

## Pantheon Report

Generated at 2017-08-21 05:21:29 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

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

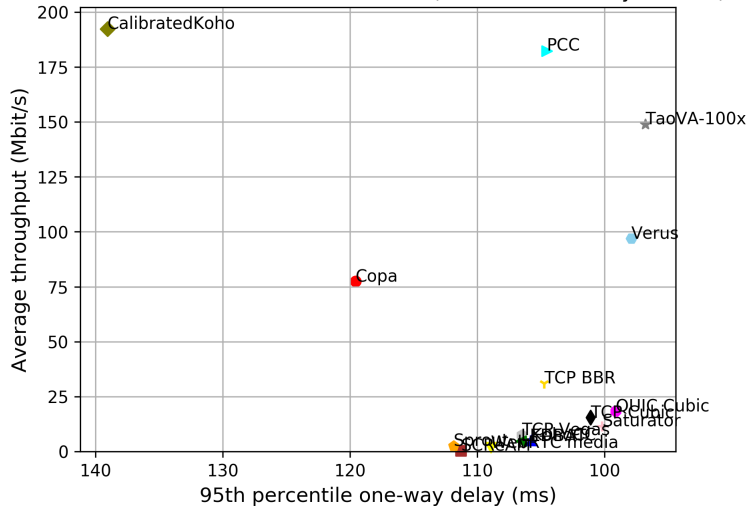
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

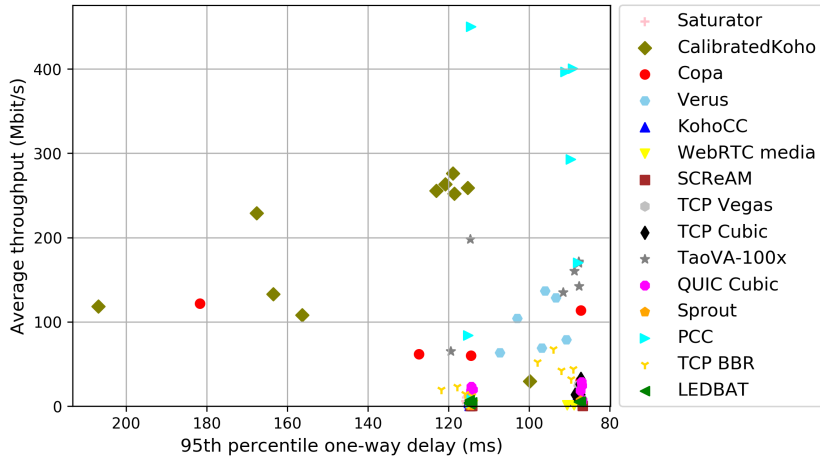
Git summary:

```
branch: master @ e43be7582298d552838afcf6382342bf187fbbd6
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ dae96123232f1bcb37725348fa2378691ce26725
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-stimuli @ fc73a85ca16c34366d1888dc8a0d0d88d4ebf2a7
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 Iowa Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme  
 3 flows with 10s interval between flows (mean of all runs by scheme)



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	15.46	15.79	15.56	103.34	108.98	105.69	29.30	34.99	34.74
CalibratedKoho	10	131.83	80.76	20.58	123.54	131.67	110.12	30.95	38.40	51.43
Copa	5	40.12	74.46	51.21	95.51	119.42	95.37	56.37	19.65	37.55
TCP Cubic	10	10.63	4.77	4.97	101.09	106.52	106.51	2.35	17.98	20.88
KohoCC	9	2.29	2.83	3.05	108.68	105.66	102.52	62.99	53.35	49.01
LEDBAT	10	2.58	2.49	1.58	106.70	106.62	109.35	3.42	7.57	9.75
PCC	10	132.72	37.43	75.66	107.87	103.83	102.46	21.23	48.72	33.09
QUIC Cubic	9	0.05	17.78	20.50	102.01	99.28	91.28	0.00	0.09	0.03
Saturator	9	8.83	8.91	9.07	103.10	103.18	100.15	22.42	22.31	19.10
SCReAM	9	0.21	0.22	0.22	105.18	93.02	93.02	0.04	0.00	0.08
Sprout	10	1.20	1.56	1.05	109.17	111.83	111.67	3.19	1.34	3.17
TaoVA-100x	7	107.54	108.50	57.42	99.70	88.30	95.85	18.07	26.33	39.60
TCP Vegas	10	3.00	4.20	5.29	106.51	103.79	103.90	1.67	1.49	7.99
Verus	6	72.64	20.79	33.55	98.73	108.76	97.28	26.29	70.39	37.40
WebRTC media	9	0.25	1.73	0.36	111.02	90.71	111.51	0.00	0.00	0.40

Run 1: Statistics of TCP BBR

Start at: 2017-08-21 01:57:35

End at: 2017-08-21 01:58:05

# Below is generated by plot.py at 2017-08-21 05:08:02

# Datalink statistics

-- Total of 3 flows:

Average throughput: 67.70 Mbit/s

95th percentile per-packet one-way delay: 93.977 ms

Loss rate: 15.15%

-- Flow 1:

Average throughput: 16.02 Mbit/s

95th percentile per-packet one-way delay: 88.540 ms

Loss rate: 29.93%

-- Flow 2:

Average throughput: 60.25 Mbit/s

95th percentile per-packet one-way delay: 95.674 ms

Loss rate: 5.68%

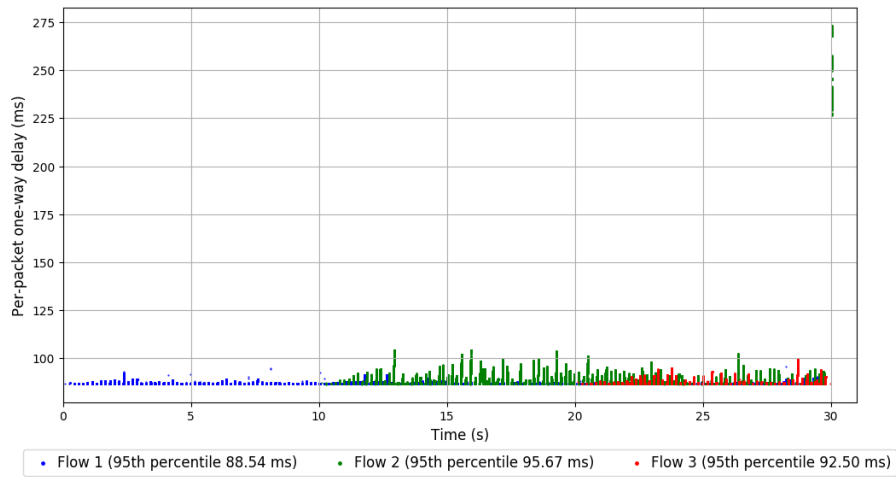
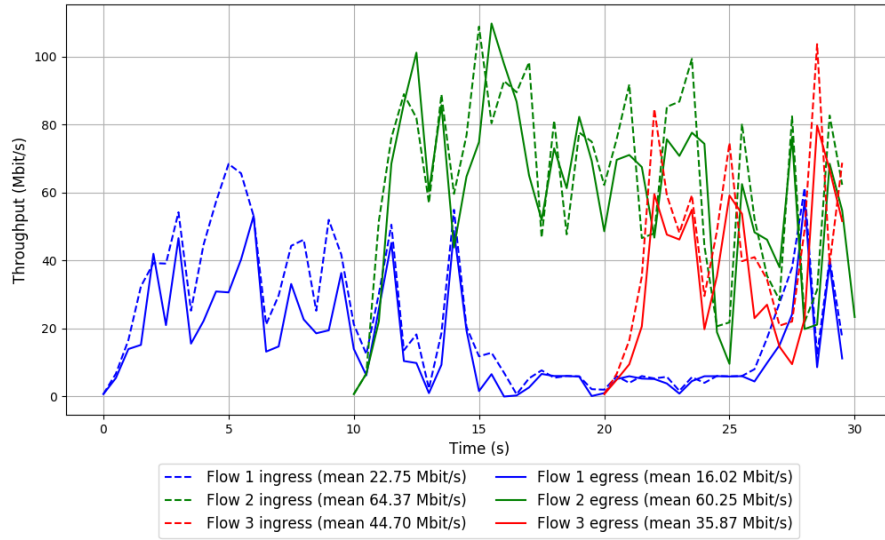
-- Flow 3:

Average throughput: 35.87 Mbit/s

95th percentile per-packet one-way delay: 92.496 ms

Loss rate: 19.81%

### Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-08-21 02:11:18

End at: 2017-08-21 02:11:48

# Below is generated by plot.py at 2017-08-21 05:08:02

# Datalink statistics

-- Total of 3 flows:

Average throughput: 44.20 Mbit/s

95th percentile per-packet one-way delay: 89.113 ms

Loss rate: 34.35%

-- Flow 1:

Average throughput: 17.43 Mbit/s

95th percentile per-packet one-way delay: 88.339 ms

Loss rate: 43.57%

-- Flow 2:

Average throughput: 27.36 Mbit/s

95th percentile per-packet one-way delay: 89.421 ms

Loss rate: 25.92%

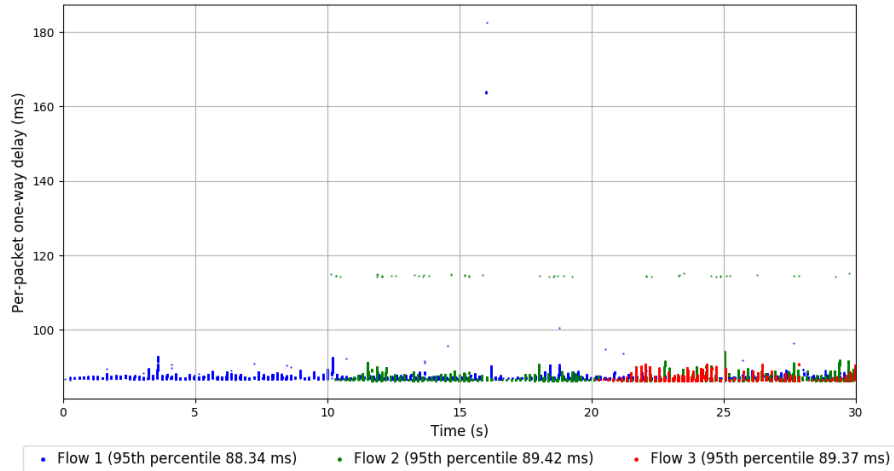
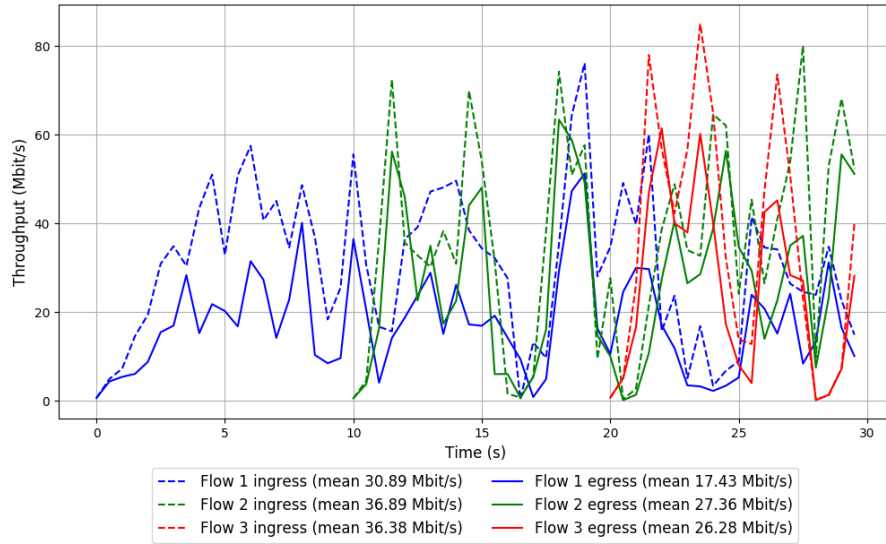
-- Flow 3:

Average throughput: 26.28 Mbit/s

95th percentile per-packet one-way delay: 89.369 ms

Loss rate: 27.79%

## Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-08-21 02:24:37

End at: 2017-08-21 02:25:07

# Below is generated by plot.py at 2017-08-21 05:08:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 42.44 Mbit/s

95th percentile per-packet one-way delay: 92.050 ms

Loss rate: 25.71%

-- Flow 1:

Average throughput: 24.45 Mbit/s

95th percentile per-packet one-way delay: 91.417 ms

Loss rate: 25.53%

-- Flow 2:

Average throughput: 27.07 Mbit/s

95th percentile per-packet one-way delay: 92.549 ms

Loss rate: 25.89%

-- Flow 3:

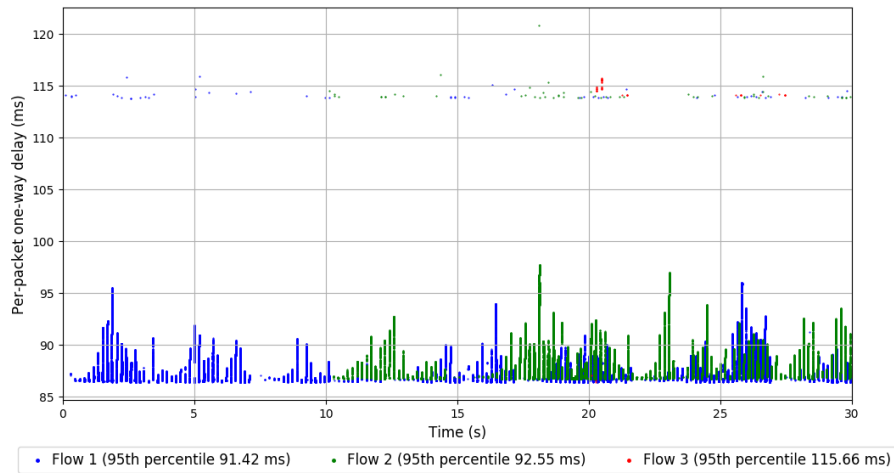
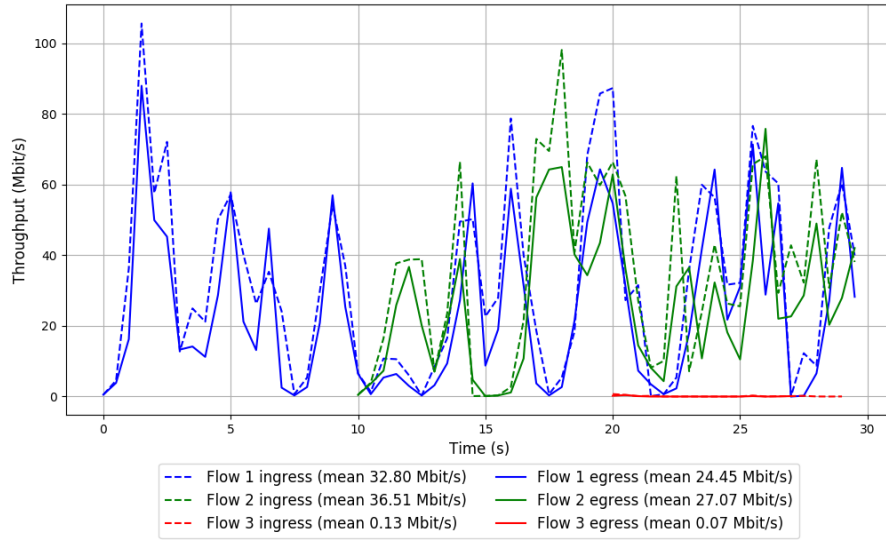
Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 115.655 ms

Loss rate: 55.09%



### Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-08-21 02:36:55

End at: 2017-08-21 02:37:25

# Below is generated by plot.py at 2017-08-21 05:08:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 32.10 Mbit/s

95th percentile per-packet one-way delay: 89.637 ms

Loss rate: 27.97%

-- Flow 1:

Average throughput: 23.80 Mbit/s

95th percentile per-packet one-way delay: 89.722 ms

Loss rate: 27.78%

-- Flow 2:

Average throughput: 0.17 Mbit/s

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

Loss rate: 53.96%

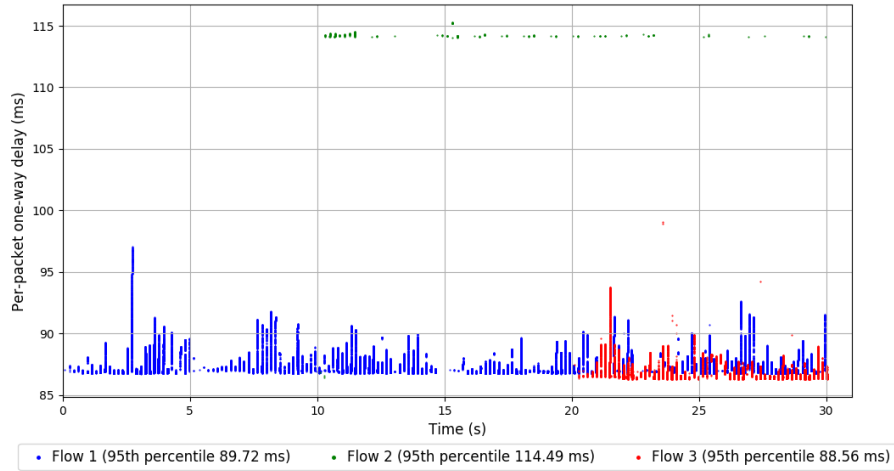
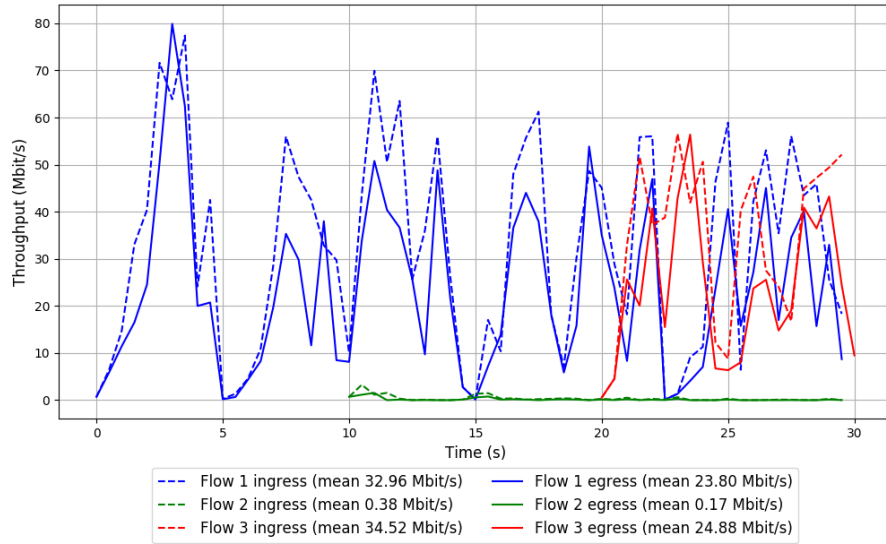
-- Flow 3:

Average throughput: 24.88 Mbit/s

95th percentile per-packet one-way delay: 88.563 ms

Loss rate: 27.93%

### Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-08-21 02:48:53

End at: 2017-08-21 02:49:23

# Below is generated by plot.py at 2017-08-21 05:08:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 14.76 Mbit/s

95th percentile per-packet one-way delay: 115.876 ms

Loss rate: 33.56%

-- Flow 1:

Average throughput: 1.08 Mbit/s

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

Loss rate: 33.87%

-- Flow 2:

Average throughput: 20.39 Mbit/s

95th percentile per-packet one-way delay: 115.930 ms

Loss rate: 33.28%

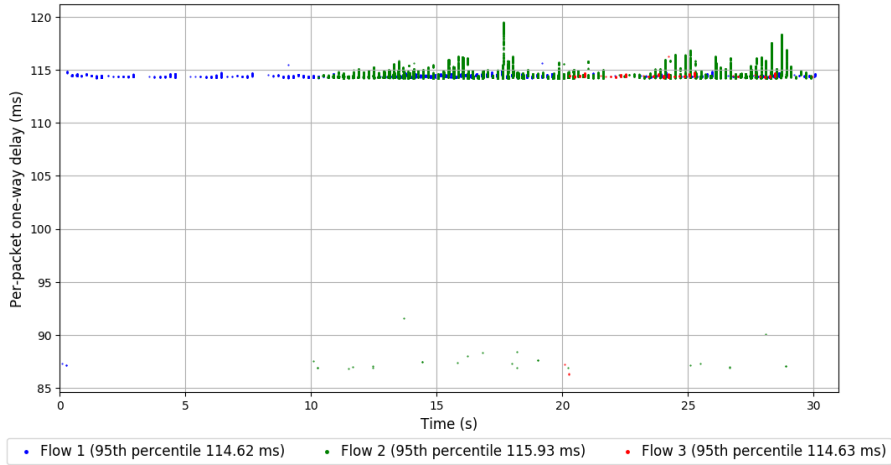
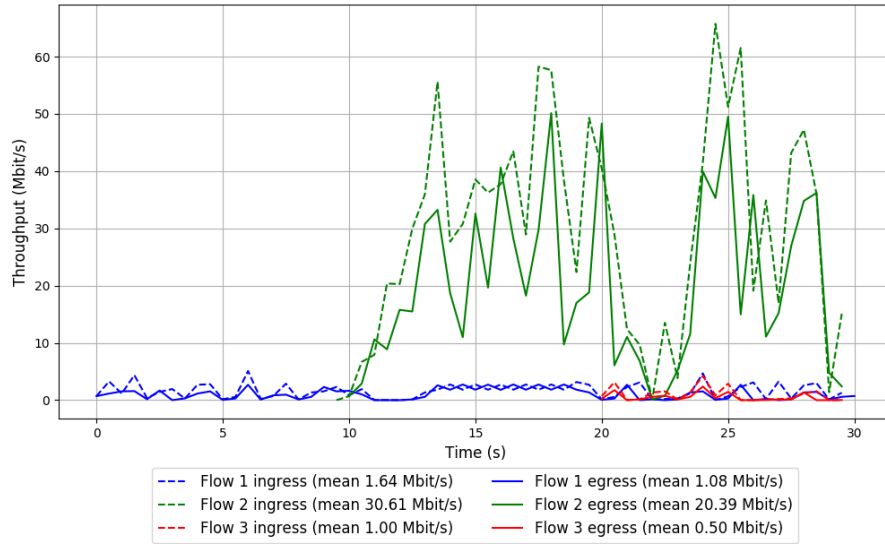
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 114.631 ms

Loss rate: 49.25%

### Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-08-21 03:00:12

End at: 2017-08-21 03:00:42

# Below is generated by plot.py at 2017-08-21 05:08:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 23.16 Mbit/s

95th percentile per-packet one-way delay: 117.898 ms

Loss rate: 36.12%

-- Flow 1:

Average throughput: 16.82 Mbit/s

95th percentile per-packet one-way delay: 118.307 ms

Loss rate: 35.65%

-- Flow 2:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 114.890 ms

Loss rate: 47.39%

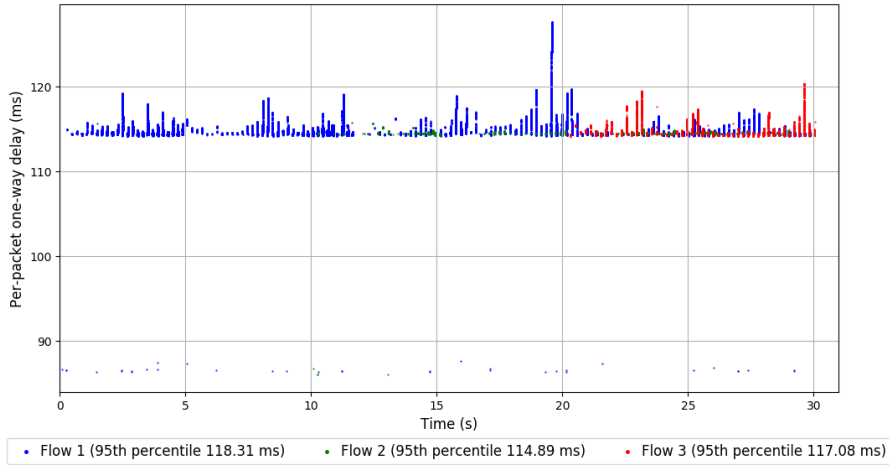
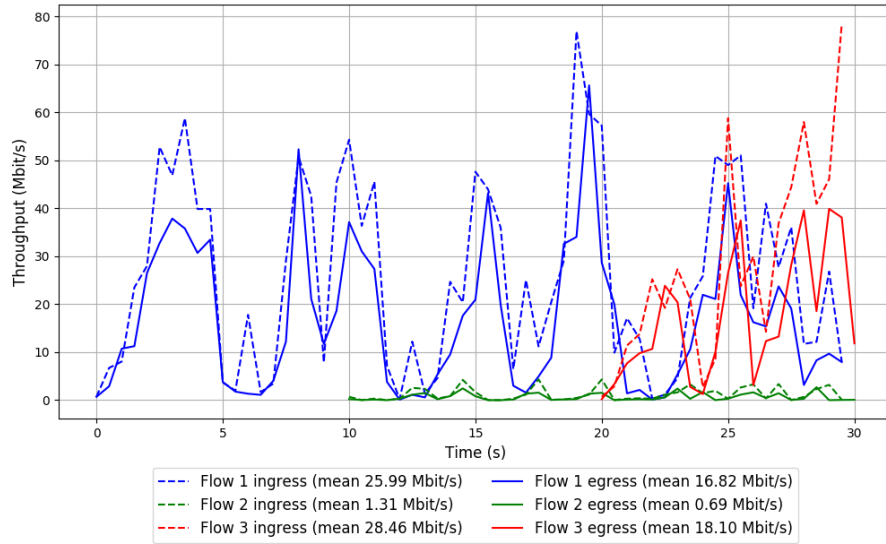
-- Flow 3:

Average throughput: 18.10 Mbit/s

95th percentile per-packet one-way delay: 117.082 ms

Loss rate: 36.40%

### Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-08-21 03:11:51

End at: 2017-08-21 03:12:21

# Below is generated by plot.py at 2017-08-21 05:08:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 19.71 Mbit/s

95th percentile per-packet one-way delay: 121.817 ms

Loss rate: 28.72%

-- Flow 1:

Average throughput: 0.74 Mbit/s

95th percentile per-packet one-way delay: 115.199 ms

Loss rate: 30.80%

-- Flow 2:

Average throughput: 20.56 Mbit/s

95th percentile per-packet one-way delay: 122.558 ms

Loss rate: 24.95%

-- Flow 3:

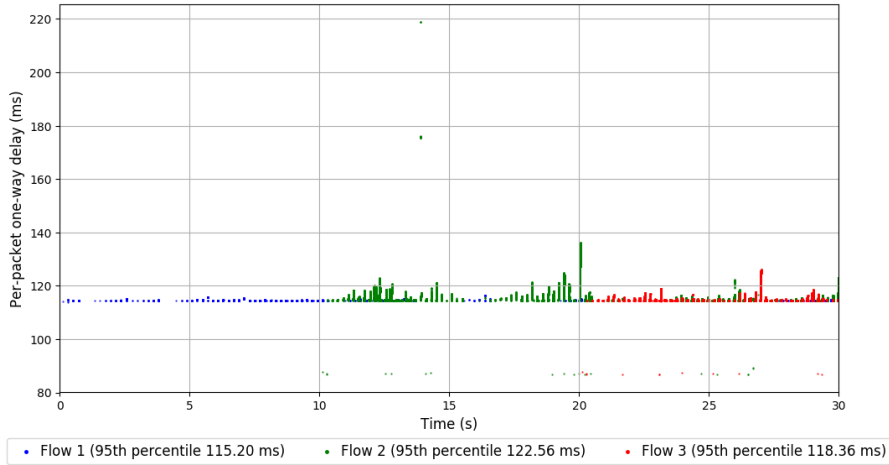
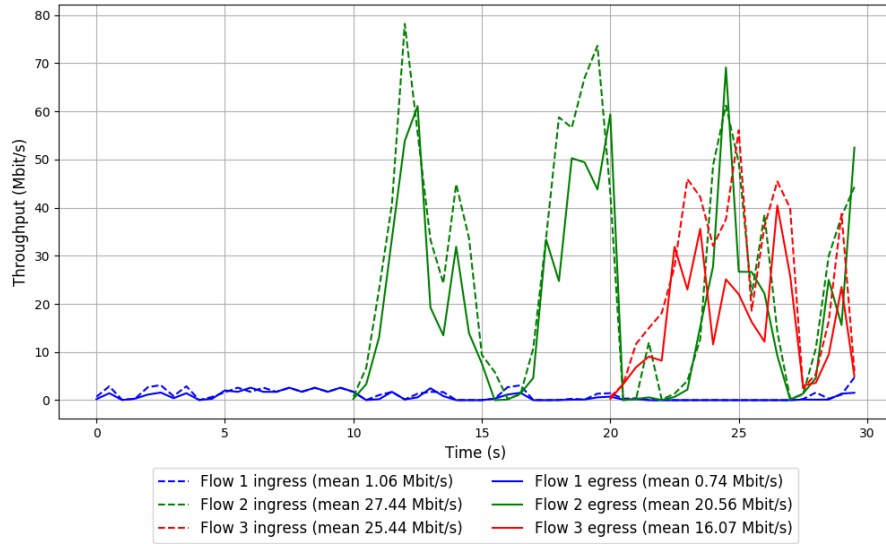
Average throughput: 16.07 Mbit/s

95th percentile per-packet one-way delay: 118.363 ms

Loss rate: 36.68%



### Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-08-21 03:23:34

End at: 2017-08-21 03:24:04

# Below is generated by plot.py at 2017-08-21 05:08:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 115.065 ms

Loss rate: 35.49%

-- Flow 1:

Average throughput: 0.97 Mbit/s

95th percentile per-packet one-way delay: 115.074 ms

Loss rate: 27.69%

-- Flow 2:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 115.684 ms

Loss rate: 49.63%

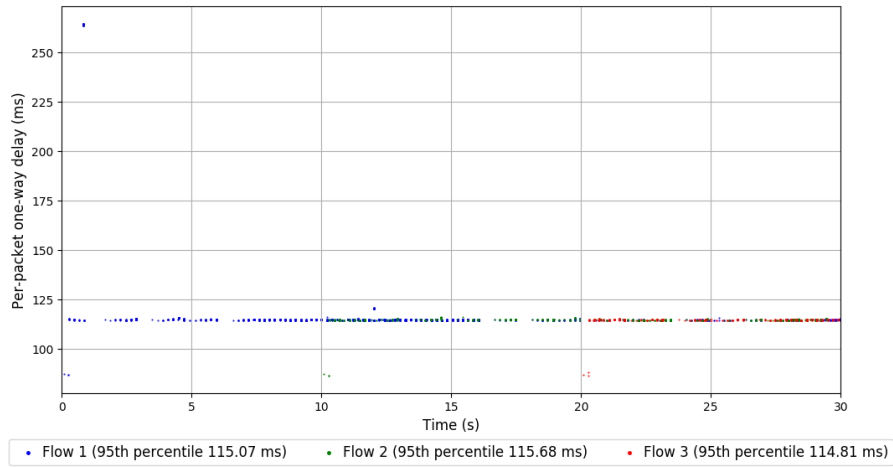
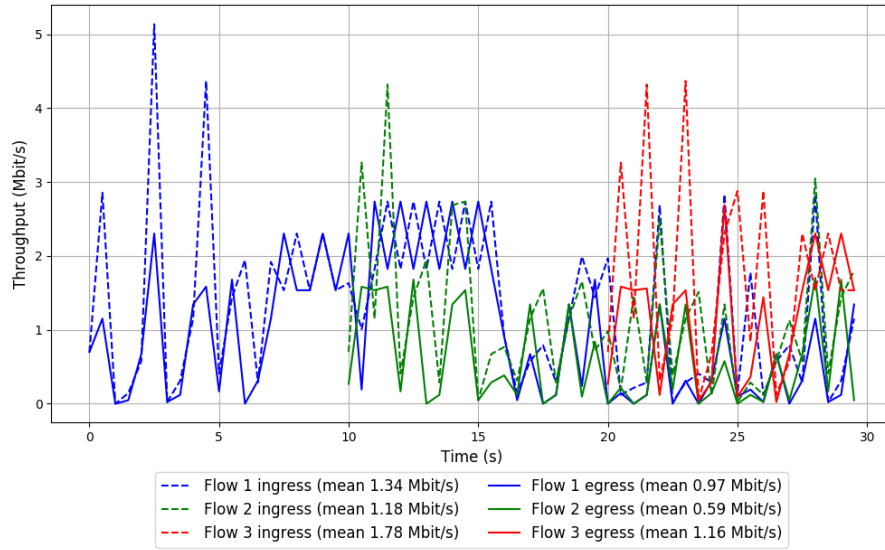
-- Flow 3:

Average throughput: 1.16 Mbit/s

95th percentile per-packet one-way delay: 114.806 ms

Loss rate: 34.55%

### Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-08-21 03:35:10

End at: 2017-08-21 03:35:40

# Below is generated by plot.py at 2017-08-21 05:08:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 52.45 Mbit/s

95th percentile per-packet one-way delay: 97.962 ms

Loss rate: 5.65%

-- Flow 1:

Average throughput: 52.29 Mbit/s

95th percentile per-packet one-way delay: 97.603 ms

Loss rate: 5.29%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.199 ms

Loss rate: 46.94%

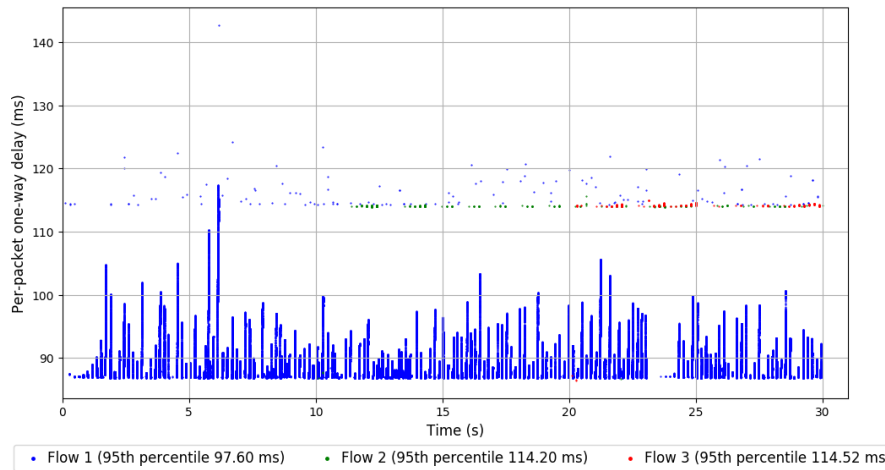
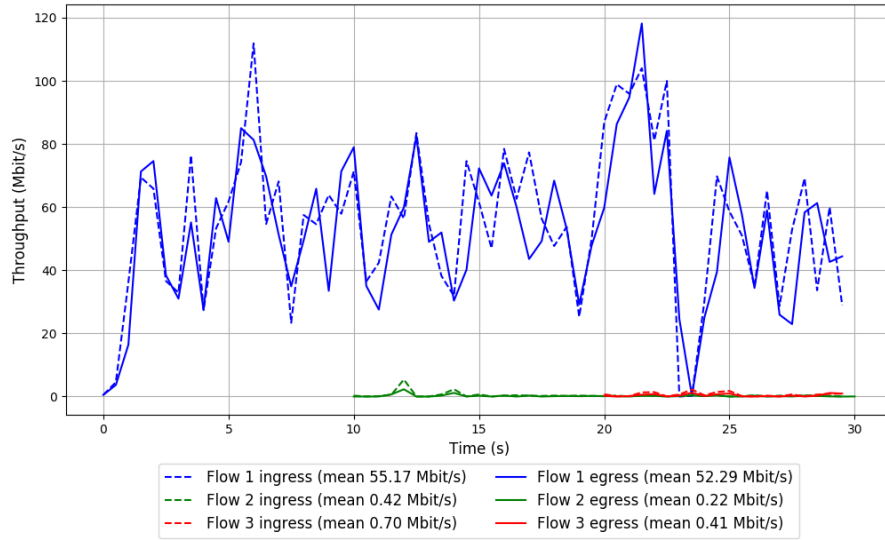
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 114.524 ms

Loss rate: 42.22%

### Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-08-21 03:47:32

End at: 2017-08-21 03:48:02

# Below is generated by plot.py at 2017-08-21 05:08:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 11.89 Mbit/s

95th percentile per-packet one-way delay: 114.176 ms

Loss rate: 19.65%

-- Flow 1:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 114.554 ms

Loss rate: 32.86%

-- Flow 2:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 114.382 ms

Loss rate: 36.22%

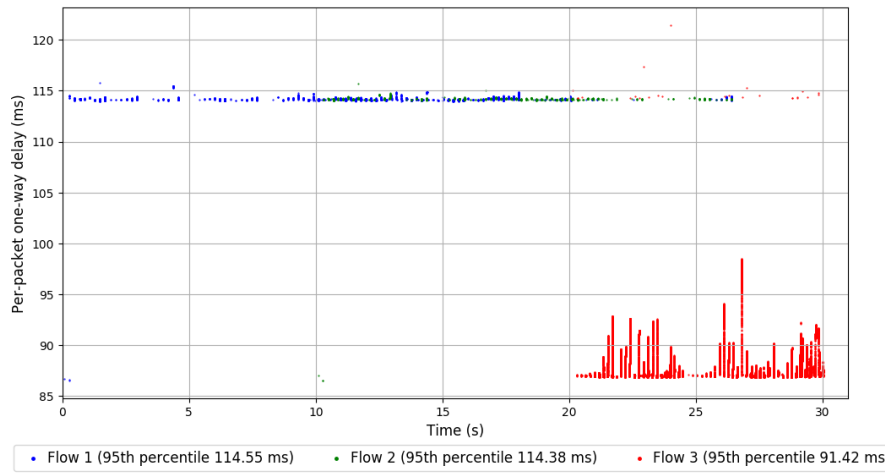
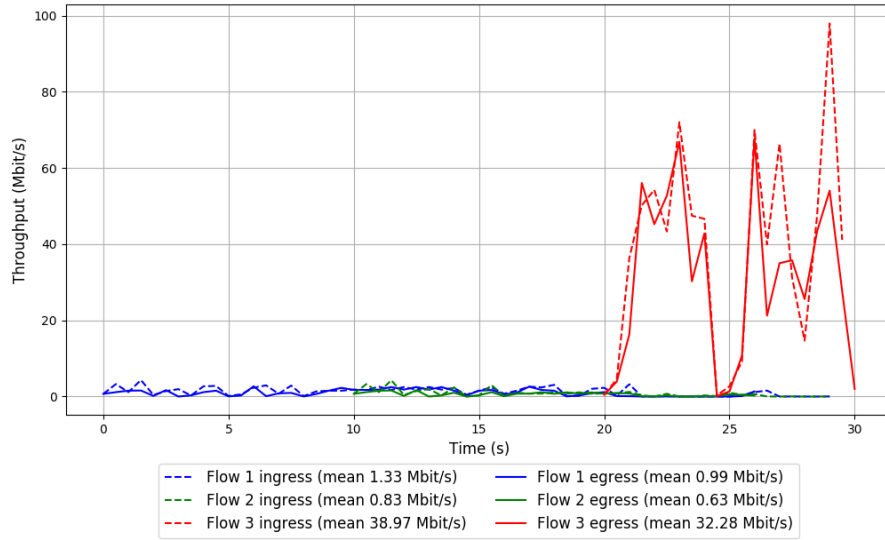
-- Flow 3:

Average throughput: 32.28 Mbit/s

95th percentile per-packet one-way delay: 91.424 ms

Loss rate: 17.64%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-08-21 01:59:17

End at: 2017-08-21 01:59:47

# Below is generated by plot.py at 2017-08-21 05:09:06

# Datalink statistics

-- Total of 3 flows:

Average throughput: 259.04 Mbit/s

95th percentile per-packet one-way delay: 115.224 ms

Loss rate: 7.07%

-- Flow 1:

Average throughput: 175.85 Mbit/s

95th percentile per-packet one-way delay: 117.242 ms

Loss rate: 9.14%

-- Flow 2:

Average throughput: 102.59 Mbit/s

95th percentile per-packet one-way delay: 109.744 ms

Loss rate: 2.57%

-- Flow 3:

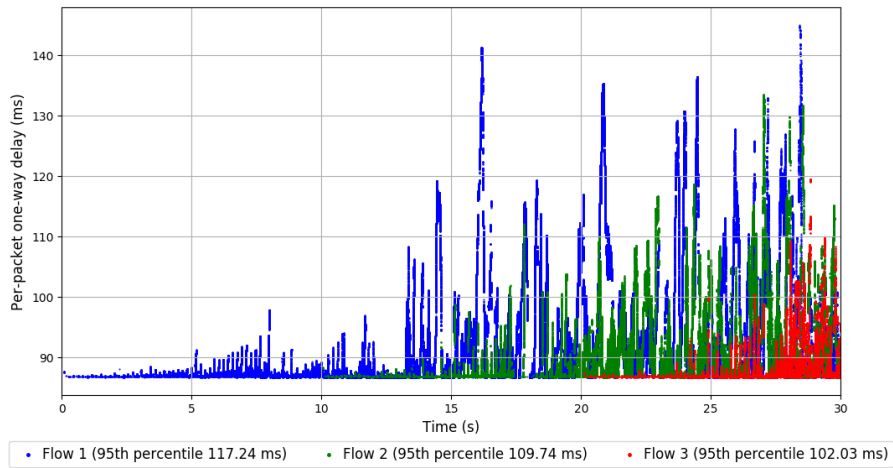
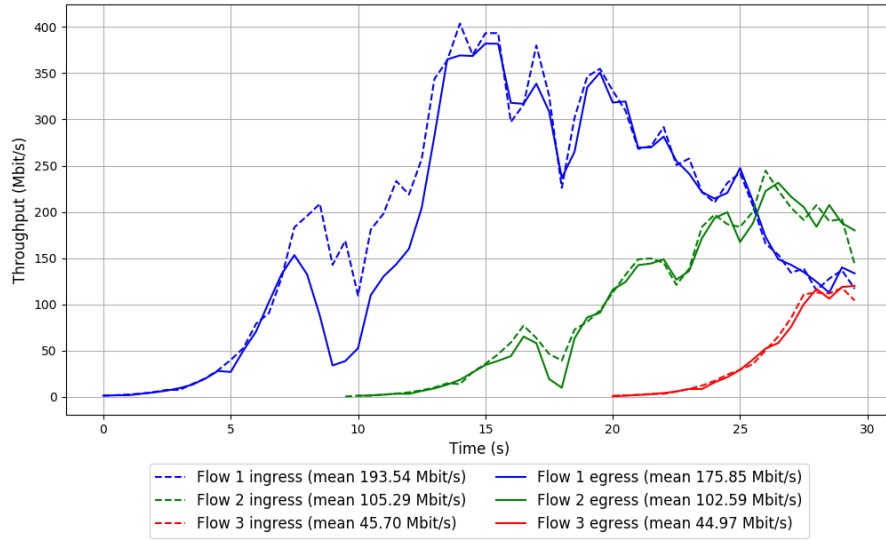
Average throughput: 44.97 Mbit/s

95th percentile per-packet one-way delay: 102.031 ms

Loss rate: 1.52%



### Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-08-21 02:12:55

End at: 2017-08-21 02:13:25

# Below is generated by plot.py at 2017-08-21 05:09:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 252.31 Mbit/s

95th percentile per-packet one-way delay: 118.576 ms

Loss rate: 3.89%

-- Flow 1:

Average throughput: 252.31 Mbit/s

95th percentile per-packet one-way delay: 118.576 ms

Loss rate: 3.80%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 114.105 ms

Loss rate: 99.52%

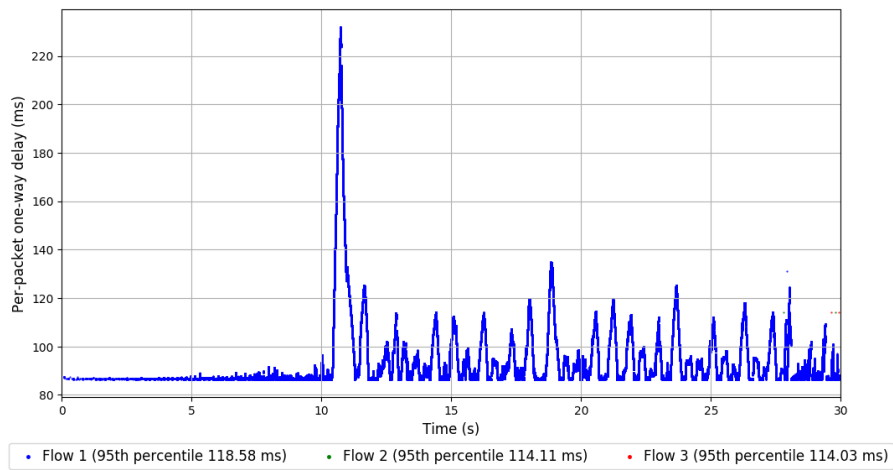
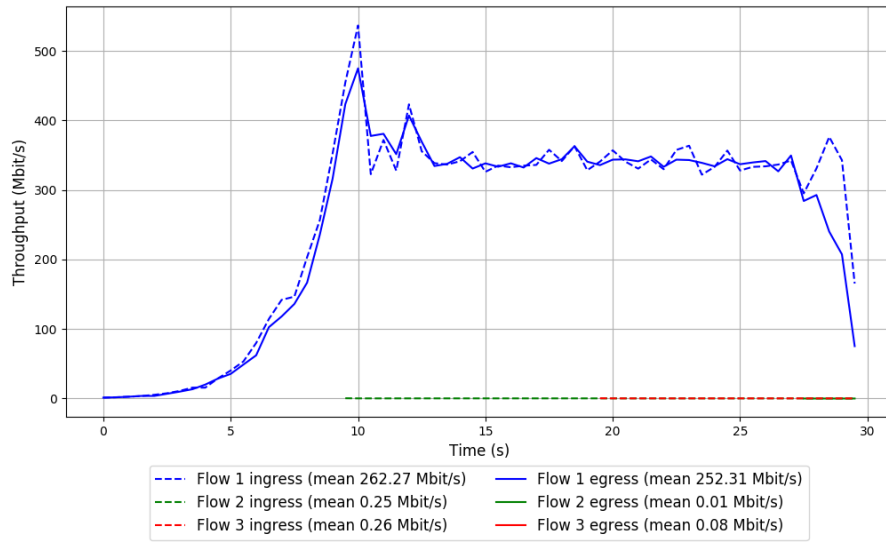
-- Flow 3:

Average throughput: 0.08 Mbit/s

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

Loss rate: 99.07%

## Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-08-21 02:26:10

End at: 2017-08-21 02:26:40

# Below is generated by plot.py at 2017-08-21 05:09:51

# Datalink statistics

-- Total of 3 flows:

Average throughput: 255.39 Mbit/s

95th percentile per-packet one-way delay: 123.019 ms

Loss rate: 4.30%

-- Flow 1:

Average throughput: 239.58 Mbit/s

95th percentile per-packet one-way delay: 124.257 ms

Loss rate: 3.87%

-- Flow 2:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 114.146 ms

Loss rate: 99.52%

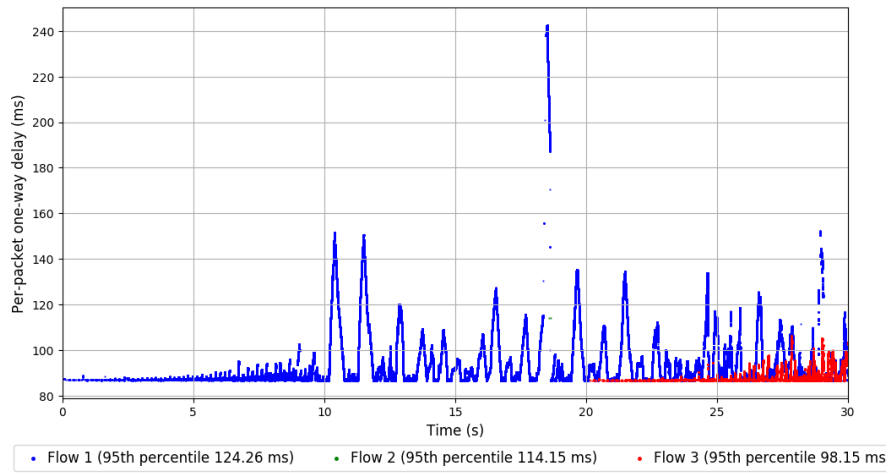
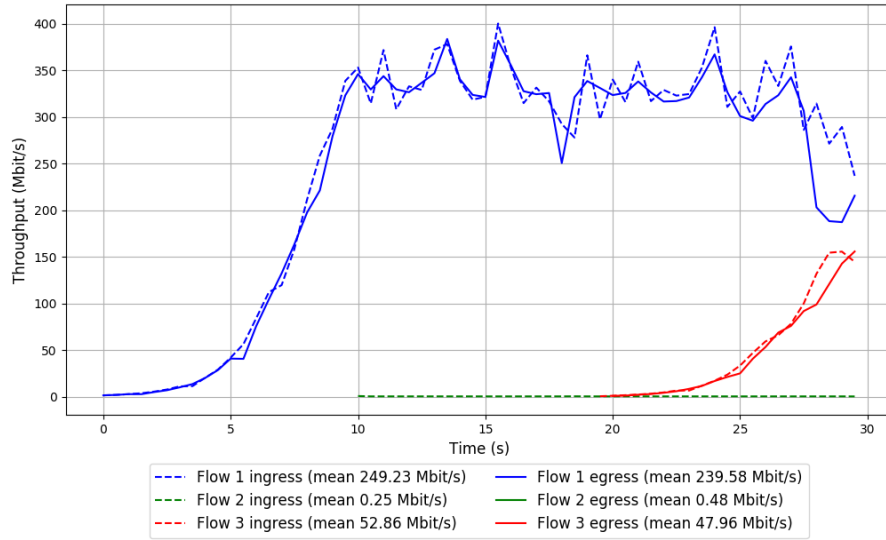
-- Flow 3:

Average throughput: 47.96 Mbit/s

95th percentile per-packet one-way delay: 98.152 ms

Loss rate: 9.59%

### Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-08-21 02:38:28

End at: 2017-08-21 02:38:58

# Below is generated by plot.py at 2017-08-21 05:09:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 275.97 Mbit/s

95th percentile per-packet one-way delay: 118.952 ms

Loss rate: 3.93%

-- Flow 1:

Average throughput: 206.47 Mbit/s

95th percentile per-packet one-way delay: 121.565 ms

Loss rate: 4.85%

-- Flow 2:

Average throughput: 104.52 Mbit/s

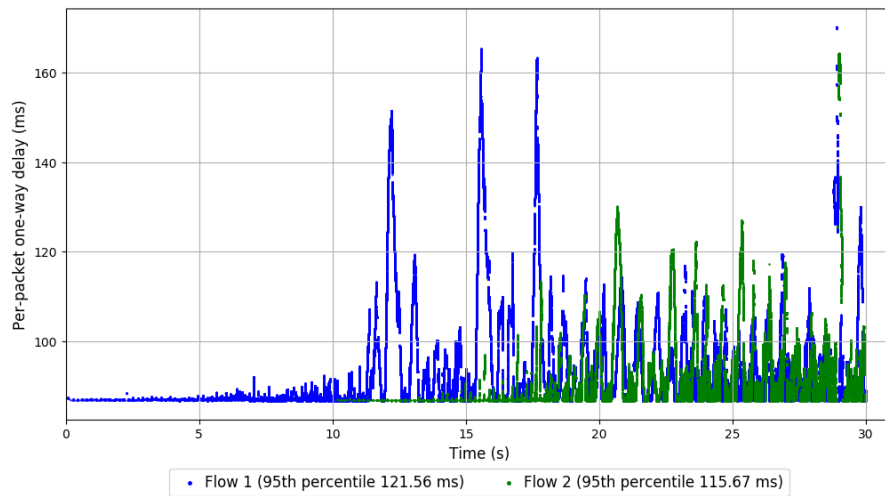
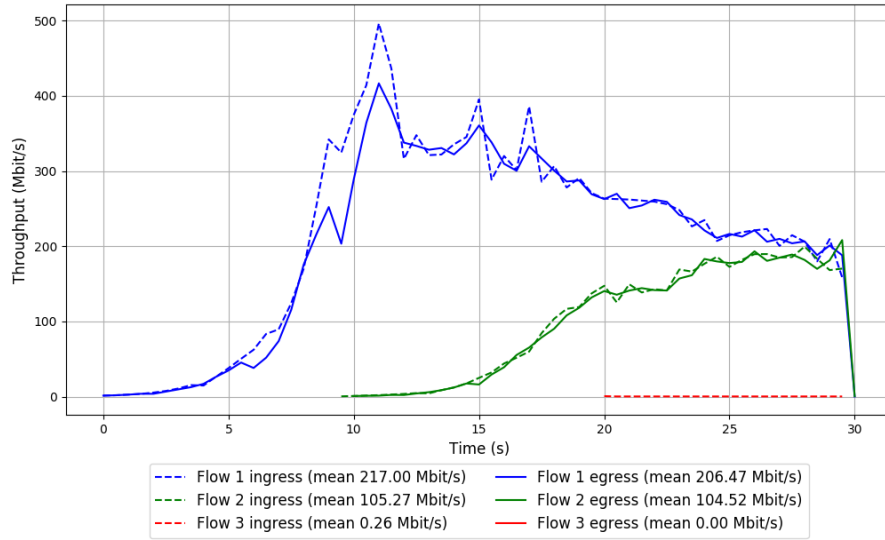
95th percentile per-packet one-way delay: 115.665 ms

Loss rate: 0.96%

-- Flow 3:

Average throughput: 0.00 Mbit/s

### Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-08-21 02:50:22

End at: 2017-08-21 02:50:52

