

Pantheon Report

Generated at 2017-12-12 03:58:57 (UTC).

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

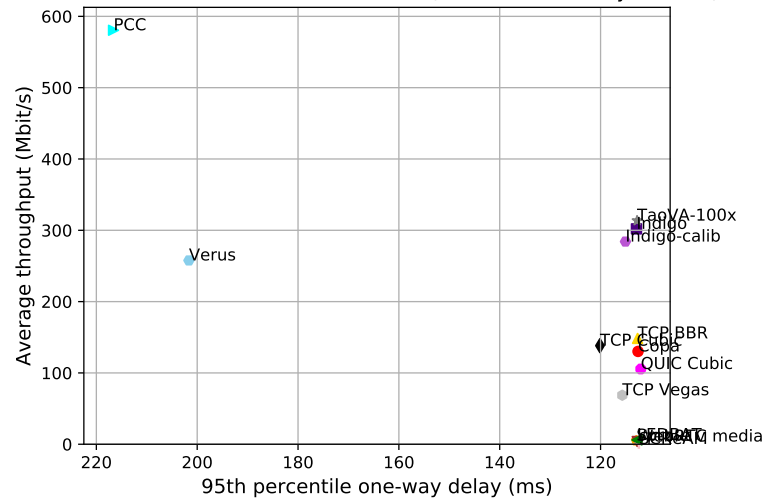
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

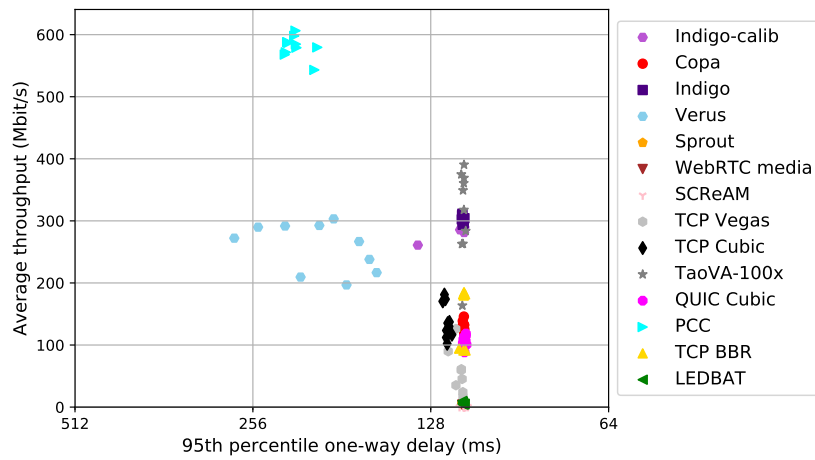
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
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 London 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 London Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows



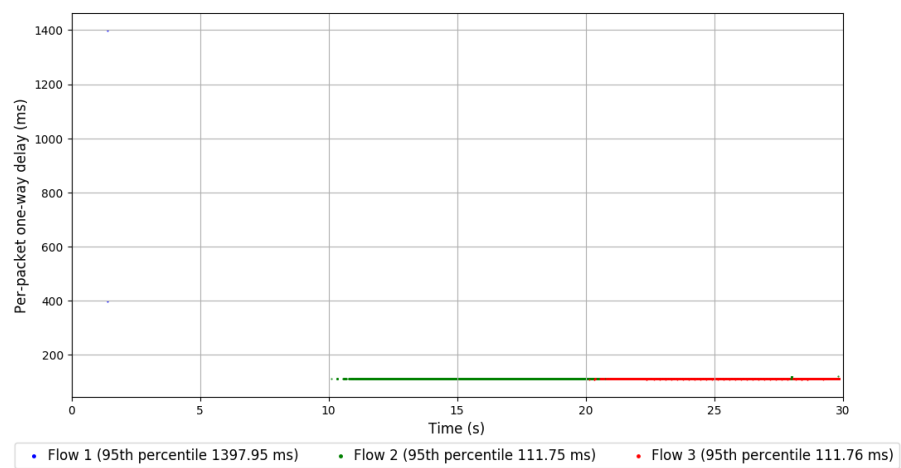
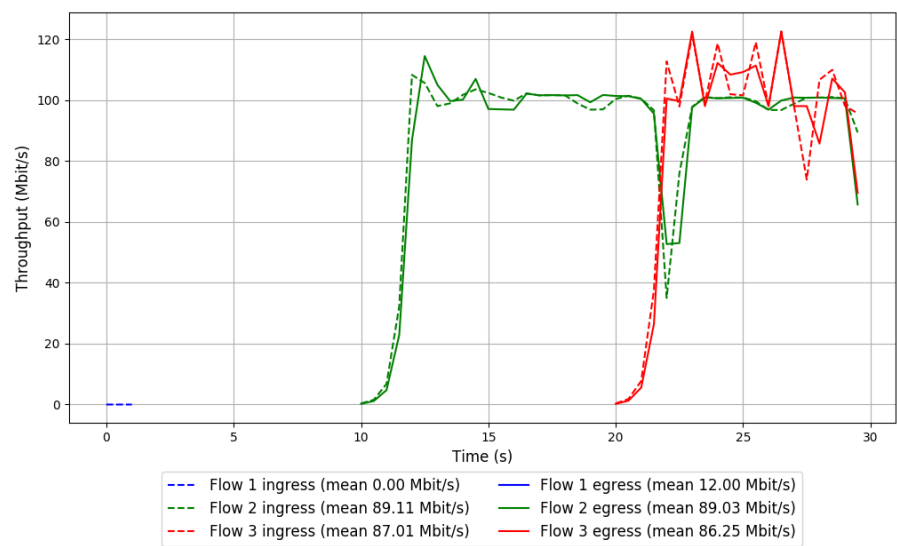
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	8	59.92	92.60	85.20	374.24	112.50	113.01	0.42	1.15	2.75
TCP Cubic	10	73.58	69.07	58.52	119.48	119.91	120.11	0.88	1.18	3.80
LEDBAT	10	3.48	2.94	1.72	112.81	112.66	112.41	1.10	2.22	4.21
PCC	10	506.38	92.23	26.85	216.68	216.09	215.11	3.00	2.52	3.89
QUIC Cubic	10	54.02	55.49	45.50	111.71	111.89	111.08	0.83	0.94	2.97
SCReAM	10	0.21	0.22	0.21	112.16	111.38	111.70	0.75	1.09	2.04
WebRTC media	10	2.10	1.29	0.47	112.07	112.17	112.50	0.92	1.34	3.82
Sprout	10	2.85	2.27	1.98	112.90	113.02	112.58	0.74	1.64	3.14
TaoVA-100x	10	198.12	125.61	127.10	112.75	113.57	113.92	0.84	0.94	3.16
TCP Vegas	10	39.07	33.66	22.59	115.45	115.47	114.58	0.66	1.19	2.49
Verus	10	163.04	102.34	83.48	186.12	190.39	214.80	1.53	1.61	7.72
Copa	10	73.58	62.27	60.38	112.50	112.33	112.29	0.67	1.30	4.42
Indigo	10	161.51	152.66	122.46	112.56	113.33	114.27	0.73	1.10	2.72
Indigo-calib	10	151.16	143.81	117.61	114.54	115.14	116.55	0.76	1.18	2.90

```
Run 1: Statistics of TCP BBR

Start at: 2017-12-11 22:39:32
End at: 2017-12-11 22:40:02

# Below is generated by plot.py at 2017-12-12 03:04:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.19 Mbit/s
95th percentile per-packet one-way delay: 111.756 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 12.00 Mbit/s
95th percentile per-packet one-way delay: 1397.953 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 89.03 Mbit/s
95th percentile per-packet one-way delay: 111.754 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 86.25 Mbit/s
95th percentile per-packet one-way delay: 111.761 ms
Loss rate: 2.66%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-11 22:53:28

End at: 2017-12-11 22:53:58

Below is generated by plot.py at 2017-12-12 03:06:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 185.19 Mbit/s

95th percentile per-packet one-way delay: 112.430 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 93.06 Mbit/s

95th percentile per-packet one-way delay: 112.164 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 95.79 Mbit/s

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

Loss rate: 1.21%

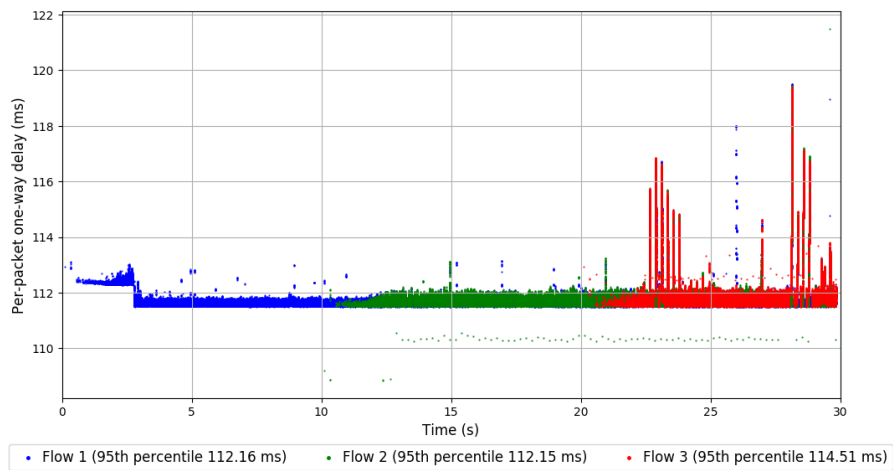
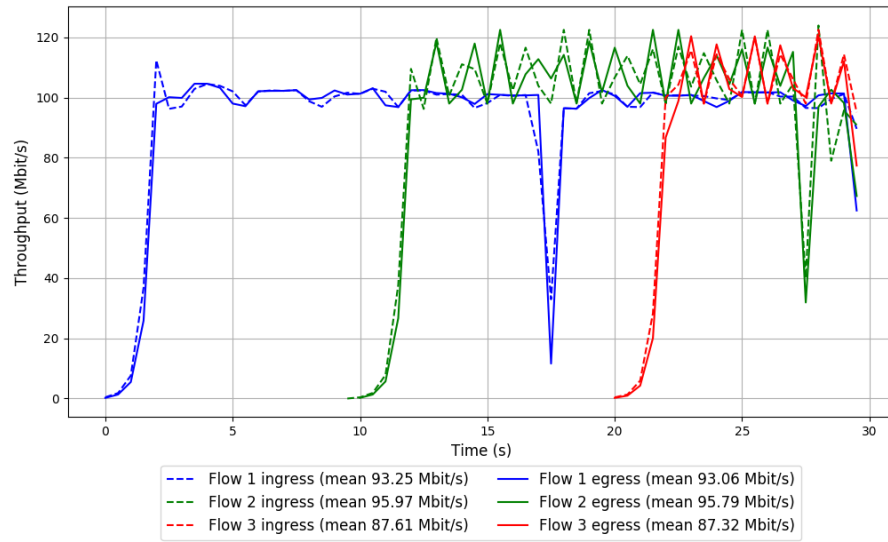
-- Flow 3:

Average throughput: 87.32 Mbit/s

95th percentile per-packet one-way delay: 114.506 ms

Loss rate: 2.56%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-11 23:07:05

End at: 2017-12-11 23:07:35

Below is generated by plot.py at 2017-12-12 03:06:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.26 Mbit/s

95th percentile per-packet one-way delay: 112.457 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 95.13 Mbit/s

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

Loss rate: 0.85%

-- Flow 2:

Average throughput: 91.07 Mbit/s

95th percentile per-packet one-way delay: 111.848 ms

Loss rate: 1.18%

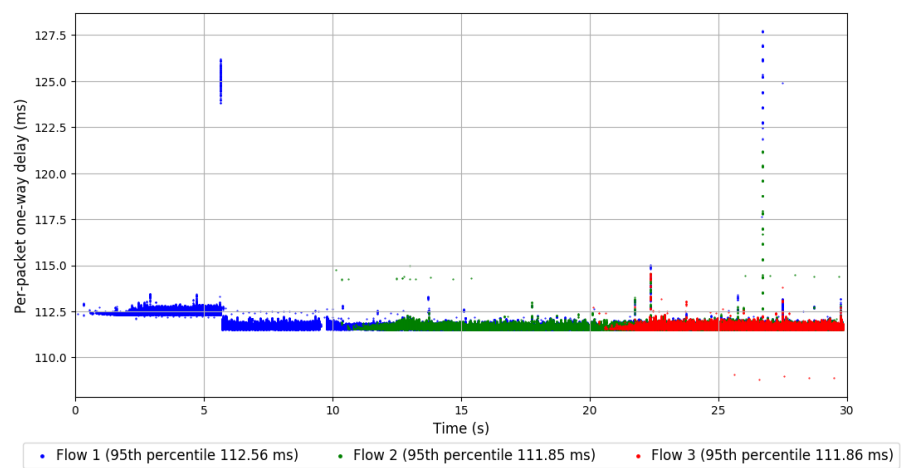
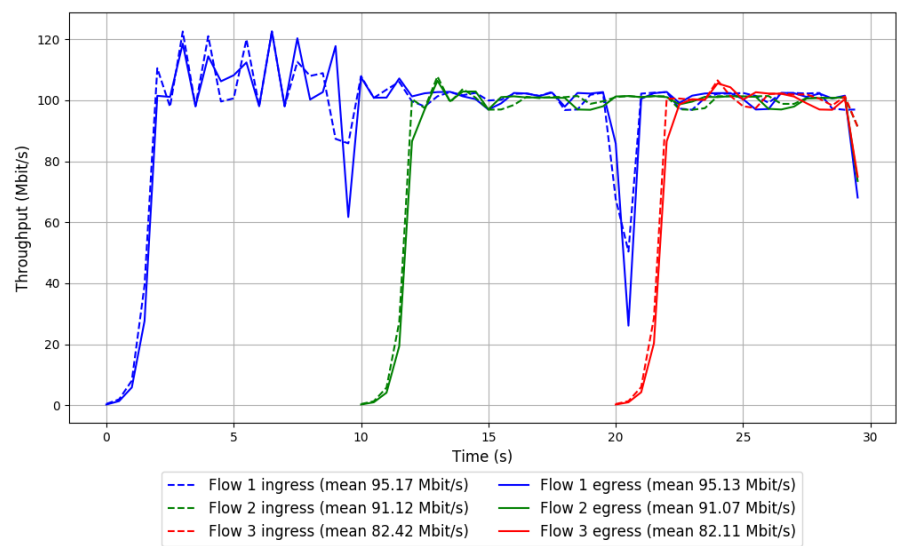
-- Flow 3:

Average throughput: 82.11 Mbit/s

95th percentile per-packet one-way delay: 111.863 ms

Loss rate: 2.61%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-11 23:20:48

End at: 2017-12-11 23:21:18

Below is generated by plot.py at 2017-12-12 03:06:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.76 Mbit/s

95th percentile per-packet one-way delay: 112.543 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 91.14 Mbit/s

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

Loss rate: 0.88%

-- Flow 2:

Average throughput: 89.97 Mbit/s

95th percentile per-packet one-way delay: 112.543 ms

Loss rate: 1.21%

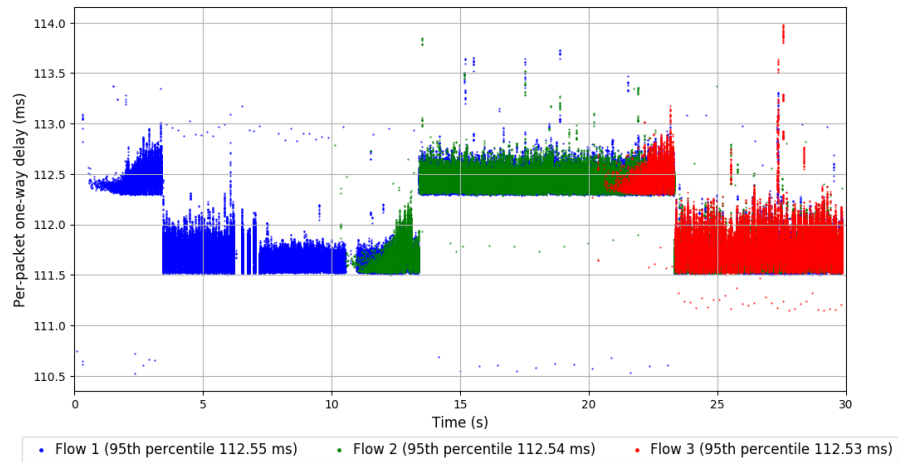
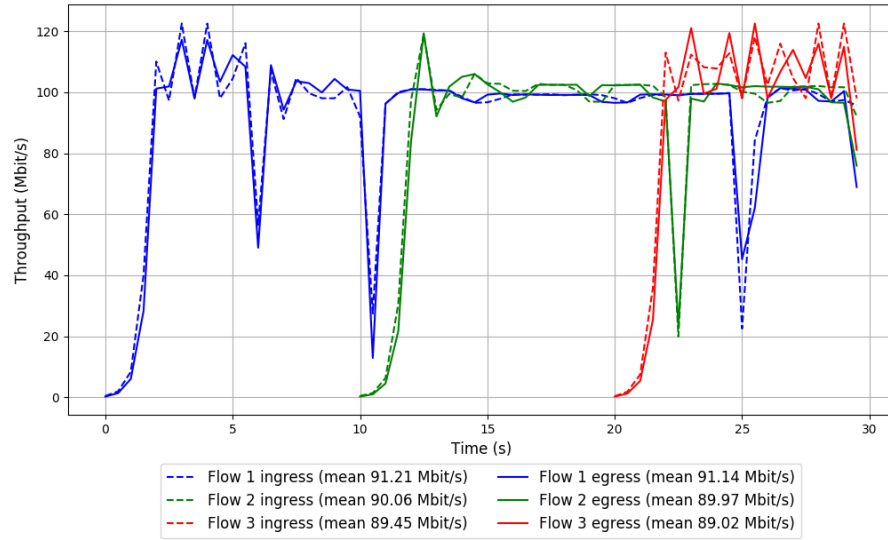
-- Flow 3:

Average throughput: 89.02 Mbit/s

95th percentile per-packet one-way delay: 112.535 ms

Loss rate: 2.76%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-11 23:34:46

End at: 2017-12-11 23:35:17

Below is generated by plot.py at 2017-12-12 03:06:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.18 Mbit/s

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

Loss rate: 1.71%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 777.693 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 91.83 Mbit/s

95th percentile per-packet one-way delay: 112.638 ms

Loss rate: 1.17%

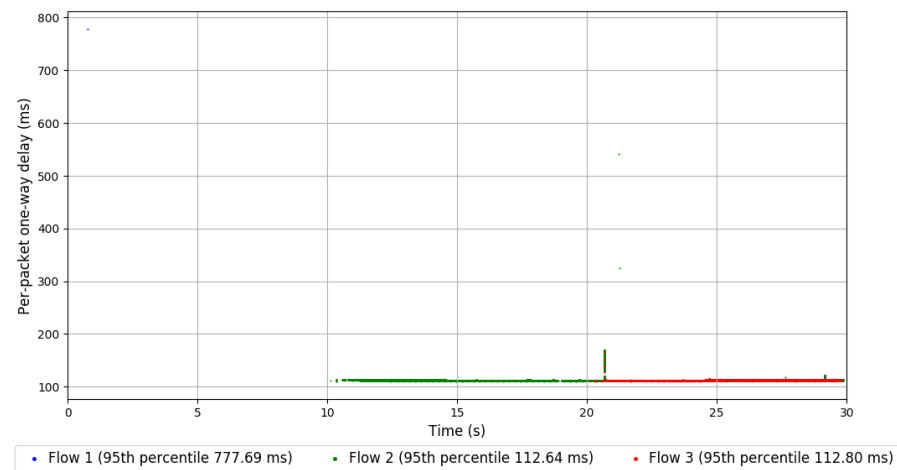
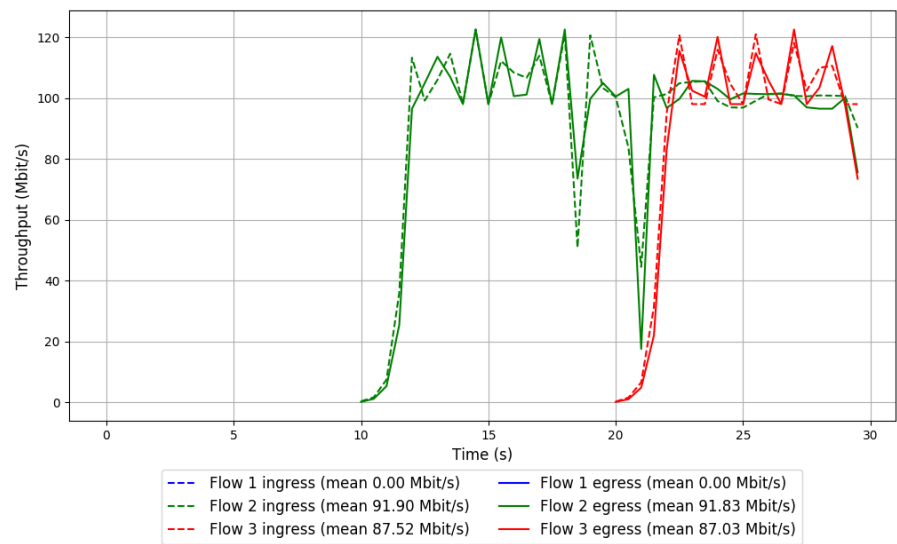
-- Flow 3:

Average throughput: 87.03 Mbit/s

95th percentile per-packet one-way delay: 112.797 ms

Loss rate: 2.84%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-11 23:48:21

End at: 2017-12-11 23:48:51

Below is generated by plot.py at 2017-12-12 03:06:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.64 Mbit/s

95th percentile per-packet one-way delay: 111.952 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 95.67 Mbit/s

95th percentile per-packet one-way delay: 111.928 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 93.41 Mbit/s

95th percentile per-packet one-way delay: 111.993 ms

Loss rate: 1.24%

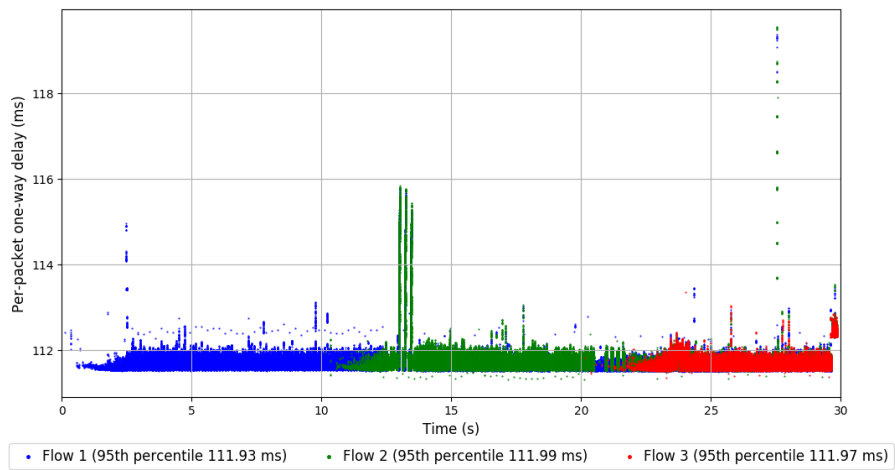
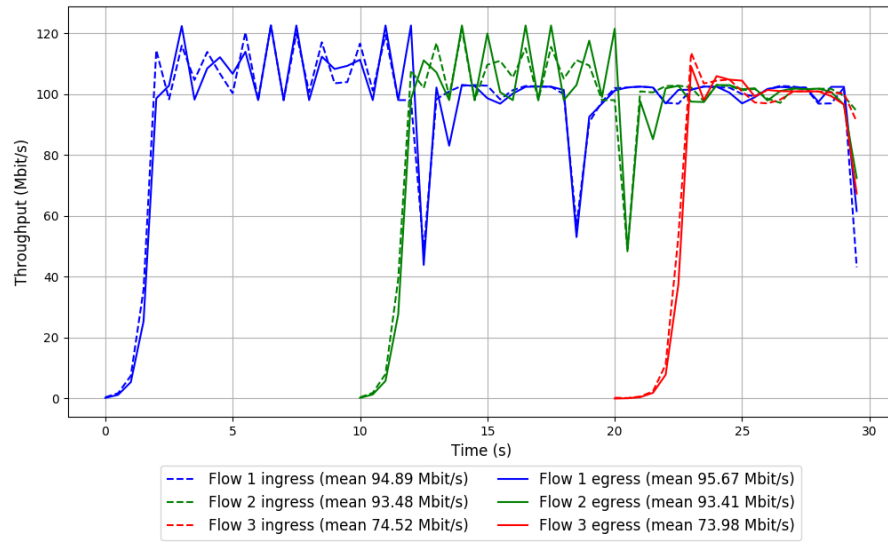
-- Flow 3:

Average throughput: 73.98 Mbit/s

95th percentile per-packet one-way delay: 111.967 ms

Loss rate: 2.99%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-12 00:02:09

End at: 2017-12-12 00:02:39

Below is generated by plot.py at 2017-12-12 03:06:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.73 Mbit/s

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

Loss rate: 1.25%

-- Flow 1:

Average throughput: 92.38 Mbit/s

95th percentile per-packet one-way delay: 112.709 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 91.43 Mbit/s

95th percentile per-packet one-way delay: 112.908 ms

Loss rate: 1.22%

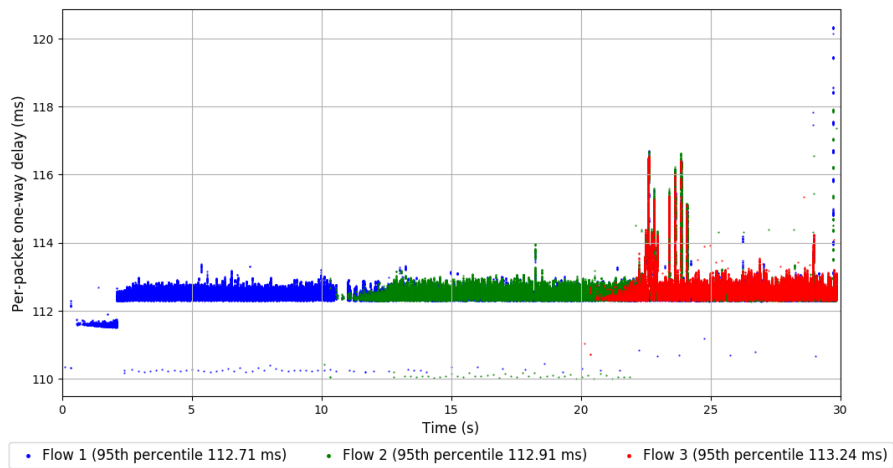
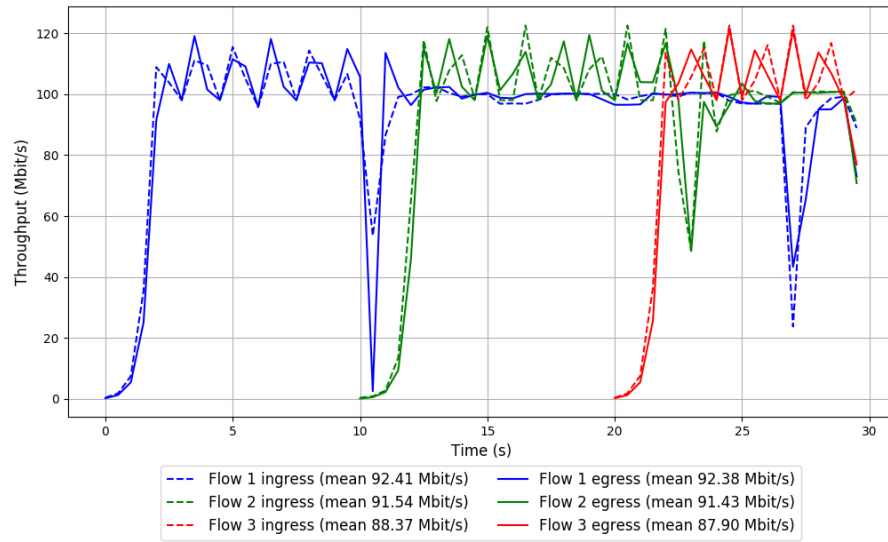
-- Flow 3:

Average throughput: 87.90 Mbit/s

95th percentile per-packet one-way delay: 113.242 ms

Loss rate: 2.80%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-12 00:15:45

End at: 2017-12-12 00:16:15

Below is generated by plot.py at 2017-12-12 03:06:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.20 Mbit/s

95th percentile per-packet one-way delay: 114.584 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 256.379 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 98.26 Mbit/s

95th percentile per-packet one-way delay: 114.179 ms

Loss rate: 0.73%

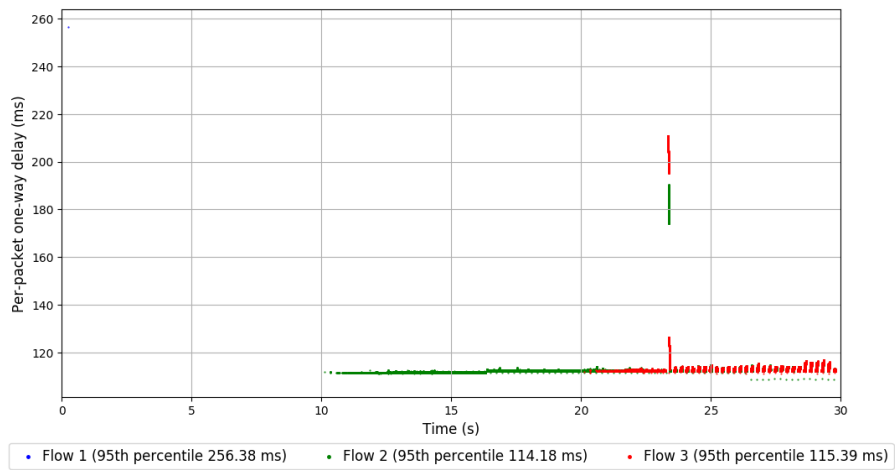
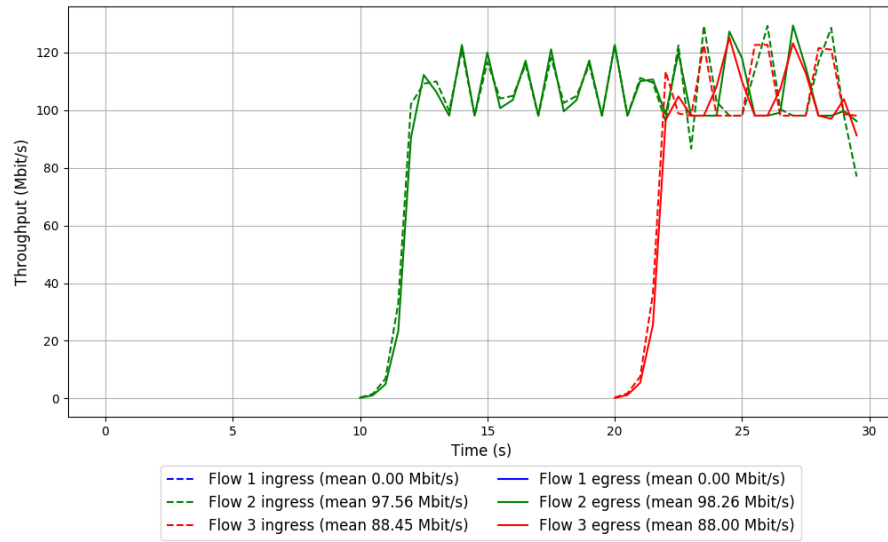
-- Flow 3:

Average throughput: 88.00 Mbit/s

95th percentile per-packet one-way delay: 115.391 ms

Loss rate: 2.80%

Run 8: Report of TCP BBR — Data Link

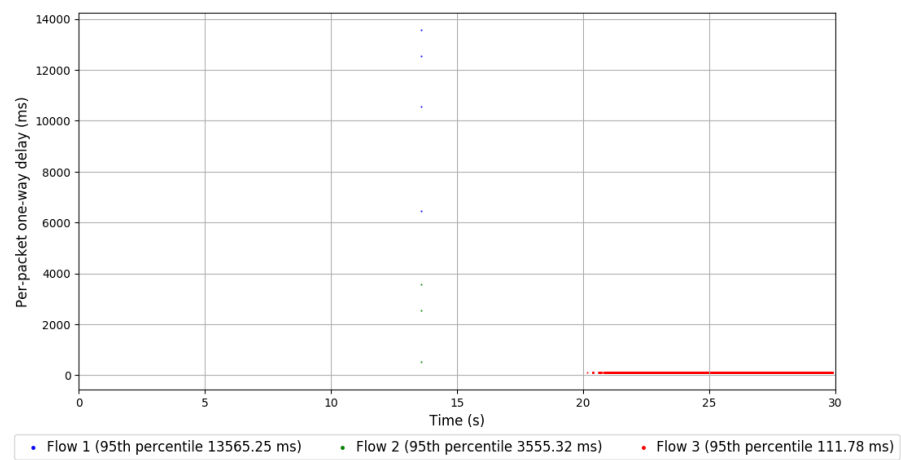
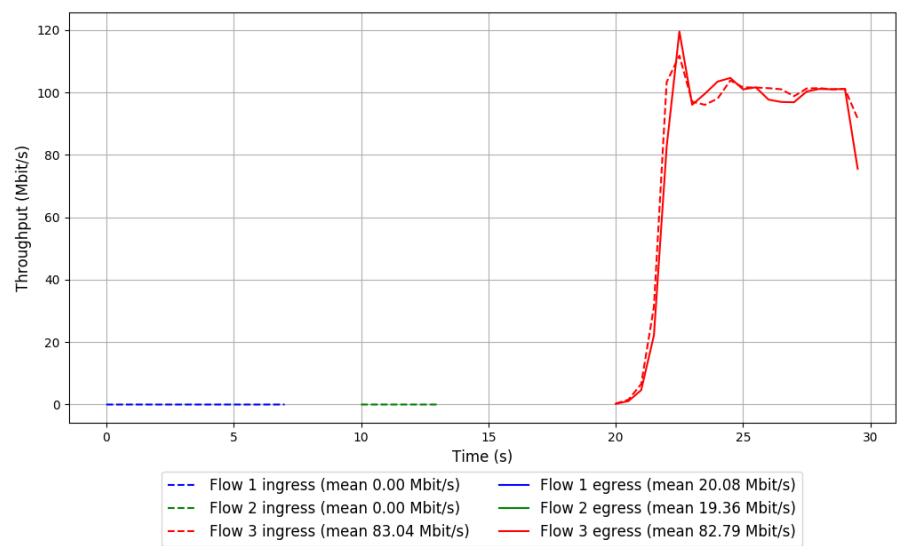


Run 9: Statistics of TCP BBR

Start at: 2017-12-12 00:29:27

End at: 2017-12-12 00:29:57

Run 9: Report of TCP BBR — Data Link

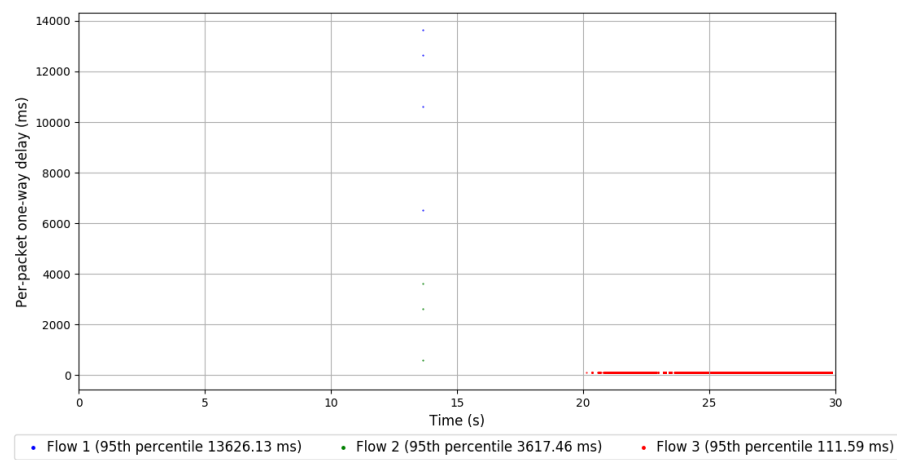
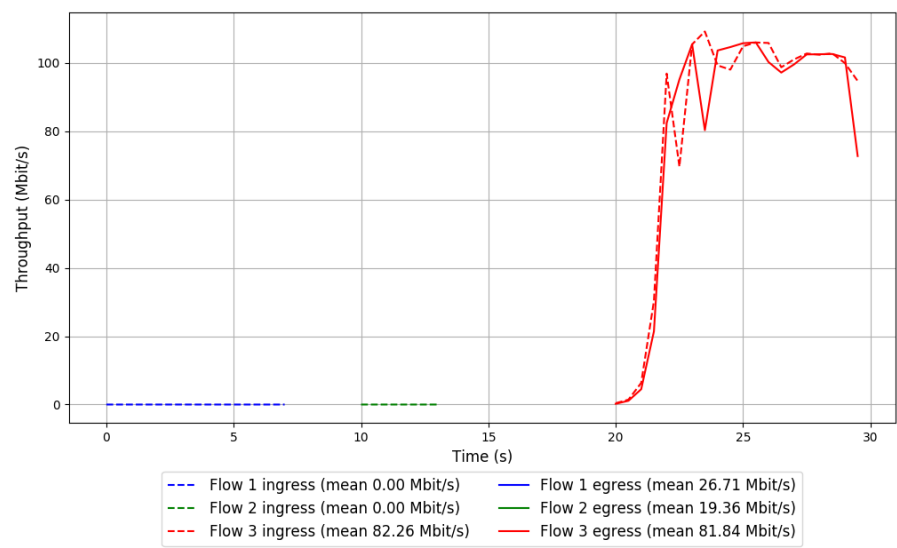


Run 10: Statistics of TCP BBR

Start at: 2017-12-12 00:43:08

End at: 2017-12-12 00:43:38

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-11 22:35:48

End at: 2017-12-11 22:36:18

Below is generated by plot.py at 2017-12-12 03:07:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.22 Mbit/s

95th percentile per-packet one-way delay: 121.356 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 95.34 Mbit/s

95th percentile per-packet one-way delay: 119.334 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 100.07 Mbit/s

95th percentile per-packet one-way delay: 122.845 ms

Loss rate: 1.24%

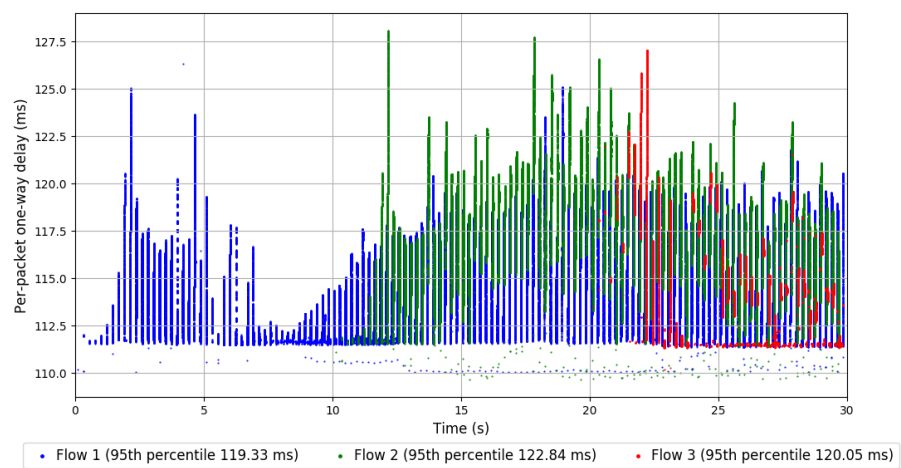
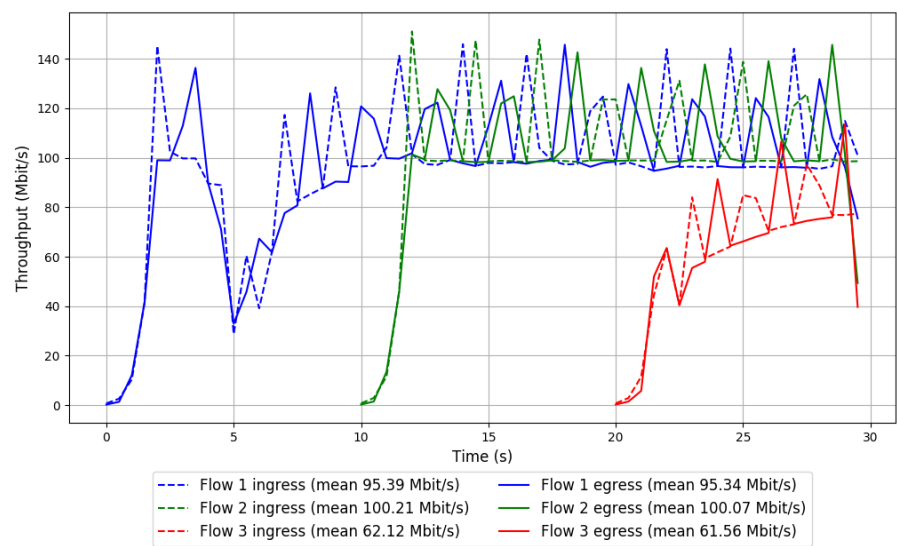
-- Flow 3:

Average throughput: 61.56 Mbit/s

95th percentile per-packet one-way delay: 120.052 ms

Loss rate: 3.14%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-11 22:49:49

End at: 2017-12-11 22:50:19

Below is generated by plot.py at 2017-12-12 03:07:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.24 Mbit/s

95th percentile per-packet one-way delay: 119.823 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 96.54 Mbit/s

95th percentile per-packet one-way delay: 119.522 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 57.18 Mbit/s

95th percentile per-packet one-way delay: 120.411 ms

Loss rate: 1.40%

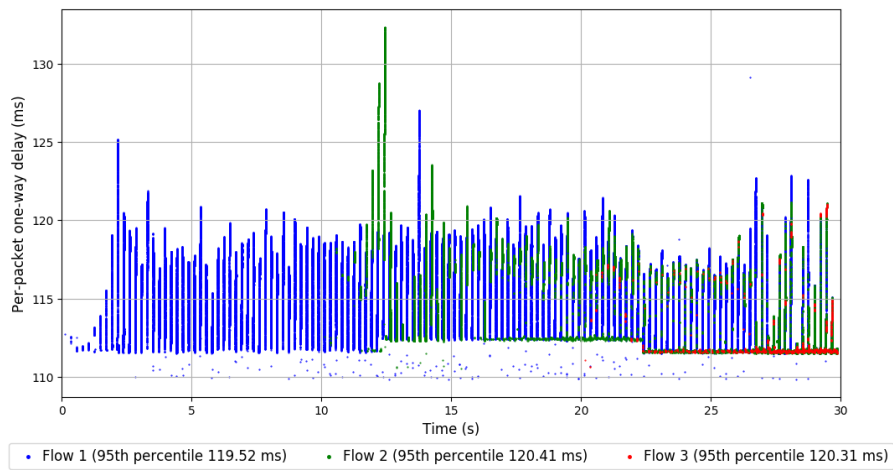
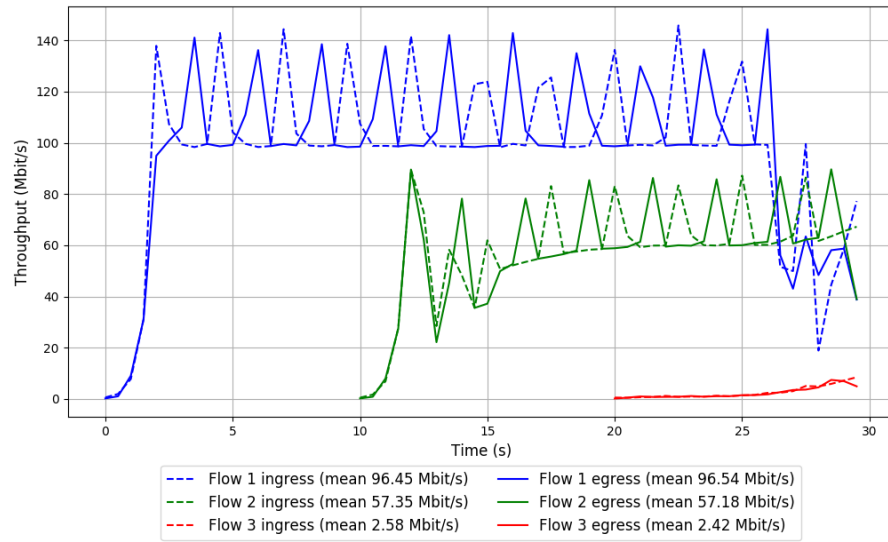
-- Flow 3:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 120.312 ms

Loss rate: 8.43%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-11 23:03:26

End at: 2017-12-11 23:03:56

Below is generated by plot.py at 2017-12-12 03:07:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 137.19 Mbit/s

95th percentile per-packet one-way delay: 119.011 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 68.22 Mbit/s

95th percentile per-packet one-way delay: 117.712 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 73.32 Mbit/s

95th percentile per-packet one-way delay: 118.969 ms

Loss rate: 1.09%

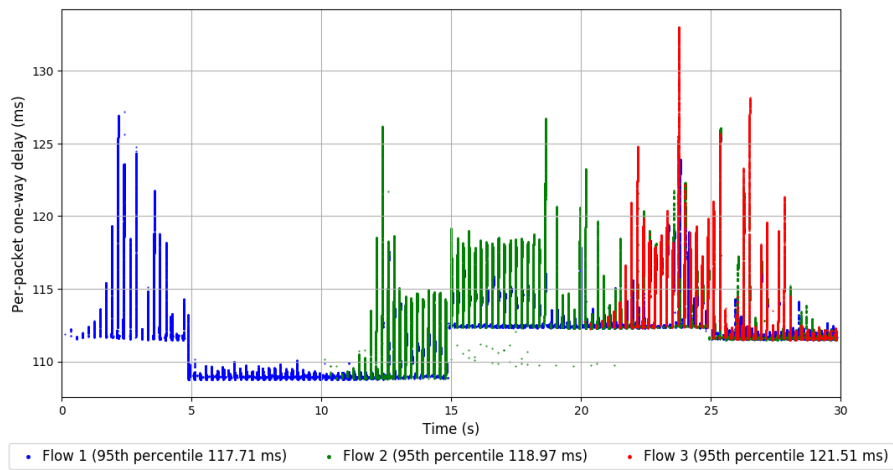
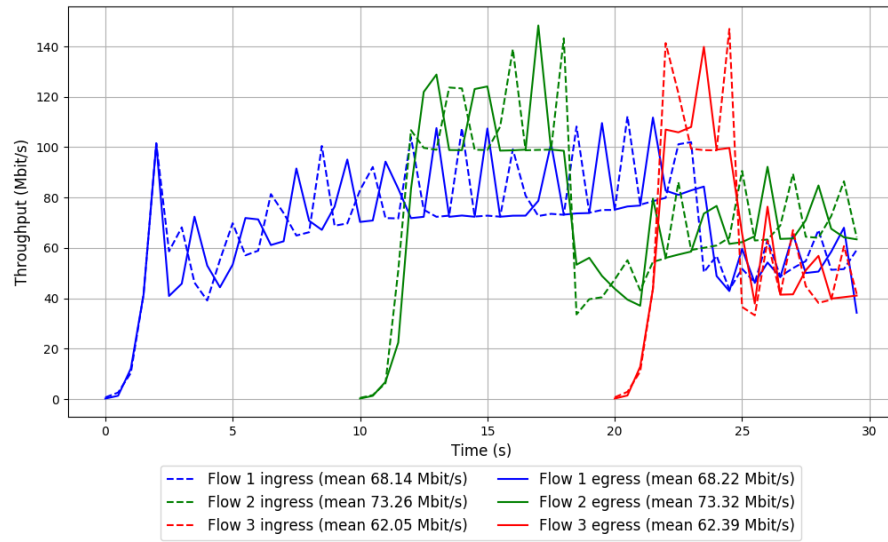
-- Flow 3:

Average throughput: 62.39 Mbit/s

95th percentile per-packet one-way delay: 121.514 ms

Loss rate: 1.71%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-11 23:17:08

End at: 2017-12-11 23:17:38

Below is generated by plot.py at 2017-12-12 03:08:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.92 Mbit/s

95th percentile per-packet one-way delay: 119.186 ms

Loss rate: 1.62%

-- Flow 1:

Average throughput: 66.57 Mbit/s

95th percentile per-packet one-way delay: 118.400 ms

Loss rate: 1.20%

-- Flow 2:

Average throughput: 49.94 Mbit/s

95th percentile per-packet one-way delay: 115.461 ms

Loss rate: 1.50%

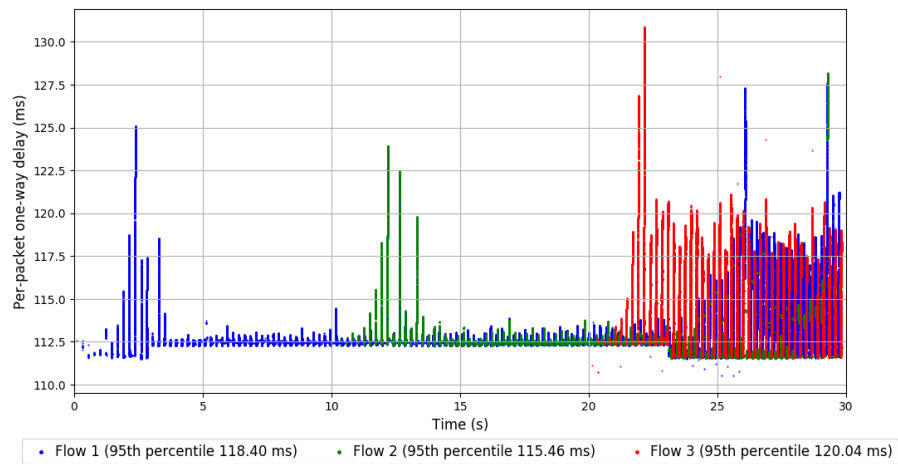
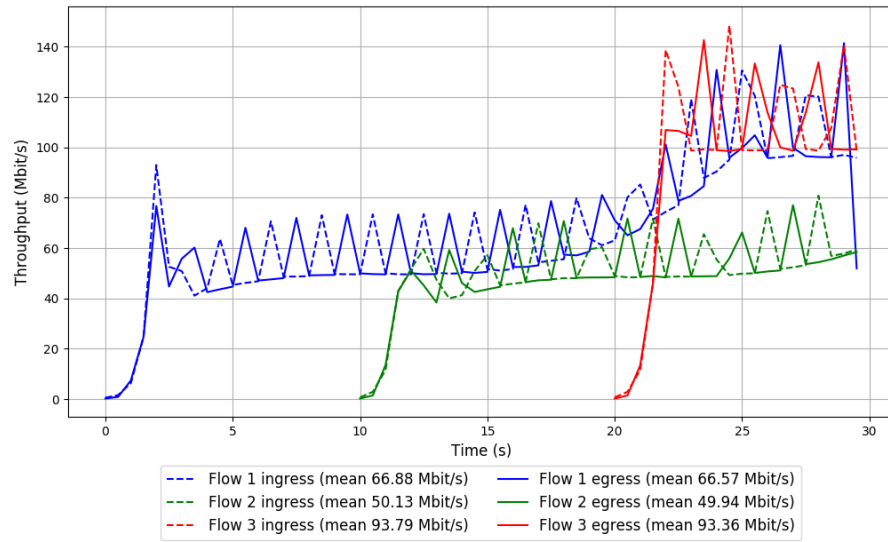
-- Flow 3:

Average throughput: 93.36 Mbit/s

95th percentile per-packet one-way delay: 120.037 ms

Loss rate: 2.64%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-11 23:31:08

End at: 2017-12-11 23:31:38

Below is generated by plot.py at 2017-12-12 03:08:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 116.73 Mbit/s

95th percentile per-packet one-way delay: 117.825 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 66.66 Mbit/s

95th percentile per-packet one-way delay: 118.037 ms

Loss rate: 1.38%

-- Flow 2:

Average throughput: 54.08 Mbit/s

95th percentile per-packet one-way delay: 118.013 ms

Loss rate: 1.04%

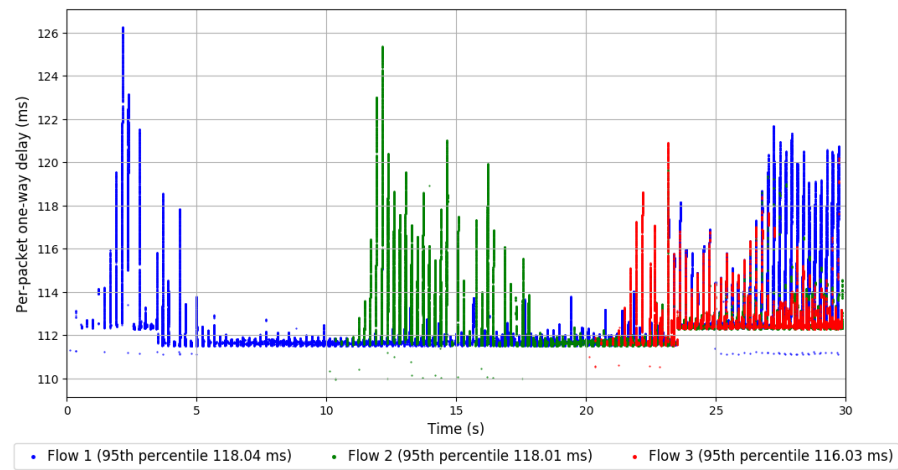
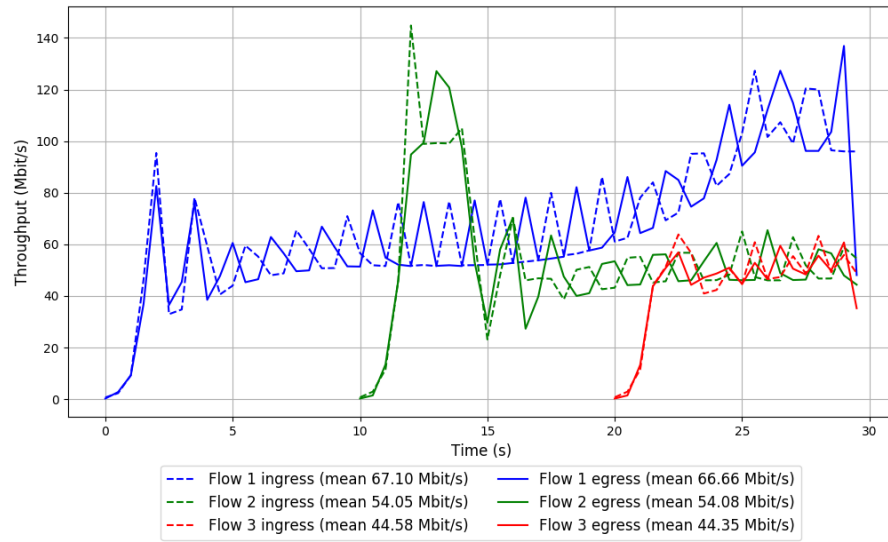
-- Flow 3:

Average throughput: 44.35 Mbit/s

95th percentile per-packet one-way delay: 116.029 ms

Loss rate: 2.76%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-11 23:44:42

End at: 2017-12-11 23:45:12

Below is generated by plot.py at 2017-12-12 03:08:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.49 Mbit/s

95th percentile per-packet one-way delay: 120.430 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 61.38 Mbit/s

95th percentile per-packet one-way delay: 120.057 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 49.07 Mbit/s

95th percentile per-packet one-way delay: 121.379 ms

Loss rate: 1.35%

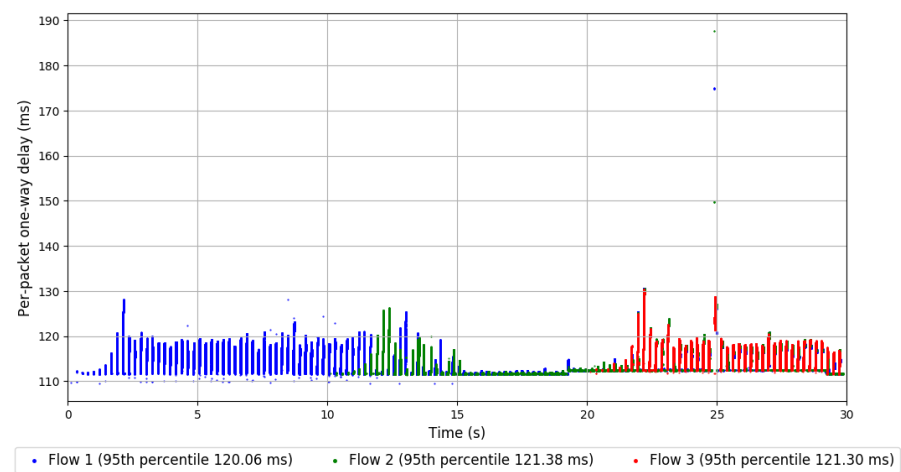
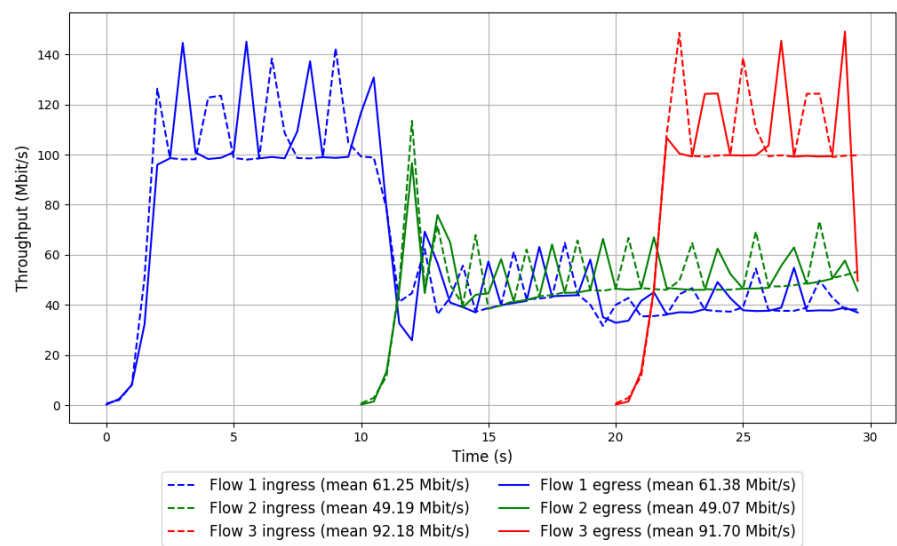
-- Flow 3:

Average throughput: 91.70 Mbit/s

95th percentile per-packet one-way delay: 121.295 ms

Loss rate: 2.77%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-11 23:58:27

End at: 2017-12-11 23:58:57

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 170.38 Mbit/s

95th percentile per-packet one-way delay: 122.145 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 103.43 Mbit/s

95th percentile per-packet one-way delay: 122.596 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 56.85 Mbit/s

95th percentile per-packet one-way delay: 120.706 ms

Loss rate: 1.03%

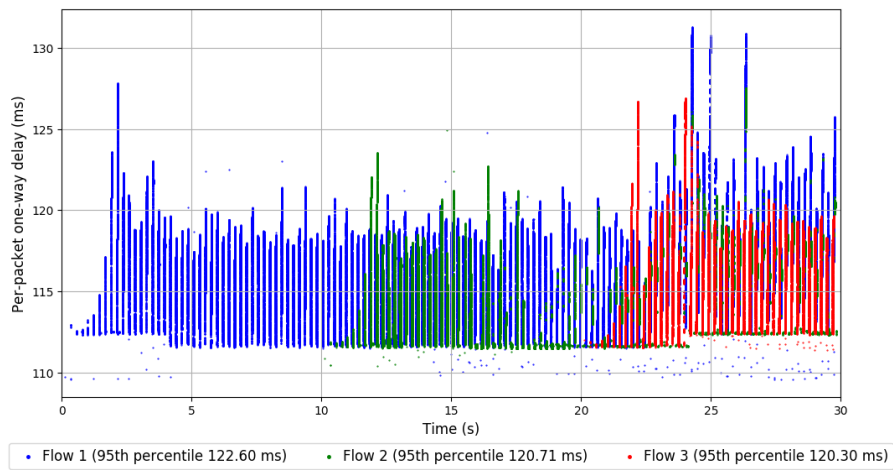
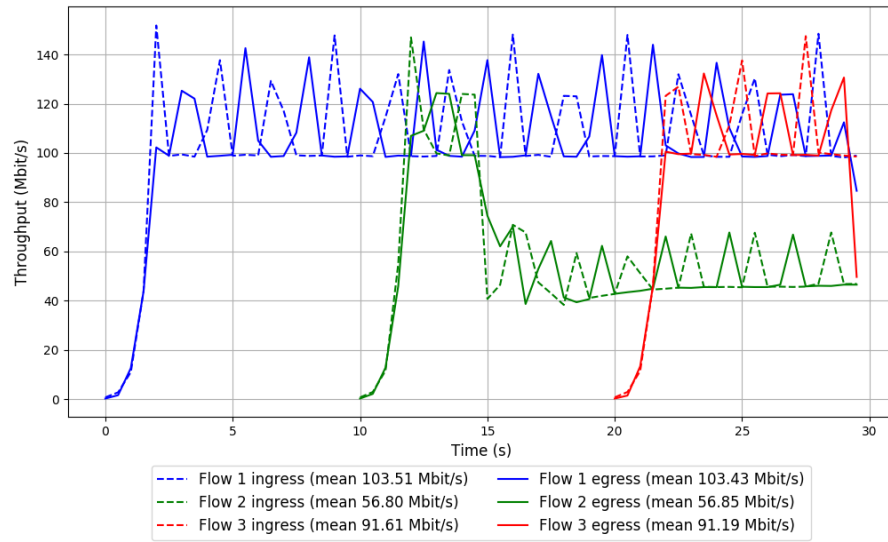
-- Flow 3:

Average throughput: 91.19 Mbit/s

95th percentile per-packet one-way delay: 120.296 ms

Loss rate: 2.72%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

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

End at: 2017-12-12 00:12:31

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 173.84 Mbit/s

95th percentile per-packet one-way delay: 120.871 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 94.64 Mbit/s

95th percentile per-packet one-way delay: 121.520 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 96.90 Mbit/s

95th percentile per-packet one-way delay: 120.047 ms

Loss rate: 0.45%

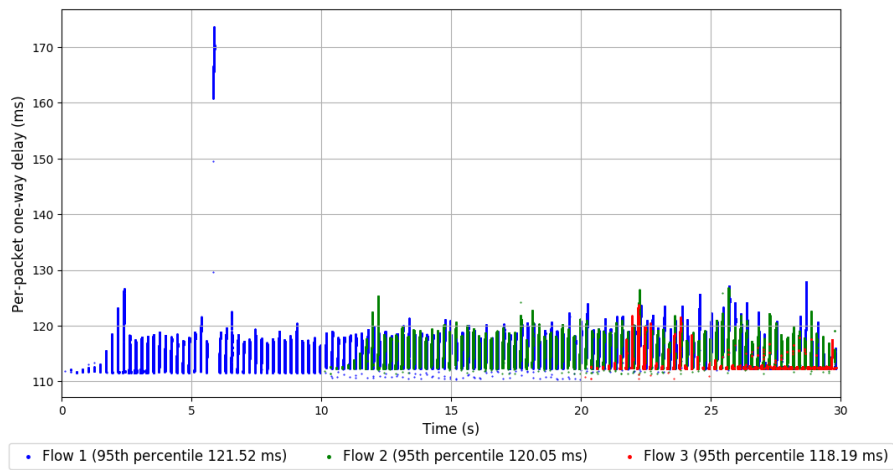
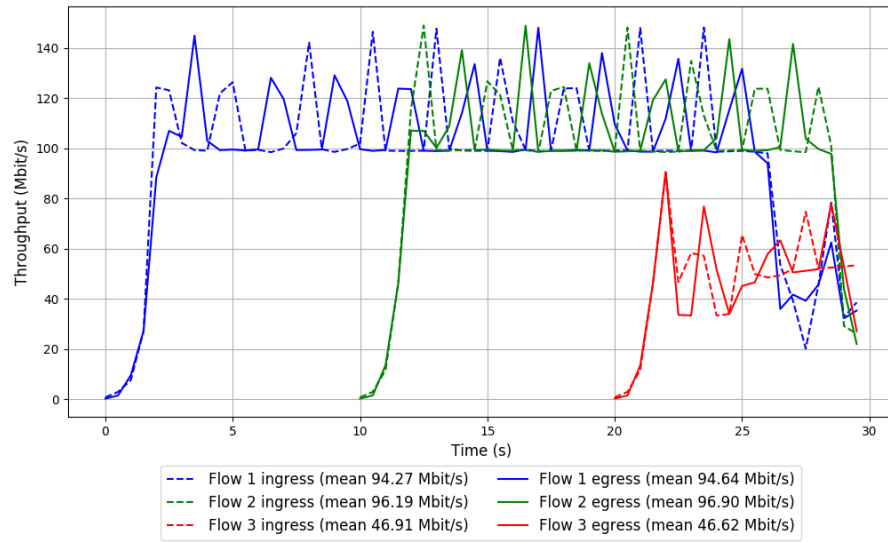
-- Flow 3:

Average throughput: 46.62 Mbit/s

95th percentile per-packet one-way delay: 118.185 ms

Loss rate: 2.86%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-12 00:25:51

End at: 2017-12-12 00:26:21

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.01 Mbit/s

95th percentile per-packet one-way delay: 120.059 ms

Loss rate: 1.34%

-- Flow 1:

Average throughput: 65.82 Mbit/s

95th percentile per-packet one-way delay: 119.628 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 53.83 Mbit/s

95th percentile per-packet one-way delay: 121.055 ms

Loss rate: 1.46%

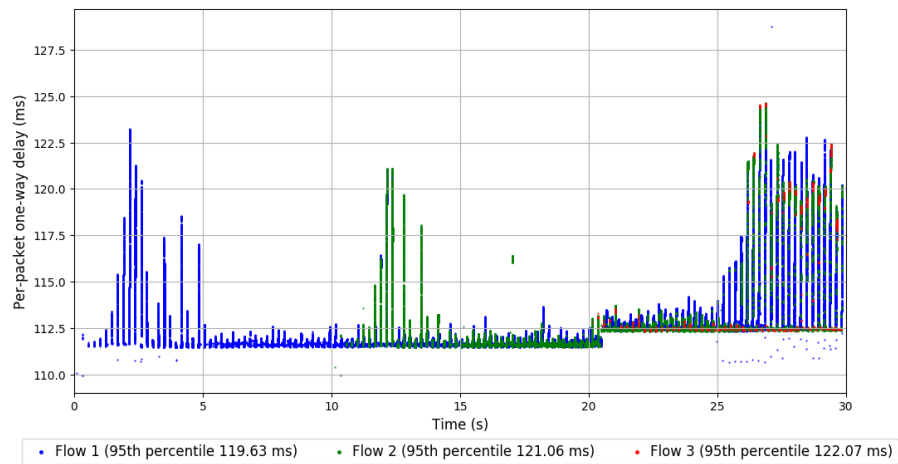
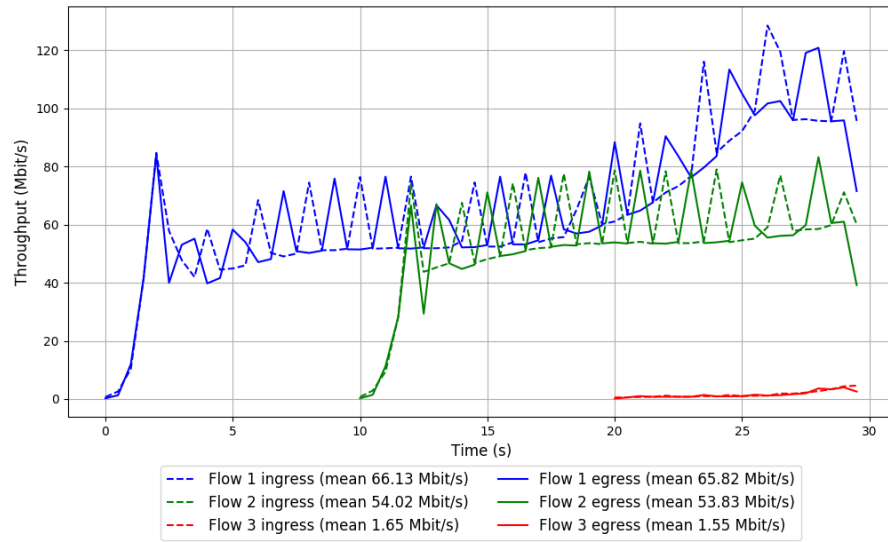
-- Flow 3:

Average throughput: 1.55 Mbit/s

95th percentile per-packet one-way delay: 122.072 ms

Loss rate: 8.17%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-12 00:39:32

End at: 2017-12-12 00:40:02

Below is generated by plot.py at 2017-12-12 03:09:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.18 Mbit/s

95th percentile per-packet one-way delay: 120.461 ms

Loss rate: 1.65%

-- Flow 1:

Average throughput: 17.23 Mbit/s

95th percentile per-packet one-way delay: 118.005 ms

Loss rate: 1.25%

-- Flow 2:

Average throughput: 99.49 Mbit/s

95th percentile per-packet one-way delay: 120.255 ms

Loss rate: 1.25%

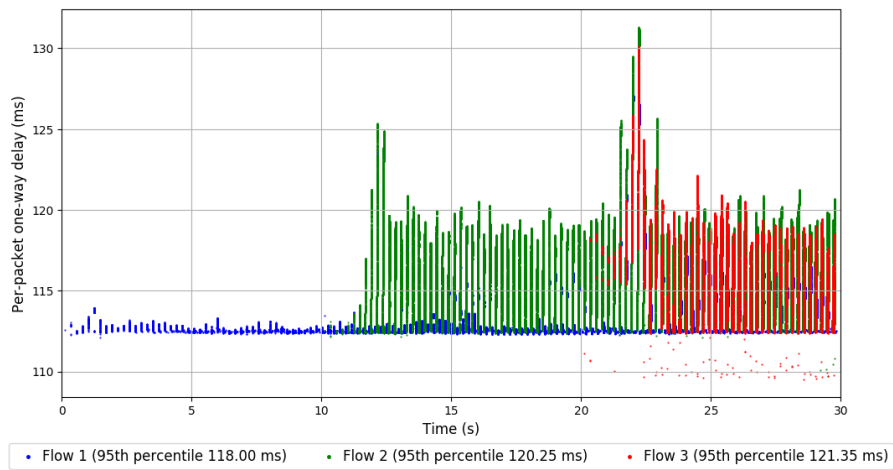
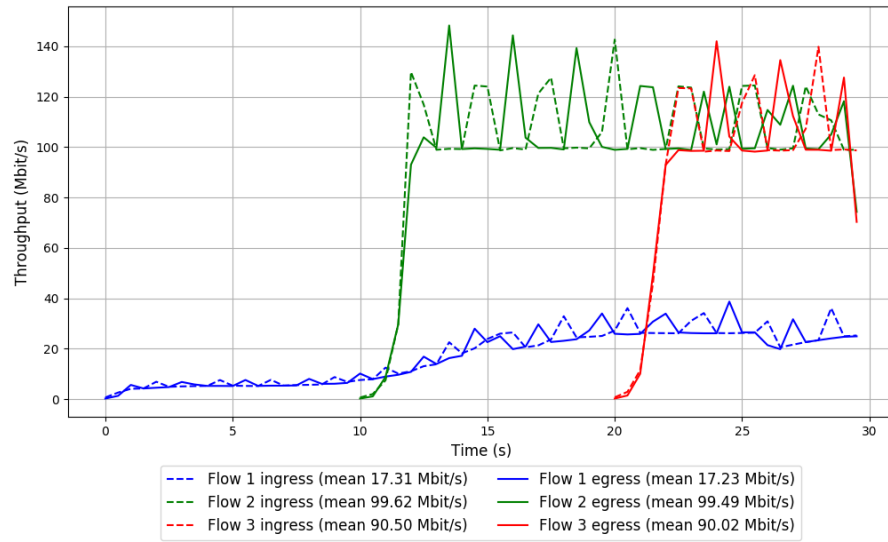
-- Flow 3:

Average throughput: 90.02 Mbit/s

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

Loss rate: 2.77%

Run 10: Report of TCP Cubic — Data Link

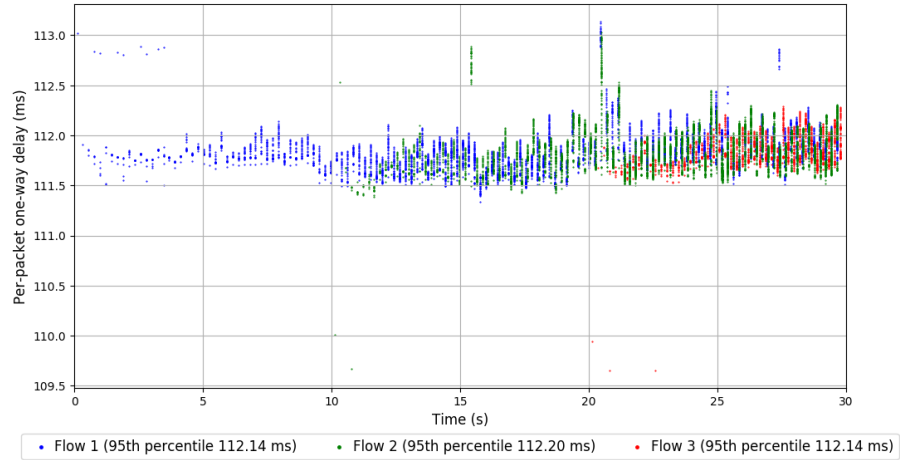
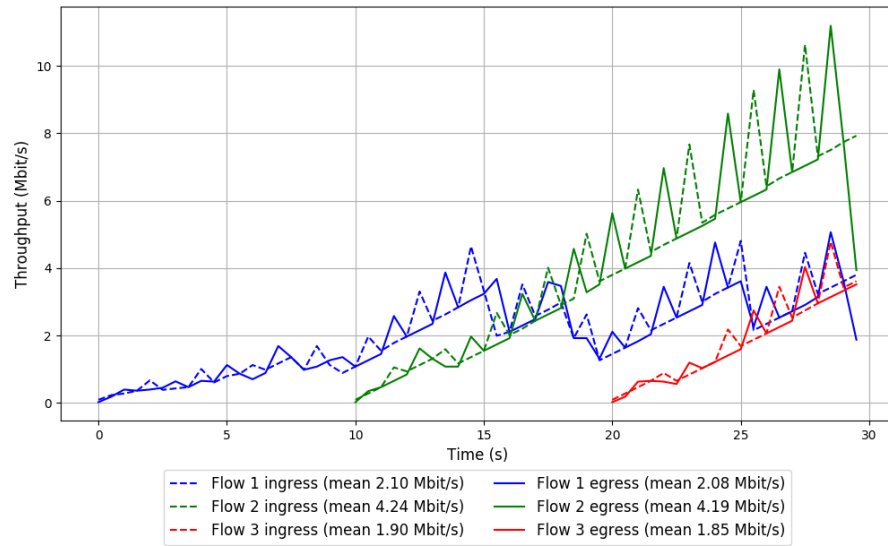


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-11 22:35:02
End at: 2017-12-11 22:35:32

# Below is generated by plot.py at 2017-12-12 03:09:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.43 Mbit/s
95th percentile per-packet one-way delay: 112.180 ms
Loss rate: 2.35%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 112.138 ms
Loss rate: 1.54%
-- Flow 2:
Average throughput: 4.19 Mbit/s
95th percentile per-packet one-way delay: 112.200 ms
Loss rate: 2.38%
-- Flow 3:
Average throughput: 1.85 Mbit/s
95th percentile per-packet one-way delay: 112.140 ms
Loss rate: 4.88%
```


