

Pantheon Report

Generated at 2017-10-12 23:11:16 (UTC).

Data path: GCE Tokyo 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.

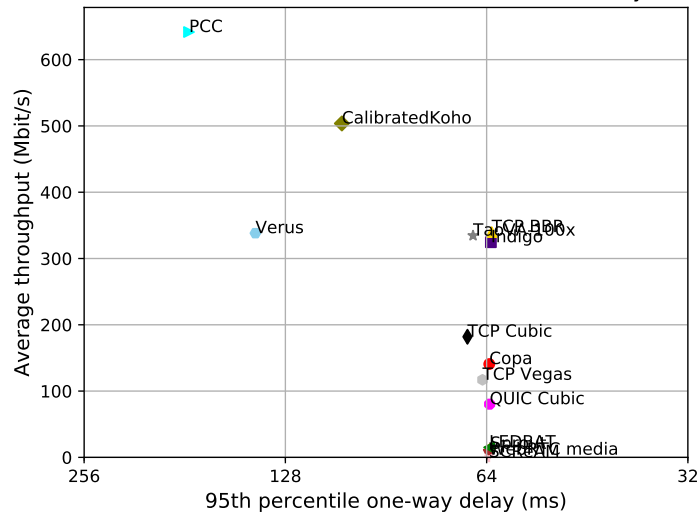
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

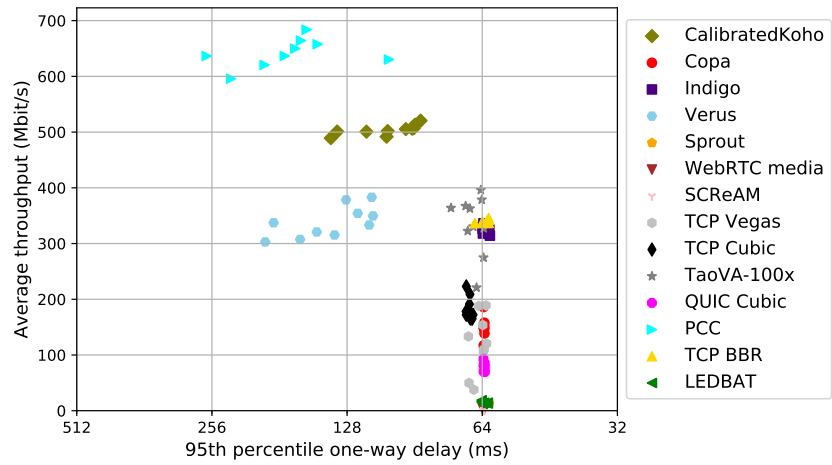
Git summary:

```
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 @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

test from GCE Tokyo 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 Tokyo 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	173.03	170.03	163.82	62.71	62.71	63.95	0.41	0.67	1.41
TCP Cubic	10	90.80	89.87	95.76	67.76	68.19	68.02	0.52	0.63	1.35
LEDBAT	7	8.02	7.74	5.57	63.51	63.30	63.26	0.83	1.32	2.23
PCC	9	577.54	79.04	34.37	181.92	149.20	139.93	2.87	1.32	2.18
QUIC Cubic	10	47.84	37.06	23.96	63.24	62.98	62.96	0.53	1.17	1.05
SCReAM	8	43.98	0.22	0.22	582.10	63.39	62.98	0.37	0.63	1.10
WebRTC media	10	2.07	1.40	0.57	63.46	63.31	62.97	0.57	0.73	1.75
Sprout	10	6.57	6.44	6.25	63.17	63.34	63.33	0.60	0.58	1.67
TaoVA-100x	10	178.80	191.13	119.08	68.34	65.49	66.57	0.48	0.66	2.12
TCP Vegas	10	56.58	60.14	62.36	63.57	65.62	64.52	0.40	0.59	1.27
Verus	10	204.77	133.93	137.11	136.71	153.63	145.98	1.50	1.41	2.18
Copa	9	72.34	75.20	72.01	114.25	63.22	63.18	0.30	0.57	1.95
CalibratedKoho	10	323.69	235.67	71.23	102.54	112.91	87.14	0.35	0.76	4.81
Indigo	10	173.78	160.05	138.50	63.01	62.98	62.56	0.39	0.62	1.43

Run 1: Statistics of TCP BBR

Start at: 2017-10-12 17:38:41

End at: 2017-10-12 17:39:11

Below is generated by plot.py at 2017-10-12 21:58:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 336.58 Mbit/s

95th percentile per-packet one-way delay: 66.486 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 172.59 Mbit/s

95th percentile per-packet one-way delay: 64.882 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 165.78 Mbit/s

95th percentile per-packet one-way delay: 66.279 ms

Loss rate: 0.71%

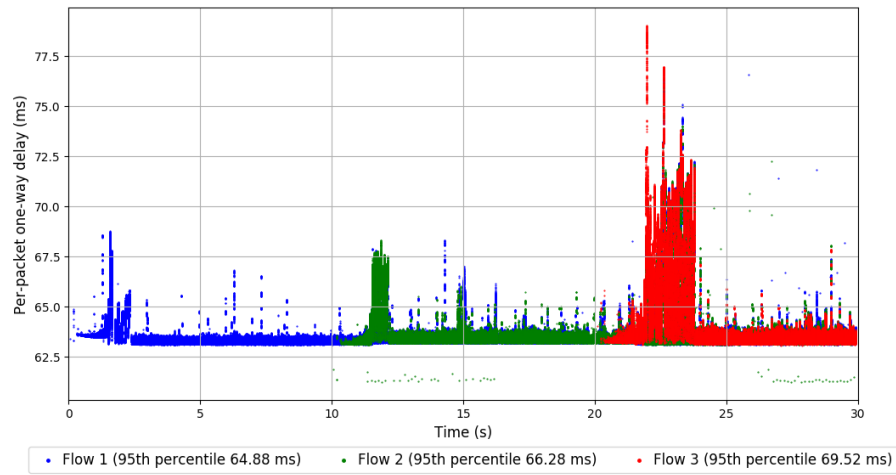
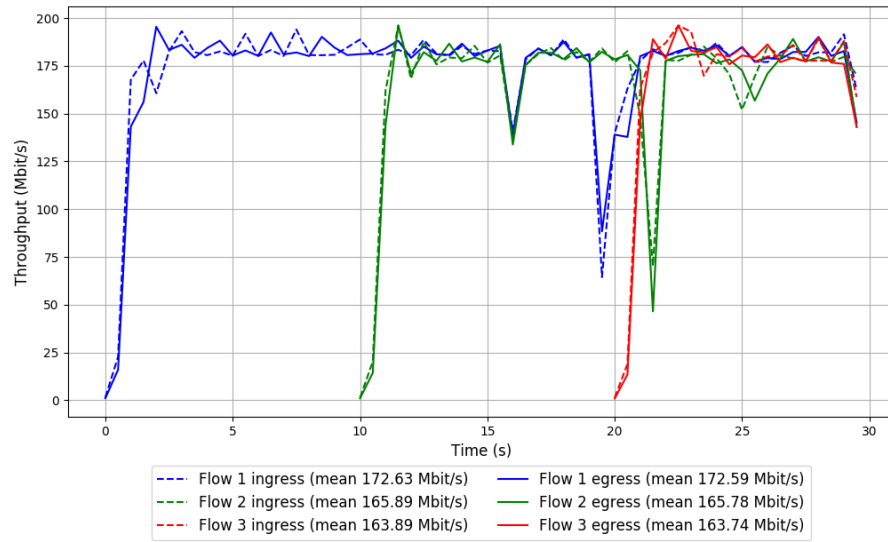
-- Flow 3:

Average throughput: 163.74 Mbit/s

95th percentile per-packet one-way delay: 69.517 ms

Loss rate: 1.36%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-10-12 17:51:37

End at: 2017-10-12 17:52:07

Below is generated by plot.py at 2017-10-12 21:58:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.77 Mbit/s

95th percentile per-packet one-way delay: 64.098 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 172.14 Mbit/s

95th percentile per-packet one-way delay: 64.015 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 167.32 Mbit/s

95th percentile per-packet one-way delay: 63.846 ms

Loss rate: 0.69%

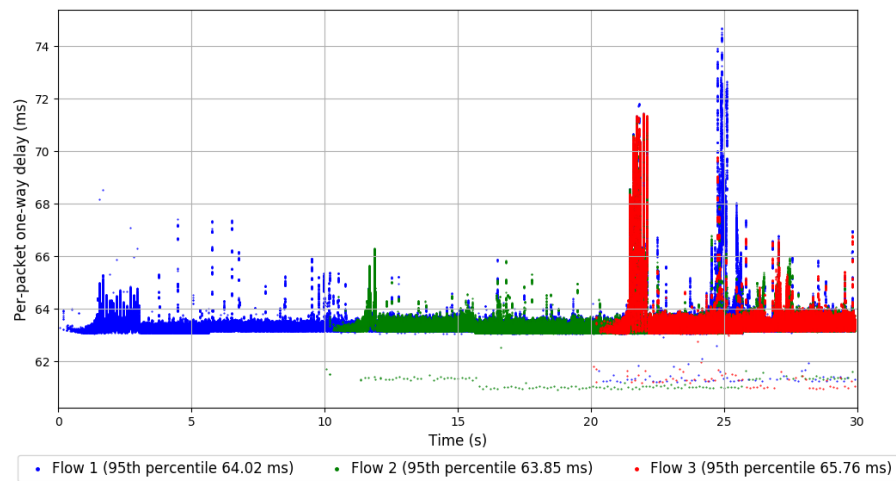
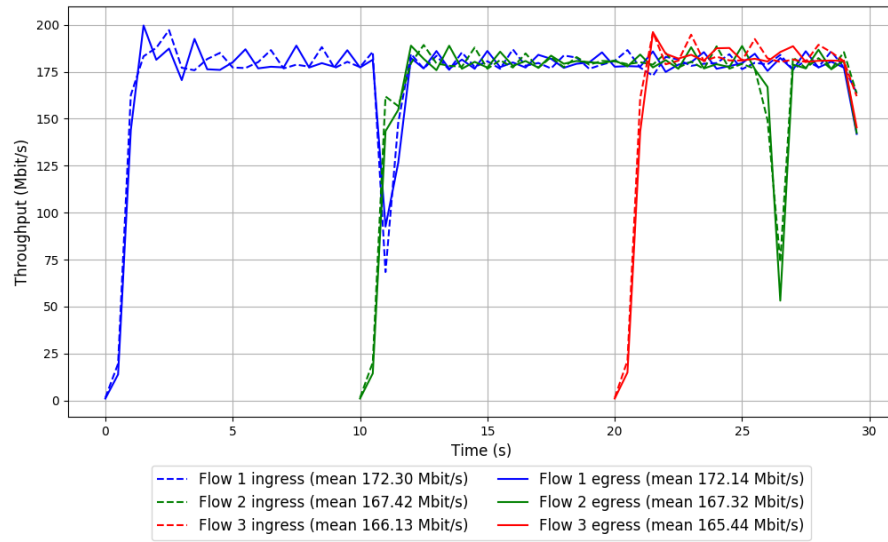
-- Flow 3:

Average throughput: 165.44 Mbit/s

95th percentile per-packet one-way delay: 65.758 ms

Loss rate: 1.40%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-10-12 18:04:31

End at: 2017-10-12 18:05:01

Below is generated by plot.py at 2017-10-12 21:58:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 342.26 Mbit/s

95th percentile per-packet one-way delay: 62.247 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 174.95 Mbit/s

95th percentile per-packet one-way delay: 62.783 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 169.51 Mbit/s

95th percentile per-packet one-way delay: 61.705 ms

Loss rate: 0.67%

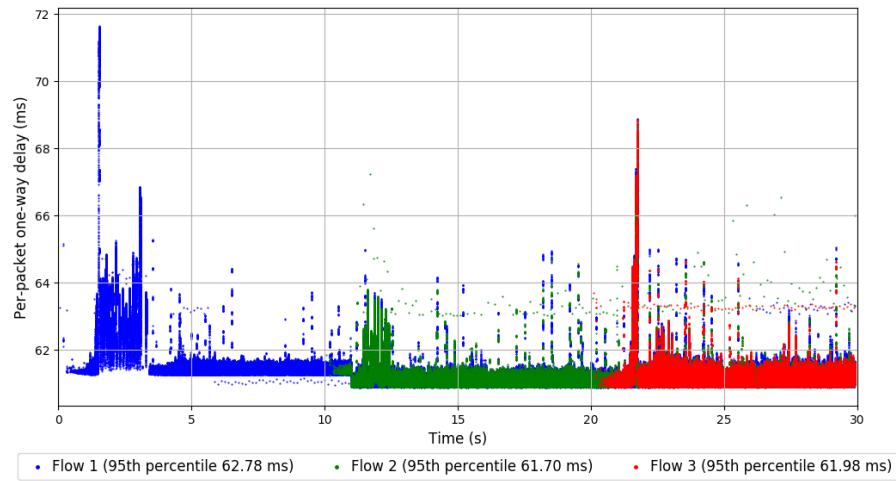
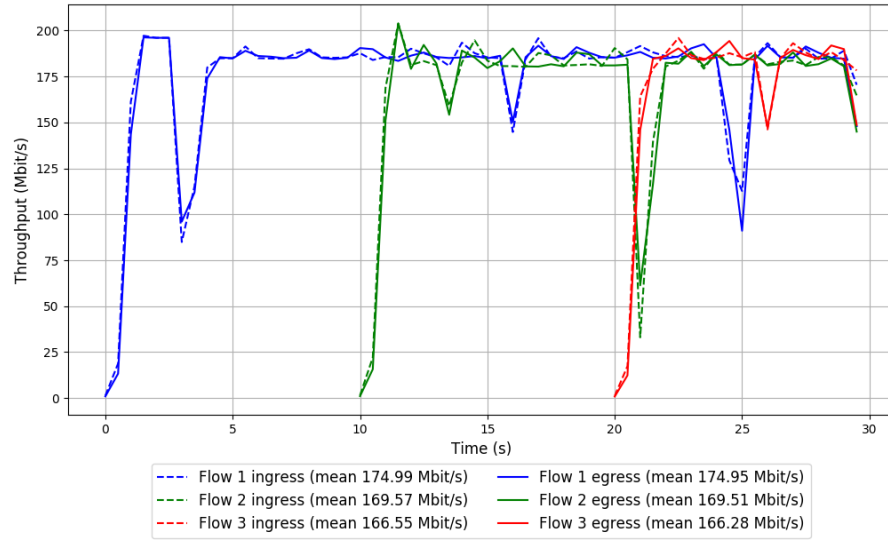
-- Flow 3:

Average throughput: 166.28 Mbit/s

95th percentile per-packet one-way delay: 61.982 ms

Loss rate: 1.39%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-10-12 18:17:19

End at: 2017-10-12 18:17:49

Below is generated by plot.py at 2017-10-12 21:58:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 336.89 Mbit/s

95th percentile per-packet one-way delay: 61.907 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 172.95 Mbit/s

95th percentile per-packet one-way delay: 61.879 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 167.12 Mbit/s

95th percentile per-packet one-way delay: 61.896 ms

Loss rate: 0.68%

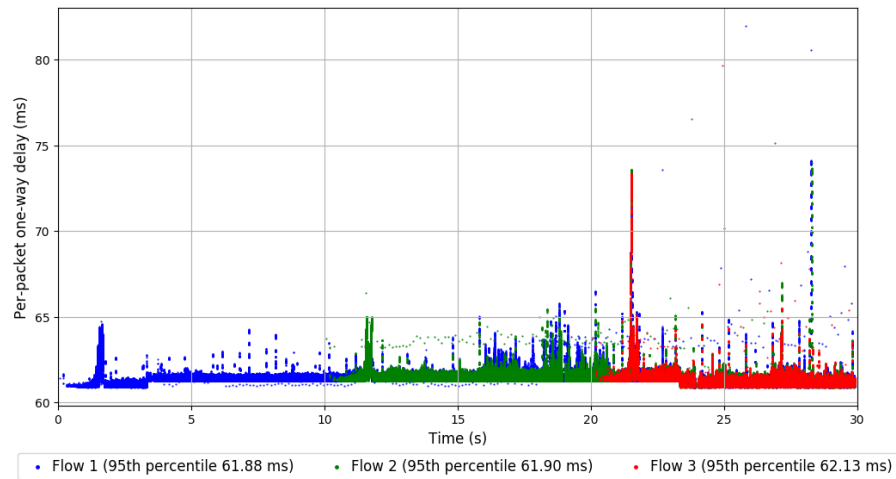
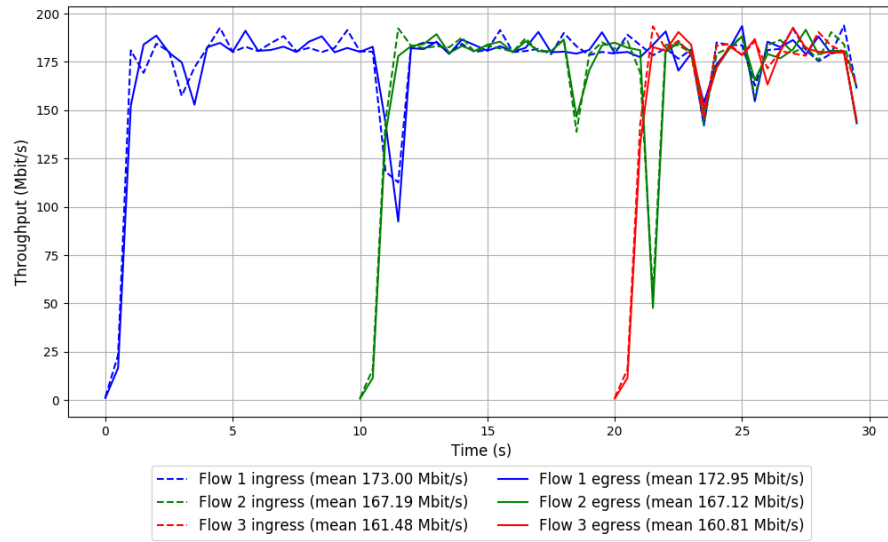
-- Flow 3:

Average throughput: 160.81 Mbit/s

95th percentile per-packet one-way delay: 62.126 ms

Loss rate: 1.47%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-10-12 18:30:11

End at: 2017-10-12 18:30:41

Below is generated by plot.py at 2017-10-12 21:58:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.24 Mbit/s

95th percentile per-packet one-way delay: 62.538 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 169.10 Mbit/s

95th percentile per-packet one-way delay: 62.011 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 172.50 Mbit/s

95th percentile per-packet one-way delay: 62.027 ms

Loss rate: 0.67%

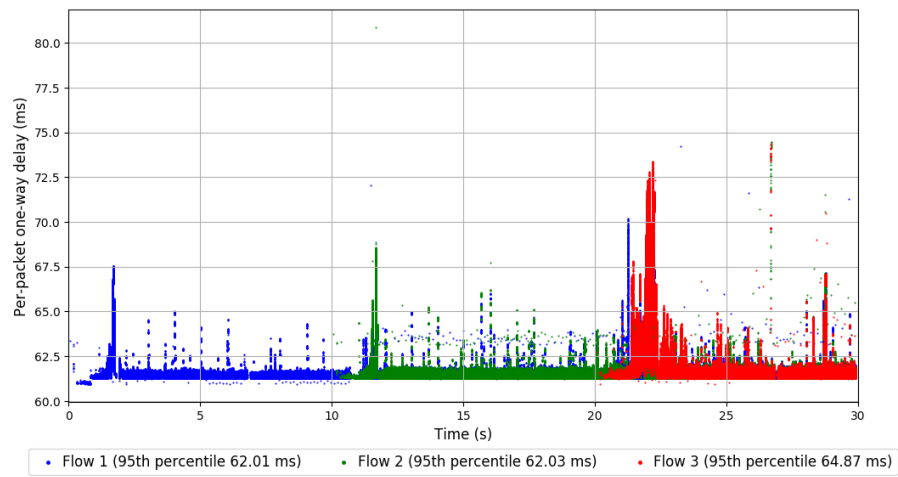
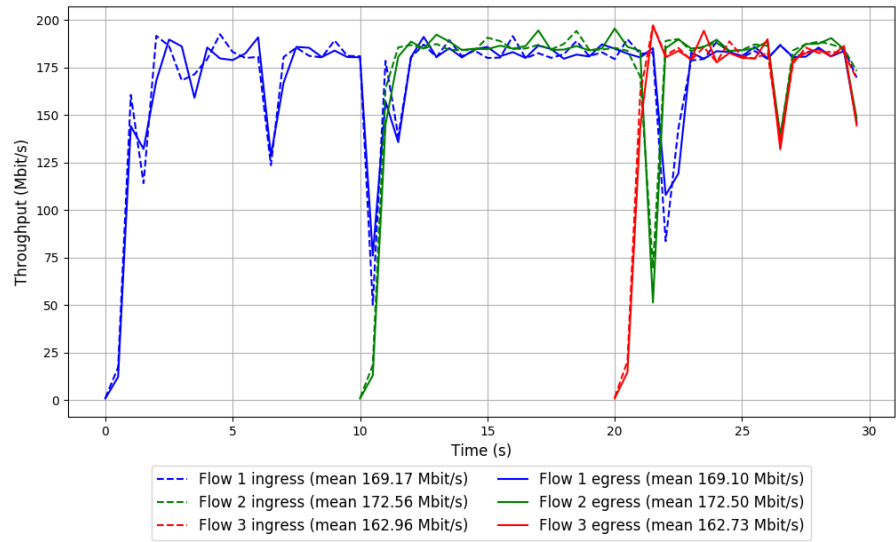
-- Flow 3:

Average throughput: 162.73 Mbit/s

95th percentile per-packet one-way delay: 64.872 ms

Loss rate: 1.41%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-10-12 18:42:47

End at: 2017-10-12 18:43:17

Below is generated by plot.py at 2017-10-12 21:58:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 345.60 Mbit/s

95th percentile per-packet one-way delay: 61.924 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 175.83 Mbit/s

95th percentile per-packet one-way delay: 61.898 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 172.97 Mbit/s

95th percentile per-packet one-way delay: 61.862 ms

Loss rate: 0.70%

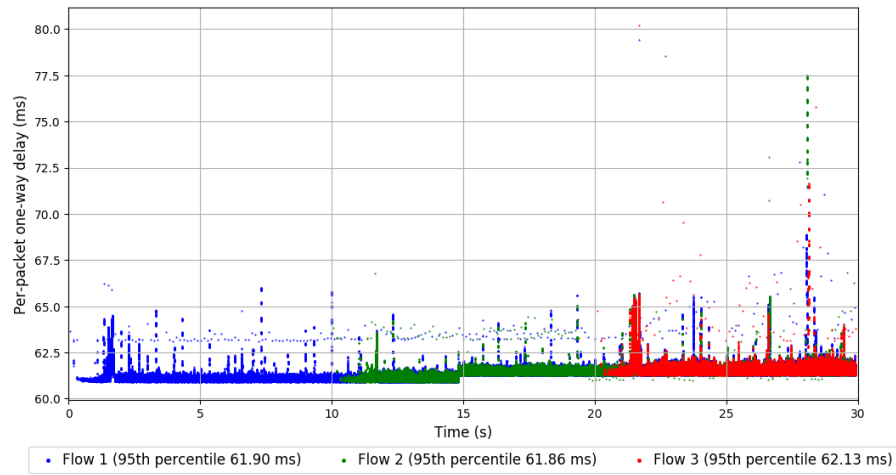
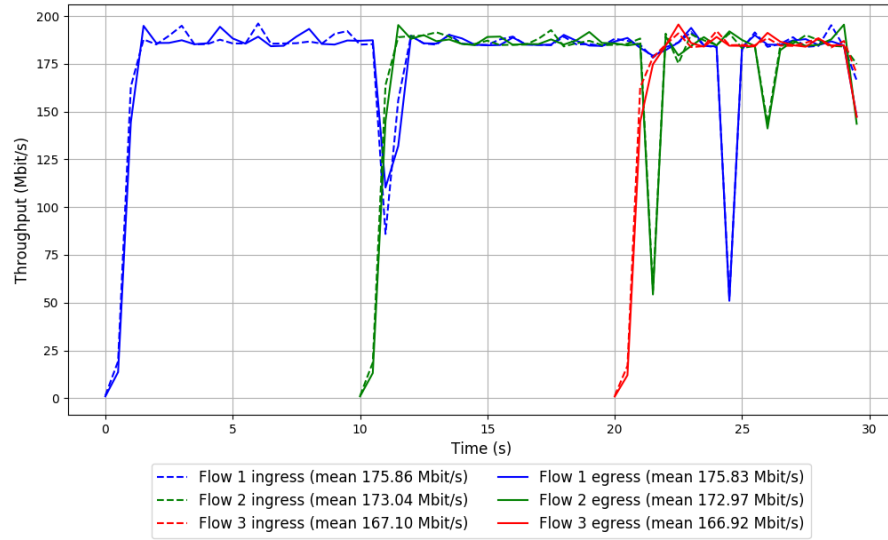
-- Flow 3:

Average throughput: 166.92 Mbit/s

95th percentile per-packet one-way delay: 62.131 ms

Loss rate: 1.40%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-10-12 18:55:38

End at: 2017-10-12 18:56:08

Below is generated by plot.py at 2017-10-12 21:58:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 342.57 Mbit/s

95th percentile per-packet one-way delay: 61.889 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 173.93 Mbit/s

95th percentile per-packet one-way delay: 61.853 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 172.99 Mbit/s

95th percentile per-packet one-way delay: 61.813 ms

Loss rate: 0.67%

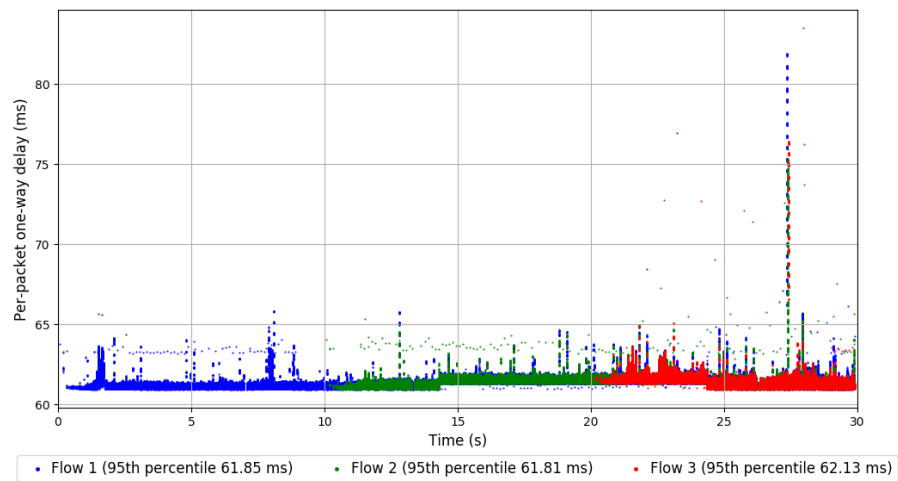
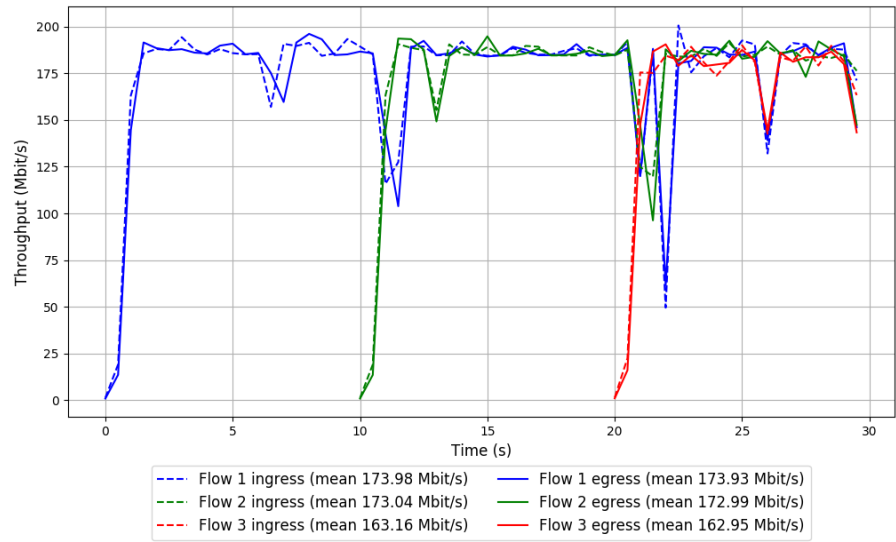
-- Flow 3:

Average throughput: 162.95 Mbit/s

95th percentile per-packet one-way delay: 62.130 ms

Loss rate: 1.40%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-10-12 19:08:46

End at: 2017-10-12 19:09:16

Below is generated by plot.py at 2017-10-12 21:58:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 339.36 Mbit/s

95th percentile per-packet one-way delay: 62.149 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 173.14 Mbit/s

95th percentile per-packet one-way delay: 62.248 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 169.45 Mbit/s

95th percentile per-packet one-way delay: 61.976 ms

Loss rate: 0.67%

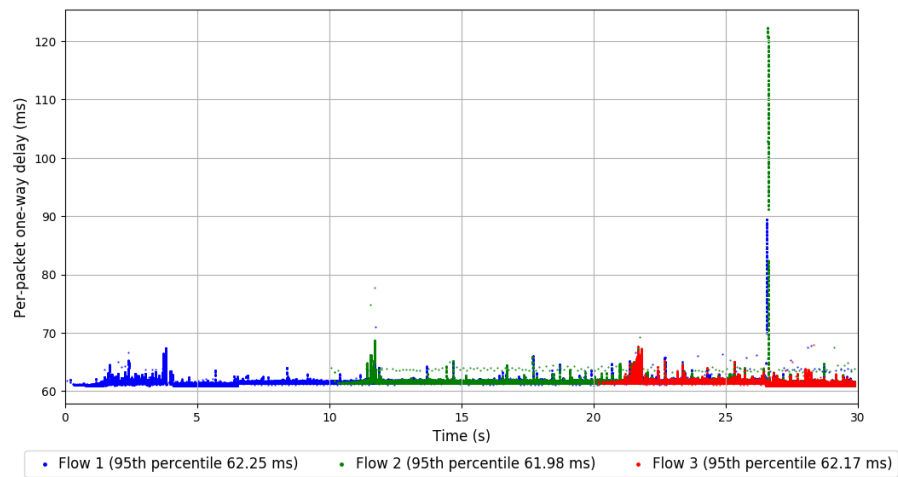
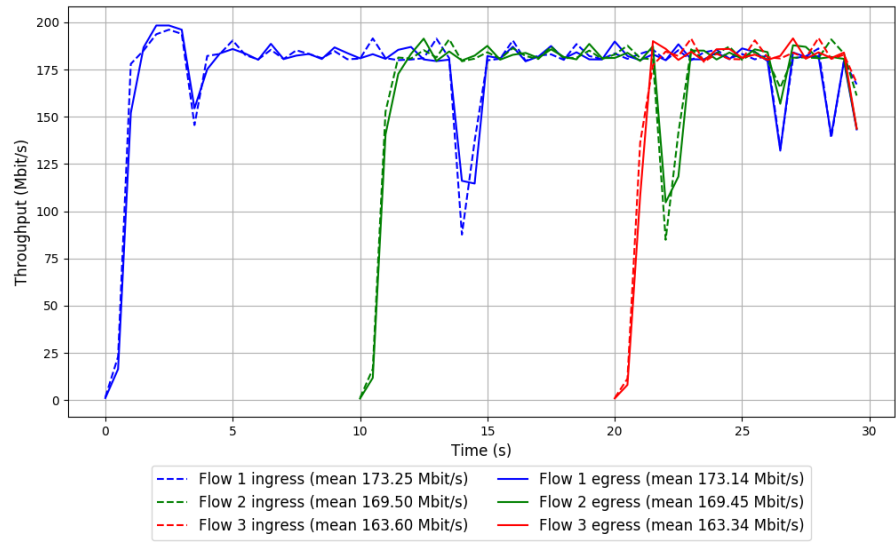
-- Flow 3:

Average throughput: 163.34 Mbit/s

95th percentile per-packet one-way delay: 62.172 ms

Loss rate: 1.48%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-10-12 19:21:35

End at: 2017-10-12 19:22:05

Below is generated by plot.py at 2017-10-12 22:04:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 342.43 Mbit/s

95th percentile per-packet one-way delay: 62.128 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 174.07 Mbit/s

95th percentile per-packet one-way delay: 61.941 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 171.77 Mbit/s

95th percentile per-packet one-way delay: 61.953 ms

Loss rate: 0.57%

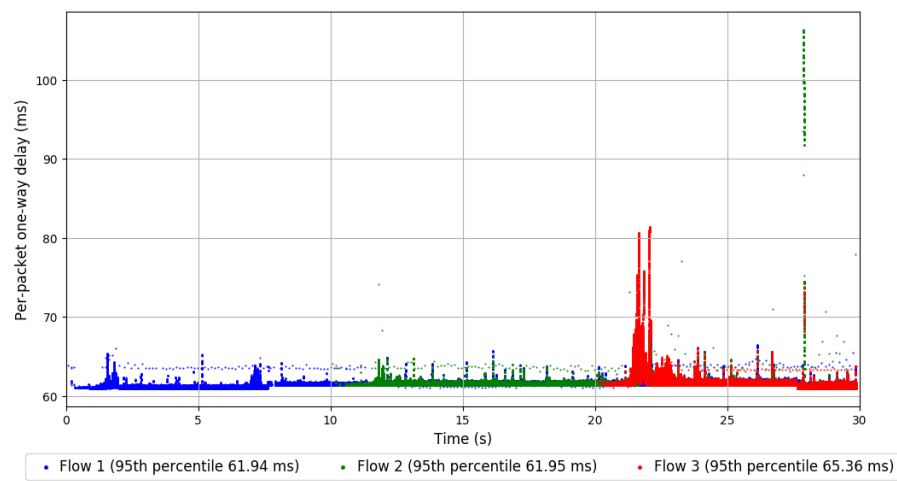
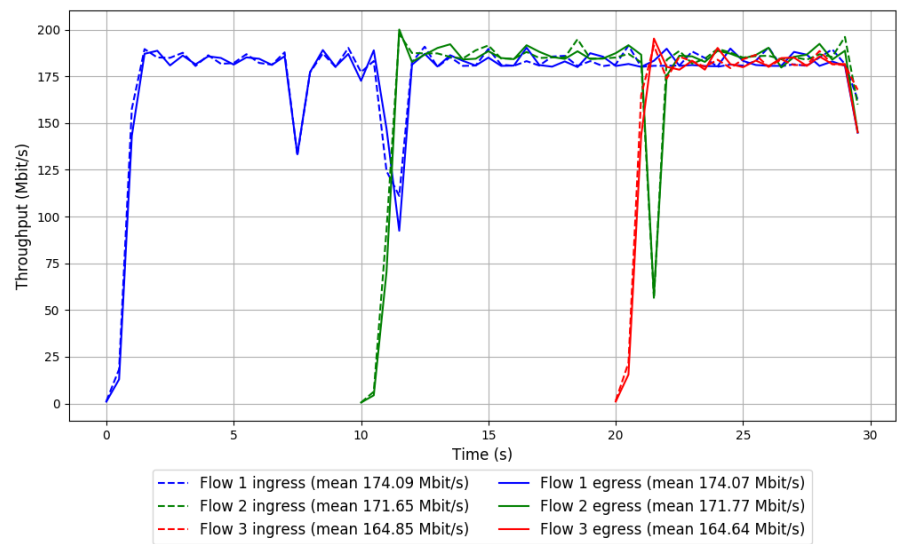
-- Flow 3:

Average throughput: 164.64 Mbit/s

95th percentile per-packet one-way delay: 65.358 ms

Loss rate: 1.39%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-10-12 19:34:33

End at: 2017-10-12 19:35:03

Below is generated by plot.py at 2017-10-12 22:04:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.93 Mbit/s

95th percentile per-packet one-way delay: 63.657 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 171.57 Mbit/s

95th percentile per-packet one-way delay: 63.639 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 170.93 Mbit/s

95th percentile per-packet one-way delay: 63.696 ms

Loss rate: 0.69%

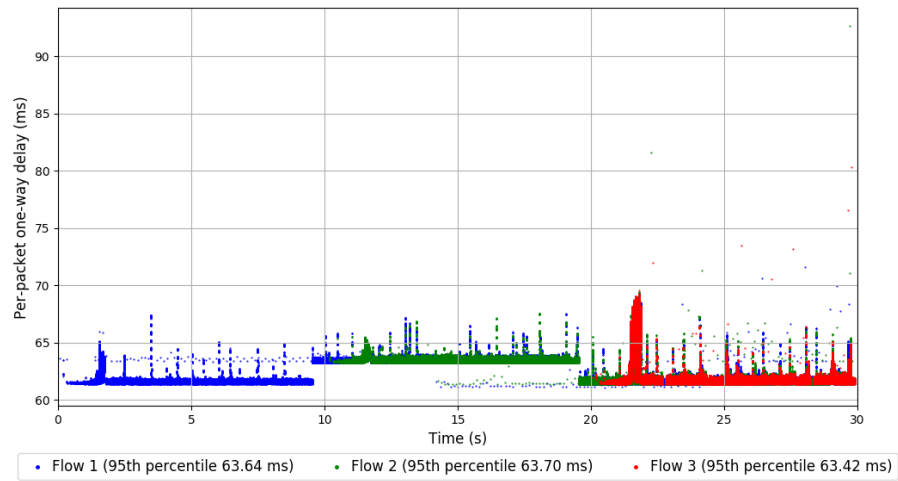
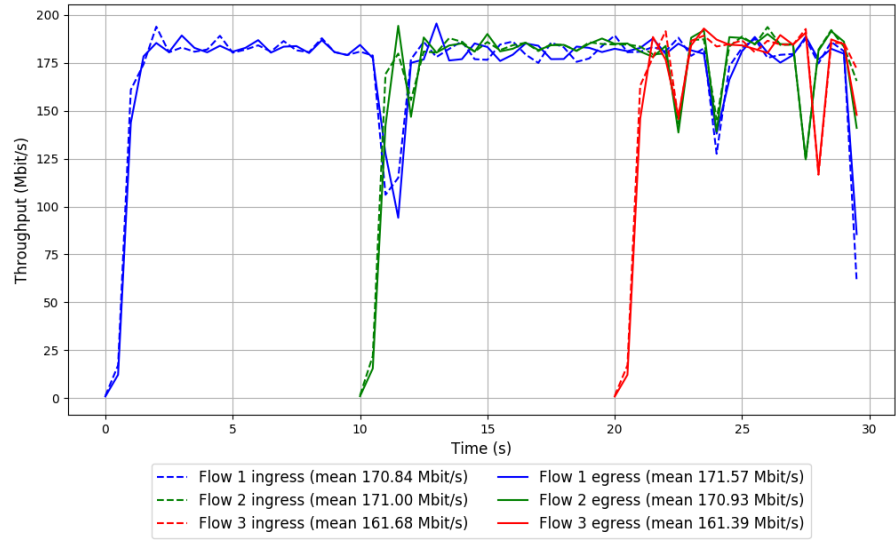
-- Flow 3:

Average throughput: 161.39 Mbit/s

95th percentile per-packet one-way delay: 63.422 ms

Loss rate: 1.45%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-10-12 17:43:37

End at: 2017-10-12 17:44:07

Below is generated by plot.py at 2017-10-12 22:04:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 178.21 Mbit/s

95th percentile per-packet one-way delay: 69.537 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 79.21 Mbit/s

95th percentile per-packet one-way delay: 66.690 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 101.24 Mbit/s

95th percentile per-packet one-way delay: 70.269 ms

Loss rate: 0.62%

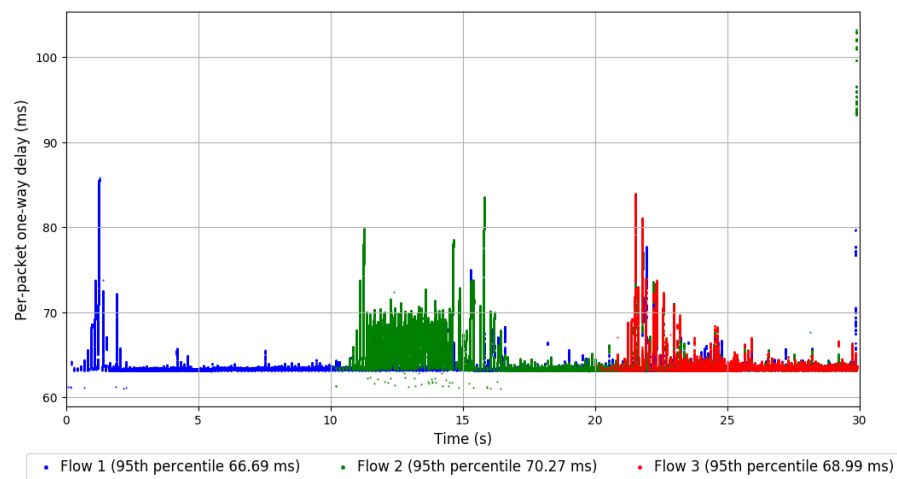
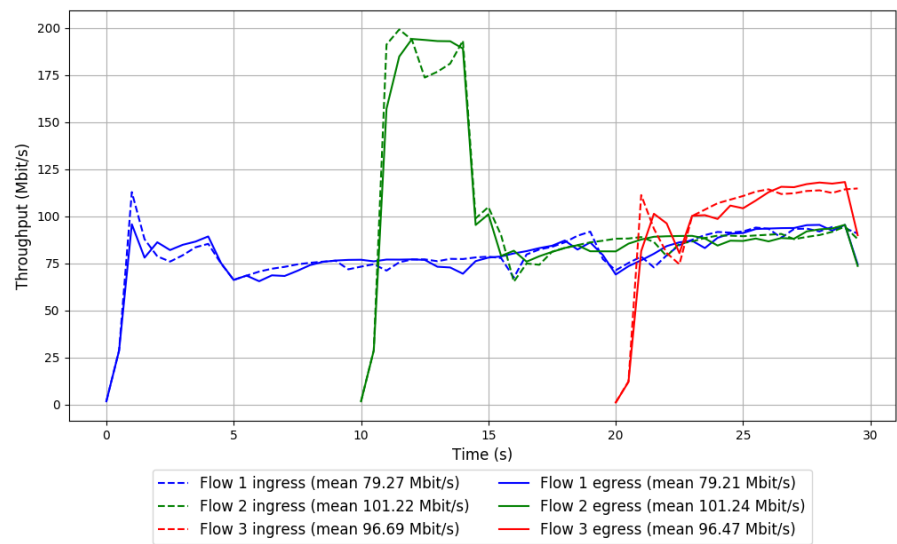
-- Flow 3:

Average throughput: 96.47 Mbit/s

95th percentile per-packet one-way delay: 68.986 ms

Loss rate: 1.49%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-10-12 17:56:29

End at: 2017-10-12 17:56:59

Below is generated by plot.py at 2017-10-12 22:04:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 191.15 Mbit/s

95th percentile per-packet one-way delay: 68.351 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 101.68 Mbit/s

95th percentile per-packet one-way delay: 67.430 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 90.85 Mbit/s

95th percentile per-packet one-way delay: 68.732 ms

Loss rate: 0.81%

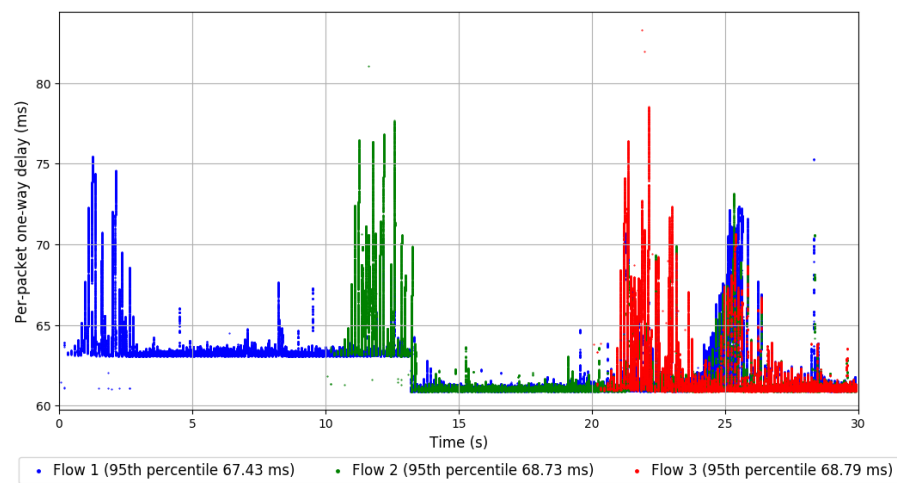
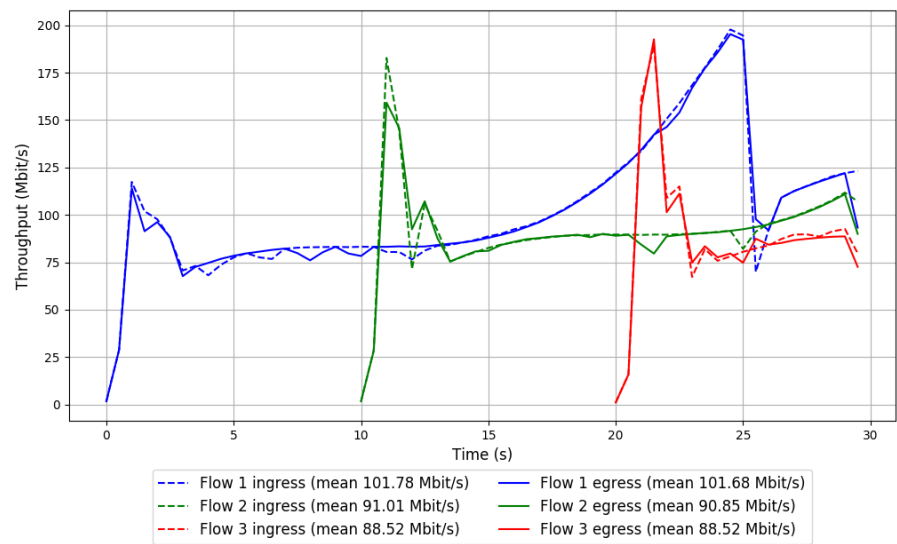
-- Flow 3:

Average throughput: 88.52 Mbit/s

95th percentile per-packet one-way delay: 68.786 ms

Loss rate: 1.27%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-10-12 18:09:31

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

Below is generated by plot.py at 2017-10-12 22:04:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 223.10 Mbit/s

95th percentile per-packet one-way delay: 69.450 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 112.37 Mbit/s

95th percentile per-packet one-way delay: 70.364 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 93.97 Mbit/s

95th percentile per-packet one-way delay: 67.062 ms

Loss rate: 0.73%

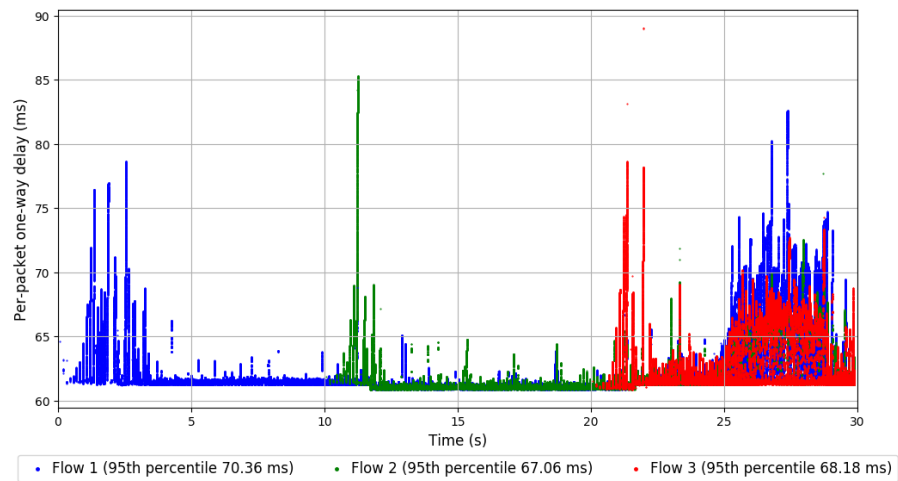
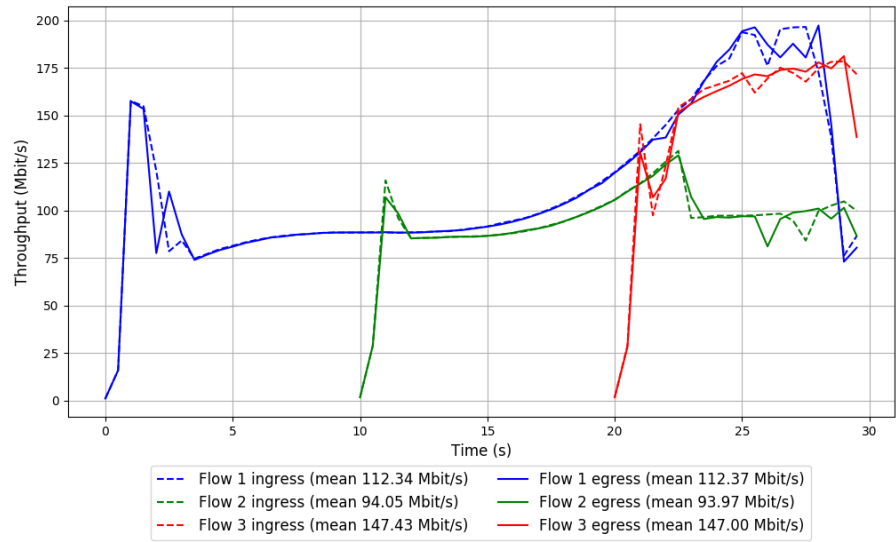
-- Flow 3:

Average throughput: 147.00 Mbit/s

95th percentile per-packet one-way delay: 68.178 ms

Loss rate: 1.53%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-10-12 18:22:24

End at: 2017-10-12 18:22:54

Below is generated by plot.py at 2017-10-12 22:04:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 208.85 Mbit/s

95th percentile per-packet one-way delay: 68.165 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 104.16 Mbit/s

95th percentile per-packet one-way delay: 66.721 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 108.79 Mbit/s

95th percentile per-packet one-way delay: 68.240 ms

Loss rate: 0.54%

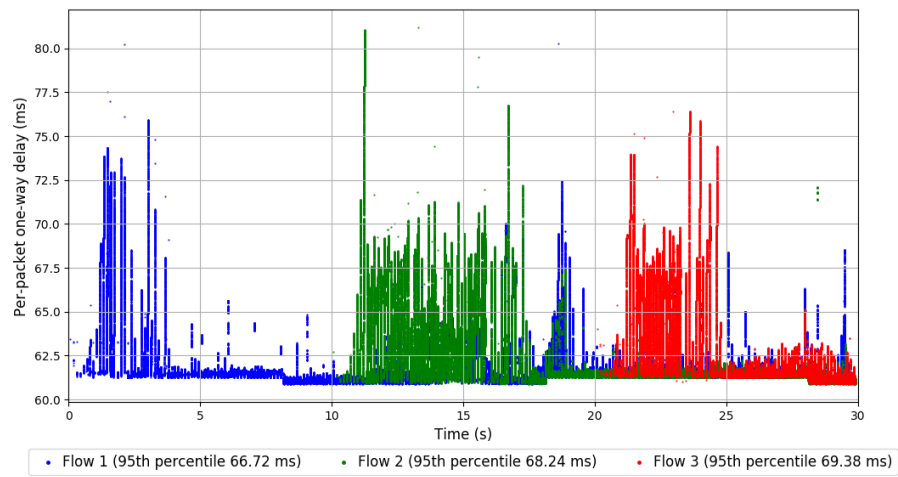
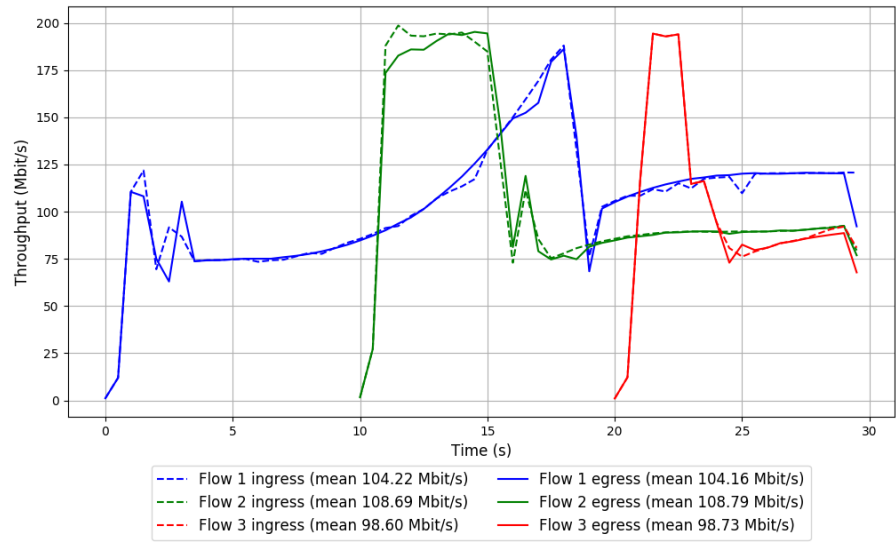
-- Flow 3:

Average throughput: 98.73 Mbit/s

95th percentile per-packet one-way delay: 69.382 ms

Loss rate: 1.14%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-10-12 18:35:08

End at: 2017-10-12 18:35:38

Below is generated by plot.py at 2017-10-12 22:04:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 172.18 Mbit/s

95th percentile per-packet one-way delay: 69.476 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 82.39 Mbit/s

95th percentile per-packet one-way delay: 69.849 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 86.63 Mbit/s

95th percentile per-packet one-way delay: 68.890 ms

Loss rate: 0.65%

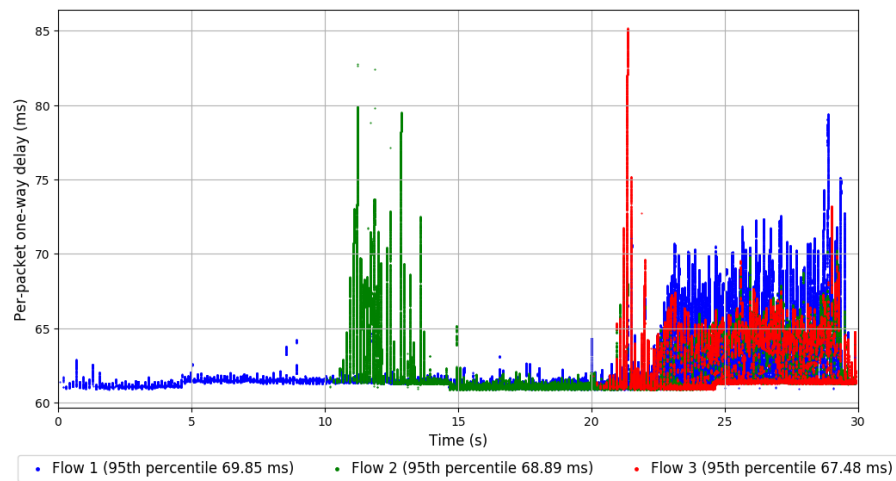
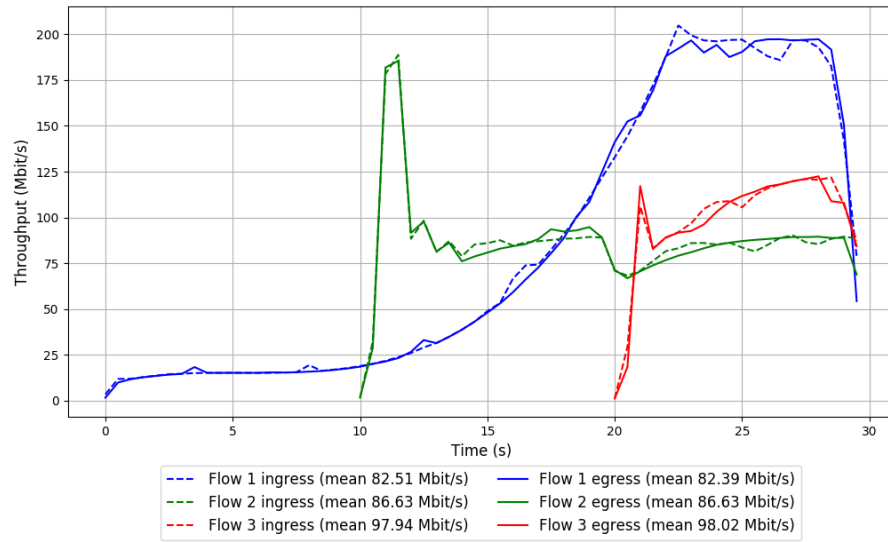
-- Flow 3:

Average throughput: 98.02 Mbit/s

95th percentile per-packet one-way delay: 67.485 ms

Loss rate: 1.15%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-10-12 18:47:45

End at: 2017-10-12 18:48:15

Below is generated by plot.py at 2017-10-12 22:04:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 165.03 Mbit/s

95th percentile per-packet one-way delay: 67.409 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 79.10 Mbit/s

95th percentile per-packet one-way delay: 65.792 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 84.95 Mbit/s

95th percentile per-packet one-way delay: 68.554 ms

Loss rate: 0.58%

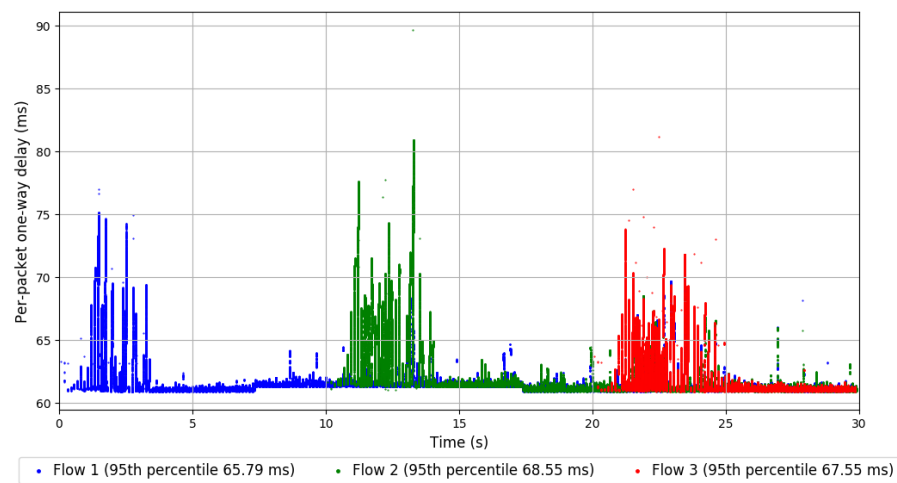
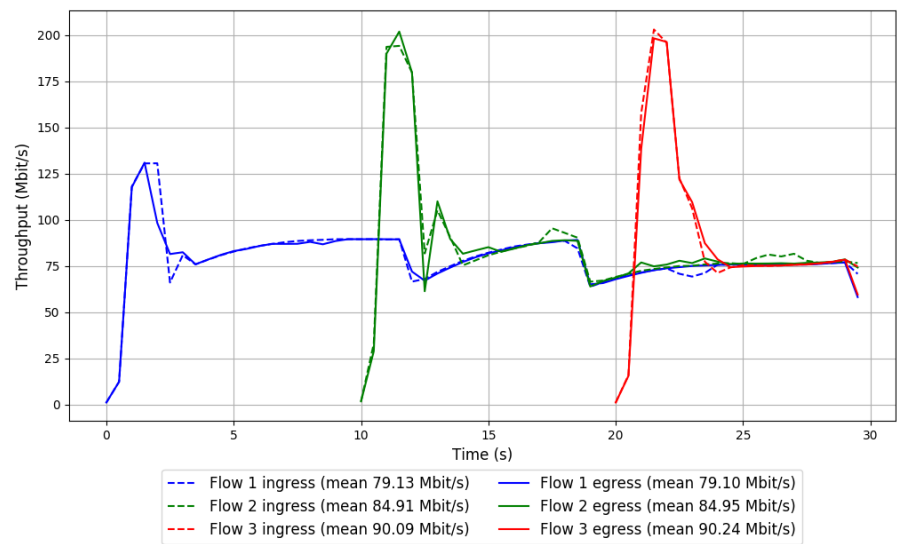
-- Flow 3:

Average throughput: 90.24 Mbit/s

95th percentile per-packet one-way delay: 67.552 ms

Loss rate: 1.12%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-10-12 19:00:41

End at: 2017-10-12 19:01:11

Below is generated by plot.py at 2017-10-12 22:04:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 165.35 Mbit/s

95th percentile per-packet one-way delay: 68.003 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 89.17 Mbit/s

95th percentile per-packet one-way delay: 68.758 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 67.06 Mbit/s

95th percentile per-packet one-way delay: 66.896 ms

Loss rate: 0.54%

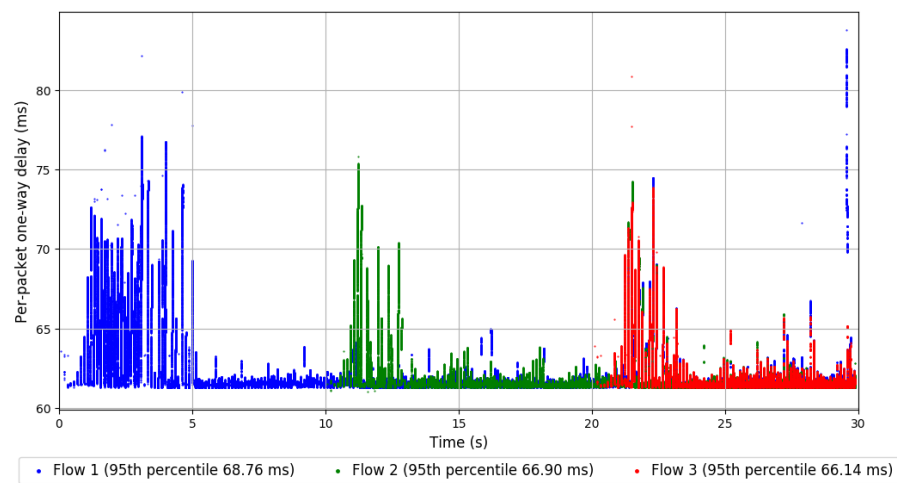
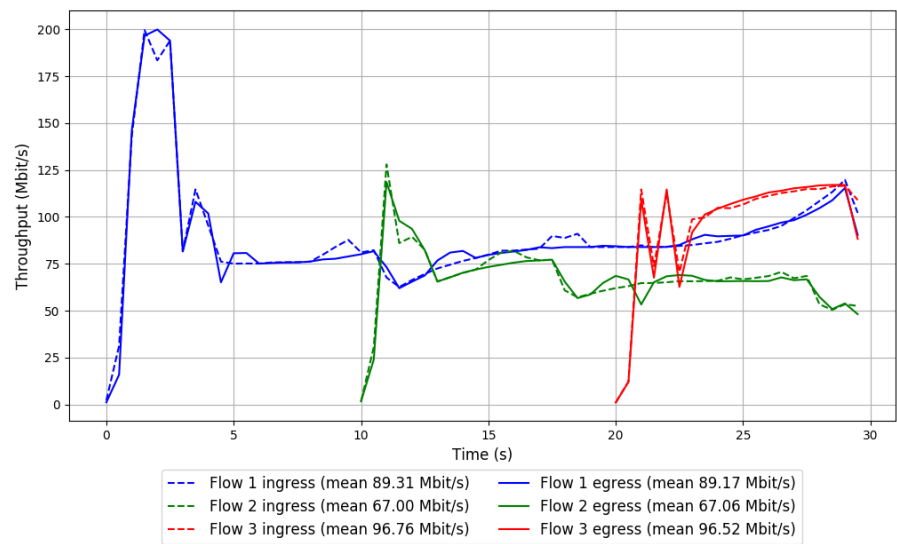
-- Flow 3:

Average throughput: 96.52 Mbit/s

95th percentile per-packet one-way delay: 66.144 ms

Loss rate: 1.53%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-10-12 19:13:40

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

Below is generated by plot.py at 2017-10-12 22:04:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 174.84 Mbit/s

95th percentile per-packet one-way delay: 67.907 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 85.09 Mbit/s

95th percentile per-packet one-way delay: 67.962 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 95.35 Mbit/s

95th percentile per-packet one-way delay: 68.408 ms

Loss rate: 0.53%

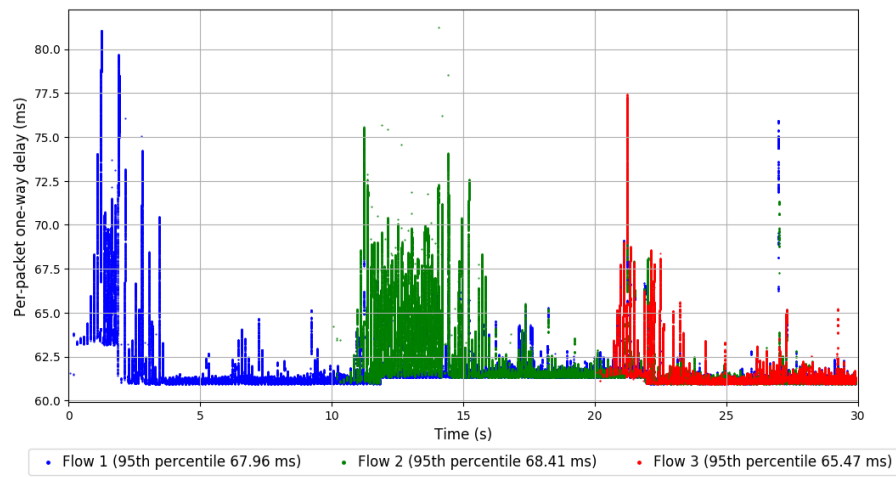
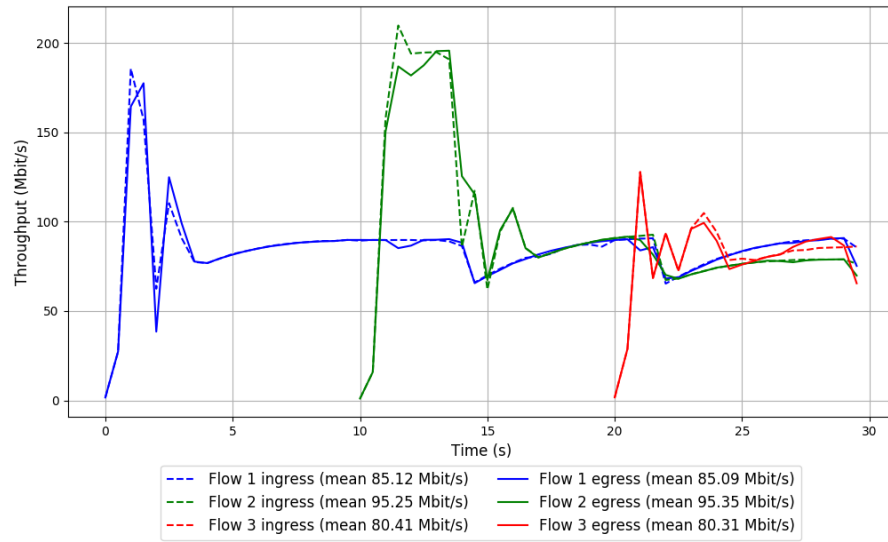
-- Flow 3:

Average throughput: 80.31 Mbit/s

95th percentile per-packet one-way delay: 65.470 ms

Loss rate: 1.37%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-10-12 19:26:33

End at: 2017-10-12 19:27:03

Below is generated by plot.py at 2017-10-12 22:04:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 168.64 Mbit/s

95th percentile per-packet one-way delay: 68.350 ms

Loss rate: 0.94%

-- Flow 1:

Average throughput: 77.01 Mbit/s

95th percentile per-packet one-way delay: 68.604 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 97.07 Mbit/s

95th percentile per-packet one-way delay: 65.635 ms

Loss rate: 0.77%

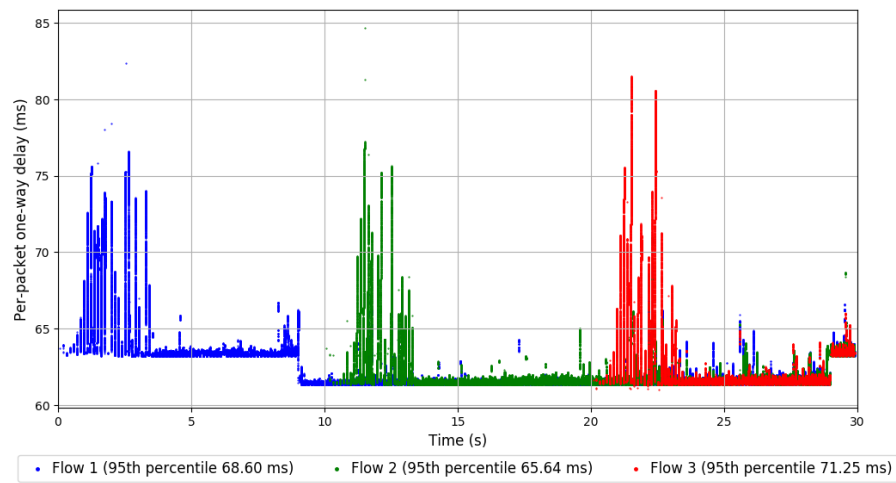
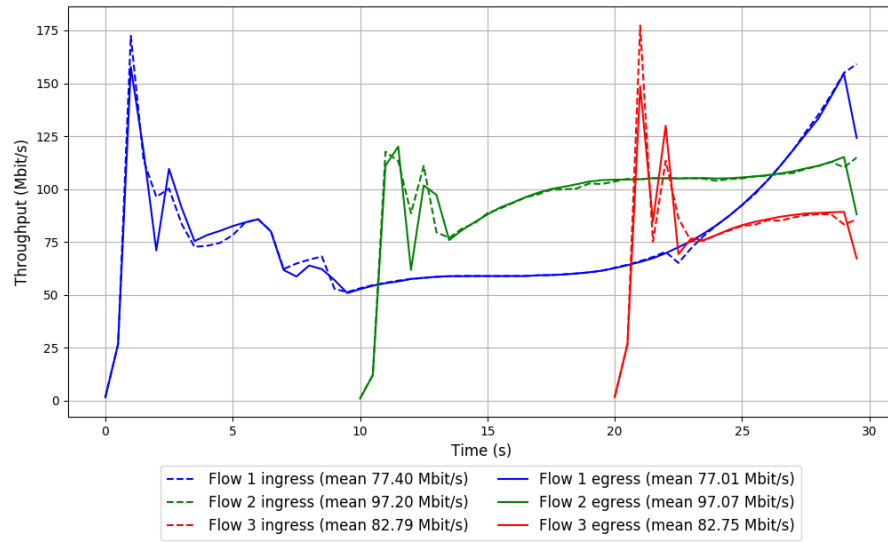
-- Flow 3:

Average throughput: 82.75 Mbit/s

95th percentile per-packet one-way delay: 71.254 ms

Loss rate: 1.36%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-10-12 19:39:36

End at: 2017-10-12 19:40:06

Below is generated by plot.py at 2017-10-12 22:04:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 172.13 Mbit/s

95th percentile per-packet one-way delay: 67.096 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 97.80 Mbit/s

95th percentile per-packet one-way delay: 65.464 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 72.83 Mbit/s

95th percentile per-packet one-way delay: 69.263 ms

Loss rate: 0.51%

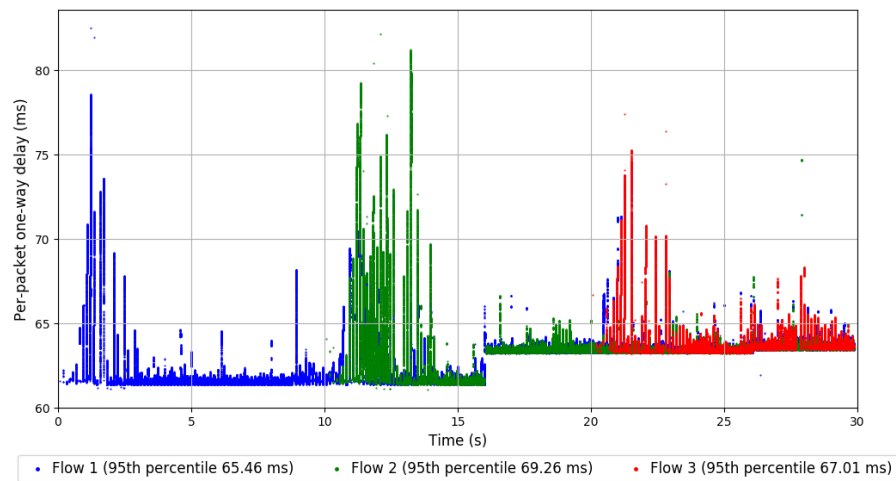
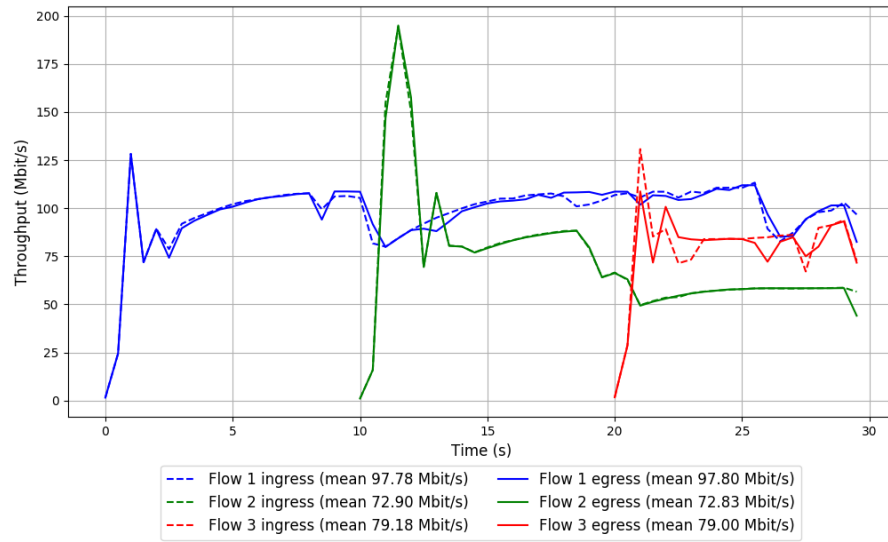
-- Flow 3:

Average throughput: 79.00 Mbit/s

95th percentile per-packet one-way delay: 67.011 ms

Loss rate: 1.53%

Run 10: Report of TCP Cubic — Data Link

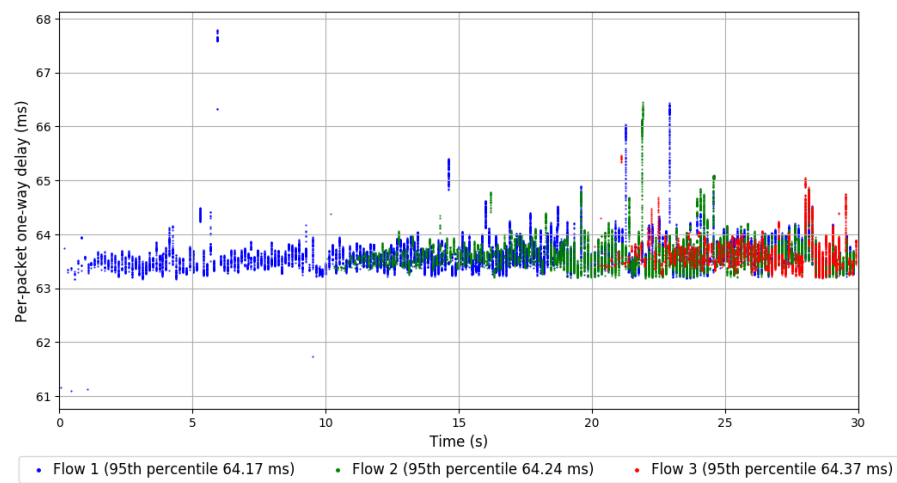
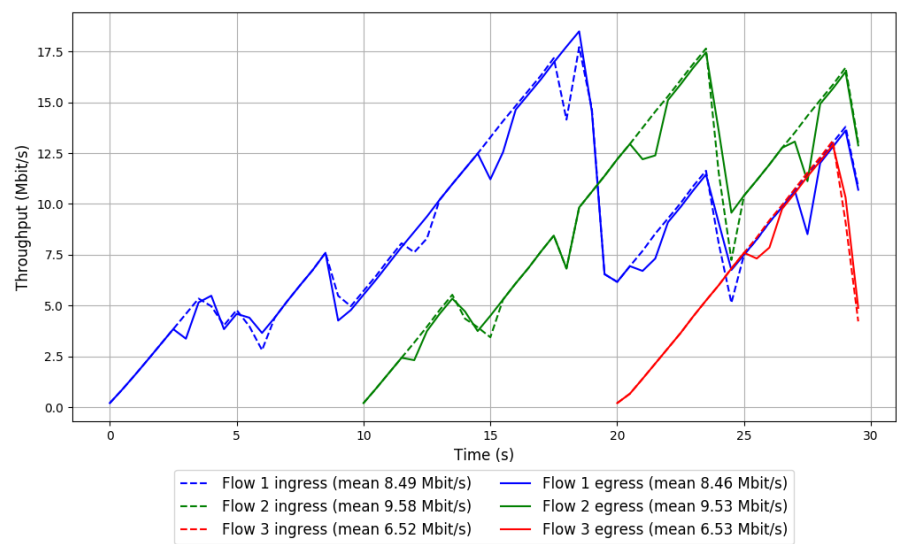