# Below is generated by plot.py at 2017-08-21 05:10:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 108.00 Mbit/s

95th percentile per-packet one-way delay: 156.369 ms

Loss rate: 1.88%

-- Flow 1:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 115.312 ms

Loss rate: 70.31%

-- Flow 2:

Average throughput: 160.89 Mbit/s

95th percentile per-packet one-way delay: 156.415 ms

Loss rate: 0.40%

-- Flow 3:

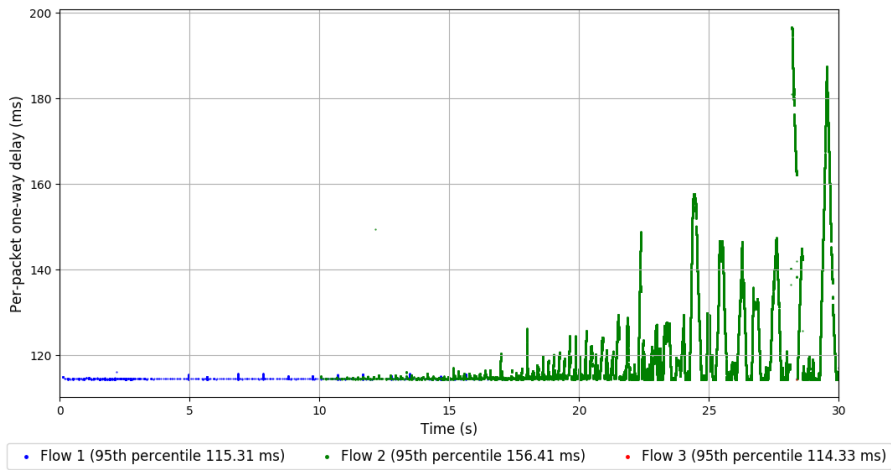
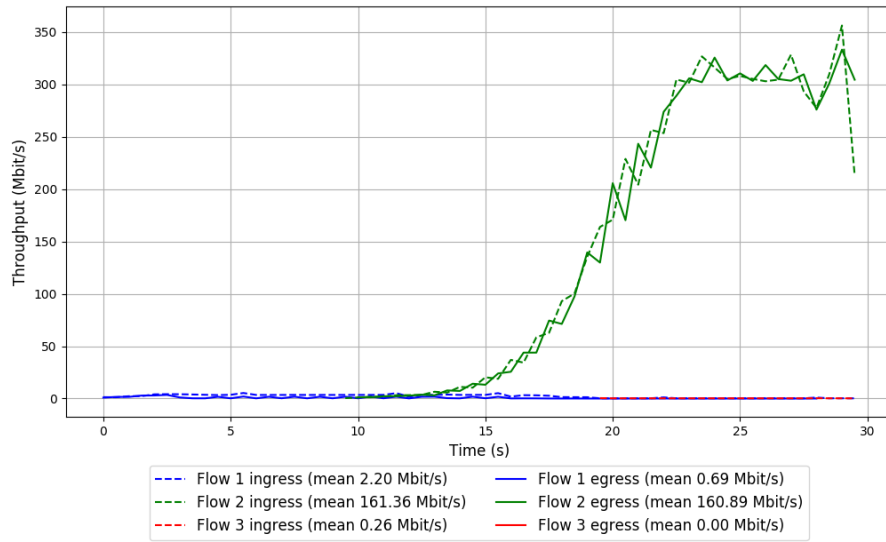
Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 114.327 ms

Loss rate: 99.54%



### Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-08-21 03:01:43

End at: 2017-08-21 03:02:13

# Below is generated by plot.py at 2017-08-21 05:10:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 229.15 Mbit/s

95th percentile per-packet one-way delay: 167.616 ms

Loss rate: 5.94%

-- Flow 1:

Average throughput: 220.59 Mbit/s

95th percentile per-packet one-way delay: 168.907 ms

Loss rate: 5.89%

-- Flow 2:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 114.561 ms

Loss rate: 73.51%

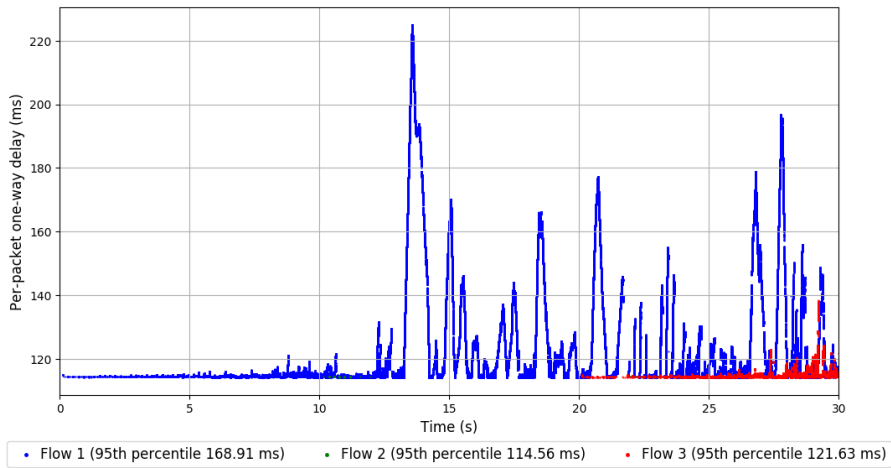
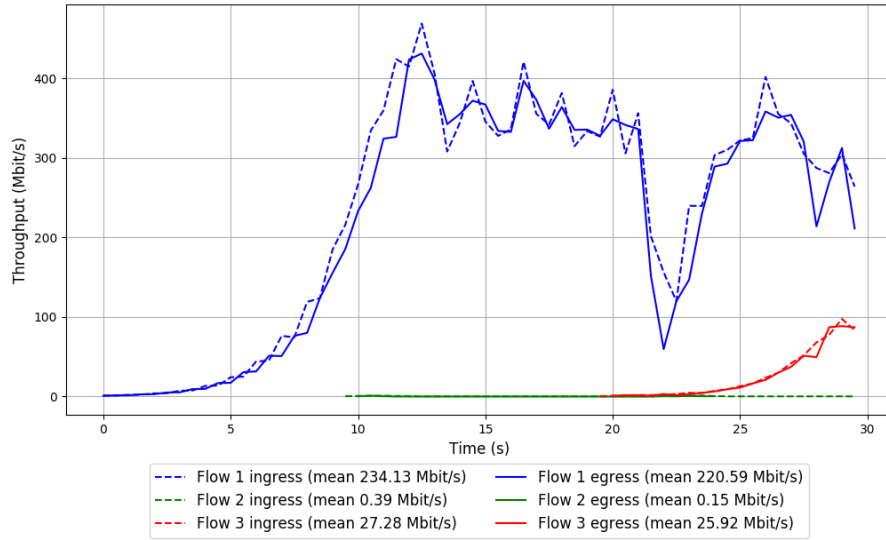
-- Flow 3:

Average throughput: 25.92 Mbit/s

95th percentile per-packet one-way delay: 121.627 ms

Loss rate: 5.30%

### Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-08-21 03:13:21

End at: 2017-08-21 03:13:51

# Below is generated by plot.py at 2017-08-21 05:10:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 118.32 Mbit/s

95th percentile per-packet one-way delay: 206.931 ms

Loss rate: 5.49%

-- Flow 1:

Average throughput: 0.88 Mbit/s

95th percentile per-packet one-way delay: 115.169 ms

Loss rate: 68.78%

-- Flow 2:

Average throughput: 176.33 Mbit/s

95th percentile per-packet one-way delay: 206.990 ms

Loss rate: 4.08%

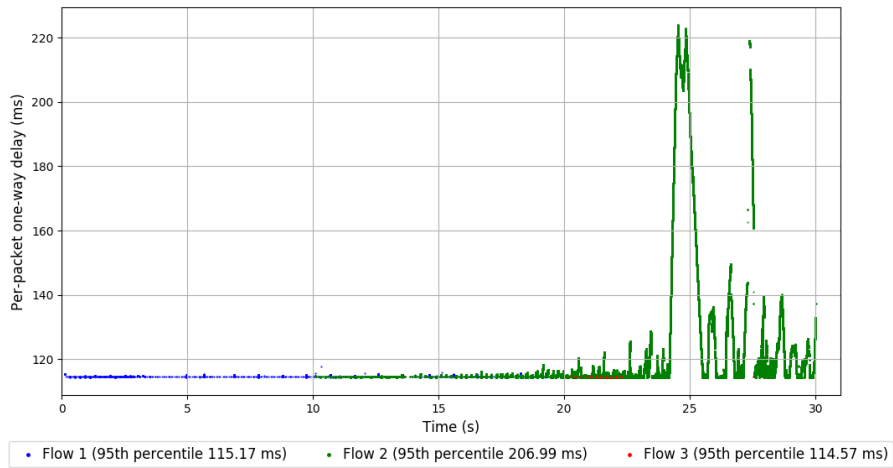
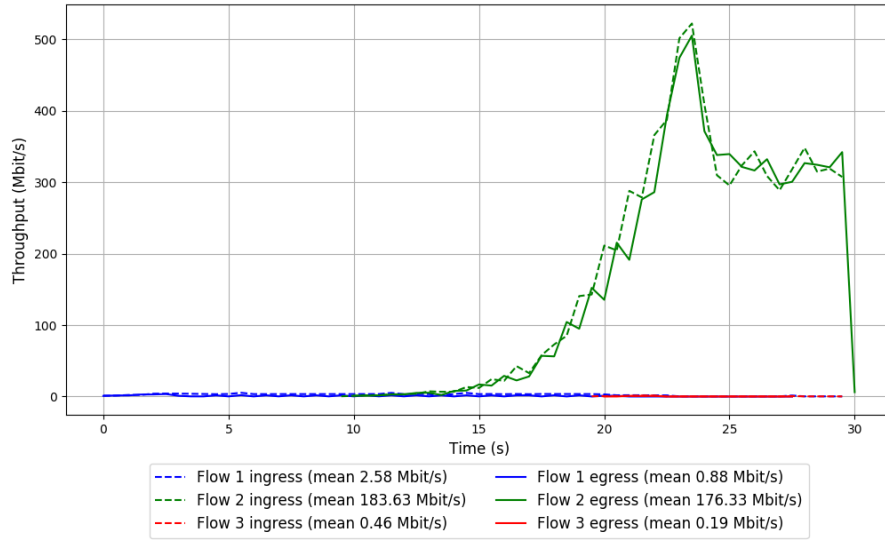
-- Flow 3:

Average throughput: 0.19 Mbit/s

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

Loss rate: 69.15%

### Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-08-21 03:25:01

End at: 2017-08-21 03:25:31

# Below is generated by plot.py at 2017-08-21 05:10:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 132.79 Mbit/s

95th percentile per-packet one-way delay: 163.472 ms

Loss rate: 3.52%

-- Flow 1:

Average throughput: 0.81 Mbit/s

95th percentile per-packet one-way delay: 115.226 ms

Loss rate: 67.85%

-- Flow 2:

Average throughput: 197.87 Mbit/s

95th percentile per-packet one-way delay: 163.596 ms

Loss rate: 2.38%

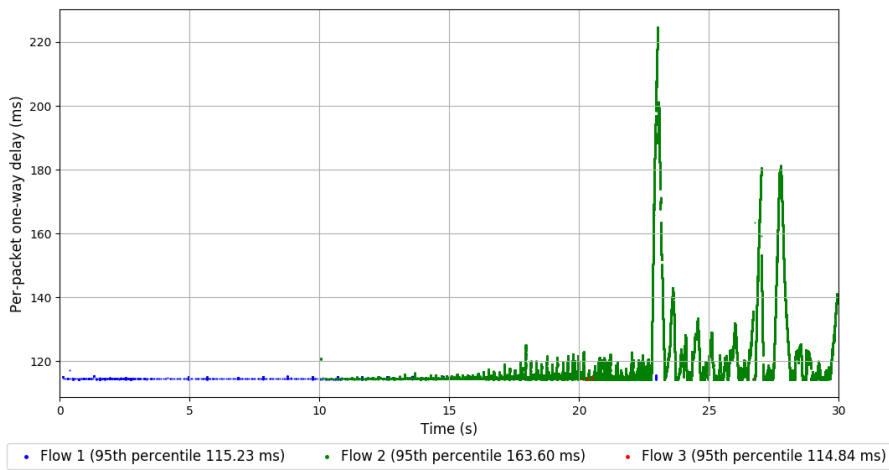
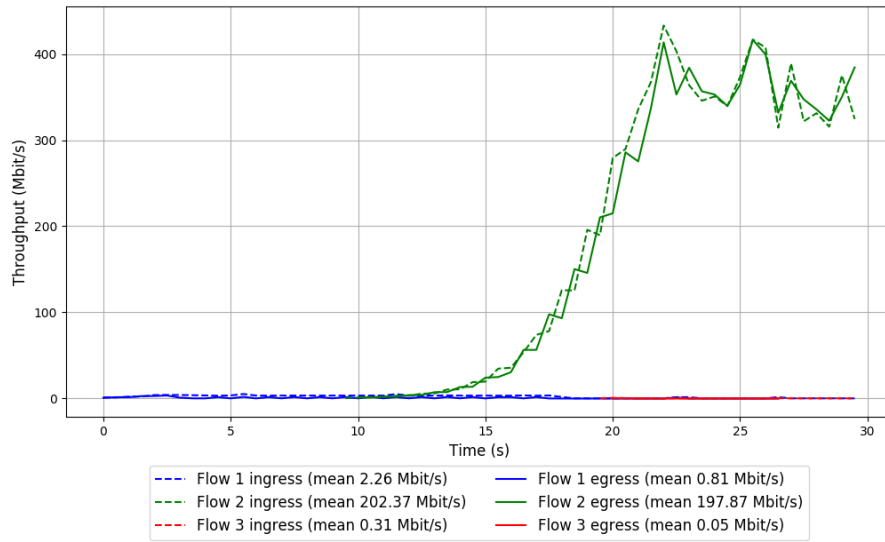
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 114.842 ms

Loss rate: 89.88%

### Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-08-21 03:36:43

End at: 2017-08-21 03:37:13

# Below is generated by plot.py at 2017-08-21 05:11:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 263.19 Mbit/s

95th percentile per-packet one-way delay: 120.801 ms

Loss rate: 9.89%

-- Flow 1:

Average throughput: 220.29 Mbit/s

95th percentile per-packet one-way delay: 123.973 ms

Loss rate: 4.24%

-- Flow 2:

Average throughput: 64.37 Mbit/s

95th percentile per-packet one-way delay: 107.003 ms

Loss rate: 30.72%

-- Flow 3:

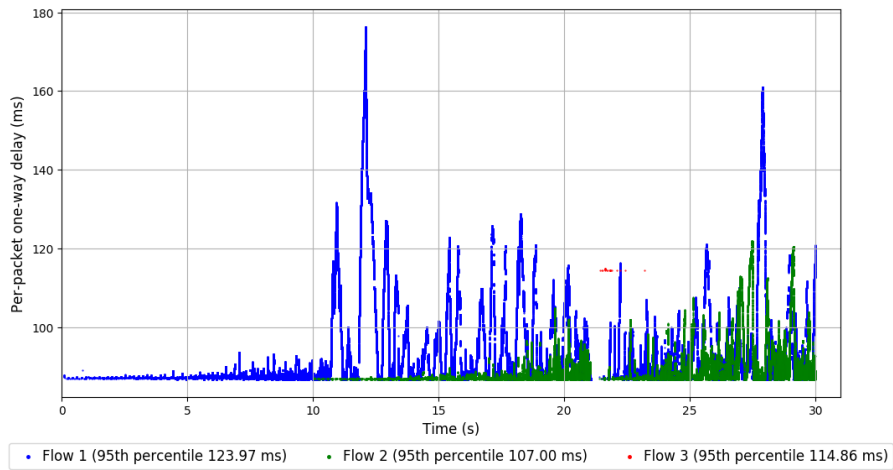
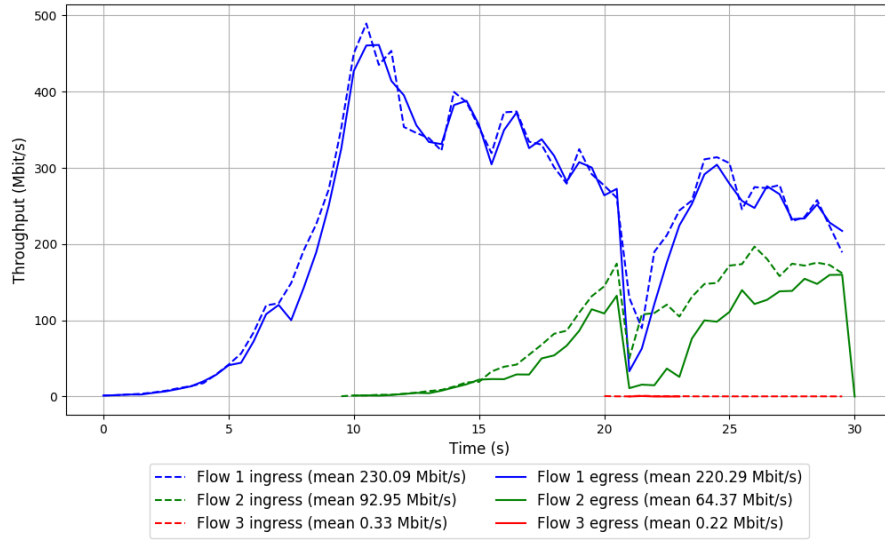
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.856 ms

Loss rate: 88.36%



### Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-08-21 03:49:02

End at: 2017-08-21 03:49:32

# Below is generated by plot.py at 2017-08-21 05:11:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 29.75 Mbit/s

95th percentile per-packet one-way delay: 99.807 ms

Loss rate: 7.75%

-- Flow 1:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 115.220 ms

Loss rate: 70.74%

-- Flow 2:

Average throughput: 0.42 Mbit/s

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

Loss rate: 70.32%

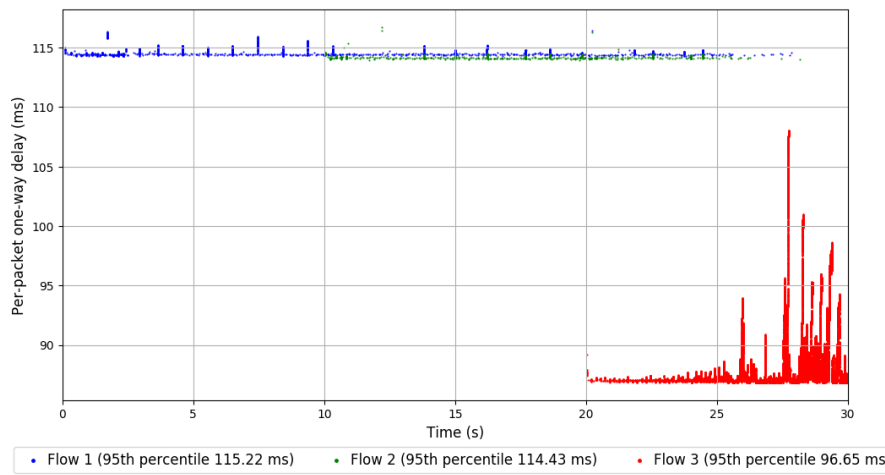
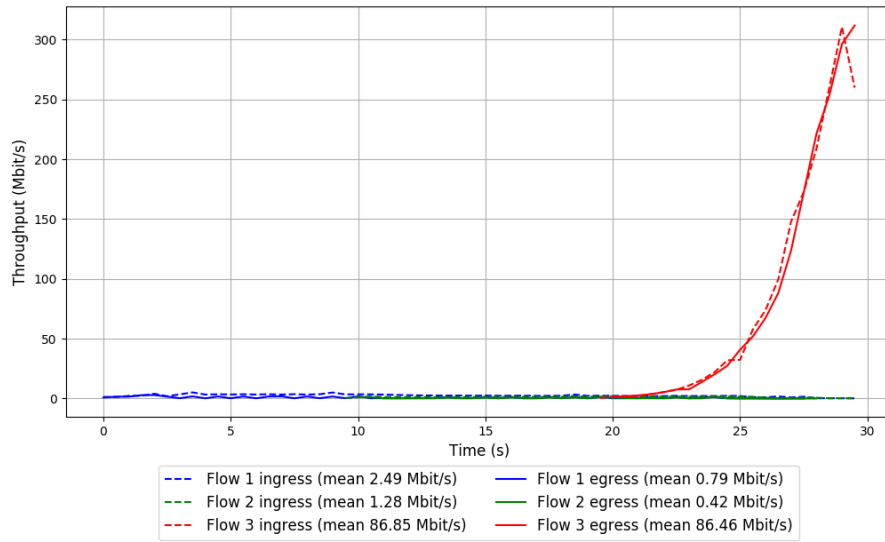
-- Flow 3:

Average throughput: 86.46 Mbit/s

95th percentile per-packet one-way delay: 96.653 ms

Loss rate: 0.46%

Run 10: Report of CalibratedKoho — Data Link



Run 1: Statistics of Copa

Start at: 2017-08-21 02:03:05

End at: 2017-08-21 02:03:35

# Below is generated by plot.py at 2017-08-21 05:11:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 30.27 Mbit/s

95th percentile per-packet one-way delay: 87.290 ms

Loss rate: 4.79%

-- Flow 1:

Average throughput: 2.62 Mbit/s

95th percentile per-packet one-way delay: 129.884 ms

Loss rate: 91.82%

-- Flow 2:

Average throughput: 28.29 Mbit/s

95th percentile per-packet one-way delay: 114.451 ms

Loss rate: 0.00%

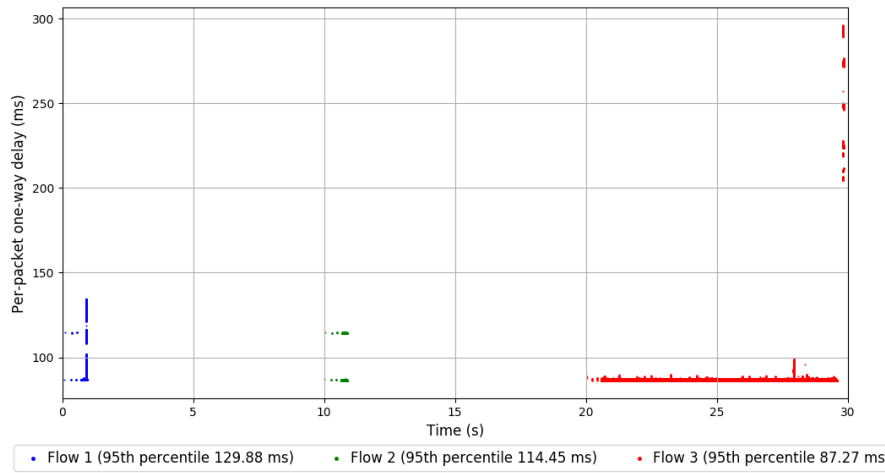
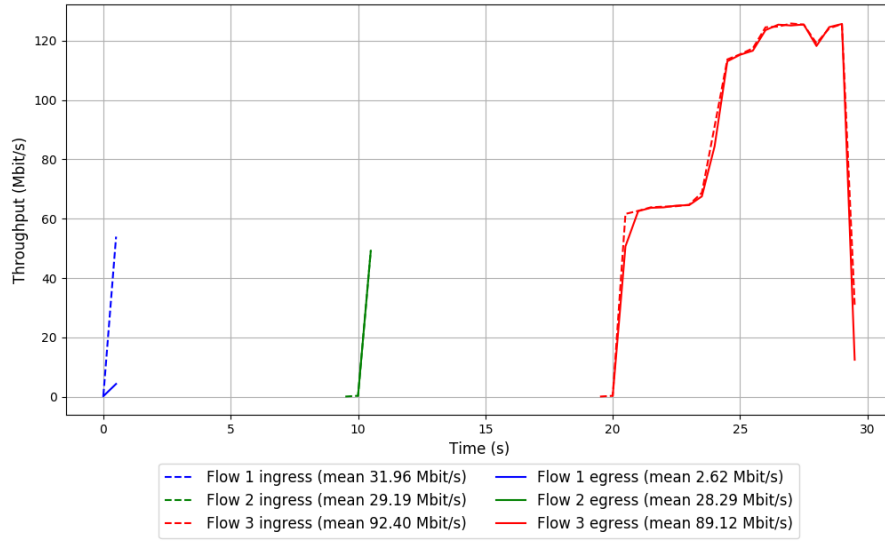
-- Flow 3:

Average throughput: 89.12 Mbit/s

95th percentile per-packet one-way delay: 87.269 ms

Loss rate: 2.29%

# Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-08-21 02:16:28

End at: 2017-08-21 02:16:58

# Below is generated by plot.py at 2017-08-21 05:11:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 113.65 Mbit/s

95th percentile per-packet one-way delay: 87.170 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 87.042 ms

Loss rate: 91.68%

-- Flow 2:

Average throughput: 159.19 Mbit/s

95th percentile per-packet one-way delay: 87.138 ms

Loss rate: 0.17%

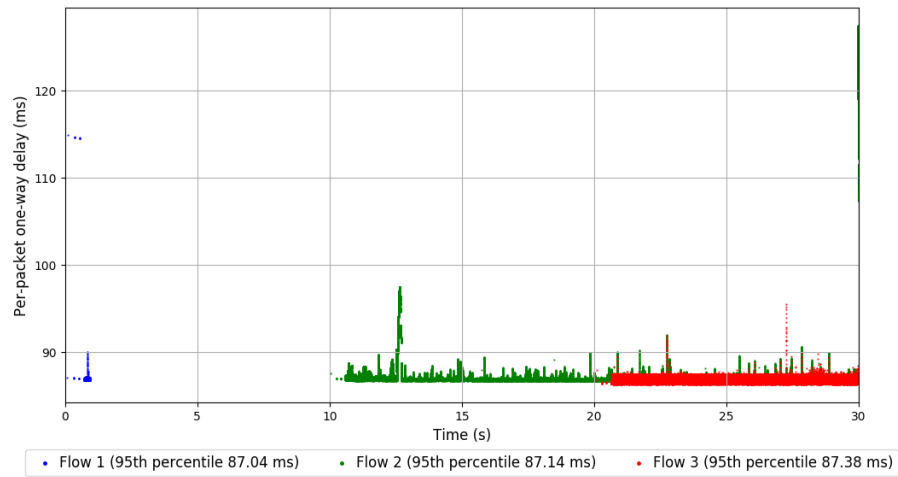
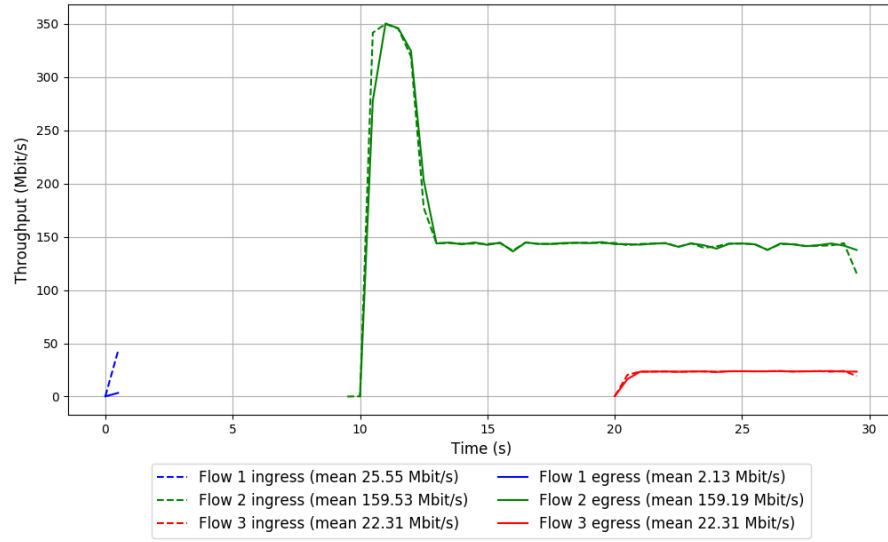
-- Flow 3:

Average throughput: 22.31 Mbit/s

95th percentile per-packet one-way delay: 87.384 ms

Loss rate: 0.00%

## Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-08-21 02:29:29

End at: 2017-08-21 02:29:59

# Below is generated by plot.py at 2017-08-21 05:12:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 121.72 Mbit/s

95th percentile per-packet one-way delay: 181.658 ms

Loss rate: 3.61%

-- Flow 1:

Average throughput: 60.32 Mbit/s

95th percentile per-packet one-way delay: 86.565 ms

Loss rate: 2.59%

-- Flow 2:

Average throughput: 92.23 Mbit/s

95th percentile per-packet one-way delay: 194.530 ms

Loss rate: 4.59%

-- Flow 3:

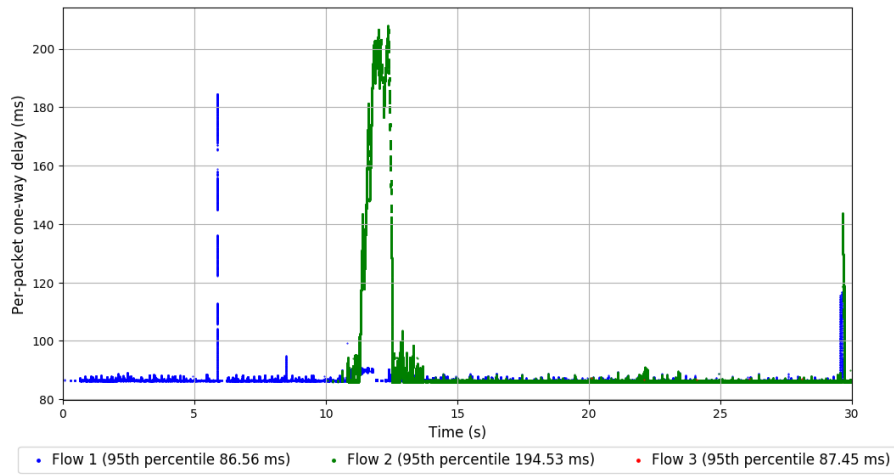
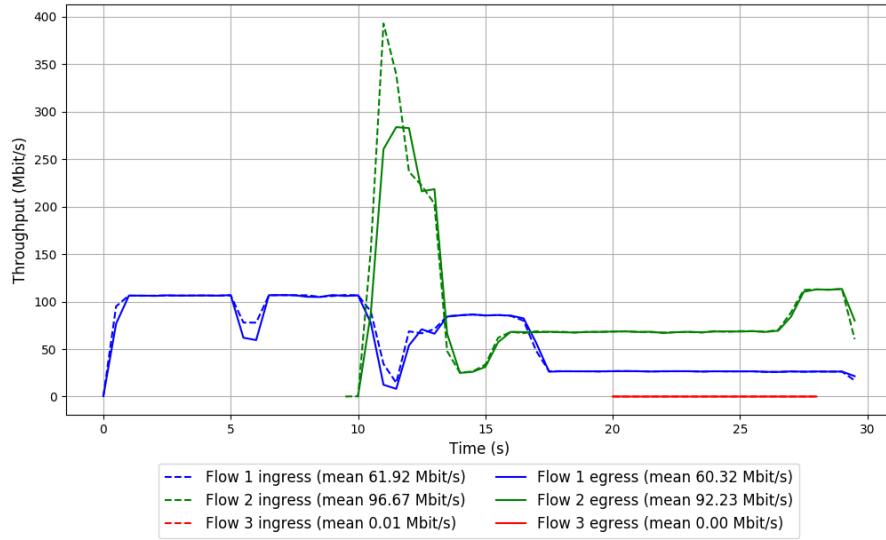
Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 87.451 ms

Loss rate: 92.35%



### Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-08-21 02:41:48

End at: 2017-08-21 02:42:18

# Below is generated by plot.py at 2017-08-21 05:12:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 59.90 Mbit/s

95th percentile per-packet one-way delay: 114.436 ms

Loss rate: 2.72%

-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 86.949 ms

Loss rate: 91.69%

-- Flow 2:

Average throughput: 89.76 Mbit/s

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

Loss rate: 1.65%

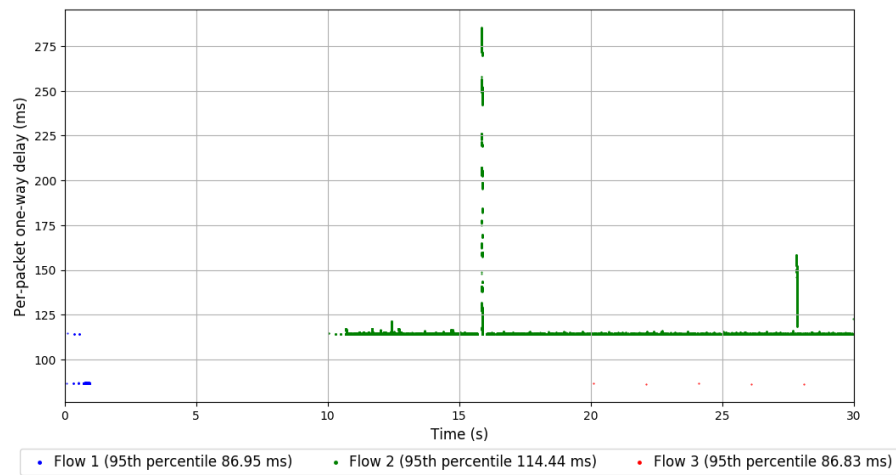
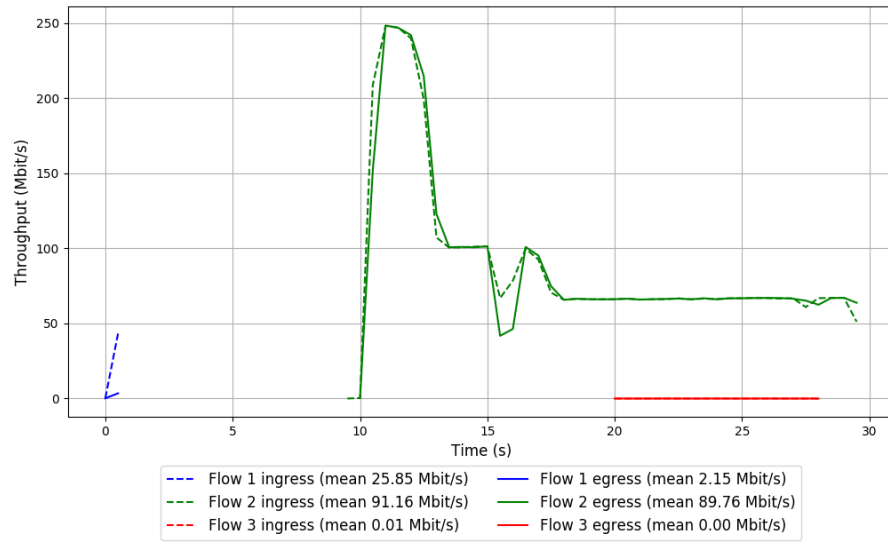
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 86.829 ms

Loss rate: 92.35%

### Run 4: Report of Copa — Data Link

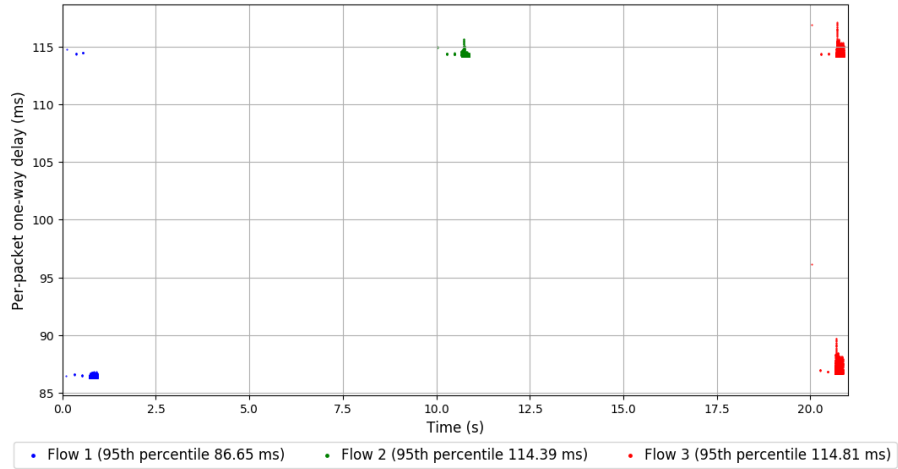
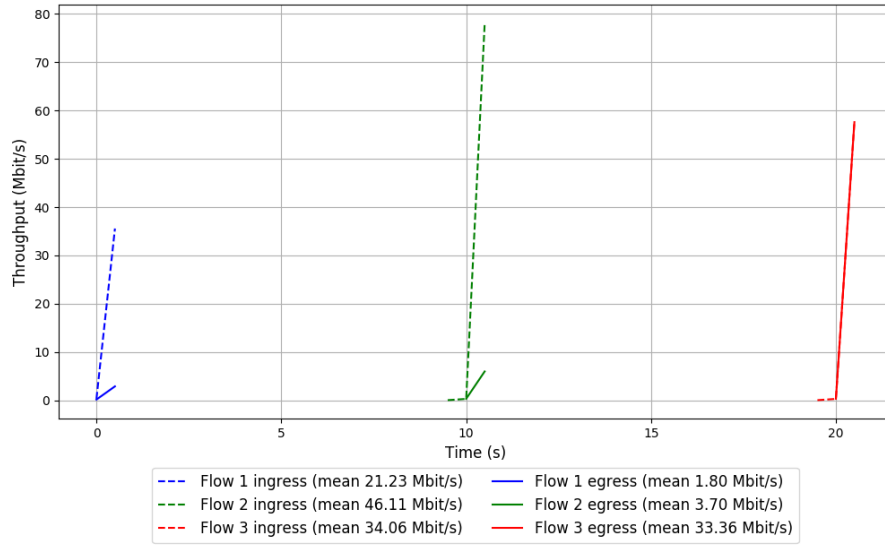


Run 5: Statistics of Copa

Start at: 2017-08-21 02:53:30

End at: 2017-08-21 02:54:00

### Run 5: Report of Copa — Data Link

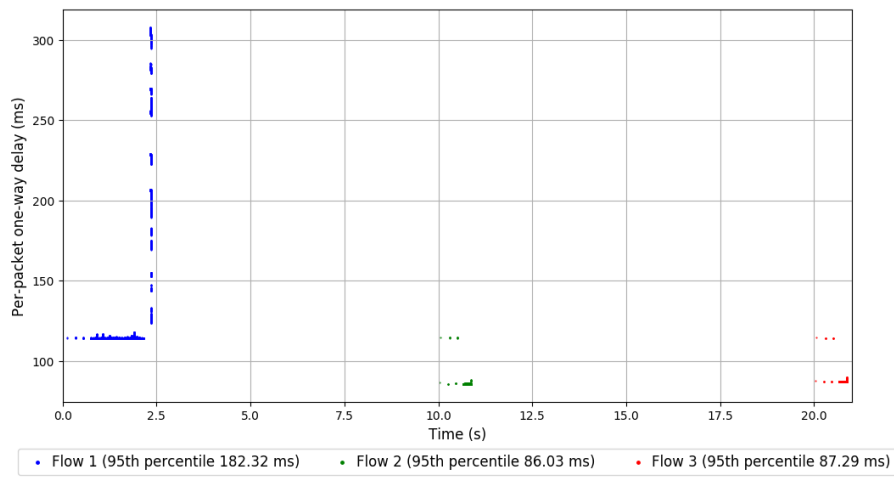
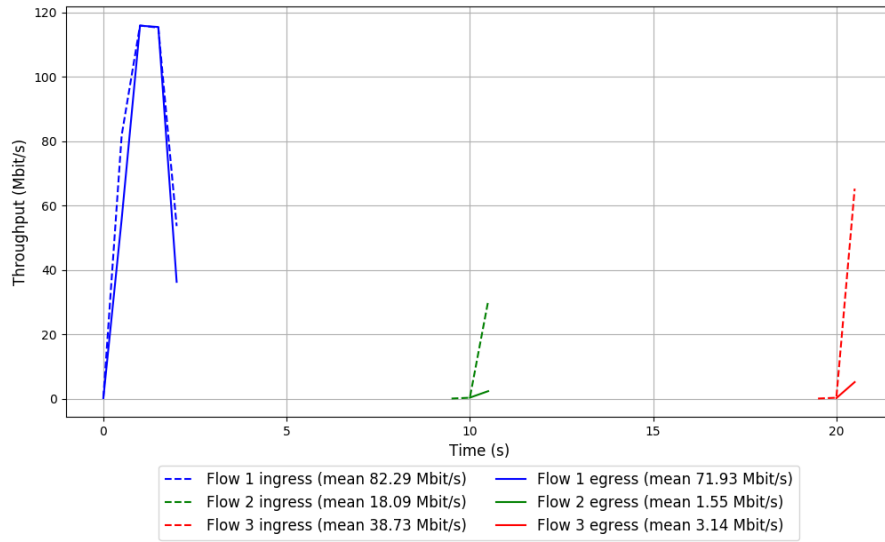


Run 6: Statistics of Copa

Start at: 2017-08-21 03:05:02

End at: 2017-08-21 03:05:32

### Run 6: Report of Copa — Data Link



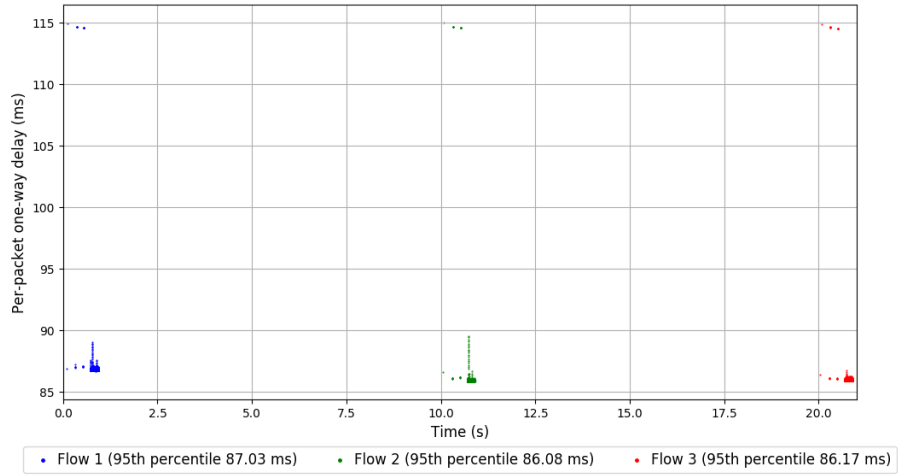
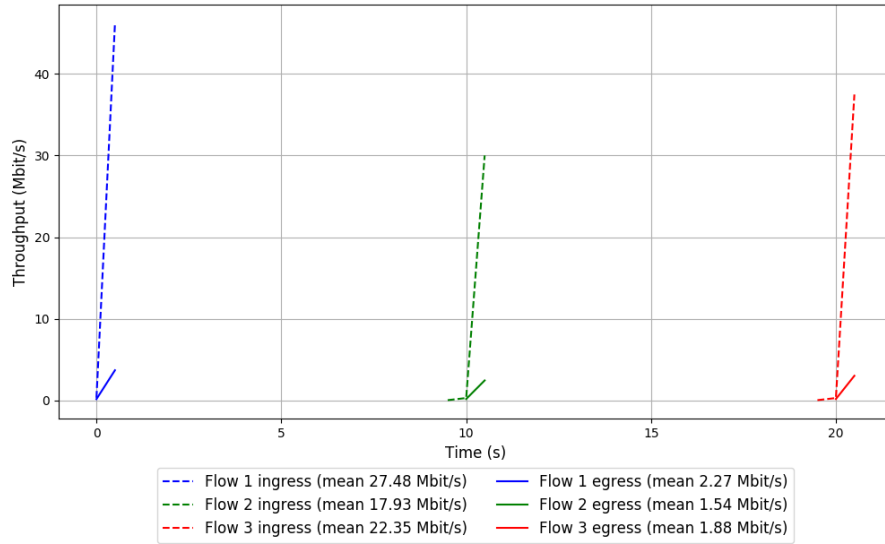
Run 7: Statistics of Copa

Start at: 2017-08-21 03:16:30

End at: 2017-08-21 03:17:00



### Run 7: Report of Copa — Data Link

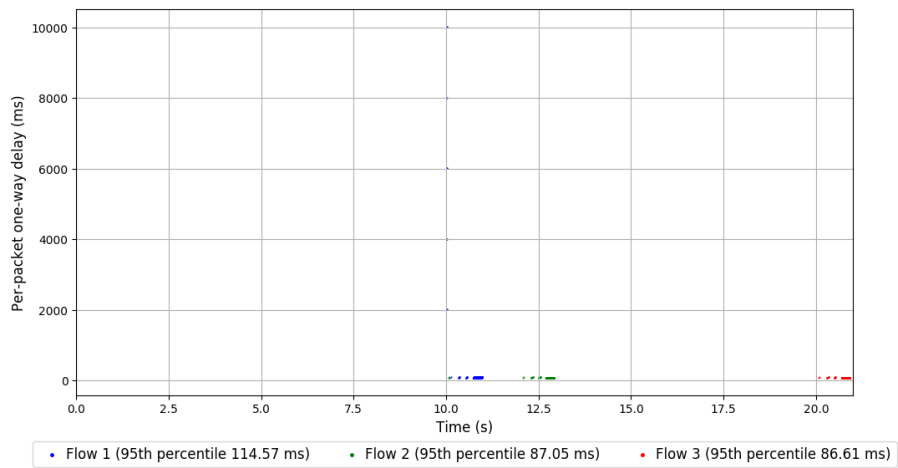
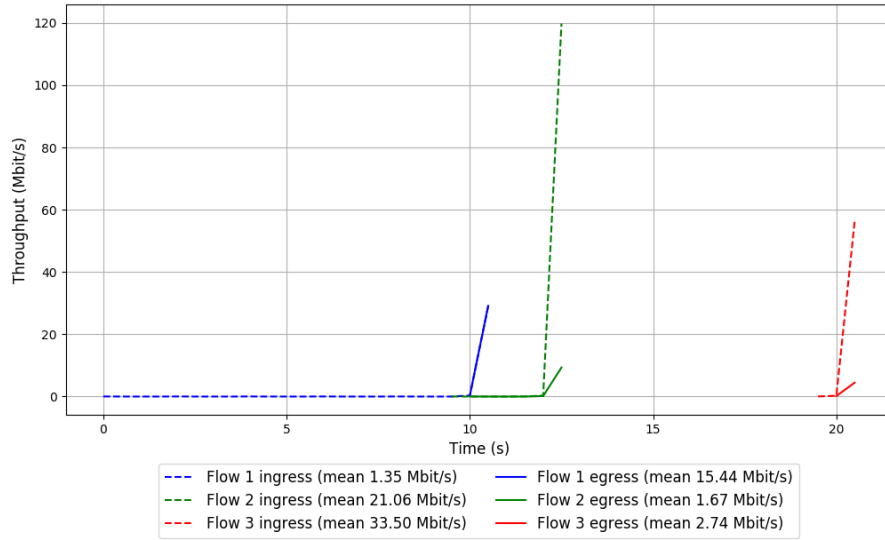


Run 8: Statistics of Copa

Start at: 2017-08-21 03:28:10

End at: 2017-08-21 03:28:40

### Run 8: Report of Copa — Data Link

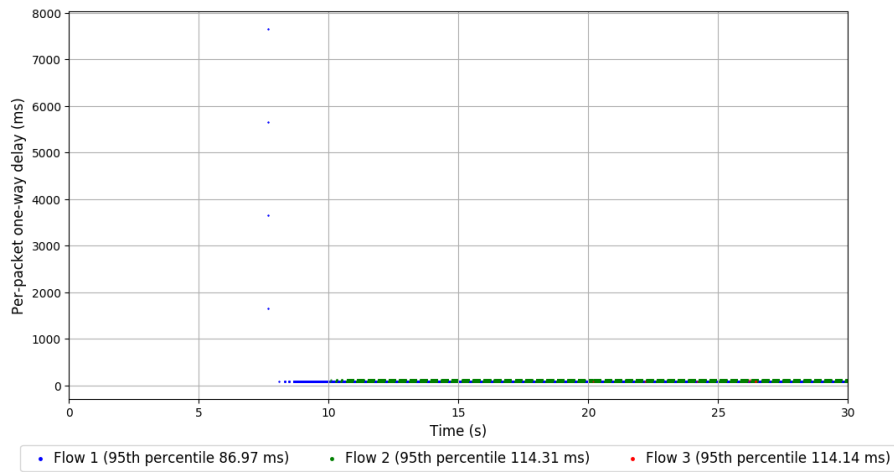
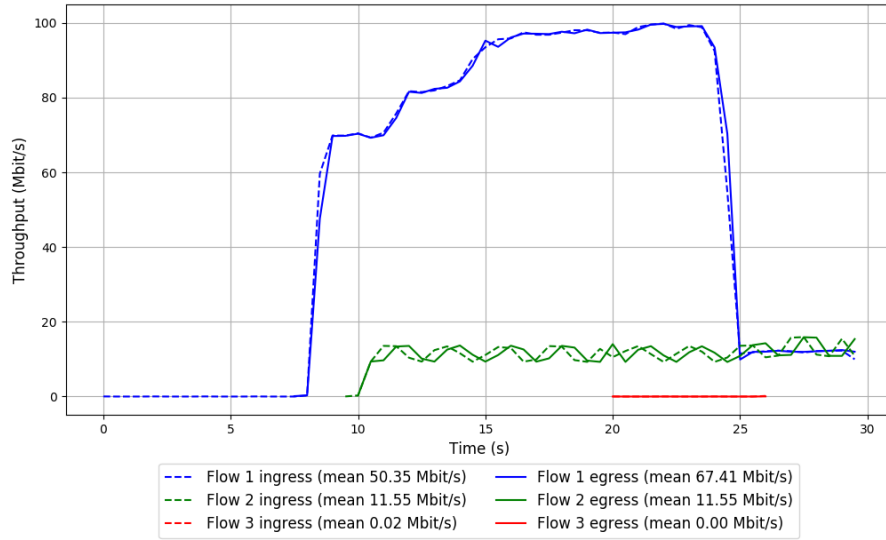


Run 9: Statistics of Copa

Start at: 2017-08-21 03:40:01

End at: 2017-08-21 03:40:31

### Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-08-21 03:52:01

End at: 2017-08-21 03:52:31

# Below is generated by plot.py at 2017-08-21 05:12:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 61.63 Mbit/s

95th percentile per-packet one-way delay: 127.368 ms

Loss rate: 2.91%

-- Flow 1:

Average throughput: 133.37 Mbit/s

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

Loss rate: 4.07%

-- Flow 2:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 86.533 ms

Loss rate: 91.86%

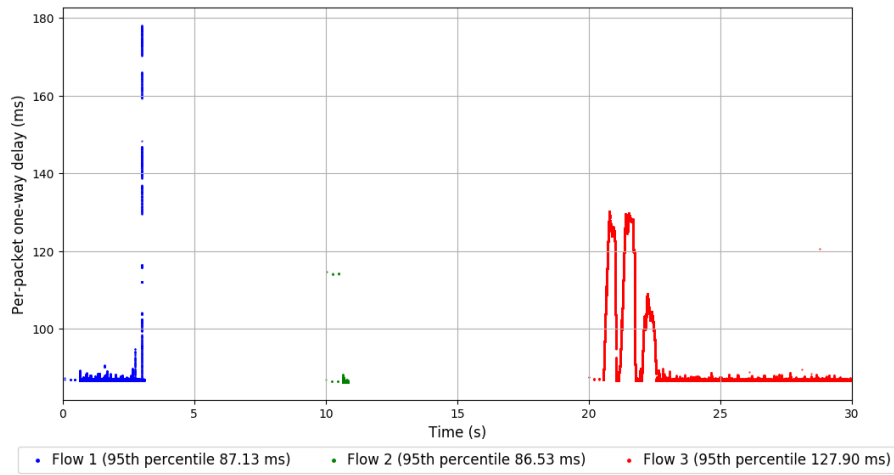
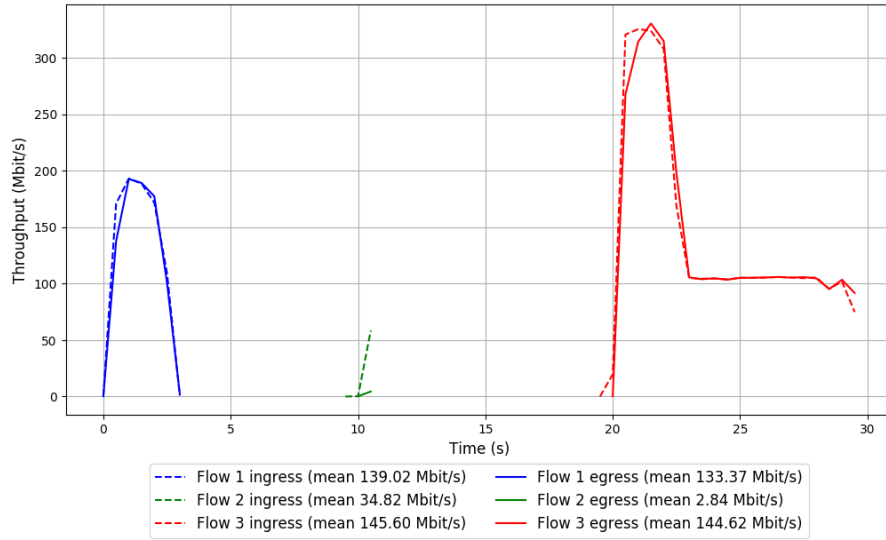
-- Flow 3:

Average throughput: 144.62 Mbit/s

95th percentile per-packet one-way delay: 127.898 ms

Loss rate: 0.76%

### Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-08-21 01:56:48

End at: 2017-08-21 01:57:18

# Below is generated by plot.py at 2017-08-21 05:12:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 13.83 Mbit/s

95th percentile per-packet one-way delay: 87.215 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 7.80 Mbit/s

95th percentile per-packet one-way delay: 87.153 ms

Loss rate: 1.96%

-- Flow 2:

Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 87.049 ms

Loss rate: 1.55%

-- Flow 3:

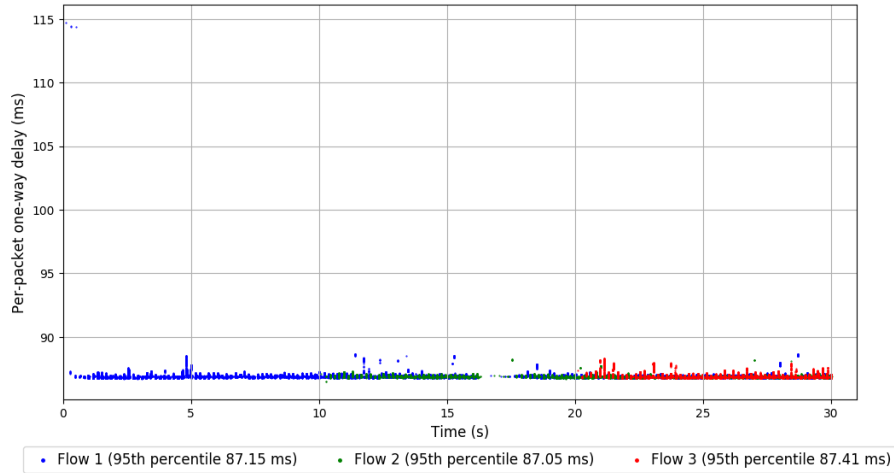
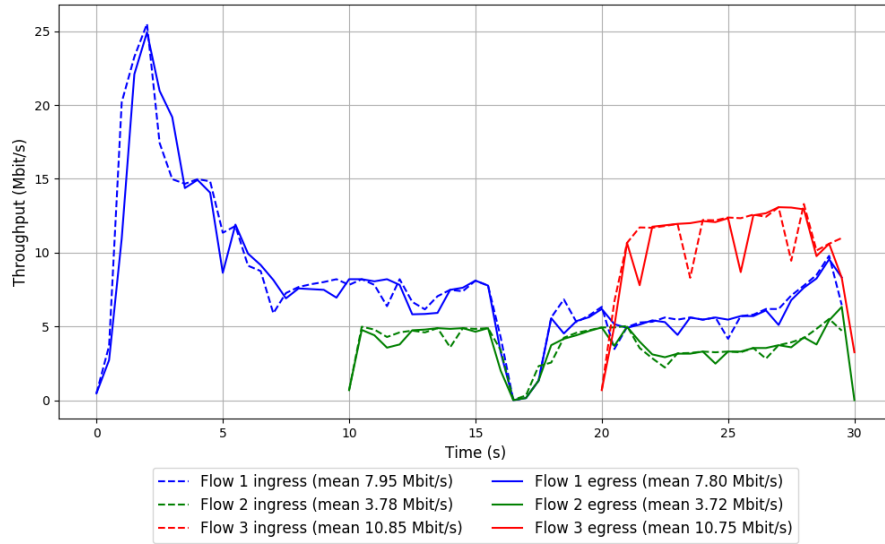
Average throughput: 10.75 Mbit/s

95th percentile per-packet one-way delay: 87.406 ms

Loss rate: 0.94%



### Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-08-21 02:10:30

End at: 2017-08-21 02:11:00

# Below is generated by plot.py at 2017-08-21 05:12:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 32.49 Mbit/s

95th percentile per-packet one-way delay: 87.164 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 32.47 Mbit/s

95th percentile per-packet one-way delay: 87.160 ms

Loss rate: 1.10%

-- Flow 2:

Average throughput: 0.02 Mbit/s

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

Loss rate: 65.13%

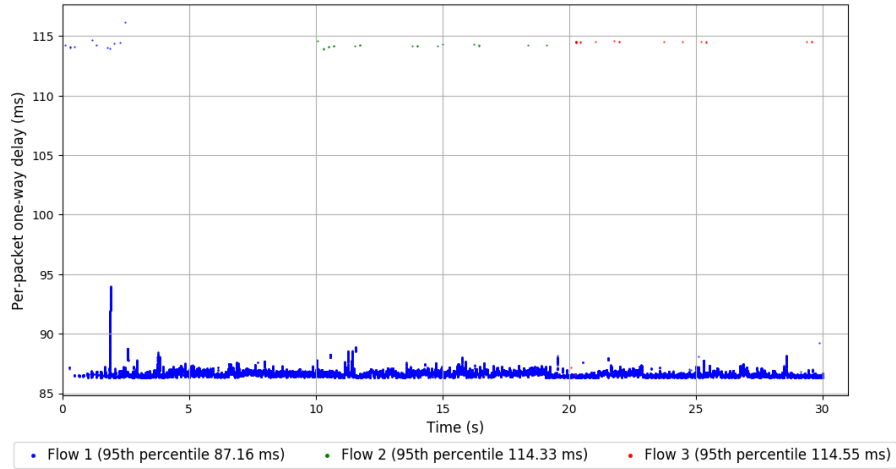
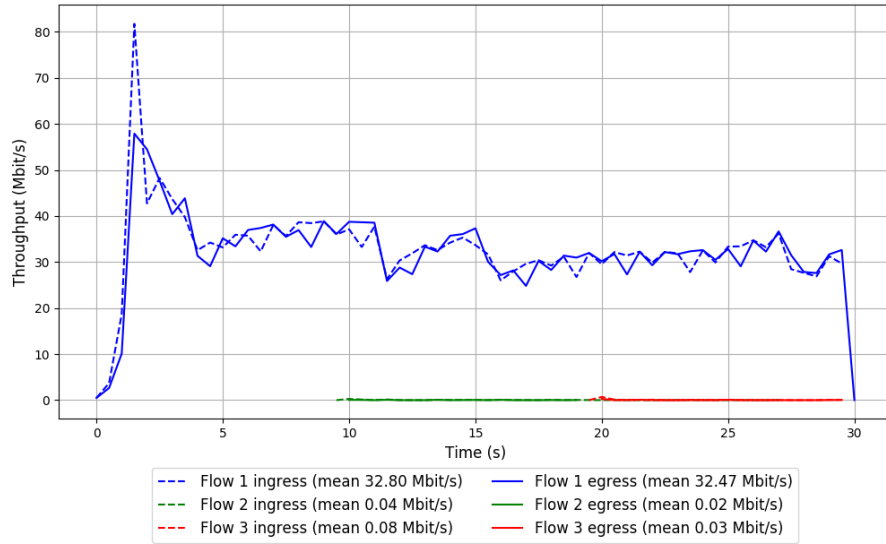
-- Flow 3:

Average throughput: 0.03 Mbit/s

95th percentile per-packet one-way delay: 114.547 ms

Loss rate: 62.09%

## Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-08-21 02:23:51

End at: 2017-08-21 02:24:21

# Below is generated by plot.py at 2017-08-21 05:12:38

# Datalink statistics

-- Total of 3 flows:

Average throughput: 27.20 Mbit/s

95th percentile per-packet one-way delay: 86.976 ms

Loss rate: 1.93%

-- Flow 1:

Average throughput: 22.45 Mbit/s

95th percentile per-packet one-way delay: 86.976 ms

Loss rate: 1.53%

-- Flow 2:

Average throughput: 7.13 Mbit/s

95th percentile per-packet one-way delay: 86.972 ms

Loss rate: 3.61%

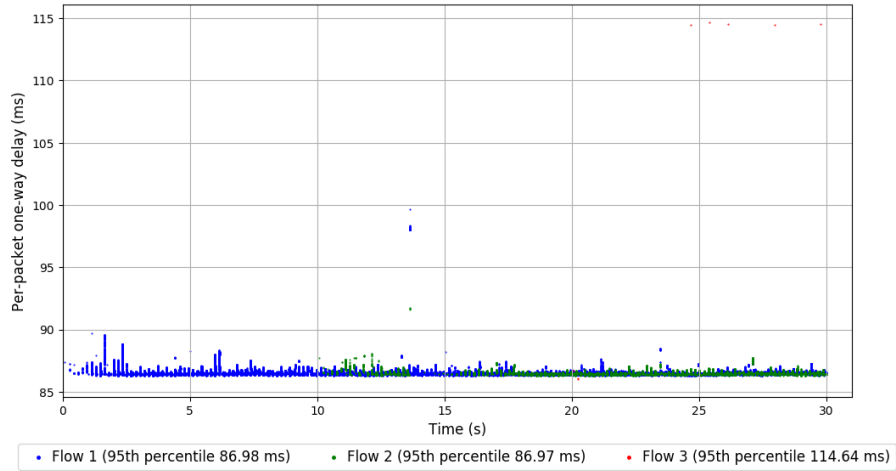
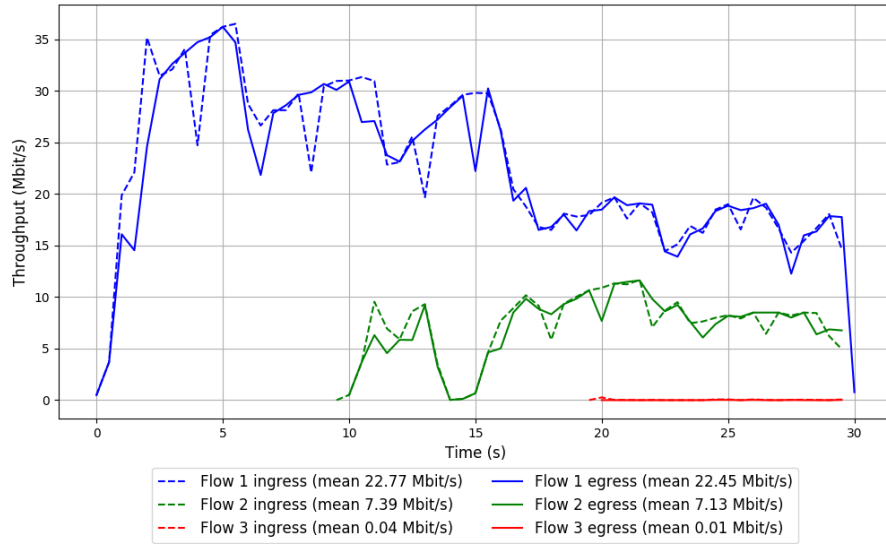
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 114.639 ms

Loss rate: 83.32%

### Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-08-21 02:36:09

End at: 2017-08-21 02:36:39

# Below is generated by plot.py at 2017-08-21 05:12:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 26.15 Mbit/s

95th percentile per-packet one-way delay: 87.440 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 18.61 Mbit/s

95th percentile per-packet one-way delay: 87.301 ms

Loss rate: 1.25%

-- Flow 2:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 115.157 ms

Loss rate: 39.75%

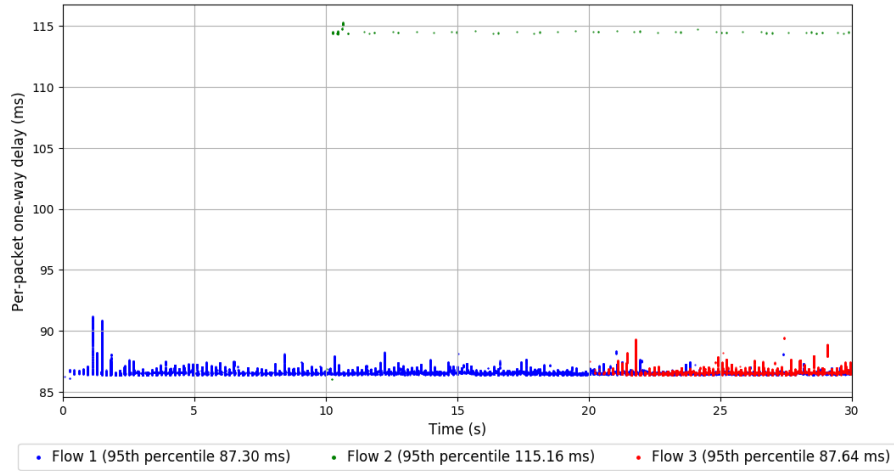
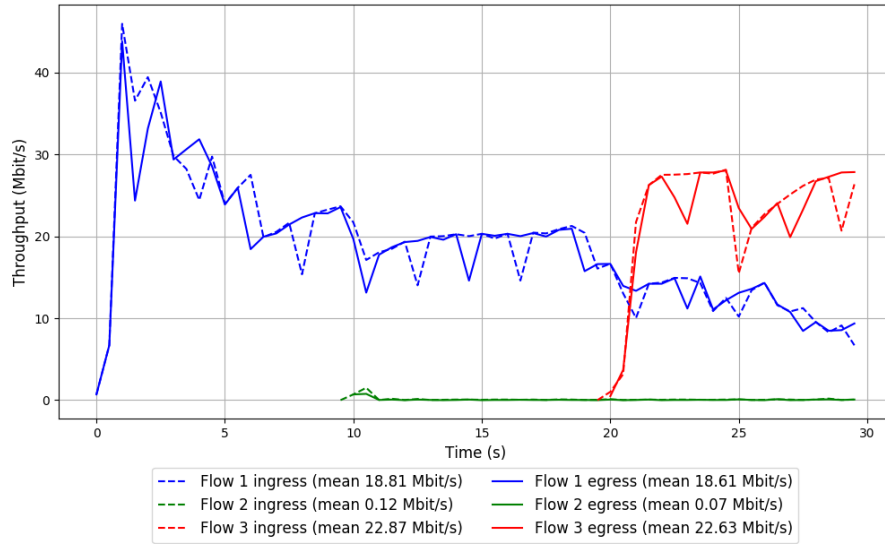
-- Flow 3:

Average throughput: 22.63 Mbit/s

95th percentile per-packet one-way delay: 87.638 ms

Loss rate: 1.03%

### Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-08-21 02:48:09

End at: 2017-08-21 02:48:39

# Below is generated by plot.py at 2017-08-21 05:12:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 6.73 Mbit/s

95th percentile per-packet one-way delay: 114.774 ms

Loss rate: 2.90%

-- Flow 1:

Average throughput: 2.81 Mbit/s