Run 1: Report of LEDBAT — Data Link

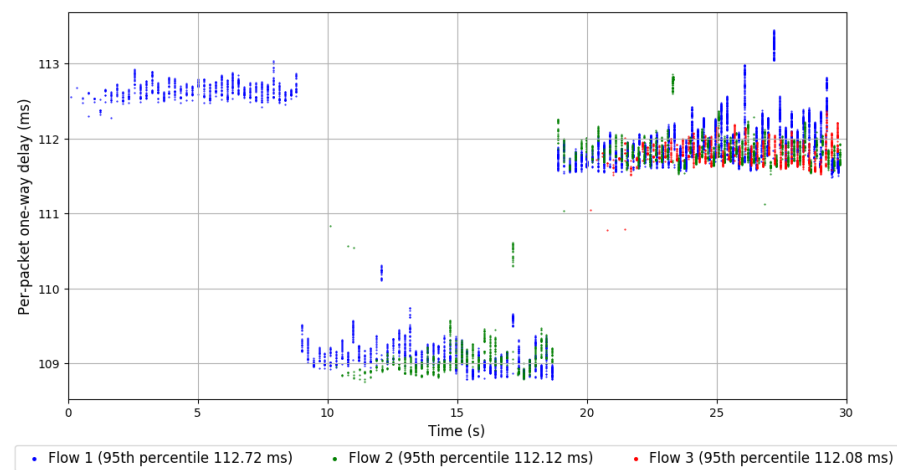
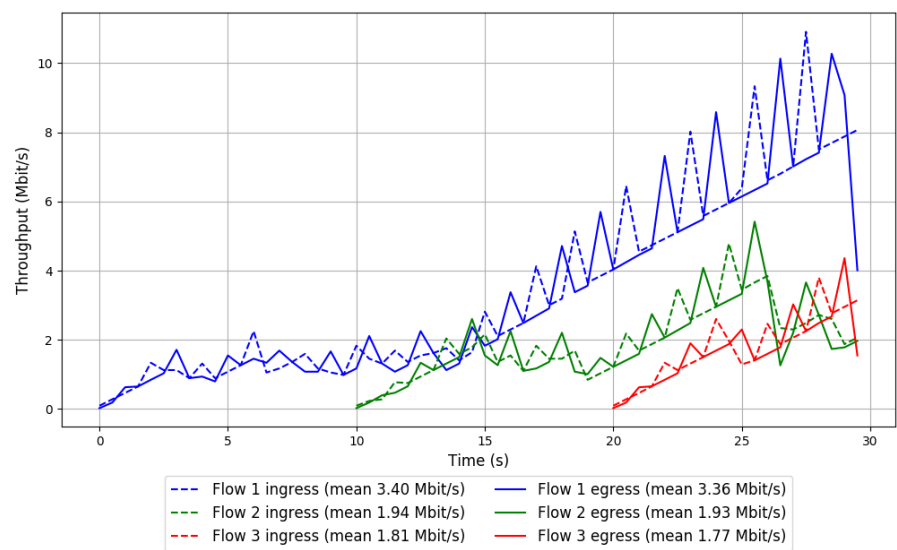


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-11 22:49:02
End at: 2017-12-11 22:49:32

# Below is generated by plot.py at 2017-12-12 03:09:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.20 Mbit/s
95th percentile per-packet one-way delay: 112.658 ms
Loss rate: 2.18%
-- Flow 1:
Average throughput: 3.36 Mbit/s
95th percentile per-packet one-way delay: 112.720 ms
Loss rate: 2.00%
-- Flow 2:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 112.117 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 112.076 ms
Loss rate: 4.51%
```

Run 2: Report of LEDBAT — Data Link

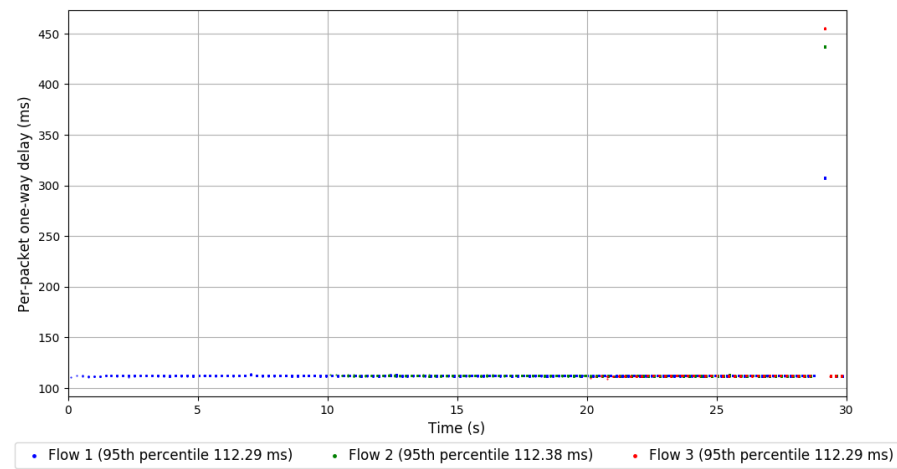
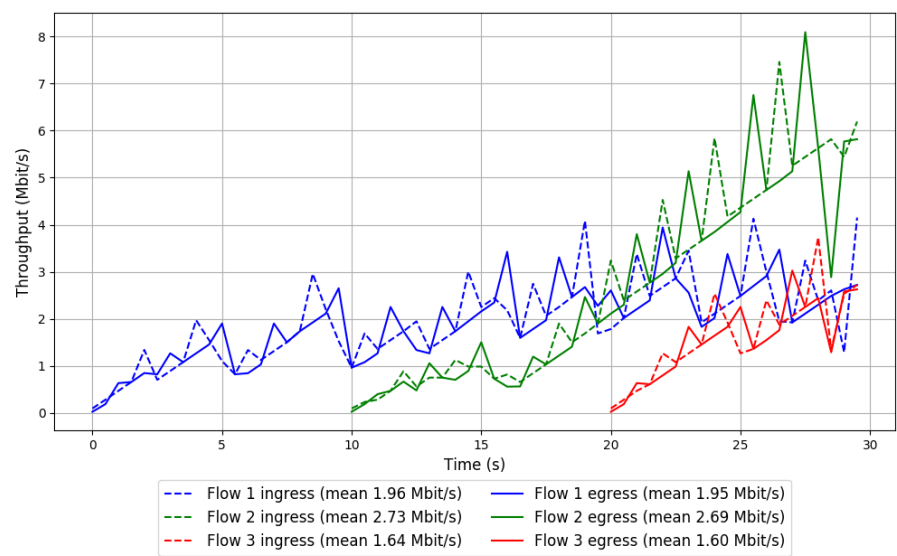


```
Run 3: Statistics of LEDBAT

Start at: 2017-12-11 23:02:40
End at: 2017-12-11 23:03:10

# Below is generated by plot.py at 2017-12-12 03:09:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 112.319 ms
Loss rate: 2.24%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 112.294 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 2.69 Mbit/s
95th percentile per-packet one-way delay: 112.379 ms
Loss rate: 2.73%
-- Flow 3:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 112.288 ms
Loss rate: 4.26%
```

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-11 23:16:21

End at: 2017-12-11 23:16:51

Below is generated by plot.py at 2017-12-12 03:09:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.06 Mbit/s

95th percentile per-packet one-way delay: 113.080 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 2.86 Mbit/s

95th percentile per-packet one-way delay: 113.123 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 112.928 ms

Loss rate: 2.30%

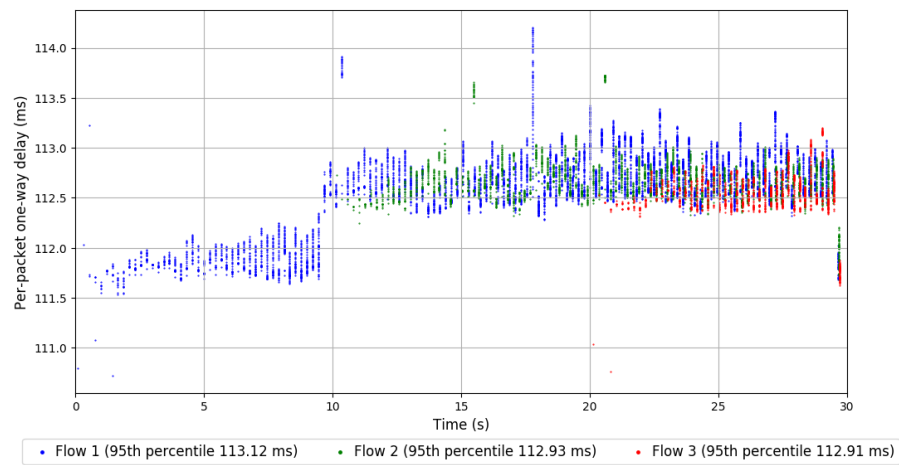
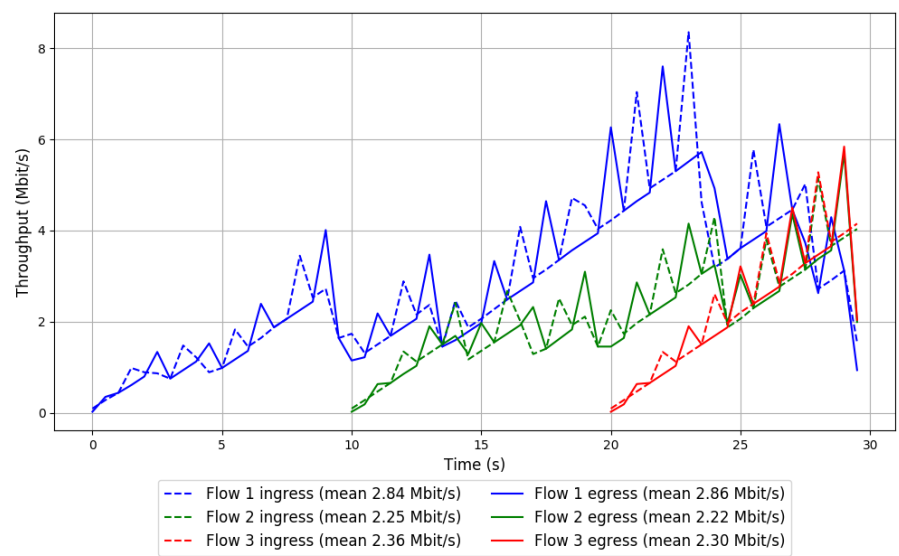
-- Flow 3:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 112.913 ms

Loss rate: 4.57%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-11 23:30:21

End at: 2017-12-11 23:30:51

Below is generated by plot.py at 2017-12-12 03:09:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.22 Mbit/s

95th percentile per-packet one-way delay: 112.957 ms

Loss rate: 1.83%

-- Flow 1:

Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 112.983 ms

Loss rate: 1.17%

-- Flow 2:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 112.884 ms

Loss rate: 2.25%

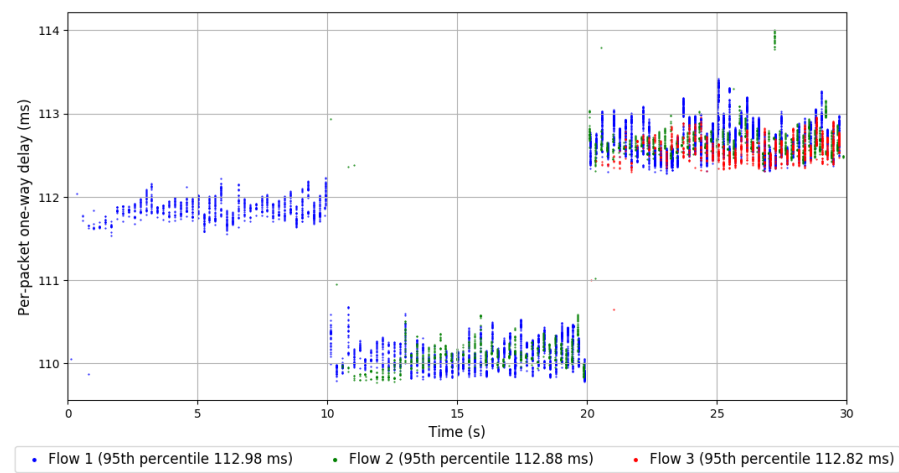
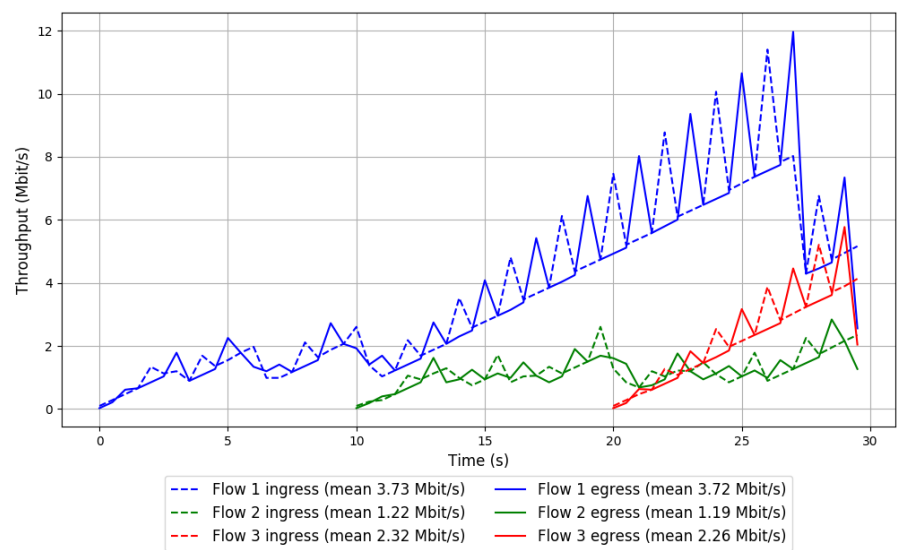
-- Flow 3:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 112.820 ms

Loss rate: 4.60%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-11 23:43:55

End at: 2017-12-11 23:44:25

Below is generated by plot.py at 2017-12-12 03:09:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.93 Mbit/s

95th percentile per-packet one-way delay: 113.159 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 6.17 Mbit/s

95th percentile per-packet one-way delay: 113.178 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 4.76 Mbit/s

95th percentile per-packet one-way delay: 113.144 ms

Loss rate: 2.25%

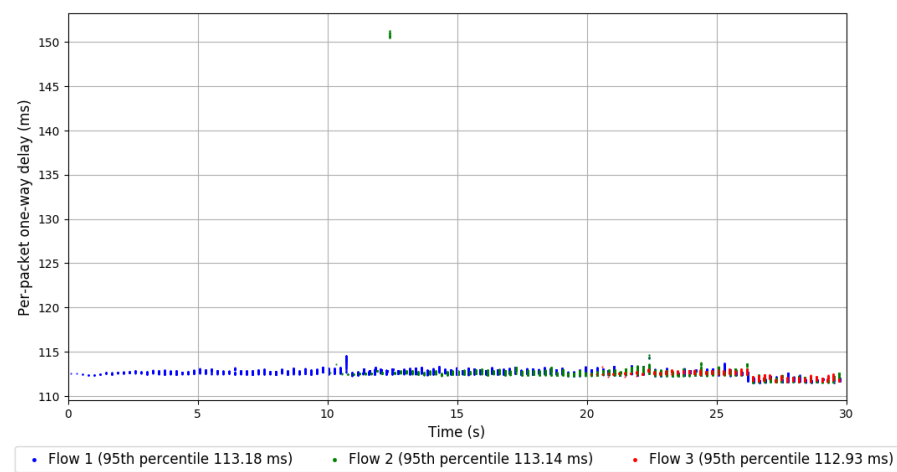
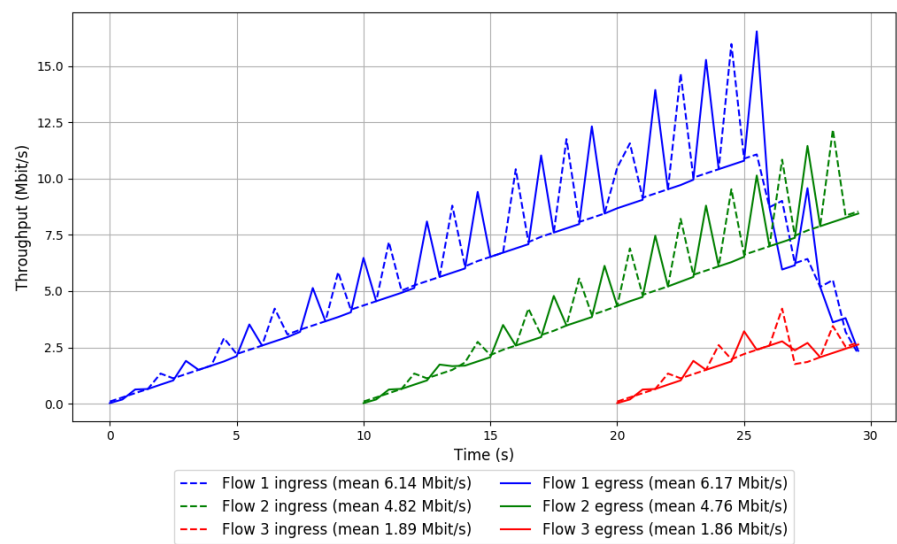
-- Flow 3:

Average throughput: 1.86 Mbit/s

95th percentile per-packet one-way delay: 112.928 ms

Loss rate: 3.73%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-11 23:57:41

End at: 2017-12-11 23:58:11

Below is generated by plot.py at 2017-12-12 03:09:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 112.888 ms

Loss rate: 2.03%

-- Flow 1:

Average throughput: 1.91 Mbit/s

95th percentile per-packet one-way delay: 112.925 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 2.87 Mbit/s

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

Loss rate: 2.83%

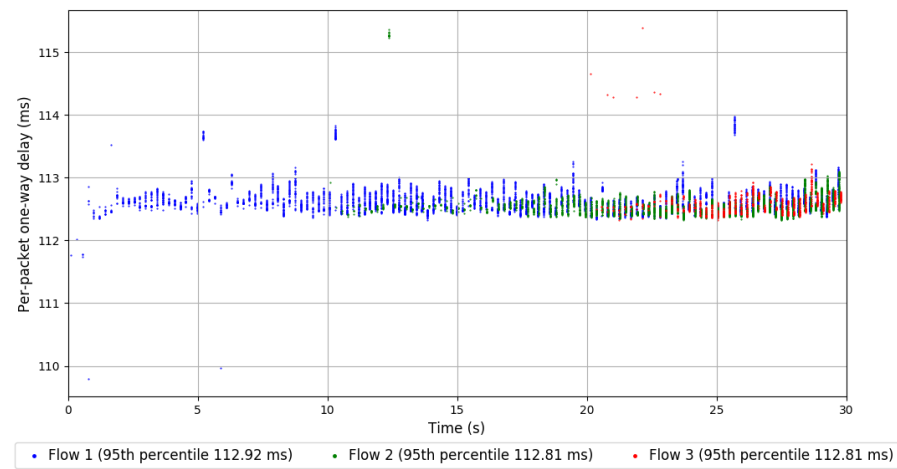
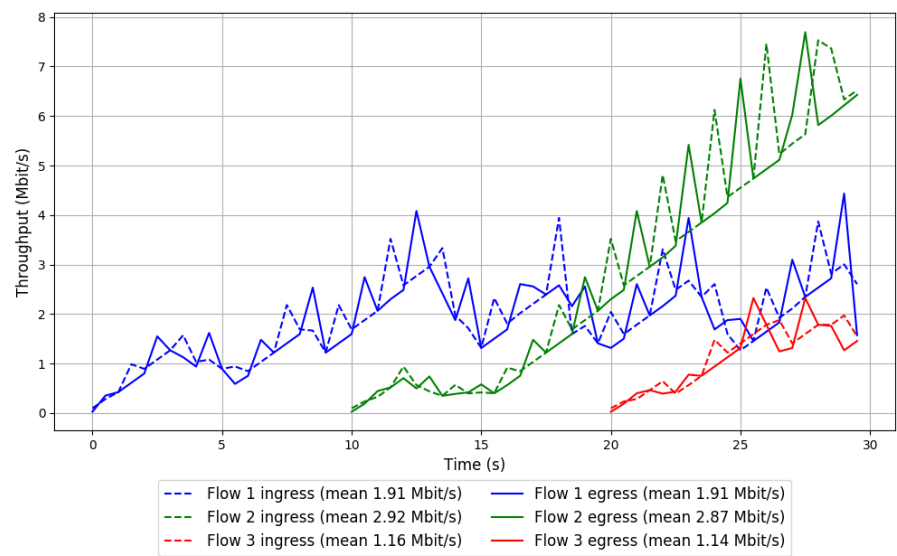
-- Flow 3:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 112.809 ms

Loss rate: 3.59%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-12 00:11:14

End at: 2017-12-12 00:11:44

Below is generated by plot.py at 2017-12-12 03:09:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 112.913 ms

Loss rate: 1.61%

-- Flow 1:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 112.941 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 4.66 Mbit/s

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

Loss rate: 2.26%

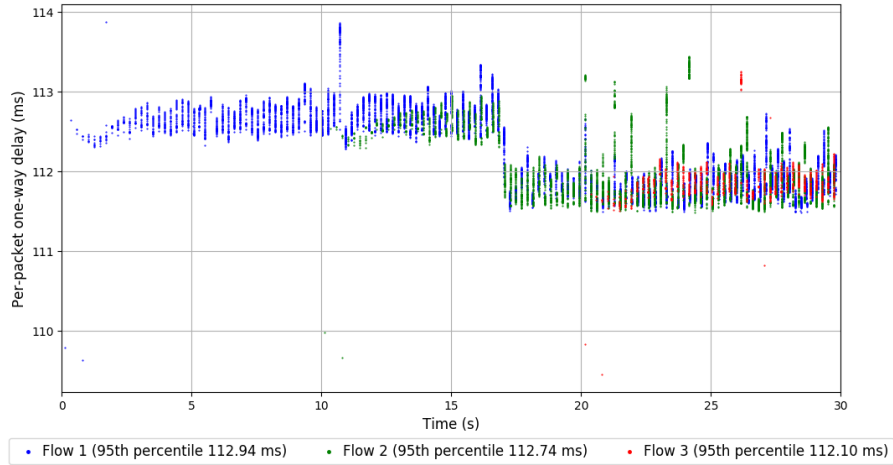
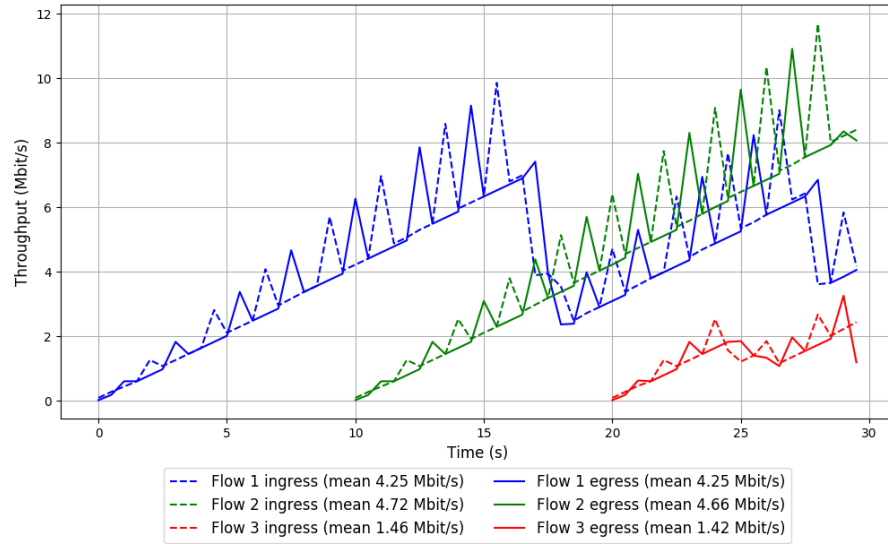
-- Flow 3:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 112.104 ms

Loss rate: 4.35%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-12 00:25:04

End at: 2017-12-12 00:25:34

Below is generated by plot.py at 2017-12-12 03:09:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.33 Mbit/s

95th percentile per-packet one-way delay: 112.908 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 5.01 Mbit/s

95th percentile per-packet one-way delay: 112.945 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 2.79 Mbit/s

95th percentile per-packet one-way delay: 112.749 ms

Loss rate: 1.46%

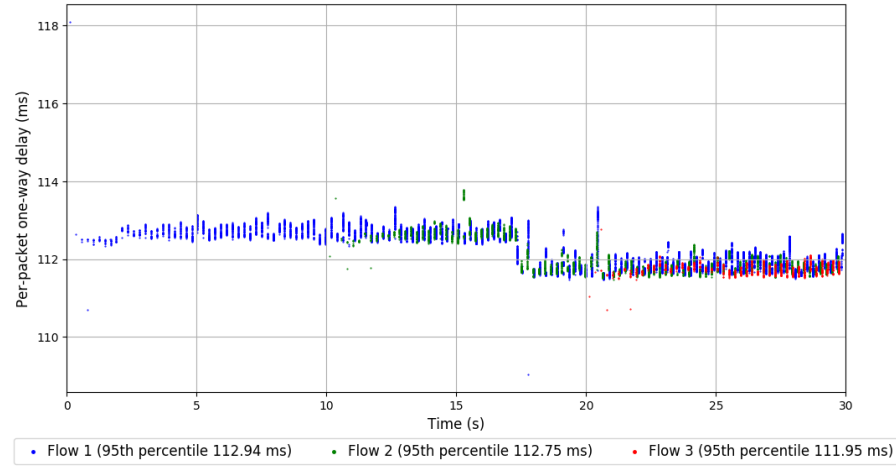
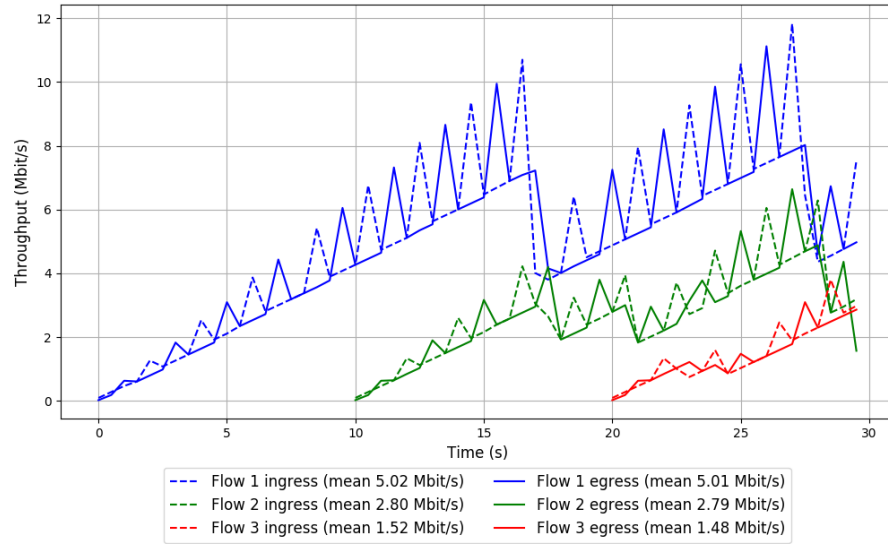
-- Flow 3:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 111.955 ms

Loss rate: 5.09%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-12 00:38:45

End at: 2017-12-12 00:39:15

Below is generated by plot.py at 2017-12-12 03:09:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.32 Mbit/s

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

Loss rate: 1.98%

-- Flow 1:

Average throughput: 3.47 Mbit/s

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

Loss rate: 1.81%

-- Flow 2:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 112.701 ms

Loss rate: 2.20%

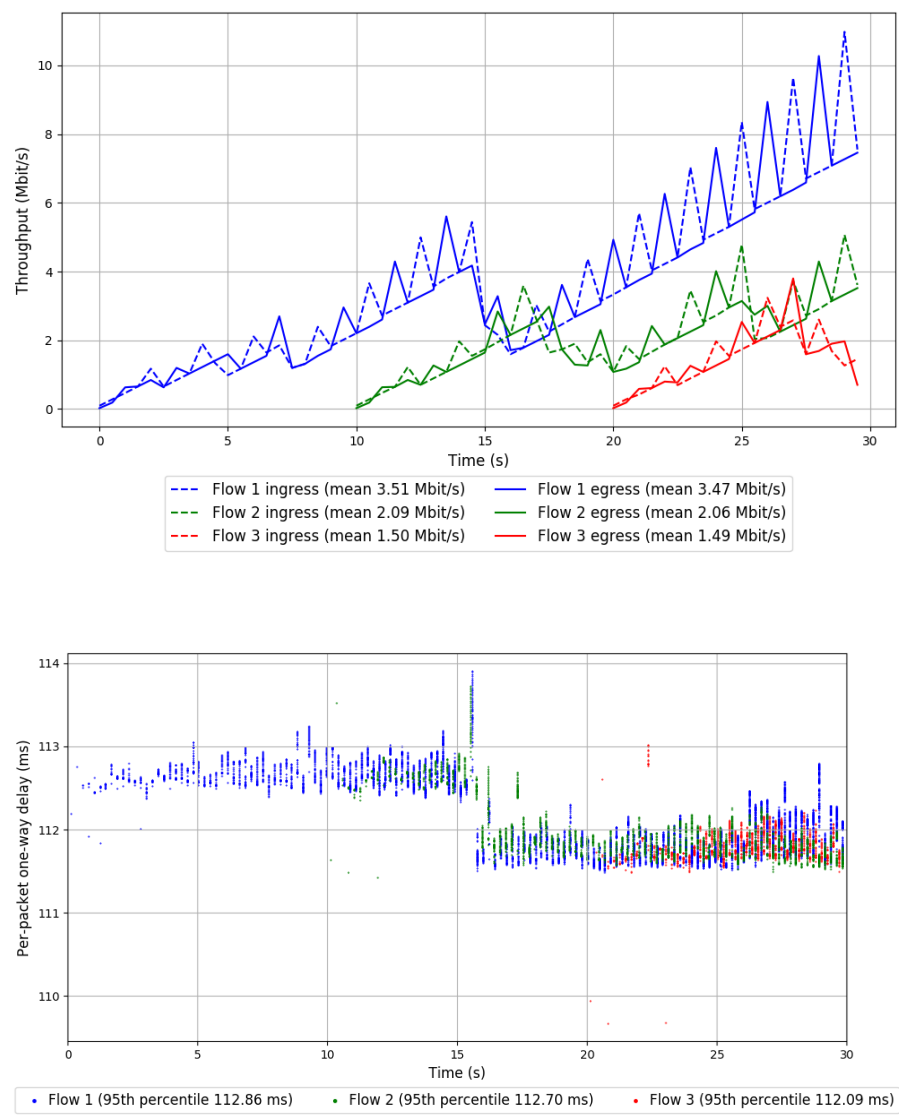
-- Flow 3:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 112.086 ms

Loss rate: 2.56%

Run 10: Report of LEDBAT — Data Link

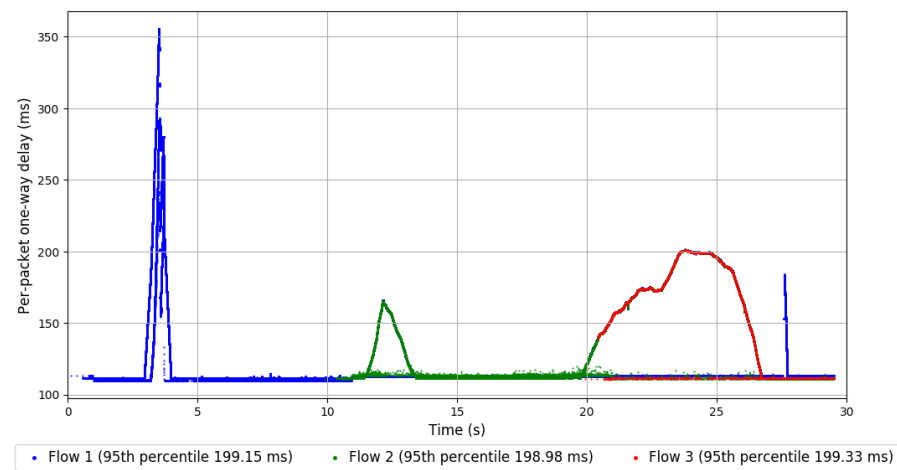
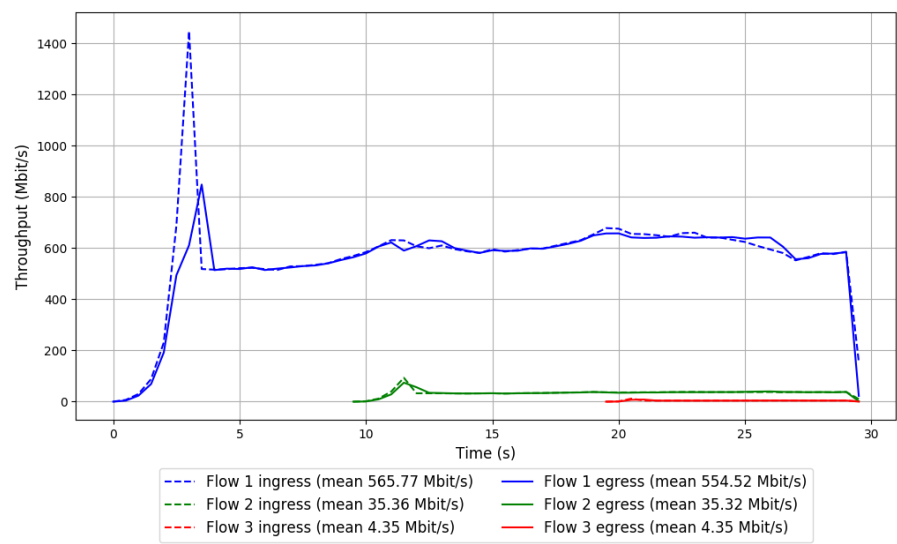


```
Run 1: Statistics of PCC

Start at: 2017-12-11 22:38:20
End at: 2017-12-11 22:38:50

# Below is generated by plot.py at 2017-12-12 03:18:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 579.50 Mbit/s
95th percentile per-packet one-way delay: 199.141 ms
Loss rate: 2.68%
-- Flow 1:
Average throughput: 554.52 Mbit/s
95th percentile per-packet one-way delay: 199.149 ms
Loss rate: 2.74%
-- Flow 2:
Average throughput: 35.32 Mbit/s
95th percentile per-packet one-way delay: 198.982 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 199.332 ms
Loss rate: 2.24%
```

Run 1: Report of PCC — Data Link

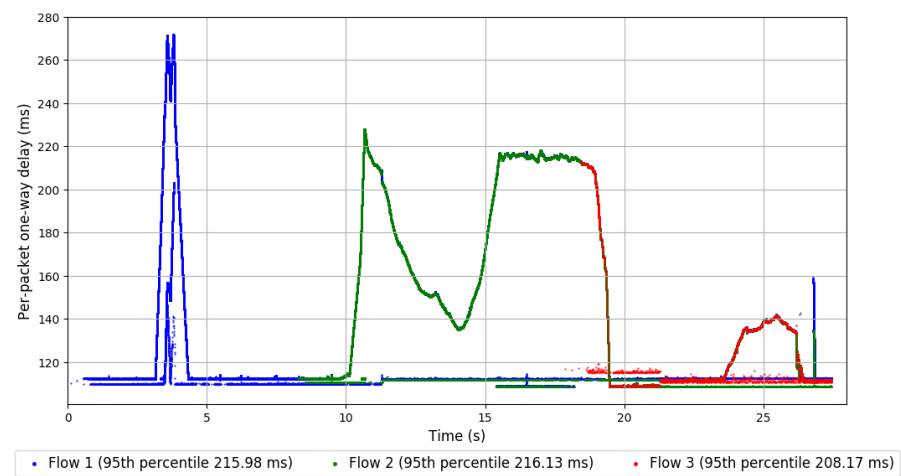
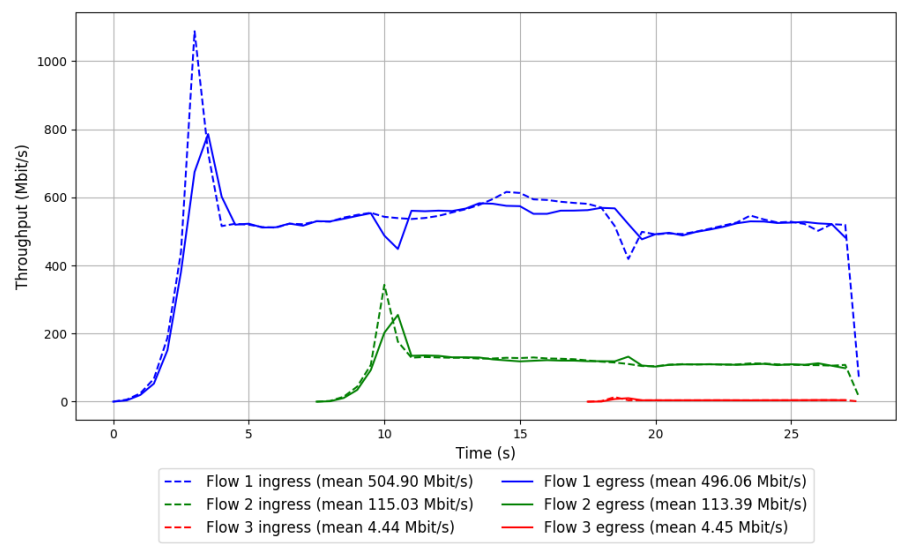


```
Run 2: Statistics of PCC

Start at: 2017-12-11 22:52:17
End at: 2017-12-11 22:52:47

# Below is generated by plot.py at 2017-12-12 03:18:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 579.01 Mbit/s
95th percentile per-packet one-way delay: 216.009 ms
Loss rate: 2.54%
-- Flow 1:
Average throughput: 496.06 Mbit/s
95th percentile per-packet one-way delay: 215.978 ms
Loss rate: 2.54%
-- Flow 2:
Average throughput: 113.39 Mbit/s
95th percentile per-packet one-way delay: 216.129 ms
Loss rate: 2.53%
-- Flow 3:
Average throughput: 4.45 Mbit/s
95th percentile per-packet one-way delay: 208.171 ms
Loss rate: 2.25%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-11 23:05:54

End at: 2017-12-11 23:06:24

Below is generated by plot.py at 2017-12-12 03:18:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 587.95 Mbit/s

95th percentile per-packet one-way delay: 223.959 ms

Loss rate: 2.83%

-- Flow 1:

Average throughput: 485.59 Mbit/s

95th percentile per-packet one-way delay: 224.253 ms

Loss rate: 2.81%

-- Flow 2:

Average throughput: 125.46 Mbit/s

95th percentile per-packet one-way delay: 223.428 ms

Loss rate: 2.83%

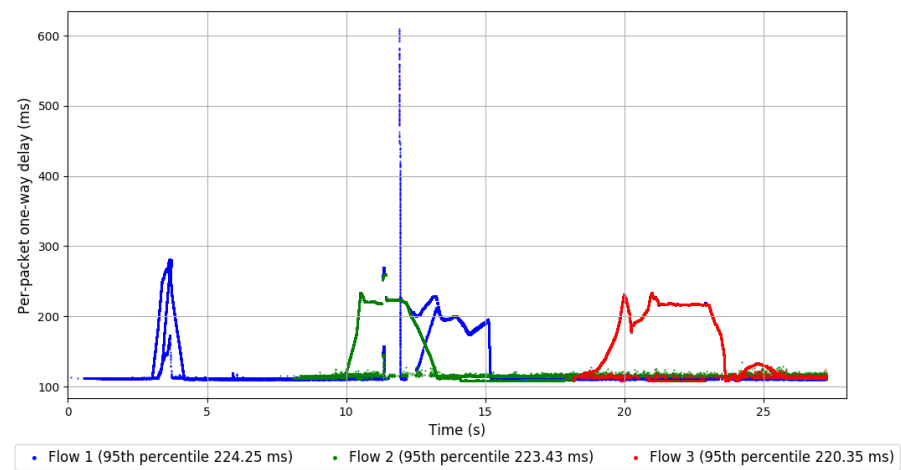
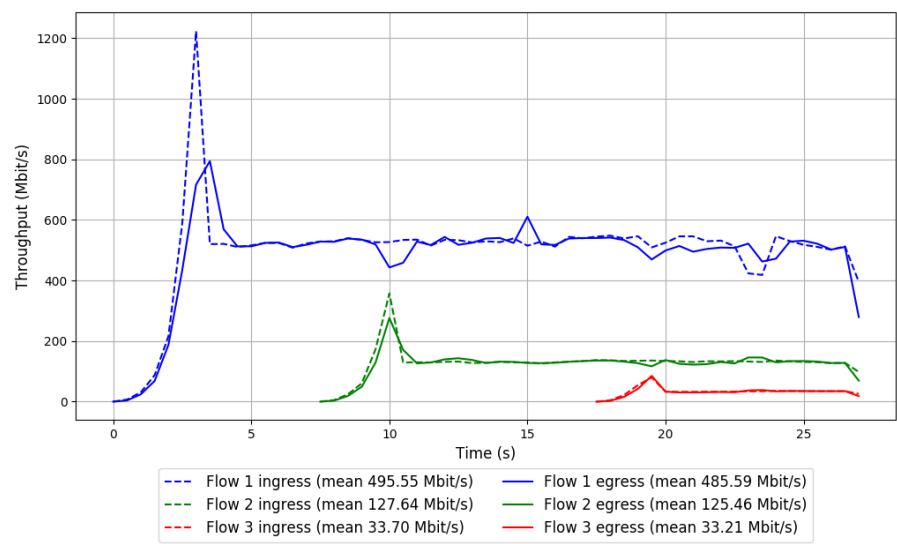
-- Flow 3:

Average throughput: 33.21 Mbit/s

95th percentile per-packet one-way delay: 220.351 ms

Loss rate: 3.70%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-11 23:19:35

End at: 2017-12-11 23:20:05

Below is generated by plot.py at 2017-12-12 03:18:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 567.84 Mbit/s

95th percentile per-packet one-way delay: 226.052 ms

Loss rate: 4.76%

-- Flow 1:

Average throughput: 461.39 Mbit/s

95th percentile per-packet one-way delay: 226.186 ms

Loss rate: 4.54%

-- Flow 2:

Average throughput: 127.62 Mbit/s

95th percentile per-packet one-way delay: 225.006 ms

Loss rate: 4.78%

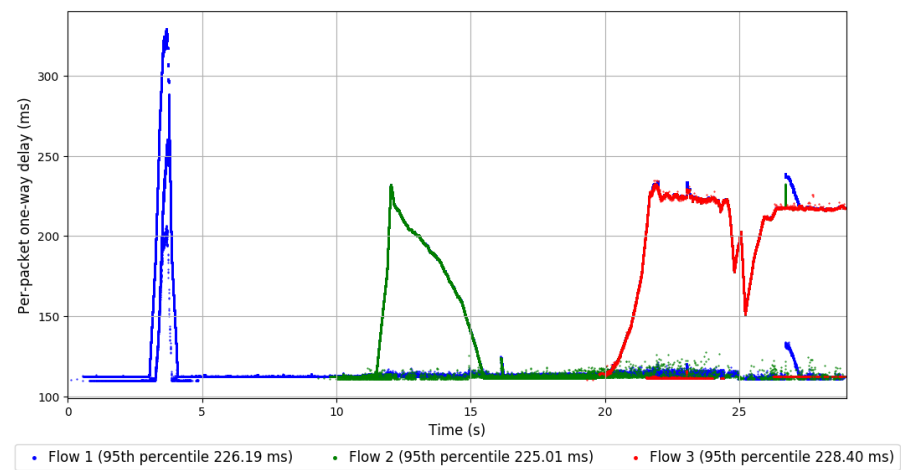
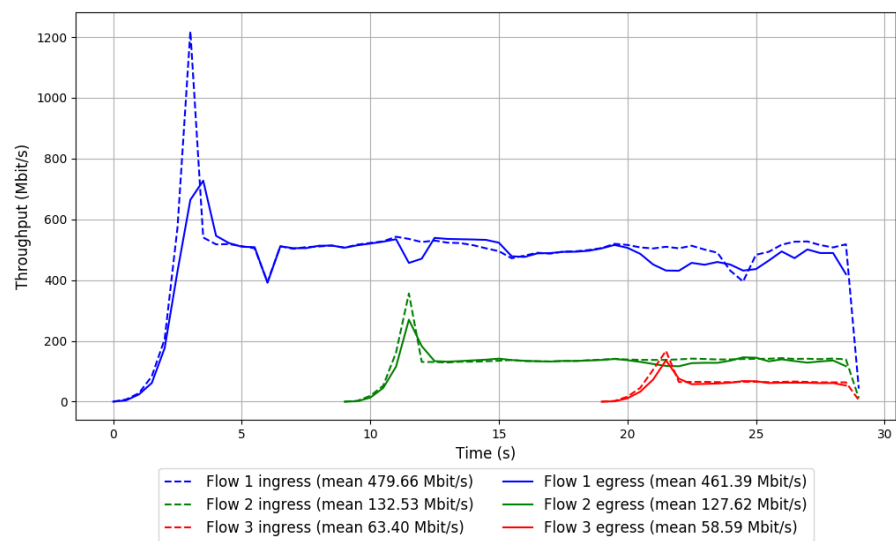
-- Flow 3:

