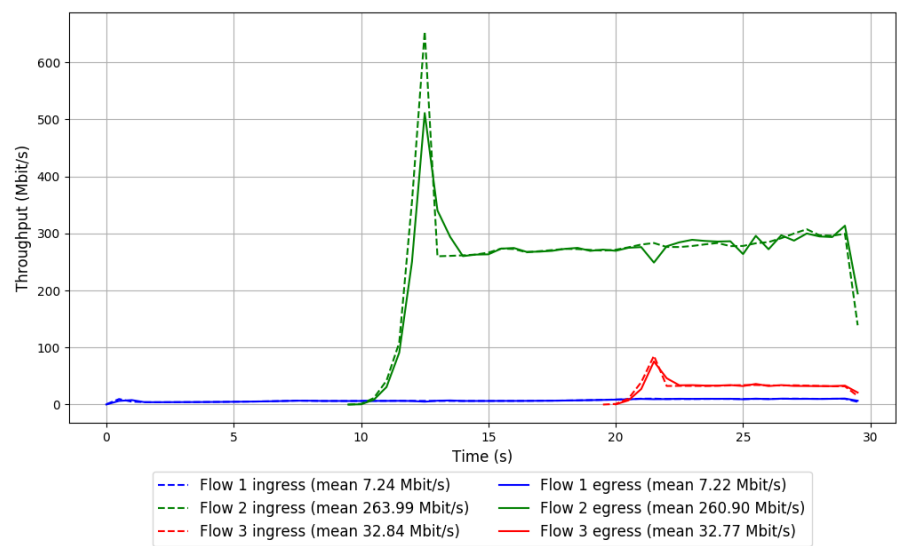


```
Run 1: Statistics of PCC

Start at: 2018-02-17 02:06:02
End at: 2018-02-17 02:06:32

# Below is generated by plot.py at 2018-02-17 07:42:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 191.97 Mbit/s
95th percentile per-packet one-way delay: 193.447 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 7.22 Mbit/s
95th percentile per-packet one-way delay: 173.765 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 260.90 Mbit/s
95th percentile per-packet one-way delay: 195.429 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 32.77 Mbit/s
95th percentile per-packet one-way delay: 188.675 ms
Loss rate: 0.47%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-02-17 02:24:00

End at: 2018-02-17 02:24:30

Below is generated by plot.py at 2018-02-17 07:44:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 288.07 Mbit/s

95th percentile per-packet one-way delay: 180.913 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 271.70 Mbit/s

95th percentile per-packet one-way delay: 182.525 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 16.50 Mbit/s

95th percentile per-packet one-way delay: 158.912 ms

Loss rate: 0.20%

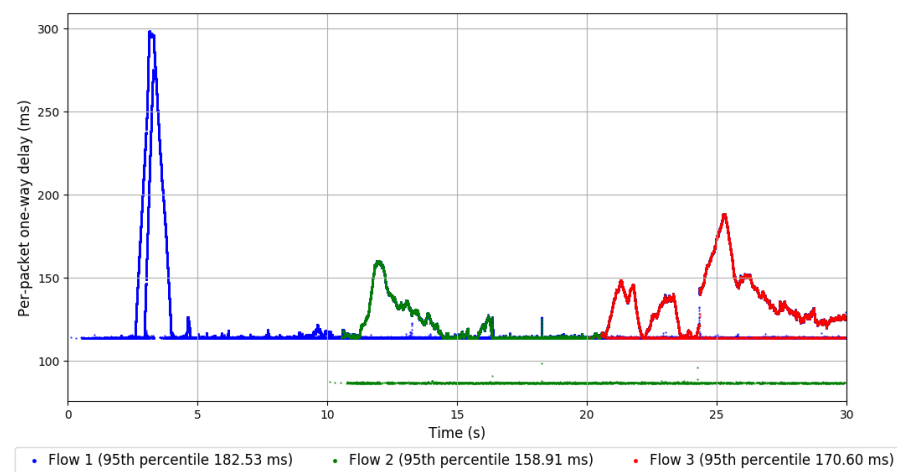
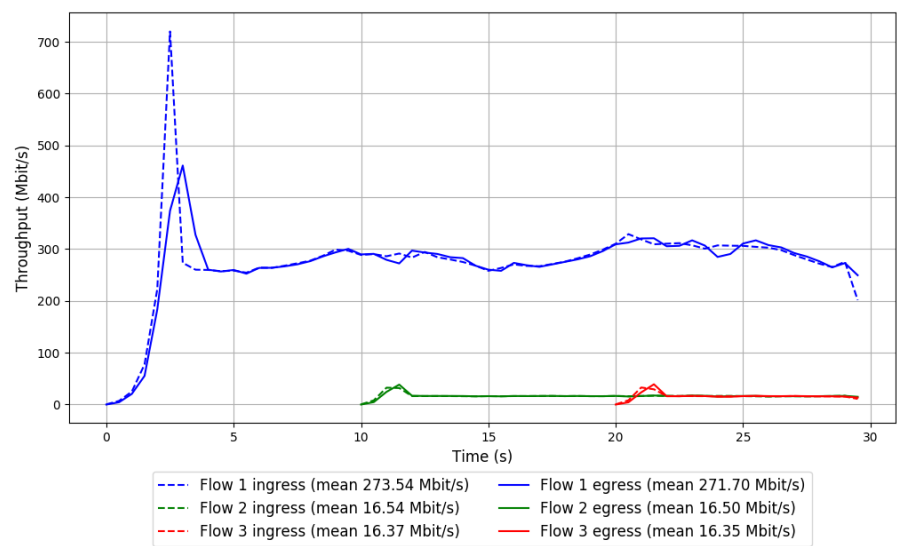
-- Flow 3:

Average throughput: 16.35 Mbit/s

95th percentile per-packet one-way delay: 170.604 ms

Loss rate: 0.36%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-17 02:42:02

End at: 2018-02-17 02:42:32

Below is generated by plot.py at 2018-02-17 07:44:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 302.54 Mbit/s

95th percentile per-packet one-way delay: 257.308 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 276.45 Mbit/s

95th percentile per-packet one-way delay: 256.257 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 31.24 Mbit/s

95th percentile per-packet one-way delay: 265.209 ms

Loss rate: 0.42%

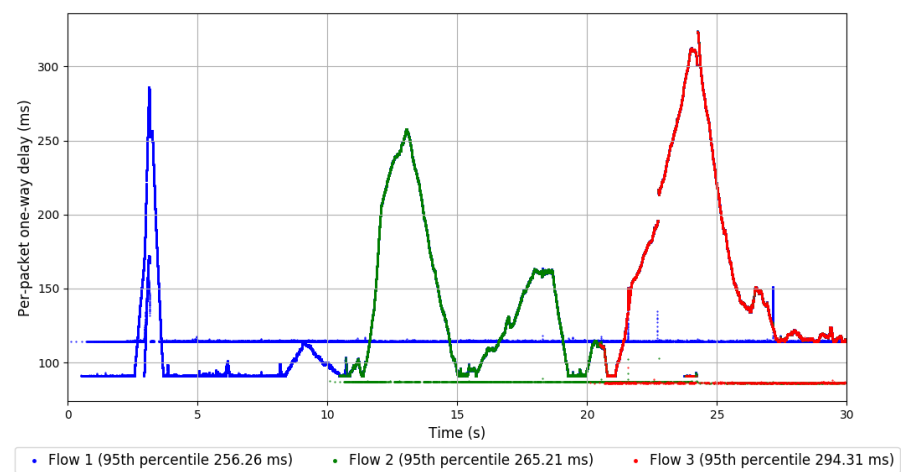
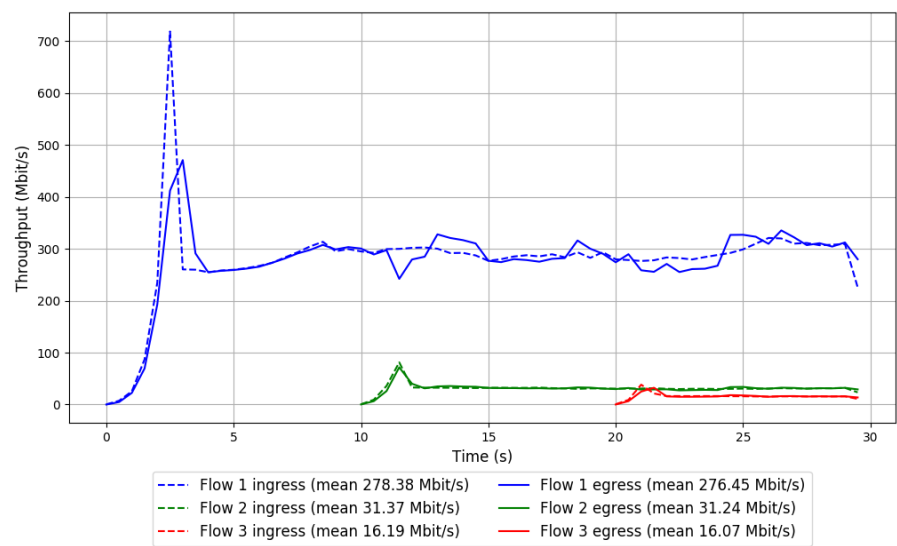
-- Flow 3:

Average throughput: 16.07 Mbit/s

95th percentile per-packet one-way delay: 294.314 ms

Loss rate: 0.76%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-02-17 02:59:56

End at: 2018-02-17 03:00:26

Below is generated by plot.py at 2018-02-17 07:44:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 243.96 Mbit/s

95th percentile per-packet one-way delay: 236.415 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 231.97 Mbit/s

95th percentile per-packet one-way delay: 236.293 ms

Loss rate: 1.13%

-- Flow 2:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 234.714 ms

Loss rate: 0.89%

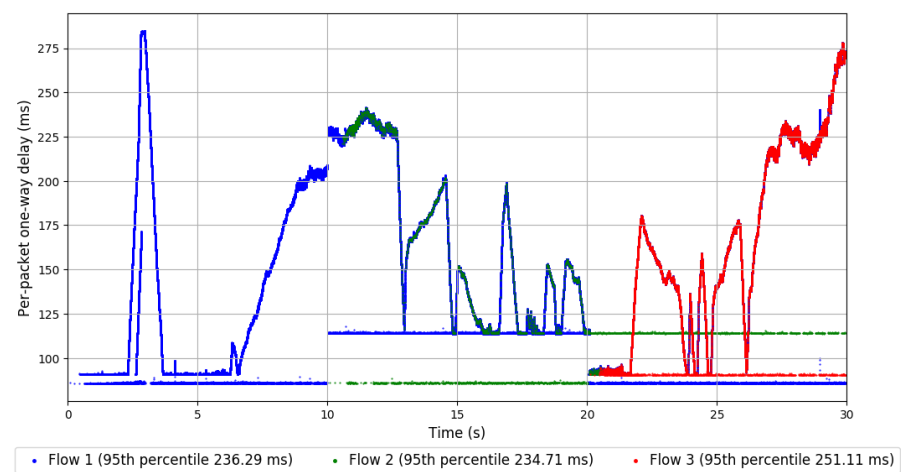
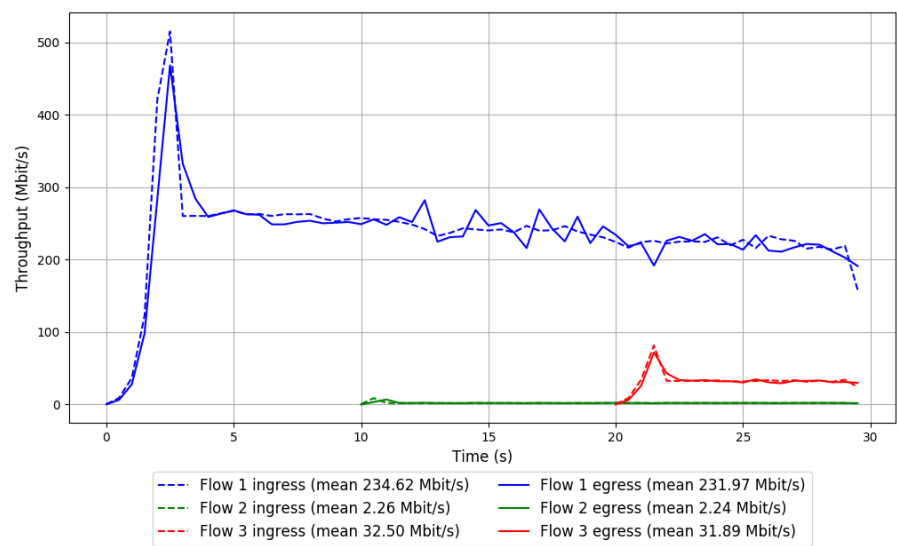
-- Flow 3:

Average throughput: 31.89 Mbit/s

95th percentile per-packet one-way delay: 251.114 ms

Loss rate: 1.90%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-17 03:18:10

End at: 2018-02-17 03:18:40

Below is generated by plot.py at 2018-02-17 07:46:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 297.67 Mbit/s

95th percentile per-packet one-way delay: 239.208 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 274.98 Mbit/s

95th percentile per-packet one-way delay: 239.119 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 32.06 Mbit/s

95th percentile per-packet one-way delay: 240.170 ms

Loss rate: 0.79%

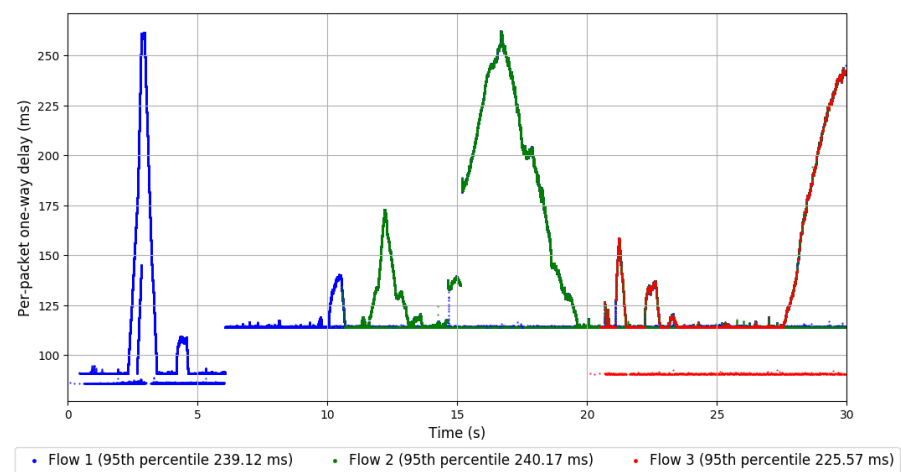
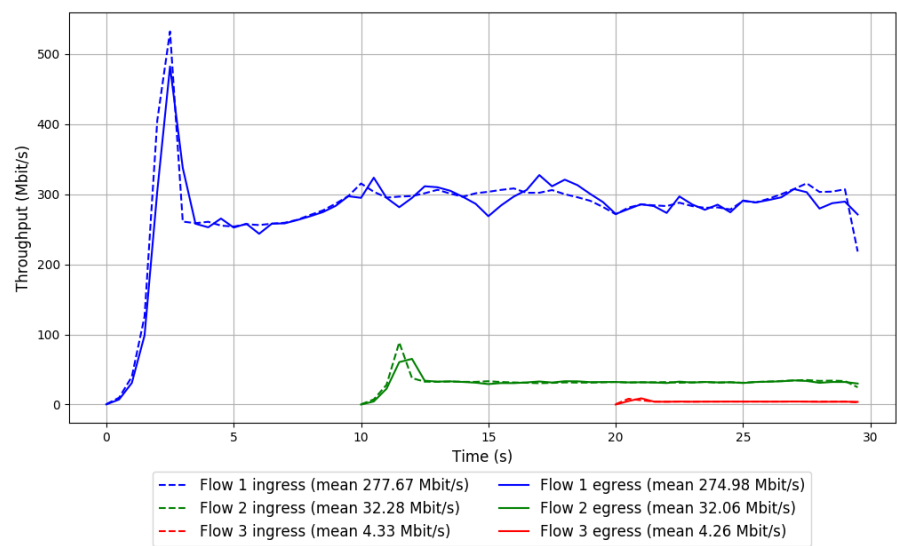
-- Flow 3:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 225.566 ms

Loss rate: 1.44%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-17 03:36:31

End at: 2018-02-17 03:37:01

Below is generated by plot.py at 2018-02-17 07:46:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 293.82 Mbit/s

95th percentile per-packet one-way delay: 230.421 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 279.99 Mbit/s

95th percentile per-packet one-way delay: 230.272 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 4.86 Mbit/s

95th percentile per-packet one-way delay: 227.346 ms

Loss rate: 0.26%

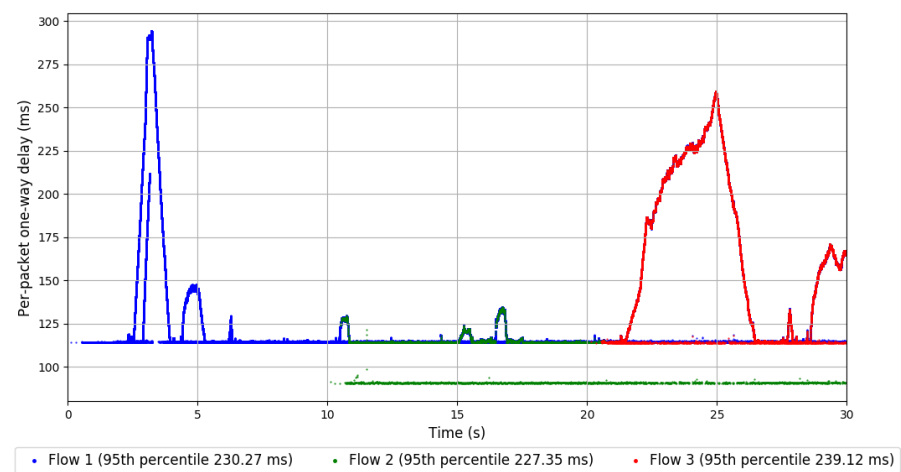
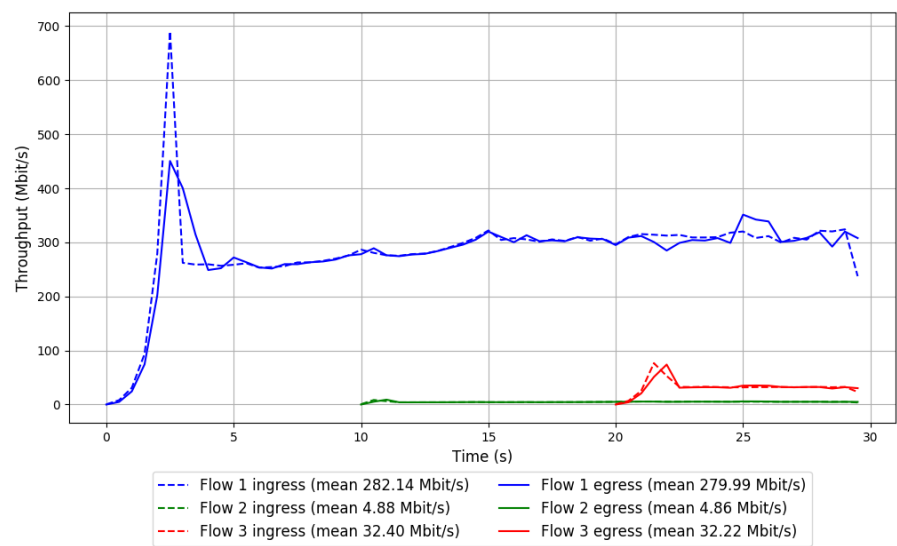
-- Flow 3:

Average throughput: 32.22 Mbit/s

95th percentile per-packet one-way delay: 239.115 ms

Loss rate: 0.54%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-02-17 03:55:12

End at: 2018-02-17 03:55:42

Below is generated by plot.py at 2018-02-17 07:47:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 314.55 Mbit/s

95th percentile per-packet one-way delay: 176.807 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 302.40 Mbit/s

95th percentile per-packet one-way delay: 177.172 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 16.16 Mbit/s

95th percentile per-packet one-way delay: 166.677 ms

Loss rate: 0.00%

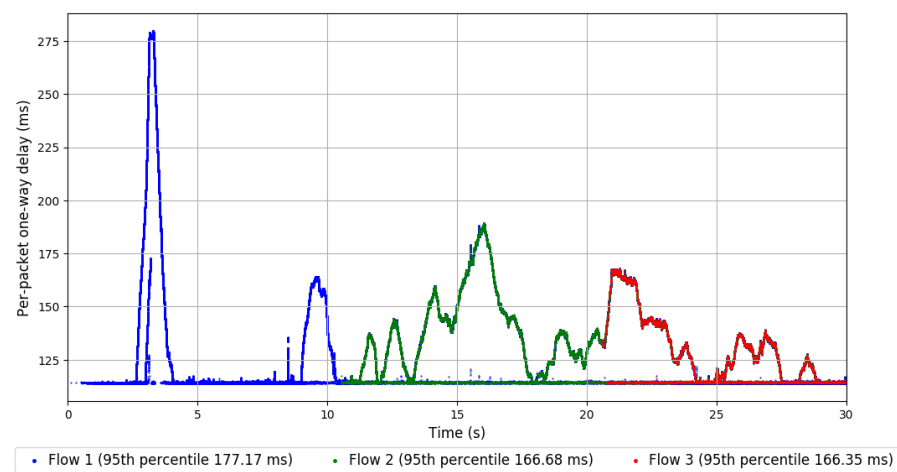
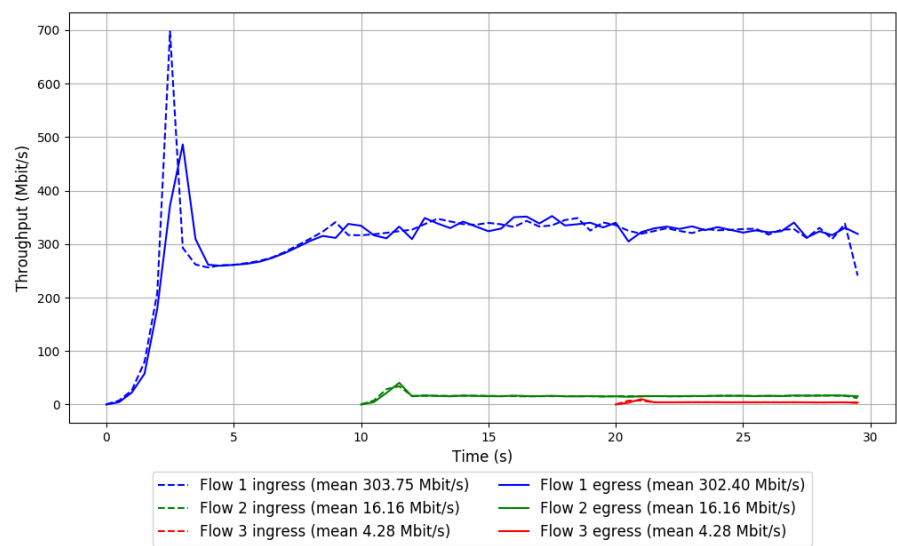
-- Flow 3:

Average throughput: 4.28 Mbit/s

95th percentile per-packet one-way delay: 166.351 ms

Loss rate: 0.00%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-17 04:13:54

End at: 2018-02-17 04:14:24

Below is generated by plot.py at 2018-02-17 07:47:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 294.90 Mbit/s

95th percentile per-packet one-way delay: 175.921 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 269.84 Mbit/s

95th percentile per-packet one-way delay: 176.884 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 35.56 Mbit/s

95th percentile per-packet one-way delay: 170.307 ms

Loss rate: 0.02%

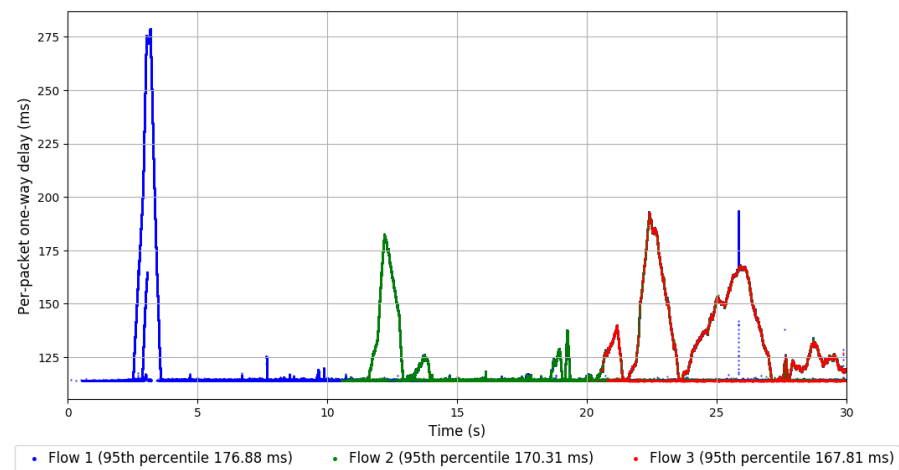
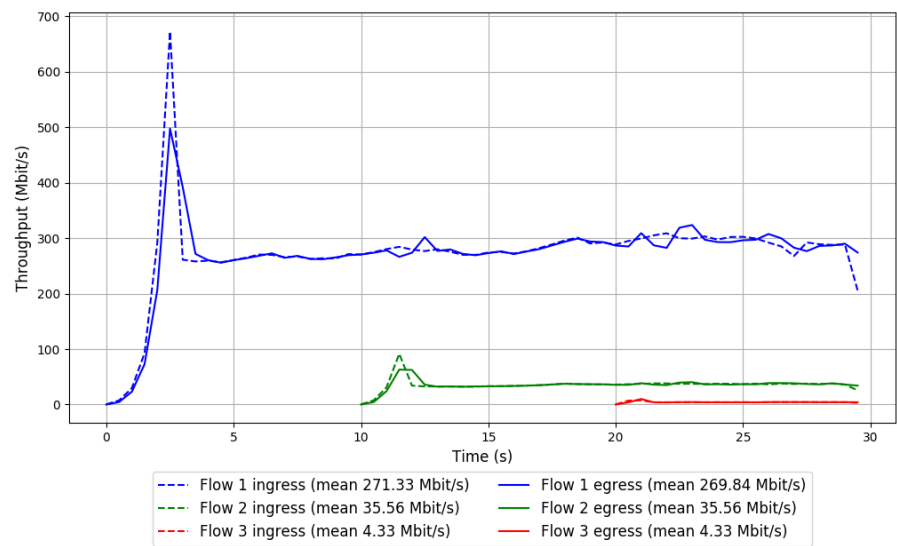
-- Flow 3:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 167.808 ms

Loss rate: 0.03%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-17 04:33:03

End at: 2018-02-17 04:33:33

Below is generated by plot.py at 2018-02-17 07:48:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 305.59 Mbit/s

95th percentile per-packet one-way delay: 212.786 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 283.99 Mbit/s

95th percentile per-packet one-way delay: 212.411 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 16.70 Mbit/s

95th percentile per-packet one-way delay: 211.898 ms

Loss rate: 0.00%

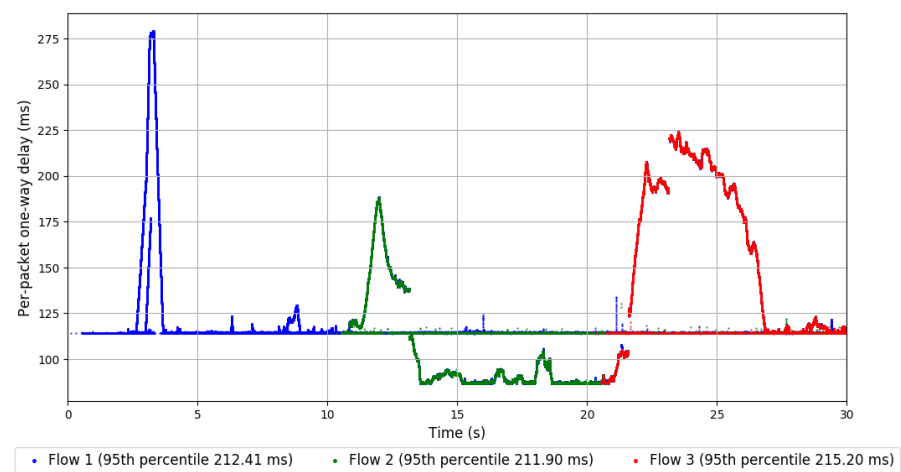
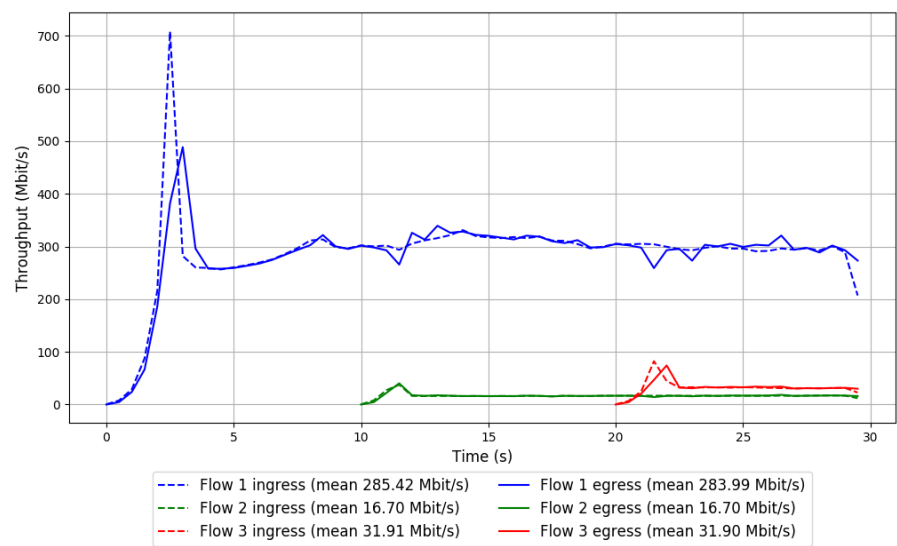
-- Flow 3:

Average throughput: 31.90 Mbit/s

95th percentile per-packet one-way delay: 215.203 ms

Loss rate: 0.00%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-02-17 04:51:56

End at: 2018-02-17 04:52:26

Below is generated by plot.py at 2018-02-17 07:49:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 284.70 Mbit/s

95th percentile per-packet one-way delay: 251.125 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 268.91 Mbit/s

95th percentile per-packet one-way delay: 248.832 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 8.19 Mbit/s

95th percentile per-packet one-way delay: 251.802 ms

Loss rate: 0.25%

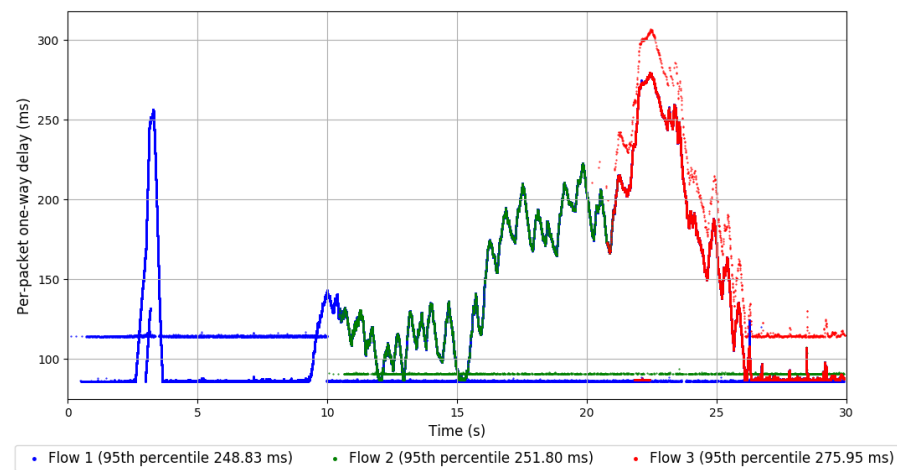
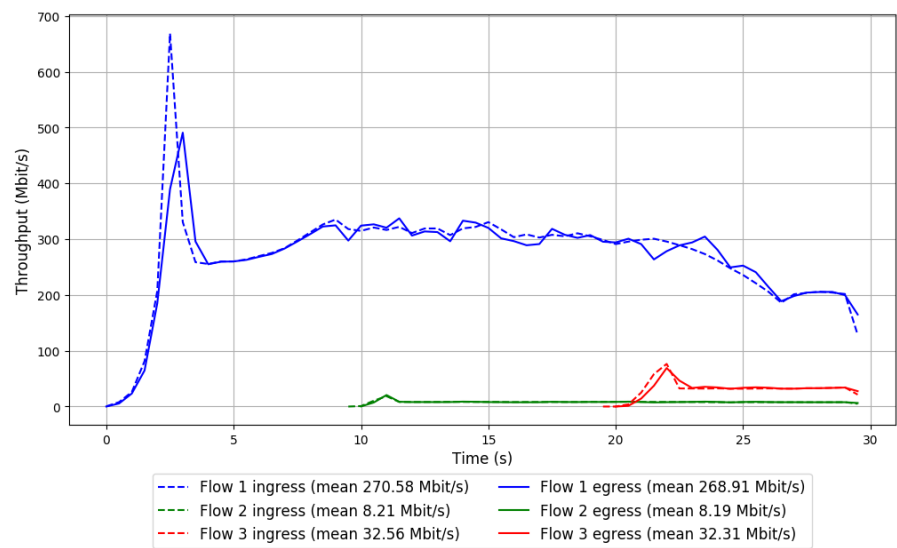
-- Flow 3:

Average throughput: 32.31 Mbit/s

95th percentile per-packet one-way delay: 275.946 ms

Loss rate: 1.76%

Run 10: Report of PCC — Data Link

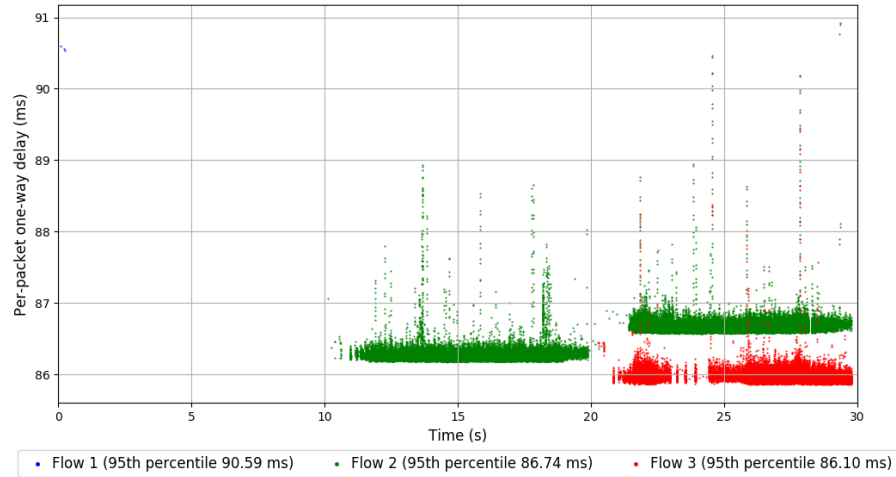
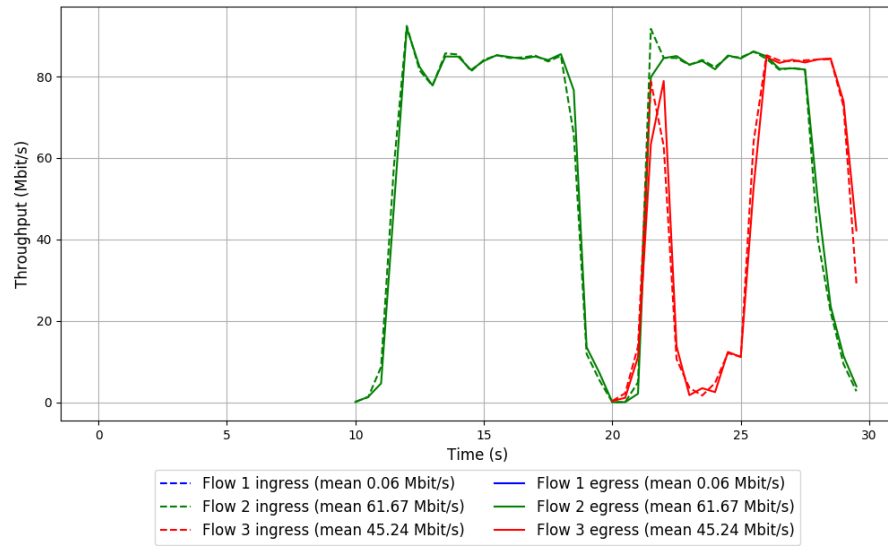


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-17 02:05:15
End at: 2018-02-17 02:05:45

# Below is generated by plot.py at 2018-02-17 07:49:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.52 Mbit/s
95th percentile per-packet one-way delay: 86.721 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 90.592 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.67 Mbit/s
95th percentile per-packet one-way delay: 86.737 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.24 Mbit/s
95th percentile per-packet one-way delay: 86.100 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-17 02:23:11

End at: 2018-02-17 02:23:41

Below is generated by plot.py at 2018-02-17 07:49:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.02 Mbit/s

95th percentile per-packet one-way delay: 114.055 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 54.04 Mbit/s

95th percentile per-packet one-way delay: 86.415 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.35 Mbit/s

95th percentile per-packet one-way delay: 114.103 ms

Loss rate: 0.02%

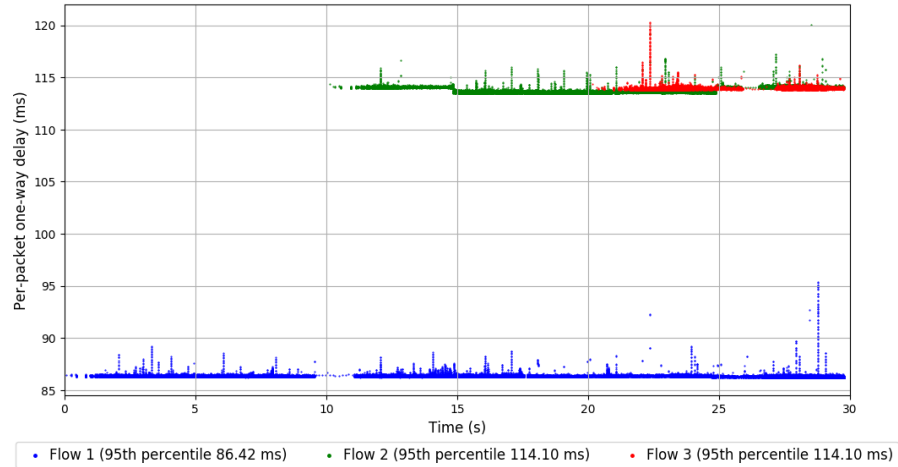
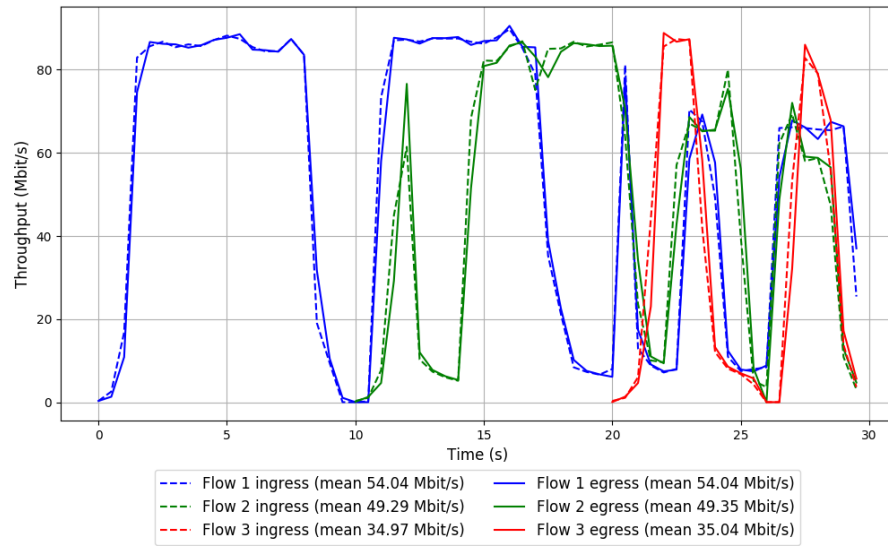
-- Flow 3:

Average throughput: 35.04 Mbit/s

95th percentile per-packet one-way delay: 114.096 ms

Loss rate: 0.07%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-17 02:41:12

End at: 2018-02-17 02:41:42

Below is generated by plot.py at 2018-02-17 07:49:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.28 Mbit/s

95th percentile per-packet one-way delay: 113.991 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 54.44 Mbit/s

95th percentile per-packet one-way delay: 114.020 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 46.86 Mbit/s

95th percentile per-packet one-way delay: 113.962 ms

Loss rate: 0.23%

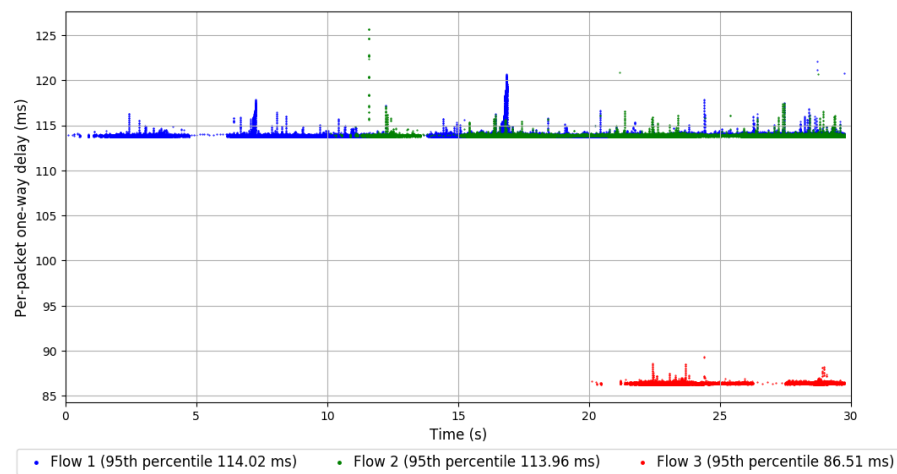
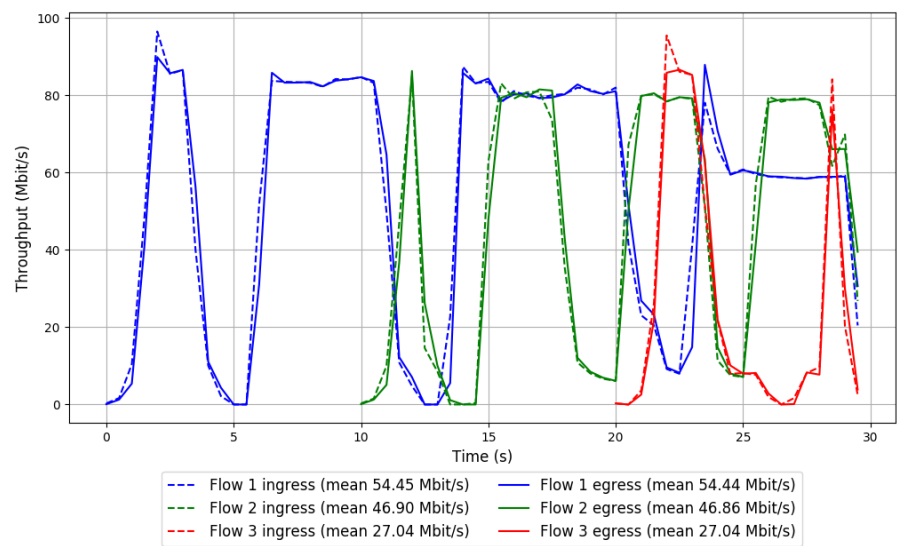
-- Flow 3:

Average throughput: 27.04 Mbit/s

95th percentile per-packet one-way delay: 86.508 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-17 02:59:06

End at: 2018-02-17 02:59:36

Below is generated by plot.py at 2018-02-17 07:49:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.32 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 56.34 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.34 Mbit/s

95th percentile per-packet one-way delay: 113.990 ms

Loss rate: 0.02%

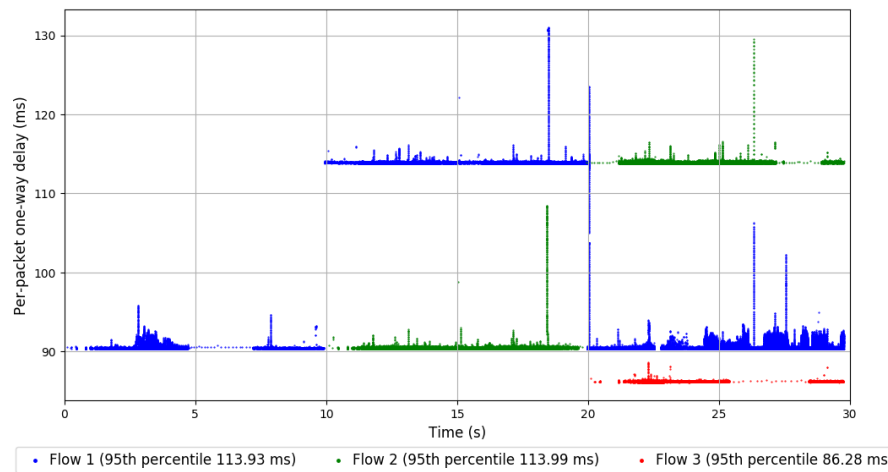
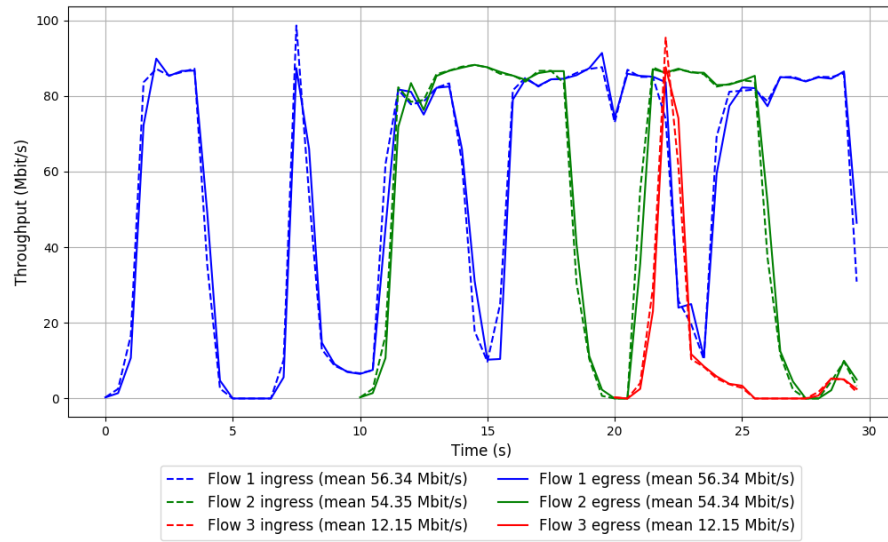
-- Flow 3:

Average throughput: 12.15 Mbit/s

95th percentile per-packet one-way delay: 86.275 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-17 03:17:17

End at: 2018-02-17 03:17:47

Below is generated by plot.py at 2018-02-17 07:49:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 116.69 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 68.04 Mbit/s

95th percentile per-packet one-way delay: 113.940 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.59 Mbit/s

95th percentile per-packet one-way delay: 114.026 ms

Loss rate: 0.00%

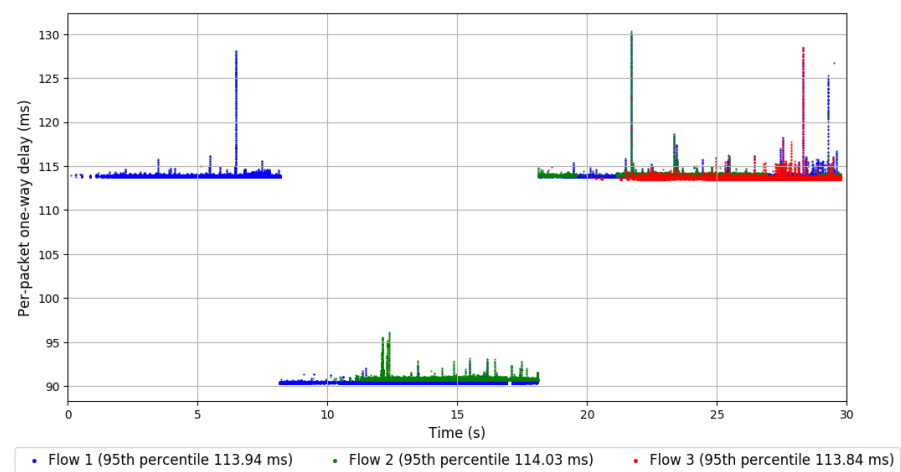
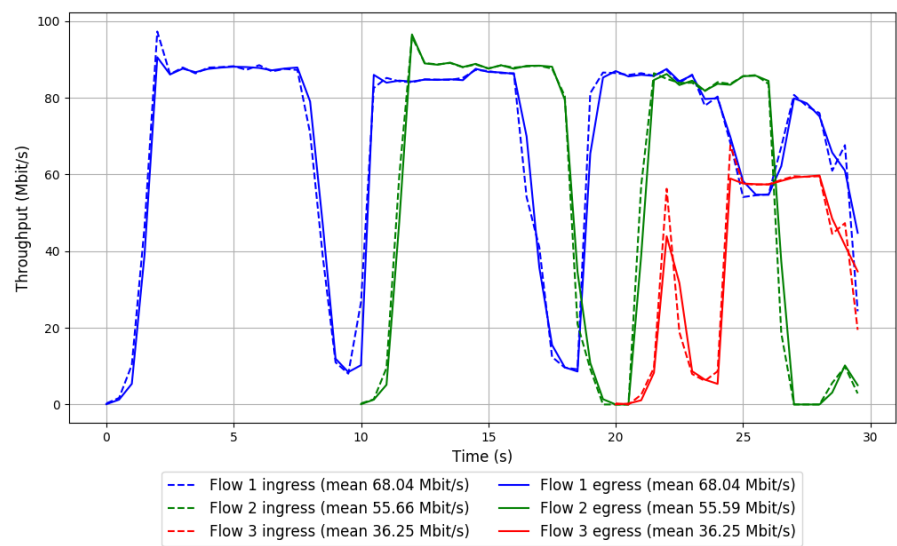
-- Flow 3:

Average throughput: 36.25 Mbit/s

95th percentile per-packet one-way delay: 113.839 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-17 03:35:40

End at: 2018-02-17 03:36:10

Below is generated by plot.py at 2018-02-17 07:49:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.77 Mbit/s

95th percentile per-packet one-way delay: 114.059 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 60.76 Mbit/s

95th percentile per-packet one-way delay: 90.556 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.14 Mbit/s

95th percentile per-packet one-way delay: 114.118 ms

Loss rate: 0.18%

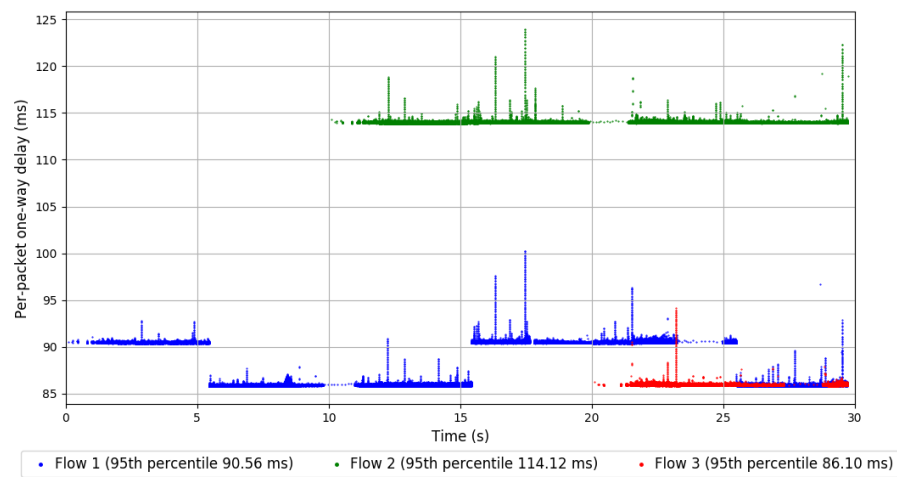
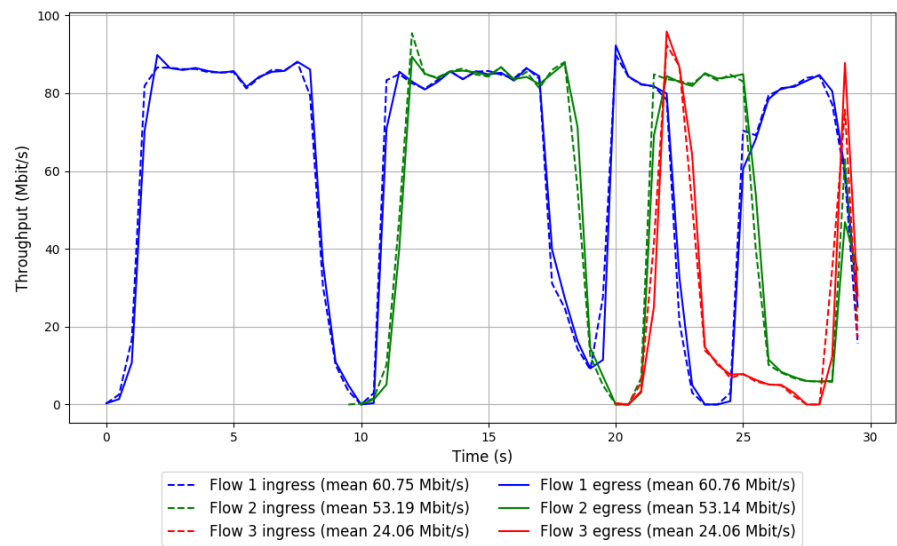
-- Flow 3:

Average throughput: 24.06 Mbit/s

95th percentile per-packet one-way delay: 86.104 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-17 03:54:22

End at: 2018-02-17 03:54:52

Below is generated by plot.py at 2018-02-17 07:49:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.76 Mbit/s

95th percentile per-packet one-way delay: 113.977 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.93 Mbit/s

95th percentile per-packet one-way delay: 113.837 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.40 Mbit/s

95th percentile per-packet one-way delay: 113.849 ms

Loss rate: 0.00%

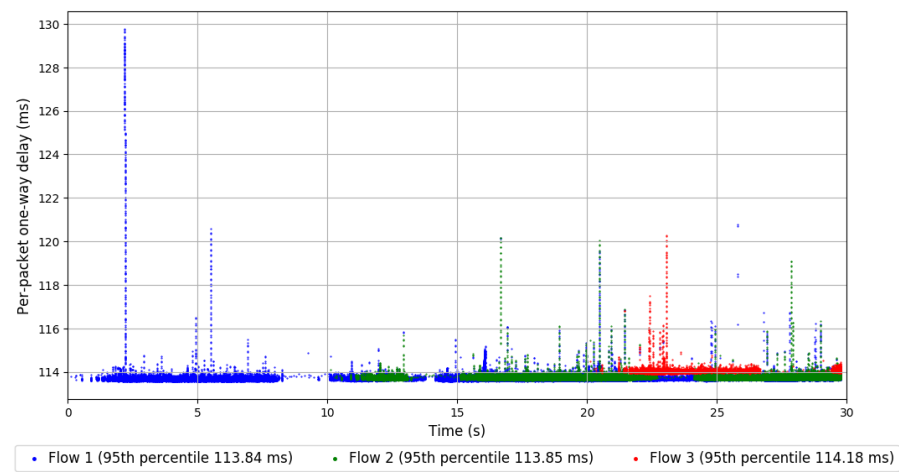
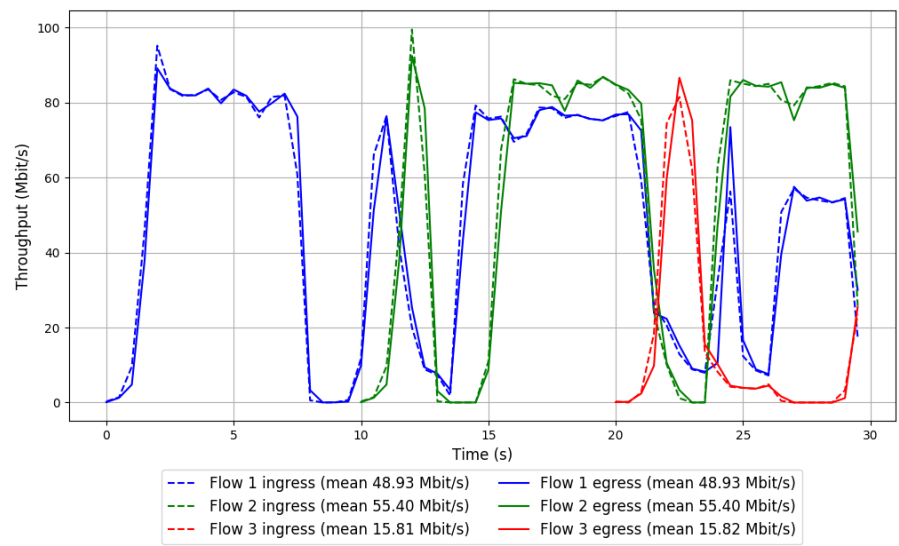
-- Flow 3:

Average throughput: 15.82 Mbit/s

95th percentile per-packet one-way delay: 114.178 ms

Loss rate: 0.01%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-17 04:13:03

End at: 2018-02-17 04:13:33

Below is generated by plot.py at 2018-02-17 07:49:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.43 Mbit/s

95th percentile per-packet one-way delay: 114.785 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 56.27 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.35 Mbit/s

95th percentile per-packet one-way delay: 115.499 ms

Loss rate: 0.00%

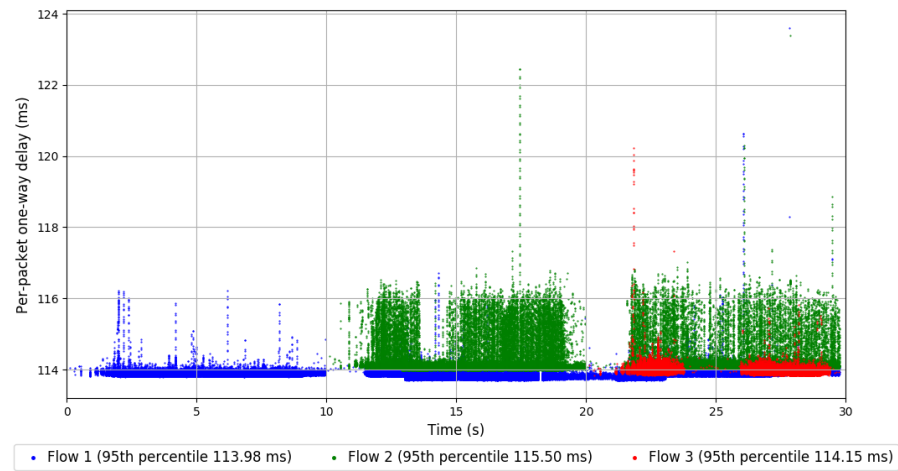
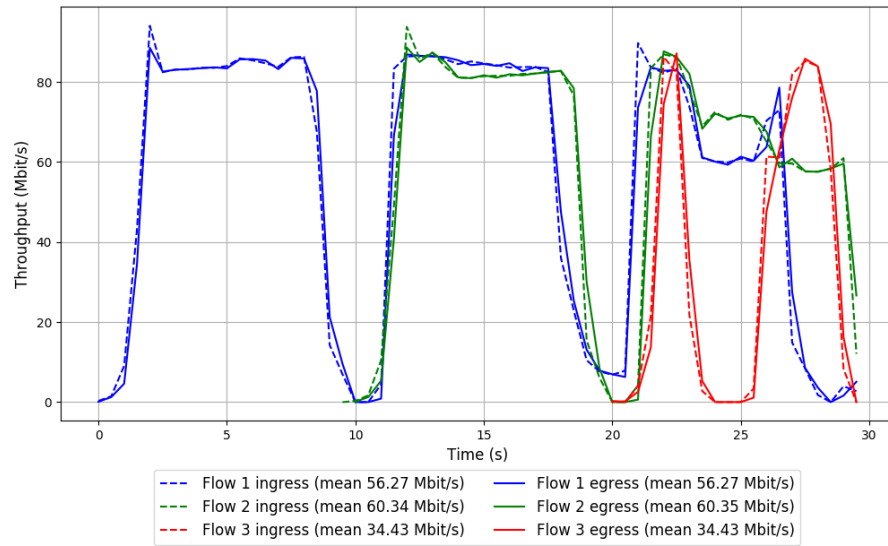
-- Flow 3:

Average throughput: 34.43 Mbit/s

95th percentile per-packet one-way delay: 114.153 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-17 04:32:11

End at: 2018-02-17 04:32:41

Below is generated by plot.py at 2018-02-17 07:50:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.54 Mbit/s

95th percentile per-packet one-way delay: 114.087 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.97 Mbit/s

95th percentile per-packet one-way delay: 86.868 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.40 Mbit/s

95th percentile per-packet one-way delay: 86.789 ms

Loss rate: 0.00%

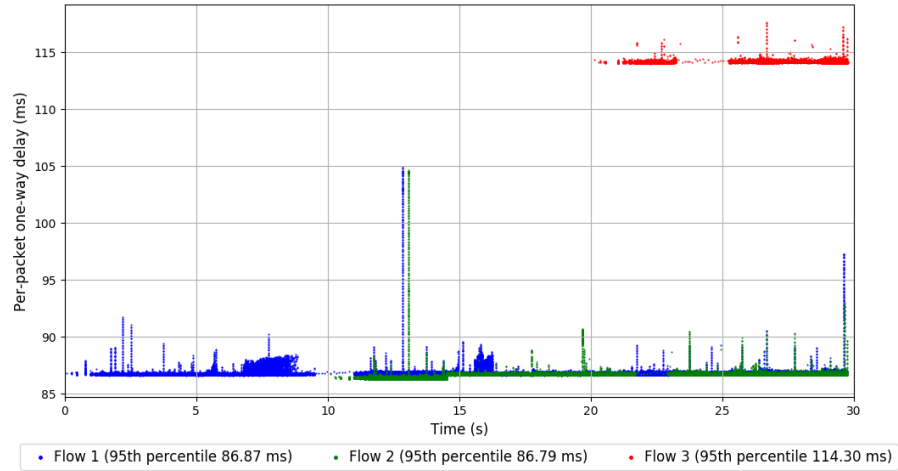
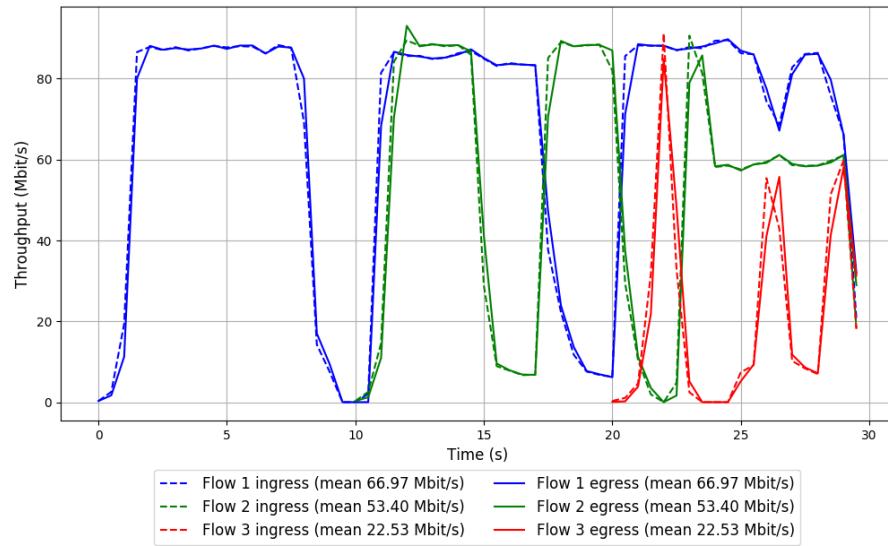
-- Flow 3:

Average throughput: 22.53 Mbit/s

95th percentile per-packet one-way delay: 114.295 ms

Loss rate: 0.01%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-02-17 04:51:06

End at: 2018-02-17 04:51:36

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.34 Mbit/s

95th percentile per-packet one-way delay: 90.570 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.24 Mbit/s

95th percentile per-packet one-way delay: 86.051 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.19 Mbit/s

95th percentile per-packet one-way delay: 90.642 ms

Loss rate: 0.00%

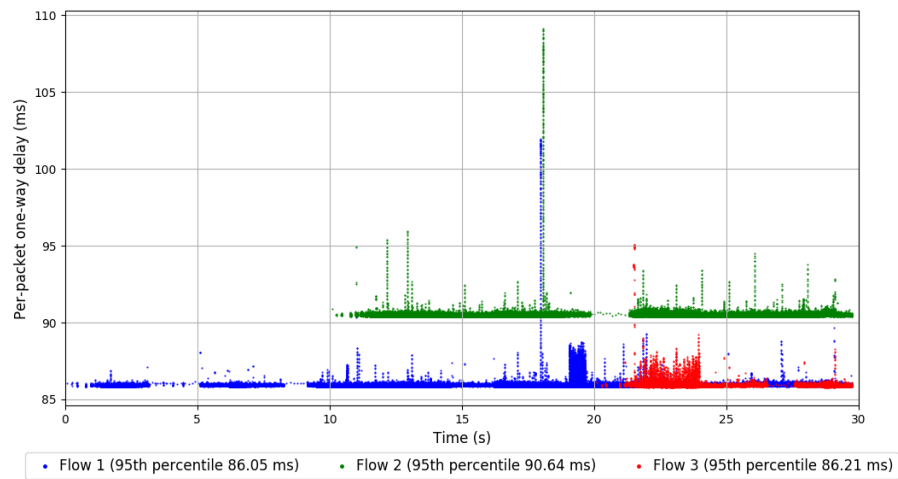
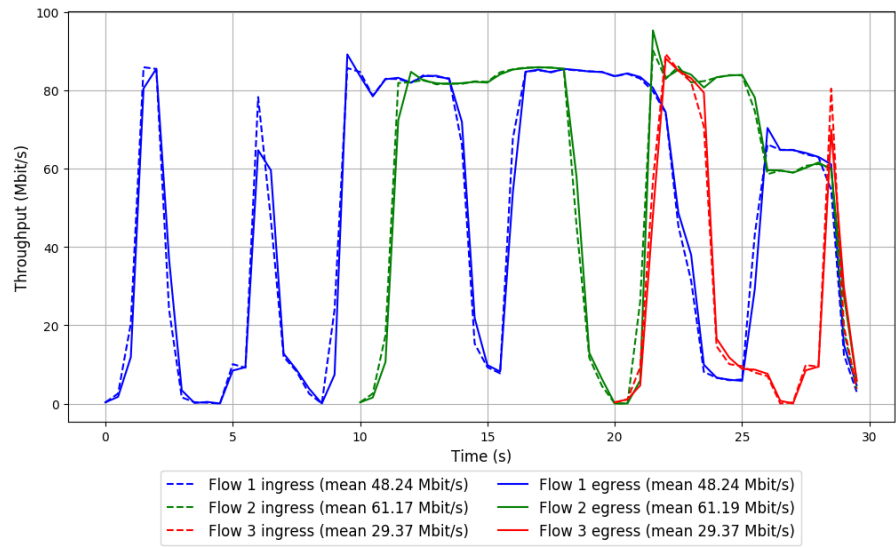
-- Flow 3:

Average throughput: 29.37 Mbit/s

95th percentile per-packet one-way delay: 86.209 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

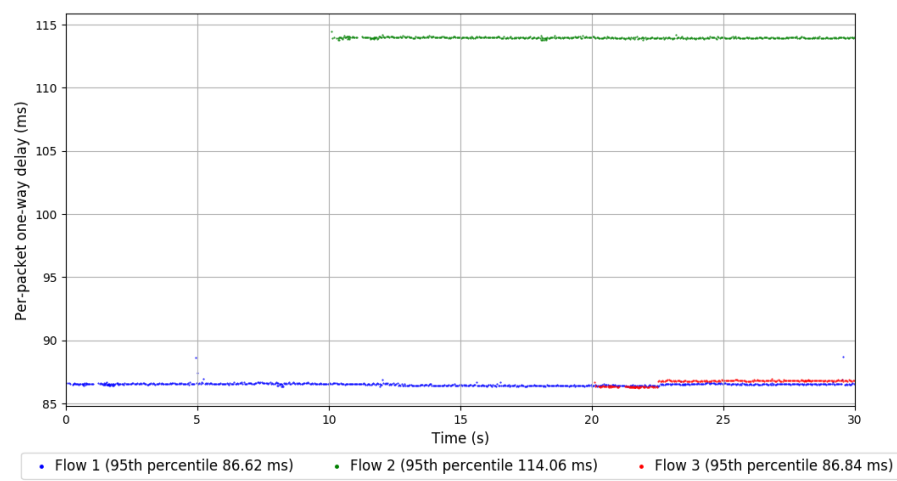
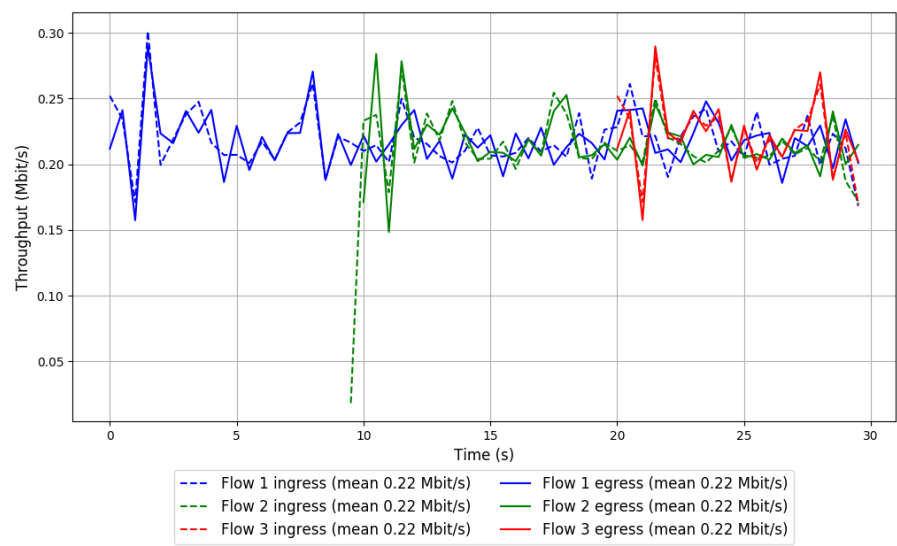