```
Run 1: Statistics of LEDBAT

Start at: 2017-10-12 17:35:57
End at: 2017-10-12 17:36:27

# Below is generated by plot.py at 2017-10-12 22:04:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.87 Mbit/s
95th percentile per-packet one-way delay: 64.213 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 8.46 Mbit/s
95th percentile per-packet one-way delay: 64.168 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 9.53 Mbit/s
95th percentile per-packet one-way delay: 64.241 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 6.53 Mbit/s
95th percentile per-packet one-way delay: 64.373 ms
Loss rate: 1.14%
```


Run 1: Report of LEDBAT — Data Link

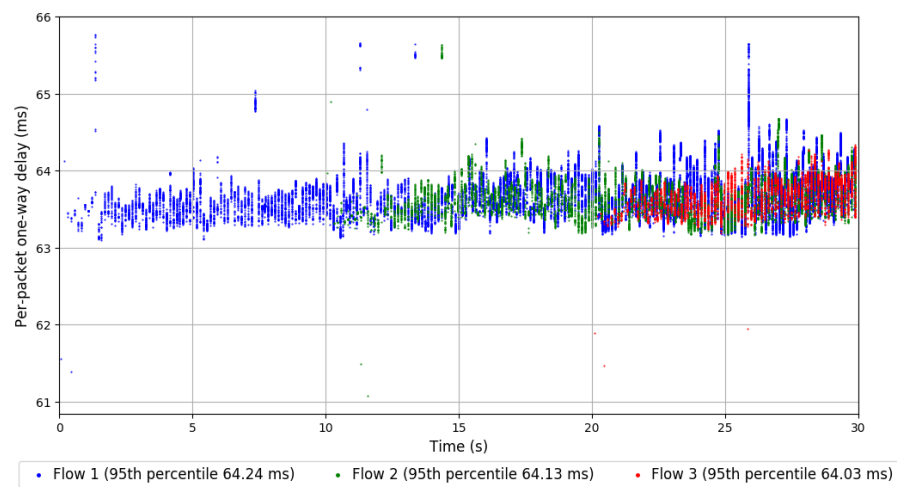
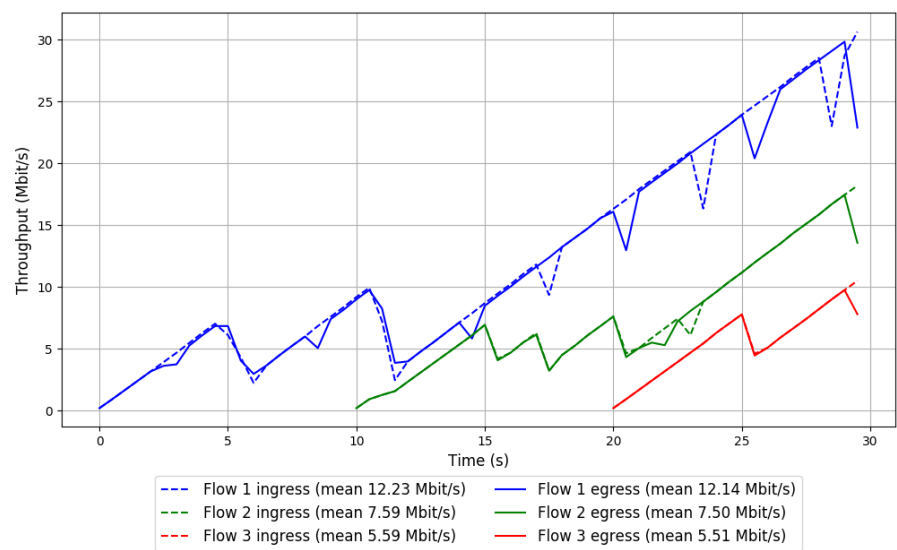


```
Run 2: Statistics of LEDBAT

Start at: 2017-10-12 17:48:51
End at: 2017-10-12 17:49:21

# Below is generated by plot.py at 2017-10-12 22:04:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.92 Mbit/s
95th percentile per-packet one-way delay: 64.198 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 12.14 Mbit/s
95th percentile per-packet one-way delay: 64.242 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 7.50 Mbit/s
95th percentile per-packet one-way delay: 64.131 ms
Loss rate: 1.71%
-- Flow 3:
Average throughput: 5.51 Mbit/s
95th percentile per-packet one-way delay: 64.025 ms
Loss rate: 2.56%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-10-12 18:01:46

End at: 2017-10-12 18:02:16

Below is generated by plot.py at 2017-10-12 22:04:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.36 Mbit/s

95th percentile per-packet one-way delay: 63.390 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 7.29 Mbit/s

95th percentile per-packet one-way delay: 63.632 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 7.04 Mbit/s

95th percentile per-packet one-way delay: 62.185 ms

Loss rate: 1.35%

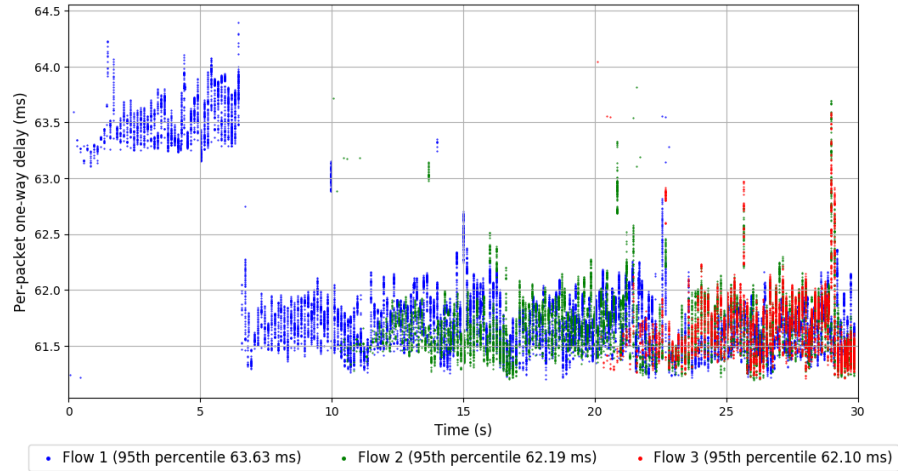
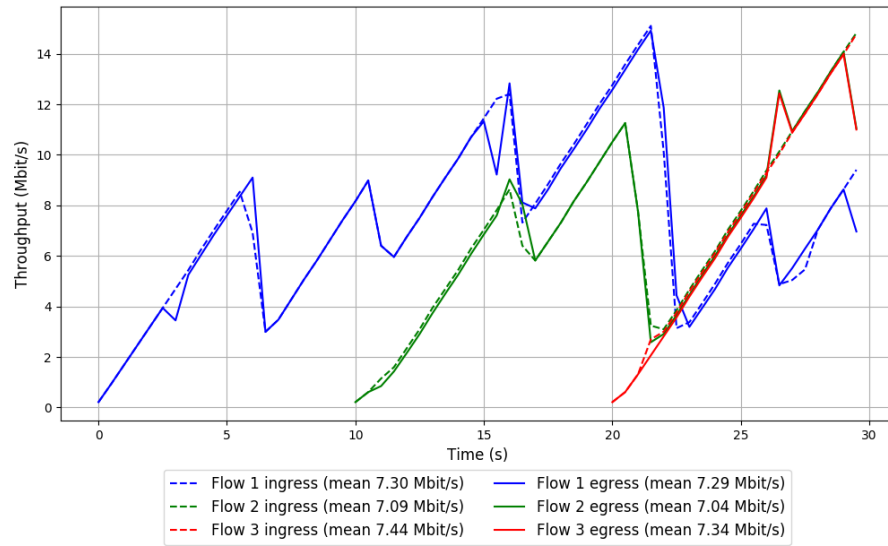
-- Flow 3:

Average throughput: 7.34 Mbit/s

95th percentile per-packet one-way delay: 62.098 ms

Loss rate: 2.57%

Run 3: Report of LEDBAT — Data Link

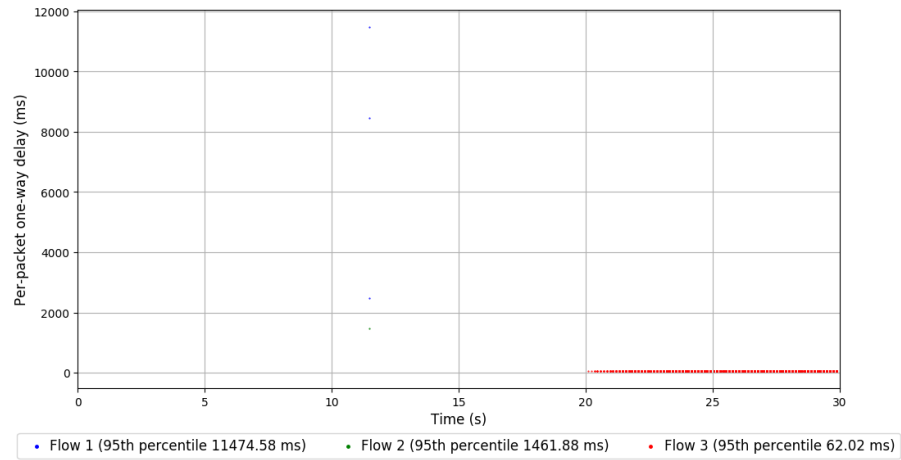
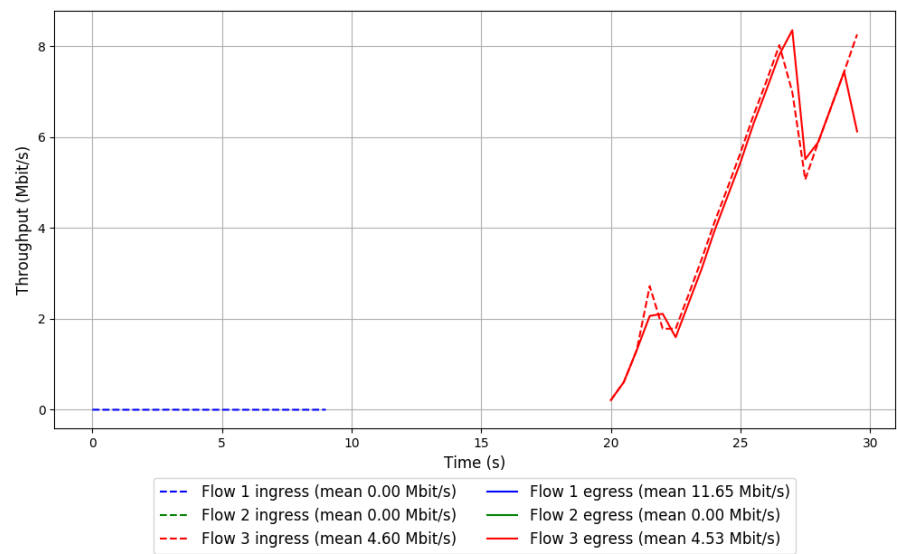


Run 4: Statistics of LEDBAT

Start at: 2017-10-12 18:14:40

End at: 2017-10-12 18:15:10

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-10-12 18:27:38

End at: 2017-10-12 18:28:08

Below is generated by plot.py at 2017-10-12 22:04:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.72 Mbit/s

95th percentile per-packet one-way delay: 62.200 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 4.74 Mbit/s

95th percentile per-packet one-way delay: 62.363 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 9.45 Mbit/s

95th percentile per-packet one-way delay: 62.060 ms

Loss rate: 1.58%

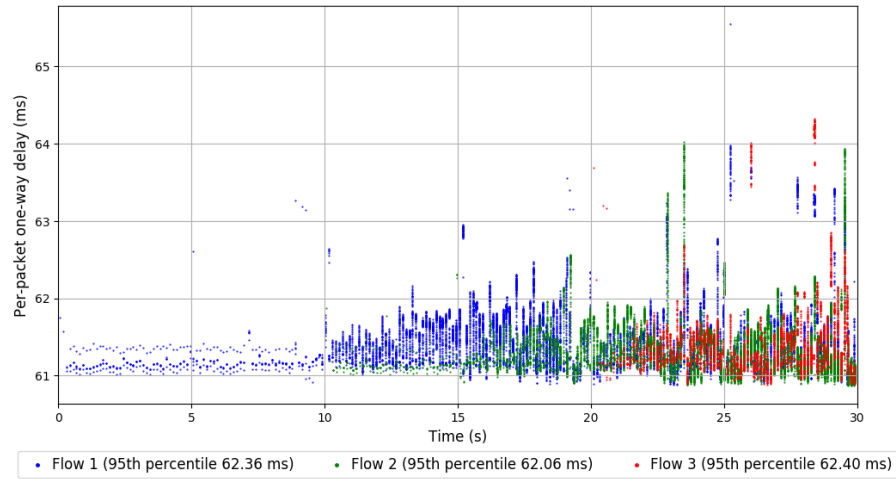
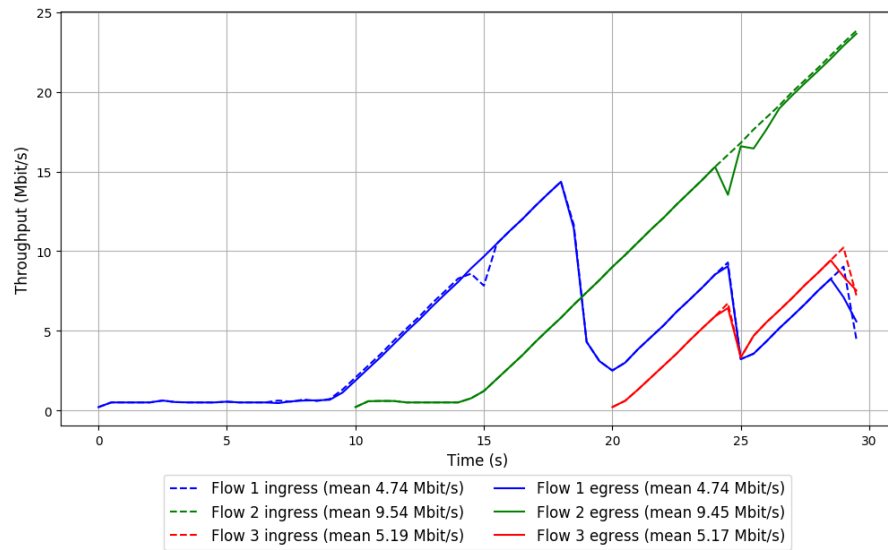
-- Flow 3:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 62.400 ms

Loss rate: 1.78%

Run 5: Report of LEDBAT — Data Link

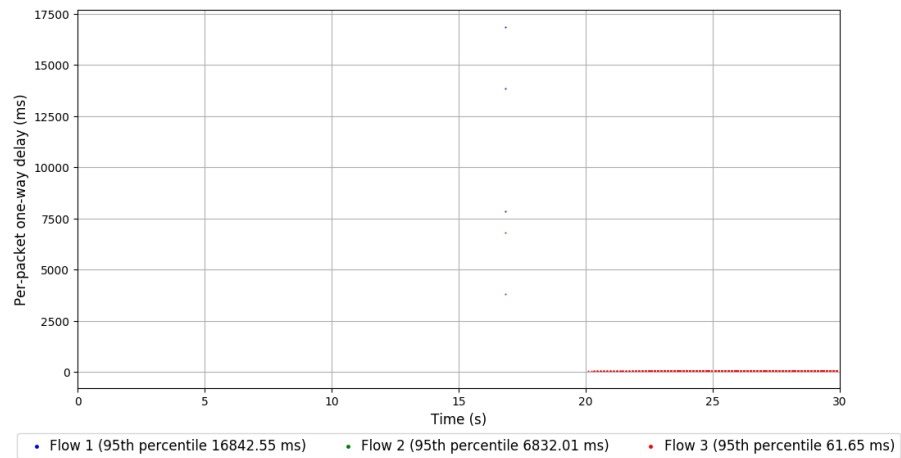
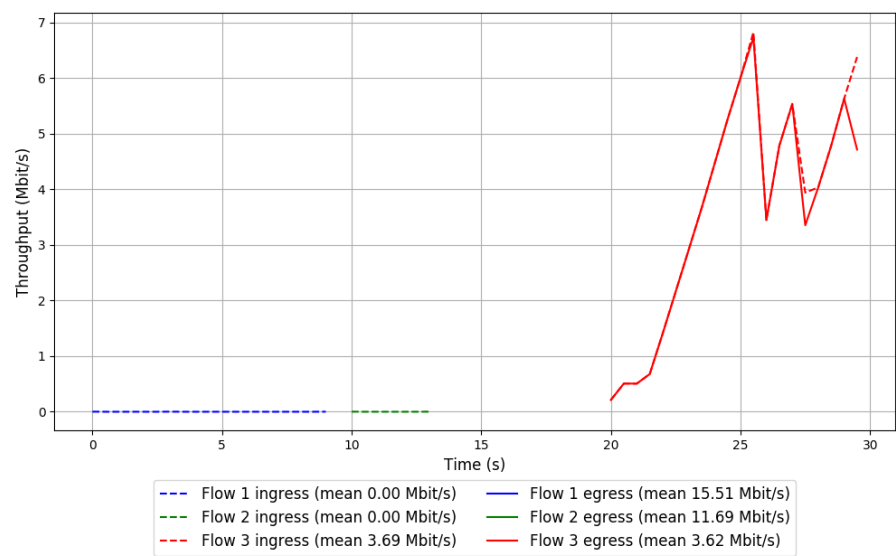


Run 6: Statistics of LEDBAT

Start at: 2017-10-12 18:40:11

End at: 2017-10-12 18:40:41

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-10-12 18:52:55

End at: 2017-10-12 18:53:25

Below is generated by plot.py at 2017-10-12 22:04:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.64 Mbit/s

95th percentile per-packet one-way delay: 62.196 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 62.088 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 7.25 Mbit/s

95th percentile per-packet one-way delay: 62.475 ms

Loss rate: 0.66%

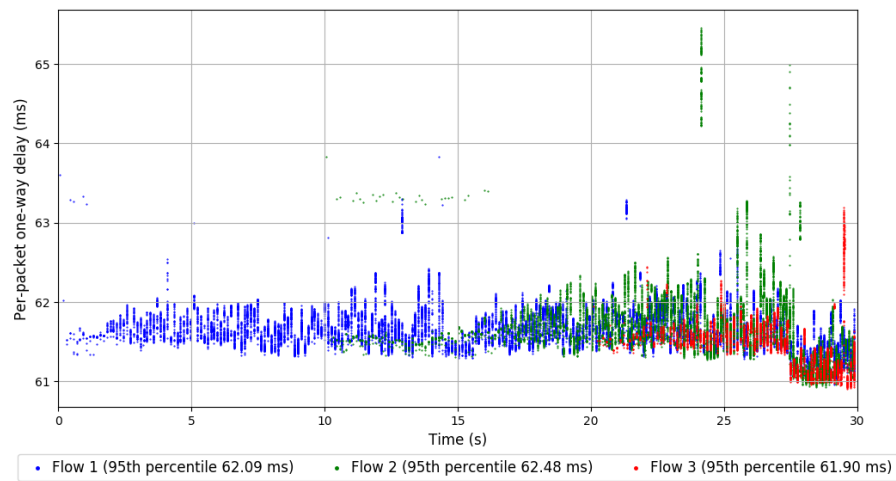
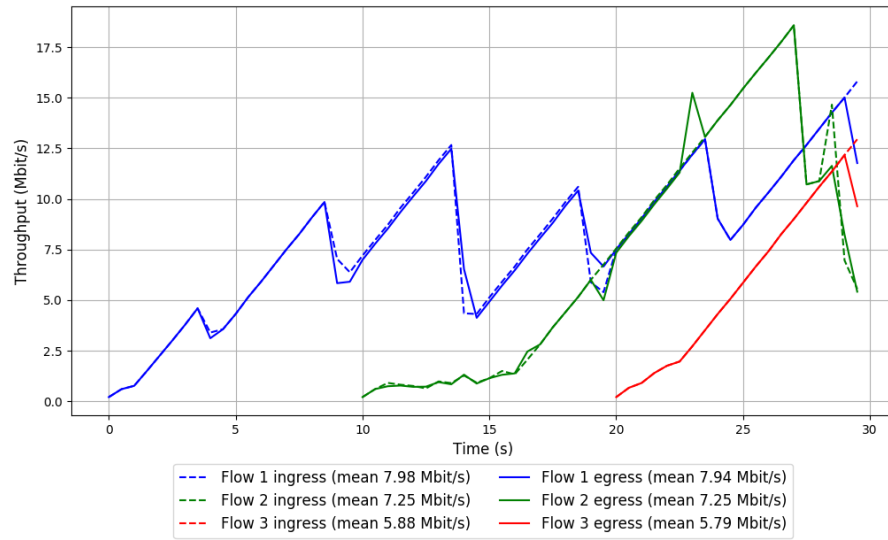
-- Flow 3:

Average throughput: 5.79 Mbit/s

95th percentile per-packet one-way delay: 61.903 ms

Loss rate: 2.84%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-10-12 19:06:00

End at: 2017-10-12 19:06:30

Below is generated by plot.py at 2017-10-12 22:04:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.05 Mbit/s

95th percentile per-packet one-way delay: 64.203 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 8.45 Mbit/s

95th percentile per-packet one-way delay: 64.179 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 7.44 Mbit/s

95th percentile per-packet one-way delay: 64.273 ms

Loss rate: 1.38%

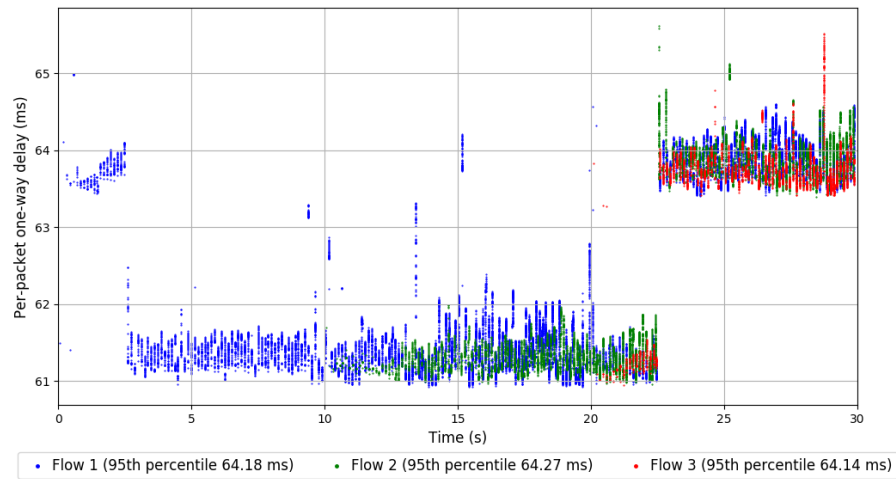
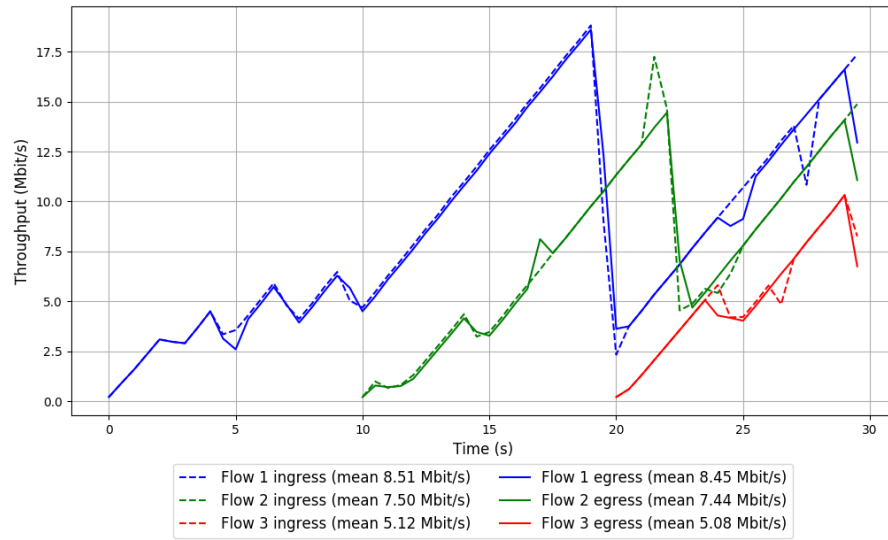
-- Flow 3:

Average throughput: 5.08 Mbit/s

95th percentile per-packet one-way delay: 64.137 ms

Loss rate: 2.08%

Run 8: Report of LEDBAT — Data Link

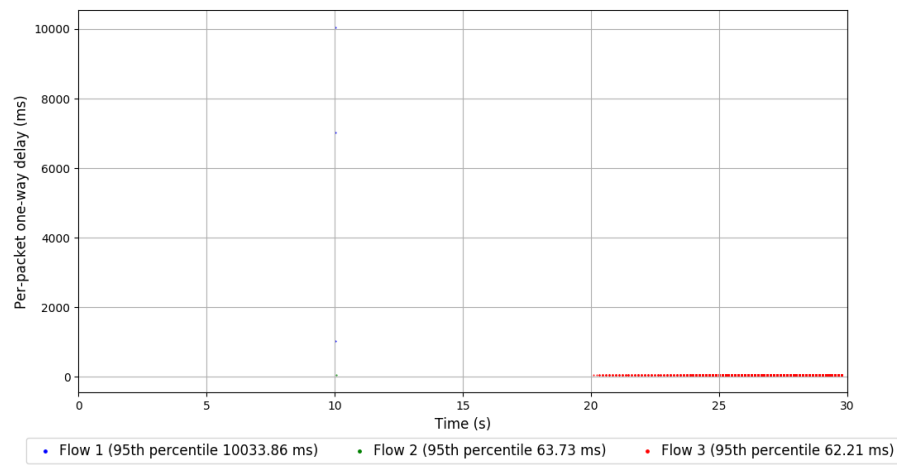
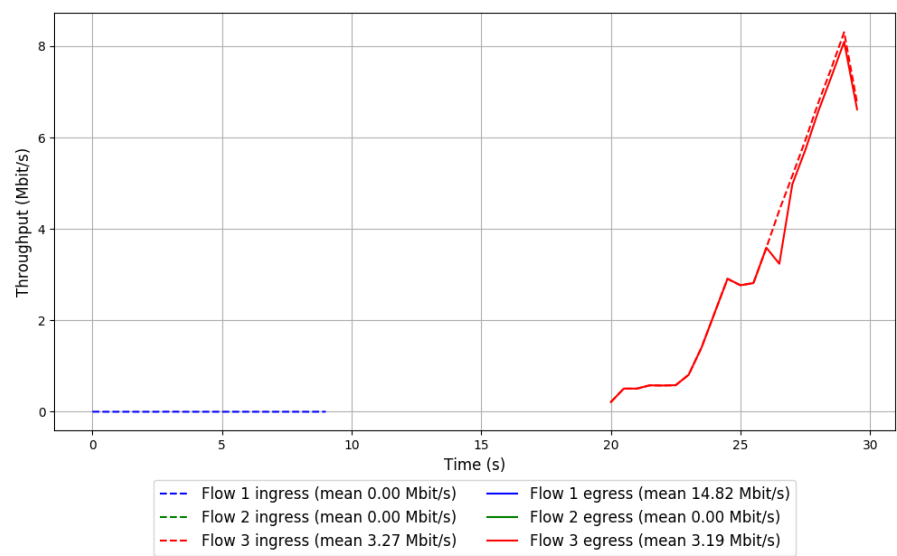


Run 9: Statistics of LEDBAT

Start at: 2017-10-12 19:18:50

End at: 2017-10-12 19:19:20

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-10-12 19:31:48

End at: 2017-10-12 19:32:18

Below is generated by plot.py at 2017-10-12 22:04:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.27 Mbit/s

95th percentile per-packet one-way delay: 63.838 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 7.12 Mbit/s

95th percentile per-packet one-way delay: 63.871 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 5.99 Mbit/s

95th percentile per-packet one-way delay: 63.736 ms

Loss rate: 1.32%

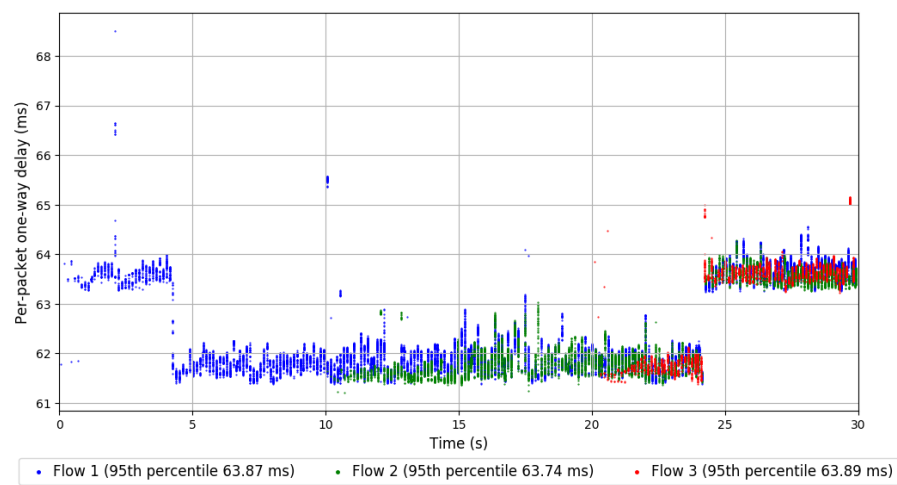
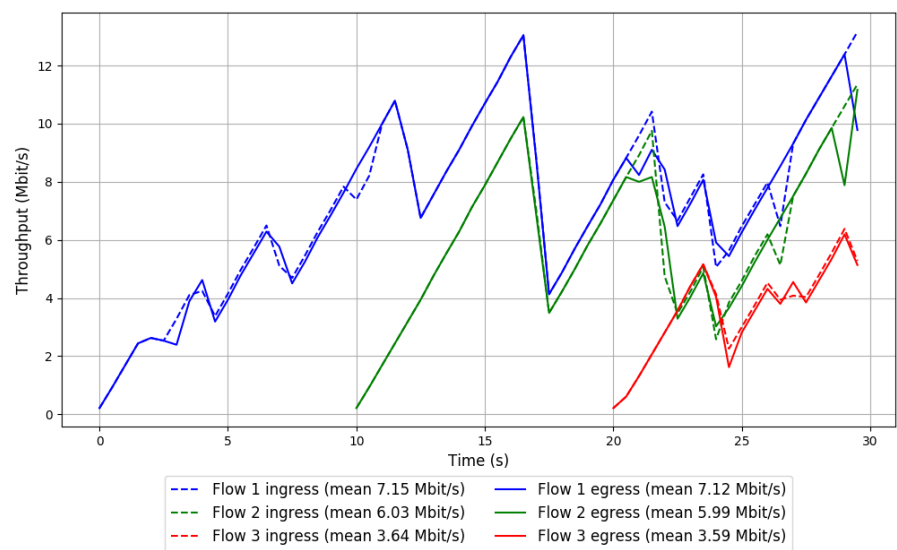
-- Flow 3:

