

Pantheon Report

Generated at 2017-10-12 08:46:17 (UTC).

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

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.

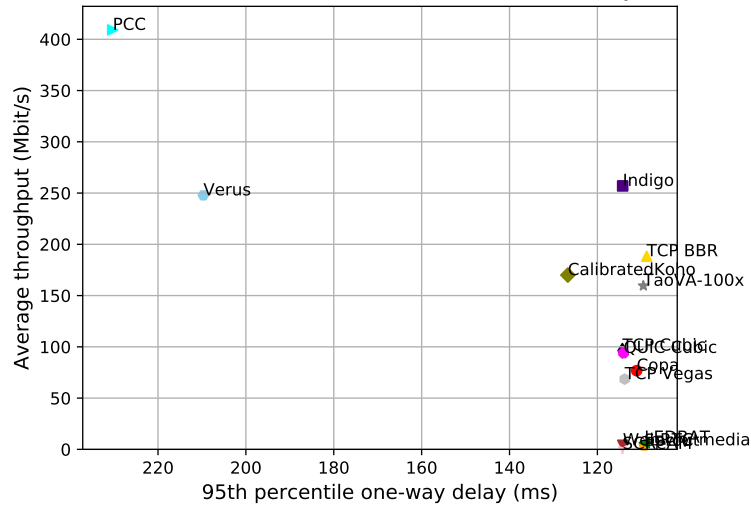
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

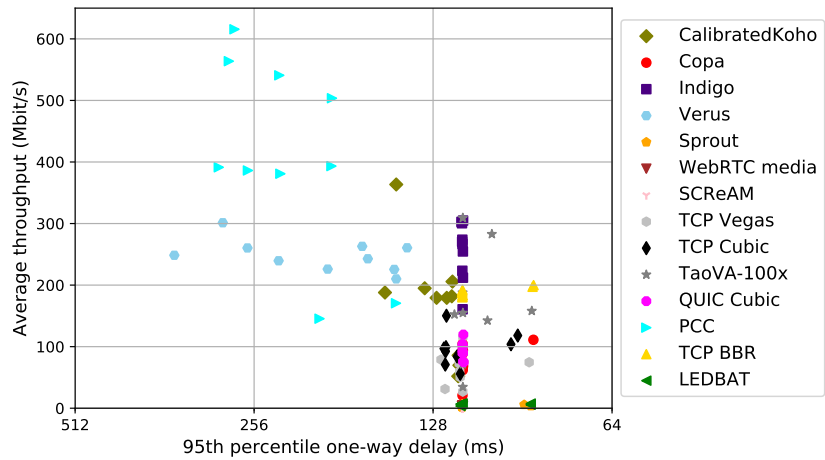
Git summary:

```
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 @ f1a14bffe749737437f61b1eae30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	96.46	95.09	88.45	108.78	108.79	104.00	0.80	1.18	2.63
TCP Cubic	10	55.40	42.71	38.78	116.11	110.71	108.58	0.89	1.99	3.65
LEDBAT	10	3.90	2.97	1.95	109.39	103.93	98.29	1.50	2.78	3.94
PCC	10	188.77	264.44	141.50	460.24	199.33	184.24	3.00	4.41	4.04
QUIC Cubic	10	50.76	49.75	32.02	105.84	108.59	105.79	0.88	0.88	2.43
SCReAM	9	0.21	0.20	0.20	114.26	108.18	102.05	0.71	0.98	1.95
WebRTC media	9	2.17	1.33	0.48	108.16	111.22	111.19	0.93	1.30	3.45
Sprout	10	1.93	1.71	1.37	109.13	111.75	109.01	0.90	1.49	3.51
TaoVA-100x	10	73.54	107.96	66.45	113.41	106.65	110.31	0.26	0.81	2.45
TCP Vegas	10	28.38	47.40	26.64	110.27	112.95	115.03	0.83	1.03	2.36
Verus	10	148.48	107.37	87.26	188.86	184.02	213.89	2.85	2.83	6.80
Copa	9	37.84	49.34	27.01	111.08	108.04	111.11	1.11	0.64	5.11
CalibratedKoho	10	104.64	89.64	18.23	126.37	124.79	111.66	1.00	0.55	6.33
Indigo	10	130.78	139.53	105.56	114.19	114.38	111.72	0.51	0.81	2.28

Run 1: Statistics of TCP BBR

Start at: 2017-10-12 03:38:02

End at: 2017-10-12 03:38:32

Below is generated by plot.py at 2017-10-12 08:05:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 183.57 Mbit/s

95th percentile per-packet one-way delay: 114.115 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 94.38 Mbit/s

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

Loss rate: 0.77%

-- Flow 2:

Average throughput: 93.10 Mbit/s

95th percentile per-packet one-way delay: 114.162 ms

Loss rate: 1.19%

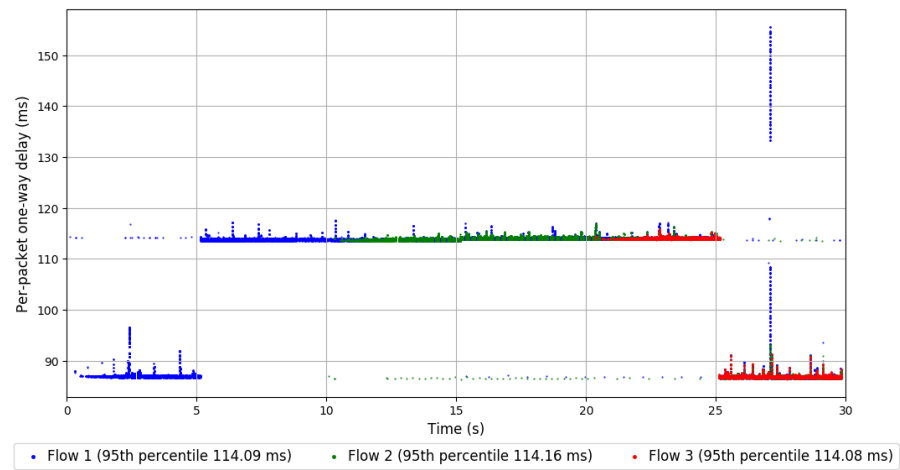
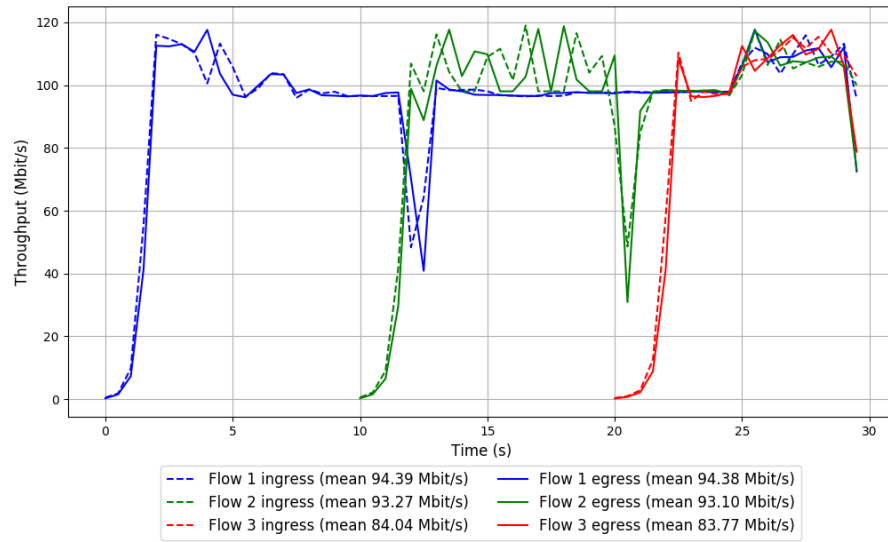
-- Flow 3:

Average throughput: 83.77 Mbit/s

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

Loss rate: 2.62%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-10-12 03:50:50

End at: 2017-10-12 03:51:20

Below is generated by plot.py at 2017-10-12 08:05:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.02 Mbit/s

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

Loss rate: 1.28%

-- Flow 1:

Average throughput: 91.39 Mbit/s

95th percentile per-packet one-way delay: 114.211 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 96.00 Mbit/s

95th percentile per-packet one-way delay: 114.300 ms

Loss rate: 1.28%

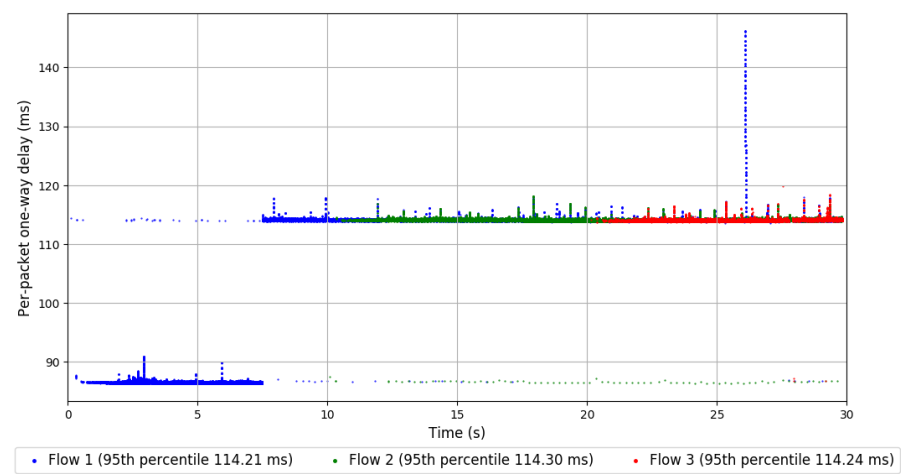
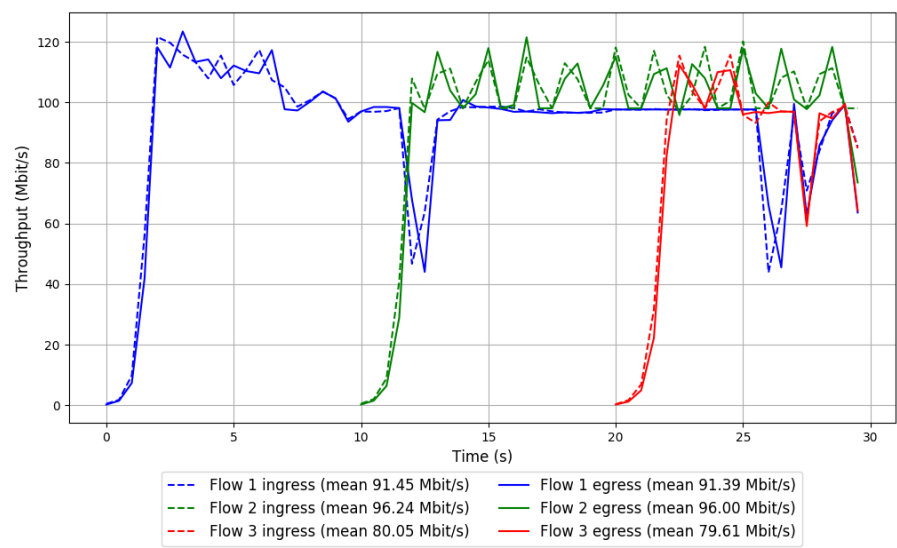
-- Flow 3:

Average throughput: 79.61 Mbit/s

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

Loss rate: 2.83%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-10-12 04:03:22

End at: 2017-10-12 04:03:52

Below is generated by plot.py at 2017-10-12 08:05:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 183.62 Mbit/s

95th percentile per-packet one-way delay: 114.227 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 93.14 Mbit/s

95th percentile per-packet one-way delay: 114.211 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 92.42 Mbit/s

95th percentile per-packet one-way delay: 114.219 ms

Loss rate: 1.20%

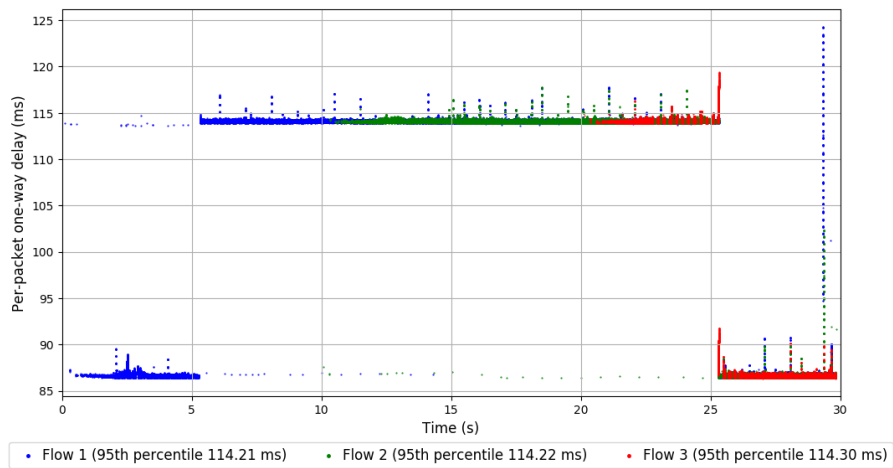
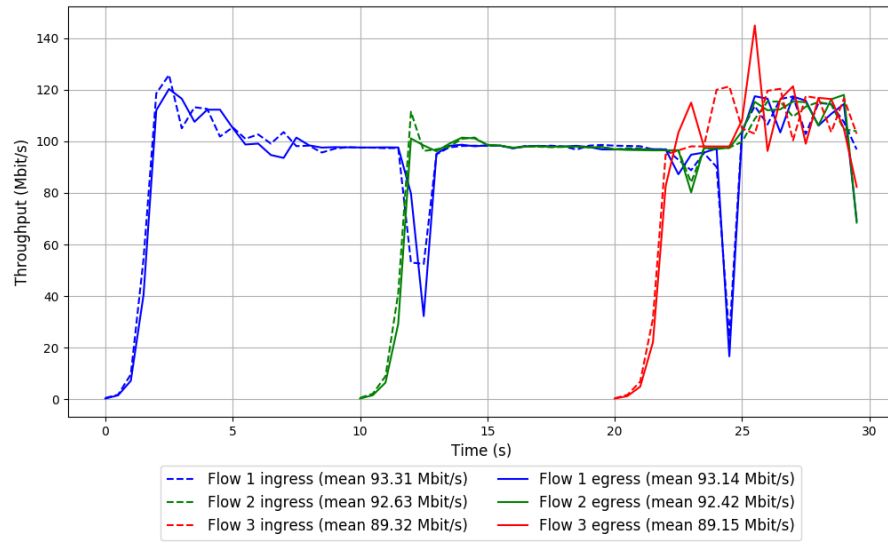
-- Flow 3:

Average throughput: 89.15 Mbit/s

95th percentile per-packet one-way delay: 114.303 ms

Loss rate: 2.50%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-10-12 04:16:15

End at: 2017-10-12 04:16:45

Below is generated by plot.py at 2017-10-12 08:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 199.93 Mbit/s

95th percentile per-packet one-way delay: 86.729 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 102.87 Mbit/s

95th percentile per-packet one-way delay: 86.786 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 101.01 Mbit/s

95th percentile per-packet one-way delay: 86.629 ms

Loss rate: 1.11%

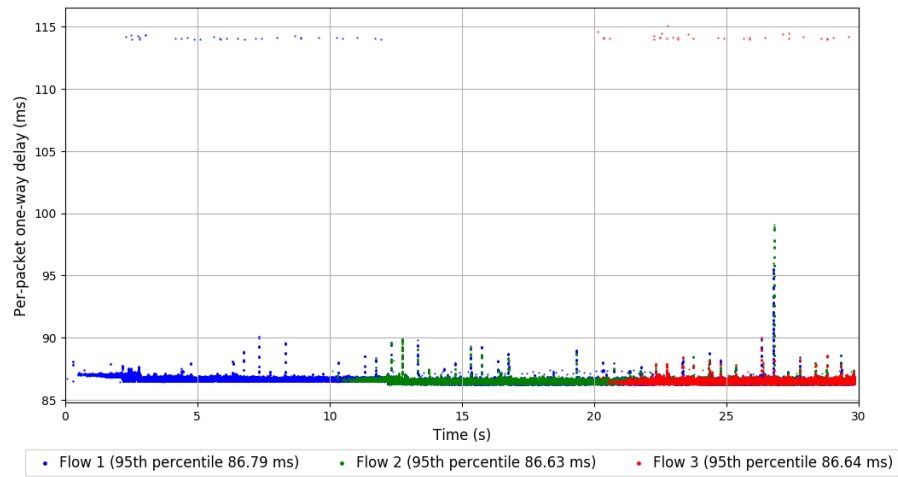
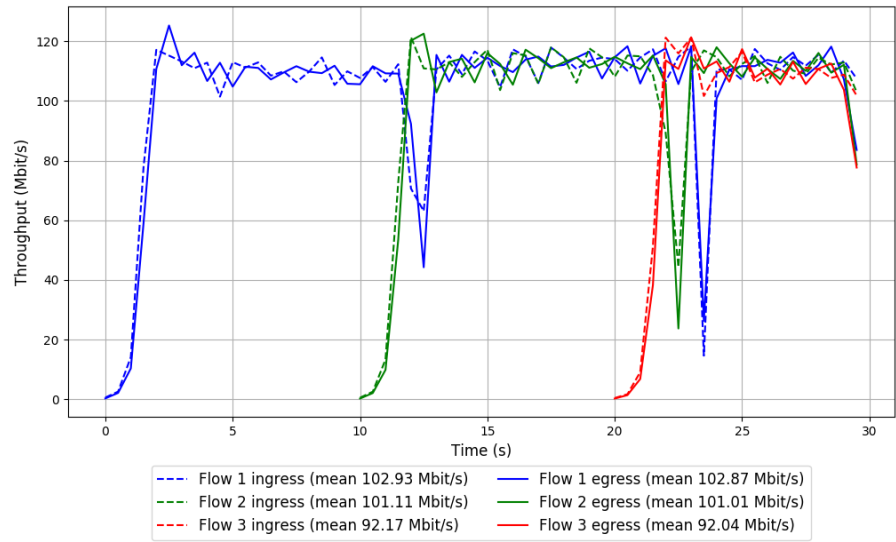
-- Flow 3:

Average throughput: 92.04 Mbit/s

95th percentile per-packet one-way delay: 86.635 ms

Loss rate: 2.46%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-10-12 04:29:12

End at: 2017-10-12 04:29:42

Below is generated by plot.py at 2017-10-12 08:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 192.50 Mbit/s

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

Loss rate: 1.14%

-- Flow 1:

Average throughput: 100.00 Mbit/s

95th percentile per-packet one-way delay: 114.207 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 97.06 Mbit/s

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

Loss rate: 1.11%

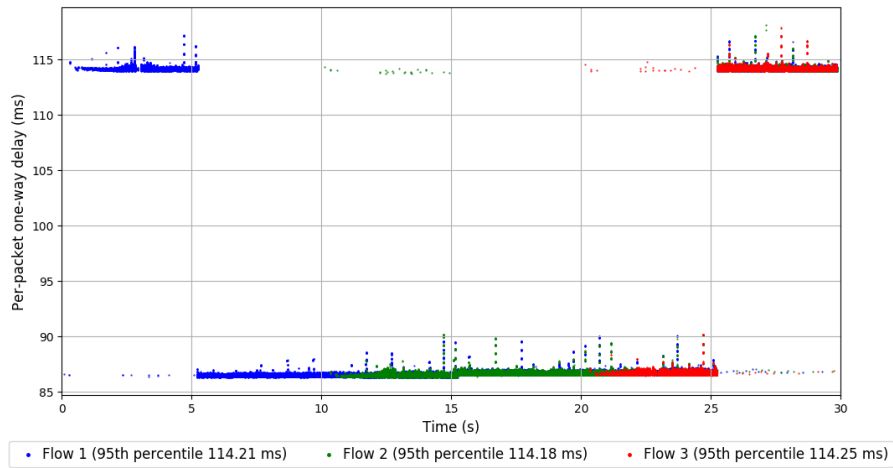
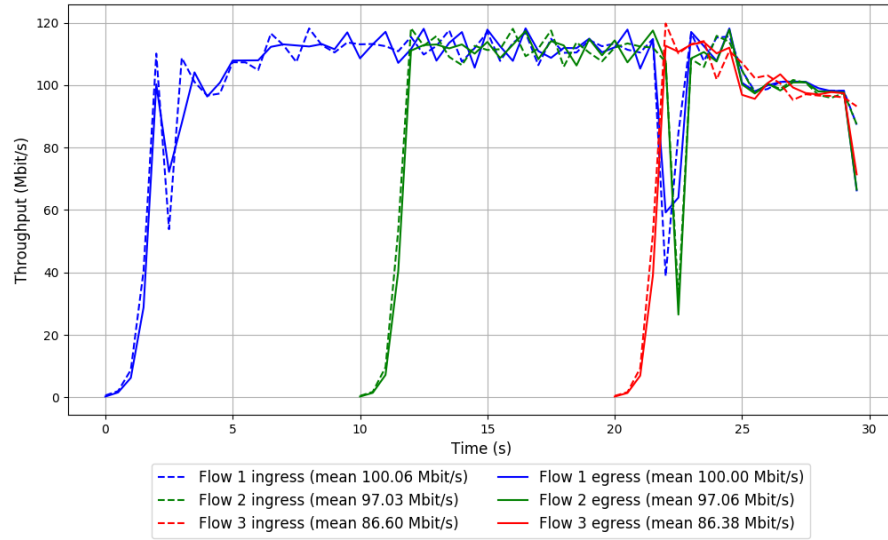
-- Flow 3:

Average throughput: 86.38 Mbit/s

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

Loss rate: 2.61%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-10-12 04:41:48

End at: 2017-10-12 04:42:18

Below is generated by plot.py at 2017-10-12 08:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.85 Mbit/s

95th percentile per-packet one-way delay: 114.296 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 97.00 Mbit/s

95th percentile per-packet one-way delay: 114.239 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 94.38 Mbit/s

95th percentile per-packet one-way delay: 114.249 ms

Loss rate: 1.12%

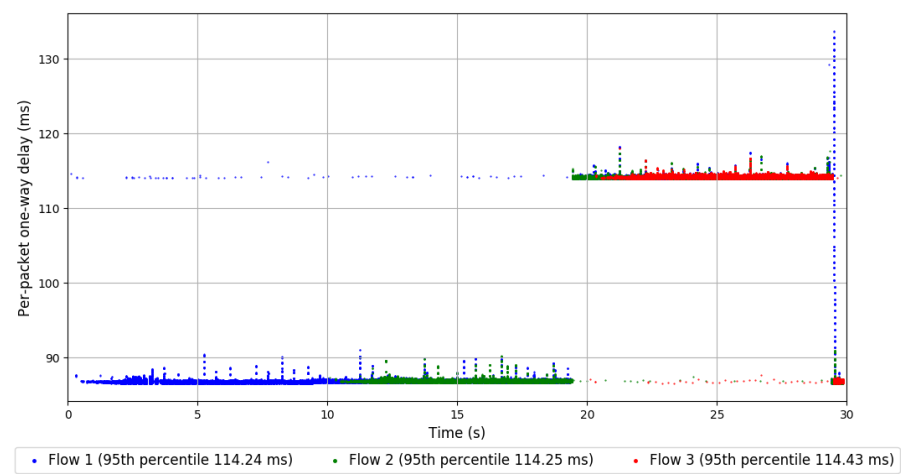
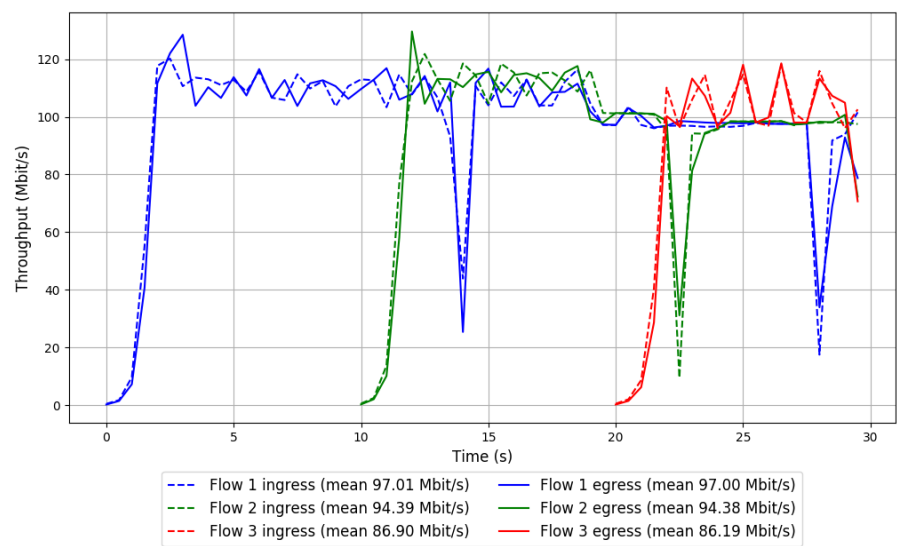
-- Flow 3:

Average throughput: 86.19 Mbit/s

95th percentile per-packet one-way delay: 114.433 ms

Loss rate: 2.76%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-10-12 04:54:15

End at: 2017-10-12 04:54:45

Below is generated by plot.py at 2017-10-12 08:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 180.15 Mbit/s

95th percentile per-packet one-way delay: 114.287 ms

Loss rate: 1.34%

-- Flow 1:

Average throughput: 89.80 Mbit/s

95th percentile per-packet one-way delay: 114.287 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 92.30 Mbit/s

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

Loss rate: 1.27%

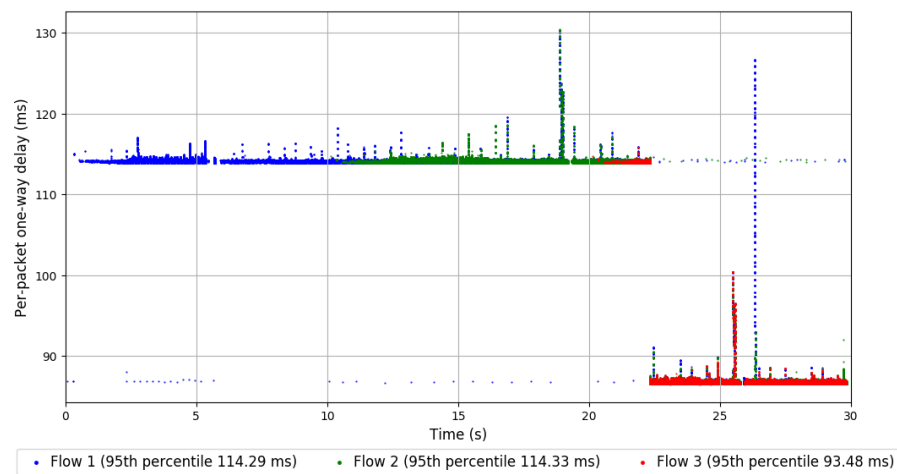
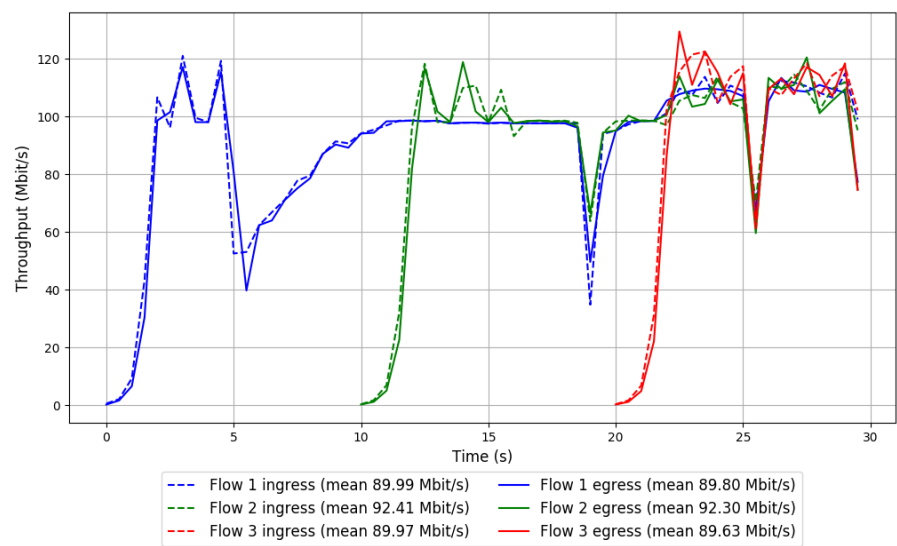
-- Flow 3:

Average throughput: 89.63 Mbit/s

95th percentile per-packet one-way delay: 93.479 ms

Loss rate: 2.85%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-10-12 05:07:26

End at: 2017-10-12 05:07:56

Below is generated by plot.py at 2017-10-12 08:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.38 Mbit/s

95th percentile per-packet one-way delay: 114.310 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 98.70 Mbit/s

95th percentile per-packet one-way delay: 114.308 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 93.13 Mbit/s

95th percentile per-packet one-way delay: 114.344 ms

Loss rate: 1.24%

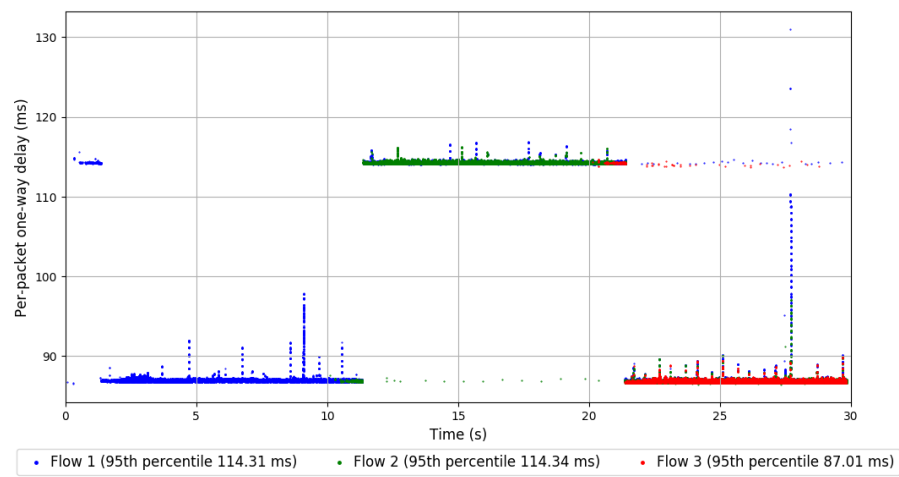
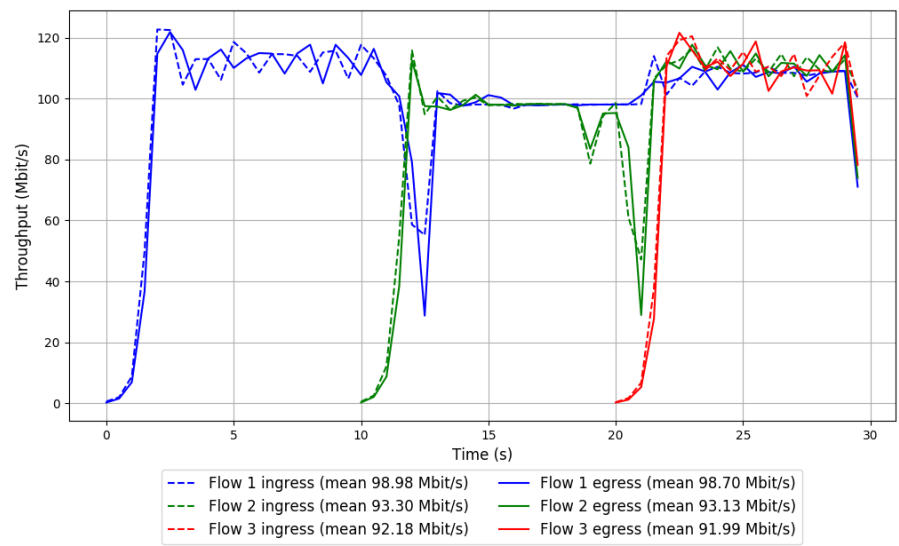
-- Flow 3:

Average throughput: 91.99 Mbit/s

95th percentile per-packet one-way delay: 87.006 ms

Loss rate: 2.65%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-10-12 05:19:56

End at: 2017-10-12 05:20:26

Below is generated by plot.py at 2017-10-12 08:09:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 197.27 Mbit/s

95th percentile per-packet one-way delay: 87.069 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 102.37 Mbit/s

95th percentile per-packet one-way delay: 87.050 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 97.06 Mbit/s

95th percentile per-packet one-way delay: 87.069 ms

Loss rate: 1.13%

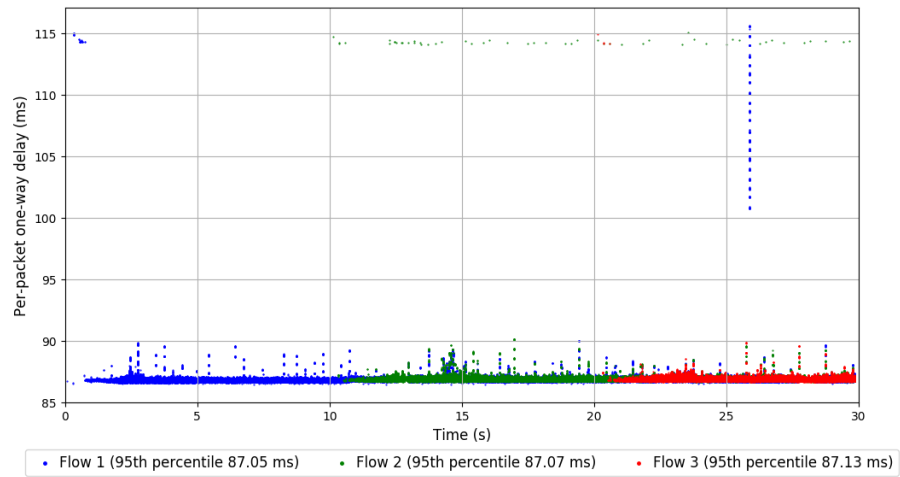
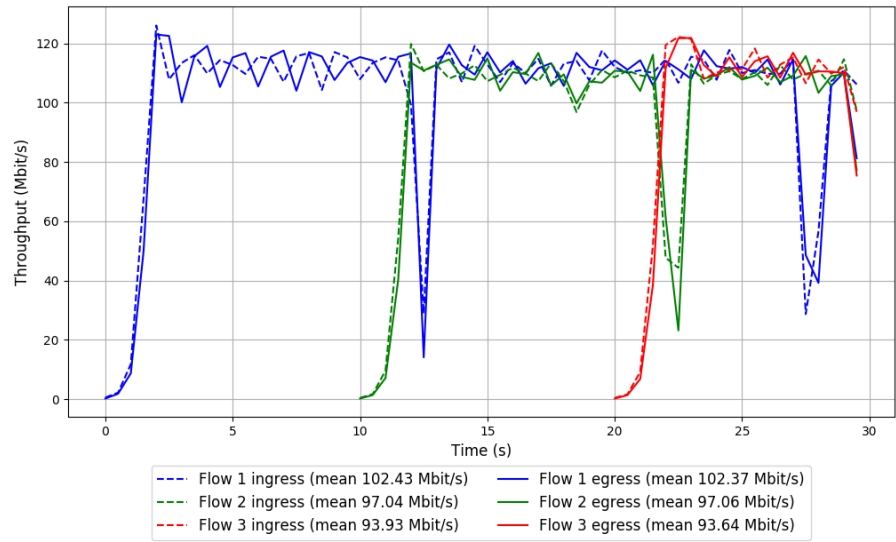
-- Flow 3:

Average throughput: 93.64 Mbit/s

95th percentile per-packet one-way delay: 87.127 ms

Loss rate: 2.33%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-10-12 05:33:00

End at: 2017-10-12 05:33:30

Below is generated by plot.py at 2017-10-12 08:09:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.55 Mbit/s

95th percentile per-packet one-way delay: 114.417 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 94.93 Mbit/s

95th percentile per-packet one-way delay: 114.420 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 94.48 Mbit/s

95th percentile per-packet one-way delay: 114.417 ms

Loss rate: 1.17%

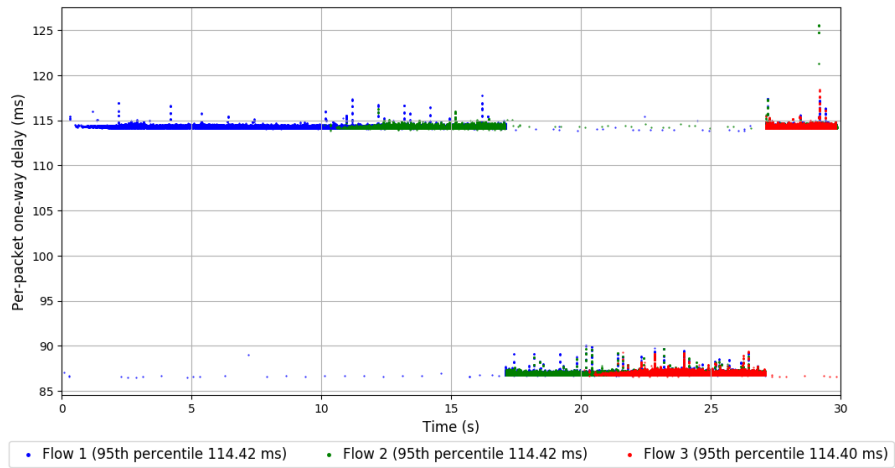
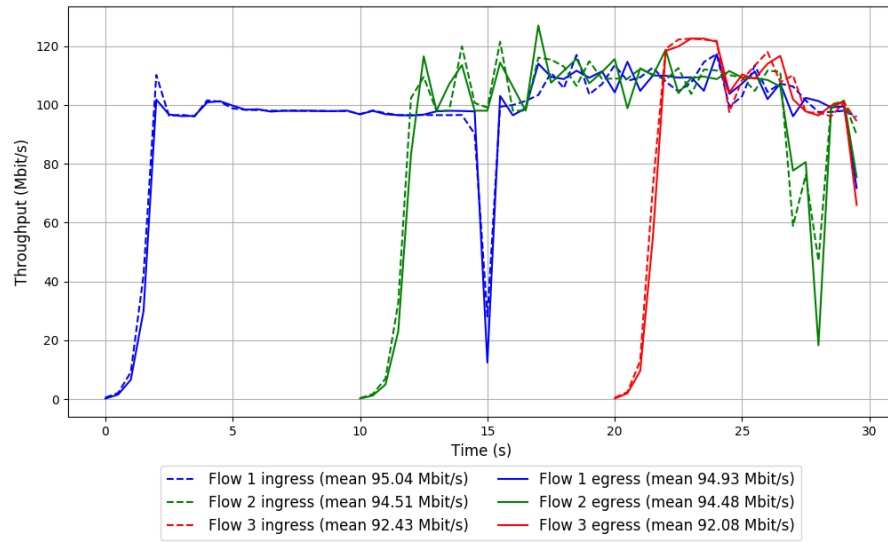
-- Flow 3:

Average throughput: 92.08 Mbit/s

95th percentile per-packet one-way delay: 114.402 ms

Loss rate: 2.67%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-10-12 03:44:37

End at: 2017-10-12 03:45:07

Below is generated by plot.py at 2017-10-12 08:09:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.95 Mbit/s

95th percentile per-packet one-way delay: 122.736 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 51.75 Mbit/s

95th percentile per-packet one-way delay: 123.456 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 59.75 Mbit/s

95th percentile per-packet one-way delay: 118.796 ms

Loss rate: 1.46%

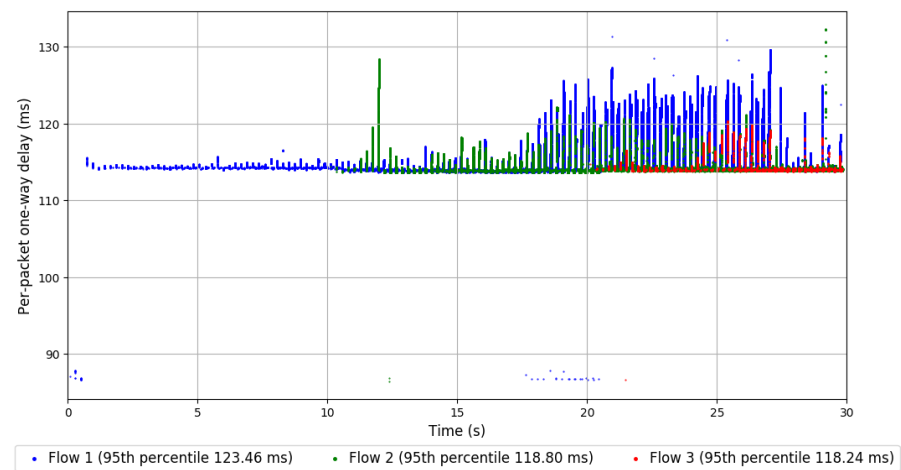
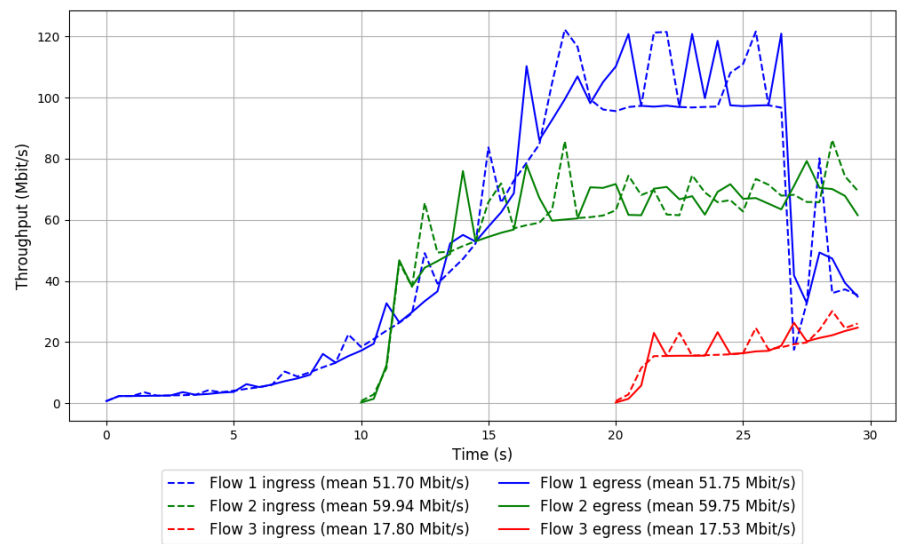
-- Flow 3:

Average throughput: 17.53 Mbit/s

95th percentile per-packet one-way delay: 118.244 ms

Loss rate: 3.76%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-10-12 03:57:08

End at: 2017-10-12 03:57:38

Below is generated by plot.py at 2017-10-12 08:09:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 55.88 Mbit/s

95th percentile per-packet one-way delay: 115.202 ms

Loss rate: 2.13%

-- Flow 1:

Average throughput: 45.40 Mbit/s

95th percentile per-packet one-way delay: 115.264 ms

Loss rate: 1.63%

-- Flow 2:

Average throughput: 13.09 Mbit/s

95th percentile per-packet one-way delay: 115.064 ms

Loss rate: 3.58%

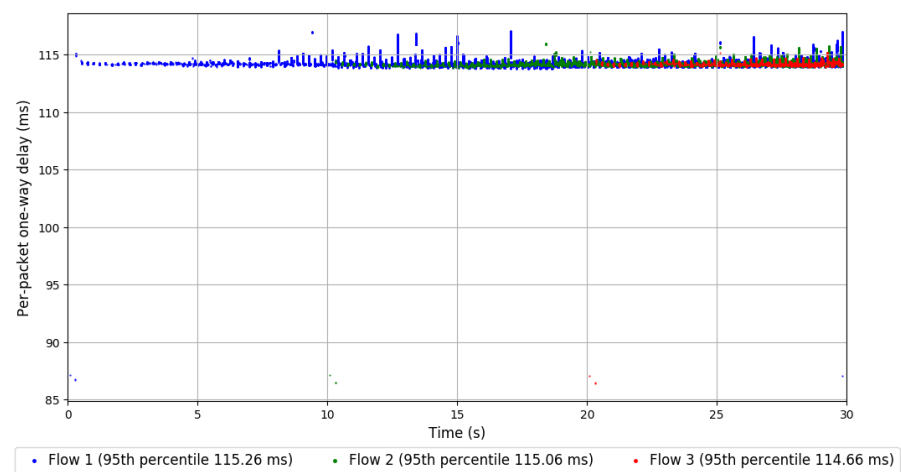
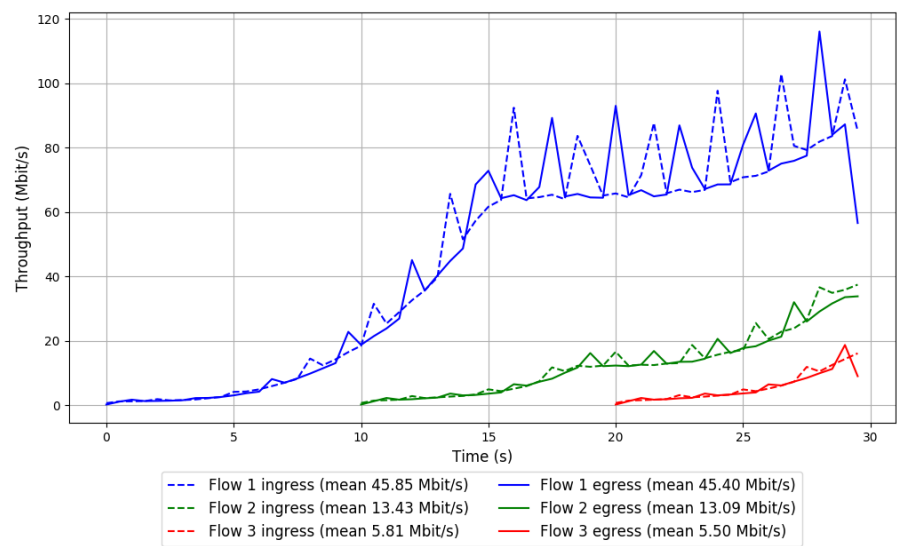
-- Flow 3:

Average throughput: 5.50 Mbit/s

95th percentile per-packet one-way delay: 114.659 ms

Loss rate: 7.25%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-10-12 04:09:59

End at: 2017-10-12 04:10:29

Below is generated by plot.py at 2017-10-12 08:09:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.05 Mbit/s

95th percentile per-packet one-way delay: 92.212 ms

Loss rate: 1.40%

-- Flow 1:

Average throughput: 56.45 Mbit/s

95th percentile per-packet one-way delay: 90.548 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 56.66 Mbit/s

95th percentile per-packet one-way delay: 94.476 ms

Loss rate: 1.12%

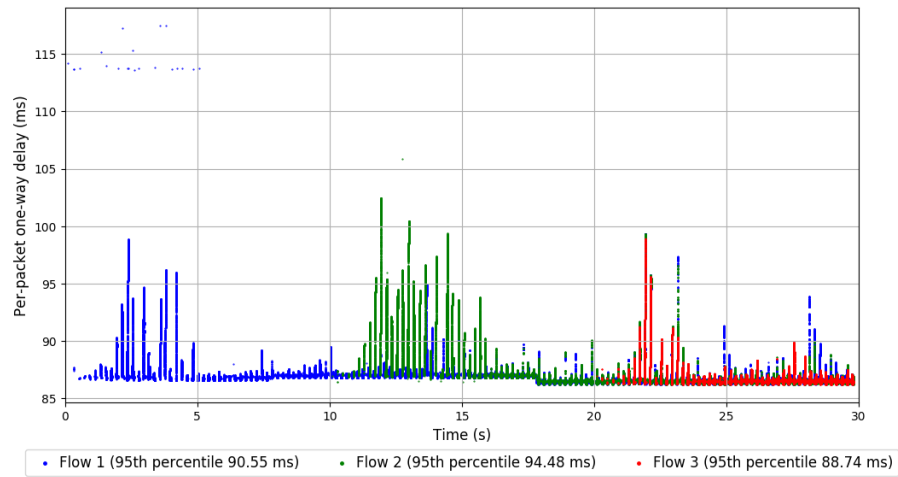
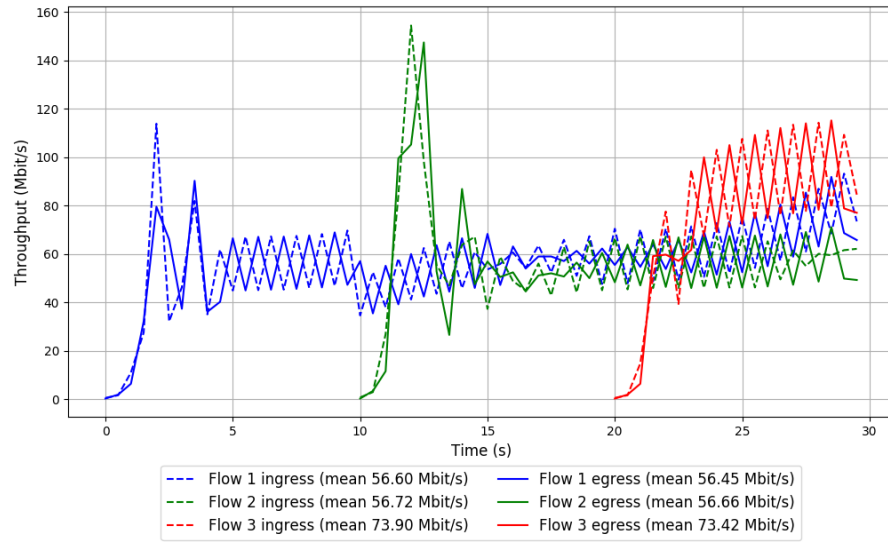
-- Flow 3:

Average throughput: 73.42 Mbit/s

95th percentile per-packet one-way delay: 88.738 ms

Loss rate: 2.66%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-10-12 04:22:56

End at: 2017-10-12 04:23:26

Below is generated by plot.py at 2017-10-12 08:09:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.87 Mbit/s

95th percentile per-packet one-way delay: 94.664 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 50.49 Mbit/s

95th percentile per-packet one-way delay: 114.157 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 53.18 Mbit/s

95th percentile per-packet one-way delay: 91.458 ms

Loss rate: 1.20%

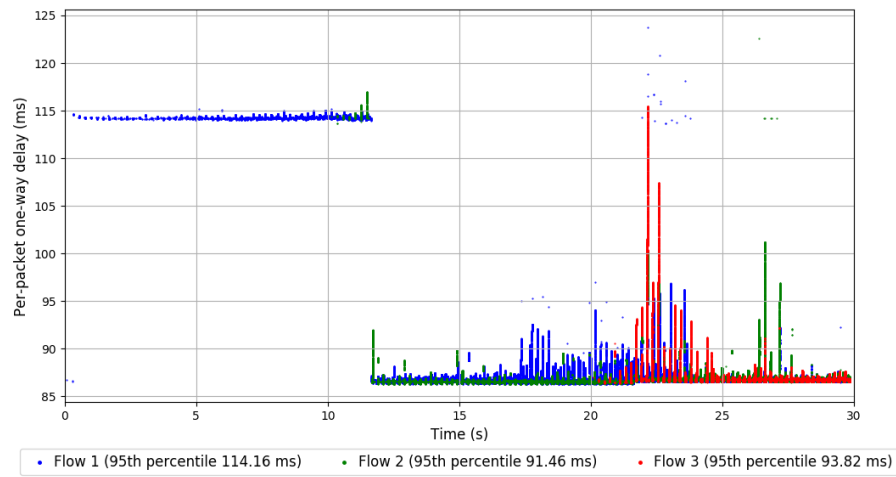
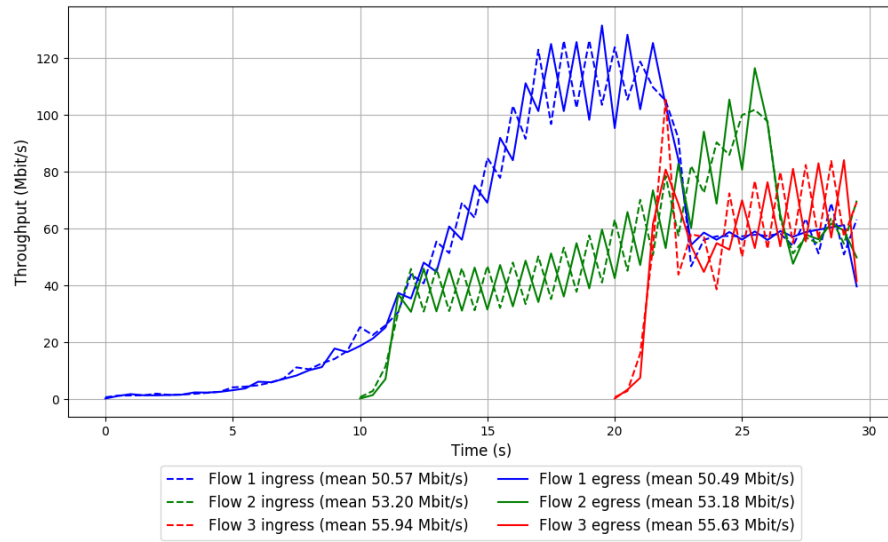
-- Flow 3:

Average throughput: 55.63 Mbit/s

95th percentile per-packet one-way delay: 93.821 ms

Loss rate: 2.56%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-10-12 04:35:54

End at: 2017-10-12 04:36:24

Below is generated by plot.py at 2017-10-12 08:09:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.51 Mbit/s

95th percentile per-packet one-way delay: 121.952 ms

Loss rate: 1.68%

-- Flow 1:

Average throughput: 60.33 Mbit/s

95th percentile per-packet one-way delay: 121.574 ms

Loss rate: 1.32%

-- Flow 2:

Average throughput: 16.85 Mbit/s

95th percentile per-packet one-way delay: 117.142 ms

Loss rate: 2.67%

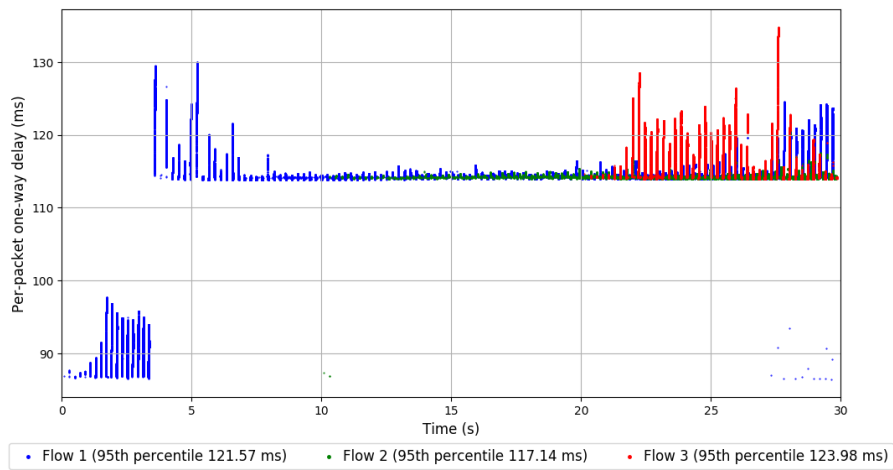
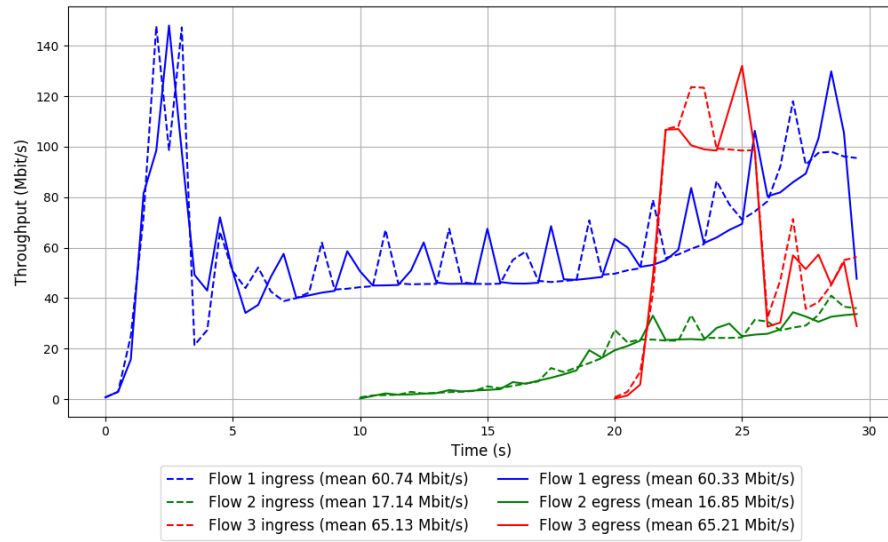
-- Flow 3:

Average throughput: 65.21 Mbit/s

95th percentile per-packet one-way delay: 123.983 ms

Loss rate: 2.18%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-10-12 04:48:07

End at: 2017-10-12 04:48:37

Below is generated by plot.py at 2017-10-12 08:09:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.87 Mbit/s

95th percentile per-packet one-way delay: 122.080 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 35.81 Mbit/s

95th percentile per-packet one-way delay: 122.322 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 31.92 Mbit/s

95th percentile per-packet one-way delay: 120.374 ms

Loss rate: 1.22%

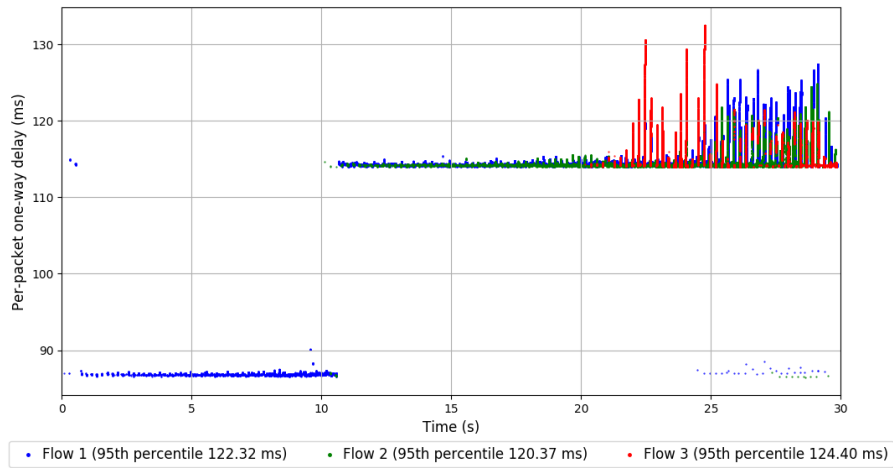
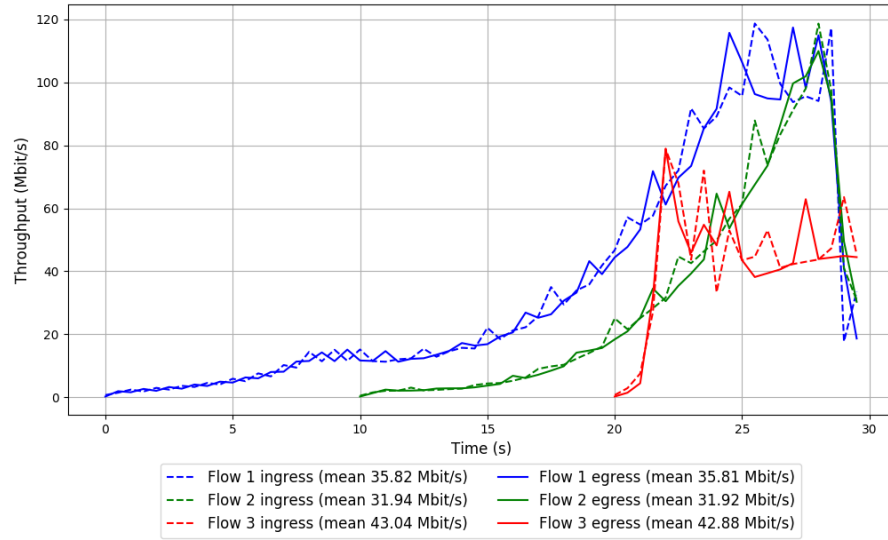
-- Flow 3:

Average throughput: 42.88 Mbit/s

95th percentile per-packet one-way delay: 124.400 ms

Loss rate: 2.66%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-10-12 05:00:53

End at: 2017-10-12 05:01:23

Below is generated by plot.py at 2017-10-12 08:09:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.46 Mbit/s

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

Loss rate: 1.40%

-- Flow 1:

Average throughput: 65.60 Mbit/s

95th percentile per-packet one-way delay: 114.503 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 14.29 Mbit/s

95th percentile per-packet one-way delay: 89.254 ms

Loss rate: 3.77%

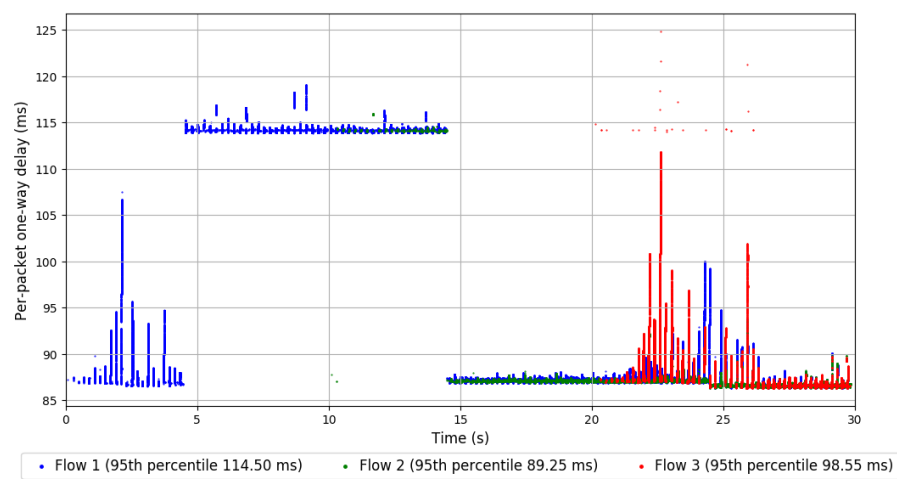
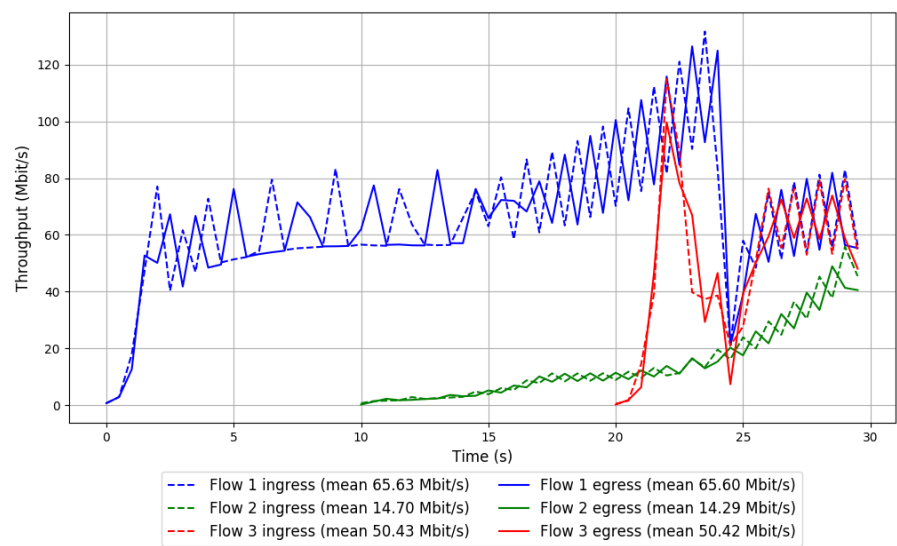
-- Flow 3:

Average throughput: 50.42 Mbit/s

95th percentile per-packet one-way delay: 98.551 ms

Loss rate: 2.69%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-10-12 05:13:53

End at: 2017-10-12 05:14:23

Below is generated by plot.py at 2017-10-12 08:09:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.03 Mbit/s

95th percentile per-packet one-way delay: 116.629 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 56.31 Mbit/s

95th percentile per-packet one-way delay: 118.917 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 38.74 Mbit/s

95th percentile per-packet one-way delay: 115.040 ms

Loss rate: 2.92%

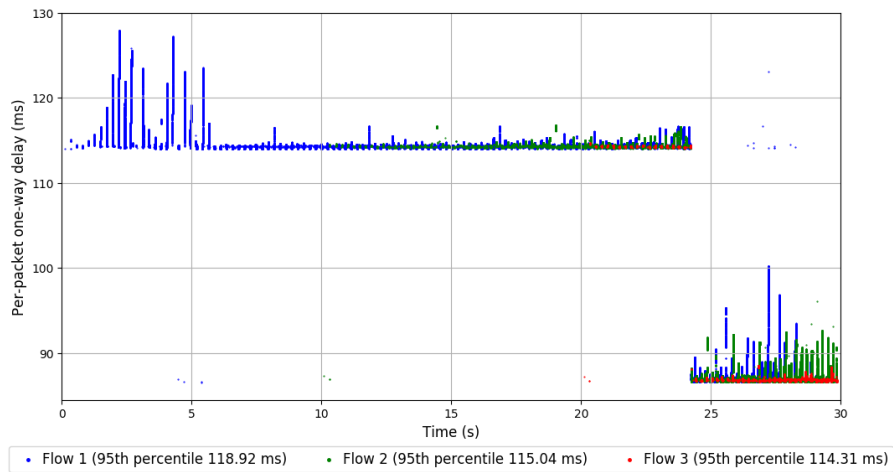
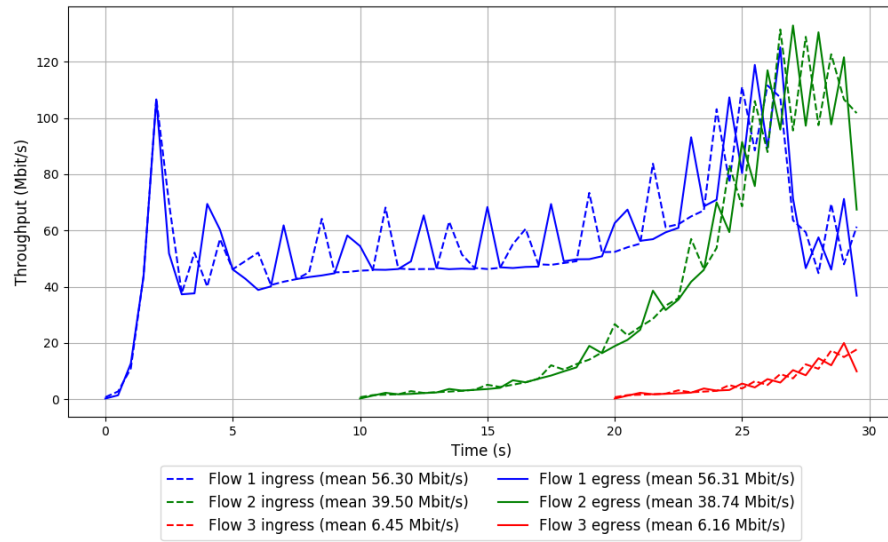
-- Flow 3:

Average throughput: 6.16 Mbit/s

95th percentile per-packet one-way delay: 114.312 ms

Loss rate: 6.51%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-10-12 05:26:45

End at: 2017-10-12 05:27:15

Below is generated by plot.py at 2017-10-12 08:09:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.24 Mbit/s

95th percentile per-packet one-way delay: 121.537 ms

Loss rate: 0.94%

-- Flow 1:

Average throughput: 76.72 Mbit/s

95th percentile per-packet one-way delay: 119.051 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 77.98 Mbit/s

95th percentile per-packet one-way delay: 122.442 ms

Loss rate: 0.73%

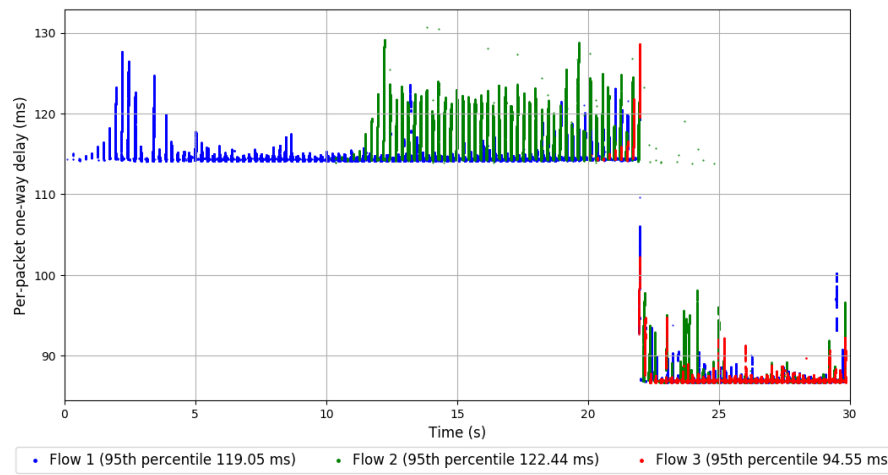
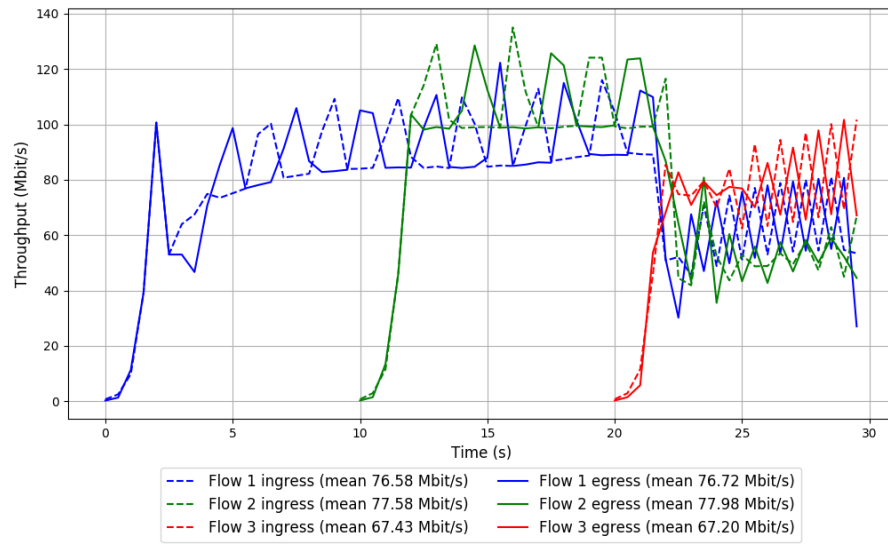
-- Flow 3:

Average throughput: 67.20 Mbit/s

95th percentile per-packet one-way delay: 94.550 ms

Loss rate: 2.64%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-10-12 05:39:31

End at: 2017-10-12 05:40:01

Below is generated by plot.py at 2017-10-12 08:09:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.20 Mbit/s

95th percentile per-packet one-way delay: 121.761 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 55.13 Mbit/s

95th percentile per-packet one-way delay: 121.346 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 64.59 Mbit/s

95th percentile per-packet one-way delay: 123.031 ms

Loss rate: 1.28%

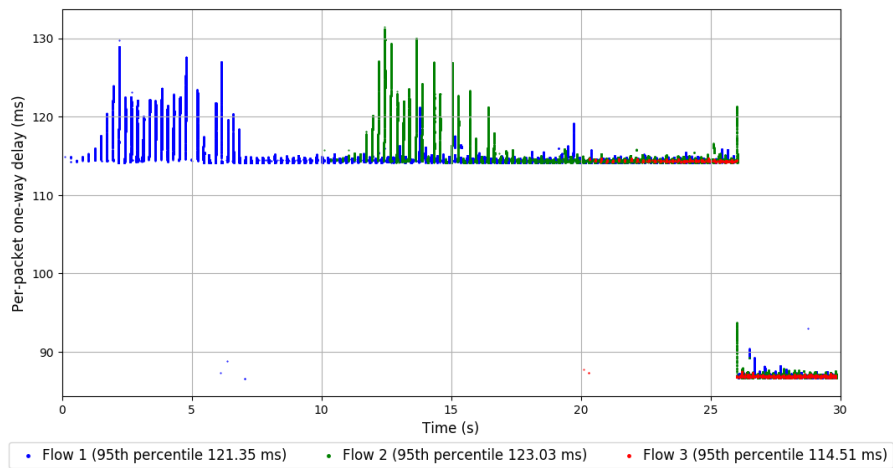
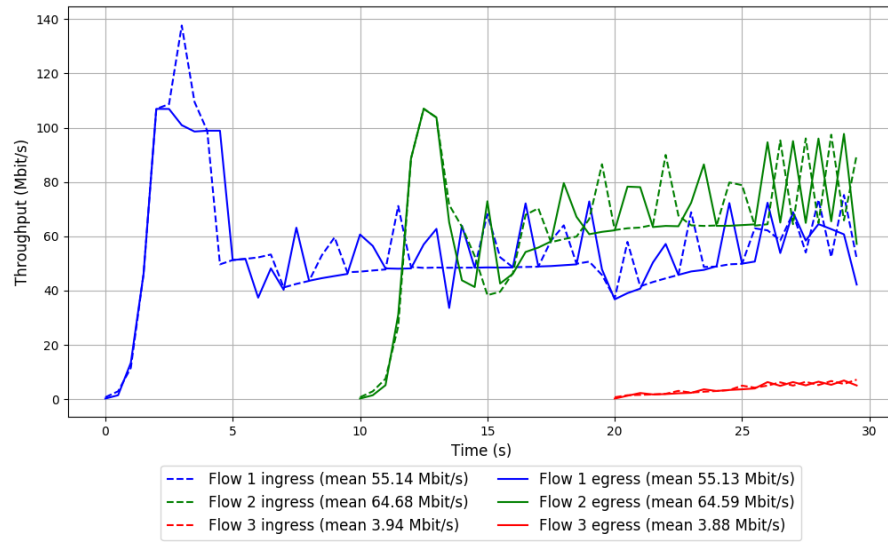
-- Flow 3:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 114.511 ms

Loss rate: 3.55%

Run 10: Report of TCP Cubic — Data Link

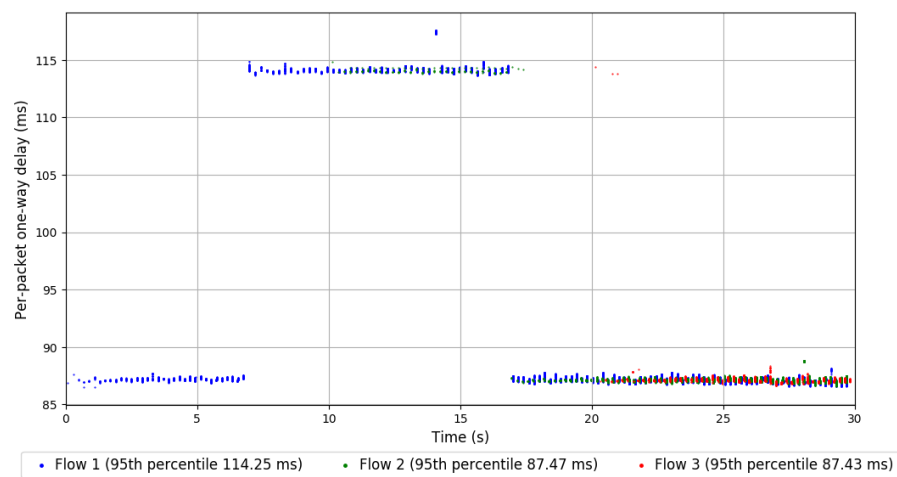
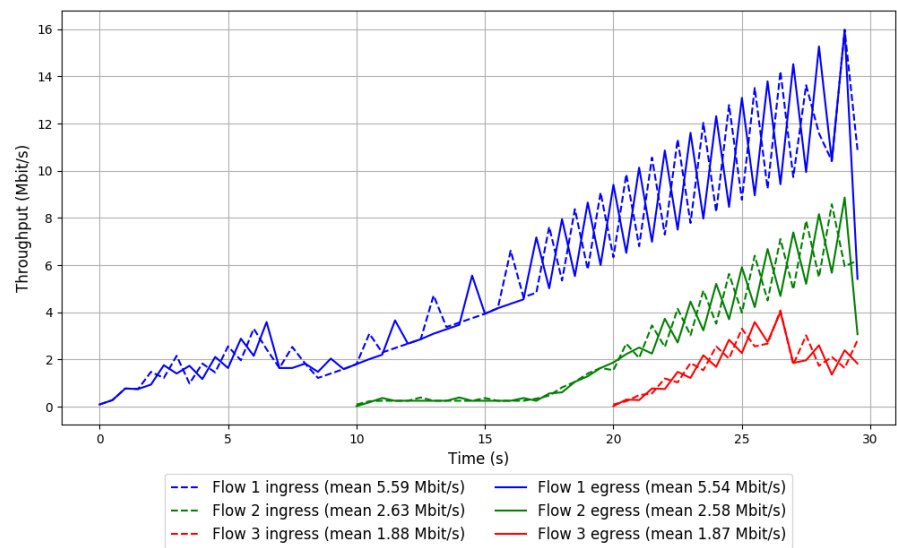