```
Run 1: Statistics of SCReAM

Start at: 2018-02-17 02:11:33
End at: 2018-02-17 02:12:03

# Below is generated by plot.py at 2018-02-17 07:50:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 114.012 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.616 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.058 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.841 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

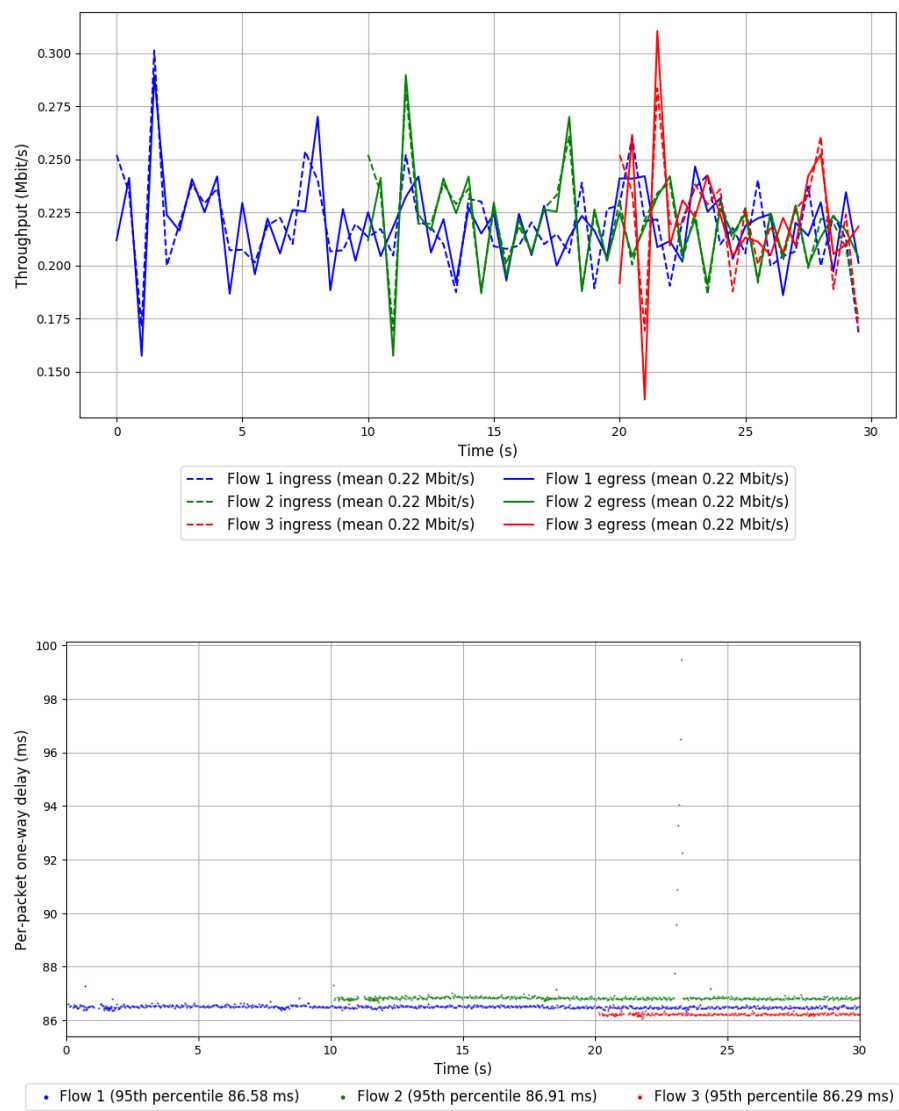


```
Run 2: Statistics of SCReAM

Start at: 2018-02-17 02:29:27
End at: 2018-02-17 02:29:57

# Below is generated by plot.py at 2018-02-17 07:50:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.875 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.583 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.906 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.288 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

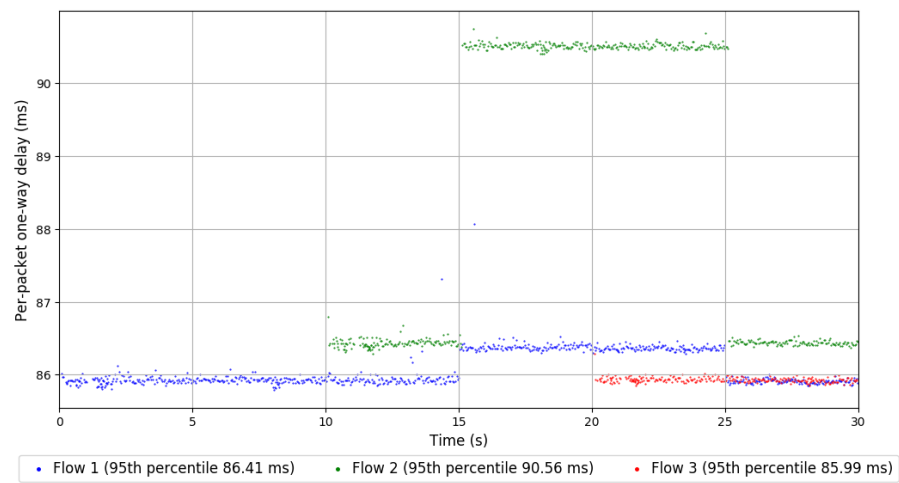
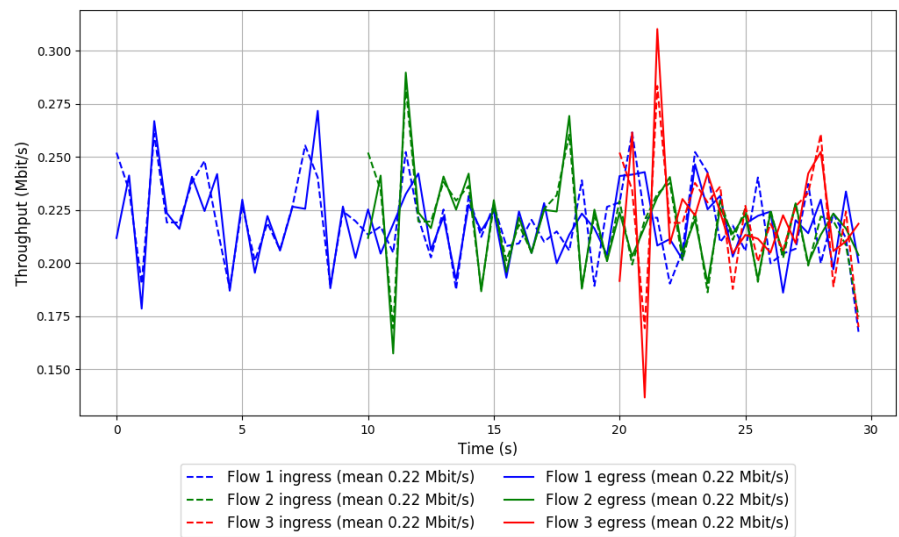


```
Run 3: Statistics of SReAM

Start at: 2018-02-17 02:47:31
End at: 2018-02-17 02:48:01

# Below is generated by plot.py at 2018-02-17 07:50:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 90.528 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.407 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 90.560 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.989 ms
Loss rate: 0.00%
```


Run 3: Report of SReAM — Data Link

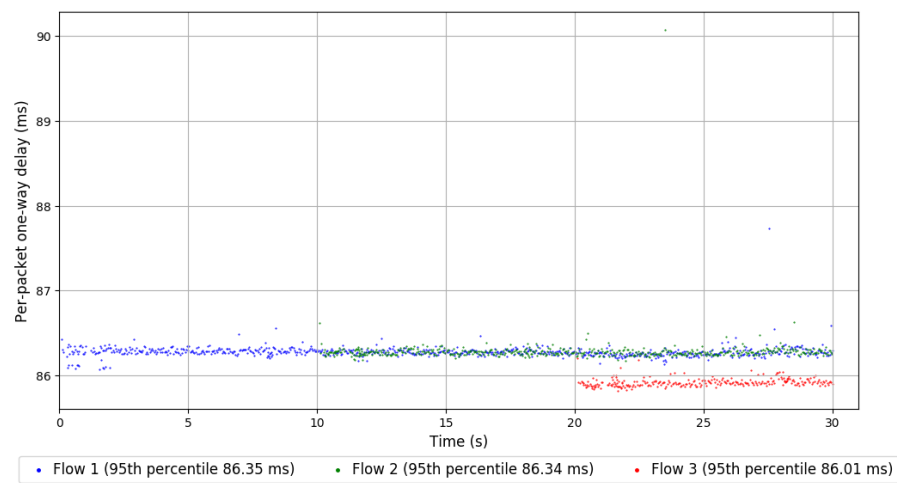
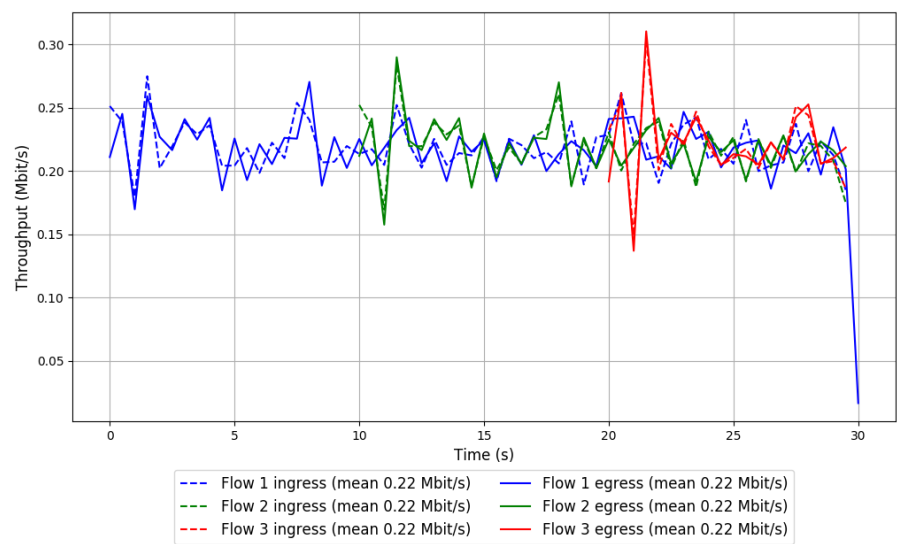


```
Run 4: Statistics of SReAM

Start at: 2018-02-17 03:05:33
End at: 2018-02-17 03:06:03

# Below is generated by plot.py at 2018-02-17 07:50:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.341 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.346 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.345 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.008 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-02-17 03:23:45

End at: 2018-02-17 03:24:15

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.192 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 90.722 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.775 ms

Loss rate: 0.00%

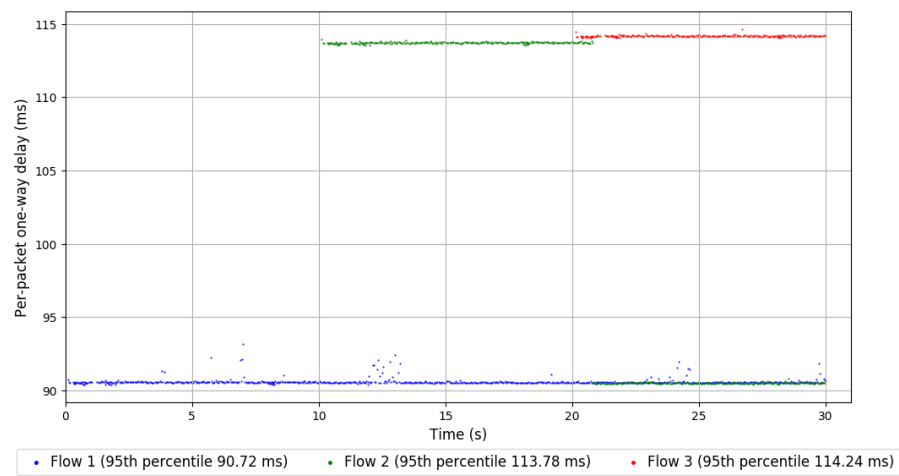
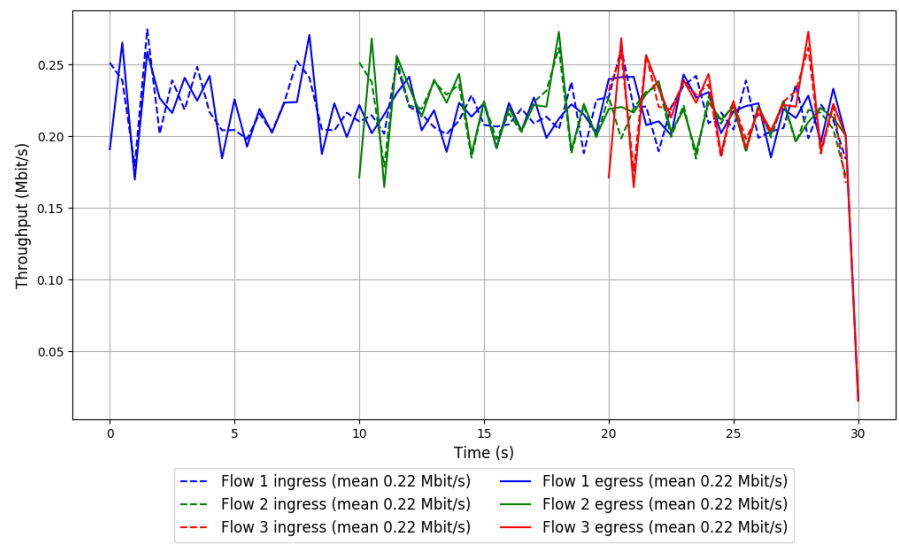
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.236 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-02-17 03:42:18

End at: 2018-02-17 03:42:48

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.400 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.421 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.350 ms

Loss rate: 0.00%

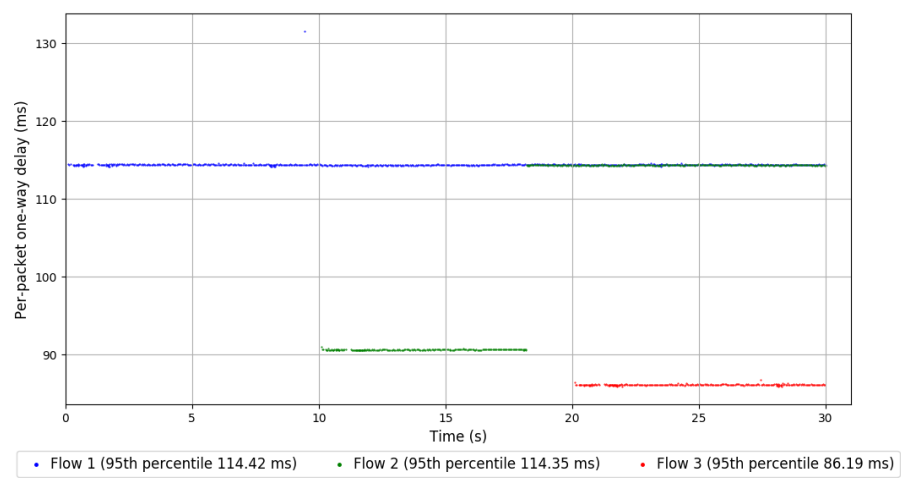
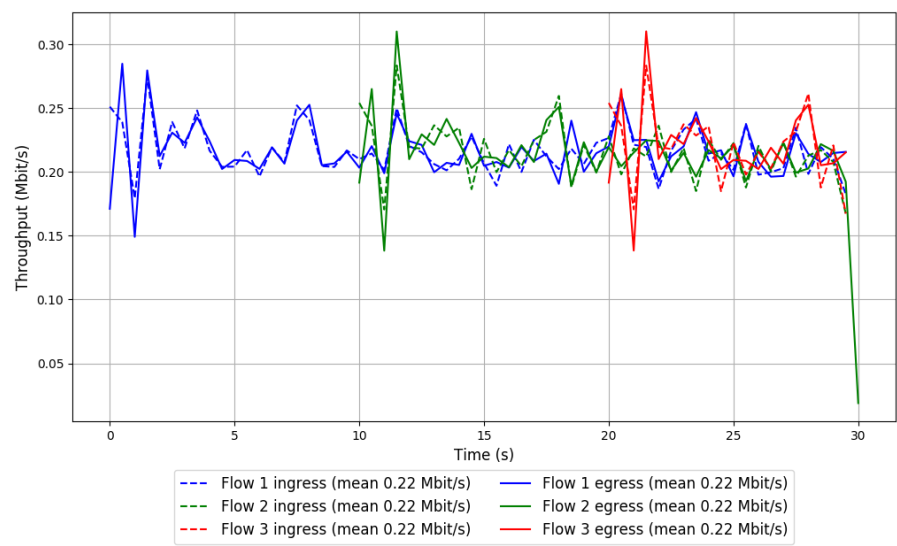
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.188 ms

Loss rate: 0.00%

Run 6: Report of SCReAM — Data Link

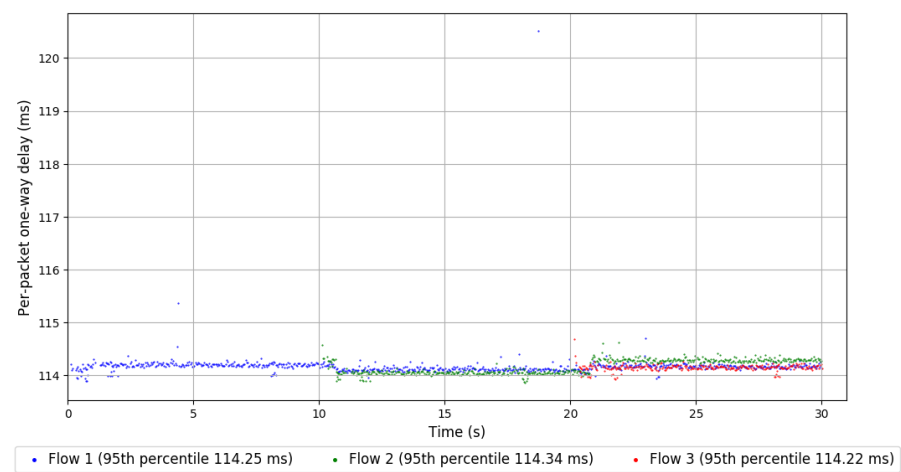
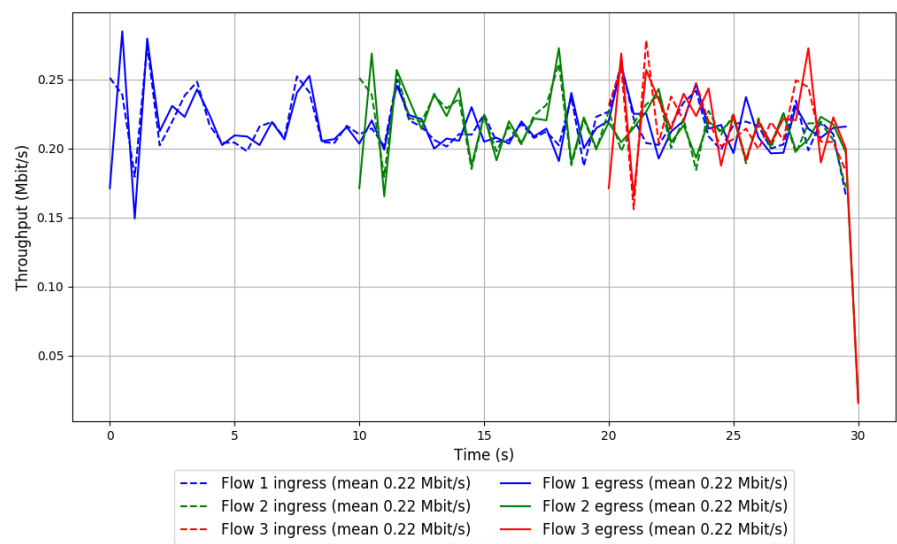


```
Run 7: Statistics of SReAM

Start at: 2018-02-17 04:01:05
End at: 2018-02-17 04:01:35

# Below is generated by plot.py at 2018-02-17 07:50:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 114.310 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.251 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.344 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.223 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-02-17 04:19:56

End at: 2018-02-17 04:20:26

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.258 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.187 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.833 ms

Loss rate: 0.00%

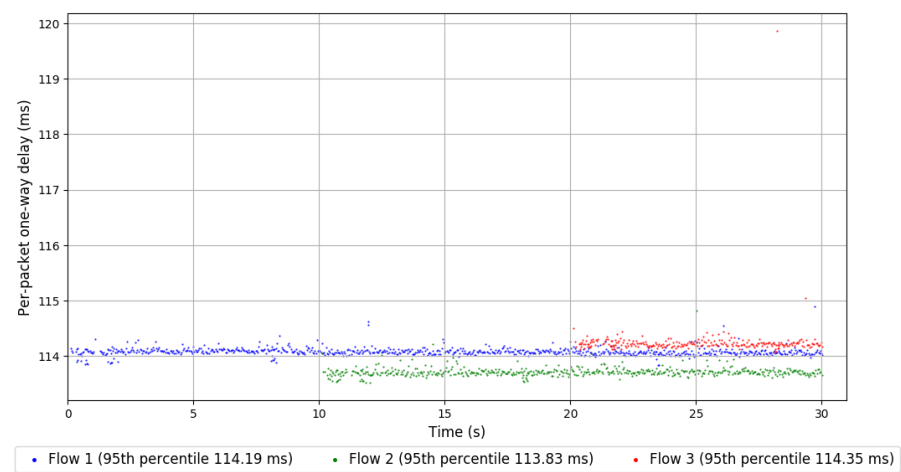
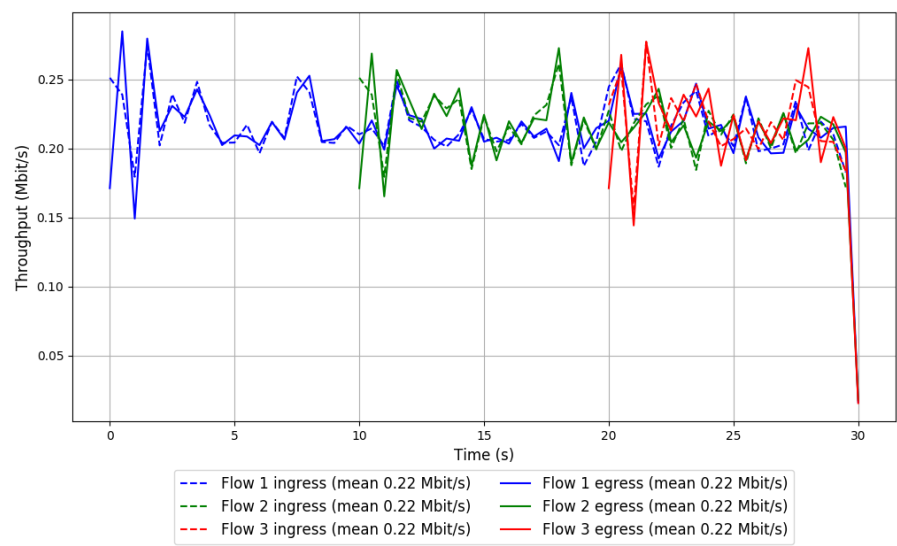
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.349 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-02-17 04:38:56

End at: 2018-02-17 04:39:26

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.948 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.954 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.948 ms

Loss rate: 0.00%

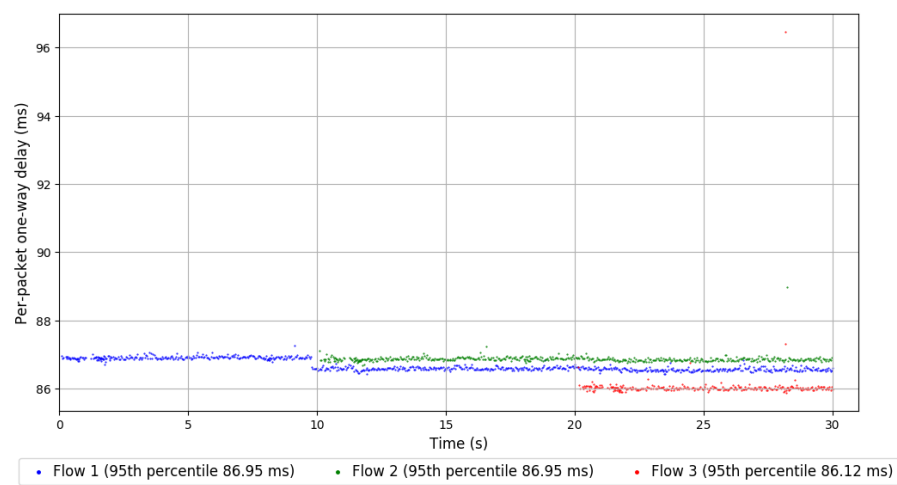
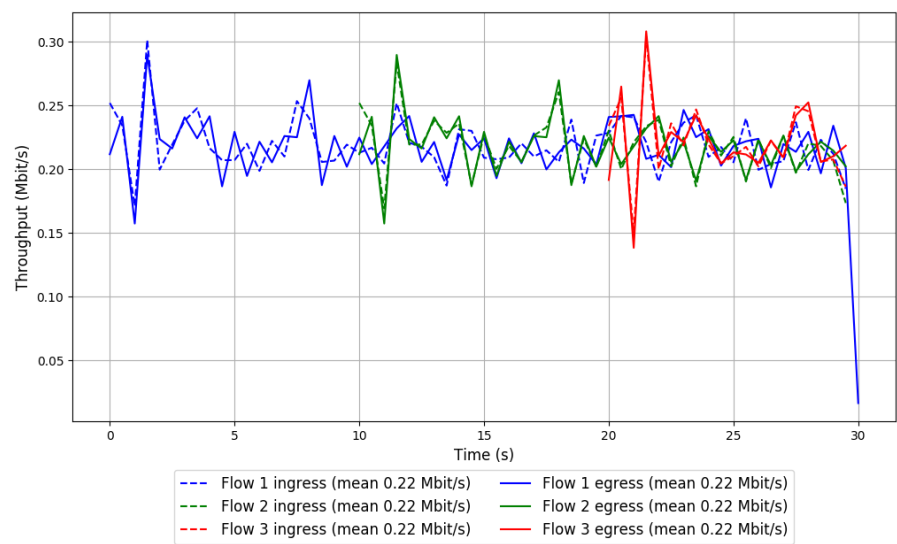
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.119 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-02-17 04:57:38

End at: 2018-02-17 04:58:08

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 90.649 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 90.666 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.624 ms

Loss rate: 0.00%

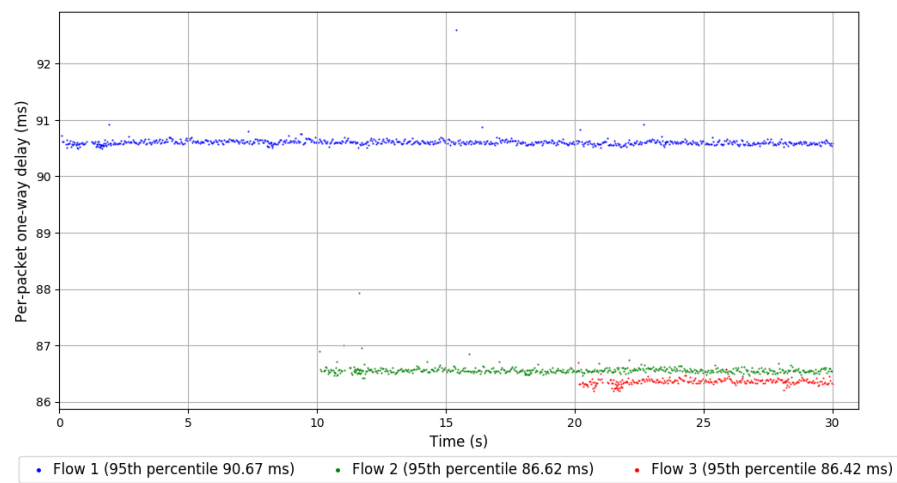
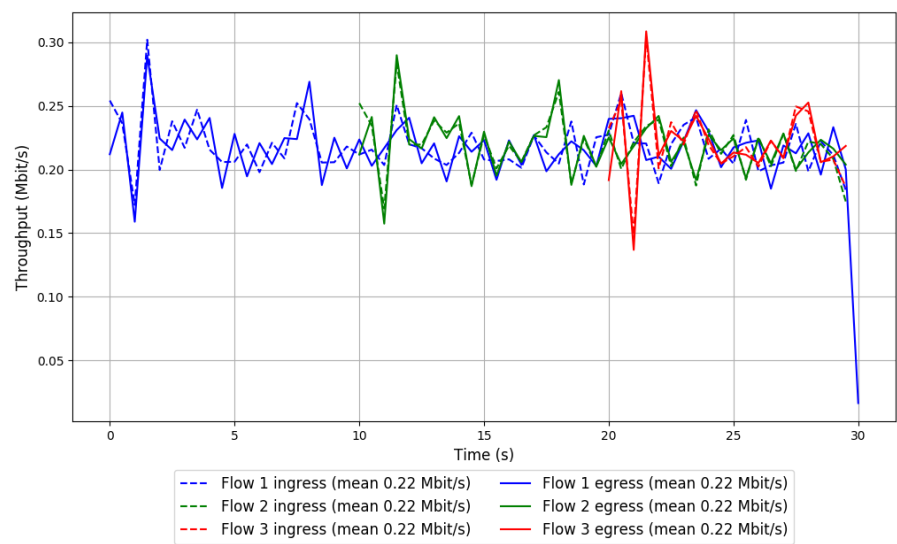
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.425 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

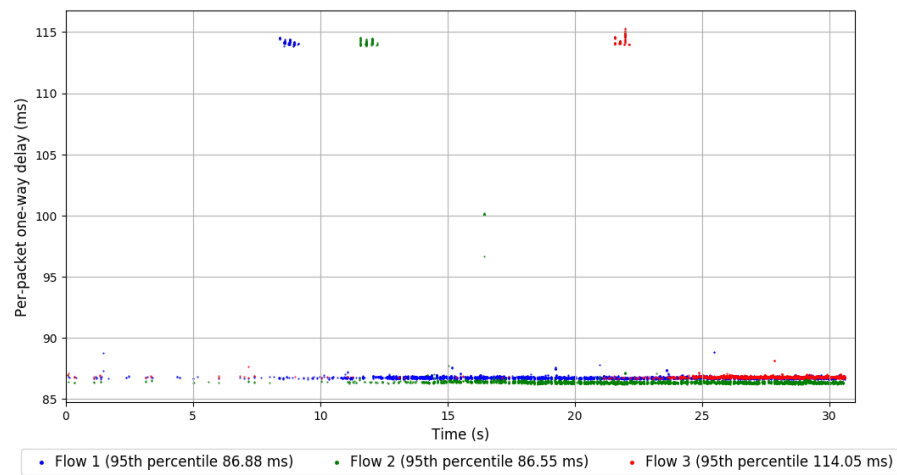
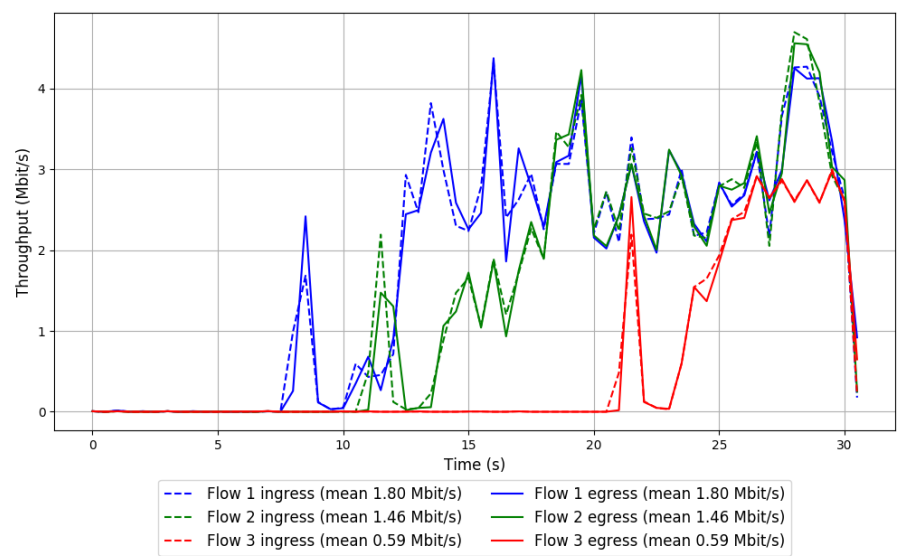


```
Run 1: Statistics of WebRTC media

Start at: 2018-02-17 02:16:08
End at: 2018-02-17 02:16:38

# Below is generated by plot.py at 2018-02-17 07:50:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: 86.903 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 86.882 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 86.553 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 114.049 ms
Loss rate: 0.01%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

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

End at: 2018-02-17 02:34:32

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.00 Mbit/s

95th percentile per-packet one-way delay: 114.119 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 114.149 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 86.366 ms

Loss rate: 0.00%

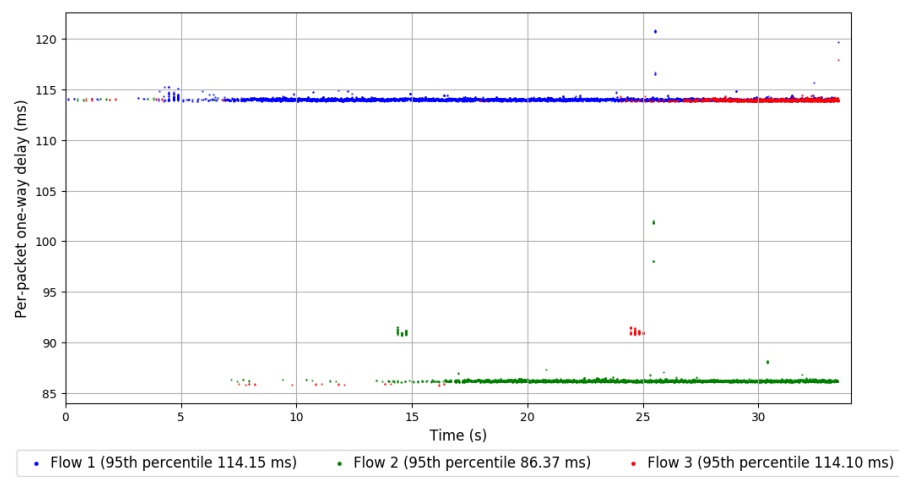
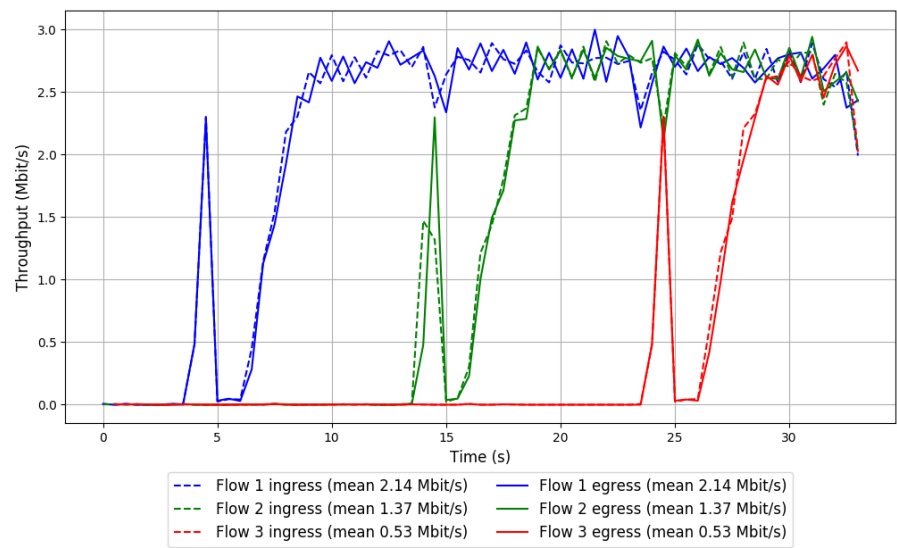
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 114.101 ms

Loss rate: 0.11%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-17 02:52:01

End at: 2018-02-17 02:52:31

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 113.964 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 86.290 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 90.986 ms

Loss rate: 0.00%

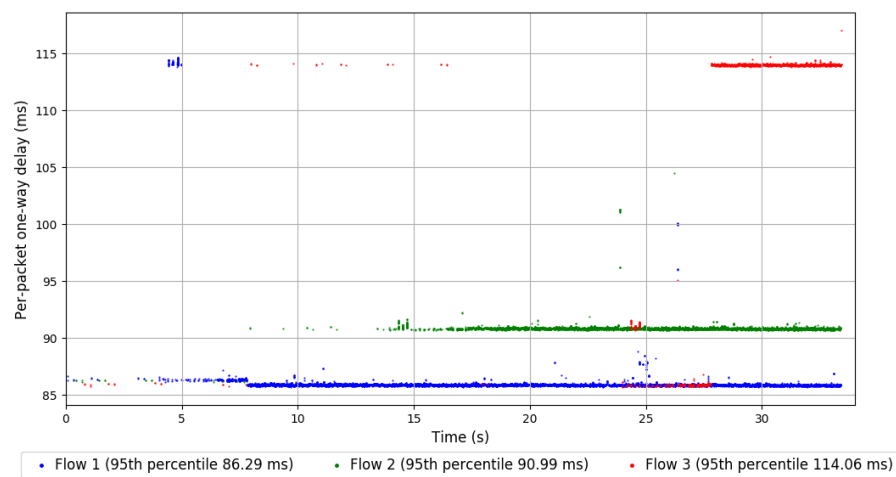
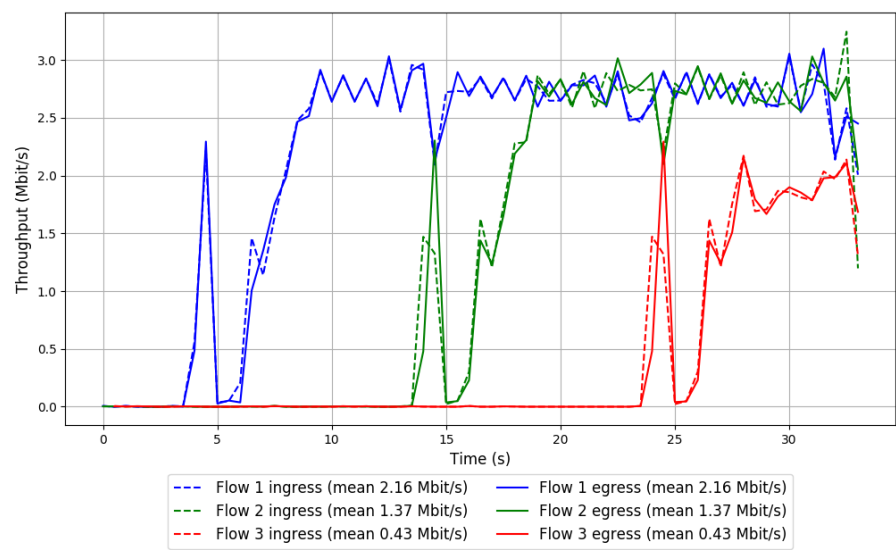
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 114.064 ms

Loss rate: 0.33%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-17 03:10:14

End at: 2018-02-17 03:10:44

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.02 Mbit/s

95th percentile per-packet one-way delay: 113.927 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 113.945 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 86.399 ms

Loss rate: 0.00%

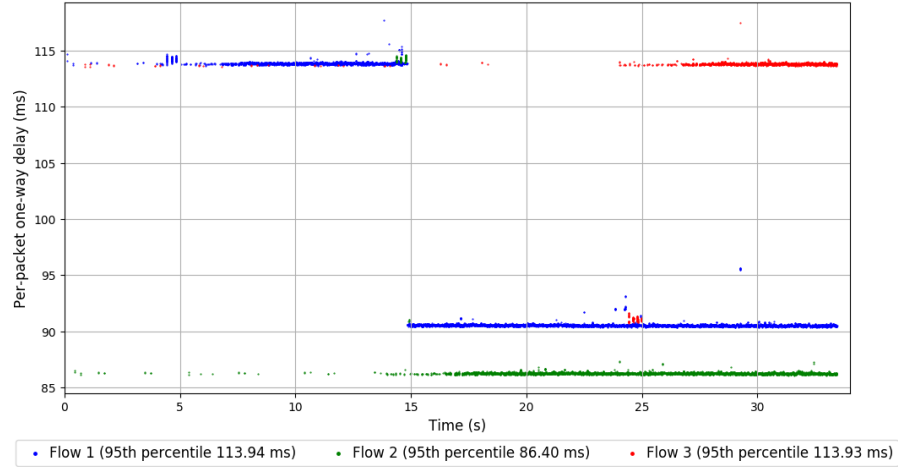
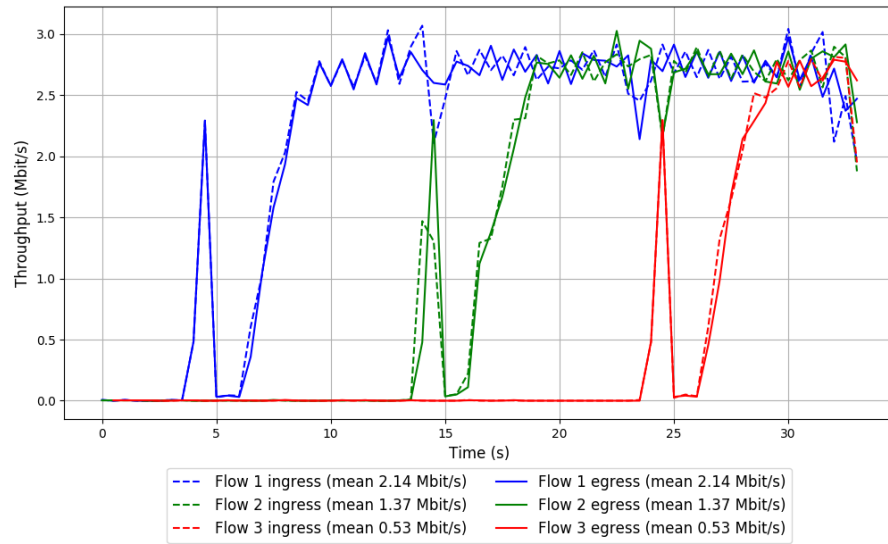
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 113.929 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-17 03:28:28

End at: 2018-02-17 03:28:58

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.00 Mbit/s

95th percentile per-packet one-way delay: 114.343 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 114.354 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 114.129 ms

Loss rate: 0.00%

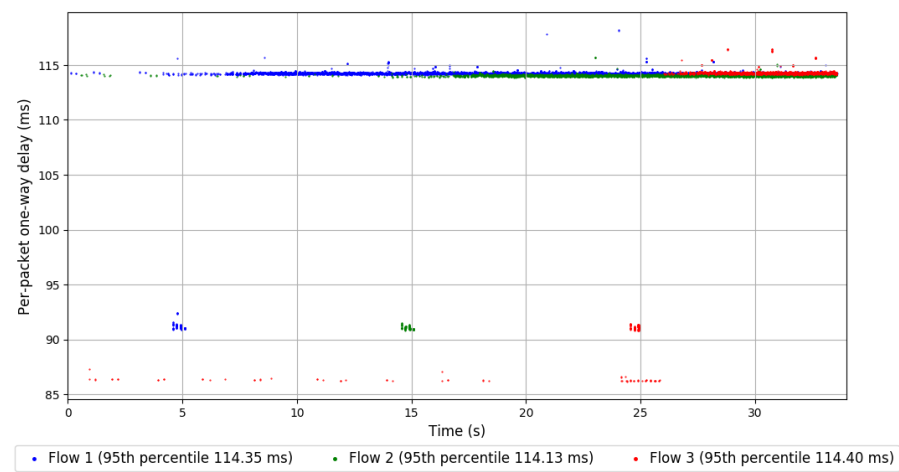
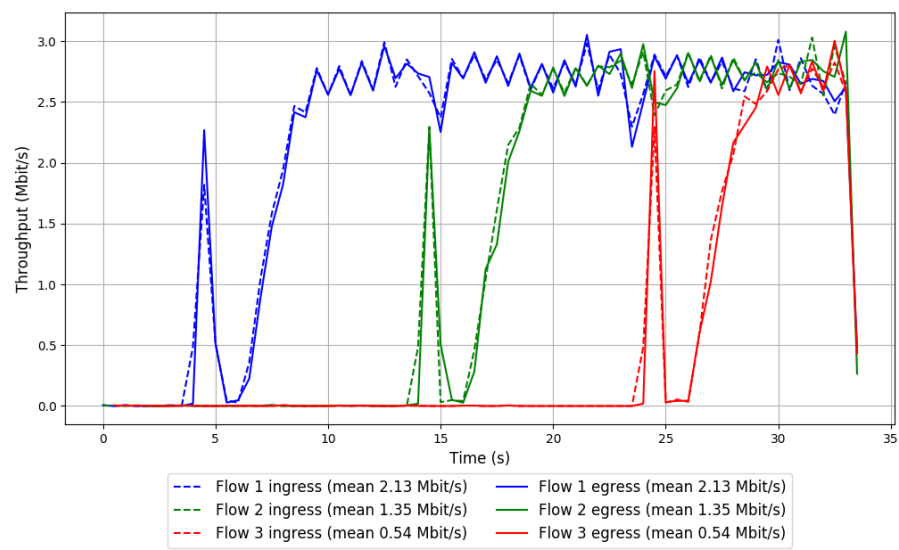
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 114.396 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-17 03:47:05

End at: 2018-02-17 03:47:35

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.91 Mbit/s

95th percentile per-packet one-way delay: 114.519 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 114.569 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 114.317 ms

Loss rate: 0.02%

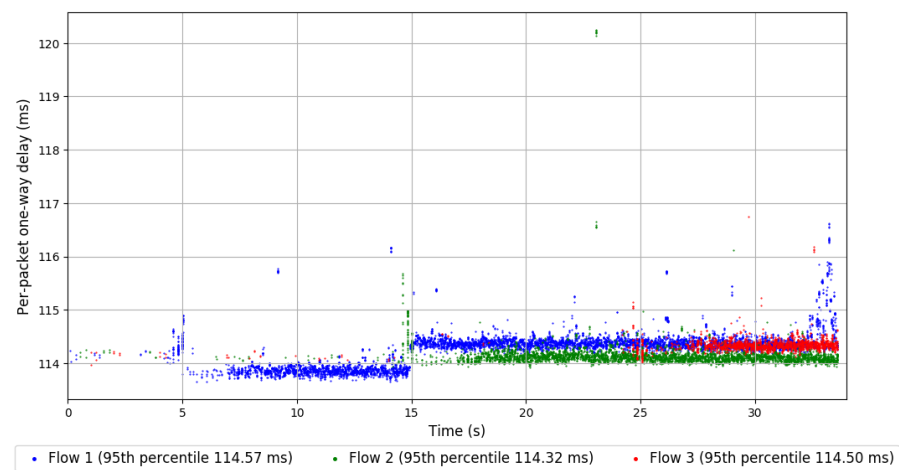
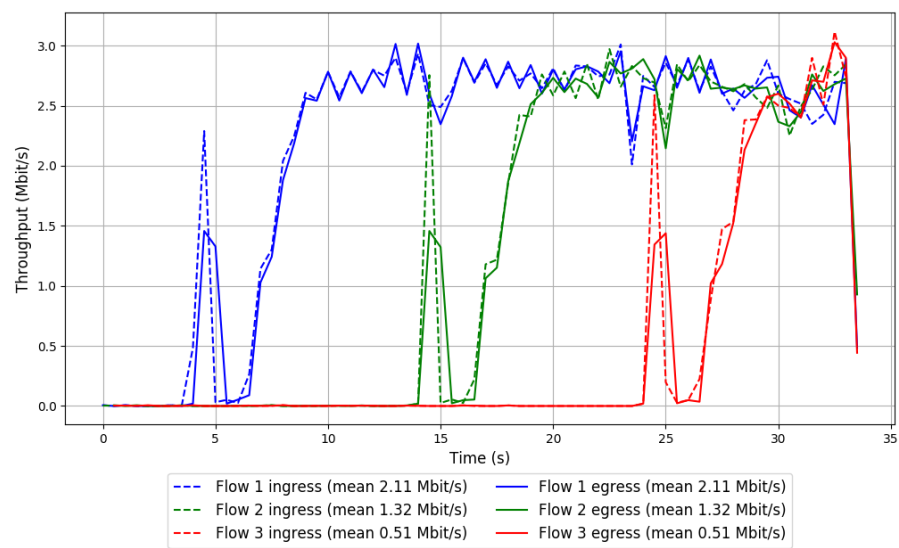
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 114.501 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-17 04:05:38

End at: 2018-02-17 04:06:08

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 114.377 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 114.416 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 113.902 ms