Average throughput: 58.59 Mbit/s

95th percentile per-packet one-way delay: 228.396 ms

Loss rate: 9.66%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-11 23:33:34

End at: 2017-12-11 23:34:04

Below is generated by plot.py at 2017-12-12 03:18:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 584.69 Mbit/s

95th percentile per-packet one-way delay: 216.485 ms

Loss rate: 3.42%

-- Flow 1:

Average throughput: 518.38 Mbit/s

95th percentile per-packet one-way delay: 216.476 ms

Loss rate: 3.41%

-- Flow 2:

Average throughput: 65.53 Mbit/s

95th percentile per-packet one-way delay: 216.277 ms

Loss rate: 2.27%

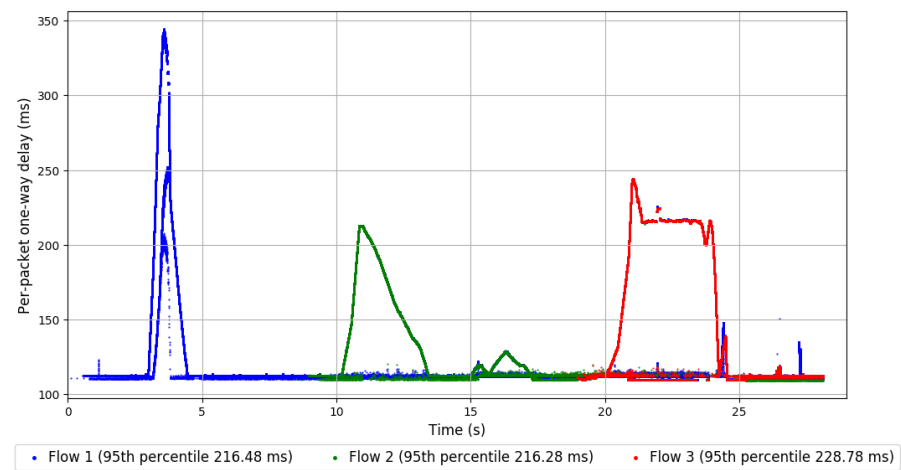
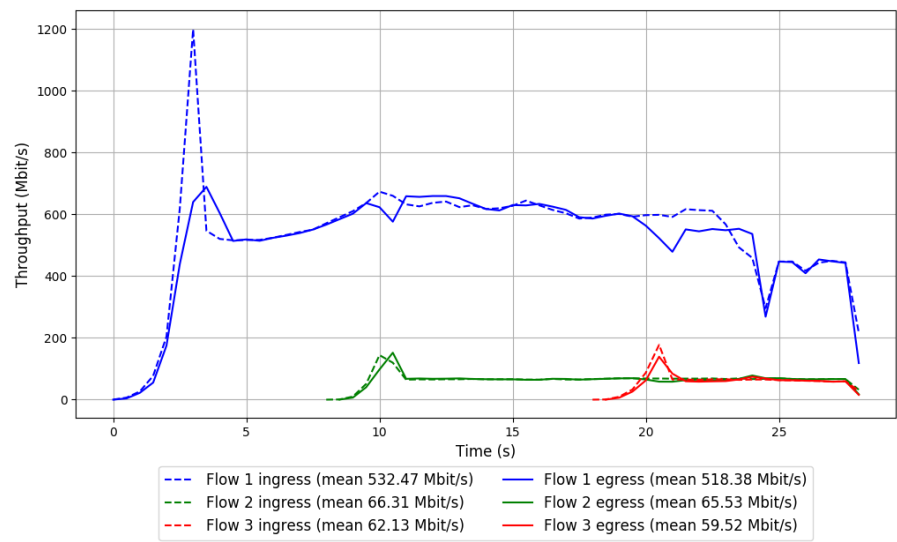
-- Flow 3:

Average throughput: 59.52 Mbit/s

95th percentile per-packet one-way delay: 228.776 ms

Loss rate: 6.38%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-11 23:47:09

End at: 2017-12-11 23:47:39

Below is generated by plot.py at 2017-12-12 03:18:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 606.40 Mbit/s

95th percentile per-packet one-way delay: 216.817 ms

Loss rate: 2.57%

-- Flow 1:

Average throughput: 559.29 Mbit/s

95th percentile per-packet one-way delay: 216.823 ms

Loss rate: 2.60%

-- Flow 2:

Average throughput: 64.66 Mbit/s

95th percentile per-packet one-way delay: 216.771 ms

Loss rate: 2.15%

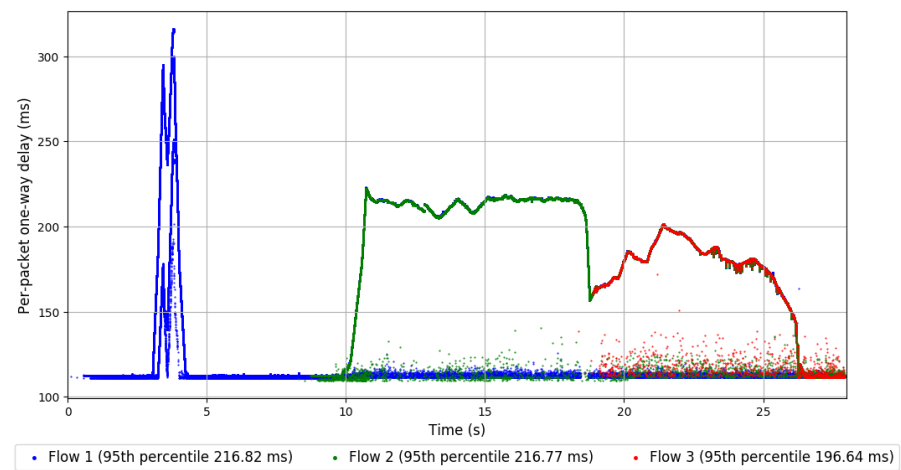
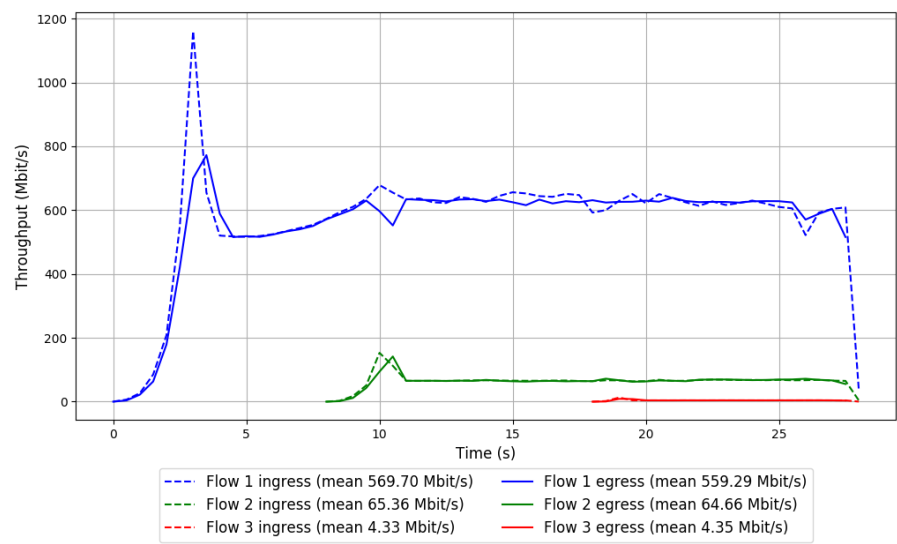
-- Flow 3:

Average throughput: 4.35 Mbit/s

95th percentile per-packet one-way delay: 196.643 ms

Loss rate: 2.05%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

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

End at: 2017-12-12 00:01:28

Below is generated by plot.py at 2017-12-12 03:18:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 586.86 Mbit/s

95th percentile per-packet one-way delay: 223.002 ms

Loss rate: 2.97%

-- Flow 1:

Average throughput: 493.67 Mbit/s

95th percentile per-packet one-way delay: 223.027 ms

Loss rate: 3.04%

-- Flow 2:

Average throughput: 128.11 Mbit/s

95th percentile per-packet one-way delay: 222.882 ms

Loss rate: 2.58%

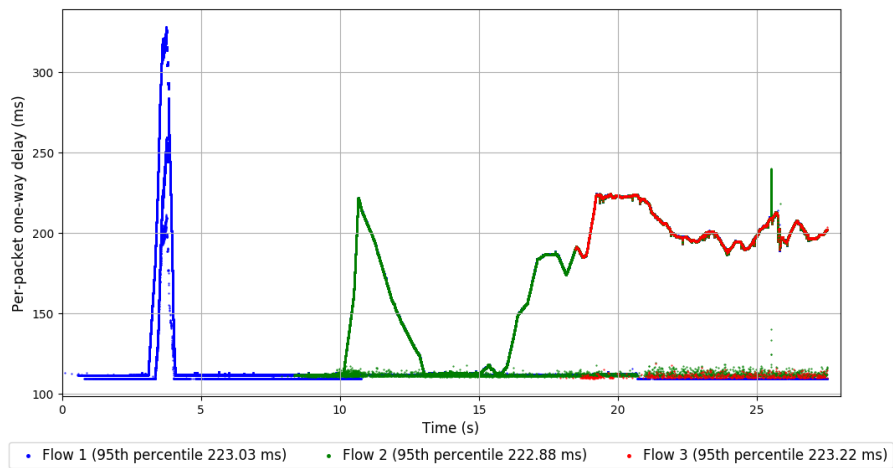
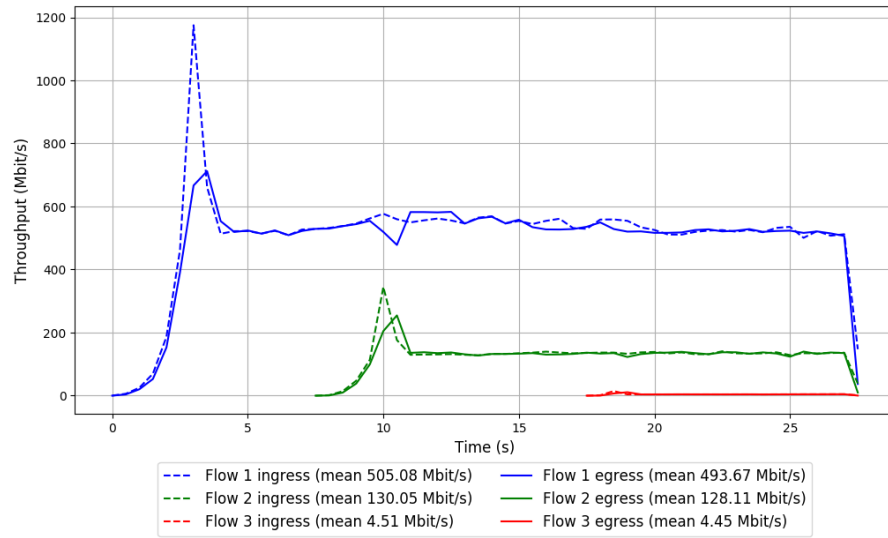
-- Flow 3:

Average throughput: 4.45 Mbit/s

95th percentile per-packet one-way delay: 223.222 ms

Loss rate: 3.58%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-12 00:14:32

End at: 2017-12-12 00:15:02

Below is generated by plot.py at 2017-12-12 03:19:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 598.05 Mbit/s

95th percentile per-packet one-way delay: 217.870 ms

Loss rate: 3.05%

-- Flow 1:

Average throughput: 494.36 Mbit/s

95th percentile per-packet one-way delay: 217.887 ms

Loss rate: 2.98%

-- Flow 2:

Average throughput: 118.93 Mbit/s

95th percentile per-packet one-way delay: 217.787 ms

Loss rate: 3.29%

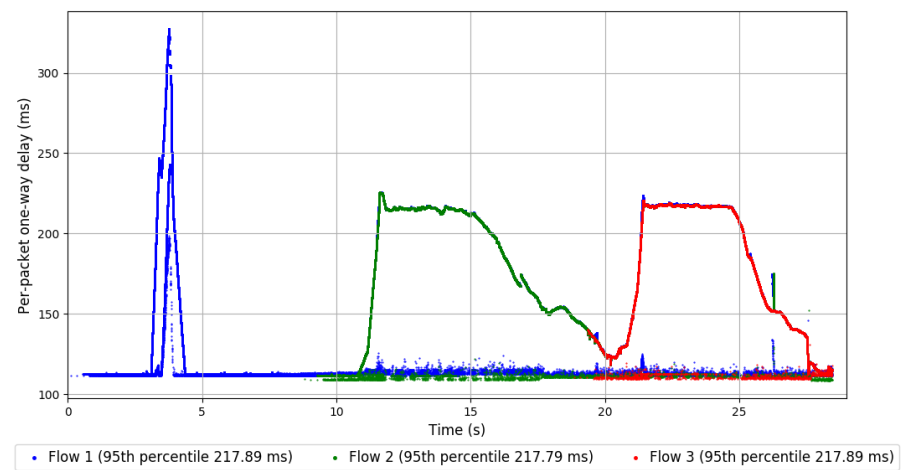
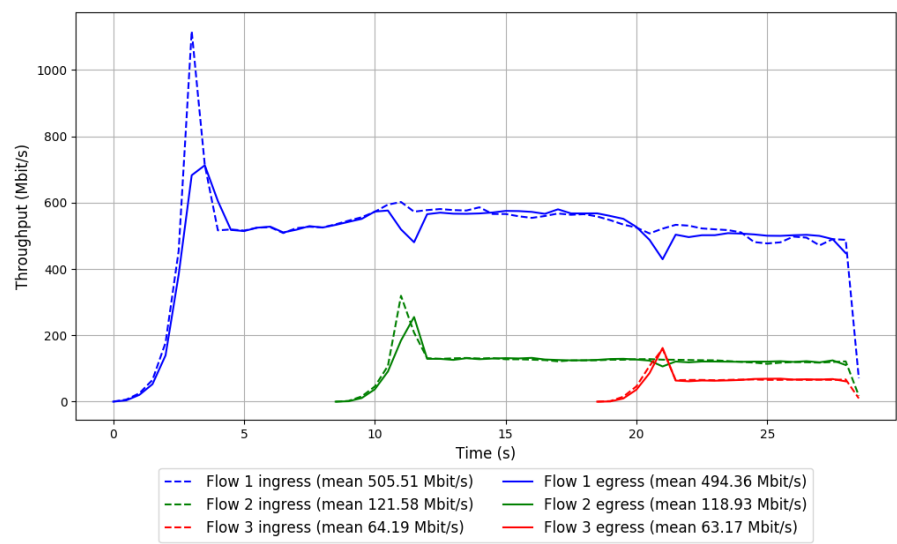
-- Flow 3:

Average throughput: 63.17 Mbit/s

95th percentile per-packet one-way delay: 217.893 ms

Loss rate: 3.82%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-12 00:28:17

End at: 2017-12-12 00:28:47

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 571.50 Mbit/s

95th percentile per-packet one-way delay: 225.143 ms

Loss rate: 3.16%

-- Flow 1:

Average throughput: 481.08 Mbit/s

95th percentile per-packet one-way delay: 225.569 ms

Loss rate: 3.29%

-- Flow 2:

Average throughput: 124.88 Mbit/s

95th percentile per-packet one-way delay: 223.974 ms

Loss rate: 2.47%

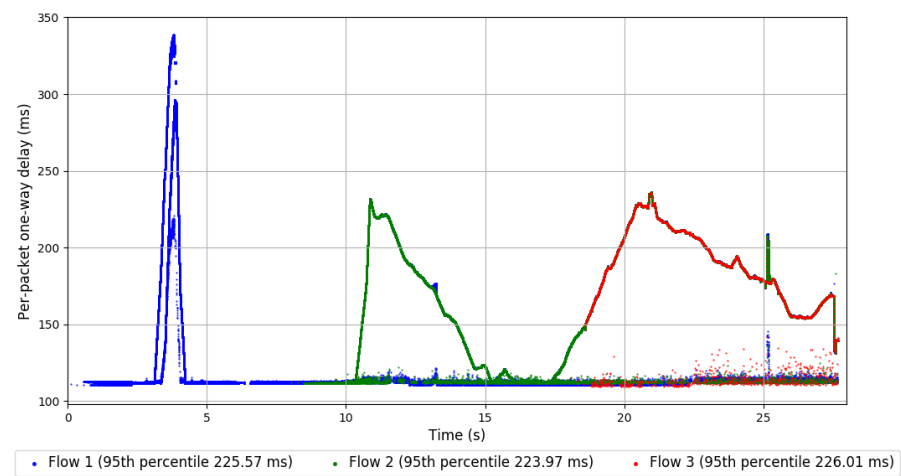
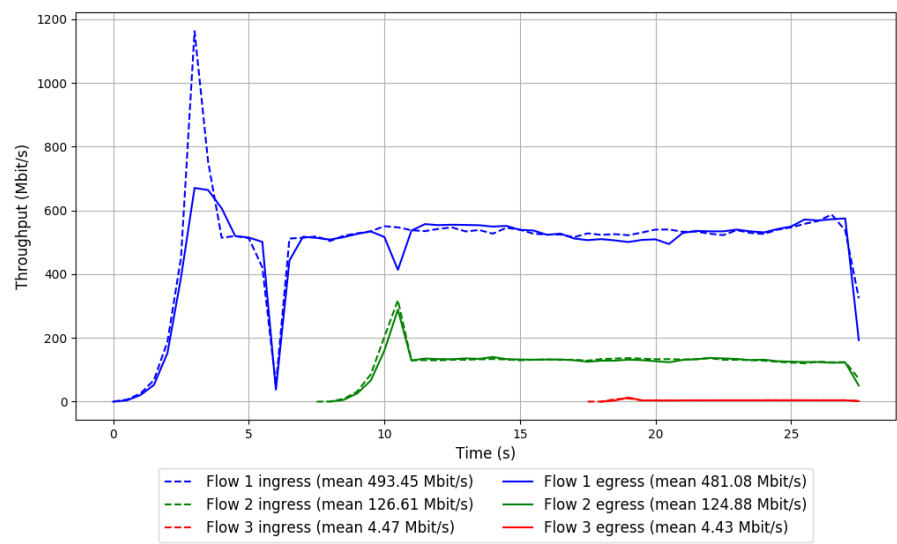
-- Flow 3:

Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 226.011 ms

Loss rate: 3.02%

Run 9: Report of PCC — Data Link

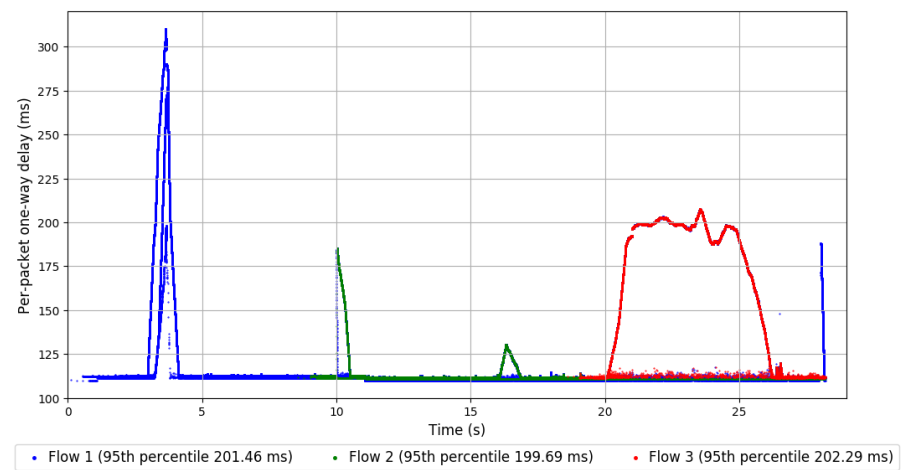
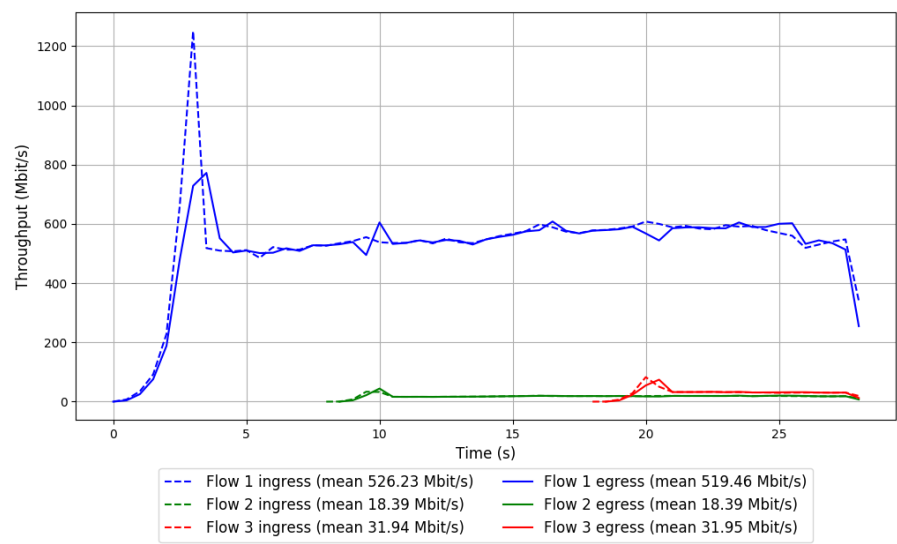


```
Run 10: Statistics of PCC

Start at: 2017-12-12 00:41:58
End at: 2017-12-12 00:42:28

# Below is generated by plot.py at 2017-12-12 03:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 543.21 Mbit/s
95th percentile per-packet one-way delay: 201.445 ms
Loss rate: 2.03%
-- Flow 1:
Average throughput: 519.46 Mbit/s
95th percentile per-packet one-way delay: 201.455 ms
Loss rate: 2.05%
-- Flow 2:
Average throughput: 18.39 Mbit/s
95th percentile per-packet one-way delay: 199.685 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 31.95 Mbit/s
95th percentile per-packet one-way delay: 202.286 ms
Loss rate: 2.19%
```

Run 10: Report of PCC — Data Link

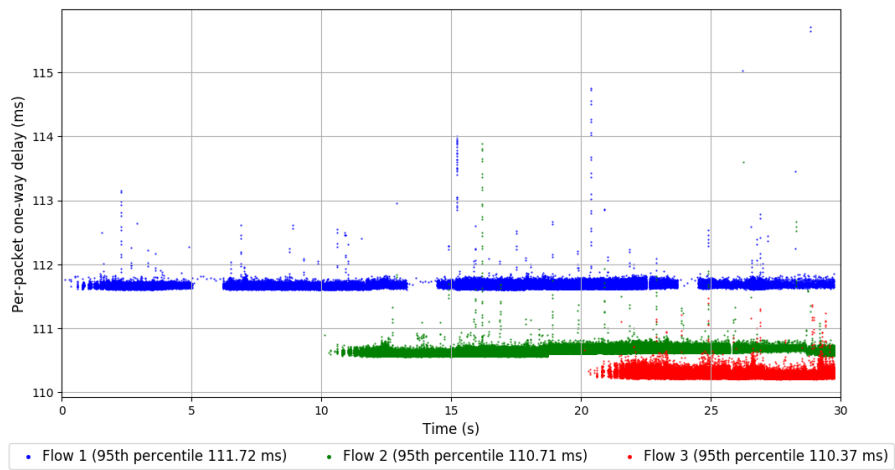
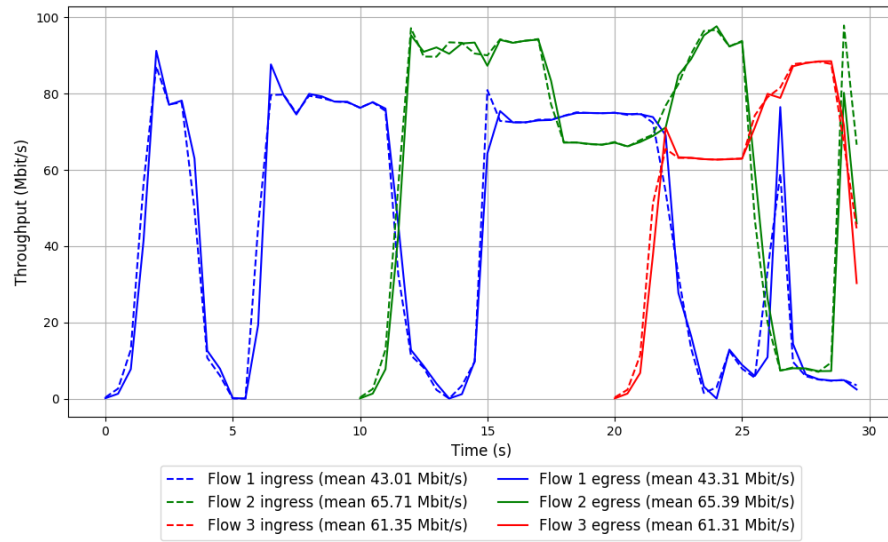


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-11 22:30:12
End at: 2017-12-11 22:30:42

# Below is generated by plot.py at 2017-12-12 03:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 106.48 Mbit/s
95th percentile per-packet one-way delay: 111.698 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 43.31 Mbit/s
95th percentile per-packet one-way delay: 111.723 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 65.39 Mbit/s
95th percentile per-packet one-way delay: 110.713 ms
Loss rate: 1.61%
-- Flow 3:
Average throughput: 61.31 Mbit/s
95th percentile per-packet one-way delay: 110.367 ms
Loss rate: 2.33%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-11 22:44:15

End at: 2017-12-11 22:44:45

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.20 Mbit/s

95th percentile per-packet one-way delay: 112.224 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 49.60 Mbit/s

95th percentile per-packet one-way delay: 112.245 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 41.59 Mbit/s

95th percentile per-packet one-way delay: 110.358 ms

Loss rate: 1.71%

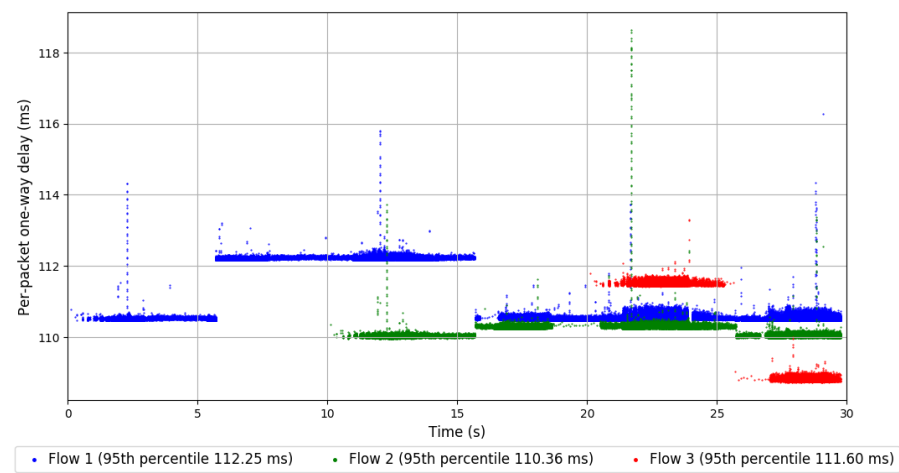
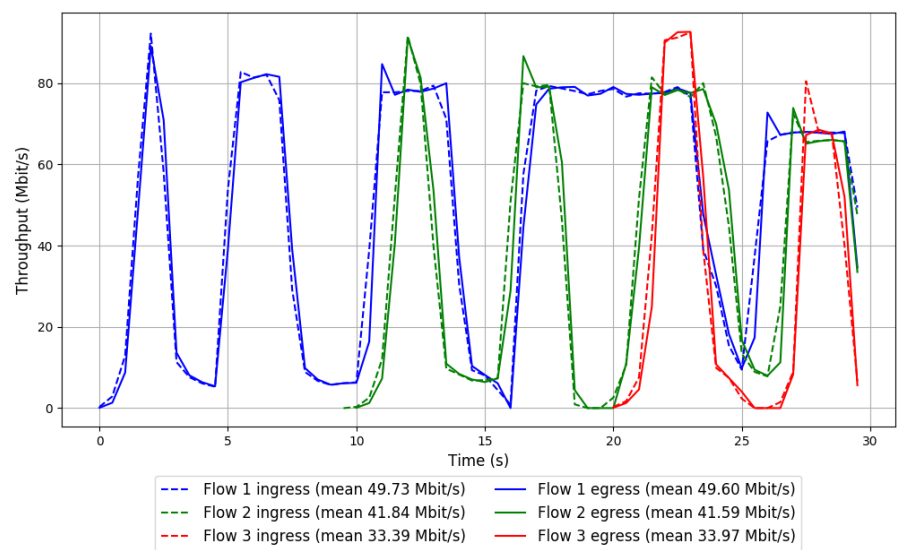
-- Flow 3:

Average throughput: 33.97 Mbit/s

95th percentile per-packet one-way delay: 111.604 ms

Loss rate: 0.57%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-11 22:57:52

End at: 2017-12-11 22:58:22

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.47 Mbit/s

95th percentile per-packet one-way delay: 111.619 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 52.34 Mbit/s

95th percentile per-packet one-way delay: 109.647 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 69.54 Mbit/s

95th percentile per-packet one-way delay: 111.636 ms

Loss rate: 1.38%

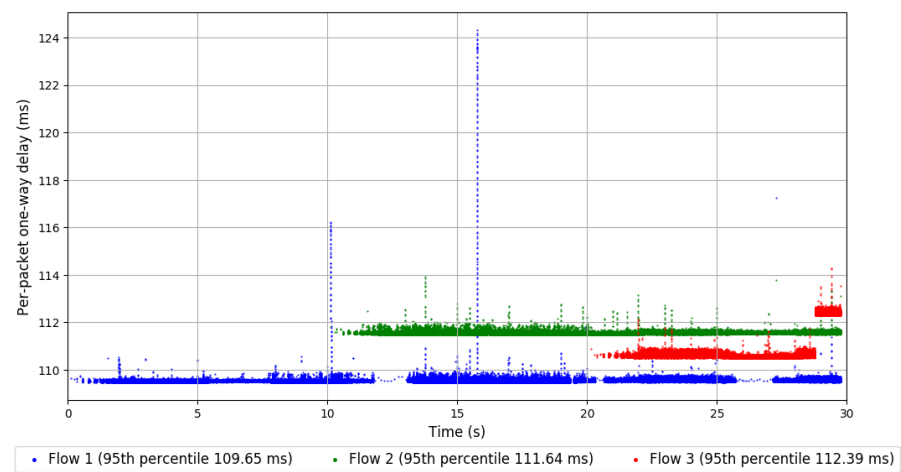
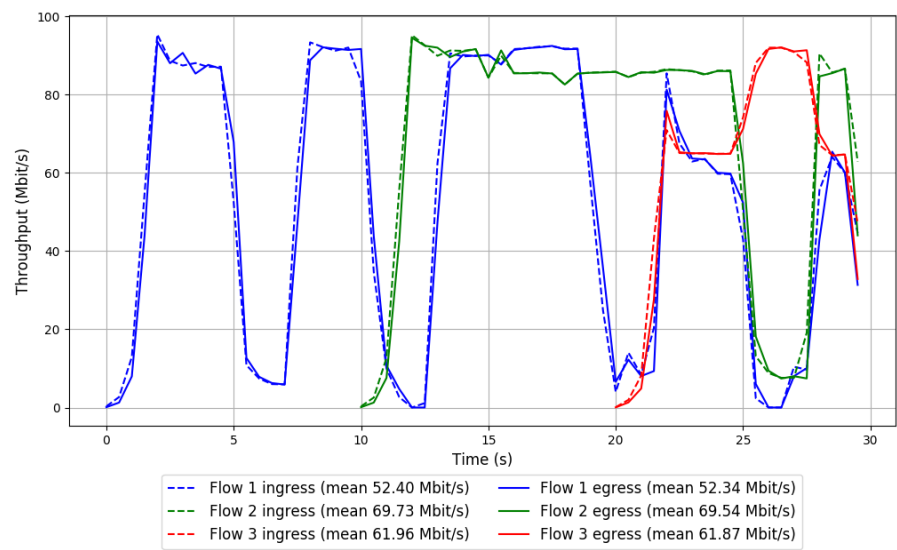
-- Flow 3:

Average throughput: 61.87 Mbit/s

95th percentile per-packet one-way delay: 112.395 ms

Loss rate: 2.37%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-11 23:11:37

End at: 2017-12-11 23:12:07

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.64 Mbit/s

95th percentile per-packet one-way delay: 112.967 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 53.37 Mbit/s

95th percentile per-packet one-way delay: 112.988 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 61.67 Mbit/s

95th percentile per-packet one-way delay: 112.413 ms

Loss rate: 0.17%

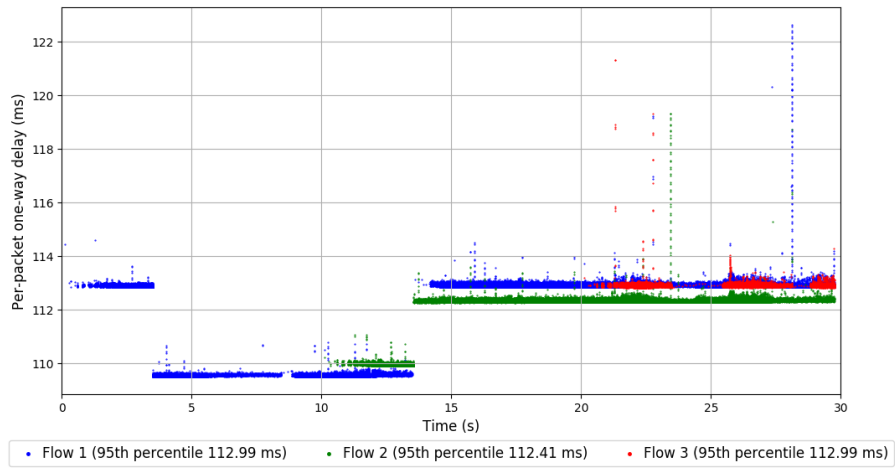
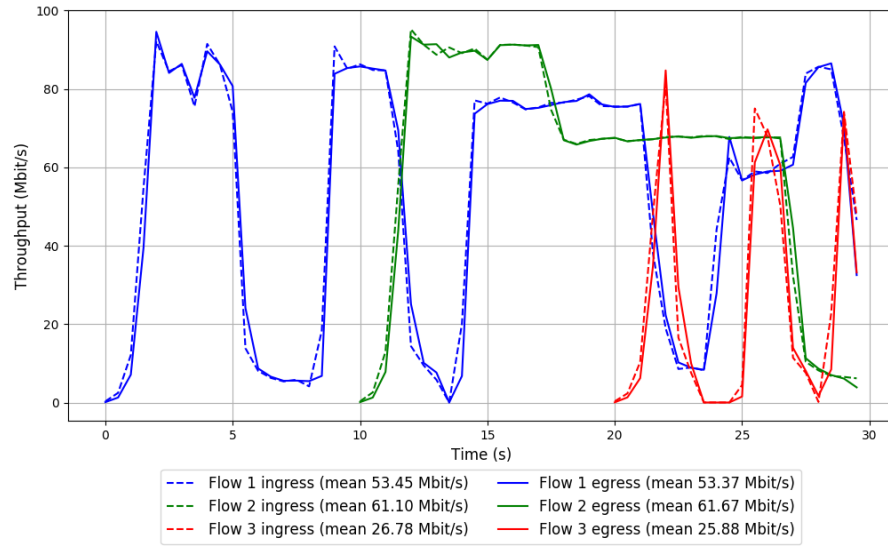
-- Flow 3:

Average throughput: 25.88 Mbit/s

95th percentile per-packet one-way delay: 112.991 ms

Loss rate: 5.55%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-11 23:25:23

End at: 2017-12-11 23:25:53

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.93 Mbit/s

95th percentile per-packet one-way delay: 112.745 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 51.13 Mbit/s

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

Loss rate: 0.91%

-- Flow 2:

Average throughput: 50.36 Mbit/s

95th percentile per-packet one-way delay: 114.516 ms

Loss rate: 0.14%

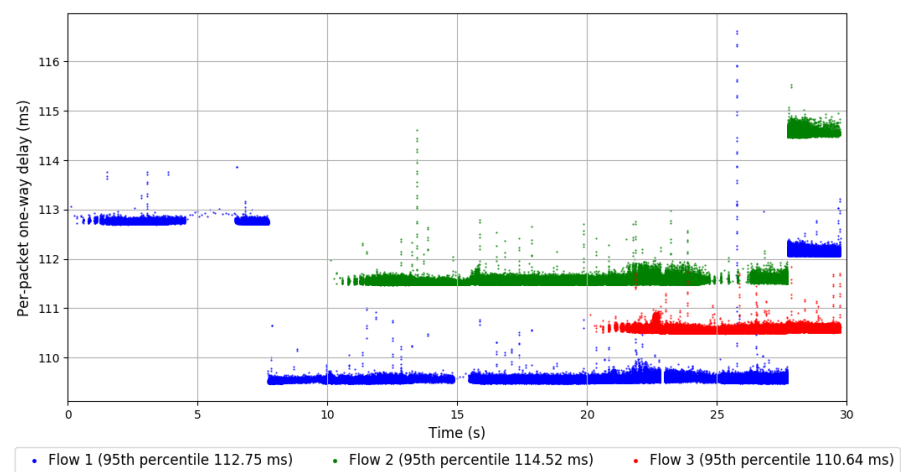
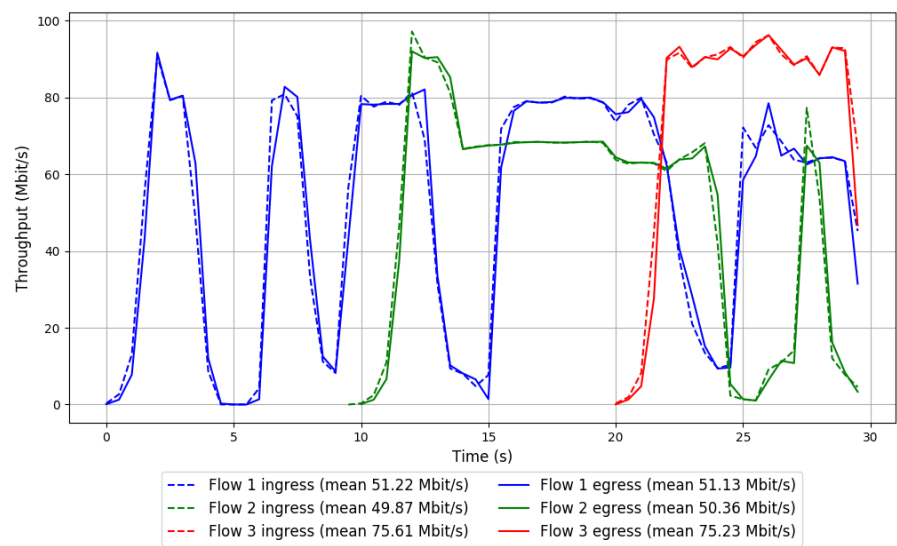
-- Flow 3:

Average throughput: 75.23 Mbit/s

95th percentile per-packet one-way delay: 110.645 ms

Loss rate: 2.74%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-11 23:39:02

End at: 2017-12-11 23:39:33

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.45 Mbit/s

95th percentile per-packet one-way delay: 111.602 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 62.00 Mbit/s

95th percentile per-packet one-way delay: 111.593 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 48.36 Mbit/s

95th percentile per-packet one-way delay: 111.618 ms

Loss rate: 0.00%

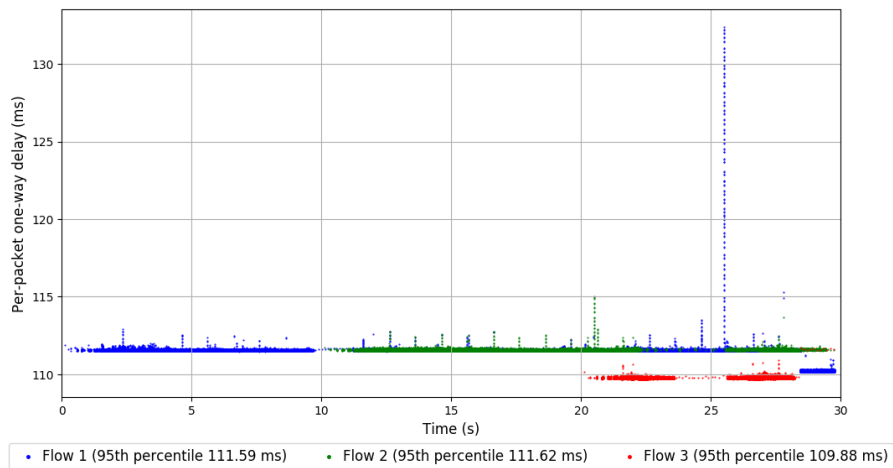
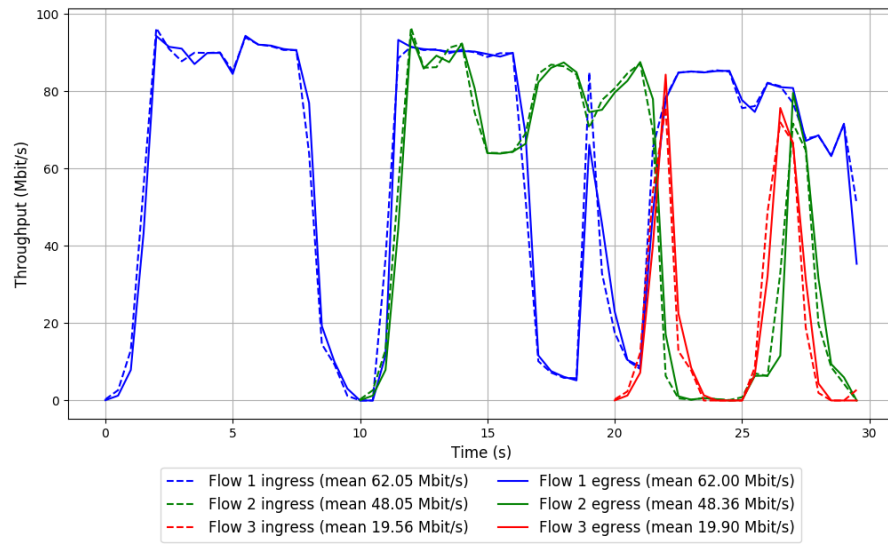
-- Flow 3:

Average throughput: 19.90 Mbit/s

95th percentile per-packet one-way delay: 109.878 ms

Loss rate: 0.72%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-11 23:52:51

End at: 2017-12-11 23:53:21

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 115.33 Mbit/s

95th percentile per-packet one-way delay: 111.609 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 62.81 Mbit/s

95th percentile per-packet one-way delay: 111.227 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 50.44 Mbit/s

95th percentile per-packet one-way delay: 111.670 ms

Loss rate: 1.35%

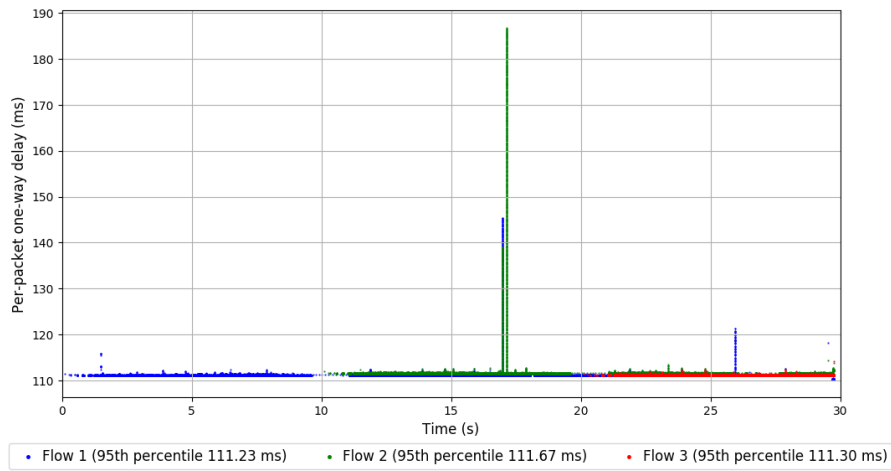
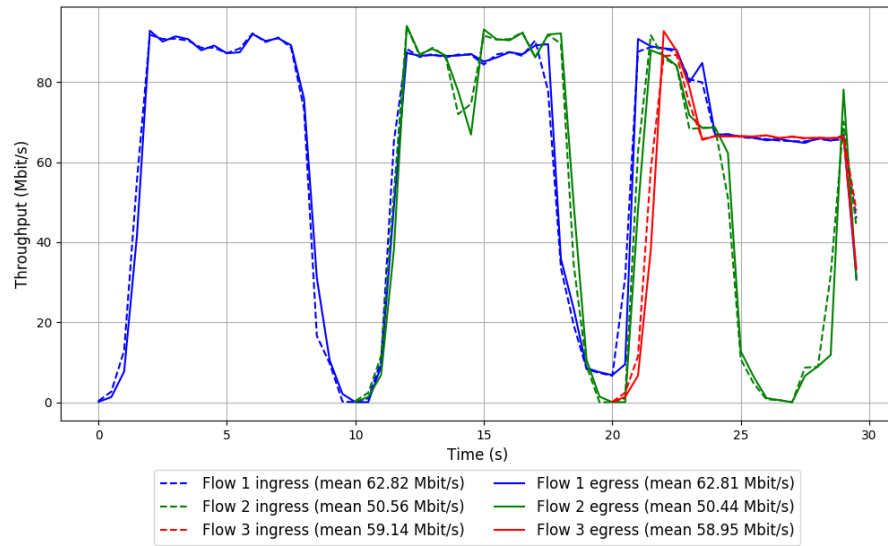
-- Flow 3:

Average throughput: 58.95 Mbit/s

95th percentile per-packet one-way delay: 111.302 ms

Loss rate: 2.55%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-12 00:06:24

End at: 2017-12-12 00:06:54

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 113.52 Mbit/s

95th percentile per-packet one-way delay: 112.436 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 68.41 Mbit/s

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

Loss rate: 0.74%

-- Flow 2:

Average throughput: 53.71 Mbit/s

95th percentile per-packet one-way delay: 112.436 ms

Loss rate: 1.35%

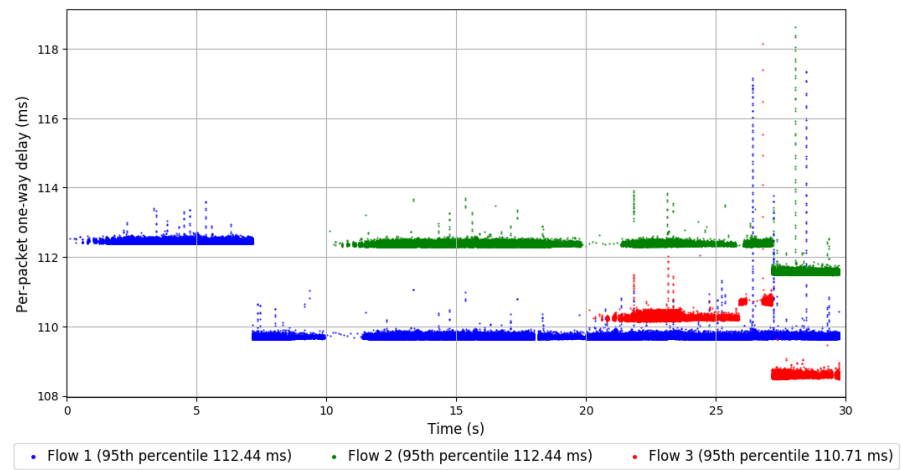
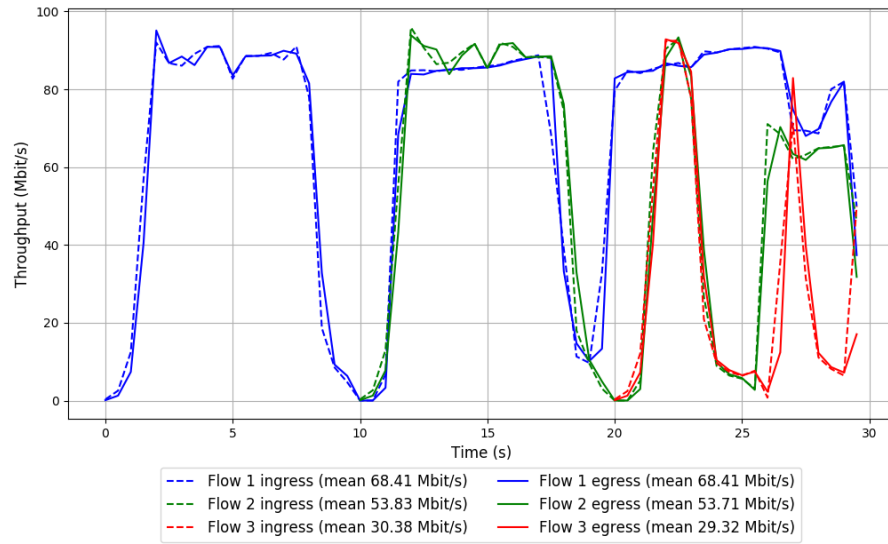
-- Flow 3:

Average throughput: 29.32 Mbit/s

95th percentile per-packet one-way delay: 110.707 ms

Loss rate: 5.64%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-12 00:20:14

End at: 2017-12-12 00:20:44

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.93 Mbit/s

95th percentile per-packet one-way delay: 112.121 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 52.57 Mbit/s

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

Loss rate: 0.90%

-- Flow 2:

Average throughput: 61.04 Mbit/s

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

Loss rate: 0.23%

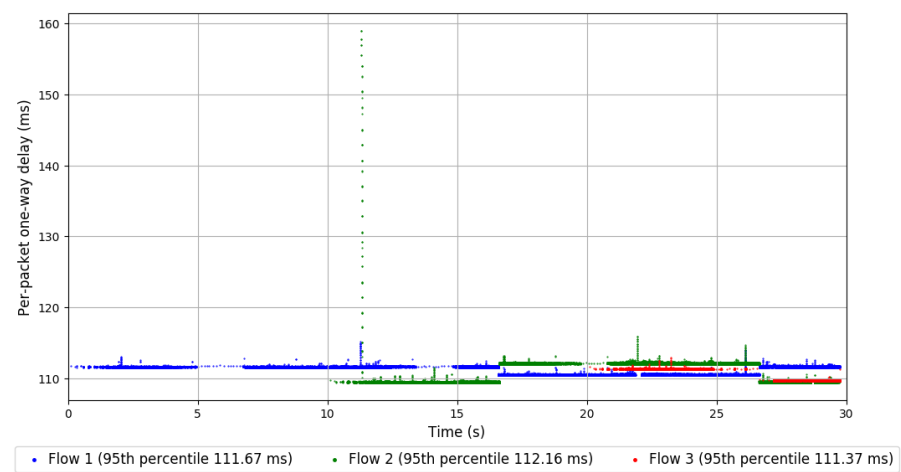
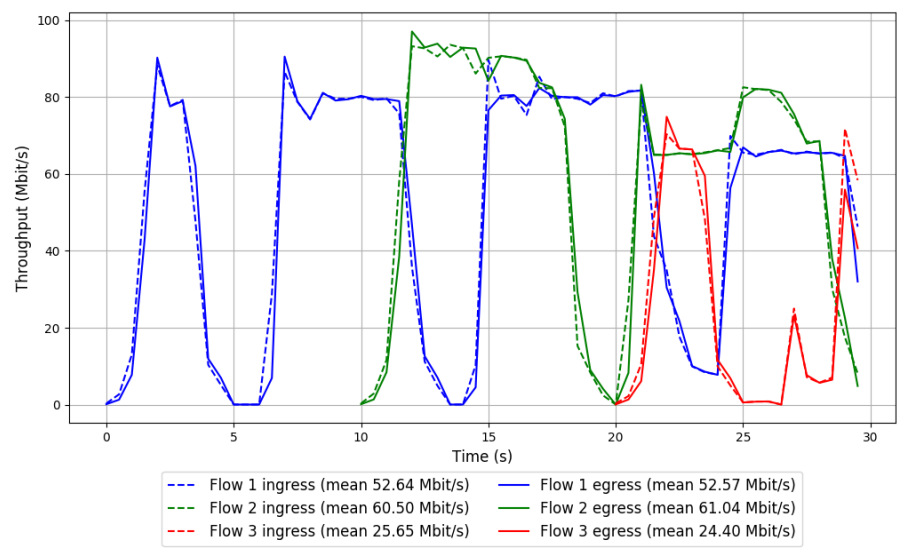
-- Flow 3:

Average throughput: 24.40 Mbit/s

95th percentile per-packet one-way delay: 111.371 ms

Loss rate: 7.01%

Run 9: Report of QUIC Cubic — Data Link

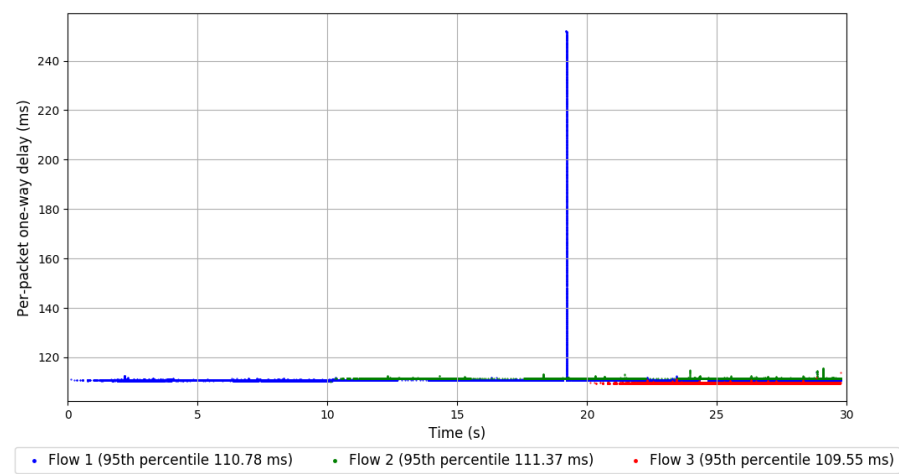
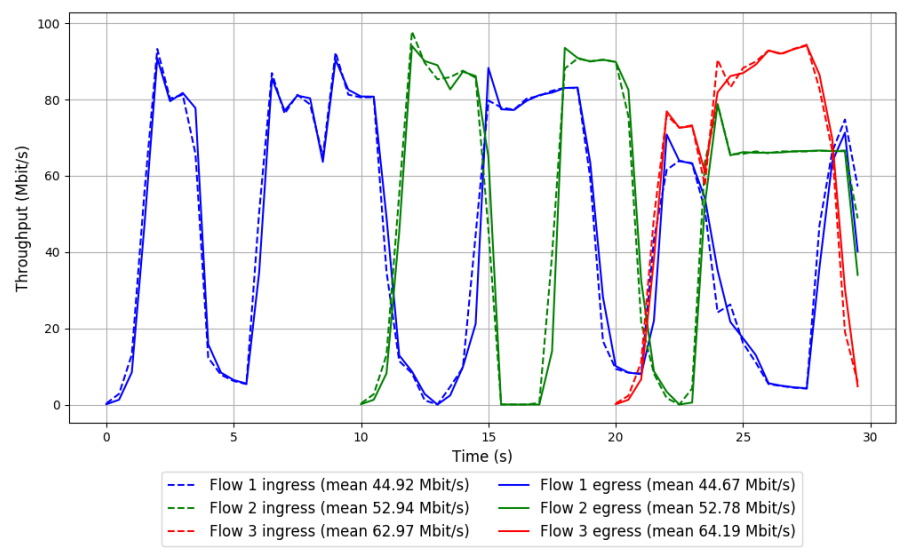


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-12 00:33:51
End at: 2017-12-12 00:34:21

# Below is generated by plot.py at 2017-12-12 03:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.48 Mbit/s
95th percentile per-packet one-way delay: 111.338 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 44.67 Mbit/s
95th percentile per-packet one-way delay: 110.784 ms
Loss rate: 1.31%
-- Flow 2:
Average throughput: 52.78 Mbit/s
95th percentile per-packet one-way delay: 111.370 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 64.19 Mbit/s
95th percentile per-packet one-way delay: 109.545 ms
Loss rate: 0.26%
```

Run 10: Report of QUIC Cubic — Data Link

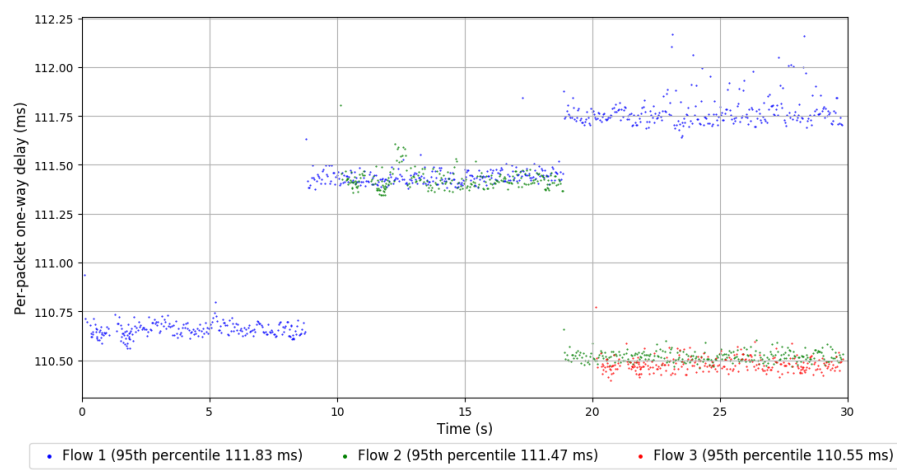
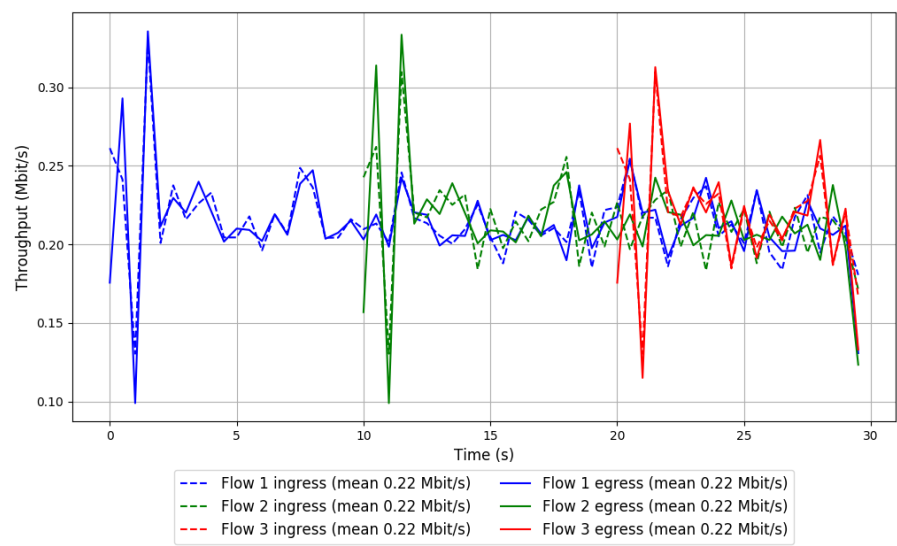