Average throughput: 3.59 Mbit/s

95th percentile per-packet one-way delay: 63.890 ms

Loss rate: 2.64%

Run 10: Report of LEDBAT — Data Link

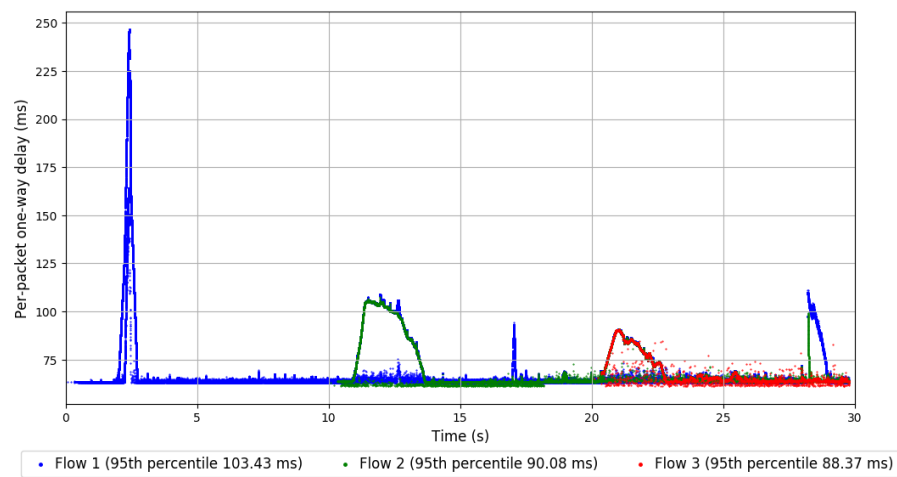
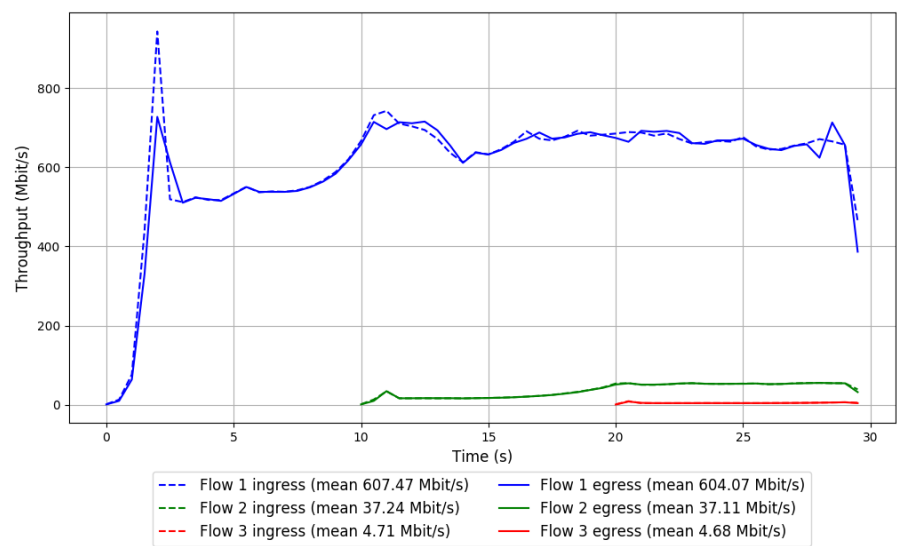


```
Run 1: Statistics of PCC

Start at: 2017-10-12 17:36:39
End at: 2017-10-12 17:37:09

# Below is generated by plot.py at 2017-10-12 22:15:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 630.23 Mbit/s
95th percentile per-packet one-way delay: 103.273 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 604.07 Mbit/s
95th percentile per-packet one-way delay: 103.433 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 37.11 Mbit/s
95th percentile per-packet one-way delay: 90.080 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 4.68 Mbit/s
95th percentile per-packet one-way delay: 88.367 ms
Loss rate: 1.95%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-10-12 17:49:33

End at: 2017-10-12 17:50:03

Below is generated by plot.py at 2017-10-12 22:15:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 620.55 Mbit/s

95th percentile per-packet one-way delay: 195.396 ms

Loss rate: 2.41%

-- Flow 1:

Average throughput: 487.59 Mbit/s

95th percentile per-packet one-way delay: 209.949 ms

Loss rate: 2.69%

-- Flow 2:

Average throughput: 169.97 Mbit/s

95th percentile per-packet one-way delay: 159.678 ms

Loss rate: 1.22%

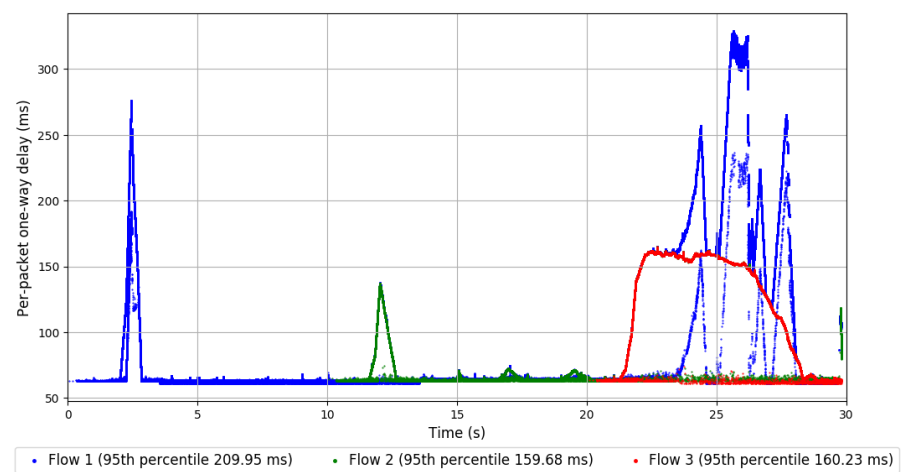
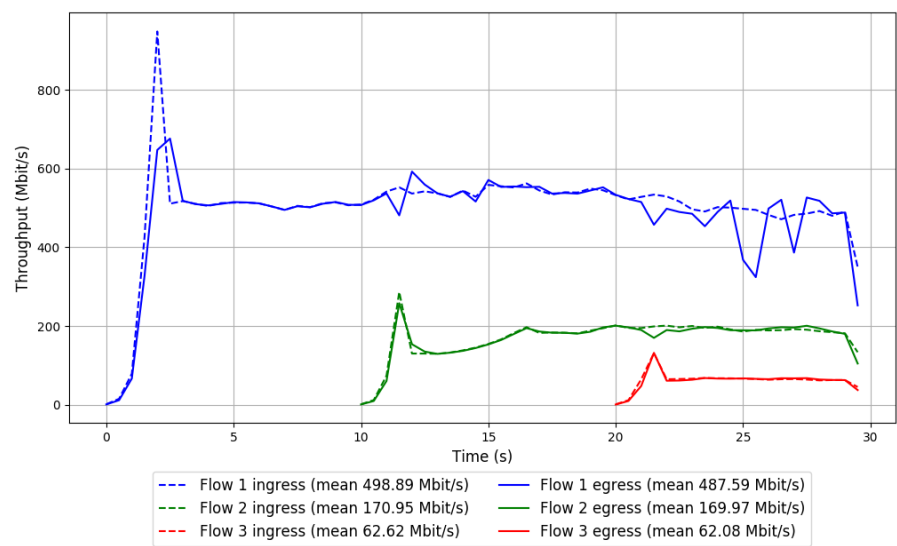
-- Flow 3:

Average throughput: 62.08 Mbit/s

95th percentile per-packet one-way delay: 160.233 ms

Loss rate: 2.15%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-10-12 18:02:27

End at: 2017-10-12 18:02:58

Below is generated by plot.py at 2017-10-12 22:15:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 595.87 Mbit/s

95th percentile per-packet one-way delay: 232.046 ms

Loss rate: 4.50%

-- Flow 1:

Average throughput: 500.56 Mbit/s

95th percentile per-packet one-way delay: 235.601 ms

Loss rate: 5.16%

-- Flow 2:

Average throughput: 127.55 Mbit/s

95th percentile per-packet one-way delay: 147.975 ms

Loss rate: 0.85%

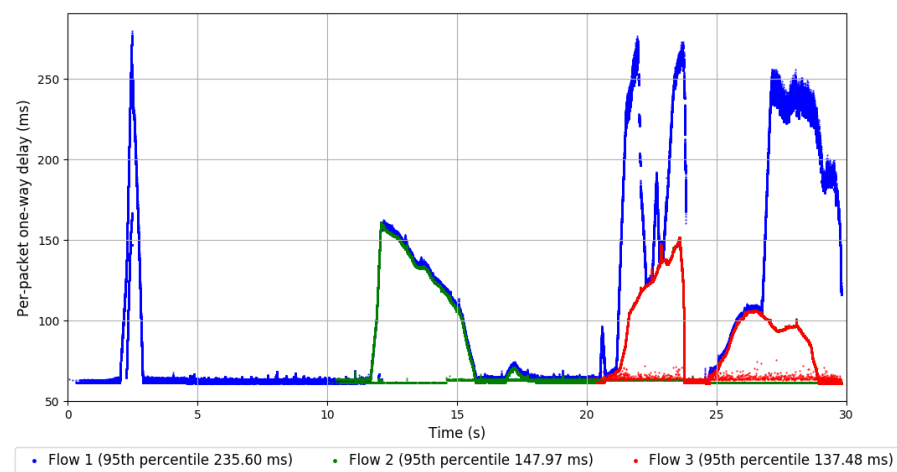
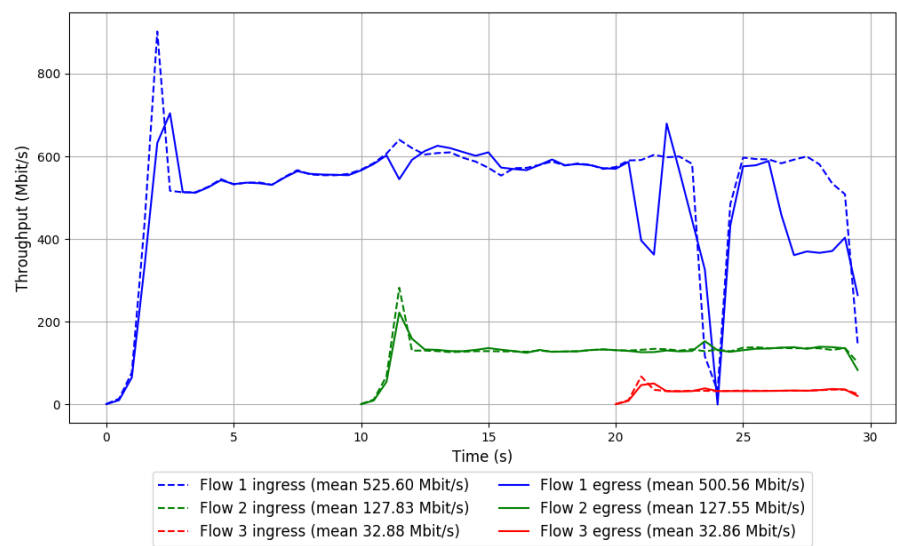
-- Flow 3:

Average throughput: 32.86 Mbit/s

95th percentile per-packet one-way delay: 137.477 ms

Loss rate: 1.38%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-10-12 18:15:21

End at: 2017-10-12 18:15:51

Below is generated by plot.py at 2017-10-12 22:16:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 636.49 Mbit/s

95th percentile per-packet one-way delay: 262.953 ms

Loss rate: 6.48%

-- Flow 1:

Average throughput: 512.72 Mbit/s

95th percentile per-packet one-way delay: 273.940 ms

Loss rate: 7.30%

-- Flow 2:

Average throughput: 154.37 Mbit/s

95th percentile per-packet one-way delay: 158.317 ms

Loss rate: 2.76%

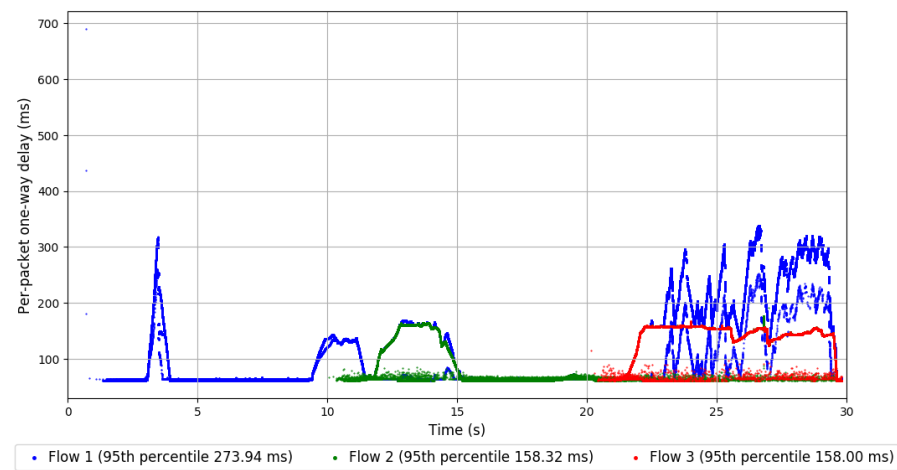
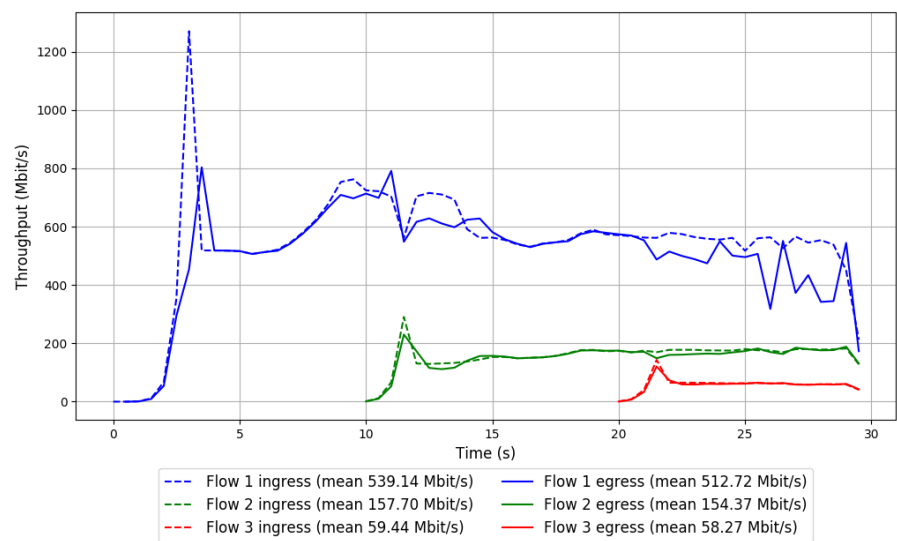
-- Flow 3:

Average throughput: 58.27 Mbit/s

95th percentile per-packet one-way delay: 158.002 ms

Loss rate: 3.69%

Run 4: Report of PCC — Data Link

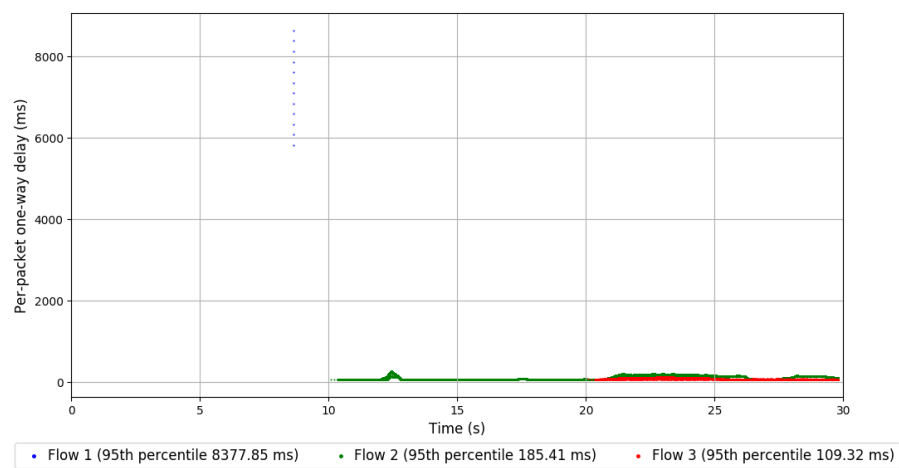
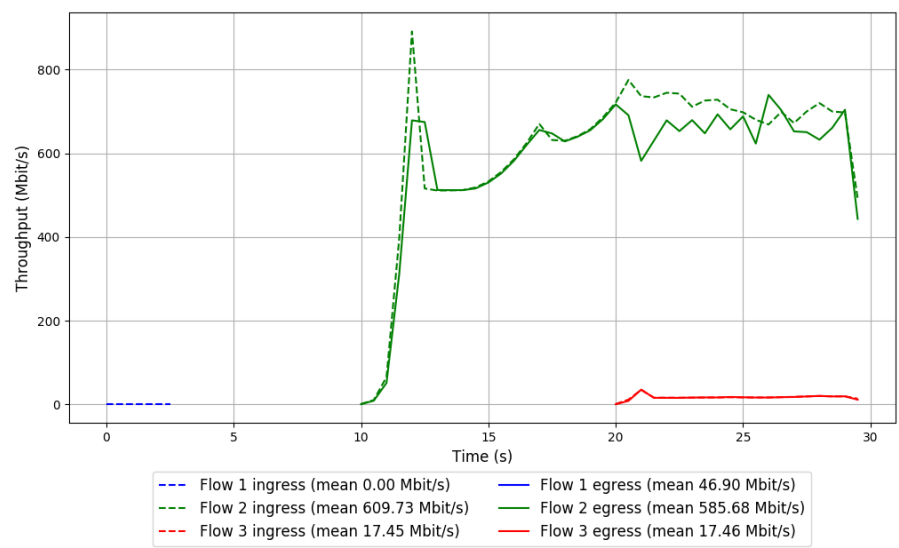


Run 5: Statistics of PCC

Start at: 2017-10-12 18:28:20

End at: 2017-10-12 18:28:50

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-10-12 18:40:52

End at: 2017-10-12 18:41:22

Below is generated by plot.py at 2017-10-12 22:16:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 657.68 Mbit/s

95th percentile per-packet one-way delay: 148.851 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 631.53 Mbit/s

95th percentile per-packet one-way delay: 149.222 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 30.50 Mbit/s

95th percentile per-packet one-way delay: 150.731 ms

Loss rate: 0.74%

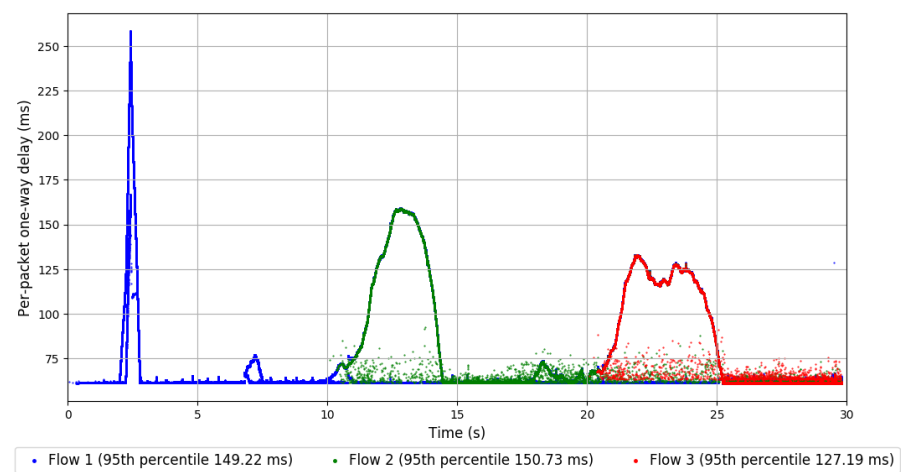
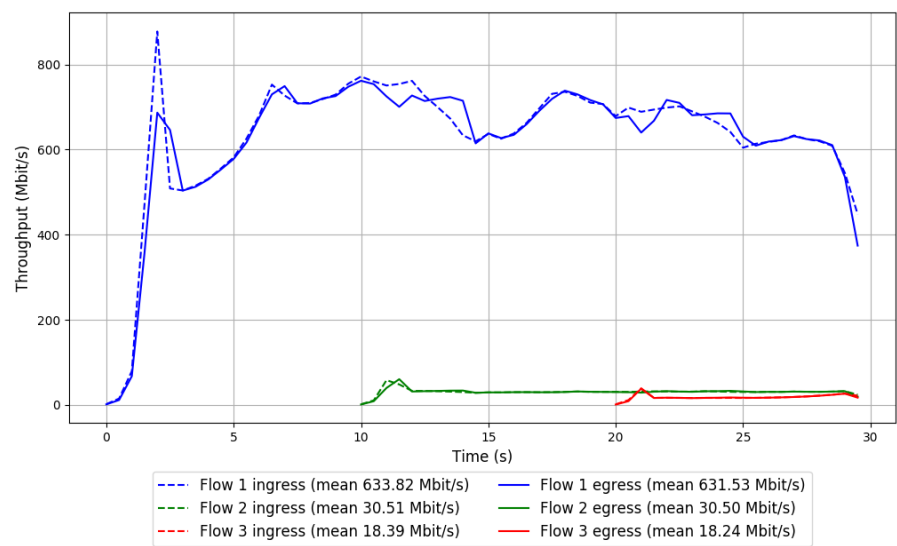
-- Flow 3:

Average throughput: 18.24 Mbit/s

95th percentile per-packet one-way delay: 127.192 ms

Loss rate: 2.13%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-10-12 18:53:37

End at: 2017-10-12 18:54:07

Below is generated by plot.py at 2017-10-12 22:16:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 636.59 Mbit/s

95th percentile per-packet one-way delay: 176.201 ms

Loss rate: 3.55%

-- Flow 1:

Average throughput: 570.35 Mbit/s

95th percentile per-packet one-way delay: 178.060 ms

Loss rate: 3.81%

-- Flow 2:

Average throughput: 65.14 Mbit/s

95th percentile per-packet one-way delay: 158.520 ms

Loss rate: 1.17%

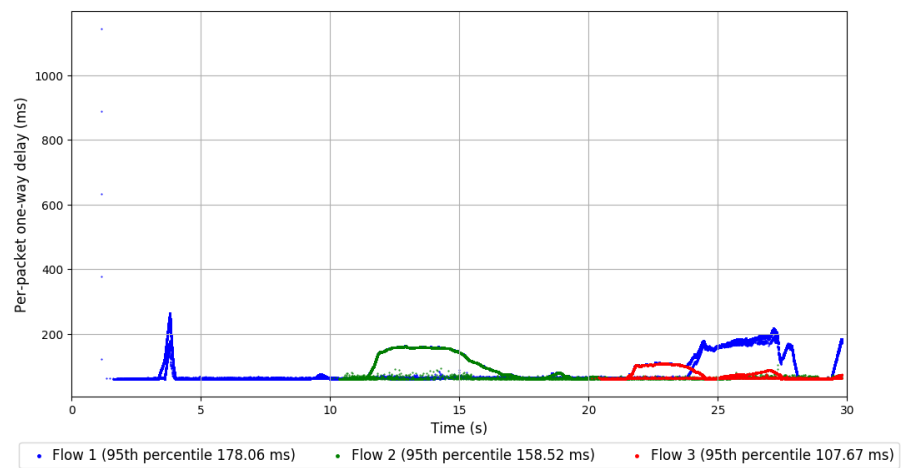
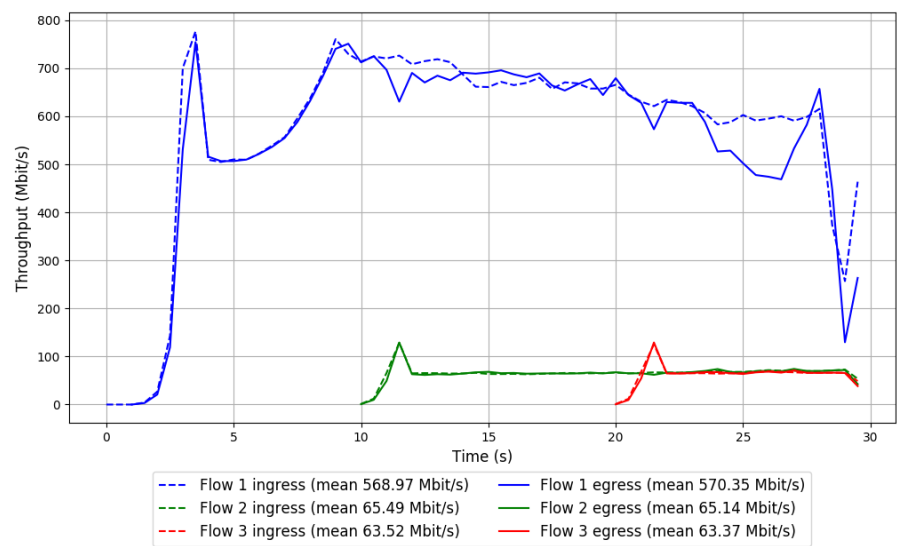
-- Flow 3:

Average throughput: 63.37 Mbit/s

95th percentile per-packet one-way delay: 107.672 ms

Loss rate: 1.53%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-10-12 19:06:42

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

Below is generated by plot.py at 2017-10-12 22:17:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 683.63 Mbit/s

95th percentile per-packet one-way delay: 157.514 ms

Loss rate: 1.65%

-- Flow 1:

Average throughput: 642.64 Mbit/s

95th percentile per-packet one-way delay: 157.526 ms

Loss rate: 1.65%

-- Flow 2:

Average throughput: 59.91 Mbit/s

95th percentile per-packet one-way delay: 157.376 ms

Loss rate: 1.62%

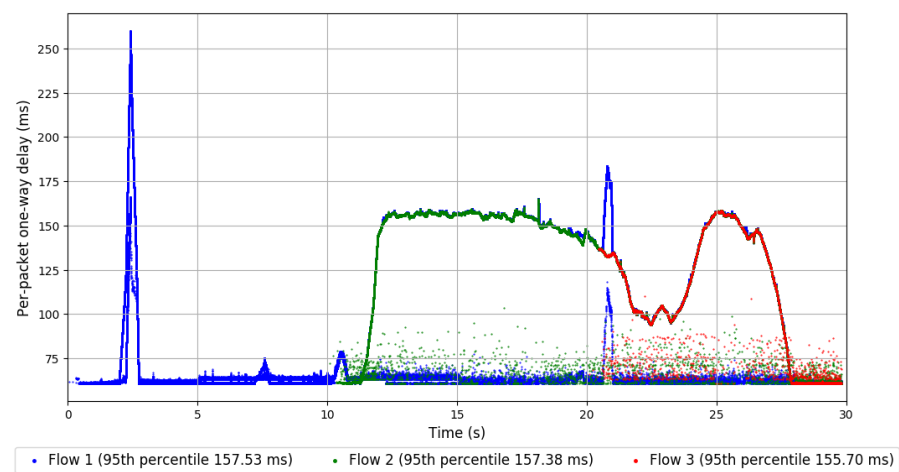
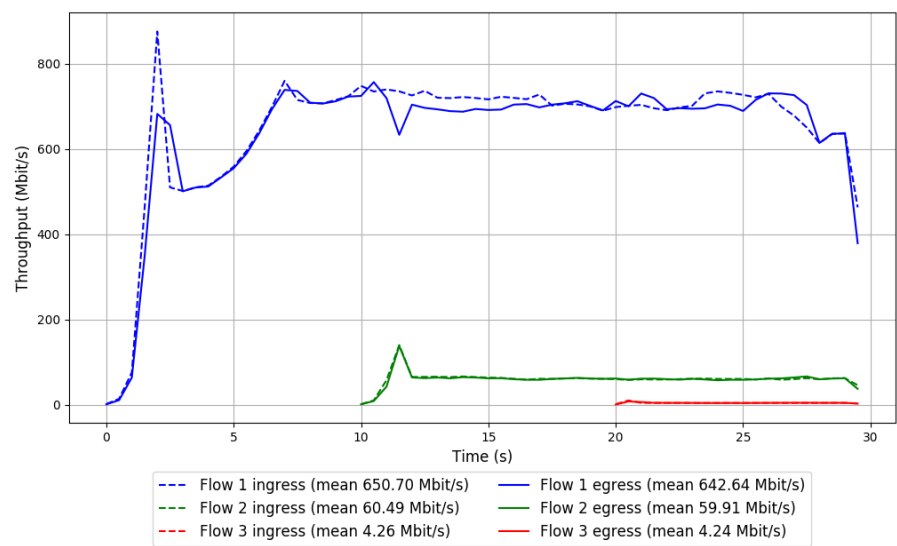
-- Flow 3:

Average throughput: 4.24 Mbit/s

95th percentile per-packet one-way delay: 155.702 ms

Loss rate: 1.81%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-10-12 19:19:30

End at: 2017-10-12 19:20:00

Below is generated by plot.py at 2017-10-12 22:25:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 664.11 Mbit/s

95th percentile per-packet one-way delay: 162.125 ms

Loss rate: 1.44%

-- Flow 1:

Average throughput: 639.87 Mbit/s

95th percentile per-packet one-way delay: 162.114 ms

Loss rate: 1.44%

-- Flow 2:

Average throughput: 34.37 Mbit/s

95th percentile per-packet one-way delay: 162.214 ms

Loss rate: 1.38%

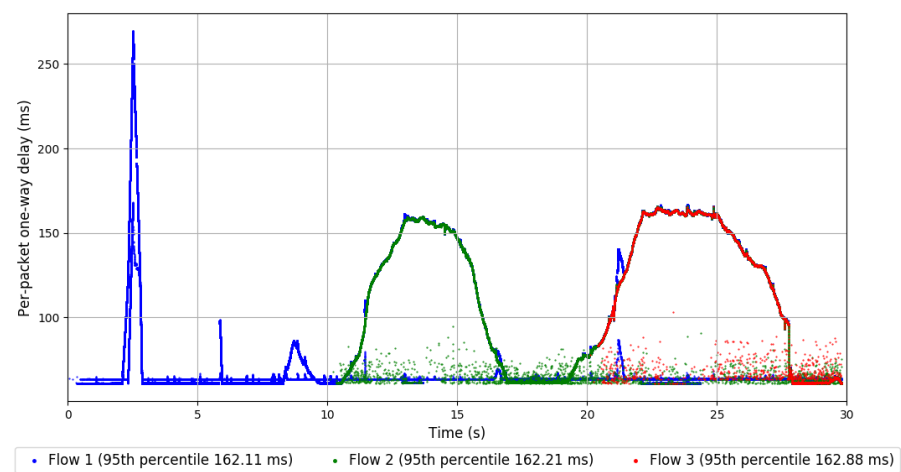
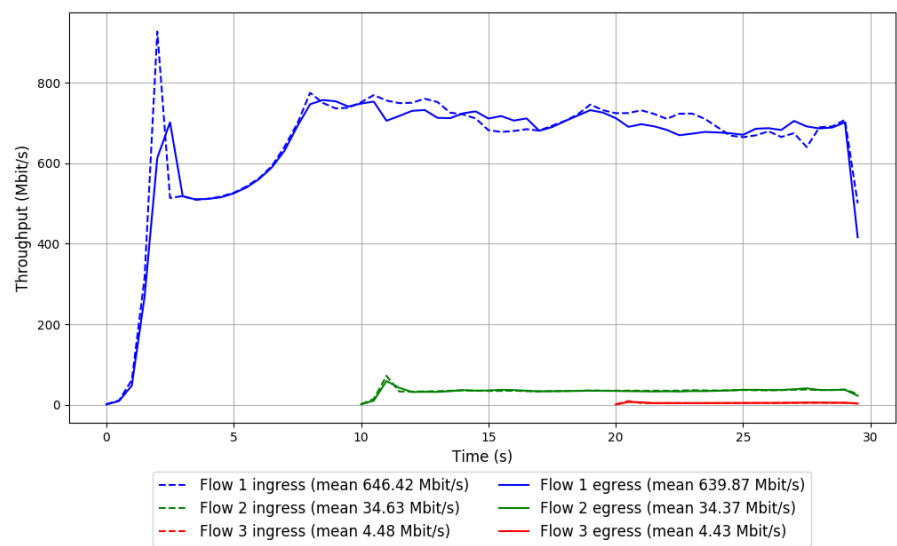
-- Flow 3:

Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 162.878 ms

Loss rate: 2.52%

Run 9: Report of PCC — Data Link

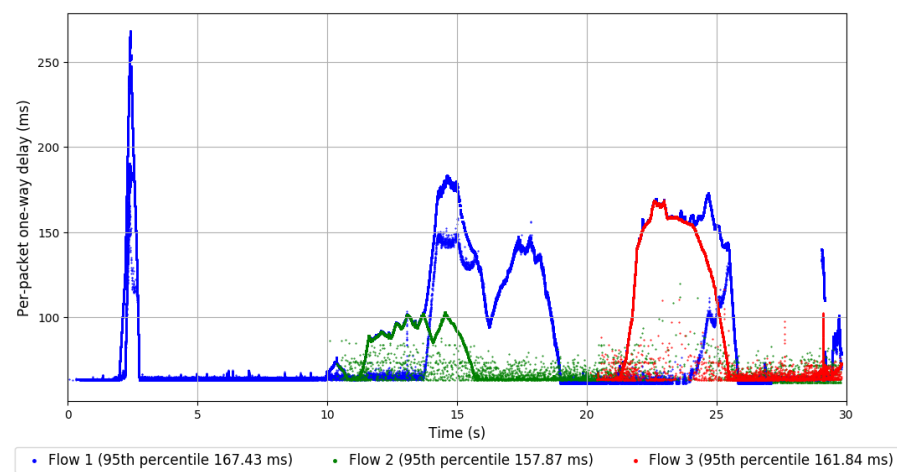
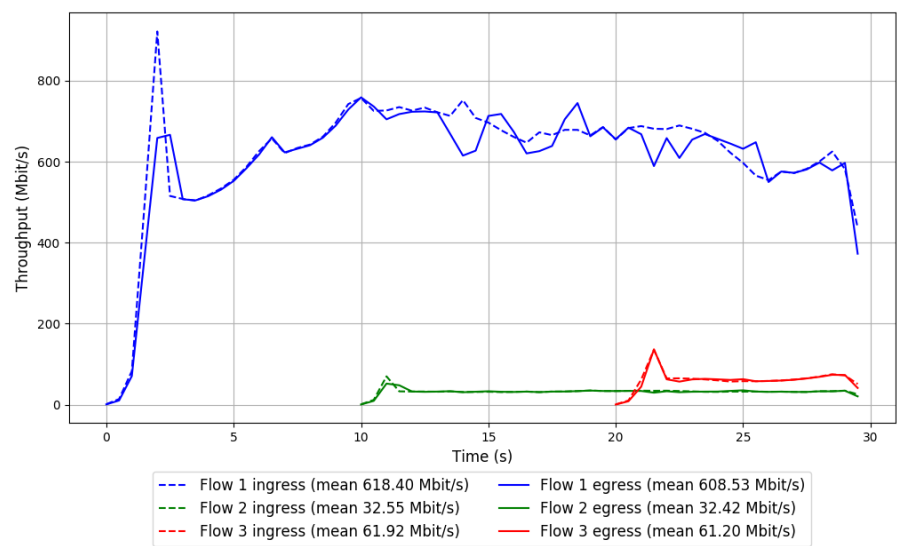


```
Run 10: Statistics of PCC

Start at: 2017-10-12 19:32:30
End at: 2017-10-12 19:33:00

# Below is generated by plot.py at 2017-10-12 22:28:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 649.93 Mbit/s
95th percentile per-packet one-way delay: 166.889 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 608.53 Mbit/s
95th percentile per-packet one-way delay: 167.430 ms
Loss rate: 2.02%
-- Flow 2:
Average throughput: 32.42 Mbit/s
95th percentile per-packet one-way delay: 157.872 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 61.20 Mbit/s
95th percentile per-packet one-way delay: 161.845 ms
Loss rate: 2.49%
```

Run 10: Report of PCC — Data Link

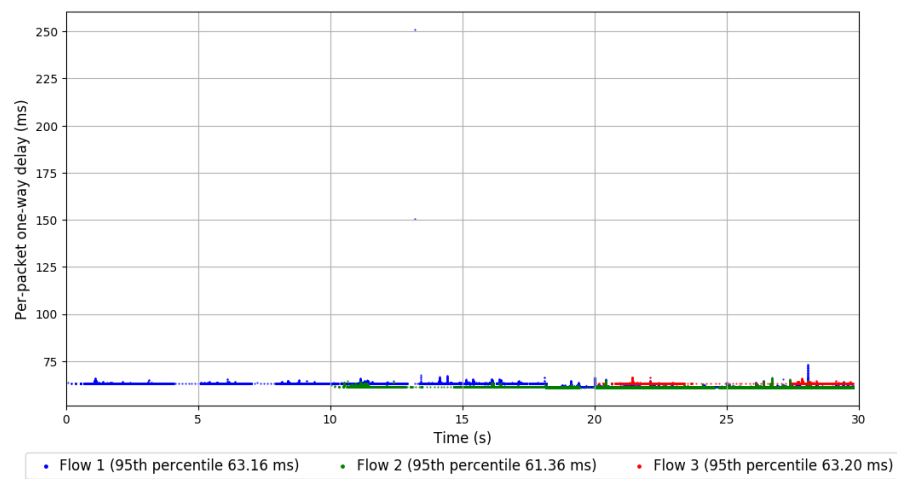
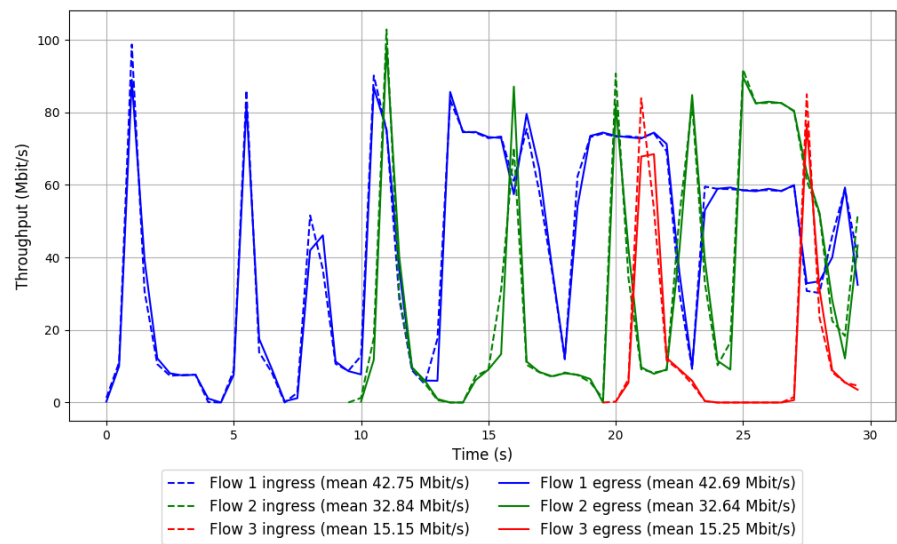


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-10-12 17:40:59
End at: 2017-10-12 17:41:29

# Below is generated by plot.py at 2017-10-12 22:28:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.35 Mbit/s
95th percentile per-packet one-way delay: 63.153 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 42.69 Mbit/s
95th percentile per-packet one-way delay: 63.165 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 32.64 Mbit/s
95th percentile per-packet one-way delay: 61.362 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 15.25 Mbit/s
95th percentile per-packet one-way delay: 63.200 ms
Loss rate: 0.61%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-10-12 17:53:54

End at: 2017-10-12 17:54:24

Below is generated by plot.py at 2017-10-12 22:28:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.32 Mbit/s

95th percentile per-packet one-way delay: 63.223 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 44.30 Mbit/s

95th percentile per-packet one-way delay: 63.200 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 42.89 Mbit/s

95th percentile per-packet one-way delay: 61.339 ms

Loss rate: 1.18%

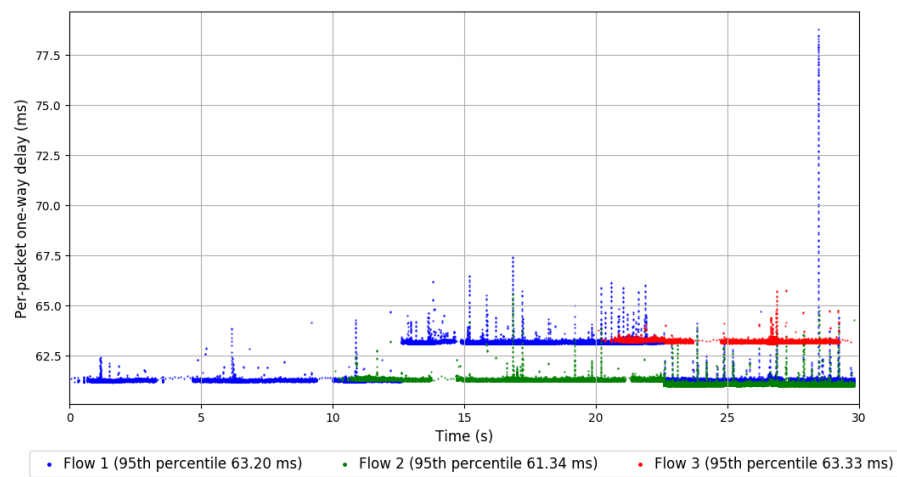
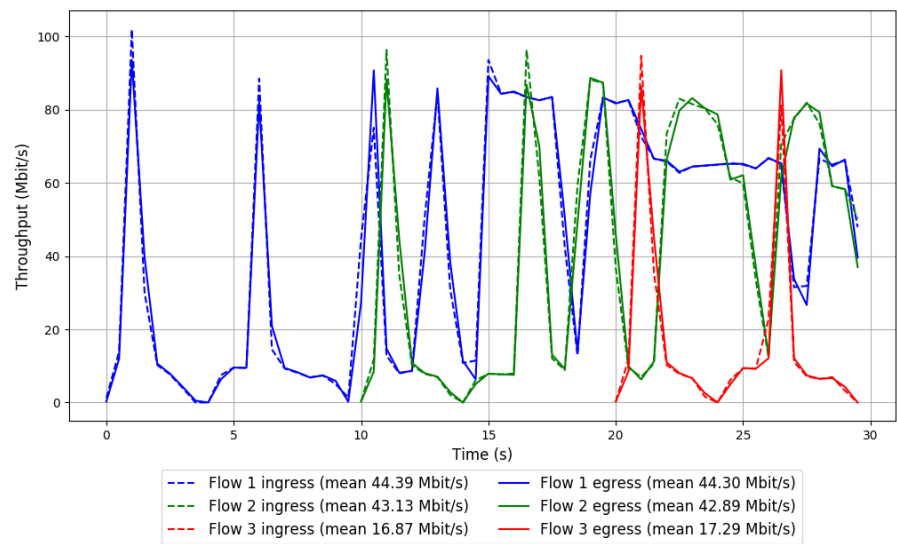
-- Flow 3:

Average throughput: 17.29 Mbit/s

95th percentile per-packet one-way delay: 63.326 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-10-12 18:06:49

End at: 2017-10-12 18:07:19

Below is generated by plot.py at 2017-10-12 22:28:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.83 Mbit/s

95th percentile per-packet one-way delay: 63.260 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 44.56 Mbit/s

95th percentile per-packet one-way delay: 63.074 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 37.52 Mbit/s

95th percentile per-packet one-way delay: 63.284 ms

Loss rate: 1.06%

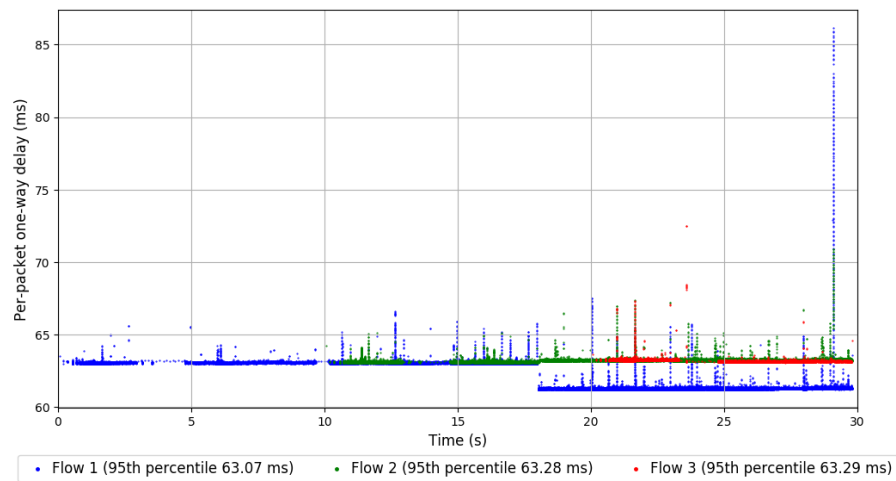
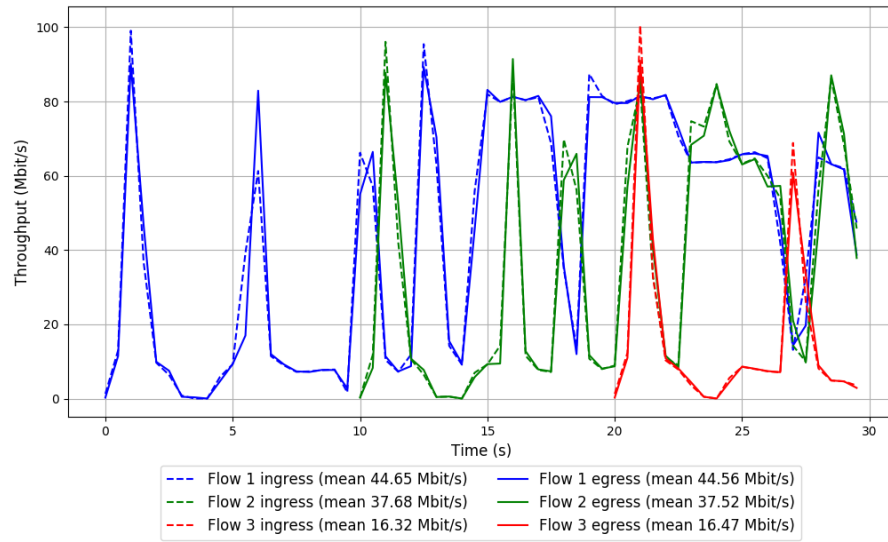
-- Flow 3:

Average throughput: 16.47 Mbit/s

95th percentile per-packet one-way delay: 63.293 ms

Loss rate: 0.39%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-10-12 18:19:37

End at: 2017-10-12 18:20:07

Below is generated by plot.py at 2017-10-12 22:28:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.70 Mbit/s

95th percentile per-packet one-way delay: 63.242 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 55.82 Mbit/s

95th percentile per-packet one-way delay: 63.245 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 31.15 Mbit/s

95th percentile per-packet one-way delay: 63.194 ms

Loss rate: 0.25%

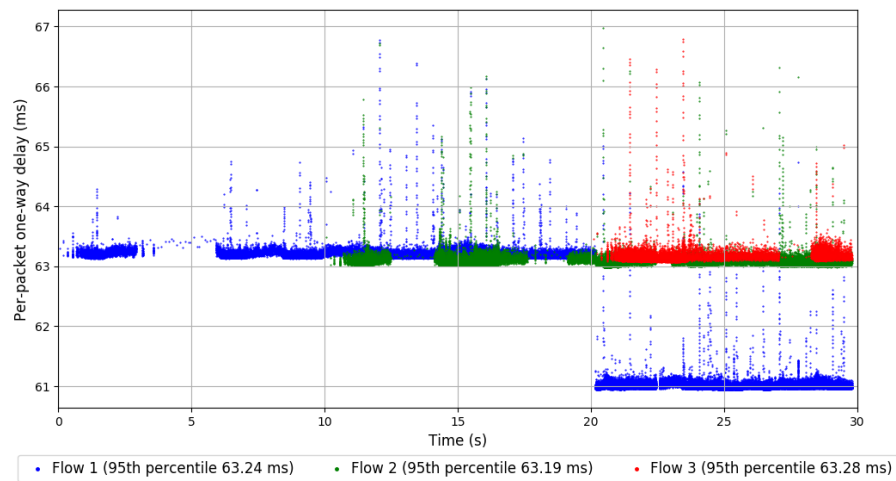
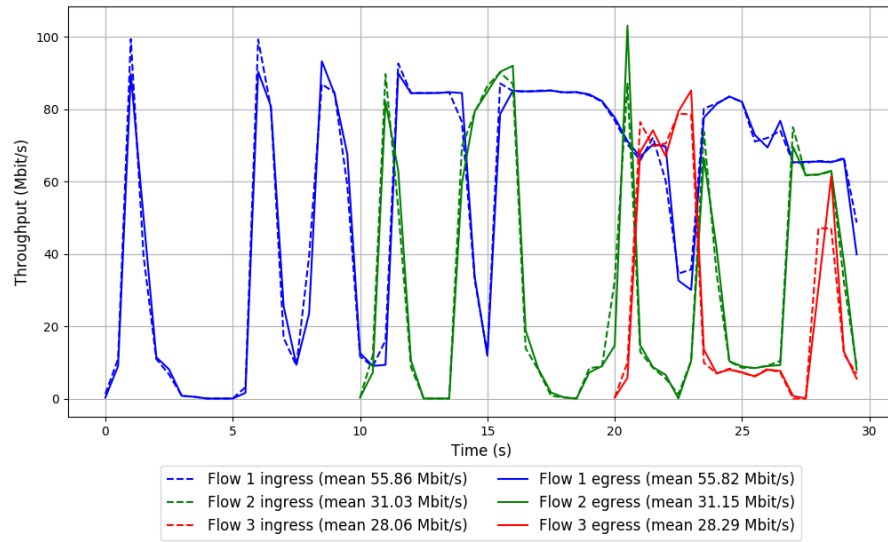
-- Flow 3:

Average throughput: 28.29 Mbit/s

95th percentile per-packet one-way delay: 63.283 ms

Loss rate: 0.50%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-10-12 18:32:29

End at: 2017-10-12 18:32:59

Below is generated by plot.py at 2017-10-12 22:28:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.81 Mbit/s

95th percentile per-packet one-way delay: 63.498 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 53.47 Mbit/s

95th percentile per-packet one-way delay: 63.198 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 26.59 Mbit/s

95th percentile per-packet one-way delay: 63.566 ms

Loss rate: 1.42%

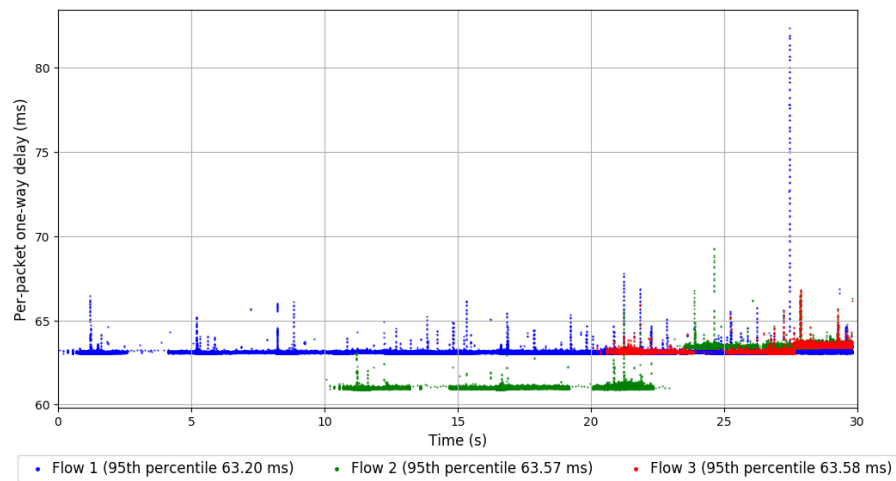
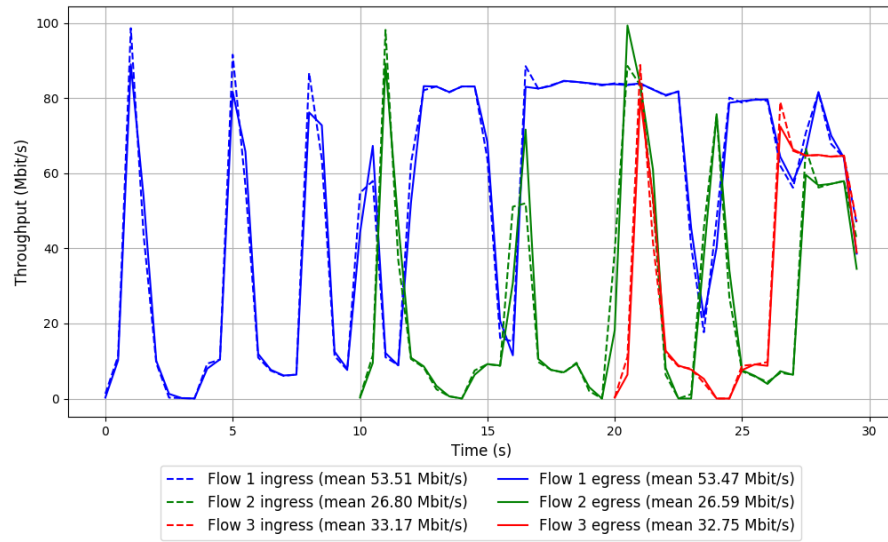
-- Flow 3:

Average throughput: 32.75 Mbit/s

95th percentile per-packet one-way delay: 63.581 ms

Loss rate: 2.53%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-10-12 18:45:06

End at: 2017-10-12 18:45:36

Below is generated by plot.py at 2017-10-12 22:28:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.79 Mbit/s

95th percentile per-packet one-way delay: 63.298 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 34.65 Mbit/s

95th percentile per-packet one-way delay: 63.339 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 48.38 Mbit/s

95th percentile per-packet one-way delay: 63.220 ms

Loss rate: 0.88%

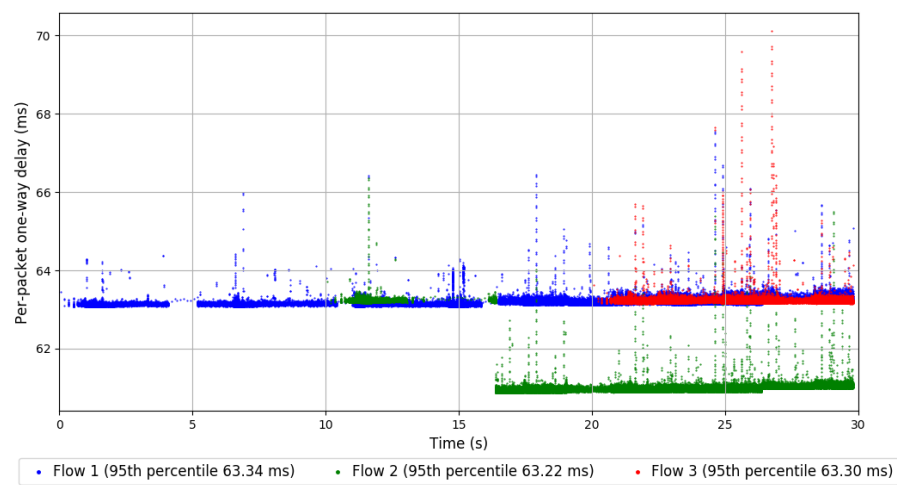
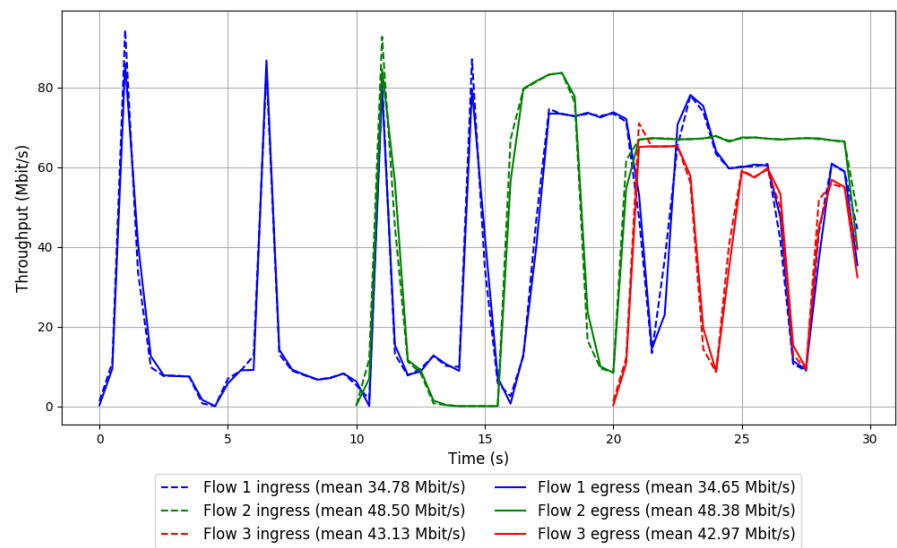
-- Flow 3:

Average throughput: 42.97 Mbit/s

95th percentile per-packet one-way delay: 63.301 ms

Loss rate: 1.62%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-10-12 18:57:56

End at: 2017-10-12 18:58:26

Below is generated by plot.py at 2017-10-12 22:28:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 69.76 Mbit/s

95th percentile per-packet one-way delay: 63.532 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 43.79 Mbit/s

95th percentile per-packet one-way delay: 63.164 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 35.89 Mbit/s

95th percentile per-packet one-way delay: 63.603 ms

Loss rate: 1.17%

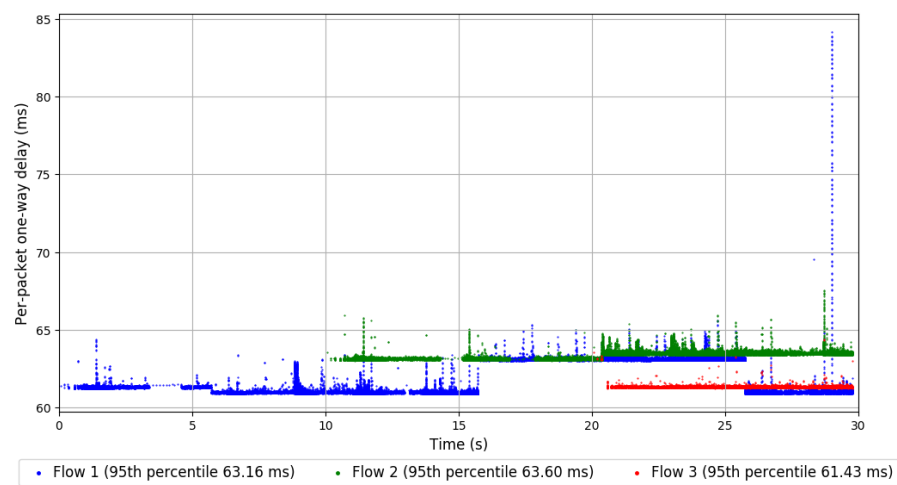
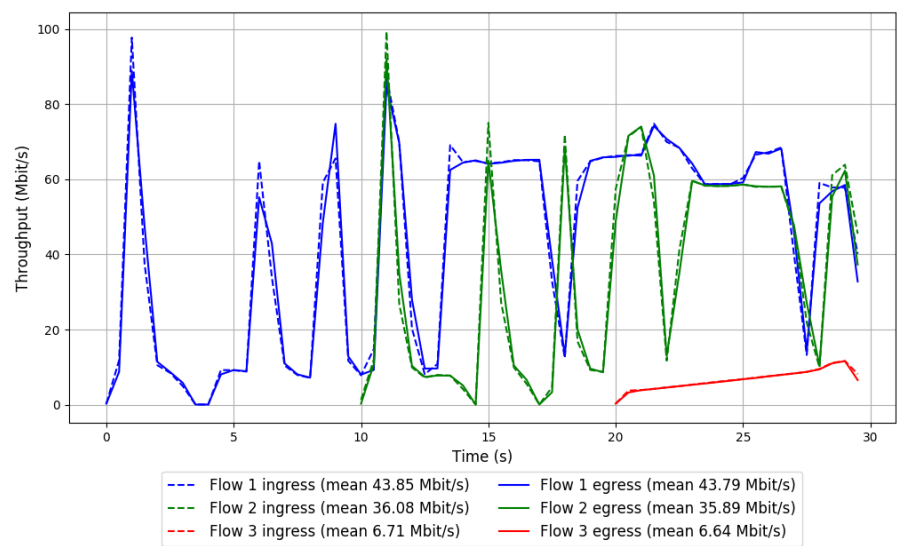
-- Flow 3:

Average throughput: 6.64 Mbit/s

95th percentile per-packet one-way delay: 61.433 ms

Loss rate: 2.23%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-10-12 19:11:04

End at: 2017-10-12 19:11:34

Below is generated by plot.py at 2017-10-12 22:28:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.87 Mbit/s

95th percentile per-packet one-way delay: 63.315 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 54.26 Mbit/s

95th percentile per-packet one-way delay: 63.319 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 38.55 Mbit/s

95th percentile per-packet one-way delay: 63.318 ms

Loss rate: 1.15%

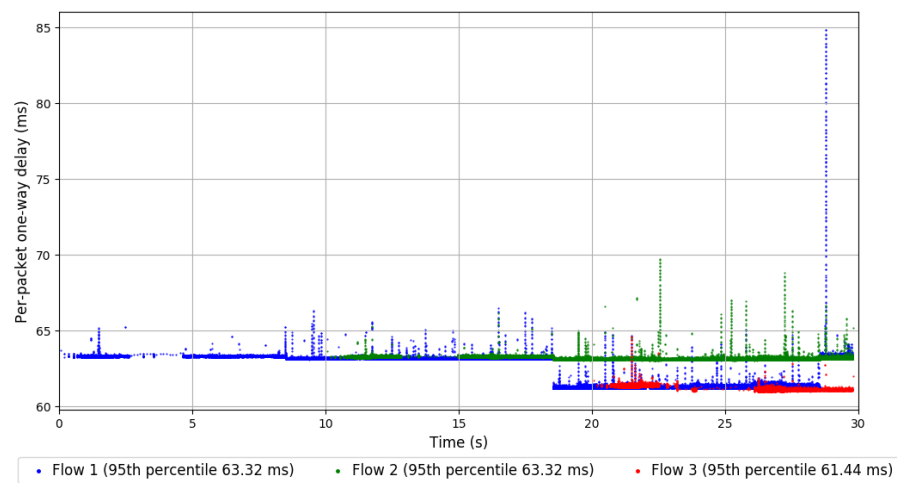
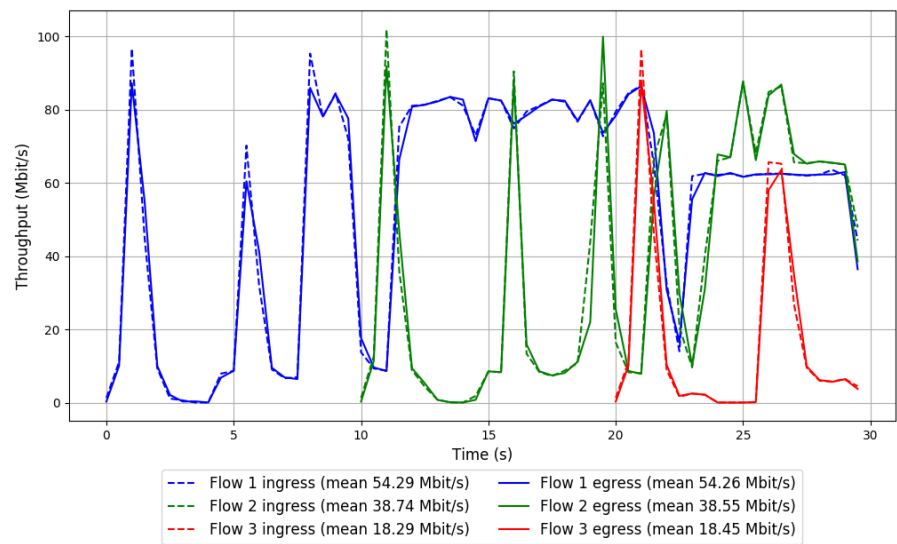
-- Flow 3:

Average throughput: 18.45 Mbit/s

95th percentile per-packet one-way delay: 61.436 ms

Loss rate: 0.43%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-10-12 19:23:55

End at: 2017-10-12 19:24:25

Below is generated by plot.py at 2017-10-12 22:28:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.25 Mbit/s

95th percentile per-packet one-way delay: 63.592 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 55.43 Mbit/s

95th percentile per-packet one-way delay: 63.307 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 36.02 Mbit/s

95th percentile per-packet one-way delay: 63.675 ms

Loss rate: 2.07%

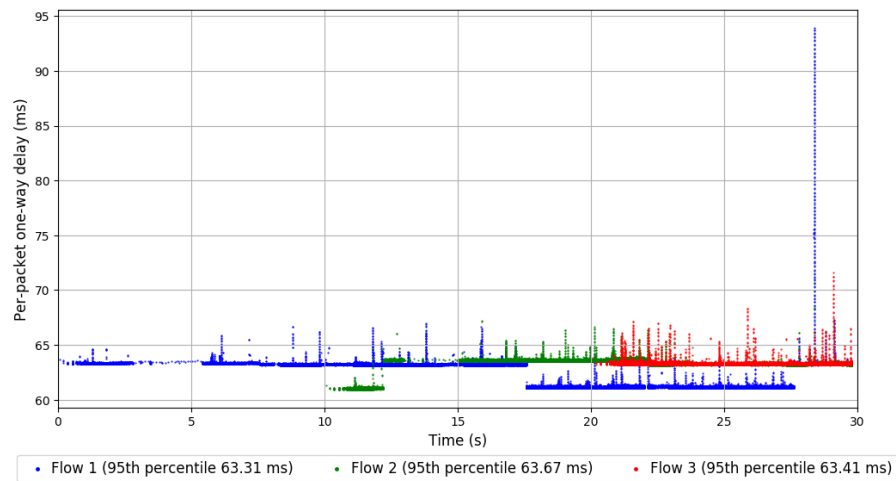
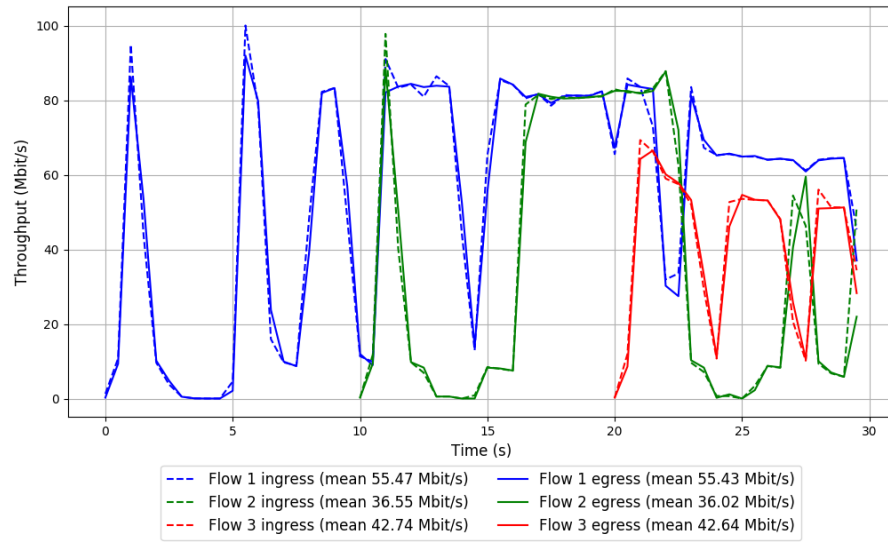
-- Flow 3:

Average throughput: 42.64 Mbit/s

95th percentile per-packet one-way delay: 63.410 ms

Loss rate: 1.50%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-10-12 19:36:51

End at: 2017-10-12 19:37:21

Below is generated by plot.py at 2017-10-12 22:28:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.79 Mbit/s

95th percentile per-packet one-way delay: 63.339 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 49.46 Mbit/s

95th percentile per-packet one-way delay: 63.366 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 40.95 Mbit/s

95th percentile per-packet one-way delay: 63.253 ms

Loss rate: 1.30%

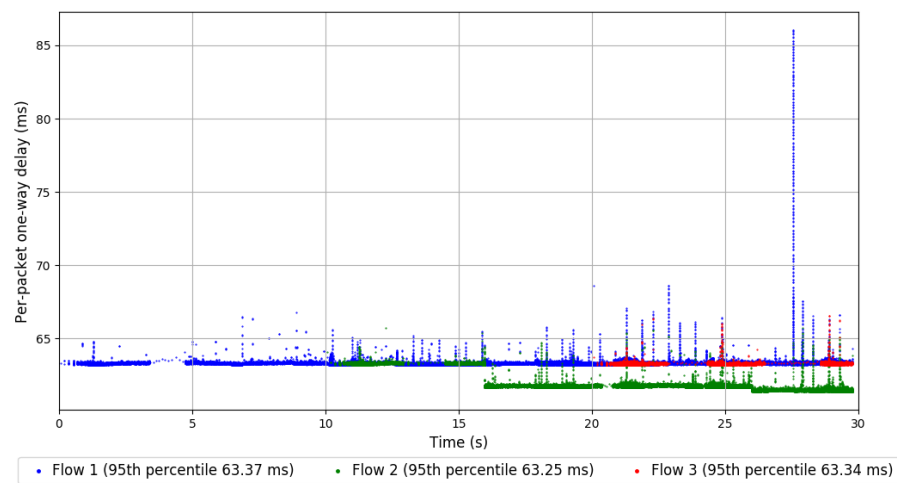
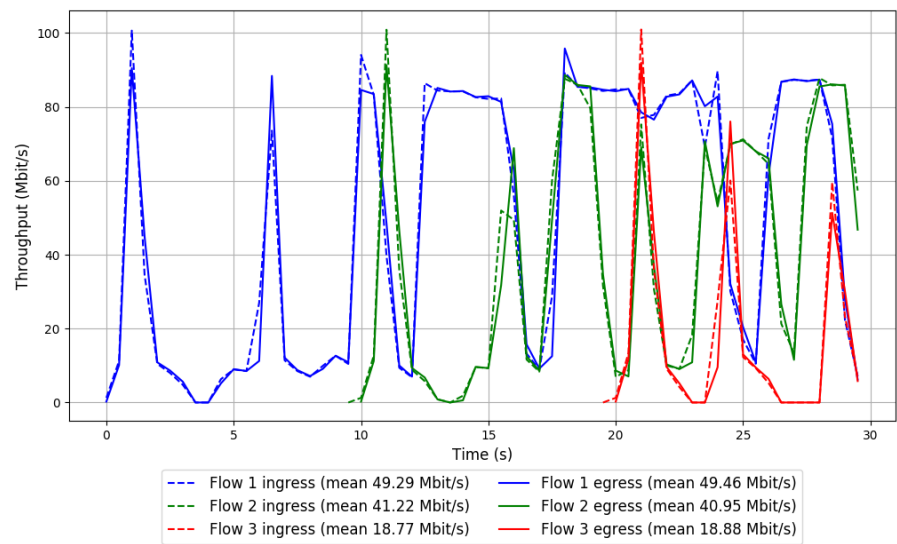
-- Flow 3:

Average throughput: 18.88 Mbit/s

95th percentile per-packet one-way delay: 63.336 ms

Loss rate: 0.69%

Run 10: Report of QUIC Cubic — Data Link

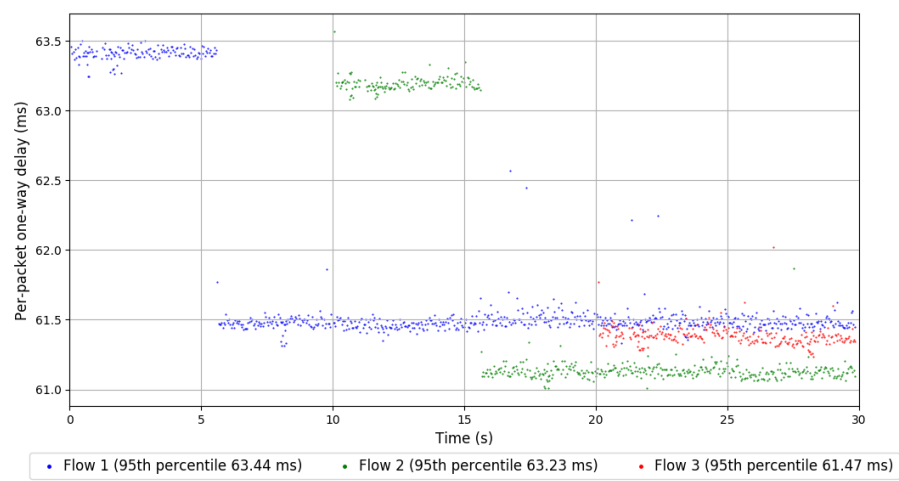
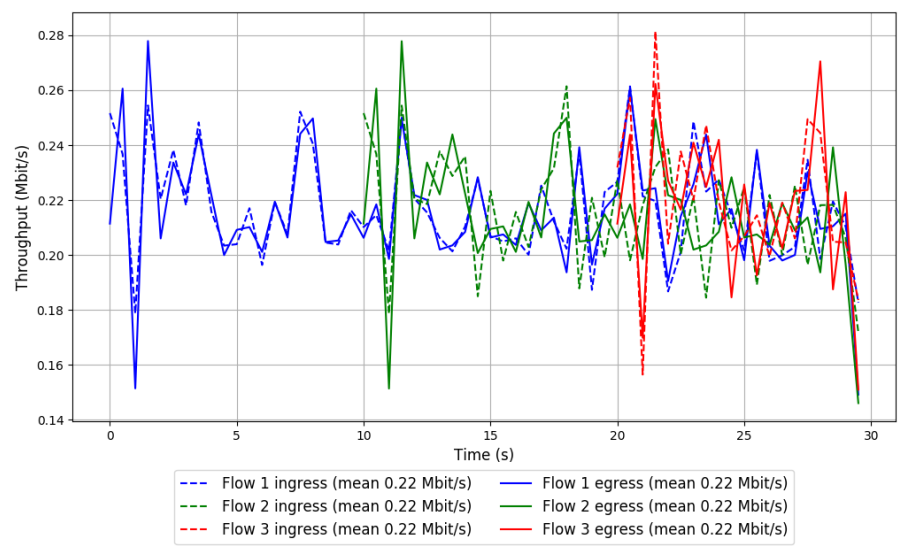


