

Pantheon Report

Generated at 2017-10-12 10:14:46 (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.

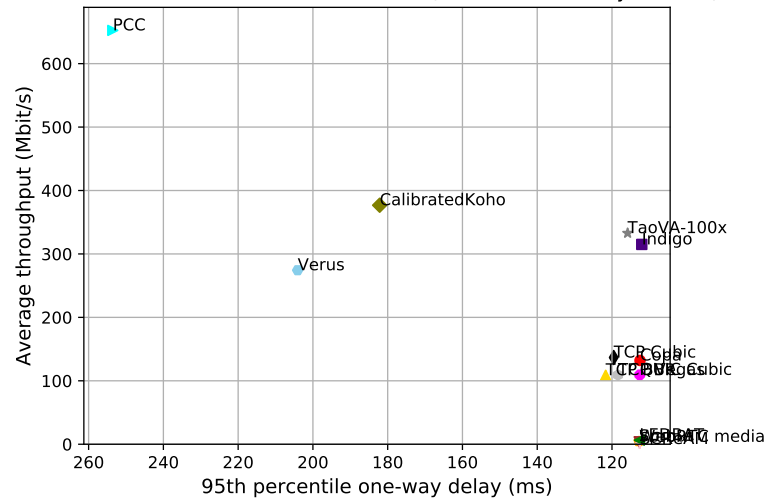
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

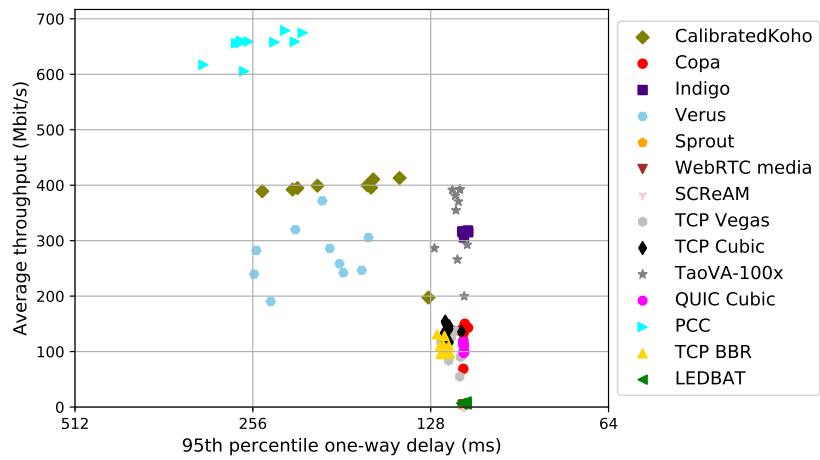
Git summary:

```
branch: indigos @ 45998d6404be7c5106956530acb9cfc43bd06e7d
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
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 @ 03455460fd1a8ffbdad86fab936fdca204b80db
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 @ f1a14bffe749737437f61b1eaeab30b267cde681
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



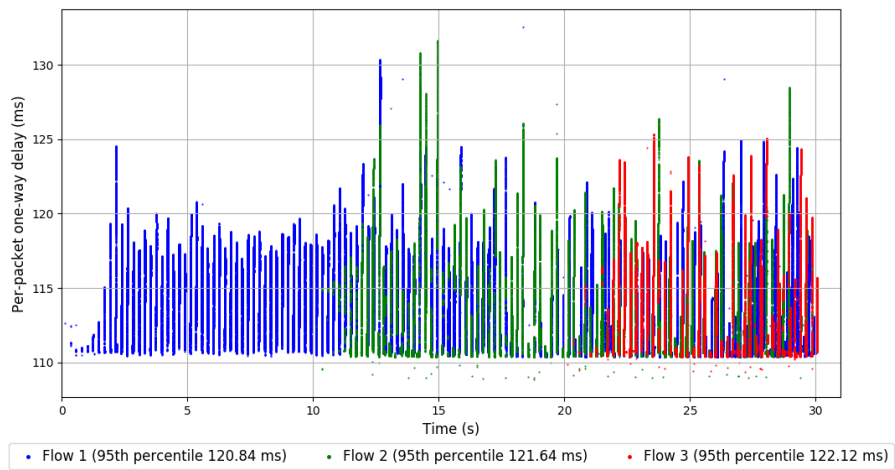
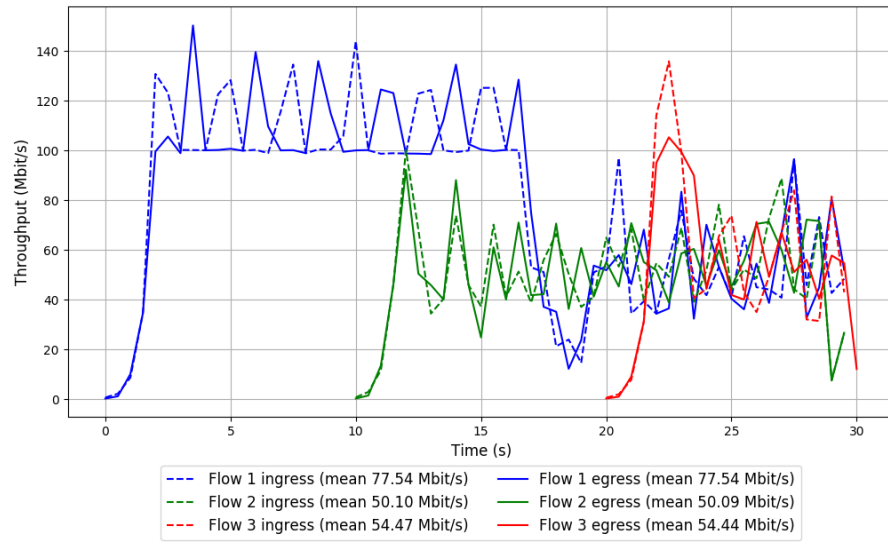
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	51.90	54.05	63.93	120.94	122.24	122.10	0.00	0.02	0.00
TCP Cubic	9	71.70	68.42	59.25	118.85	117.60	120.83	0.01	0.01	0.04
LEDBAT	10	3.82	3.06	1.61	112.66	112.61	112.52	0.02	0.01	0.00
PCC	10	531.95	144.64	73.86	263.41	209.49	210.66	5.48	2.96	4.62
QUIC Cubic	10	62.06	52.37	38.86	111.55	112.03	112.07	0.00	0.00	0.00
SCReAM	10	0.19	0.20	0.22	112.37	111.34	111.53	0.04	0.00	0.00
WebRTC media	9	2.10	1.29	0.46	112.51	111.79	112.61	0.00	0.00	0.00
Sprout	9	2.34	2.33	1.79	112.65	112.93	112.70	0.00	0.01	0.23
TaoVA-100x	10	178.50	179.88	137.14	113.28	119.04	115.82	0.01	0.00	0.02
TCP Vegas	10	60.51	45.13	56.78	116.81	116.60	119.27	0.01	0.02	0.00
Verus	10	154.86	138.00	87.23	173.17	214.51	194.99	0.17	1.27	0.84
Copa	10	67.48	70.36	66.60	303.33	112.18	112.07	0.00	0.00	0.01
CalibratedKoho	9	246.11	183.94	14.82	726.76	193.23	122.00	0.27	0.31	0.04
Indigo	9	167.13	158.67	133.15	111.87	112.27	112.31	0.00	0.00	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2017-10-12 05:51:50
End at: 2017-10-12 05:52:20

# Below is generated by plot.py at 2017-10-12 09:16:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.42 Mbit/s
95th percentile per-packet one-way delay: 121.315 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 77.54 Mbit/s
95th percentile per-packet one-way delay: 120.837 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.09 Mbit/s
95th percentile per-packet one-way delay: 121.638 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 54.44 Mbit/s
95th percentile per-packet one-way delay: 122.123 ms
Loss rate: 0.00%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-10-12 06:05:45

End at: 2017-10-12 06:06:15

Below is generated by plot.py at 2017-10-12 09:16:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.63 Mbit/s

95th percentile per-packet one-way delay: 122.691 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 50.34 Mbit/s

95th percentile per-packet one-way delay: 122.079 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 50.61 Mbit/s

95th percentile per-packet one-way delay: 123.536 ms

Loss rate: 0.02%

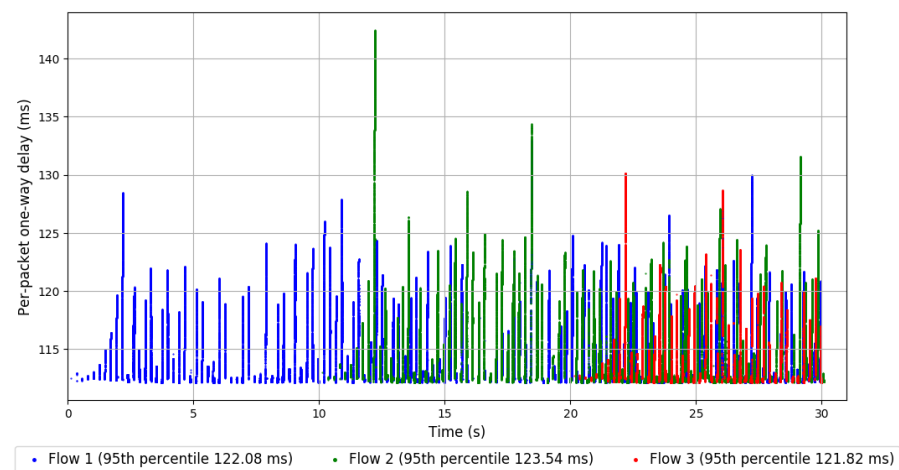
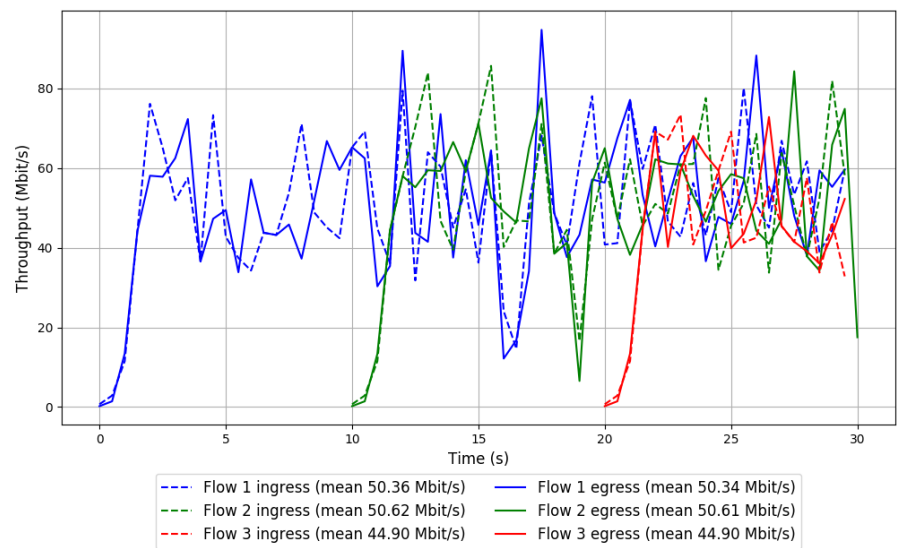
-- Flow 3:

Average throughput: 44.90 Mbit/s

95th percentile per-packet one-way delay: 121.823 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-10-12 06:19:48

End at: 2017-10-12 06:20:18

Below is generated by plot.py at 2017-10-12 09:16:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 131.09 Mbit/s

95th percentile per-packet one-way delay: 124.852 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.06 Mbit/s

95th percentile per-packet one-way delay: 120.772 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.32 Mbit/s

95th percentile per-packet one-way delay: 125.748 ms

Loss rate: 0.00%

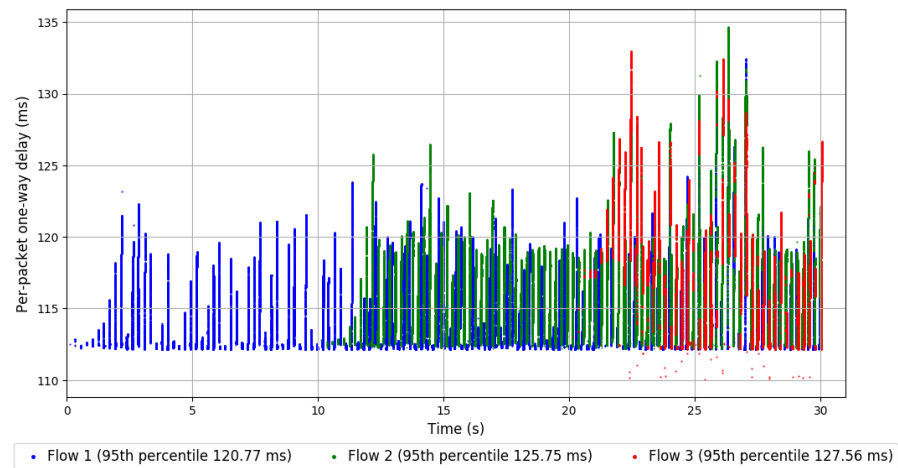
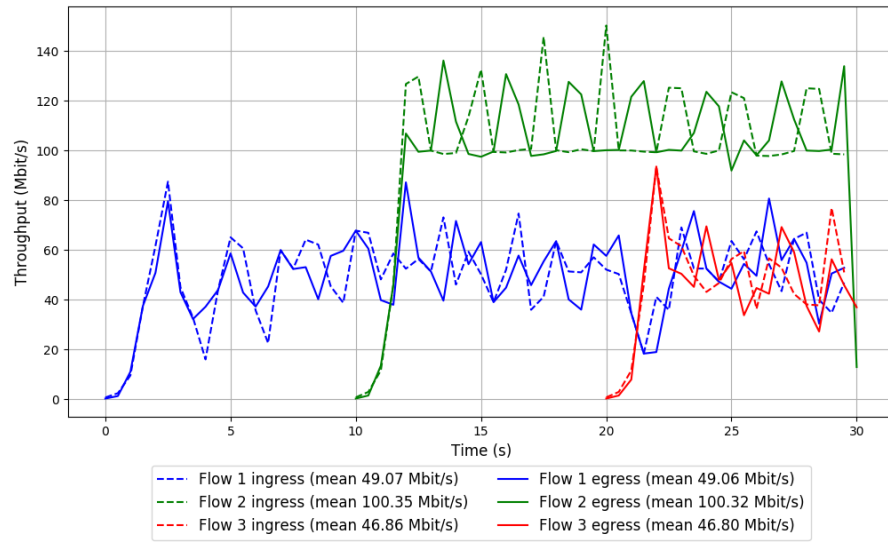
-- Flow 3:

Average throughput: 46.80 Mbit/s

95th percentile per-packet one-way delay: 127.559 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-10-12 06:33:31

End at: 2017-10-12 06:34:01

Below is generated by plot.py at 2017-10-12 09:16:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.46 Mbit/s

95th percentile per-packet one-way delay: 118.761 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.46 Mbit/s

95th percentile per-packet one-way delay: 118.837 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.98 Mbit/s

95th percentile per-packet one-way delay: 118.577 ms

Loss rate: 0.00%

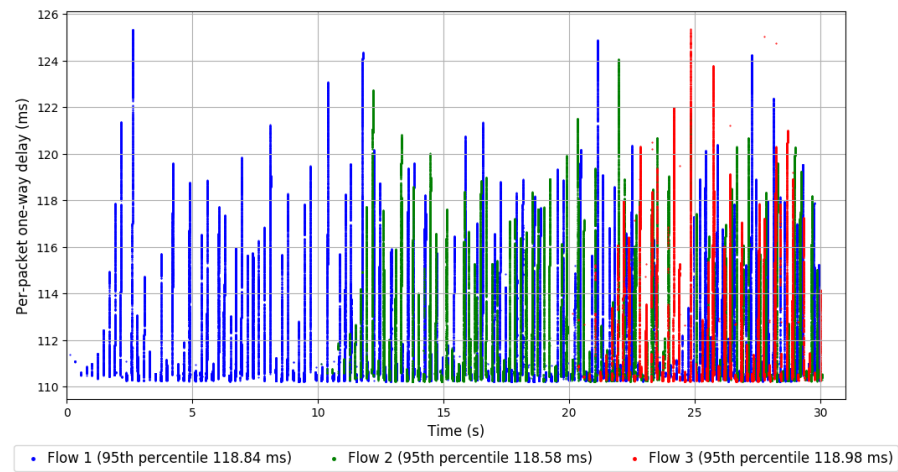
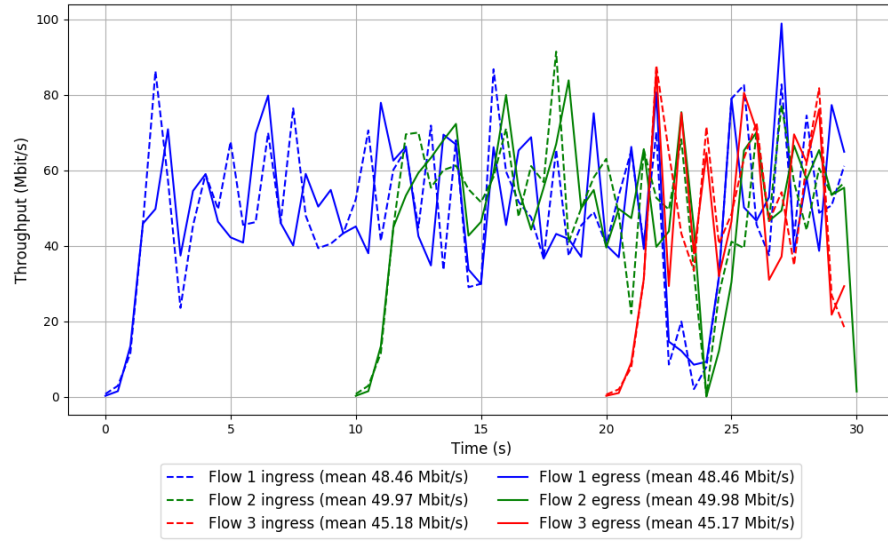
-- Flow 3:

Average throughput: 45.17 Mbit/s

95th percentile per-packet one-way delay: 118.985 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-10-12 06:47:25

End at: 2017-10-12 06:47:55

Below is generated by plot.py at 2017-10-12 09:16:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.91 Mbit/s

95th percentile per-packet one-way delay: 120.924 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 48.75 Mbit/s

95th percentile per-packet one-way delay: 119.683 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 51.51 Mbit/s

95th percentile per-packet one-way delay: 121.914 ms

Loss rate: 0.02%

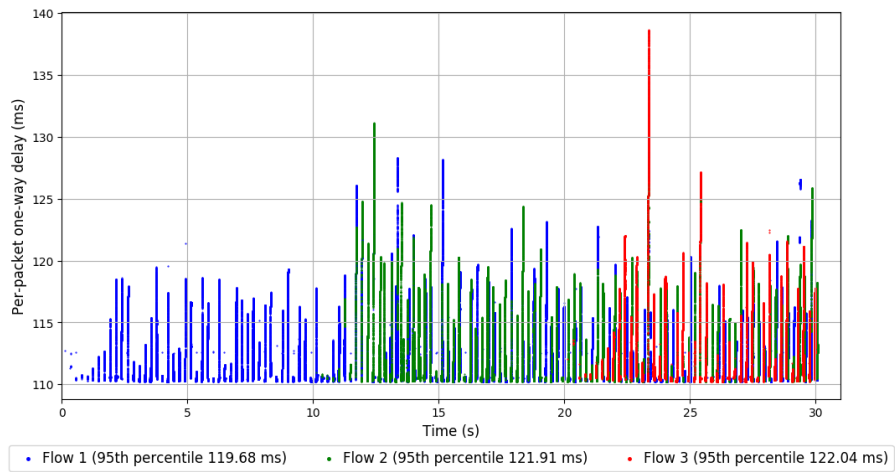
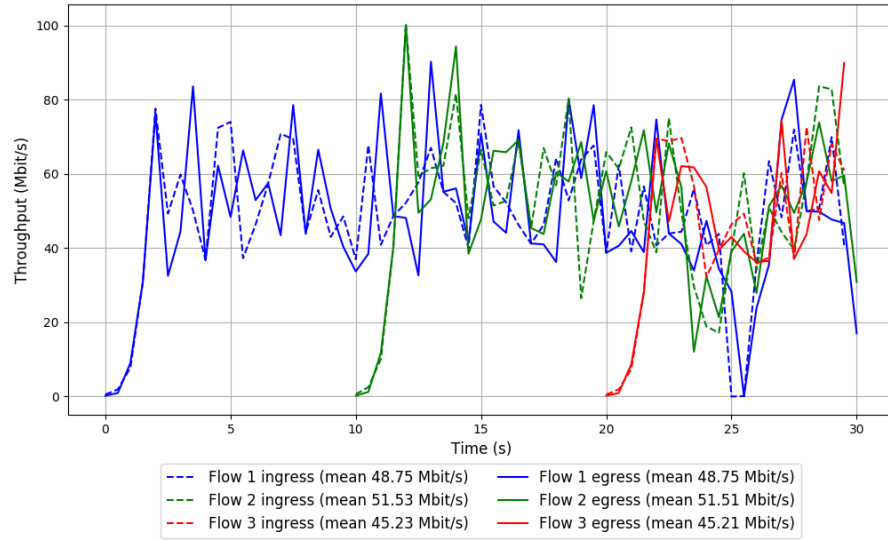
-- Flow 3:

Average throughput: 45.21 Mbit/s

95th percentile per-packet one-way delay: 122.037 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-10-12 07:01:03

End at: 2017-10-12 07:01:33

Below is generated by plot.py at 2017-10-12 09:16:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 110.85 Mbit/s

95th percentile per-packet one-way delay: 119.299 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.00 Mbit/s

95th percentile per-packet one-way delay: 119.530 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.25 Mbit/s

95th percentile per-packet one-way delay: 119.222 ms

Loss rate: 0.00%

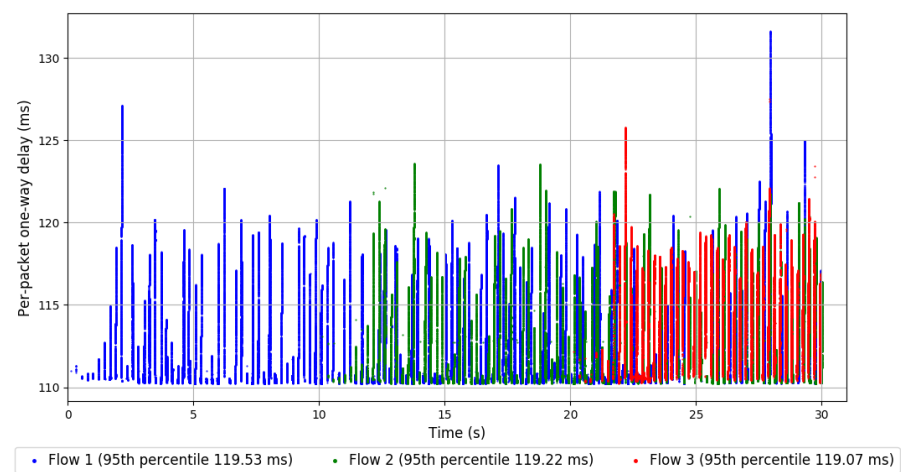
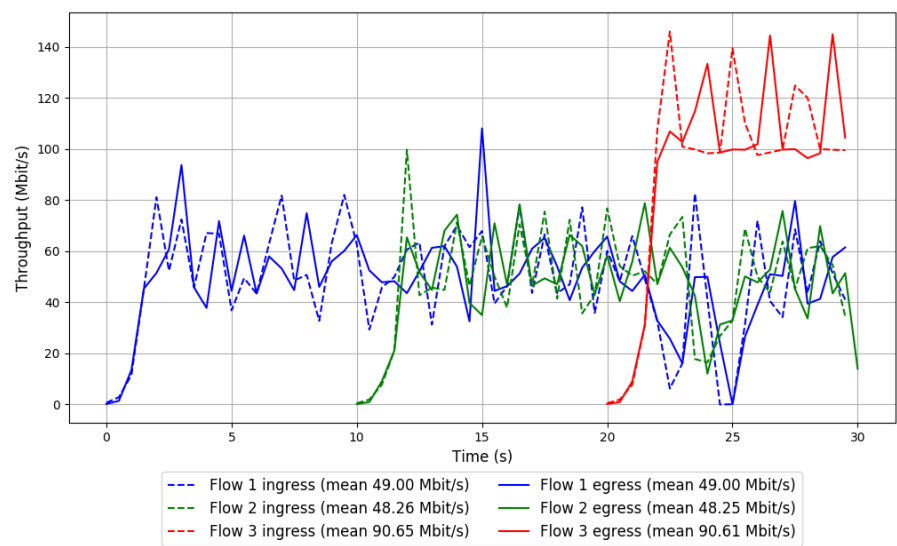
-- Flow 3:

Average throughput: 90.61 Mbit/s

95th percentile per-packet one-way delay: 119.066 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-10-12 07:15:09

End at: 2017-10-12 07:15:39

Below is generated by plot.py at 2017-10-12 09:16:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.97 Mbit/s

95th percentile per-packet one-way delay: 123.363 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.34 Mbit/s

95th percentile per-packet one-way delay: 121.850 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.60 Mbit/s

95th percentile per-packet one-way delay: 125.867 ms

Loss rate: 0.00%

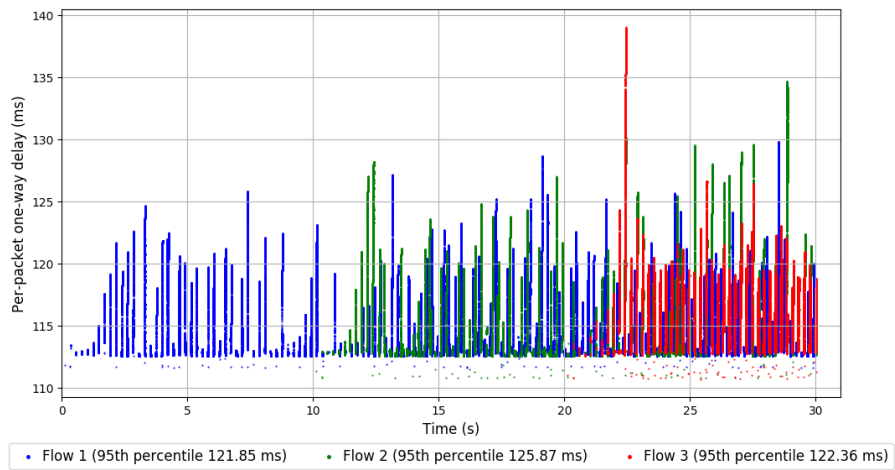
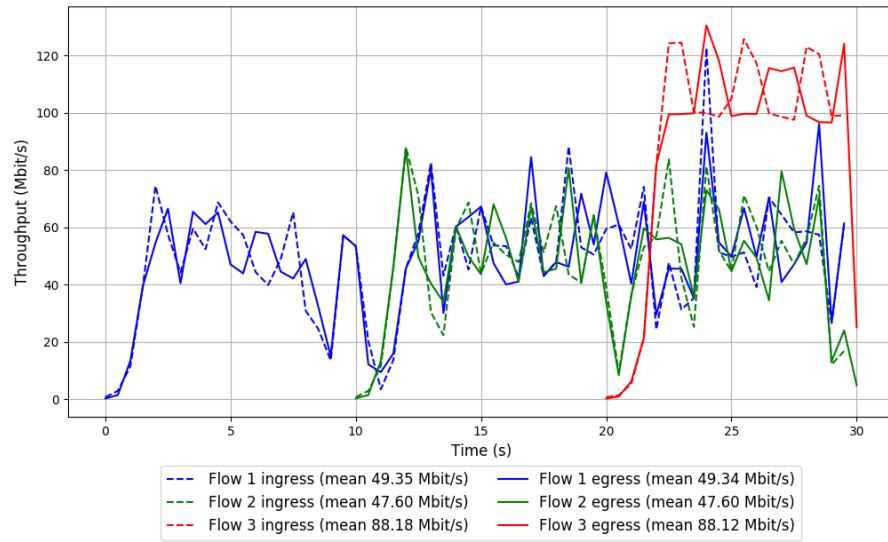
-- Flow 3:

Average throughput: 88.12 Mbit/s

95th percentile per-packet one-way delay: 122.355 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-10-12 07:28:50

End at: 2017-10-12 07:29:20

Below is generated by plot.py at 2017-10-12 09:16:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.50 Mbit/s

95th percentile per-packet one-way delay: 122.907 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.44 Mbit/s

95th percentile per-packet one-way delay: 122.788 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 48.42 Mbit/s

95th percentile per-packet one-way delay: 122.299 ms

Loss rate: 0.00%

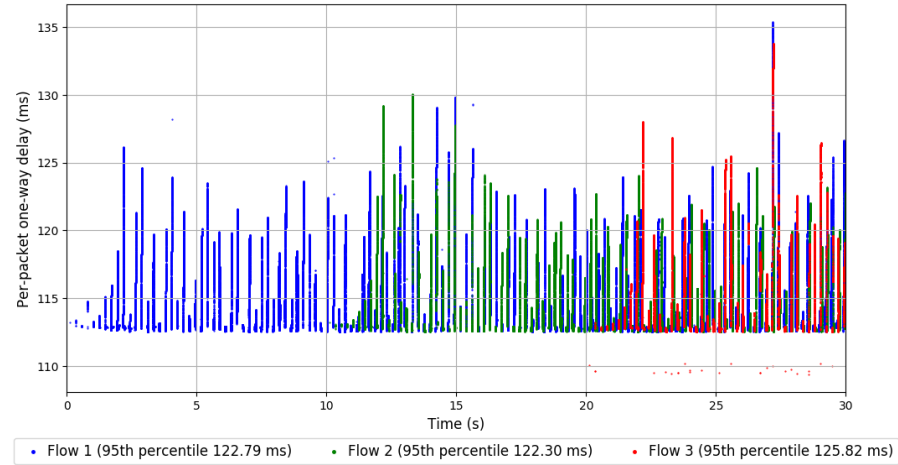
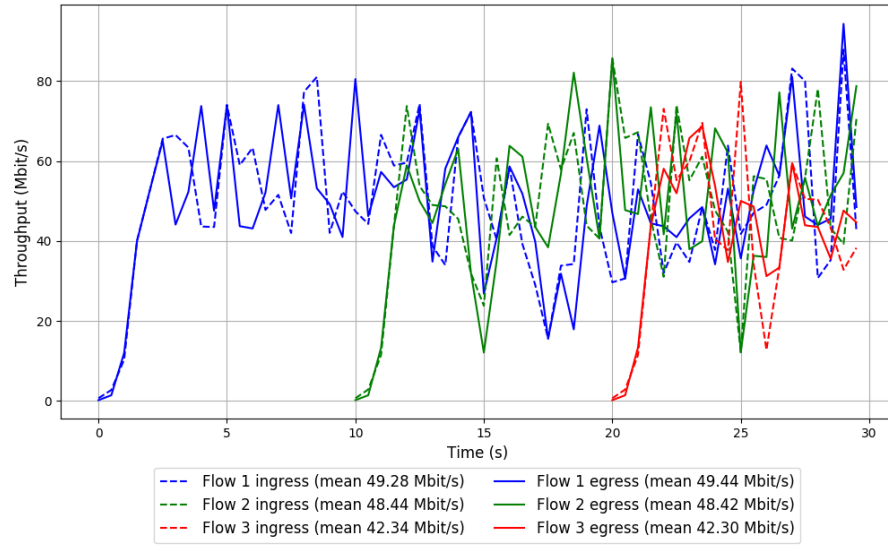
-- Flow 3:

Average throughput: 42.30 Mbit/s

95th percentile per-packet one-way delay: 125.822 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-10-12 07:42:43

End at: 2017-10-12 07:43:13

Below is generated by plot.py at 2017-10-12 09:17:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.34 Mbit/s

95th percentile per-packet one-way delay: 120.907 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 47.29 Mbit/s

95th percentile per-packet one-way delay: 121.203 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.73 Mbit/s

95th percentile per-packet one-way delay: 121.086 ms

Loss rate: 0.14%

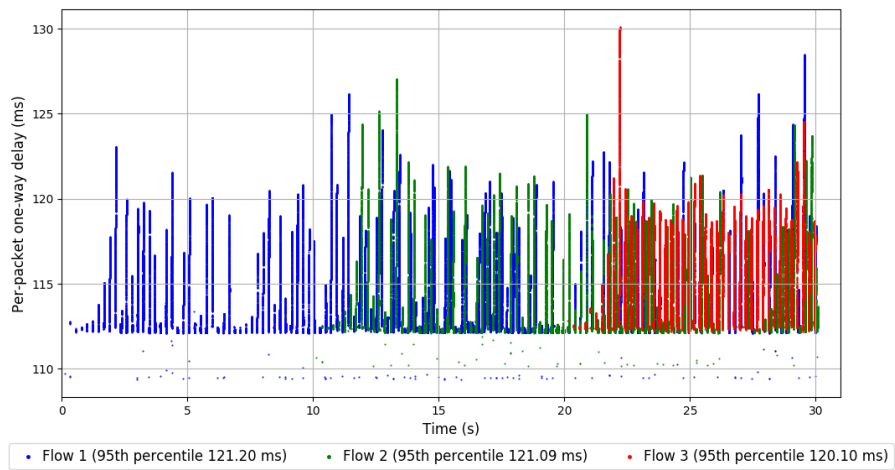
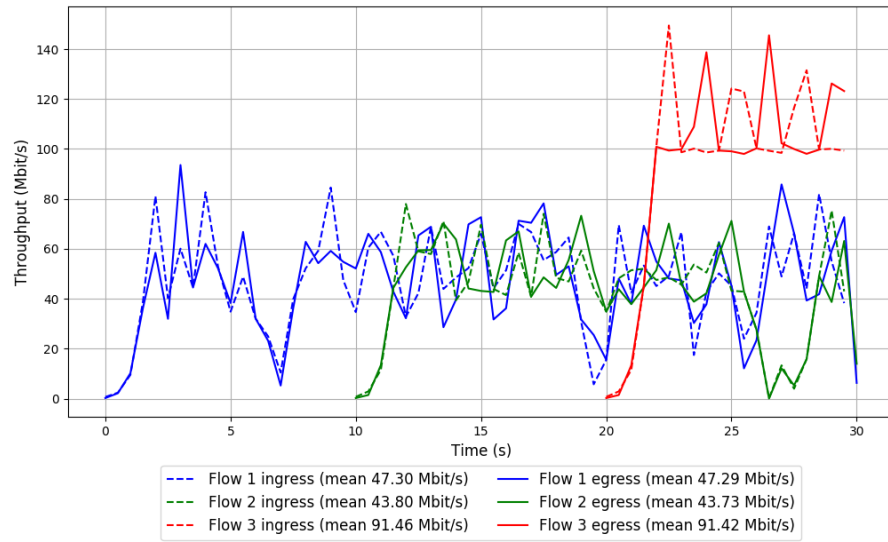
-- Flow 3:

Average throughput: 91.42 Mbit/s

95th percentile per-packet one-way delay: 120.096 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-10-12 07:56:43

End at: 2017-10-12 07:57:13

Below is generated by plot.py at 2017-10-12 09:17:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.59 Mbit/s

95th percentile per-packet one-way delay: 121.933 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.82 Mbit/s

95th percentile per-packet one-way delay: 121.851 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.95 Mbit/s

95th percentile per-packet one-way delay: 122.507 ms

Loss rate: 0.00%

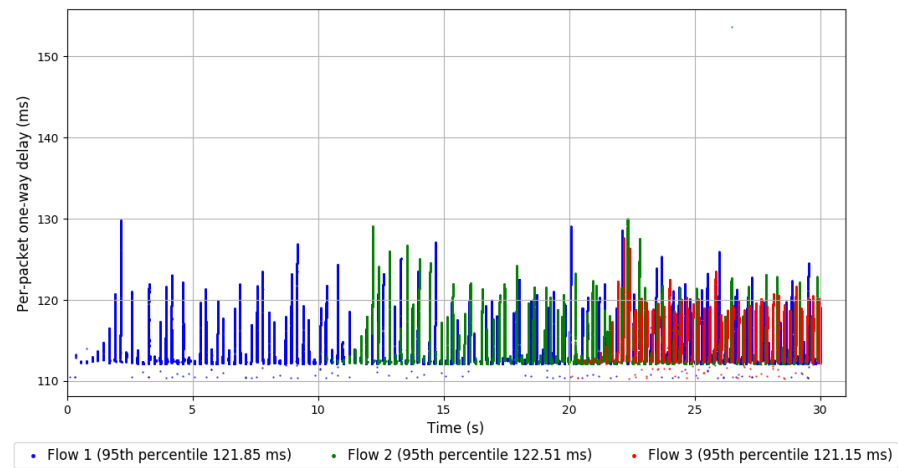
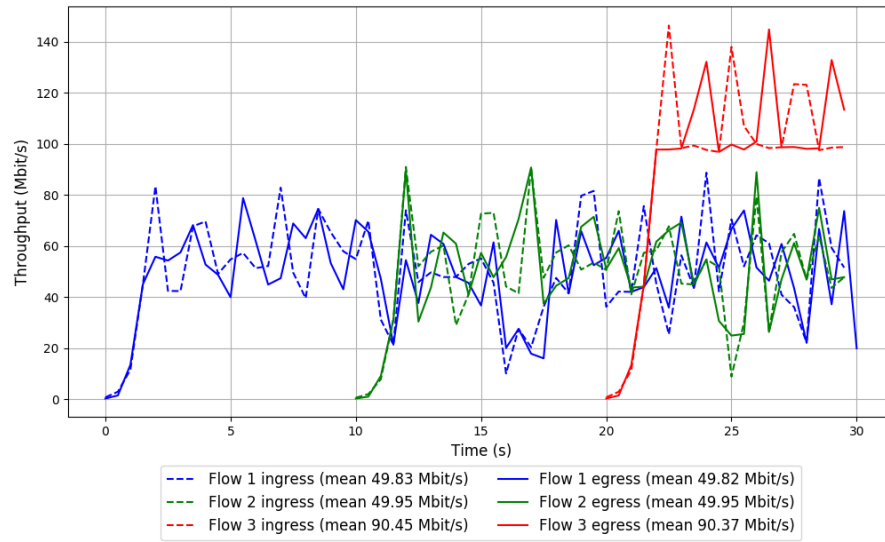
-- Flow 3:

Average throughput: 90.37 Mbit/s

95th percentile per-packet one-way delay: 121.154 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link

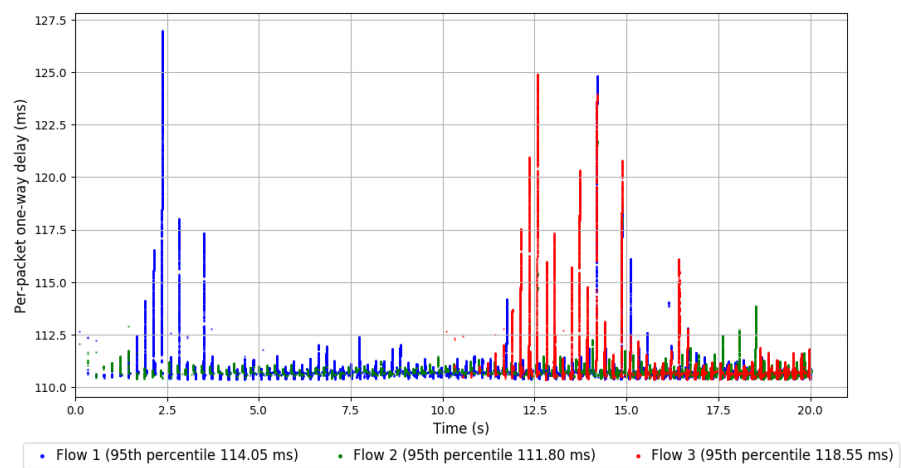
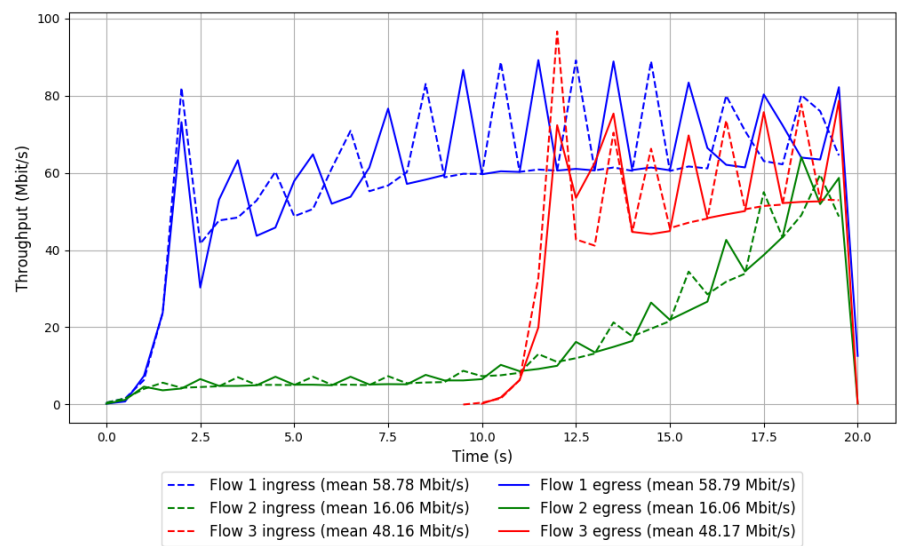


Run 1: Statistics of TCP Cubic

Start at: 2017-10-12 06:01:08

End at: 2017-10-12 06:01:38

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-10-12 06:15:00

End at: 2017-10-12 06:15:30

Below is generated by plot.py at 2017-10-12 09:17:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 116.48 Mbit/s

95th percentile per-packet one-way delay: 121.409 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 62.04 Mbit/s

95th percentile per-packet one-way delay: 121.232 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 59.48 Mbit/s

95th percentile per-packet one-way delay: 118.276 ms

Loss rate: 0.00%

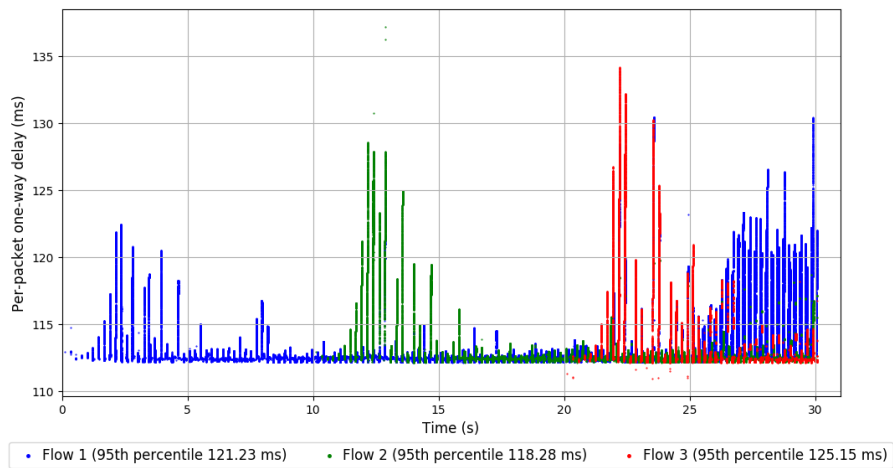
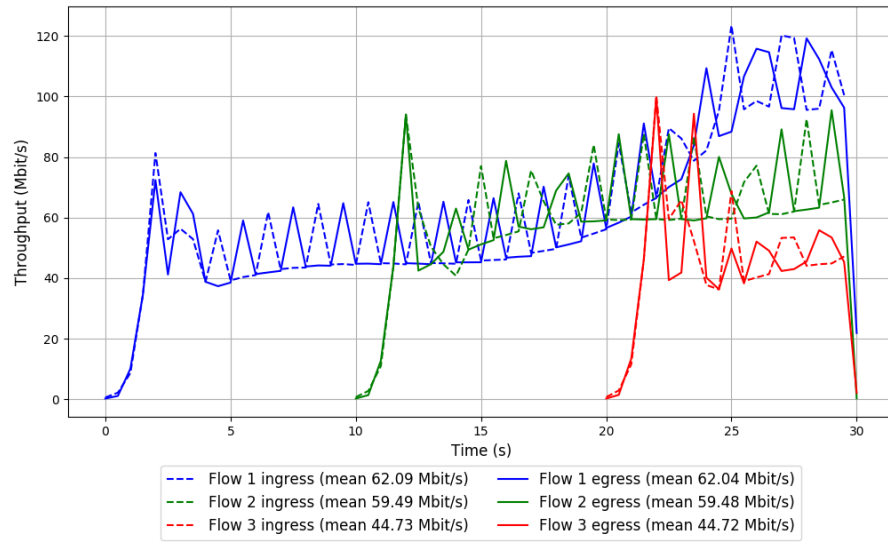
-- Flow 3:

Average throughput: 44.72 Mbit/s

95th percentile per-packet one-way delay: 125.146 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-10-12 06:29:03

End at: 2017-10-12 06:29:33

Below is generated by plot.py at 2017-10-12 09:18:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 116.79 Mbit/s

95th percentile per-packet one-way delay: 119.022 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 45.42 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 84.81 Mbit/s

95th percentile per-packet one-way delay: 119.681 ms

Loss rate: 0.00%

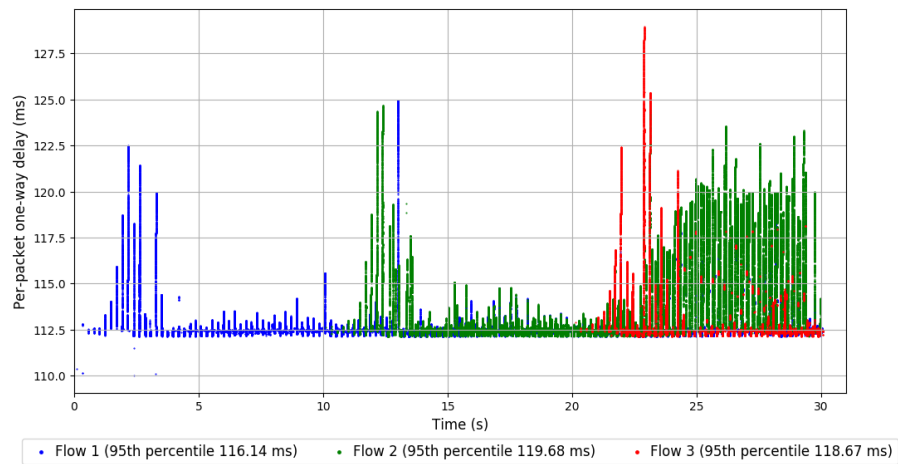
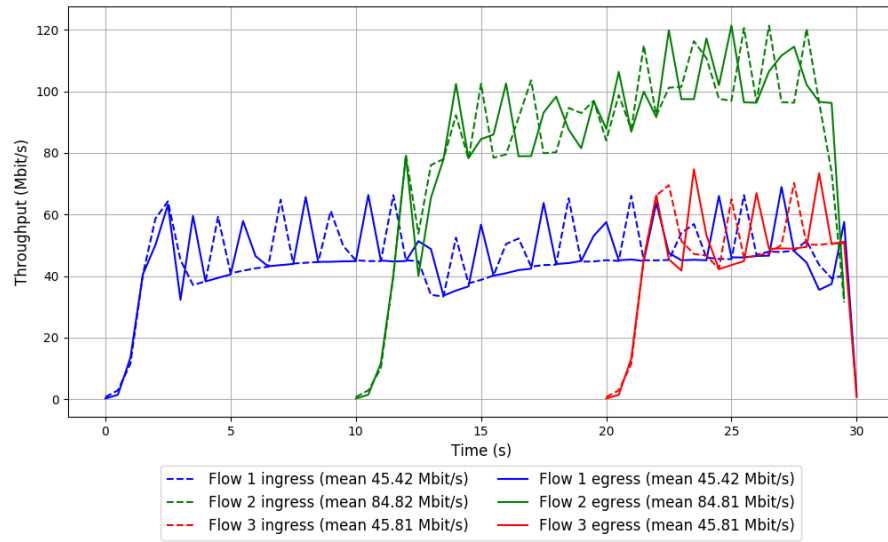
-- Flow 3:

Average throughput: 45.81 Mbit/s

95th percentile per-packet one-way delay: 118.673 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-10-12 06:42:45

End at: 2017-10-12 06:43:15

Below is generated by plot.py at 2017-10-12 09:18:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 154.21 Mbit/s

95th percentile per-packet one-way delay: 120.962 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 103.05 Mbit/s

95th percentile per-packet one-way delay: 121.343 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 75.99 Mbit/s

95th percentile per-packet one-way delay: 118.864 ms

Loss rate: 0.00%

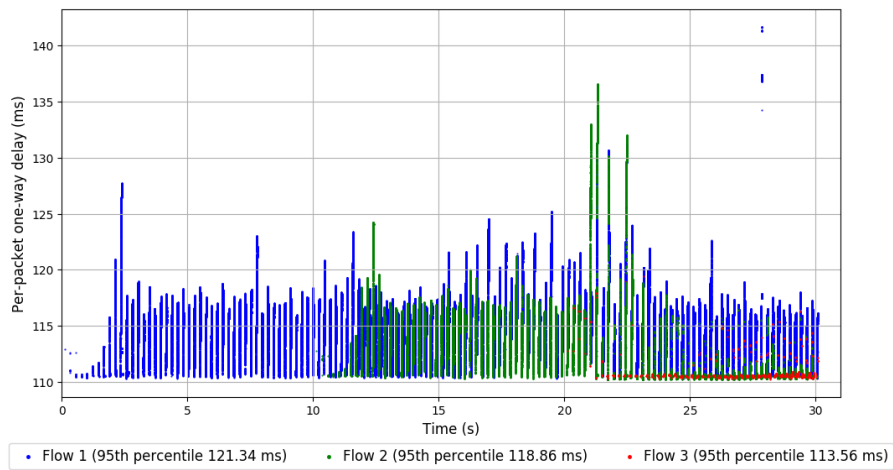
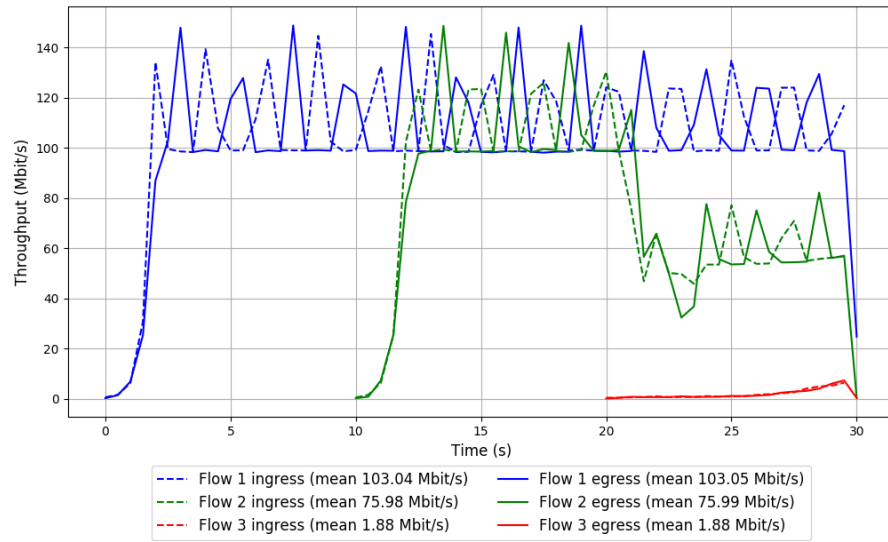
-- Flow 3:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 113.564 ms

Loss rate: 0.38%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-10-12 06:56:46

End at: 2017-10-12 06:57:16

Below is generated by plot.py at 2017-10-12 09:18:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.72 Mbit/s

95th percentile per-packet one-way delay: 113.468 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 65.80 Mbit/s

95th percentile per-packet one-way delay: 113.542 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 81.81 Mbit/s

95th percentile per-packet one-way delay: 112.358 ms

Loss rate: 0.05%

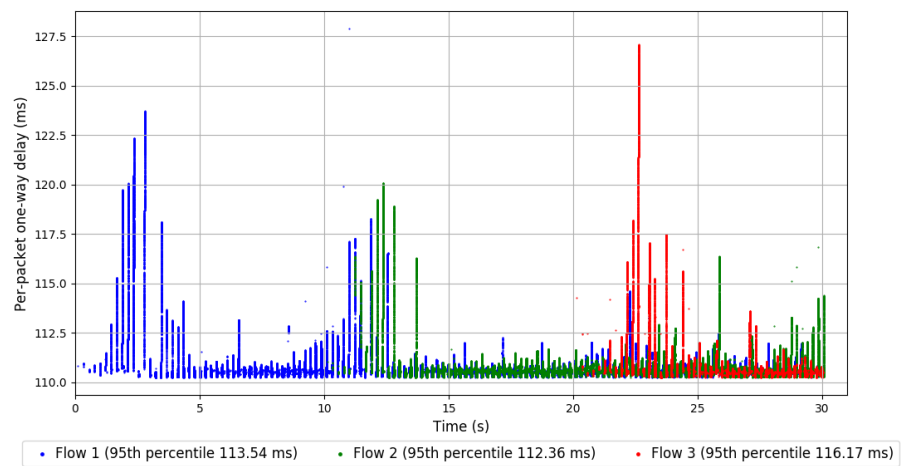
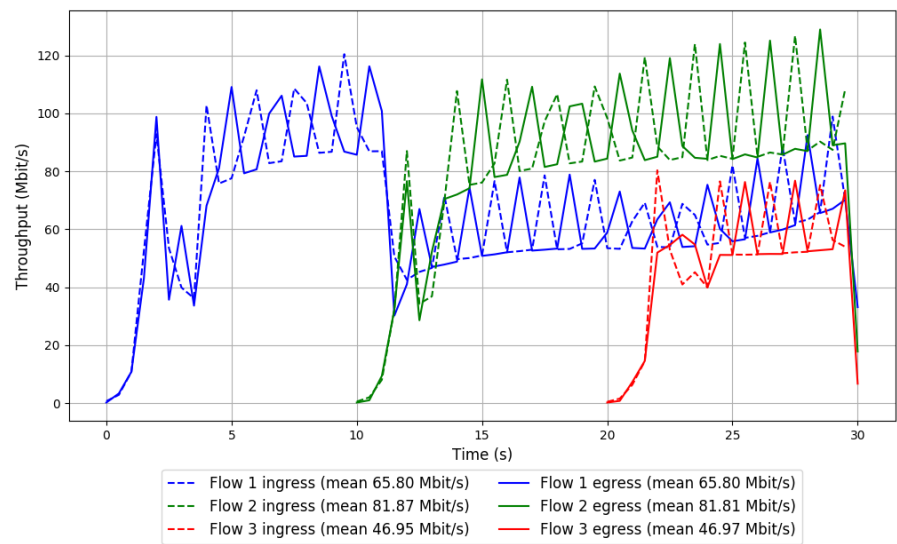
-- Flow 3:

Average throughput: 46.97 Mbit/s

95th percentile per-packet one-way delay: 116.167 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-10-12 07:10:21

End at: 2017-10-12 07:10:51

Below is generated by plot.py at 2017-10-12 09:19:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 137.23 Mbit/s

95th percentile per-packet one-way delay: 120.610 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 73.14 Mbit/s

95th percentile per-packet one-way delay: 120.673 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 51.09 Mbit/s

95th percentile per-packet one-way delay: 115.814 ms

Loss rate: 0.00%

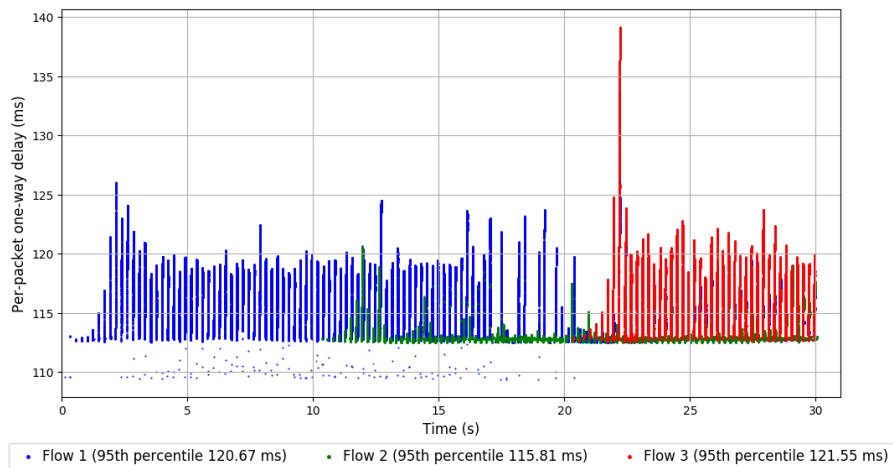
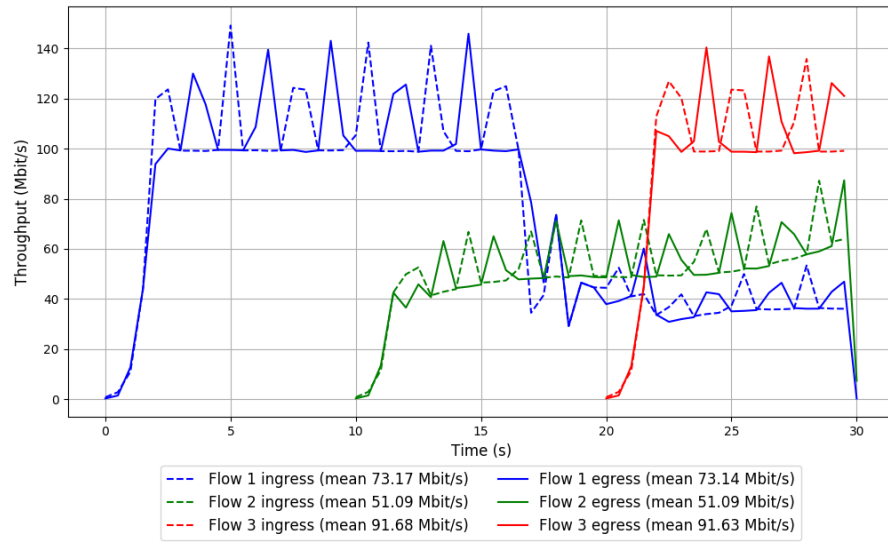
-- Flow 3:

Average throughput: 91.63 Mbit/s

95th percentile per-packet one-way delay: 121.550 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-10-12 07:24:05

End at: 2017-10-12 07:24:35

Below is generated by plot.py at 2017-10-12 09:19:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 133.49 Mbit/s

95th percentile per-packet one-way delay: 121.431 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.51 Mbit/s

95th percentile per-packet one-way delay: 121.259 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.22 Mbit/s

95th percentile per-packet one-way delay: 119.300 ms

Loss rate: 0.00%

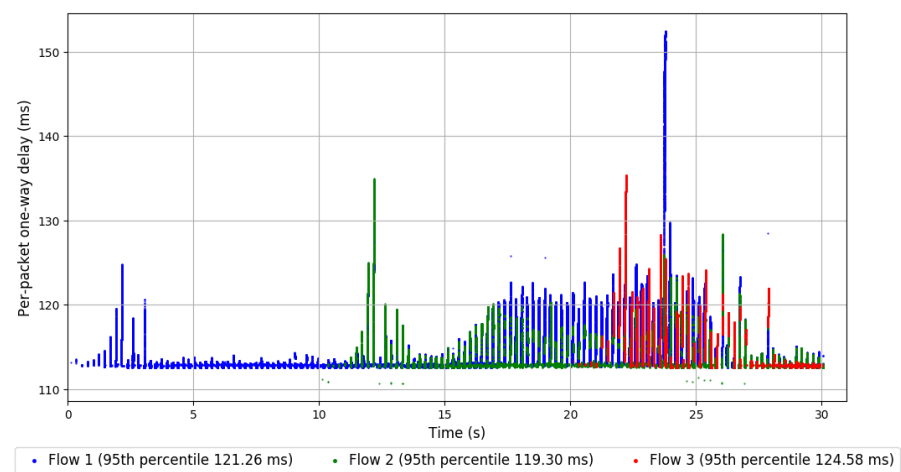
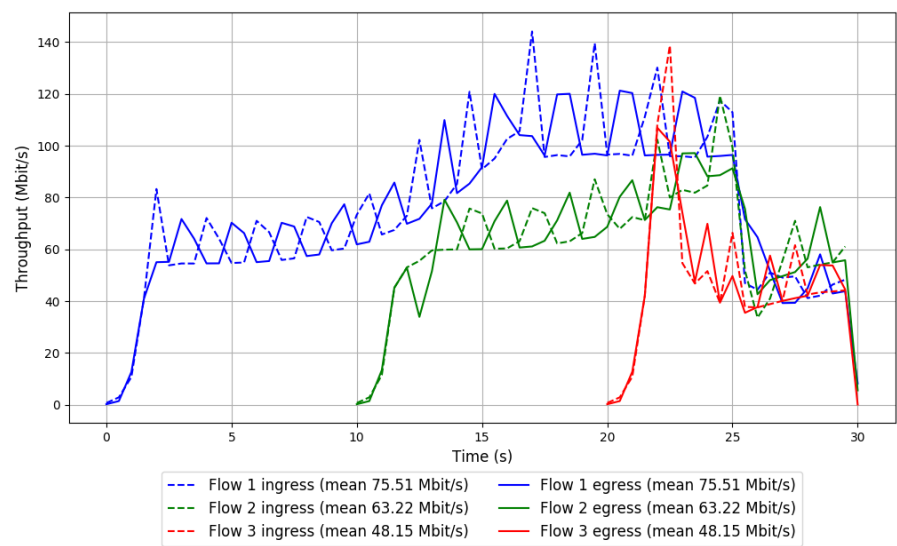
-- Flow 3:

Average throughput: 48.15 Mbit/s

95th percentile per-packet one-way delay: 124.582 ms

Loss rate: 0.01%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-10-12 07:38:02

End at: 2017-10-12 07:38:32

Below is generated by plot.py at 2017-10-12 09:20:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.31 Mbit/s

95th percentile per-packet one-way delay: 119.227 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 69.42 Mbit/s

95th percentile per-packet one-way delay: 117.159 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.43 Mbit/s

95th percentile per-packet one-way delay: 117.514 ms

Loss rate: 0.00%

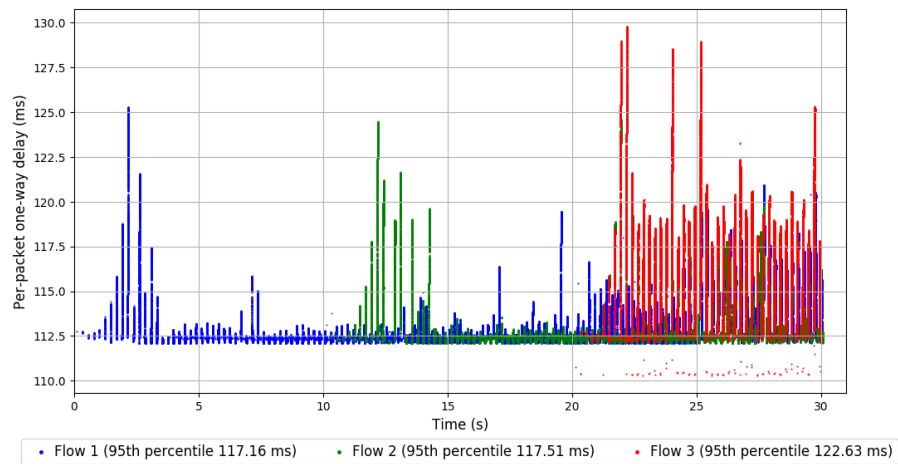
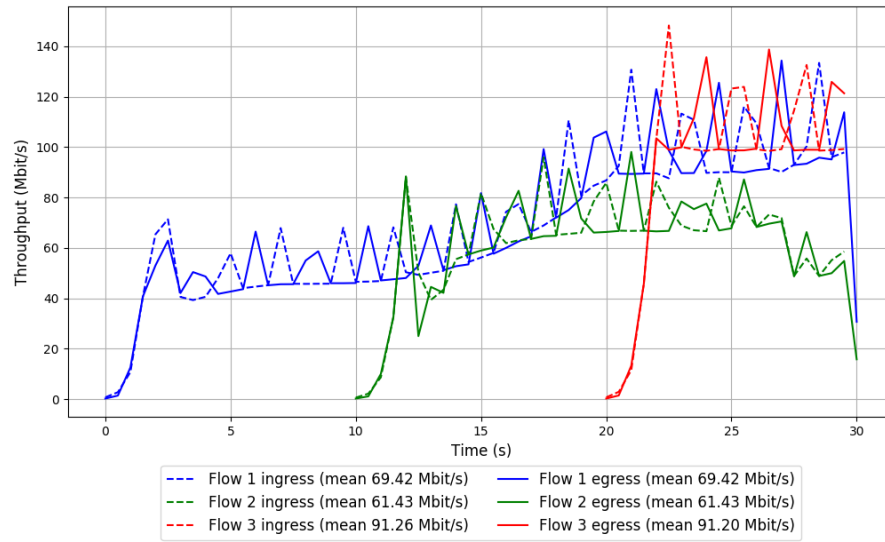
-- Flow 3:

Average throughput: 91.20 Mbit/s

95th percentile per-packet one-way delay: 122.629 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-10-12 07:52:00

End at: 2017-10-12 07:52:30

Below is generated by plot.py at 2017-10-12 09:20:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.01 Mbit/s

95th percentile per-packet one-way delay: 119.151 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 76.83 Mbit/s

95th percentile per-packet one-way delay: 118.939 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 69.01 Mbit/s

95th percentile per-packet one-way delay: 116.182 ms

Loss rate: 0.00%

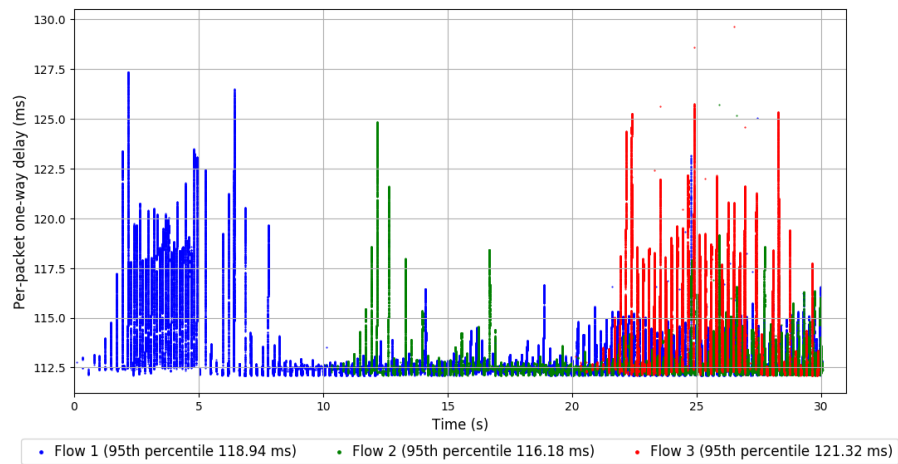
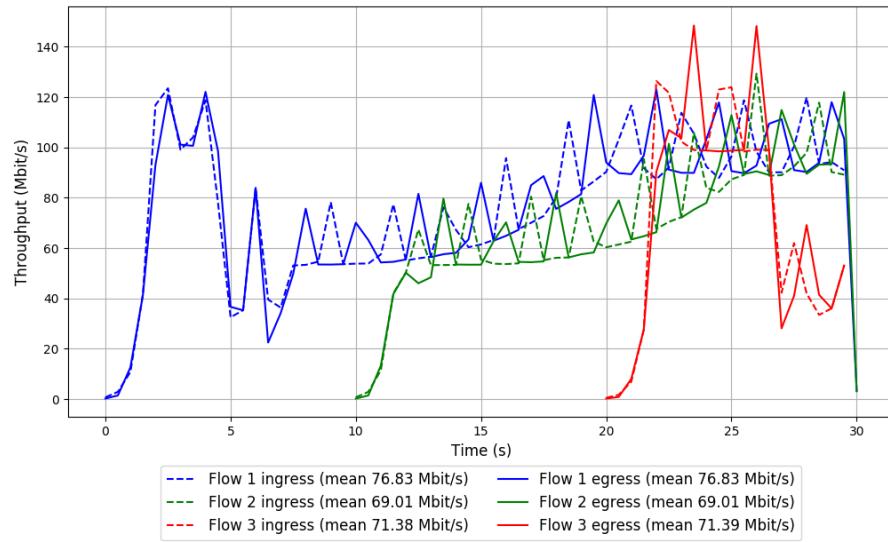
-- Flow 3:

Average throughput: 71.39 Mbit/s

95th percentile per-packet one-way delay: 121.324 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-10-12 08:06:01

End at: 2017-10-12 08:06:31

Below is generated by plot.py at 2017-10-12 09:20:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.04 Mbit/s

95th percentile per-packet one-way delay: 120.632 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.07 Mbit/s

95th percentile per-packet one-way delay: 119.369 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.92 Mbit/s

95th percentile per-packet one-way delay: 120.407 ms

Loss rate: 0.00%

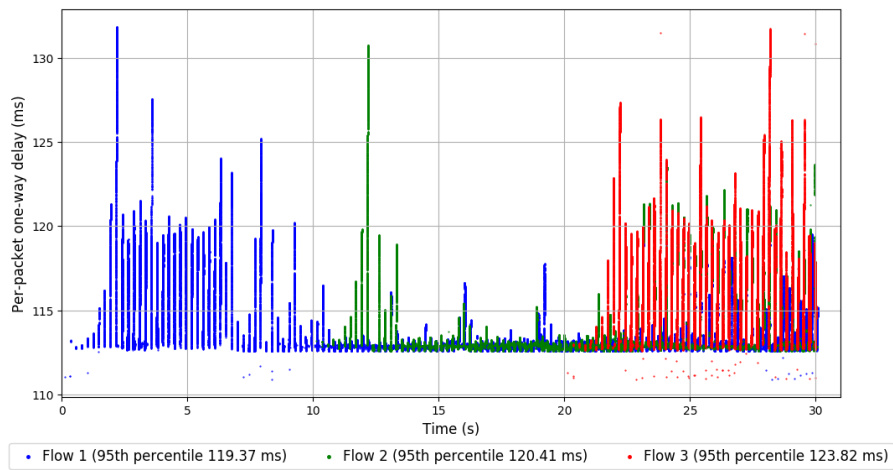
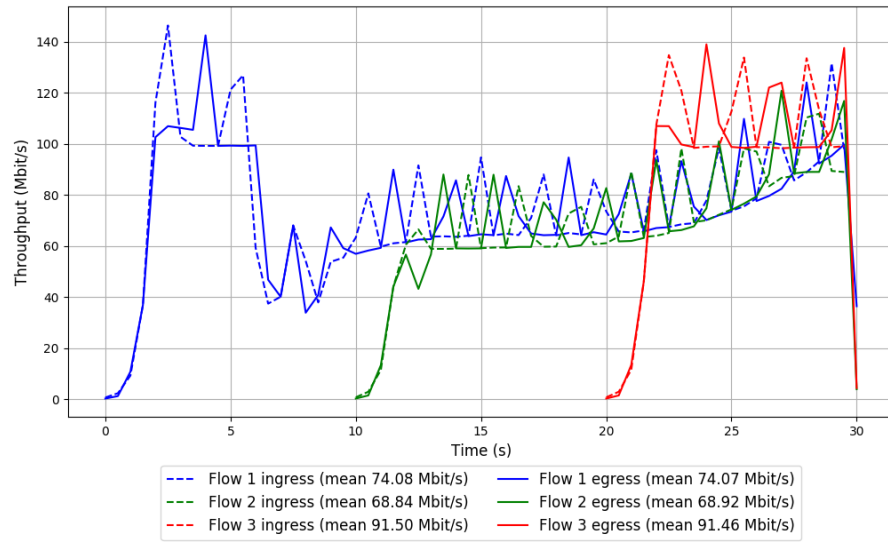
-- Flow 3:

Average throughput: 91.46 Mbit/s

95th percentile per-packet one-way delay: 123.824 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

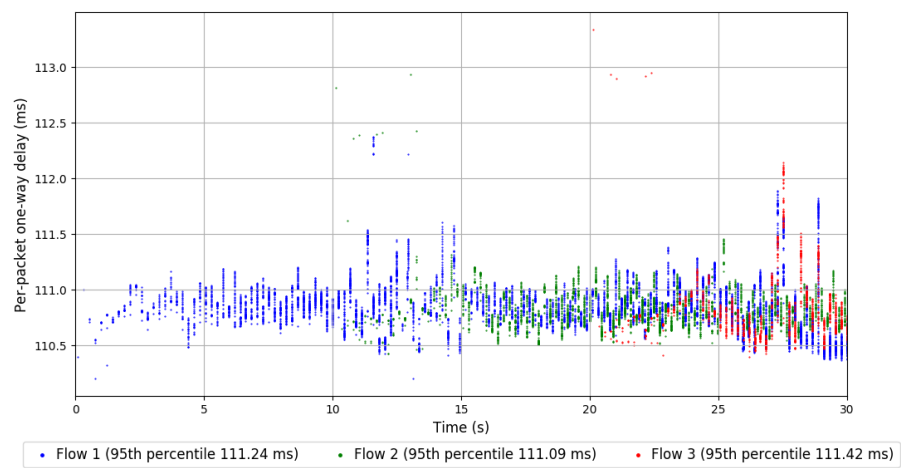
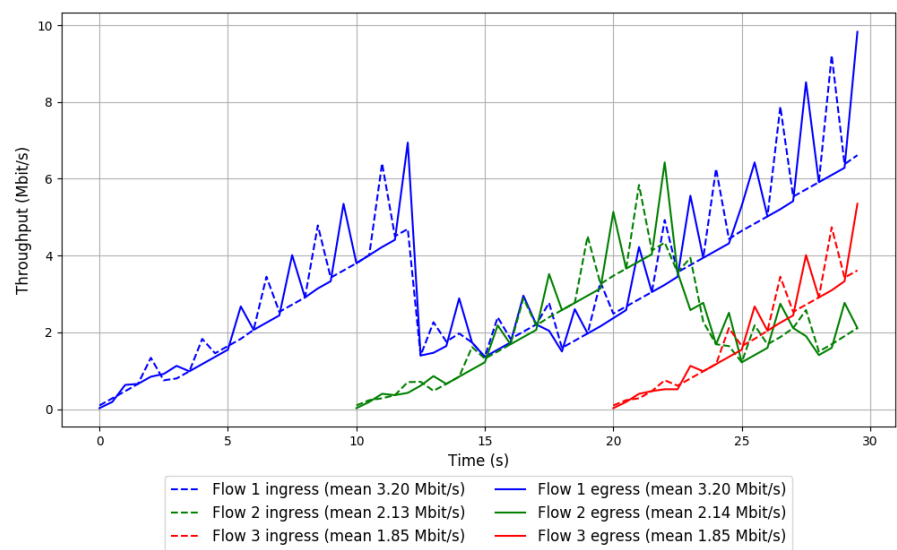


