

## Pantheon Report

Generated at 2017-11-22 02:01:42 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

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

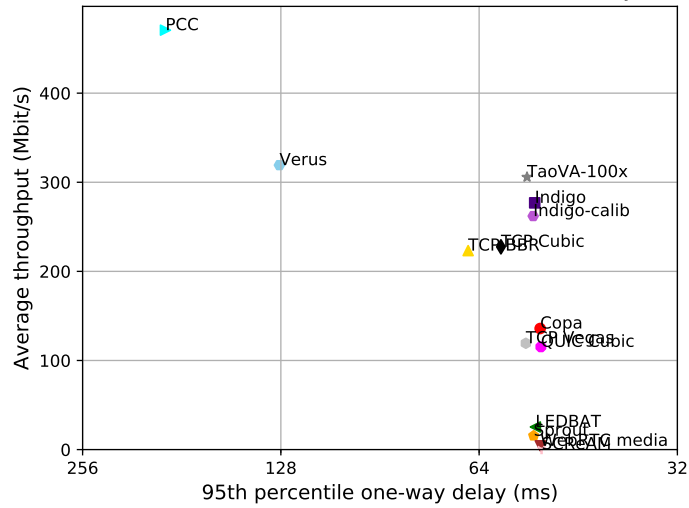
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

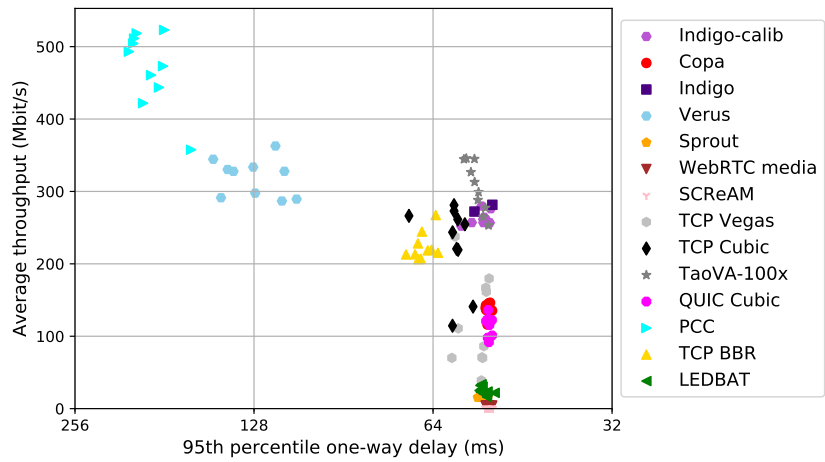
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fab936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ 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 London Ethernet, 10 runs of 30s each per scheme  
 3 flows with 10s interval between flows (mean of all runs by scheme)



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	117.16	107.05	105.78	65.01	66.50	71.49	0.01	0.03	0.13
TCP Cubic	10	123.80	108.30	95.01	58.23	58.92	59.75	0.01	0.05	0.07
LEDBAT	10	13.80	12.94	9.07	52.58	52.52	52.47	0.03	0.01	0.01
PCC	10	417.42	51.81	57.27	191.02	187.64	189.59	1.97	2.13	2.61
QUIC Cubic	10	63.43	53.56	50.10	51.32	51.13	51.19	0.01	0.30	0.00
SCReAM	10	0.22	0.22	0.21	51.13	51.40	51.59	0.02	0.00	0.23
WebRTC media	10	2.23	1.41	0.58	51.36	51.49	51.74	0.00	0.00	0.22
Sprout	10	7.87	7.81	7.60	52.93	52.81	52.60	0.04	0.01	0.02
TaoVA-100x	10	169.44	143.54	167.42	53.16	55.69	54.00	0.01	0.01	0.01
TCP Vegas	10	39.50	72.62	94.95	53.02	53.45	55.22	0.02	0.01	0.03
Verus	10	187.47	148.57	103.55	121.68	131.69	138.45	0.15	0.26	0.38
Copa	9	75.40	67.04	61.47	51.71	51.68	51.32	0.00	0.01	0.00
Indigo	2	150.54	140.51	102.17	52.16	53.24	54.16	0.00	0.00	0.00
Indigo-calib	10	135.29	136.22	112.95	52.38	53.12	53.76	0.00	0.00	0.01

Run 1: Statistics of TCP BBR

Start at: 2017-11-21 21:35:06

End at: 2017-11-21 21:35:36

# Below is generated by plot.py at 2017-11-22 01:01:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 213.11 Mbit/s

95th percentile per-packet one-way delay: 68.617 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 118.54 Mbit/s

95th percentile per-packet one-way delay: 67.039 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 96.06 Mbit/s

95th percentile per-packet one-way delay: 66.354 ms

Loss rate: 0.07%

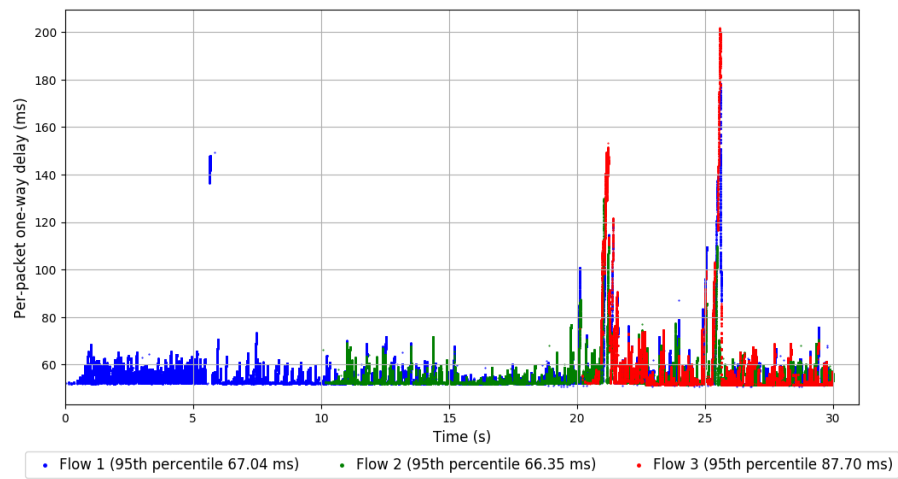
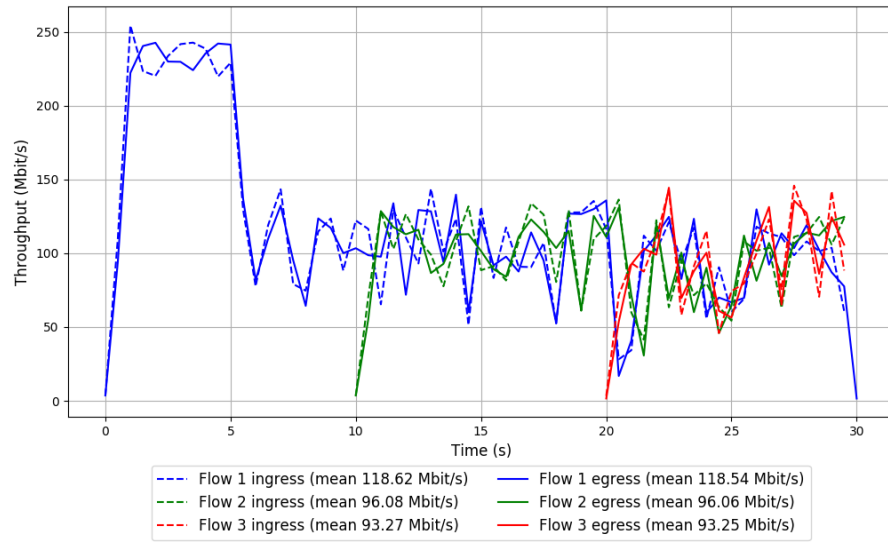
-- Flow 3:

Average throughput: 93.25 Mbit/s

95th percentile per-packet one-way delay: 87.704 ms

Loss rate: 0.21%

# Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-21 21:46:42

End at: 2017-11-21 21:47:12

# Below is generated by plot.py at 2017-11-22 01:01:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 207.15 Mbit/s

95th percentile per-packet one-way delay: 67.140 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 105.05 Mbit/s

95th percentile per-packet one-way delay: 65.907 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 100.34 Mbit/s

95th percentile per-packet one-way delay: 66.016 ms

Loss rate: 0.03%

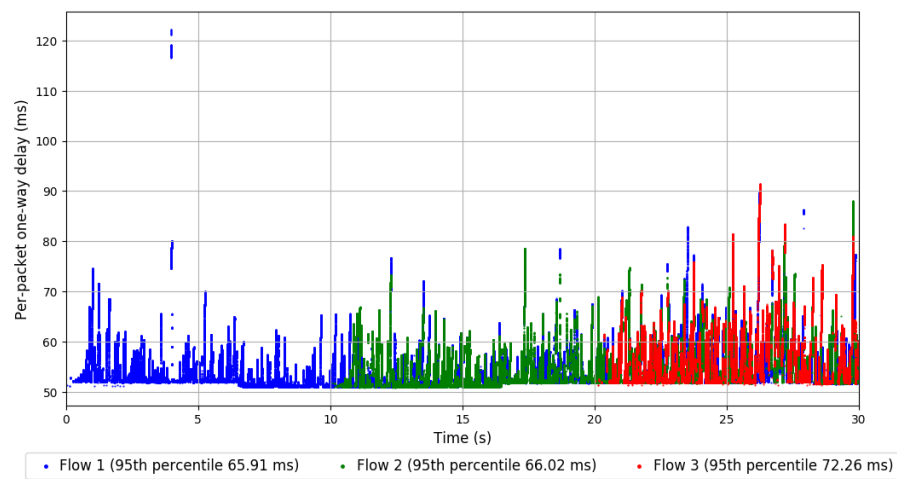
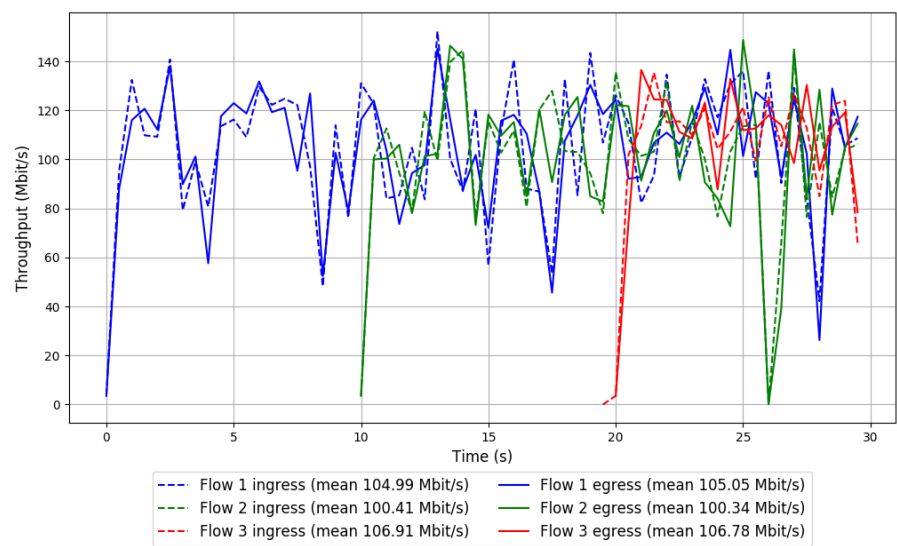
-- Flow 3:

Average throughput: 106.78 Mbit/s

95th percentile per-packet one-way delay: 72.263 ms

Loss rate: 0.06%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-21 21:58:25

End at: 2017-11-21 21:58:55

# Below is generated by plot.py at 2017-11-22 01:02:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 244.50 Mbit/s

95th percentile per-packet one-way delay: 66.816 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 125.07 Mbit/s

95th percentile per-packet one-way delay: 65.807 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 126.54 Mbit/s

95th percentile per-packet one-way delay: 68.697 ms

Loss rate: 0.00%

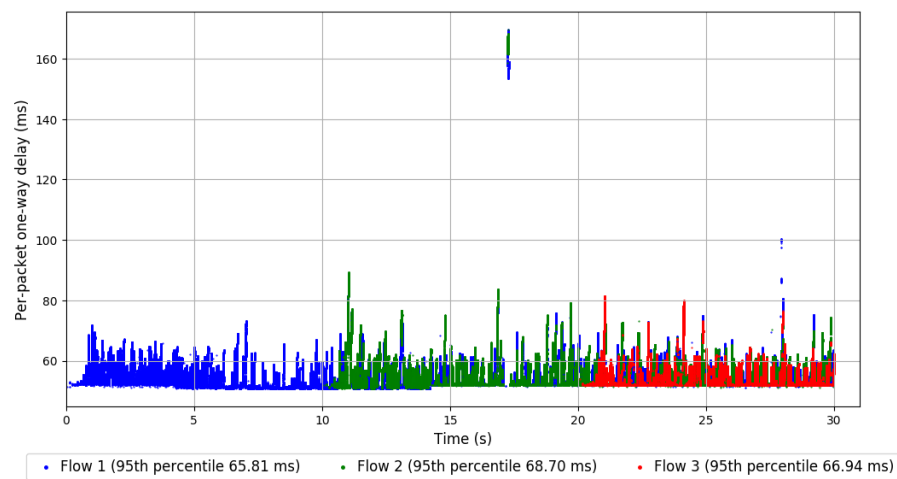
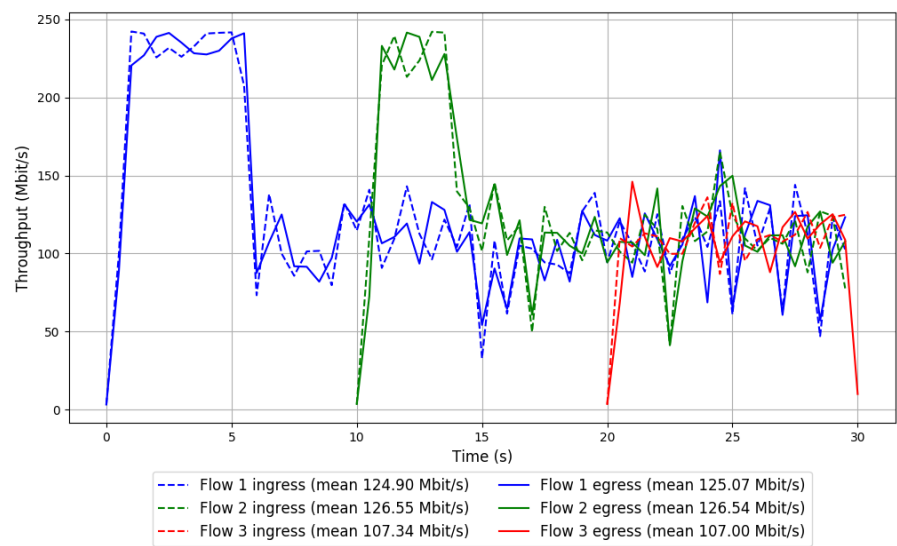
-- Flow 3:

Average throughput: 107.00 Mbit/s

95th percentile per-packet one-way delay: 66.945 ms

Loss rate: 0.29%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-21 22:10:28

End at: 2017-11-21 22:10:58

# Below is generated by plot.py at 2017-11-22 01:02:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 206.48 Mbit/s

95th percentile per-packet one-way delay: 67.729 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 103.20 Mbit/s

95th percentile per-packet one-way delay: 65.750 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 103.88 Mbit/s

95th percentile per-packet one-way delay: 66.281 ms

Loss rate: 0.06%

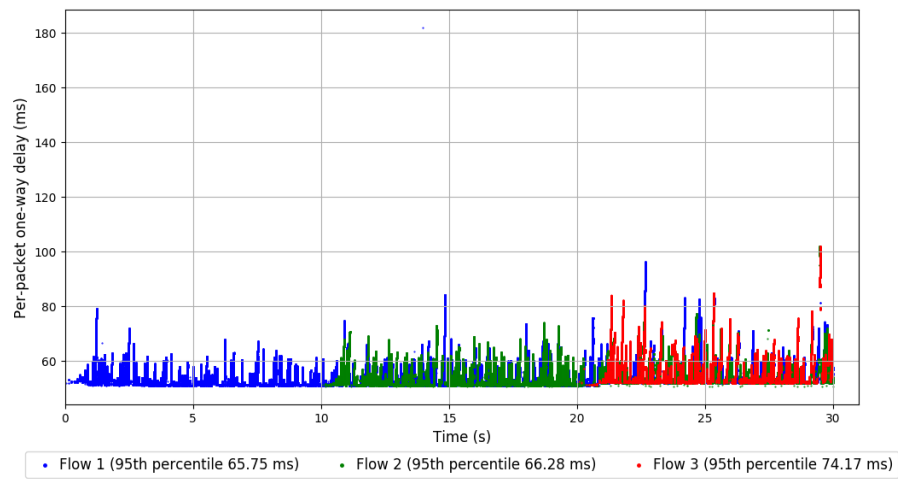
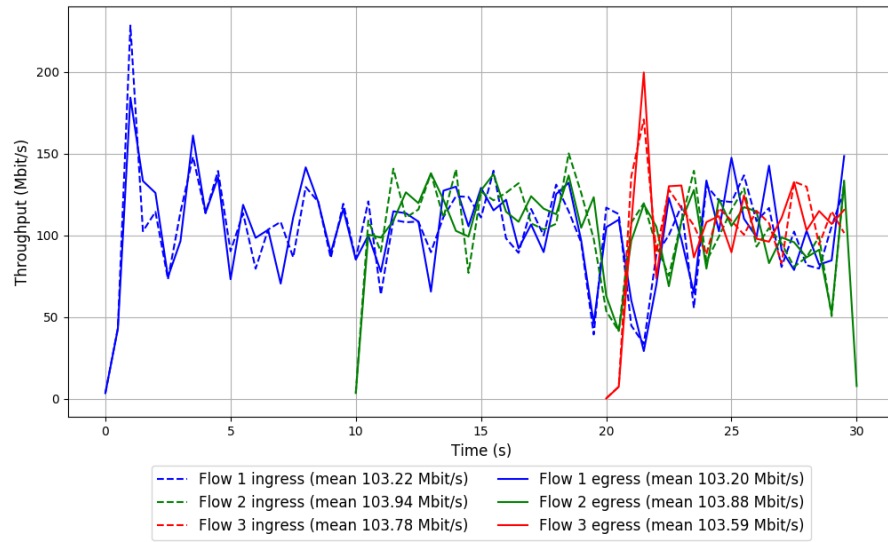
-- Flow 3:

Average throughput: 103.59 Mbit/s

95th percentile per-packet one-way delay: 74.165 ms

Loss rate: 0.05%

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



Run 5: Statistics of TCP BBR

Start at: 2017-11-21 22:22:15

End at: 2017-11-21 22:22:45

# Below is generated by plot.py at 2017-11-22 01:02:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 219.57 Mbit/s

95th percentile per-packet one-way delay: 64.373 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 108.54 Mbit/s

95th percentile per-packet one-way delay: 63.117 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 110.70 Mbit/s