```
Run 1: Statistics of LEDBAT

Start at: 2017-10-12 03:42:00
End at: 2017-10-12 03:42:30

# Below is generated by plot.py at 2017-10-12 08:09:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.82 Mbit/s
95th percentile per-packet one-way delay: 114.194 ms
Loss rate: 2.05%
-- Flow 1:
Average throughput: 5.54 Mbit/s
95th percentile per-packet one-way delay: 114.249 ms
Loss rate: 1.64%
-- Flow 2:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 87.471 ms
Loss rate: 3.00%
-- Flow 3:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 87.429 ms
Loss rate: 3.14%
```


Run 1: Report of LEDBAT — Data Link

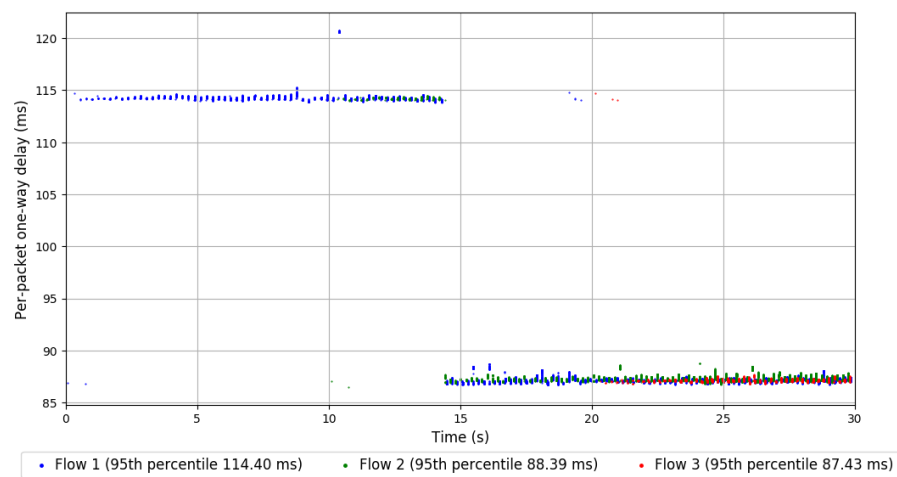
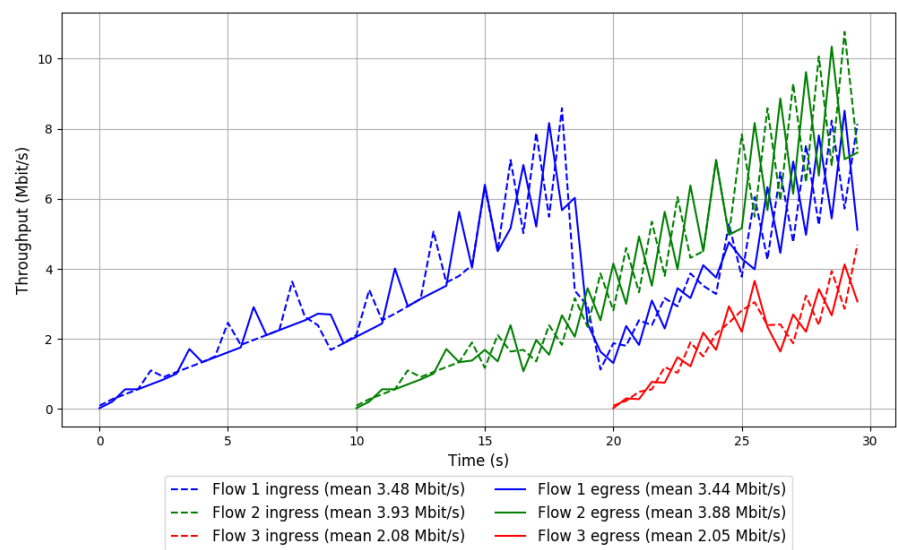


```
Run 2: Statistics of LEDBAT

Start at: 2017-10-12 03:54:33
End at: 2017-10-12 03:55:03

# Below is generated by plot.py at 2017-10-12 08:09:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.67 Mbit/s
95th percentile per-packet one-way delay: 114.318 ms
Loss rate: 2.13%
-- Flow 1:
Average throughput: 3.44 Mbit/s
95th percentile per-packet one-way delay: 114.399 ms
Loss rate: 1.58%
-- Flow 2:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 88.391 ms
Loss rate: 2.39%
-- Flow 3:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 87.426 ms
Loss rate: 3.92%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-10-12 04:07:21

End at: 2017-10-12 04:07:51

Below is generated by plot.py at 2017-10-12 08:09:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.69 Mbit/s

95th percentile per-packet one-way delay: 114.877 ms

Loss rate: 1.67%

-- Flow 1:

Average throughput: 3.96 Mbit/s

95th percentile per-packet one-way delay: 114.760 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 3.38 Mbit/s

95th percentile per-packet one-way delay: 114.933 ms

Loss rate: 2.27%

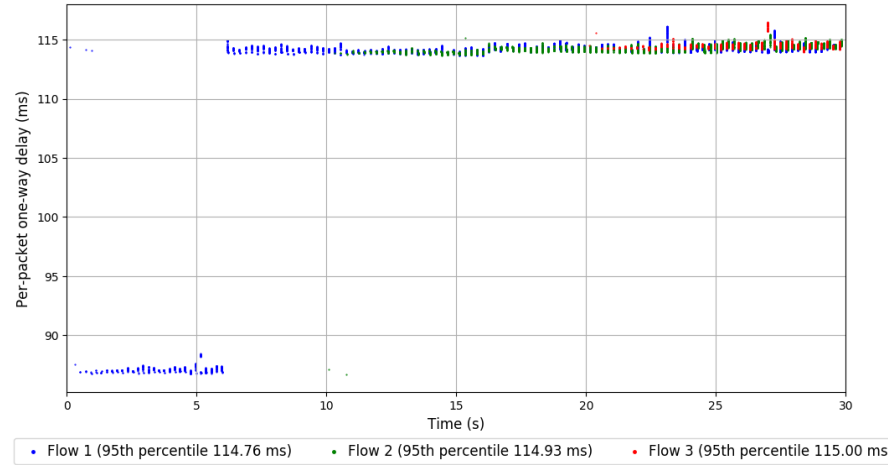
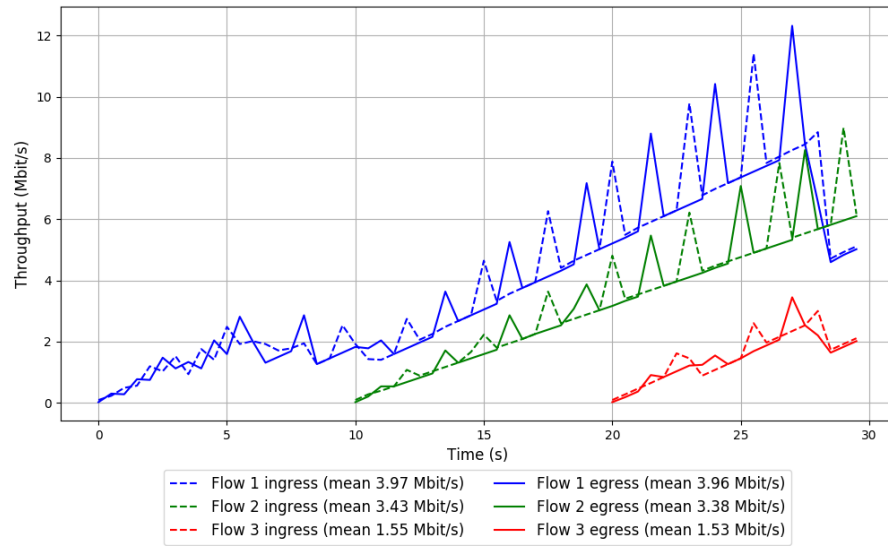
-- Flow 3:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 114.996 ms

Loss rate: 3.54%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-10-12 04:20:18

End at: 2017-10-12 04:20:48

Below is generated by plot.py at 2017-10-12 08:09:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.57 Mbit/s

95th percentile per-packet one-way delay: 87.725 ms

Loss rate: 2.36%

-- Flow 1:

Average throughput: 3.49 Mbit/s

95th percentile per-packet one-way delay: 87.952 ms

Loss rate: 1.99%

-- Flow 2:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 87.248 ms

Loss rate: 2.05%

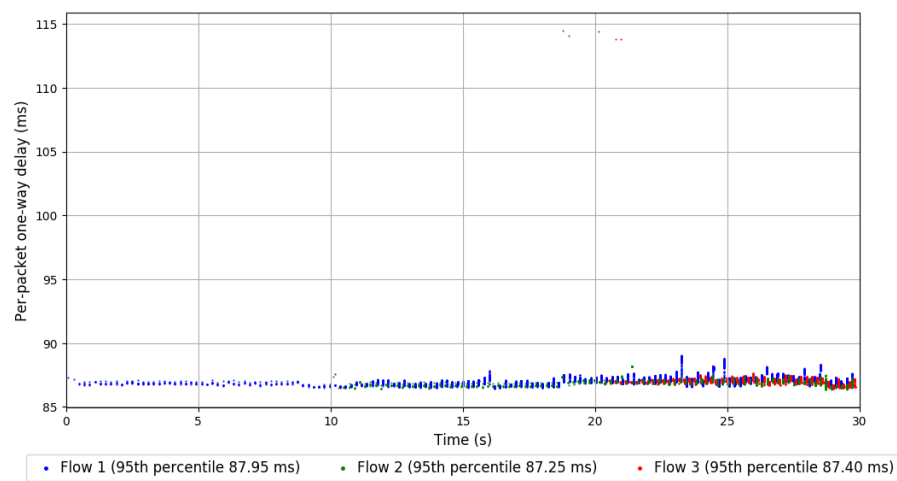
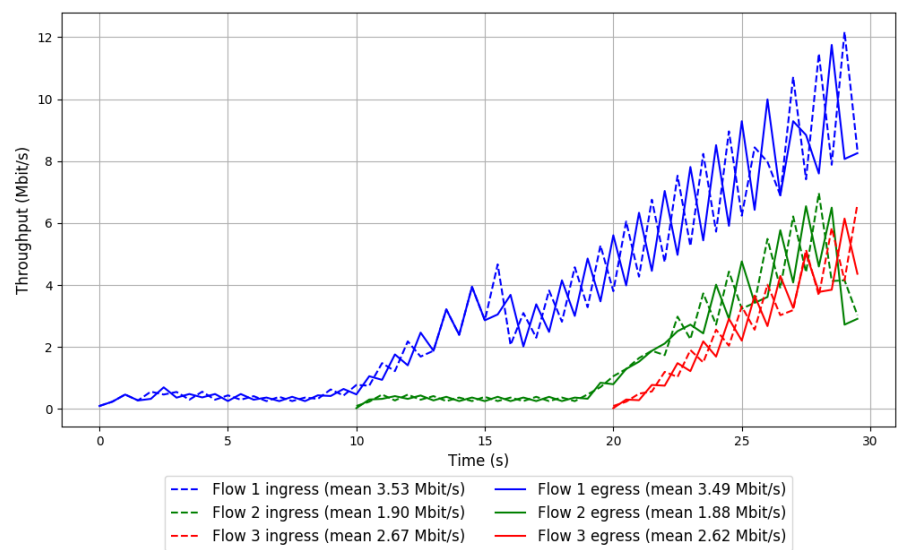
-- Flow 3:

Average throughput: 2.62 Mbit/s

95th percentile per-packet one-way delay: 87.396 ms

Loss rate: 4.24%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-10-12 04:33:16

End at: 2017-10-12 04:33:46

Below is generated by plot.py at 2017-10-12 08:09:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.15 Mbit/s

95th percentile per-packet one-way delay: 114.589 ms

Loss rate: 2.12%

-- Flow 1:

Average throughput: 5.69 Mbit/s

95th percentile per-packet one-way delay: 114.619 ms

Loss rate: 1.57%

-- Flow 2:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 114.370 ms

Loss rate: 4.01%

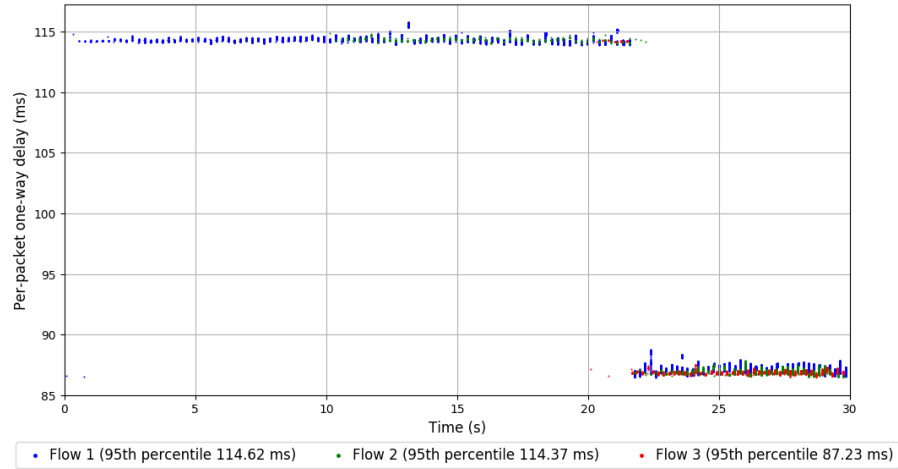
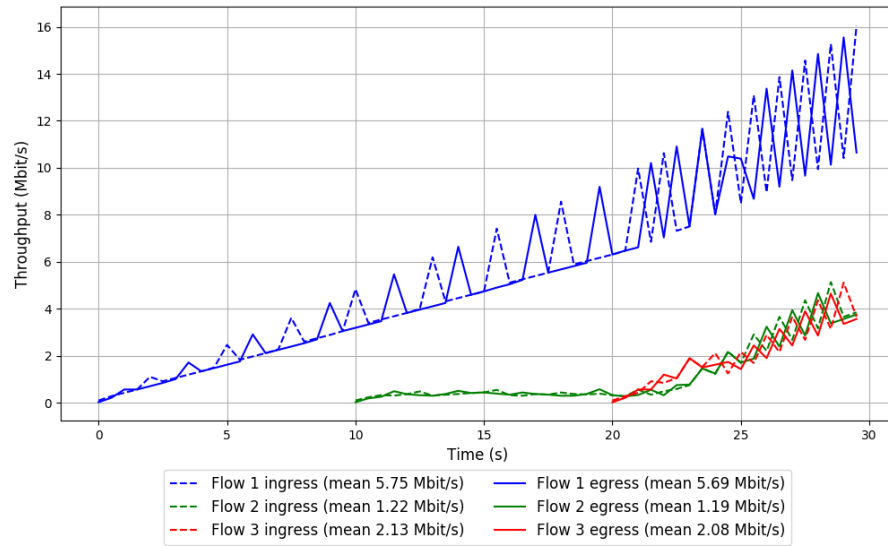
-- Flow 3:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 87.230 ms

Loss rate: 4.43%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-10-12 04:45:33

End at: 2017-10-12 04:46:03

Below is generated by plot.py at 2017-10-12 08:09:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 114.668 ms

Loss rate: 1.68%

-- Flow 1:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 114.734 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 3.41 Mbit/s

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

Loss rate: 2.27%

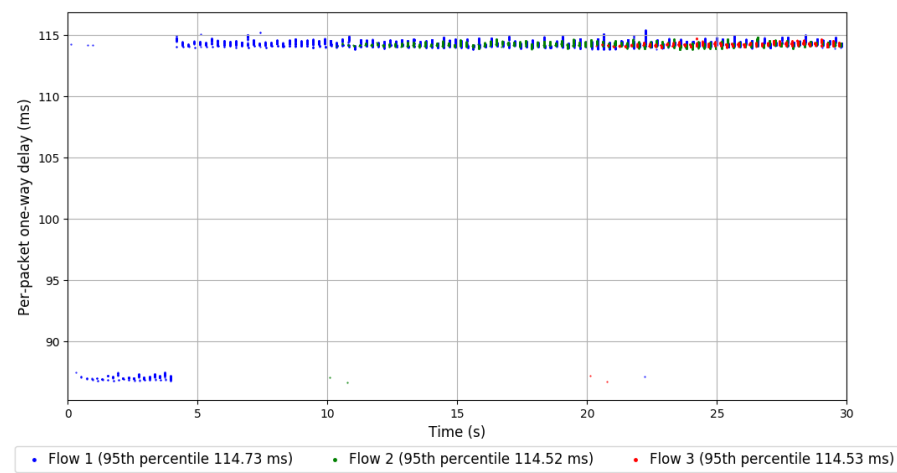
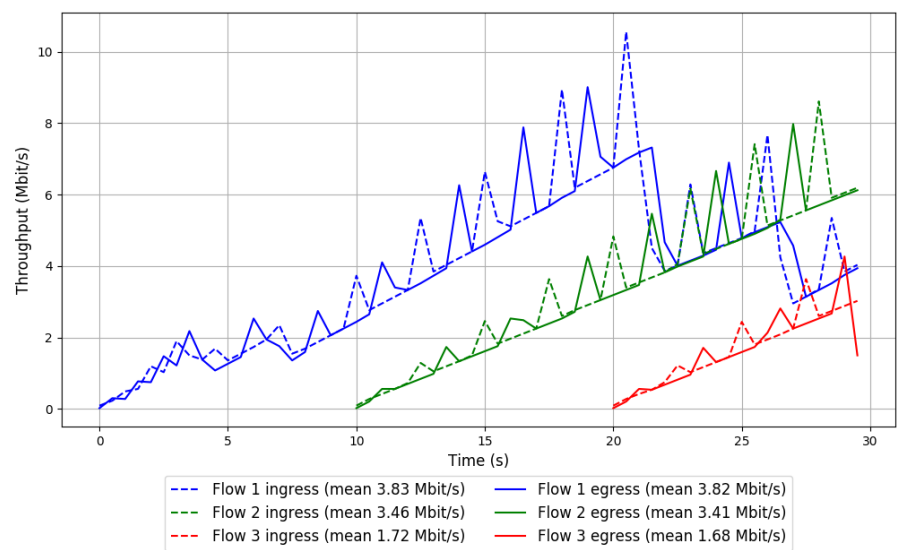
-- Flow 3:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 114.526 ms

Loss rate: 4.52%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-10-12 04:58:14

End at: 2017-10-12 04:58:44

Below is generated by plot.py at 2017-10-12 08:09:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.71 Mbit/s

95th percentile per-packet one-way delay: 115.018 ms

Loss rate: 2.22%

-- Flow 1:

Average throughput: 4.06 Mbit/s

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

Loss rate: 1.77%

-- Flow 2:

Average throughput: 3.32 Mbit/s

95th percentile per-packet one-way delay: 114.815 ms

Loss rate: 2.58%

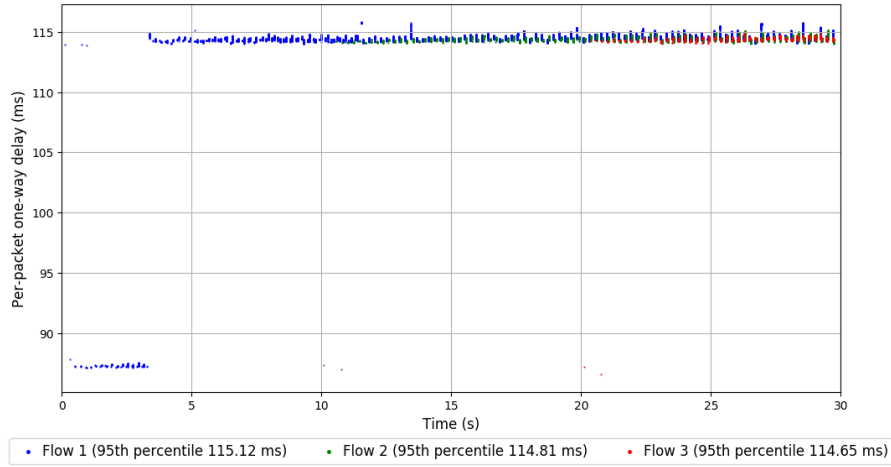
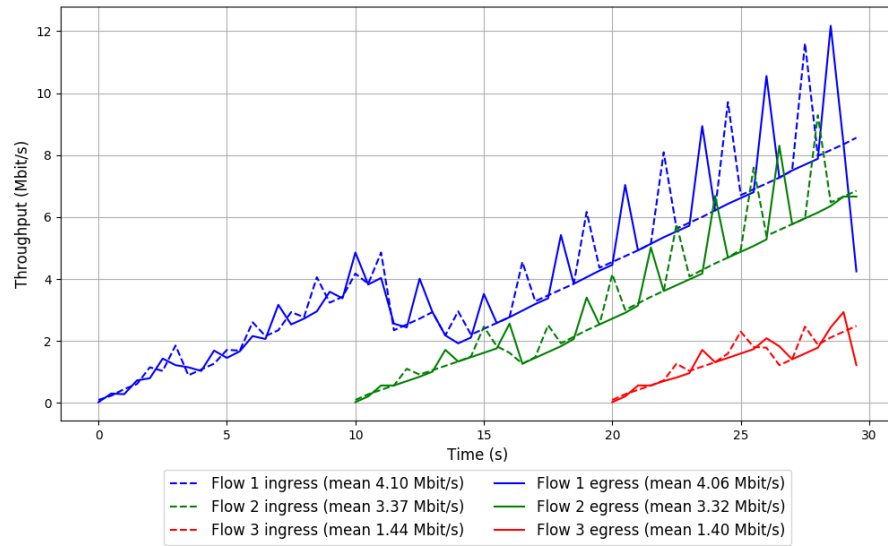
-- Flow 3:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 114.653 ms

Loss rate: 4.49%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-10-12 05:11:18

End at: 2017-10-12 05:11:48

Below is generated by plot.py at 2017-10-12 08:09:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.54 Mbit/s

95th percentile per-packet one-way delay: 115.124 ms

Loss rate: 2.40%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 115.283 ms

Loss rate: 1.36%

-- Flow 2:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 114.821 ms

Loss rate: 4.78%

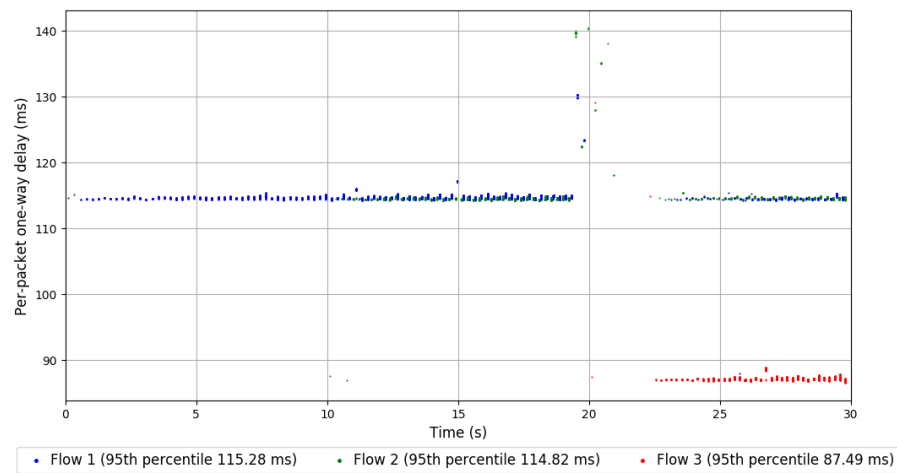
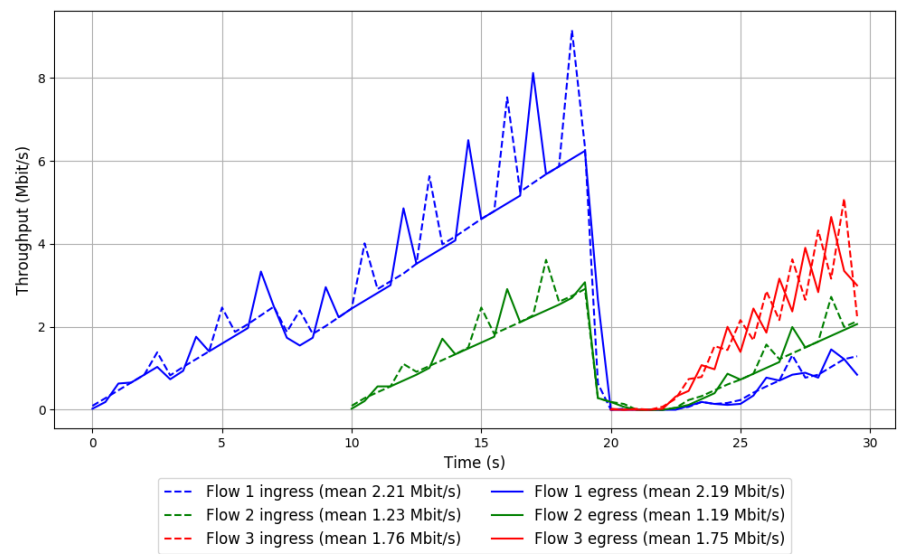
-- Flow 3:

Average throughput: 1.75 Mbit/s

95th percentile per-packet one-way delay: 87.493 ms

Loss rate: 3.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-10-12 05:24:04

End at: 2017-10-12 05:24:34

Below is generated by plot.py at 2017-10-12 08:09:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.62 Mbit/s

95th percentile per-packet one-way delay: 115.039 ms

Loss rate: 2.01%

-- Flow 1:

Average throughput: 3.60 Mbit/s

95th percentile per-packet one-way delay: 115.039 ms

Loss rate: 1.51%

-- Flow 2:

Average throughput: 3.66 Mbit/s

95th percentile per-packet one-way delay: 115.093 ms

Loss rate: 2.27%

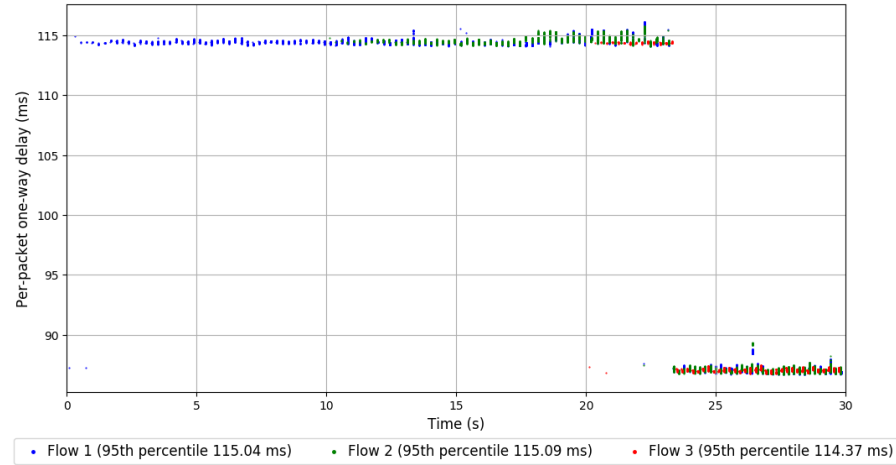
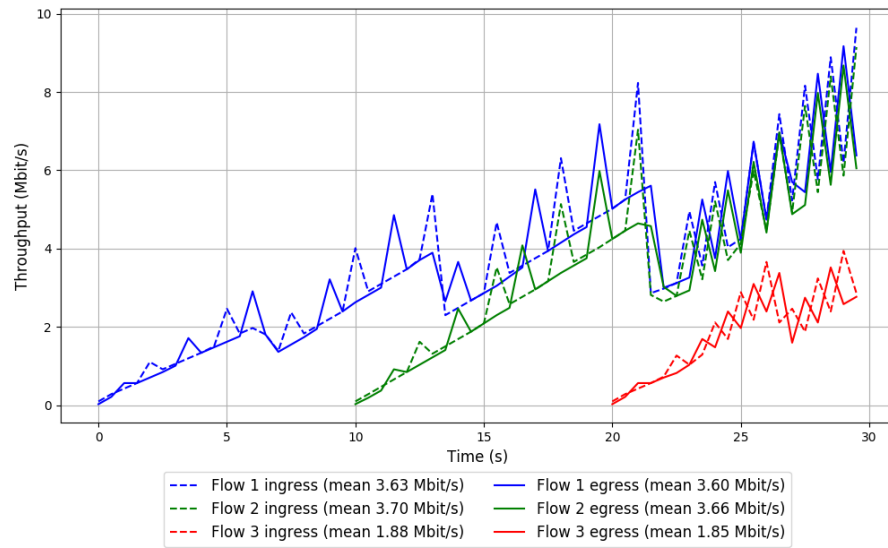
-- Flow 3:

Average throughput: 1.85 Mbit/s

95th percentile per-packet one-way delay: 114.371 ms

Loss rate: 3.92%

Run 9: Report of LEDBAT — Data Link

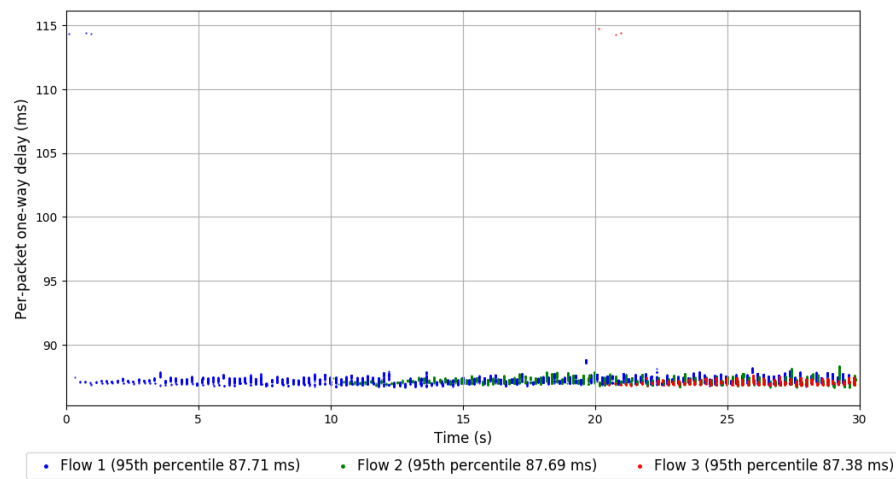
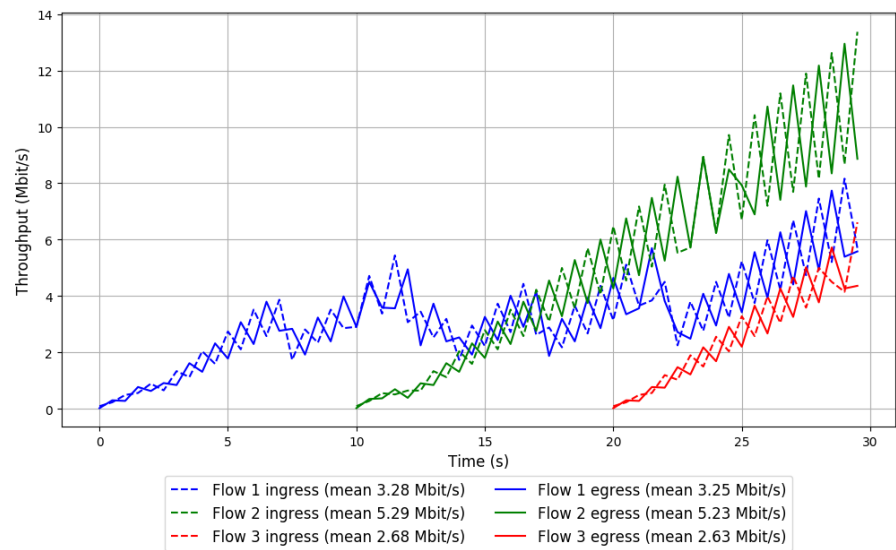


```
Run 10: Statistics of LEDBAT

Start at: 2017-10-12 05:36:54
End at: 2017-10-12 05:37:24

# Below is generated by plot.py at 2017-10-12 08:09:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.57 Mbit/s
95th percentile per-packet one-way delay: 87.686 ms
Loss rate: 2.14%
-- Flow 1:
Average throughput: 3.25 Mbit/s
95th percentile per-packet one-way delay: 87.711 ms
Loss rate: 1.58%
-- Flow 2:
Average throughput: 5.23 Mbit/s
95th percentile per-packet one-way delay: 87.686 ms
Loss rate: 2.14%
-- Flow 3:
Average throughput: 2.63 Mbit/s
95th percentile per-packet one-way delay: 87.383 ms
Loss rate: 4.24%
```

Run 10: Report of LEDBAT — Data Link

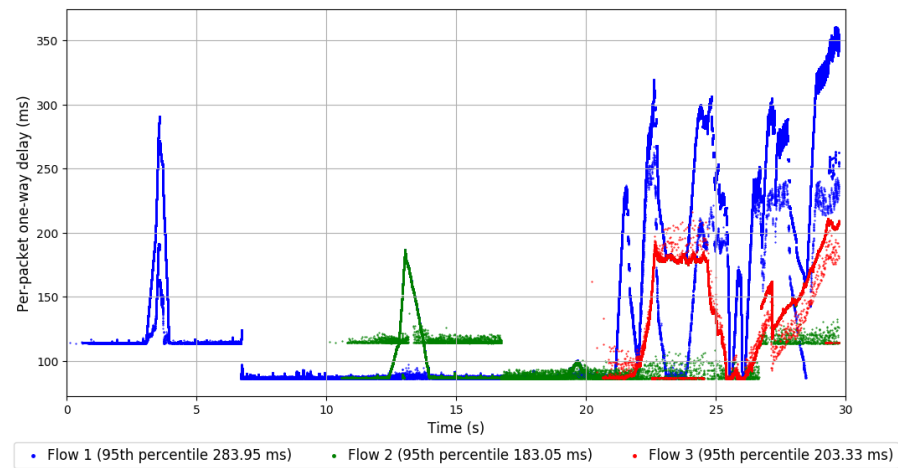
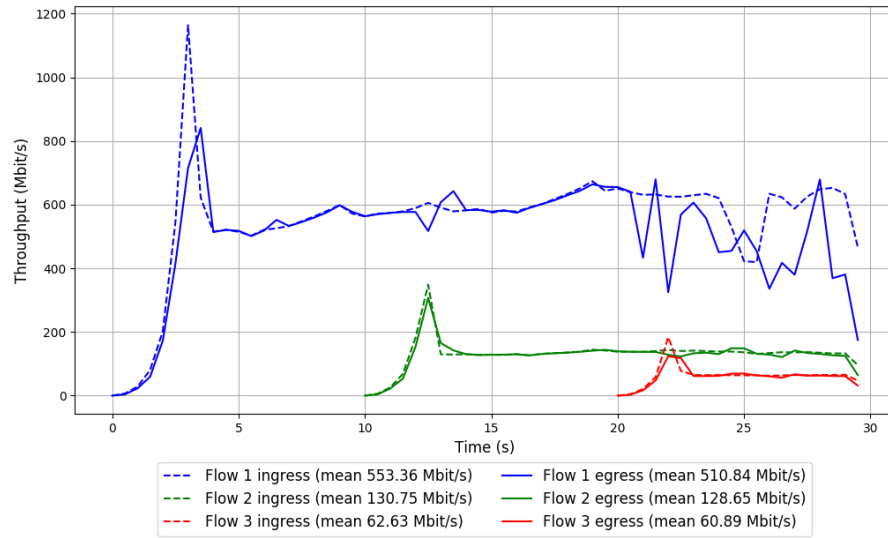


```
Run 1: Statistics of PCC

Start at: 2017-10-12 03:39:00
End at: 2017-10-12 03:39:30

# Below is generated by plot.py at 2017-10-12 08:19:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 615.61 Mbit/s
95th percentile per-packet one-way delay: 276.188 ms
Loss rate: 7.56%
-- Flow 1:
Average throughput: 510.84 Mbit/s
95th percentile per-packet one-way delay: 283.948 ms
Loss rate: 8.39%
-- Flow 2:
Average throughput: 128.65 Mbit/s
95th percentile per-packet one-way delay: 183.047 ms
Loss rate: 2.75%
-- Flow 3:
Average throughput: 60.89 Mbit/s
95th percentile per-packet one-way delay: 203.334 ms
Loss rate: 5.52%
```

Run 1: Report of PCC — Data Link

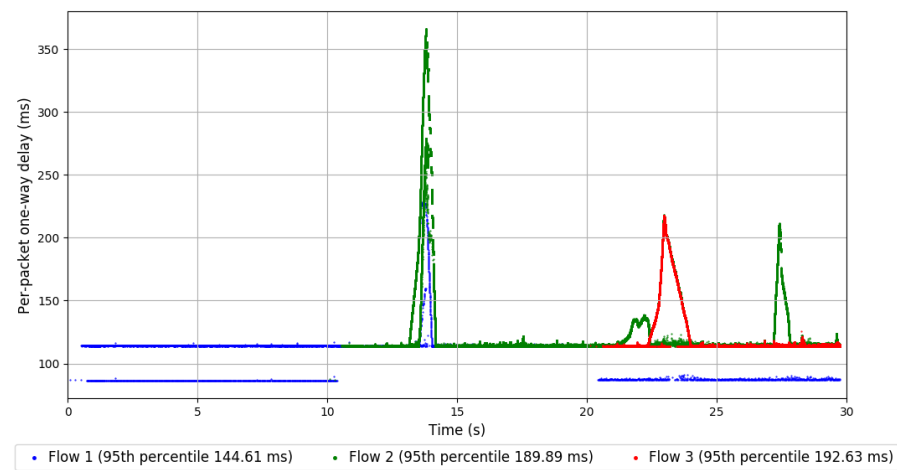
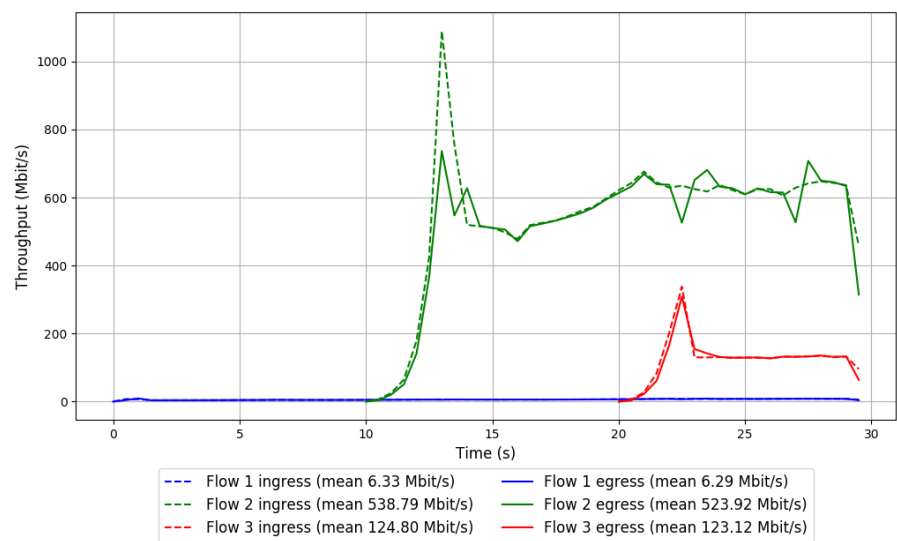


```
Run 2: Statistics of PCC

Start at: 2017-10-12 03:51:47
End at: 2017-10-12 03:52:17

# Below is generated by plot.py at 2017-10-12 08:19:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.32 Mbit/s
95th percentile per-packet one-way delay: 189.737 ms
Loss rate: 3.70%
-- Flow 1:
Average throughput: 6.29 Mbit/s
95th percentile per-packet one-way delay: 144.611 ms
Loss rate: 1.33%
-- Flow 2:
Average throughput: 523.92 Mbit/s
95th percentile per-packet one-way delay: 189.892 ms
Loss rate: 3.75%
-- Flow 3:
Average throughput: 123.12 Mbit/s
95th percentile per-packet one-way delay: 192.627 ms
Loss rate: 3.65%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-10-12 04:04:20

End at: 2017-10-12 04:04:50

Below is generated by plot.py at 2017-10-12 08:19:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 170.53 Mbit/s

95th percentile per-packet one-way delay: 147.753 ms

Loss rate: 4.80%

-- Flow 1:

Average throughput: 12.38 Mbit/s

95th percentile per-packet one-way delay: 114.219 ms

Loss rate: 2.39%

-- Flow 2:

Average throughput: 5.99 Mbit/s

95th percentile per-packet one-way delay: 114.357 ms

Loss rate: 2.01%

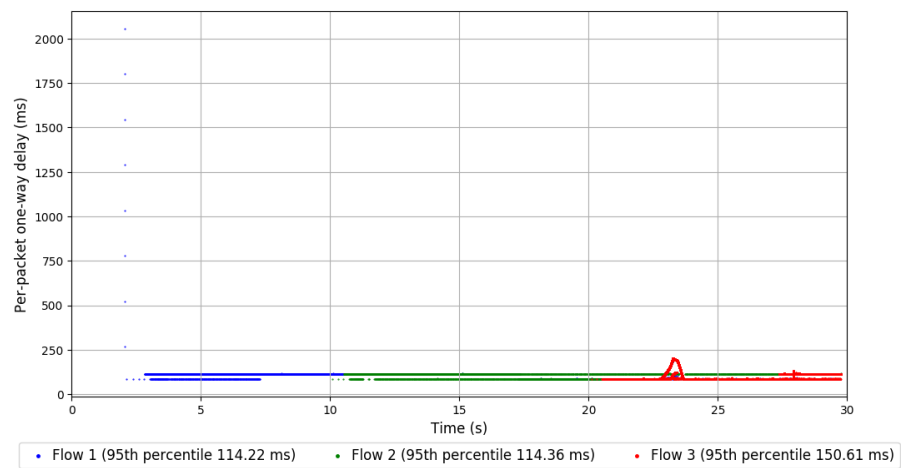
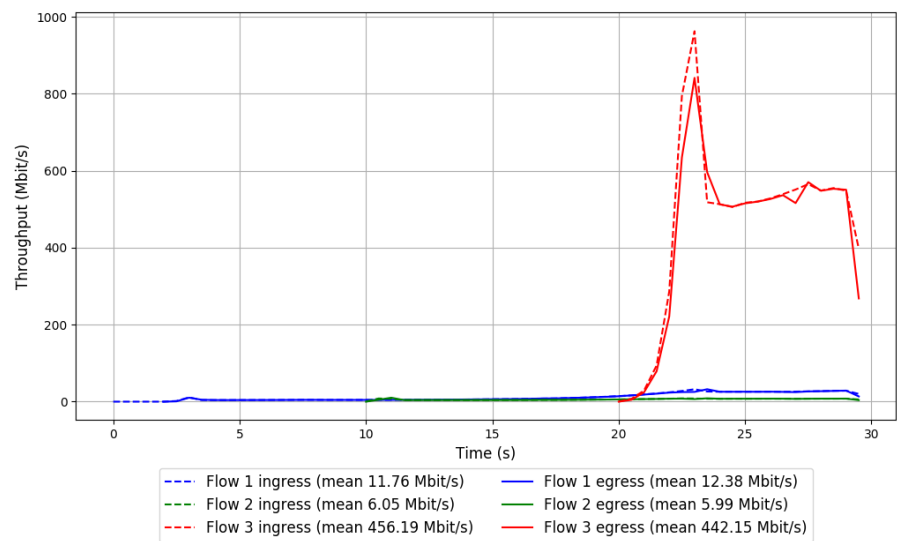
-- Flow 3:

Average throughput: 442.15 Mbit/s

95th percentile per-packet one-way delay: 150.606 ms

Loss rate: 5.06%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-10-12 04:17:13

End at: 2017-10-12 04:17:43

Below is generated by plot.py at 2017-10-12 08:19:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 563.78 Mbit/s

95th percentile per-packet one-way delay: 282.288 ms

Loss rate: 8.09%

-- Flow 1:

Average throughput: 455.36 Mbit/s

95th percentile per-packet one-way delay: 284.326 ms

Loss rate: 9.33%

-- Flow 2:

Average throughput: 133.27 Mbit/s

95th percentile per-packet one-way delay: 179.515 ms

Loss rate: 2.40%

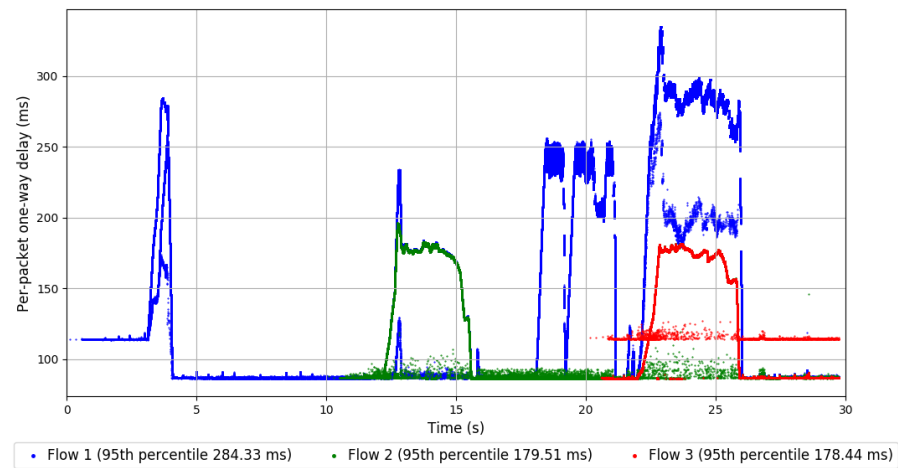
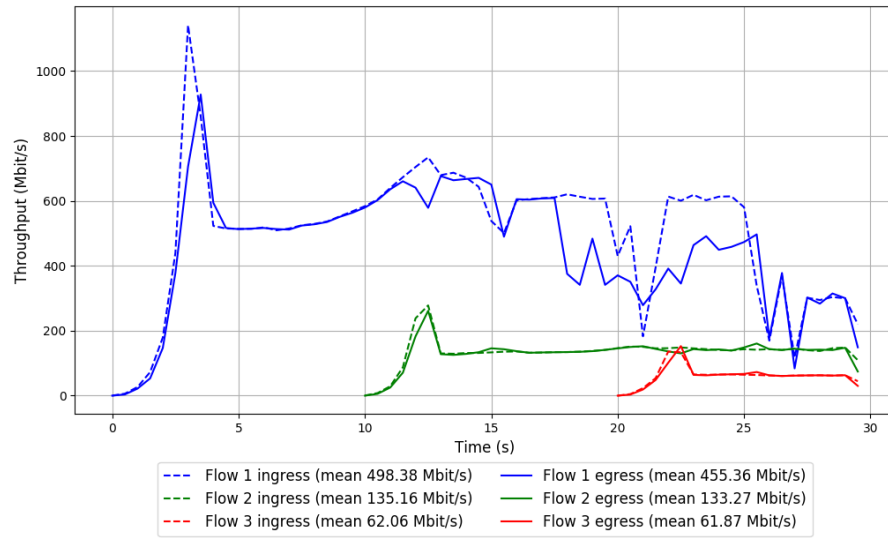
-- Flow 3:

Average throughput: 61.87 Mbit/s

95th percentile per-packet one-way delay: 178.437 ms

Loss rate: 2.65%

Run 4: Report of PCC — Data Link

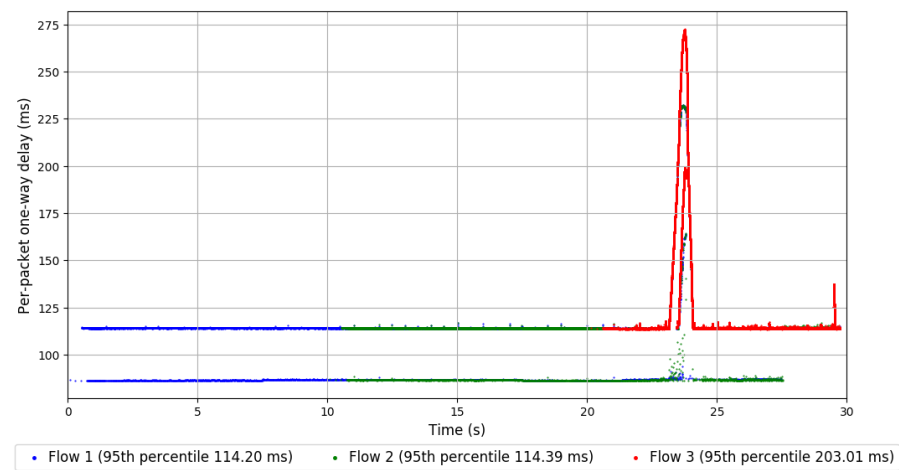
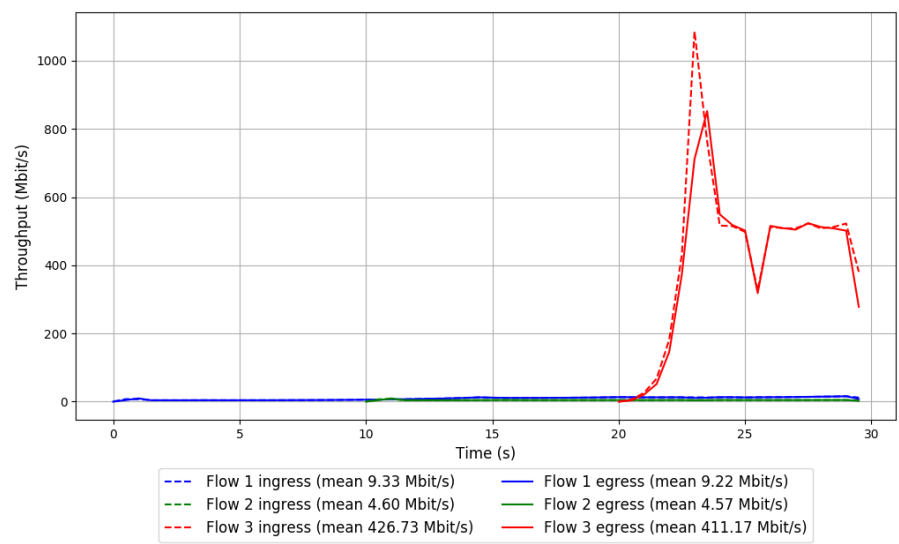