95th percentile per-packet one-way delay: 114.564 ms

Loss rate: 2.36%

-- Flow 2:

Average throughput: 2.70 Mbit/s

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

Loss rate: 6.08%

-- Flow 3:

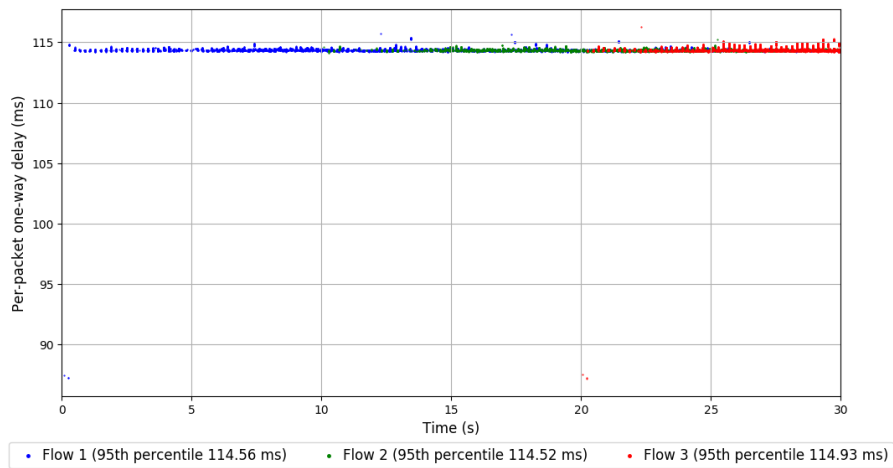
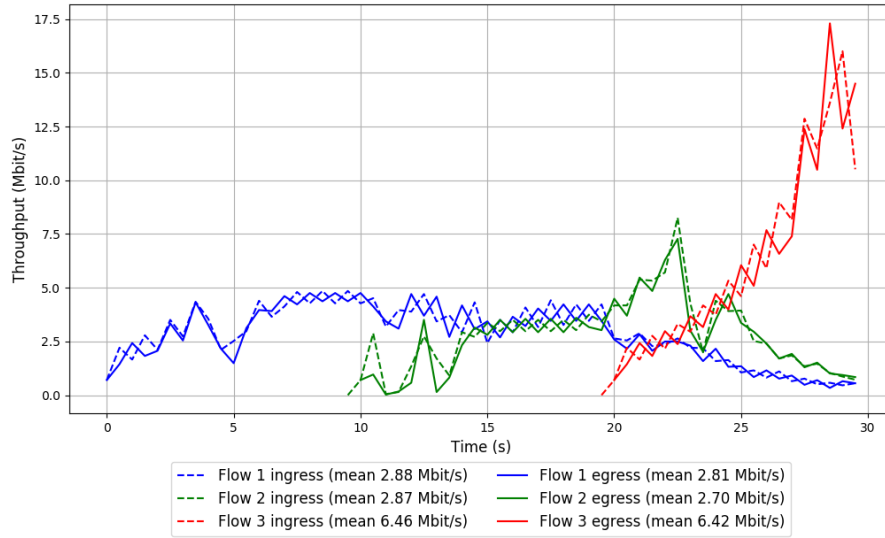
Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 114.926 ms

Loss rate: 0.77%



### Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-08-21 02:59:28

End at: 2017-08-21 02:59:58

# Below is generated by plot.py at 2017-08-21 05:12:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.85 Mbit/s

95th percentile per-packet one-way delay: 114.685 ms

Loss rate: 3.90%

-- Flow 1:

Average throughput: 3.81 Mbit/s

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

Loss rate: 2.60%

-- Flow 2:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 114.690 ms

Loss rate: 2.20%

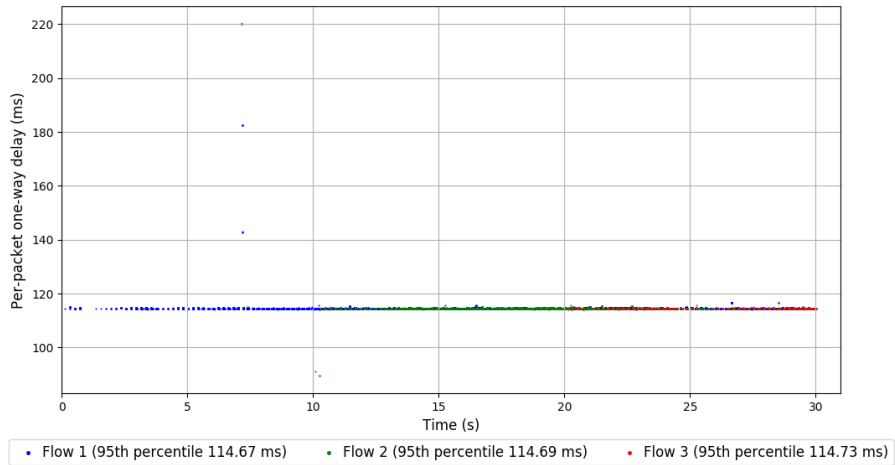
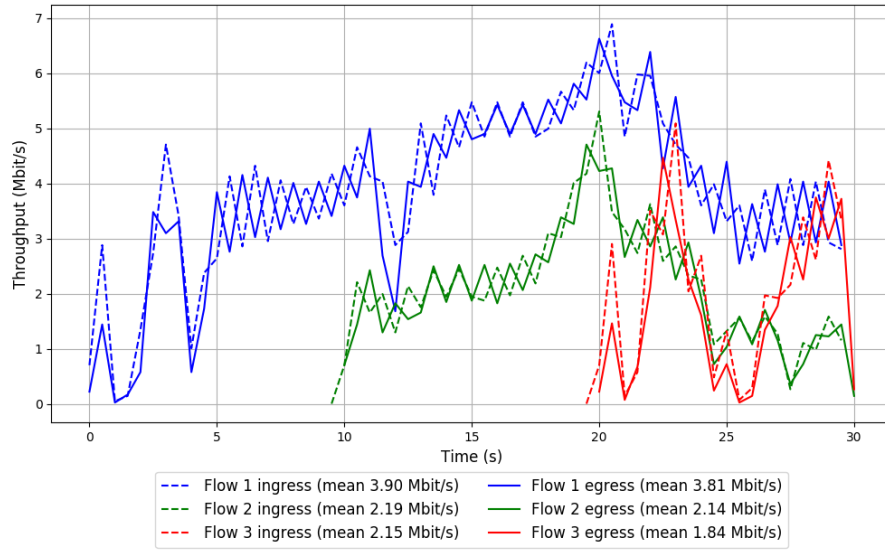
-- Flow 3:

Average throughput: 1.84 Mbit/s

95th percentile per-packet one-way delay: 114.727 ms

Loss rate: 14.57%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-08-21 03:11:06

End at: 2017-08-21 03:11:36

# Below is generated by plot.py at 2017-08-21 05:12:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.79 Mbit/s

95th percentile per-packet one-way delay: 114.919 ms

Loss rate: 2.69%

-- Flow 1:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 114.723 ms

Loss rate: 2.31%

-- Flow 2:

Average throughput: 4.54 Mbit/s

95th percentile per-packet one-way delay: 114.997 ms

Loss rate: 2.98%

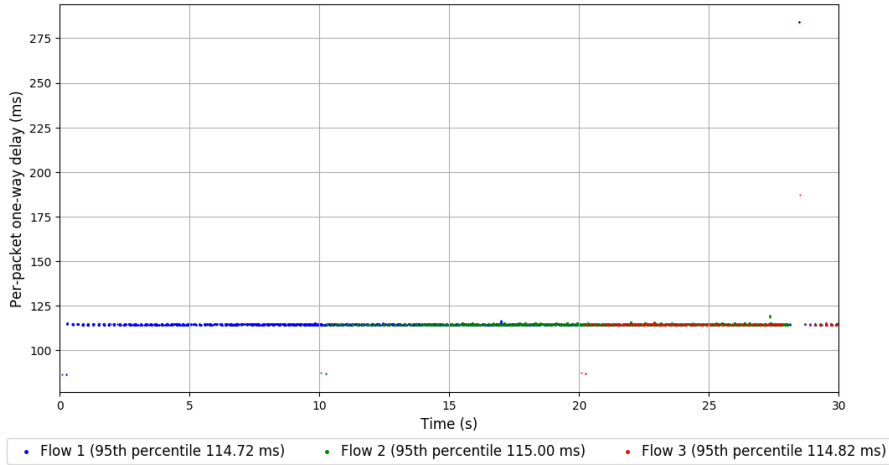
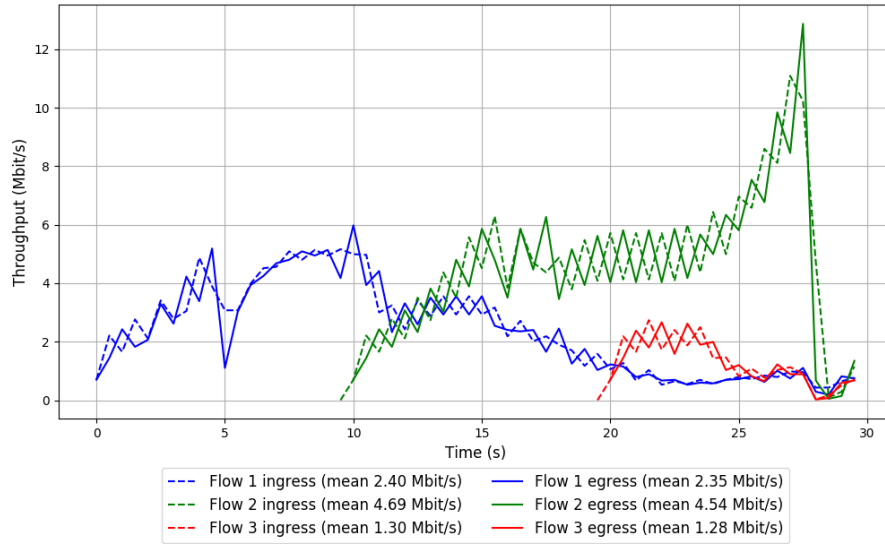
-- Flow 3:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 114.816 ms

Loss rate: 2.69%

### Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-08-21 03:22:49

End at: 2017-08-21 03:23:19

# Below is generated by plot.py at 2017-08-21 05:12:45

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.06 Mbit/s

95th percentile per-packet one-way delay: 114.781 ms

Loss rate: 5.19%

-- Flow 1:

Average throughput: 2.46 Mbit/s

95th percentile per-packet one-way delay: 114.796 ms

Loss rate: 2.67%

-- Flow 2:

Average throughput: 1.62 Mbit/s

95th percentile per-packet one-way delay: 114.803 ms

Loss rate: 11.86%

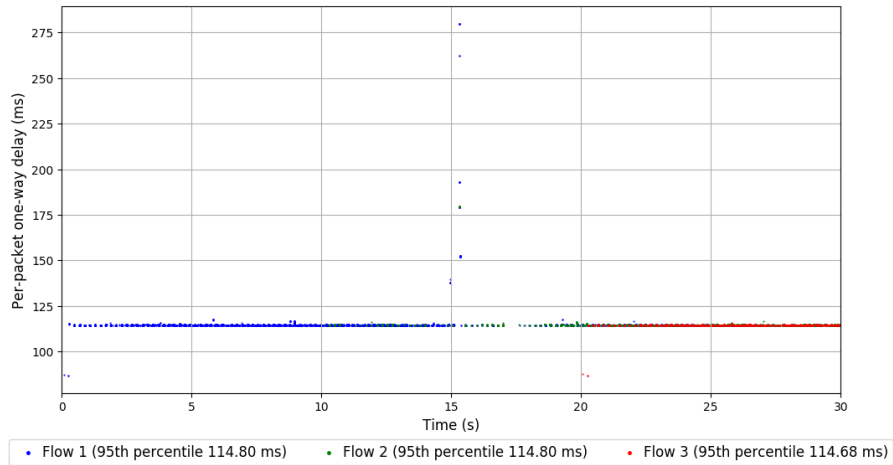
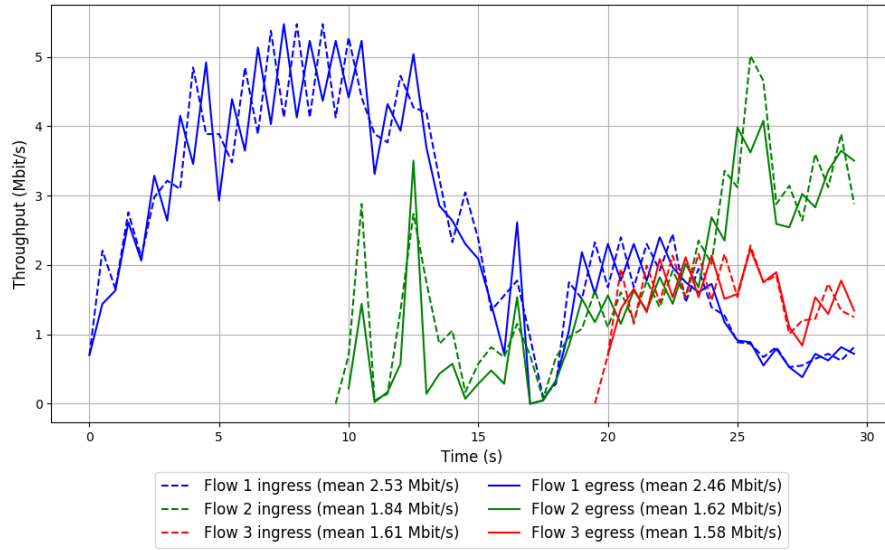
-- Flow 3:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 114.682 ms

Loss rate: 1.81%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-08-21 03:34:24

End at: 2017-08-21 03:34:54

# Below is generated by plot.py at 2017-08-21 05:12:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 18.54 Mbit/s

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

Loss rate: 2.71%

-- Flow 1:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 114.740 ms

Loss rate: 6.03%

-- Flow 2:

Average throughput: 25.67 Mbit/s

95th percentile per-packet one-way delay: 88.124 ms

Loss rate: 2.29%

-- Flow 3:

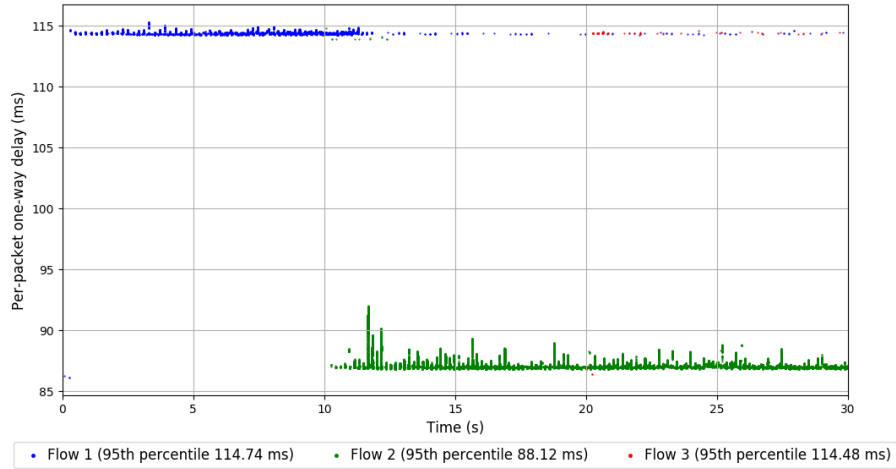
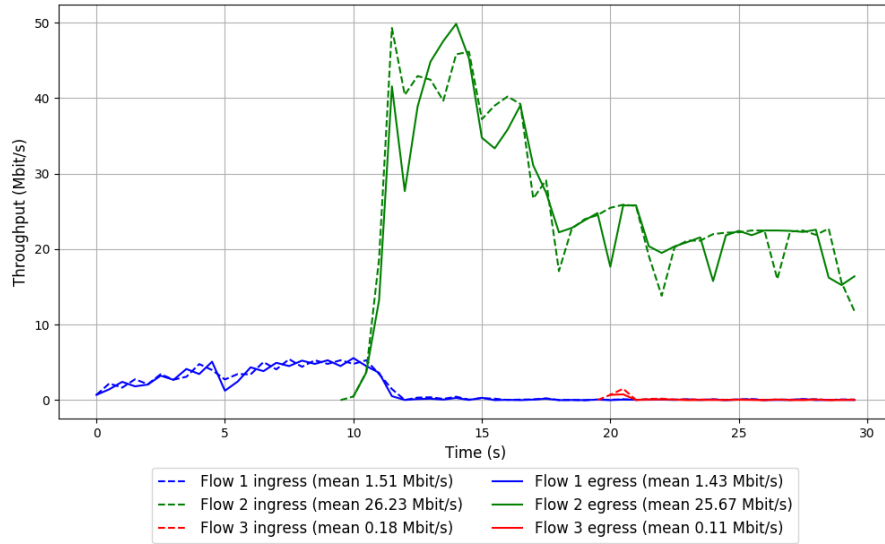
Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 114.480 ms

Loss rate: 41.16%



### Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-08-21 03:46:47

End at: 2017-08-21 03:47:17

# Below is generated by plot.py at 2017-08-21 05:12:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 13.84 Mbit/s

95th percentile per-packet one-way delay: 88.647 ms

Loss rate: 1.84%

-- Flow 1:

Average throughput: 12.10 Mbit/s

95th percentile per-packet one-way delay: 88.807 ms

Loss rate: 1.72%

-- Flow 2:

Average throughput: 0.09 Mbit/s

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

Loss rate: 44.31%

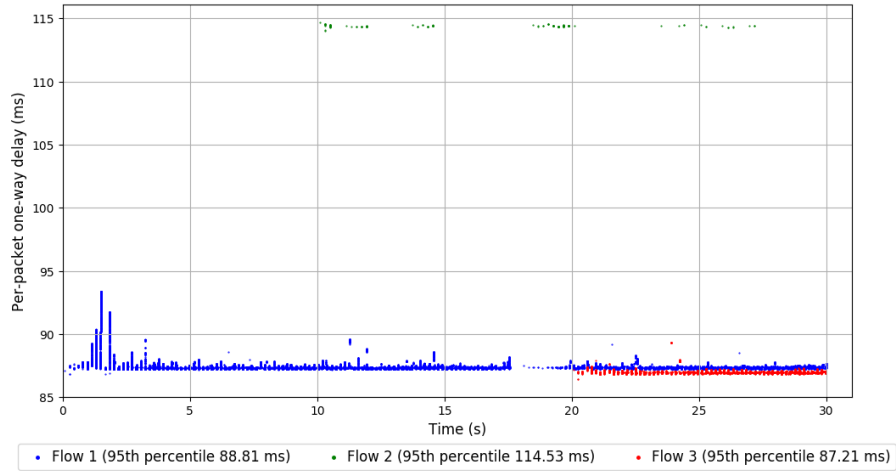
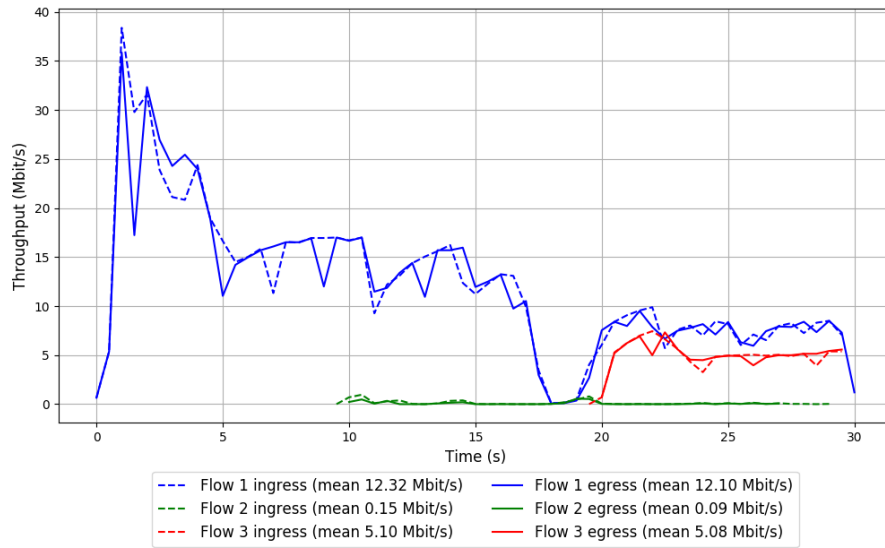
-- Flow 3:

Average throughput: 5.08 Mbit/s

95th percentile per-packet one-way delay: 87.213 ms

Loss rate: 0.40%

Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of KohoCC

Start at: 2017-08-21 01:55:03

End at: 2017-08-21 01:55:33

# Below is generated by plot.py at 2017-08-21 05:12:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 13.08 Mbit/s

95th percentile per-packet one-way delay: 87.341 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 6.65 Mbit/s

95th percentile per-packet one-way delay: 87.434 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 87.240 ms

Loss rate: 2.10%

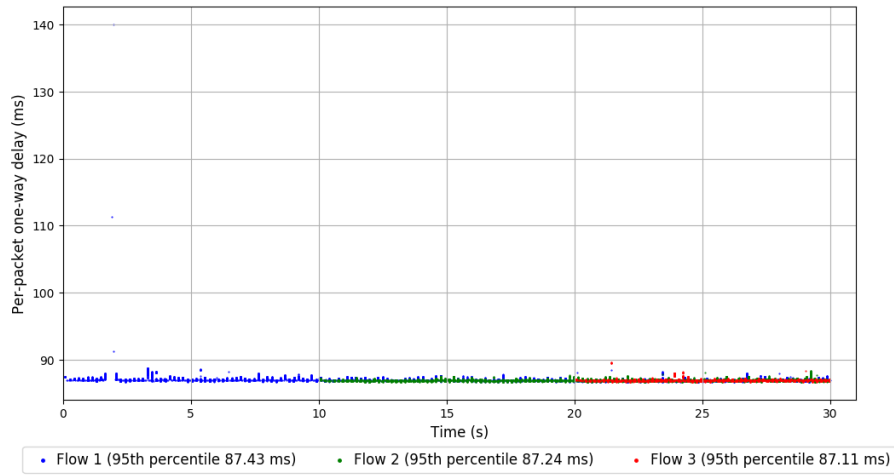
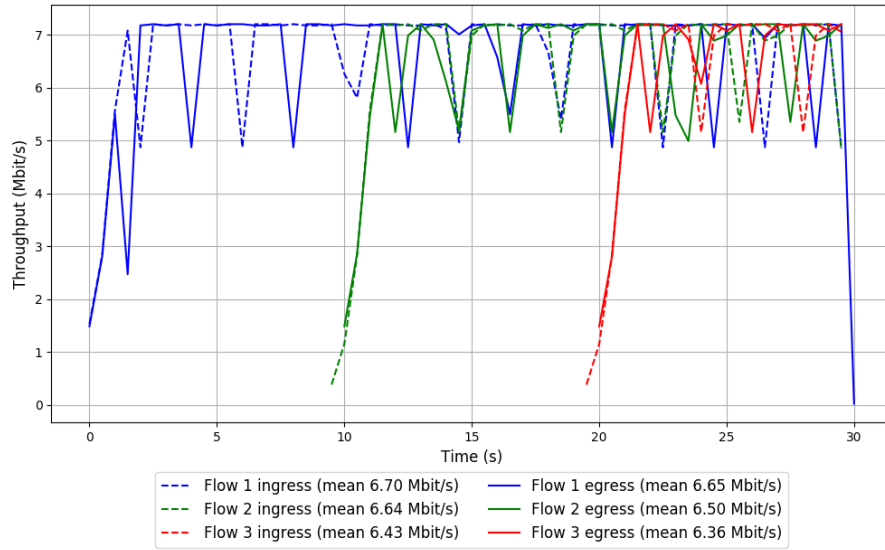
-- Flow 3:

Average throughput: 6.36 Mbit/s

95th percentile per-packet one-way delay: 87.114 ms

Loss rate: 1.09%

Run 1: Report of KohoCC — Data Link



Run 2: Statistics of KohoCC

Start at: 2017-08-21 02:08:46

End at: 2017-08-21 02:09:16

# Below is generated by plot.py at 2017-08-21 05:12:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 114.502 ms

Loss rate: 70.55%

-- Flow 1:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 114.727 ms

Loss rate: 93.71%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 92.35%

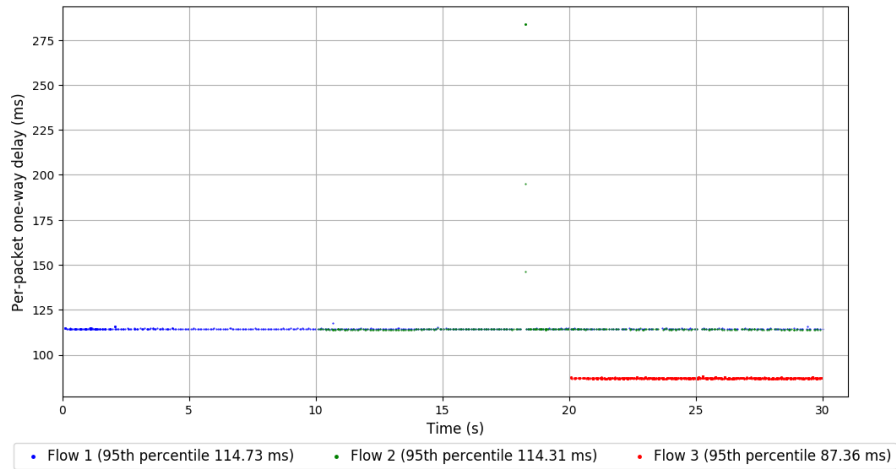
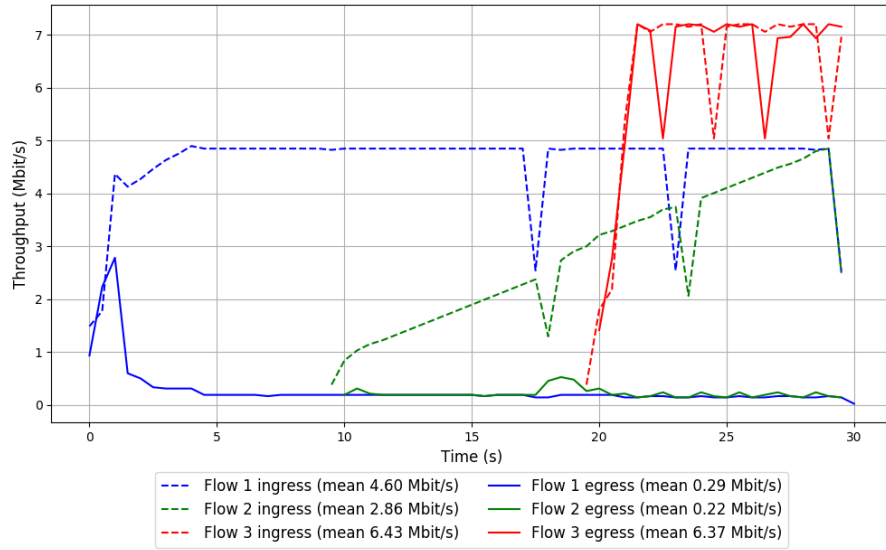
-- Flow 3:

Average throughput: 6.37 Mbit/s

95th percentile per-packet one-way delay: 87.358 ms

Loss rate: 0.91%

## Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-08-21 02:22:13

End at: 2017-08-21 02:22:43

# Below is generated by plot.py at 2017-08-21 05:12:55

# Datalink statistics

-- Total of 3 flows:

Average throughput: 10.99 Mbit/s

95th percentile per-packet one-way delay: 87.572 ms

Loss rate: 10.36%

-- Flow 1:

Average throughput: 6.53 Mbit/s

95th percentile per-packet one-way delay: 87.377 ms

Loss rate: 1.48%

-- Flow 2:

Average throughput: 6.45 Mbit/s

95th percentile per-packet one-way delay: 87.632 ms

Loss rate: 1.07%

-- Flow 3:

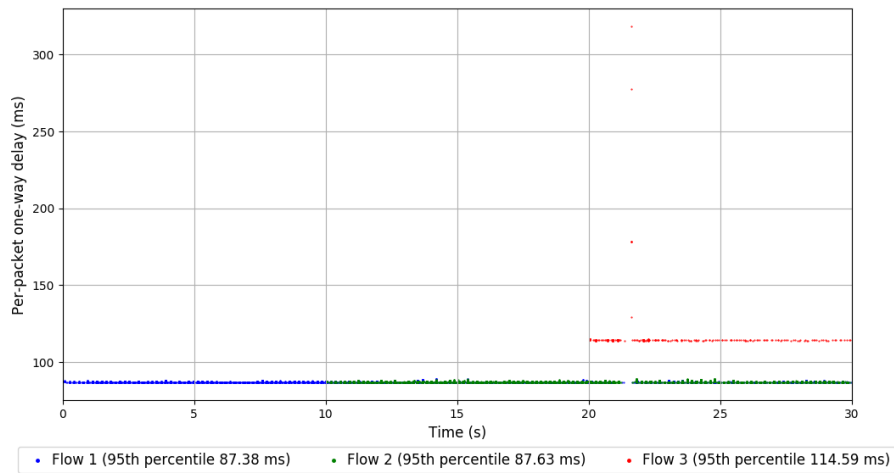
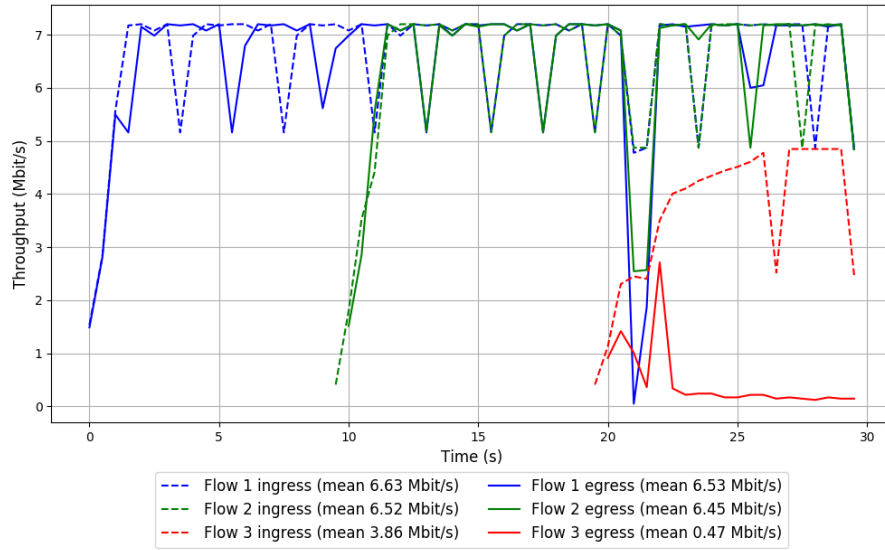
Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 114.588 ms

Loss rate: 87.92%



Run 3: Report of KohoCC — Data Link

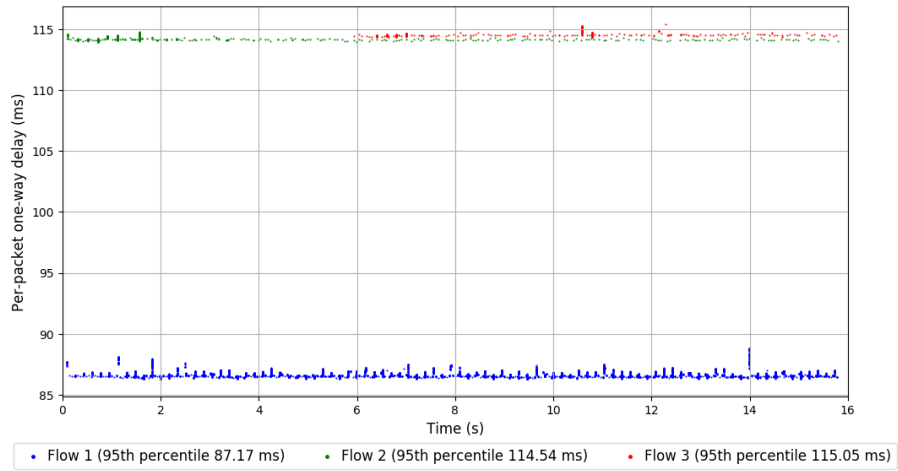
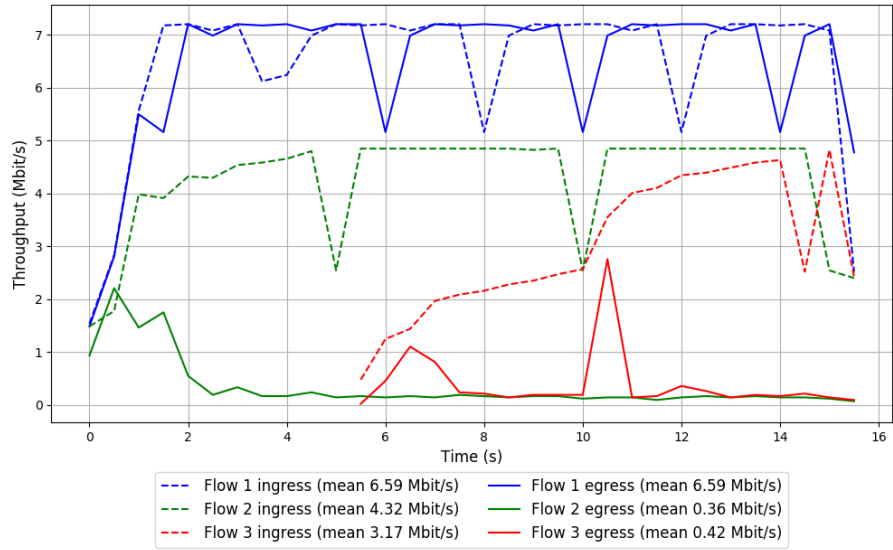


Run 4: Statistics of KohoCC

Start at: 2017-08-21 02:34:32

End at: 2017-08-21 02:35:02

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

Start at: 2017-08-21 02:46:41

End at: 2017-08-21 02:47:11

# Below is generated by plot.py at 2017-08-21 05:12:57

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 114.960 ms

Loss rate: 58.93%

-- Flow 1:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 114.701 ms

Loss rate: 93.91%

-- Flow 2:

Average throughput: 5.20 Mbit/s

95th percentile per-packet one-way delay: 114.977 ms

Loss rate: 7.89%

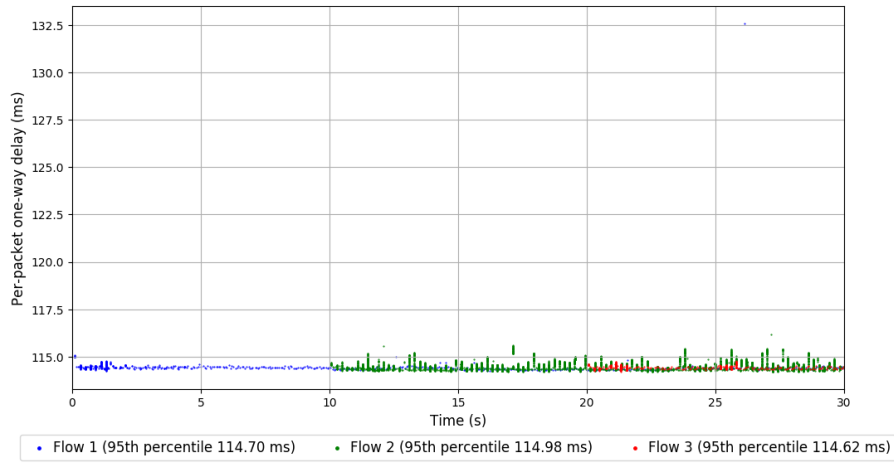
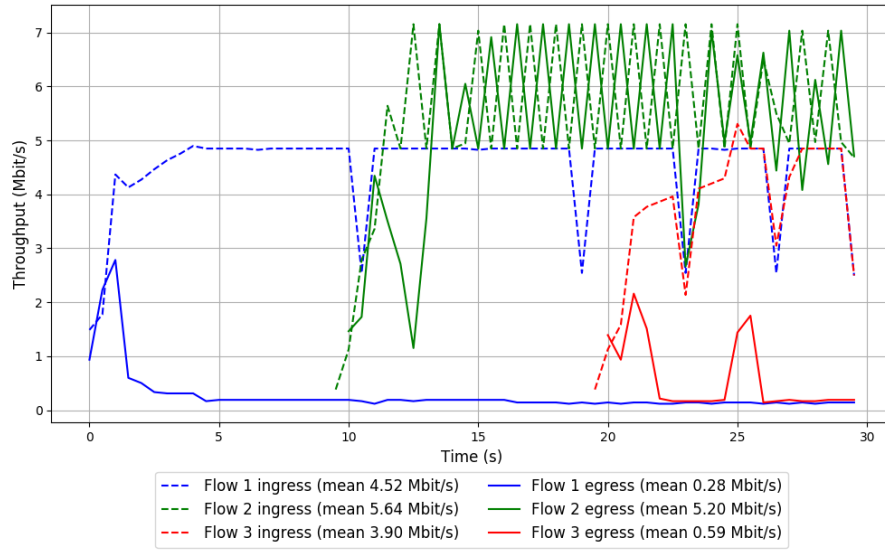
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 114.625 ms

Loss rate: 84.87%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-08-21 02:58:00

End at: 2017-08-21 02:58:30

# Below is generated by plot.py at 2017-08-21 05:12:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.91 Mbit/s

95th percentile per-packet one-way delay: 115.005 ms

Loss rate: 35.77%

-- Flow 1:

Average throughput: 5.65 Mbit/s

95th percentile per-packet one-way delay: 115.007 ms

Loss rate: 2.54%

-- Flow 2:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 114.997 ms

Loss rate: 93.17%

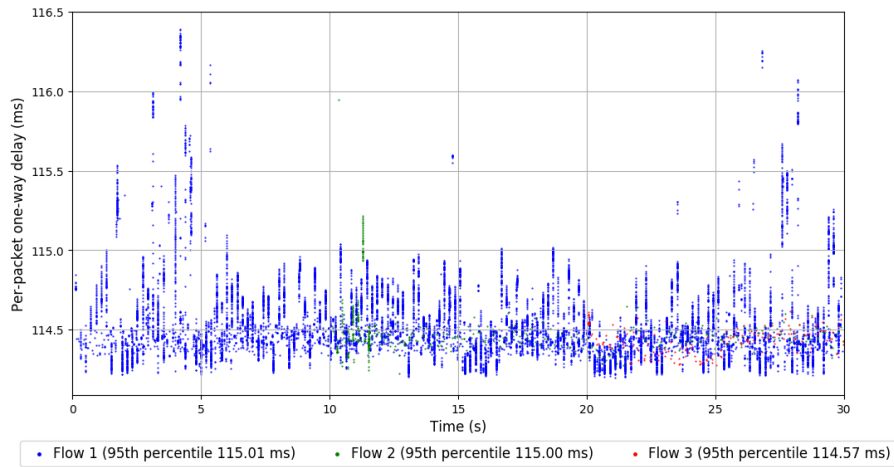
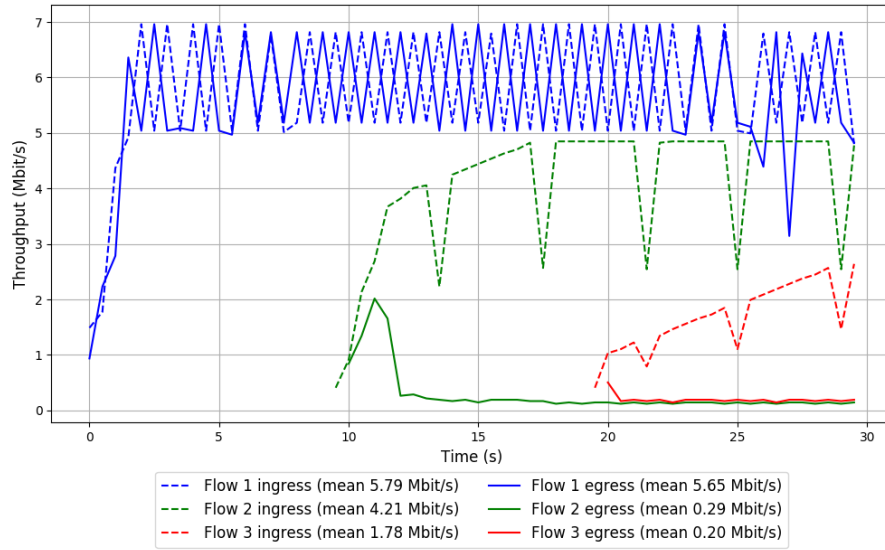
-- Flow 3:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 114.571 ms

Loss rate: 88.92%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-08-21 03:09:33

End at: 2017-08-21 03:10:03

# Below is generated by plot.py at 2017-08-21 05:12:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 114.835 ms

Loss rate: 92.87%

-- Flow 1:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 114.981 ms

Loss rate: 93.51%

-- Flow 2:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 114.625 ms

Loss rate: 92.83%

-- Flow 3:

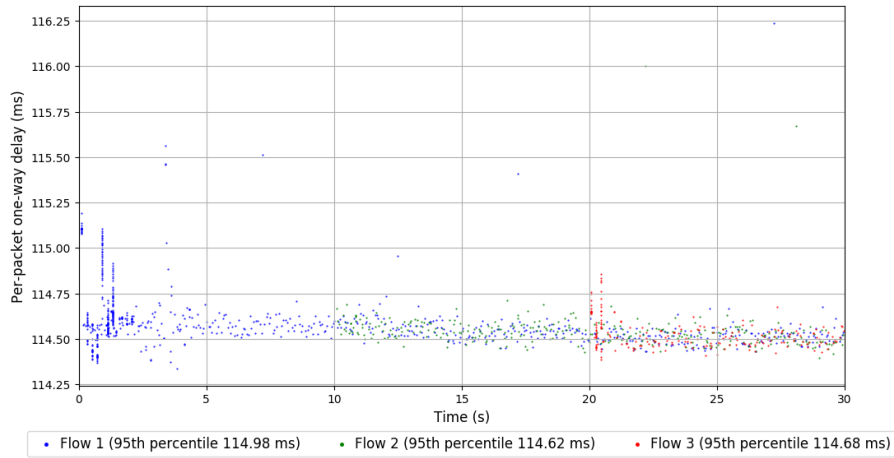
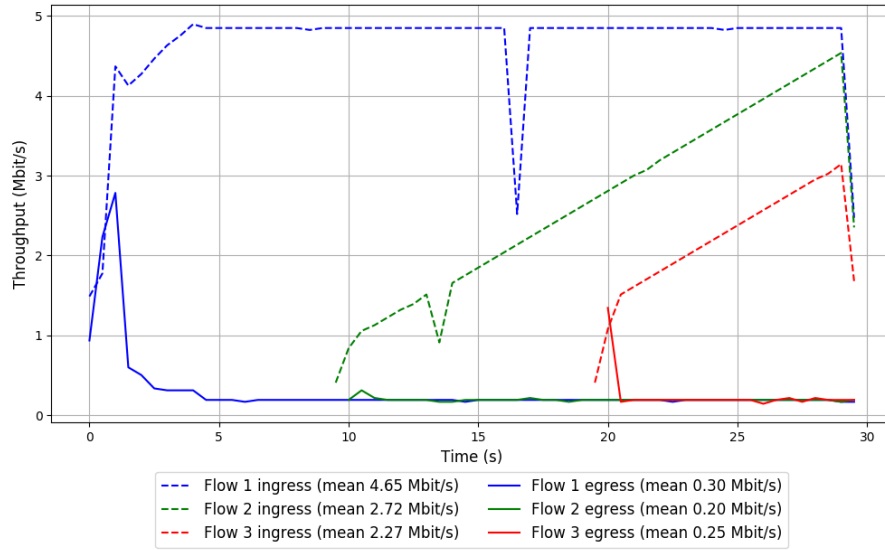
Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 114.684 ms

Loss rate: 89.03%



### Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-08-21 03:21:22

End at: 2017-08-21 03:21:52

# Below is generated by plot.py at 2017-08-21 05:13:00

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 114.730 ms

Loss rate: 92.45%

-- Flow 1:

Average throughput: 0.30 Mbit/s

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

Loss rate: 93.57%

-- Flow 2:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 114.751 ms

Loss rate: 91.90%

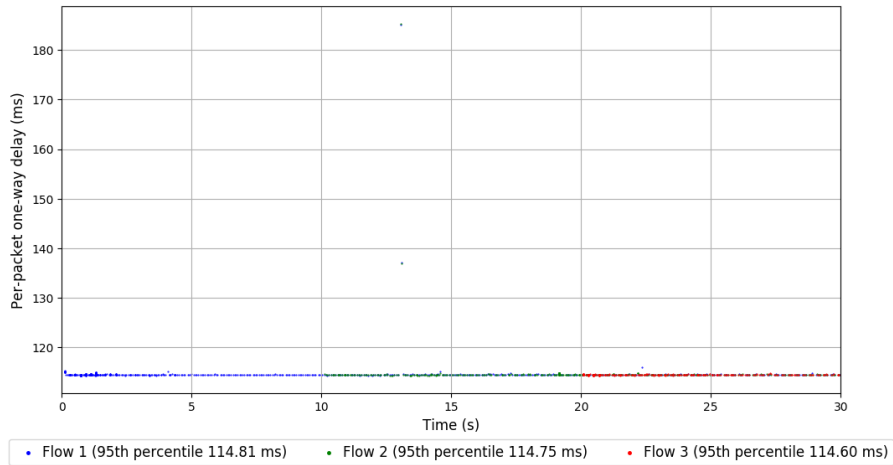
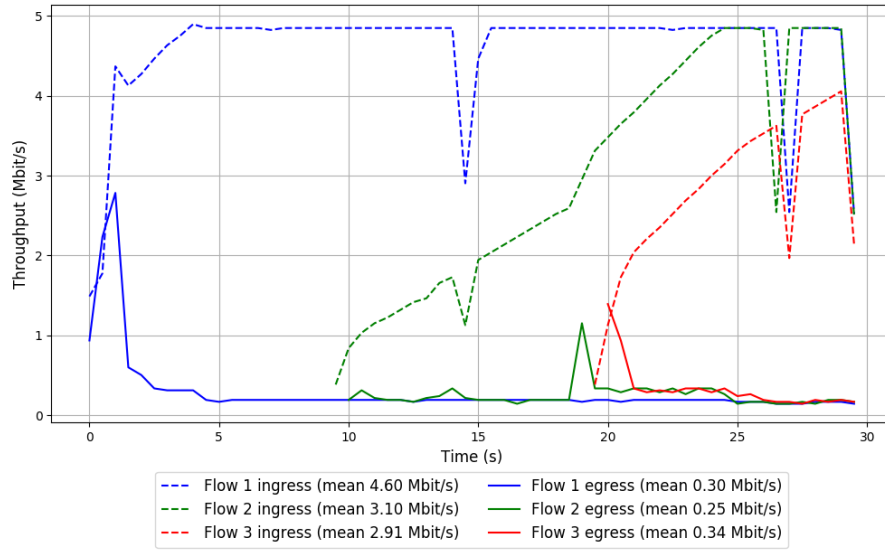
-- Flow 3:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 114.598 ms

Loss rate: 88.31%

### Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-08-21 03:32:47

End at: 2017-08-21 03:33:17

# Below is generated by plot.py at 2017-08-21 05:13:02

# Datalink statistics

-- Total of 3 flows:

Average throughput: 6.52 Mbit/s

95th percentile per-packet one-way delay: 88.601 ms

Loss rate: 40.99%

-- Flow 1:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 114.782 ms

Loss rate: 93.49%

-- Flow 2:

Average throughput: 6.14 Mbit/s

95th percentile per-packet one-way delay: 87.827 ms

Loss rate: 5.87%

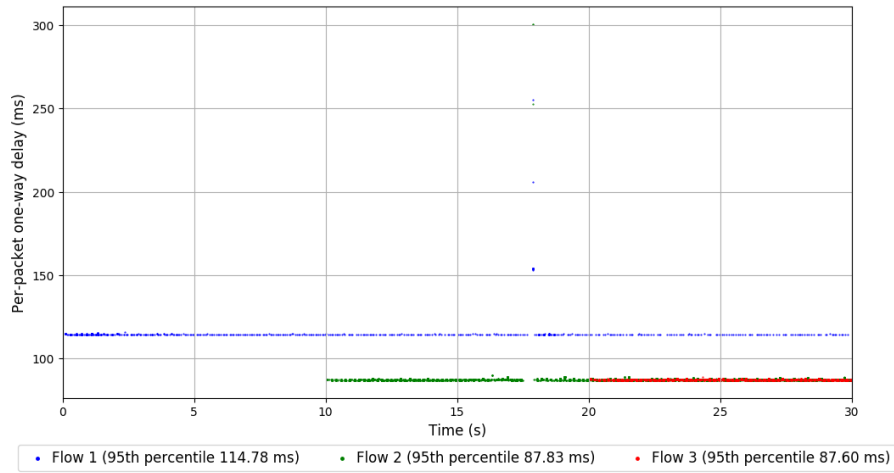
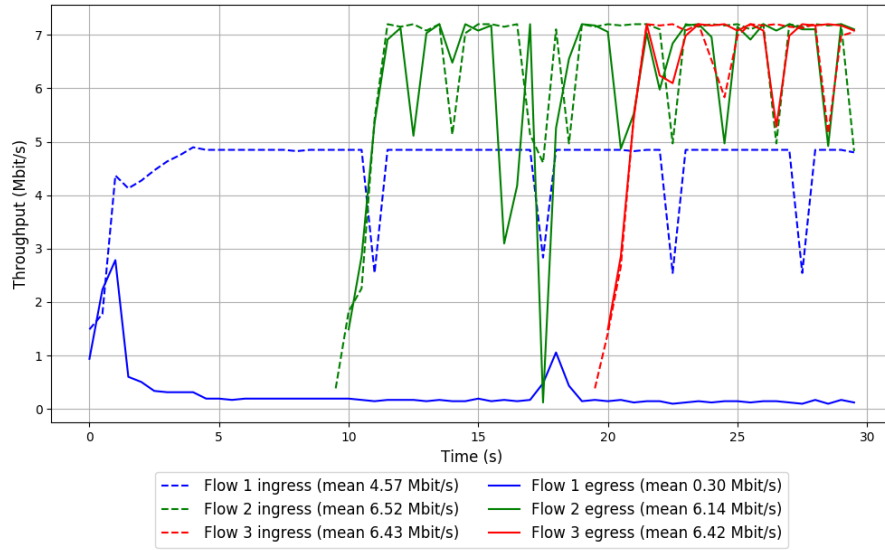
-- Flow 3:

Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 87.602 ms

Loss rate: 0.04%

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: 2017-08-21 03:45:11

End at: 2017-08-21 03:45:41

# Below is generated by plot.py at 2017-08-21 05:13:02

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 114.391 ms

Loss rate: 70.26%

-- Flow 1:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 114.325 ms

Loss rate: 93.97%

-- Flow 2:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 114.599 ms

Loss rate: 93.00%

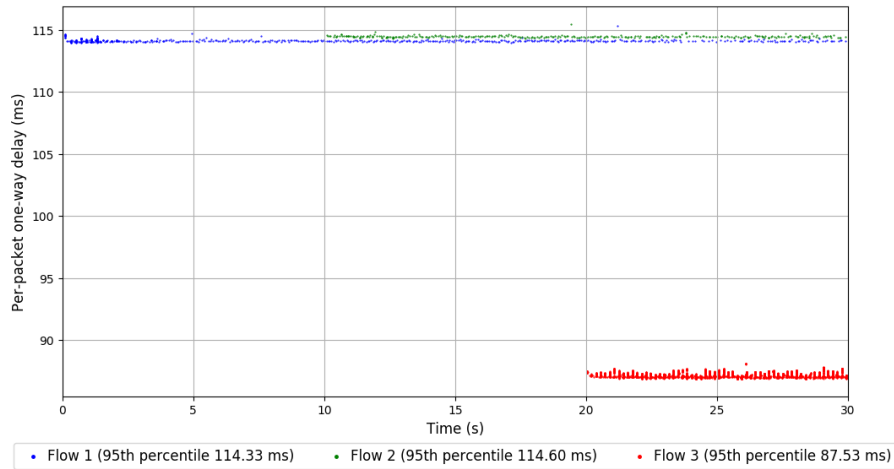
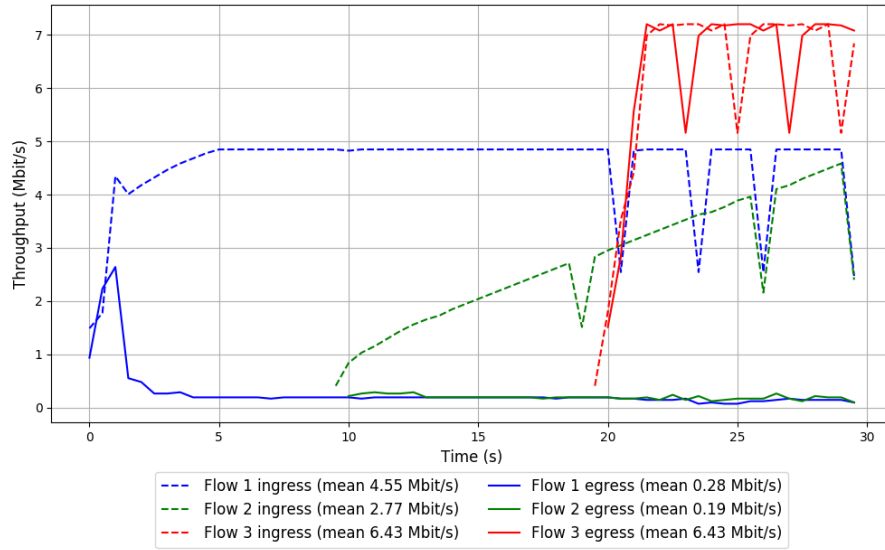
-- Flow 3:

Average throughput: 6.43 Mbit/s

95th percentile per-packet one-way delay: 87.532 ms

Loss rate: 0.00%

Run 10: Report of KohoCC — Data Link



Run 1: Statistics of LEDBAT

Start at: 2017-08-21 02:02:19

End at: 2017-08-21 02:02:49

# Below is generated by plot.py at 2017-08-21 05:13:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.65 Mbit/s

95th percentile per-packet one-way delay: 87.172 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 5.63 Mbit/s

95th percentile per-packet one-way delay: 87.138 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 114.575 ms

Loss rate: 53.23%

-- Flow 3:

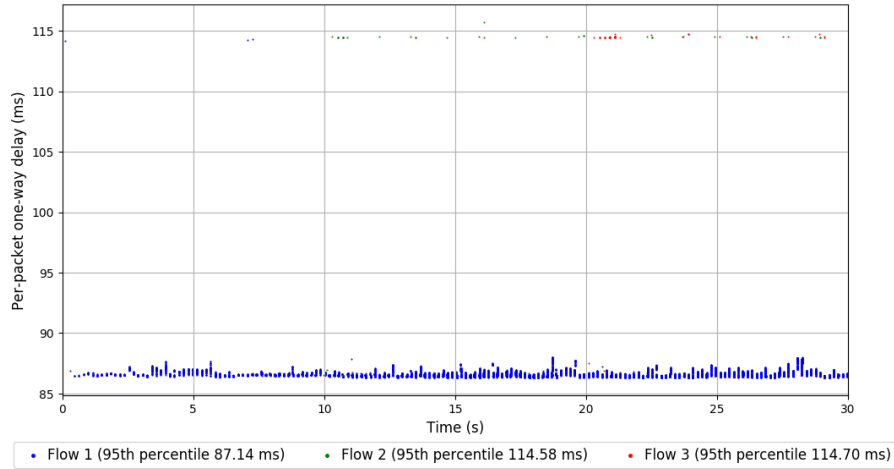
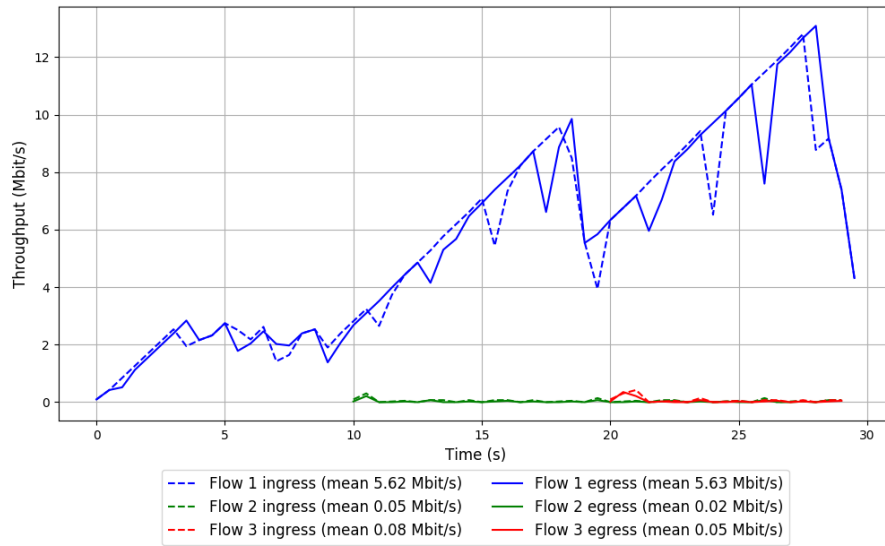
Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 114.697 ms

Loss rate: 40.31%



### Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-08-21 02:15:43

End at: 2017-08-21 02:16:13

# Below is generated by plot.py at 2017-08-21 05:13:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.62 Mbit/s

95th percentile per-packet one-way delay: 114.673 ms

Loss rate: 5.68%

-- Flow 1:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 114.596 ms

Loss rate: 5.97%

-- Flow 2:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 114.442 ms

Loss rate: 5.38%

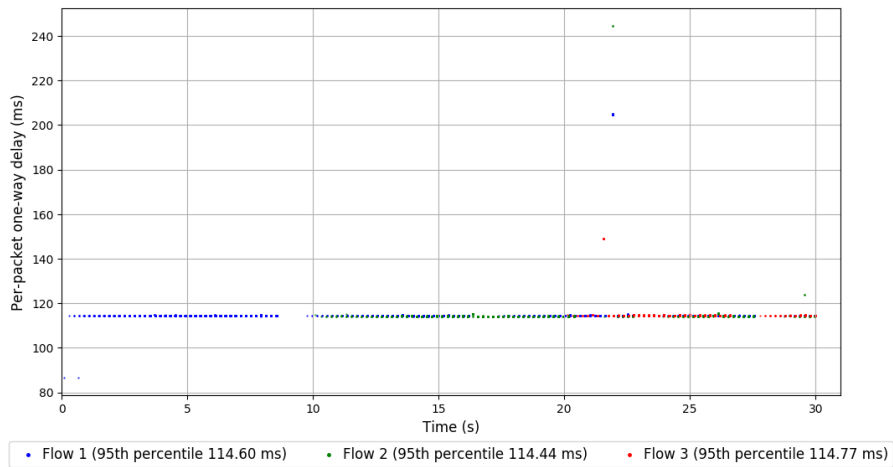
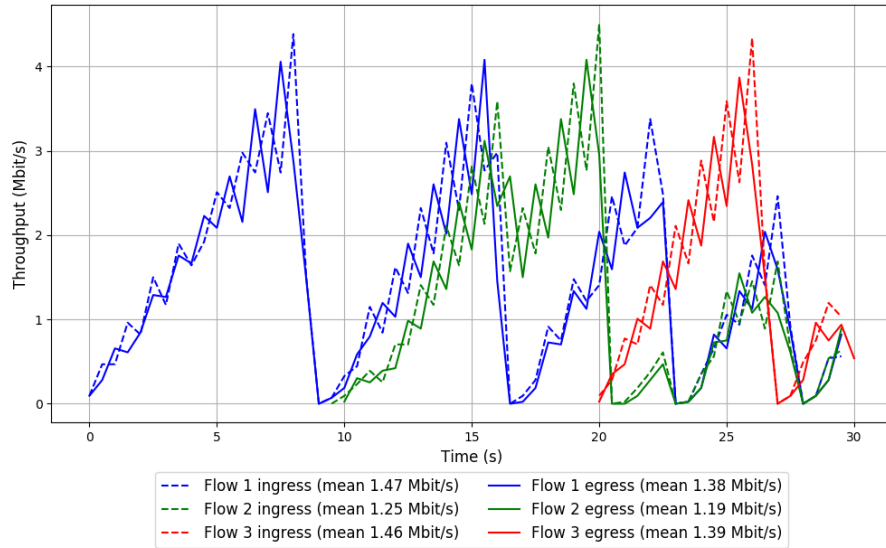
-- Flow 3:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 114.767 ms

Loss rate: 5.35%

## Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-08-21 02:28:45

End at: 2017-08-21 02:29:15

# Below is generated by plot.py at 2017-08-21 05:13:06

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.67 Mbit/s

95th percentile per-packet one-way delay: 87.619 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 87.682 ms

Loss rate: 1.54%

-- Flow 2:

Average throughput: 3.55 Mbit/s

95th percentile per-packet one-way delay: 87.367 ms

Loss rate: 0.58%

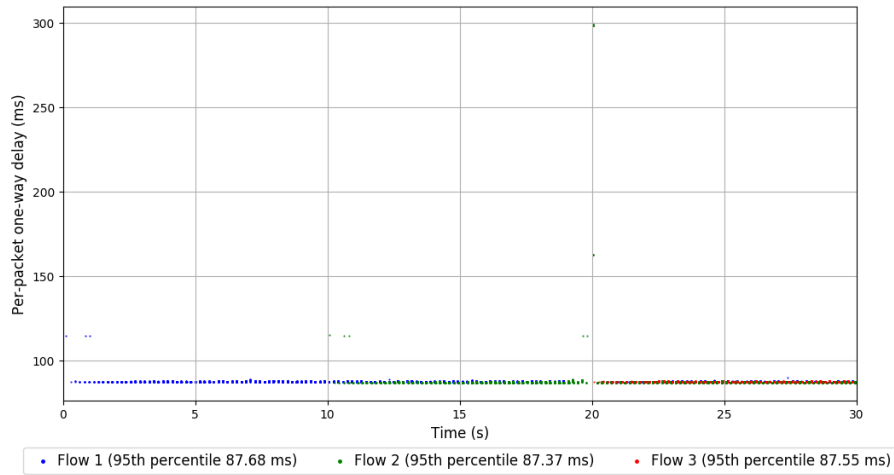