Loss rate: 0.00%

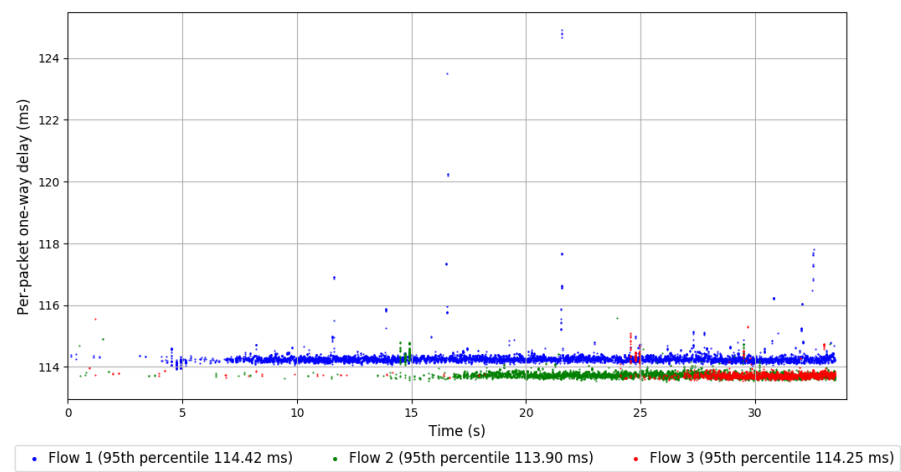
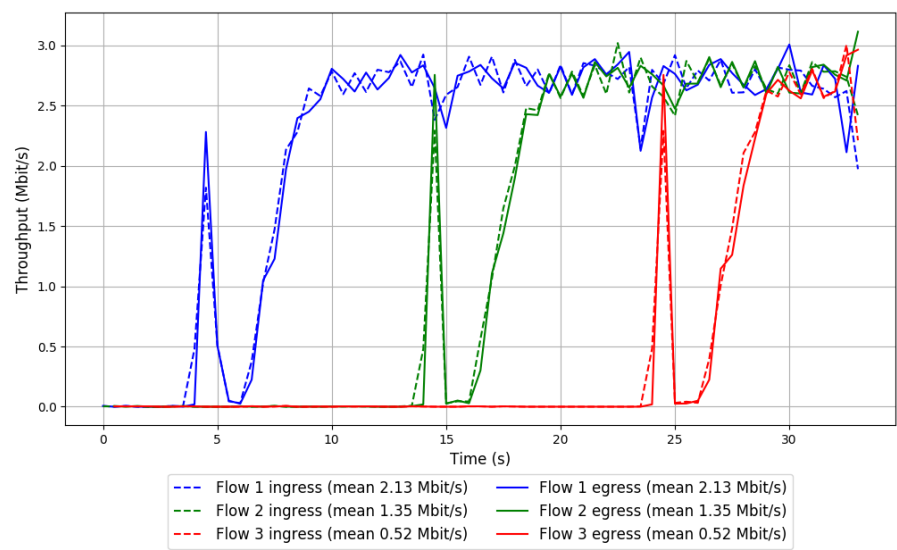
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 114.250 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-17 04:24:43

End at: 2018-02-17 04:25:13

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.96 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 114.331 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 114.200 ms

Loss rate: 0.00%

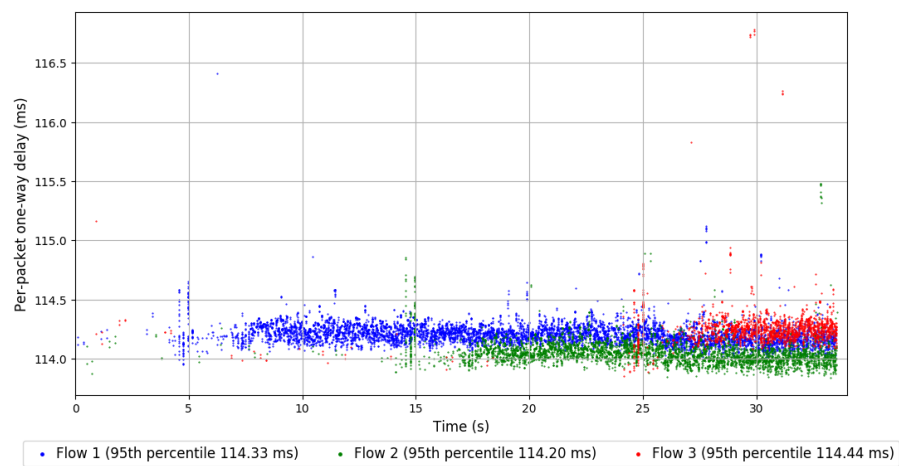
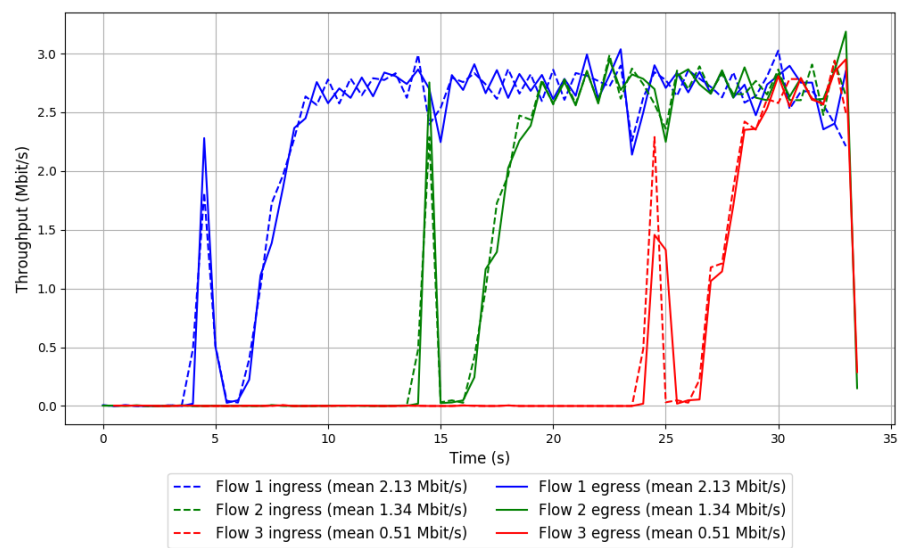
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 114.443 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-17 04:43:42

End at: 2018-02-17 04:44:12

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.85 Mbit/s

95th percentile per-packet one-way delay: 114.252 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 114.292 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 86.591 ms

Loss rate: 0.00%

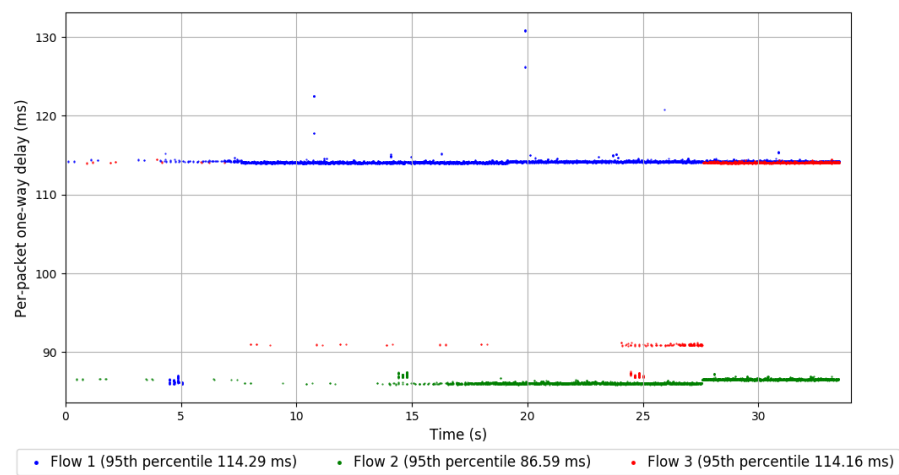
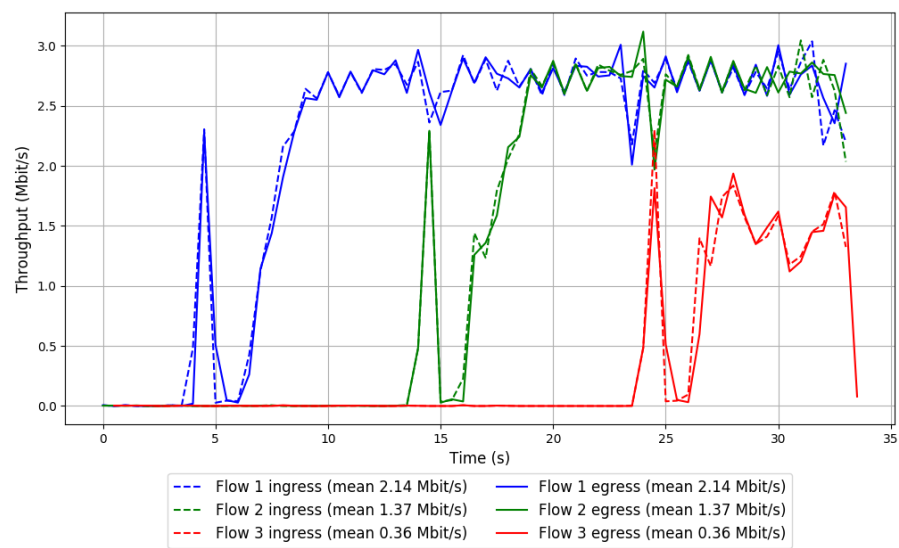
-- Flow 3:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 114.155 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-17 05:02:19

End at: 2018-02-17 05:02:49

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.05 Mbit/s

95th percentile per-packet one-way delay: 113.991 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 114.091 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 86.484 ms

Loss rate: 0.00%

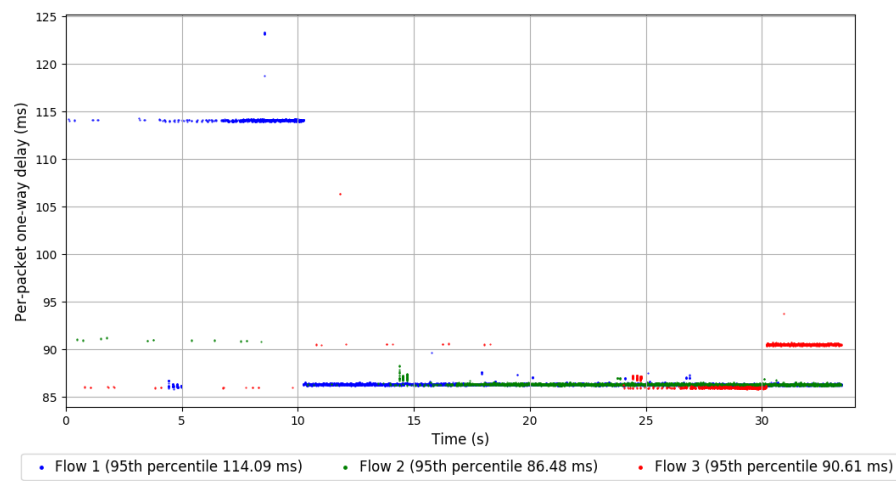
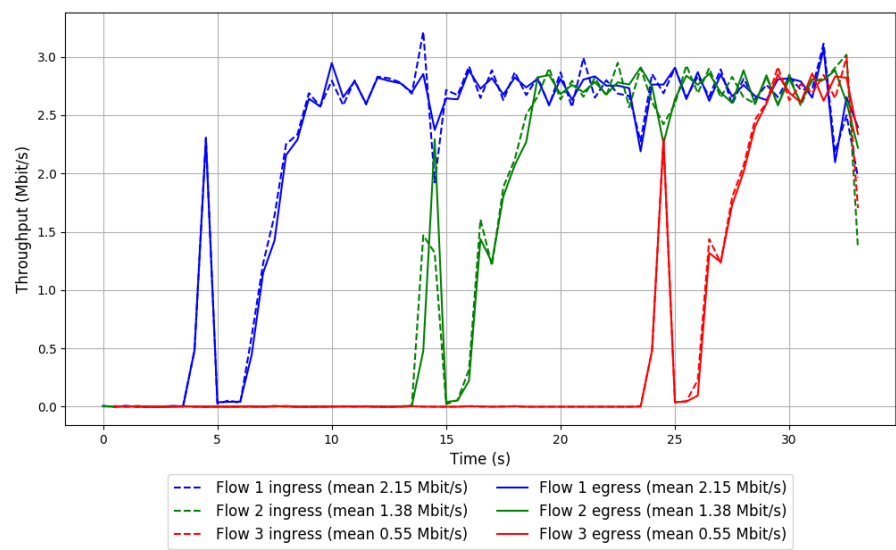
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 90.606 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

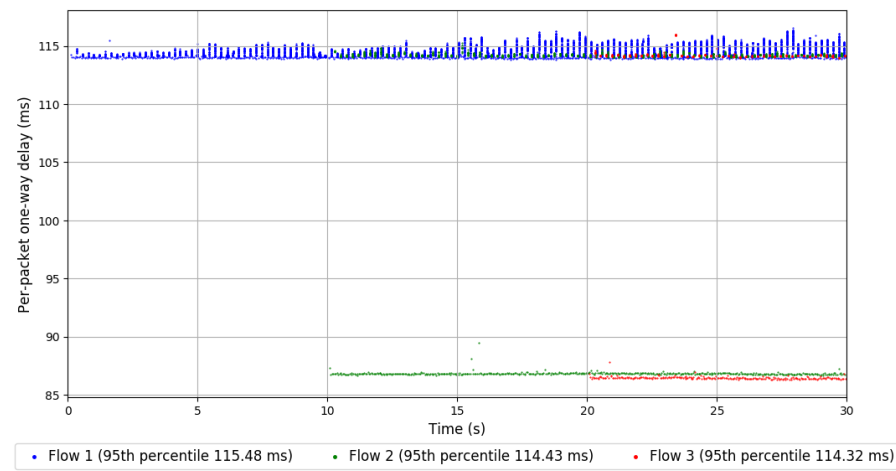
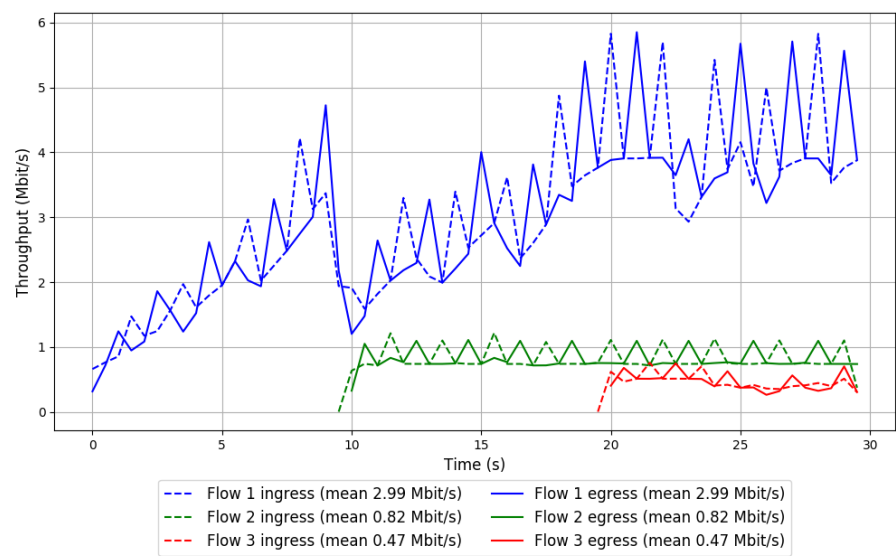


```
Run 1: Statistics of Sprout

Start at: 2018-02-17 02:10:50
End at: 2018-02-17 02:11:20

# Below is generated by plot.py at 2018-02-17 07:50:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.70 Mbit/s
95th percentile per-packet one-way delay: 115.420 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.99 Mbit/s
95th percentile per-packet one-way delay: 115.481 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.82 Mbit/s
95th percentile per-packet one-way delay: 114.429 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 114.316 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-17 02:28:43

End at: 2018-02-17 02:29:13

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.47 Mbit/s

95th percentile per-packet one-way delay: 114.236 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.81 Mbit/s

95th percentile per-packet one-way delay: 114.382 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 91.717 ms

Loss rate: 0.00%

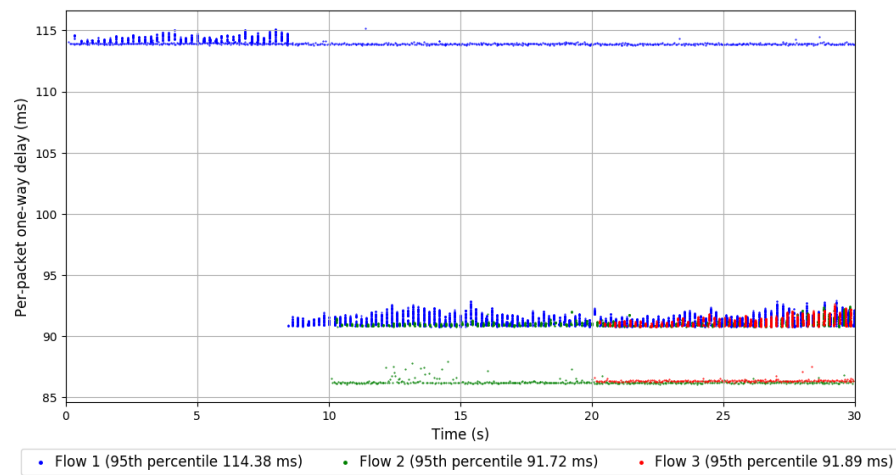
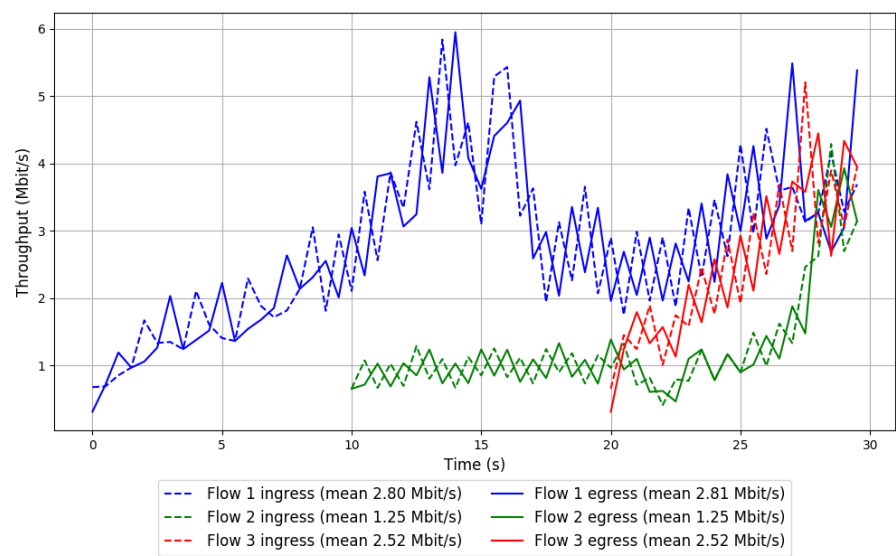
-- Flow 3:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 91.887 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-17 02:46:45

End at: 2018-02-17 02:47:15

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 114.218 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.24 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.83 Mbit/s

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

Loss rate: 0.00%

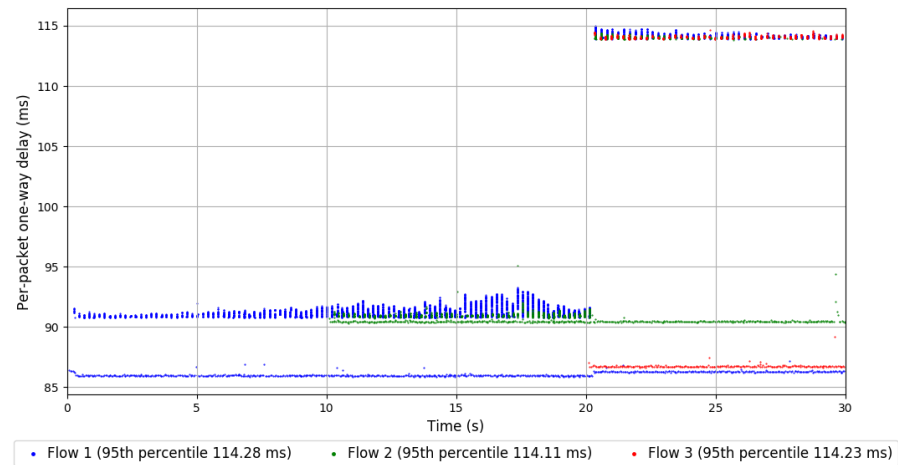
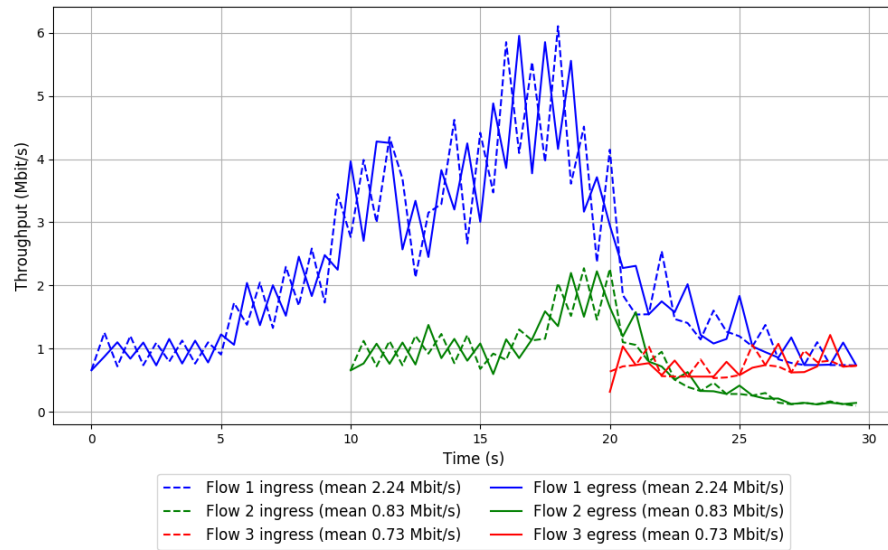
-- Flow 3:

Average throughput: 0.73 Mbit/s

95th percentile per-packet one-way delay: 114.229 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-17 03:04:50

End at: 2018-02-17 03:05:20

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.62 Mbit/s

95th percentile per-packet one-way delay: 114.819 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.86 Mbit/s

95th percentile per-packet one-way delay: 114.576 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 115.013 ms

Loss rate: 0.00%

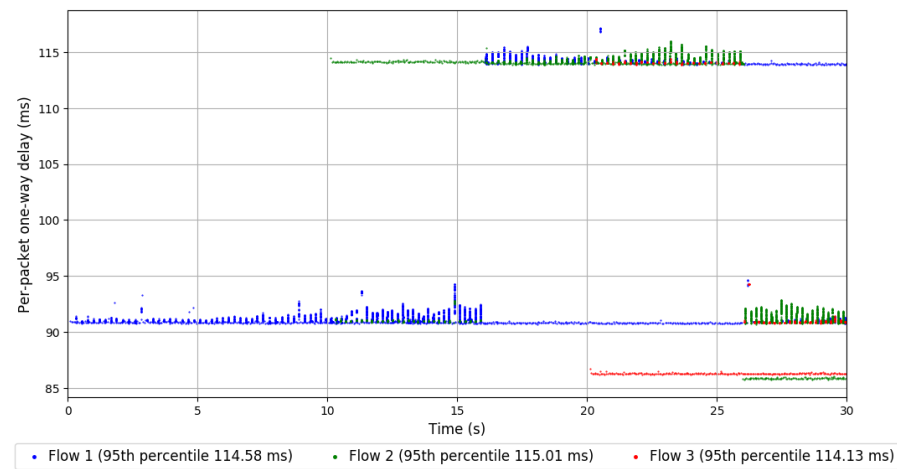
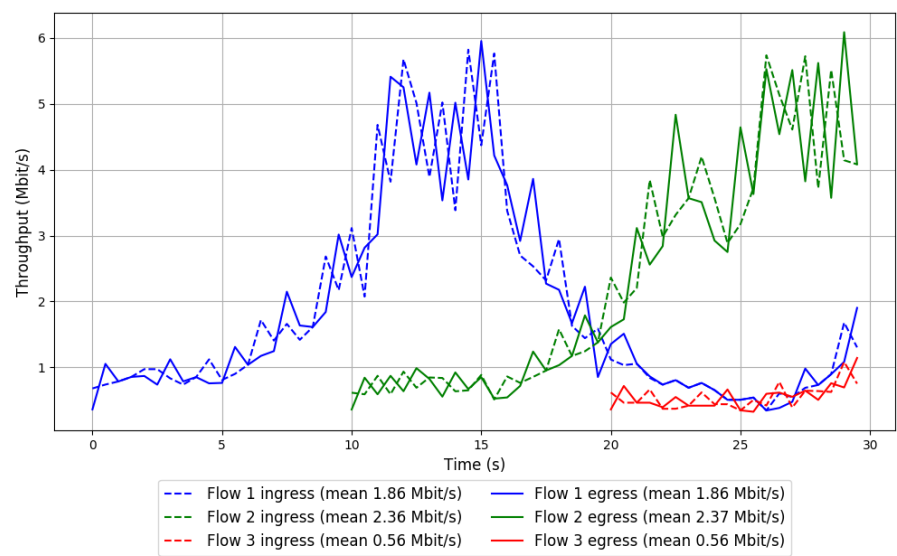
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 114.126 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-17 03:23:00

End at: 2018-02-17 03:23:30

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.44 Mbit/s

95th percentile per-packet one-way delay: 115.026 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 115.182 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.10 Mbit/s

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

Loss rate: 0.40%

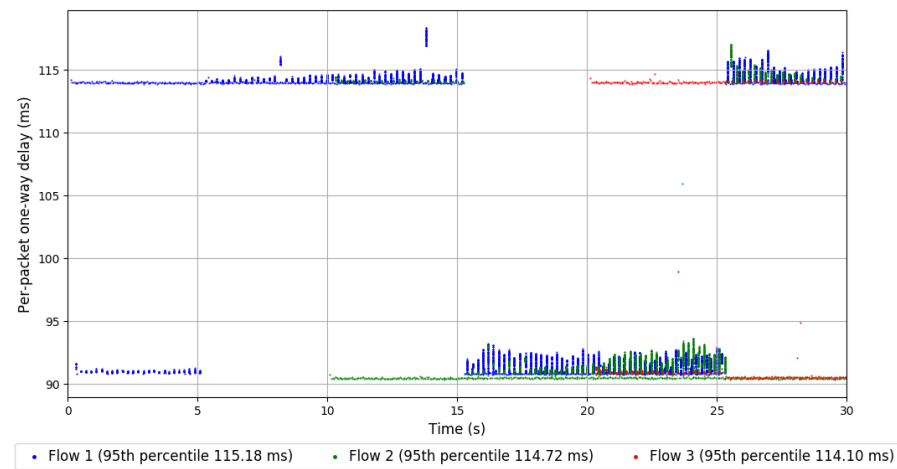
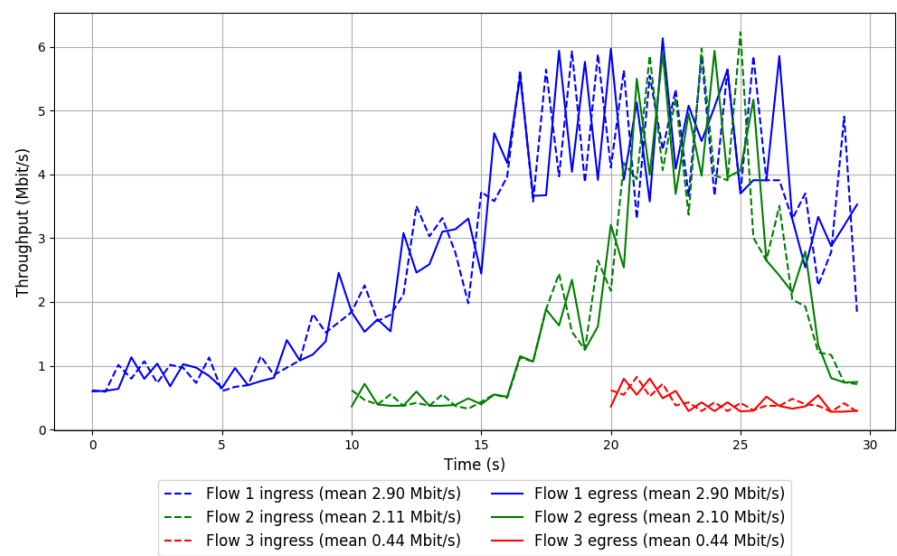
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.096 ms

Loss rate: 1.63%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-17 03:41:33

End at: 2018-02-17 03:42:03

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.04 Mbit/s

95th percentile per-packet one-way delay: 115.774 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 115.539 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.01 Mbit/s

95th percentile per-packet one-way delay: 116.122 ms

Loss rate: 0.00%

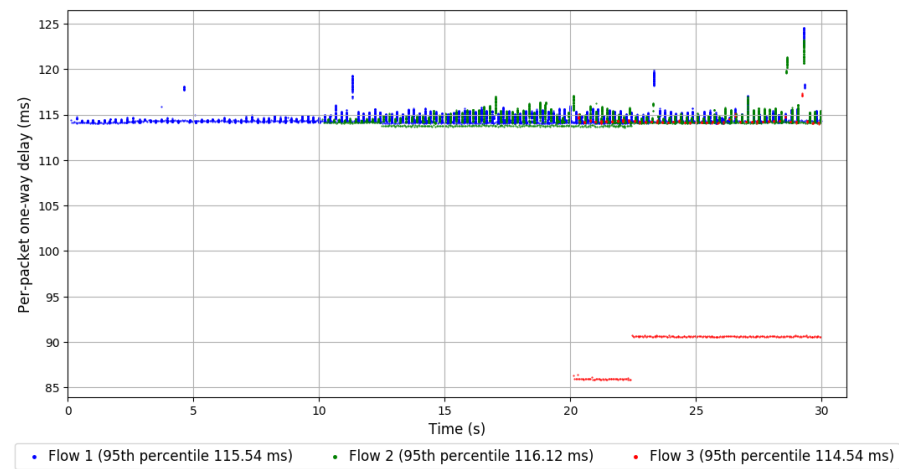
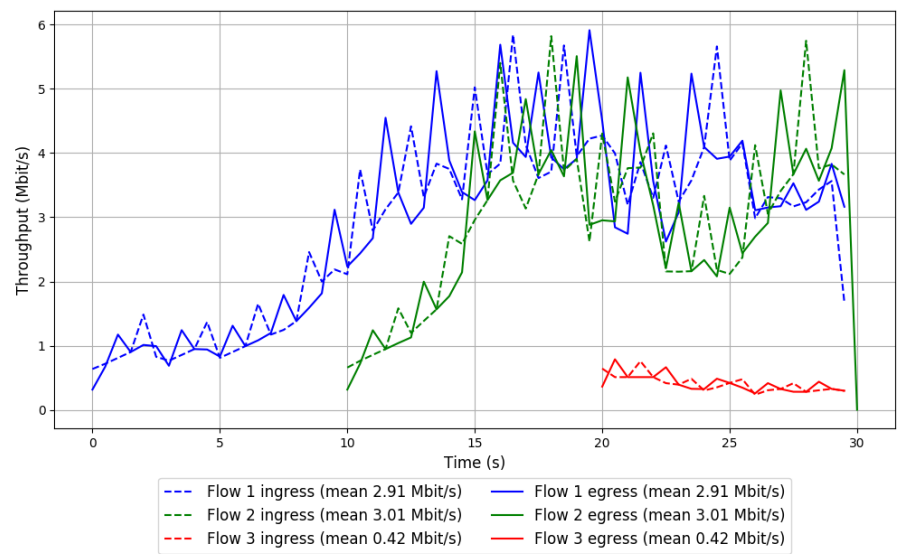
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 114.540 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-17 04:00:20

End at: 2018-02-17 04:00:50

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.55 Mbit/s

95th percentile per-packet one-way delay: 115.529 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.18 Mbit/s

95th percentile per-packet one-way delay: 115.560 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 115.447 ms

Loss rate: 0.00%

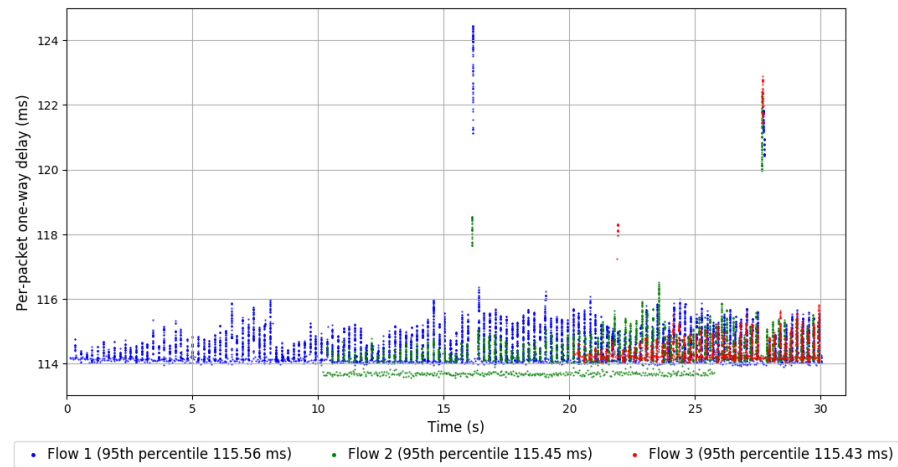
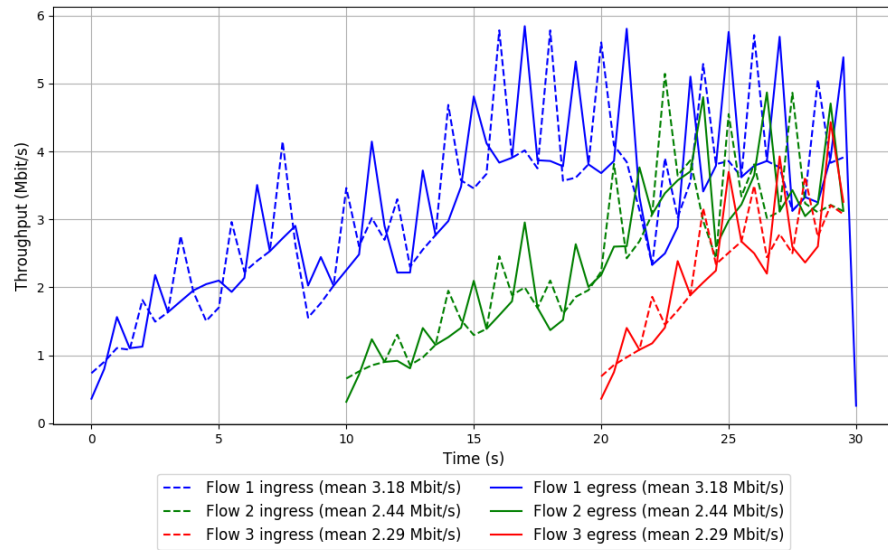
-- Flow 3:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 115.434 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-17 04:19:11

End at: 2018-02-17 04:19:41

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.04 Mbit/s

95th percentile per-packet one-way delay: 115.641 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 3.49 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.18 Mbit/s

95th percentile per-packet one-way delay: 115.807 ms

Loss rate: 0.00%

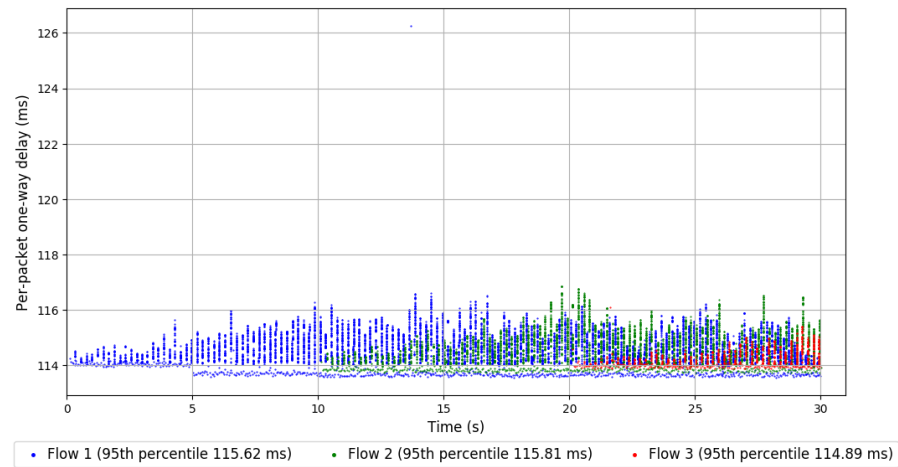
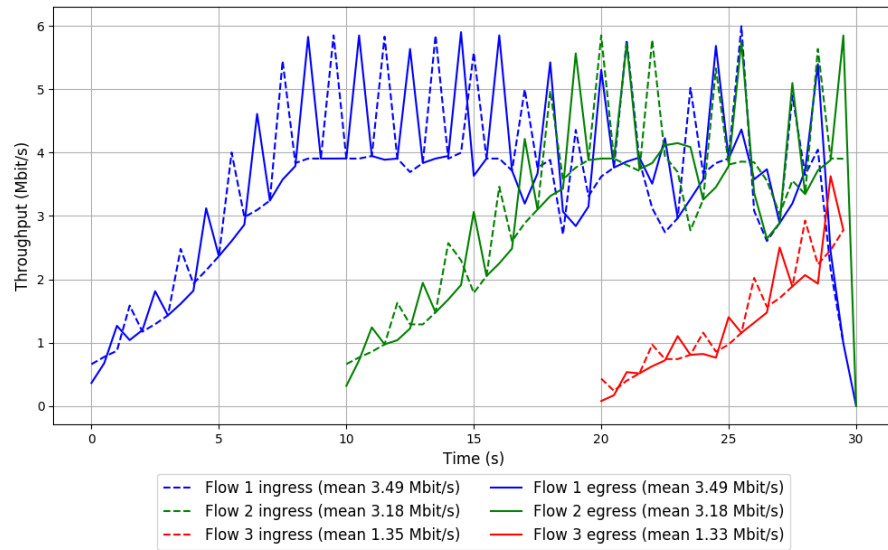
-- Flow 3:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 114.889 ms

Loss rate: 1.07%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-17 04:38:11

End at: 2018-02-17 04:38:41

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.07 Mbit/s

95th percentile per-packet one-way delay: 87.803 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.56 Mbit/s

95th percentile per-packet one-way delay: 113.956 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.13 Mbit/s

95th percentile per-packet one-way delay: 87.416 ms

Loss rate: 0.00%

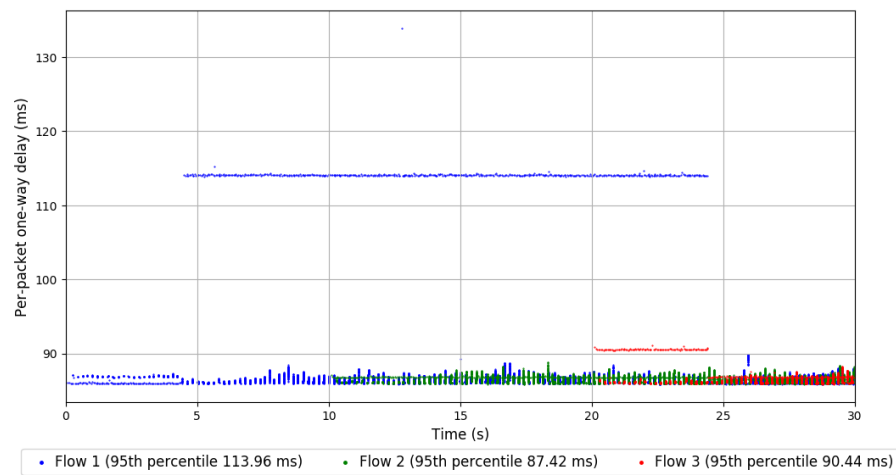
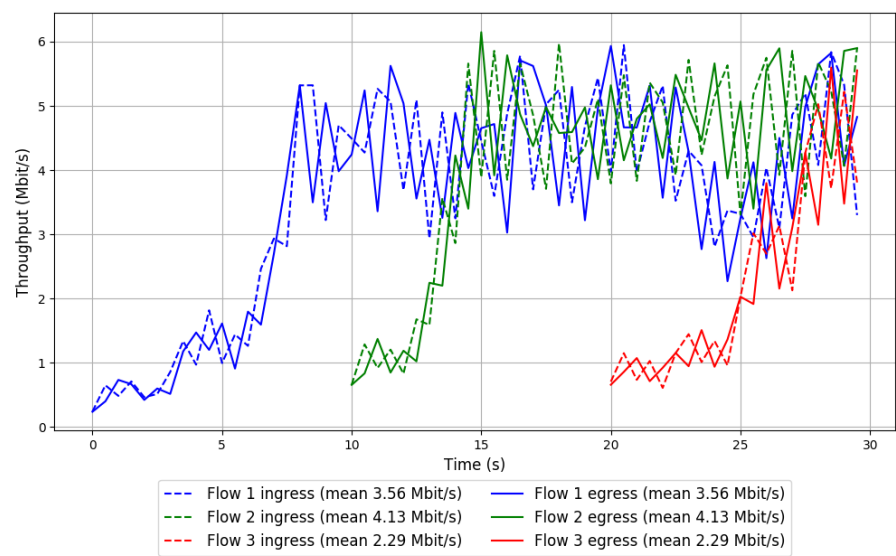
-- Flow 3:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 90.437 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-17 04:56:54

End at: 2018-02-17 04:57:24

Below is generated by plot.py at 2018-02-17 07:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.65 Mbit/s

95th percentile per-packet one-way delay: 90.525 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 113.912 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 88.045 ms

Loss rate: 0.00%

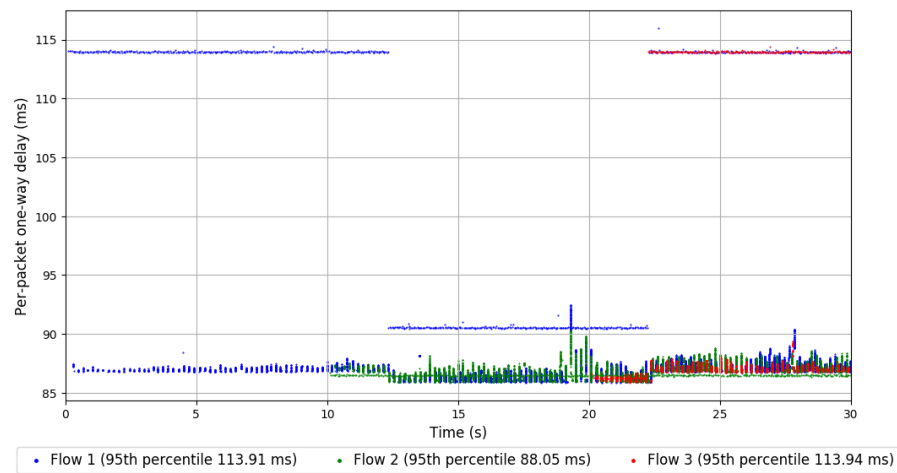
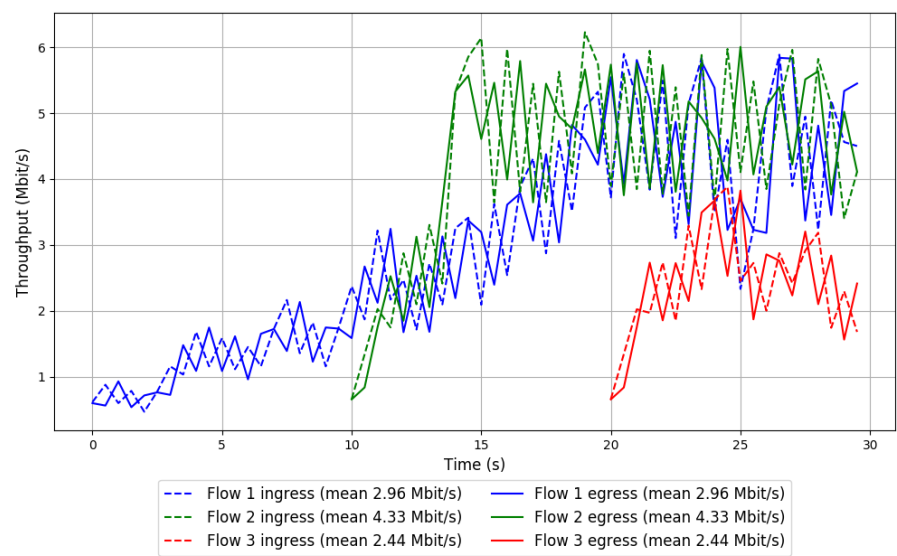
-- Flow 3:

Average throughput: 2.44 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

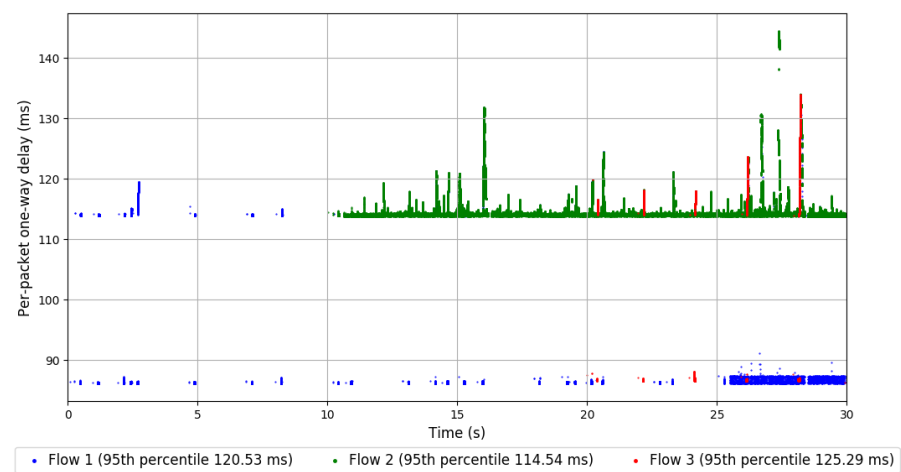
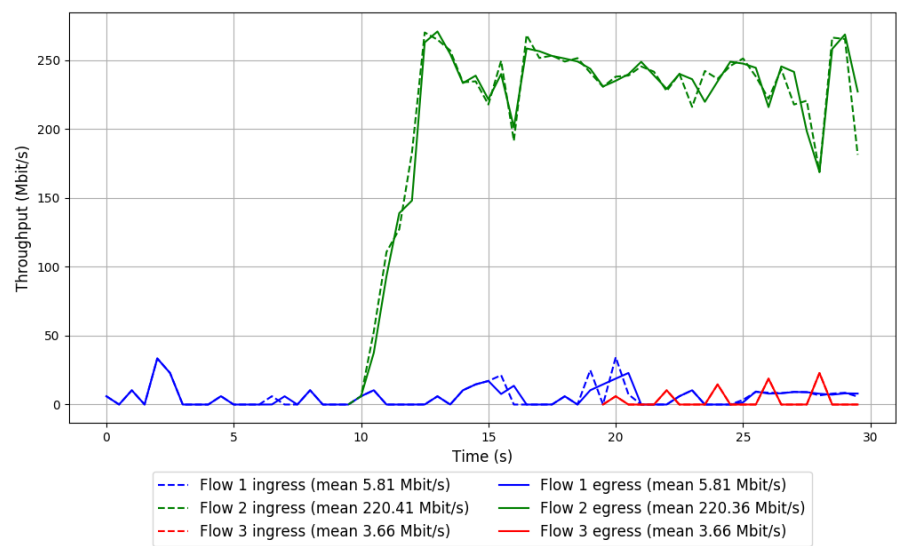


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-17 02:08:58
End at: 2018-02-17 02:09:28

# Below is generated by plot.py at 2018-02-17 07:54:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 154.09 Mbit/s
95th percentile per-packet one-way delay: 114.838 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 5.81 Mbit/s
95th percentile per-packet one-way delay: 120.535 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 220.36 Mbit/s
95th percentile per-packet one-way delay: 114.539 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 3.66 Mbit/s
95th percentile per-packet one-way delay: 125.289 ms
Loss rate: 0.03%
```


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

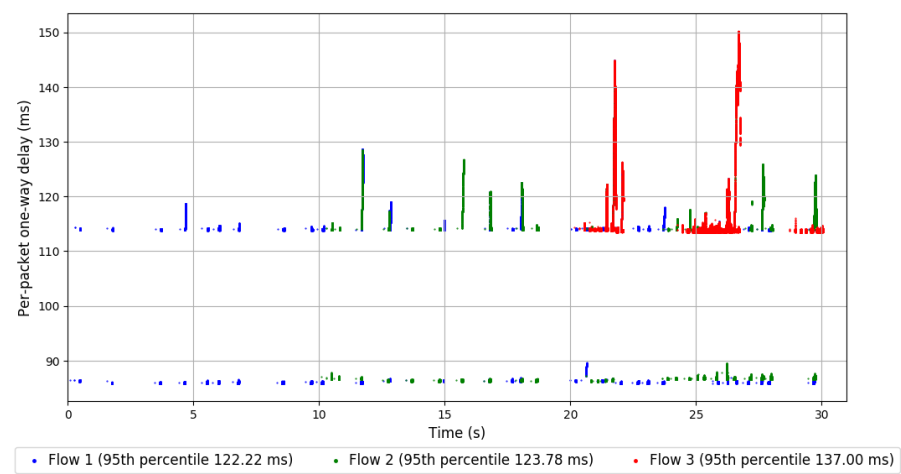
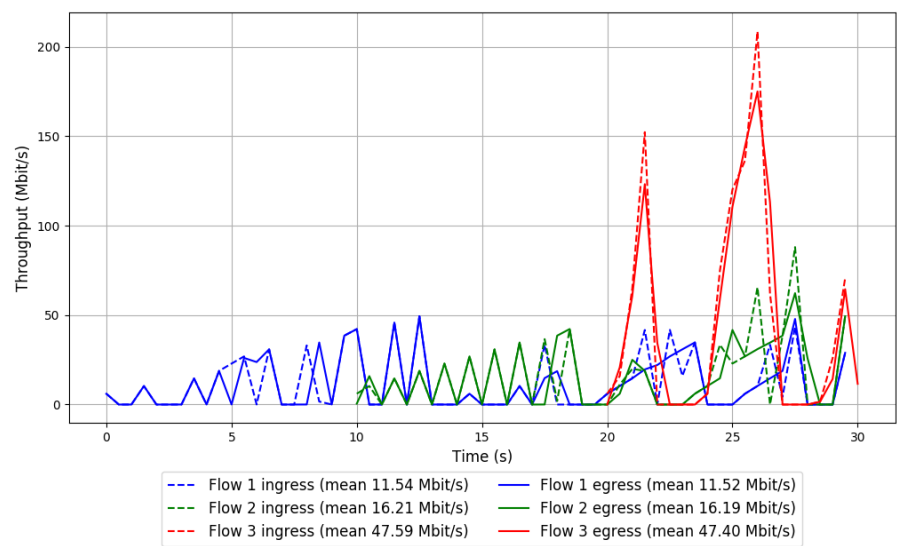


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-17 02:27:04
End at: 2018-02-17 02:27:34