95th percentile per-packet one-way delay: 64.681 ms

Loss rate: 0.13%

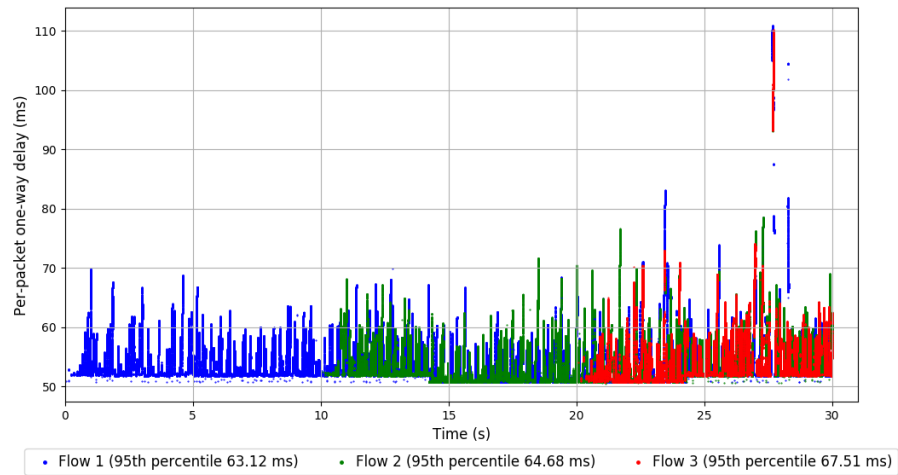
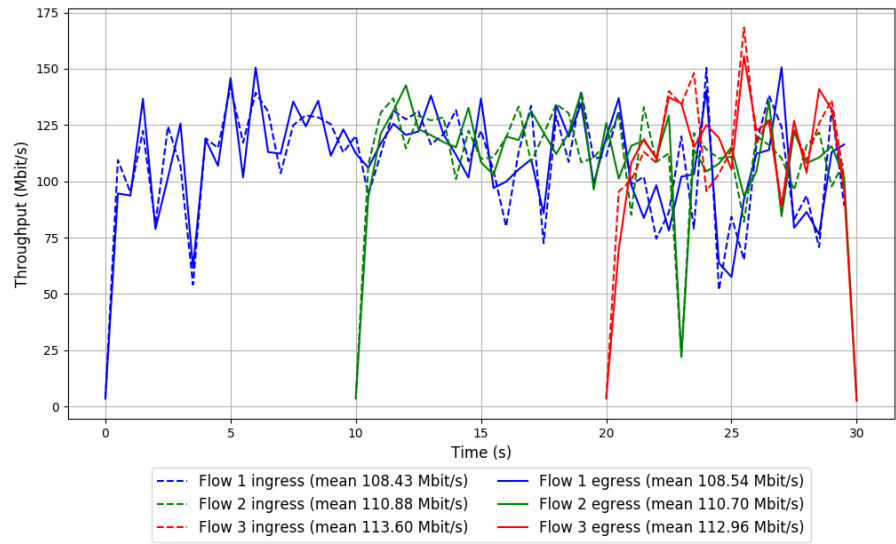
-- Flow 3:

Average throughput: 112.96 Mbit/s

95th percentile per-packet one-way delay: 67.510 ms

Loss rate: 0.52%

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



Run 6: Statistics of TCP BBR

Start at: 2017-11-21 22:34:19

End at: 2017-11-21 22:34:49

# Below is generated by plot.py at 2017-11-22 01:02:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 212.96 Mbit/s

95th percentile per-packet one-way delay: 71.051 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 105.45 Mbit/s

95th percentile per-packet one-way delay: 66.981 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 107.54 Mbit/s

95th percentile per-packet one-way delay: 72.225 ms

Loss rate: 0.01%

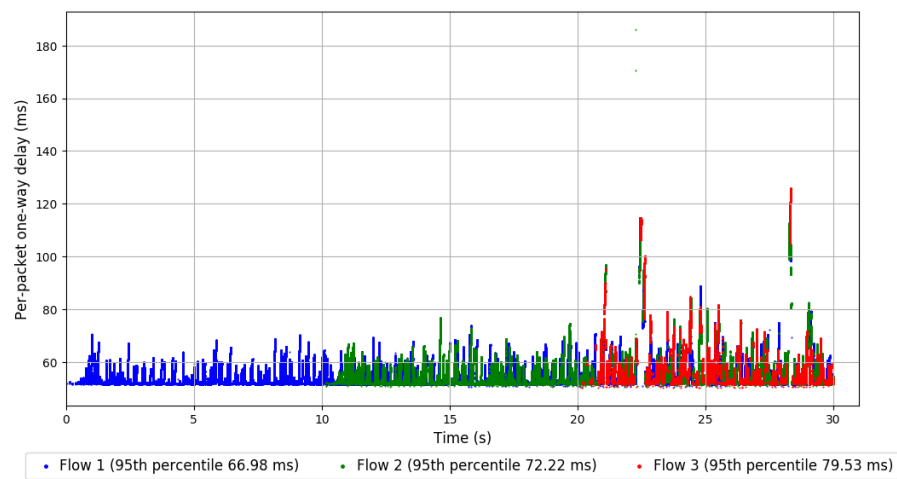
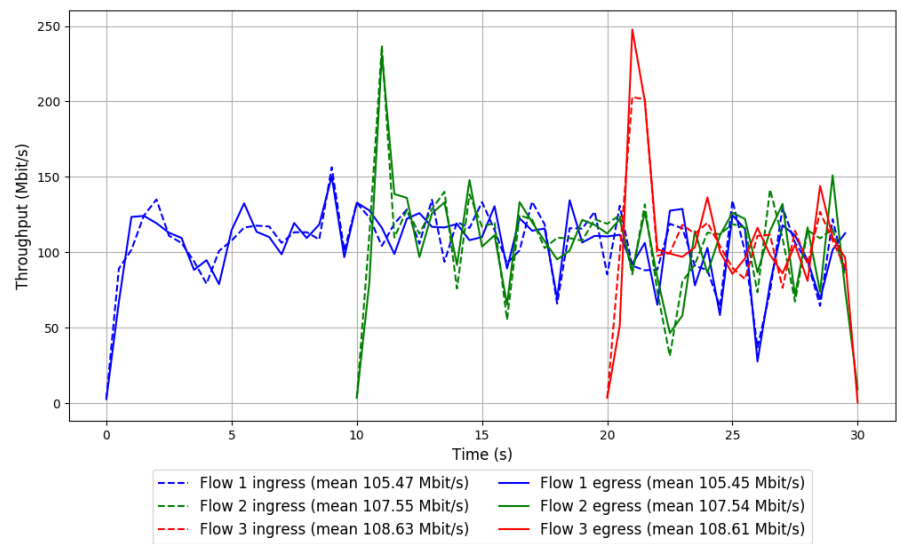
-- Flow 3:

Average throughput: 108.61 Mbit/s

95th percentile per-packet one-way delay: 79.526 ms

Loss rate: 0.01%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-21 22:45:56

End at: 2017-11-21 22:46:26

# Below is generated by plot.py at 2017-11-22 01:02:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 228.18 Mbit/s

95th percentile per-packet one-way delay: 67.857 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 118.14 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 107.54 Mbit/s

95th percentile per-packet one-way delay: 66.579 ms

Loss rate: 0.00%

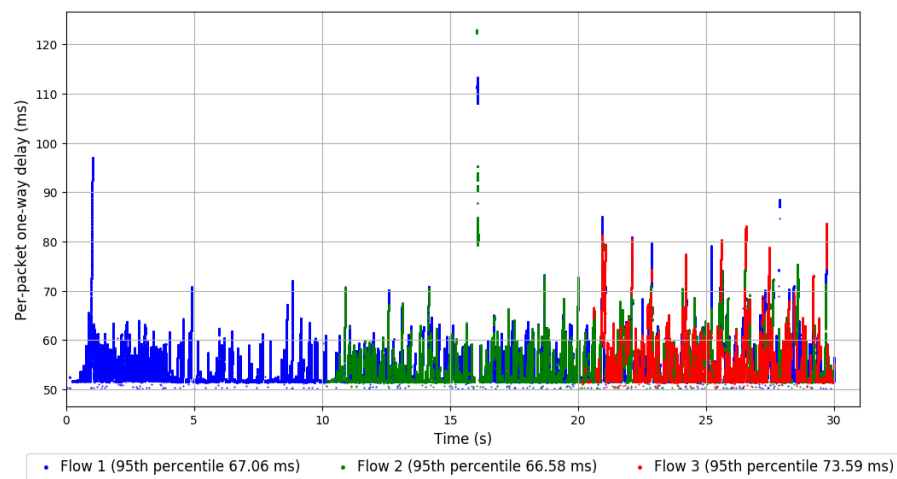
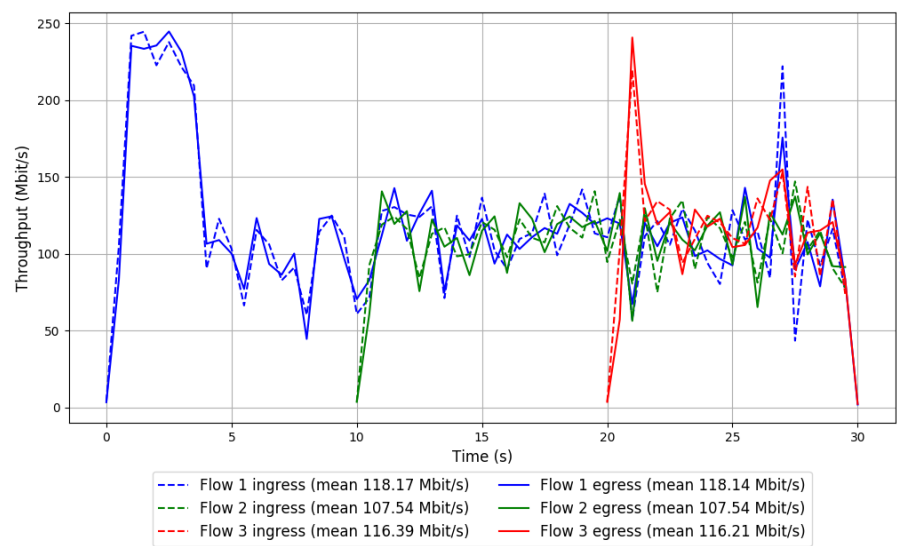
-- Flow 3:

Average throughput: 116.21 Mbit/s

95th percentile per-packet one-way delay: 73.586 ms

Loss rate: 0.14%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-21 22:57:41

End at: 2017-11-21 22:58:11

# Below is generated by plot.py at 2017-11-22 01:02:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 267.37 Mbit/s

95th percentile per-packet one-way delay: 63.342 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 164.15 Mbit/s

95th percentile per-packet one-way delay: 62.391 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 104.86 Mbit/s

95th percentile per-packet one-way delay: 64.658 ms

Loss rate: 0.01%

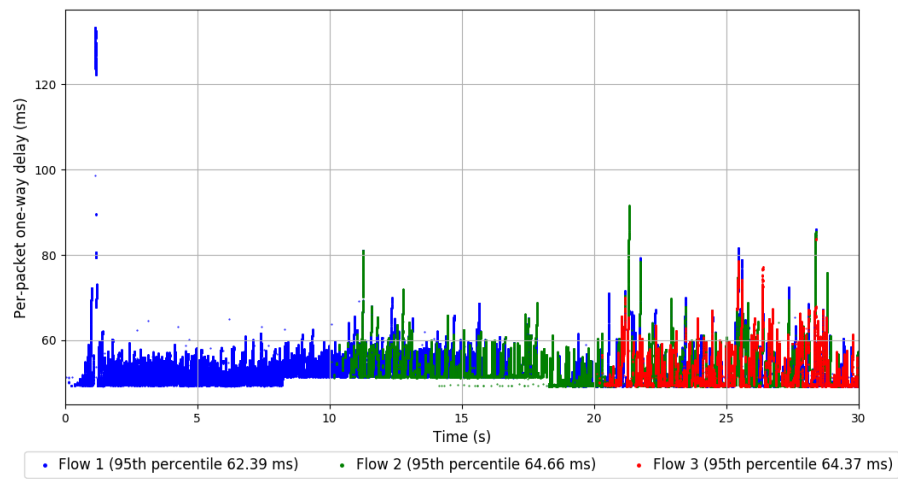
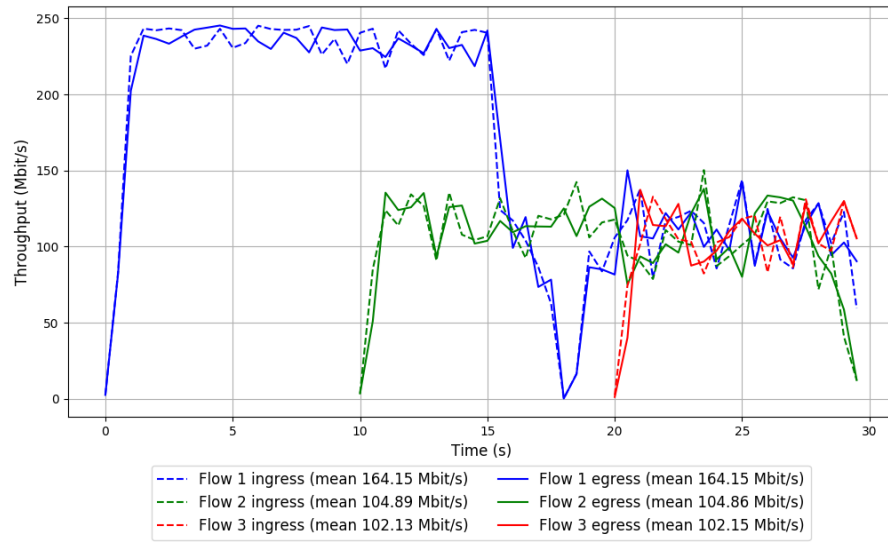
-- Flow 3:

Average throughput: 102.15 Mbit/s

95th percentile per-packet one-way delay: 64.373 ms

Loss rate: 0.00%

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



Run 9: Statistics of TCP BBR

Start at: 2017-11-21 23:09:38

End at: 2017-11-21 23:10:08

# Below is generated by plot.py at 2017-11-22 01:05:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 218.55 Mbit/s

95th percentile per-packet one-way delay: 65.337 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 112.91 Mbit/s

95th percentile per-packet one-way delay: 63.656 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 106.97 Mbit/s

95th percentile per-packet one-way delay: 66.055 ms

Loss rate: 0.00%

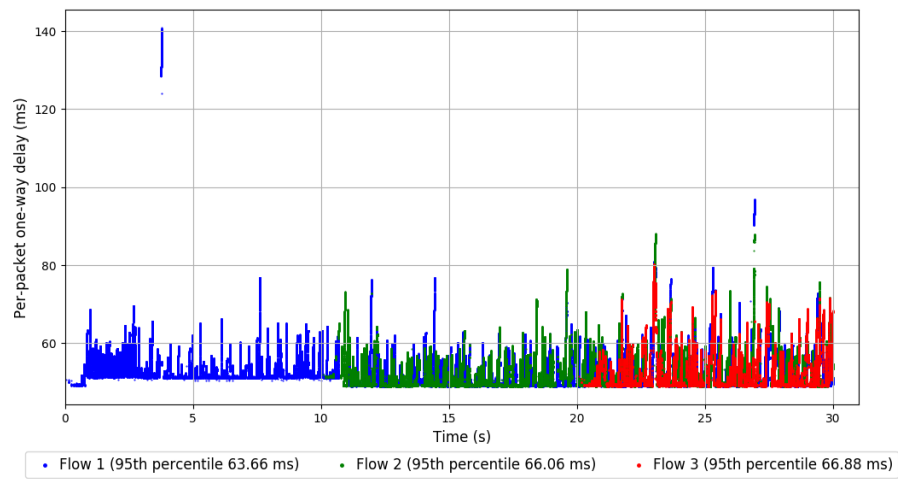
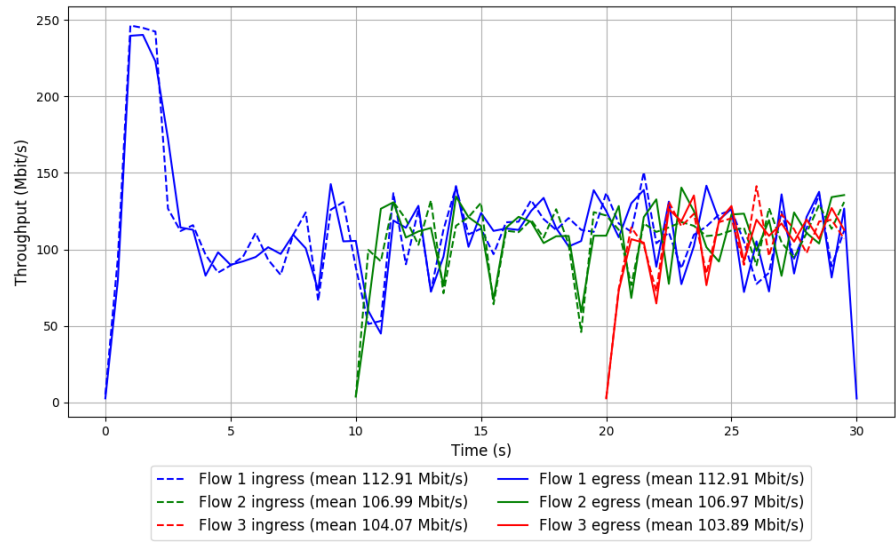
-- Flow 3:

Average throughput: 103.89 Mbit/s

95th percentile per-packet one-way delay: 66.879 ms

Loss rate: 0.00%

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



Run 10: Statistics of TCP BBR

Start at: 2017-11-21 23:21:36

End at: 2017-11-21 23:22:06

# Below is generated by plot.py at 2017-11-22 01:05:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 215.29 Mbit/s

95th percentile per-packet one-way delay: 62.786 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 110.57 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 106.02 Mbit/s

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

Loss rate: 0.00%

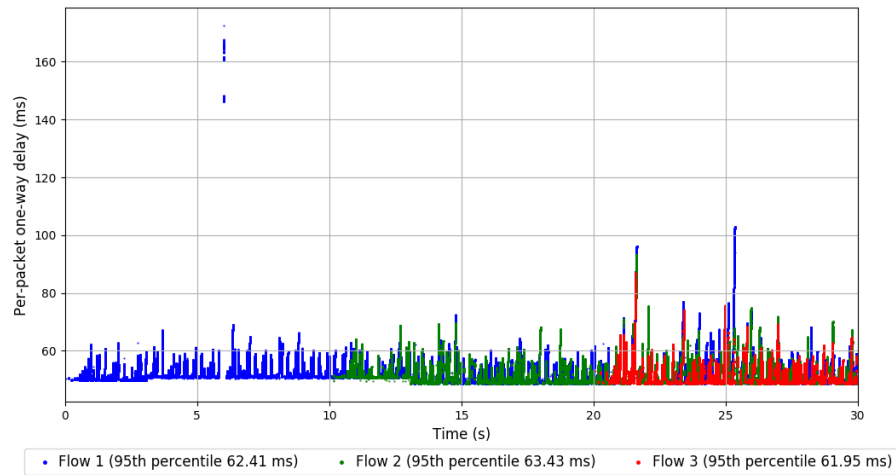
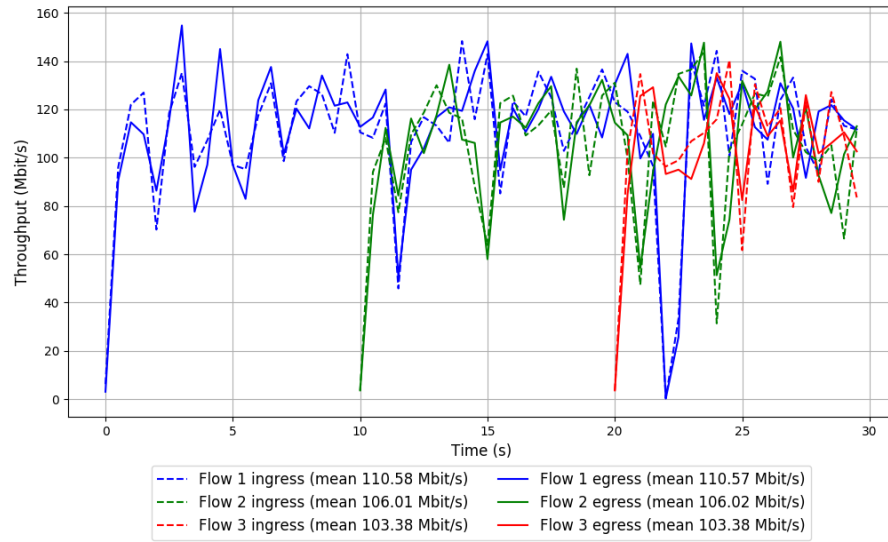
-- Flow 3:

Average throughput: 103.38 Mbit/s

95th percentile per-packet one-way delay: 61.946 ms

Loss rate: 0.02%

# Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-21 21:38:35

End at: 2017-11-21 21:39:05

# Below is generated by plot.py at 2017-11-22 01:05:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 219.29 Mbit/s

95th percentile per-packet one-way delay: 58.085 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 148.29 Mbit/s

95th percentile per-packet one-way delay: 56.662 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 89.07 Mbit/s

95th percentile per-packet one-way delay: 59.972 ms

Loss rate: 0.02%

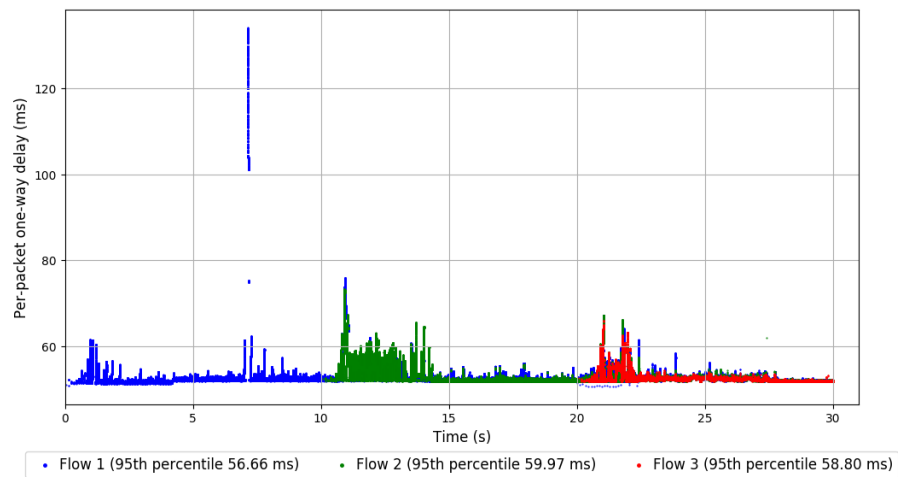
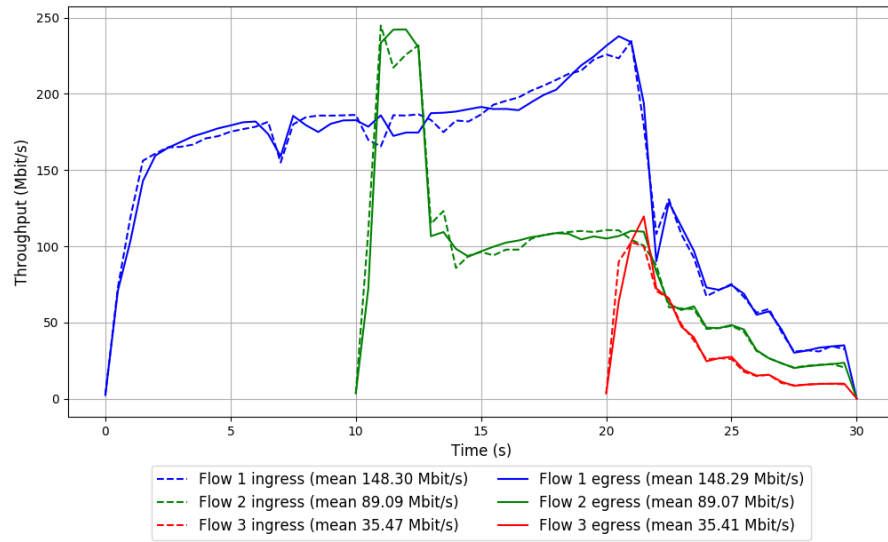
-- Flow 3:

Average throughput: 35.41 Mbit/s

95th percentile per-packet one-way delay: 58.801 ms

Loss rate: 0.16%

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



Run 2: Statistics of TCP Cubic

Start at: 2017-11-21 21:50:16

End at: 2017-11-21 21:50:46

# Below is generated by plot.py at 2017-11-22 01:05:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 114.48 Mbit/s

95th percentile per-packet one-way delay: 59.355 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 57.01 Mbit/s

95th percentile per-packet one-way delay: 55.882 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 29.60 Mbit/s

95th percentile per-packet one-way delay: 59.521 ms

Loss rate: 0.43%

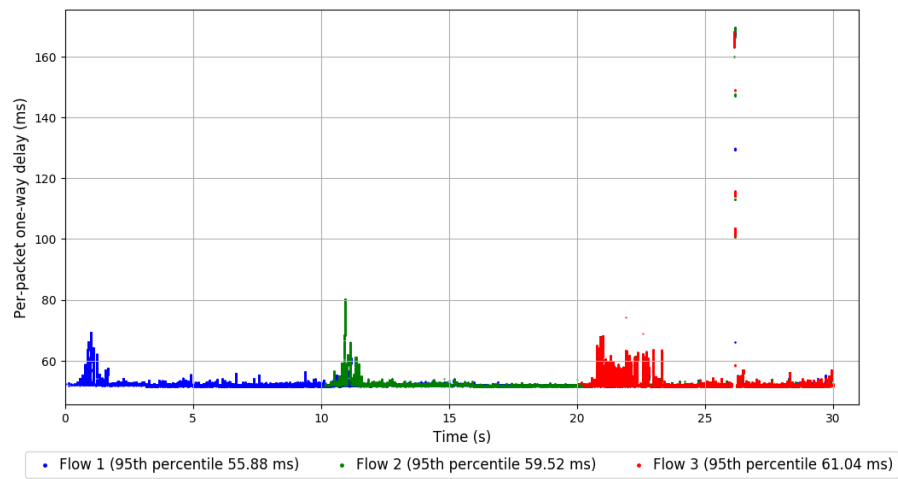
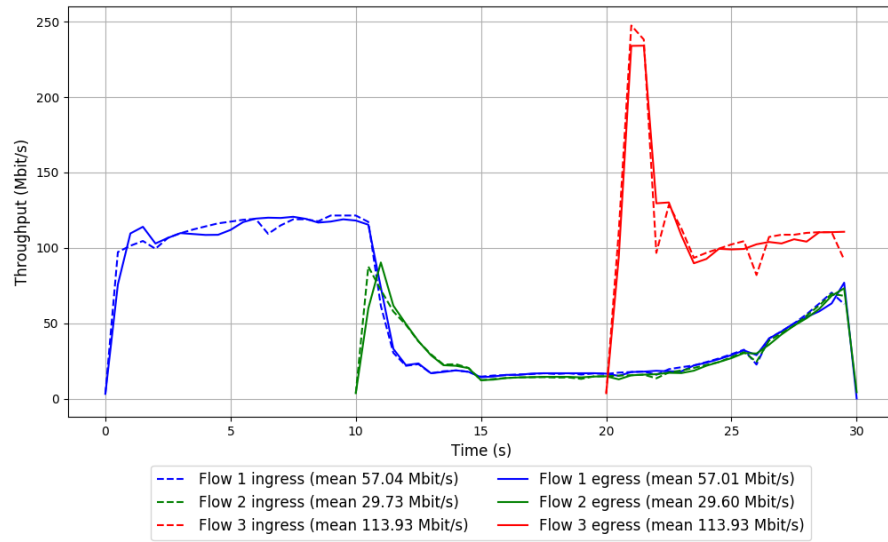
-- Flow 3:

Average throughput: 113.93 Mbit/s

95th percentile per-packet one-way delay: 61.041 ms

Loss rate: 0.00%

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



Run 3: Statistics of TCP Cubic

Start at: 2017-11-21 22:02:03

End at: 2017-11-21 22:02:33

# Below is generated by plot.py at 2017-11-22 01:06:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 261.40 Mbit/s

95th percentile per-packet one-way delay: 58.174 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 133.20 Mbit/s

95th percentile per-packet one-way delay: 56.469 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 126.10 Mbit/s