```
Run 1: Statistics of LEDBAT

Start at: 2017-10-12 06:00:22
End at: 2017-10-12 06:00:52

# Below is generated by plot.py at 2017-10-12 09:20:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.22 Mbit/s
95th percentile per-packet one-way delay: 111.207 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 3.20 Mbit/s
95th percentile per-packet one-way delay: 111.238 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 111.092 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.85 Mbit/s
95th percentile per-packet one-way delay: 111.422 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

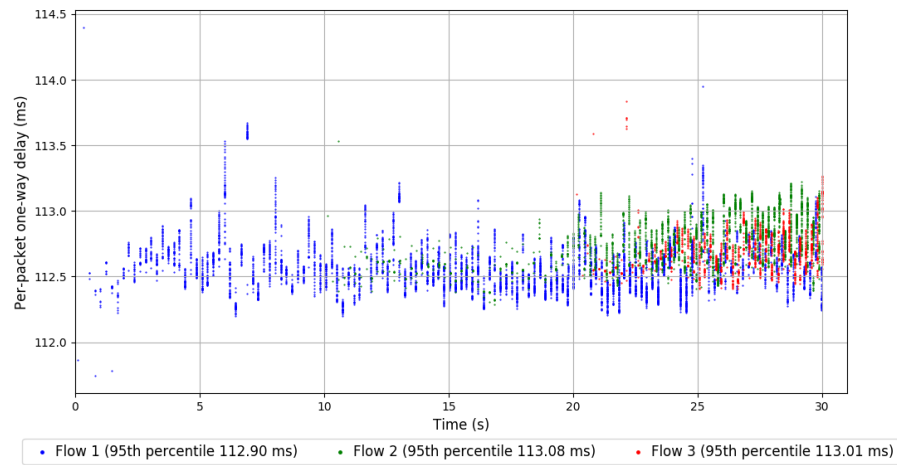
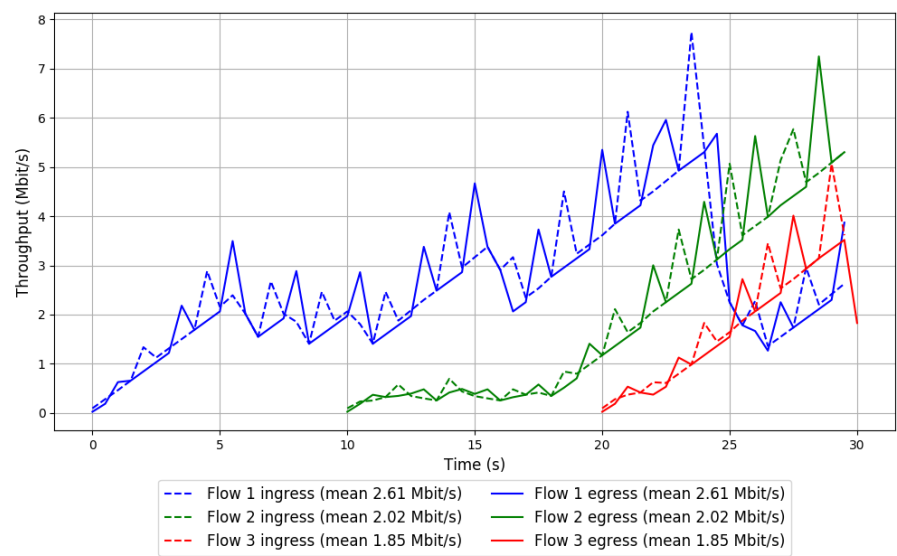


```
Run 2: Statistics of LEDBAT

Start at: 2017-10-12 06:14:14
End at: 2017-10-12 06:14:44

# Below is generated by plot.py at 2017-10-12 09:20:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.55 Mbit/s
95th percentile per-packet one-way delay: 113.042 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 2.61 Mbit/s
95th percentile per-packet one-way delay: 112.897 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 113.083 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.85 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: 2017-10-12 06:28:16

End at: 2017-10-12 06:28:46

Below is generated by plot.py at 2017-10-12 09:20:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.12 Mbit/s

95th percentile per-packet one-way delay: 113.192 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.30 Mbit/s

95th percentile per-packet one-way delay: 113.095 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.65 Mbit/s

95th percentile per-packet one-way delay: 113.251 ms

Loss rate: 0.00%

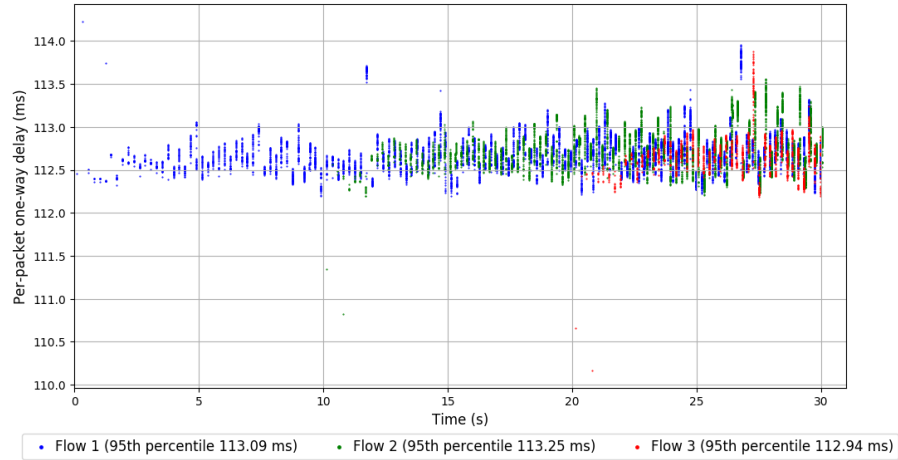
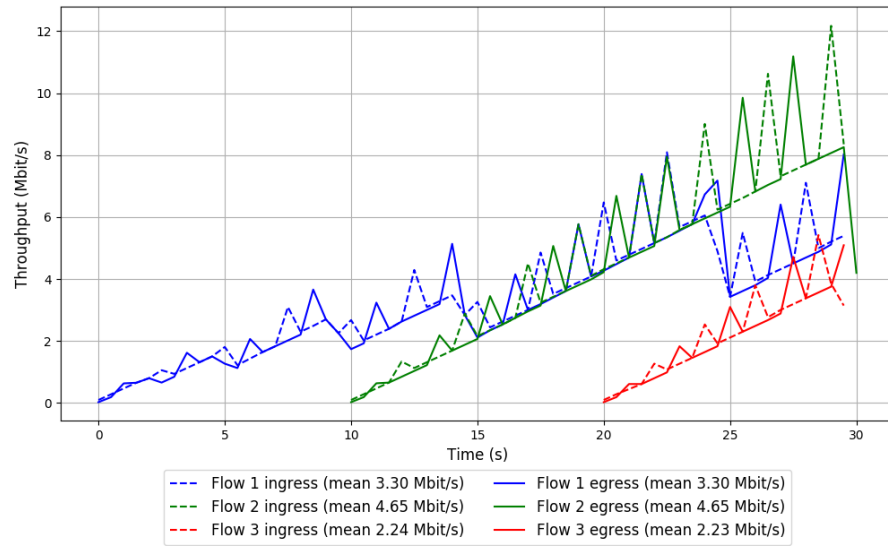
-- Flow 3:

Average throughput: 2.23 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-10-12 06:41:58

End at: 2017-10-12 06:42:28

Below is generated by plot.py at 2017-10-12 09:20:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.66 Mbit/s

95th percentile per-packet one-way delay: 111.403 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 1.49 Mbit/s

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

Loss rate: 0.05%

-- Flow 2:

Average throughput: 4.64 Mbit/s

95th percentile per-packet one-way delay: 111.435 ms

Loss rate: 0.00%

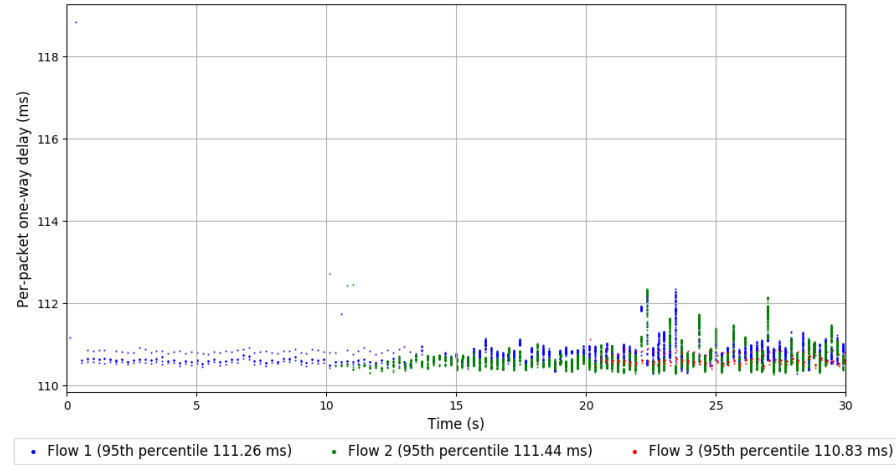
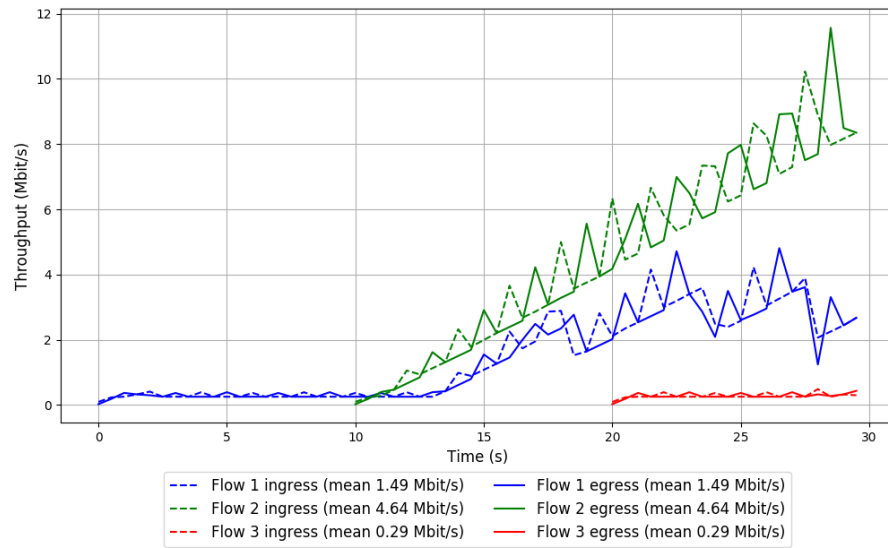
-- Flow 3:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 110.832 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-10-12 06:55:59

End at: 2017-10-12 06:56:29

Below is generated by plot.py at 2017-10-12 09:20:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.29 Mbit/s

95th percentile per-packet one-way delay: 111.303 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.64 Mbit/s

95th percentile per-packet one-way delay: 111.324 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 111.274 ms

Loss rate: 0.00%

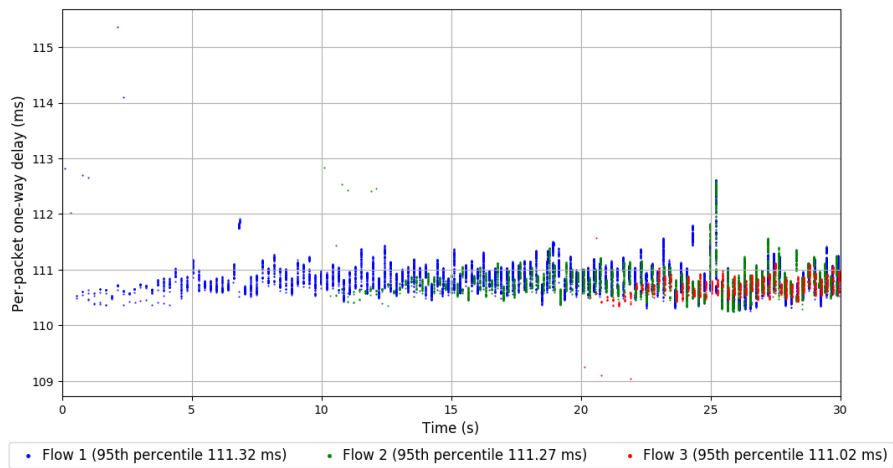
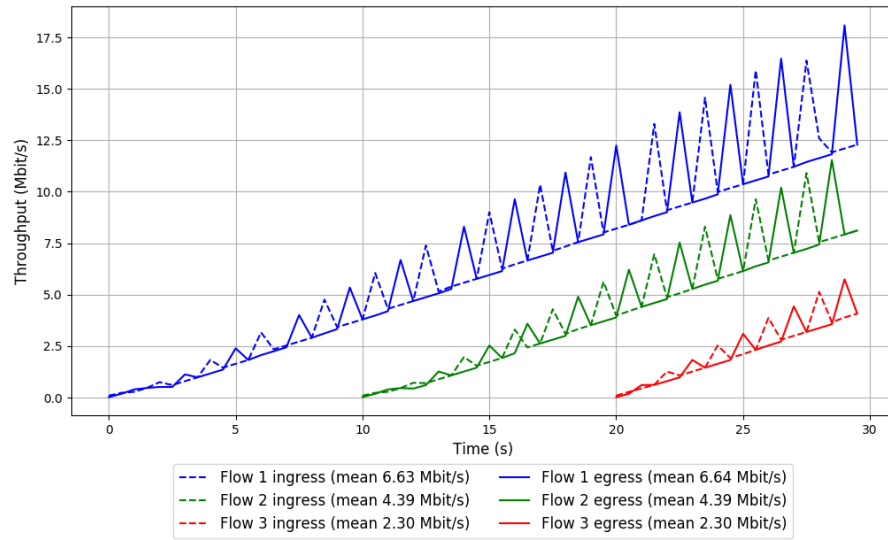
-- Flow 3:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 111.022 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-10-12 07:09:34

End at: 2017-10-12 07:10:04

Below is generated by plot.py at 2017-10-12 09:20:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.93 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 113.619 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.77 Mbit/s

95th percentile per-packet one-way delay: 113.452 ms

Loss rate: 0.02%

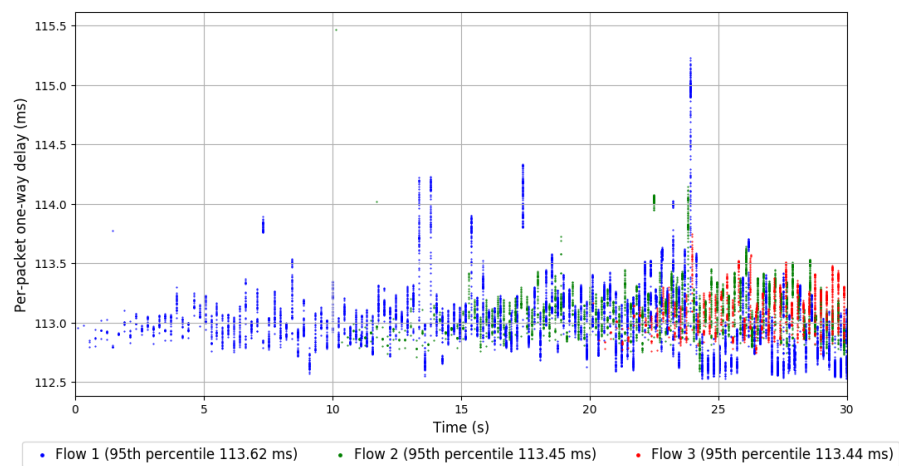
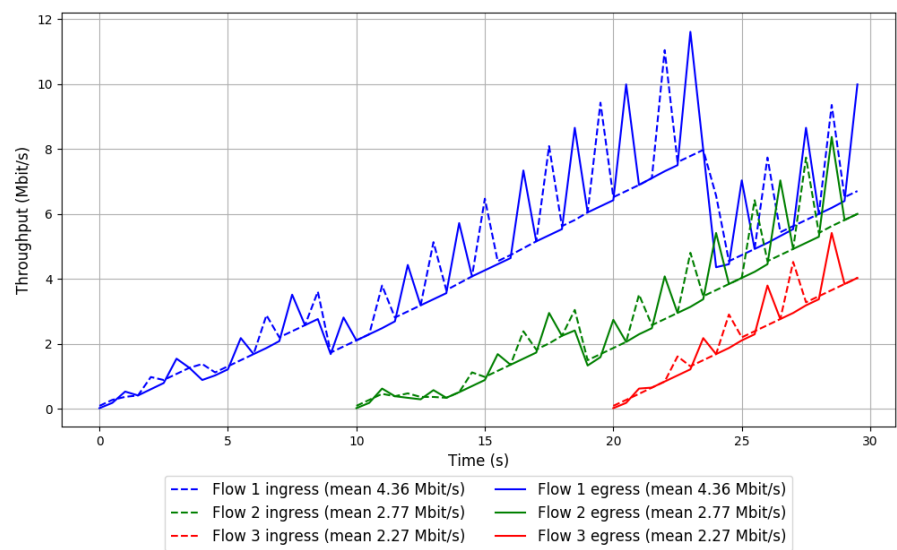
-- Flow 3:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 113.440 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-10-12 07:23:18

End at: 2017-10-12 07:23:48

Below is generated by plot.py at 2017-10-12 09:20:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.26 Mbit/s

95th percentile per-packet one-way delay: 113.428 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 113.508 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.66 Mbit/s

95th percentile per-packet one-way delay: 113.282 ms

Loss rate: 0.00%

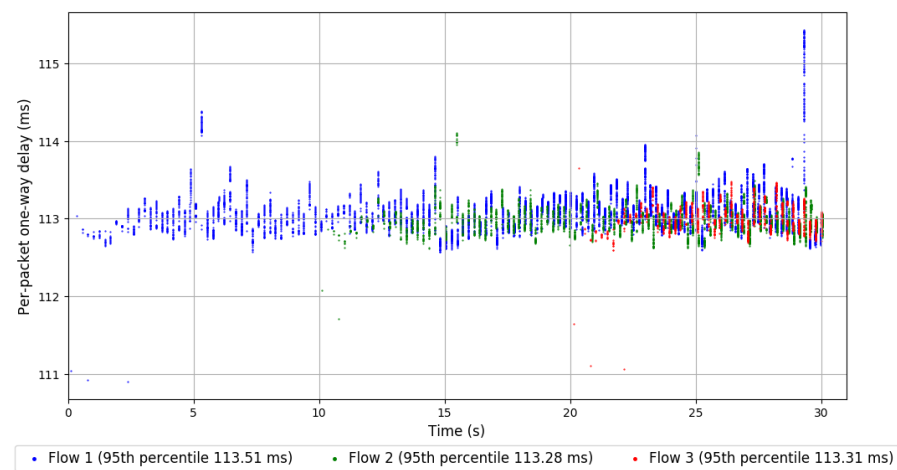
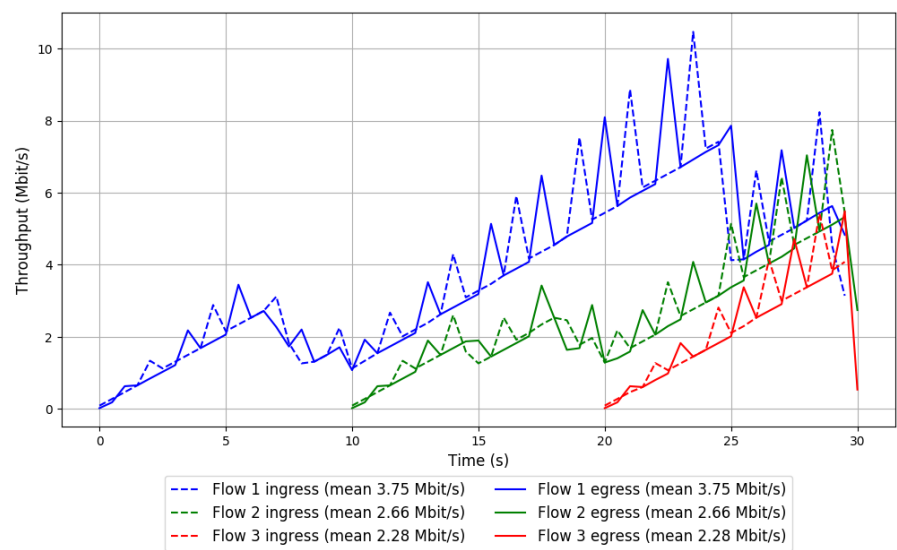
-- Flow 3:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 113.315 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-10-12 07:37:15

End at: 2017-10-12 07:37:45

Below is generated by plot.py at 2017-10-12 09:20:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.94 Mbit/s

95th percentile per-packet one-way delay: 112.973 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 3.16 Mbit/s

95th percentile per-packet one-way delay: 113.015 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 4.06 Mbit/s

95th percentile per-packet one-way delay: 112.916 ms

Loss rate: 0.00%

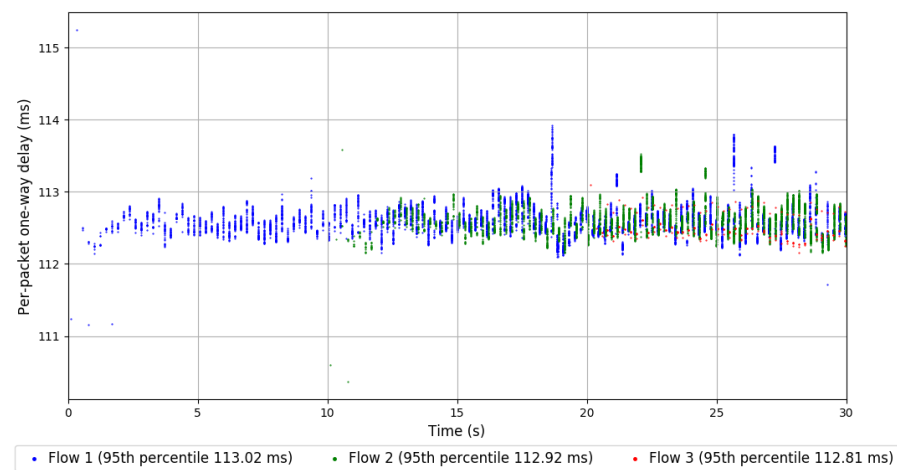
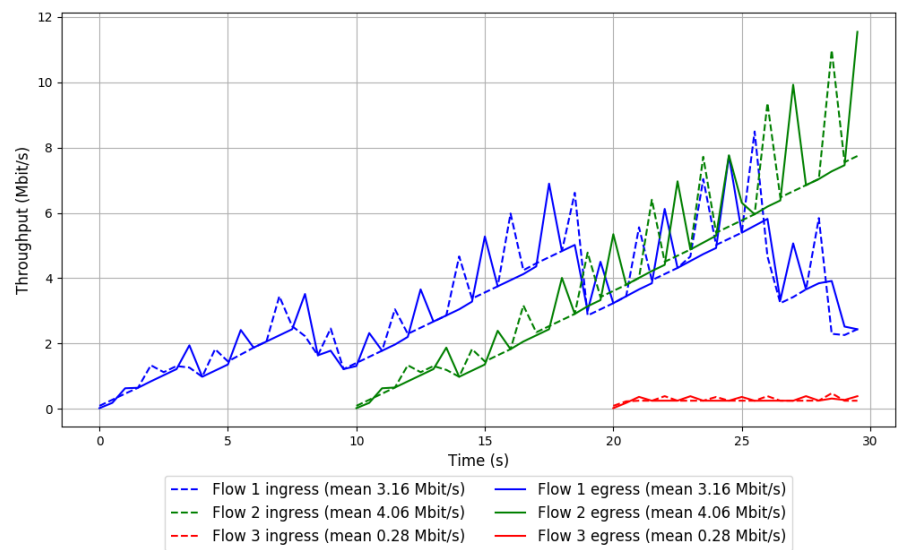
-- Flow 3:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 112.812 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-10-12 07:51:13

End at: 2017-10-12 07:51:43

Below is generated by plot.py at 2017-10-12 09:20:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.11 Mbit/s

95th percentile per-packet one-way delay: 113.223 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.80 Mbit/s

95th percentile per-packet one-way delay: 113.232 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 112.870 ms

Loss rate: 0.00%

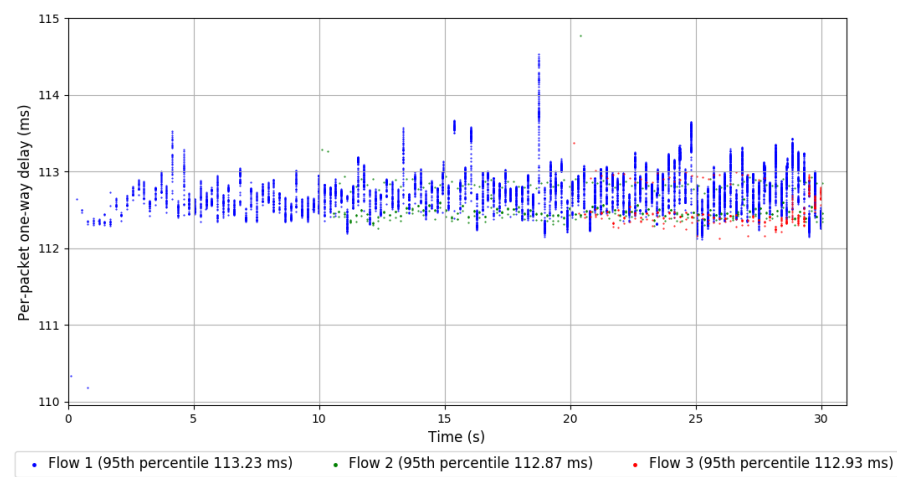
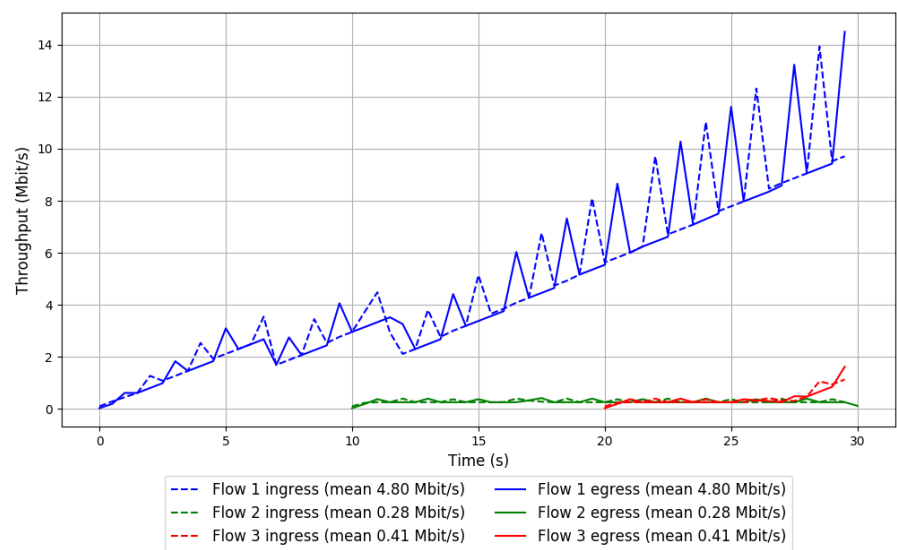
-- Flow 3:

Average throughput: 0.41 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

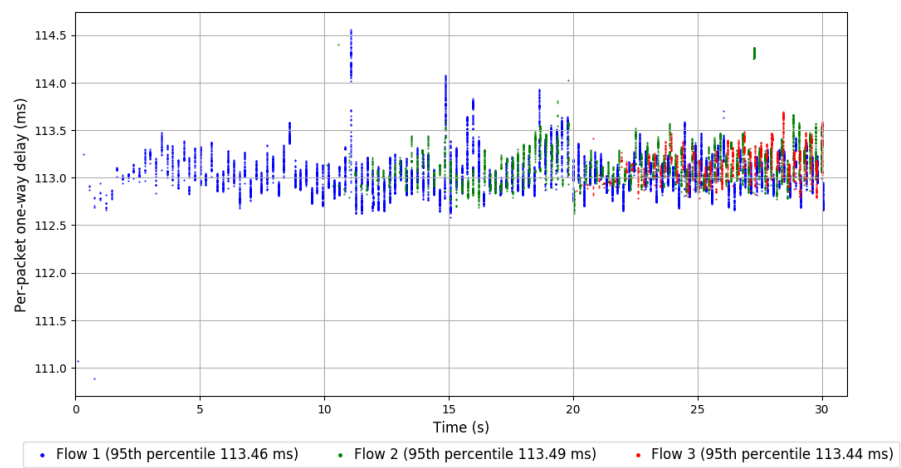
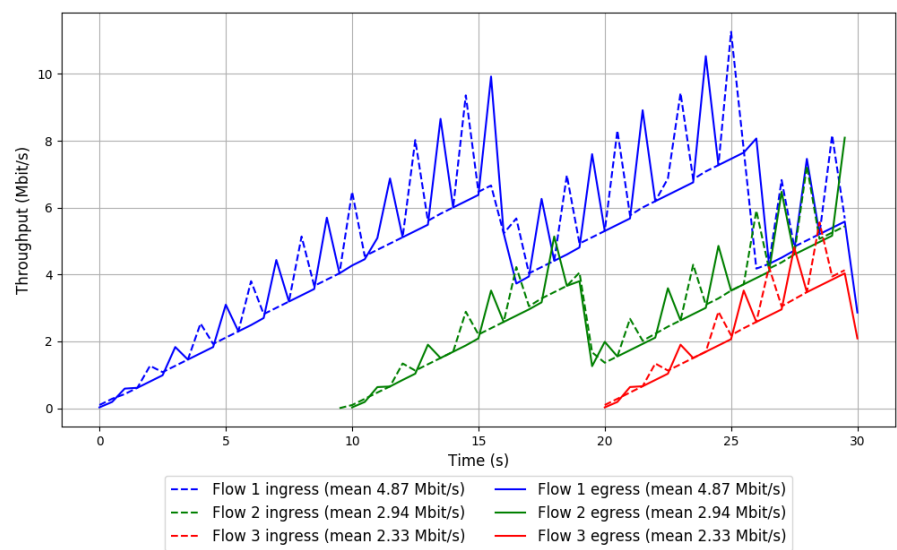


```
Run 10: Statistics of LEDBAT

Start at: 2017-10-12 08:05:14
End at: 2017-10-12 08:05:44

# Below is generated by plot.py at 2017-10-12 09:20:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.59 Mbit/s
95th percentile per-packet one-way delay: 113.465 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 4.87 Mbit/s
95th percentile per-packet one-way delay: 113.456 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.94 Mbit/s
95th percentile per-packet one-way delay: 113.494 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 113.444 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