```
Run 1: Statistics of SCReAM

Start at: 2017-12-11 22:33:22
End at: 2017-12-11 22:33:52

# Below is generated by plot.py at 2017-12-12 03:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 111.783 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.825 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.472 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.551 ms
Loss rate: 1.87%
```

Run 1: Report of SReAM — Data Link

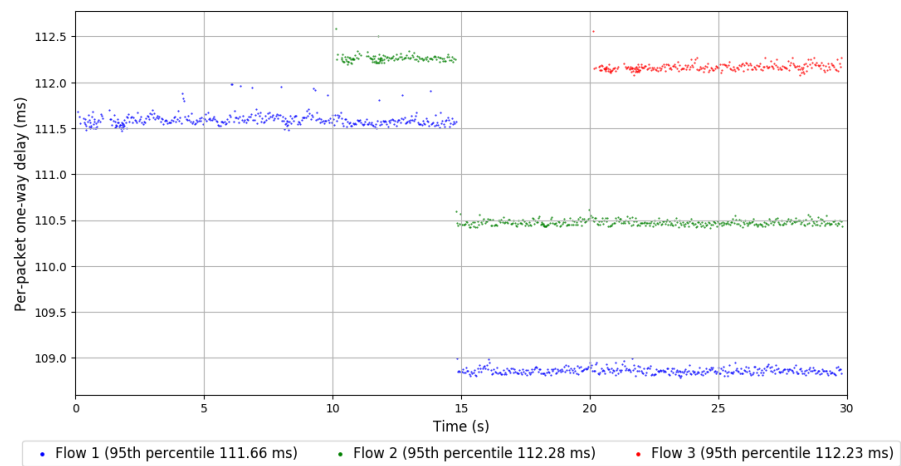
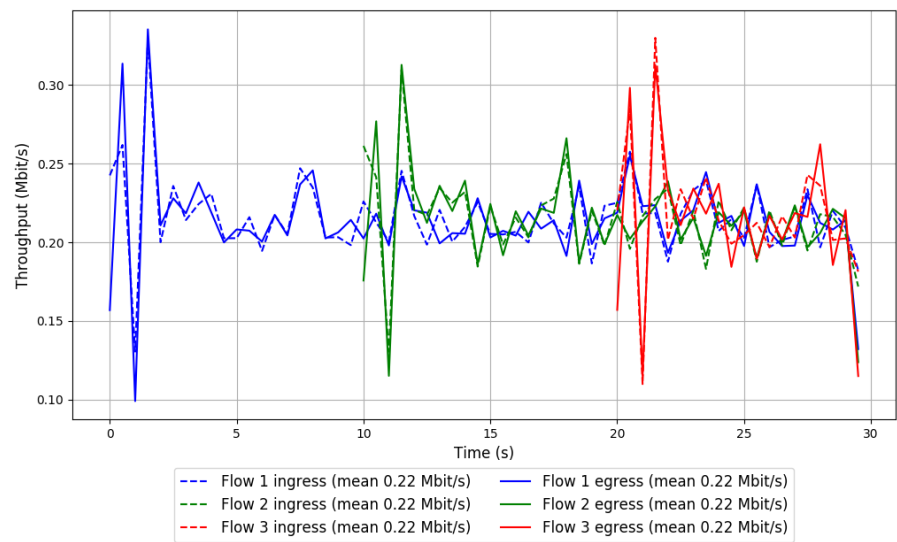


```
Run 2: Statistics of SCReAM

Start at: 2017-12-11 22:47:26
End at: 2017-12-11 22:47:56

# Below is generated by plot.py at 2017-12-12 03:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.259 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.656 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.280 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.228 ms
Loss rate: 2.25%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2017-12-11 23:01:02

End at: 2017-12-11 23:01:32

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.359 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.368 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.690 ms

Loss rate: 1.05%

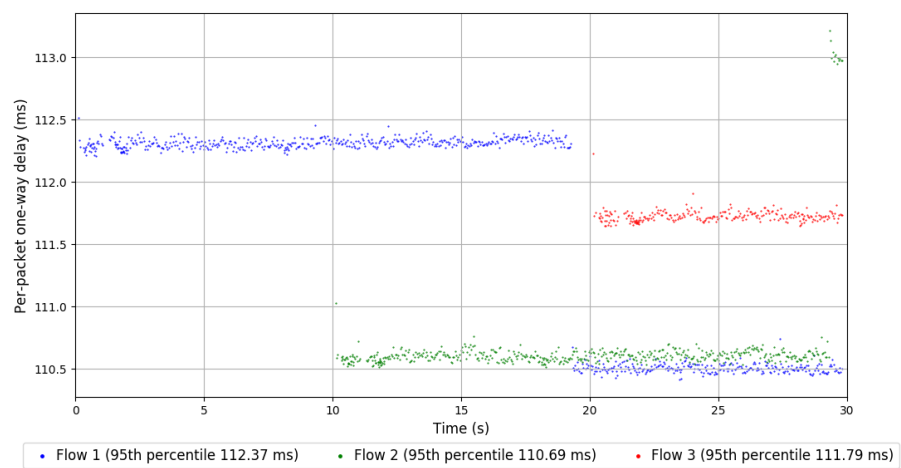
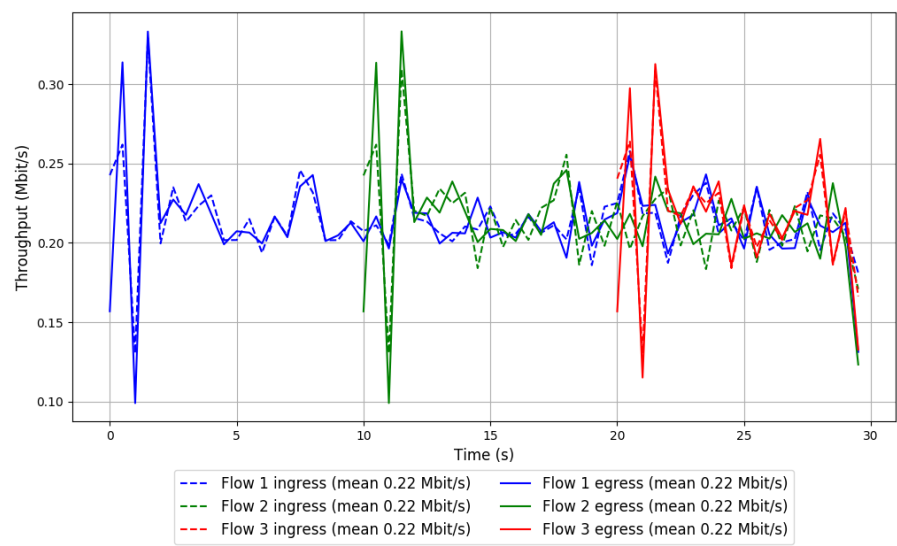
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.793 ms

Loss rate: 1.87%

Run 3: Report of SReAM — Data Link

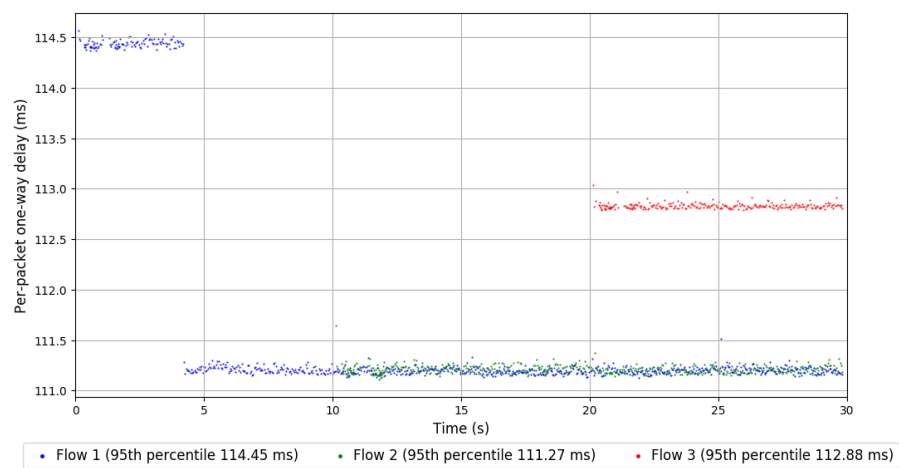
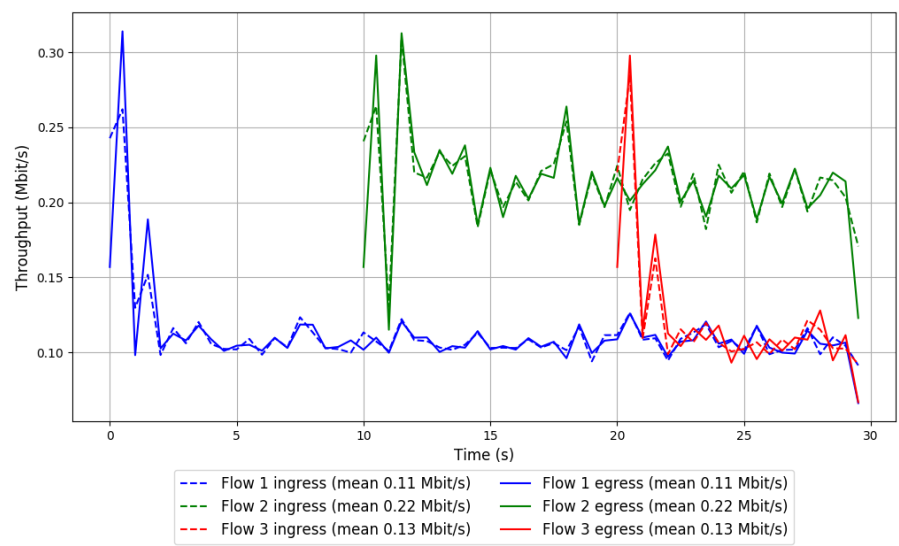


```
Run 4: Statistics of SCReAM

Start at: 2017-12-11 23:14:47
End at: 2017-12-11 23:15:17

# Below is generated by plot.py at 2017-12-12 03:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 114.413 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 114.449 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.274 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 112.881 ms
Loss rate: 1.66%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2017-12-11 23:28:40

End at: 2017-12-11 23:29:10

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.553 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.702 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.578 ms

Loss rate: 1.05%

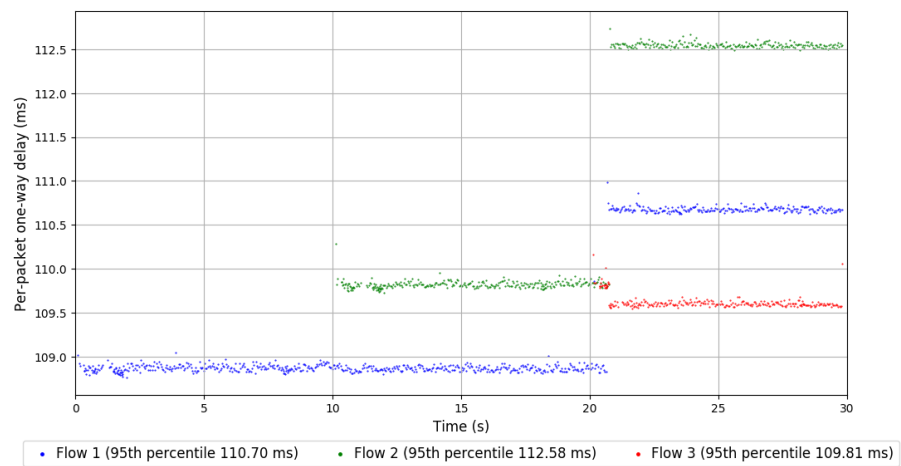
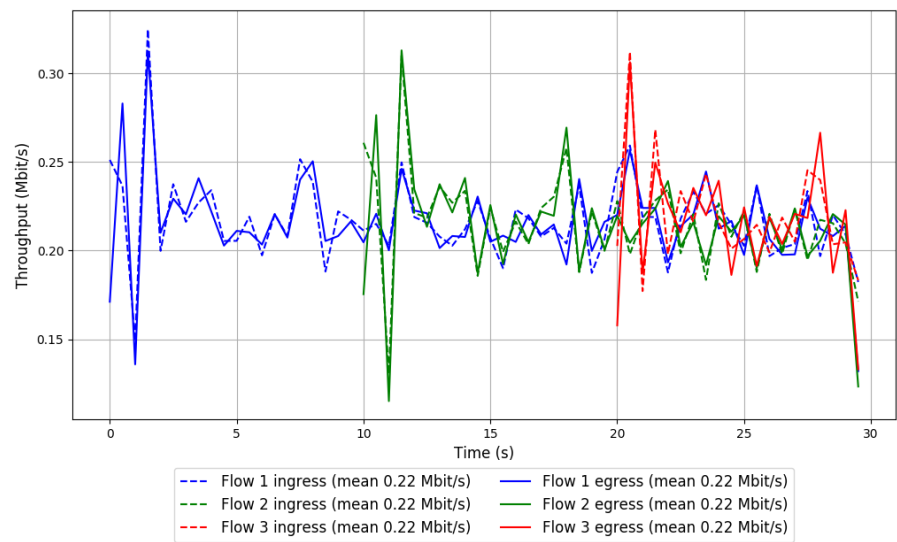
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 109.807 ms

Loss rate: 1.86%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-11 23:42:19

End at: 2017-12-11 23:42:49

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.297 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.430 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.175 ms

Loss rate: 1.25%

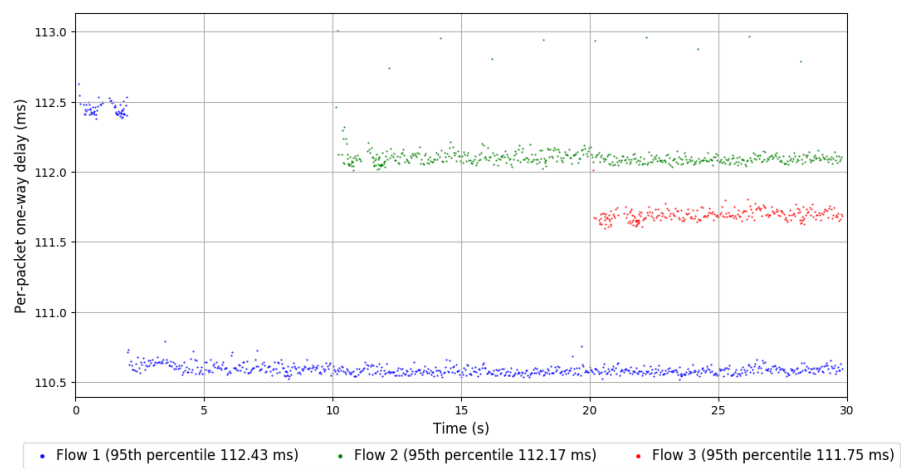
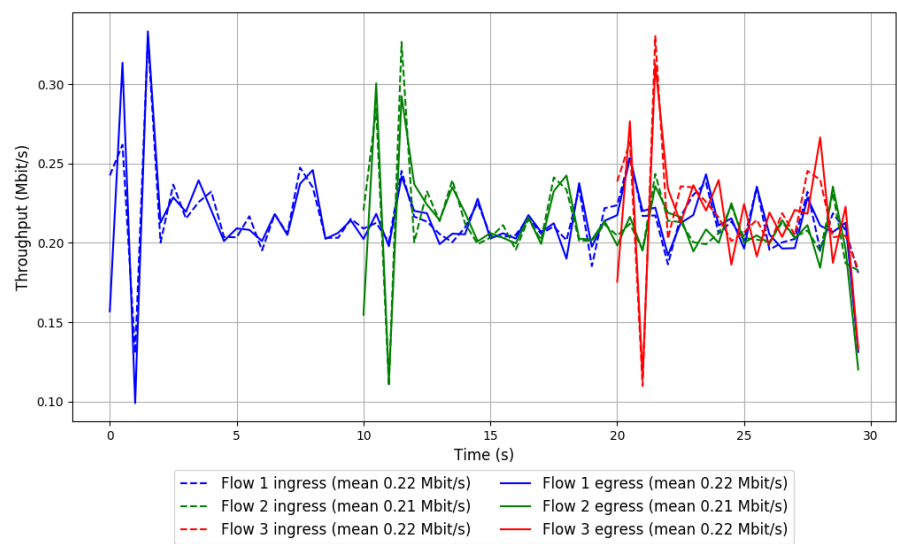
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.752 ms

Loss rate: 1.87%

Run 6: Report of SReAM — Data Link

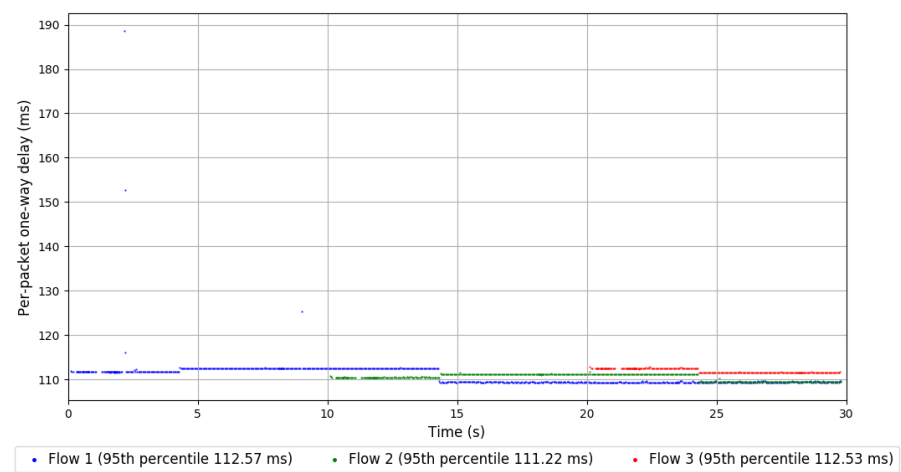
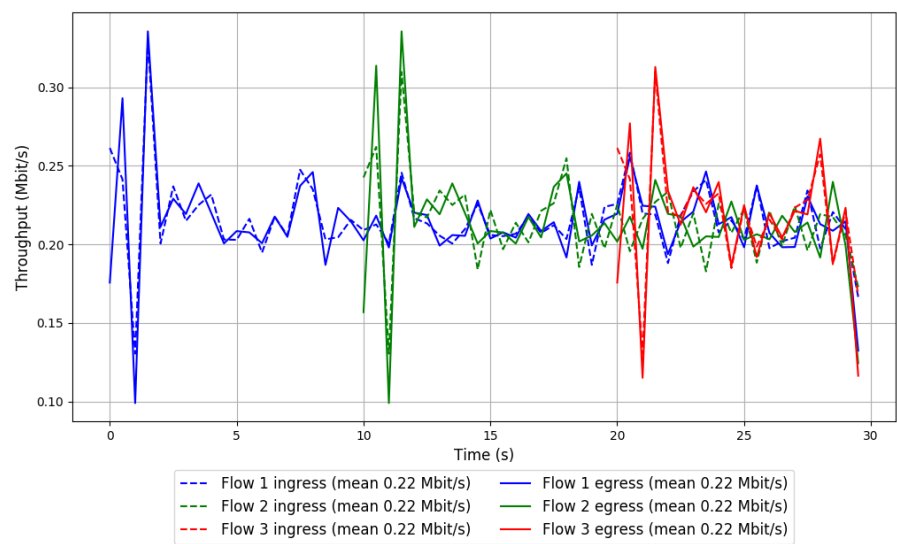


```
Run 7: Statistics of SReAM

Start at: 2017-12-11 23:56:07
End at: 2017-12-11 23:56:37

# Below is generated by plot.py at 2017-12-12 03:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.550 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.566 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.224 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.534 ms
Loss rate: 2.26%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-12 00:09:40

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

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 110.723 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.558 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 108.684 ms

Loss rate: 1.06%

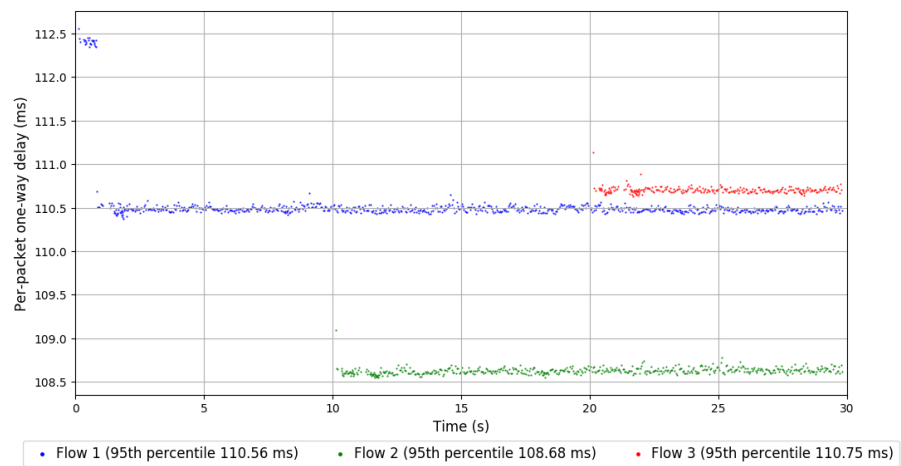
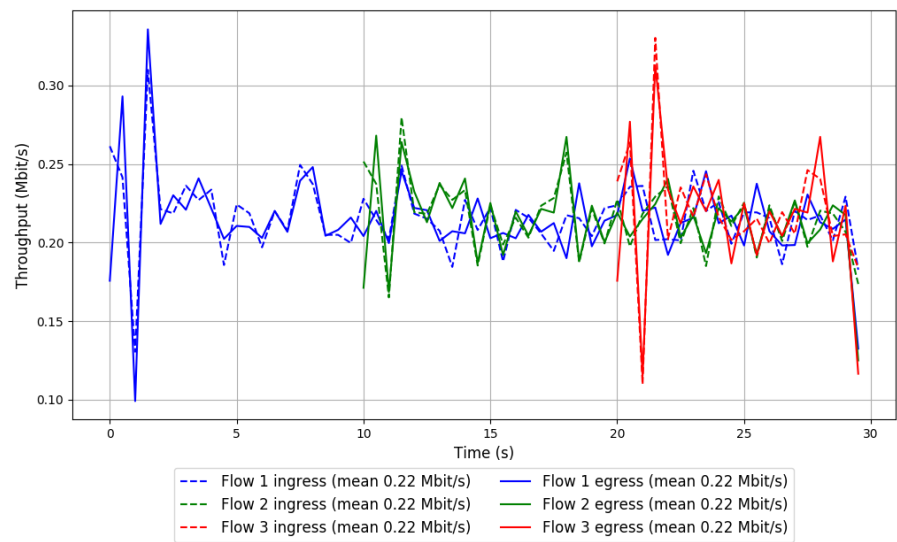
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.747 ms

Loss rate: 2.26%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-12 00:23:28

End at: 2017-12-12 00:23:58

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.449 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.473 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.741 ms

Loss rate: 1.05%

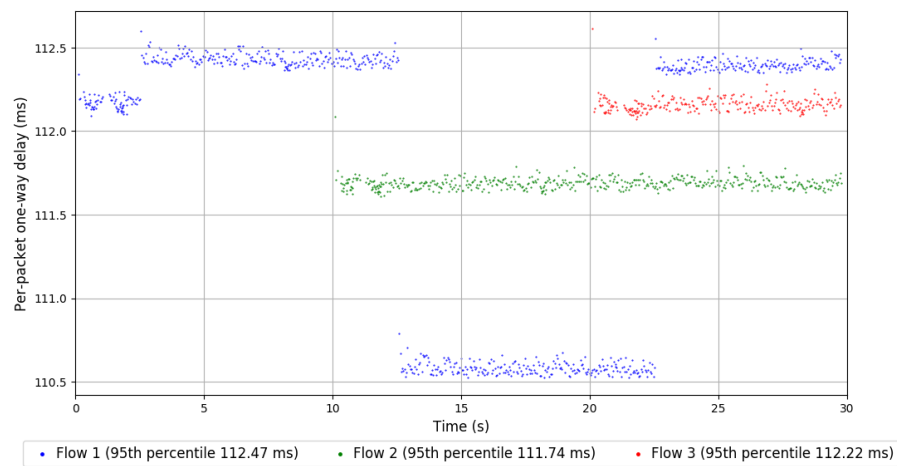
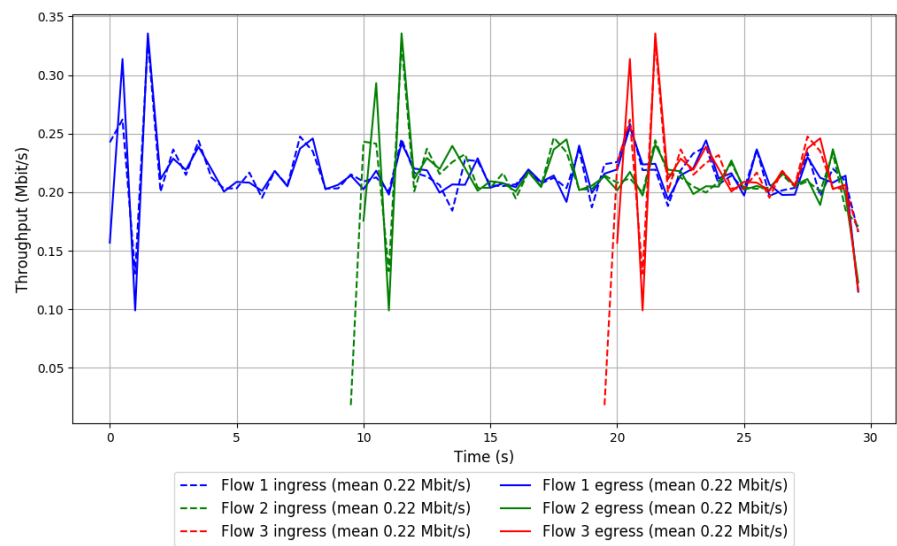
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.220 ms

Loss rate: 2.25%

Run 9: Report of SCSReAM — Data Link

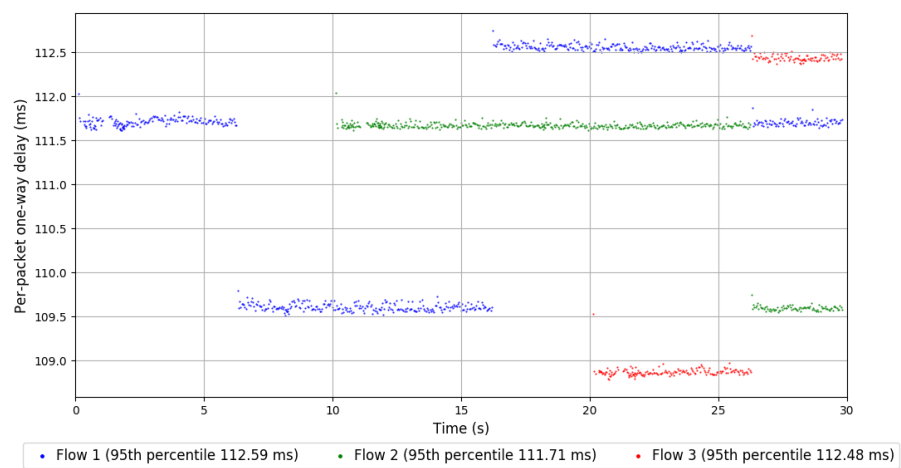
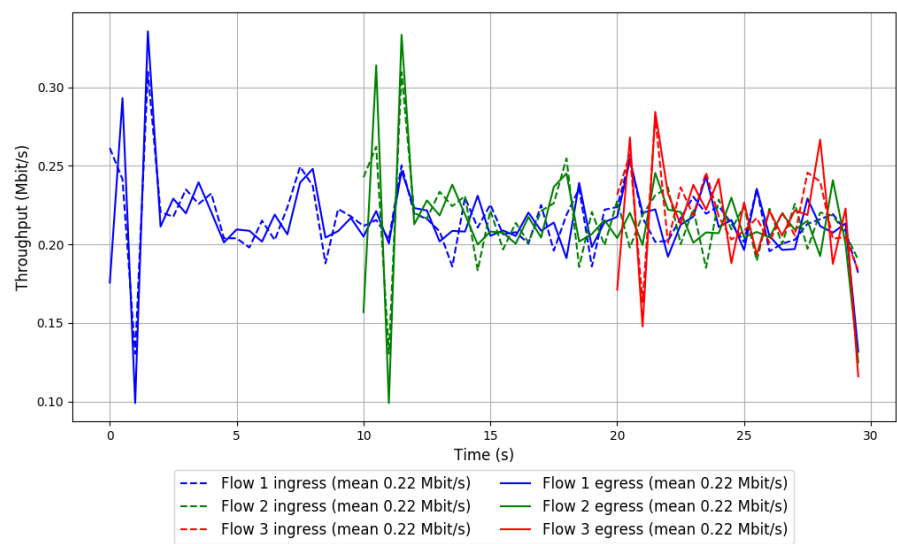


```
Run 10: Statistics of SReAM

Start at: 2017-12-12 00:37:05
End at: 2017-12-12 00:37:35

# Below is generated by plot.py at 2017-12-12 03:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.570 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.589 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.710 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.476 ms
Loss rate: 2.25%
```

Run 10: Report of SReAM — Data Link

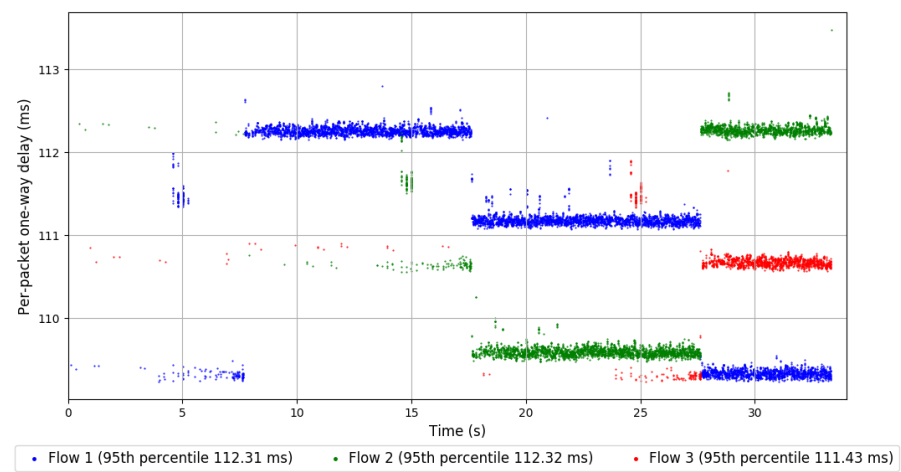
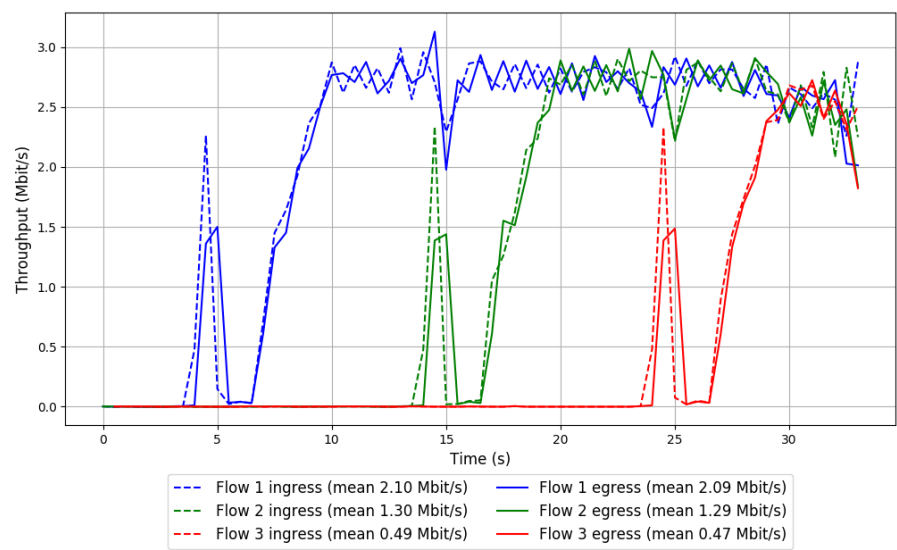


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-11 22:36:47
End at: 2017-12-11 22:37:17

# Below is generated by plot.py at 2017-12-12 03:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 112.305 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 112.306 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 112.316 ms
Loss rate: 1.35%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 111.429 ms
Loss rate: 3.60%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-11 22:50:44

End at: 2017-12-11 22:51:14

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 112.999 ms

Loss rate: 1.40%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 112.619 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 112.877 ms

Loss rate: 1.37%

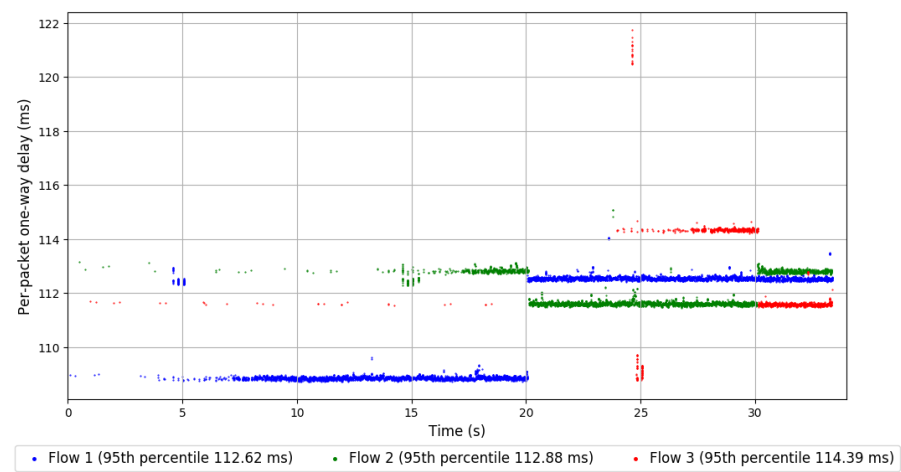
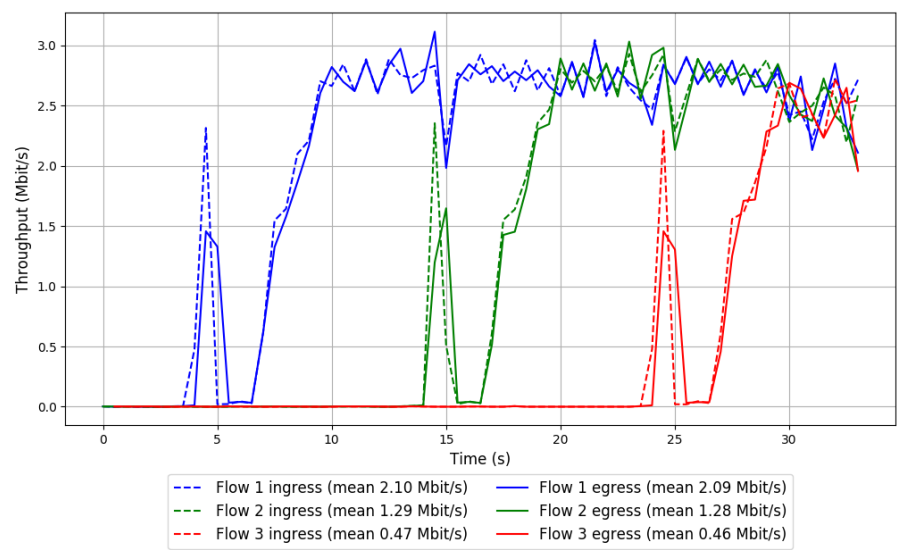
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 114.394 ms

Loss rate: 3.86%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-11 23:04:21

End at: 2017-12-11 23:04:51

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 113.003 ms

Loss rate: 1.38%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 112.366 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 113.039 ms

Loss rate: 1.27%

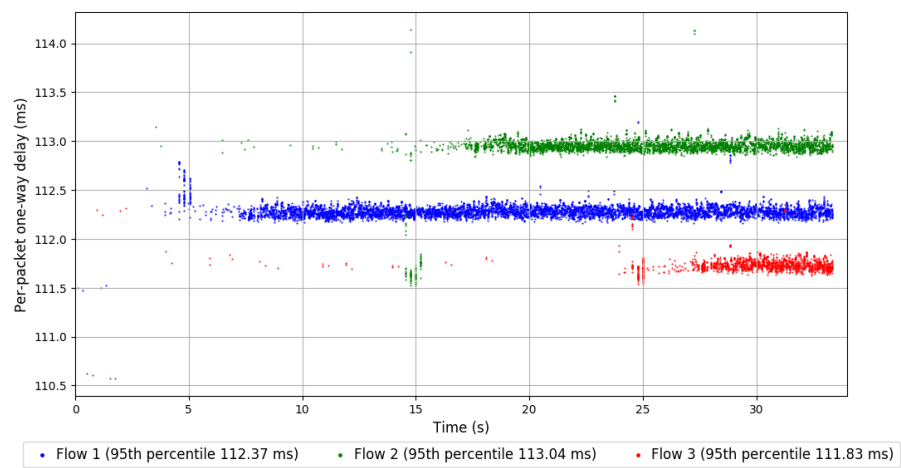
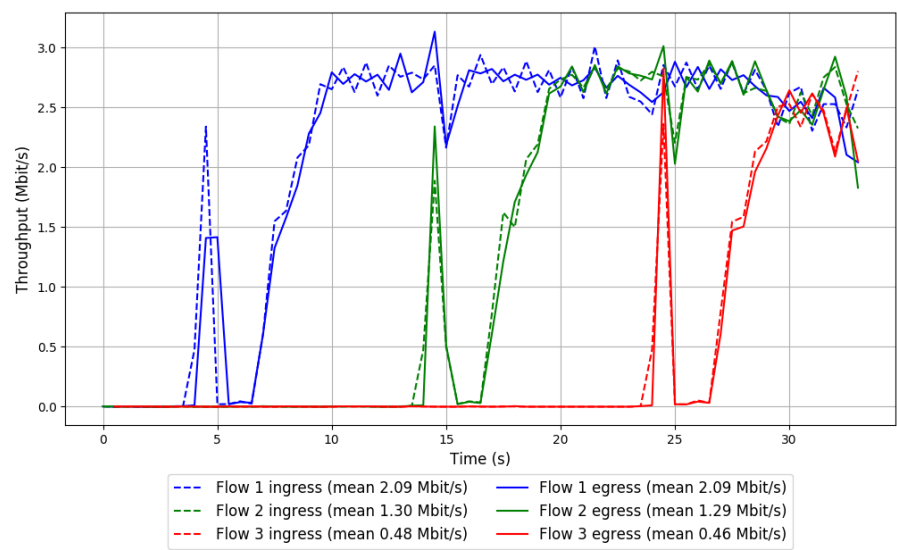
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 111.826 ms

Loss rate: 3.89%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-11 23:18:02

End at: 2017-12-11 23:18:32

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 112.301 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 111.775 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 112.279 ms

Loss rate: 1.02%

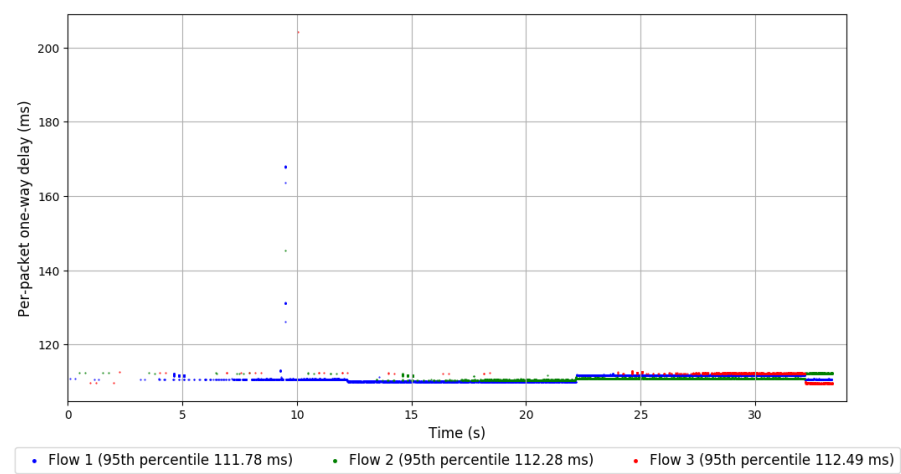
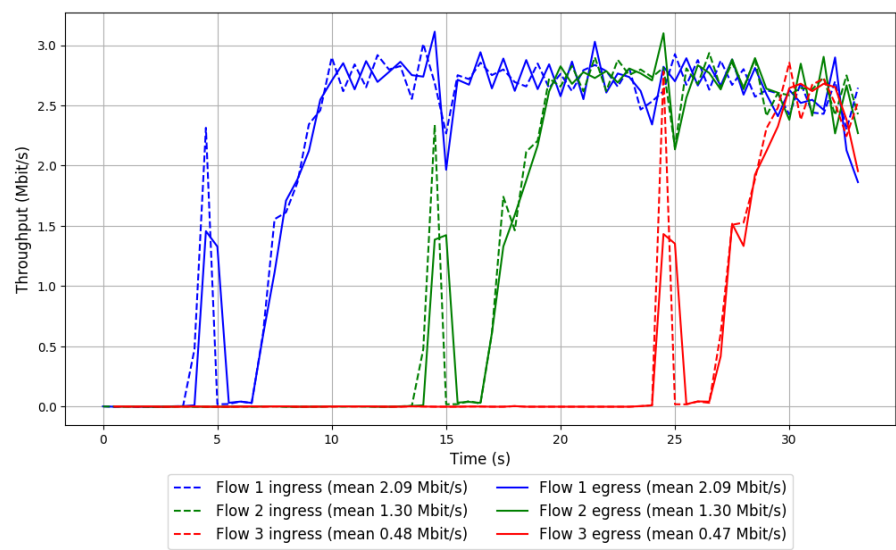
-- Flow 3:

Average throughput: 0.47 Mbit/s

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

Loss rate: 3.19%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-11 23:32:01

End at: 2017-12-11 23:32:31

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 112.854 ms

Loss rate: 1.47%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 109.832 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 112.887 ms

Loss rate: 1.35%

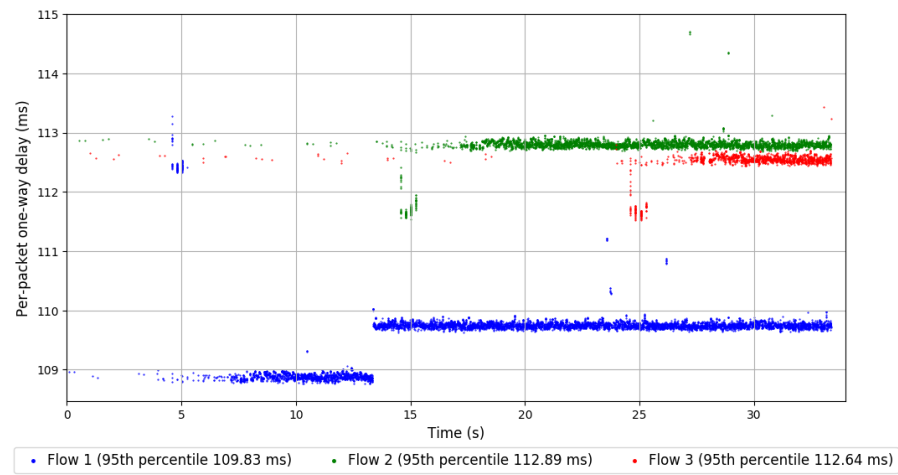
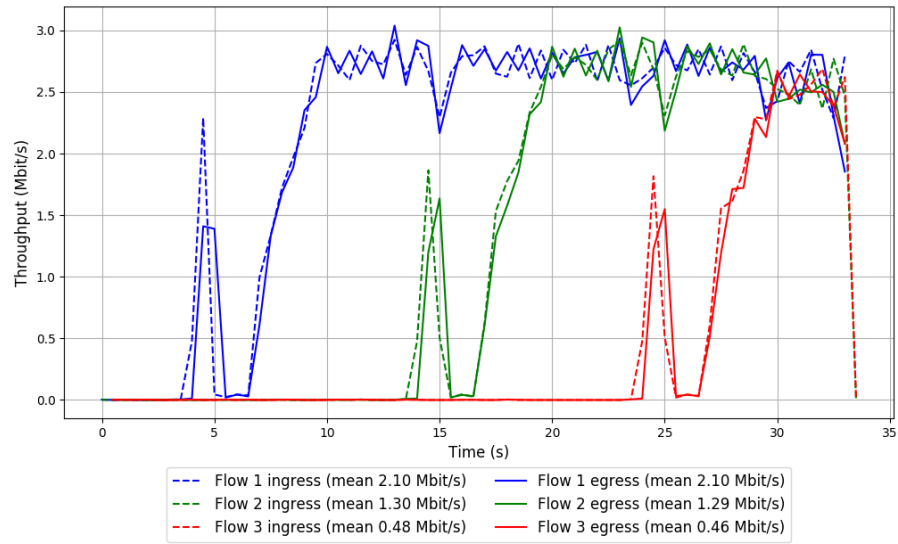
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 112.636 ms

Loss rate: 4.08%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-11 23:45:36

End at: 2017-12-11 23:46:06

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 112.560 ms

Loss rate: 1.42%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 112.580 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 1.28 Mbit/s

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

Loss rate: 1.38%

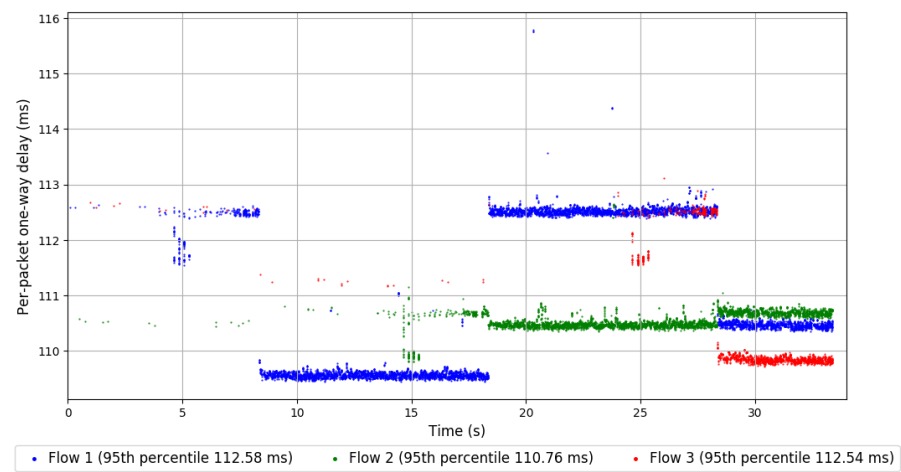
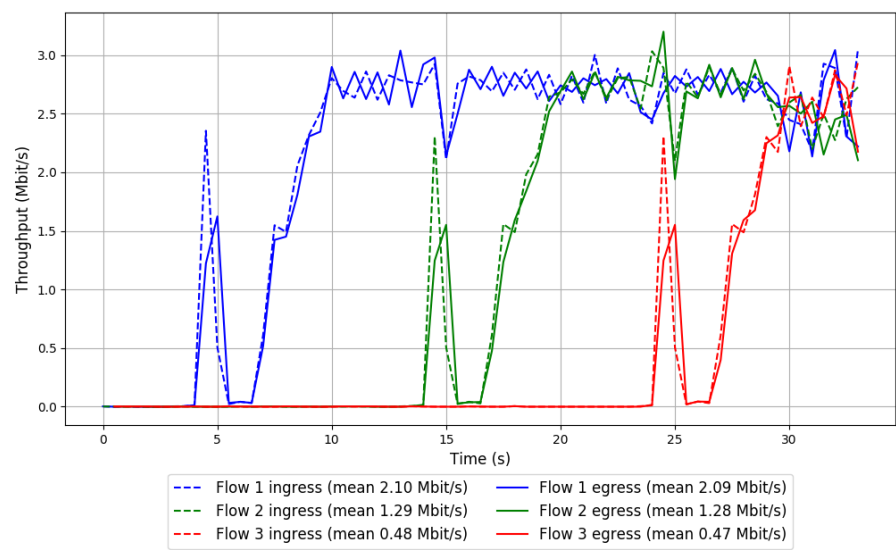
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 112.536 ms

Loss rate: 3.82%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-11 23:59:25

End at: 2017-12-11 23:59:55

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.81 Mbit/s

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

Loss rate: 1.49%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 112.457 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 112.599 ms

Loss rate: 1.61%

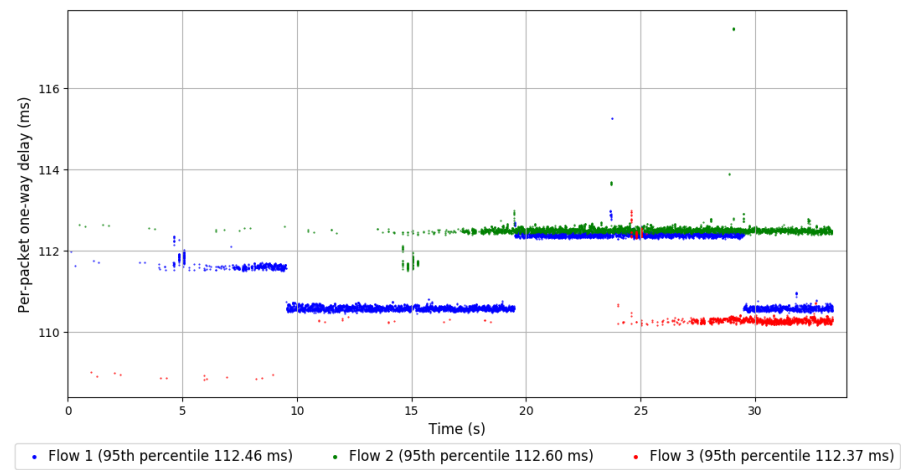
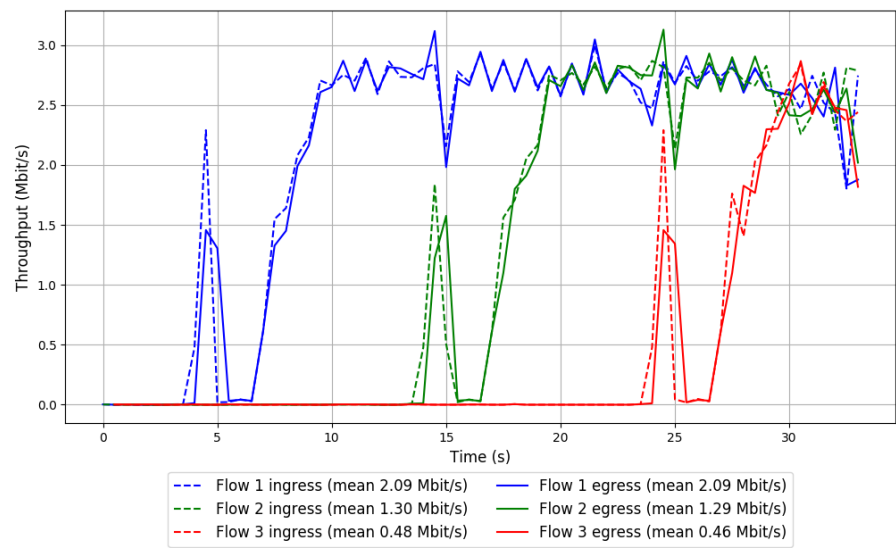
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 112.373 ms

Loss rate: 3.80%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

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

End at: 2017-12-12 00:13:29

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 113.212 ms

Loss rate: 1.52%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 111.246 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 1.29 Mbit/s

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

Loss rate: 1.51%

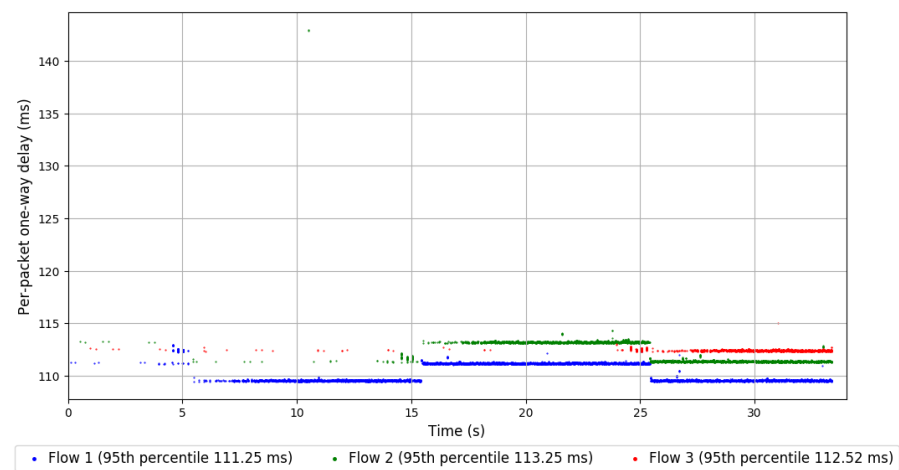
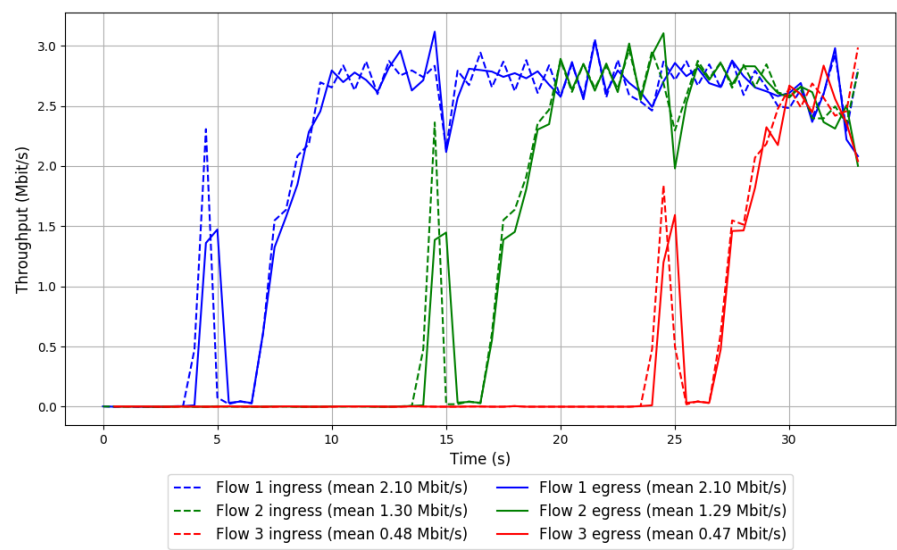
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 112.520 ms

Loss rate: 4.54%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-12 00:26:43

End at: 2017-12-12 00:27:13

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.90 Mbit/s

95th percentile per-packet one-way delay: 112.466 ms

Loss rate: 1.34%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 112.491 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 111.487 ms

Loss rate: 1.30%

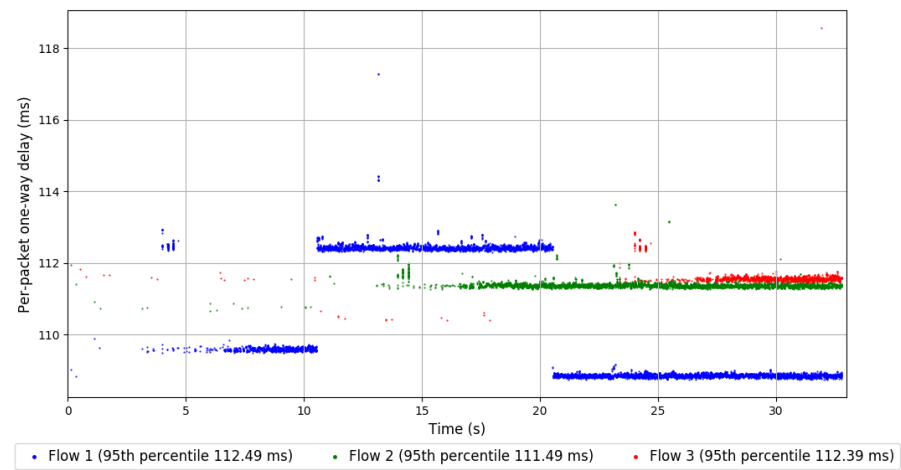
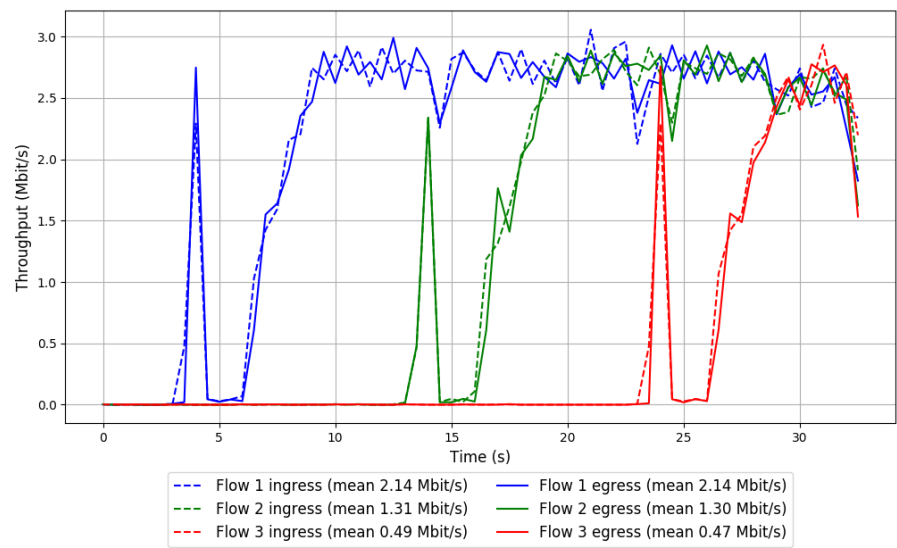
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 112.394 ms

Loss rate: 3.63%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-12 00:40:25

End at: 2017-12-12 00:40:55

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.83 Mbit/s

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

Loss rate: 1.44%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 113.036 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 110.168 ms

Loss rate: 1.29%

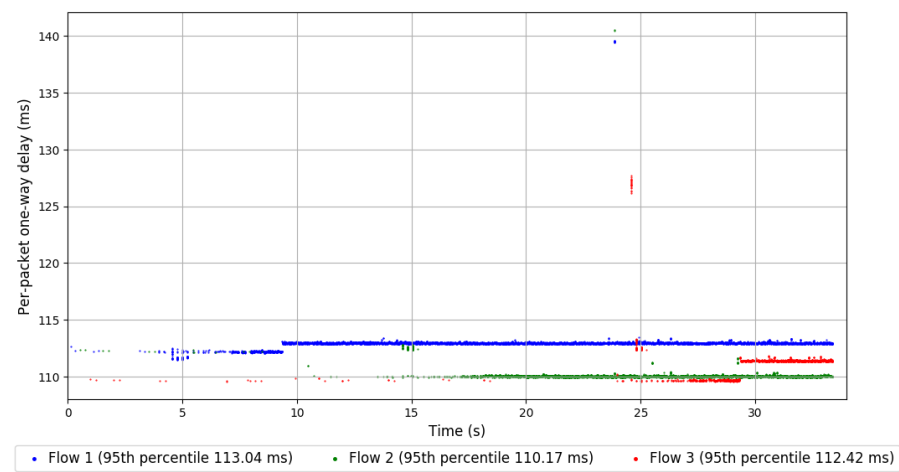
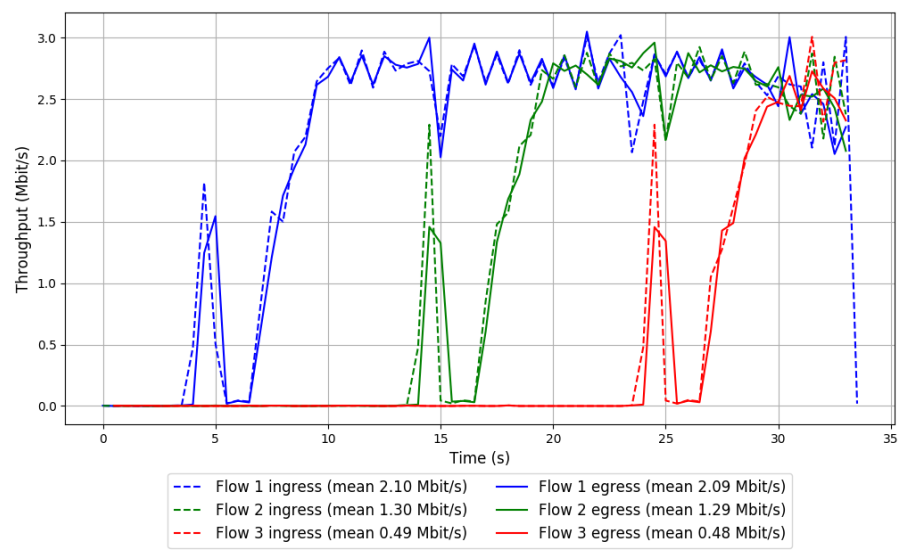
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 112.421 ms

