

Pantheon Report

Generated at 2017-12-12 04:50:01 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

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

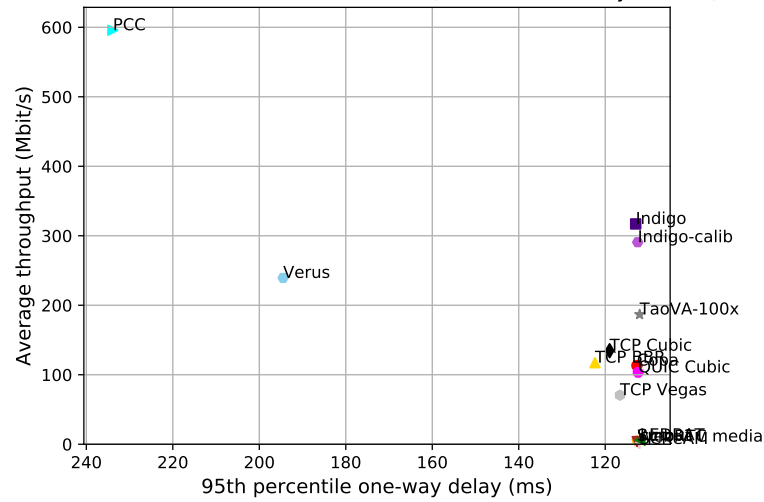
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

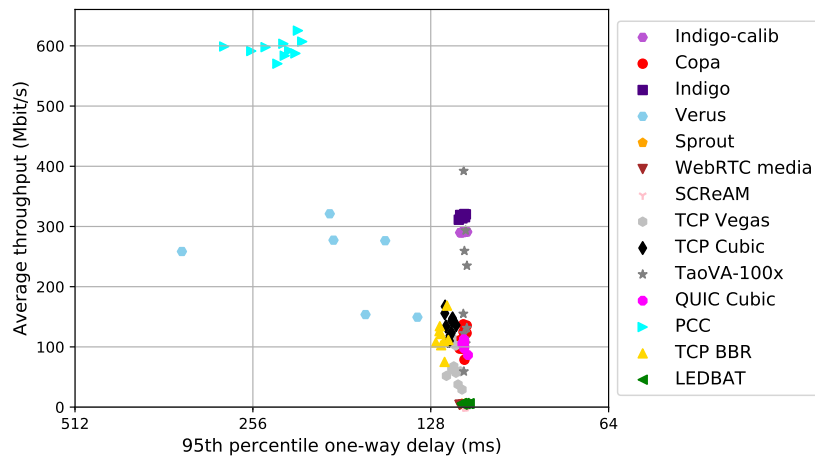
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
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-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eae30b267cde681
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/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	9	52.71	66.49	64.16	566.13	123.05	124.11	0.12	0.03	0.01
TCP Cubic	10	67.62	65.95	70.48	118.33	118.44	120.07	0.01	0.00	0.00
LEDBAT	10	3.42	2.64	1.74	111.92	111.95	111.86	0.00	0.03	0.06
PCC	10	502.01	120.33	41.95	237.73	220.70	223.90	2.68	2.53	3.40
QUIC Cubic	9	59.16	53.98	26.17	111.81	111.06	111.25	0.01	0.00	0.00
SCReAM	10	0.22	0.22	0.22	111.49	111.60	111.31	0.00	0.00	0.00
WebRTC media	10	2.07	1.28	0.46	111.94	112.33	111.28	0.00	0.00	0.02
Sprout	10	2.63	2.62	1.90	112.71	112.41	112.15	0.01	0.01	0.00
TaoVA-100x	10	93.36	105.50	90.60	112.21	112.07	112.37	0.01	0.02	0.01
TCP Vegas	10	32.86	36.39	40.91	115.32	115.00	116.70	0.14	0.01	0.02
Verus	6	167.88	72.43	72.24	192.51	183.34	159.01	2.44	1.54	0.48
Copa	10	63.19	55.37	50.90	112.53	1201.04	199.60	0.00	0.00	0.01
Indigo	10	168.61	159.09	133.87	112.44	113.40	114.61	0.02	0.01	0.01
Indigo-calib	10	153.09	146.78	125.58	112.25	112.41	112.81	0.00	0.00	0.01

Run 1: Statistics of TCP BBR

Start at: 2017-12-12 00:54:23

End at: 2017-12-12 00:54:53

Below is generated by plot.py at 2017-12-12 04:01:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.76 Mbit/s

95th percentile per-packet one-way delay: 122.914 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 47.87 Mbit/s

95th percentile per-packet one-way delay: 121.597 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.48 Mbit/s

95th percentile per-packet one-way delay: 123.033 ms

Loss rate: 0.22%

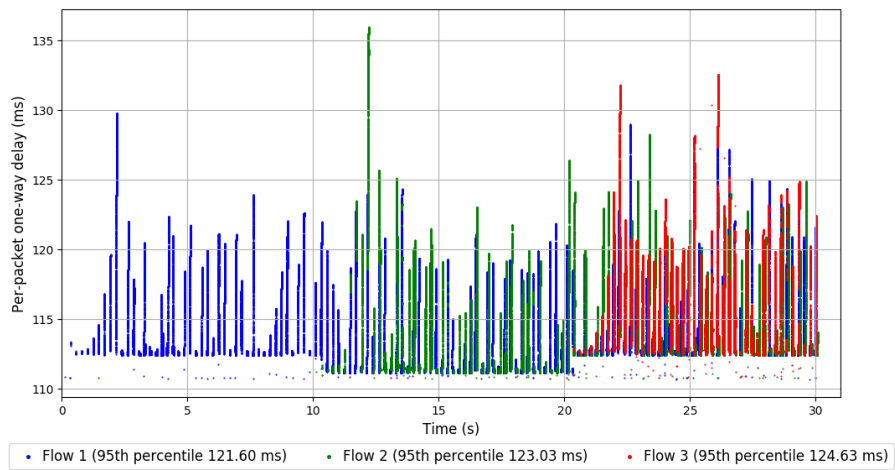
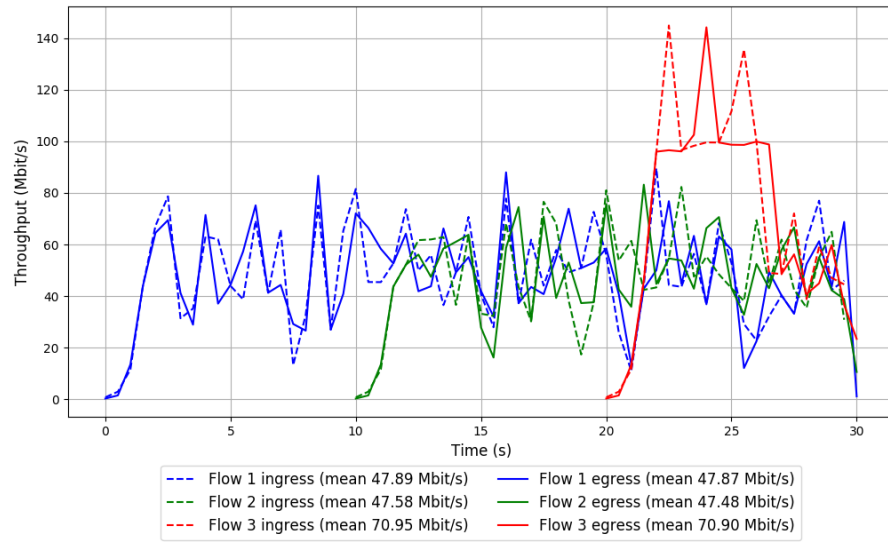
-- Flow 3:

Average throughput: 70.90 Mbit/s

95th percentile per-packet one-way delay: 124.630 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-12 01:07:43

End at: 2017-12-12 01:08:13

Below is generated by plot.py at 2017-12-12 04:01:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.43 Mbit/s

95th percentile per-packet one-way delay: 123.120 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 54.06 Mbit/s

95th percentile per-packet one-way delay: 121.848 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 70.13 Mbit/s

95th percentile per-packet one-way delay: 122.269 ms

Loss rate: 0.00%

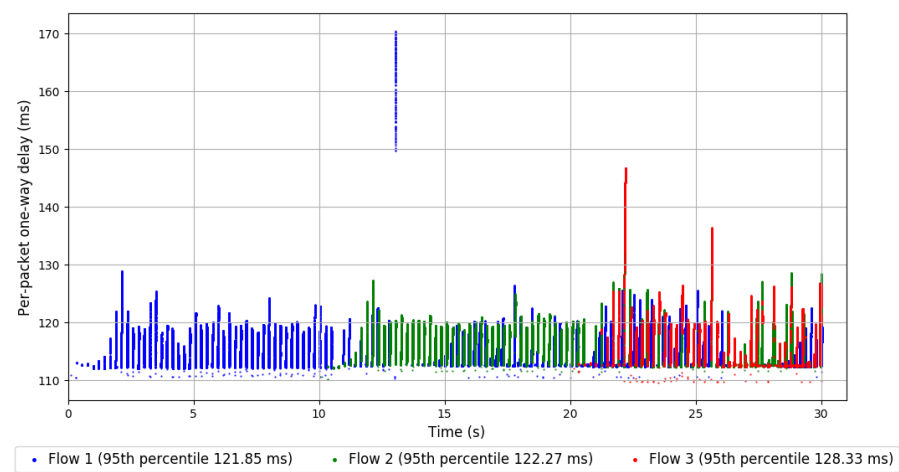
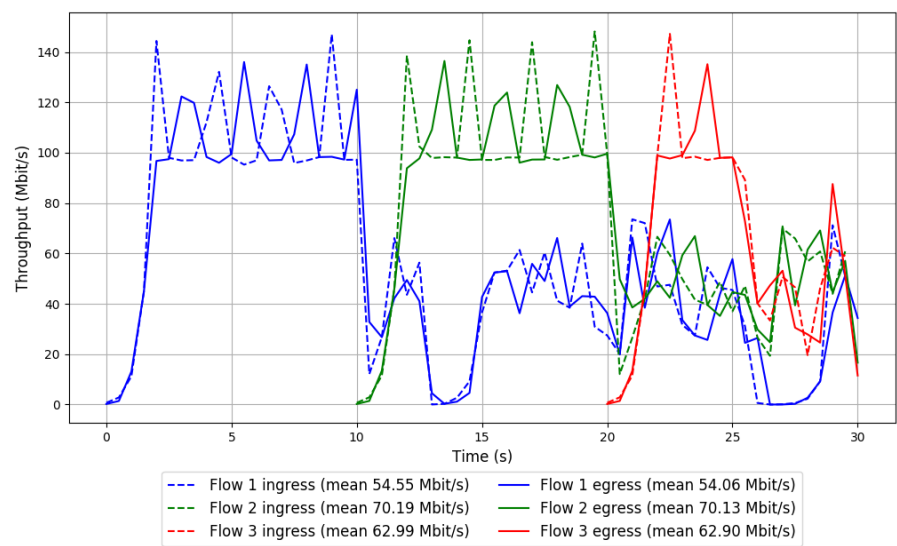
-- Flow 3:

Average throughput: 62.90 Mbit/s

95th percentile per-packet one-way delay: 128.334 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link

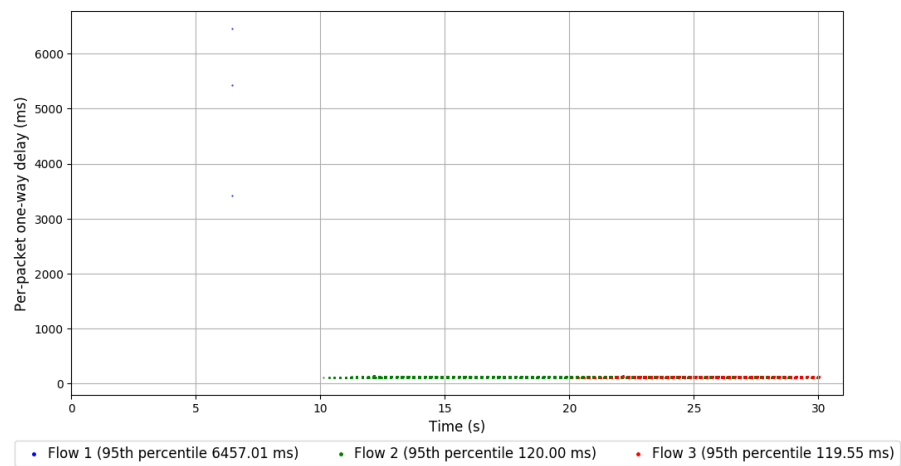
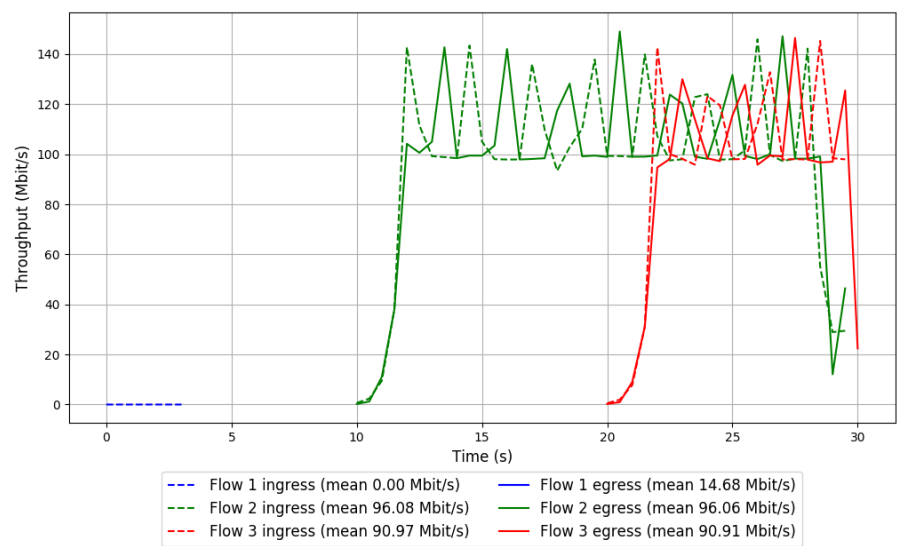


Run 3: Statistics of TCP BBR

Start at: 2017-12-12 01:20:56

End at: 2017-12-12 01:21:26

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-12 01:33:58

End at: 2017-12-12 01:34:28

Below is generated by plot.py at 2017-12-12 04:01:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.26 Mbit/s

95th percentile per-packet one-way delay: 125.486 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 49.38 Mbit/s

95th percentile per-packet one-way delay: 123.664 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 57.85 Mbit/s

95th percentile per-packet one-way delay: 127.127 ms

Loss rate: 0.01%

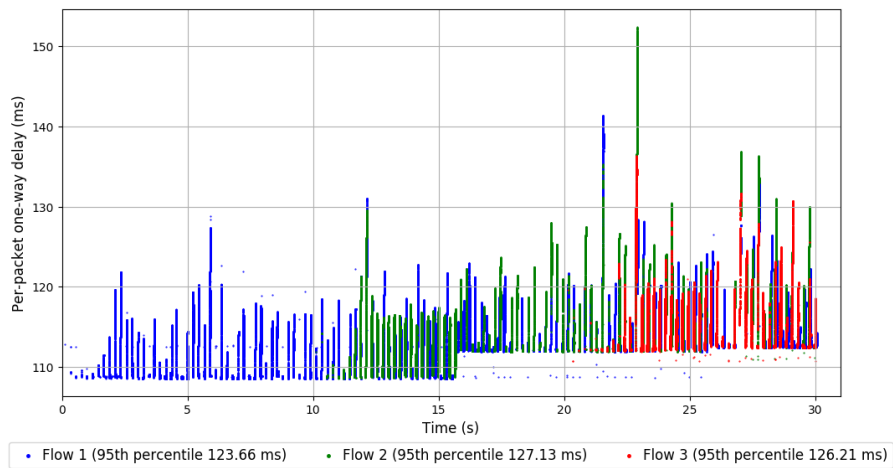
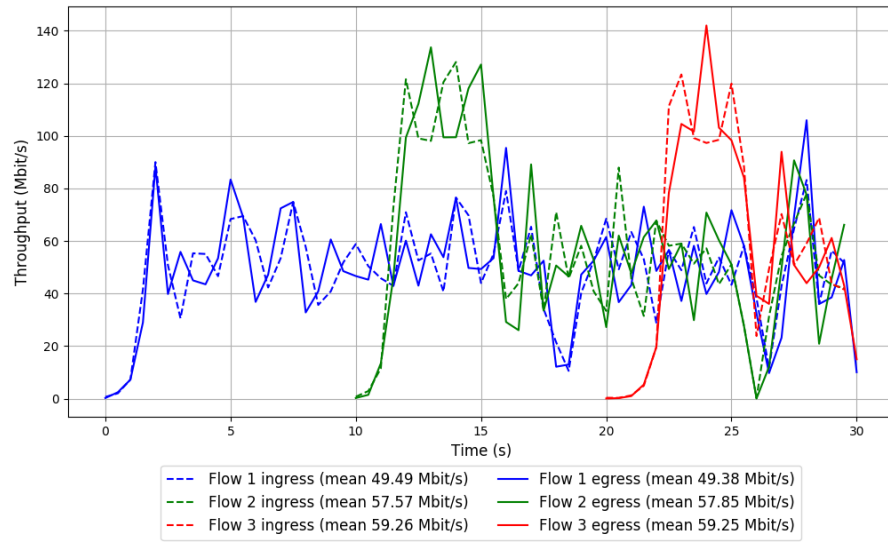
-- Flow 3:

Average throughput: 59.25 Mbit/s

95th percentile per-packet one-way delay: 126.208 ms

Loss rate: 0.03%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-12 01:47:28

End at: 2017-12-12 01:47:58

Below is generated by plot.py at 2017-12-12 04:01:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.09 Mbit/s

95th percentile per-packet one-way delay: 121.280 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 15.67 Mbit/s

95th percentile per-packet one-way delay: 4127.203 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.85 Mbit/s

95th percentile per-packet one-way delay: 120.738 ms

Loss rate: 0.01%

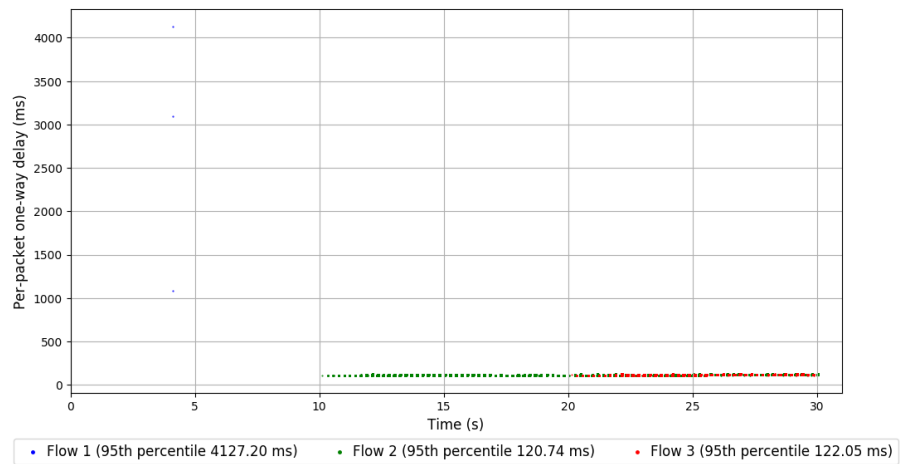
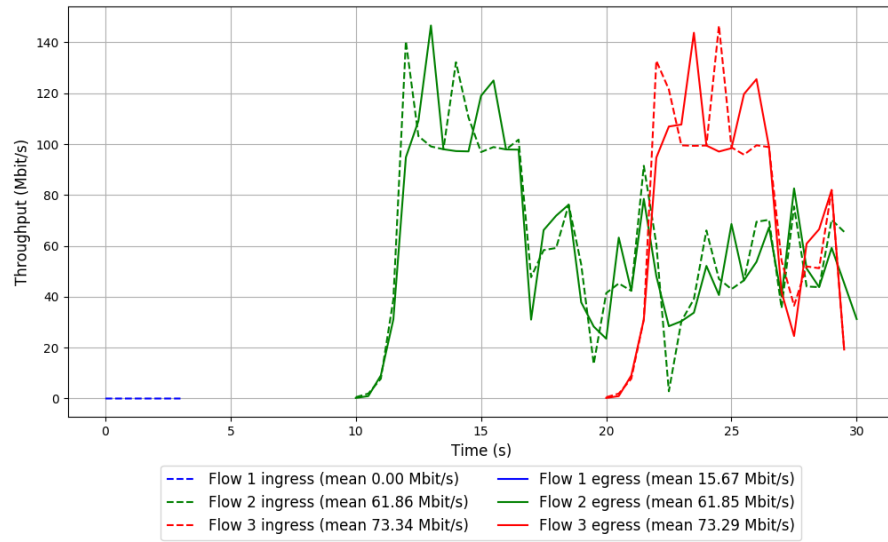
-- Flow 3:

Average throughput: 73.29 Mbit/s

95th percentile per-packet one-way delay: 122.052 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-12 02:00:57

End at: 2017-12-12 02:01:27

Below is generated by plot.py at 2017-12-12 04:01:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.15 Mbit/s

95th percentile per-packet one-way delay: 123.721 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.86 Mbit/s

95th percentile per-packet one-way delay: 122.222 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 97.04 Mbit/s

95th percentile per-packet one-way delay: 125.066 ms

Loss rate: 0.00%

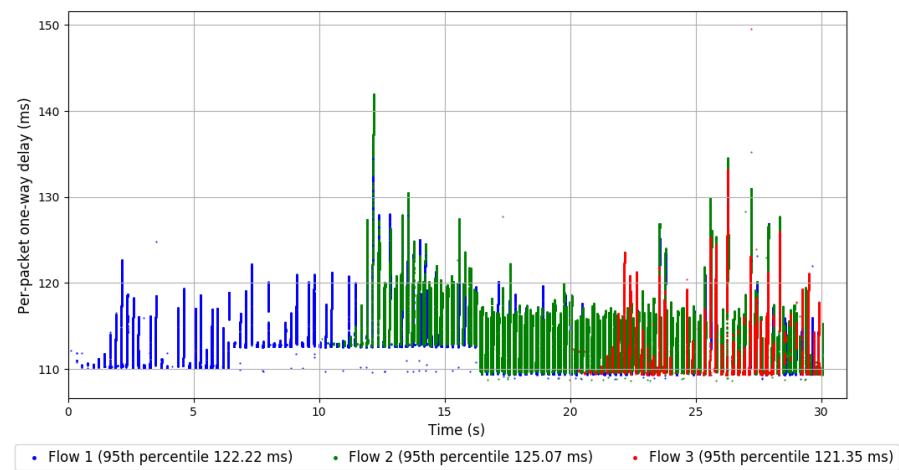
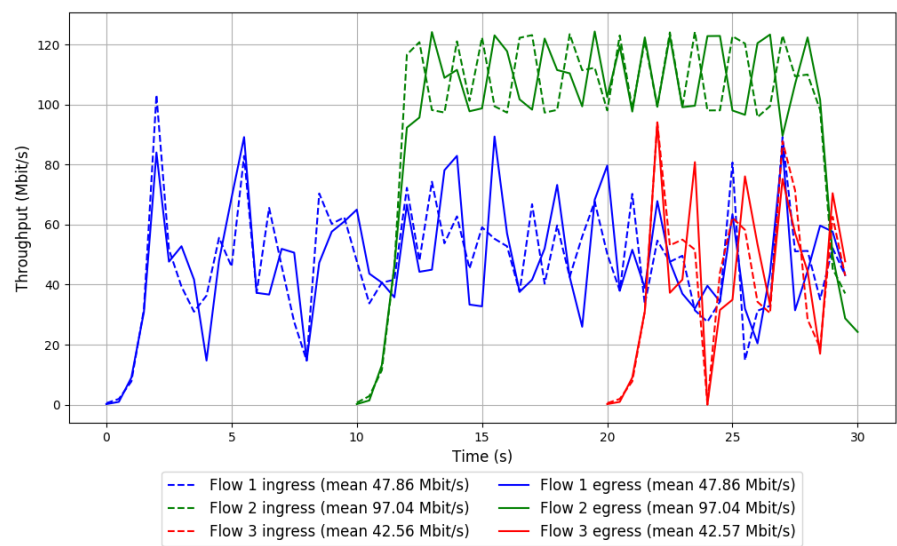
-- Flow 3:

Average throughput: 42.57 Mbit/s

95th percentile per-packet one-way delay: 121.348 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-12 02:14:18

End at: 2017-12-12 02:14:48

Below is generated by plot.py at 2017-12-12 04:01:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.83 Mbit/s

95th percentile per-packet one-way delay: 121.678 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 49.50 Mbit/s

95th percentile per-packet one-way delay: 120.379 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.68 Mbit/s

95th percentile per-packet one-way delay: 122.047 ms

Loss rate: 0.00%

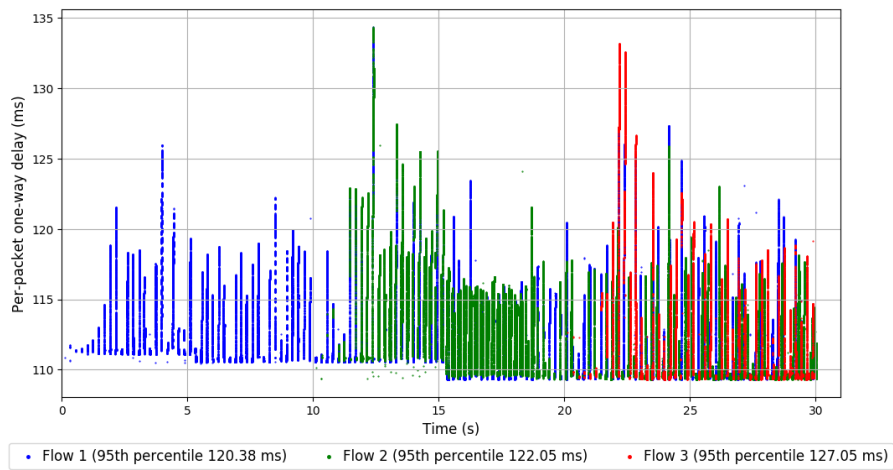
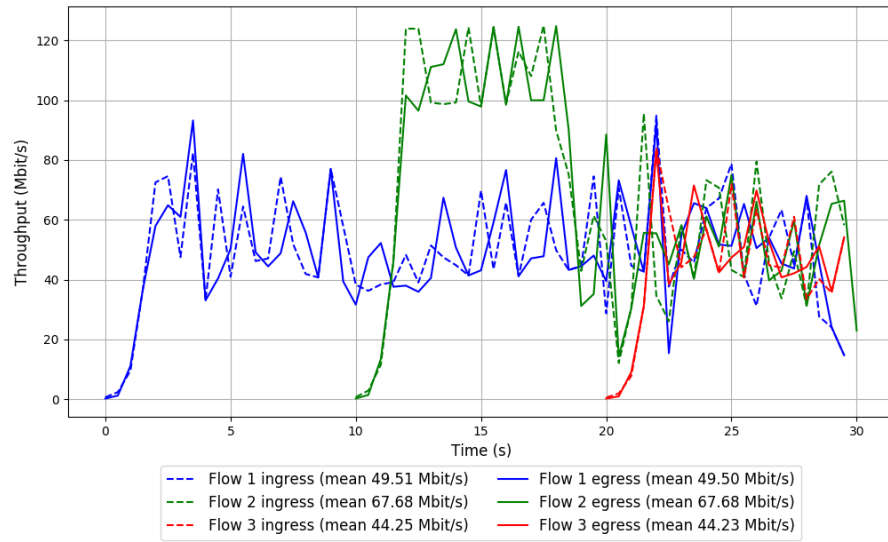
-- Flow 3:

Average throughput: 44.23 Mbit/s

95th percentile per-packet one-way delay: 127.051 ms

Loss rate: 0.07%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-12 02:27:58

End at: 2017-12-12 02:28:28

Below is generated by plot.py at 2017-12-12 04:01:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.53 Mbit/s

95th percentile per-packet one-way delay: 119.494 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.75 Mbit/s

95th percentile per-packet one-way delay: 118.658 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.56 Mbit/s

95th percentile per-packet one-way delay: 120.055 ms

Loss rate: 0.00%

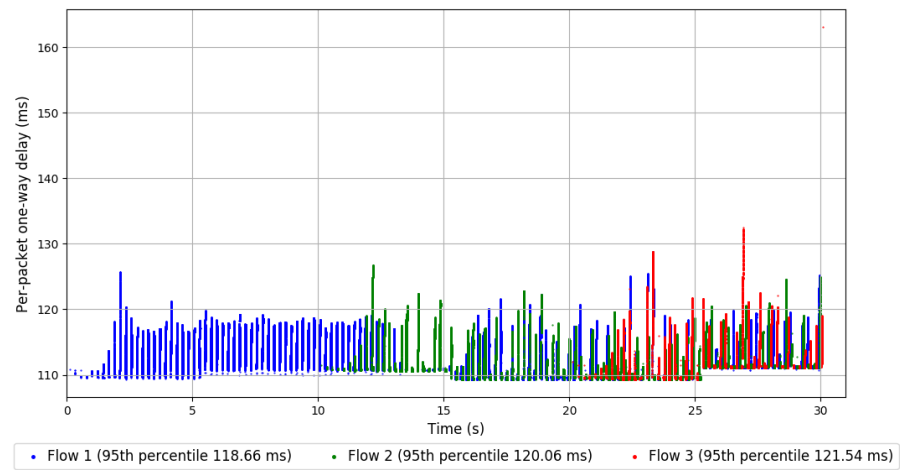
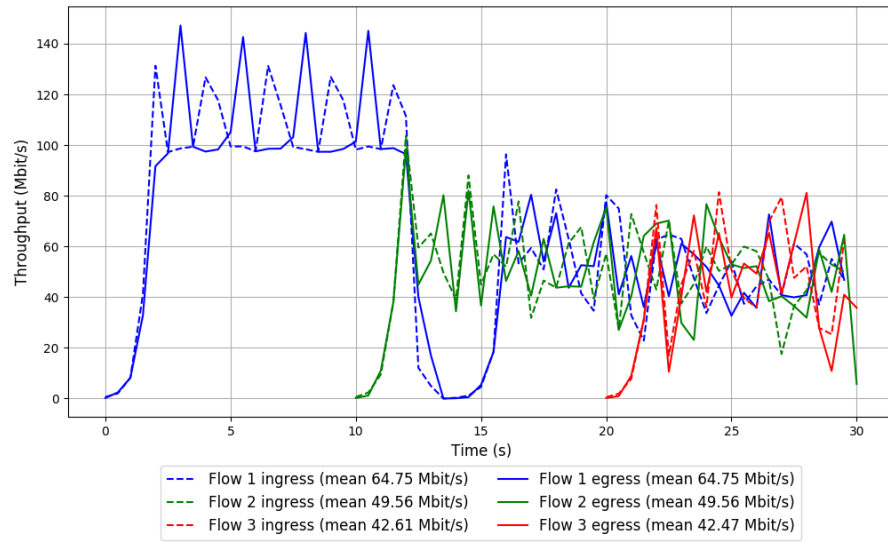
-- Flow 3:

Average throughput: 42.47 Mbit/s

95th percentile per-packet one-way delay: 121.541 ms

Loss rate: 0.03%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-12 02:41:23

End at: 2017-12-12 02:41:53

Below is generated by plot.py at 2017-12-12 04:03:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 168.56 Mbit/s

95th percentile per-packet one-way delay: 120.129 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 71.74 Mbit/s

95th percentile per-packet one-way delay: 119.535 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.37 Mbit/s

95th percentile per-packet one-way delay: 120.945 ms

Loss rate: 0.01%

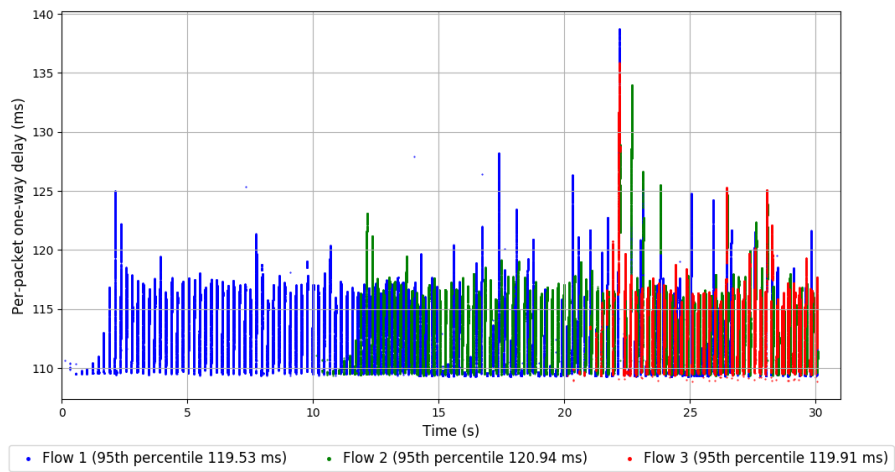
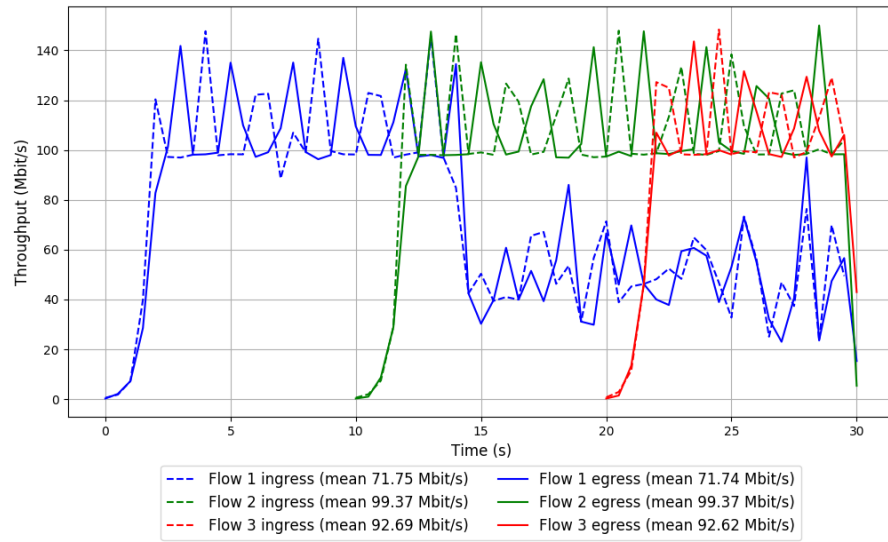
-- Flow 3:

Average throughput: 92.62 Mbit/s

95th percentile per-packet one-way delay: 119.905 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-12 02:54:37

End at: 2017-12-12 02:55:07

Below is generated by plot.py at 2017-12-12 04:03:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.37 Mbit/s

95th percentile per-packet one-way delay: 123.559 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.52 Mbit/s

95th percentile per-packet one-way delay: 120.090 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.48 Mbit/s

95th percentile per-packet one-way delay: 126.145 ms

Loss rate: 0.00%

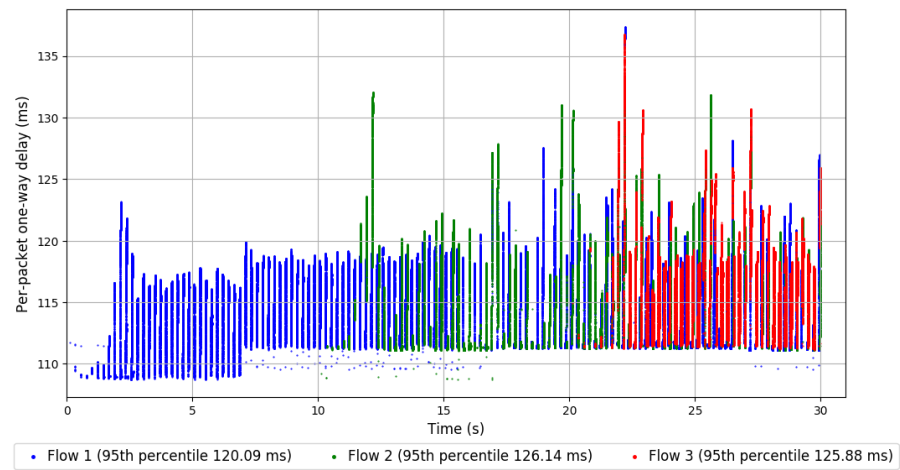
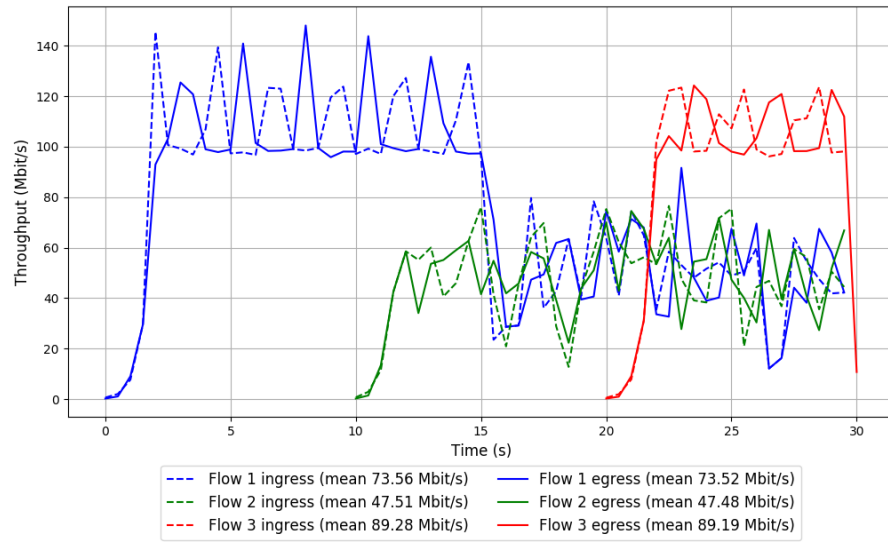
-- Flow 3:

Average throughput: 89.19 Mbit/s

95th percentile per-packet one-way delay: 125.880 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-12 00:48:35

End at: 2017-12-12 00:49:05

Below is generated by plot.py at 2017-12-12 04:03:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 155.84 Mbit/s

95th percentile per-packet one-way delay: 121.180 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.42 Mbit/s

95th percentile per-packet one-way delay: 119.773 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 82.03 Mbit/s

95th percentile per-packet one-way delay: 121.088 ms

Loss rate: 0.00%

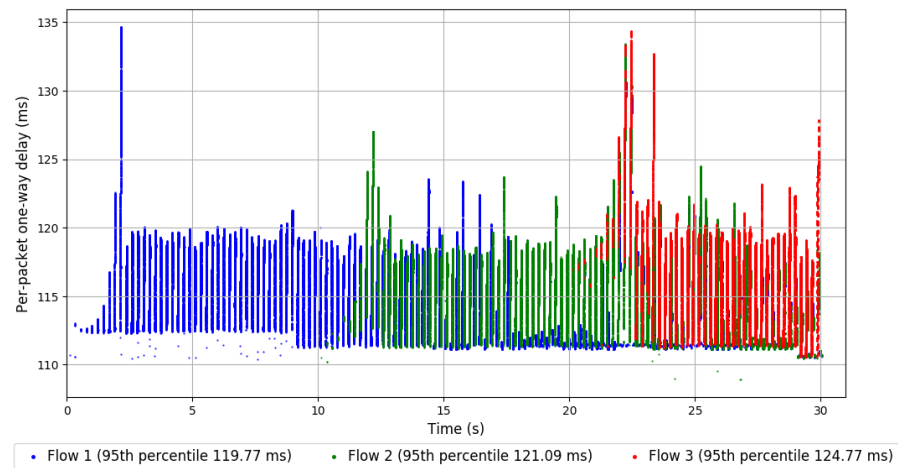
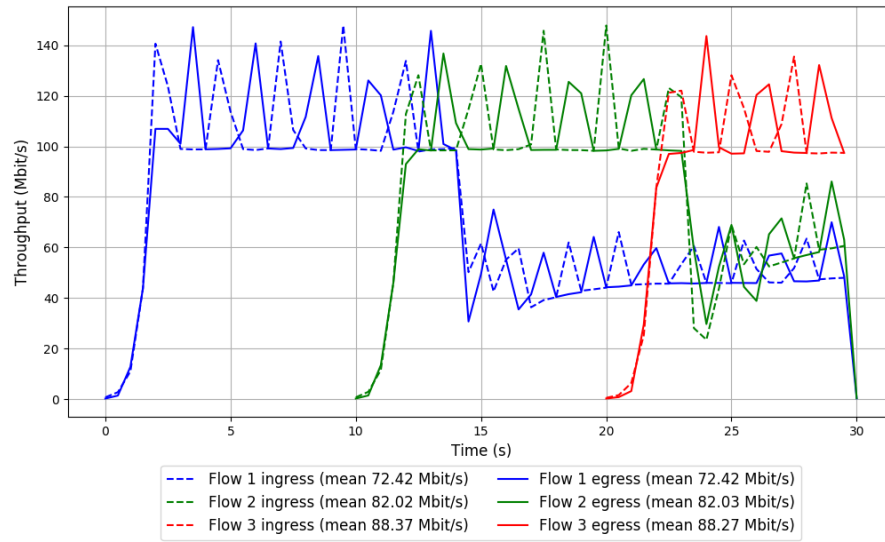
-- Flow 3:

Average throughput: 88.27 Mbit/s

95th percentile per-packet one-way delay: 124.770 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-12 01:01:38

End at: 2017-12-12 01:02:08

Below is generated by plot.py at 2017-12-12 04:04:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 167.08 Mbit/s

95th percentile per-packet one-way delay: 121.015 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 77.58 Mbit/s

95th percentile per-packet one-way delay: 120.118 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 93.31 Mbit/s

95th percentile per-packet one-way delay: 121.195 ms

Loss rate: 0.00%

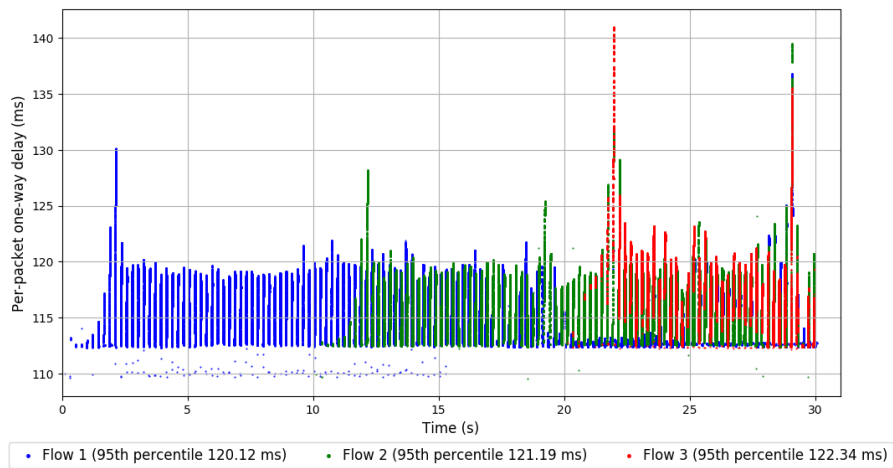
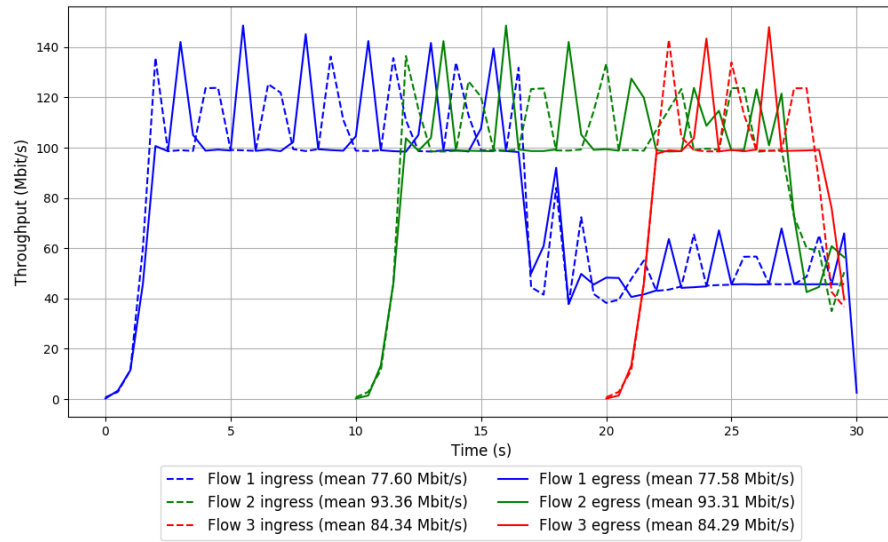
-- Flow 3:

Average throughput: 84.29 Mbit/s

95th percentile per-packet one-way delay: 122.339 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-12 01:15:06

End at: 2017-12-12 01:15:36

Below is generated by plot.py at 2017-12-12 04:04:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.93 Mbit/s

95th percentile per-packet one-way delay: 119.791 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 38.26 Mbit/s

95th percentile per-packet one-way delay: 119.993 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 62.66 Mbit/s

95th percentile per-packet one-way delay: 119.704 ms

Loss rate: 0.00%

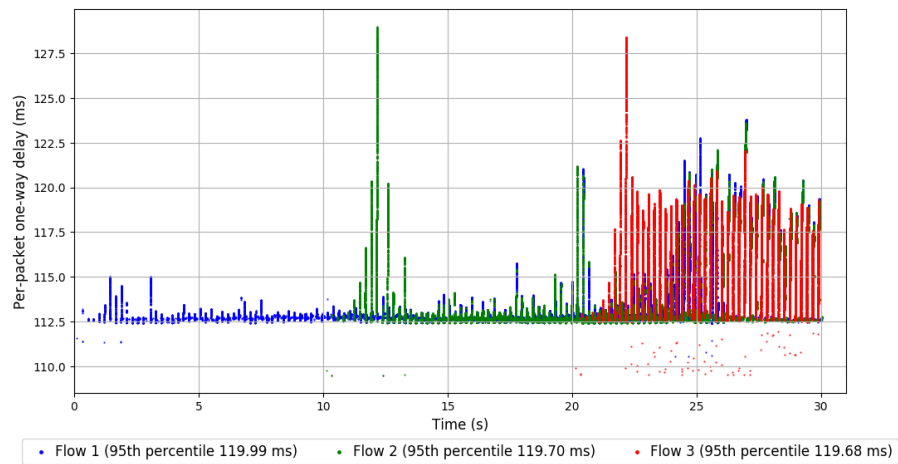
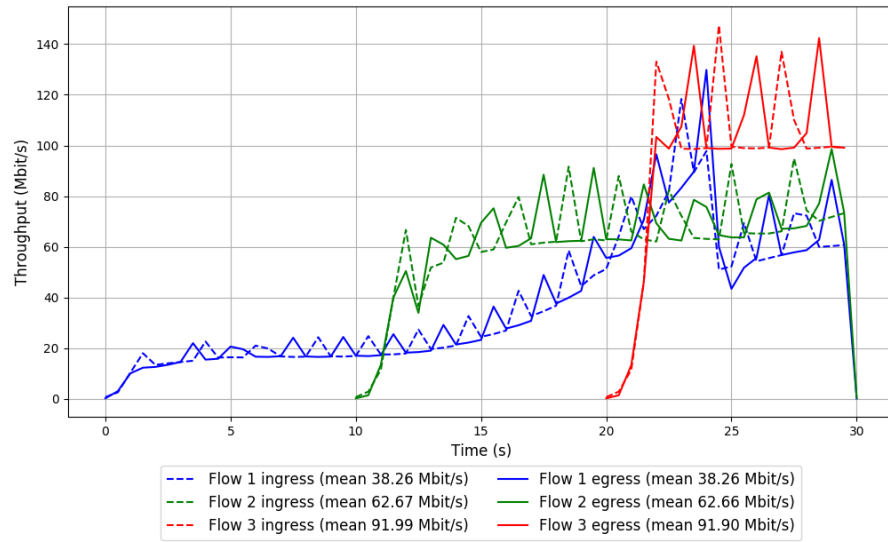
-- Flow 3:

Average throughput: 91.90 Mbit/s

95th percentile per-packet one-way delay: 119.679 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-12 01:28:13

End at: 2017-12-12 01:28:43

Below is generated by plot.py at 2017-12-12 04:04:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 133.84 Mbit/s

95th percentile per-packet one-way delay: 120.604 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.24 Mbit/s

95th percentile per-packet one-way delay: 120.928 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.51 Mbit/s

95th percentile per-packet one-way delay: 121.357 ms

Loss rate: 0.00%

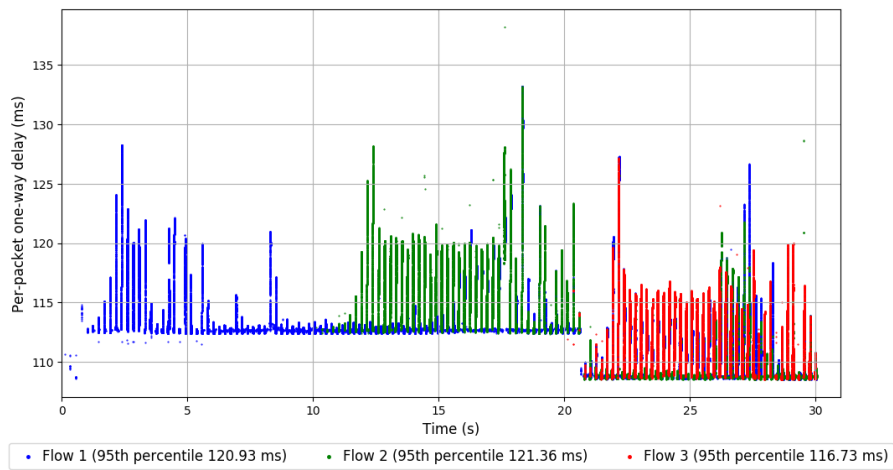
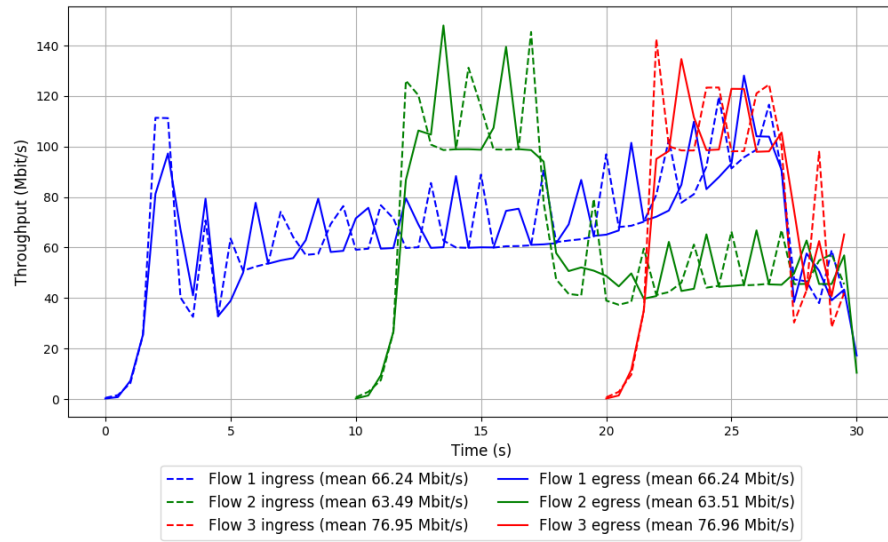
-- Flow 3:

Average throughput: 76.96 Mbit/s

95th percentile per-packet one-way delay: 116.732 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-12 01:41:40

End at: 2017-12-12 01:42:10

Below is generated by plot.py at 2017-12-12 04:04:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.96 Mbit/s

95th percentile per-packet one-way delay: 118.748 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 68.25 Mbit/s

95th percentile per-packet one-way delay: 117.288 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.56 Mbit/s

95th percentile per-packet one-way delay: 119.956 ms

Loss rate: 0.00%

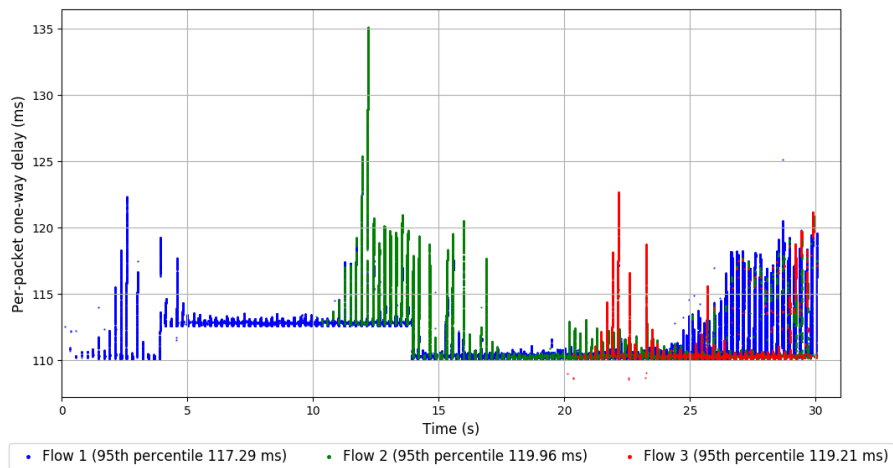
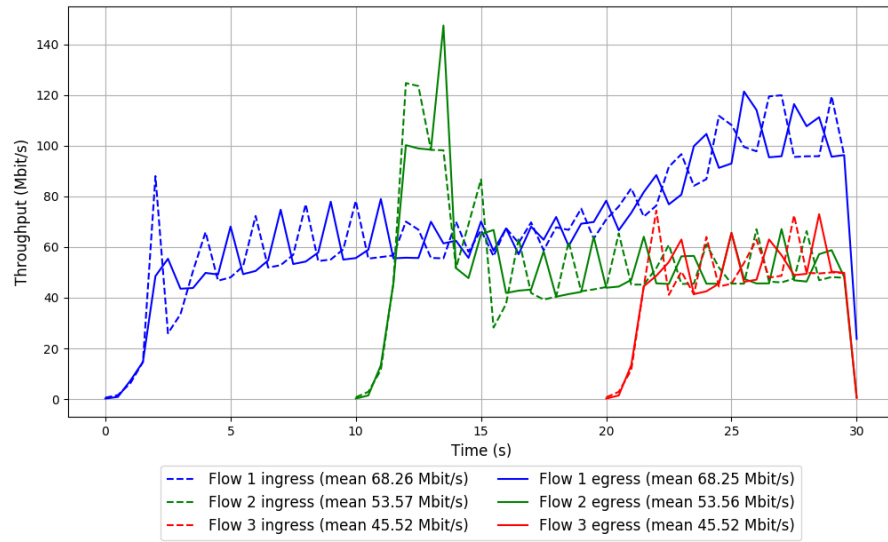
-- Flow 3:

Average throughput: 45.52 Mbit/s

95th percentile per-packet one-way delay: 119.208 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-12 01:54:51

End at: 2017-12-12 01:55:21

Below is generated by plot.py at 2017-12-12 04:04:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.54 Mbit/s

95th percentile per-packet one-way delay: 118.111 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 100.28 Mbit/s

95th percentile per-packet one-way delay: 117.774 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.97 Mbit/s

95th percentile per-packet one-way delay: 118.611 ms

Loss rate: 0.01%

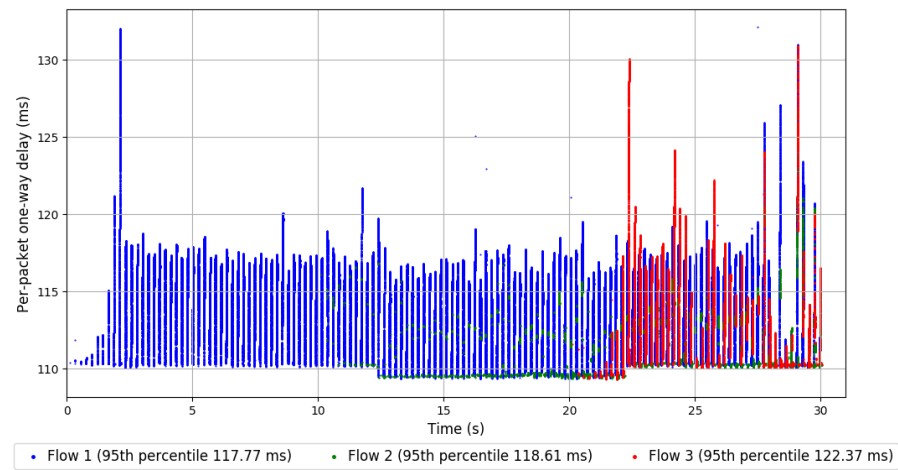
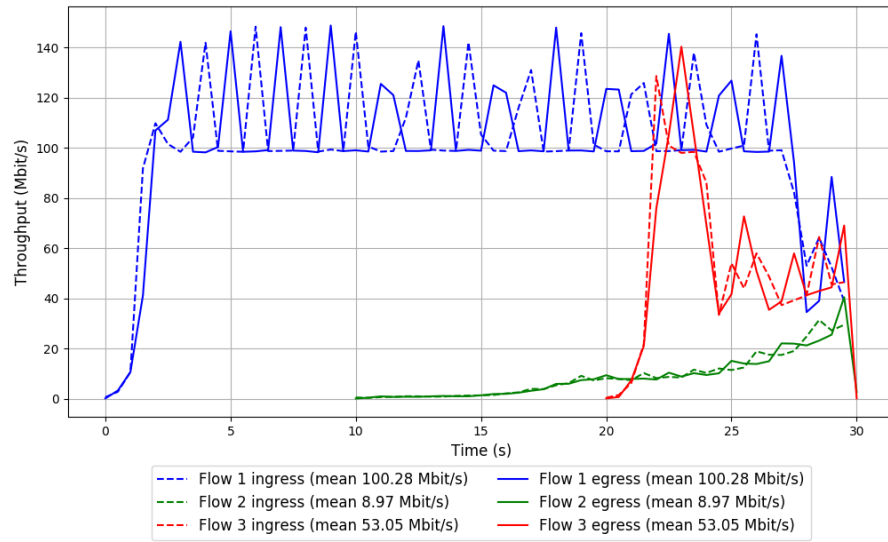
-- Flow 3:

Average throughput: 53.05 Mbit/s

95th percentile per-packet one-way delay: 122.369 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-12 02:08:18

End at: 2017-12-12 02:08:48

Below is generated by plot.py at 2017-12-12 04:05:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.85 Mbit/s

95th percentile per-packet one-way delay: 119.000 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 52.97 Mbit/s

95th percentile per-packet one-way delay: 119.734 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.01 Mbit/s