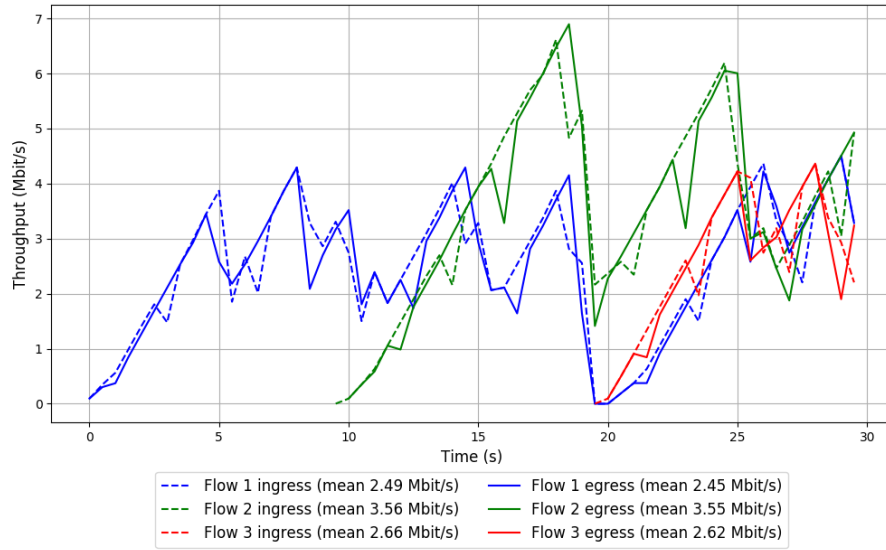
-- Flow 3:

Average throughput: 2.62 Mbit/s

95th percentile per-packet one-way delay: 87.546 ms

Loss rate: 1.40%

### Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-08-21 02:41:04

End at: 2017-08-21 02:41:34

# Below is generated by plot.py at 2017-08-21 05:13:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.47 Mbit/s

95th percentile per-packet one-way delay: 114.740 ms

Loss rate: 1.68%

-- Flow 1:

Average throughput: 3.33 Mbit/s

95th percentile per-packet one-way delay: 114.780 ms

Loss rate: 0.95%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 114.661 ms

Loss rate: 6.06%

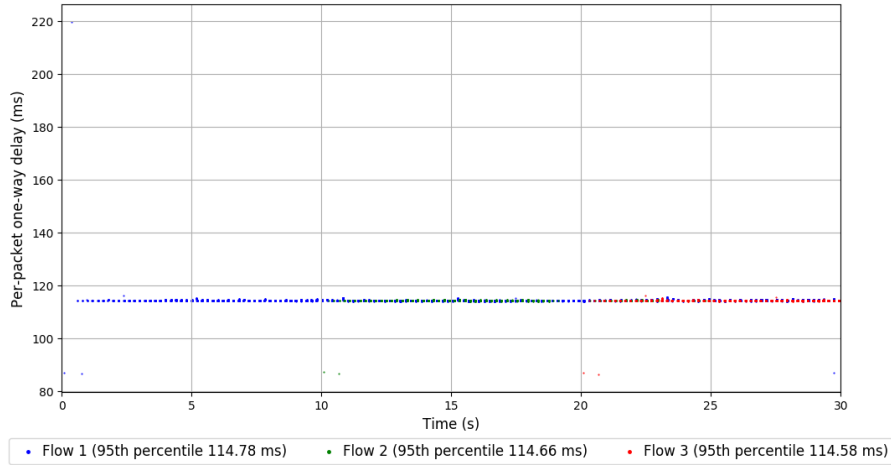
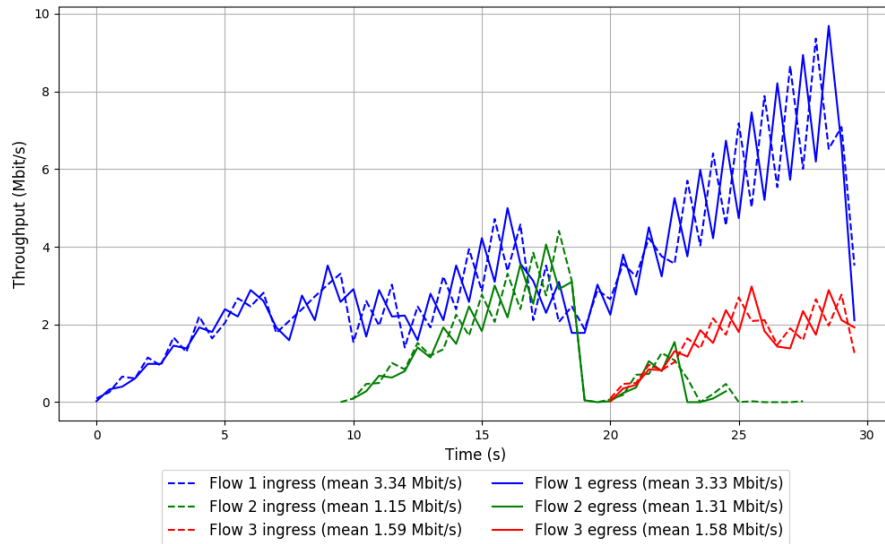
-- Flow 3:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 114.582 ms

Loss rate: 0.52%

### Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-08-21 02:52:46

End at: 2017-08-21 02:53:16

# Below is generated by plot.py at 2017-08-21 05:13:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 7.30 Mbit/s

95th percentile per-packet one-way delay: 114.805 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 114.859 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 4.44 Mbit/s

95th percentile per-packet one-way delay: 114.785 ms

Loss rate: 0.00%

-- Flow 3:

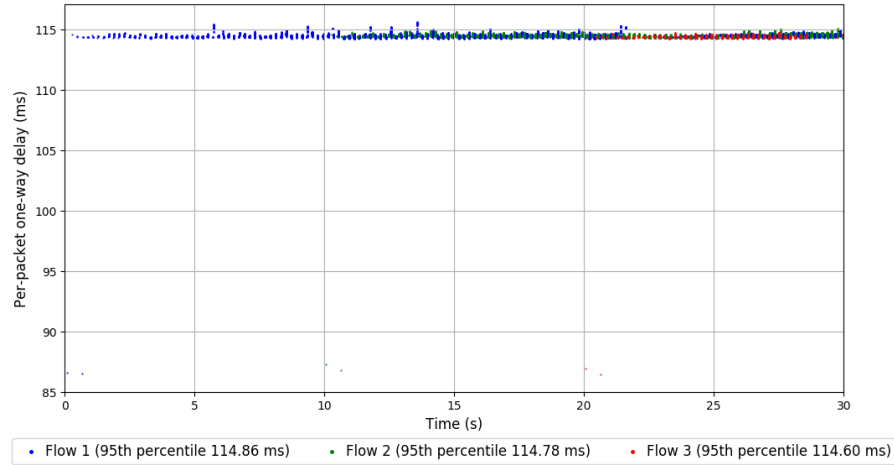
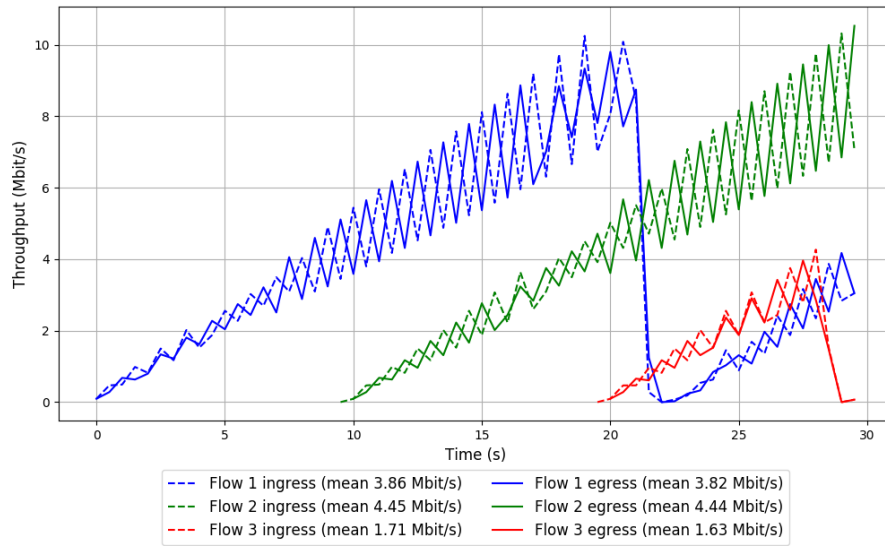
Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 114.597 ms

Loss rate: 4.54%



### Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-08-21 03:04:18

End at: 2017-08-21 03:04:48

# Below is generated by plot.py at 2017-08-21 05:13:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.23 Mbit/s

95th percentile per-packet one-way delay: 114.918 ms

Loss rate: 3.85%

-- Flow 1:

Average throughput: 1.56 Mbit/s

95th percentile per-packet one-way delay: 114.976 ms

Loss rate: 4.70%

-- Flow 2:

Average throughput: 1.56 Mbit/s

95th percentile per-packet one-way delay: 114.851 ms

Loss rate: 4.50%

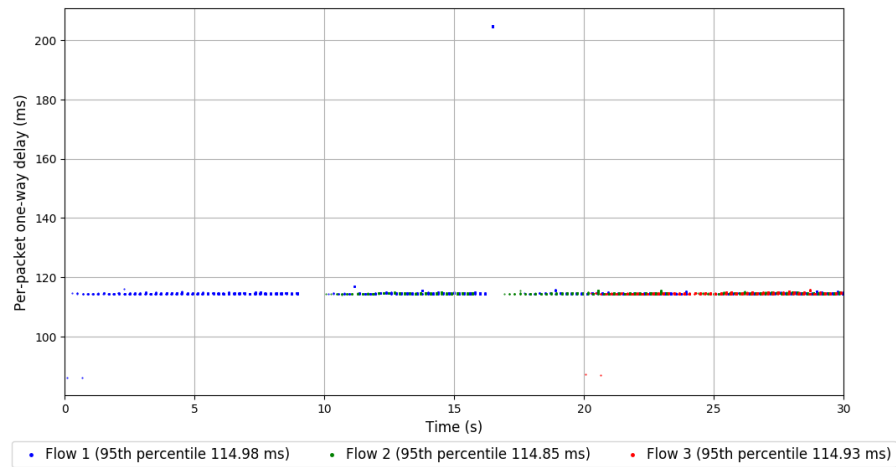
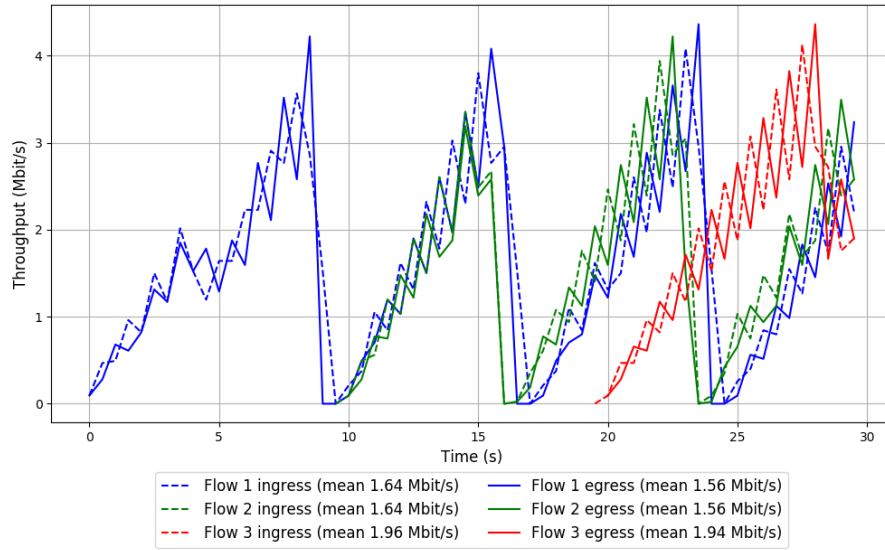
-- Flow 3:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 114.929 ms

Loss rate: 0.61%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-08-21 03:15:46

End at: 2017-08-21 03:16:16

# Below is generated by plot.py at 2017-08-21 05:13:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 114.963 ms

Loss rate: 2.82%

-- Flow 1:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 114.906 ms

Loss rate: 5.04%

-- Flow 2:

Average throughput: 3.27 Mbit/s

95th percentile per-packet one-way delay: 115.005 ms

Loss rate: 1.96%

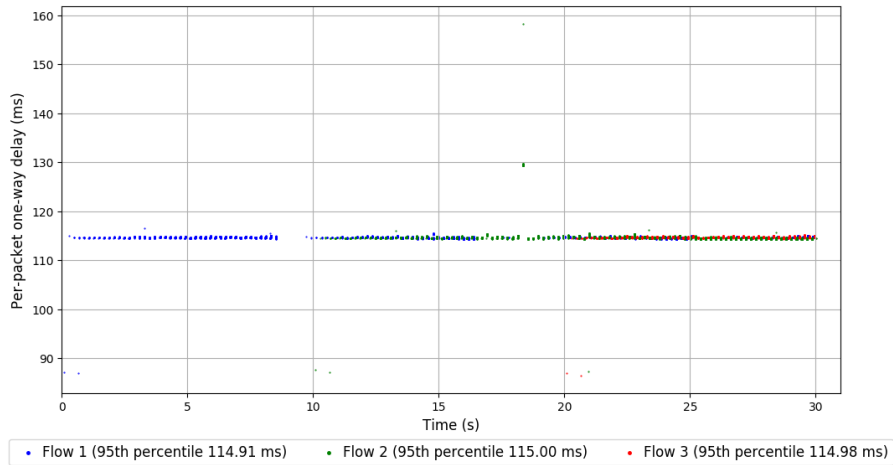
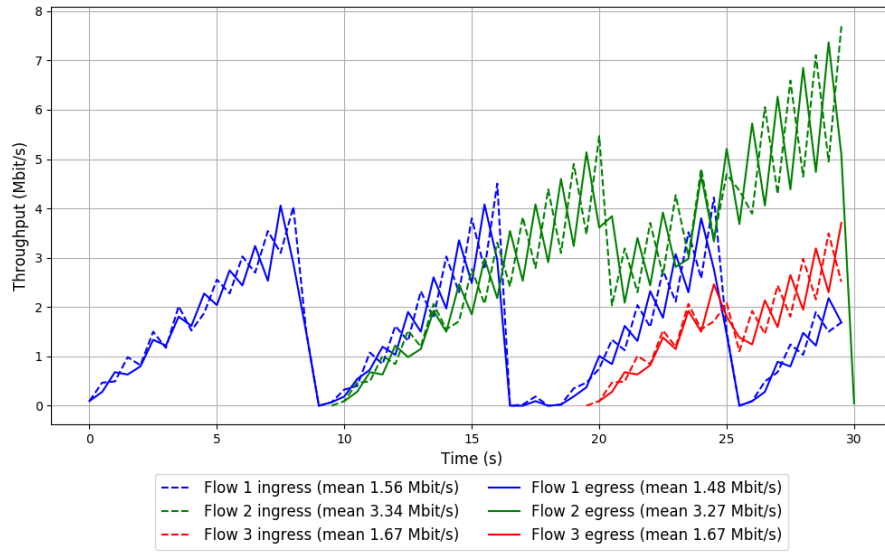
-- Flow 3:

Average throughput: 1.67 Mbit/s

95th percentile per-packet one-way delay: 114.985 ms

Loss rate: 0.07%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-08-21 03:27:26

End at: 2017-08-21 03:27:56

# Below is generated by plot.py at 2017-08-21 05:13:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.89 Mbit/s

95th percentile per-packet one-way delay: 115.020 ms

Loss rate: 3.05%

-- Flow 1:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 115.004 ms

Loss rate: 4.66%

-- Flow 2:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 115.010 ms

Loss rate: 2.67%

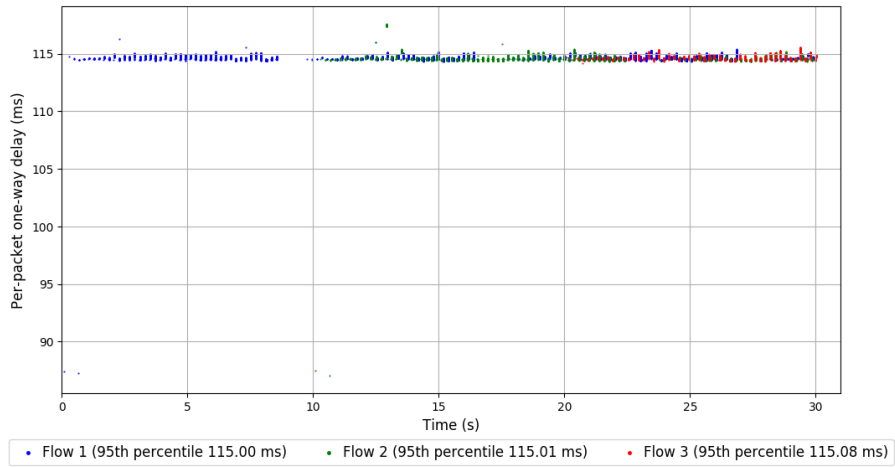
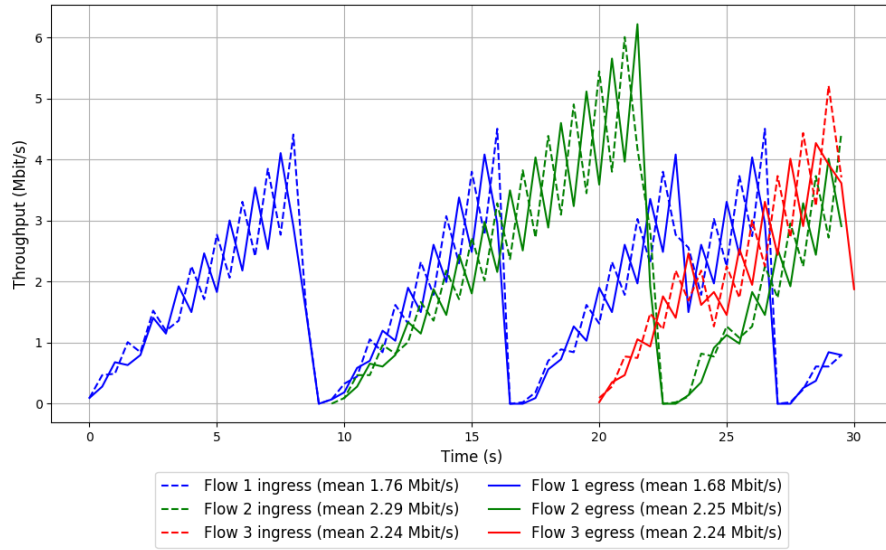
-- Flow 3:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 115.078 ms

Loss rate: 0.00%

### Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-08-21 03:39:17

End at: 2017-08-21 03:39:48

# Below is generated by plot.py at 2017-08-21 05:13:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.77 Mbit/s

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

Loss rate: 1.37%

-- Flow 1:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 115.278 ms

Loss rate: 8.89%

-- Flow 2:

Average throughput: 4.93 Mbit/s

95th percentile per-packet one-way delay: 88.160 ms

Loss rate: 0.11%

-- Flow 3:

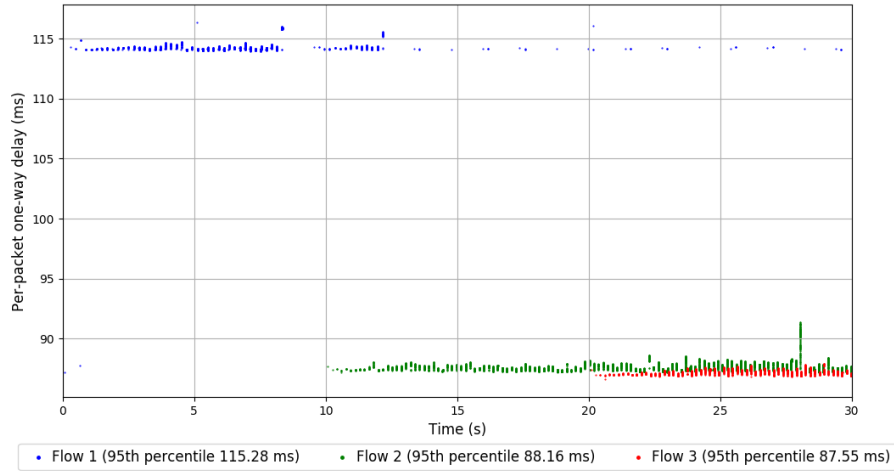
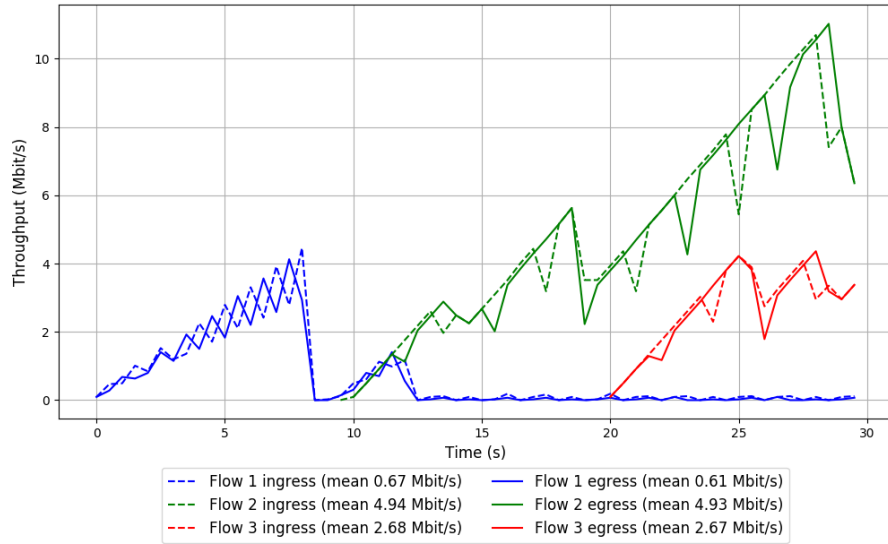
Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 87.545 ms

Loss rate: 0.44%



Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-08-21 03:51:17

End at: 2017-08-21 03:51:47

# Below is generated by plot.py at 2017-08-21 05:13:14

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.42 Mbit/s

95th percentile per-packet one-way delay: 87.737 ms

Loss rate: 1.58%

-- Flow 1:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 87.793 ms

Loss rate: 1.49%

-- Flow 2:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 87.365 ms

Loss rate: 1.23%

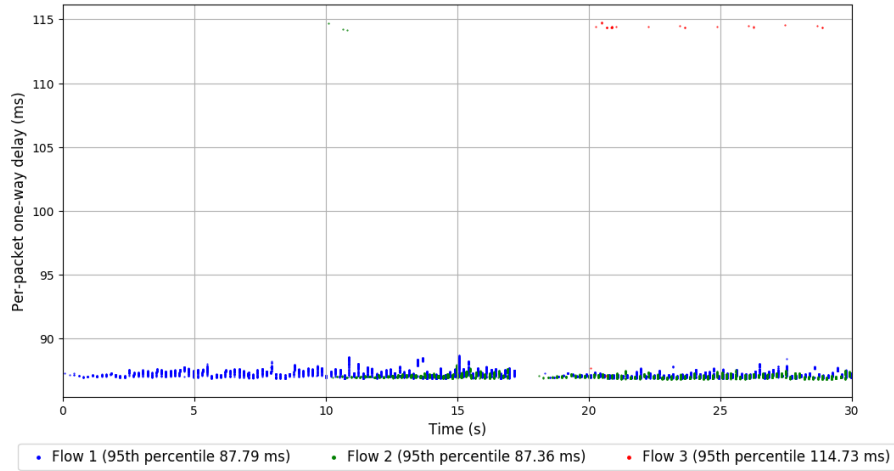
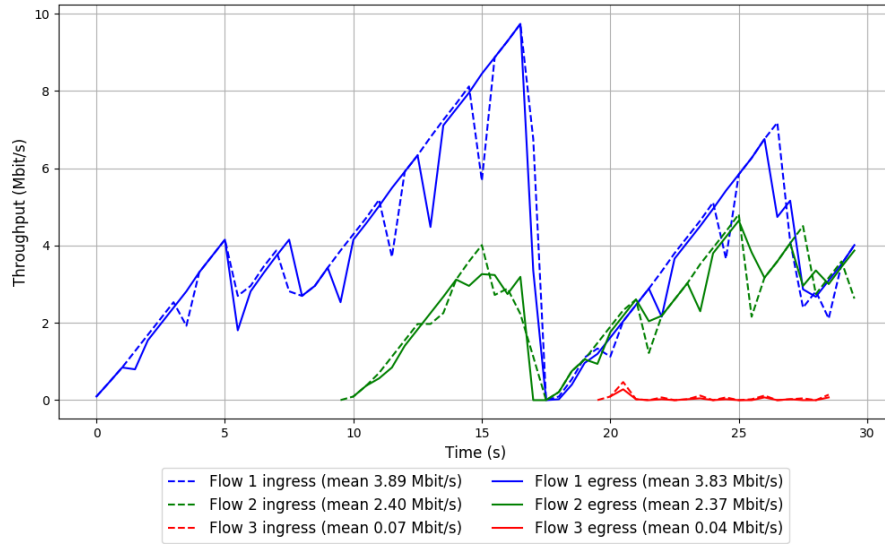
-- Flow 3:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 114.732 ms

Loss rate: 44.21%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC

Start at: 2017-08-21 01:52:13

End at: 2017-08-21 01:52:43

# Below is generated by plot.py at 2017-08-21 05:14:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 450.16 Mbit/s

95th percentile per-packet one-way delay: 114.463 ms

Loss rate: 4.19%

-- Flow 1:

Average throughput: 311.98 Mbit/s

95th percentile per-packet one-way delay: 122.273 ms

Loss rate: 5.61%

-- Flow 2:

Average throughput: 104.86 Mbit/s

95th percentile per-packet one-way delay: 88.127 ms

Loss rate: 1.26%

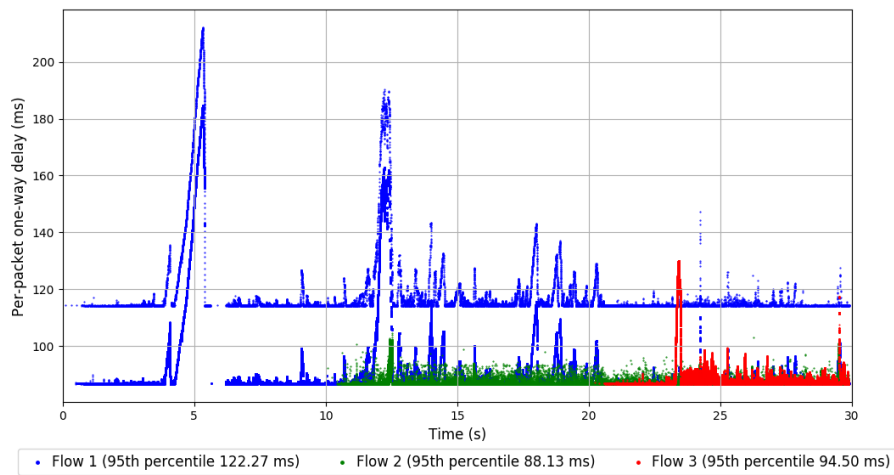
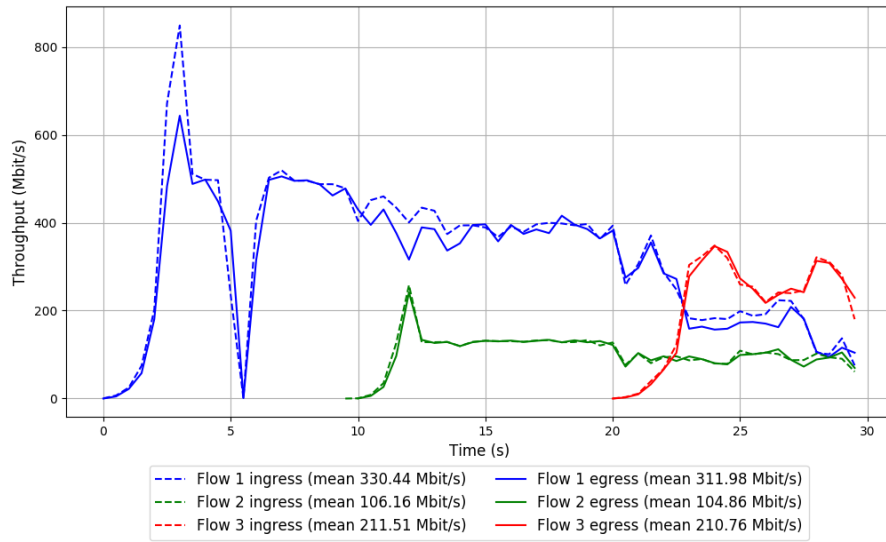
-- Flow 3:

Average throughput: 210.76 Mbit/s

95th percentile per-packet one-way delay: 94.497 ms

Loss rate: 0.36%

### Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-08-21 02:06:00

End at: 2017-08-21 02:06:30

# Below is generated by plot.py at 2017-08-21 05:14:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 396.81 Mbit/s

95th percentile per-packet one-way delay: 91.076 ms

Loss rate: 2.88%

-- Flow 1:

Average throughput: 348.80 Mbit/s

95th percentile per-packet one-way delay: 90.977 ms

Loss rate: 2.05%

-- Flow 2:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 115.208 ms

Loss rate: 99.68%

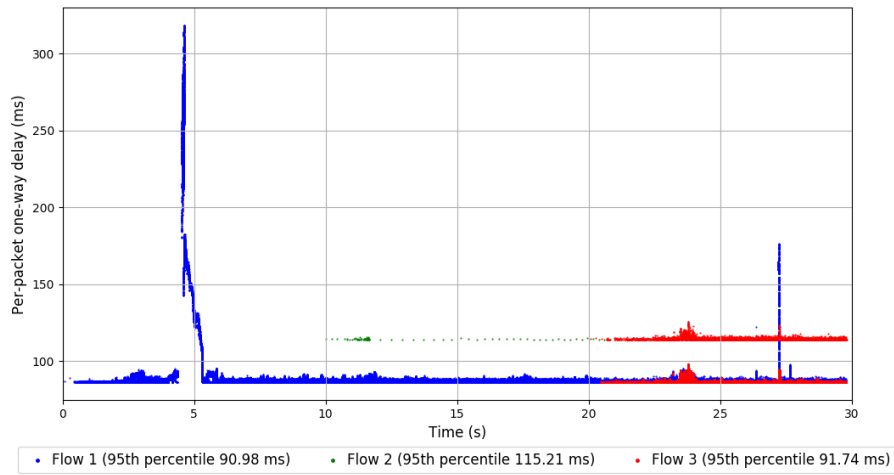
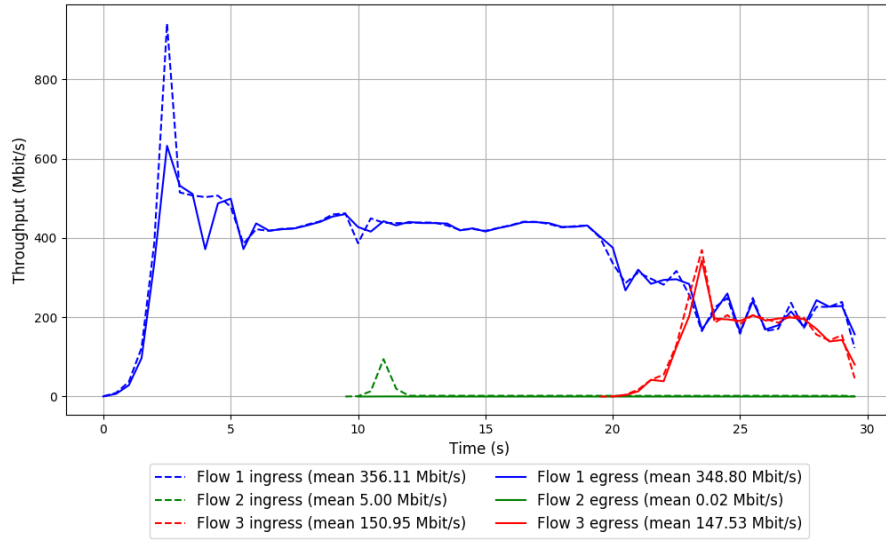
-- Flow 3:

Average throughput: 147.53 Mbit/s

95th percentile per-packet one-way delay: 91.738 ms

Loss rate: 2.29%

## Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-08-21 02:19:27

End at: 2017-08-21 02:19:57

# Below is generated by plot.py at 2017-08-21 05:15:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 400.50 Mbit/s

95th percentile per-packet one-way delay: 89.149 ms

Loss rate: 4.83%

-- Flow 1:

Average throughput: 354.74 Mbit/s

95th percentile per-packet one-way delay: 89.143 ms

Loss rate: 3.34%

-- Flow 2:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 88.765 ms

Loss rate: 99.65%

-- Flow 3:

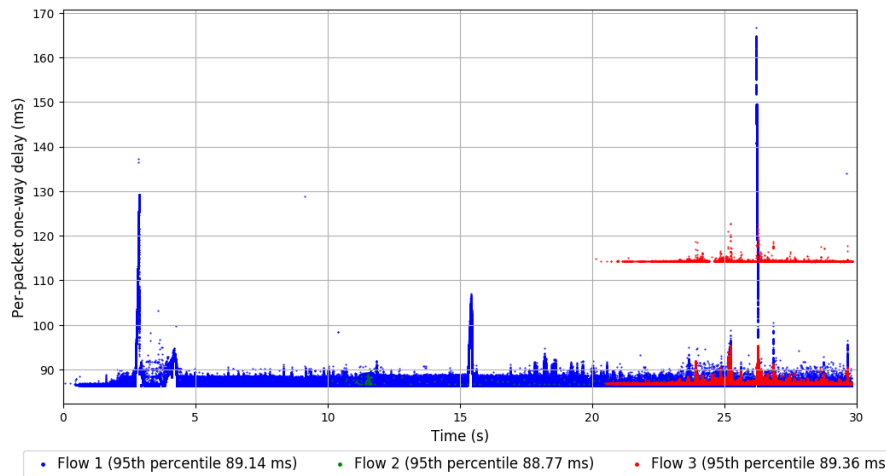
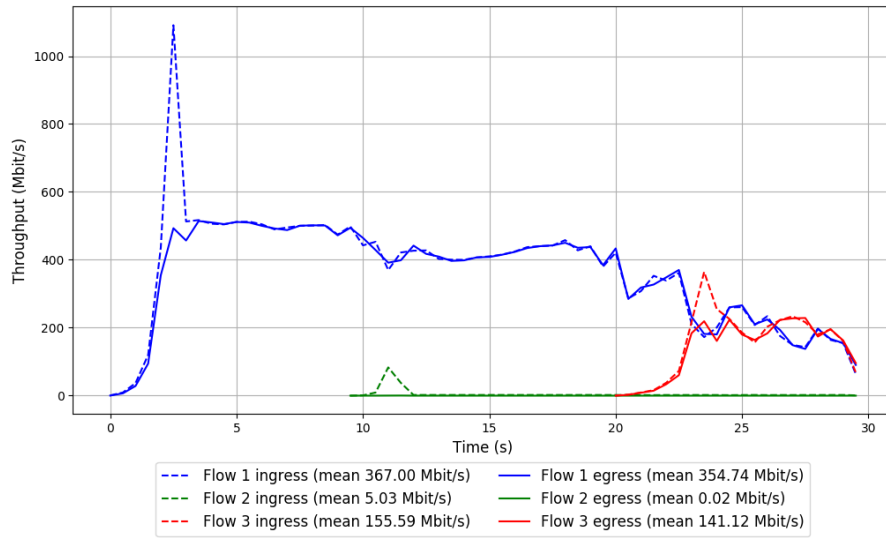
Average throughput: 141.12 Mbit/s

95th percentile per-packet one-way delay: 89.362 ms

Loss rate: 9.32%



### Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-08-21 02:32:12

End at: 2017-08-21 02:32:42

# Below is generated by plot.py at 2017-08-21 05:15:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 170.49 Mbit/s

95th percentile per-packet one-way delay: 87.898 ms

Loss rate: 17.44%

-- Flow 1:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 114.457 ms

Loss rate: 64.01%

-- Flow 2:

Average throughput: 253.25 Mbit/s

95th percentile per-packet one-way delay: 87.667 ms

Loss rate: 15.65%

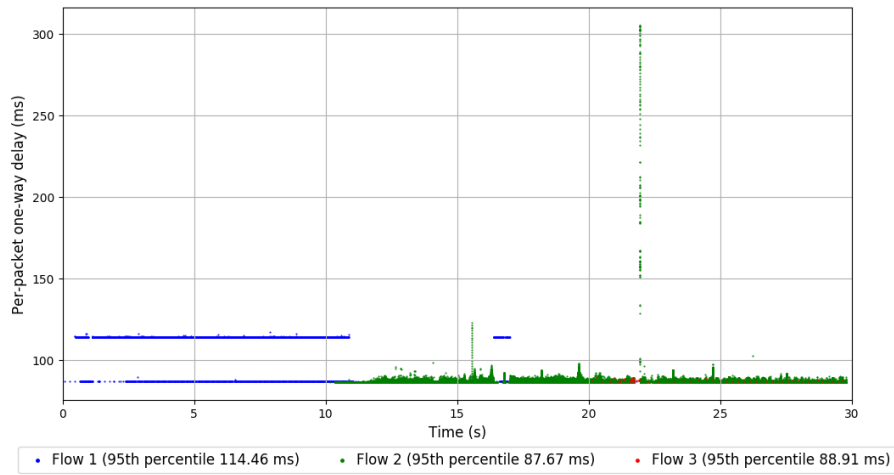
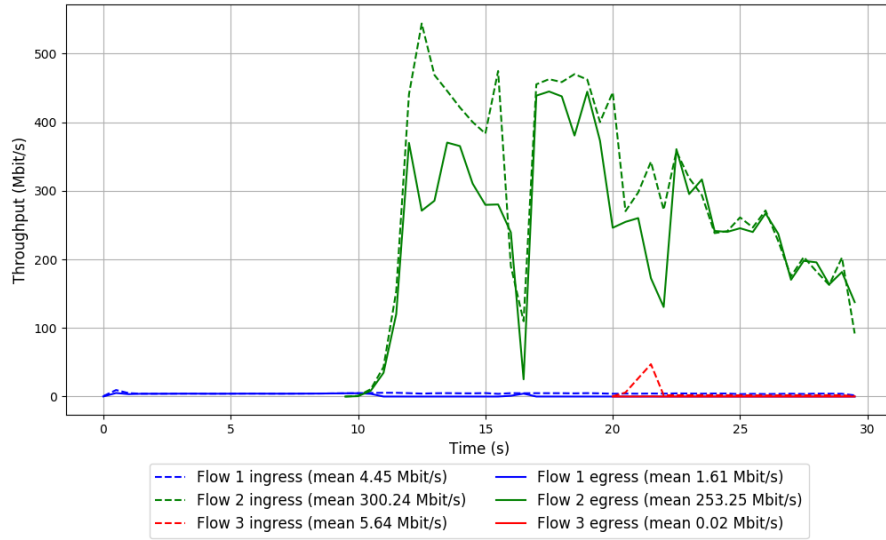
-- Flow 3:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 88.912 ms

Loss rate: 99.71%

### Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-08-21 02:44:29

End at: 2017-08-21 02:44:59

# Below is generated by plot.py at 2017-08-21 05:15:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 7.54 Mbit/s

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

Loss rate: 33.44%

-- Flow 1:

Average throughput: 4.26 Mbit/s

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

Loss rate: 14.92%

-- Flow 2:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 114.355 ms

Loss rate: 47.70%

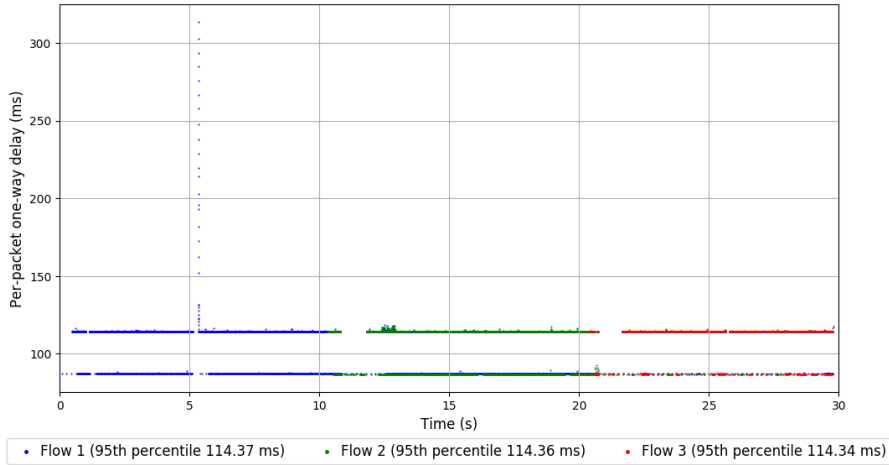
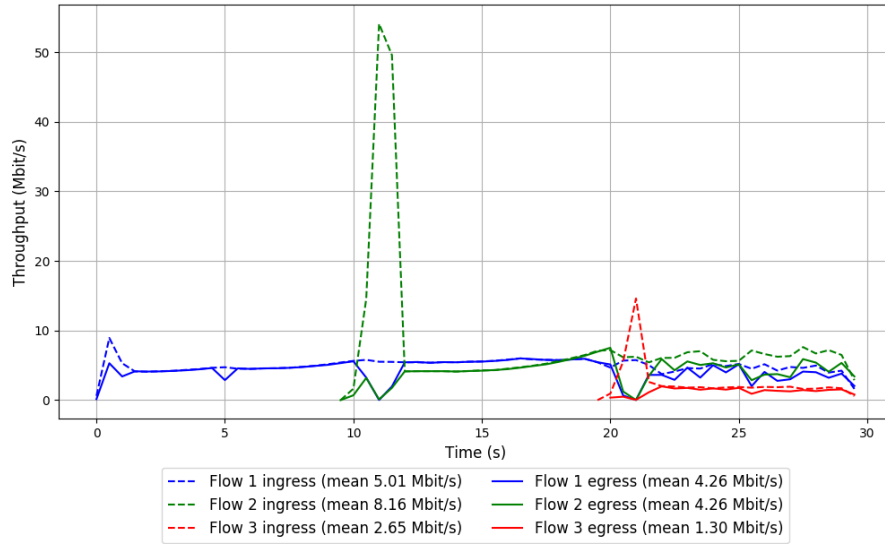
-- Flow 3:

Average throughput: 1.30 Mbit/s

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

Loss rate: 50.71%

### Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-08-21 02:55:43

End at: 2017-08-21 02:56:13

# Below is generated by plot.py at 2017-08-21 05:15:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 84.14 Mbit/s

95th percentile per-packet one-way delay: 115.192 ms

Loss rate: 7.29%

-- Flow 1:

Average throughput: 3.84 Mbit/s

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

Loss rate: 32.90%

-- Flow 2:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 114.332 ms

Loss rate: 1.23%

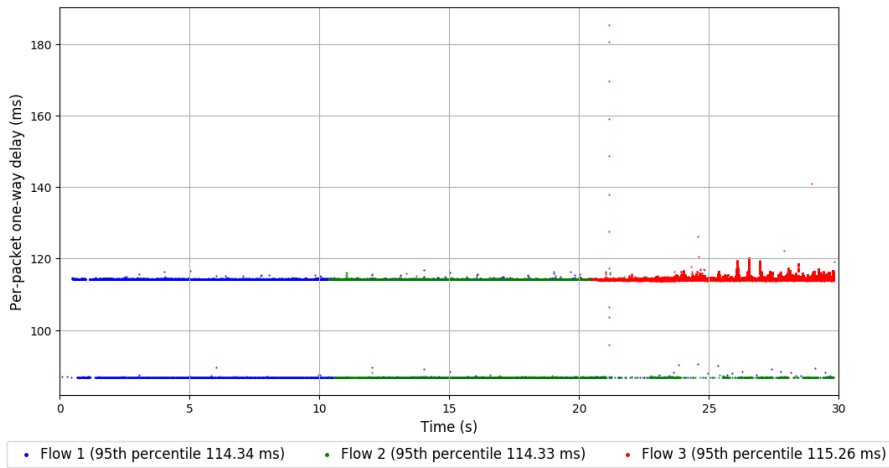
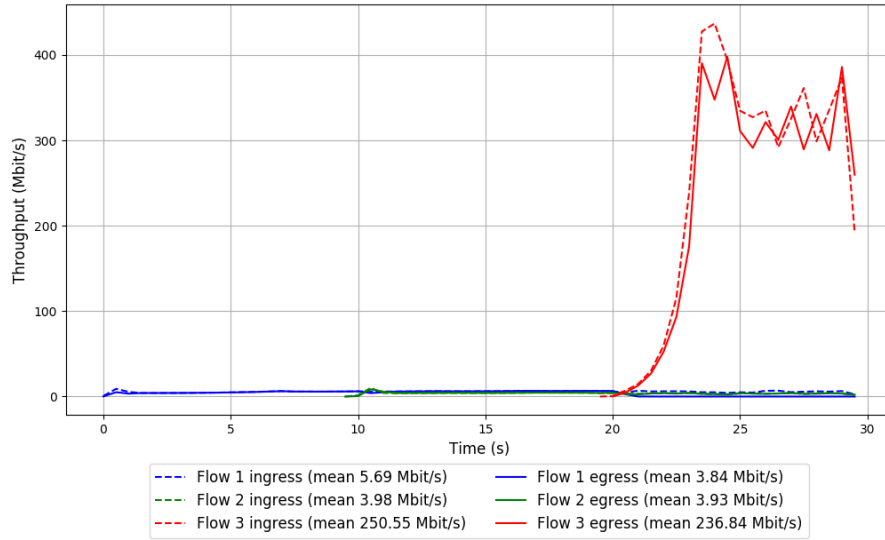
-- Flow 3:

Average throughput: 236.84 Mbit/s

95th percentile per-packet one-way delay: 115.260 ms

Loss rate: 5.71%

### Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-08-21 03:07:21

End at: 2017-08-21 03:07:51

# Below is generated by plot.py at 2017-08-21 05:15:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 8.35 Mbit/s

95th percentile per-packet one-way delay: 114.465 ms

Loss rate: 17.87%

-- Flow 1:

Average throughput: 4.88 Mbit/s

95th percentile per-packet one-way delay: 114.464 ms

Loss rate: 13.08%

-- Flow 2:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 114.470 ms

Loss rate: 1.20%

-- Flow 3:

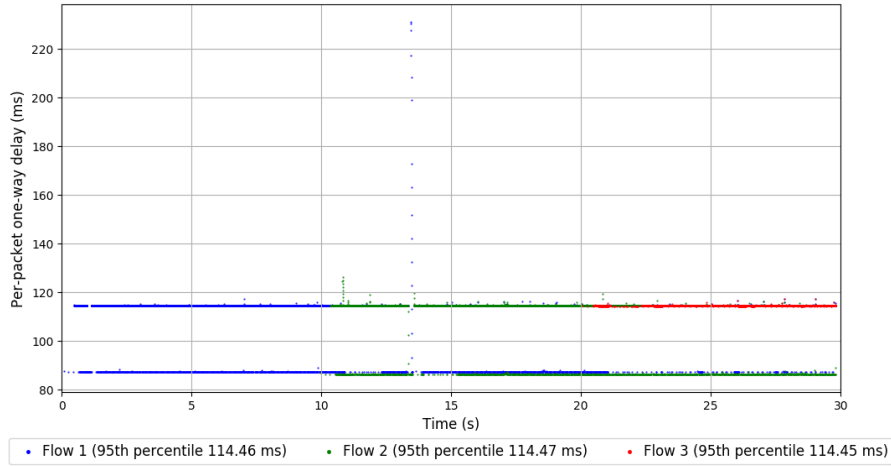
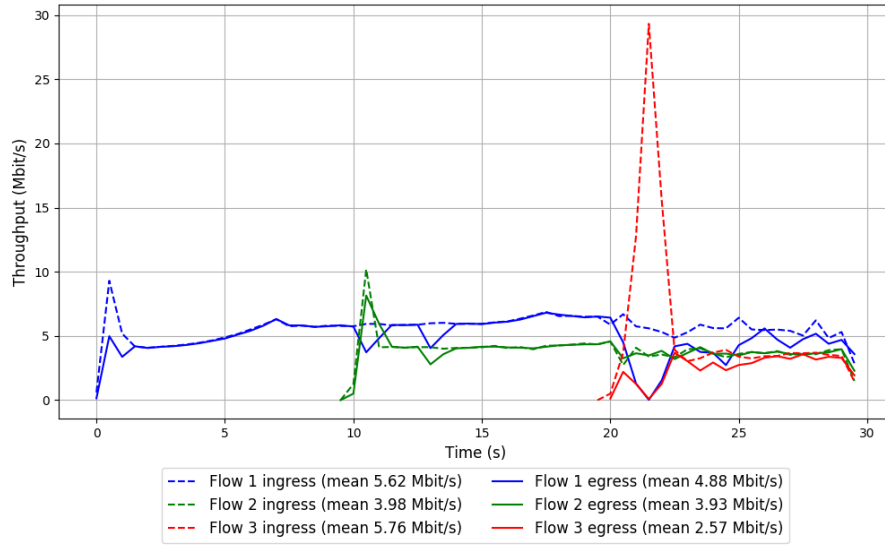
Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 114.455 ms

Loss rate: 55.46%



### Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-08-21 03:19:10

End at: 2017-08-21 03:19:40

# Below is generated by plot.py at 2017-08-21 05:15:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.50 Mbit/s

95th percentile per-packet one-way delay: 114.467 ms

Loss rate: 68.94%

-- Flow 1:

Average throughput: 3.78 Mbit/s

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

Loss rate: 65.98%

-- Flow 2:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 114.480 ms

Loss rate: 79.13%

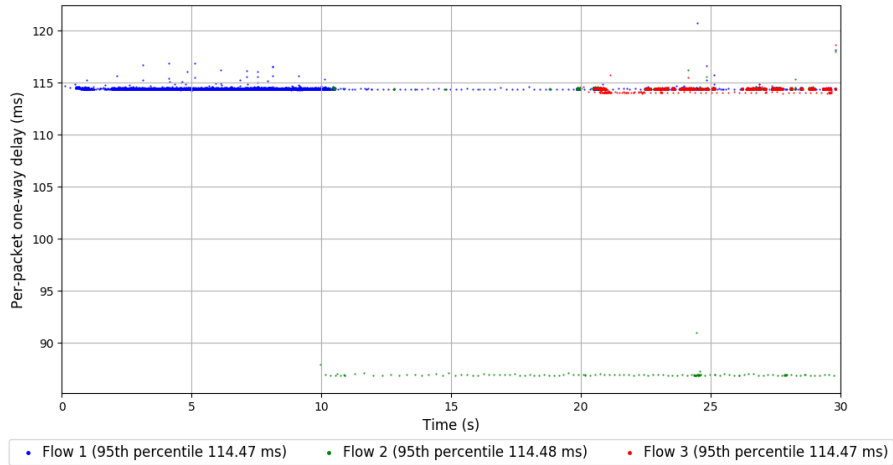
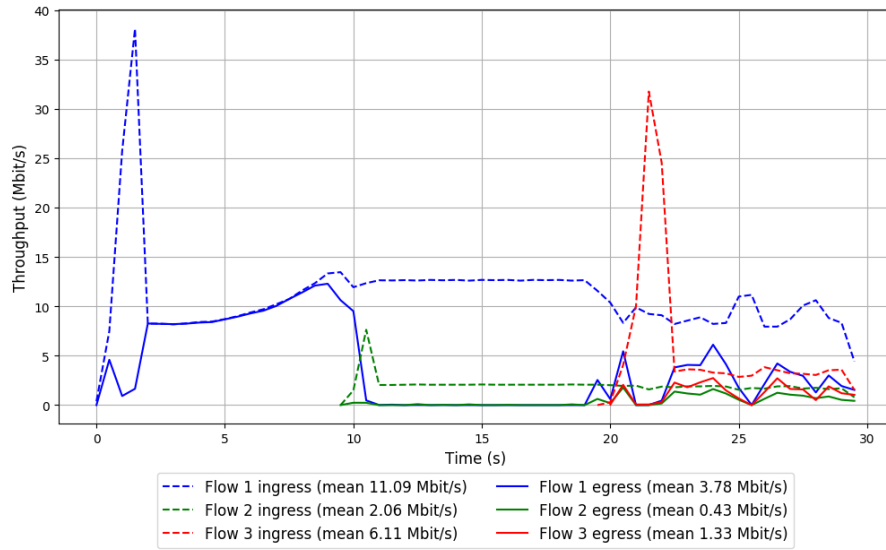
-- Flow 3:

Average throughput: 1.33 Mbit/s

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

Loss rate: 78.35%

### Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-08-21 03:30:34

End at: 2017-08-21 03:31:04

# Below is generated by plot.py at 2017-08-21 05:15:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 7.70 Mbit/s

95th percentile per-packet one-way delay: 114.485 ms

Loss rate: 24.16%

-- Flow 1:

Average throughput: 4.30 Mbit/s

95th percentile per-packet one-way delay: 114.489 ms

Loss rate: 8.01%

-- Flow 2:

Average throughput: 3.62 Mbit/s

95th percentile per-packet one-way delay: 114.476 ms

Loss rate: 42.03%

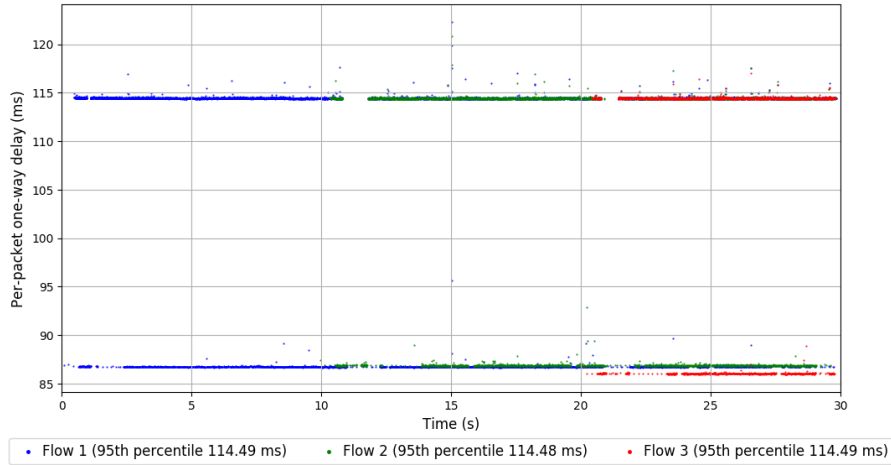
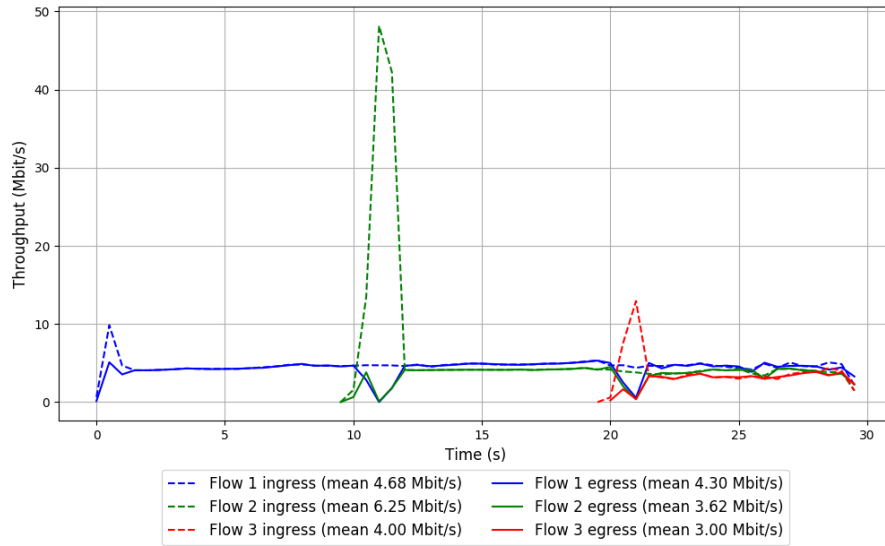
-- Flow 3:

Average throughput: 3.00 Mbit/s

95th percentile per-packet one-way delay: 114.486 ms

Loss rate: 24.92%

### Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-08-21 03:42:40

End at: 2017-08-21 03:43:10

# Below is generated by plot.py at 2017-08-21 05:16:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 293.04 Mbit/s

95th percentile per-packet one-way delay: 89.729 ms

Loss rate: 3.51%

-- Flow 1:

Average throughput: 289.06 Mbit/s

95th percentile per-packet one-way delay: 89.741 ms

Loss rate: 2.40%

-- Flow 2:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 86.437 ms

Loss rate: 99.65%

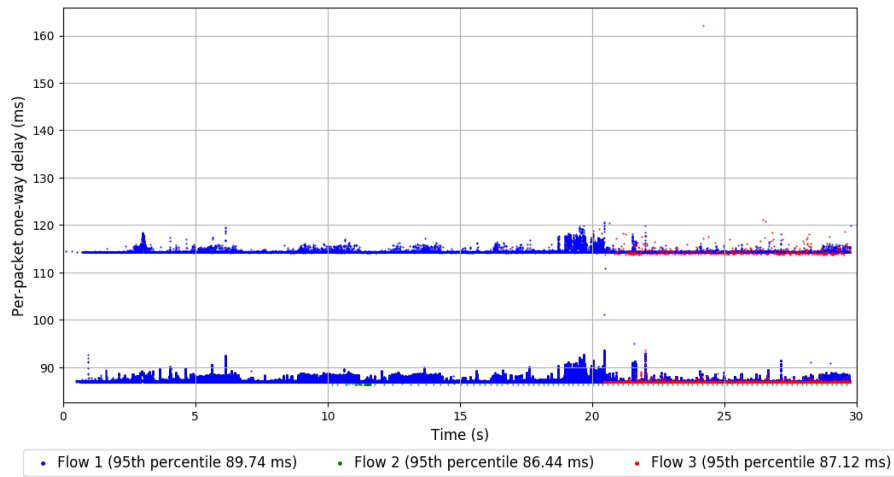
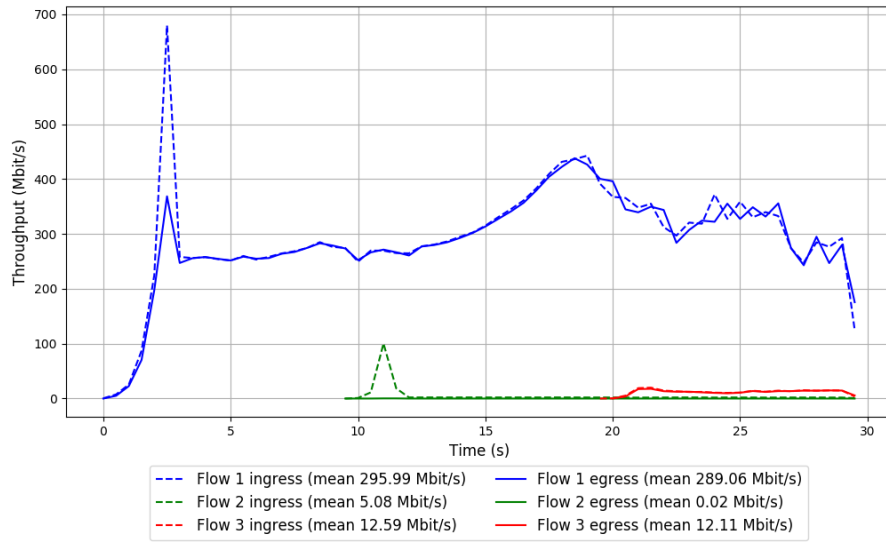
-- Flow 3:

Average throughput: 12.11 Mbit/s