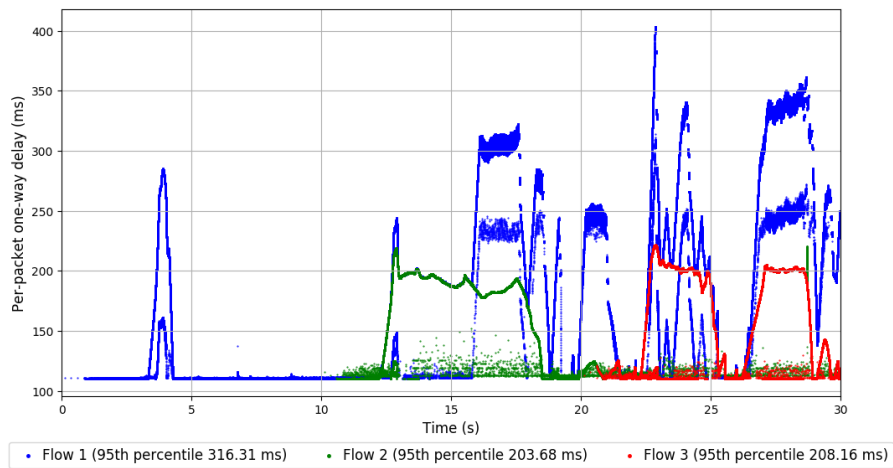
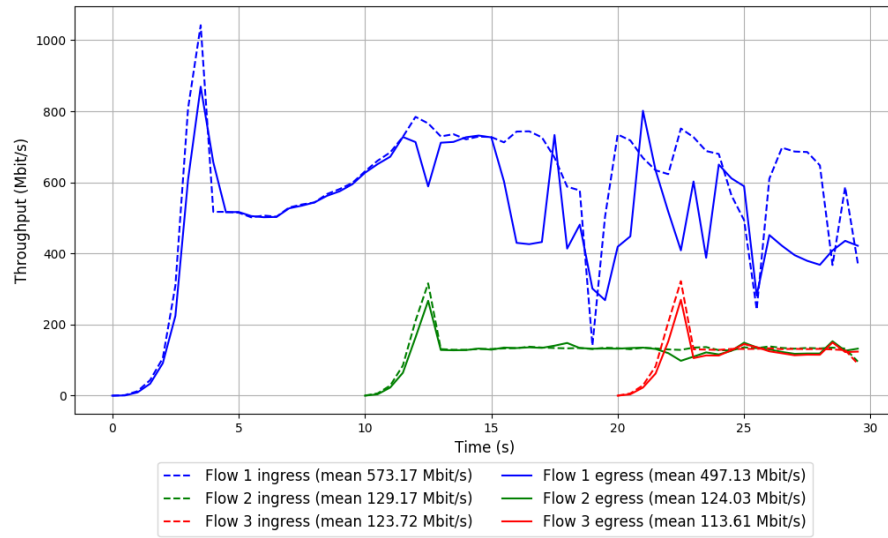


```
Run 1: Statistics of PCC

Start at: 2017-10-12 05:53:40
End at: 2017-10-12 05:54:10

# Below is generated by plot.py at 2017-10-12 09:29:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 617.02 Mbit/s
95th percentile per-packet one-way delay: 310.356 ms
Loss rate: 11.83%
-- Flow 1:
Average throughput: 497.13 Mbit/s
95th percentile per-packet one-way delay: 316.308 ms
Loss rate: 13.26%
-- Flow 2:
Average throughput: 124.03 Mbit/s
95th percentile per-packet one-way delay: 203.679 ms
Loss rate: 3.99%
-- Flow 3:
Average throughput: 113.61 Mbit/s
95th percentile per-packet one-way delay: 208.158 ms
Loss rate: 8.18%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-10-12 06:07:30

End at: 2017-10-12 06:08:00

Below is generated by plot.py at 2017-10-12 09:30:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 660.19 Mbit/s

95th percentile per-packet one-way delay: 267.826 ms

Loss rate: 4.50%

-- Flow 1:

Average throughput: 486.07 Mbit/s

95th percentile per-packet one-way delay: 294.523 ms

Loss rate: 5.12%

-- Flow 2:

Average throughput: 231.23 Mbit/s

95th percentile per-packet one-way delay: 204.347 ms

Loss rate: 2.85%

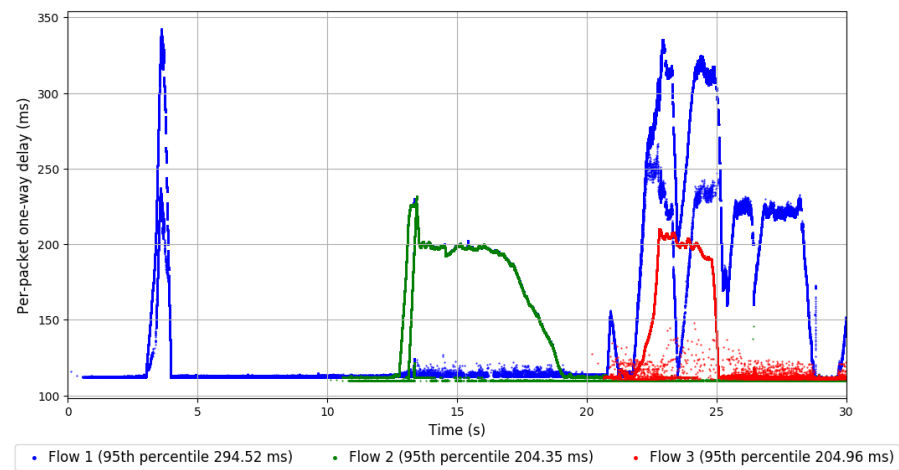
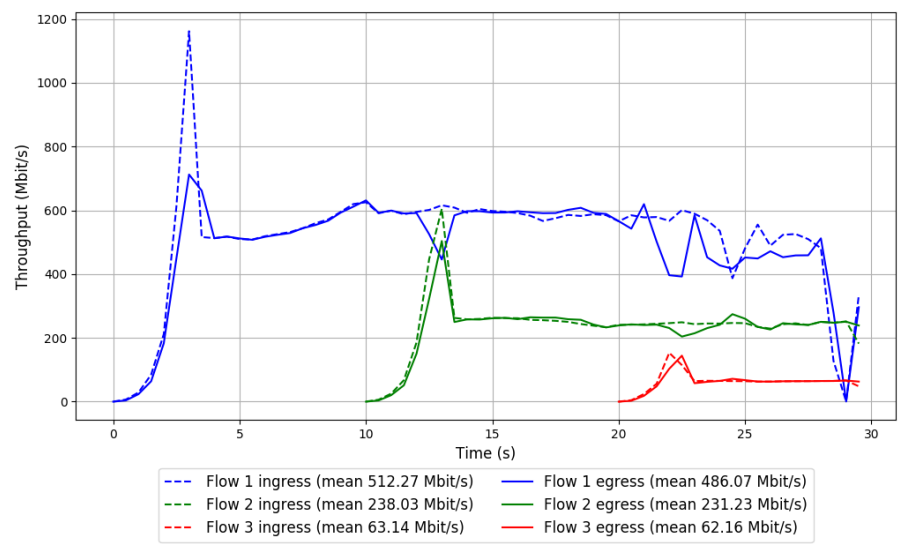
-- Flow 3:

Average throughput: 62.16 Mbit/s

95th percentile per-packet one-way delay: 204.963 ms

Loss rate: 1.70%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-10-12 06:21:37

End at: 2017-10-12 06:22:07

Below is generated by plot.py at 2017-10-12 09:30:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 605.35 Mbit/s

95th percentile per-packet one-way delay: 264.901 ms

Loss rate: 4.86%

-- Flow 1:

Average throughput: 485.13 Mbit/s

95th percentile per-packet one-way delay: 283.427 ms

Loss rate: 5.17%

-- Flow 2:

Average throughput: 123.16 Mbit/s

95th percentile per-packet one-way delay: 234.185 ms

Loss rate: 2.85%

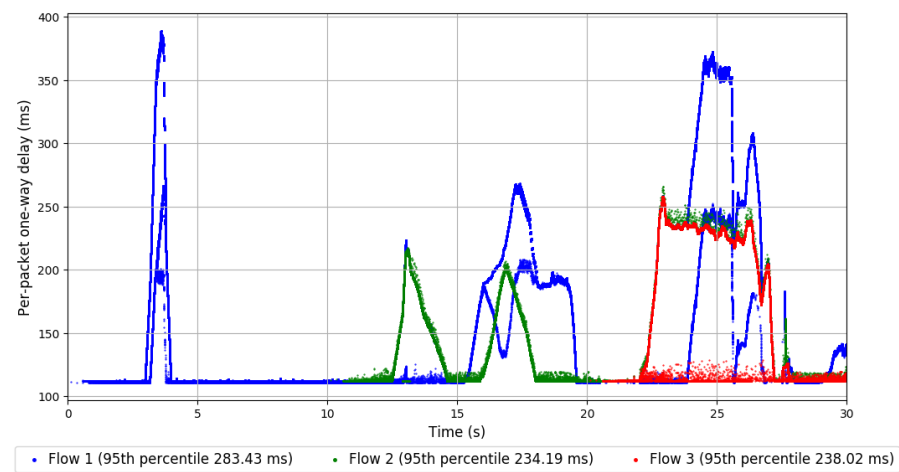
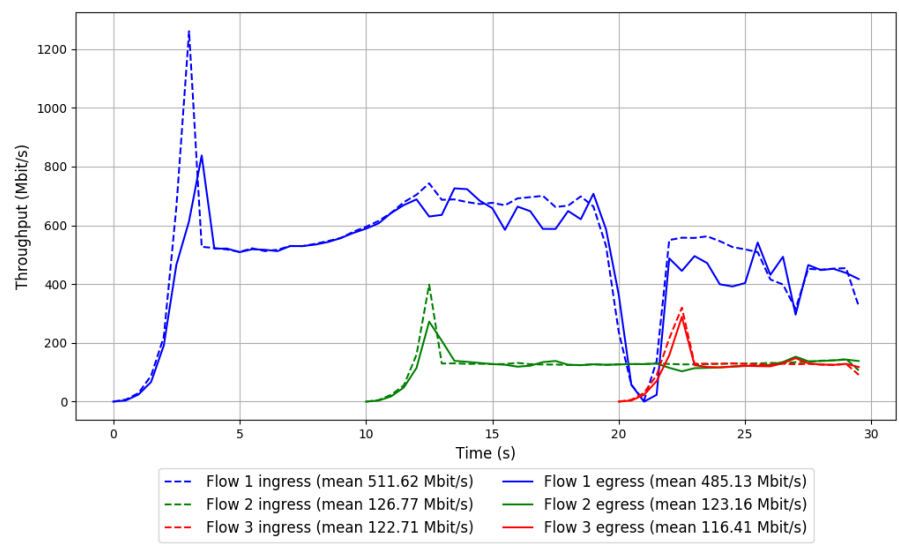
-- Flow 3:

Average throughput: 116.41 Mbit/s

95th percentile per-packet one-way delay: 238.024 ms

Loss rate: 5.13%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-10-12 06:35:17

End at: 2017-10-12 06:35:47

Below is generated by plot.py at 2017-10-12 09:30:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 656.39 Mbit/s

95th percentile per-packet one-way delay: 268.960 ms

Loss rate: 3.51%

-- Flow 1:

Average throughput: 549.17 Mbit/s

95th percentile per-packet one-way delay: 271.736 ms

Loss rate: 3.79%

-- Flow 2:

Average throughput: 145.49 Mbit/s

95th percentile per-packet one-way delay: 200.480 ms

Loss rate: 1.95%

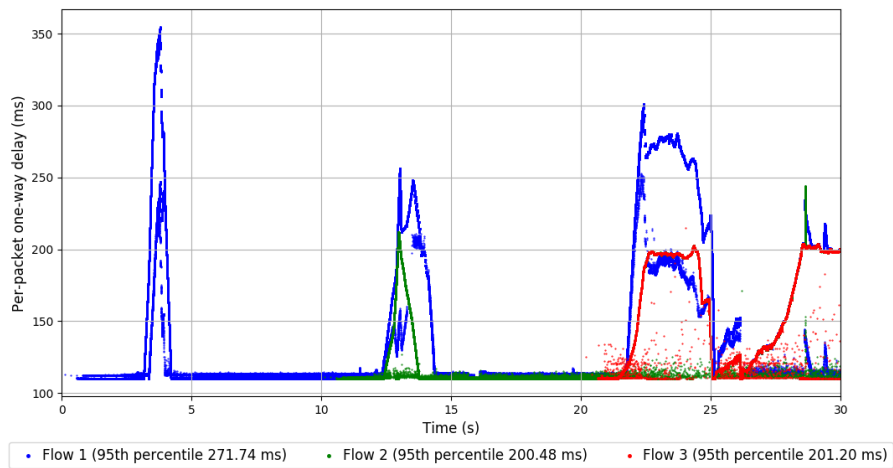
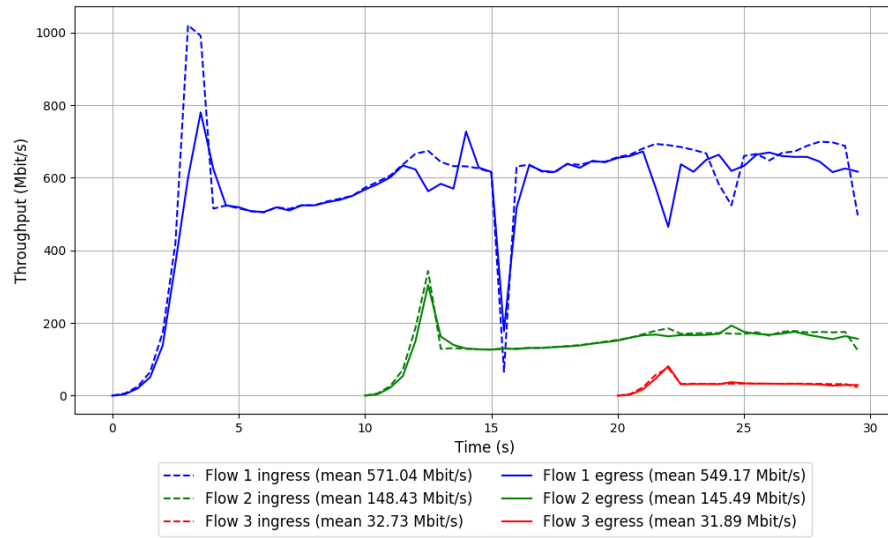
-- Flow 3:

Average throughput: 31.89 Mbit/s

95th percentile per-packet one-way delay: 201.202 ms

Loss rate: 2.58%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-10-12 06:49:14

End at: 2017-10-12 06:49:44

Below is generated by plot.py at 2017-10-12 09:30:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 658.75 Mbit/s

95th percentile per-packet one-way delay: 217.462 ms

Loss rate: 4.24%

-- Flow 1:

Average throughput: 541.25 Mbit/s

95th percentile per-packet one-way delay: 218.280 ms

Loss rate: 4.01%

-- Flow 2:

Average throughput: 67.40 Mbit/s

95th percentile per-packet one-way delay: 212.451 ms

Loss rate: 2.91%

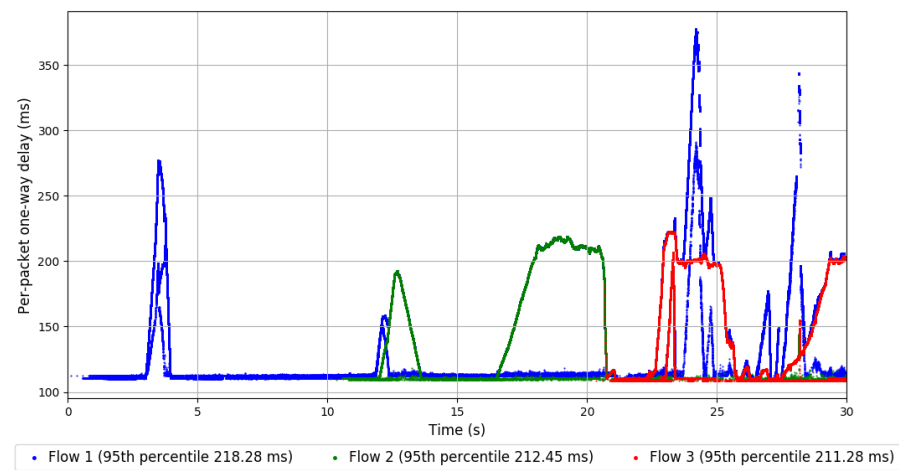
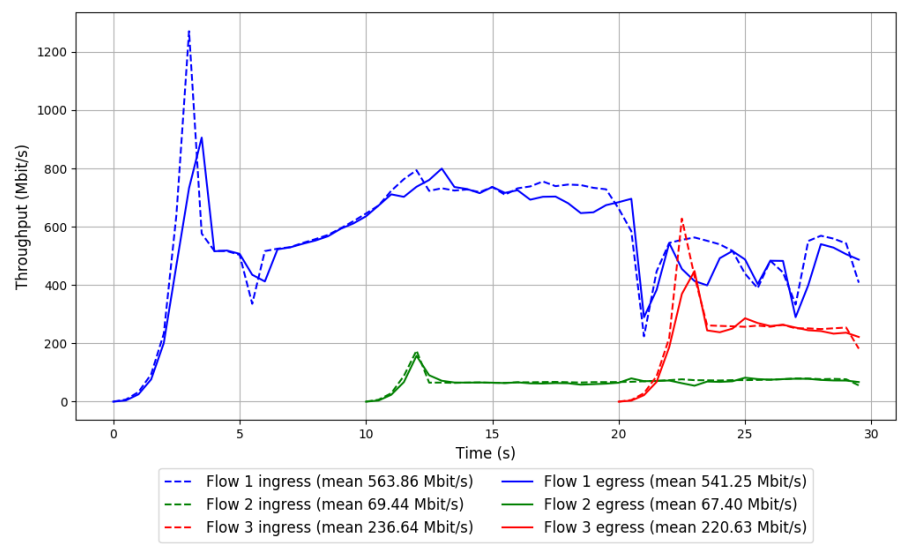
-- Flow 3:

Average throughput: 220.63 Mbit/s

95th percentile per-packet one-way delay: 211.275 ms

Loss rate: 6.73%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-10-12 07:02:53

End at: 2017-10-12 07:03:23

Below is generated by plot.py at 2017-10-12 09:31:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 678.85 Mbit/s

95th percentile per-packet one-way delay: 225.718 ms

Loss rate: 4.85%

-- Flow 1:

Average throughput: 593.53 Mbit/s

95th percentile per-packet one-way delay: 234.692 ms

Loss rate: 4.98%

-- Flow 2:

Average throughput: 126.36 Mbit/s

95th percentile per-packet one-way delay: 218.281 ms

Loss rate: 3.88%

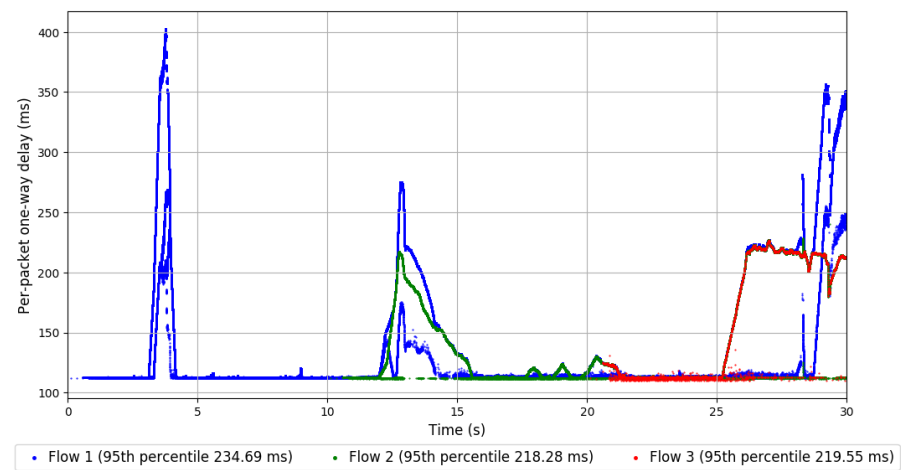
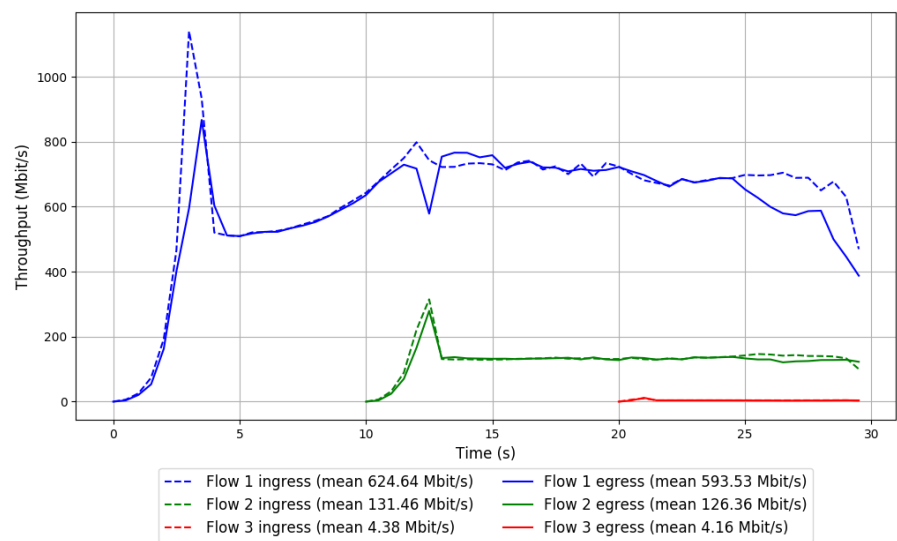
-- Flow 3:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 219.547 ms

Loss rate: 5.07%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-10-12 07:16:57

End at: 2017-10-12 07:17:27

Below is generated by plot.py at 2017-10-12 09:31:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 658.87 Mbit/s

95th percentile per-packet one-way delay: 260.362 ms

Loss rate: 6.72%

-- Flow 1:

Average throughput: 465.87 Mbit/s

95th percentile per-packet one-way delay: 286.855 ms

Loss rate: 6.56%

-- Flow 2:

Average throughput: 236.99 Mbit/s

95th percentile per-packet one-way delay: 212.049 ms

Loss rate: 6.32%

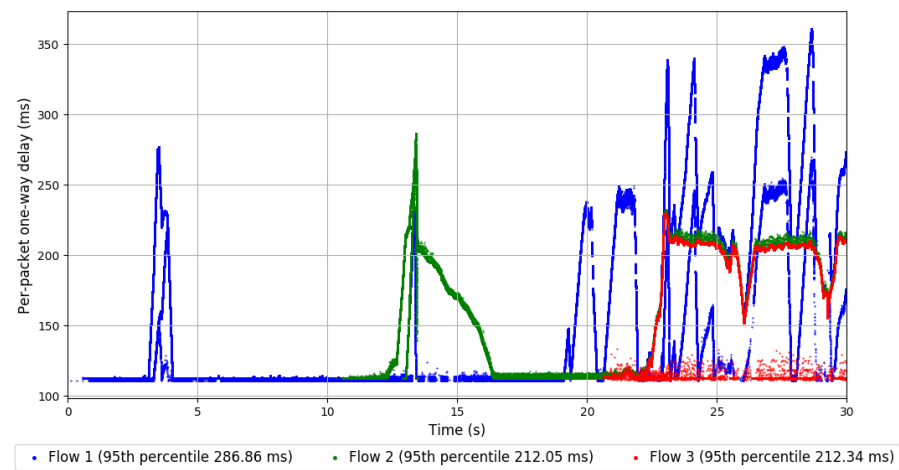
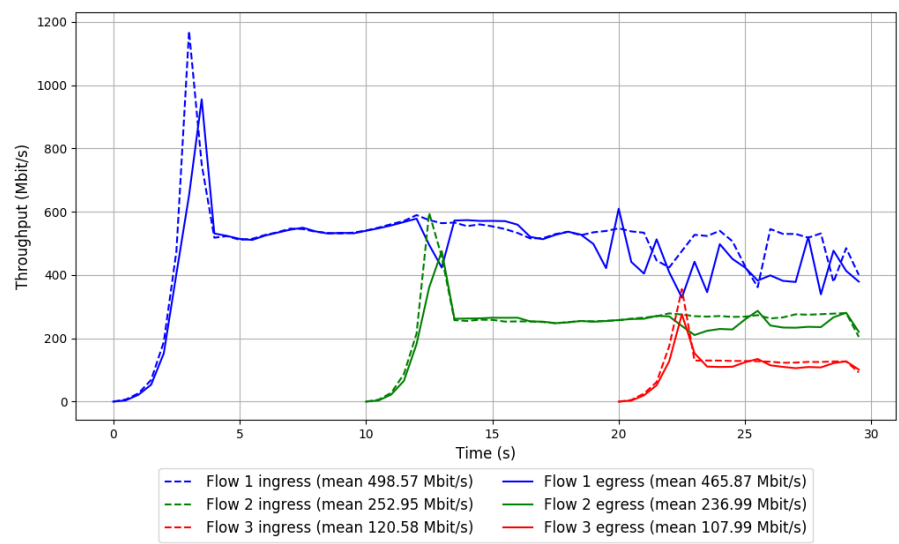
-- Flow 3:

Average throughput: 107.99 Mbit/s

95th percentile per-packet one-way delay: 212.335 ms

Loss rate: 10.46%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-10-12 07:30:33

End at: 2017-10-12 07:31:03

Below is generated by plot.py at 2017-10-12 09:31:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 657.93 Mbit/s

95th percentile per-packet one-way delay: 235.438 ms

Loss rate: 3.38%

-- Flow 1:

Average throughput: 471.12 Mbit/s

95th percentile per-packet one-way delay: 240.351 ms

Loss rate: 3.79%

-- Flow 2:

Average throughput: 278.92 Mbit/s

95th percentile per-packet one-way delay: 205.583 ms

Loss rate: 2.34%

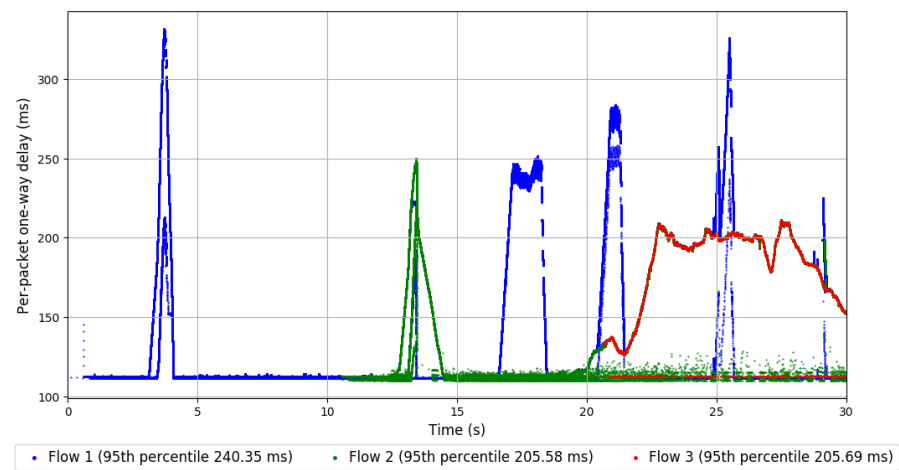
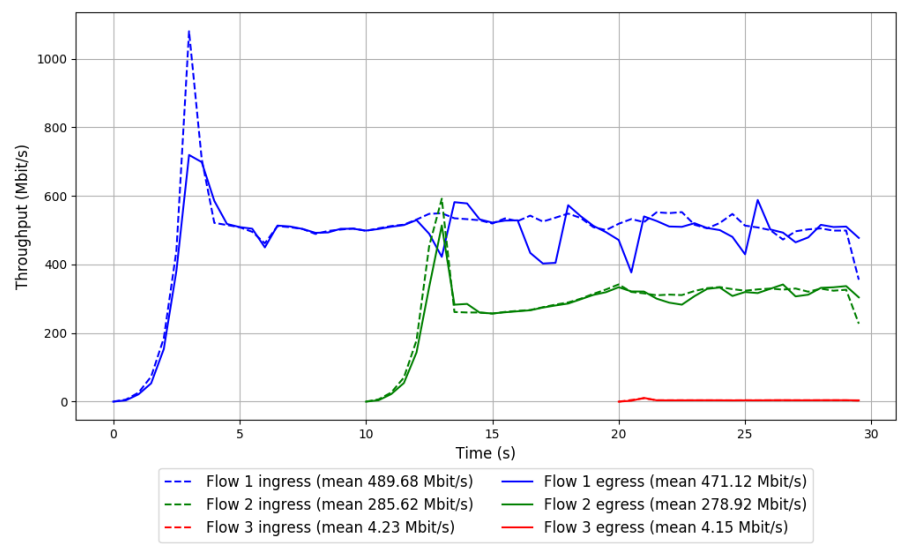
-- Flow 3:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 205.694 ms

Loss rate: 1.85%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-10-12 07:44:30

End at: 2017-10-12 07:45:00

Below is generated by plot.py at 2017-10-12 09:40:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 655.94 Mbit/s

95th percentile per-packet one-way delay: 273.394 ms

Loss rate: 5.31%

-- Flow 1:

Average throughput: 584.13 Mbit/s

95th percentile per-packet one-way delay: 276.898 ms

Loss rate: 5.77%

-- Flow 2:

Average throughput: 77.68 Mbit/s

95th percentile per-packet one-way delay: 198.874 ms

Loss rate: 1.12%

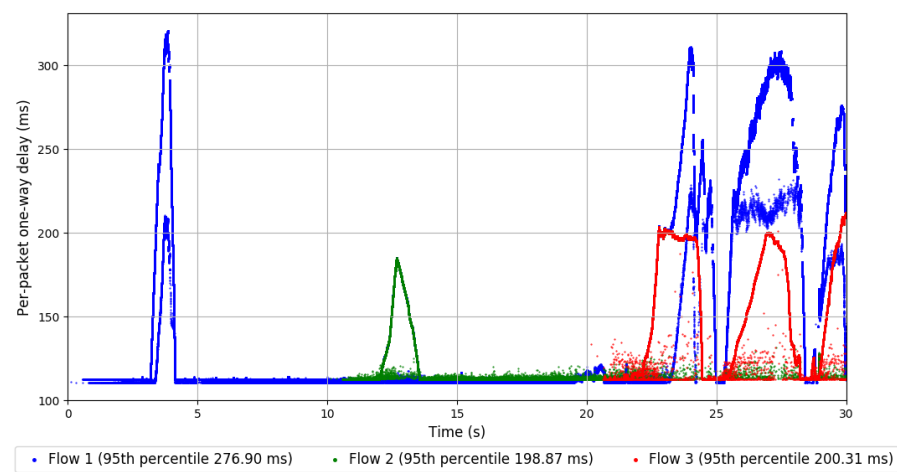
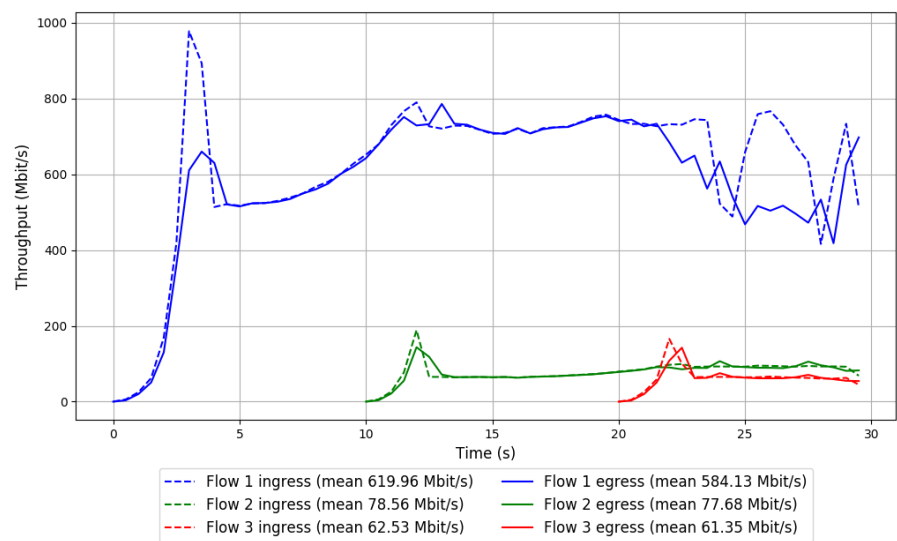
-- Flow 3:

Average throughput: 61.35 Mbit/s

95th percentile per-packet one-way delay: 200.314 ms

Loss rate: 2.09%

Run 9: Report of PCC — Data Link

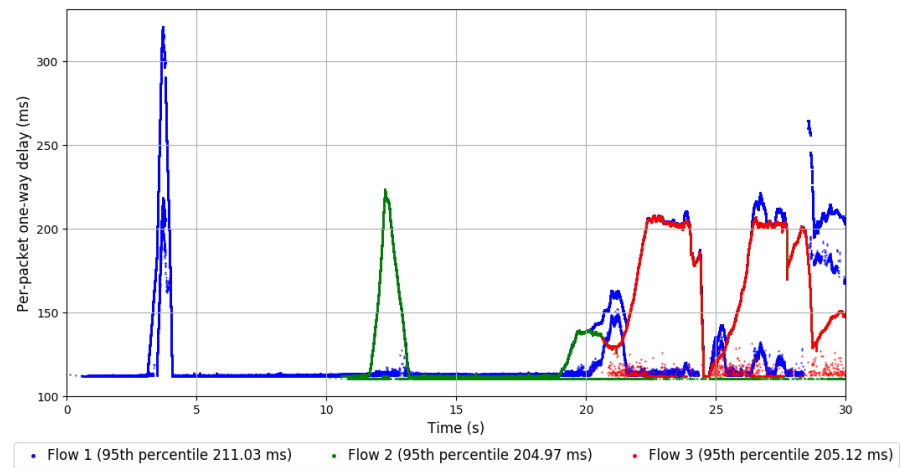
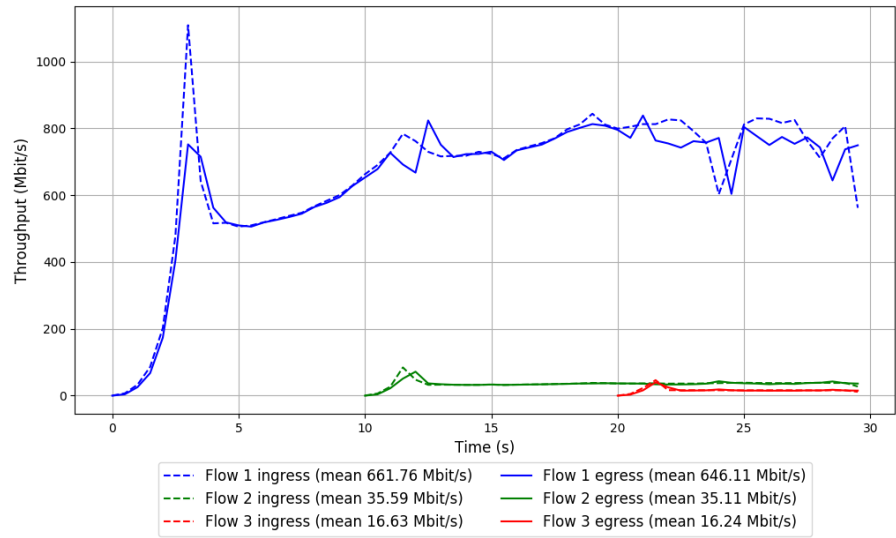


```
Run 10: Statistics of PCC

Start at: 2017-10-12 07:58:31
End at: 2017-10-12 07:59:01

# Below is generated by plot.py at 2017-10-12 09:41:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 674.80 Mbit/s
95th percentile per-packet one-way delay: 210.838 ms
Loss rate: 2.33%
-- Flow 1:
Average throughput: 646.11 Mbit/s
95th percentile per-packet one-way delay: 211.035 ms
Loss rate: 2.36%
-- Flow 2:
Average throughput: 35.11 Mbit/s
95th percentile per-packet one-way delay: 204.965 ms
Loss rate: 1.35%
-- Flow 3:
Average throughput: 16.24 Mbit/s
95th percentile per-packet one-way delay: 205.121 ms
Loss rate: 2.40%
```

Run 10: Report of PCC — Data Link

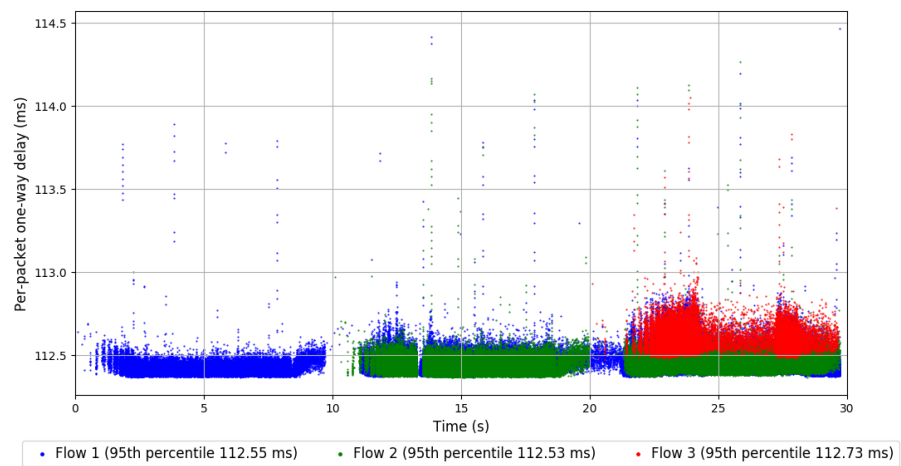
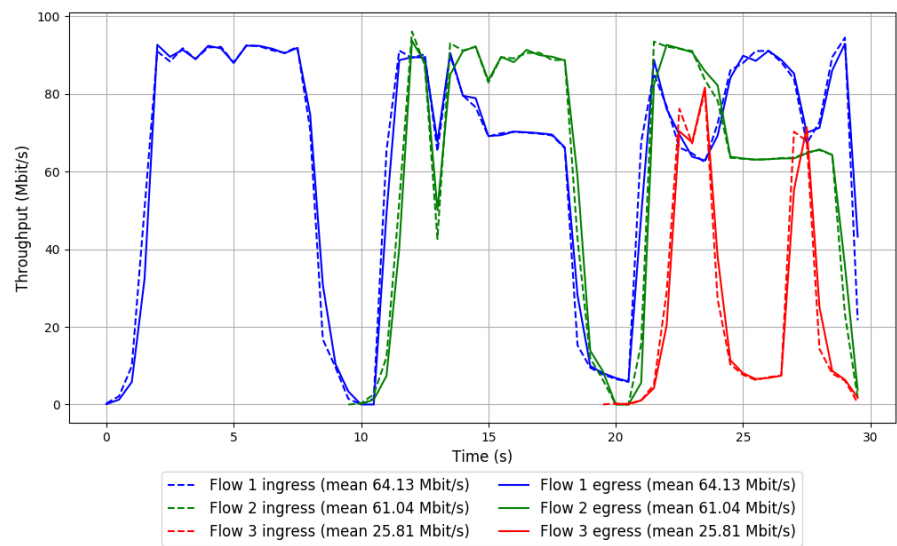


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-10-12 05:56:27
End at: 2017-10-12 05:56:57

# Below is generated by plot.py at 2017-10-12 09:41:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 112.89 Mbit/s
95th percentile per-packet one-way delay: 112.599 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.13 Mbit/s
95th percentile per-packet one-way delay: 112.551 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 61.04 Mbit/s
95th percentile per-packet one-way delay: 112.534 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 25.81 Mbit/s
95th percentile per-packet one-way delay: 112.732 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link

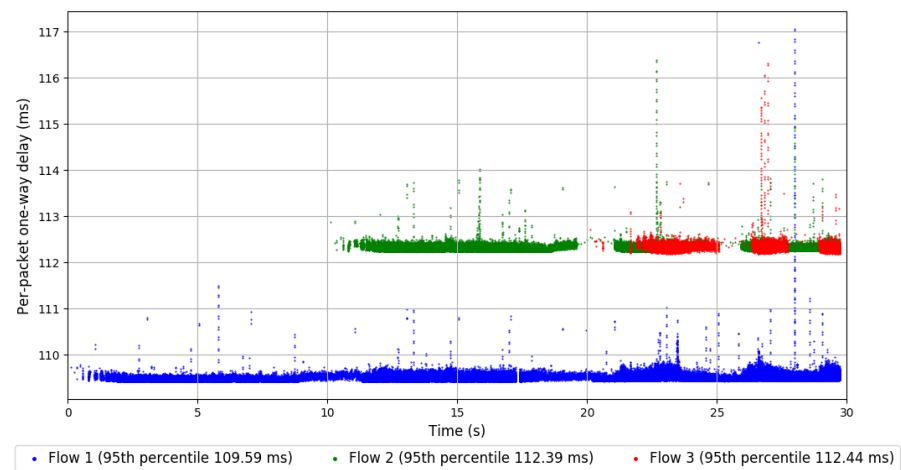
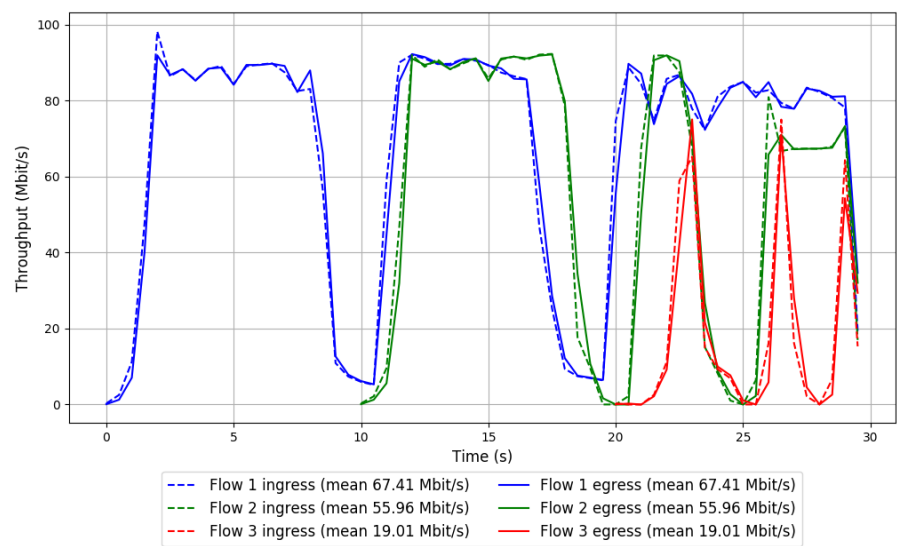


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-10-12 06:10:20
End at: 2017-10-12 06:10:50

# Below is generated by plot.py at 2017-10-12 09:41:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 110.63 Mbit/s
95th percentile per-packet one-way delay: 112.361 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.41 Mbit/s
95th percentile per-packet one-way delay: 109.593 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 55.96 Mbit/s
95th percentile per-packet one-way delay: 112.391 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.01 Mbit/s
95th percentile per-packet one-way delay: 112.436 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-10-12 06:24:23

End at: 2017-10-12 06:24:53

Below is generated by plot.py at 2017-10-12 09:41:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.82 Mbit/s

95th percentile per-packet one-way delay: 112.763 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 69.37 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.01 Mbit/s

95th percentile per-packet one-way delay: 112.799 ms

Loss rate: 0.00%

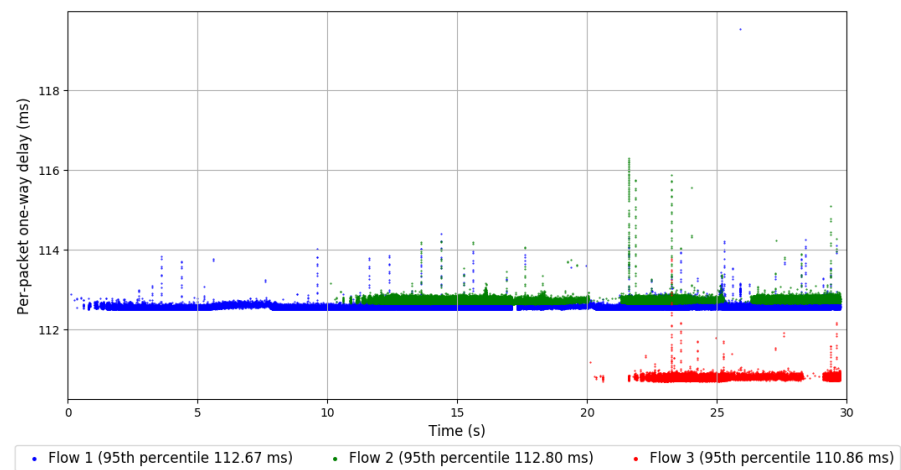
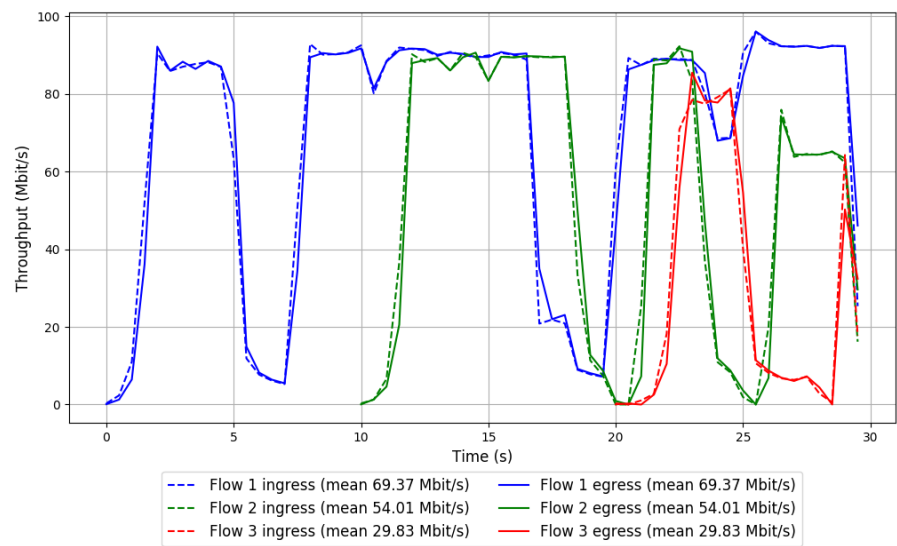
-- Flow 3:

Average throughput: 29.83 Mbit/s

95th percentile per-packet one-way delay: 110.863 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-10-12 06:38:05

End at: 2017-10-12 06:38:35

Below is generated by plot.py at 2017-10-12 09:41:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.06 Mbit/s

95th percentile per-packet one-way delay: 112.526 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.32 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.27 Mbit/s

95th percentile per-packet one-way delay: 112.327 ms

Loss rate: 0.00%

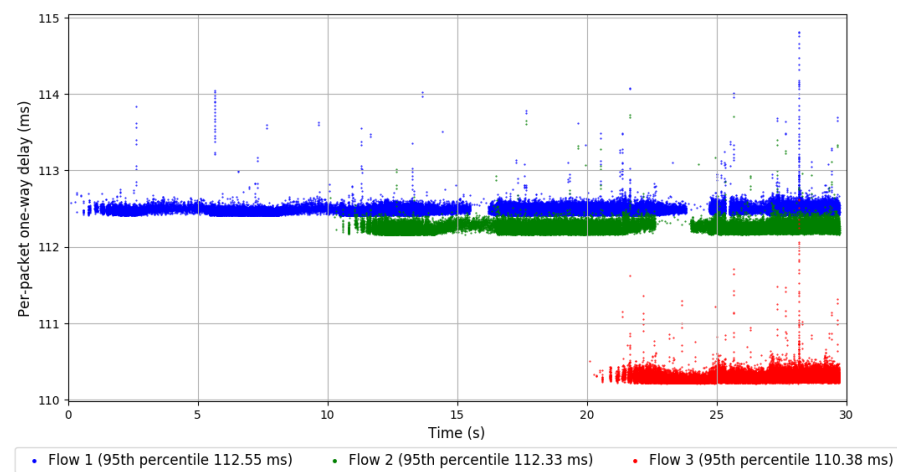
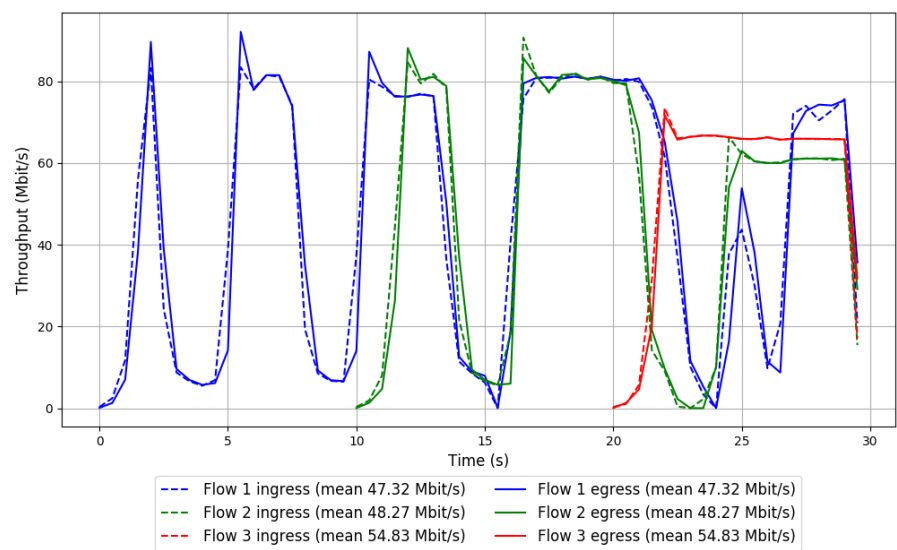
-- Flow 3:

Average throughput: 54.83 Mbit/s

95th percentile per-packet one-way delay: 110.381 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-10-12 06:52:03

End at: 2017-10-12 06:52:33

Below is generated by plot.py at 2017-10-12 09:41:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.29 Mbit/s

95th percentile per-packet one-way delay: 112.770 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 62.51 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.38 Mbit/s

95th percentile per-packet one-way delay: 110.612 ms

Loss rate: 0.00%

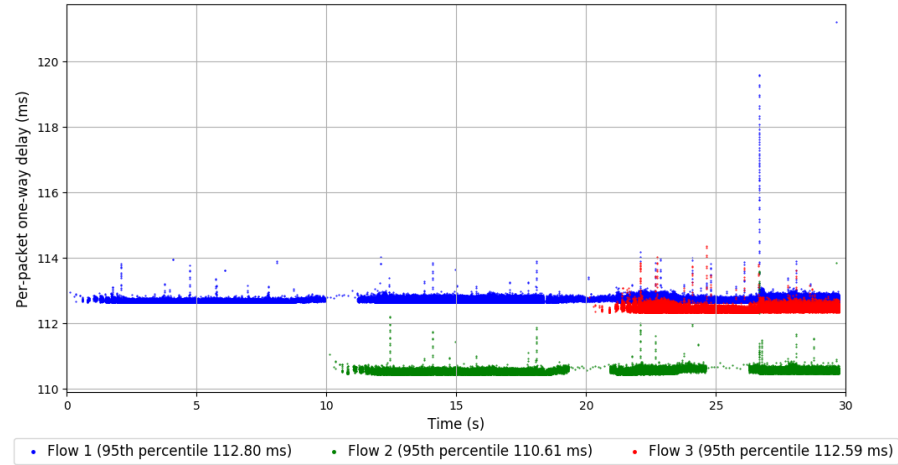
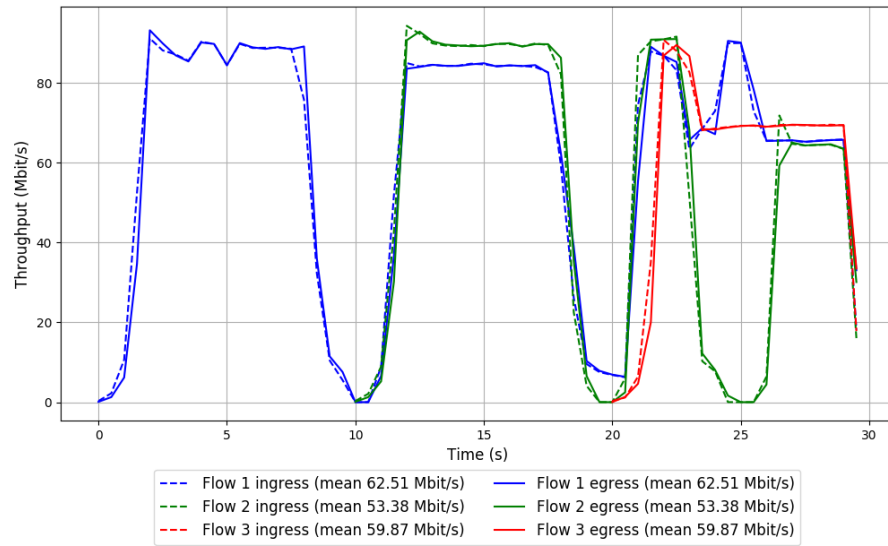
-- Flow 3:

Average throughput: 59.87 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-10-12 07:05:41

End at: 2017-10-12 07:06:11

Below is generated by plot.py at 2017-10-12 09:41:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.60 Mbit/s

95th percentile per-packet one-way delay: 112.742 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 57.58 Mbit/s

95th percentile per-packet one-way delay: 112.744 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 52.58 Mbit/s

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

Loss rate: 0.00%

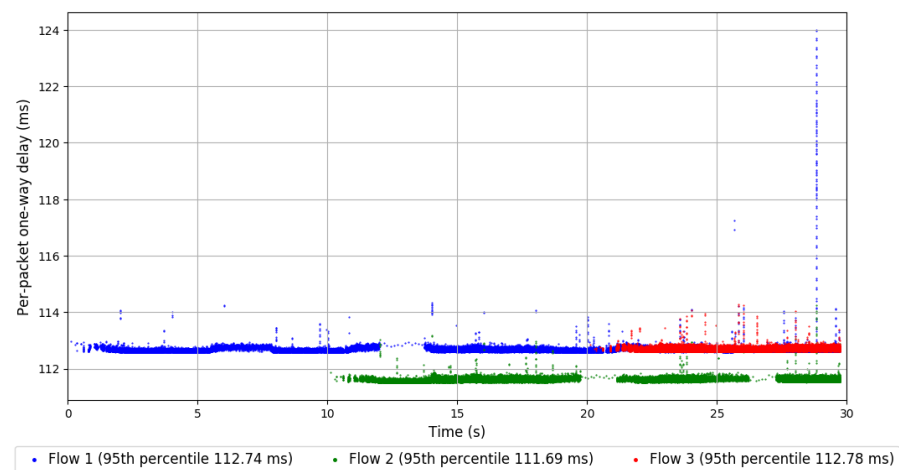
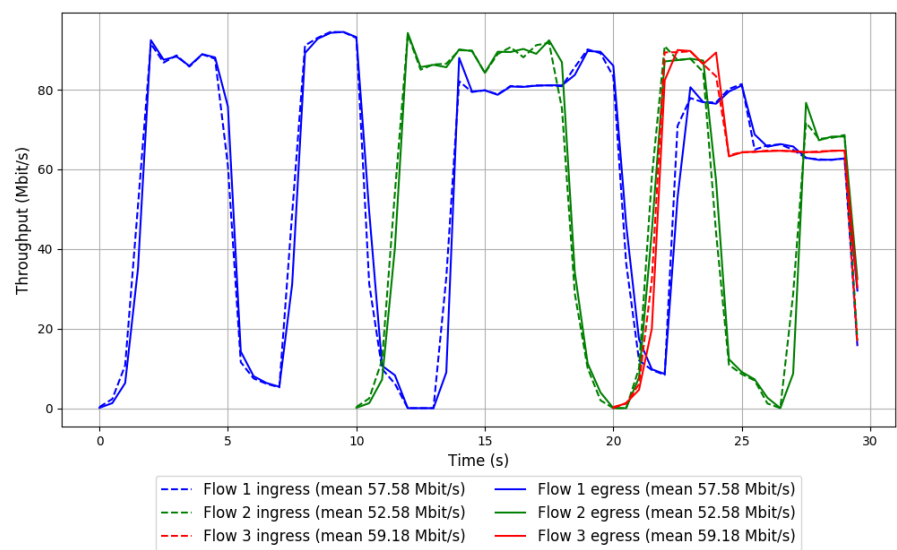
-- Flow 3:

Average throughput: 59.18 Mbit/s

95th percentile per-packet one-way delay: 112.782 ms

Loss rate: 0.02%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-10-12 07:19:47

End at: 2017-10-12 07:20:17

Below is generated by plot.py at 2017-10-12 09:41:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.97 Mbit/s

95th percentile per-packet one-way delay: 112.738 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.77 Mbit/s

95th percentile per-packet one-way delay: 110.956 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 50.75 Mbit/s

95th percentile per-packet one-way delay: 110.711 ms

Loss rate: 0.00%

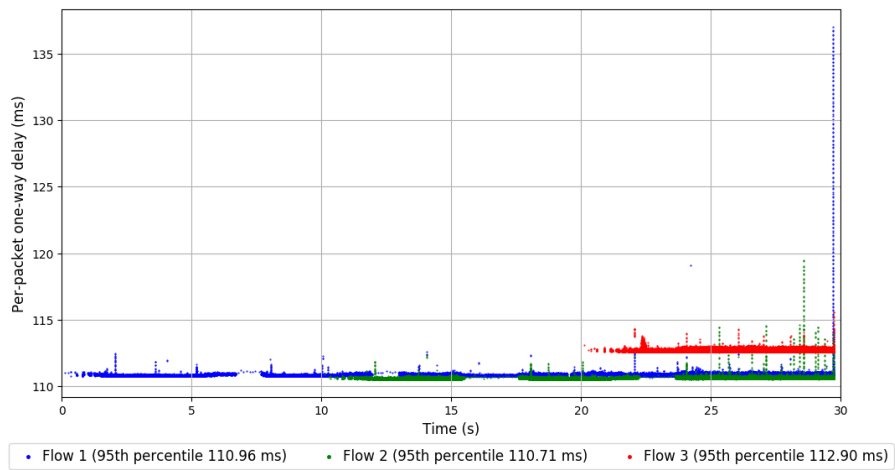
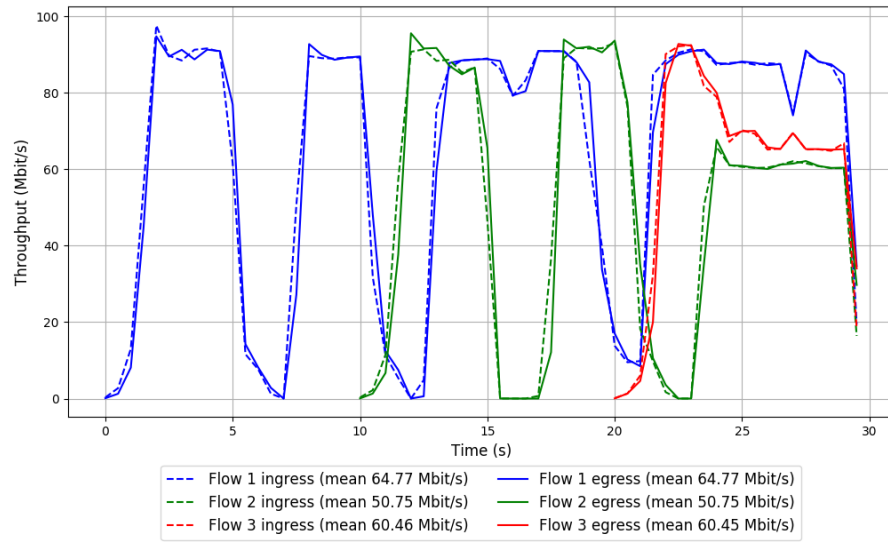
-- Flow 3:

Average throughput: 60.45 Mbit/s

95th percentile per-packet one-way delay: 112.896 ms

Loss rate: 0.02%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-10-12 07:33:21

End at: 2017-10-12 07:33:51

Below is generated by plot.py at 2017-10-12 09:41:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.84 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 76.64 Mbit/s

95th percentile per-packet one-way delay: 111.018 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.27 Mbit/s

95th percentile per-packet one-way delay: 112.474 ms

Loss rate: 0.01%

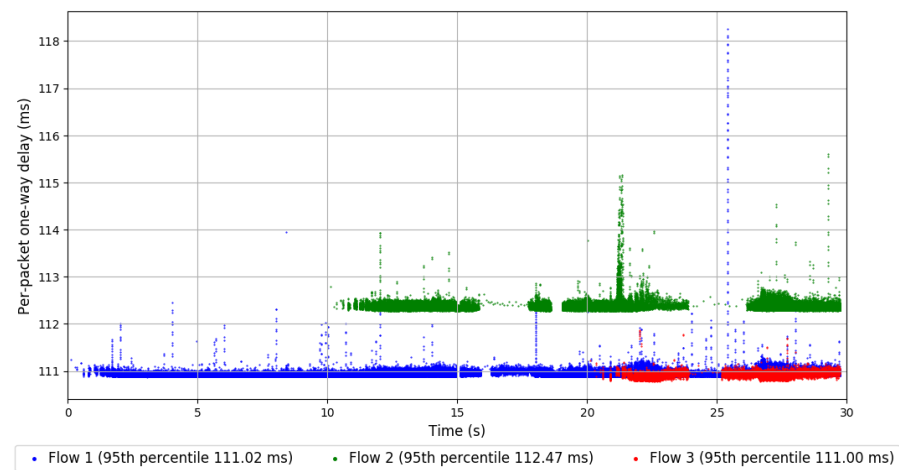
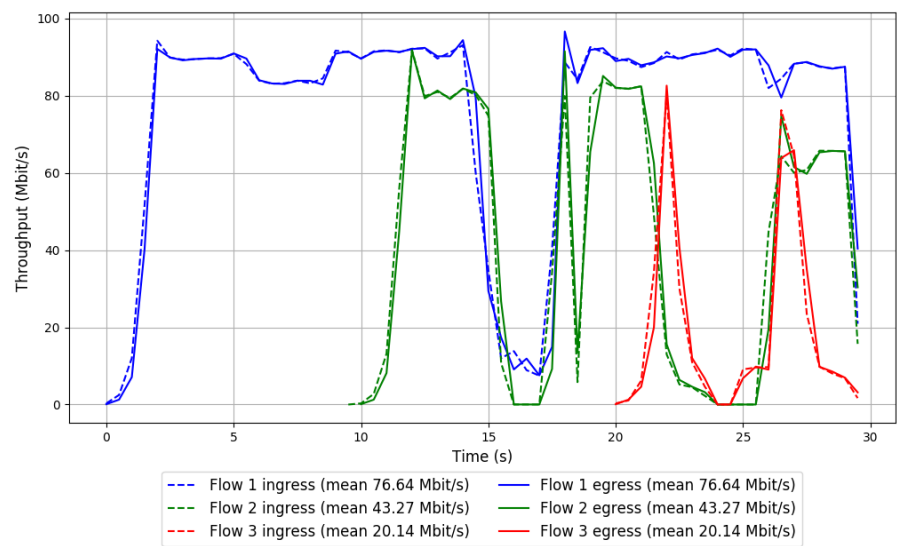
-- Flow 3:

Average throughput: 20.14 Mbit/s

95th percentile per-packet one-way delay: 111.004 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-10-12 07:47:19

End at: 2017-10-12 07:47:49

Below is generated by plot.py at 2017-10-12 09:41:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.95 Mbit/s

95th percentile per-packet one-way delay: 112.160 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.64 Mbit/s

95th percentile per-packet one-way delay: 110.428 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.70 Mbit/s

95th percentile per-packet one-way delay: 112.142 ms

Loss rate: 0.00%

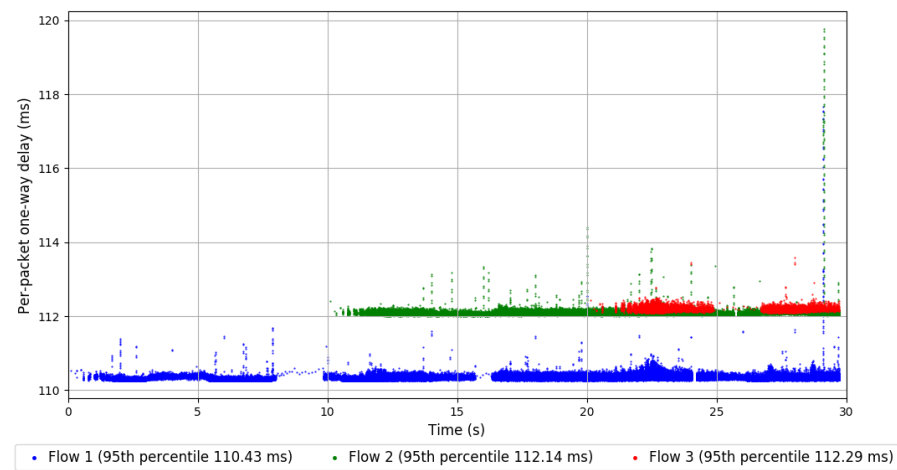
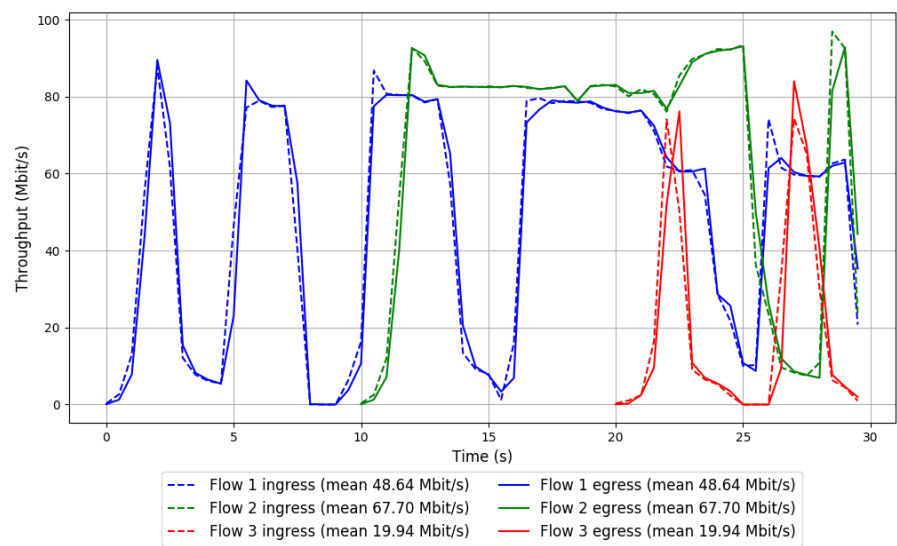
-- Flow 3:

Average throughput: 19.94 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

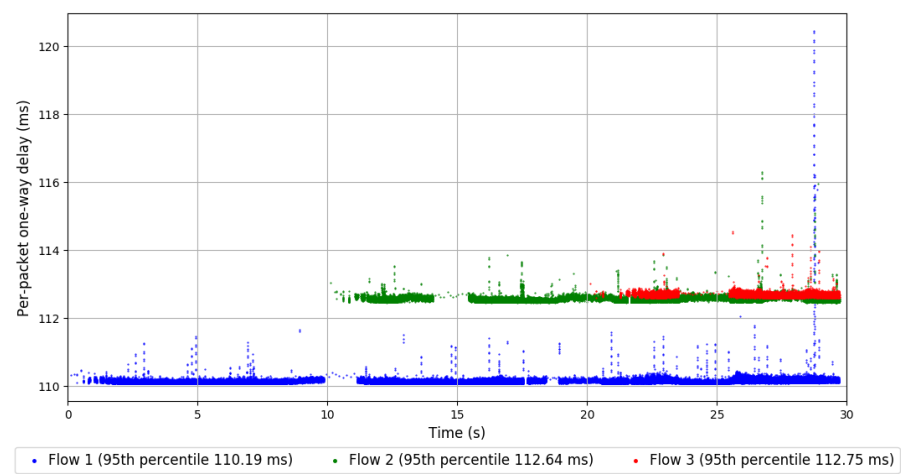
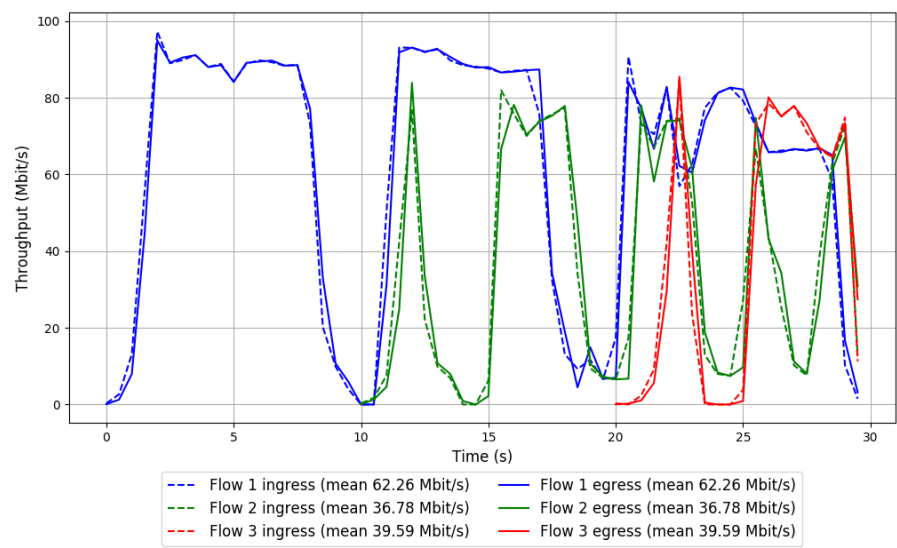


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-10-12 08:01:20
End at: 2017-10-12 08:01:50

# Below is generated by plot.py at 2017-10-12 09:41:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.43 Mbit/s
95th percentile per-packet one-way delay: 112.678 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 62.26 Mbit/s
95th percentile per-packet one-way delay: 110.192 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.78 Mbit/s
95th percentile per-packet one-way delay: 112.640 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.59 Mbit/s
95th percentile per-packet one-way delay: 112.748 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

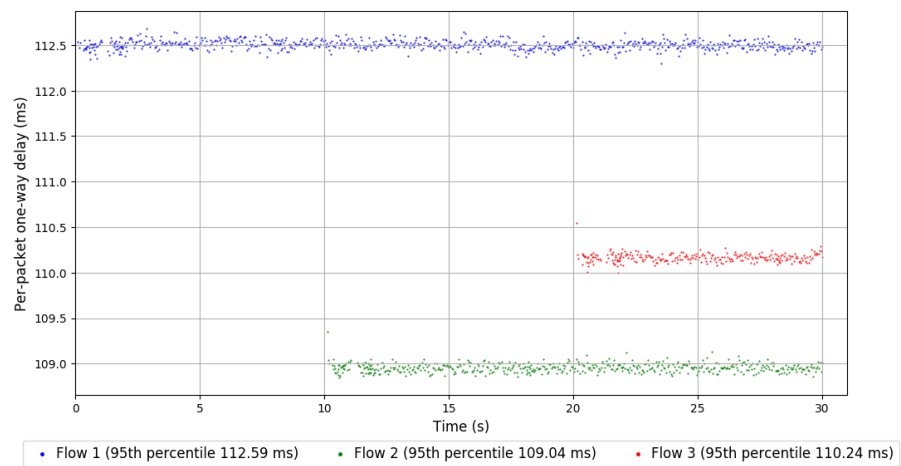
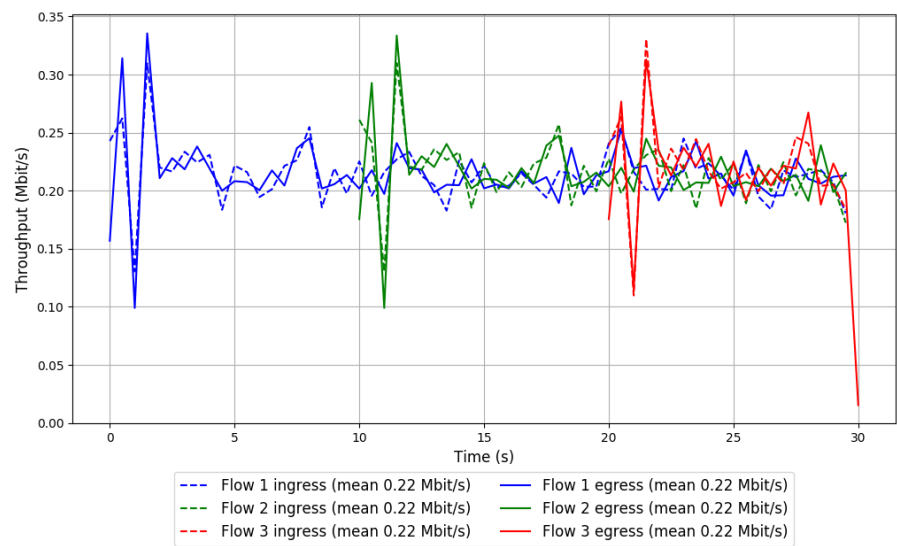