```
Run 1: Statistics of SReAM

Start at: 2017-10-12 17:34:11
End at: 2017-10-12 17:34:41

# Below is generated by plot.py at 2017-10-12 22:28:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.414 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.439 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.228 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.467 ms
Loss rate: 1.10%
```

Run 1: Report of SReAM — Data Link

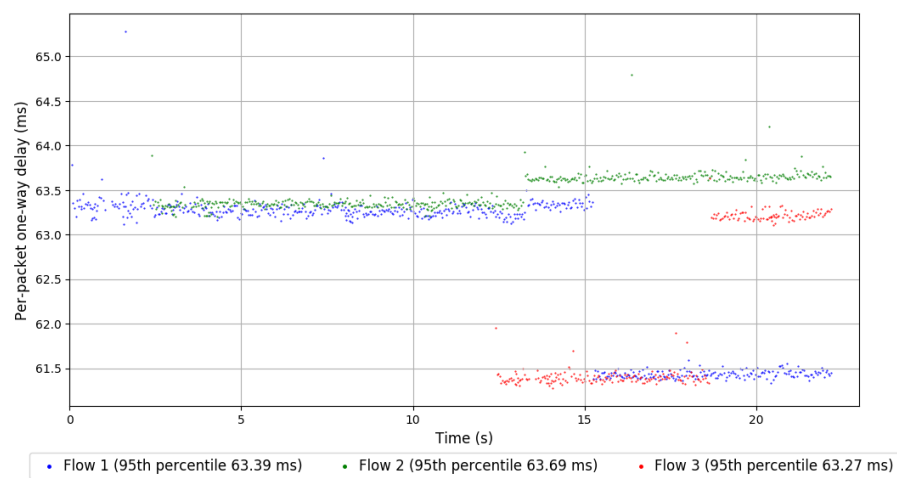
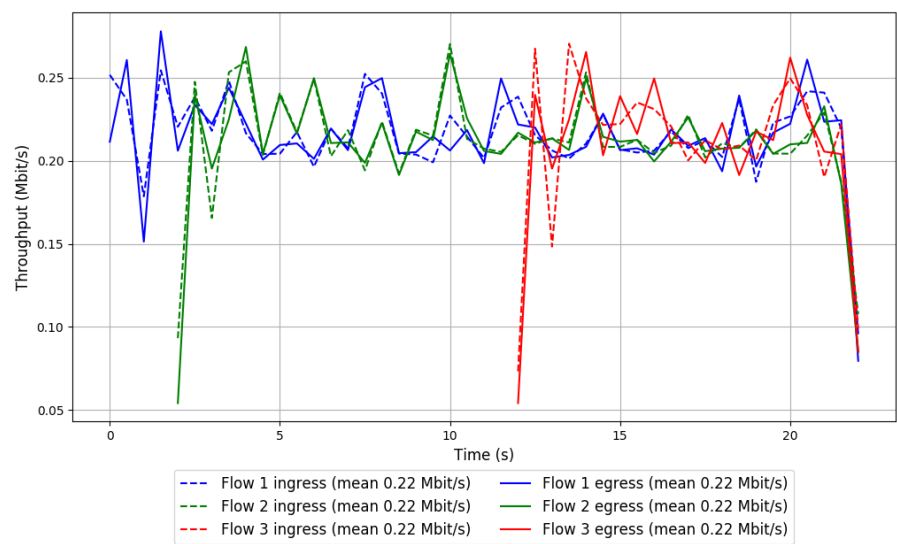


Run 2: Statistics of SReAM

Start at: 2017-10-12 17:47:06

End at: 2017-10-12 17:47:36

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2017-10-12 17:59:59

End at: 2017-10-12 18:00:29

Below is generated by plot.py at 2017-10-12 22:28:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 63.369 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.387 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.205 ms

Loss rate: 0.63%

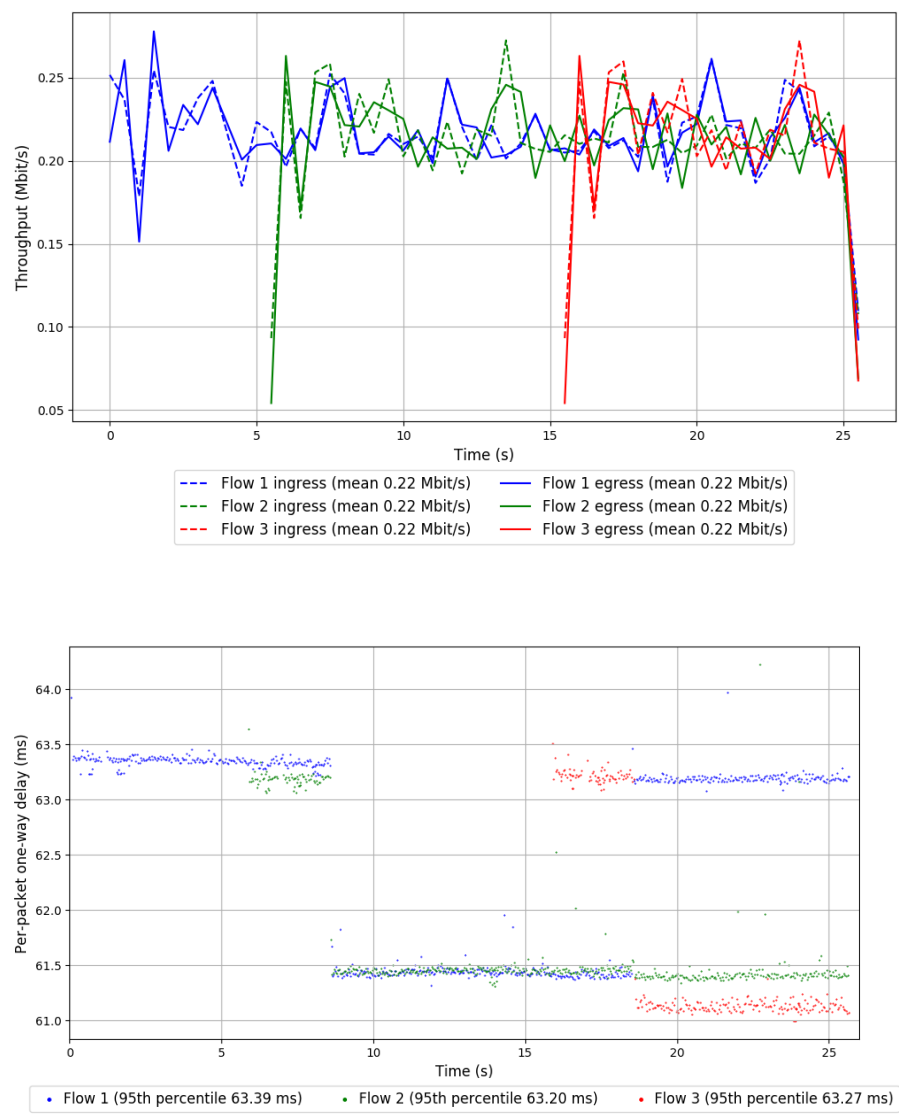
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.267 ms

Loss rate: 1.10%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-10-12 18:12:54

End at: 2017-10-12 18:13:24

Below is generated by plot.py at 2017-10-12 22:28:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 63.507 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.533 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.341 ms

Loss rate: 0.63%

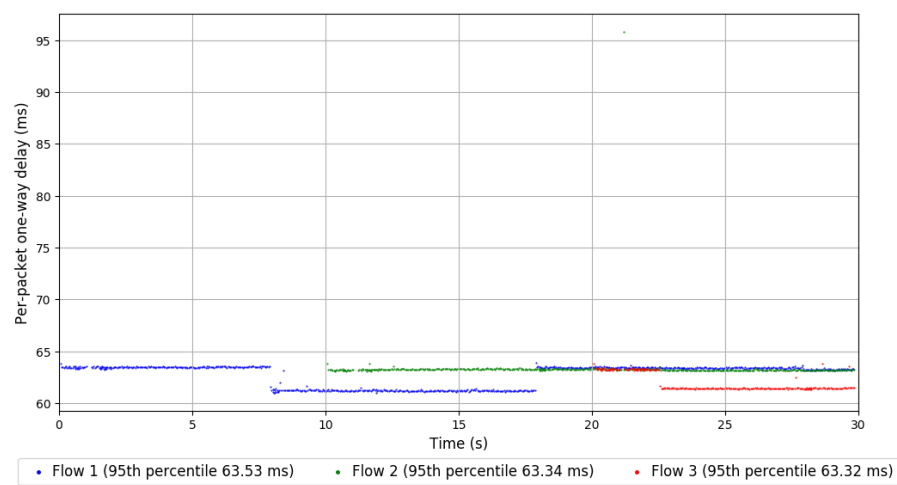
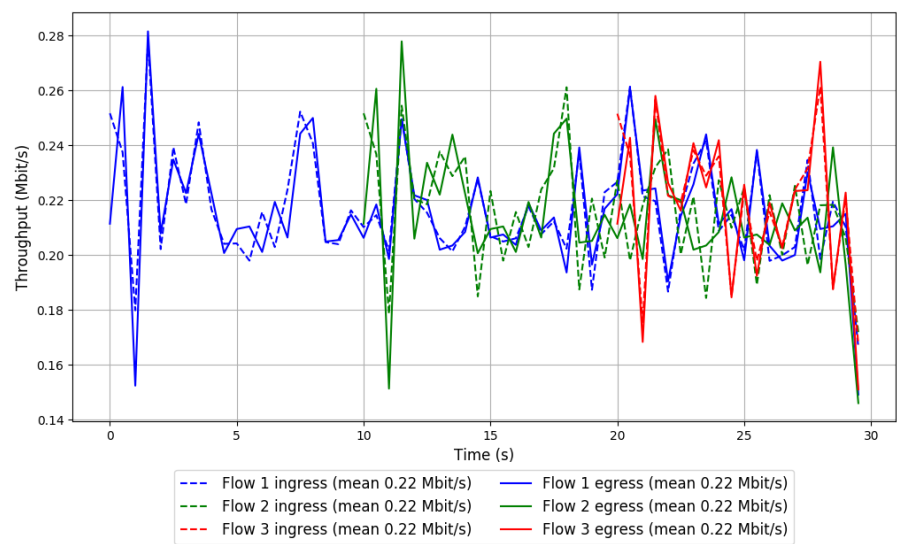
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.317 ms

Loss rate: 1.10%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-10-12 18:25:52

End at: 2017-10-12 18:26:22

Below is generated by plot.py at 2017-10-12 22:28:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 63.422 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.440 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.248 ms

Loss rate: 0.63%

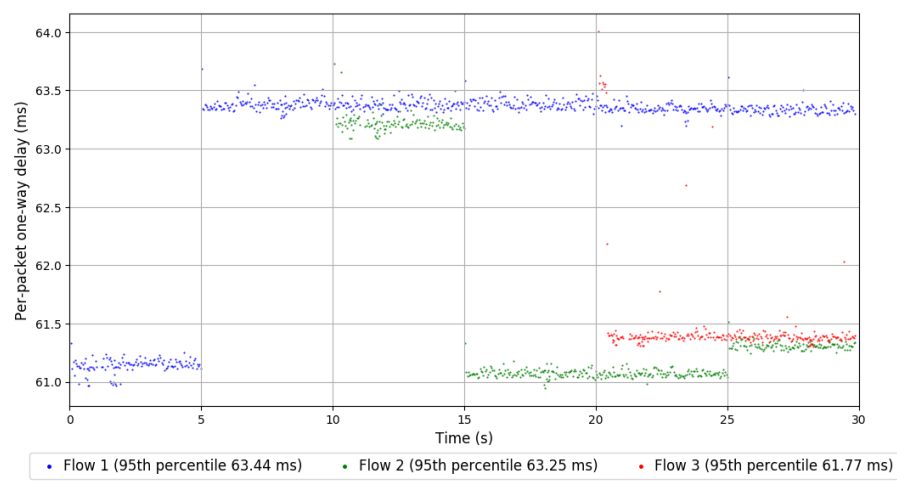
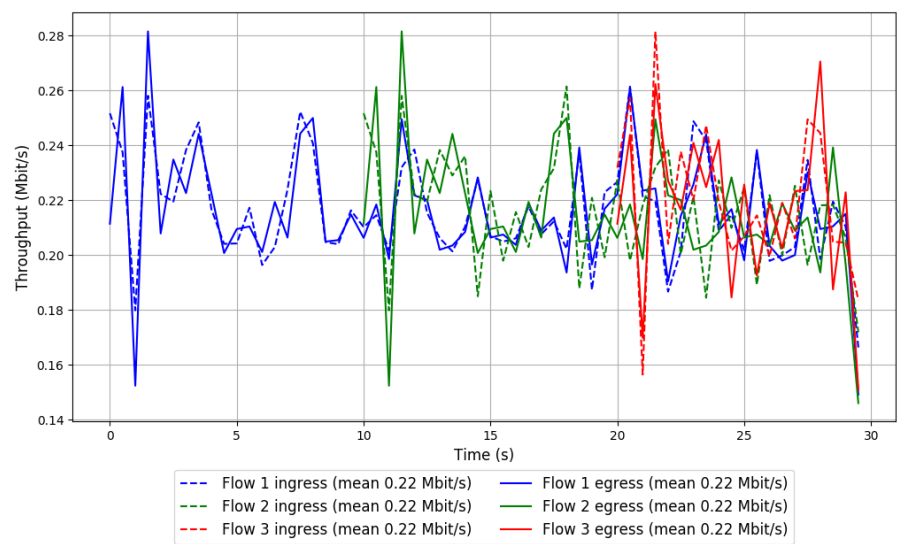
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.775 ms

Loss rate: 1.10%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2017-10-12 18:38:25

End at: 2017-10-12 18:38:55

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 63.627 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 350.28 Mbit/s

95th percentile per-packet one-way delay: 4212.738 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.434 ms

Loss rate: 0.63%

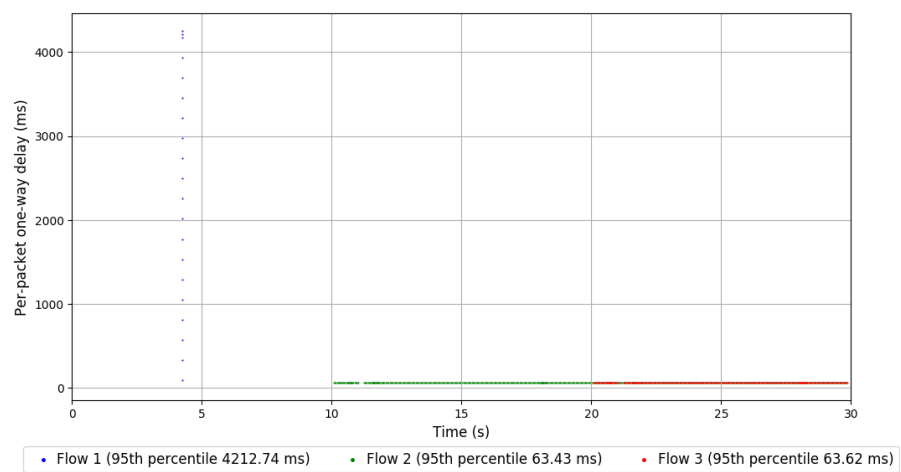
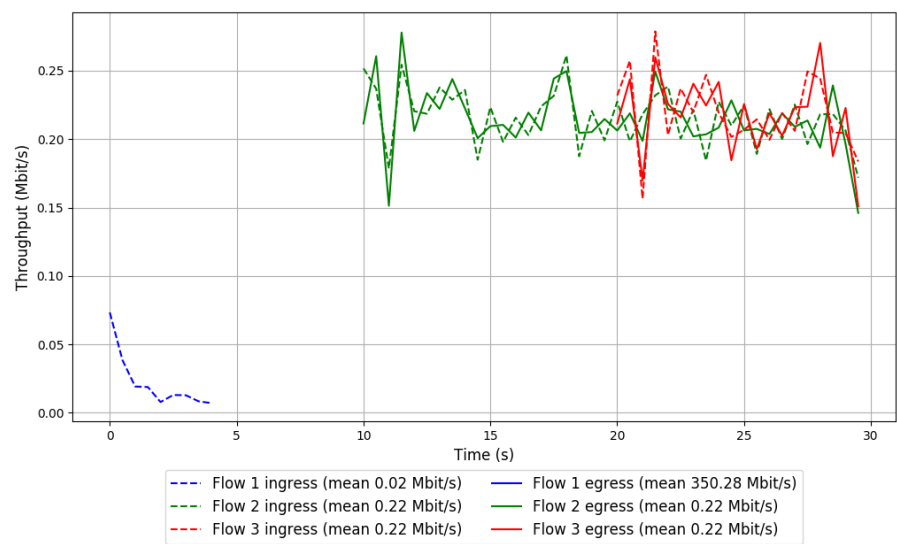
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.619 ms

Loss rate: 1.10%

Run 6: Report of SReAM — Data Link

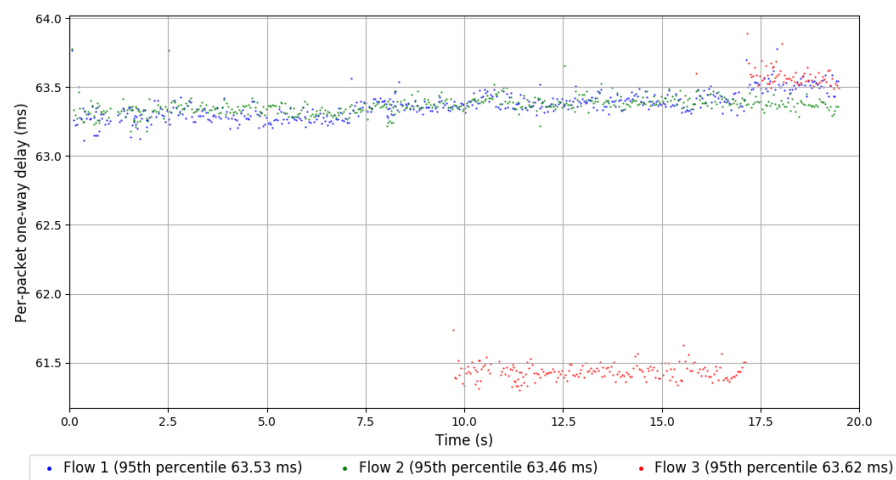
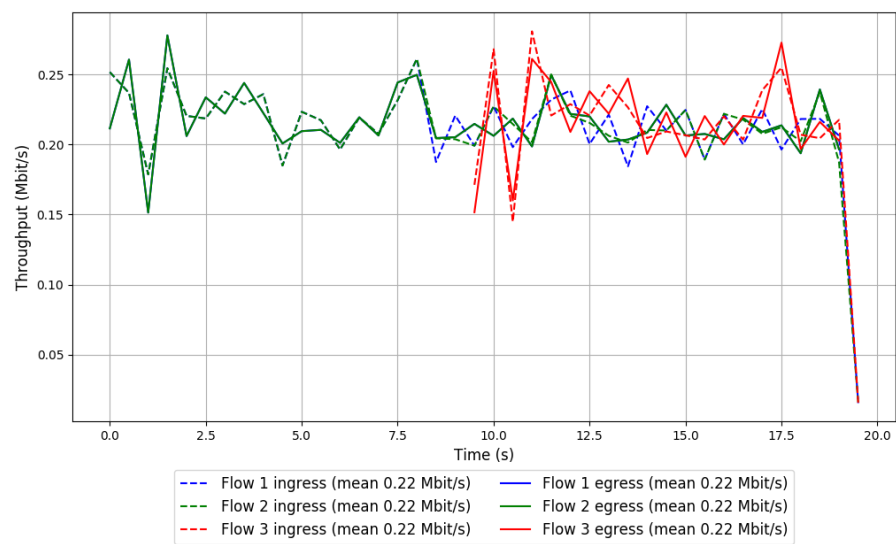


Run 7: Statistics of SReAM

Start at: 2017-10-12 18:51:09

End at: 2017-10-12 18:51:39

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2017-10-12 19:04:14

End at: 2017-10-12 19:04:44

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 63.554 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.444 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.580 ms

Loss rate: 0.63%

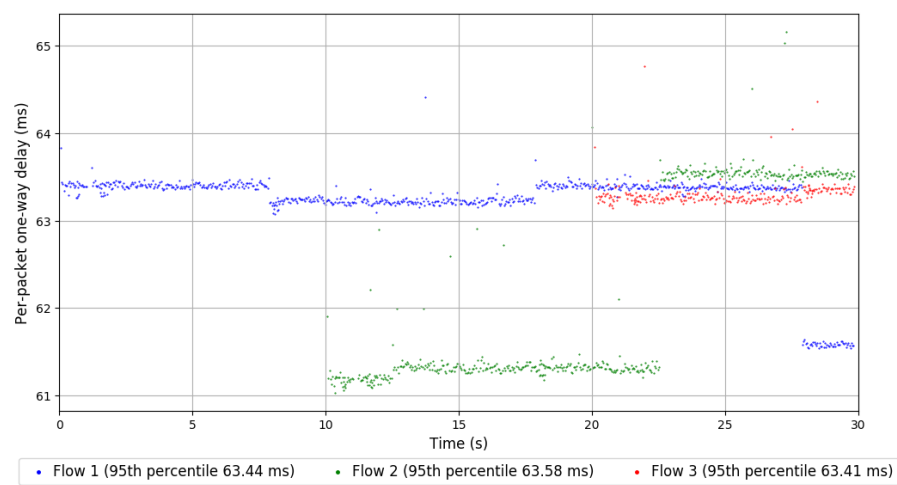
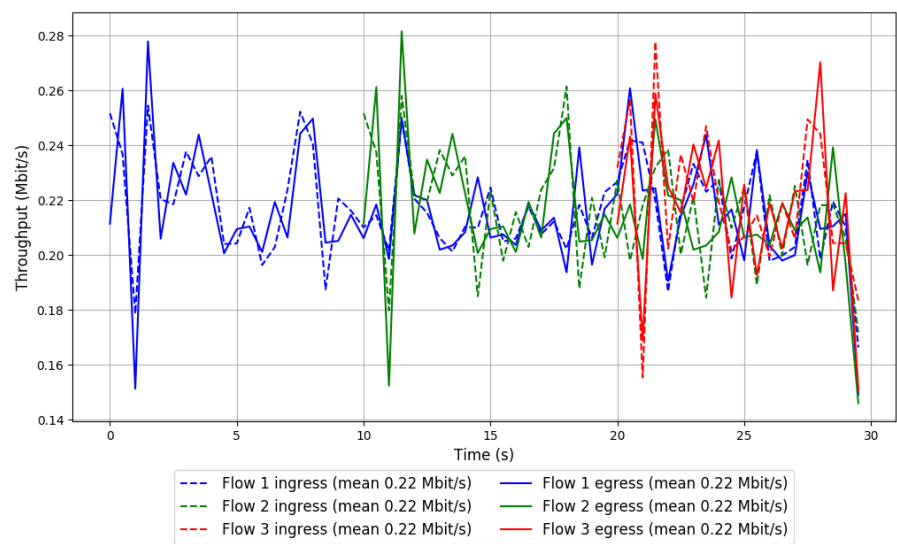
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.405 ms

Loss rate: 1.10%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-10-12 19:17:05

End at: 2017-10-12 19:17:35

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 63.460 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.434 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.369 ms

Loss rate: 0.63%

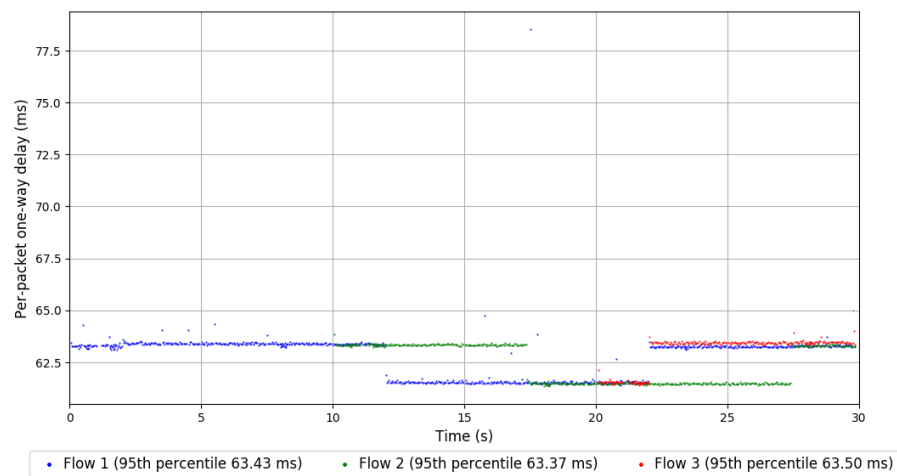
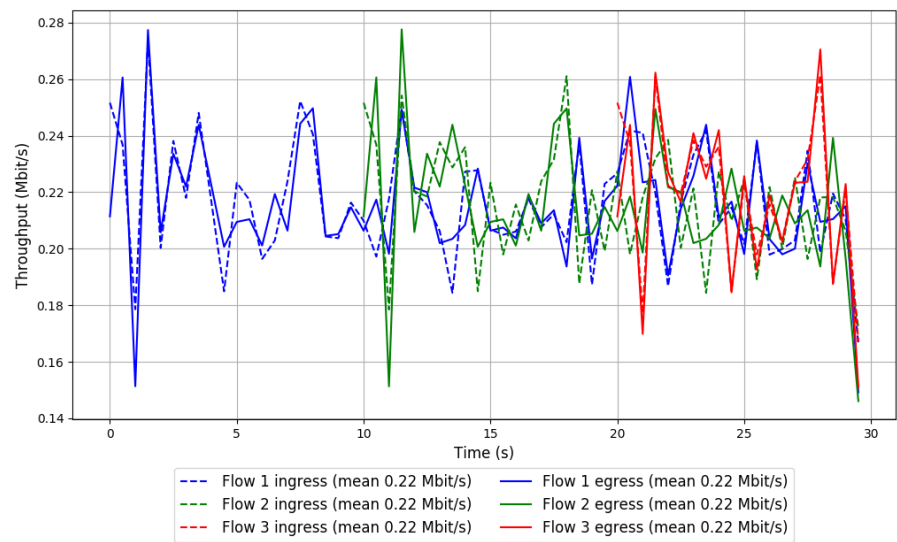
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.500 ms

Loss rate: 1.10%

Run 9: Report of SReAM — Data Link

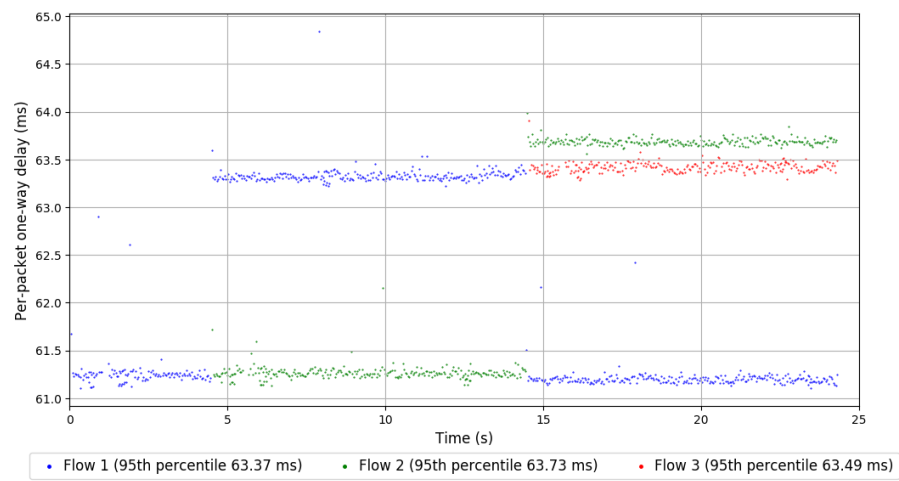
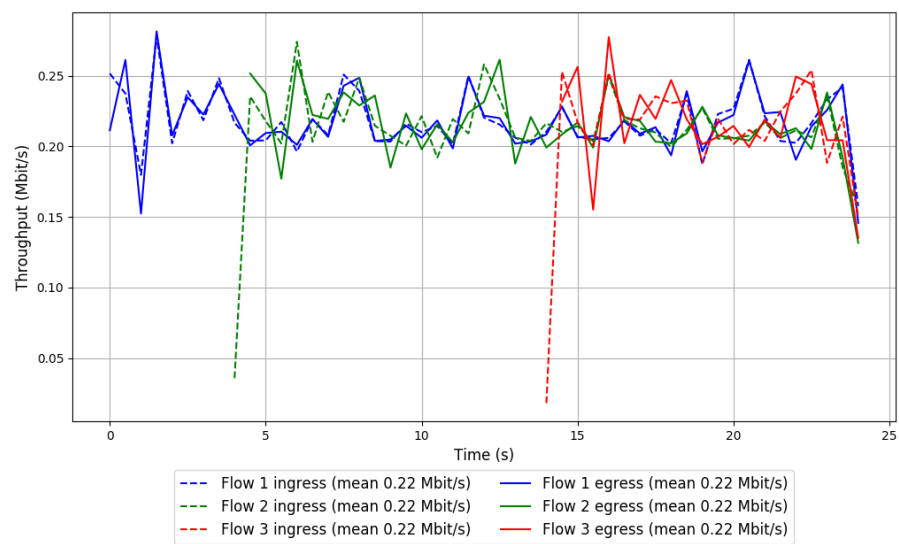


```
Run 10: Statistics of SCReAM

Start at: 2017-10-12 19:30:02
End at: 2017-10-12 19:30:32

# Below is generated by plot.py at 2017-10-12 22:28:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 63.704 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.372 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.729 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.493 ms
Loss rate: 1.10%
```

Run 10: Report of SReAM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2017-10-12 17:31:34

End at: 2017-10-12 17:32:04

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 63.507 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 63.511 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 63.523 ms

Loss rate: 0.67%

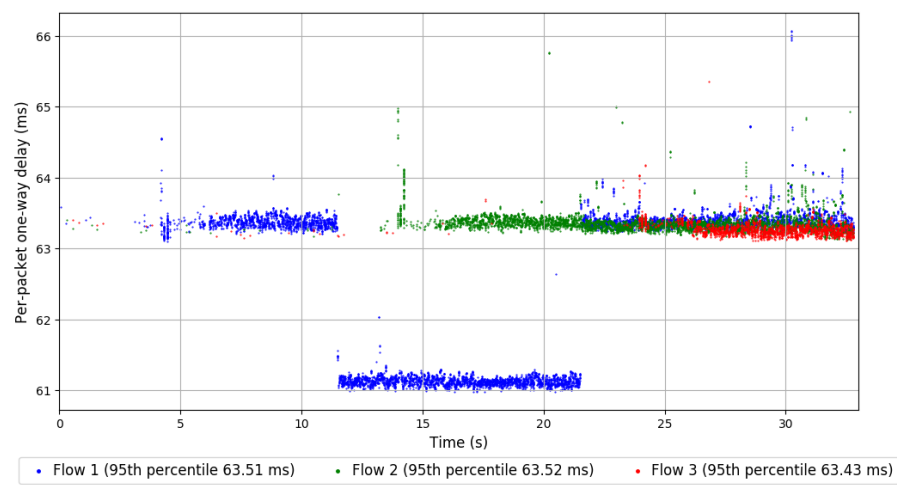
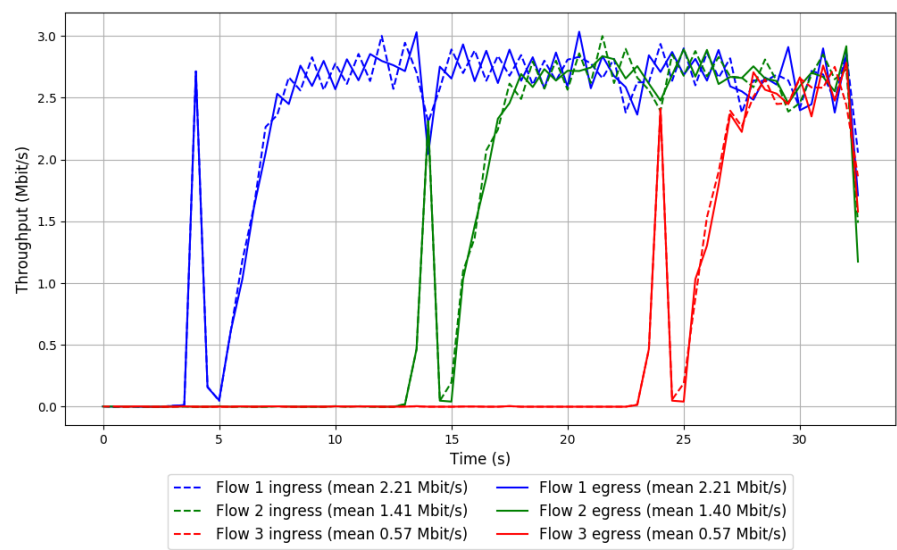
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 63.426 ms

Loss rate: 1.32%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-10-12 17:44:29

End at: 2017-10-12 17:44:59

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 63.394 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 63.328 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 63.428 ms

Loss rate: 0.73%

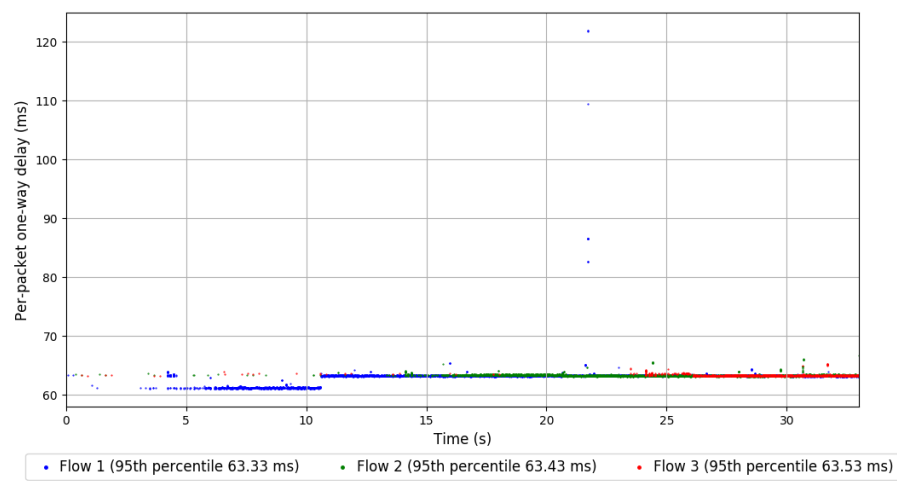
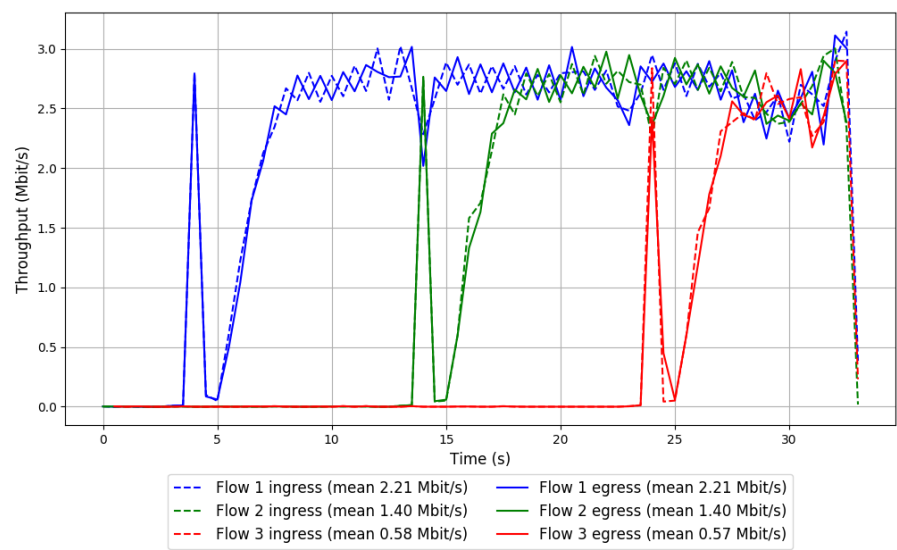
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 63.534 ms

Loss rate: 1.84%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-10-12 17:57:22

End at: 2017-10-12 17:57:52

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 63.685 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 63.264 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 63.744 ms

Loss rate: 0.66%

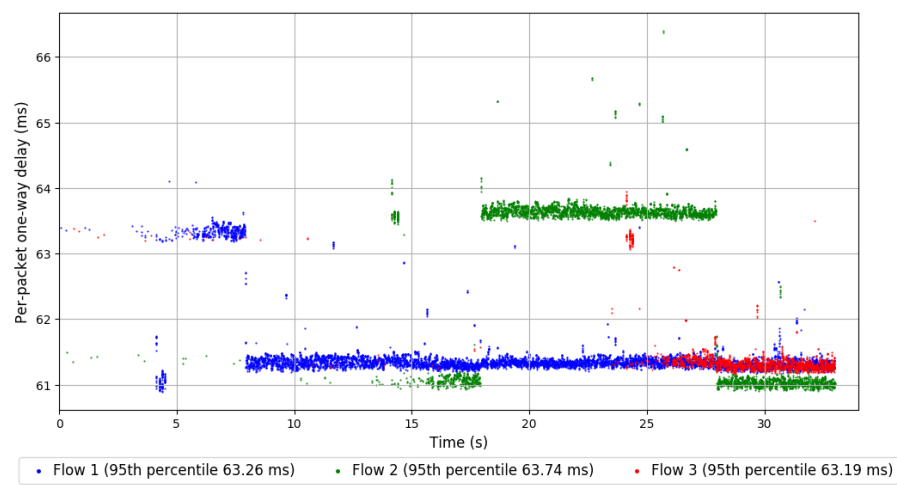
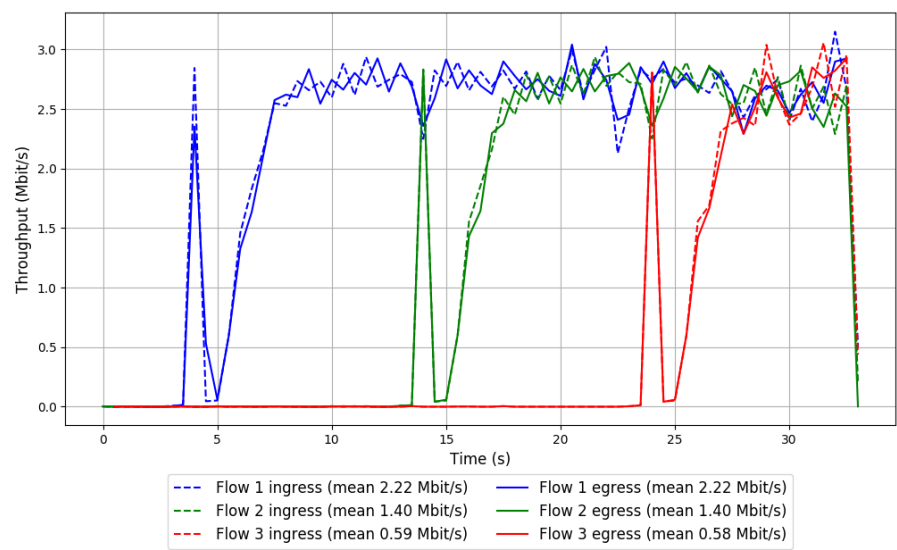
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 63.191 ms

Loss rate: 1.75%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

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

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

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 63.630 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 63.547 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 63.688 ms

Loss rate: 0.89%

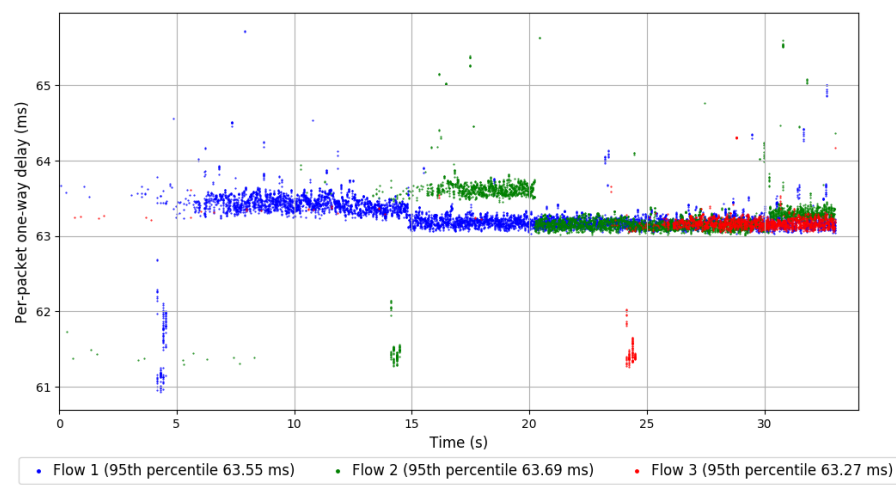
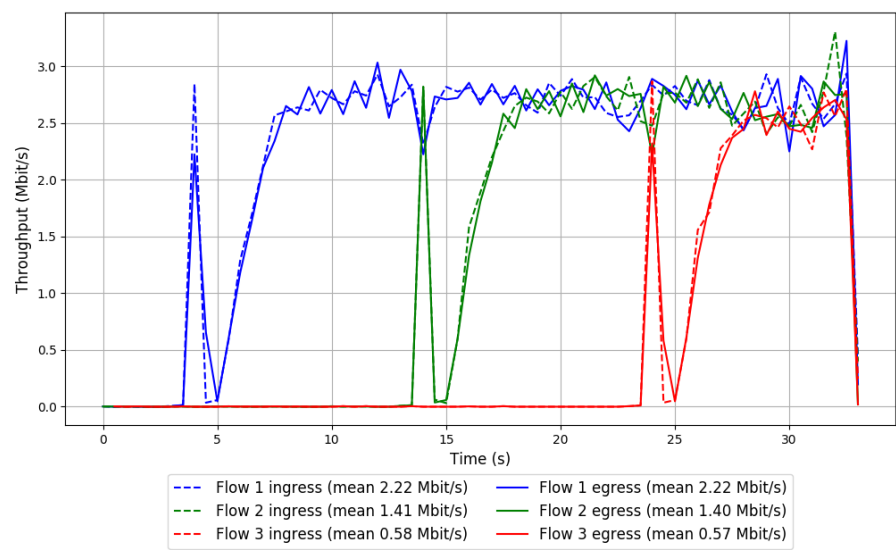
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 63.267 ms

Loss rate: 1.84%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

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

End at: 2017-10-12 18:23:48

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 63.333 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 63.340 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 63.339 ms

Loss rate: 0.71%

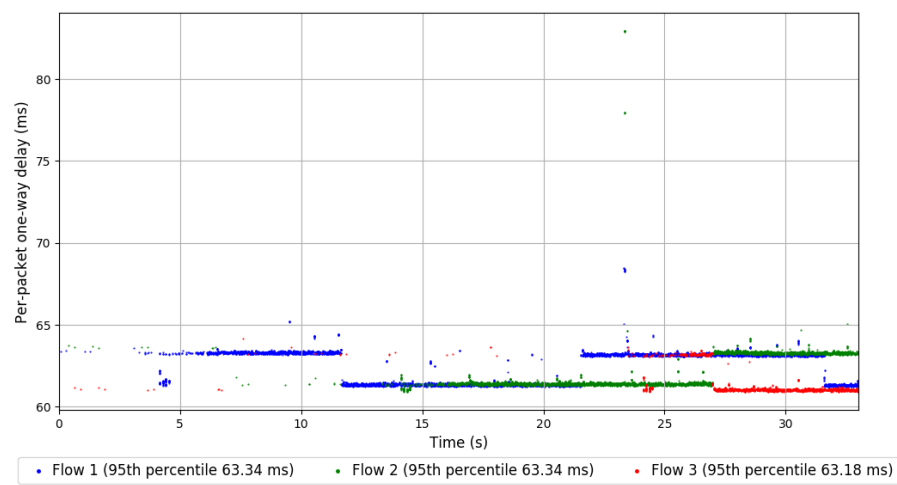
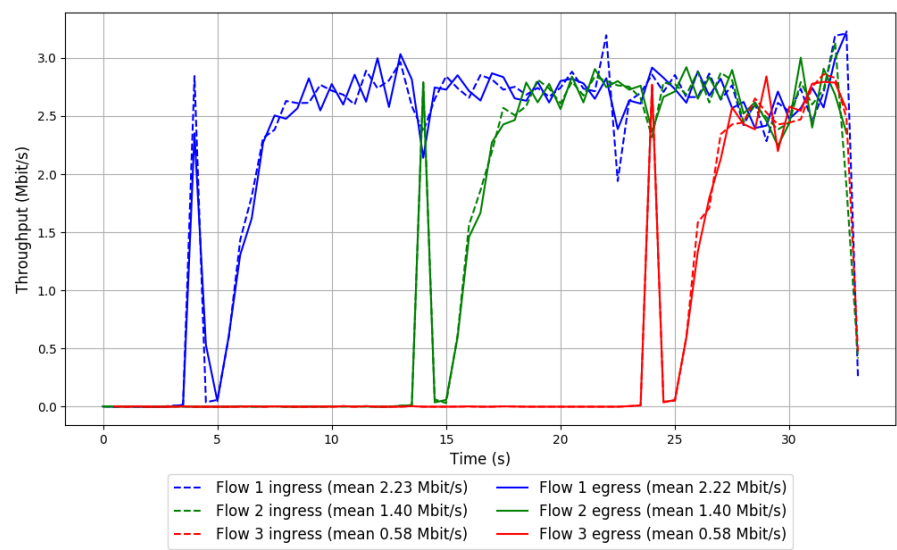
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 63.183 ms

Loss rate: 1.85%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-10-12 18:36:00

End at: 2017-10-12 18:36:30

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.43 Mbit/s

95th percentile per-packet one-way delay: 63.606 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 63.334 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 63.642 ms

Loss rate: 0.95%

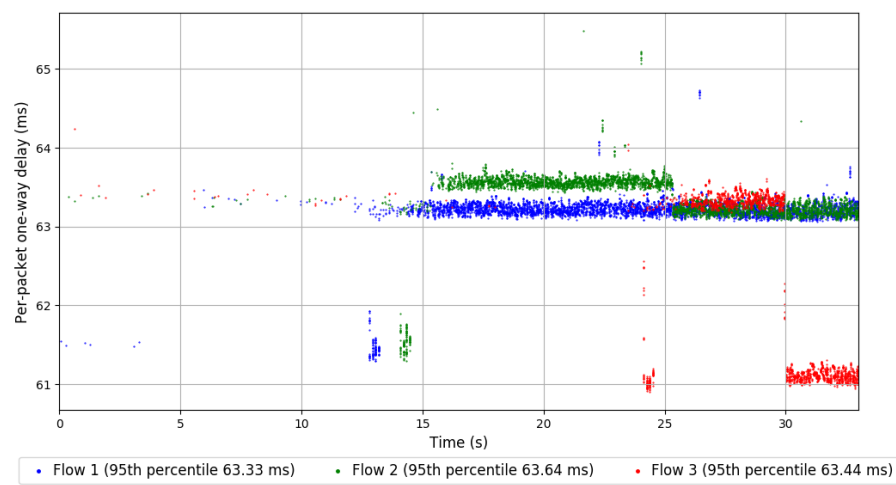
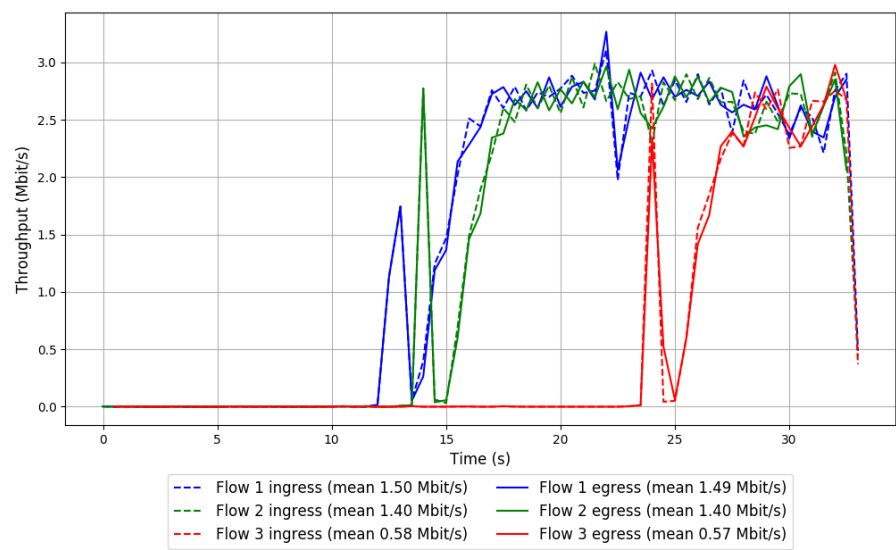
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 63.441 ms

Loss rate: 1.63%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-10-12 18:48:36

End at: 2017-10-12 18:49:06

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 63.434 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 63.457 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 63.406 ms

Loss rate: 0.76%

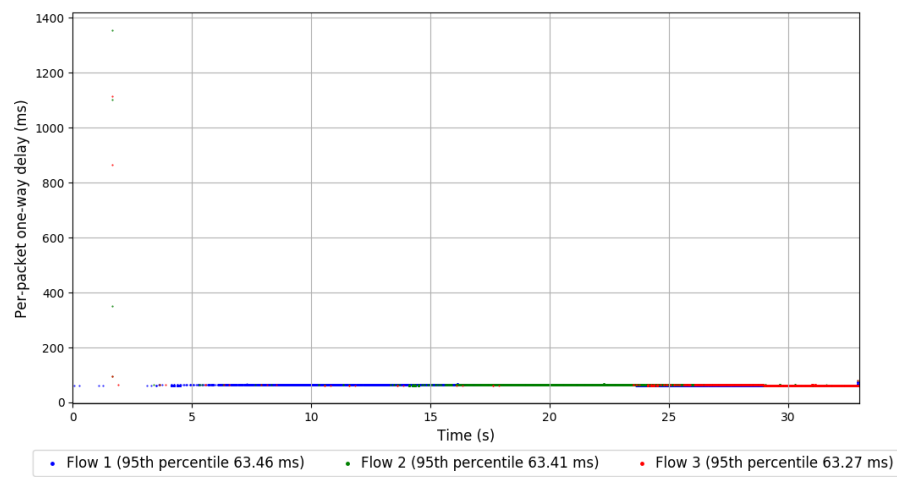
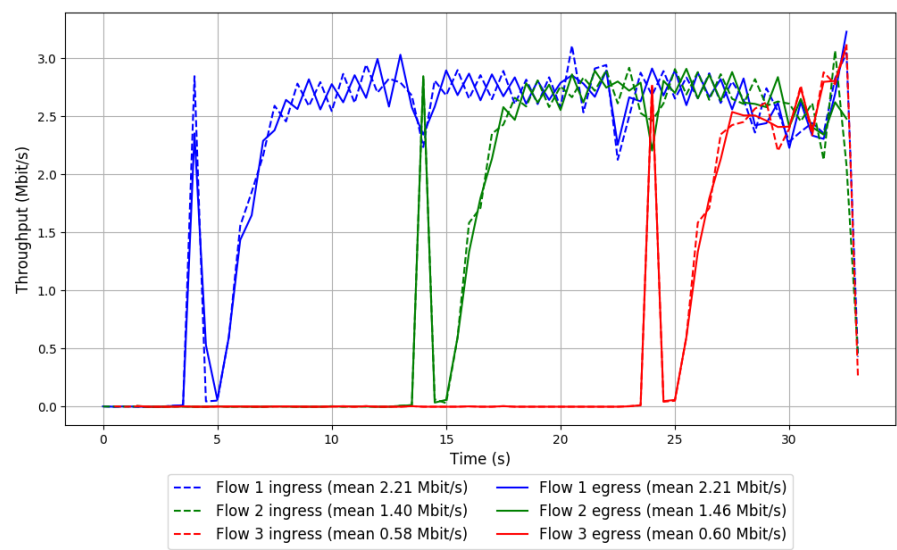
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 63.268 ms

Loss rate: 1.30%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-10-12 19:01:33

End at: 2017-10-12 19:02:03

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 63.528 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 63.565 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 63.384 ms

Loss rate: 0.50%

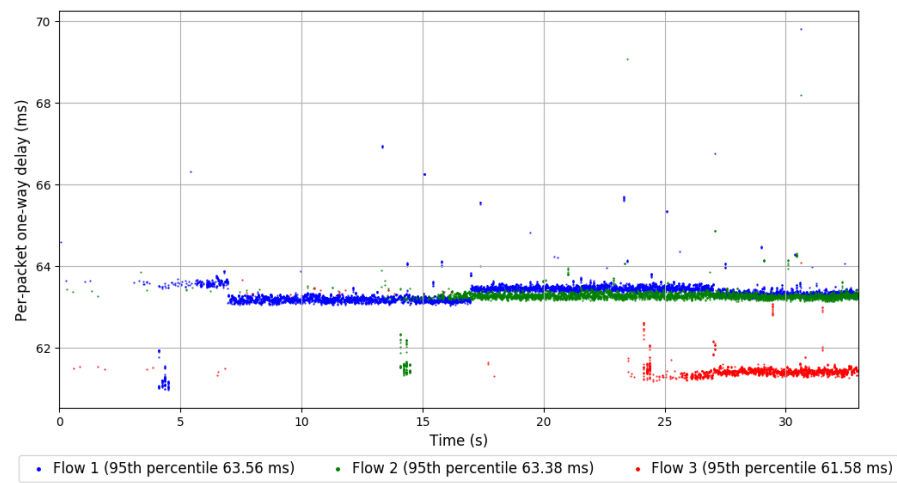
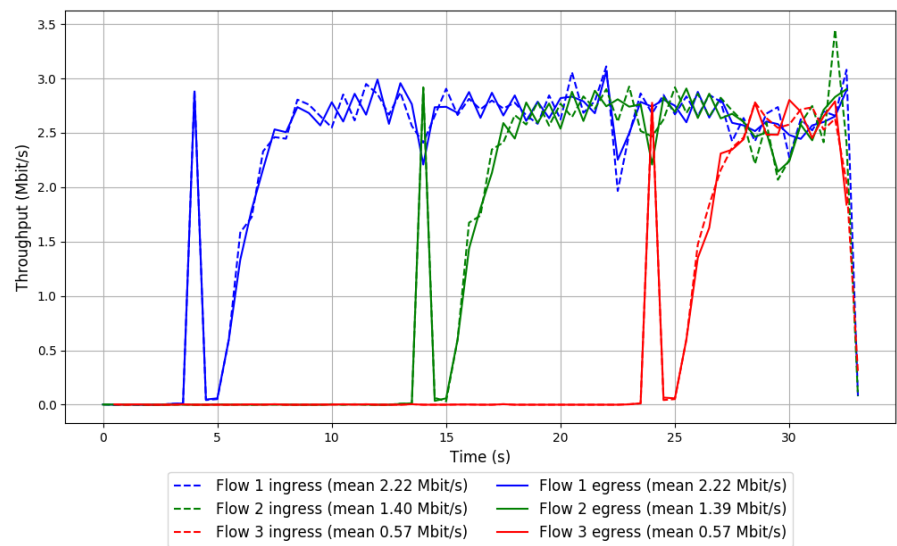
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 61.583 ms

Loss rate: 1.97%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-10-12 19:14:32

End at: 2017-10-12 19:15:02

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.12 Mbit/s

95th percentile per-packet one-way delay: 63.460 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 63.489 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 61.536 ms

Loss rate: 0.72%

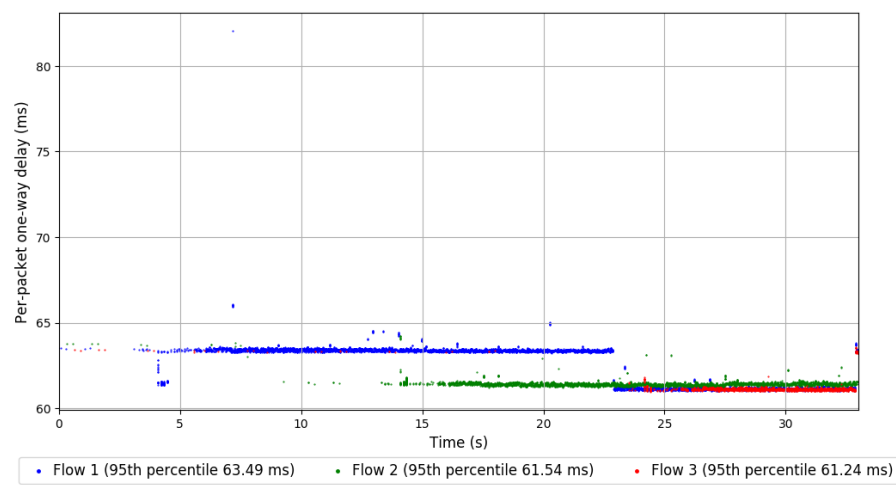
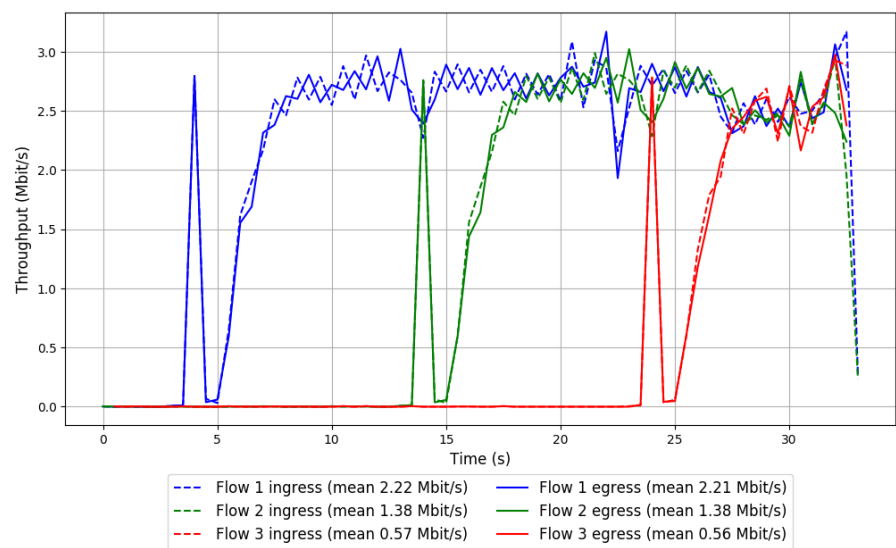
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 61.240 ms

Loss rate: 2.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-10-12 19:27:25

End at: 2017-10-12 19:27:55

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.39 Mbit/s

95th percentile per-packet one-way delay: 63.734 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 63.766 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 63.437 ms

Loss rate: 0.76%

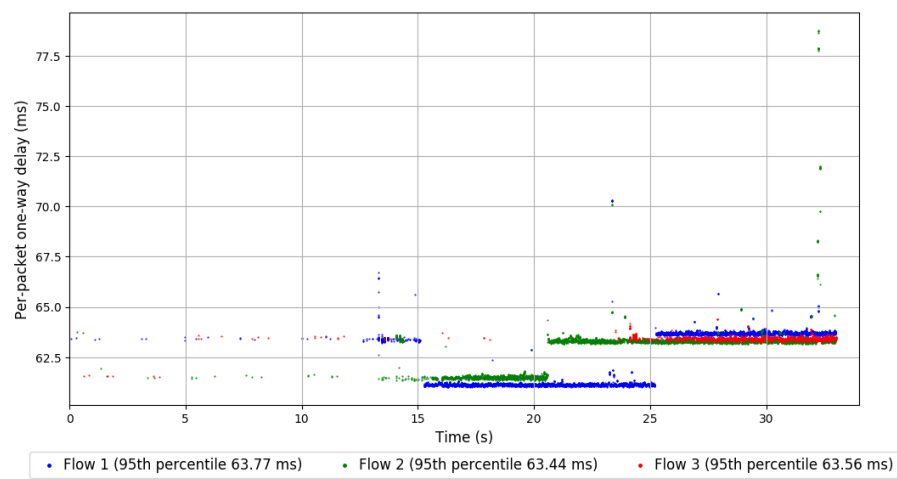
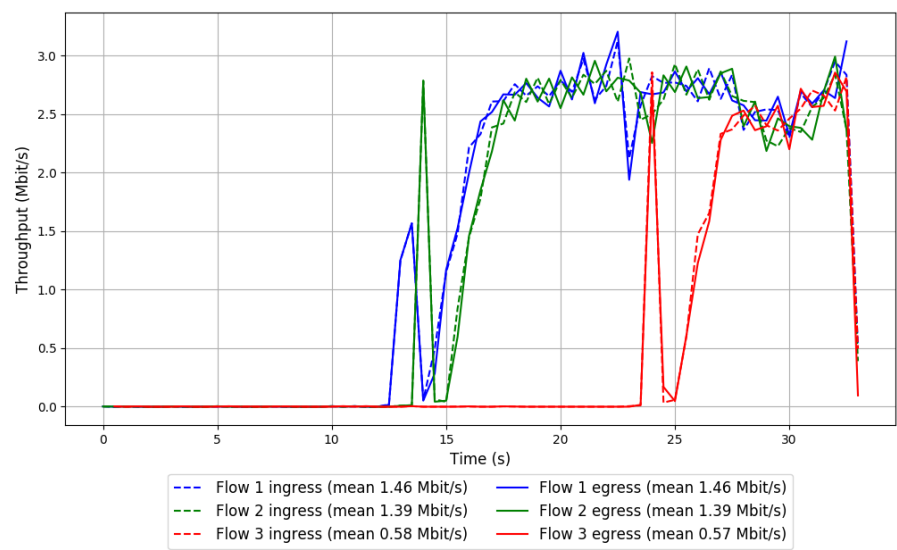
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 63.557 ms

Loss rate: 1.97%

Run 10: Report of WebRTC media — Data Link

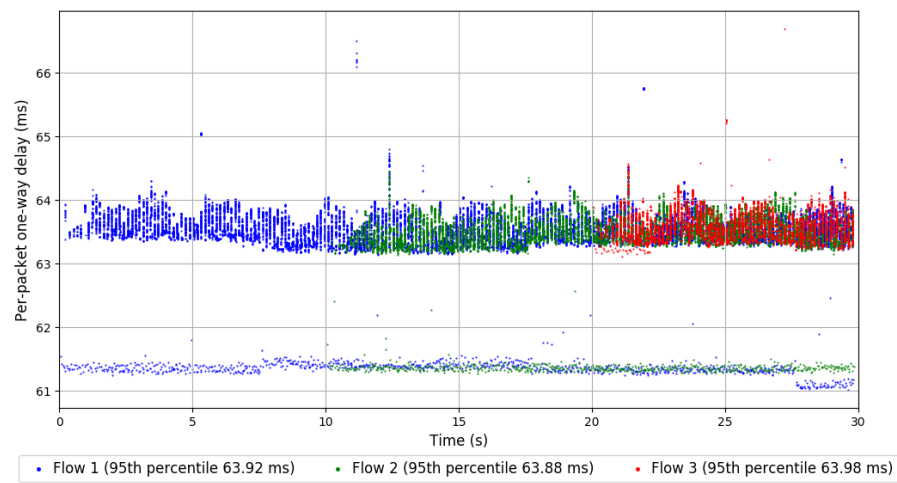
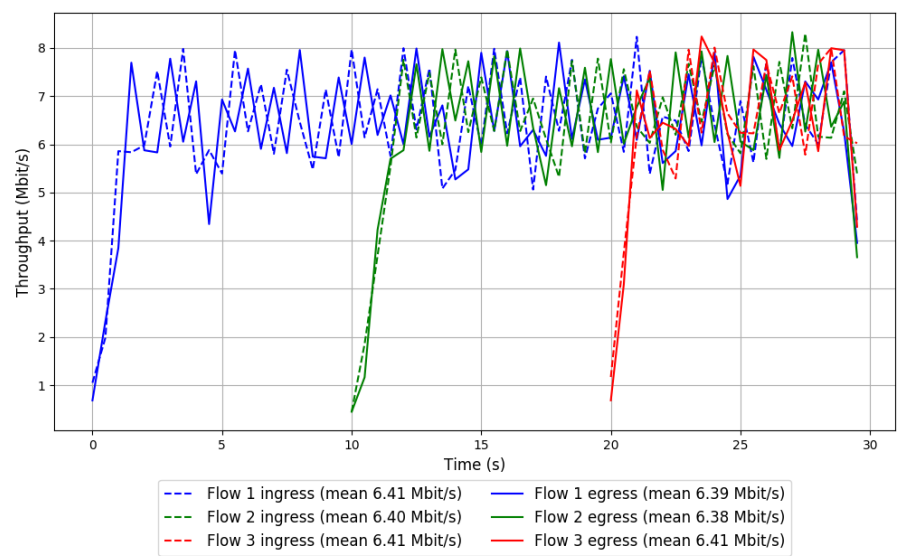