95th percentile per-packet one-way delay: 87.123 ms

Loss rate: 4.10%

### Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2017-08-21 02:05:12

End at: 2017-08-21 02:05:42

# Below is generated by plot.py at 2017-08-21 05:16:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 19.62 Mbit/s

95th percentile per-packet one-way delay: 114.013 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 114.384 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 17.07 Mbit/s

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

Loss rate: 0.00%

-- Flow 3:

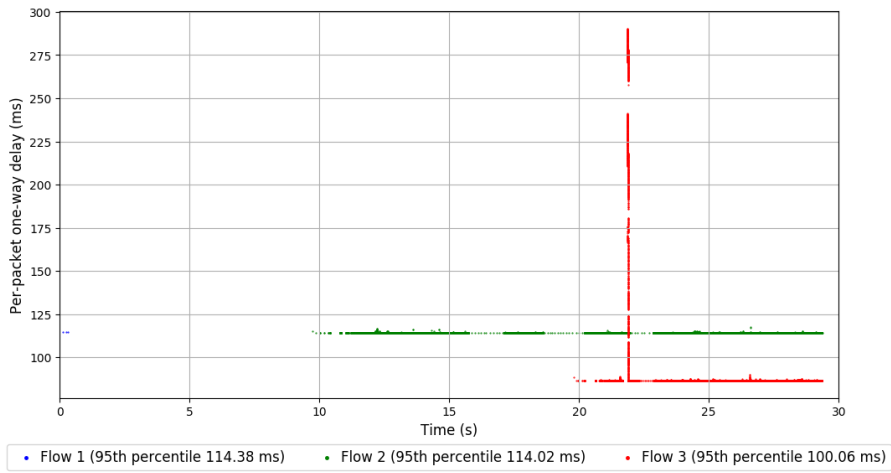
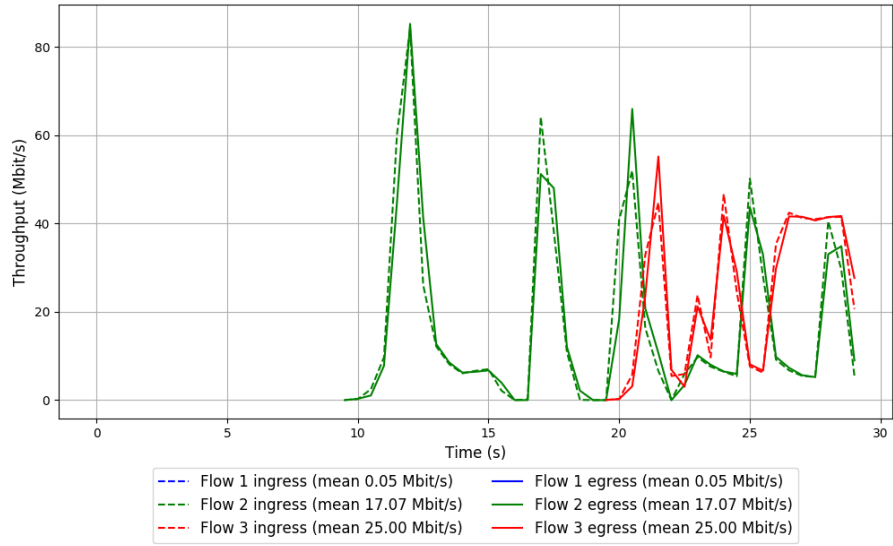
Average throughput: 25.00 Mbit/s

95th percentile per-packet one-way delay: 100.059 ms

Loss rate: 0.00%



# Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-08-21 02:18:40

End at: 2017-08-21 02:19:10

# Below is generated by plot.py at 2017-08-21 05:16:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 7.24 Mbit/s

95th percentile per-packet one-way delay: 86.845 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 87.398 ms

Loss rate: 0.00%

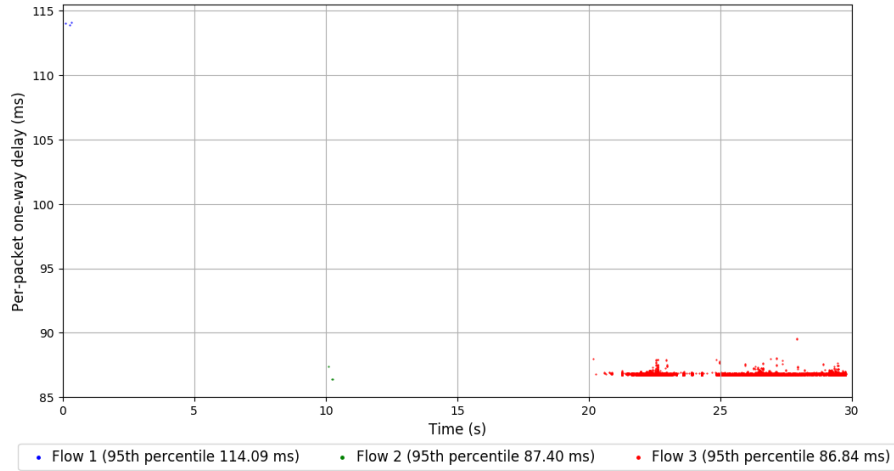
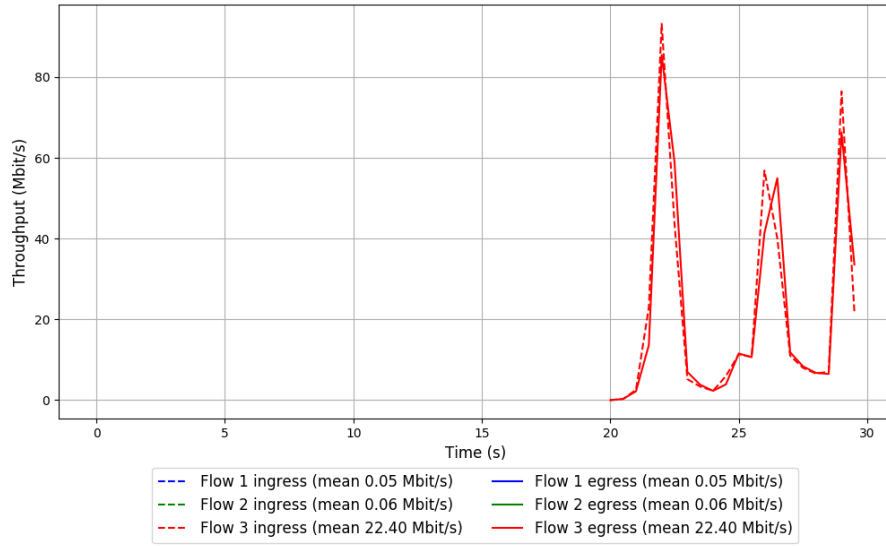
-- Flow 3:

Average throughput: 22.40 Mbit/s

95th percentile per-packet one-way delay: 86.845 ms

Loss rate: 0.00%

## Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-08-21 02:31:27

End at: 2017-08-21 02:31:57

# Below is generated by plot.py at 2017-08-21 05:16:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.95 Mbit/s

95th percentile per-packet one-way delay: 86.872 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 114.412 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 88.198 ms

Loss rate: 0.00%

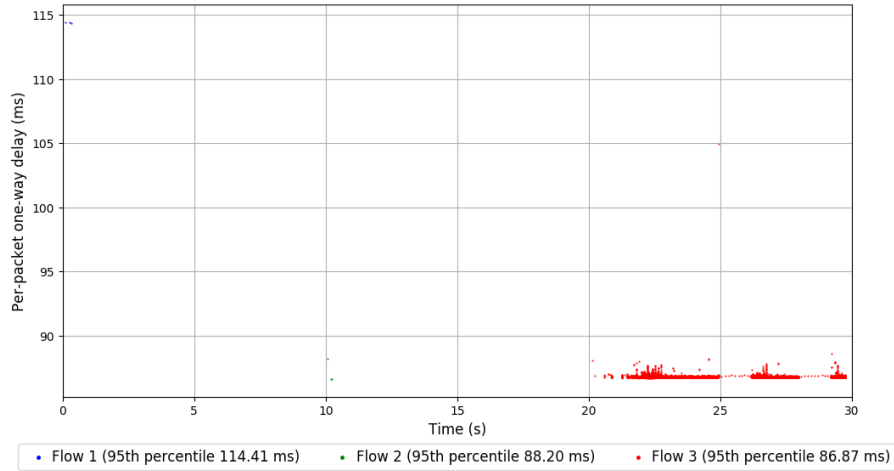
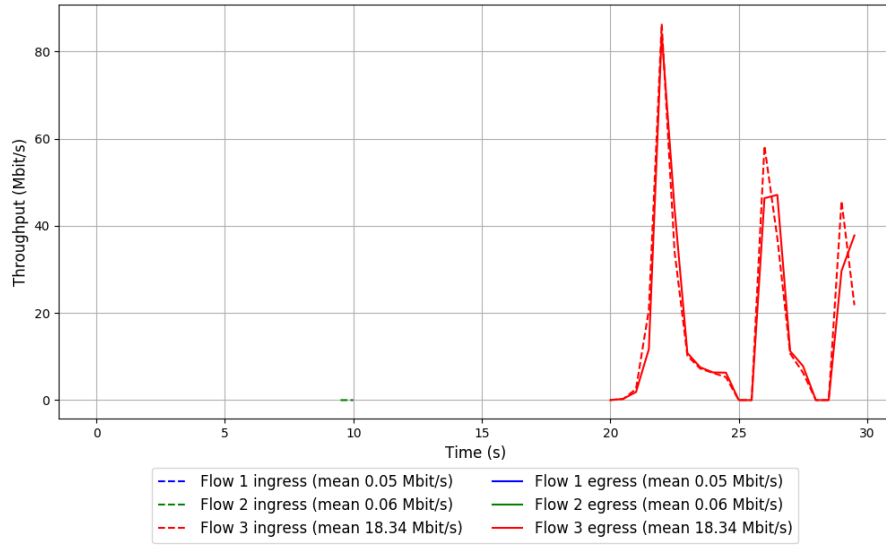
-- Flow 3:

Average throughput: 18.34 Mbit/s

95th percentile per-packet one-way delay: 86.871 ms

Loss rate: 0.00%

### Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-08-21 02:43:42

End at: 2017-08-21 02:44:12

# Below is generated by plot.py at 2017-08-21 05:16:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 23.28 Mbit/s

95th percentile per-packet one-way delay: 114.367 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 86.932 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 24.69 Mbit/s

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

Loss rate: 0.23%

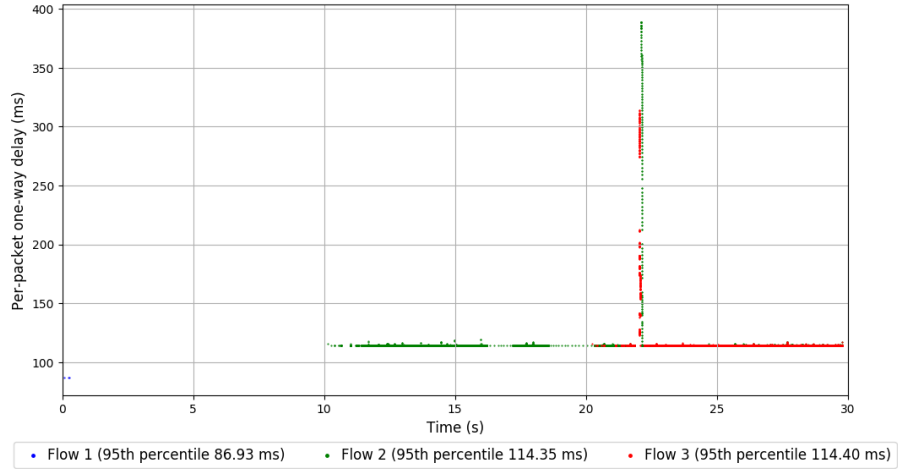
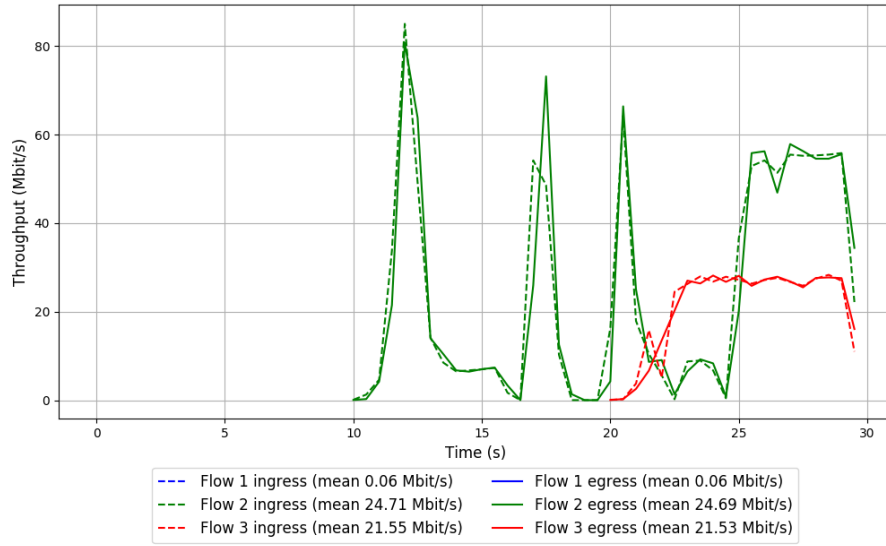
-- Flow 3:

Average throughput: 21.53 Mbit/s

95th percentile per-packet one-way delay: 114.401 ms

Loss rate: 0.26%

### Run 4: Report of QUIC Cubic — Data Link



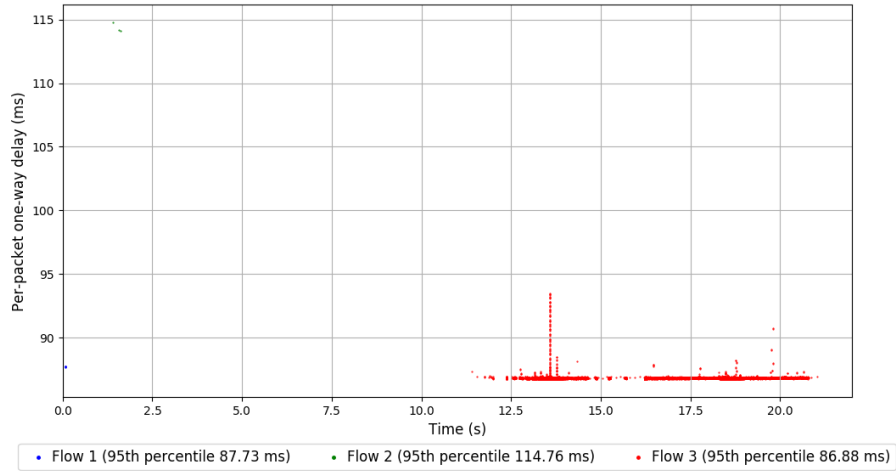
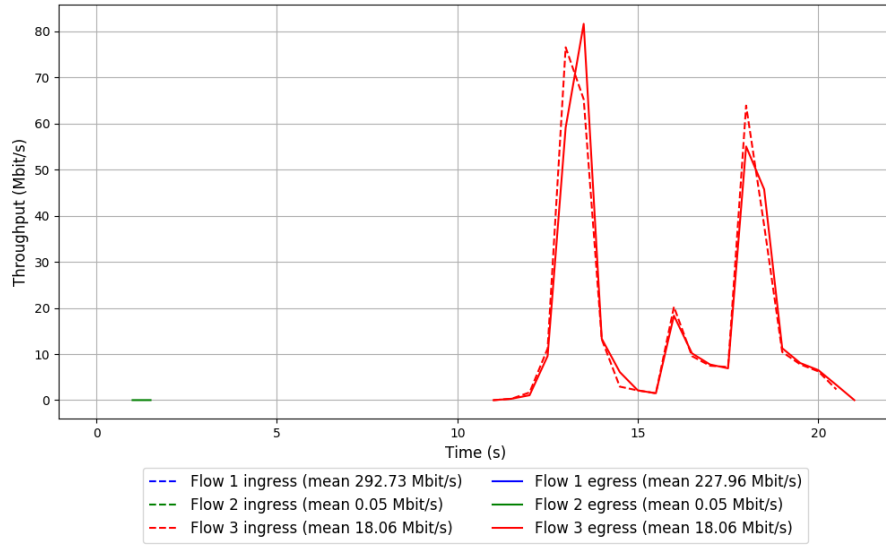
Run 5: Statistics of QUIC Cubic

Start at: 2017-08-21 02:54:57

End at: 2017-08-21 02:55:27



### Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-08-21 03:06:32

End at: 2017-08-21 03:07:02

# Below is generated by plot.py at 2017-08-21 05:16:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 19.74 Mbit/s

95th percentile per-packet one-way delay: 114.403 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 0.05 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 17.96 Mbit/s

95th percentile per-packet one-way delay: 114.444 ms

Loss rate: 0.52%

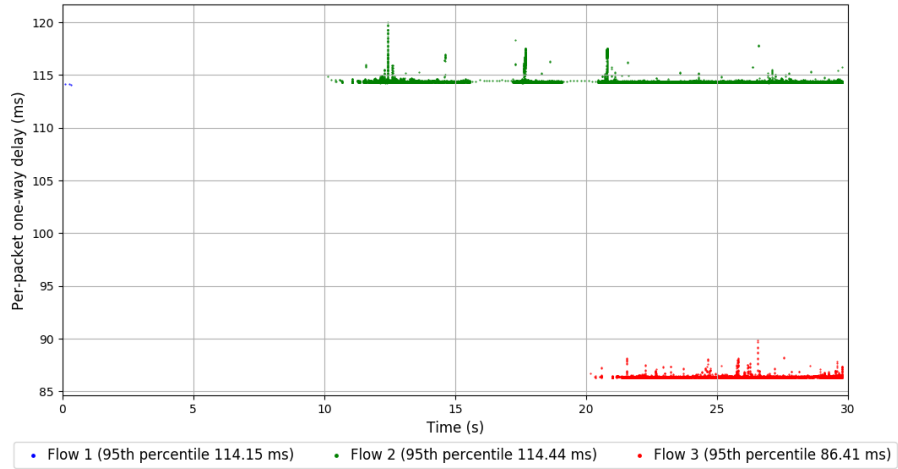
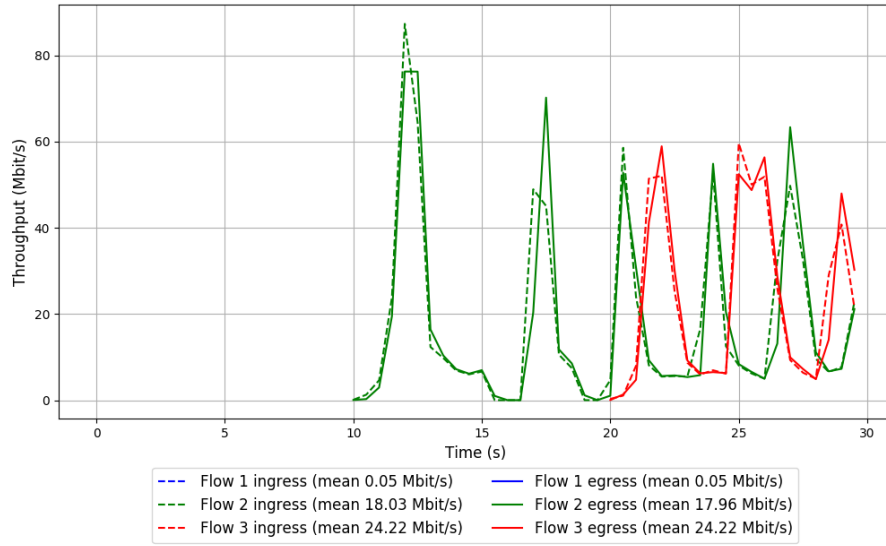
-- Flow 3:

Average throughput: 24.22 Mbit/s

95th percentile per-packet one-way delay: 86.406 ms

Loss rate: 0.00%

### Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-08-21 03:18:23

End at: 2017-08-21 03:18:53

# Below is generated by plot.py at 2017-08-21 05:16:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 18.59 Mbit/s

95th percentile per-packet one-way delay: 87.243 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 86.436 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 16.71 Mbit/s

95th percentile per-packet one-way delay: 87.263 ms

Loss rate: 0.00%

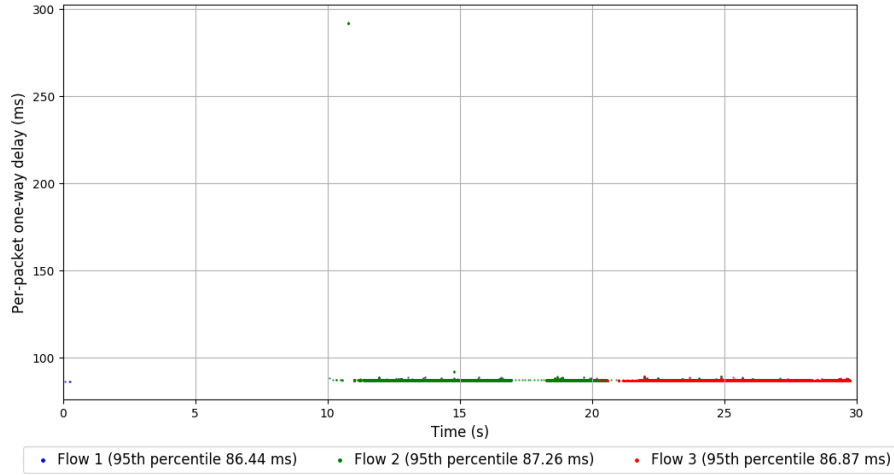
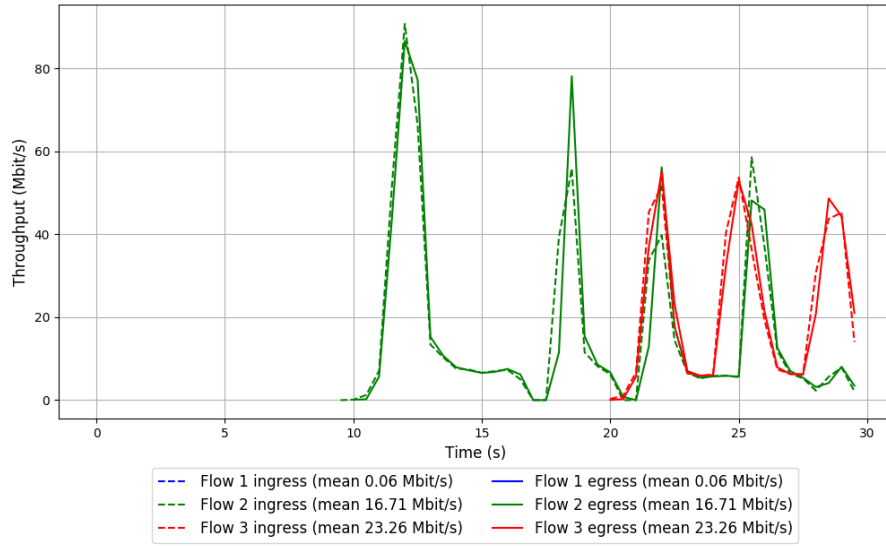
-- Flow 3:

Average throughput: 23.26 Mbit/s

95th percentile per-packet one-way delay: 86.868 ms

Loss rate: 0.00%

### Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-08-21 03:29:48

End at: 2017-08-21 03:30:18

# Below is generated by plot.py at 2017-08-21 05:16:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 18.14 Mbit/s

95th percentile per-packet one-way delay: 114.452 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 114.491 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 17.70 Mbit/s

95th percentile per-packet one-way delay: 114.471 ms

Loss rate: 0.04%

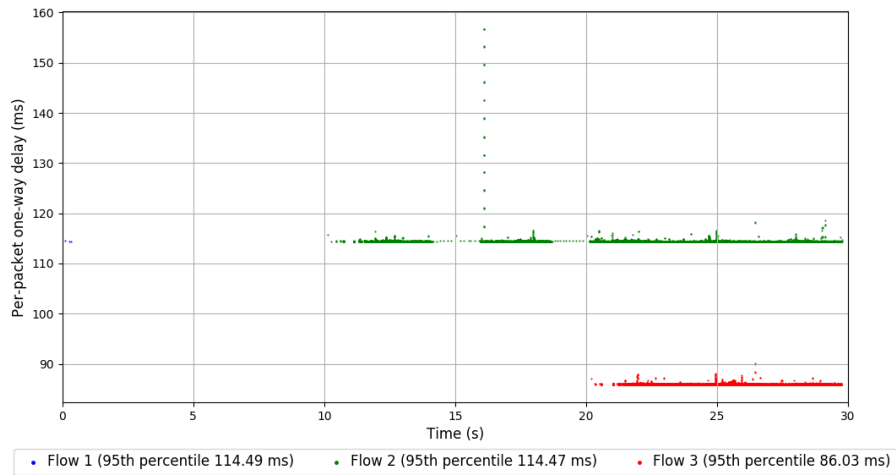
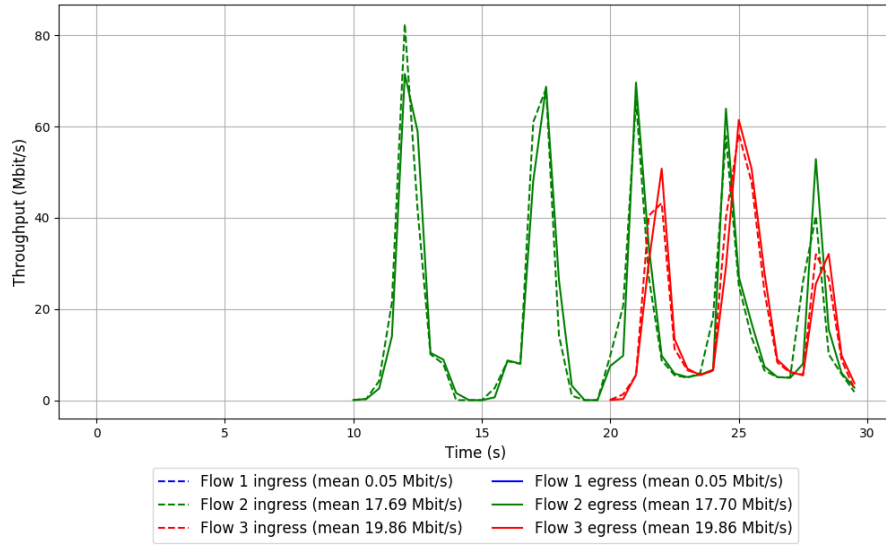
-- Flow 3:

Average throughput: 19.86 Mbit/s

95th percentile per-packet one-way delay: 86.030 ms

Loss rate: 0.00%

### Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-08-21 03:41:53

End at: 2017-08-21 03:42:23

# Below is generated by plot.py at 2017-08-21 05:16:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 28.74 Mbit/s

95th percentile per-packet one-way delay: 87.017 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 86.961 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.90 Mbit/s

95th percentile per-packet one-way delay: 86.912 ms

Loss rate: 0.00%

-- Flow 3:

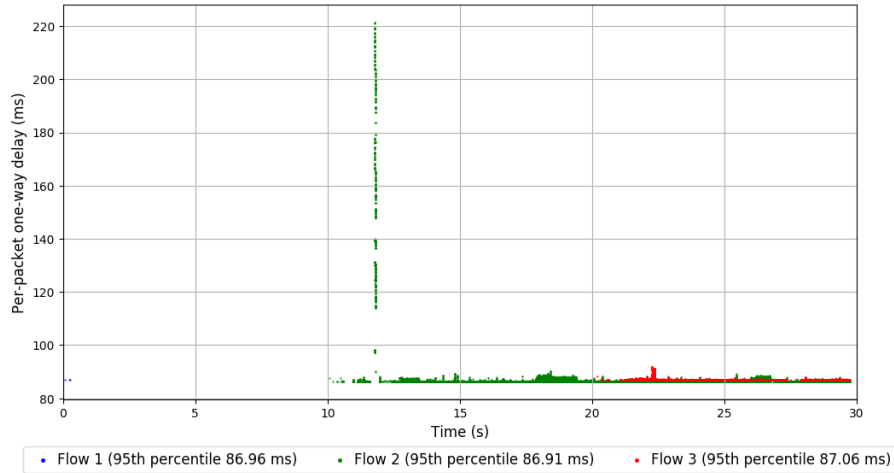
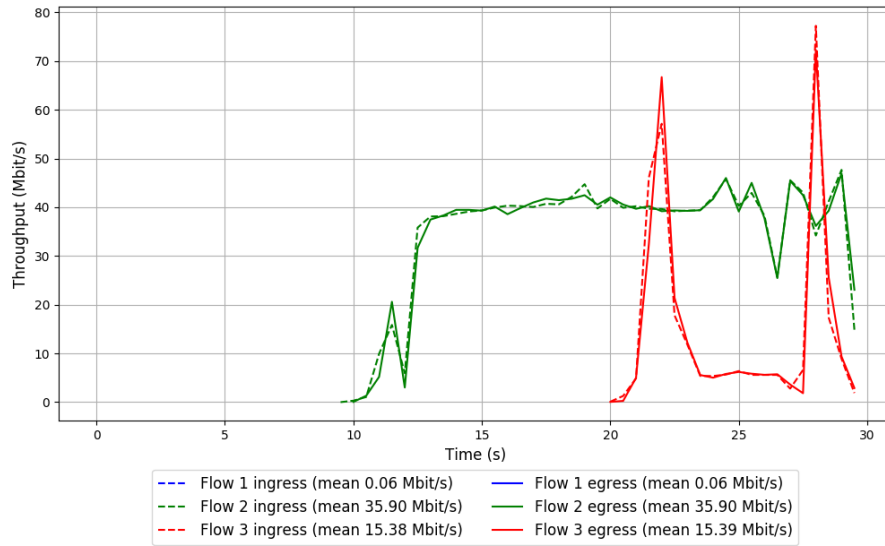
Average throughput: 15.39 Mbit/s

95th percentile per-packet one-way delay: 87.064 ms

Loss rate: 0.01%



### Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-08-21 03:54:01

End at: 2017-08-21 03:54:31

# Below is generated by plot.py at 2017-08-21 05:16:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 24.47 Mbit/s

95th percentile per-packet one-way delay: 86.933 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 86.268 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 29.87 Mbit/s

95th percentile per-packet one-way delay: 86.495 ms

Loss rate: 0.00%

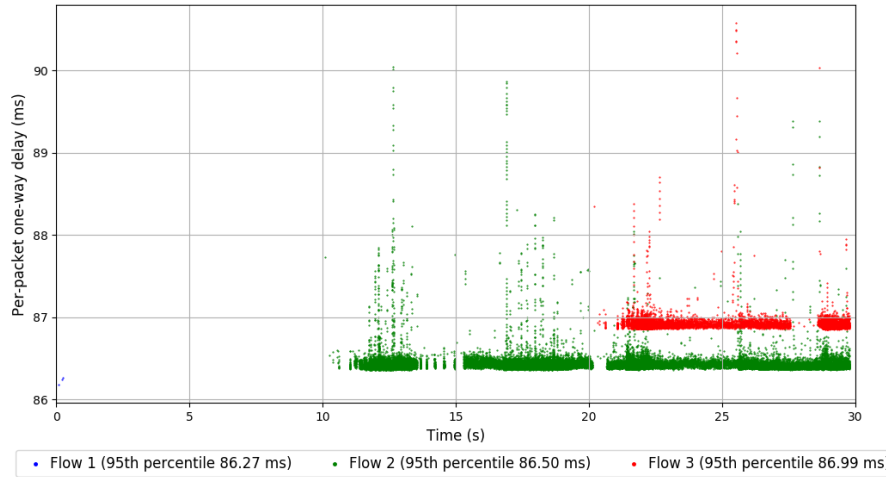
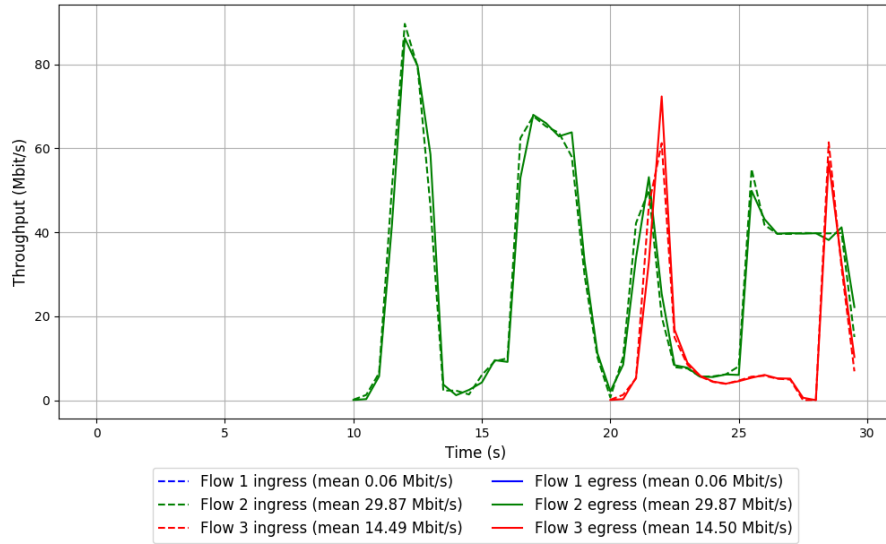
-- Flow 3:

Average throughput: 14.50 Mbit/s

95th percentile per-packet one-way delay: 86.987 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of Saturator

Start at: 2017-08-21 02:00:46

End at: 2017-08-21 02:01:16

# Below is generated by plot.py at 2017-08-21 05:16:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 13.41 Mbit/s

95th percentile per-packet one-way delay: 87.707 ms

Loss rate: 9.02%

-- Flow 1:

Average throughput: 13.48 Mbit/s

95th percentile per-packet one-way delay: 87.832 ms

Loss rate: 1.44%

-- Flow 2:

Average throughput: 13.11 Mbit/s

95th percentile per-packet one-way delay: 87.424 ms

Loss rate: 3.01%

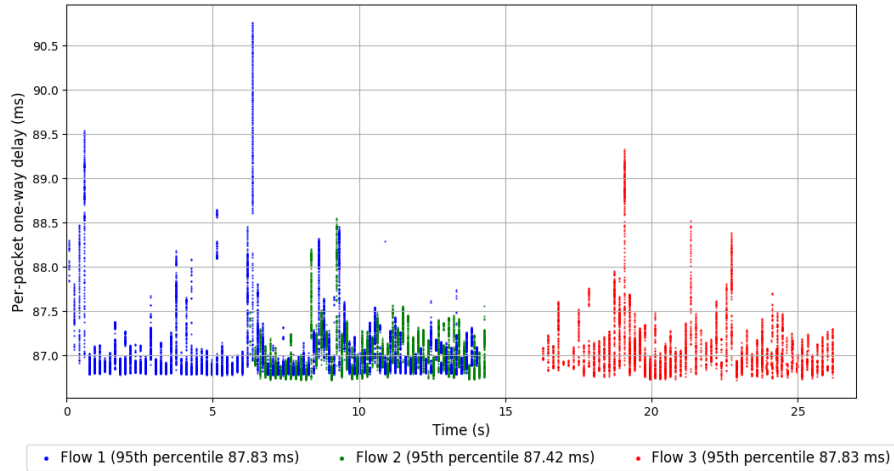
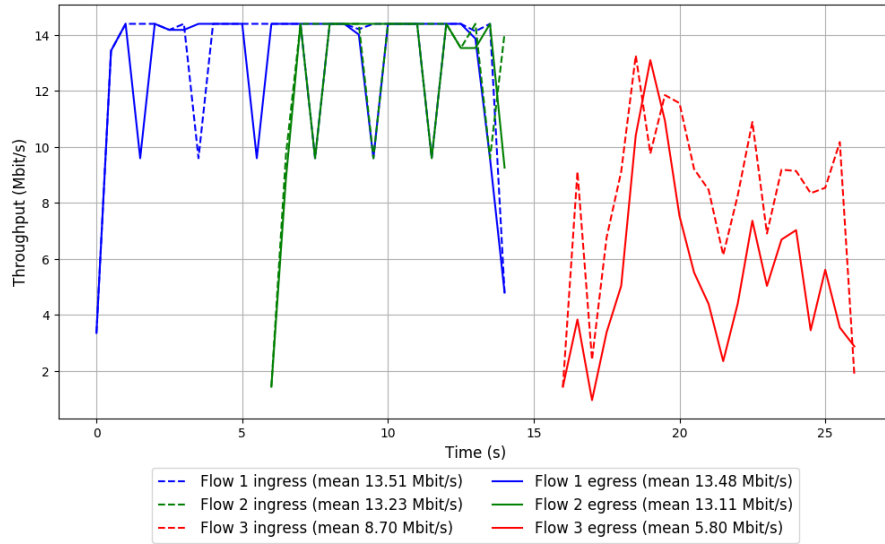
-- Flow 3:

Average throughput: 5.80 Mbit/s

95th percentile per-packet one-way delay: 87.827 ms

Loss rate: 33.33%

Run 1: Report of Saturator — Data Link



Run 2: Statistics of Saturator

Start at: 2017-08-21 02:14:10

End at: 2017-08-21 02:14:40

# Below is generated by plot.py at 2017-08-21 05:16:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 24.33 Mbit/s

95th percentile per-packet one-way delay: 88.002 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 13.64 Mbit/s

95th percentile per-packet one-way delay: 87.852 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 13.36 Mbit/s

95th percentile per-packet one-way delay: 88.140 ms

Loss rate: 0.88%

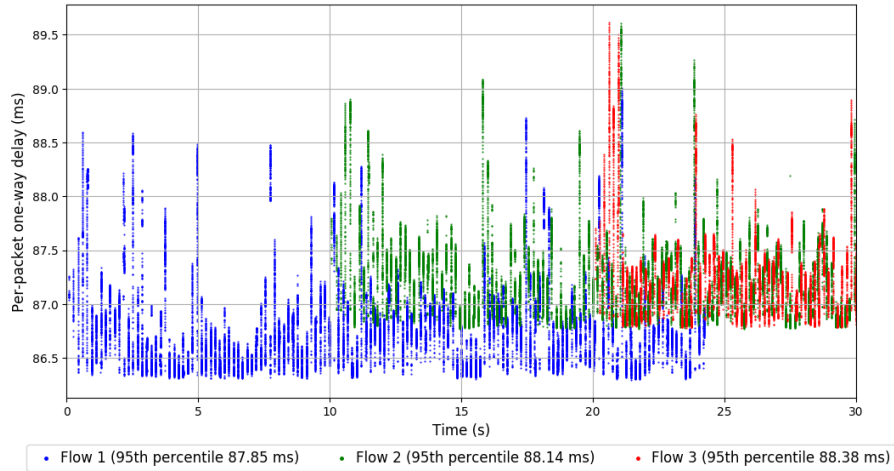
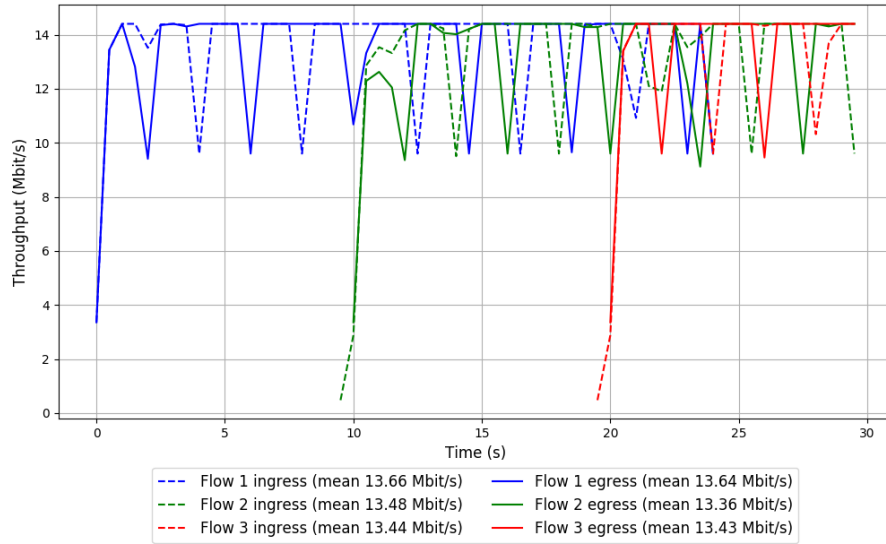
-- Flow 3:

Average throughput: 13.43 Mbit/s

95th percentile per-packet one-way delay: 88.380 ms

Loss rate: 0.04%

## Run 2: Report of Saturator — Data Link



Run 3: Statistics of Saturator

Start at: 2017-08-21 02:27:15

End at: 2017-08-21 02:27:46

# Below is generated by plot.py at 2017-08-21 05:16:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 16.45 Mbit/s

95th percentile per-packet one-way delay: 87.975 ms

Loss rate: 3.54%

-- Flow 1:

Average throughput: 12.54 Mbit/s

95th percentile per-packet one-way delay: 88.125 ms

Loss rate: 4.49%

-- Flow 2:

Average throughput: 12.82 Mbit/s

95th percentile per-packet one-way delay: 87.868 ms

Loss rate: 2.30%

-- Flow 3:

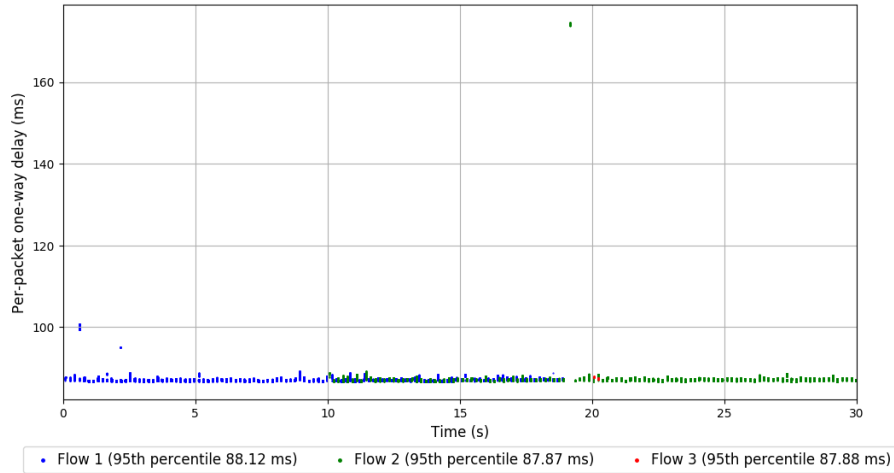
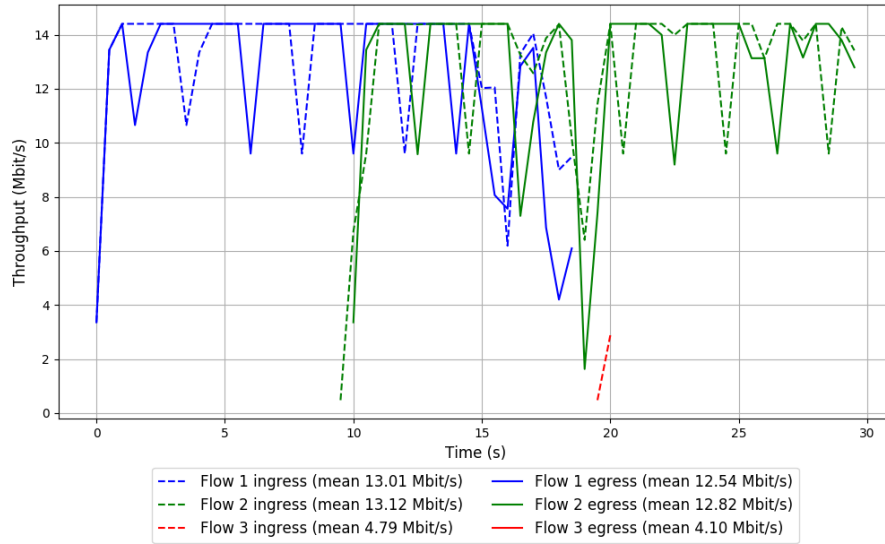
Average throughput: 4.10 Mbit/s

95th percentile per-packet one-way delay: 87.876 ms

Loss rate: 57.14%



### Run 3: Report of Saturator — Data Link



Run 4: Statistics of Saturator

Start at: 2017-08-21 02:39:36

End at: 2017-08-21 02:40:06

# Below is generated by plot.py at 2017-08-21 05:16:28

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.14 Mbit/s

95th percentile per-packet one-way delay: 115.310 ms

Loss rate: 10.46%

-- Flow 1:

Average throughput: 9.40 Mbit/s

95th percentile per-packet one-way delay: 115.297 ms

Loss rate: 10.31%

-- Flow 2:

Average throughput: 3.54 Mbit/s

95th percentile per-packet one-way delay: 115.165 ms

Loss rate: 57.14%

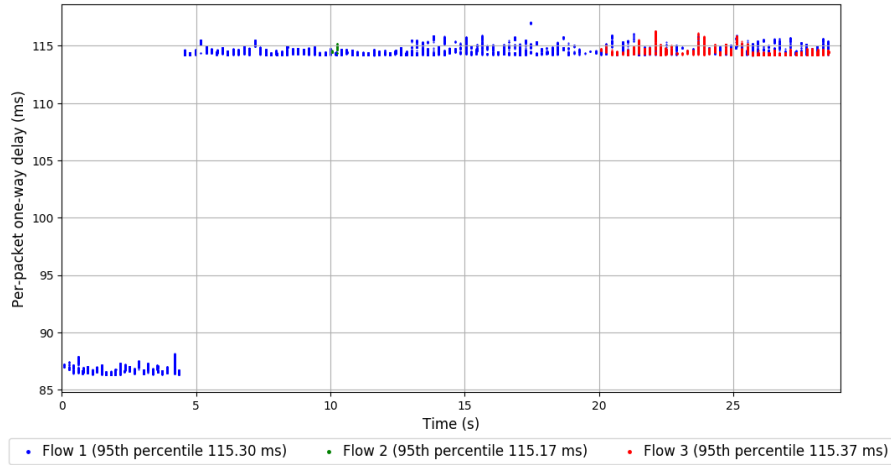
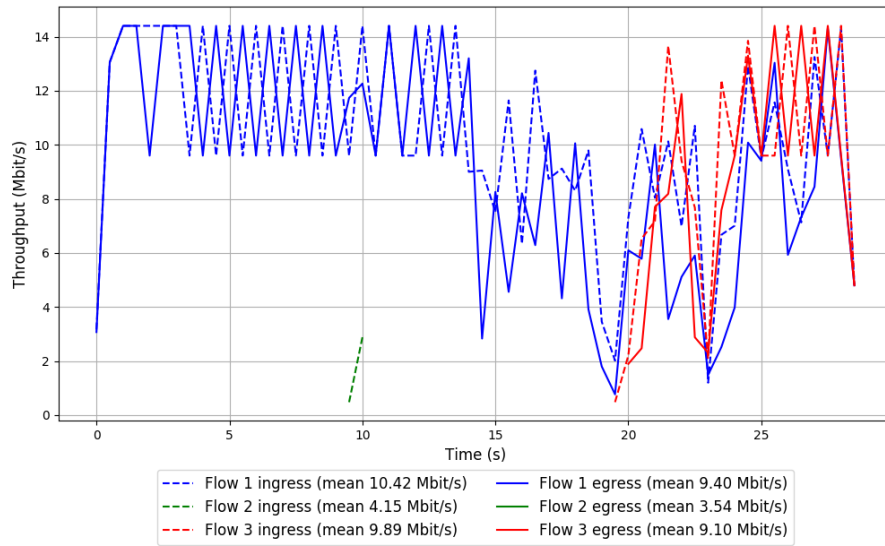
-- Flow 3:

Average throughput: 9.10 Mbit/s

95th percentile per-packet one-way delay: 115.372 ms

Loss rate: 10.06%

### Run 4: Report of Saturator — Data Link



Run 5: Statistics of Saturator

Start at: 2017-08-21 02:51:18

End at: 2017-08-21 02:51:48

# Below is generated by plot.py at 2017-08-21 05:16:28

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.91 Mbit/s

95th percentile per-packet one-way delay: 115.787 ms

Loss rate: 3.65%

-- Flow 1:

Average throughput: 3.55 Mbit/s

95th percentile per-packet one-way delay: 115.056 ms

Loss rate: 57.14%

-- Flow 2:

Average throughput: 11.26 Mbit/s

95th percentile per-packet one-way delay: 115.411 ms

Loss rate: 3.67%

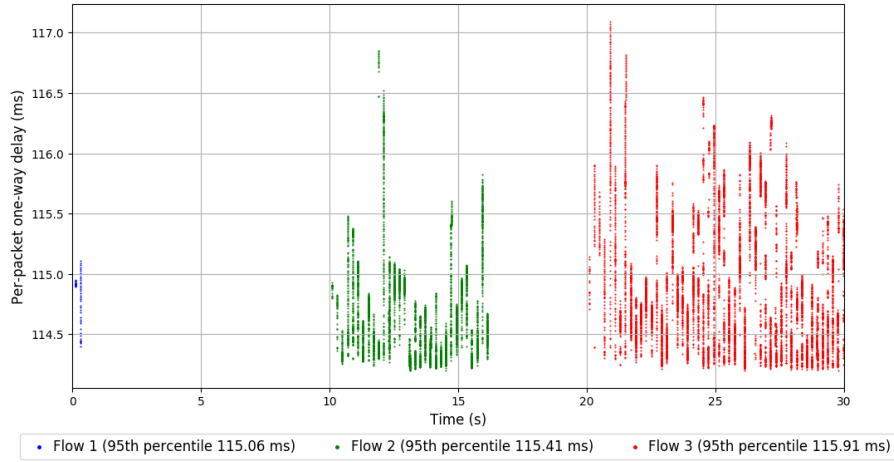
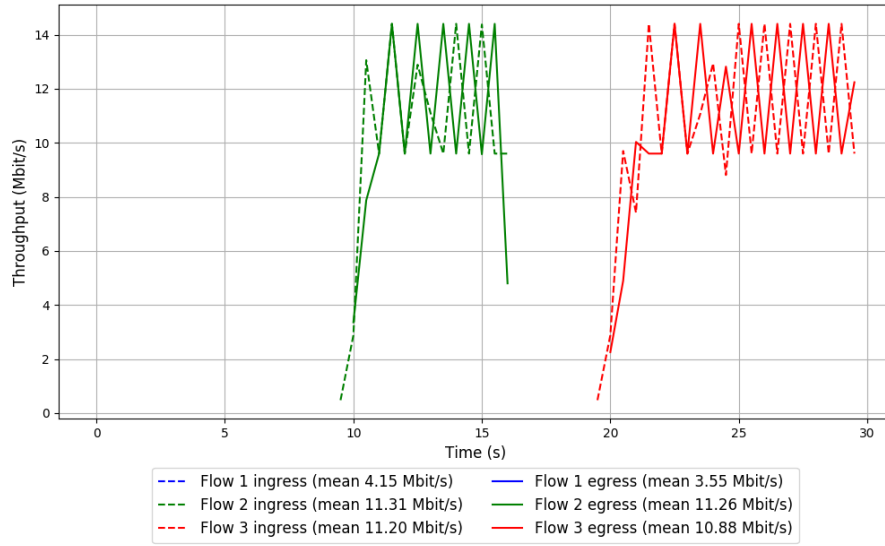
-- Flow 3:

Average throughput: 10.88 Mbit/s

95th percentile per-packet one-way delay: 115.905 ms

Loss rate: 2.82%

Run 5: Report of Saturator — Data Link

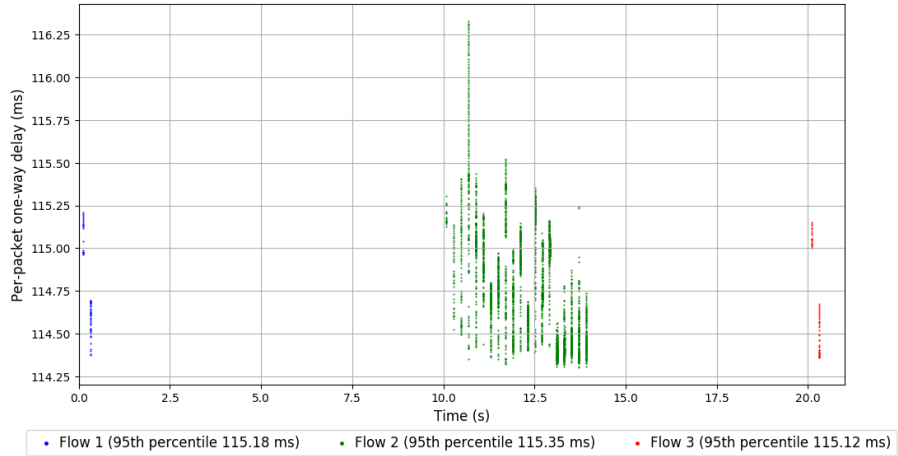
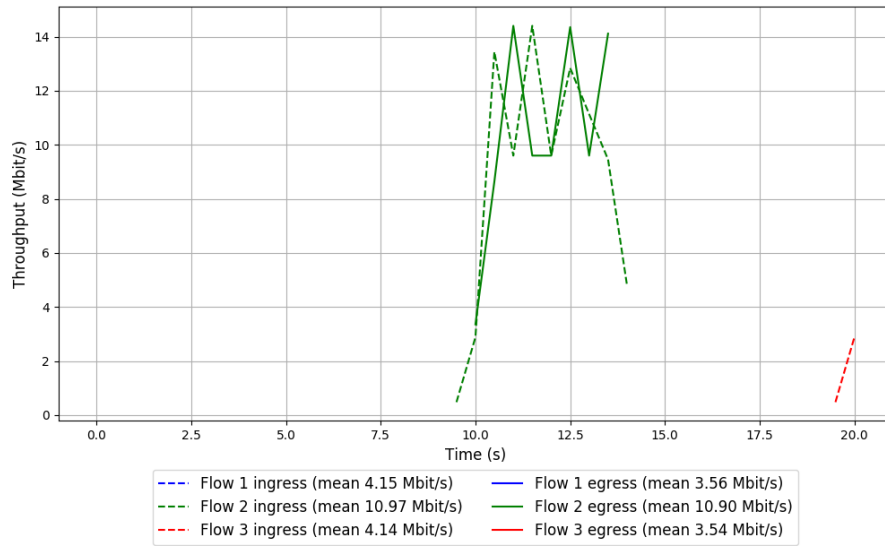


Run 6: Statistics of Saturator

Start at: 2017-08-21 03:02:51

End at: 2017-08-21 03:03:21

### Run 6: Report of Saturator — Data Link



Run 7: Statistics of Saturator

Start at: 2017-08-21 03:14:19

End at: 2017-08-21 03:14:49

# Below is generated by plot.py at 2017-08-21 05:16:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.51 Mbit/s

95th percentile per-packet one-way delay: 115.590 ms

Loss rate: 8.90%

-- Flow 1:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 115.179 ms

Loss rate: 54.66%

-- Flow 2:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 115.287 ms

Loss rate: 54.69%

-- Flow 3:

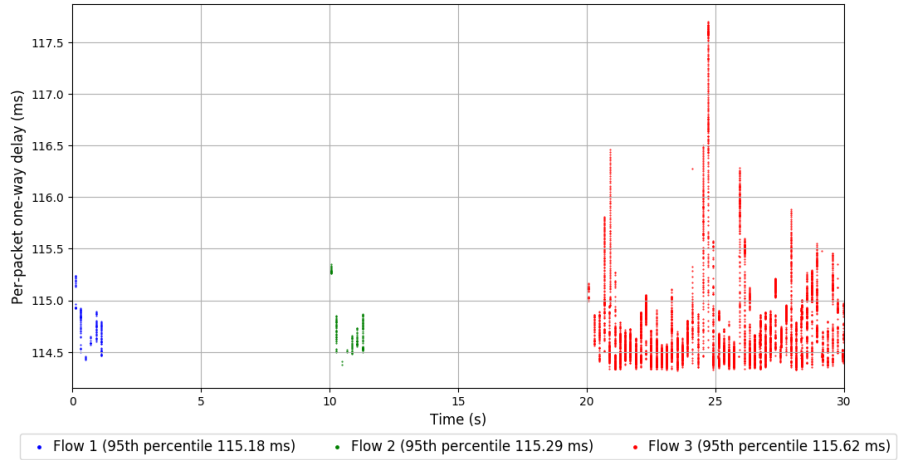
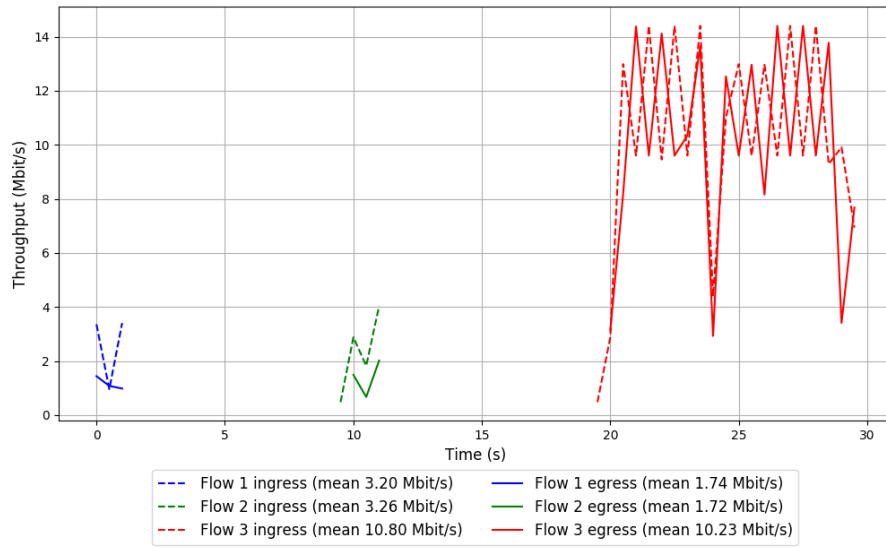
Average throughput: 10.23 Mbit/s

95th percentile per-packet one-way delay: 115.621 ms

Loss rate: 5.27%



### Run 7: Report of Saturator — Data Link



Run 8: Statistics of Saturator

Start at: 2017-08-21 03:25:58

End at: 2017-08-21 03:26:28

# Below is generated by plot.py at 2017-08-21 05:16:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 10.39 Mbit/s

95th percentile per-packet one-way delay: 115.594 ms

Loss rate: 13.37%

-- Flow 1:

Average throughput: 9.54 Mbit/s

95th percentile per-packet one-way delay: 115.502 ms

Loss rate: 9.50%

-- Flow 2:

Average throughput: 8.16 Mbit/s

95th percentile per-packet one-way delay: 115.681 ms

Loss rate: 16.76%

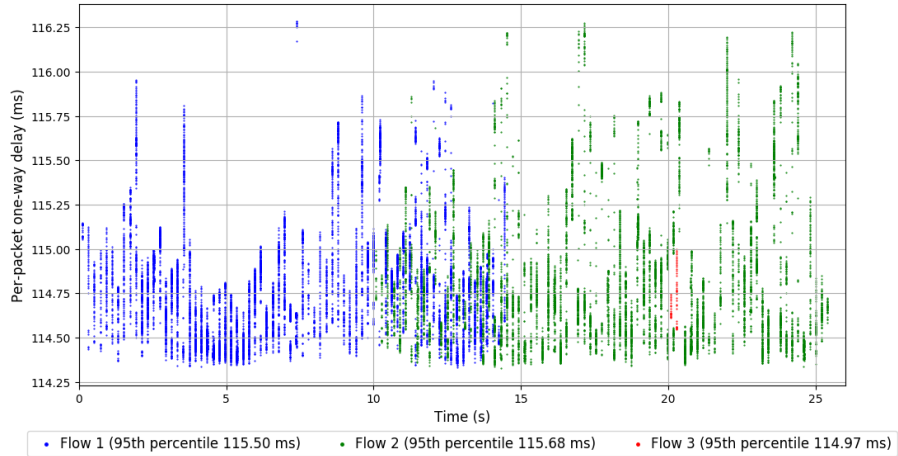
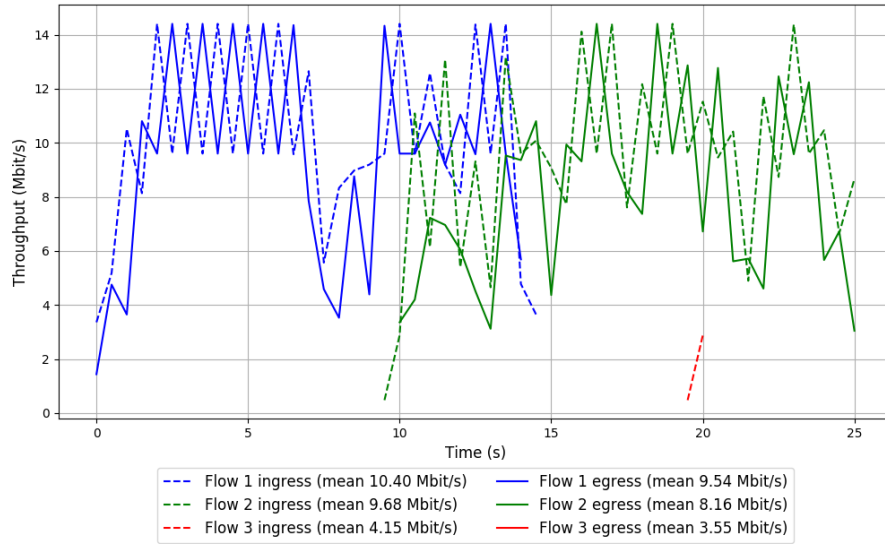
-- Flow 3:

Average throughput: 3.55 Mbit/s

95th percentile per-packet one-way delay: 114.970 ms

Loss rate: 57.14%

Run 8: Report of Saturator — Data Link



Run 9: Statistics of Saturator

Start at: 2017-08-21 03:37:49

End at: 2017-08-21 03:38:19