```
Run 1: Statistics of SCReAM

Start at: 2017-10-12 05:54:55
End at: 2017-10-12 05:55:25

# Below is generated by plot.py at 2017-10-12 09:41:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.568 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.588 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.036 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.238 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

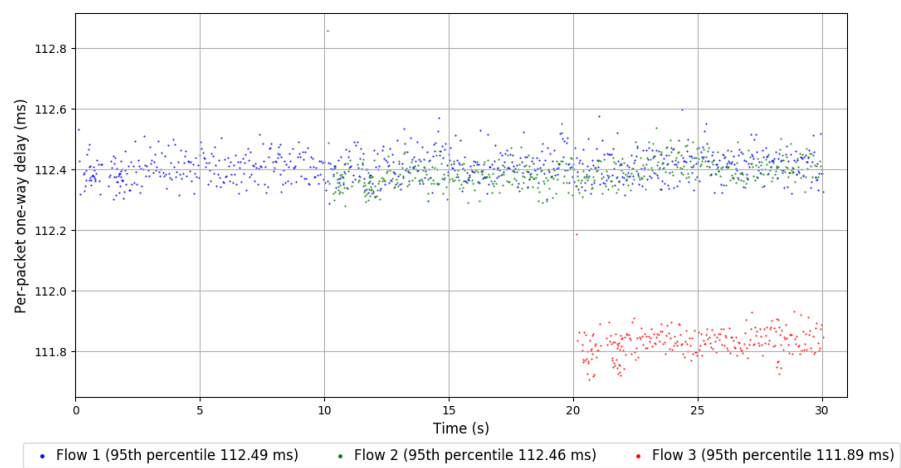
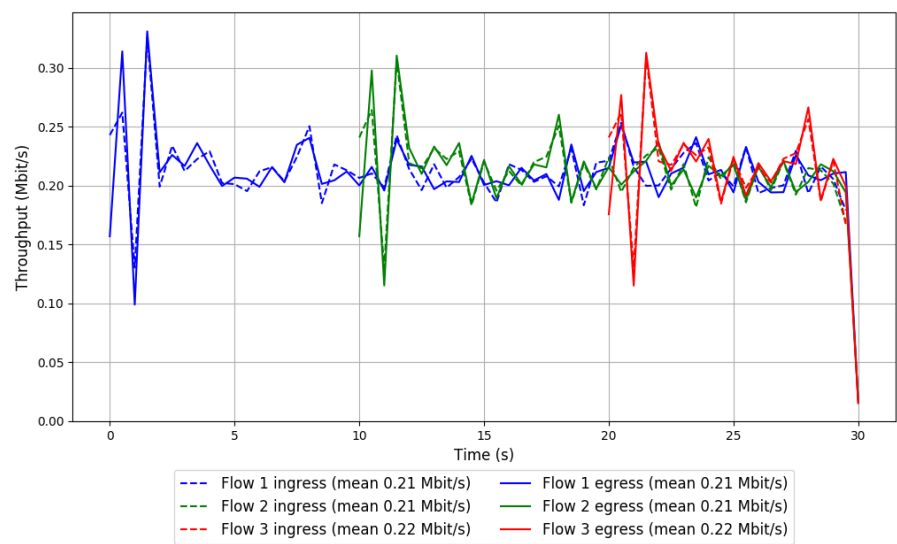


```
Run 2: Statistics of SReAM

Start at: 2017-10-12 06:08:48
End at: 2017-10-12 06:09:18

# Below is generated by plot.py at 2017-10-12 09:41:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.473 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.489 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.461 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.892 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

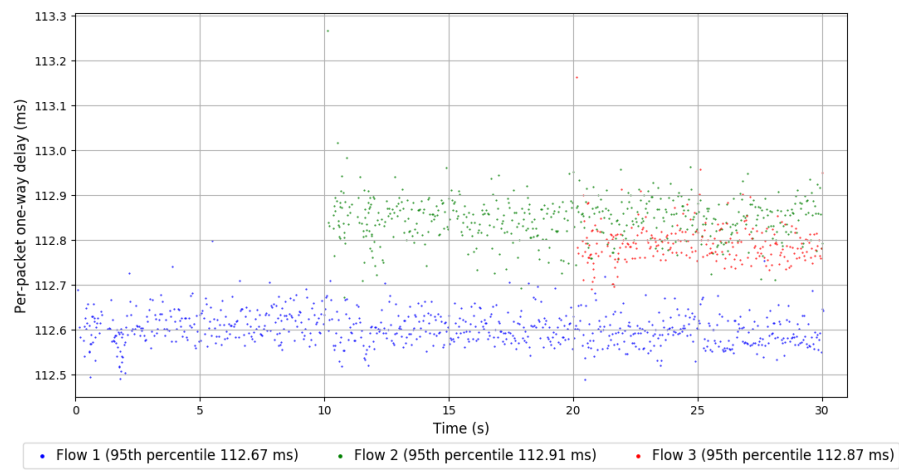
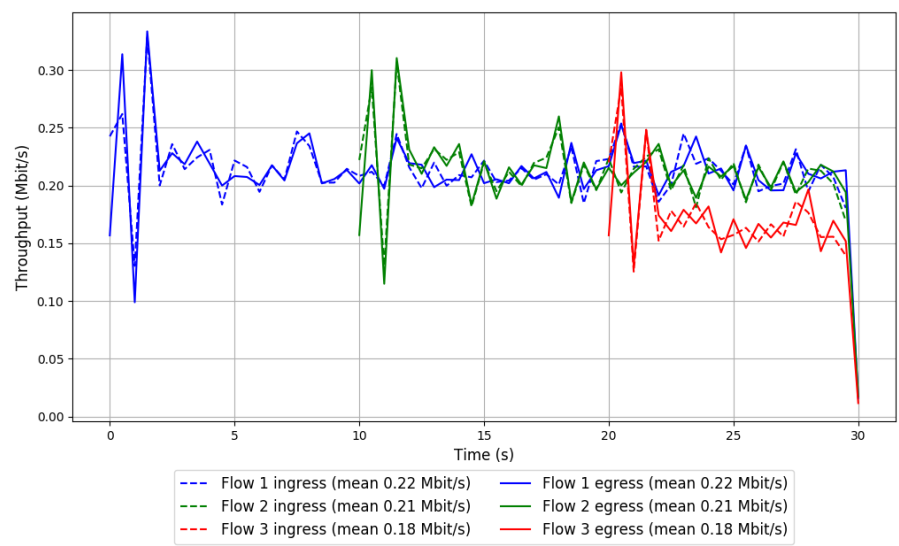


```
Run 3: Statistics of SReAM

Start at: 2017-10-12 06:22:51
End at: 2017-10-12 06:23:21

# Below is generated by plot.py at 2017-10-12 09:41:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 112.891 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.667 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.913 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 112.873 ms
Loss rate: 0.00%
```


Run 3: Report of SCReAM — Data Link

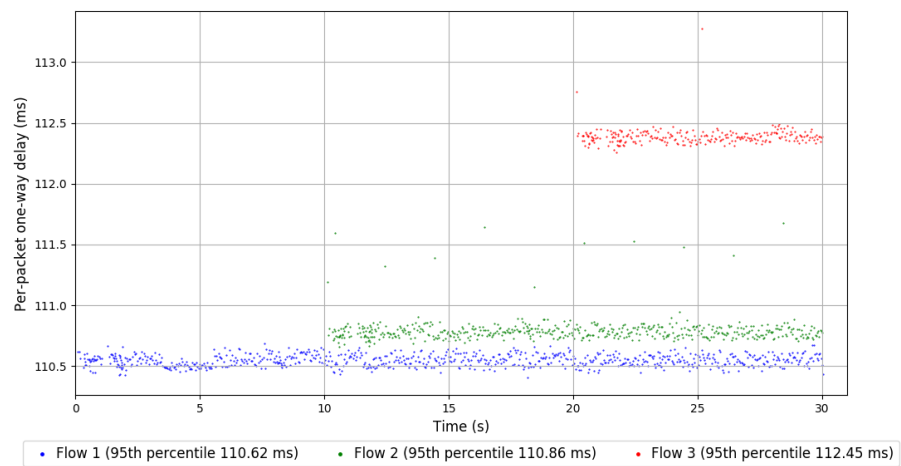
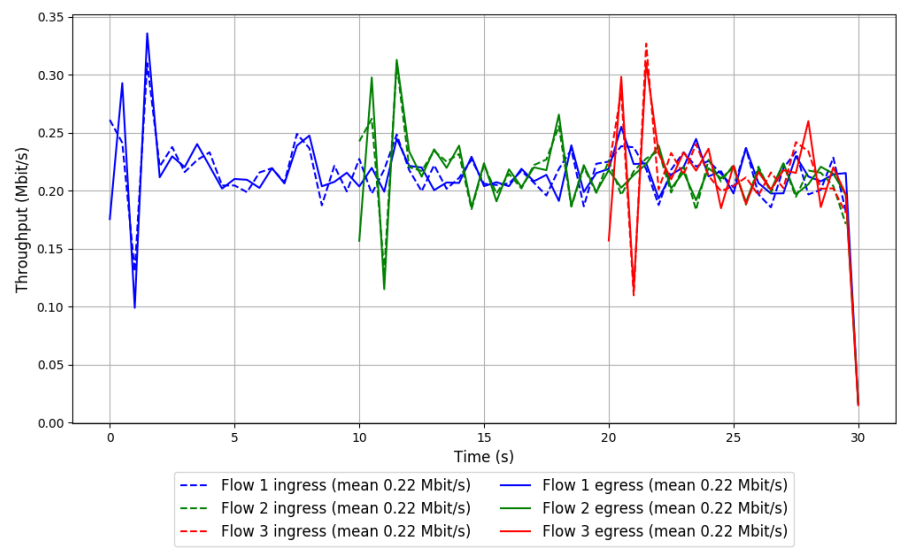


```
Run 4: Statistics of SCReAM

Start at: 2017-10-12 06:36:33
End at: 2017-10-12 06:37:03

# Below is generated by plot.py at 2017-10-12 09:41:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.405 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.625 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.862 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.453 ms
Loss rate: 0.00%
```

Run 4: Report of SCRaM — Data Link

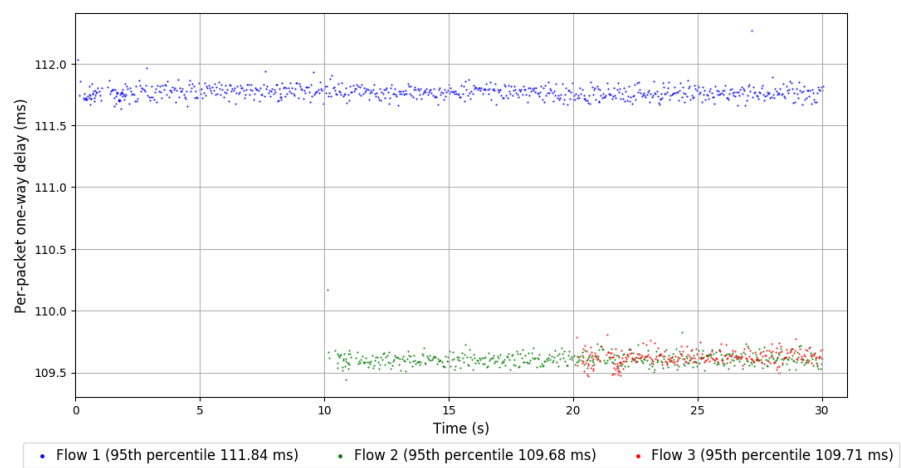
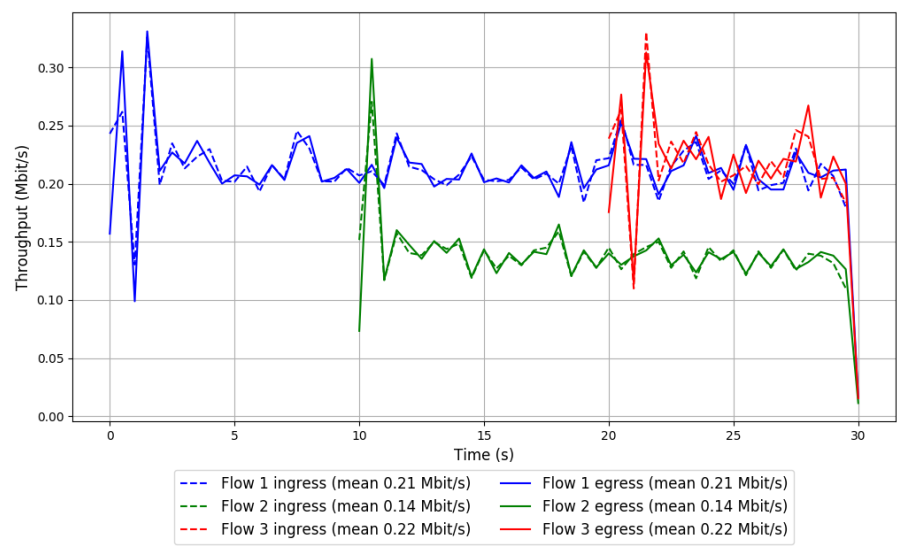


```
Run 5: Statistics of SCReAM

Start at: 2017-10-12 06:50:30
End at: 2017-10-12 06:51:00

# Below is generated by plot.py at 2017-10-12 09:41:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 111.824 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 111.840 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 109.684 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.714 ms
Loss rate: 0.00%
```

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-10-12 07:04:08

End at: 2017-10-12 07:04:38

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 112.627 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.19 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.824 ms

Loss rate: 0.00%

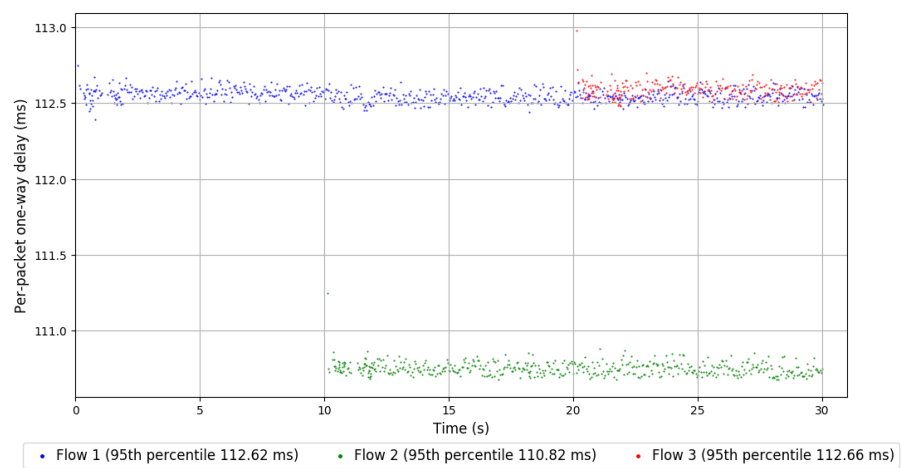
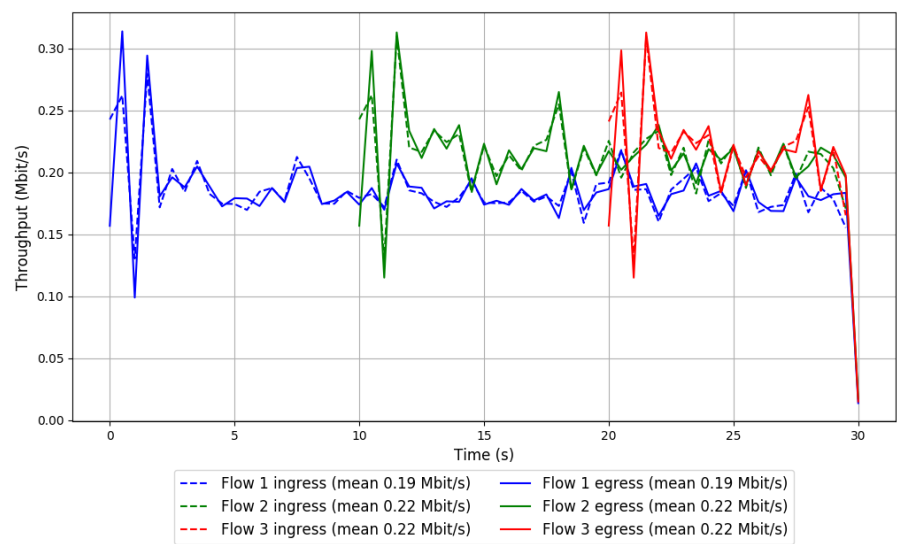
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.655 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SReAM

Start at: 2017-10-12 07:18:15

End at: 2017-10-12 07:18:45

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 113.045 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.058 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.947 ms

Loss rate: 0.00%

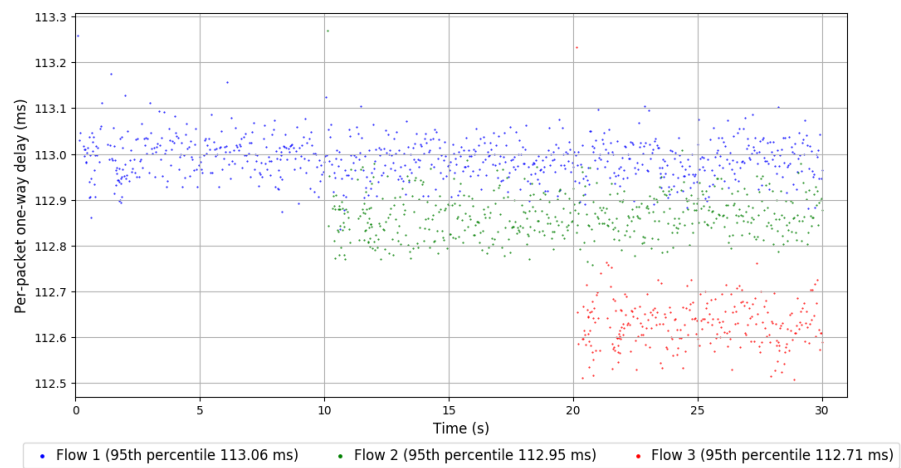
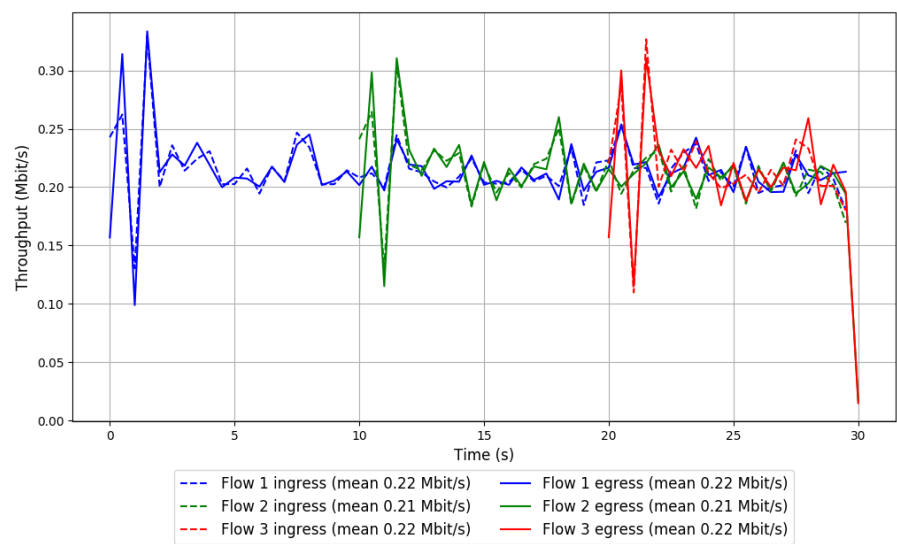
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.712 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2017-10-12 07:31:49

End at: 2017-10-12 07:32:19

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 112.922 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.715 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 112.937 ms

Loss rate: 0.00%

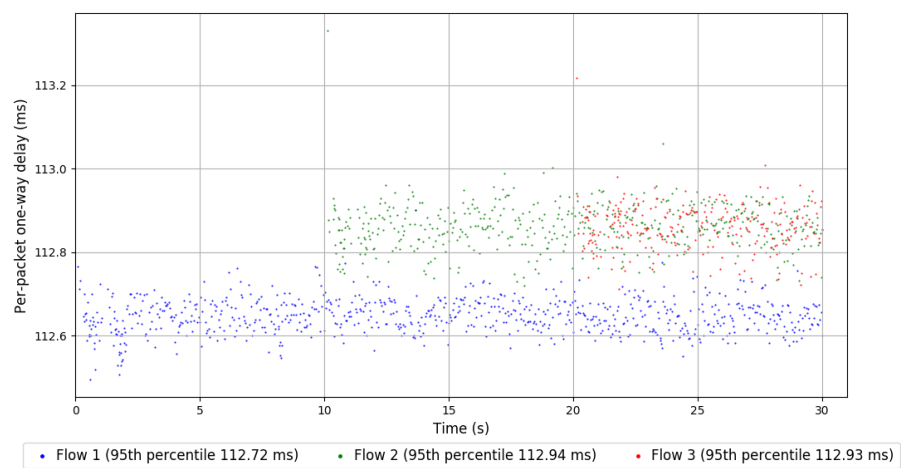
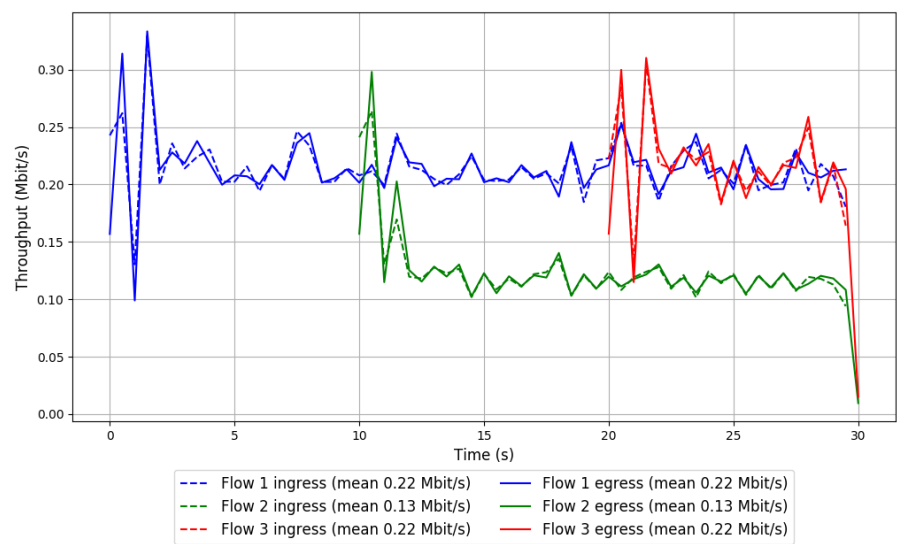
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.933 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-10-12 07:45:46

End at: 2017-10-12 07:46:16

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 112.424 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 112.440 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.875 ms

Loss rate: 0.00%

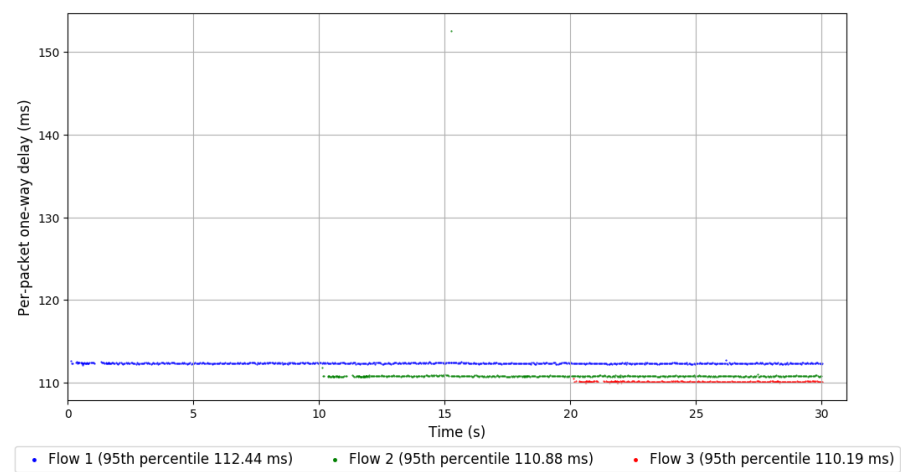
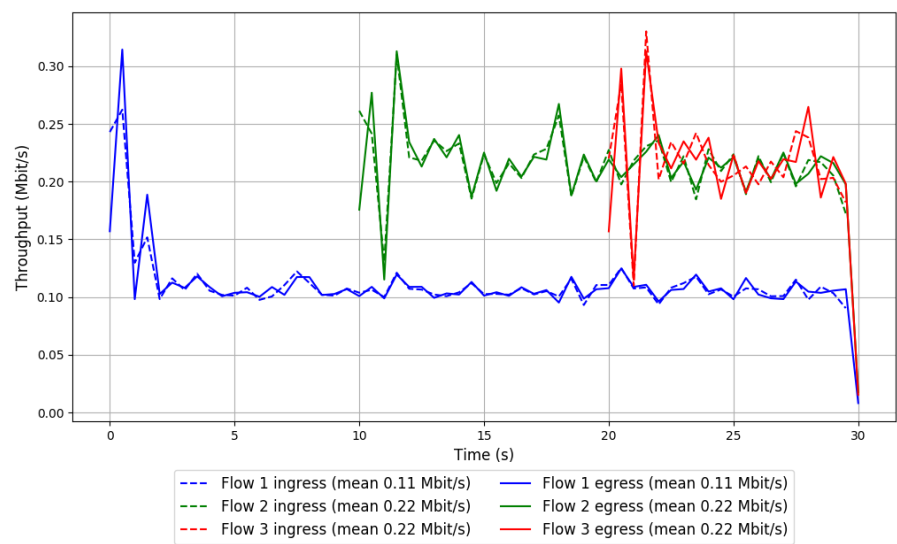
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.186 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

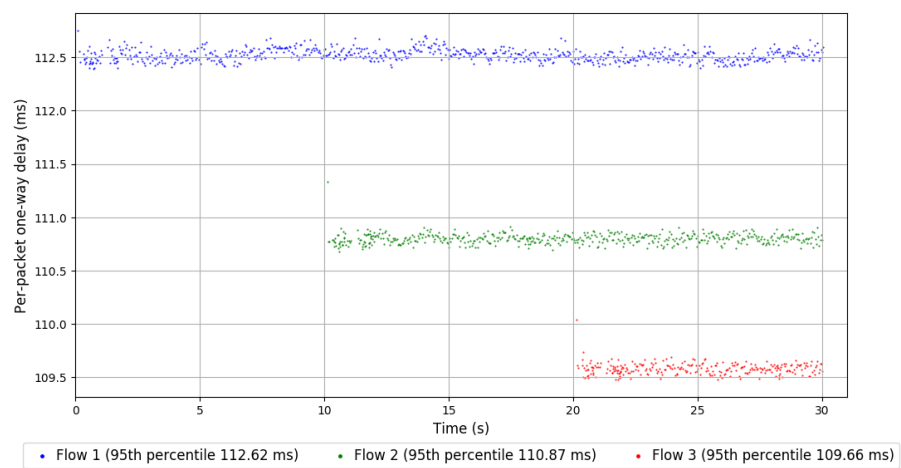
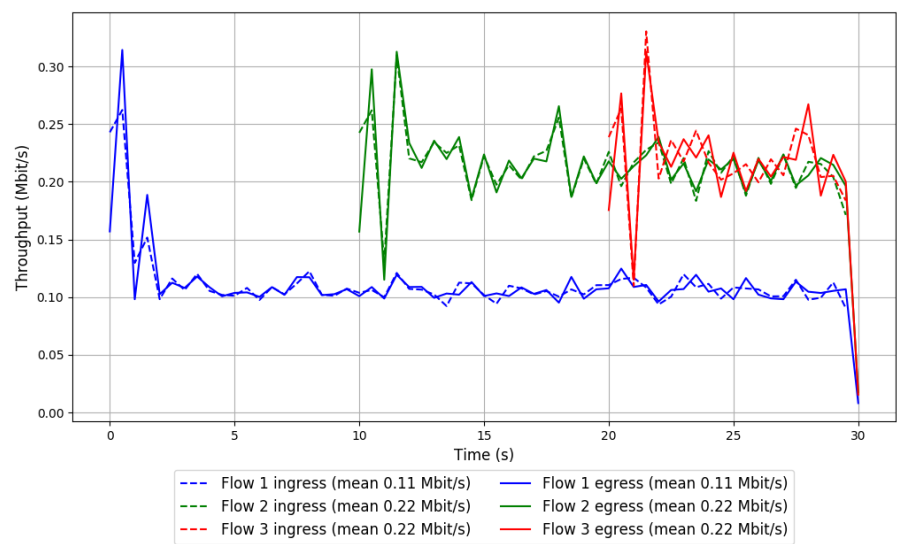


```
Run 10: Statistics of SCReAM

Start at: 2017-10-12 07:59:47
End at: 2017-10-12 08:00:17

# Below is generated by plot.py at 2017-10-12 09:41:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 112.592 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 112.619 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.874 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.662 ms
Loss rate: 0.00%
```

Run 10: Report of SCReAM — Data Link

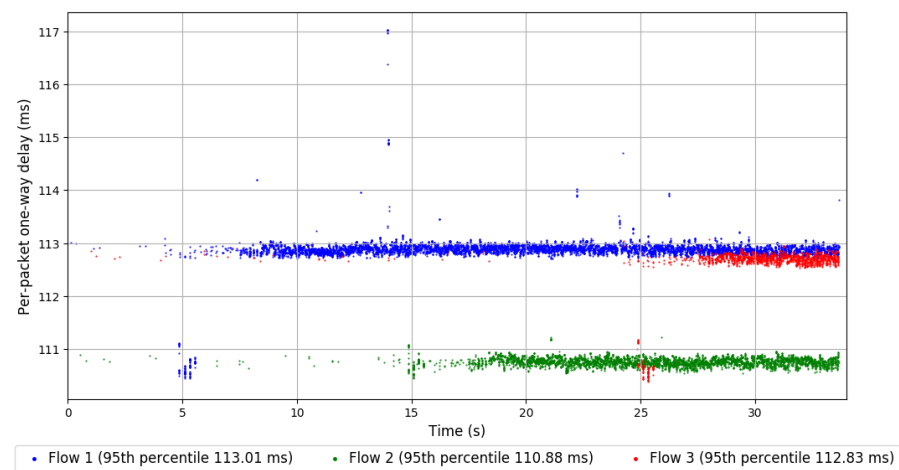
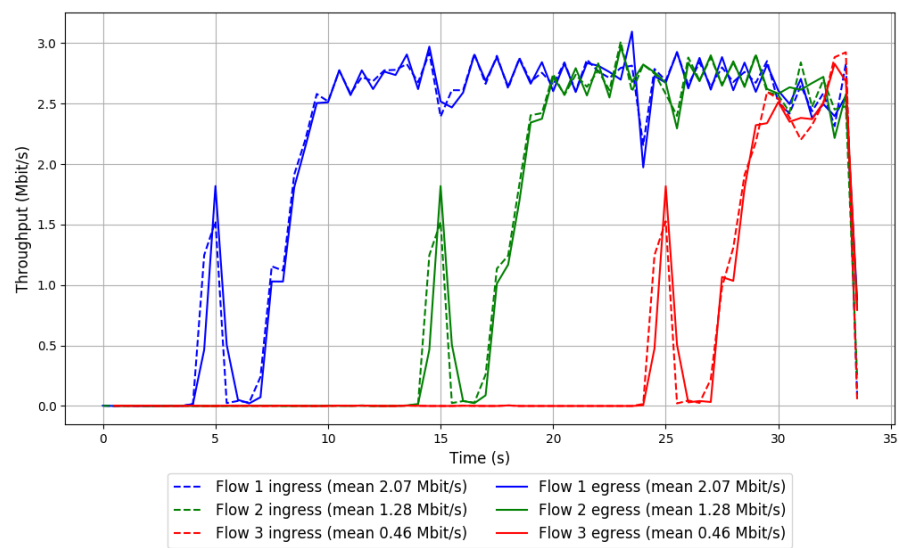


```
Run 1: Statistics of WebRTC media

Start at: 2017-10-12 05:55:41
End at: 2017-10-12 05:56:11

# Below is generated by plot.py at 2017-10-12 09:41:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.78 Mbit/s
95th percentile per-packet one-way delay: 112.985 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 113.010 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 110.882 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 112.828 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link

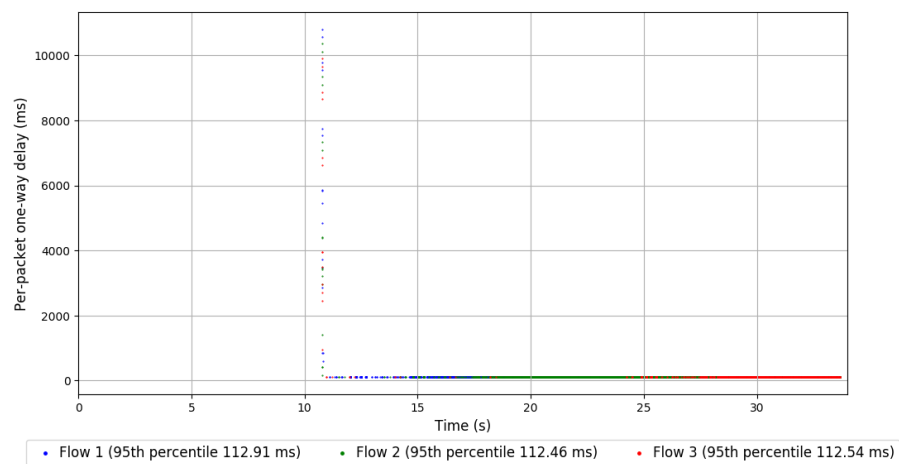
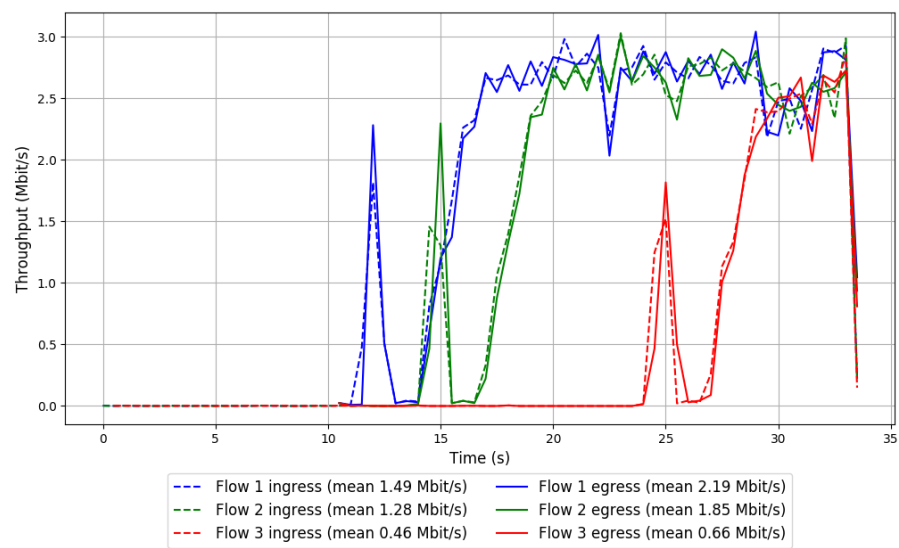


Run 2: Statistics of WebRTC media

Start at: 2017-10-12 06:09:33

End at: 2017-10-12 06:10:03

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-10-12 06:23:37

End at: 2017-10-12 06:24:07

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 112.990 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 113.012 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 112.505 ms

Loss rate: 0.00%

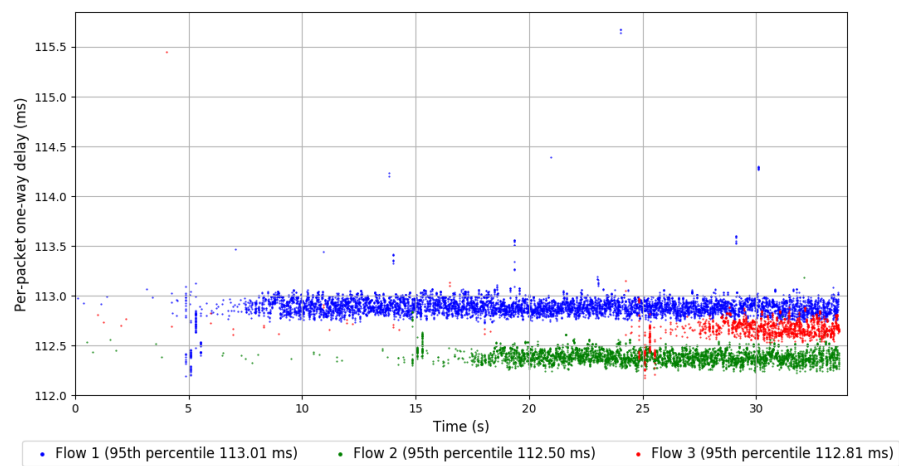
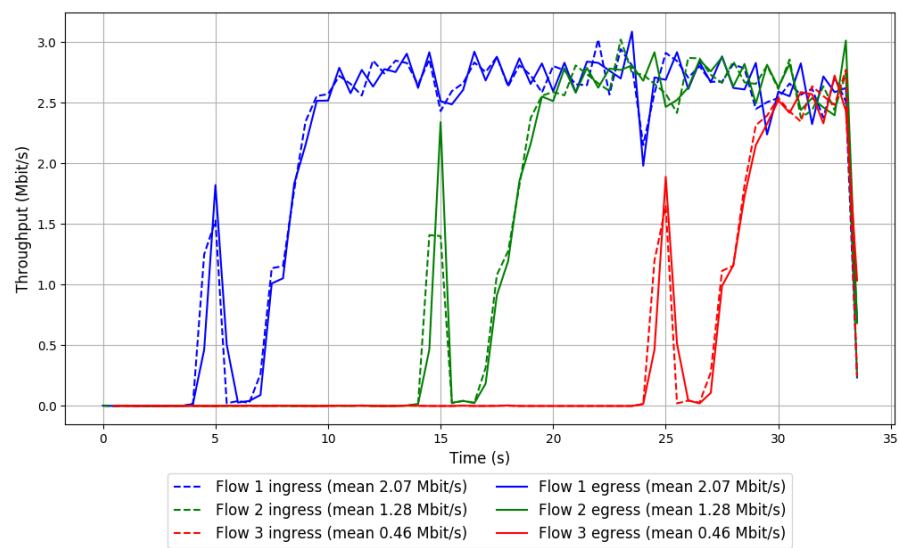
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 112.813 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-10-12 06:37:19

End at: 2017-10-12 06:37:49

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 112.601 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 112.621 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 110.868 ms

Loss rate: 0.00%

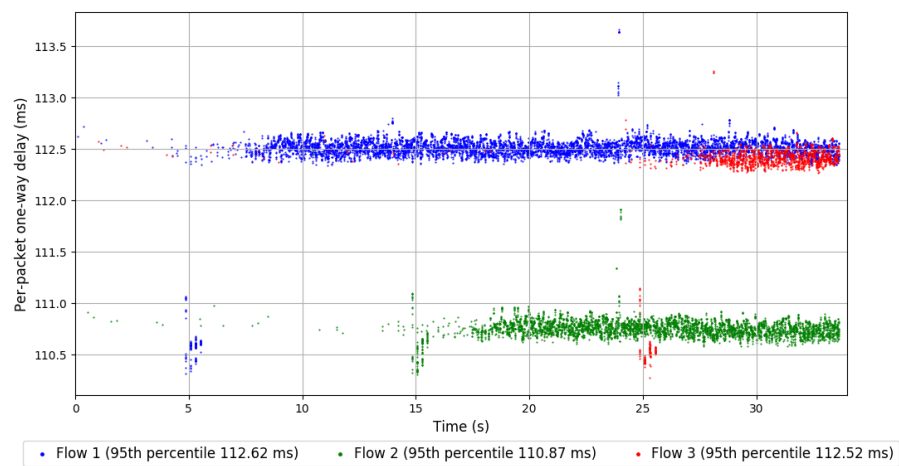
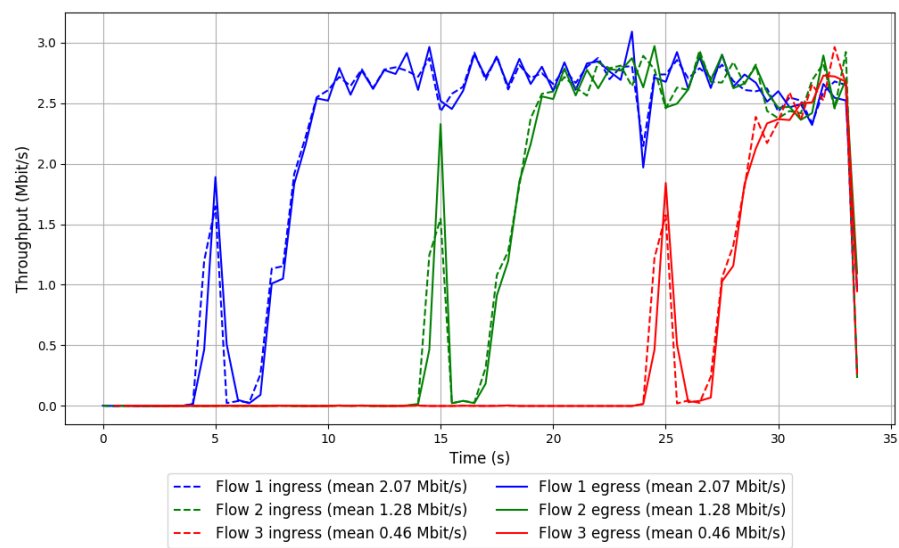
-- Flow 3:

Average throughput: 0.46 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-10-12 06:51:16

End at: 2017-10-12 06:51:46

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 112.703 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 112.728 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 111.852 ms

Loss rate: 0.00%

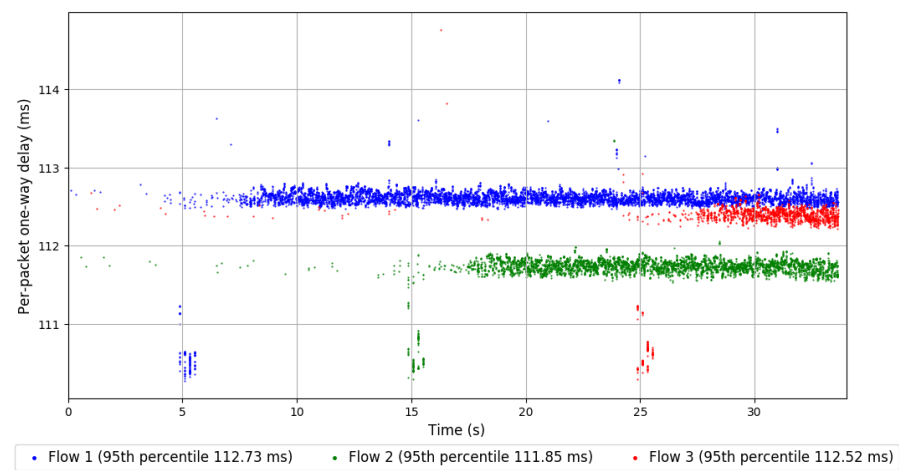
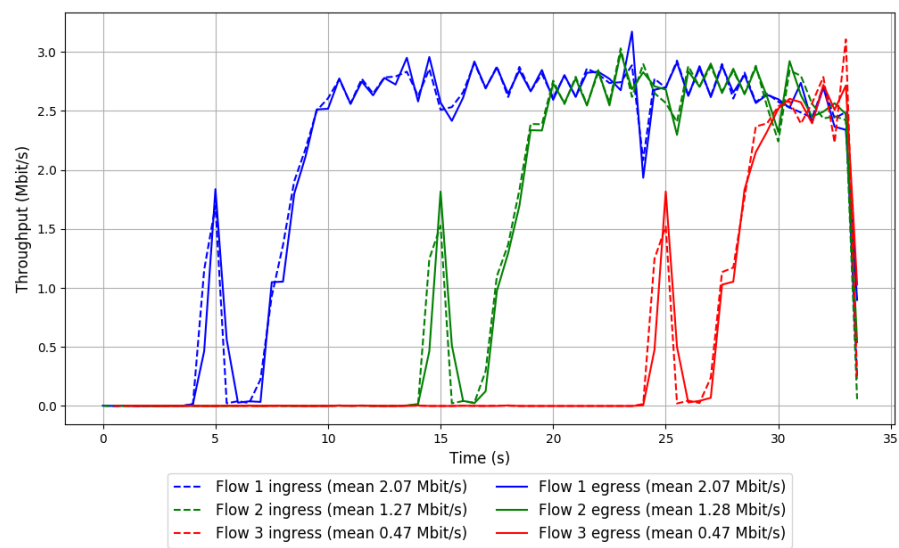
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 112.518 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-10-12 07:04:54

End at: 2017-10-12 07:05:24

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.77 Mbit/s

95th percentile per-packet one-way delay: 112.817 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 112.726 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 112.857 ms

Loss rate: 0.00%

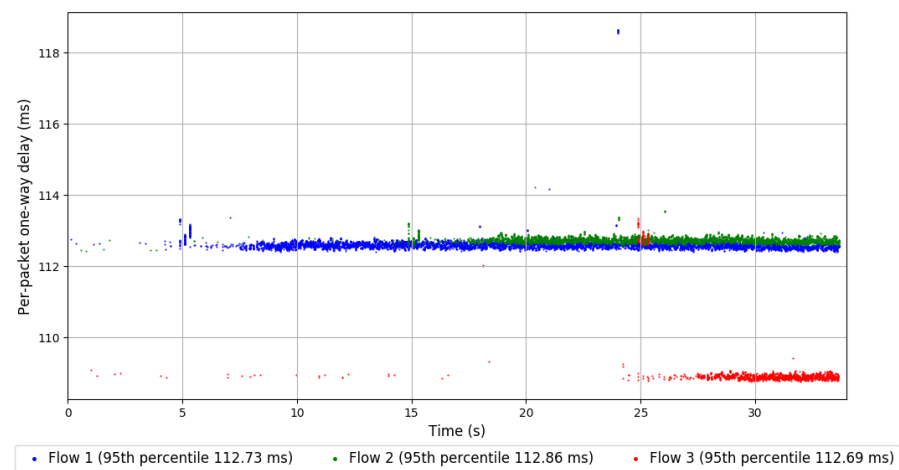
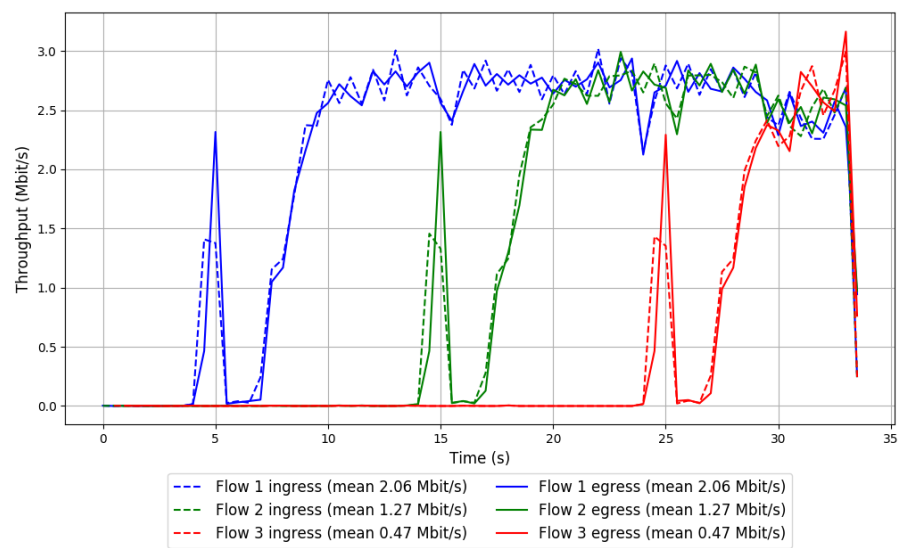
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 112.689 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-10-12 07:19:00

End at: 2017-10-12 07:19:30

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.71 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.04 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 111.112 ms

Loss rate: 0.00%

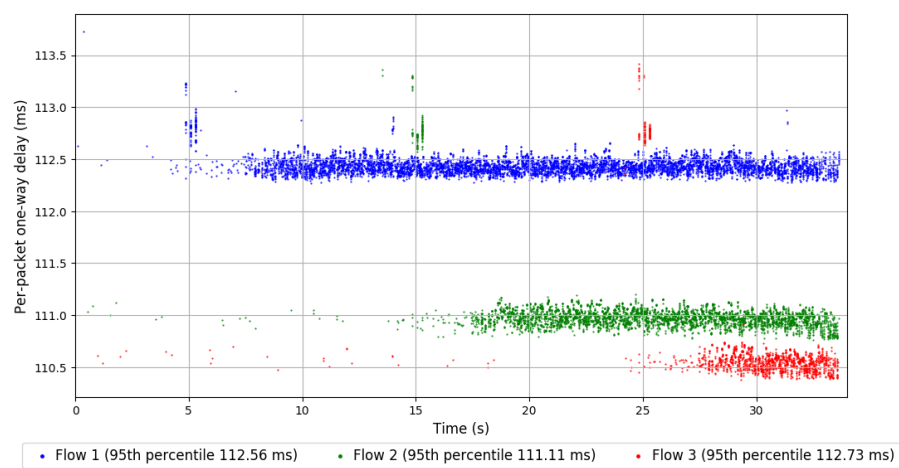
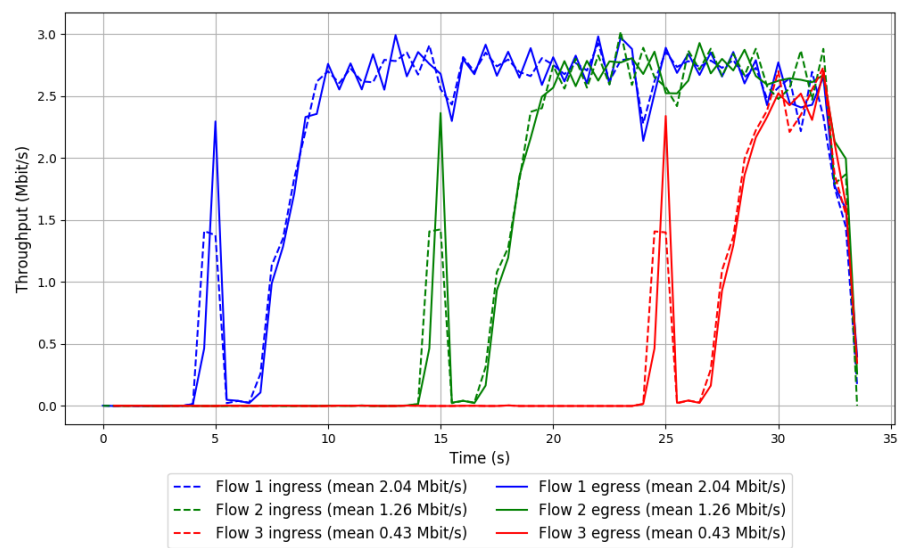
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.728 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-10-12 07:32:34

End at: 2017-10-12 07:33:04

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.78 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 112.961 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 112.697 ms

Loss rate: 0.00%

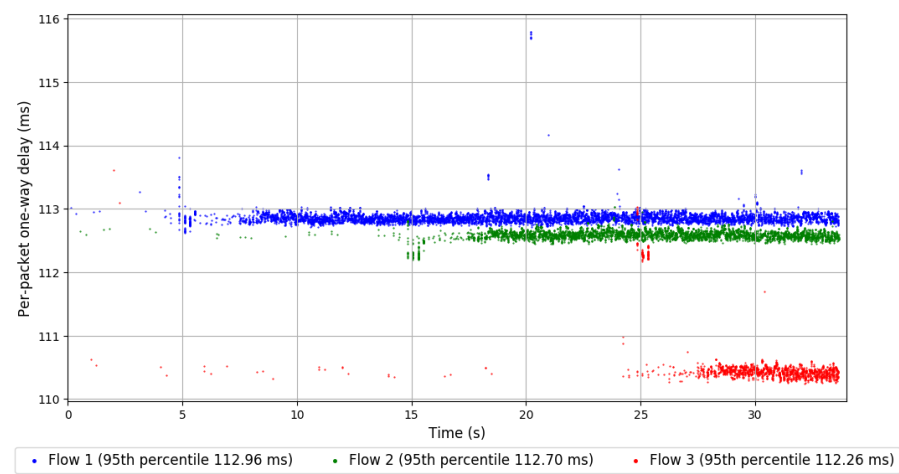
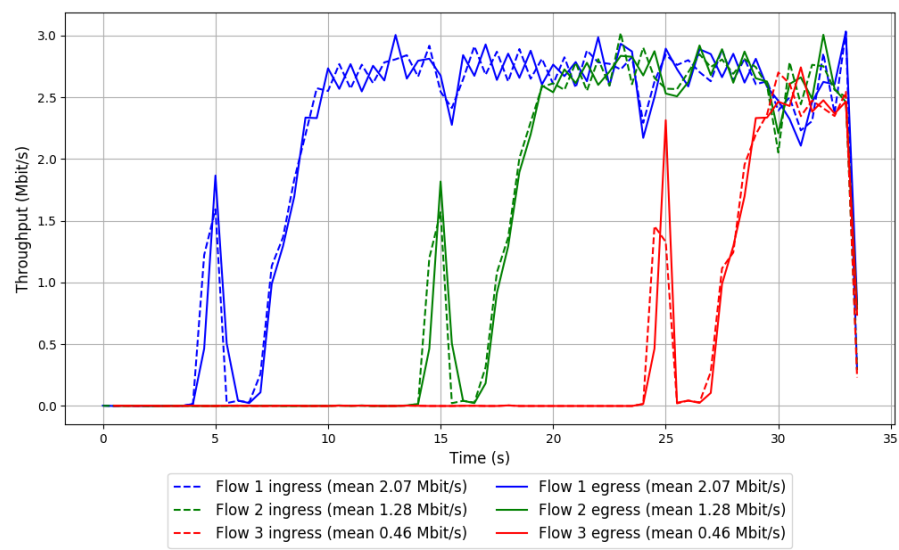
-- Flow 3:

Average throughput: 0.46 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-10-12 07:46:32

End at: 2017-10-12 07:47:02

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.03 Mbit/s

95th percentile per-packet one-way delay: 112.348 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 110.326 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 112.372 ms

Loss rate: 0.00%

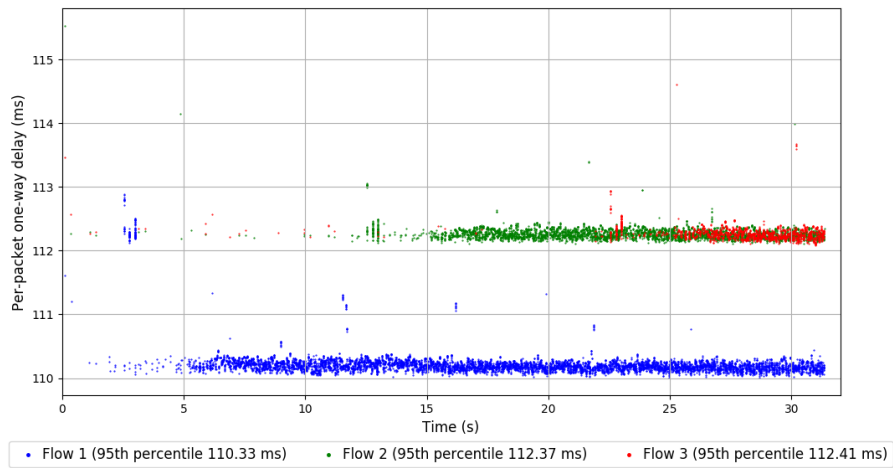
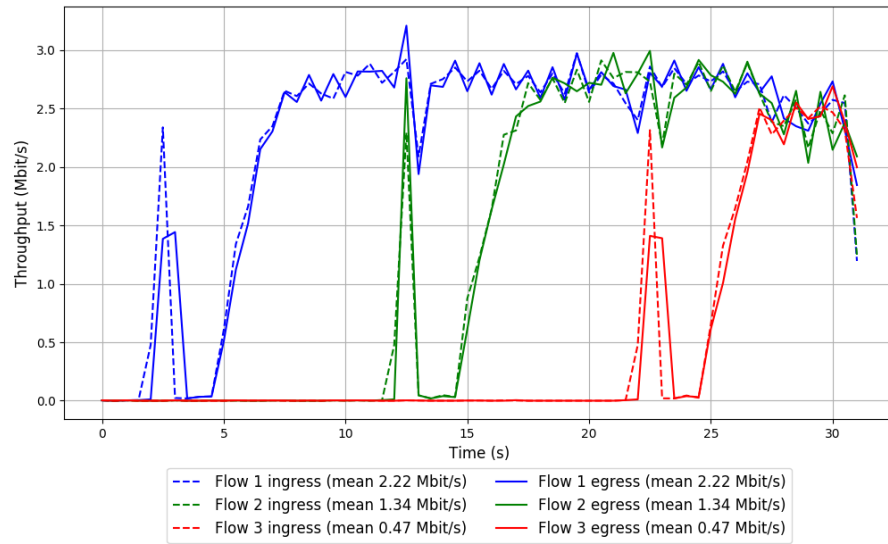
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 112.405 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-10-12 08:00:33

End at: 2017-10-12 08:01:03

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.00 Mbit/s

95th percentile per-packet one-way delay: 112.678 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 112.668 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 110.942 ms

Loss rate: 0.00%

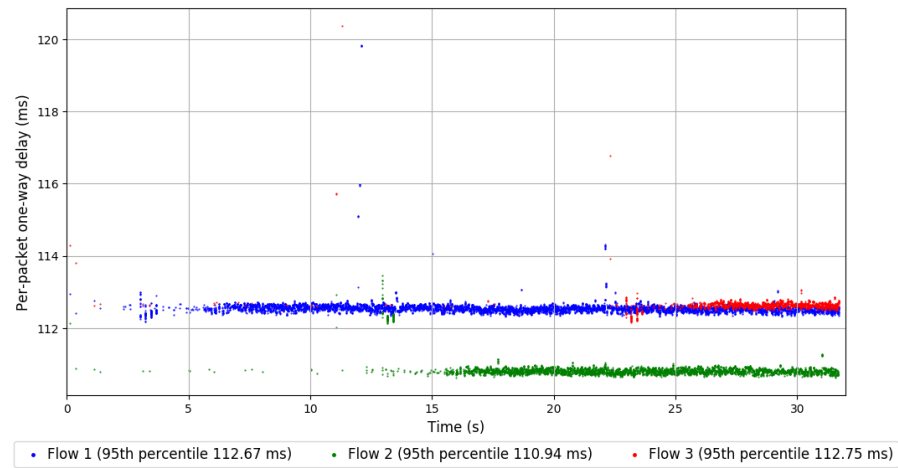
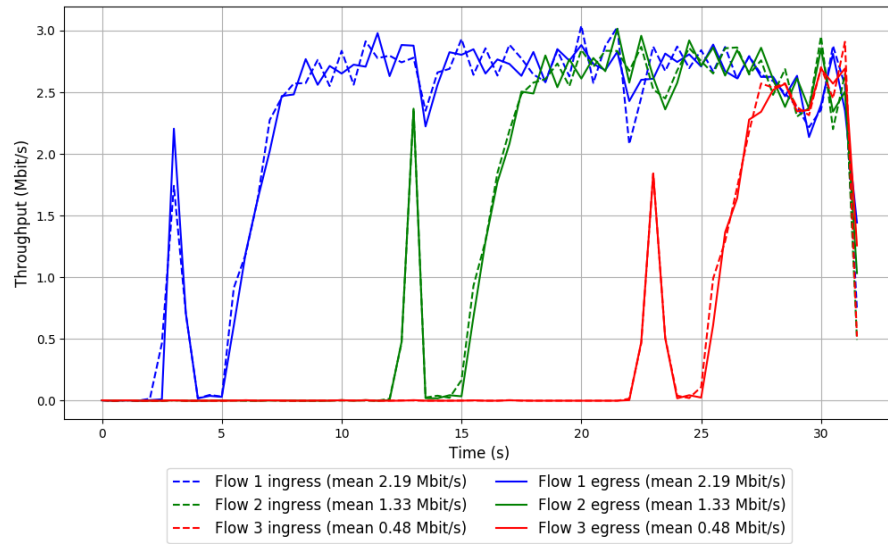
-- Flow 3:

Average throughput: 0.48 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

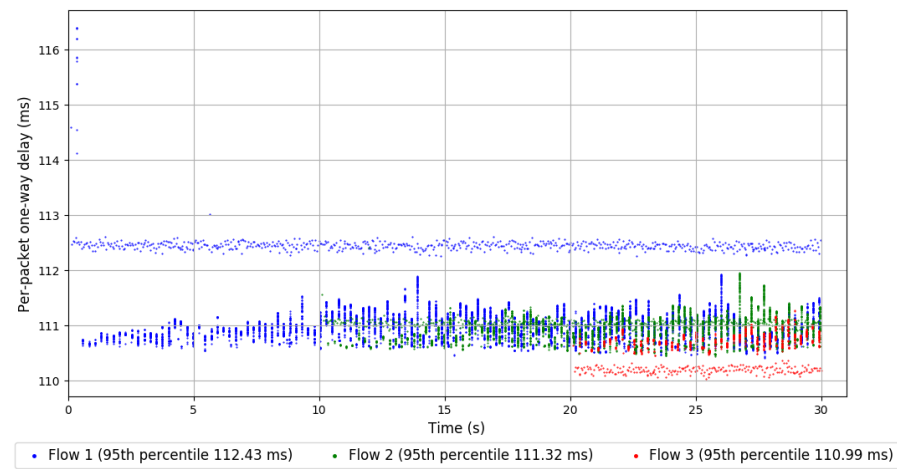
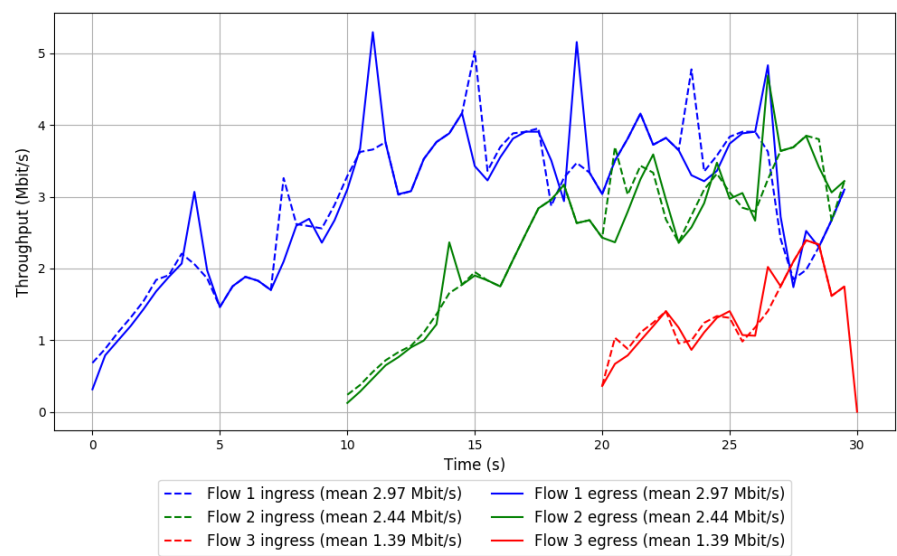


```
Run 1: Statistics of Sprout

Start at: 2017-10-12 05:59:35
End at: 2017-10-12 06:00:05

# Below is generated by plot.py at 2017-10-12 09:41:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.05 Mbit/s
95th percentile per-packet one-way delay: 111.859 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 2.97 Mbit/s
95th percentile per-packet one-way delay: 112.434 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.44 Mbit/s
95th percentile per-packet one-way delay: 111.321 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 110.994 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-10-12 06:13:28

End at: 2017-10-12 06:13:58

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.04 Mbit/s

95th percentile per-packet one-way delay: 113.110 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 113.008 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 113.134 ms

Loss rate: 0.00%

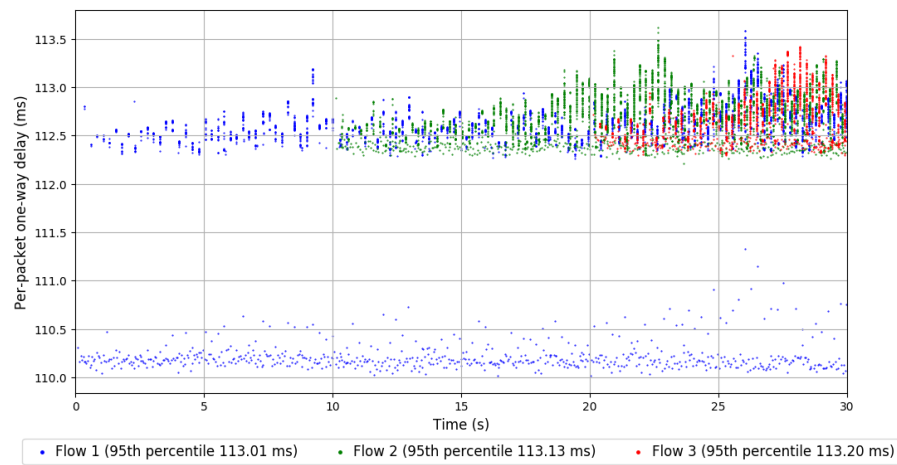
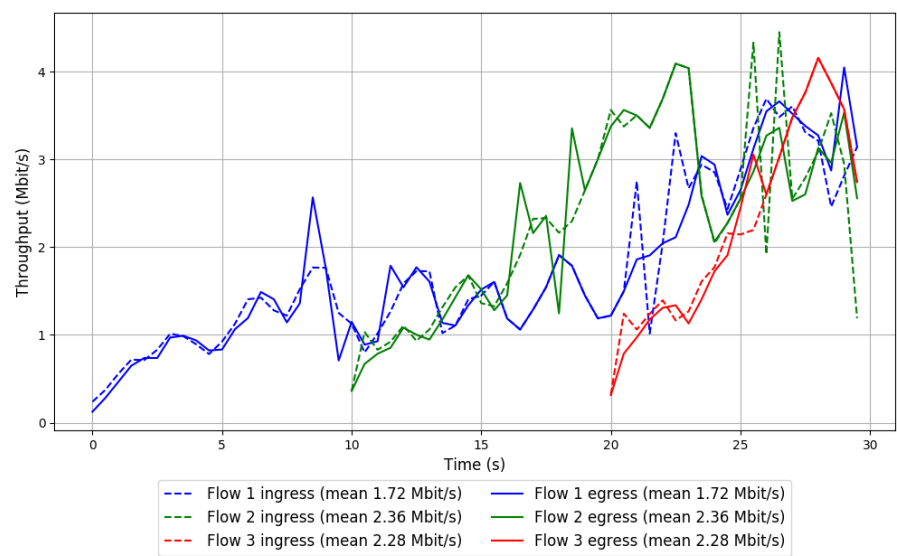
-- Flow 3:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 113.205 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-10-12 06:27:30

End at: 2017-10-12 06:28:00

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.64 Mbit/s

95th percentile per-packet one-way delay: 113.062 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 112.807 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 113.070 ms

Loss rate: 0.00%

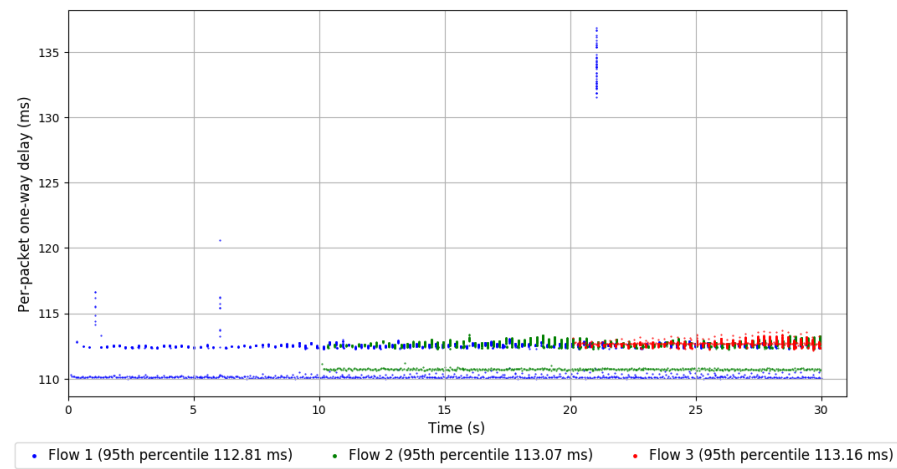
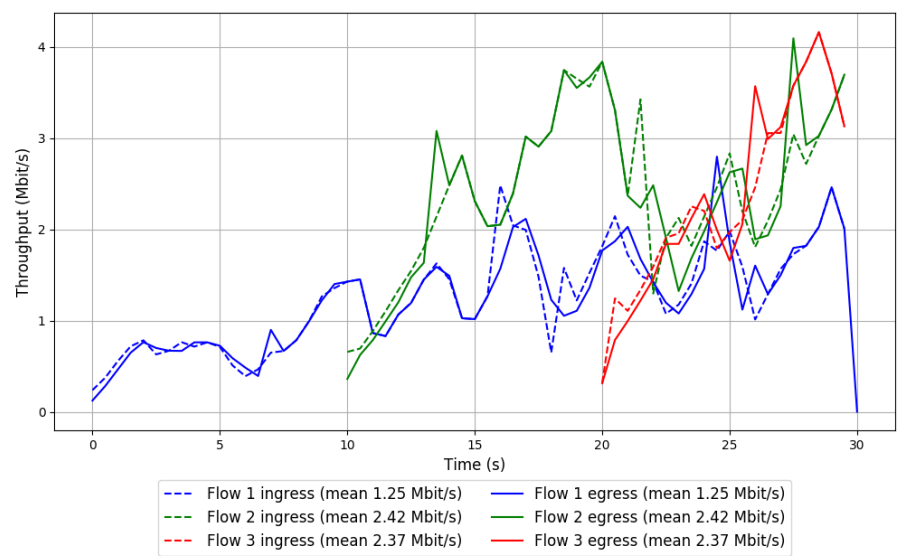
-- Flow 3:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 113.155 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-10-12 06:41:11

End at: 2017-10-12 06:41:41

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.55 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.46 Mbit/s

95th percentile per-packet one-way delay: 111.200 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 112.796 ms

Loss rate: 0.00%

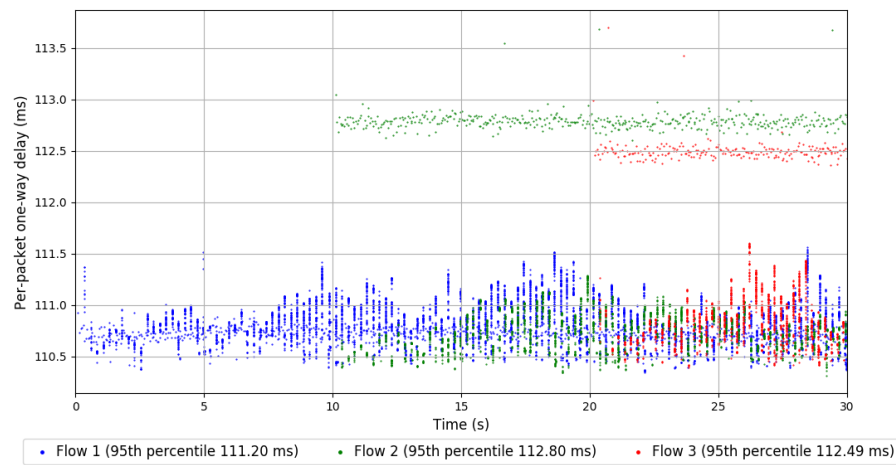
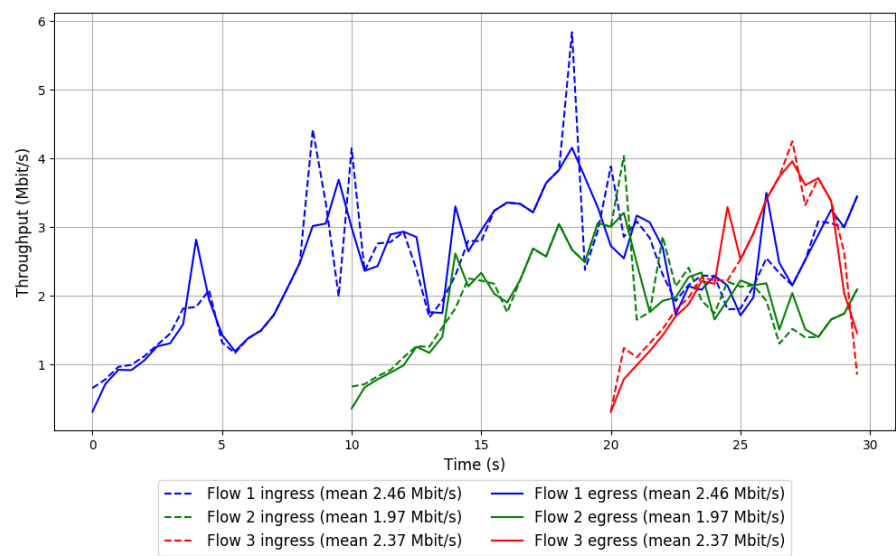
-- Flow 3:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 112.486 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-10-12 06:55:12

End at: 2017-10-12 06:55:42

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.86 Mbit/s

95th percentile per-packet one-way delay: 111.645 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.77 Mbit/s

95th percentile per-packet one-way delay: 111.308 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 111.730 ms

Loss rate: 0.00%

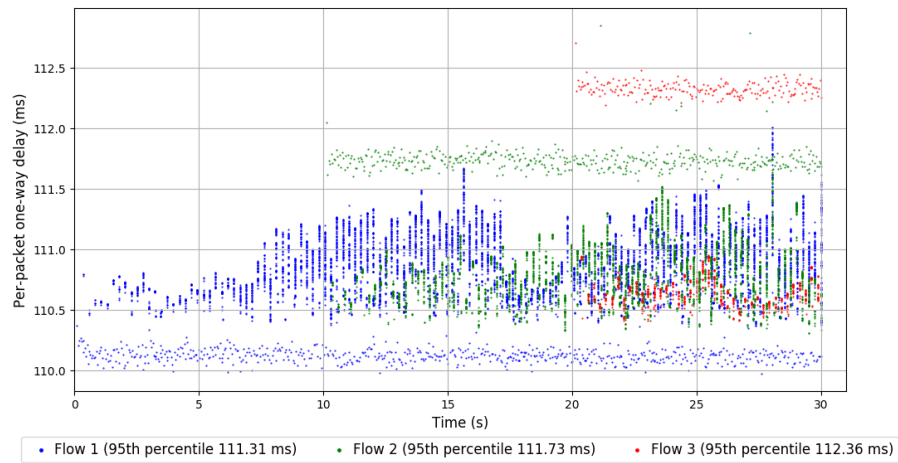
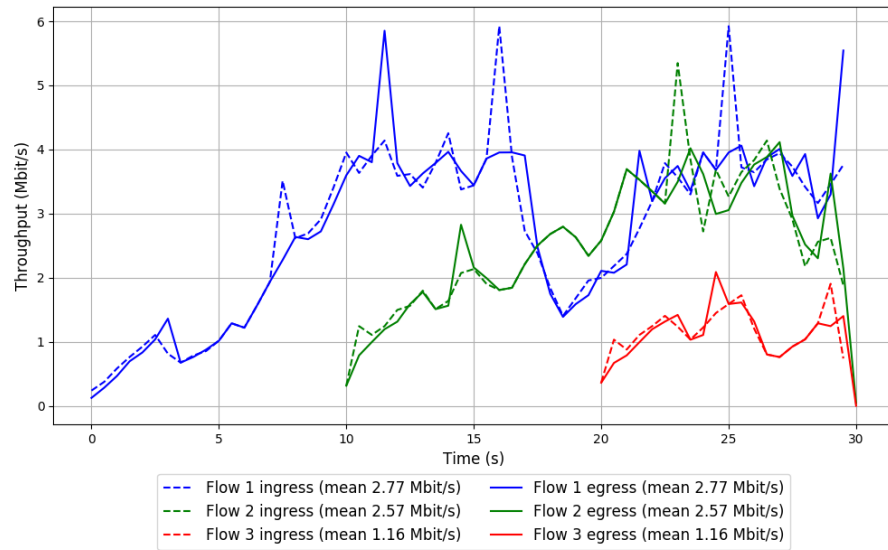
-- Flow 3:

Average throughput: 1.16 Mbit/s

95th percentile per-packet one-way delay: 112.362 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-10-12 07:08:47

End at: 2017-10-12 07:09:17

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.64 Mbit/s

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

Loss rate: 0.28%

-- Flow 1:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 113.513 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 113.391 ms

Loss rate: 0.00%

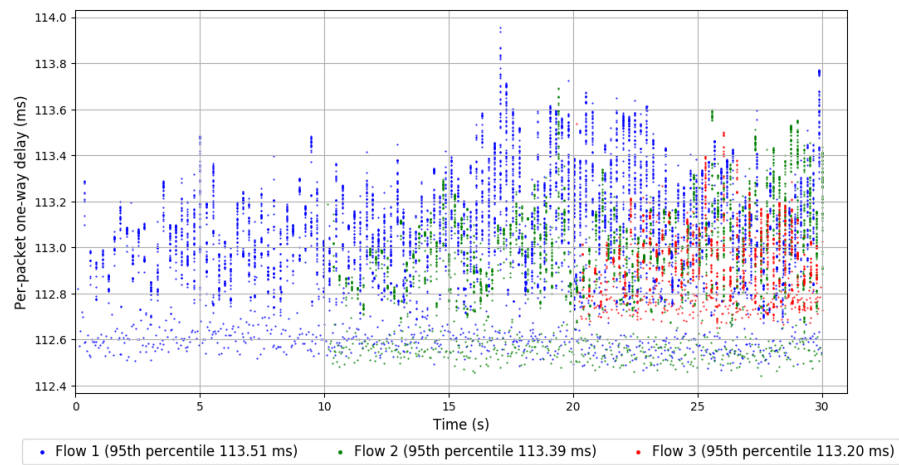
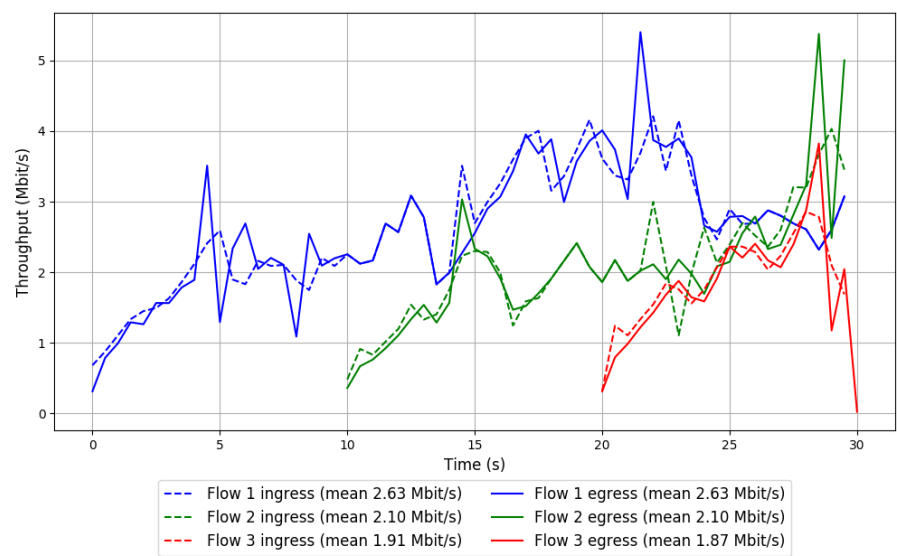
-- Flow 3:

Average throughput: 1.87 Mbit/s

95th percentile per-packet one-way delay: 113.198 ms

Loss rate: 2.09%

Run 6: Report of Sprout — Data Link

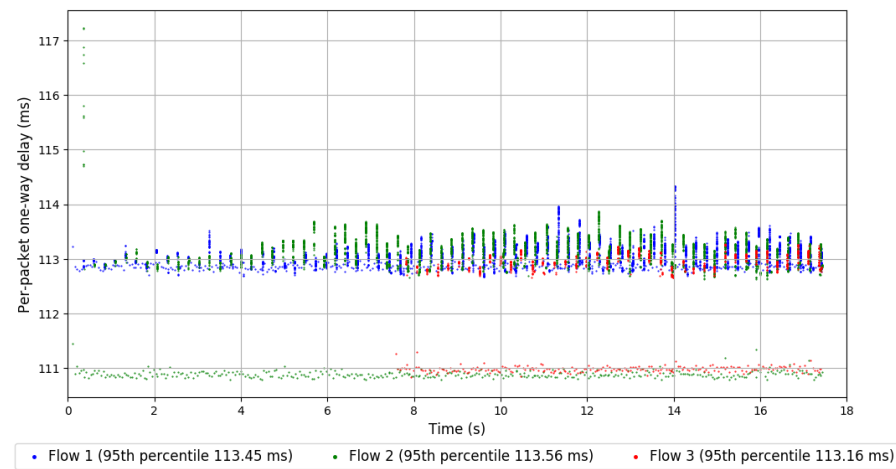
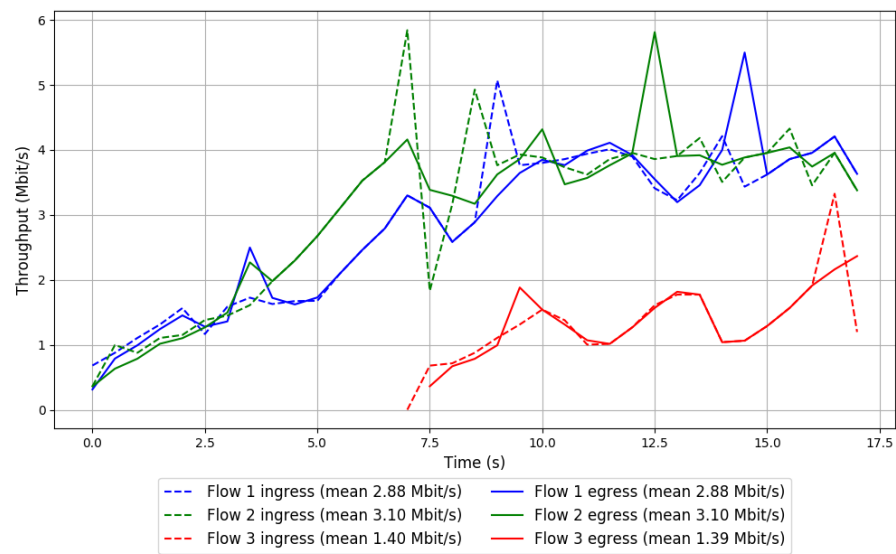


Run 7: Statistics of Sprout

Start at: 2017-10-12 07:22:32

End at: 2017-10-12 07:23:02

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-10-12 07:36:29

End at: 2017-10-12 07:36:59

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 113.238 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.81 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 114.431 ms

Loss rate: 0.00%

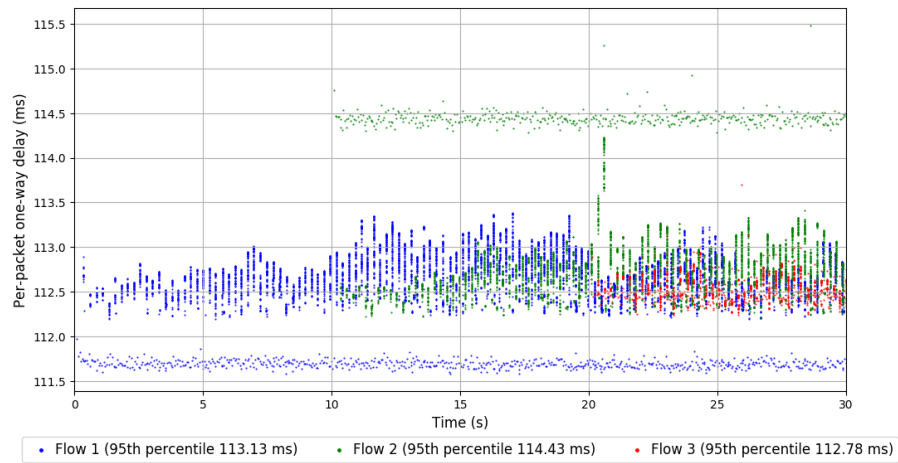
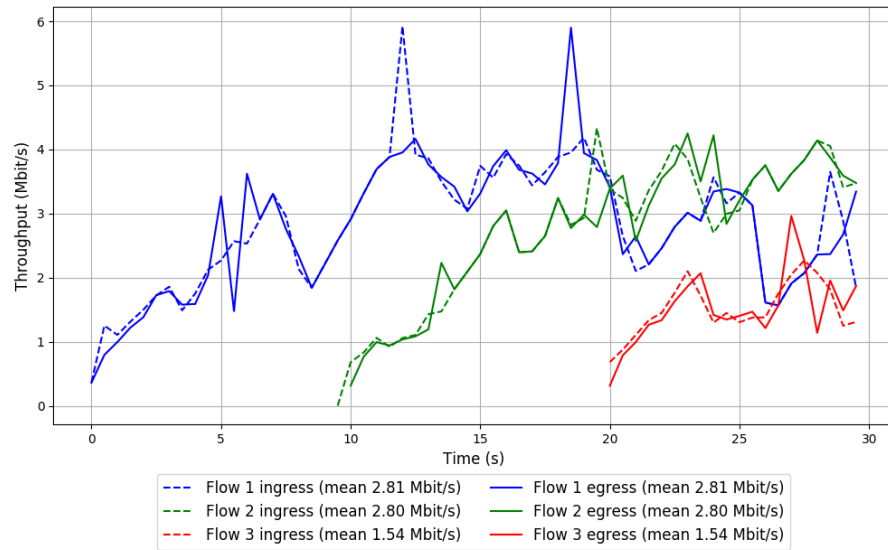
-- Flow 3:

Average throughput: 1.54 Mbit/s

95th percentile per-packet one-way delay: 112.784 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-10-12 07:50:26

End at: 2017-10-12 07:50:56

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.57 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 112.995 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 113.106 ms

Loss rate: 0.00%

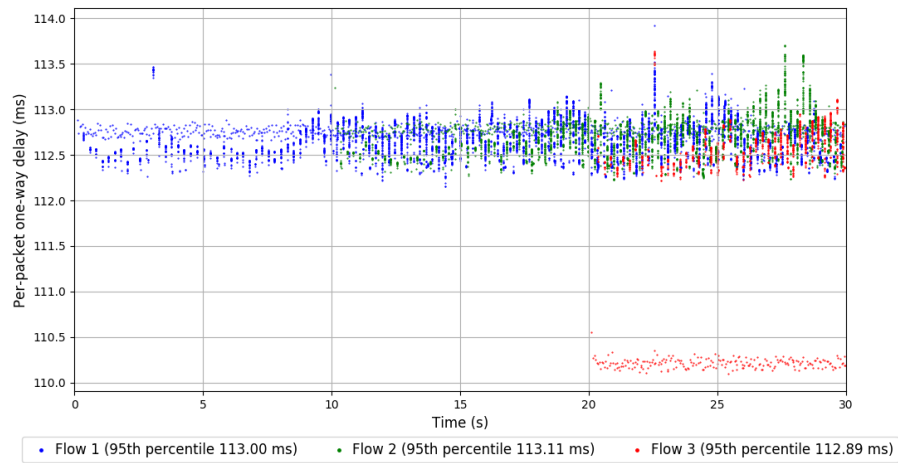
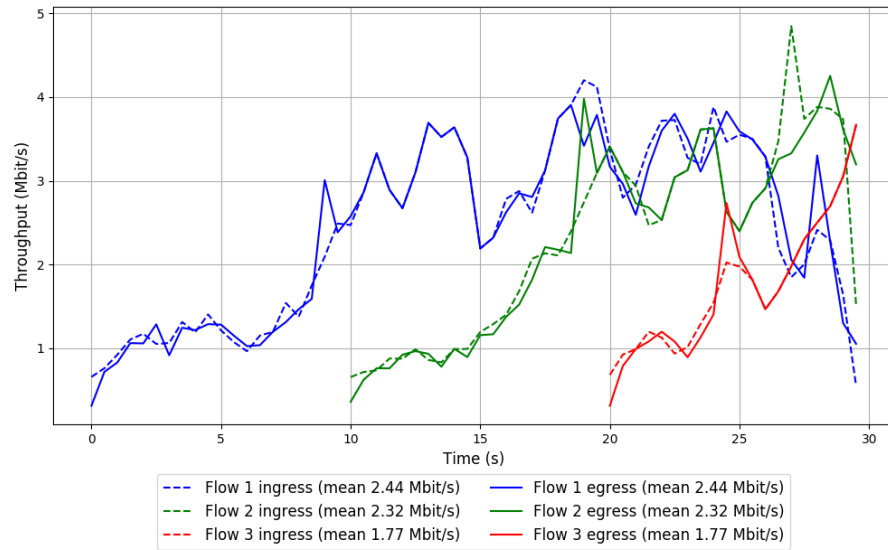
-- Flow 3:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 112.885 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-10-12 08:04:27

End at: 2017-10-12 08:04:57

Below is generated by plot.py at 2017-10-12 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.76 Mbit/s

95th percentile per-packet one-way delay: 113.419 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 113.457 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 113.394 ms

Loss rate: 0.06%

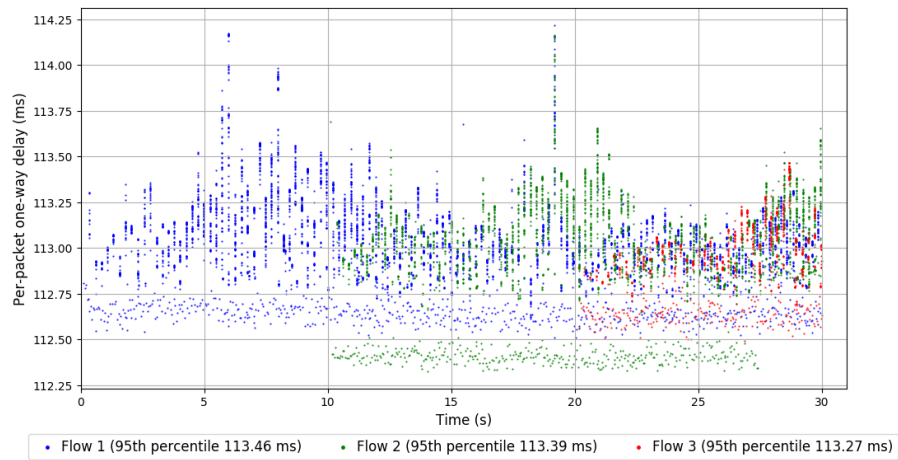
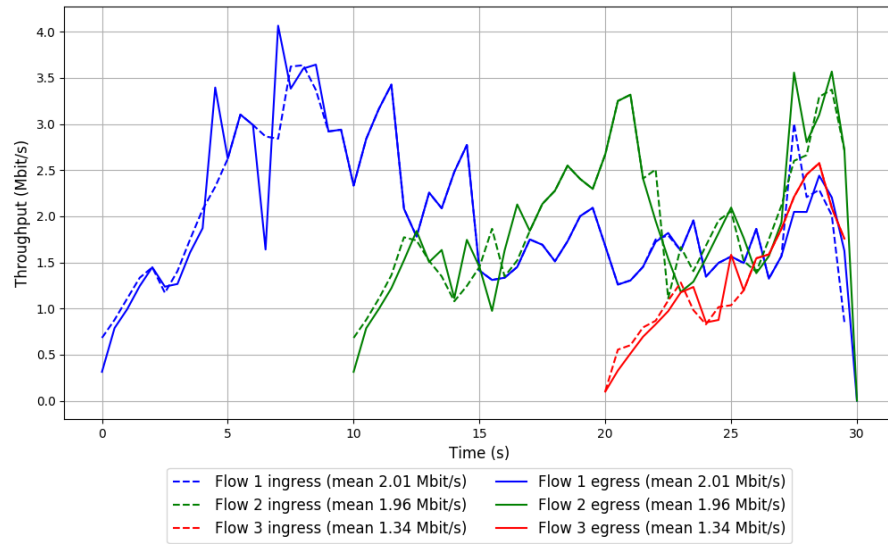
-- Flow 3:

Average throughput: 1.34 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

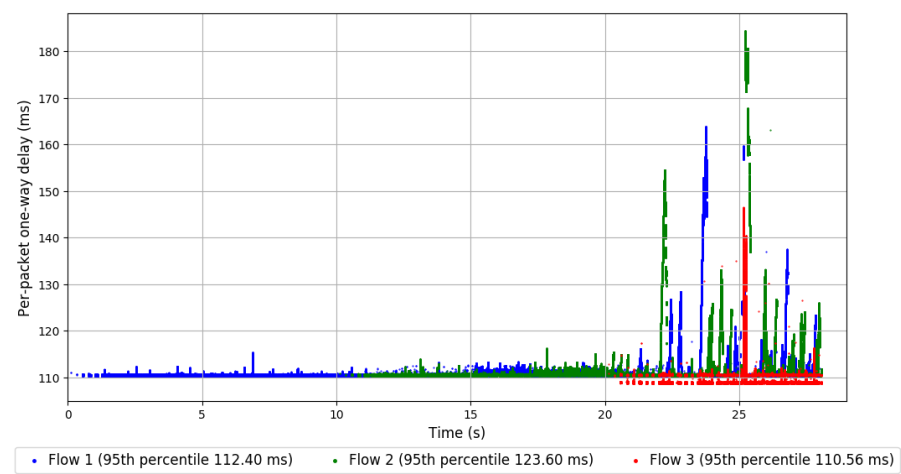
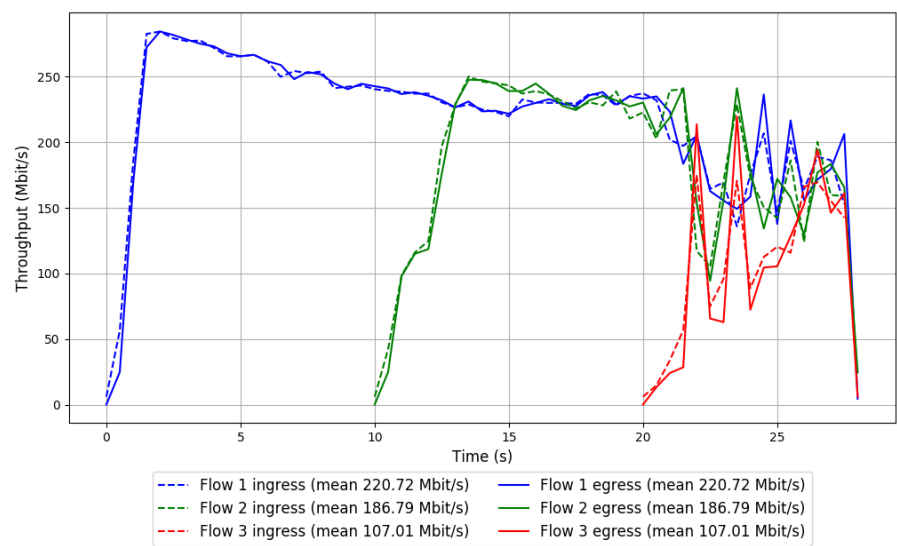


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-10-12 06:01:59
End at: 2017-10-12 06:02:29

# Below is generated by plot.py at 2017-10-12 09:45:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 370.54 Mbit/s
95th percentile per-packet one-way delay: 114.885 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 220.72 Mbit/s
95th percentile per-packet one-way delay: 112.402 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 186.79 Mbit/s
95th percentile per-packet one-way delay: 123.597 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 107.01 Mbit/s
95th percentile per-packet one-way delay: 110.563 ms
Loss rate: 0.00%
```


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

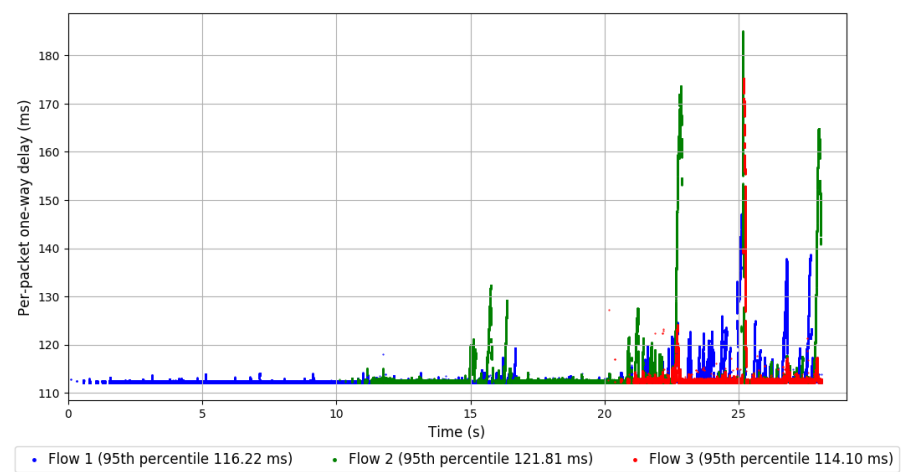
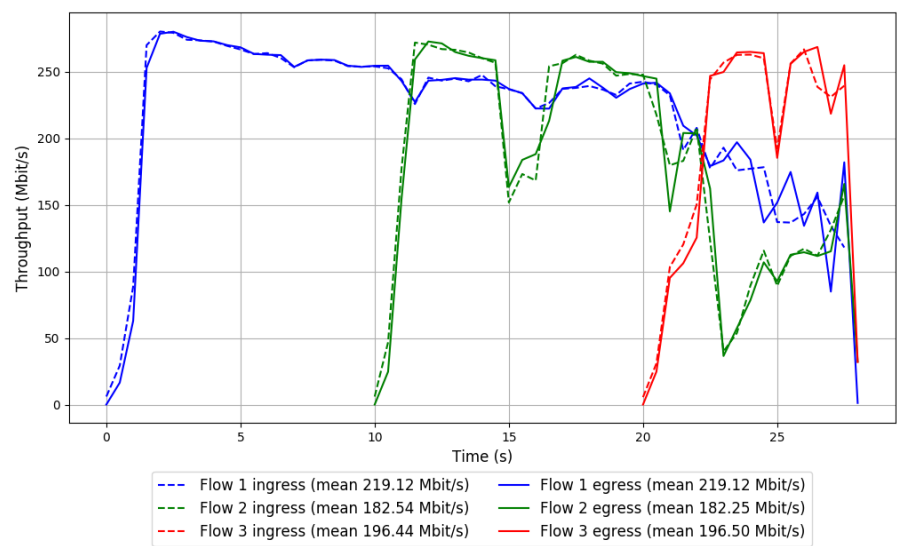


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-10-12 06:15:54
End at: 2017-10-12 06:16:24