```
Run 1: Statistics of Sprout

Start at: 2017-10-12 17:32:15
End at: 2017-10-12 17:32:45

# Below is generated by plot.py at 2017-10-12 22:28:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.72 Mbit/s
95th percentile per-packet one-way delay: 63.921 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 6.39 Mbit/s
95th percentile per-packet one-way delay: 63.919 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 6.38 Mbit/s
95th percentile per-packet one-way delay: 63.885 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 6.41 Mbit/s
95th percentile per-packet one-way delay: 63.981 ms
Loss rate: 1.54%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-10-12 17:45:10

End at: 2017-10-12 17:45:40

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.96 Mbit/s

95th percentile per-packet one-way delay: 63.895 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 6.58 Mbit/s

95th percentile per-packet one-way delay: 63.929 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 6.40 Mbit/s

95th percentile per-packet one-way delay: 63.883 ms

Loss rate: 0.76%

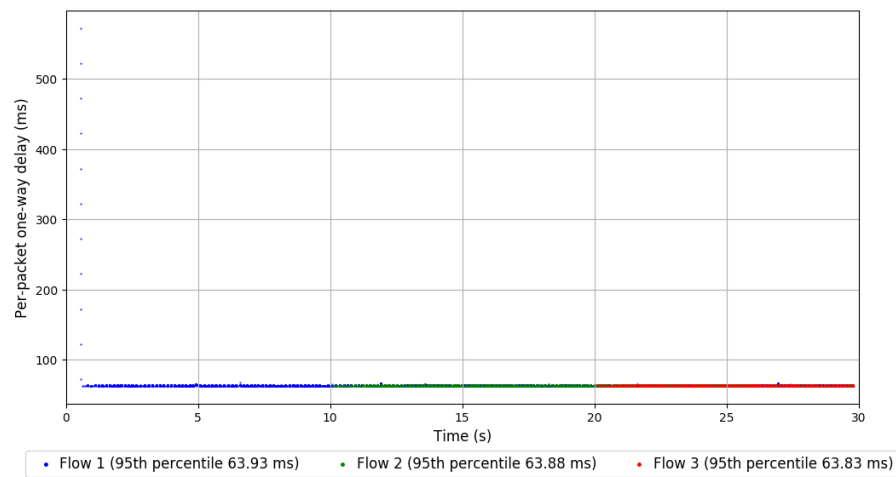
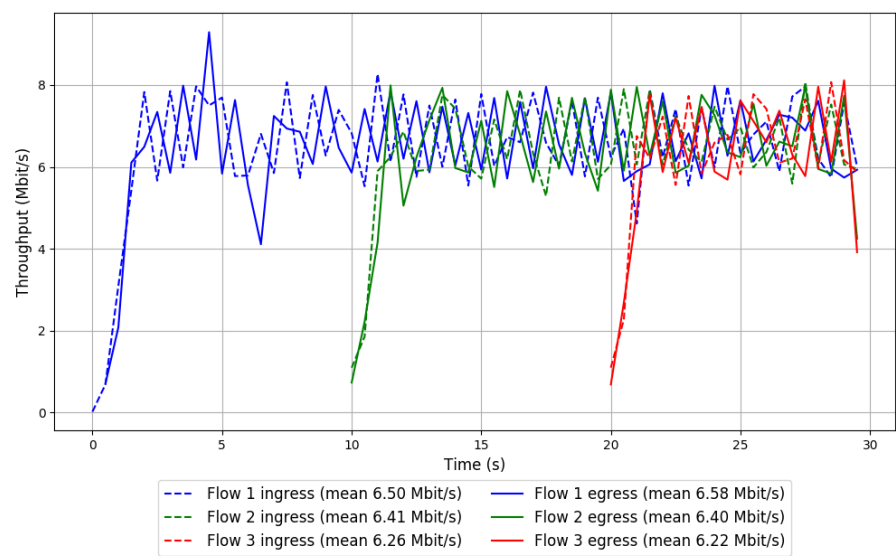
-- Flow 3:

Average throughput: 6.22 Mbit/s

95th percentile per-packet one-way delay: 63.827 ms

Loss rate: 1.60%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-10-12 17:58:03

End at: 2017-10-12 17:58:33

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.89 Mbit/s

95th percentile per-packet one-way delay: 63.770 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 6.67 Mbit/s

95th percentile per-packet one-way delay: 63.772 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 6.27 Mbit/s

95th percentile per-packet one-way delay: 63.746 ms

Loss rate: 0.79%

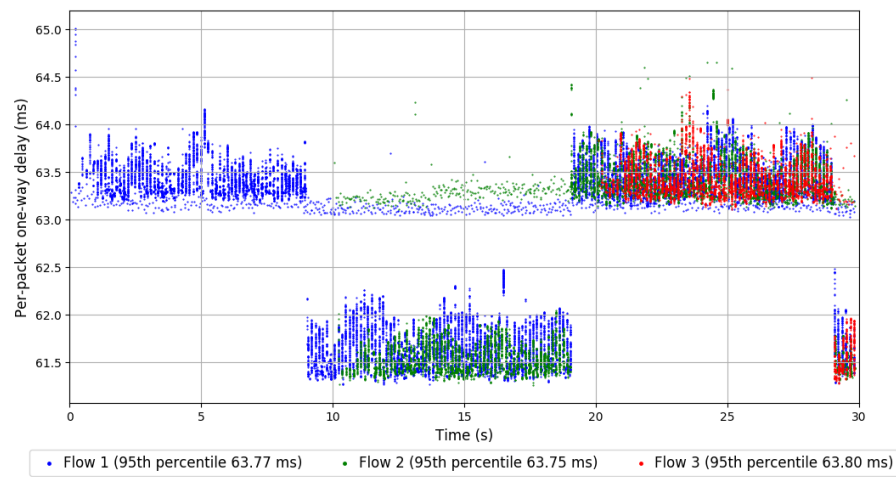
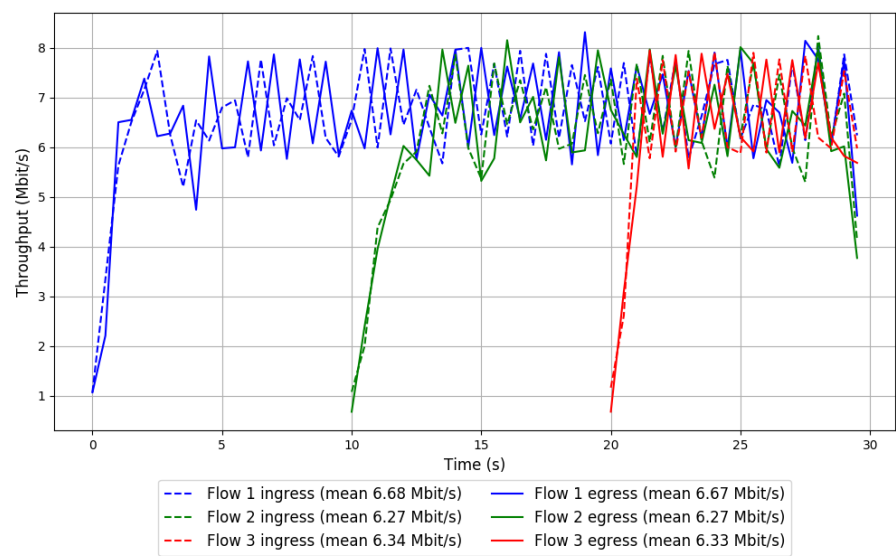
-- Flow 3:

Average throughput: 6.33 Mbit/s

95th percentile per-packet one-way delay: 63.800 ms

Loss rate: 1.66%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-10-12 18:11:06

End at: 2017-10-12 18:11:36

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.03 Mbit/s

95th percentile per-packet one-way delay: 63.038 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 63.089 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 6.62 Mbit/s

95th percentile per-packet one-way delay: 62.140 ms

Loss rate: 0.00%

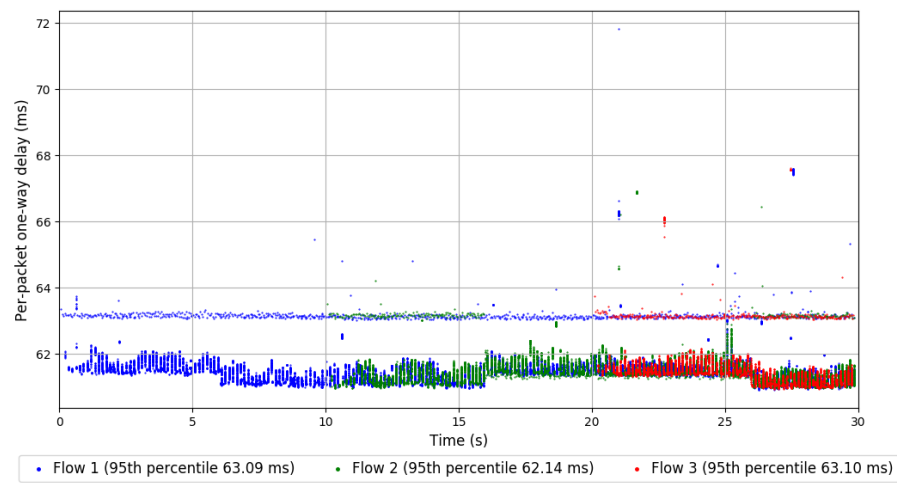
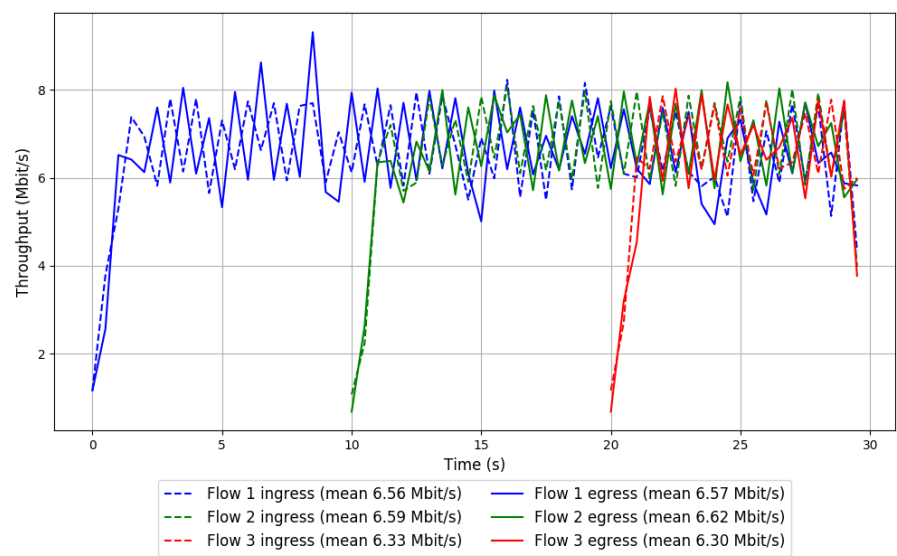
-- Flow 3:

Average throughput: 6.30 Mbit/s

95th percentile per-packet one-way delay: 63.102 ms

Loss rate: 2.01%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-10-12 18:23:59

End at: 2017-10-12 18:24:29

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.83 Mbit/s

95th percentile per-packet one-way delay: 63.713 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 6.49 Mbit/s

95th percentile per-packet one-way delay: 63.679 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 63.806 ms

Loss rate: 0.13%

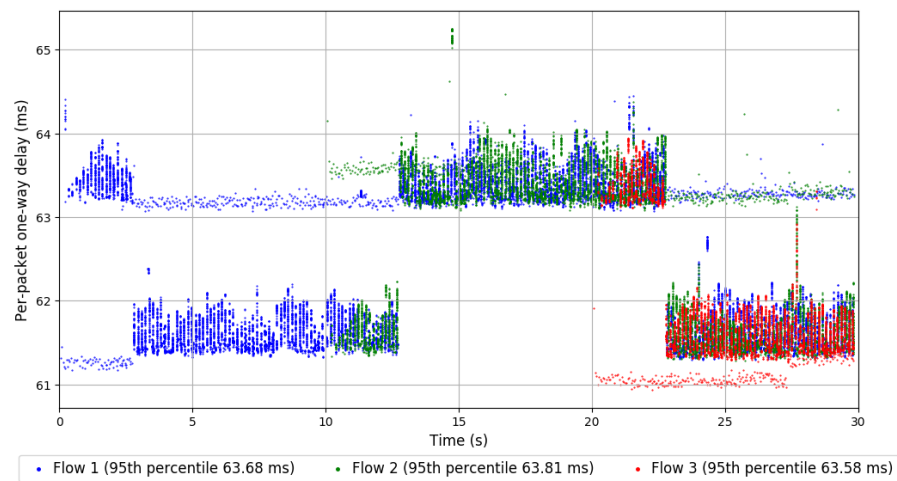
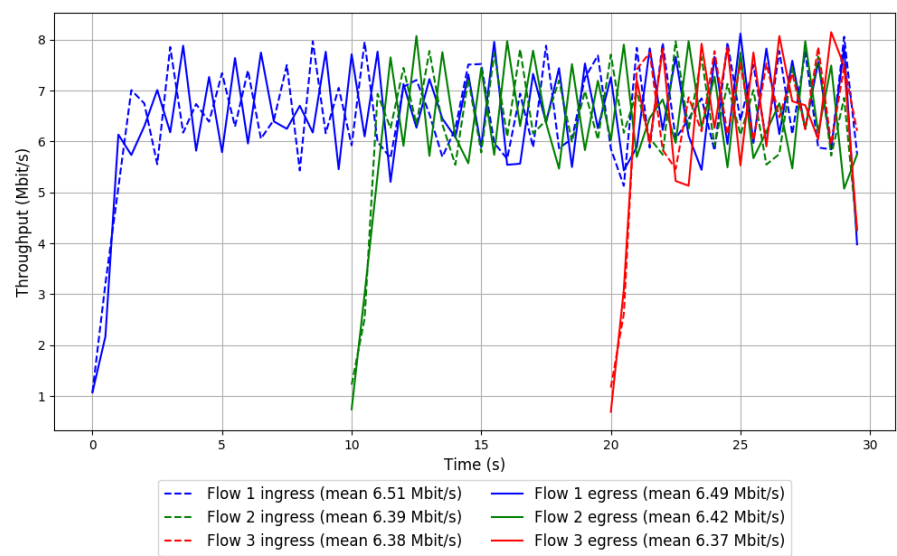
-- Flow 3:

Average throughput: 6.37 Mbit/s

95th percentile per-packet one-way delay: 63.579 ms

Loss rate: 1.58%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-10-12 18:36:41

End at: 2017-10-12 18:37:11

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.87 Mbit/s

95th percentile per-packet one-way delay: 61.737 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 61.770 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 61.683 ms

Loss rate: 0.86%

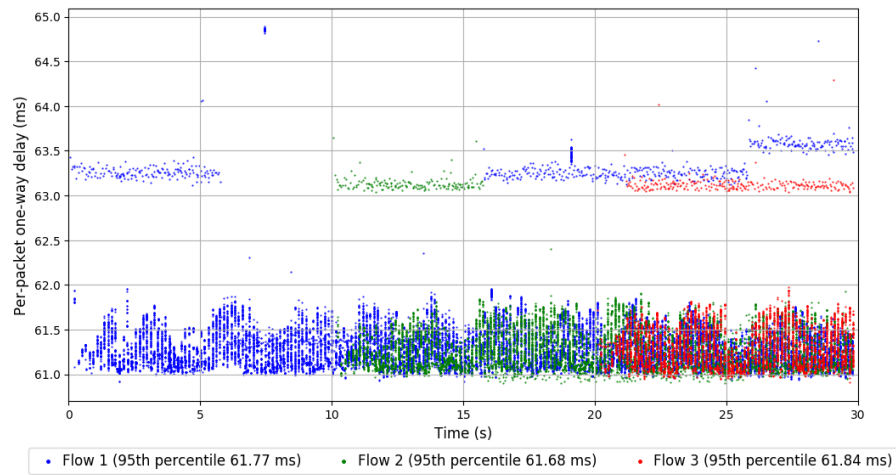
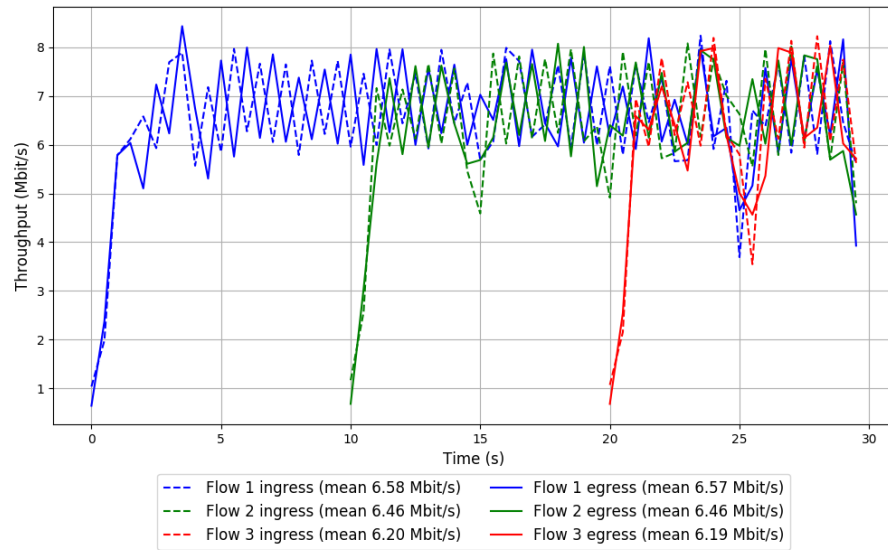
-- Flow 3:

Average throughput: 6.19 Mbit/s

95th percentile per-packet one-way delay: 61.843 ms

Loss rate: 1.61%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-10-12 18:49:17

End at: 2017-10-12 18:49:47

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.09 Mbit/s

95th percentile per-packet one-way delay: 63.605 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 6.67 Mbit/s

95th percentile per-packet one-way delay: 63.452 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 63.670 ms

Loss rate: 0.75%

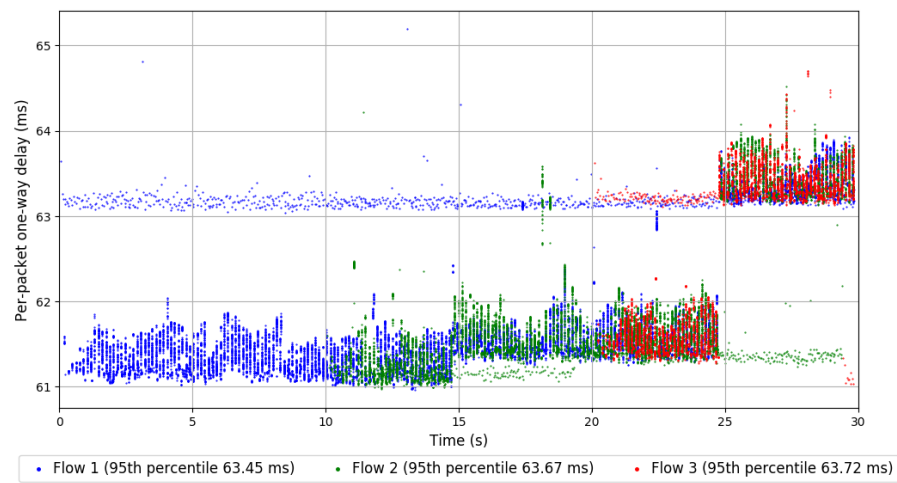
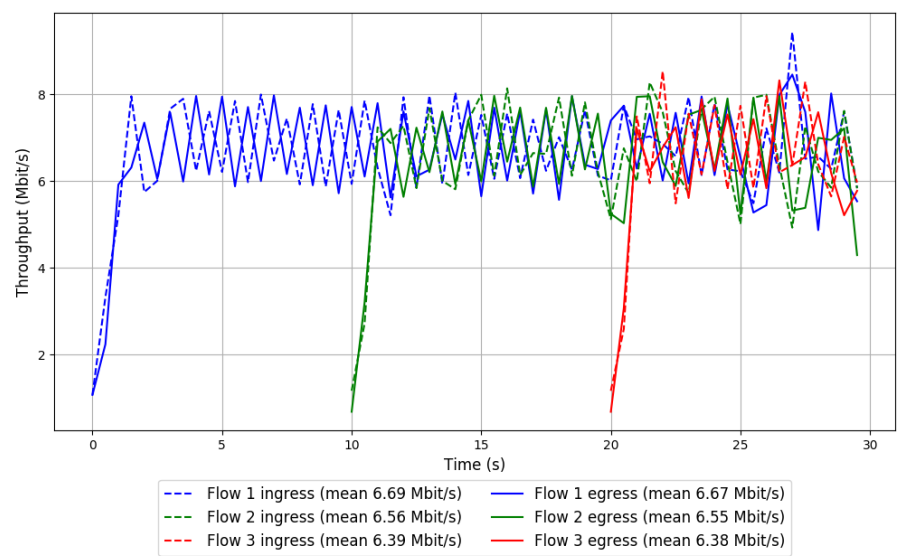
-- Flow 3:

Average throughput: 6.38 Mbit/s

95th percentile per-packet one-way delay: 63.720 ms

Loss rate: 1.59%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-10-12 19:02:14

End at: 2017-10-12 19:02:44

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.95 Mbit/s

95th percentile per-packet one-way delay: 62.100 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 62.041 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 6.45 Mbit/s

95th percentile per-packet one-way delay: 63.149 ms

Loss rate: 0.73%

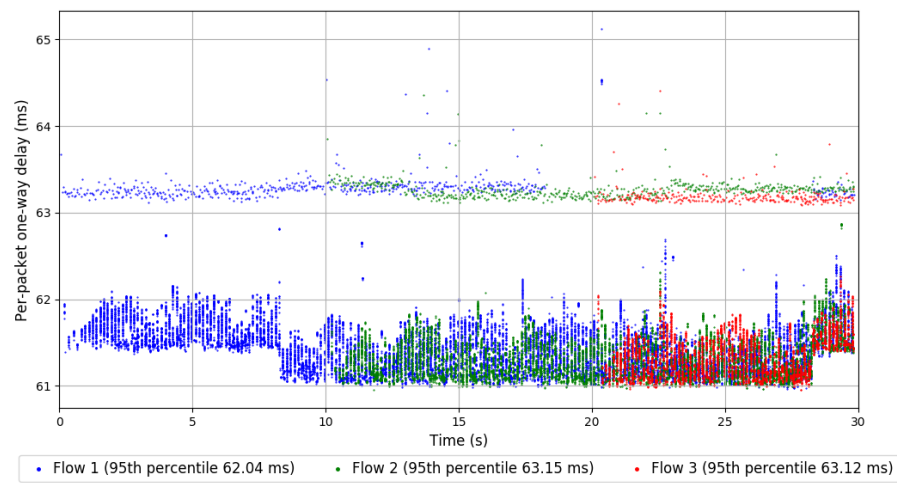
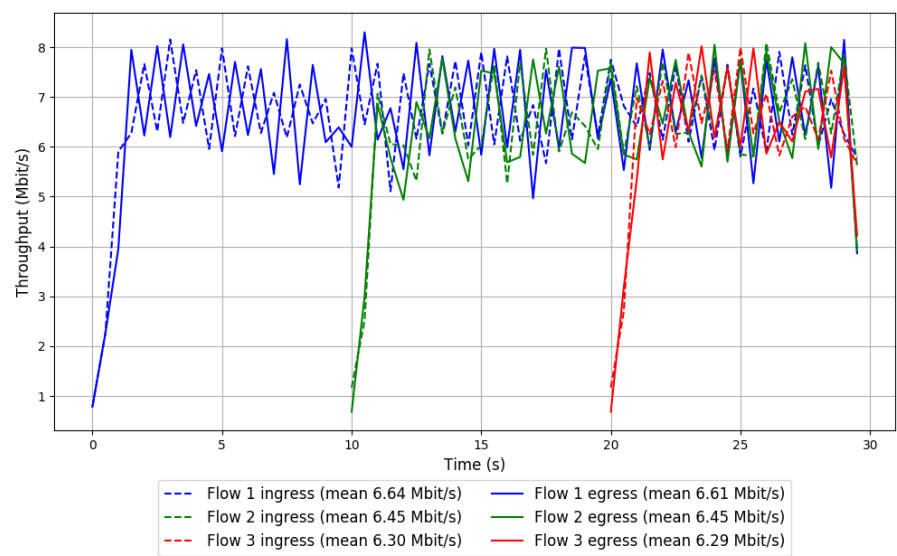
-- Flow 3:

Average throughput: 6.29 Mbit/s

95th percentile per-packet one-way delay: 63.120 ms

Loss rate: 1.38%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-10-12 19:15:13

End at: 2017-10-12 19:15:43

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.82 Mbit/s

95th percentile per-packet one-way delay: 62.283 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 62.166 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 63.490 ms

Loss rate: 0.46%

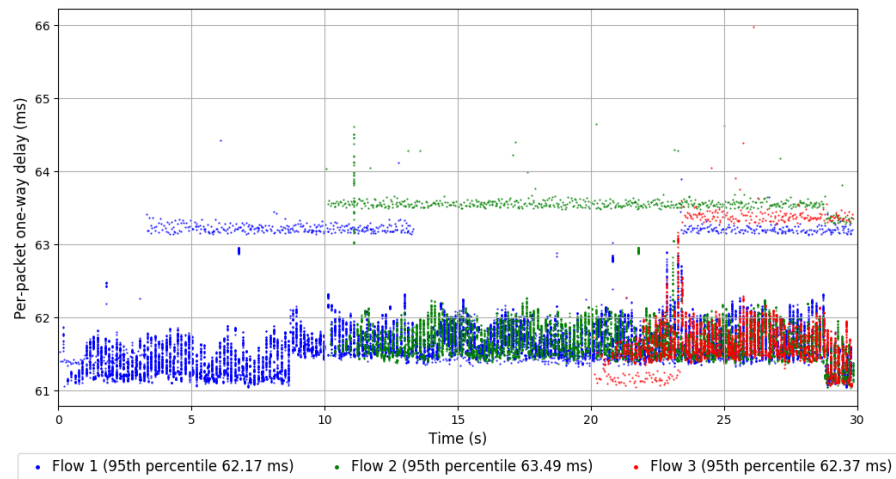
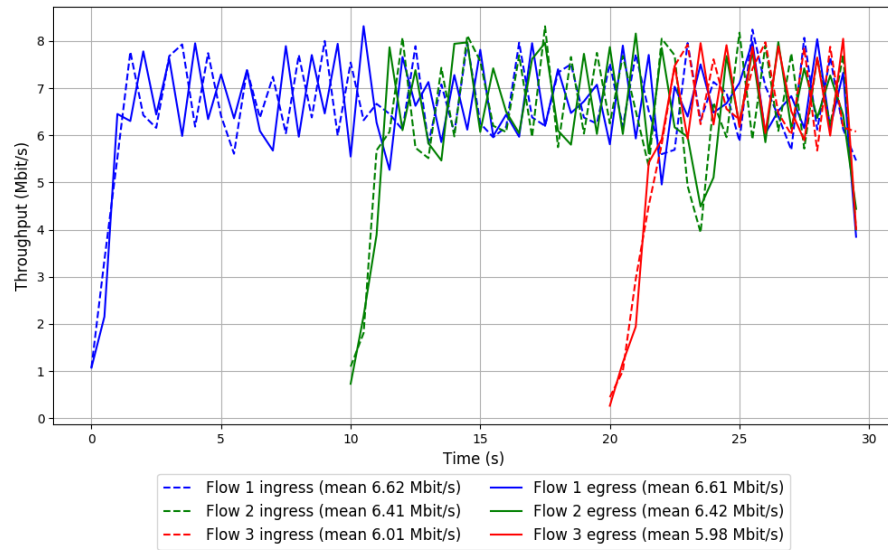
-- Flow 3:

Average throughput: 5.98 Mbit/s

95th percentile per-packet one-way delay: 62.370 ms

Loss rate: 1.75%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-10-12 19:28:06

End at: 2017-10-12 19:28:36

Below is generated by plot.py at 2017-10-12 22:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.84 Mbit/s

95th percentile per-packet one-way delay: 63.934 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 6.58 Mbit/s

95th percentile per-packet one-way delay: 63.915 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 6.45 Mbit/s

95th percentile per-packet one-way delay: 63.947 ms

Loss rate: 0.56%

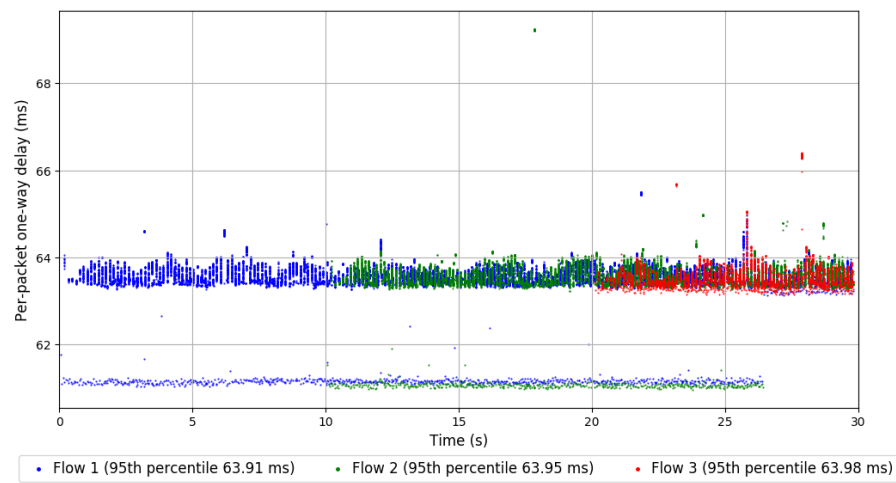
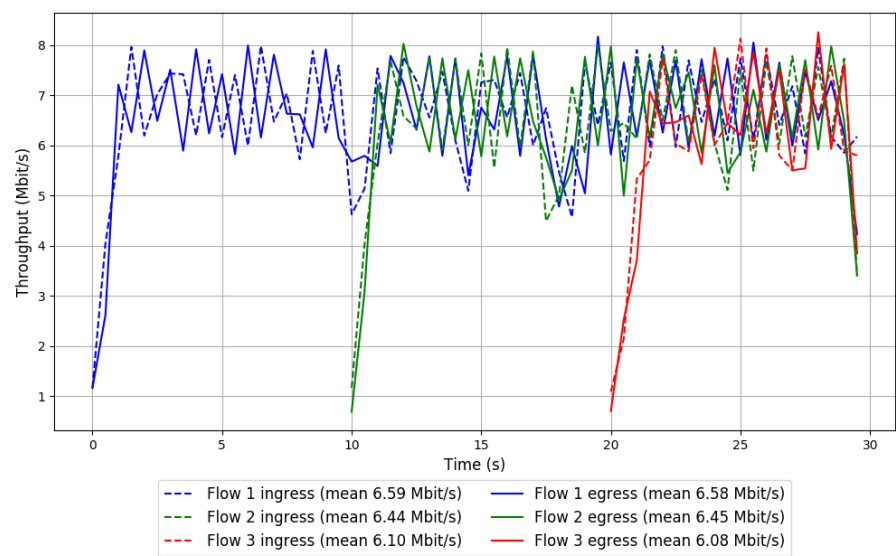
-- Flow 3:

Average throughput: 6.08 Mbit/s

95th percentile per-packet one-way delay: 63.976 ms

Loss rate: 2.01%

Run 10: Report of Sprout — Data Link

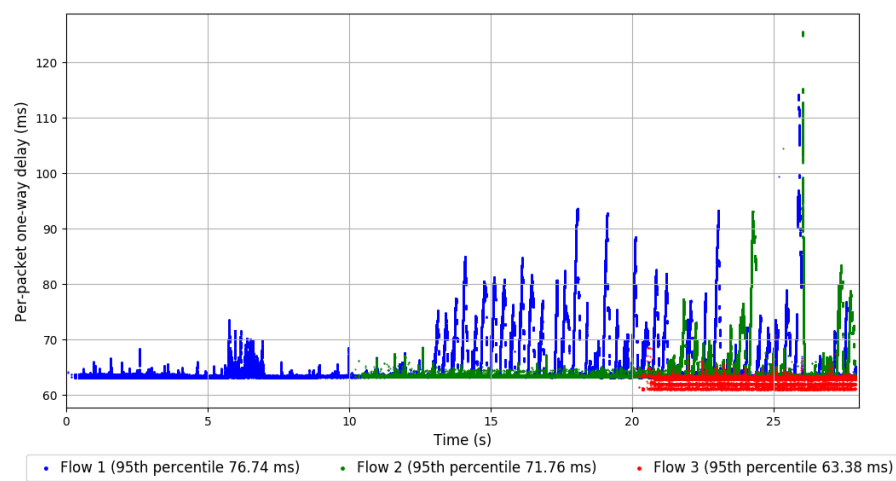
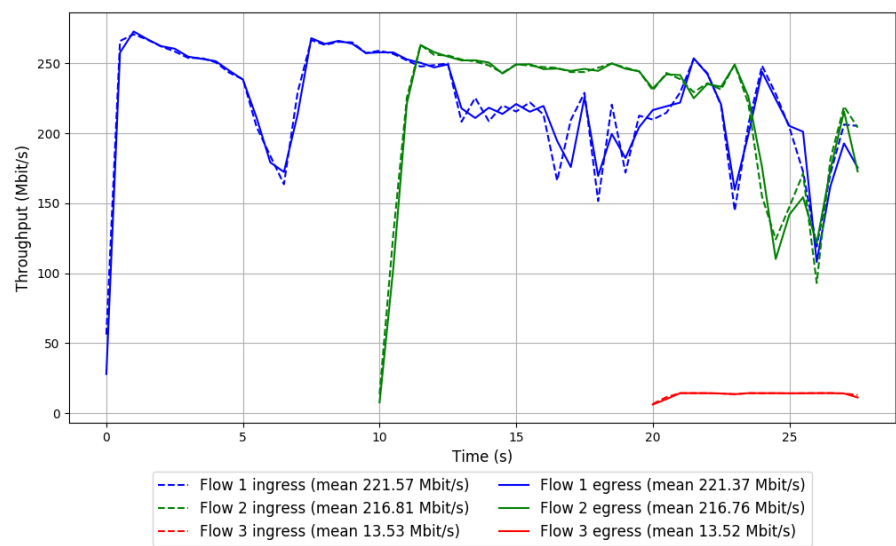


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-10-12 17:32:56
End at: 2017-10-12 17:33:26

# Below is generated by plot.py at 2017-10-12 22:31:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 363.94 Mbit/s
95th percentile per-packet one-way delay: 75.145 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 221.37 Mbit/s
95th percentile per-packet one-way delay: 76.736 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 216.76 Mbit/s
95th percentile per-packet one-way delay: 71.757 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 13.52 Mbit/s
95th percentile per-packet one-way delay: 63.380 ms
Loss rate: 1.67%
```


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

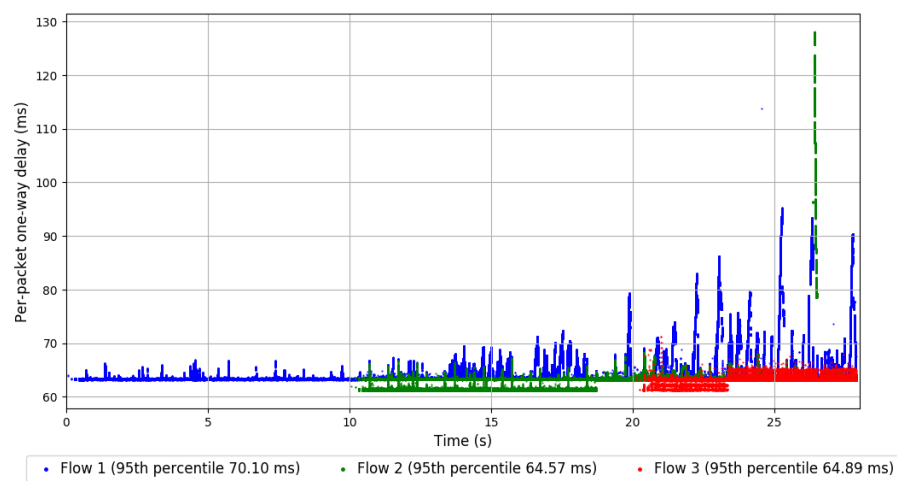
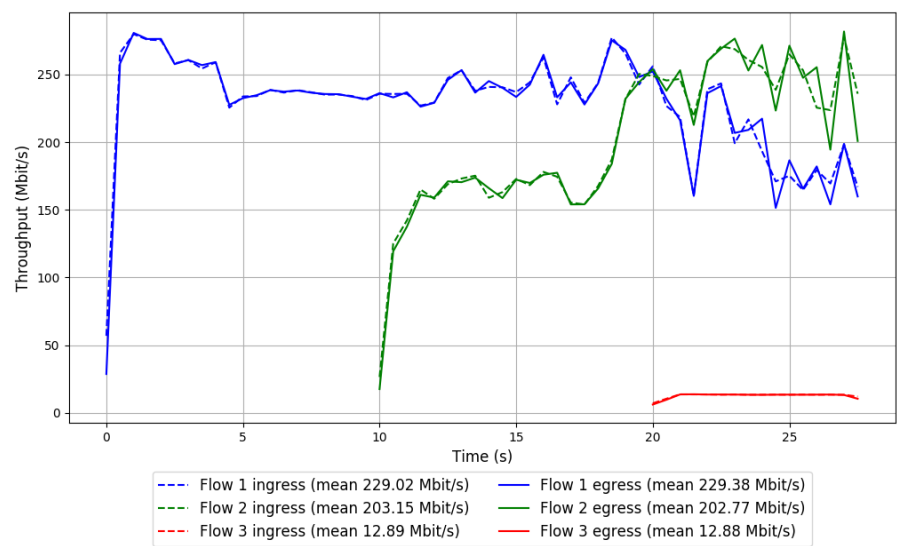


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-10-12 17:45:51
End at: 2017-10-12 17:46:21

# Below is generated by plot.py at 2017-10-12 22:31:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 362.79 Mbit/s
95th percentile per-packet one-way delay: 68.183 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 229.38 Mbit/s
95th percentile per-packet one-way delay: 70.096 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 202.77 Mbit/s
95th percentile per-packet one-way delay: 64.568 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 12.88 Mbit/s
95th percentile per-packet one-way delay: 64.893 ms
Loss rate: 1.63%
```

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

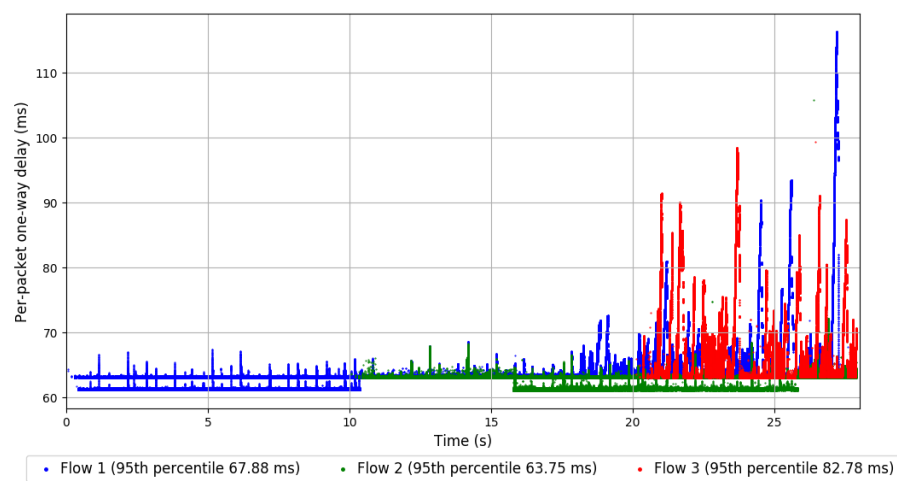
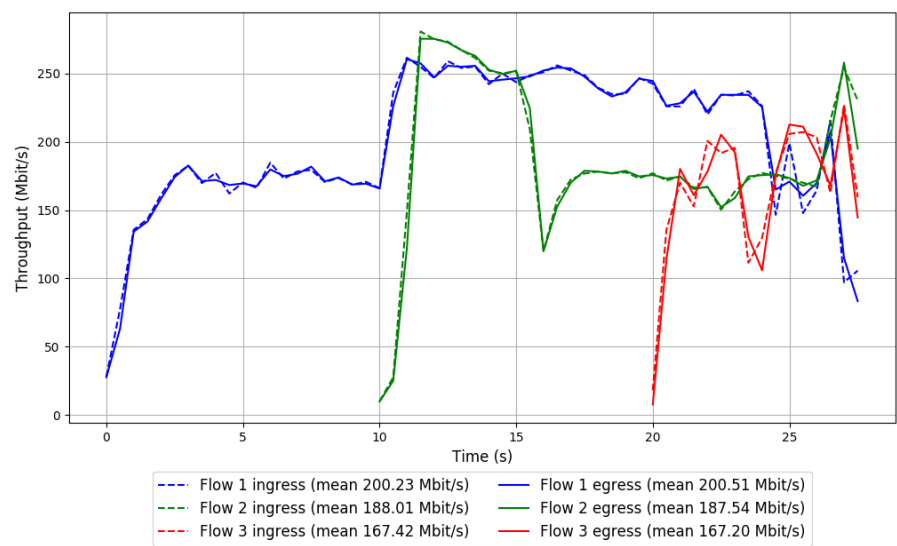


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-10-12 17:58:44
End at: 2017-10-12 17:59:14

# Below is generated by plot.py at 2017-10-12 22:31:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 367.34 Mbit/s
95th percentile per-packet one-way delay: 69.699 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 200.51 Mbit/s
95th percentile per-packet one-way delay: 67.880 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 187.54 Mbit/s
95th percentile per-packet one-way delay: 63.750 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 167.20 Mbit/s
95th percentile per-packet one-way delay: 82.783 ms
Loss rate: 1.75%
```

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

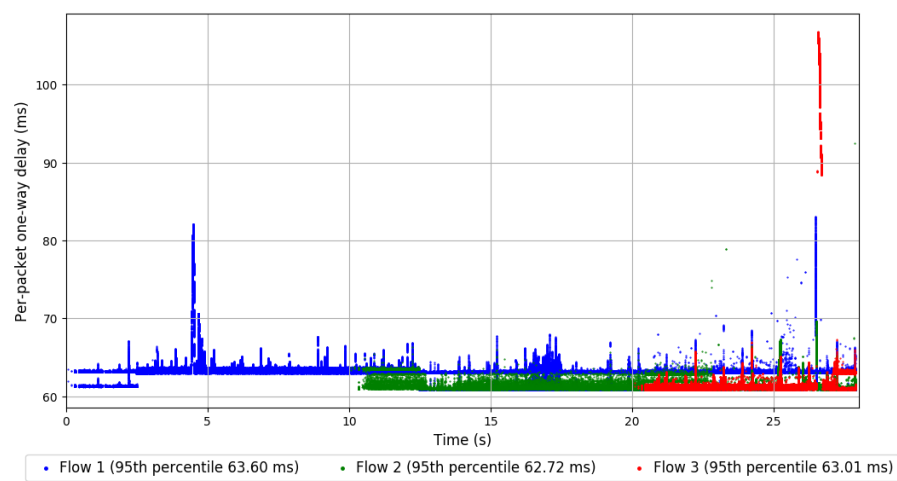
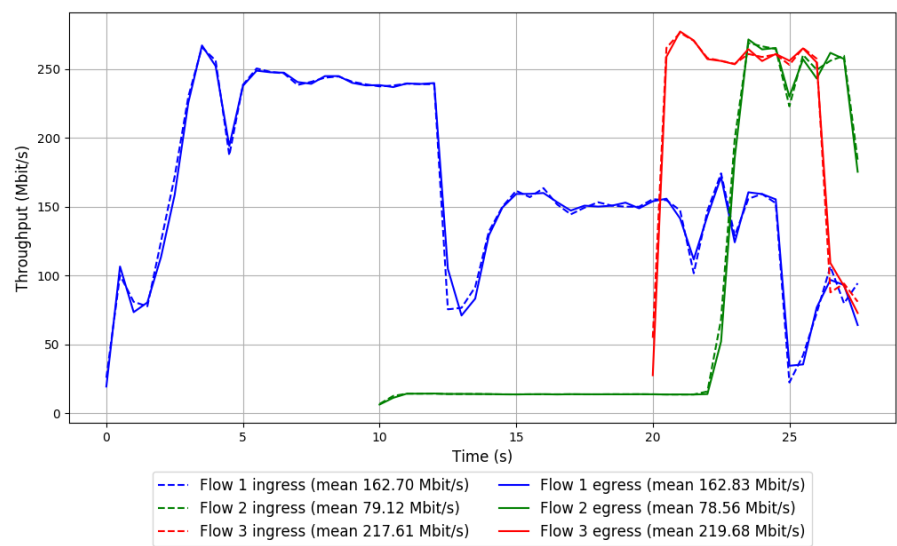


```
Run 4: Statistics of TaoVA-100x

Start at: 2017-10-12 18:11:48
End at: 2017-10-12 18:12:18

# Below is generated by plot.py at 2017-10-12 22:31:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 274.78 Mbit/s
95th percentile per-packet one-way delay: 63.584 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 162.83 Mbit/s
95th percentile per-packet one-way delay: 63.601 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 78.56 Mbit/s
95th percentile per-packet one-way delay: 62.717 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 219.68 Mbit/s
95th percentile per-packet one-way delay: 63.013 ms
Loss rate: 0.62%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-10-12 18:24:41

End at: 2017-10-12 18:25:11

Below is generated by plot.py at 2017-10-12 22:31:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 327.39 Mbit/s

95th percentile per-packet one-way delay: 63.521 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 161.45 Mbit/s

95th percentile per-packet one-way delay: 63.126 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 195.50 Mbit/s

95th percentile per-packet one-way delay: 63.595 ms

Loss rate: 0.46%

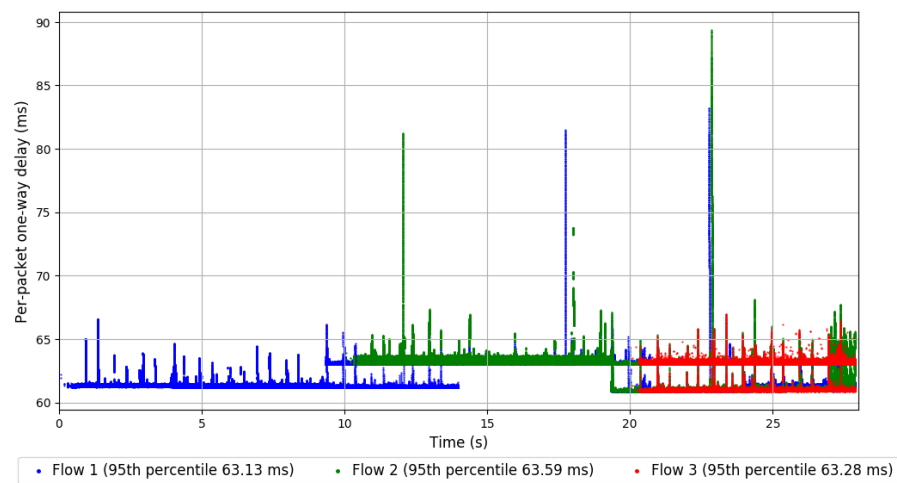
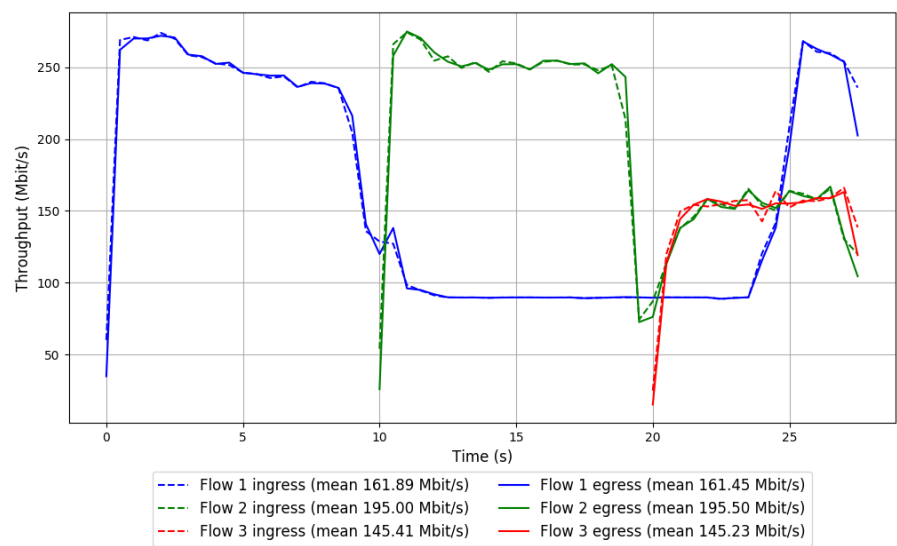
-- Flow 3:

Average throughput: 145.23 Mbit/s

95th percentile per-packet one-way delay: 63.281 ms

Loss rate: 1.71%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-10-12 18:37:22

End at: 2017-10-12 18:37:52

Below is generated by plot.py at 2017-10-12 22:31:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 220.96 Mbit/s

95th percentile per-packet one-way delay: 65.913 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 58.13 Mbit/s

95th percentile per-packet one-way delay: 78.871 ms

Loss rate: 1.27%

-- Flow 2:

Average throughput: 237.14 Mbit/s

95th percentile per-packet one-way delay: 61.954 ms

Loss rate: 0.71%

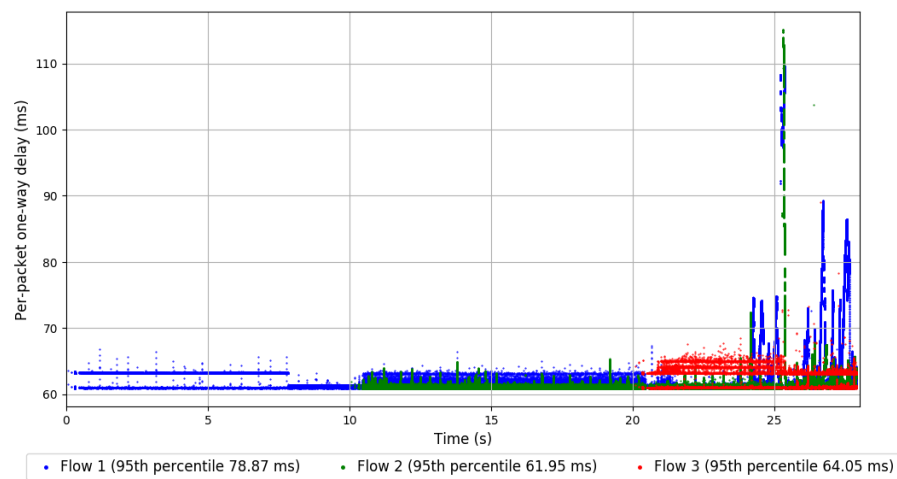
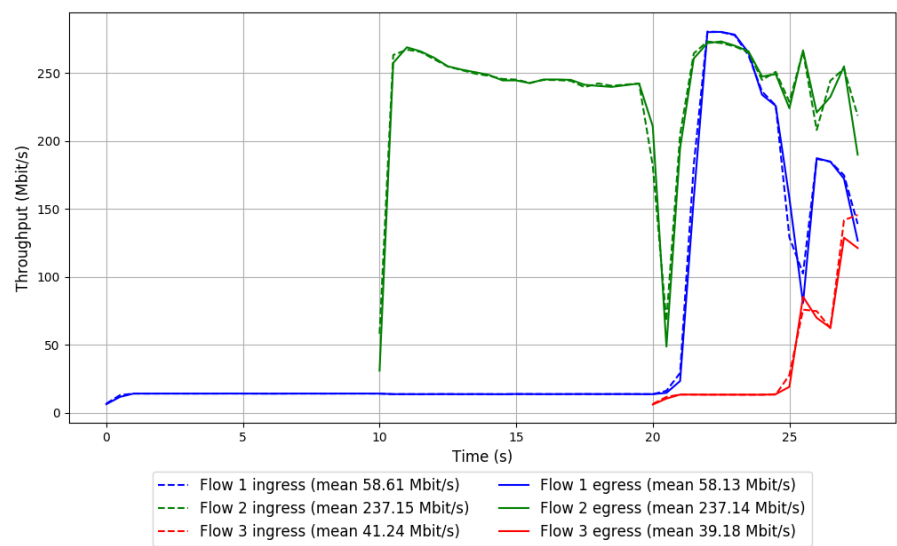
-- Flow 3:

Average throughput: 39.18 Mbit/s

95th percentile per-packet one-way delay: 64.052 ms

Loss rate: 6.49%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-10-12 18:49:59

End at: 2017-10-12 18:50:29

Below is generated by plot.py at 2017-10-12 22:36:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 330.45 Mbit/s

95th percentile per-packet one-way delay: 67.045 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 149.34 Mbit/s

95th percentile per-packet one-way delay: 63.556 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 223.82 Mbit/s

95th percentile per-packet one-way delay: 72.114 ms

Loss rate: 0.20%

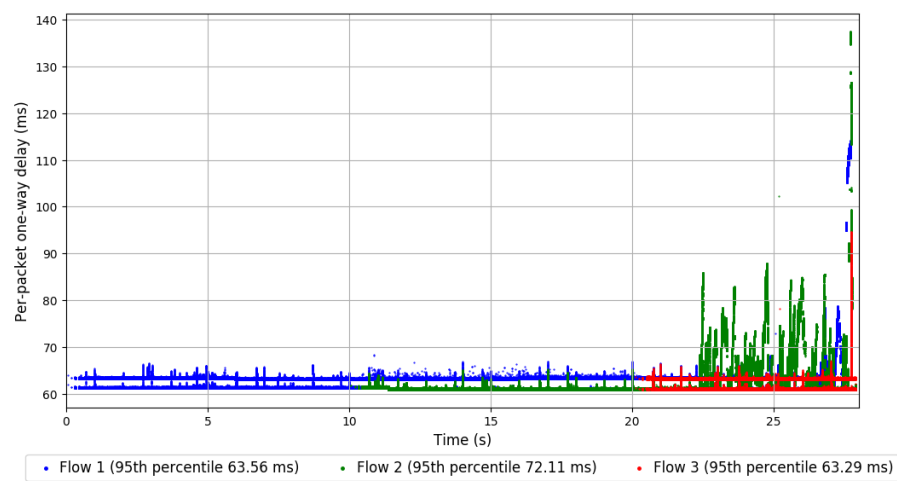
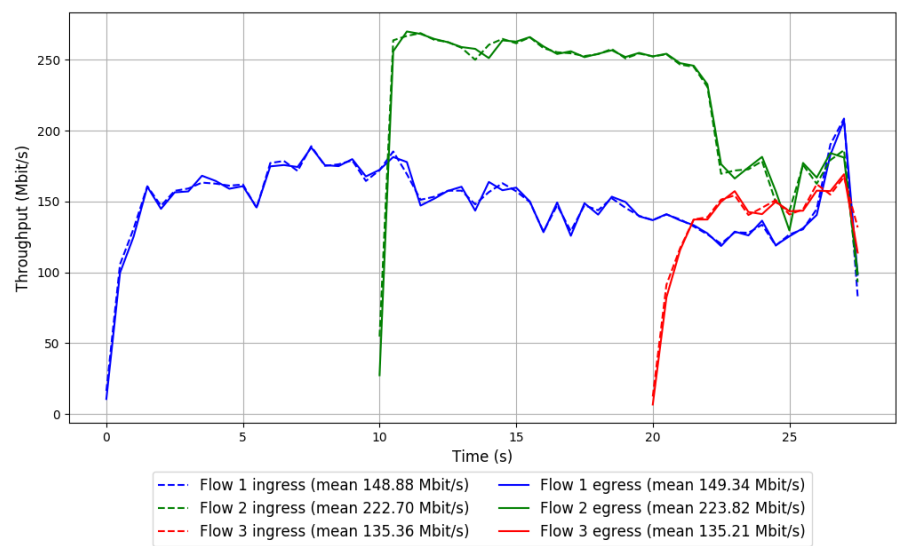
-- Flow 3:

Average throughput: 135.21 Mbit/s

95th percentile per-packet one-way delay: 63.294 ms

Loss rate: 1.68%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-10-12 19:02:55

End at: 2017-10-12 19:03:25

Below is generated by plot.py at 2017-10-12 22:40:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 396.12 Mbit/s

95th percentile per-packet one-way delay: 64.474 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 216.42 Mbit/s

95th percentile per-packet one-way delay: 64.161 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 222.91 Mbit/s

95th percentile per-packet one-way delay: 65.271 ms

Loss rate: 0.29%

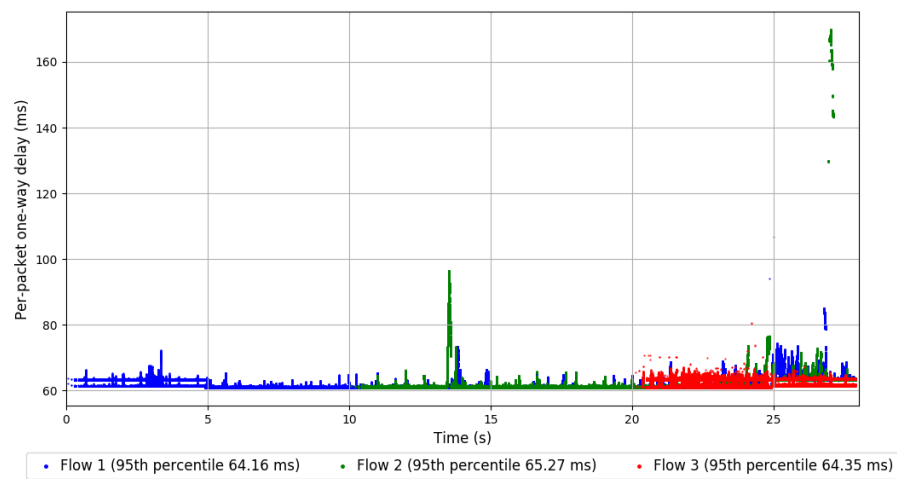
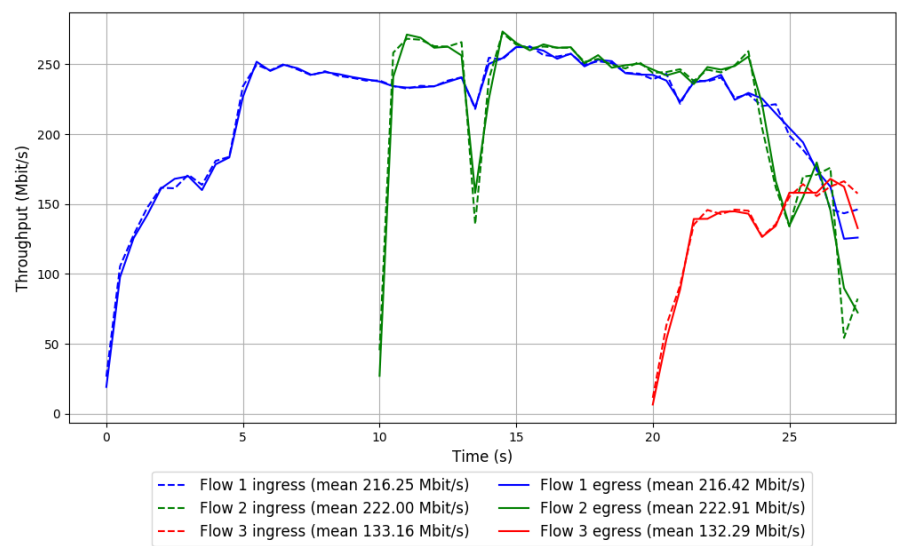
-- Flow 3:

Average throughput: 132.29 Mbit/s

95th percentile per-packet one-way delay: 64.347 ms

Loss rate: 2.24%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-10-12 19:15:55

End at: 2017-10-12 19:16:25

Below is generated by plot.py at 2017-10-12 22:40:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 322.56 Mbit/s

95th percentile per-packet one-way delay: 68.941 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 181.81 Mbit/s

95th percentile per-packet one-way delay: 71.944 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 160.96 Mbit/s

95th percentile per-packet one-way delay: 65.622 ms

Loss rate: 0.62%

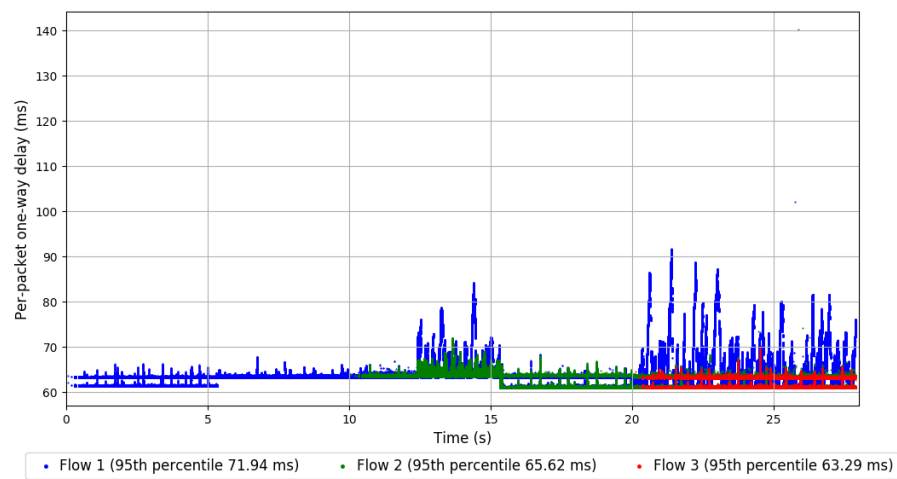
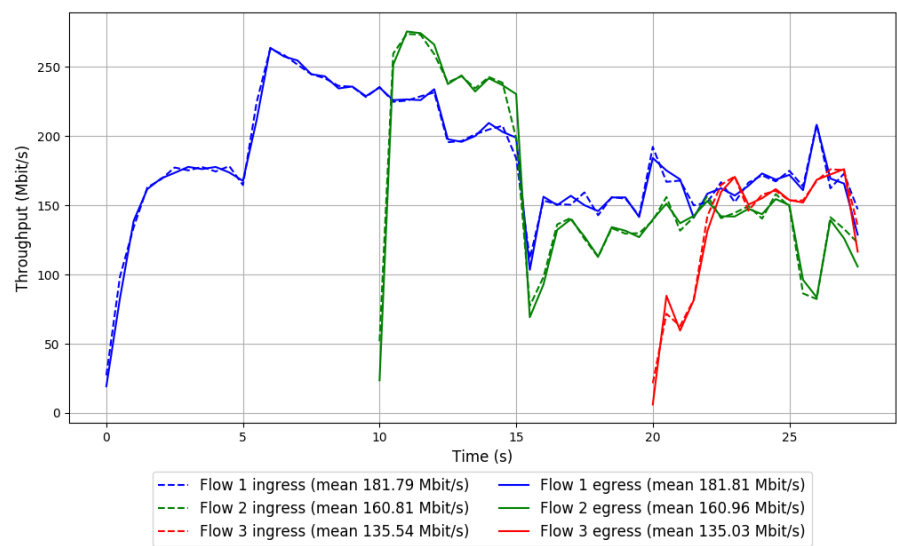
-- Flow 3:

Average throughput: 135.03 Mbit/s

95th percentile per-packet one-way delay: 63.291 ms

Loss rate: 1.93%

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

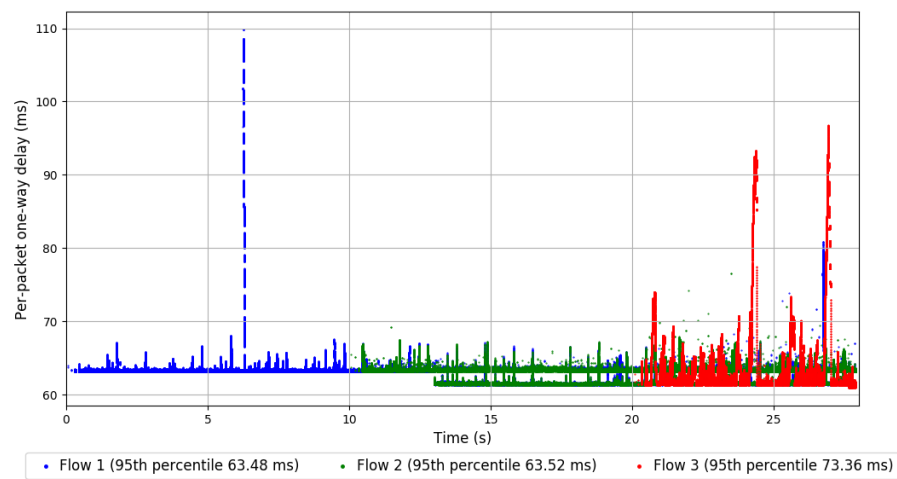
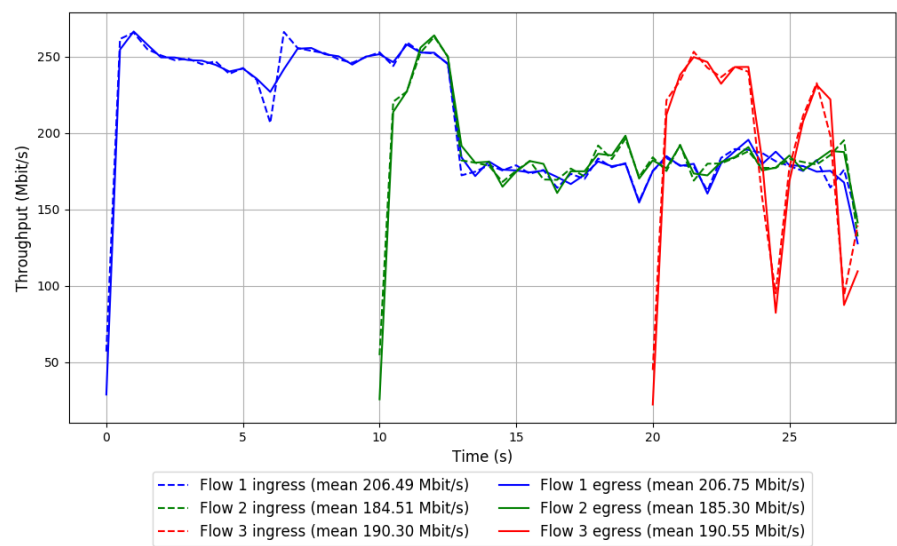


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-10-12 19:28:47
End at: 2017-10-12 19:29:17

# Below is generated by plot.py at 2017-10-12 22:41:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 378.71 Mbit/s
95th percentile per-packet one-way delay: 64.167 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 206.75 Mbit/s
95th percentile per-packet one-way delay: 63.477 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 185.30 Mbit/s
95th percentile per-packet one-way delay: 63.518 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 190.55 Mbit/s
95th percentile per-packet one-way delay: 73.362 ms
Loss rate: 1.47%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-10-12 17:42:53

End at: 2017-10-12 17:43:23

Below is generated by plot.py at 2017-10-12 22:41:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 49.86 Mbit/s

95th percentile per-packet one-way delay: 68.496 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 11.93 Mbit/s

95th percentile per-packet one-way delay: 63.884 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 49.37 Mbit/s

95th percentile per-packet one-way delay: 70.753 ms

Loss rate: 0.63%

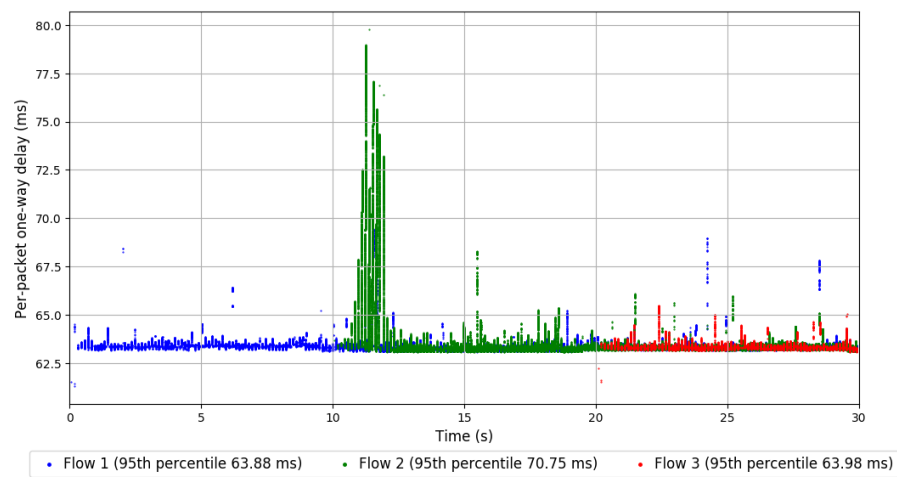
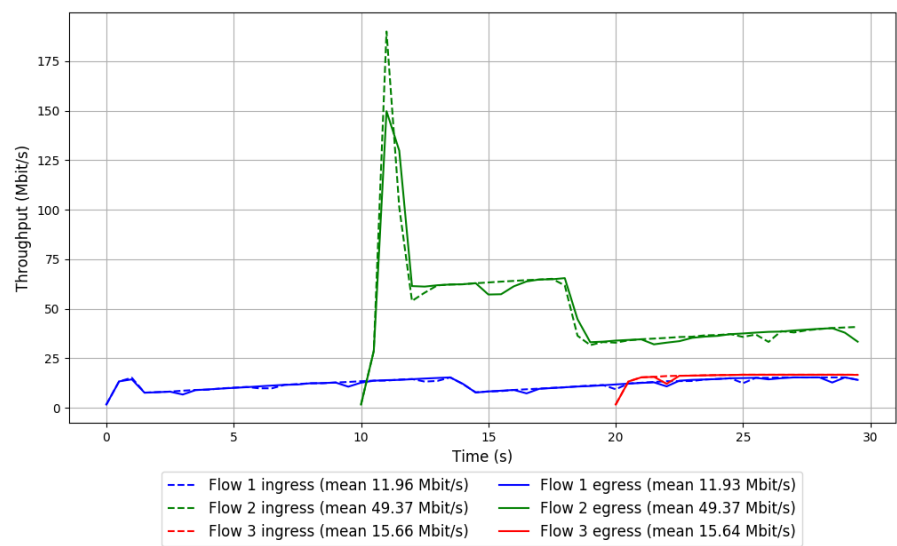
-- Flow 3:

Average throughput: 15.64 Mbit/s

95th percentile per-packet one-way delay: 63.976 ms

Loss rate: 1.36%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-10-12 17:55:46

End at: 2017-10-12 17:56:16

Below is generated by plot.py at 2017-10-12 22:41:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 37.65 Mbit/s

95th percentile per-packet one-way delay: 66.810 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 14.50 Mbit/s

95th percentile per-packet one-way delay: 63.903 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 13.98 Mbit/s

95th percentile per-packet one-way delay: 63.576 ms

Loss rate: 0.87%

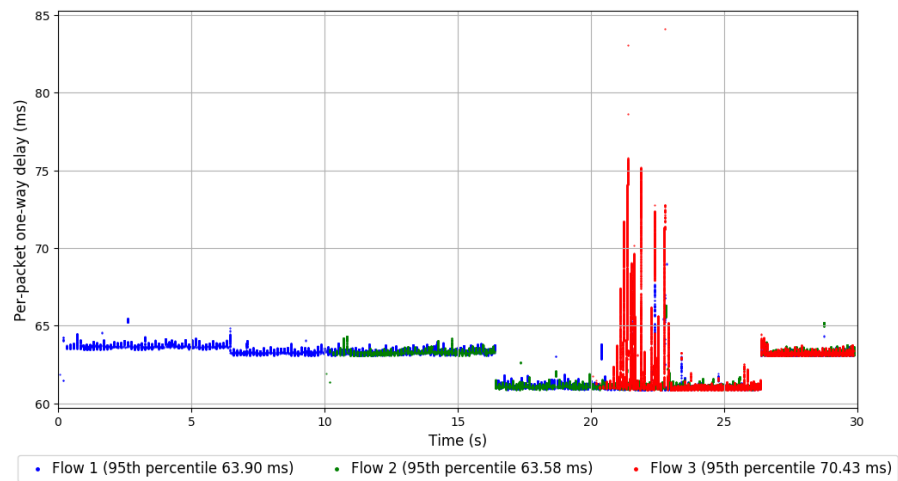
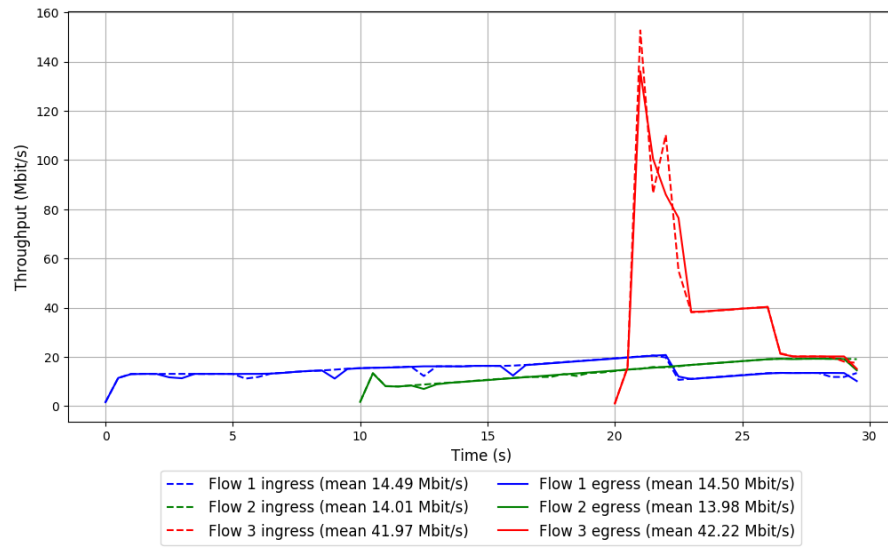
-- Flow 3:

Average throughput: 42.22 Mbit/s

95th percentile per-packet one-way delay: 70.426 ms

Loss rate: 0.69%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-10-12 18:08:42

End at: 2017-10-12 18:09:12

Below is generated by plot.py at 2017-10-12 22:41:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 133.21 Mbit/s

95th percentile per-packet one-way delay: 68.698 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 59.34 Mbit/s

95th percentile per-packet one-way delay: 66.691 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 83.65 Mbit/s

95th percentile per-packet one-way delay: 69.373 ms

Loss rate: 0.48%

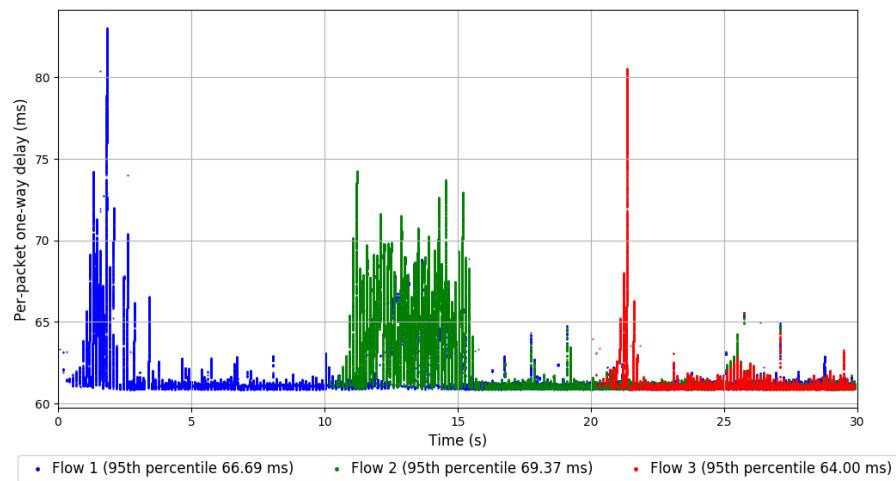
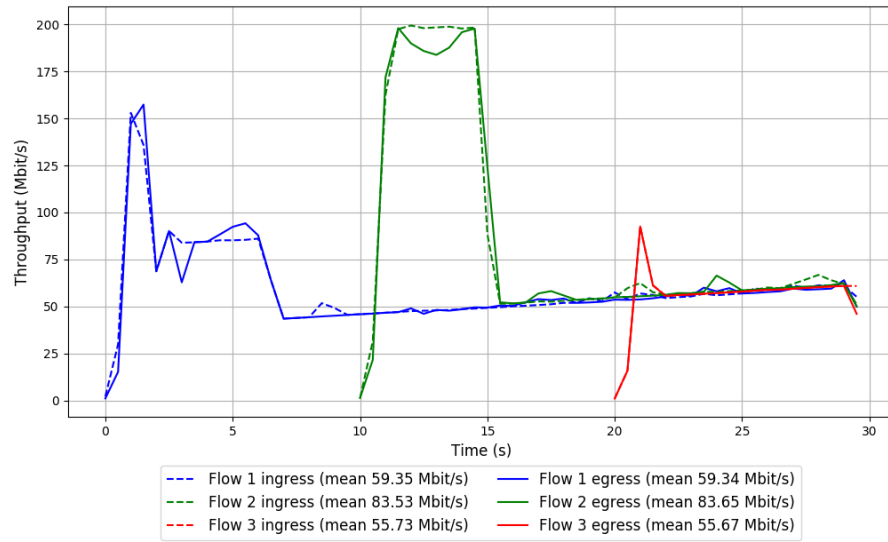
-- Flow 3:

Average throughput: 55.67 Mbit/s

95th percentile per-packet one-way delay: 64.004 ms

Loss rate: 1.38%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-10-12 18:21:32

End at: 2017-10-12 18:22:02

Below is generated by plot.py at 2017-10-12 22:41:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.10 Mbit/s

95th percentile per-packet one-way delay: 65.200 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 112.11 Mbit/s

95th percentile per-packet one-way delay: 63.237 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 79.47 Mbit/s

95th percentile per-packet one-way delay: 67.490 ms

Loss rate: 0.61%

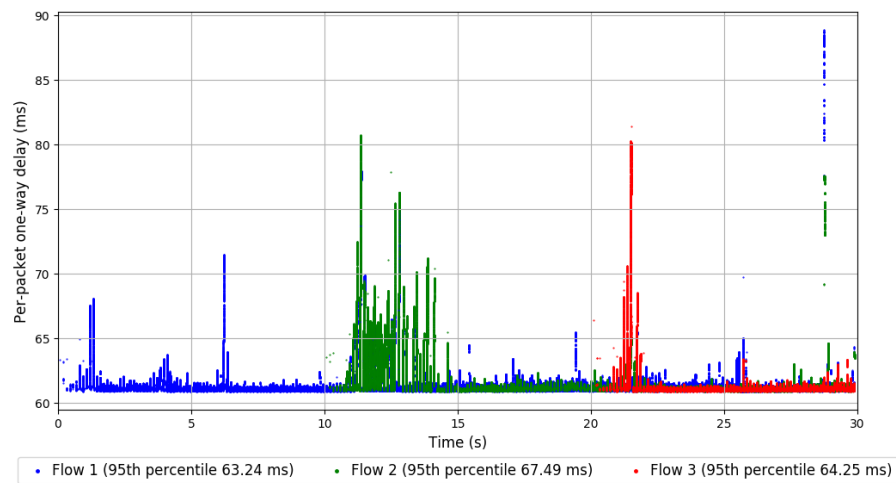
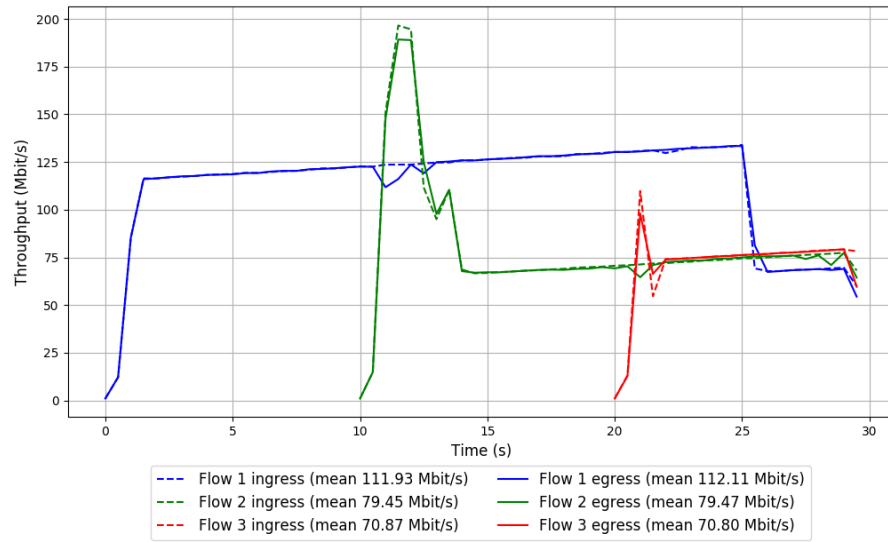
-- Flow 3:

Average throughput: 70.80 Mbit/s

95th percentile per-packet one-way delay: 64.253 ms

Loss rate: 1.41%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-10-12 18:34:20

End at: 2017-10-12 18:34:50

Below is generated by plot.py at 2017-10-12 22:41:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.43 Mbit/s

95th percentile per-packet one-way delay: 62.595 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 48.78 Mbit/s

95th percentile per-packet one-way delay: 62.175 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 82.13 Mbit/s

95th percentile per-packet one-way delay: 62.977 ms

Loss rate: 0.40%

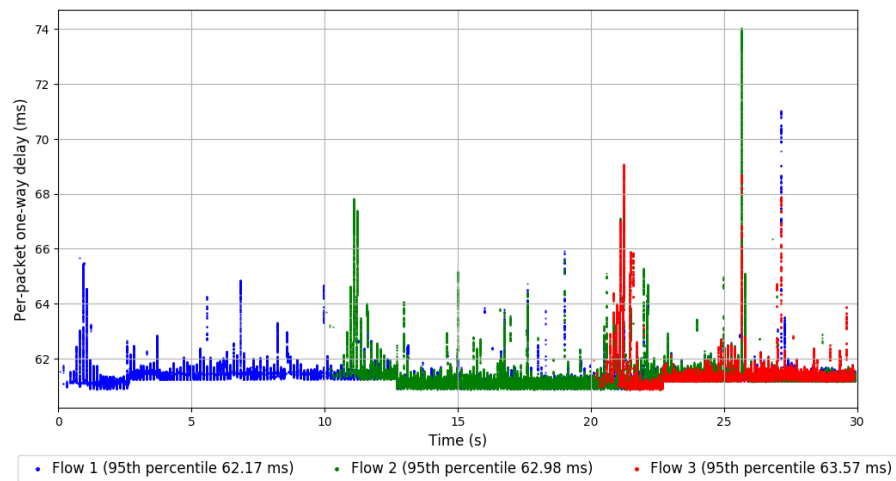
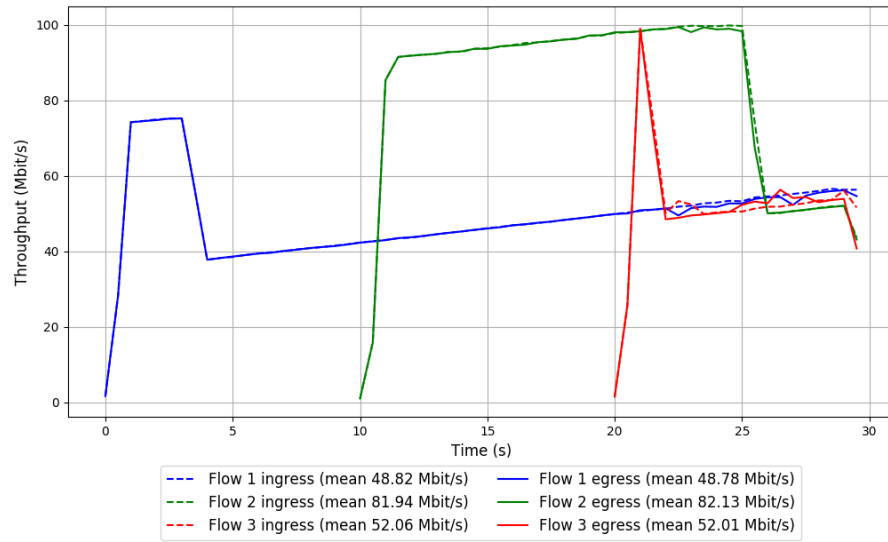
-- Flow 3:

Average throughput: 52.01 Mbit/s

95th percentile per-packet one-way delay: 63.574 ms

Loss rate: 1.34%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-10-12 18:46:58

End at: 2017-10-12 18:47:28

Below is generated by plot.py at 2017-10-12 22:41:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.19 Mbit/s

95th percentile per-packet one-way delay: 63.621 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 61.69 Mbit/s

95th percentile per-packet one-way delay: 63.639 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 53.19 Mbit/s

95th percentile per-packet one-way delay: 64.200 ms

Loss rate: 0.39%

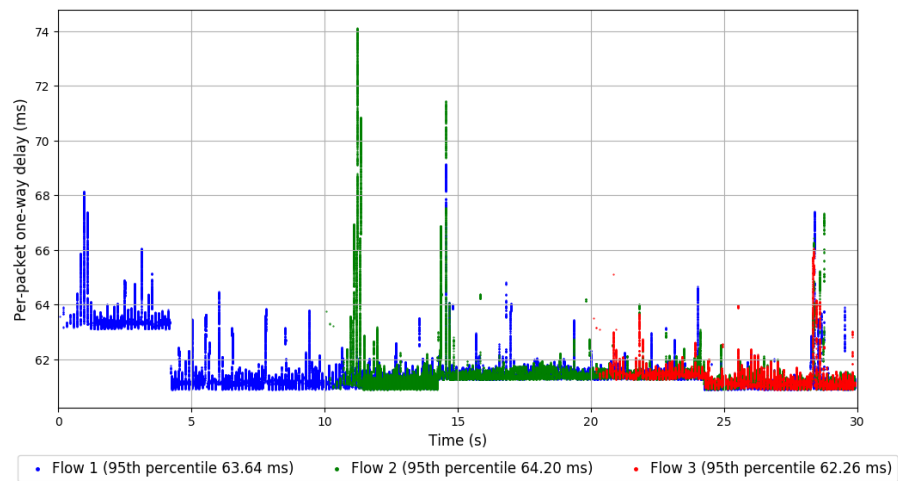
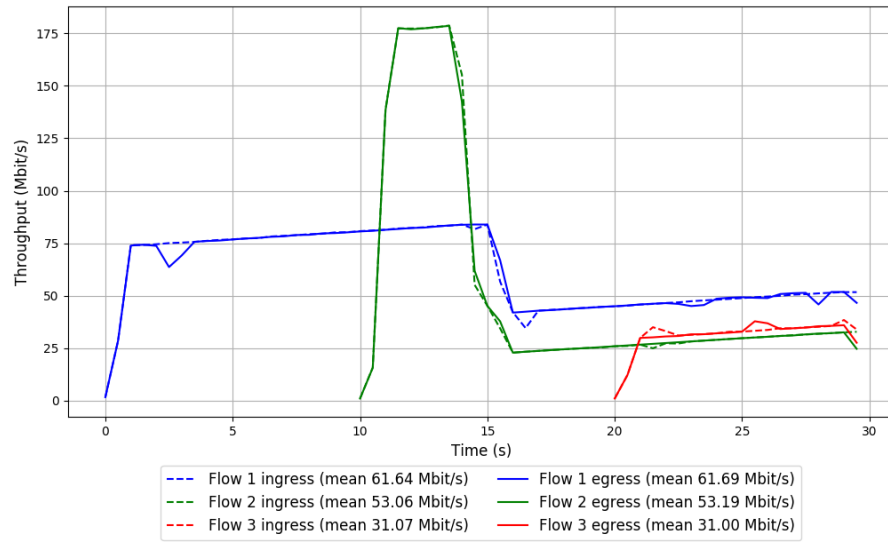
-- Flow 3:

Average throughput: 31.00 Mbit/s

95th percentile per-packet one-way delay: 62.260 ms

Loss rate: 1.48%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-10-12 18:59:49

End at: 2017-10-12 19:00:19

Below is generated by plot.py at 2017-10-12 22:41:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.97 Mbit/s

95th percentile per-packet one-way delay: 62.780 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 73.03 Mbit/s

95th percentile per-packet one-way delay: 62.410 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 113.66 Mbit/s

95th percentile per-packet one-way delay: 63.240 ms

Loss rate: 0.41%

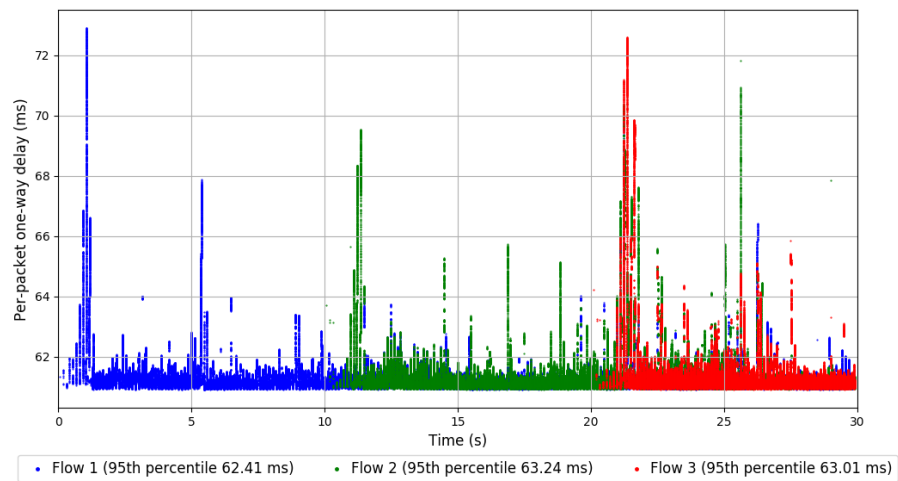
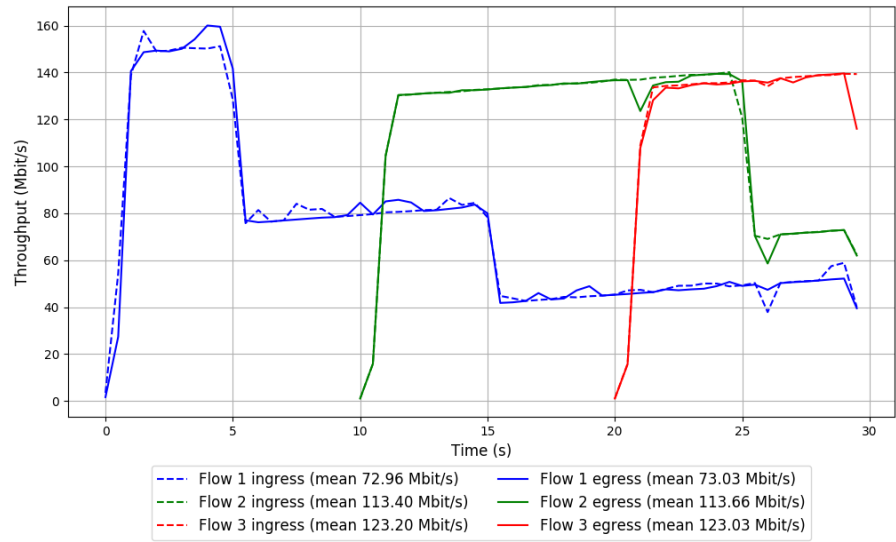
-- Flow 3:

Average throughput: 123.03 Mbit/s

95th percentile per-packet one-way delay: 63.005 ms

Loss rate: 1.42%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-10-12 19:12:55

End at: 2017-10-12 19:13:25

Below is generated by plot.py at 2017-10-12 22:41:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.88 Mbit/s

95th percentile per-packet one-way delay: 63.792 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 49.59 Mbit/s

95th percentile per-packet one-way delay: 63.742 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 13.51 Mbit/s

95th percentile per-packet one-way delay: 63.717 ms

Loss rate: 0.90%

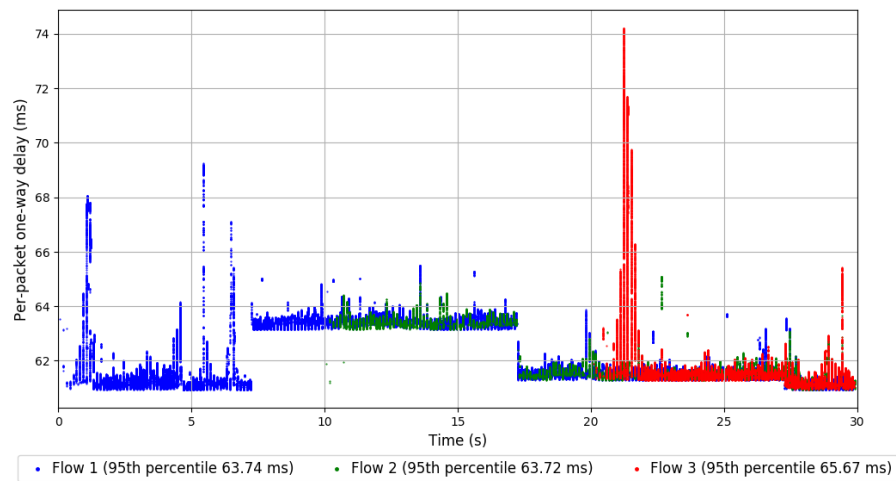
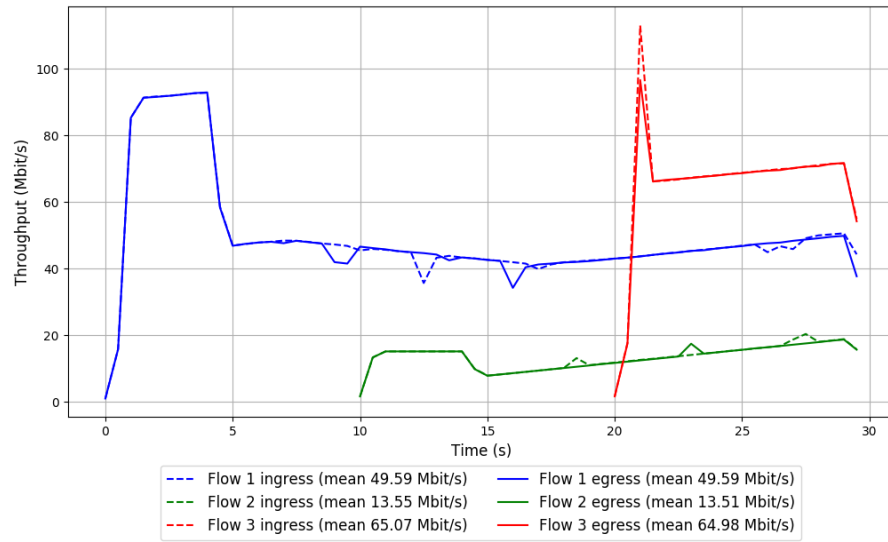
-- Flow 3:

Average throughput: 64.98 Mbit/s

95th percentile per-packet one-way delay: 65.674 ms

Loss rate: 1.39%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-10-12 19:25:46

End at: 2017-10-12 19:26:16

Below is generated by plot.py at 2017-10-12 22:41:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 110.93 Mbit/s

95th percentile per-packet one-way delay: 63.365 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 34.90 Mbit/s

95th percentile per-packet one-way delay: 62.317 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 73.53 Mbit/s

95th percentile per-packet one-way delay: 62.957 ms

Loss rate: 0.65%

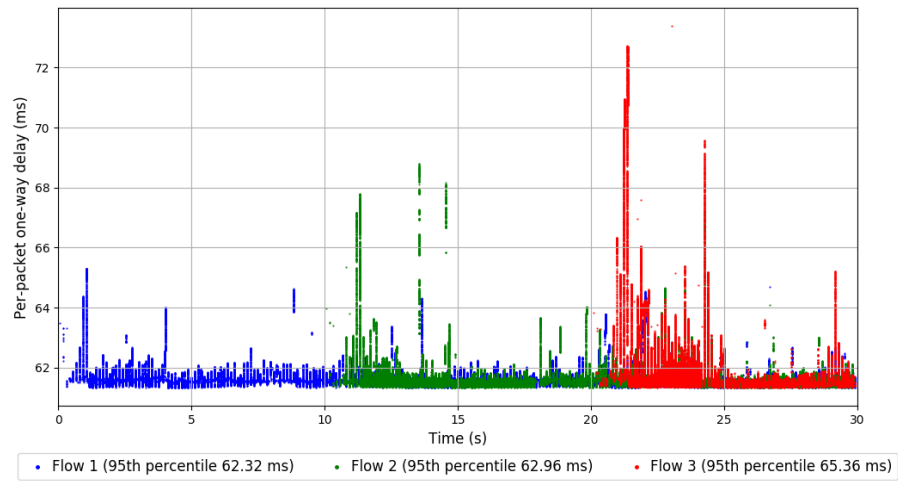
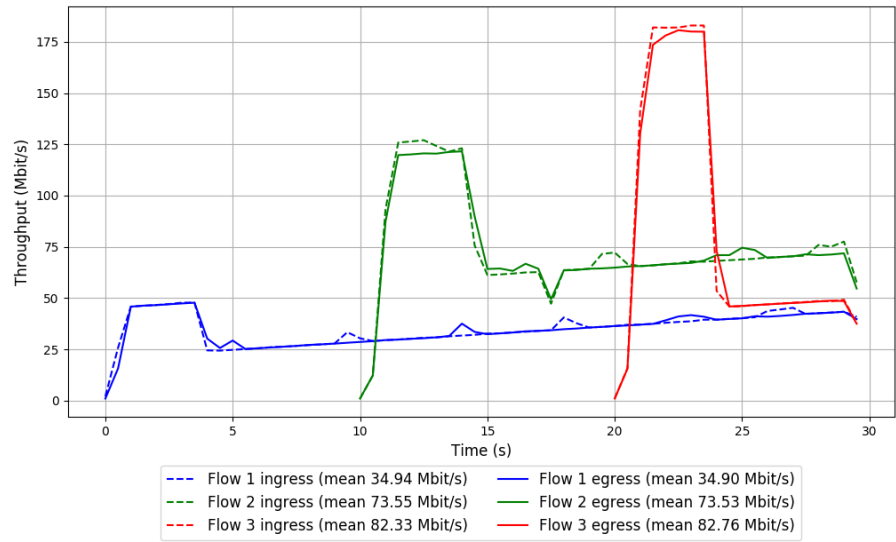
-- Flow 3:

Average throughput: 82.76 Mbit/s

95th percentile per-packet one-way delay: 65.355 ms

Loss rate: 0.77%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-10-12 19:38:46

End at: 2017-10-12 19:39:16

Below is generated by plot.py at 2017-10-12 22:41:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 153.78 Mbit/s

95th percentile per-packet one-way delay: 63.838 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 99.94 Mbit/s

95th percentile per-packet one-way delay: 63.747 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 38.90 Mbit/s

95th percentile per-packet one-way delay: 67.939 ms

Loss rate: 0.59%

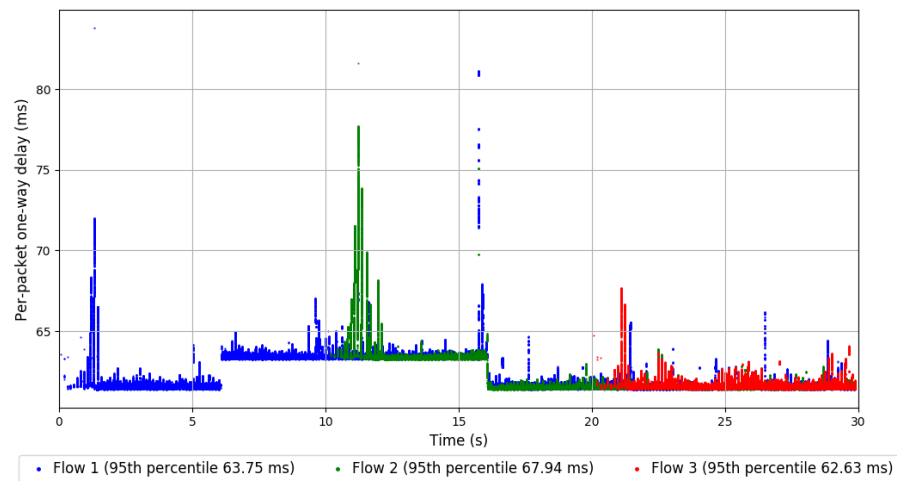
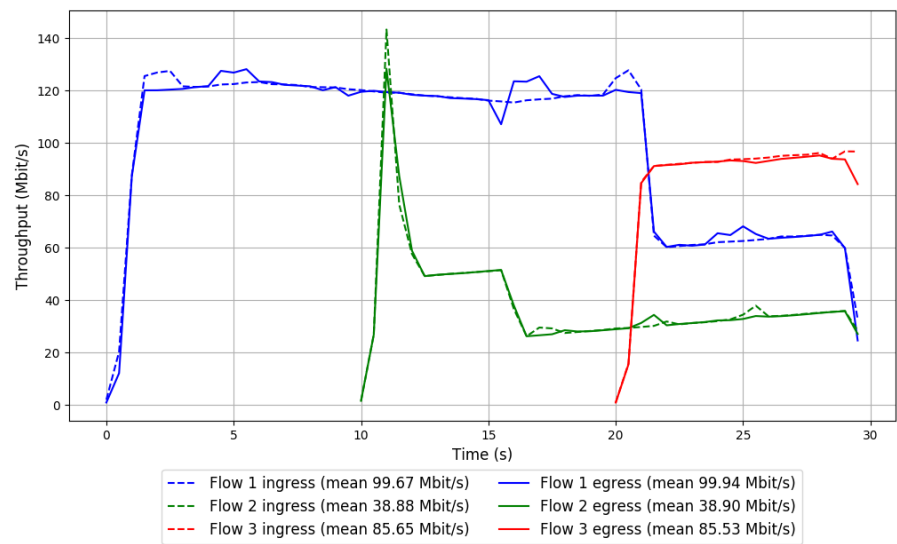
-- Flow 3:

Average throughput: 85.53 Mbit/s

95th percentile per-packet one-way delay: 62.633 ms

Loss rate: 1.43%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-10-12 17:41:44

End at: 2017-10-12 17:42:14

Below is generated by plot.py at 2017-10-12 22:41:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 307.37 Mbit/s

95th percentile per-packet one-way delay: 162.860 ms

Loss rate: 2.00%

-- Flow 1:

Average throughput: 168.34 Mbit/s

95th percentile per-packet one-way delay: 155.794 ms

Loss rate: 2.65%

-- Flow 2:

Average throughput: 120.81 Mbit/s

95th percentile per-packet one-way delay: 124.104 ms

Loss rate: 0.53%

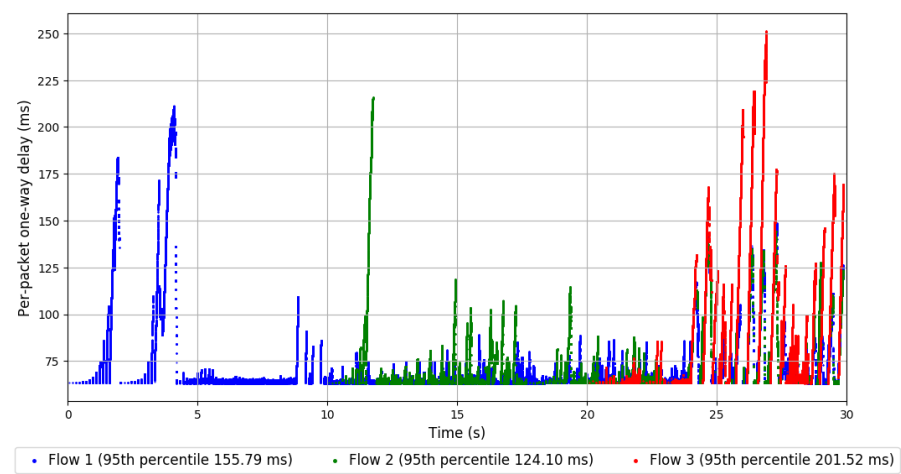
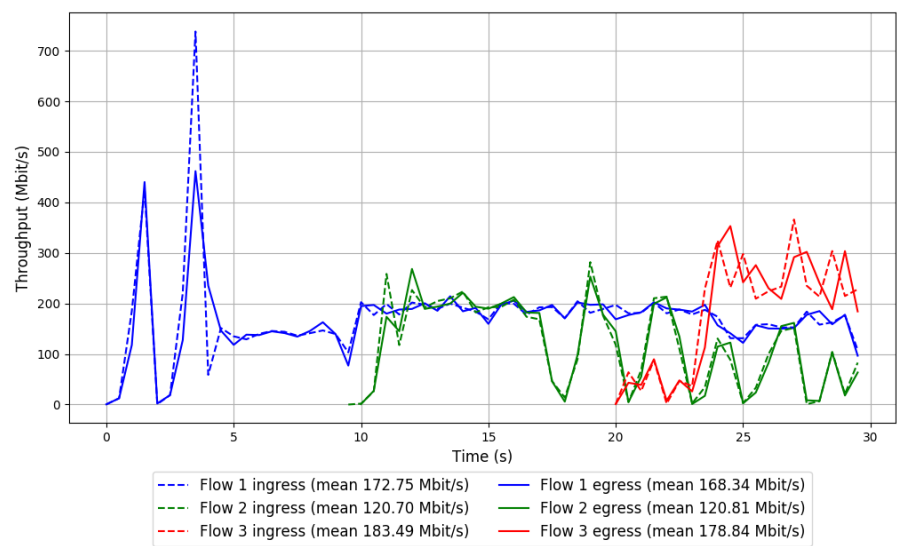
-- Flow 3:

Average throughput: 178.84 Mbit/s

95th percentile per-packet one-way delay: 201.521 ms

Loss rate: 2.10%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-10-12 17:54:40

End at: 2017-10-12 17:55:10

Below is generated by plot.py at 2017-10-12 22:43:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.27 Mbit/s

95th percentile per-packet one-way delay: 186.560 ms

Loss rate: 1.80%

-- Flow 1:

Average throughput: 233.75 Mbit/s

95th percentile per-packet one-way delay: 186.406 ms

Loss rate: 2.00%

-- Flow 2:

Average throughput: 117.44 Mbit/s

95th percentile per-packet one-way delay: 210.700 ms

Loss rate: 1.65%

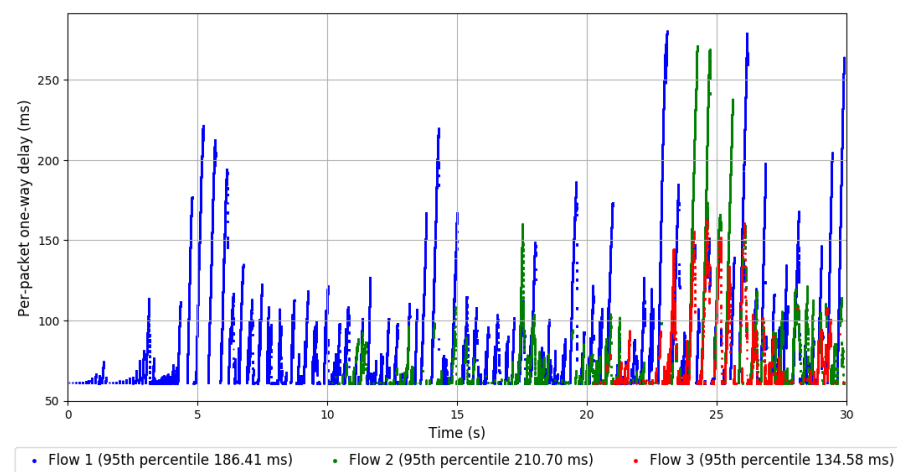
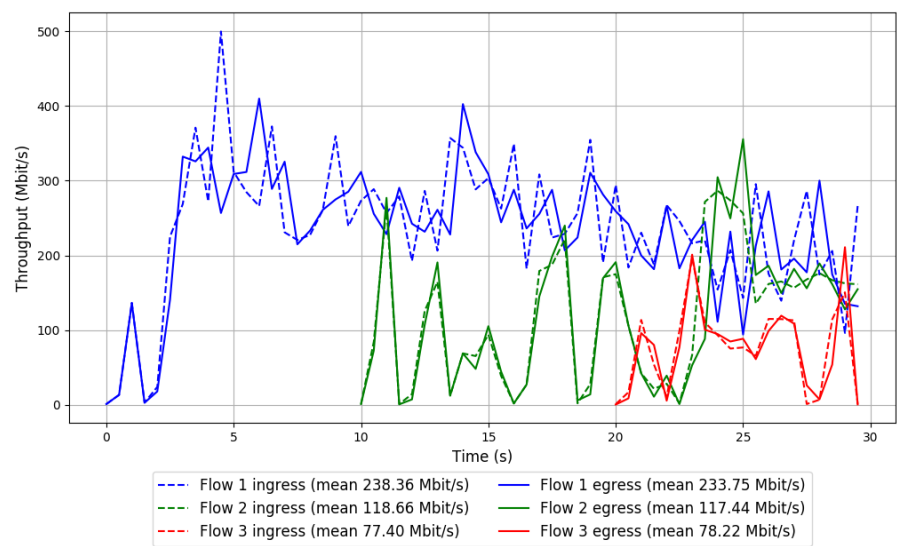
-- Flow 3:

Average throughput: 78.22 Mbit/s

95th percentile per-packet one-way delay: 134.582 ms

Loss rate: 0.38%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-10-12 18:07:34

End at: 2017-10-12 18:08:04

Below is generated by plot.py at 2017-10-12 22:43:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 354.21 Mbit/s

95th percentile per-packet one-way delay: 121.193 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 209.79 Mbit/s

95th percentile per-packet one-way delay: 113.200 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 155.98 Mbit/s

95th percentile per-packet one-way delay: 135.094 ms

Loss rate: 0.36%

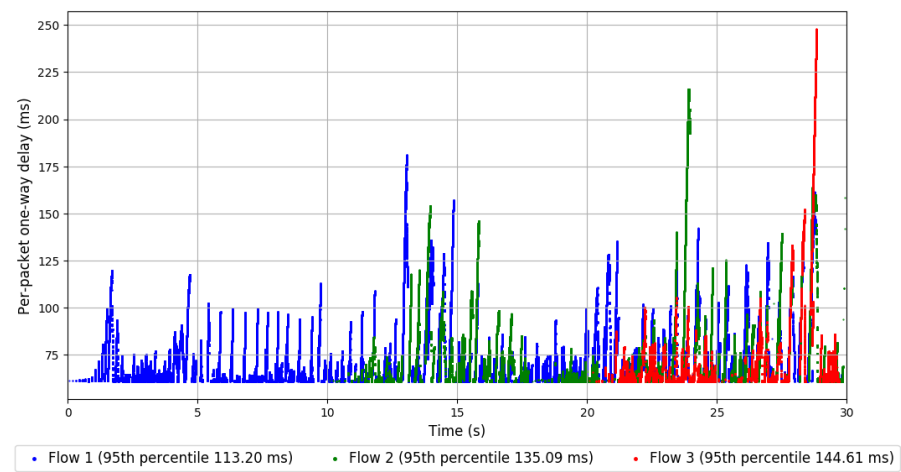
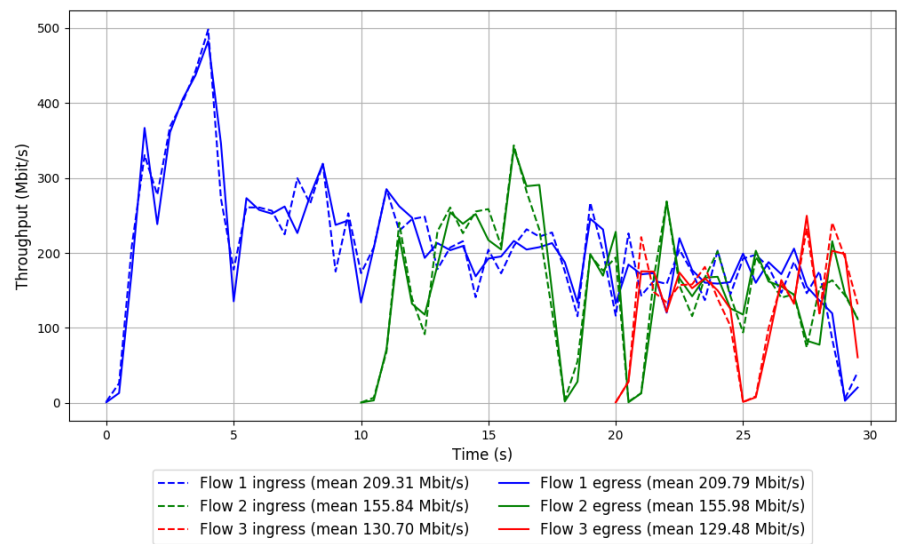
-- Flow 3:

Average throughput: 129.48 Mbit/s

95th percentile per-packet one-way delay: 144.614 ms

Loss rate: 4.00%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-10-12 18:20:23

End at: 2017-10-12 18:20:53

Below is generated by plot.py at 2017-10-12 22:45:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 383.02 Mbit/s

95th percentile per-packet one-way delay: 112.818 ms

Loss rate: 2.47%

-- Flow 1:

Average throughput: 257.23 Mbit/s

95th percentile per-packet one-way delay: 105.633 ms

Loss rate: 2.70%

-- Flow 2:

Average throughput: 107.96 Mbit/s

95th percentile per-packet one-way delay: 96.404 ms

Loss rate: 1.19%

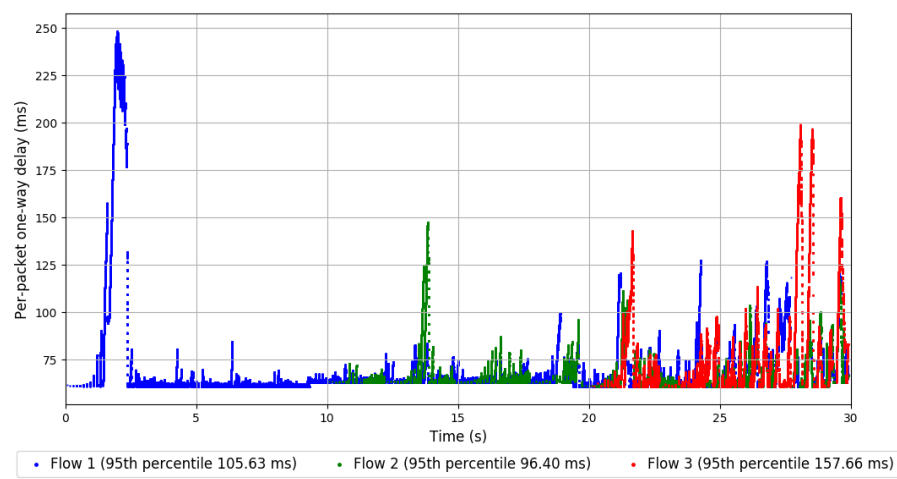
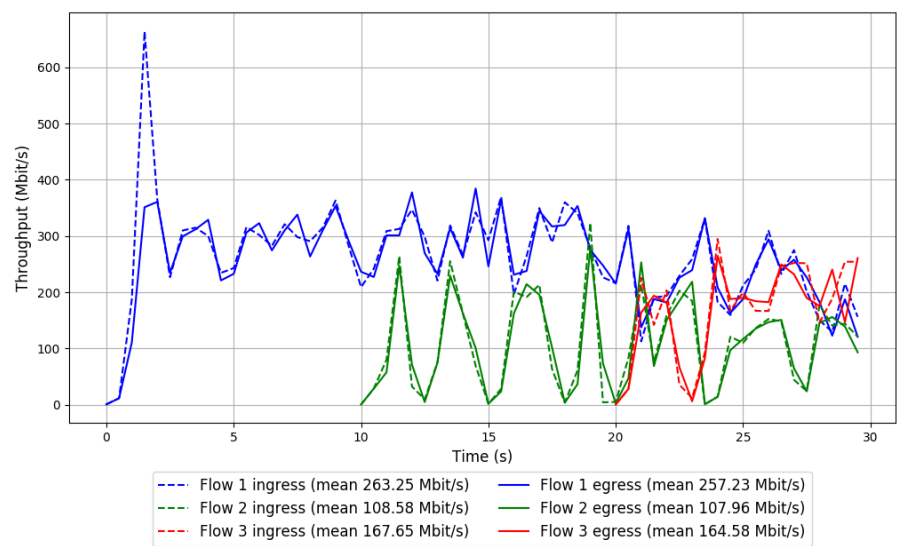
-- Flow 3:

Average throughput: 164.58 Mbit/s

95th percentile per-packet one-way delay: 157.656 ms

Loss rate: 3.03%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-10-12 18:33:15

End at: 2017-10-12 18:33:45

Below is generated by plot.py at 2017-10-12 22:45:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 302.92 Mbit/s

95th percentile per-packet one-way delay: 194.750 ms

Loss rate: 1.91%

-- Flow 1:

Average throughput: 173.00 Mbit/s

95th percentile per-packet one-way delay: 171.673 ms

Loss rate: 2.09%

-- Flow 2:

Average throughput: 147.36 Mbit/s

95th percentile per-packet one-way delay: 219.436 ms

Loss rate: 0.55%

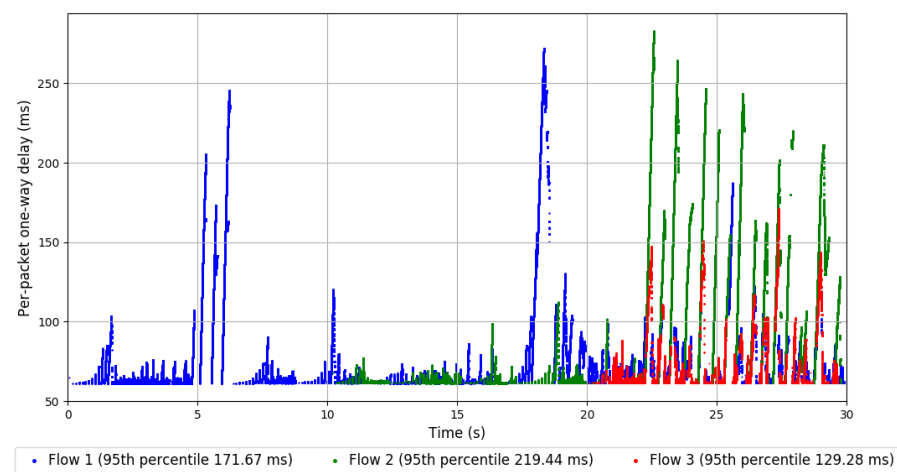
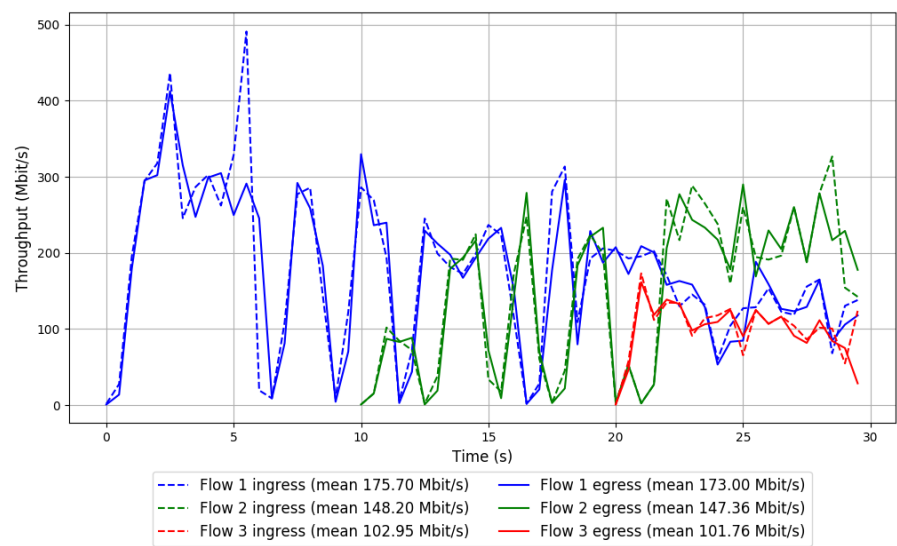
-- Flow 3:

Average throughput: 101.76 Mbit/s

95th percentile per-packet one-way delay: 129.282 ms

Loss rate: 4.85%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-10-12 18:45:52

End at: 2017-10-12 18:46:22

Below is generated by plot.py at 2017-10-12 22:45:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 333.29 Mbit/s

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

Loss rate: 2.29%

-- Flow 1:

Average throughput: 182.77 Mbit/s

95th percentile per-packet one-way delay: 87.900 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 142.66 Mbit/s

95th percentile per-packet one-way delay: 246.695 ms

Loss rate: 5.83%

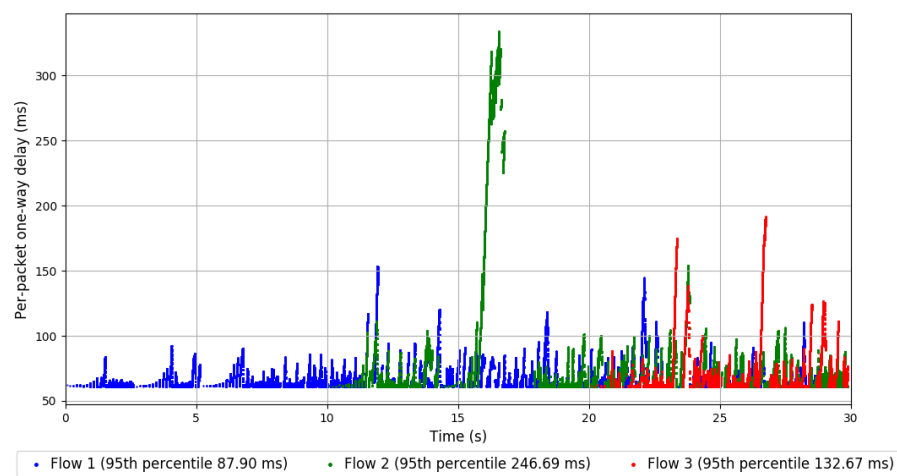
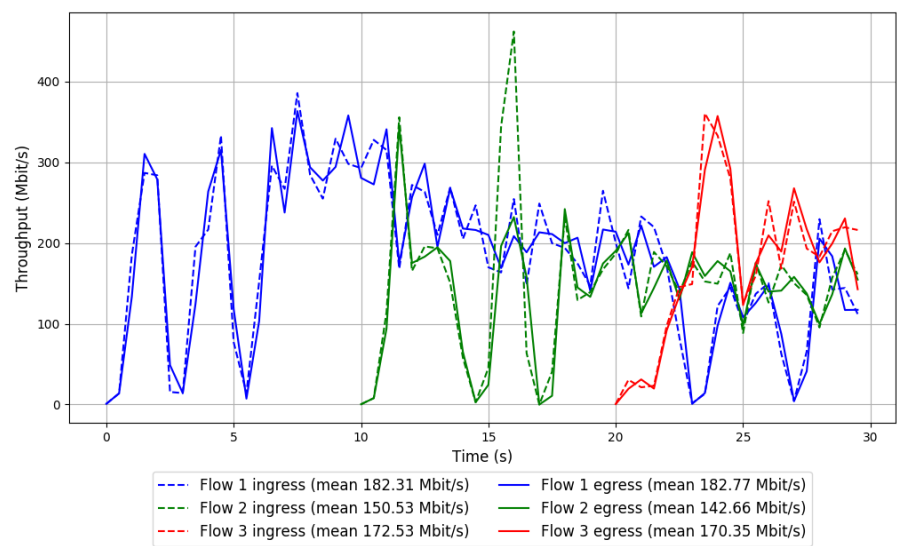
-- Flow 3:

Average throughput: 170.35 Mbit/s

95th percentile per-packet one-way delay: 132.669 ms

Loss rate: 2.52%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-10-12 18:58:41

End at: 2017-10-12 18:59:11

Below is generated by plot.py at 2017-10-12 22:47:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 349.58 Mbit/s

95th percentile per-packet one-way delay: 112.055 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 208.99 Mbit/s

95th percentile per-packet one-way delay: 123.654 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 139.75 Mbit/s

95th percentile per-packet one-way delay: 98.920 ms

Loss rate: 0.00%

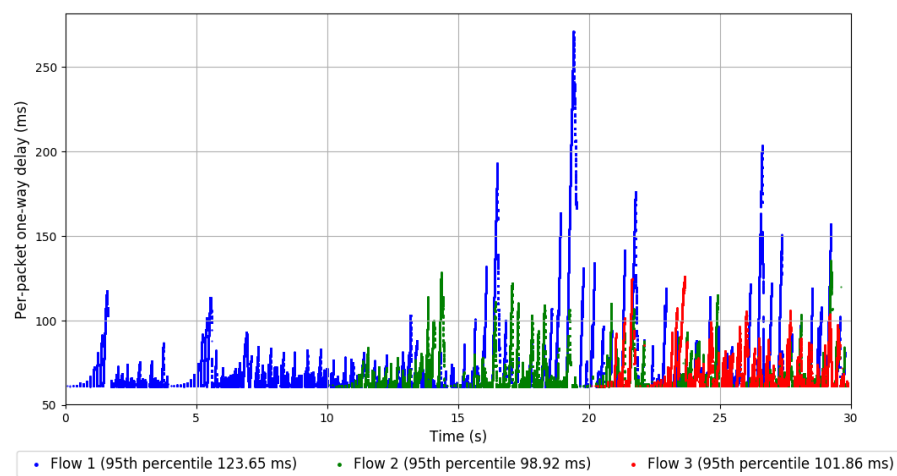
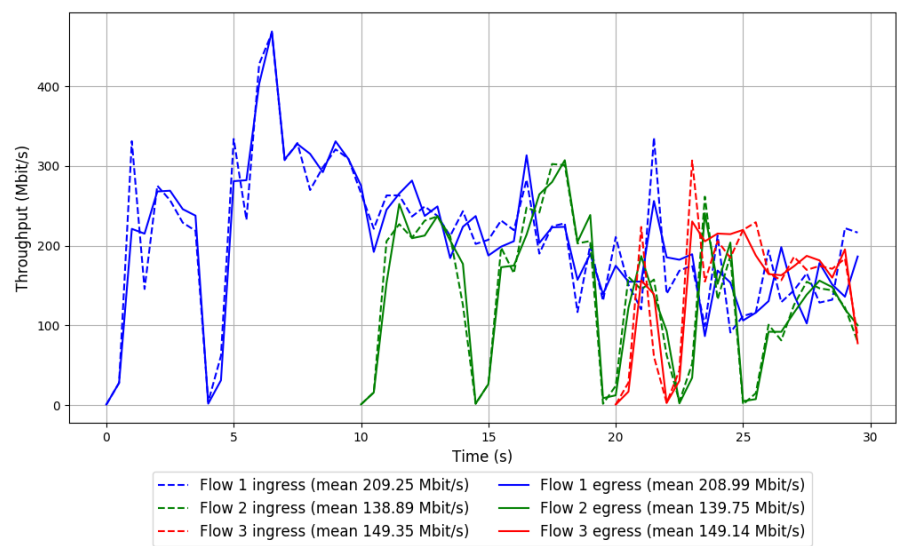
-- Flow 3:

Average throughput: 149.14 Mbit/s

95th percentile per-packet one-way delay: 101.857 ms

Loss rate: 1.10%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-10-12 19:11:50

End at: 2017-10-12 19:12:20

Below is generated by plot.py at 2017-10-12 22:47:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 320.74 Mbit/s

95th percentile per-packet one-way delay: 149.520 ms

Loss rate: 1.70%

-- Flow 1:

Average throughput: 184.22 Mbit/s

95th percentile per-packet one-way delay: 161.146 ms

Loss rate: 2.61%

-- Flow 2:

Average throughput: 154.92 Mbit/s

95th percentile per-packet one-way delay: 148.790 ms

Loss rate: 0.59%

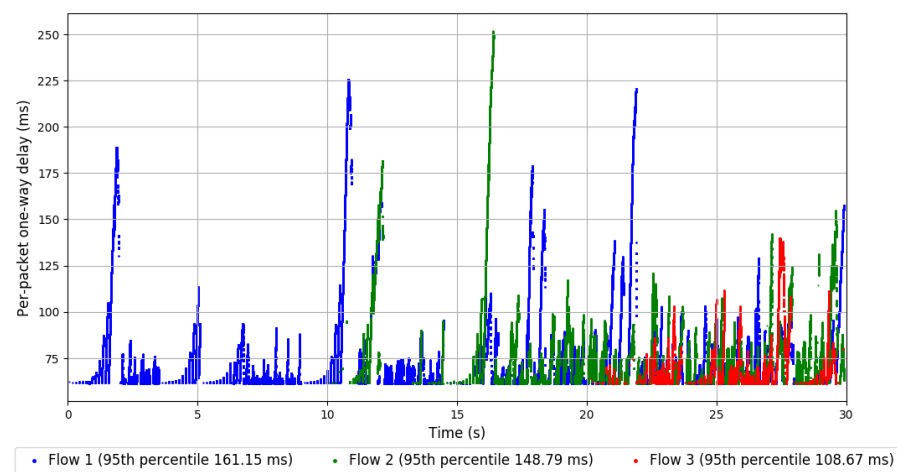
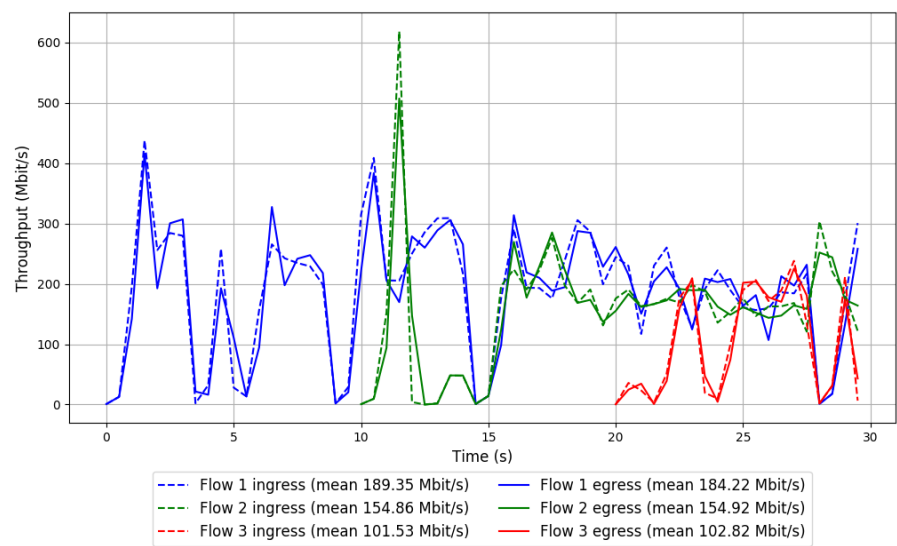
-- Flow 3:

Average throughput: 102.82 Mbit/s

95th percentile per-packet one-way delay: 108.668 ms

Loss rate: 0.03%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-10-12 19:24:41

End at: 2017-10-12 19:25:11

Below is generated by plot.py at 2017-10-12 22:47:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.37 Mbit/s

95th percentile per-packet one-way delay: 136.493 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 197.07 Mbit/s

95th percentile per-packet one-way delay: 142.585 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 112.84 Mbit/s

95th percentile per-packet one-way delay: 120.834 ms

Loss rate: 2.31%

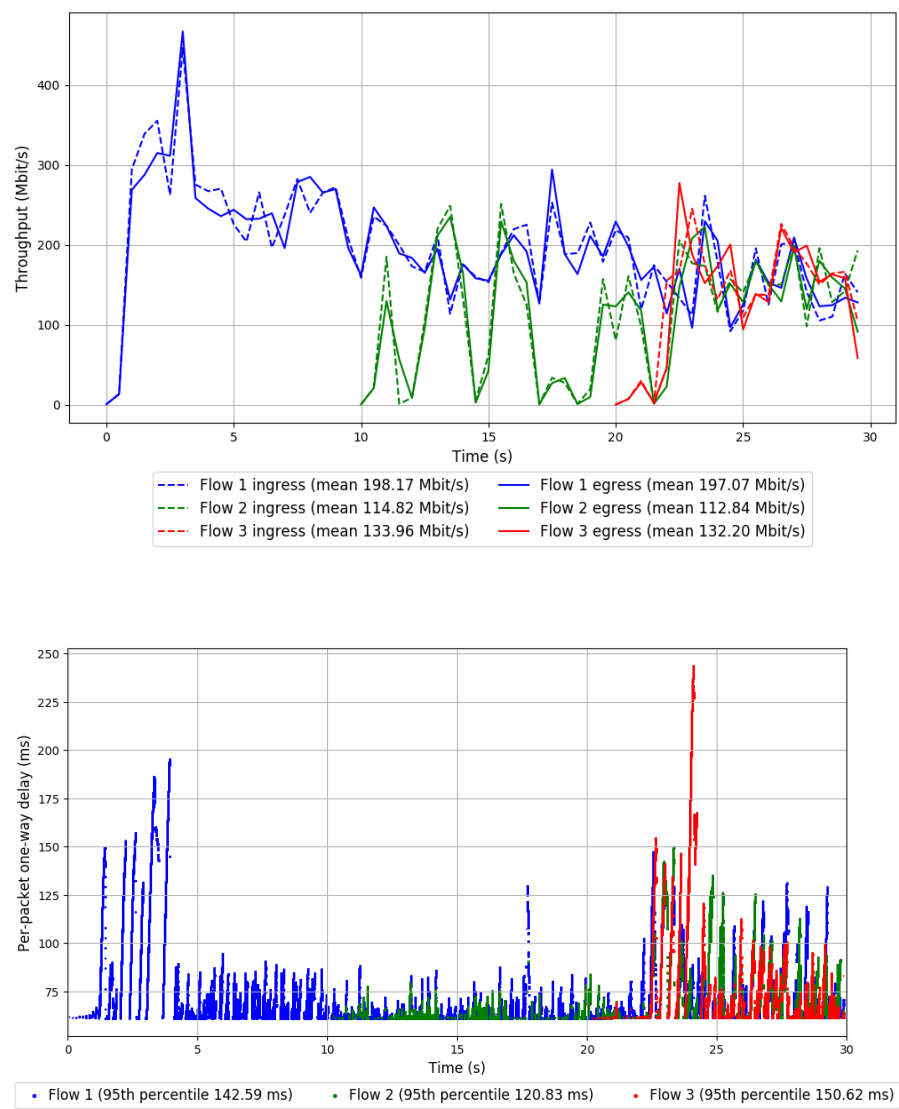
-- Flow 3:

Average throughput: 132.20 Mbit/s

95th percentile per-packet one-way delay: 150.619 ms

Loss rate: 2.66%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

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

End at: 2017-10-12 19:38:07

Below is generated by plot.py at 2017-10-12 22:50:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 378.47 Mbit/s

95th percentile per-packet one-way delay: 128.666 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 232.55 Mbit/s

95th percentile per-packet one-way delay: 119.084 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 139.58 Mbit/s

95th percentile per-packet one-way delay: 135.336 ms

Loss rate: 1.09%

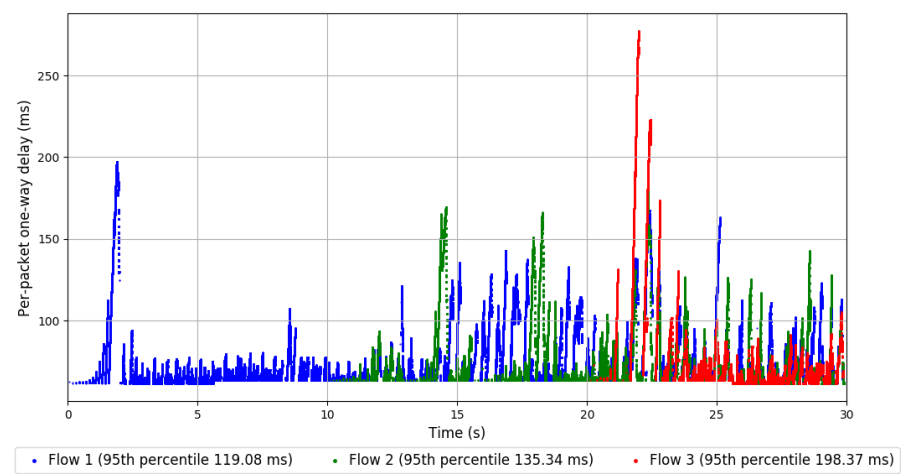
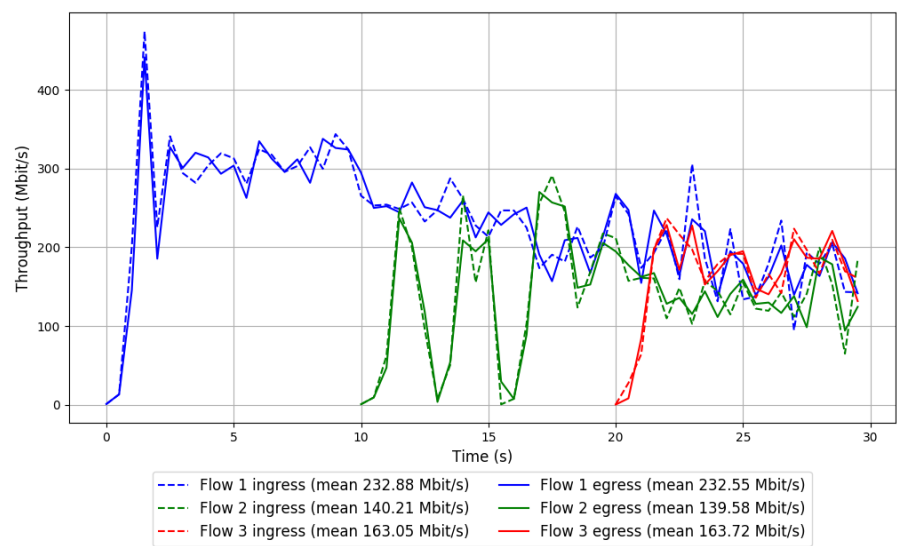
-- Flow 3:

Average throughput: 163.72 Mbit/s

95th percentile per-packet one-way delay: 198.372 ms

Loss rate: 1.17%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-10-12 17:37:45

End at: 2017-10-12 17:38:15

Below is generated by plot.py at 2017-10-12 22:50:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 147.24 Mbit/s

95th percentile per-packet one-way delay: 63.398 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 80.46 Mbit/s

95th percentile per-packet one-way delay: 63.448 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 71.06 Mbit/s

95th percentile per-packet one-way delay: 63.326 ms

Loss rate: 0.57%

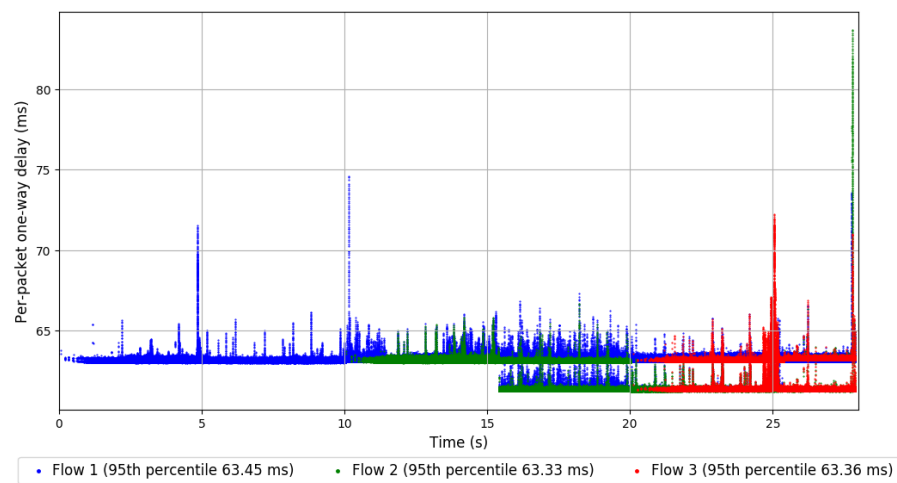
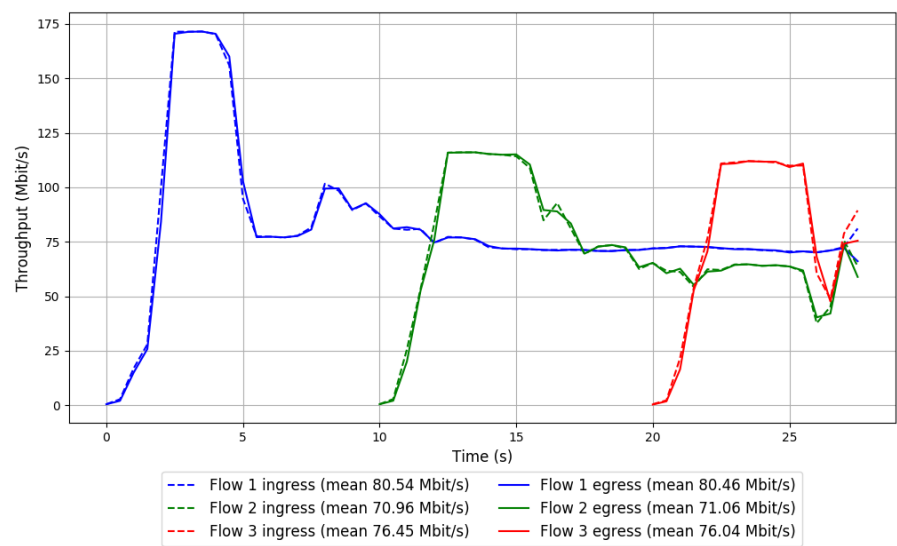
-- Flow 3:

Average throughput: 76.04 Mbit/s

95th percentile per-packet one-way delay: 63.361 ms

Loss rate: 2.10%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-10-12 17:50:39

End at: 2017-10-12 17:51:09

Below is generated by plot.py at 2017-10-12 22:50:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 157.95 Mbit/s

95th percentile per-packet one-way delay: 63.314 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 88.01 Mbit/s

95th percentile per-packet one-way delay: 63.268 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 72.92 Mbit/s

95th percentile per-packet one-way delay: 63.425 ms

Loss rate: 0.55%

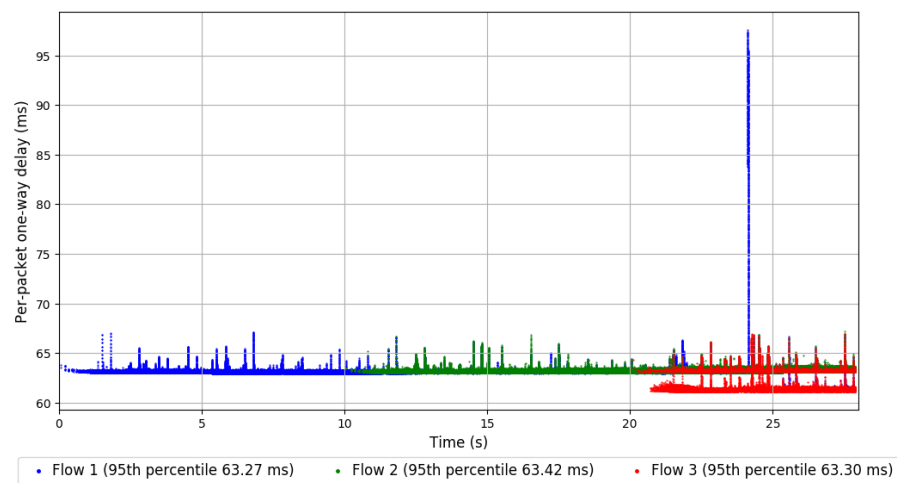
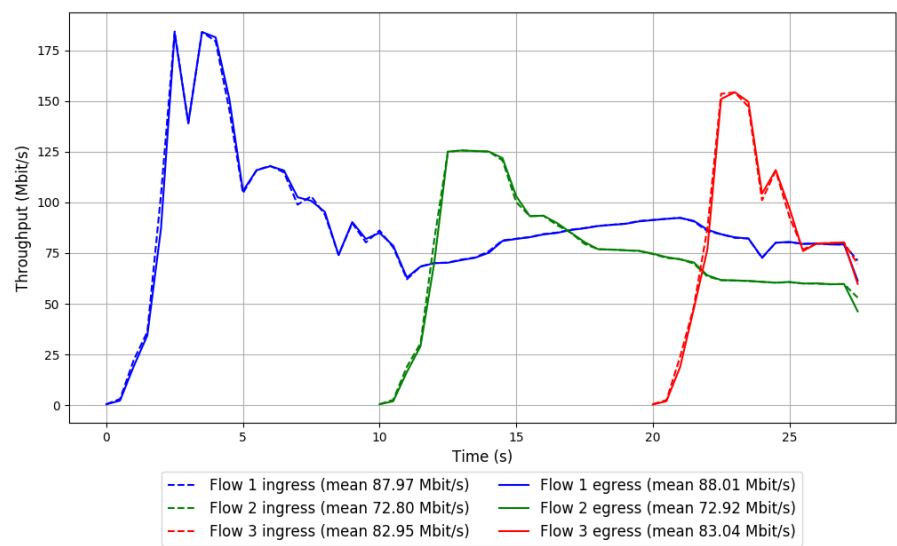
-- Flow 3:

Average throughput: 83.04 Mbit/s

95th percentile per-packet one-way delay: 63.298 ms

Loss rate: 1.51%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-10-12 18:03:33

End at: 2017-10-12 18:04:03

Below is generated by plot.py at 2017-10-12 22:51:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.03 Mbit/s

95th percentile per-packet one-way delay: 63.605 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 110.22 Mbit/s

95th percentile per-packet one-way delay: 63.595 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 81.54 Mbit/s

95th percentile per-packet one-way delay: 63.642 ms

Loss rate: 0.54%

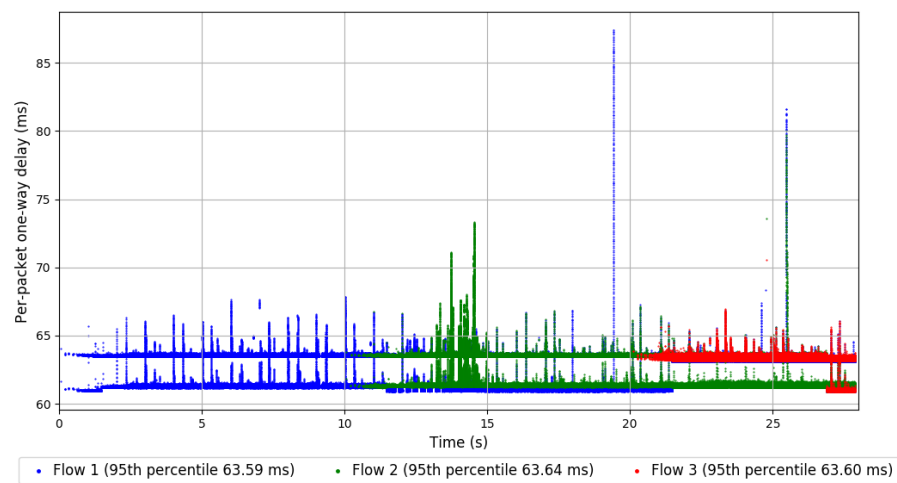
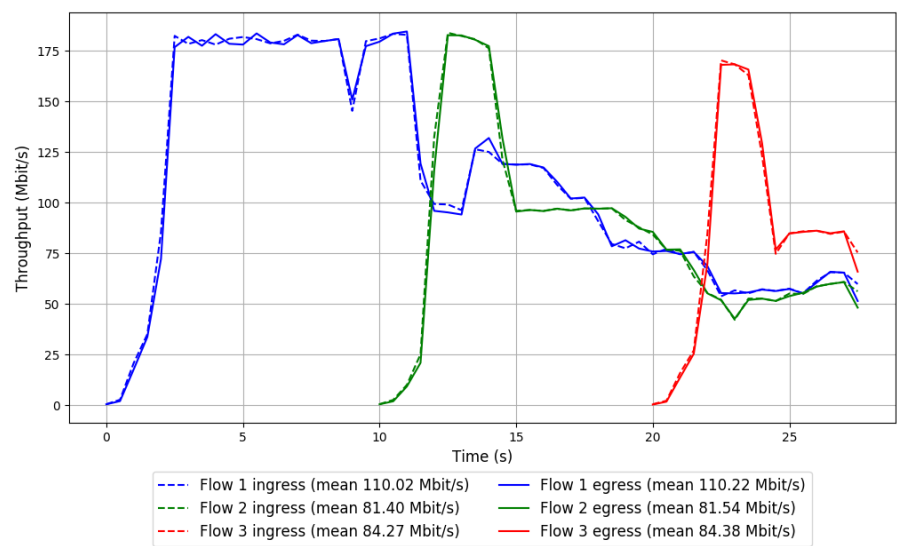
-- Flow 3:

Average throughput: 84.38 Mbit/s

95th percentile per-packet one-way delay: 63.601 ms

Loss rate: 1.50%

Run 3: Report of Copa — Data Link

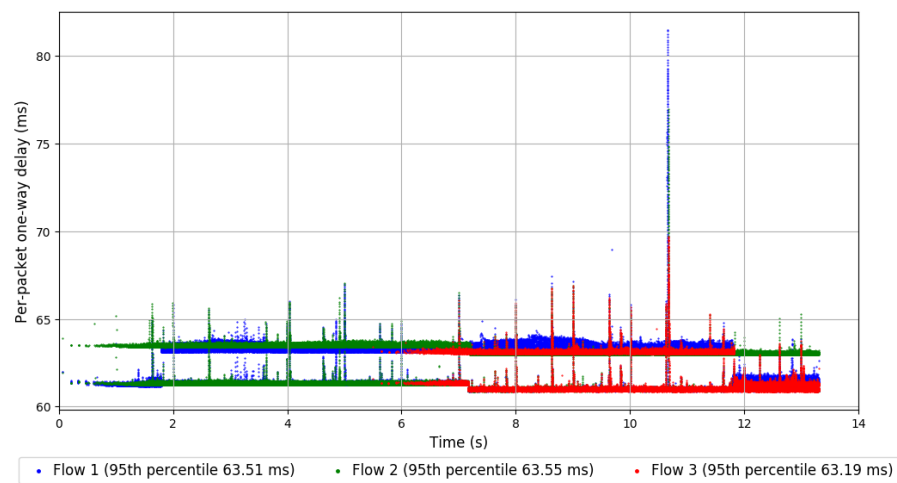
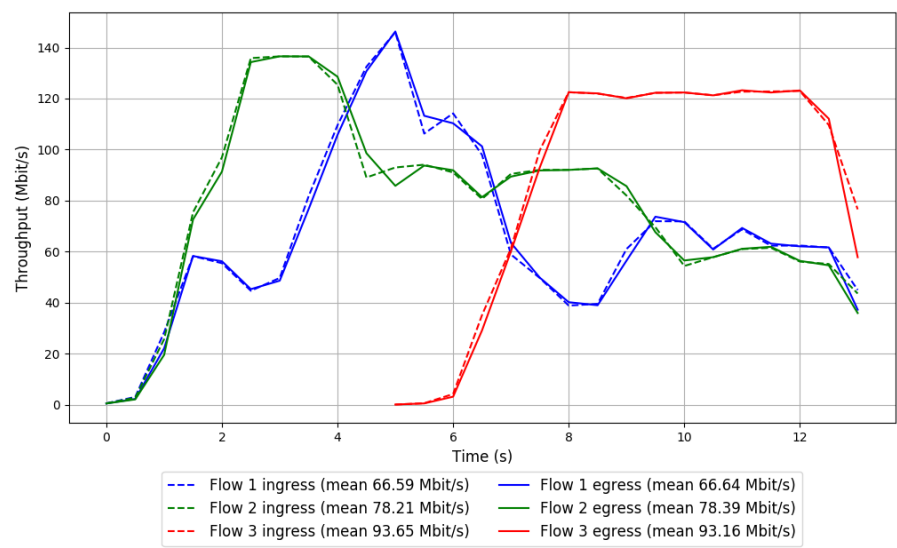


Run 4: Statistics of Copa

Start at: 2017-10-12 18:16:28

End at: 2017-10-12 18:16:58

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-10-12 18:29:17

End at: 2017-10-12 18:29:47

Below is generated by plot.py at 2017-10-12 22:51:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.36 Mbit/s

95th percentile per-packet one-way delay: 63.525 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 45.12 Mbit/s

95th percentile per-packet one-way delay: 63.557 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 80.48 Mbit/s

95th percentile per-packet one-way delay: 63.213 ms

Loss rate: 0.74%

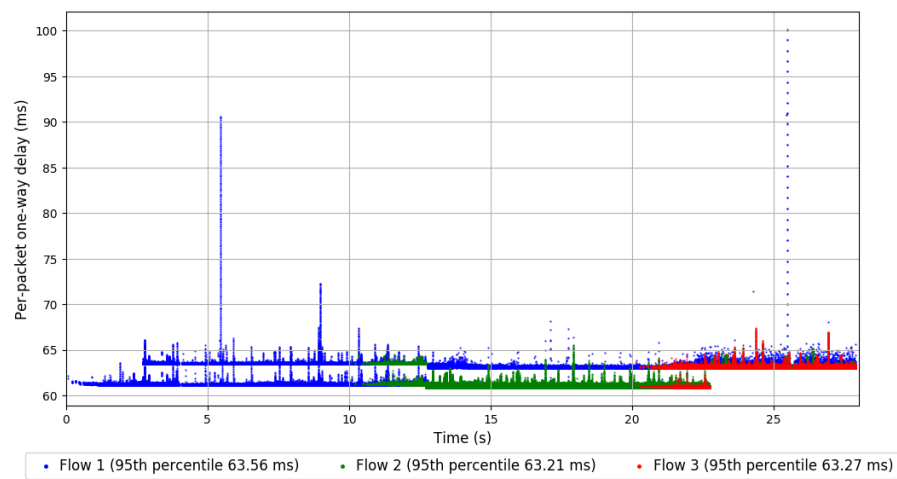
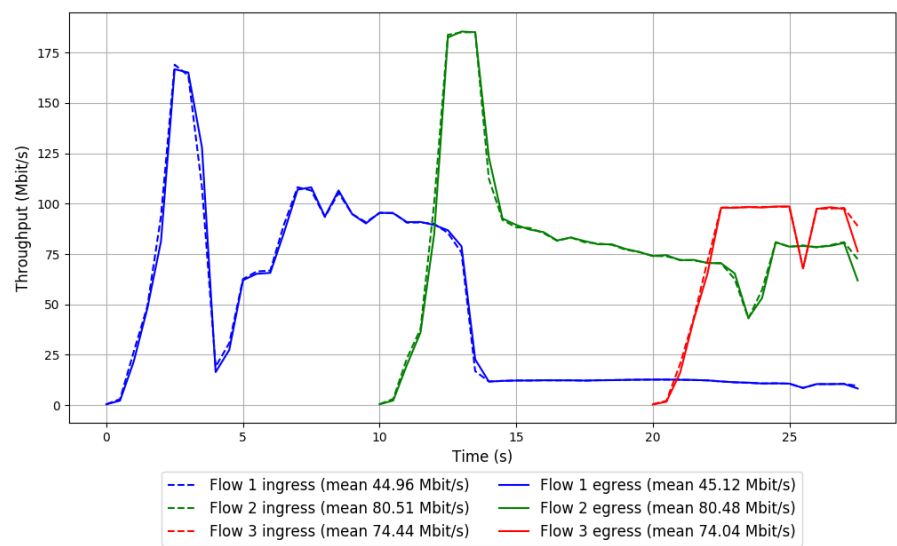
-- Flow 3:

Average throughput: 74.04 Mbit/s

95th percentile per-packet one-way delay: 63.270 ms

Loss rate: 2.11%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-10-12 18:41:59

End at: 2017-10-12 18:42:29

Below is generated by plot.py at 2017-10-12 22:51:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.06 Mbit/s

95th percentile per-packet one-way delay: 63.394 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 521.078 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 79.99 Mbit/s

95th percentile per-packet one-way delay: 63.418 ms

Loss rate: 0.38%

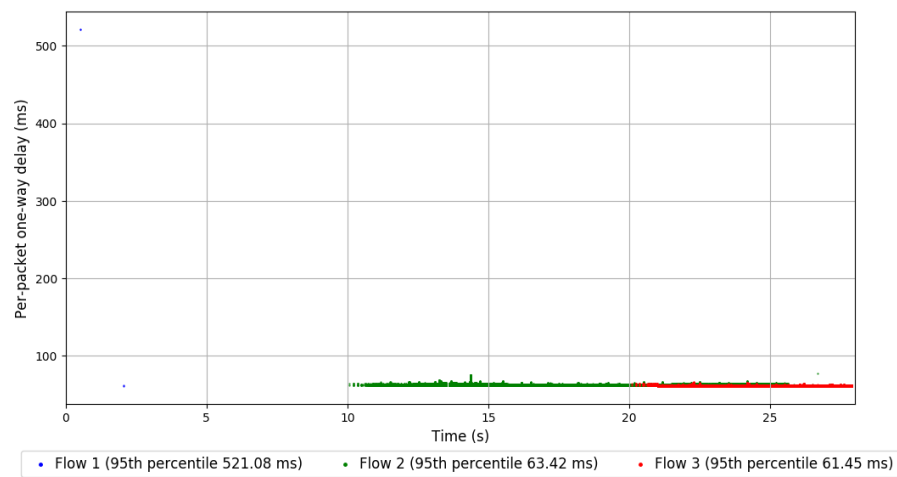
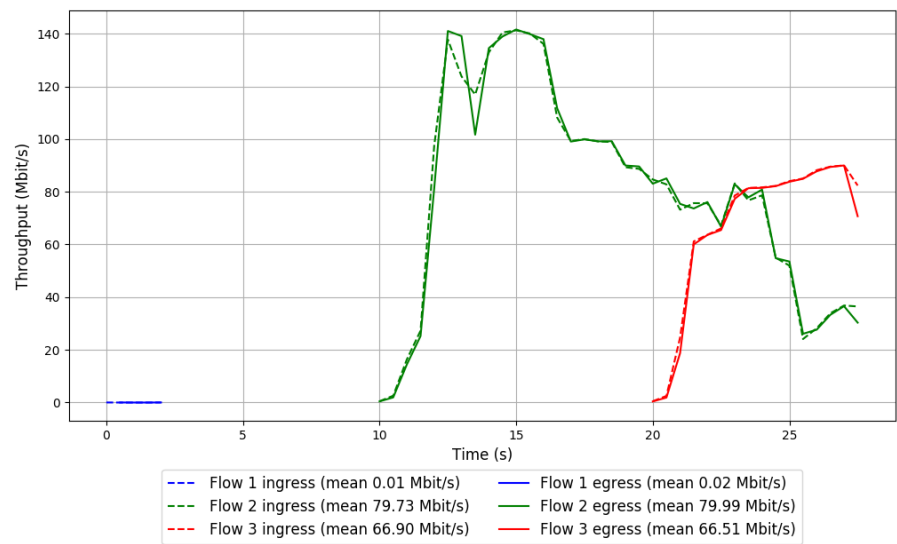
-- Flow 3:

Average throughput: 66.51 Mbit/s

95th percentile per-packet one-way delay: 61.452 ms

Loss rate: 2.14%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-10-12 18:54:42

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

Below is generated by plot.py at 2017-10-12 22:52:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.64 Mbit/s

95th percentile per-packet one-way delay: 63.277 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 71.11 Mbit/s

95th percentile per-packet one-way delay: 63.290 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 72.11 Mbit/s

95th percentile per-packet one-way delay: 61.442 ms

Loss rate: 0.90%

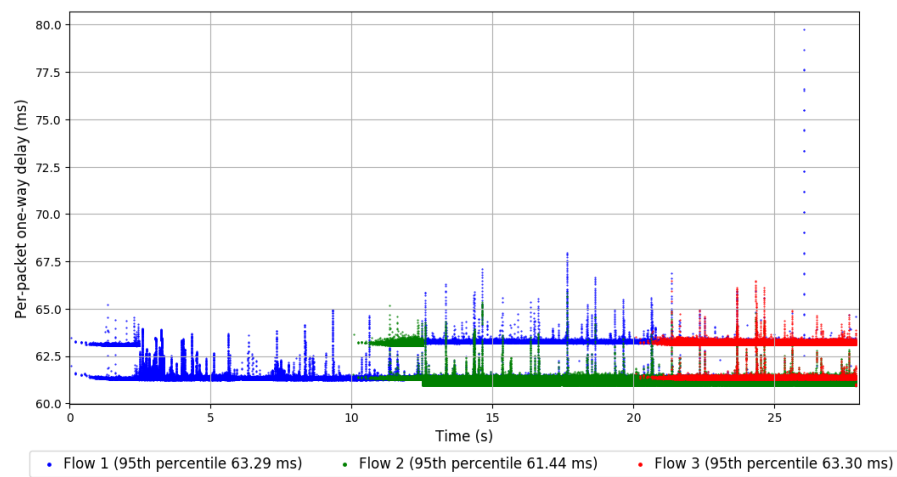
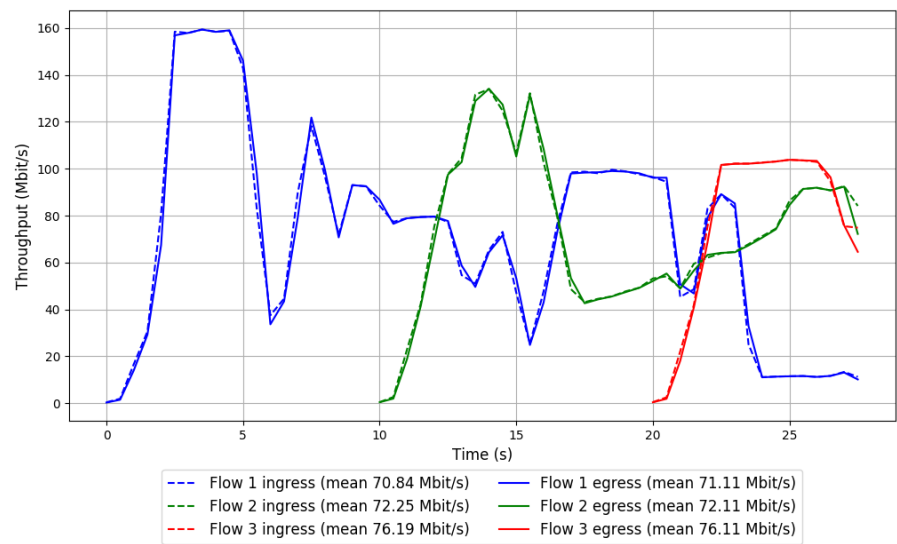
-- Flow 3:

Average throughput: 76.11 Mbit/s

95th percentile per-packet one-way delay: 63.298 ms

Loss rate: 1.69%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-10-12 19:07:50

End at: 2017-10-12 19:08:20

Below is generated by plot.py at 2017-10-12 22:53:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.87 Mbit/s

95th percentile per-packet one-way delay: 63.374 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 83.83 Mbit/s

95th percentile per-packet one-way delay: 63.307 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 69.77 Mbit/s

95th percentile per-packet one-way delay: 63.467 ms

Loss rate: 0.58%

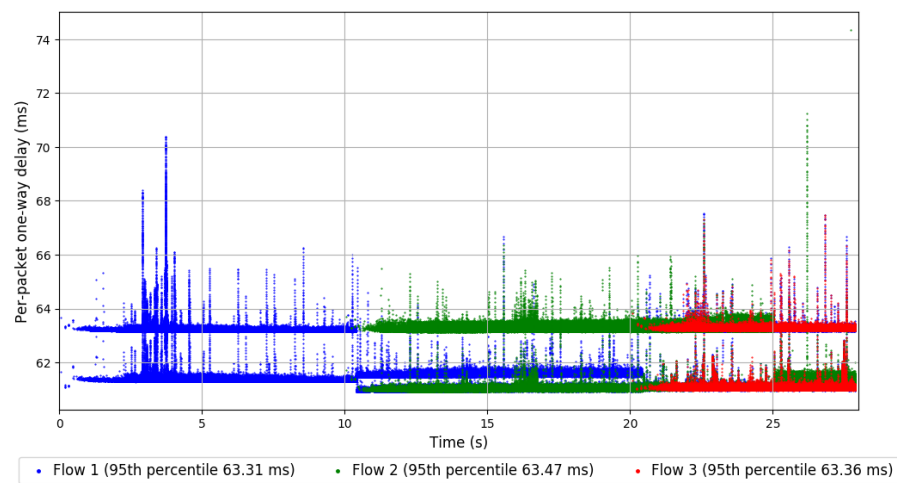
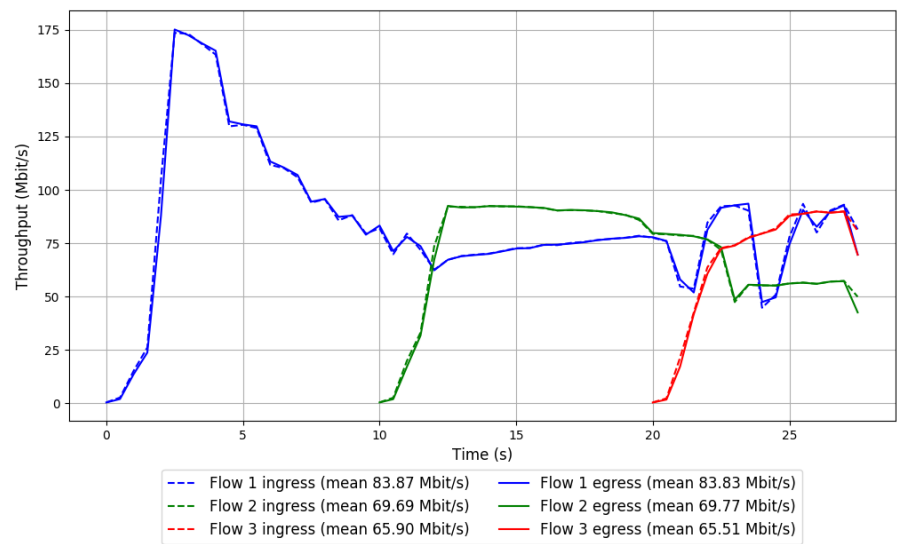
-- Flow 3:

Average throughput: 65.51 Mbit/s

95th percentile per-packet one-way delay: 63.364 ms

Loss rate: 2.15%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-10-12 19:20:38

End at: 2017-10-12 19:21:08

Below is generated by plot.py at 2017-10-12 22:53:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.95 Mbit/s

95th percentile per-packet one-way delay: 63.346 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 87.96 Mbit/s

95th percentile per-packet one-way delay: 63.313 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 77.83 Mbit/s

95th percentile per-packet one-way delay: 63.371 ms

Loss rate: 0.50%

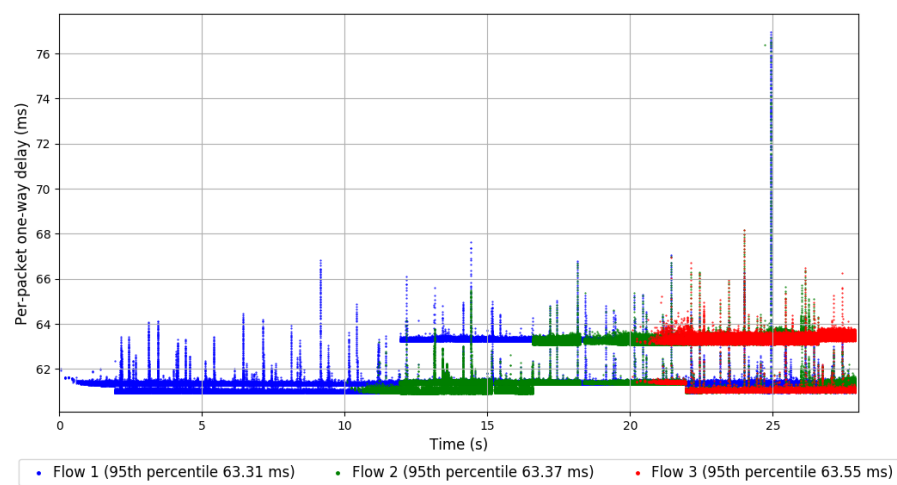
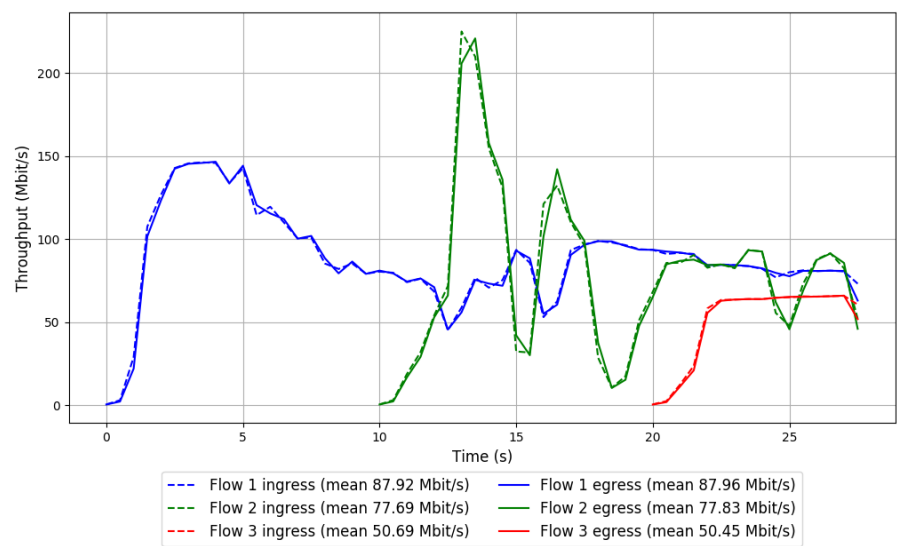
-- Flow 3:

Average throughput: 50.45 Mbit/s

95th percentile per-packet one-way delay: 63.551 ms

Loss rate: 2.06%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-10-12 19:33:36

End at: 2017-10-12 19:34:06

Below is generated by plot.py at 2017-10-12 22:54:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 149.98 Mbit/s

95th percentile per-packet one-way delay: 63.592 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 84.32 Mbit/s

95th percentile per-packet one-way delay: 63.359 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 71.11 Mbit/s

95th percentile per-packet one-way delay: 63.694 ms

Loss rate: 0.35%

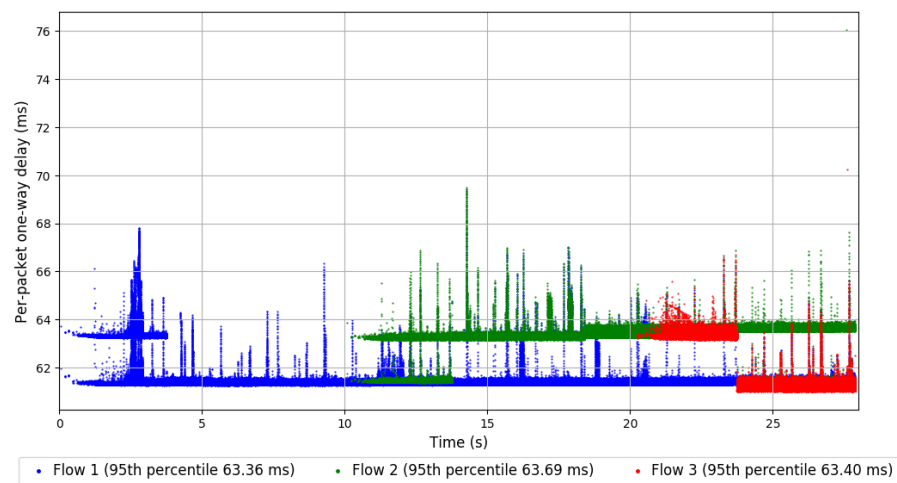
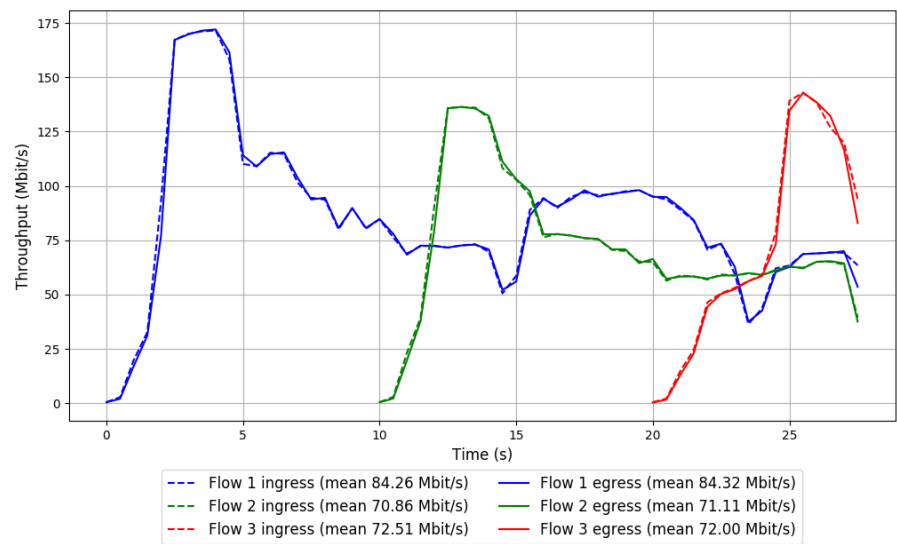
-- Flow 3:

Average throughput: 72.00 Mbit/s

95th percentile per-packet one-way delay: 63.401 ms

Loss rate: 2.29%

Run 10: Report of Copa — Data Link

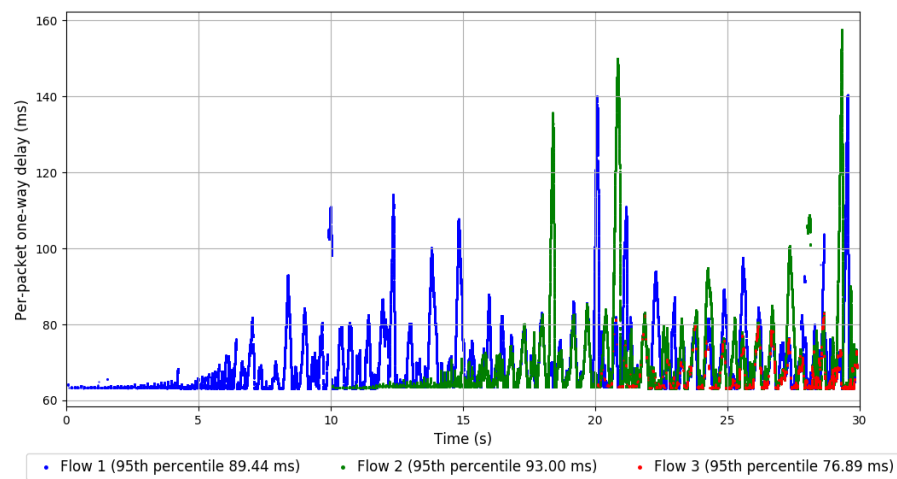
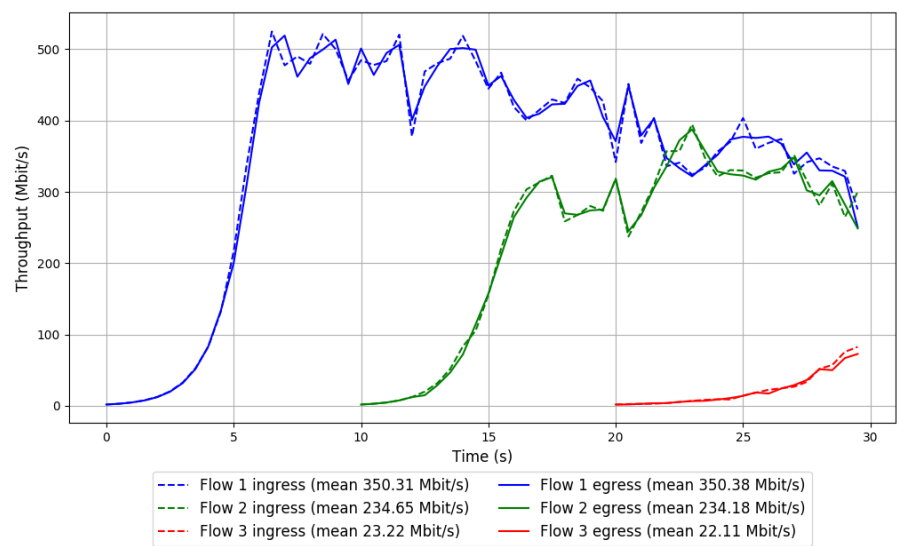


```
Run 1: Statistics of CalibratedKoho

Start at: 2017-10-12 17:39:40
End at: 2017-10-12 17:40:10

# Below is generated by plot.py at 2017-10-12 23:00:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 513.25 Mbit/s
95th percentile per-packet one-way delay: 90.352 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 350.38 Mbit/s
95th percentile per-packet one-way delay: 89.439 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 234.18 Mbit/s
95th percentile per-packet one-way delay: 93.003 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 22.11 Mbit/s
95th percentile per-packet one-way delay: 76.895 ms
Loss rate: 5.98%
```


Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-10-12 17:52:36

End at: 2017-10-12 17:53:07

Below is generated by plot.py at 2017-10-12 23:00:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 505.42 Mbit/s

95th percentile per-packet one-way delay: 94.692 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 327.48 Mbit/s

95th percentile per-packet one-way delay: 93.300 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 259.61 Mbit/s

95th percentile per-packet one-way delay: 101.108 ms

Loss rate: 0.90%

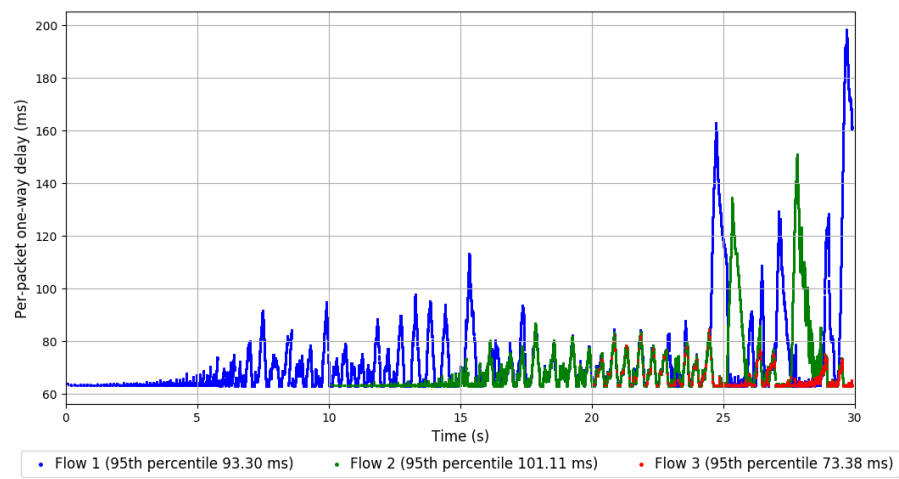
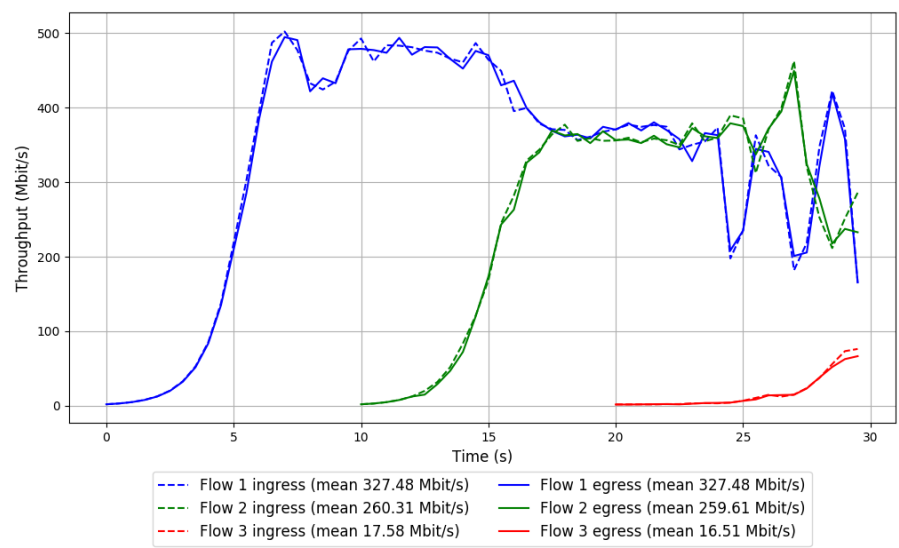
-- Flow 3:

Average throughput: 16.51 Mbit/s

95th percentile per-packet one-way delay: 73.380 ms

Loss rate: 7.31%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-10-12 18:05:31

End at: 2017-10-12 18:06:01

Below is generated by plot.py at 2017-10-12 23:00:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 506.15 Mbit/s

95th percentile per-packet one-way delay: 91.716 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 341.00 Mbit/s

95th percentile per-packet one-way delay: 90.313 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 244.26 Mbit/s

95th percentile per-packet one-way delay: 114.012 ms

Loss rate: 1.39%

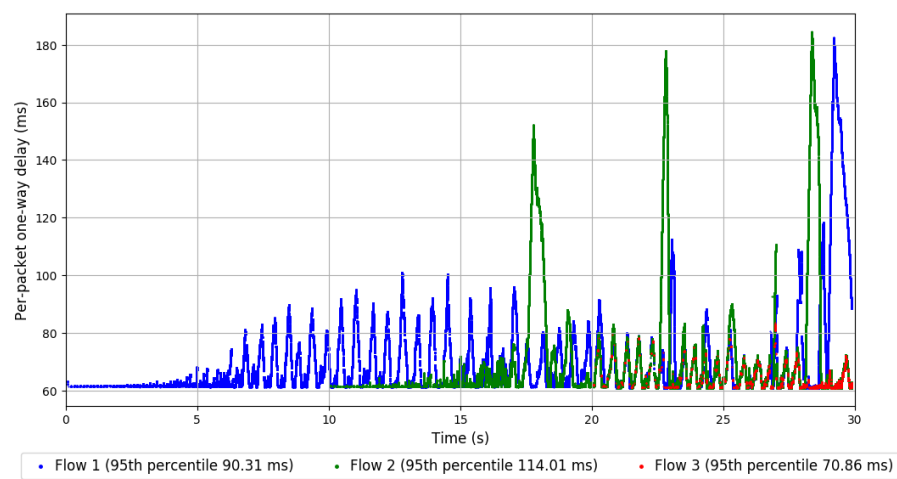
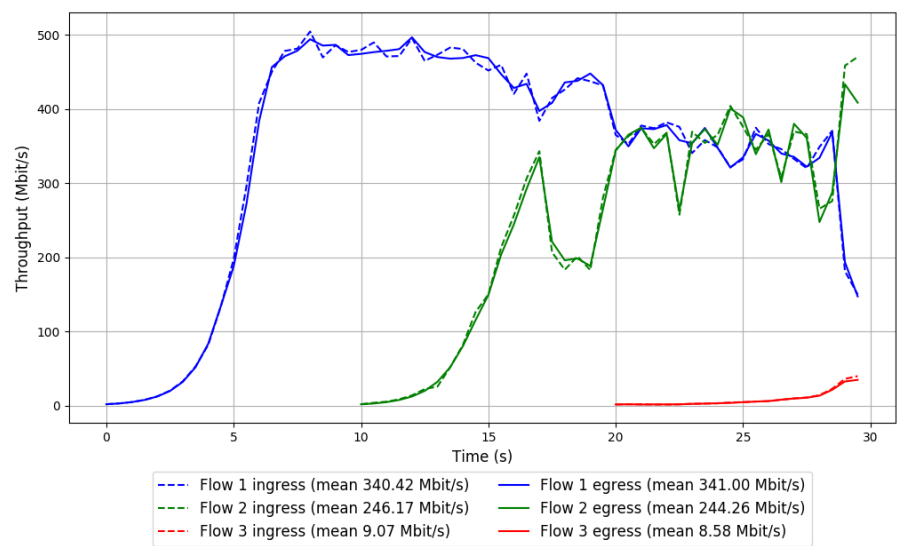
-- Flow 3:

Average throughput: 8.58 Mbit/s

95th percentile per-packet one-way delay: 70.863 ms

Loss rate: 6.51%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-10-12 18:18:19

End at: 2017-10-12 18:18:49

Below is generated by plot.py at 2017-10-12 23:00:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 491.76 Mbit/s

95th percentile per-packet one-way delay: 104.538 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 297.77 Mbit/s

95th percentile per-packet one-way delay: 105.531 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 234.41 Mbit/s

95th percentile per-packet one-way delay: 106.513 ms

Loss rate: 0.80%

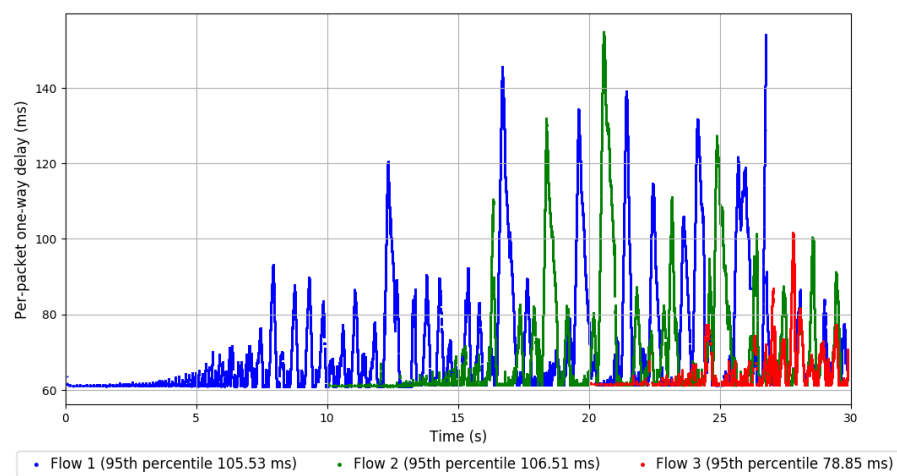
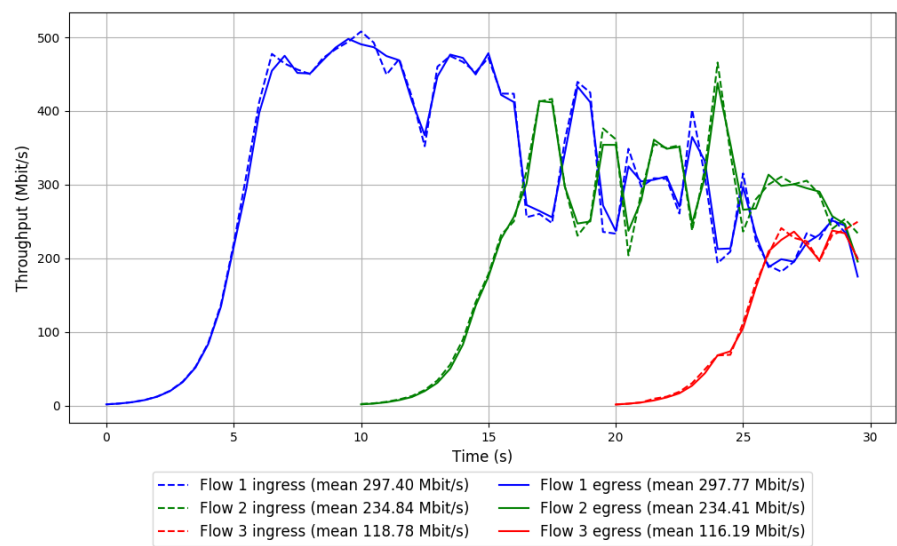
-- Flow 3:

Average throughput: 116.19 Mbit/s

95th percentile per-packet one-way delay: 78.854 ms

Loss rate: 3.39%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-10-12 18:31:11

End at: 2017-10-12 18:31:41

Below is generated by plot.py at 2017-10-12 23:01:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 501.85 Mbit/s

95th percentile per-packet one-way delay: 103.945 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 308.08 Mbit/s

95th percentile per-packet one-way delay: 92.131 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 229.97 Mbit/s

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

Loss rate: 0.53%

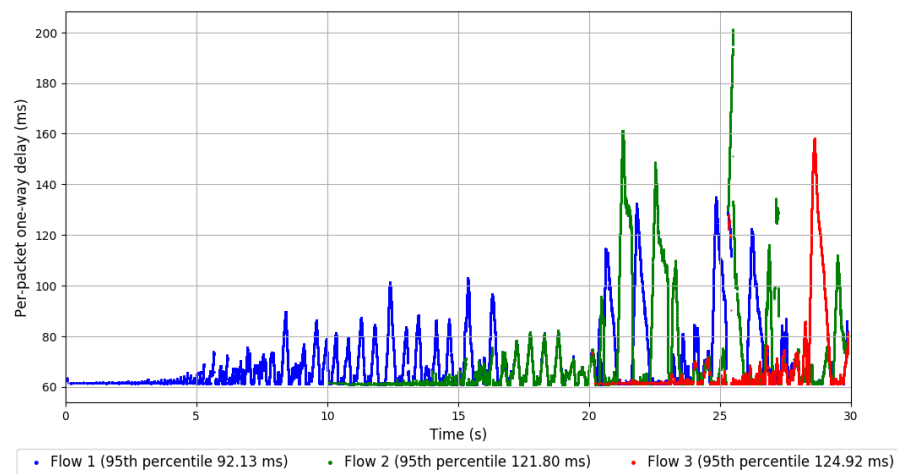
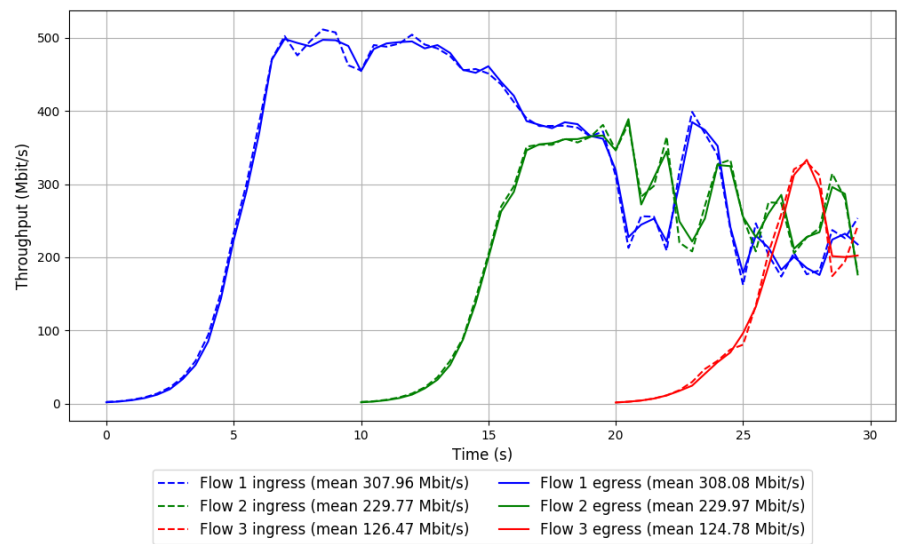
-- Flow 3:

Average throughput: 124.78 Mbit/s

95th percentile per-packet one-way delay: 124.924 ms

Loss rate: 2.70%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-10-12 18:43:48

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

Below is generated by plot.py at 2017-10-12 23:02:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 500.78 Mbit/s

95th percentile per-packet one-way delay: 115.911 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 318.95 Mbit/s

95th percentile per-packet one-way delay: 120.093 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 213.43 Mbit/s

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

Loss rate: 0.61%

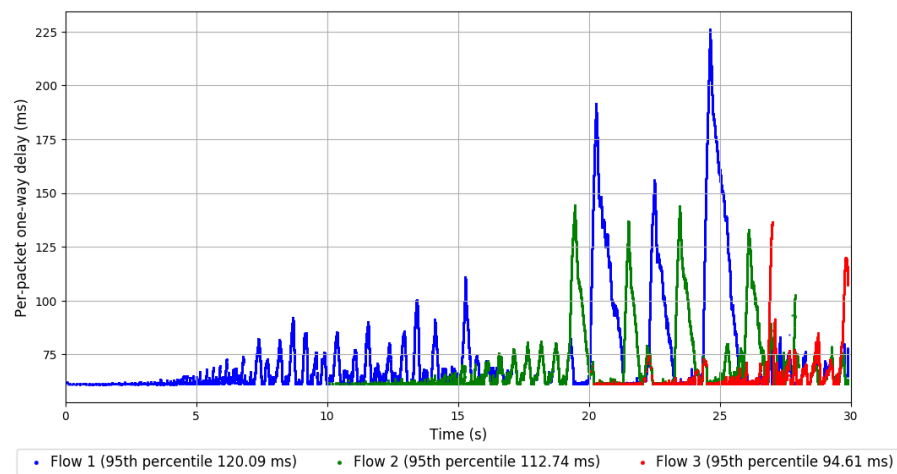
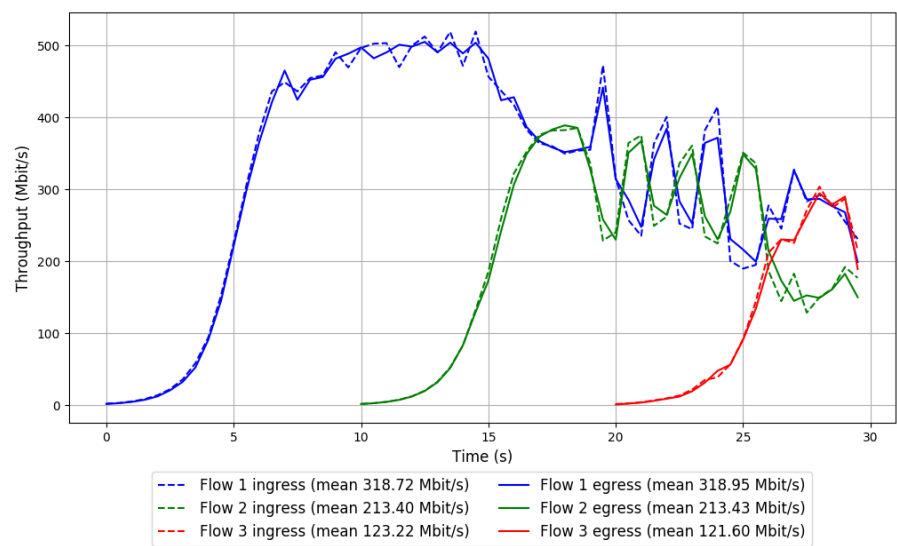
-- Flow 3:

Average throughput: 121.60 Mbit/s

95th percentile per-packet one-way delay: 94.614 ms

Loss rate: 2.62%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-10-12 18:56:39

End at: 2017-10-12 18:57:09

Below is generated by plot.py at 2017-10-12 23:02:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 489.27 Mbit/s

95th percentile per-packet one-way delay: 139.128 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 322.43 Mbit/s

95th percentile per-packet one-way delay: 140.161 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 202.17 Mbit/s

95th percentile per-packet one-way delay: 141.495 ms

Loss rate: 0.57%

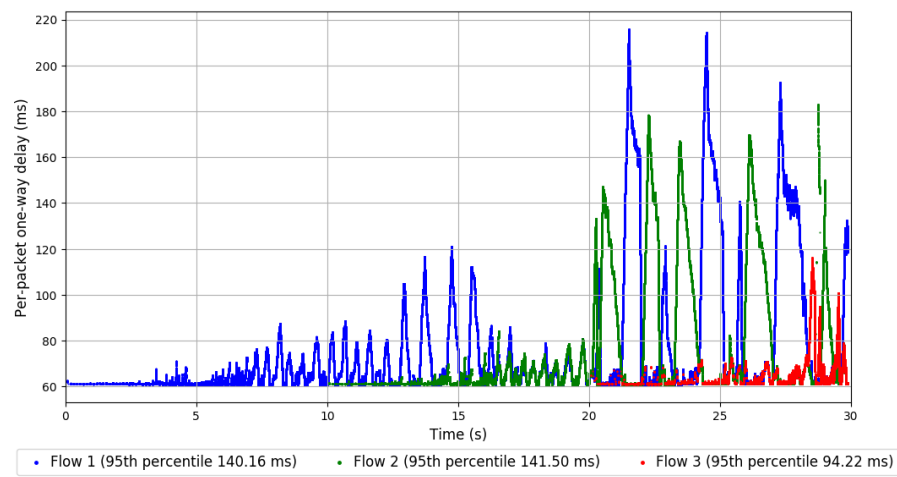
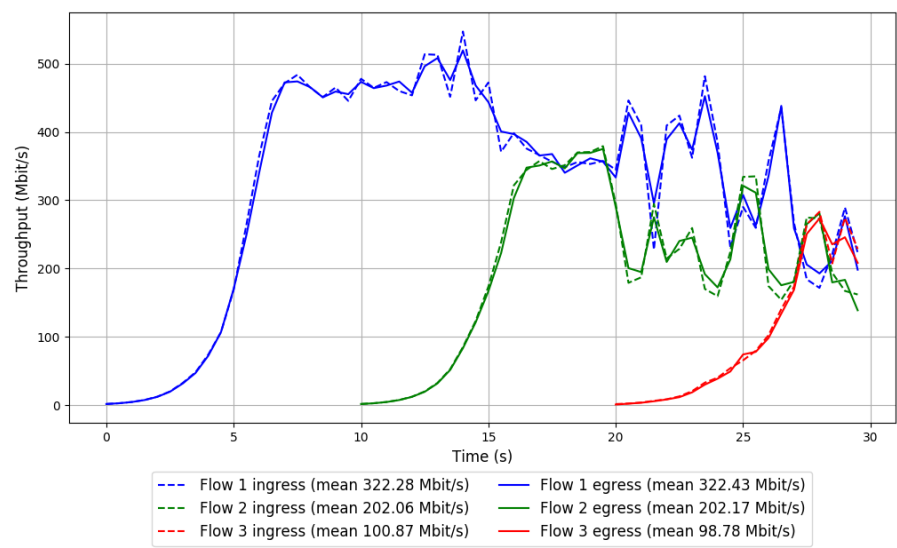
-- Flow 3:

Average throughput: 98.78 Mbit/s

95th percentile per-packet one-way delay: 94.218 ms

Loss rate: 3.34%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-10-12 19:09:46

End at: 2017-10-12 19:10:16

Below is generated by plot.py at 2017-10-12 23:03:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 507.08 Mbit/s

95th percentile per-packet one-way delay: 90.927 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 316.26 Mbit/s

95th percentile per-packet one-way delay: 88.479 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 248.56 Mbit/s

95th percentile per-packet one-way delay: 103.864 ms

Loss rate: 0.71%

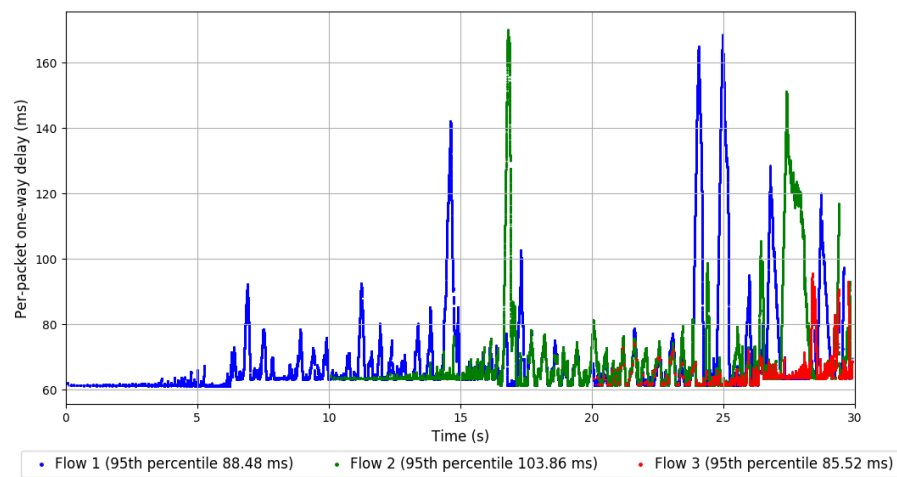
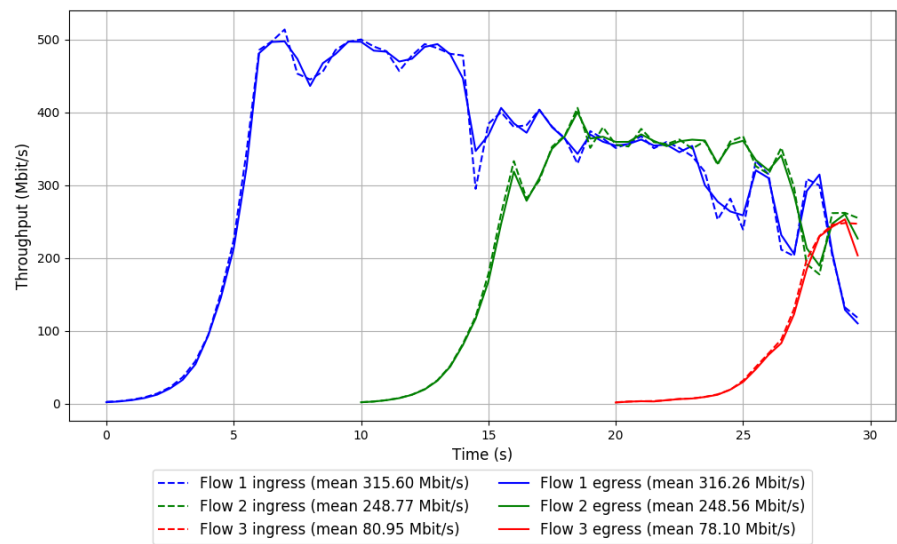
-- Flow 3:

Average throughput: 78.10 Mbit/s

95th percentile per-packet one-way delay: 85.522 ms

Loss rate: 4.75%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-10-12 19:22:36

End at: 2017-10-12 19:23:06

Below is generated by plot.py at 2017-10-12 23:09:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 520.52 Mbit/s

95th percentile per-packet one-way delay: 87.819 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 339.99 Mbit/s

95th percentile per-packet one-way delay: 90.545 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 262.66 Mbit/s

95th percentile per-packet one-way delay: 86.356 ms

Loss rate: 0.57%

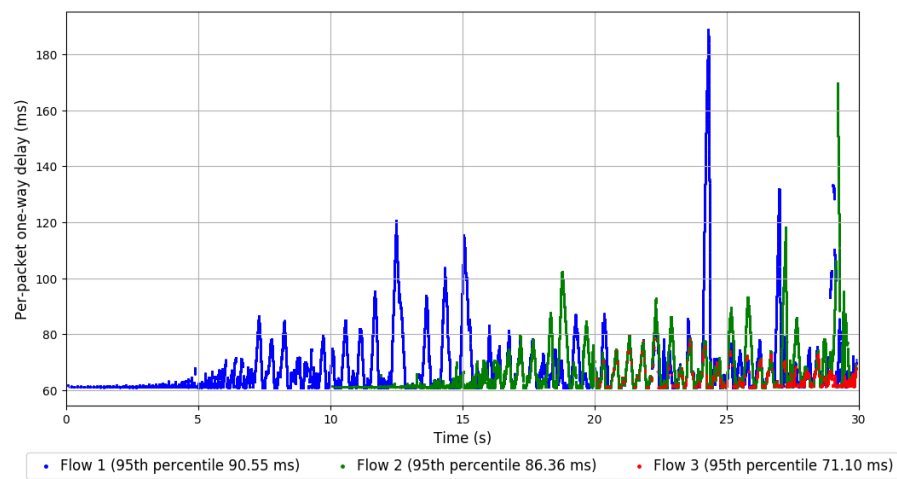
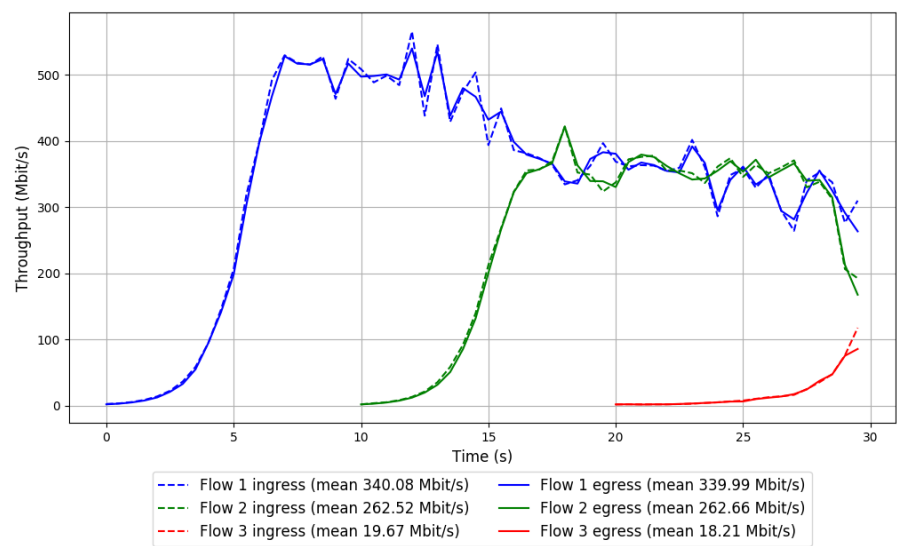
-- Flow 3:

Average throughput: 18.21 Mbit/s

95th percentile per-packet one-way delay: 71.098 ms

Loss rate: 8.61%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-10-12 19:35:33

End at: 2017-10-12 19:36:03

Below is generated by plot.py at 2017-10-12 23:09:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 500.98 Mbit/s

95th percentile per-packet one-way delay: 134.682 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 314.51 Mbit/s

95th percentile per-packet one-way delay: 115.446 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 227.41 Mbit/s

95th percentile per-packet one-way delay: 148.158 ms

Loss rate: 0.65%

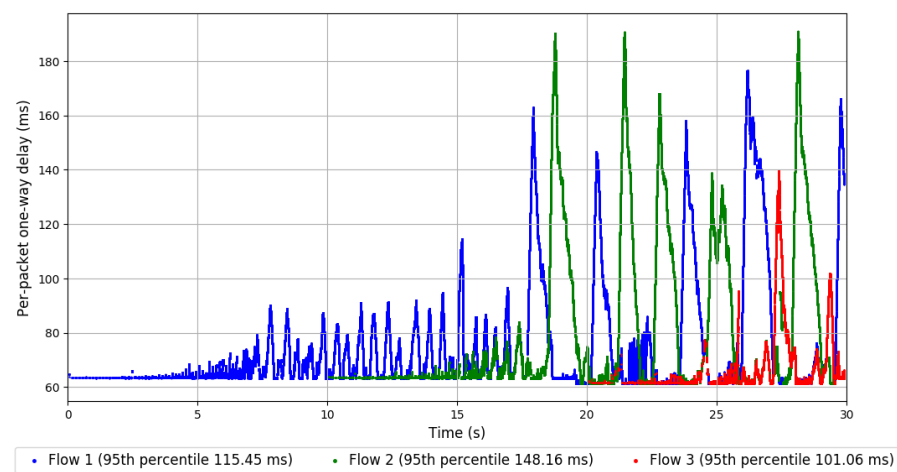
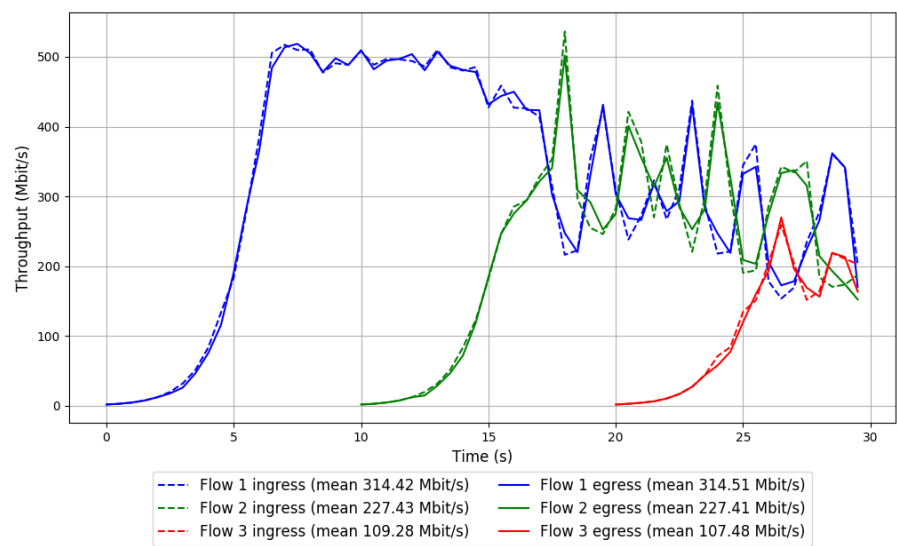
-- Flow 3:

Average throughput: 107.48 Mbit/s

95th percentile per-packet one-way delay: 101.060 ms

Loss rate: 2.89%

Run 10: Report of CalibratedKoho — Data Link

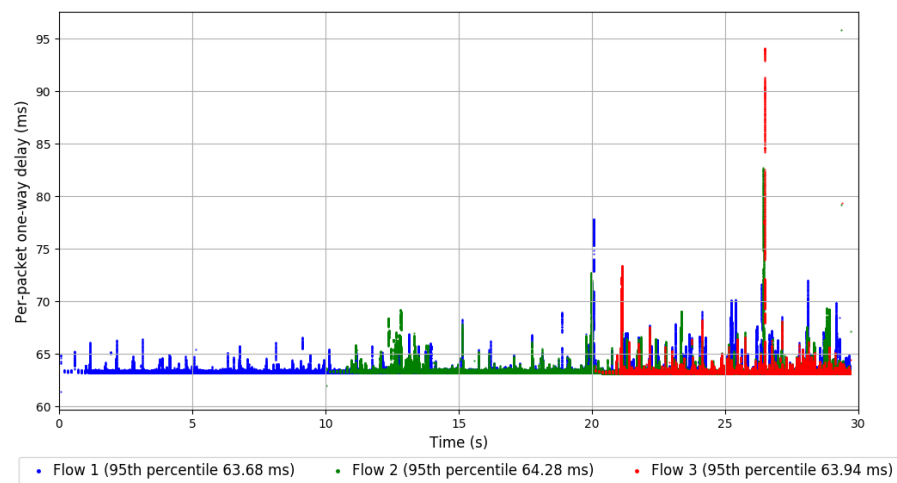
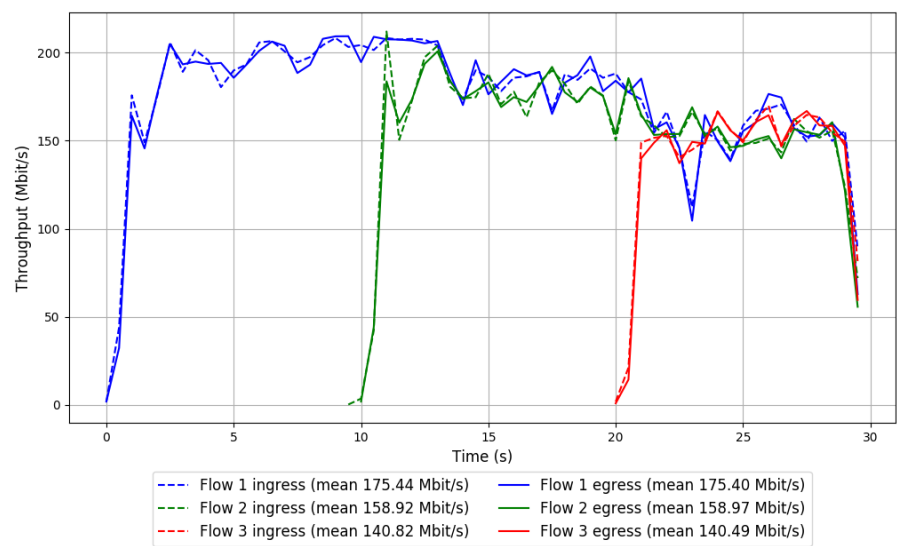


```
Run 1: Statistics of Indigo

Start at: 2017-10-12 17:34:52
End at: 2017-10-12 17:35:22

# Below is generated by plot.py at 2017-10-12 23:09:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 326.25 Mbit/s
95th percentile per-packet one-way delay: 63.909 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 175.40 Mbit/s
95th percentile per-packet one-way delay: 63.679 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 158.97 Mbit/s
95th percentile per-packet one-way delay: 64.280 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 140.49 Mbit/s
95th percentile per-packet one-way delay: 63.936 ms
Loss rate: 1.53%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-10-12 17:47:46

End at: 2017-10-12 17:48:16

Below is generated by plot.py at 2017-10-12 23:09:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 317.92 Mbit/s

95th percentile per-packet one-way delay: 63.784 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 172.63 Mbit/s

95th percentile per-packet one-way delay: 63.759 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 160.02 Mbit/s

95th percentile per-packet one-way delay: 64.000 ms

Loss rate: 0.74%

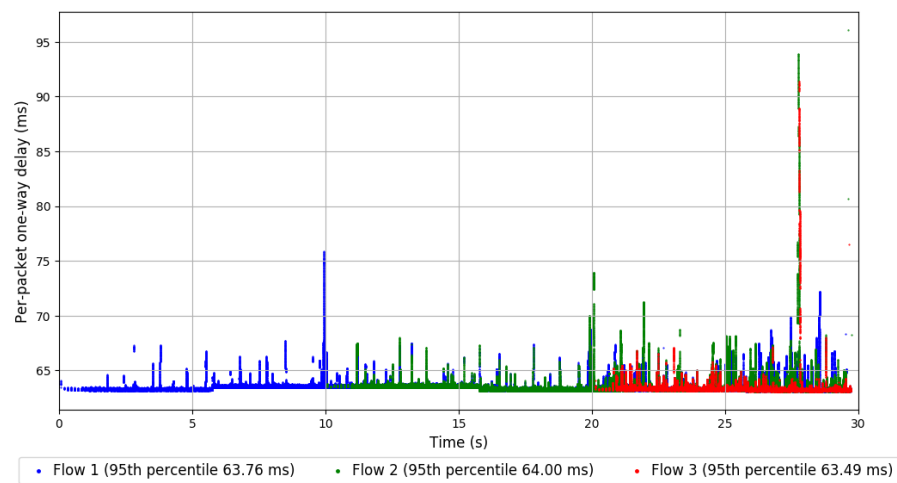
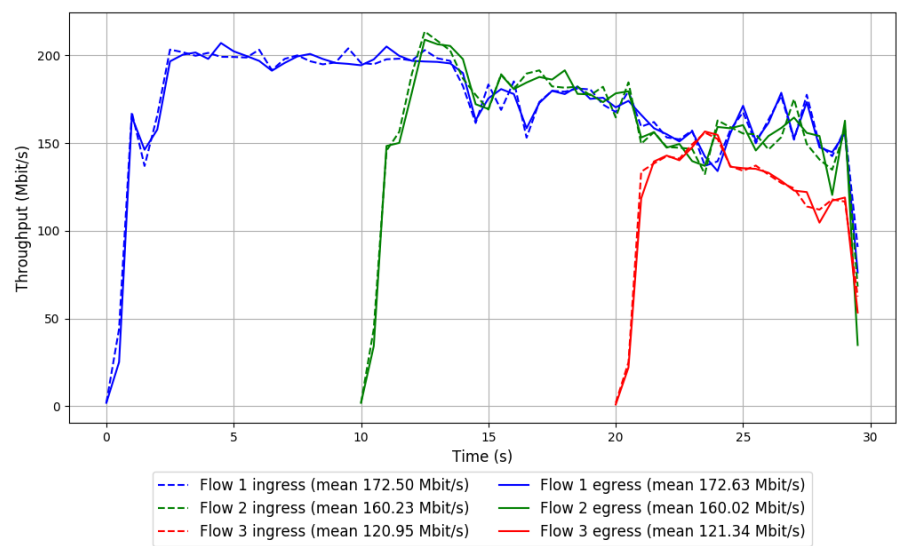
-- Flow 3:

Average throughput: 121.34 Mbit/s

95th percentile per-packet one-way delay: 63.493 ms

Loss rate: 1.01%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-10-12 18:00:40

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

Below is generated by plot.py at 2017-10-12 23:09:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 336.29 Mbit/s

95th percentile per-packet one-way delay: 63.615 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 178.69 Mbit/s

95th percentile per-packet one-way delay: 63.623 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 166.91 Mbit/s

95th percentile per-packet one-way delay: 63.733 ms

Loss rate: 0.62%

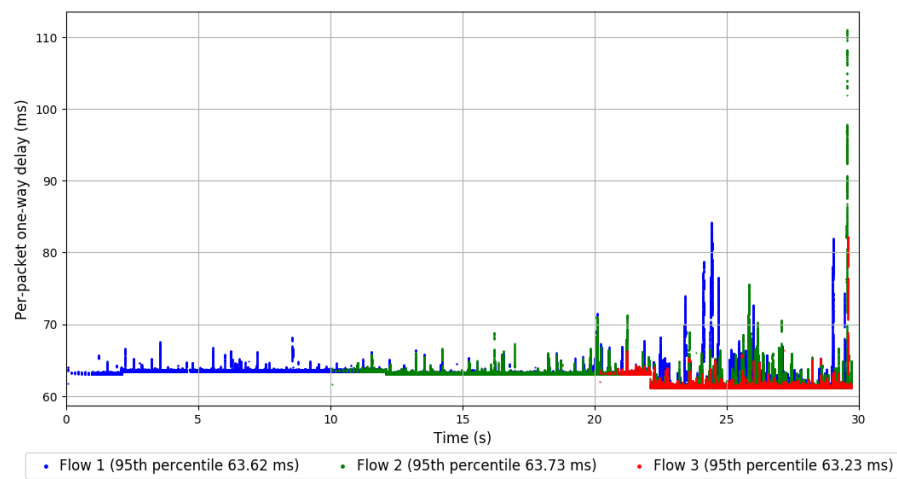
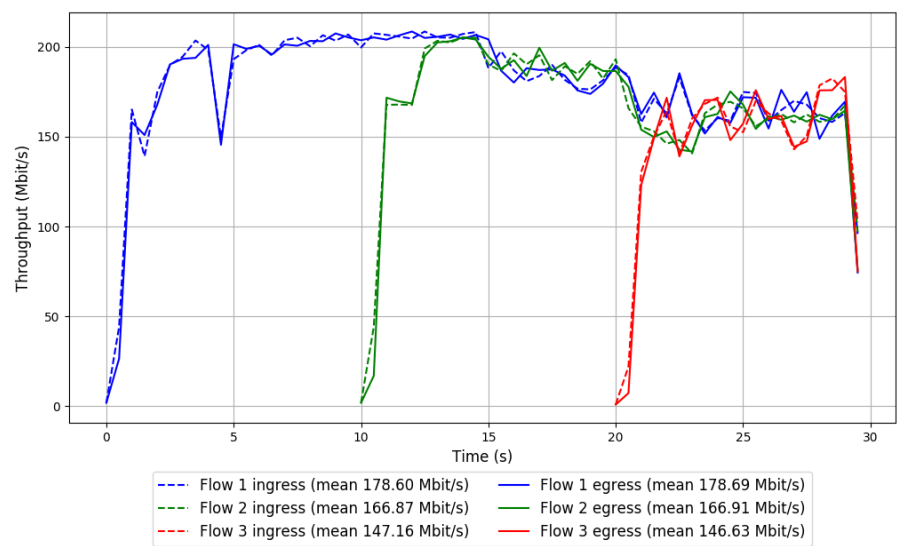
-- Flow 3:

Average throughput: 146.63 Mbit/s

95th percentile per-packet one-way delay: 63.226 ms

Loss rate: 1.67%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-10-12 18:13:35

End at: 2017-10-12 18:14:05

Below is generated by plot.py at 2017-10-12 23:09:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 329.04 Mbit/s

95th percentile per-packet one-way delay: 63.551 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 174.23 Mbit/s

95th percentile per-packet one-way delay: 63.570 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 164.99 Mbit/s

95th percentile per-packet one-way delay: 61.862 ms

Loss rate: 0.64%

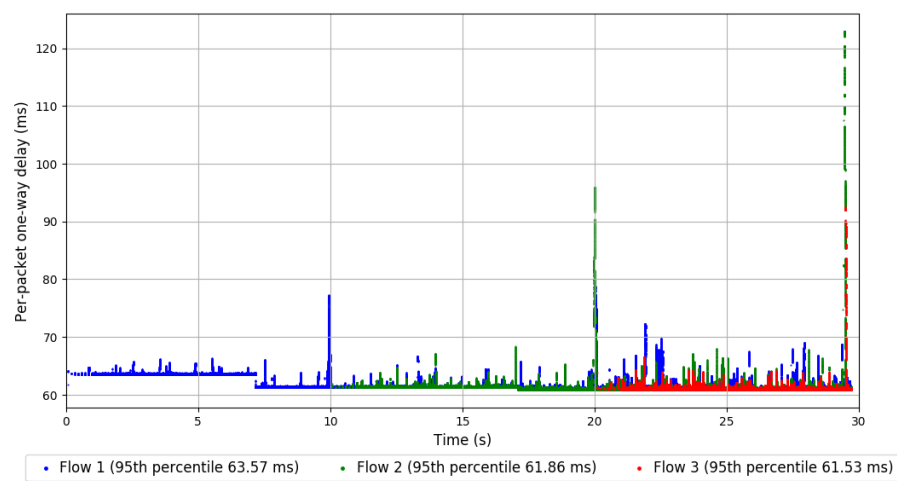
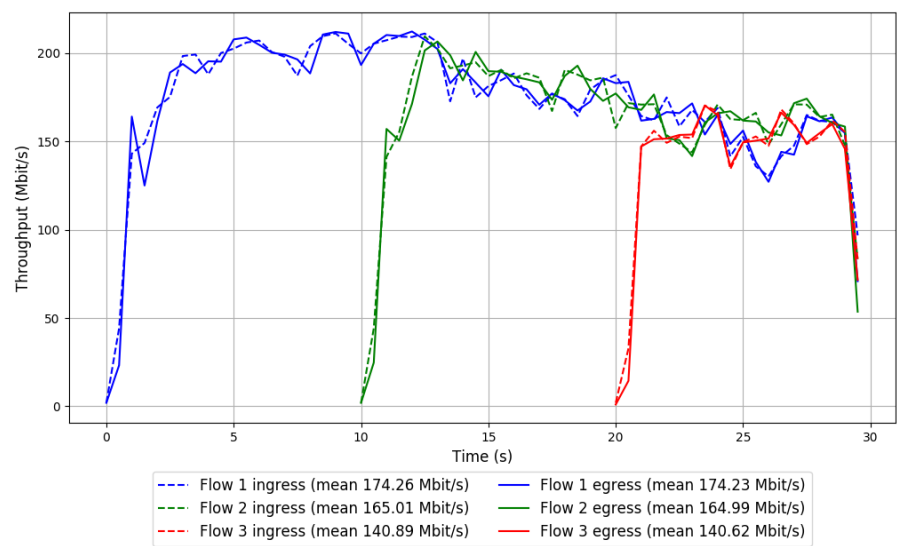
-- Flow 3:

Average throughput: 140.62 Mbit/s

95th percentile per-packet one-way delay: 61.532 ms

Loss rate: 1.47%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-10-12 18:26:32

End at: 2017-10-12 18:27:02

Below is generated by plot.py at 2017-10-12 23:09:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 317.42 Mbit/s

95th percentile per-packet one-way delay: 61.867 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 171.57 Mbit/s

95th percentile per-packet one-way delay: 61.577 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 155.52 Mbit/s

95th percentile per-packet one-way delay: 62.781 ms

Loss rate: 0.77%

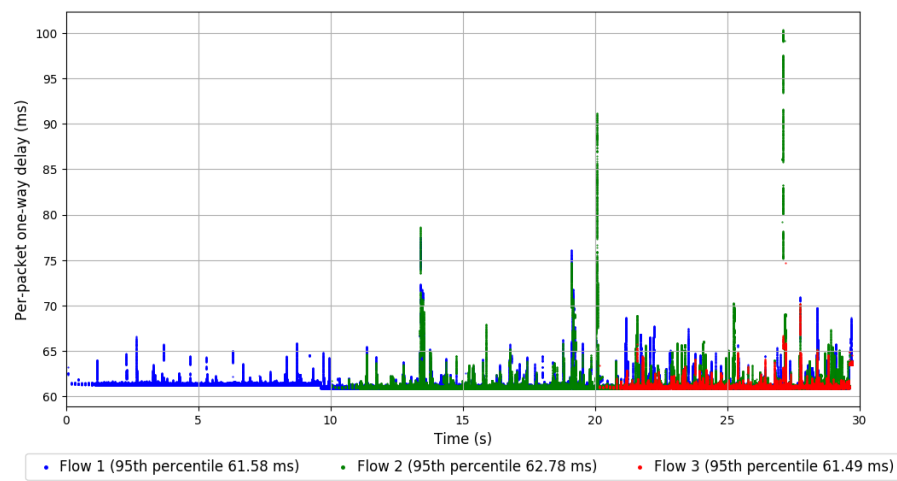
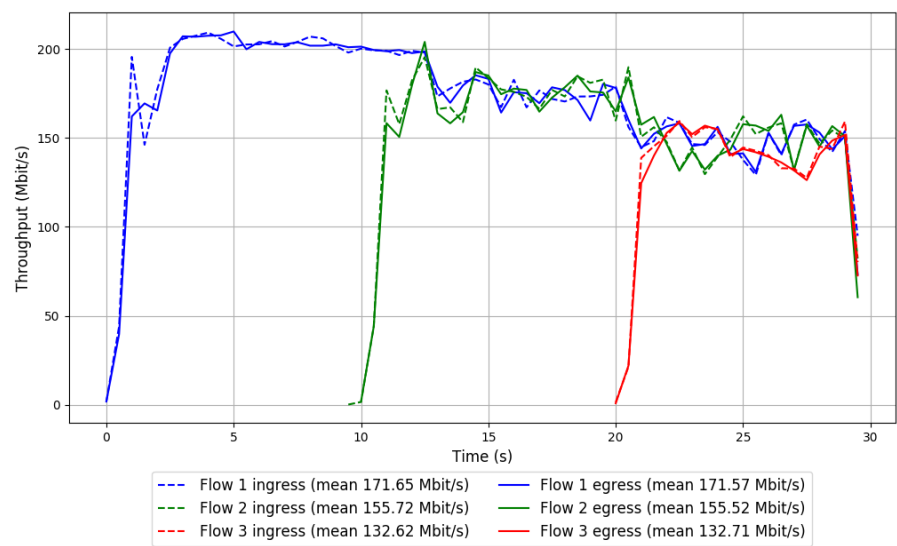
-- Flow 3:

Average throughput: 132.71 Mbit/s

95th percentile per-packet one-way delay: 61.487 ms

Loss rate: 1.23%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-10-12 18:39:05

End at: 2017-10-12 18:39:35

Below is generated by plot.py at 2017-10-12 23:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 325.37 Mbit/s

95th percentile per-packet one-way delay: 61.724 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 173.42 Mbit/s

95th percentile per-packet one-way delay: 61.843 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 160.30 Mbit/s

95th percentile per-packet one-way delay: 61.742 ms

Loss rate: 0.55%

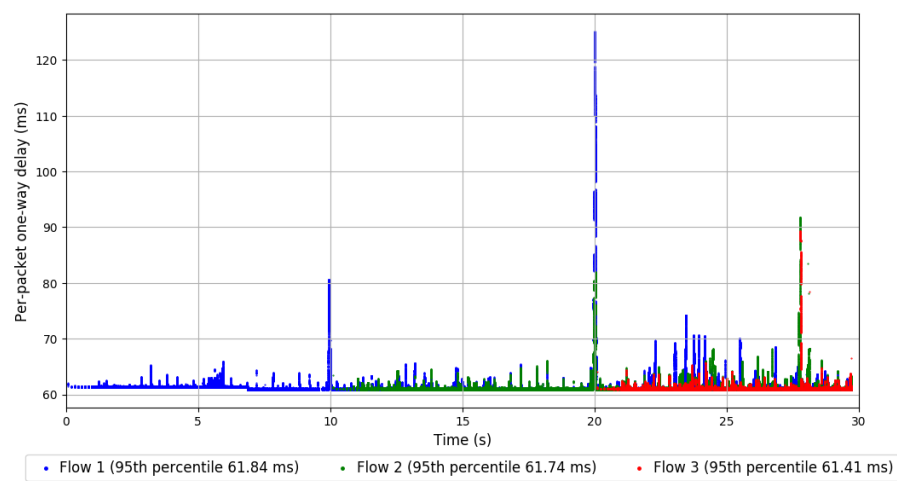
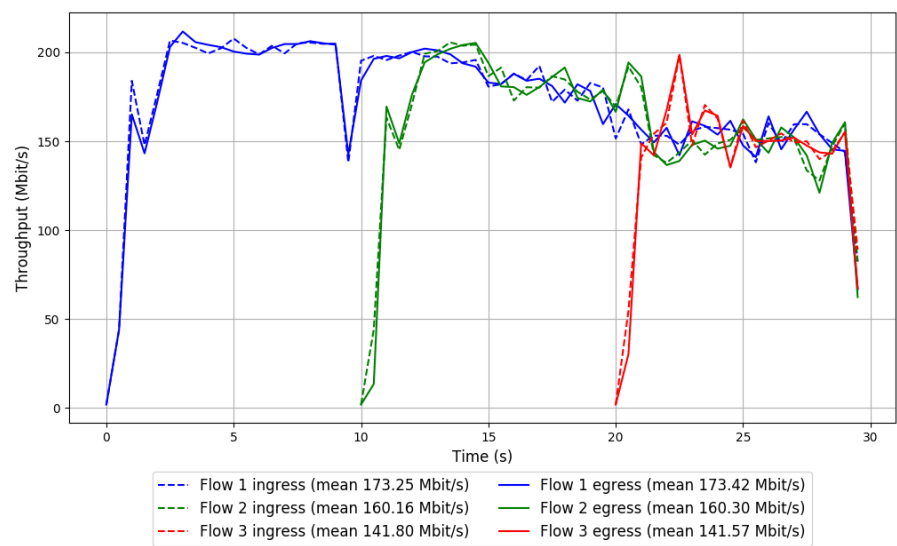
-- Flow 3:

Average throughput: 141.57 Mbit/s

95th percentile per-packet one-way delay: 61.408 ms

Loss rate: 1.41%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-10-12 18:51:50

End at: 2017-10-12 18:52:20

Below is generated by plot.py at 2017-10-12 23:10:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 327.00 Mbit/s

95th percentile per-packet one-way delay: 63.613 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 174.23 Mbit/s

95th percentile per-packet one-way delay: 63.440 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 164.32 Mbit/s

95th percentile per-packet one-way delay: 63.939 ms

Loss rate: 0.59%

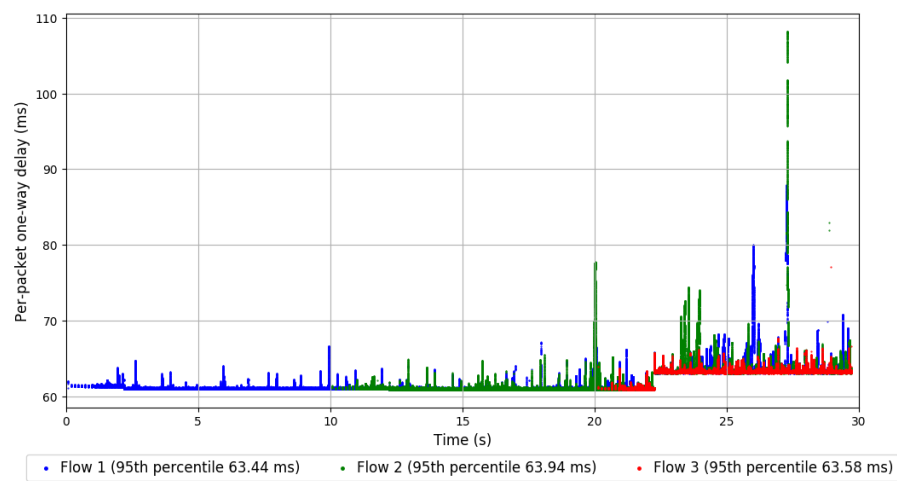
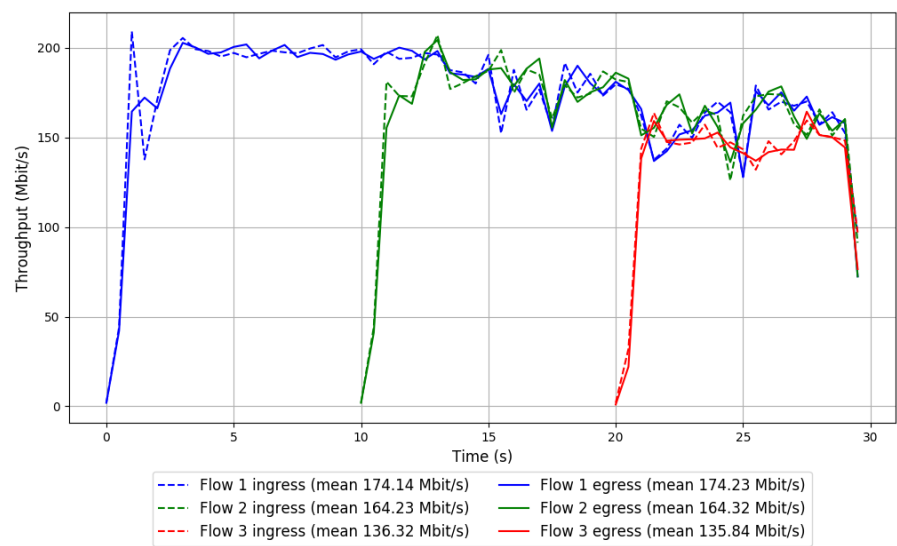
-- Flow 3:

Average throughput: 135.84 Mbit/s

95th percentile per-packet one-way delay: 63.582 ms

Loss rate: 1.61%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

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

End at: 2017-10-12 19:05:25

Below is generated by plot.py at 2017-10-12 23:10:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 321.94 Mbit/s

95th percentile per-packet one-way delay: 63.302 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 169.01 Mbit/s

95th percentile per-packet one-way delay: 63.319 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 156.97 Mbit/s

95th percentile per-packet one-way delay: 61.904 ms

Loss rate: 0.65%

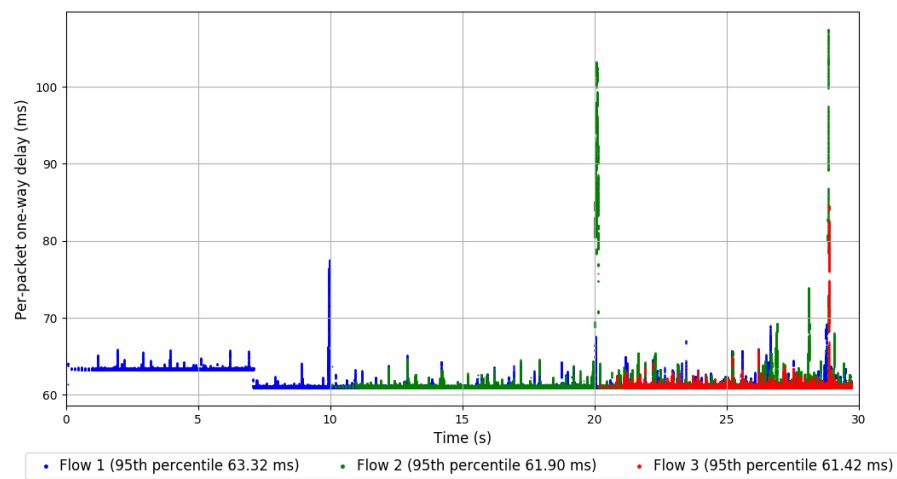
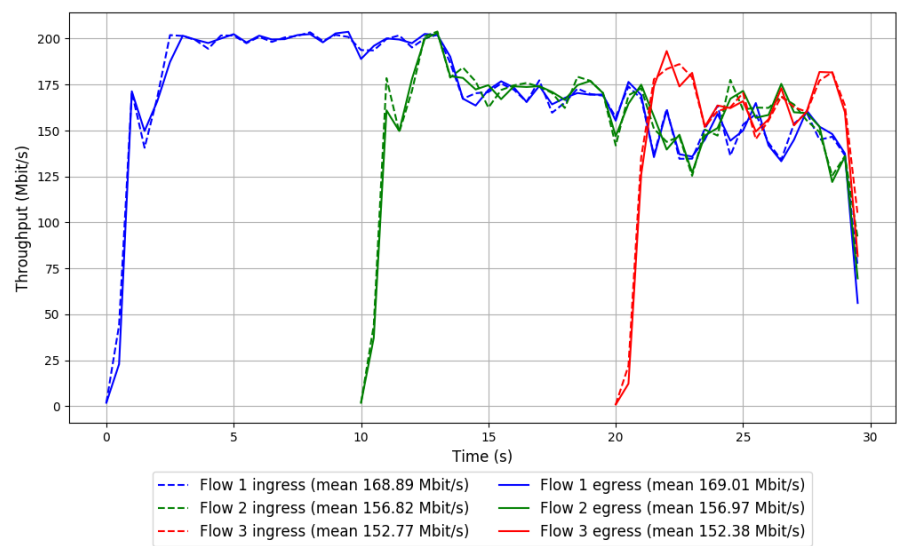
-- Flow 3:

Average throughput: 152.38 Mbit/s

95th percentile per-packet one-way delay: 61.420 ms

Loss rate: 1.57%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-10-12 19:17:45

End at: 2017-10-12 19:18:15

Below is generated by plot.py at 2017-10-12 23:11:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 314.11 Mbit/s

95th percentile per-packet one-way delay: 61.539 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 168.86 Mbit/s

95th percentile per-packet one-way delay: 61.484 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 154.57 Mbit/s

95th percentile per-packet one-way delay: 61.558 ms

Loss rate: 0.56%

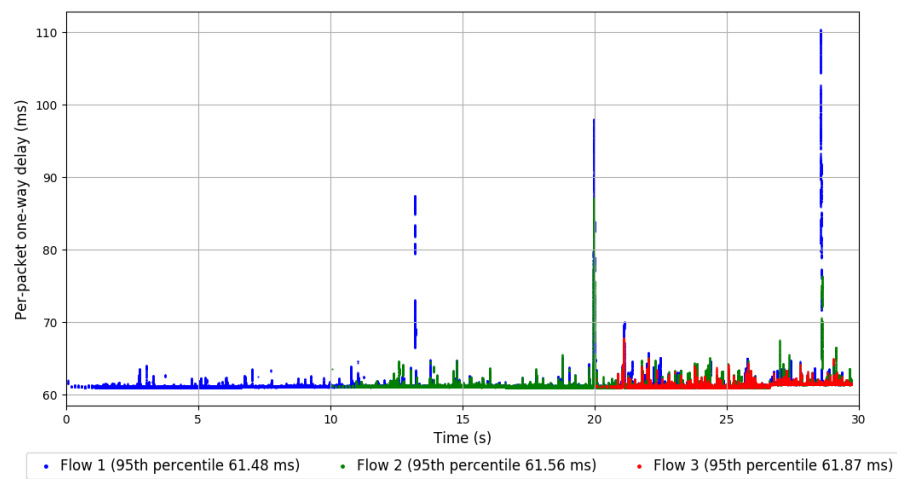
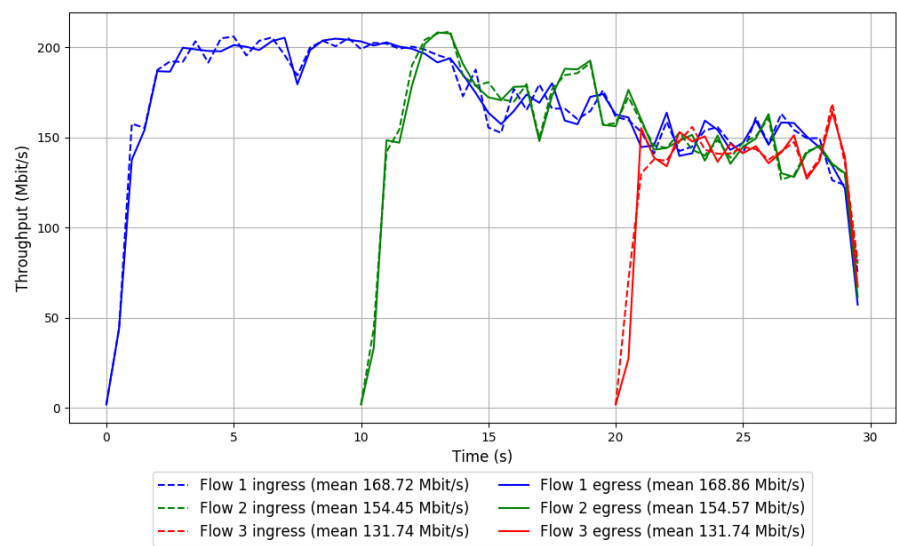
-- Flow 3:

Average throughput: 131.74 Mbit/s

95th percentile per-packet one-way delay: 61.866 ms

Loss rate: 1.29%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-10-12 19:30:43

End at: 2017-10-12 19:31:13

Below is generated by plot.py at 2017-10-12 23:11:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 330.27 Mbit/s

95th percentile per-packet one-way delay: 63.818 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 179.72 Mbit/s

95th percentile per-packet one-way delay: 63.784 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 157.93 Mbit/s

95th percentile per-packet one-way delay: 64.033 ms

Loss rate: 0.53%

-- Flow 3:

Average throughput: 141.72 Mbit/s

95th percentile per-packet one-way delay: 63.668 ms

Loss rate: 1.52%

Run 10: Report of Indigo — Data Link