# Below is generated by plot.py at 2018-02-17 07:54:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.72 Mbit/s
95th percentile per-packet one-way delay: 125.334 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 11.52 Mbit/s
95th percentile per-packet one-way delay: 122.225 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 16.19 Mbit/s
95th percentile per-packet one-way delay: 123.783 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 47.40 Mbit/s
95th percentile per-packet one-way delay: 136.998 ms
Loss rate: 0.68%
```

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

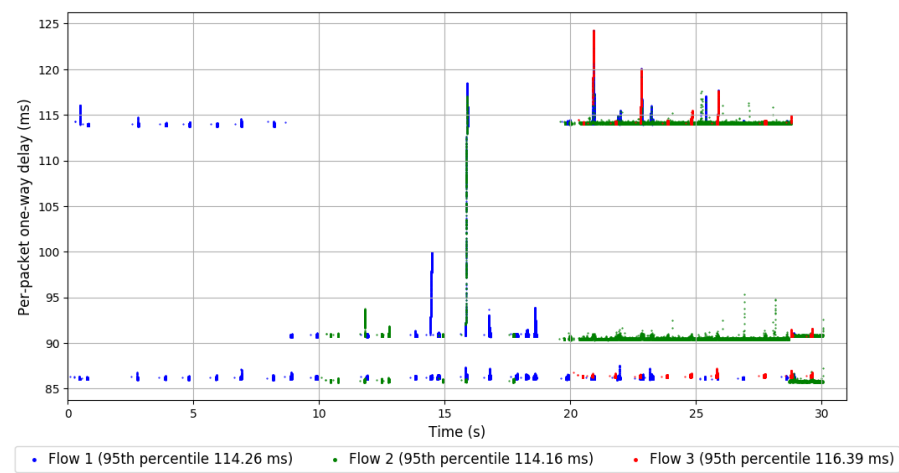
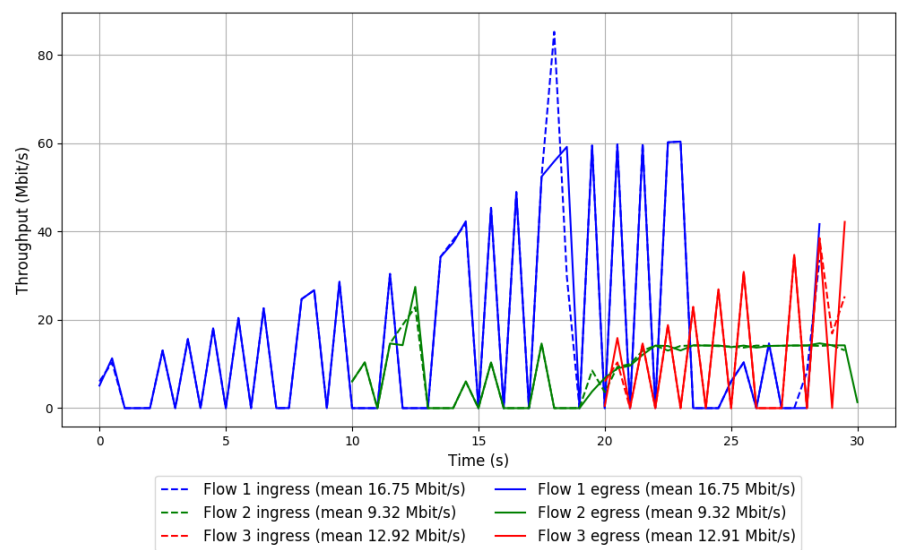


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-17 02:45:07
End at: 2018-02-17 02:45:37

# Below is generated by plot.py at 2018-02-17 07:54:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 26.42 Mbit/s
95th percentile per-packet one-way delay: 114.249 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 16.75 Mbit/s
95th percentile per-packet one-way delay: 114.259 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 9.32 Mbit/s
95th percentile per-packet one-way delay: 114.155 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 12.91 Mbit/s
95th percentile per-packet one-way delay: 116.394 ms
Loss rate: 0.00%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-02-17 03:03:00

End at: 2018-02-17 03:03:30

Below is generated by plot.py at 2018-02-17 07:54:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.48 Mbit/s

95th percentile per-packet one-way delay: 117.831 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.17 Mbit/s

95th percentile per-packet one-way delay: 119.470 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 175.62 Mbit/s

95th percentile per-packet one-way delay: 117.365 ms

Loss rate: 0.00%

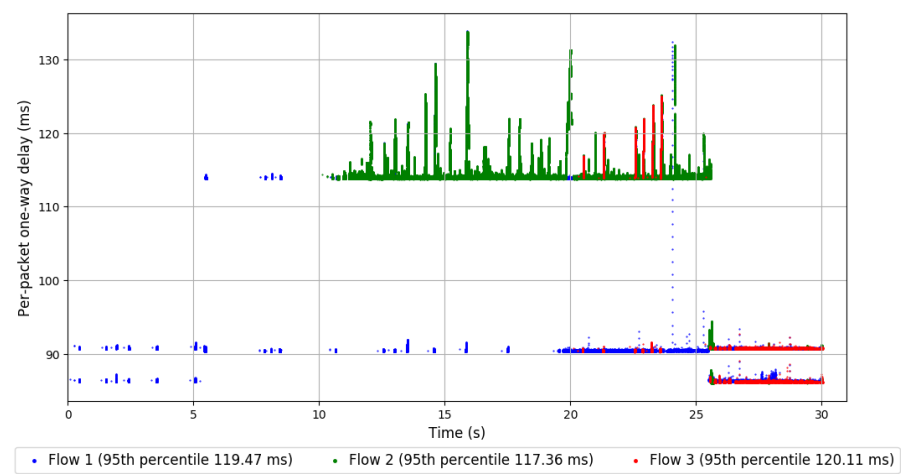
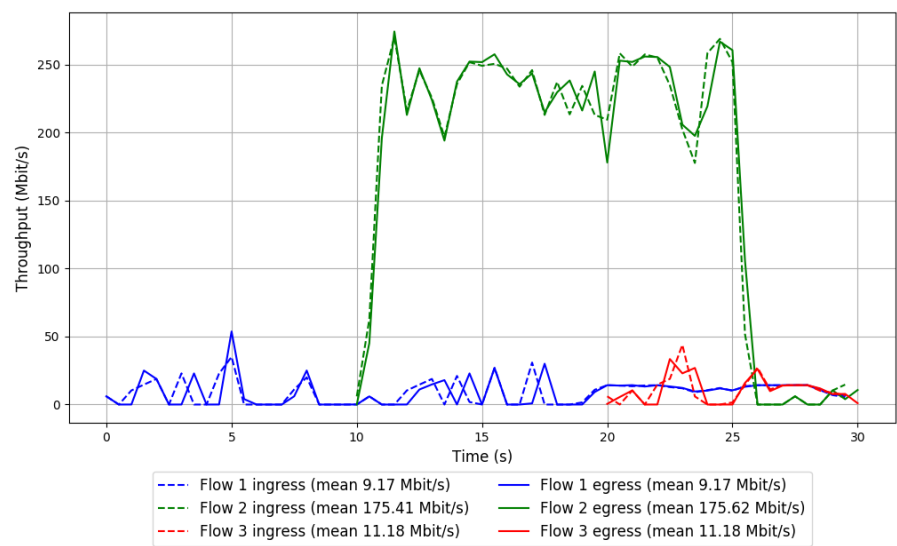
-- Flow 3:

Average throughput: 11.18 Mbit/s

95th percentile per-packet one-way delay: 120.114 ms

Loss rate: 0.02%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-17 03:21:16

End at: 2018-02-17 03:21:46

Below is generated by plot.py at 2018-02-17 07:54:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.90 Mbit/s

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

Loss rate: 0.27%

-- Flow 1:

Average throughput: 19.67 Mbit/s

95th percentile per-packet one-way delay: 113.791 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 21.41 Mbit/s

95th percentile per-packet one-way delay: 115.061 ms

Loss rate: 0.71%

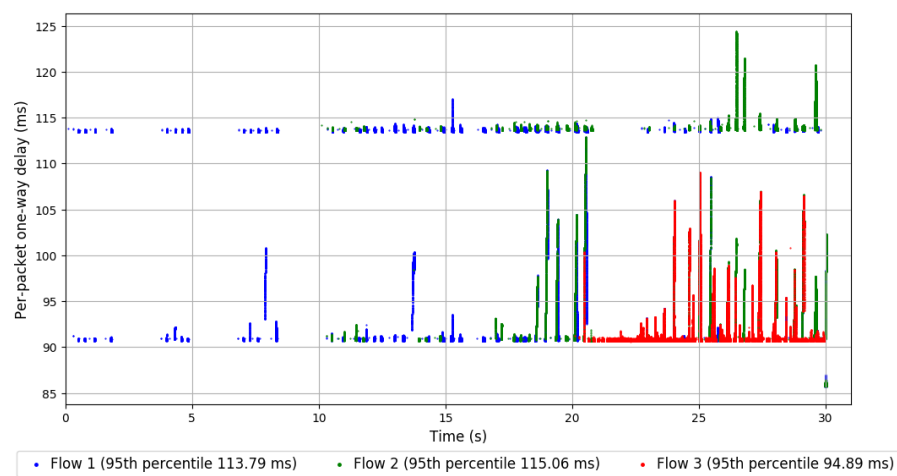
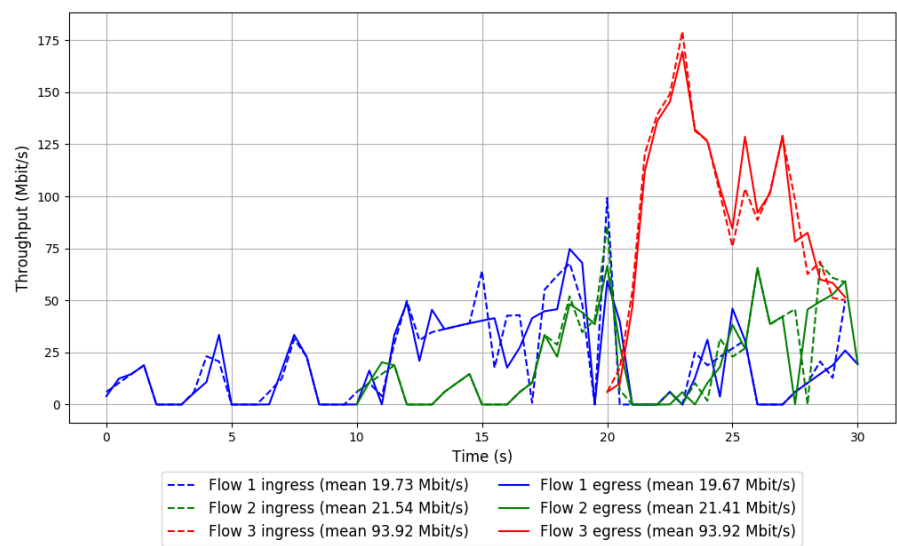
-- Flow 3:

Average throughput: 93.92 Mbit/s

95th percentile per-packet one-way delay: 94.887 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-17 03:39:40

End at: 2018-02-17 03:40:10

Below is generated by plot.py at 2018-02-17 07:54:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 147.93 Mbit/s

95th percentile per-packet one-way delay: 116.374 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 126.95 Mbit/s

95th percentile per-packet one-way delay: 115.588 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 19.99 Mbit/s

95th percentile per-packet one-way delay: 116.945 ms

Loss rate: 1.13%

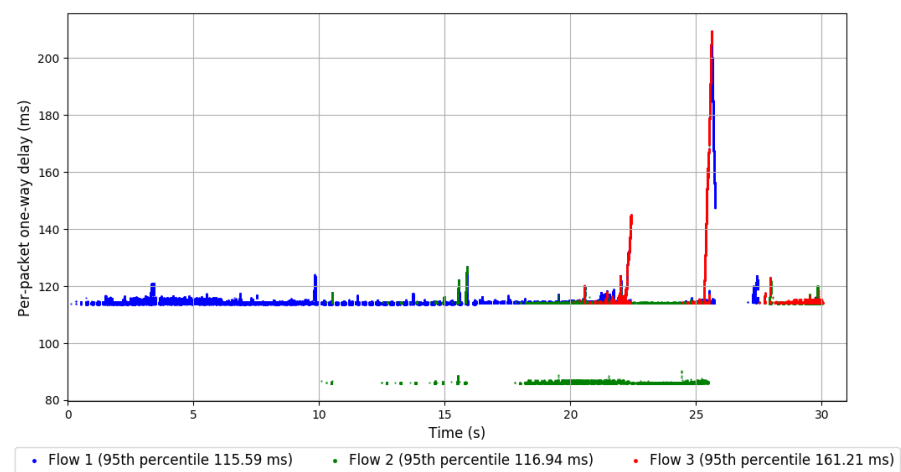
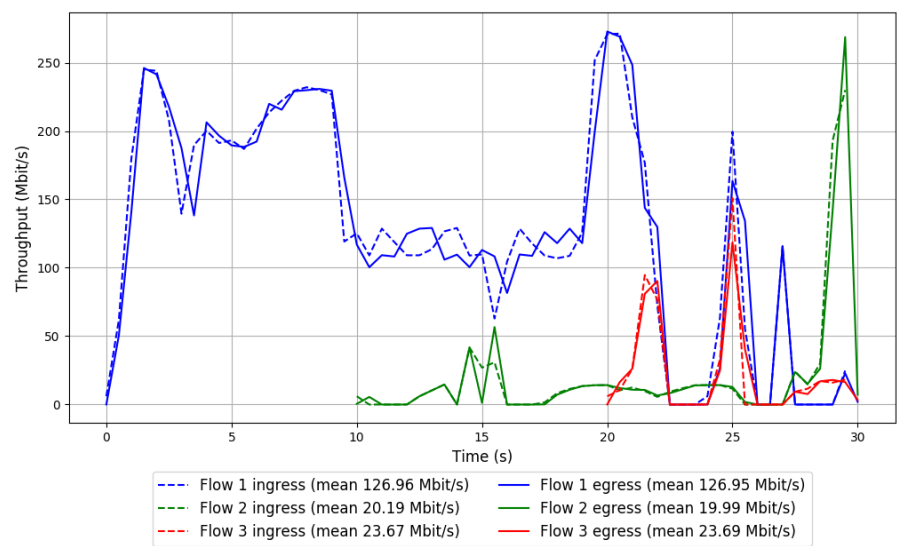
-- Flow 3:

Average throughput: 23.69 Mbit/s

95th percentile per-packet one-way delay: 161.212 ms

Loss rate: 0.12%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-02-17 03:58:23

End at: 2018-02-17 03:58:53

Below is generated by plot.py at 2018-02-17 07:55:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 155.86 Mbit/s

95th percentile per-packet one-way delay: 121.038 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 99.46 Mbit/s

95th percentile per-packet one-way delay: 120.821 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.84 Mbit/s

95th percentile per-packet one-way delay: 121.751 ms

Loss rate: 0.00%

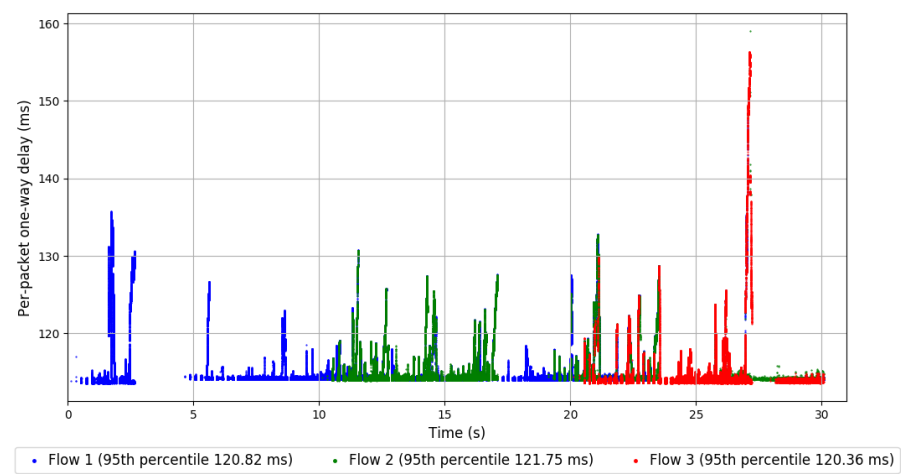
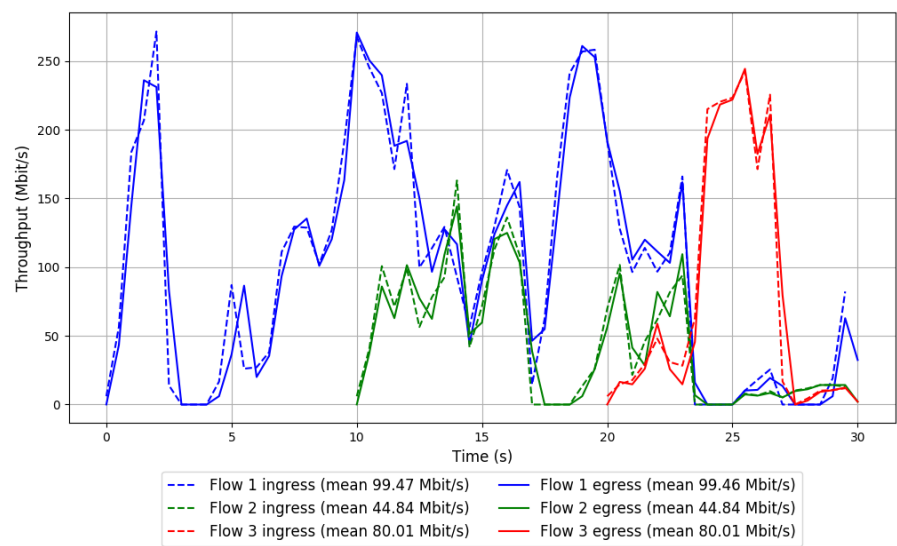
-- Flow 3:

Average throughput: 80.01 Mbit/s

95th percentile per-packet one-way delay: 120.357 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-17 04:17:05

End at: 2018-02-17 04:17:35

Below is generated by plot.py at 2018-02-17 07:57:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 211.03 Mbit/s

95th percentile per-packet one-way delay: 117.882 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 141.58 Mbit/s

95th percentile per-packet one-way delay: 116.143 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 86.32 Mbit/s

95th percentile per-packet one-way delay: 122.789 ms

Loss rate: 0.03%

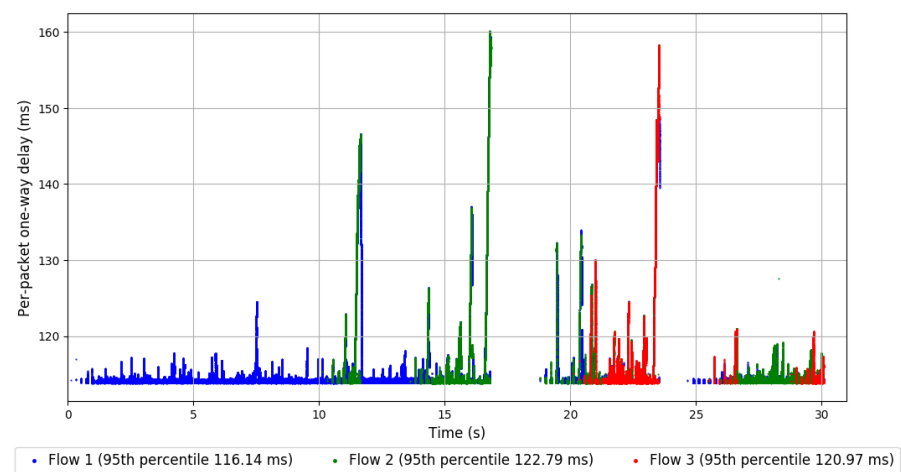
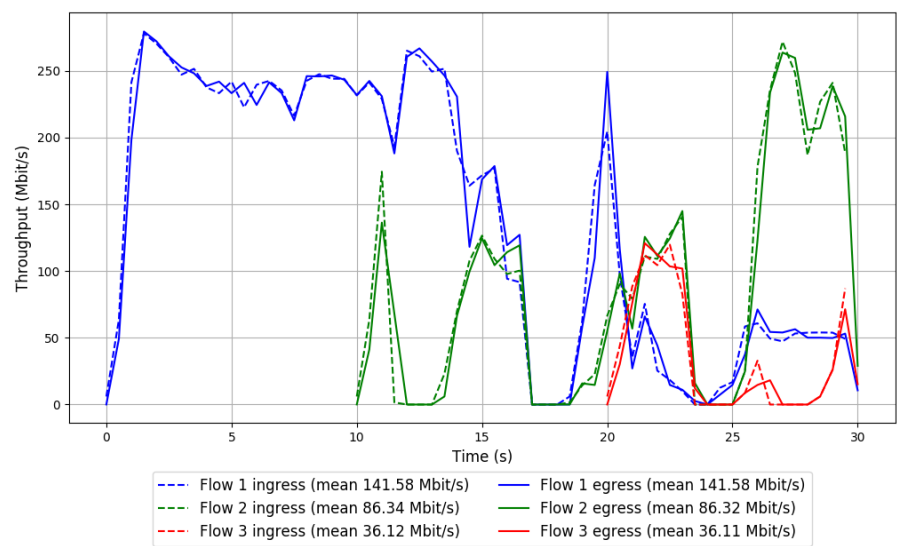
-- Flow 3:

Average throughput: 36.11 Mbit/s

95th percentile per-packet one-way delay: 120.972 ms

Loss rate: 0.05%

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

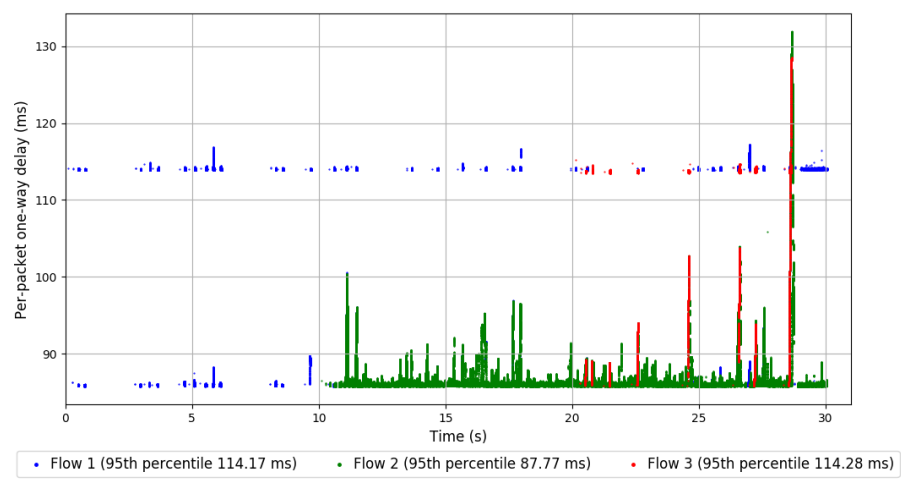
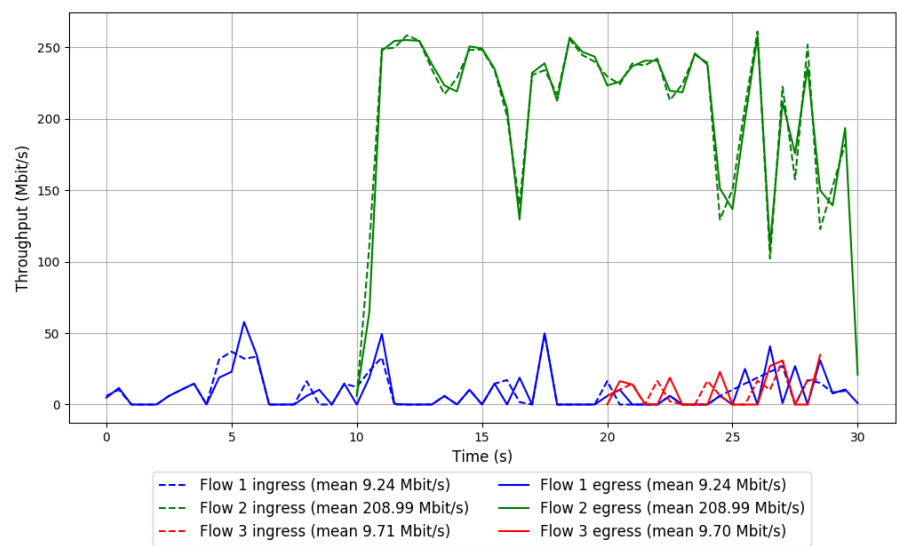


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-02-17 04:36:17
End at: 2018-02-17 04:36:47

# Below is generated by plot.py at 2018-02-17 07:57:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 151.16 Mbit/s
95th percentile per-packet one-way delay: 98.598 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.24 Mbit/s
95th percentile per-packet one-way delay: 114.175 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 208.99 Mbit/s
95th percentile per-packet one-way delay: 87.766 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.70 Mbit/s
95th percentile per-packet one-way delay: 114.278 ms
Loss rate: 0.00%
```


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

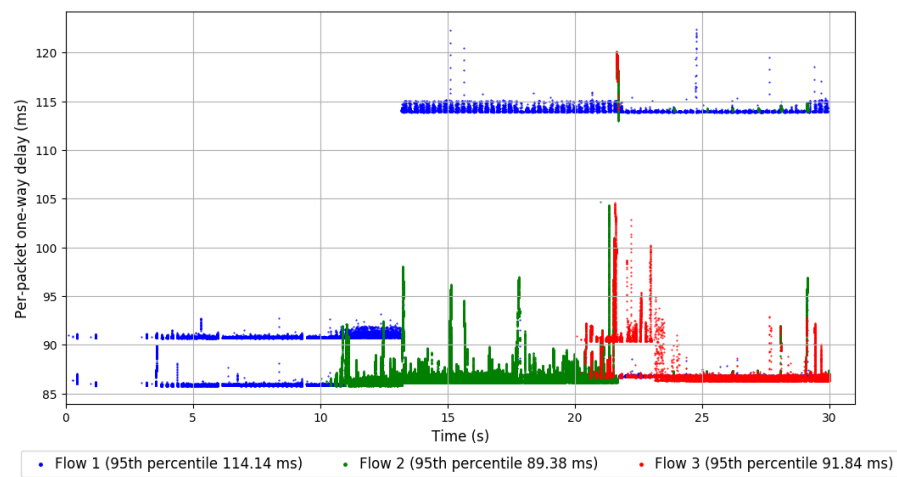
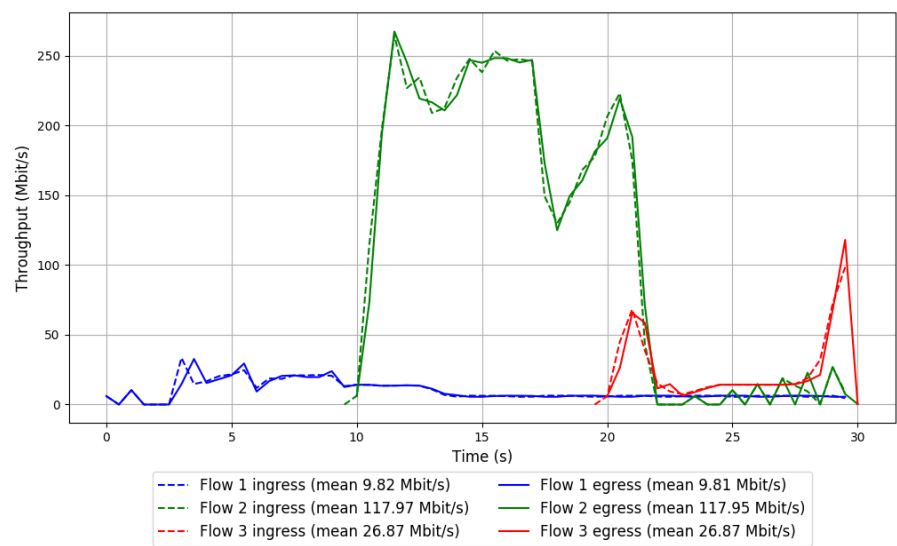


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-17 04:55:03
End at: 2018-02-17 04:55:33

# Below is generated by plot.py at 2018-02-17 07:57:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.38 Mbit/s
95th percentile per-packet one-way delay: 91.568 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 9.81 Mbit/s
95th percentile per-packet one-way delay: 114.136 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 117.95 Mbit/s
95th percentile per-packet one-way delay: 89.379 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 26.87 Mbit/s
95th percentile per-packet one-way delay: 91.838 ms
Loss rate: 0.04%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-17 02:04:28

End at: 2018-02-17 02:04:58

Below is generated by plot.py at 2018-02-17 07:57:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.06 Mbit/s

95th percentile per-packet one-way delay: 110.446 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 8.11 Mbit/s

95th percentile per-packet one-way delay: 114.840 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 18.50 Mbit/s

95th percentile per-packet one-way delay: 95.652 ms

Loss rate: 0.01%

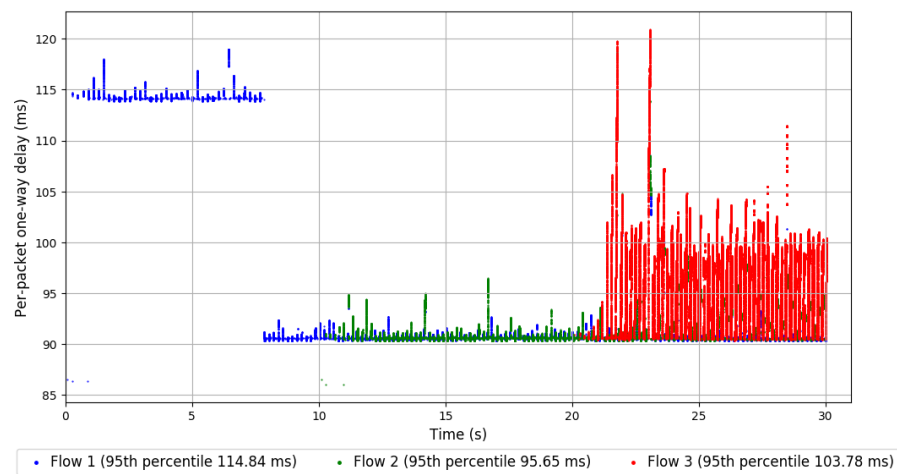
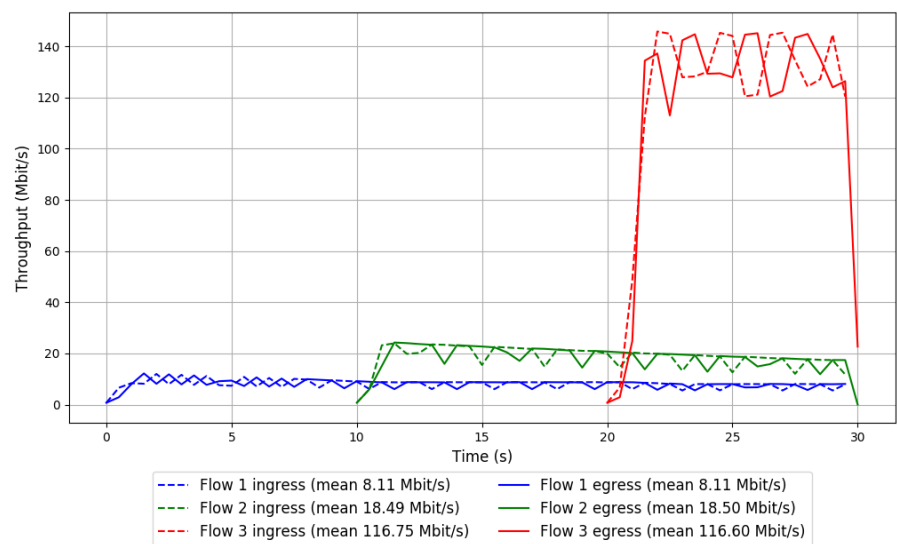
-- Flow 3:

Average throughput: 116.60 Mbit/s

95th percentile per-packet one-way delay: 103.782 ms

Loss rate: 0.06%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-17 02:22:17

End at: 2018-02-17 02:22:47

Below is generated by plot.py at 2018-02-17 07:57:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 168.96 Mbit/s

95th percentile per-packet one-way delay: 128.635 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 101.91 Mbit/s

95th percentile per-packet one-way delay: 128.872 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 91.59 Mbit/s

95th percentile per-packet one-way delay: 128.285 ms

Loss rate: 0.01%

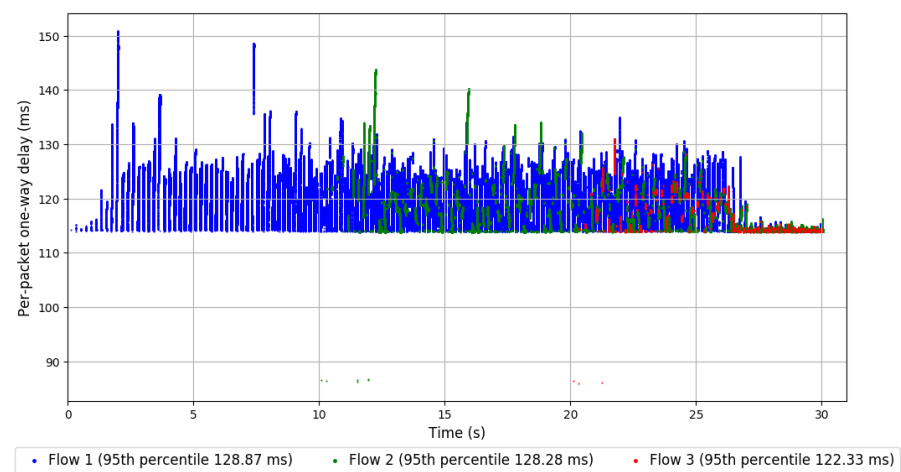
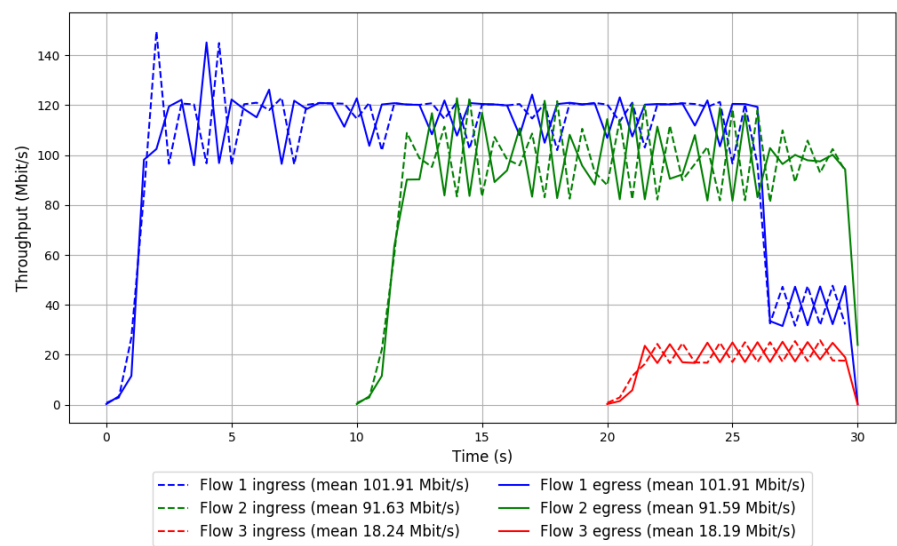
-- Flow 3:

Average throughput: 18.19 Mbit/s

95th percentile per-packet one-way delay: 122.335 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-17 02:40:26

End at: 2018-02-17 02:40:56

Below is generated by plot.py at 2018-02-17 07:57:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 50.51 Mbit/s

95th percentile per-packet one-way delay: 117.152 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 15.23 Mbit/s

95th percentile per-packet one-way delay: 116.327 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 25.58 Mbit/s

95th percentile per-packet one-way delay: 116.571 ms

Loss rate: 0.00%

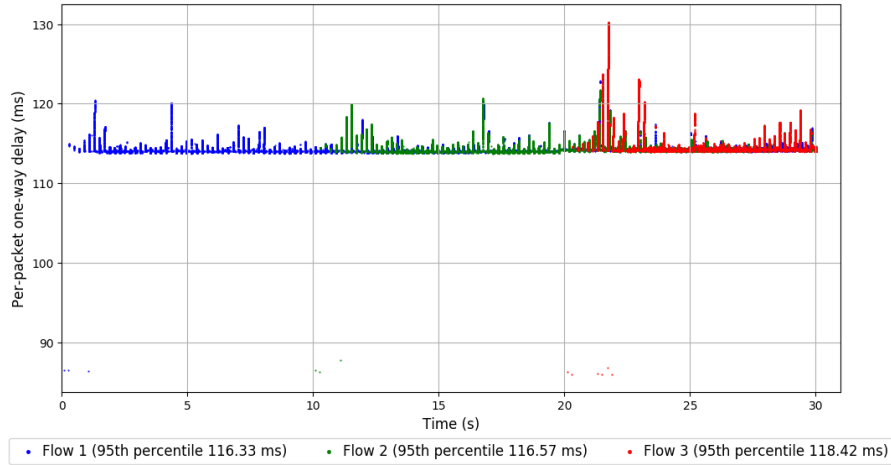
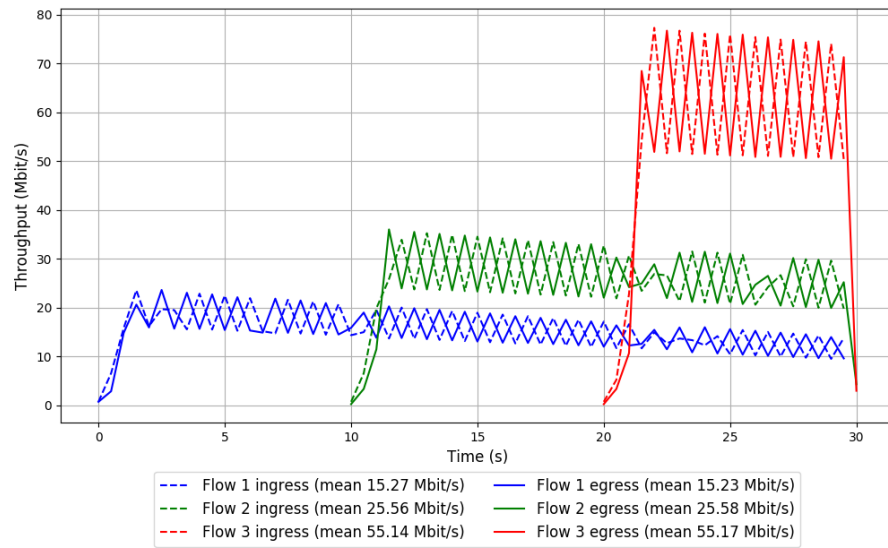
-- Flow 3:

Average throughput: 55.17 Mbit/s

95th percentile per-packet one-way delay: 118.425 ms

Loss rate: 0.04%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-17 02:58:14

End at: 2018-02-17 02:58:44

Below is generated by plot.py at 2018-02-17 07:57:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.90 Mbit/s

95th percentile per-packet one-way delay: 129.137 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 18.94 Mbit/s

95th percentile per-packet one-way delay: 123.713 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 117.31 Mbit/s

95th percentile per-packet one-way delay: 129.544 ms

Loss rate: 0.00%

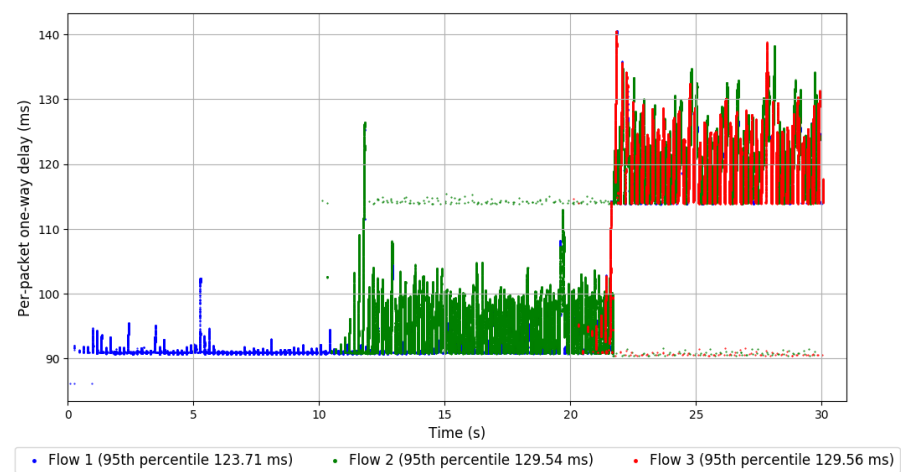
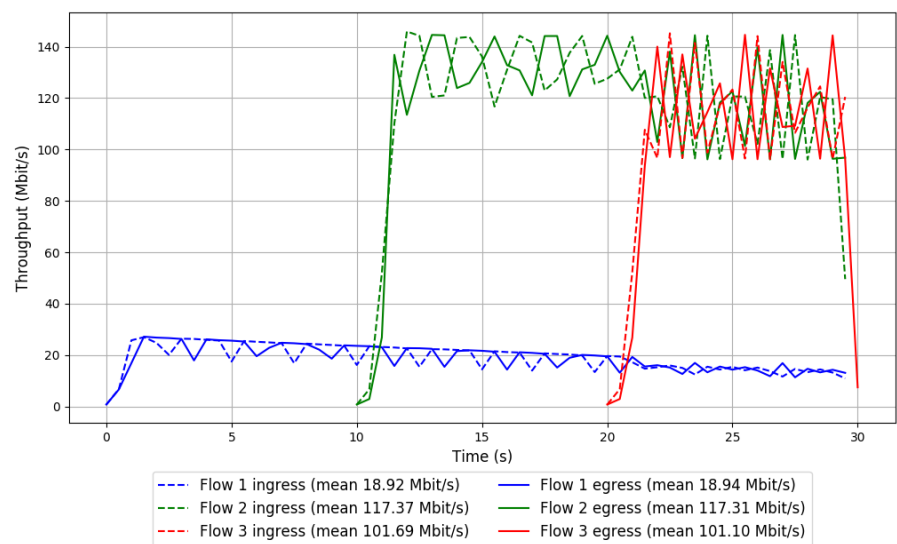
-- Flow 3:

Average throughput: 101.10 Mbit/s

95th percentile per-packet one-way delay: 129.555 ms

Loss rate: 0.83%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-17 03:16:22

End at: 2018-02-17 03:16:52

Below is generated by plot.py at 2018-02-17 07:57:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 153.53 Mbit/s

95th percentile per-packet one-way delay: 126.778 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 119.26 Mbit/s

95th percentile per-packet one-way delay: 126.018 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 124.965 ms

Loss rate: 0.96%

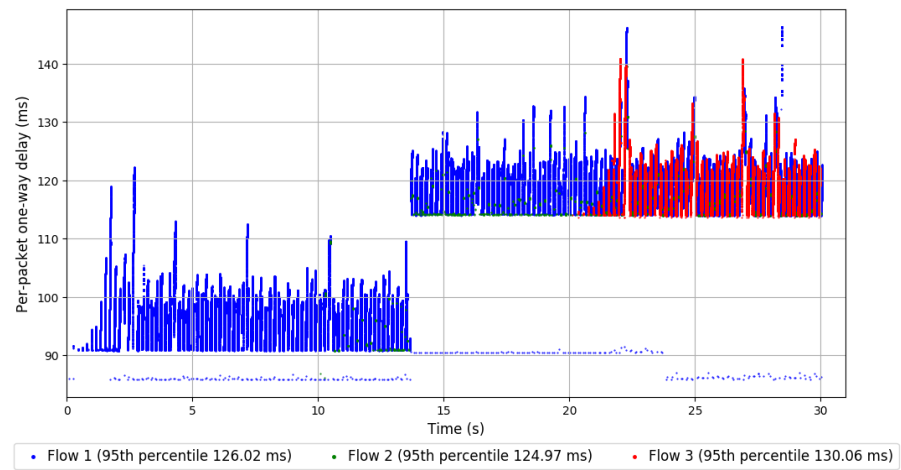
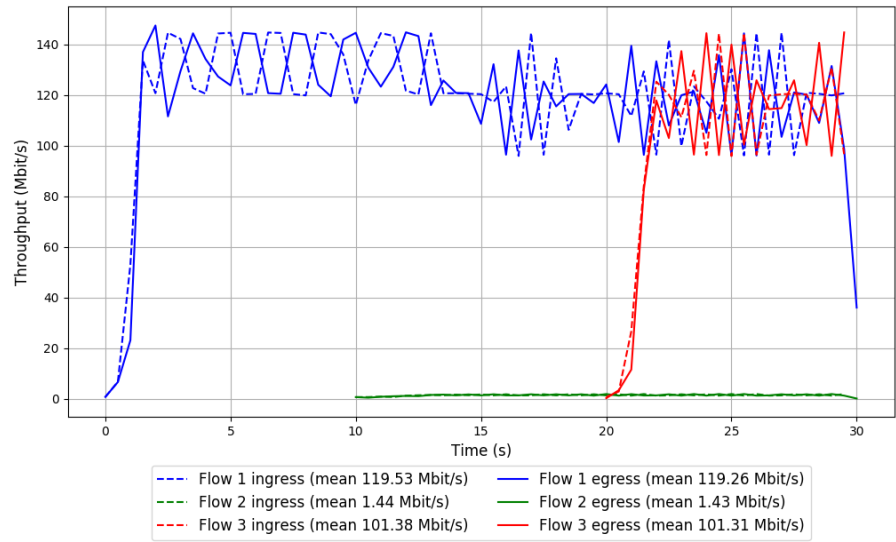
-- Flow 3:

Average throughput: 101.31 Mbit/s

95th percentile per-packet one-way delay: 130.062 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-17 03:34:45

End at: 2018-02-17 03:35:15

Below is generated by plot.py at 2018-02-17 07:58:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.23 Mbit/s

95th percentile per-packet one-way delay: 130.955 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 112.17 Mbit/s

95th percentile per-packet one-way delay: 131.323 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 51.90 Mbit/s

95th percentile per-packet one-way delay: 130.844 ms

Loss rate: 0.00%

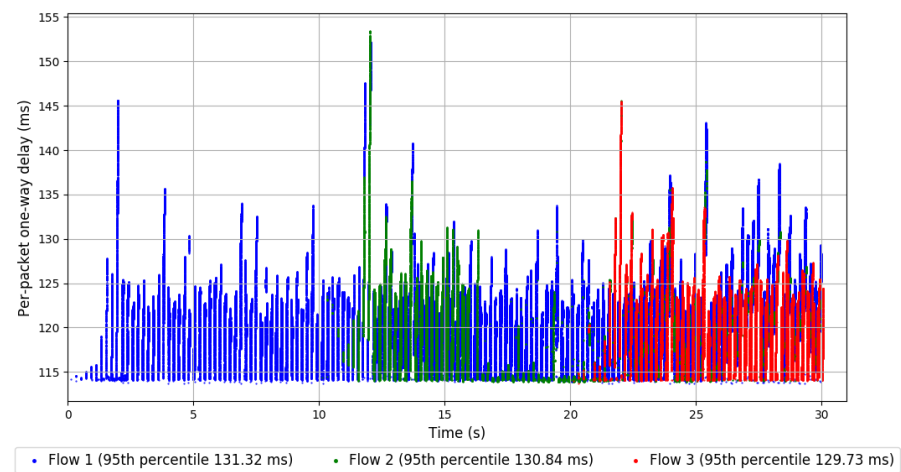
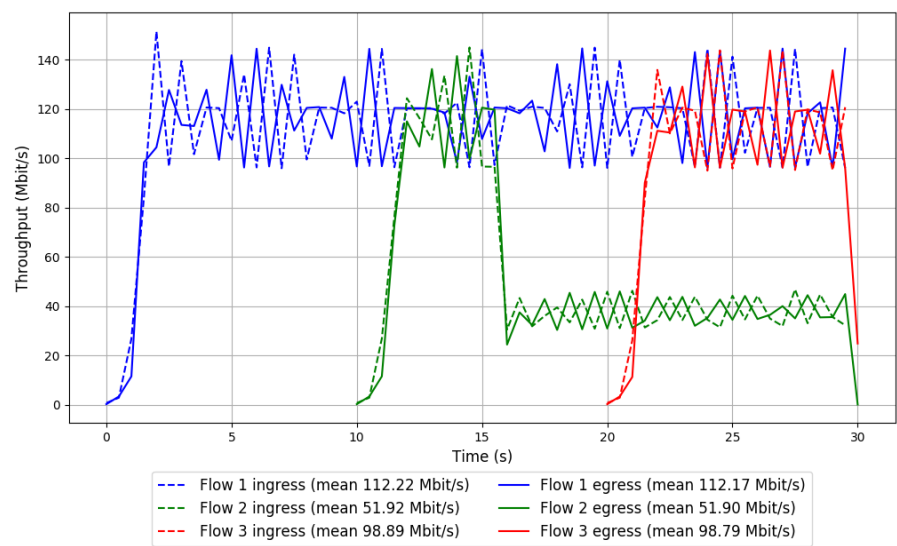
-- Flow 3:

Average throughput: 98.79 Mbit/s

95th percentile per-packet one-way delay: 129.727 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-17 03:53:31

End at: 2018-02-17 03:54:01

Below is generated by plot.py at 2018-02-17 07:58:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.17 Mbit/s

95th percentile per-packet one-way delay: 125.786 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 43.03 Mbit/s

95th percentile per-packet one-way delay: 128.350 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 88.31 Mbit/s

95th percentile per-packet one-way delay: 125.310 ms

Loss rate: 0.02%

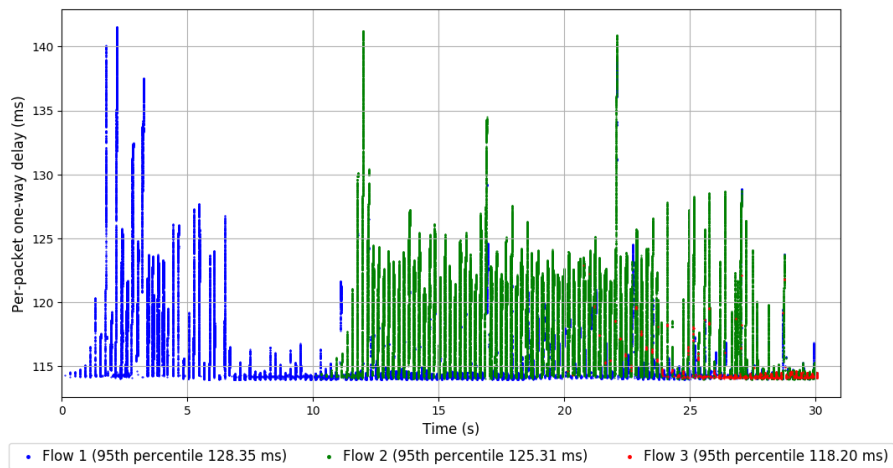
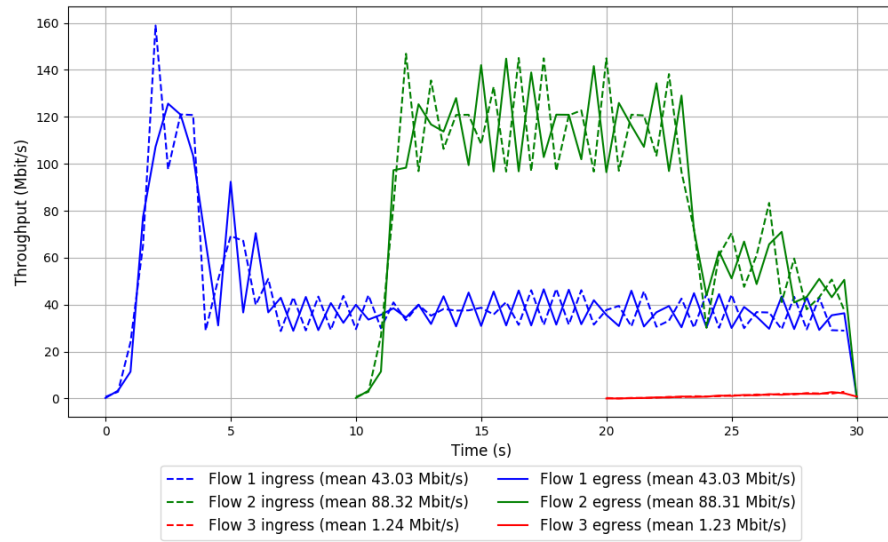
-- Flow 3:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 118.203 ms

Loss rate: 0.98%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-17 04:12:03

End at: 2018-02-17 04:12:33

Below is generated by plot.py at 2018-02-17 07:59:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 213.77 Mbit/s

95th percentile per-packet one-way delay: 141.707 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 110.76 Mbit/s

95th percentile per-packet one-way delay: 139.726 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 107.20 Mbit/s

95th percentile per-packet one-way delay: 139.725 ms

Loss rate: 0.00%

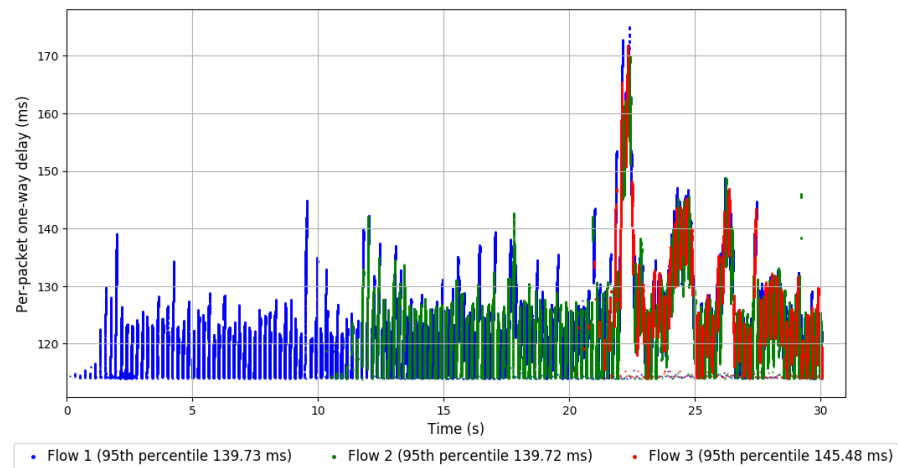
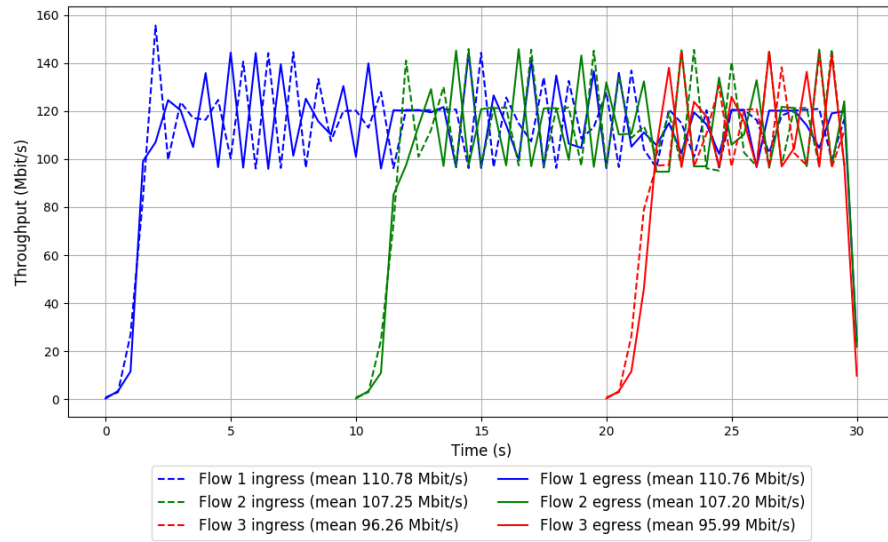
-- Flow 3:

Average throughput: 95.99 Mbit/s

95th percentile per-packet one-way delay: 145.478 ms

Loss rate: 0.28%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-17 04:31:15

End at: 2018-02-17 04:31:45

Below is generated by plot.py at 2018-02-17 07:59:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 185.70 Mbit/s

95th percentile per-packet one-way delay: 129.751 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 111.30 Mbit/s

95th percentile per-packet one-way delay: 129.302 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 107.90 Mbit/s

95th percentile per-packet one-way delay: 130.501 ms

Loss rate: 0.00%

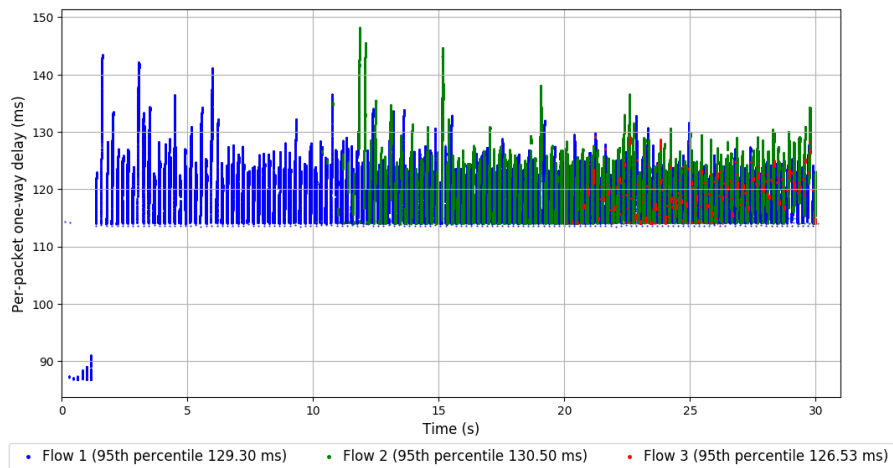
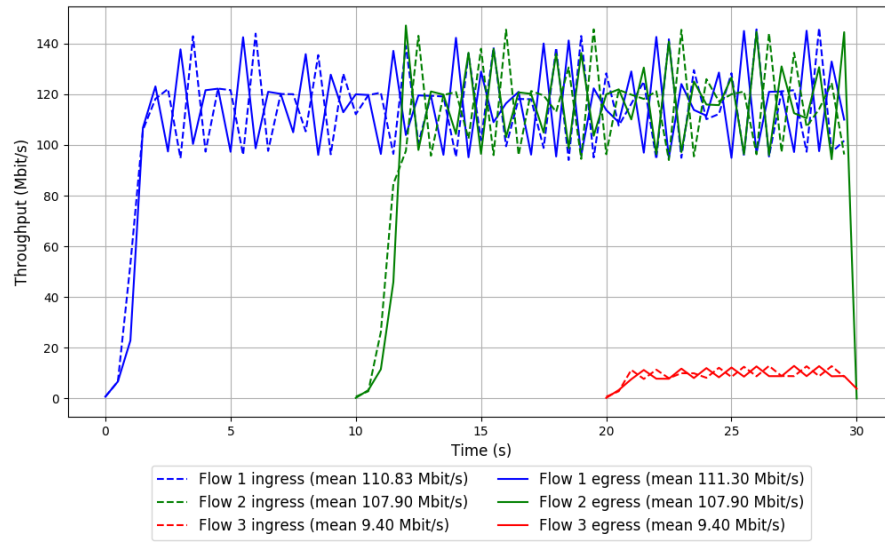
-- Flow 3:

Average throughput: 9.40 Mbit/s

95th percentile per-packet one-way delay: 126.535 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-17 04:50:12

End at: 2018-02-17 04:50:42

Below is generated by plot.py at 2018-02-17 07:59:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 154.31 Mbit/s

95th percentile per-packet one-way delay: 97.905 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 106.01 Mbit/s

95th percentile per-packet one-way delay: 97.506 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.38 Mbit/s

95th percentile per-packet one-way delay: 98.555 ms

Loss rate: 0.00%

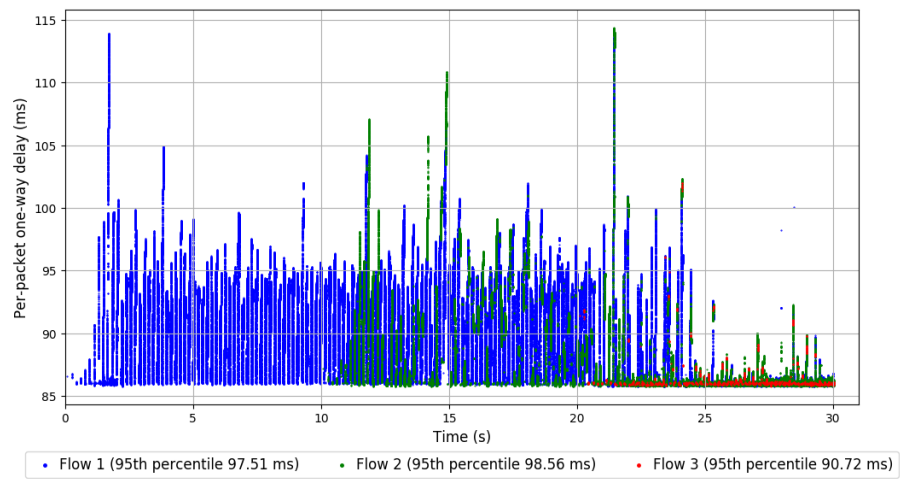
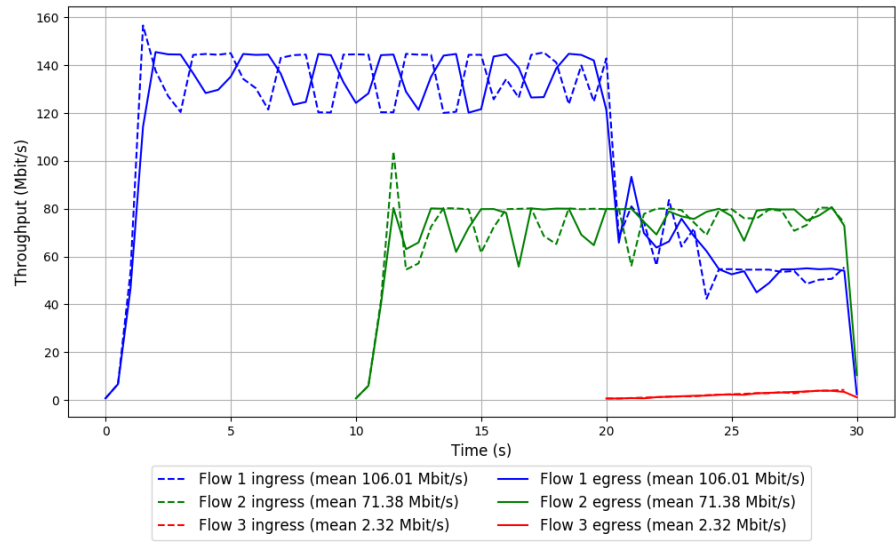
-- Flow 3:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 90.716 ms