# Below is generated by plot.py at 2017-10-12 09:45:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 391.78 Mbit/s
95th percentile per-packet one-way delay: 117.662 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 219.12 Mbit/s
95th percentile per-packet one-way delay: 116.218 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 182.25 Mbit/s
95th percentile per-packet one-way delay: 121.814 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 196.50 Mbit/s
95th percentile per-packet one-way delay: 114.100 ms
Loss rate: 0.00%
```

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

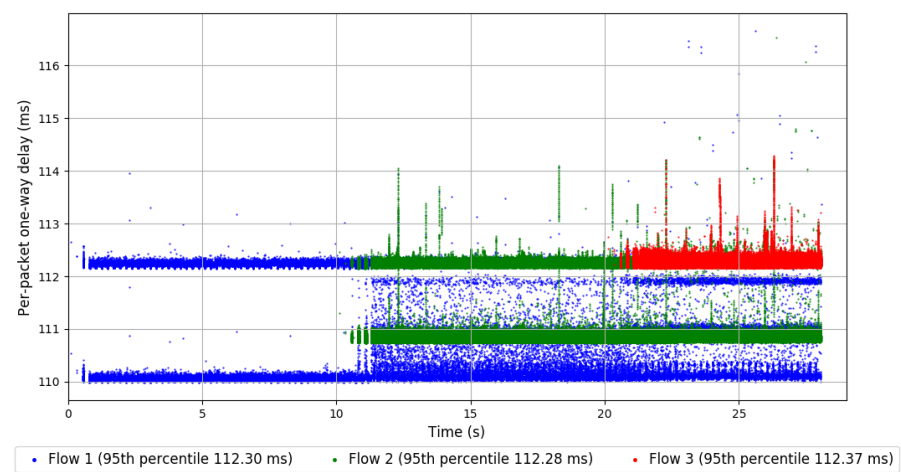
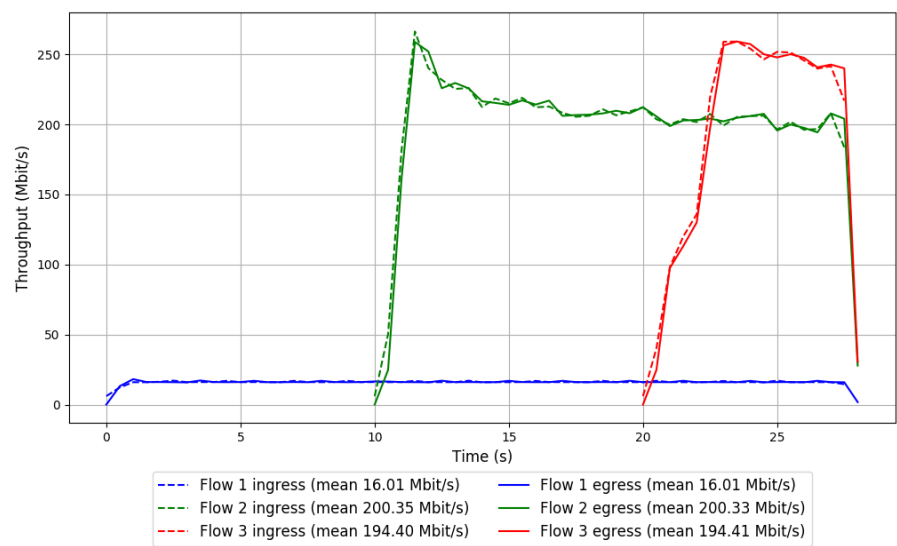


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-10-12 06:29:57
End at: 2017-10-12 06:30:27

# Below is generated by plot.py at 2017-10-12 09:45:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 199.79 Mbit/s
95th percentile per-packet one-way delay: 112.326 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 16.01 Mbit/s
95th percentile per-packet one-way delay: 112.296 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 200.33 Mbit/s
95th percentile per-packet one-way delay: 112.281 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 194.41 Mbit/s
95th percentile per-packet one-way delay: 112.366 ms
Loss rate: 0.00%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-10-12 06:43:41

End at: 2017-10-12 06:44:11

Below is generated by plot.py at 2017-10-12 09:45:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 292.70 Mbit/s

95th percentile per-packet one-way delay: 111.025 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 136.21 Mbit/s

95th percentile per-packet one-way delay: 110.389 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 226.97 Mbit/s

95th percentile per-packet one-way delay: 111.127 ms

Loss rate: 0.00%

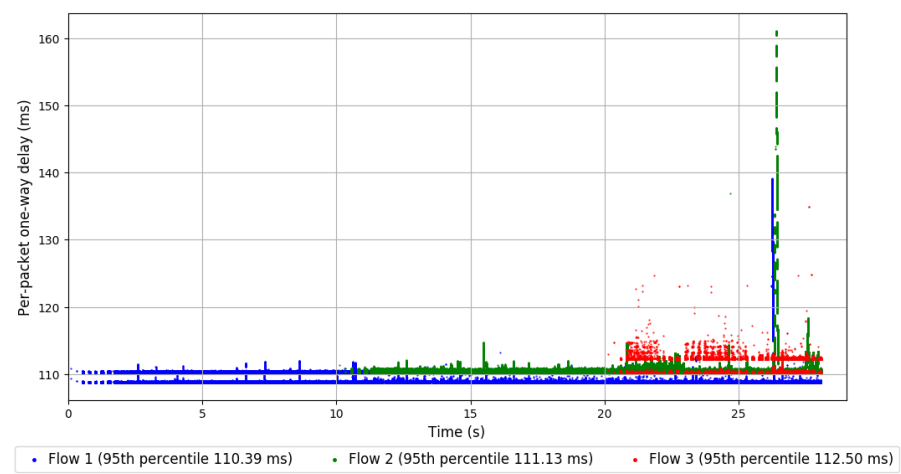
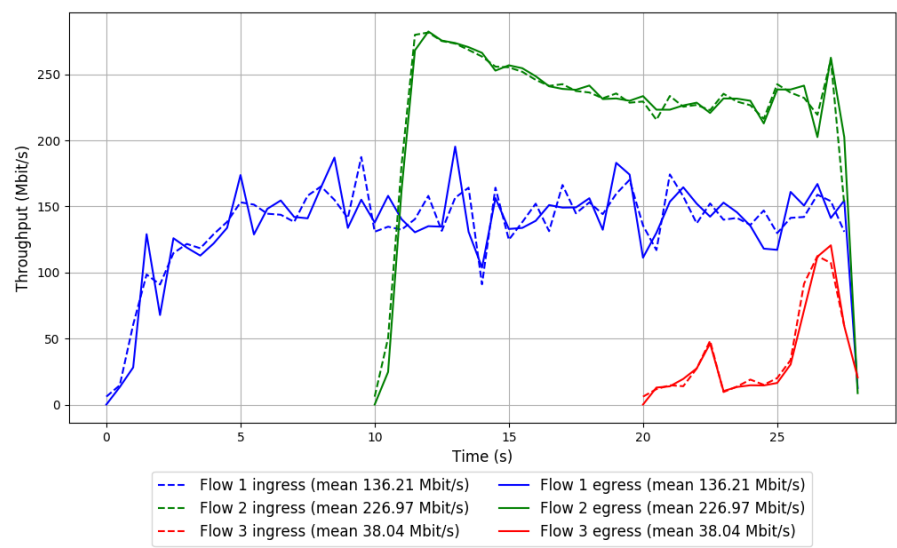
-- Flow 3:

Average throughput: 38.04 Mbit/s

95th percentile per-packet one-way delay: 112.501 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-10-12 06:57:41

End at: 2017-10-12 06:58:11

Below is generated by plot.py at 2017-10-12 09:45:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 354.73 Mbit/s

95th percentile per-packet one-way delay: 115.985 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 229.77 Mbit/s

95th percentile per-packet one-way delay: 111.720 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 187.84 Mbit/s

95th percentile per-packet one-way delay: 122.158 ms

Loss rate: 0.00%

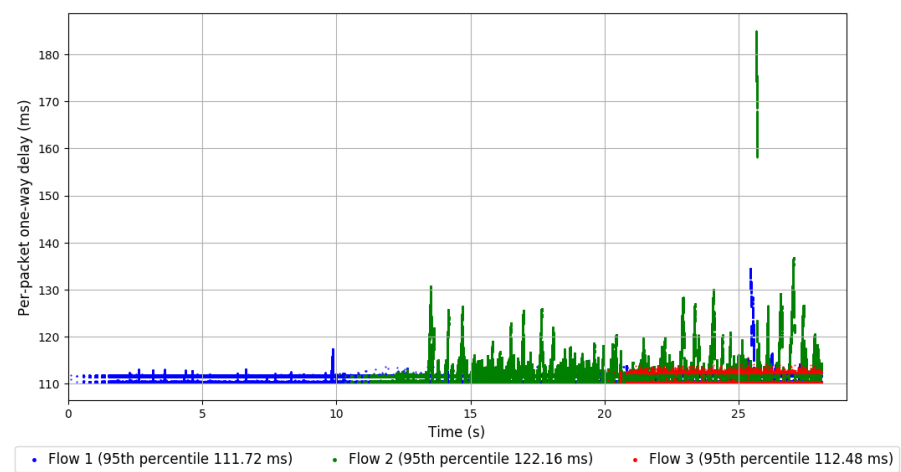
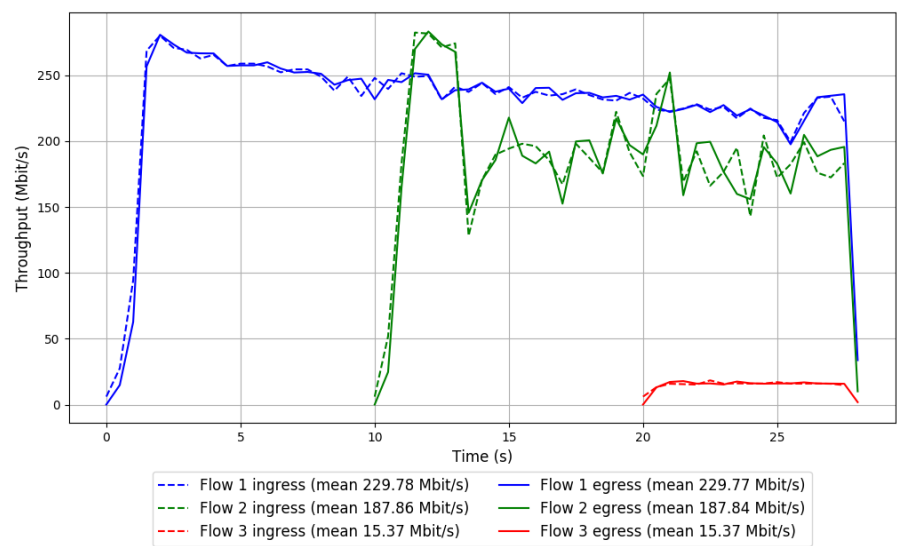
-- Flow 3:

Average throughput: 15.37 Mbit/s

95th percentile per-packet one-way delay: 112.485 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-10-12 07:11:16

End at: 2017-10-12 07:11:46

Below is generated by plot.py at 2017-10-12 09:46:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 391.95 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 232.24 Mbit/s

95th percentile per-packet one-way delay: 113.622 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 163.87 Mbit/s

95th percentile per-packet one-way delay: 122.775 ms

Loss rate: 0.00%

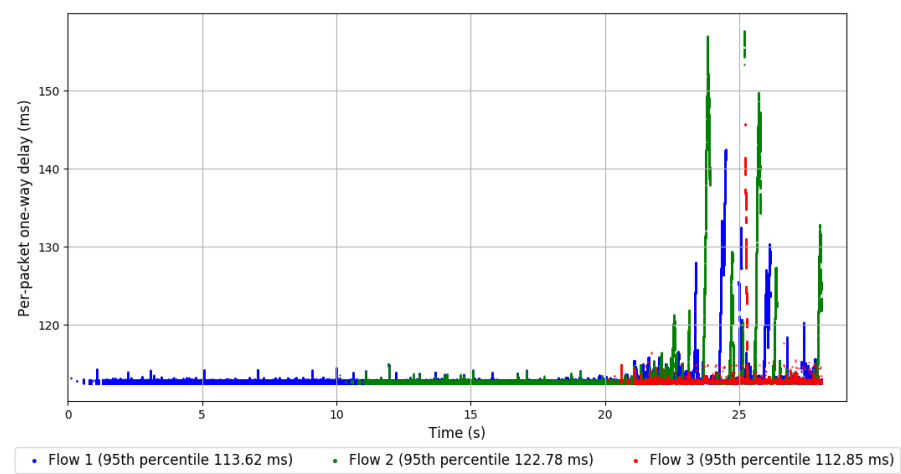
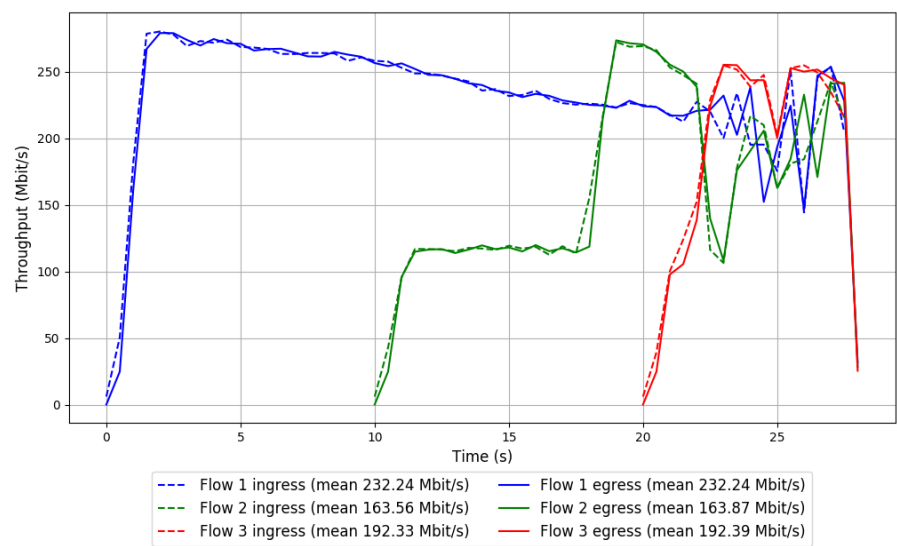
-- Flow 3:

Average throughput: 192.39 Mbit/s

95th percentile per-packet one-way delay: 112.849 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-10-12 07:25:00

End at: 2017-10-12 07:25:30

Below is generated by plot.py at 2017-10-12 09:51:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 381.23 Mbit/s

95th percentile per-packet one-way delay: 116.365 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 203.88 Mbit/s

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

Loss rate: 0.04%

-- Flow 2:

Average throughput: 213.61 Mbit/s

95th percentile per-packet one-way delay: 121.364 ms

Loss rate: 0.00%

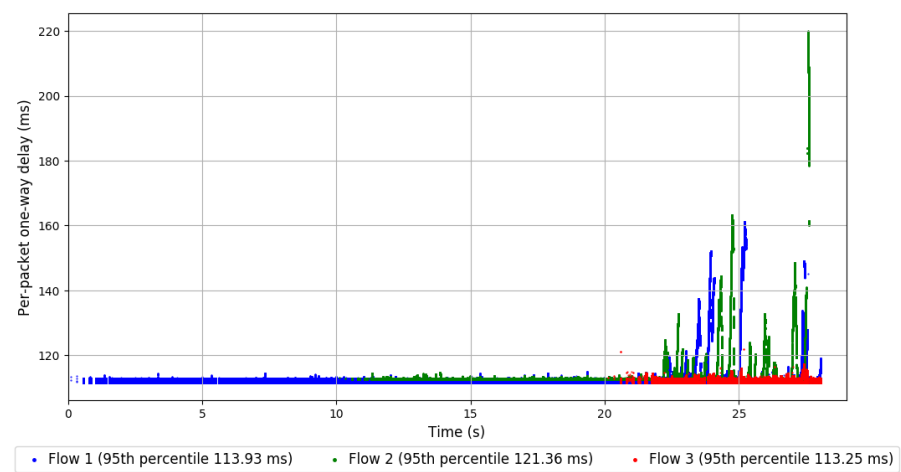
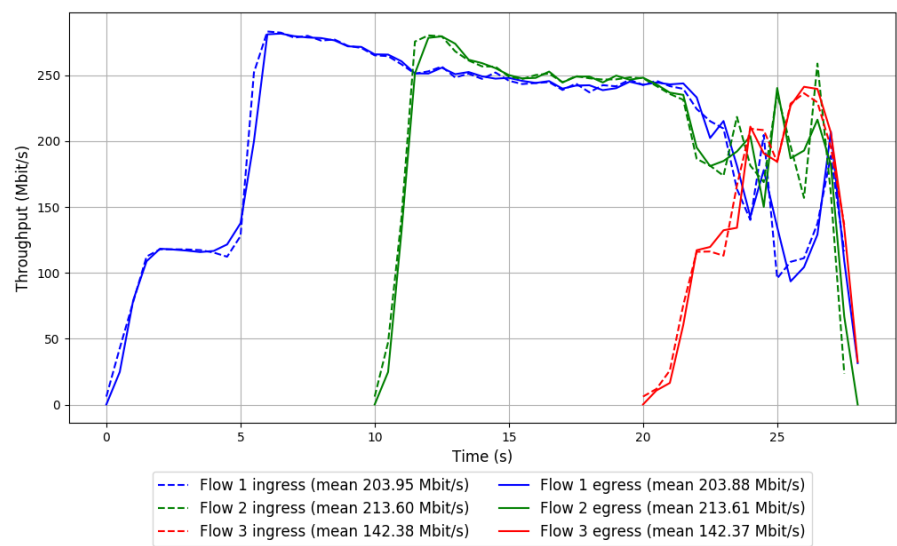
-- Flow 3:

Average throughput: 142.37 Mbit/s

95th percentile per-packet one-way delay: 113.248 ms

Loss rate: 0.04%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-10-12 07:38:57

End at: 2017-10-12 07:39:27

Below is generated by plot.py at 2017-10-12 09:51:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 286.36 Mbit/s

95th percentile per-packet one-way delay: 126.159 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 101.02 Mbit/s

95th percentile per-packet one-way delay: 112.223 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 206.20 Mbit/s

95th percentile per-packet one-way delay: 129.844 ms

Loss rate: 0.04%

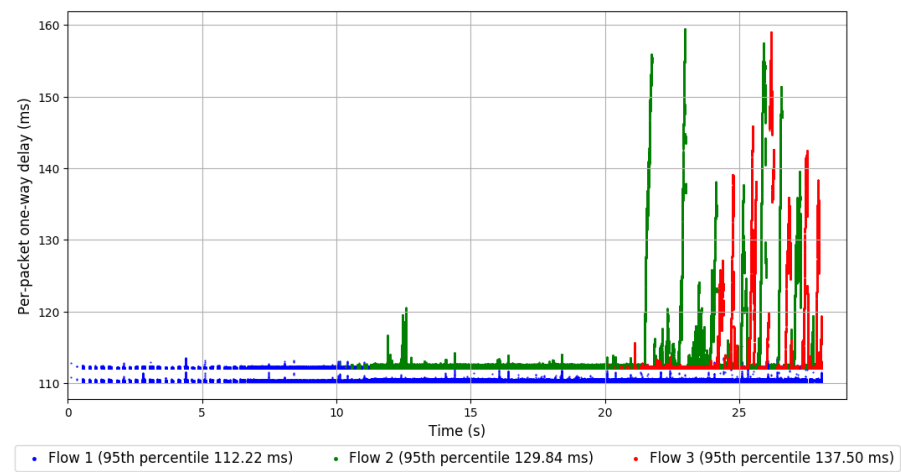
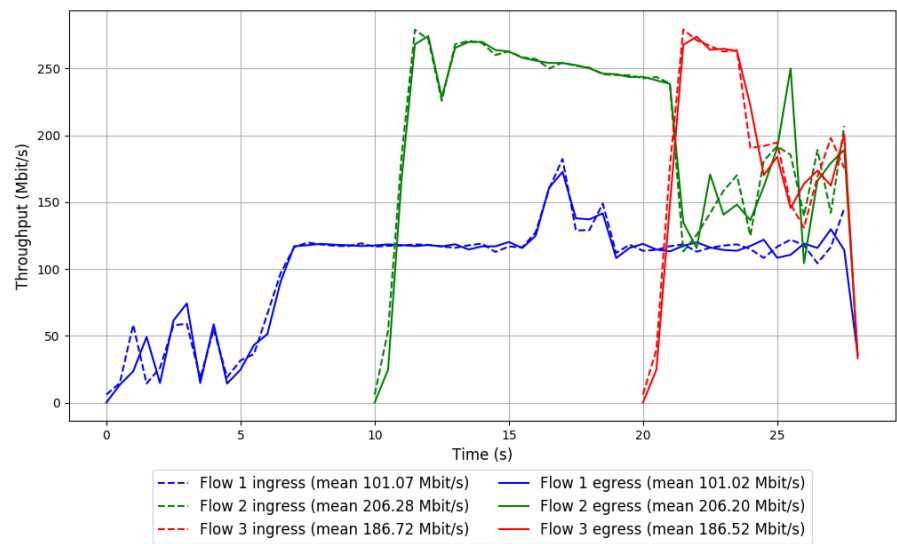
-- Flow 3:

Average throughput: 186.52 Mbit/s

95th percentile per-packet one-way delay: 137.498 ms

Loss rate: 0.10%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-10-12 07:52:55

End at: 2017-10-12 07:53:26

Below is generated by plot.py at 2017-10-12 09:51:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 266.06 Mbit/s

95th percentile per-packet one-way delay: 115.338 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 200.66 Mbit/s

95th percentile per-packet one-way delay: 114.324 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 15.79 Mbit/s

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

Loss rate: 0.00%

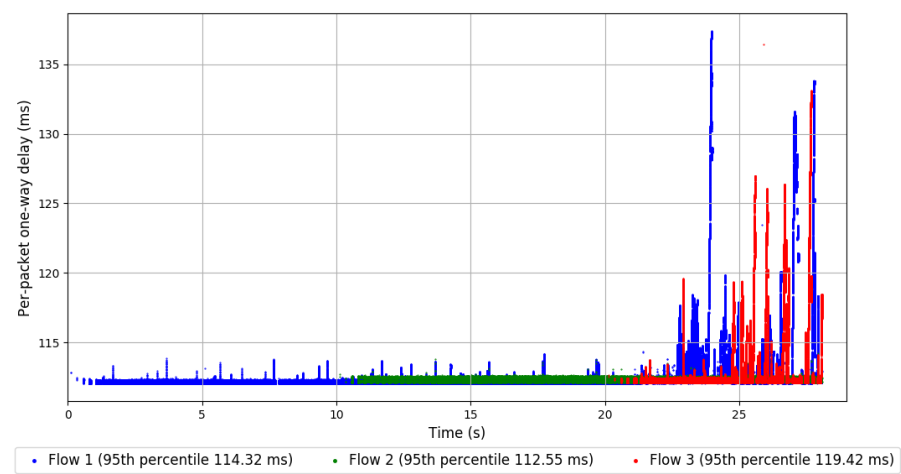
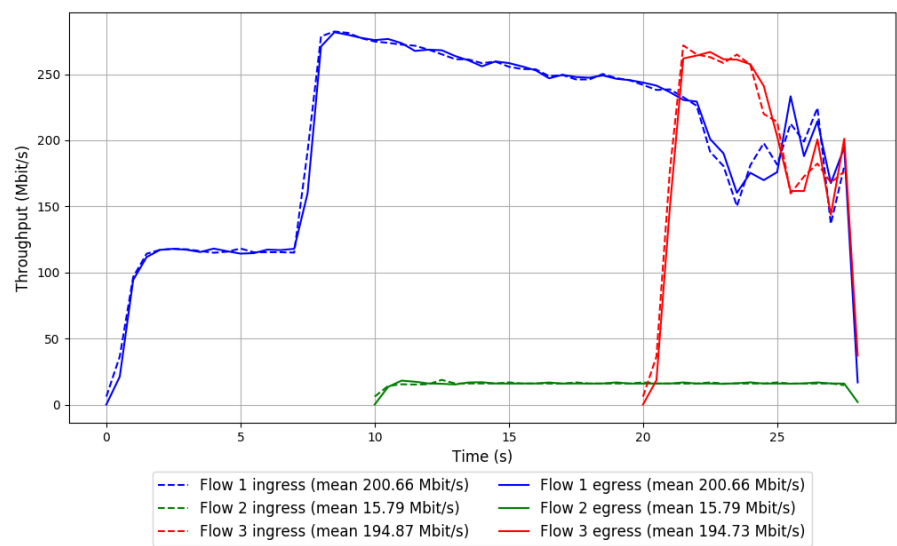
-- Flow 3:

Average throughput: 194.73 Mbit/s

95th percentile per-packet one-way delay: 119.415 ms

Loss rate: 0.06%

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

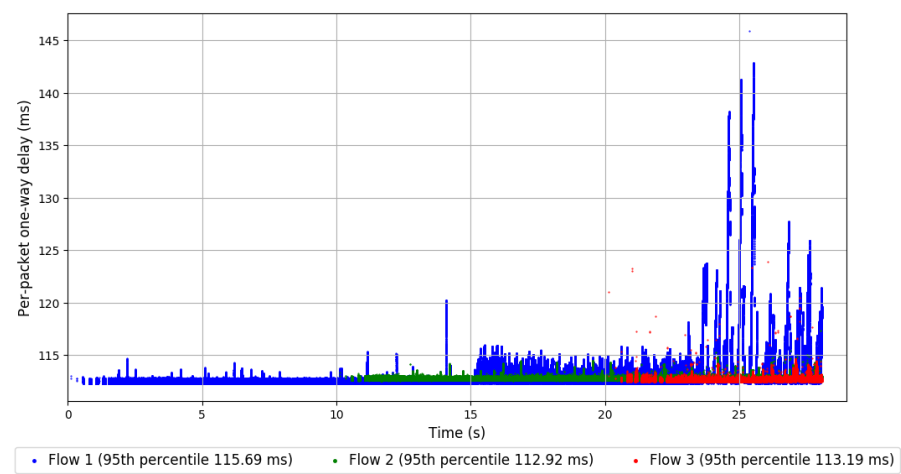
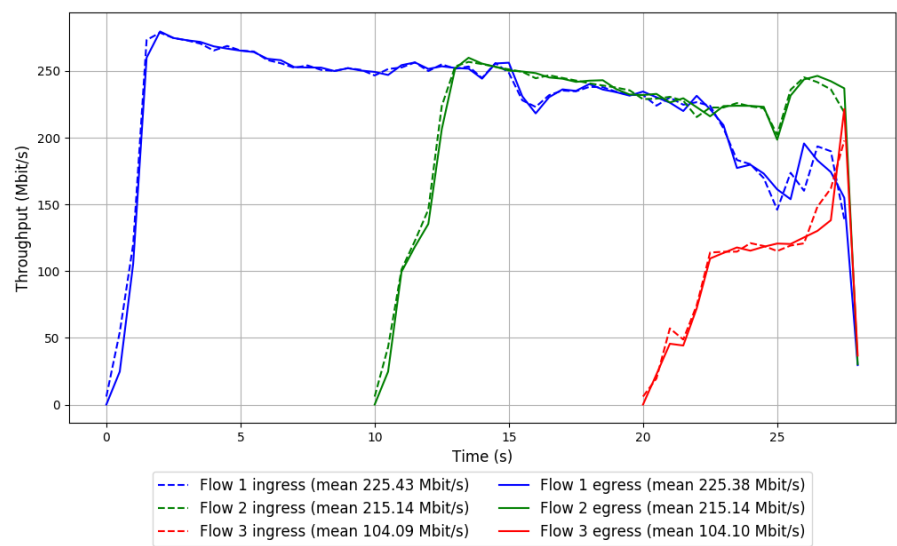


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-10-12 08:06:57
End at: 2017-10-12 08:07:27

# Below is generated by plot.py at 2017-10-12 09:54:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.04 Mbit/s
95th percentile per-packet one-way delay: 114.216 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 225.38 Mbit/s
95th percentile per-packet one-way delay: 115.692 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 215.14 Mbit/s
95th percentile per-packet one-way delay: 112.924 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 104.10 Mbit/s
95th percentile per-packet one-way delay: 113.192 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-10-12 05:52:45

End at: 2017-10-12 05:53:15

Below is generated by plot.py at 2017-10-12 09:54:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.32 Mbit/s

95th percentile per-packet one-way delay: 116.488 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.36 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.37 Mbit/s

95th percentile per-packet one-way delay: 114.585 ms

Loss rate: 0.00%

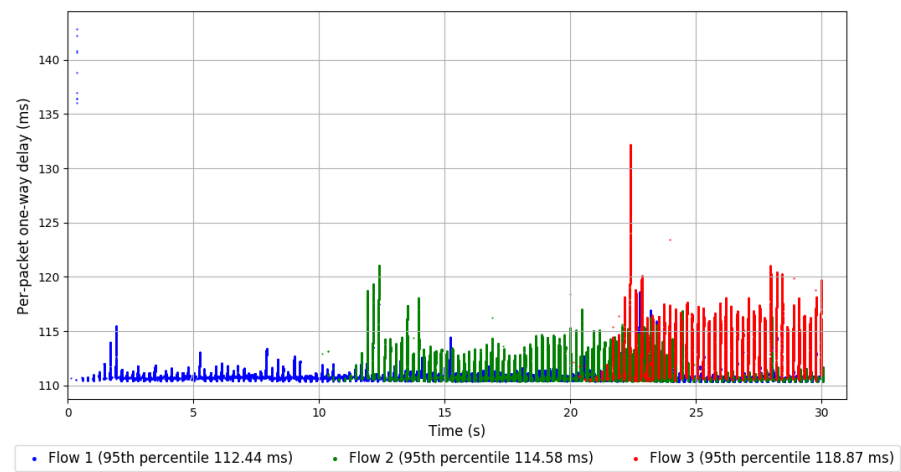
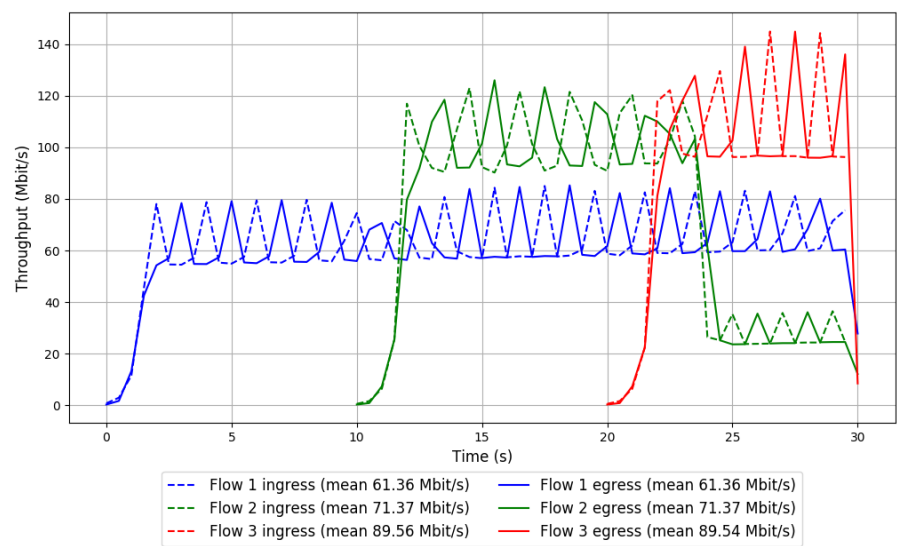
-- Flow 3:

Average throughput: 89.54 Mbit/s

95th percentile per-packet one-way delay: 118.871 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-10-12 06:06:38

End at: 2017-10-12 06:07:08

Below is generated by plot.py at 2017-10-12 09:54:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.86 Mbit/s

95th percentile per-packet one-way delay: 119.328 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 41.95 Mbit/s

95th percentile per-packet one-way delay: 115.240 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 19.43 Mbit/s

95th percentile per-packet one-way delay: 113.258 ms

Loss rate: 0.00%

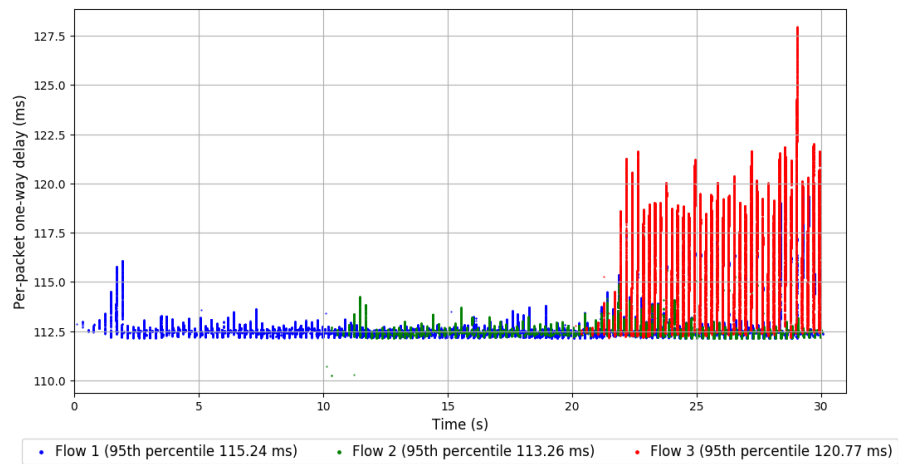
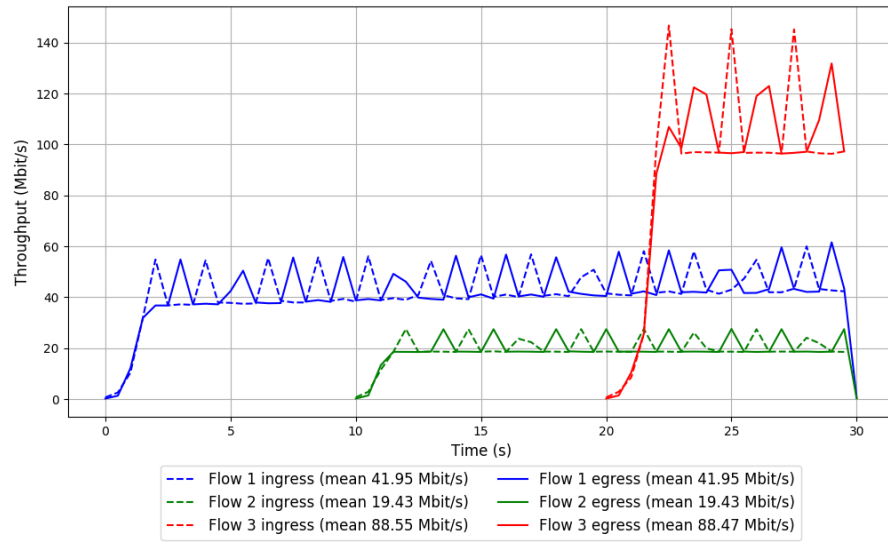
-- Flow 3:

Average throughput: 88.47 Mbit/s

95th percentile per-packet one-way delay: 120.769 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-10-12 06:20:43

End at: 2017-10-12 06:21:13

Below is generated by plot.py at 2017-10-12 09:54:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.22 Mbit/s

95th percentile per-packet one-way delay: 120.064 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.18 Mbit/s

95th percentile per-packet one-way delay: 117.018 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 81.96 Mbit/s

95th percentile per-packet one-way delay: 120.983 ms

Loss rate: 0.00%

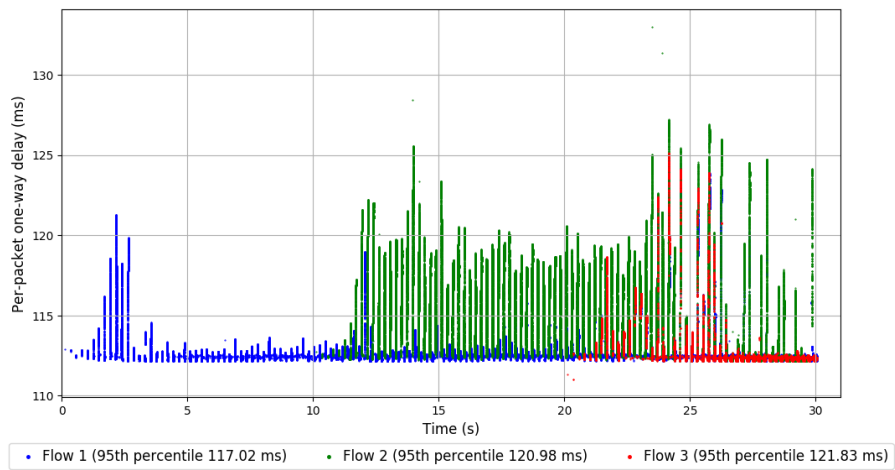
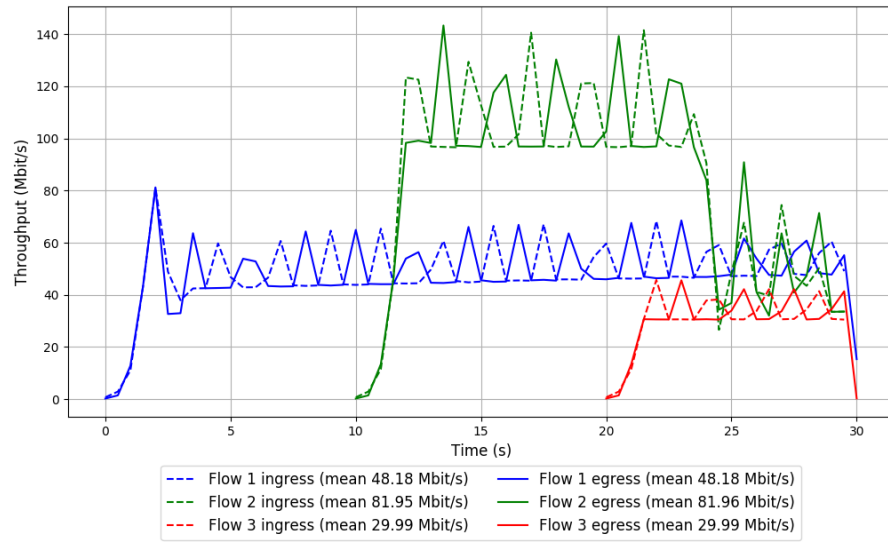
-- Flow 3:

Average throughput: 29.99 Mbit/s

95th percentile per-packet one-way delay: 121.829 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-10-12 06:34:25

End at: 2017-10-12 06:34:55

Below is generated by plot.py at 2017-10-12 09:54:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.04 Mbit/s

95th percentile per-packet one-way delay: 113.872 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 35.73 Mbit/s

95th percentile per-packet one-way delay: 112.487 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.68 Mbit/s

95th percentile per-packet one-way delay: 112.502 ms

Loss rate: 0.00%

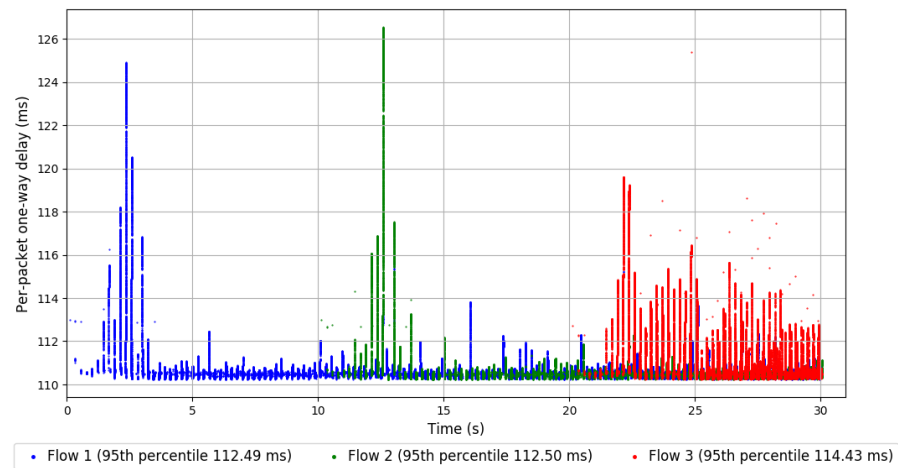
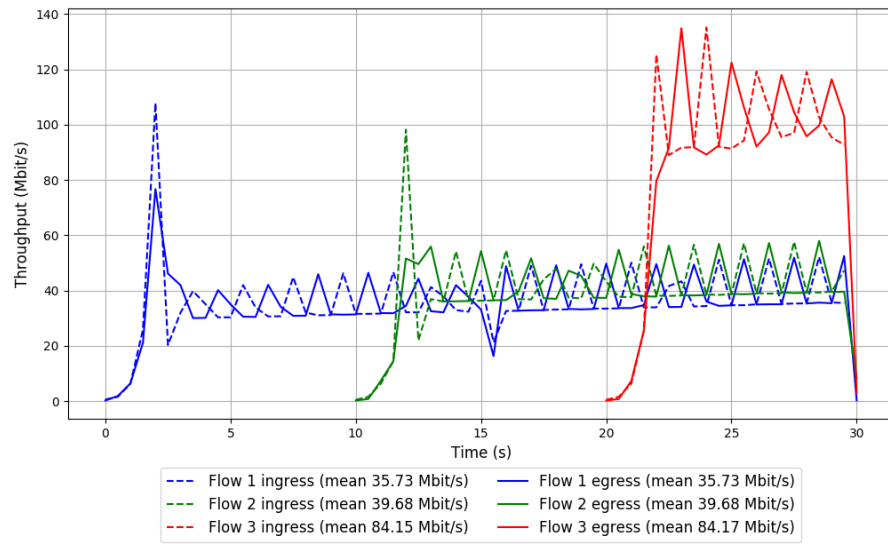
-- Flow 3:

Average throughput: 84.17 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-10-12 06:48:19

End at: 2017-10-12 06:48:49

Below is generated by plot.py at 2017-10-12 09:54:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 125.70 Mbit/s

95th percentile per-packet one-way delay: 118.157 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 98.70 Mbit/s

95th percentile per-packet one-way delay: 118.087 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 28.00 Mbit/s

95th percentile per-packet one-way delay: 117.803 ms

Loss rate: 0.11%

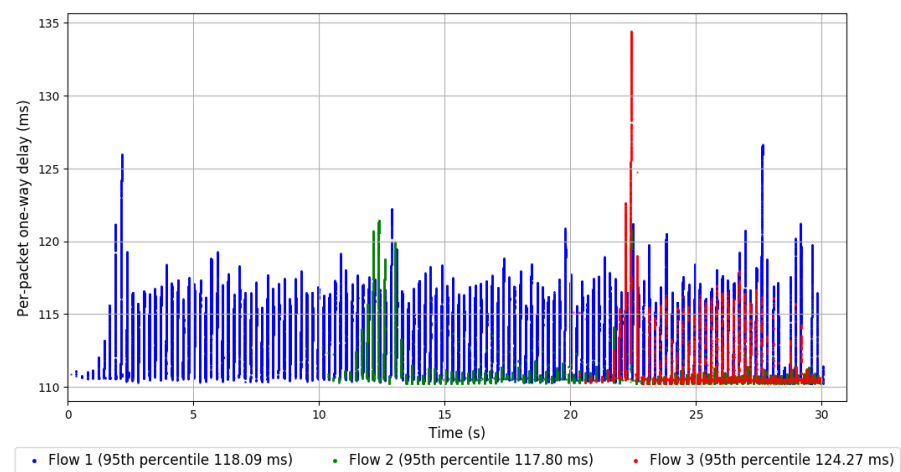
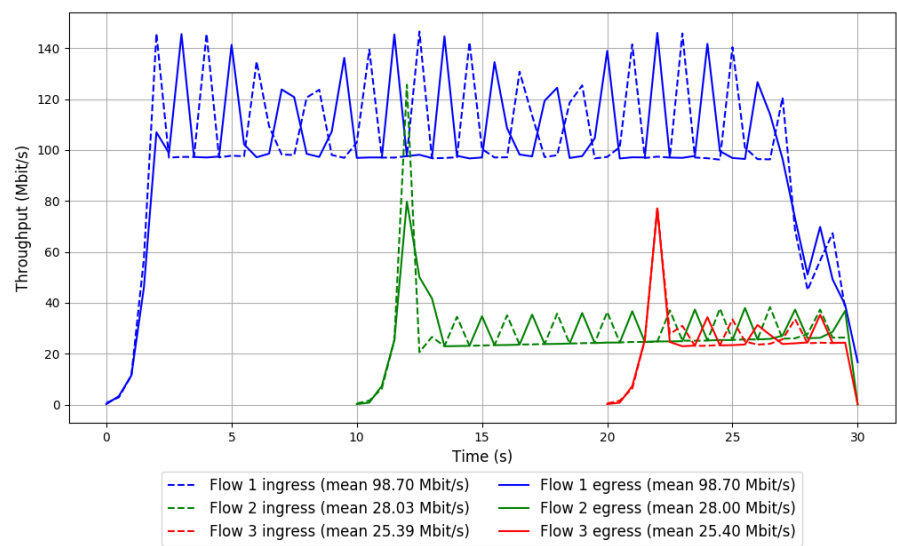
-- Flow 3:

Average throughput: 25.40 Mbit/s

95th percentile per-packet one-way delay: 124.274 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-10-12 07:01:58

End at: 2017-10-12 07:02:28

Below is generated by plot.py at 2017-10-12 09:54:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 141.89 Mbit/s

95th percentile per-packet one-way delay: 119.134 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 65.63 Mbit/s

95th percentile per-packet one-way delay: 118.585 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.70 Mbit/s

95th percentile per-packet one-way delay: 121.019 ms

Loss rate: 0.00%

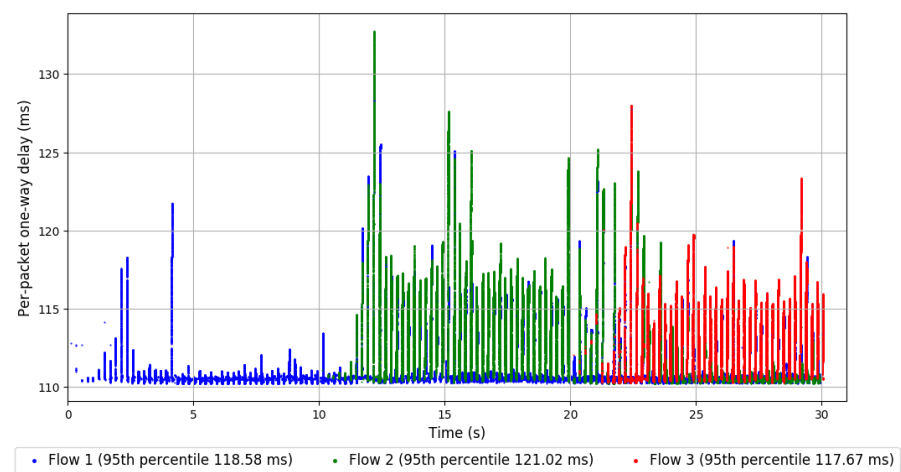
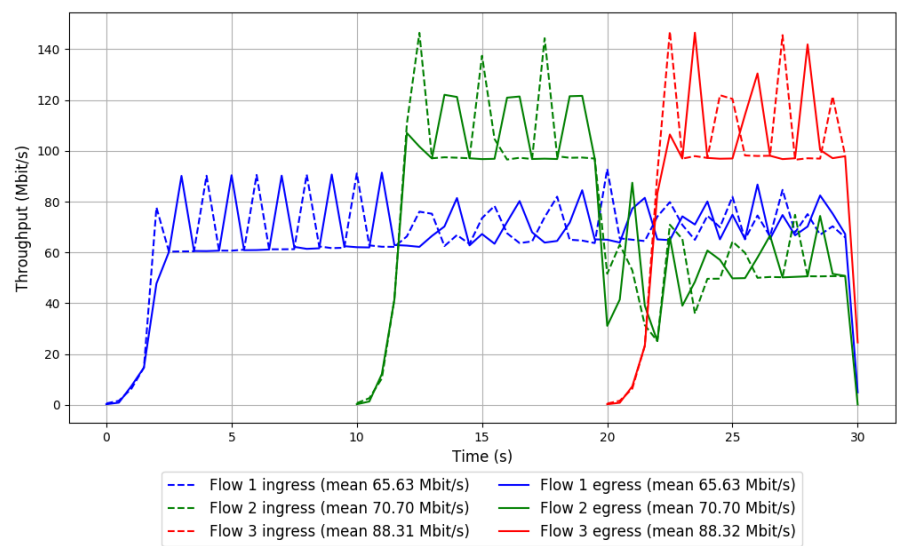
-- Flow 3:

Average throughput: 88.32 Mbit/s

95th percentile per-packet one-way delay: 117.667 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-10-12 07:16:03

End at: 2017-10-12 07:16:33

Below is generated by plot.py at 2017-10-12 09:54:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 115.39 Mbit/s

95th percentile per-packet one-way delay: 119.982 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 95.04 Mbit/s

95th percentile per-packet one-way delay: 120.187 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 16.45 Mbit/s

95th percentile per-packet one-way delay: 114.217 ms

Loss rate: 0.00%

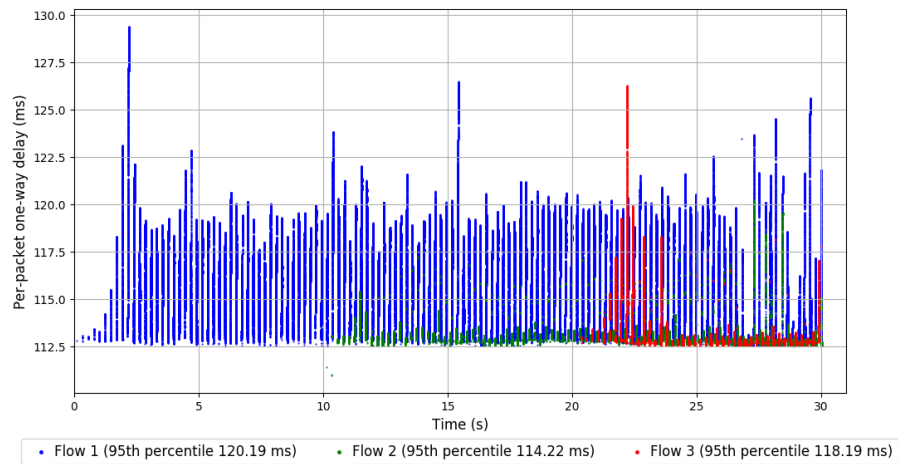
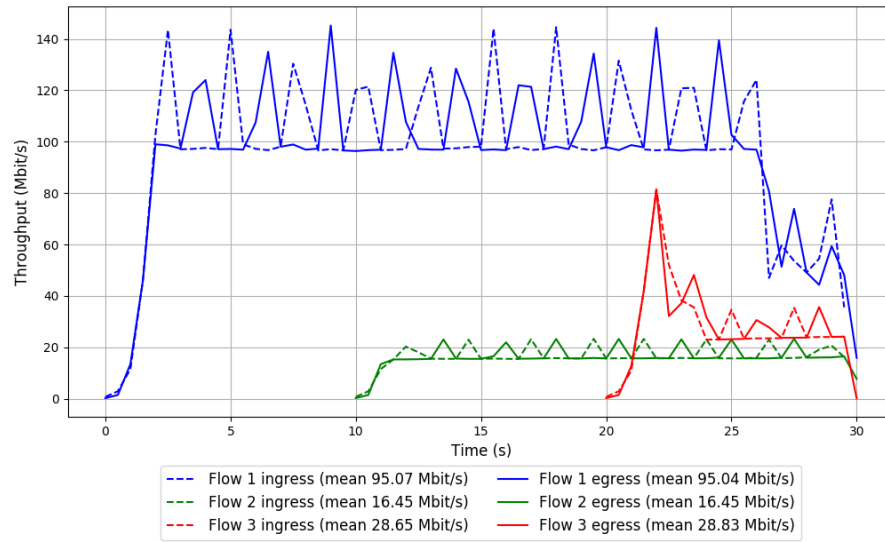
-- Flow 3:

Average throughput: 28.83 Mbit/s

95th percentile per-packet one-way delay: 118.189 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-10-12 07:29:44

End at: 2017-10-12 07:30:14

Below is generated by plot.py at 2017-10-12 09:54:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 54.89 Mbit/s

95th percentile per-packet one-way delay: 114.305 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 36.97 Mbit/s

95th percentile per-packet one-way delay: 114.492 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 19.29 Mbit/s

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

Loss rate: 0.12%

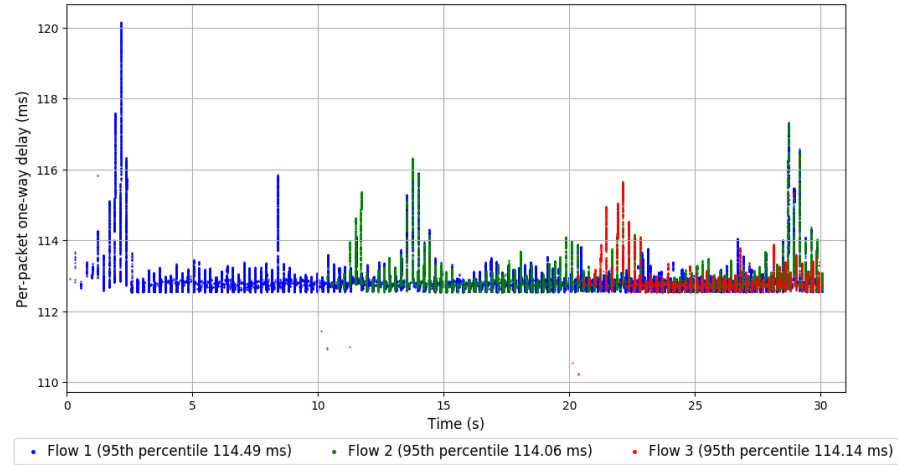
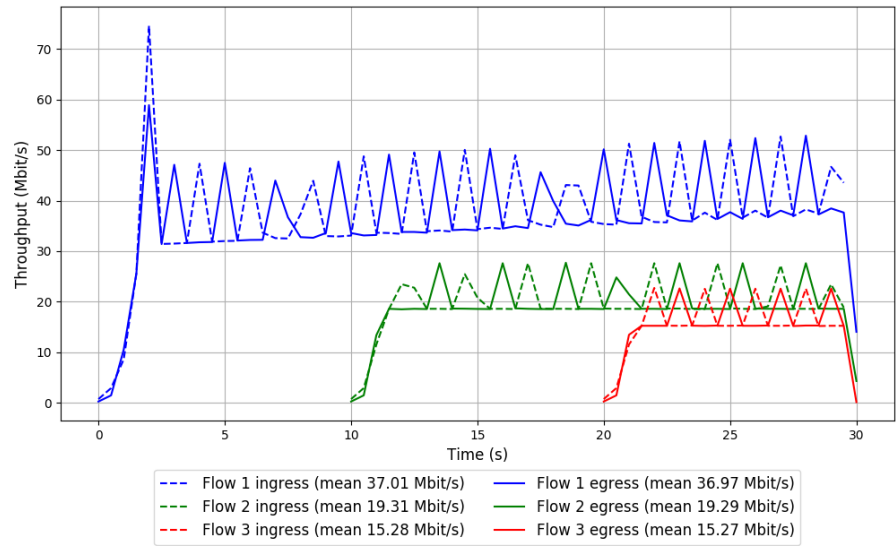
-- Flow 3:

Average throughput: 15.27 Mbit/s

95th percentile per-packet one-way delay: 114.139 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-10-12 07:43:36

End at: 2017-10-12 07:44:06

Below is generated by plot.py at 2017-10-12 09:54:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.61 Mbit/s

95th percentile per-packet one-way delay: 119.743 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 92.66 Mbit/s

95th percentile per-packet one-way delay: 119.916 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 16.12 Mbit/s

95th percentile per-packet one-way delay: 116.689 ms

Loss rate: 0.00%

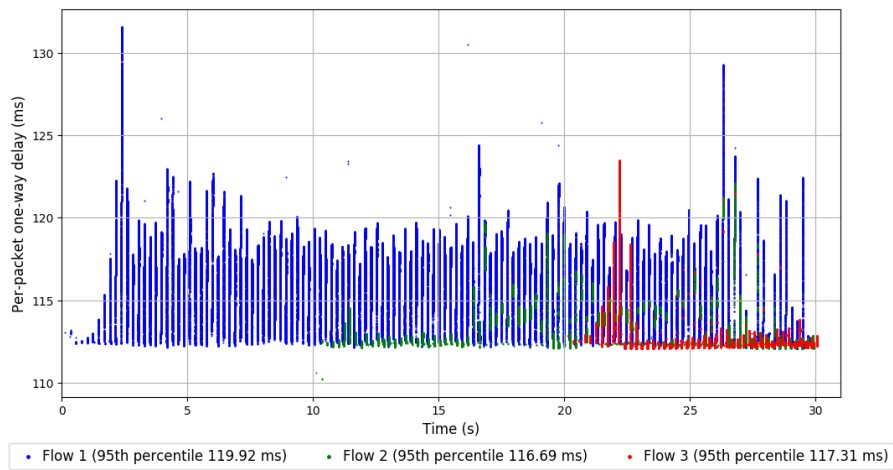
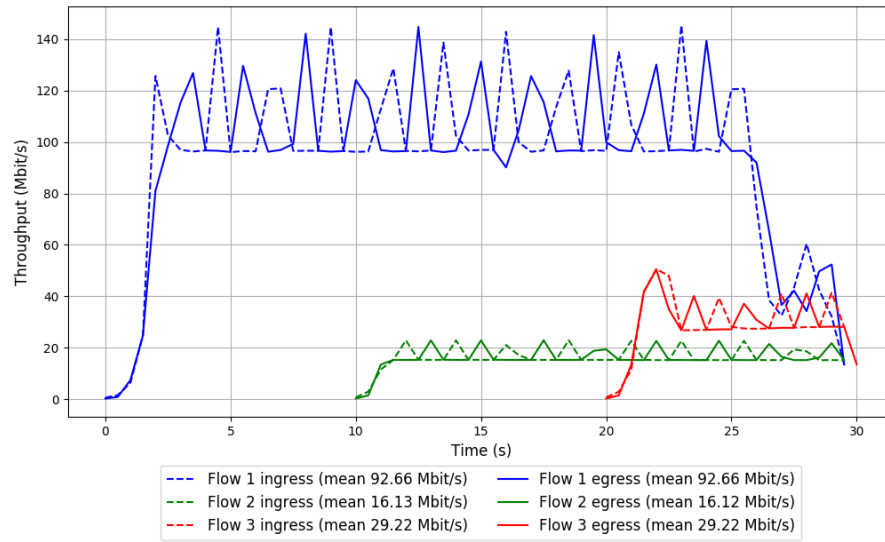
-- Flow 3:

Average throughput: 29.22 Mbit/s

95th percentile per-packet one-way delay: 117.315 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-10-12 07:57:37

End at: 2017-10-12 07:58:07

Below is generated by plot.py at 2017-10-12 09:54:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 116.44 Mbit/s

95th percentile per-packet one-way delay: 122.991 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 28.84 Mbit/s

95th percentile per-packet one-way delay: 119.621 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 88.32 Mbit/s

95th percentile per-packet one-way delay: 120.878 ms

Loss rate: 0.00%

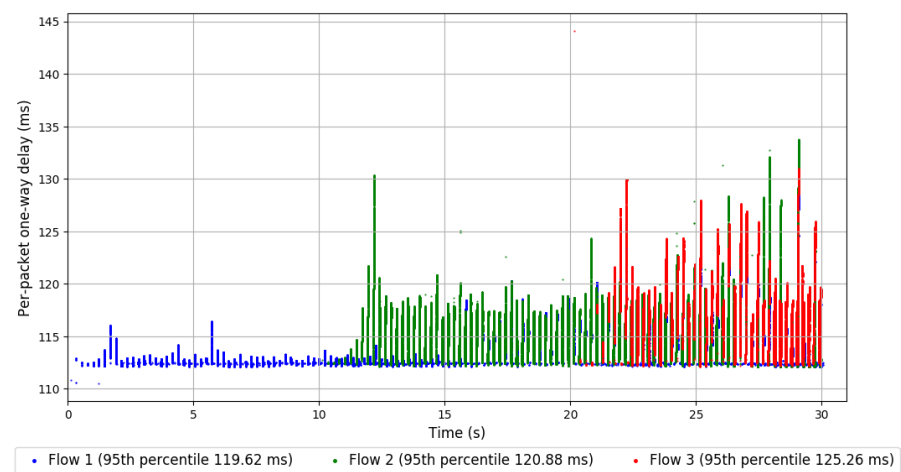
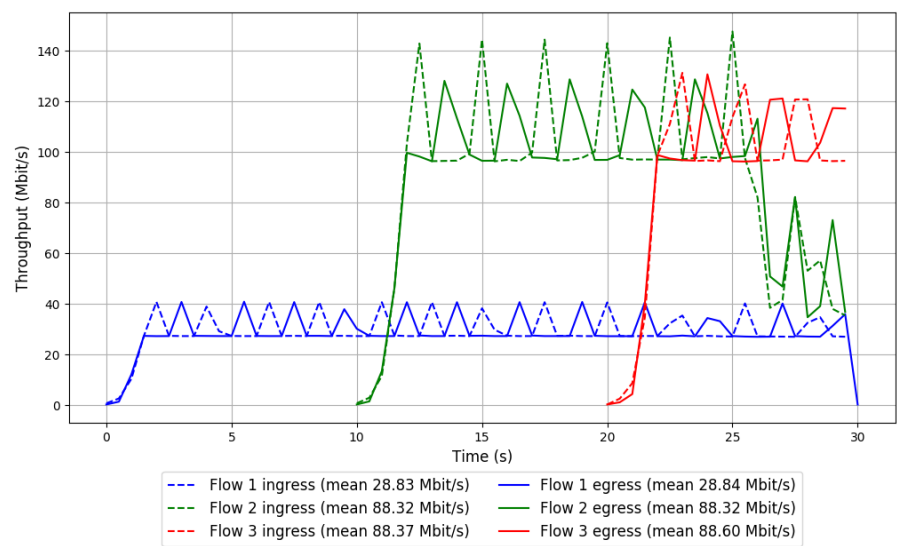
-- Flow 3:

Average throughput: 88.60 Mbit/s

95th percentile per-packet one-way delay: 125.262 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-10-12 06:03:23

End at: 2017-10-12 06:03:53

Below is generated by plot.py at 2017-10-12 09:54:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.51 Mbit/s

95th percentile per-packet one-way delay: 238.719 ms

Loss rate: 1.69%

-- Flow 1:

Average throughput: 102.27 Mbit/s

95th percentile per-packet one-way delay: 208.971 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 84.86 Mbit/s