# Below is generated by plot.py at 2017-08-21 05:16:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.65 Mbit/s

95th percentile per-packet one-way delay: 88.039 ms

Loss rate: 4.11%

-- Flow 1:

Average throughput: 12.03 Mbit/s

95th percentile per-packet one-way delay: 88.061 ms

Loss rate: 6.25%

-- Flow 2:

Average throughput: 12.64 Mbit/s

95th percentile per-packet one-way delay: 88.510 ms

Loss rate: 5.19%

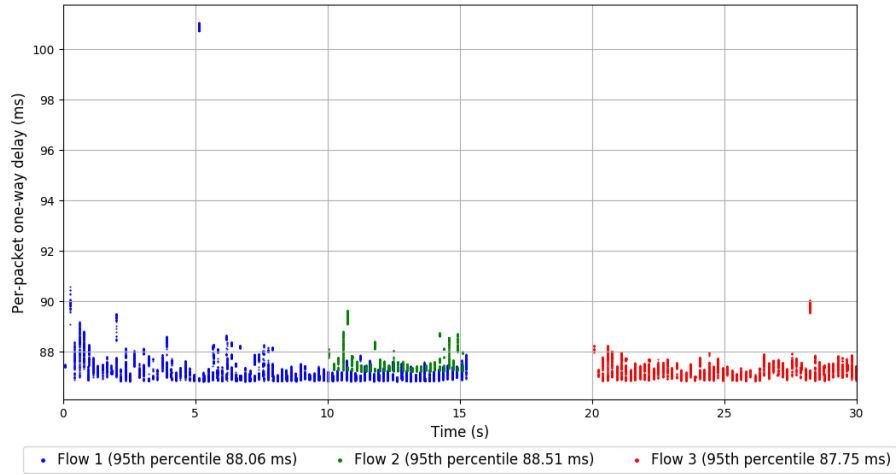
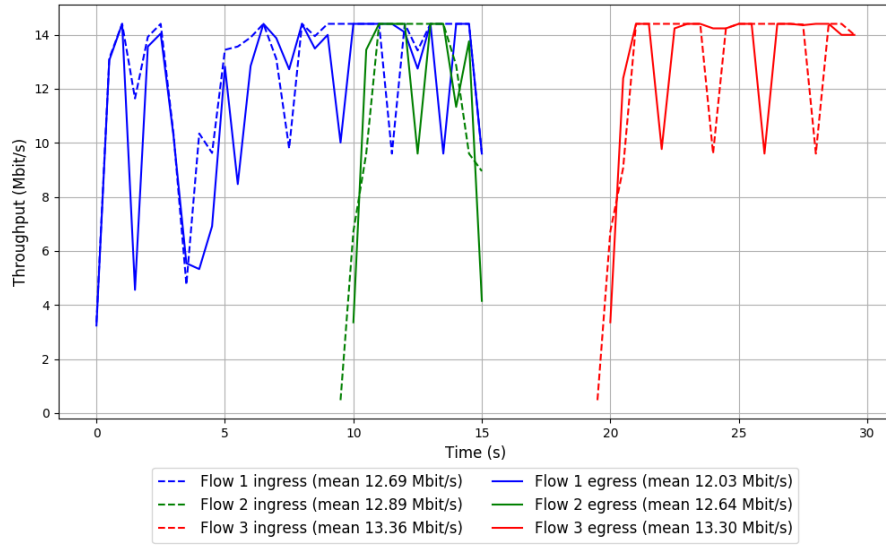
-- Flow 3:

Average throughput: 13.30 Mbit/s

95th percentile per-packet one-way delay: 87.747 ms

Loss rate: 0.43%

### Run 9: Report of Saturator — Data Link



Run 10: Statistics of Saturator

Start at: 2017-08-21 03:49:49

End at: 2017-08-21 03:50:19

# Below is generated by plot.py at 2017-08-21 05:16:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.13 Mbit/s

95th percentile per-packet one-way delay: 87.663 ms

Loss rate: 7.10%

-- Flow 1:

Average throughput: 3.55 Mbit/s

95th percentile per-packet one-way delay: 114.977 ms

Loss rate: 57.14%

-- Flow 2:

Average throughput: 3.55 Mbit/s

95th percentile per-packet one-way delay: 115.122 ms

Loss rate: 57.14%

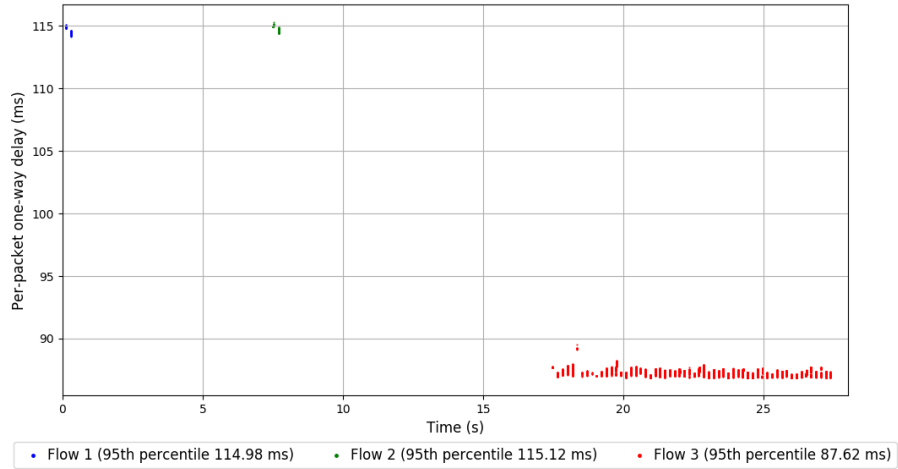
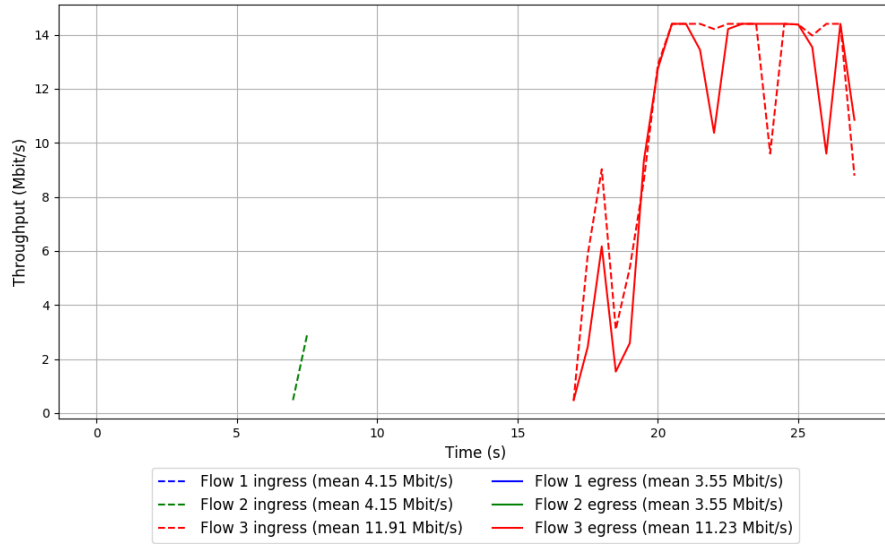
-- Flow 3:

Average throughput: 11.23 Mbit/s

95th percentile per-packet one-way delay: 87.620 ms

Loss rate: 5.68%

Run 10: Report of Saturator — Data Link



Run 1: Statistics of SCReAM

Start at: 2017-08-21 01:54:18

End at: 2017-08-21 01:54:48

# Below is generated by plot.py at 2017-08-21 05:16:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.573 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.595 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 3:

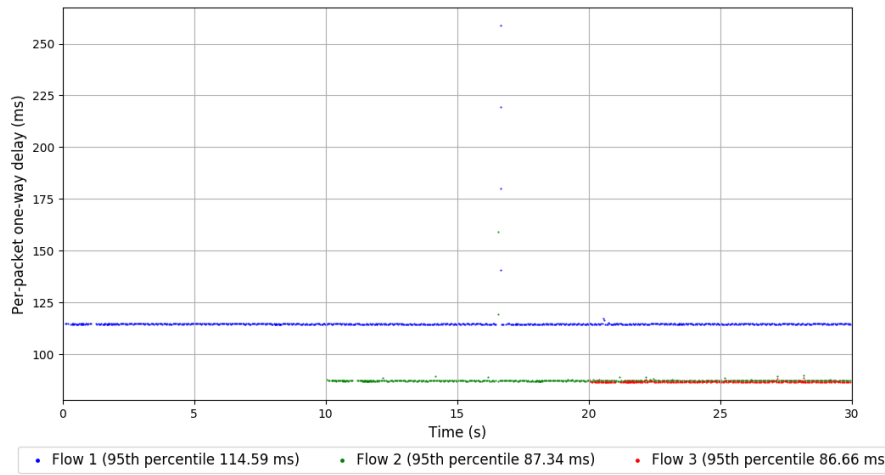
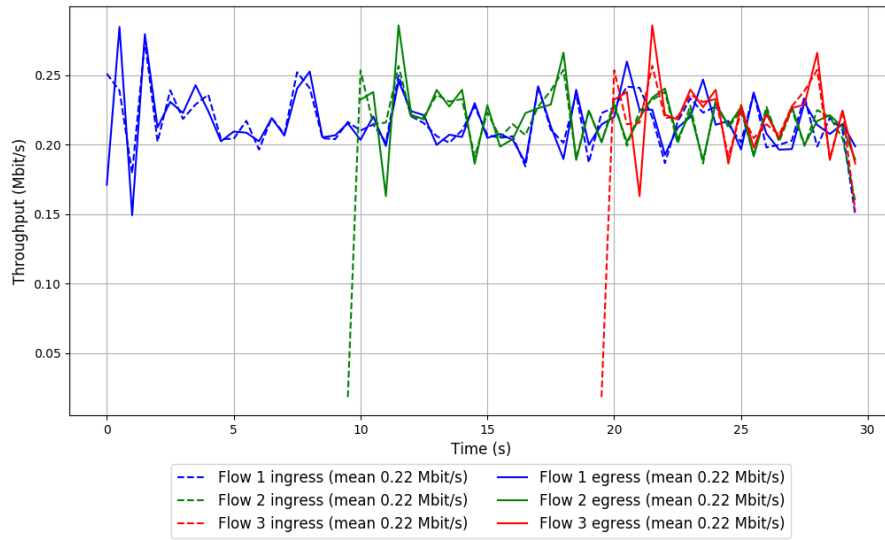
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.656 ms

Loss rate: 0.00%



Run 1: Report of SCReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2017-08-21 02:08:01

End at: 2017-08-21 02:08:31

# Below is generated by plot.py at 2017-08-21 05:16:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.474 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.285 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

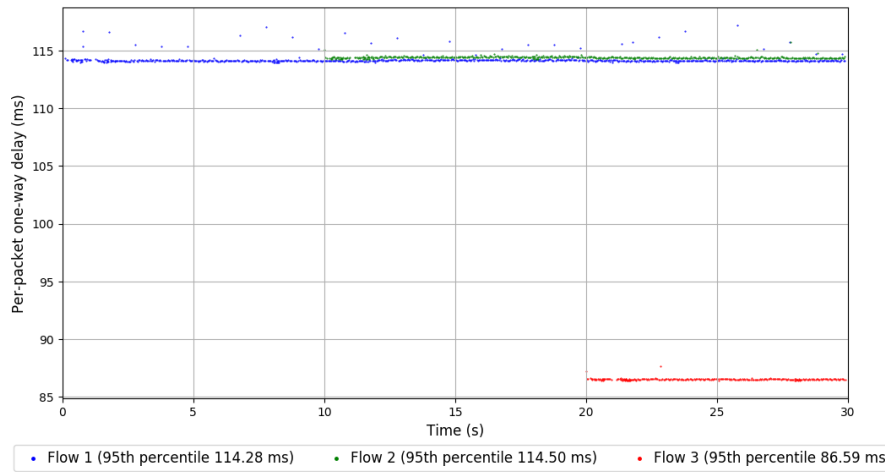
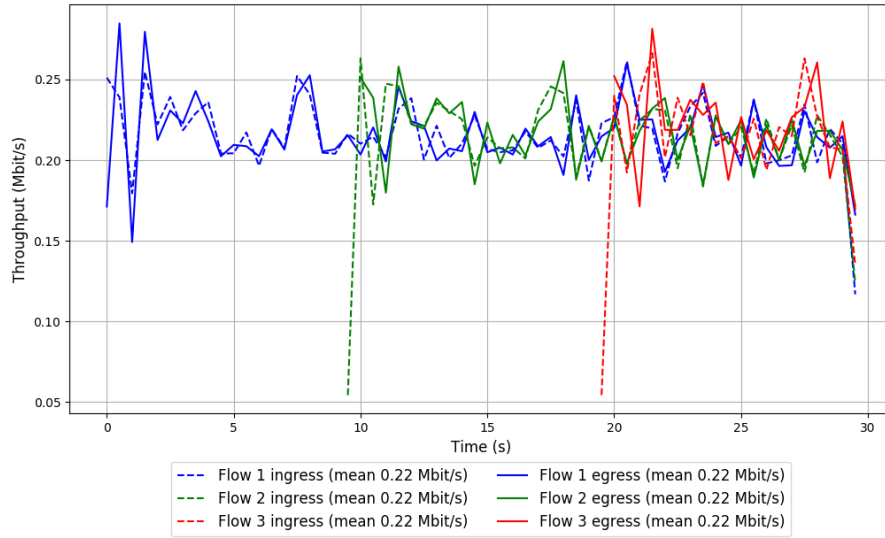
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.589 ms

Loss rate: 0.00%

Run 2: Report of SCReAM — Data Link

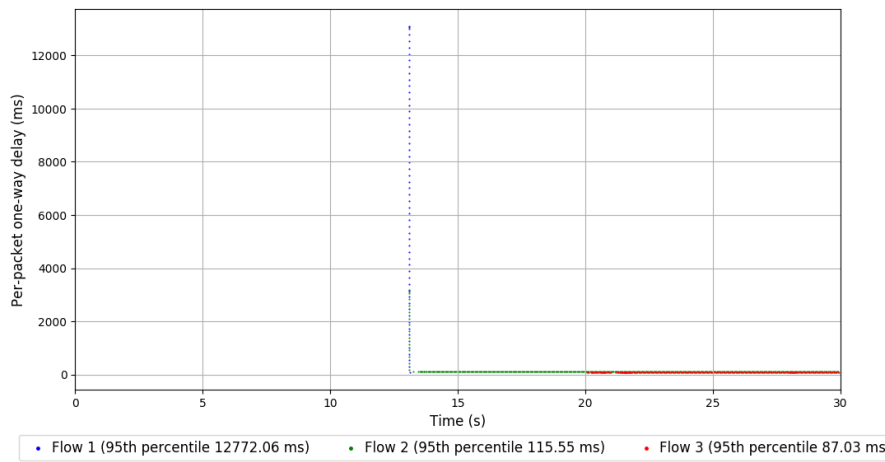
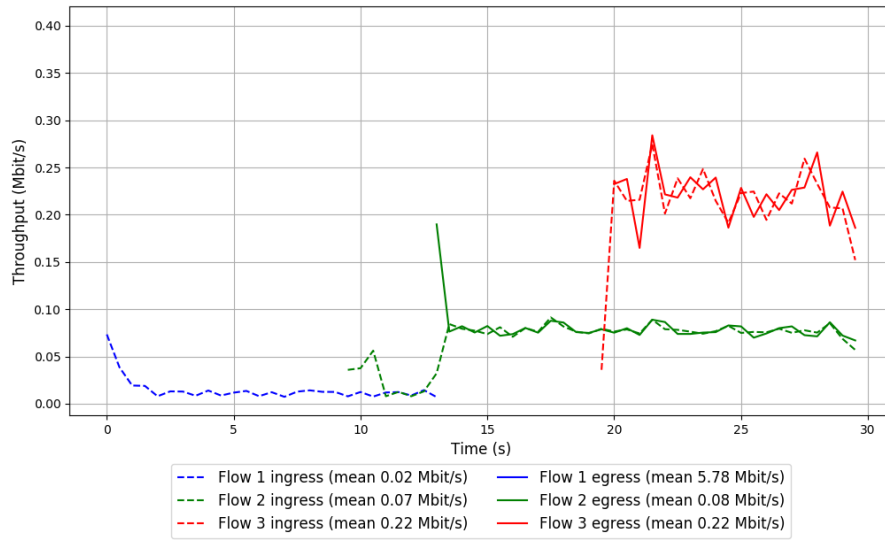


Run 3: Statistics of SCReAM

Start at: 2017-08-21 02:21:30

End at: 2017-08-21 02:22:00

### Run 3: Report of SCReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-08-21 02:33:48

End at: 2017-08-21 02:34:18

# Below is generated by plot.py at 2017-08-21 05:16:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 86.700 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.711 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.311 ms

Loss rate: 0.00%

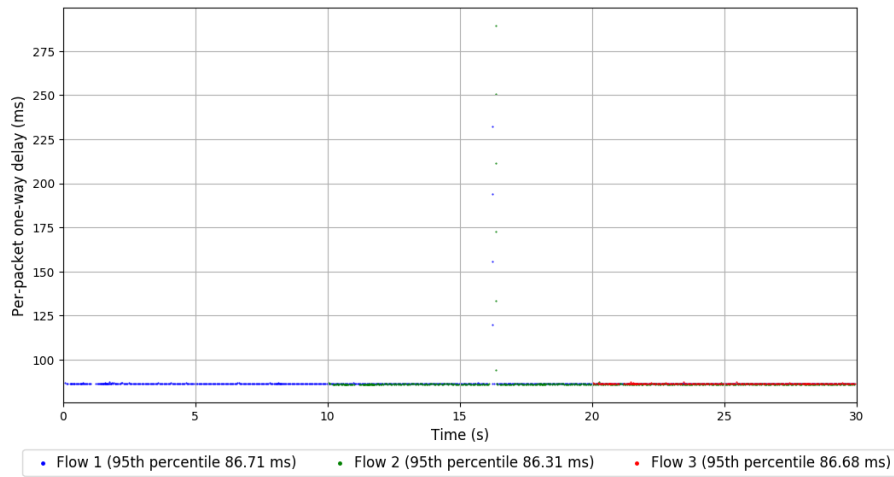
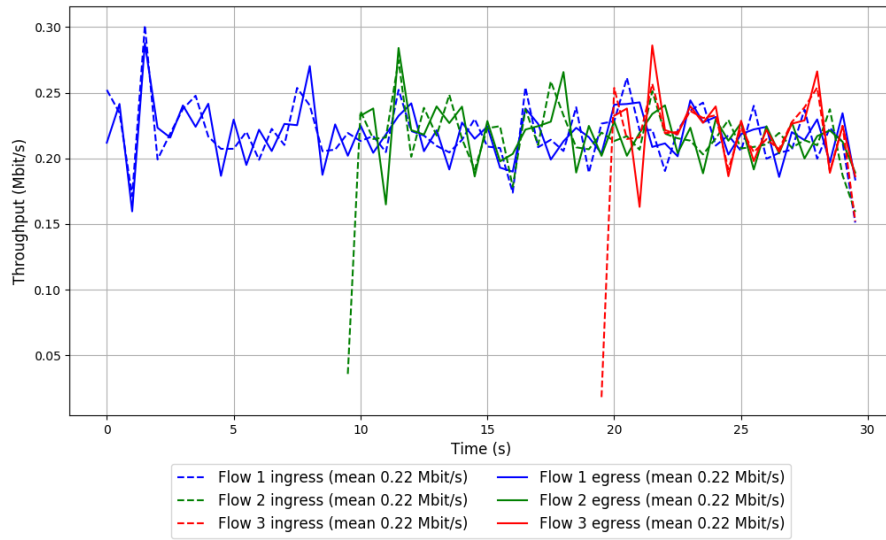
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.681 ms

Loss rate: 0.00%

### Run 4: Report of SCReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-08-21 02:45:57

End at: 2017-08-21 02:46:27

# Below is generated by plot.py at 2017-08-21 05:16:38

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 114.497 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 114.524 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.041 ms

Loss rate: 0.00%

-- Flow 3:

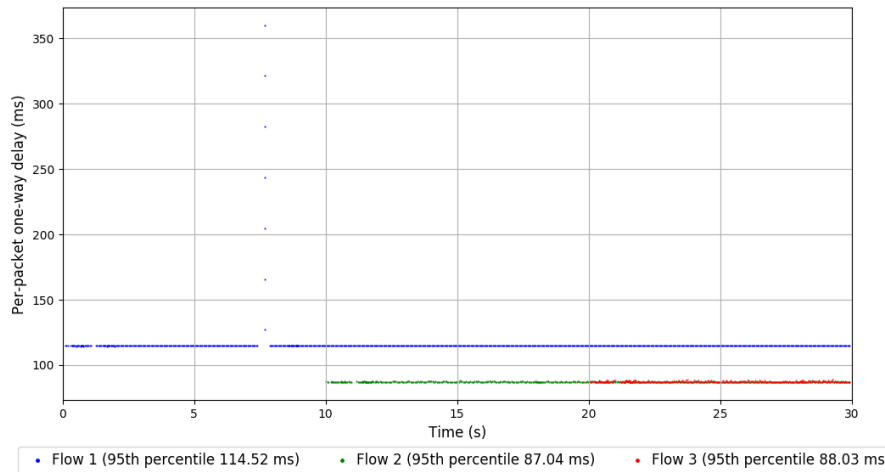
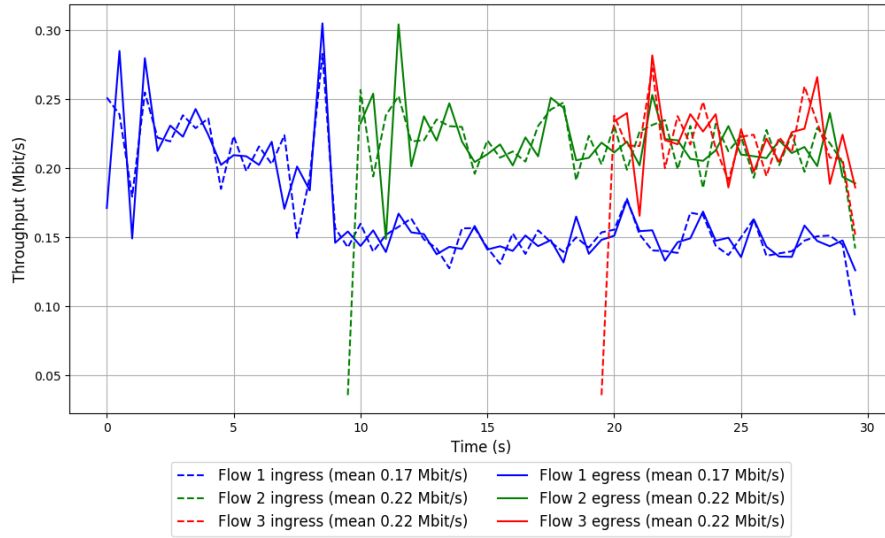
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 88.026 ms

Loss rate: 0.00%



Run 5: Report of SCReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-08-21 02:57:16

End at: 2017-08-21 02:57:46

# Below is generated by plot.py at 2017-08-21 05:16:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.147 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.620 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.184 ms

Loss rate: 0.00%

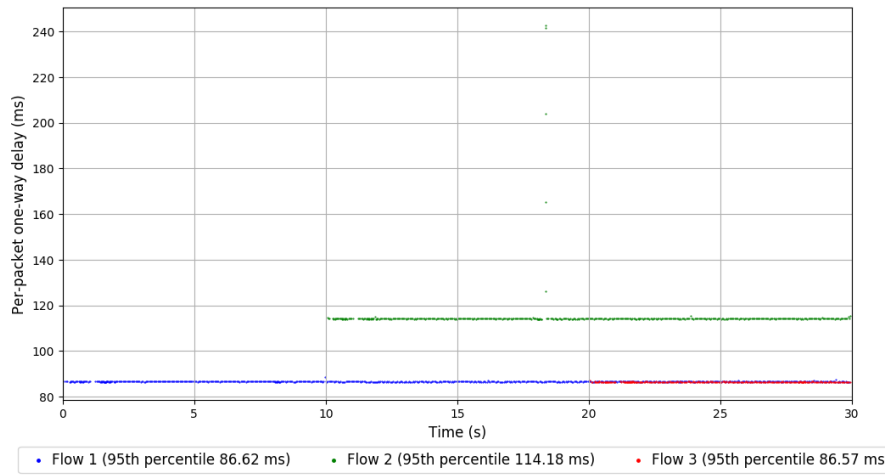
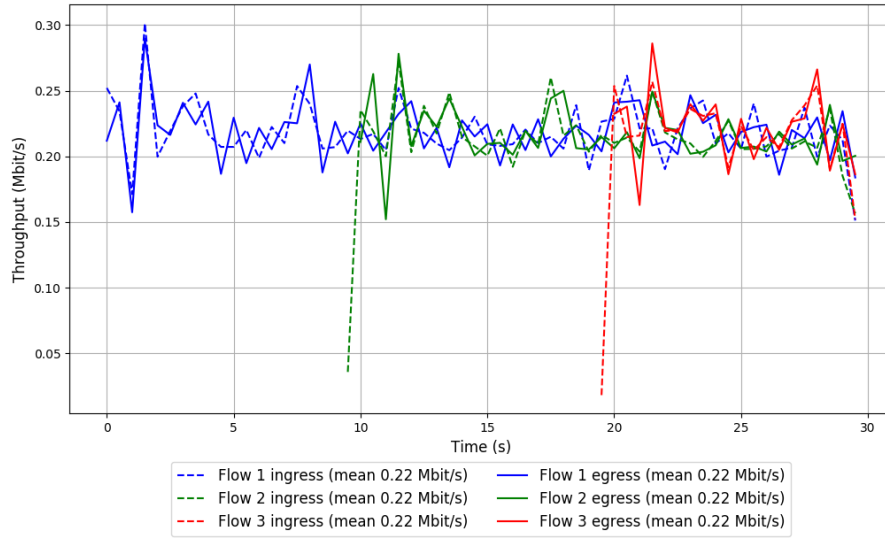
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.570 ms

Loss rate: 0.00%

Run 6: Report of SCReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-08-21 03:08:49

End at: 2017-08-21 03:09:19

# Below is generated by plot.py at 2017-08-21 05:16:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 114.537 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.979 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 87.158 ms

Loss rate: 0.00%

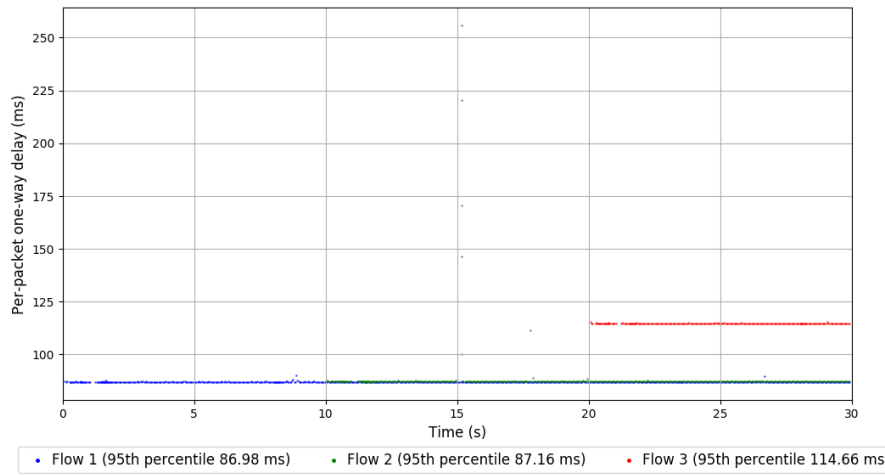
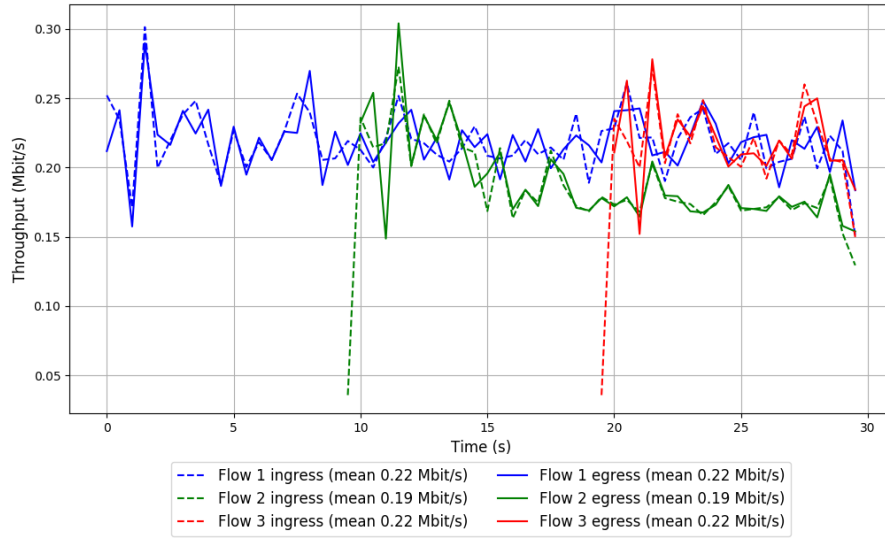
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.662 ms

Loss rate: 0.35%

### Run 7: Report of SCReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-08-21 03:20:38

End at: 2017-08-21 03:21:08

# Below is generated by plot.py at 2017-08-21 05:16:40

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.183 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.214 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.068 ms

Loss rate: 0.00%

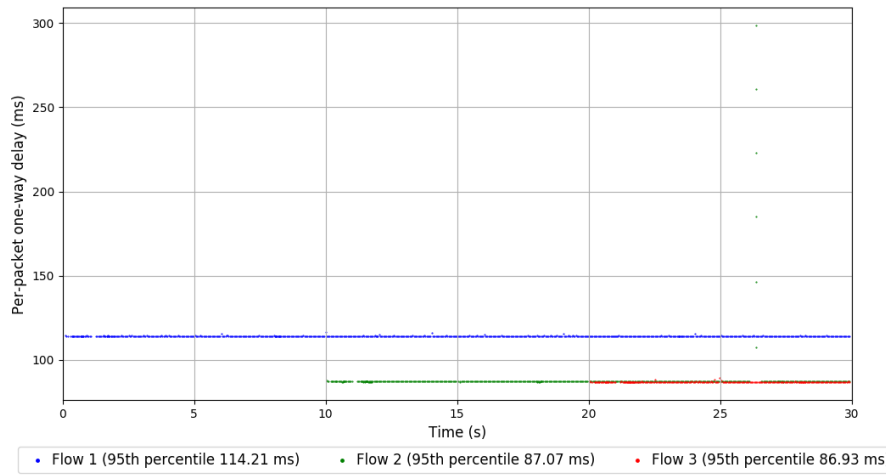
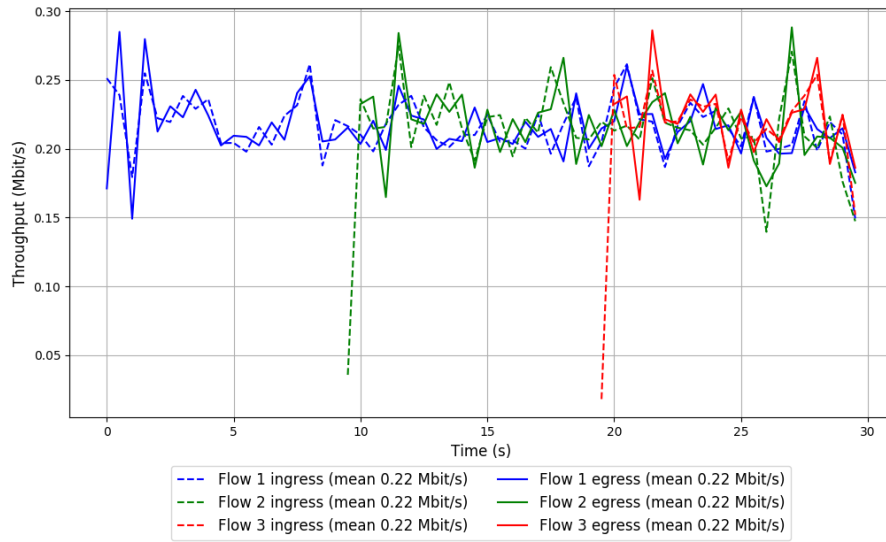
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.933 ms

Loss rate: 0.00%

### Run 8: Report of SCReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-08-21 03:32:03

End at: 2017-08-21 03:32:33

# Below is generated by plot.py at 2017-08-21 05:16:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.475 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.496 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.585 ms

Loss rate: 0.00%

-- Flow 3:

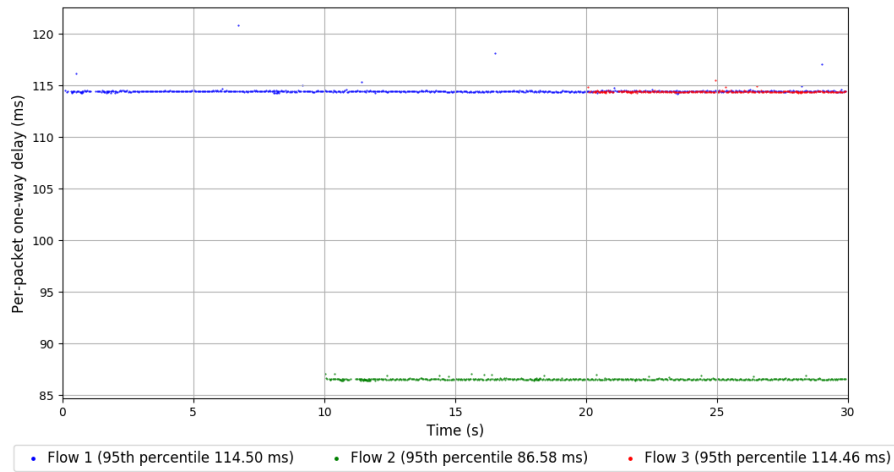
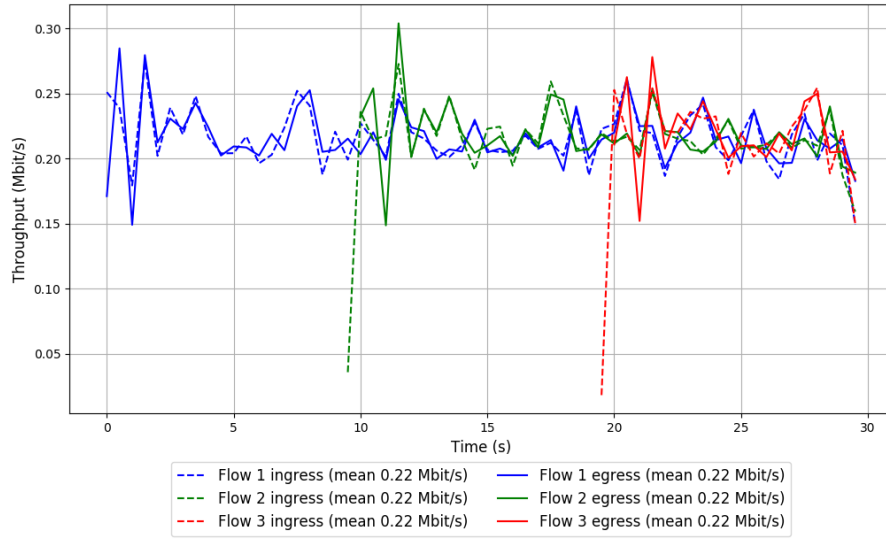
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.460 ms

Loss rate: 0.35%



### Run 9: Report of SCReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-08-21 03:44:27

End at: 2017-08-21 03:44:57

# Below is generated by plot.py at 2017-08-21 05:16:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

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

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.169 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.949 ms

Loss rate: 0.00%

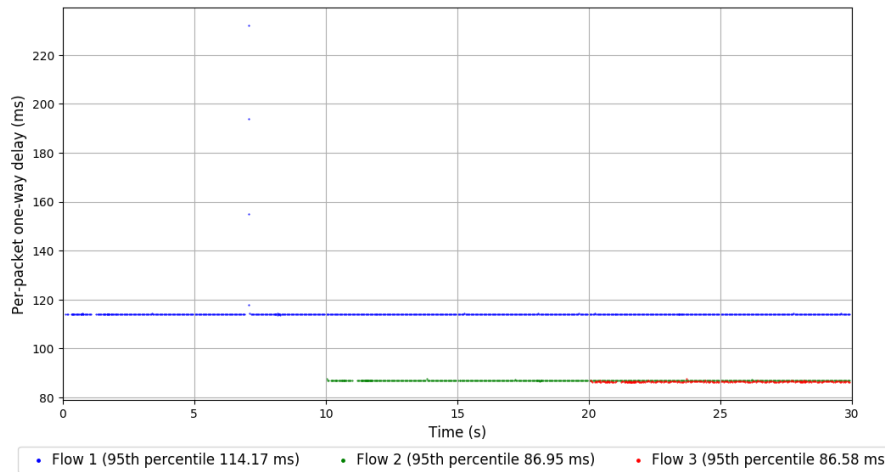
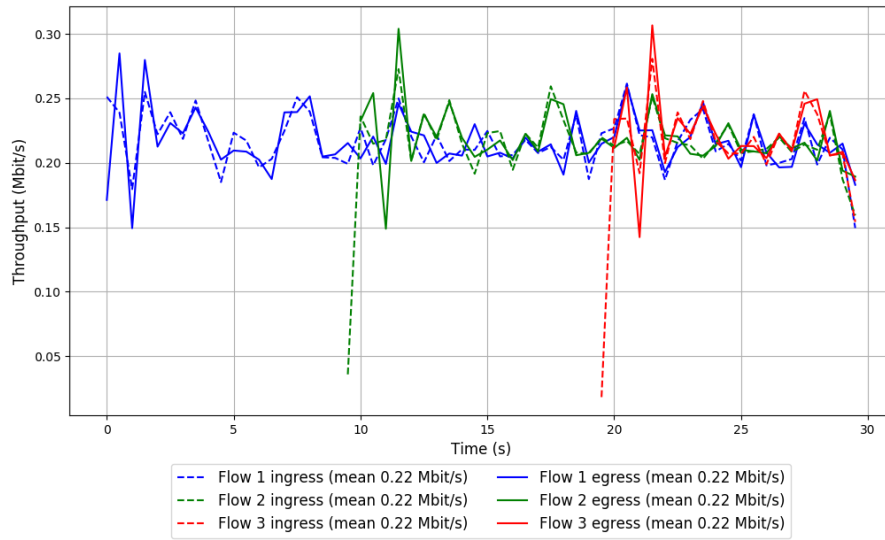
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.580 ms

Loss rate: 0.00%

### Run 10: Report of SCReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2017-08-21 01:53:32

End at: 2017-08-21 01:54:02

# Below is generated by plot.py at 2017-08-21 05:16:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 6.92 Mbit/s

95th percentile per-packet one-way delay: 87.317 ms

Loss rate: 2.03%

-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 87.358 ms

Loss rate: 4.04%

-- Flow 2:

Average throughput: 4.32 Mbit/s

95th percentile per-packet one-way delay: 87.327 ms

Loss rate: 0.00%

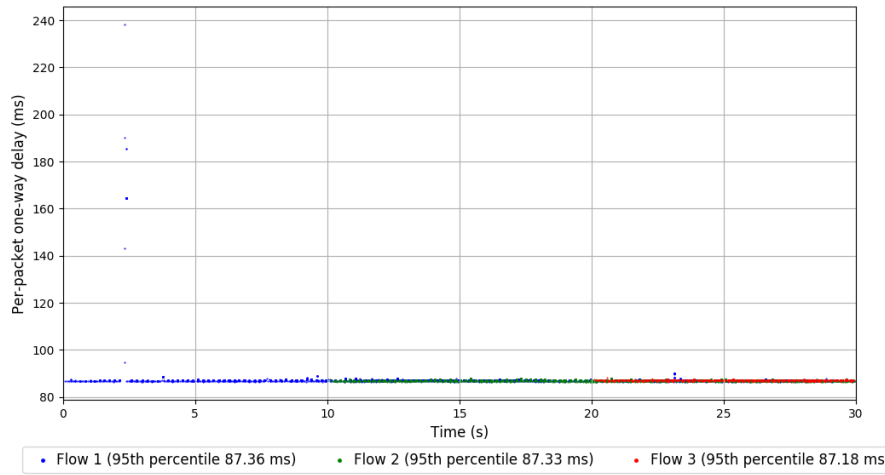
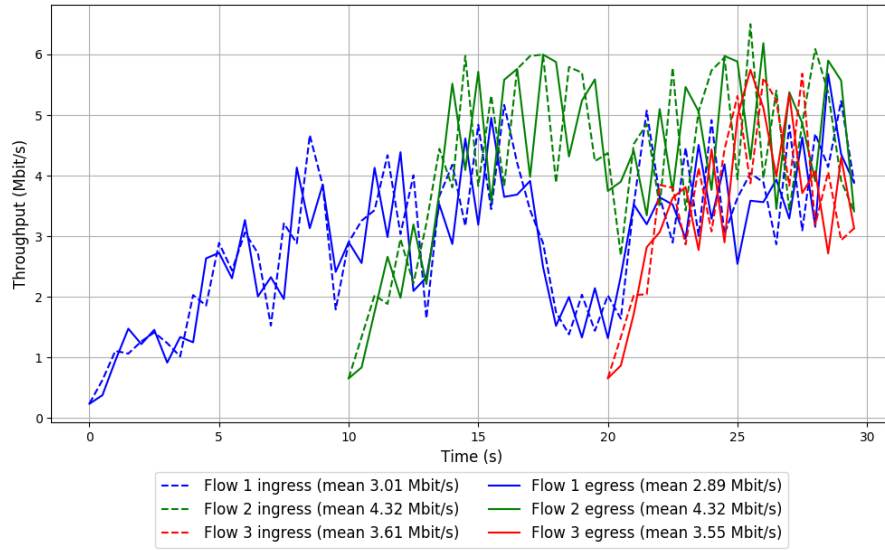
-- Flow 3:

Average throughput: 3.55 Mbit/s

95th percentile per-packet one-way delay: 87.183 ms

Loss rate: 1.83%

# Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-08-21 02:07:16

End at: 2017-08-21 02:07:46

# Below is generated by plot.py at 2017-08-21 05:16:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.14 Mbit/s

95th percentile per-packet one-way delay: 114.540 ms

Loss rate: 3.94%

-- Flow 1:

Average throughput: 0.71 Mbit/s

95th percentile per-packet one-way delay: 114.708 ms

Loss rate: 8.41%

-- Flow 2:

Average throughput: 3.30 Mbit/s

95th percentile per-packet one-way delay: 114.458 ms

Loss rate: 2.78%

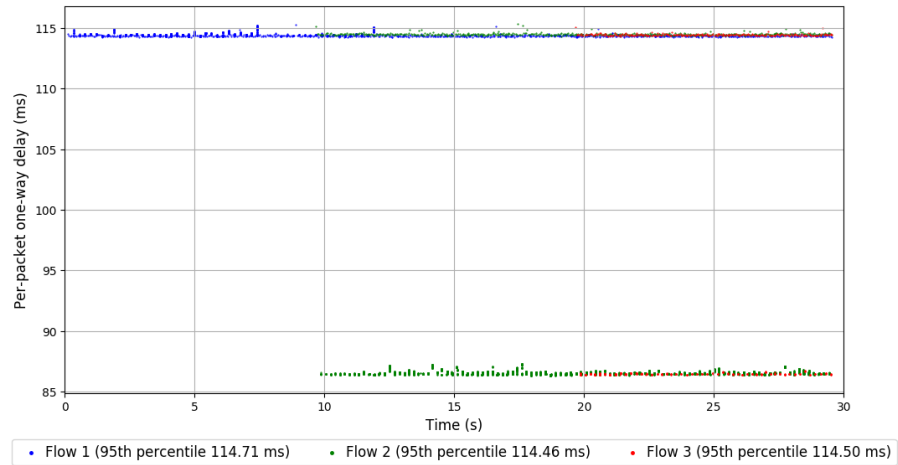
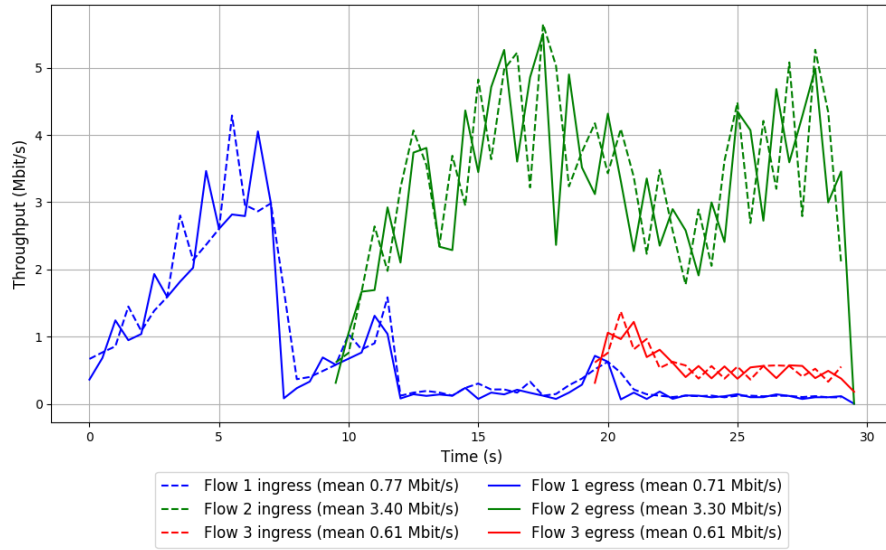
-- Flow 3:

Average throughput: 0.61 Mbit/s

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

Loss rate: 0.00%

## Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-08-21 02:20:45

End at: 2017-08-21 02:21:15

# Below is generated by plot.py at 2017-08-21 05:16:45

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 114.688 ms

Loss rate: 4.91%

-- Flow 1:

Average throughput: 1.55 Mbit/s

95th percentile per-packet one-way delay: 114.722 ms

Loss rate: 5.15%

-- Flow 2:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 114.455 ms

Loss rate: 0.00%

-- Flow 3:

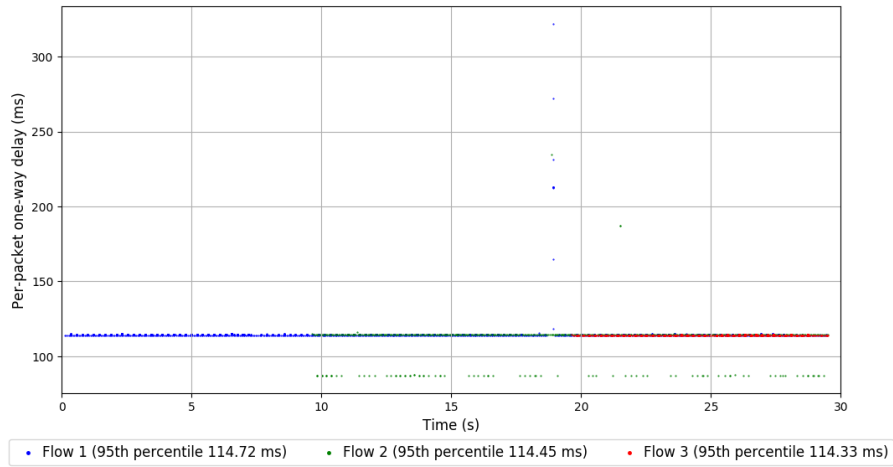
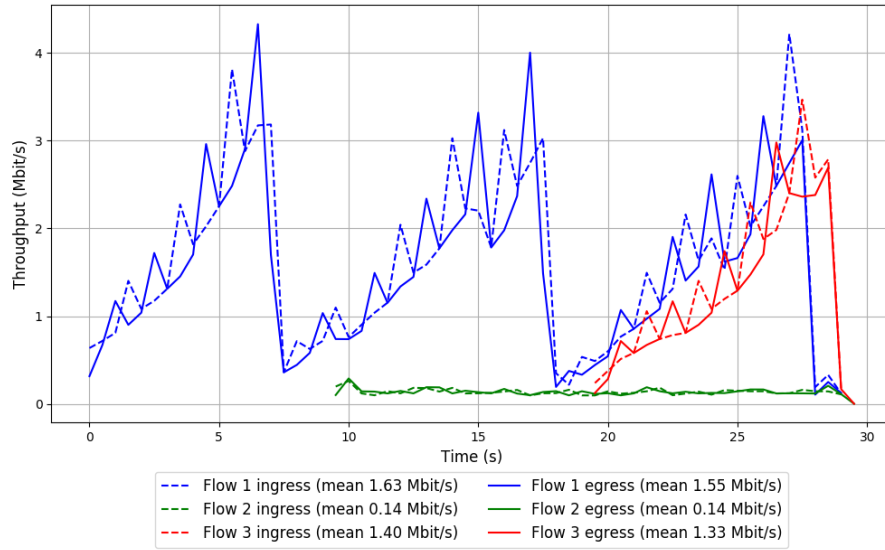
Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 114.335 ms

Loss rate: 5.06%



### Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-08-21 02:33:04

End at: 2017-08-21 02:33:34

# Below is generated by plot.py at 2017-08-21 05:16:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 114.356 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 0.72 Mbit/s

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

Loss rate: 0.83%

-- Flow 2:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 114.408 ms

Loss rate: 0.00%

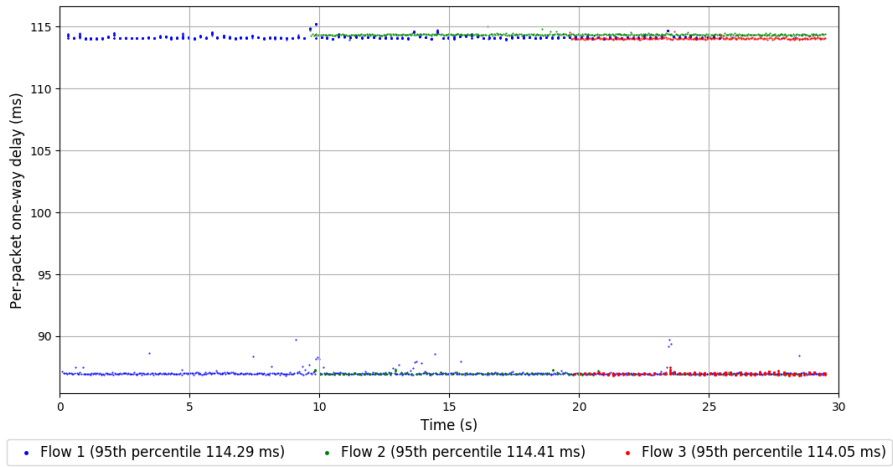
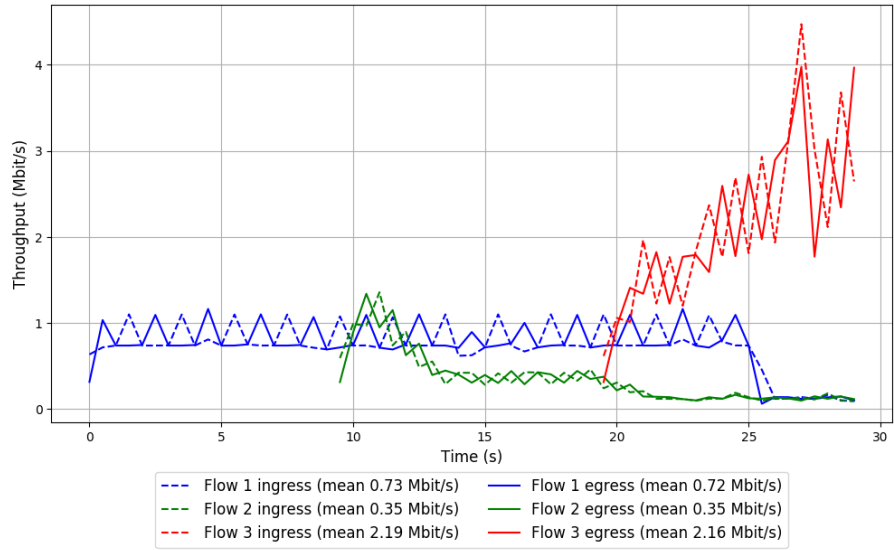
-- Flow 3:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 114.046 ms

Loss rate: 1.70%

### Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-08-21 02:45:13

End at: 2017-08-21 02:45:44

# Below is generated by plot.py at 2017-08-21 05:16:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.94 Mbit/s

95th percentile per-packet one-way delay: 114.558 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 114.489 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.67 Mbit/s

95th percentile per-packet one-way delay: 114.582 ms

Loss rate: 0.00%

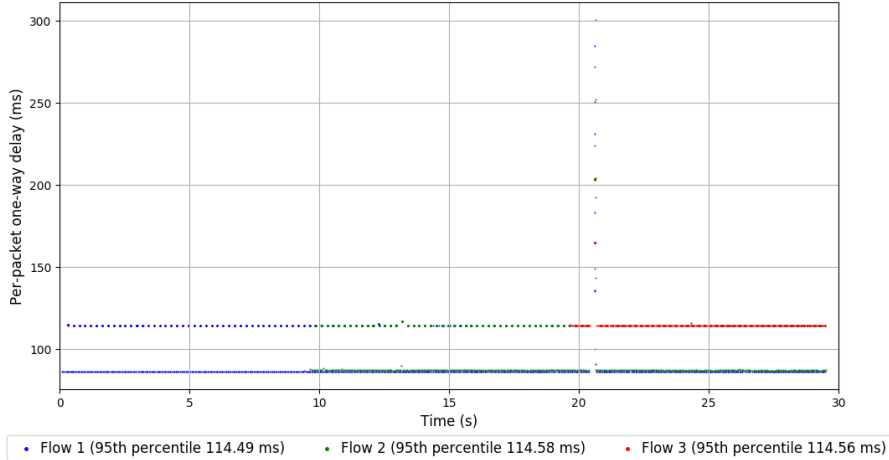
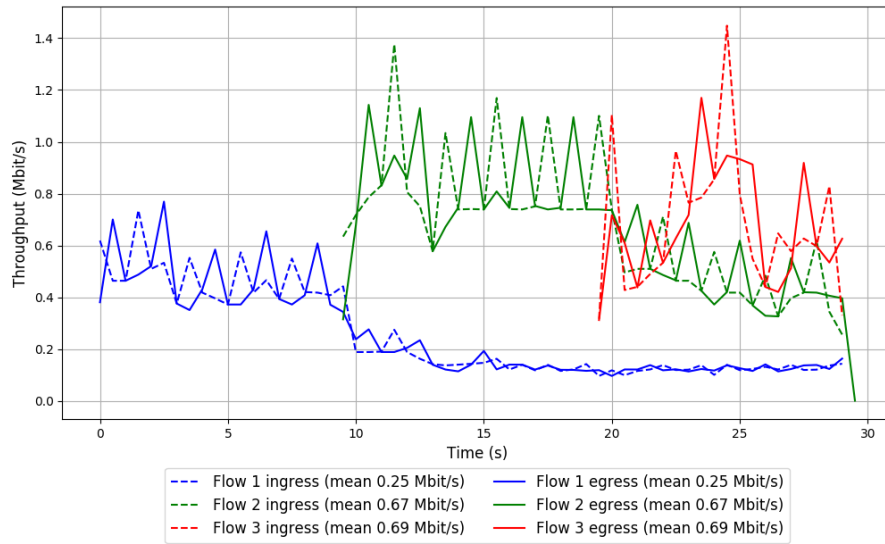
-- Flow 3:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 114.559 ms

Loss rate: 0.01%

### Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-08-21 02:56:32

End at: 2017-08-21 02:57:02

# Below is generated by plot.py at 2017-08-21 05:16:48

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 114.691 ms

Loss rate: 3.48%

-- Flow 1:

Average throughput: 0.38 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 114.708 ms

Loss rate: 4.80%

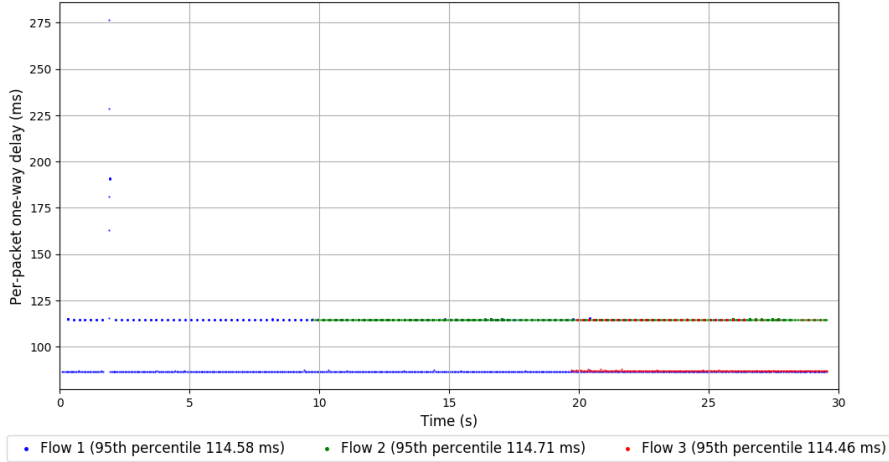
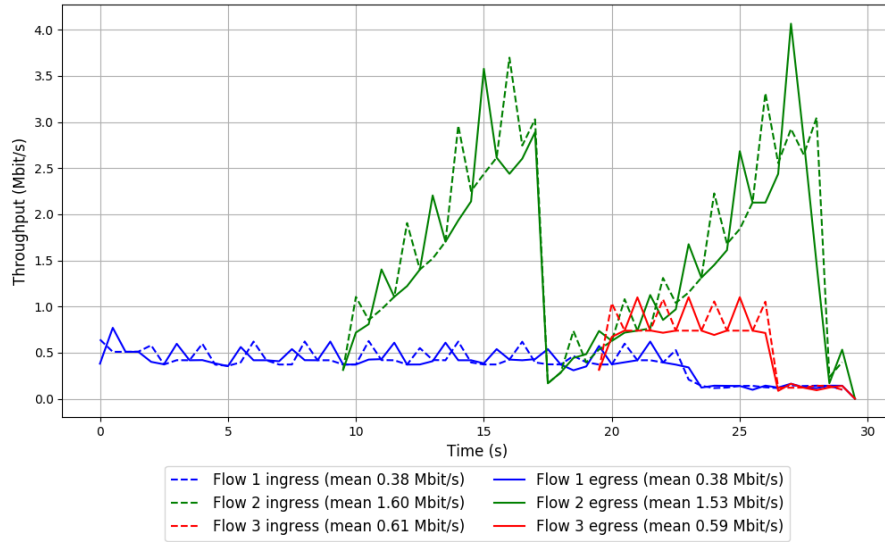
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 114.463 ms

Loss rate: 2.98%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-08-21 03:08:05

End at: 2017-08-21 03:08:35

# Below is generated by plot.py at 2017-08-21 05:16:48

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 114.807 ms

Loss rate: 3.43%

-- Flow 1:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 114.480 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 114.916 ms

Loss rate: 4.33%

-- Flow 3:

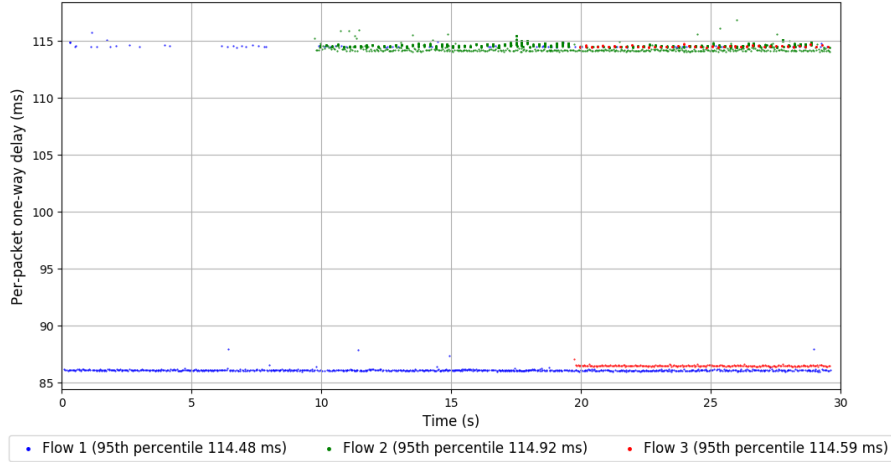
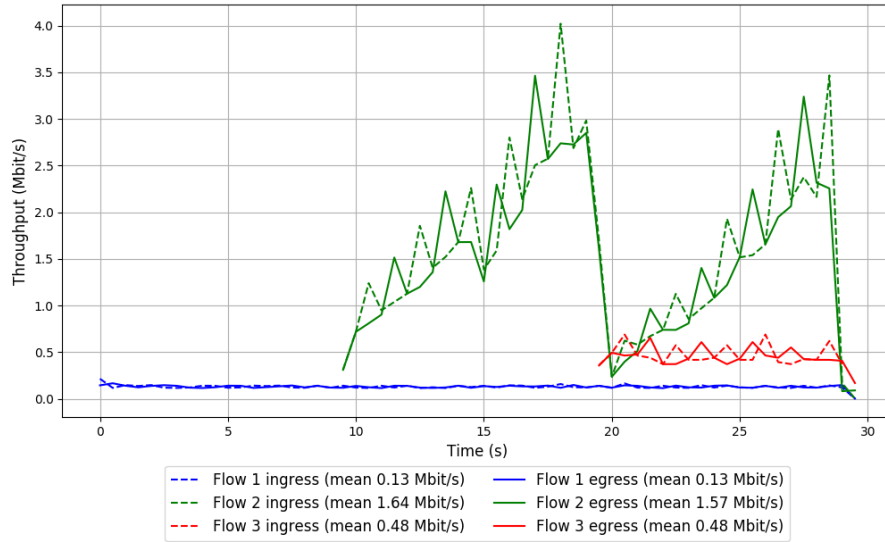
Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 114.586 ms

Loss rate: 0.00%



### Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-08-21 03:19:54

End at: 2017-08-21 03:20:24

# Below is generated by plot.py at 2017-08-21 05:16:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 114.749 ms

Loss rate: 4.25%

-- Flow 1:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 114.780 ms

Loss rate: 5.68%

-- Flow 2:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 114.562 ms

Loss rate: 1.52%

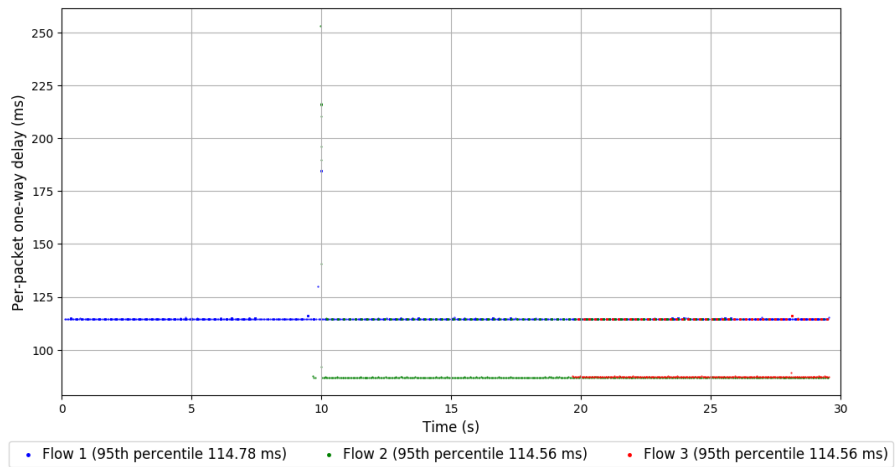
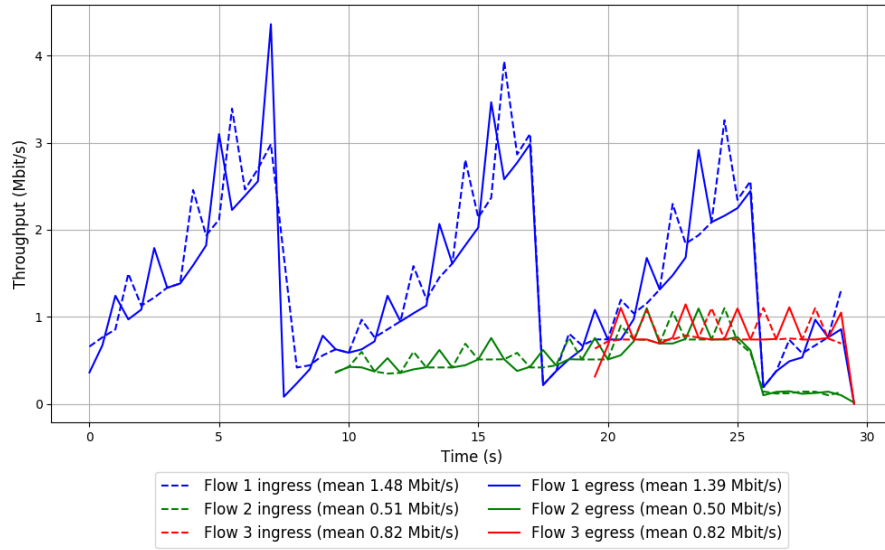
-- Flow 3:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 114.562 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-08-21 03:31:19

End at: 2017-08-21 03:31:49

# Below is generated by plot.py at 2017-08-21 05:16:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.08 Mbit/s

95th percentile per-packet one-way delay: 114.765 ms

Loss rate: 2.67%

-- Flow 1:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 114.856 ms

Loss rate: 6.46%

-- Flow 2:

Average throughput: 2.82 Mbit/s

95th percentile per-packet one-way delay: 114.481 ms

Loss rate: 0.00%

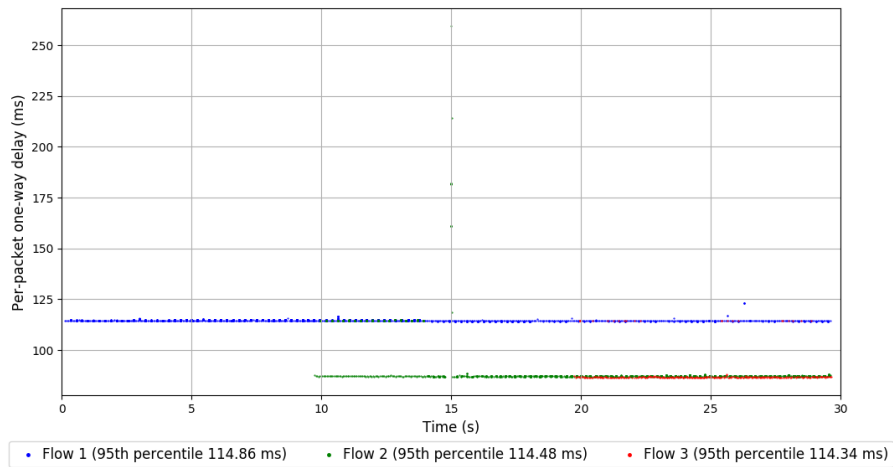
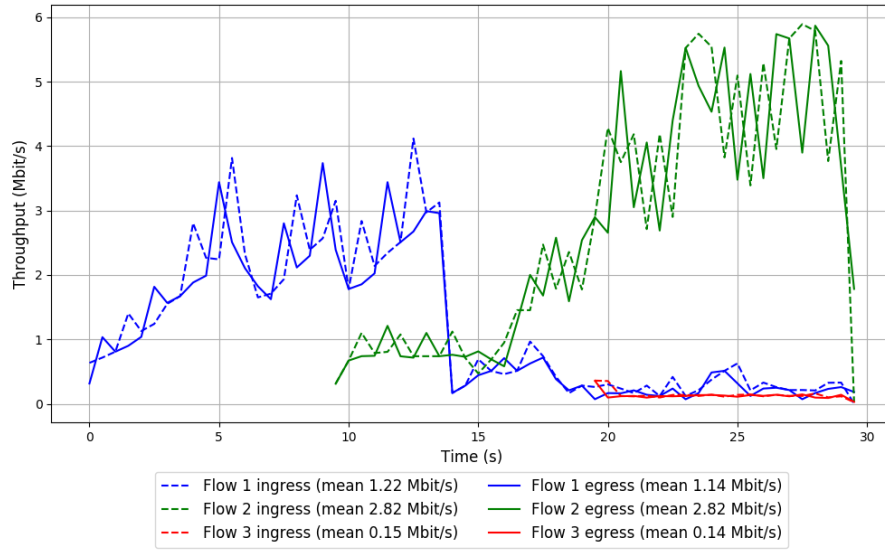
-- Flow 3:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 114.338 ms

Loss rate: 10.98%

### Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-08-21 03:43:43

End at: 2017-08-21 03:44:13

# Below is generated by plot.py at 2017-08-21 05:16:51

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.17 Mbit/s

95th percentile per-packet one-way delay: 114.314 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 87.476 ms

Loss rate: 1.34%

-- Flow 2:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 114.426 ms

Loss rate: 0.00%

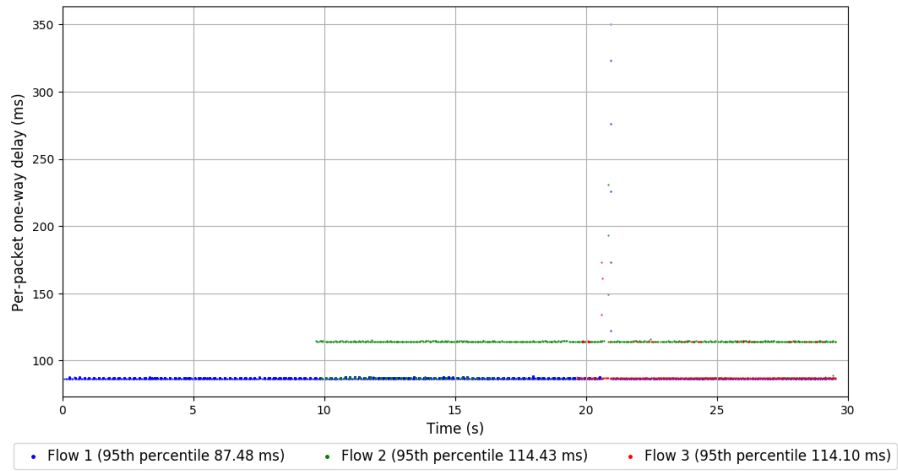
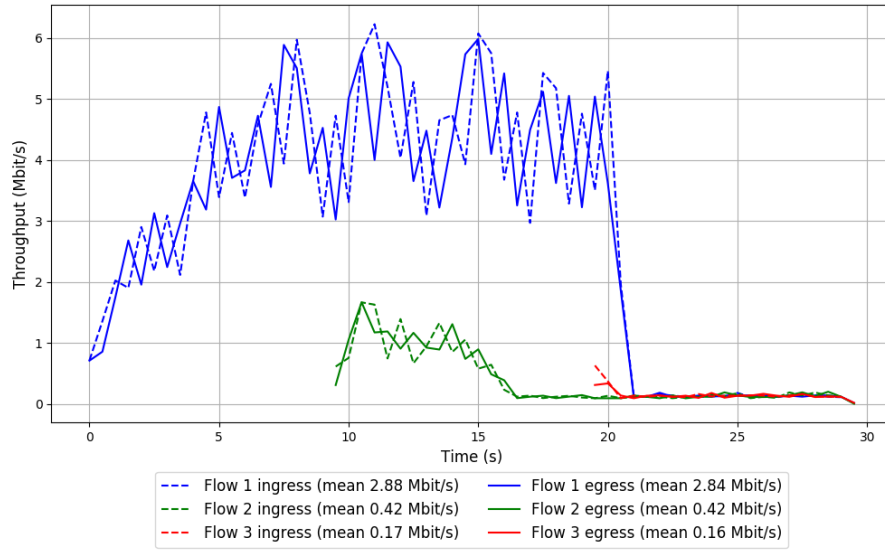
-- Flow 3:

Average throughput: 0.16 Mbit/s

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

Loss rate: 9.11%

### Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2017-08-21 02:03:57

End at: 2017-08-21 02:04:27

# Below is generated by plot.py at 2017-08-21 05:17:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 171.45 Mbit/s

95th percentile per-packet one-way delay: 87.749 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 202.44 Mbit/s

95th percentile per-packet one-way delay: 88.352 ms

Loss rate: 2.94%

-- Flow 2:

Average throughput: 148.35 Mbit/s

95th percentile per-packet one-way delay: 87.514 ms

Loss rate: 0.64%

-- Flow 3:

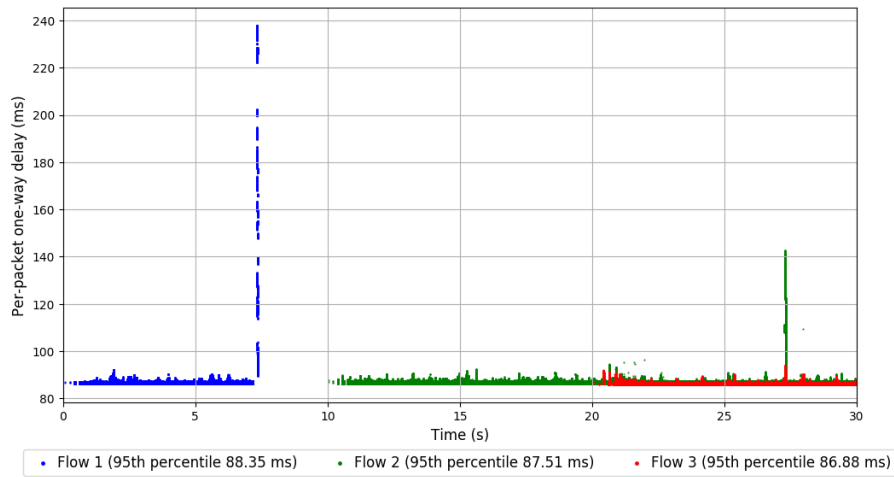
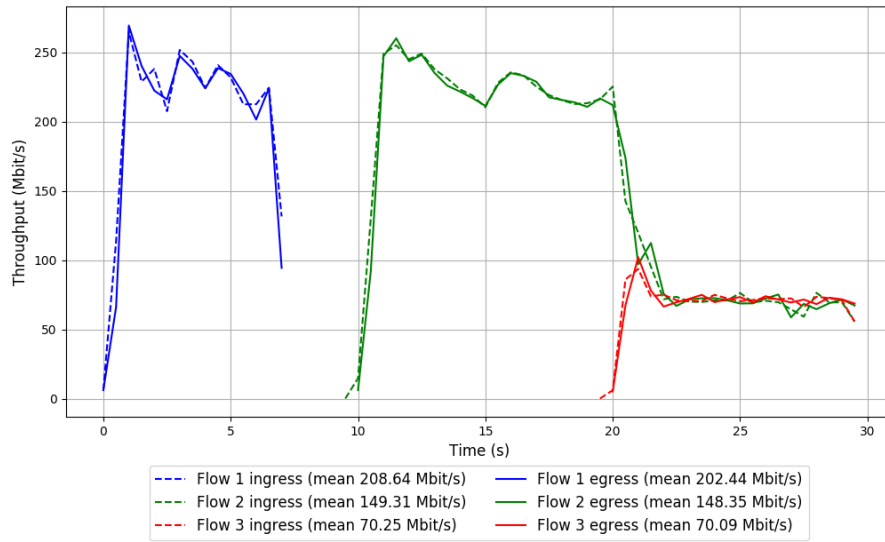
Average throughput: 70.09 Mbit/s

95th percentile per-packet one-way delay: 86.875 ms

Loss rate: 0.22%



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



Run 2: Statistics of TaoVA-100x

Start at: 2017-08-21 02:17:37

End at: 2017-08-21 02:18:07

# Below is generated by plot.py at 2017-08-21 05:17:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 142.27 Mbit/s

95th percentile per-packet one-way delay: 87.606 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 6.91 Mbit/s

95th percentile per-packet one-way delay: 114.067 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 213.43 Mbit/s

95th percentile per-packet one-way delay: 87.600 ms

Loss rate: 0.56%

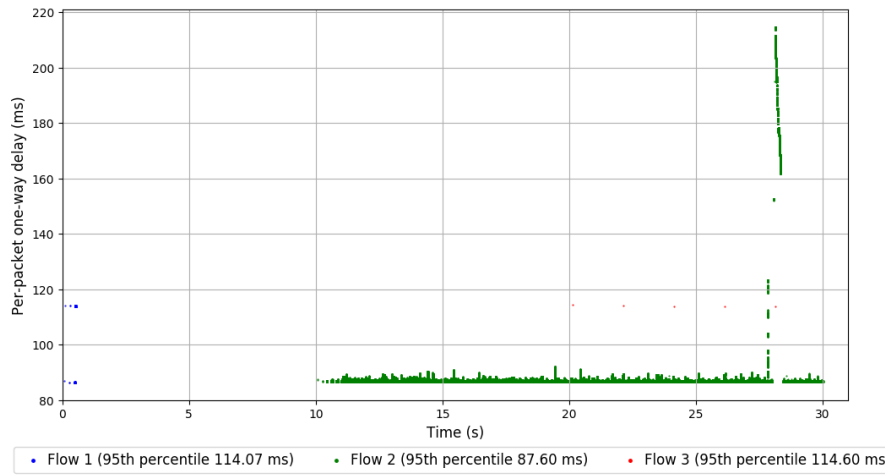
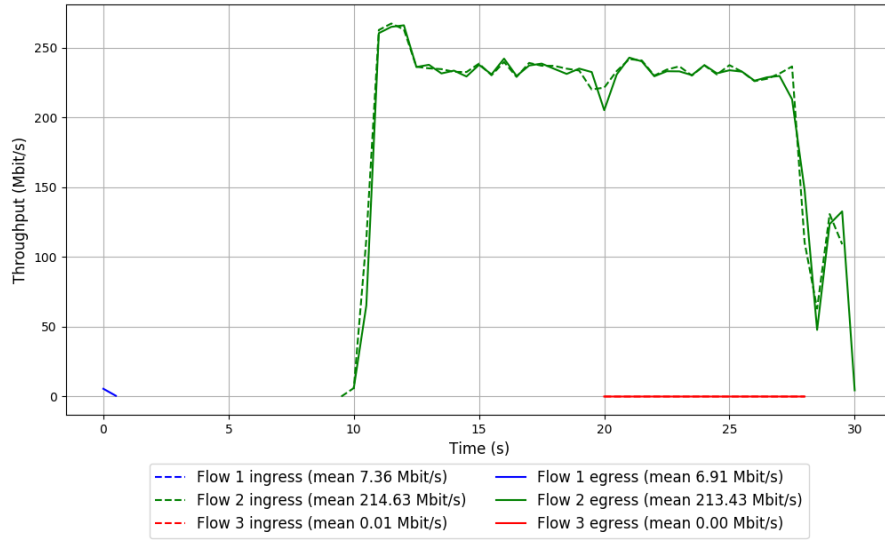
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 114.601 ms

Loss rate: 92.35%

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-08-21 02:30:25

End at: 2017-08-21 02:30:55

# Below is generated by plot.py at 2017-08-21 05:18:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 160.26 Mbit/s

95th percentile per-packet one-way delay: 88.847 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 197.54 Mbit/s

95th percentile per-packet one-way delay: 91.442 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 154.81 Mbit/s

95th percentile per-packet one-way delay: 87.601 ms

Loss rate: 0.23%

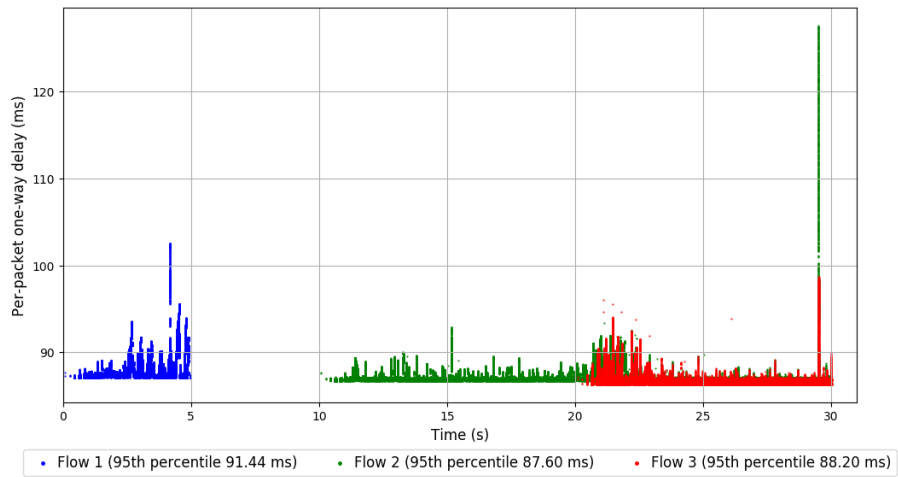
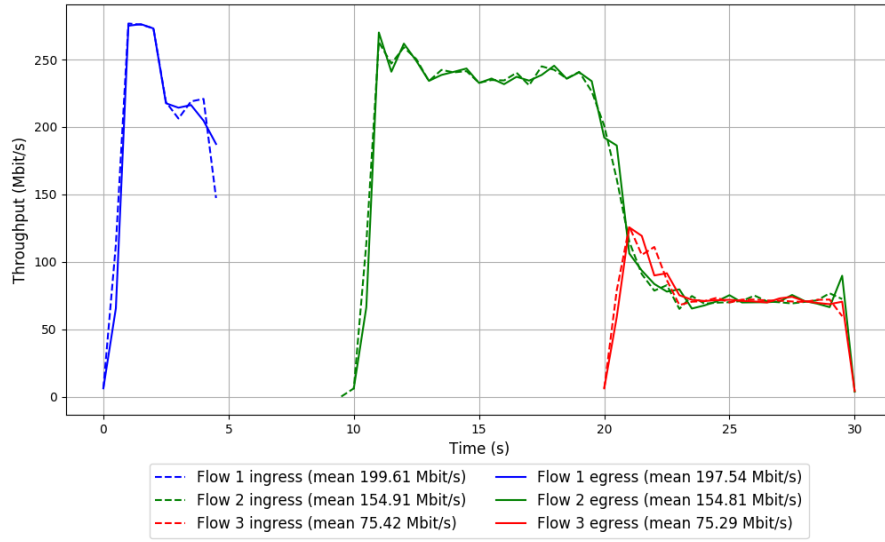
-- Flow 3:

Average throughput: 75.29 Mbit/s

95th percentile per-packet one-way delay: 88.199 ms

Loss rate: 0.17%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-08-21 02:42:39

End at: 2017-08-21 02:43:09

# Below is generated by plot.py at 2017-08-21 05:18:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 198.05 Mbit/s

95th percentile per-packet one-way delay: 114.651 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 216.39 Mbit/s

95th percentile per-packet one-way delay: 114.651 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 89.813 ms

Loss rate: 91.21%

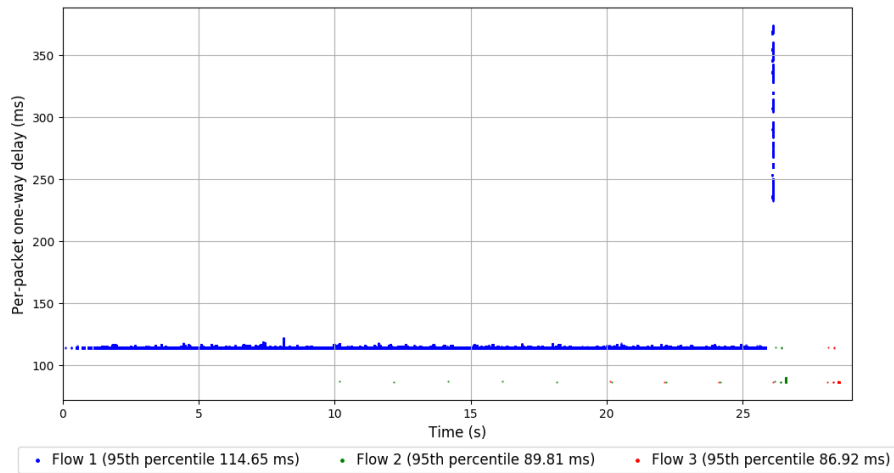
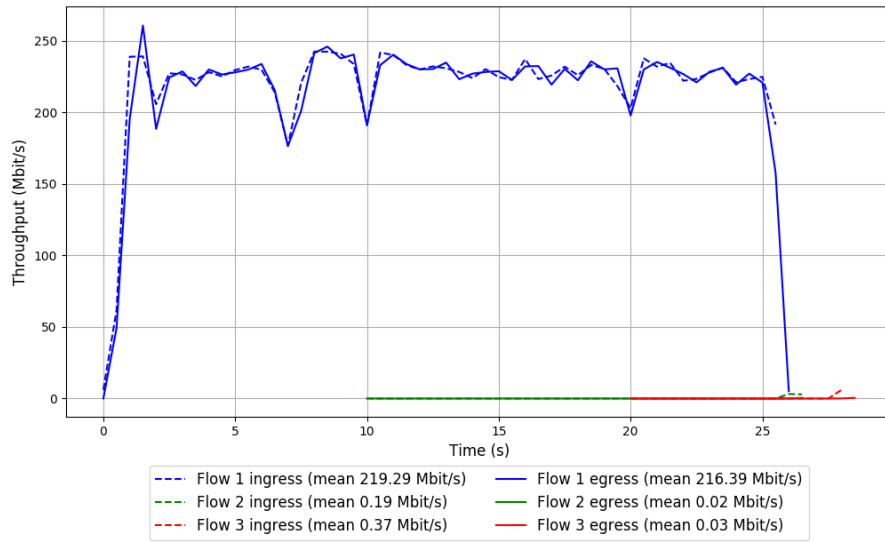
-- Flow 3:

Average throughput: 0.03 Mbit/s

95th percentile per-packet one-way delay: 86.918 ms

Loss rate: 91.19%

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



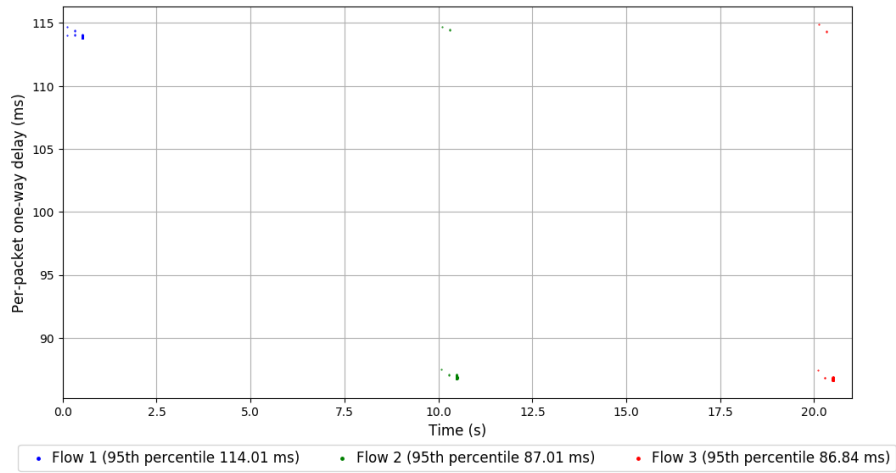
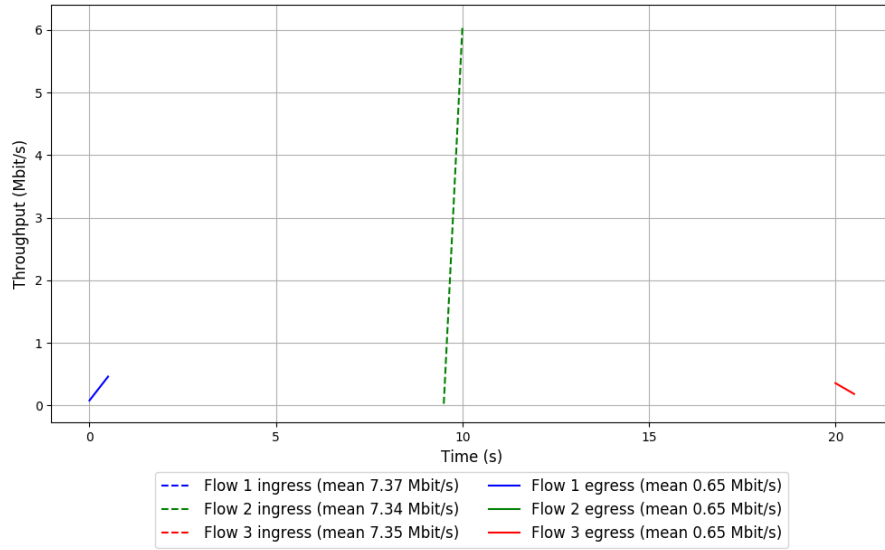
Run 5: Statistics of TaoVA-100x

Start at: 2017-08-21 02:54:14

End at: 2017-08-21 02:54:44



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

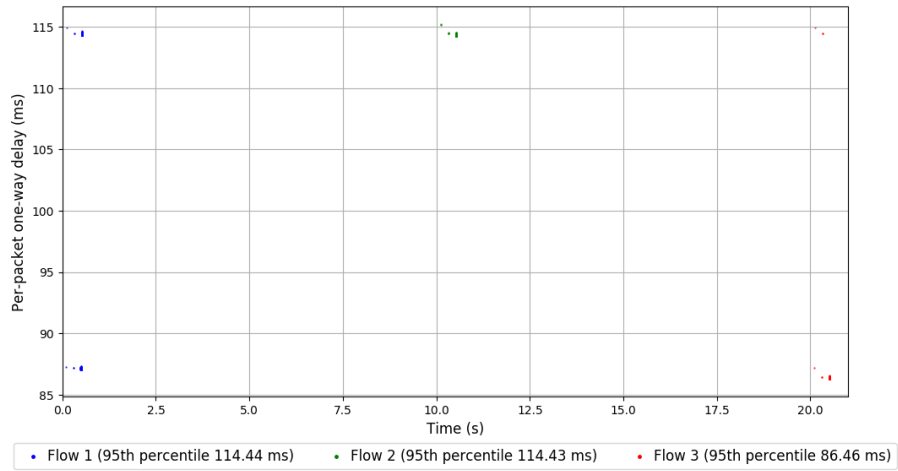
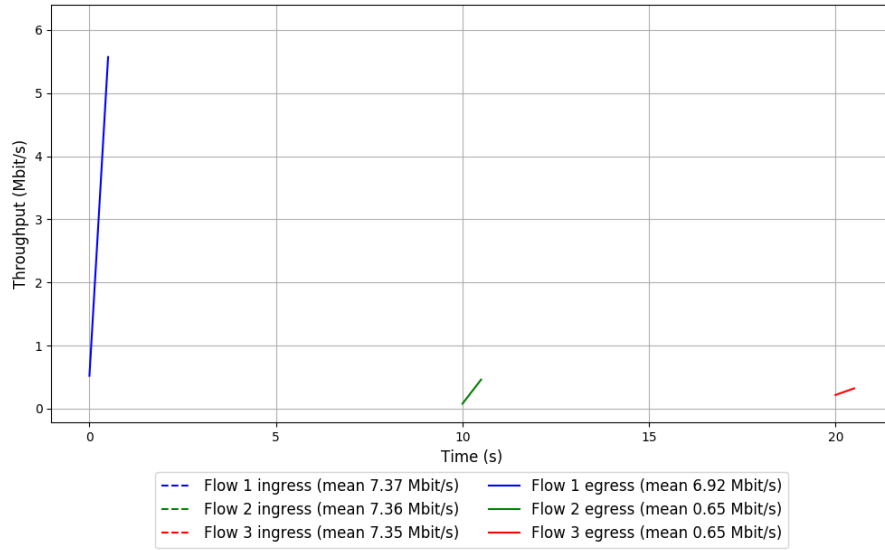


Run 6: Statistics of TaoVA-100x

Start at: 2017-08-21 03:05:49

End at: 2017-08-21 03:06:19

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

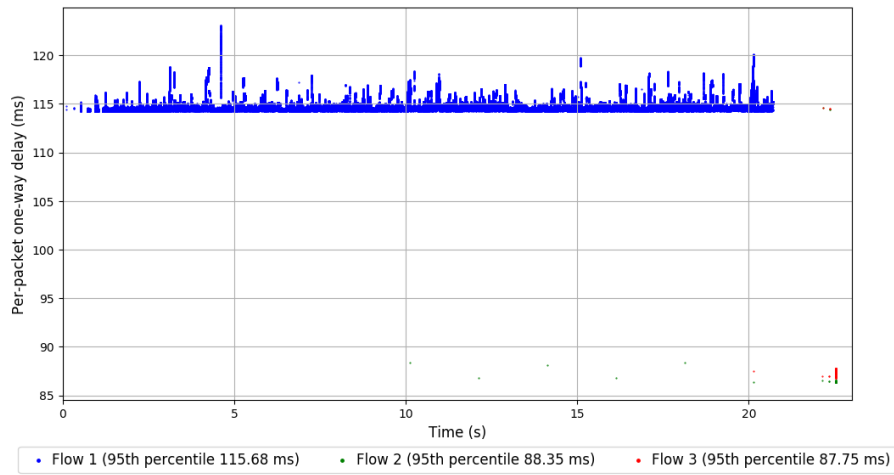
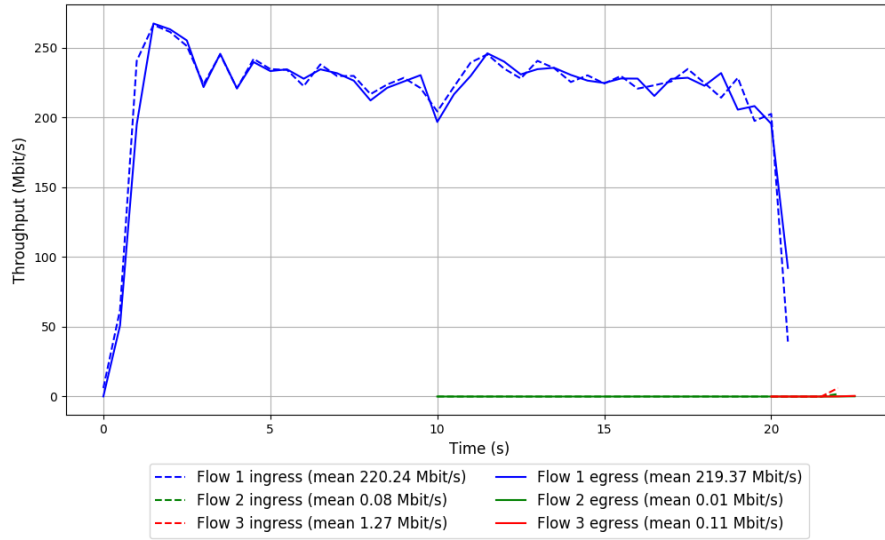


Run 7: Statistics of TaoVA-100x

Start at: 2017-08-21 03:17:14

End at: 2017-08-21 03:17:44

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-08-21 03:28:54

End at: 2017-08-21 03:29:24

# Below is generated by plot.py at 2017-08-21 05:19:14

# Datalink statistics

-- Total of 3 flows:

Average throughput: 65.33 Mbit/s

95th percentile per-packet one-way delay: 119.448 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 87.007 ms

Loss rate: 91.17%

-- Flow 2:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 86.532 ms

Loss rate: 91.17%

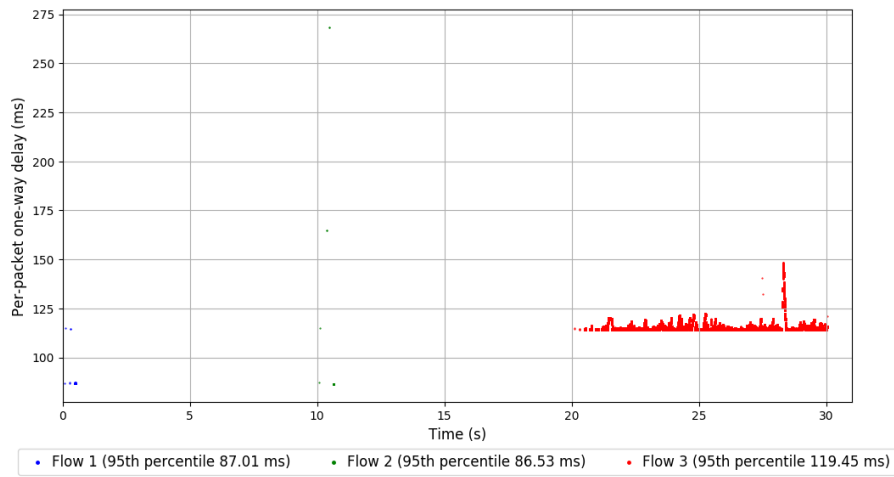
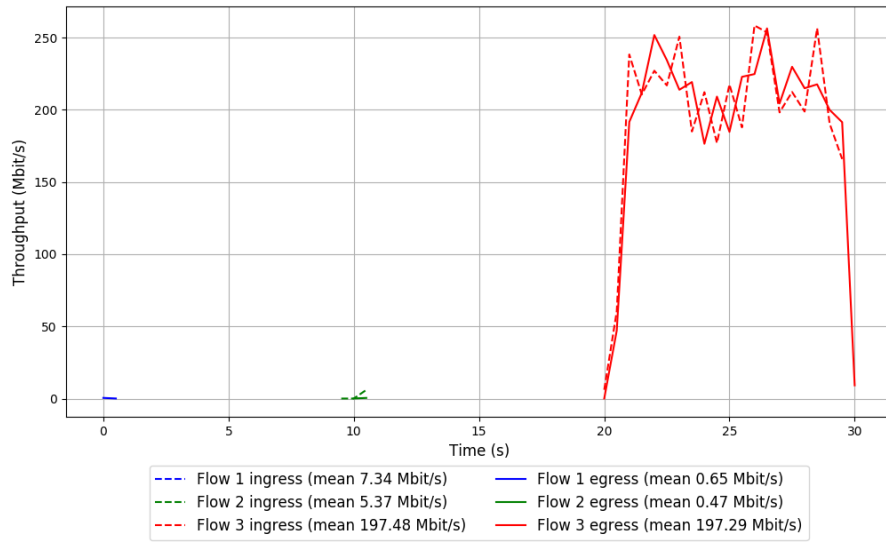
-- Flow 3:

Average throughput: 197.29 Mbit/s

95th percentile per-packet one-way delay: 119.450 ms

Loss rate: 0.32%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-08-21 03:40:52

End at: 2017-08-21 03:41:22

# Below is generated by plot.py at 2017-08-21 05:19:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 135.24 Mbit/s

95th percentile per-packet one-way delay: 91.587 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 4.97 Mbit/s

95th percentile per-packet one-way delay: 114.463 ms

Loss rate: 28.29%

-- Flow 2:

Average throughput: 173.55 Mbit/s

95th percentile per-packet one-way delay: 91.976 ms

Loss rate: 0.51%

-- Flow 3:

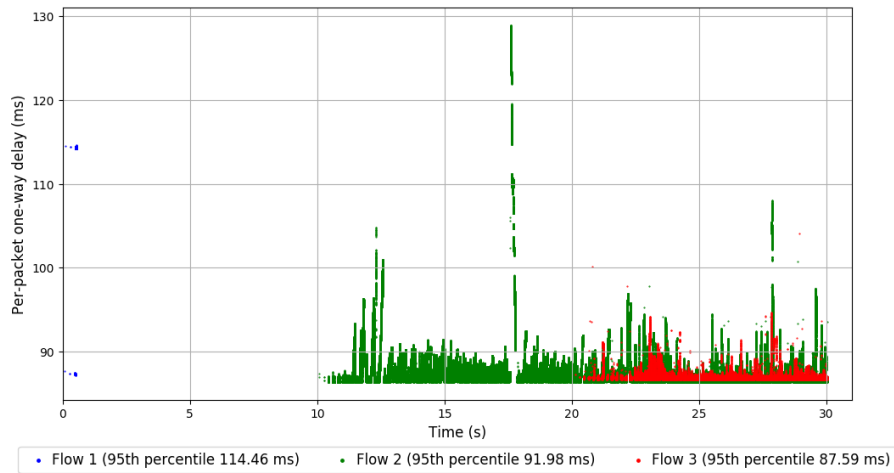
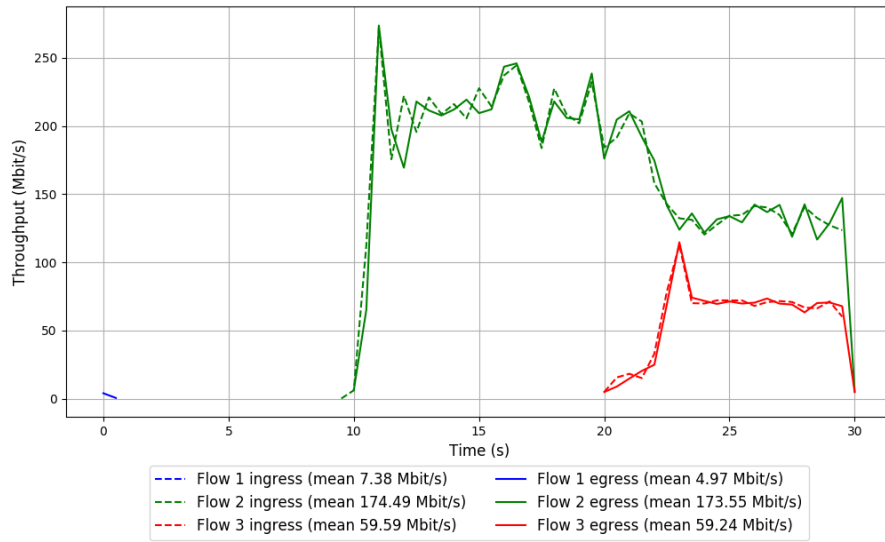
Average throughput: 59.24 Mbit/s

95th percentile per-packet one-way delay: 87.595 ms

Loss rate: 0.59%



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



Run 10: Statistics of TaoVA-100x

Start at: 2017-08-21 03:52:57

End at: 2017-08-21 03:53:27

# Below is generated by plot.py at 2017-08-21 05:20:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 169.69 Mbit/s

95th percentile per-packet one-way delay: 87.712 ms

Loss rate: 1.54%

-- Flow 1:

Average throughput: 123.85 Mbit/s

95th percentile per-packet one-way delay: 87.902 ms

Loss rate: 2.09%

-- Flow 2:

Average throughput: 68.90 Mbit/s

95th percentile per-packet one-way delay: 87.062 ms

Loss rate: 0.00%

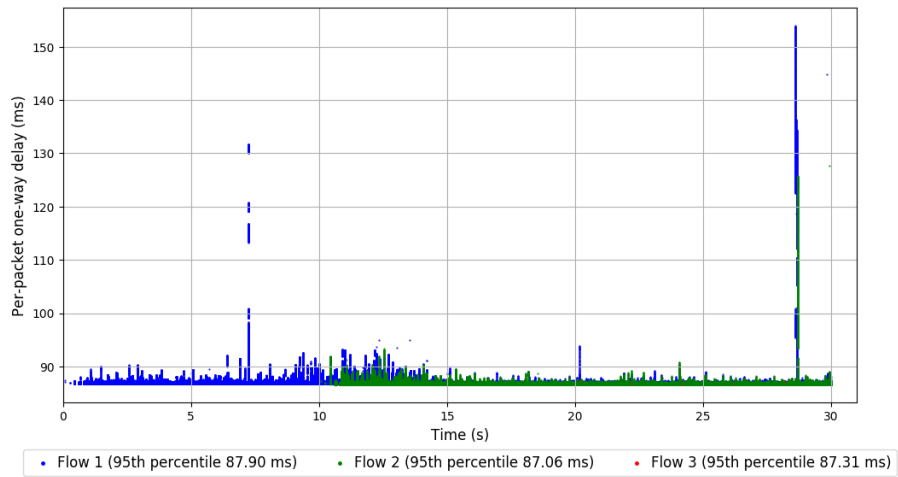
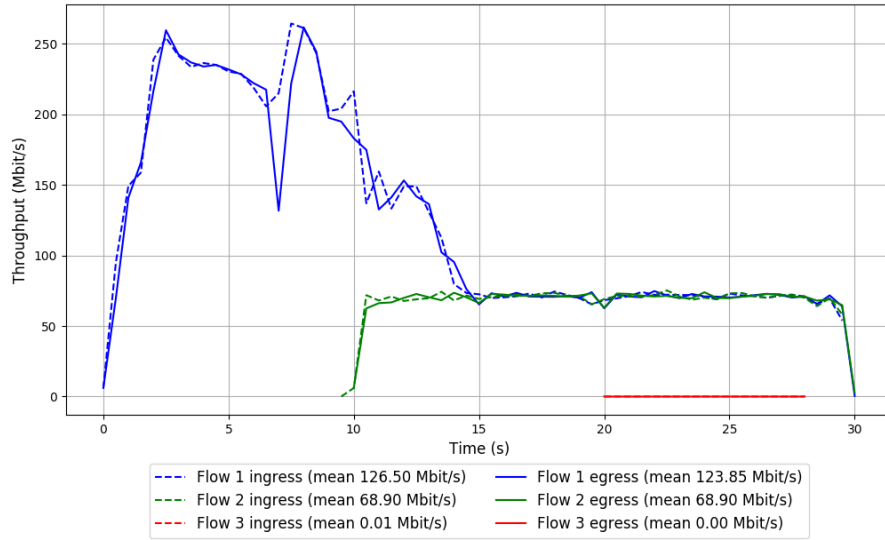
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 87.307 ms

Loss rate: 92.35%

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



Run 1: Statistics of TCP Vegas

Start at: 2017-08-21 01:58:28

End at: 2017-08-21 01:58:58

# Below is generated by plot.py at 2017-08-21 05:20:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 25.61 Mbit/s

95th percentile per-packet one-way delay: 87.720 ms

Loss rate: 1.93%

-- Flow 1:

Average throughput: 12.55 Mbit/s

95th percentile per-packet one-way delay: 87.830 ms

Loss rate: 1.34%

-- Flow 2:

Average throughput: 13.47 Mbit/s

95th percentile per-packet one-way delay: 87.302 ms

Loss rate: 3.16%

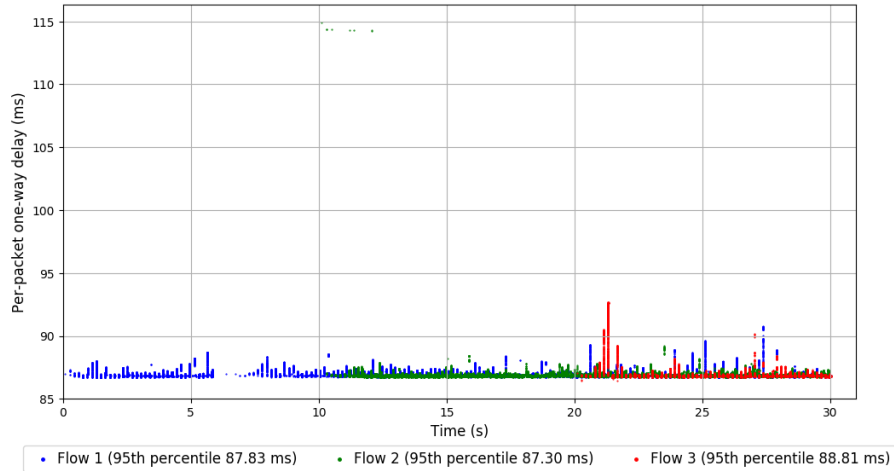
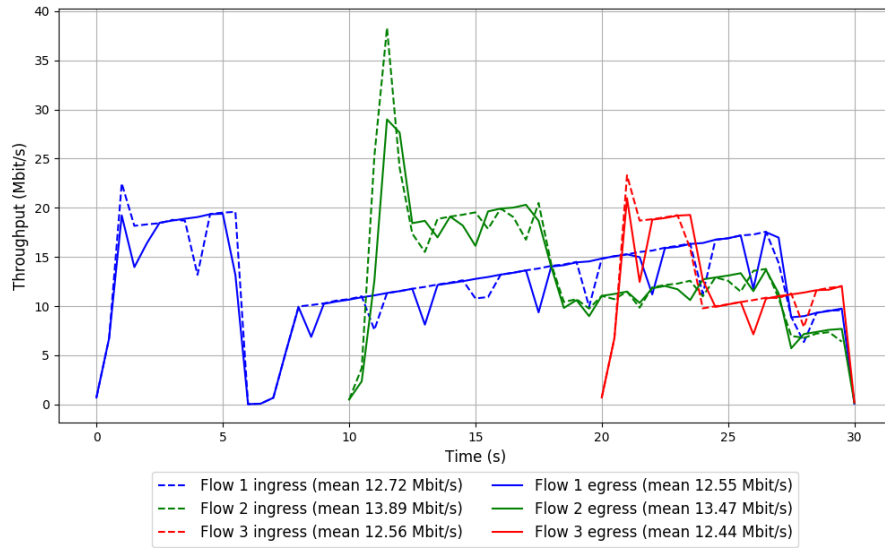
-- Flow 3:

Average throughput: 12.44 Mbit/s

95th percentile per-packet one-way delay: 88.812 ms

Loss rate: 0.98%

### Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-08-21 02:12:10

End at: 2017-08-21 02:12:40

# Below is generated by plot.py at 2017-08-21 05:20:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 114.748 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 0.98 Mbit/s

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

Loss rate: 0.61%

-- Flow 2:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 114.893 ms

Loss rate: 0.34%

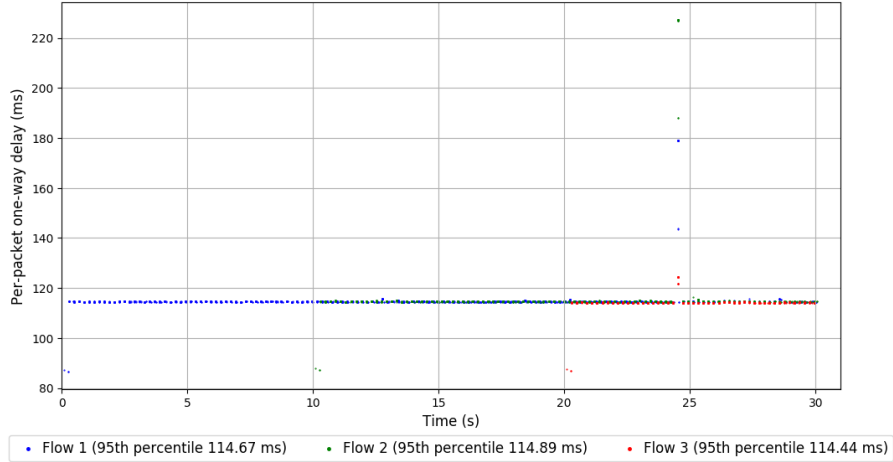
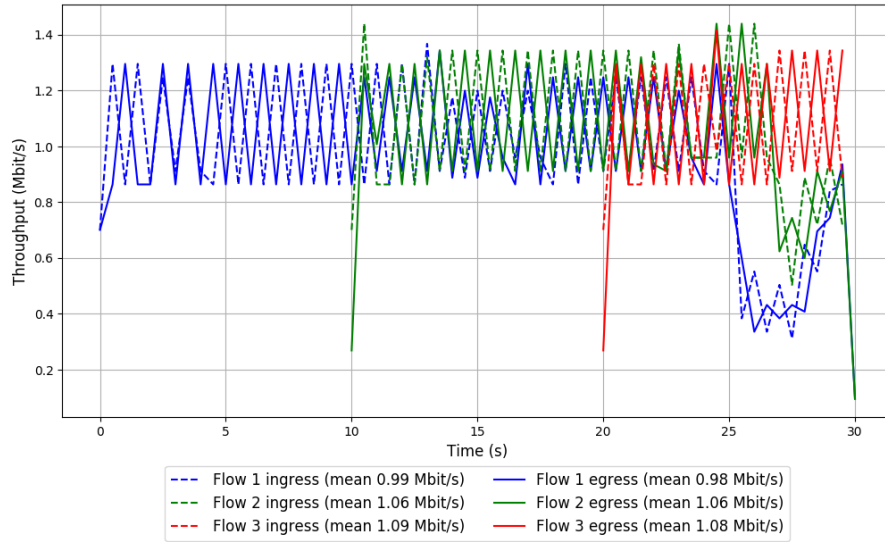
-- Flow 3:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 114.436 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-08-21 02:25:25

End at: 2017-08-21 02:25:55

# Below is generated by plot.py at 2017-08-21 05:20:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 7.44 Mbit/s

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

Loss rate: 4.07%

-- Flow 1:

Average throughput: 1.04 Mbit/s

95th percentile per-packet one-way delay: 114.725 ms

Loss rate: 8.52%

-- Flow 2:

Average throughput: 3.89 Mbit/s

95th percentile per-packet one-way delay: 87.216 ms

Loss rate: 0.77%

-- Flow 3:

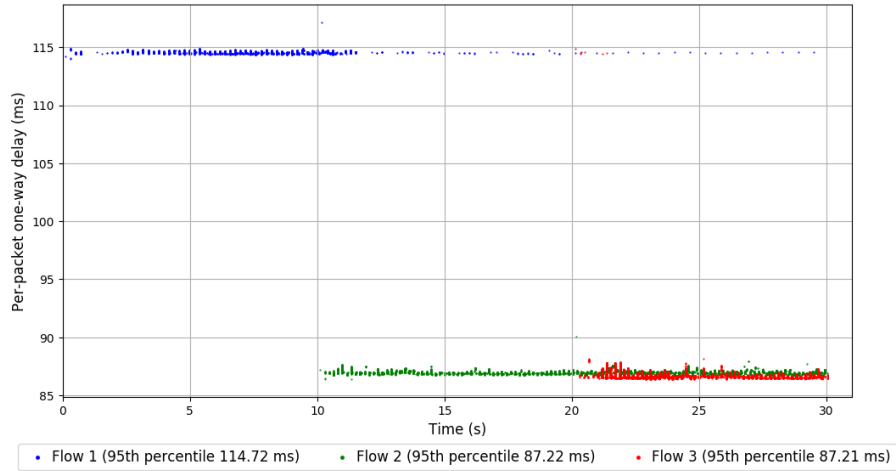
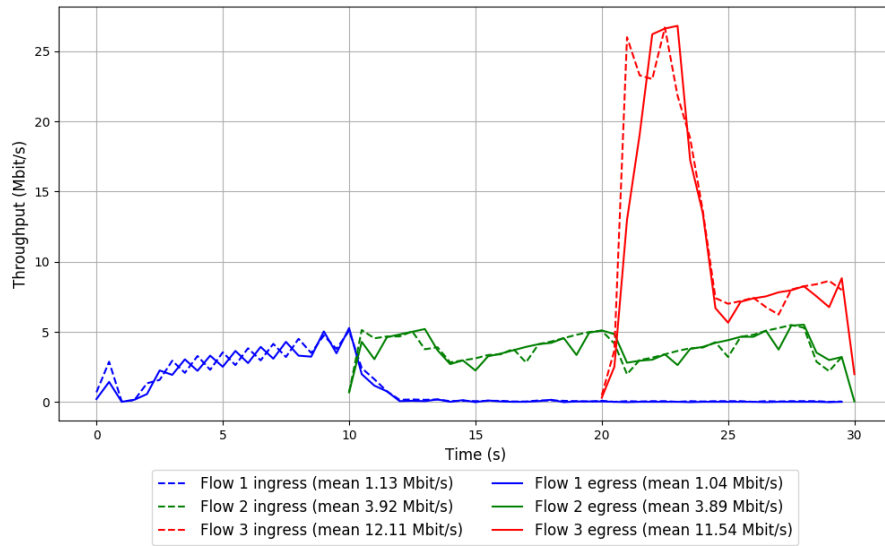
Average throughput: 11.54 Mbit/s

95th percentile per-packet one-way delay: 87.213 ms

Loss rate: 4.97%



### Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-08-21 02:37:43

End at: 2017-08-21 02:38:13

# Below is generated by plot.py at 2017-08-21 05:20:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 14.46 Mbit/s

95th percentile per-packet one-way delay: 87.356 ms

Loss rate: 2.38%

-- Flow 1:

Average throughput: 5.62 Mbit/s

95th percentile per-packet one-way delay: 87.223 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 6.12 Mbit/s

95th percentile per-packet one-way delay: 87.416 ms

Loss rate: 4.67%

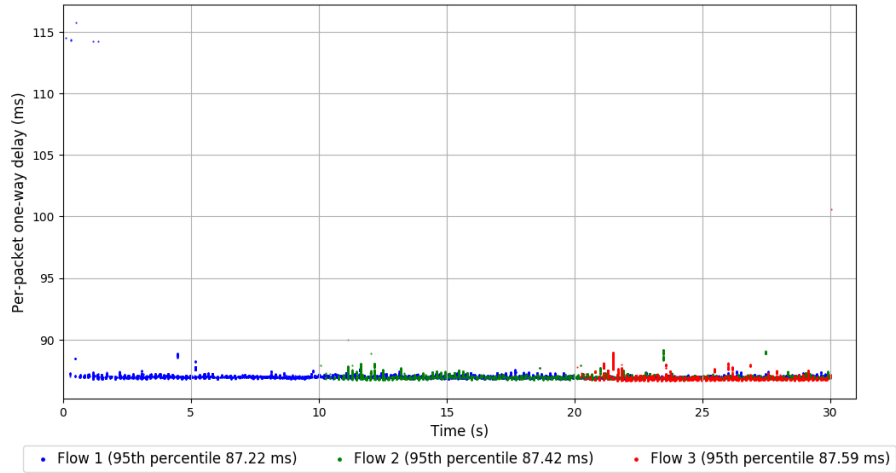
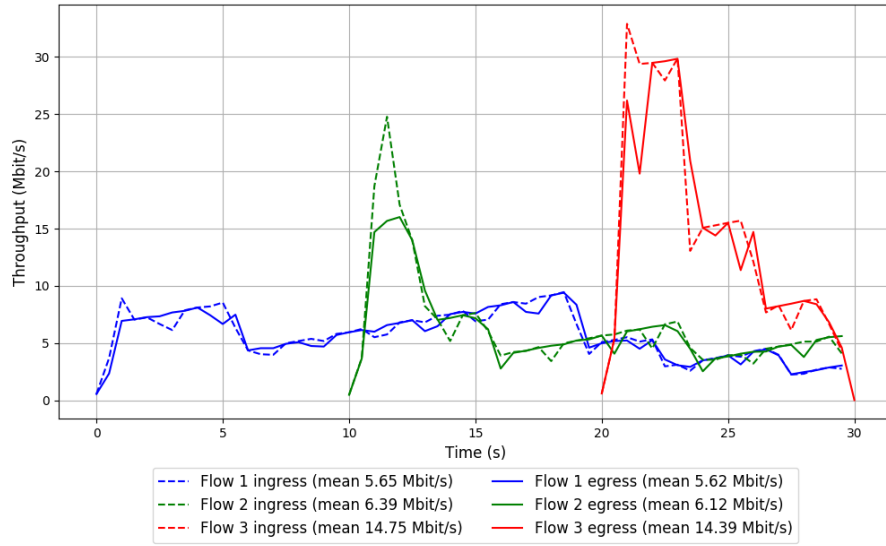
-- Flow 3:

Average throughput: 14.39 Mbit/s

95th percentile per-packet one-way delay: 87.592 ms

Loss rate: 2.31%

### Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-08-21 02:49:39

End at: 2017-08-21 02:50:09

# Below is generated by plot.py at 2017-08-21 05:20:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 114.555 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 114.565 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.03 Mbit/s

95th percentile per-packet one-way delay: 114.546 ms

Loss rate: 0.00%

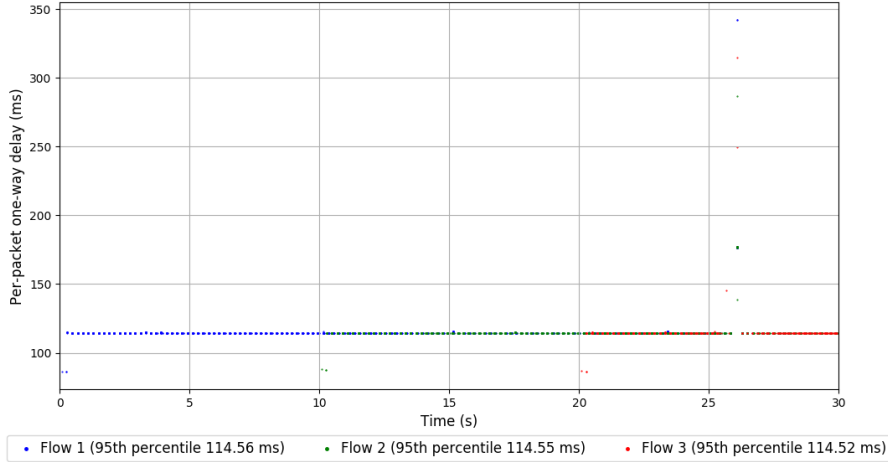
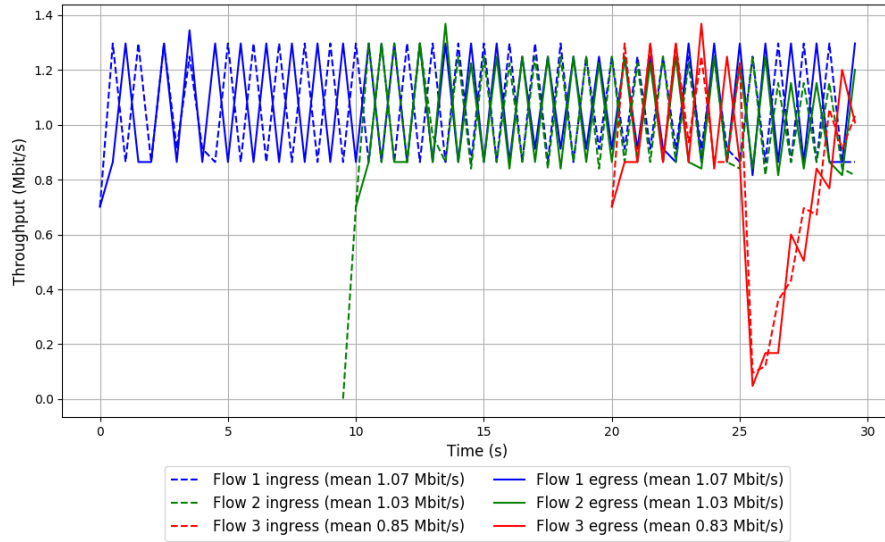
-- Flow 3:

Average throughput: 0.83 Mbit/s

95th percentile per-packet one-way delay: 114.518 ms

Loss rate: 2.71%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-08-21 03:00:59

End at: 2017-08-21 03:01:29

# Below is generated by plot.py at 2017-08-21 05:20:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 114.661 ms

Loss rate: 2.86%

-- Flow 1:

Average throughput: 0.93 Mbit/s

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

Loss rate: 1.36%

-- Flow 2:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 114.595 ms

Loss rate: 0.00%

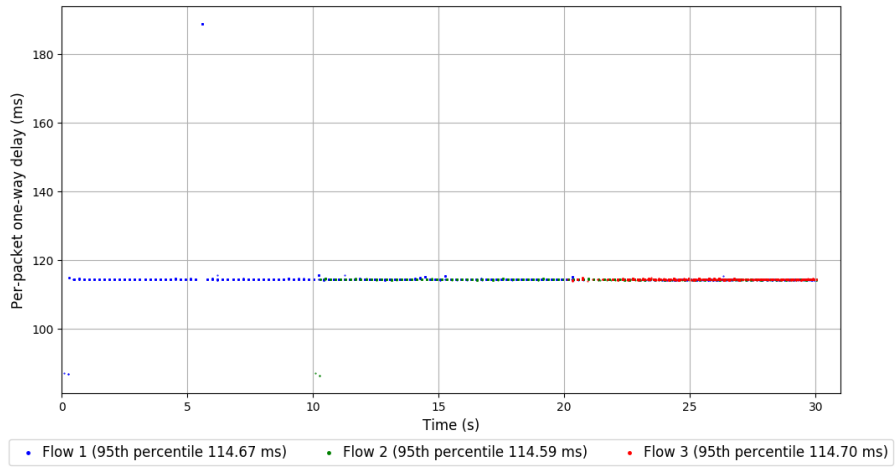
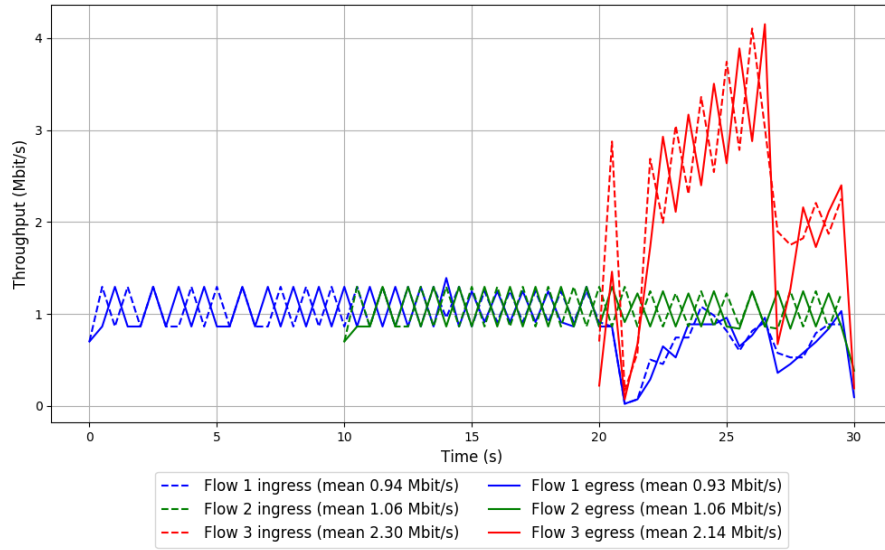
-- Flow 3:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 114.696 ms

Loss rate: 7.35%

### Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-08-21 03:12:37

End at: 2017-08-21 03:13:07

# Below is generated by plot.py at 2017-08-21 05:20:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 114.761 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 114.718 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 114.799 ms

Loss rate: 0.89%

-- Flow 3:

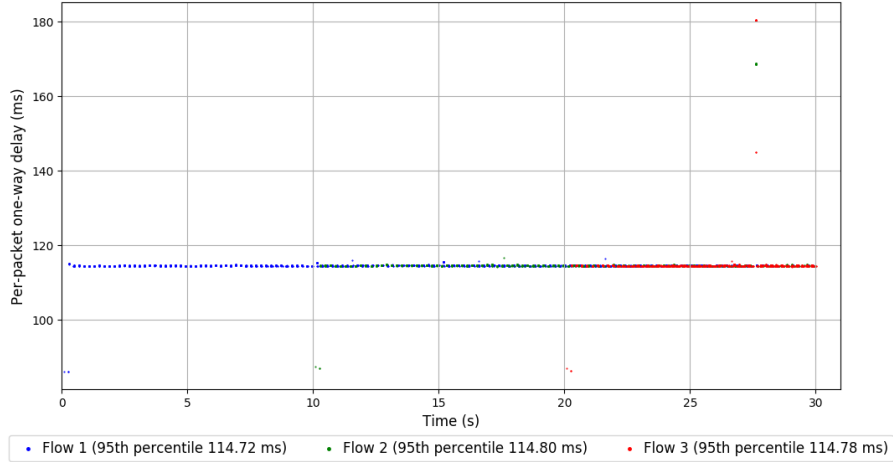
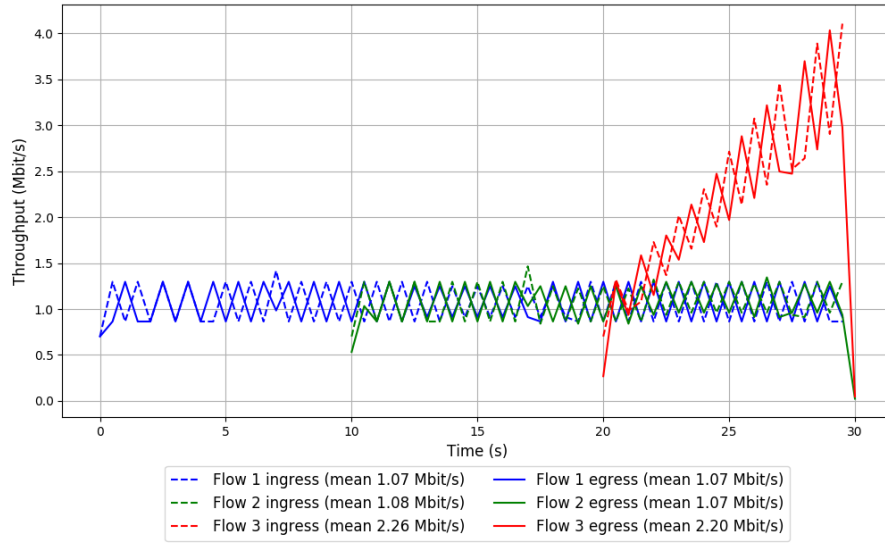
Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 114.785 ms

Loss rate: 2.68%



### Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-08-21 03:24:18

End at: 2017-08-21 03:24:48

# Below is generated by plot.py at 2017-08-21 05:20:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 114.766 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 114.742 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 114.766 ms

Loss rate: 0.00%

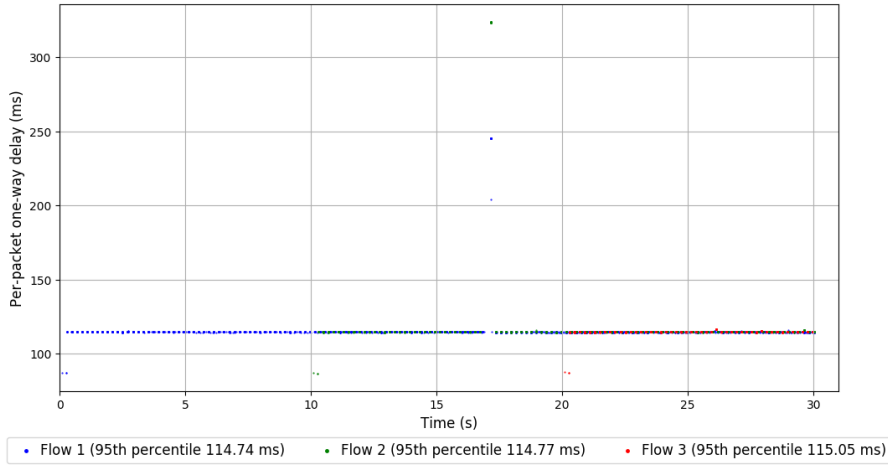
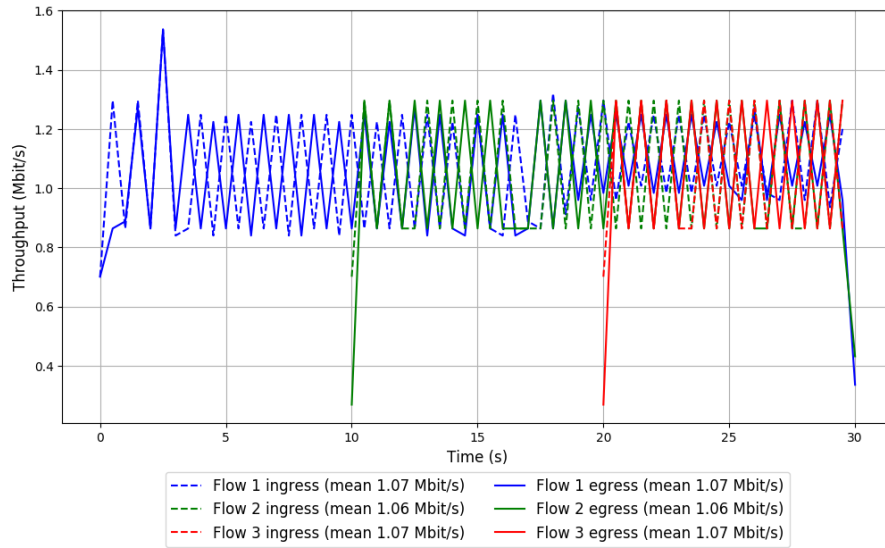
-- Flow 3:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 115.046 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-08-21 03:35:58