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

Loss rate: 0.00%

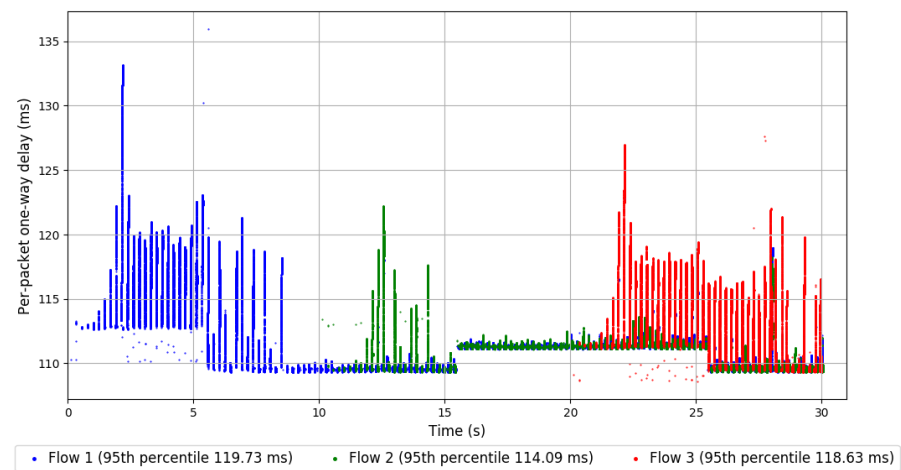
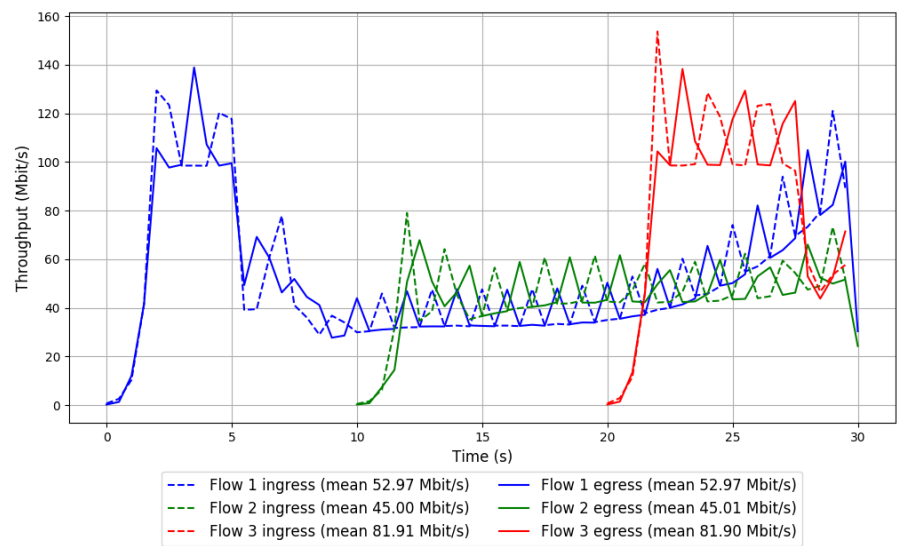
-- Flow 3:

Average throughput: 81.90 Mbit/s

95th percentile per-packet one-way delay: 118.626 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-12 02:21:55

End at: 2017-12-12 02:22:25

Below is generated by plot.py at 2017-12-12 04:05:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 136.05 Mbit/s

95th percentile per-packet one-way delay: 115.933 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 71.95 Mbit/s

95th percentile per-packet one-way delay: 112.181 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 51.52 Mbit/s

95th percentile per-packet one-way delay: 113.639 ms

Loss rate: 0.00%

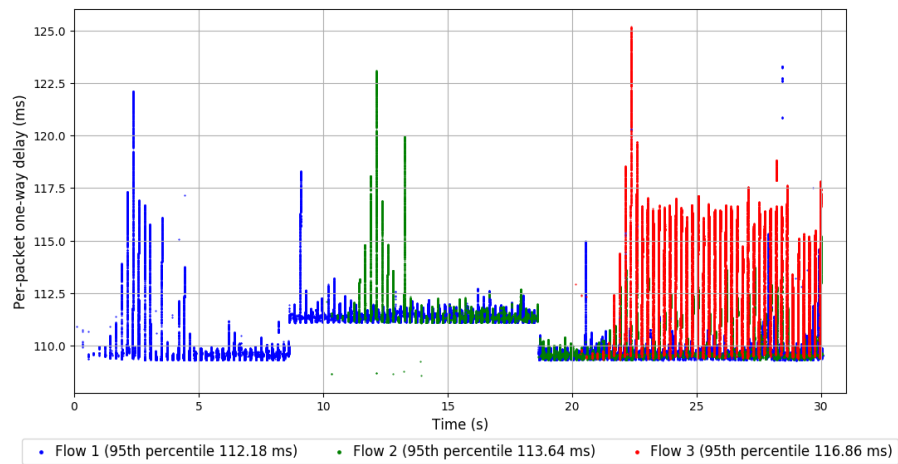
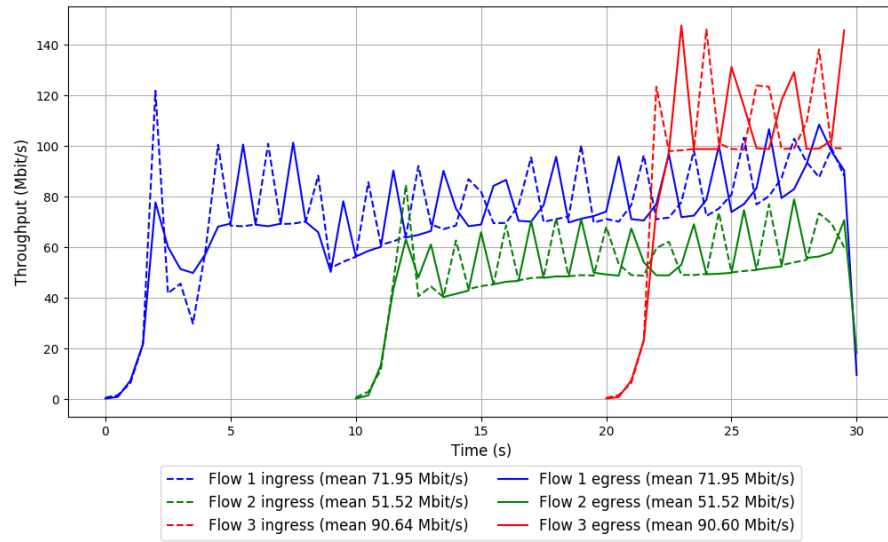
-- Flow 3:

Average throughput: 90.60 Mbit/s

95th percentile per-packet one-way delay: 116.861 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-12 02:35:32

End at: 2017-12-12 02:36:02

Below is generated by plot.py at 2017-12-12 04:06:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 147.39 Mbit/s

95th percentile per-packet one-way delay: 117.569 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.89 Mbit/s

95th percentile per-packet one-way delay: 117.196 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.13 Mbit/s

95th percentile per-packet one-way delay: 117.888 ms

Loss rate: 0.00%

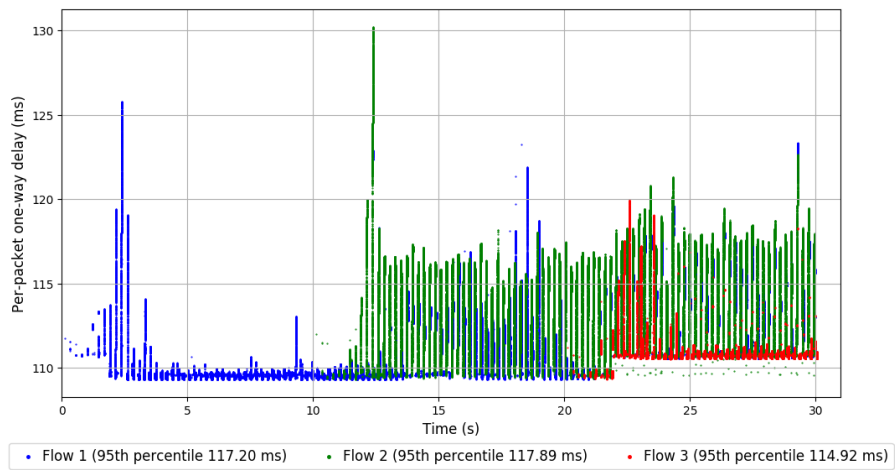
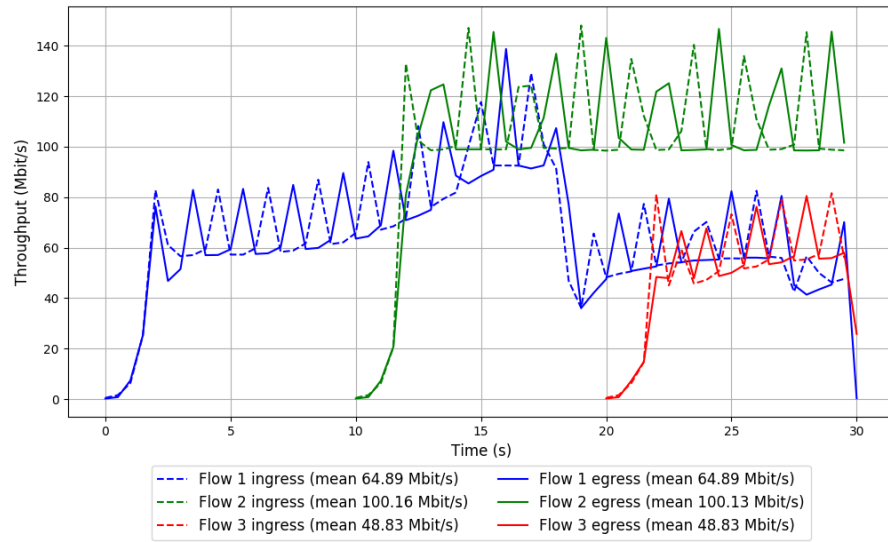
-- Flow 3:

Average throughput: 48.83 Mbit/s

95th percentile per-packet one-way delay: 114.920 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-12 02:48:43

End at: 2017-12-12 02:49:13

Below is generated by plot.py at 2017-12-12 04:06:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.23 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 63.35 Mbit/s

95th percentile per-packet one-way delay: 118.318 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 98.76 Mbit/s

95th percentile per-packet one-way delay: 116.855 ms

Loss rate: 0.00%

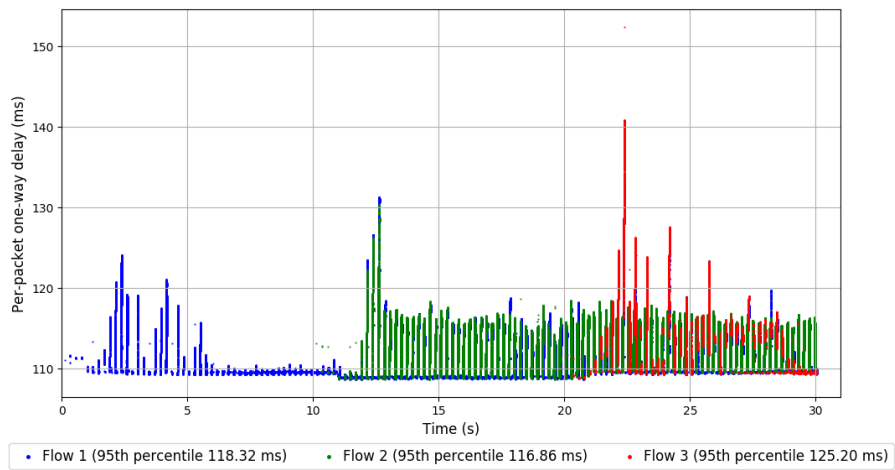
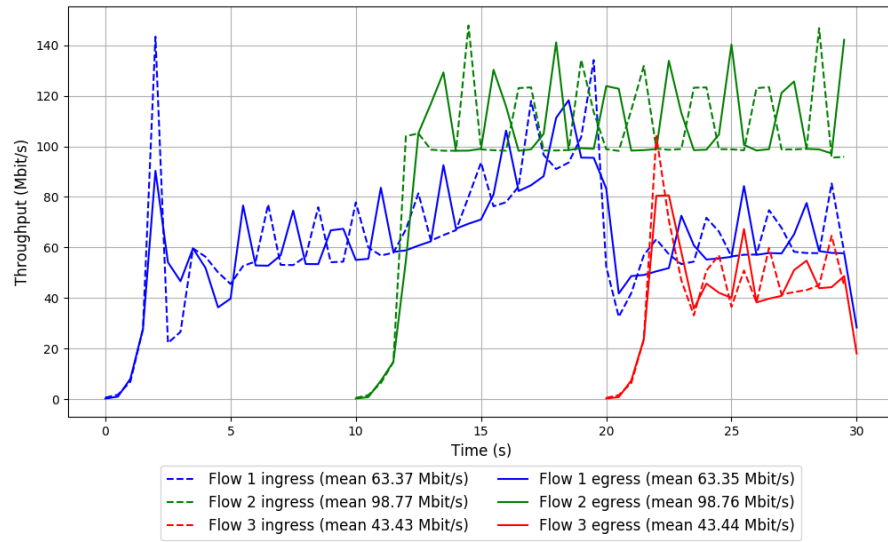
-- Flow 3:

Average throughput: 43.44 Mbit/s

95th percentile per-packet one-way delay: 125.196 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

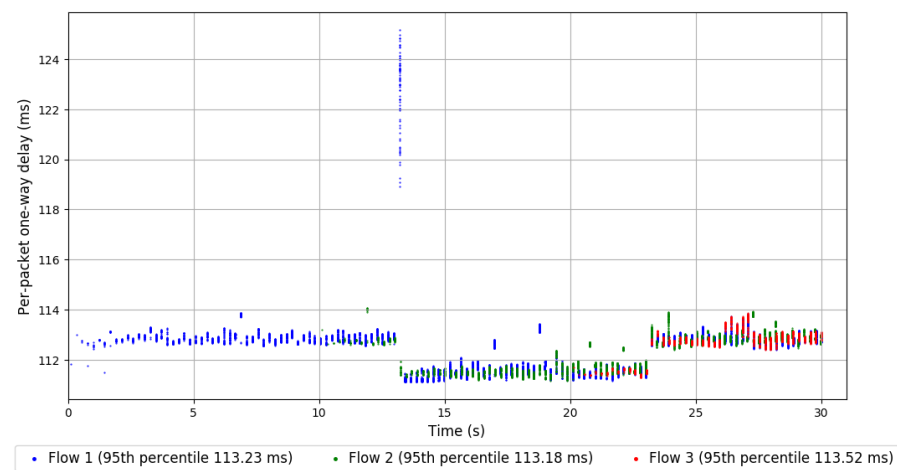
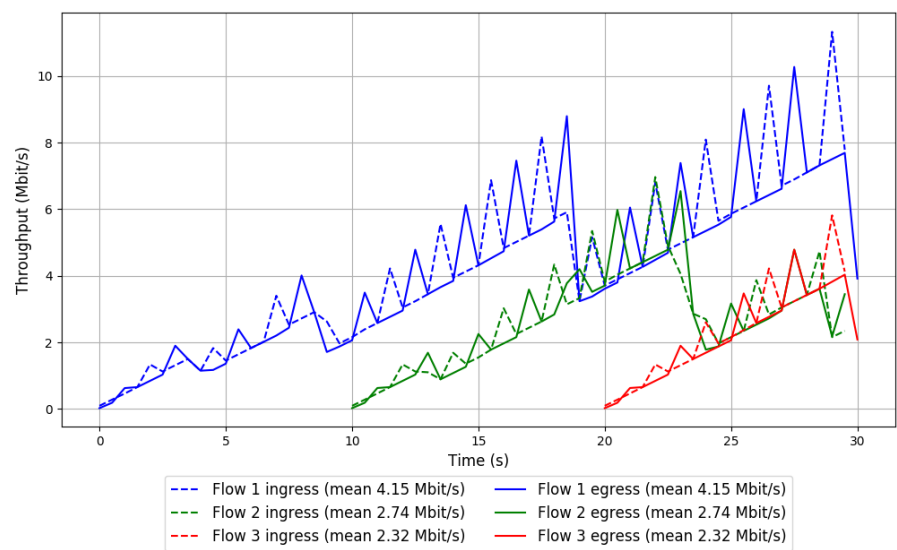


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-12 00:51:30
End at: 2017-12-12 00:52:00

# Below is generated by plot.py at 2017-12-12 04:06:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.74 Mbit/s
95th percentile per-packet one-way delay: 113.262 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 113.234 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.74 Mbit/s
95th percentile per-packet one-way delay: 113.177 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 113.518 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

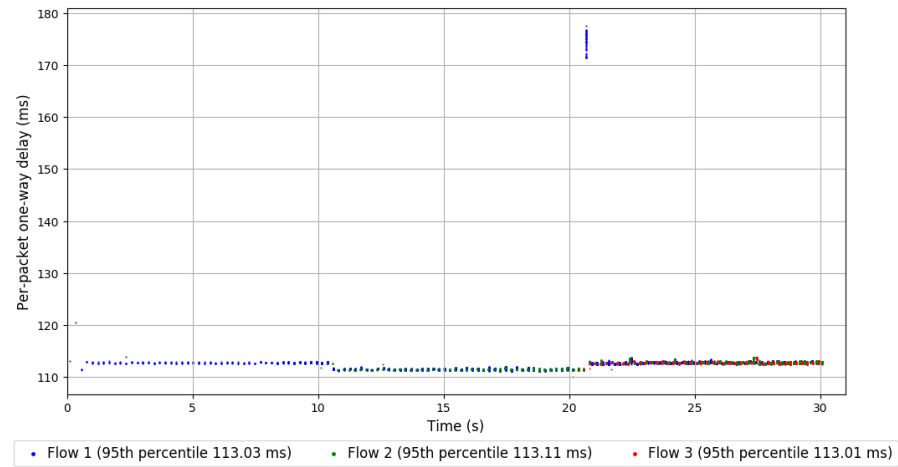
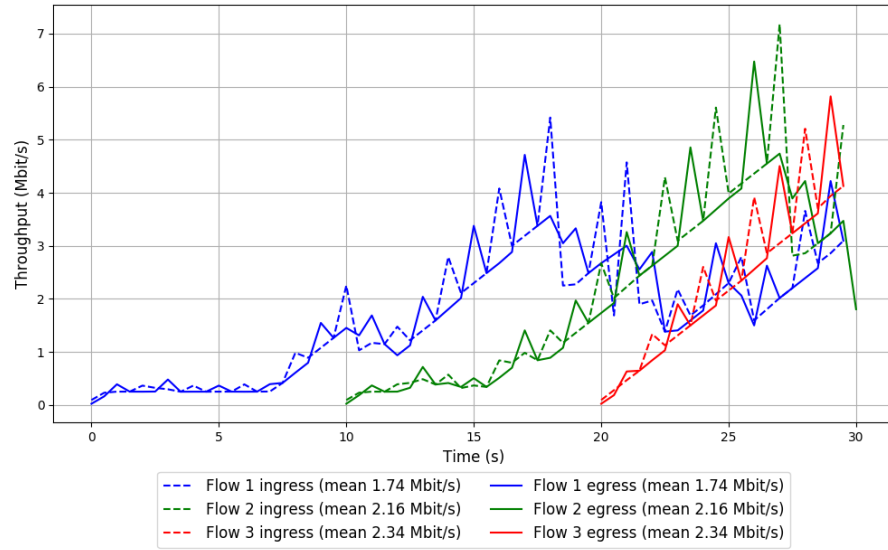


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-12 01:04:33
End at: 2017-12-12 01:05:03

# Below is generated by plot.py at 2017-12-12 04:06:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.94 Mbit/s
95th percentile per-packet one-way delay: 113.062 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 113.028 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 113.114 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 113.013 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

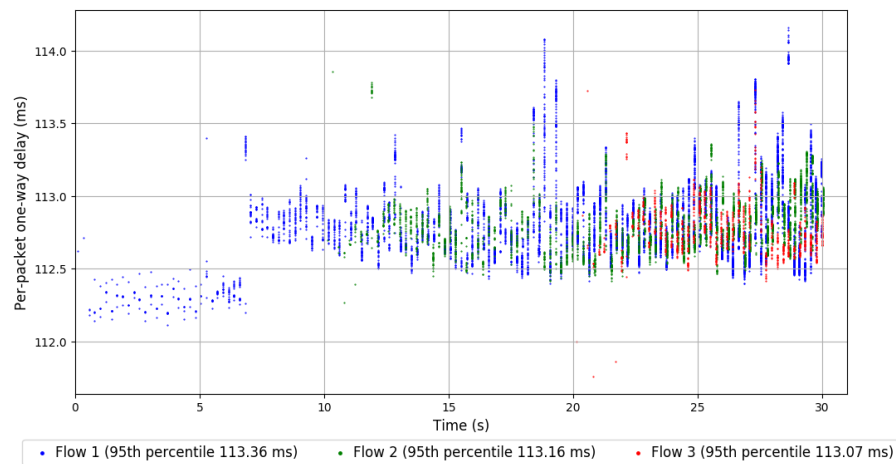
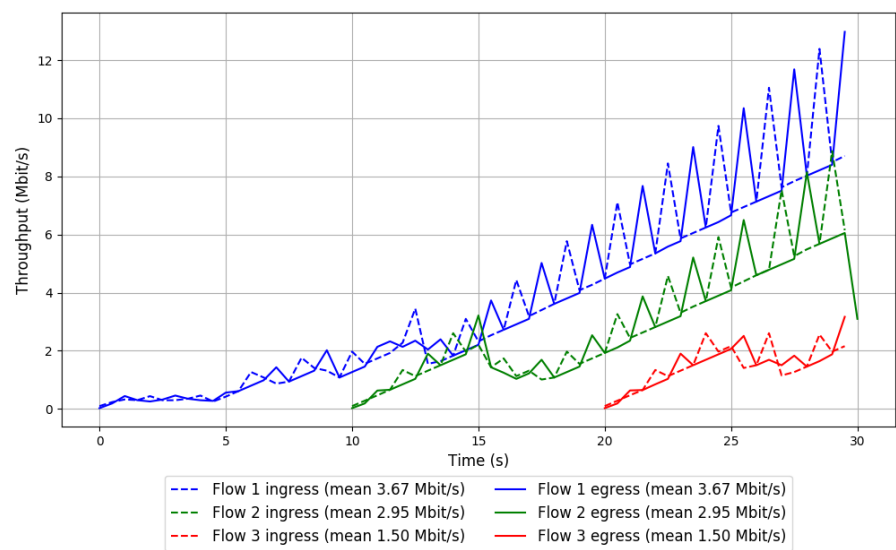


```
Run 3: Statistics of LEDBAT

Start at: 2017-12-12 01:17:57
End at: 2017-12-12 01:18:27

# Below is generated by plot.py at 2017-12-12 04:06:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.12 Mbit/s
95th percentile per-packet one-way delay: 113.265 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 113.358 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 2.95 Mbit/s
95th percentile per-packet one-way delay: 113.157 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 113.066 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-12 01:31:05

End at: 2017-12-12 01:31:35

Below is generated by plot.py at 2017-12-12 04:06:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.81 Mbit/s

95th percentile per-packet one-way delay: 112.238 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 5.27 Mbit/s

95th percentile per-packet one-way delay: 112.150 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 112.171 ms

Loss rate: 0.04%

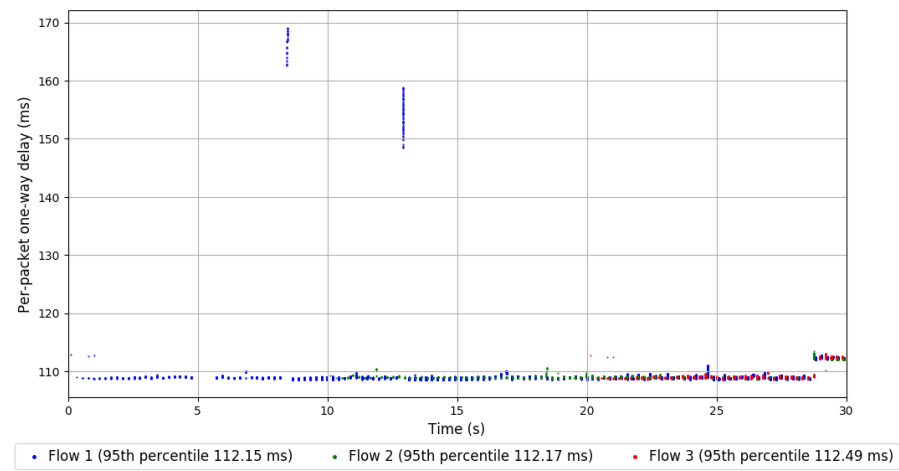
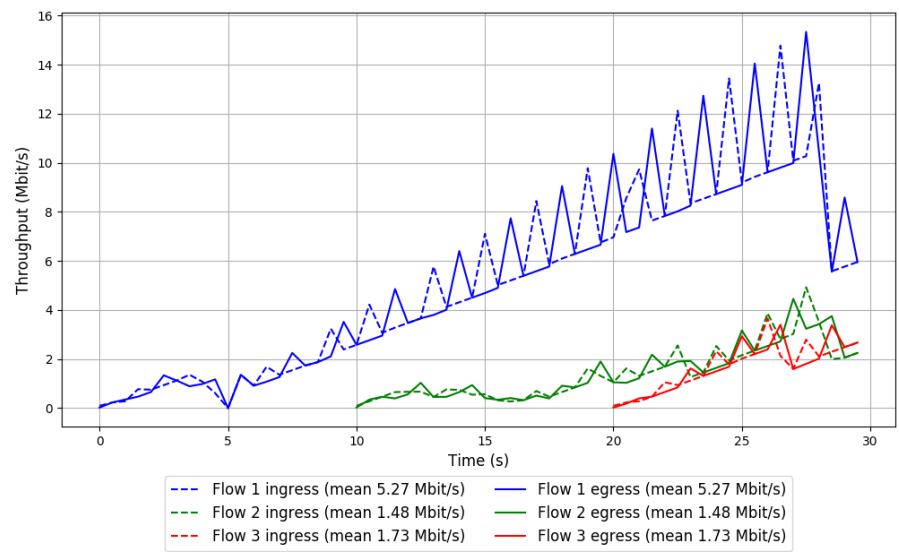
-- Flow 3:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 112.493 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-12 01:44:31

End at: 2017-12-12 01:45:01

Below is generated by plot.py at 2017-12-12 04:06:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.88 Mbit/s

95th percentile per-packet one-way delay: 113.514 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 113.164 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.82 Mbit/s

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

Loss rate: 0.00%

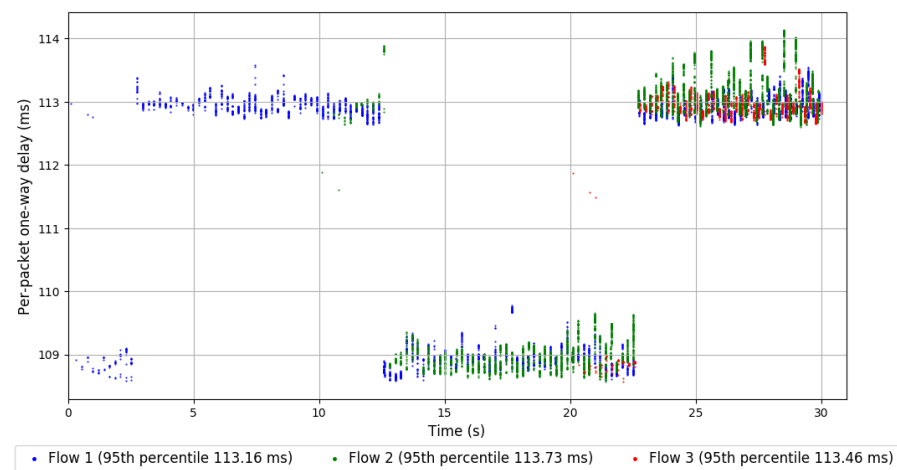
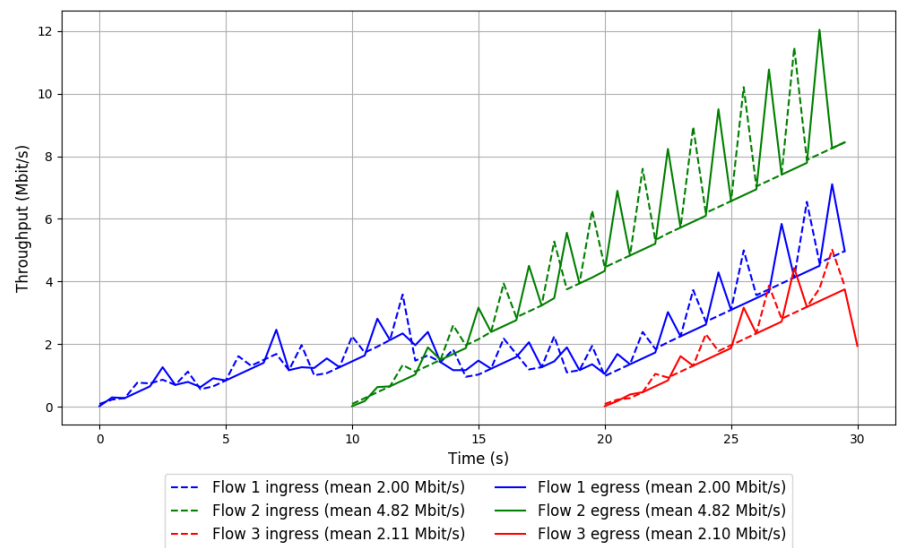
-- Flow 3:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 113.461 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-12 01:57:43

End at: 2017-12-12 01:58:13

Below is generated by plot.py at 2017-12-12 04:06:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.30 Mbit/s

95th percentile per-packet one-way delay: 110.545 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 3.66 Mbit/s

95th percentile per-packet one-way delay: 110.586 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.86 Mbit/s

95th percentile per-packet one-way delay: 110.088 ms

Loss rate: 0.06%

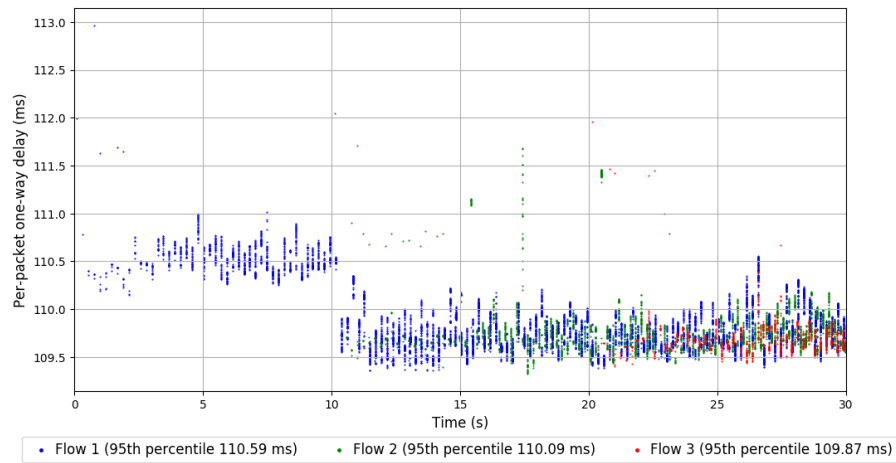
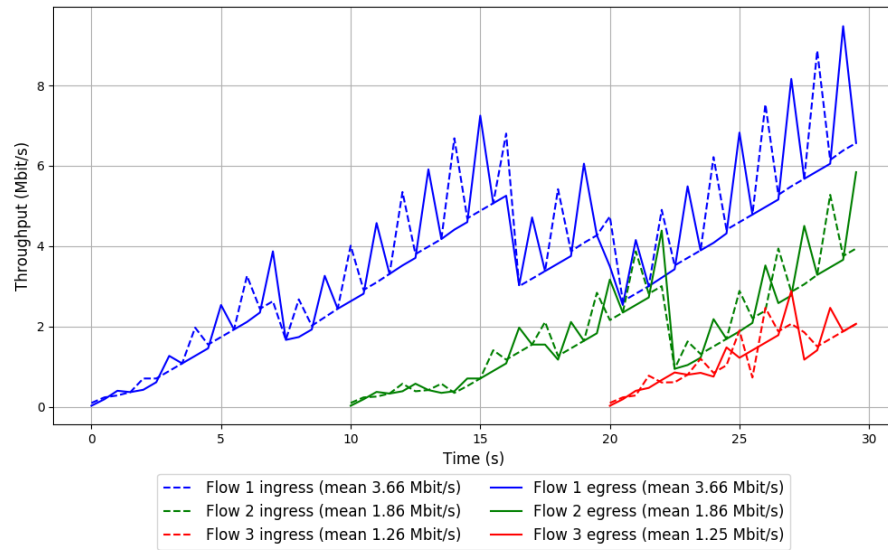
-- Flow 3:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 109.869 ms

Loss rate: 0.57%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-12 02:11:09

End at: 2017-12-12 02:11:39

Below is generated by plot.py at 2017-12-12 04:06:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.00 Mbit/s

95th percentile per-packet one-way delay: 111.799 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 3.31 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 111.807 ms

Loss rate: 0.06%

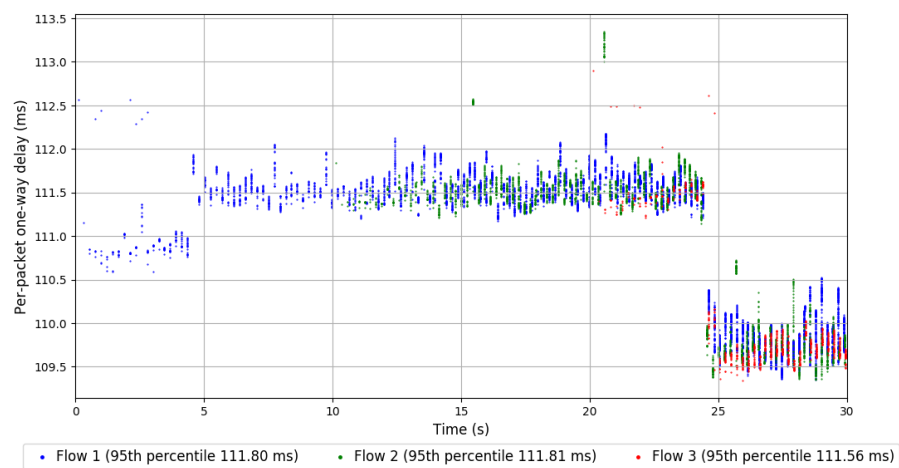
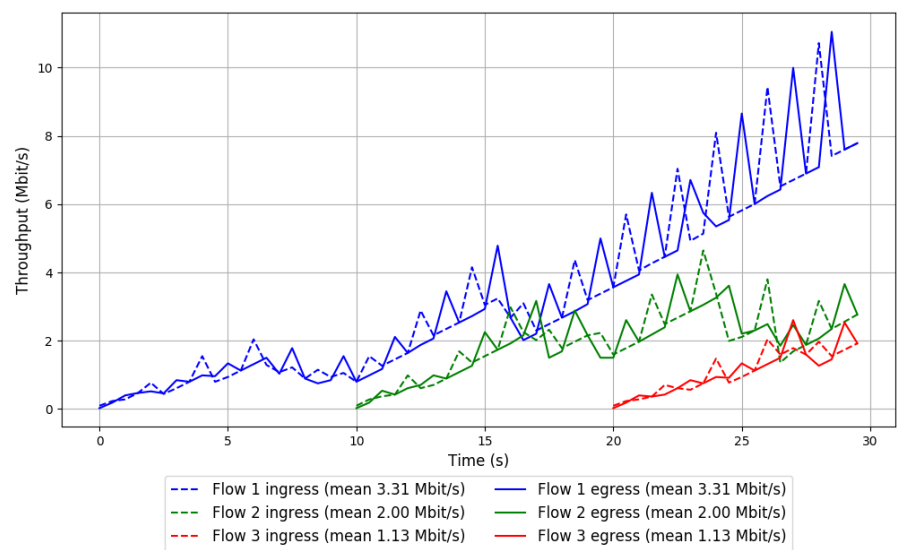
-- Flow 3:

Average throughput: 1.13 Mbit/s

95th percentile per-packet one-way delay: 111.558 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-12 02:24:48

End at: 2017-12-12 02:25:18

Below is generated by plot.py at 2017-12-12 04:06:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.33 Mbit/s

95th percentile per-packet one-way delay: 110.090 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 3.02 Mbit/s

95th percentile per-packet one-way delay: 110.033 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.46 Mbit/s

95th percentile per-packet one-way delay: 110.133 ms

Loss rate: 0.01%

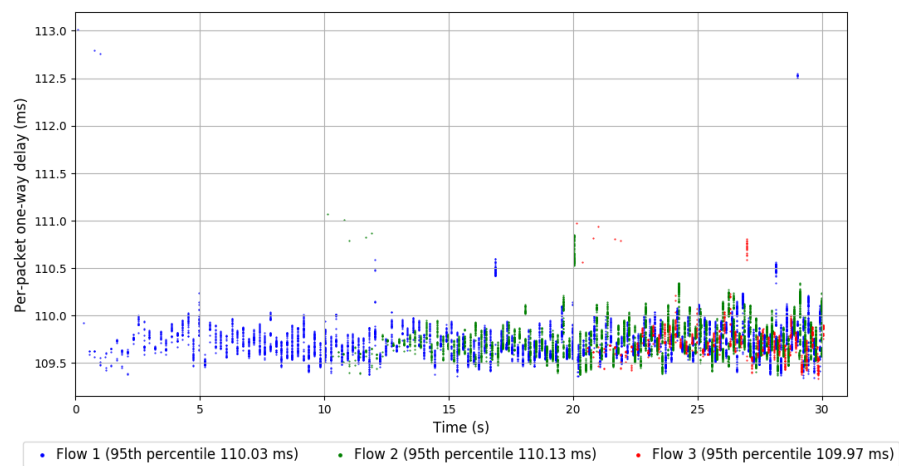
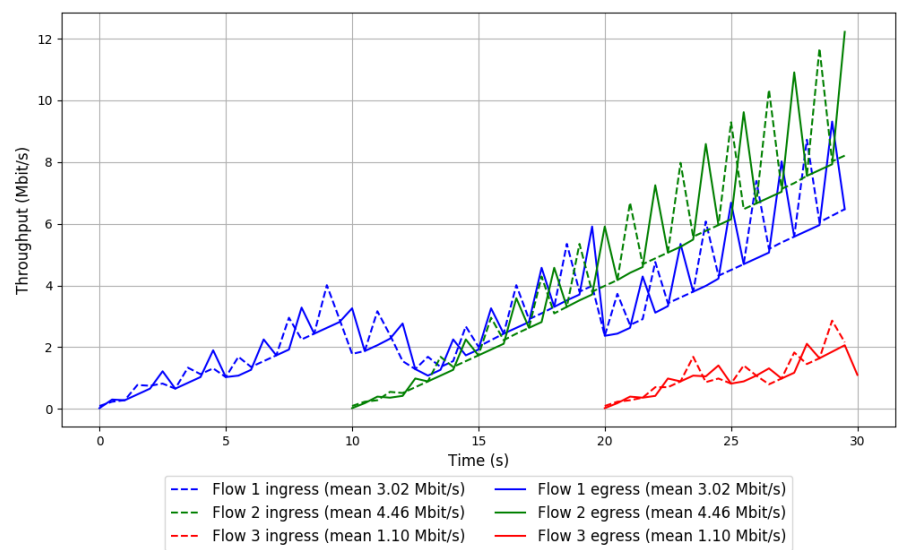
-- Flow 3:

Average throughput: 1.10 Mbit/s

95th percentile per-packet one-way delay: 109.975 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-12 02:38:25

End at: 2017-12-12 02:38:55

Below is generated by plot.py at 2017-12-12 04:06:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.77 Mbit/s

95th percentile per-packet one-way delay: 110.060 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 4.00 Mbit/s

95th percentile per-packet one-way delay: 110.050 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.87 Mbit/s

95th percentile per-packet one-way delay: 110.135 ms

Loss rate: 0.13%

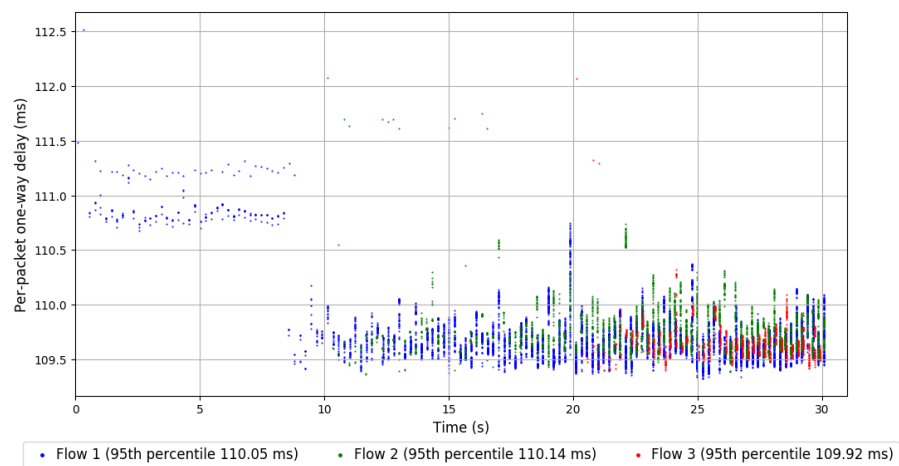
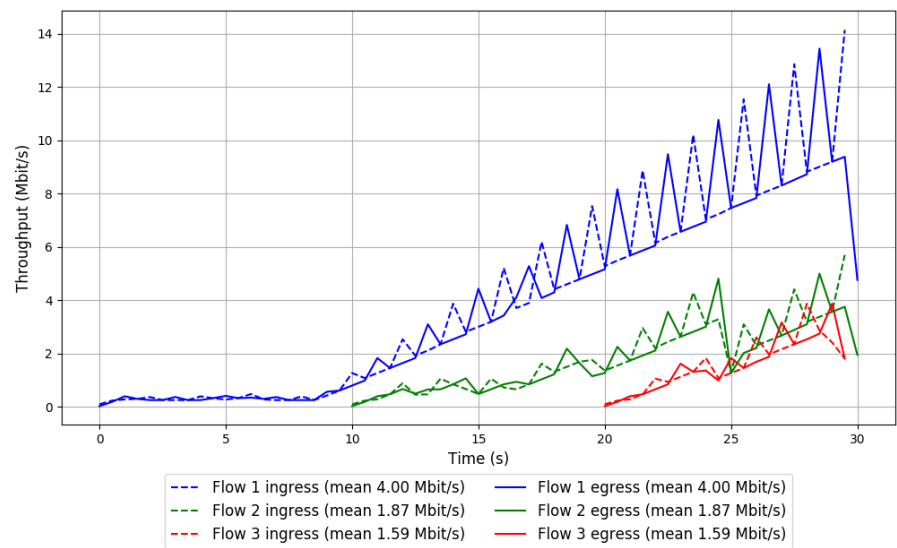
-- Flow 3:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 109.922 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

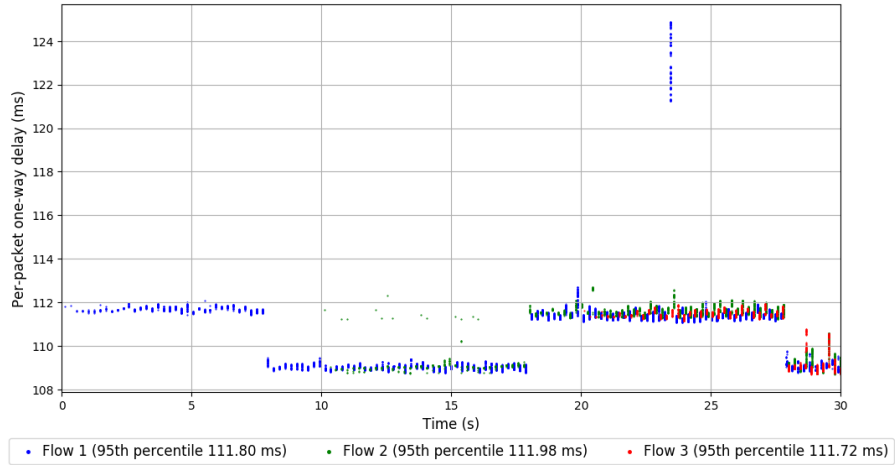
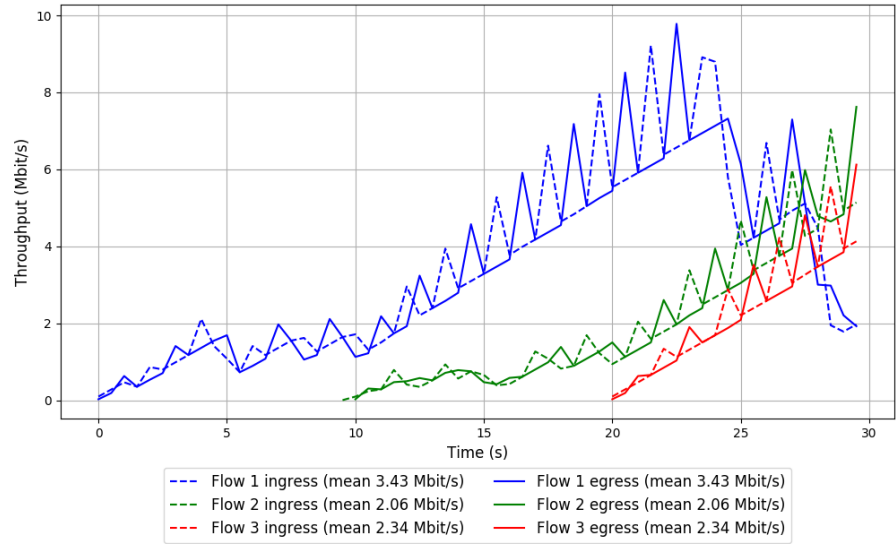


```
Run 10: Statistics of LEDBAT

Start at: 2017-12-12 02:51:36
End at: 2017-12-12 02:52:06

# Below is generated by plot.py at 2017-12-12 04:06:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.57 Mbit/s
95th percentile per-packet one-way delay: 111.855 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 3.43 Mbit/s
95th percentile per-packet one-way delay: 111.803 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 111.982 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 111.717 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