95th percentile per-packet one-way delay: 282.831 ms

Loss rate: 3.67%

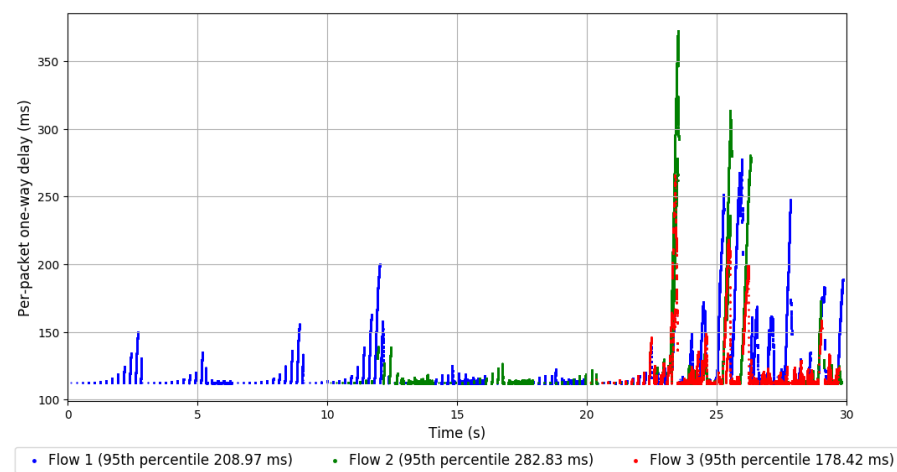
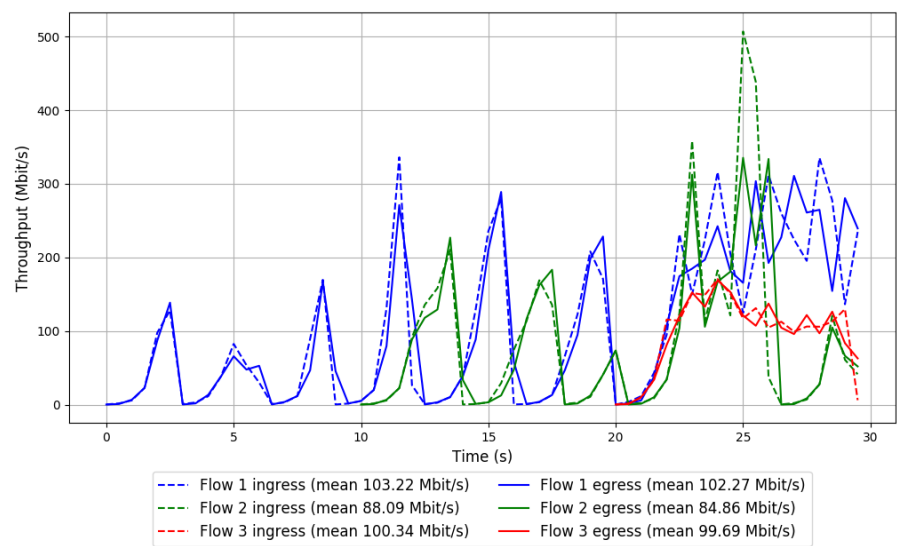
-- Flow 3:

Average throughput: 99.69 Mbit/s

95th percentile per-packet one-way delay: 178.418 ms

Loss rate: 0.57%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-10-12 06:17:20

End at: 2017-10-12 06:17:50

Below is generated by plot.py at 2017-10-12 09:54:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 239.58 Mbit/s

95th percentile per-packet one-way delay: 254.676 ms

Loss rate: 2.08%

-- Flow 1:

Average throughput: 99.70 Mbit/s

95th percentile per-packet one-way delay: 175.206 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 197.07 Mbit/s

95th percentile per-packet one-way delay: 268.276 ms

Loss rate: 3.11%

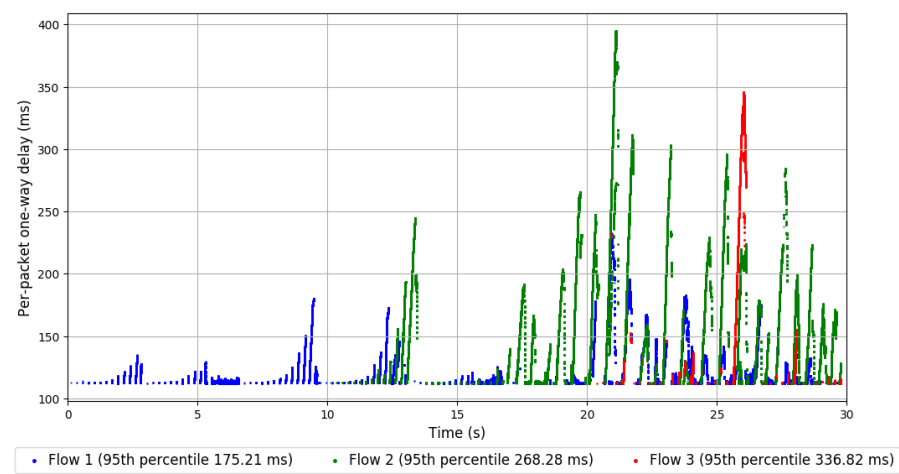
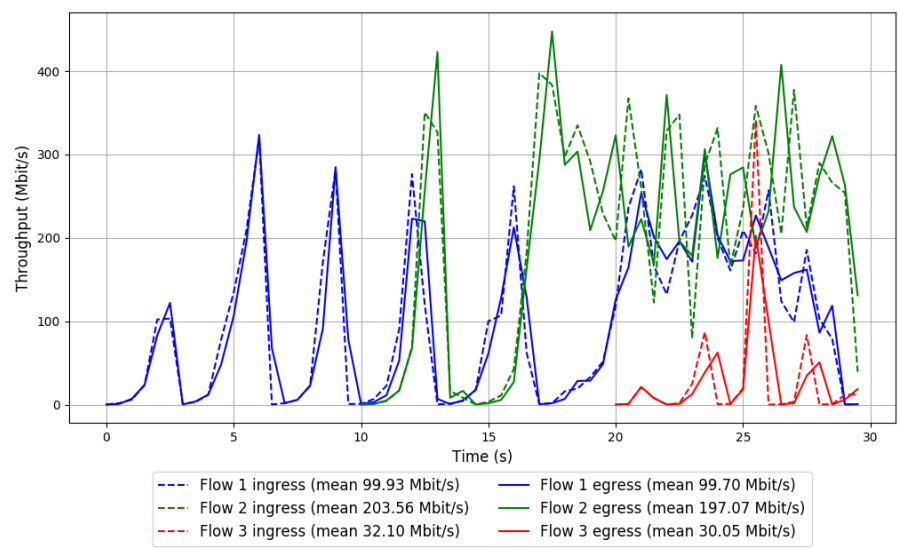
-- Flow 3:

Average throughput: 30.05 Mbit/s

95th percentile per-packet one-way delay: 336.825 ms

Loss rate: 6.51%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-10-12 06:31:04

End at: 2017-10-12 06:31:34

Below is generated by plot.py at 2017-10-12 09:54:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 258.36 Mbit/s

95th percentile per-packet one-way delay: 182.623 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 172.40 Mbit/s

95th percentile per-packet one-way delay: 174.739 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 83.86 Mbit/s

95th percentile per-packet one-way delay: 145.839 ms

Loss rate: 0.00%

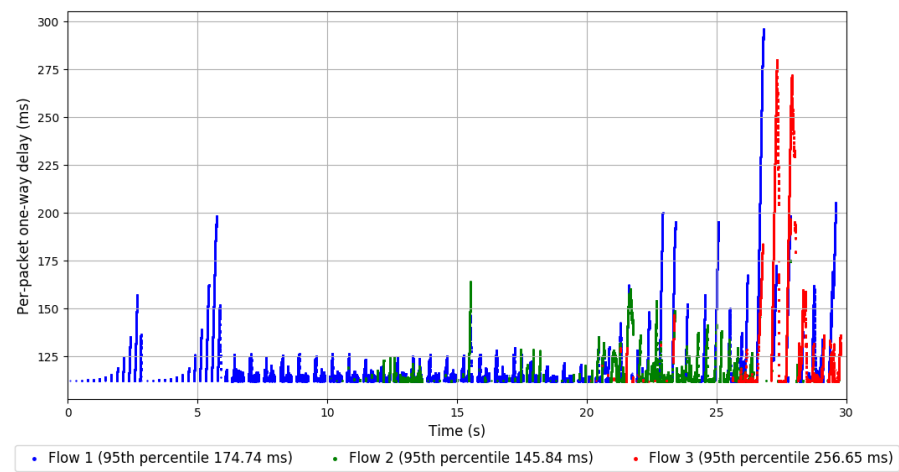
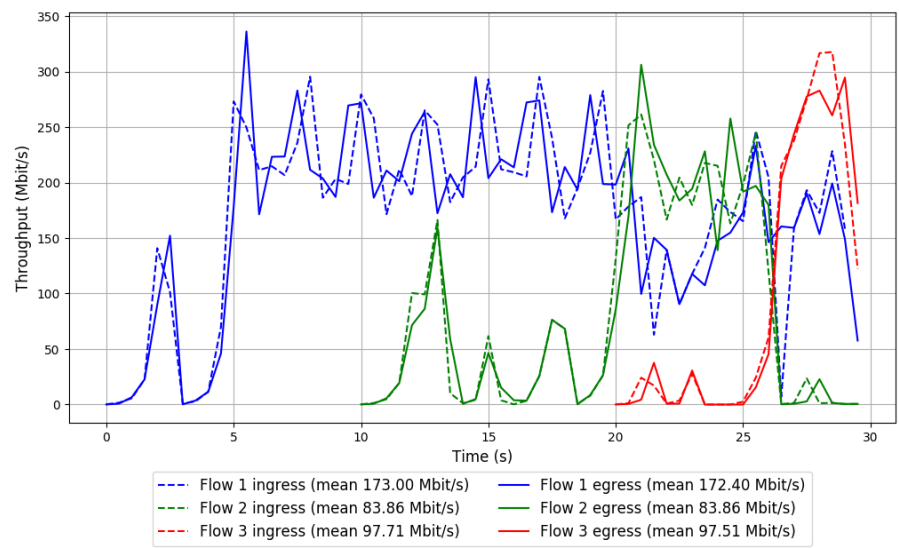
-- Flow 3:

Average throughput: 97.51 Mbit/s

95th percentile per-packet one-way delay: 256.653 ms

Loss rate: 0.07%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-10-12 06:44:57

End at: 2017-10-12 06:45:27

Below is generated by plot.py at 2017-10-12 09:55:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 285.84 Mbit/s

95th percentile per-packet one-way delay: 189.669 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 196.45 Mbit/s

95th percentile per-packet one-way delay: 180.410 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 77.66 Mbit/s

95th percentile per-packet one-way delay: 193.475 ms

Loss rate: 0.00%

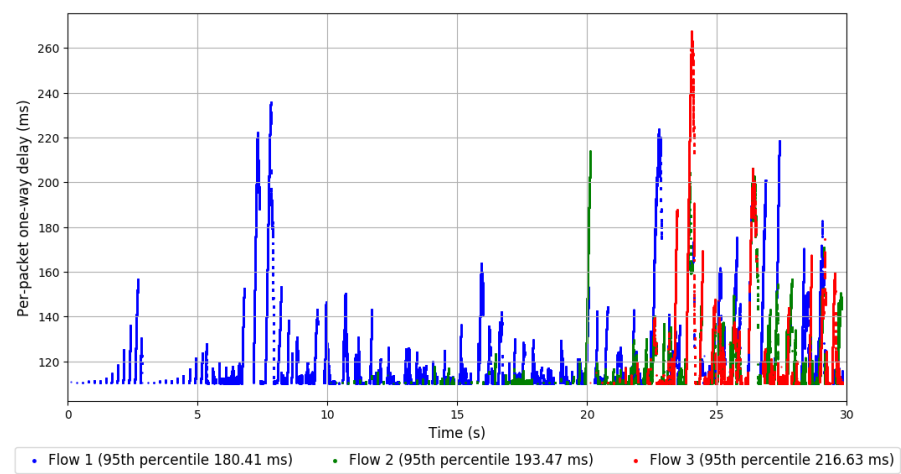
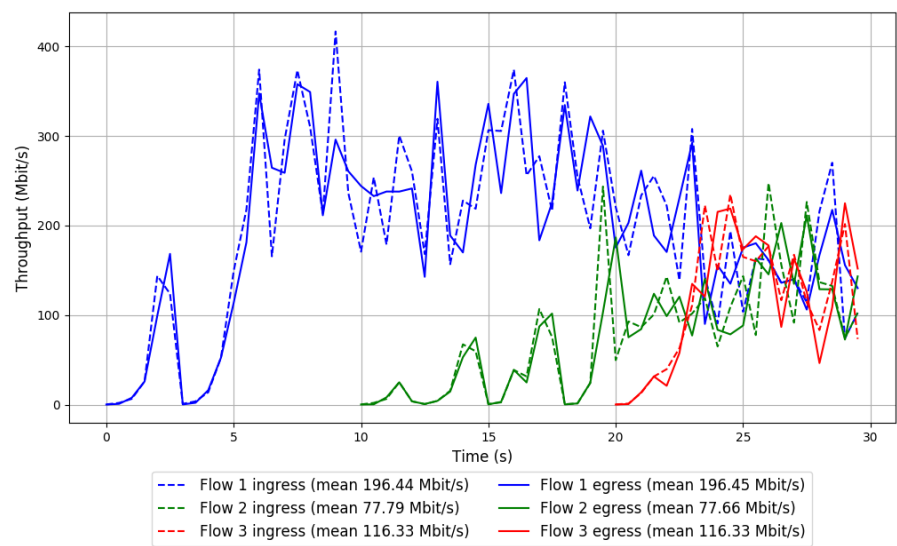
-- Flow 3:

Average throughput: 116.33 Mbit/s

95th percentile per-packet one-way delay: 216.627 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-10-12 06:59:03

End at: 2017-10-12 06:59:33

Below is generated by plot.py at 2017-10-12 09:55:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 305.72 Mbit/s

95th percentile per-packet one-way delay: 163.107 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 202.06 Mbit/s

95th percentile per-packet one-way delay: 167.816 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 85.95 Mbit/s

95th percentile per-packet one-way delay: 161.122 ms

Loss rate: 0.00%

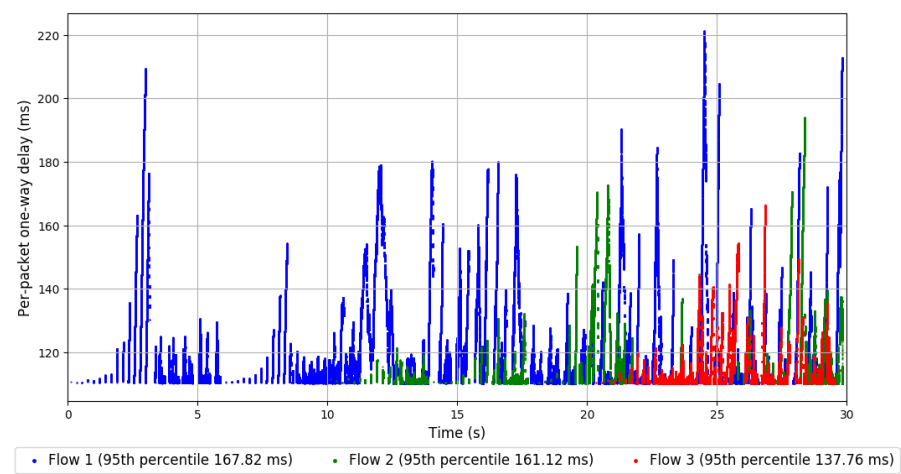
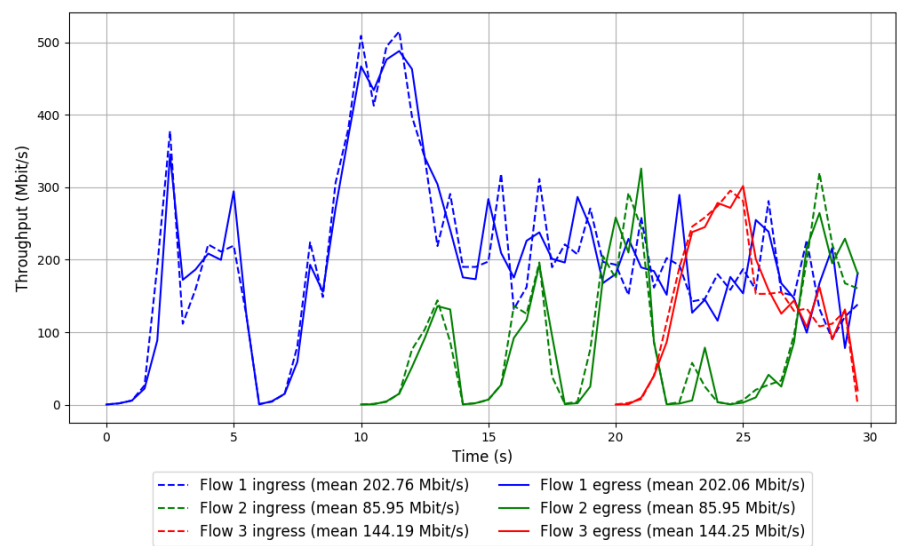
-- Flow 3:

Average throughput: 144.25 Mbit/s

95th percentile per-packet one-way delay: 137.763 ms

Loss rate: 0.00%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-10-12 07:12:42

End at: 2017-10-12 07:13:12

Below is generated by plot.py at 2017-10-12 09:55:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 246.63 Mbit/s

95th percentile per-packet one-way delay: 167.481 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 108.81 Mbit/s

95th percentile per-packet one-way delay: 147.467 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 131.10 Mbit/s

95th percentile per-packet one-way delay: 166.840 ms

Loss rate: 0.00%

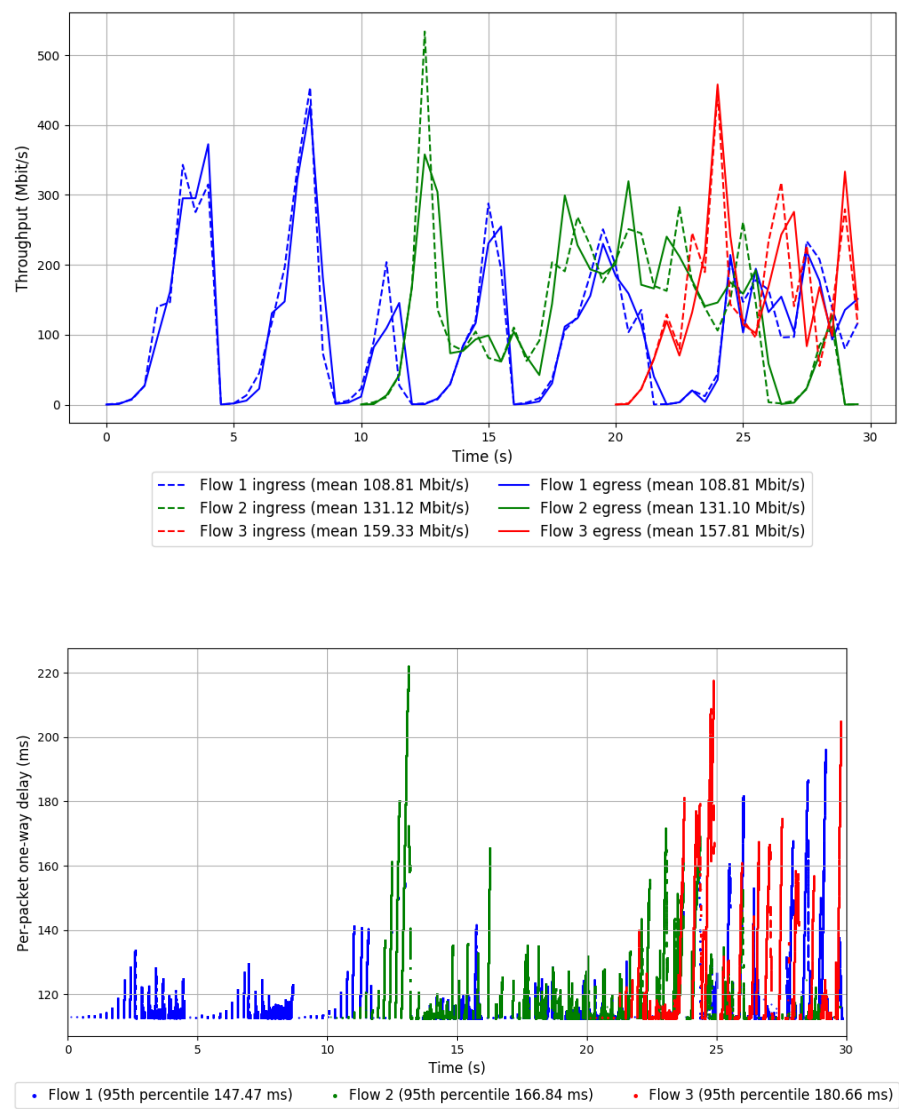
-- Flow 3:

Average throughput: 157.81 Mbit/s

95th percentile per-packet one-way delay: 180.657 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-10-12 07:26:25

End at: 2017-10-12 07:26:55

Below is generated by plot.py at 2017-10-12 09:56:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 242.29 Mbit/s

95th percentile per-packet one-way delay: 179.871 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 127.67 Mbit/s

95th percentile per-packet one-way delay: 145.856 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 148.22 Mbit/s

95th percentile per-packet one-way delay: 216.115 ms

Loss rate: 0.00%

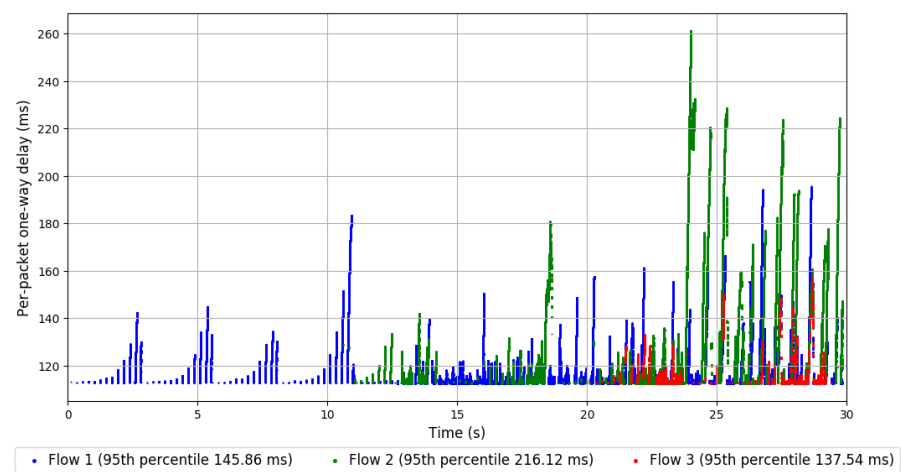
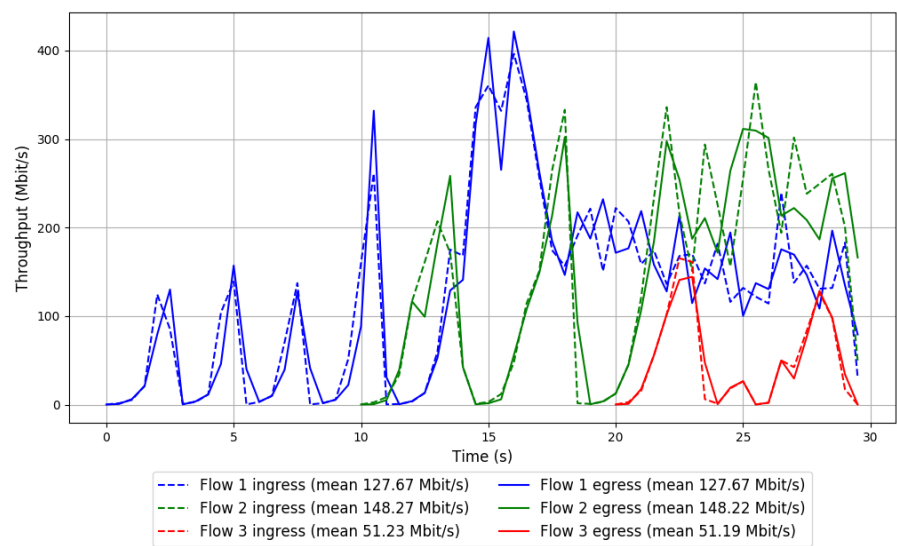
-- Flow 3:

Average throughput: 51.19 Mbit/s

95th percentile per-packet one-way delay: 137.536 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-10-12 07:40:14

End at: 2017-10-12 07:40:44

Below is generated by plot.py at 2017-10-12 09:58:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 282.56 Mbit/s

95th percentile per-packet one-way delay: 252.520 ms

Loss rate: 1.69%

-- Flow 1:

Average throughput: 124.83 Mbit/s

95th percentile per-packet one-way delay: 163.432 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 210.17 Mbit/s

95th percentile per-packet one-way delay: 279.089 ms

Loss rate: 3.36%

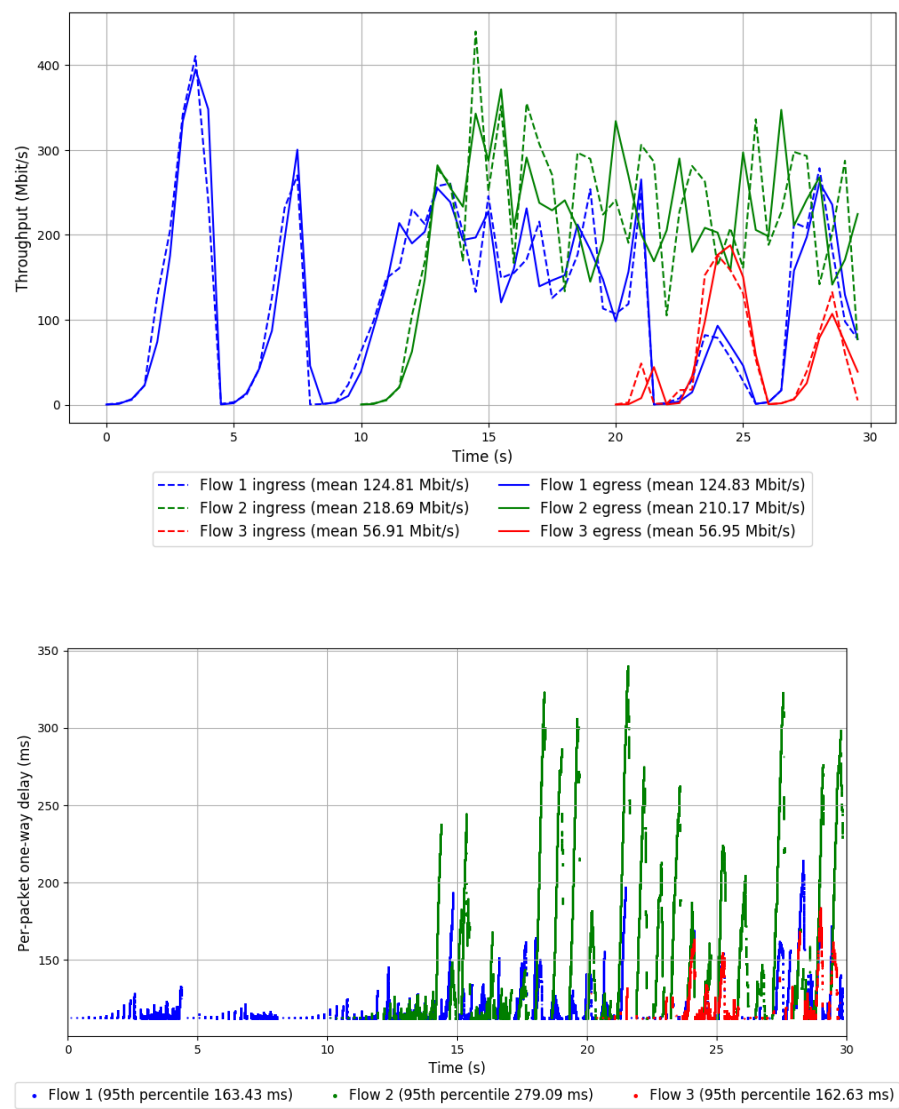
-- Flow 3:

Average throughput: 56.95 Mbit/s

95th percentile per-packet one-way delay: 162.634 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-10-12 07:54:09

End at: 2017-10-12 07:54:39

Below is generated by plot.py at 2017-10-12 09:59:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 319.85 Mbit/s

95th percentile per-packet one-way delay: 216.891 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 163.95 Mbit/s

95th percentile per-packet one-way delay: 169.051 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 198.19 Mbit/s

95th percentile per-packet one-way delay: 241.639 ms

Loss rate: 2.15%

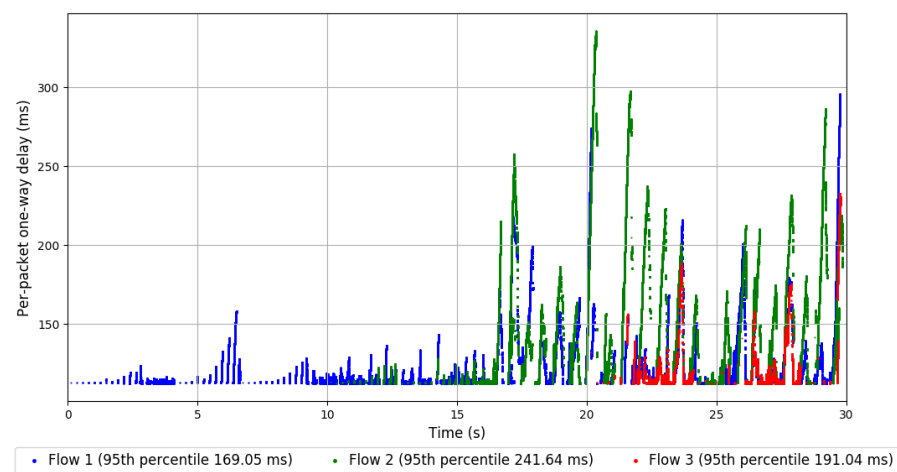
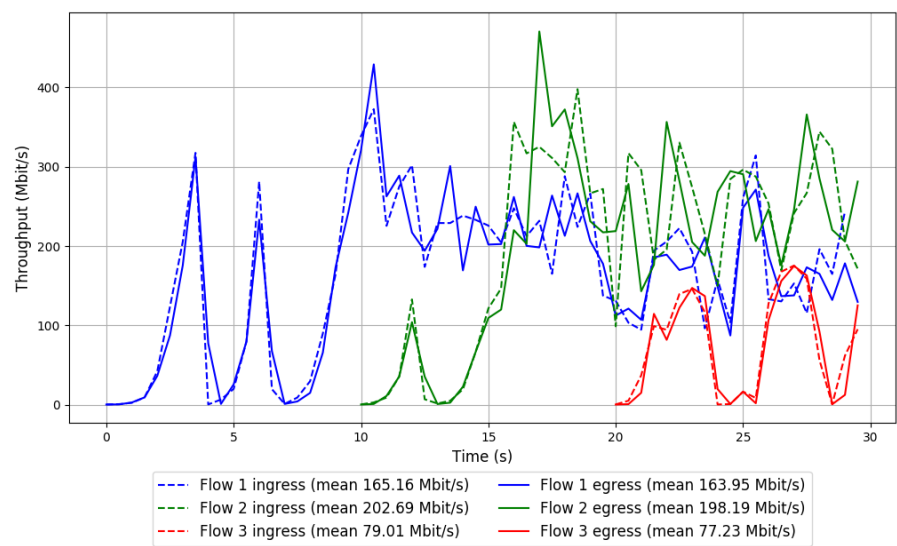
-- Flow 3:

Average throughput: 77.23 Mbit/s

95th percentile per-packet one-way delay: 191.040 ms

Loss rate: 1.29%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-10-12 08:08:24

End at: 2017-10-12 08:08:54

Below is generated by plot.py at 2017-10-12 10:00:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 371.88 Mbit/s

95th percentile per-packet one-way delay: 195.339 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 250.49 Mbit/s

95th percentile per-packet one-way delay: 198.704 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 162.93 Mbit/s

95th percentile per-packet one-way delay: 189.862 ms

Loss rate: 0.43%

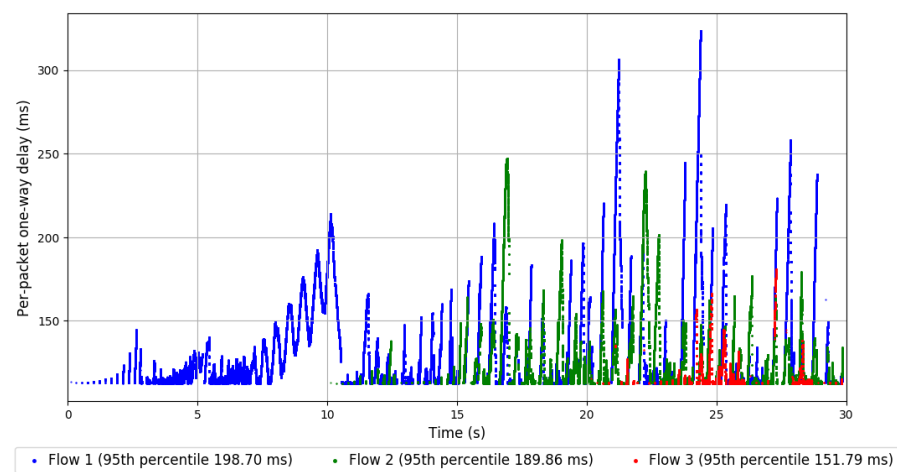
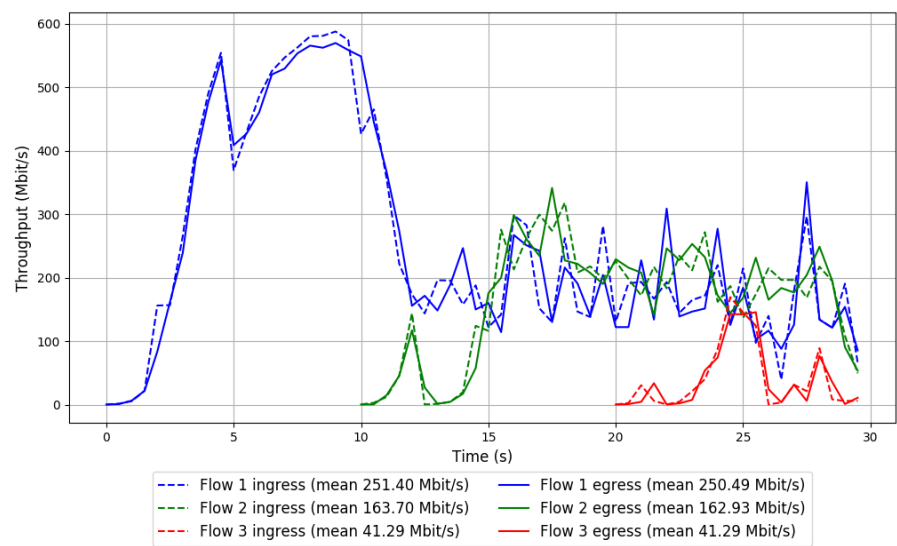
-- Flow 3:

Average throughput: 41.29 Mbit/s

95th percentile per-packet one-way delay: 151.793 ms

Loss rate: 0.00%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-10-12 05:58:33

End at: 2017-10-12 05:59:03

Below is generated by plot.py at 2017-10-12 10:00:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.03 Mbit/s

95th percentile per-packet one-way delay: 110.644 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 77.74 Mbit/s

95th percentile per-packet one-way delay: 110.696 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.74 Mbit/s

95th percentile per-packet one-way delay: 110.551 ms

Loss rate: 0.00%

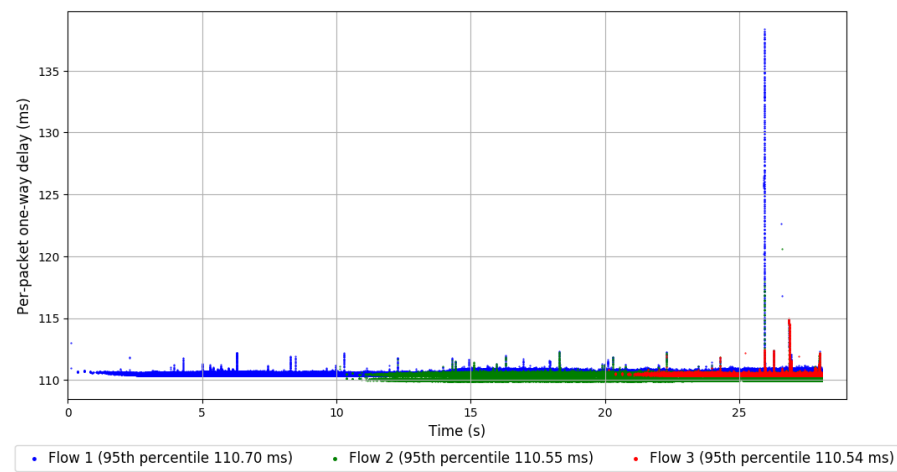
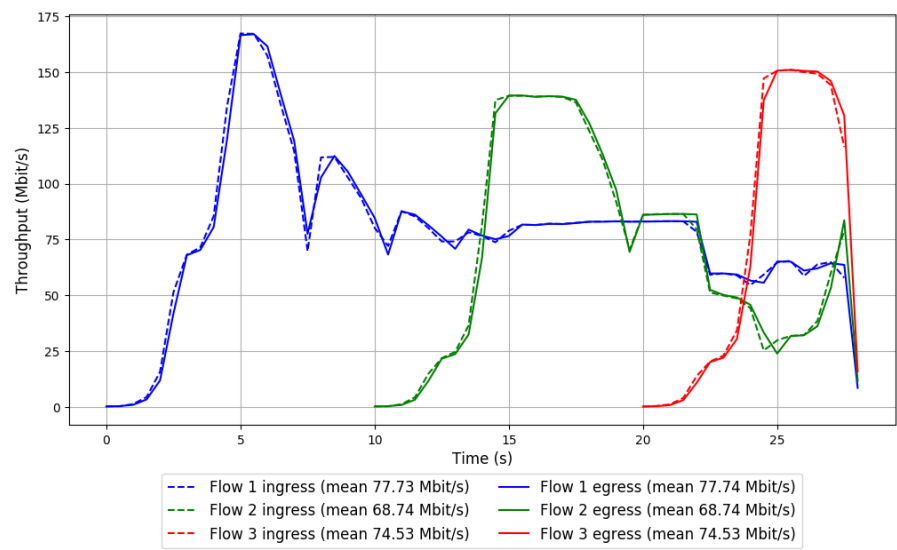
-- Flow 3:

Average throughput: 74.53 Mbit/s

95th percentile per-packet one-way delay: 110.537 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-10-12 06:12:26

End at: 2017-10-12 06:12:56

Below is generated by plot.py at 2017-10-12 10:00:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 137.98 Mbit/s

95th percentile per-packet one-way delay: 112.378 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.26 Mbit/s

95th percentile per-packet one-way delay: 112.460 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 80.13 Mbit/s

95th percentile per-packet one-way delay: 112.283 ms

Loss rate: 0.00%

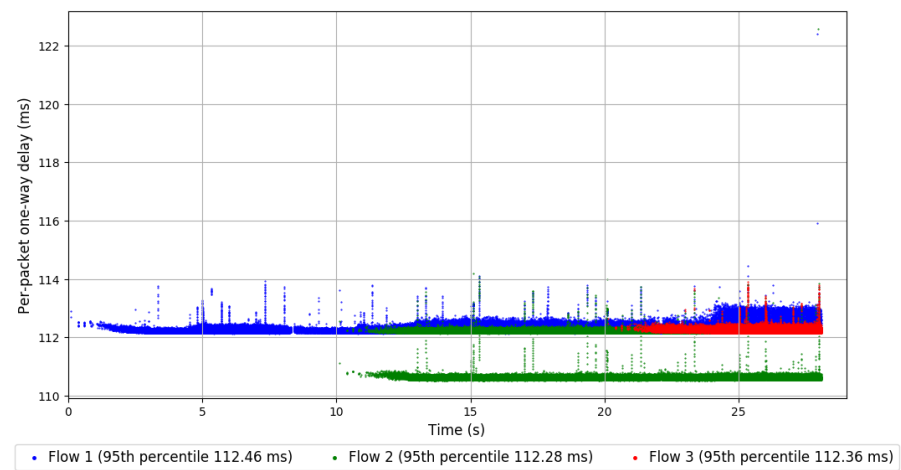
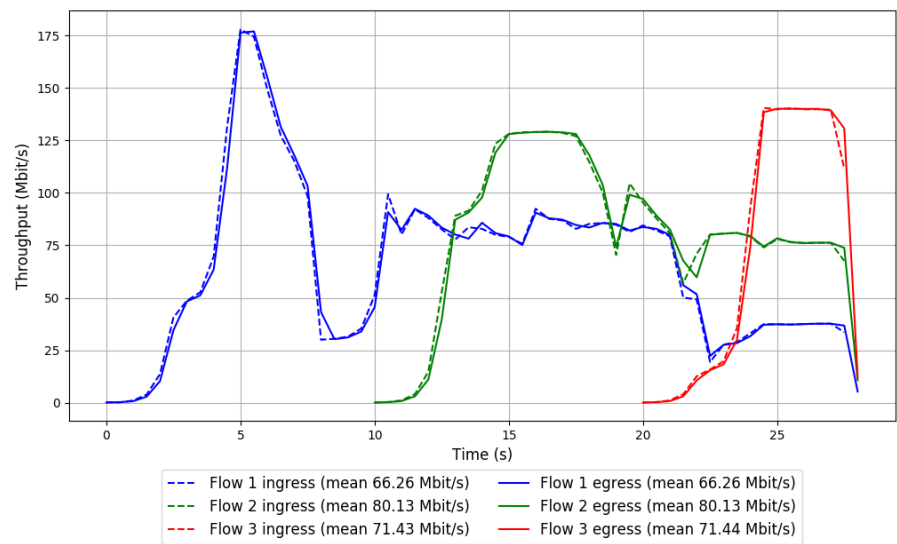
-- Flow 3:

Average throughput: 71.44 Mbit/s

95th percentile per-packet one-way delay: 112.363 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-10-12 06:26:30

End at: 2017-10-12 06:27:00

Below is generated by plot.py at 2017-10-12 10:00:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 119.98 Mbit/s

95th percentile per-packet one-way delay: 112.697 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.85 Mbit/s

95th percentile per-packet one-way delay: 112.713 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.95 Mbit/s

95th percentile per-packet one-way delay: 112.500 ms

Loss rate: 0.00%

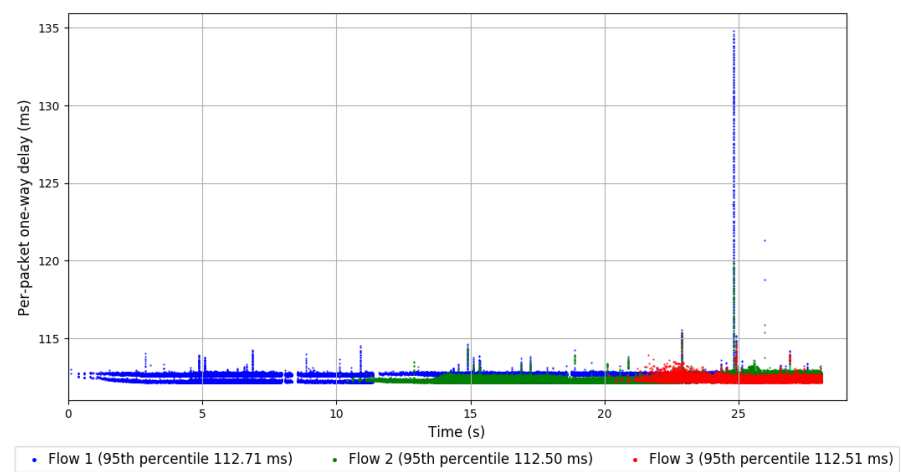
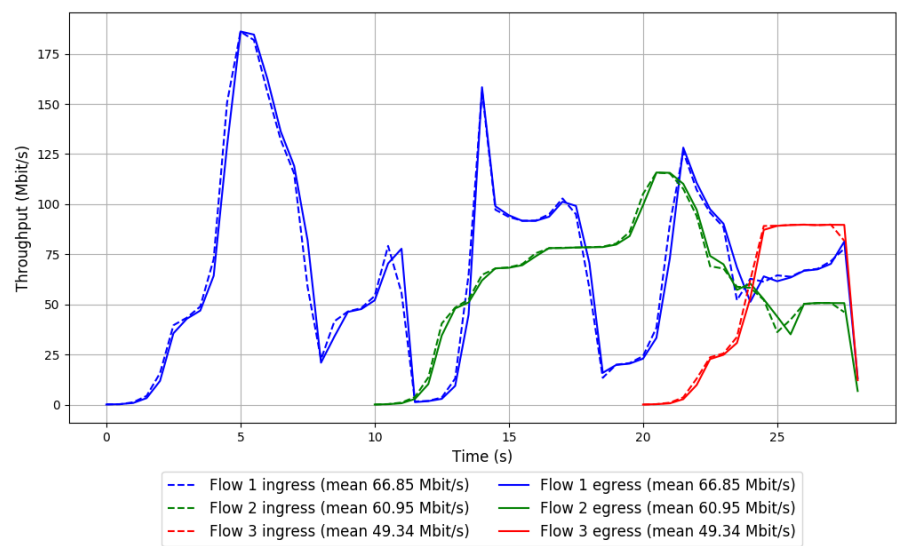
-- Flow 3:

Average throughput: 49.34 Mbit/s

95th percentile per-packet one-way delay: 112.513 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-10-12 06:40:11

End at: 2017-10-12 06:40:41

Below is generated by plot.py at 2017-10-12 10:00:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 133.52 Mbit/s

95th percentile per-packet one-way delay: 112.552 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.30 Mbit/s

95th percentile per-packet one-way delay: 110.671 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 59.03 Mbit/s

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

Loss rate: 0.00%

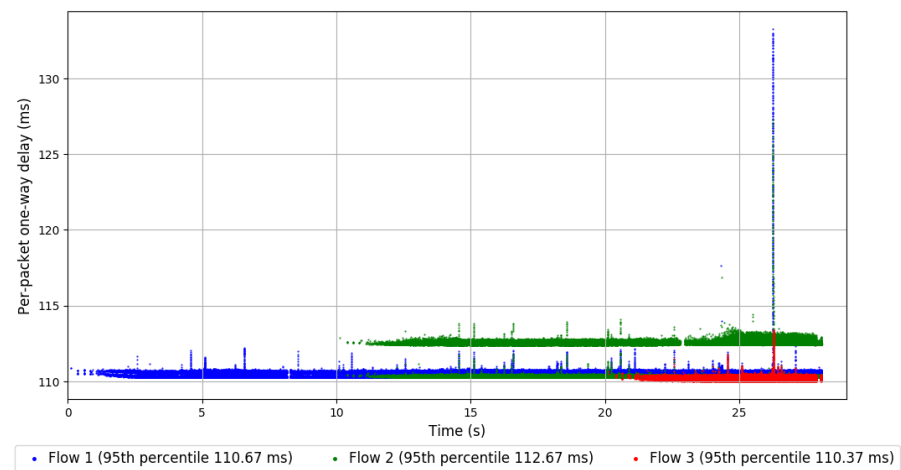
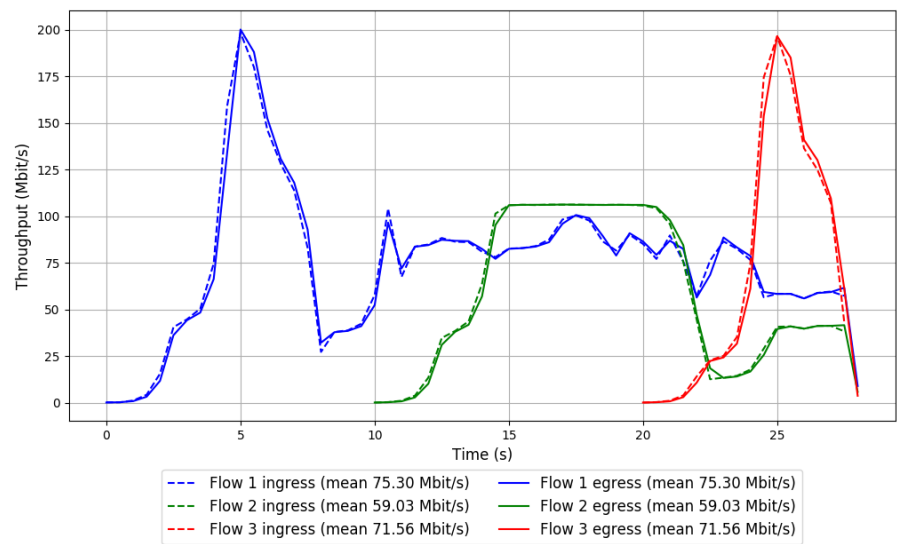
-- Flow 3:

Average throughput: 71.56 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-10-12 06:54:09

End at: 2017-10-12 06:54:39

Below is generated by plot.py at 2017-10-12 10:00:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.26 Mbit/s

95th percentile per-packet one-way delay: 112.062 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 82.69 Mbit/s

95th percentile per-packet one-way delay: 110.399 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 78.10 Mbit/s

95th percentile per-packet one-way delay: 110.791 ms

Loss rate: 0.00%

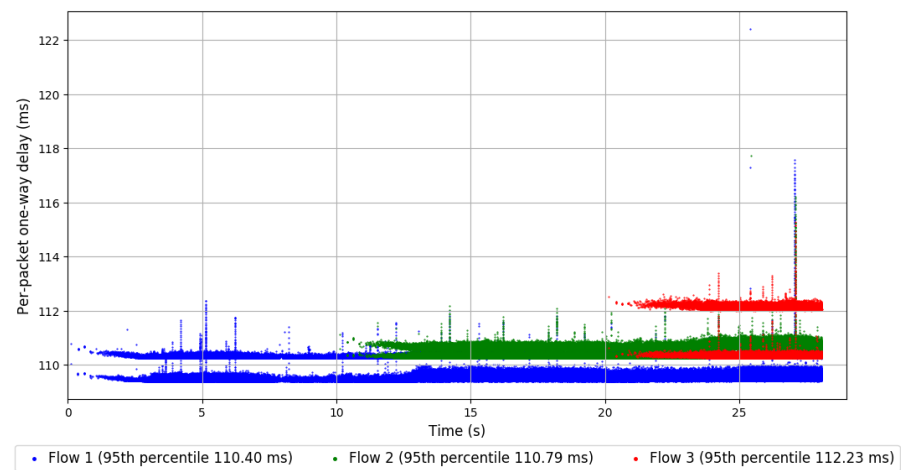
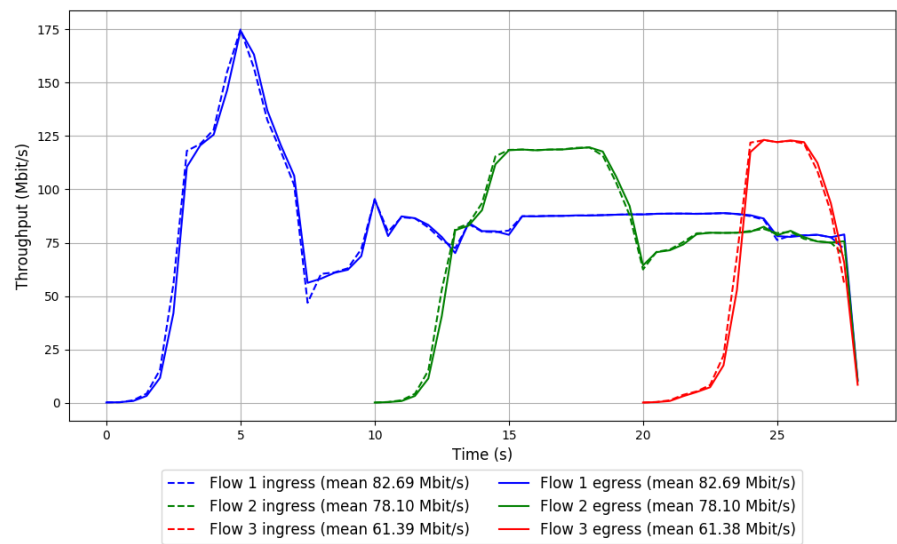
-- Flow 3:

Average throughput: 61.38 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-10-12 07:07:47

End at: 2017-10-12 07:08:17

Below is generated by plot.py at 2017-10-12 10:02:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.27 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 75.16 Mbit/s

95th percentile per-packet one-way delay: 112.660 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 75.39 Mbit/s

95th percentile per-packet one-way delay: 112.655 ms

Loss rate: 0.01%

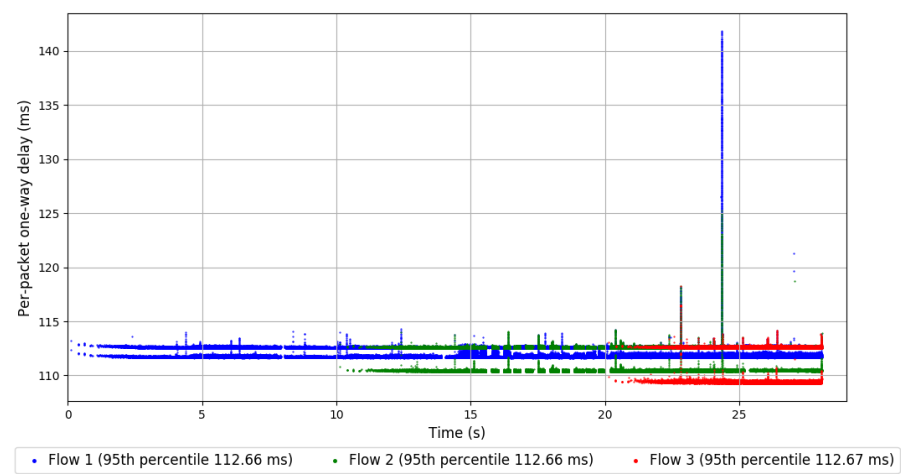
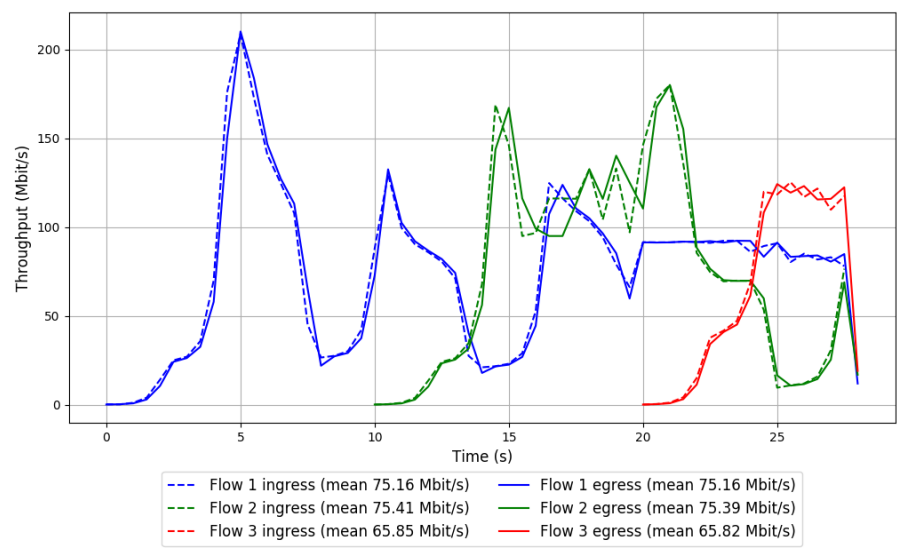
-- Flow 3:

Average throughput: 65.82 Mbit/s

95th percentile per-packet one-way delay: 112.675 ms

Loss rate: 0.03%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-10-12 07:21:39

End at: 2017-10-12 07:22:09

Below is generated by plot.py at 2017-10-12 10:02:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.99 Mbit/s

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

Loss rate: 0.02%

-- Flow 1:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 2024.265 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 69.83 Mbit/s

95th percentile per-packet one-way delay: 112.699 ms

Loss rate: 0.01%

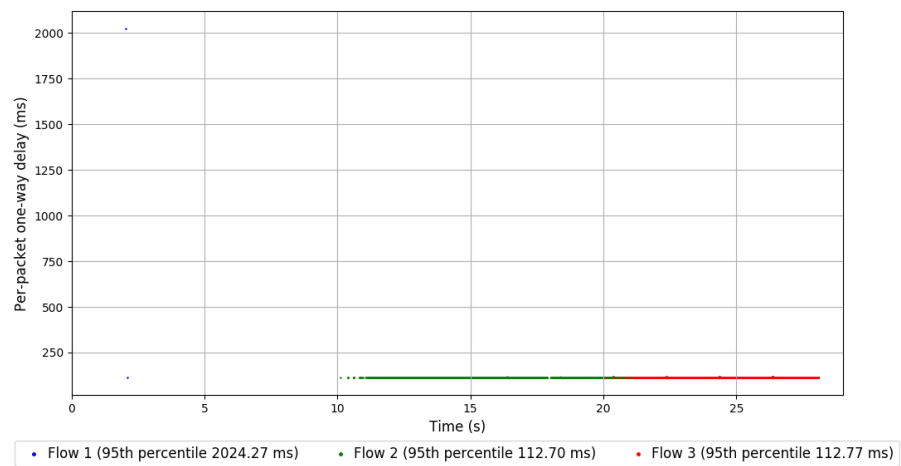
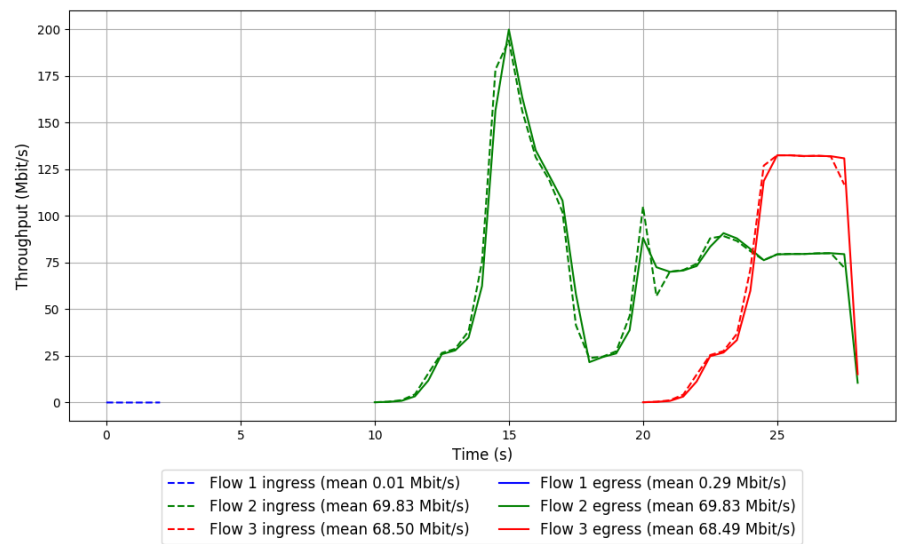
-- Flow 3:

Average throughput: 68.49 Mbit/s

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

Loss rate: 0.04%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-10-12 07:35:26

End at: 2017-10-12 07:35:56

Below is generated by plot.py at 2017-10-12 10:02:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 137.65 Mbit/s

95th percentile per-packet one-way delay: 114.302 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.26 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.90 Mbit/s

95th percentile per-packet one-way delay: 112.601 ms

Loss rate: 0.00%

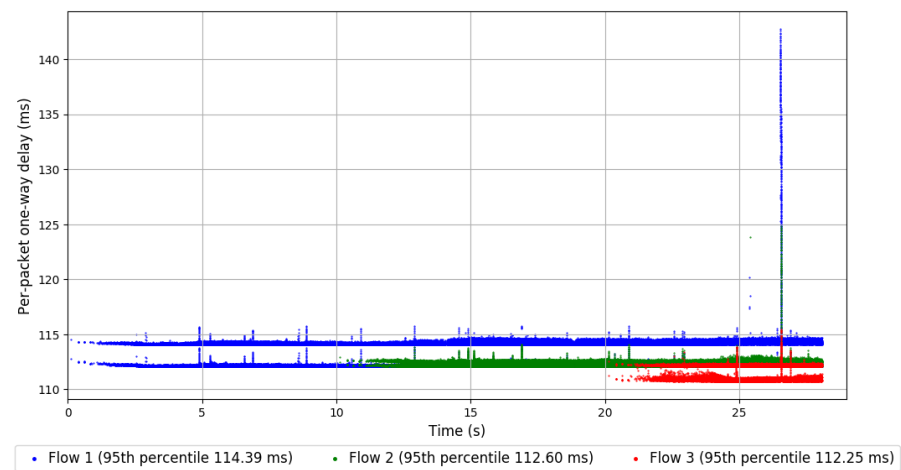
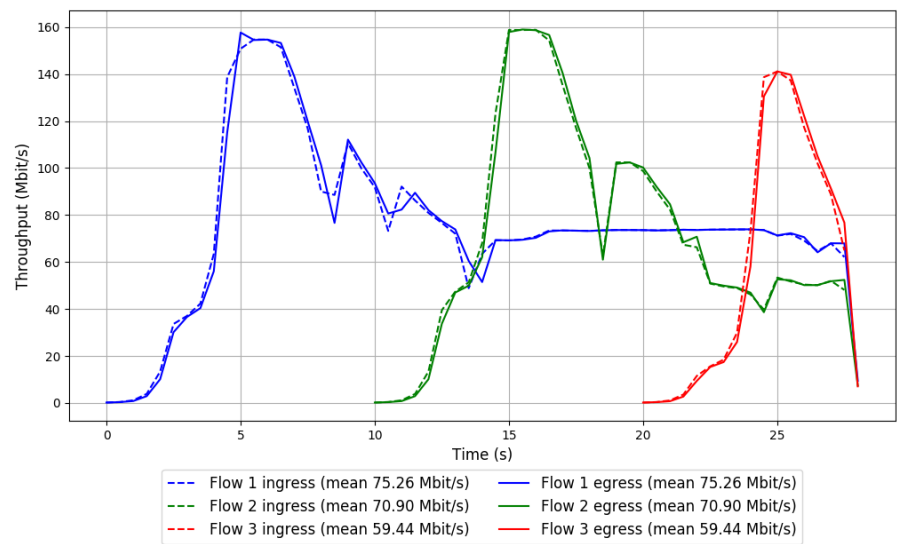
-- Flow 3:

Average throughput: 59.44 Mbit/s

95th percentile per-packet one-way delay: 112.248 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-10-12 07:49:24

End at: 2017-10-12 07:49:54

Below is generated by plot.py at 2017-10-12 10:02:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.28 Mbit/s

95th percentile per-packet one-way delay: 112.288 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.83 Mbit/s

95th percentile per-packet one-way delay: 112.320 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 79.09 Mbit/s

95th percentile per-packet one-way delay: 112.247 ms

Loss rate: 0.00%

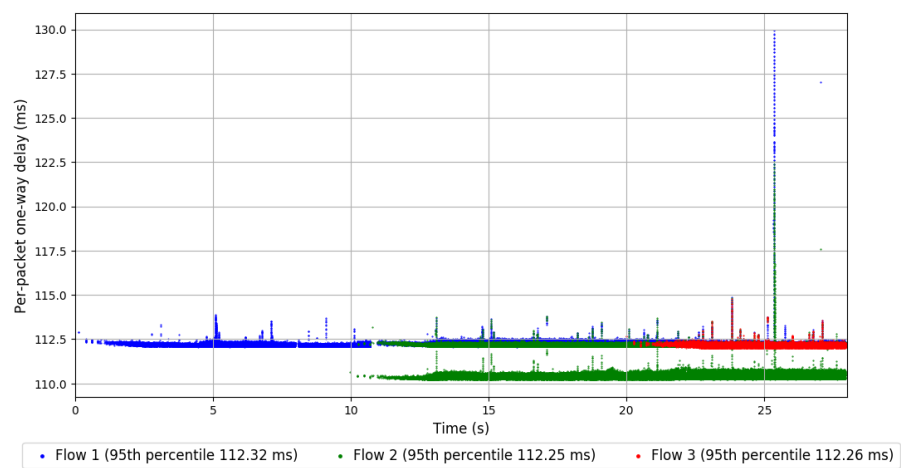
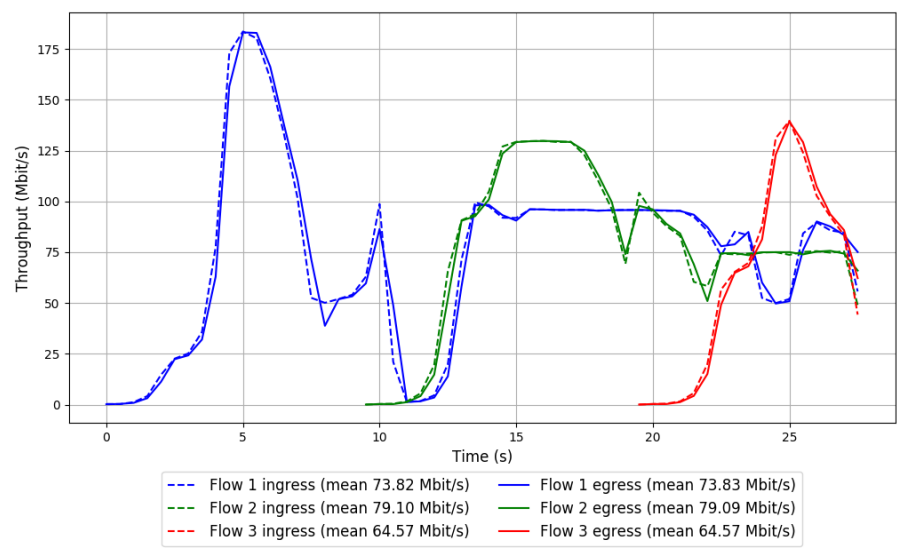
-- Flow 3:

Average throughput: 64.57 Mbit/s

95th percentile per-packet one-way delay: 112.260 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-10-12 08:03:25

End at: 2017-10-12 08:03:55

Below is generated by plot.py at 2017-10-12 10:03:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.39 Mbit/s

95th percentile per-packet one-way delay: 112.751 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 81.40 Mbit/s

95th percentile per-packet one-way delay: 112.733 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 61.43 Mbit/s

95th percentile per-packet one-way delay: 112.798 ms

Loss rate: 0.00%

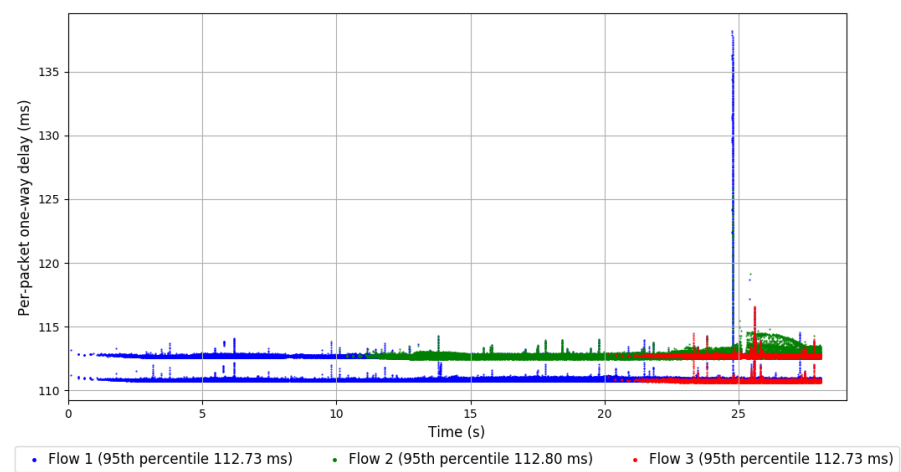
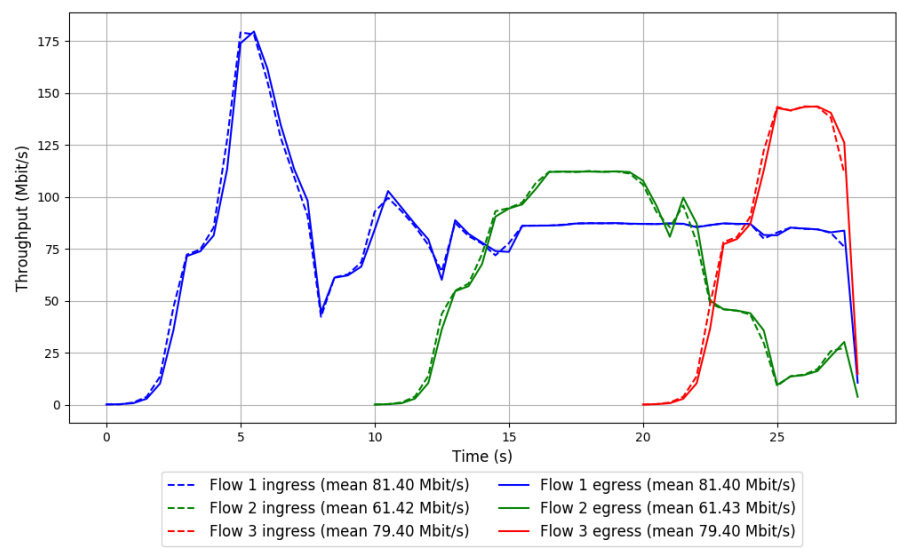
-- Flow 3:

Average throughput: 79.40 Mbit/s

95th percentile per-packet one-way delay: 112.734 ms

Loss rate: 0.02%

Run 10: Report of Copa — Data Link

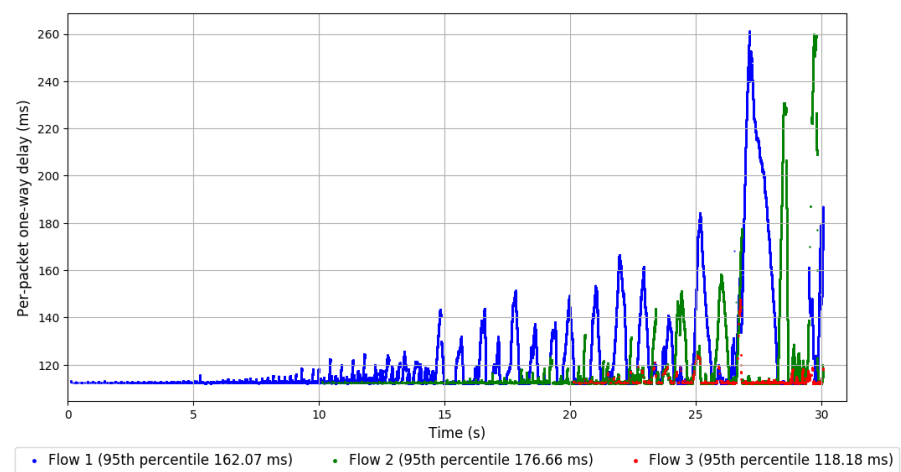
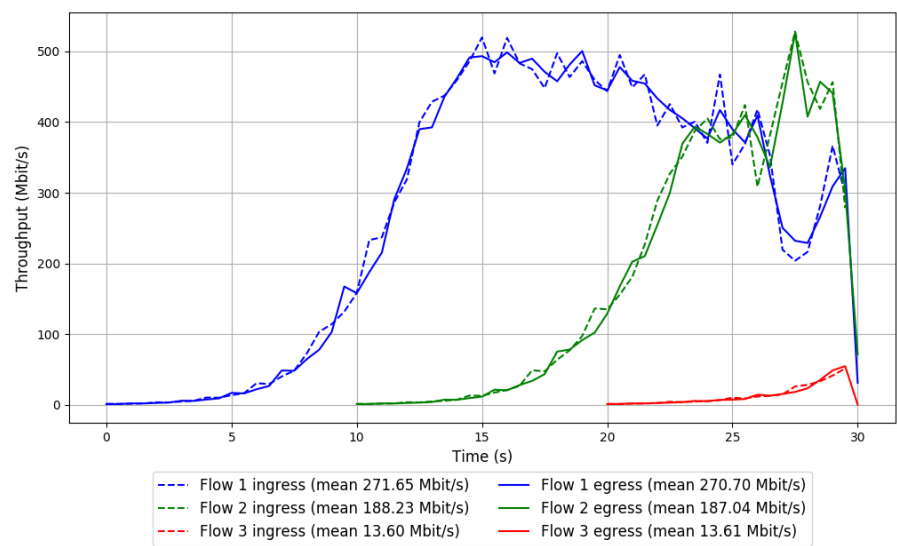