Loss rate: 0.05%

Run 10: Report of TCP Vegas — Data Link

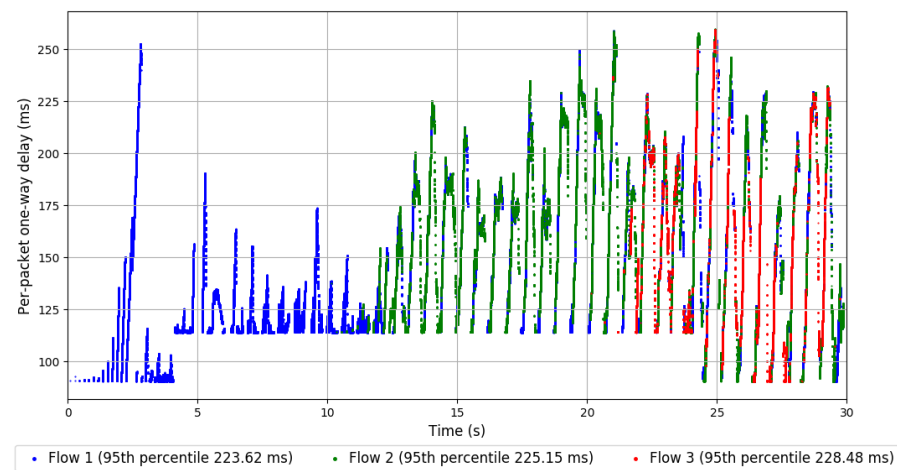
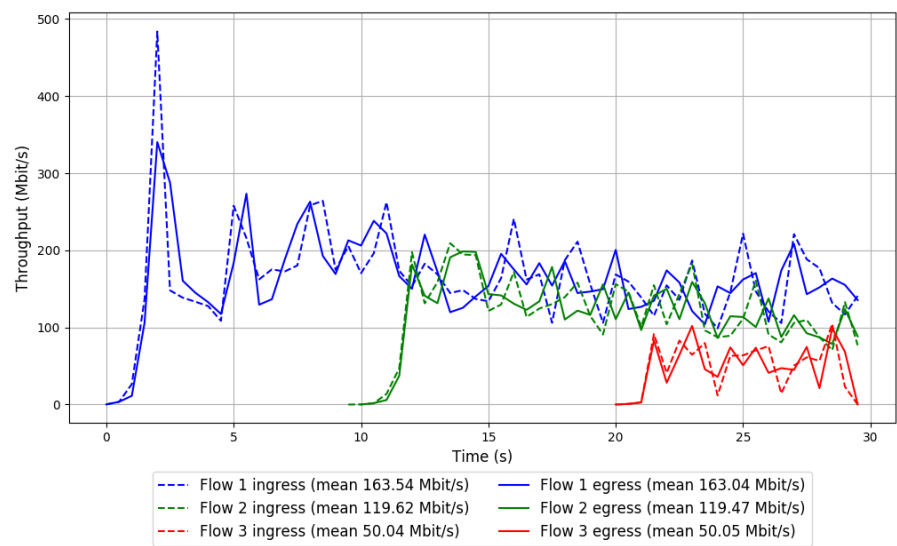


```
Run 1: Statistics of Verus

Start at: 2018-02-17 01:59:51
End at: 2018-02-17 02:00:21

# Below is generated by plot.py at 2018-02-17 08:01:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 258.30 Mbit/s
95th percentile per-packet one-way delay: 224.633 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 163.04 Mbit/s
95th percentile per-packet one-way delay: 223.625 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 119.47 Mbit/s
95th percentile per-packet one-way delay: 225.148 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 50.05 Mbit/s
95th percentile per-packet one-way delay: 228.482 ms
Loss rate: 0.00%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-17 02:17:40

End at: 2018-02-17 02:18:10

Below is generated by plot.py at 2018-02-17 08:01:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 208.23 Mbit/s

95th percentile per-packet one-way delay: 248.065 ms

Loss rate: 1.32%

-- Flow 1:

Average throughput: 116.91 Mbit/s

95th percentile per-packet one-way delay: 259.836 ms

Loss rate: 1.92%

-- Flow 2:

Average throughput: 126.30 Mbit/s

95th percentile per-packet one-way delay: 236.250 ms

Loss rate: 0.57%

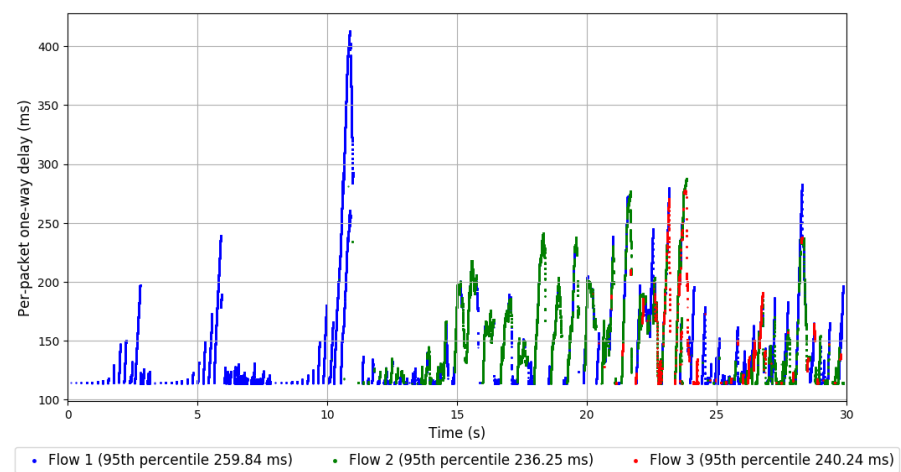
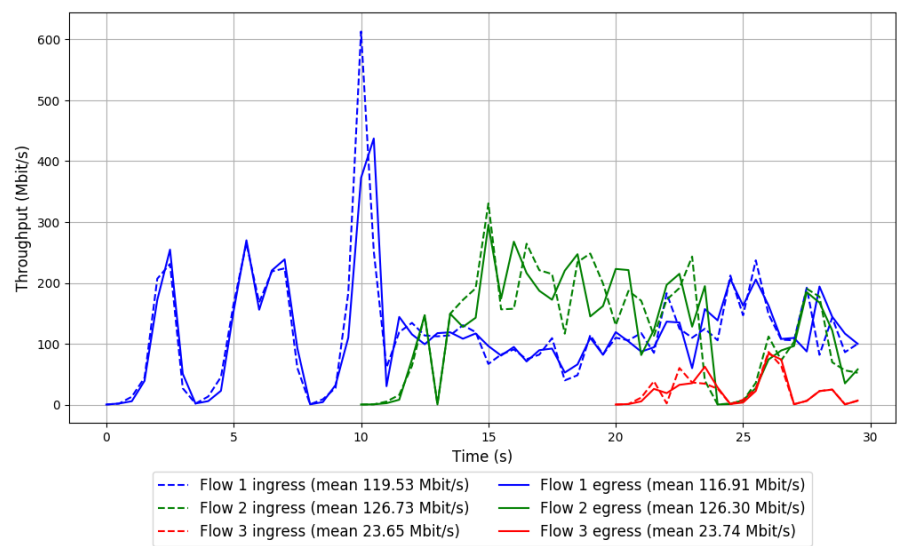
-- Flow 3:

Average throughput: 23.74 Mbit/s

95th percentile per-packet one-way delay: 240.235 ms

Loss rate: 0.17%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-17 02:35:57

End at: 2018-02-17 02:36:27

Below is generated by plot.py at 2018-02-17 08:01:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 207.79 Mbit/s

95th percentile per-packet one-way delay: 163.028 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 125.08 Mbit/s

95th percentile per-packet one-way delay: 154.822 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 98.66 Mbit/s

95th percentile per-packet one-way delay: 179.355 ms

Loss rate: 0.12%

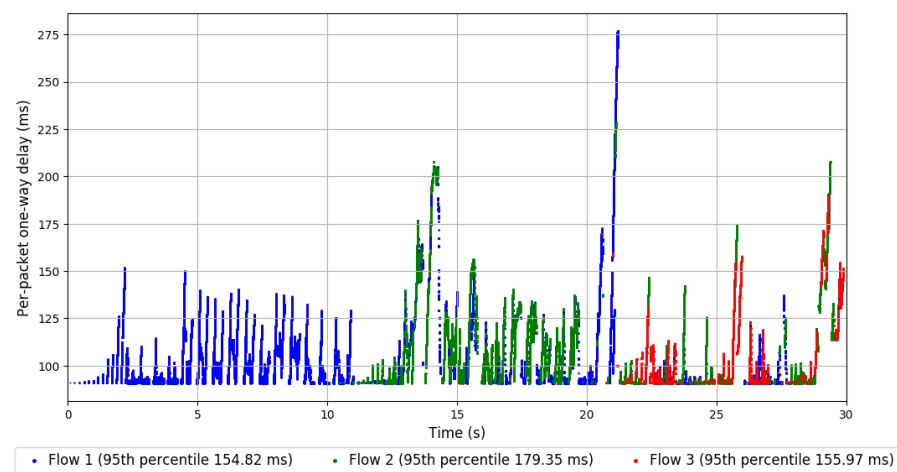
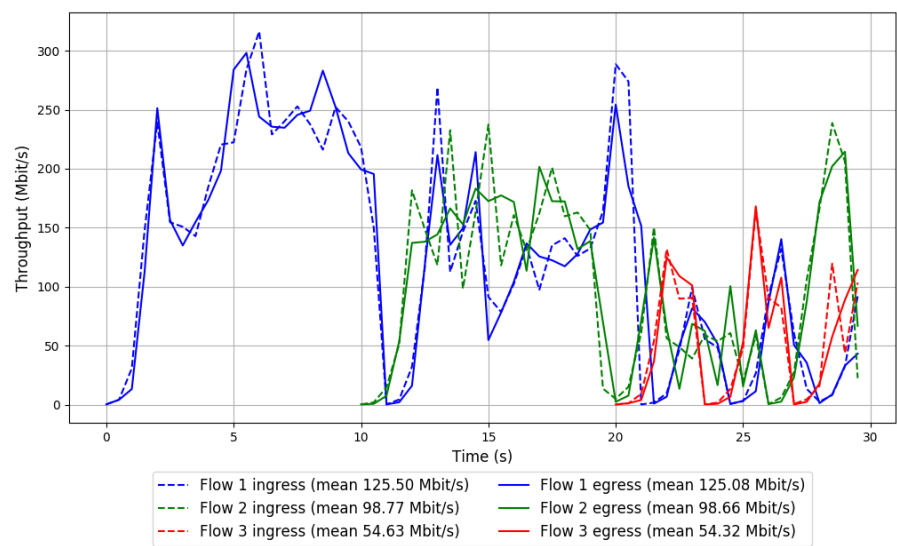
-- Flow 3:

Average throughput: 54.32 Mbit/s

95th percentile per-packet one-way delay: 155.973 ms

Loss rate: 0.61%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-17 02:53:35

End at: 2018-02-17 02:54:05

Below is generated by plot.py at 2018-02-17 08:01:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 208.01 Mbit/s

95th percentile per-packet one-way delay: 269.444 ms

Loss rate: 2.04%

-- Flow 1:

Average throughput: 146.88 Mbit/s

95th percentile per-packet one-way delay: 283.652 ms

Loss rate: 2.50%

-- Flow 2:

Average throughput: 49.91 Mbit/s

95th percentile per-packet one-way delay: 227.933 ms

Loss rate: 0.21%

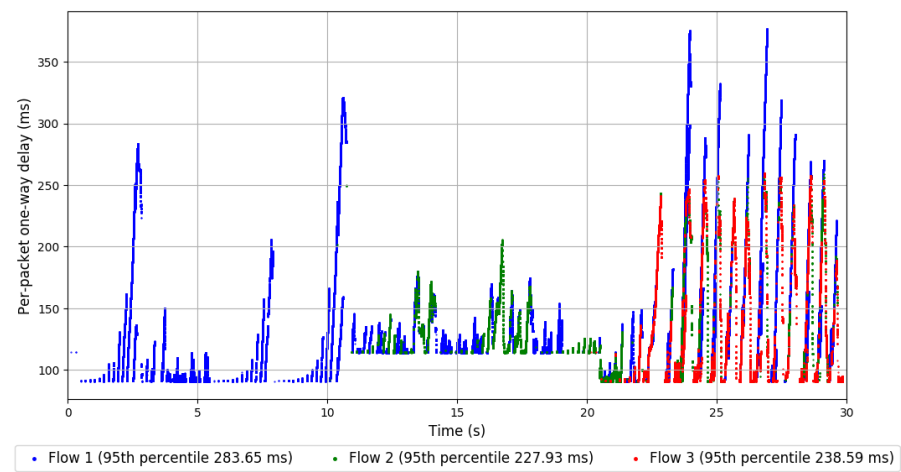
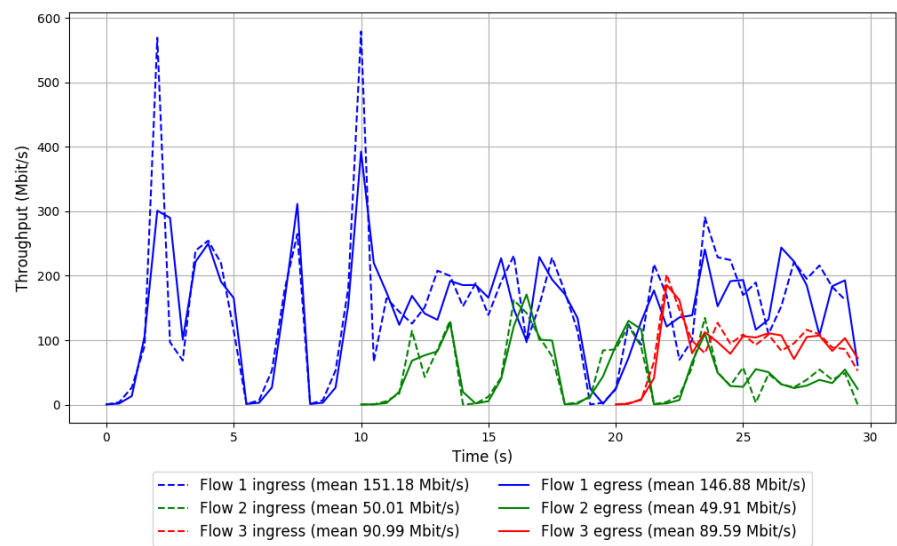
-- Flow 3:

Average throughput: 89.59 Mbit/s

95th percentile per-packet one-way delay: 238.586 ms

Loss rate: 1.76%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-17 03:11:55

End at: 2018-02-17 03:12:25

Below is generated by plot.py at 2018-02-17 08:01:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.37 Mbit/s

95th percentile per-packet one-way delay: 233.490 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 91.62 Mbit/s

95th percentile per-packet one-way delay: 199.084 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 119.75 Mbit/s

95th percentile per-packet one-way delay: 222.715 ms

Loss rate: 0.34%

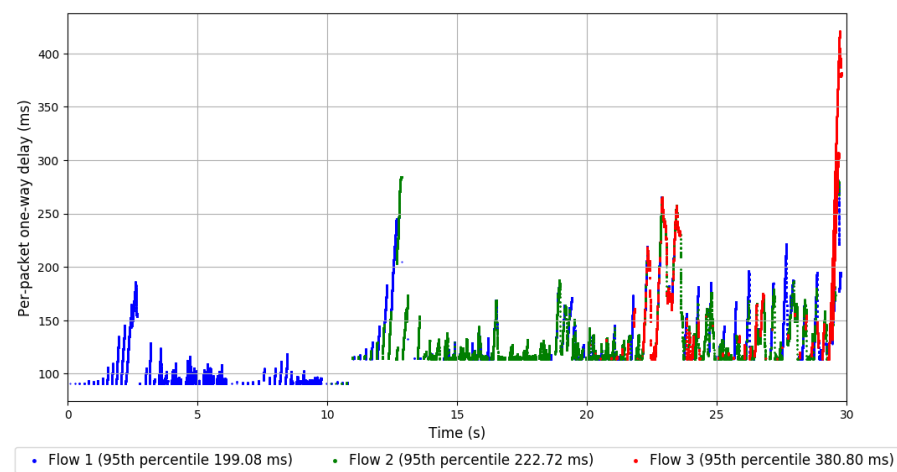
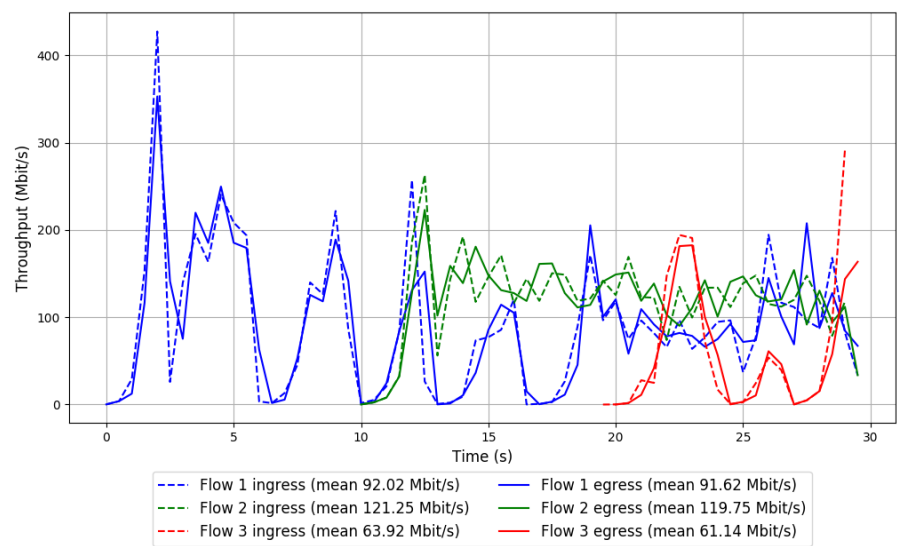
-- Flow 3:

Average throughput: 61.14 Mbit/s

95th percentile per-packet one-way delay: 380.798 ms

Loss rate: 1.77%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-17 03:30:08

End at: 2018-02-17 03:30:38

Below is generated by plot.py at 2018-02-17 08:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 161.97 Mbit/s

95th percentile per-packet one-way delay: 269.444 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 92.43 Mbit/s

95th percentile per-packet one-way delay: 273.923 ms

Loss rate: 1.32%

-- Flow 2:

Average throughput: 69.75 Mbit/s

95th percentile per-packet one-way delay: 262.436 ms

Loss rate: 0.80%

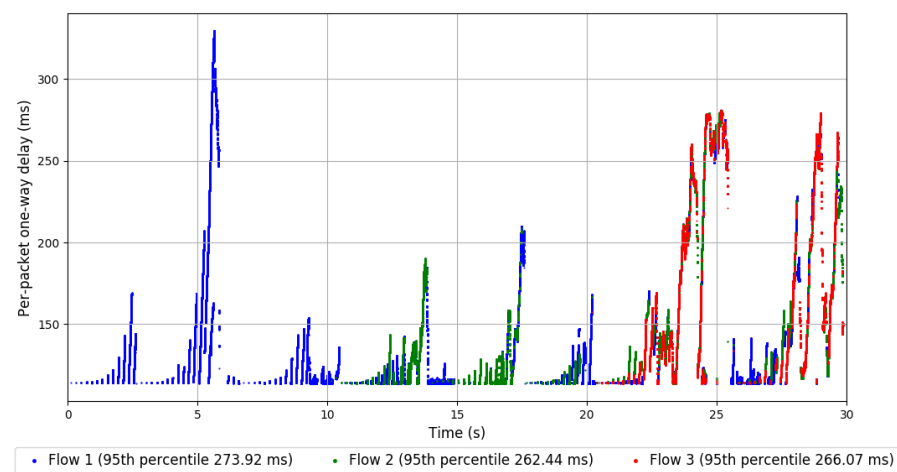
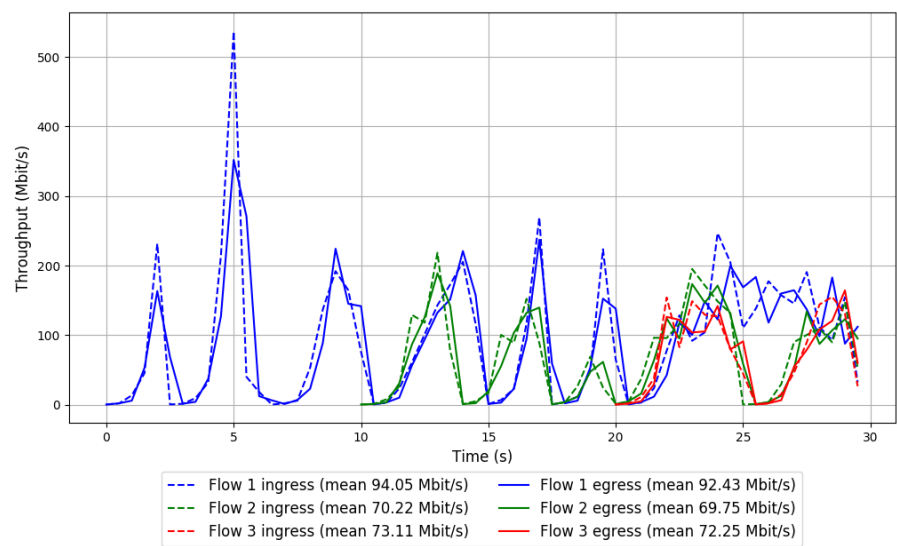
-- Flow 3:

Average throughput: 72.25 Mbit/s

95th percentile per-packet one-way delay: 266.066 ms

Loss rate: 1.81%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-17 03:48:50

End at: 2018-02-17 03:49:20

Below is generated by plot.py at 2018-02-17 08:03:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 224.37 Mbit/s

95th percentile per-packet one-way delay: 188.253 ms

Loss rate: 1.33%

-- Flow 1:

Average throughput: 103.51 Mbit/s

95th percentile per-packet one-way delay: 269.382 ms

Loss rate: 2.84%

-- Flow 2:

Average throughput: 150.00 Mbit/s

95th percentile per-packet one-way delay: 168.011 ms

Loss rate: 0.00%

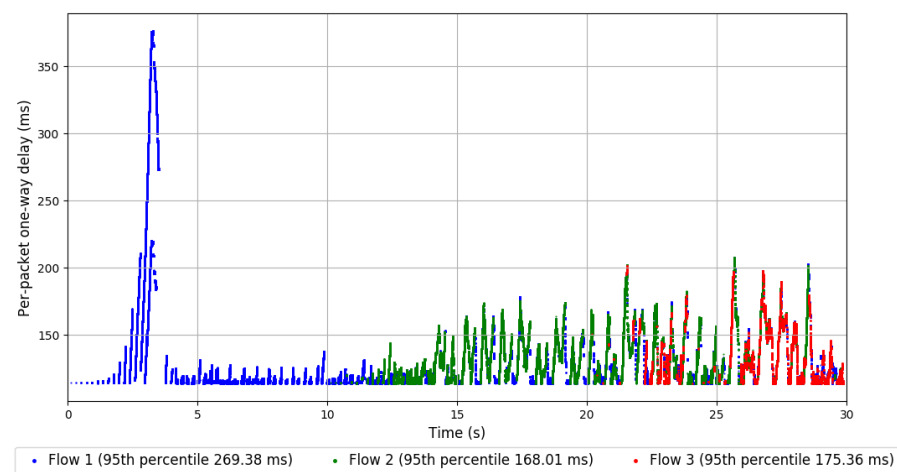
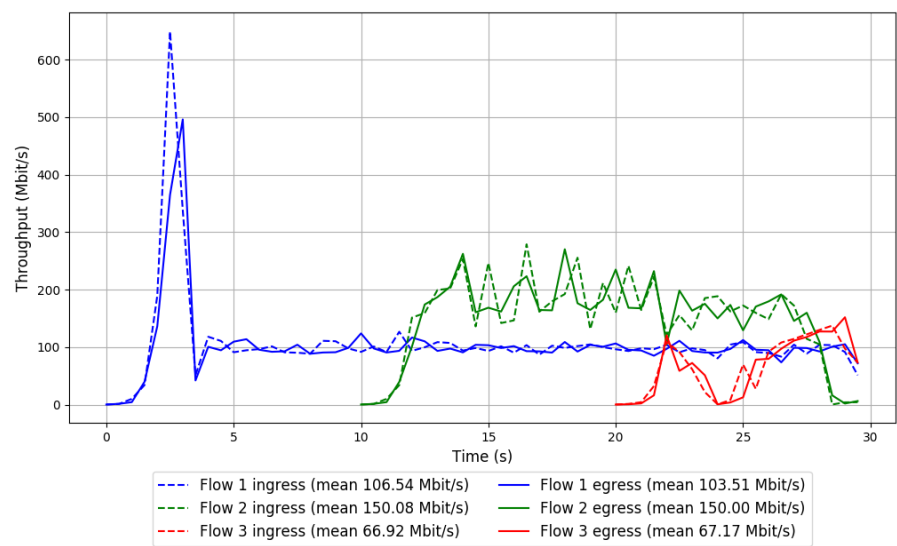
-- Flow 3:

Average throughput: 67.17 Mbit/s

95th percentile per-packet one-way delay: 175.364 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-17 04:07:22

End at: 2018-02-17 04:07:52

Below is generated by plot.py at 2018-02-17 08:03:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 231.54 Mbit/s

95th percentile per-packet one-way delay: 210.470 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 123.91 Mbit/s

95th percentile per-packet one-way delay: 243.505 ms

Loss rate: 1.72%

-- Flow 2:

Average throughput: 136.31 Mbit/s

95th percentile per-packet one-way delay: 186.658 ms

Loss rate: 0.04%

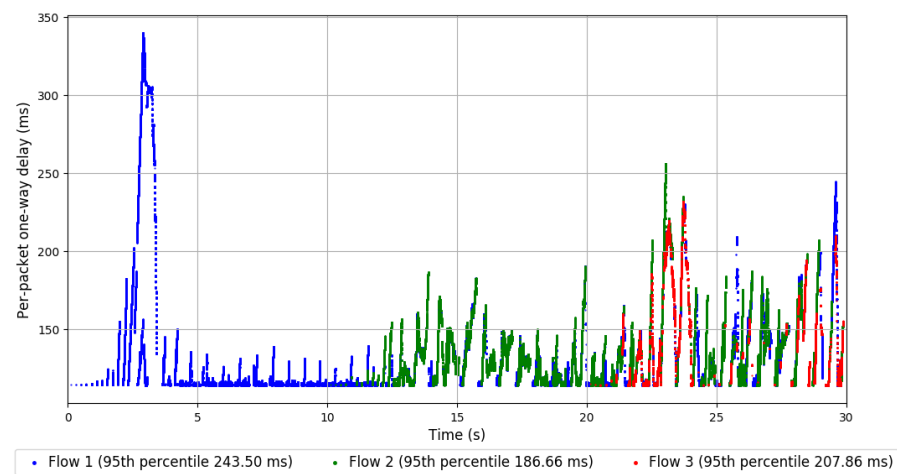
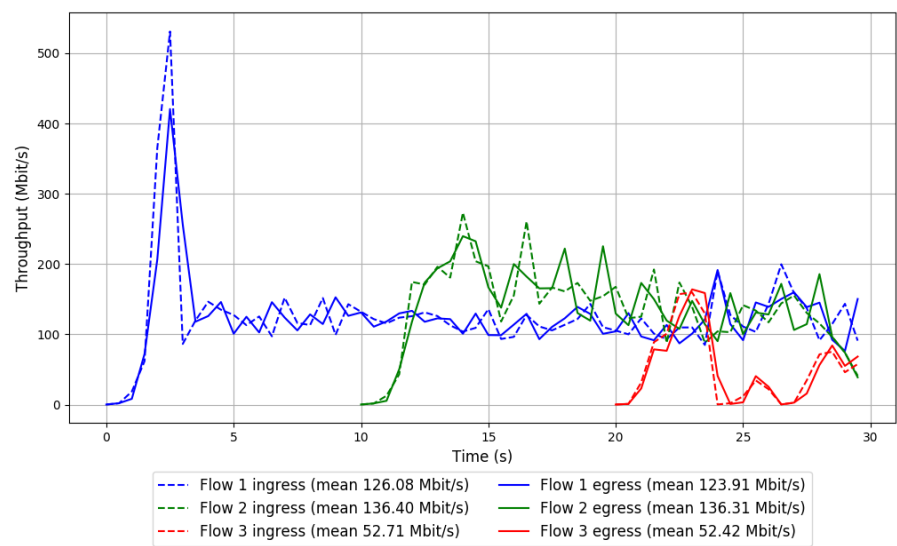
-- Flow 3:

Average throughput: 52.42 Mbit/s

95th percentile per-packet one-way delay: 207.860 ms

Loss rate: 0.52%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-17 04:26:30

End at: 2018-02-17 04:27:00

Below is generated by plot.py at 2018-02-17 08:04:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 205.69 Mbit/s

95th percentile per-packet one-way delay: 182.644 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 158.55 Mbit/s

95th percentile per-packet one-way delay: 185.825 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 50.91 Mbit/s

95th percentile per-packet one-way delay: 173.535 ms

Loss rate: 0.00%

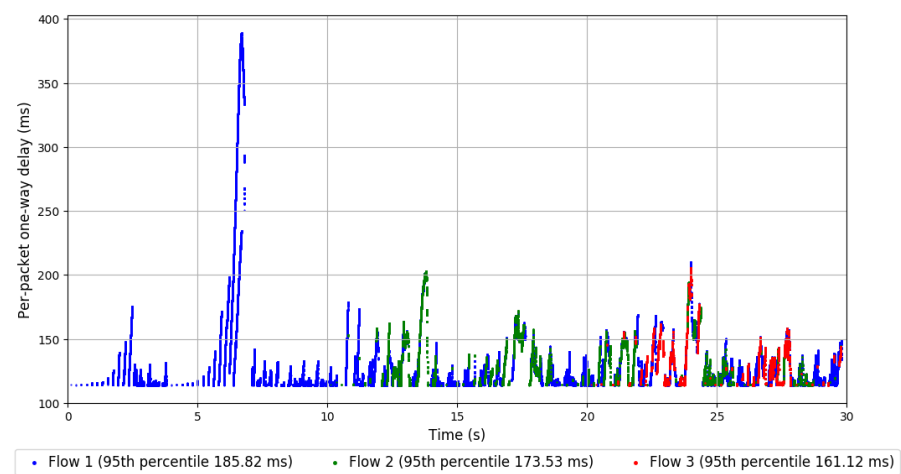
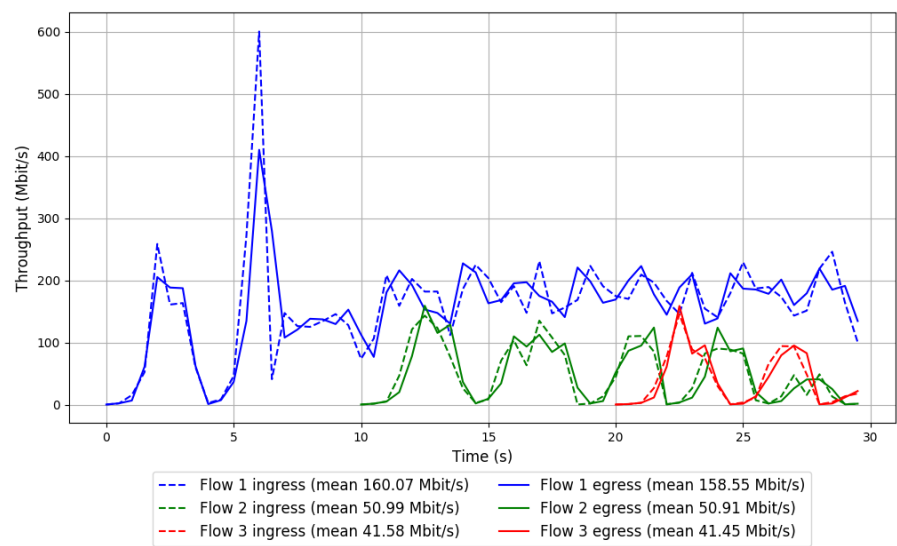
-- Flow 3:

Average throughput: 41.45 Mbit/s

95th percentile per-packet one-way delay: 161.121 ms

Loss rate: 0.00%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-17 04:45:25

End at: 2018-02-17 04:45:55

Below is generated by plot.py at 2018-02-17 08:05:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 213.05 Mbit/s

95th percentile per-packet one-way delay: 176.951 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 146.70 Mbit/s

95th percentile per-packet one-way delay: 182.240 ms

Loss rate: 1.68%

-- Flow 2:

Average throughput: 77.54 Mbit/s

95th percentile per-packet one-way delay: 130.929 ms

Loss rate: 0.00%

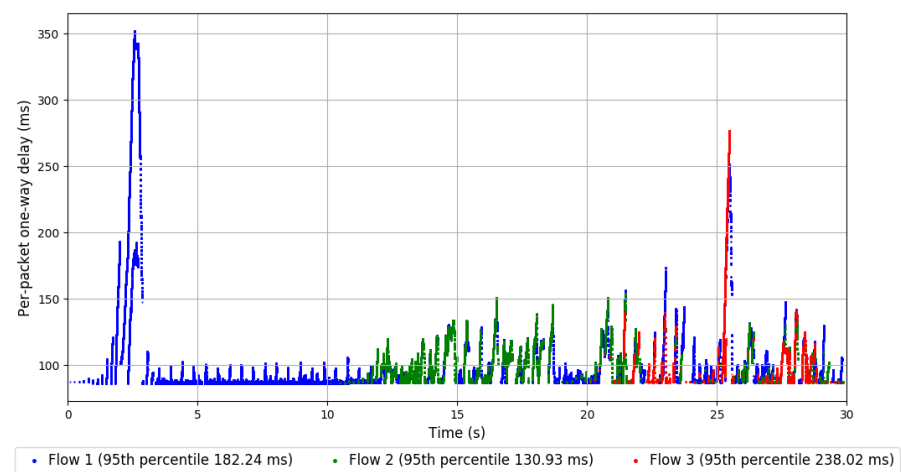
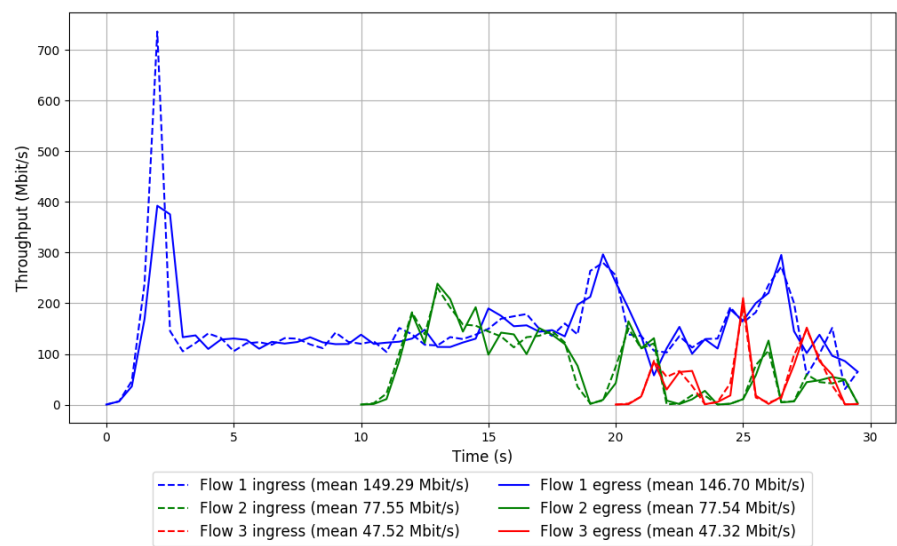
-- Flow 3:

Average throughput: 47.32 Mbit/s

95th percentile per-packet one-way delay: 238.021 ms

Loss rate: 0.44%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-02-17 02:16:52

End at: 2018-02-17 02:17:22

Below is generated by plot.py at 2018-02-17 08:05:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 48.87 Mbit/s

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

Loss rate: 0.20%

-- Flow 1:

Average throughput: 15.08 Mbit/s

95th percentile per-packet one-way delay: 114.050 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 14.59 Mbit/s

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

Loss rate: 0.20%

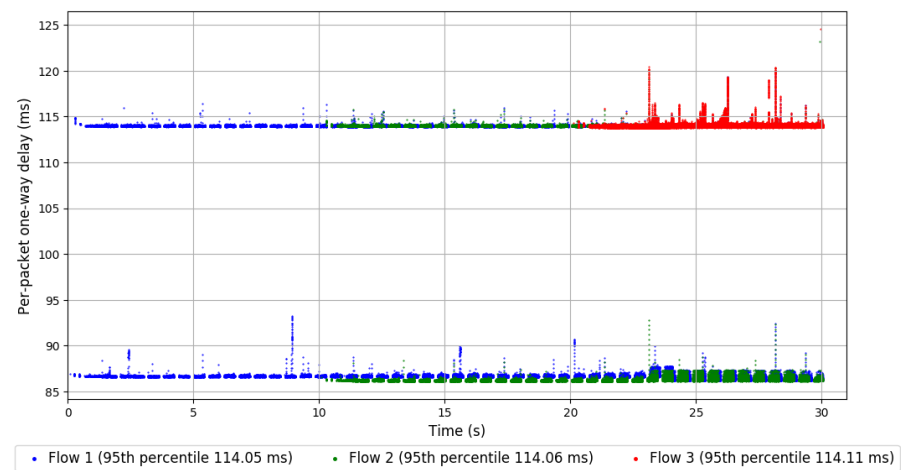
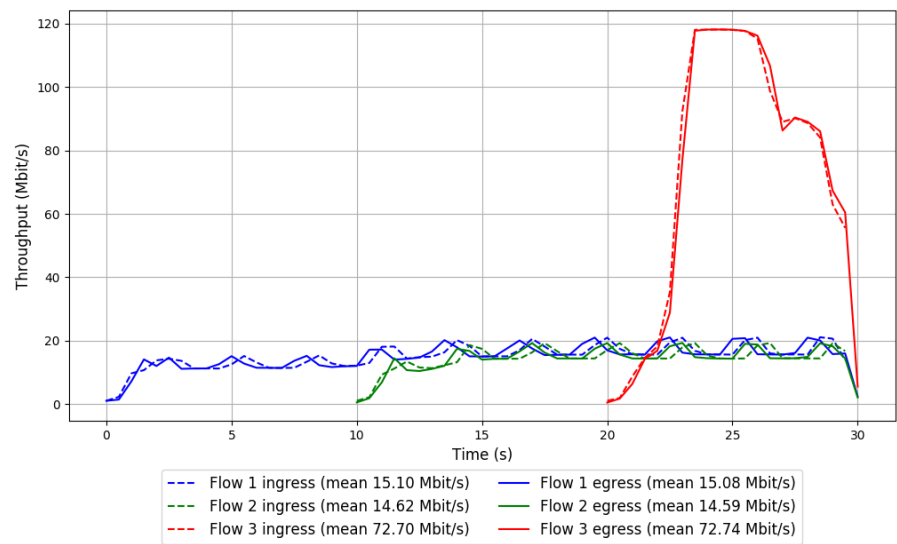
-- Flow 3:

Average throughput: 72.74 Mbit/s

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

Loss rate: 0.23%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-17 02:34:46

End at: 2018-02-17 02:35:16

Below is generated by plot.py at 2018-02-17 08:13:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.47 Mbit/s

95th percentile per-packet one-way delay: 341.191 ms

Loss rate: 39.76%

-- Flow 1:

Average throughput: 301.22 Mbit/s

95th percentile per-packet one-way delay: 341.197 ms

Loss rate: 39.77%

-- Flow 2:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 280.535 ms

Loss rate: 23.65%

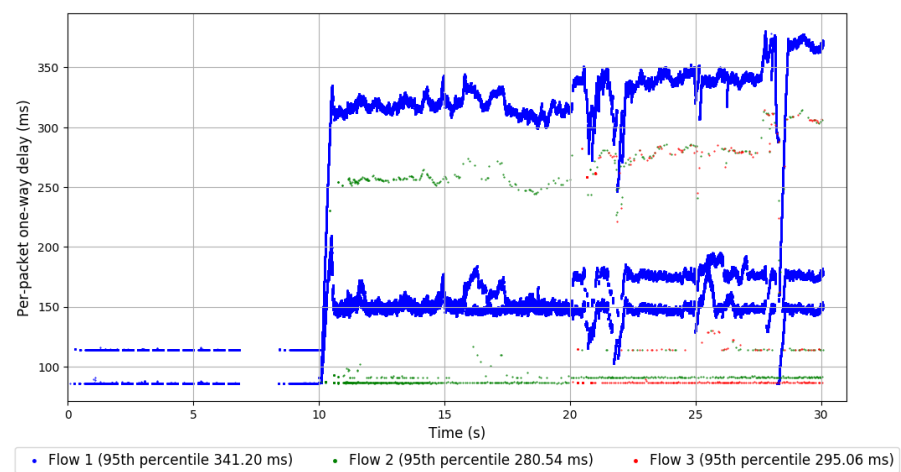
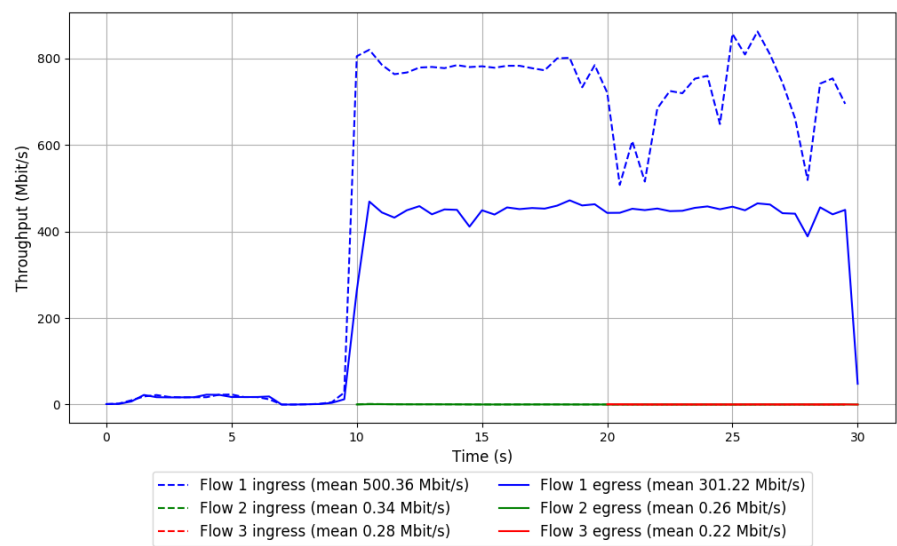
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 295.064 ms

Loss rate: 22.33%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-17 02:52:45

End at: 2018-02-17 02:53:15

Below is generated by plot.py at 2018-02-17 08:13:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.90 Mbit/s

95th percentile per-packet one-way delay: 113.932 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 14.05 Mbit/s

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

Loss rate: 0.03%

-- Flow 2:

Average throughput: 43.43 Mbit/s

95th percentile per-packet one-way delay: 113.895 ms

Loss rate: 0.05%

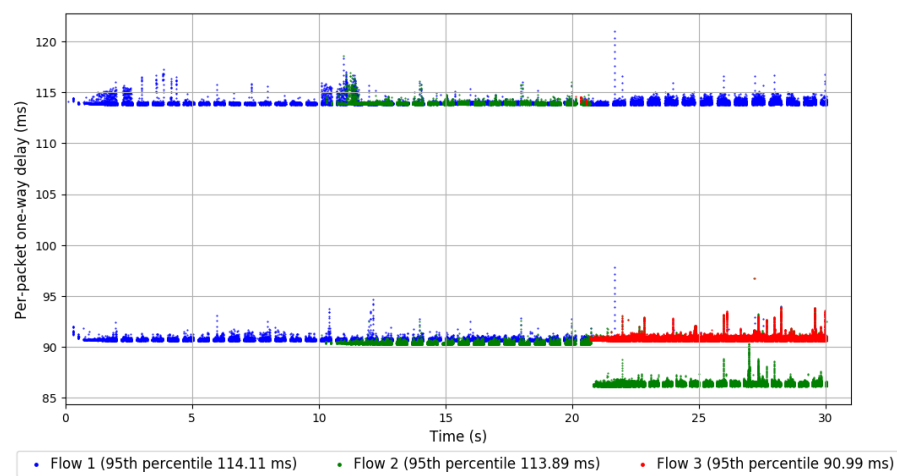
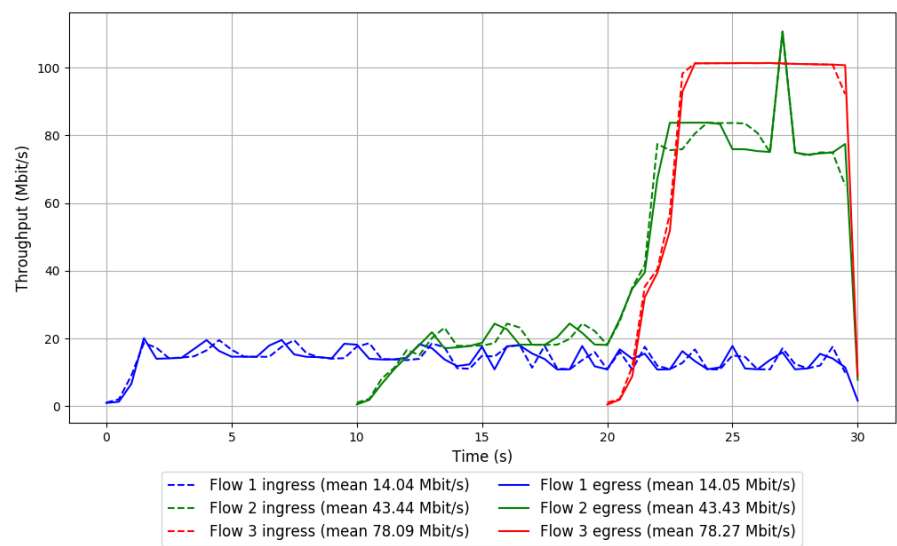
-- Flow 3:

Average throughput: 78.27 Mbit/s

95th percentile per-packet one-way delay: 90.989 ms

Loss rate: 0.05%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-17 03:11:00

End at: 2018-02-17 03:11:30

Below is generated by plot.py at 2018-02-17 08:13:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.61 Mbit/s

95th percentile per-packet one-way delay: 114.080 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.19 Mbit/s

95th percentile per-packet one-way delay: 114.013 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 30.39 Mbit/s

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

Loss rate: 0.00%

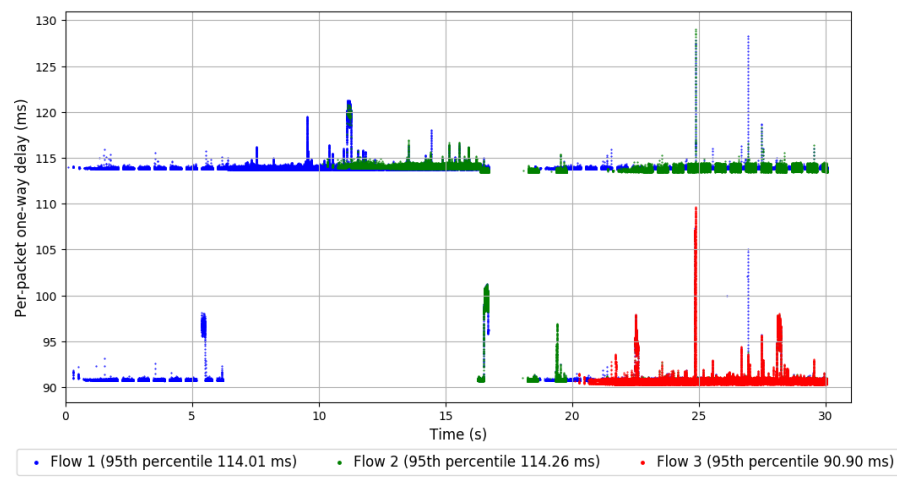
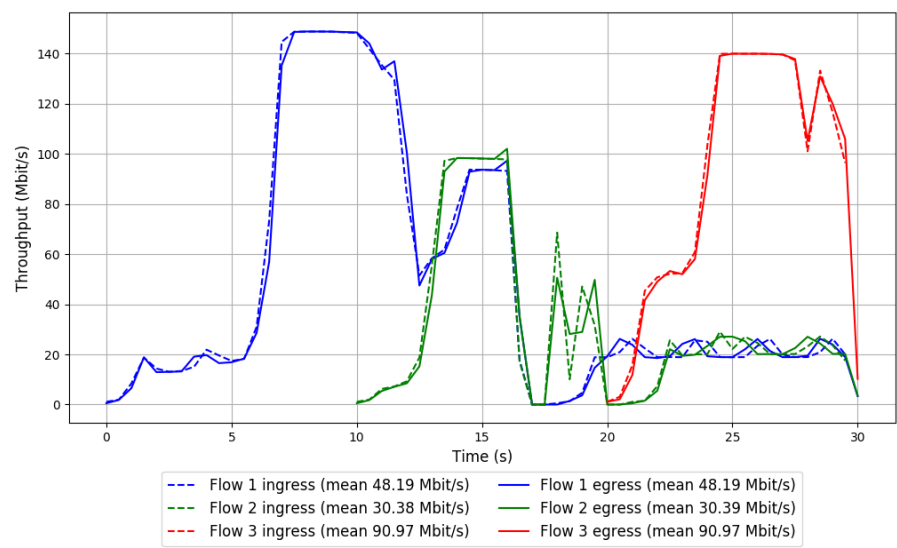
-- Flow 3:

Average throughput: 90.97 Mbit/s

95th percentile per-packet one-way delay: 90.904 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-17 03:29:13

End at: 2018-02-17 03:29:43

Below is generated by plot.py at 2018-02-17 08:13:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.12 Mbit/s

95th percentile per-packet one-way delay: 114.428 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 76.56 Mbit/s

95th percentile per-packet one-way delay: 114.293 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 12.81 Mbit/s

95th percentile per-packet one-way delay: 114.640 ms

Loss rate: 0.00%

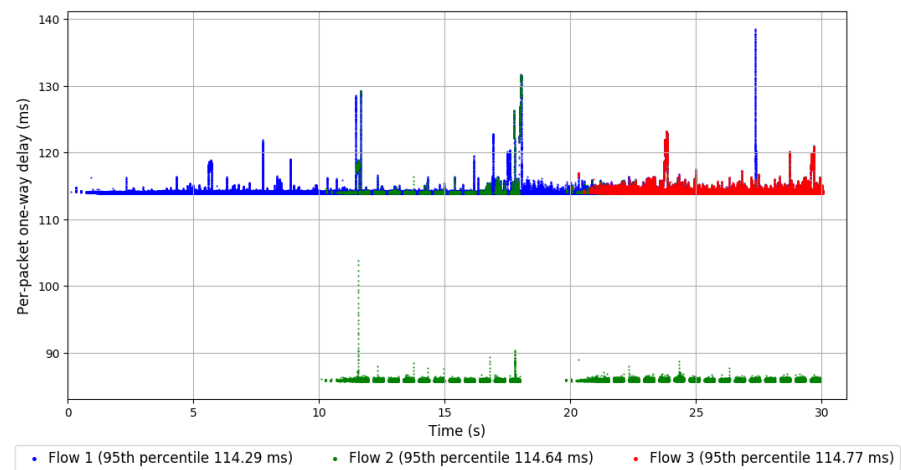
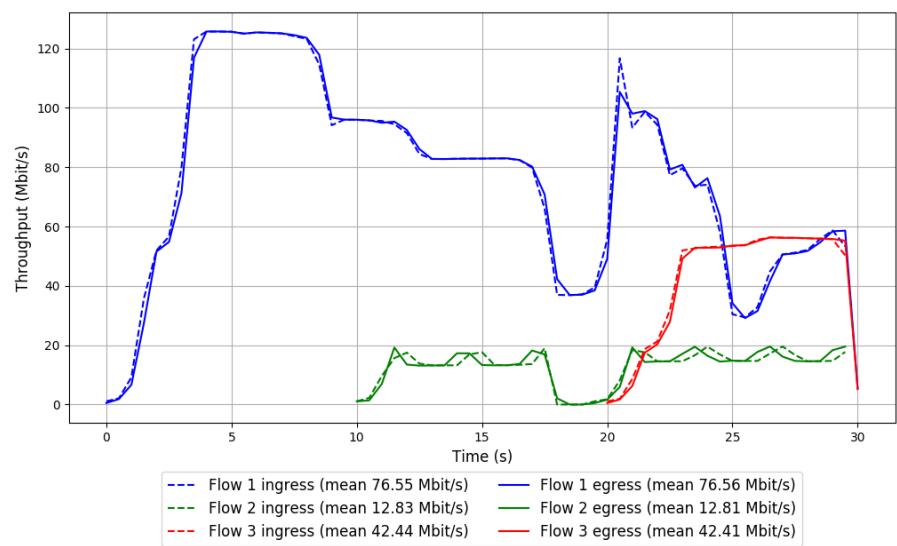
-- Flow 3:

Average throughput: 42.41 Mbit/s

95th percentile per-packet one-way delay: 114.768 ms

Loss rate: 0.30%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-17 03:47:50

End at: 2018-02-17 03:48:20

Below is generated by plot.py at 2018-02-17 08:13:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.29 Mbit/s

95th percentile per-packet one-way delay: 114.539 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 79.25 Mbit/s

95th percentile per-packet one-way delay: 114.404 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.51 Mbit/s

95th percentile per-packet one-way delay: 114.717 ms

Loss rate: 0.00%

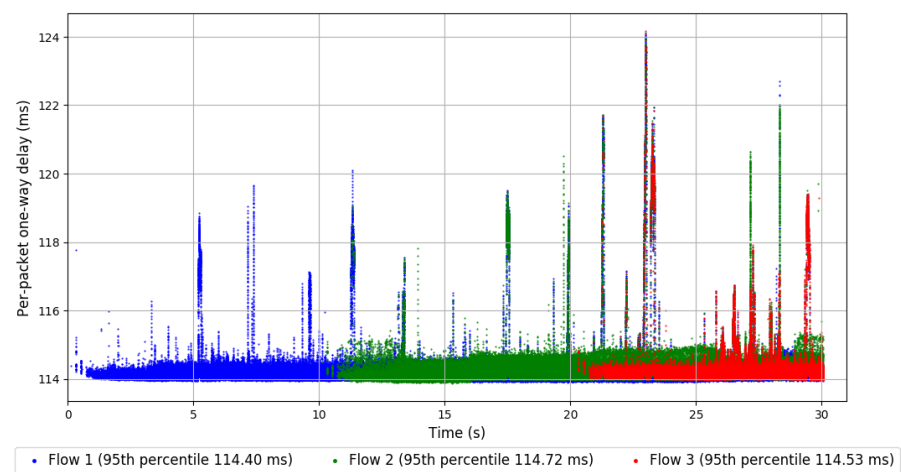
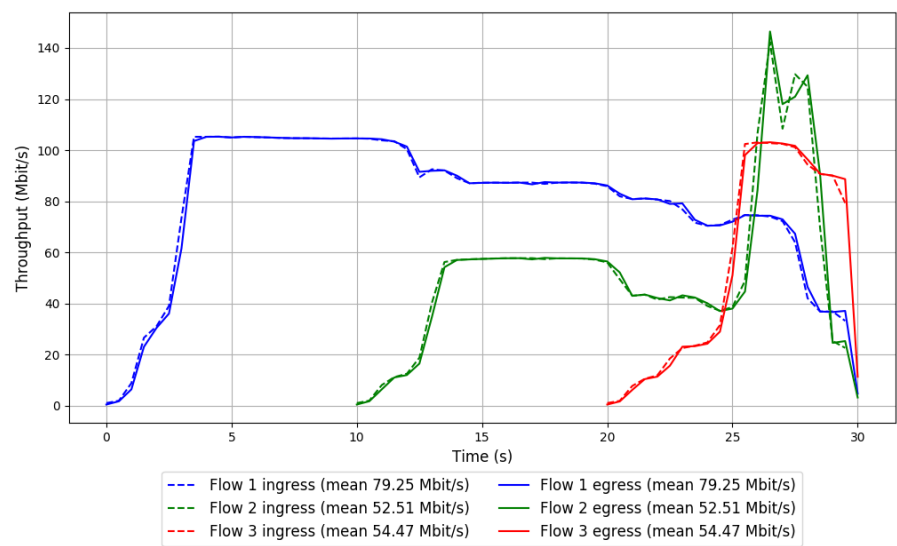
-- Flow 3:

Average throughput: 54.47 Mbit/s

95th percentile per-packet one-way delay: 114.535 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-17 04:06:23

End at: 2018-02-17 04:06:53

Below is generated by plot.py at 2018-02-17 08:13:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.10 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.59 Mbit/s

95th percentile per-packet one-way delay: 114.208 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.14 Mbit/s

95th percentile per-packet one-way delay: 114.330 ms

Loss rate: 0.00%

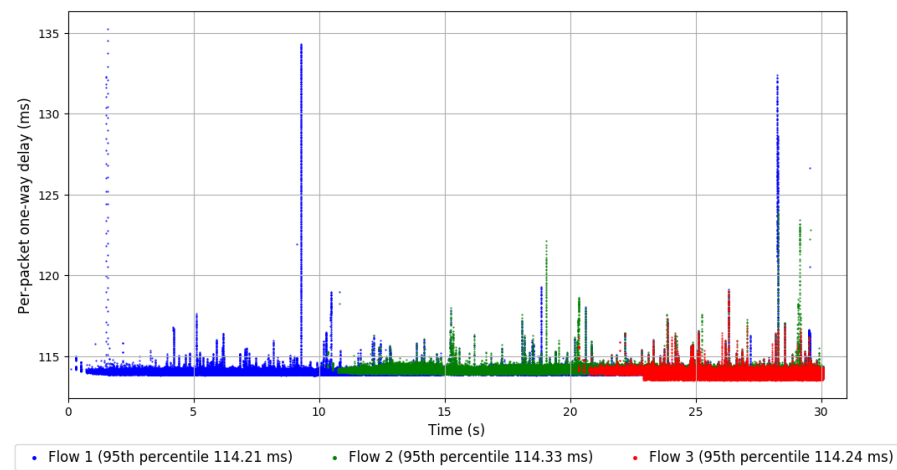
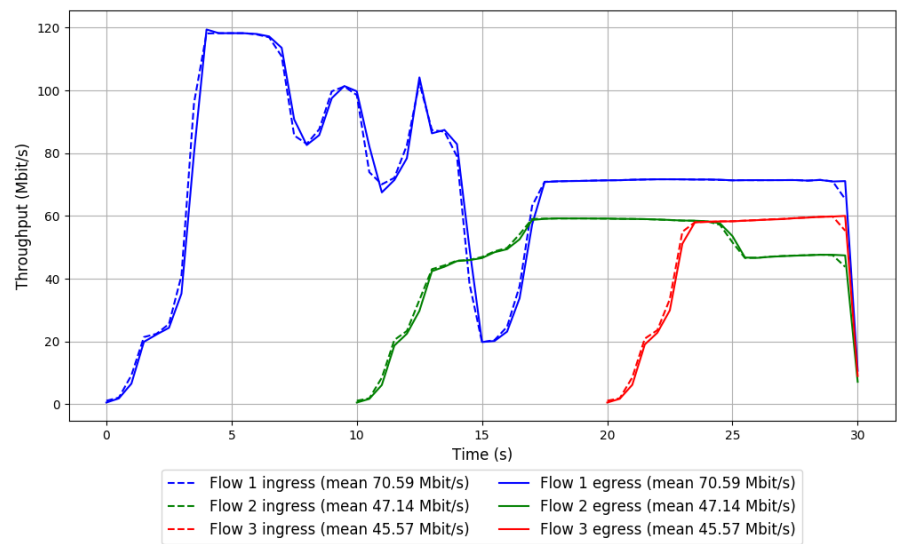
-- Flow 3:

Average throughput: 45.57 Mbit/s

95th percentile per-packet one-way delay: 114.244 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-17 04:25:29

End at: 2018-02-17 04:25:59

Below is generated by plot.py at 2018-02-17 08:13:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 141.22 Mbit/s

95th percentile per-packet one-way delay: 114.200 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.25 Mbit/s

95th percentile per-packet one-way delay: 114.208 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.89 Mbit/s

95th percentile per-packet one-way delay: 114.231 ms

Loss rate: 0.00%

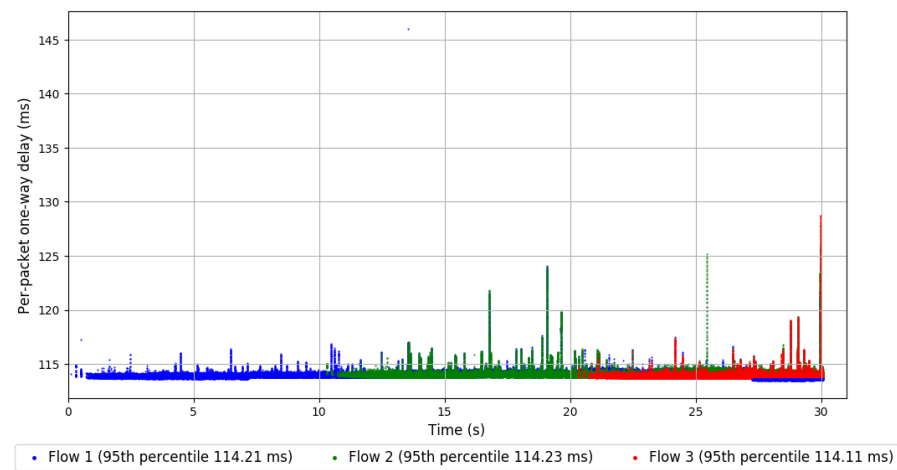
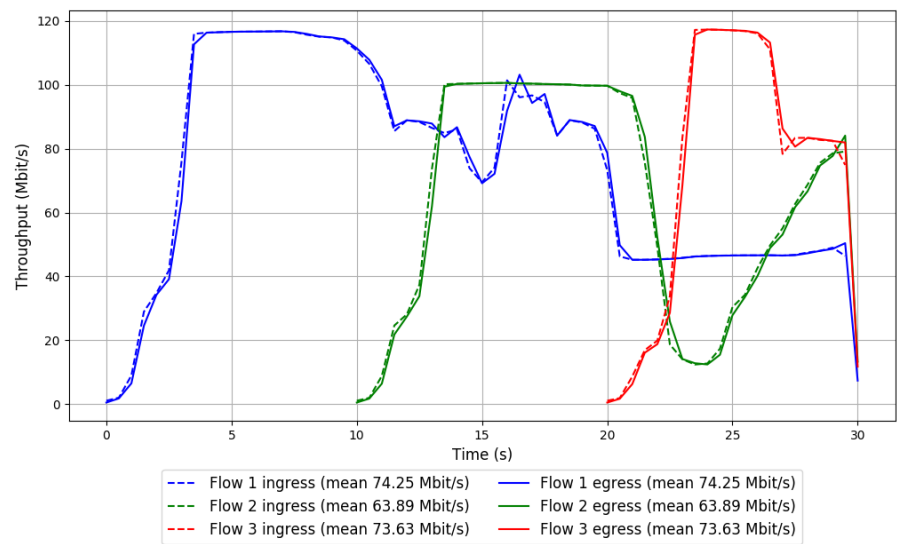
-- Flow 3:

Average throughput: 73.63 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-17 04:44:26

End at: 2018-02-17 04:44:56

Below is generated by plot.py at 2018-02-17 08:13:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 137.64 Mbit/s

95th percentile per-packet one-way delay: 87.034 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 73.84 Mbit/s

95th percentile per-packet one-way delay: 86.990 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 59.34 Mbit/s

95th percentile per-packet one-way delay: 87.044 ms

Loss rate: 0.01%

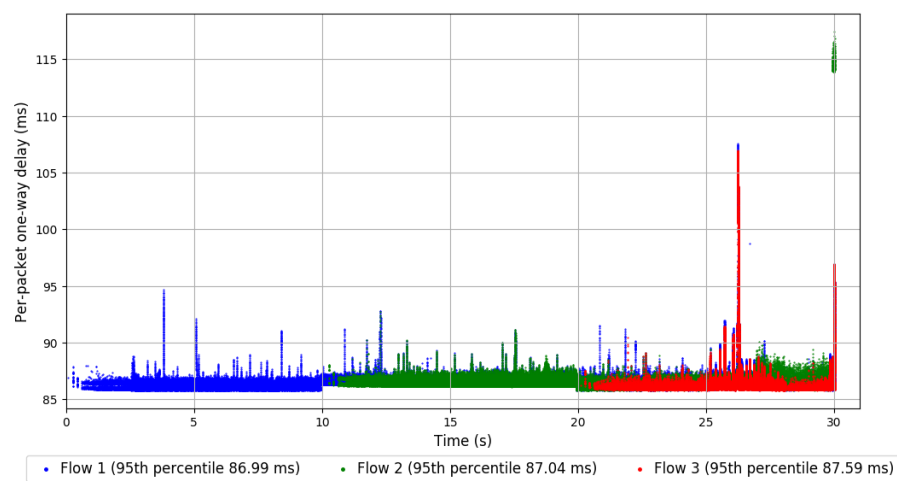
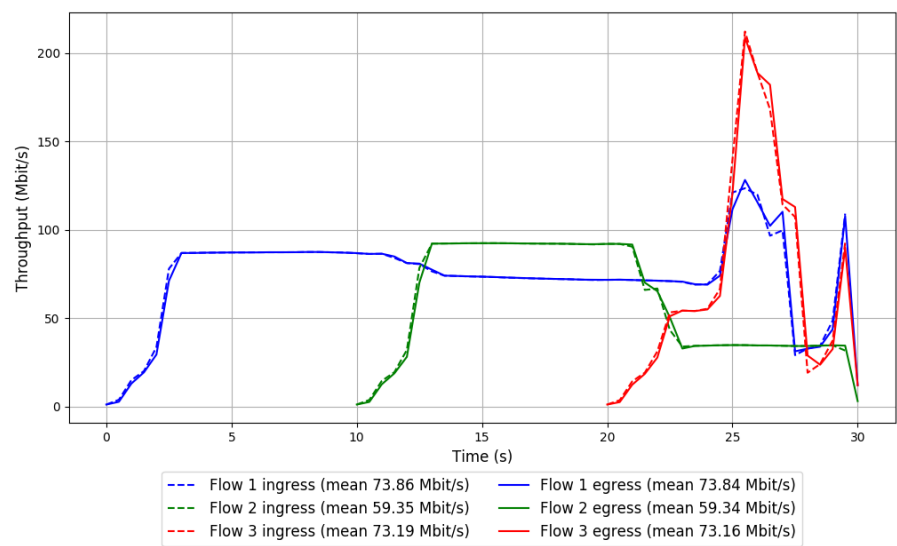
-- Flow 3:

Average throughput: 73.16 Mbit/s

95th percentile per-packet one-way delay: 87.593 ms

Loss rate: 0.01%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-17 05:03:03

End at: 2018-02-17 05:03:33

Below is generated by plot.py at 2018-02-17 08:13:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 136.35 Mbit/s

95th percentile per-packet one-way delay: 90.603 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 79.34 Mbit/s

95th percentile per-packet one-way delay: 86.858 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 56.01 Mbit/s

95th percentile per-packet one-way delay: 90.797 ms

Loss rate: 0.01%

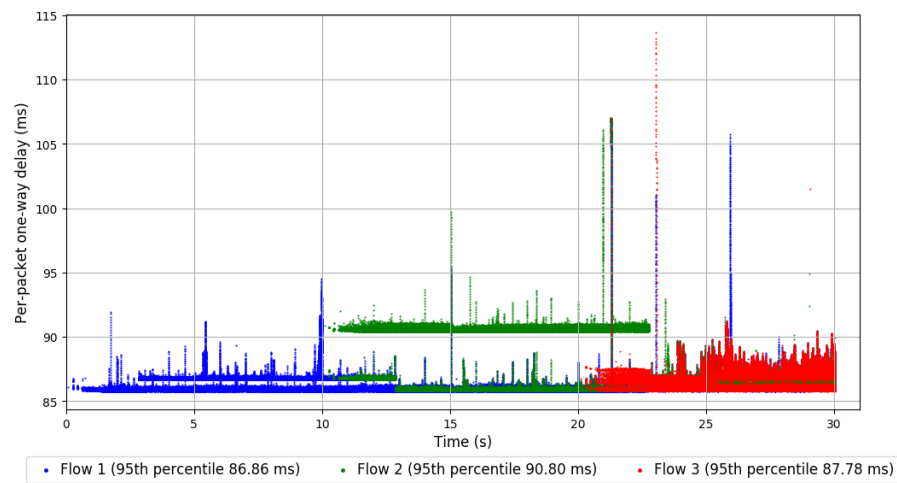
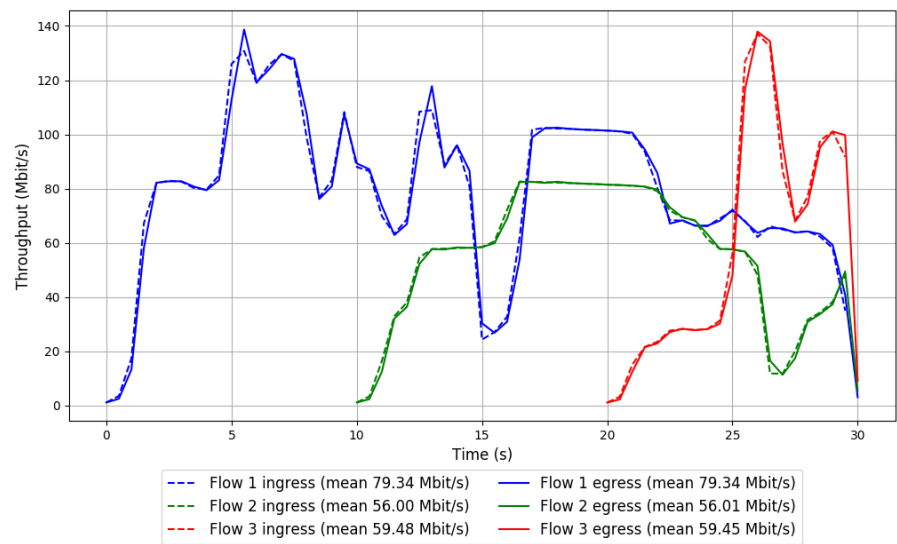
-- Flow 3:

Average throughput: 59.45 Mbit/s

95th percentile per-packet one-way delay: 87.785 ms

Loss rate: 0.03%

Run 10: Report of Copa — Data Link

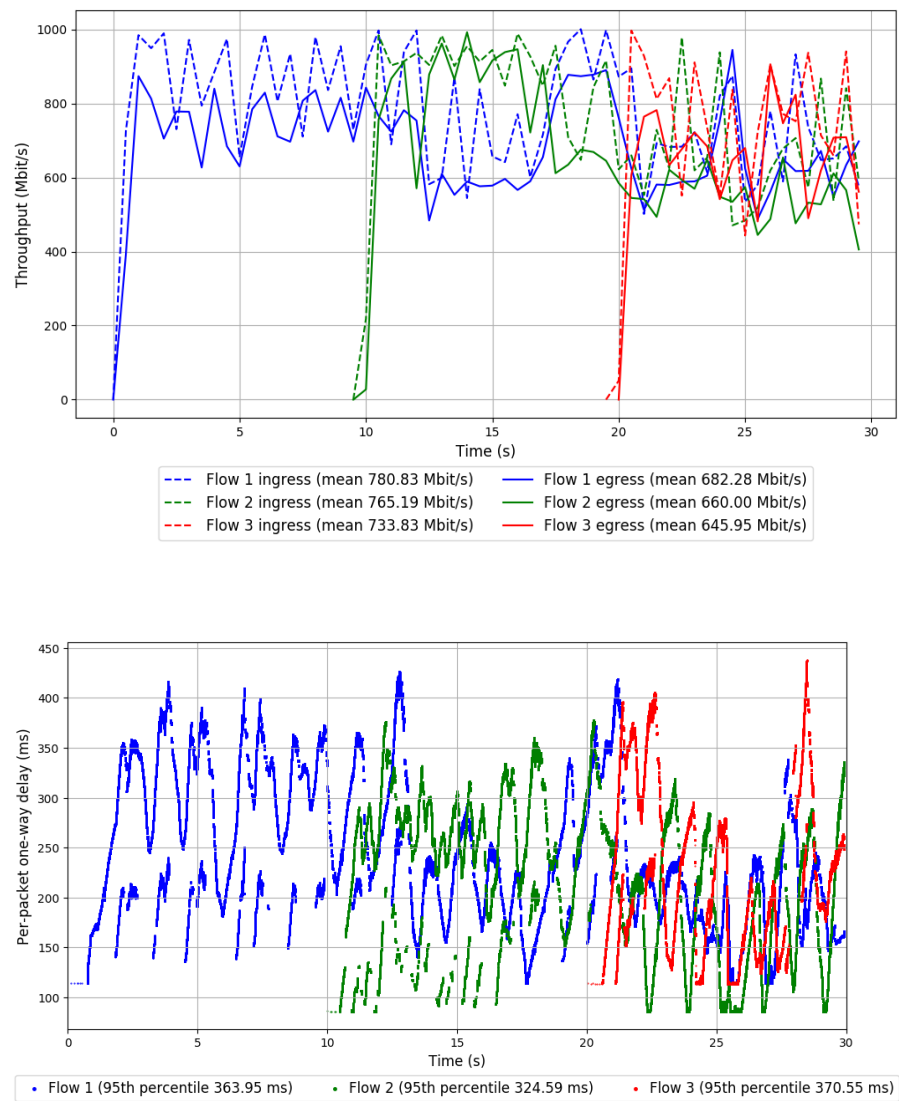