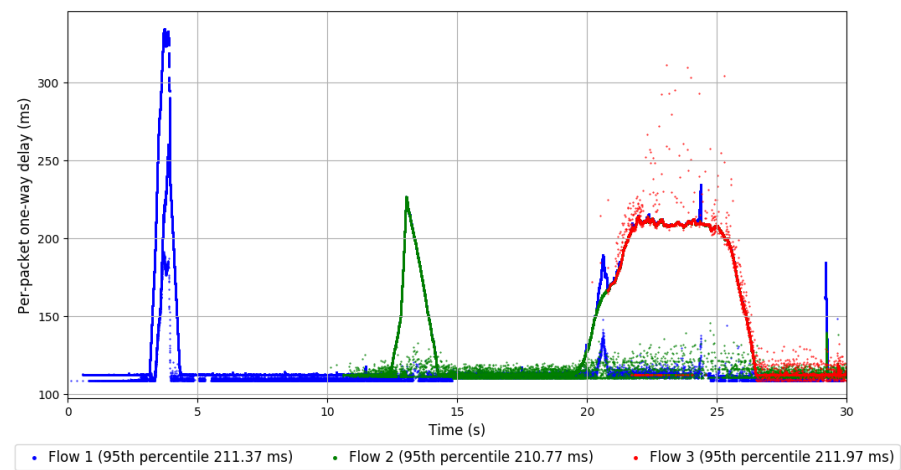
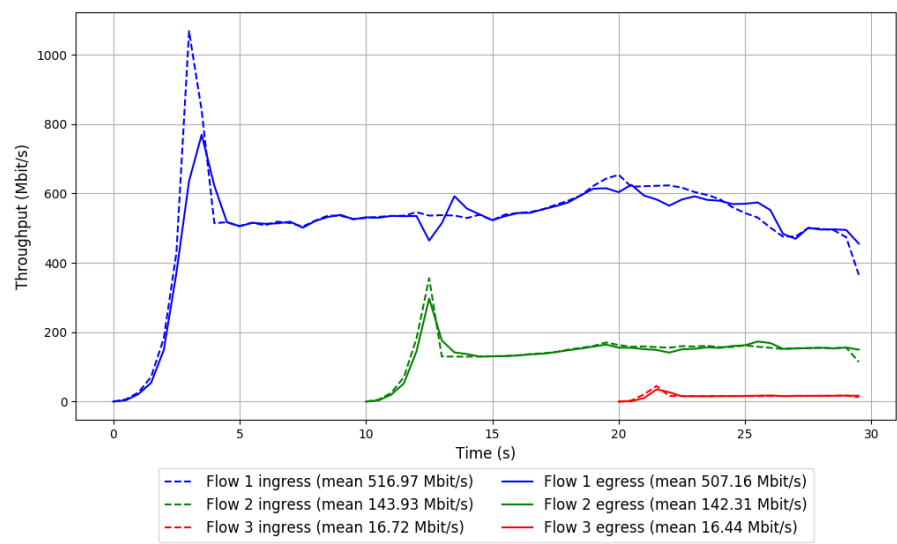


```
Run 1: Statistics of PCC

Start at: 2017-12-12 00:53:09
End at: 2017-12-12 00:53:39

# Below is generated by plot.py at 2017-12-12 04:14:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 607.10 Mbit/s
95th percentile per-packet one-way delay: 211.218 ms
Loss rate: 1.78%
-- Flow 1:
Average throughput: 507.16 Mbit/s
95th percentile per-packet one-way delay: 211.368 ms
Loss rate: 1.89%
-- Flow 2:
Average throughput: 142.31 Mbit/s
95th percentile per-packet one-way delay: 210.766 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 16.44 Mbit/s
95th percentile per-packet one-way delay: 211.971 ms
Loss rate: 2.29%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-12 01:06:28

End at: 2017-12-12 01:06:58

Below is generated by plot.py at 2017-12-12 04:14:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 603.49 Mbit/s

95th percentile per-packet one-way delay: 227.301 ms

Loss rate: 4.34%

-- Flow 1:

Average throughput: 441.02 Mbit/s

95th percentile per-packet one-way delay: 226.212 ms

Loss rate: 3.92%

-- Flow 2:

Average throughput: 229.15 Mbit/s

95th percentile per-packet one-way delay: 227.910 ms

Loss rate: 5.43%

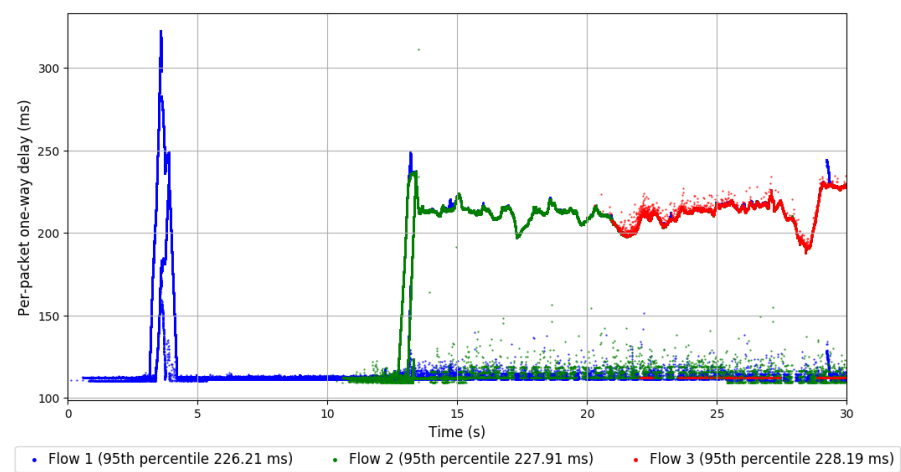
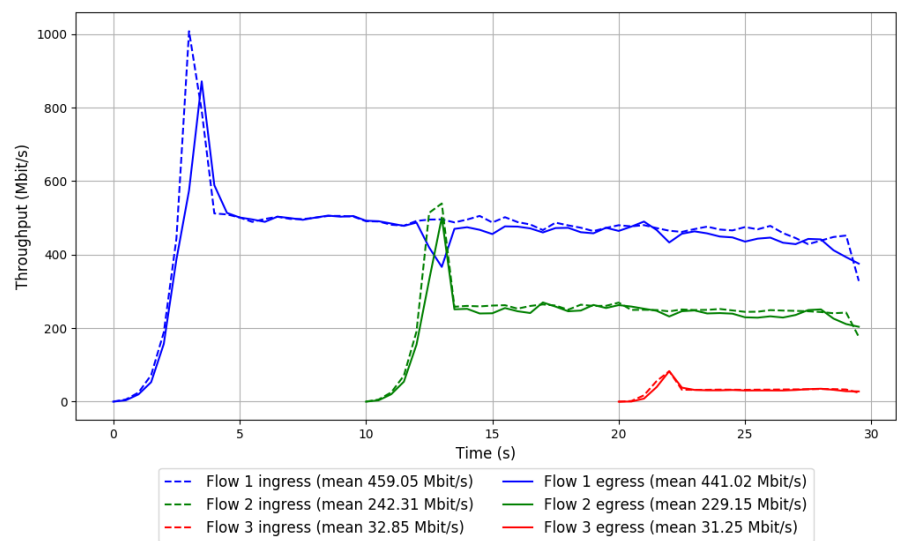
-- Flow 3:

Average throughput: 31.25 Mbit/s

95th percentile per-packet one-way delay: 228.195 ms

Loss rate: 5.90%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-12 01:19:43

End at: 2017-12-12 01:20:13

Below is generated by plot.py at 2017-12-12 04:14:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 583.69 Mbit/s

95th percentile per-packet one-way delay: 226.080 ms

Loss rate: 2.59%

-- Flow 1:

Average throughput: 538.91 Mbit/s

95th percentile per-packet one-way delay: 226.109 ms

Loss rate: 2.65%

-- Flow 2:

Average throughput: 65.24 Mbit/s

95th percentile per-packet one-way delay: 225.857 ms

Loss rate: 1.86%

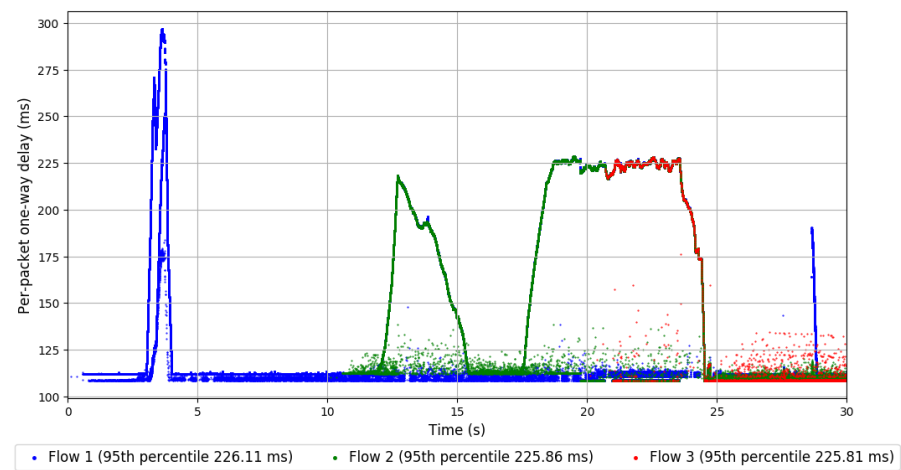
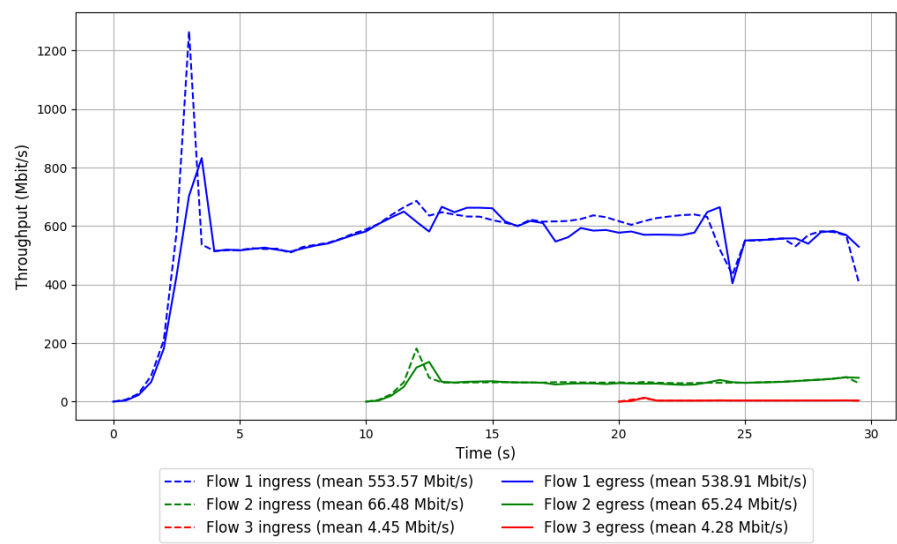
-- Flow 3:

Average throughput: 4.28 Mbit/s

95th percentile per-packet one-way delay: 225.815 ms

Loss rate: 3.84%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-12 01:32:44

End at: 2017-12-12 01:33:14

Below is generated by plot.py at 2017-12-12 04:14:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 597.85 Mbit/s

95th percentile per-packet one-way delay: 243.612 ms

Loss rate: 2.88%

-- Flow 1:

Average throughput: 475.88 Mbit/s

95th percentile per-packet one-way delay: 268.084 ms

Loss rate: 2.85%

-- Flow 2:

Average throughput: 126.07 Mbit/s

95th percentile per-packet one-way delay: 212.239 ms

Loss rate: 2.33%

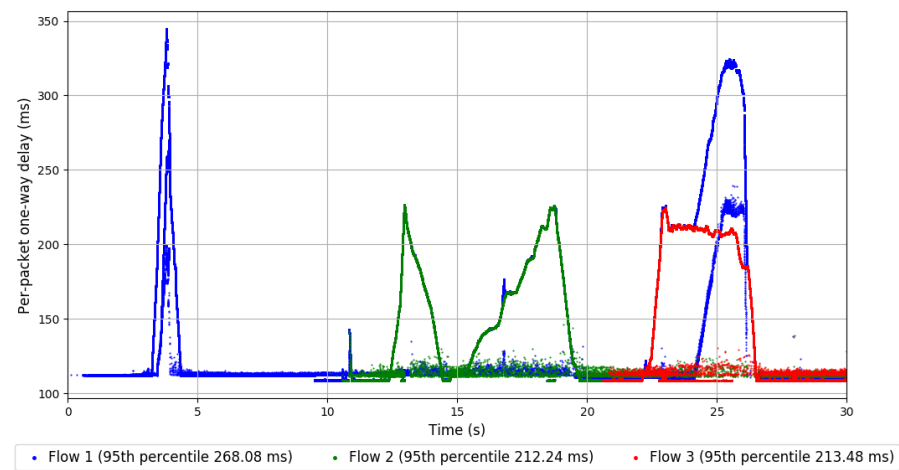
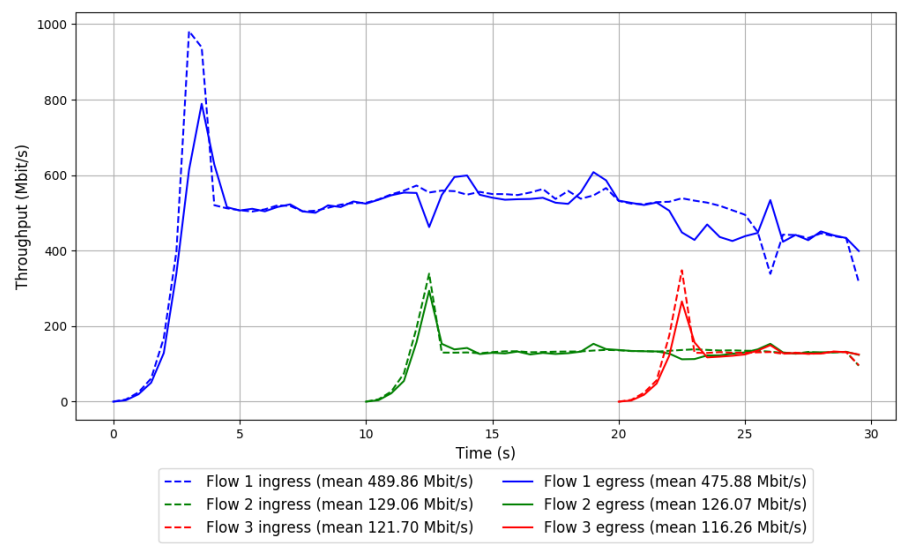
-- Flow 3:

Average throughput: 116.26 Mbit/s

95th percentile per-packet one-way delay: 213.483 ms

Loss rate: 4.51%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-12 01:46:15

End at: 2017-12-12 01:46:45

Below is generated by plot.py at 2017-12-12 04:15:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 591.41 Mbit/s

95th percentile per-packet one-way delay: 257.586 ms

Loss rate: 2.28%

-- Flow 1:

Average throughput: 496.44 Mbit/s

95th percentile per-packet one-way delay: 269.781 ms

Loss rate: 2.38%

-- Flow 2:

Average throughput: 127.24 Mbit/s

95th percentile per-packet one-way delay: 220.475 ms

Loss rate: 1.72%

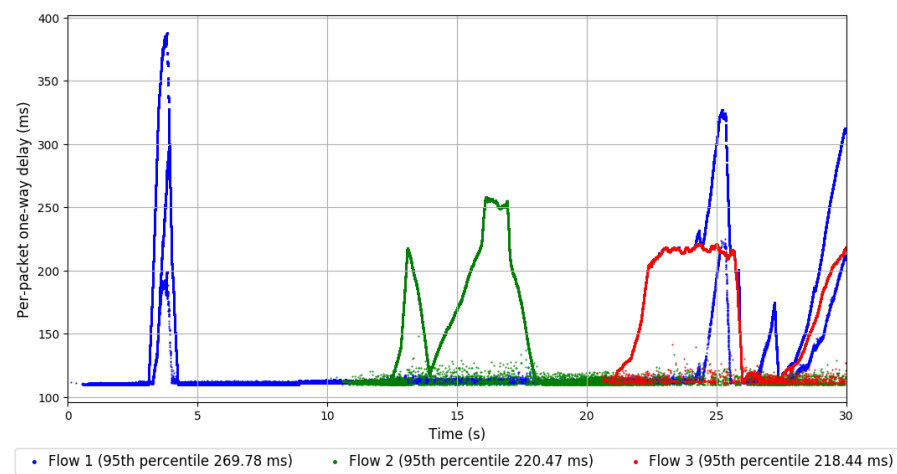
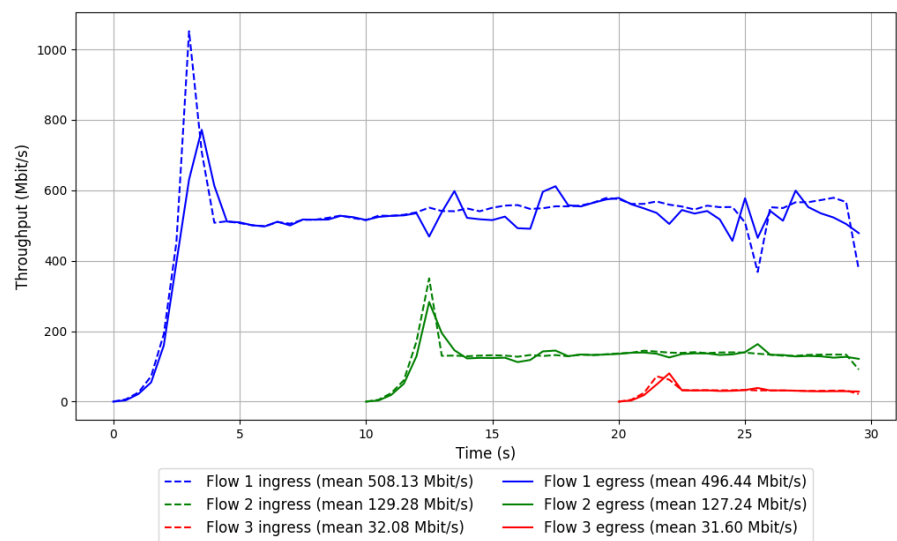
-- Flow 3:

Average throughput: 31.60 Mbit/s

95th percentile per-packet one-way delay: 218.443 ms

Loss rate: 1.73%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-12 01:59:42

End at: 2017-12-12 02:00:12

Below is generated by plot.py at 2017-12-12 04:16:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 598.96 Mbit/s

95th percentile per-packet one-way delay: 286.255 ms

Loss rate: 3.89%

-- Flow 1:

Average throughput: 508.77 Mbit/s

95th percentile per-packet one-way delay: 289.018 ms

Loss rate: 4.03%

-- Flow 2:

Average throughput: 119.75 Mbit/s

95th percentile per-packet one-way delay: 224.639 ms

Loss rate: 3.14%

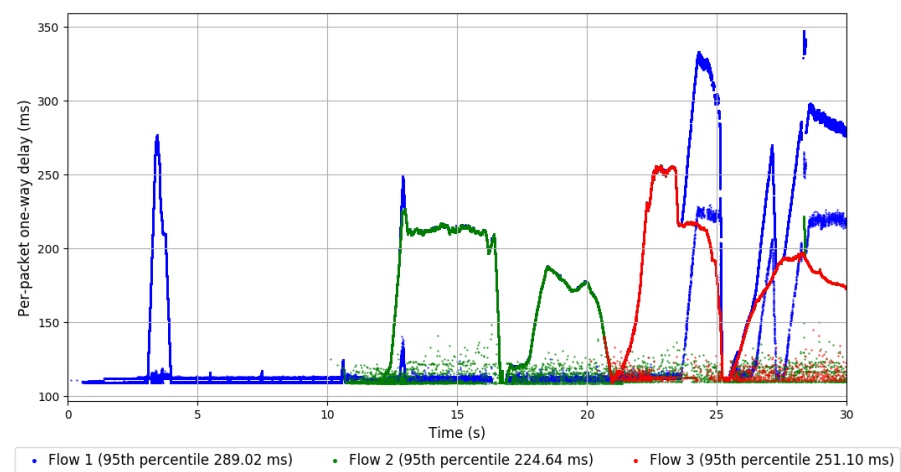
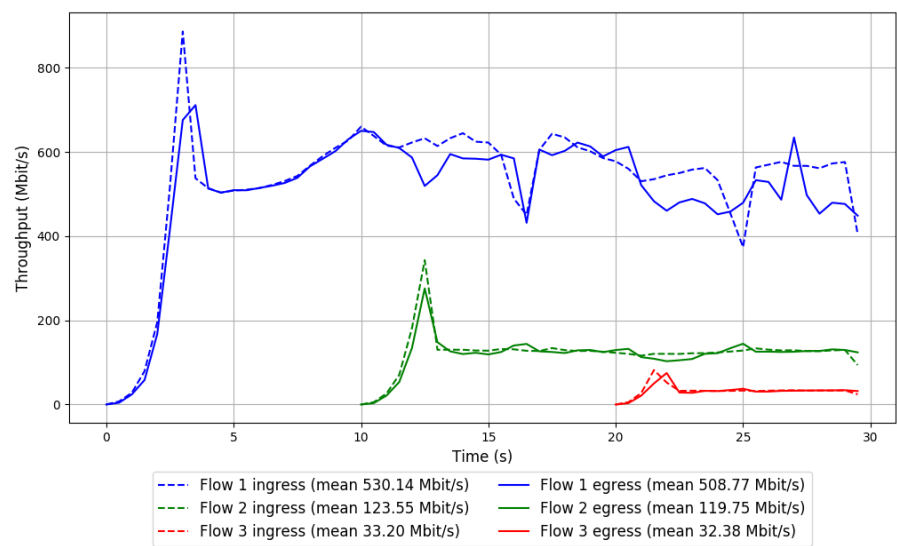
-- Flow 3:

Average throughput: 32.38 Mbit/s

95th percentile per-packet one-way delay: 251.098 ms

Loss rate: 2.63%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-12 02:13:05

End at: 2017-12-12 02:13:35

Below is generated by plot.py at 2017-12-12 04:16:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 587.44 Mbit/s

95th percentile per-packet one-way delay: 216.880 ms

Loss rate: 2.80%

-- Flow 1:

Average throughput: 480.00 Mbit/s

95th percentile per-packet one-way delay: 216.638 ms

Loss rate: 2.75%

-- Flow 2:

Average throughput: 131.61 Mbit/s

95th percentile per-packet one-way delay: 217.309 ms

Loss rate: 2.73%

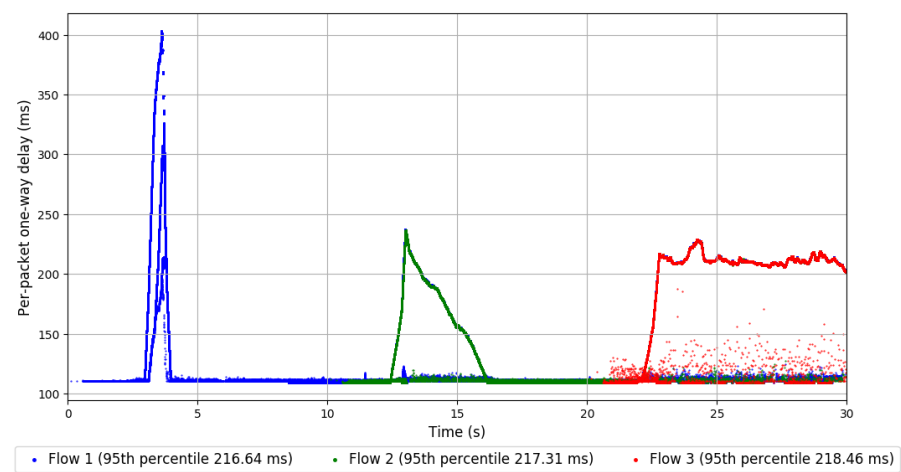
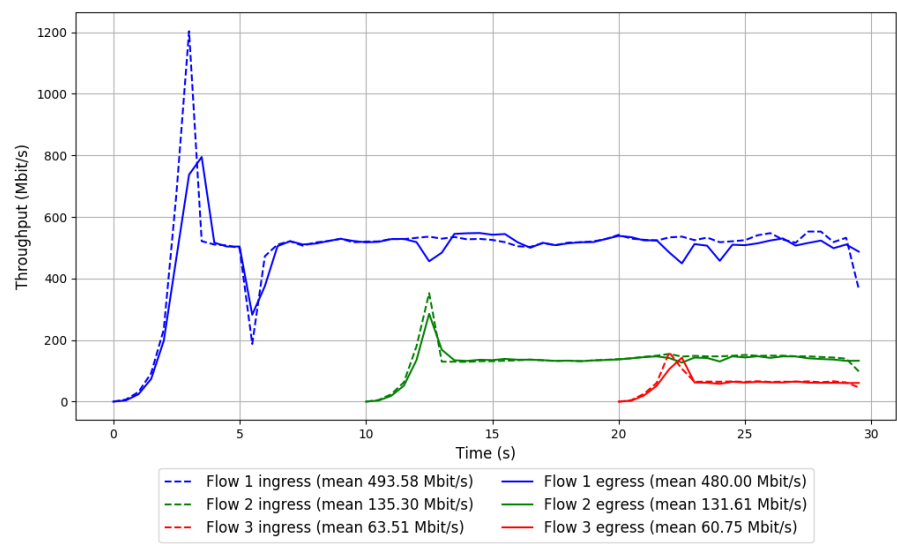
-- Flow 3:

Average throughput: 60.75 Mbit/s

95th percentile per-packet one-way delay: 218.464 ms

Loss rate: 4.36%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-12 02:26:45

End at: 2017-12-12 02:27:15

Below is generated by plot.py at 2017-12-12 04:16:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 592.01 Mbit/s

95th percentile per-packet one-way delay: 222.196 ms

Loss rate: 2.44%

-- Flow 1:

Average throughput: 509.96 Mbit/s

95th percentile per-packet one-way delay: 222.522 ms

Loss rate: 2.44%

-- Flow 2:

Average throughput: 121.35 Mbit/s

95th percentile per-packet one-way delay: 221.324 ms

Loss rate: 2.44%

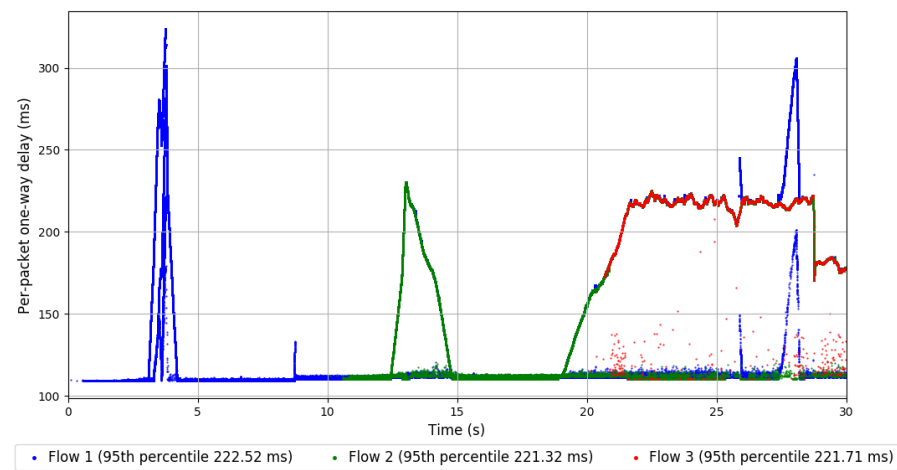
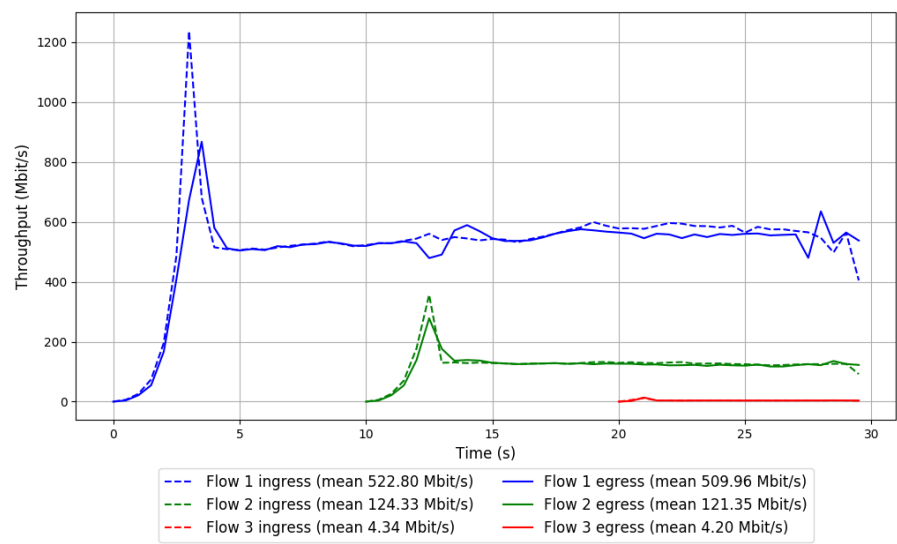
-- Flow 3:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 221.706 ms

Loss rate: 3.43%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-12 02:40:11

End at: 2017-12-12 02:40:41

Below is generated by plot.py at 2017-12-12 04:24:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 570.37 Mbit/s

95th percentile per-packet one-way delay: 232.659 ms

Loss rate: 2.44%

-- Flow 1:

Average throughput: 539.52 Mbit/s

95th percentile per-packet one-way delay: 232.423 ms

Loss rate: 2.40%

-- Flow 2:

Average throughput: 16.14 Mbit/s

95th percentile per-packet one-way delay: 232.326 ms

Loss rate: 2.01%

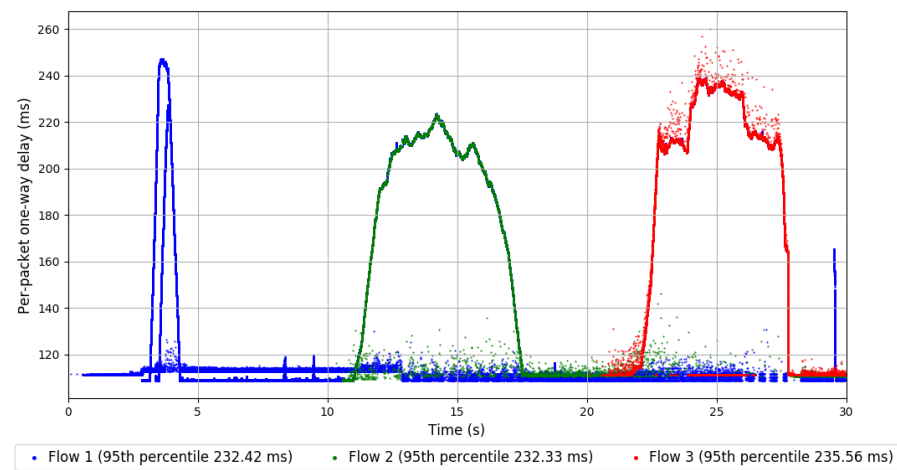
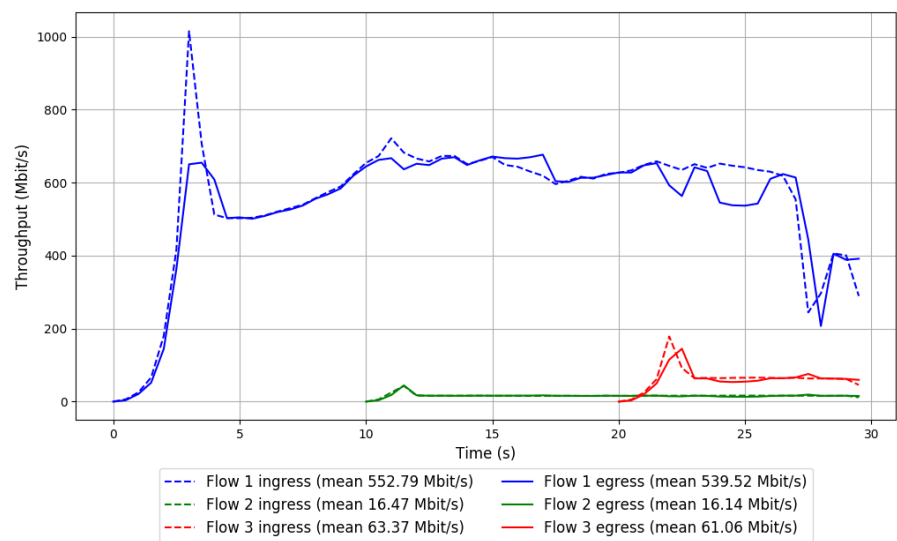
-- Flow 3:

Average throughput: 61.06 Mbit/s

95th percentile per-packet one-way delay: 235.558 ms

Loss rate: 3.66%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-12 02:53:22

End at: 2017-12-12 02:53:52

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 625.31 Mbit/s

95th percentile per-packet one-way delay: 214.787 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 522.46 Mbit/s

95th percentile per-packet one-way delay: 215.115 ms

Loss rate: 1.49%

-- Flow 2:

Average throughput: 124.43 Mbit/s

95th percentile per-packet one-way delay: 214.193 ms

Loss rate: 2.48%

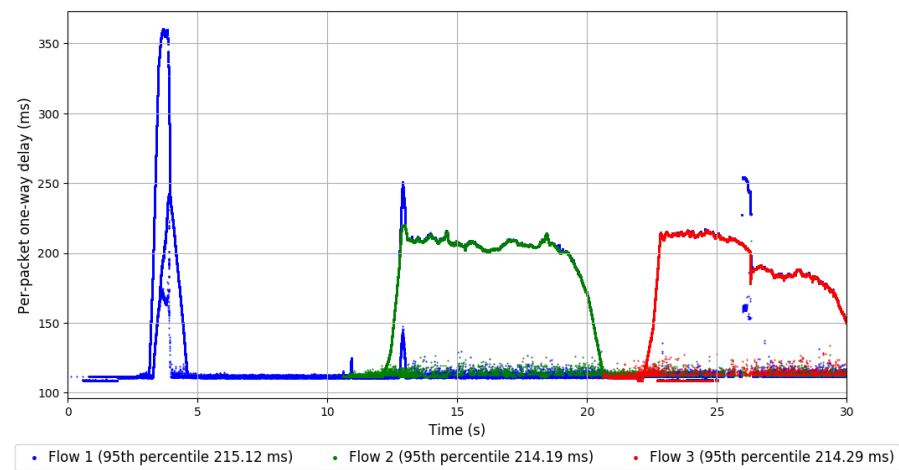
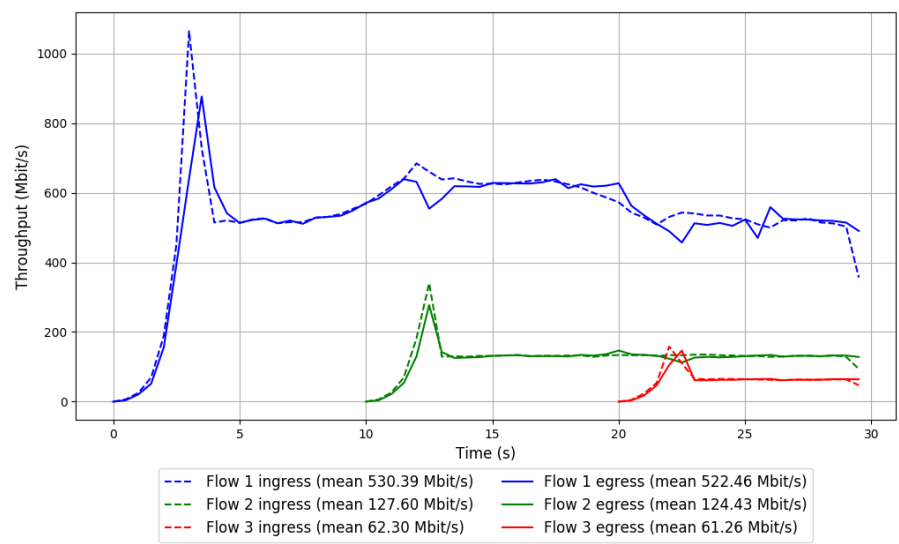
-- Flow 3:

Average throughput: 61.26 Mbit/s

95th percentile per-packet one-way delay: 214.291 ms

Loss rate: 1.63%

Run 10: Report of PCC — Data Link

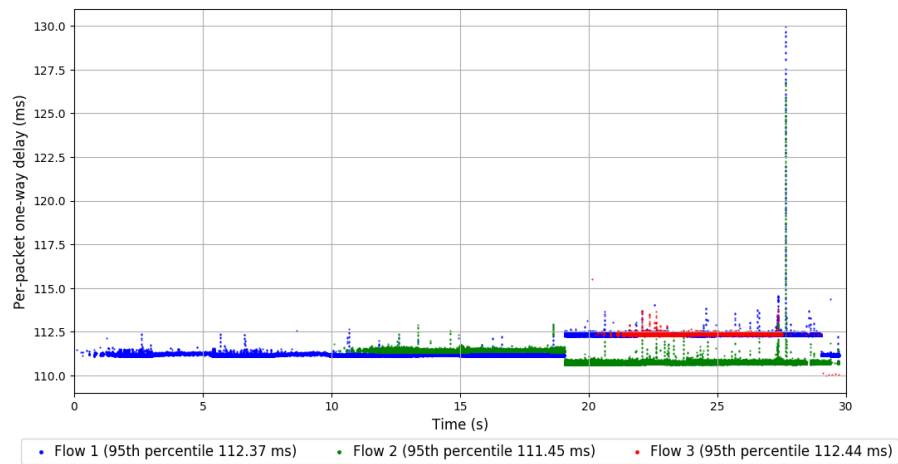
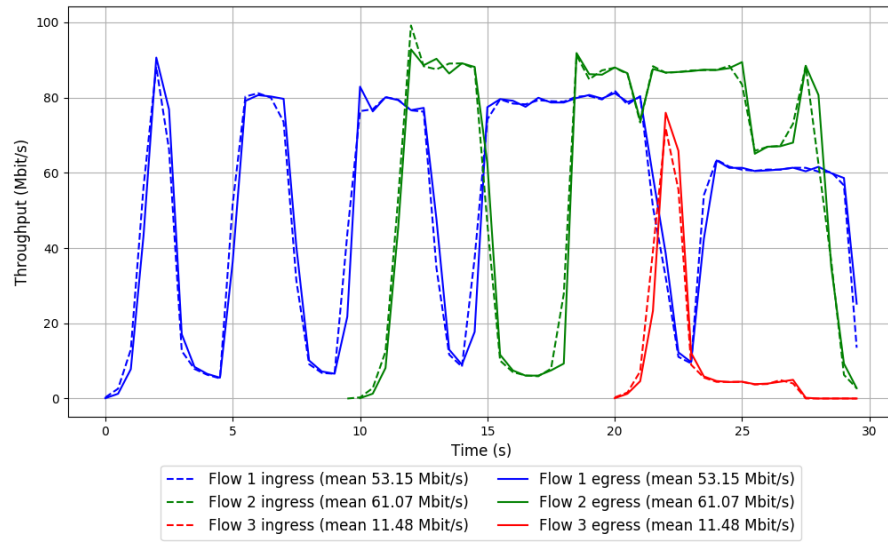


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-12 00:56:04
End at: 2017-12-12 00:56:34

# Below is generated by plot.py at 2017-12-12 04:25:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.33 Mbit/s
95th percentile per-packet one-way delay: 112.356 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.15 Mbit/s
95th percentile per-packet one-way delay: 112.368 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.07 Mbit/s
95th percentile per-packet one-way delay: 111.449 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.48 Mbit/s
95th percentile per-packet one-way delay: 112.442 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-12 01:09:25

End at: 2017-12-12 01:09:55

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.65 Mbit/s

95th percentile per-packet one-way delay: 112.753 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 65.35 Mbit/s

95th percentile per-packet one-way delay: 110.476 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.83 Mbit/s

95th percentile per-packet one-way delay: 112.791 ms

Loss rate: 0.00%

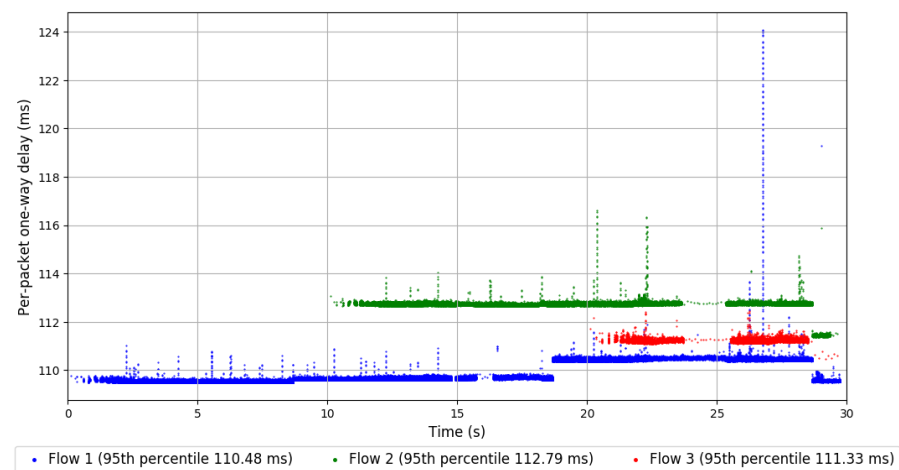
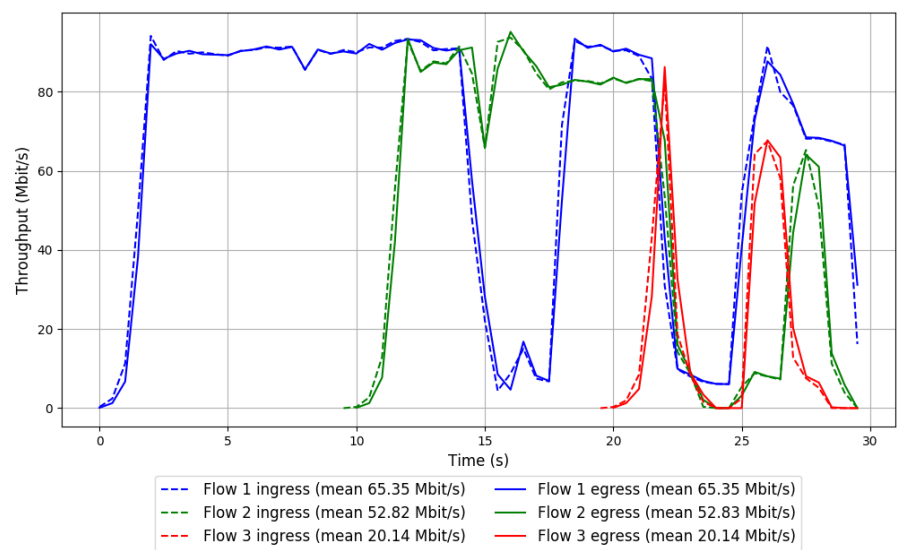
-- Flow 3:

Average throughput: 20.14 Mbit/s

95th percentile per-packet one-way delay: 111.326 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-12 01:22:35

End at: 2017-12-12 01:23:05

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.74 Mbit/s

95th percentile per-packet one-way delay: 112.497 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 68.85 Mbit/s

95th percentile per-packet one-way delay: 112.516 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.58 Mbit/s

95th percentile per-packet one-way delay: 111.570 ms

Loss rate: 0.00%

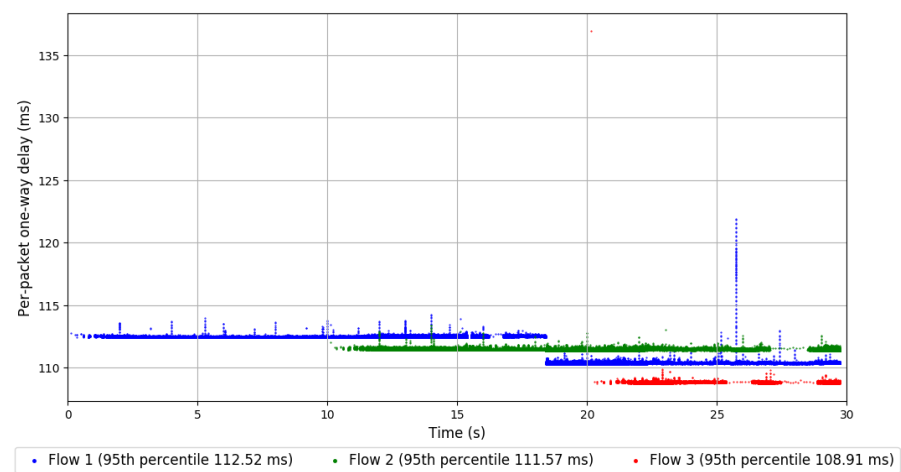
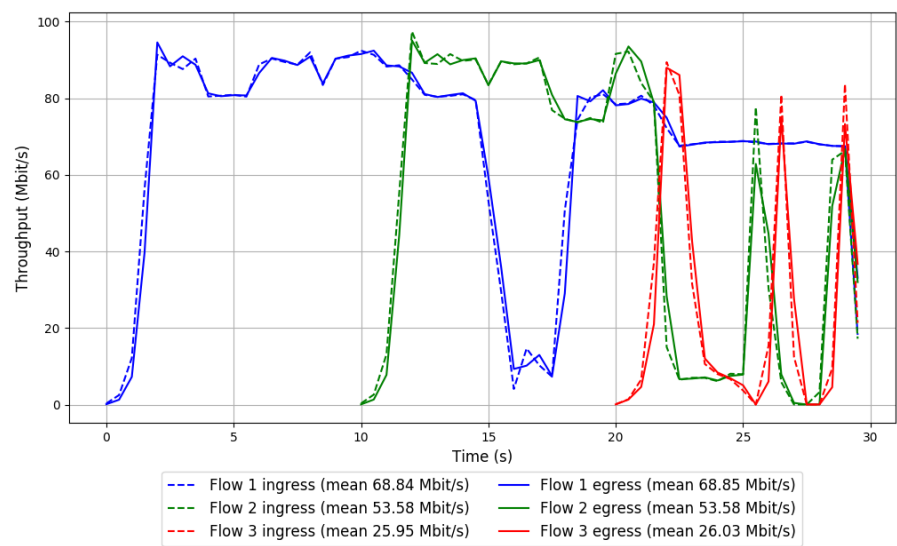
-- Flow 3:

Average throughput: 26.03 Mbit/s

95th percentile per-packet one-way delay: 108.905 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-12 01:35:39

End at: 2017-12-12 01:36:09

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 105.34 Mbit/s

95th percentile per-packet one-way delay: 112.756 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 55.30 Mbit/s

95th percentile per-packet one-way delay: 112.801 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 61.21 Mbit/s

95th percentile per-packet one-way delay: 111.542 ms

Loss rate: 0.00%

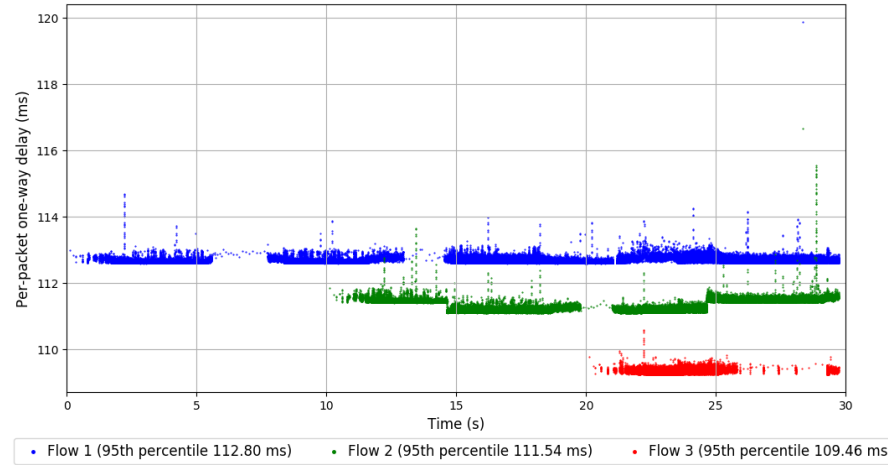
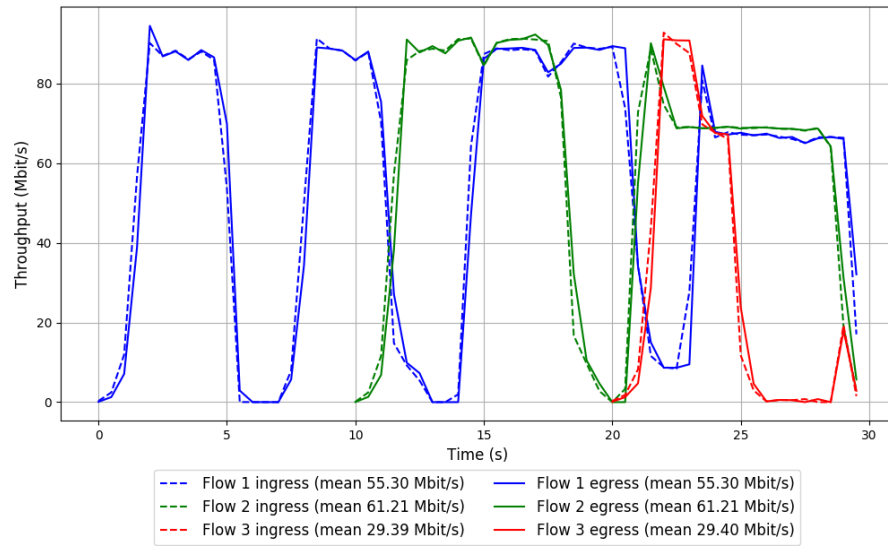
-- Flow 3:

Average throughput: 29.40 Mbit/s

95th percentile per-packet one-way delay: 109.464 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-12 01:49:05

End at: 2017-12-12 01:49:35

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.71 Mbit/s

95th percentile per-packet one-way delay: 112.804 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 60.77 Mbit/s

95th percentile per-packet one-way delay: 112.294 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 43.81 Mbit/s

95th percentile per-packet one-way delay: 111.673 ms

Loss rate: 0.01%

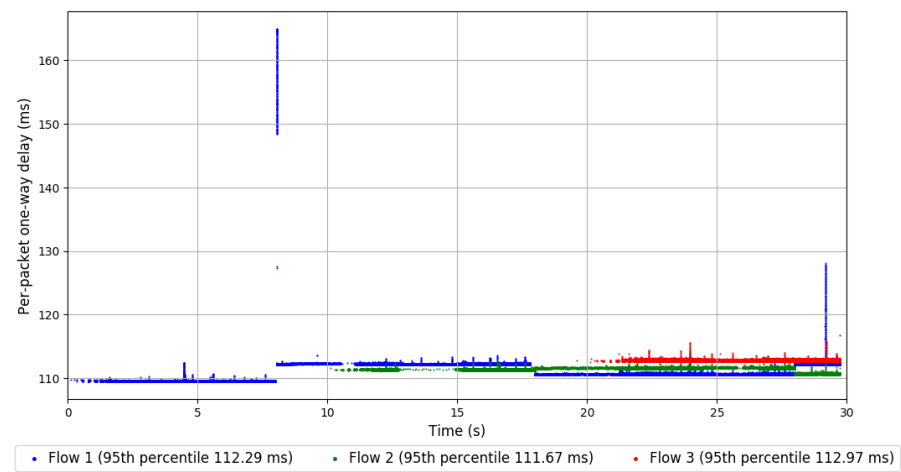
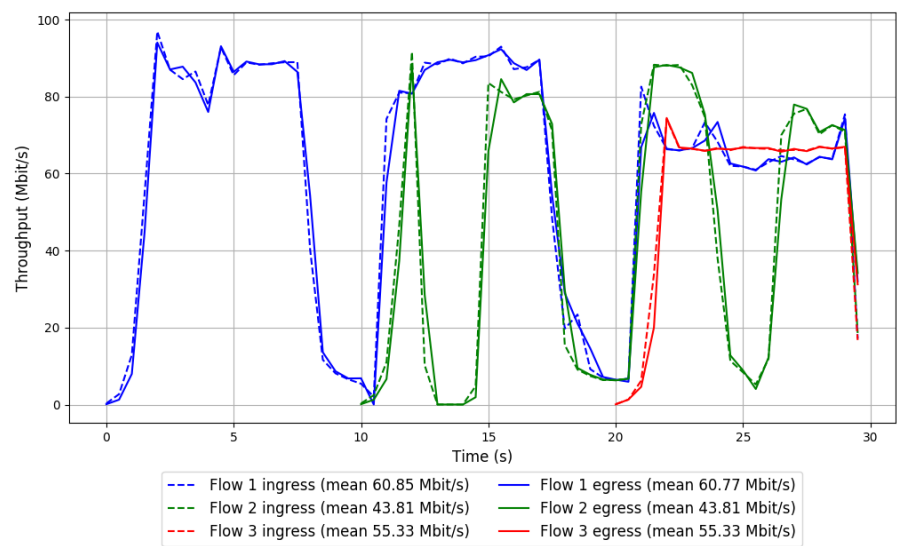
-- Flow 3:

Average throughput: 55.33 Mbit/s

95th percentile per-packet one-way delay: 112.972 ms

Loss rate: 0.04%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-12 02:02:39

End at: 2017-12-12 02:03:09

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.99 Mbit/s

95th percentile per-packet one-way delay: 112.271 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.78 Mbit/s

95th percentile per-packet one-way delay: 112.251 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.70 Mbit/s

95th percentile per-packet one-way delay: 109.473 ms

Loss rate: 0.00%

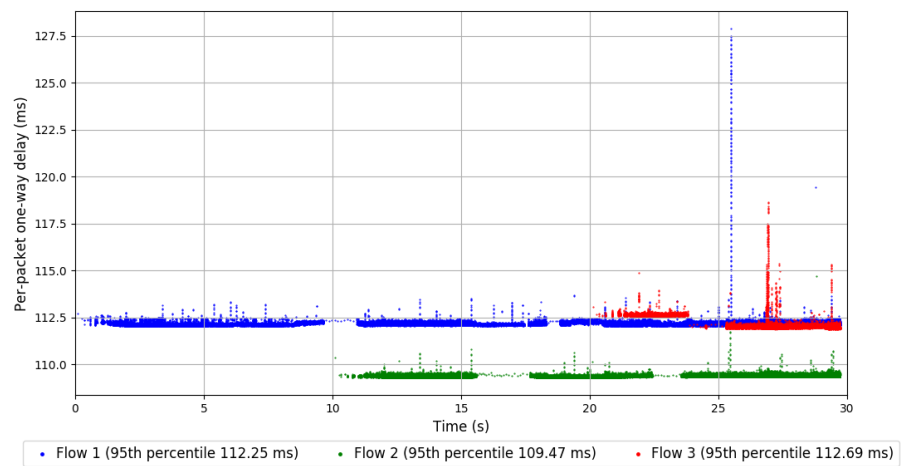
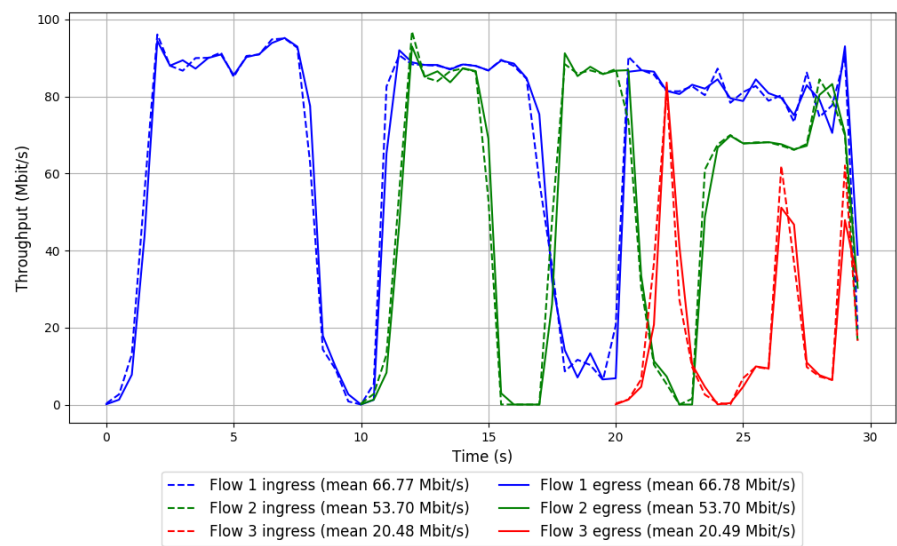
-- Flow 3:

Average throughput: 20.49 Mbit/s

95th percentile per-packet one-way delay: 112.695 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-12 02:15:59

End at: 2017-12-12 02:16:29

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.17 Mbit/s

95th percentile per-packet one-way delay: 112.266 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.67 Mbit/s

95th percentile per-packet one-way delay: 111.469 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.37 Mbit/s

95th percentile per-packet one-way delay: 110.691 ms

Loss rate: 0.00%

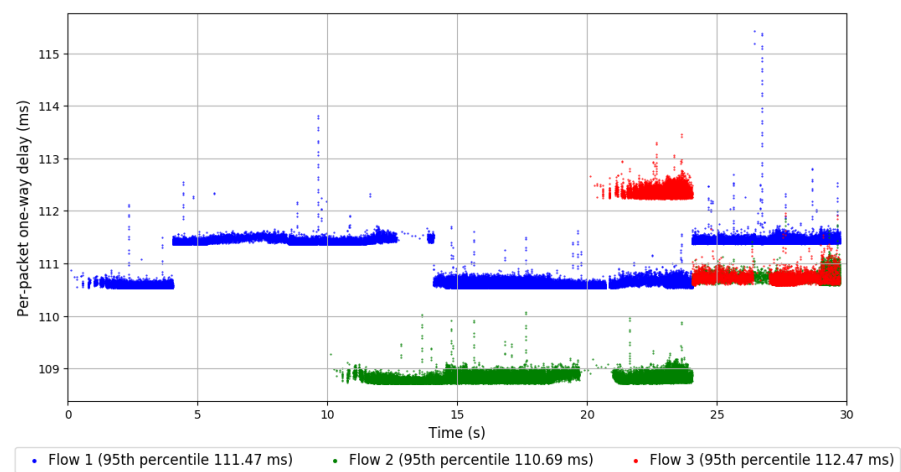
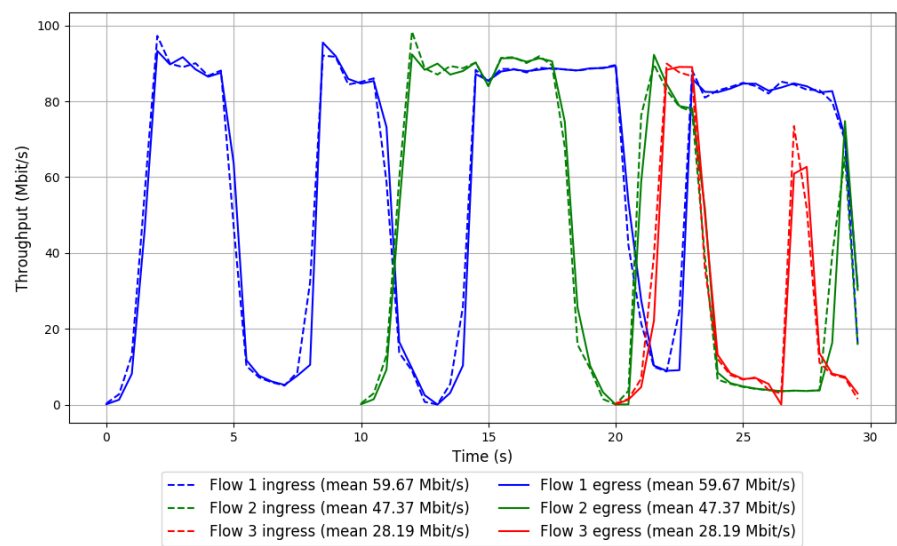
-- Flow 3:

Average throughput: 28.19 Mbit/s

95th percentile per-packet one-way delay: 112.469 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-12 02:29:40

End at: 2017-12-12 02:30:10

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.96 Mbit/s

95th percentile per-packet one-way delay: 113.197 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 56.45 Mbit/s

95th percentile per-packet one-way delay: 113.222 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 59.94 Mbit/s

95th percentile per-packet one-way delay: 109.601 ms

Loss rate: 0.00%

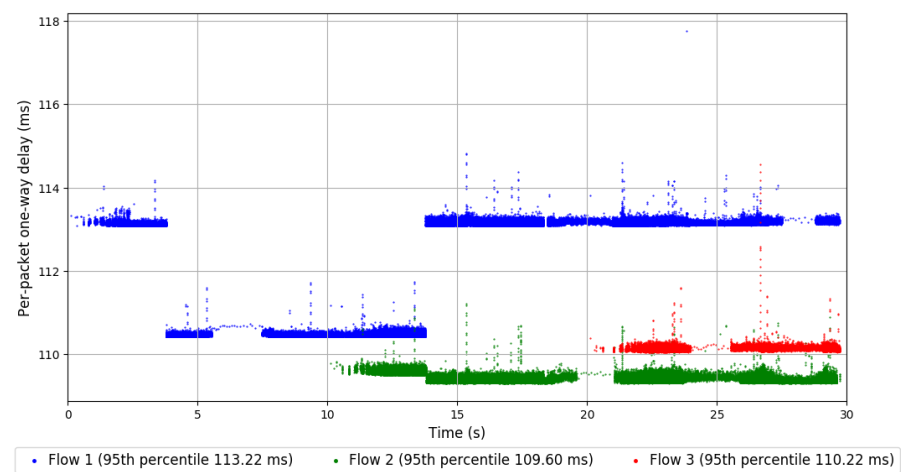
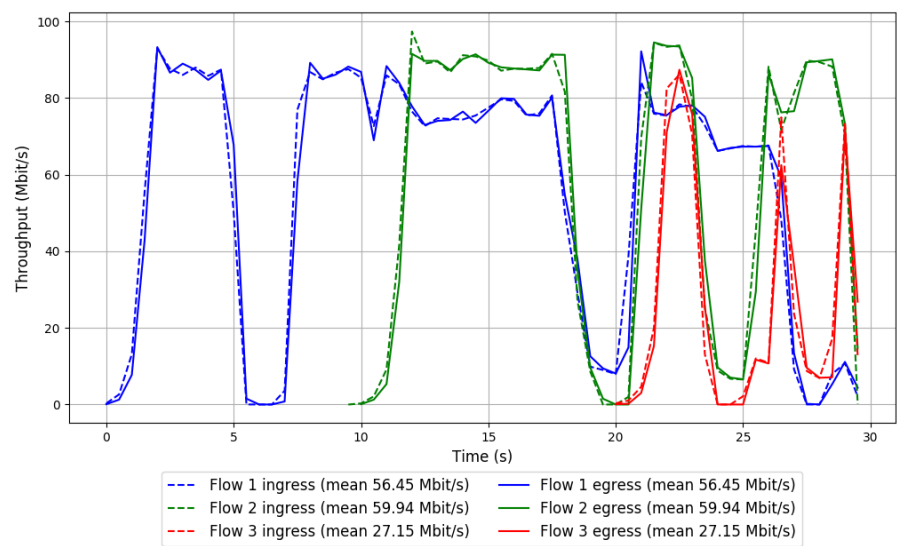
-- Flow 3:

Average throughput: 27.15 Mbit/s

95th percentile per-packet one-way delay: 110.224 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link

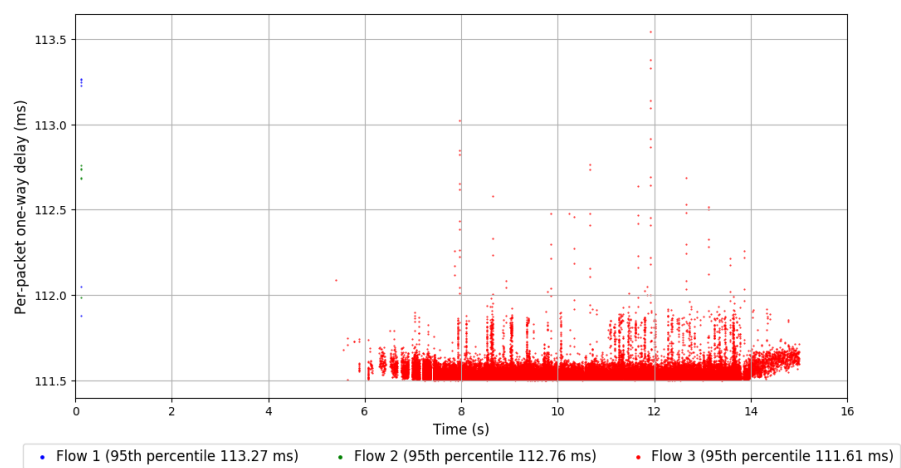
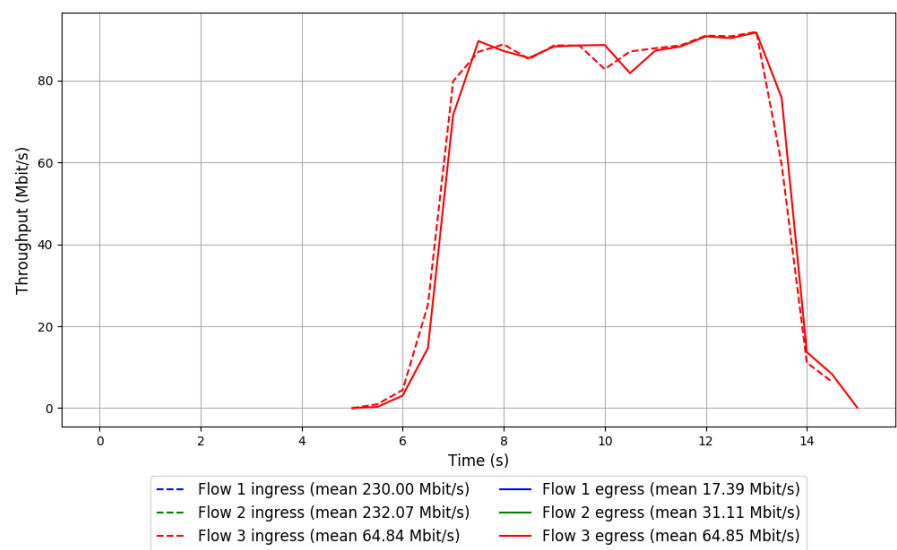


Run 9: Statistics of QUIC Cubic

Start at: 2017-12-12 02:43:07

End at: 2017-12-12 02:43:37

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-12 02:56:19

End at: 2017-12-12 02:56:49

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.40 Mbit/s

95th percentile per-packet one-way delay: 110.701 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.11 Mbit/s

95th percentile per-packet one-way delay: 108.912 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.33 Mbit/s

95th percentile per-packet one-way delay: 110.731 ms

Loss rate: 0.00%

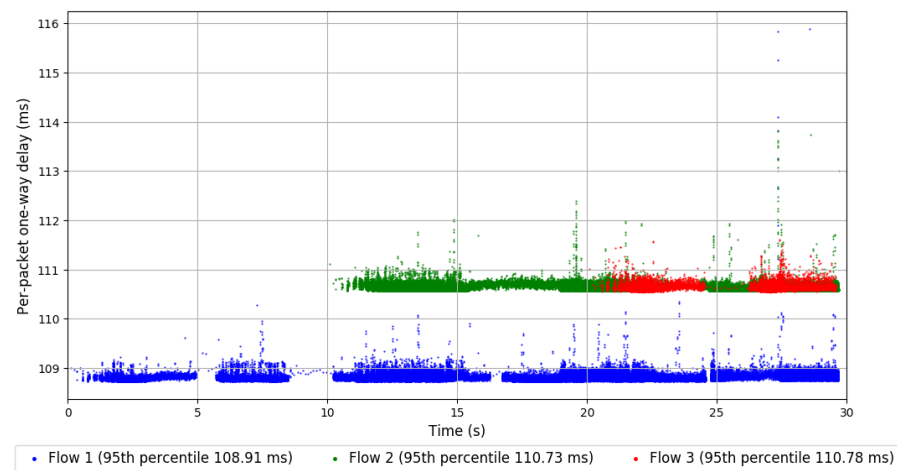
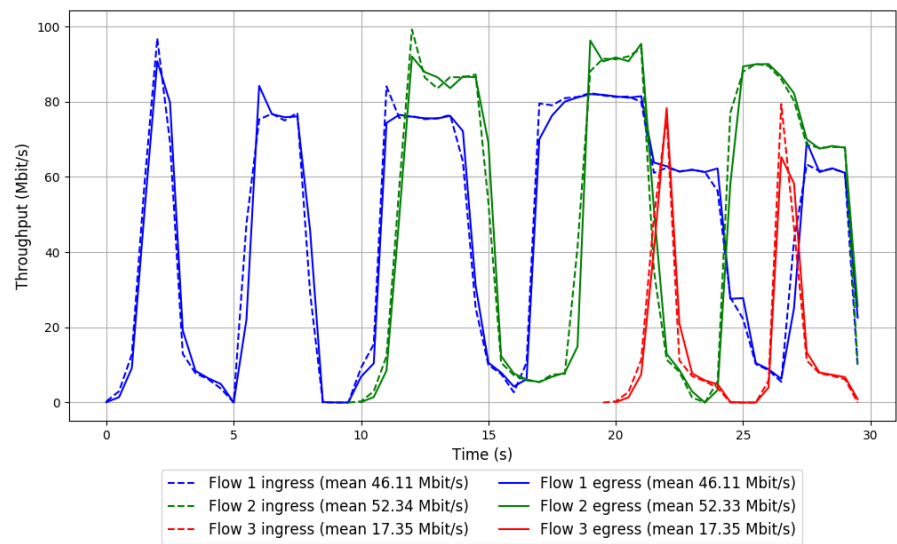
-- Flow 3:

Average throughput: 17.35 Mbit/s

95th percentile per-packet one-way delay: 110.782 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

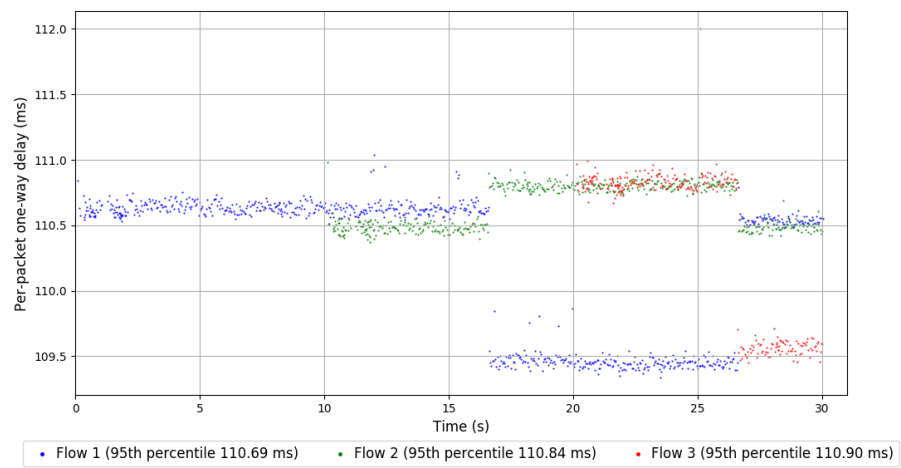
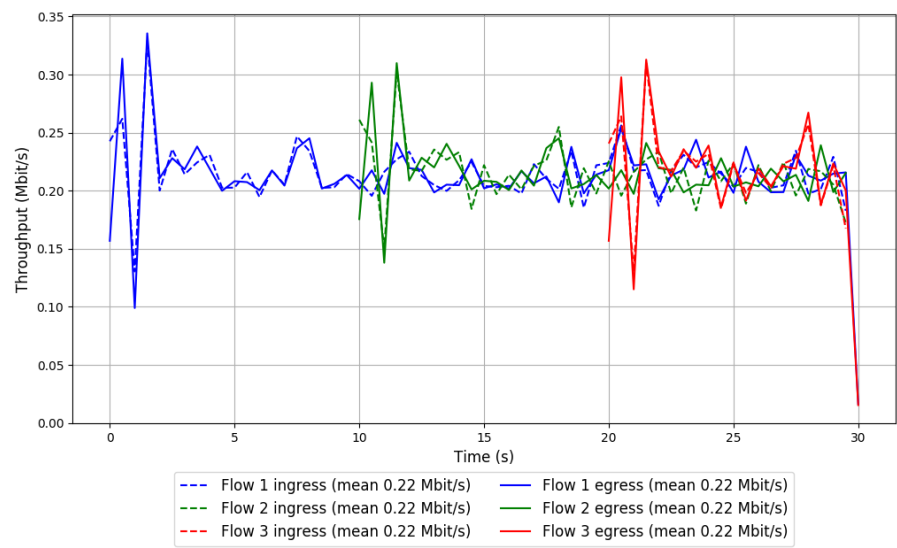


```
Run 1: Statistics of SReAM

Start at: 2017-12-12 00:56:57
End at: 2017-12-12 00:57:27

# Below is generated by plot.py at 2017-12-12 04:25:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 110.853 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.695 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.844 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.903 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