End at: 2017-08-21 03:36:28

# Below is generated by plot.py at 2017-08-21 05:20:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 13.27 Mbit/s

95th percentile per-packet one-way delay: 87.918 ms

Loss rate: 1.90%

-- Flow 1:

Average throughput: 4.87 Mbit/s

95th percentile per-packet one-way delay: 87.622 ms

Loss rate: 1.92%

-- Flow 2:

Average throughput: 12.61 Mbit/s

95th percentile per-packet one-way delay: 88.016 ms

Loss rate: 1.79%

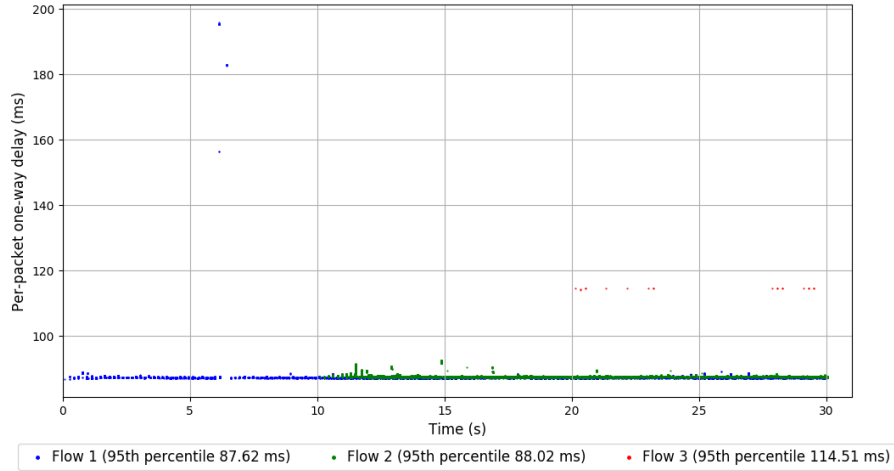
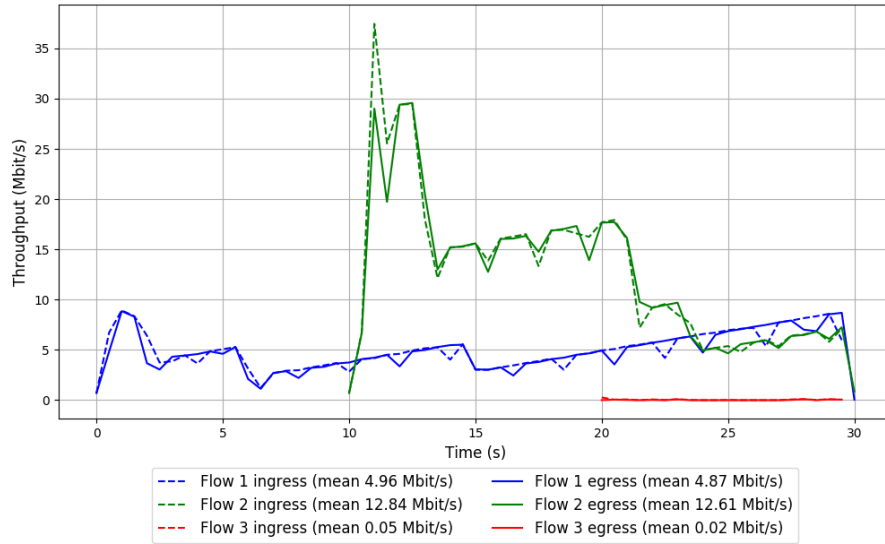
-- Flow 3:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 114.512 ms

Loss rate: 57.21%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-08-21 03:48:18

End at: 2017-08-21 03:48:48

# Below is generated by plot.py at 2017-08-21 05:20:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.53 Mbit/s

95th percentile per-packet one-way delay: 114.235 ms

Loss rate: 2.03%

-- Flow 1:

Average throughput: 0.77 Mbit/s

95th percentile per-packet one-way delay: 114.327 ms

Loss rate: 2.26%

-- Flow 2:

Average throughput: 0.61 Mbit/s

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

Loss rate: 3.26%

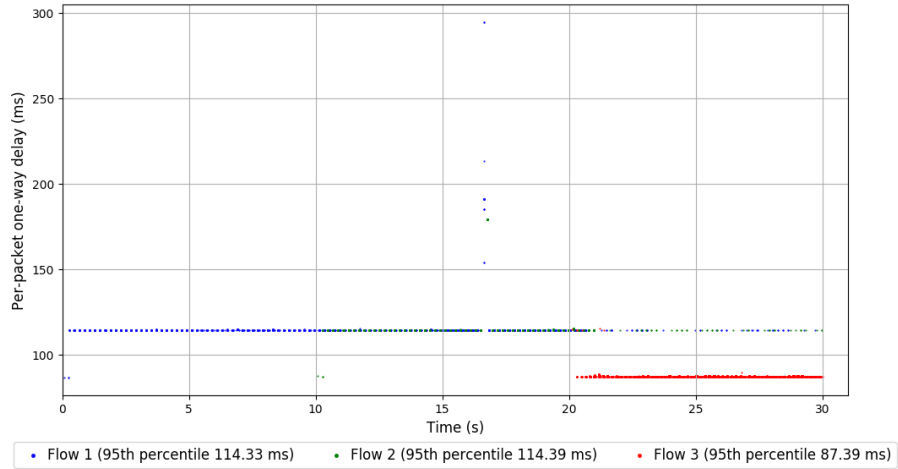
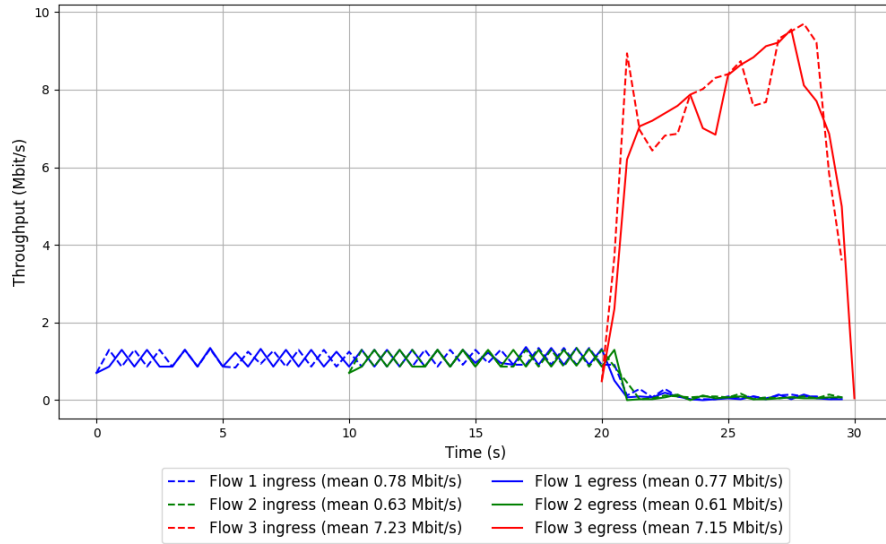
-- Flow 3:

Average throughput: 7.15 Mbit/s

95th percentile per-packet one-way delay: 87.386 ms

Loss rate: 1.73%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-08-21 01:55:49

End at: 2017-08-21 01:56:19

# Below is generated by plot.py at 2017-08-21 05:20:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 136.98 Mbit/s

95th percentile per-packet one-way delay: 96.081 ms

Loss rate: 26.01%

-- Flow 1:

Average throughput: 79.24 Mbit/s

95th percentile per-packet one-way delay: 95.482 ms

Loss rate: 29.75%

-- Flow 2:

Average throughput: 64.41 Mbit/s

95th percentile per-packet one-way delay: 100.566 ms

Loss rate: 23.83%

-- Flow 3:

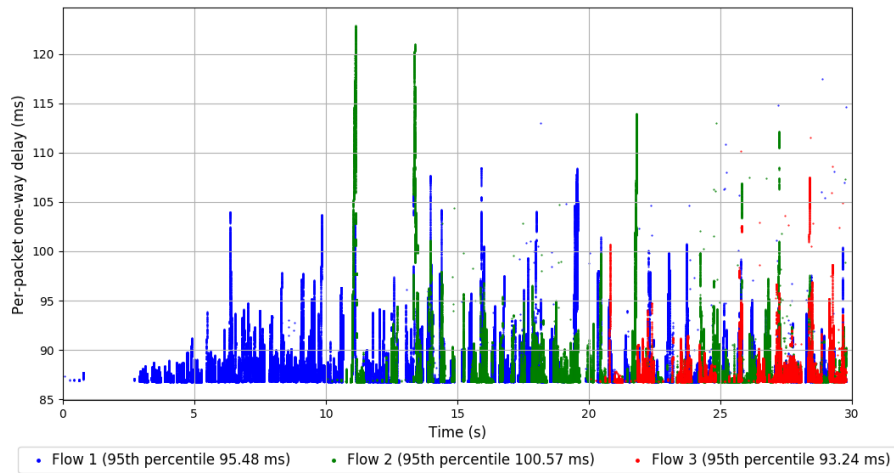
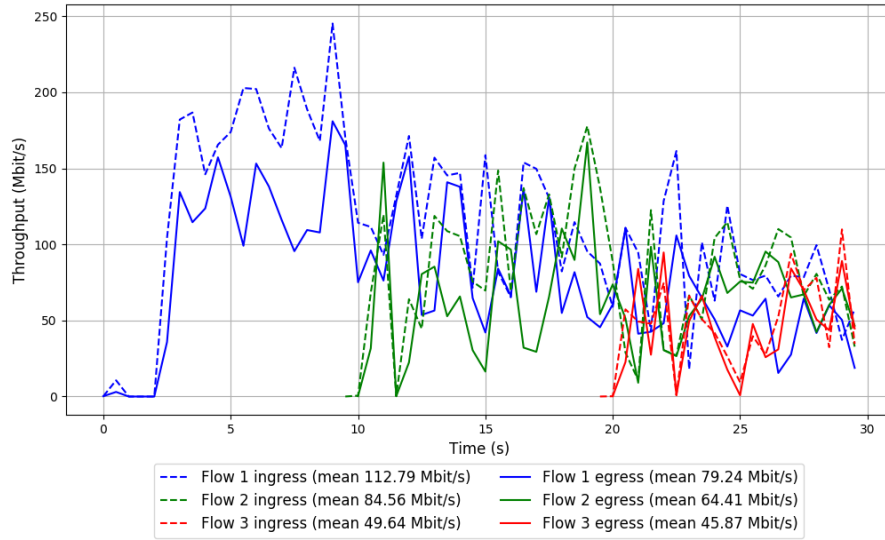
Average throughput: 45.87 Mbit/s

95th percentile per-packet one-way delay: 93.244 ms

Loss rate: 7.61%



### Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-08-21 02:09:32

End at: 2017-08-21 02:10:02

# Below is generated by plot.py at 2017-08-21 05:20:38

# Datalink statistics

-- Total of 3 flows:

Average throughput: 128.62 Mbit/s

95th percentile per-packet one-way delay: 93.396 ms

Loss rate: 16.69%

-- Flow 1:

Average throughput: 78.08 Mbit/s

95th percentile per-packet one-way delay: 92.797 ms

Loss rate: 15.00%

-- Flow 2:

Average throughput: 59.66 Mbit/s

95th percentile per-packet one-way delay: 93.572 ms

Loss rate: 20.37%

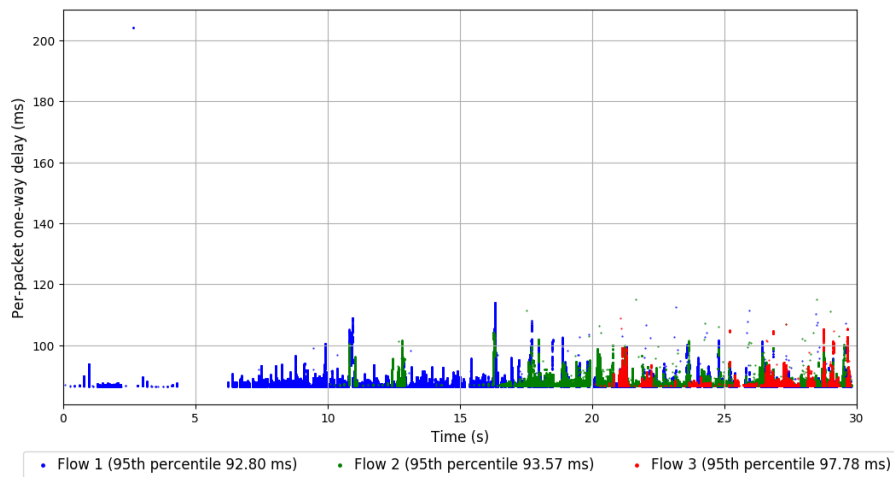
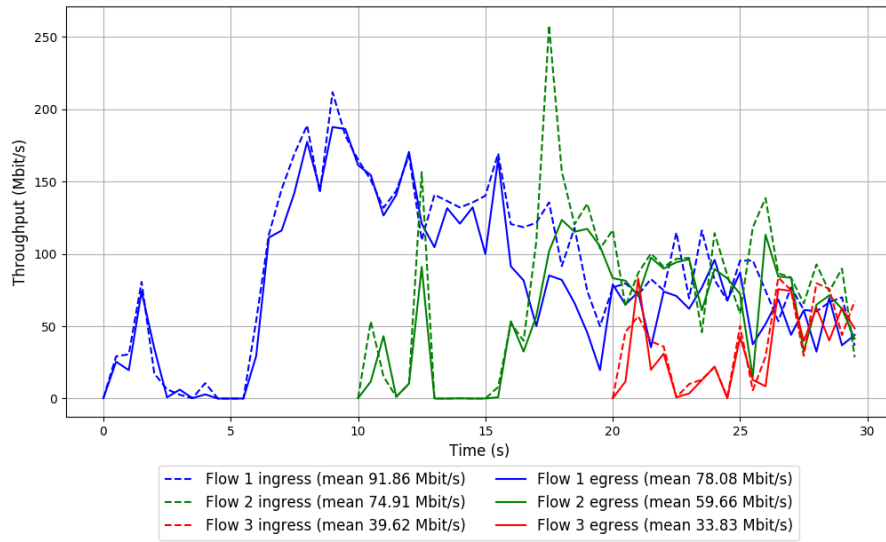
-- Flow 3:

Average throughput: 33.83 Mbit/s

95th percentile per-packet one-way delay: 97.781 ms

Loss rate: 14.61%

## Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-08-21 02:22:58

End at: 2017-08-21 02:23:28

# Below is generated by plot.py at 2017-08-21 05:20:48

# Datalink statistics

-- Total of 3 flows:

Average throughput: 68.91 Mbit/s

95th percentile per-packet one-way delay: 96.845 ms

Loss rate: 25.36%

-- Flow 1:

Average throughput: 54.58 Mbit/s

95th percentile per-packet one-way delay: 96.090 ms

Loss rate: 11.49%

-- Flow 2:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 114.938 ms

Loss rate: 99.63%

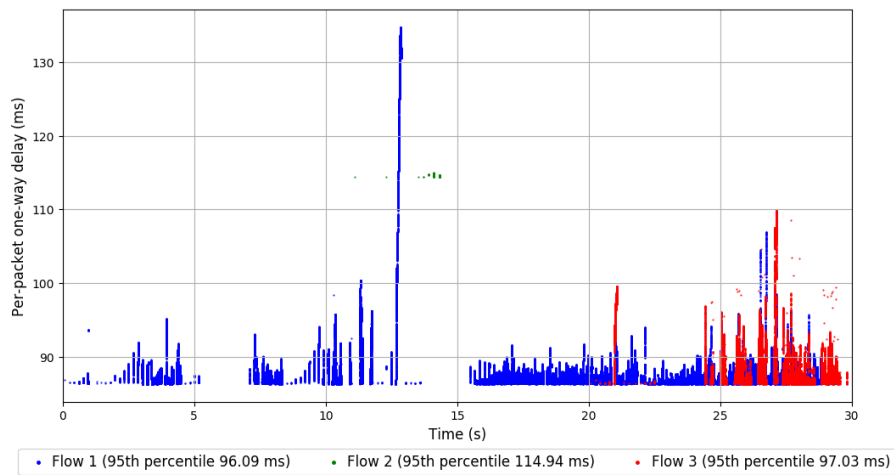
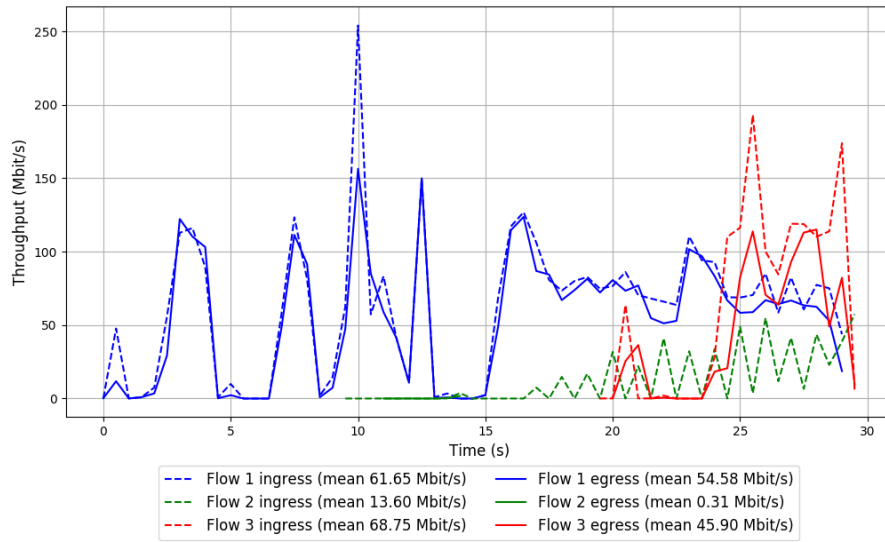
-- Flow 3:

Average throughput: 45.90 Mbit/s

95th percentile per-packet one-way delay: 97.028 ms

Loss rate: 33.23%

### Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-08-21 02:35:16

End at: 2017-08-21 02:35:46

# Below is generated by plot.py at 2017-08-21 05:20:55

# Datalink statistics

-- Total of 3 flows:

Average throughput: 79.06 Mbit/s

95th percentile per-packet one-way delay: 90.758 ms

Loss rate: 51.36%

-- Flow 1:

Average throughput: 64.05 Mbit/s

95th percentile per-packet one-way delay: 90.684 ms

Loss rate: 55.88%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 114.860 ms

Loss rate: 80.00%

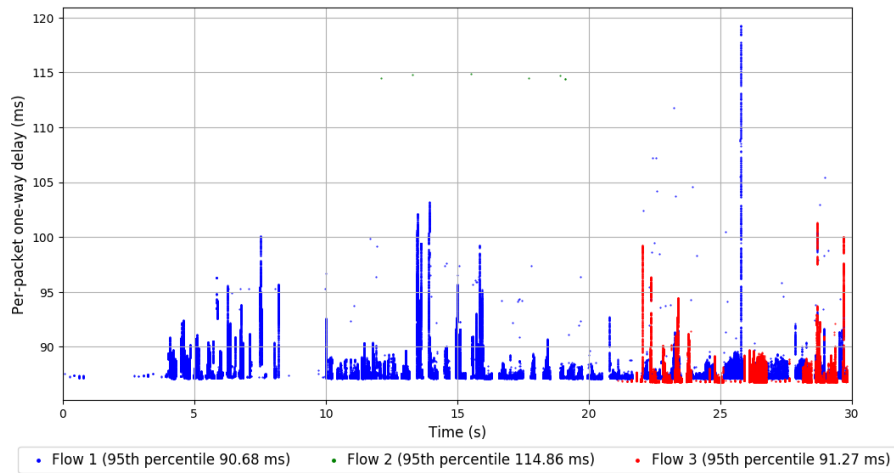
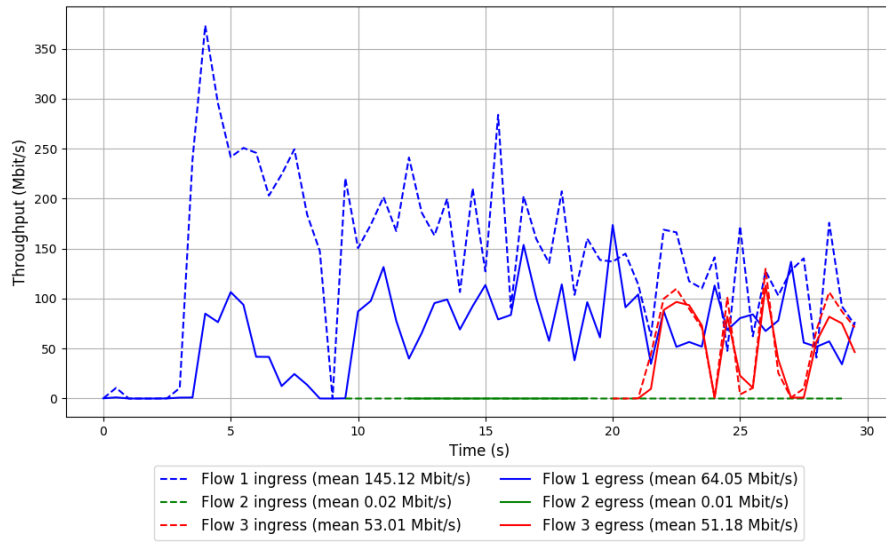
-- Flow 3:

Average throughput: 51.18 Mbit/s

95th percentile per-packet one-way delay: 91.268 ms

Loss rate: 13.43%

### Run 4: Report of Verus — Data Link



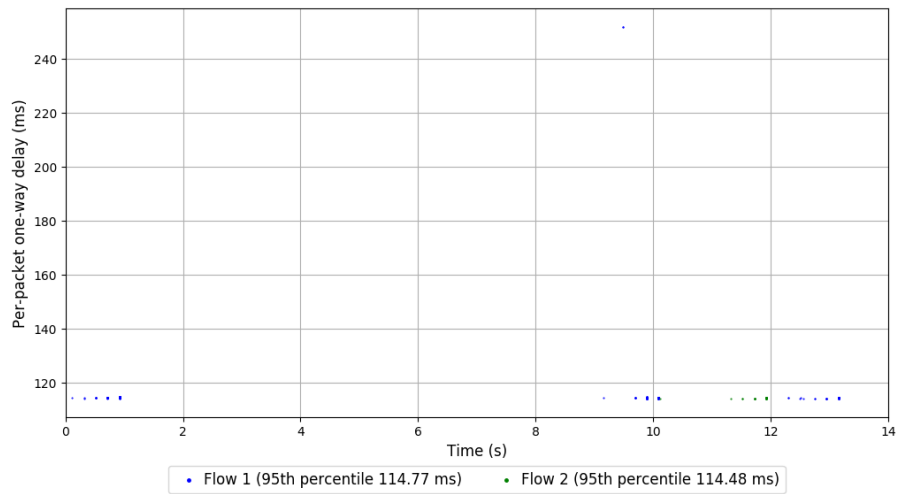
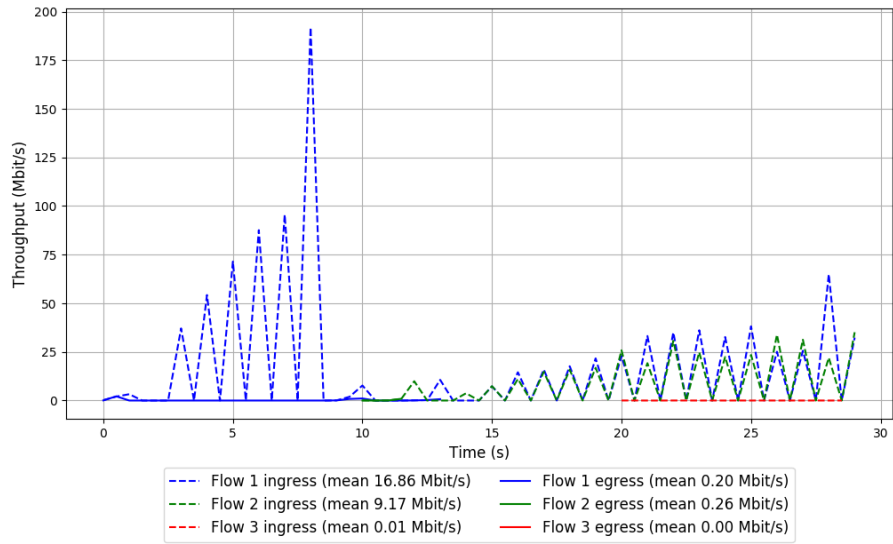
Run 5: Statistics of Verus

Start at: 2017-08-21 02:47:25

End at: 2017-08-21 02:47:55



### Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-08-21 02:58:44

End at: 2017-08-21 02:59:14

Run 6: Report of Verus — Data Link

Figure is missing

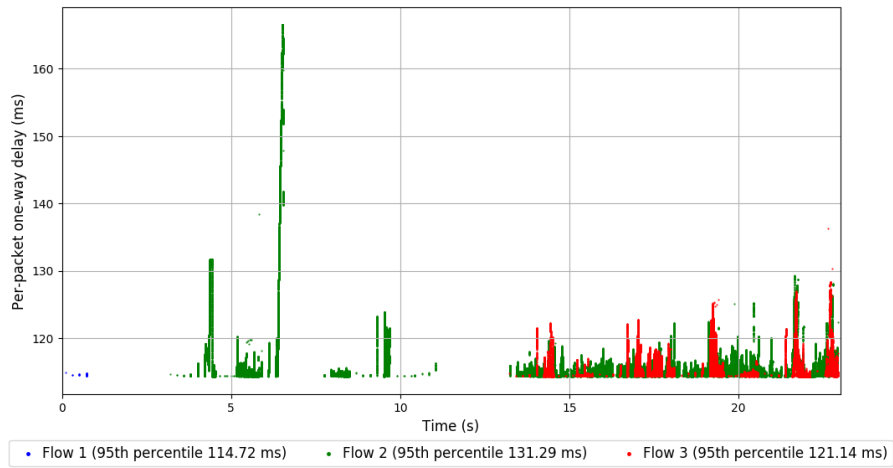
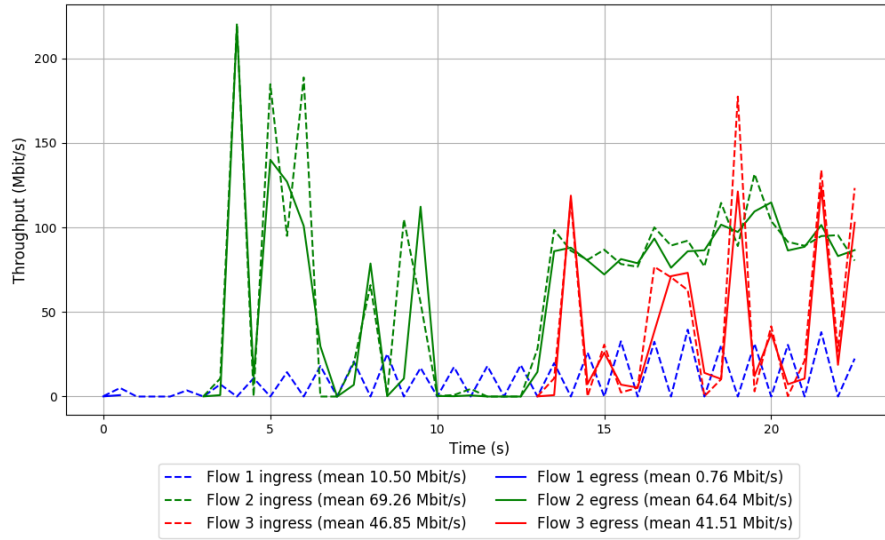
Figure is missing

Run 7: Statistics of Verus

Start at: 2017-08-21 03:10:16

End at: 2017-08-21 03:10:46

### Run 7: Report of Verus — Data Link

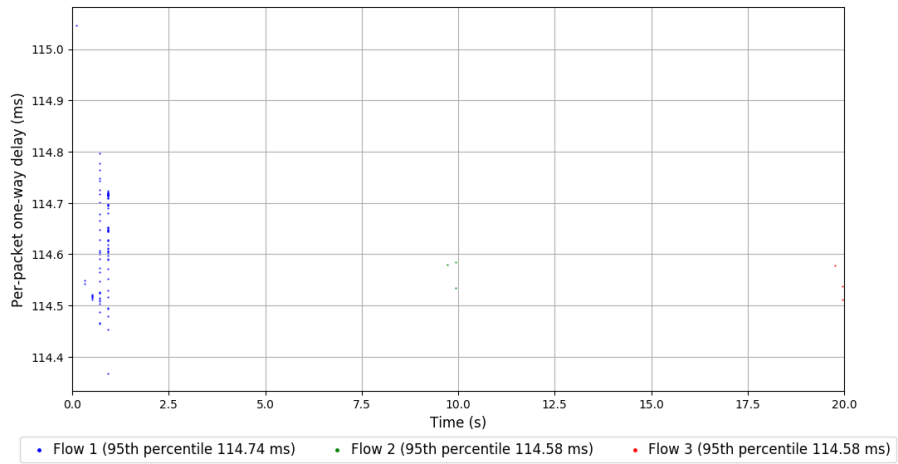
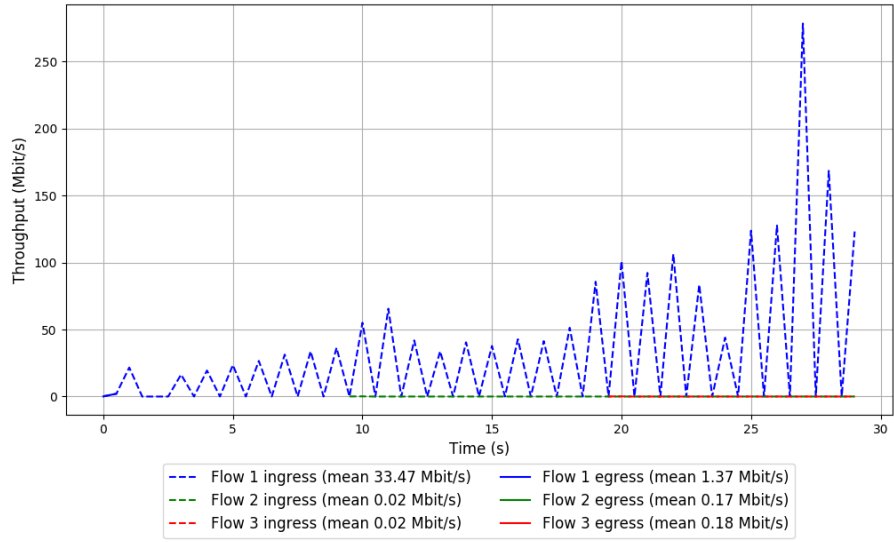


Run 8: Statistics of Verus

Start at: 2017-08-21 03:22:05

End at: 2017-08-21 03:22:35

### Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-08-21 03:33:31

End at: 2017-08-21 03:34:01

# Below is generated by plot.py at 2017-08-21 05:21:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 104.36 Mbit/s

95th percentile per-packet one-way delay: 103.008 ms

Loss rate: 27.85%

-- Flow 1:

Average throughput: 104.33 Mbit/s

95th percentile per-packet one-way delay: 102.978 ms

Loss rate: 26.62%

-- Flow 2:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 114.521 ms

Loss rate: 98.68%

-- Flow 3:

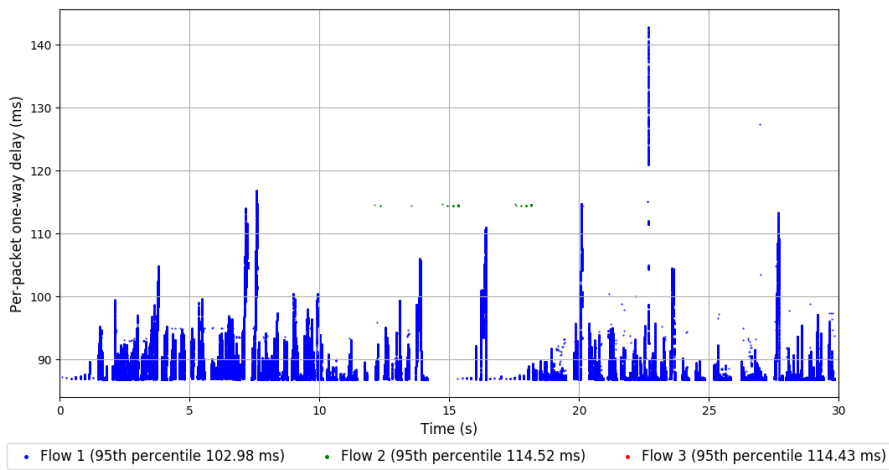
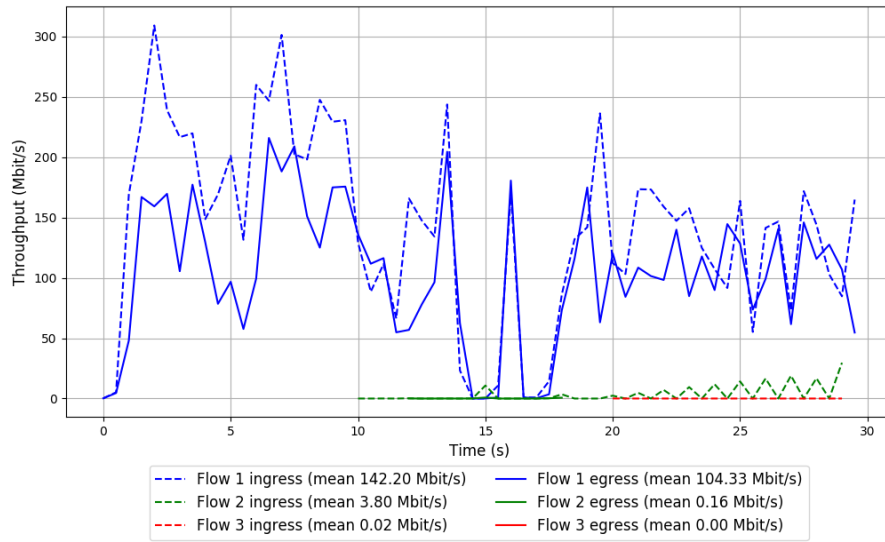
Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 114.429 ms

Loss rate: 91.67%



Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-08-21 03:45:55

End at: 2017-08-21 03:46:25

# Below is generated by plot.py at 2017-08-21 05:21:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 63.61 Mbit/s

95th percentile per-packet one-way delay: 107.311 ms

Loss rate: 38.62%

-- Flow 1:

Average throughput: 55.56 Mbit/s

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

Loss rate: 19.01%

-- Flow 2:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 114.121 ms

Loss rate: 99.85%

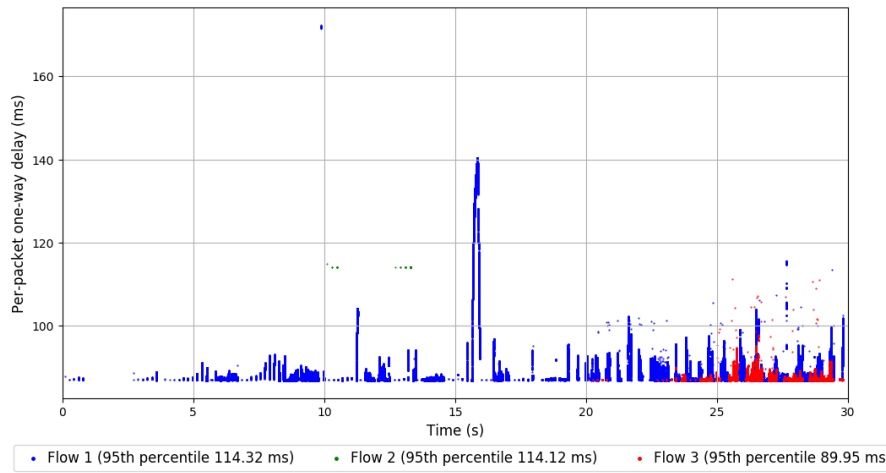
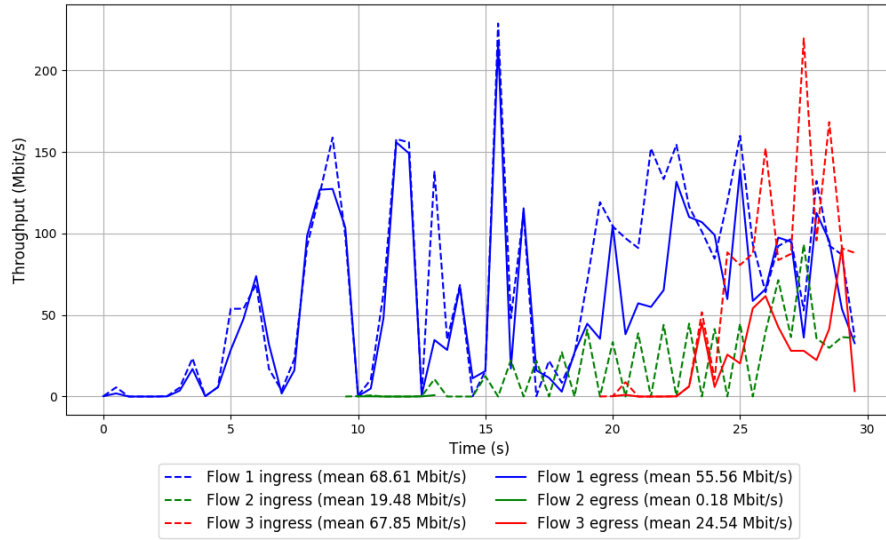
-- Flow 3:

Average throughput: 24.54 Mbit/s

95th percentile per-packet one-way delay: 89.950 ms

Loss rate: 63.83%

Run 10: Report of Verus — Data Link



Run 1: Statistics of WebRTC media

Start at: 2017-08-21 02:01:33

End at: 2017-08-21 02:02:03

# Below is generated by plot.py at 2017-08-21 05:21:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.33 Mbit/s

95th percentile per-packet one-way delay: 114.620 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 114.641 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

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

Loss rate: 0.03%

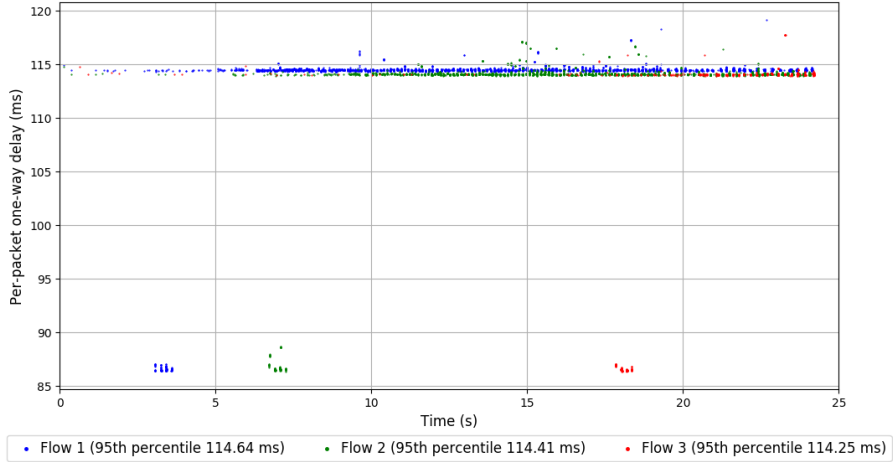
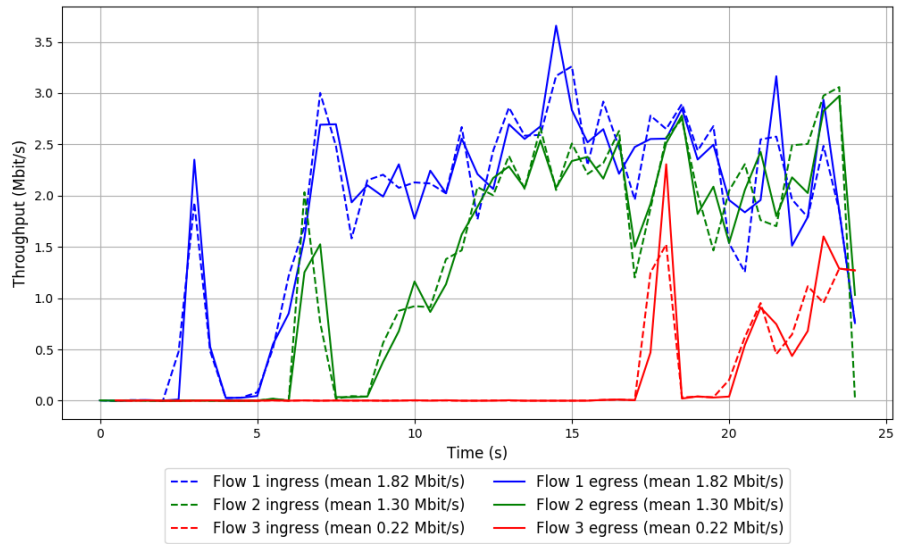
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.250 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

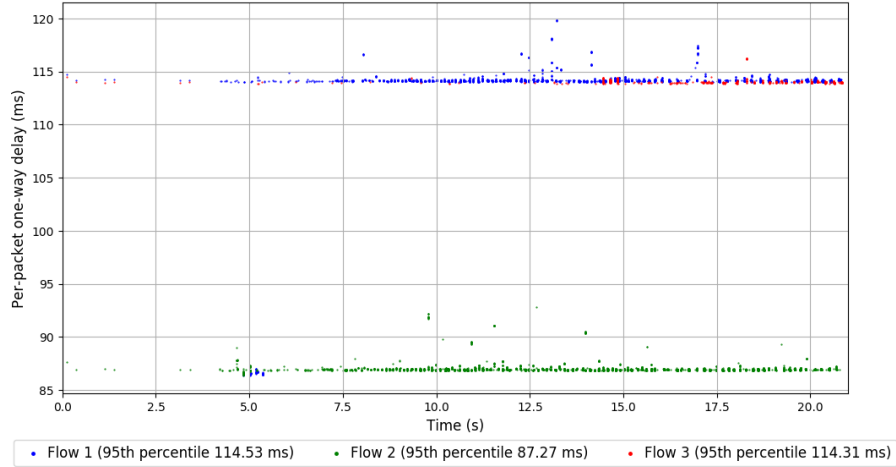
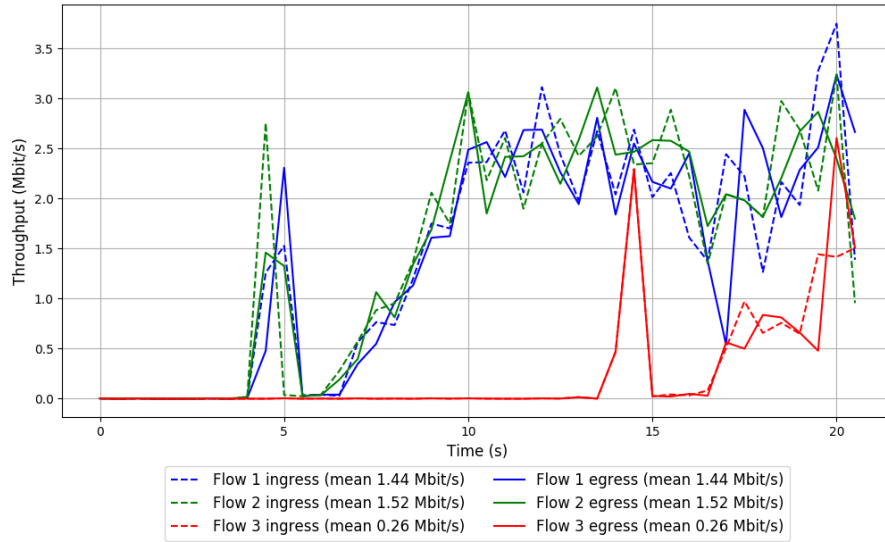


Run 2: Statistics of WebRTC media

Start at: 2017-08-21 02:14:58

End at: 2017-08-21 02:15:28

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-08-21 02:28:01

End at: 2017-08-21 02:28:31

# Below is generated by plot.py at 2017-08-21 05:21:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 90.580 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 133.712 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.91 Mbit/s

95th percentile per-packet one-way delay: 87.207 ms

Loss rate: 0.00%

-- Flow 3:

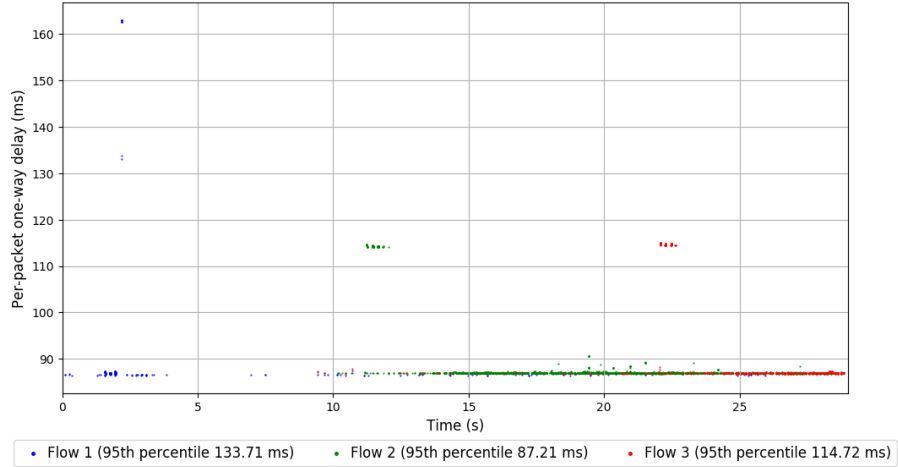
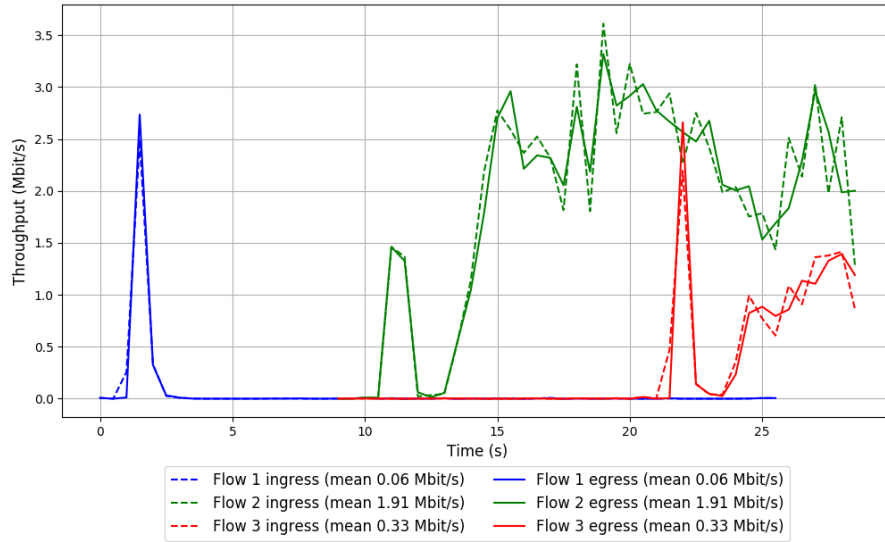
Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 114.720 ms

Loss rate: 0.00%



### Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-08-21 02:40:21

End at: 2017-08-21 02:40:51

# Below is generated by plot.py at 2017-08-21 05:21:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.62 Mbit/s

95th percentile per-packet one-way delay: 114.411 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 114.737 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.84 Mbit/s

95th percentile per-packet one-way delay: 87.695 ms

Loss rate: 0.00%

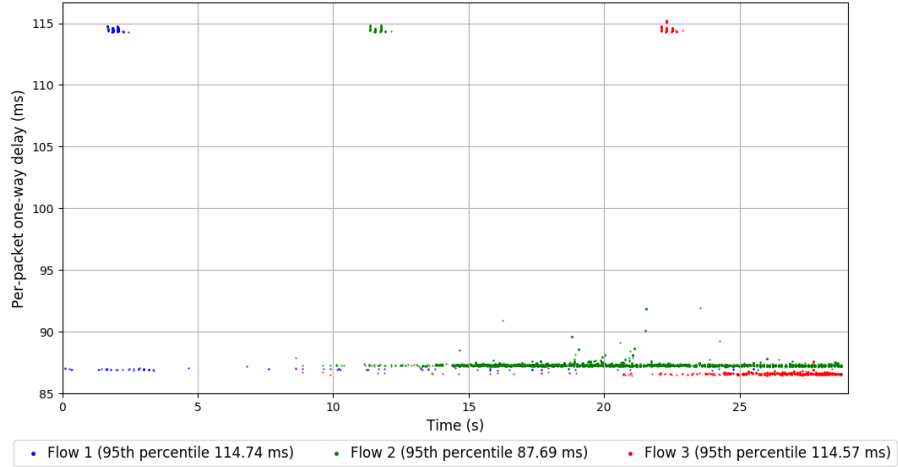
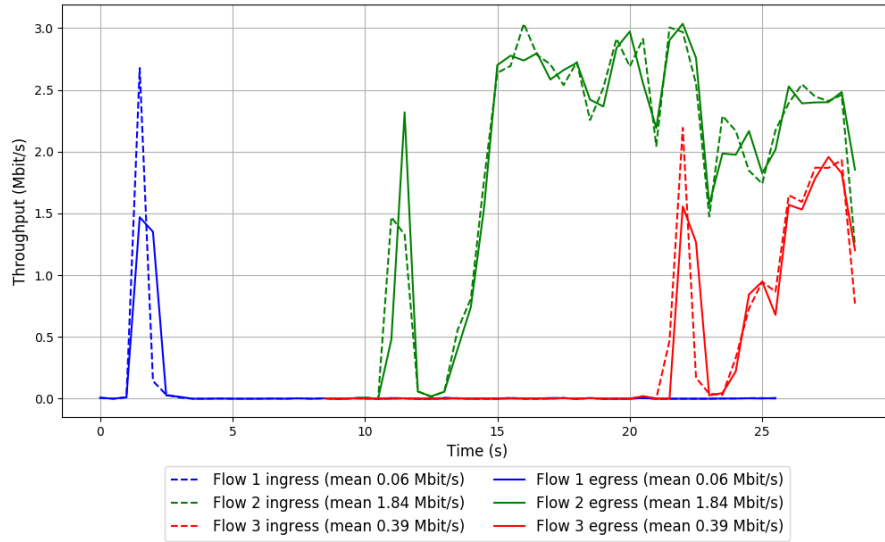
-- Flow 3:

Average throughput: 0.39 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-08-21 02:52:02

End at: 2017-08-21 02:52:32

# Below is generated by plot.py at 2017-08-21 05:21:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 114.463 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.52 Mbit/s

95th percentile per-packet one-way delay: 88.310 ms

Loss rate: 0.00%

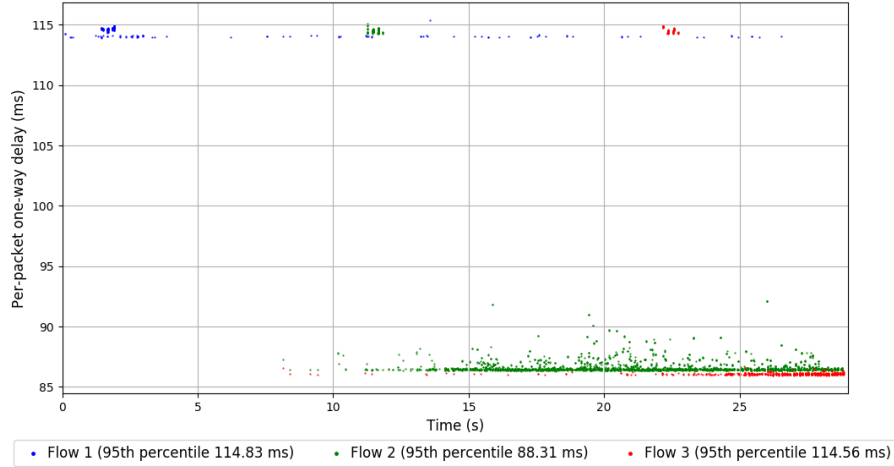
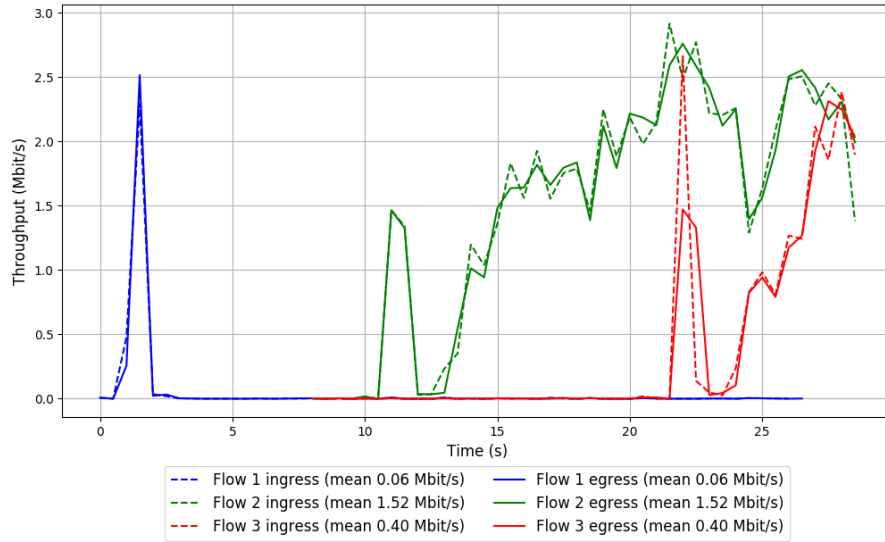
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 114.557 ms

Loss rate: 0.00%

### Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-08-21 03:03:34

End at: 2017-08-21 03:04:04

# Below is generated by plot.py at 2017-08-21 05:21:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 114.484 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 114.940 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.86 Mbit/s

95th percentile per-packet one-way delay: 86.805 ms

Loss rate: 0.00%

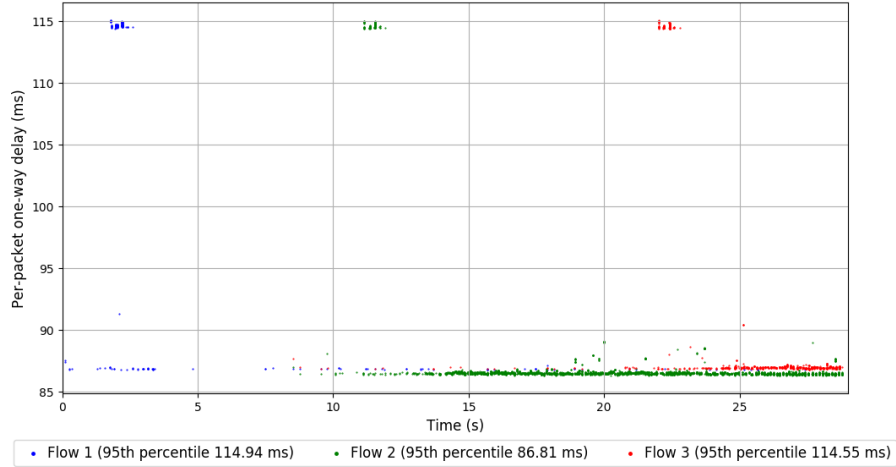
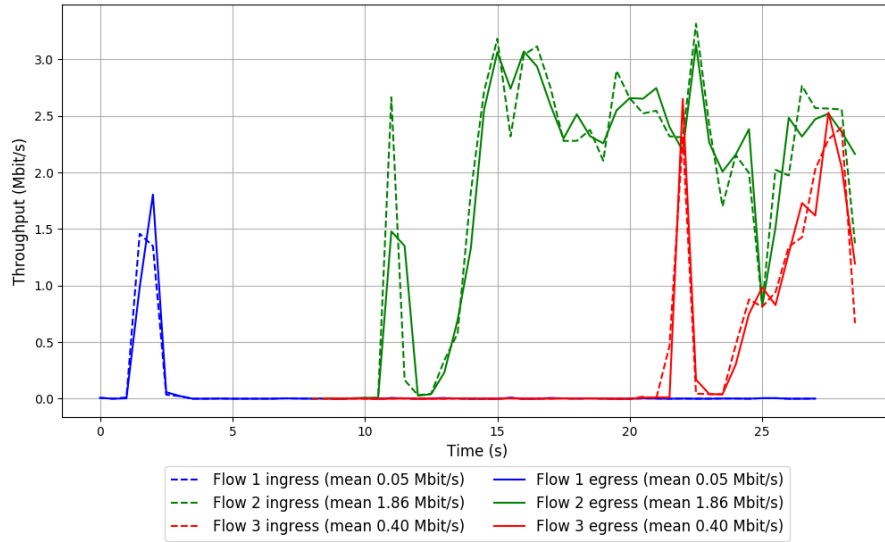
-- Flow 3:

Average throughput: 0.40 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-08-21 03:15:03

End at: 2017-08-21 03:15:33

# Below is generated by plot.py at 2017-08-21 05:21:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.62 Mbit/s

95th percentile per-packet one-way delay: 114.524 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 114.939 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 87.859 ms

Loss rate: 0.00%

-- Flow 3:

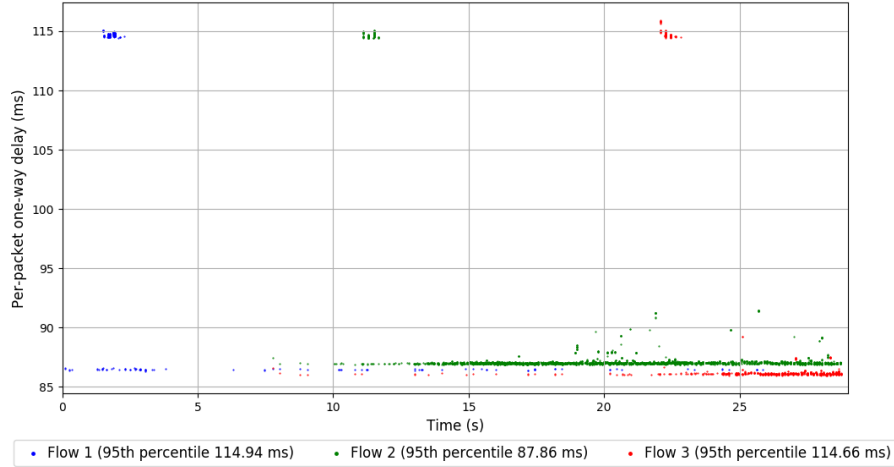
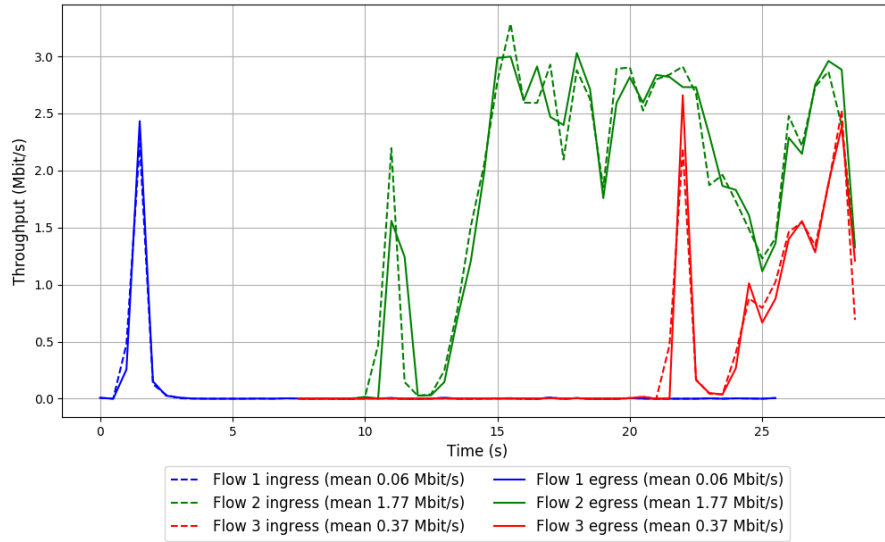
Average throughput: 0.37 Mbit/s

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

Loss rate: 0.00%



Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-08-21 03:26:43

End at: 2017-08-21 03:27:13

# Below is generated by plot.py at 2017-08-21 05:21:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 114.563 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 115.051 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 87.744 ms

Loss rate: 0.00%

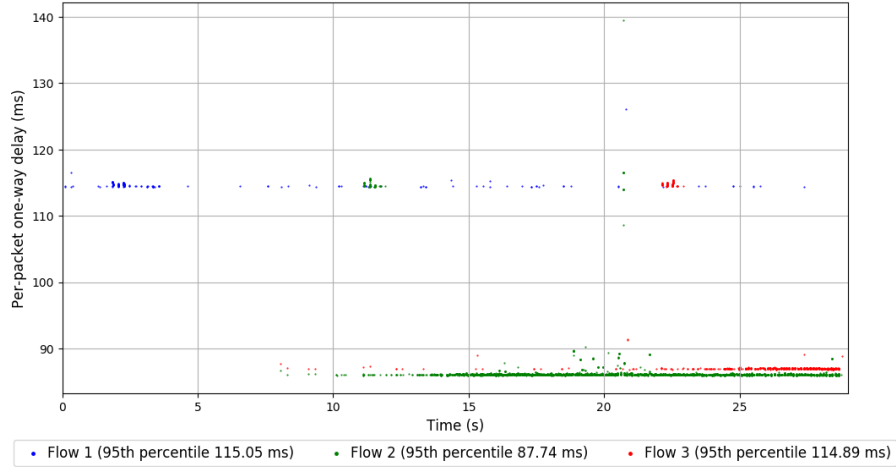
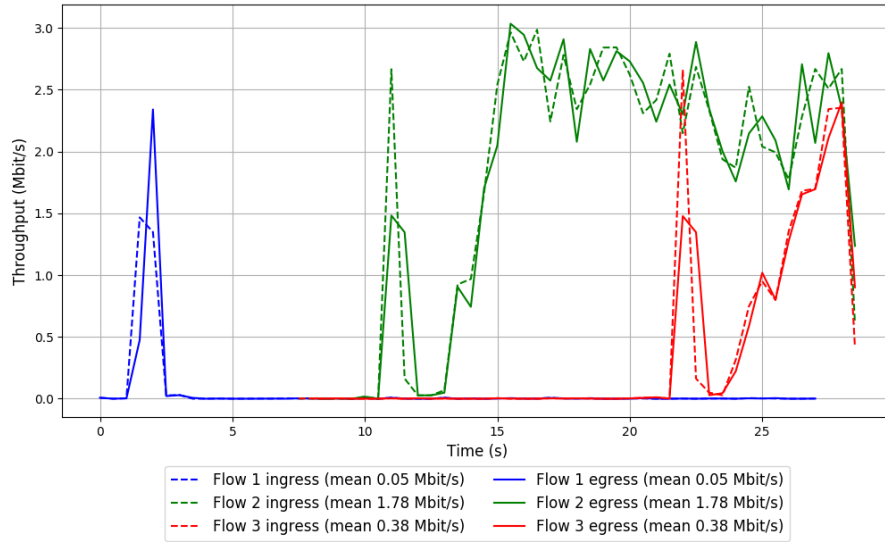
-- Flow 3:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 114.892 ms

Loss rate: 0.00%

### Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-08-21 03:38:34

End at: 2017-08-21 03:39:04

# Below is generated by plot.py at 2017-08-21 05:21:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.62 Mbit/s

95th percentile per-packet one-way delay: 114.022 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 87.437 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.89 Mbit/s

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

Loss rate: 0.00%

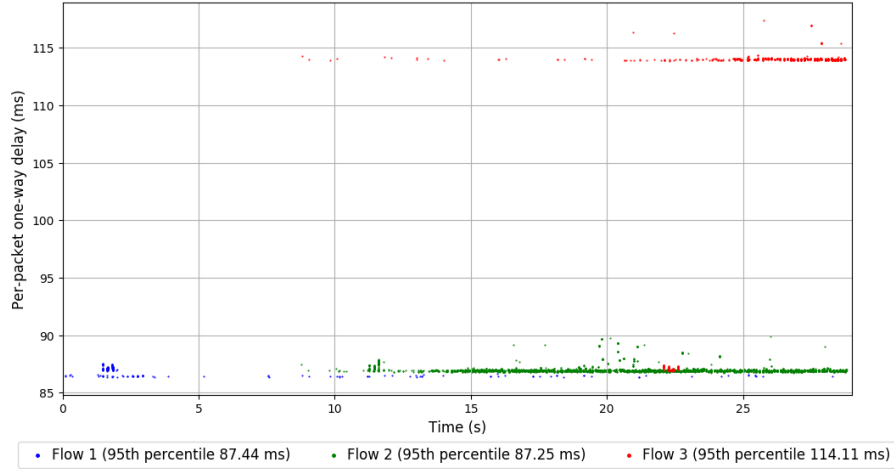
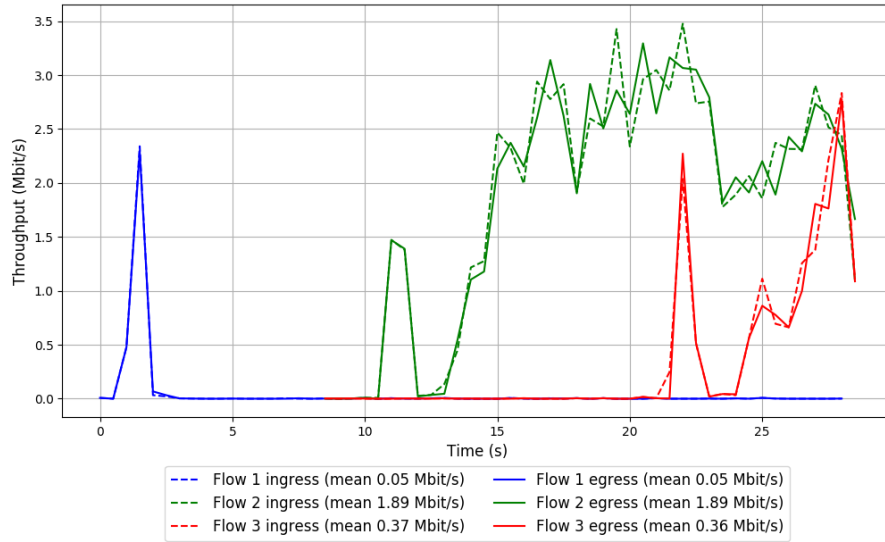
-- Flow 3:

Average throughput: 0.36 Mbit/s

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

Loss rate: 3.56%

### Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-21 03:50:33

End at: 2017-08-21 03:51:03

# Below is generated by plot.py at 2017-08-21 05:21:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.55 Mbit/s

95th percentile per-packet one-way delay: 88.904 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 88.894 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 89.136 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 87.282 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