```
Run 1: Statistics of FillP

Start at: 2018-02-17 02:12:17
End at: 2018-02-17 02:12:47

# Below is generated by plot.py at 2018-02-17 08:31:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1338.09 Mbit/s
95th percentile per-packet one-way delay: 357.721 ms
Loss rate: 12.97%
-- Flow 1:
Average throughput: 682.28 Mbit/s
95th percentile per-packet one-way delay: 363.955 ms
Loss rate: 12.70%
-- Flow 2:
Average throughput: 660.00 Mbit/s
95th percentile per-packet one-way delay: 324.591 ms
Loss rate: 13.75%
-- Flow 3:
Average throughput: 645.95 Mbit/s
95th percentile per-packet one-way delay: 370.547 ms
Loss rate: 12.22%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-02-17 02:30:10

End at: 2018-02-17 02:30:40

Below is generated by plot.py at 2018-02-17 08:34:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 1458.04 Mbit/s

95th percentile per-packet one-way delay: 337.628 ms

Loss rate: 7.48%

-- Flow 1:

Average throughput: 774.01 Mbit/s

95th percentile per-packet one-way delay: 313.257 ms

Loss rate: 4.69%

-- Flow 2:

Average throughput: 711.12 Mbit/s

95th percentile per-packet one-way delay: 350.271 ms

Loss rate: 10.06%

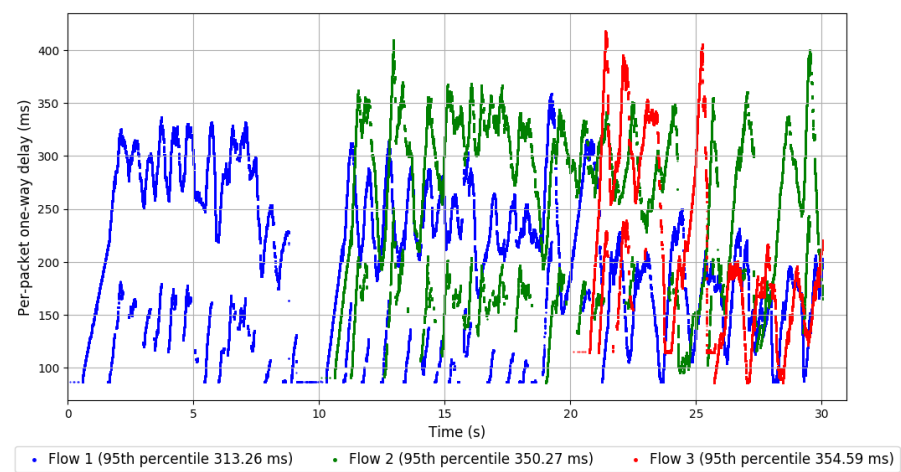
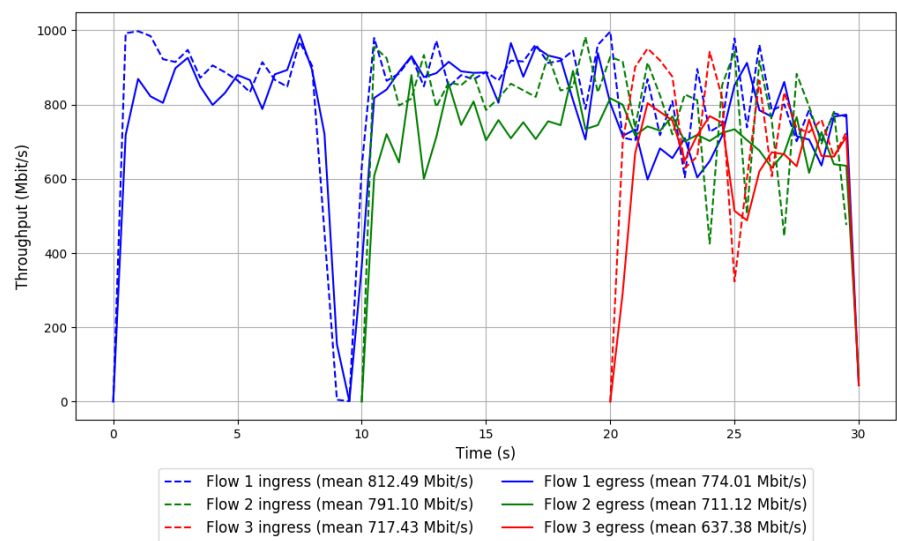
-- Flow 3:

Average throughput: 637.38 Mbit/s

95th percentile per-packet one-way delay: 354.591 ms

Loss rate: 11.28%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-17 02:48:15

End at: 2018-02-17 02:48:45

Below is generated by plot.py at 2018-02-17 08:34:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 1324.30 Mbit/s

95th percentile per-packet one-way delay: 329.789 ms

Loss rate: 8.58%

-- Flow 1:

Average throughput: 651.13 Mbit/s

95th percentile per-packet one-way delay: 326.048 ms

Loss rate: 6.08%

-- Flow 2:

Average throughput: 698.67 Mbit/s

95th percentile per-packet one-way delay: 336.023 ms

Loss rate: 10.71%

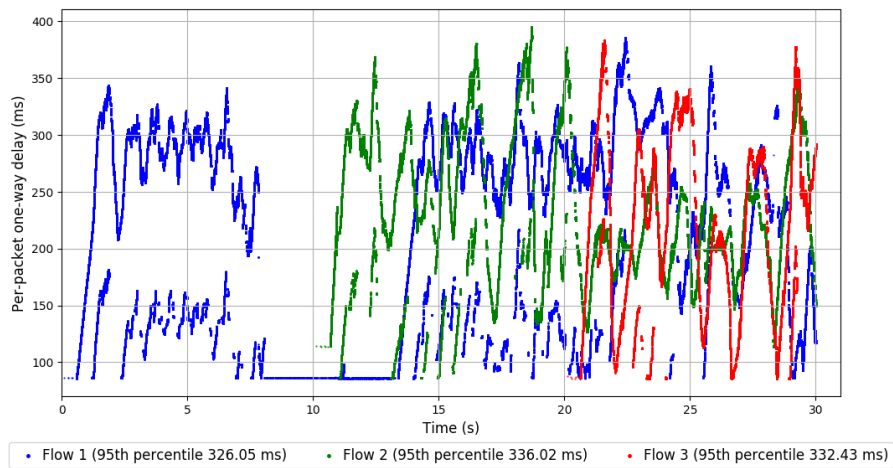
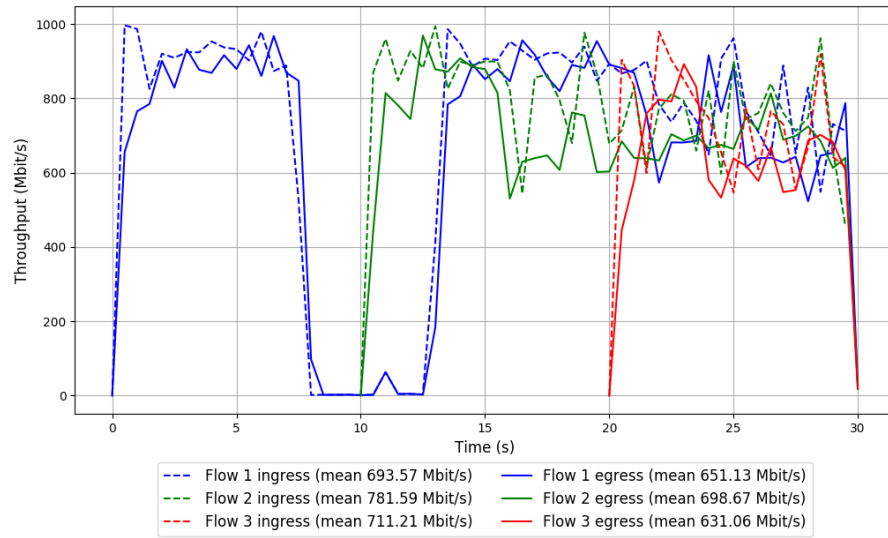
-- Flow 3:

Average throughput: 631.06 Mbit/s

95th percentile per-packet one-way delay: 332.434 ms

Loss rate: 11.24%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-17 03:06:17

End at: 2018-02-17 03:06:47

Below is generated by plot.py at 2018-02-17 08:34:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 1378.22 Mbit/s

95th percentile per-packet one-way delay: 357.582 ms

Loss rate: 9.35%

-- Flow 1:

Average throughput: 749.63 Mbit/s

95th percentile per-packet one-way delay: 358.183 ms

Loss rate: 8.30%

-- Flow 2:

Average throughput: 627.77 Mbit/s

95th percentile per-packet one-way delay: 359.492 ms

Loss rate: 10.82%

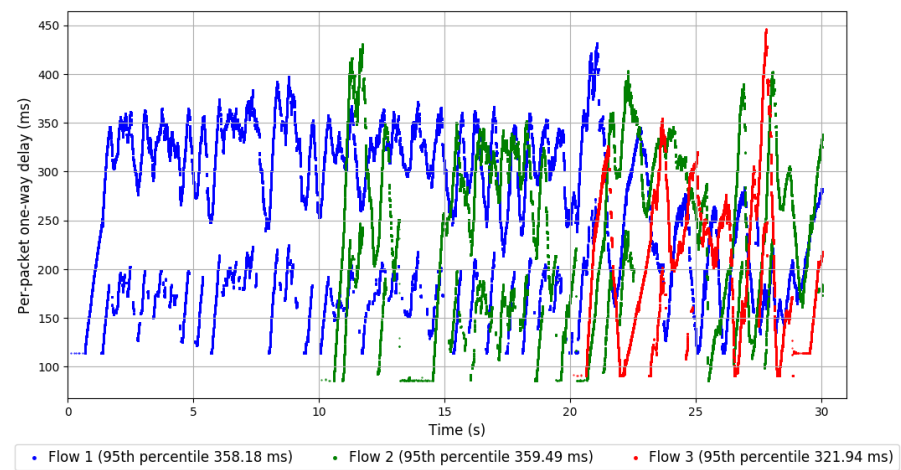
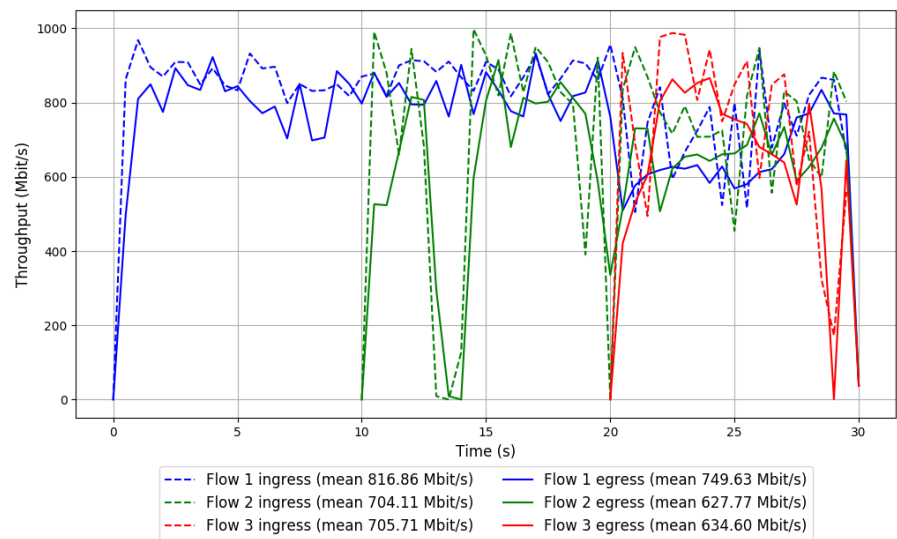
-- Flow 3:

Average throughput: 634.60 Mbit/s

95th percentile per-packet one-way delay: 321.937 ms

Loss rate: 10.07%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-17 03:24:30

End at: 2018-02-17 03:25:00

Below is generated by plot.py at 2018-02-17 08:37:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 1403.73 Mbit/s

95th percentile per-packet one-way delay: 359.506 ms

Loss rate: 10.06%

-- Flow 1:

Average throughput: 695.09 Mbit/s

95th percentile per-packet one-way delay: 366.614 ms

Loss rate: 10.19%

-- Flow 2:

Average throughput: 745.39 Mbit/s

95th percentile per-packet one-way delay: 358.938 ms

Loss rate: 10.22%

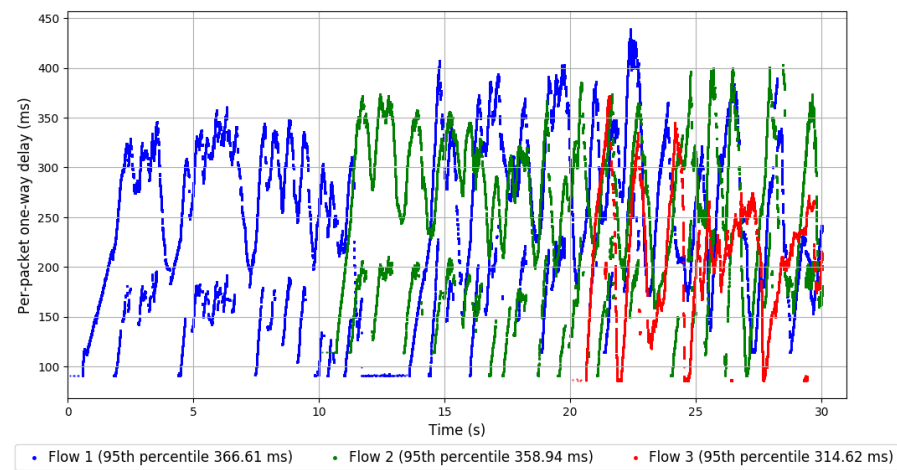
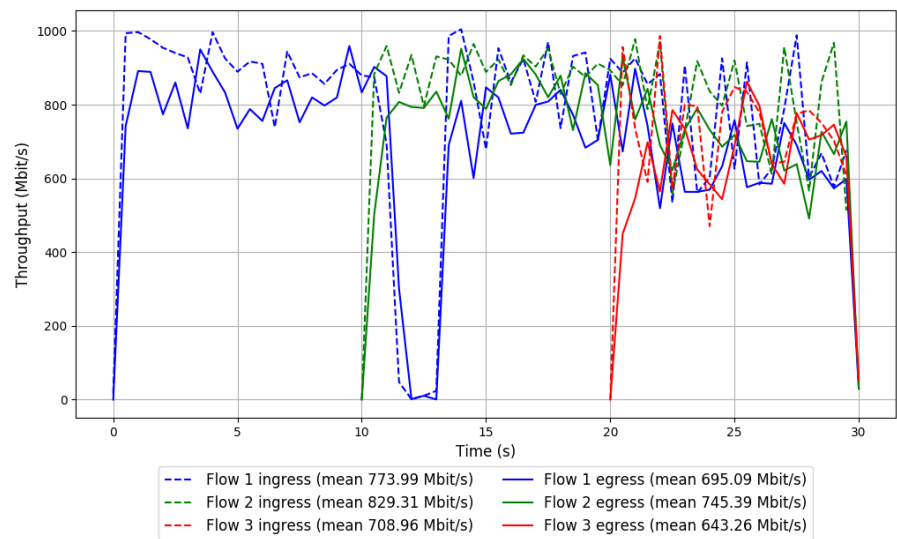
-- Flow 3:

Average throughput: 643.26 Mbit/s

95th percentile per-packet one-way delay: 314.620 ms

Loss rate: 9.23%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-17 03:43:01

End at: 2018-02-17 03:43:31

Below is generated by plot.py at 2018-02-17 08:38:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 1457.13 Mbit/s

95th percentile per-packet one-way delay: 352.243 ms

Loss rate: 8.65%

-- Flow 1:

Average throughput: 796.52 Mbit/s

95th percentile per-packet one-way delay: 353.973 ms

Loss rate: 6.25%

-- Flow 2:

Average throughput: 655.35 Mbit/s

95th percentile per-packet one-way delay: 357.896 ms

Loss rate: 12.81%

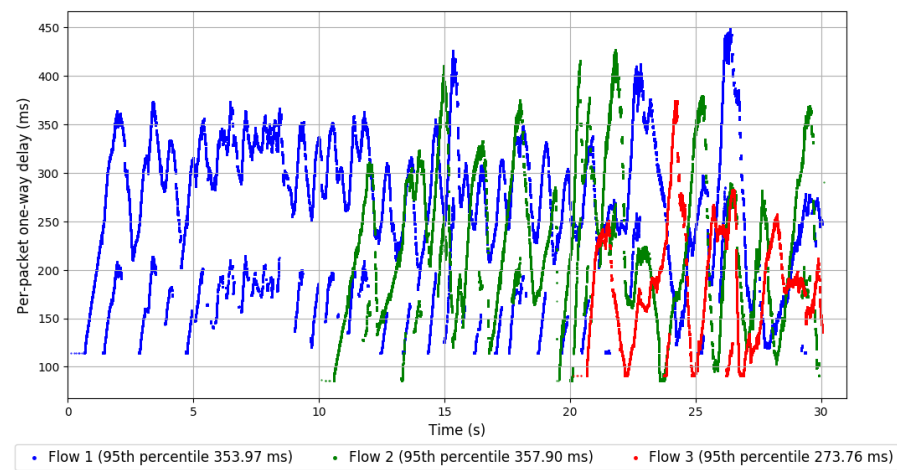
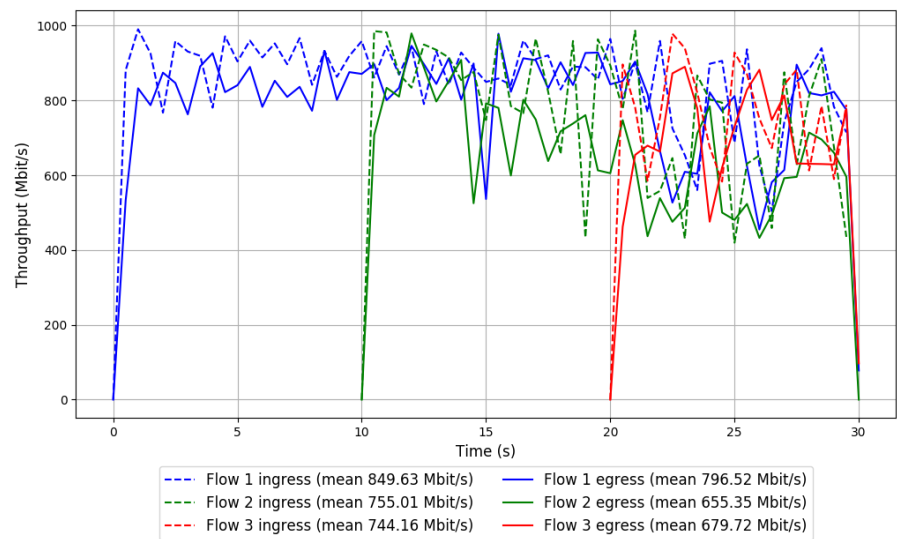
-- Flow 3:

Average throughput: 679.72 Mbit/s

95th percentile per-packet one-way delay: 273.762 ms

Loss rate: 8.44%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-17 04:01:50

End at: 2018-02-17 04:02:20

Below is generated by plot.py at 2018-02-17 08:38:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 1011.09 Mbit/s

95th percentile per-packet one-way delay: 361.961 ms

Loss rate: 8.12%

-- Flow 1:

Average throughput: 362.48 Mbit/s

95th percentile per-packet one-way delay: 358.773 ms

Loss rate: 6.06%

-- Flow 2:

Average throughput: 620.51 Mbit/s

95th percentile per-packet one-way delay: 356.577 ms

Loss rate: 6.77%

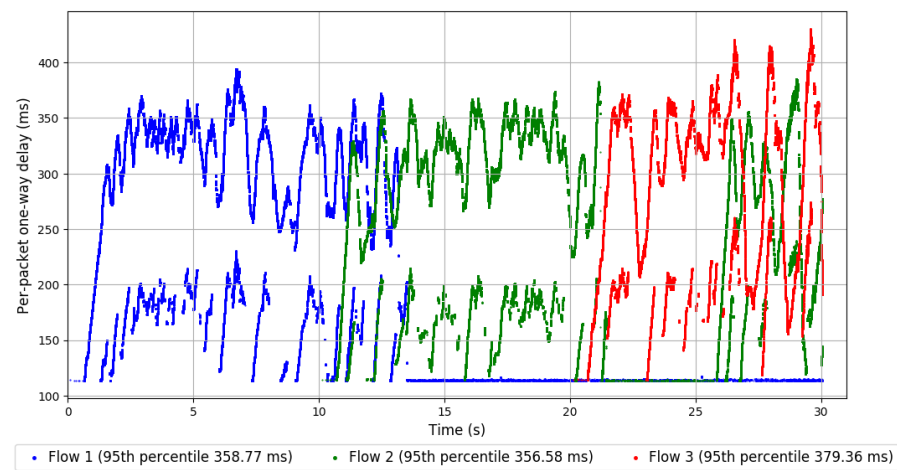
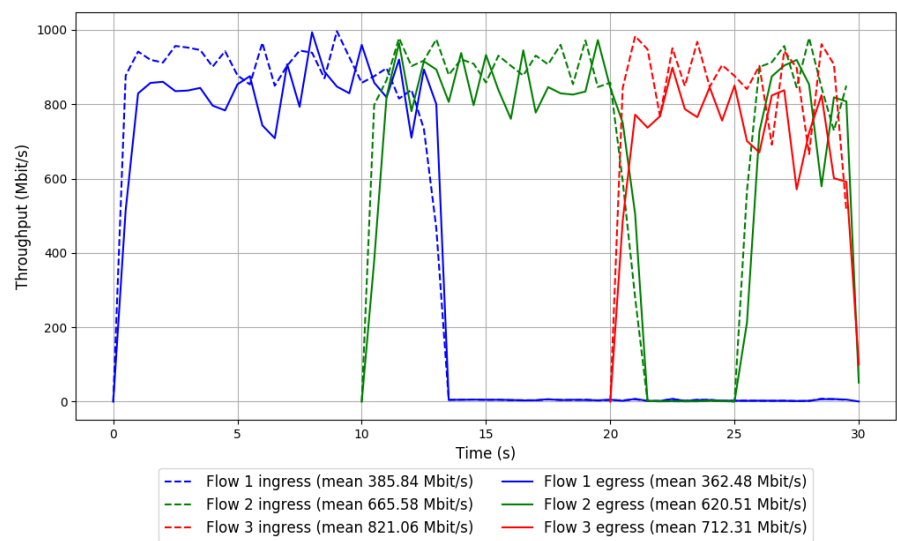
-- Flow 3:

Average throughput: 712.31 Mbit/s

95th percentile per-packet one-way delay: 379.356 ms

Loss rate: 13.24%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-17 04:20:41

End at: 2018-02-17 04:21:11

Below is generated by plot.py at 2018-02-17 08:45:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 1473.78 Mbit/s

95th percentile per-packet one-way delay: 356.056 ms

Loss rate: 8.03%

-- Flow 1:

Average throughput: 835.86 Mbit/s

95th percentile per-packet one-way delay: 345.863 ms

Loss rate: 4.19%

-- Flow 2:

Average throughput: 653.28 Mbit/s

95th percentile per-packet one-way delay: 368.155 ms

Loss rate: 12.85%

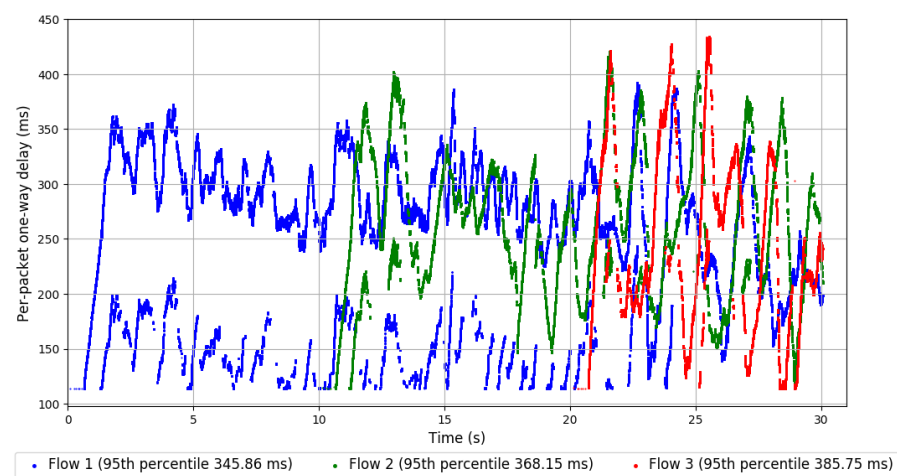
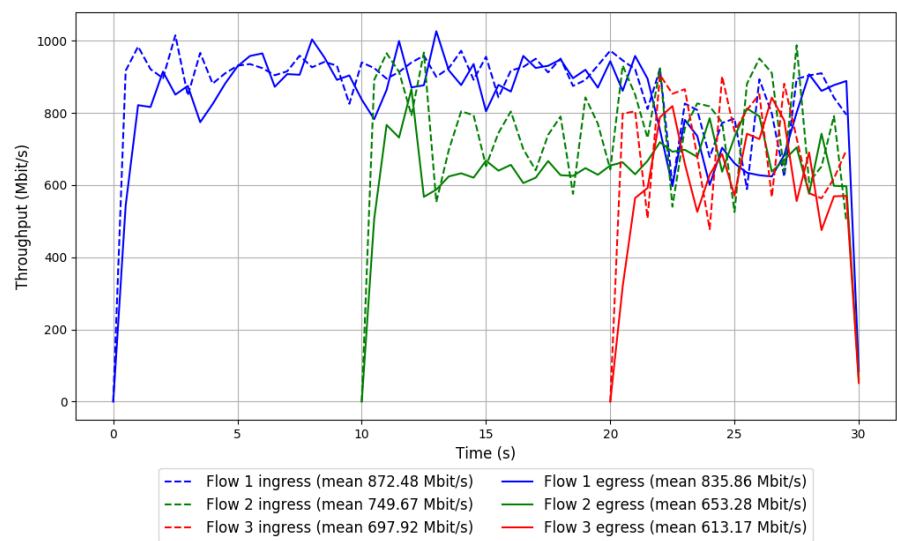
-- Flow 3:

Average throughput: 613.17 Mbit/s

95th percentile per-packet one-way delay: 385.748 ms

Loss rate: 12.14%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-17 04:39:39

End at: 2018-02-17 04:40:09

Below is generated by plot.py at 2018-02-17 09:03:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 1489.32 Mbit/s

95th percentile per-packet one-way delay: 347.415 ms

Loss rate: 8.83%

-- Flow 1:

Average throughput: 762.44 Mbit/s

95th percentile per-packet one-way delay: 349.527 ms

Loss rate: 8.77%

-- Flow 2:

Average throughput: 760.52 Mbit/s

95th percentile per-packet one-way delay: 347.674 ms

Loss rate: 7.66%

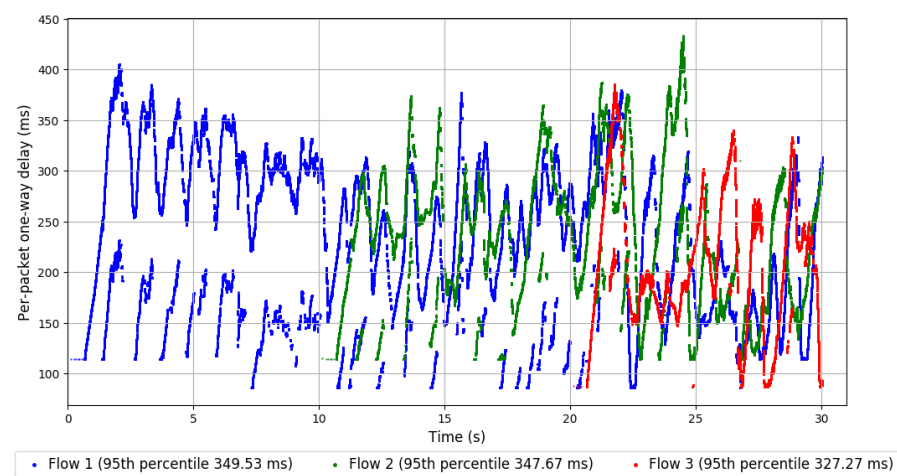
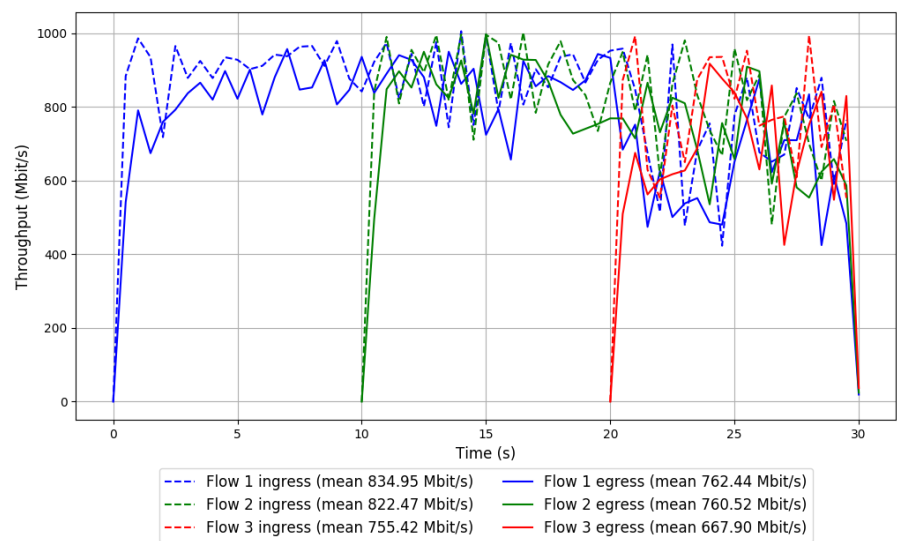
-- Flow 3:

Average throughput: 667.90 Mbit/s

95th percentile per-packet one-way delay: 327.274 ms

Loss rate: 11.59%

Run 9: Report of FillP — Data Link

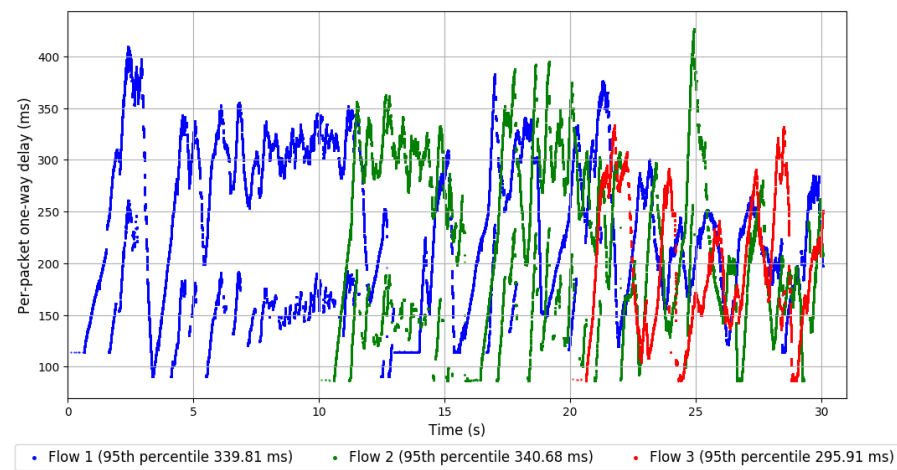
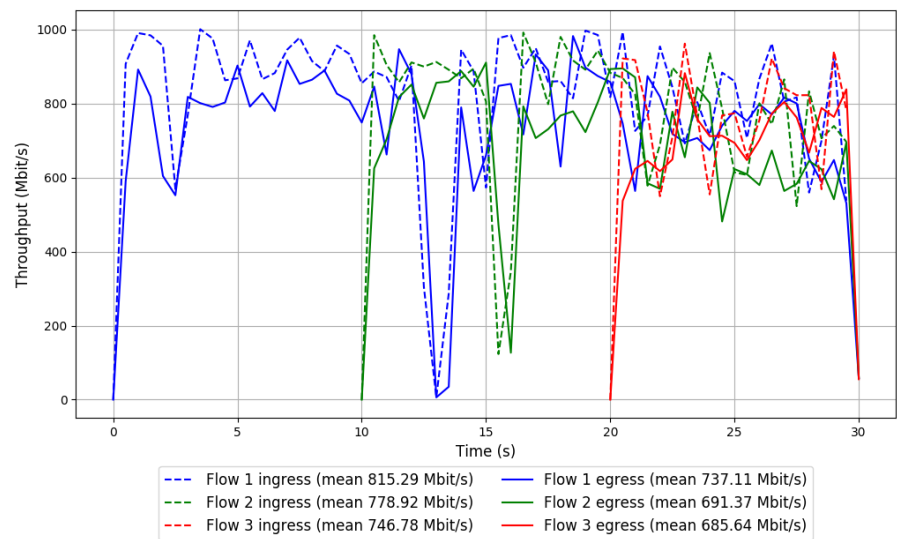


```
Run 10: Statistics of FillP

Start at: 2018-02-17 04:58:23
End at: 2018-02-17 04:58:53

# Below is generated by plot.py at 2018-02-17 09:04:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1425.54 Mbit/s
95th percentile per-packet one-way delay: 336.819 ms
Loss rate: 9.84%
-- Flow 1:
Average throughput: 737.11 Mbit/s
95th percentile per-packet one-way delay: 339.807 ms
Loss rate: 9.60%
-- Flow 2:
Average throughput: 691.37 Mbit/s
95th percentile per-packet one-way delay: 340.681 ms
Loss rate: 11.12%
-- Flow 3:
Average throughput: 685.64 Mbit/s
95th percentile per-packet one-way delay: 295.913 ms
Loss rate: 7.95%
```

Run 10: Report of FillP — Data Link

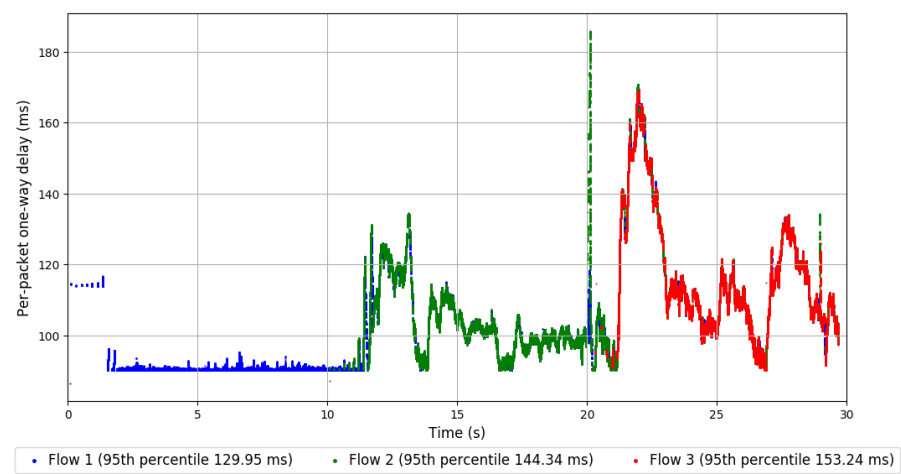
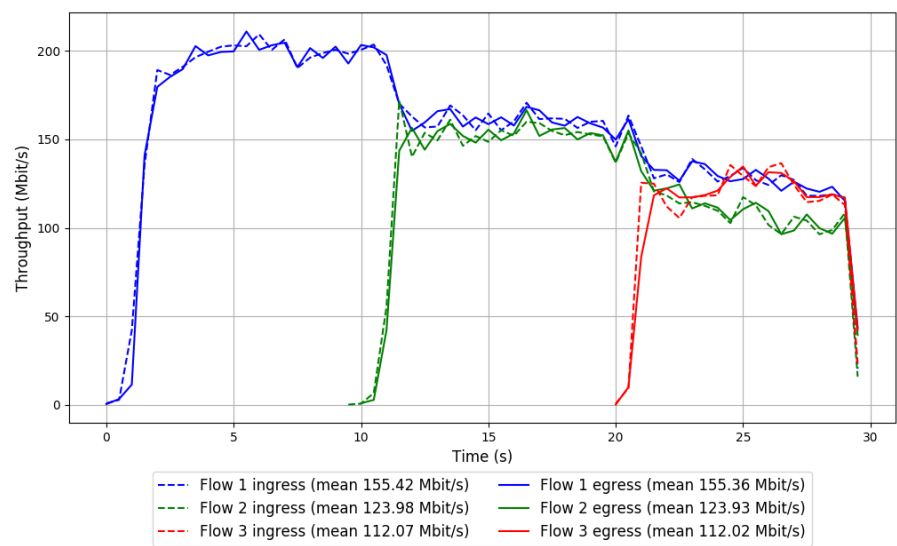


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-17 02:07:54
End at: 2018-02-17 02:08:24

# Below is generated by plot.py at 2018-02-17 09:04:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 272.91 Mbit/s
95th percentile per-packet one-way delay: 139.617 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 155.36 Mbit/s
95th percentile per-packet one-way delay: 129.950 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 123.93 Mbit/s
95th percentile per-packet one-way delay: 144.345 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 112.02 Mbit/s
95th percentile per-packet one-way delay: 153.236 ms
Loss rate: 0.13%
```

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

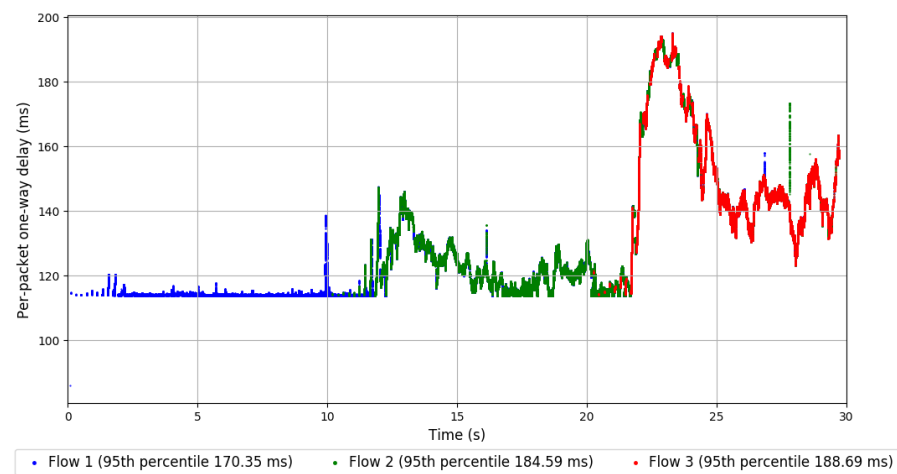
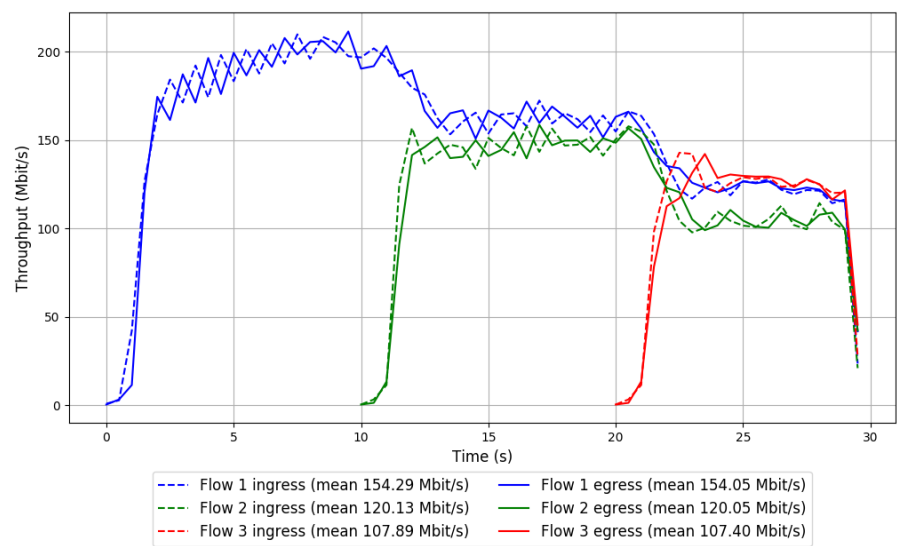


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-17 02:26:01
End at: 2018-02-17 02:26:31

# Below is generated by plot.py at 2018-02-17 09:04:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 267.37 Mbit/s
95th percentile per-packet one-way delay: 182.746 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 154.05 Mbit/s
95th percentile per-packet one-way delay: 170.352 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 120.05 Mbit/s
95th percentile per-packet one-way delay: 184.587 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 107.40 Mbit/s
95th percentile per-packet one-way delay: 188.685 ms
Loss rate: 0.81%
```

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-17 02:44:03

End at: 2018-02-17 02:44:33

Below is generated by plot.py at 2018-02-17 09:04:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 271.19 Mbit/s

95th percentile per-packet one-way delay: 135.474 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 156.18 Mbit/s

95th percentile per-packet one-way delay: 127.050 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 130.78 Mbit/s

95th percentile per-packet one-way delay: 137.366 ms

Loss rate: 0.16%

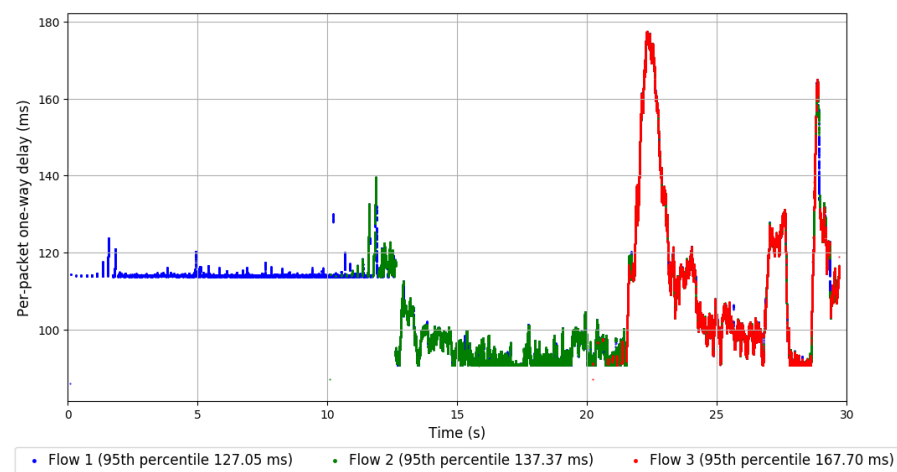
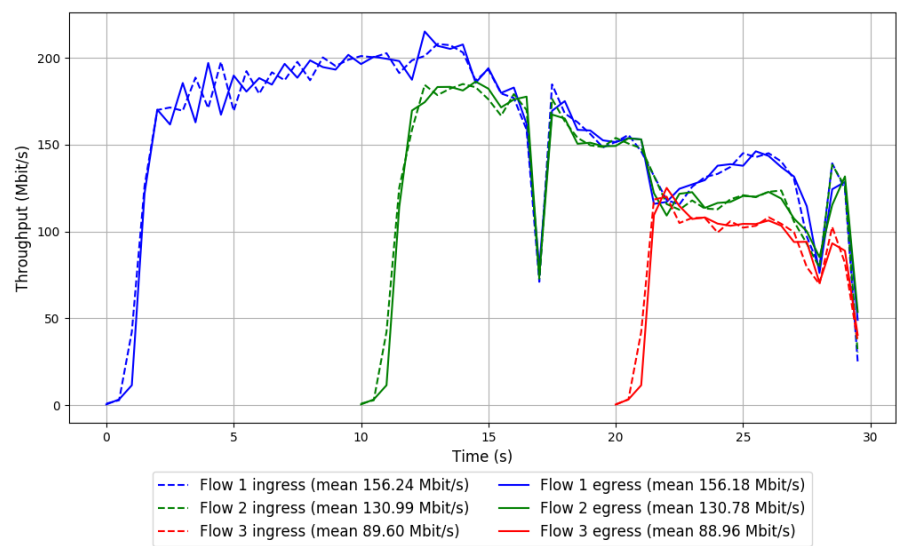
-- Flow 3:

Average throughput: 88.96 Mbit/s

95th percentile per-packet one-way delay: 167.697 ms

Loss rate: 0.69%

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



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-17 03:01:55

End at: 2018-02-17 03:02:25

Below is generated by plot.py at 2018-02-17 09:04:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 285.64 Mbit/s

95th percentile per-packet one-way delay: 167.044 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 164.45 Mbit/s

95th percentile per-packet one-way delay: 152.852 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 131.15 Mbit/s

95th percentile per-packet one-way delay: 168.721 ms

Loss rate: 0.13%

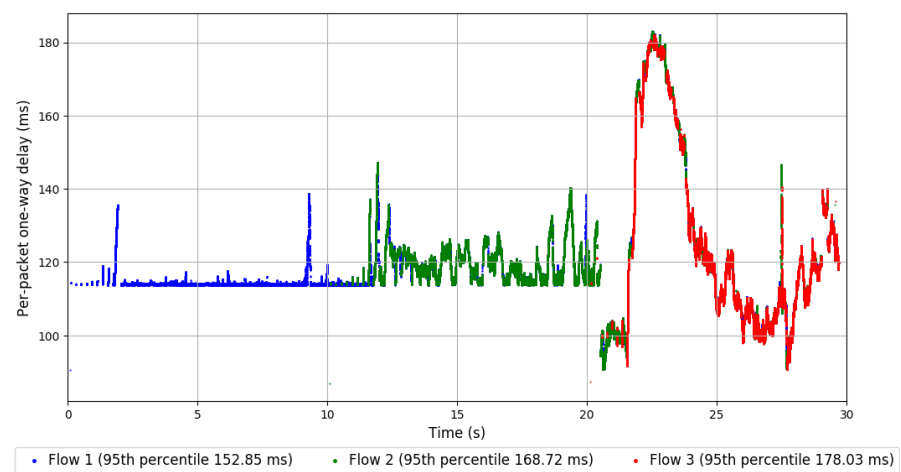
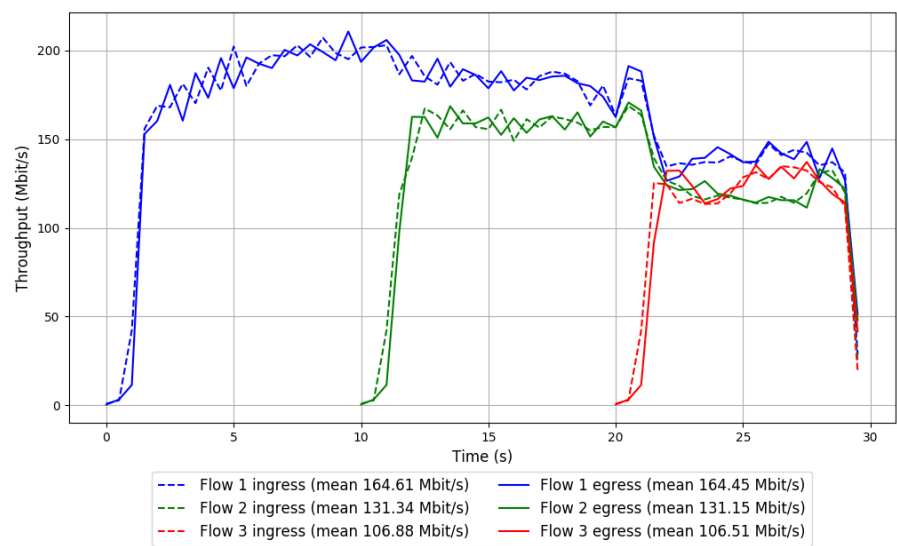
-- Flow 3:

Average throughput: 106.51 Mbit/s

95th percentile per-packet one-way delay: 178.033 ms

Loss rate: 0.31%

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



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-17 03:20:11

End at: 2018-02-17 03:20:41

Below is generated by plot.py at 2018-02-17 09:04:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 277.41 Mbit/s

95th percentile per-packet one-way delay: 175.517 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 162.47 Mbit/s

95th percentile per-packet one-way delay: 150.422 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 121.04 Mbit/s

95th percentile per-packet one-way delay: 176.911 ms

Loss rate: 0.00%

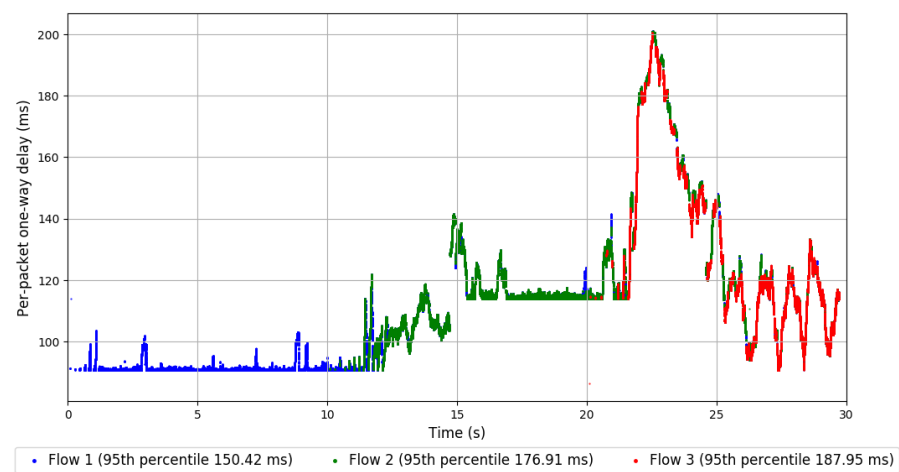
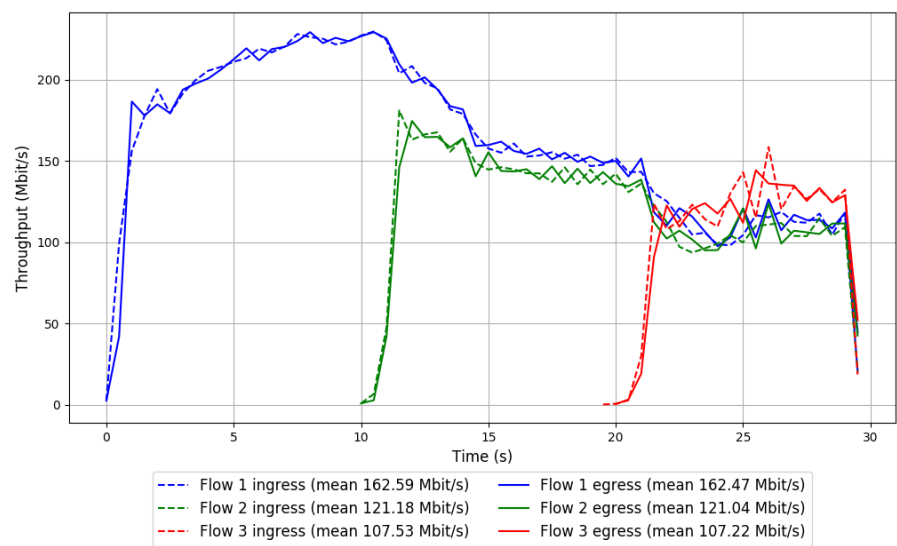
-- Flow 3:

Average throughput: 107.22 Mbit/s

95th percentile per-packet one-way delay: 187.947 ms

Loss rate: 0.00%

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



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-17 03:38:33

End at: 2018-02-17 03:39:03

Below is generated by plot.py at 2018-02-17 09:04:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 286.17 Mbit/s

95th percentile per-packet one-way delay: 148.162 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 183.97 Mbit/s

95th percentile per-packet one-way delay: 143.911 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 144.45 Mbit/s