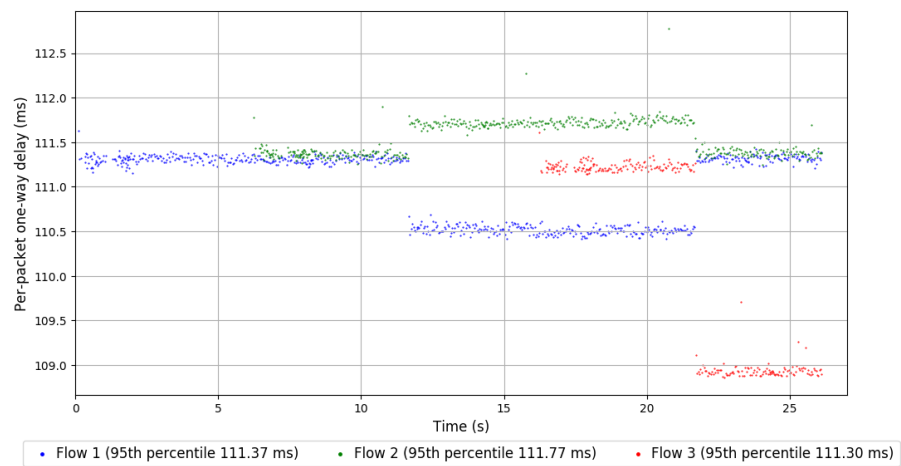
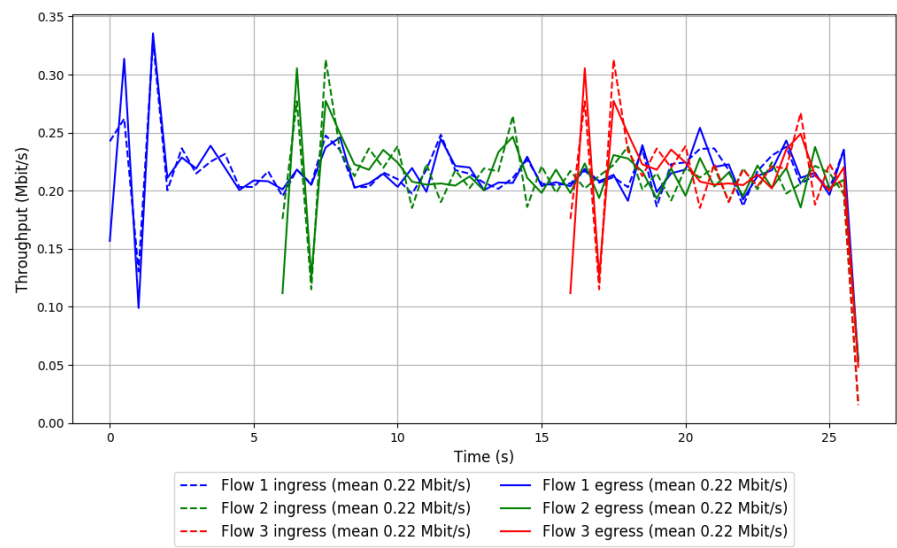


```
Run 2: Statistics of SReAM

Start at: 2017-12-12 01:10:18
End at: 2017-12-12 01:10:48

# Below is generated by plot.py at 2017-12-12 04:25:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 111.740 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.369 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.774 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.298 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-12 01:23:29

End at: 2017-12-12 01:23:59

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 112.355 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.693 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

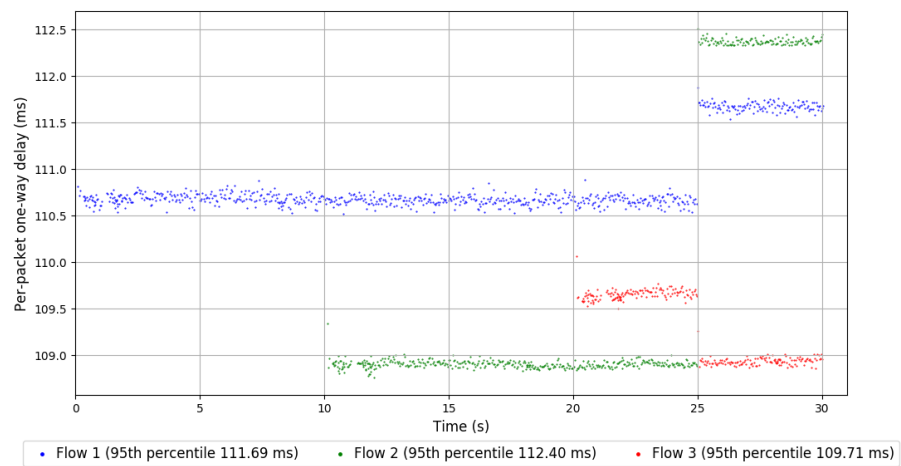
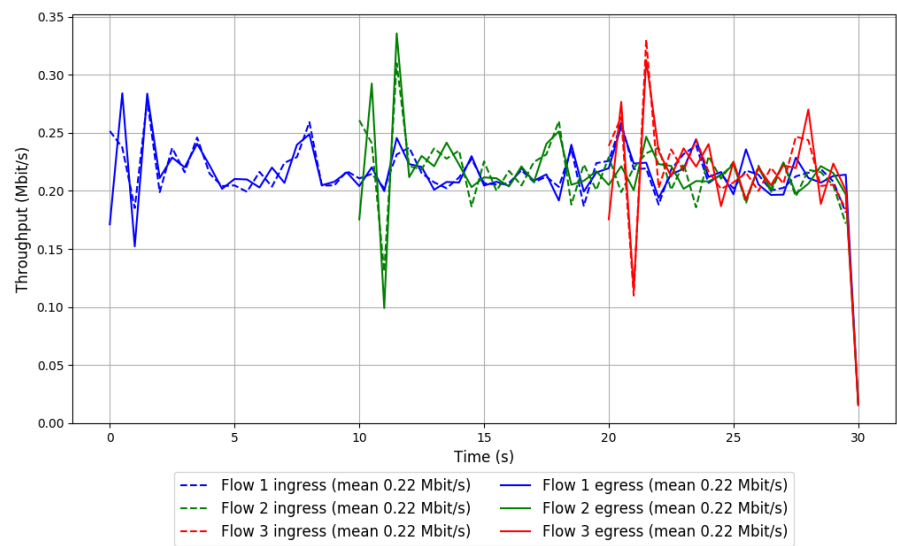
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 109.708 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

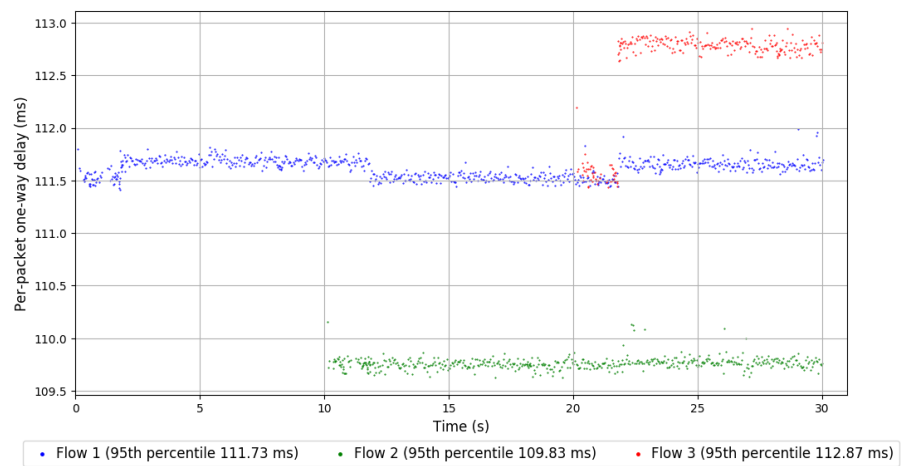
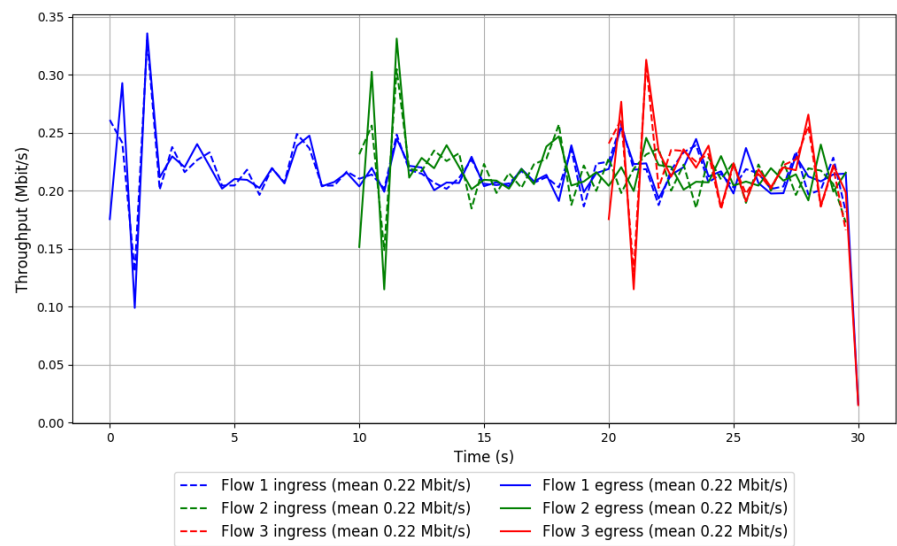


```
Run 4: Statistics of SReAM

Start at: 2017-12-12 01:36:32
End at: 2017-12-12 01:37:02

# Below is generated by plot.py at 2017-12-12 04:25:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.811 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.735 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.829 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.871 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2017-12-12 01:49:59

End at: 2017-12-12 01:50:29

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.765 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.790 ms

Loss rate: 0.00%

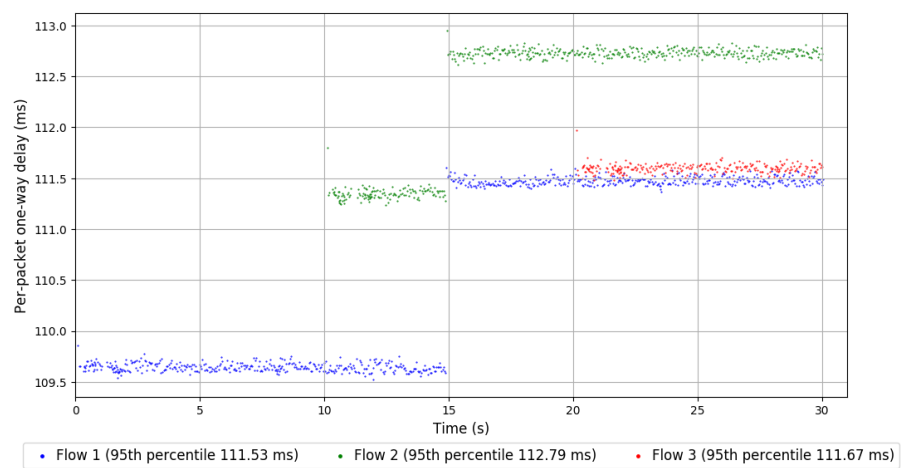
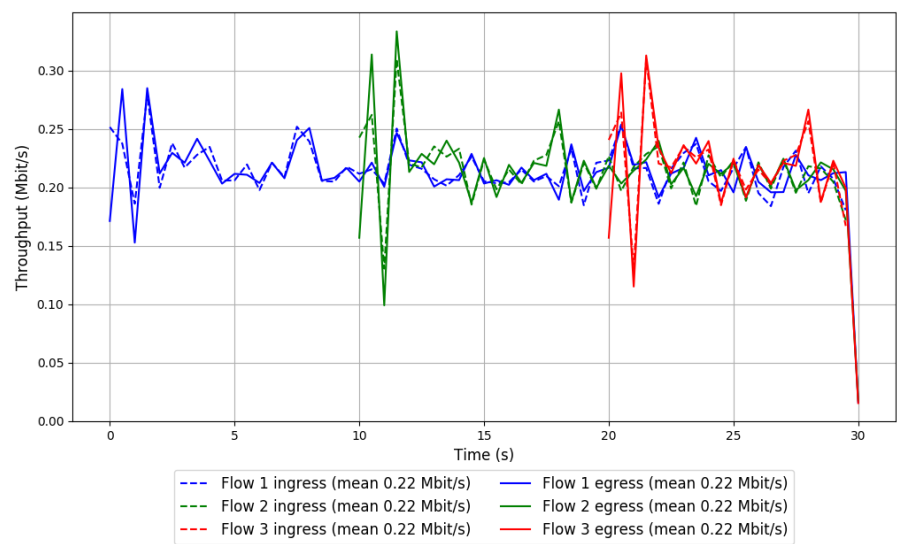
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.666 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2017-12-12 02:03:33

End at: 2017-12-12 02:04:03

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 111.366 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.834 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.401 ms

Loss rate: 0.00%

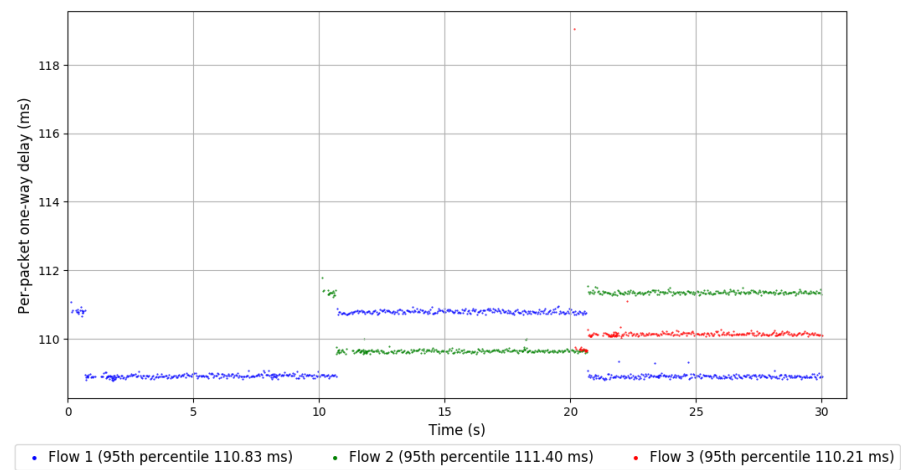
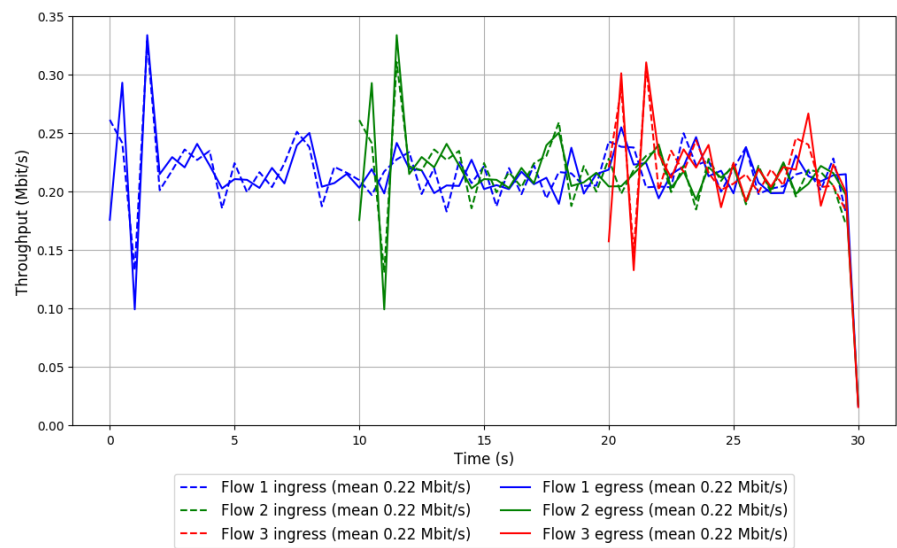
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.209 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-12-12 02:16:52

End at: 2017-12-12 02:17:22

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 112.438 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.423 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.304 ms

Loss rate: 0.00%

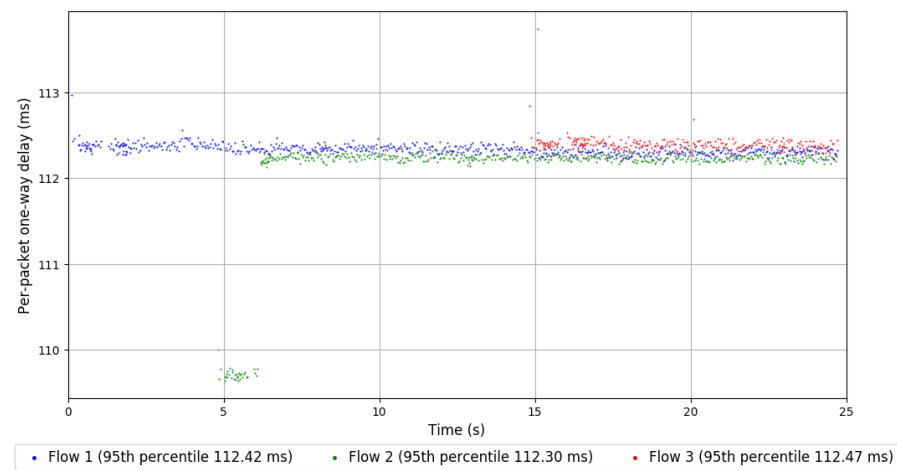
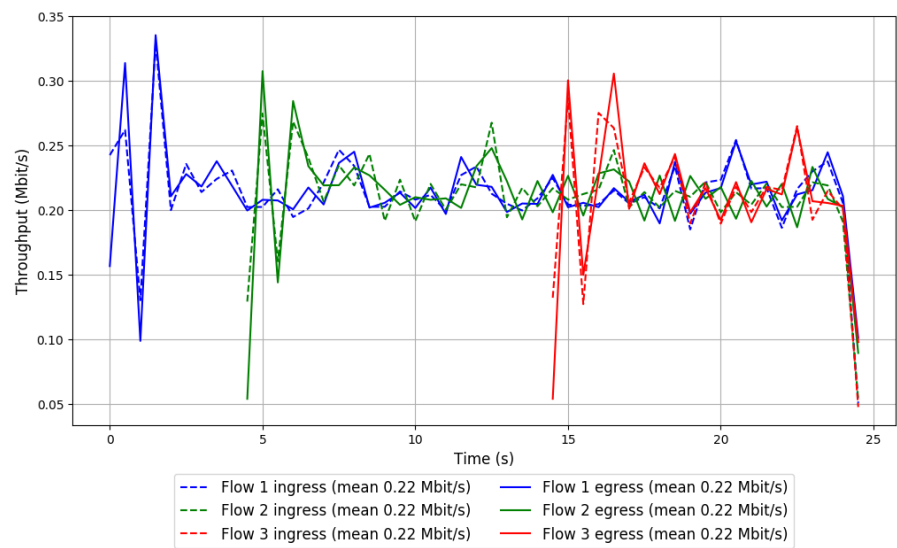
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.469 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2017-12-12 02:30:33

End at: 2017-12-12 02:31:03

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 111.516 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.855 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.559 ms

Loss rate: 0.00%

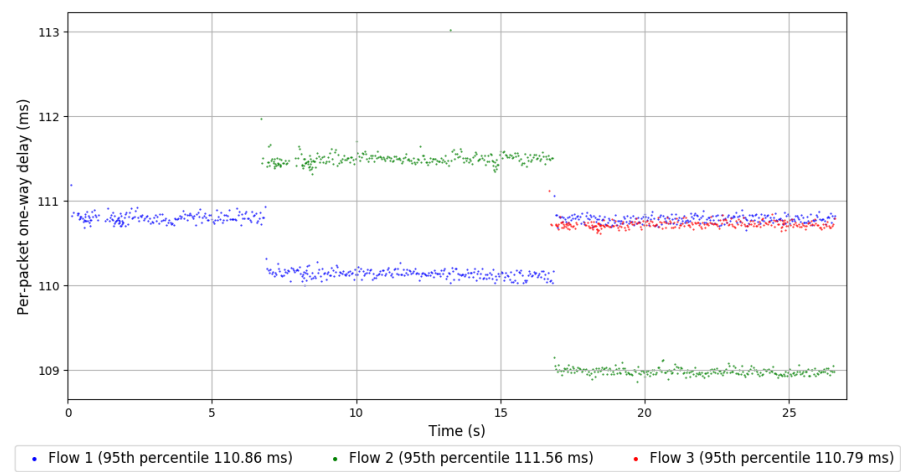
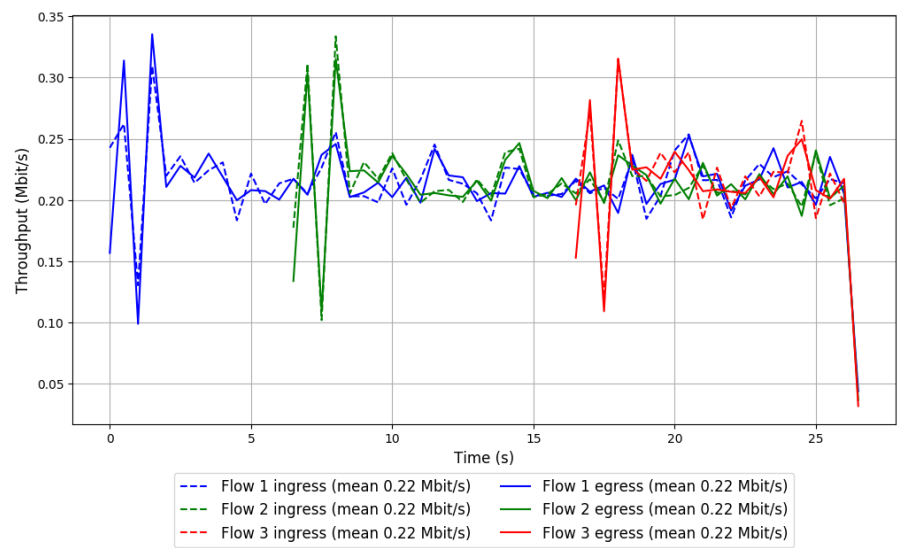
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.788 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-12 02:43:56

End at: 2017-12-12 02:44:26

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.643 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.280 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 112.677 ms

Loss rate: 0.00%

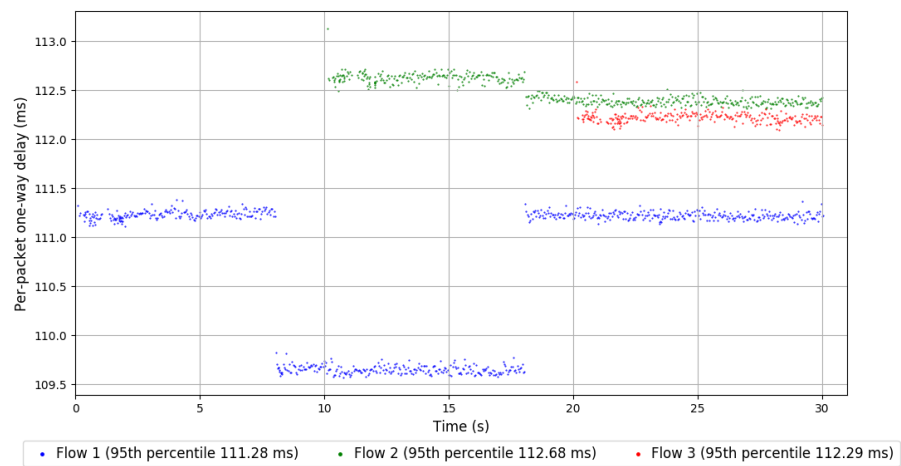
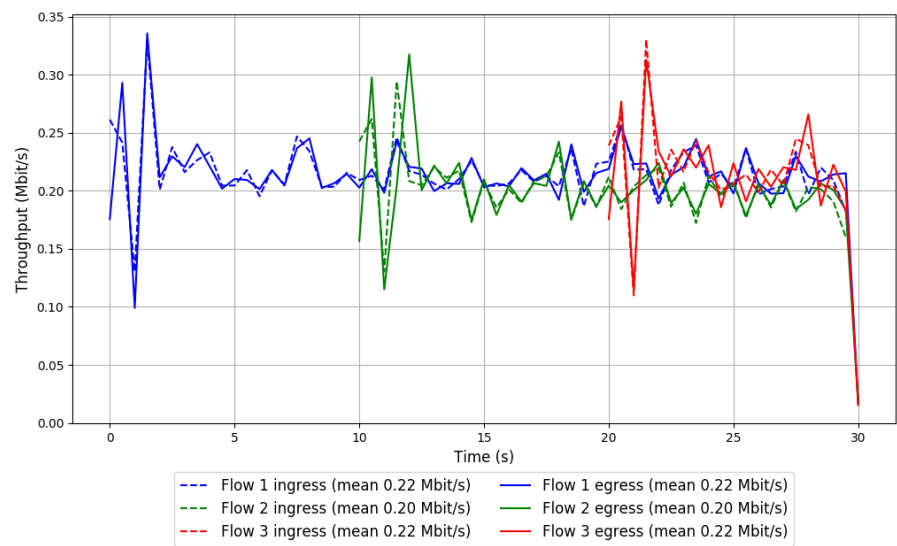
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.286 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

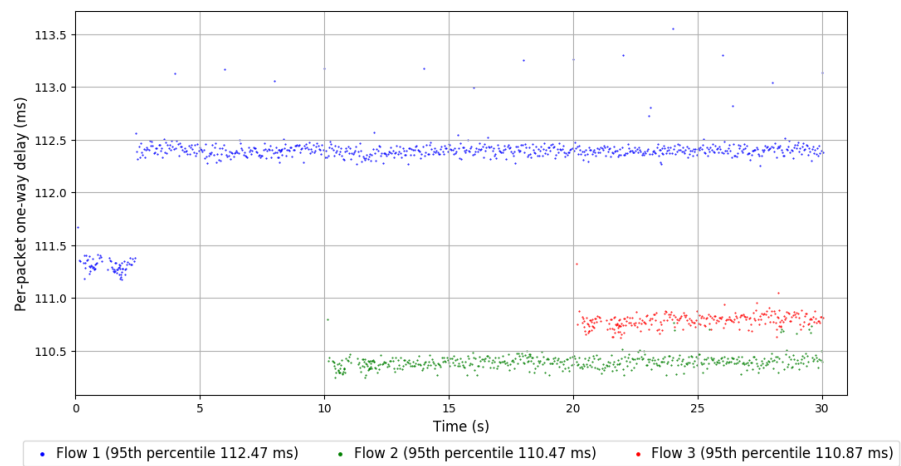
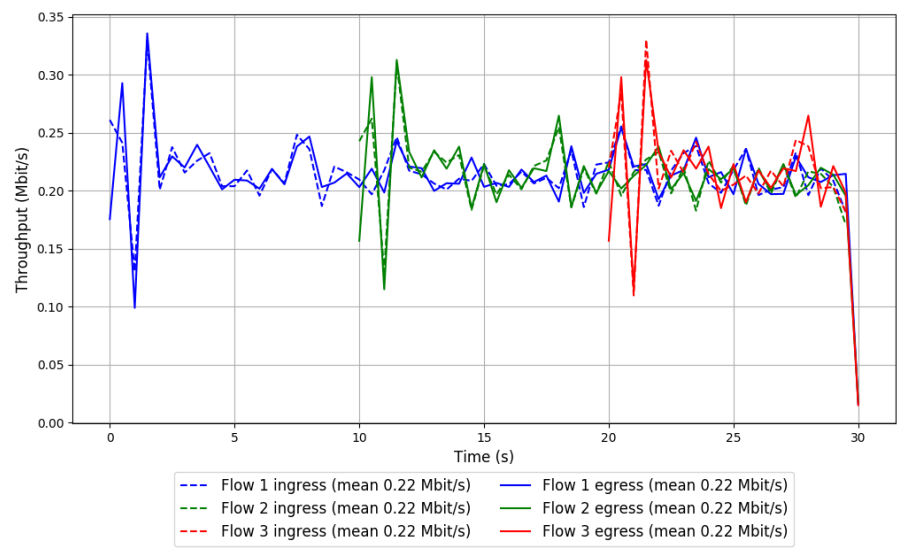


```
Run 10: Statistics of SCReAM

Start at: 2017-12-12 02:57:11
End at: 2017-12-12 02:57:41

# Below is generated by plot.py at 2017-12-12 04:25:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.451 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.469 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.470 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.873 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

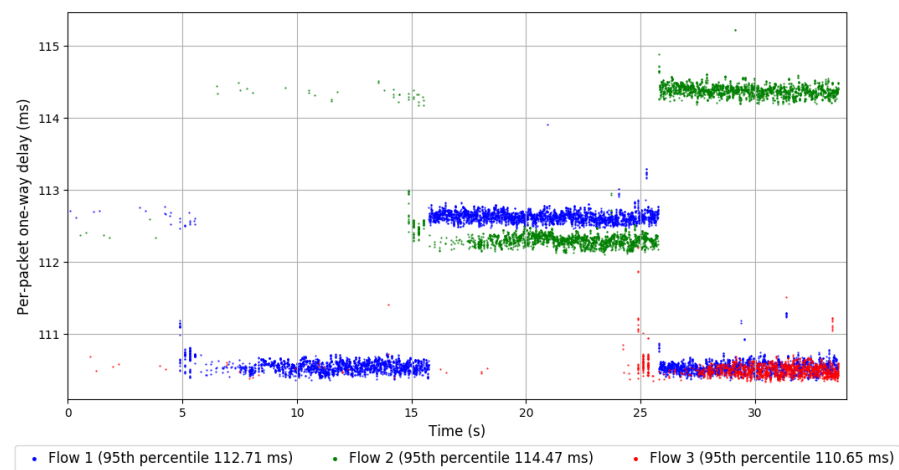
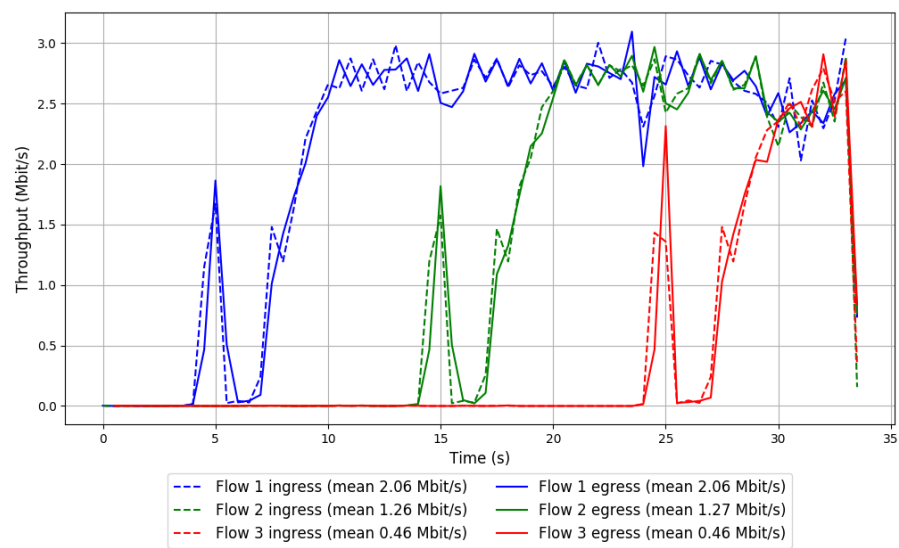


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-12 00:49:31
End at: 2017-12-12 00:50:01

# Below is generated by plot.py at 2017-12-12 04:25:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 114.415 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 112.706 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 114.469 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 110.647 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-12 01:02:36

End at: 2017-12-12 01:03:06

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.79 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.07 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 112.419 ms

Loss rate: 0.00%

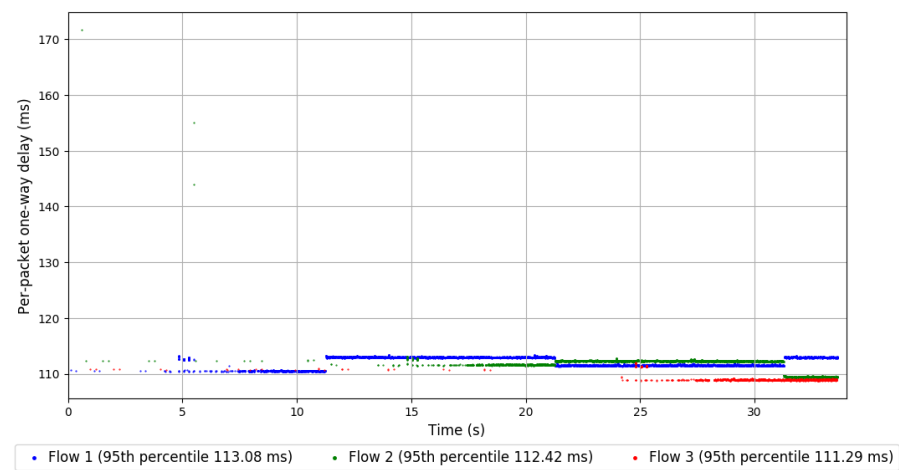
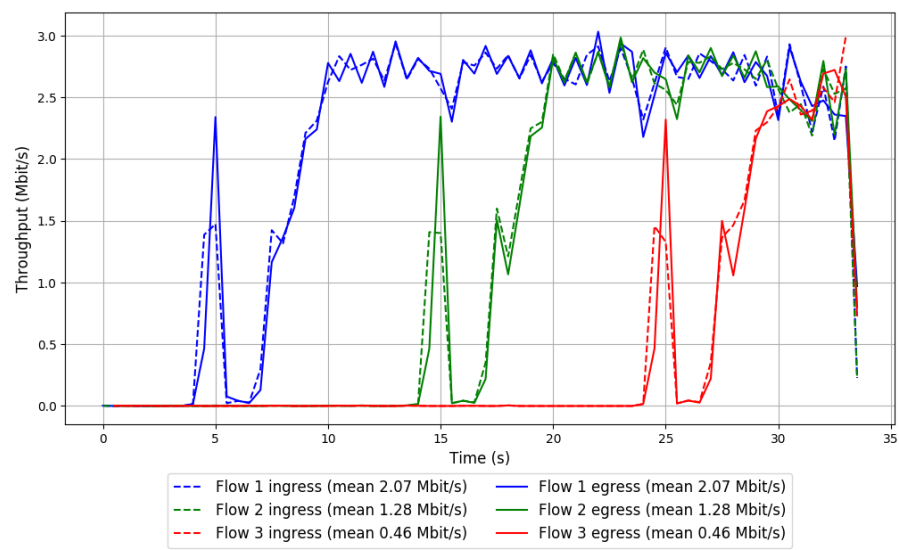
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 111.292 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-12 01:16:00

End at: 2017-12-12 01:16:30

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 111.651 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 111.657 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.28 Mbit/s

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

Loss rate: 0.00%

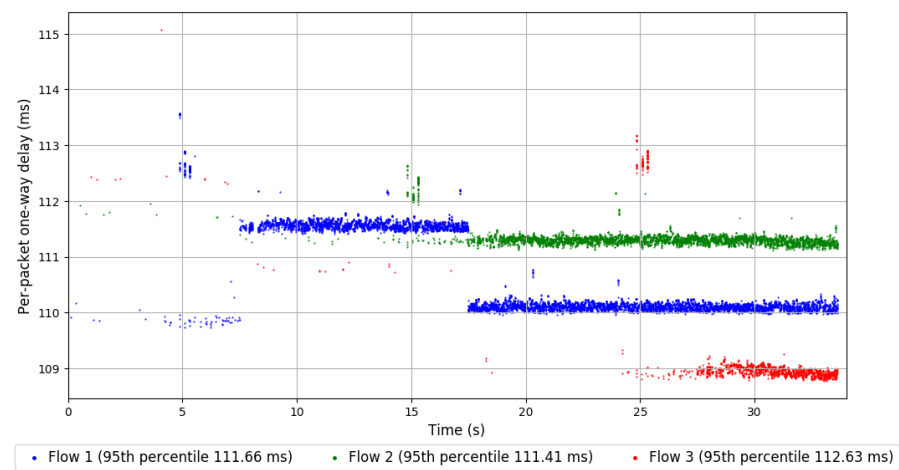
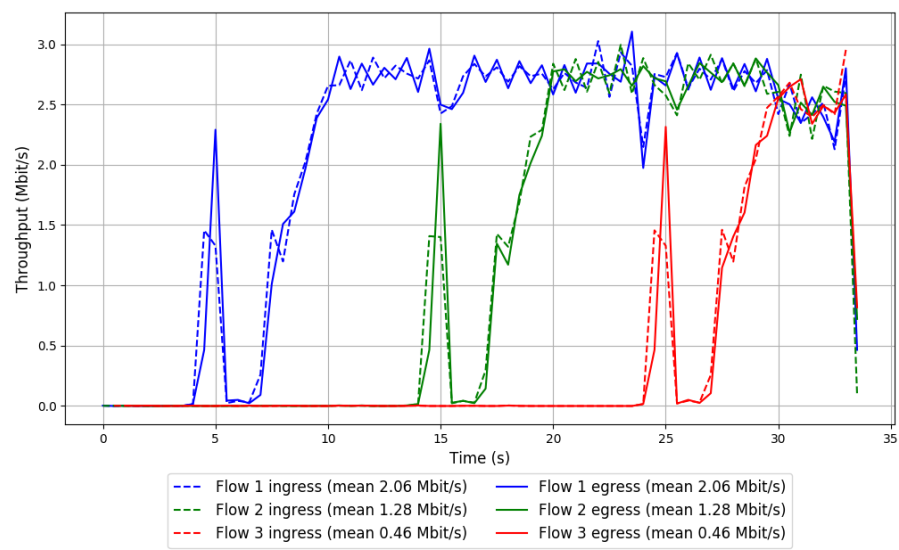
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 112.633 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-12 01:29:08

End at: 2017-12-12 01:29:38

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.79 Mbit/s

95th percentile per-packet one-way delay: 110.681 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 110.659 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 110.705 ms

Loss rate: 0.00%

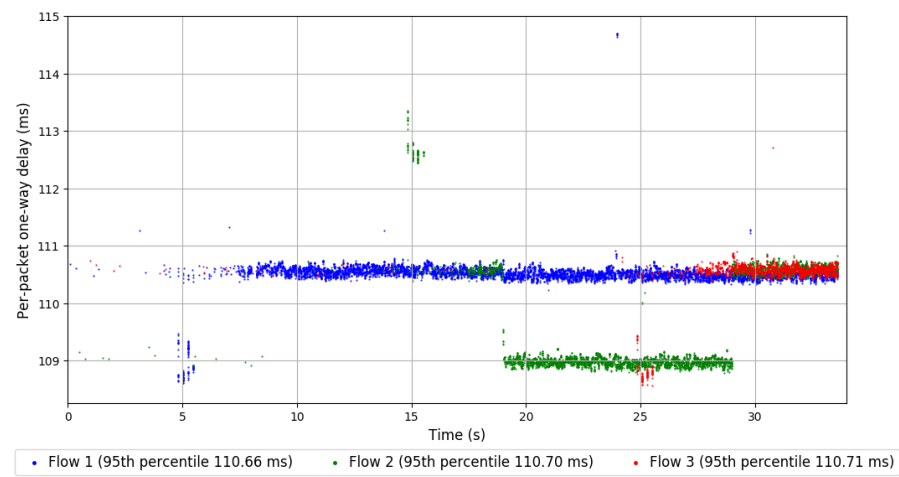
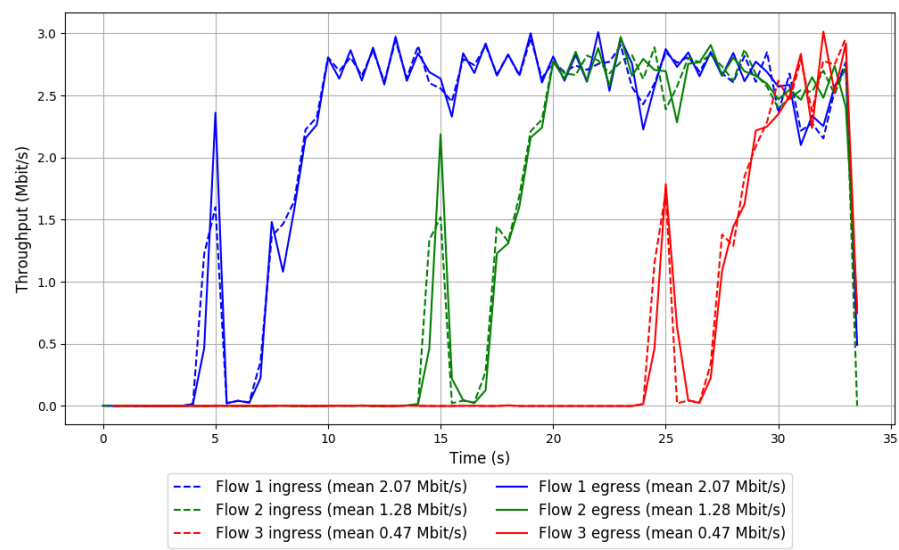
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 110.708 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-12 01:42:34

End at: 2017-12-12 01:43:04

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.77 Mbit/s

95th percentile per-packet one-way delay: 112.839 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 112.865 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.27 Mbit/s

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

Loss rate: 0.02%

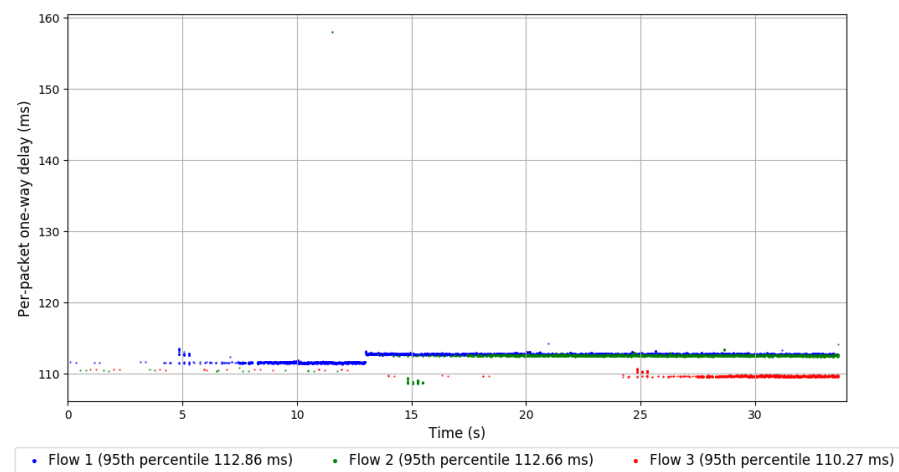
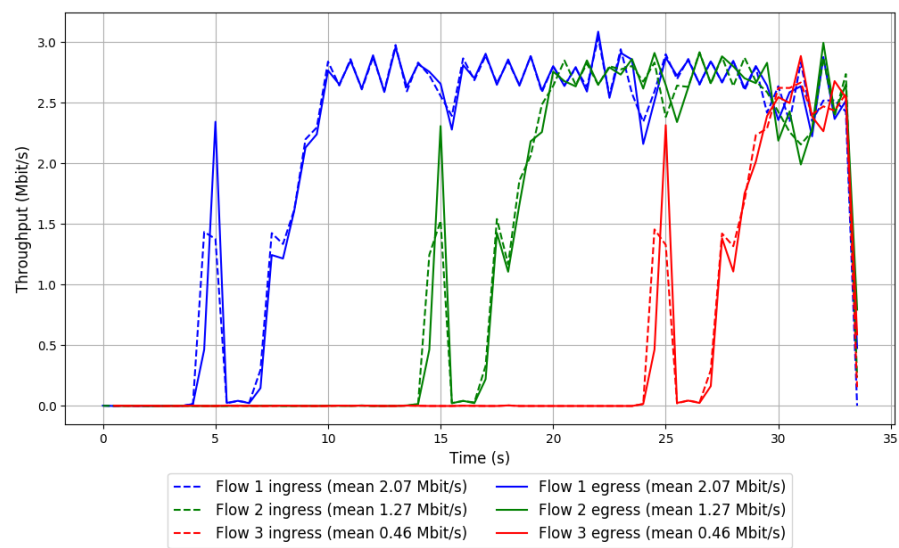
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 110.267 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-12 01:55:46

End at: 2017-12-12 01:56:16

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 112.808 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 112.837 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 110.803 ms

Loss rate: 0.00%

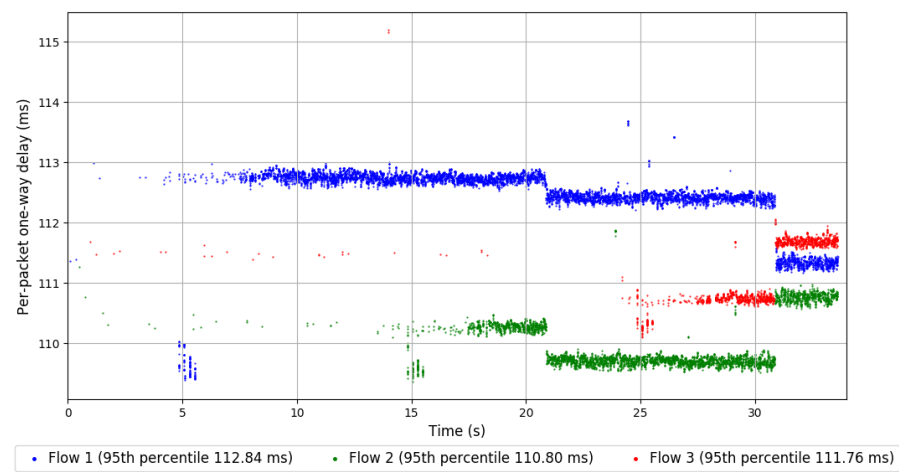
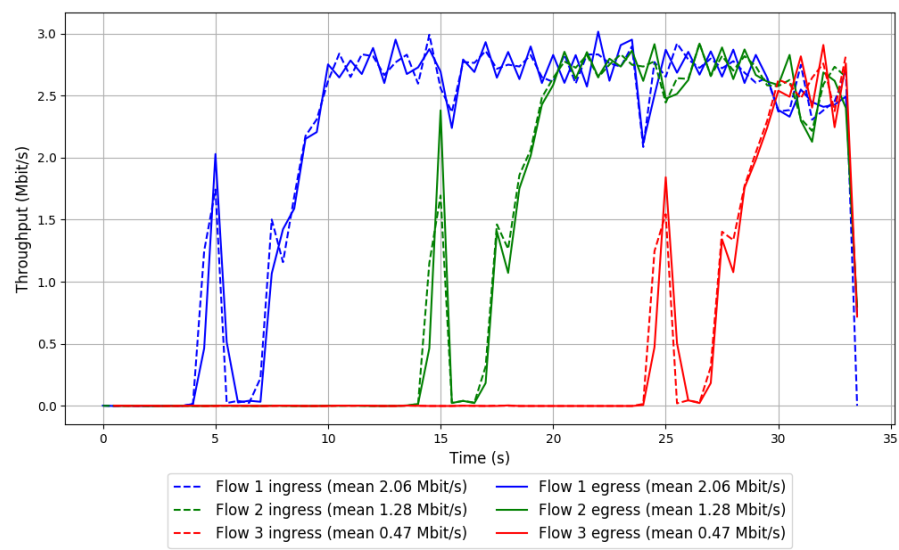
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 111.761 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-12 02:09:12

End at: 2017-12-12 02:09:42

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.74 Mbit/s

95th percentile per-packet one-way delay: 112.323 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 112.277 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 112.365 ms

Loss rate: 0.02%

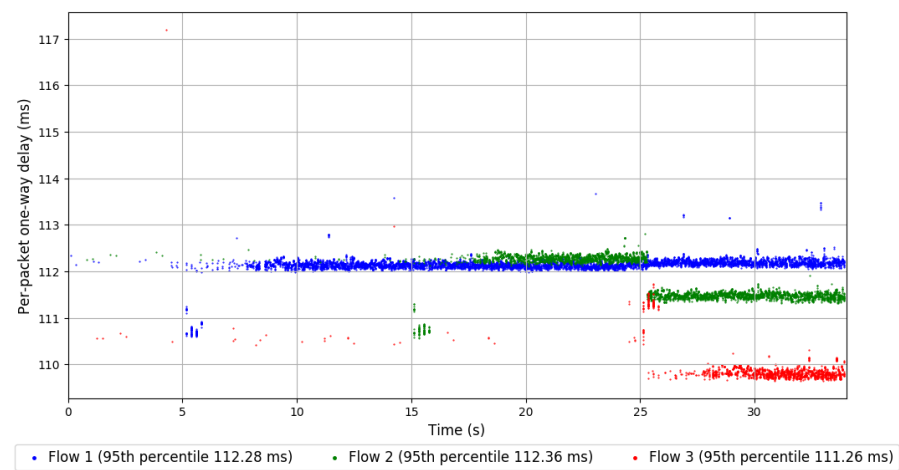
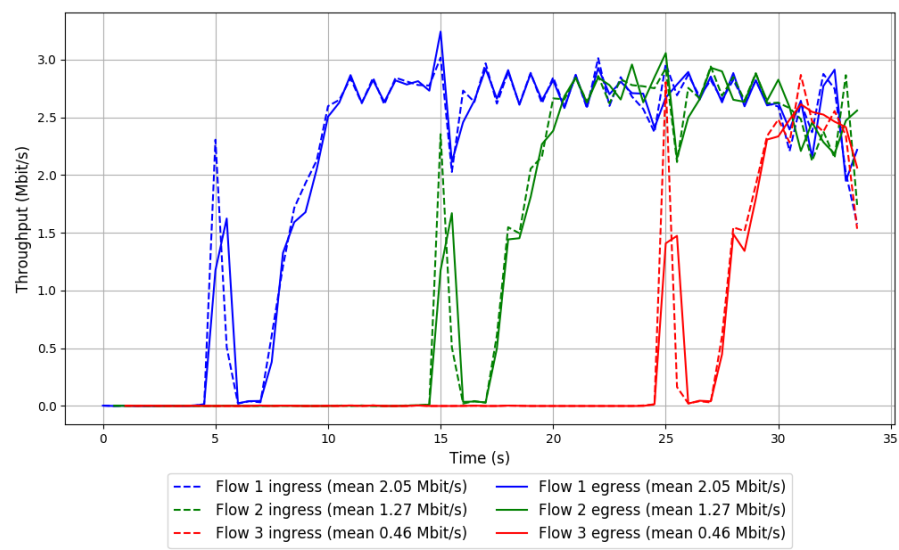
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 111.264 ms

Loss rate: 0.24%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-12 02:22:50

End at: 2017-12-12 02:23:20

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.79 Mbit/s

95th percentile per-packet one-way delay: 111.889 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 110.844 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 111.930 ms

Loss rate: 0.00%

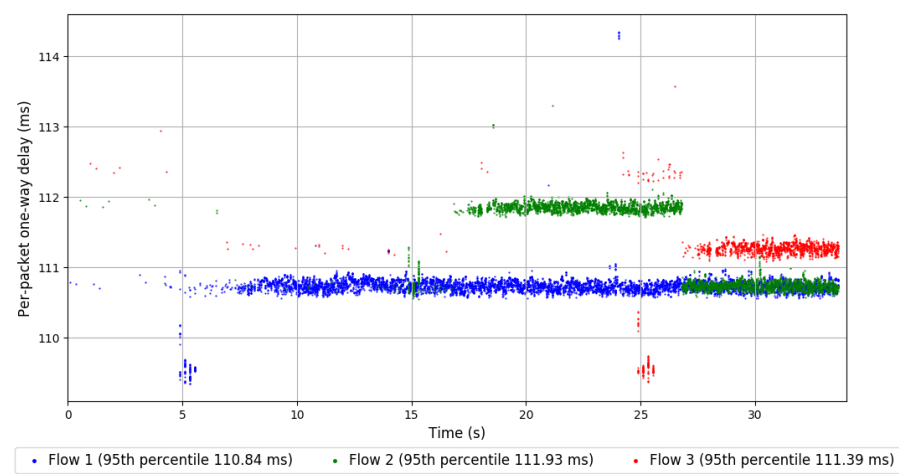
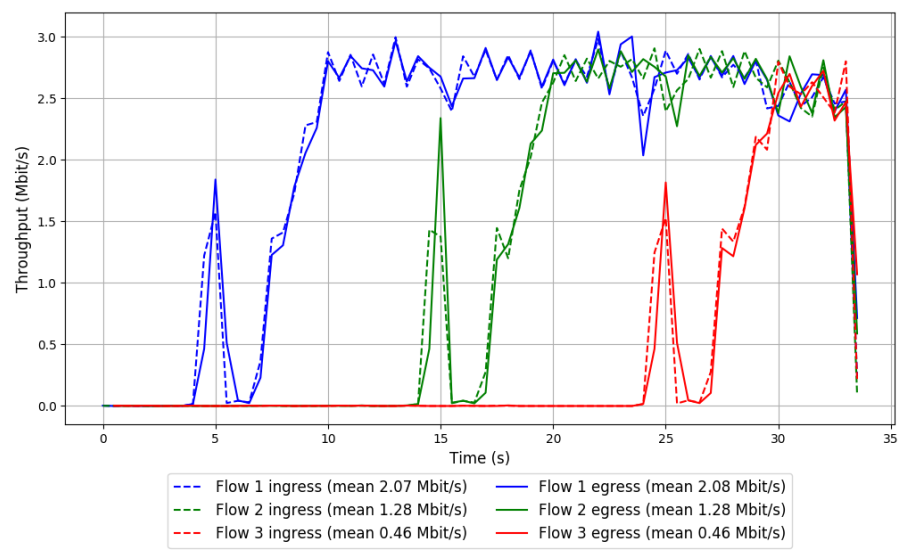
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 111.388 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-12 02:36:28

End at: 2017-12-12 02:36:58

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.79 Mbit/s

95th percentile per-packet one-way delay: 112.193 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 111.571 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 112.232 ms

Loss rate: 0.00%

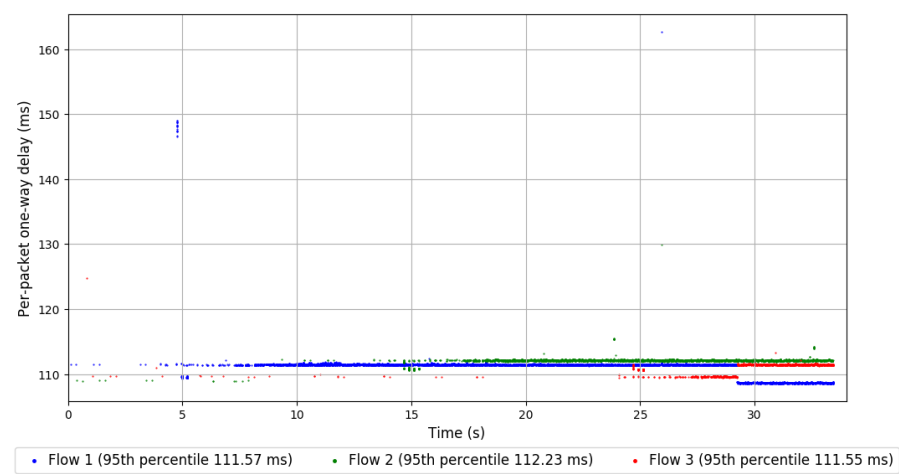
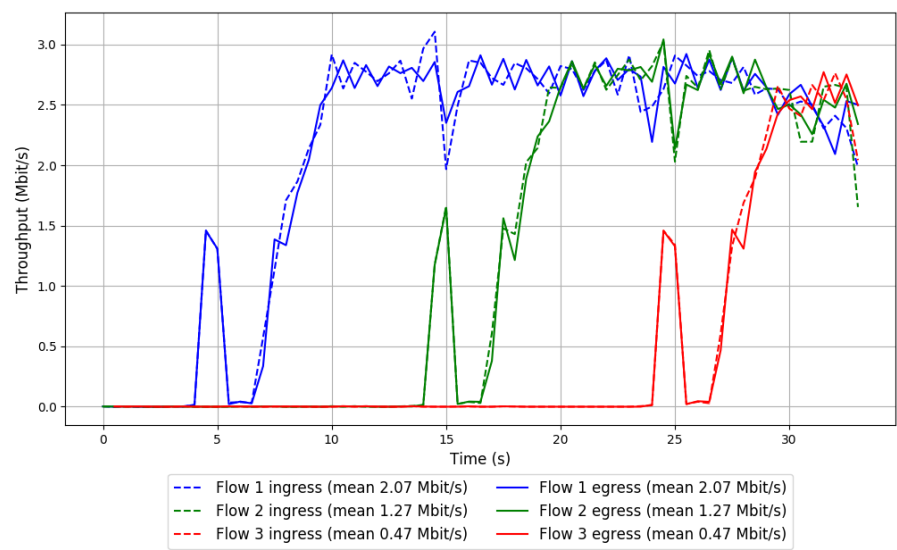
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 111.545 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-12 02:49:38

End at: 2017-12-12 02:50:08

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.85 Mbit/s

95th percentile per-packet one-way delay: 114.288 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 110.903 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.29 Mbit/s

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

Loss rate: 0.00%

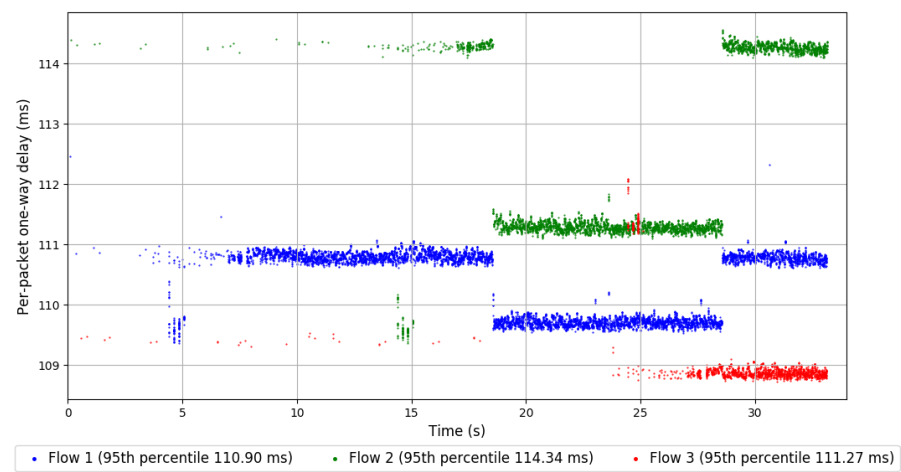
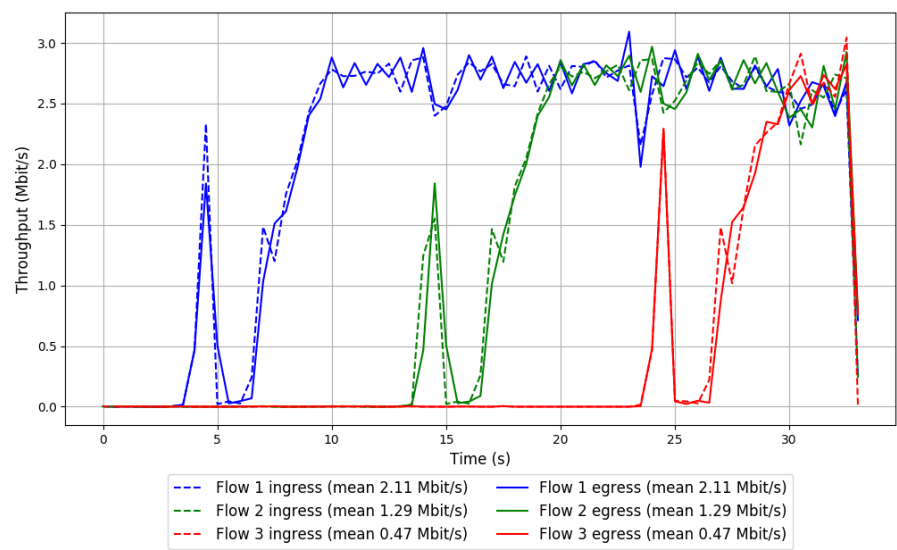
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 111.270 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

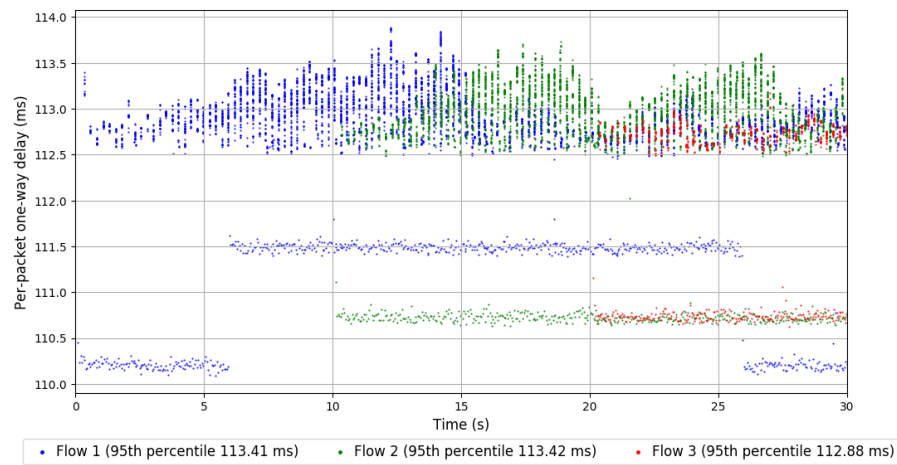
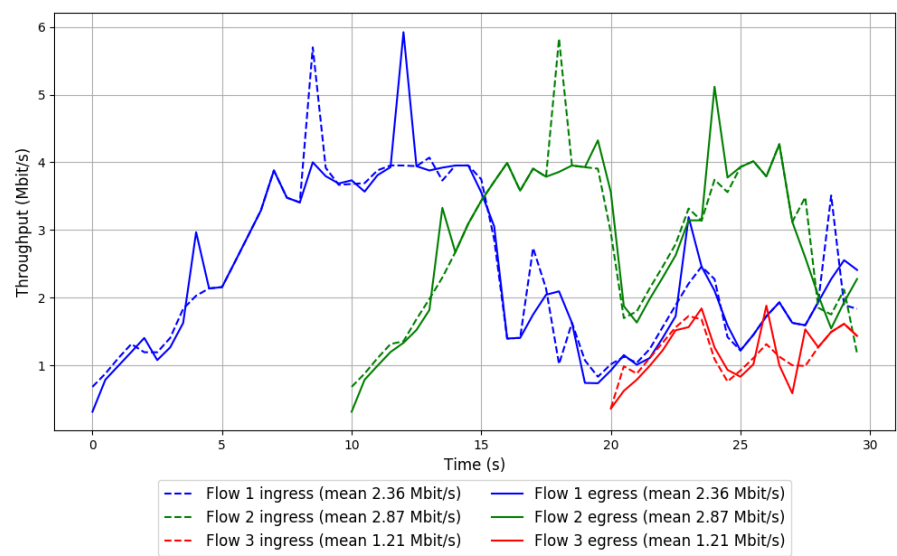