```
Run 5: Statistics of PCC

Start at: 2017-10-12 04:30:10
End at: 2017-10-12 04:30:40

# Below is generated by plot.py at 2017-10-12 08:19:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 145.45 Mbit/s
95th percentile per-packet one-way delay: 198.681 ms
Loss rate: 5.56%
-- Flow 1:
Average throughput: 9.22 Mbit/s
95th percentile per-packet one-way delay: 114.205 ms
Loss rate: 1.77%
-- Flow 2:
Average throughput: 4.57 Mbit/s
95th percentile per-packet one-way delay: 114.388 ms
Loss rate: 1.72%
-- Flow 3:
Average throughput: 411.17 Mbit/s
95th percentile per-packet one-way delay: 203.006 ms
Loss rate: 5.89%
```

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-10-12 04:42:45

End at: 2017-10-12 04:43:15

Below is generated by plot.py at 2017-10-12 08:19:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 380.93 Mbit/s

95th percentile per-packet one-way delay: 231.226 ms

Loss rate: 5.58%

-- Flow 1:

Average throughput: 75.68 Mbit/s

95th percentile per-packet one-way delay: 172.832 ms

Loss rate: 1.40%

-- Flow 2:

Average throughput: 430.27 Mbit/s

95th percentile per-packet one-way delay: 247.561 ms

Loss rate: 6.78%

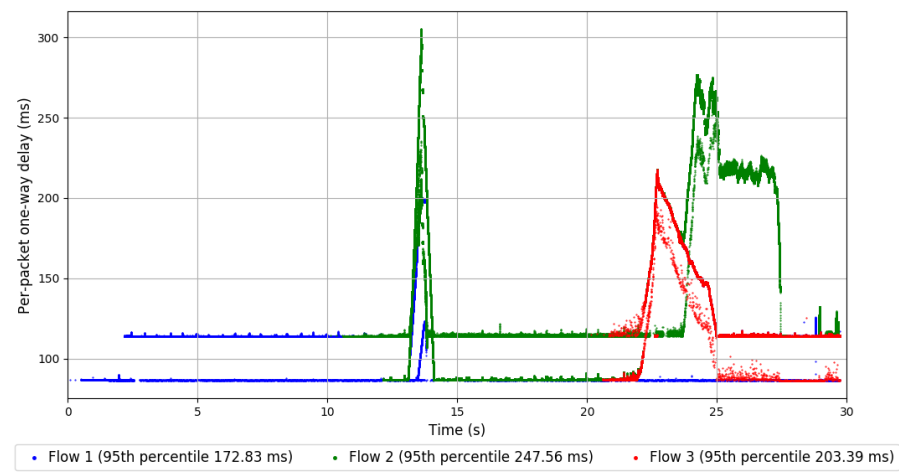
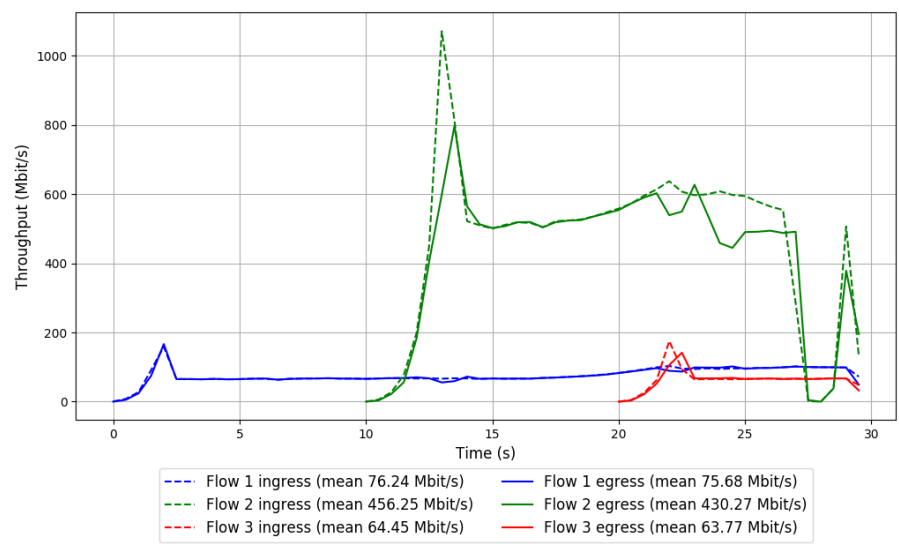
-- Flow 3:

Average throughput: 63.77 Mbit/s

95th percentile per-packet one-way delay: 203.387 ms

Loss rate: 3.37%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-10-12 04:55:12

End at: 2017-10-12 04:55:42

Below is generated by plot.py at 2017-10-12 08:19:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 391.36 Mbit/s

95th percentile per-packet one-way delay: 293.505 ms

Loss rate: 7.29%

-- Flow 1:

Average throughput: 21.67 Mbit/s

95th percentile per-packet one-way delay: 204.393 ms

Loss rate: 1.83%

-- Flow 2:

Average throughput: 527.99 Mbit/s

95th percentile per-packet one-way delay: 294.346 ms

Loss rate: 7.75%

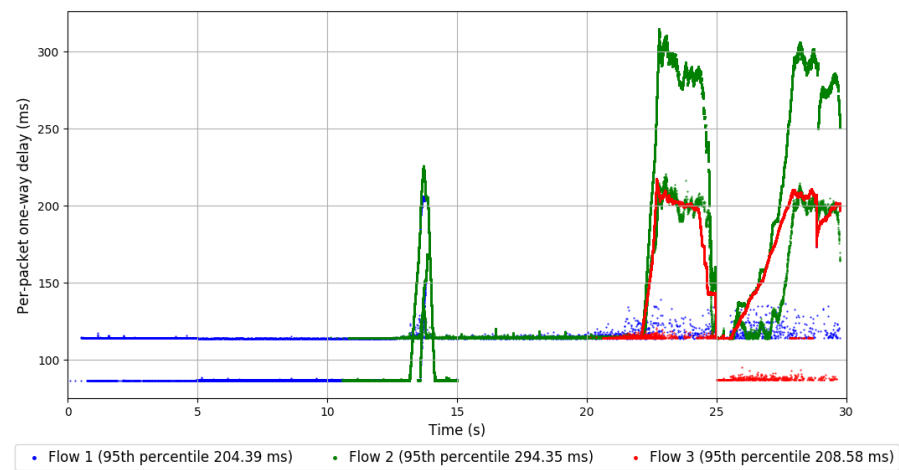
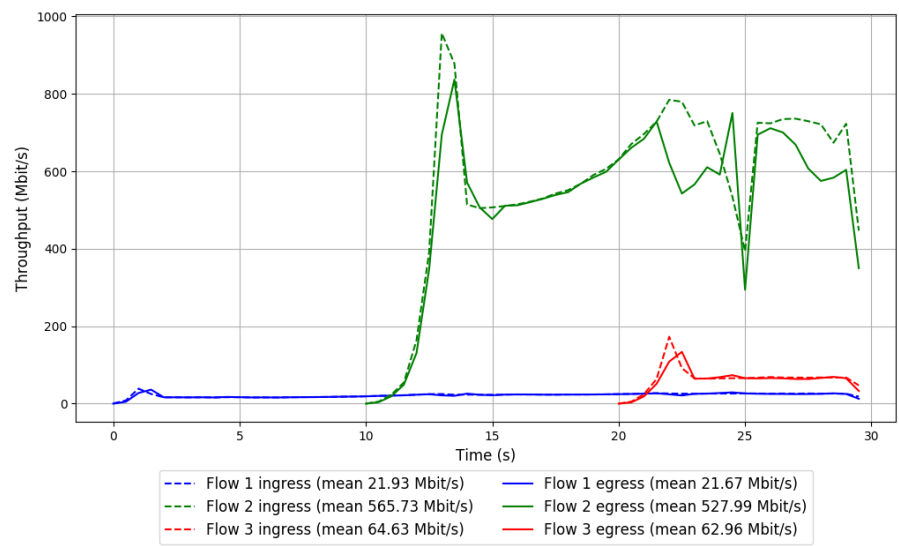
-- Flow 3:

Average throughput: 62.96 Mbit/s

95th percentile per-packet one-way delay: 208.577 ms

Loss rate: 4.83%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-10-12 05:08:24

End at: 2017-10-12 05:08:54

Below is generated by plot.py at 2017-10-12 08:20:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 540.79 Mbit/s

95th percentile per-packet one-way delay: 232.189 ms

Loss rate: 3.62%

-- Flow 1:

Average throughput: 243.48 Mbit/s

95th percentile per-packet one-way delay: 180.258 ms

Loss rate: 1.27%

-- Flow 2:

Average throughput: 418.67 Mbit/s

95th percentile per-packet one-way delay: 288.831 ms

Loss rate: 5.64%

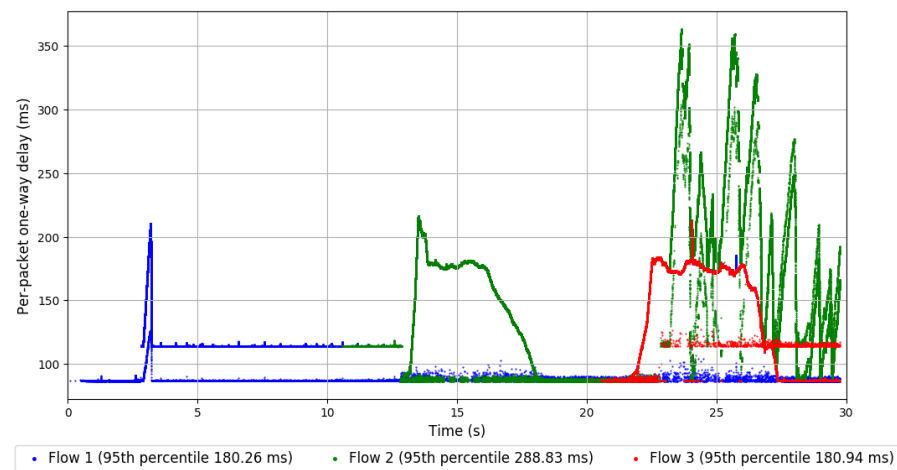
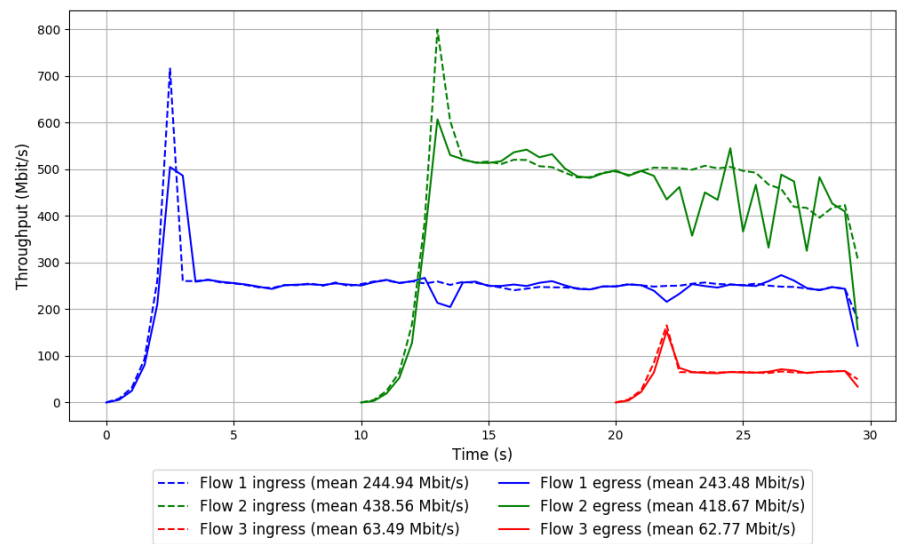
-- Flow 3:

Average throughput: 62.77 Mbit/s

95th percentile per-packet one-way delay: 180.939 ms

Loss rate: 3.17%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-10-12 05:20:54

End at: 2017-10-12 05:21:24

Below is generated by plot.py at 2017-10-12 08:21:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 503.57 Mbit/s

95th percentile per-packet one-way delay: 189.340 ms

Loss rate: 2.25%

-- Flow 1:

Average throughput: 496.65 Mbit/s

95th percentile per-packet one-way delay: 189.397 ms

Loss rate: 2.26%

-- Flow 2:

Average throughput: 8.33 Mbit/s

95th percentile per-packet one-way delay: 114.306 ms

Loss rate: 1.74%

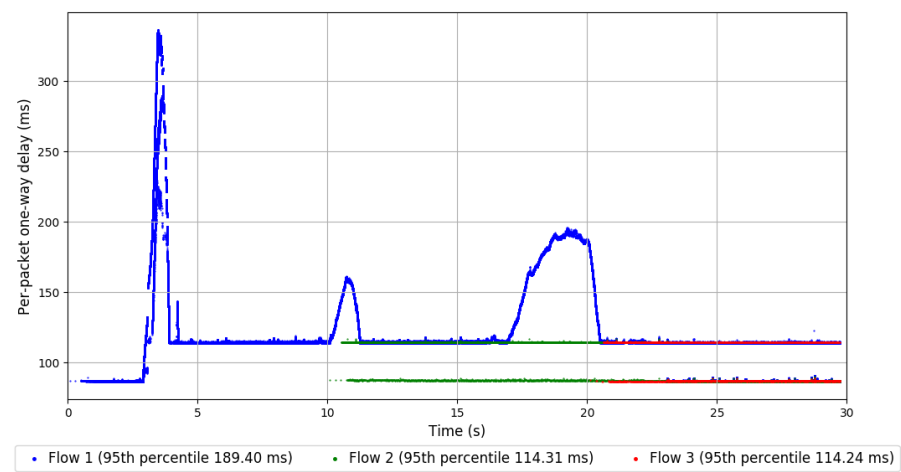
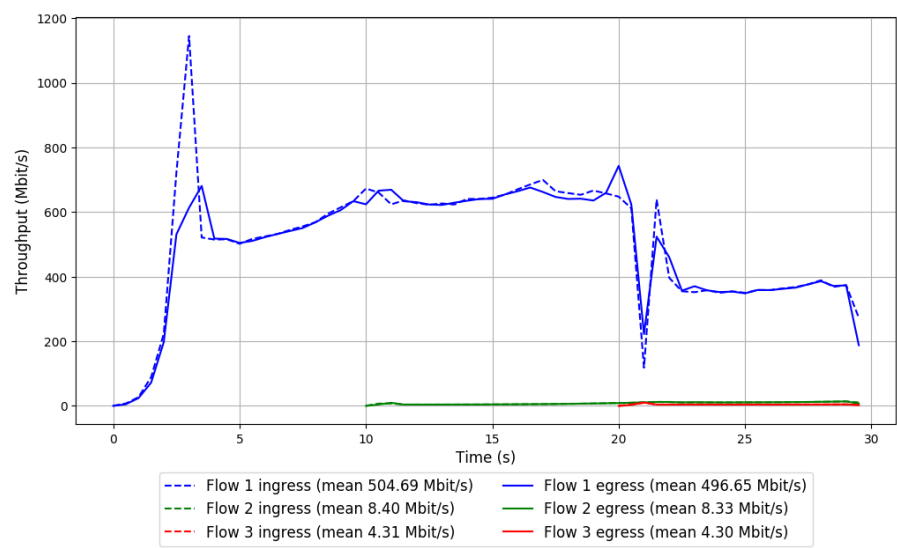
-- Flow 3:

Average throughput: 4.30 Mbit/s

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

Loss rate: 2.26%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

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

End at: 2017-10-12 05:34:28

Below is generated by plot.py at 2017-10-12 08:21:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 386.20 Mbit/s

95th percentile per-packet one-way delay: 262.193 ms

Loss rate: 8.98%

-- Flow 1:

Average throughput: 56.11 Mbit/s

95th percentile per-packet one-way delay: 2914.183 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 462.76 Mbit/s

95th percentile per-packet one-way delay: 267.082 ms

Loss rate: 9.58%

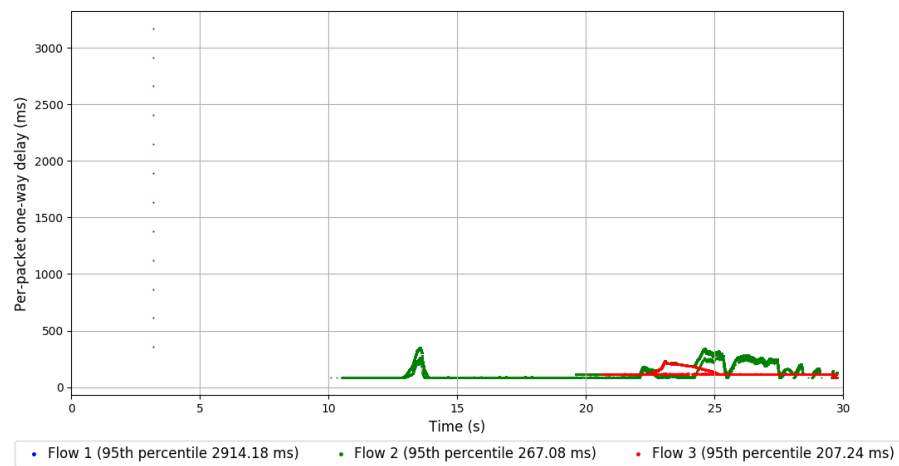
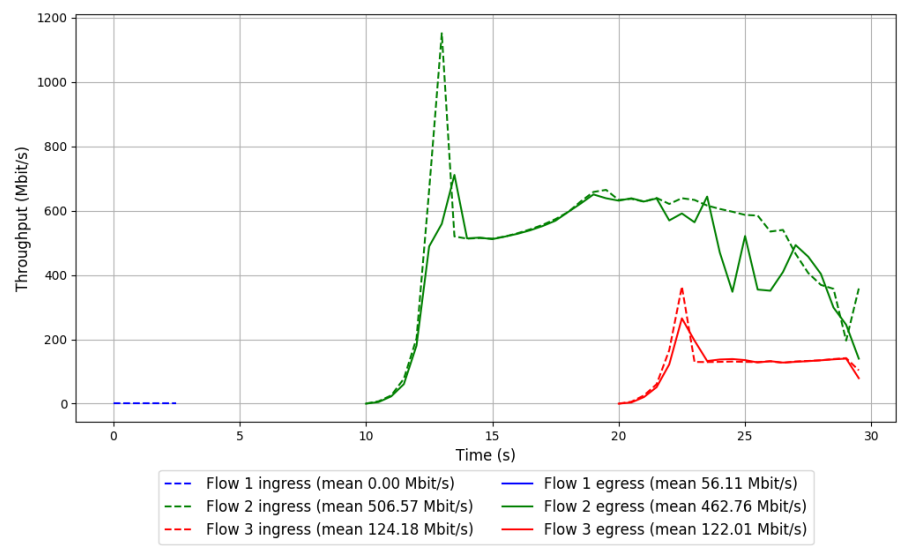
-- Flow 3:

Average throughput: 122.01 Mbit/s

95th percentile per-packet one-way delay: 207.242 ms

Loss rate: 4.02%

Run 10: Report of PCC — Data Link

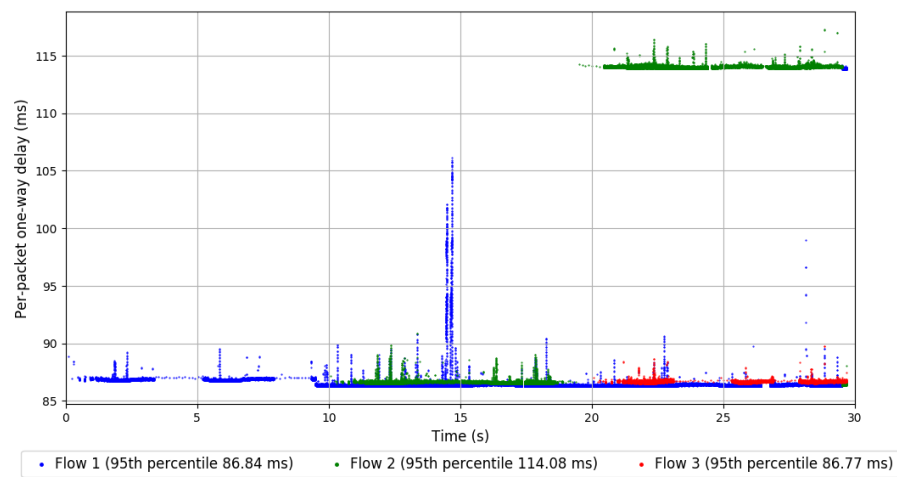
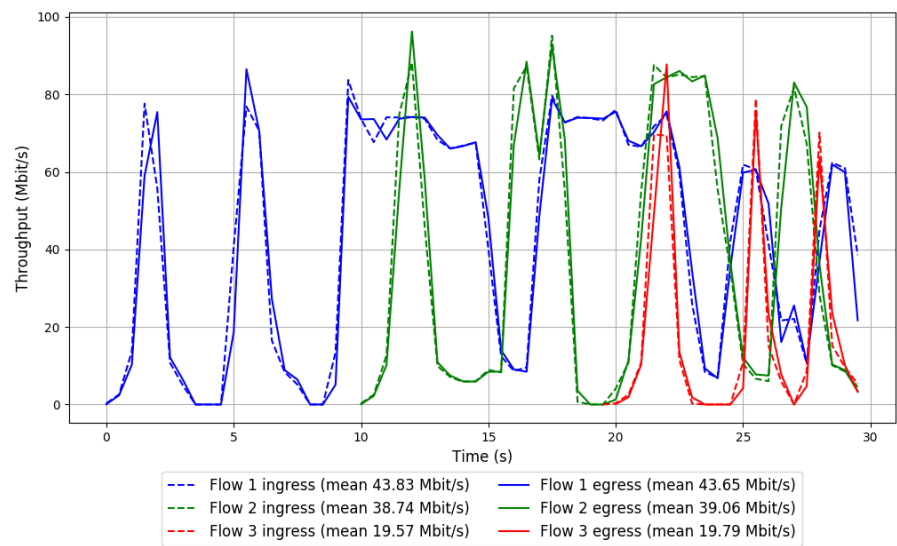


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-10-12 03:47:28
End at: 2017-10-12 03:47:58

# Below is generated by plot.py at 2017-10-12 08:21:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.95 Mbit/s
95th percentile per-packet one-way delay: 114.001 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 43.65 Mbit/s
95th percentile per-packet one-way delay: 86.845 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 39.06 Mbit/s
95th percentile per-packet one-way delay: 114.081 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 19.79 Mbit/s
95th percentile per-packet one-way delay: 86.774 ms
Loss rate: 0.92%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-10-12 03:59:56

End at: 2017-10-12 04:00:26

Below is generated by plot.py at 2017-10-12 08:21:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.22 Mbit/s

95th percentile per-packet one-way delay: 114.248 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 47.80 Mbit/s

95th percentile per-packet one-way delay: 86.847 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 42.85 Mbit/s

95th percentile per-packet one-way delay: 114.289 ms

Loss rate: 1.73%

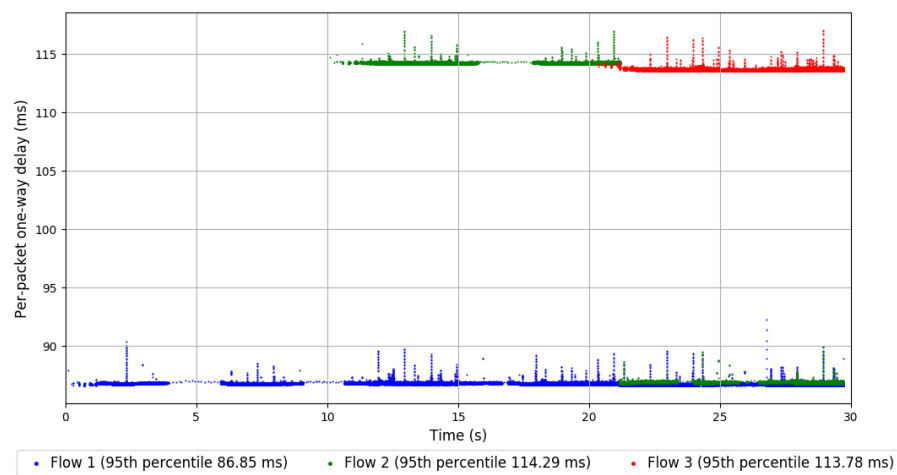
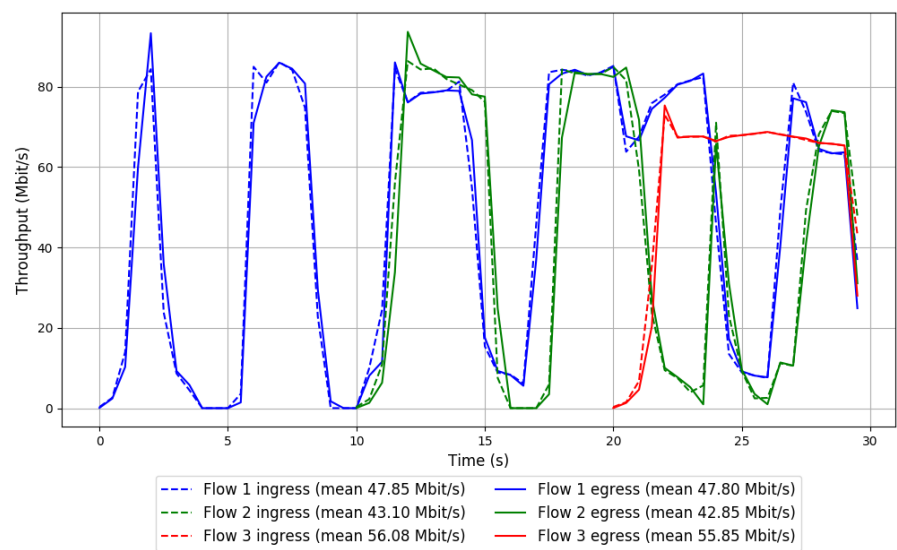
-- Flow 3:

Average throughput: 55.85 Mbit/s

95th percentile per-packet one-way delay: 113.779 ms

Loss rate: 2.74%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-10-12 04:12:52

End at: 2017-10-12 04:13:22

Below is generated by plot.py at 2017-10-12 08:21:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.74 Mbit/s

95th percentile per-packet one-way delay: 113.656 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 40.18 Mbit/s

95th percentile per-packet one-way delay: 86.859 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 43.79 Mbit/s

95th percentile per-packet one-way delay: 113.703 ms

Loss rate: 0.72%

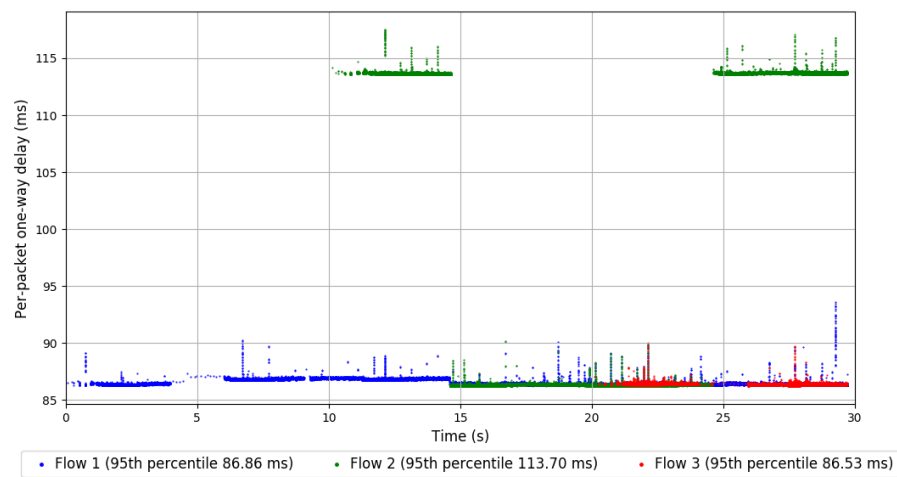
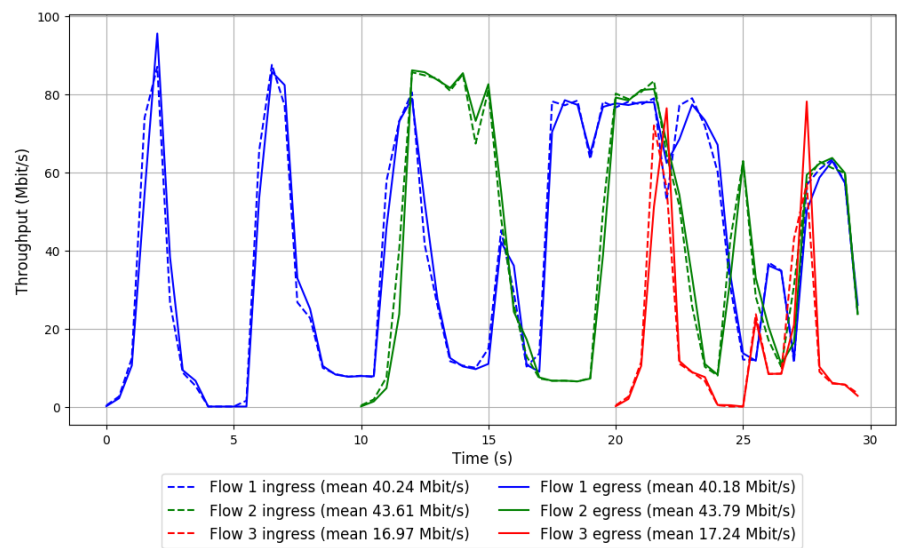
-- Flow 3:

Average throughput: 17.24 Mbit/s

95th percentile per-packet one-way delay: 86.534 ms

Loss rate: 0.52%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-10-12 04:25:45

End at: 2017-10-12 04:26:15

Below is generated by plot.py at 2017-10-12 08:21:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.33 Mbit/s

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

Loss rate: 0.99%

-- Flow 1:

Average throughput: 54.49 Mbit/s

95th percentile per-packet one-way delay: 114.038 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 39.10 Mbit/s

95th percentile per-packet one-way delay: 86.826 ms

Loss rate: 1.76%

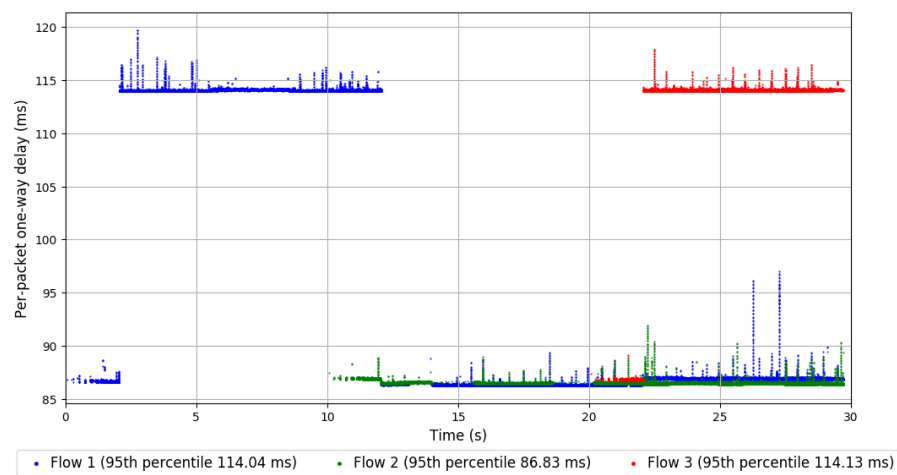
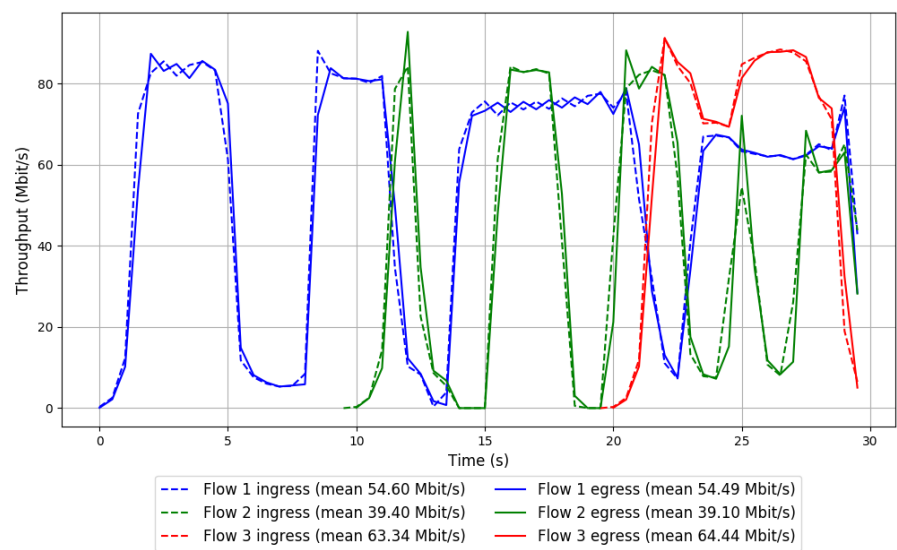
-- Flow 3:

Average throughput: 64.44 Mbit/s

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

Loss rate: 0.36%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-10-12 04:38:34

End at: 2017-10-12 04:39:04

Below is generated by plot.py at 2017-10-12 08:21:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.73 Mbit/s

95th percentile per-packet one-way delay: 113.975 ms

Loss rate: 1.67%

-- Flow 1:

Average throughput: 47.63 Mbit/s

95th percentile per-packet one-way delay: 113.745 ms

Loss rate: 1.08%

-- Flow 2:

Average throughput: 53.42 Mbit/s

95th percentile per-packet one-way delay: 114.015 ms

Loss rate: 1.34%

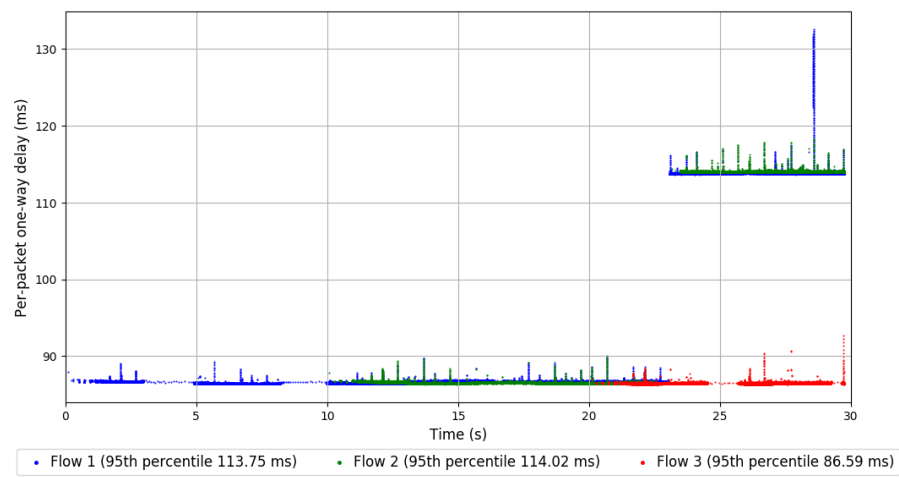
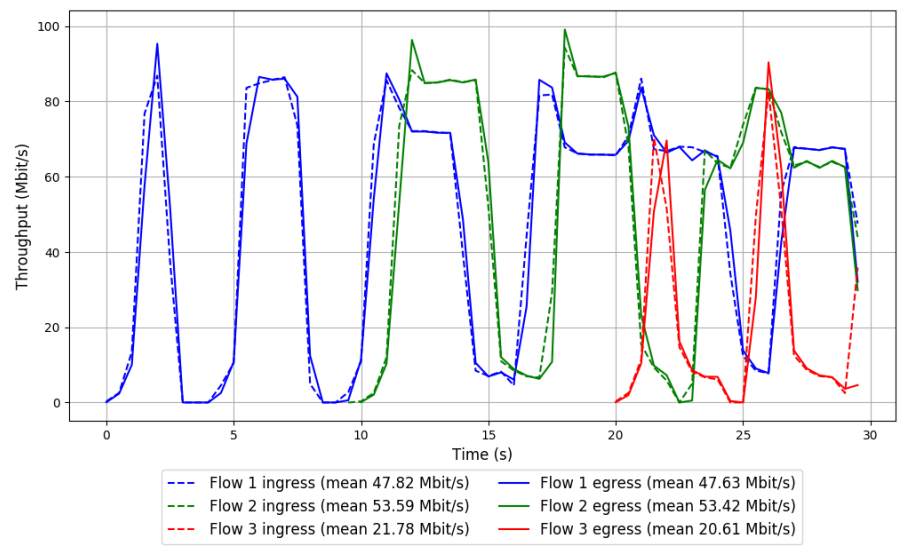
-- Flow 3:

Average throughput: 20.61 Mbit/s

95th percentile per-packet one-way delay: 86.590 ms

Loss rate: 7.28%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-10-12 04:50:51

End at: 2017-10-12 04:51:21

Below is generated by plot.py at 2017-10-12 08:21:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.67 Mbit/s

95th percentile per-packet one-way delay: 114.016 ms

Loss rate: 1.27%

-- Flow 1:

Average throughput: 46.86 Mbit/s

95th percentile per-packet one-way delay: 113.710 ms

Loss rate: 1.25%

-- Flow 2:

Average throughput: 52.90 Mbit/s

95th percentile per-packet one-way delay: 114.051 ms

Loss rate: 0.17%

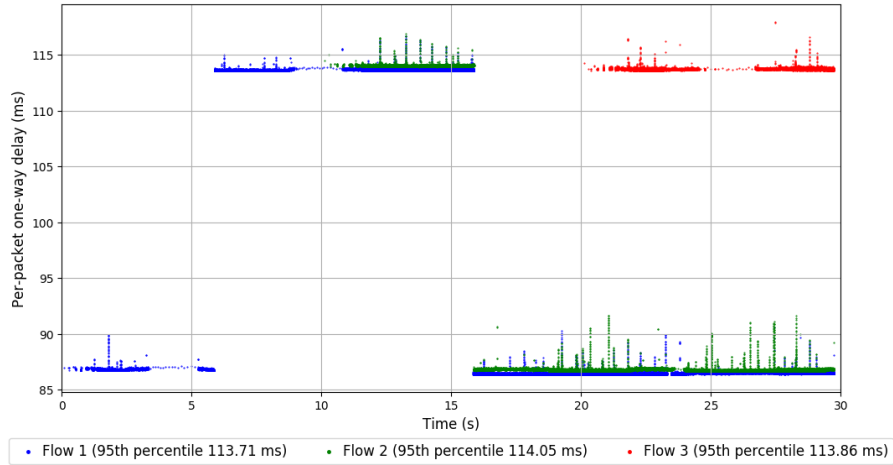
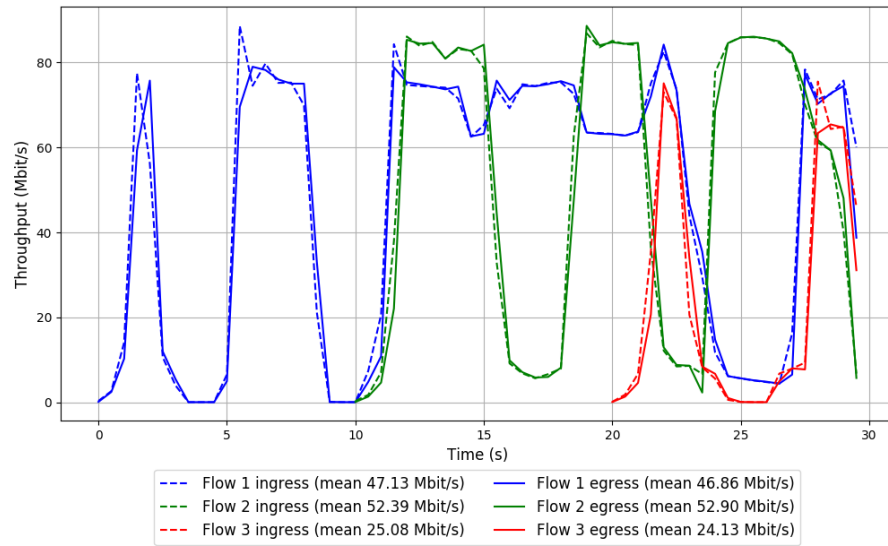
-- Flow 3:

Average throughput: 24.13 Mbit/s

95th percentile per-packet one-way delay: 113.856 ms

Loss rate: 6.01%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-10-12 05:03:45

End at: 2017-10-12 05:04:15

Below is generated by plot.py at 2017-10-12 08:21:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 119.73 Mbit/s

95th percentile per-packet one-way delay: 113.835 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 67.56 Mbit/s

95th percentile per-packet one-way delay: 113.807 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 61.62 Mbit/s

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

Loss rate: 0.19%

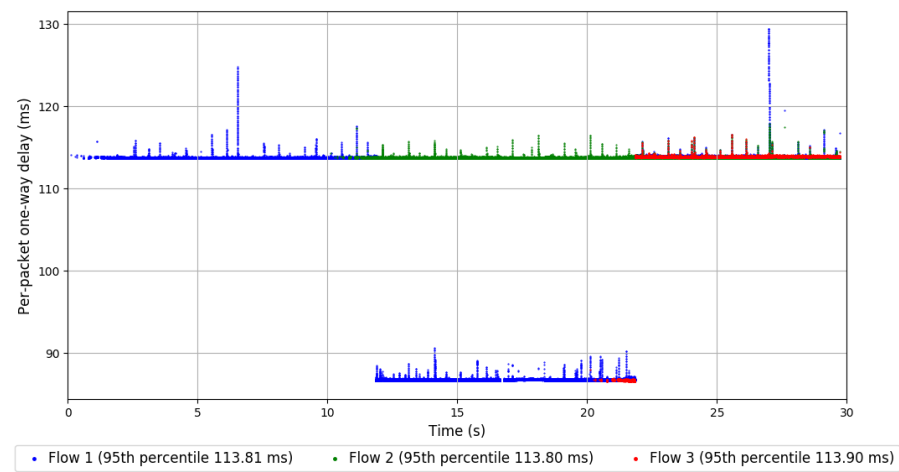
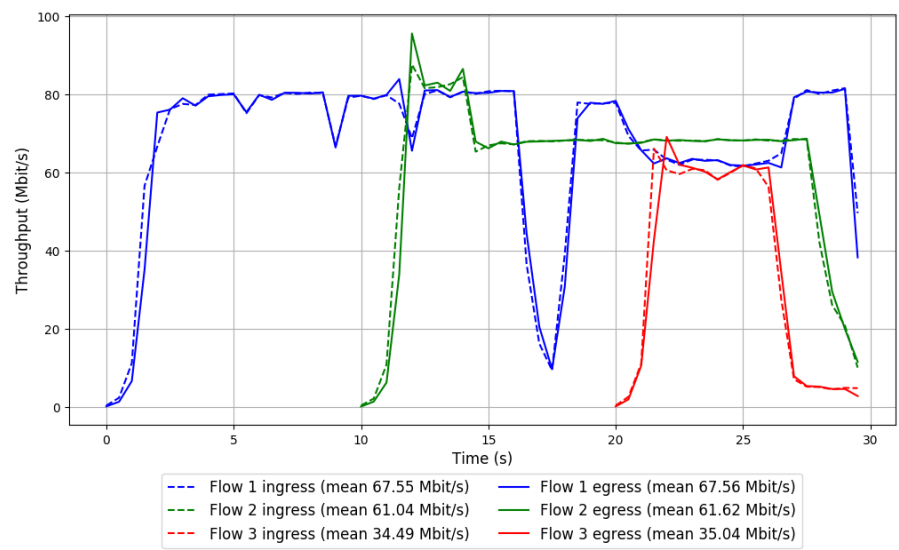
-- Flow 3:

Average throughput: 35.04 Mbit/s

95th percentile per-packet one-way delay: 113.899 ms

Loss rate: 0.48%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-10-12 05:16:42

End at: 2017-10-12 05:17:12

Below is generated by plot.py at 2017-10-12 08:21:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.16 Mbit/s

95th percentile per-packet one-way delay: 114.195 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 54.12 Mbit/s

95th percentile per-packet one-way delay: 114.240 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 54.54 Mbit/s

95th percentile per-packet one-way delay: 86.672 ms

Loss rate: 1.24%

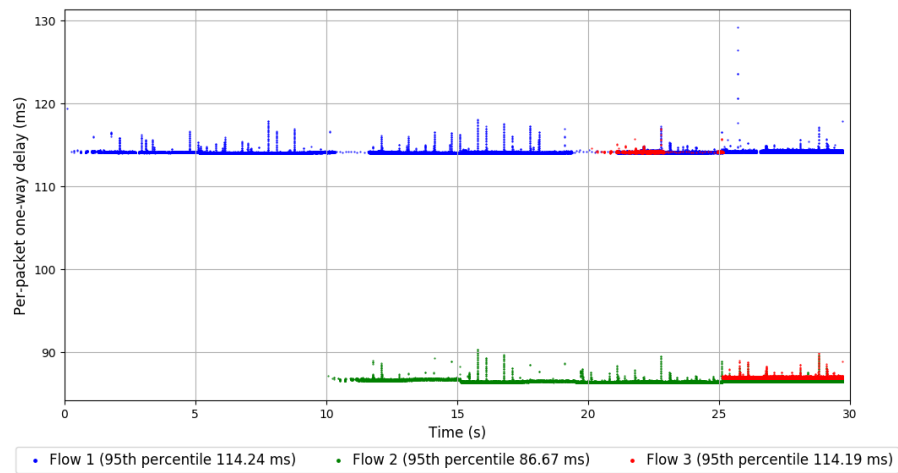
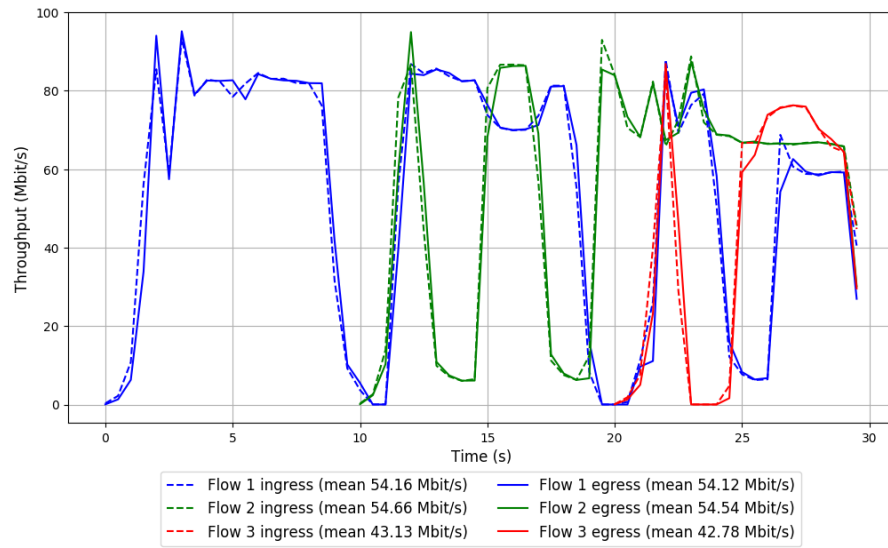
-- Flow 3:

Average throughput: 42.78 Mbit/s

95th percentile per-packet one-way delay: 114.185 ms

Loss rate: 3.11%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-10-12 05:29:34

End at: 2017-10-12 05:30:04

Below is generated by plot.py at 2017-10-12 08:21:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.50 Mbit/s

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

Loss rate: 0.88%

-- Flow 1:

Average throughput: 60.21 Mbit/s

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

Loss rate: 0.75%

-- Flow 2:

Average throughput: 48.50 Mbit/s

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

Loss rate: 1.36%

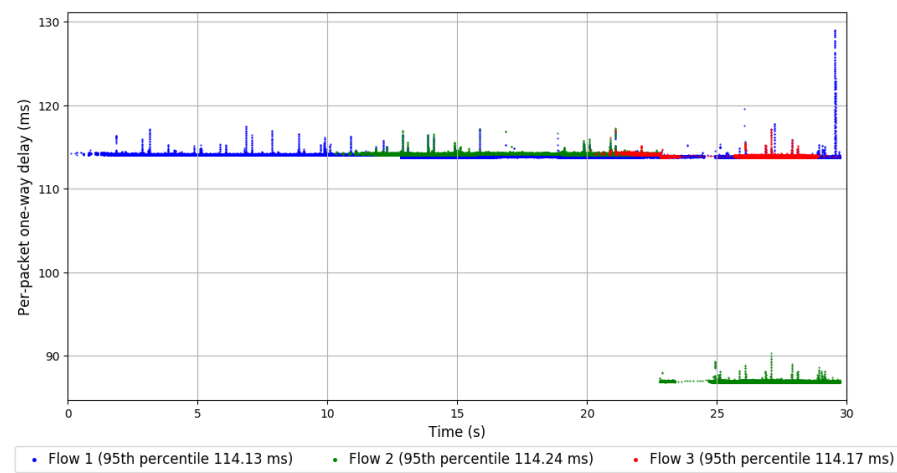
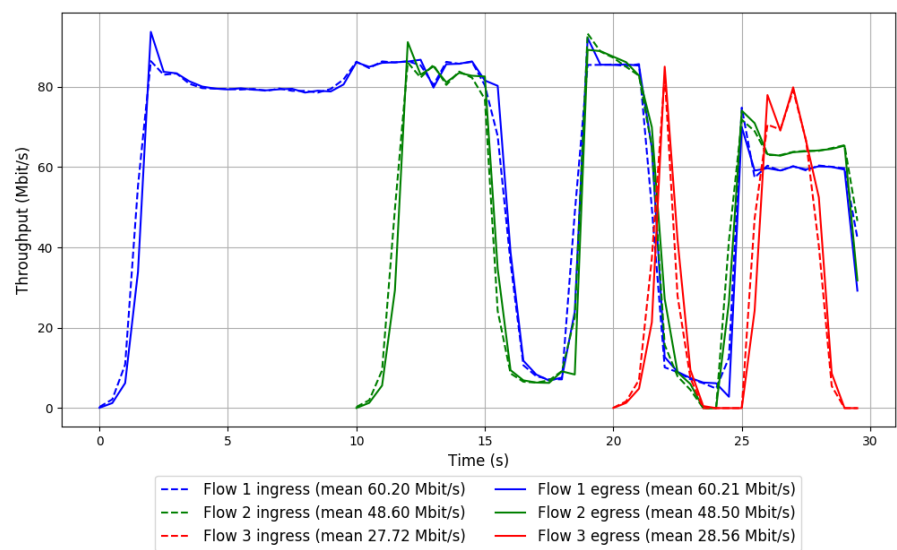
-- Flow 3:

Average throughput: 28.56 Mbit/s

95th percentile per-packet one-way delay: 114.174 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

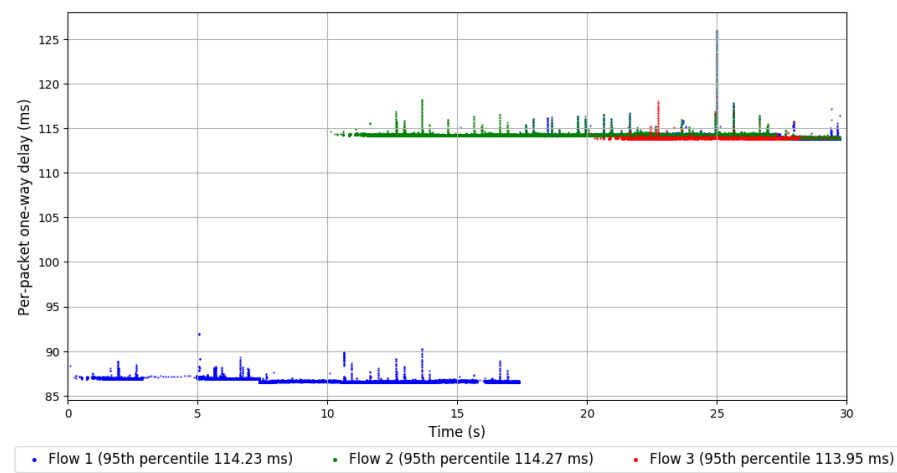
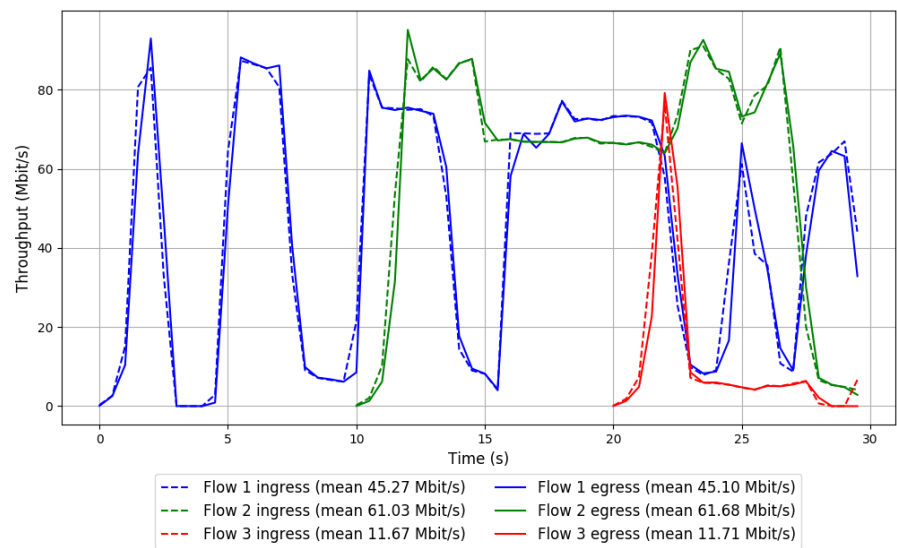


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-10-12 05:42:20
End at: 2017-10-12 05:42:50

# Below is generated by plot.py at 2017-10-12 08:21:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.64 Mbit/s
95th percentile per-packet one-way delay: 114.253 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 45.10 Mbit/s
95th percentile per-packet one-way delay: 114.230 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 61.68 Mbit/s
95th percentile per-packet one-way delay: 114.273 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 11.71 Mbit/s
95th percentile per-packet one-way delay: 113.953 ms
Loss rate: 2.90%
```

Run 10: Report of QUIC Cubic — Data Link

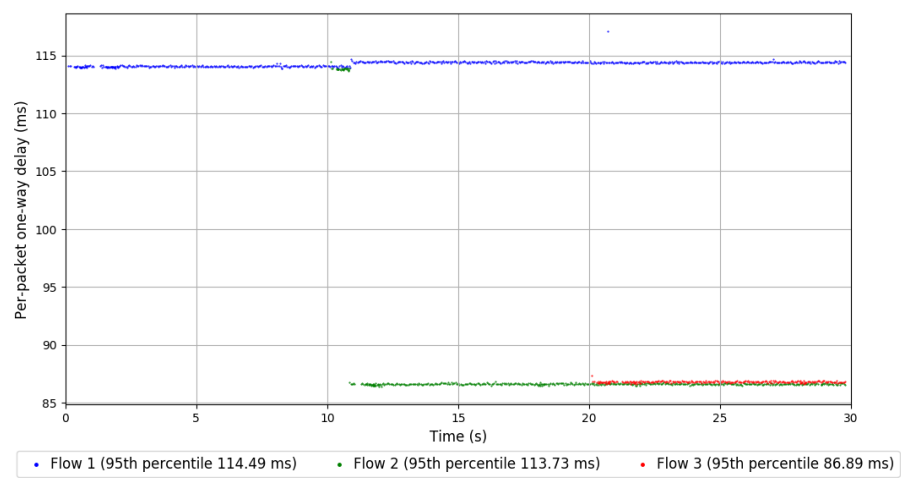
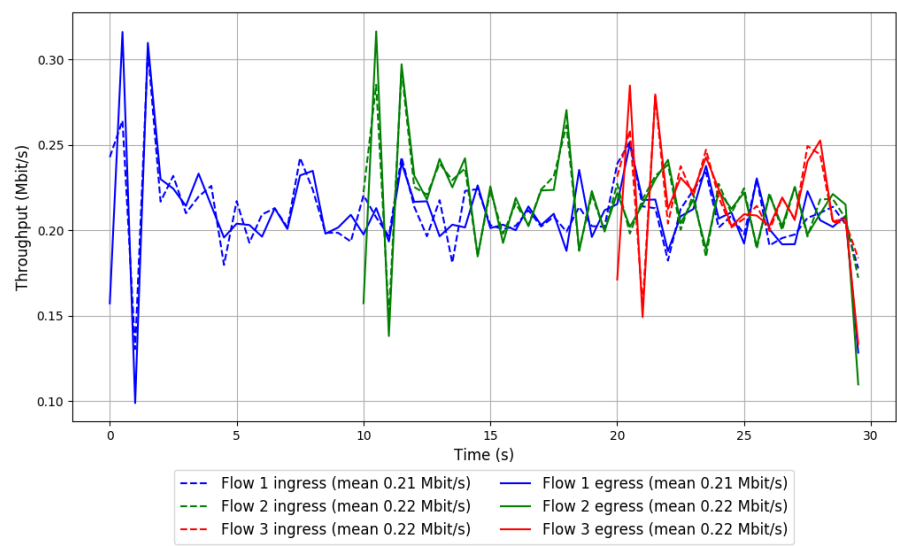


```
Run 1: Statistics of SCReAM

Start at: 2017-10-12 03:42:46
End at: 2017-10-12 03:43:16

# Below is generated by plot.py at 2017-10-12 08:21:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 114.463 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 114.488 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.730 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.890 ms
Loss rate: 1.87%
```