95th percentile per-packet one-way delay: 152.938 ms

Loss rate: 0.05%

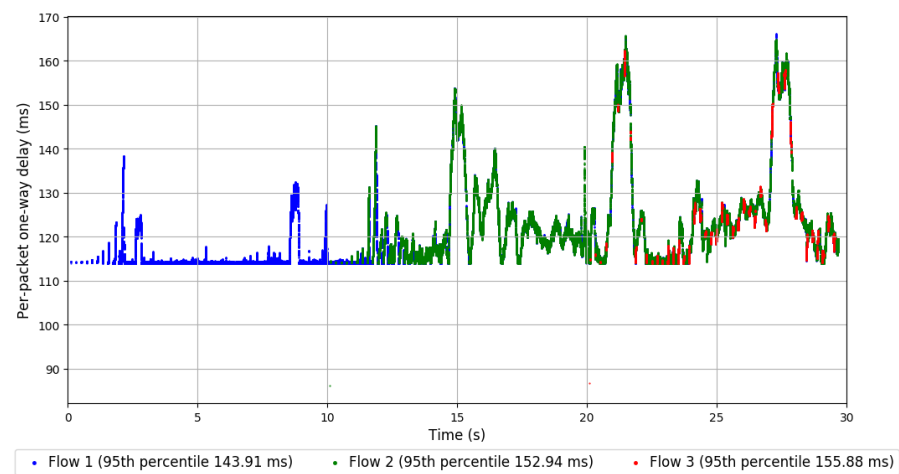
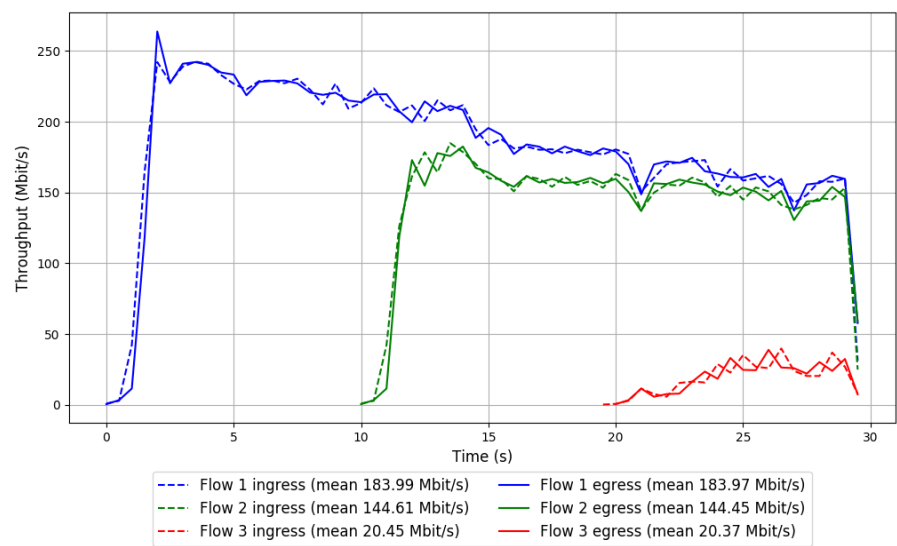
-- Flow 3:

Average throughput: 20.37 Mbit/s

95th percentile per-packet one-way delay: 155.884 ms

Loss rate: 1.99%

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



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-17 03:57:17

End at: 2018-02-17 03:57:47

Below is generated by plot.py at 2018-02-17 09:04:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 266.30 Mbit/s

95th percentile per-packet one-way delay: 152.606 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 154.51 Mbit/s

95th percentile per-packet one-way delay: 149.147 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 139.40 Mbit/s

95th percentile per-packet one-way delay: 153.600 ms

Loss rate: 0.12%

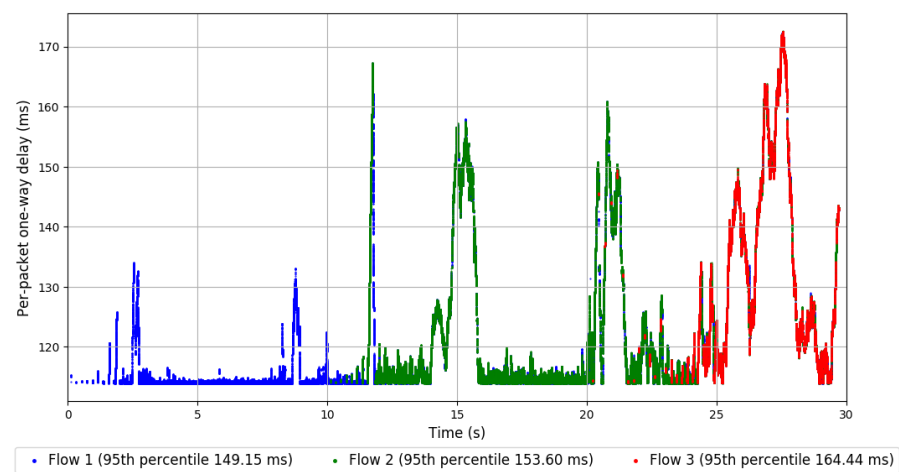
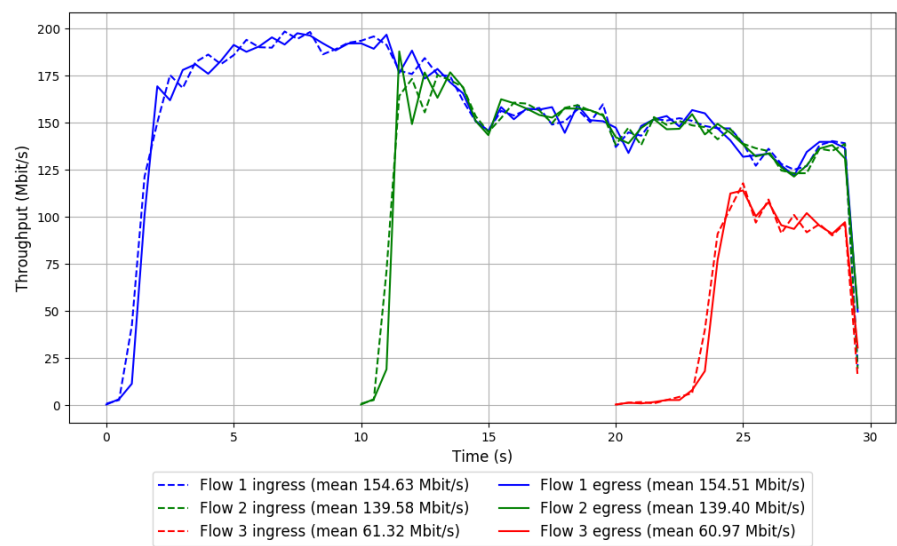
-- Flow 3:

Average throughput: 60.97 Mbit/s

95th percentile per-packet one-way delay: 164.440 ms

Loss rate: 0.56%

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



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-17 04:15:59

End at: 2018-02-17 04:16:29

Below is generated by plot.py at 2018-02-17 09:04:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 275.57 Mbit/s

95th percentile per-packet one-way delay: 167.445 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 159.45 Mbit/s

95th percentile per-packet one-way delay: 160.301 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 129.04 Mbit/s

95th percentile per-packet one-way delay: 167.650 ms

Loss rate: 0.00%

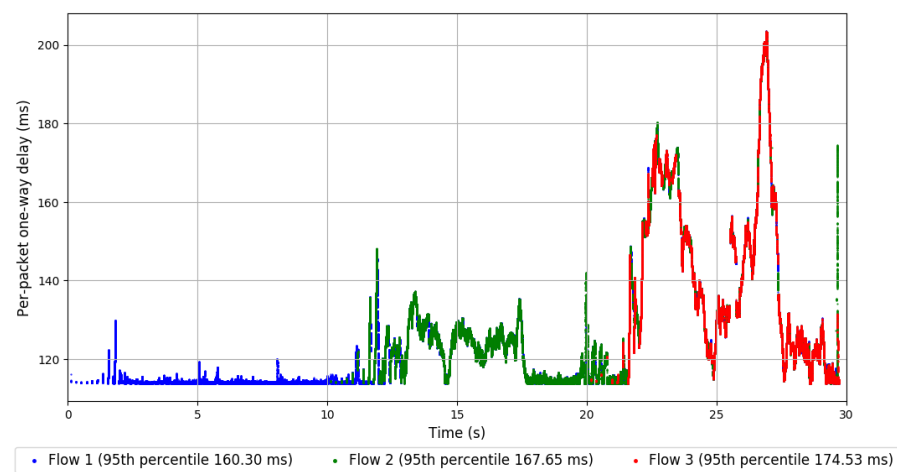
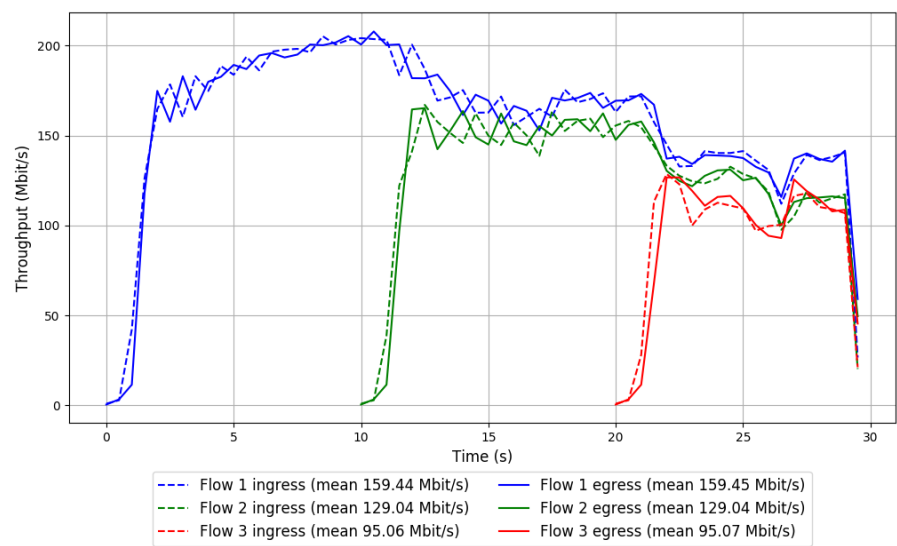
-- Flow 3:

Average throughput: 95.07 Mbit/s

95th percentile per-packet one-way delay: 174.529 ms

Loss rate: 0.00%

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



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-17 04:35:08

End at: 2018-02-17 04:35:38

Below is generated by plot.py at 2018-02-17 09:04:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 310.71 Mbit/s

95th percentile per-packet one-way delay: 126.510 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 179.57 Mbit/s

95th percentile per-packet one-way delay: 121.719 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 140.10 Mbit/s

95th percentile per-packet one-way delay: 127.264 ms

Loss rate: 0.00%

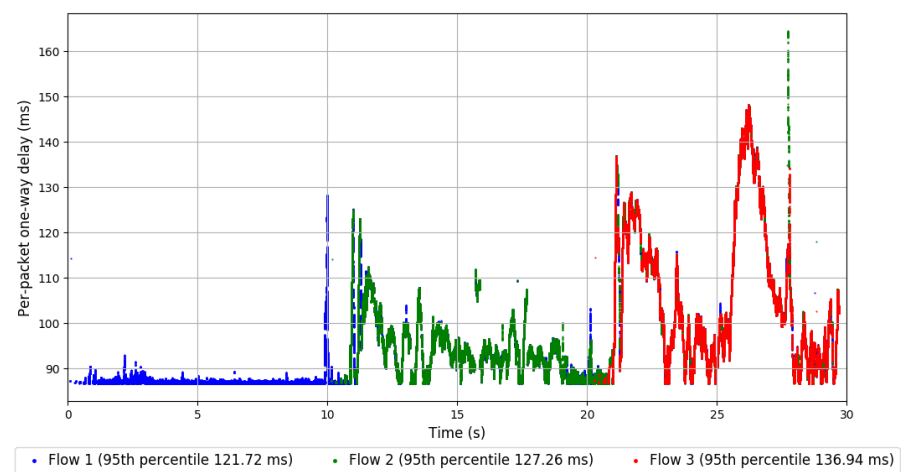
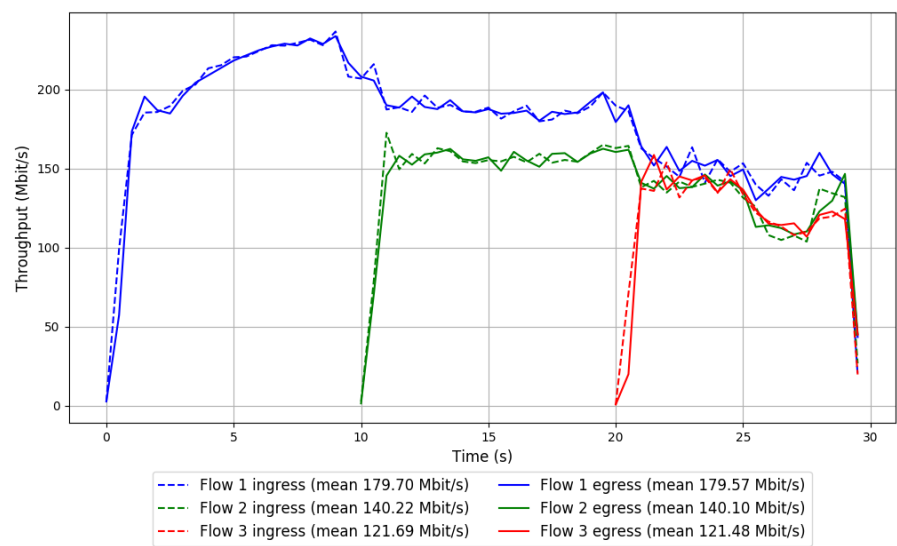
-- Flow 3:

Average throughput: 121.48 Mbit/s

95th percentile per-packet one-way delay: 136.941 ms

Loss rate: 0.00%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-17 04:53:57

End at: 2018-02-17 04:54:27

Below is generated by plot.py at 2018-02-17 09:04:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 277.16 Mbit/s

95th percentile per-packet one-way delay: 127.327 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 173.65 Mbit/s

95th percentile per-packet one-way delay: 125.113 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 137.52 Mbit/s

95th percentile per-packet one-way delay: 129.226 ms

Loss rate: 0.10%

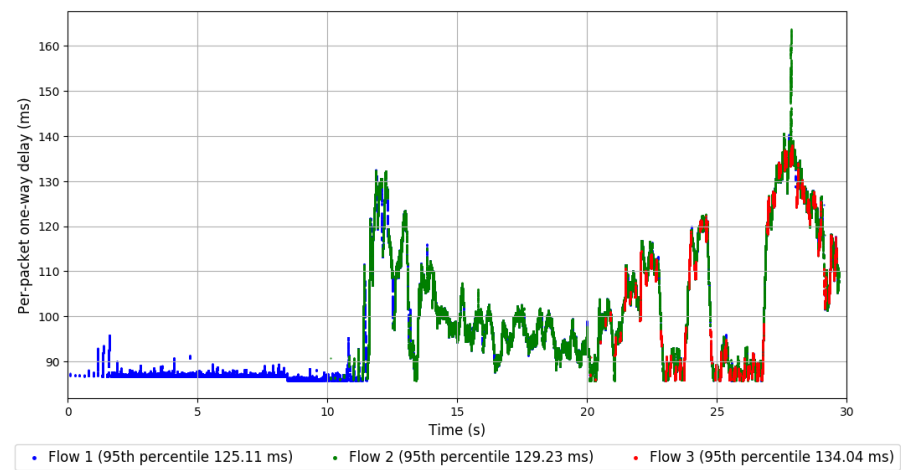
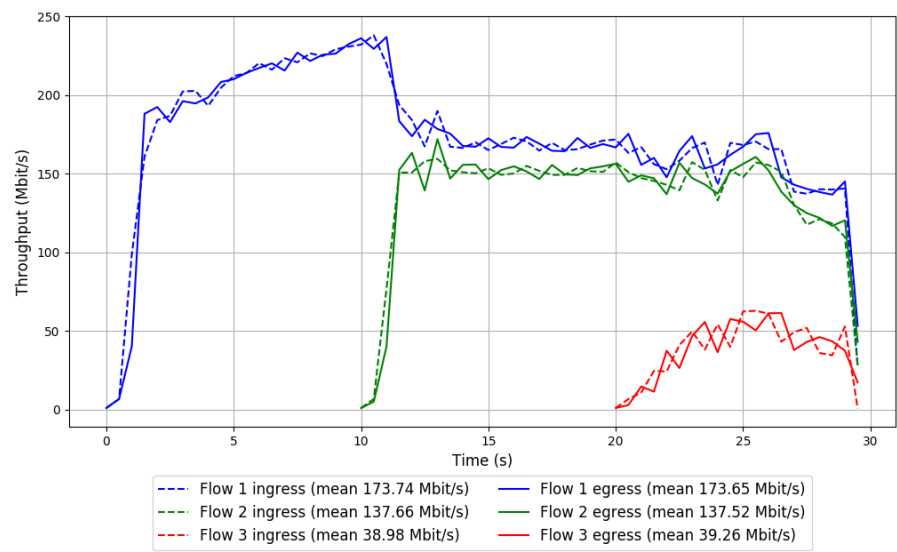
-- Flow 3:

Average throughput: 39.26 Mbit/s

95th percentile per-packet one-way delay: 134.042 ms

Loss rate: 0.09%

Run 10: Report of Indigo-1-32 — Data Link

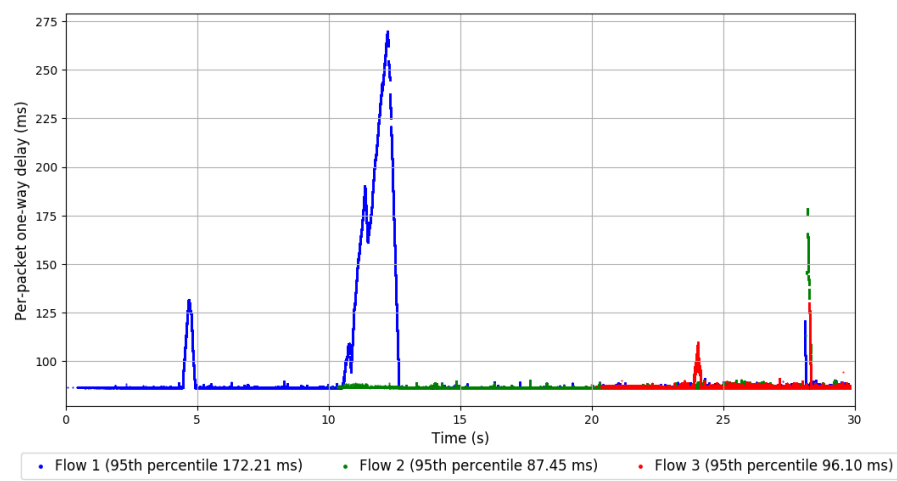
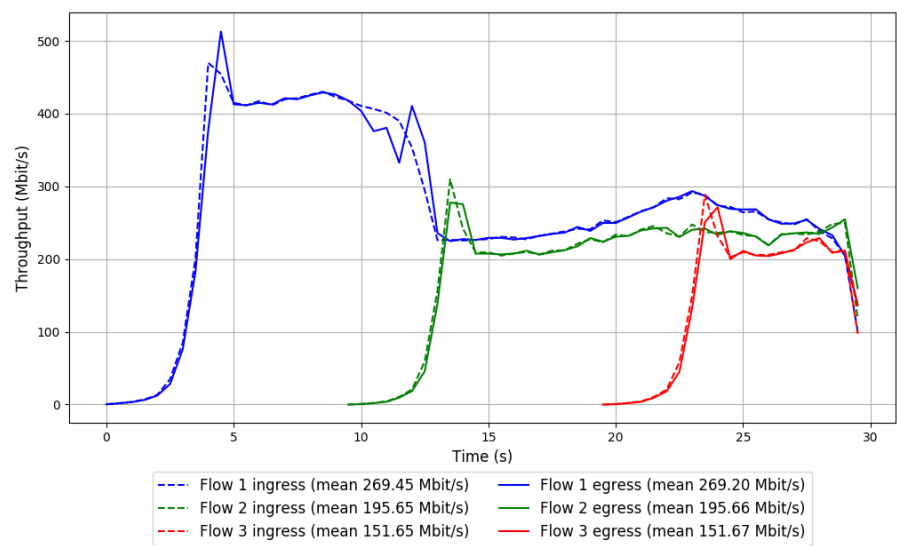


```
Run 1: Statistics of Vivace-latency

Start at: 2018-02-17 02:01:51
End at: 2018-02-17 02:02:21

# Below is generated by plot.py at 2018-02-17 09:04:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 449.90 Mbit/s
95th percentile per-packet one-way delay: 129.318 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 269.20 Mbit/s
95th percentile per-packet one-way delay: 172.212 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 195.66 Mbit/s
95th percentile per-packet one-way delay: 87.451 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 151.67 Mbit/s
95th percentile per-packet one-way delay: 96.097 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-17 02:19:37

End at: 2018-02-17 02:20:07

Below is generated by plot.py at 2018-02-17 09:04:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 441.16 Mbit/s

95th percentile per-packet one-way delay: 113.911 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 275.34 Mbit/s

95th percentile per-packet one-way delay: 87.353 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 180.99 Mbit/s

95th percentile per-packet one-way delay: 87.706 ms

Loss rate: 0.03%

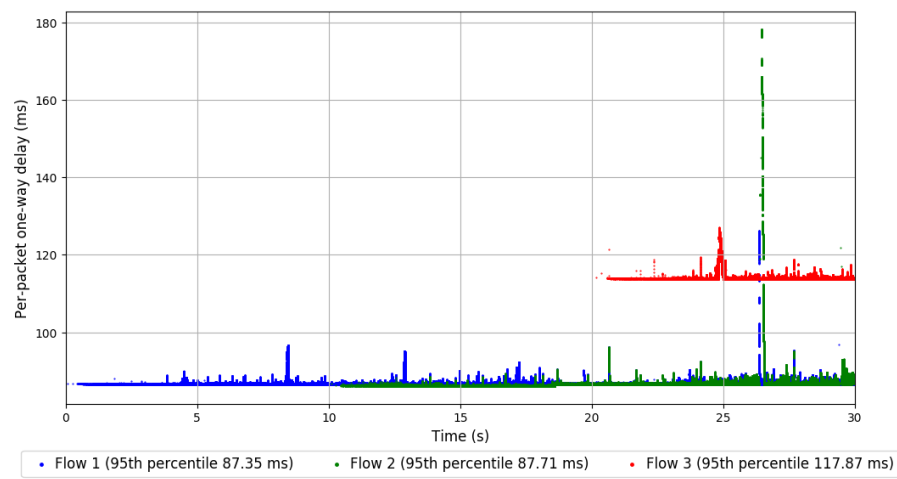
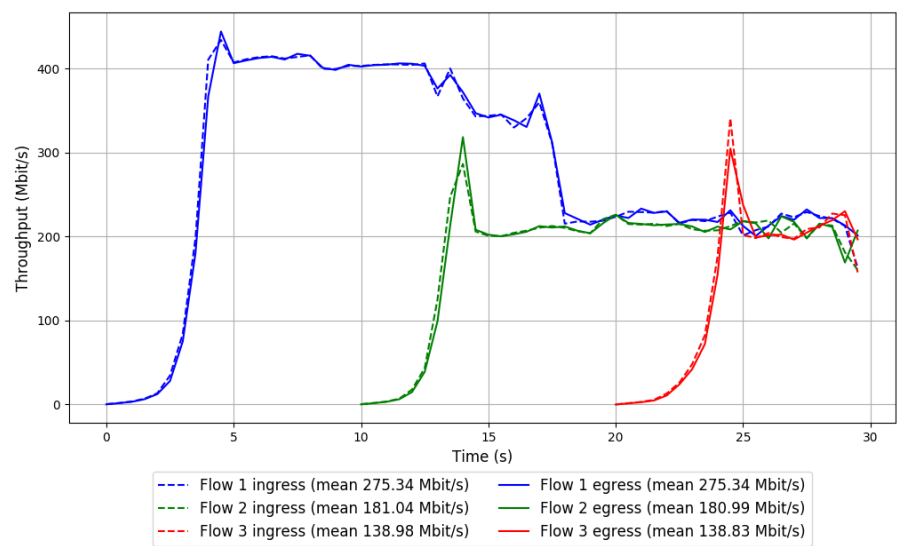
-- Flow 3:

Average throughput: 138.83 Mbit/s

95th percentile per-packet one-way delay: 117.866 ms

Loss rate: 0.38%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-17 02:37:52

End at: 2018-02-17 02:38:22

Below is generated by plot.py at 2018-02-17 09:04:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 450.52 Mbit/s

95th percentile per-packet one-way delay: 114.017 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 280.13 Mbit/s

95th percentile per-packet one-way delay: 88.419 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 193.00 Mbit/s

95th percentile per-packet one-way delay: 113.991 ms

Loss rate: 0.02%

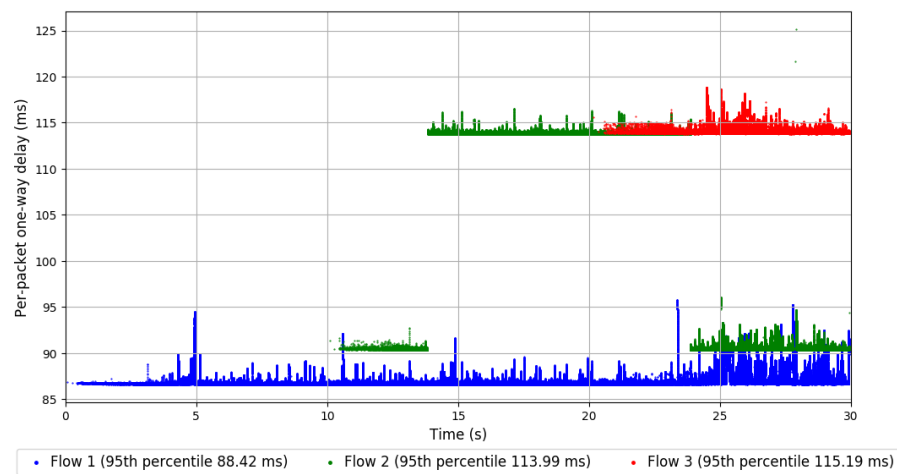
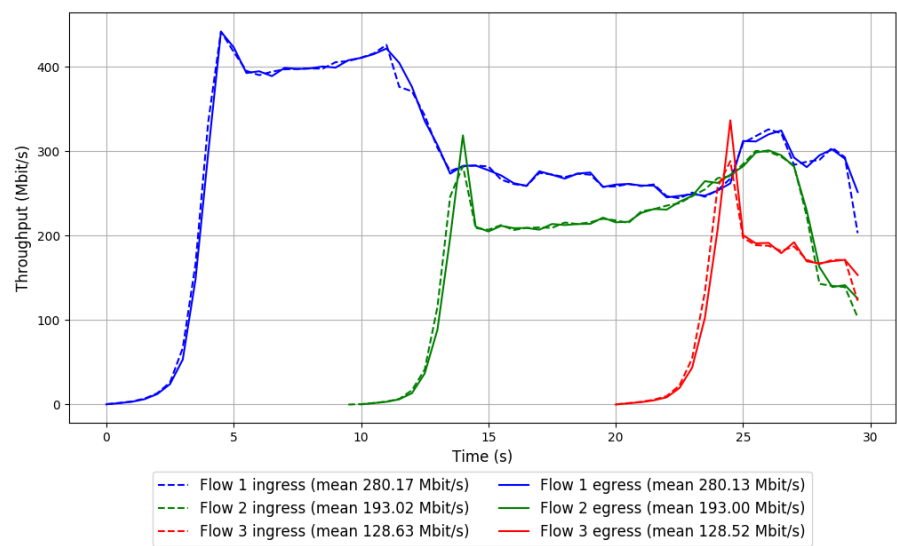
-- Flow 3:

Average throughput: 128.52 Mbit/s

95th percentile per-packet one-way delay: 115.188 ms

Loss rate: 0.40%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-17 02:55:32

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

Below is generated by plot.py at 2018-02-17 09:04:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 486.63 Mbit/s

95th percentile per-packet one-way delay: 210.237 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 304.10 Mbit/s

95th percentile per-packet one-way delay: 240.730 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 199.13 Mbit/s

95th percentile per-packet one-way delay: 114.096 ms

Loss rate: 0.01%

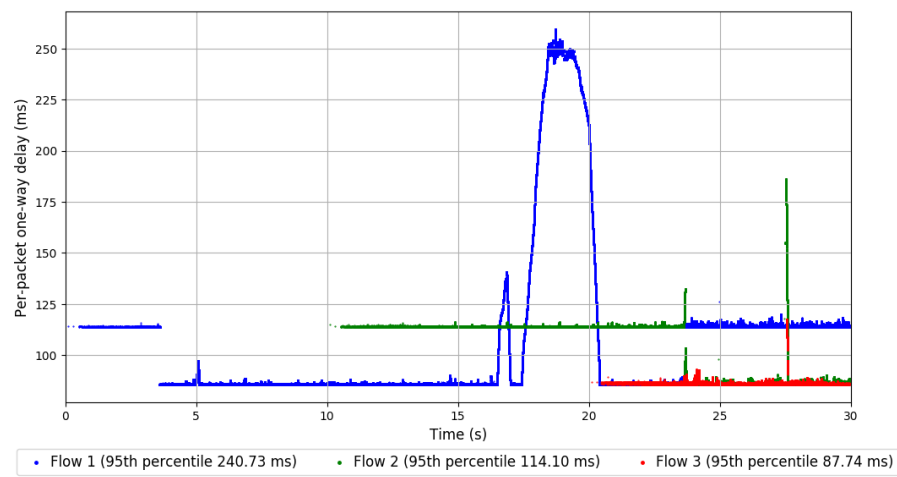
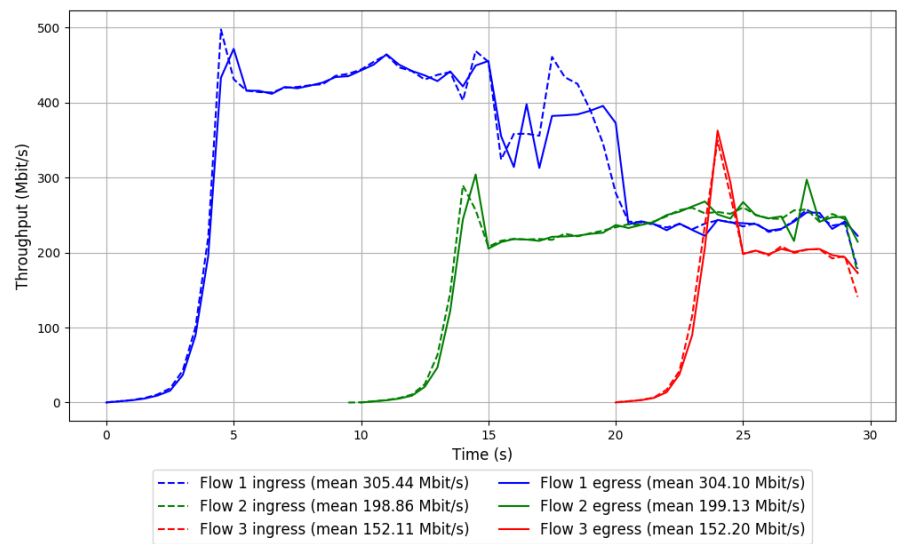
-- Flow 3:

Average throughput: 152.20 Mbit/s

95th percentile per-packet one-way delay: 87.741 ms

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-17 03:13:52

End at: 2018-02-17 03:14:22

Below is generated by plot.py at 2018-02-17 09:04:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 336.61 Mbit/s

95th percentile per-packet one-way delay: 115.549 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 165.26 Mbit/s

95th percentile per-packet one-way delay: 115.434 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 185.45 Mbit/s

95th percentile per-packet one-way delay: 115.656 ms

Loss rate: 0.01%

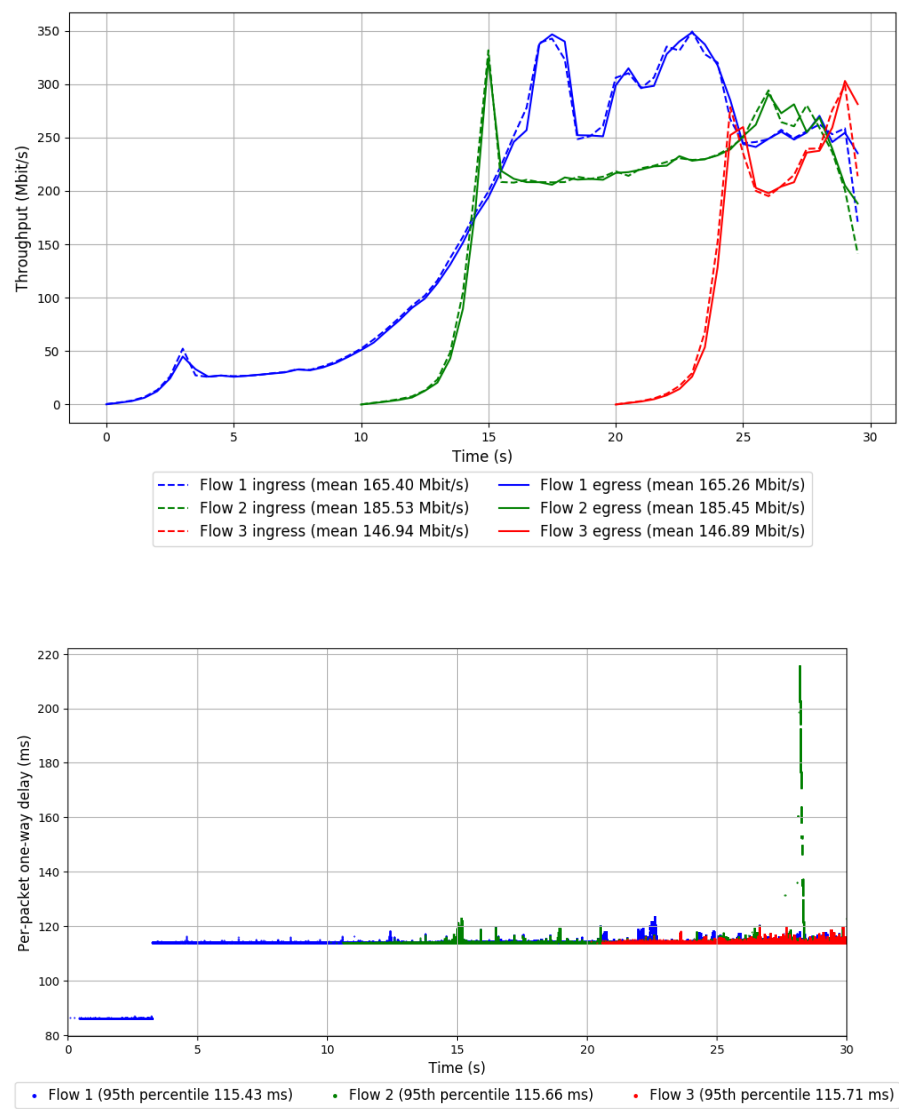
-- Flow 3:

Average throughput: 146.89 Mbit/s

95th percentile per-packet one-way delay: 115.707 ms

Loss rate: 0.05%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-17 03:32:03

End at: 2018-02-17 03:32:33

Below is generated by plot.py at 2018-02-17 09:04:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 416.69 Mbit/s

95th percentile per-packet one-way delay: 115.851 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 252.96 Mbit/s

95th percentile per-packet one-way delay: 116.485 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 177.40 Mbit/s

95th percentile per-packet one-way delay: 114.431 ms

Loss rate: 0.00%

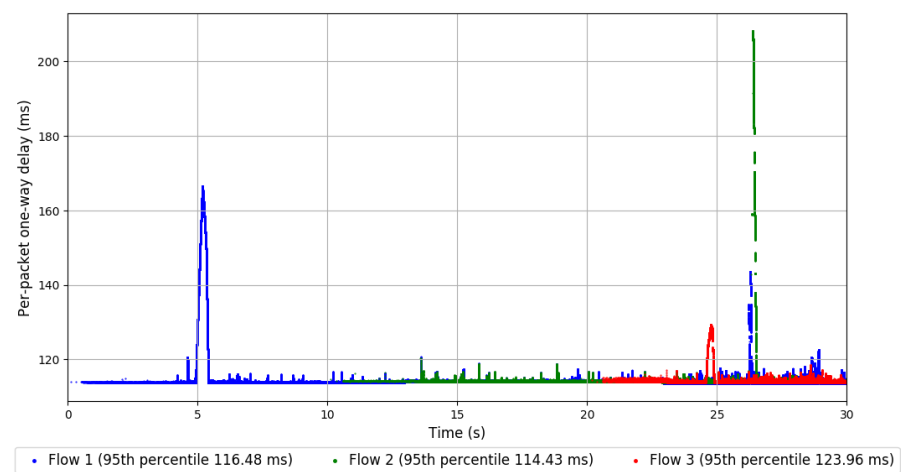
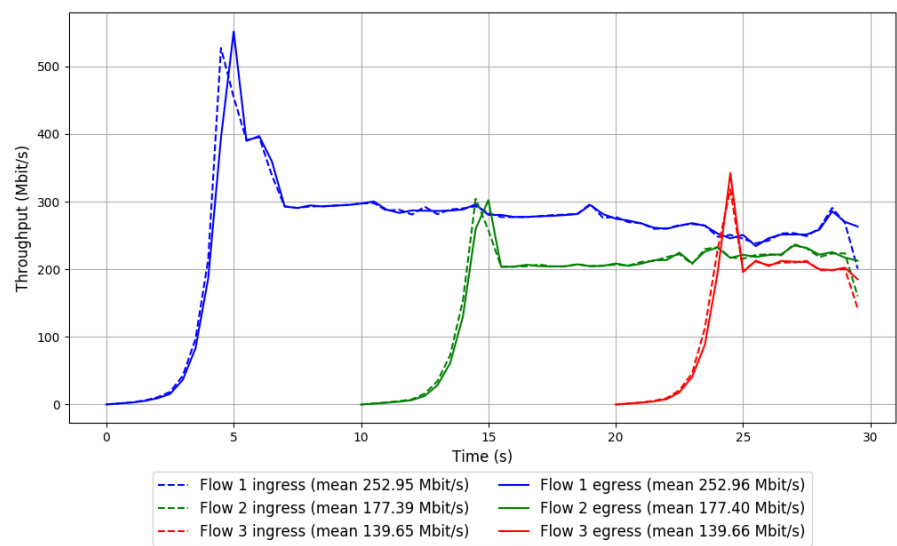
-- Flow 3:

Average throughput: 139.66 Mbit/s

95th percentile per-packet one-way delay: 123.956 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-17 03:50:52

End at: 2018-02-17 03:51:22

Below is generated by plot.py at 2018-02-17 09:04:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 380.91 Mbit/s

95th percentile per-packet one-way delay: 114.698 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 214.44 Mbit/s

95th percentile per-packet one-way delay: 114.579 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 177.94 Mbit/s

95th percentile per-packet one-way delay: 114.612 ms

Loss rate: 0.00%

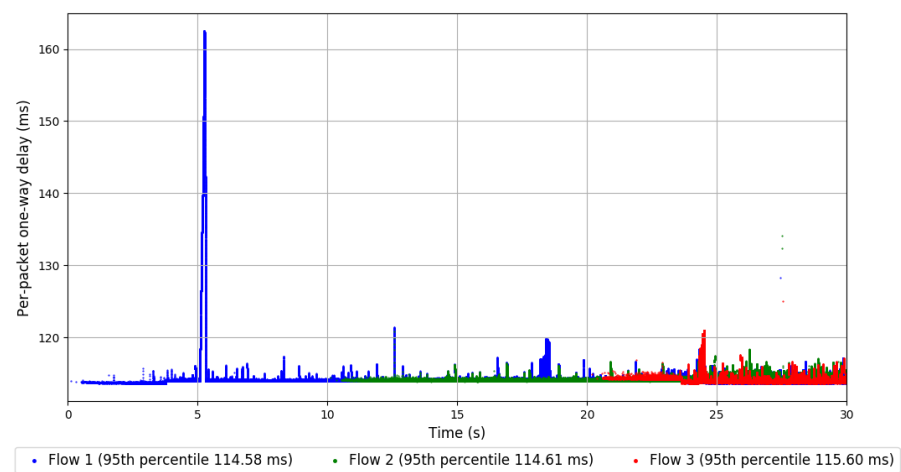
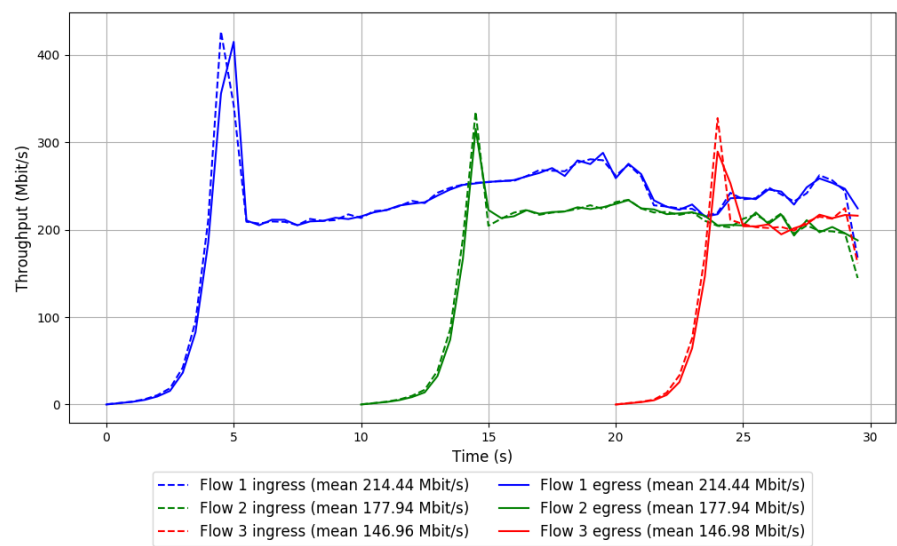
-- Flow 3:

Average throughput: 146.98 Mbit/s

95th percentile per-packet one-way delay: 115.599 ms

Loss rate: 0.00%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-17 04:09:22

End at: 2018-02-17 04:09:52

Below is generated by plot.py at 2018-02-17 09:05:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 491.74 Mbit/s

95th percentile per-packet one-way delay: 118.693 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 282.53 Mbit/s

95th percentile per-packet one-way delay: 116.592 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 245.99 Mbit/s

95th percentile per-packet one-way delay: 124.907 ms

Loss rate: 0.00%

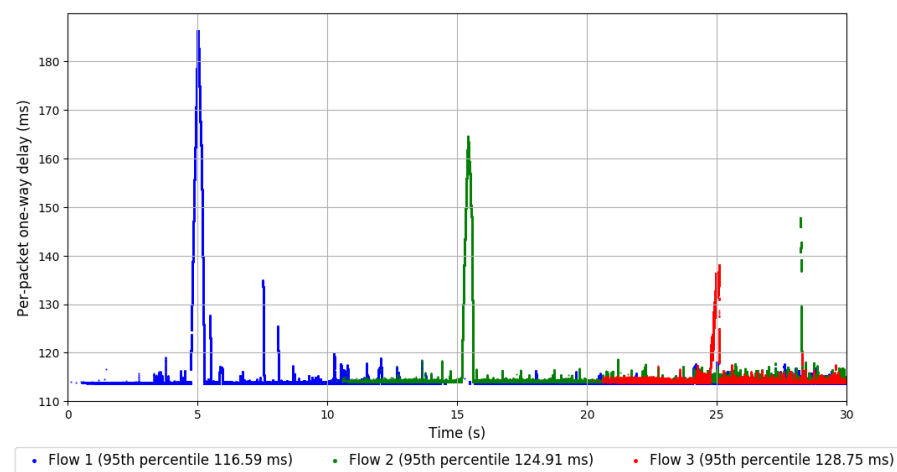
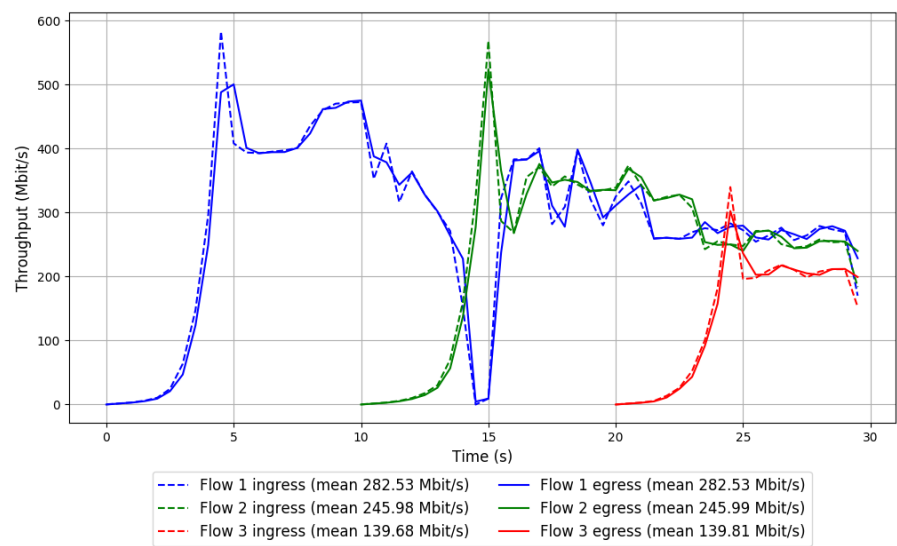
-- Flow 3:

Average throughput: 139.81 Mbit/s

95th percentile per-packet one-way delay: 128.750 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-17 04:28:28

End at: 2018-02-17 04:28:58

Below is generated by plot.py at 2018-02-17 09:05:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 455.56 Mbit/s

95th percentile per-packet one-way delay: 115.754 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 286.42 Mbit/s

95th percentile per-packet one-way delay: 115.912 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 190.00 Mbit/s

95th percentile per-packet one-way delay: 115.657 ms

Loss rate: 0.00%

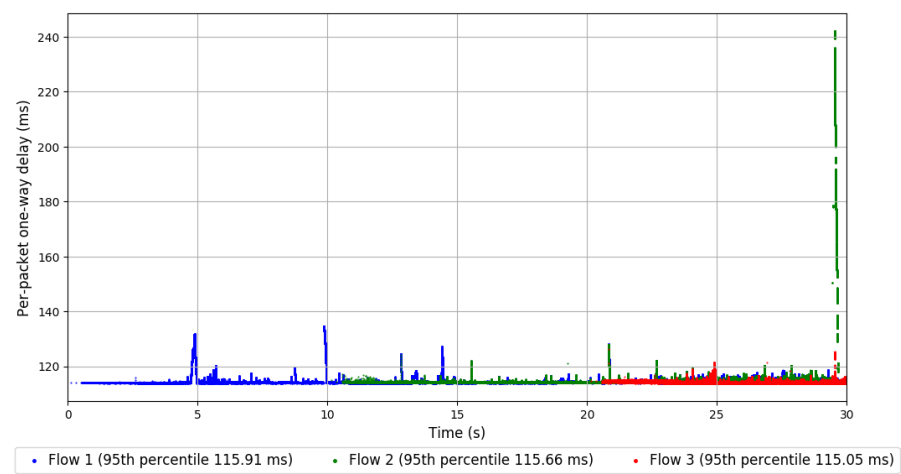
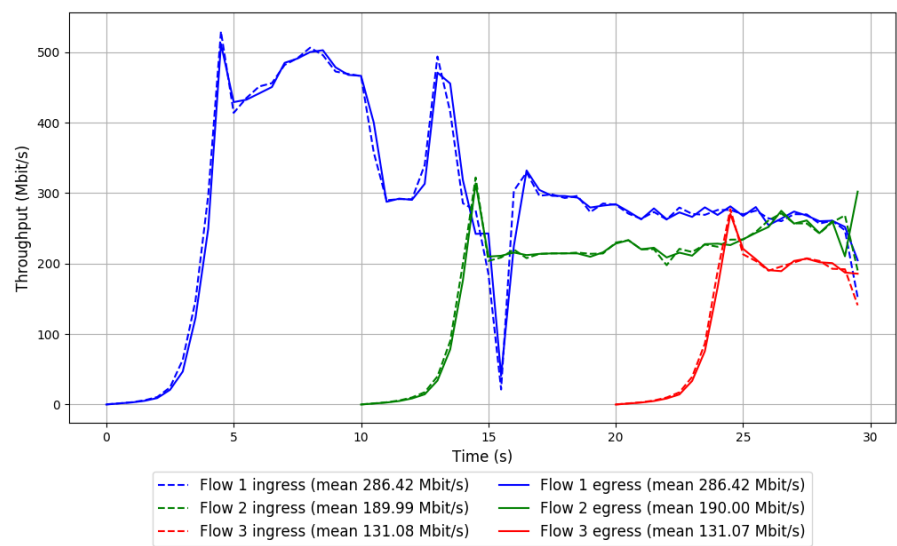
-- Flow 3:

Average throughput: 131.07 Mbit/s

95th percentile per-packet one-way delay: 115.050 ms

Loss rate: 0.00%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-17 04:47:26

End at: 2018-02-17 04:47:56

Below is generated by plot.py at 2018-02-17 09:06:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 480.37 Mbit/s

95th percentile per-packet one-way delay: 114.155 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 275.59 Mbit/s

95th percentile per-packet one-way delay: 114.080 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 271.42 Mbit/s

95th percentile per-packet one-way delay: 91.494 ms

Loss rate: 0.00%

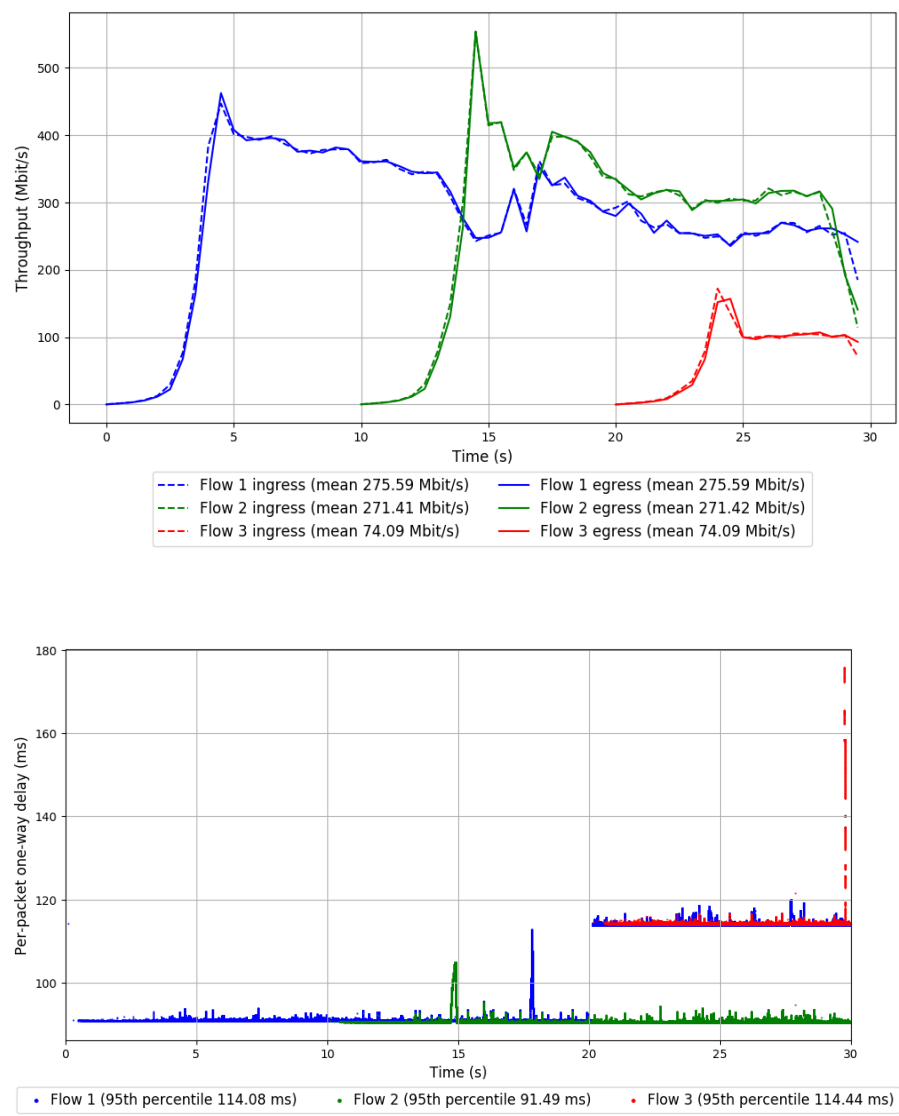
-- Flow 3:

Average throughput: 74.09 Mbit/s

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

Loss rate: 0.01%

Run 10: Report of Vivace-latency — Data Link

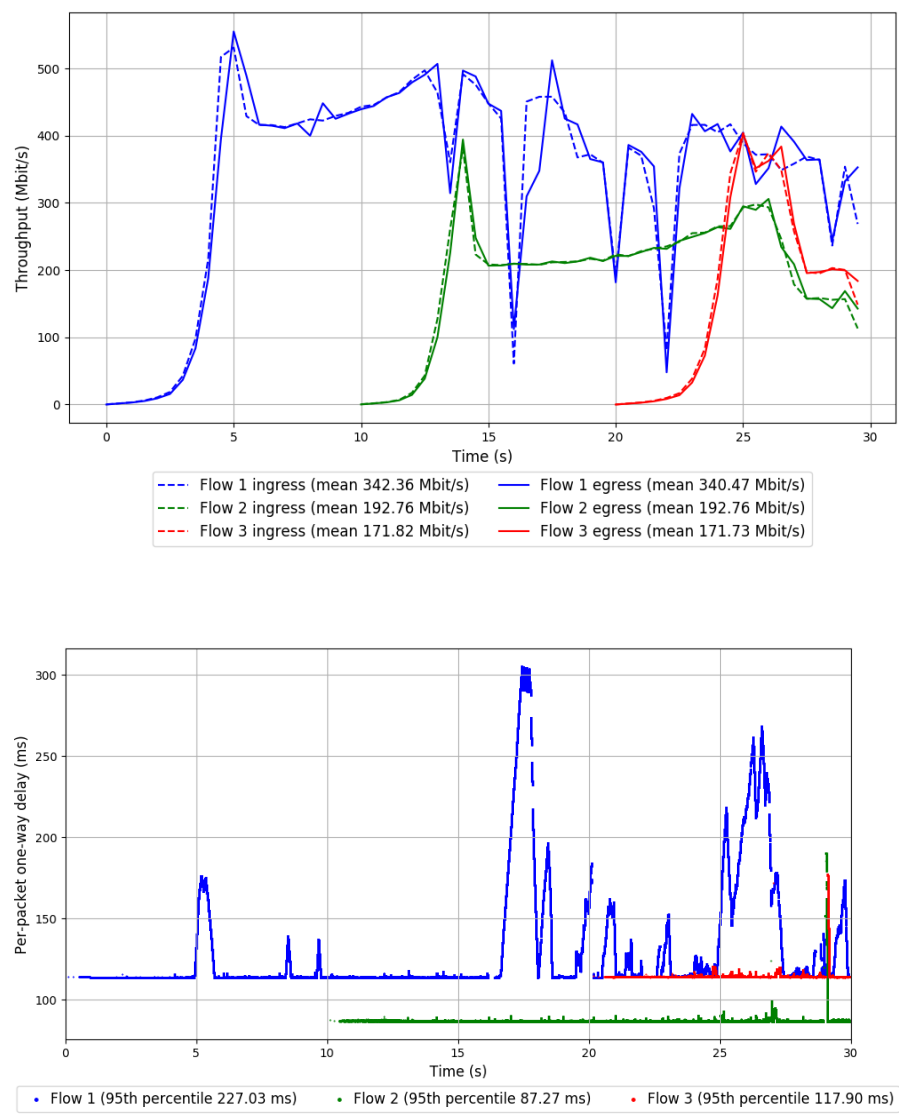


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-17 02:14:45
End at: 2018-02-17 02:15:15

# Below is generated by plot.py at 2018-02-17 09:07:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 524.95 Mbit/s
95th percentile per-packet one-way delay: 200.279 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 340.47 Mbit/s
95th percentile per-packet one-way delay: 227.032 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 192.76 Mbit/s
95th percentile per-packet one-way delay: 87.271 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 171.73 Mbit/s
95th percentile per-packet one-way delay: 117.902 ms
Loss rate: 0.32%
```

Run 1: Report of Vivace-loss — Data Link

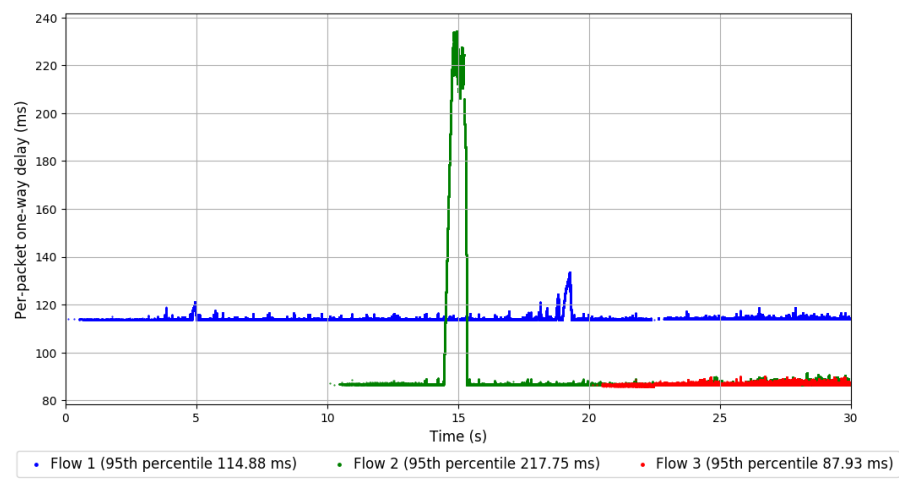
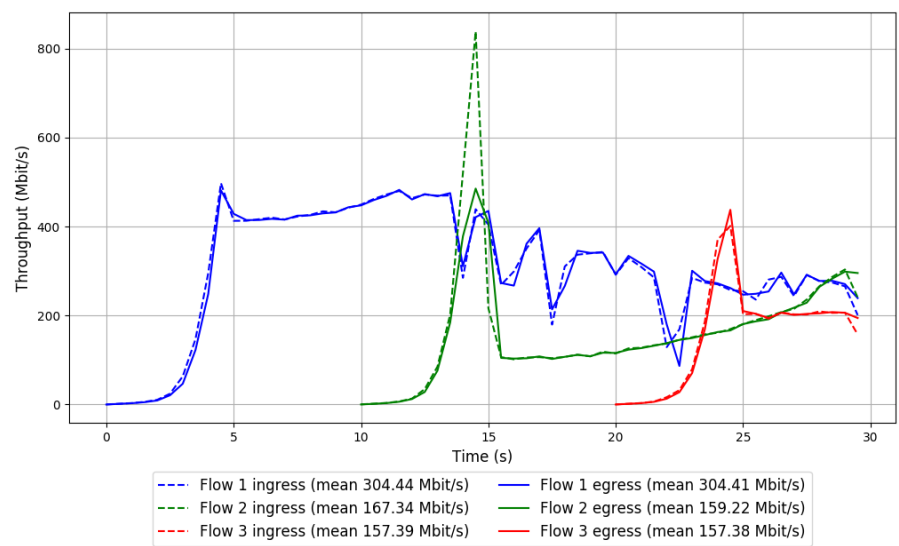


```
Run 2: Statistics of Vivace-loss

Start at: 2018-02-17 02:32:43
End at: 2018-02-17 02:33:13

# Below is generated by plot.py at 2018-02-17 09:08:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 462.12 Mbit/s
95th percentile per-packet one-way delay: 115.987 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 304.41 Mbit/s
95th percentile per-packet one-way delay: 114.879 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 159.22 Mbit/s
95th percentile per-packet one-way delay: 217.752 ms
Loss rate: 4.85%
-- Flow 3:
Average throughput: 157.38 Mbit/s
95th percentile per-packet one-way delay: 87.928 ms
Loss rate: 0.00%
```

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-17 02:50:43

End at: 2018-02-17 02:51:13

Below is generated by plot.py at 2018-02-17 09:11:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 451.44 Mbit/s

95th percentile per-packet one-way delay: 95.487 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 258.10 Mbit/s

95th percentile per-packet one-way delay: 117.250 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 219.13 Mbit/s