```
Run 1: Statistics of Sprout

Start at: 2017-12-12 00:55:18
End at: 2017-12-12 00:55:48

# Below is generated by plot.py at 2017-12-12 04:25:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.67 Mbit/s
95th percentile per-packet one-way delay: 113.405 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 113.411 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.87 Mbit/s
95th percentile per-packet one-way delay: 113.416 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 112.881 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-12 01:08:38

End at: 2017-12-12 01:09:08

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.08 Mbit/s

95th percentile per-packet one-way delay: 113.369 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.48 Mbit/s

95th percentile per-packet one-way delay: 113.293 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.06 Mbit/s

95th percentile per-packet one-way delay: 113.478 ms

Loss rate: 0.00%

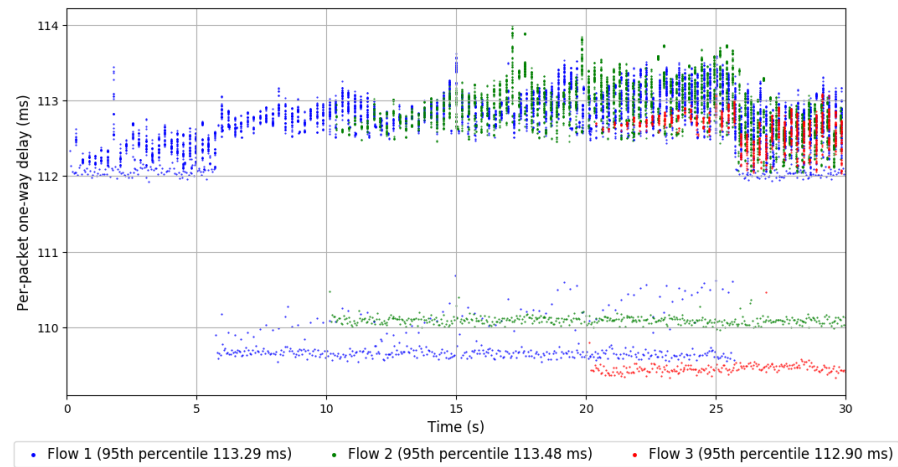
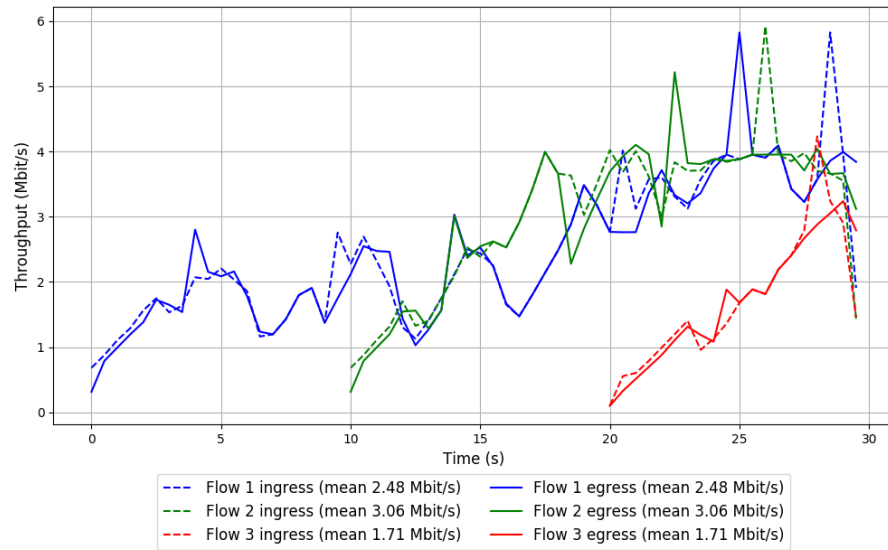
-- Flow 3:

Average throughput: 1.71 Mbit/s

95th percentile per-packet one-way delay: 112.899 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-12 01:21:48

End at: 2017-12-12 01:22:18

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.56 Mbit/s

95th percentile per-packet one-way delay: 112.848 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 112.858 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 112.572 ms

Loss rate: 0.11%

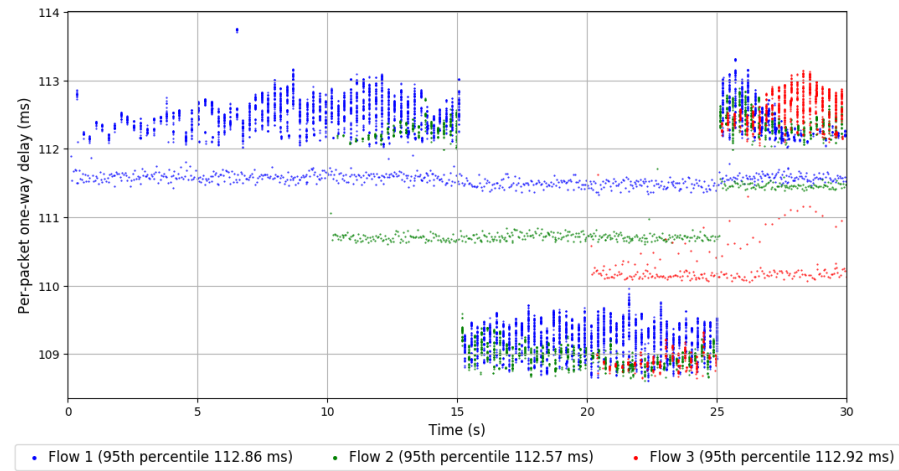
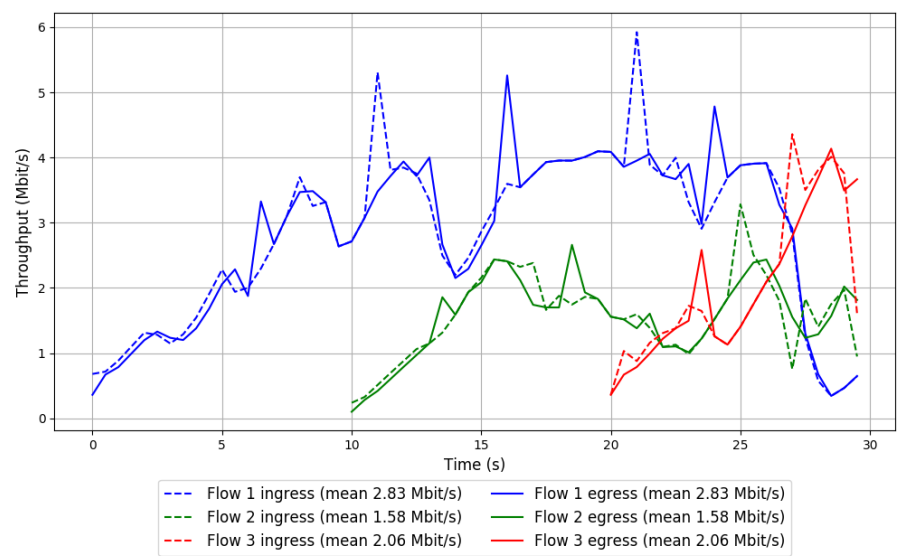
-- Flow 3:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 112.919 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-12 01:34:52

End at: 2017-12-12 01:35:22

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.96 Mbit/s

95th percentile per-packet one-way delay: 113.374 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.21 Mbit/s

95th percentile per-packet one-way delay: 113.420 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.13 Mbit/s

95th percentile per-packet one-way delay: 113.331 ms

Loss rate: 0.00%

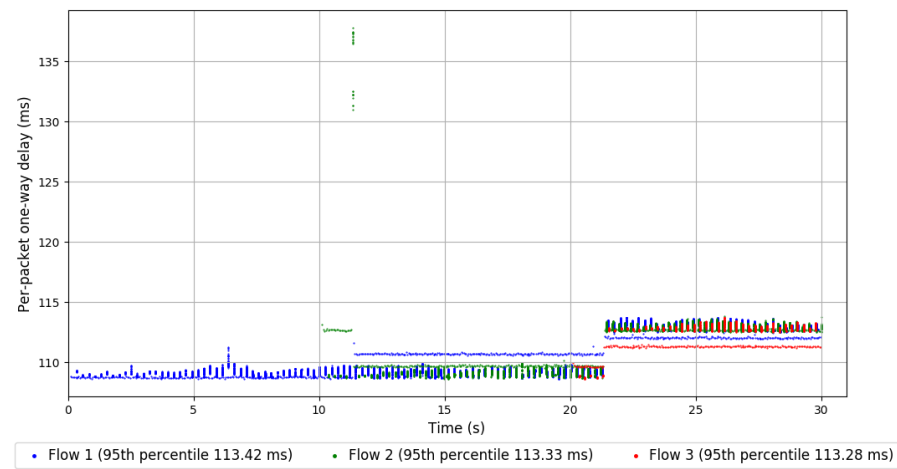
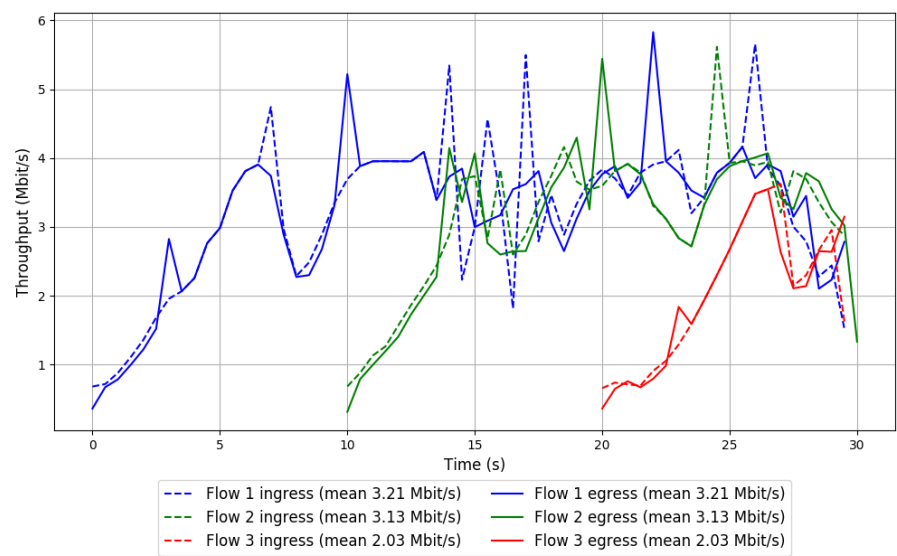
-- Flow 3:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 113.283 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-12 01:48:19

End at: 2017-12-12 01:48:49

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.55 Mbit/s

95th percentile per-packet one-way delay: 112.705 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 112.969 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 111.176 ms

Loss rate: 0.00%

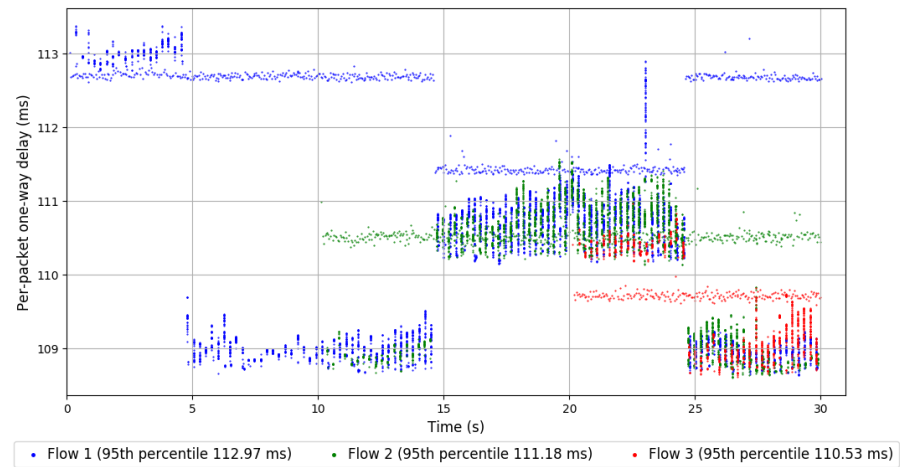
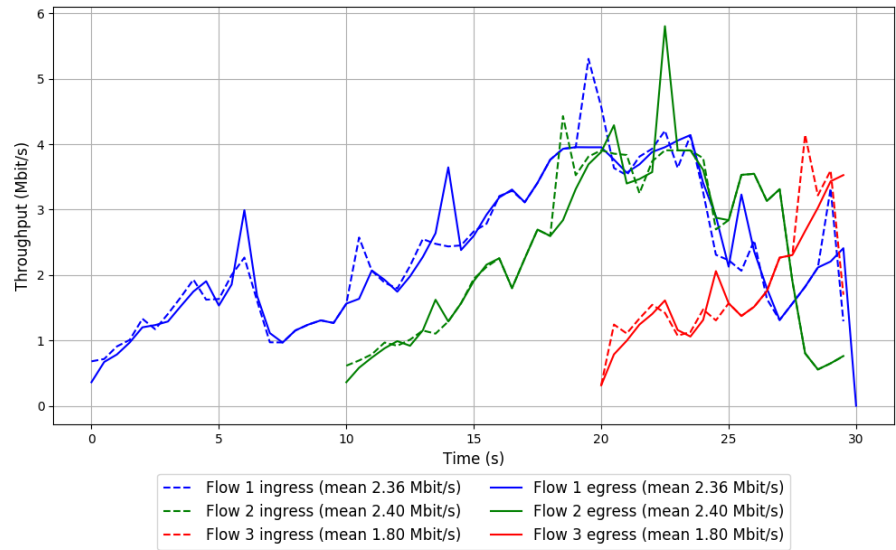
-- Flow 3:

Average throughput: 1.80 Mbit/s

95th percentile per-packet one-way delay: 110.530 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-12 02:01:53

End at: 2017-12-12 02:02:23

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.31 Mbit/s

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

Loss rate: 0.04%

-- Flow 1:

Average throughput: 1.90 Mbit/s

95th percentile per-packet one-way delay: 113.103 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 2.77 Mbit/s

95th percentile per-packet one-way delay: 113.226 ms

Loss rate: 0.00%

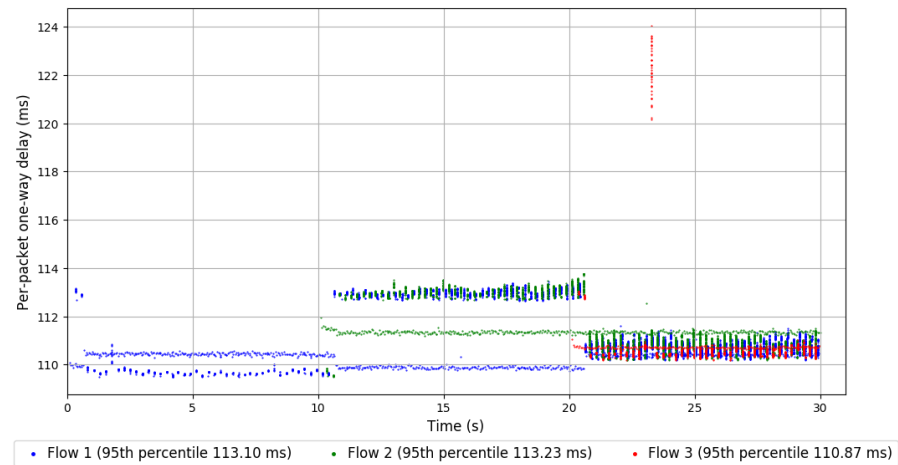
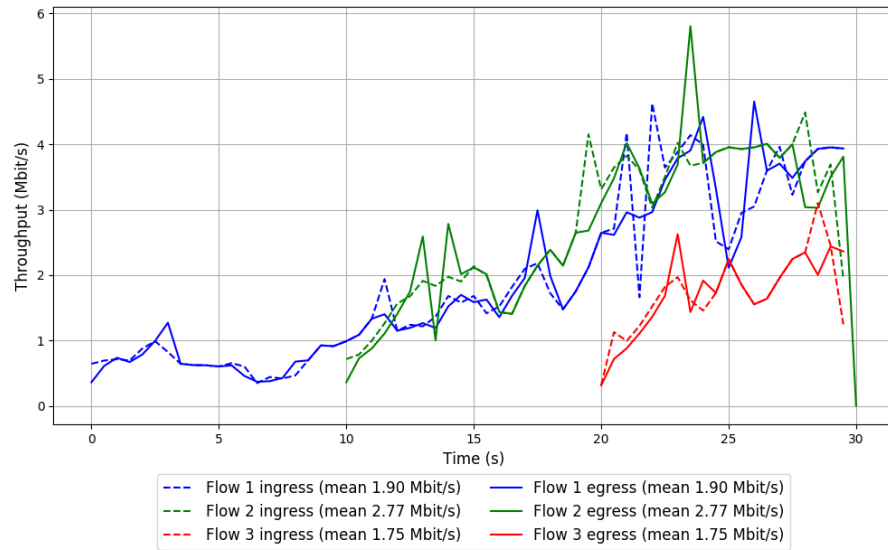
-- Flow 3:

Average throughput: 1.75 Mbit/s

95th percentile per-packet one-way delay: 110.870 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-12 02:15:13

End at: 2017-12-12 02:15:43

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.89 Mbit/s

95th percentile per-packet one-way delay: 111.992 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.16 Mbit/s

95th percentile per-packet one-way delay: 112.042 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.10 Mbit/s

95th percentile per-packet one-way delay: 111.794 ms

Loss rate: 0.00%

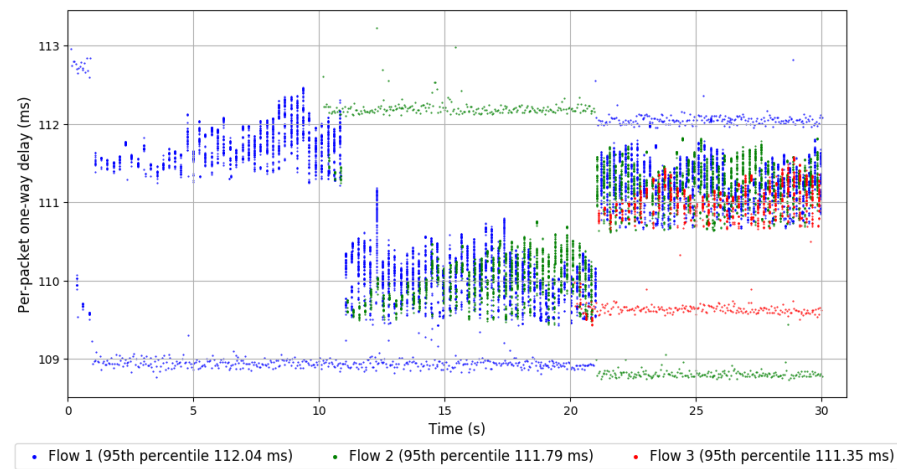
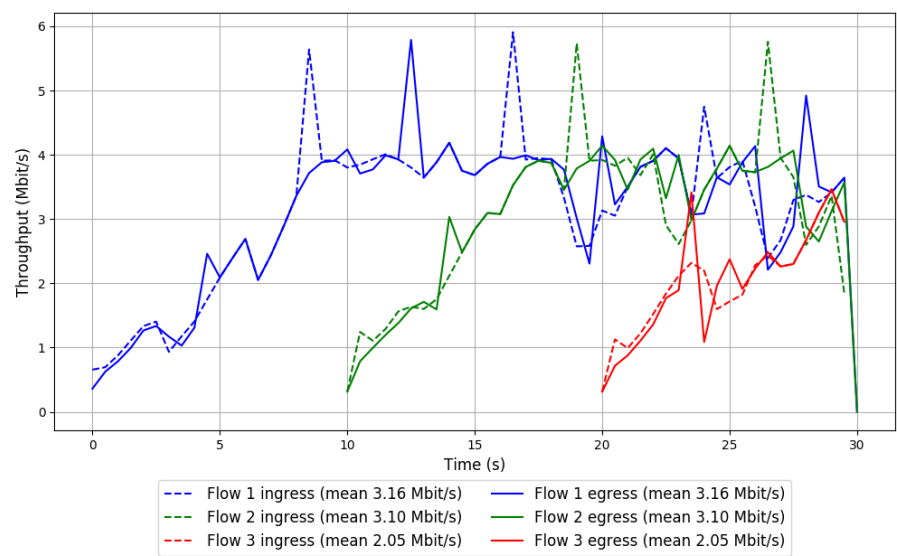
-- Flow 3:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 111.349 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-12 02:28:53

End at: 2017-12-12 02:29:23

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.29 Mbit/s

95th percentile per-packet one-way delay: 112.367 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 112.476 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 112.317 ms

Loss rate: 0.00%

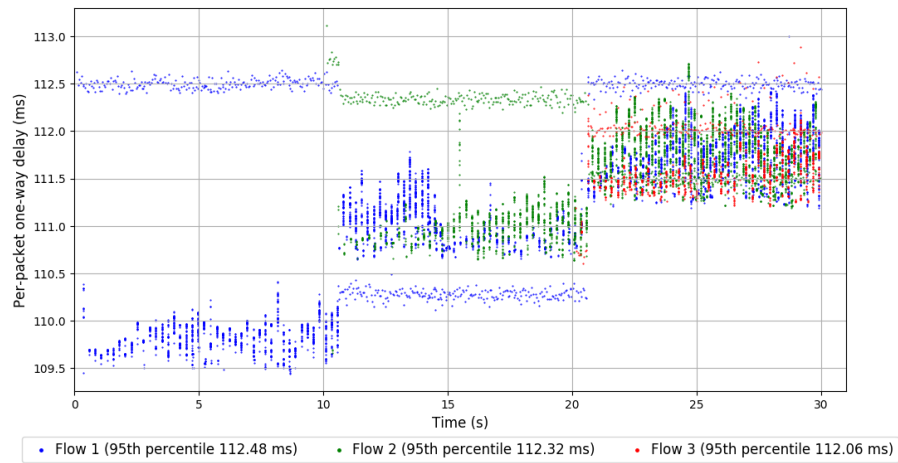
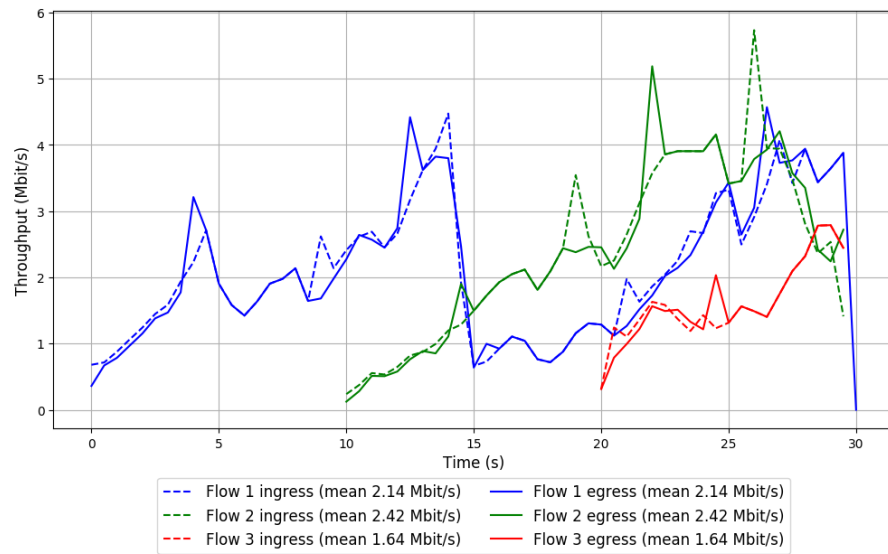
-- Flow 3:

Average throughput: 1.64 Mbit/s

95th percentile per-packet one-way delay: 112.058 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-12 02:42:21

End at: 2017-12-12 02:42:51

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.44 Mbit/s

95th percentile per-packet one-way delay: 111.164 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 111.202 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.02 Mbit/s

95th percentile per-packet one-way delay: 110.756 ms

Loss rate: 0.00%

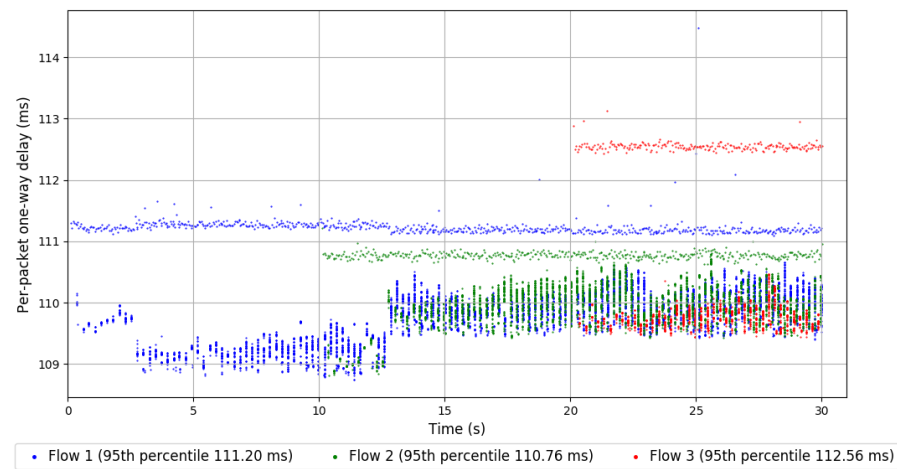
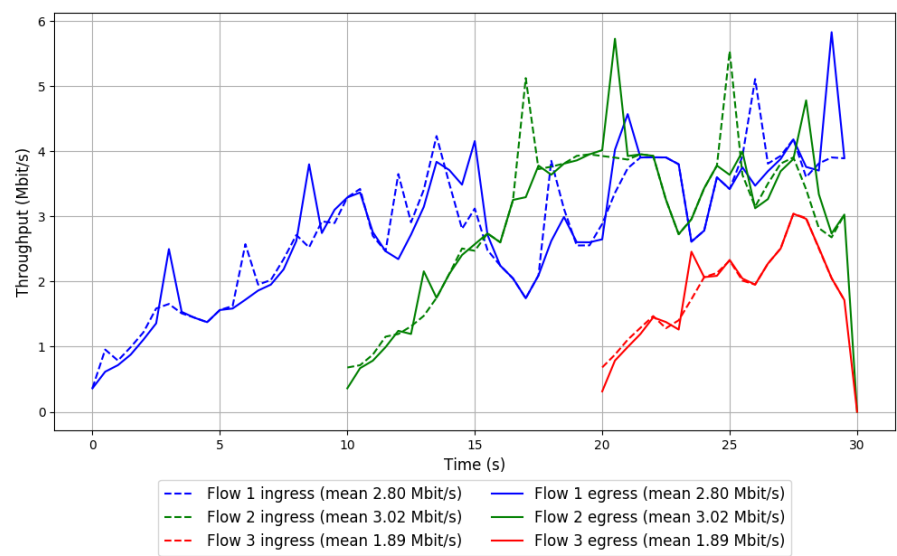
-- Flow 3:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 112.555 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-12 02:55:33

End at: 2017-12-12 02:56:03

Below is generated by plot.py at 2017-12-12 04:25:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.29 Mbit/s

95th percentile per-packet one-way delay: 112.289 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.10 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.87 Mbit/s

95th percentile per-packet one-way delay: 112.077 ms

Loss rate: 0.00%

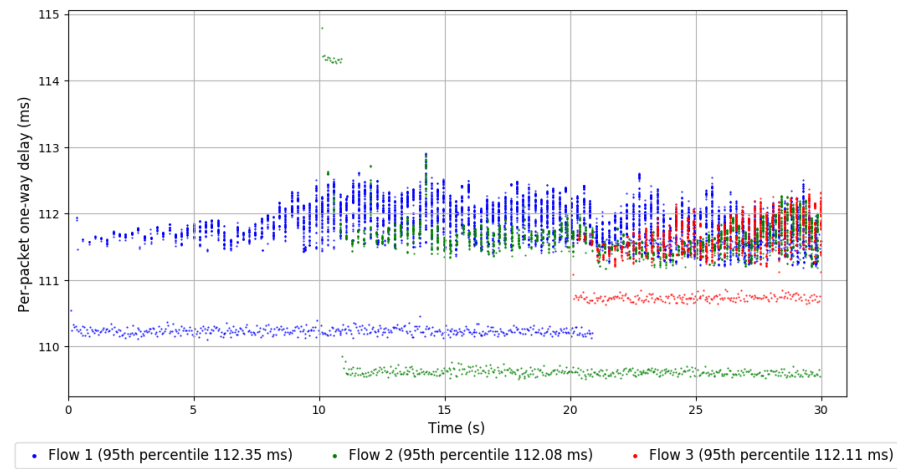
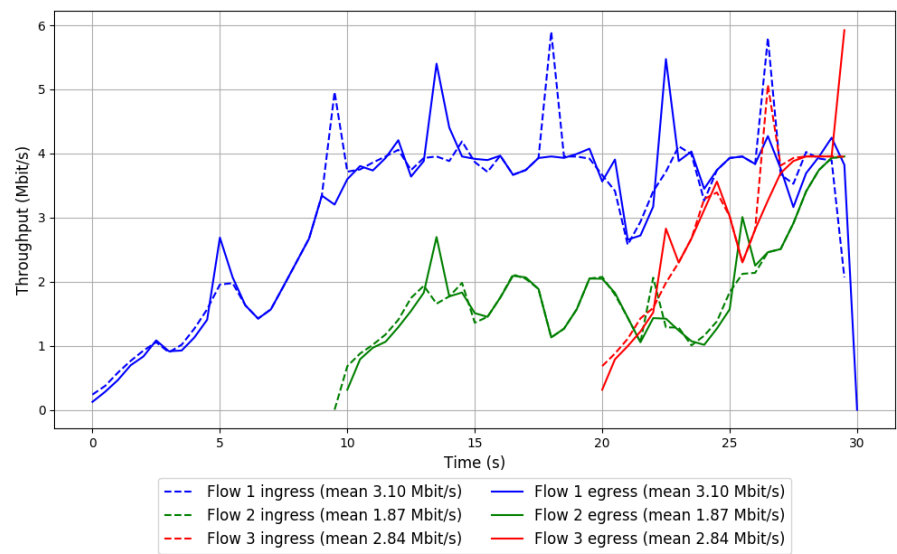
-- Flow 3:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 112.111 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

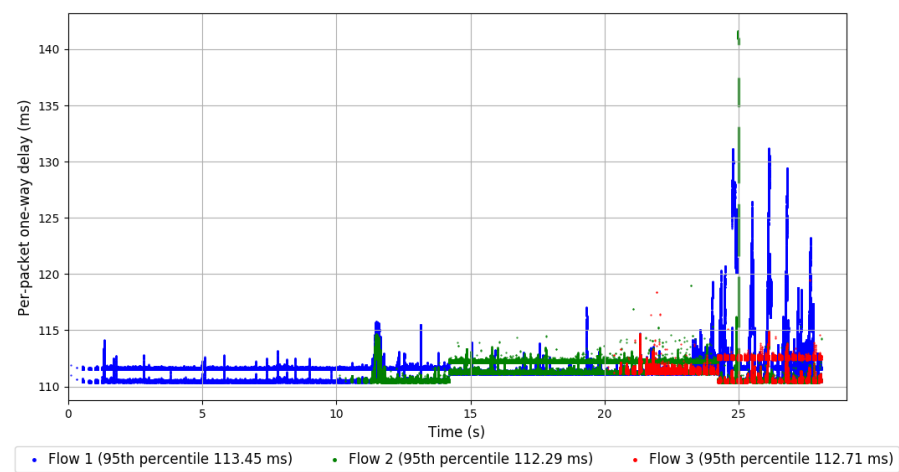
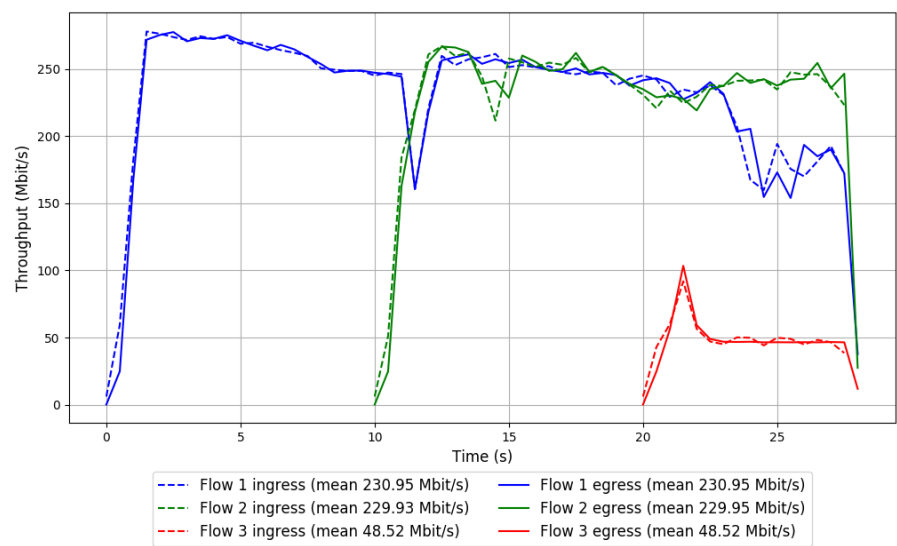


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-12 00:47:07
End at: 2017-12-12 00:47:37

# Below is generated by plot.py at 2017-12-12 04:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 392.33 Mbit/s
95th percentile per-packet one-way delay: 112.582 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 230.95 Mbit/s
95th percentile per-packet one-way delay: 113.448 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 229.95 Mbit/s
95th percentile per-packet one-way delay: 112.286 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 48.52 Mbit/s
95th percentile per-packet one-way delay: 112.710 ms
Loss rate: 0.01%
```


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

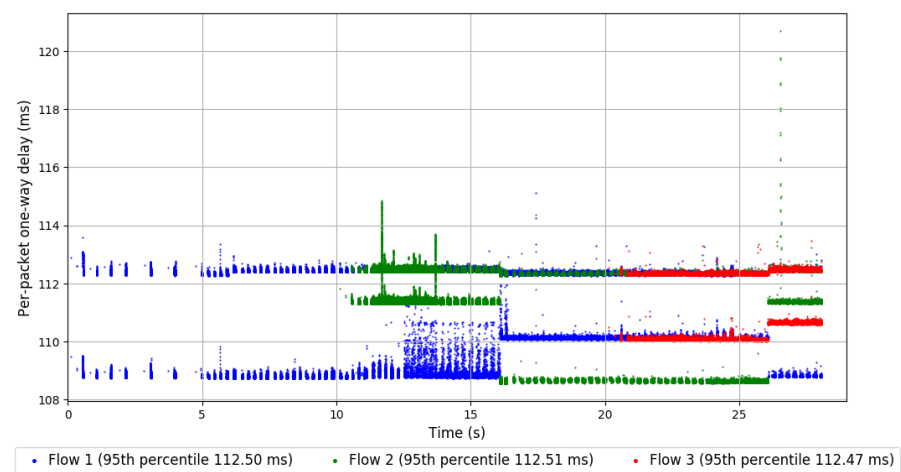
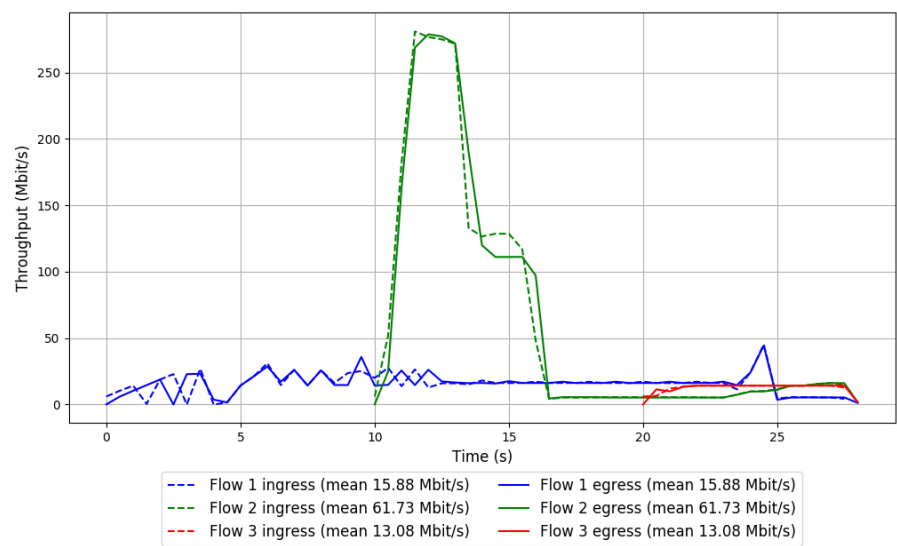


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-12 01:00:46
End at: 2017-12-12 01:01:16

# Below is generated by plot.py at 2017-12-12 04:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.20 Mbit/s
95th percentile per-packet one-way delay: 112.504 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 15.88 Mbit/s
95th percentile per-packet one-way delay: 112.496 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.73 Mbit/s
95th percentile per-packet one-way delay: 112.507 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.08 Mbit/s
95th percentile per-packet one-way delay: 112.474 ms
Loss rate: 0.00%
```

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

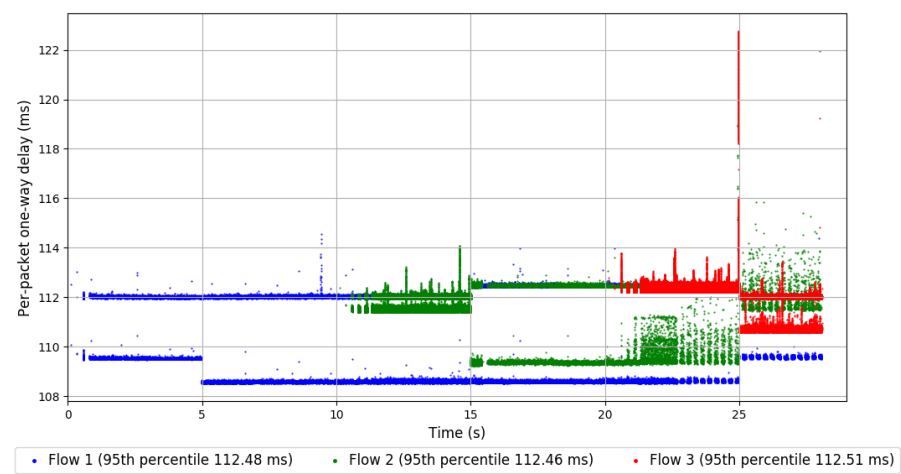
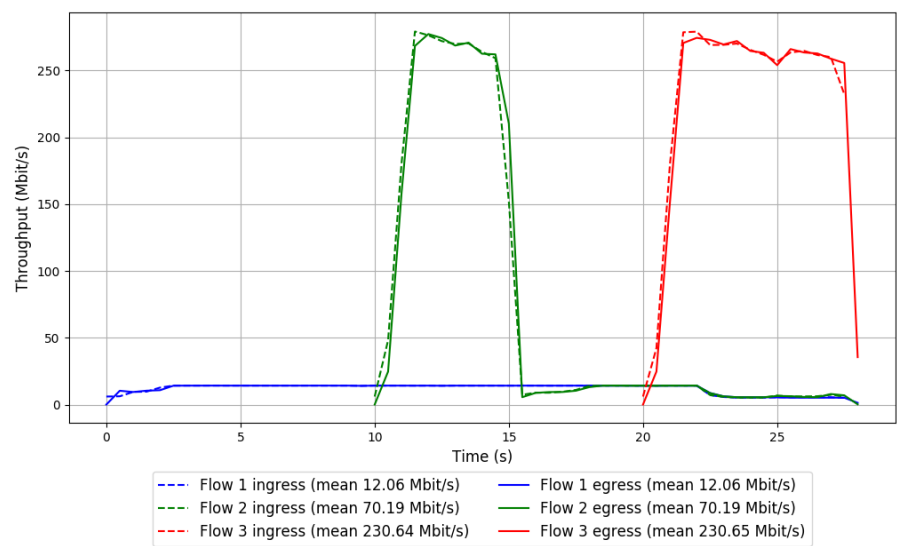


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-12 01:14:07
End at: 2017-12-12 01:14:37

# Below is generated by plot.py at 2017-12-12 04:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 122.57 Mbit/s
95th percentile per-packet one-way delay: 112.499 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 12.06 Mbit/s
95th percentile per-packet one-way delay: 112.480 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 70.19 Mbit/s
95th percentile per-packet one-way delay: 112.457 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 230.65 Mbit/s
95th percentile per-packet one-way delay: 112.512 ms
Loss rate: 0.02%
```

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

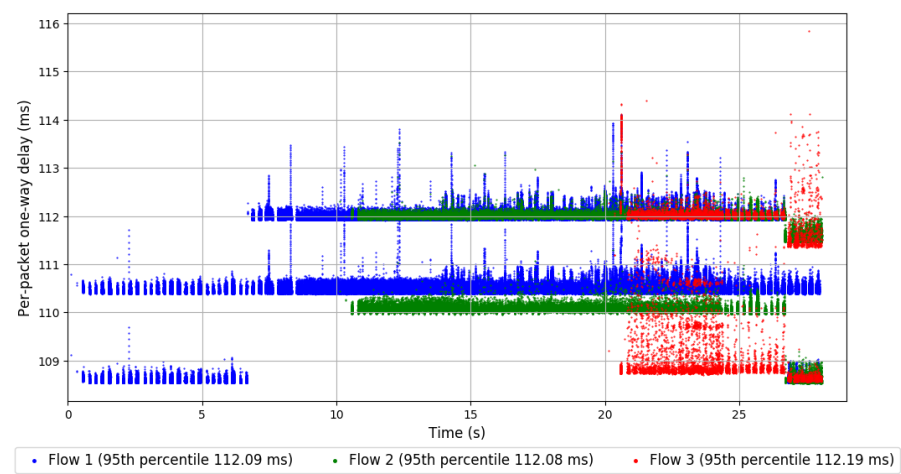
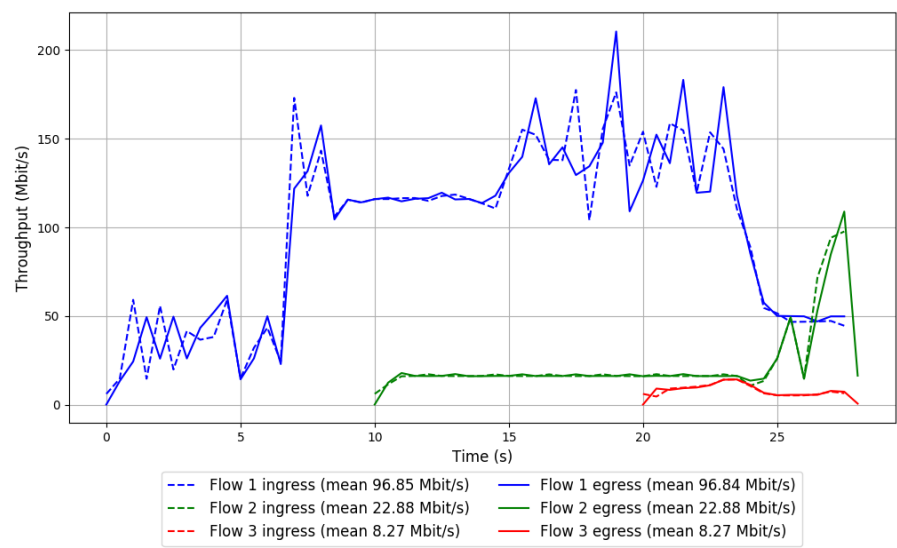


```
Run 4: Statistics of TaoVA-100x

Start at: 2017-12-12 01:27:15
End at: 2017-12-12 01:27:45

# Below is generated by plot.py at 2017-12-12 04:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 113.56 Mbit/s
95th percentile per-packet one-way delay: 112.092 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.84 Mbit/s
95th percentile per-packet one-way delay: 112.093 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 22.88 Mbit/s
95th percentile per-packet one-way delay: 112.077 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 112.193 ms
Loss rate: 0.02%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-12 01:40:22

End at: 2017-12-12 01:40:52

Below is generated by plot.py at 2017-12-12 04:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 293.36 Mbit/s

95th percentile per-packet one-way delay: 111.716 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 192.86 Mbit/s

95th percentile per-packet one-way delay: 110.749 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 152.86 Mbit/s

95th percentile per-packet one-way delay: 112.412 ms

Loss rate: 0.00%

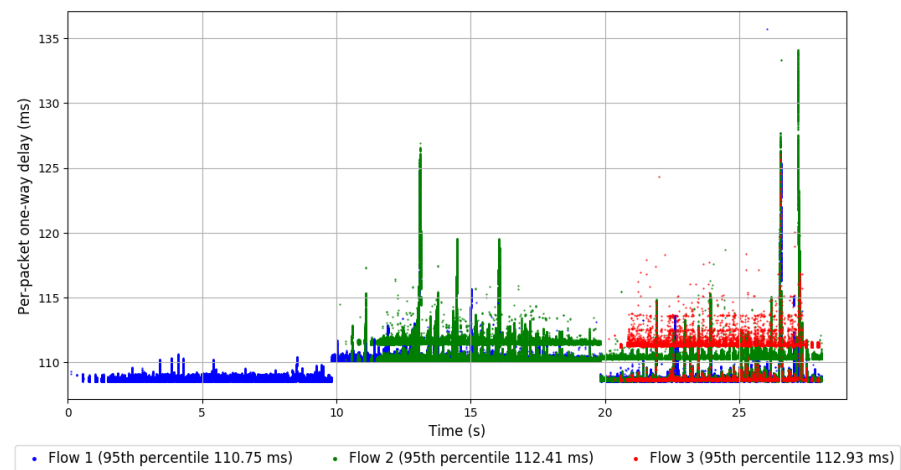
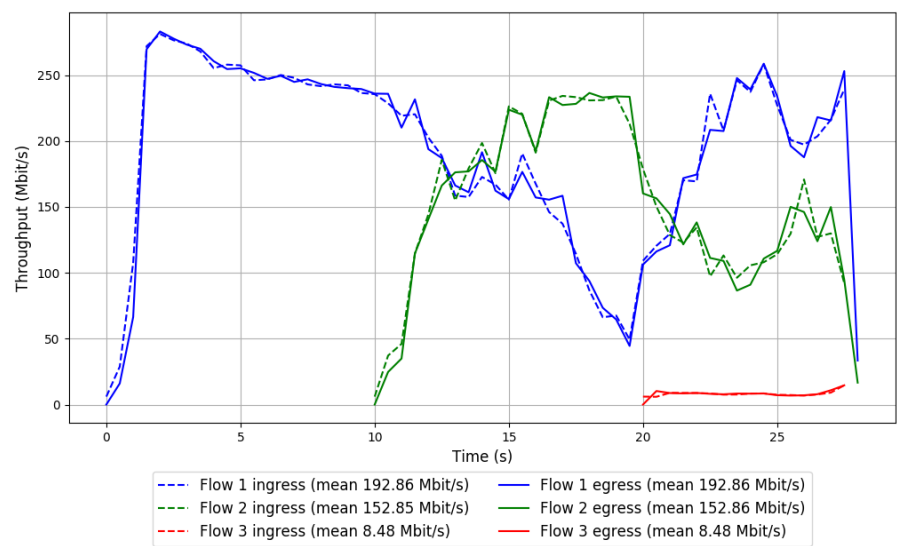
-- Flow 3:

Average throughput: 8.48 Mbit/s

95th percentile per-packet one-way delay: 112.927 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-12 01:53:49

End at: 2017-12-12 01:54:19

Below is generated by plot.py at 2017-12-12 04:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 154.99 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 129.11 Mbit/s

95th percentile per-packet one-way delay: 112.716 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 12.25 Mbit/s

95th percentile per-packet one-way delay: 112.710 ms

Loss rate: 0.00%

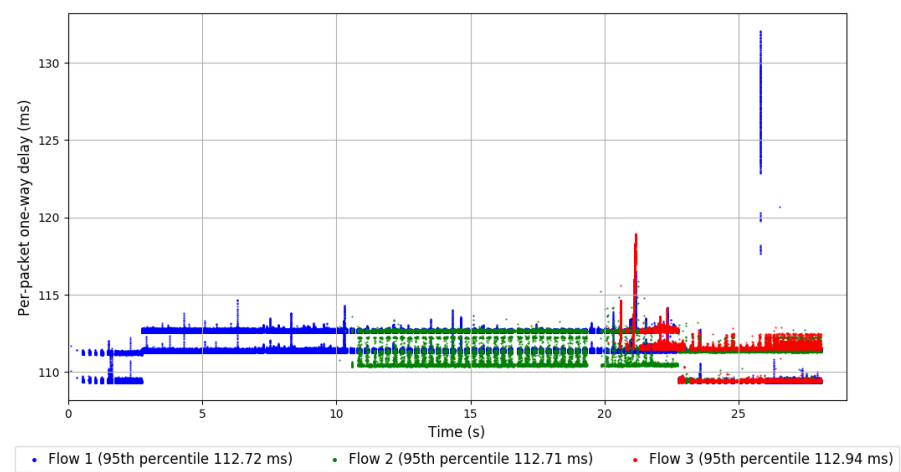
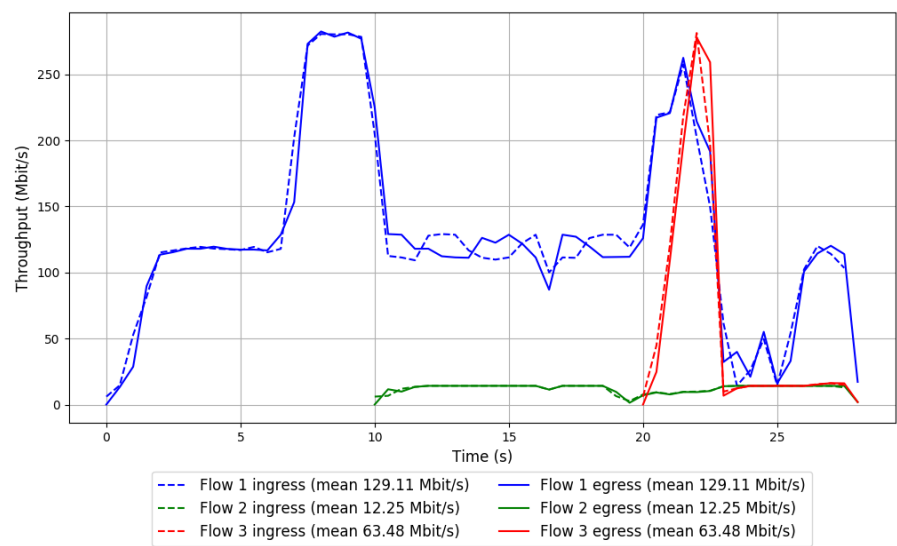
-- Flow 3:

Average throughput: 63.48 Mbit/s

95th percentile per-packet one-way delay: 112.940 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-12 02:07:20

End at: 2017-12-12 02:07:50

Below is generated by plot.py at 2017-12-12 04:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 105.59 Mbit/s

95th percentile per-packet one-way delay: 111.671 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 39.03 Mbit/s

95th percentile per-packet one-way delay: 111.245 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 98.73 Mbit/s

95th percentile per-packet one-way delay: 111.996 ms

Loss rate: 0.00%

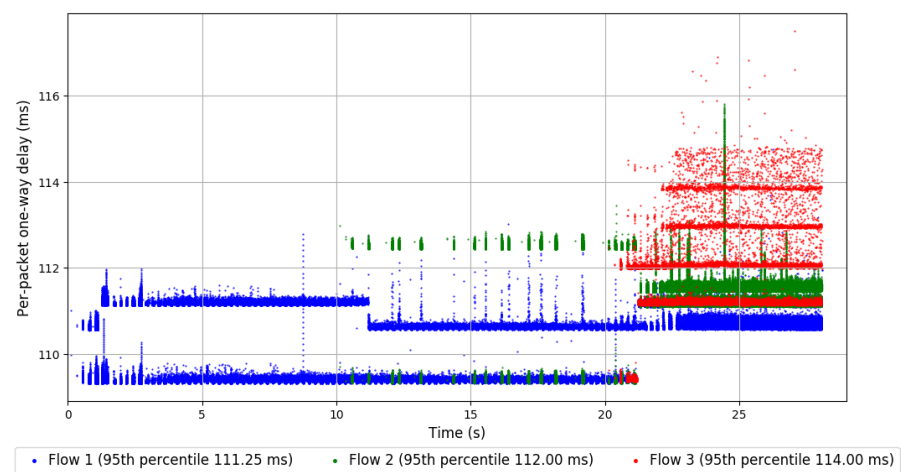
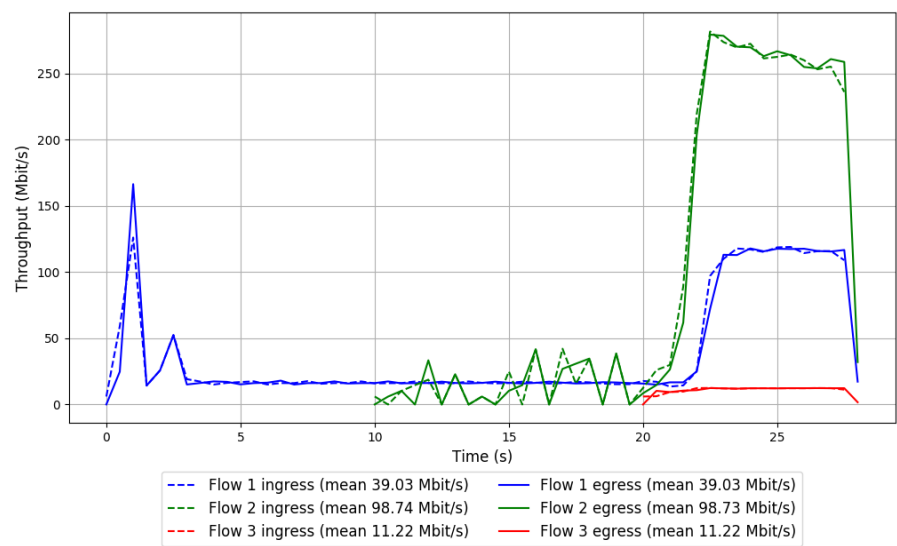
-- Flow 3:

Average throughput: 11.22 Mbit/s

95th percentile per-packet one-way delay: 113.998 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-12 02:20:41

End at: 2017-12-12 02:21:11

Below is generated by plot.py at 2017-12-12 04:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 259.43 Mbit/s

95th percentile per-packet one-way delay: 112.255 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 185.81 Mbit/s

95th percentile per-packet one-way delay: 112.262 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 14.06 Mbit/s