```
Run 1: Statistics of CalibratedKoho

Start at: 2017-10-12 06:04:25
End at: 2017-10-12 06:04:55

# Below is generated by plot.py at 2017-10-12 10:06:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 399.78 Mbit/s
95th percentile per-packet one-way delay: 163.789 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 270.70 Mbit/s
95th percentile per-packet one-way delay: 162.072 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 187.04 Mbit/s
95th percentile per-packet one-way delay: 176.662 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 13.61 Mbit/s
95th percentile per-packet one-way delay: 118.178 ms
Loss rate: 0.09%
```


Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-10-12 06:18:27

End at: 2017-10-12 06:18:57

Below is generated by plot.py at 2017-10-12 10:07:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 410.49 Mbit/s

95th percentile per-packet one-way delay: 160.091 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 283.82 Mbit/s

95th percentile per-packet one-way delay: 150.292 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 184.22 Mbit/s

95th percentile per-packet one-way delay: 193.762 ms

Loss rate: 0.00%

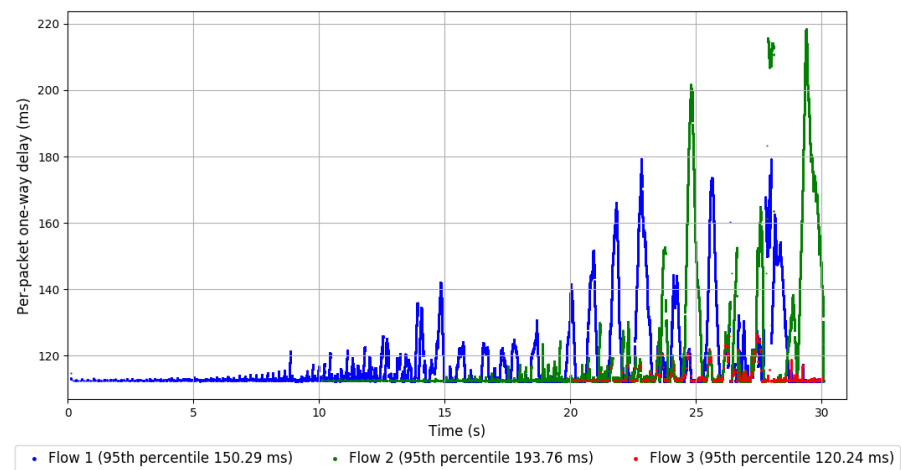
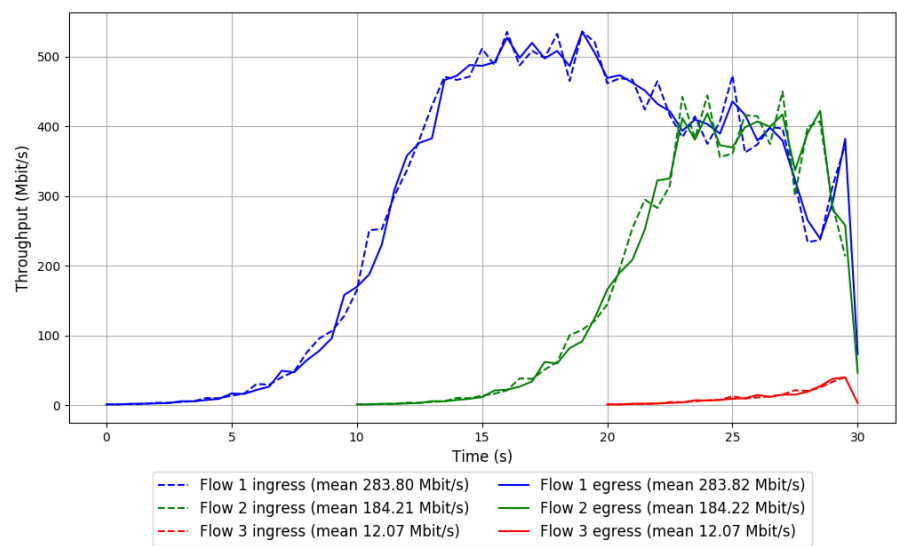
-- Flow 3:

Average throughput: 12.07 Mbit/s

95th percentile per-packet one-way delay: 120.239 ms

Loss rate: 0.00%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-10-12 06:32:12

End at: 2017-10-12 06:32:42

Below is generated by plot.py at 2017-10-12 10:07:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 399.04 Mbit/s

95th percentile per-packet one-way delay: 199.018 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 285.99 Mbit/s

95th percentile per-packet one-way delay: 171.995 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 166.42 Mbit/s

95th percentile per-packet one-way delay: 218.039 ms

Loss rate: 0.00%

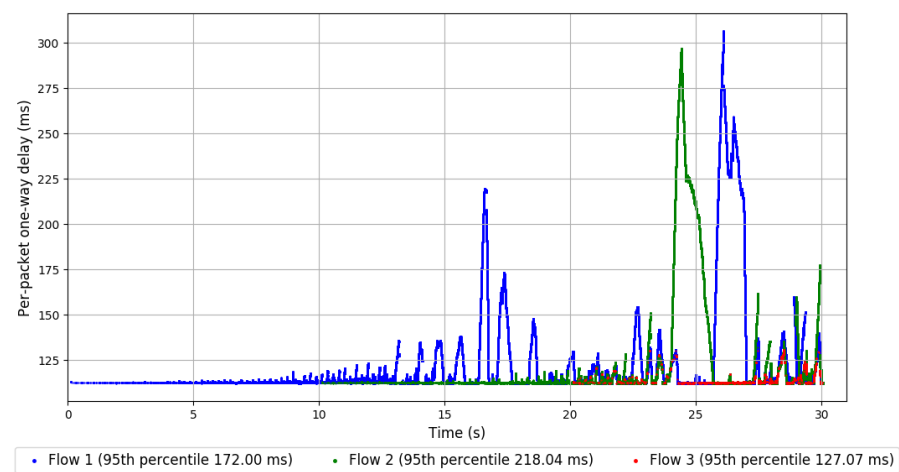
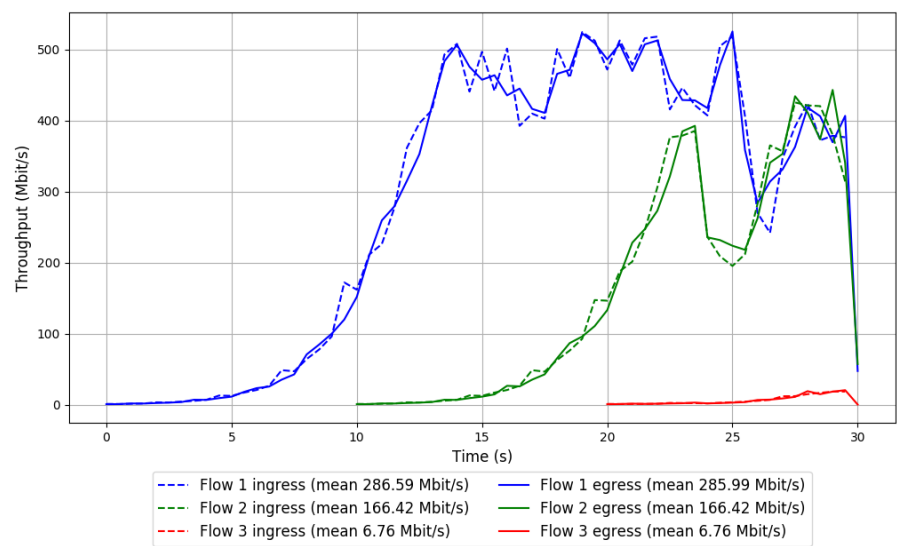
-- Flow 3:

Average throughput: 6.76 Mbit/s

95th percentile per-packet one-way delay: 127.073 ms

Loss rate: 0.00%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-10-12 06:46:06

End at: 2017-10-12 06:46:36

Below is generated by plot.py at 2017-10-12 10:07:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 392.10 Mbit/s

95th percentile per-packet one-way delay: 219.271 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 269.84 Mbit/s

95th percentile per-packet one-way delay: 224.139 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 174.22 Mbit/s

95th percentile per-packet one-way delay: 206.158 ms

Loss rate: 1.27%

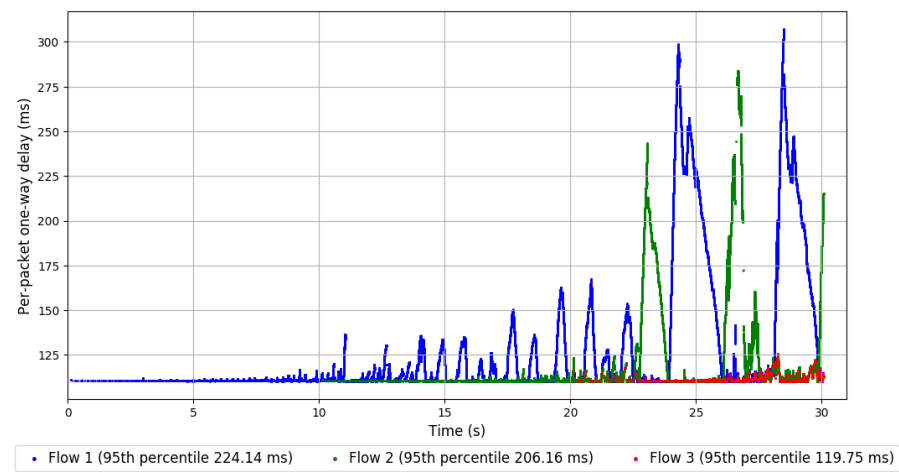
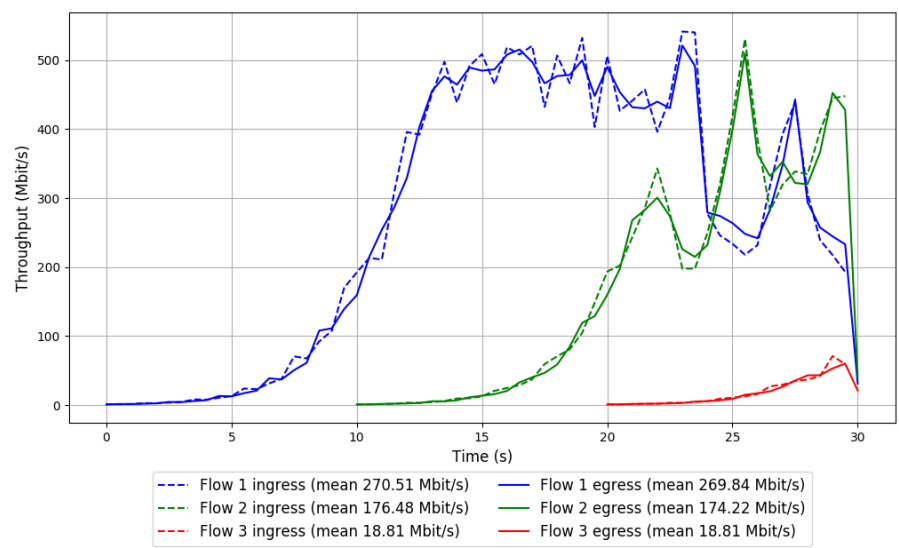
-- Flow 3:

Average throughput: 18.81 Mbit/s

95th percentile per-packet one-way delay: 119.750 ms

Loss rate: 0.02%

Run 4: Report of CalibratedKoho — Data Link

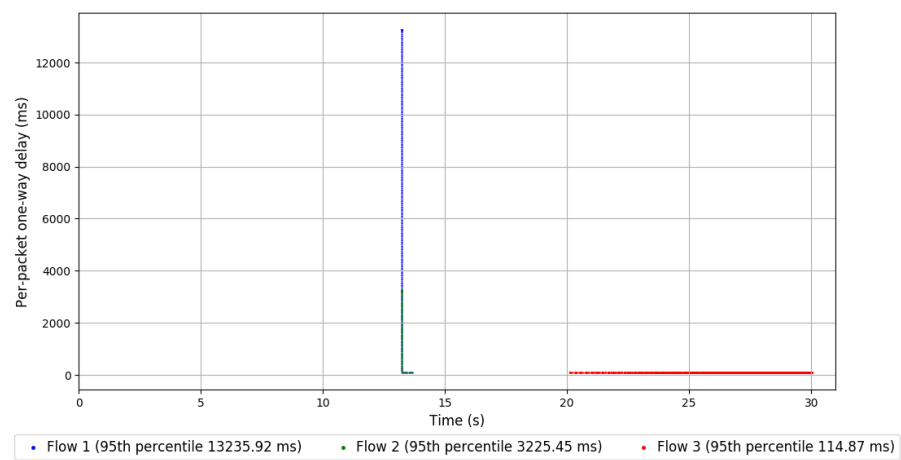
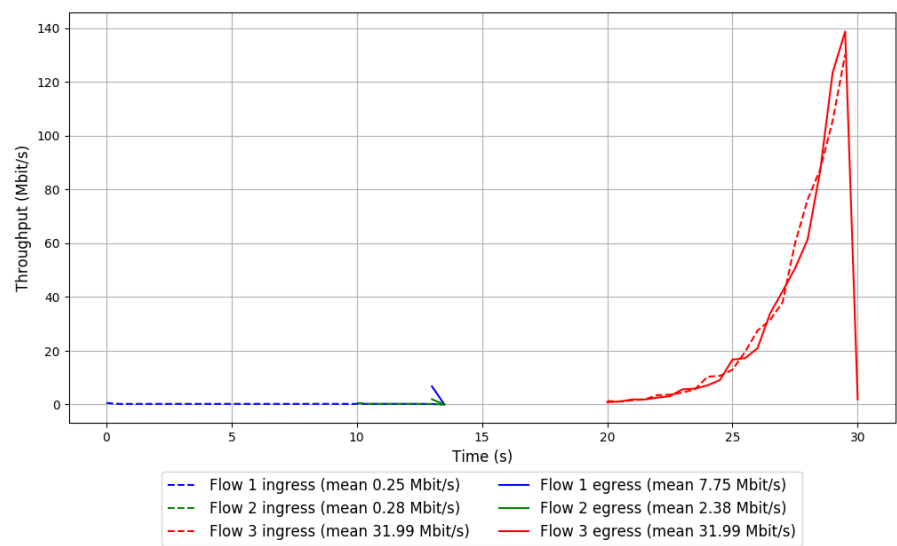


Run 5: Statistics of CalibratedKoho

Start at: 2017-10-12 07:00:15

End at: 2017-10-12 07:00:45

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-10-12 07:13:49

End at: 2017-10-12 07:14:19

Below is generated by plot.py at 2017-10-12 10:09:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 395.55 Mbit/s

95th percentile per-packet one-way delay: 161.506 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 271.36 Mbit/s

95th percentile per-packet one-way delay: 146.311 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 182.95 Mbit/s

95th percentile per-packet one-way delay: 208.517 ms

Loss rate: 0.41%

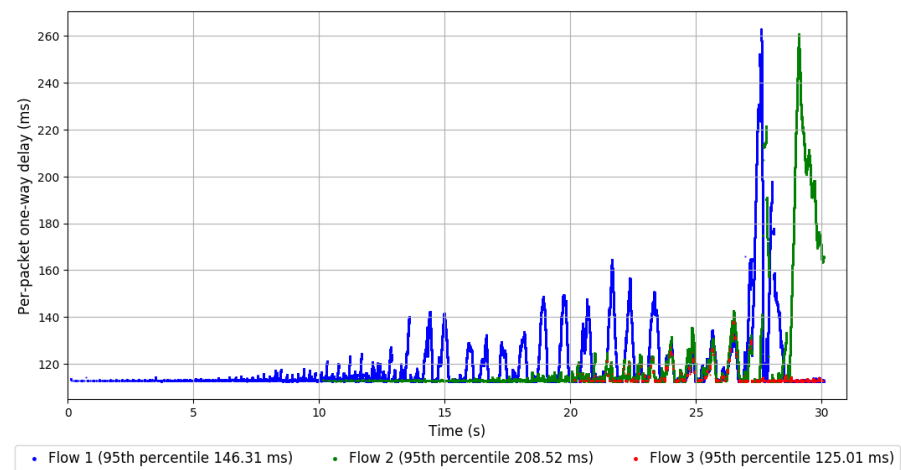
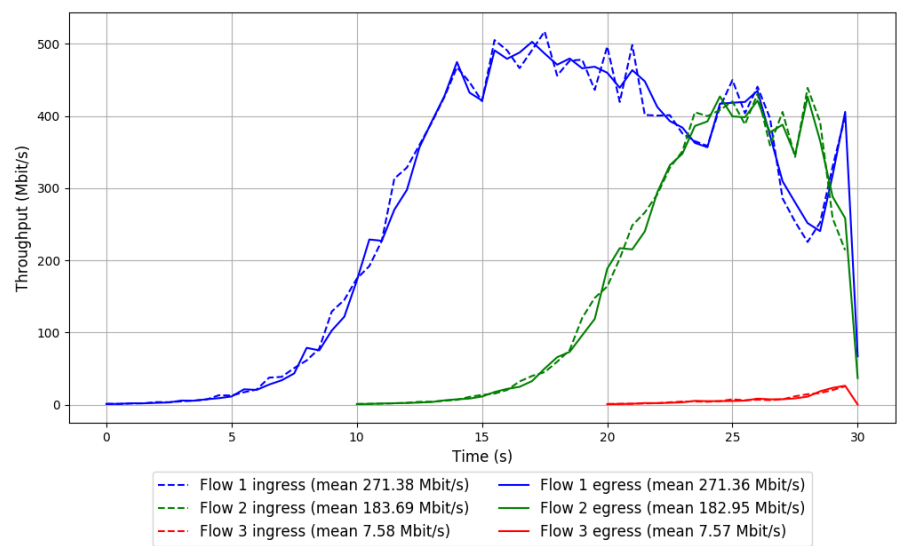
-- Flow 3:

Average throughput: 7.57 Mbit/s

95th percentile per-packet one-way delay: 125.011 ms

Loss rate: 0.13%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-10-12 07:27:31

End at: 2017-10-12 07:28:01

Below is generated by plot.py at 2017-10-12 10:09:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 394.81 Mbit/s

95th percentile per-packet one-way delay: 215.191 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 289.70 Mbit/s

95th percentile per-packet one-way delay: 166.902 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 151.36 Mbit/s

95th percentile per-packet one-way delay: 257.772 ms

Loss rate: 0.18%

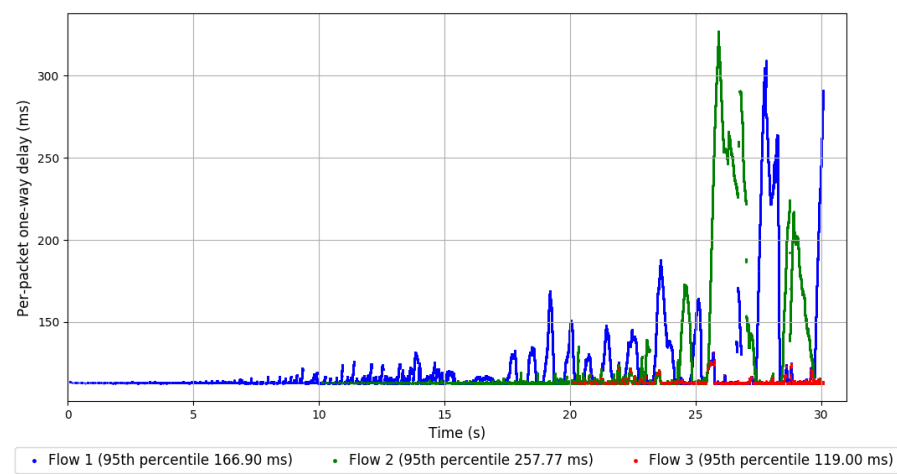
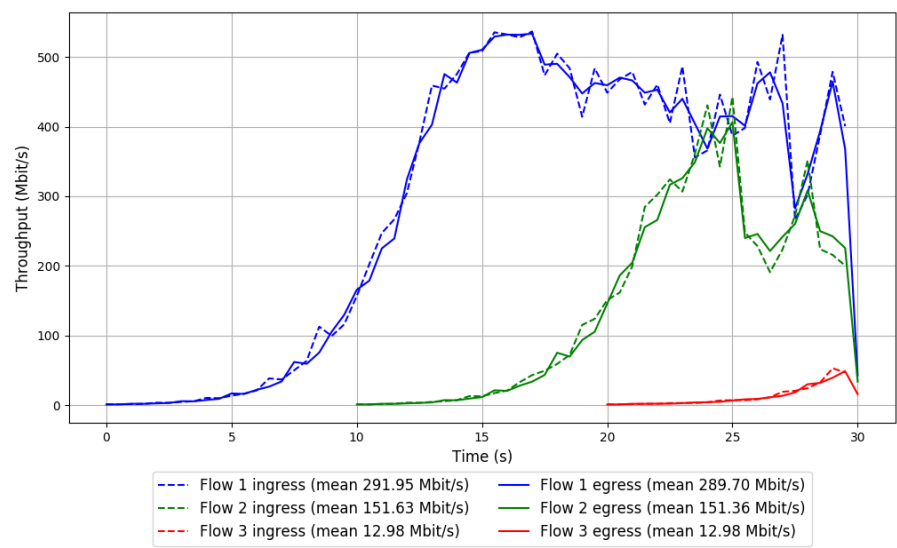
-- Flow 3:

Average throughput: 12.98 Mbit/s

95th percentile per-packet one-way delay: 118.995 ms

Loss rate: 0.01%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-10-12 07:41:24

End at: 2017-10-12 07:41:54

Below is generated by plot.py at 2017-10-12 10:09:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 389.13 Mbit/s

95th percentile per-packet one-way delay: 246.776 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 258.38 Mbit/s

95th percentile per-packet one-way delay: 256.482 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 182.77 Mbit/s

95th percentile per-packet one-way delay: 197.662 ms

Loss rate: 0.30%

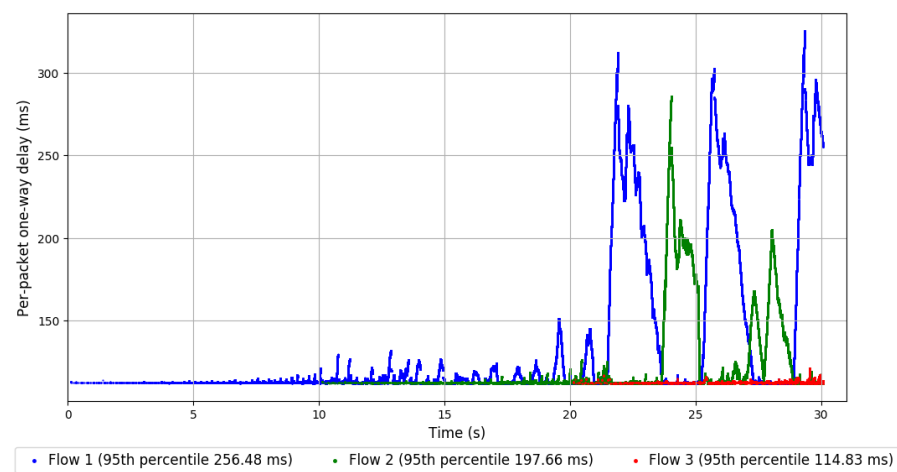
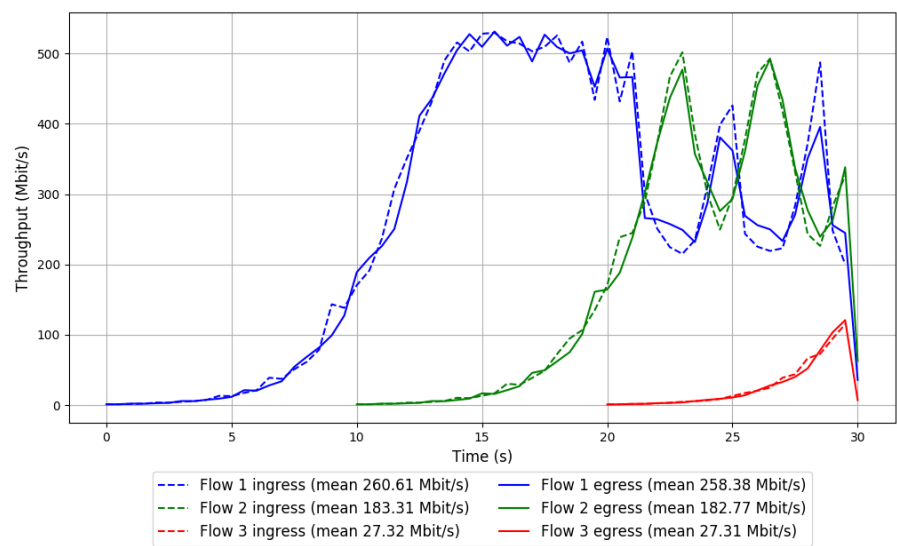
-- Flow 3:

Average throughput: 27.31 Mbit/s

95th percentile per-packet one-way delay: 114.831 ms

Loss rate: 0.03%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-10-12 07:55:22

End at: 2017-10-12 07:55:52

Below is generated by plot.py at 2017-10-12 10:10:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 412.97 Mbit/s

95th percentile per-packet one-way delay: 144.506 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 281.89 Mbit/s

95th percentile per-packet one-way delay: 142.419 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 194.12 Mbit/s

95th percentile per-packet one-way delay: 151.130 ms

Loss rate: 0.00%

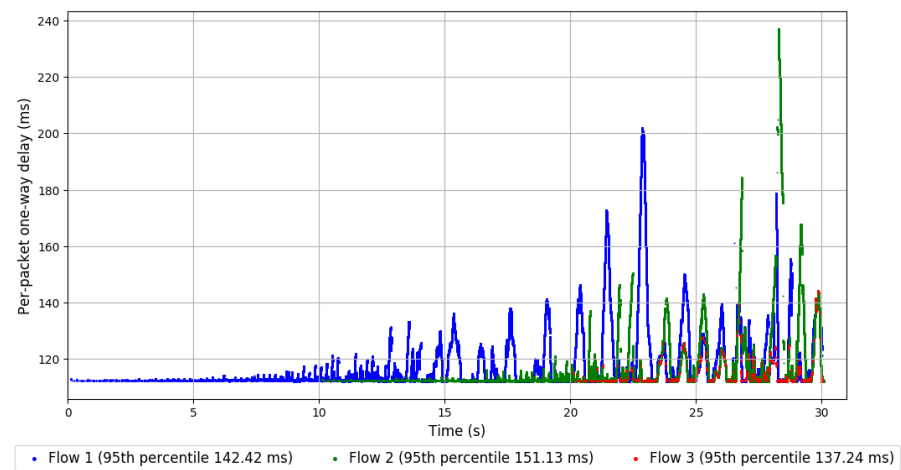
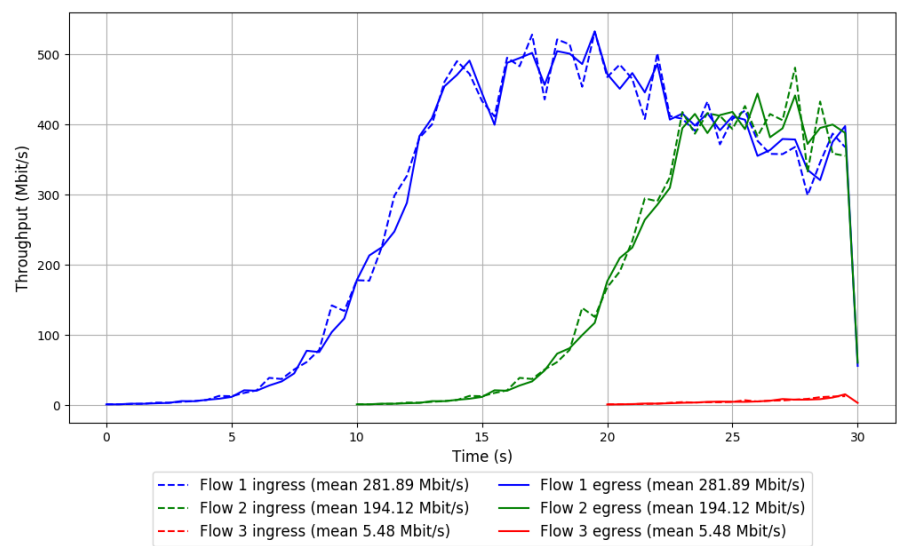
-- Flow 3:

Average throughput: 5.48 Mbit/s

95th percentile per-packet one-way delay: 137.238 ms

Loss rate: 0.09%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-10-12 08:09:40

End at: 2017-10-12 08:10:10

Below is generated by plot.py at 2017-10-12 10:10:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 197.37 Mbit/s

95th percentile per-packet one-way delay: 129.144 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.35 Mbit/s

95th percentile per-packet one-way delay: 5120.253 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 232.36 Mbit/s

95th percentile per-packet one-way delay: 129.386 ms

Loss rate: 0.00%

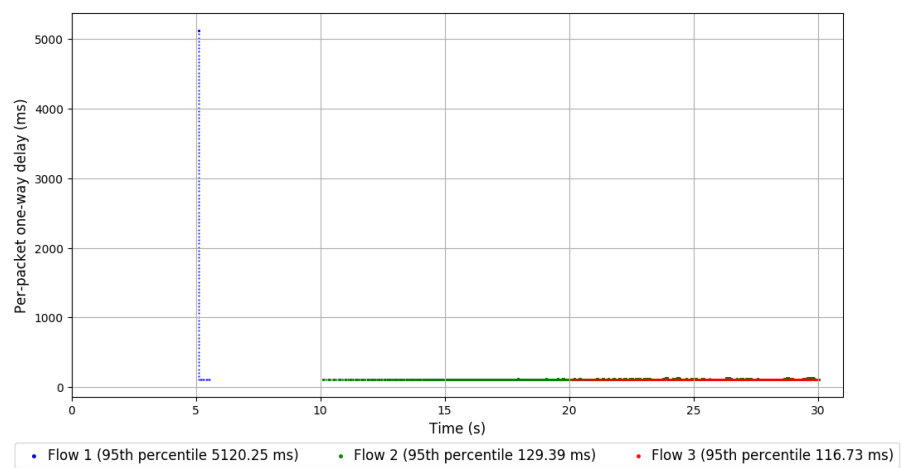
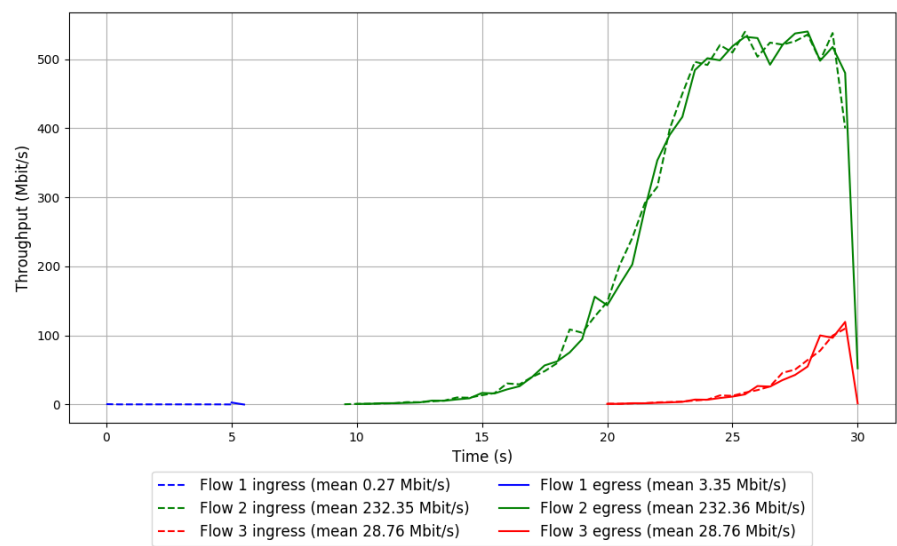
-- Flow 3:

Average throughput: 28.76 Mbit/s

95th percentile per-packet one-way delay: 116.728 ms

Loss rate: 0.00%

Run 10: Report of CalibratedKoho — Data Link

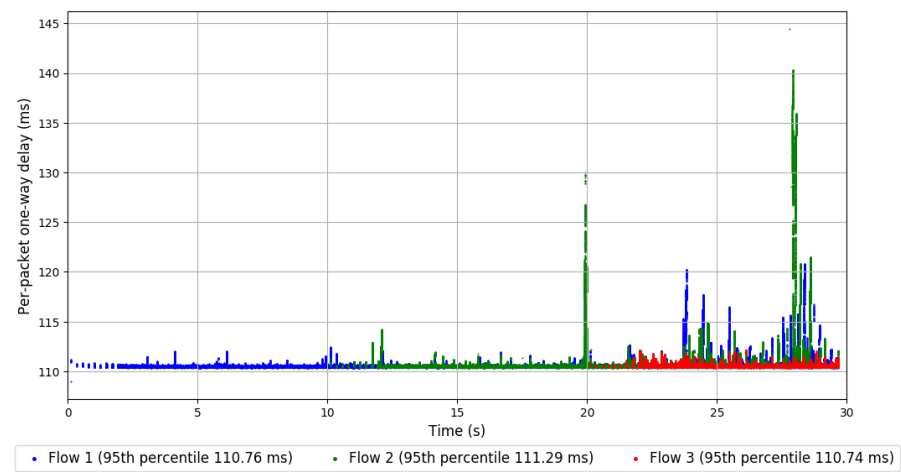
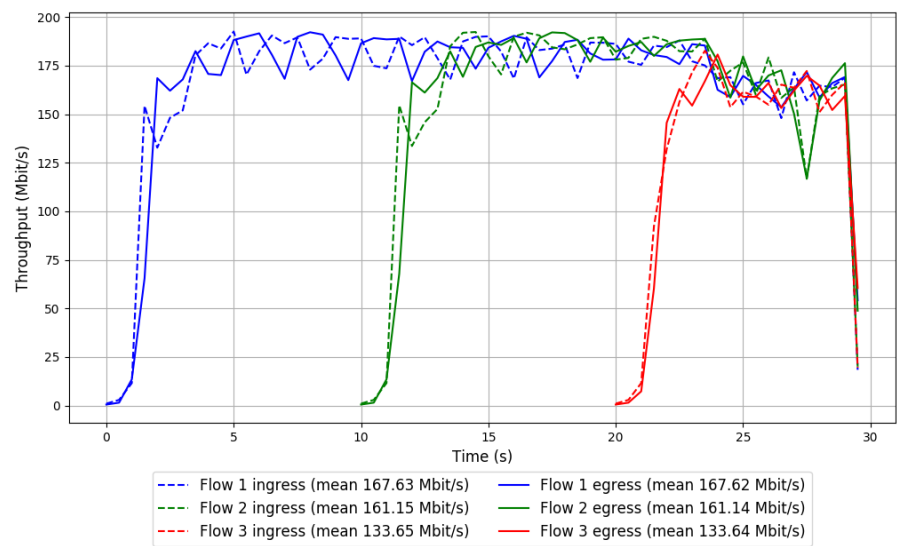


```
Run 1: Statistics of Indigo

Start at: 2017-10-12 05:57:21
End at: 2017-10-12 05:57:51

# Below is generated by plot.py at 2017-10-12 10:12:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 317.34 Mbit/s
95th percentile per-packet one-way delay: 110.881 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 167.62 Mbit/s
95th percentile per-packet one-way delay: 110.764 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 161.14 Mbit/s
95th percentile per-packet one-way delay: 111.292 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 133.64 Mbit/s
95th percentile per-packet one-way delay: 110.738 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

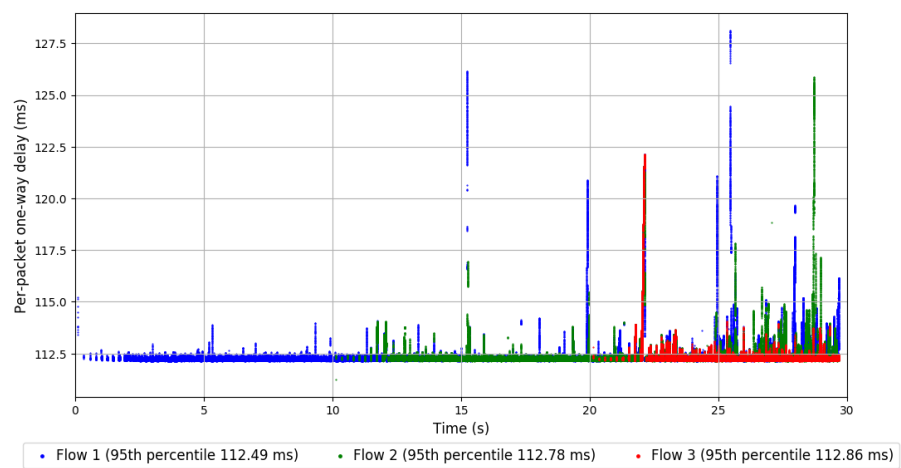
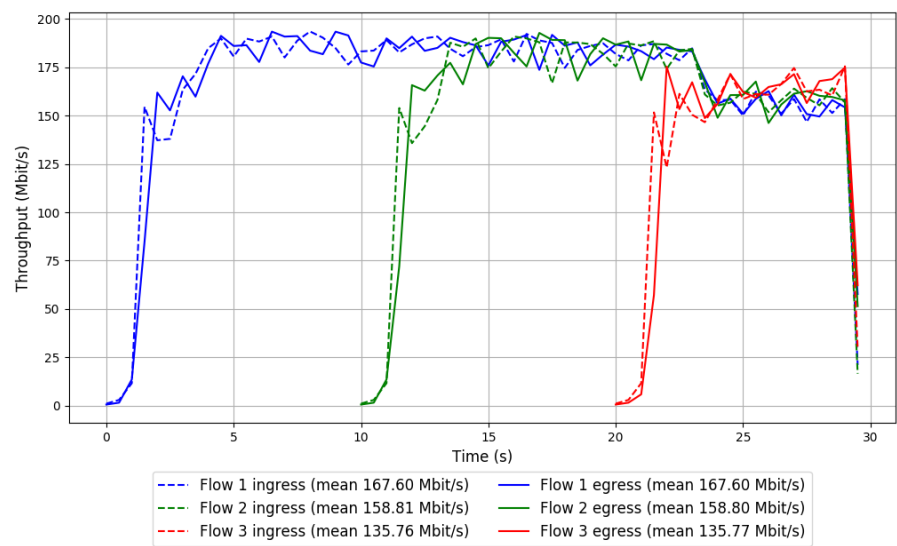


```
Run 2: Statistics of Indigo

Start at: 2017-10-12 06:11:13
End at: 2017-10-12 06:11:43

# Below is generated by plot.py at 2017-10-12 10:12:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 316.49 Mbit/s
95th percentile per-packet one-way delay: 112.643 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 167.60 Mbit/s
95th percentile per-packet one-way delay: 112.494 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 158.80 Mbit/s
95th percentile per-packet one-way delay: 112.781 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 135.77 Mbit/s
95th percentile per-packet one-way delay: 112.857 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-10-12 06:25:18

End at: 2017-10-12 06:25:48

Below is generated by plot.py at 2017-10-12 10:12:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.10 Mbit/s

95th percentile per-packet one-way delay: 112.610 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 167.53 Mbit/s

95th percentile per-packet one-way delay: 112.451 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 157.48 Mbit/s

95th percentile per-packet one-way delay: 112.768 ms

Loss rate: 0.00%

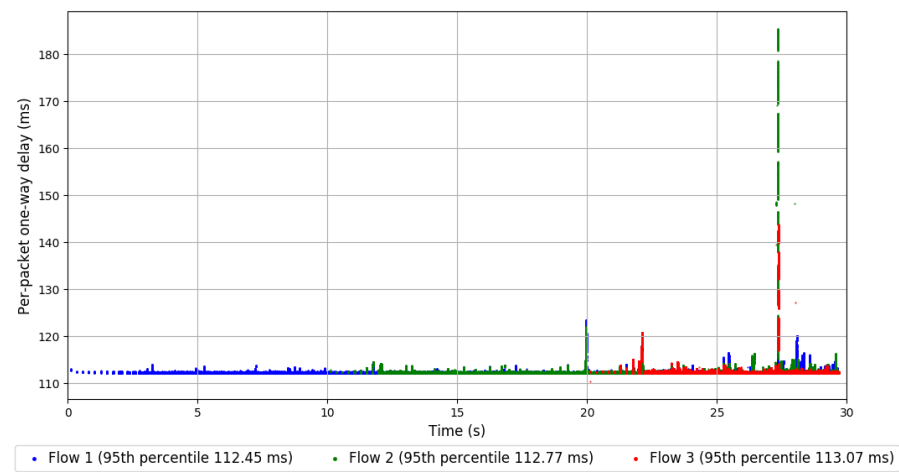
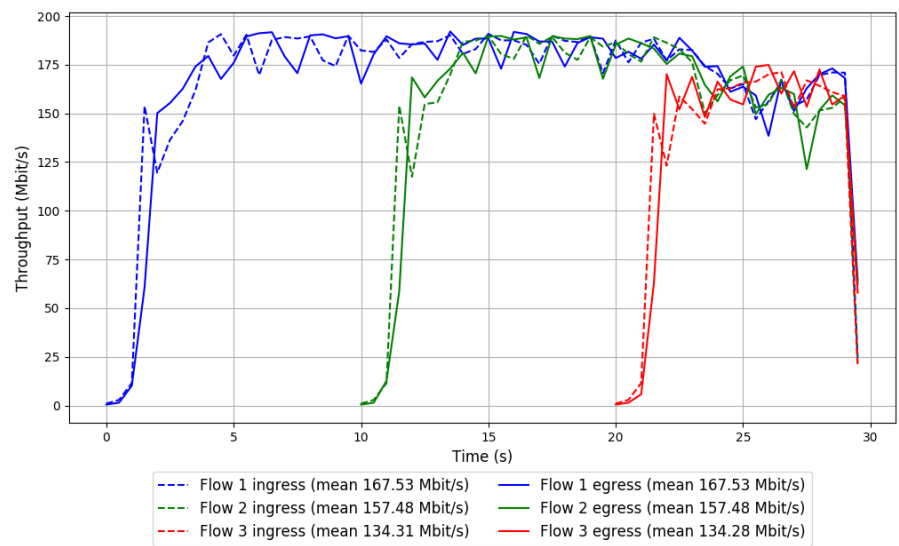
-- Flow 3:

Average throughput: 134.28 Mbit/s

95th percentile per-packet one-way delay: 113.067 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-10-12 06:38:58

End at: 2017-10-12 06:39:28

Below is generated by plot.py at 2017-10-12 10:13:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 318.26 Mbit/s

95th percentile per-packet one-way delay: 110.741 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 169.63 Mbit/s

95th percentile per-packet one-way delay: 110.599 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 156.67 Mbit/s

95th percentile per-packet one-way delay: 110.817 ms

Loss rate: 0.00%

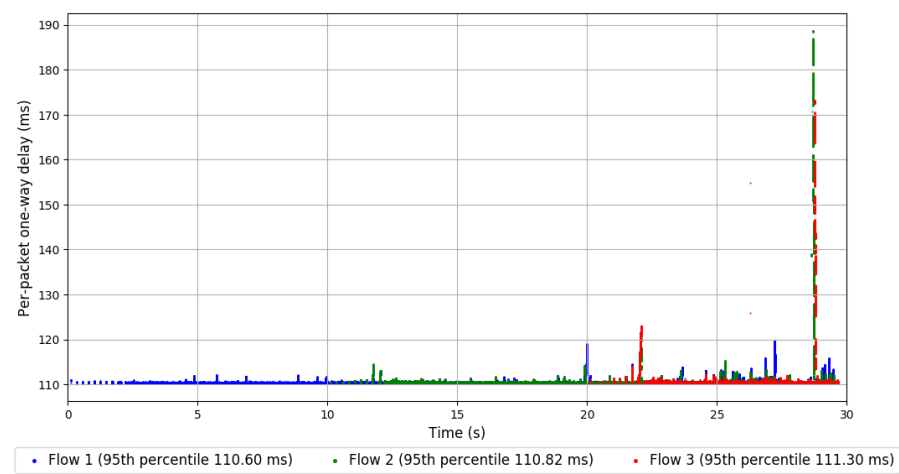
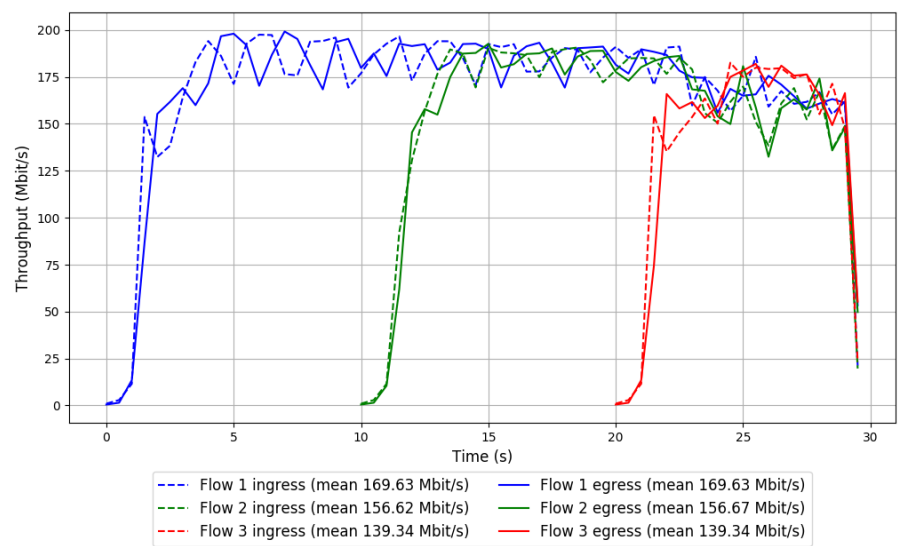
-- Flow 3:

Average throughput: 139.34 Mbit/s

95th percentile per-packet one-way delay: 111.297 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-10-12 06:52:57

End at: 2017-10-12 06:53:27

Below is generated by plot.py at 2017-10-12 10:13:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.29 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 167.32 Mbit/s

95th percentile per-packet one-way delay: 110.436 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 160.86 Mbit/s

95th percentile per-packet one-way delay: 110.727 ms

Loss rate: 0.00%

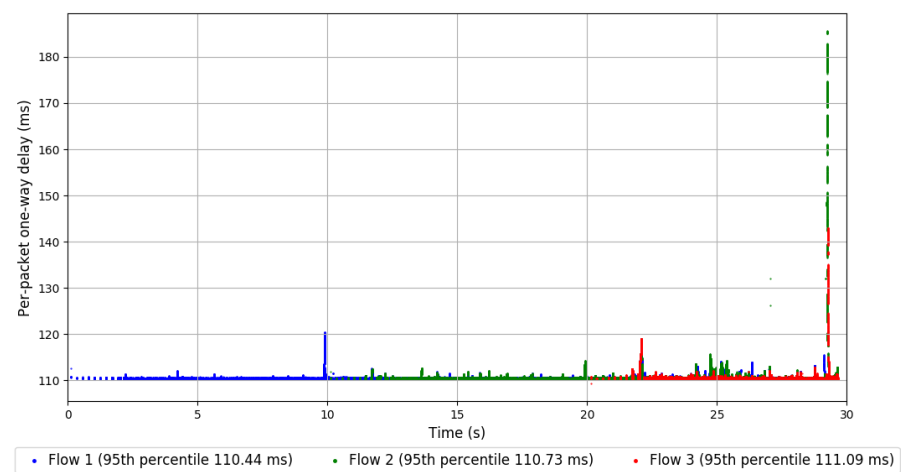
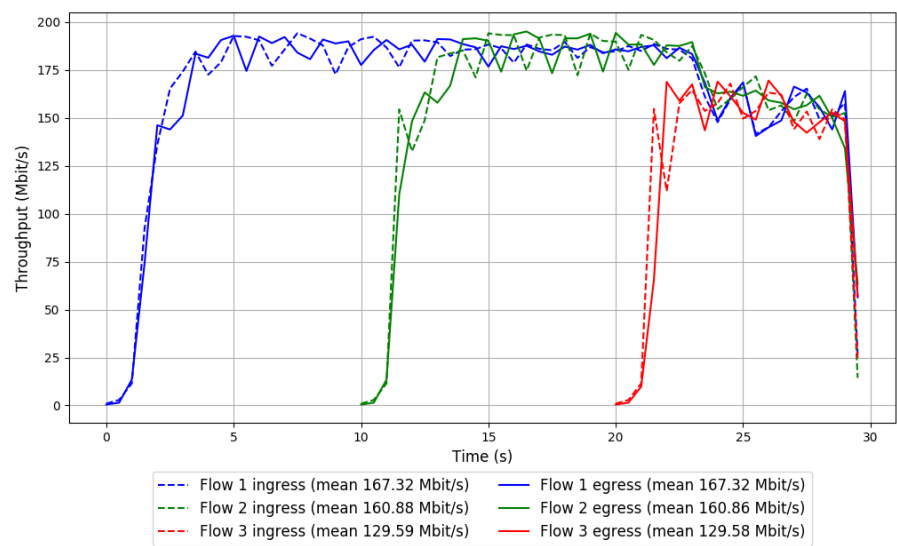
-- Flow 3:

Average throughput: 129.58 Mbit/s

95th percentile per-packet one-way delay: 111.093 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-10-12 07:06:34

End at: 2017-10-12 07:07:04

Below is generated by plot.py at 2017-10-12 10:14:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 316.43 Mbit/s

95th percentile per-packet one-way delay: 113.208 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 167.24 Mbit/s

95th percentile per-packet one-way delay: 112.944 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 160.31 Mbit/s

95th percentile per-packet one-way delay: 113.671 ms

Loss rate: 0.00%

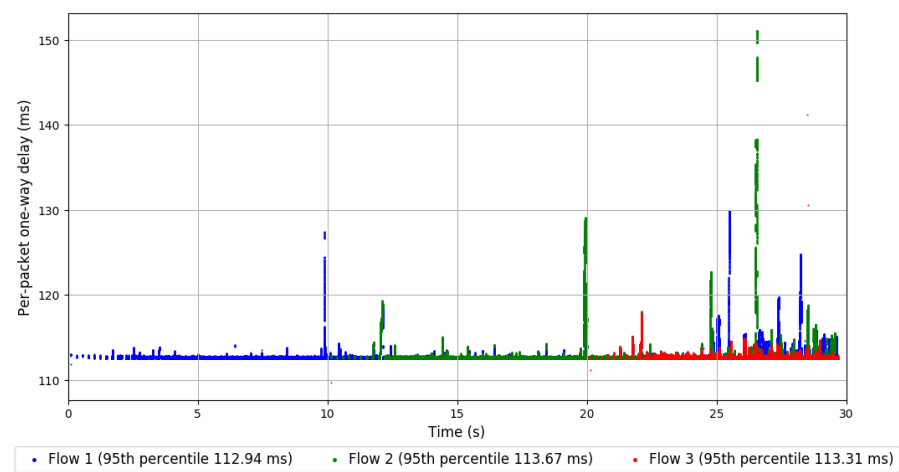
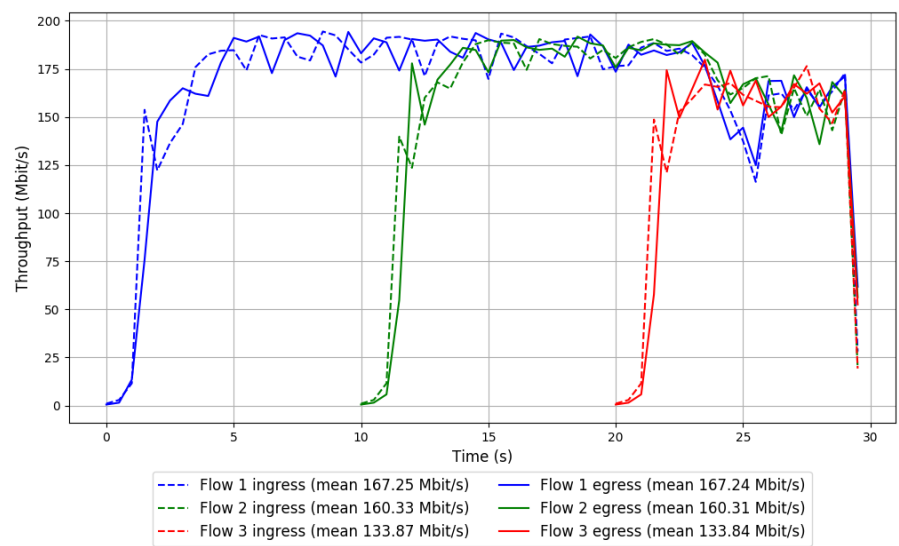
-- Flow 3:

Average throughput: 133.84 Mbit/s

95th percentile per-packet one-way delay: 113.308 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link

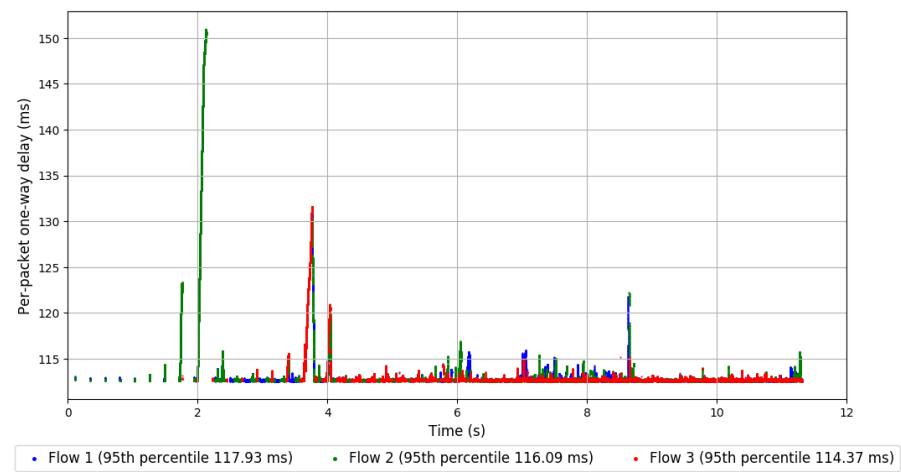
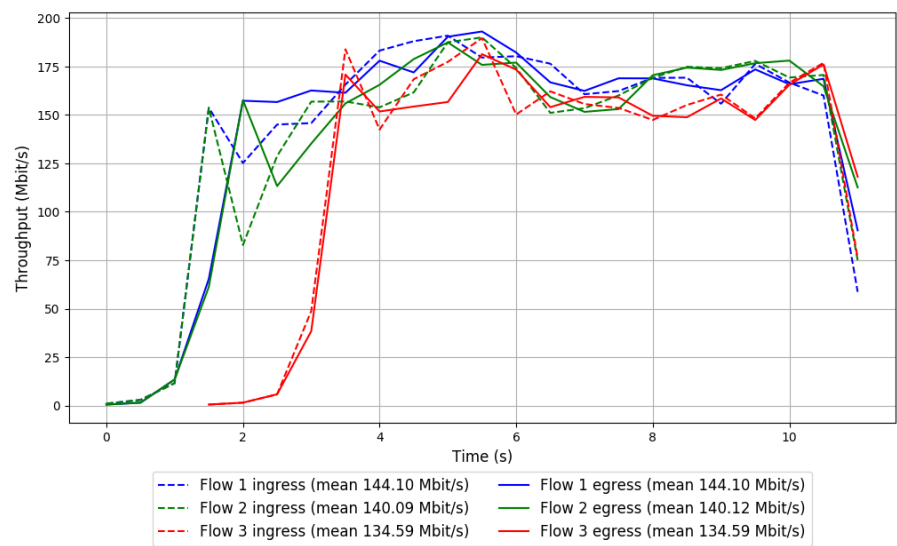


Run 7: Statistics of Indigo

Start at: 2017-10-12 07:20:41

End at: 2017-10-12 07:21:11

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-10-12 07:34:14

End at: 2017-10-12 07:34:44

Below is generated by plot.py at 2017-10-12 10:14:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 305.73 Mbit/s

95th percentile per-packet one-way delay: 112.422 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 161.91 Mbit/s

95th percentile per-packet one-way delay: 112.353 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 152.66 Mbit/s

95th percentile per-packet one-way delay: 112.535 ms

Loss rate: 0.00%

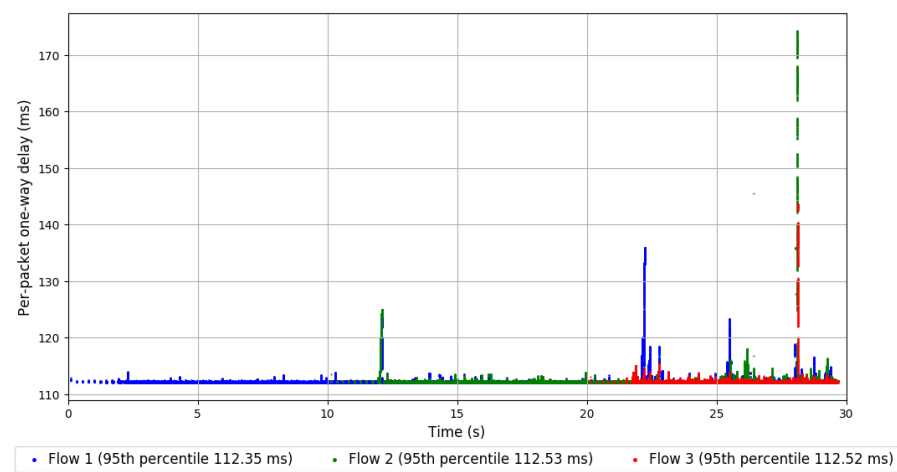
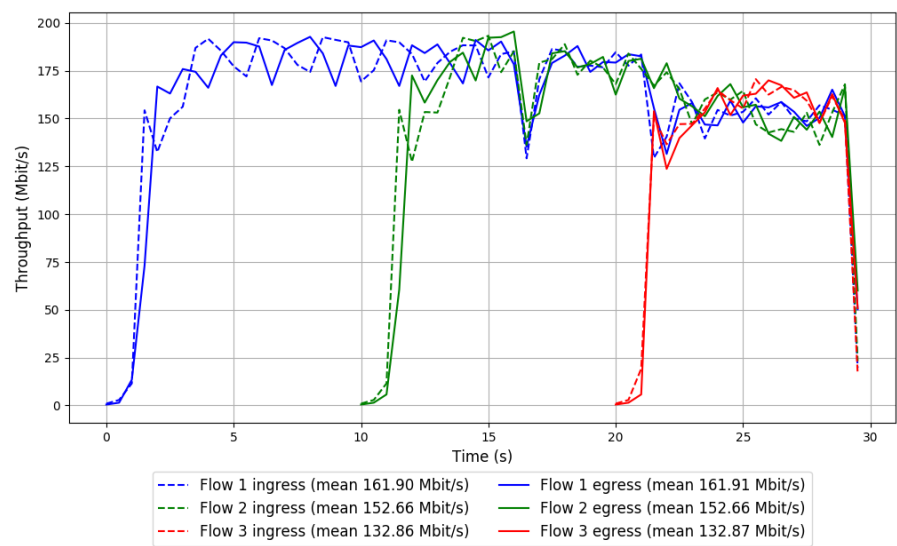
-- Flow 3:

Average throughput: 132.87 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-10-12 07:48:12

End at: 2017-10-12 07:48:42

Below is generated by plot.py at 2017-10-12 10:14:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.24 Mbit/s

95th percentile per-packet one-way delay: 112.483 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 167.53 Mbit/s

95th percentile per-packet one-way delay: 112.340 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 160.02 Mbit/s

95th percentile per-packet one-way delay: 112.693 ms

Loss rate: 0.00%

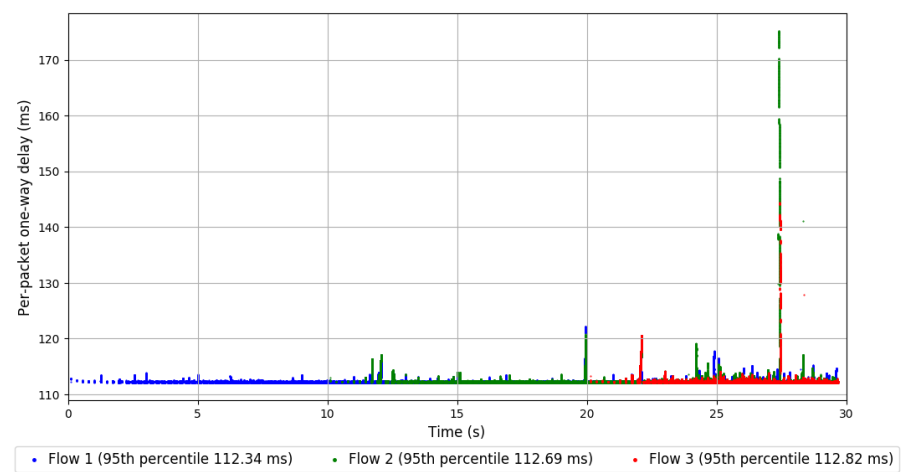
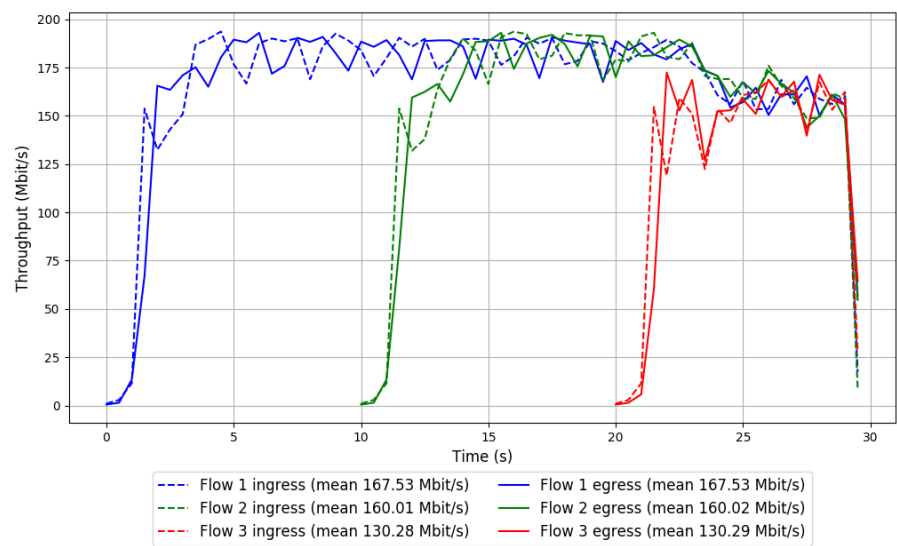
-- Flow 3:

Average throughput: 130.29 Mbit/s

95th percentile per-packet one-way delay: 112.817 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-10-12 08:02:13

End at: 2017-10-12 08:02:43

Below is generated by plot.py at 2017-10-12 10:14:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.29 Mbit/s

95th percentile per-packet one-way delay: 112.764 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 167.81 Mbit/s

95th percentile per-packet one-way delay: 112.479 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 160.06 Mbit/s

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

Loss rate: 0.00%

-- Flow 3:

Average throughput: 128.70 Mbit/s

95th percentile per-packet one-way delay: 113.139 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