95th percentile per-packet one-way delay: 87.131 ms

Loss rate: 0.00%

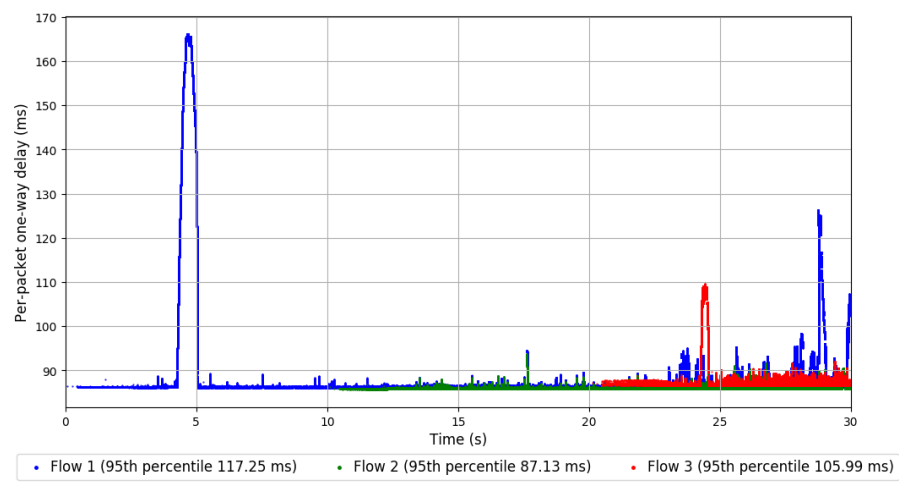
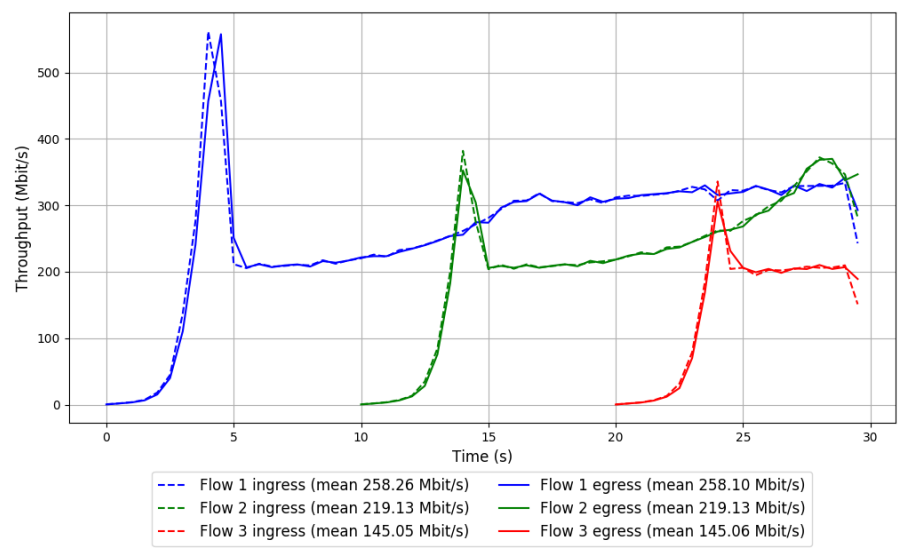
-- Flow 3:

Average throughput: 145.06 Mbit/s

95th percentile per-packet one-way delay: 105.986 ms

Loss rate: 0.00%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-17 03:08:51

End at: 2018-02-17 03:09:21

Below is generated by plot.py at 2018-02-17 09:14:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 530.03 Mbit/s

95th percentile per-packet one-way delay: 113.978 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 314.57 Mbit/s

95th percentile per-packet one-way delay: 114.020 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 246.96 Mbit/s

95th percentile per-packet one-way delay: 92.758 ms

Loss rate: 0.00%

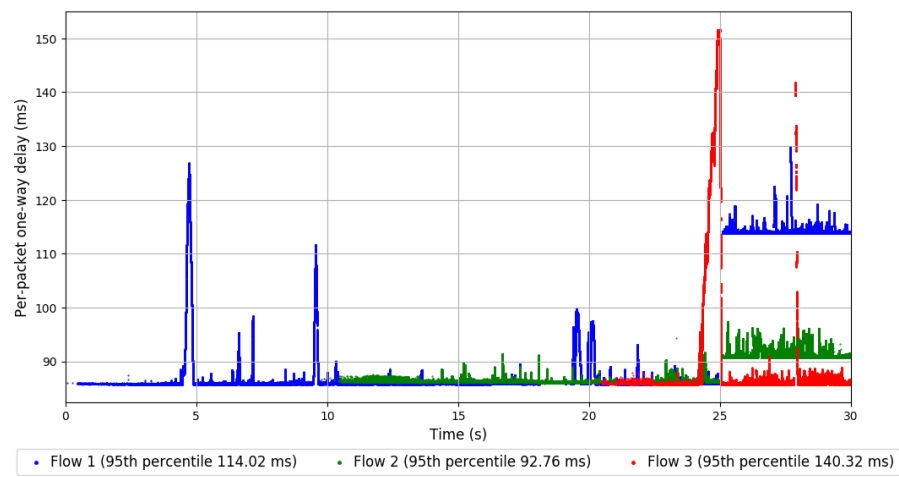
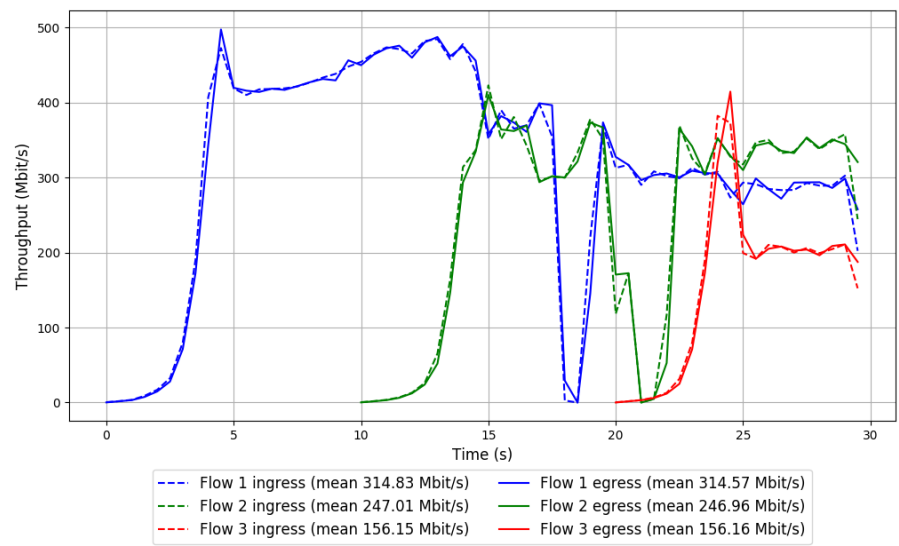
-- Flow 3:

Average throughput: 156.16 Mbit/s

95th percentile per-packet one-way delay: 140.317 ms

Loss rate: 0.00%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-17 03:27:06

End at: 2018-02-17 03:27:36

Below is generated by plot.py at 2018-02-17 09:14:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 474.15 Mbit/s

95th percentile per-packet one-way delay: 101.561 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 278.88 Mbit/s

95th percentile per-packet one-way delay: 109.946 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 194.35 Mbit/s

95th percentile per-packet one-way delay: 90.600 ms

Loss rate: 0.00%

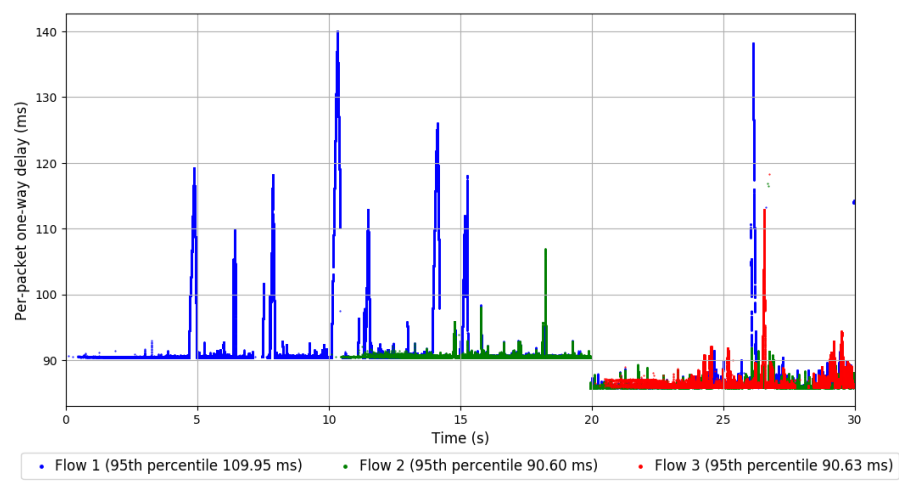
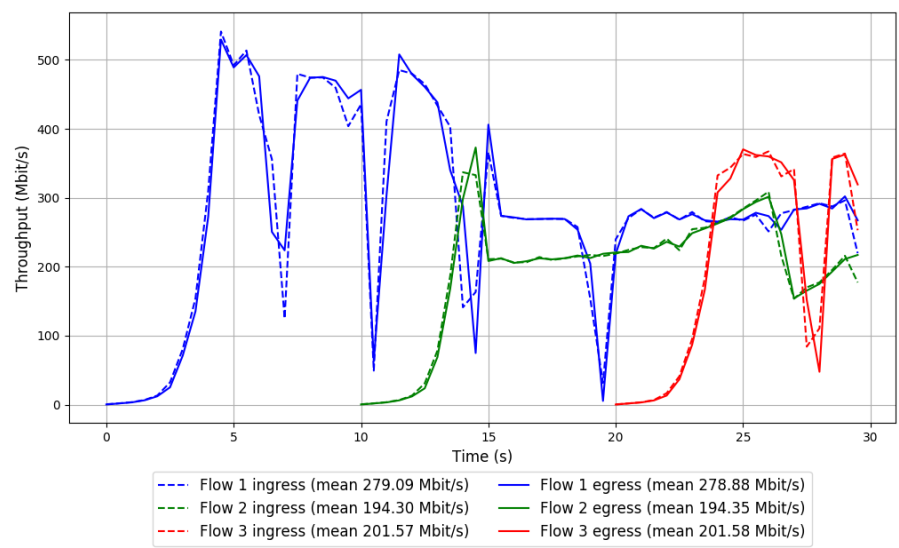
-- Flow 3:

Average throughput: 201.58 Mbit/s

95th percentile per-packet one-way delay: 90.632 ms

Loss rate: 0.00%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-17 03:45:38

End at: 2018-02-17 03:46:08

Below is generated by plot.py at 2018-02-17 09:16:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 512.39 Mbit/s

95th percentile per-packet one-way delay: 178.273 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 305.69 Mbit/s

95th percentile per-packet one-way delay: 186.949 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 255.89 Mbit/s

95th percentile per-packet one-way delay: 115.111 ms

Loss rate: 0.00%

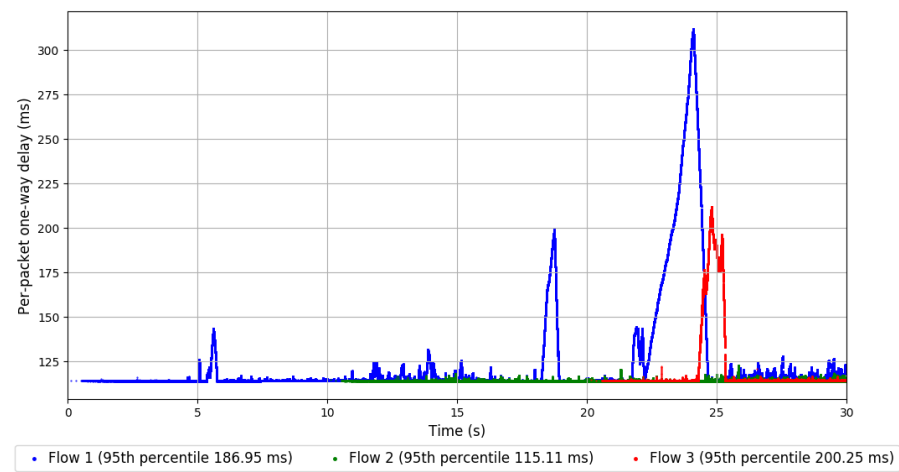
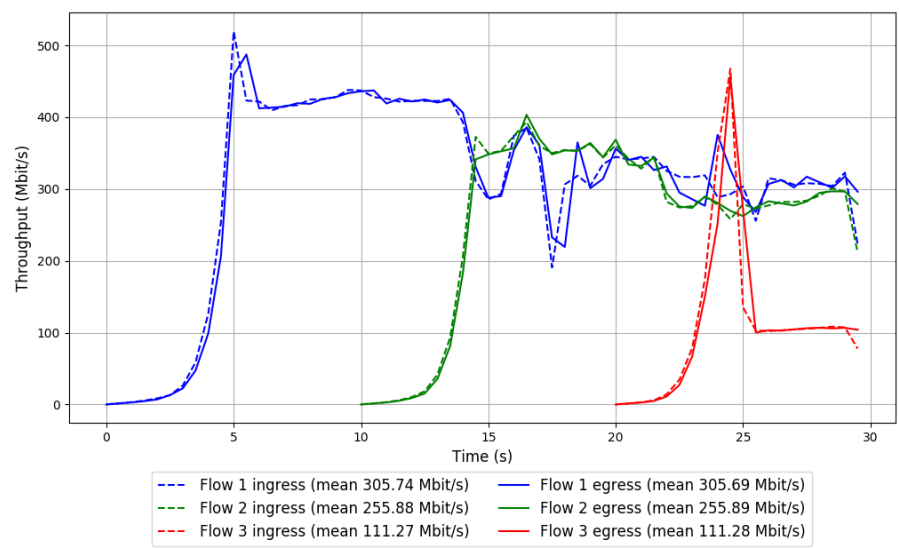
-- Flow 3:

Average throughput: 111.28 Mbit/s

95th percentile per-packet one-way delay: 200.253 ms

Loss rate: 0.00%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-17 04:04:11

End at: 2018-02-17 04:04:41

Below is generated by plot.py at 2018-02-17 09:16:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 542.20 Mbit/s

95th percentile per-packet one-way delay: 131.352 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 312.19 Mbit/s

95th percentile per-packet one-way delay: 115.786 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 272.30 Mbit/s

95th percentile per-packet one-way delay: 177.301 ms

Loss rate: 0.40%

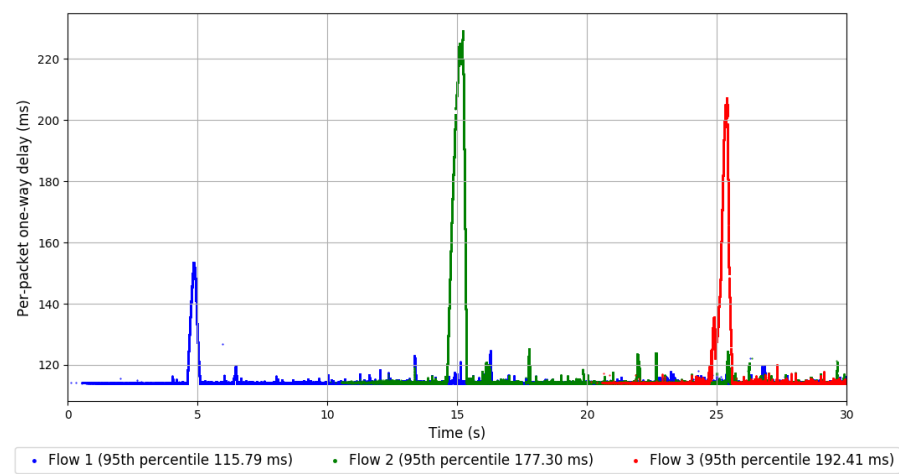
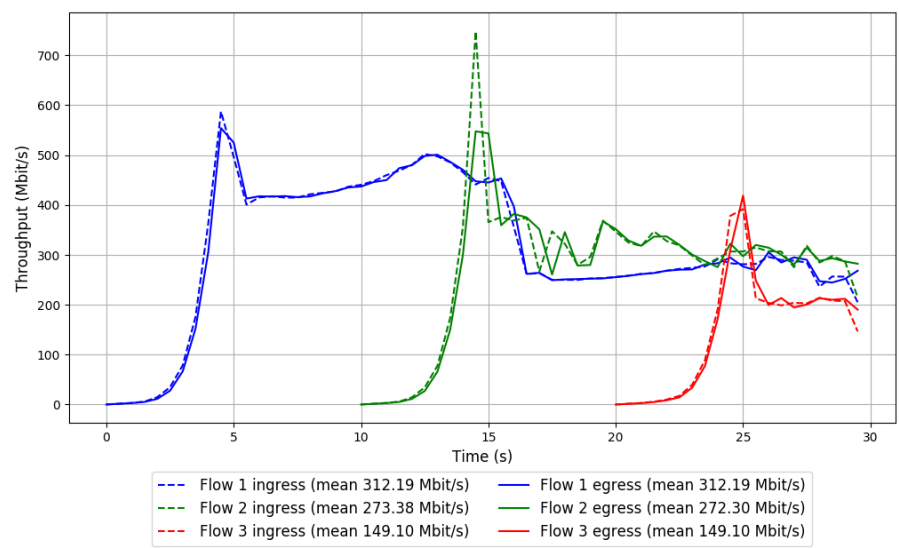
-- Flow 3:

Average throughput: 149.10 Mbit/s

95th percentile per-packet one-way delay: 192.408 ms

Loss rate: 0.00%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-17 04:23:19

End at: 2018-02-17 04:23:49

Below is generated by plot.py at 2018-02-17 09:16:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 508.64 Mbit/s

95th percentile per-packet one-way delay: 126.732 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 308.47 Mbit/s

95th percentile per-packet one-way delay: 121.061 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 207.00 Mbit/s

95th percentile per-packet one-way delay: 126.452 ms

Loss rate: 0.00%

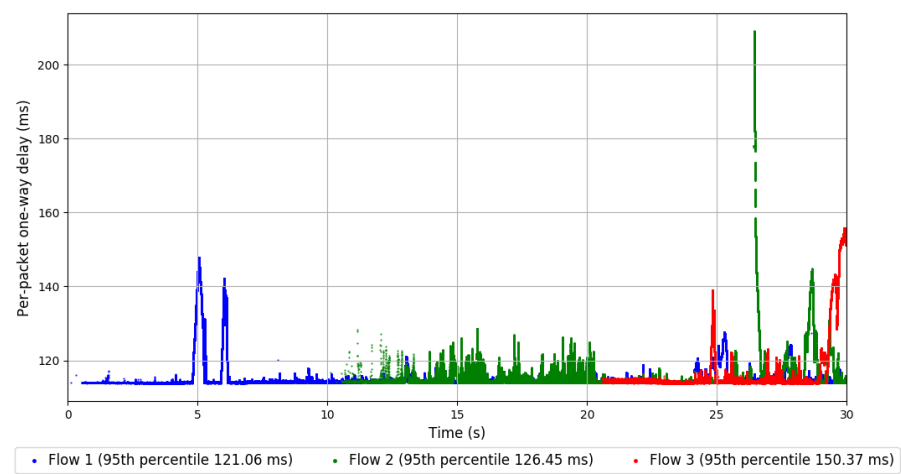
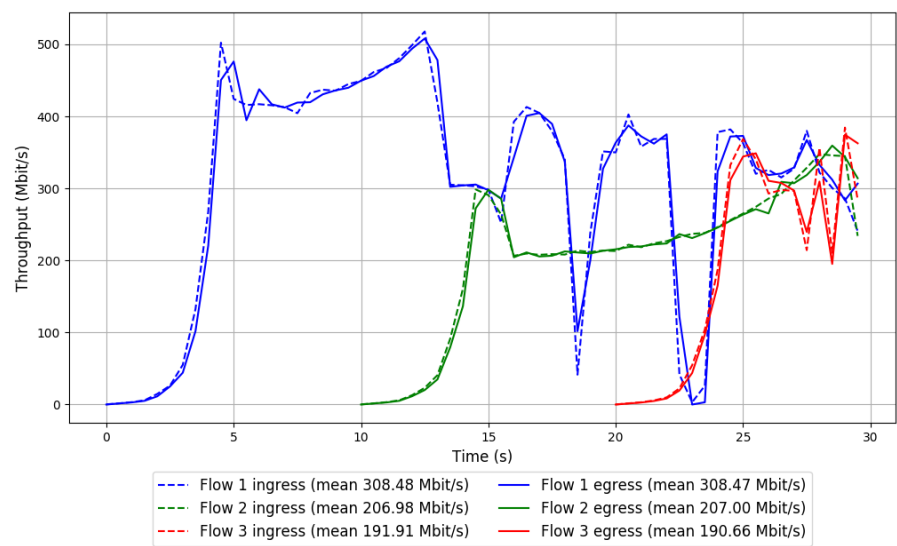
-- Flow 3:

Average throughput: 190.66 Mbit/s

95th percentile per-packet one-way delay: 150.373 ms

Loss rate: 0.63%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-17 04:42:15

End at: 2018-02-17 04:42:45

Below is generated by plot.py at 2018-02-17 09:19:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 552.58 Mbit/s

95th percentile per-packet one-way delay: 90.702 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 313.92 Mbit/s

95th percentile per-packet one-way delay: 88.910 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 282.39 Mbit/s

95th percentile per-packet one-way delay: 92.793 ms

Loss rate: 0.00%

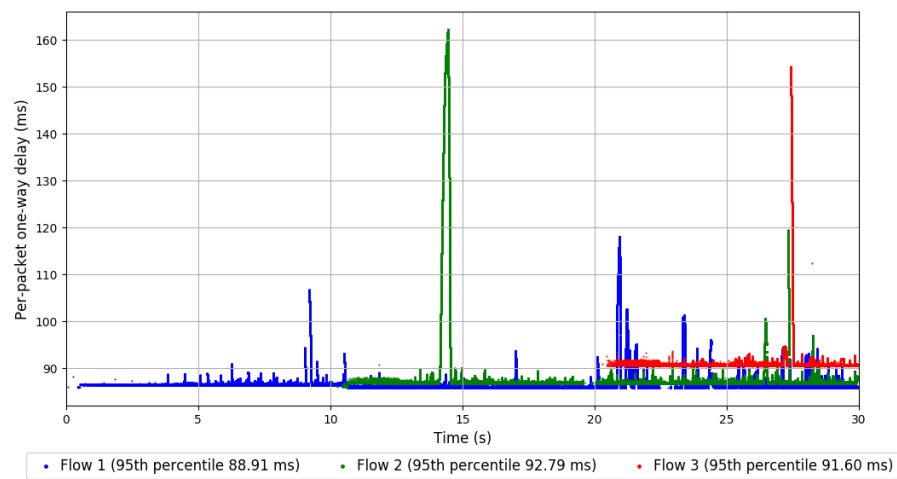
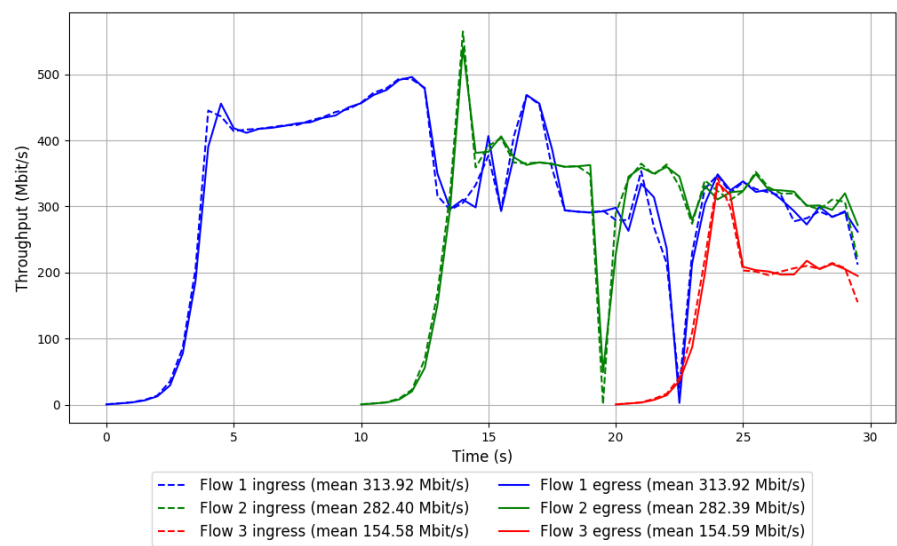
-- Flow 3:

Average throughput: 154.59 Mbit/s

95th percentile per-packet one-way delay: 91.601 ms

Loss rate: 0.00%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-17 05:00:57

End at: 2018-02-17 05:01:27

Below is generated by plot.py at 2018-02-17 09:19:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 480.23 Mbit/s

95th percentile per-packet one-way delay: 123.740 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 293.01 Mbit/s

95th percentile per-packet one-way delay: 115.078 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 215.68 Mbit/s

95th percentile per-packet one-way delay: 160.230 ms

Loss rate: 0.00%

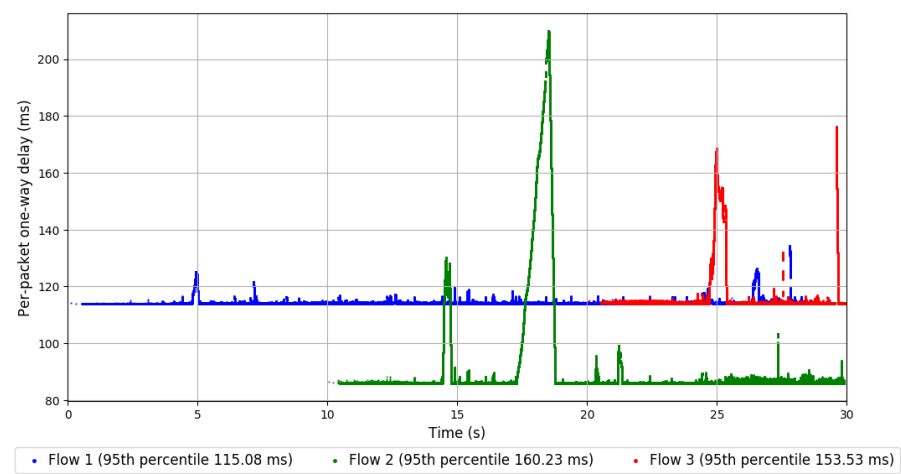
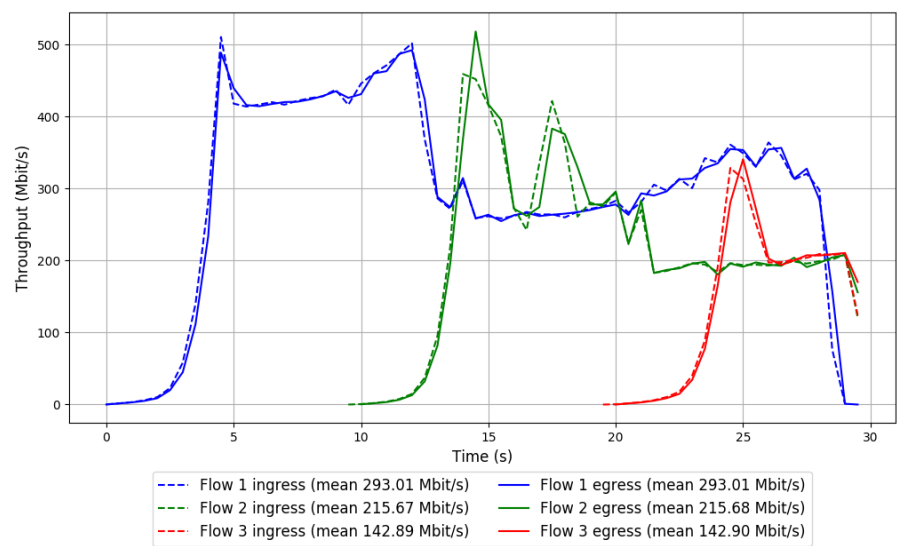
-- Flow 3:

Average throughput: 142.90 Mbit/s

95th percentile per-packet one-way delay: 153.526 ms

Loss rate: 0.00%

Run 10: Report of Vivace-loss — Data Link

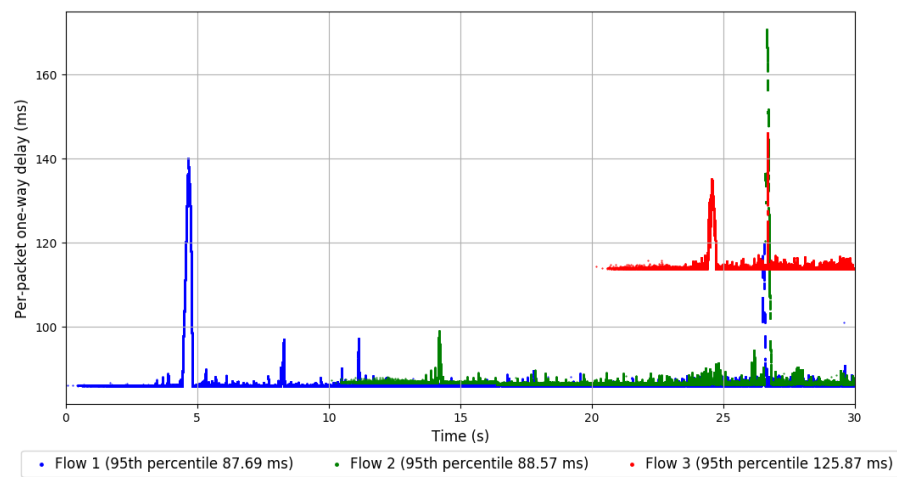
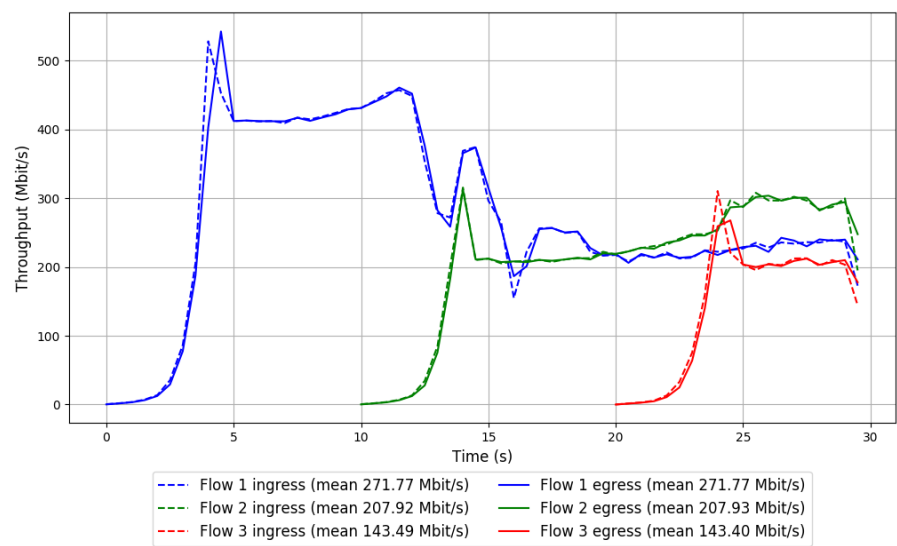


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-17 02:03:09
End at: 2018-02-17 02:03:39

# Below is generated by plot.py at 2018-02-17 09:20:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 456.98 Mbit/s
95th percentile per-packet one-way delay: 113.966 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 271.77 Mbit/s
95th percentile per-packet one-way delay: 87.687 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 207.93 Mbit/s
95th percentile per-packet one-way delay: 88.573 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 143.40 Mbit/s
95th percentile per-packet one-way delay: 125.870 ms
Loss rate: 0.37%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-17 02:20:56

End at: 2018-02-17 02:21:26

Below is generated by plot.py at 2018-02-17 09:23:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 489.50 Mbit/s

95th percentile per-packet one-way delay: 113.978 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 276.99 Mbit/s

95th percentile per-packet one-way delay: 88.570 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 266.93 Mbit/s

95th percentile per-packet one-way delay: 94.391 ms

Loss rate: 0.00%

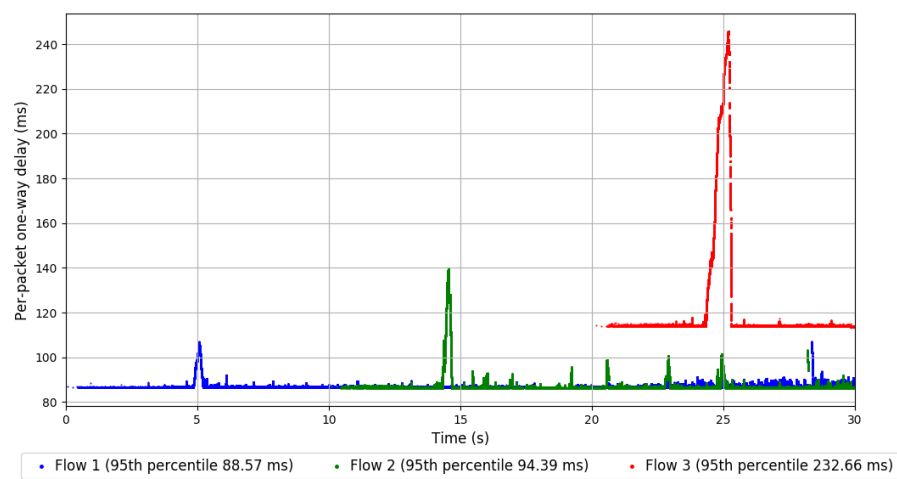
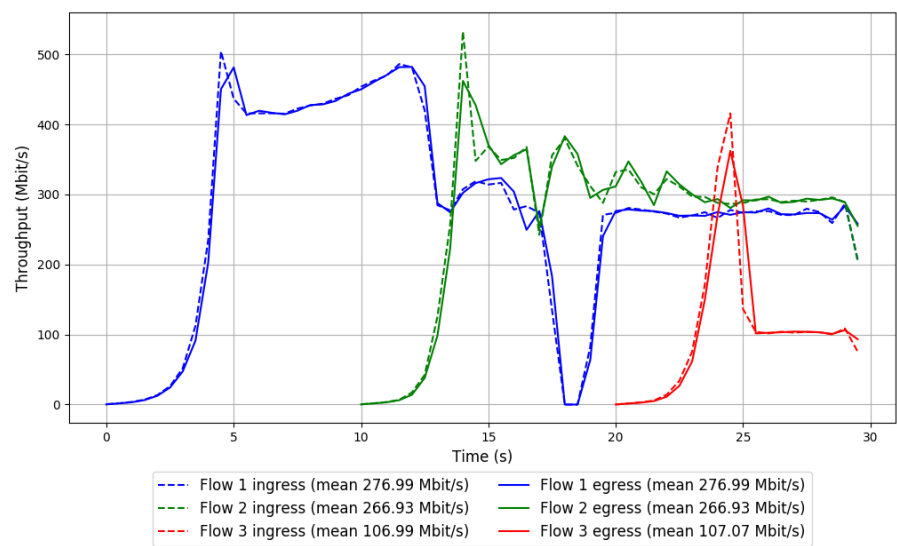
-- Flow 3:

Average throughput: 107.07 Mbit/s

95th percentile per-packet one-way delay: 232.658 ms

Loss rate: 0.33%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-17 02:39:12

End at: 2018-02-17 02:39:42

Below is generated by plot.py at 2018-02-17 09:23:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 395.54 Mbit/s

95th percentile per-packet one-way delay: 114.080 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 216.18 Mbit/s

95th percentile per-packet one-way delay: 114.302 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 196.78 Mbit/s

95th percentile per-packet one-way delay: 91.855 ms

Loss rate: 0.02%

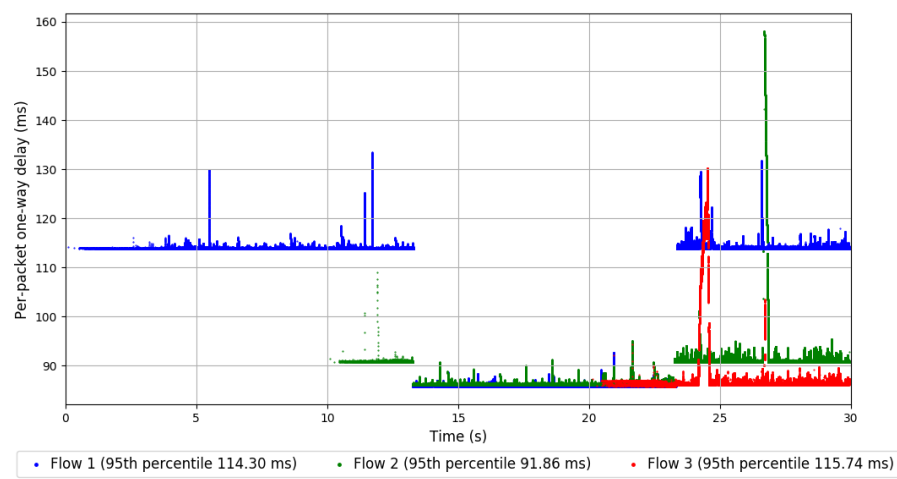
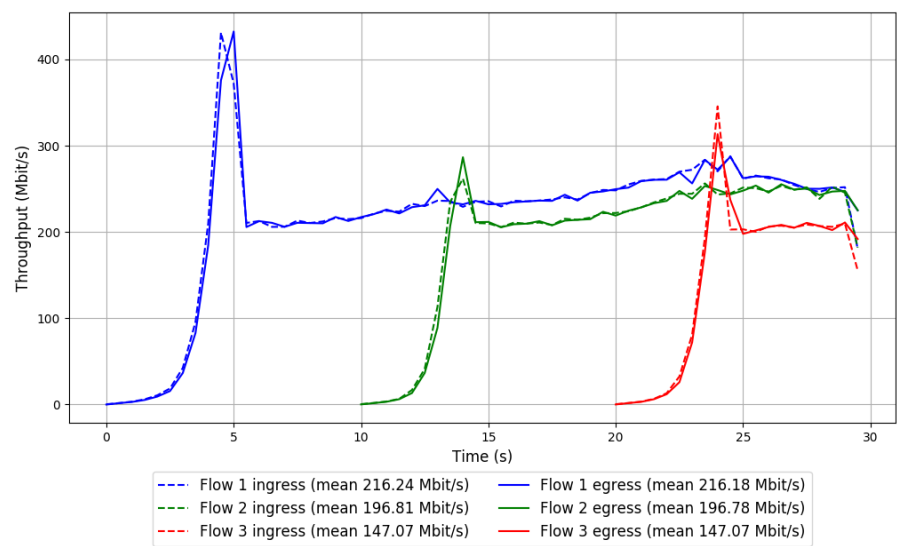
-- Flow 3:

Average throughput: 147.07 Mbit/s

95th percentile per-packet one-way delay: 115.740 ms

Loss rate: 0.00%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-17 02:56:53

End at: 2018-02-17 02:57:23

Below is generated by plot.py at 2018-02-17 09:25:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 477.44 Mbit/s

95th percentile per-packet one-way delay: 115.827 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 304.20 Mbit/s

95th percentile per-packet one-way delay: 116.301 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 192.14 Mbit/s

95th percentile per-packet one-way delay: 91.382 ms

Loss rate: 0.00%

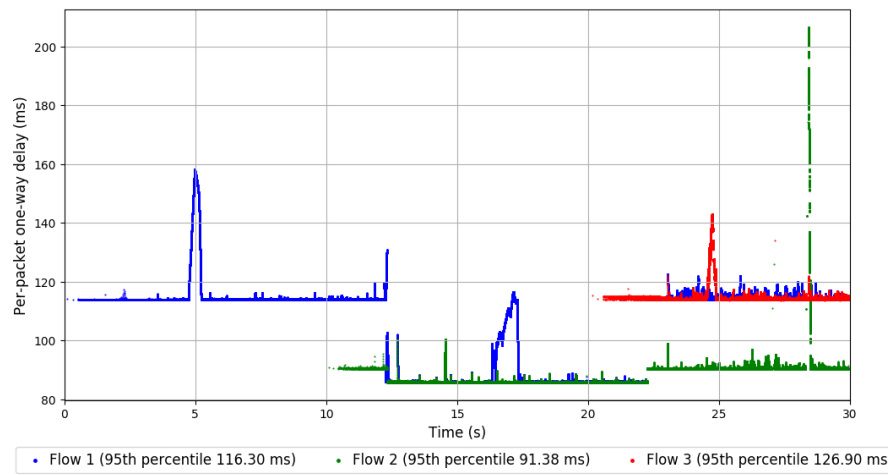
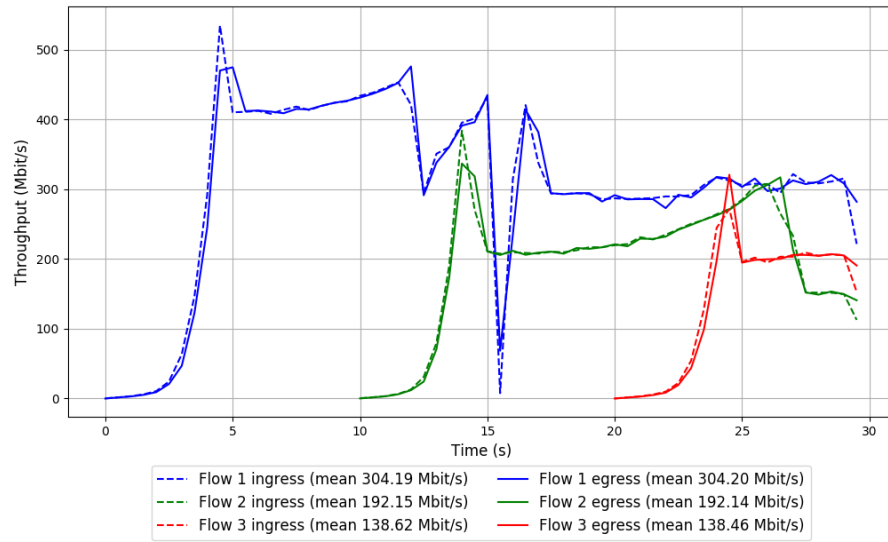
-- Flow 3:

Average throughput: 138.46 Mbit/s

95th percentile per-packet one-way delay: 126.904 ms

Loss rate: 0.36%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-17 03:15:03

End at: 2018-02-17 03:15:33

Below is generated by plot.py at 2018-02-17 09:25:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 433.71 Mbit/s

95th percentile per-packet one-way delay: 113.752 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 265.92 Mbit/s

95th percentile per-packet one-way delay: 87.275 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 181.16 Mbit/s

95th percentile per-packet one-way delay: 115.414 ms

Loss rate: 0.00%

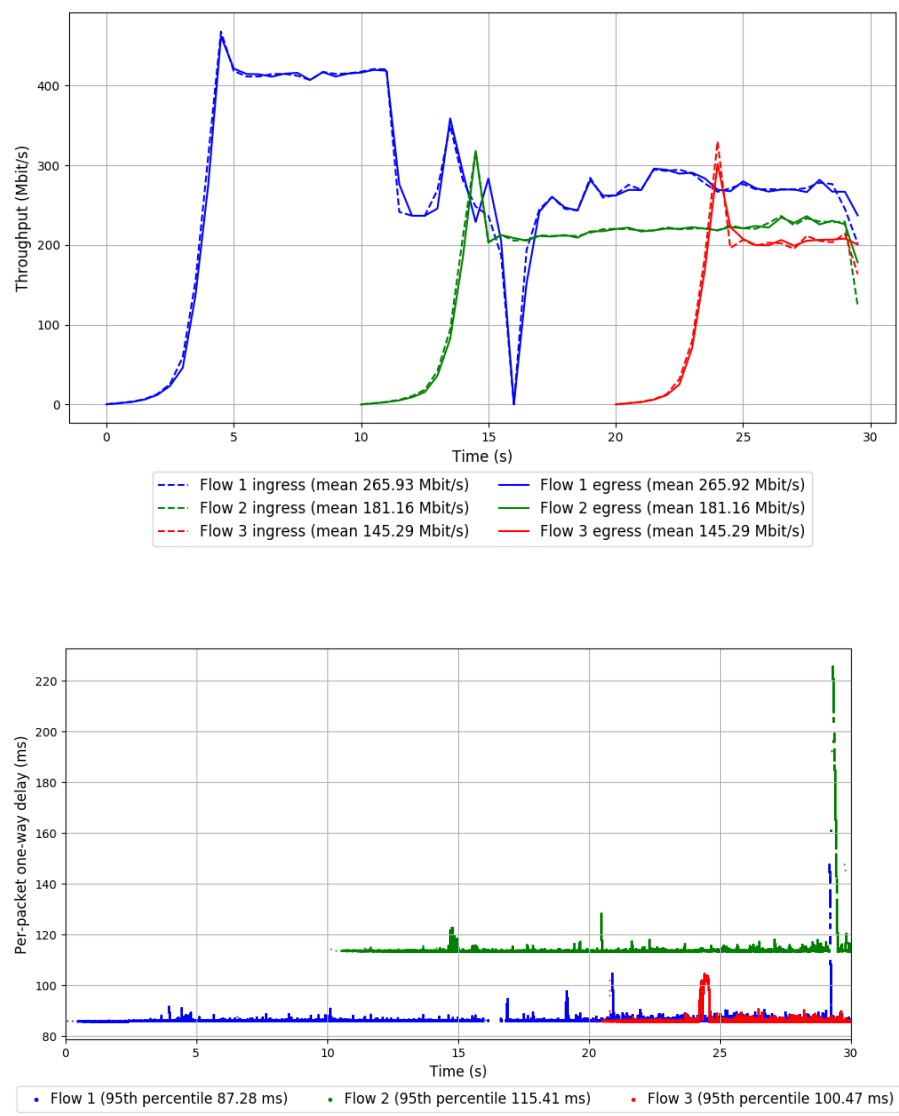
-- Flow 3:

Average throughput: 145.29 Mbit/s

95th percentile per-packet one-way delay: 100.473 ms

Loss rate: 0.00%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-17 03:33:24

End at: 2018-02-17 03:33:54

Below is generated by plot.py at 2018-02-17 09:25:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 482.20 Mbit/s

95th percentile per-packet one-way delay: 117.410 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 311.10 Mbit/s

95th percentile per-packet one-way delay: 116.888 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 186.37 Mbit/s

95th percentile per-packet one-way delay: 119.782 ms

Loss rate: 0.02%

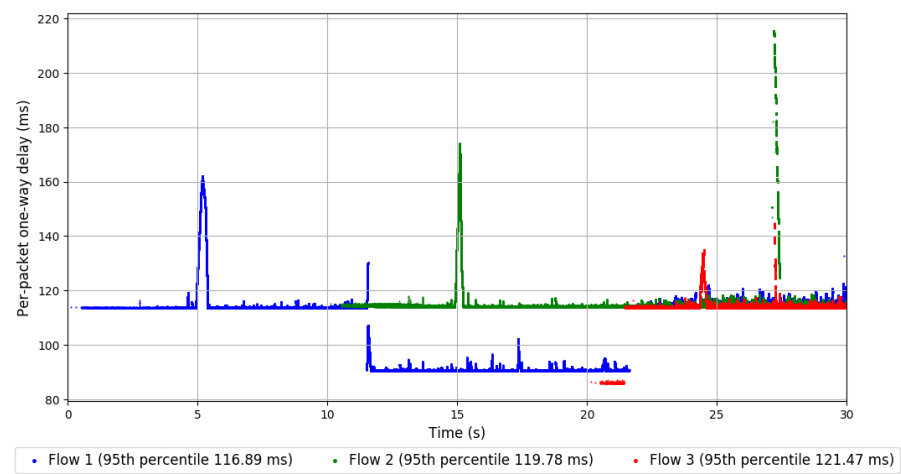
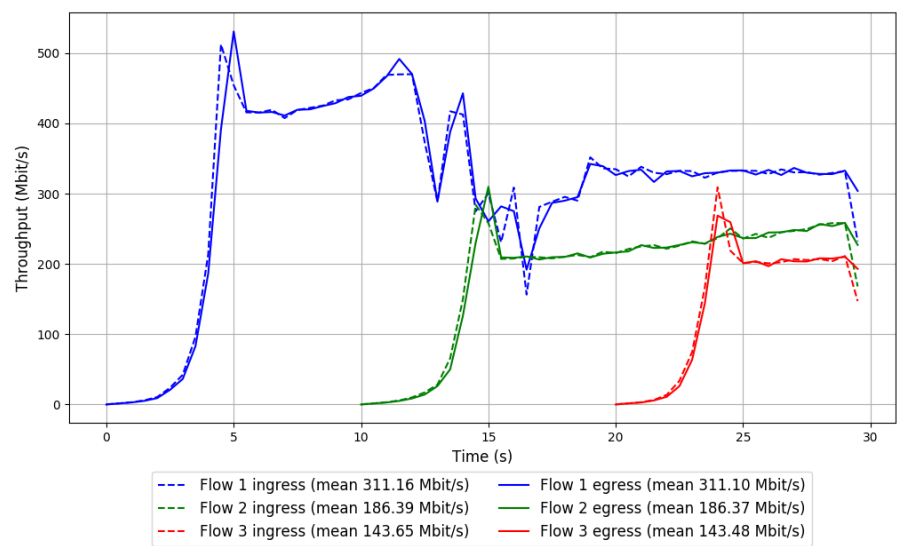
-- Flow 3:

Average throughput: 143.48 Mbit/s

95th percentile per-packet one-way delay: 121.469 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-17 03:52:08

End at: 2018-02-17 03:52:38

Below is generated by plot.py at 2018-02-17 09:26:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 481.19 Mbit/s

95th percentile per-packet one-way delay: 128.360 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 283.93 Mbit/s

95th percentile per-packet one-way delay: 131.328 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 194.89 Mbit/s

95th percentile per-packet one-way delay: 114.755 ms

Loss rate: 0.00%

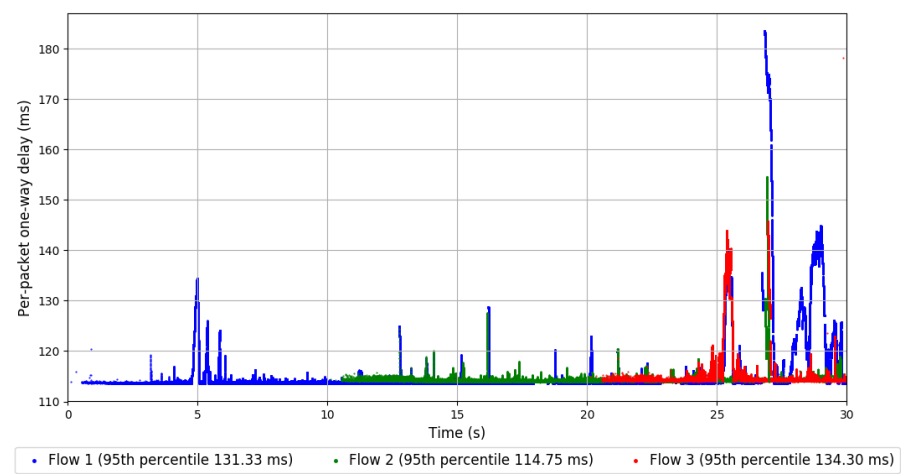
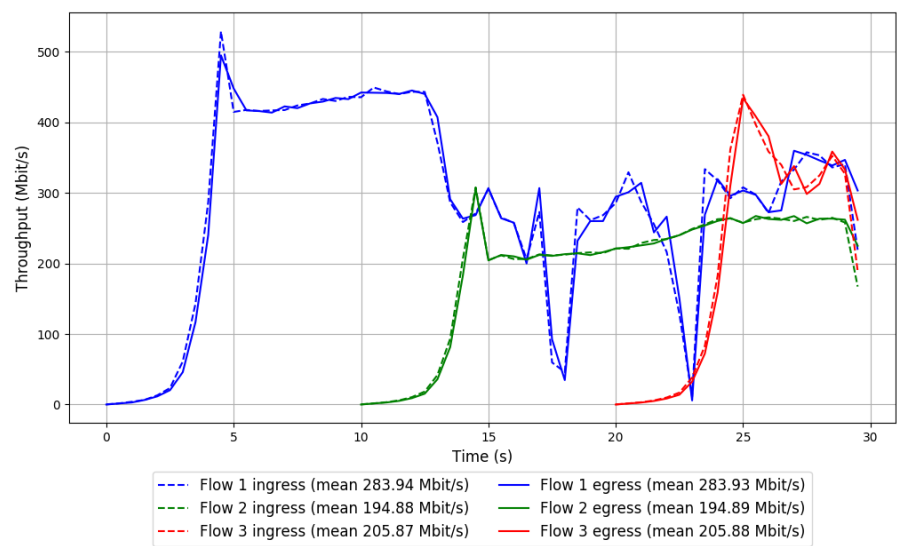
-- Flow 3:

Average throughput: 205.88 Mbit/s

95th percentile per-packet one-way delay: 134.300 ms

Loss rate: 0.00%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-17 04:10:47

End at: 2018-02-17 04:11:17

Below is generated by plot.py at 2018-02-17 09:26:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 397.90 Mbit/s

95th percentile per-packet one-way delay: 116.342 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 225.07 Mbit/s

95th percentile per-packet one-way delay: 115.439 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 193.68 Mbit/s

95th percentile per-packet one-way delay: 115.402 ms

Loss rate: 0.00%

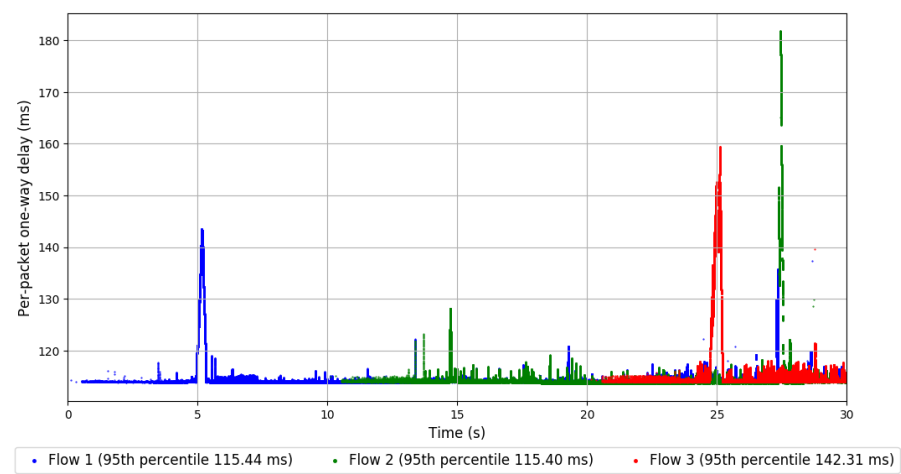
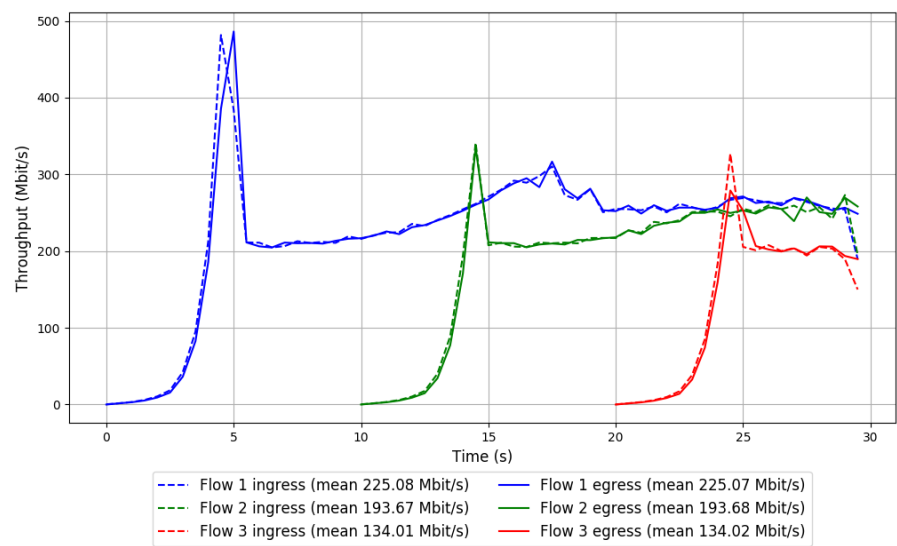
-- Flow 3:

Average throughput: 134.02 Mbit/s

95th percentile per-packet one-way delay: 142.309 ms

Loss rate: 0.00%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-17 04:29:52

End at: 2018-02-17 04:30:22

Below is generated by plot.py at 2018-02-17 09:26:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 478.63 Mbit/s

95th percentile per-packet one-way delay: 150.541 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 324.64 Mbit/s

95th percentile per-packet one-way delay: 162.499 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 120.30 Mbit/s

95th percentile per-packet one-way delay: 132.467 ms

Loss rate: 0.00%

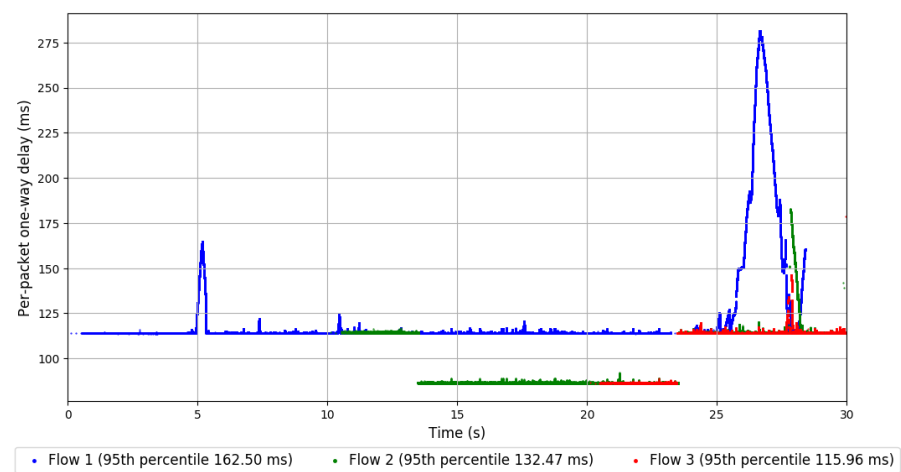
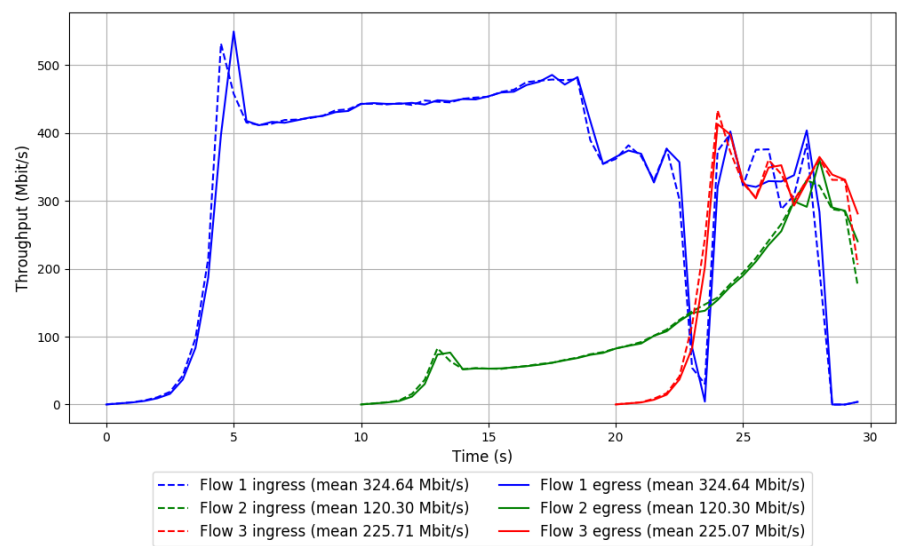
-- Flow 3:

Average throughput: 225.07 Mbit/s

95th percentile per-packet one-way delay: 115.960 ms

Loss rate: 0.00%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-02-17 04:48:48

End at: 2018-02-17 04:49:18

Below is generated by plot.py at 2018-02-17 09:26:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 496.70 Mbit/s

95th percentile per-packet one-way delay: 114.220 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 320.07 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 191.69 Mbit/s

95th percentile per-packet one-way delay: 90.641 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 150.03 Mbit/s

95th percentile per-packet one-way delay: 92.152 ms

Loss rate: 0.00%

Run 10: Report of Vivace-LTE — Data Link