95th percentile per-packet one-way delay: 112.545 ms

Loss rate: 0.15%

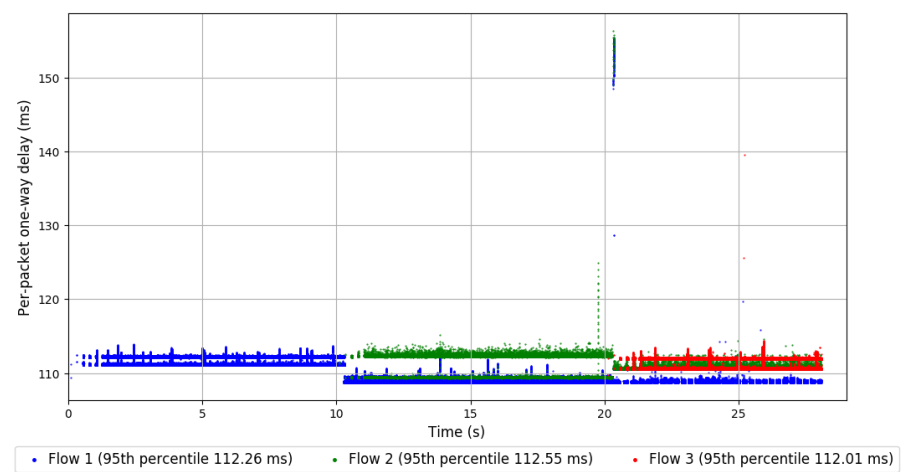
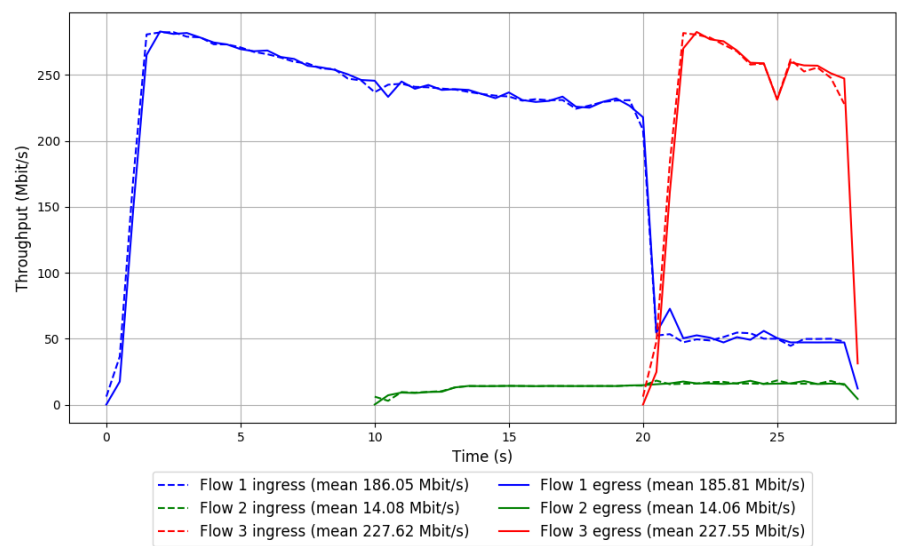
-- Flow 3:

Average throughput: 227.55 Mbit/s

95th percentile per-packet one-way delay: 112.009 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-12 02:34:21

End at: 2017-12-12 02:34:51

Below is generated by plot.py at 2017-12-12 04:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 234.92 Mbit/s

95th percentile per-packet one-way delay: 111.171 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 20.59 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 236.95 Mbit/s

95th percentile per-packet one-way delay: 110.472 ms

Loss rate: 0.00%

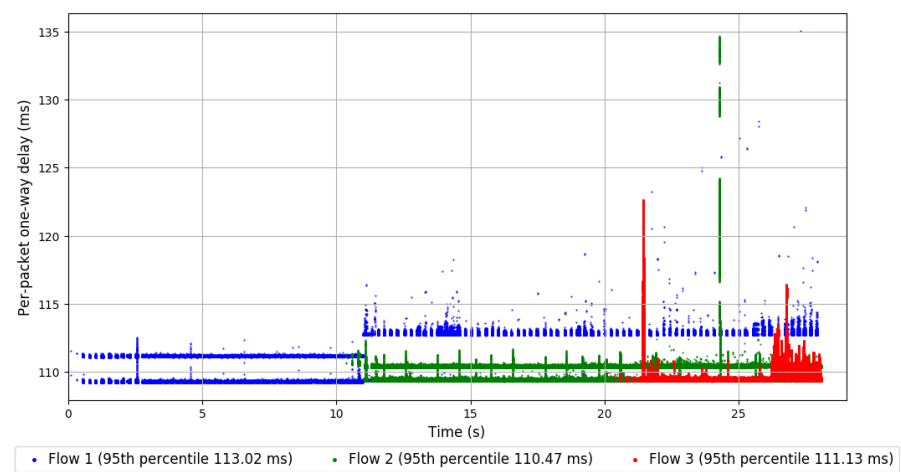
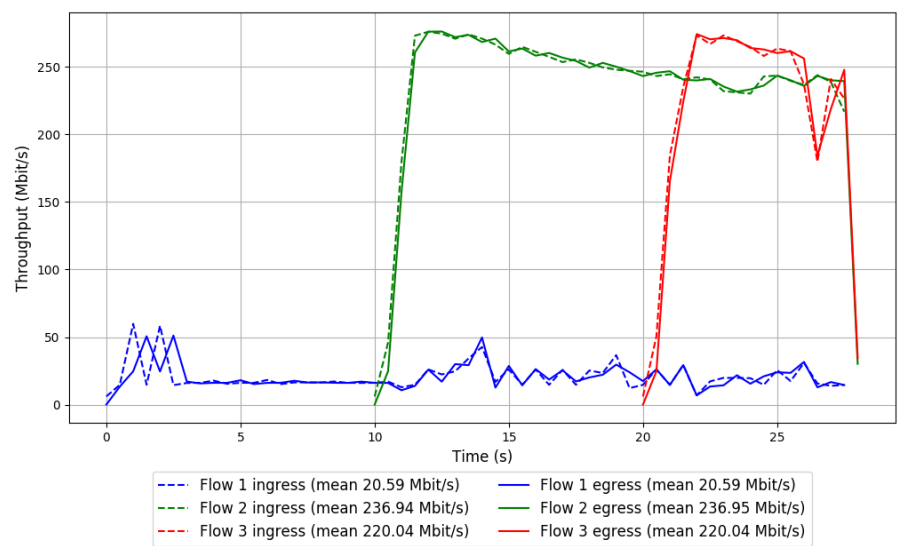
-- Flow 3:

Average throughput: 220.04 Mbit/s

95th percentile per-packet one-way delay: 111.130 ms

Loss rate: 0.00%

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

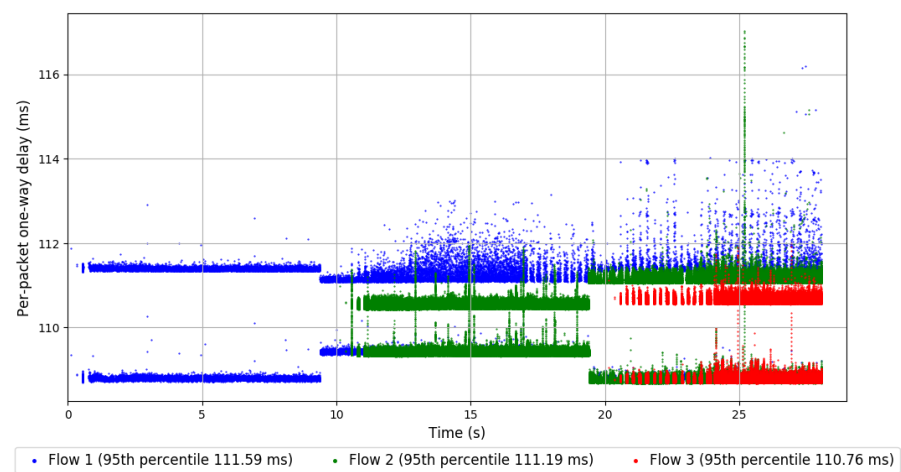
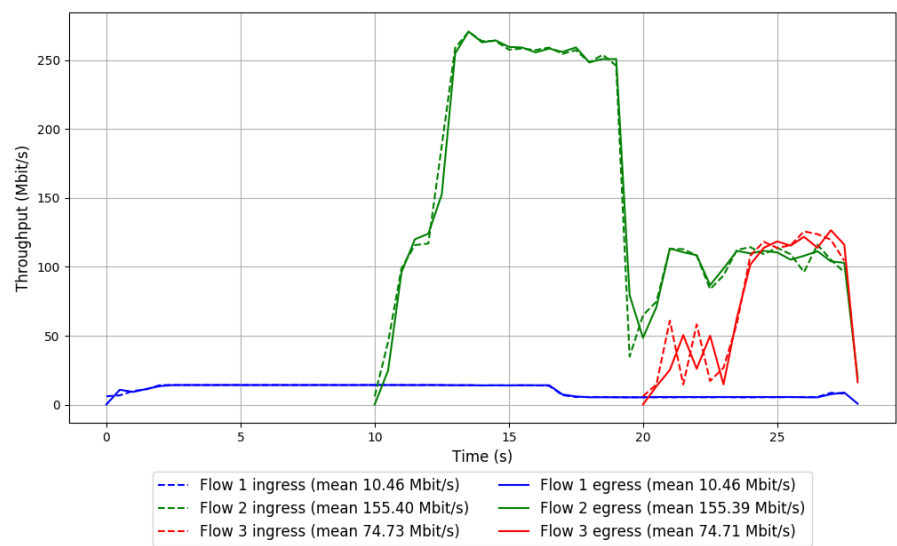


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-12 02:47:42
End at: 2017-12-12 02:48:12

# Below is generated by plot.py at 2017-12-12 04:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 131.43 Mbit/s
95th percentile per-packet one-way delay: 111.239 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.46 Mbit/s
95th percentile per-packet one-way delay: 111.586 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 155.39 Mbit/s
95th percentile per-packet one-way delay: 111.192 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 74.71 Mbit/s
95th percentile per-packet one-way delay: 110.763 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-12 00:43:58

End at: 2017-12-12 00:44:28

Below is generated by plot.py at 2017-12-12 04:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.61 Mbit/s

95th percentile per-packet one-way delay: 118.284 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 32.05 Mbit/s

95th percentile per-packet one-way delay: 115.343 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.46 Mbit/s

95th percentile per-packet one-way delay: 117.640 ms

Loss rate: 0.00%

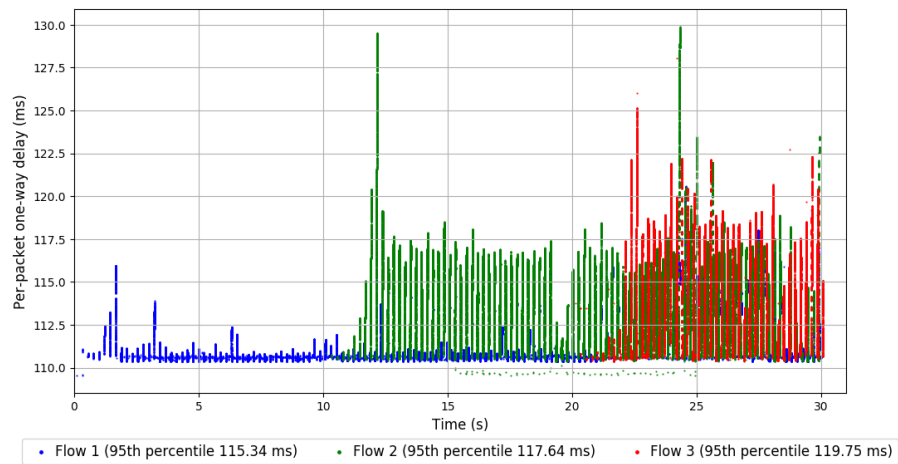
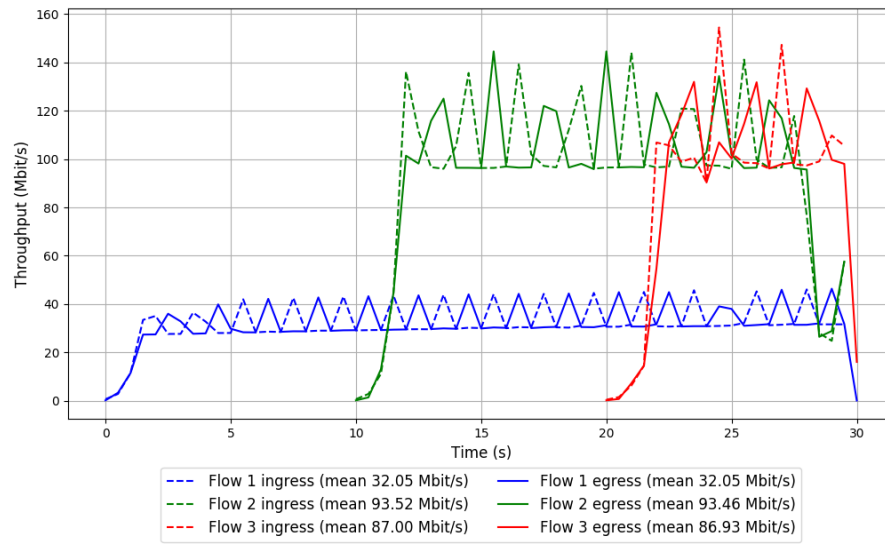
-- Flow 3:

Average throughput: 86.93 Mbit/s

95th percentile per-packet one-way delay: 119.751 ms

Loss rate: 0.08%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-12 00:57:44

End at: 2017-12-12 00:58:14

Below is generated by plot.py at 2017-12-12 04:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.83 Mbit/s

95th percentile per-packet one-way delay: 120.402 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 6.96 Mbit/s

95th percentile per-packet one-way delay: 113.957 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 49.00 Mbit/s

95th percentile per-packet one-way delay: 120.492 ms

Loss rate: 0.01%

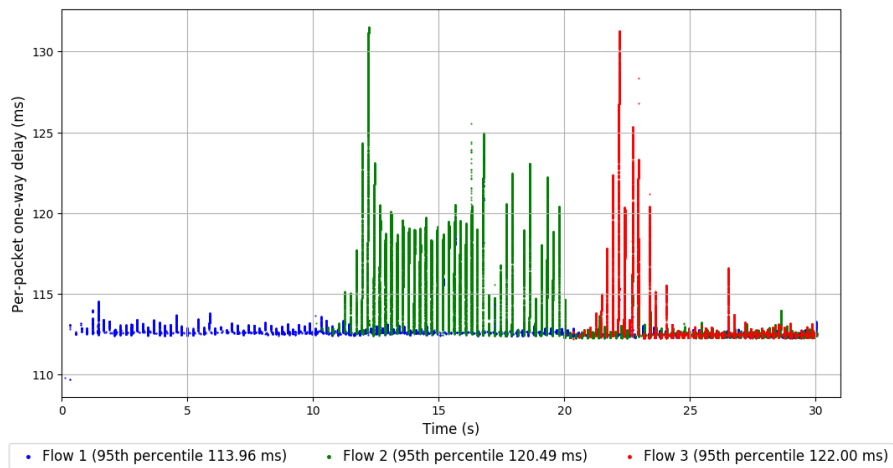
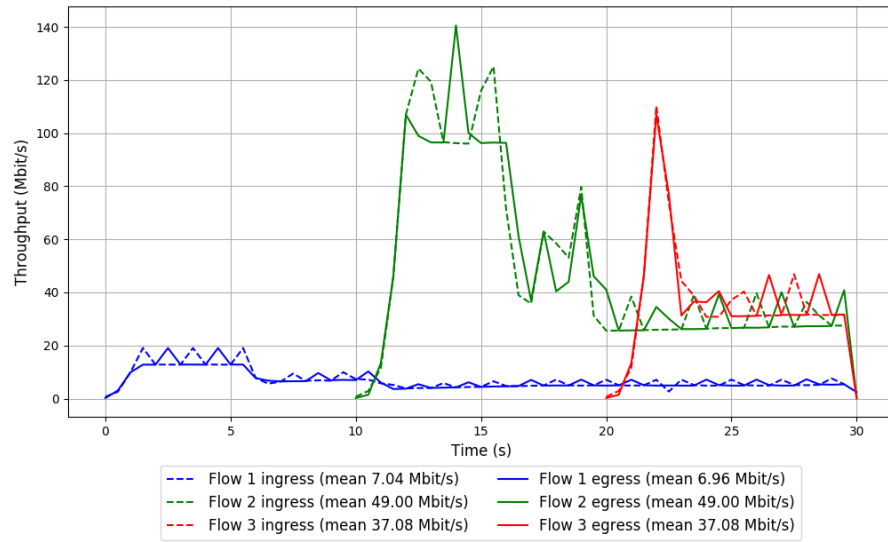
-- Flow 3:

Average throughput: 37.08 Mbit/s

95th percentile per-packet one-way delay: 122.002 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-12 01:11:04

End at: 2017-12-12 01:11:34

Below is generated by plot.py at 2017-12-12 04:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.51 Mbit/s

95th percentile per-packet one-way delay: 114.025 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.03 Mbit/s

95th percentile per-packet one-way delay: 114.221 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 17.16 Mbit/s

95th percentile per-packet one-way delay: 113.663 ms

Loss rate: 0.00%

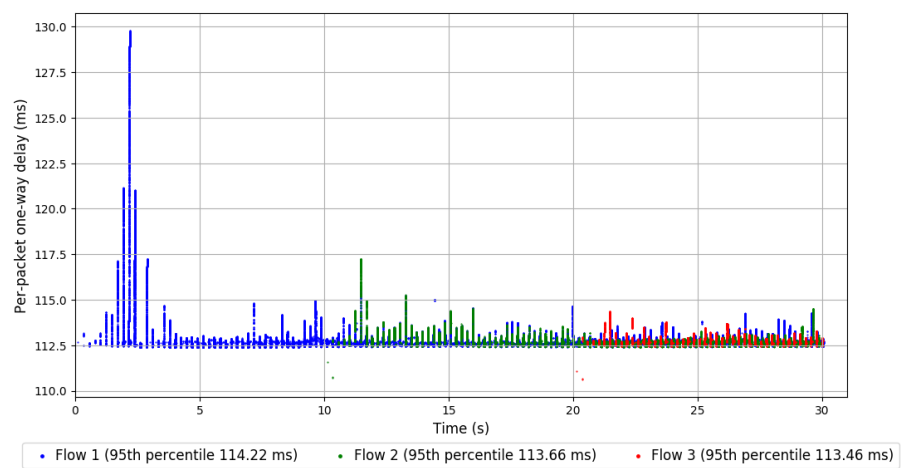
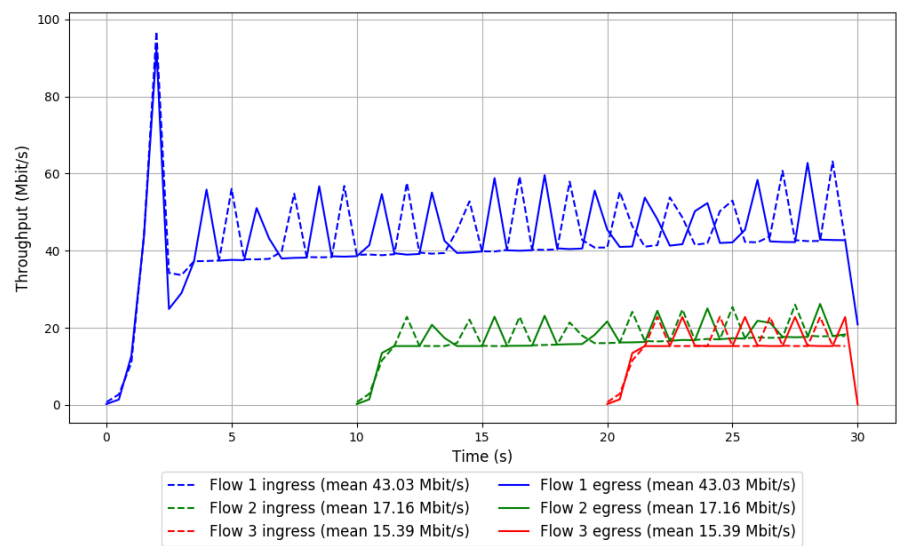
-- Flow 3:

Average throughput: 15.39 Mbit/s

95th percentile per-packet one-way delay: 113.459 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-12 01:24:15

End at: 2017-12-12 01:24:45

Below is generated by plot.py at 2017-12-12 04:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 37.53 Mbit/s

95th percentile per-packet one-way delay: 115.071 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 20.50 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 8.94 Mbit/s

95th percentile per-packet one-way delay: 113.115 ms

Loss rate: 0.00%

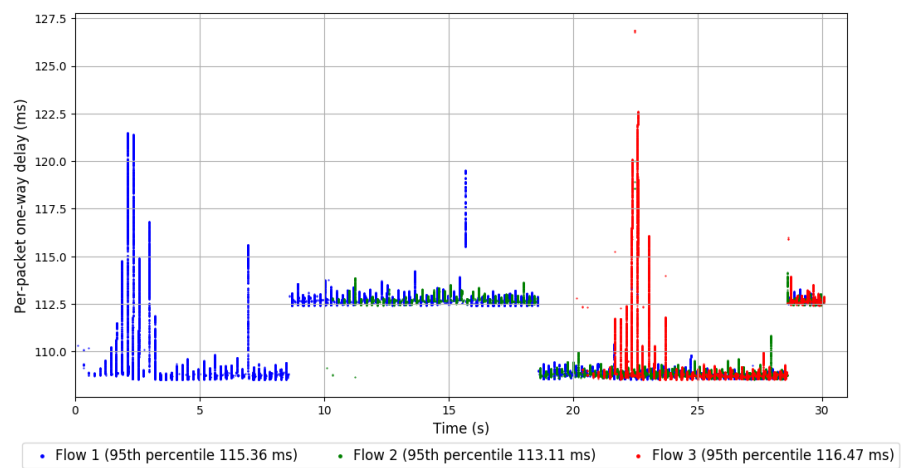
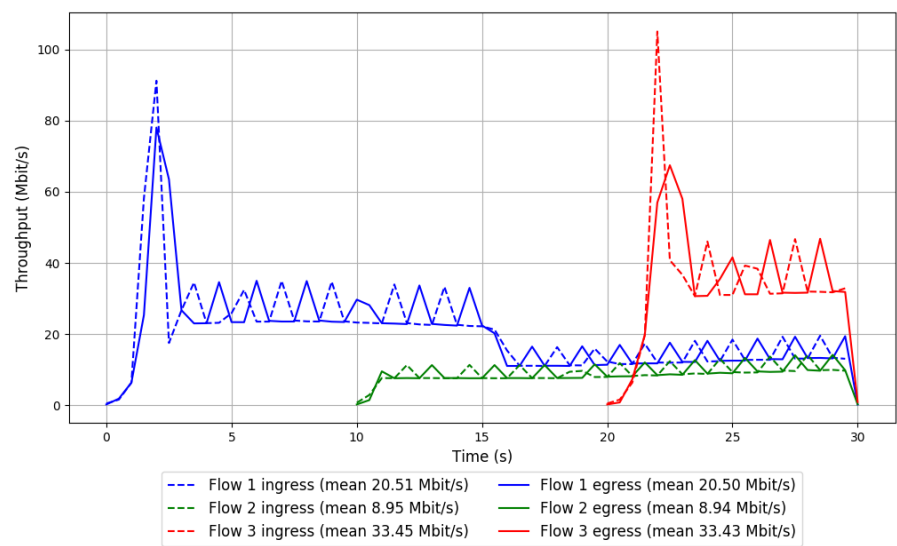
-- Flow 3:

Average throughput: 33.43 Mbit/s

95th percentile per-packet one-way delay: 116.474 ms

Loss rate: 0.07%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-12 01:37:18

End at: 2017-12-12 01:37:48

Below is generated by plot.py at 2017-12-12 04:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.59 Mbit/s

95th percentile per-packet one-way delay: 117.012 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 42.67 Mbit/s

95th percentile per-packet one-way delay: 117.255 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 29.69 Mbit/s

95th percentile per-packet one-way delay: 115.743 ms

Loss rate: 0.01%

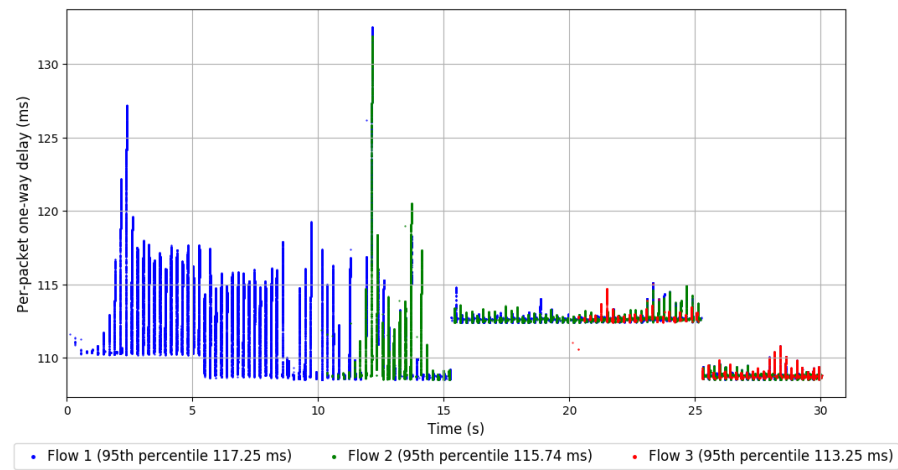
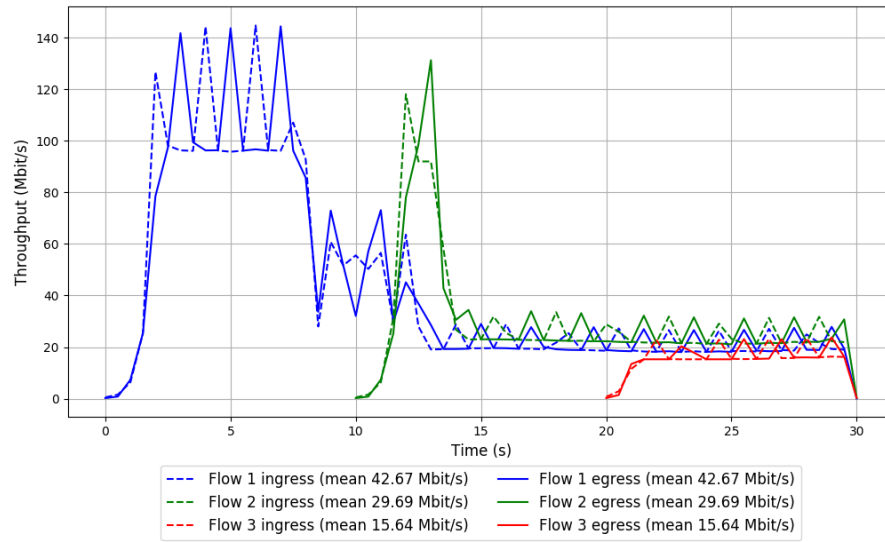
-- Flow 3:

Average throughput: 15.64 Mbit/s

95th percentile per-packet one-way delay: 113.254 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-12 01:50:45

End at: 2017-12-12 01:51:15

Below is generated by plot.py at 2017-12-12 04:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 63.26 Mbit/s

95th percentile per-packet one-way delay: 117.922 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 40.72 Mbit/s

95th percentile per-packet one-way delay: 118.120 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 18.66 Mbit/s

95th percentile per-packet one-way delay: 112.540 ms

Loss rate: 0.03%

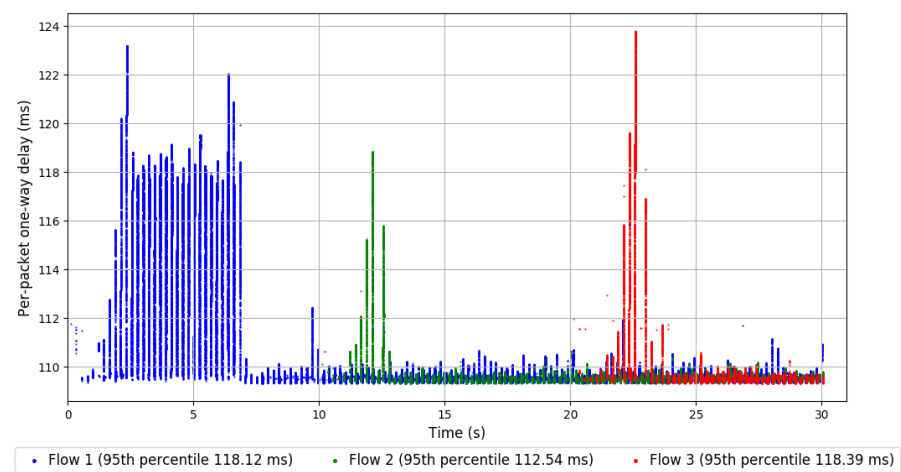
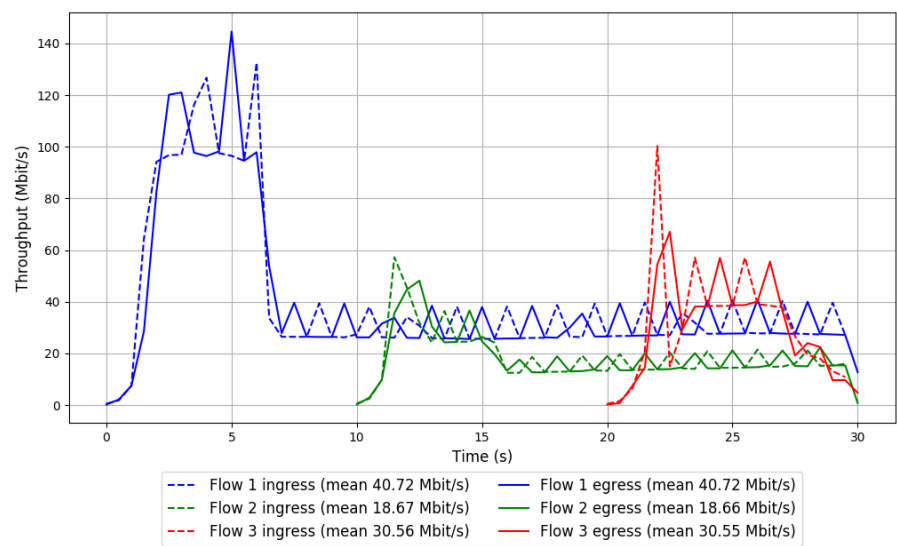
-- Flow 3:

Average throughput: 30.55 Mbit/s

95th percentile per-packet one-way delay: 118.392 ms

Loss rate: 0.04%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-12 02:04:19

End at: 2017-12-12 02:04:49

Below is generated by plot.py at 2017-12-12 04:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.17 Mbit/s

95th percentile per-packet one-way delay: 113.317 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 8.08 Mbit/s

95th percentile per-packet one-way delay: 113.196 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 16.37 Mbit/s

95th percentile per-packet one-way delay: 113.276 ms

Loss rate: 0.00%

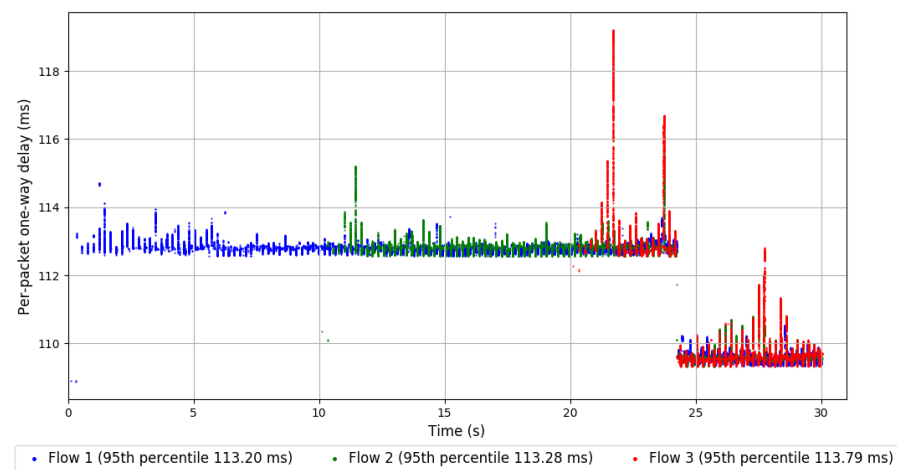
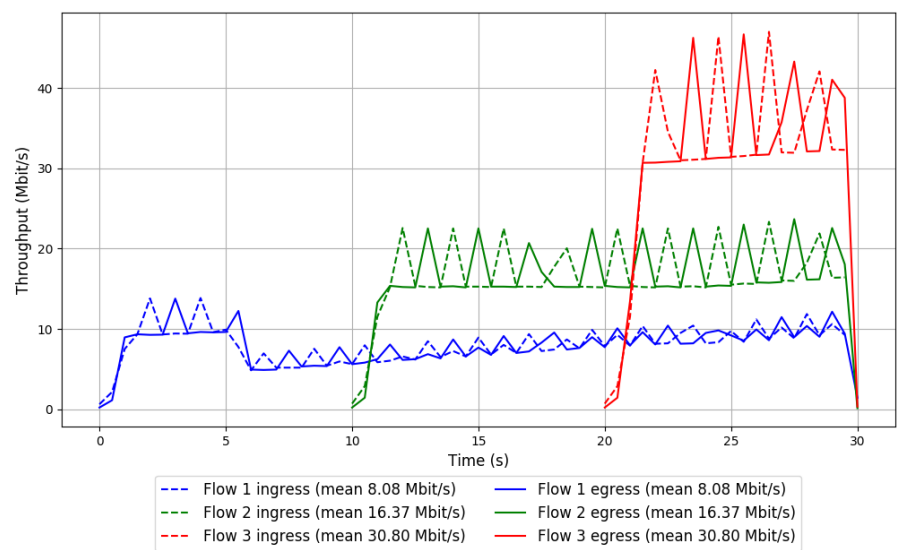
-- Flow 3:

Average throughput: 30.80 Mbit/s

95th percentile per-packet one-way delay: 113.793 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-12 02:17:38

End at: 2017-12-12 02:18:08

Below is generated by plot.py at 2017-12-12 04:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.97 Mbit/s

95th percentile per-packet one-way delay: 117.883 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 62.26 Mbit/s

95th percentile per-packet one-way delay: 116.829 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 34.98 Mbit/s

95th percentile per-packet one-way delay: 118.251 ms

Loss rate: 0.00%

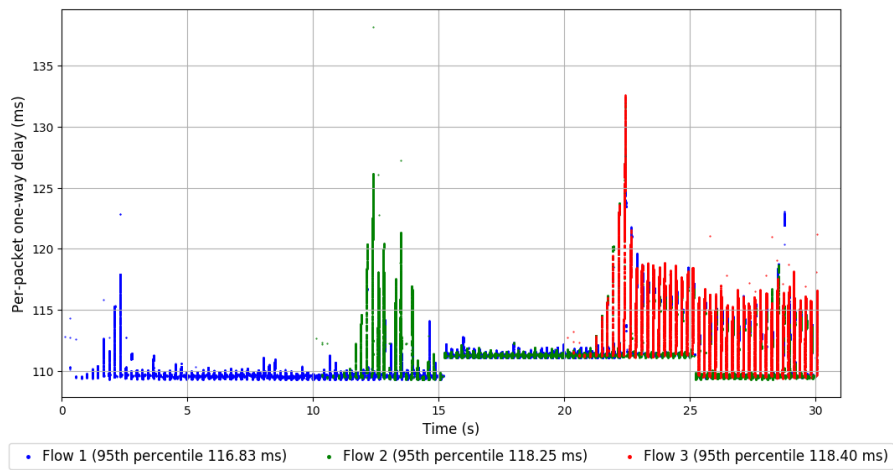
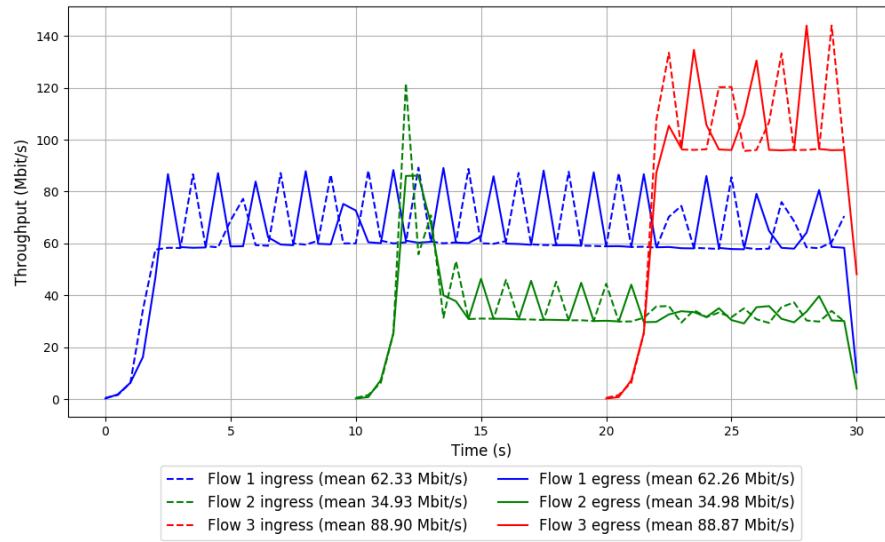
-- Flow 3:

Average throughput: 88.87 Mbit/s

95th percentile per-packet one-way delay: 118.398 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-12 02:31:20

End at: 2017-12-12 02:31:50

Below is generated by plot.py at 2017-12-12 04:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.32 Mbit/s

95th percentile per-packet one-way delay: 116.081 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 57.22 Mbit/s

95th percentile per-packet one-way delay: 116.470 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 56.56 Mbit/s

95th percentile per-packet one-way delay: 112.754 ms

Loss rate: 0.00%

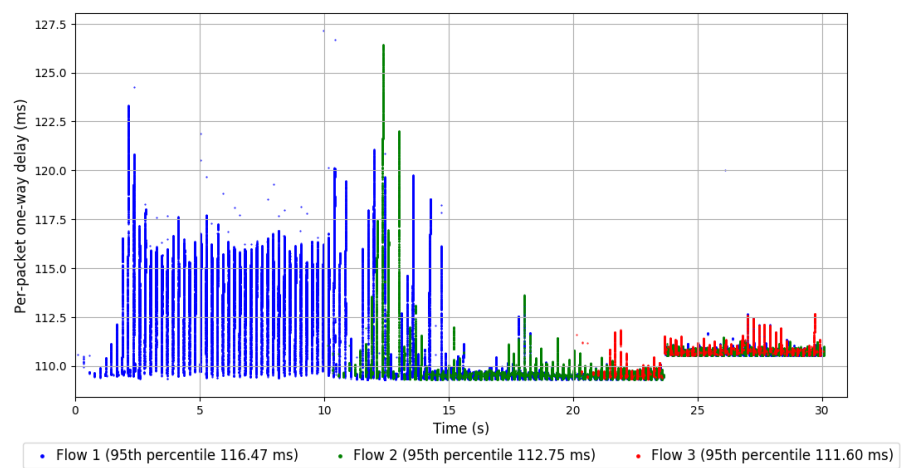
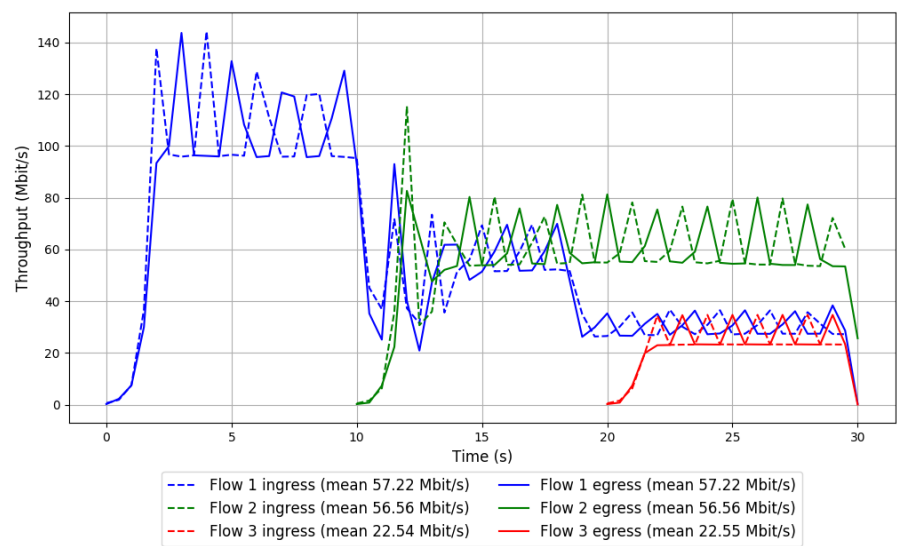
-- Flow 3:

Average throughput: 22.55 Mbit/s

95th percentile per-packet one-way delay: 111.598 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-12 02:44:42

End at: 2017-12-12 02:45:12

Below is generated by plot.py at 2017-12-12 04:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 57.00 Mbit/s

95th percentile per-packet one-way delay: 116.023 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 15.07 Mbit/s

95th percentile per-packet one-way delay: 112.427 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.10 Mbit/s

95th percentile per-packet one-way delay: 112.530 ms

Loss rate: 0.00%

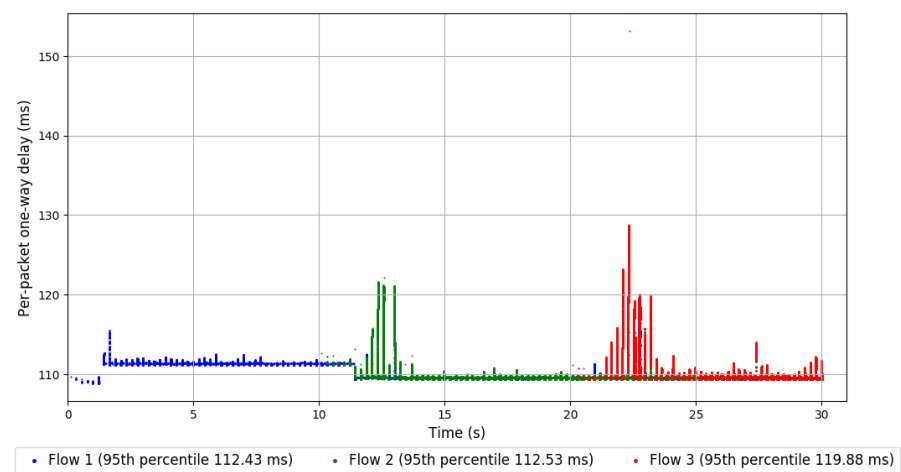
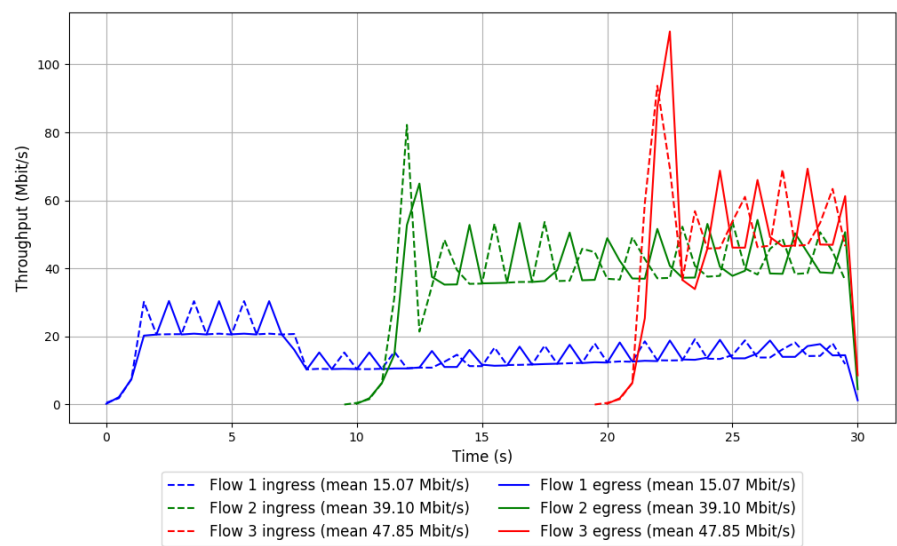
-- Flow 3:

Average throughput: 47.85 Mbit/s

95th percentile per-packet one-way delay: 119.875 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

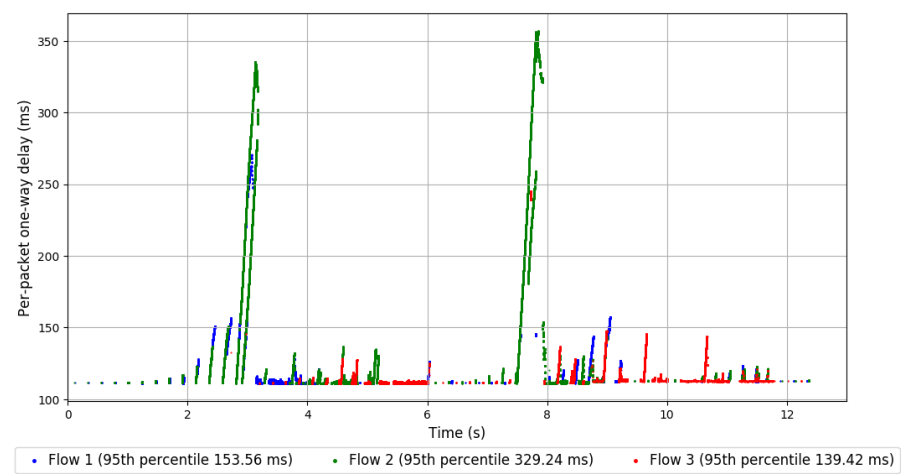
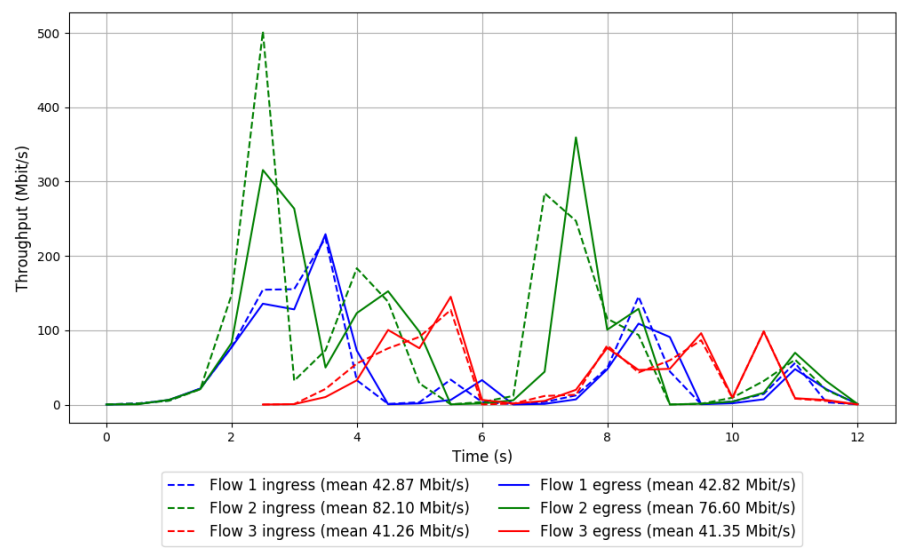


Run 1: Statistics of Verus

Start at: 2017-12-12 00:52:17

End at: 2017-12-12 00:52:47

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-12 01:05:20

End at: 2017-12-12 01:05:50

Below is generated by plot.py at 2017-12-12 04:32:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 258.44 Mbit/s

95th percentile per-packet one-way delay: 337.559 ms

Loss rate: 11.07%

-- Flow 1:

Average throughput: 196.36 Mbit/s

95th percentile per-packet one-way delay: 345.553 ms

Loss rate: 13.48%

-- Flow 2:

Average throughput: 78.96 Mbit/s

95th percentile per-packet one-way delay: 215.663 ms

Loss rate: 2.37%

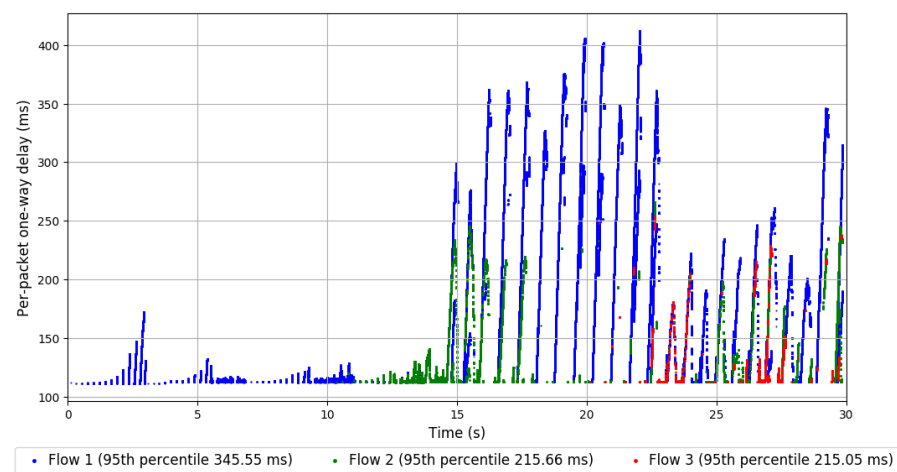
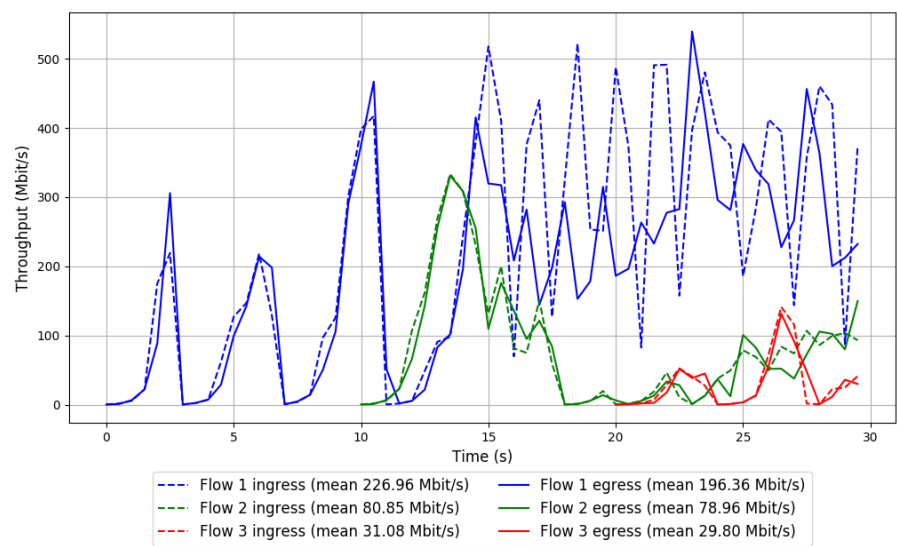
-- Flow 3:

Average throughput: 29.80 Mbit/s

95th percentile per-packet one-way delay: 215.054 ms

Loss rate: 2.89%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-12 01:18:43

End at: 2017-12-12 01:19:13

Below is generated by plot.py at 2017-12-12 04:32:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 153.69 Mbit/s

95th percentile per-packet one-way delay: 165.035 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 105.72 Mbit/s

95th percentile per-packet one-way delay: 170.199 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 44.89 Mbit/s

95th percentile per-packet one-way delay: 161.044 ms

Loss rate: 0.00%

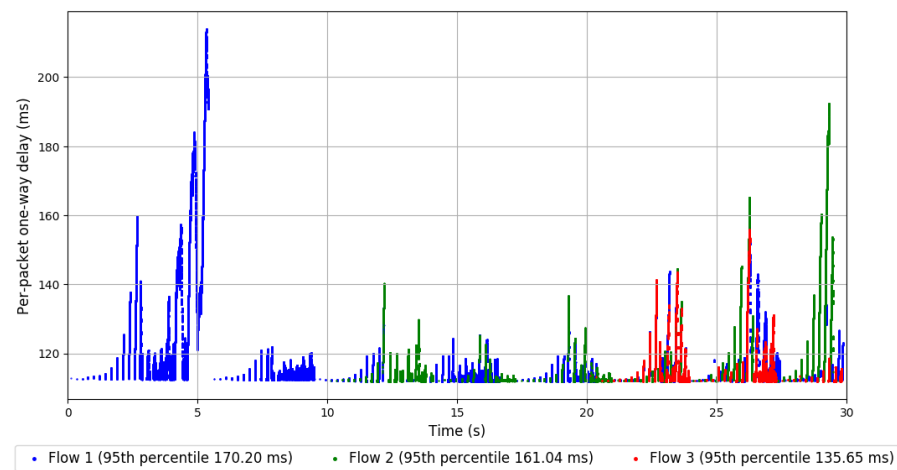
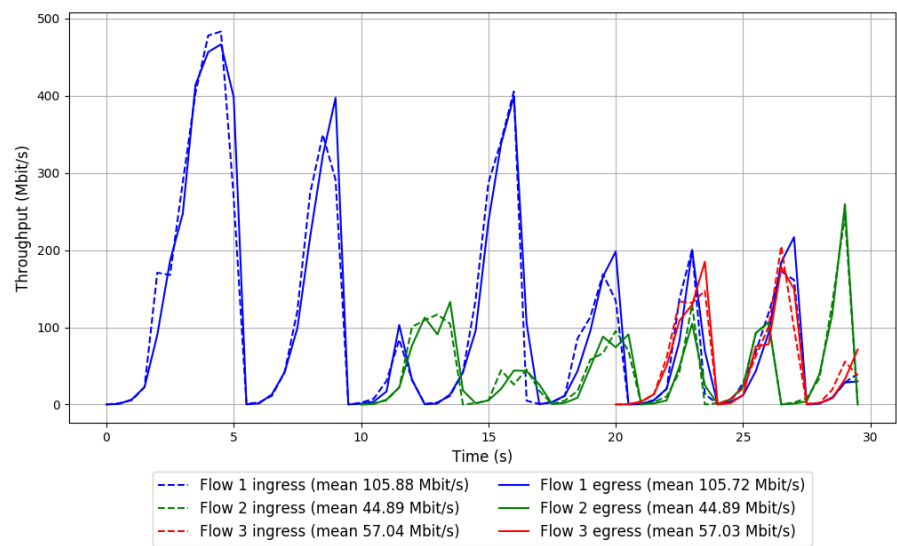
-- Flow 3:

Average throughput: 57.03 Mbit/s

95th percentile per-packet one-way delay: 135.647 ms

Loss rate: 0.00%

Run 3: Report of Verus — Data Link

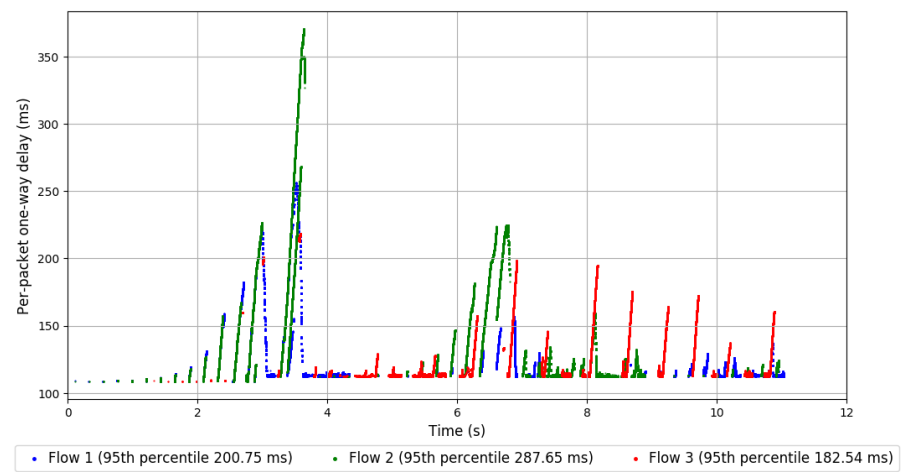
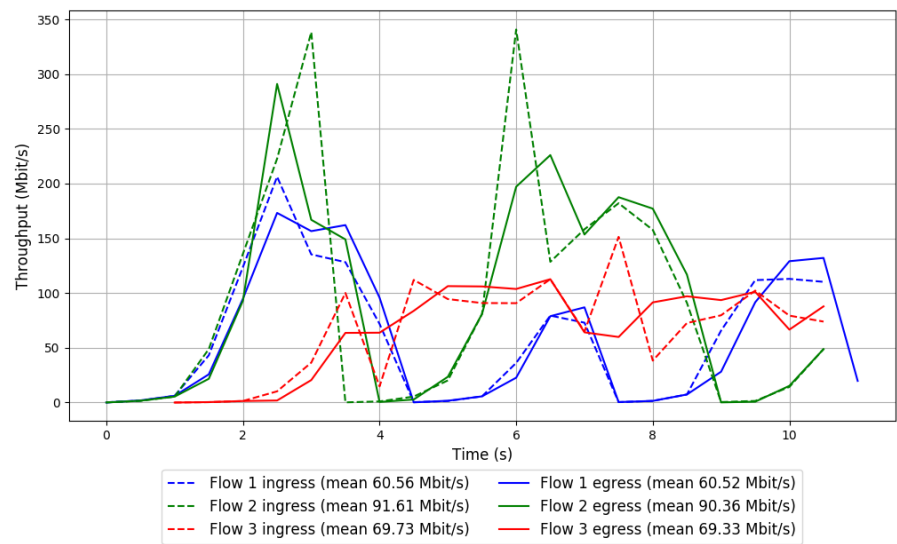


Run 4: Statistics of Verus

Start at: 2017-12-12 01:31:52

End at: 2017-12-12 01:32:22

Run 4: Report of Verus — Data Link

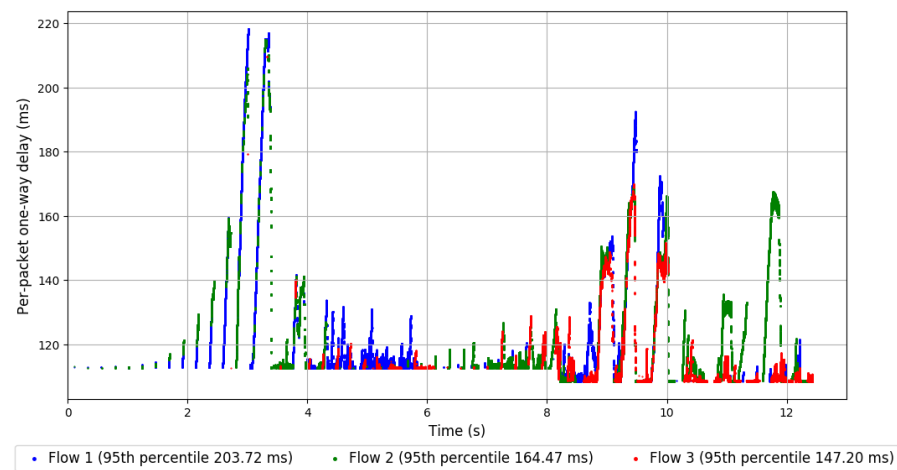
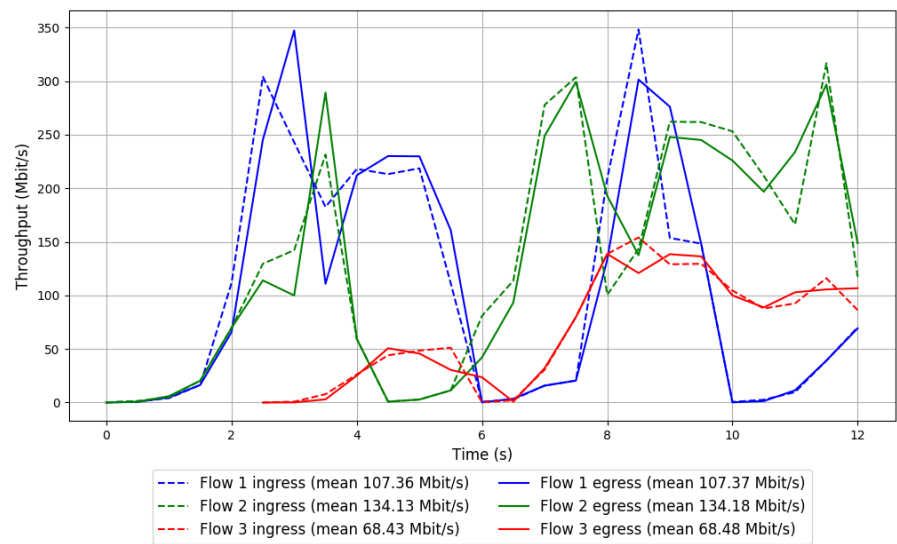