Run 1: Report of SReAM — Data Link

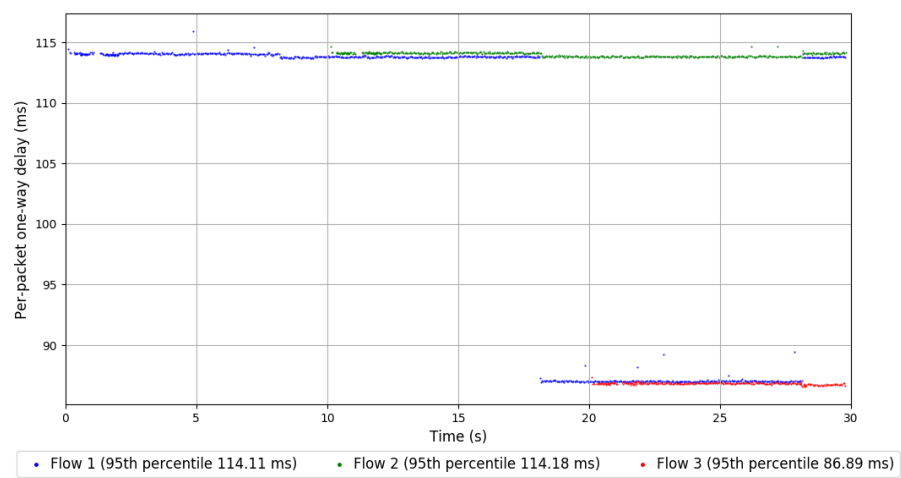
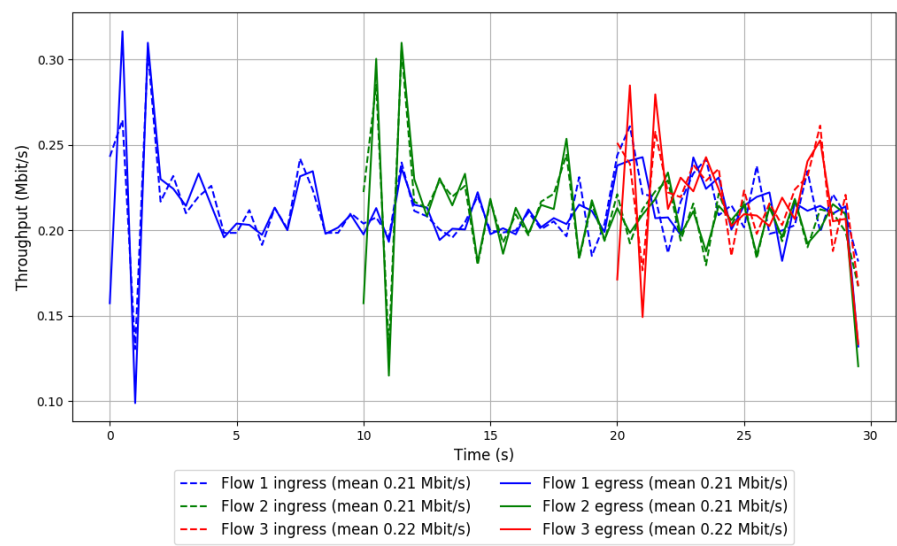


```
Run 2: Statistics of SCReAM

Start at: 2017-10-12 03:55:19
End at: 2017-10-12 03:55:49

# Below is generated by plot.py at 2017-10-12 08:21:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 114.151 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 114.106 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 114.183 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.886 ms
Loss rate: 1.87%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

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

End at: 2017-10-12 04:08:37

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 114.395 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.115 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 114.432 ms

Loss rate: 0.94%

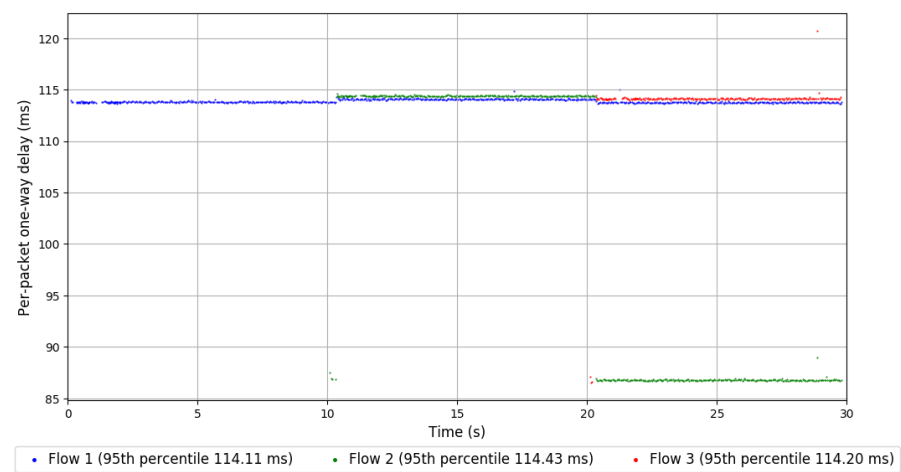
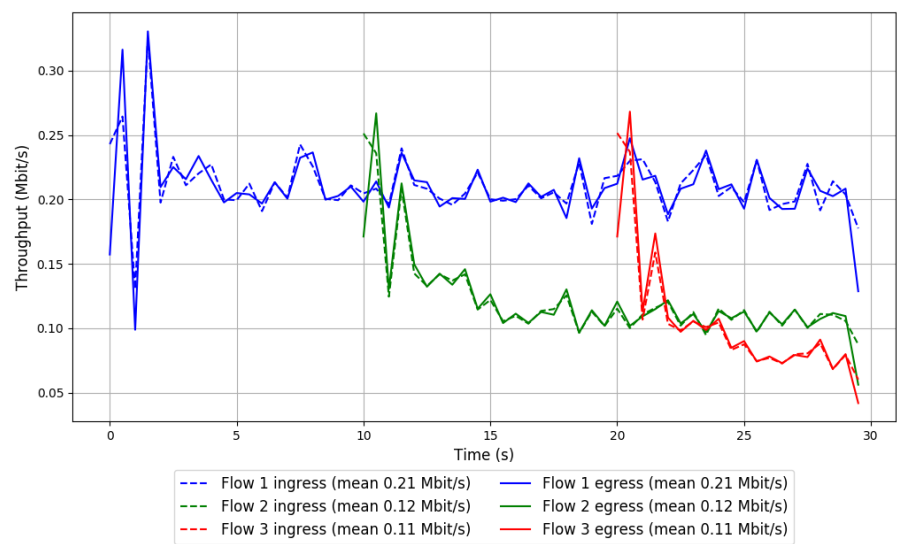
-- Flow 3:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 114.202 ms

Loss rate: 1.68%

Run 3: Report of SReAM — Data Link

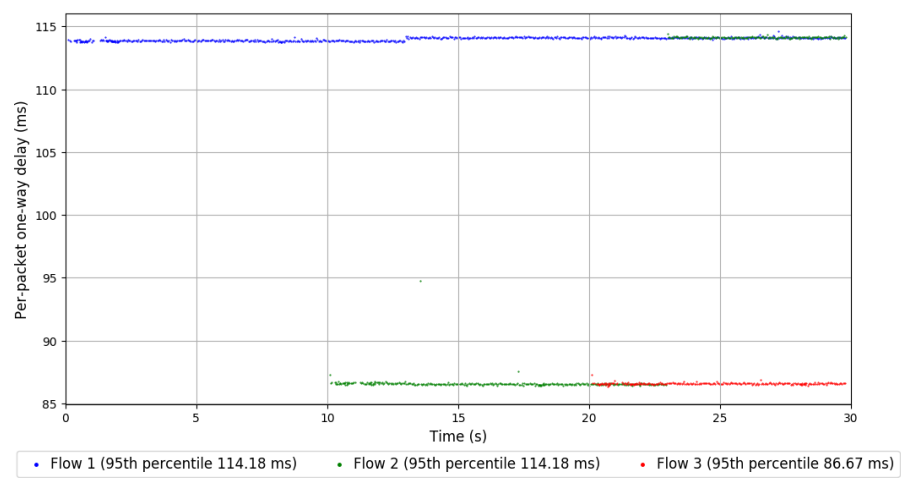
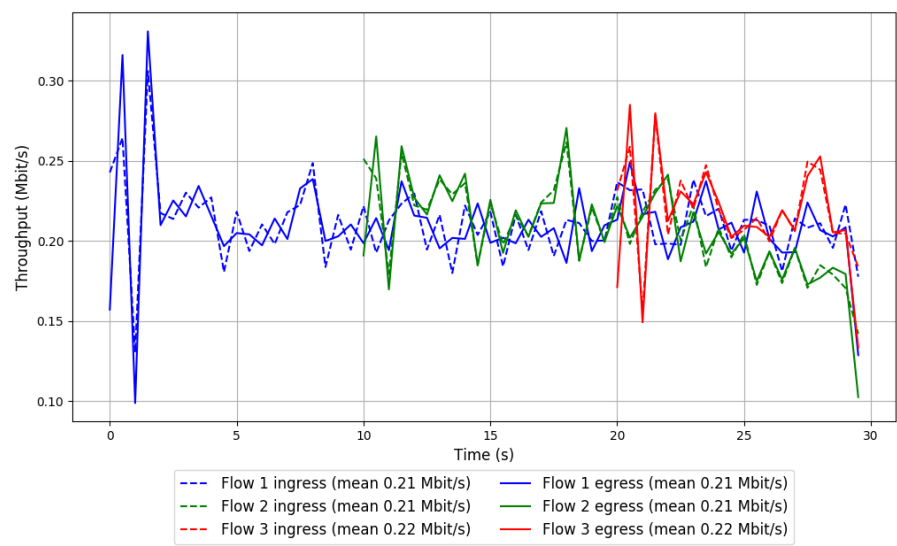


```
Run 4: Statistics of SCReAM

Start at: 2017-10-12 04:21:04
End at: 2017-10-12 04:21:34

# Below is generated by plot.py at 2017-10-12 08:21:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 114.172 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 114.178 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 114.178 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.670 ms
Loss rate: 1.87%
```

Run 4: Report of SCRaM — Data Link



Run 5: Statistics of SReAM

Start at: 2017-10-12 04:34:01

End at: 2017-10-12 04:34:31

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

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

Loss rate: 1.05%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.196 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 114.234 ms

Loss rate: 0.97%

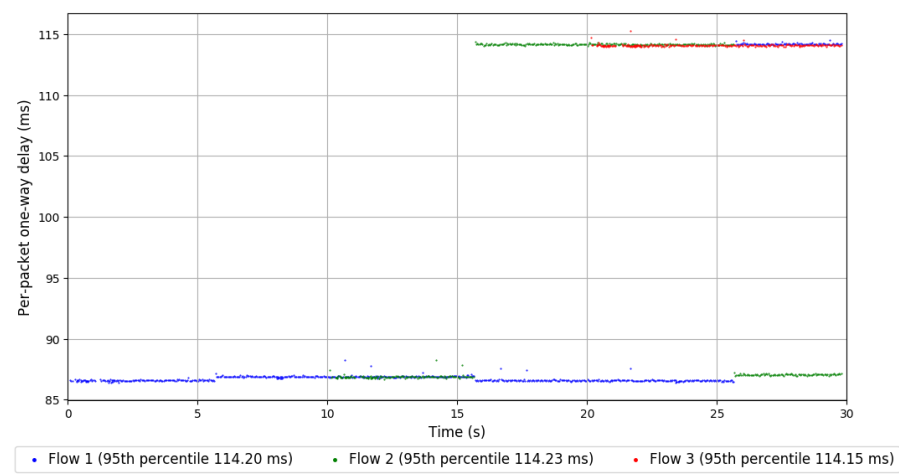
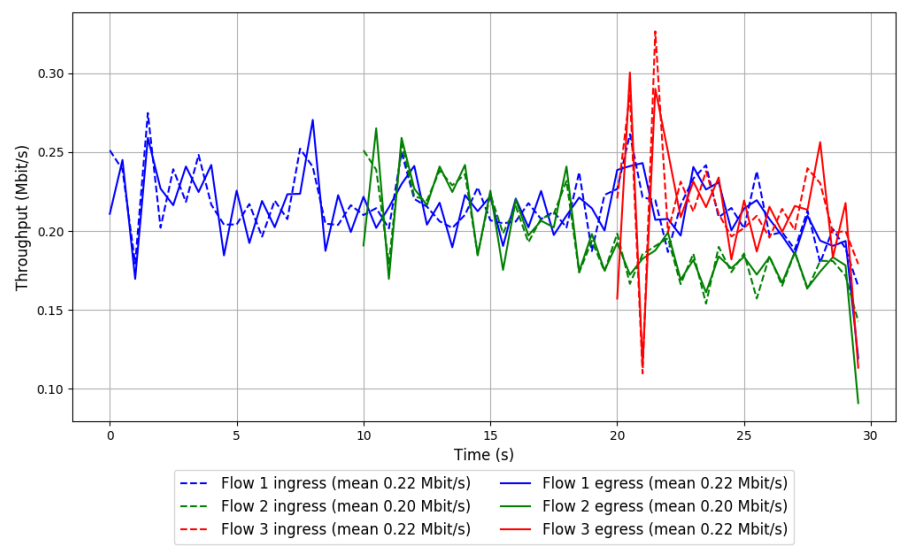
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.148 ms

Loss rate: 2.25%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-10-12 04:46:19

End at: 2017-10-12 04:46:49

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 114.410 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.286 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.97%

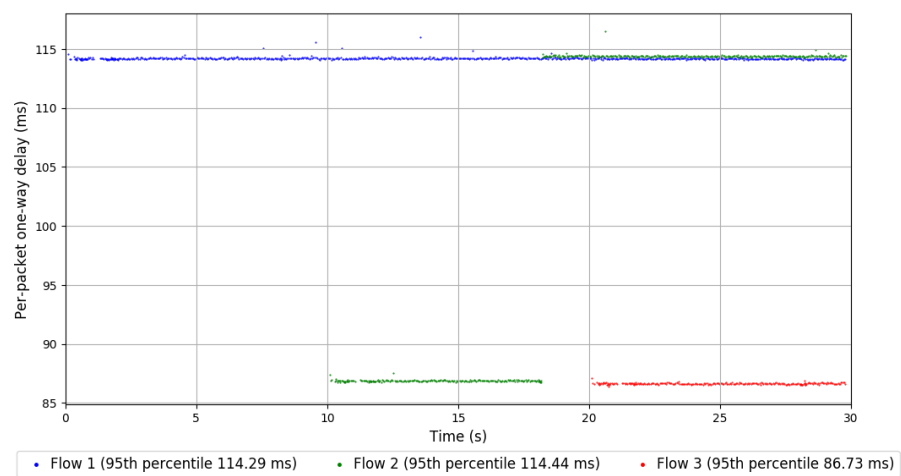
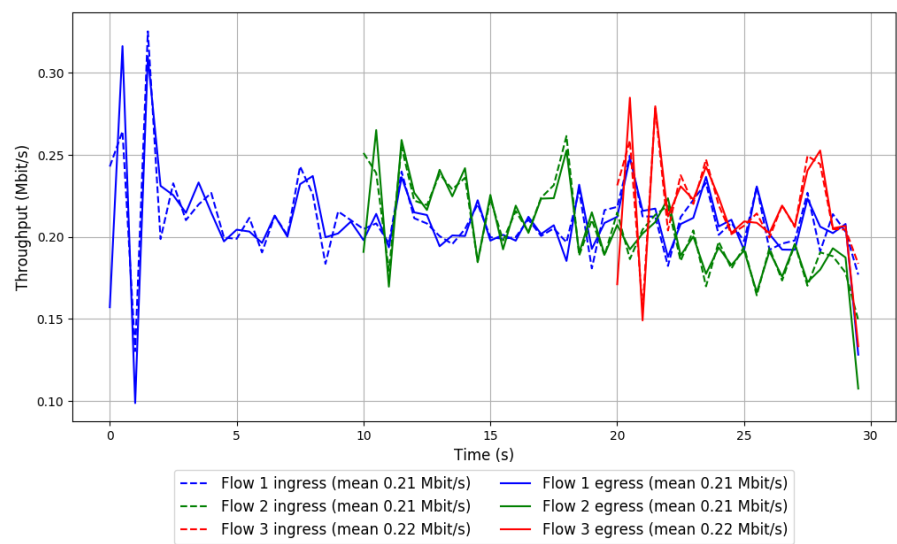
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.729 ms

Loss rate: 1.87%

Run 6: Report of SReAM — Data Link

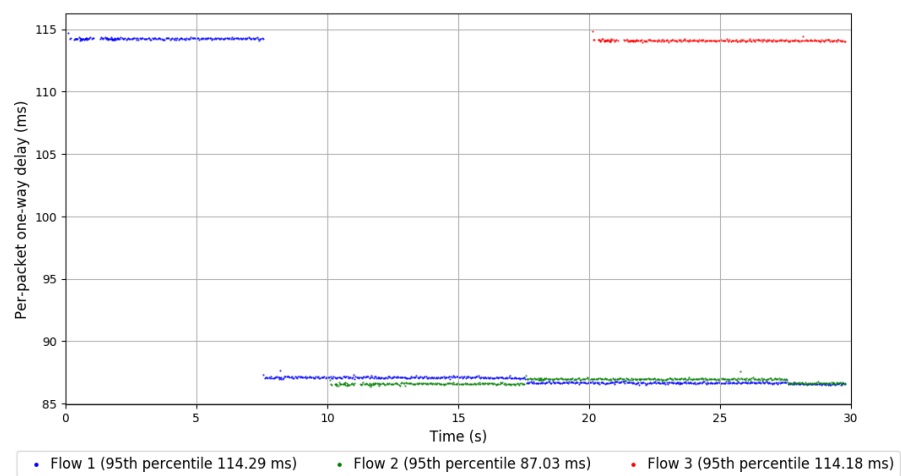
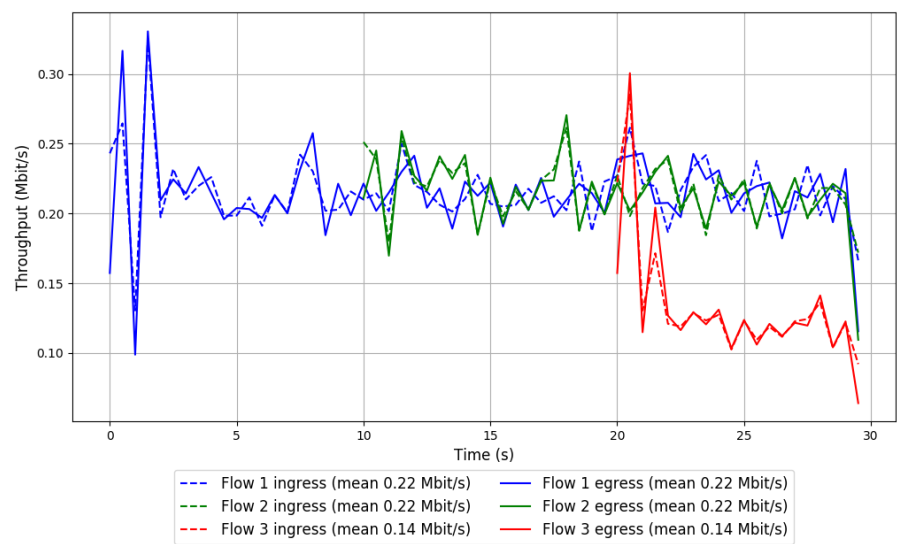


```
Run 7: Statistics of SReAM

Start at: 2017-10-12 04:59:00
End at: 2017-10-12 04:59:30

# Below is generated by plot.py at 2017-10-12 08:21:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 114.264 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.287 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.028 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 114.181 ms
Loss rate: 2.02%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-10-12 05:12:03

End at: 2017-10-12 05:12:33

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.41 Mbit/s

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

Loss rate: 0.88%

-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 114.315 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.307 ms

Loss rate: 0.84%

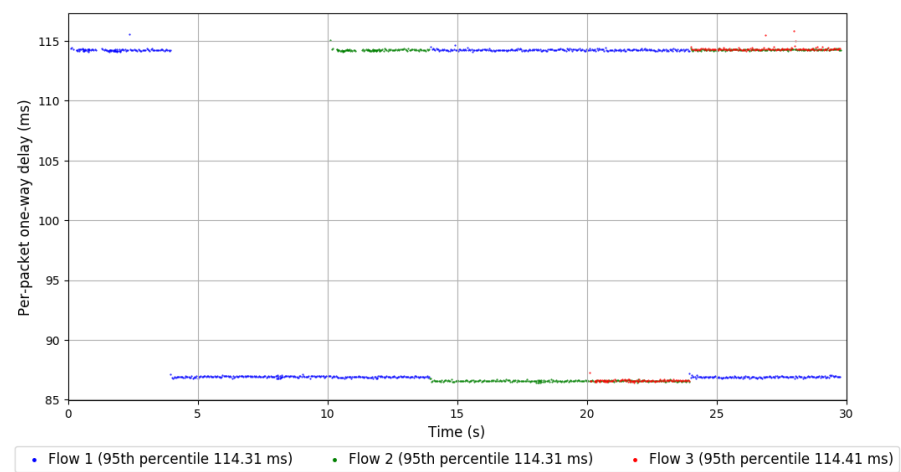
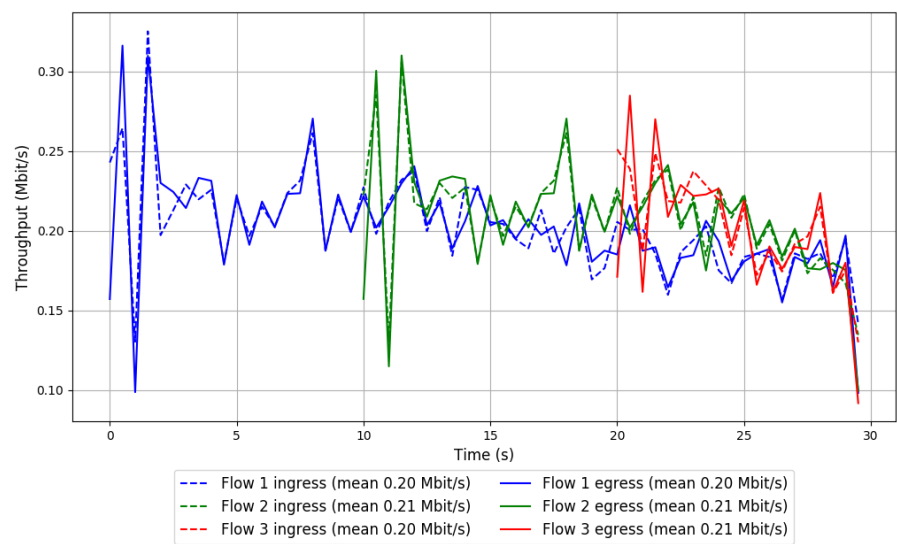
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.405 ms

Loss rate: 1.88%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-10-12 05:24:50

End at: 2017-10-12 05:25:20

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 1.04%

-- Flow 1:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.63%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.103 ms

Loss rate: 1.05%

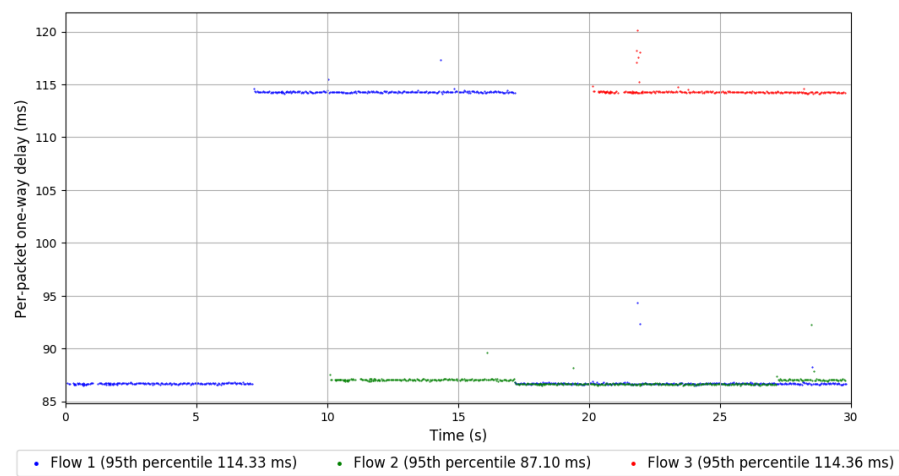
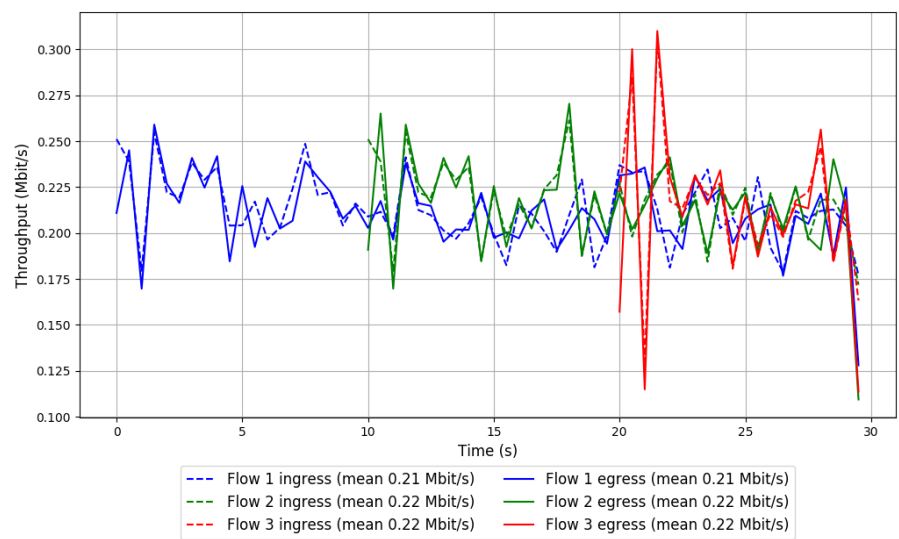
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.364 ms

Loss rate: 2.25%

Run 9: Report of SReAM — Data Link

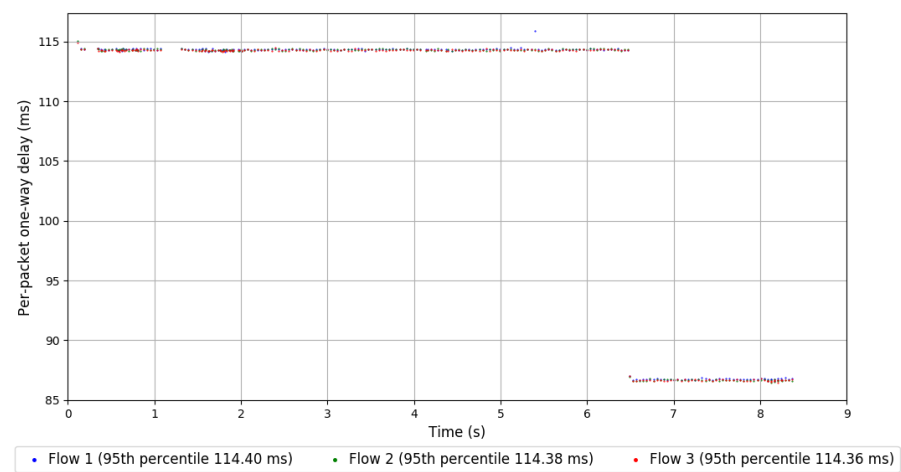
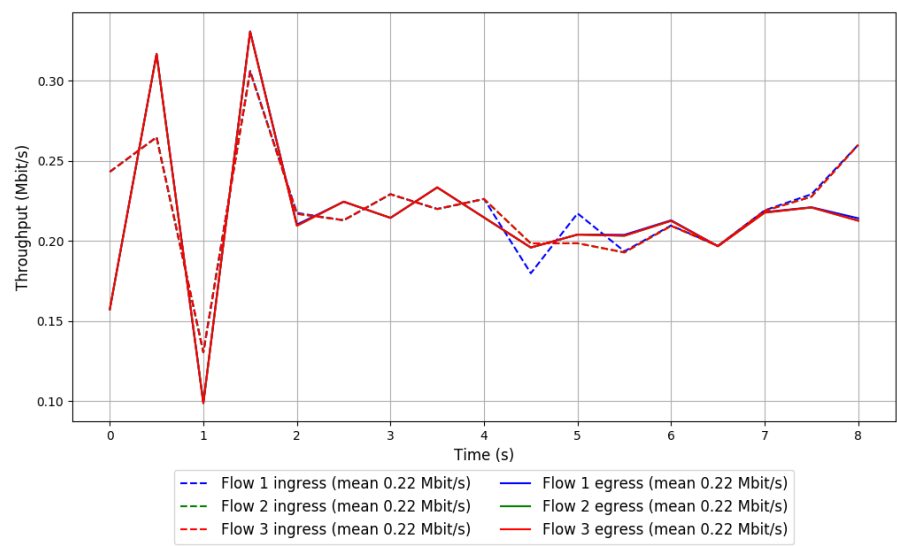


Run 10: Statistics of SCReAM

Start at: 2017-10-12 05:37:39

End at: 2017-10-12 05:38:09

Run 10: Report of SReAM — Data Link

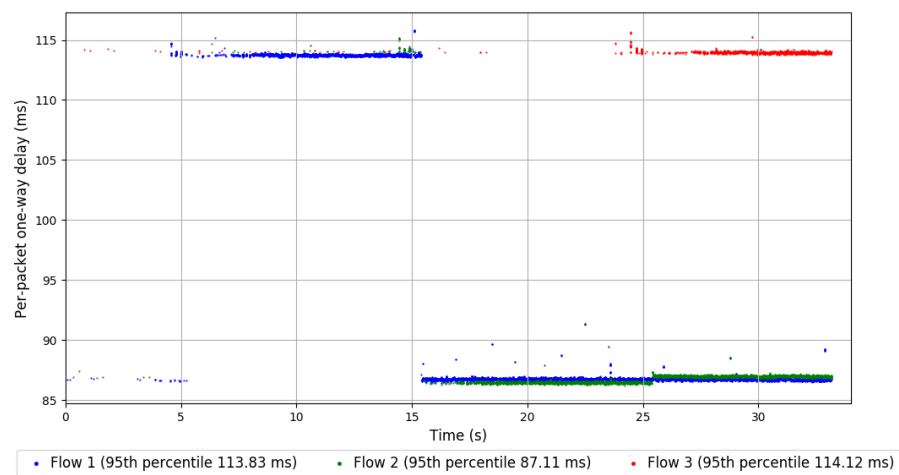
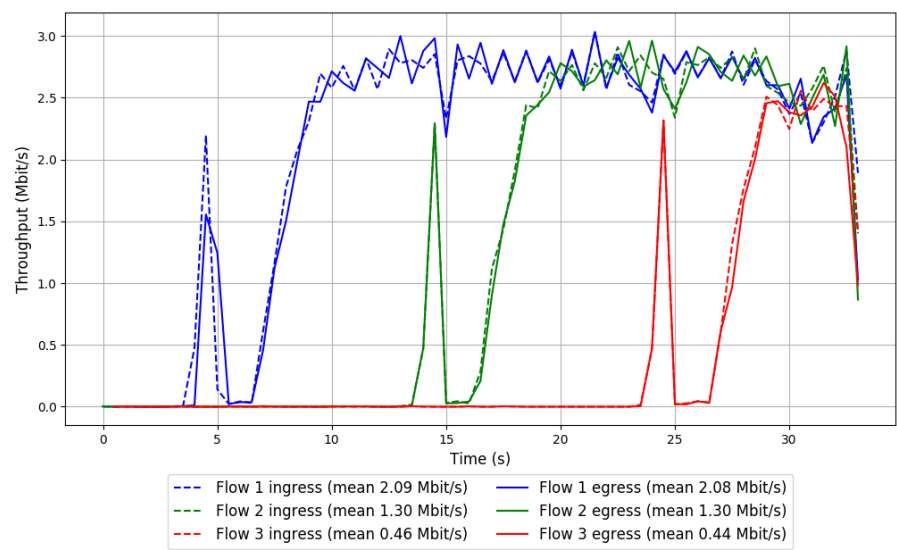


```
Run 1: Statistics of WebRTC media

Start at: 2017-10-12 03:37:15
End at: 2017-10-12 03:37:45

# Below is generated by plot.py at 2017-10-12 08:21:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.80 Mbit/s
95th percentile per-packet one-way delay: 114.002 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 113.830 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 87.111 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 114.124 ms
Loss rate: 3.91%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-10-12 03:50:03

End at: 2017-10-12 03:50:33

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 114.181 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 2.31 Mbit/s

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

Loss rate: 0.96%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 114.224 ms

Loss rate: 1.22%

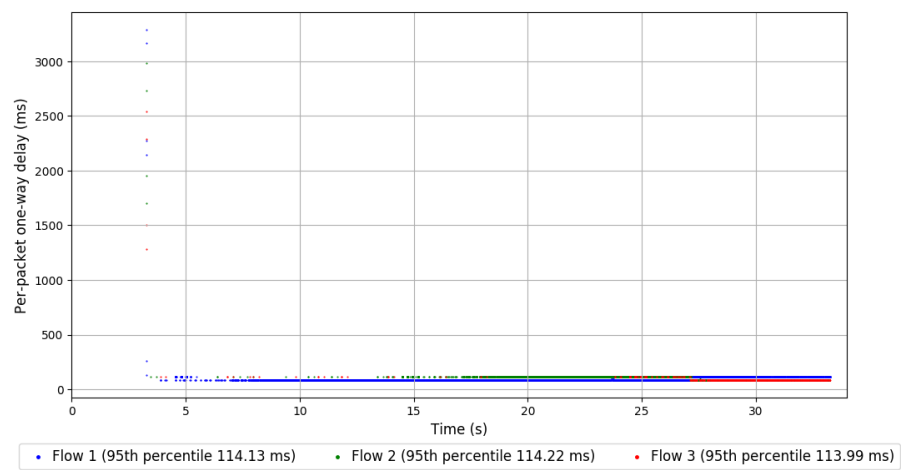
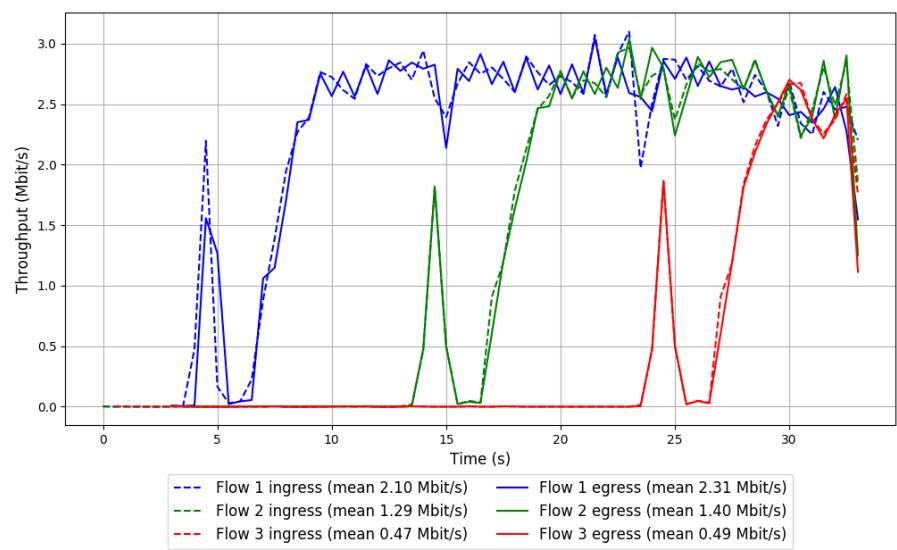
-- Flow 3:

Average throughput: 0.49 Mbit/s

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

Loss rate: 3.58%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-10-12 04:02:36

End at: 2017-10-12 04:03:06

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 114.174 ms

Loss rate: 1.47%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 114.158 ms

Loss rate: 1.23%

-- Flow 2:

Average throughput: 1.29 Mbit/s

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

Loss rate: 1.06%

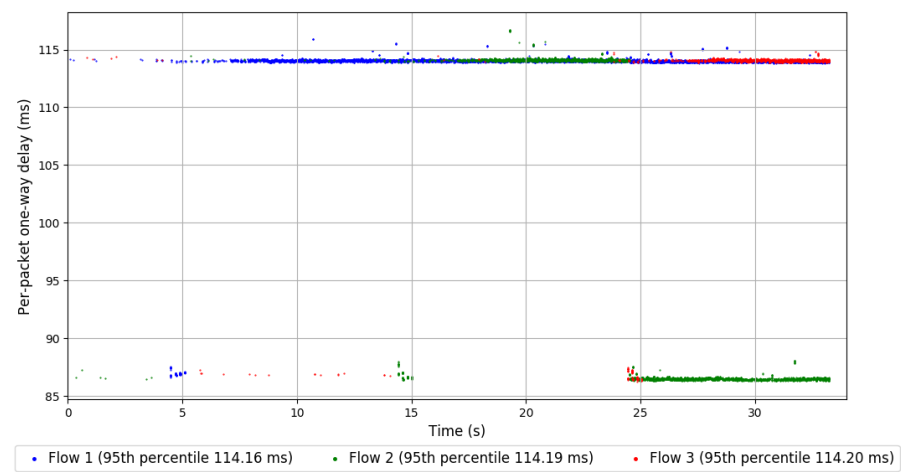
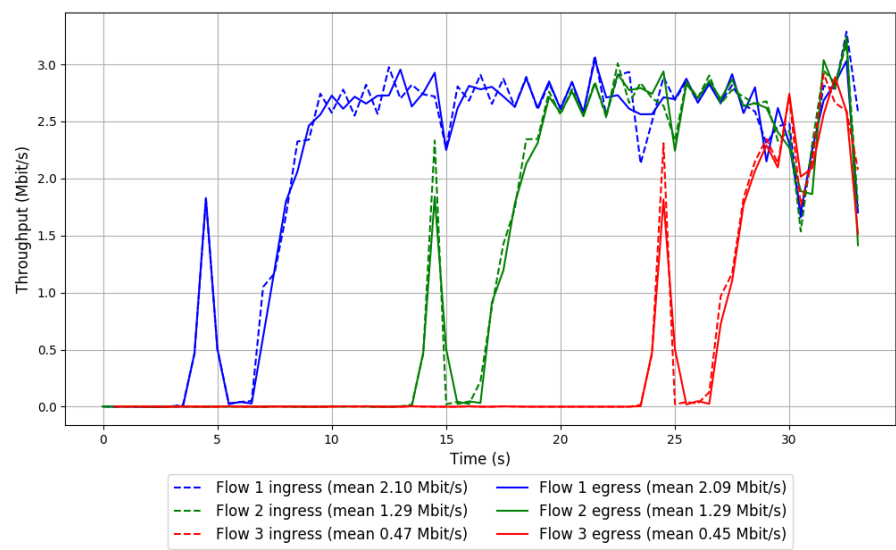
-- Flow 3:

Average throughput: 0.45 Mbit/s

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

Loss rate: 3.73%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-10-12 04:15:29

End at: 2017-10-12 04:15:59

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.85 Mbit/s

95th percentile per-packet one-way delay: 114.102 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 87.120 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 114.138 ms

Loss rate: 0.88%

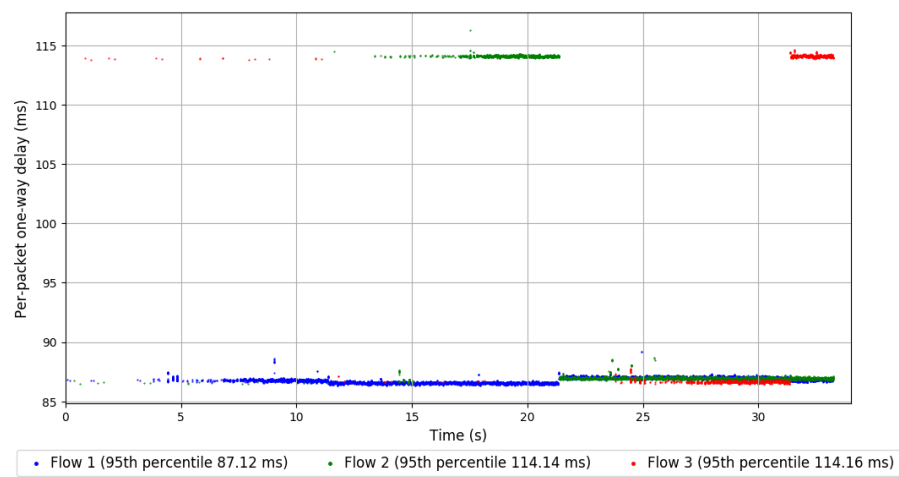
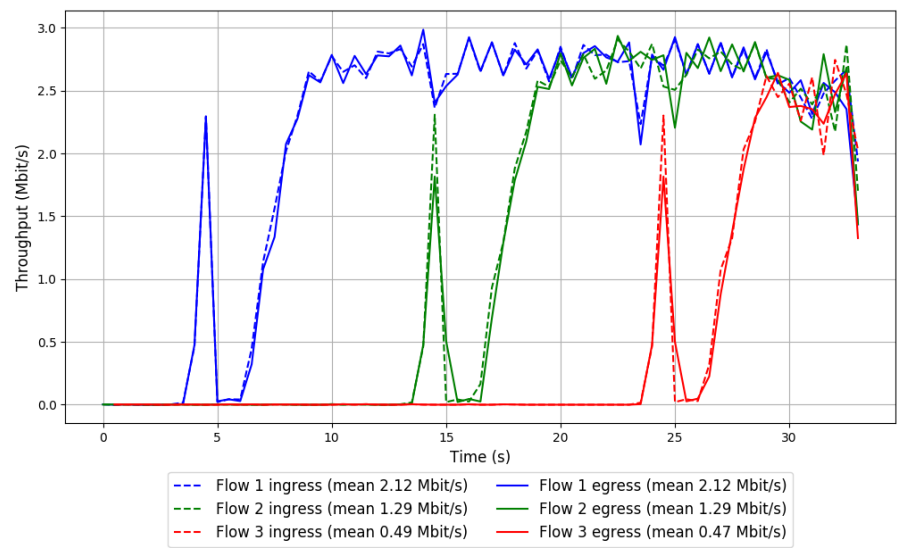
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 114.163 ms

Loss rate: 3.88%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-10-12 04:28:26

End at: 2017-10-12 04:28:56

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 114.180 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 114.207 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 113.879 ms

Loss rate: 1.62%

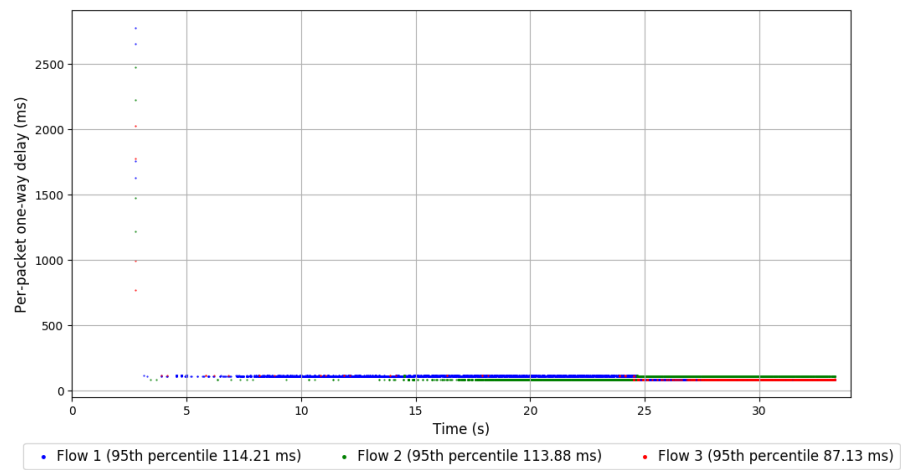
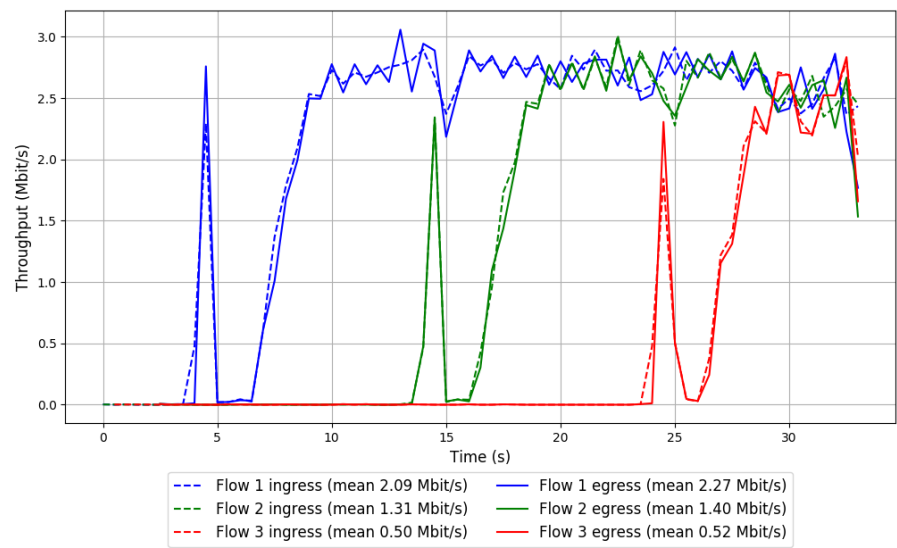
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 87.128 ms

Loss rate: 2.58%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-10-12 04:41:01

End at: 2017-10-12 04:41:31

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 114.280 ms

Loss rate: 1.50%

-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 114.241 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 1.45 Mbit/s

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

Loss rate: 1.91%

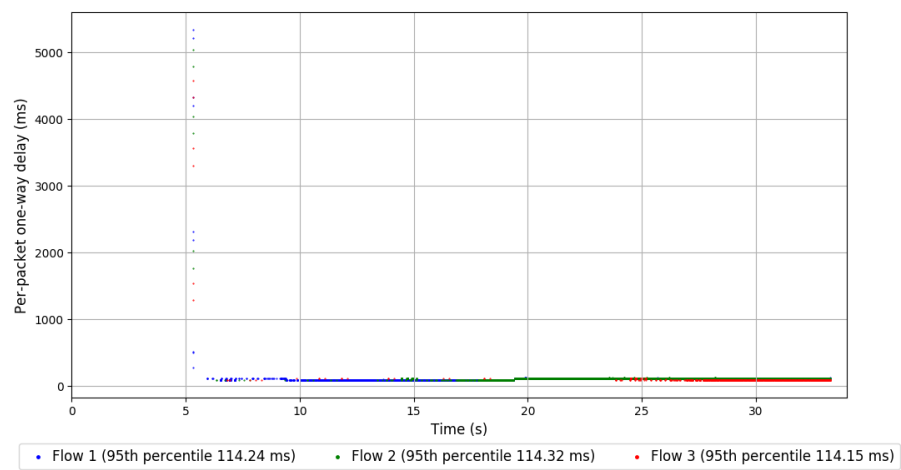
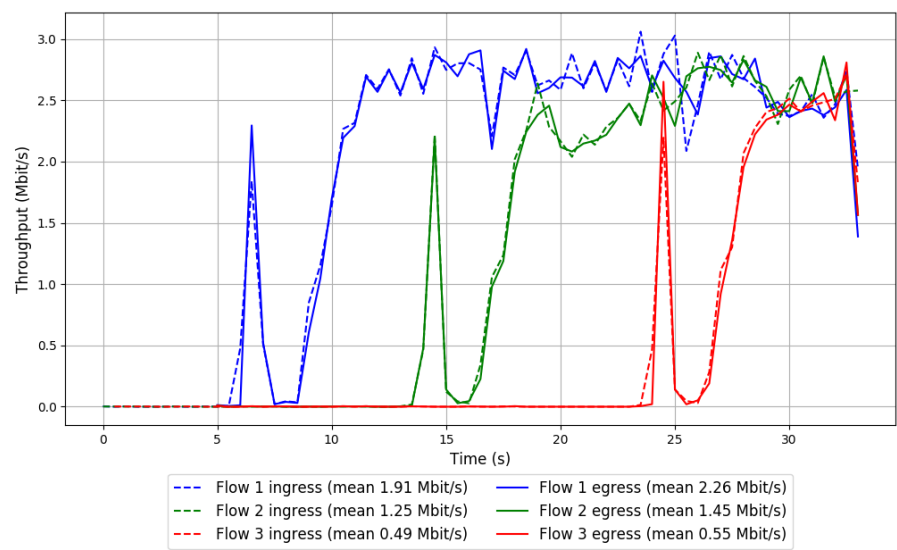
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 114.154 ms

Loss rate: 2.50%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-10-12 04:53:29

End at: 2017-10-12 04:53:59

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.84 Mbit/s

95th percentile per-packet one-way delay: 114.254 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 87.023 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 114.303 ms

Loss rate: 1.40%

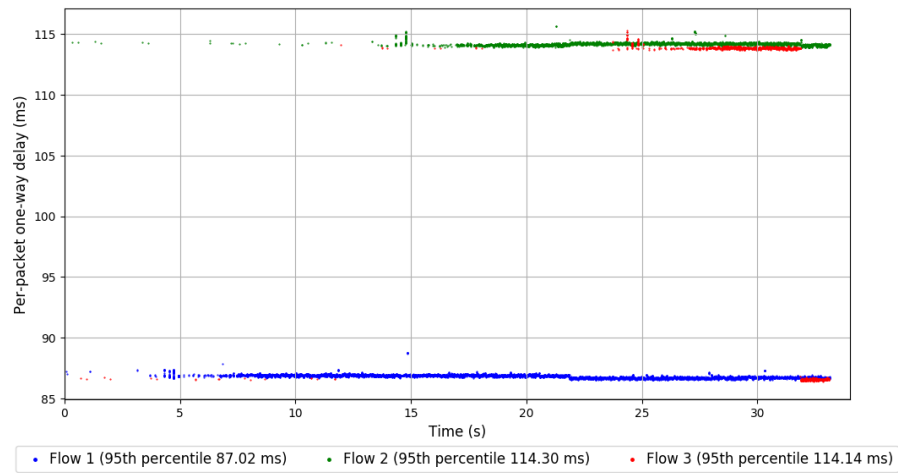
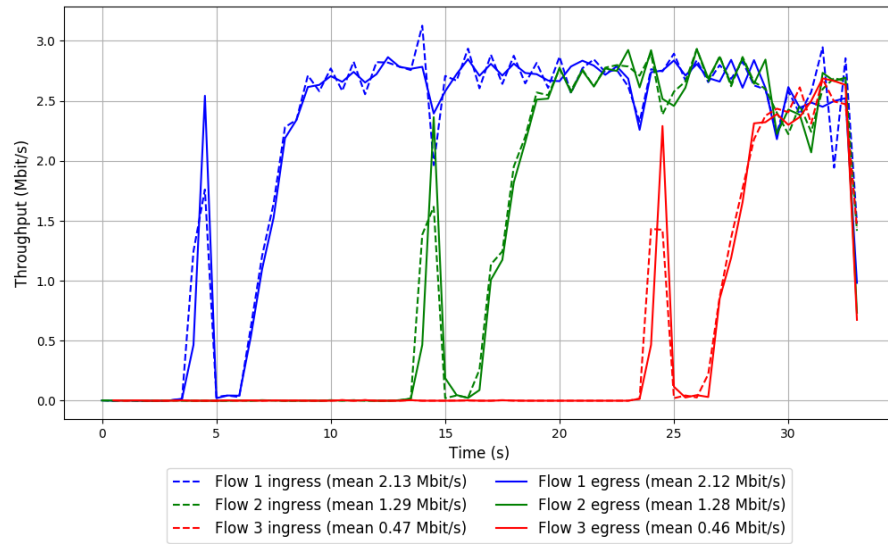
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 114.140 ms

Loss rate: 3.45%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-10-12 05:06:39

End at: 2017-10-12 05:07:09

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 114.413 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 114.303 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 114.478 ms

Loss rate: 1.45%

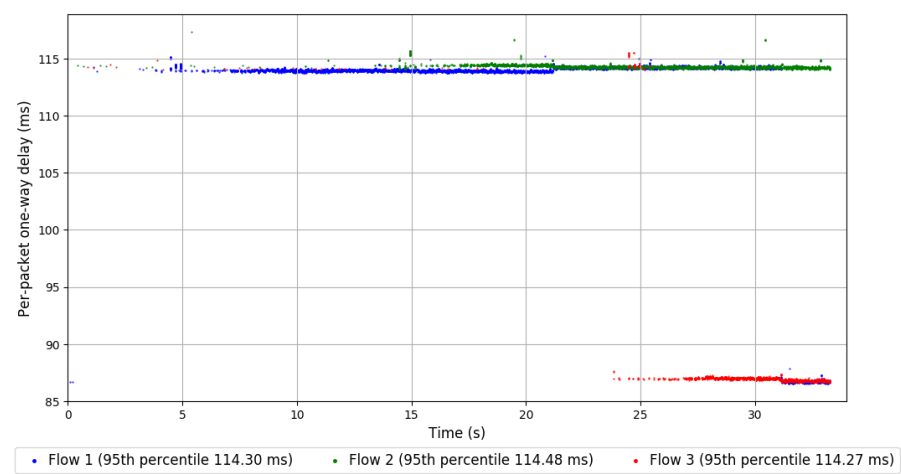
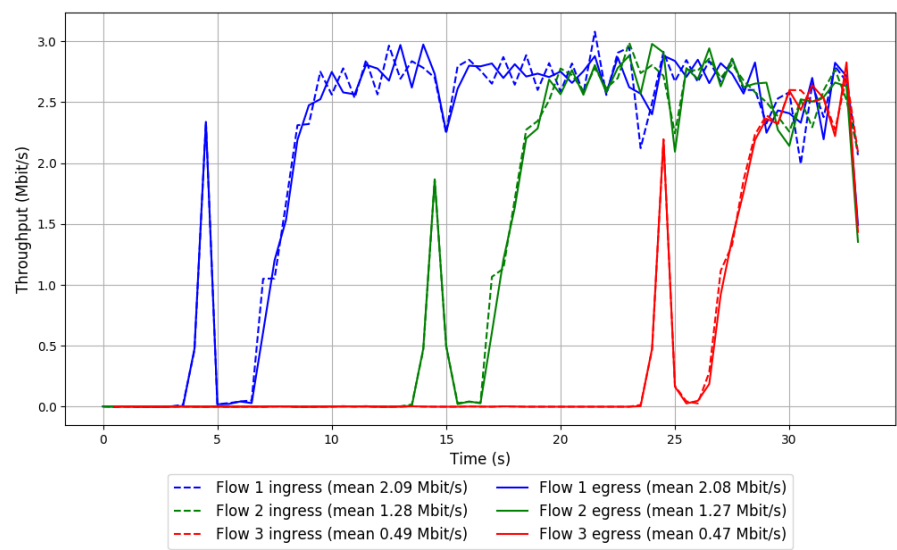
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 114.273 ms

Loss rate: 3.25%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-10-12 05:19:11

End at: 2017-10-12 05:19:41

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.93 Mbit/s

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

Loss rate: 1.34%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 114.437 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 114.352 ms

Loss rate: 1.04%

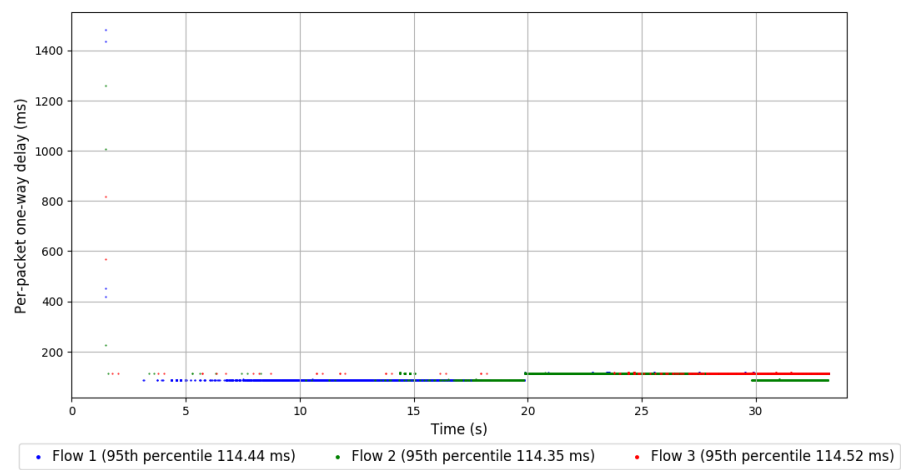
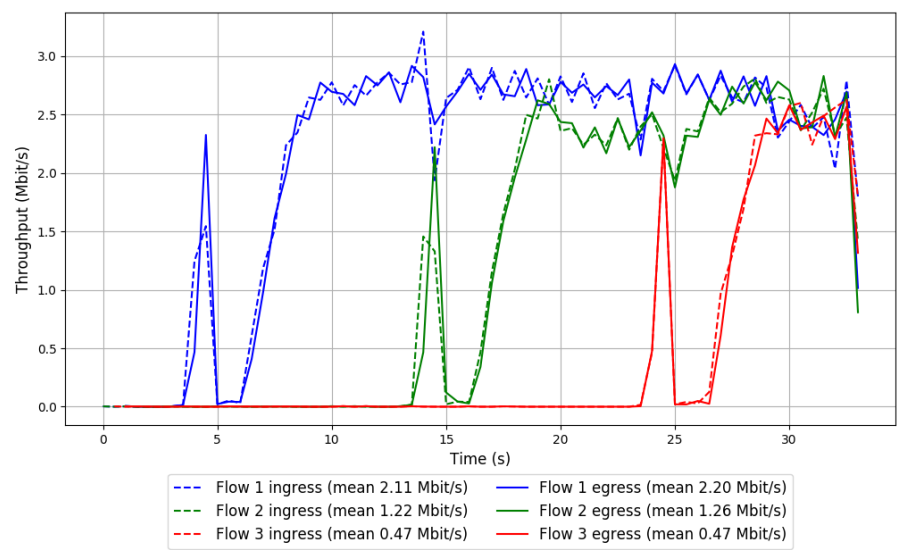
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 114.520 ms

Loss rate: 4.13%

Run 9: Report of WebRTC media — Data Link

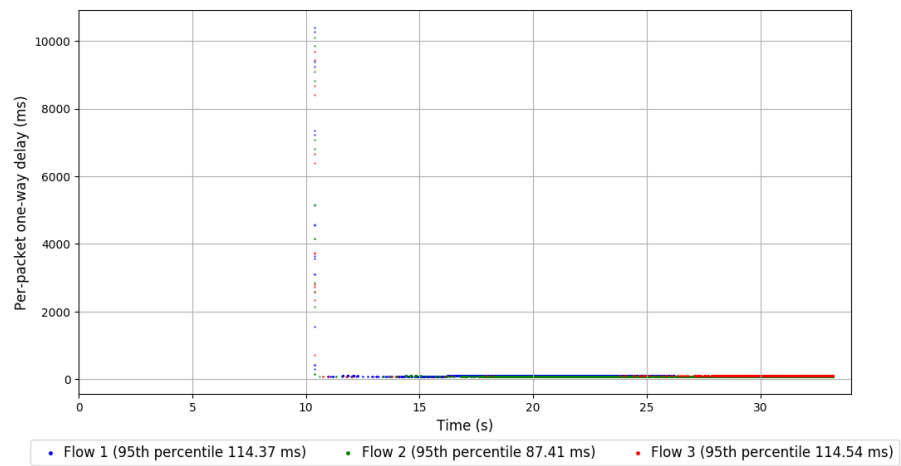
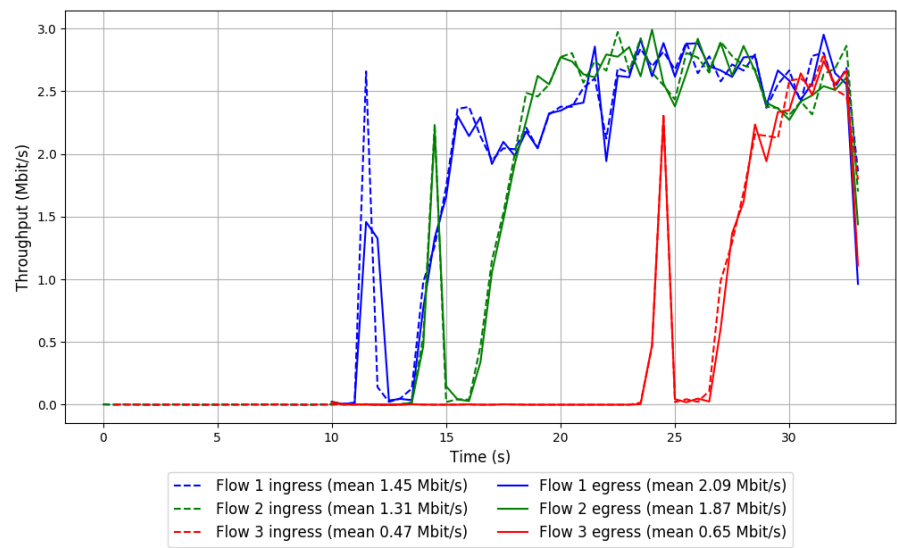


Run 10: Statistics of WebRTC media

Start at: 2017-10-12 05:32:14

End at: 2017-10-12 05:32:44

Run 10: Report of WebRTC media — Data Link

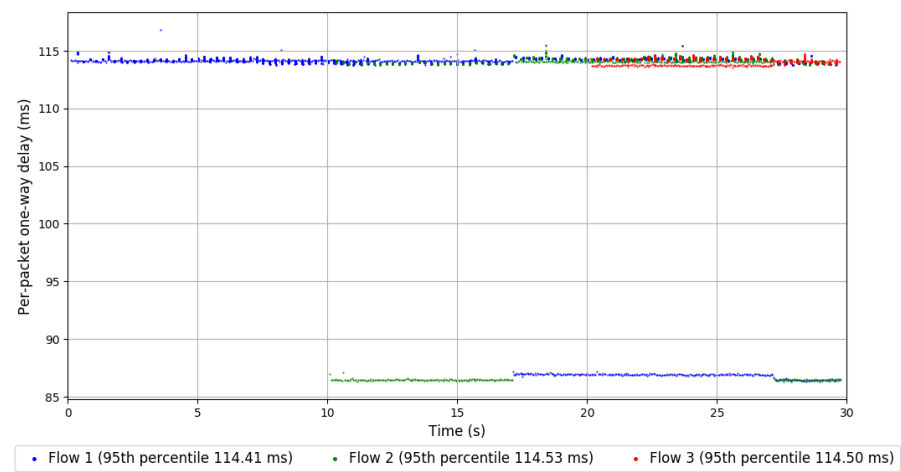
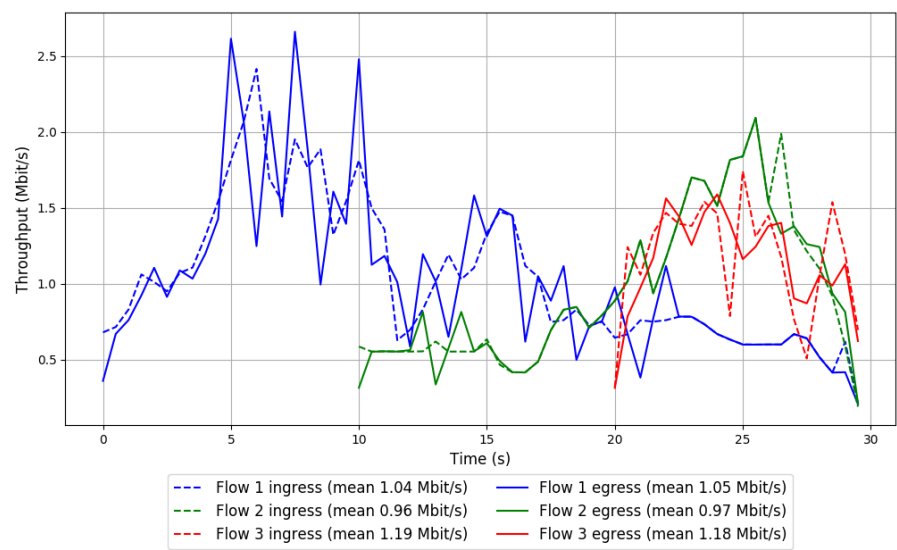