Loss rate: 3.83%

Run 10: Report of WebRTC media — Data Link

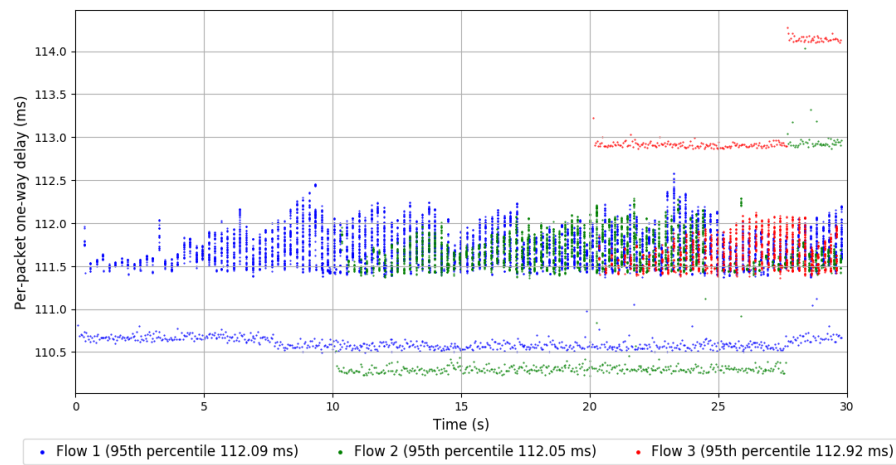
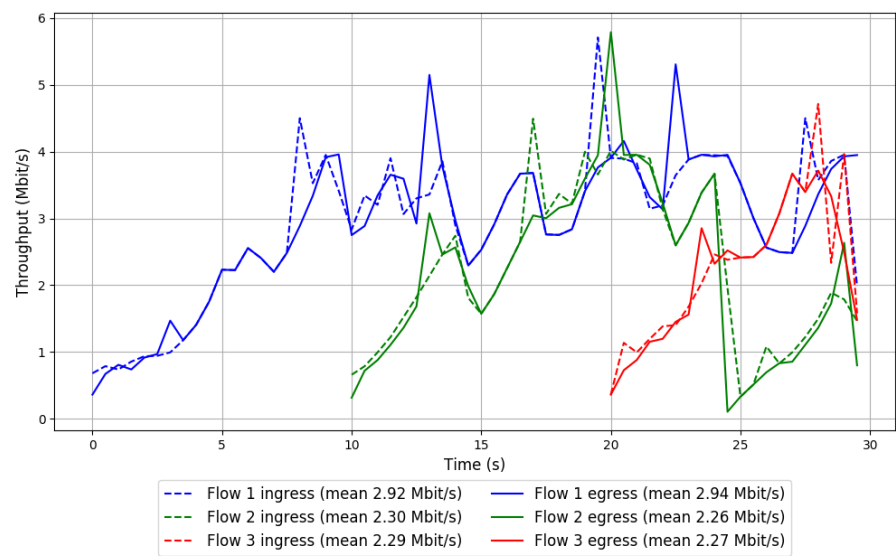


```
Run 1: Statistics of Sprout

Start at: 2017-12-11 22:37:33
End at: 2017-12-11 22:38:03

# Below is generated by plot.py at 2017-12-12 03:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.17 Mbit/s
95th percentile per-packet one-way delay: 112.104 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 2.94 Mbit/s
95th percentile per-packet one-way delay: 112.093 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 112.052 ms
Loss rate: 2.85%
-- Flow 3:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 112.919 ms
Loss rate: 3.48%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-11 22:51:31

End at: 2017-12-11 22:52:01

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 113.120 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 3.26 Mbit/s

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

Loss rate: 0.75%

-- Flow 2:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 112.814 ms

Loss rate: 0.01%

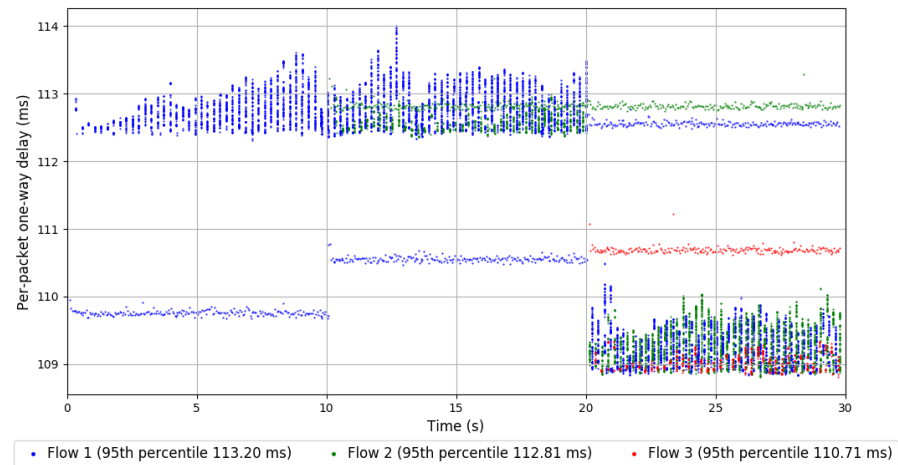
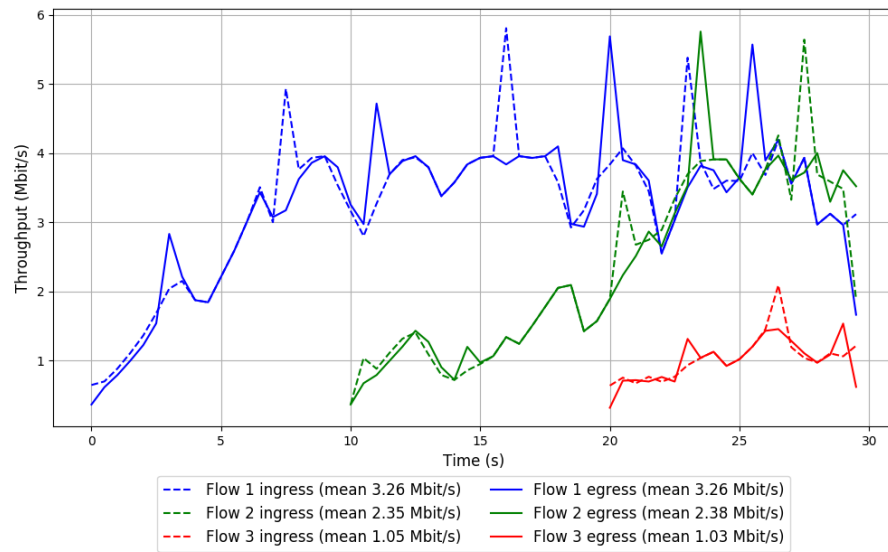
-- Flow 3:

Average throughput: 1.03 Mbit/s

95th percentile per-packet one-way delay: 110.706 ms

Loss rate: 3.12%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-11 23:05:08

End at: 2017-12-11 23:05:38

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 113.054 ms

Loss rate: 1.78%

-- Flow 1:

Average throughput: 2.72 Mbit/s

95th percentile per-packet one-way delay: 113.126 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 1.52 Mbit/s

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

Loss rate: 3.09%

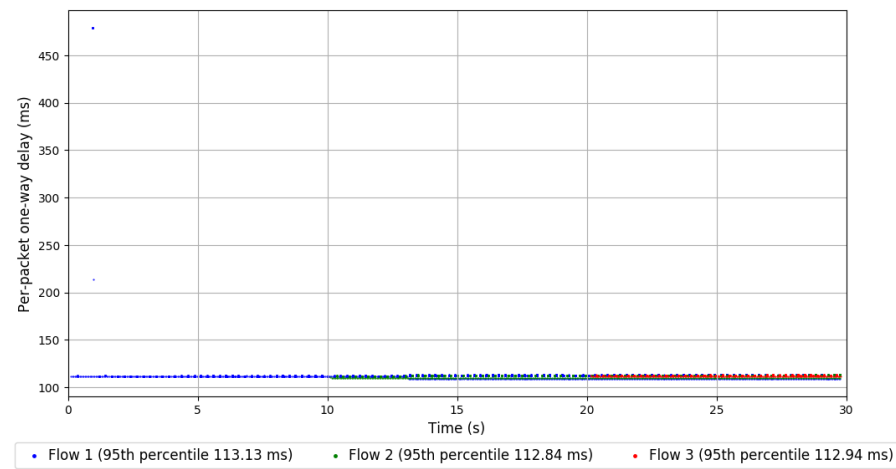
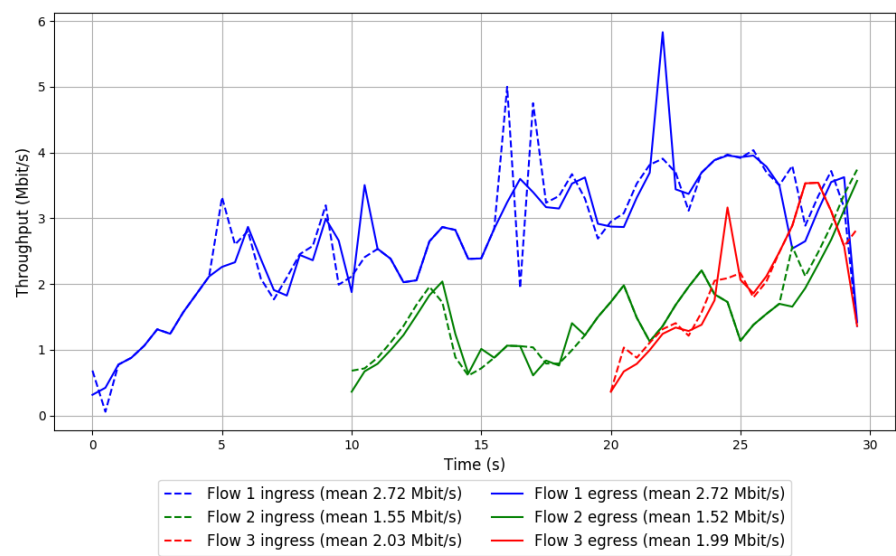
-- Flow 3:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 112.939 ms

Loss rate: 3.70%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-11 23:18:49

End at: 2017-12-11 23:19:19

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.56 Mbit/s

95th percentile per-packet one-way delay: 113.002 ms

Loss rate: 1.89%

-- Flow 1:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 112.967 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 114.886 ms

Loss rate: 1.78%

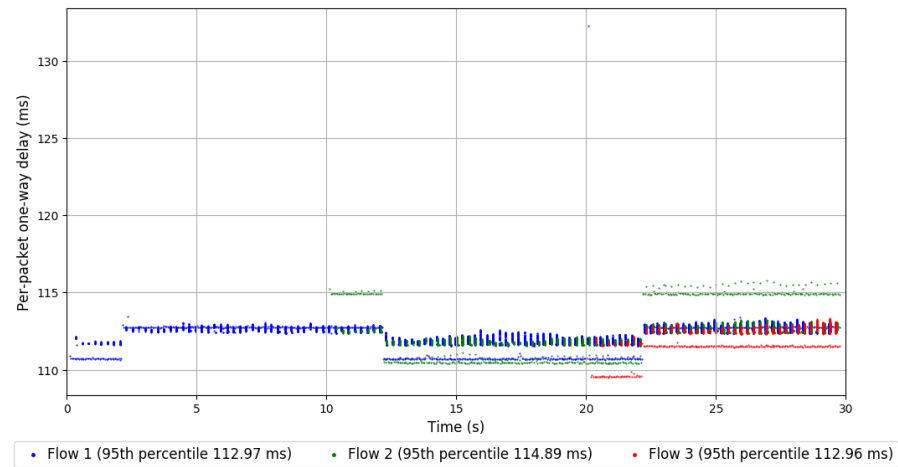
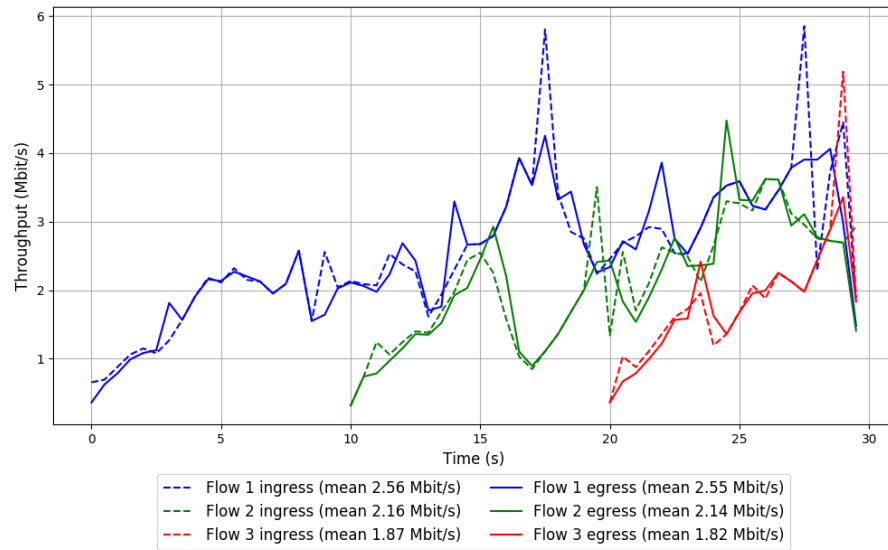
-- Flow 3:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 112.964 ms

Loss rate: 5.09%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-11 23:32:48

End at: 2017-12-11 23:33:18

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.38 Mbit/s

95th percentile per-packet one-way delay: 113.060 ms

Loss rate: 1.34%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.895 ms

Loss rate: 1.20%

-- Flow 2:

Average throughput: 2.60 Mbit/s

95th percentile per-packet one-way delay: 113.218 ms

Loss rate: 1.14%

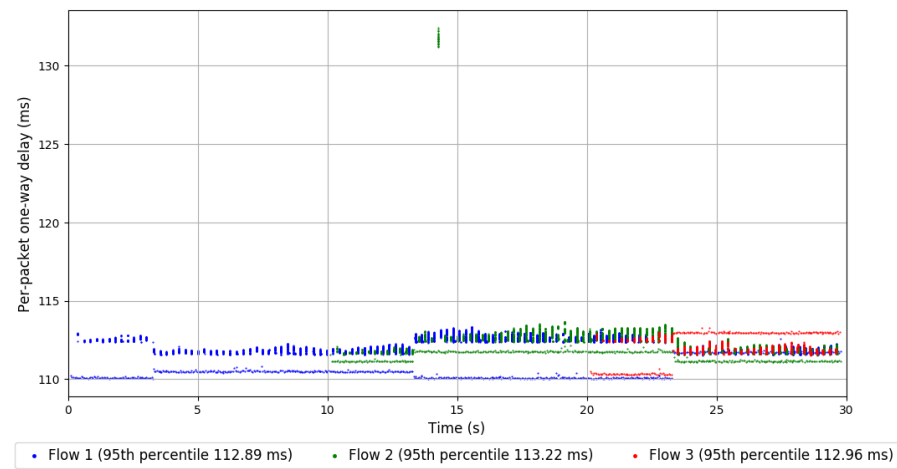
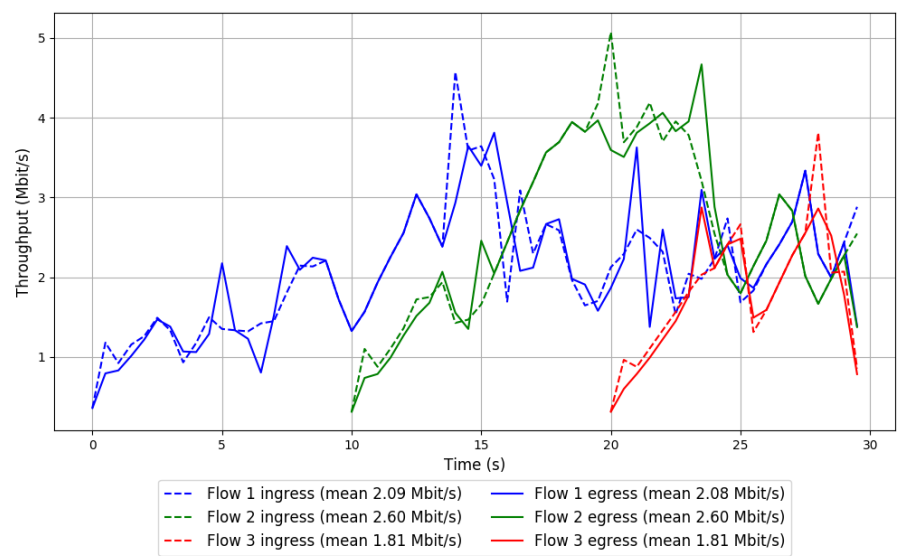
-- Flow 3:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 112.962 ms

Loss rate: 2.39%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-11 23:46:23

End at: 2017-12-11 23:46:53

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.10 Mbit/s

95th percentile per-packet one-way delay: 112.350 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 112.361 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 112.299 ms

Loss rate: 1.84%

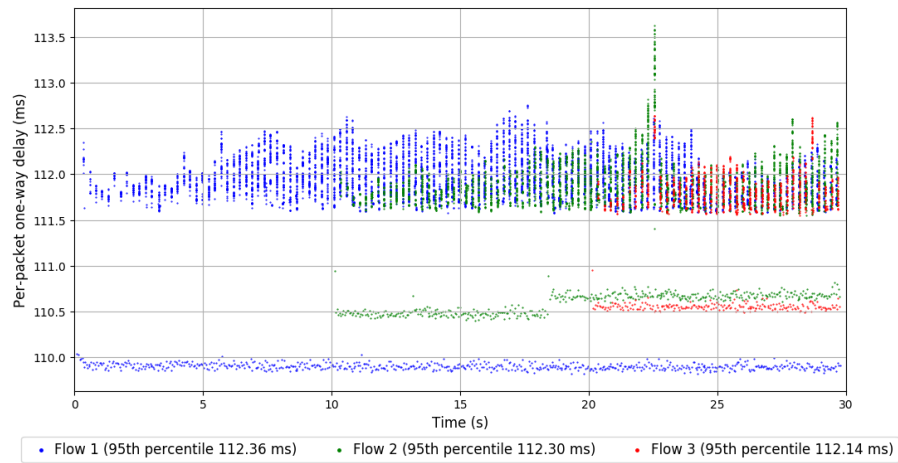
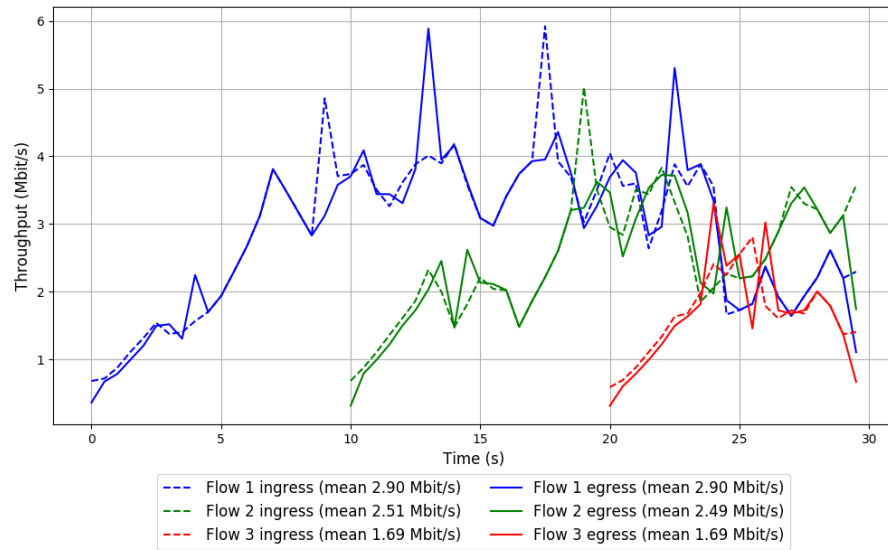
-- Flow 3:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 112.140 ms

Loss rate: 2.22%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-12 00:00:12

End at: 2017-12-12 00:00:42

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.90 Mbit/s

95th percentile per-packet one-way delay: 112.974 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 2.82 Mbit/s

95th percentile per-packet one-way delay: 113.030 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 112.866 ms

Loss rate: 1.89%

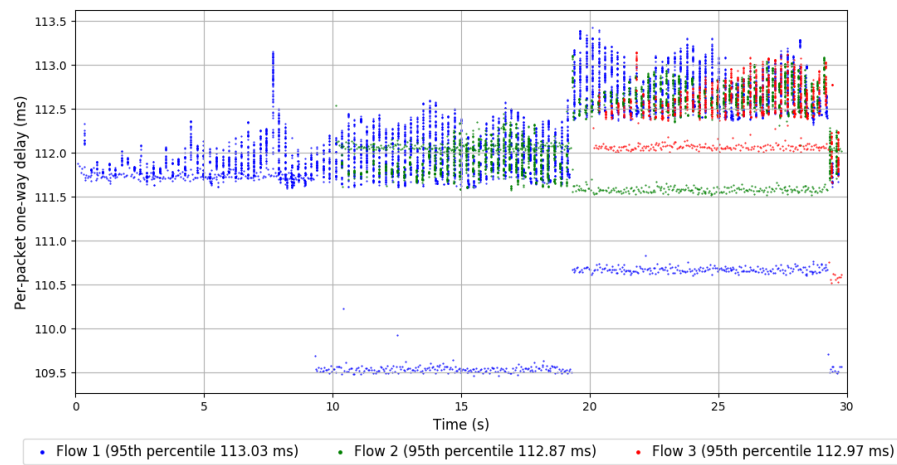
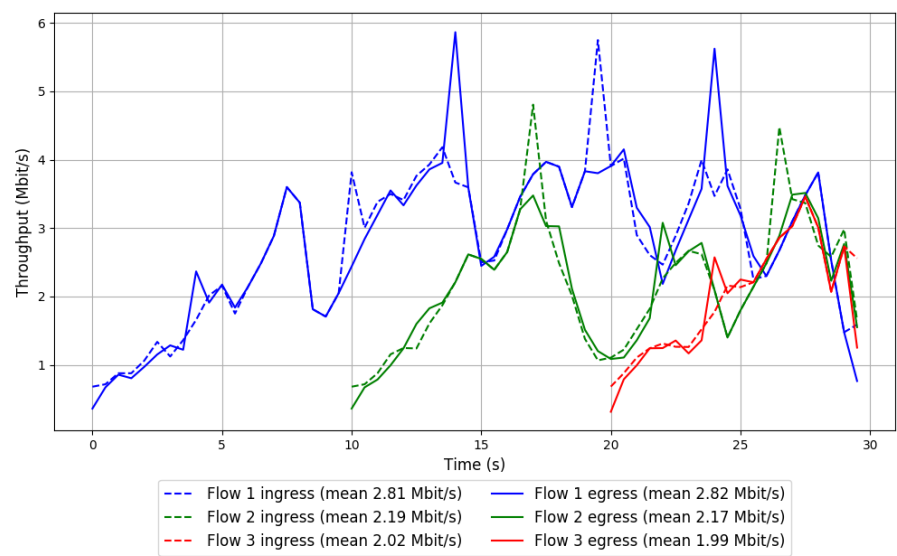
-- Flow 3:

Average throughput: 1.99 Mbit/s

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

Loss rate: 3.29%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-12 00:13:46

End at: 2017-12-12 00:14:16

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.34 Mbit/s

95th percentile per-packet one-way delay: 113.065 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 3.13 Mbit/s

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

Loss rate: 1.04%

-- Flow 2:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 112.909 ms

Loss rate: 0.96%

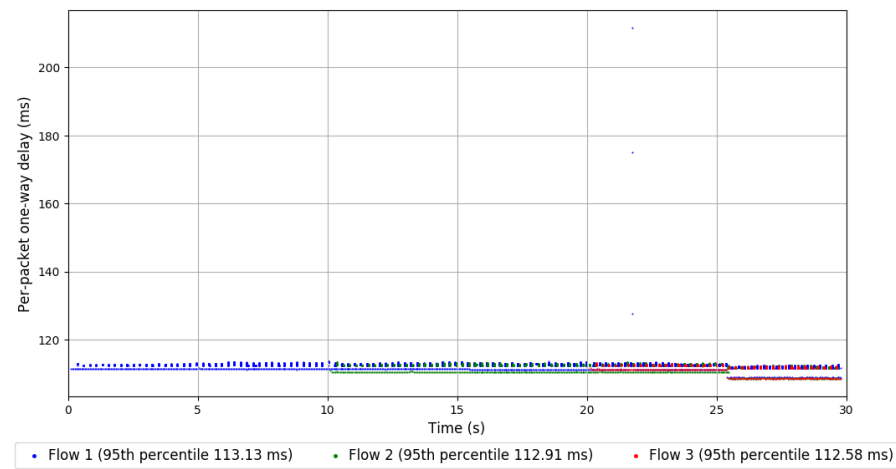
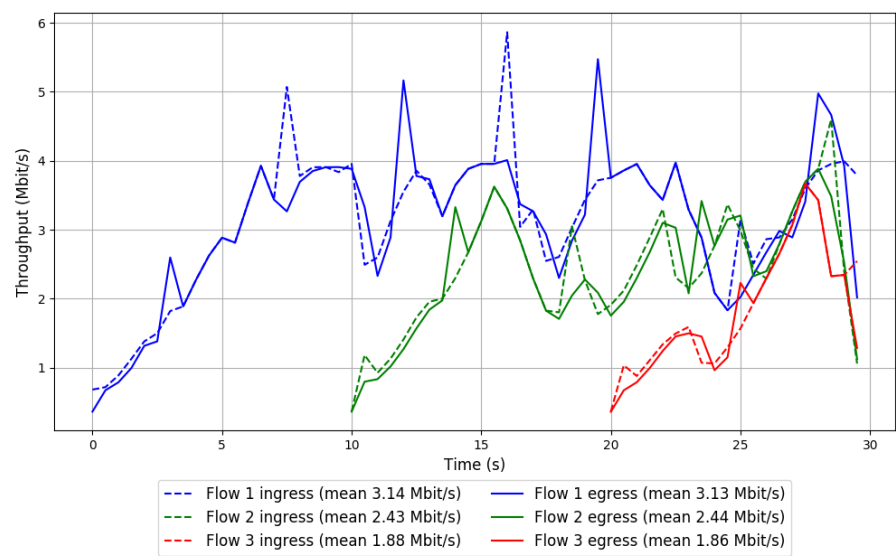
-- Flow 3:

Average throughput: 1.86 Mbit/s

95th percentile per-packet one-way delay: 112.581 ms

Loss rate: 3.41%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-12 00:27:30

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

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.70 Mbit/s

95th percentile per-packet one-way delay: 113.093 ms

Loss rate: 1.41%

-- Flow 1:

Average throughput: 3.24 Mbit/s

95th percentile per-packet one-way delay: 113.097 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 113.189 ms

Loss rate: 1.82%

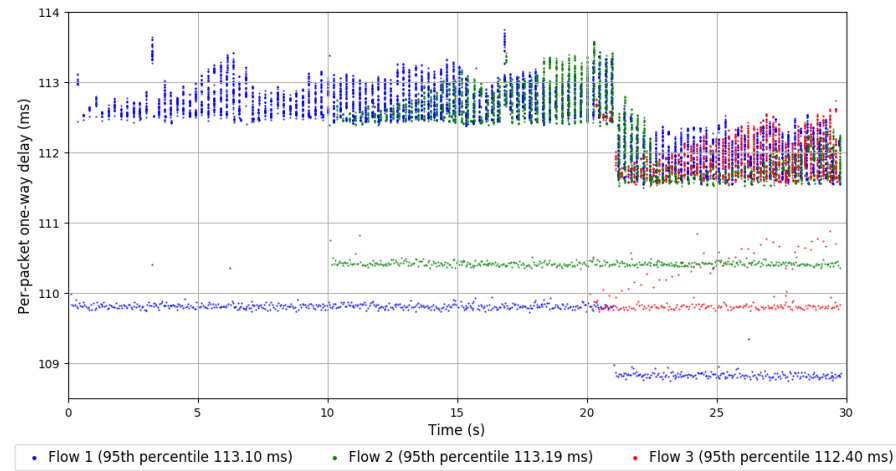
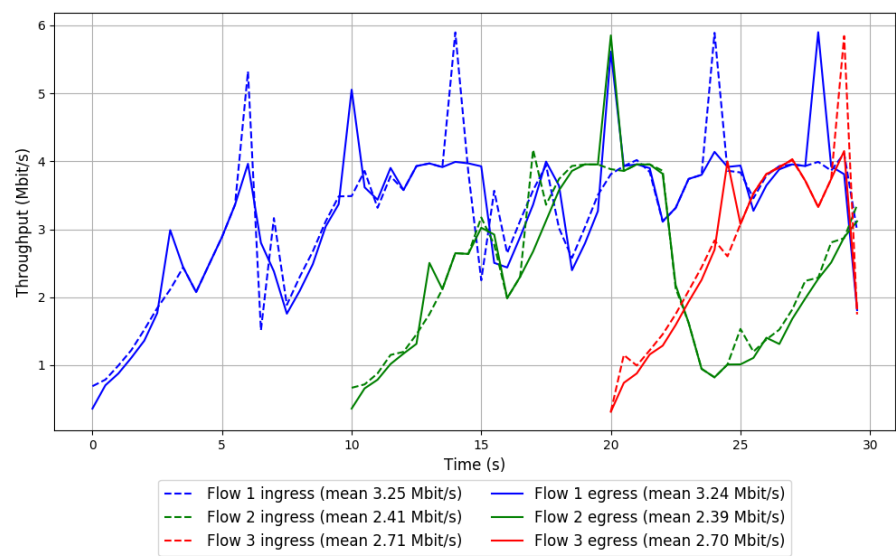
-- Flow 3:

Average throughput: 2.70 Mbit/s

95th percentile per-packet one-way delay: 112.402 ms

Loss rate: 3.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

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

End at: 2017-12-12 00:41:42

Below is generated by plot.py at 2017-12-12 03:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.22 Mbit/s

95th percentile per-packet one-way delay: 113.148 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 2.85 Mbit/s

95th percentile per-packet one-way delay: 113.125 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 113.158 ms

Loss rate: 0.97%

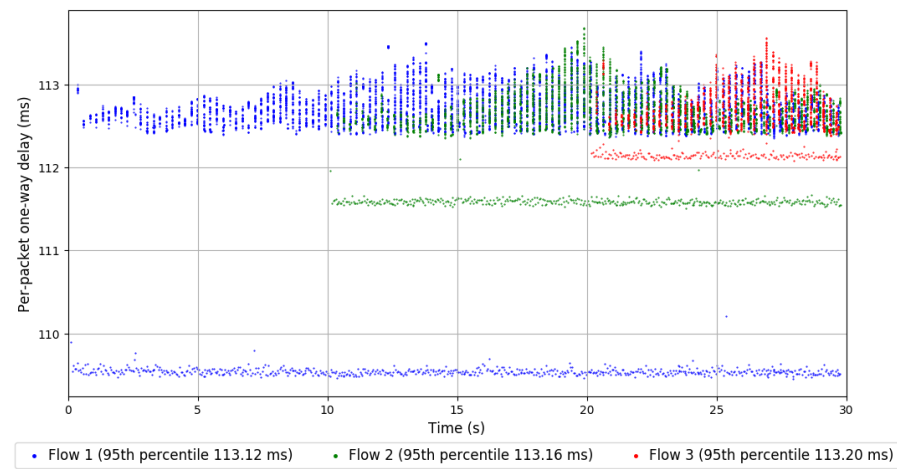
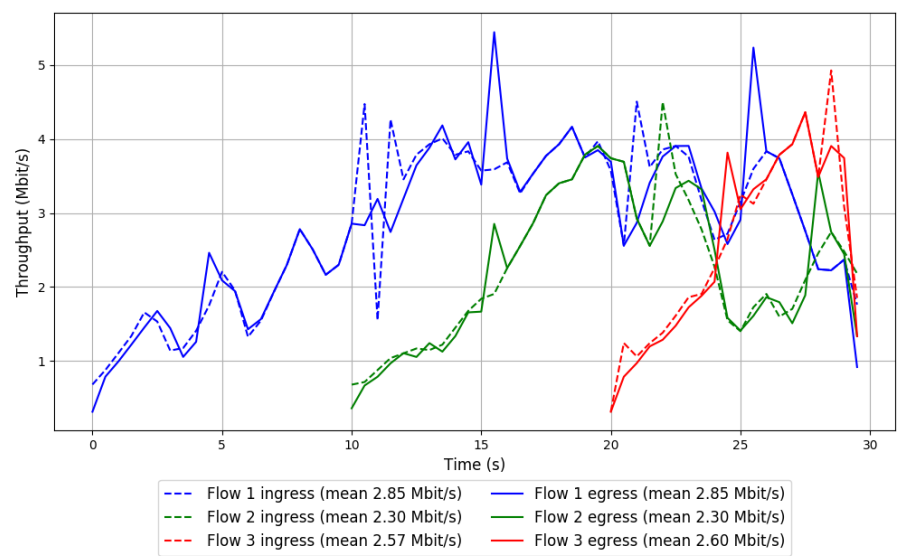
-- Flow 3:

Average throughput: 2.60 Mbit/s

95th percentile per-packet one-way delay: 113.201 ms

Loss rate: 1.74%

Run 10: Report of Sprout — Data Link

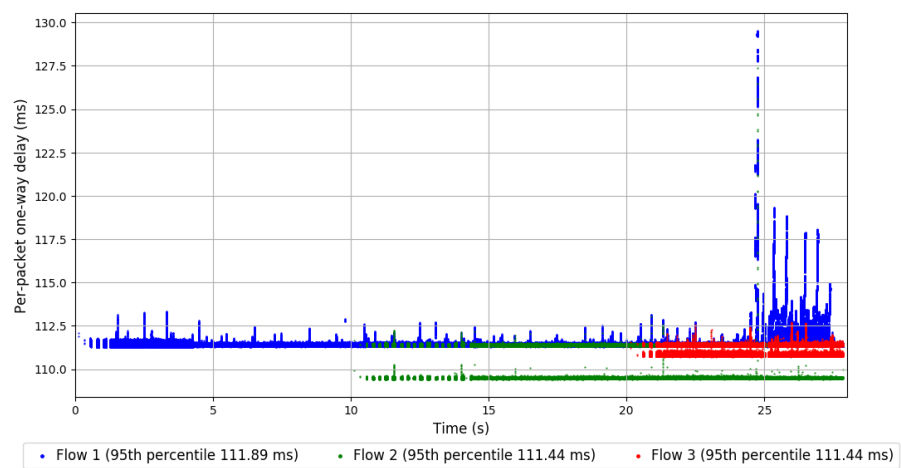
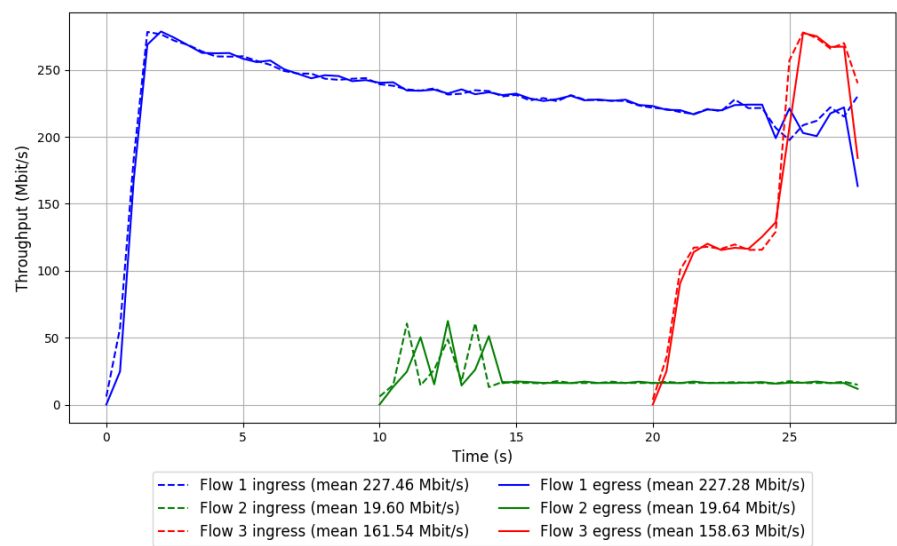


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-11 22:27:55
End at: 2017-12-11 22:28:25

# Below is generated by plot.py at 2017-12-12 03:30:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 283.80 Mbit/s
95th percentile per-packet one-way delay: 111.713 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 227.28 Mbit/s
95th percentile per-packet one-way delay: 111.891 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 19.64 Mbit/s
95th percentile per-packet one-way delay: 111.441 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 158.63 Mbit/s
95th percentile per-packet one-way delay: 111.444 ms
Loss rate: 4.59%
```


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

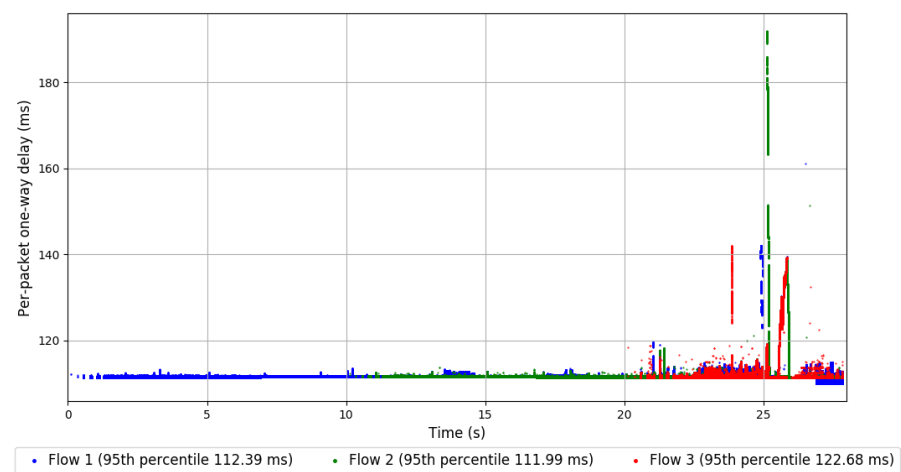
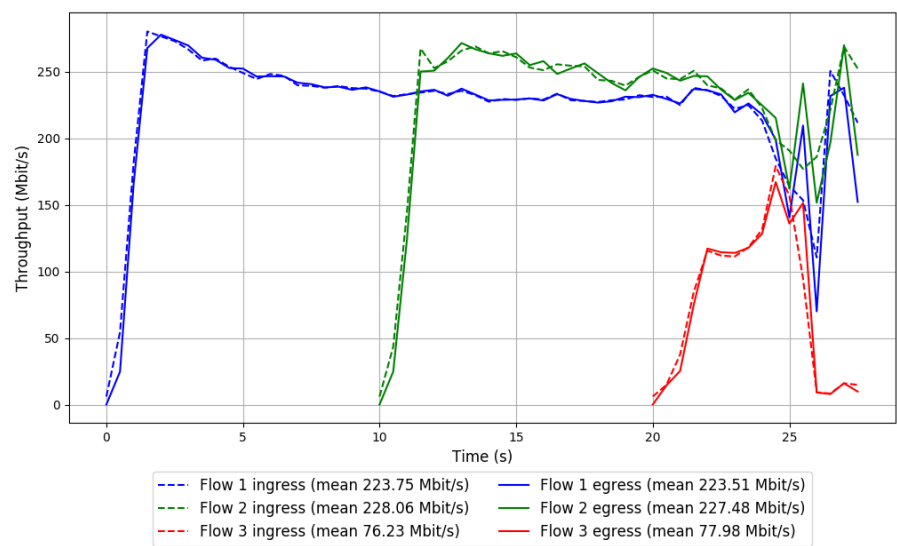


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-11 22:41:42
End at: 2017-12-11 22:42:12

# Below is generated by plot.py at 2017-12-12 03:33:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 390.57 Mbit/s
95th percentile per-packet one-way delay: 112.431 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 223.51 Mbit/s
95th percentile per-packet one-way delay: 112.392 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 227.48 Mbit/s
95th percentile per-packet one-way delay: 111.990 ms
Loss rate: 1.50%
-- Flow 3:
Average throughput: 77.98 Mbit/s
95th percentile per-packet one-way delay: 122.680 ms
Loss rate: 0.57%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-11 22:55:38

End at: 2017-12-11 22:56:08

Below is generated by plot.py at 2017-12-12 03:33:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 263.08 Mbit/s

95th percentile per-packet one-way delay: 112.924 ms

Loss rate: 2.07%

-- Flow 1:

Average throughput: 192.51 Mbit/s

95th percentile per-packet one-way delay: 112.932 ms

Loss rate: 1.41%

-- Flow 2:

Average throughput: 13.45 Mbit/s

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

Loss rate: 0.94%

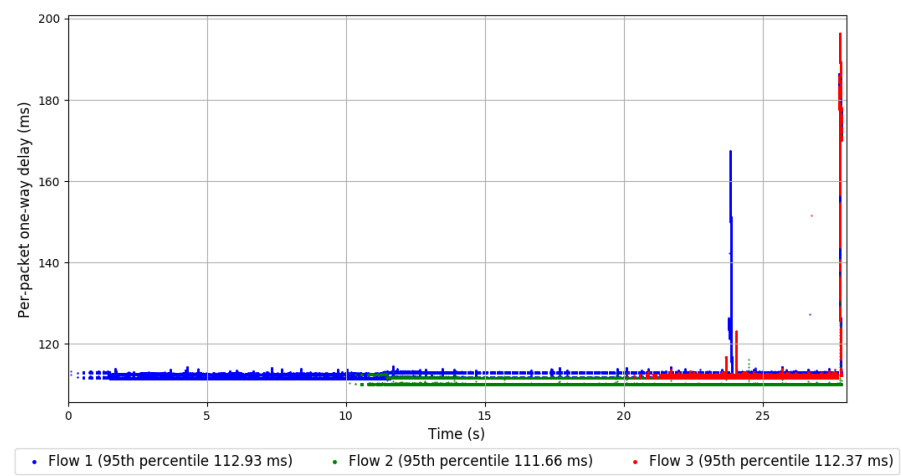
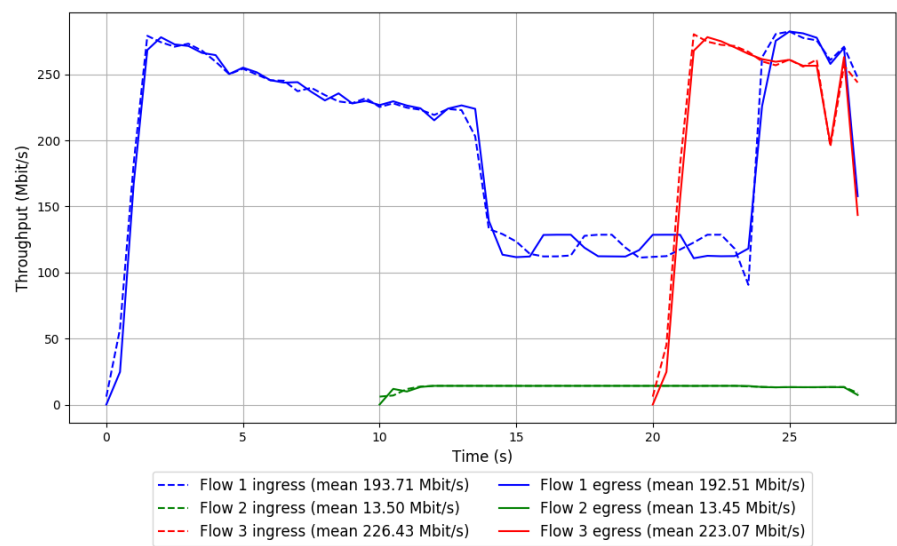
-- Flow 3:

Average throughput: 223.07 Mbit/s

95th percentile per-packet one-way delay: 112.369 ms

Loss rate: 4.24%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-11 23:09:15

End at: 2017-12-11 23:09:45

Below is generated by plot.py at 2017-12-12 03:33:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 349.16 Mbit/s

95th percentile per-packet one-way delay: 112.871 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 233.23 Mbit/s

95th percentile per-packet one-way delay: 112.876 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 143.53 Mbit/s

95th percentile per-packet one-way delay: 112.450 ms

Loss rate: 1.70%

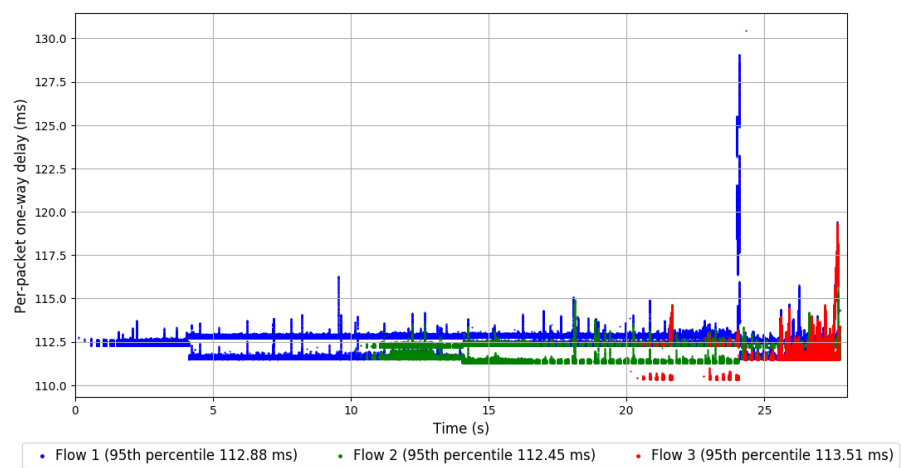
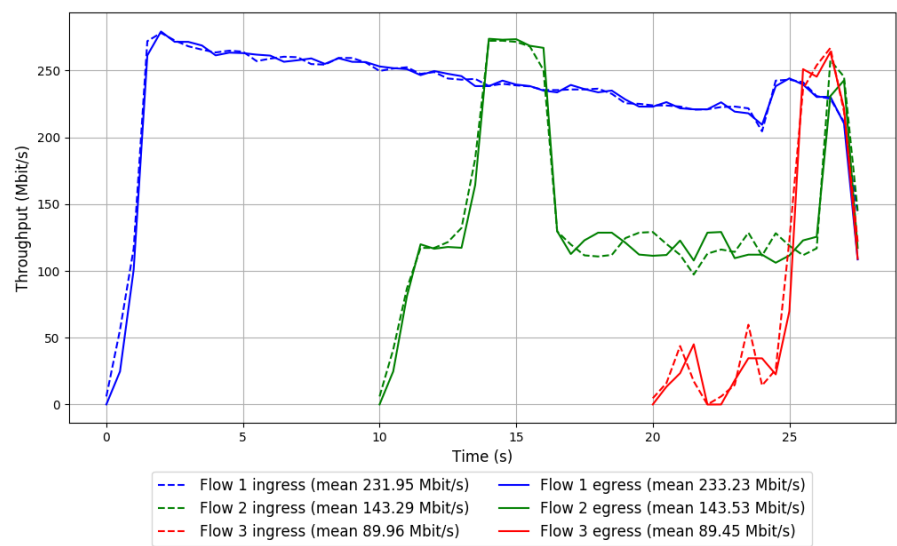
-- Flow 3:

Average throughput: 89.45 Mbit/s

95th percentile per-packet one-way delay: 113.510 ms

Loss rate: 4.98%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-11 23:22:57

End at: 2017-12-11 23:23:27

Below is generated by plot.py at 2017-12-12 03:33:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 360.73 Mbit/s

95th percentile per-packet one-way delay: 112.551 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 207.42 Mbit/s

95th percentile per-packet one-way delay: 112.534 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 172.67 Mbit/s

95th percentile per-packet one-way delay: 124.776 ms

Loss rate: 1.61%

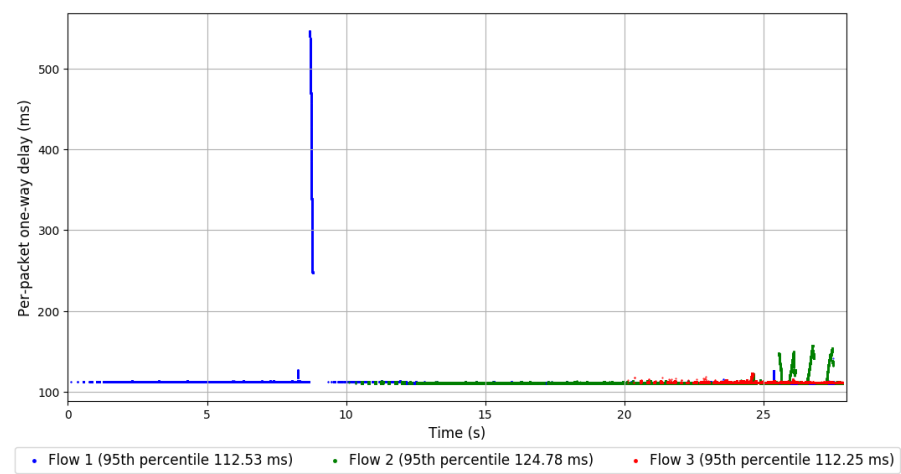
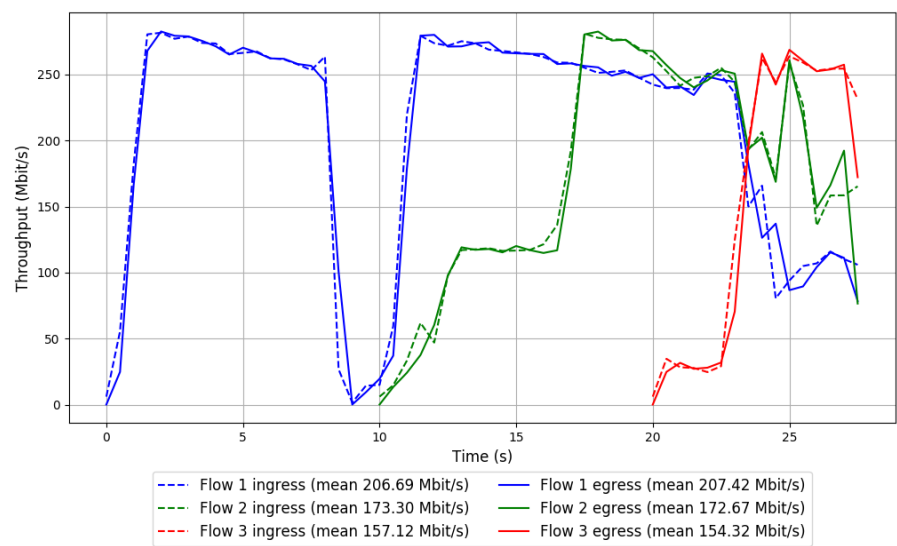
-- Flow 3:

Average throughput: 154.32 Mbit/s

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

Loss rate: 4.56%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-11 23:36:48

End at: 2017-12-11 23:37:18

Below is generated by plot.py at 2017-12-12 03:33:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 262.80 Mbit/s

95th percentile per-packet one-way delay: 113.337 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 167.37 Mbit/s

95th percentile per-packet one-way delay: 113.333 ms

Loss rate: 1.27%

-- Flow 2:

Average throughput: 87.87 Mbit/s

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

Loss rate: 0.22%

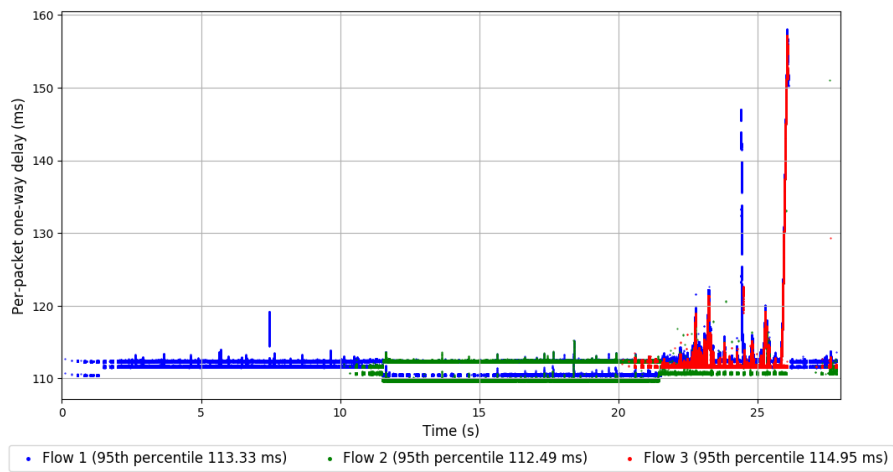
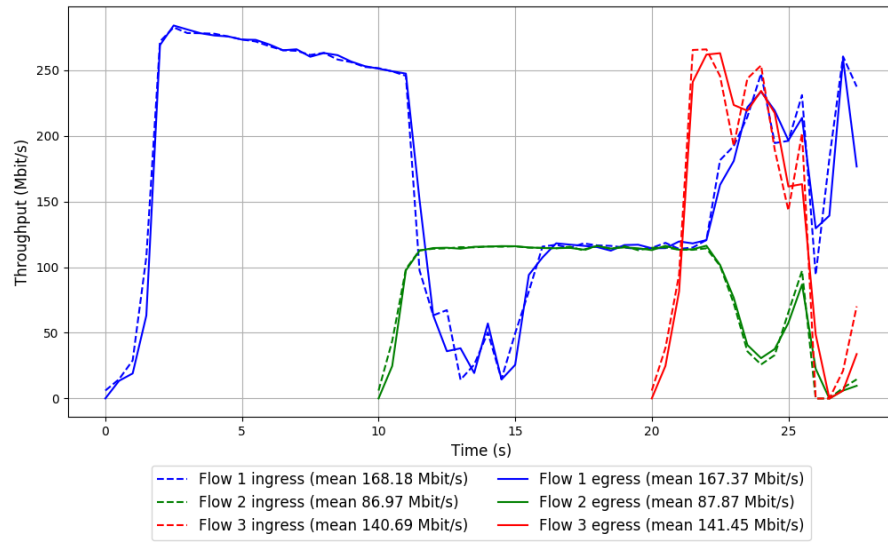
-- Flow 3:

Average throughput: 141.45 Mbit/s

95th percentile per-packet one-way delay: 114.954 ms

Loss rate: 2.30%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-11 23:50:31

End at: 2017-12-11 23:51:01

Below is generated by plot.py at 2017-12-12 03:36:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 317.82 Mbit/s

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

Loss rate: 1.06%

-- Flow 1:

Average throughput: 185.87 Mbit/s

95th percentile per-packet one-way delay: 112.392 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 109.24 Mbit/s

95th percentile per-packet one-way delay: 112.392 ms

Loss rate: 0.19%

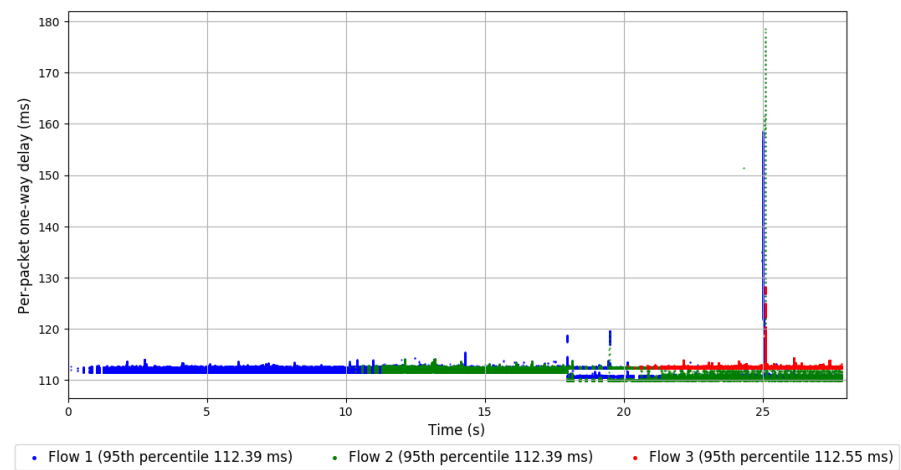
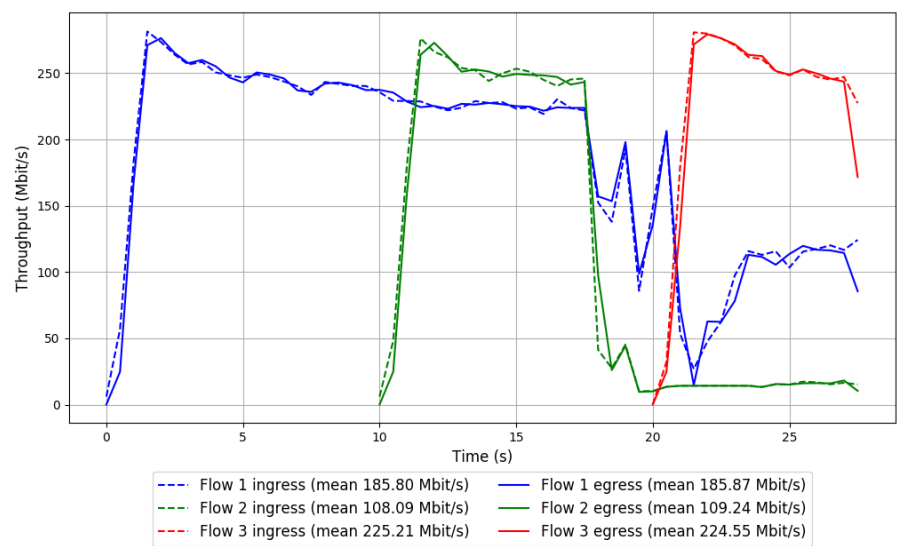
-- Flow 3:

Average throughput: 224.55 Mbit/s

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

Loss rate: 3.15%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-12 00:04:18

End at: 2017-12-12 00:04:48

Below is generated by plot.py at 2017-12-12 03:36:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 163.58 Mbit/s

95th percentile per-packet one-way delay: 113.166 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 111.08 Mbit/s

95th percentile per-packet one-way delay: 113.184 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 80.30 Mbit/s

95th percentile per-packet one-way delay: 112.459 ms

Loss rate: 1.29%

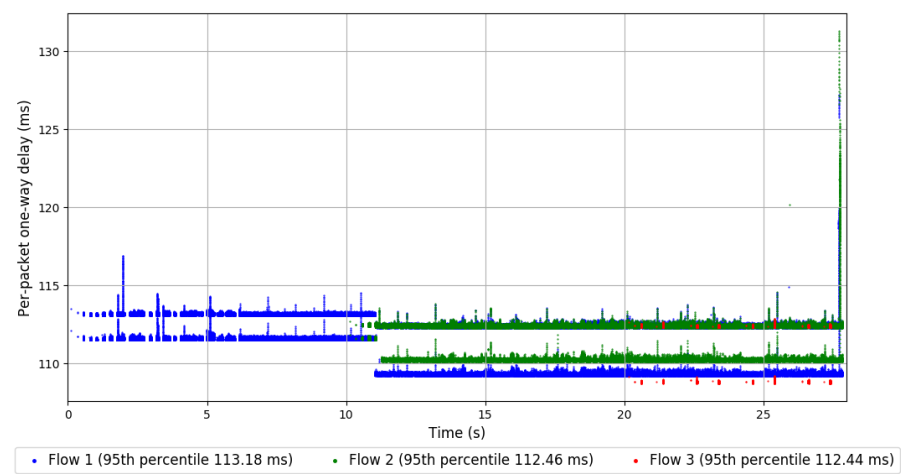
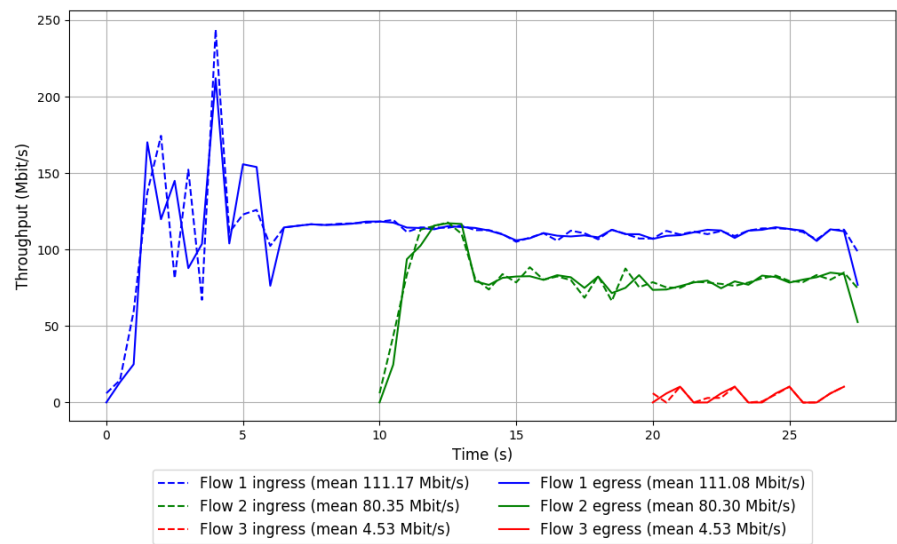
-- Flow 3:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 112.444 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-12 00:17:48