Run 5: Statistics of Verus

Start at: 2017-12-12 01:45:18

End at: 2017-12-12 01:45:48

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-12 01:58:30

End at: 2017-12-12 01:59:00

Below is generated by plot.py at 2017-12-12 04:34:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 321.08 Mbit/s

95th percentile per-packet one-way delay: 189.719 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 276.77 Mbit/s

95th percentile per-packet one-way delay: 184.358 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 46.37 Mbit/s

95th percentile per-packet one-way delay: 228.880 ms

Loss rate: 1.77%

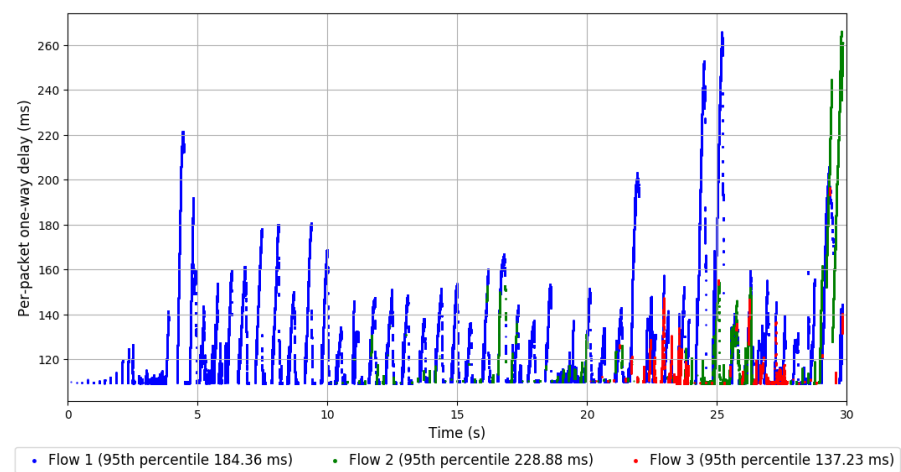
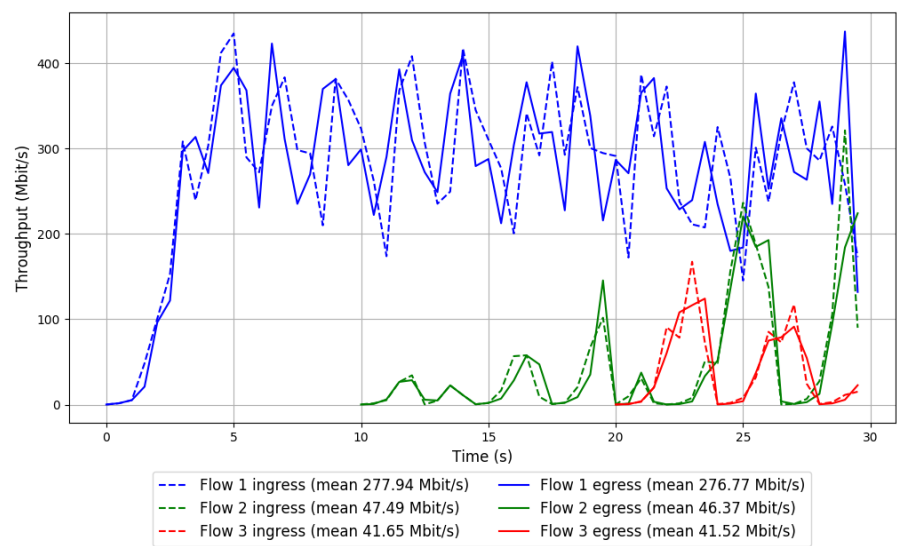
-- Flow 3:

Average throughput: 41.52 Mbit/s

95th percentile per-packet one-way delay: 137.230 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-12 02:11:56

End at: 2017-12-12 02:12:26

Below is generated by plot.py at 2017-12-12 04:34:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 277.26 Mbit/s

95th percentile per-packet one-way delay: 186.981 ms

Loss rate: 1.50%

-- Flow 1:

Average throughput: 201.01 Mbit/s

95th percentile per-packet one-way delay: 183.803 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 85.80 Mbit/s

95th percentile per-packet one-way delay: 217.350 ms

Loss rate: 5.03%

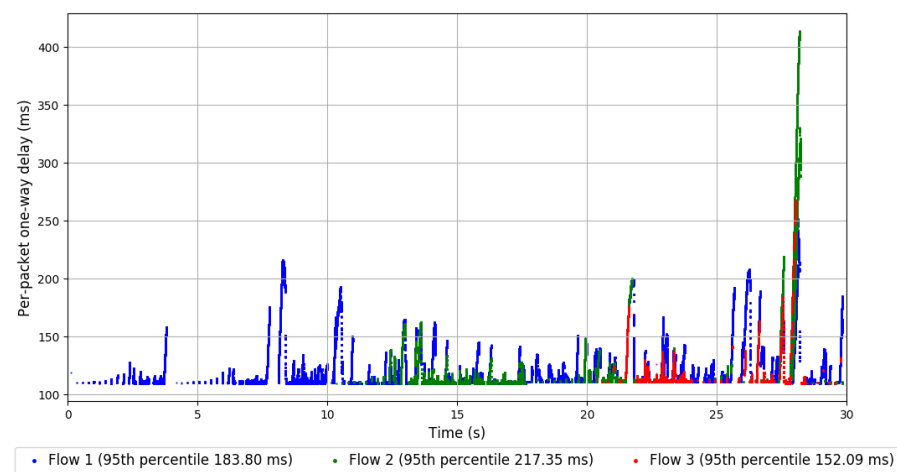
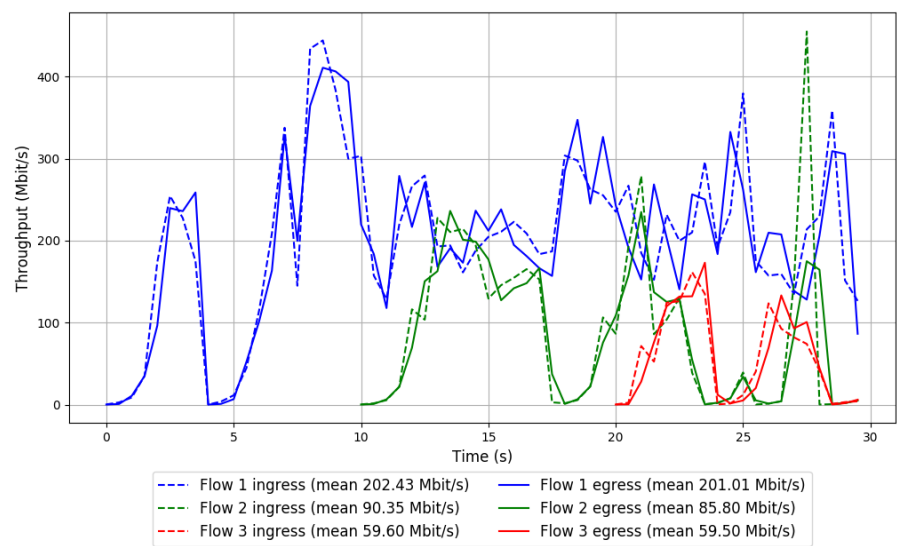
-- Flow 3:

Average throughput: 59.50 Mbit/s

95th percentile per-packet one-way delay: 152.095 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-12 02:25:35

End at: 2017-12-12 02:26:05

Below is generated by plot.py at 2017-12-12 04:34:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 276.35 Mbit/s

95th percentile per-packet one-way delay: 152.869 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 150.84 Mbit/s

95th percentile per-packet one-way delay: 149.249 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 130.01 Mbit/s

95th percentile per-packet one-way delay: 157.467 ms

Loss rate: 0.00%

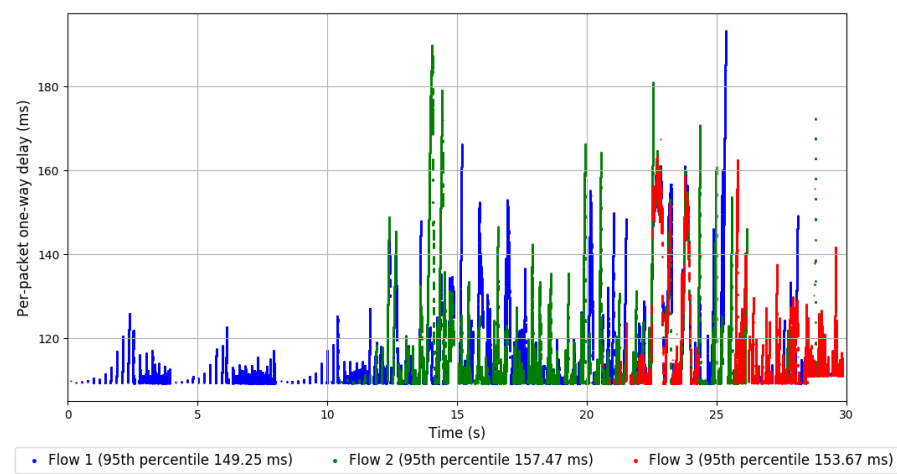
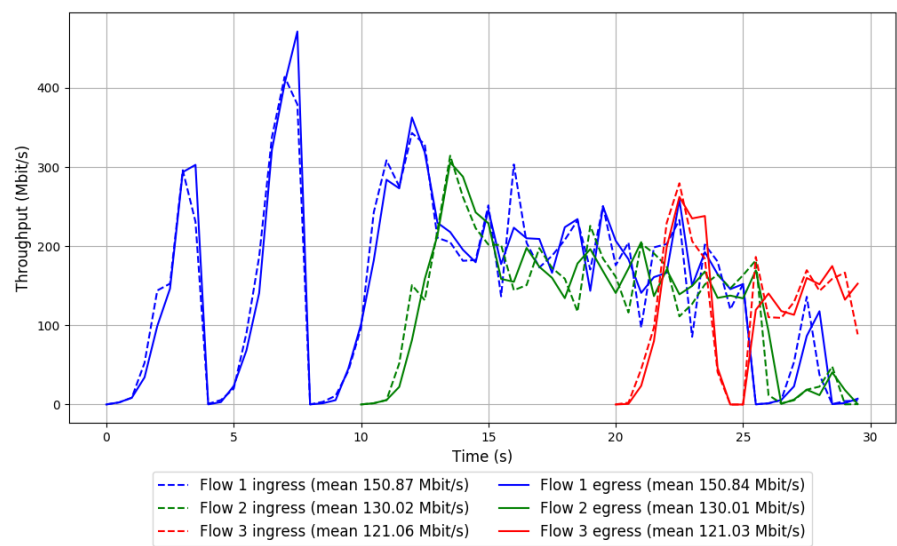
-- Flow 3:

Average throughput: 121.03 Mbit/s

95th percentile per-packet one-way delay: 153.672 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-12 02:39:12

End at: 2017-12-12 02:39:42

Below is generated by plot.py at 2017-12-12 04:34:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 149.32 Mbit/s

95th percentile per-packet one-way delay: 134.813 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 76.60 Mbit/s

95th percentile per-packet one-way delay: 121.908 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.53 Mbit/s

95th percentile per-packet one-way delay: 119.633 ms

Loss rate: 0.08%

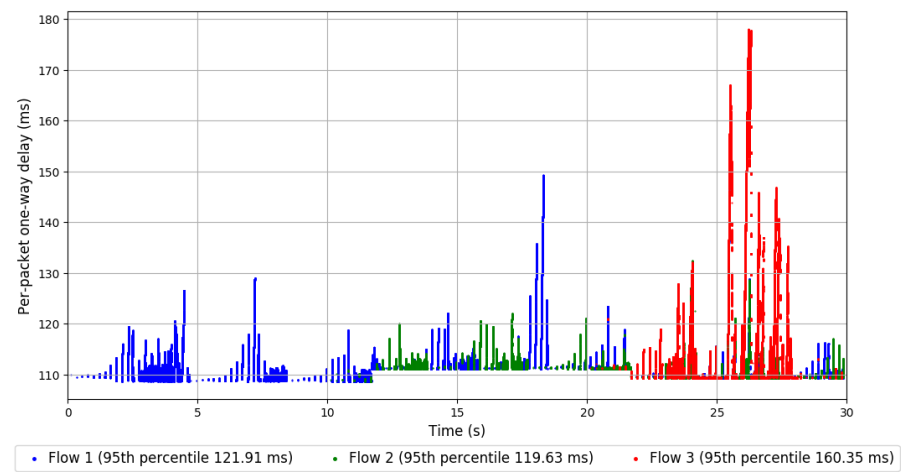
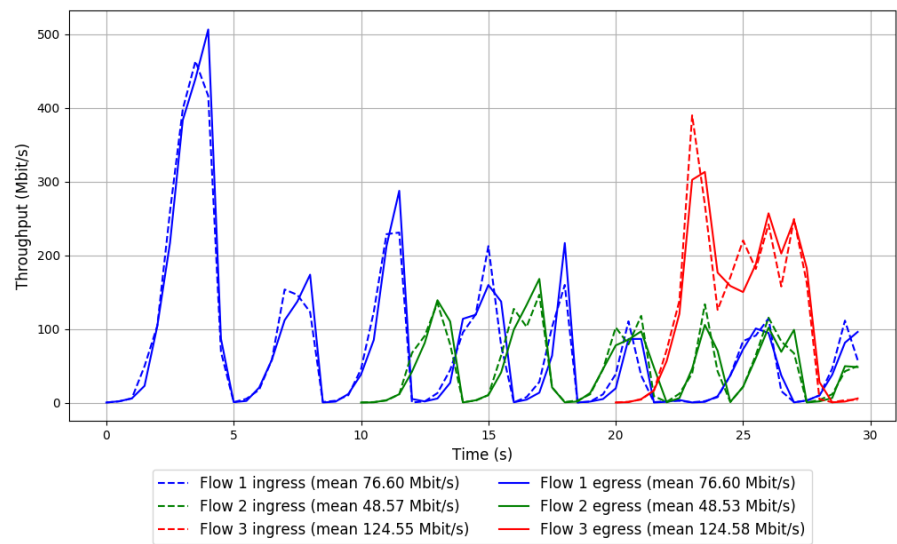
-- Flow 3:

Average throughput: 124.58 Mbit/s

95th percentile per-packet one-way delay: 160.354 ms

Loss rate: 0.00%

Run 9: Report of Verus — Data Link

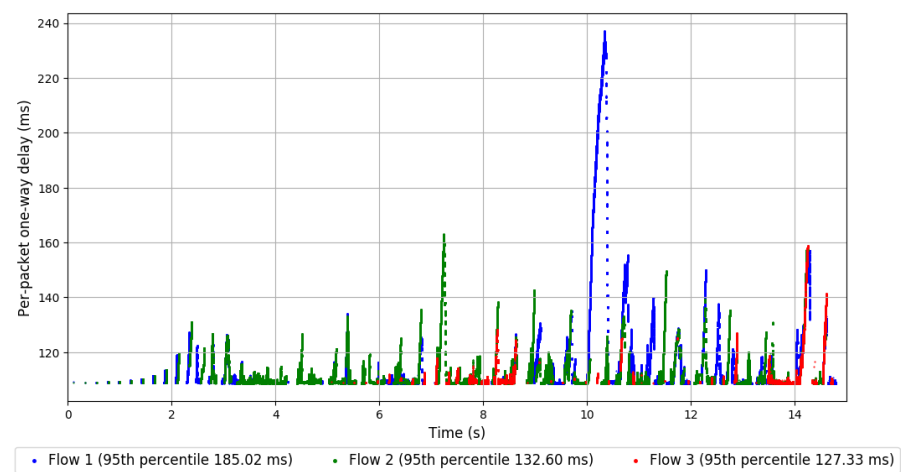
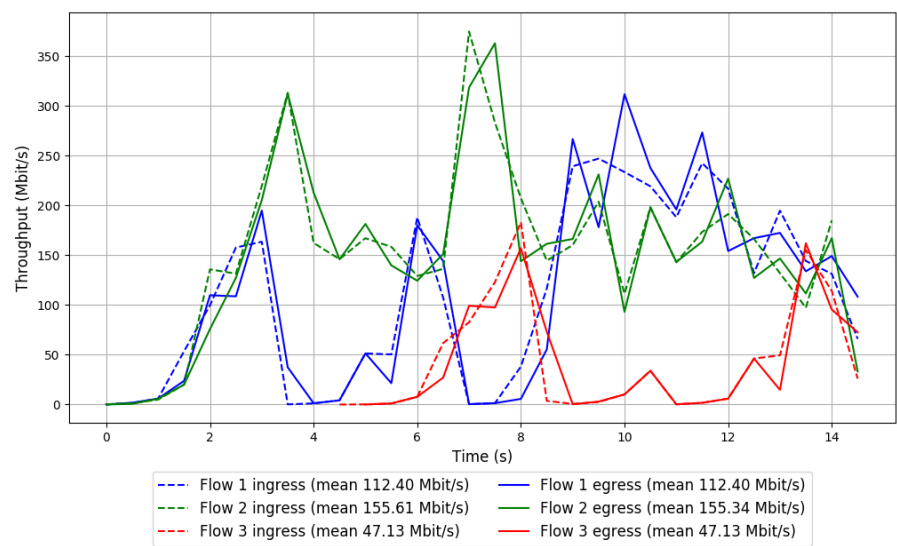


Run 10: Statistics of Verus

Start at: 2017-12-12 02:52:22

End at: 2017-12-12 02:52:52

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-12 00:46:06

End at: 2017-12-12 00:46:36

Below is generated by plot.py at 2017-12-12 04:35:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.48 Mbit/s

95th percentile per-packet one-way delay: 111.262 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 76.09 Mbit/s

95th percentile per-packet one-way delay: 111.349 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 59.14 Mbit/s

95th percentile per-packet one-way delay: 111.178 ms

Loss rate: 0.00%

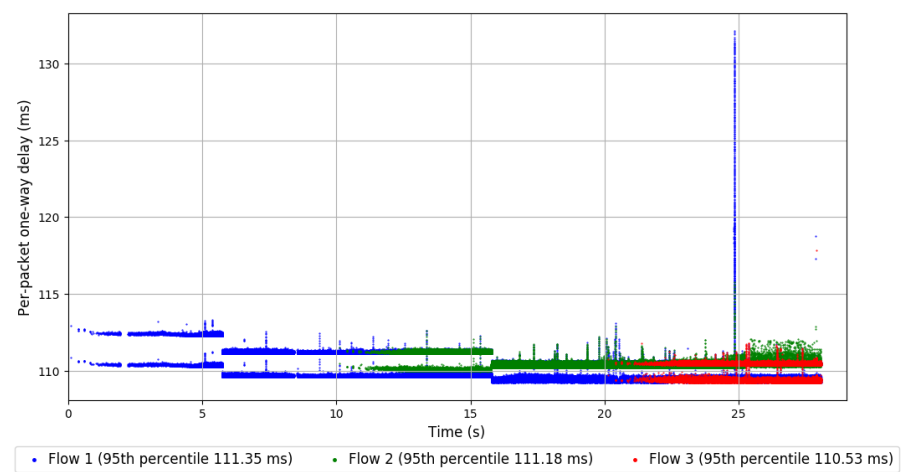
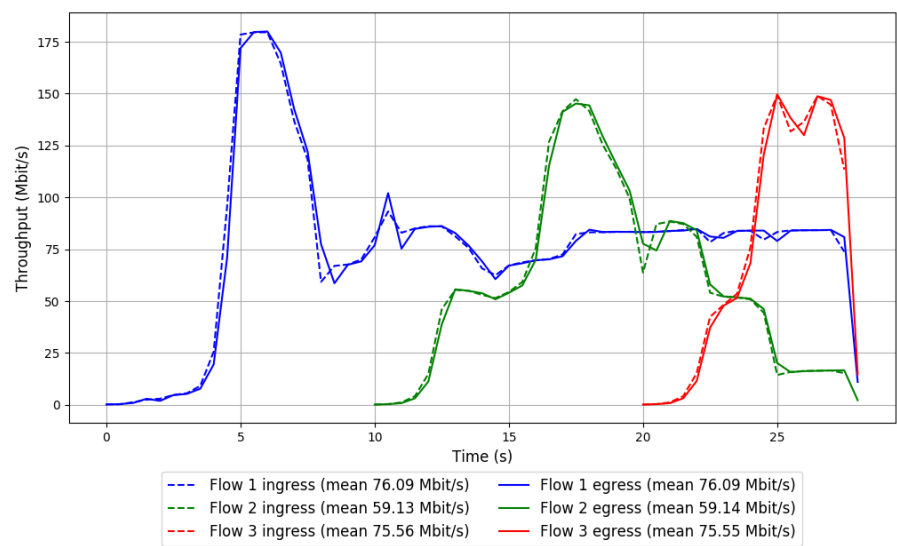
-- Flow 3:

Average throughput: 75.55 Mbit/s

95th percentile per-packet one-way delay: 110.525 ms

Loss rate: 0.04%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-12 00:59:47

End at: 2017-12-12 01:00:17

Below is generated by plot.py at 2017-12-12 04:35:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.37 Mbit/s

95th percentile per-packet one-way delay: 112.476 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 51.66 Mbit/s

95th percentile per-packet one-way delay: 112.432 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 62.59 Mbit/s

95th percentile per-packet one-way delay: 112.471 ms

Loss rate: 0.00%

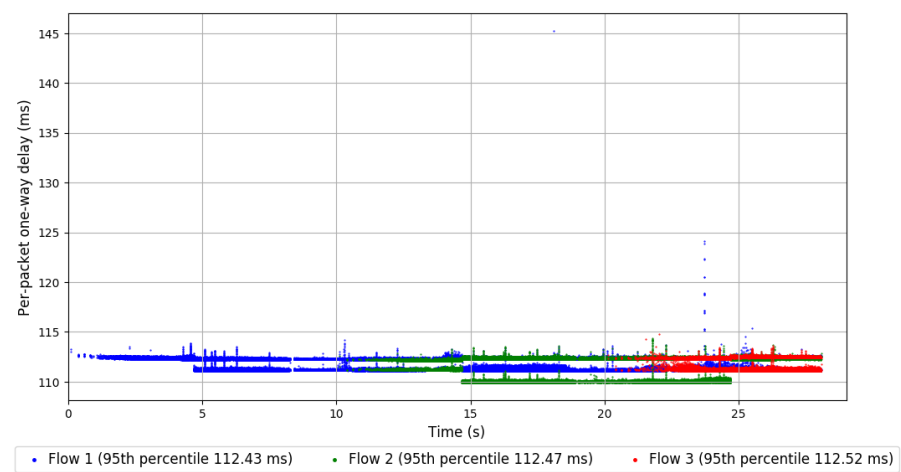
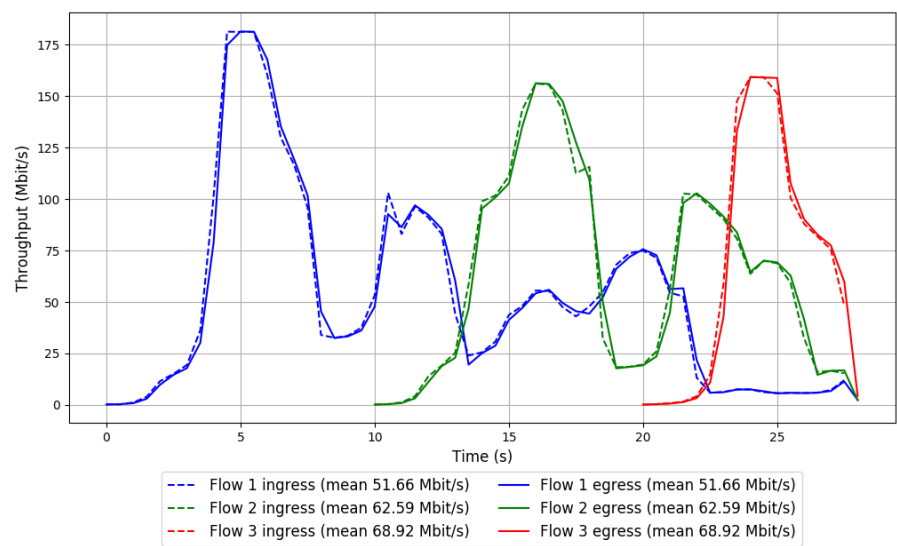
-- Flow 3:

Average throughput: 68.92 Mbit/s

95th percentile per-packet one-way delay: 112.523 ms

Loss rate: 0.01%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-12 01:13:08

End at: 2017-12-12 01:13:38

Below is generated by plot.py at 2017-12-12 04:36:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 110.92 Mbit/s

95th percentile per-packet one-way delay: 114.326 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.40 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 77.16 Mbit/s

95th percentile per-packet one-way delay: 112.561 ms

Loss rate: 0.00%

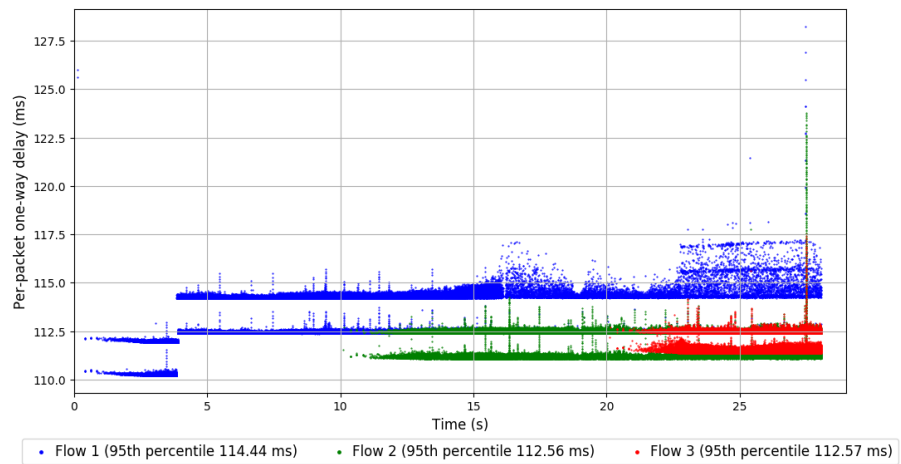
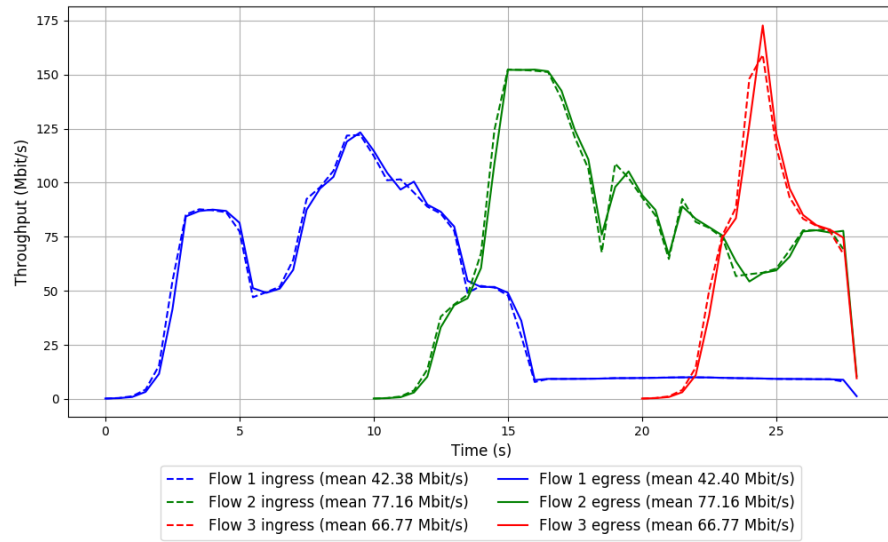
-- Flow 3:

Average throughput: 66.77 Mbit/s

95th percentile per-packet one-way delay: 112.567 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-12 01:26:16

End at: 2017-12-12 01:26:46

Below is generated by plot.py at 2017-12-12 04:36:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 116.30 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.94 Mbit/s

95th percentile per-packet one-way delay: 112.537 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.44 Mbit/s

95th percentile per-packet one-way delay: 112.575 ms

Loss rate: 0.00%

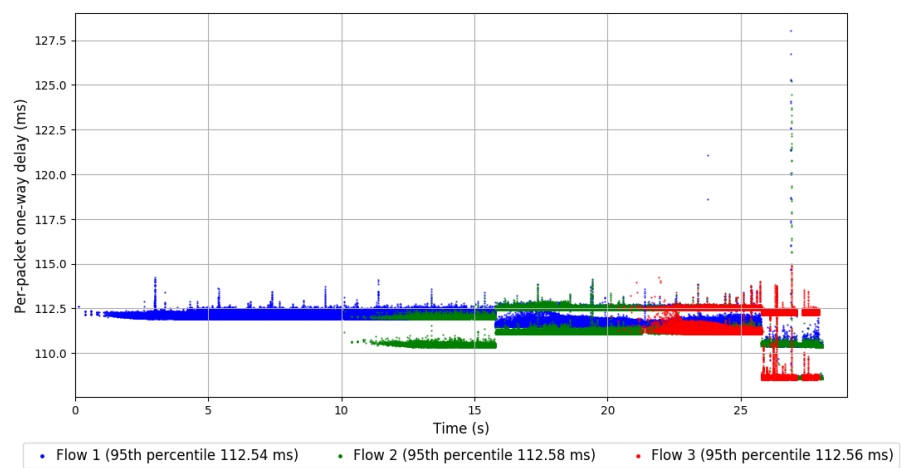
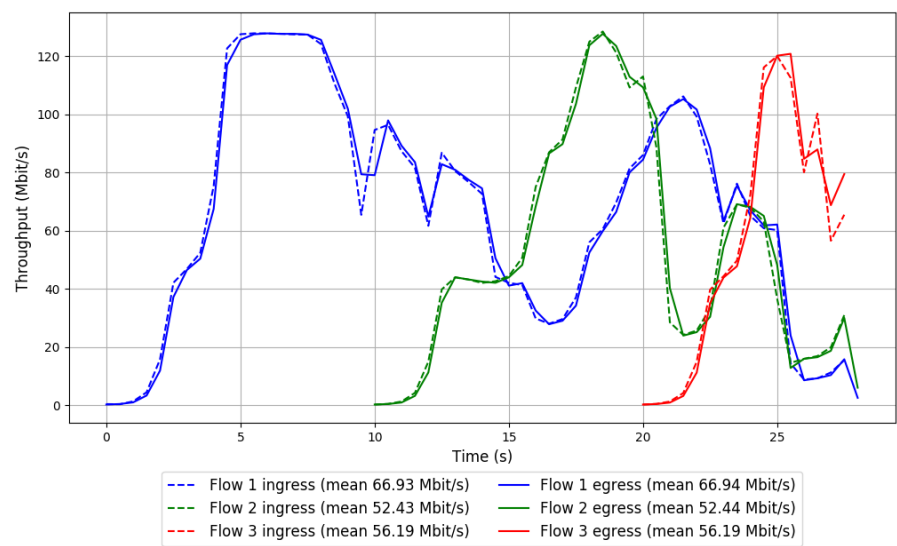
-- Flow 3:

Average throughput: 56.19 Mbit/s

95th percentile per-packet one-way delay: 112.562 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-12 01:39:21

End at: 2017-12-12 01:39:51

Below is generated by plot.py at 2017-12-12 04:37:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.88 Mbit/s

95th percentile per-packet one-way delay: 111.317 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 57.39 Mbit/s

95th percentile per-packet one-way delay: 111.349 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 79.51 Mbit/s

95th percentile per-packet one-way delay: 110.231 ms

Loss rate: 0.01%

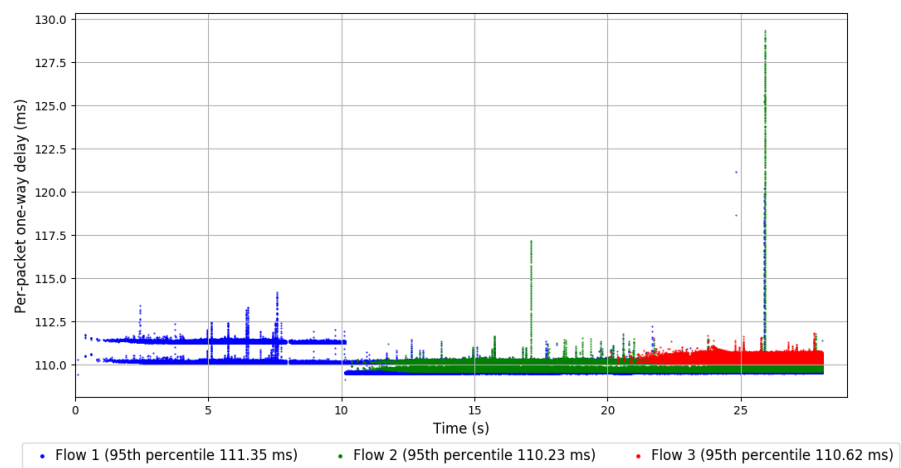
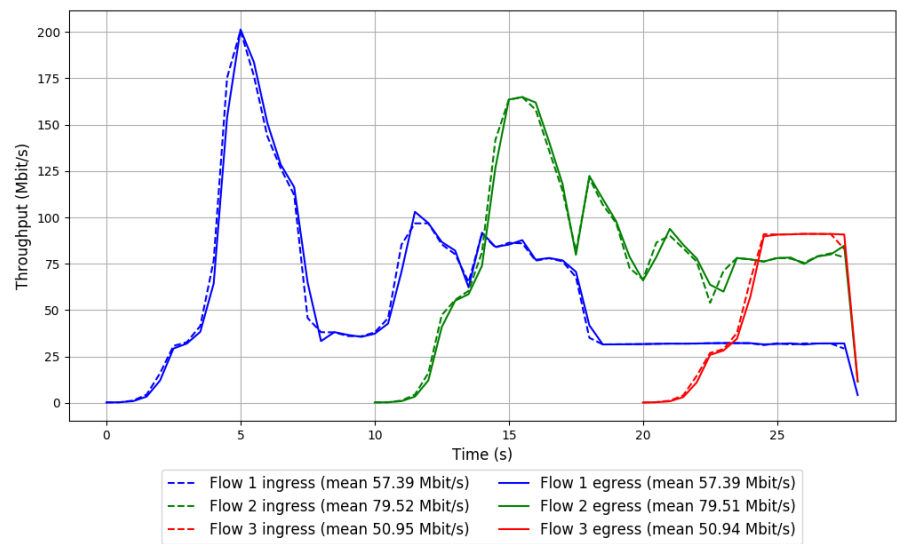
-- Flow 3:

Average throughput: 50.94 Mbit/s

95th percentile per-packet one-way delay: 110.624 ms

Loss rate: 0.04%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-12 01:52:48

End at: 2017-12-12 01:53:18

Below is generated by plot.py at 2017-12-12 04:38:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 137.50 Mbit/s

95th percentile per-packet one-way delay: 112.710 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 82.77 Mbit/s

95th percentile per-packet one-way delay: 112.706 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.33 Mbit/s

95th percentile per-packet one-way delay: 112.732 ms

Loss rate: 0.00%

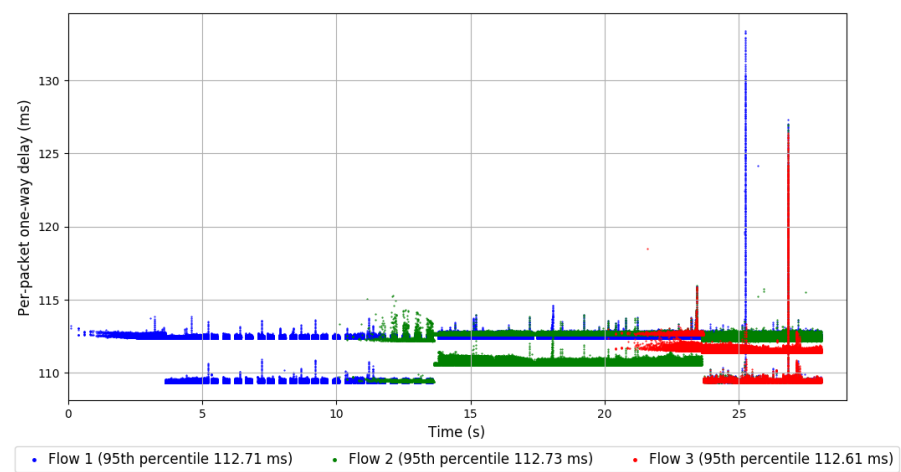
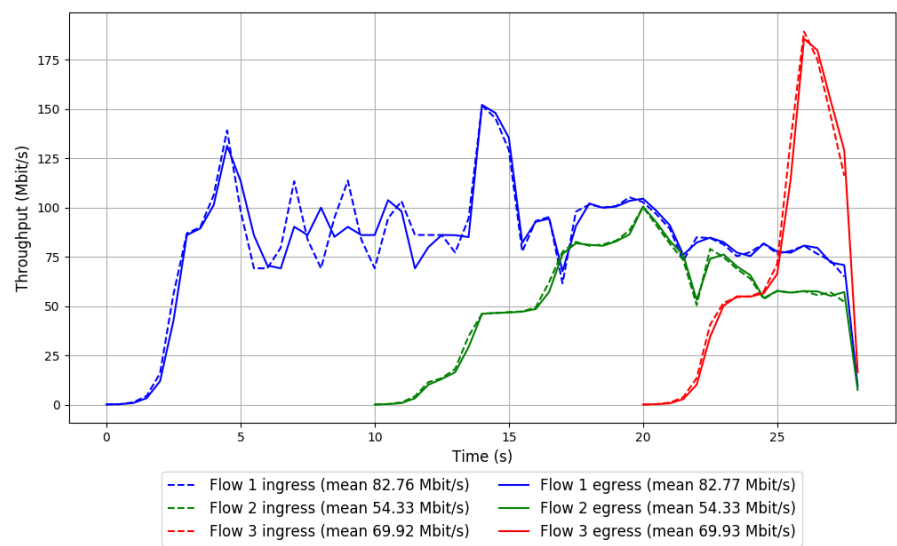
-- Flow 3:

Average throughput: 69.93 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-12 02:06:20

End at: 2017-12-12 02:06:50

Below is generated by plot.py at 2017-12-12 04:38:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 125.05 Mbit/s

95th percentile per-packet one-way delay: 112.664 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 71.26 Mbit/s

95th percentile per-packet one-way delay: 112.625 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 62.54 Mbit/s

95th percentile per-packet one-way delay: 112.671 ms

Loss rate: 0.00%

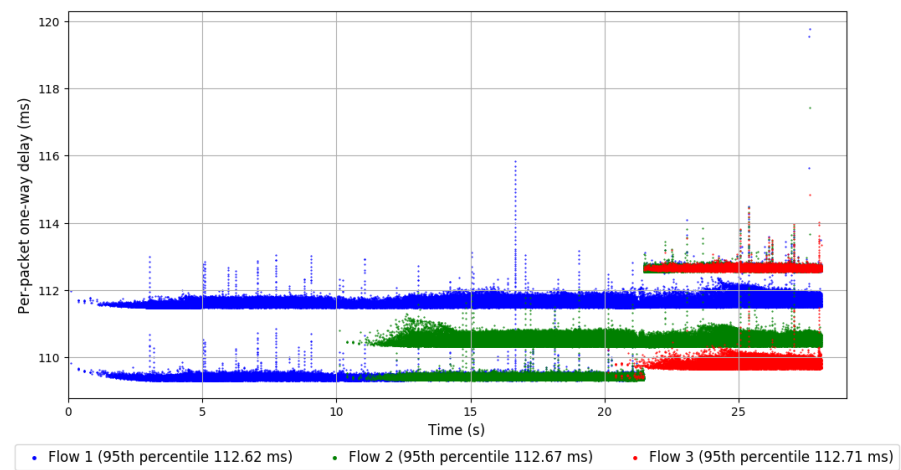
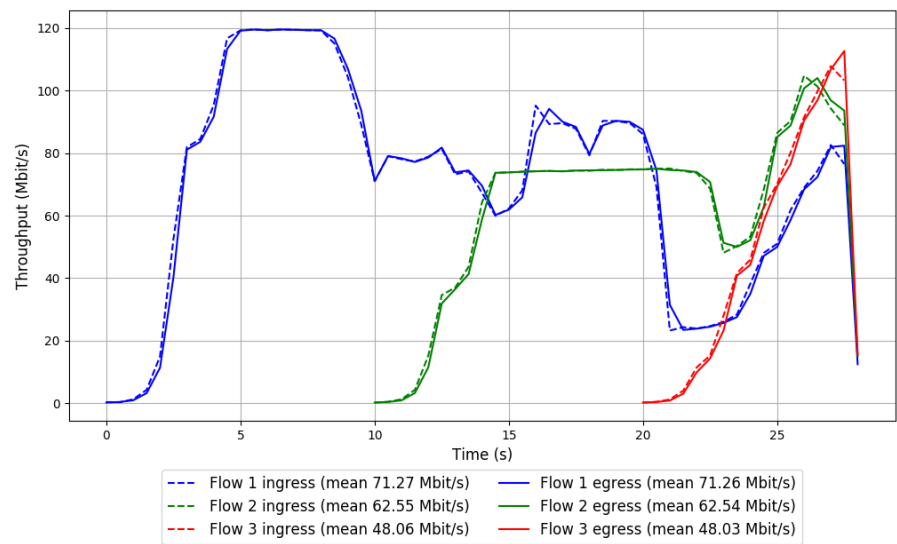
-- Flow 3:

Average throughput: 48.03 Mbit/s

95th percentile per-packet one-way delay: 112.706 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-12 02:19:45

End at: 2017-12-12 02:20:15

Below is generated by plot.py at 2017-12-12 04:38:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.34 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 41.72 Mbit/s

95th percentile per-packet one-way delay: 112.841 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 69.63 Mbit/s

95th percentile per-packet one-way delay: 112.280 ms

Loss rate: 0.00%

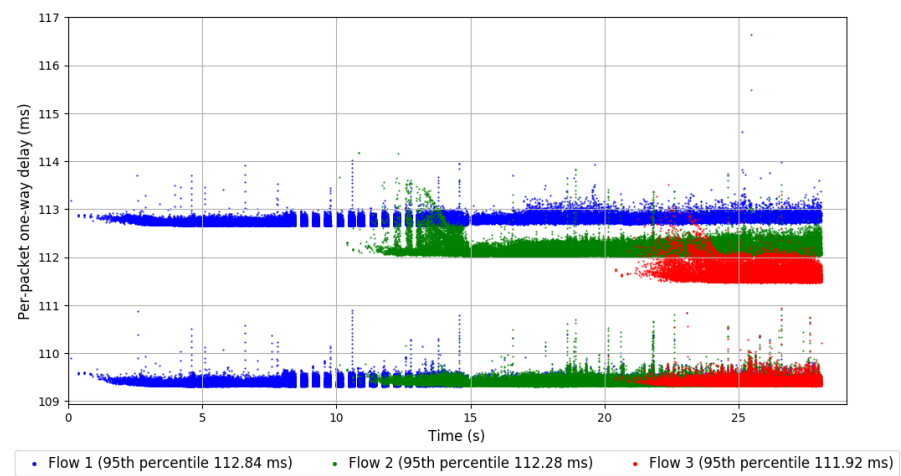
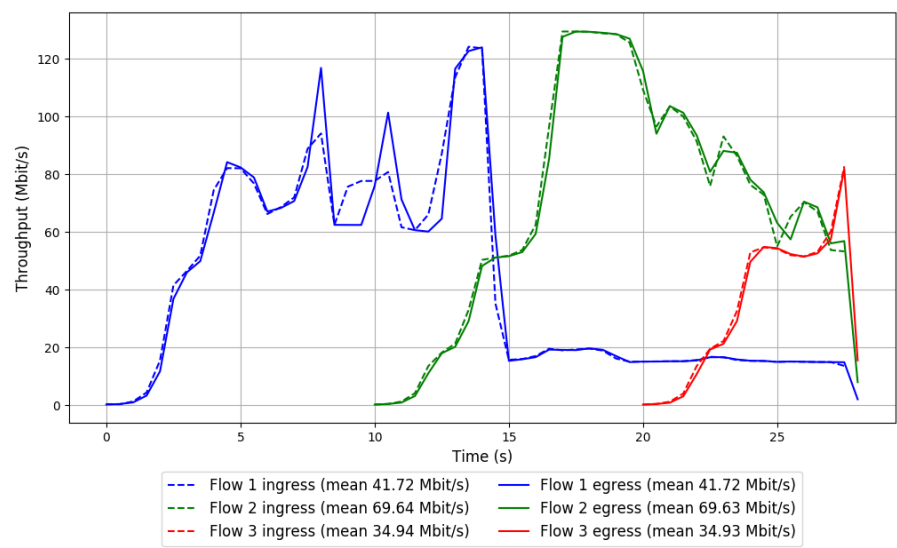
-- Flow 3:

Average throughput: 34.93 Mbit/s

95th percentile per-packet one-way delay: 111.924 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-12 02:33:26

End at: 2017-12-12 02:33:56

Below is generated by plot.py at 2017-12-12 04:38:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.64 Mbit/s

95th percentile per-packet one-way delay: 112.235 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 78.64 Mbit/s

95th percentile per-packet one-way delay: 112.235 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 10999.192 ms

Loss rate: 0.00%

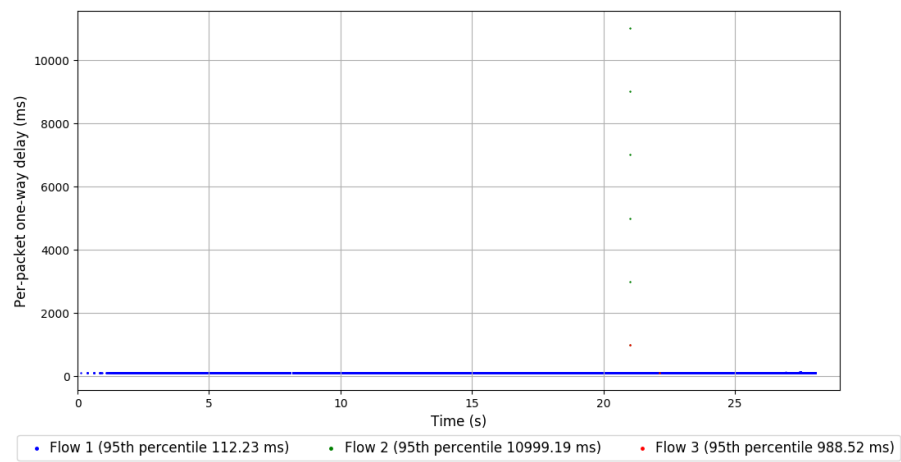
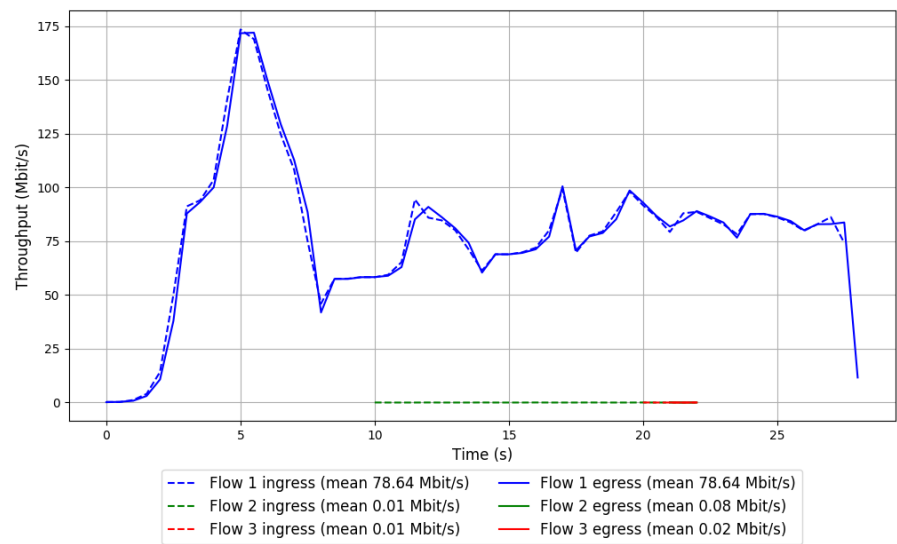
-- Flow 3:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 988.525 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-12 02:46:46

End at: 2017-12-12 02:47:16

Below is generated by plot.py at 2017-12-12 04:38:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.10 Mbit/s

95th percentile per-packet one-way delay: 114.392 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 63.07 Mbit/s

95th percentile per-packet one-way delay: 112.748 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.31 Mbit/s

95th percentile per-packet one-way delay: 114.466 ms

Loss rate: 0.00%

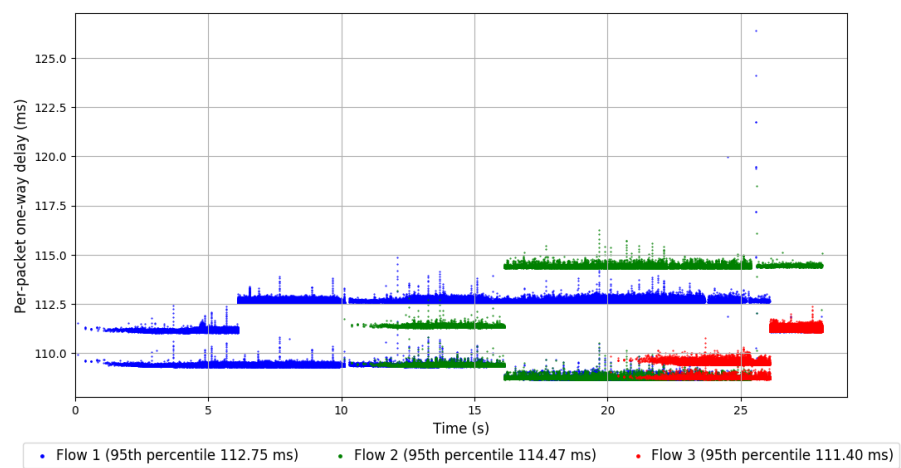
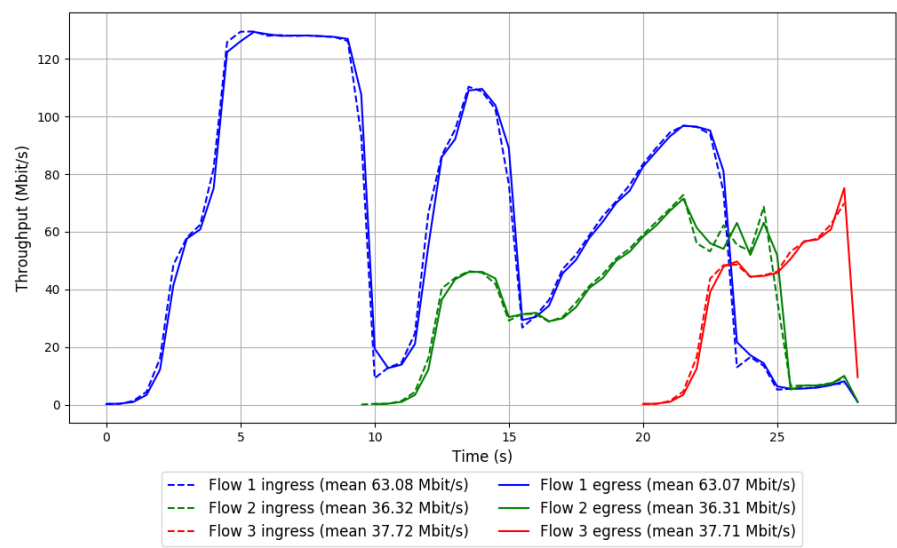
-- Flow 3:

Average throughput: 37.71 Mbit/s

95th percentile per-packet one-way delay: 111.399 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

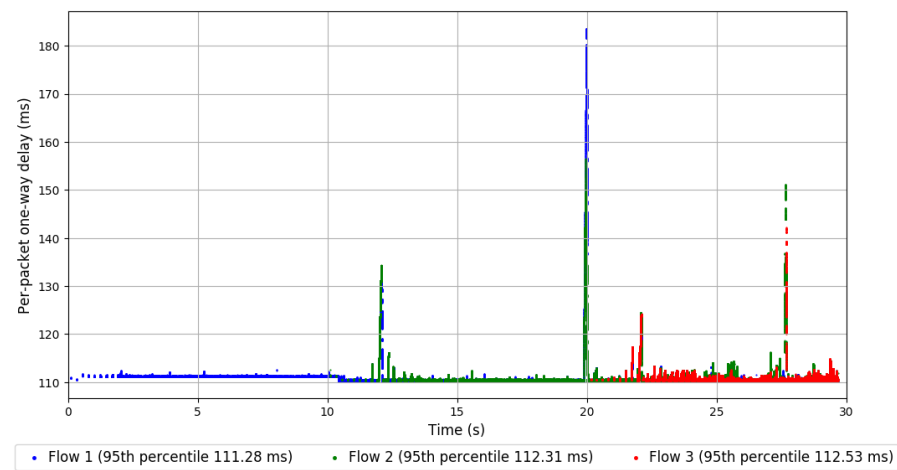
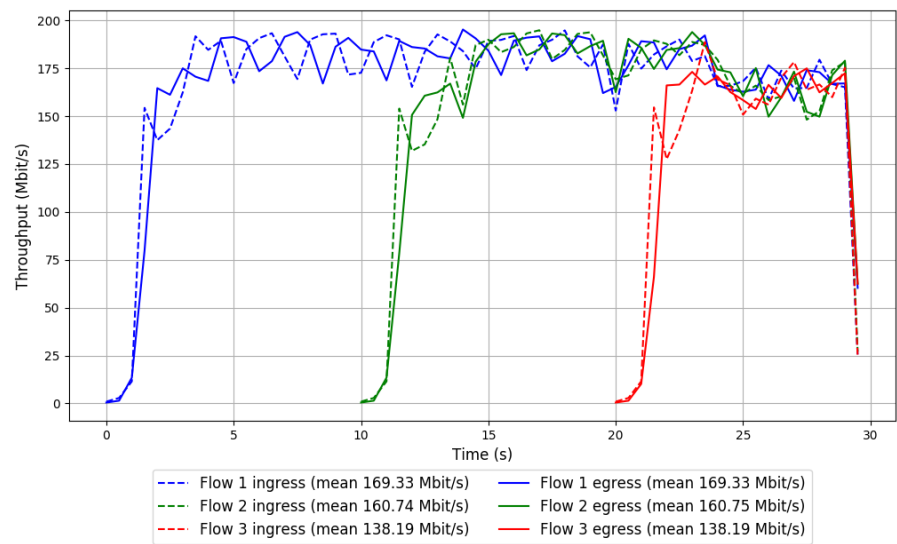


```
Run 1: Statistics of Indigo

Start at: 2017-12-12 00:44:53
End at: 2017-12-12 00:45:23

# Below is generated by plot.py at 2017-12-12 04:41:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 320.19 Mbit/s
95th percentile per-packet one-way delay: 111.630 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 169.33 Mbit/s
95th percentile per-packet one-way delay: 111.280 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 160.75 Mbit/s
95th percentile per-packet one-way delay: 112.312 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 138.19 Mbit/s
95th percentile per-packet one-way delay: 112.534 ms
Loss rate: 0.00%
```