```
Run 1: Statistics of Sprout

Start at: 2017-10-12 03:36:30
End at: 2017-10-12 03:37:00

# Below is generated by plot.py at 2017-10-12 08:21:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 114.450 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 114.409 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 114.531 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 114.497 ms
Loss rate: 2.95%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-10-12 03:49:18

End at: 2017-10-12 03:49:48

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.62 Mbit/s

95th percentile per-packet one-way delay: 114.371 ms

Loss rate: 1.33%

-- Flow 1:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 114.407 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 114.364 ms

Loss rate: 1.70%

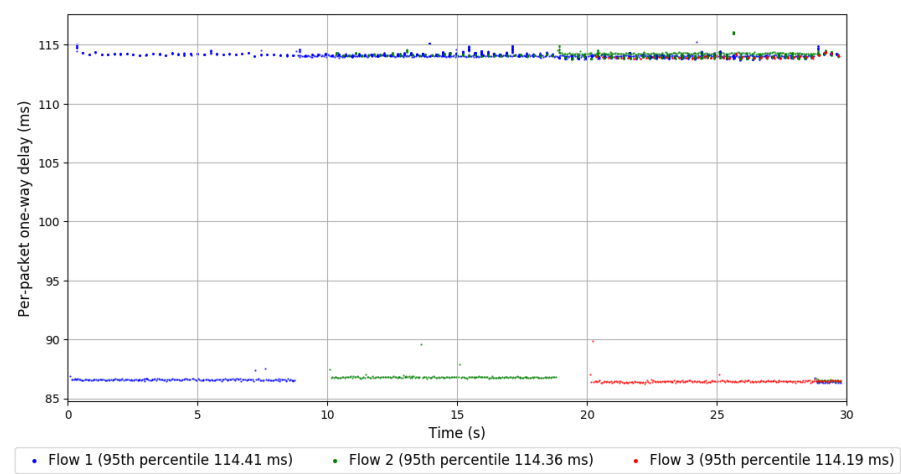
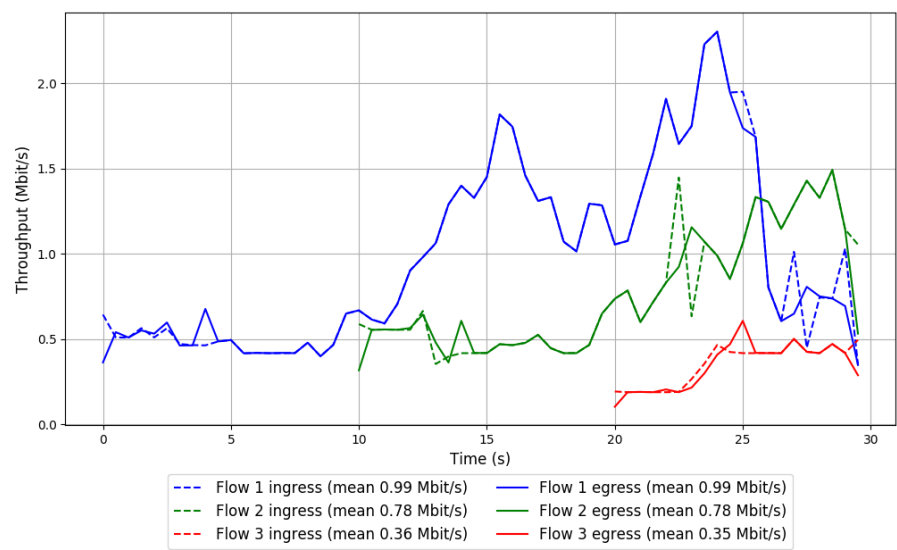
-- Flow 3:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 114.185 ms

Loss rate: 2.99%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-10-12 04:01:50

End at: 2017-10-12 04:02:20

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.25 Mbit/s

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

Loss rate: 1.92%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 114.508 ms

Loss rate: 1.53%

-- Flow 2:

Average throughput: 1.13 Mbit/s

95th percentile per-packet one-way delay: 114.185 ms

Loss rate: 2.51%

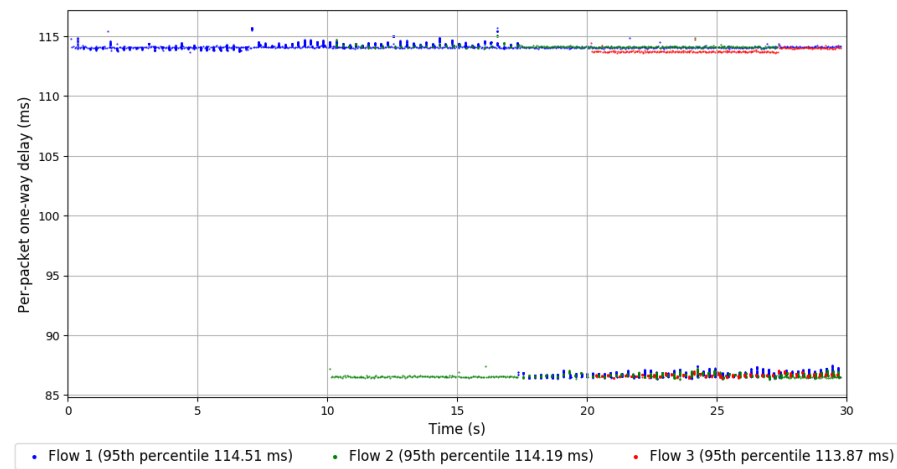
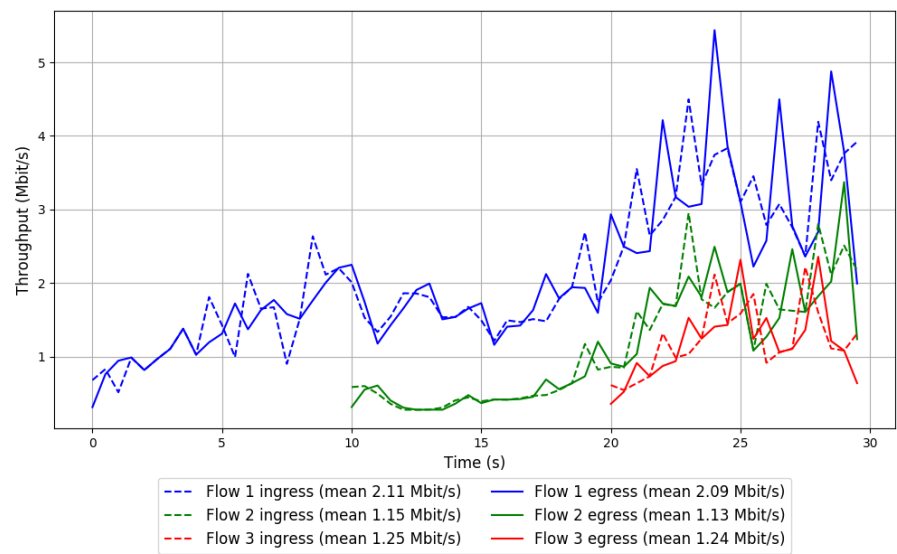
-- Flow 3:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 113.869 ms

Loss rate: 2.75%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-10-12 04:14:44

End at: 2017-10-12 04:15:14

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.70 Mbit/s

95th percentile per-packet one-way delay: 89.931 ms

Loss rate: 1.69%

-- Flow 1:

Average throughput: 3.41 Mbit/s

95th percentile per-packet one-way delay: 87.517 ms

Loss rate: 1.08%

-- Flow 2:

Average throughput: 2.66 Mbit/s

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

Loss rate: 1.80%

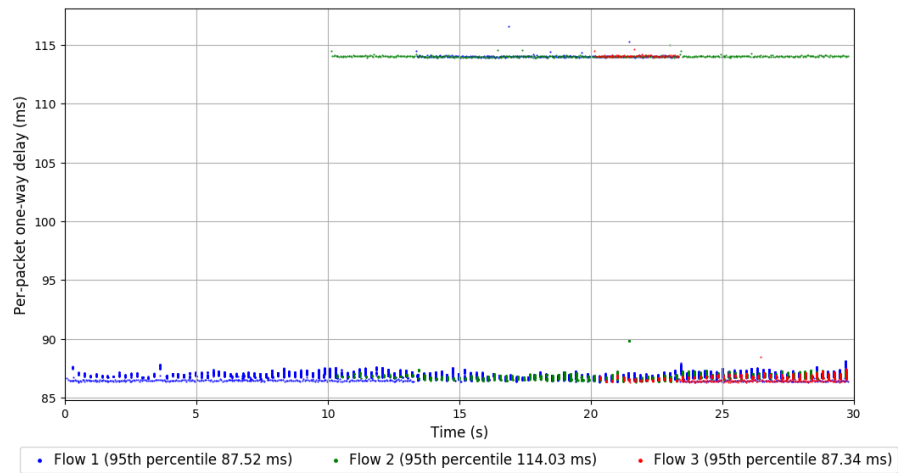
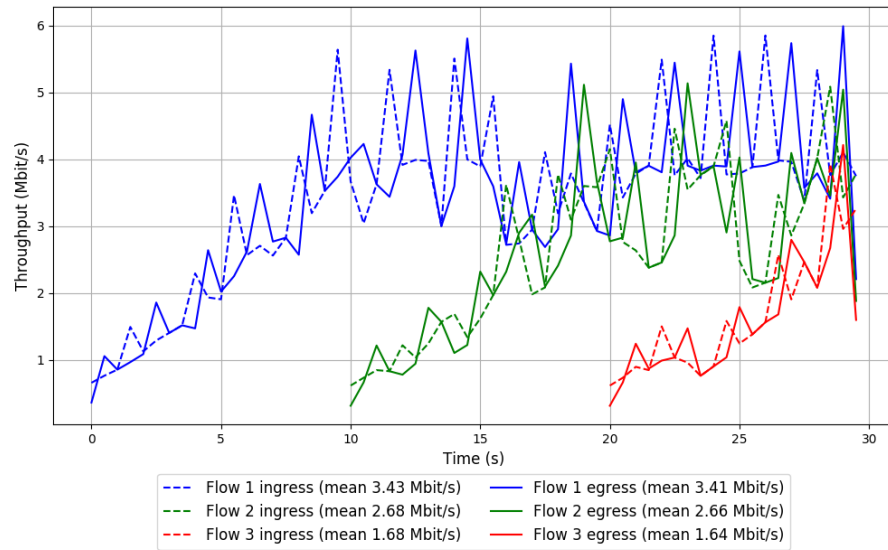
-- Flow 3:

Average throughput: 1.64 Mbit/s

95th percentile per-packet one-way delay: 87.344 ms

Loss rate: 5.02%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-10-12 04:27:39

End at: 2017-10-12 04:28:09

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.58 Mbit/s

95th percentile per-packet one-way delay: 114.345 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 3.65 Mbit/s

95th percentile per-packet one-way delay: 87.792 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 3.42 Mbit/s

95th percentile per-packet one-way delay: 114.334 ms

Loss rate: 1.00%

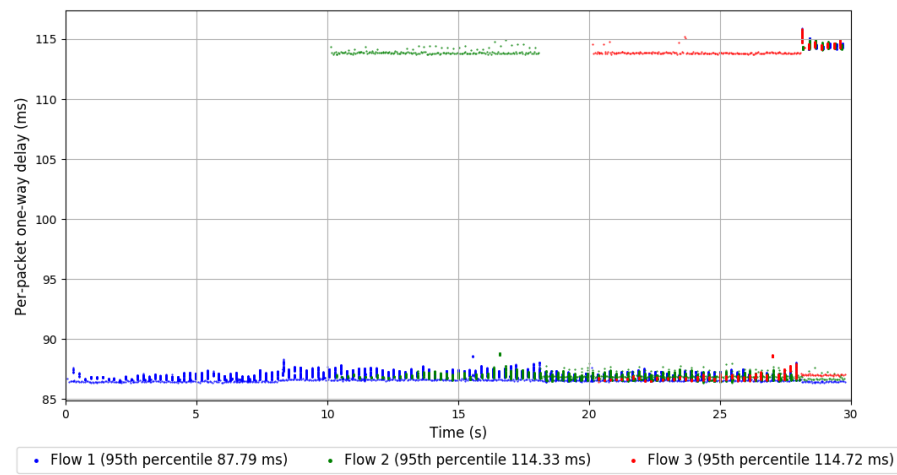
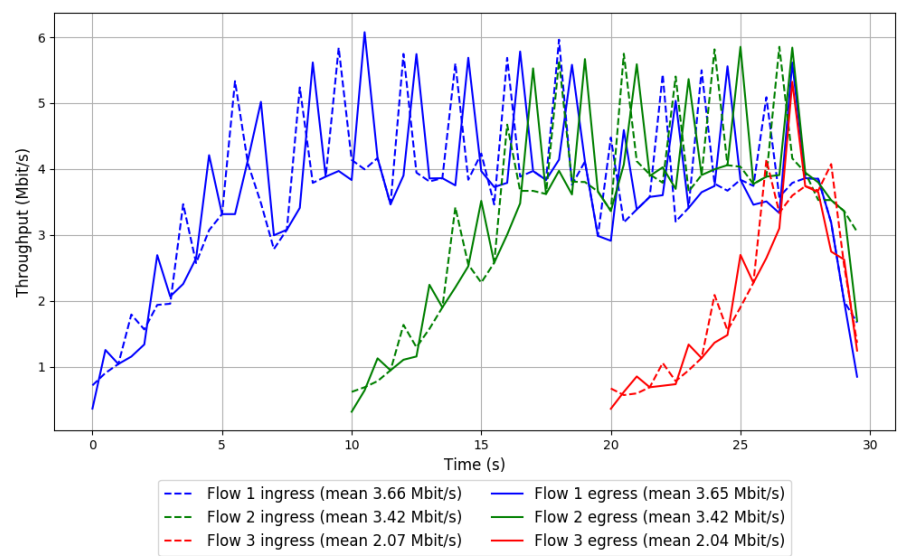
-- Flow 3:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 114.724 ms

Loss rate: 3.39%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-10-12 04:40:16

End at: 2017-10-12 04:40:46

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.68 Mbit/s

95th percentile per-packet one-way delay: 87.633 ms

Loss rate: 2.30%

-- Flow 1:

Average throughput: 1.71 Mbit/s

95th percentile per-packet one-way delay: 114.225 ms

Loss rate: 1.73%

-- Flow 2:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 87.527 ms

Loss rate: 2.15%

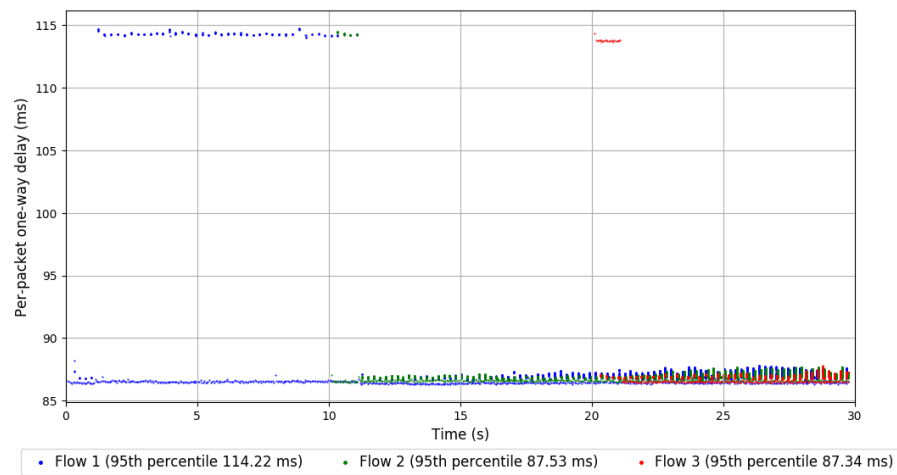
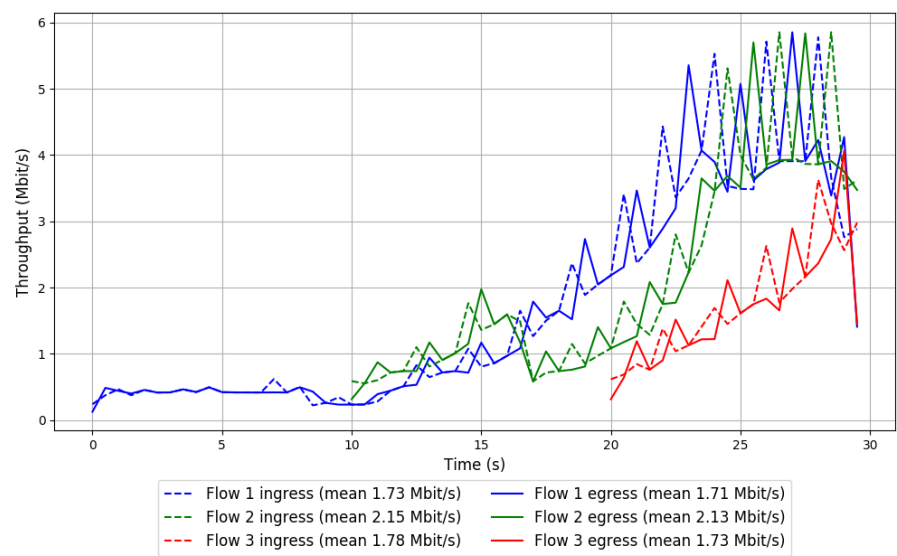
-- Flow 3:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 87.338 ms

Loss rate: 4.35%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-10-12 04:52:44

End at: 2017-10-12 04:53:14

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.01 Mbit/s

95th percentile per-packet one-way delay: 114.612 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 1.65 Mbit/s

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

Loss rate: 0.40%

-- Flow 2:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 114.712 ms

Loss rate: 1.34%

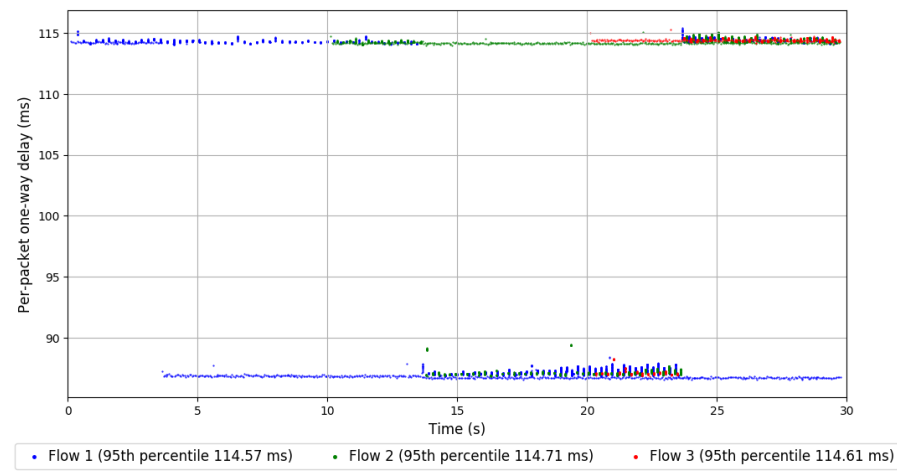
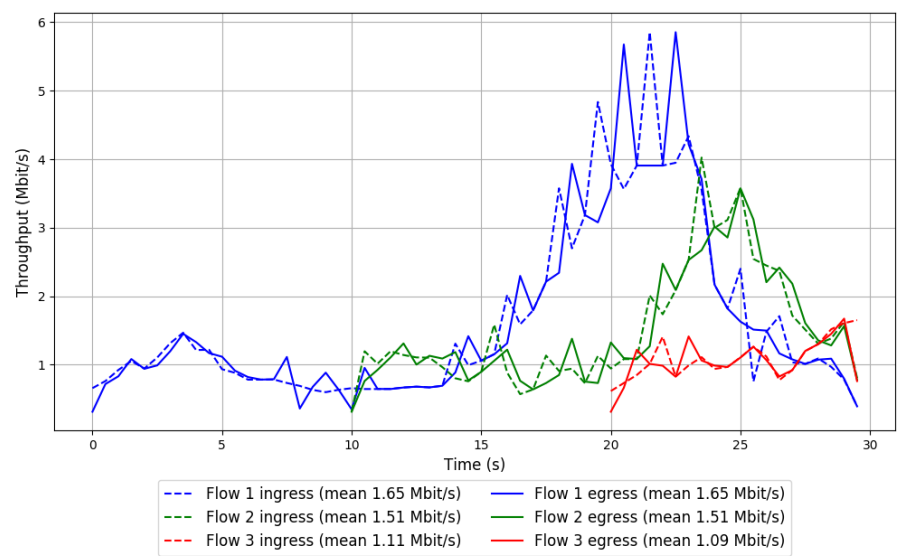
-- Flow 3:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 114.608 ms

Loss rate: 4.08%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-10-12 05:05:54

End at: 2017-10-12 05:06:24

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 114.590 ms

Loss rate: 2.29%

-- Flow 1:

Average throughput: 1.56 Mbit/s

95th percentile per-packet one-way delay: 114.629 ms

Loss rate: 1.60%

-- Flow 2:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 114.550 ms

Loss rate: 0.25%

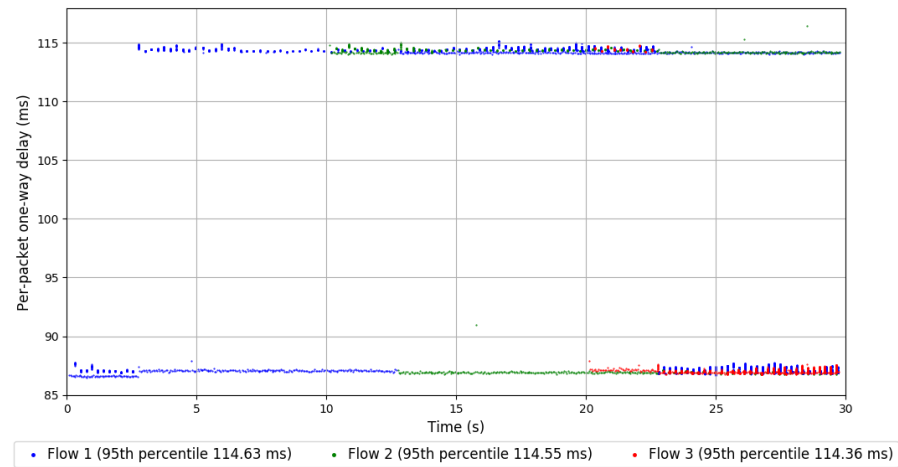
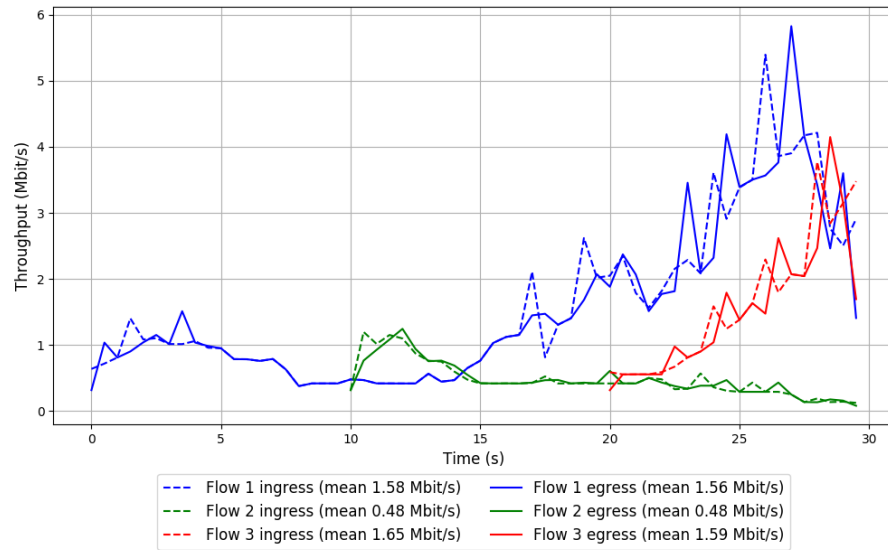
-- Flow 3:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 114.358 ms

Loss rate: 5.50%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-10-12 05:18:25

End at: 2017-10-12 05:18:55

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.56 Mbit/s

95th percentile per-packet one-way delay: 114.626 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 114.649 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 114.624 ms

Loss rate: 1.81%

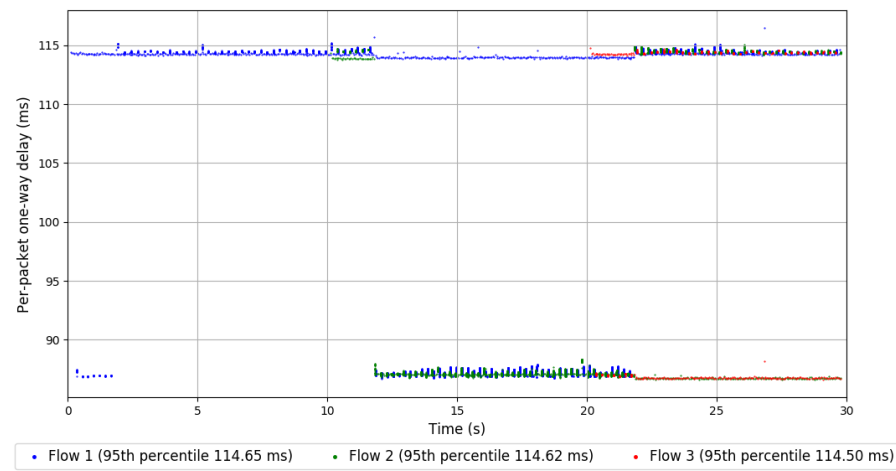
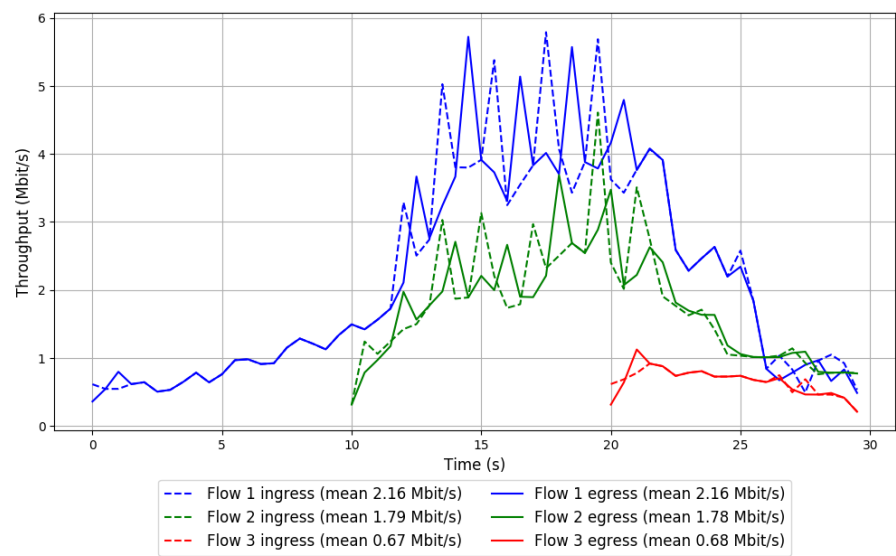
-- Flow 3:

Average throughput: 0.68 Mbit/s

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

Loss rate: 1.57%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-10-12 05:31:29

End at: 2017-10-12 05:31:59

Below is generated by plot.py at 2017-10-12 08:21:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 114.621 ms

Loss rate: 1.44%

-- Flow 1:

Average throughput: 1.04 Mbit/s

95th percentile per-packet one-way delay: 114.607 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 114.610 ms

Loss rate: 1.88%

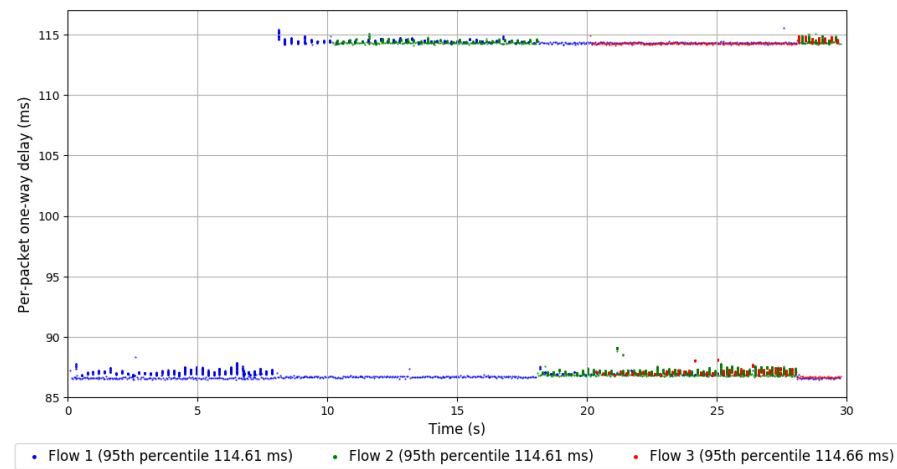
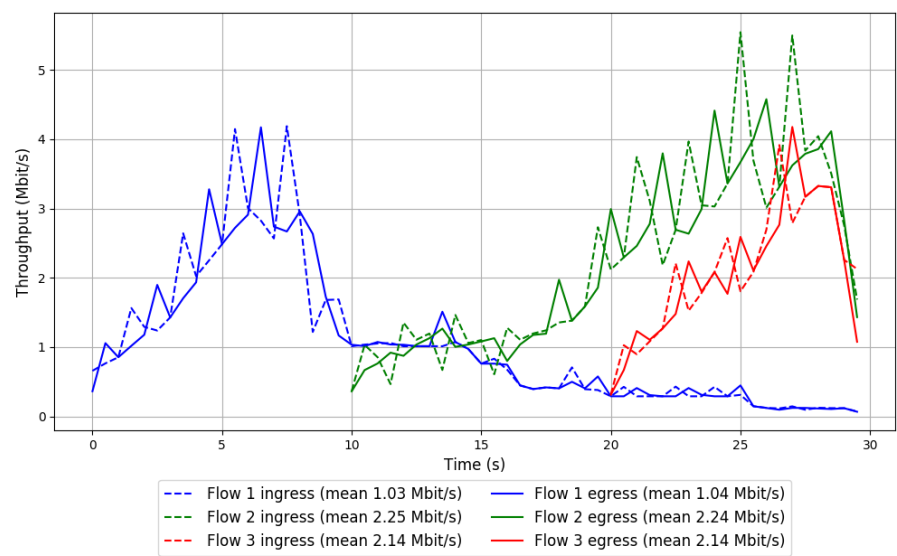
-- Flow 3:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 114.657 ms

Loss rate: 2.49%

Run 10: Report of Sprout — Data Link

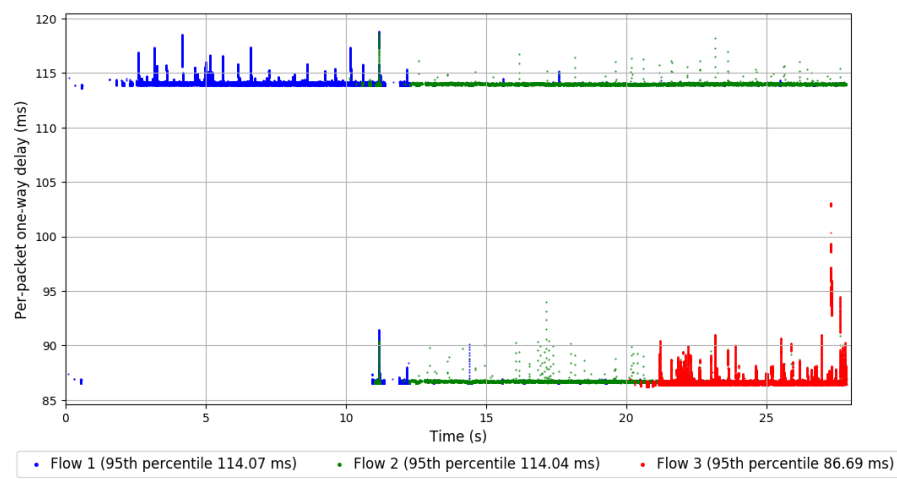
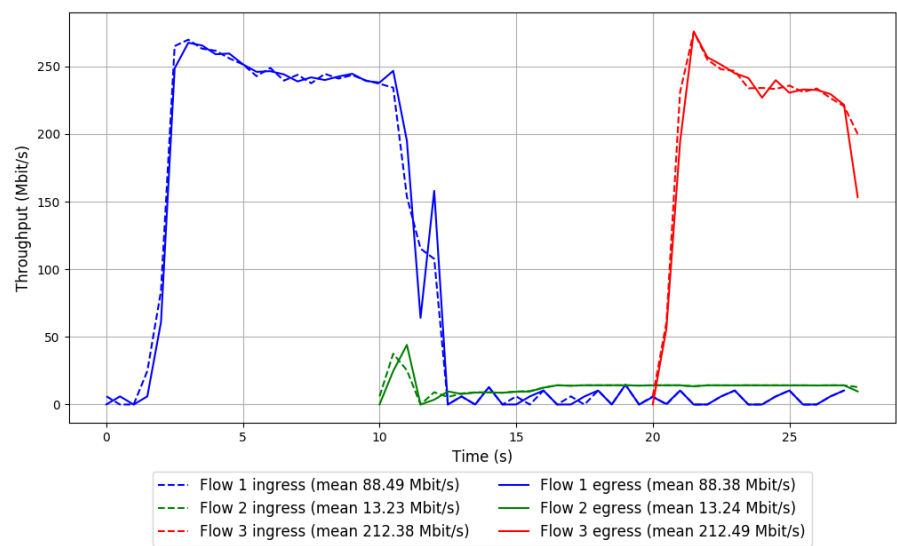


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-10-12 03:40:14
End at: 2017-10-12 03:40:44

# Below is generated by plot.py at 2017-10-12 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 154.91 Mbit/s
95th percentile per-packet one-way delay: 114.042 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 88.38 Mbit/s
95th percentile per-packet one-way delay: 114.074 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 13.24 Mbit/s
95th percentile per-packet one-way delay: 114.036 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 212.49 Mbit/s
95th percentile per-packet one-way delay: 86.692 ms
Loss rate: 2.49%
```


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

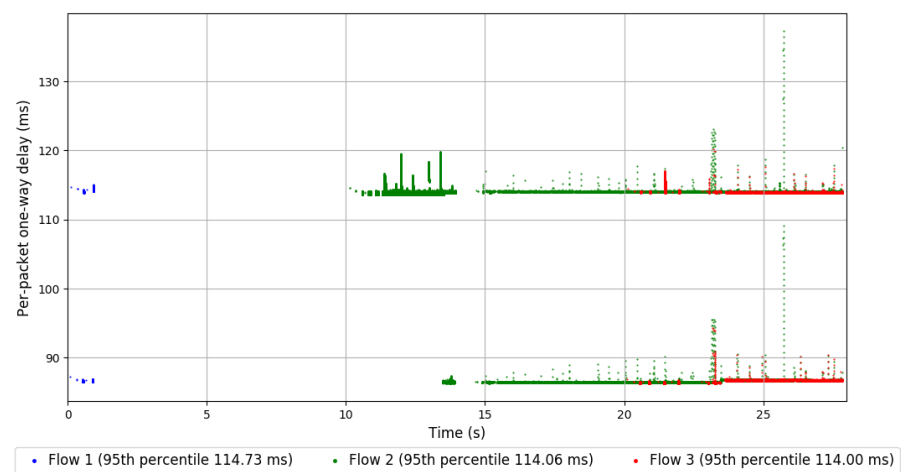
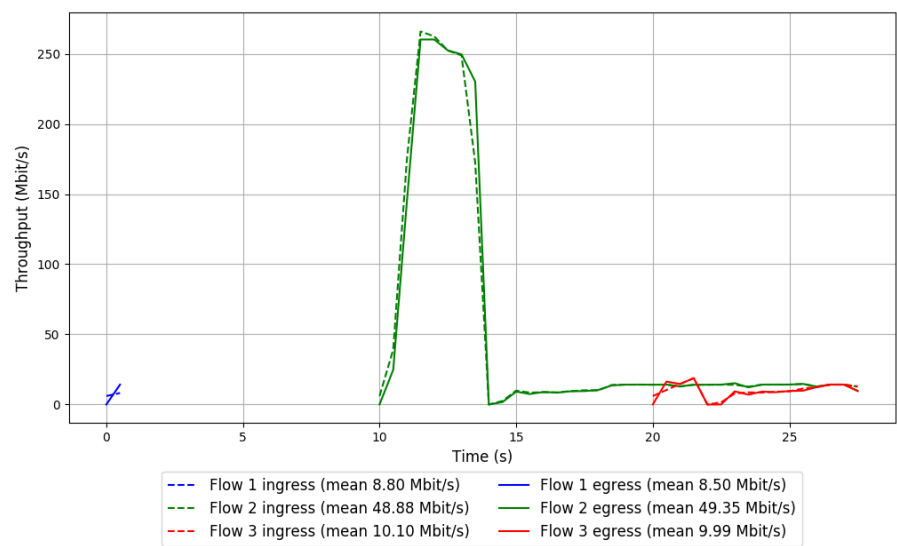


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-10-12 03:52:52
End at: 2017-10-12 03:53:22

# Below is generated by plot.py at 2017-10-12 08:25:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.54 Mbit/s
95th percentile per-packet one-way delay: 114.065 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 8.50 Mbit/s
95th percentile per-packet one-way delay: 114.730 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.35 Mbit/s
95th percentile per-packet one-way delay: 114.065 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 9.99 Mbit/s
95th percentile per-packet one-way delay: 114.001 ms
Loss rate: 3.61%
```

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

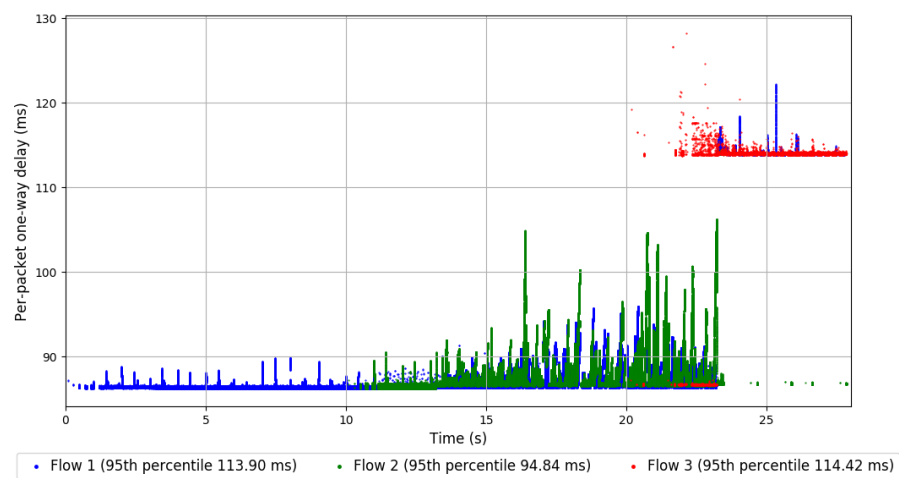
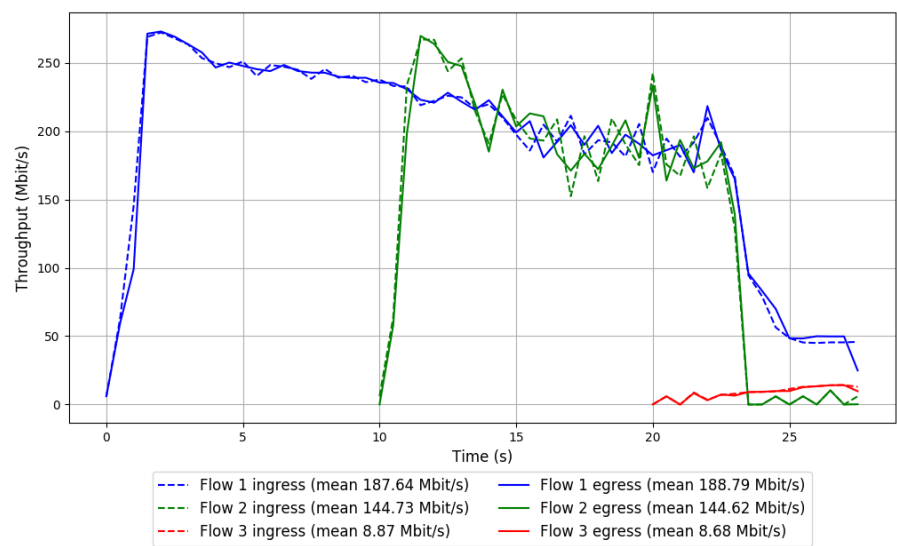


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-10-12 04:05:12
End at: 2017-10-12 04:05:42

# Below is generated by plot.py at 2017-10-12 08:29:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 282.90 Mbit/s
95th percentile per-packet one-way delay: 101.931 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 188.79 Mbit/s
95th percentile per-packet one-way delay: 113.900 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 144.62 Mbit/s
95th percentile per-packet one-way delay: 94.840 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 8.68 Mbit/s
95th percentile per-packet one-way delay: 114.423 ms
Loss rate: 4.62%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-10-12 04:18:25

End at: 2017-10-12 04:18:55

Below is generated by plot.py at 2017-10-12 08:29:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.47 Mbit/s

95th percentile per-packet one-way delay: 103.670 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 70.13 Mbit/s

95th percentile per-packet one-way delay: 94.869 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 112.95 Mbit/s

95th percentile per-packet one-way delay: 104.826 ms

Loss rate: 0.09%

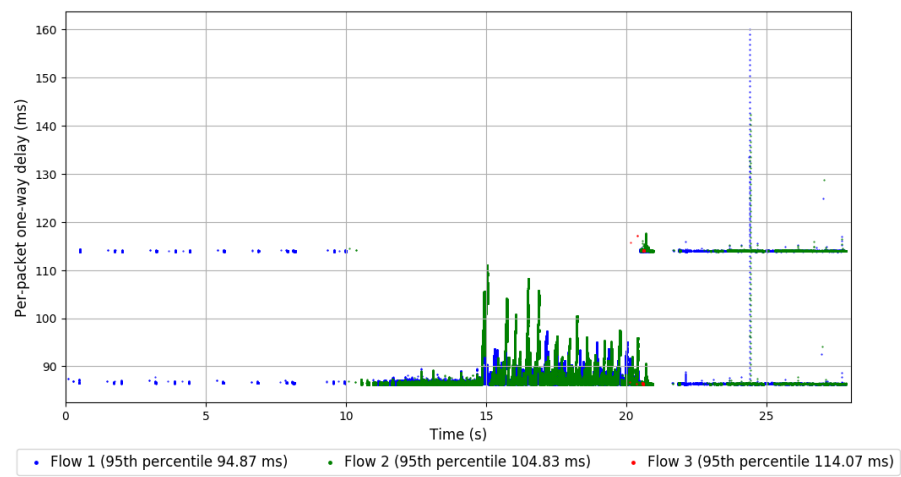
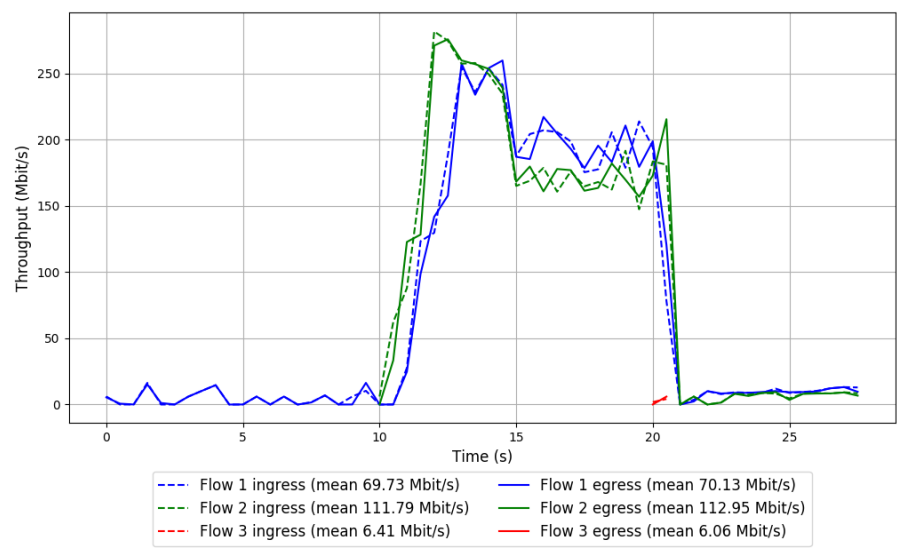
-- Flow 3:

Average throughput: 6.06 Mbit/s

95th percentile per-packet one-way delay: 114.071 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-10-12 04:31:02

End at: 2017-10-12 04:31:32

Below is generated by plot.py at 2017-10-12 08:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 309.28 Mbit/s

95th percentile per-packet one-way delay: 114.076 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 204.75 Mbit/s

95th percentile per-packet one-way delay: 114.089 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 91.91 Mbit/s

95th percentile per-packet one-way delay: 93.437 ms

Loss rate: 0.00%

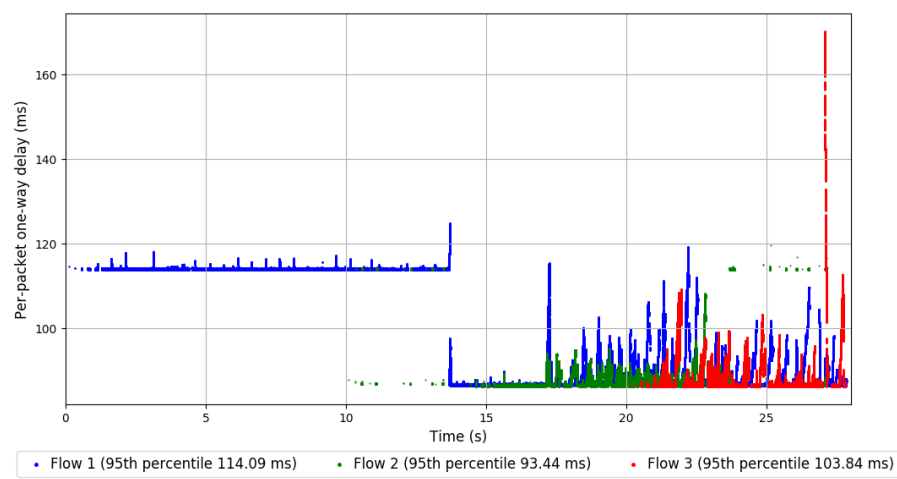
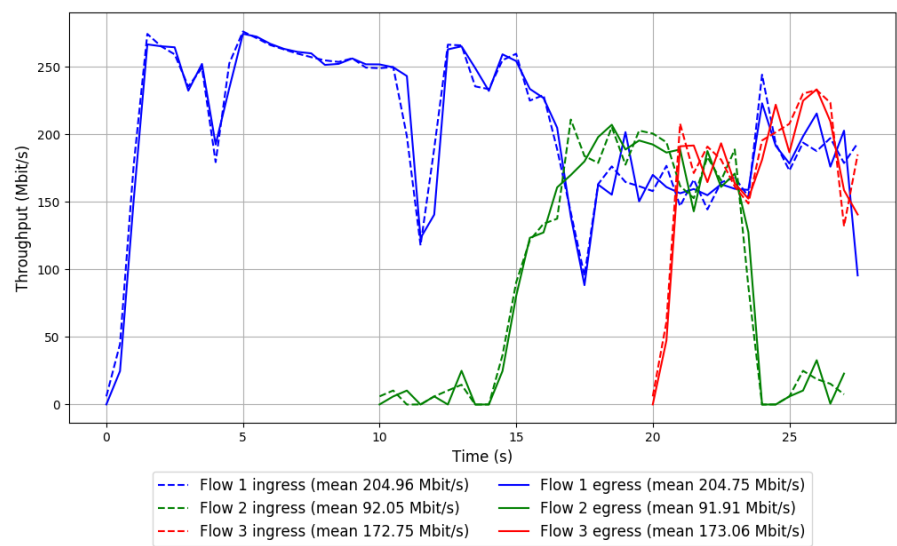
-- Flow 3:

Average throughput: 173.06 Mbit/s

95th percentile per-packet one-way delay: 103.844 ms

Loss rate: 2.77%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-10-12 04:43:48

End at: 2017-10-12 04:44:18

Below is generated by plot.py at 2017-10-12 08:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.36 Mbit/s

95th percentile per-packet one-way delay: 114.074 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 63.69 Mbit/s

95th percentile per-packet one-way delay: 114.079 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 10.02 Mbit/s

95th percentile per-packet one-way delay: 114.057 ms

Loss rate: 1.78%

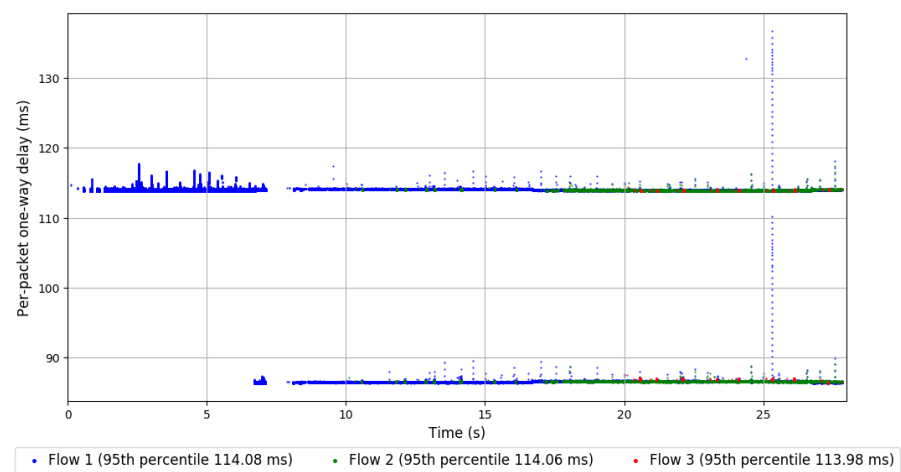
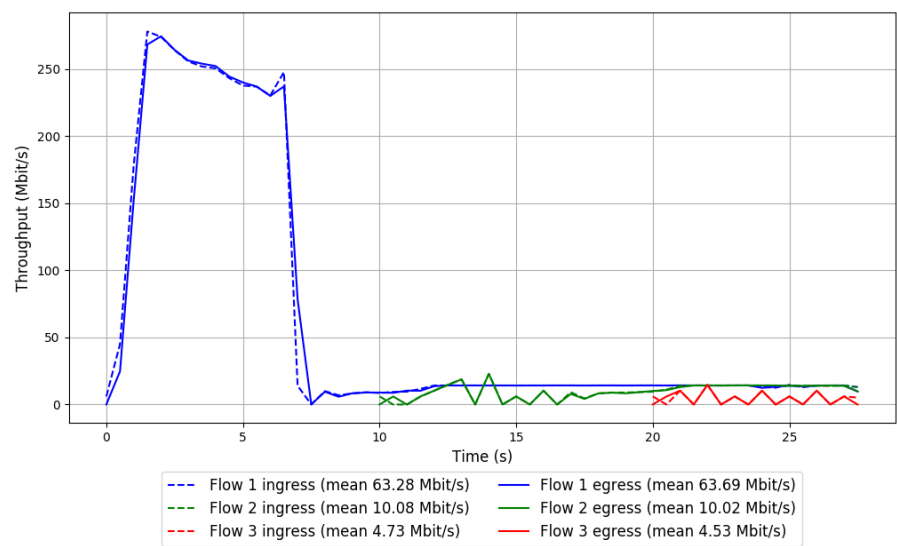
-- Flow 3:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 113.985 ms

Loss rate: 6.83%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-10-12 04:56:16

End at: 2017-10-12 04:56:46

Below is generated by plot.py at 2017-10-12 08:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 152.34 Mbit/s

95th percentile per-packet one-way delay: 117.828 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 66.10 Mbit/s

95th percentile per-packet one-way delay: 125.705 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 131.26 Mbit/s

95th percentile per-packet one-way delay: 115.756 ms

Loss rate: 0.09%

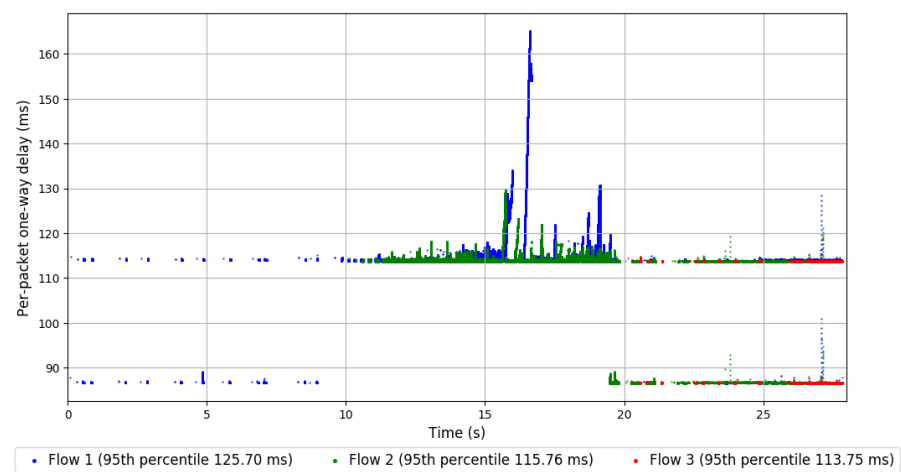
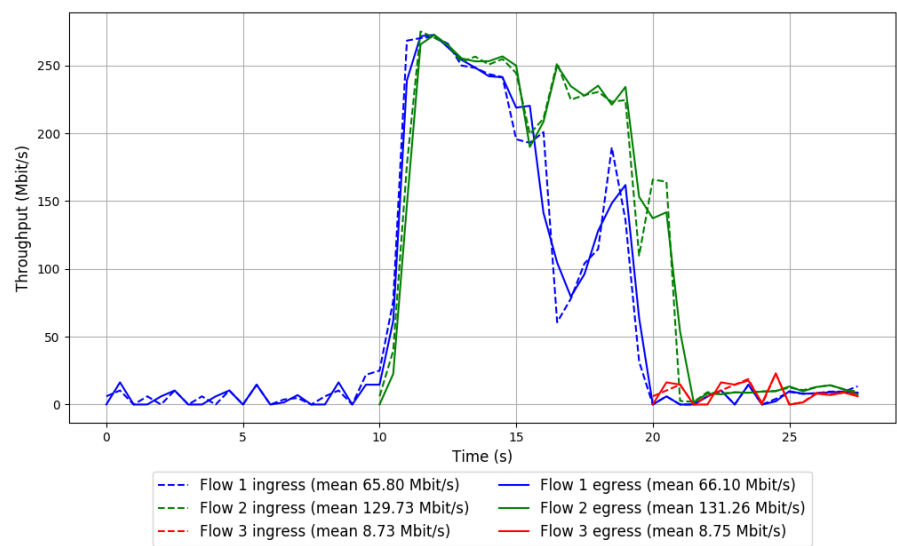
-- Flow 3:

Average throughput: 8.75 Mbit/s

95th percentile per-packet one-way delay: 113.748 ms

Loss rate: 2.35%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-10-12 05:09:34

End at: 2017-10-12 05:10:04

Below is generated by plot.py at 2017-10-12 08:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.76 Mbit/s

95th percentile per-packet one-way delay: 114.240 ms

Loss rate: 2.55%

-- Flow 1:

Average throughput: 11.55 Mbit/s

95th percentile per-packet one-way delay: 114.195 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 93.89 Mbit/s