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

Below is generated by plot.py at 2017-12-12 03:40:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 374.90 Mbit/s

95th percentile per-packet one-way delay: 113.641 ms

Loss rate: 0.88%

-- Flow 1:

Average throughput: 201.26 Mbit/s

95th percentile per-packet one-way delay: 113.481 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 191.27 Mbit/s

95th percentile per-packet one-way delay: 113.549 ms

Loss rate: 0.29%

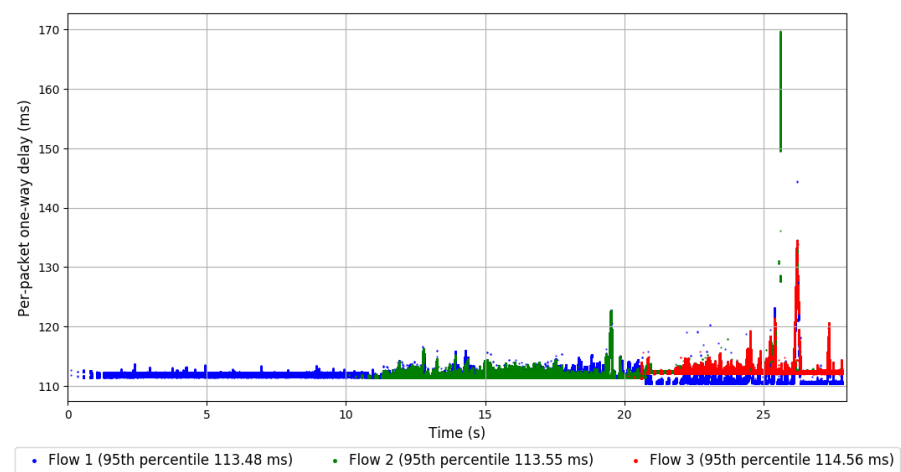
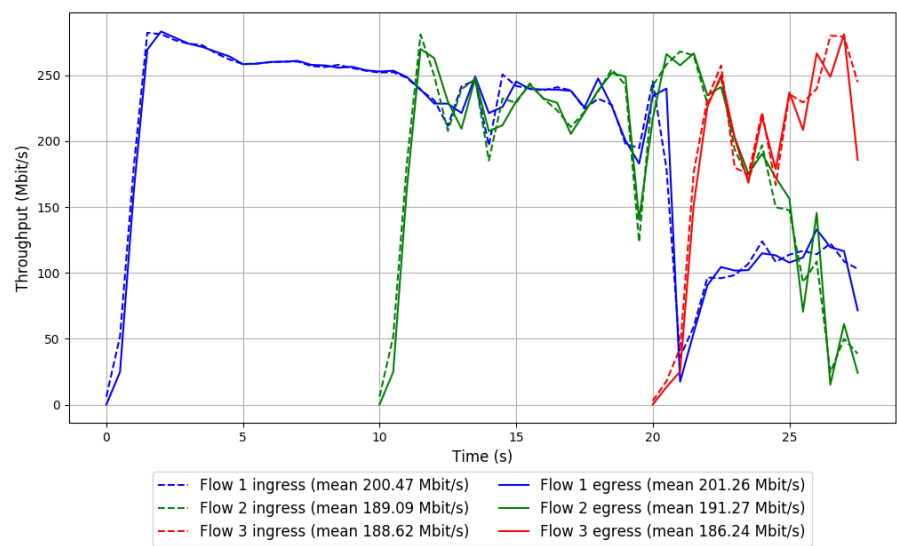
-- Flow 3:

Average throughput: 186.24 Mbit/s

95th percentile per-packet one-way delay: 114.556 ms

Loss rate: 4.02%

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

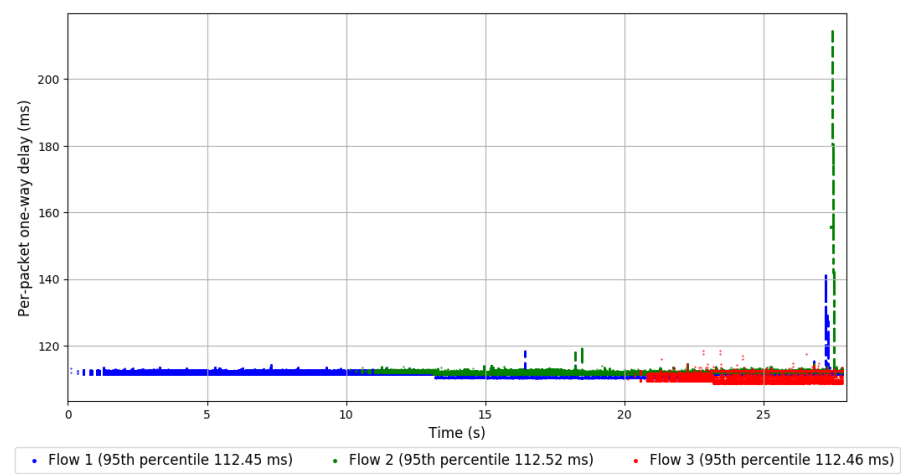
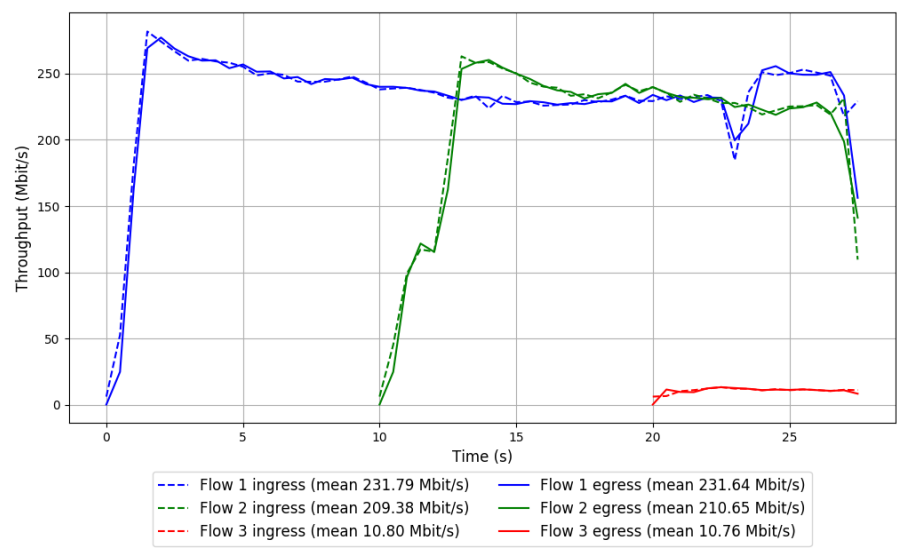


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-12 00:31:26
End at: 2017-12-12 00:31:56

# Below is generated by plot.py at 2017-12-12 03:41:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 369.25 Mbit/s
95th percentile per-packet one-way delay: 112.466 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 231.64 Mbit/s
95th percentile per-packet one-way delay: 112.452 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 210.65 Mbit/s
95th percentile per-packet one-way delay: 112.516 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 10.76 Mbit/s
95th percentile per-packet one-way delay: 112.461 ms
Loss rate: 3.16%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-11 22:34:08

End at: 2017-12-11 22:34:38

Below is generated by plot.py at 2017-12-12 03:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 110.28 Mbit/s

95th percentile per-packet one-way delay: 119.901 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 62.87 Mbit/s

95th percentile per-packet one-way delay: 118.906 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 62.10 Mbit/s

95th percentile per-packet one-way delay: 120.321 ms

Loss rate: 0.73%

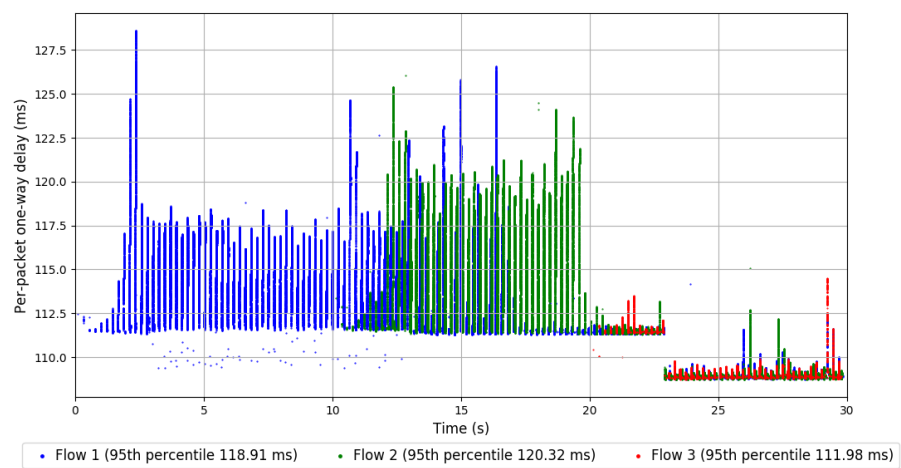
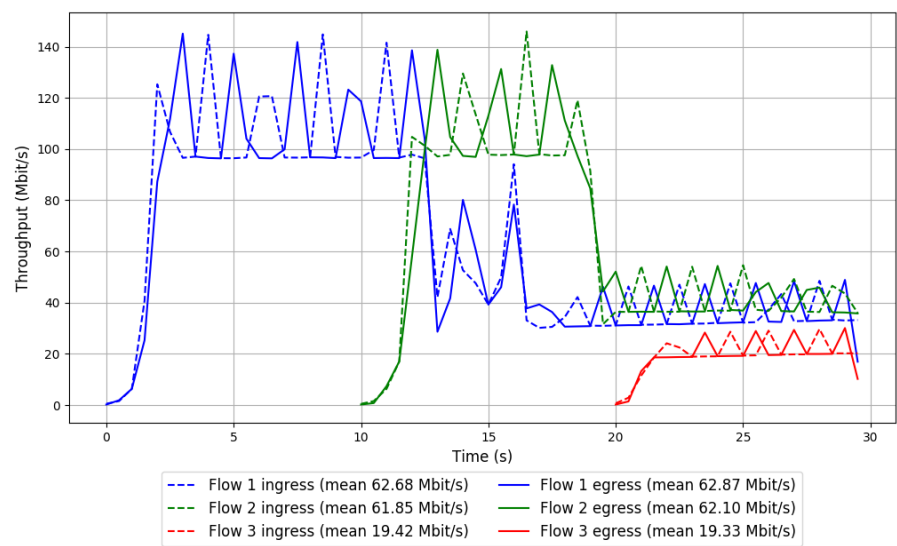
-- Flow 3:

Average throughput: 19.33 Mbit/s

95th percentile per-packet one-way delay: 111.980 ms

Loss rate: 2.64%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-11 22:48:12

End at: 2017-12-11 22:48:42

Below is generated by plot.py at 2017-12-12 03:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.48 Mbit/s

95th percentile per-packet one-way delay: 113.650 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 27.12 Mbit/s

95th percentile per-packet one-way delay: 113.509 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 39.76 Mbit/s

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

Loss rate: 1.21%

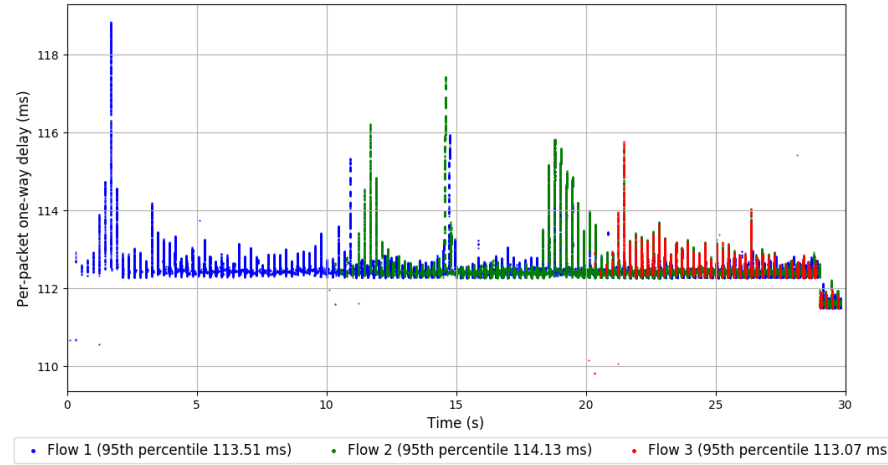
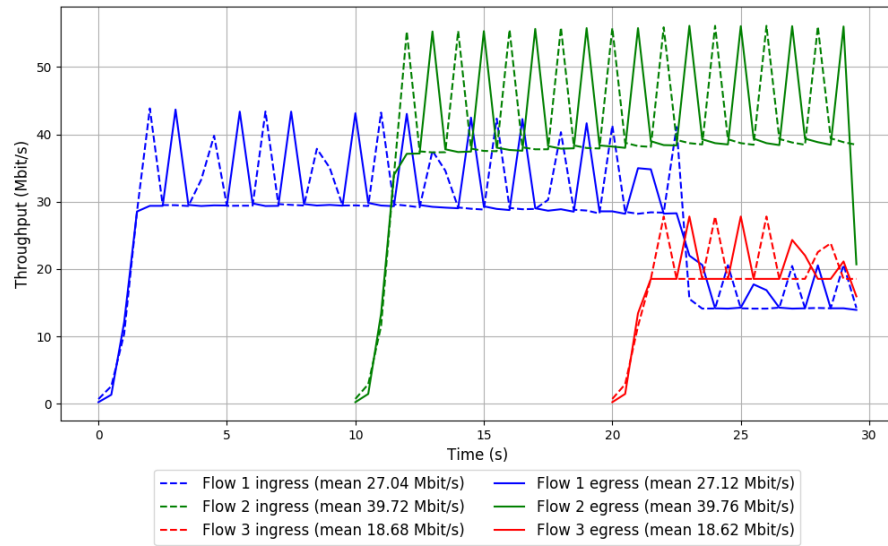
-- Flow 3:

Average throughput: 18.62 Mbit/s

95th percentile per-packet one-way delay: 113.069 ms

Loss rate: 2.52%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-11 23:01:47

End at: 2017-12-11 23:02:17

Below is generated by plot.py at 2017-12-12 03:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.86 Mbit/s

95th percentile per-packet one-way delay: 119.582 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 19.85 Mbit/s

95th percentile per-packet one-way delay: 118.037 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 98.34 Mbit/s

95th percentile per-packet one-way delay: 119.804 ms

Loss rate: 1.26%

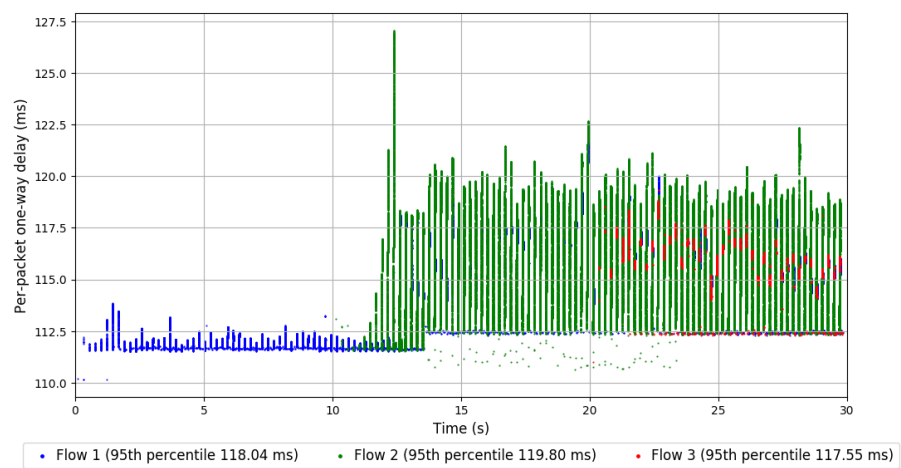
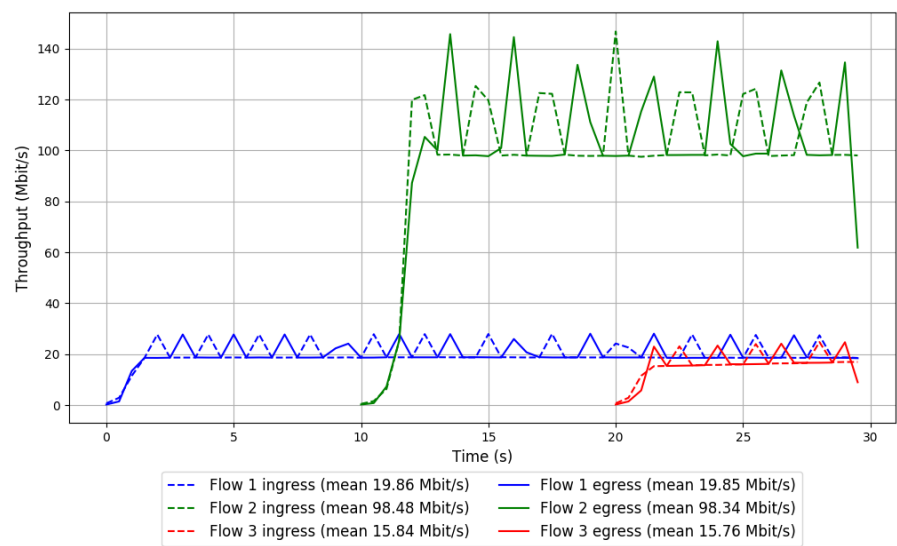
-- Flow 3:

Average throughput: 15.76 Mbit/s

95th percentile per-packet one-way delay: 117.554 ms

Loss rate: 2.71%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-11 23:15:33

End at: 2017-12-11 23:16:03

Below is generated by plot.py at 2017-12-12 03:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 35.18 Mbit/s

95th percentile per-packet one-way delay: 116.037 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 25.32 Mbit/s

95th percentile per-packet one-way delay: 117.407 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 10.44 Mbit/s

95th percentile per-packet one-way delay: 112.968 ms

Loss rate: 1.42%

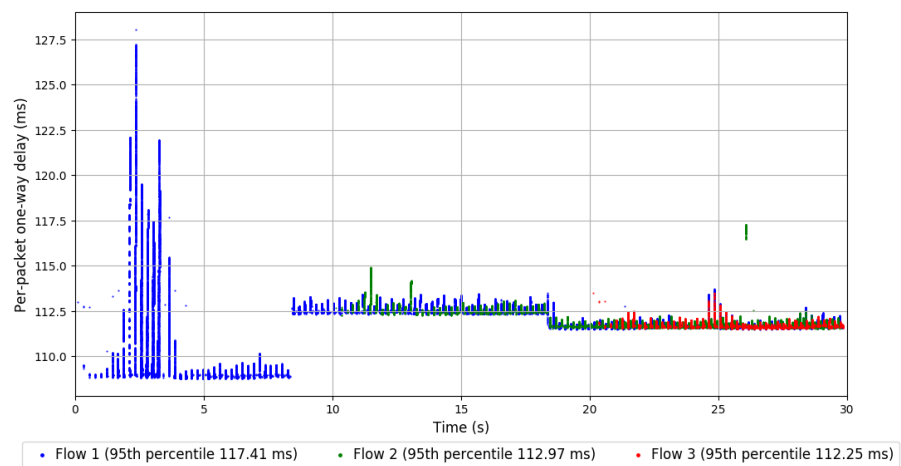
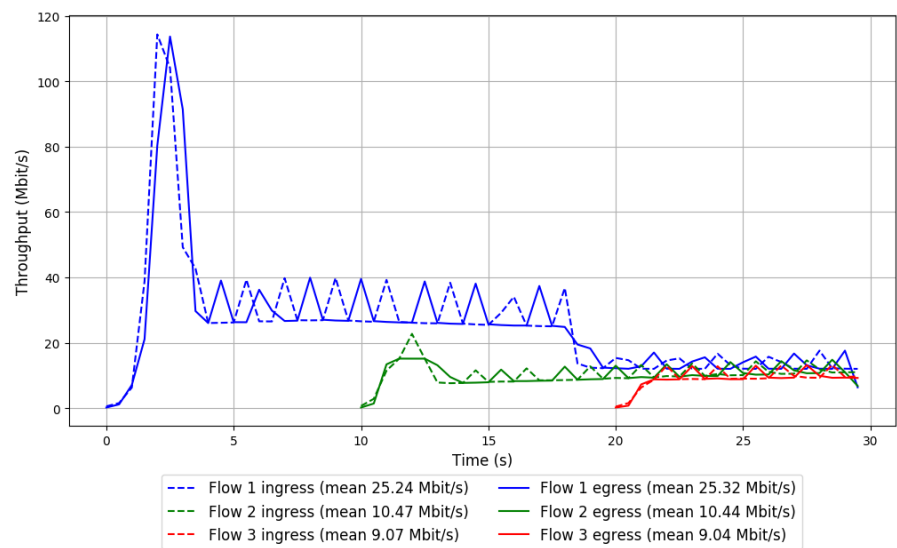
-- Flow 3:

Average throughput: 9.04 Mbit/s

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

Loss rate: 2.58%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-11 23:29:26

End at: 2017-12-11 23:29:56

Below is generated by plot.py at 2017-12-12 03:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.78 Mbit/s

95th percentile per-packet one-way delay: 118.937 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 94.57 Mbit/s

95th percentile per-packet one-way delay: 118.559 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 16.17 Mbit/s

95th percentile per-packet one-way delay: 118.298 ms

Loss rate: 1.18%

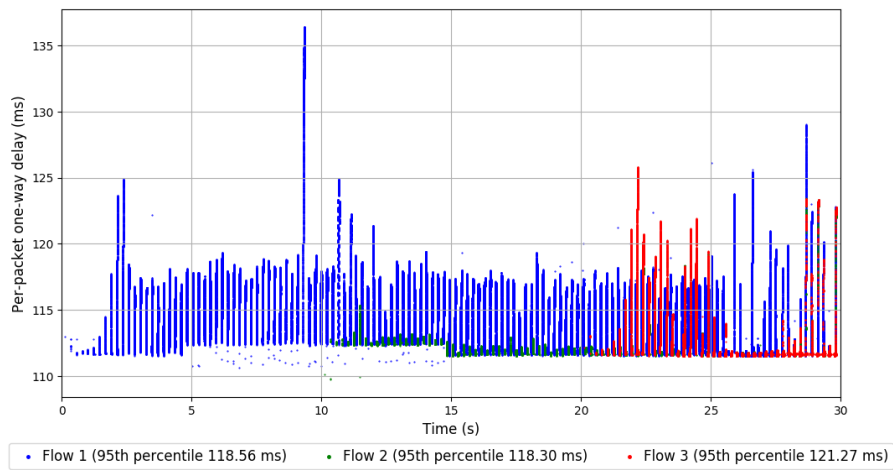
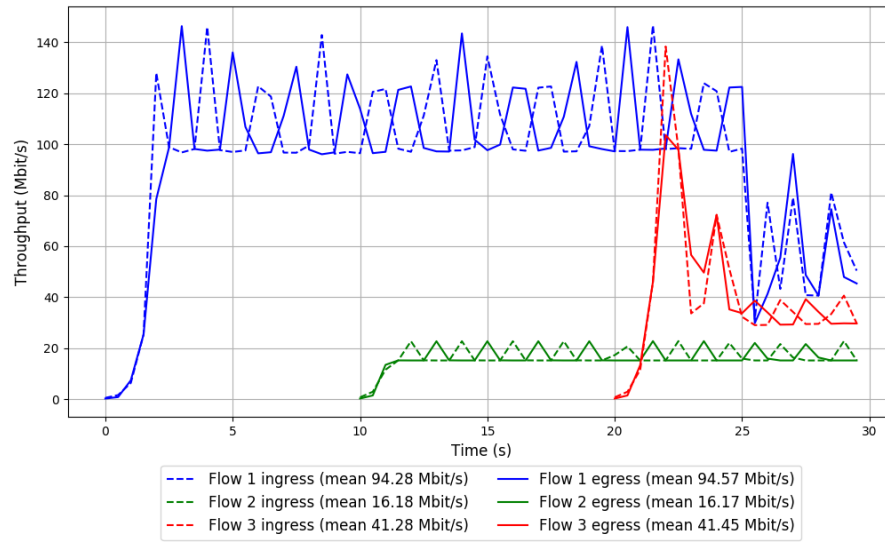
-- Flow 3:

Average throughput: 41.45 Mbit/s

95th percentile per-packet one-way delay: 121.271 ms

Loss rate: 1.83%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-11 23:43:05

End at: 2017-12-11 23:43:35

Below is generated by plot.py at 2017-12-12 03:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.09 Mbit/s

95th percentile per-packet one-way delay: 113.600 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 21.19 Mbit/s

95th percentile per-packet one-way delay: 113.081 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 52.68 Mbit/s

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

Loss rate: 1.24%

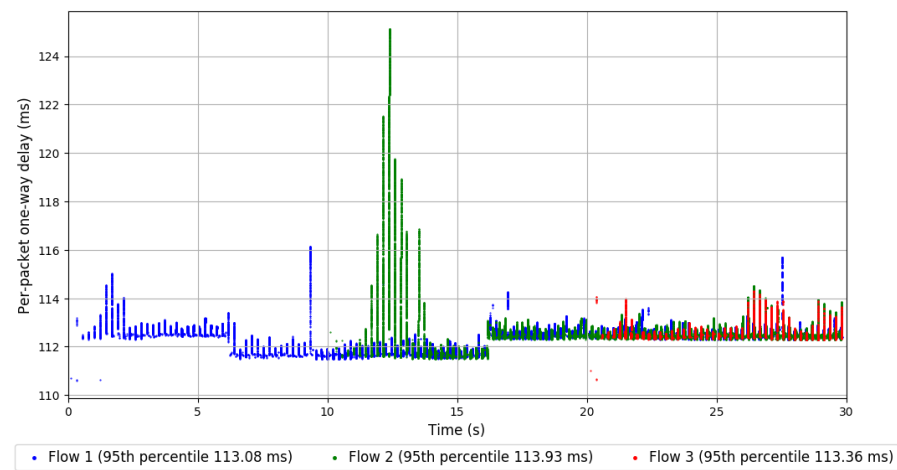
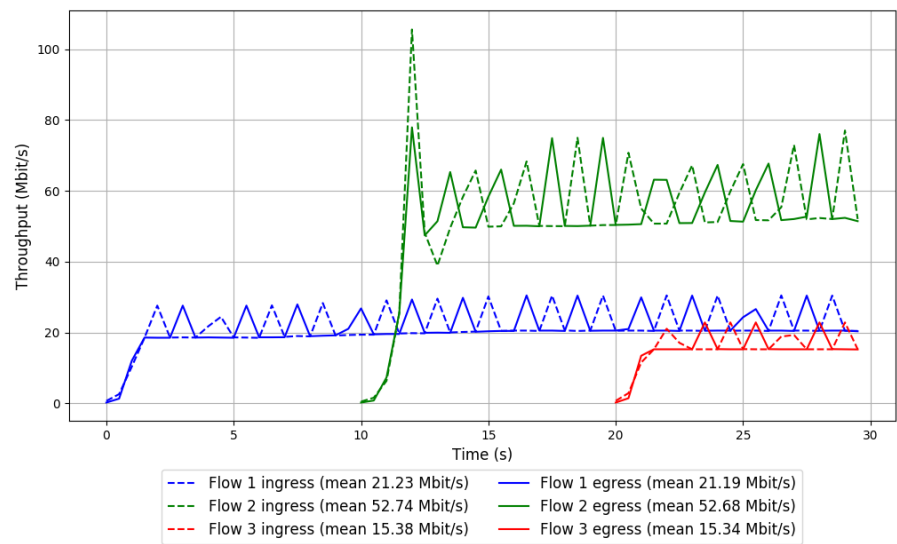
-- Flow 3:

Average throughput: 15.34 Mbit/s

95th percentile per-packet one-way delay: 113.358 ms

Loss rate: 2.50%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-11 23:56:53

End at: 2017-12-11 23:57:23

Below is generated by plot.py at 2017-12-12 03:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.03 Mbit/s

95th percentile per-packet one-way delay: 112.901 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 9.12 Mbit/s

95th percentile per-packet one-way delay: 112.923 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 7.98 Mbit/s

95th percentile per-packet one-way delay: 112.934 ms

Loss rate: 1.18%

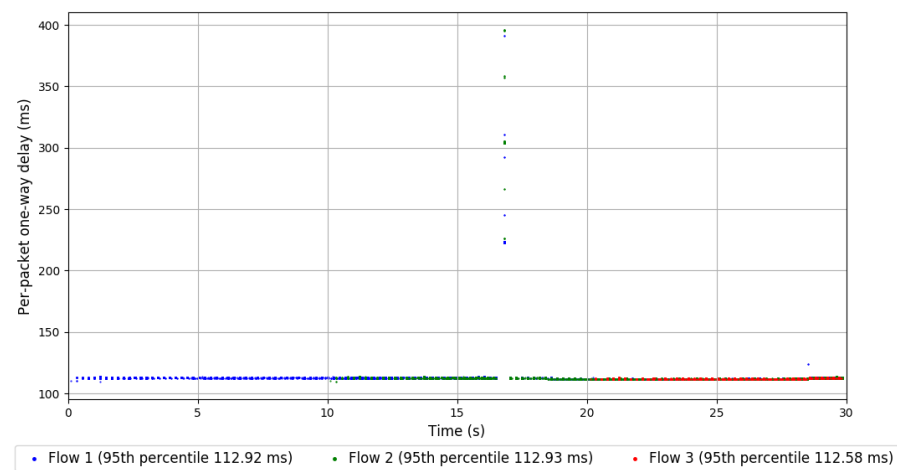
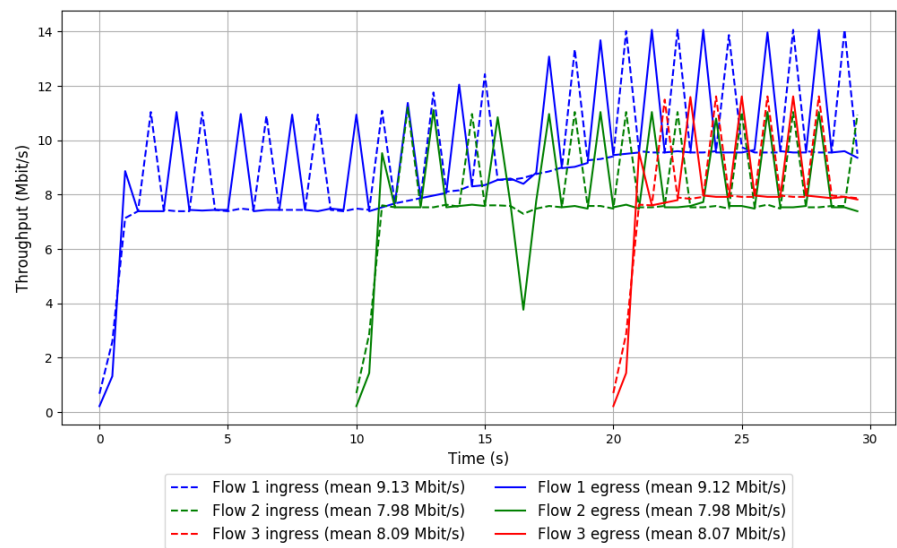
-- Flow 3:

Average throughput: 8.07 Mbit/s

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

Loss rate: 2.46%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-12 00:10:26

End at: 2017-12-12 00:10:56

Below is generated by plot.py at 2017-12-12 03:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 24.11 Mbit/s

95th percentile per-packet one-way delay: 112.946 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 8.30 Mbit/s

95th percentile per-packet one-way delay: 112.957 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 16.34 Mbit/s

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

Loss rate: 1.16%

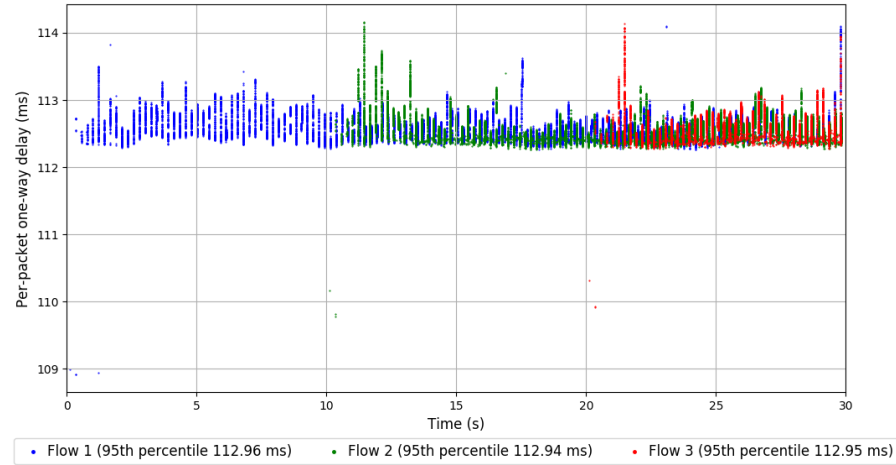
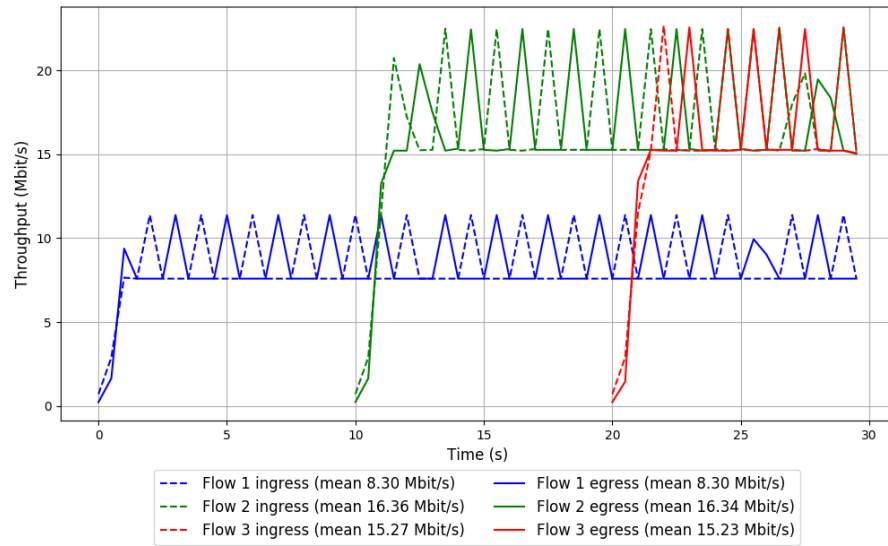
-- Flow 3:

Average throughput: 15.23 Mbit/s

95th percentile per-packet one-way delay: 112.946 ms

Loss rate: 2.50%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-12 00:24:14

End at: 2017-12-12 00:24:44

Below is generated by plot.py at 2017-12-12 03:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 45.27 Mbit/s

95th percentile per-packet one-way delay: 113.257 ms

Loss rate: 1.42%

-- Flow 1:

Average throughput: 22.50 Mbit/s

95th percentile per-packet one-way delay: 113.069 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 16.25 Mbit/s

95th percentile per-packet one-way delay: 113.256 ms

Loss rate: 1.18%

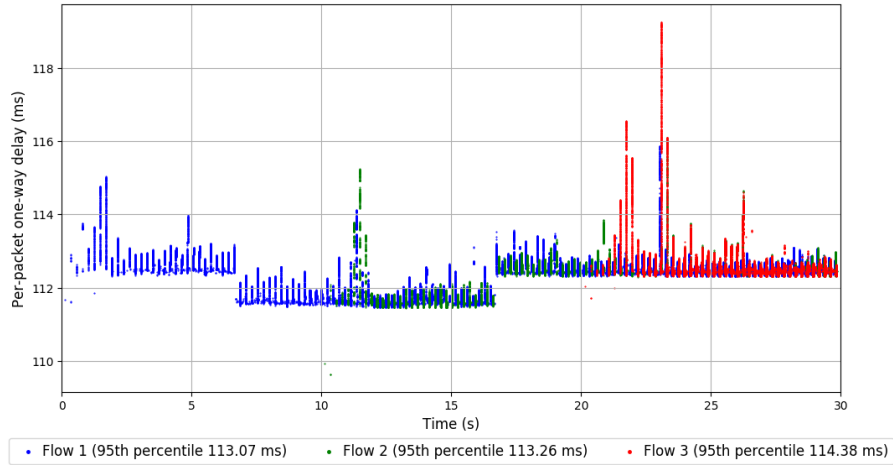
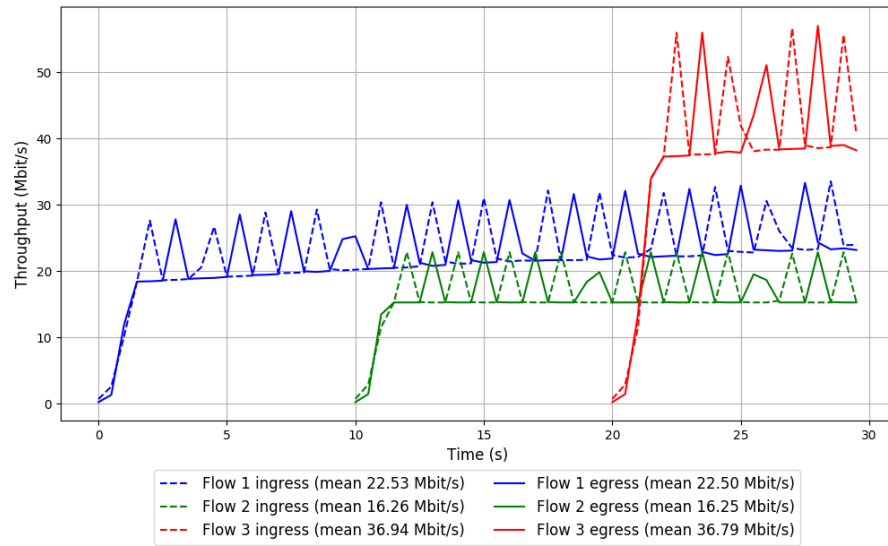
-- Flow 3:

Average throughput: 36.79 Mbit/s

95th percentile per-packet one-way delay: 114.379 ms

Loss rate: 2.65%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-12 00:37:51

End at: 2017-12-12 00:38:21

Below is generated by plot.py at 2017-12-12 03:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 125.93 Mbit/s

95th percentile per-packet one-way delay: 116.126 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 99.88 Mbit/s

95th percentile per-packet one-way delay: 116.095 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 16.56 Mbit/s

95th percentile per-packet one-way delay: 116.092 ms

Loss rate: 1.30%

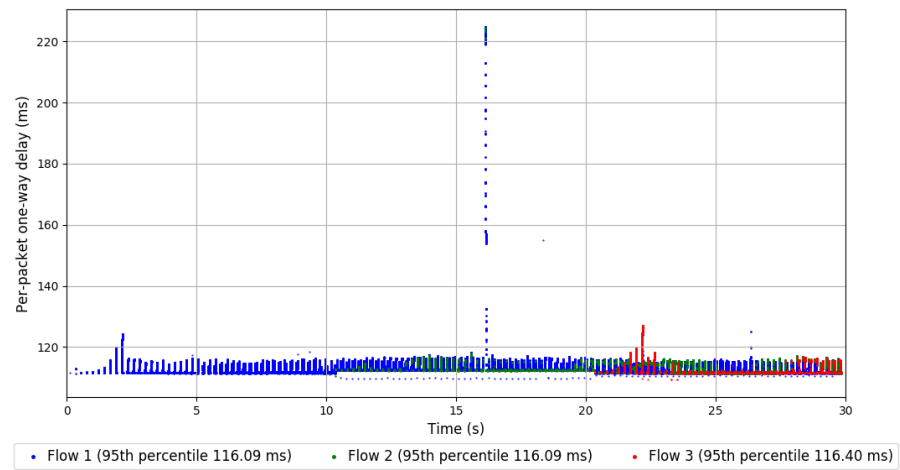
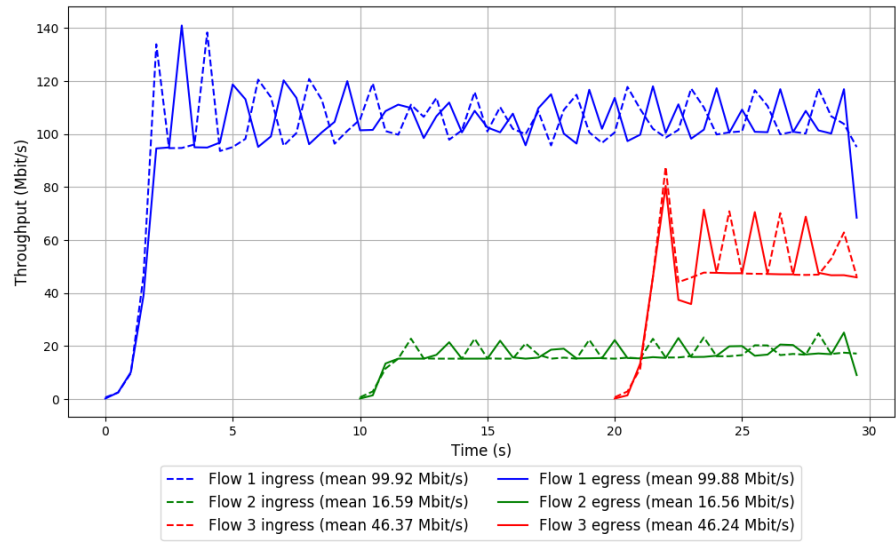
-- Flow 3:

Average throughput: 46.24 Mbit/s

95th percentile per-packet one-way delay: 116.398 ms

Loss rate: 2.52%

Run 10: Report of TCP Vegas — Data Link

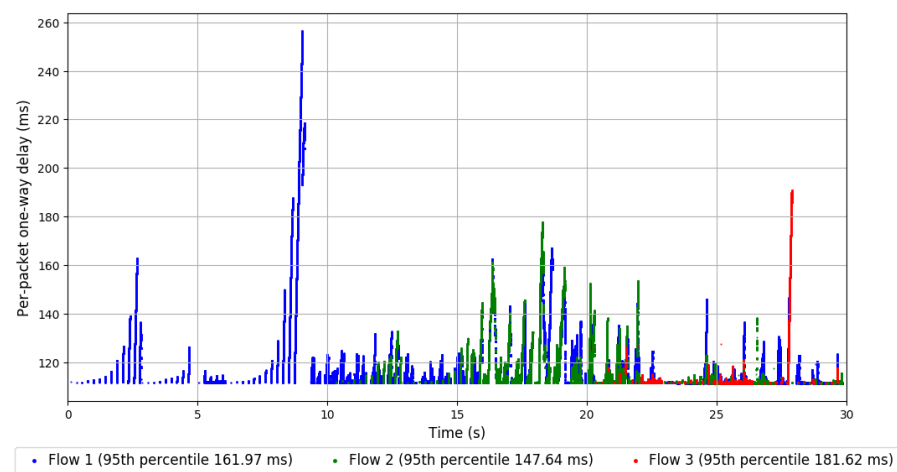
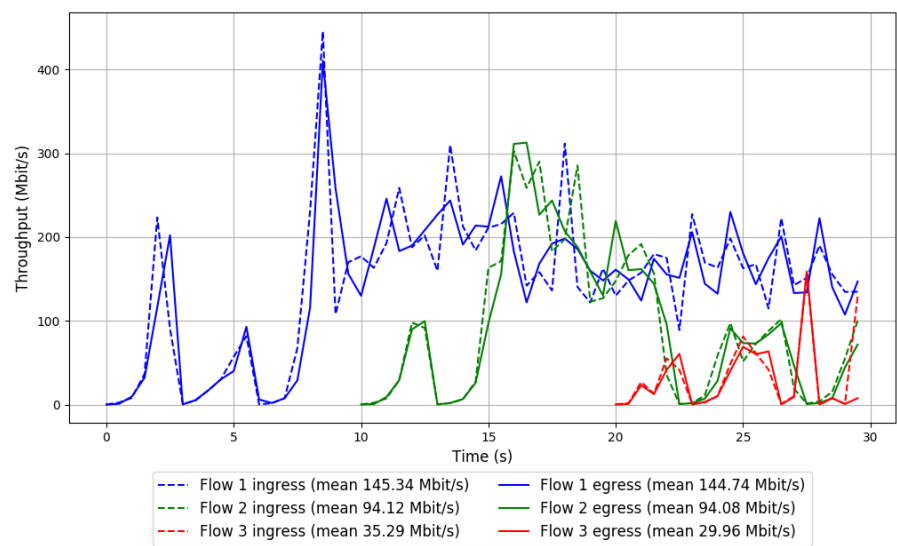


```
Run 1: Statistics of Verus

Start at: 2017-12-11 22:32:17
End at: 2017-12-11 22:32:47

# Below is generated by plot.py at 2017-12-12 03:41:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 216.62 Mbit/s
95th percentile per-packet one-way delay: 158.024 ms
Loss rate: 1.84%
-- Flow 1:
Average throughput: 144.74 Mbit/s
95th percentile per-packet one-way delay: 161.974 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 94.08 Mbit/s
95th percentile per-packet one-way delay: 147.643 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 29.96 Mbit/s
95th percentile per-packet one-way delay: 181.622 ms
Loss rate: 17.65%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-11 22:46:19

End at: 2017-12-11 22:46:49

Below is generated by plot.py at 2017-12-12 03:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 237.94 Mbit/s

95th percentile per-packet one-way delay: 162.547 ms

Loss rate: 1.44%

-- Flow 1:

Average throughput: 128.77 Mbit/s

95th percentile per-packet one-way delay: 143.425 ms

Loss rate: 1.13%

-- Flow 2:

Average throughput: 116.48 Mbit/s

95th percentile per-packet one-way delay: 204.487 ms

Loss rate: 2.48%

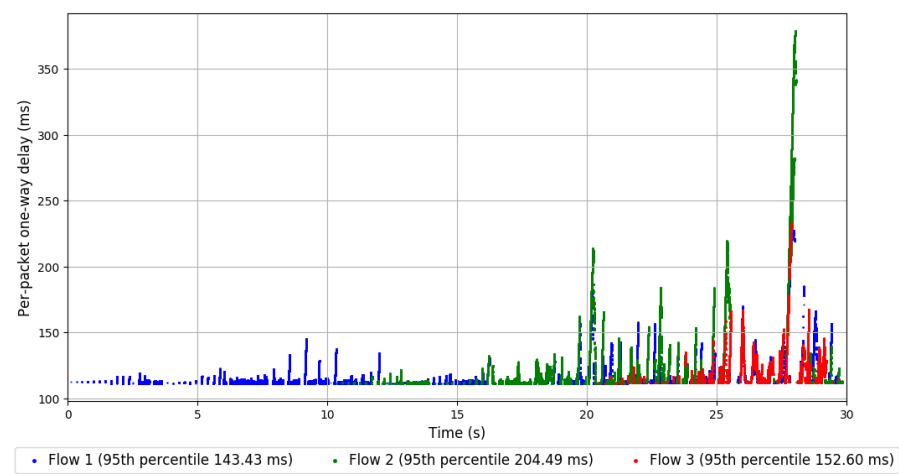
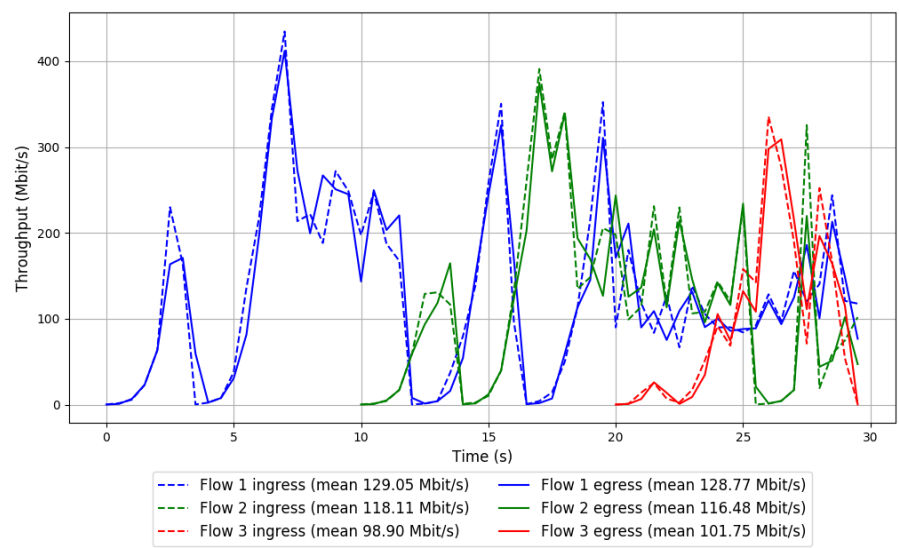
-- Flow 3:

Average throughput: 101.75 Mbit/s

95th percentile per-packet one-way delay: 152.602 ms

Loss rate: 0.15%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-11 22:59:58

End at: 2017-12-11 23:00:28

Below is generated by plot.py at 2017-12-12 03:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 196.80 Mbit/s

95th percentile per-packet one-way delay: 177.717 ms

Loss rate: 2.23%

-- Flow 1:

Average throughput: 82.59 Mbit/s

95th percentile per-packet one-way delay: 159.990 ms

Loss rate: 1.60%

-- Flow 2:

Average throughput: 130.86 Mbit/s

95th percentile per-packet one-way delay: 142.008 ms

Loss rate: 0.03%

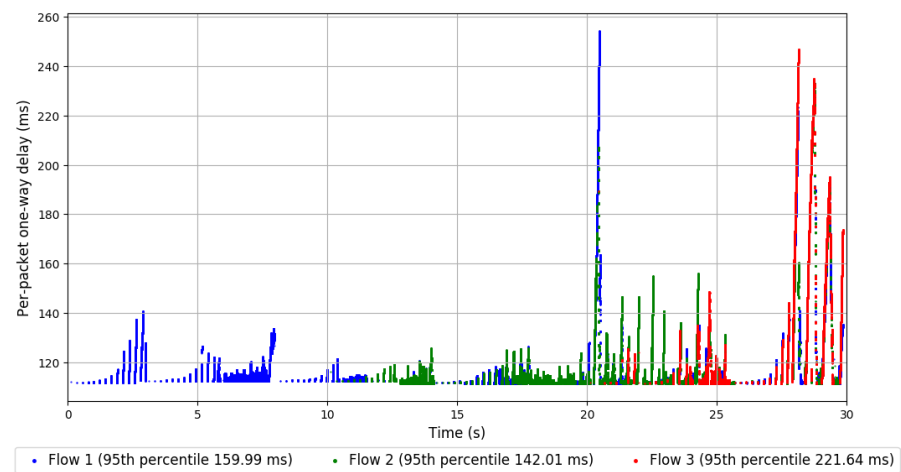
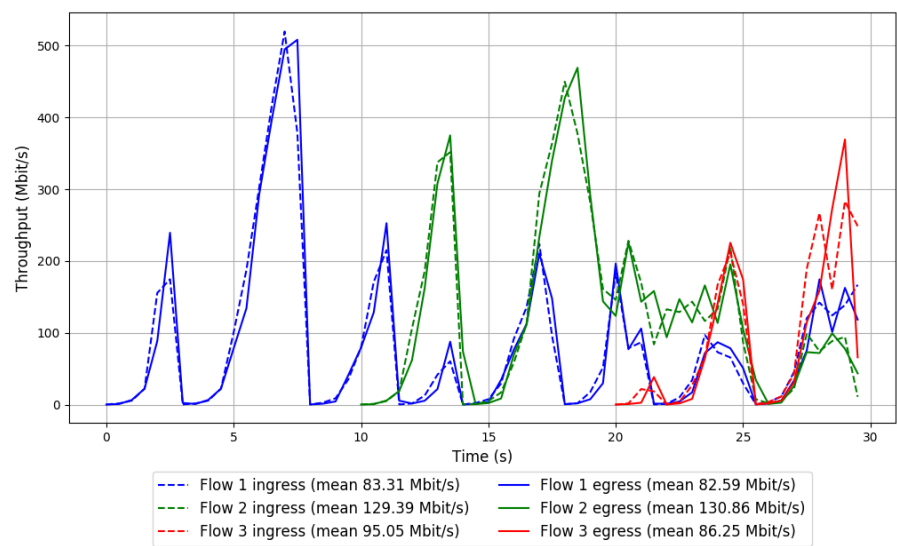
-- Flow 3:

Average throughput: 86.25 Mbit/s

95th percentile per-packet one-way delay: 221.639 ms

Loss rate: 9.98%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-11 23:13:43

End at: 2017-12-11 23:14:13

Below is generated by plot.py at 2017-12-12 03:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 209.46 Mbit/s

95th percentile per-packet one-way delay: 212.567 ms

Loss rate: 2.15%

-- Flow 1:

Average throughput: 137.41 Mbit/s

95th percentile per-packet one-way delay: 129.526 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 73.21 Mbit/s

95th percentile per-packet one-way delay: 139.134 ms

Loss rate: 2.31%

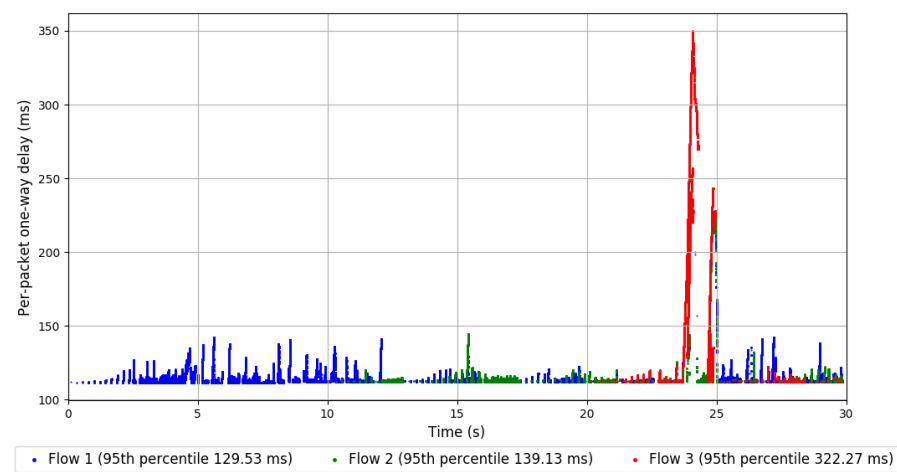
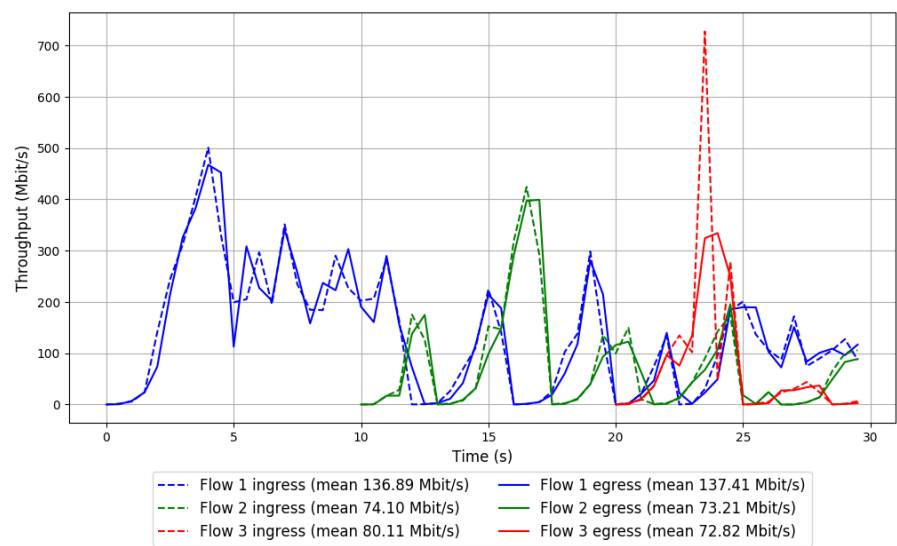
-- Flow 3:

Average throughput: 72.82 Mbit/s

95th percentile per-packet one-way delay: 322.274 ms

Loss rate: 11.16%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-11 23:27:29

End at: 2017-12-11 23:27:59

Below is generated by plot.py at 2017-12-12 03:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 292.62 Mbit/s

95th percentile per-packet one-way delay: 197.590 ms

Loss rate: 2.45%

-- Flow 1:

Average throughput: 170.30 Mbit/s

95th percentile per-packet one-way delay: 169.078 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 135.63 Mbit/s

95th percentile per-packet one-way delay: 261.776 ms

Loss rate: 3.92%

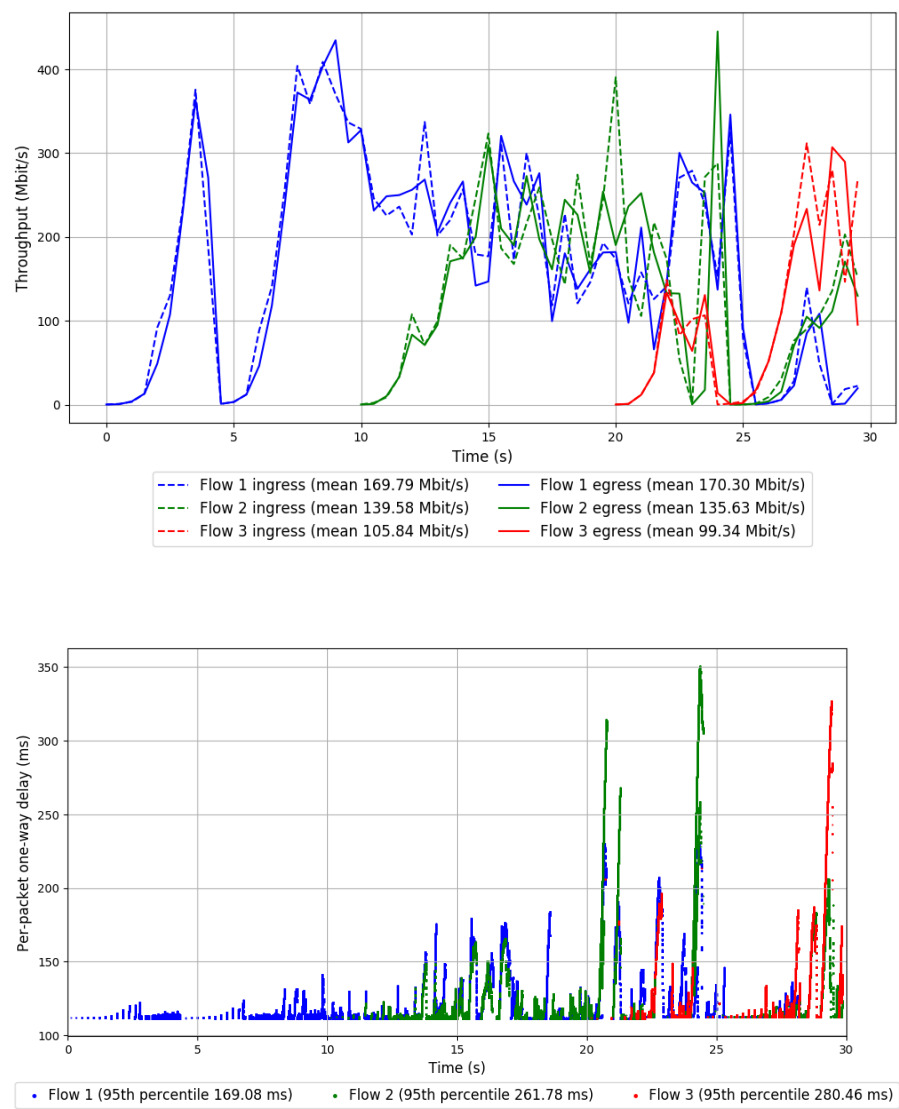
-- Flow 3:

Average throughput: 99.34 Mbit/s

95th percentile per-packet one-way delay: 280.460 ms

Loss rate: 8.27%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-11 23:41:07

End at: 2017-12-11 23:41:37

Below is generated by plot.py at 2017-12-12 03:41:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 303.23 Mbit/s

95th percentile per-packet one-way delay: 186.839 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 189.28 Mbit/s

95th percentile per-packet one-way delay: 181.106 ms

Loss rate: 1.40%

-- Flow 2:

Average throughput: 129.24 Mbit/s

95th percentile per-packet one-way delay: 187.374 ms

Loss rate: 0.34%

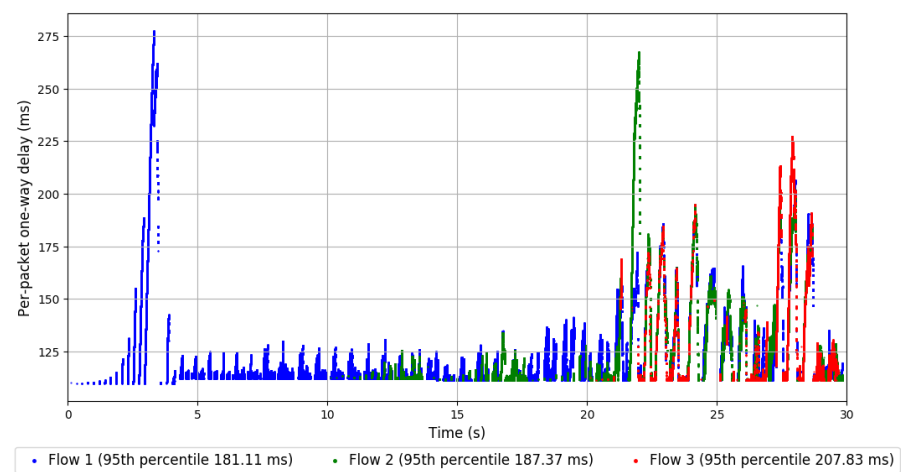
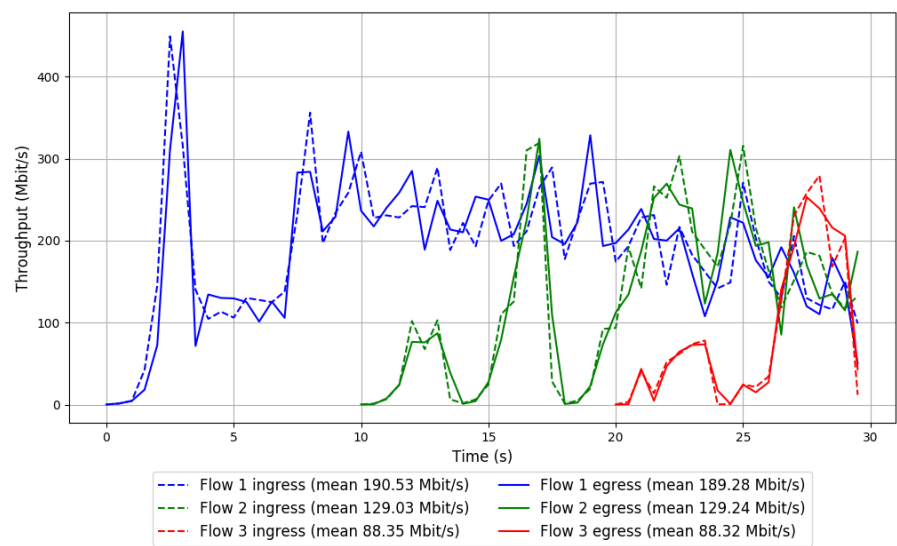
-- Flow 3:

Average throughput: 88.32 Mbit/s

95th percentile per-packet one-way delay: 207.830 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-11 23:54:56

End at: 2017-12-11 23:55:26

Below is generated by plot.py at 2017-12-12 03:42:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 291.73 Mbit/s

95th percentile per-packet one-way delay: 225.823 ms

Loss rate: 1.85%

-- Flow 1:

Average throughput: 229.68 Mbit/s

95th percentile per-packet one-way delay: 228.166 ms

Loss rate: 2.00%

-- Flow 2:

Average throughput: 55.22 Mbit/s

95th percentile per-packet one-way delay: 176.744 ms

Loss rate: 0.87%

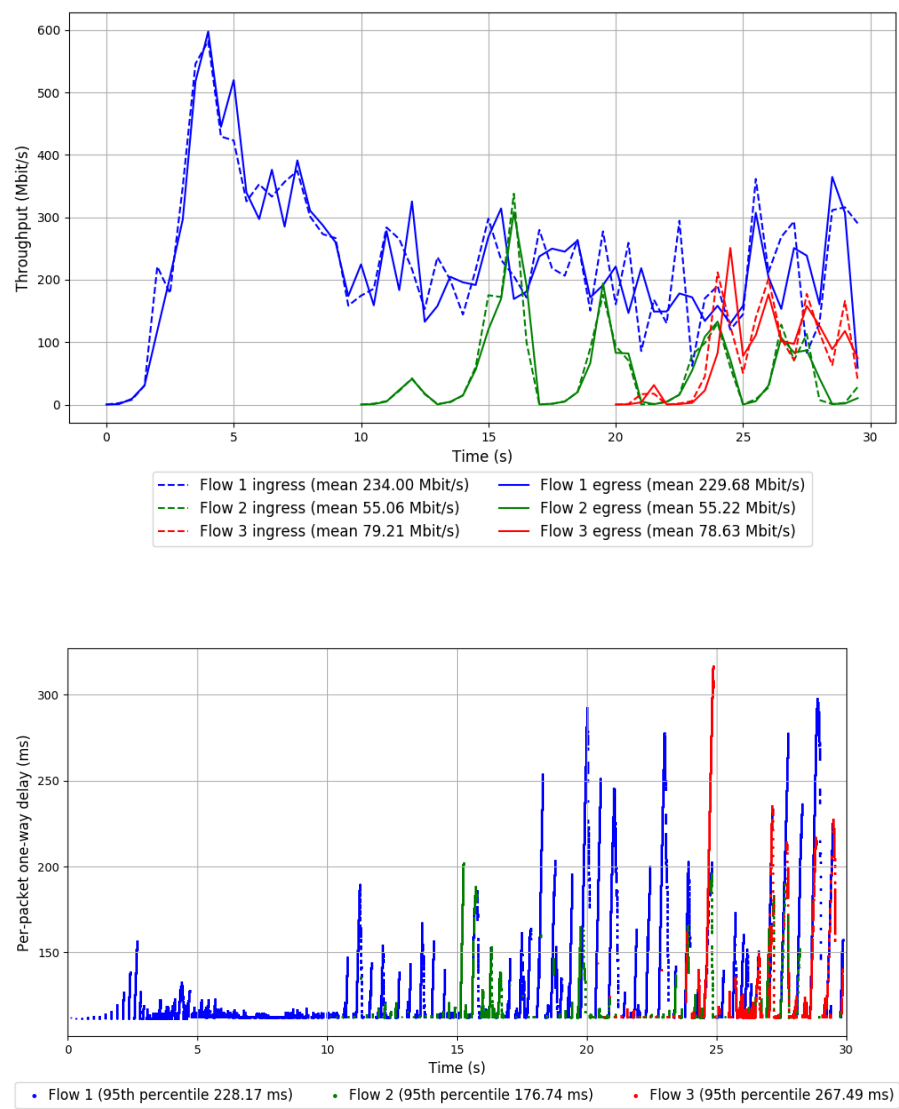
-- Flow 3:

Average throughput: 78.63 Mbit/s

95th percentile per-packet one-way delay: 267.493 ms

Loss rate: 1.92%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-12 00:08:30

End at: 2017-12-12 00:09:00

Below is generated by plot.py at 2017-12-12 03:42:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 289.89 Mbit/s

95th percentile per-packet one-way delay: 250.857 ms

Loss rate: 2.96%

-- Flow 1:

Average throughput: 205.67 Mbit/s

95th percentile per-packet one-way delay: 224.467 ms

Loss rate: 1.78%

-- Flow 2:

Average throughput: 112.21 Mbit/s

95th percentile per-packet one-way delay: 274.339 ms

Loss rate: 2.97%

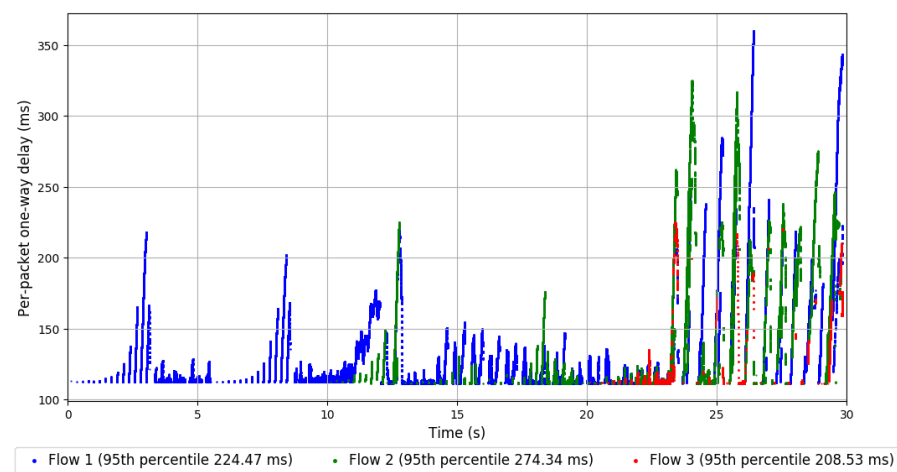
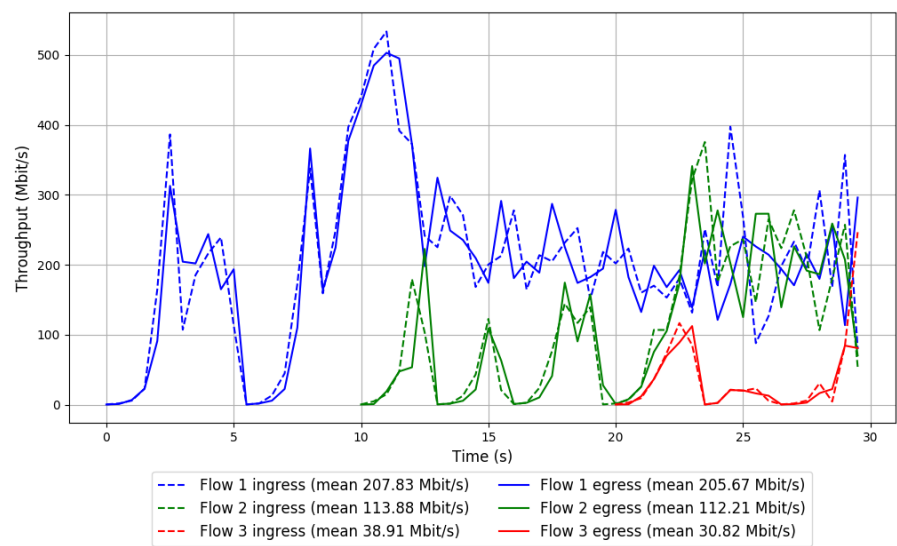
-- Flow 3:

Average throughput: 30.82 Mbit/s

95th percentile per-packet one-way delay: 208.525 ms

Loss rate: 22.14%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-12 00:22:19

End at: 2017-12-12 00:22:49

Below is generated by plot.py at 2017-12-12 03:42:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 272.14 Mbit/s

95th percentile per-packet one-way delay: 275.243 ms

Loss rate: 4.58%

-- Flow 1:

Average throughput: 195.08 Mbit/s

95th percentile per-packet one-way delay: 298.743 ms

Loss rate: 5.14%

-- Flow 2:

Average throughput: 54.97 Mbit/s

95th percentile per-packet one-way delay: 212.992 ms

Loss rate: 1.84%

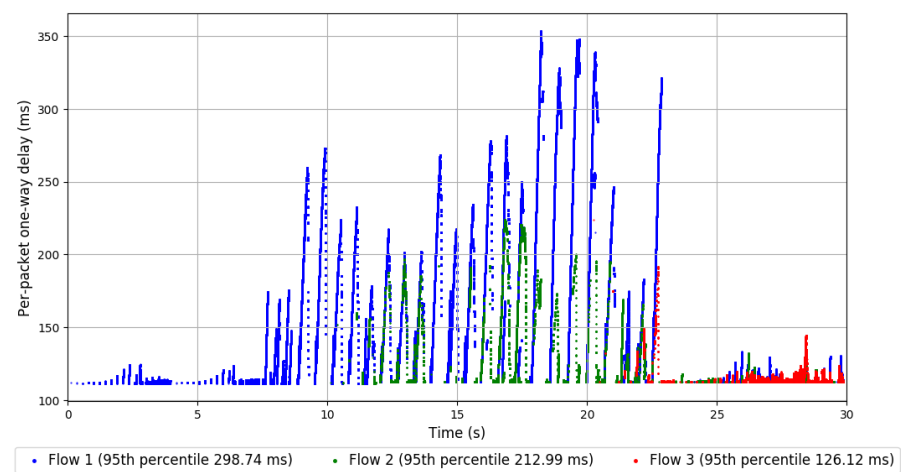
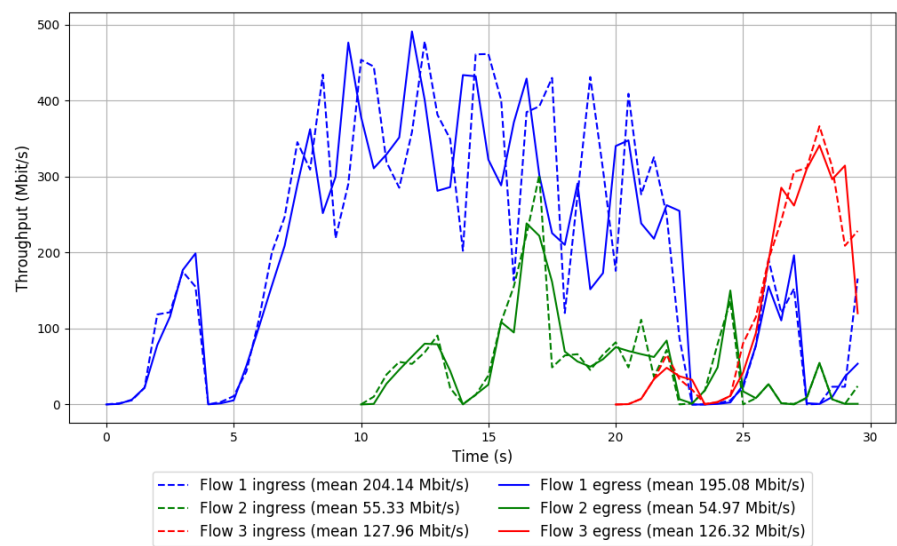
-- Flow 3:

Average throughput: 126.32 Mbit/s

95th percentile per-packet one-way delay: 126.120 ms

Loss rate: 4.27%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-12 00:35:56

End at: 2017-12-12 00:36:26

Below is generated by plot.py at 2017-12-12 03:42:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 266.71 Mbit/s

95th percentile per-packet one-way delay: 169.225 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 146.90 Mbit/s

95th percentile per-packet one-way delay: 164.733 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 121.47 Mbit/s

95th percentile per-packet one-way delay: 157.385 ms

Loss rate: 0.00%

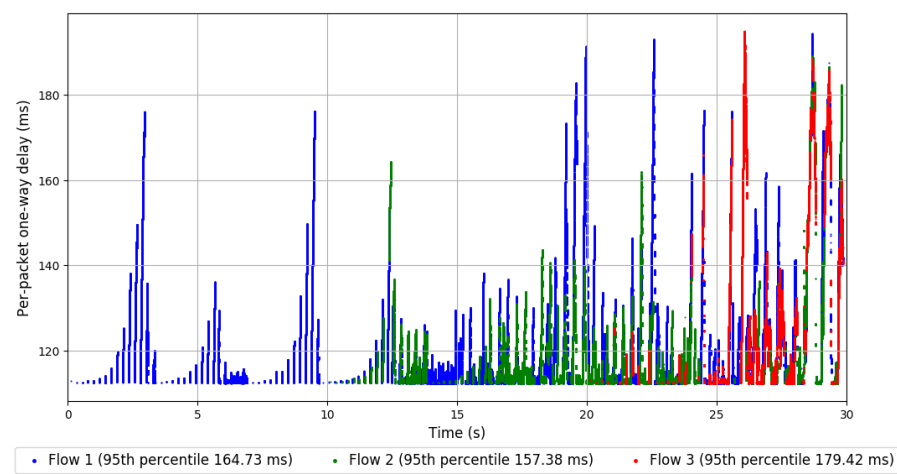
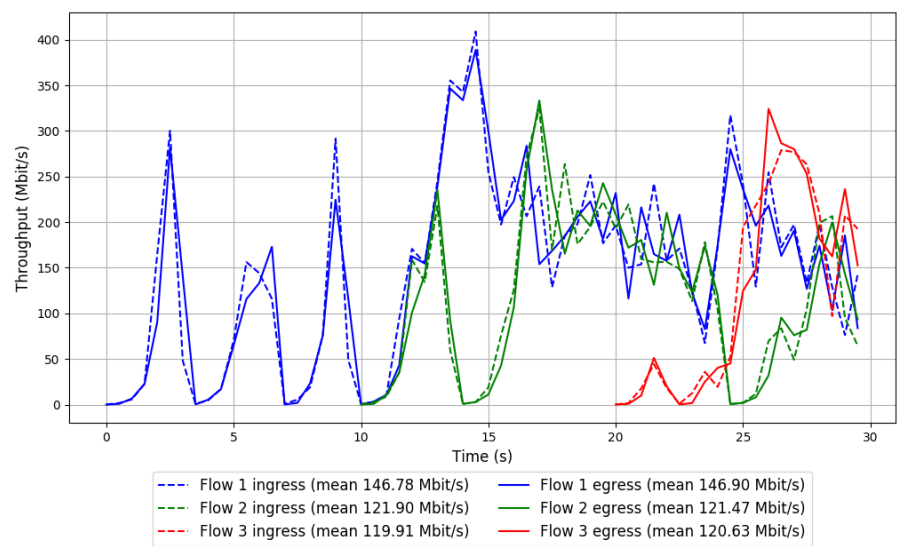
-- Flow 3:

Average throughput: 120.63 Mbit/s

95th percentile per-packet one-way delay: 179.423 ms

Loss rate: 1.68%

Run 10: Report of Verus — Data Link

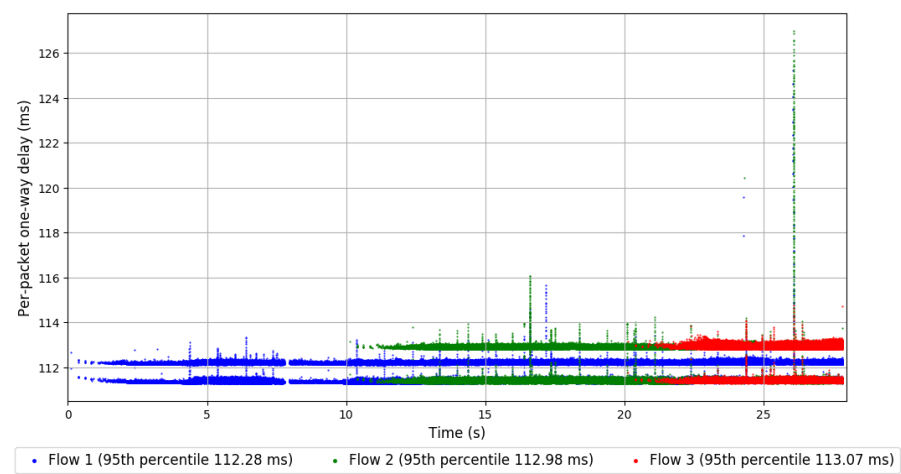
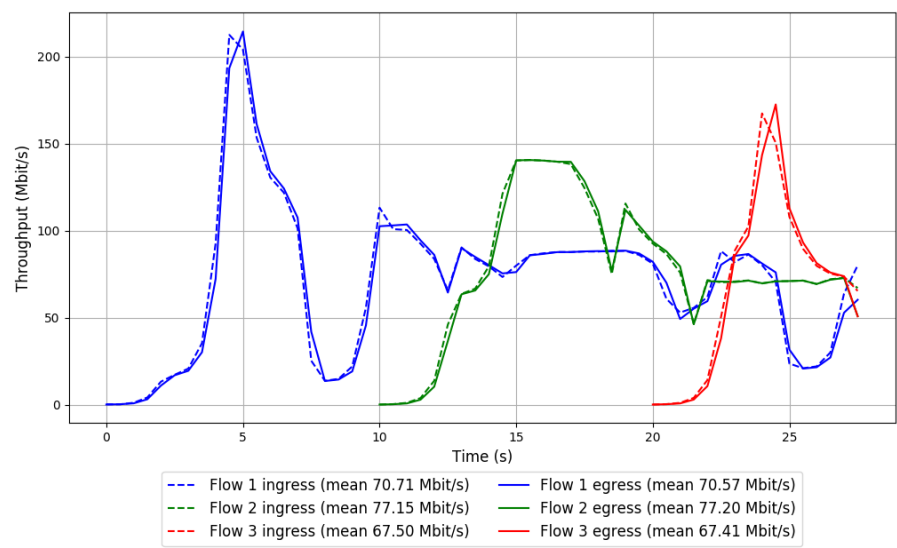


```
Run 1: Statistics of Copa

Start at: 2017-12-11 22:29:11
End at: 2017-12-11 22:29:41

# Below is generated by plot.py at 2017-12-12 03:44:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 138.66 Mbit/s
95th percentile per-packet one-way delay: 112.972 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 70.57 Mbit/s
95th percentile per-packet one-way delay: 112.276 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 77.20 Mbit/s
95th percentile per-packet one-way delay: 112.985 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 67.41 Mbit/s
95th percentile per-packet one-way delay: 113.071 ms
Loss rate: 2.90%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-11 22:43:15

End at: 2017-12-11 22:43:45

Below is generated by plot.py at 2017-12-12 03:44:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.12 Mbit/s

95th percentile per-packet one-way delay: 112.420 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 77.75 Mbit/s

95th percentile per-packet one-way delay: 112.443 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 52.28 Mbit/s

95th percentile per-packet one-way delay: 111.613 ms

Loss rate: 2.19%

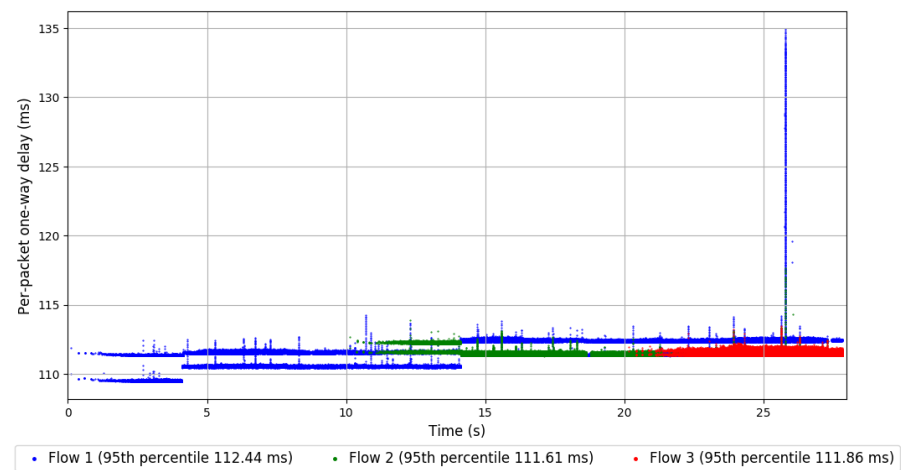
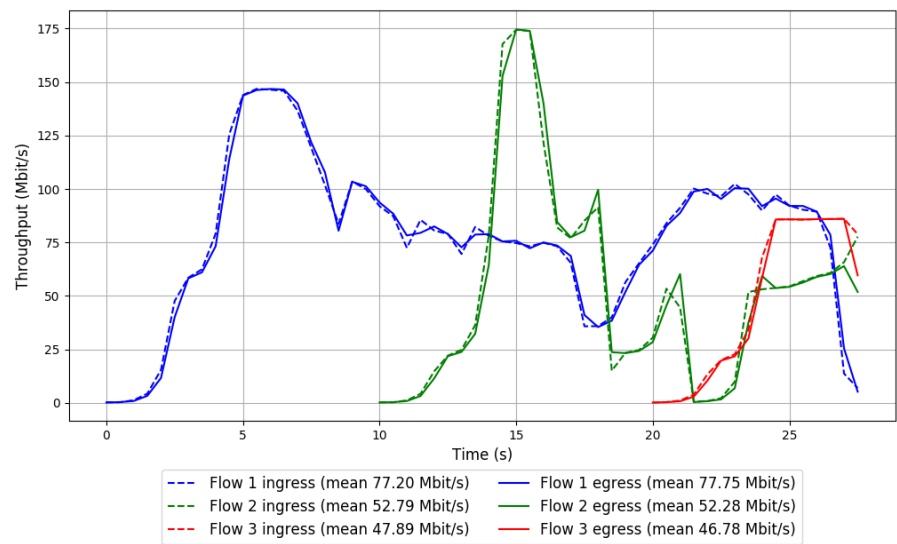
-- Flow 3:

Average throughput: 46.78 Mbit/s

95th percentile per-packet one-way delay: 111.856 ms

Loss rate: 5.07%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-11 22:56:51

End at: 2017-12-11 22:57:21

Below is generated by plot.py at 2017-12-12 03:45:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.44 Mbit/s

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

Loss rate: 1.20%

-- Flow 1:

Average throughput: 75.72 Mbit/s

95th percentile per-packet one-way delay: 112.431 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 62.15 Mbit/s

95th percentile per-packet one-way delay: 112.457 ms

Loss rate: 1.35%

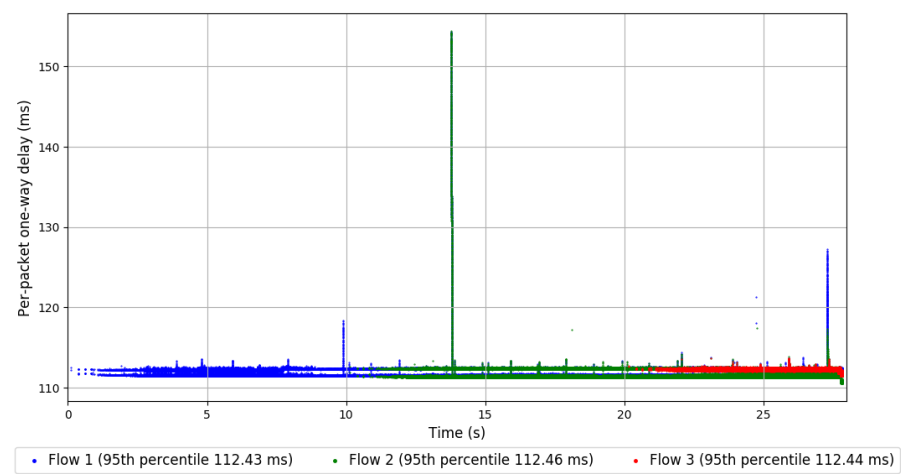
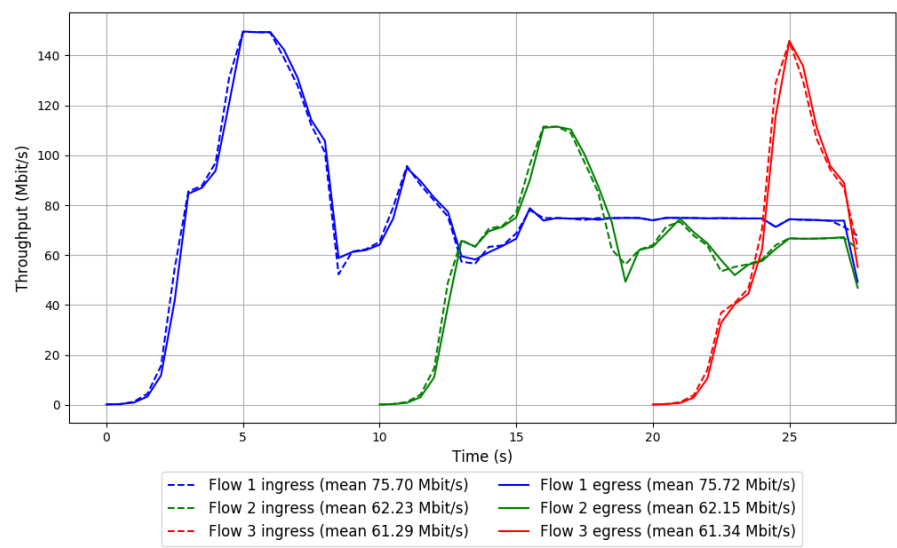
-- Flow 3:

Average throughput: 61.34 Mbit/s

95th percentile per-packet one-way delay: 112.445 ms

Loss rate: 2.74%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-11 23:10:38

End at: 2017-12-11 23:11:08

Below is generated by plot.py at 2017-12-12 03:45:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.78 Mbit/s

95th percentile per-packet one-way delay: 112.326 ms

Loss rate: 1.96%

-- Flow 1:

Average throughput: 62.79 Mbit/s

95th percentile per-packet one-way delay: 112.354 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 65.53 Mbit/s

95th percentile per-packet one-way delay: 111.674 ms

Loss rate: 1.17%

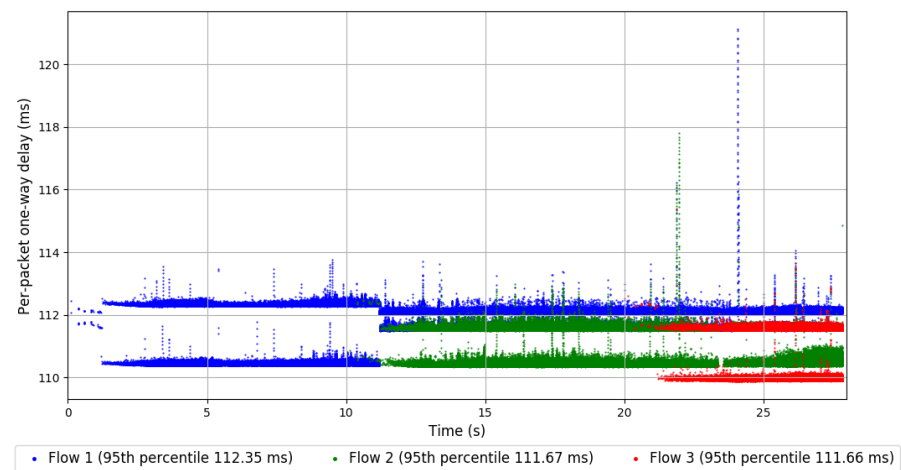
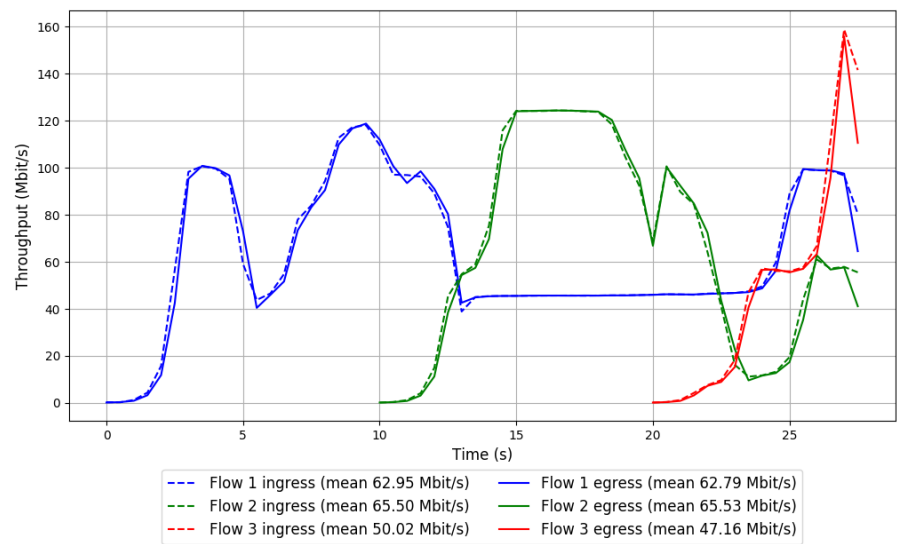
-- Flow 3:

Average throughput: 47.16 Mbit/s

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

Loss rate: 8.36%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-11 23:24:22

End at: 2017-12-11 23:24:52

Below is generated by plot.py at 2017-12-12 03:46:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.04 Mbit/s

95th percentile per-packet one-way delay: 112.928 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 78.01 Mbit/s

95th percentile per-packet one-way delay: 112.956 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 55.05 Mbit/s

95th percentile per-packet one-way delay: 112.406 ms

Loss rate: 0.58%

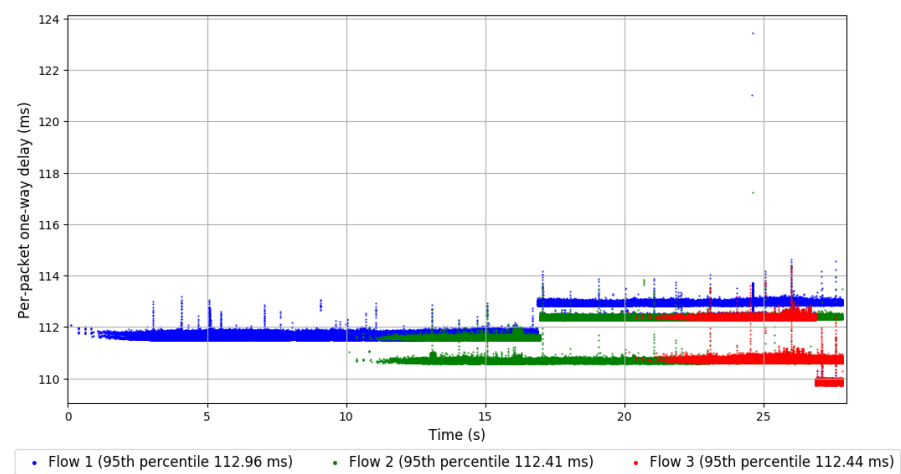
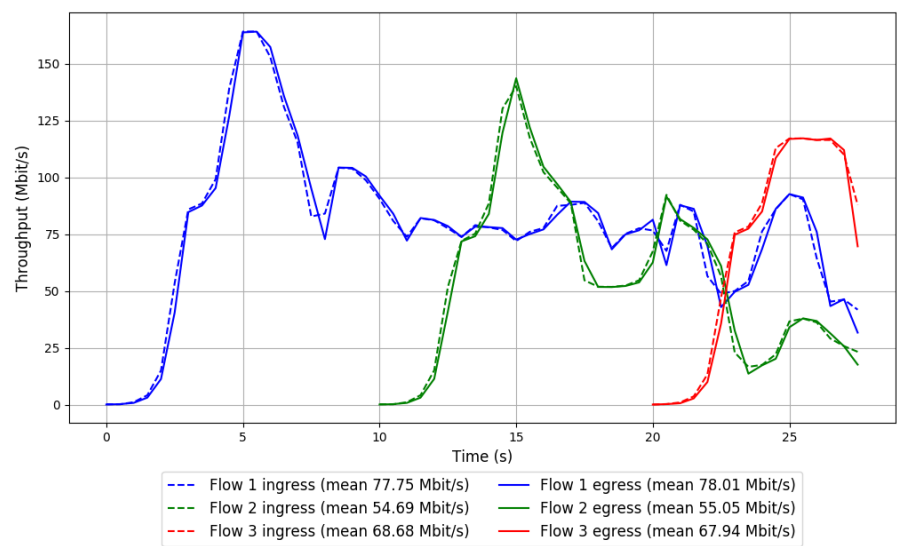
-- Flow 3:

Average throughput: 67.94 Mbit/s

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

Loss rate: 3.84%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-11 23:38:02

End at: 2017-12-11 23:38:32

Below is generated by plot.py at 2017-12-12 03:46:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 125.79 Mbit/s

95th percentile per-packet one-way delay: 112.902 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 66.92 Mbit/s

95th percentile per-packet one-way delay: 112.931 ms

Loss rate: 1.15%

-- Flow 2:

Average throughput: 64.34 Mbit/s

95th percentile per-packet one-way delay: 112.409 ms

Loss rate: 0.51%

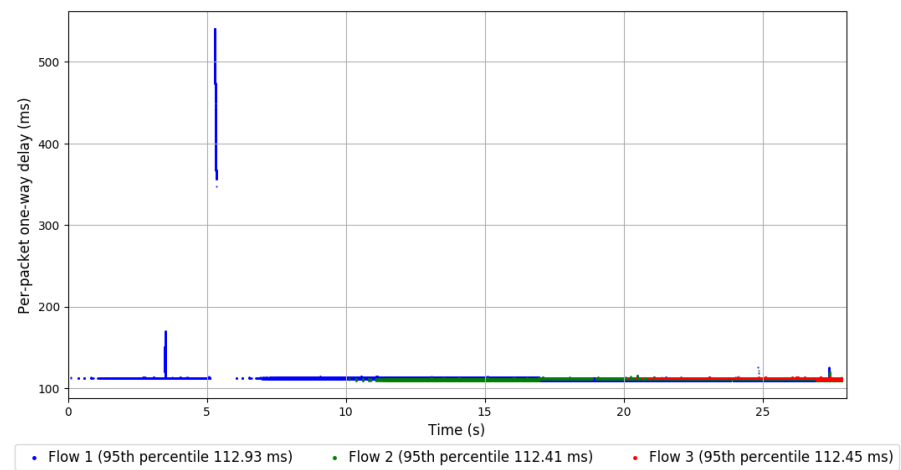
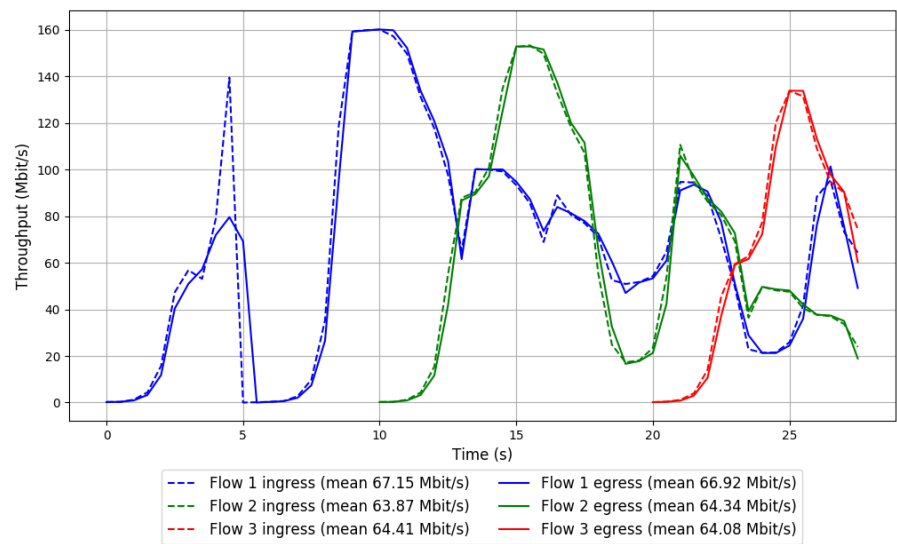
-- Flow 3:

Average throughput: 64.08 Mbit/s

95th percentile per-packet one-way delay: 112.453 ms

Loss rate: 3.35%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-11 23:51:50

End at: 2017-12-11 23:52:20

Below is generated by plot.py at 2017-12-12 03:46:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.15 Mbit/s

95th percentile per-packet one-way delay: 112.402 ms

Loss rate: 1.32%

-- Flow 1:

Average throughput: 72.10 Mbit/s

95th percentile per-packet one-way delay: 112.380 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 54.24 Mbit/s

95th percentile per-packet one-way delay: 112.389 ms

Loss rate: 1.15%

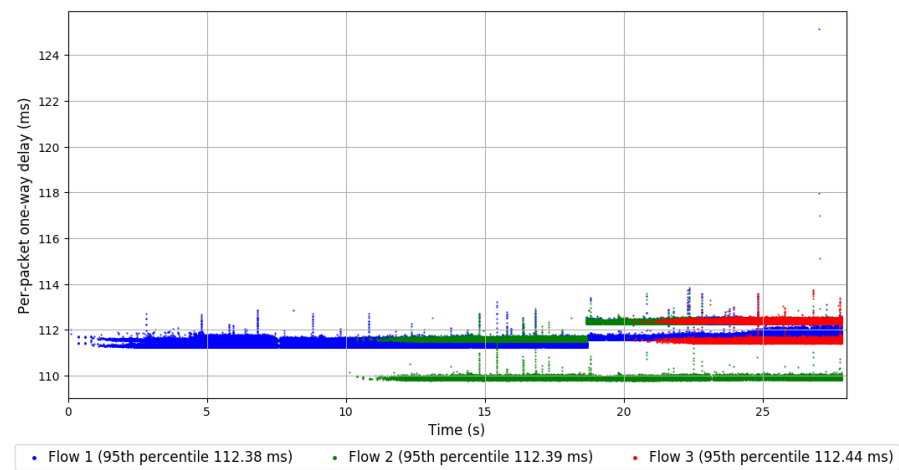
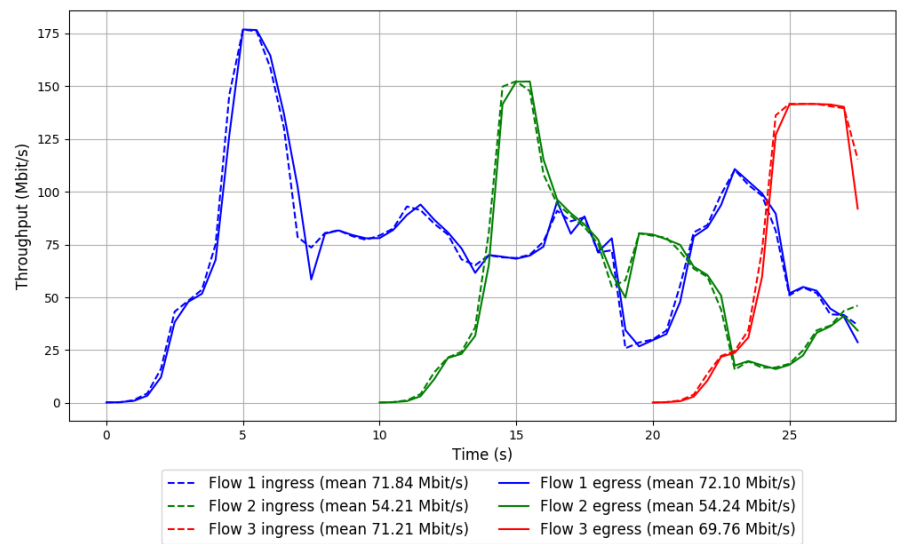
-- Flow 3:

Average throughput: 69.76 Mbit/s

95th percentile per-packet one-way delay: 112.443 ms

Loss rate: 4.77%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-12 00:05:21

End at: 2017-12-12 00:05:52

Below is generated by plot.py at 2017-12-12 03:47:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 145.86 Mbit/s

95th percentile per-packet one-way delay: 112.496 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 83.02 Mbit/s

95th percentile per-packet one-way delay: 112.443 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 76.07 Mbit/s

95th percentile per-packet one-way delay: 112.533 ms

Loss rate: 0.93%

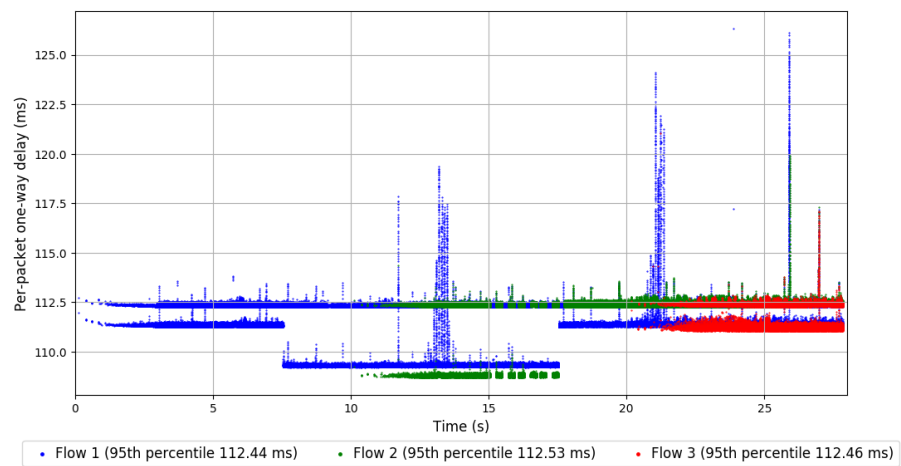
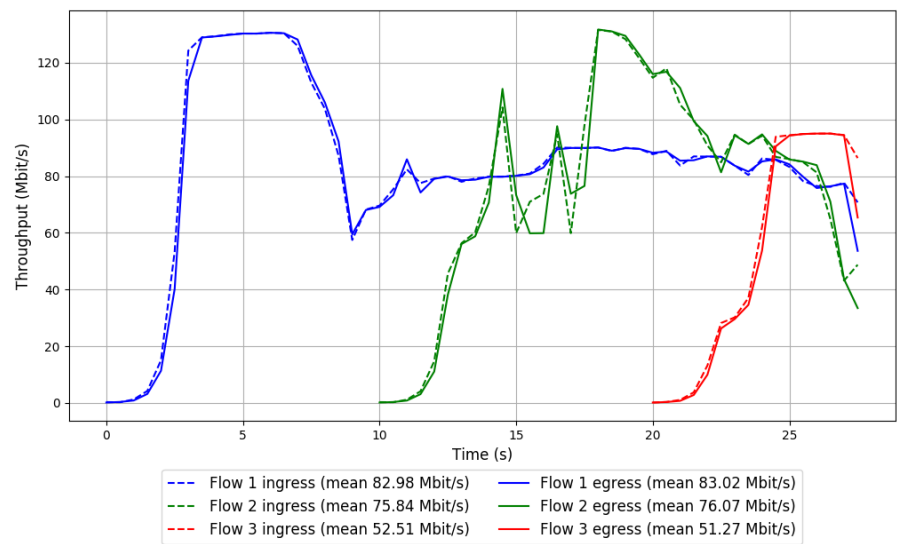
-- Flow 3:

Average throughput: 51.27 Mbit/s

95th percentile per-packet one-way delay: 112.462 ms

Loss rate: 5.11%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-12 00:19:13

End at: 2017-12-12 00:19:43

Below is generated by plot.py at 2017-12-12 03:48:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.26 Mbit/s

95th percentile per-packet one-way delay: 112.398 ms

Loss rate: 1.43%

-- Flow 1:

Average throughput: 74.42 Mbit/s

95th percentile per-packet one-way delay: 112.374 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 62.12 Mbit/s

95th percentile per-packet one-way delay: 112.398 ms

Loss rate: 1.50%

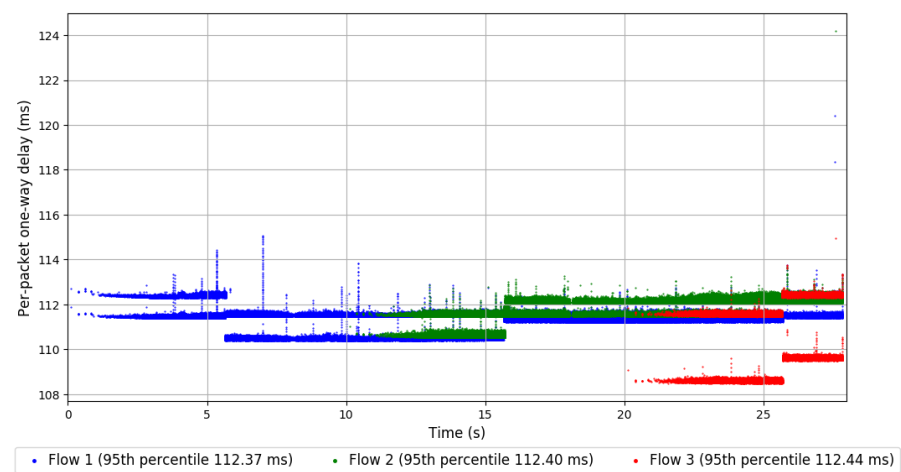
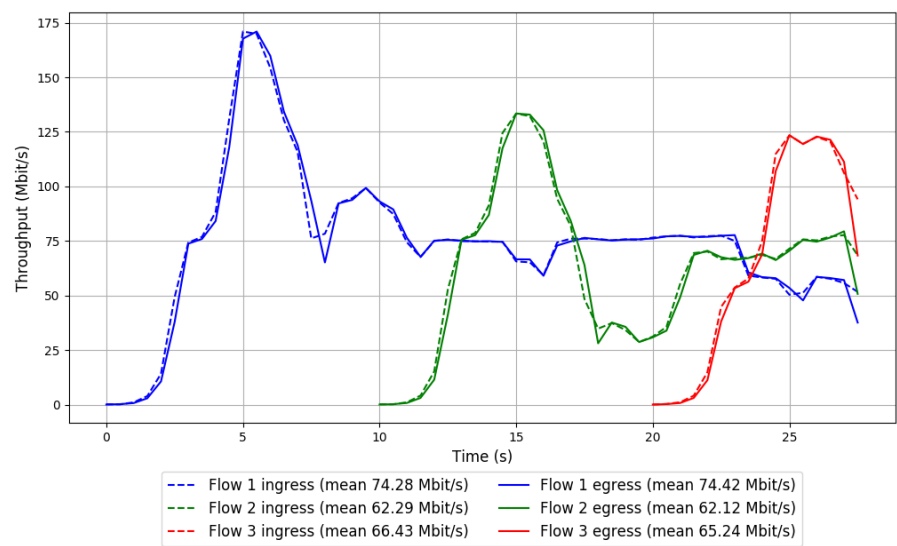
-- Flow 3:

Average throughput: 65.24 Mbit/s

95th percentile per-packet one-way delay: 112.441 ms

Loss rate: 4.49%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-12 00:32:50

End at: 2017-12-12 00:33:20

Below is generated by plot.py at 2017-12-12 03:48:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.39 Mbit/s

95th percentile per-packet one-way delay: 112.428 ms

Loss rate: 1.41%

-- Flow 1:

Average throughput: 74.55 Mbit/s

95th percentile per-packet one-way delay: 112.414 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 53.75 Mbit/s

95th percentile per-packet one-way delay: 112.465 ms

Loss rate: 2.42%

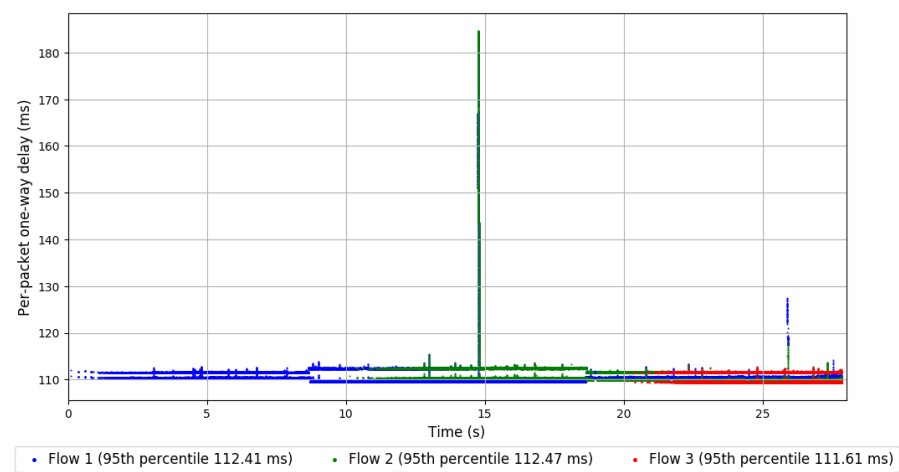
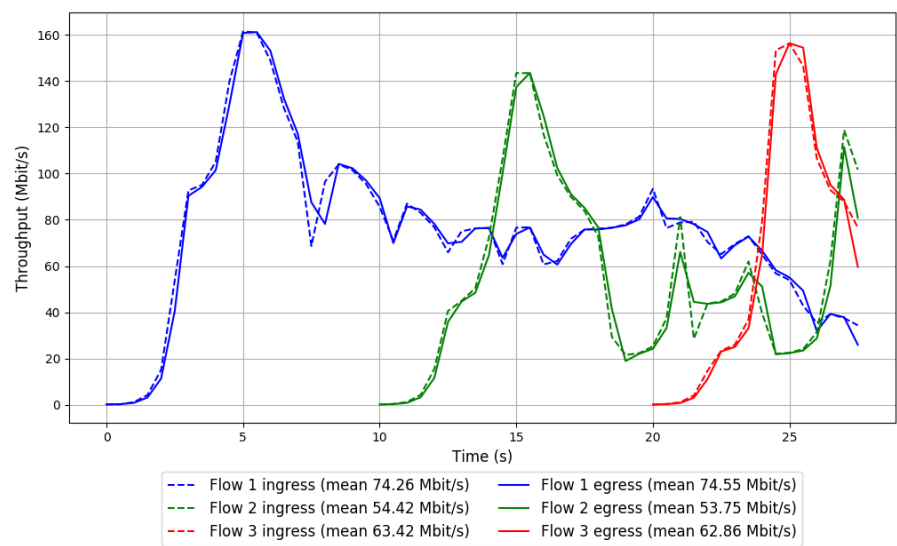
-- Flow 3:

Average throughput: 62.86 Mbit/s

95th percentile per-packet one-way delay: 111.606 ms

Loss rate: 3.61%

Run 10: Report of Copa — Data Link

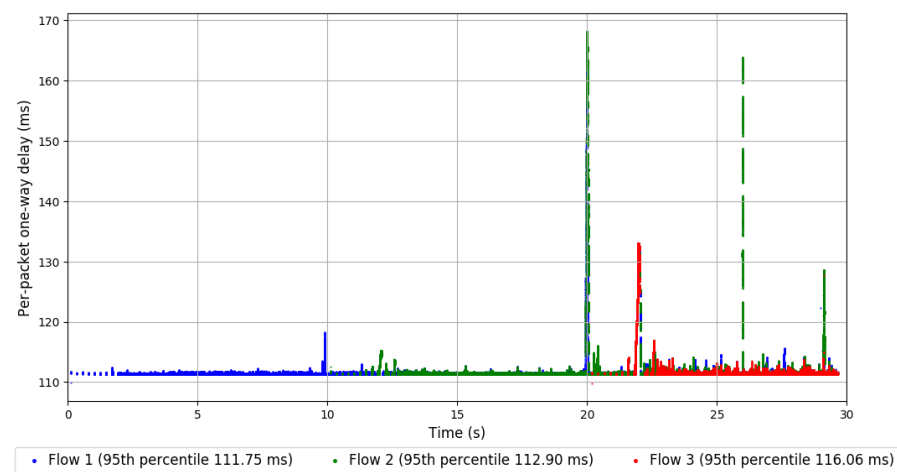
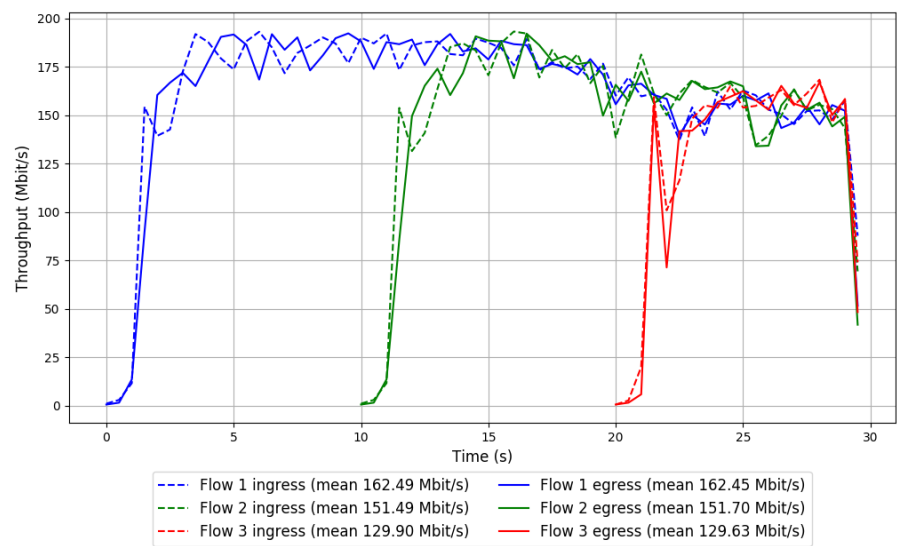


```
Run 1: Statistics of Indigo

Start at: 2017-12-11 22:31:06
End at: 2017-12-11 22:31:36

# Below is generated by plot.py at 2017-12-12 03:50:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 304.26 Mbit/s
95th percentile per-packet one-way delay: 112.258 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 162.45 Mbit/s
95th percentile per-packet one-way delay: 111.750 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 151.70 Mbit/s
95th percentile per-packet one-way delay: 112.900 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 129.63 Mbit/s
95th percentile per-packet one-way delay: 116.063 ms
Loss rate: 2.48%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-11 22:45:08

End at: 2017-12-11 22:45:38

Below is generated by plot.py at 2017-12-12 03:50:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 303.98 Mbit/s

95th percentile per-packet one-way delay: 112.610 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 160.55 Mbit/s

95th percentile per-packet one-way delay: 112.484 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 154.05 Mbit/s

95th percentile per-packet one-way delay: 112.871 ms

Loss rate: 1.17%

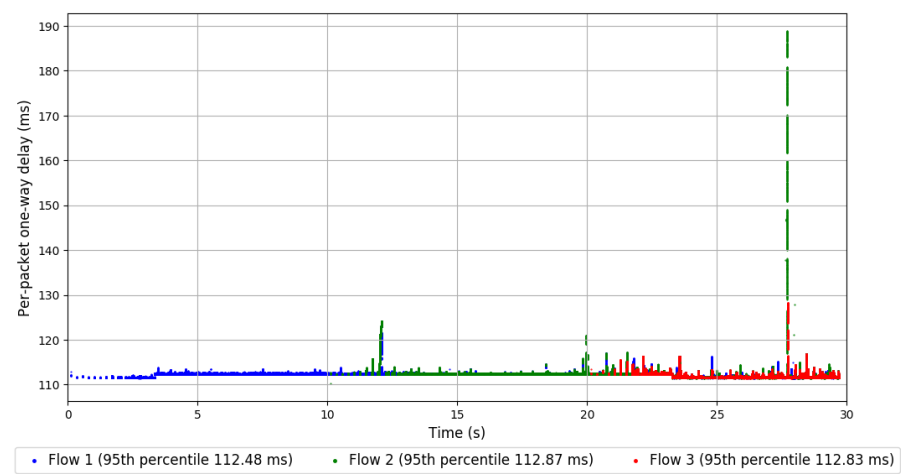
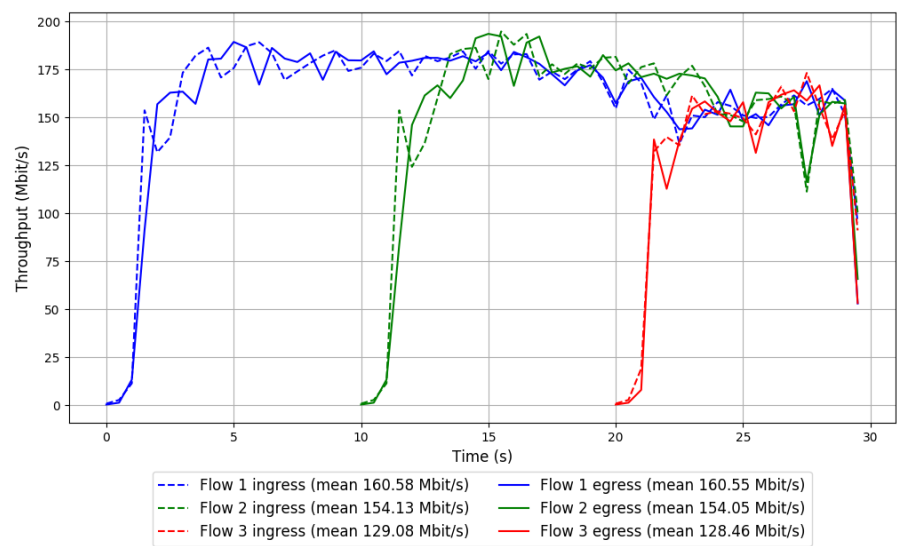
-- Flow 3:

Average throughput: 128.46 Mbit/s

95th percentile per-packet one-way delay: 112.830 ms

Loss rate: 2.76%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-11 22:58:46

End at: 2017-12-11 22:59:16

Below is generated by plot.py at 2017-12-12 03:51:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 309.23 Mbit/s

95th percentile per-packet one-way delay: 113.287 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 165.64 Mbit/s

95th percentile per-packet one-way delay: 112.741 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 154.77 Mbit/s

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

Loss rate: 1.08%

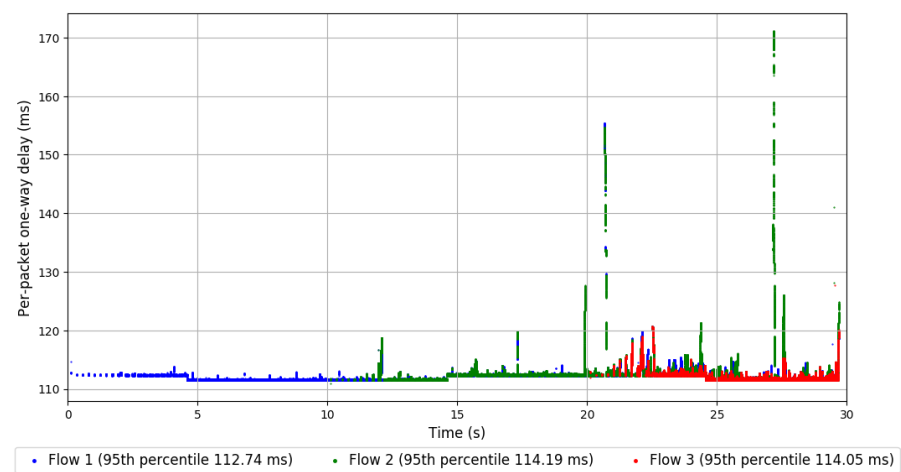
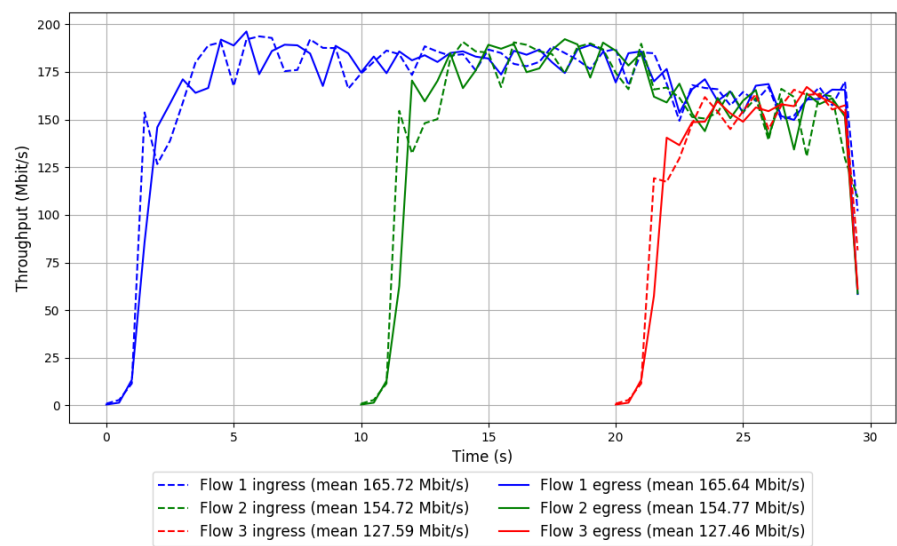
-- Flow 3:

Average throughput: 127.46 Mbit/s

95th percentile per-packet one-way delay: 114.048 ms

Loss rate: 2.37%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-11 23:12:31

End at: 2017-12-11 23:13:01

Below is generated by plot.py at 2017-12-12 03:51:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.03 Mbit/s

95th percentile per-packet one-way delay: 112.665 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 162.70 Mbit/s

95th percentile per-packet one-way delay: 112.520 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 147.27 Mbit/s

95th percentile per-packet one-way delay: 113.029 ms

Loss rate: 1.24%

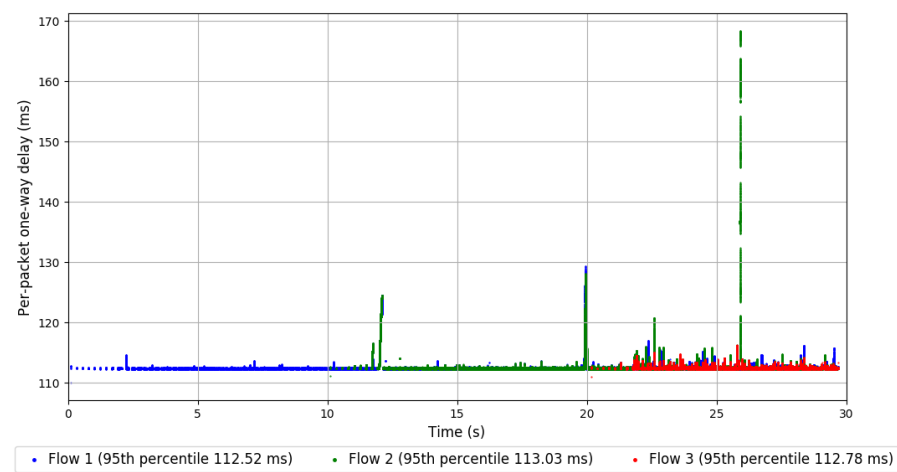
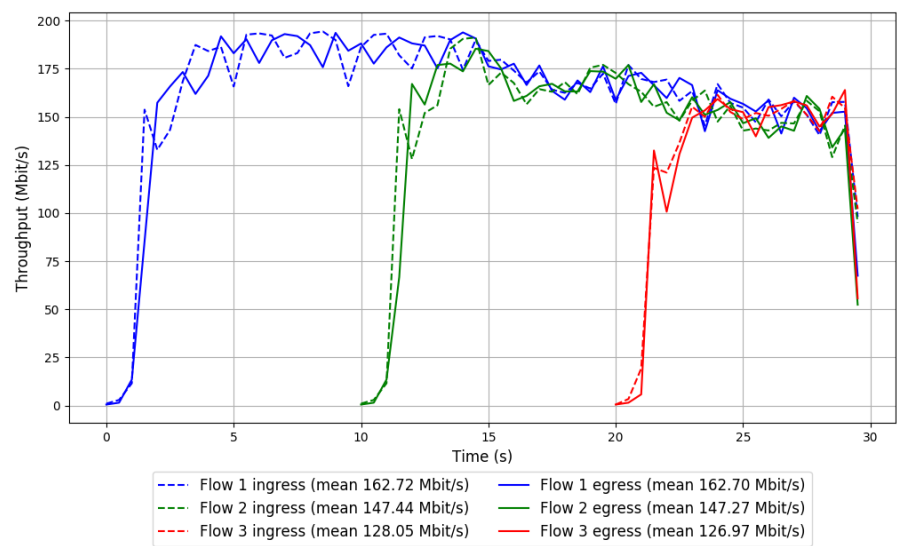
-- Flow 3:

Average throughput: 126.97 Mbit/s

95th percentile per-packet one-way delay: 112.785 ms

Loss rate: 3.08%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-11 23:26:16

End at: 2017-12-11 23:26:46

Below is generated by plot.py at 2017-12-12 03:51:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 311.57 Mbit/s

95th percentile per-packet one-way delay: 113.158 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 164.26 Mbit/s

95th percentile per-packet one-way delay: 112.761 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 160.51 Mbit/s

95th percentile per-packet one-way delay: 113.538 ms

Loss rate: 1.07%

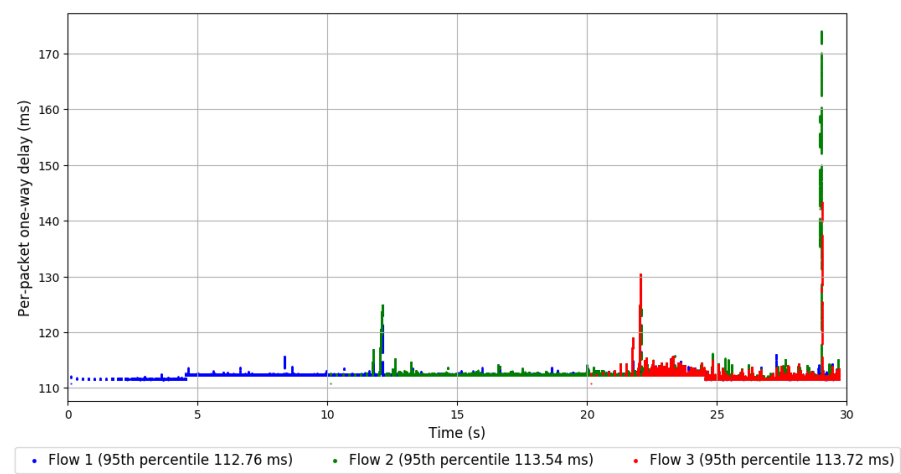
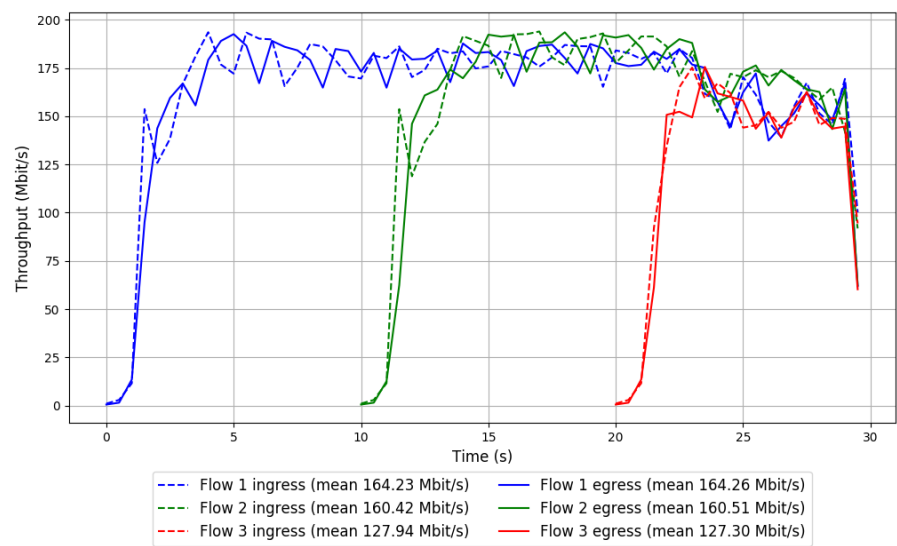
-- Flow 3:

Average throughput: 127.30 Mbit/s

95th percentile per-packet one-way delay: 113.715 ms

Loss rate: 2.79%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-11 23:39:55

End at: 2017-12-11 23:40:25

Below is generated by plot.py at 2017-12-12 03:52:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 296.34 Mbit/s

95th percentile per-packet one-way delay: 112.592 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 162.00 Mbit/s

95th percentile per-packet one-way delay: 112.480 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 154.38 Mbit/s

95th percentile per-packet one-way delay: 112.828 ms

Loss rate: 1.04%

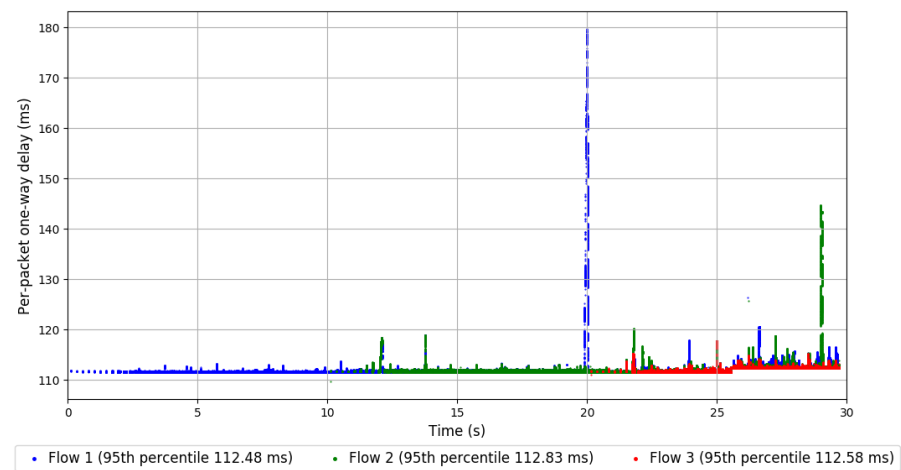
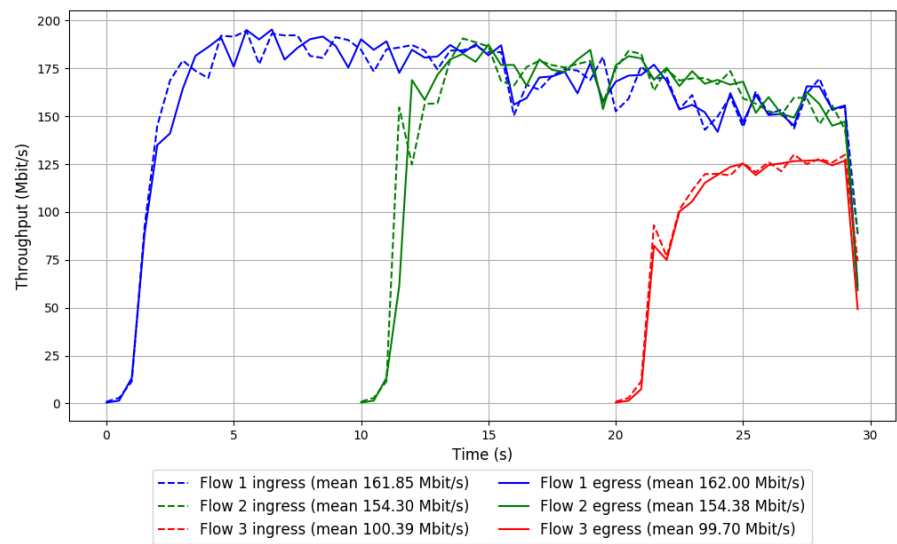
-- Flow 3:

Average throughput: 99.70 Mbit/s

95th percentile per-packet one-way delay: 112.581 ms

Loss rate: 2.90%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-11 23:53:45

End at: 2017-12-11 23:54:15

Below is generated by plot.py at 2017-12-12 03:53:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 299.42 Mbit/s

95th percentile per-packet one-way delay: 112.905 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 160.32 Mbit/s

95th percentile per-packet one-way delay: 112.648 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 150.91 Mbit/s

95th percentile per-packet one-way delay: 113.467 ms

Loss rate: 1.07%

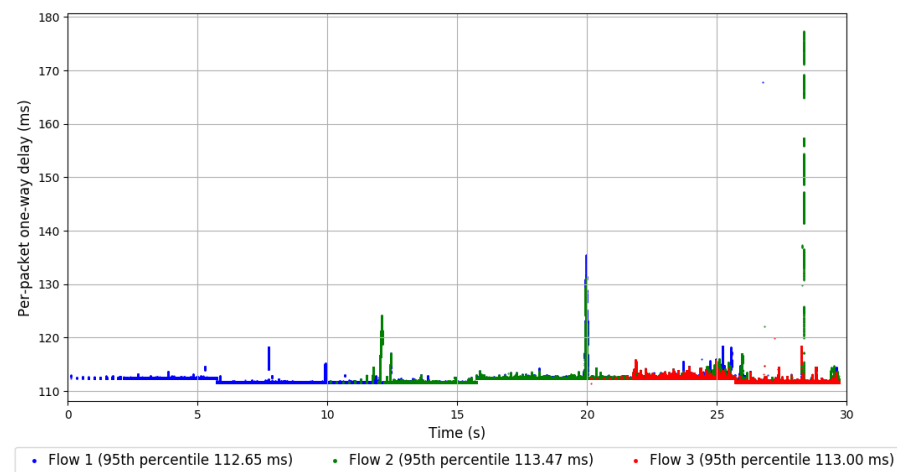
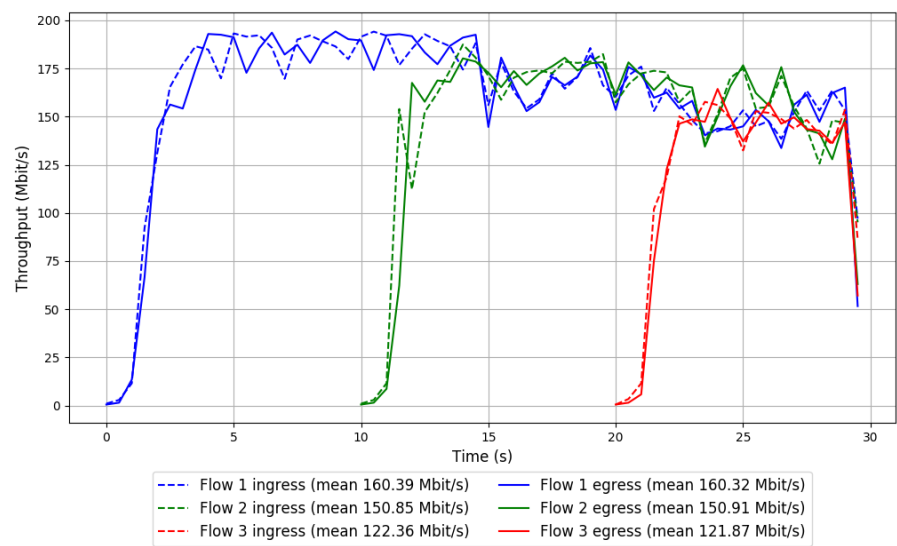
-- Flow 3:

Average throughput: 121.87 Mbit/s

95th percentile per-packet one-way delay: 113.003 ms

Loss rate: 2.66%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-12 00:07:18

End at: 2017-12-12 00:07:48

Below is generated by plot.py at 2017-12-12 03:53:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 293.82 Mbit/s

95th percentile per-packet one-way delay: 112.993 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 158.35 Mbit/s

95th percentile per-packet one-way delay: 112.672 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 148.59 Mbit/s

95th percentile per-packet one-way delay: 113.178 ms

Loss rate: 1.05%

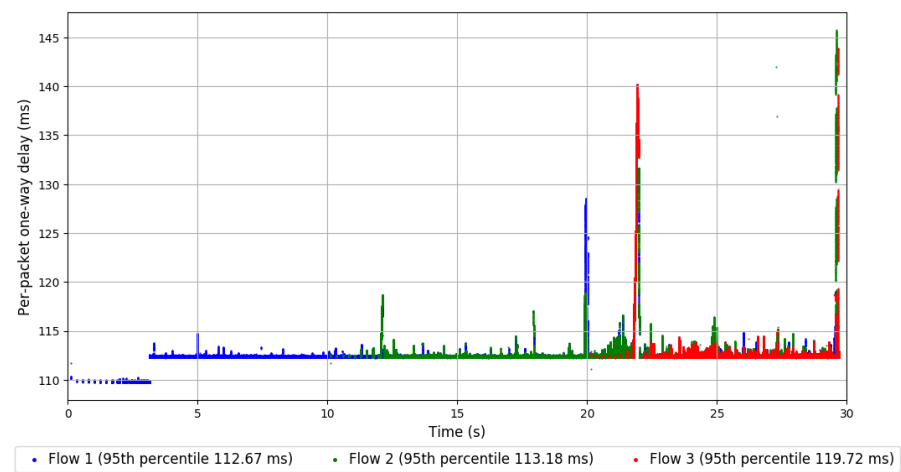
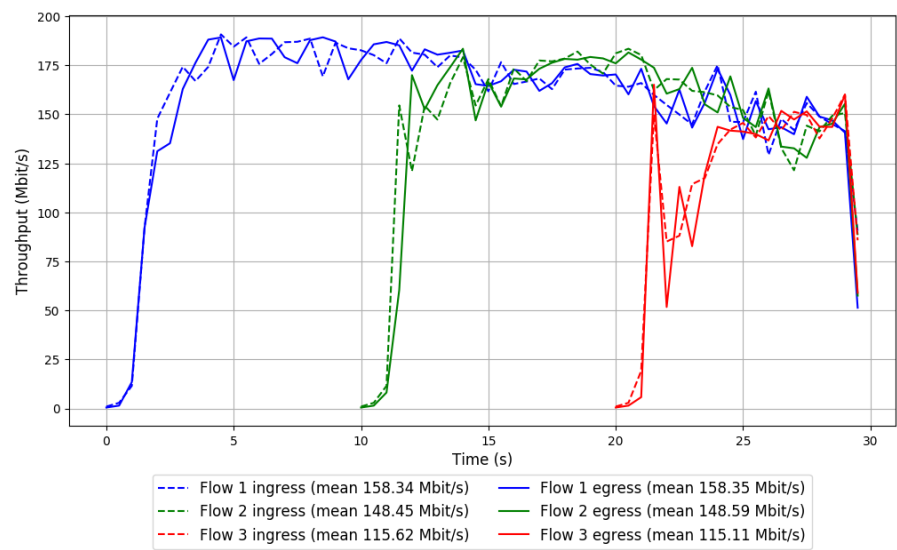
-- Flow 3:

Average throughput: 115.11 Mbit/s

95th percentile per-packet one-way delay: 119.725 ms

Loss rate: 2.74%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-12 00:21:08

End at: 2017-12-12 00:21:38

Below is generated by plot.py at 2017-12-12 03:55:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 297.91 Mbit/s

95th percentile per-packet one-way delay: 112.923 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 157.71 Mbit/s

95th percentile per-packet one-way delay: 112.646 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 150.81 Mbit/s

95th percentile per-packet one-way delay: 113.064 ms

Loss rate: 1.15%

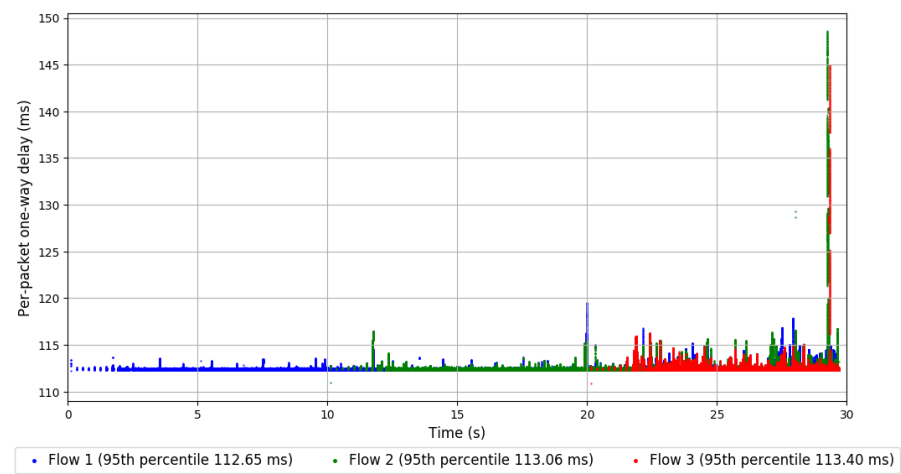
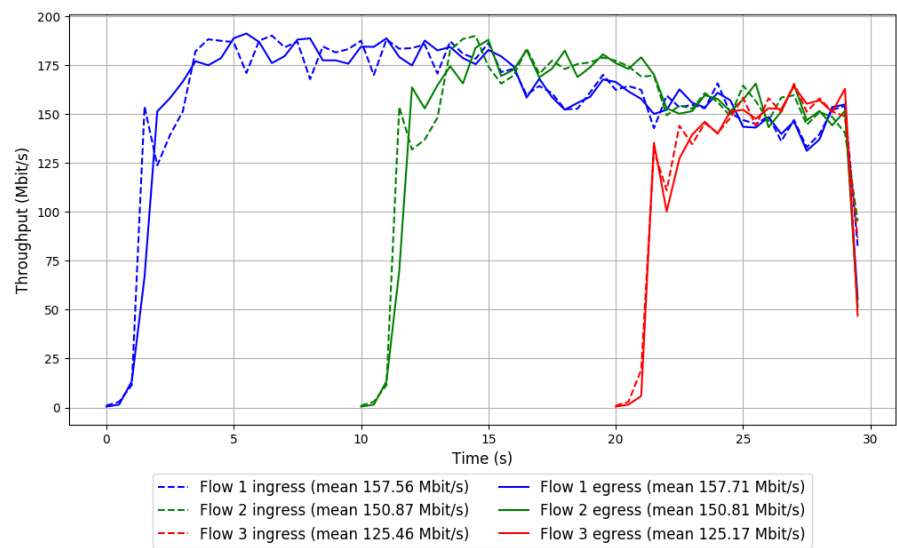
-- Flow 3:

Average throughput: 125.17 Mbit/s

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

Loss rate: 2.48%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-12 00:34:44

End at: 2017-12-12 00:35:14

Below is generated by plot.py at 2017-12-12 03:55:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 302.39 Mbit/s

95th percentile per-packet one-way delay: 113.401 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 161.14 Mbit/s

95th percentile per-packet one-way delay: 112.863 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 153.59 Mbit/s

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

Loss rate: 1.14%

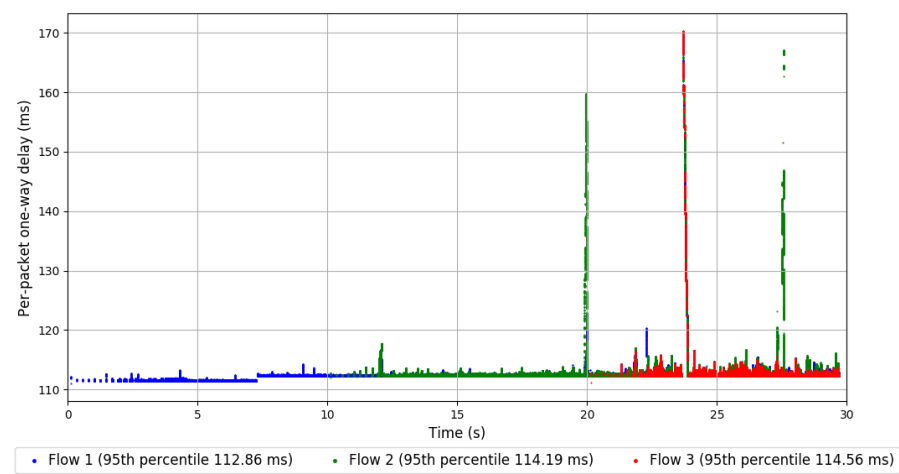
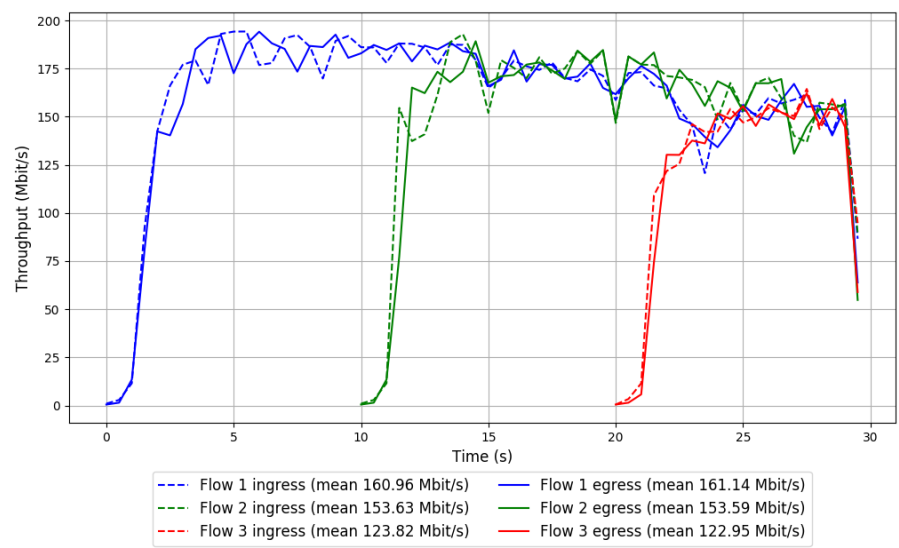
-- Flow 3:

Average throughput: 122.95 Mbit/s

95th percentile per-packet one-way delay: 114.556 ms

Loss rate: 2.95%

Run 10: Report of Indigo — Data Link

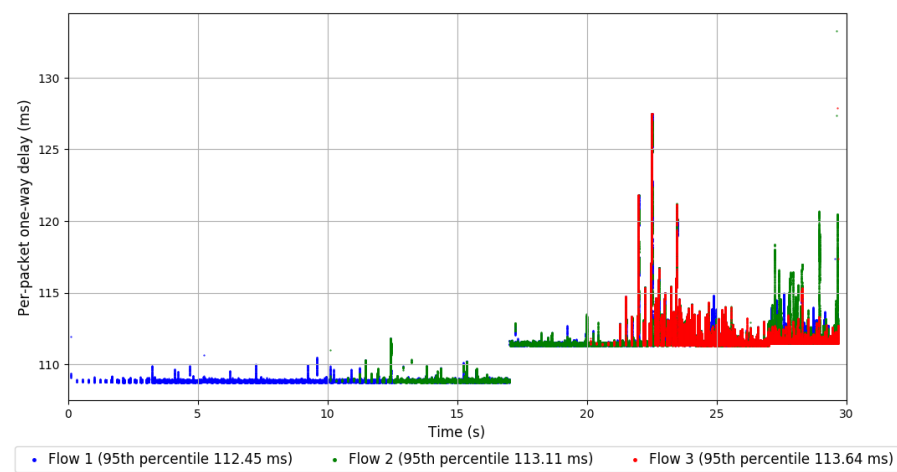
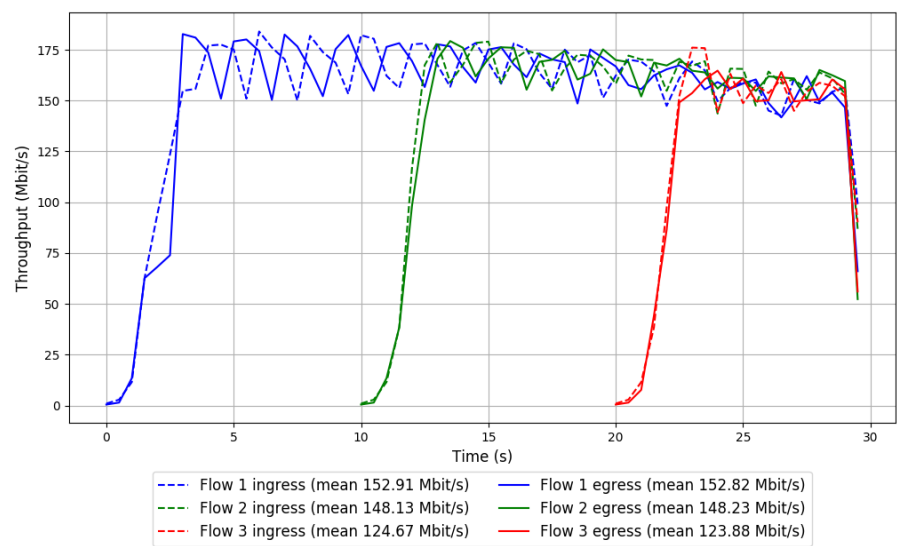


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-11 22:26:44
End at: 2017-12-11 22:27:14

# Below is generated by plot.py at 2017-12-12 03:56:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 290.92 Mbit/s
95th percentile per-packet one-way delay: 112.913 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 152.82 Mbit/s
95th percentile per-packet one-way delay: 112.448 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 148.23 Mbit/s
95th percentile per-packet one-way delay: 113.114 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 123.88 Mbit/s
95th percentile per-packet one-way delay: 113.645 ms
Loss rate: 2.86%
```

Run 1: Report of Indigo-calib — Data Link

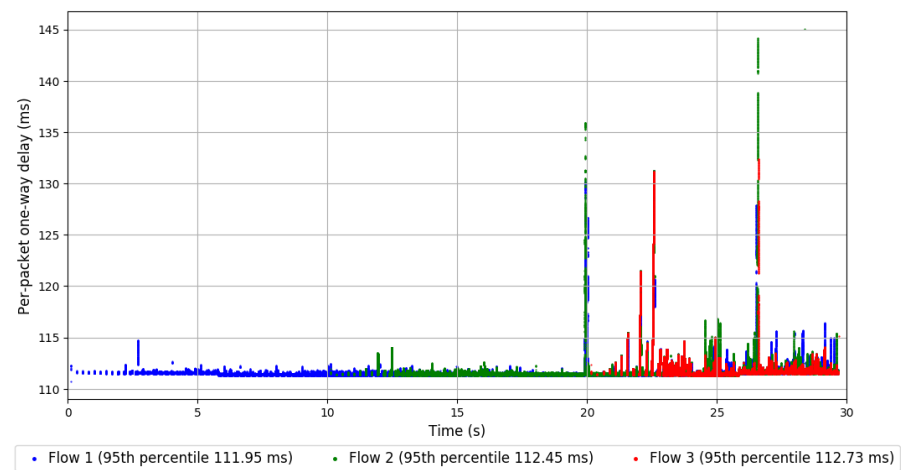
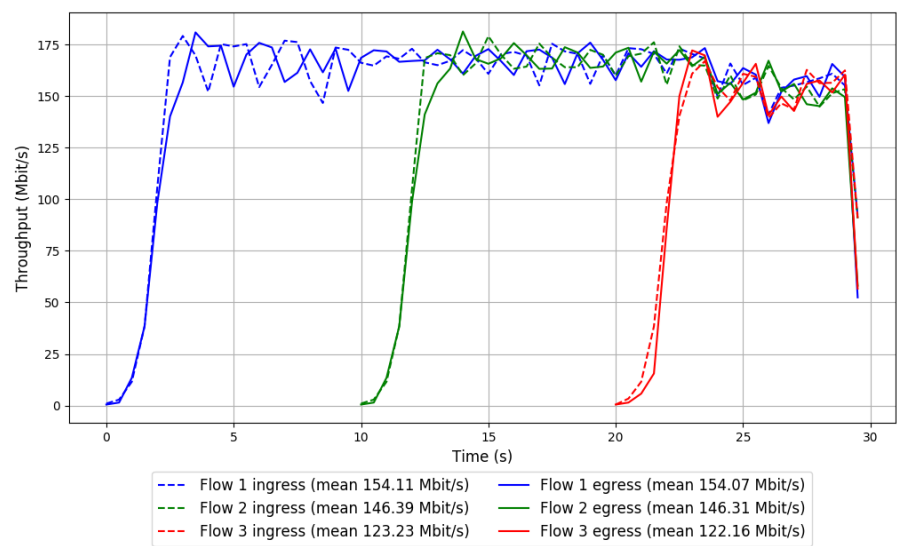


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-11 22:40:25
End at: 2017-12-11 22:40:55

# Below is generated by plot.py at 2017-12-12 03:56:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 290.13 Mbit/s
95th percentile per-packet one-way delay: 112.272 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 154.07 Mbit/s
95th percentile per-packet one-way delay: 111.952 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 146.31 Mbit/s
95th percentile per-packet one-way delay: 112.448 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 122.16 Mbit/s
95th percentile per-packet one-way delay: 112.734 ms
Loss rate: 3.12%
```

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-12-11 22:54:27

End at: 2017-12-11 22:54:57

Below is generated by plot.py at 2017-12-12 03:56:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 286.02 Mbit/s

95th percentile per-packet one-way delay: 113.285 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 149.89 Mbit/s

95th percentile per-packet one-way delay: 112.873 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 143.22 Mbit/s

95th percentile per-packet one-way delay: 113.310 ms

Loss rate: 1.25%

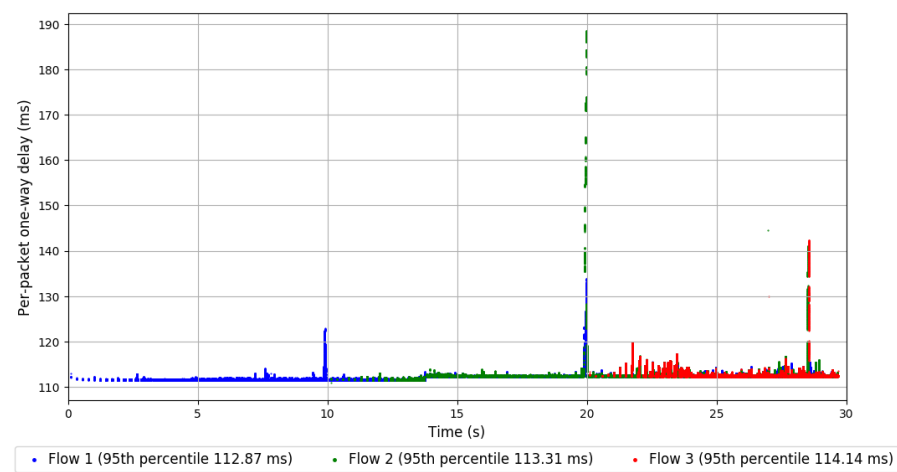
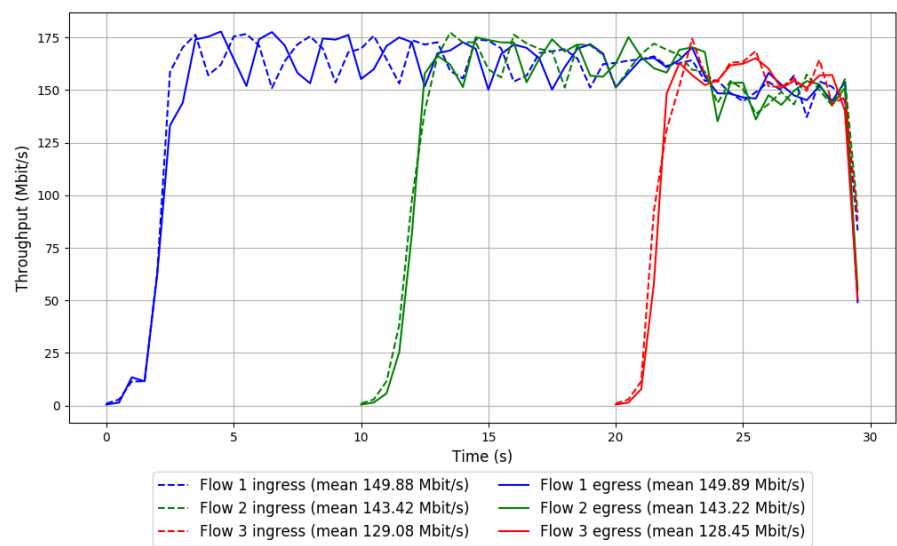
-- Flow 3:

Average throughput: 128.45 Mbit/s

95th percentile per-packet one-way delay: 114.137 ms

Loss rate: 2.74%

Run 3: Report of Indigo-calib — Data Link

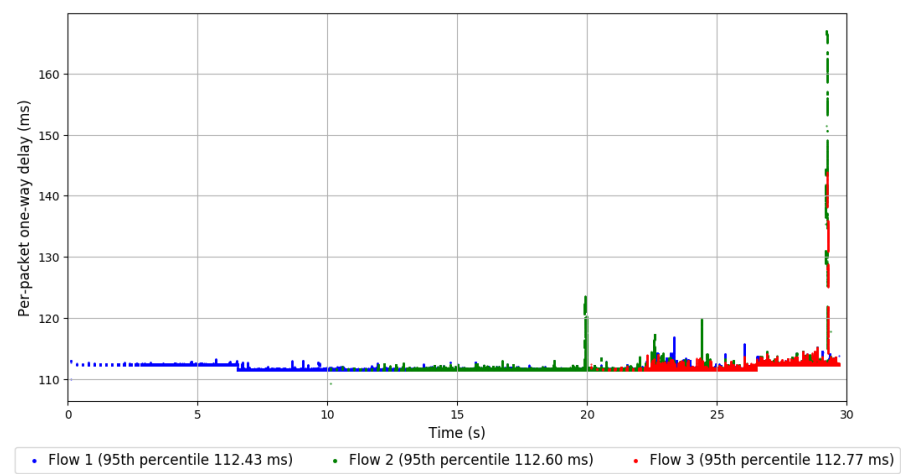
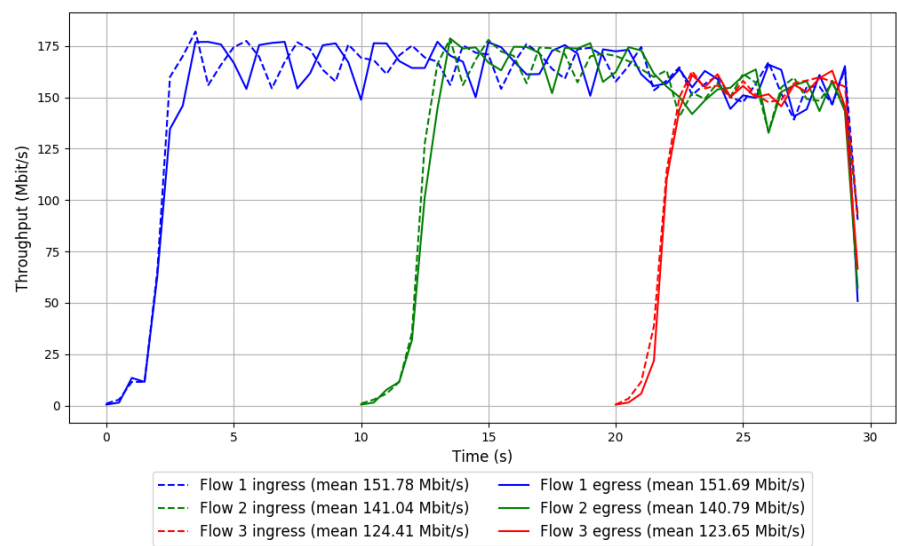


```
Run 4: Statistics of Indigo-calib

Start at: 2017-12-11 23:08:04
End at: 2017-12-11 23:08:34

# Below is generated by plot.py at 2017-12-12 03:57:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 284.67 Mbit/s
95th percentile per-packet one-way delay: 112.510 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 151.69 Mbit/s
95th percentile per-packet one-way delay: 112.428 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 140.79 Mbit/s
95th percentile per-packet one-way delay: 112.604 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 123.65 Mbit/s
95th percentile per-packet one-way delay: 112.772 ms
Loss rate: 2.86%
```

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-12-11 23:21:46

End at: 2017-12-11 23:22:16

Below is generated by plot.py at 2017-12-12 03:57:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 285.61 Mbit/s

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

Loss rate: 1.22%

-- Flow 1:

Average throughput: 150.85 Mbit/s

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

Loss rate: 0.76%

-- Flow 2:

Average throughput: 143.49 Mbit/s

95th percentile per-packet one-way delay: 114.199 ms

Loss rate: 1.25%

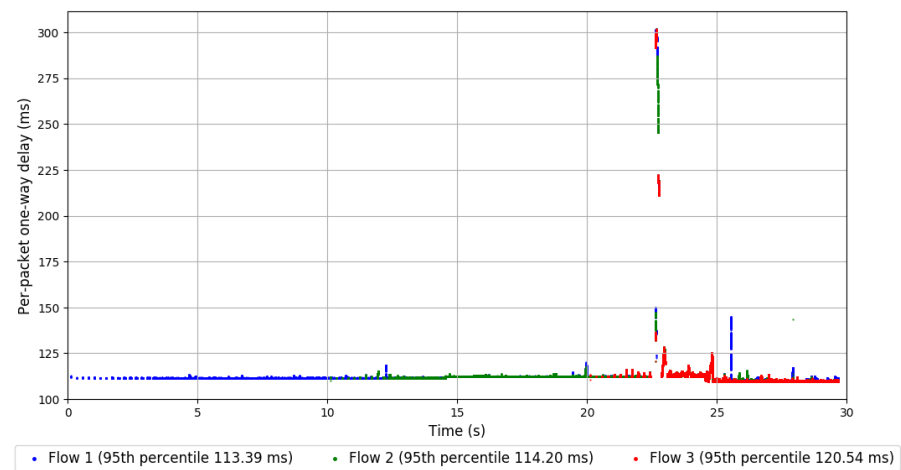
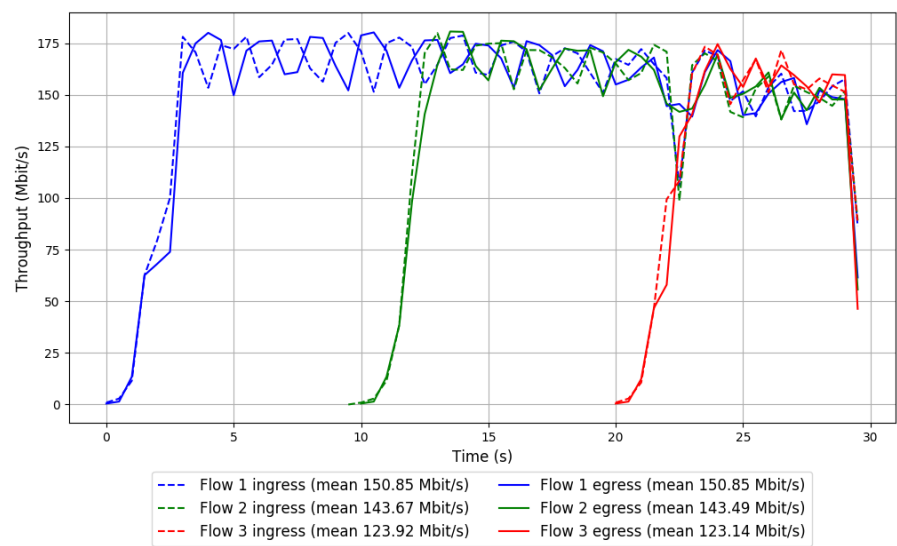
-- Flow 3:

Average throughput: 123.14 Mbit/s

95th percentile per-packet one-way delay: 120.542 ms

Loss rate: 2.89%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-11 23:35:39

End at: 2017-12-11 23:36:09

Below is generated by plot.py at 2017-12-12 03:57:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 260.92 Mbit/s

95th percentile per-packet one-way delay: 134.602 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 147.76 Mbit/s

95th percentile per-packet one-way delay: 132.011 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 138.17 Mbit/s

95th percentile per-packet one-way delay: 134.744 ms

Loss rate: 1.16%

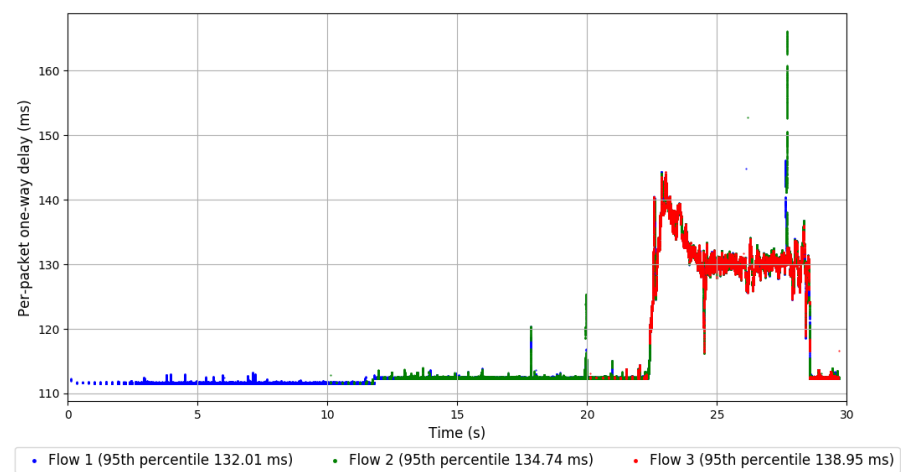
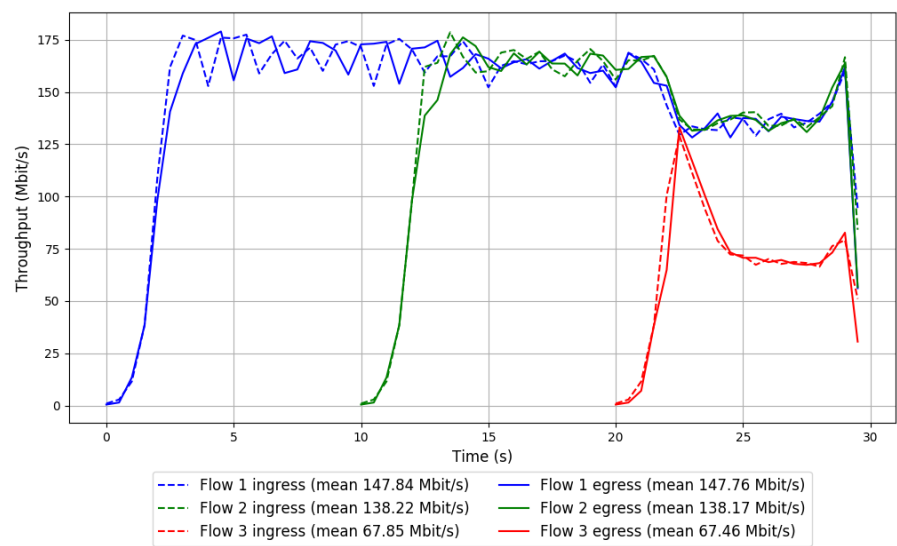
-- Flow 3:

Average throughput: 67.46 Mbit/s

95th percentile per-packet one-way delay: 138.952 ms

Loss rate: 2.79%

Run 6: Report of Indigo-calib — Data Link

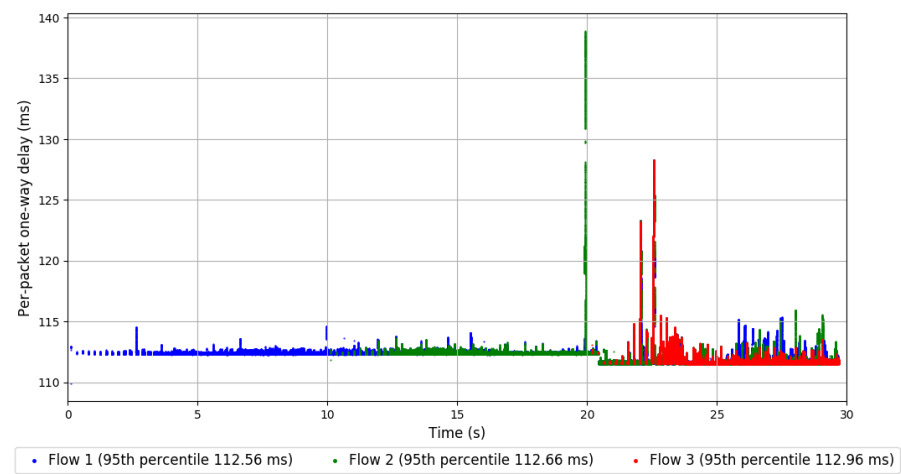
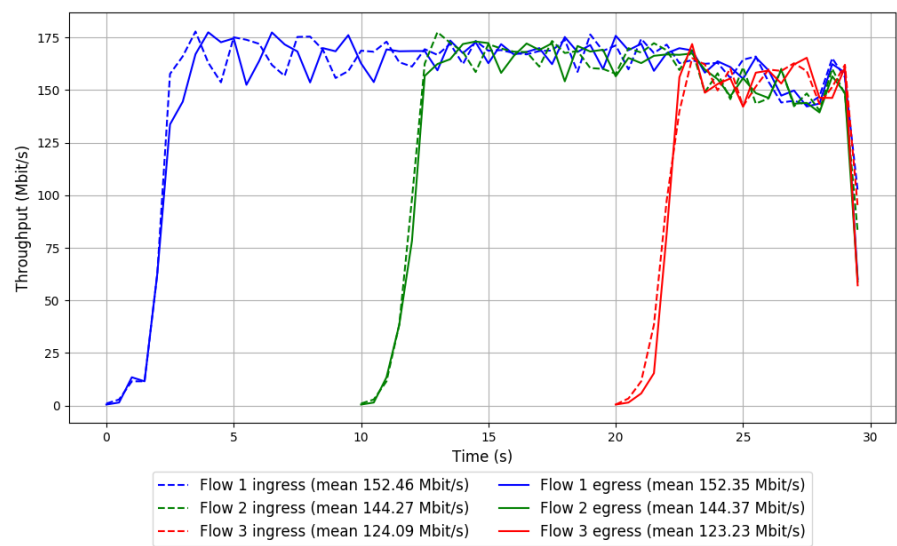


```
Run 7: Statistics of Indigo-calib

Start at: 2017-12-11 23:49:20
End at: 2017-12-11 23:49:50

# Below is generated by plot.py at 2017-12-12 03:58:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 287.42 Mbit/s
95th percentile per-packet one-way delay: 112.623 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 152.35 Mbit/s
95th percentile per-packet one-way delay: 112.560 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 144.37 Mbit/s
95th percentile per-packet one-way delay: 112.664 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 123.23 Mbit/s
95th percentile per-packet one-way delay: 112.964 ms
Loss rate: 3.06%
```


Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-12 00:03:08

End at: 2017-12-12 00:03:38

Below is generated by plot.py at 2017-12-12 03:58:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 287.54 Mbit/s

95th percentile per-packet one-way delay: 112.425 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 152.07 Mbit/s

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

Loss rate: 0.77%

-- Flow 2:

Average throughput: 144.78 Mbit/s

95th percentile per-packet one-way delay: 112.406 ms

Loss rate: 1.13%

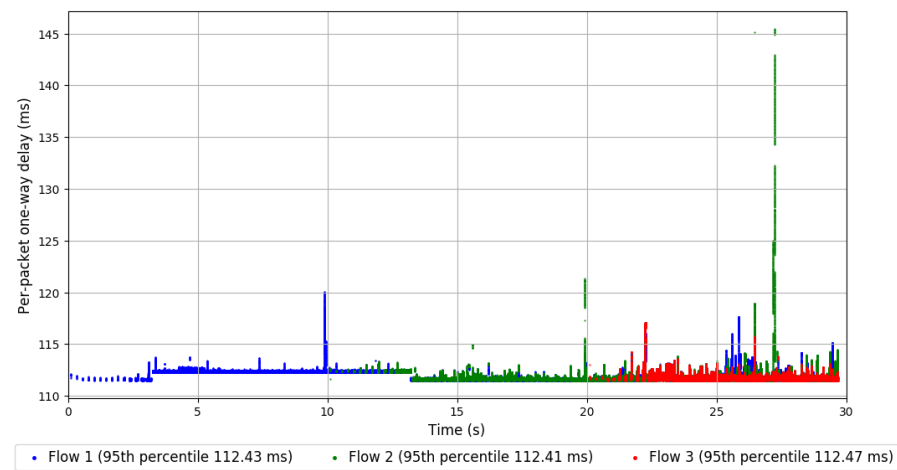
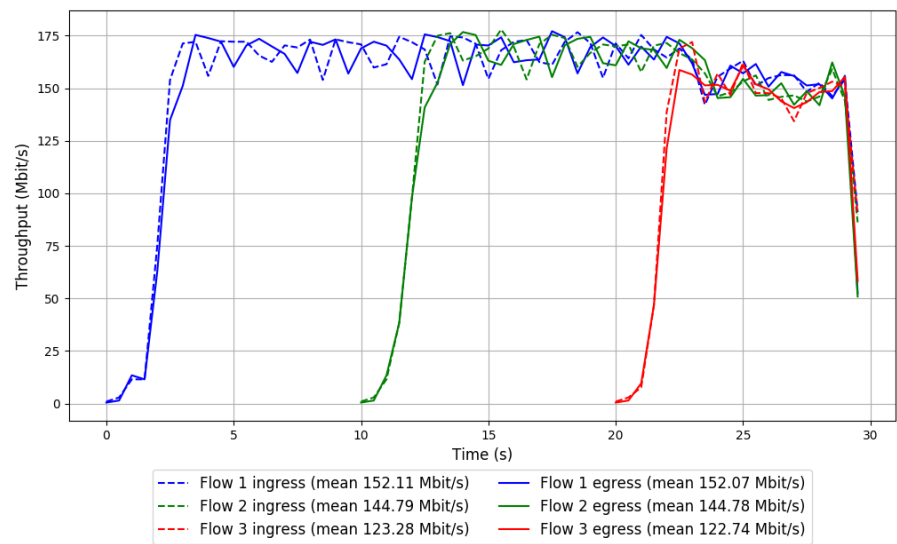
-- Flow 3:

Average throughput: 122.74 Mbit/s

95th percentile per-packet one-way delay: 112.467 ms

Loss rate: 2.76%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-12 00:16:38

End at: 2017-12-12 00:17:08

Below is generated by plot.py at 2017-12-12 03:58:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 287.48 Mbit/s

95th percentile per-packet one-way delay: 113.437 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 151.00 Mbit/s

95th percentile per-packet one-way delay: 112.894 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 147.05 Mbit/s

95th percentile per-packet one-way delay: 113.650 ms

Loss rate: 1.17%

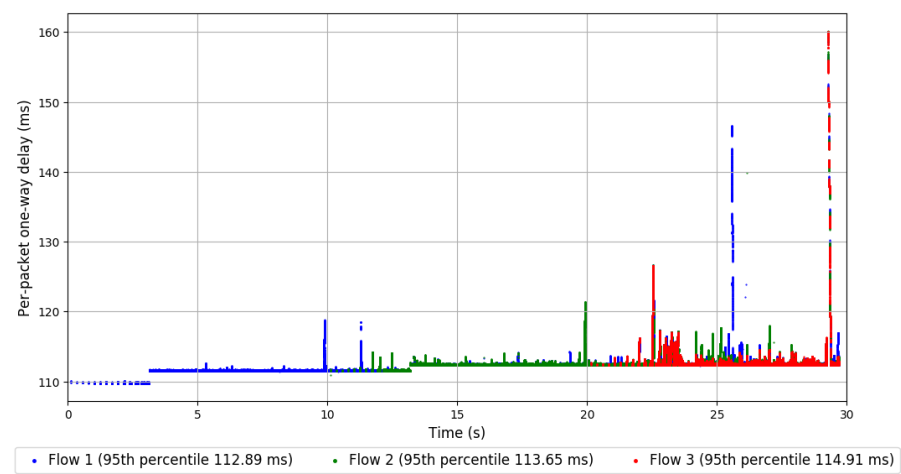
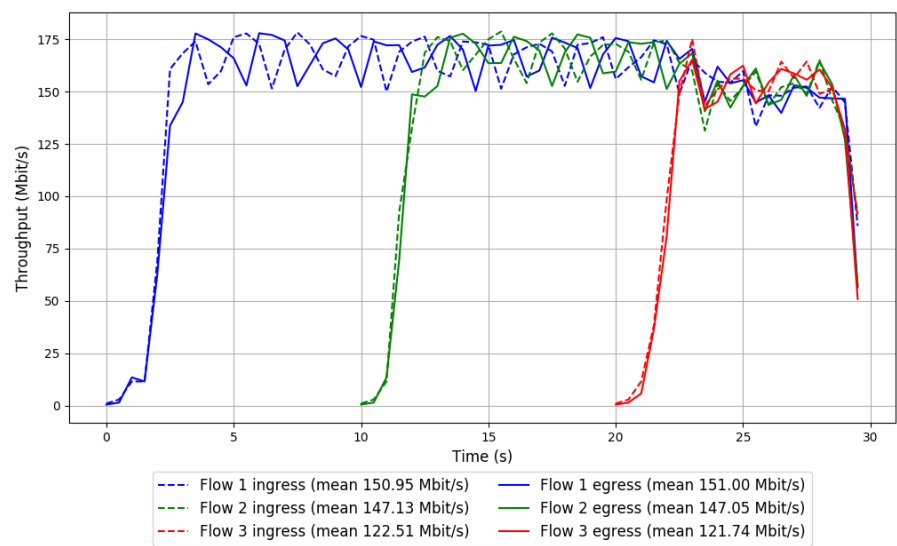
-- Flow 3:

Average throughput: 121.74 Mbit/s

95th percentile per-packet one-way delay: 114.908 ms

Loss rate: 2.89%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-12 00:30:16

End at: 2017-12-12 00:30:46

Below is generated by plot.py at 2017-12-12 03:58:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 281.25 Mbit/s

95th percentile per-packet one-way delay: 112.390 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 149.08 Mbit/s

95th percentile per-packet one-way delay: 112.393 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 141.69 Mbit/s

95th percentile per-packet one-way delay: 112.240 ms

Loss rate: 1.21%

-- Flow 3:

Average throughput: 119.65 Mbit/s

95th percentile per-packet one-way delay: 112.401 ms

Loss rate: 3.05%

Run 10: Report of Indigo-calib — Data Link