Run 1: Report of Indigo — Data Link

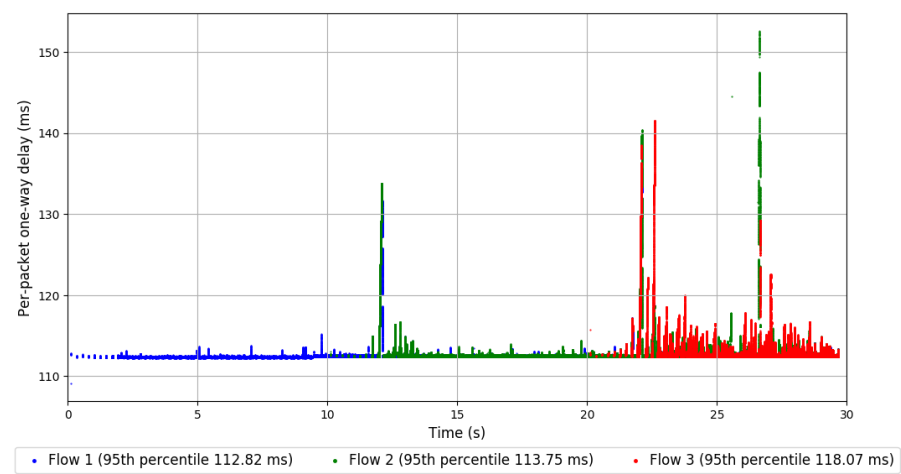
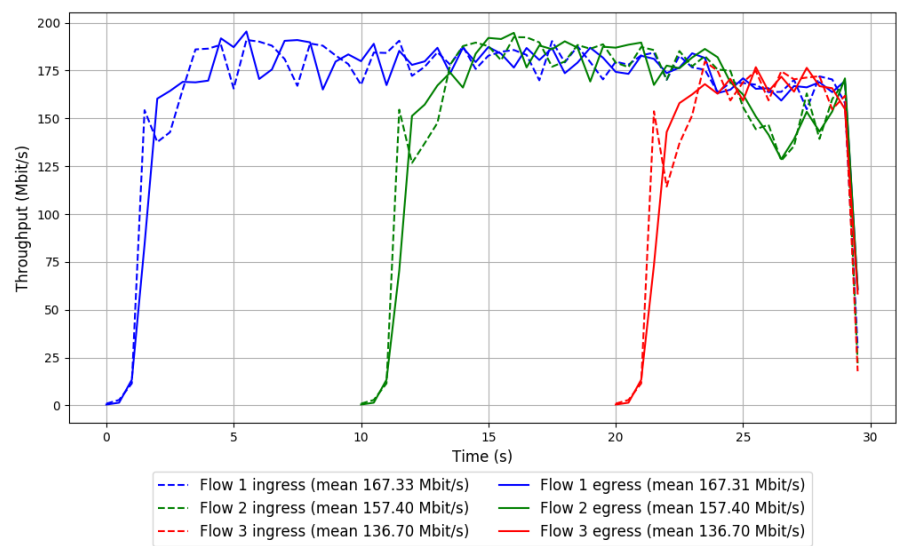


```
Run 2: Statistics of Indigo

Start at: 2017-12-12 00:58:34
End at: 2017-12-12 00:59:04

# Below is generated by plot.py at 2017-12-12 04:41:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 315.62 Mbit/s
95th percentile per-packet one-way delay: 113.781 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 167.31 Mbit/s
95th percentile per-packet one-way delay: 112.818 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 157.40 Mbit/s
95th percentile per-packet one-way delay: 113.747 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 136.70 Mbit/s
95th percentile per-packet one-way delay: 118.070 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-12 01:11:55

End at: 2017-12-12 01:12:25

Below is generated by plot.py at 2017-12-12 04:42:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 319.11 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 169.64 Mbit/s

95th percentile per-packet one-way delay: 113.627 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 159.67 Mbit/s

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

Loss rate: 0.00%

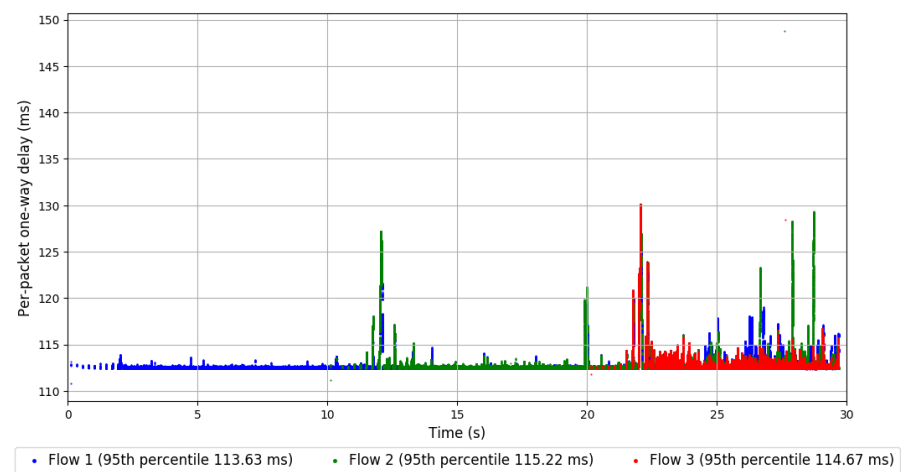
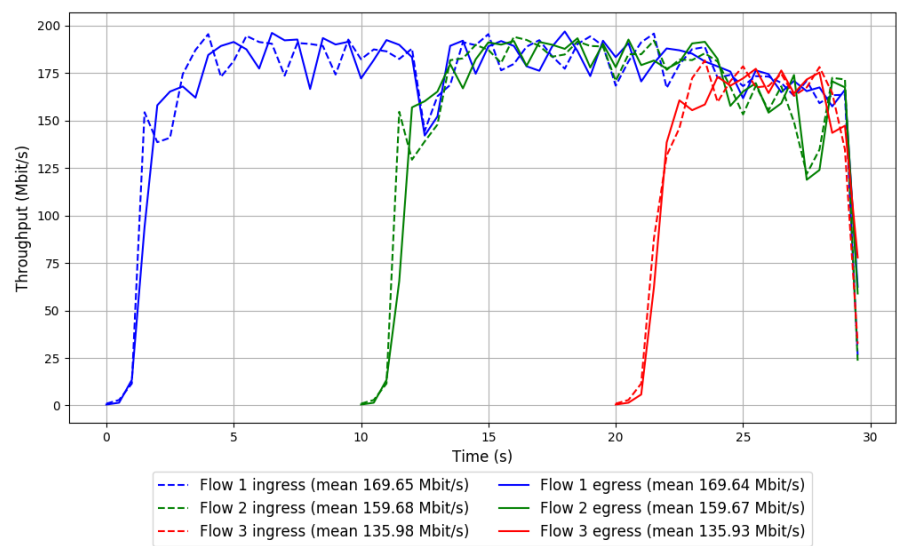
-- Flow 3:

Average throughput: 135.93 Mbit/s

95th percentile per-packet one-way delay: 114.669 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-12 01:25:04

End at: 2017-12-12 01:25:34

Below is generated by plot.py at 2017-12-12 04:42:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 313.52 Mbit/s

95th percentile per-packet one-way delay: 113.130 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 167.67 Mbit/s

95th percentile per-packet one-way delay: 112.800 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 154.53 Mbit/s

95th percentile per-packet one-way delay: 113.402 ms

Loss rate: 0.00%

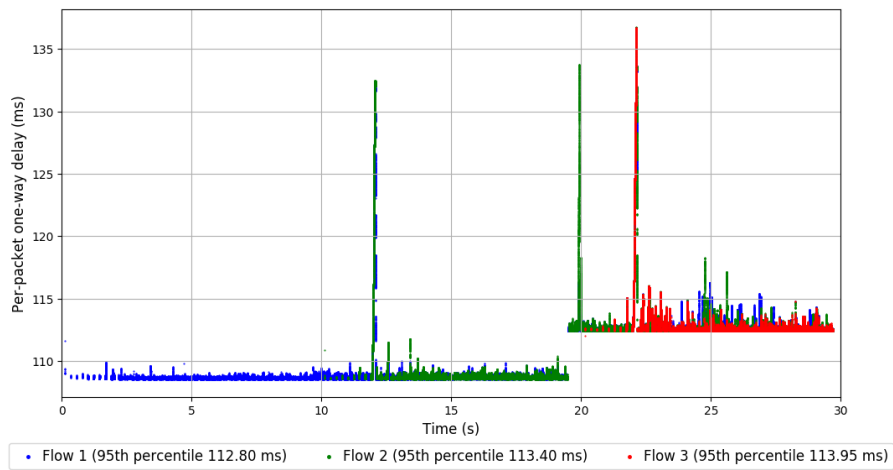
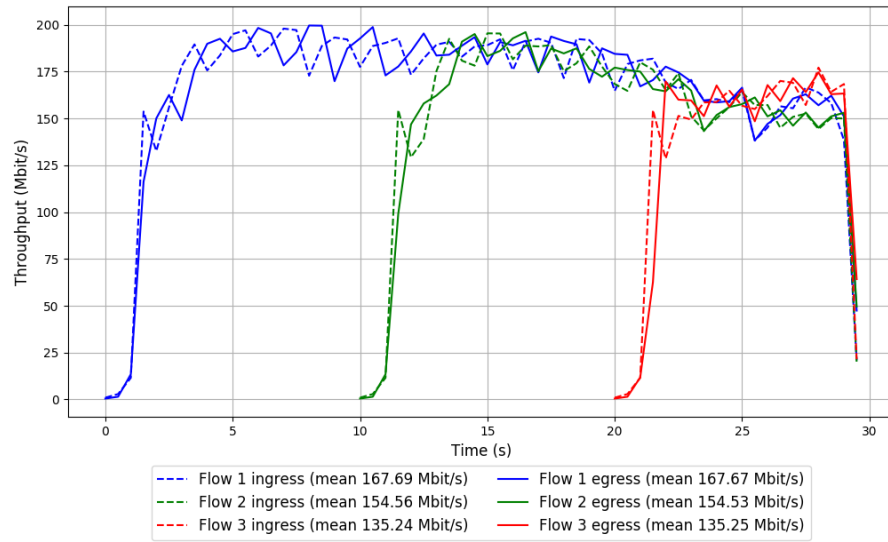
-- Flow 3:

Average throughput: 135.25 Mbit/s

95th percentile per-packet one-way delay: 113.953 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-12 01:38:09

End at: 2017-12-12 01:38:39

Below is generated by plot.py at 2017-12-12 04:42:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 318.58 Mbit/s

95th percentile per-packet one-way delay: 112.576 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 168.06 Mbit/s

95th percentile per-packet one-way delay: 112.562 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 161.92 Mbit/s

95th percentile per-packet one-way delay: 112.904 ms

Loss rate: 0.00%

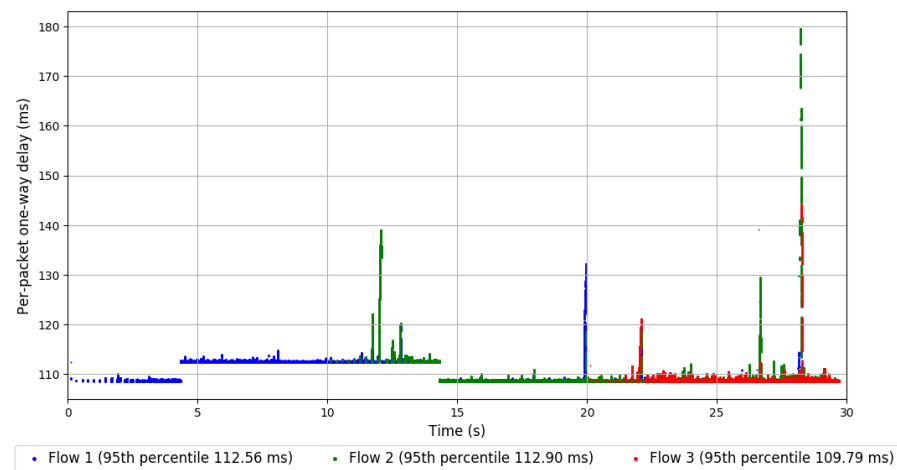
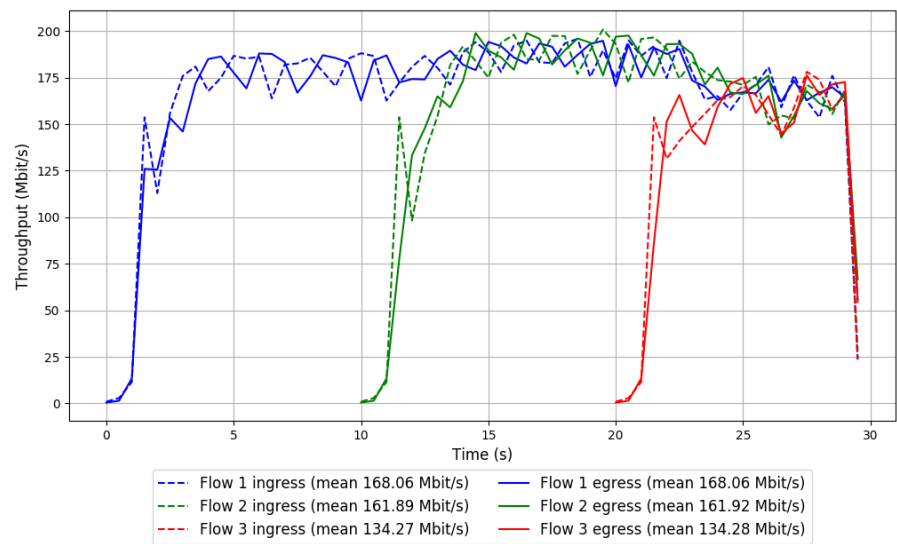
-- Flow 3:

Average throughput: 134.28 Mbit/s

95th percentile per-packet one-way delay: 109.791 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-12 01:51:36

End at: 2017-12-12 01:52:06

Below is generated by plot.py at 2017-12-12 04:43:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 311.24 Mbit/s

95th percentile per-packet one-way delay: 114.747 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 166.43 Mbit/s

95th percentile per-packet one-way delay: 113.569 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 157.58 Mbit/s

95th percentile per-packet one-way delay: 115.695 ms

Loss rate: 0.04%

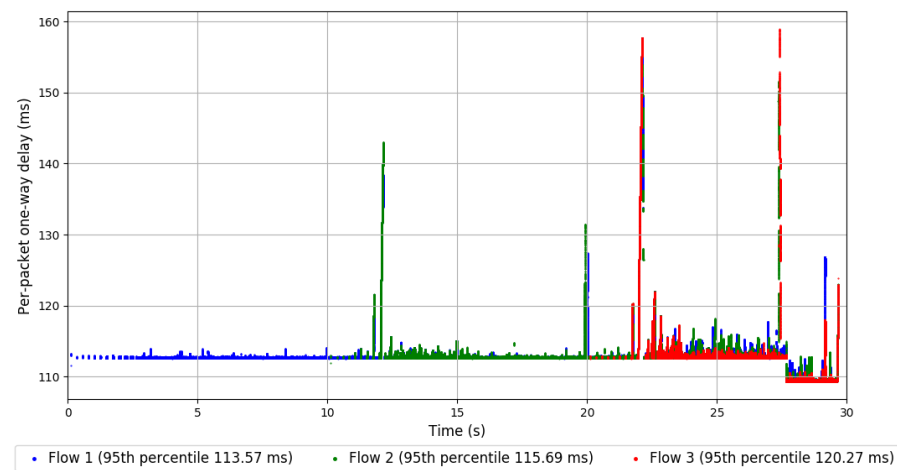
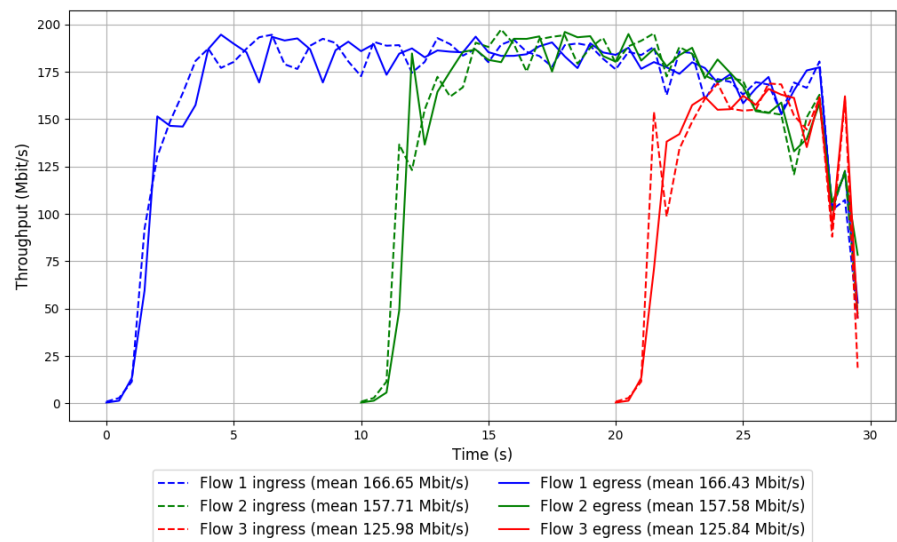
-- Flow 3:

Average throughput: 125.84 Mbit/s

95th percentile per-packet one-way delay: 120.268 ms

Loss rate: 0.13%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-12 02:05:08

End at: 2017-12-12 02:05:38

Below is generated by plot.py at 2017-12-12 04:43:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 316.65 Mbit/s

95th percentile per-packet one-way delay: 112.910 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 168.80 Mbit/s

95th percentile per-packet one-way delay: 112.722 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 159.37 Mbit/s

95th percentile per-packet one-way delay: 113.217 ms

Loss rate: 0.01%

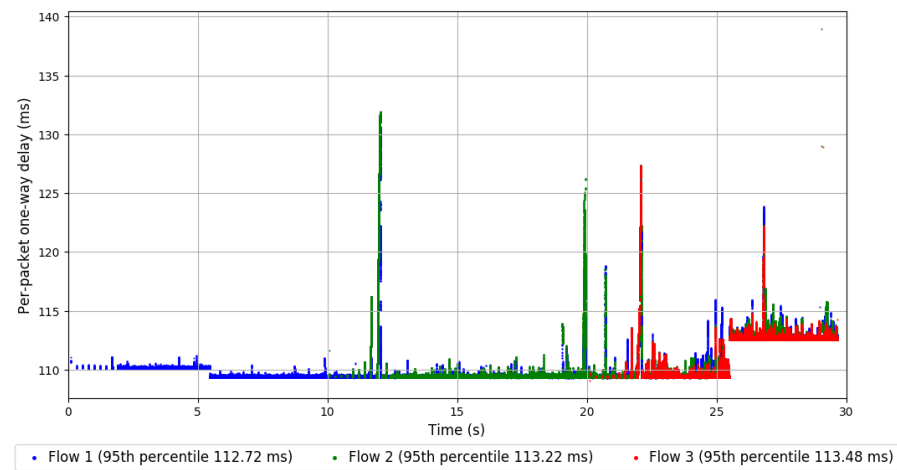
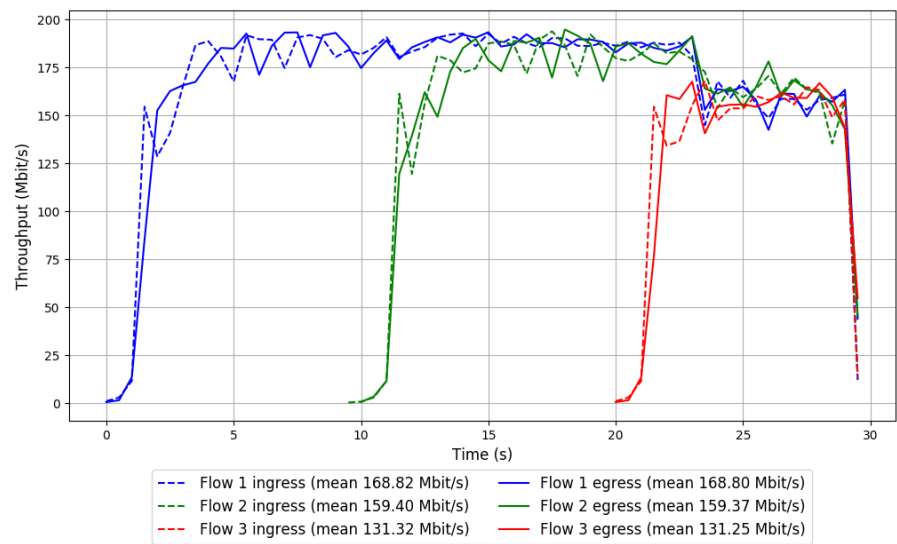
-- Flow 3:

Average throughput: 131.25 Mbit/s

95th percentile per-packet one-way delay: 113.477 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-12 02:18:32

End at: 2017-12-12 02:19:02

Below is generated by plot.py at 2017-12-12 04:43:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.47 Mbit/s

95th percentile per-packet one-way delay: 111.991 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 167.14 Mbit/s

95th percentile per-packet one-way delay: 111.509 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 158.54 Mbit/s

95th percentile per-packet one-way delay: 112.391 ms

Loss rate: 0.00%

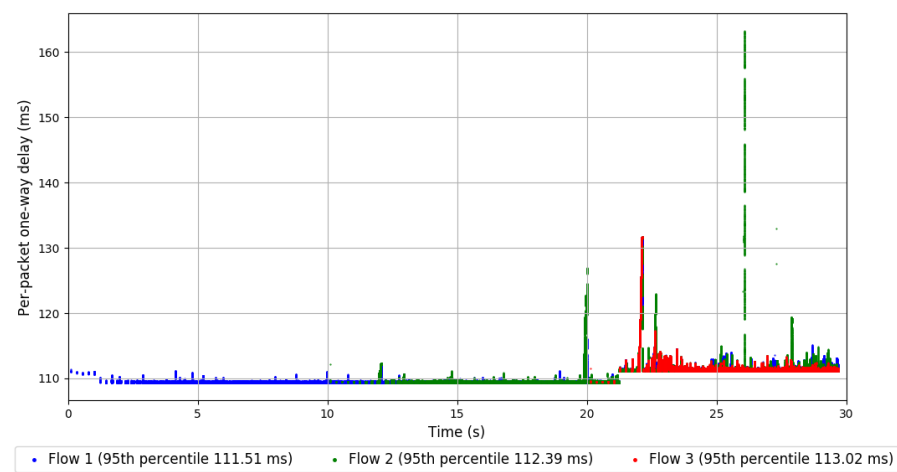
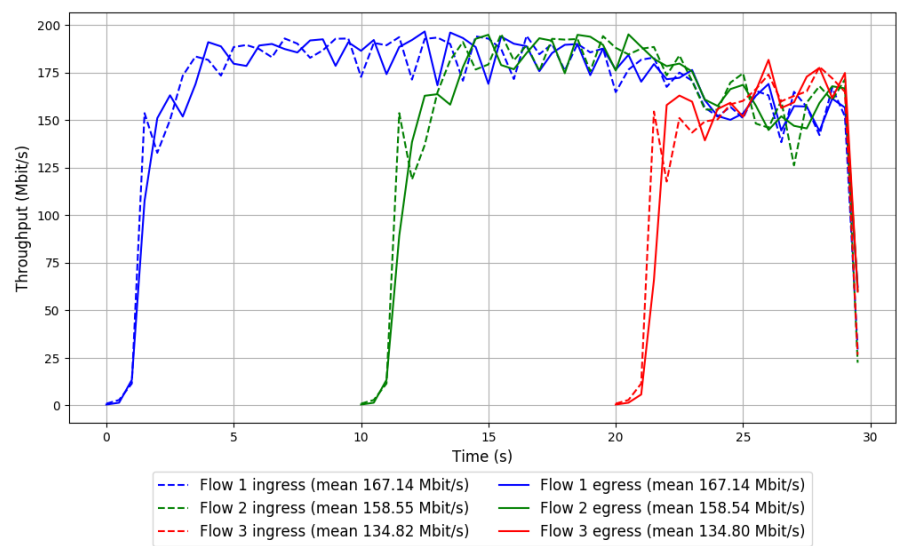
-- Flow 3:

Average throughput: 134.80 Mbit/s

95th percentile per-packet one-way delay: 113.018 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-12 02:32:13

End at: 2017-12-12 02:32:43

Below is generated by plot.py at 2017-12-12 04:47:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 320.67 Mbit/s

95th percentile per-packet one-way delay: 112.298 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 170.80 Mbit/s

95th percentile per-packet one-way delay: 111.820 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 161.12 Mbit/s

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

Loss rate: 0.00%

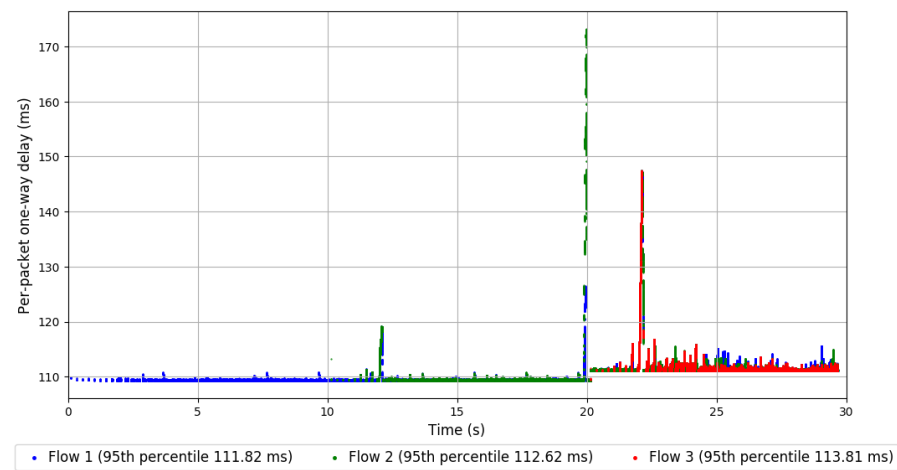
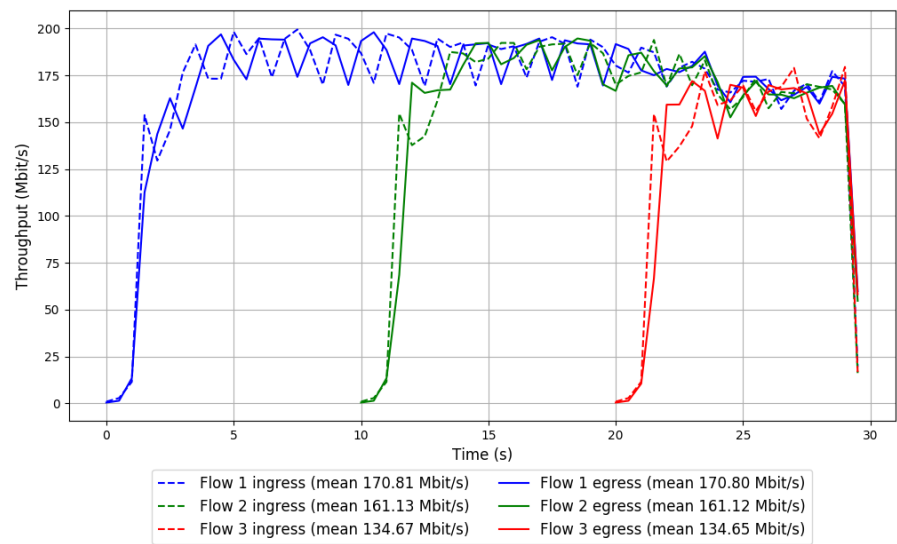
-- Flow 3:

Average throughput: 134.65 Mbit/s

95th percentile per-packet one-way delay: 113.812 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link

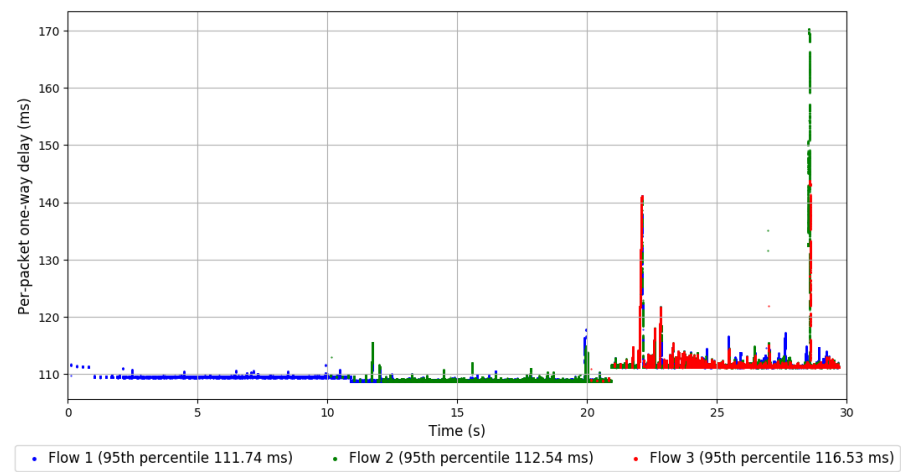
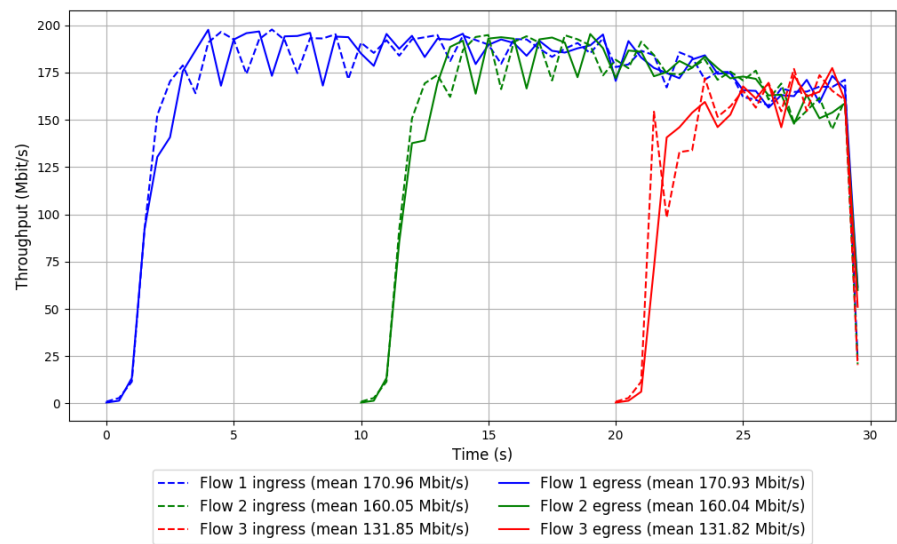


```
Run 10: Statistics of Indigo

Start at: 2017-12-12 02:45:32
End at: 2017-12-12 02:46:02

# Below is generated by plot.py at 2017-12-12 04:47:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 319.21 Mbit/s
95th percentile per-packet one-way delay: 112.367 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 170.93 Mbit/s
95th percentile per-packet one-way delay: 111.743 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 160.04 Mbit/s
95th percentile per-packet one-way delay: 112.536 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 131.82 Mbit/s
95th percentile per-packet one-way delay: 116.532 ms
Loss rate: 0.00%
```

Run 10: Report of Indigo — Data Link

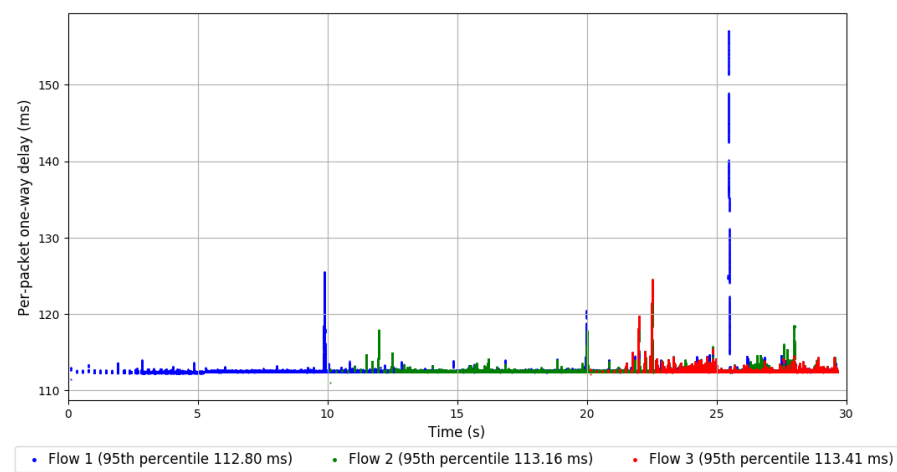
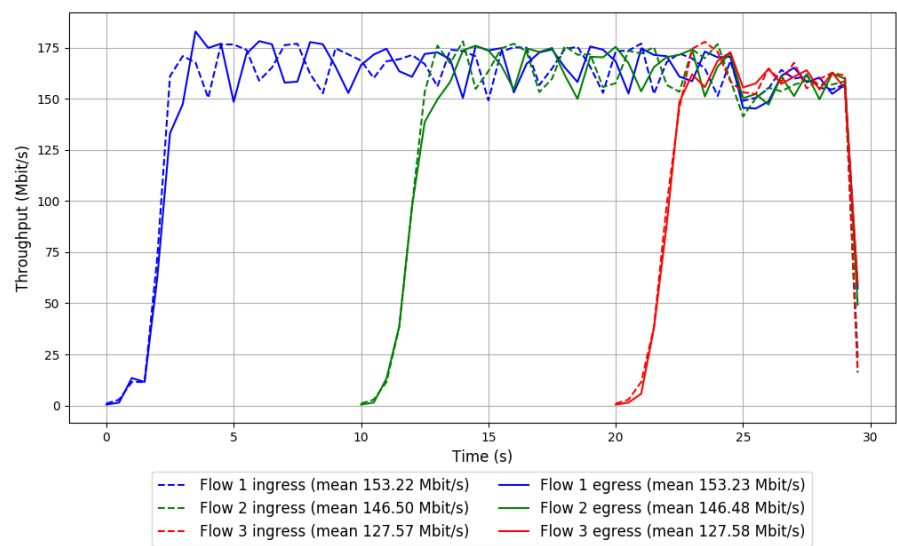


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-12 00:50:18
End at: 2017-12-12 00:50:48

# Below is generated by plot.py at 2017-12-12 04:47:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 291.31 Mbit/s
95th percentile per-packet one-way delay: 113.051 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 153.23 Mbit/s
95th percentile per-packet one-way delay: 112.801 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 146.48 Mbit/s
95th percentile per-packet one-way delay: 113.164 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 127.58 Mbit/s
95th percentile per-packet one-way delay: 113.414 ms
Loss rate: 0.04%
```

Run 1: Report of Indigo-calib — Data Link

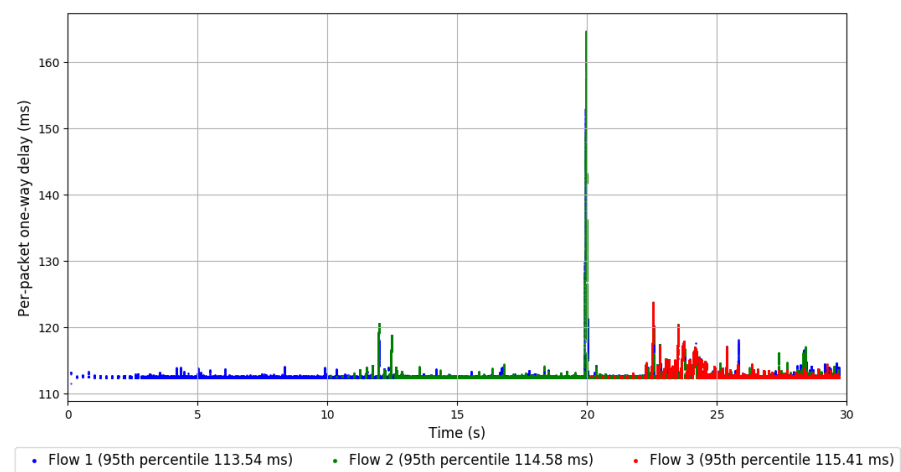
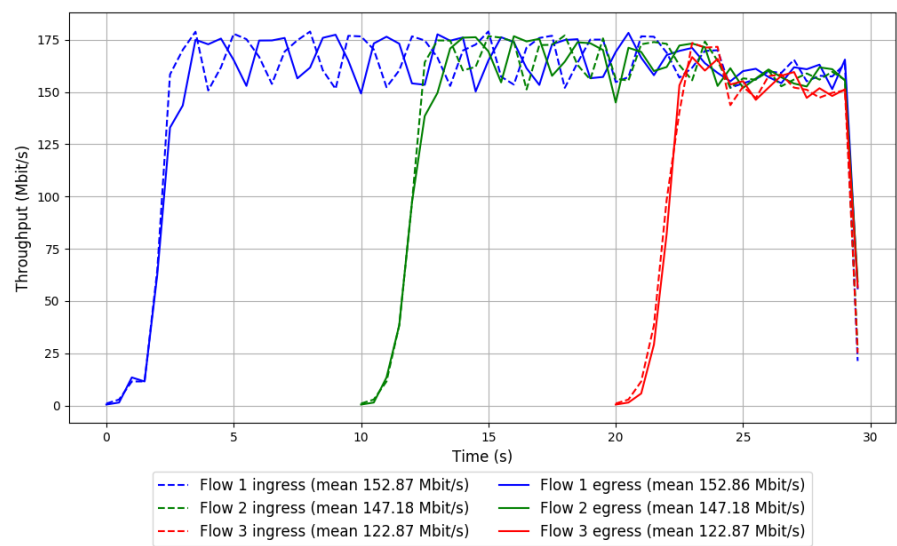


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-12 01:03:22
End at: 2017-12-12 01:03:53

# Below is generated by plot.py at 2017-12-12 04:47:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 289.84 Mbit/s
95th percentile per-packet one-way delay: 114.177 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 152.86 Mbit/s
95th percentile per-packet one-way delay: 113.539 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 147.18 Mbit/s
95th percentile per-packet one-way delay: 114.575 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 122.87 Mbit/s
95th percentile per-packet one-way delay: 115.405 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-12-12 01:16:46

End at: 2017-12-12 01:17:16

Below is generated by plot.py at 2017-12-12 04:47:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 288.95 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 153.25 Mbit/s

95th percentile per-packet one-way delay: 113.127 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 144.84 Mbit/s

95th percentile per-packet one-way delay: 114.041 ms

Loss rate: 0.00%

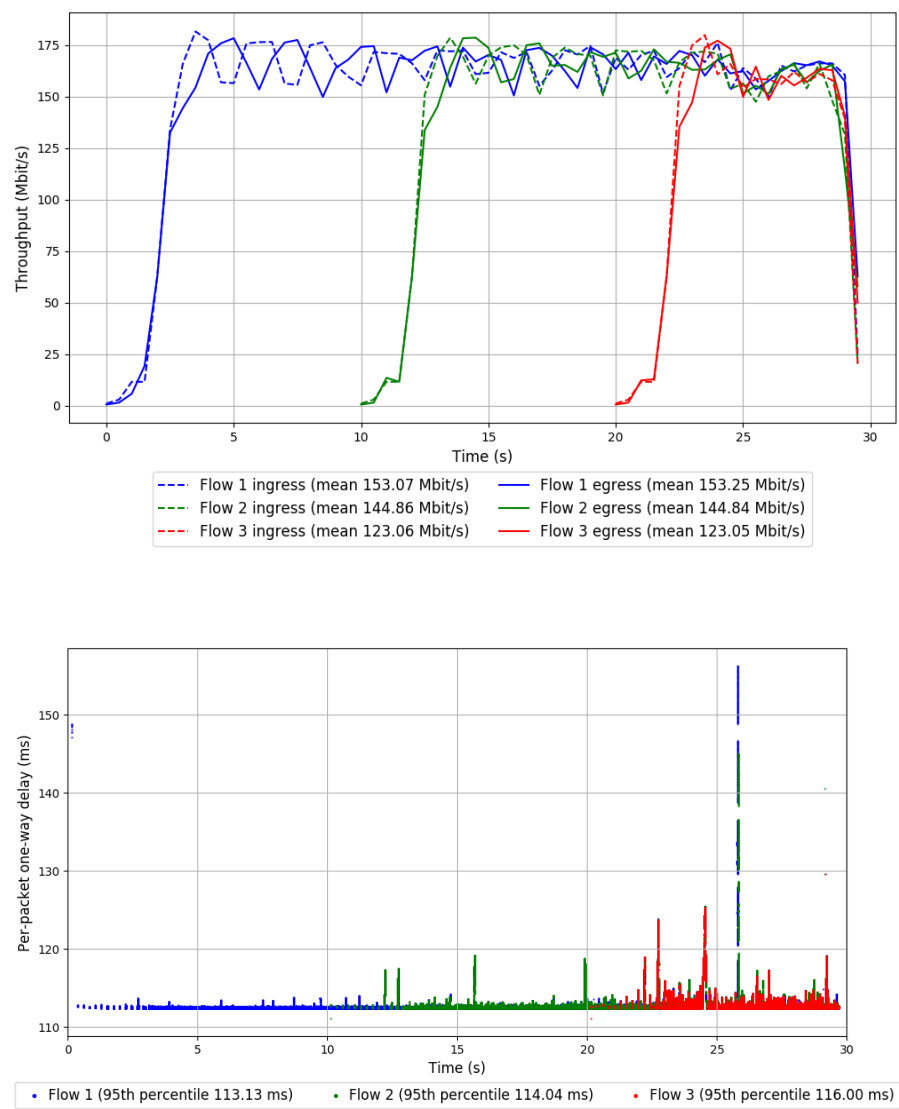
-- Flow 3:

Average throughput: 123.05 Mbit/s

95th percentile per-packet one-way delay: 115.999 ms

Loss rate: 0.00%

Run 3: Report of Indigo-calib — Data Link

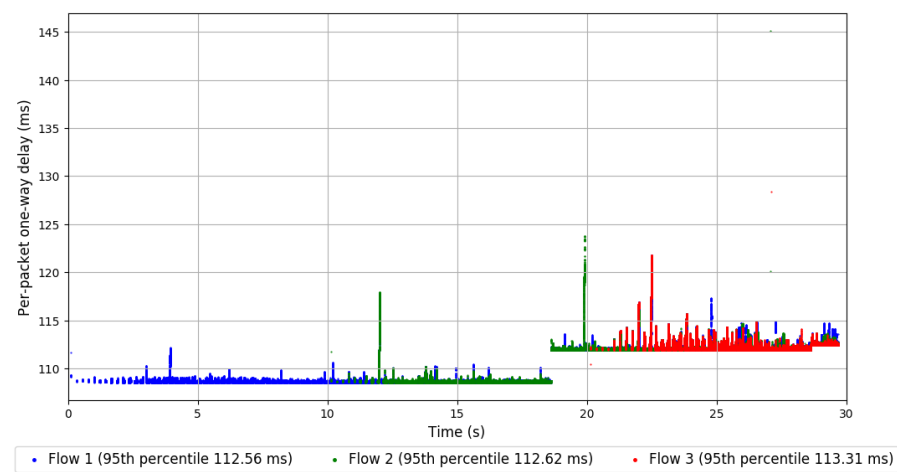
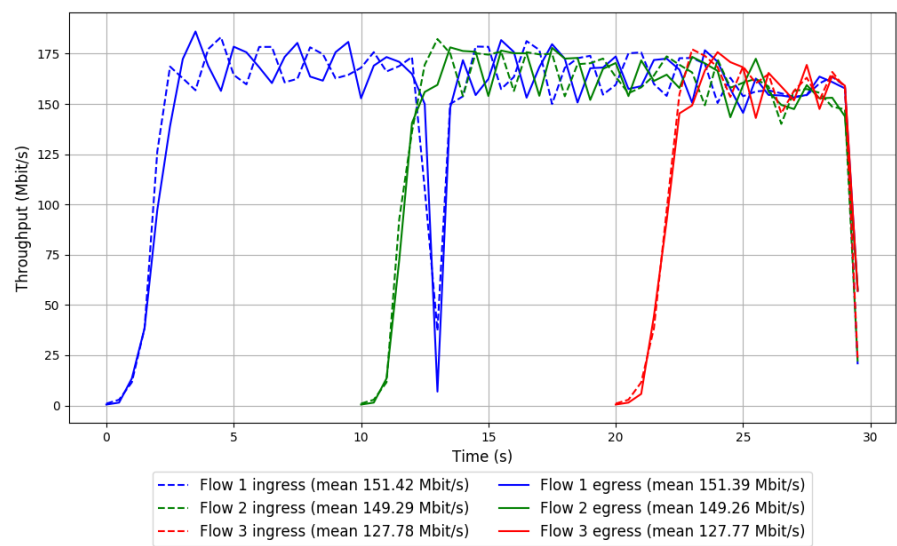


```
Run 4: Statistics of Indigo-calib

Start at: 2017-12-12 01:29:55
End at: 2017-12-12 01:30:25

# Below is generated by plot.py at 2017-12-12 04:48:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 291.24 Mbit/s
95th percentile per-packet one-way delay: 112.690 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 151.39 Mbit/s
95th percentile per-packet one-way delay: 112.559 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 149.26 Mbit/s
95th percentile per-packet one-way delay: 112.625 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 127.77 Mbit/s
95th percentile per-packet one-way delay: 113.307 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-calib — Data Link

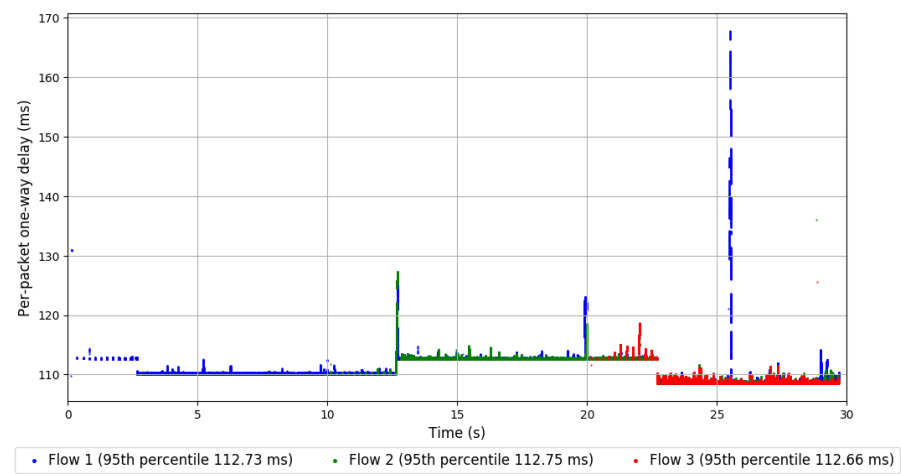
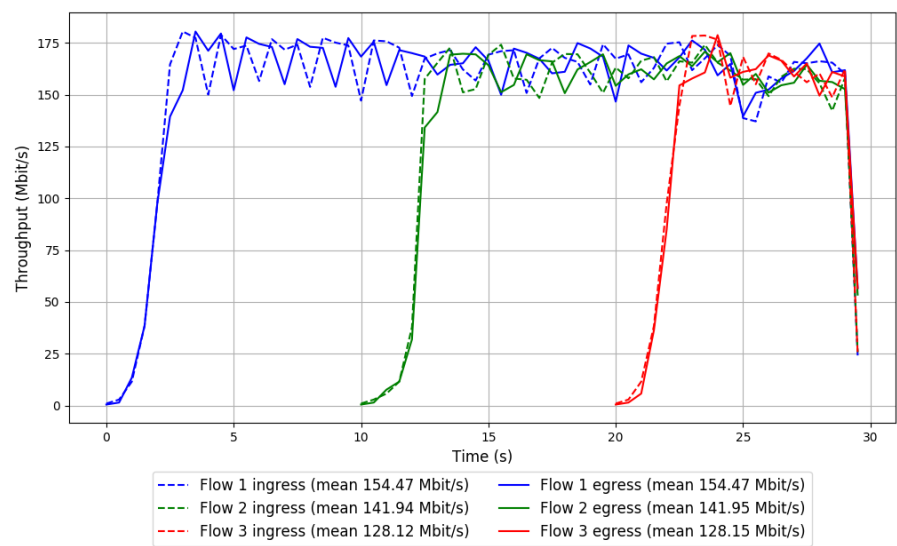


```
Run 5: Statistics of Indigo-calib

Start at: 2017-12-12 01:43:21
End at: 2017-12-12 01:43:51

# Below is generated by plot.py at 2017-12-12 04:48:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 289.74 Mbit/s
95th percentile per-packet one-way delay: 112.731 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 154.47 Mbit/s
95th percentile per-packet one-way delay: 112.728 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 141.95 Mbit/s
95th percentile per-packet one-way delay: 112.747 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 128.15 Mbit/s
95th percentile per-packet one-way delay: 112.664 ms
Loss rate: 0.01%
```

Run 5: Report of Indigo-calib — Data Link

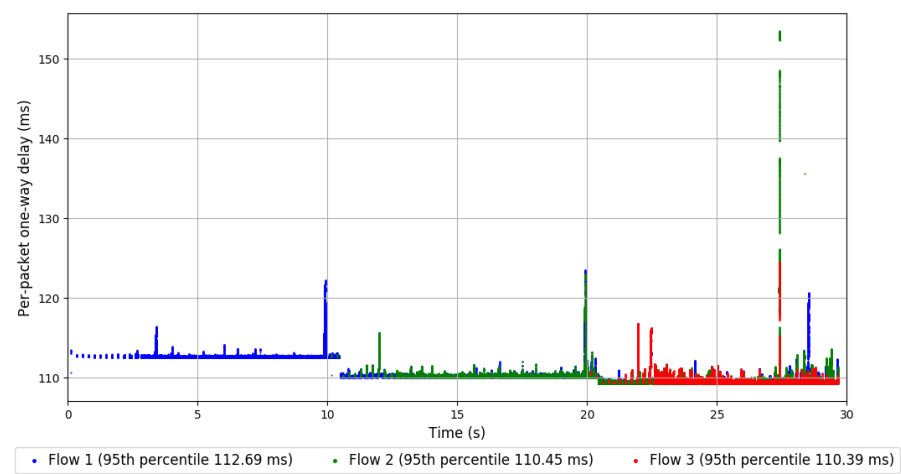
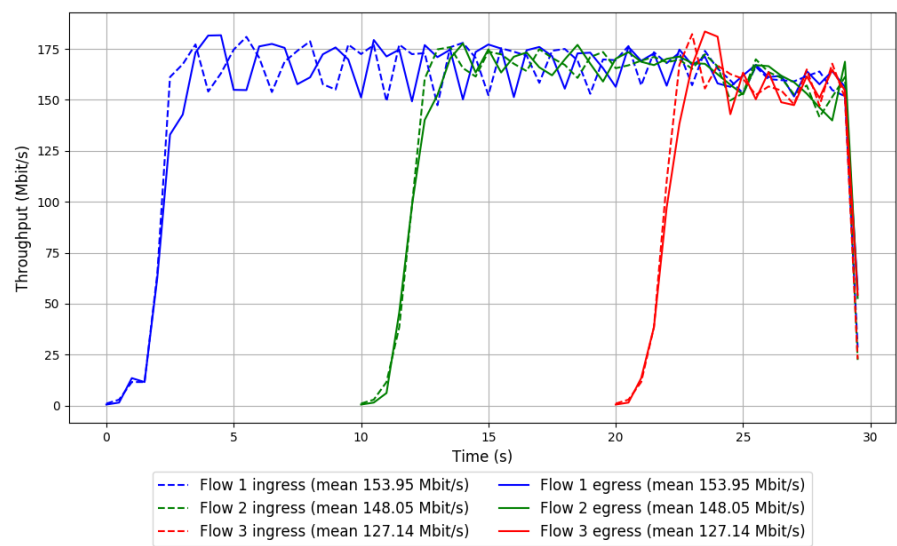


```
Run 6: Statistics of Indigo-calib

Start at: 2017-12-12 01:56:33
End at: 2017-12-12 01:57:03

# Below is generated by plot.py at 2017-12-12 04:48:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 292.73 Mbit/s
95th percentile per-packet one-way delay: 112.668 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 153.95 Mbit/s
95th percentile per-packet one-way delay: 112.687 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 148.05 Mbit/s
95th percentile per-packet one-way delay: 110.453 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 127.14 Mbit/s
95th percentile per-packet one-way delay: 110.392 ms
Loss rate: 0.01%
```

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-12-12 02:09:59

End at: 2017-12-12 02:10:29

Below is generated by plot.py at 2017-12-12 04:49:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 291.02 Mbit/s

95th percentile per-packet one-way delay: 111.037 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 153.22 Mbit/s

95th percentile per-packet one-way delay: 110.849 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 147.25 Mbit/s

95th percentile per-packet one-way delay: 111.113 ms

Loss rate: 0.00%

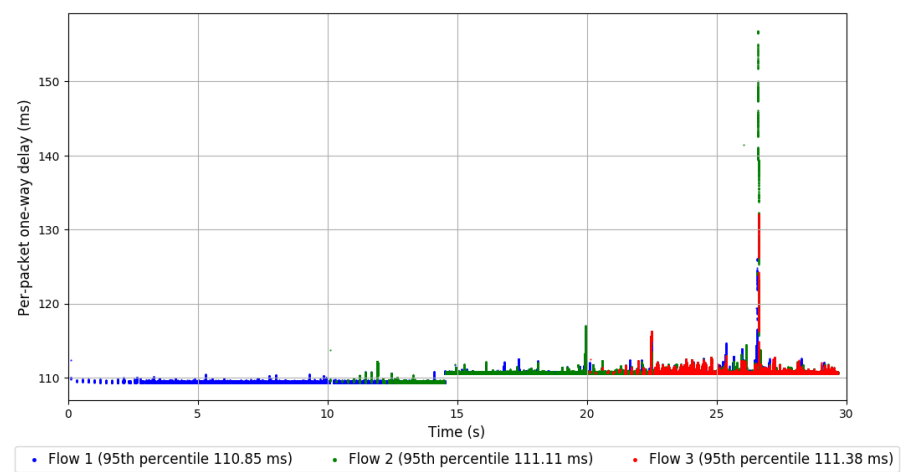
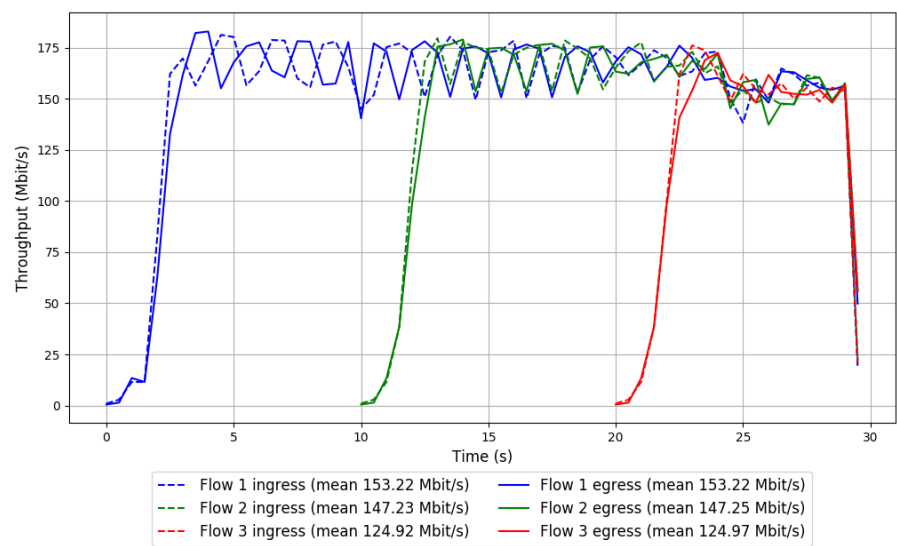
-- Flow 3:

Average throughput: 124.97 Mbit/s

95th percentile per-packet one-way delay: 111.375 ms

Loss rate: 0.00%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-12 02:23:37

End at: 2017-12-12 02:24:07

Below is generated by plot.py at 2017-12-12 04:49:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 291.22 Mbit/s

95th percentile per-packet one-way delay: 111.230 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 152.79 Mbit/s

95th percentile per-packet one-way delay: 111.232 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 148.51 Mbit/s

95th percentile per-packet one-way delay: 111.237 ms

Loss rate: 0.00%

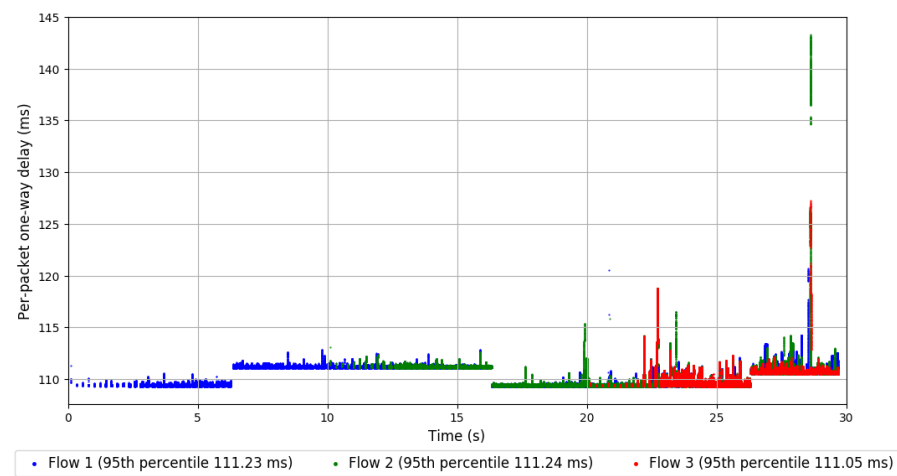
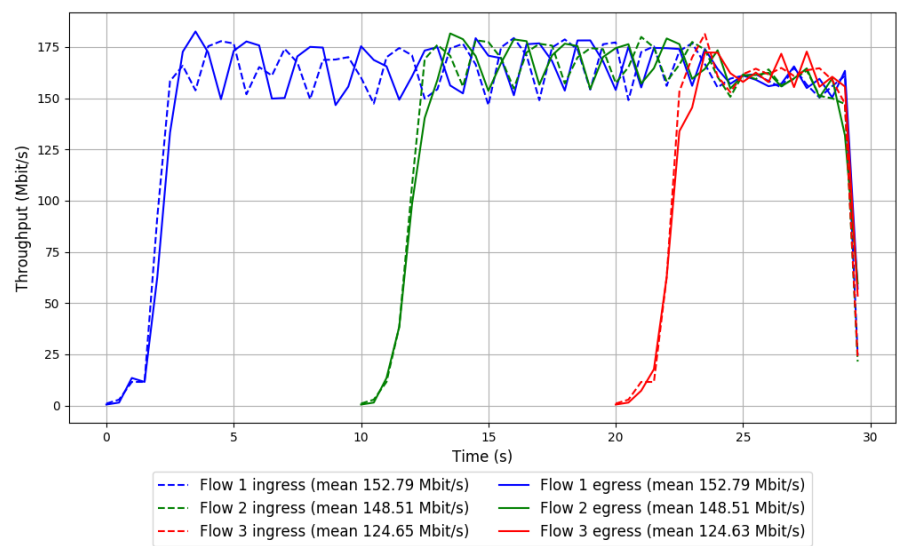
-- Flow 3:

Average throughput: 124.63 Mbit/s

95th percentile per-packet one-way delay: 111.051 ms

Loss rate: 0.00%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-12 02:37:14

End at: 2017-12-12 02:37:44

Below is generated by plot.py at 2017-12-12 04:49:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 290.47 Mbit/s

95th percentile per-packet one-way delay: 111.882 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 152.21 Mbit/s

95th percentile per-packet one-way delay: 111.467 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 147.45 Mbit/s

95th percentile per-packet one-way delay: 112.341 ms

Loss rate: 0.00%

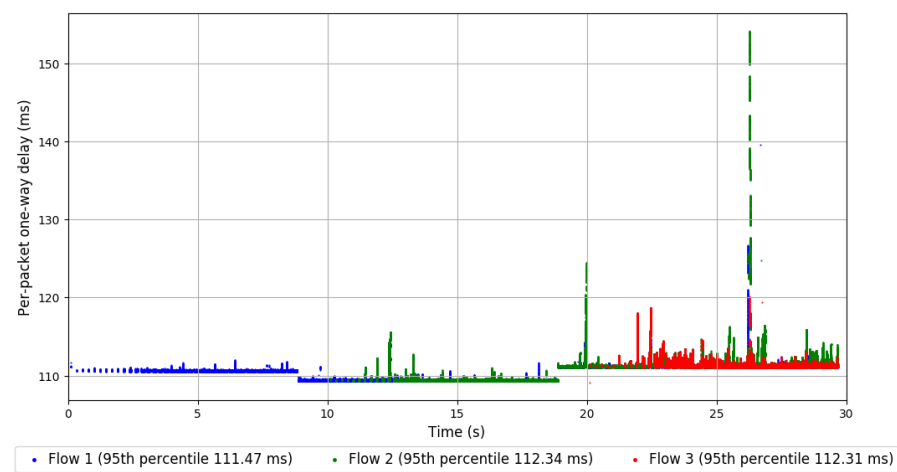
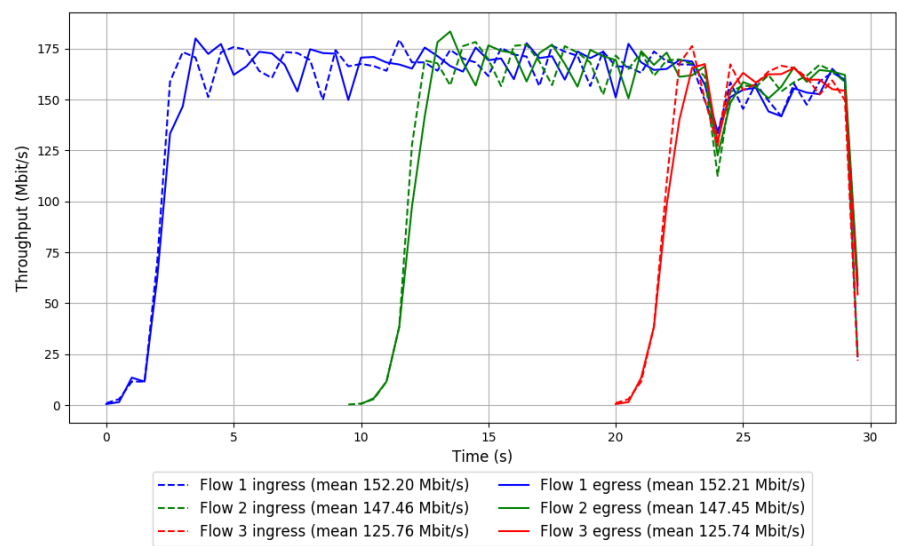
-- Flow 3:

Average throughput: 125.74 Mbit/s

95th percentile per-packet one-way delay: 112.310 ms

Loss rate: 0.00%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-12 02:50:25

End at: 2017-12-12 02:50:55

Below is generated by plot.py at 2017-12-12 04:49:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 290.82 Mbit/s

95th percentile per-packet one-way delay: 111.759 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 153.58 Mbit/s

95th percentile per-packet one-way delay: 111.555 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 146.87 Mbit/s

95th percentile per-packet one-way delay: 111.836 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 123.93 Mbit/s

95th percentile per-packet one-way delay: 112.149 ms

Loss rate: 0.00%

Run 10: Report of Indigo-calib — Data Link