95th percentile per-packet one-way delay: 114.238 ms

Loss rate: 3.45%

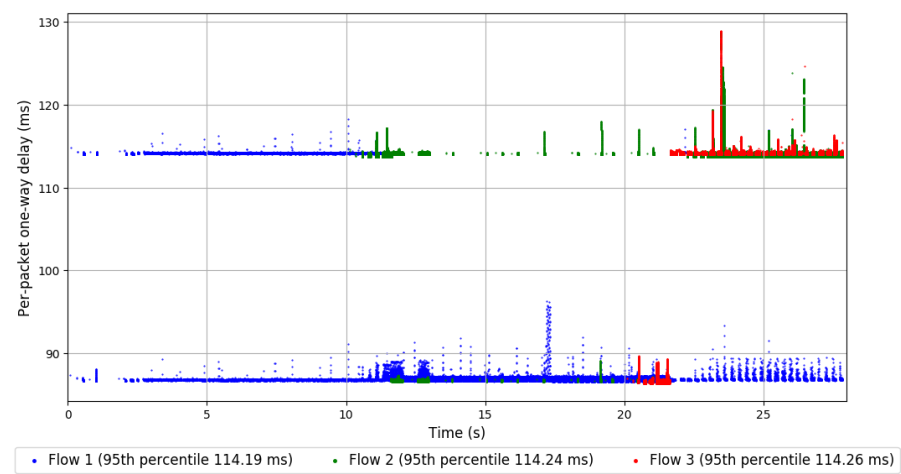
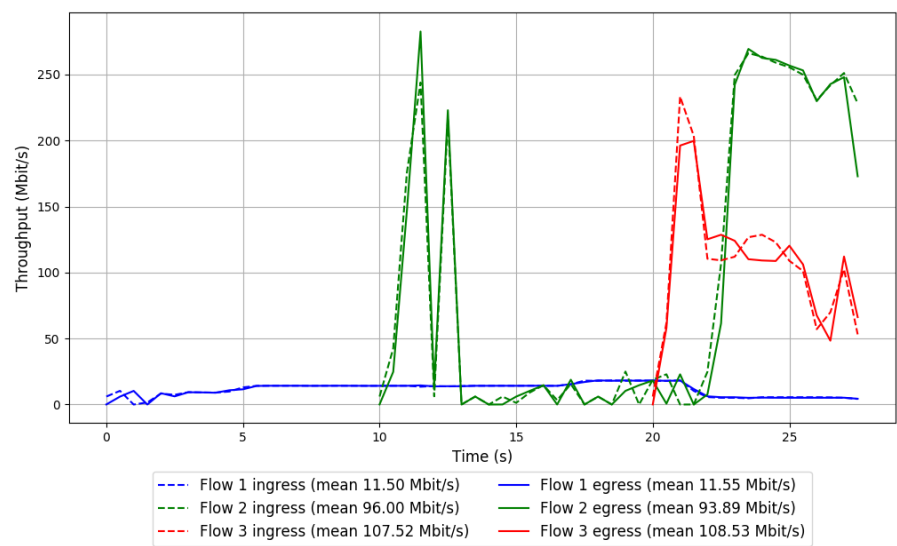
-- Flow 3:

Average throughput: 108.53 Mbit/s

95th percentile per-packet one-way delay: 114.259 ms

Loss rate: 1.57%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-10-12 05:22:01

End at: 2017-10-12 05:22:31

Below is generated by plot.py at 2017-10-12 08:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.79 Mbit/s

95th percentile per-packet one-way delay: 114.166 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 21.39 Mbit/s

95th percentile per-packet one-way delay: 114.181 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 206.19 Mbit/s

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

Loss rate: 0.88%

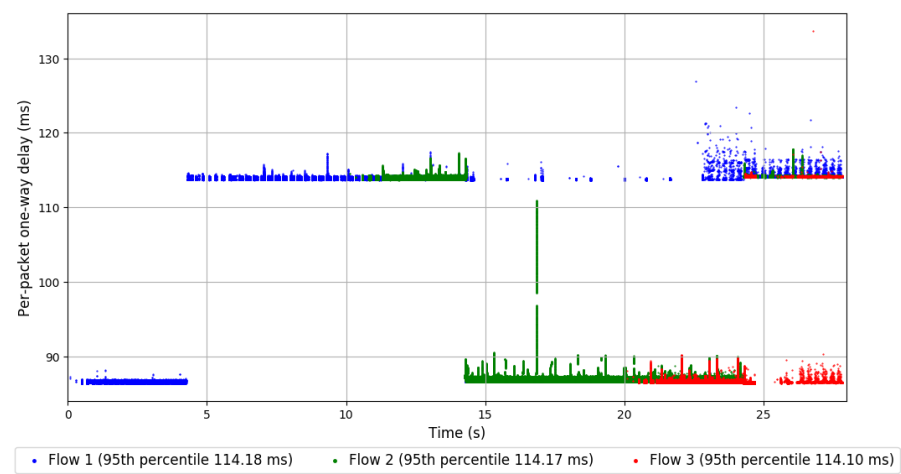
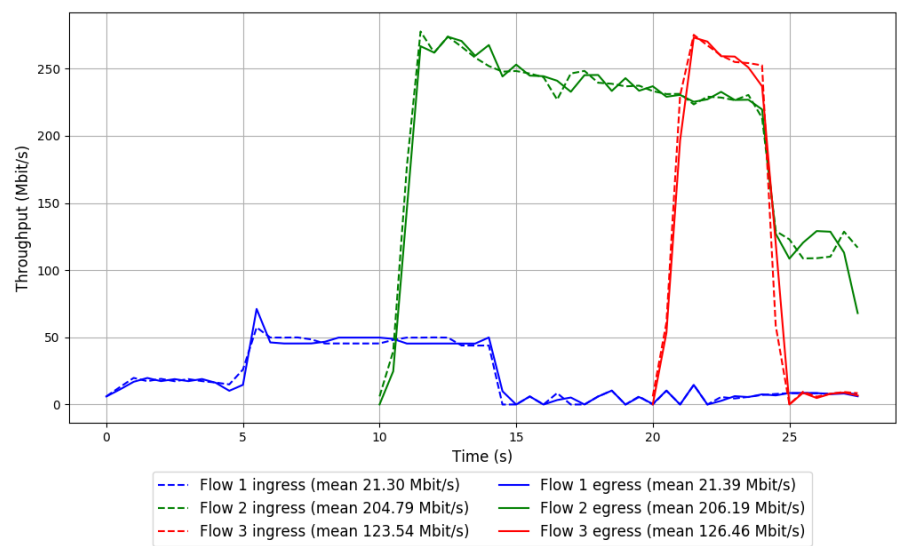
-- Flow 3:

Average throughput: 126.46 Mbit/s

95th percentile per-packet one-way delay: 114.100 ms

Loss rate: 0.21%

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

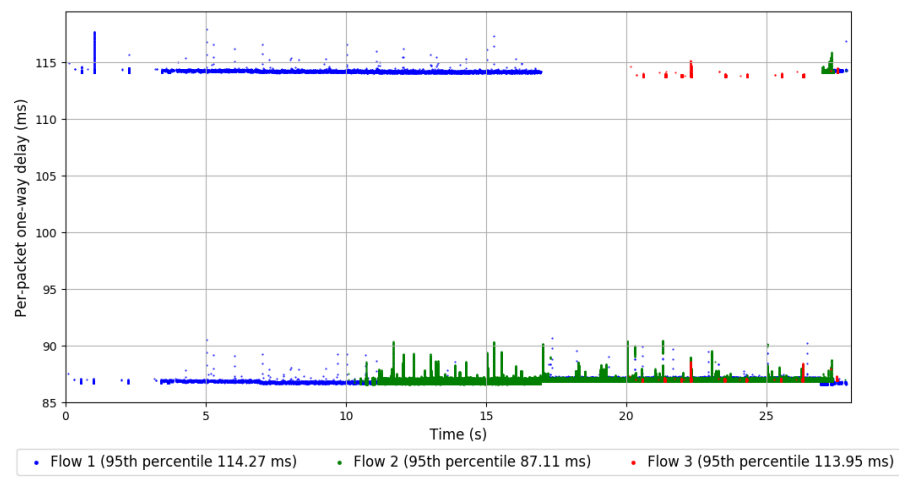
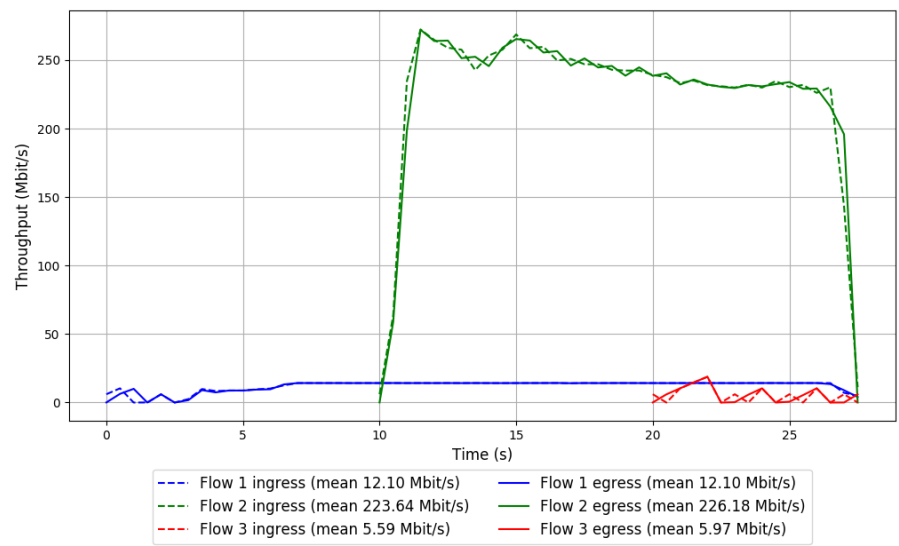


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-10-12 05:34:58
End at: 2017-10-12 05:35:28

# Below is generated by plot.py at 2017-10-12 08:30:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 158.10 Mbit/s
95th percentile per-packet one-way delay: 87.339 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 12.10 Mbit/s
95th percentile per-packet one-way delay: 114.268 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 226.18 Mbit/s
95th percentile per-packet one-way delay: 87.105 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 5.97 Mbit/s
95th percentile per-packet one-way delay: 113.949 ms
Loss rate: 0.03%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-10-12 03:46:40

End at: 2017-10-12 03:47:10

Below is generated by plot.py at 2017-10-12 08:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 26.95 Mbit/s

95th percentile per-packet one-way delay: 114.090 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 114.108 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 37.16 Mbit/s

95th percentile per-packet one-way delay: 114.088 ms

Loss rate: 0.80%

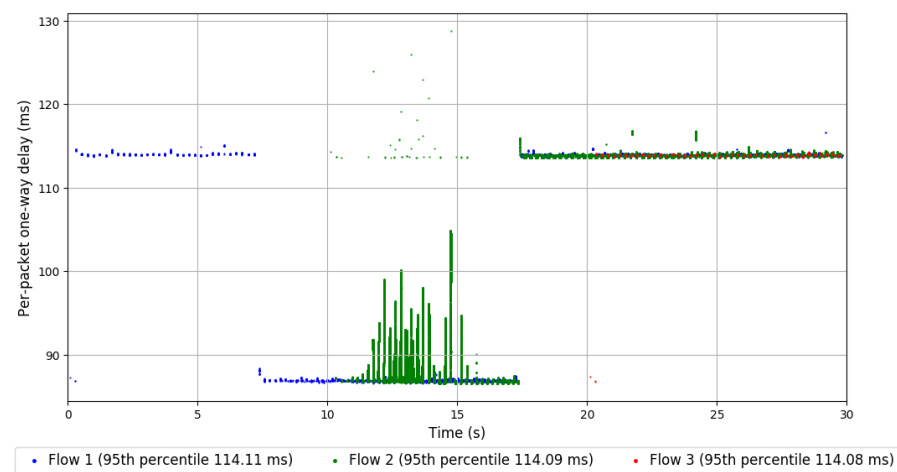
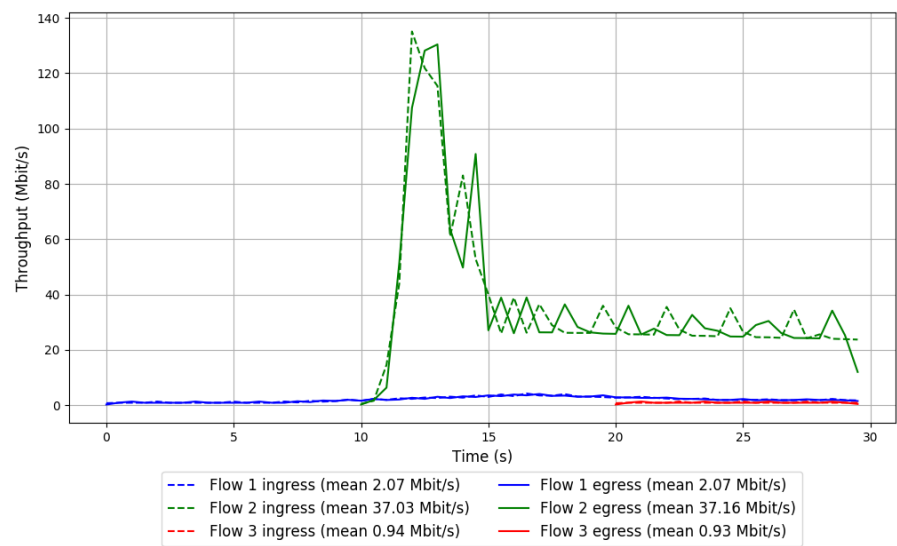
-- Flow 3:

Average throughput: 0.93 Mbit/s

95th percentile per-packet one-way delay: 114.079 ms

Loss rate: 2.35%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-10-12 03:59:09

End at: 2017-10-12 03:59:39

Below is generated by plot.py at 2017-10-12 08:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 31.18 Mbit/s

95th percentile per-packet one-way delay: 122.216 ms

Loss rate: 2.86%

-- Flow 1:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 115.750 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 114.549 ms

Loss rate: 1.19%

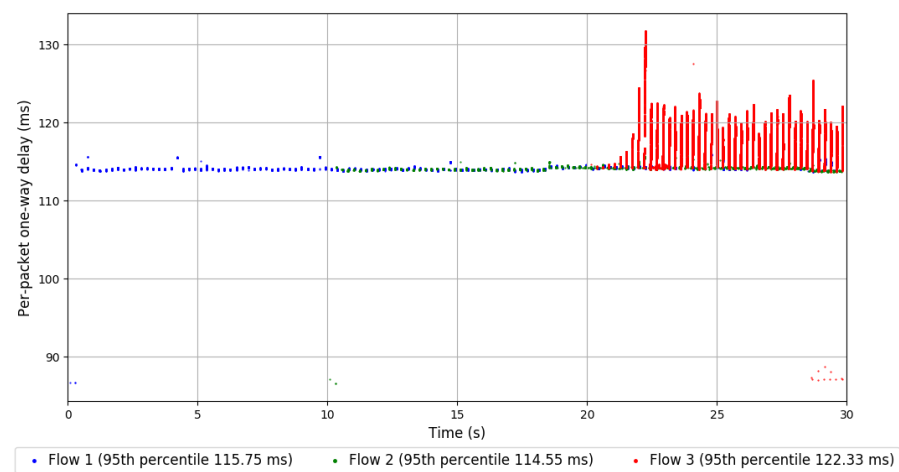
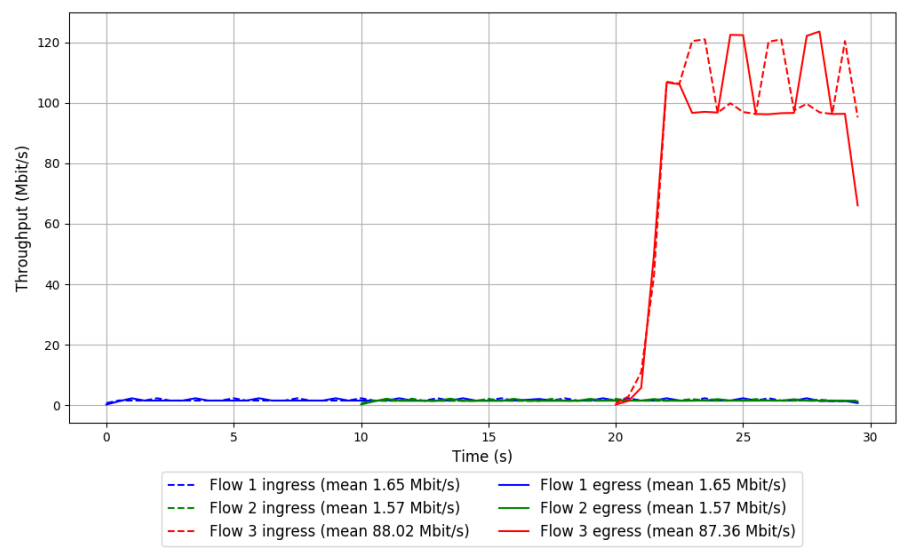
-- Flow 3:

Average throughput: 87.36 Mbit/s

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

Loss rate: 3.04%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-10-12 04:11:59

End at: 2017-10-12 04:12:29

Below is generated by plot.py at 2017-10-12 08:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 115.74 Mbit/s

95th percentile per-packet one-way delay: 114.045 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 48.73 Mbit/s

95th percentile per-packet one-way delay: 97.136 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 83.17 Mbit/s

95th percentile per-packet one-way delay: 114.062 ms

Loss rate: 1.13%

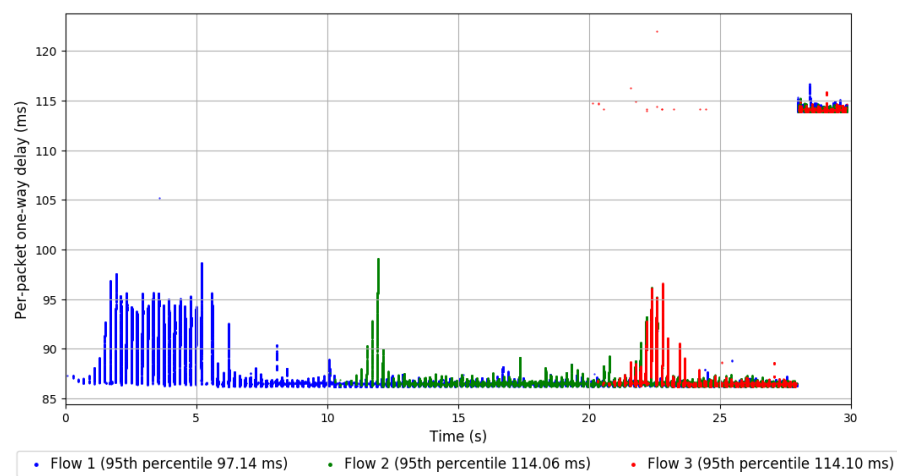
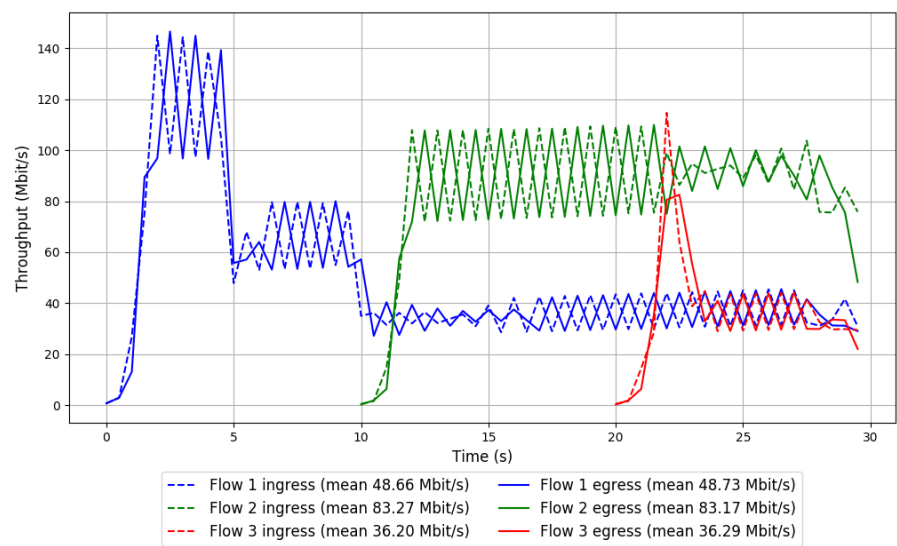
-- Flow 3:

Average throughput: 36.29 Mbit/s

95th percentile per-packet one-way delay: 114.104 ms

Loss rate: 2.05%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-10-12 04:24:54

End at: 2017-10-12 04:25:24

Below is generated by plot.py at 2017-10-12 08:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.92 Mbit/s

95th percentile per-packet one-way delay: 124.150 ms

Loss rate: 1.41%

-- Flow 1:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 114.570 ms

Loss rate: 1.70%

-- Flow 2:

Average throughput: 101.24 Mbit/s

95th percentile per-packet one-way delay: 124.220 ms

Loss rate: 1.32%

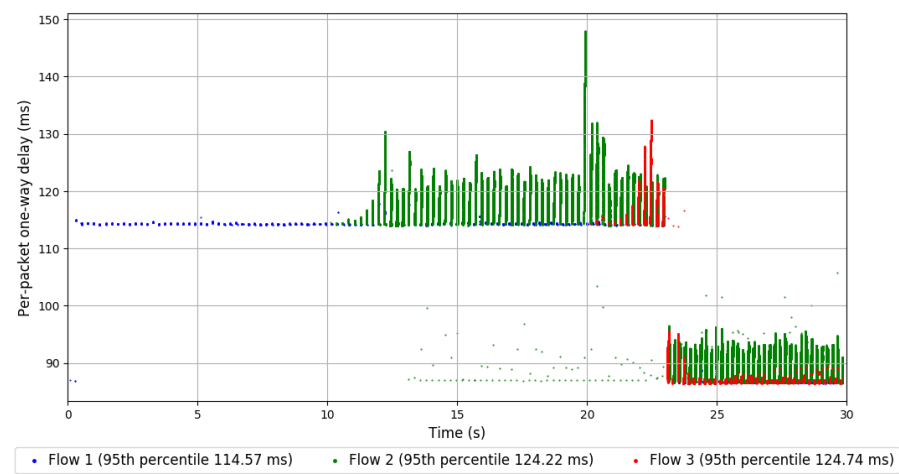
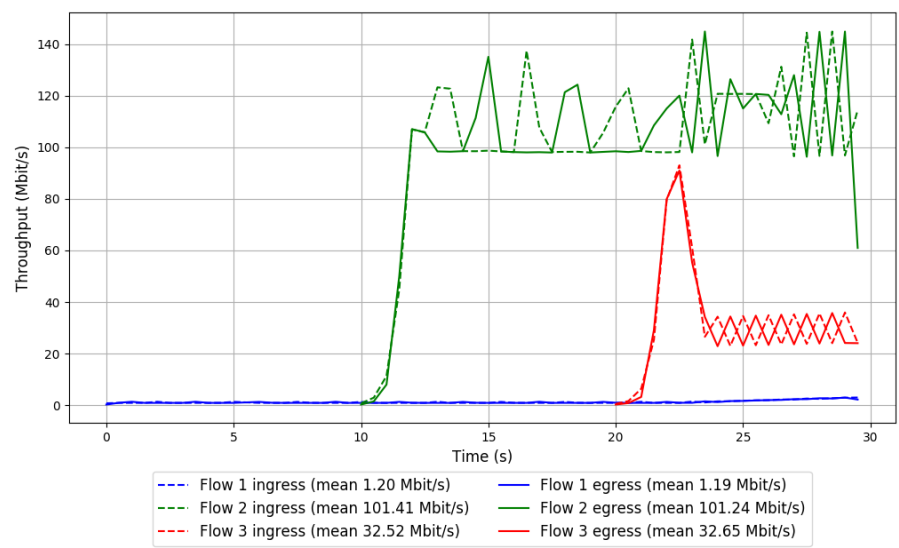
-- Flow 3:

Average throughput: 32.65 Mbit/s

95th percentile per-packet one-way delay: 124.737 ms

Loss rate: 1.89%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-10-12 04:37:44

End at: 2017-10-12 04:38:14

Below is generated by plot.py at 2017-10-12 08:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.62 Mbit/s

95th percentile per-packet one-way delay: 88.223 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 4.62 Mbit/s

95th percentile per-packet one-way delay: 87.101 ms

Loss rate: 1.31%

-- Flow 2:

Average throughput: 91.14 Mbit/s

95th percentile per-packet one-way delay: 87.771 ms

Loss rate: 1.12%

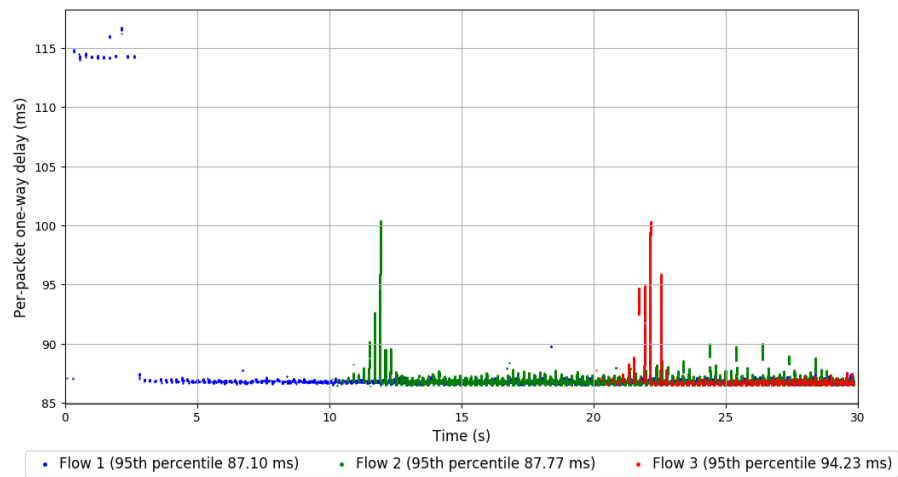
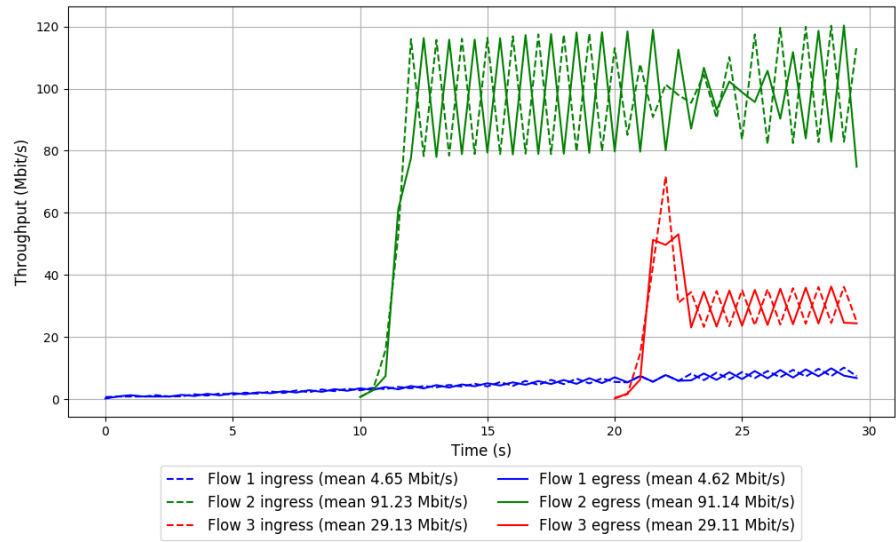
-- Flow 3:

Average throughput: 29.11 Mbit/s

95th percentile per-packet one-way delay: 94.232 ms

Loss rate: 2.12%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-10-12 04:50:00

End at: 2017-10-12 04:50:30

Below is generated by plot.py at 2017-10-12 08:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.09 Mbit/s

95th percentile per-packet one-way delay: 114.170 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 73.56 Mbit/s

95th percentile per-packet one-way delay: 114.142 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 29.65 Mbit/s

95th percentile per-packet one-way delay: 114.216 ms

Loss rate: 0.90%

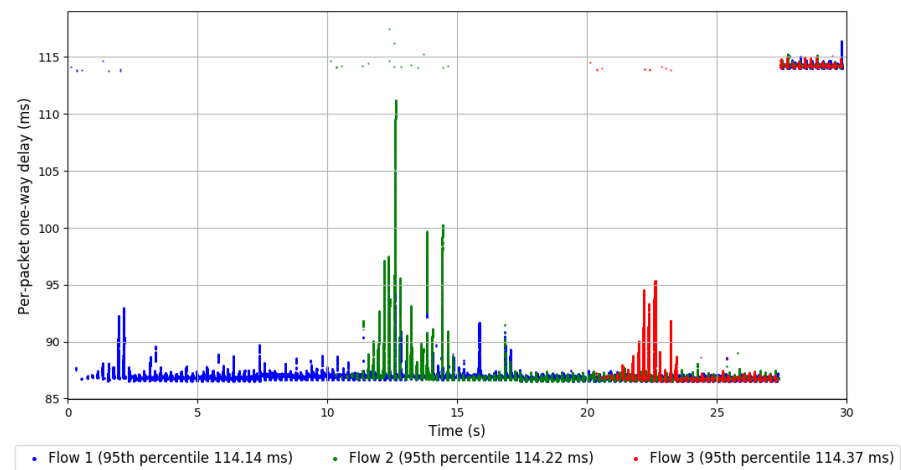
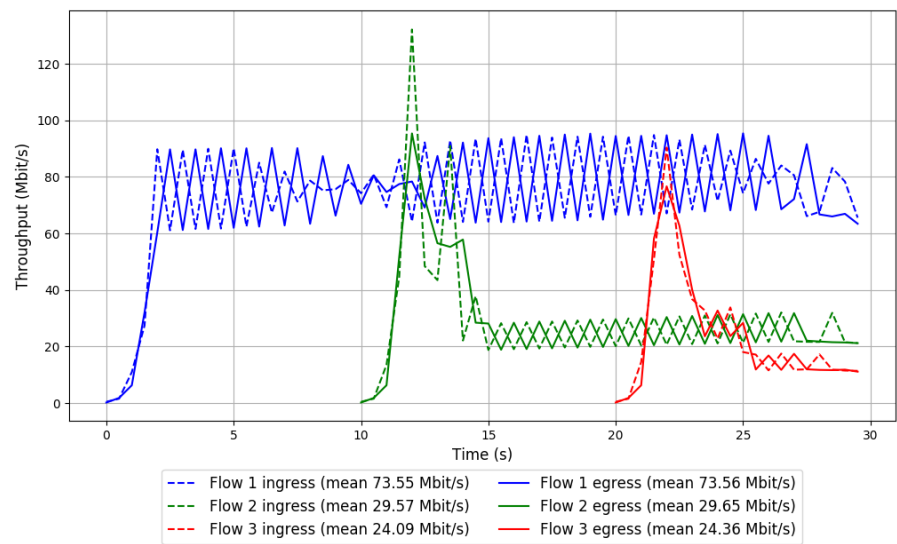
-- Flow 3:

Average throughput: 24.36 Mbit/s

95th percentile per-packet one-way delay: 114.370 ms

Loss rate: 1.21%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-10-12 05:02:55

End at: 2017-10-12 05:03:25

Below is generated by plot.py at 2017-10-12 08:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.70 Mbit/s

95th percentile per-packet one-way delay: 115.675 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 33.95 Mbit/s

95th percentile per-packet one-way delay: 115.395 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 57.47 Mbit/s

95th percentile per-packet one-way delay: 115.780 ms

Loss rate: 1.16%

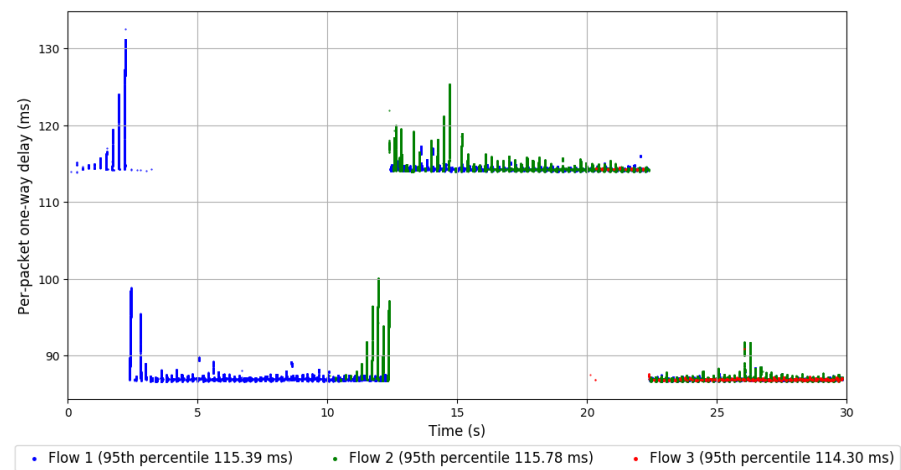
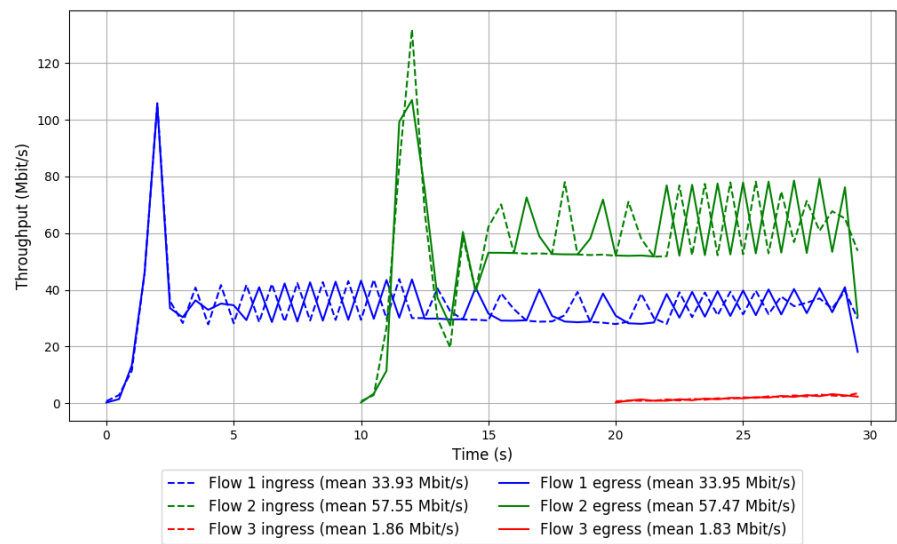
-- Flow 3:

Average throughput: 1.83 Mbit/s

95th percentile per-packet one-way delay: 114.299 ms

Loss rate: 3.52%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-10-12 05:15:52

End at: 2017-10-12 05:16:22

Below is generated by plot.py at 2017-10-12 08:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.14 Mbit/s

95th percentile per-packet one-way delay: 114.623 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 43.50 Mbit/s

95th percentile per-packet one-way delay: 114.580 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 44.29 Mbit/s

95th percentile per-packet one-way delay: 114.681 ms

Loss rate: 1.08%

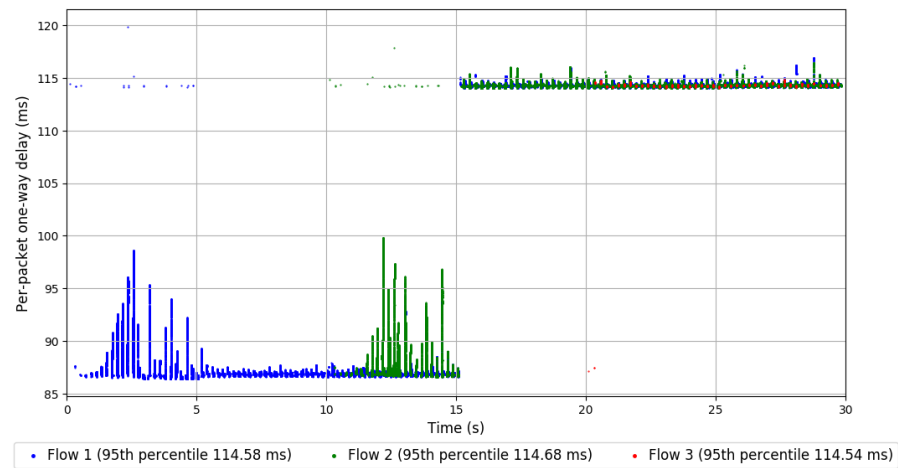
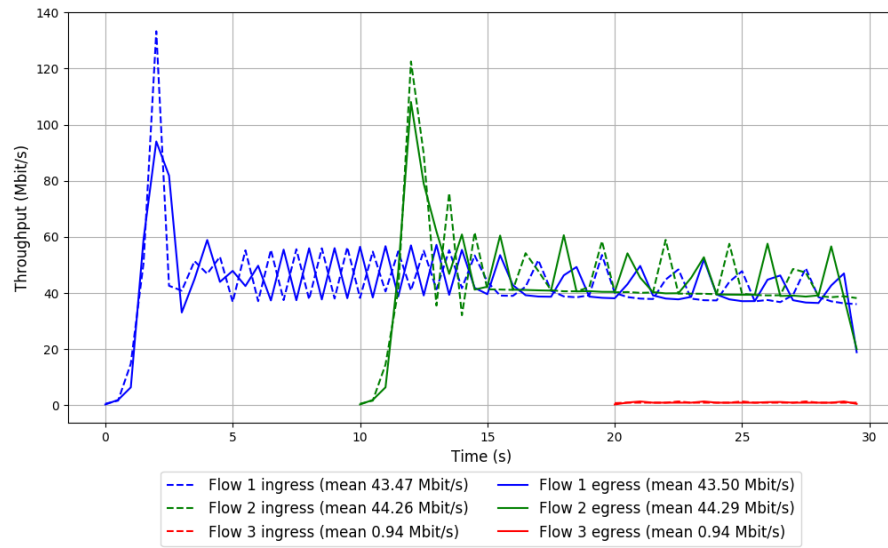
-- Flow 3:

Average throughput: 0.94 Mbit/s

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

Loss rate: 2.35%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-10-12 05:28:46

End at: 2017-10-12 05:29:16

Below is generated by plot.py at 2017-10-12 08:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 50.47 Mbit/s

95th percentile per-packet one-way delay: 115.269 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 41.92 Mbit/s

95th percentile per-packet one-way delay: 115.212 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 114.487 ms

Loss rate: 0.88%

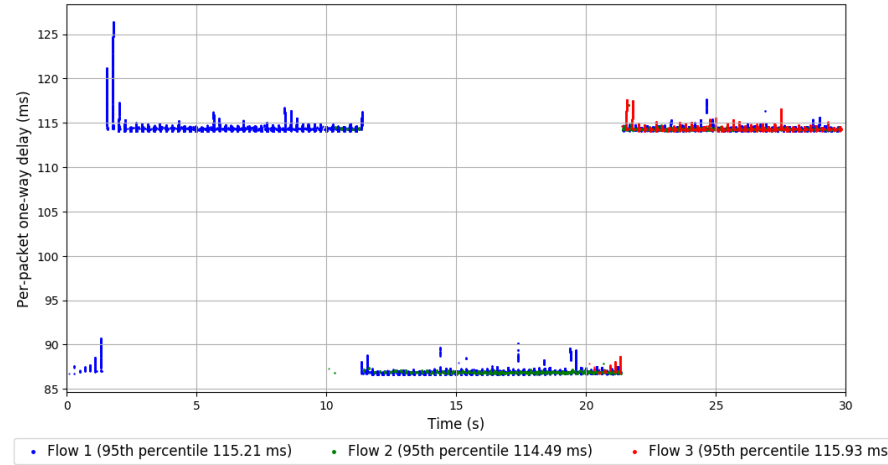
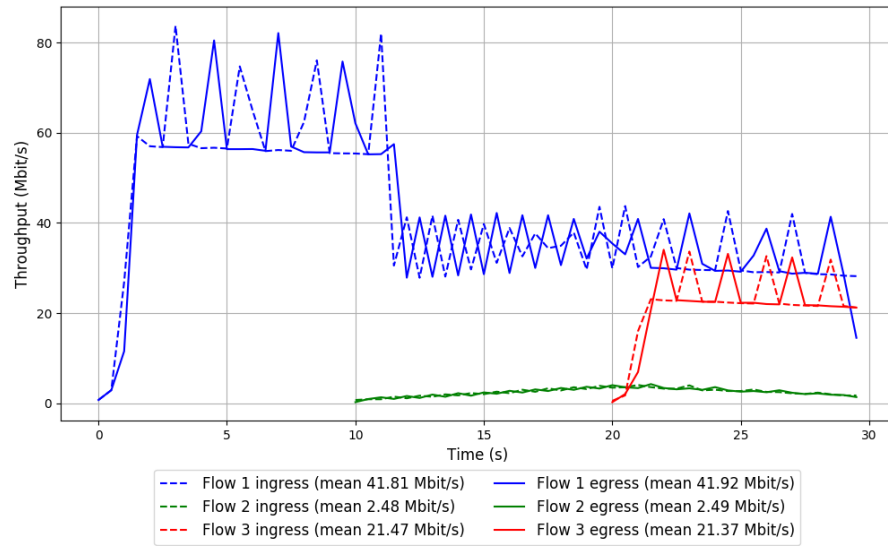
-- Flow 3:

Average throughput: 21.37 Mbit/s

95th percentile per-packet one-way delay: 115.926 ms

Loss rate: 2.49%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-10-12 05:41:31

End at: 2017-10-12 05:42:01

Below is generated by plot.py at 2017-10-12 08:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.01 Mbit/s

95th percentile per-packet one-way delay: 115.433 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 32.59 Mbit/s

95th percentile per-packet one-way delay: 114.719 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 25.86 Mbit/s

95th percentile per-packet one-way delay: 115.614 ms

Loss rate: 0.76%

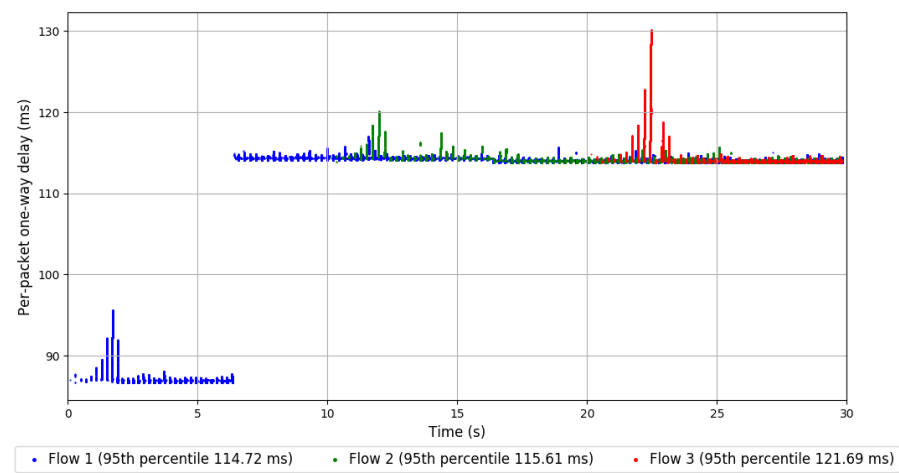
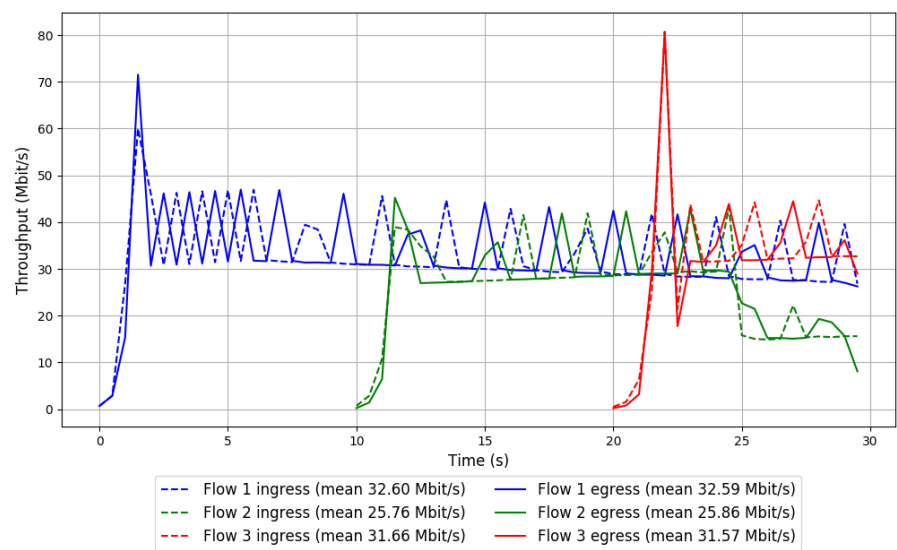
-- Flow 3:

Average throughput: 31.57 Mbit/s

95th percentile per-packet one-way delay: 121.690 ms

Loss rate: 2.60%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-10-12 03:43:31

End at: 2017-10-12 03:44:01

Below is generated by plot.py at 2017-10-12 08:32:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 239.53 Mbit/s

95th percentile per-packet one-way delay: 232.802 ms

Loss rate: 3.20%

-- Flow 1:

Average throughput: 150.58 Mbit/s

95th percentile per-packet one-way delay: 218.699 ms

Loss rate: 1.60%

-- Flow 2:

Average throughput: 100.37 Mbit/s

95th percentile per-packet one-way delay: 279.350 ms

Loss rate: 5.27%

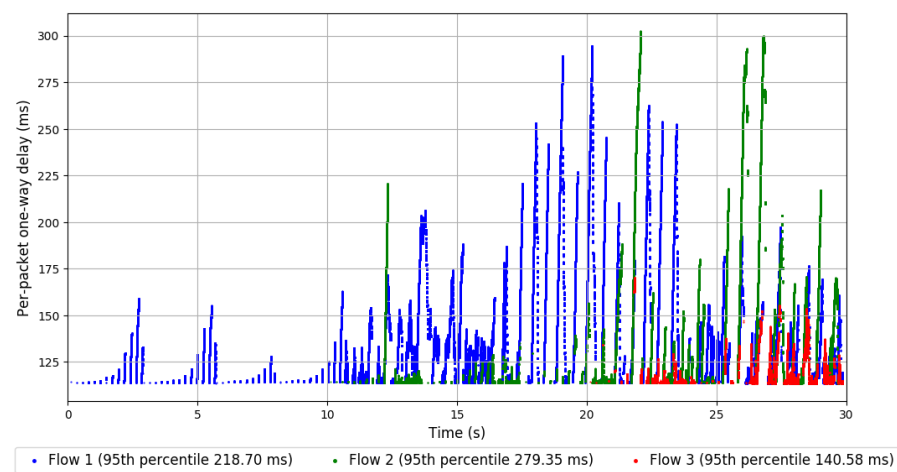
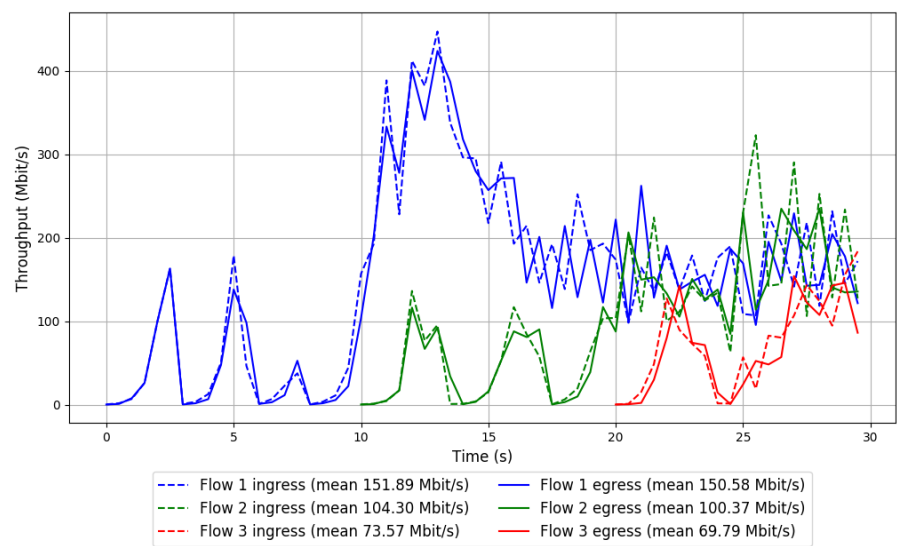
-- Flow 3:

Average throughput: 69.79 Mbit/s

95th percentile per-packet one-way delay: 140.577 ms

Loss rate: 7.34%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-10-12 03:56:04

End at: 2017-10-12 03:56:34

Below is generated by plot.py at 2017-10-12 08:32:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 225.49 Mbit/s

95th percentile per-packet one-way delay: 148.762 ms

Loss rate: 2.29%

-- Flow 1:

Average throughput: 169.55 Mbit/s

95th percentile per-packet one-way delay: 150.873 ms

Loss rate: 2.67%

-- Flow 2:

Average throughput: 63.74 Mbit/s

95th percentile per-packet one-way delay: 129.680 ms

Loss rate: 0.67%

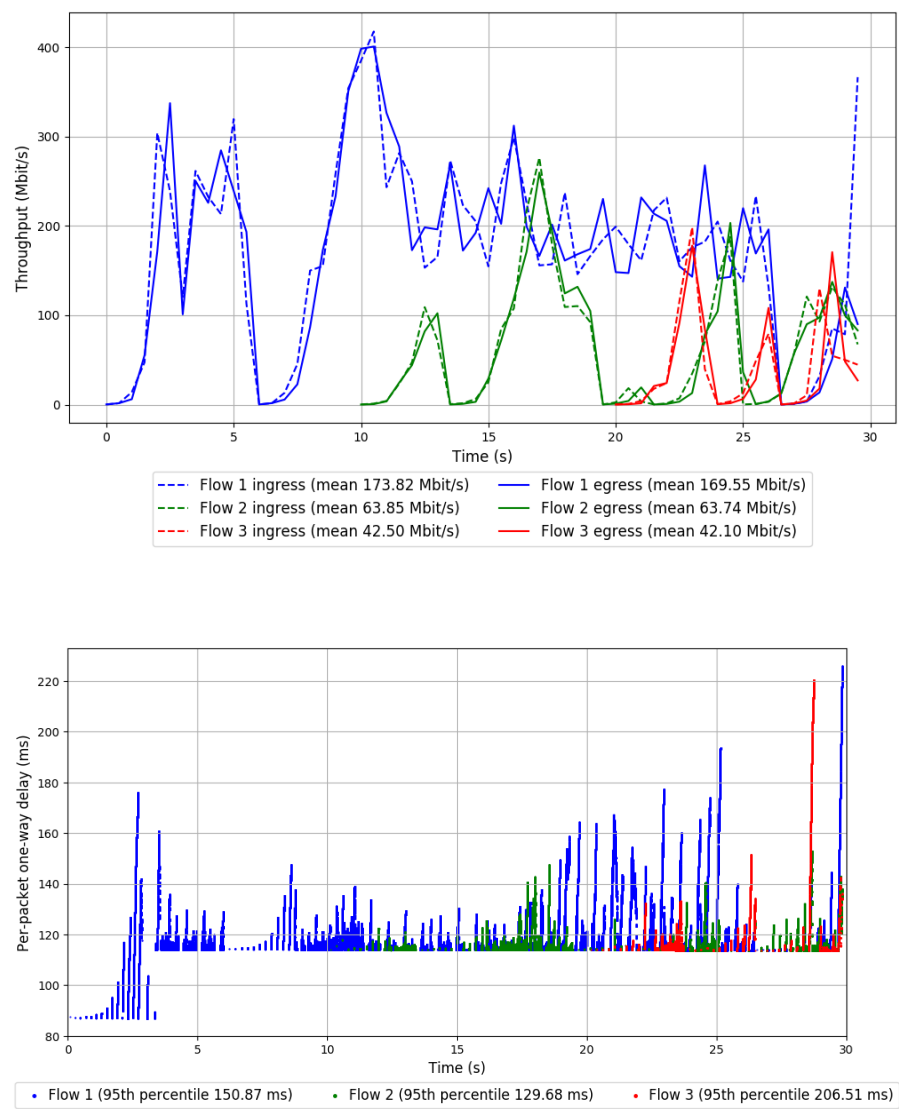
-- Flow 3:

Average throughput: 42.10 Mbit/s

95th percentile per-packet one-way delay: 206.506 ms

Loss rate: 2.55%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-10-12 04:08:52

End at: 2017-10-12 04:09:22

Below is generated by plot.py at 2017-10-12 08:33:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 260.36 Mbit/s

95th percentile per-packet one-way delay: 262.672 ms

Loss rate: 8.81%

-- Flow 1:

Average throughput: 105.50 Mbit/s

95th percentile per-packet one-way delay: 169.212 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 220.64 Mbit/s

95th percentile per-packet one-way delay: 269.904 ms

Loss rate: 12.86%

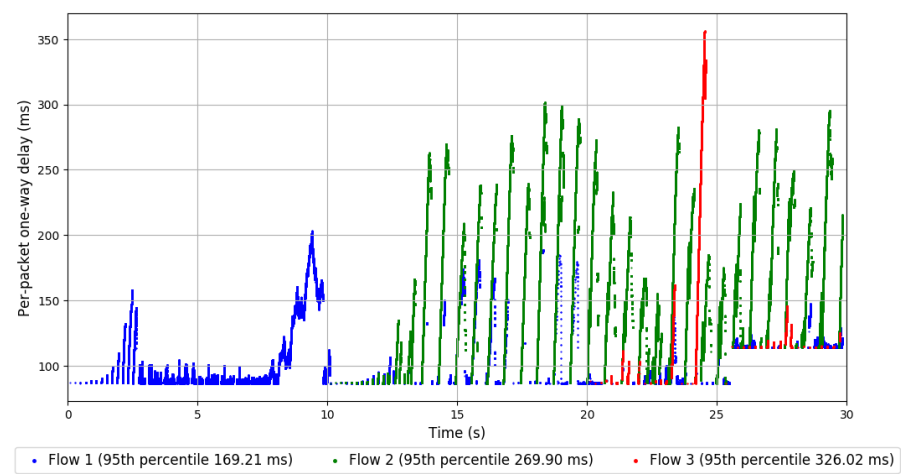
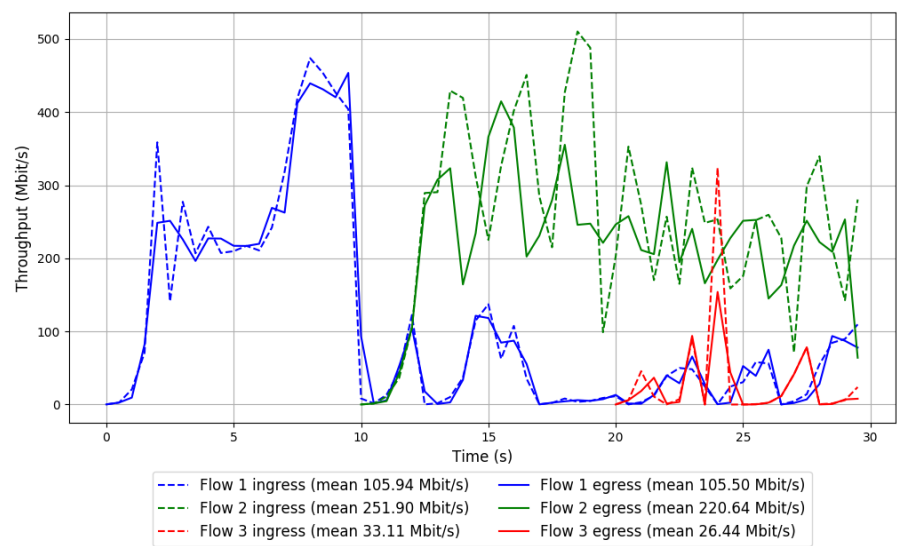
-- Flow 3:

Average throughput: 26.44 Mbit/s

95th percentile per-packet one-way delay: 326.021 ms

Loss rate: 21.83%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-10-12 04:21:50

End at: 2017-10-12 04:22:20

Below is generated by plot.py at 2017-10-12 08:33:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 242.80 Mbit/s

95th percentile per-packet one-way delay: 164.810 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 155.61 Mbit/s

95th percentile per-packet one-way delay: 170.988 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 85.62 Mbit/s

95th percentile per-packet one-way delay: 121.265 ms

Loss rate: 0.00%

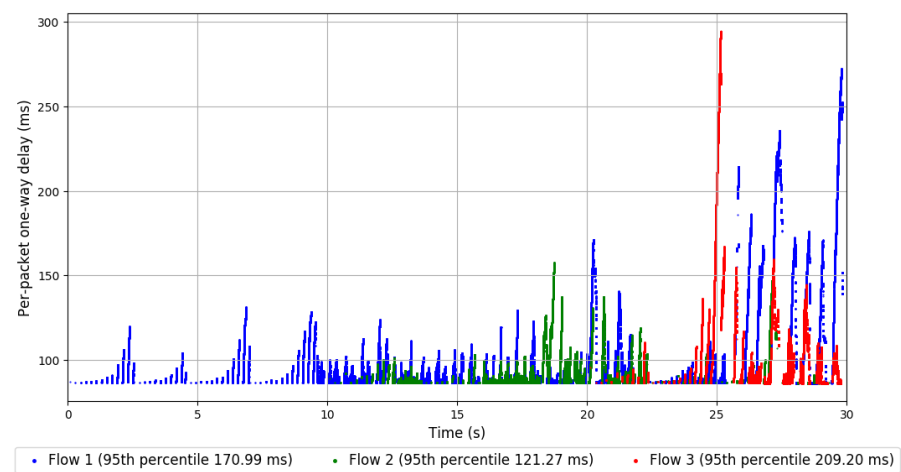
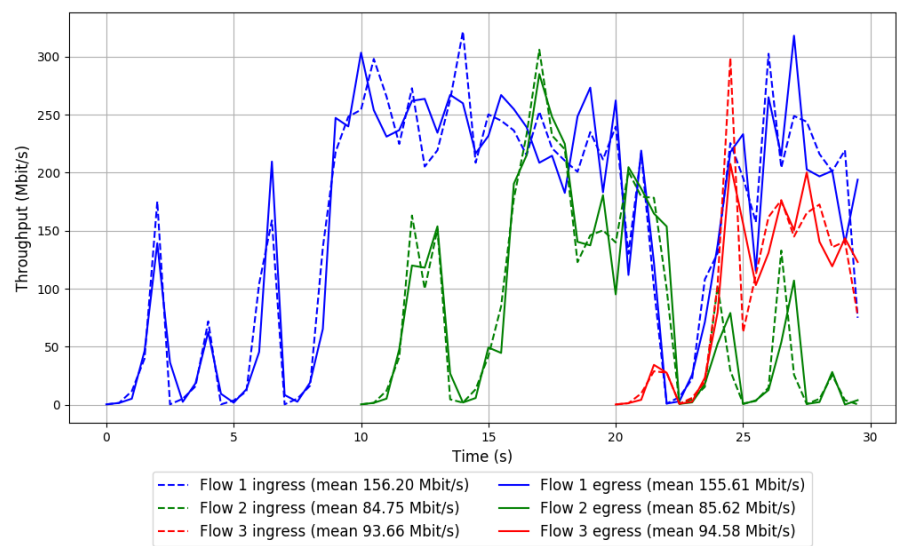
-- Flow 3:

Average throughput: 94.58 Mbit/s

95th percentile per-packet one-way delay: 209.197 ms

Loss rate: 1.17%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-10-12 04:34:46

End at: 2017-10-12 04:35:16

Below is generated by plot.py at 2017-10-12 08:33:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 260.62 Mbit/s

95th percentile per-packet one-way delay: 141.540 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 132.91 Mbit/s

95th percentile per-packet one-way delay: 132.460 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 147.62 Mbit/s

95th percentile per-packet one-way delay: 154.134 ms

Loss rate: 1.55%

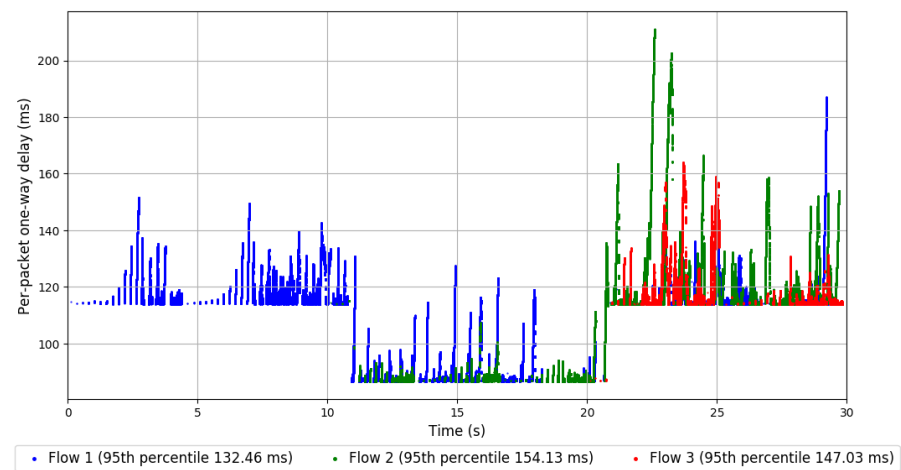
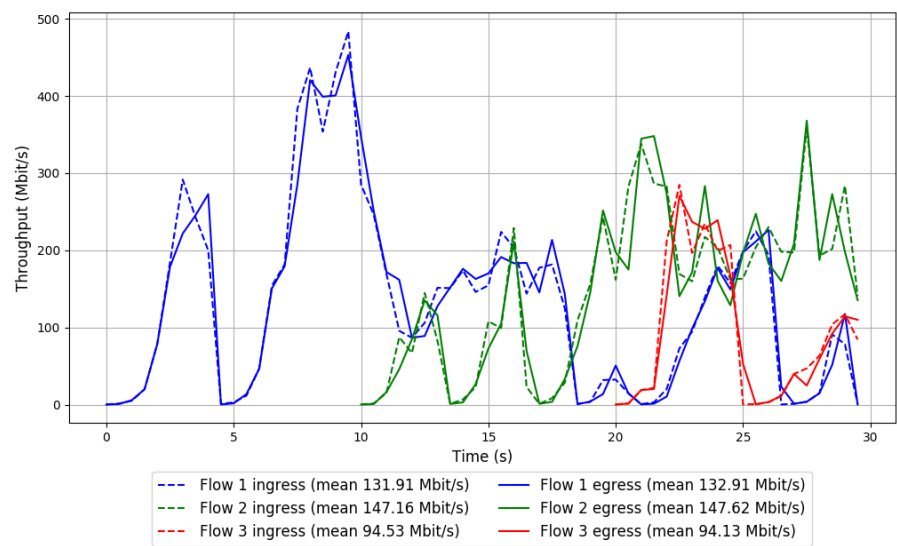
-- Flow 3:

Average throughput: 94.13 Mbit/s

95th percentile per-packet one-way delay: 147.035 ms

Loss rate: 0.83%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-10-12 04:47:04

End at: 2017-10-12 04:47:34

Below is generated by plot.py at 2017-10-12 08:33:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 210.08 Mbit/s

95th percentile per-packet one-way delay: 147.648 ms

Loss rate: 1.94%

-- Flow 1:

Average throughput: 137.58 Mbit/s

95th percentile per-packet one-way delay: 146.784 ms

Loss rate: 1.55%

-- Flow 2:

Average throughput: 63.43 Mbit/s

95th percentile per-packet one-way delay: 148.221 ms

Loss rate: 0.61%

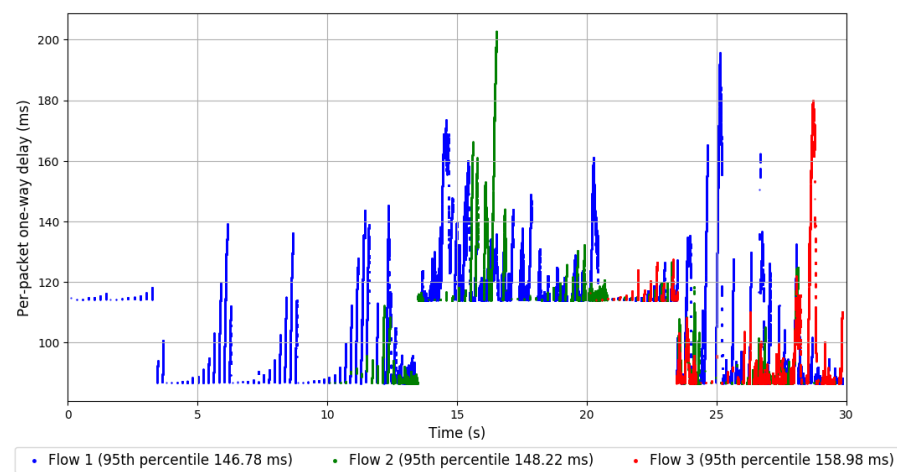
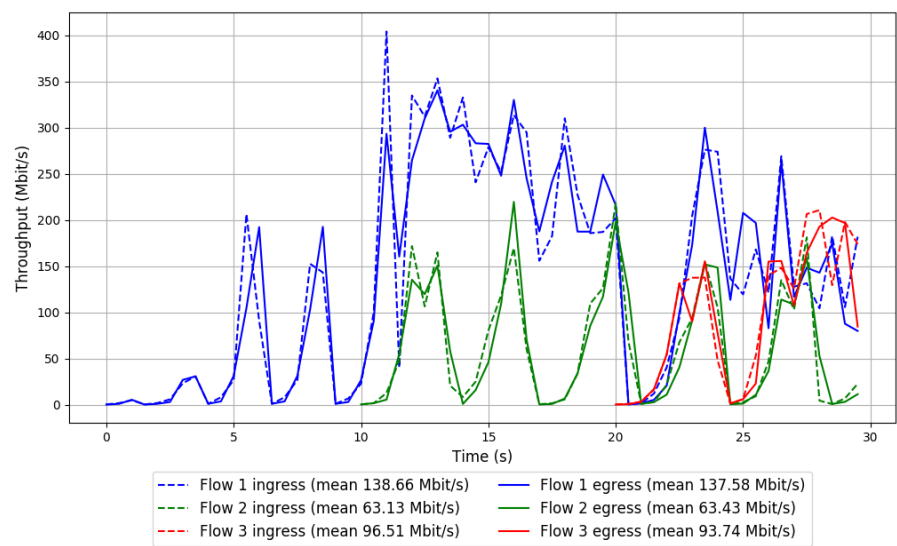
-- Flow 3:

Average throughput: 93.74 Mbit/s

95th percentile per-packet one-way delay: 158.982 ms

Loss rate: 5.36%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-10-12 04:59:46

End at: 2017-10-12 05:00:16

Below is generated by plot.py at 2017-10-12 08:34:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 262.99 Mbit/s

95th percentile per-packet one-way delay: 168.420 ms

Loss rate: 1.90%

-- Flow 1:

Average throughput: 187.35 Mbit/s

95th percentile per-packet one-way delay: 170.966 ms

Loss rate: 2.13%

-- Flow 2:

Average throughput: 69.25 Mbit/s

95th percentile per-packet one-way delay: 124.023 ms

Loss rate: 0.22%

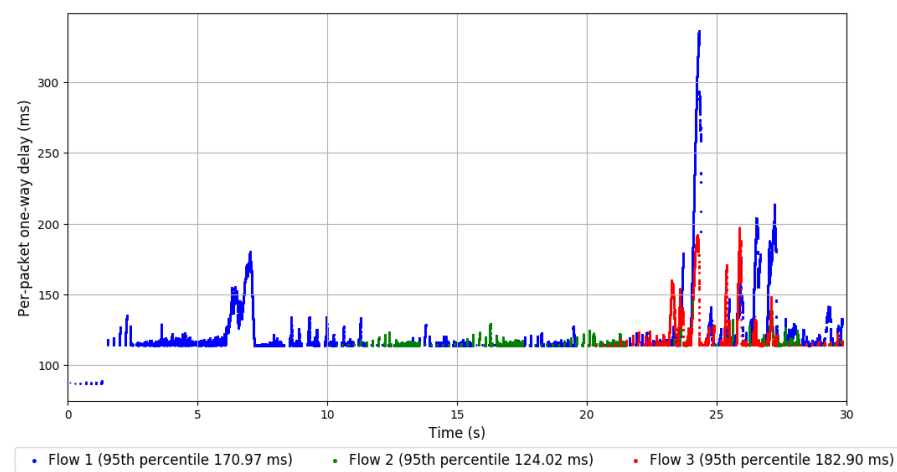
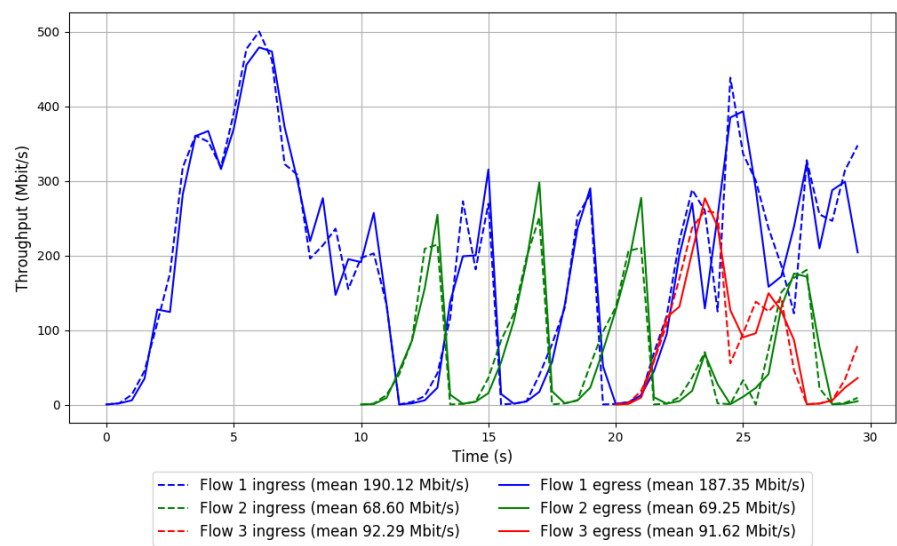
-- Flow 3:

Average throughput: 91.62 Mbit/s

95th percentile per-packet one-way delay: 182.904 ms

Loss rate: 3.01%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-10-12 05:12:48

End at: 2017-10-12 05:13:18

Below is generated by plot.py at 2017-10-12 08:34:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 225.99 Mbit/s

95th percentile per-packet one-way delay: 192.503 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 93.87 Mbit/s

95th percentile per-packet one-way delay: 188.203 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 145.49 Mbit/s

95th percentile per-packet one-way delay: 174.499 ms

Loss rate: 0.49%

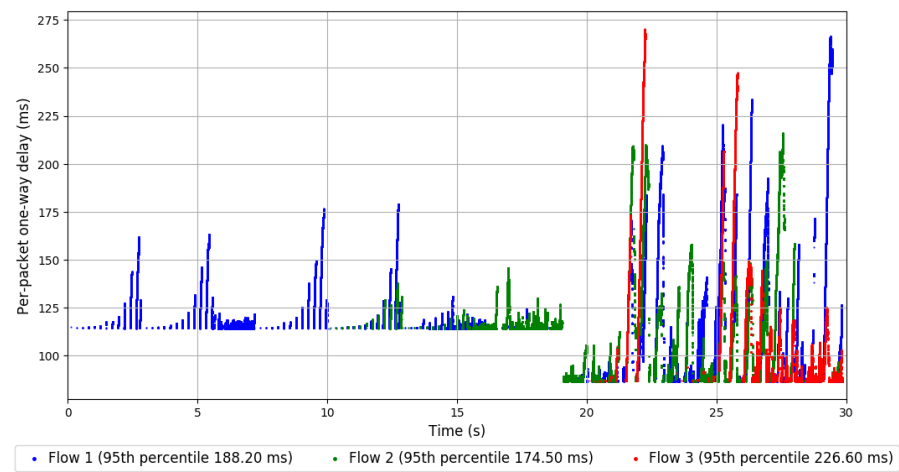
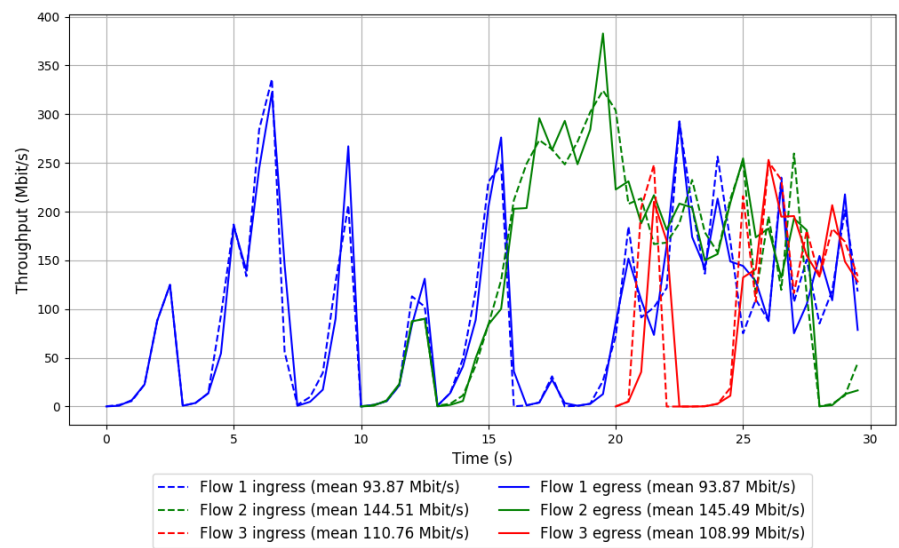
-- Flow 3:

Average throughput: 108.99 Mbit/s

95th percentile per-packet one-way delay: 226.601 ms

Loss rate: 3.58%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-10-12 05:25:35

End at: 2017-10-12 05:26:05

Below is generated by plot.py at 2017-10-12 08:37:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.29 Mbit/s

95th percentile per-packet one-way delay: 288.991 ms

Loss rate: 4.14%

-- Flow 1:

Average throughput: 192.97 Mbit/s

95th percentile per-packet one-way delay: 168.076 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 63.73 Mbit/s

95th percentile per-packet one-way delay: 181.095 ms

Loss rate: 0.16%

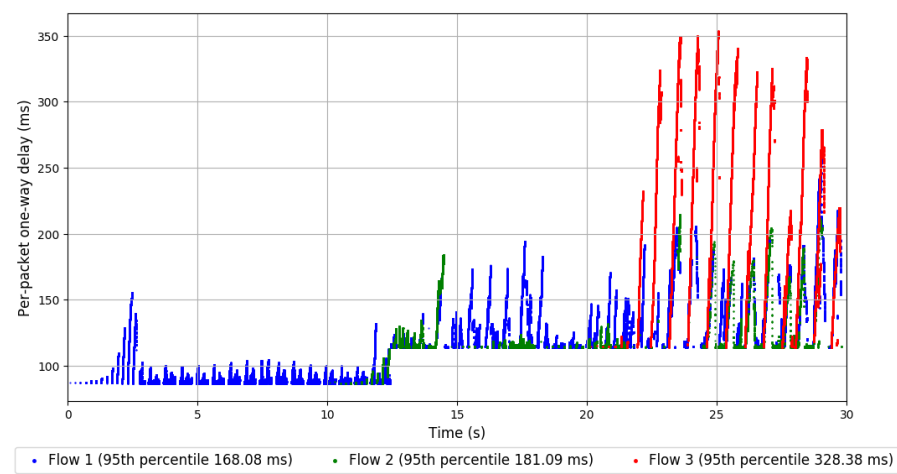
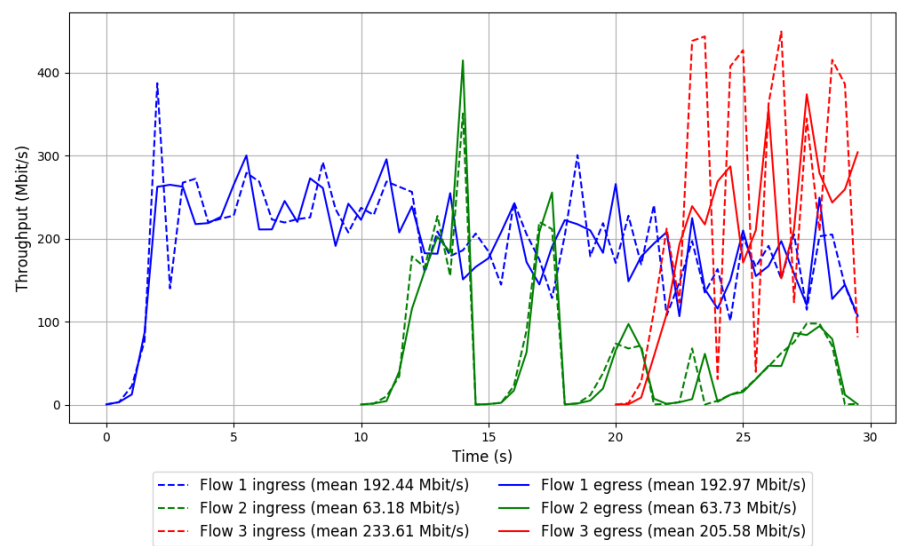
-- Flow 3:

Average throughput: 205.58 Mbit/s

95th percentile per-packet one-way delay: 328.382 ms

Loss rate: 14.95%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-10-12 05:38:24

End at: 2017-10-12 05:38:54

Below is generated by plot.py at 2017-10-12 08:37:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 248.48 Mbit/s

95th percentile per-packet one-way delay: 348.683 ms

Loss rate: 14.04%

-- Flow 1:

Average throughput: 158.86 Mbit/s

95th percentile per-packet one-way delay: 372.377 ms

Loss rate: 17.72%

-- Flow 2:

Average throughput: 113.84 Mbit/s

95th percentile per-packet one-way delay: 258.001 ms

Loss rate: 6.50%

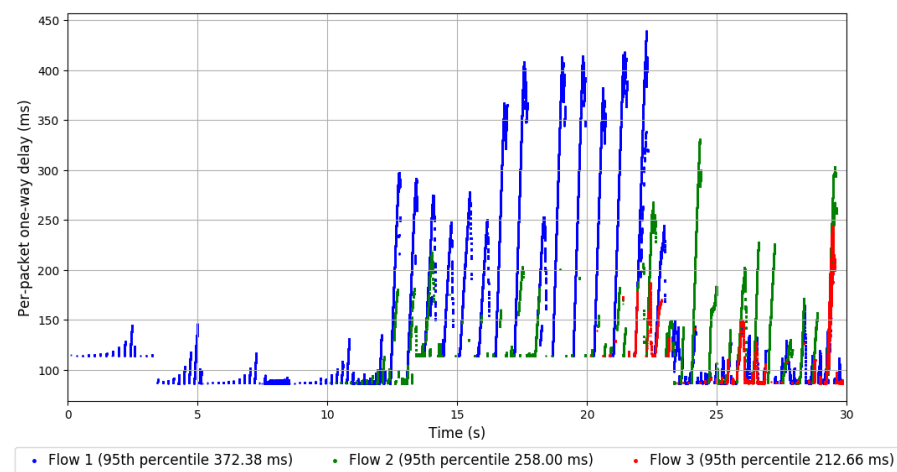
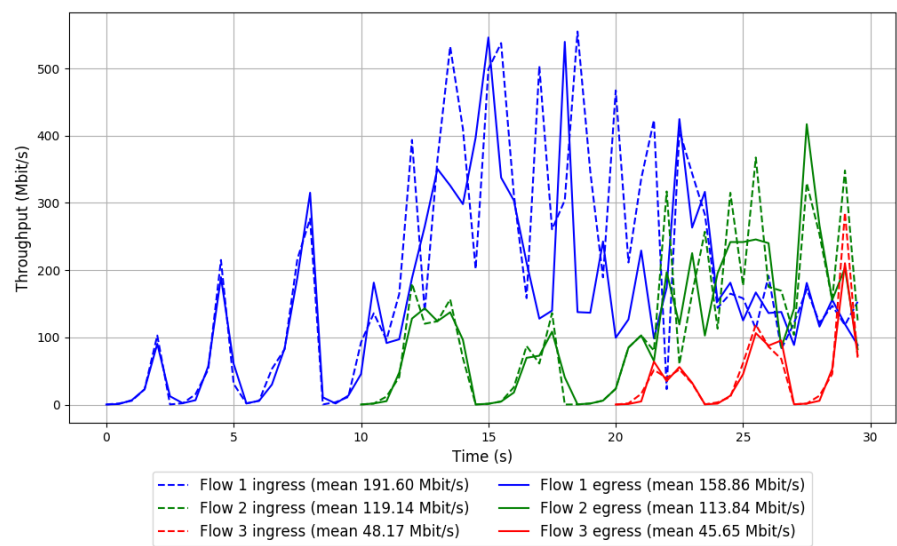
-- Flow 3:

Average throughput: 45.65 Mbit/s

95th percentile per-packet one-way delay: 212.661 ms

Loss rate: 7.42%

Run 10: Report of Verus — Data Link

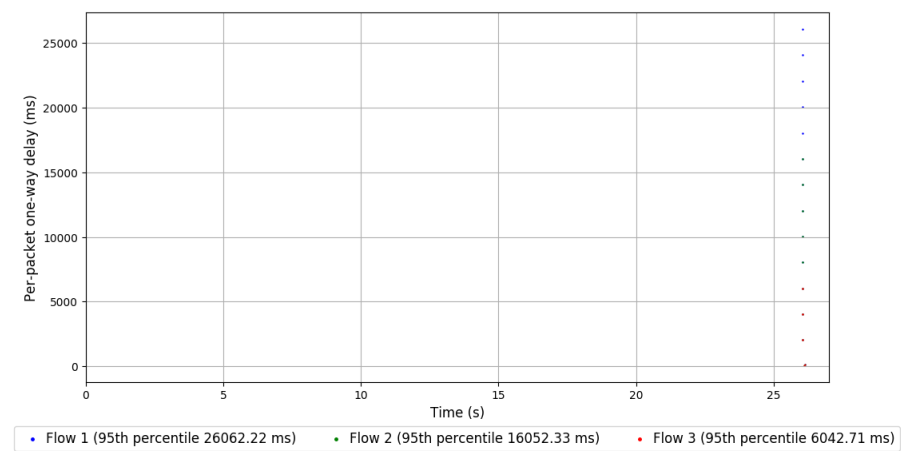
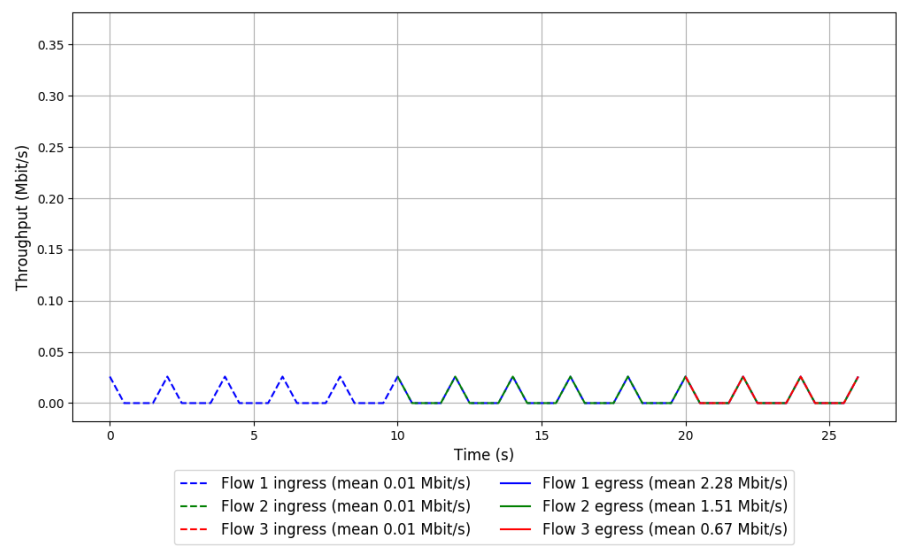


Run 1: Statistics of Copa

Start at: 2017-10-12 03:41:16

End at: 2017-10-12 03:41:46

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-10-12 03:53:41

End at: 2017-10-12 03:54:11

Below is generated by plot.py at 2017-10-12 08:37:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.01 Mbit/s

95th percentile per-packet one-way delay: 114.145 ms

Loss rate: 1.48%

-- Flow 1:

Average throughput: 14.54 Mbit/s

95th percentile per-packet one-way delay: 114.386 ms

Loss rate: 1.59%

-- Flow 2:

Average throughput: 56.69 Mbit/s

95th percentile per-packet one-way delay: 114.057 ms

Loss rate: 0.29%

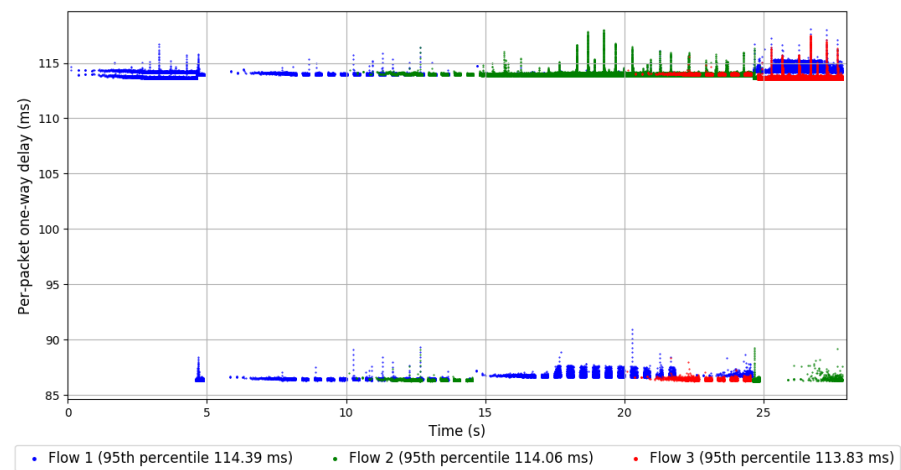
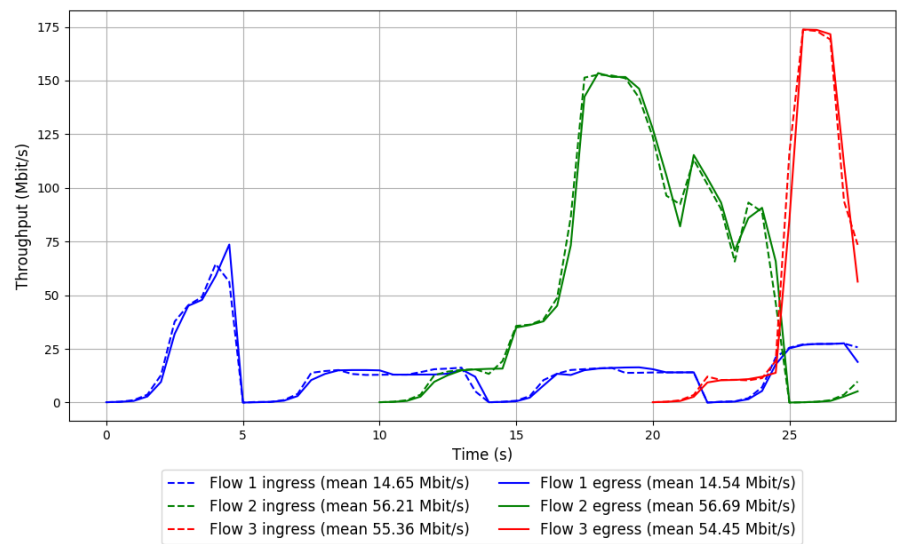
-- Flow 3:

Average throughput: 54.45 Mbit/s

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

Loss rate: 4.13%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-10-12 04:06:28

End at: 2017-10-12 04:06:58

Below is generated by plot.py at 2017-10-12 08:37:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.34 Mbit/s

95th percentile per-packet one-way delay: 113.993 ms

Loss rate: 1.73%

-- Flow 1:

Average throughput: 36.47 Mbit/s

95th percentile per-packet one-way delay: 113.908 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 27.26 Mbit/s

95th percentile per-packet one-way delay: 113.972 ms

Loss rate: 2.31%

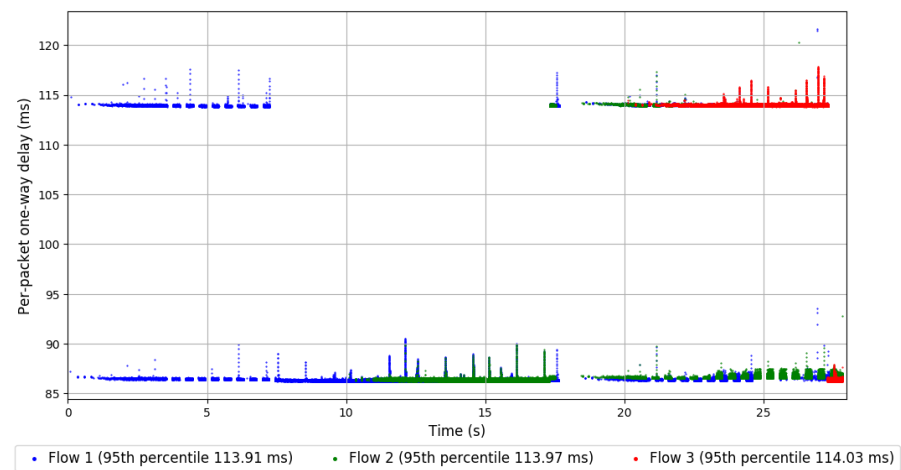
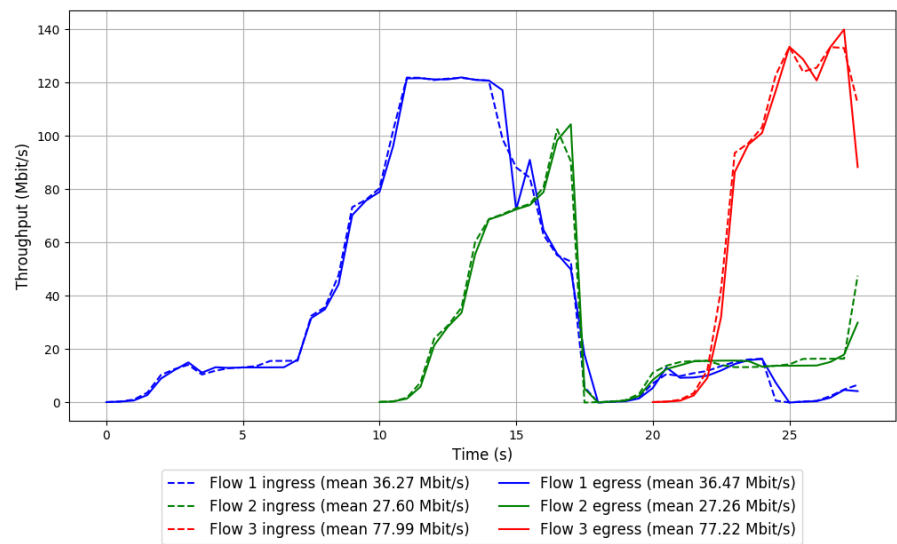
-- Flow 3:

Average throughput: 77.22 Mbit/s

95th percentile per-packet one-way delay: 114.034 ms

Loss rate: 3.82%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-10-12 04:19:25

End at: 2017-10-12 04:19:55

Below is generated by plot.py at 2017-10-12 08:37:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.44 Mbit/s

95th percentile per-packet one-way delay: 113.954 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 37.66 Mbit/s

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

Loss rate: 0.29%

-- Flow 2:

Average throughput: 44.79 Mbit/s

95th percentile per-packet one-way delay: 113.906 ms

Loss rate: 0.46%

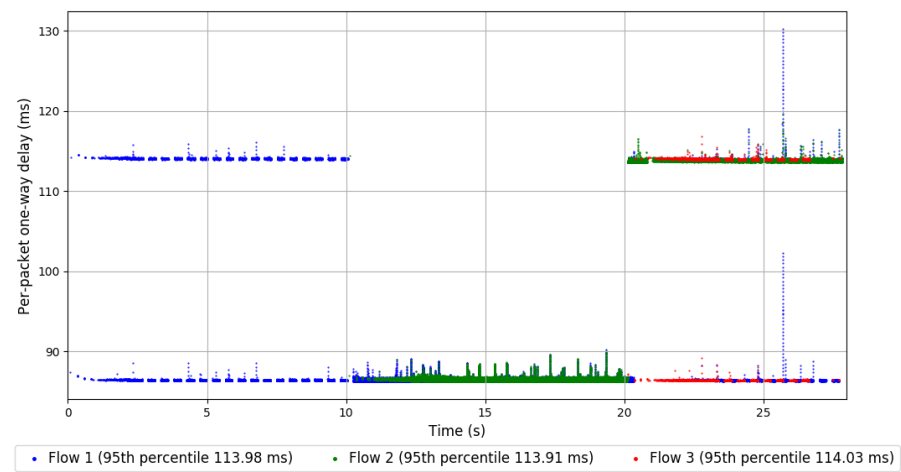
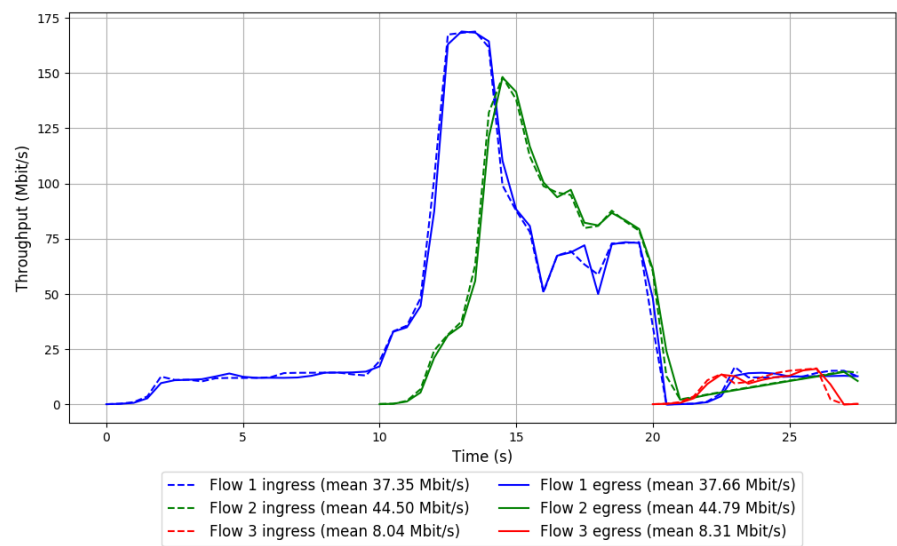
-- Flow 3:

Average throughput: 8.31 Mbit/s

95th percentile per-packet one-way delay: 114.033 ms

Loss rate: 0.12%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-10-12 04:32:18

End at: 2017-10-12 04:32:48

Below is generated by plot.py at 2017-10-12 08:37:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.15 Mbit/s

95th percentile per-packet one-way delay: 86.790 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 68.35 Mbit/s

95th percentile per-packet one-way delay: 86.732 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 63.14 Mbit/s

95th percentile per-packet one-way delay: 86.788 ms

Loss rate: 0.00%

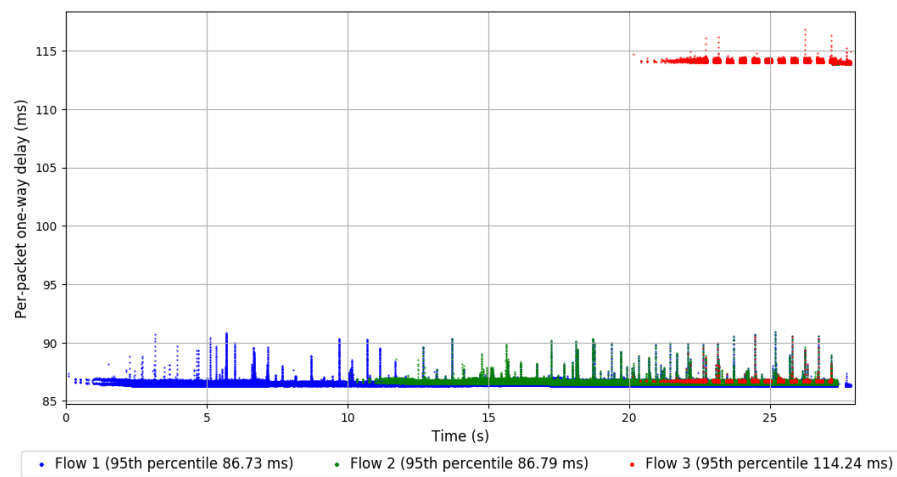
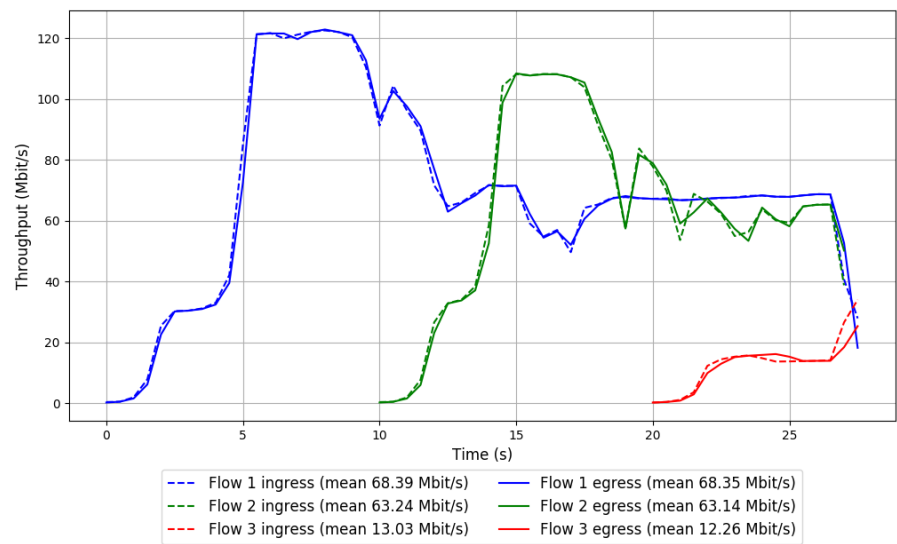
-- Flow 3:

Average throughput: 12.26 Mbit/s

95th percentile per-packet one-way delay: 114.239 ms

Loss rate: 8.26%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-10-12 04:44:42

End at: 2017-10-12 04:45:12

Below is generated by plot.py at 2017-10-12 08:37:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.89 Mbit/s

95th percentile per-packet one-way delay: 114.099 ms

Loss rate: 2.17%

-- Flow 1:

Average throughput: 19.76 Mbit/s

95th percentile per-packet one-way delay: 114.117 ms

Loss rate: 5.45%

-- Flow 2:

Average throughput: 61.75 Mbit/s

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

Loss rate: 0.08%

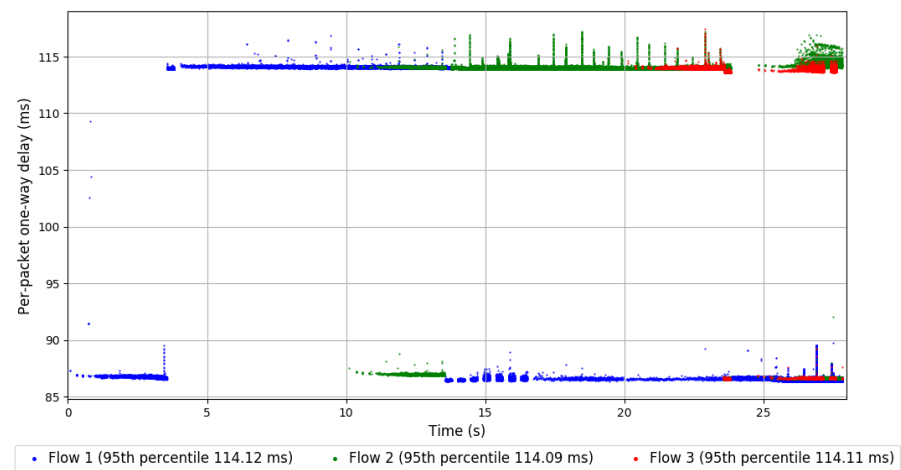
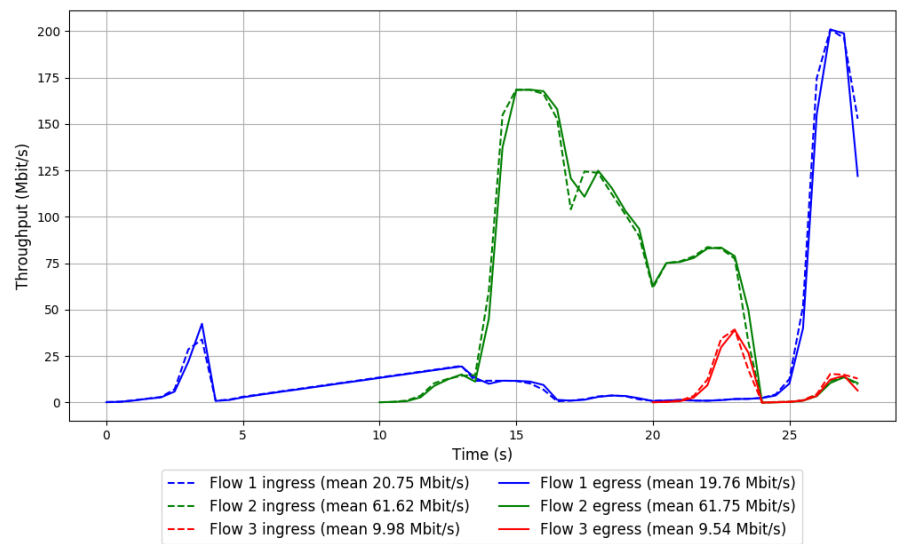
-- Flow 3:

Average throughput: 9.54 Mbit/s

95th percentile per-packet one-way delay: 114.110 ms

Loss rate: 7.16%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-10-12 04:57:17

End at: 2017-10-12 04:57:47

Below is generated by plot.py at 2017-10-12 08:37:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.25 Mbit/s

95th percentile per-packet one-way delay: 114.056 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 52.33 Mbit/s

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

Loss rate: 0.45%

-- Flow 2:

Average throughput: 46.83 Mbit/s

95th percentile per-packet one-way delay: 113.993 ms

Loss rate: 1.26%

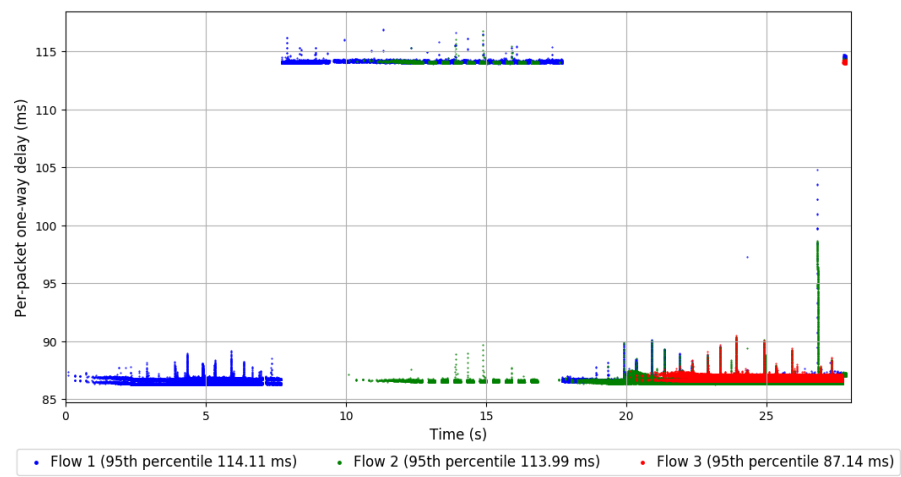
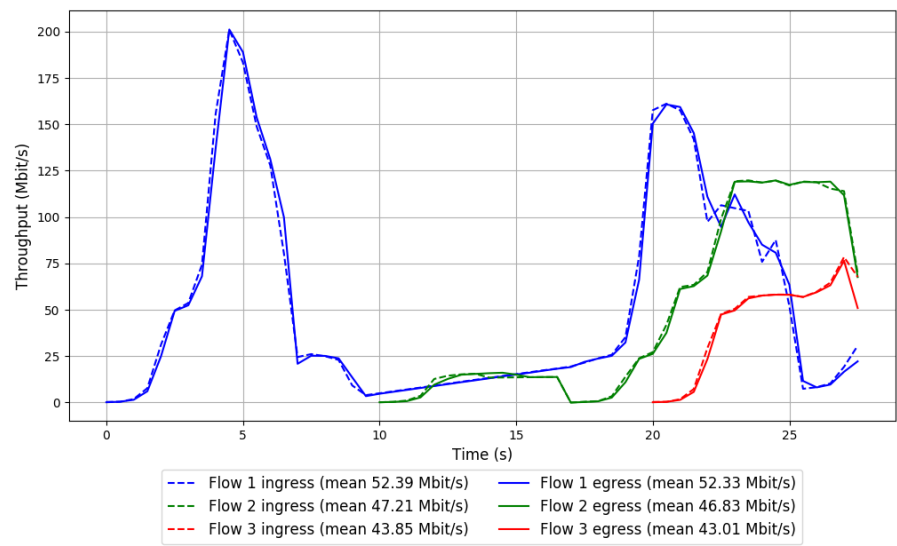
-- Flow 3:

Average throughput: 43.01 Mbit/s

95th percentile per-packet one-way delay: 87.140 ms

Loss rate: 4.42%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-10-12 05:10:30

End at: 2017-10-12 05:11:01

Below is generated by plot.py at 2017-10-12 08:37:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.77 Mbit/s

95th percentile per-packet one-way delay: 114.226 ms

Loss rate: 3.97%

-- Flow 1:

Average throughput: 9.72 Mbit/s

95th percentile per-packet one-way delay: 114.228 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 10.32 Mbit/s

95th percentile per-packet one-way delay: 114.228 ms

Loss rate: 0.06%

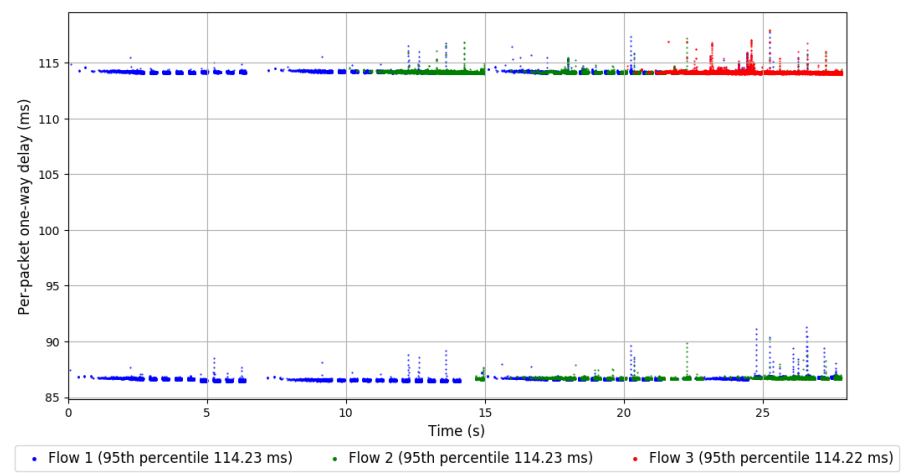
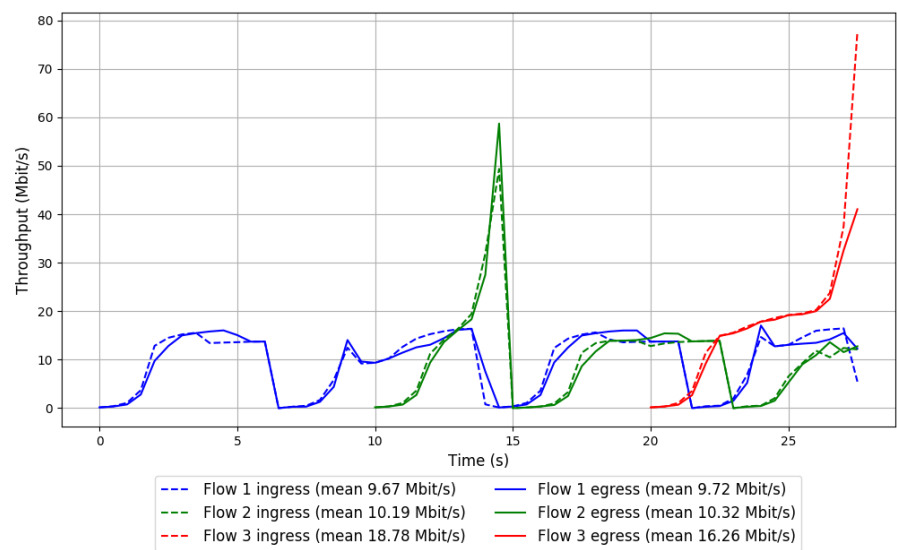
-- Flow 3:

Average throughput: 16.26 Mbit/s

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

Loss rate: 15.93%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-10-12 05:23:06

End at: 2017-10-12 05:23:36

Below is generated by plot.py at 2017-10-12 08:38:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.51 Mbit/s

95th percentile per-packet one-way delay: 114.158 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 57.62 Mbit/s

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

Loss rate: 0.72%

-- Flow 2:

Average throughput: 68.89 Mbit/s

95th percentile per-packet one-way delay: 87.132 ms

Loss rate: 1.26%

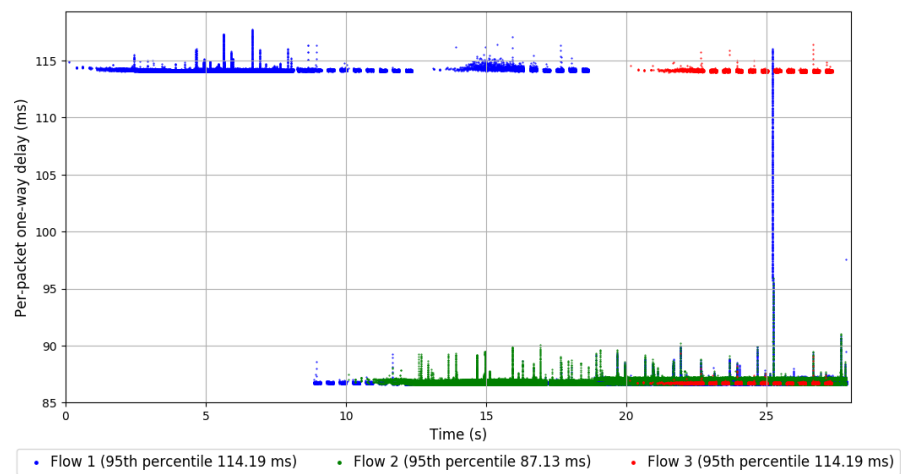
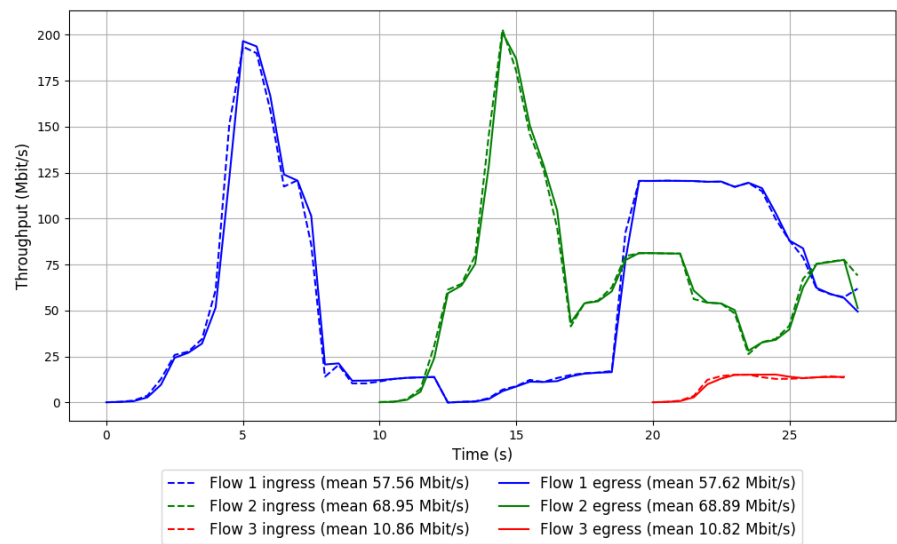
-- Flow 3:

Average throughput: 10.82 Mbit/s

95th percentile per-packet one-way delay: 114.185 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-10-12 05:35:59

End at: 2017-10-12 05:36:29

Below is generated by plot.py at 2017-10-12 08:38:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.34 Mbit/s

95th percentile per-packet one-way delay: 114.191 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 44.11 Mbit/s

95th percentile per-packet one-way delay: 114.100 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 64.36 Mbit/s

95th percentile per-packet one-way delay: 114.210 ms

Loss rate: 0.01%

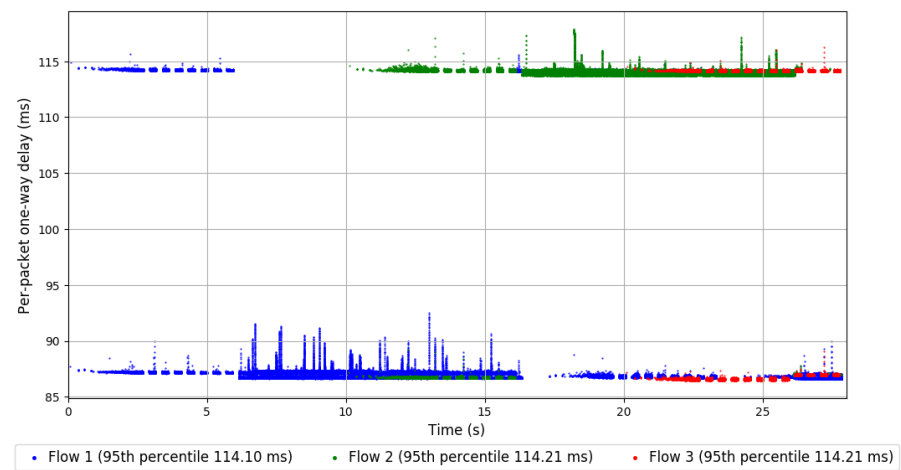
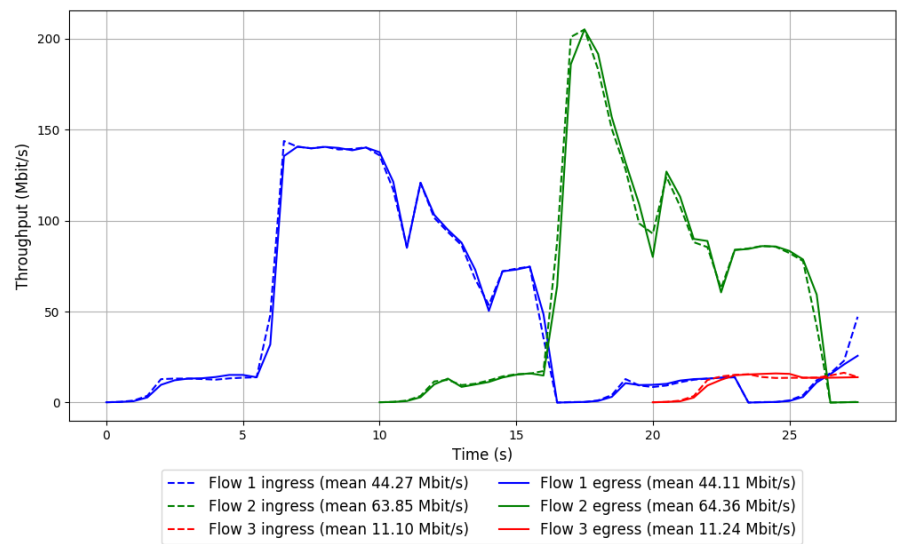
-- Flow 3:

Average throughput: 11.24 Mbit/s

95th percentile per-packet one-way delay: 114.212 ms

Loss rate: 2.19%

Run 10: Report of Copa — Data Link

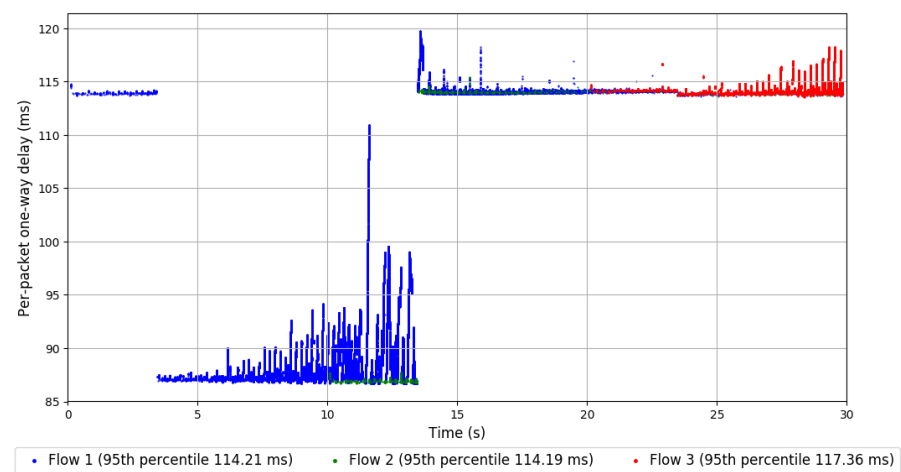
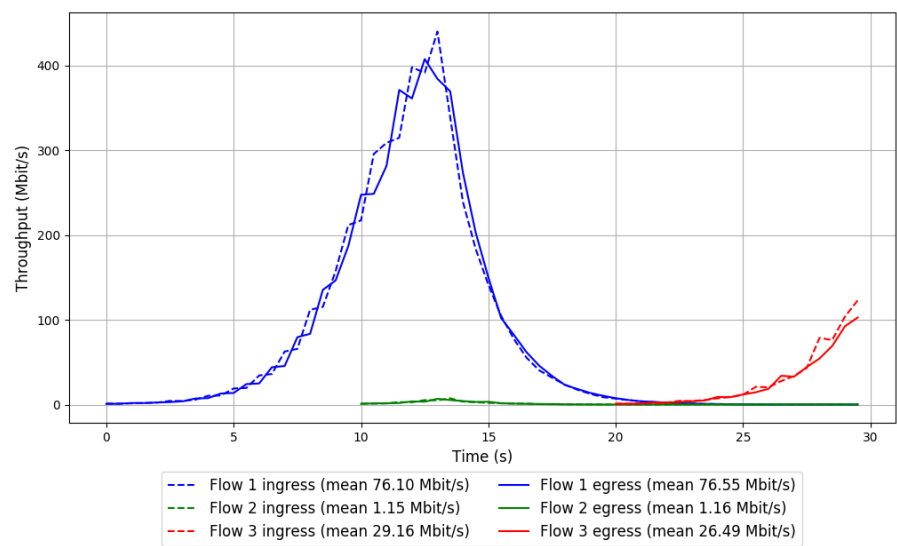


```
Run 1: Statistics of CalibratedKoho

Start at: 2017-10-12 03:35:34
End at: 2017-10-12 03:36:04

# Below is generated by plot.py at 2017-10-12 08:38:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.93 Mbit/s
95th percentile per-packet one-way delay: 115.950 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 76.55 Mbit/s
95th percentile per-packet one-way delay: 114.214 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 114.191 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 26.49 Mbit/s
95th percentile per-packet one-way delay: 117.365 ms
Loss rate: 11.26%
```


Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-10-12 03:48:18

End at: 2017-10-12 03:48:48

Below is generated by plot.py at 2017-10-12 08:39:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.31 Mbit/s

95th percentile per-packet one-way delay: 121.402 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 152.62 Mbit/s

95th percentile per-packet one-way delay: 124.605 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 27.41 Mbit/s

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

Loss rate: 0.01%

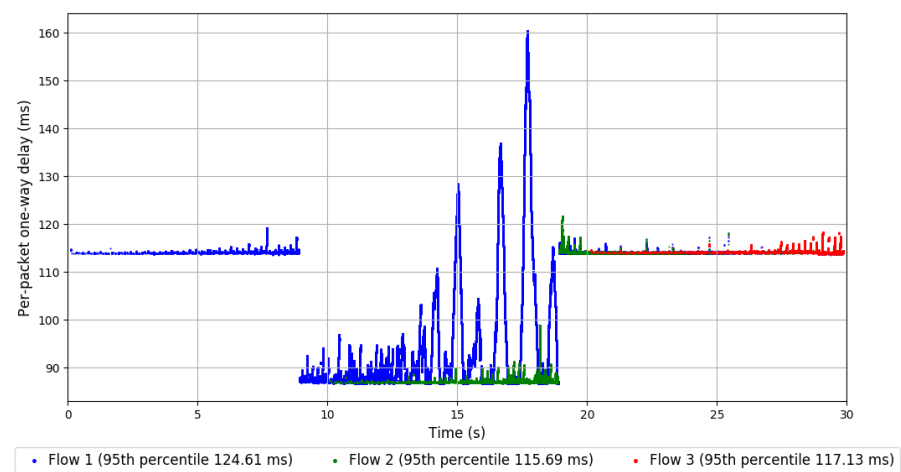
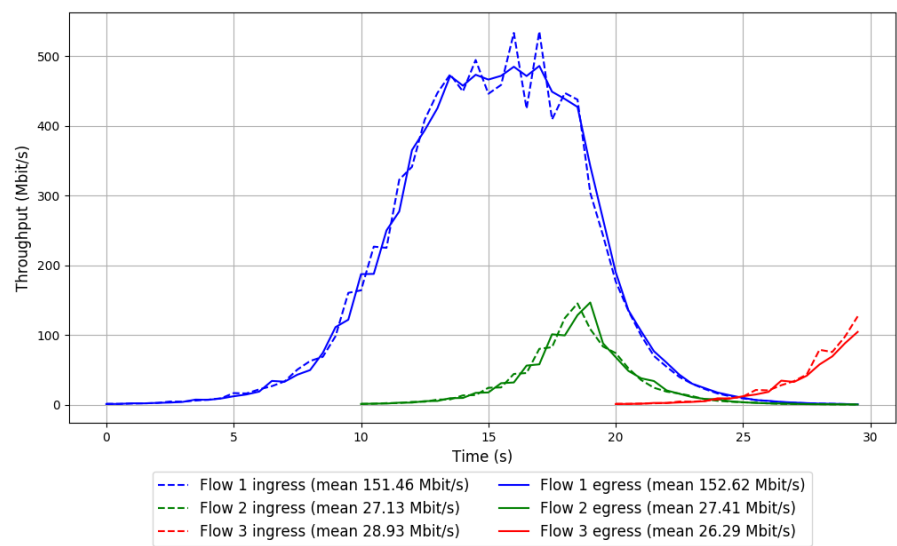
-- Flow 3:

Average throughput: 26.29 Mbit/s

95th percentile per-packet one-way delay: 117.131 ms

Loss rate: 11.21%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-10-12 04:00:48

End at: 2017-10-12 04:01:18

Below is generated by plot.py at 2017-10-12 08:40:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 194.88 Mbit/s

95th percentile per-packet one-way delay: 132.223 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 163.40 Mbit/s

95th percentile per-packet one-way delay: 133.292 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 34.70 Mbit/s

95th percentile per-packet one-way delay: 117.084 ms

Loss rate: 0.04%

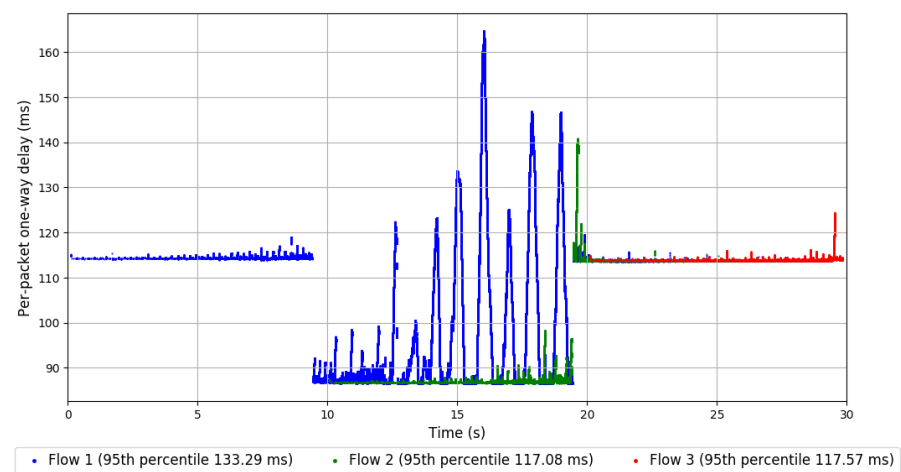
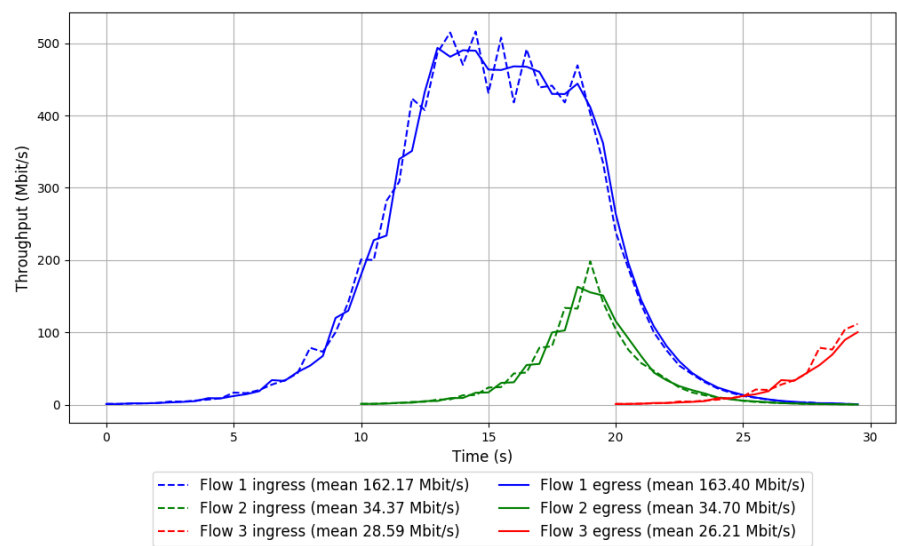
-- Flow 3:

Average throughput: 26.21 Mbit/s

95th percentile per-packet one-way delay: 117.572 ms

Loss rate: 10.42%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-10-12 04:13:43

End at: 2017-10-12 04:14:13

Below is generated by plot.py at 2017-10-12 08:40:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.92 Mbit/s

95th percentile per-packet one-way delay: 154.219 ms

Loss rate: 2.67%

-- Flow 1:

Average throughput: 34.20 Mbit/s

95th percentile per-packet one-way delay: 187.778 ms

Loss rate: 3.58%

-- Flow 2:

Average throughput: 214.05 Mbit/s

95th percentile per-packet one-way delay: 137.089 ms

Loss rate: 2.08%

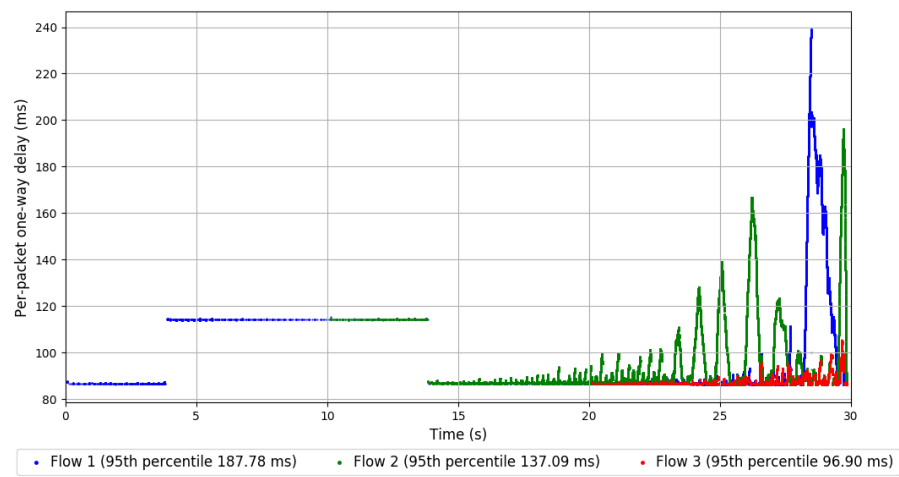
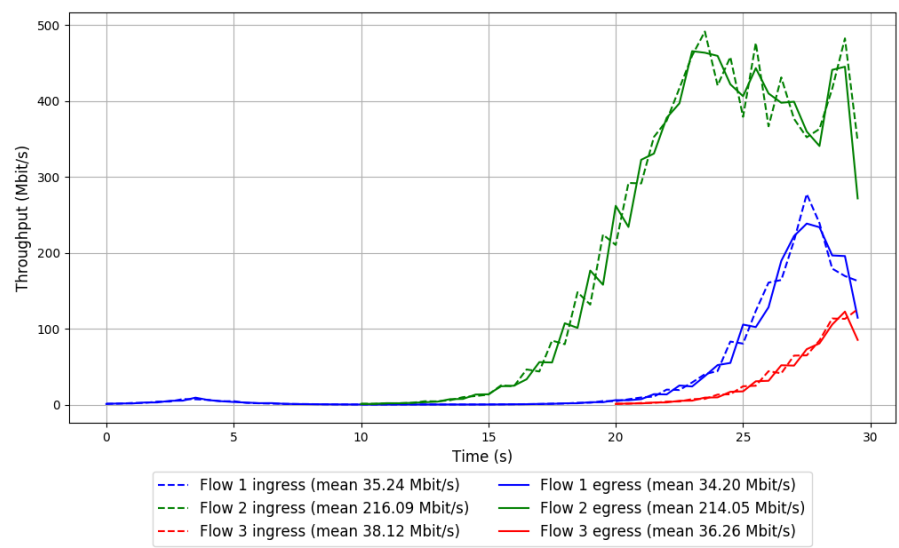
-- Flow 3:

Average throughput: 36.26 Mbit/s

95th percentile per-packet one-way delay: 96.904 ms

Loss rate: 6.81%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-10-12 04:26:39

End at: 2017-10-12 04:27:09

Below is generated by plot.py at 2017-10-12 08:40:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.82 Mbit/s

95th percentile per-packet one-way delay: 119.065 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 159.77 Mbit/s

95th percentile per-packet one-way delay: 120.704 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 18.85 Mbit/s

95th percentile per-packet one-way delay: 115.559 ms

Loss rate: 0.05%

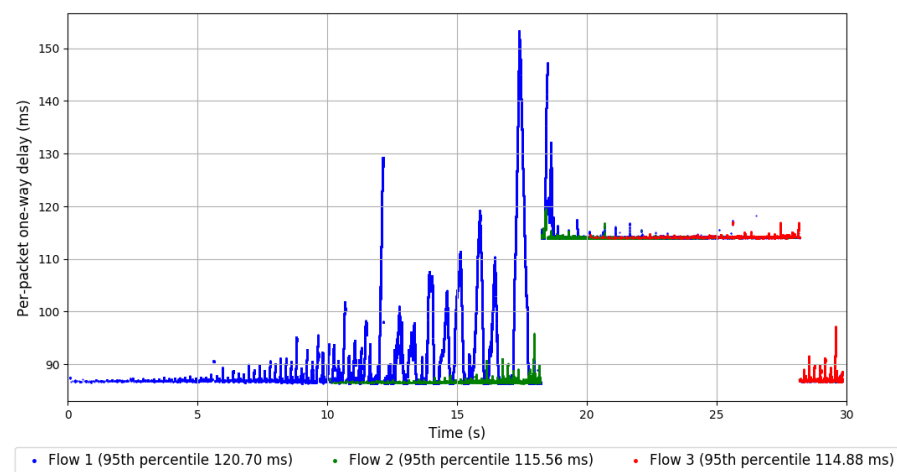
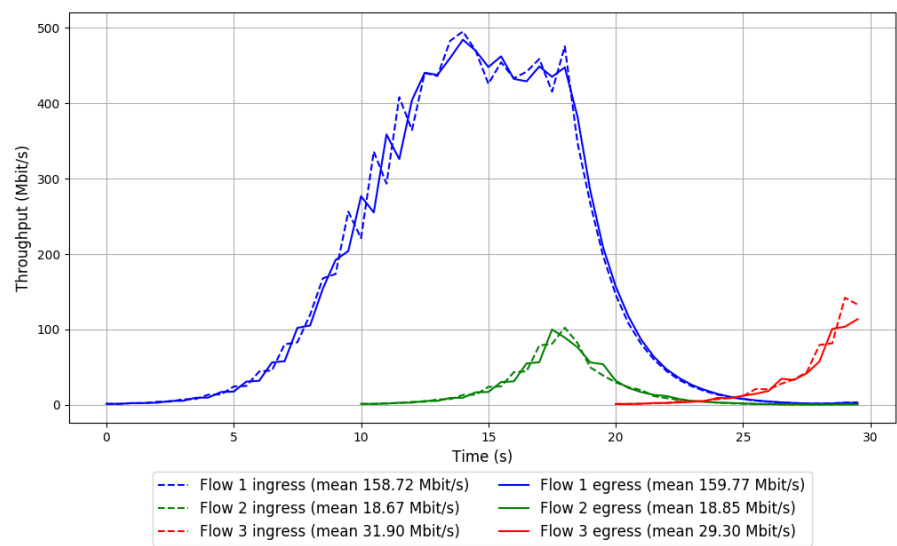
-- Flow 3:

Average throughput: 29.30 Mbit/s

95th percentile per-packet one-way delay: 114.881 ms

Loss rate: 10.26%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-10-12 04:39:26

End at: 2017-10-12 04:39:56

Below is generated by plot.py at 2017-10-12 08:40:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.98 Mbit/s

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

Loss rate: 0.05%

-- Flow 1:

Average throughput: 4.86 Mbit/s

95th percentile per-packet one-way delay: 114.383 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 70.90 Mbit/s

95th percentile per-packet one-way delay: 116.509 ms

Loss rate: 0.04%

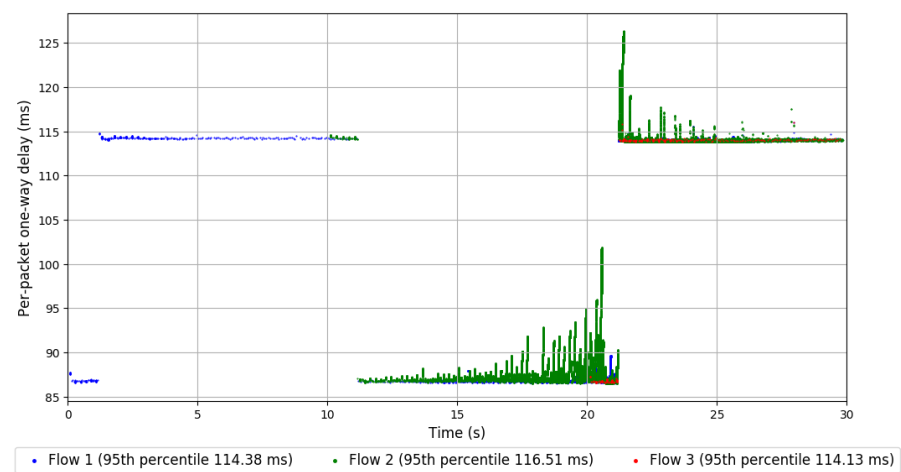
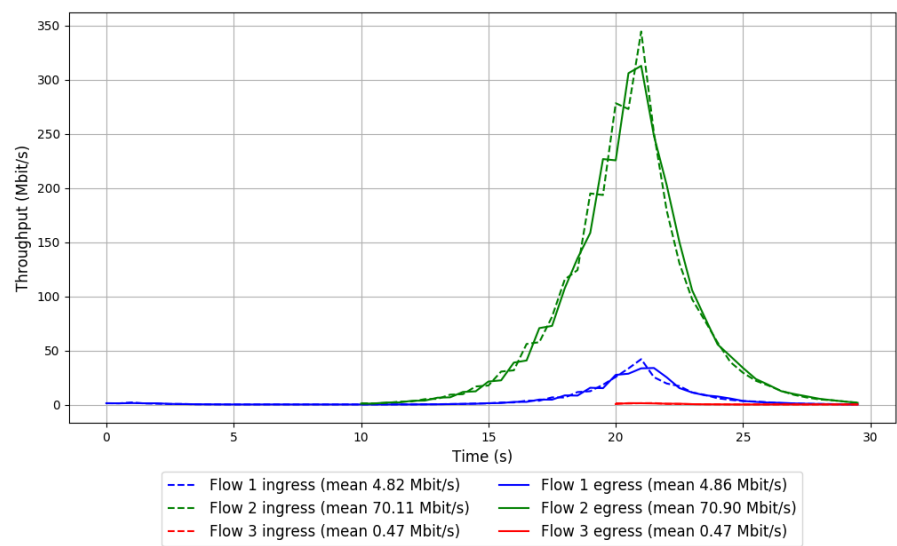
-- Flow 3:

Average throughput: 0.47 Mbit/s

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

Loss rate: 4.11%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-10-12 04:51:43

End at: 2017-10-12 04:52:13

Below is generated by plot.py at 2017-10-12 08:40:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.33 Mbit/s

95th percentile per-packet one-way delay: 126.286 ms

Loss rate: 2.67%

-- Flow 1:

Average throughput: 32.18 Mbit/s

95th percentile per-packet one-way delay: 96.382 ms

Loss rate: 6.13%

-- Flow 2:

Average throughput: 207.69 Mbit/s

95th percentile per-packet one-way delay: 131.035 ms

Loss rate: 1.57%

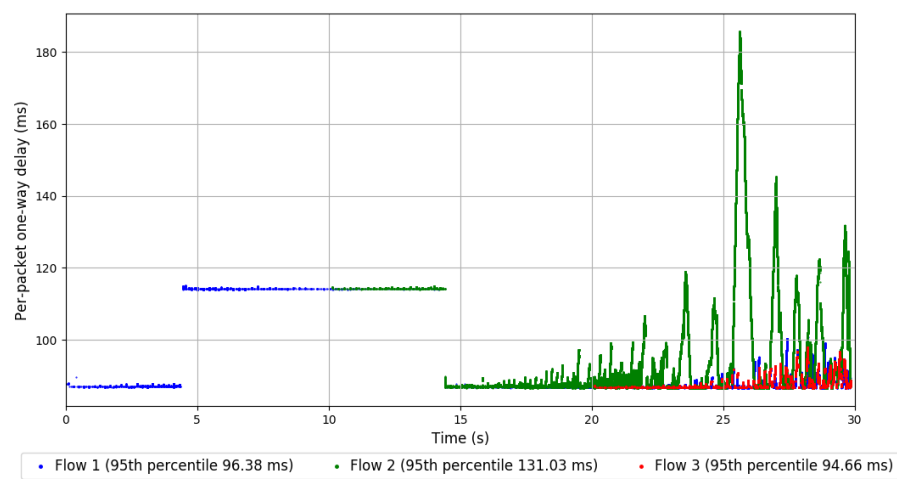
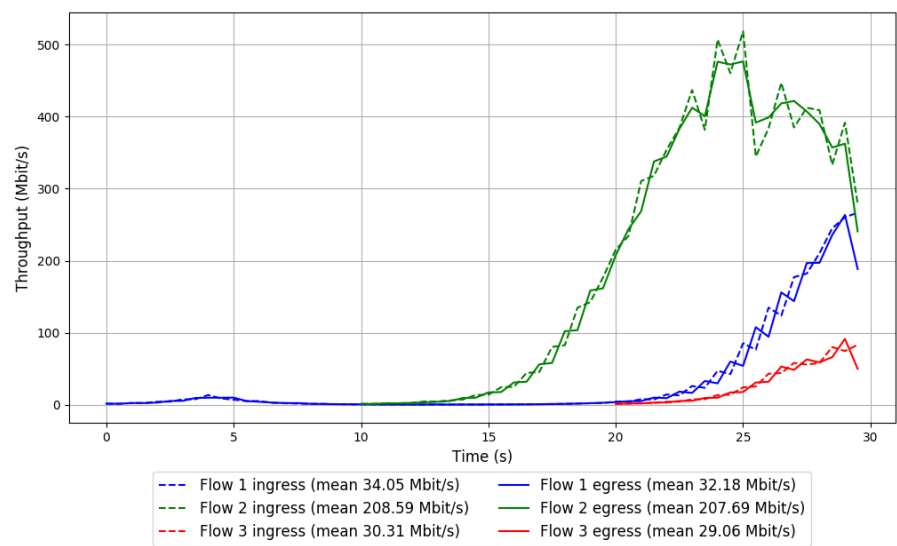
-- Flow 3:

Average throughput: 29.06 Mbit/s

95th percentile per-packet one-way delay: 94.656 ms

Loss rate: 6.08%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-10-12 05:04:40

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

Below is generated by plot.py at 2017-10-12 08:44:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 363.47 Mbit/s

95th percentile per-packet one-way delay: 147.626 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 246.24 Mbit/s

95th percentile per-packet one-way delay: 137.326 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 173.29 Mbit/s

95th percentile per-packet one-way delay: 169.421 ms

Loss rate: 1.42%

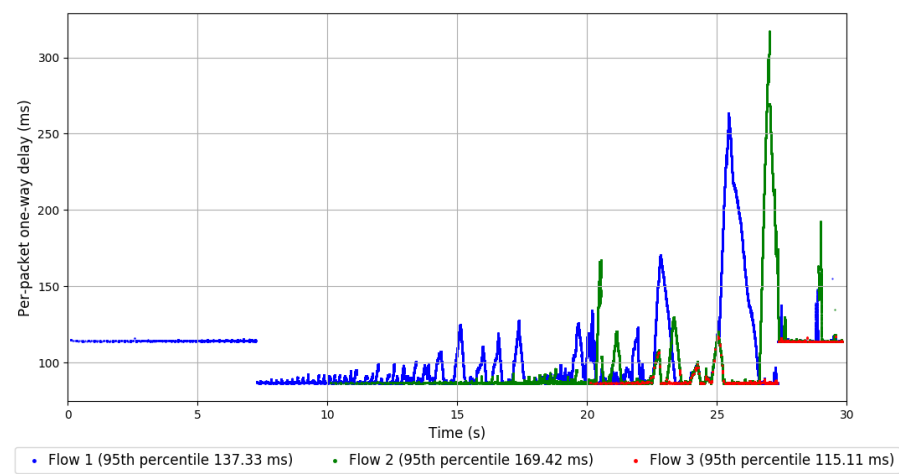
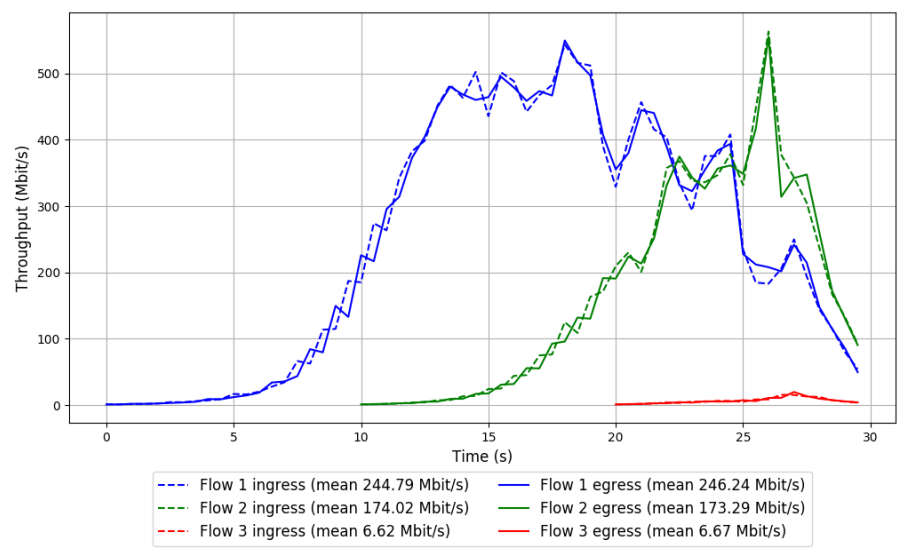
-- Flow 3:

Average throughput: 6.67 Mbit/s

95th percentile per-packet one-way delay: 115.115 ms

Loss rate: 1.37%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-10-12 05:17:35

End at: 2017-10-12 05:18:05

Below is generated by plot.py at 2017-10-12 08:44:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 69.70 Mbit/s

95th percentile per-packet one-way delay: 115.595 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 5.09 Mbit/s

95th percentile per-packet one-way delay: 114.602 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 96.88 Mbit/s

95th percentile per-packet one-way delay: 116.169 ms

Loss rate: 0.06%

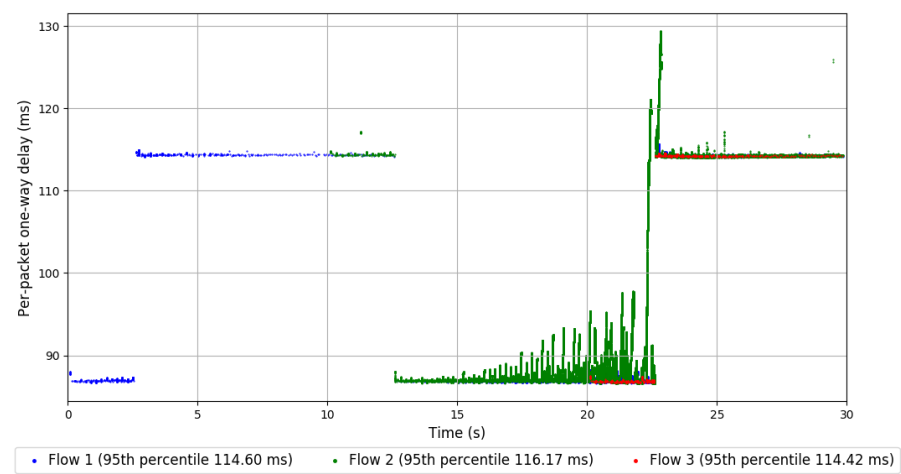
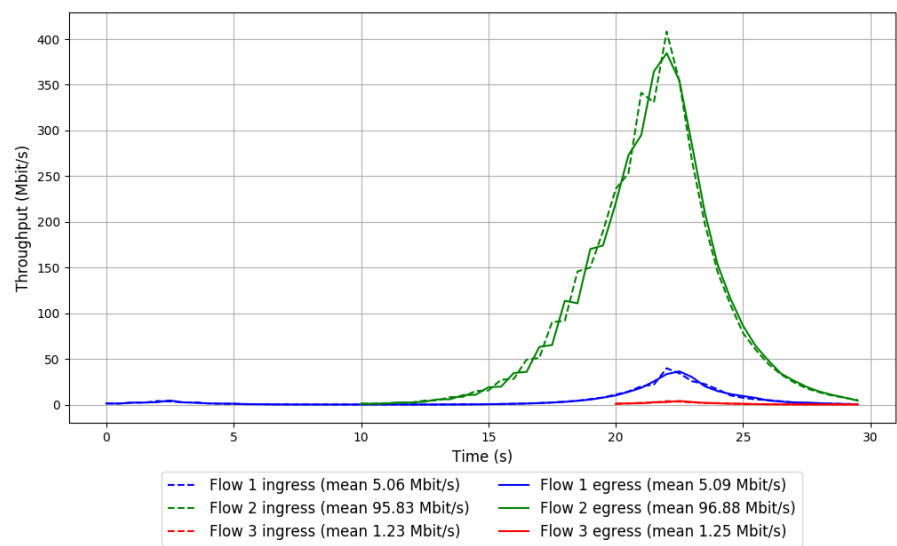
-- Flow 3:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 114.415 ms

Loss rate: 0.69%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-10-12 05:30:27

End at: 2017-10-12 05:30:57

Below is generated by plot.py at 2017-10-12 08:44:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 205.73 Mbit/s

95th percentile per-packet one-way delay: 118.735 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 171.48 Mbit/s

95th percentile per-packet one-way delay: 120.368 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 51.51 Mbit/s

95th percentile per-packet one-way delay: 115.180 ms

Loss rate: 0.03%

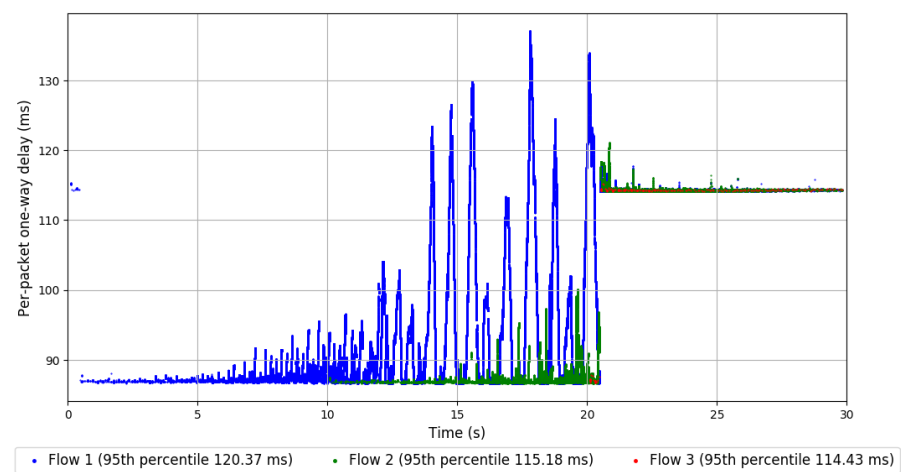
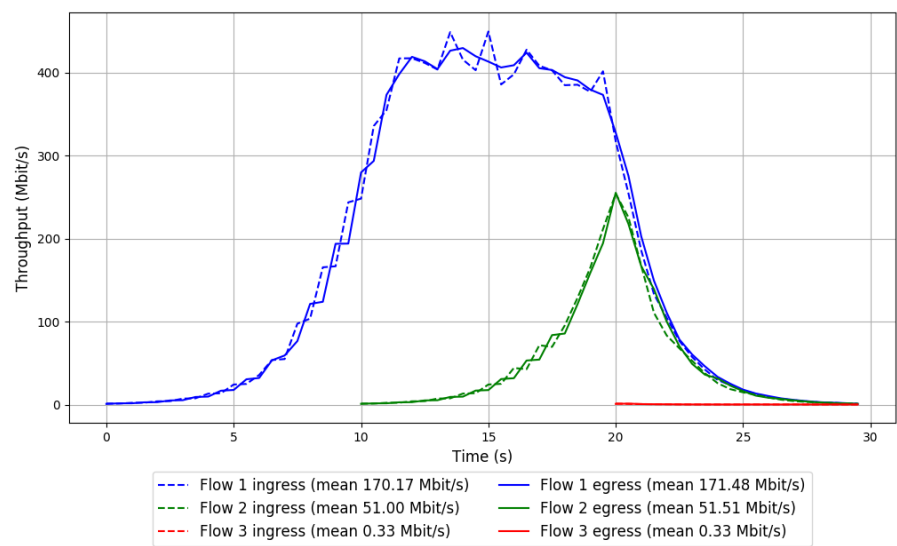
-- Flow 3:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 114.426 ms

Loss rate: 1.12%

Run 10: Report of CalibratedKoho — Data Link

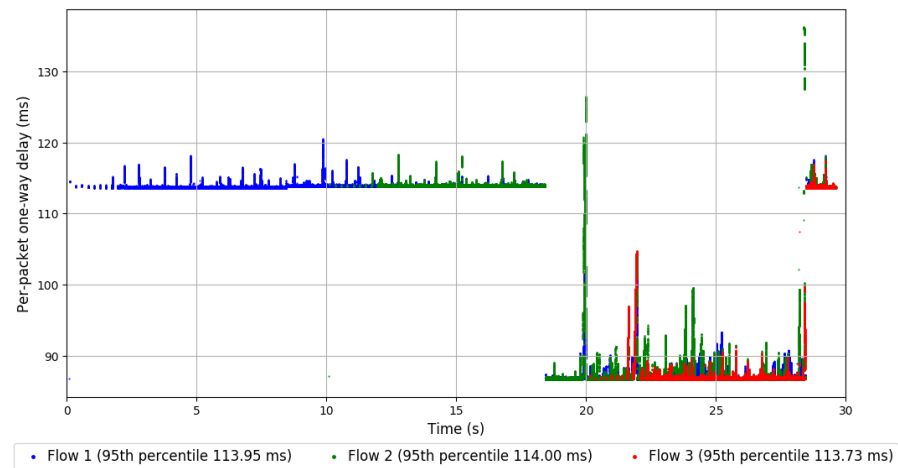
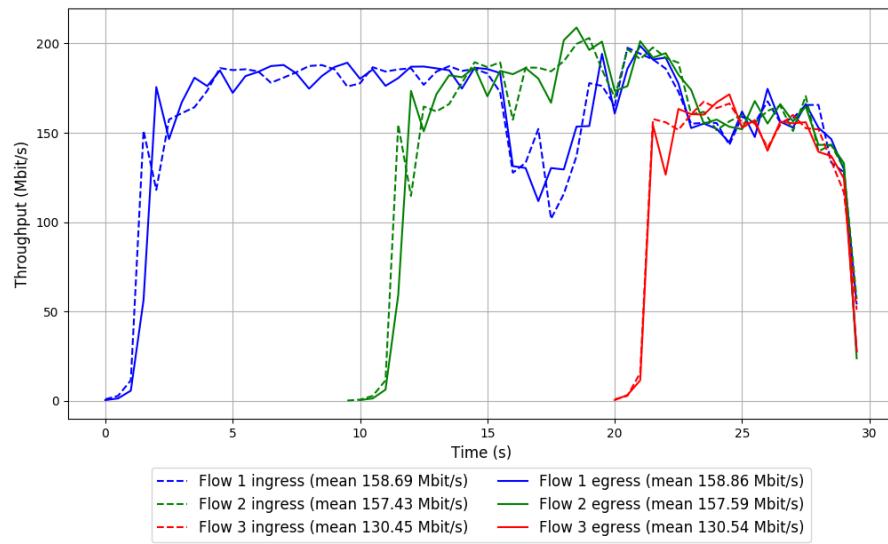


```
Run 1: Statistics of Indigo

Start at: 2017-10-12 03:45:29
End at: 2017-10-12 03:45:59

# Below is generated by plot.py at 2017-10-12 08:44:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 304.85 Mbit/s
95th percentile per-packet one-way delay: 113.954 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 158.86 Mbit/s
95th percentile per-packet one-way delay: 113.948 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 157.59 Mbit/s
95th percentile per-packet one-way delay: 114.003 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 130.54 Mbit/s
95th percentile per-packet one-way delay: 113.729 ms
Loss rate: 2.03%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-10-12 03:57:58

End at: 2017-10-12 03:58:28

Below is generated by plot.py at 2017-10-12 08:44:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 300.46 Mbit/s

95th percentile per-packet one-way delay: 114.436 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 158.01 Mbit/s

95th percentile per-packet one-way delay: 114.401 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 150.96 Mbit/s

95th percentile per-packet one-way delay: 114.617 ms

Loss rate: 1.08%

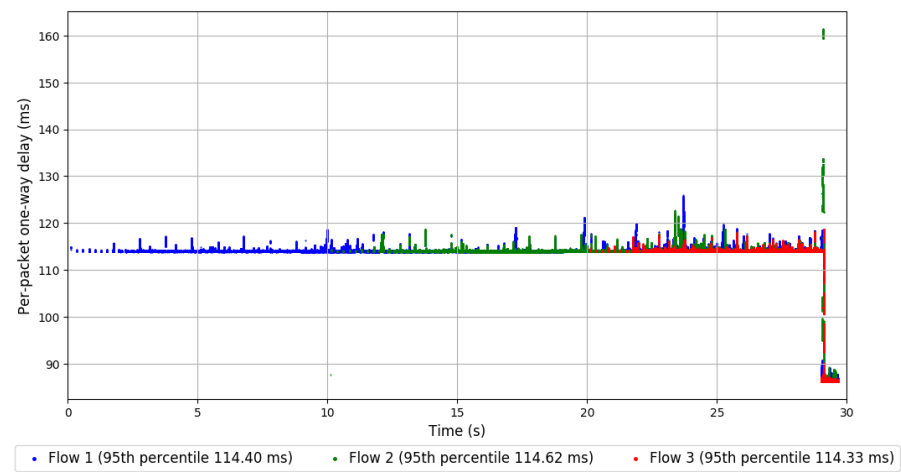
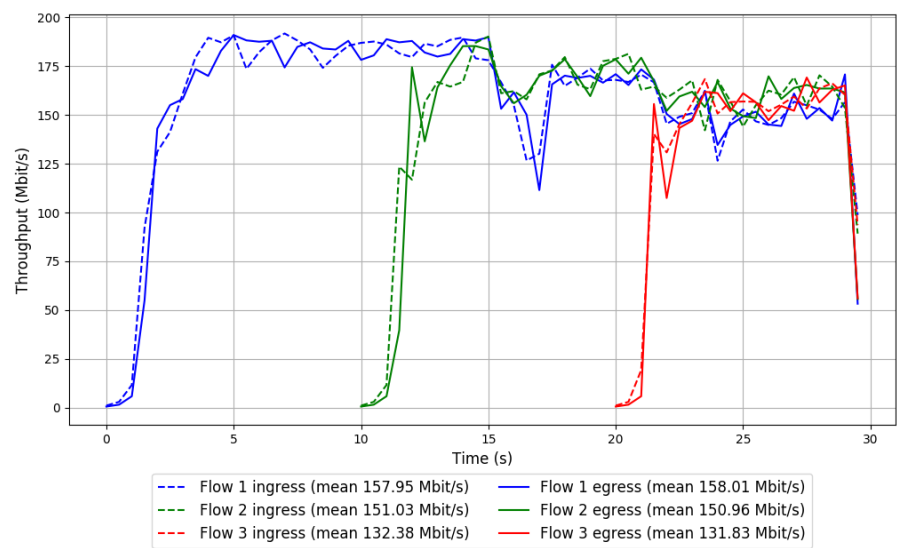
-- Flow 3:

Average throughput: 131.83 Mbit/s

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

Loss rate: 2.75%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-10-12 04:10:52

End at: 2017-10-12 04:11:22

Below is generated by plot.py at 2017-10-12 08:44:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 270.42 Mbit/s

95th percentile per-packet one-way delay: 114.378 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 162.72 Mbit/s

95th percentile per-packet one-way delay: 114.219 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 100.21 Mbit/s

95th percentile per-packet one-way delay: 114.998 ms

Loss rate: 1.16%

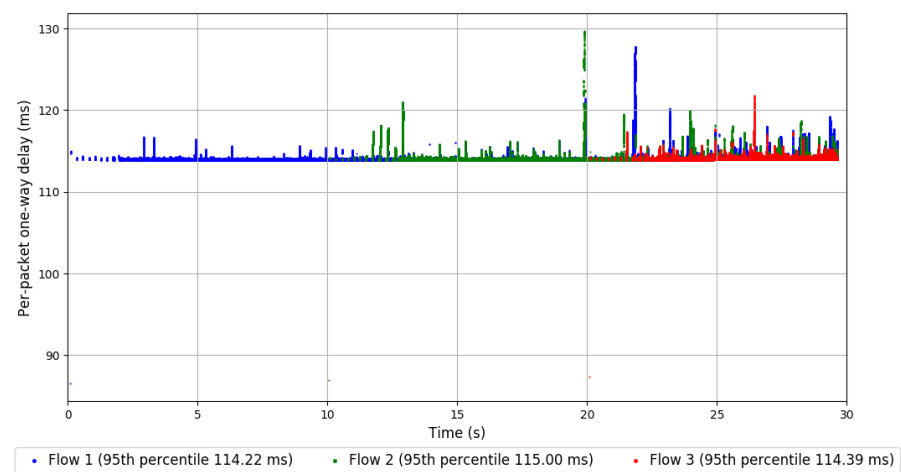
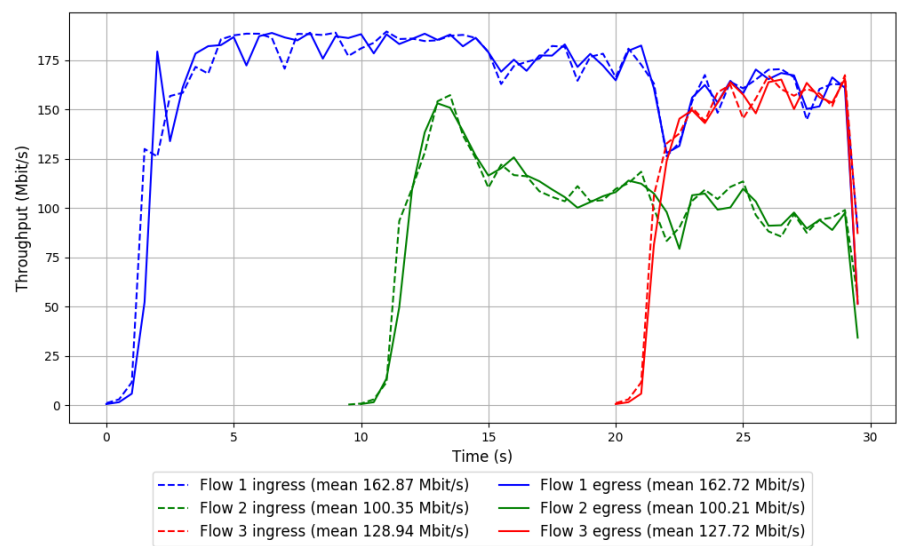
-- Flow 3:

Average throughput: 127.72 Mbit/s

95th percentile per-packet one-way delay: 114.388 ms

Loss rate: 3.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-10-12 04:23:48

End at: 2017-10-12 04:24:18

Below is generated by plot.py at 2017-10-12 08:44:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 254.65 Mbit/s

95th percentile per-packet one-way delay: 114.037 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 100.31 Mbit/s

95th percentile per-packet one-way delay: 114.038 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 162.38 Mbit/s

95th percentile per-packet one-way delay: 114.054 ms

Loss rate: 1.18%

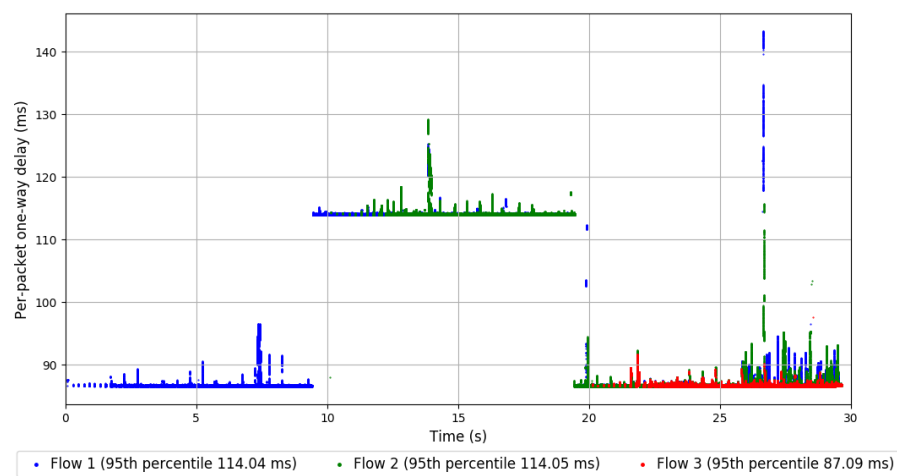
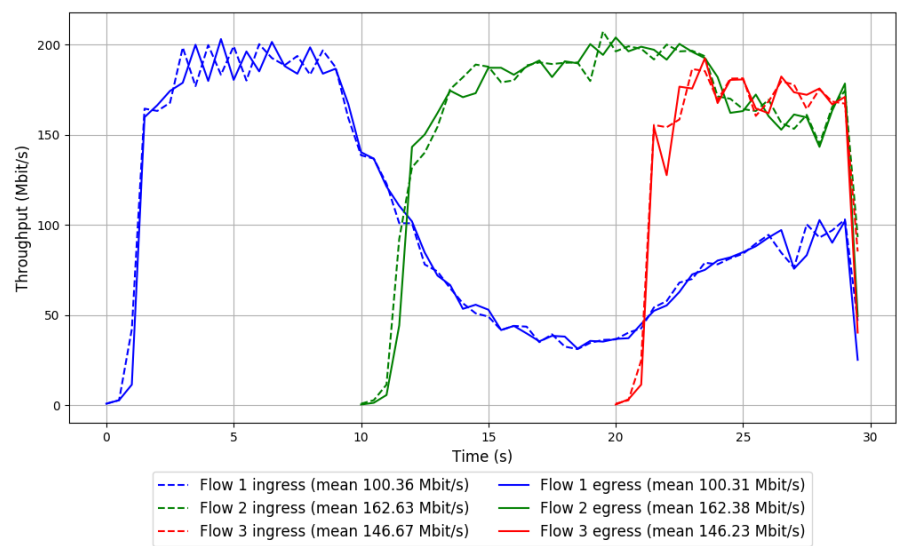
-- Flow 3:

Average throughput: 146.23 Mbit/s

95th percentile per-packet one-way delay: 87.095 ms

Loss rate: 2.39%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-10-12 04:36:45

End at: 2017-10-12 04:37:15

Below is generated by plot.py at 2017-10-12 08:44:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 160.74 Mbit/s

95th percentile per-packet one-way delay: 114.163 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 58.08 Mbit/s

95th percentile per-packet one-way delay: 114.135 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 130.49 Mbit/s

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

Loss rate: 0.32%

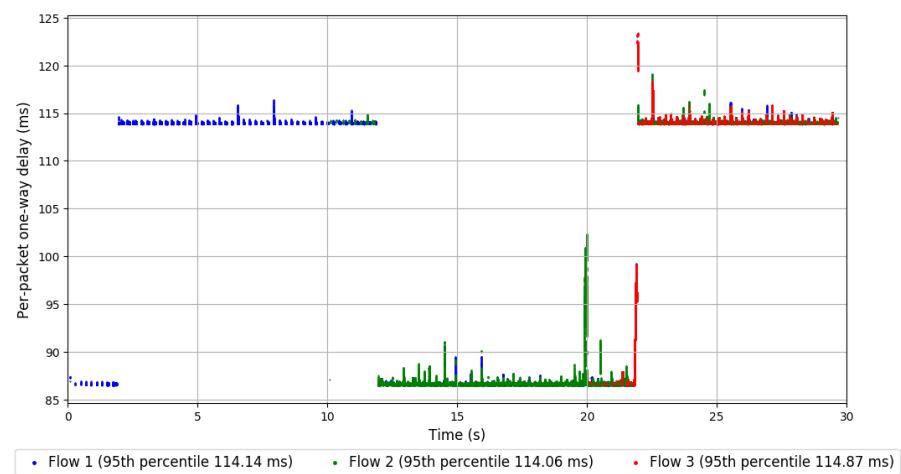
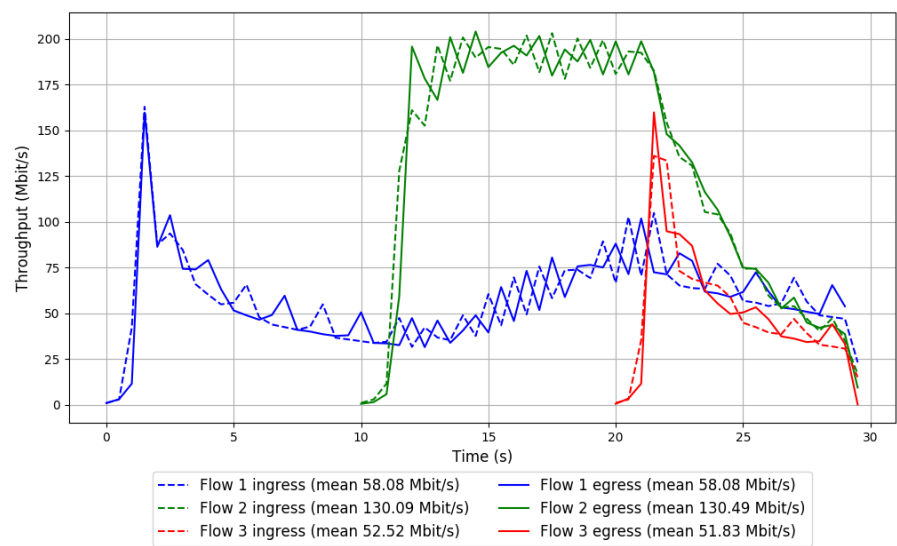
-- Flow 3:

Average throughput: 51.83 Mbit/s

95th percentile per-packet one-way delay: 114.870 ms

Loss rate: 1.50%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-10-12 04:48:56

End at: 2017-10-12 04:49:26

Below is generated by plot.py at 2017-10-12 08:44:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 212.03 Mbit/s

95th percentile per-packet one-way delay: 114.017 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 137.39 Mbit/s

95th percentile per-packet one-way delay: 114.010 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 110.21 Mbit/s

95th percentile per-packet one-way delay: 114.022 ms

Loss rate: 0.26%

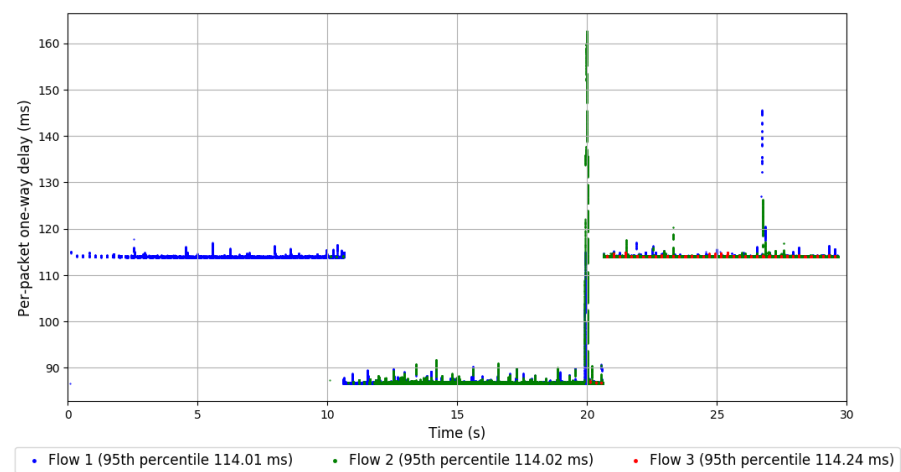
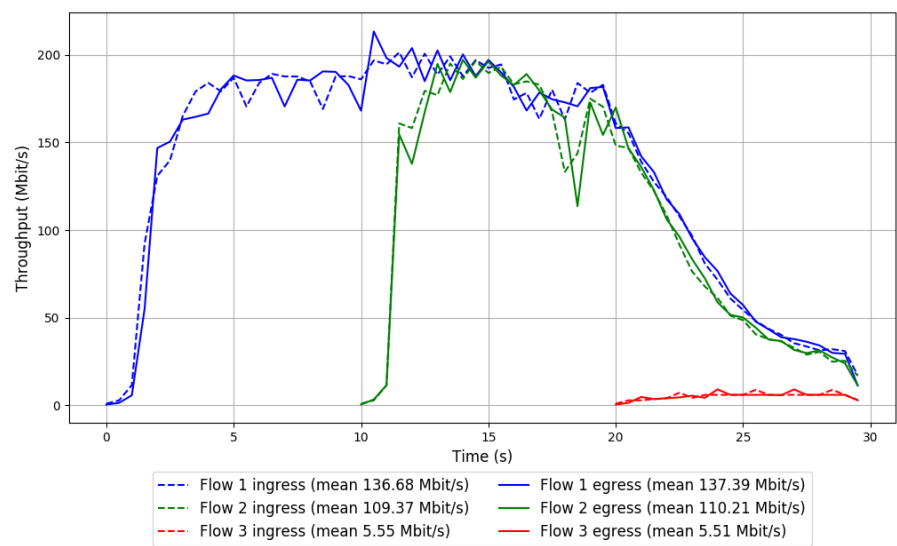
-- Flow 3:

Average throughput: 5.51 Mbit/s

95th percentile per-packet one-way delay: 114.238 ms

Loss rate: 2.92%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-10-12 05:01:44

End at: 2017-10-12 05:02:14

Below is generated by plot.py at 2017-10-12 08:46:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 302.75 Mbit/s

95th percentile per-packet one-way delay: 114.677 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 161.48 Mbit/s

95th percentile per-packet one-way delay: 114.509 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 150.28 Mbit/s

95th percentile per-packet one-way delay: 115.134 ms

Loss rate: 1.10%

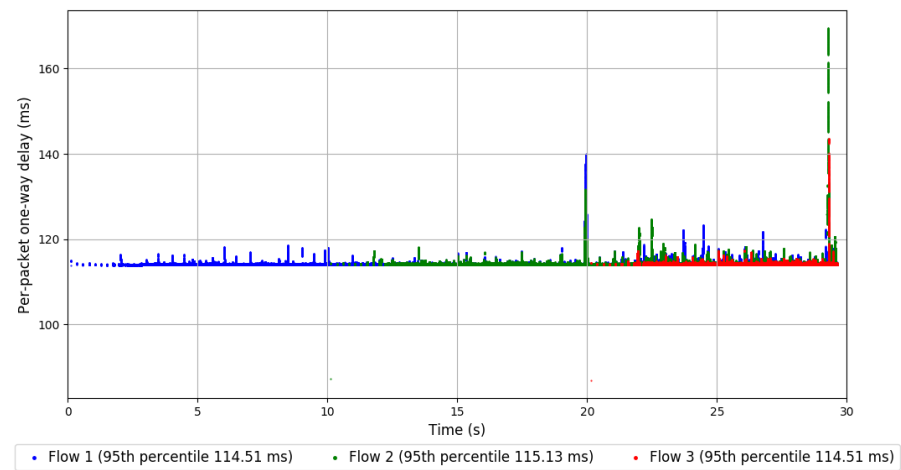
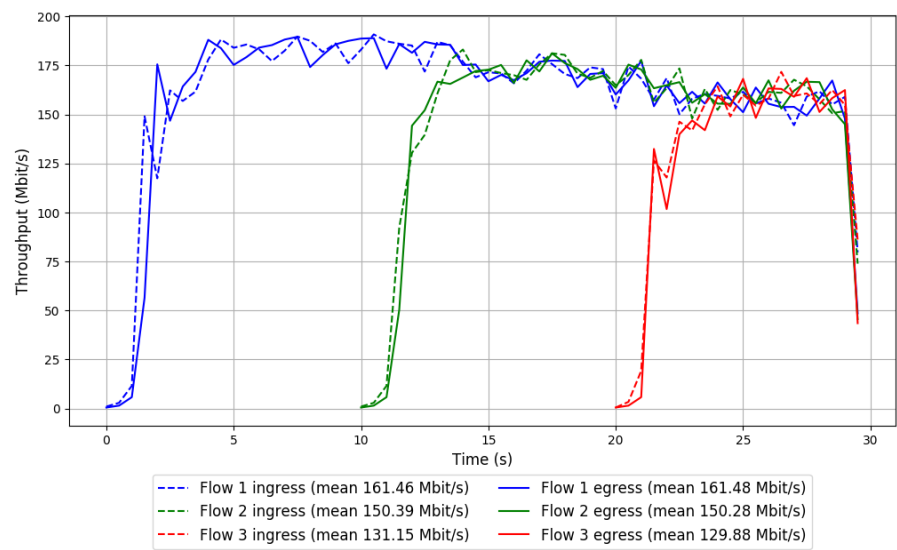
-- Flow 3:

Average throughput: 129.88 Mbit/s

95th percentile per-packet one-way delay: 114.506 ms

Loss rate: 3.04%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

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

End at: 2017-10-12 05:15:14

Below is generated by plot.py at 2017-10-12 08:46:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 266.81 Mbit/s

95th percentile per-packet one-way delay: 114.226 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 151.62 Mbit/s

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

Loss rate: 0.19%

-- Flow 2:

Average throughput: 133.03 Mbit/s

95th percentile per-packet one-way delay: 114.312 ms

Loss rate: 0.32%

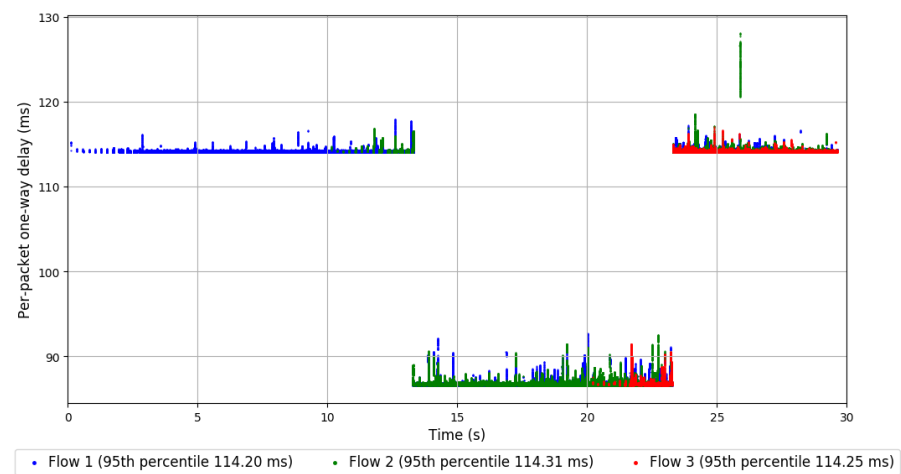
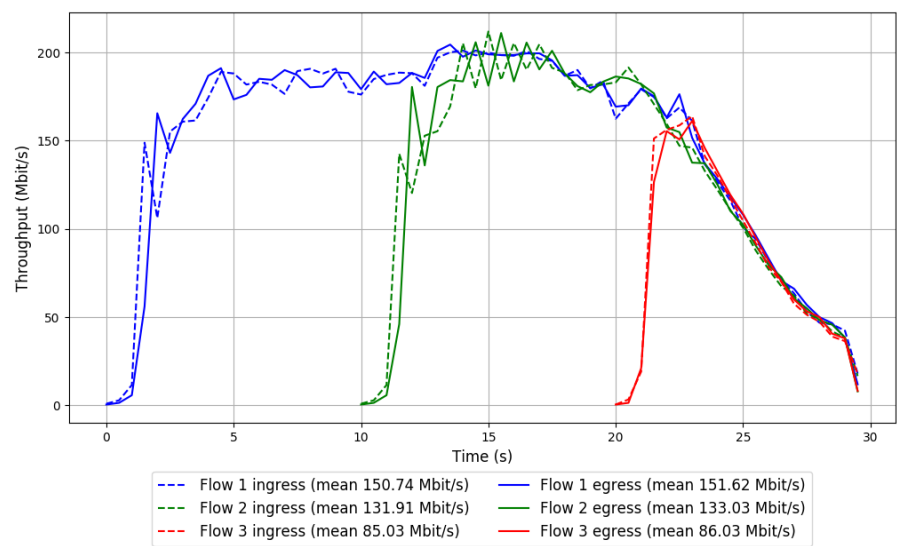
-- Flow 3:

Average throughput: 86.03 Mbit/s

95th percentile per-packet one-way delay: 114.248 ms

Loss rate: 0.96%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-10-12 05:27:42

End at: 2017-10-12 05:28:12

Below is generated by plot.py at 2017-10-12 08:46:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 223.30 Mbit/s

95th percentile per-packet one-way delay: 114.285 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 68.26 Mbit/s

95th percentile per-packet one-way delay: 114.219 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 165.27 Mbit/s

95th percentile per-packet one-way delay: 114.267 ms

Loss rate: 1.23%

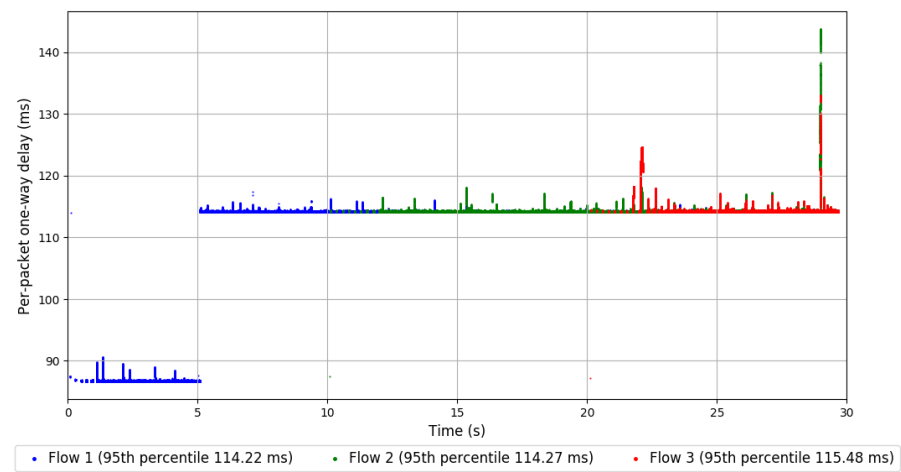
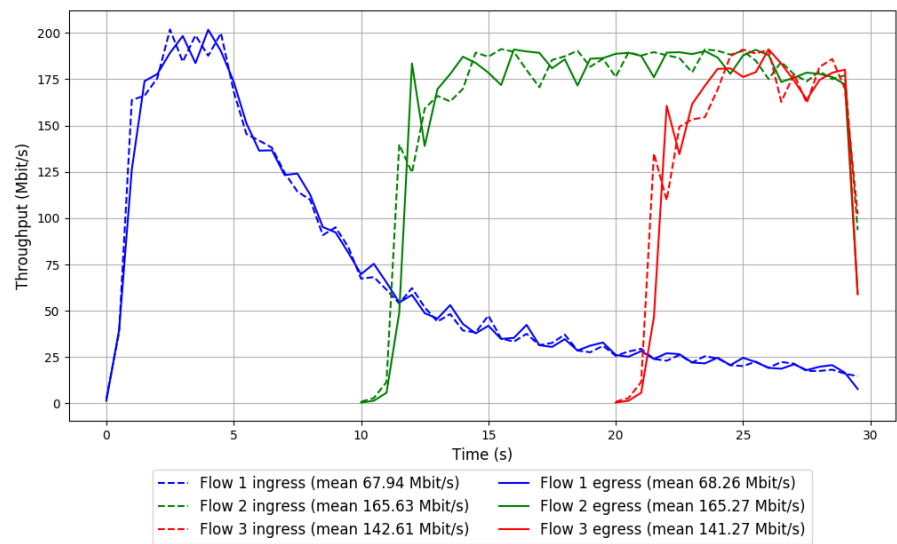
-- Flow 3:

Average throughput: 141.27 Mbit/s

95th percentile per-packet one-way delay: 115.483 ms

Loss rate: 2.97%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-10-12 05:40:23

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

Below is generated by plot.py at 2017-10-12 08:46:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 273.78 Mbit/s

95th percentile per-packet one-way delay: 114.291 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 151.08 Mbit/s

95th percentile per-packet one-way delay: 114.274 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 134.87 Mbit/s

95th percentile per-packet one-way delay: 114.309 ms

Loss rate: 0.52%

-- Flow 3:

Average throughput: 104.78 Mbit/s

95th percentile per-packet one-way delay: 114.312 ms

Loss rate: 1.21%

Run 10: Report of Indigo — Data Link