95th percentile per-packet one-way delay: 57.979 ms

Loss rate: 0.03%

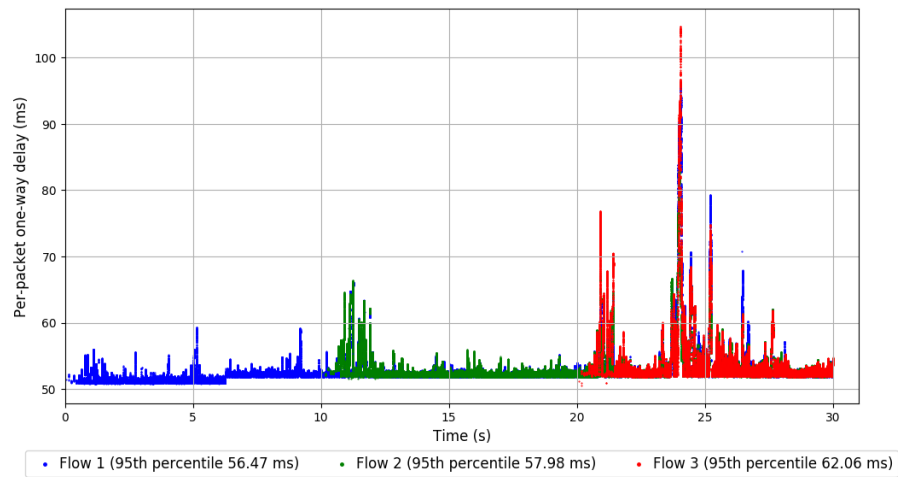
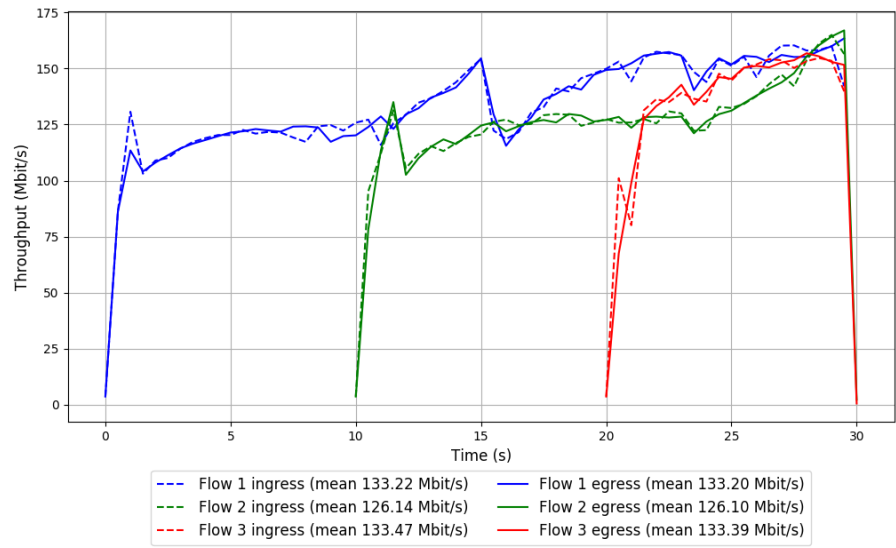
-- Flow 3:

Average throughput: 133.39 Mbit/s

95th percentile per-packet one-way delay: 62.059 ms

Loss rate: 0.03%

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



Run 4: Statistics of TCP Cubic

Start at: 2017-11-21 22:13:54

End at: 2017-11-21 22:14:24

# Below is generated by plot.py at 2017-11-22 01:06:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 220.76 Mbit/s

95th percentile per-packet one-way delay: 58.420 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 146.07 Mbit/s

95th percentile per-packet one-way delay: 59.353 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 106.83 Mbit/s

95th percentile per-packet one-way delay: 54.466 ms

Loss rate: 0.00%

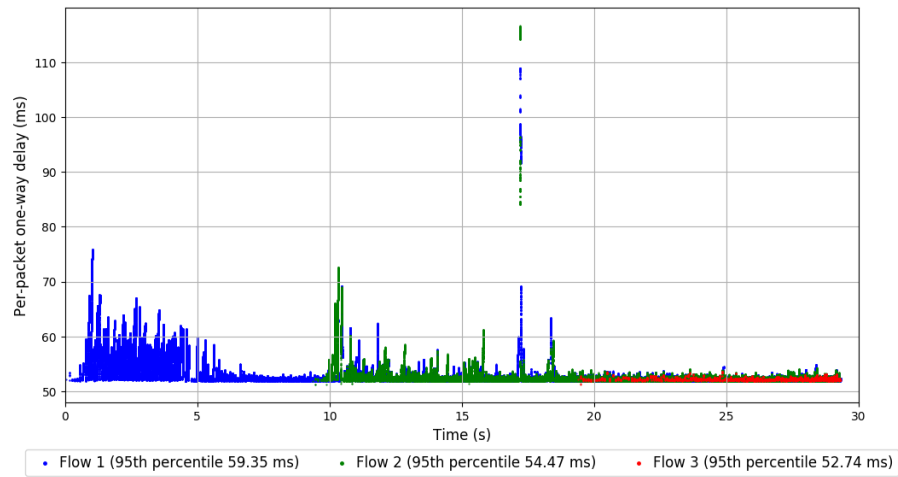
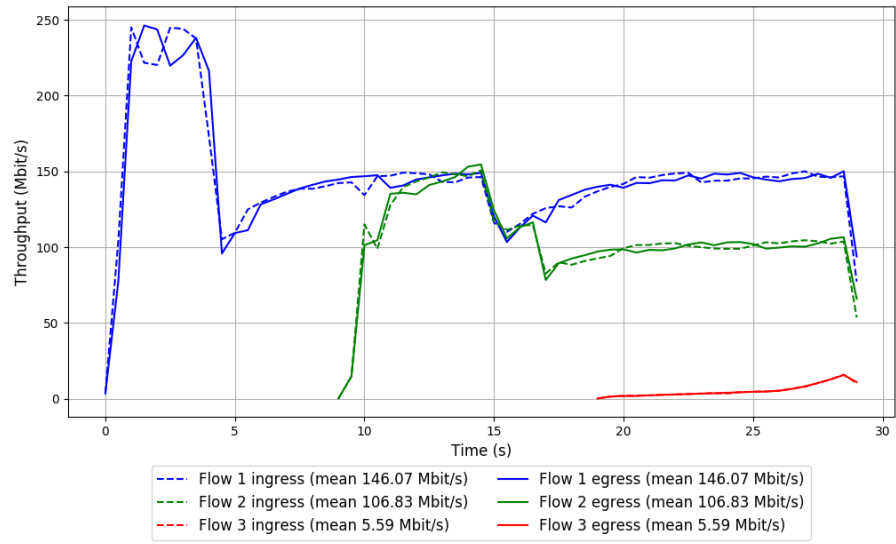
-- Flow 3:

Average throughput: 5.59 Mbit/s

95th percentile per-packet one-way delay: 52.738 ms

Loss rate: 0.04%

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



Run 5: Statistics of TCP Cubic

Start at: 2017-11-21 22:25:50

End at: 2017-11-21 22:26:20

# Below is generated by plot.py at 2017-11-22 01:06:48

# Datalink statistics

-- Total of 3 flows:

Average throughput: 243.56 Mbit/s

95th percentile per-packet one-way delay: 59.337 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 125.09 Mbit/s

95th percentile per-packet one-way delay: 59.171 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 113.90 Mbit/s

95th percentile per-packet one-way delay: 57.441 ms

Loss rate: 0.00%

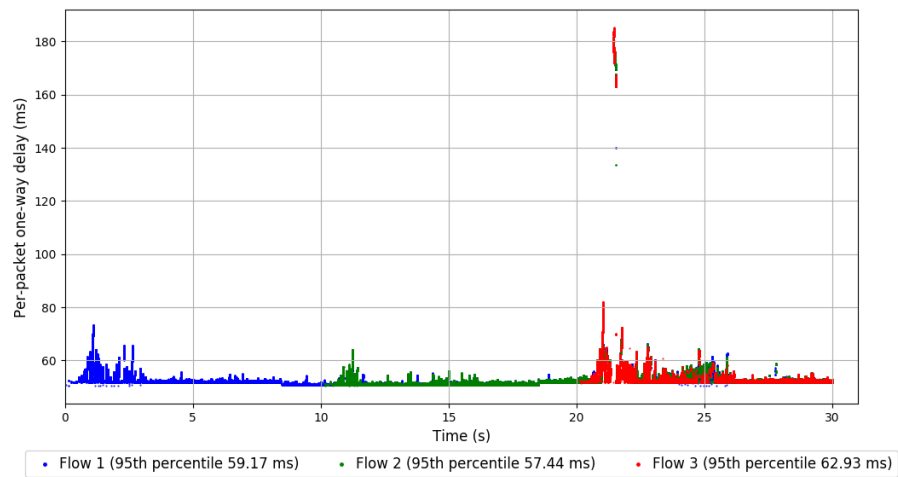
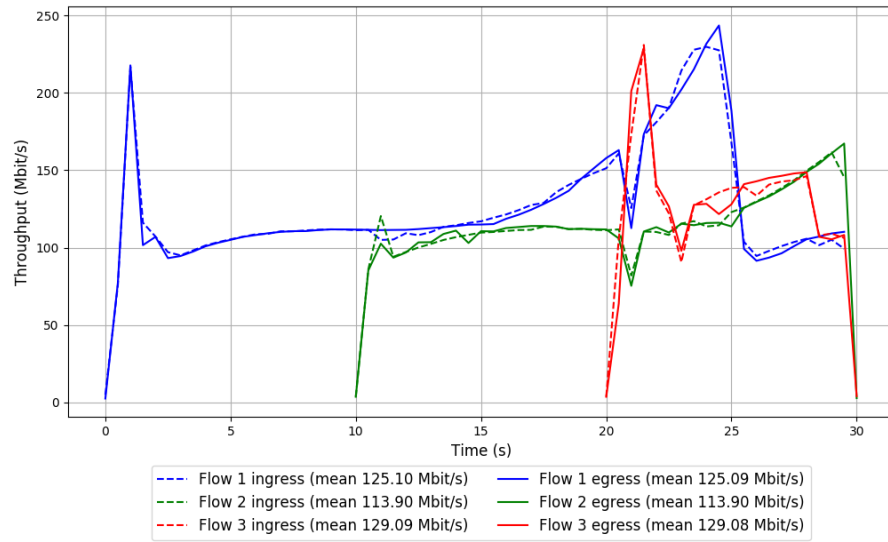
-- Flow 3:

Average throughput: 129.08 Mbit/s

95th percentile per-packet one-way delay: 62.932 ms

Loss rate: 0.01%

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



Run 6: Statistics of TCP Cubic

Start at: 2017-11-21 22:37:56

End at: 2017-11-21 22:38:26

# Below is generated by plot.py at 2017-11-22 01:06:48

# Datalink statistics

-- Total of 3 flows:

Average throughput: 140.95 Mbit/s

95th percentile per-packet one-way delay: 54.817 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 85.46 Mbit/s

95th percentile per-packet one-way delay: 53.894 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 70.17 Mbit/s

95th percentile per-packet one-way delay: 55.093 ms

Loss rate: 0.06%

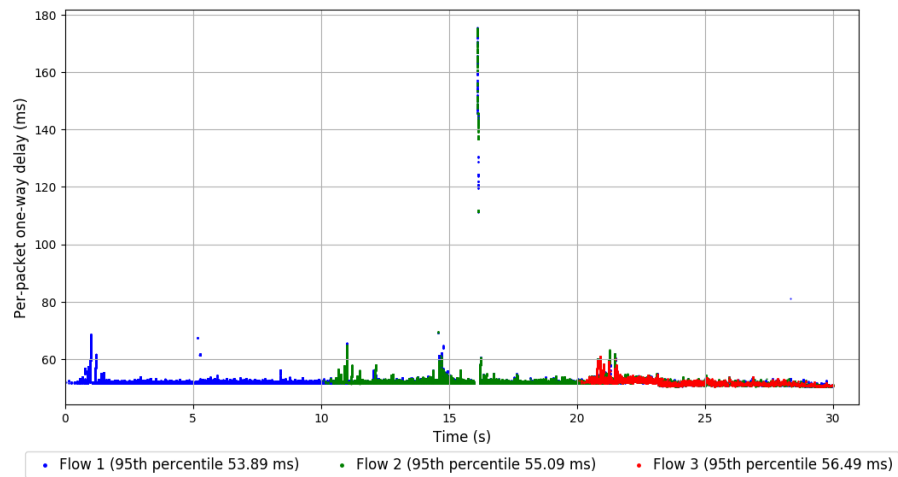
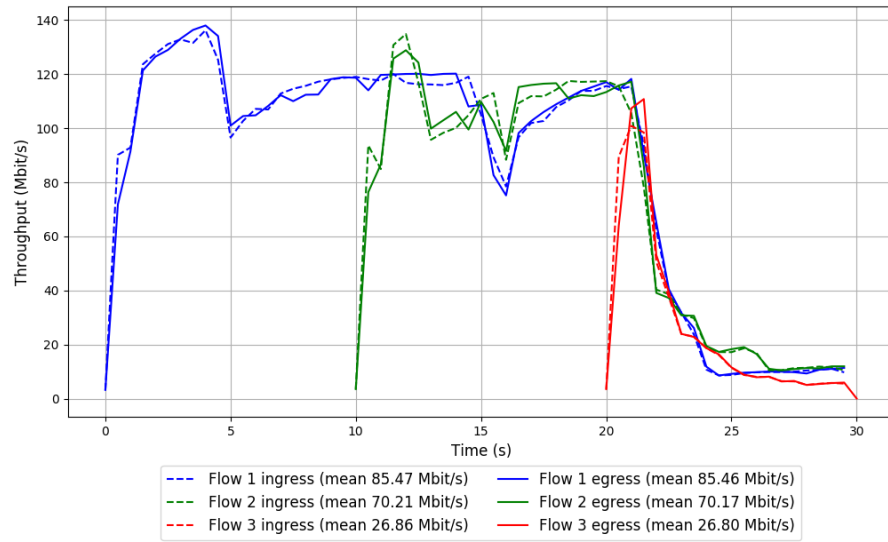
-- Flow 3:

Average throughput: 26.80 Mbit/s

95th percentile per-packet one-way delay: 56.494 ms

Loss rate: 0.27%

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



Run 7: Statistics of TCP Cubic

Start at: 2017-11-21 22:49:31

End at: 2017-11-21 22:50:01

# Below is generated by plot.py at 2017-11-22 01:09:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 281.05 Mbit/s

95th percentile per-packet one-way delay: 59.006 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 132.74 Mbit/s

95th percentile per-packet one-way delay: 57.107 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 133.17 Mbit/s

95th percentile per-packet one-way delay: 59.566 ms

Loss rate: 0.01%

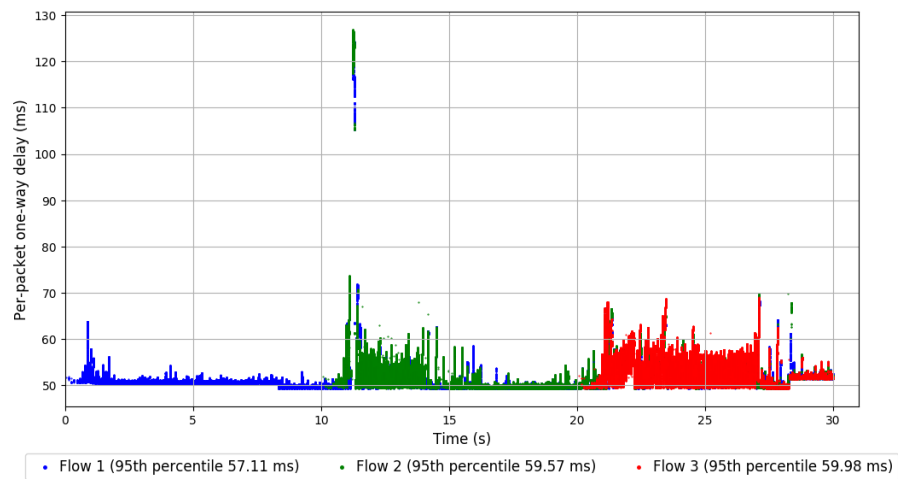
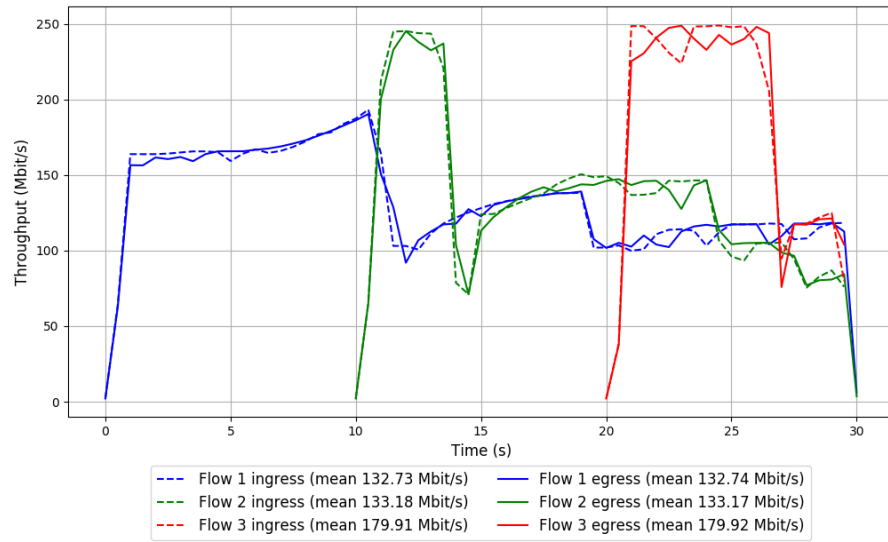
-- Flow 3:

Average throughput: 179.92 Mbit/s

95th percentile per-packet one-way delay: 59.975 ms

Loss rate: 0.00%

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



Run 8: Statistics of TCP Cubic

Start at: 2017-11-21 23:01:17

End at: 2017-11-21 23:01:47

# Below is generated by plot.py at 2017-11-22 01:10:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 266.25 Mbit/s

95th percentile per-packet one-way delay: 70.259 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 122.25 Mbit/s

95th percentile per-packet one-way delay: 68.186 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 124.15 Mbit/s

95th percentile per-packet one-way delay: 68.633 ms

Loss rate: 0.00%

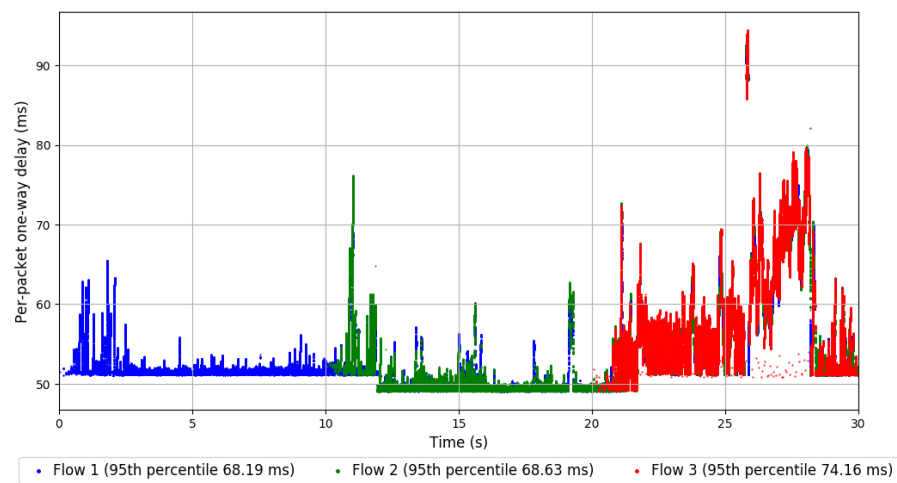
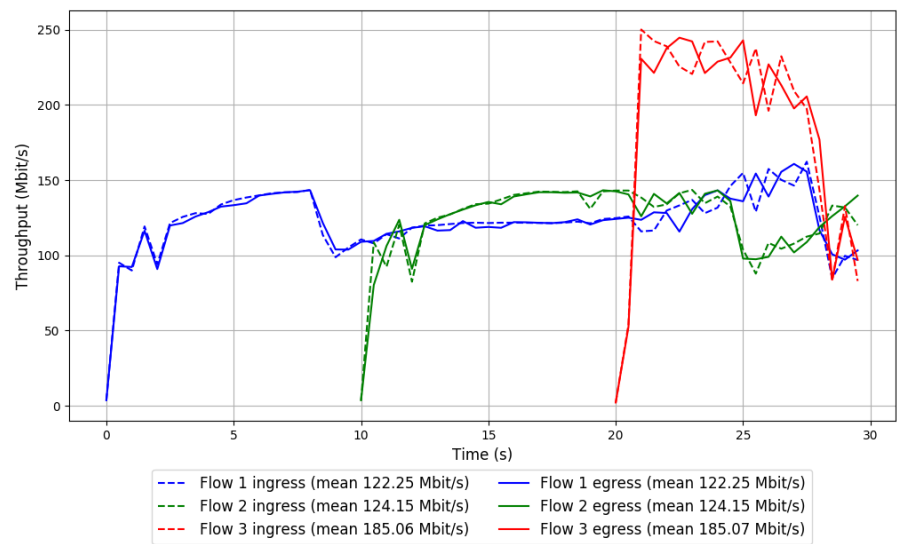
-- Flow 3:

Average throughput: 185.07 Mbit/s

95th percentile per-packet one-way delay: 74.159 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-21 23:13:13

End at: 2017-11-21 23:13:43

# Below is generated by plot.py at 2017-11-22 01:10:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 272.96 Mbit/s

95th percentile per-packet one-way delay: 58.998 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 130.00 Mbit/s

95th percentile per-packet one-way delay: 59.095 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 147.20 Mbit/s

95th percentile per-packet one-way delay: 59.720 ms

Loss rate: 0.00%

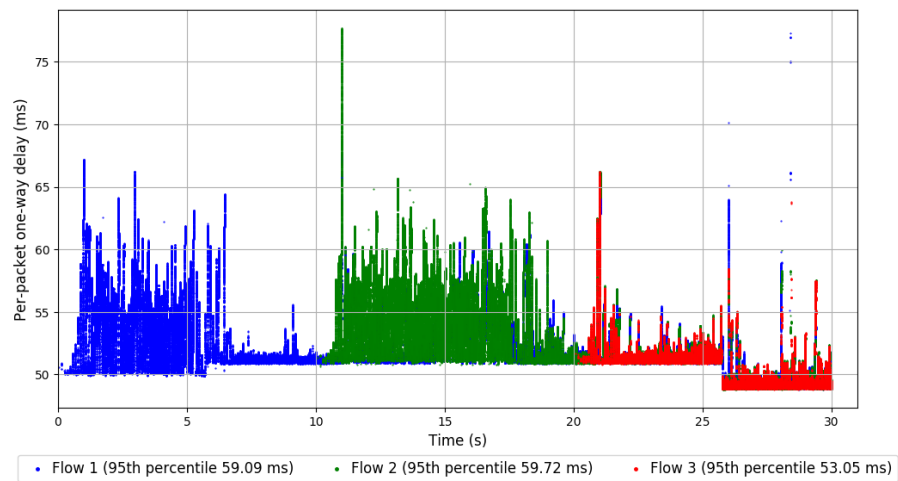
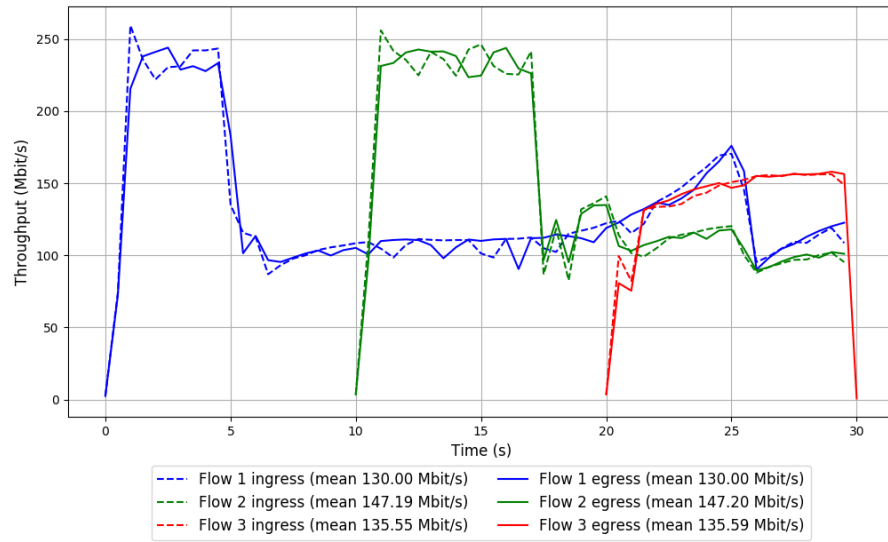
-- Flow 3:

Average throughput: 135.59 Mbit/s

95th percentile per-packet one-way delay: 53.048 ms

Loss rate: 0.00%

# Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-21 23:25:11

End at: 2017-11-21 23:25:41

# Below is generated by plot.py at 2017-11-22 01:10:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 254.67 Mbit/s

95th percentile per-packet one-way delay: 56.581 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 157.89 Mbit/s

95th percentile per-packet one-way delay: 56.444 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 142.78 Mbit/s

95th percentile per-packet one-way delay: 56.815 ms

Loss rate: 0.00%

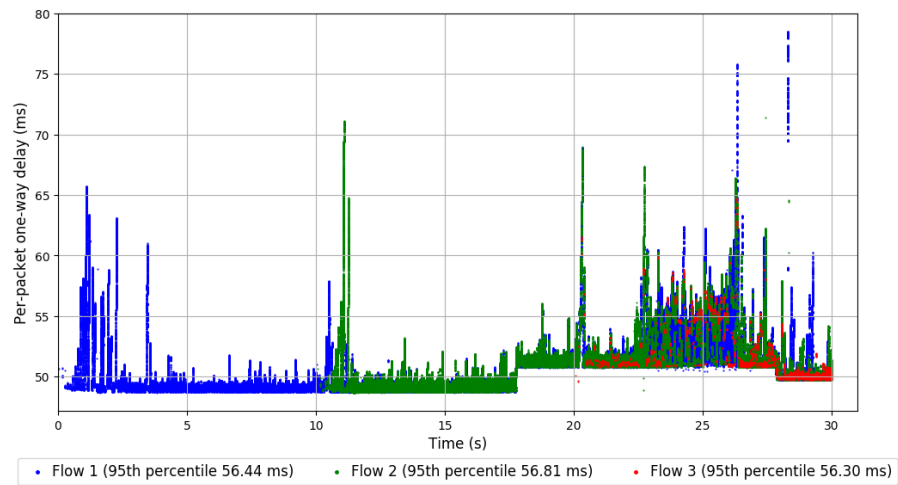
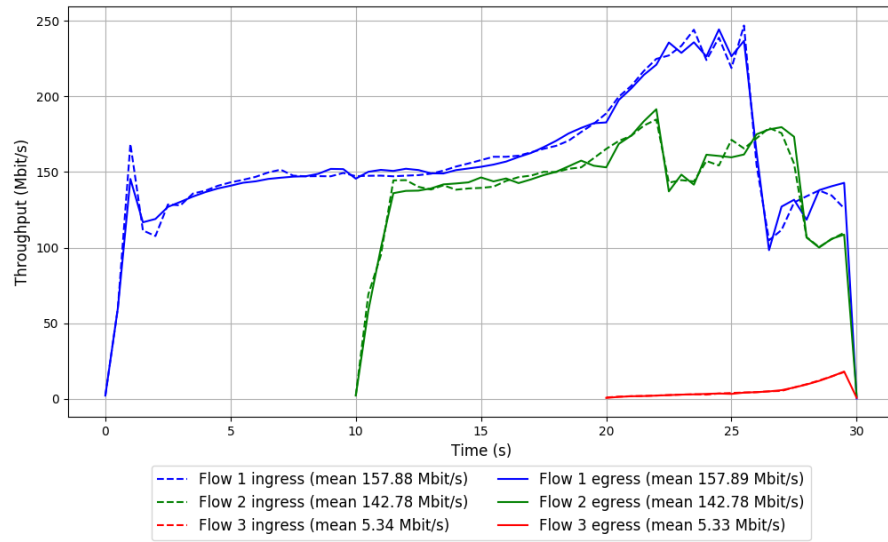
-- Flow 3:

Average throughput: 5.33 Mbit/s

95th percentile per-packet one-way delay: 56.300 ms

Loss rate: 0.14%

# Run 10: Report of TCP Cubic — Data Link

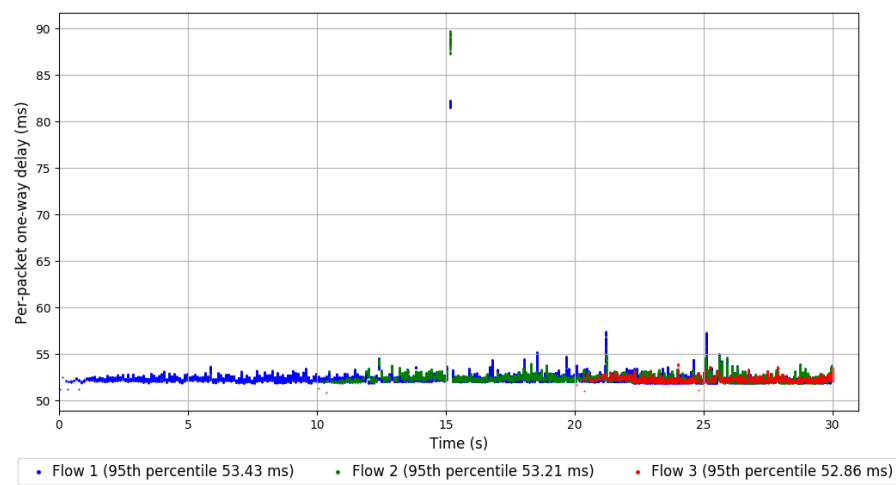
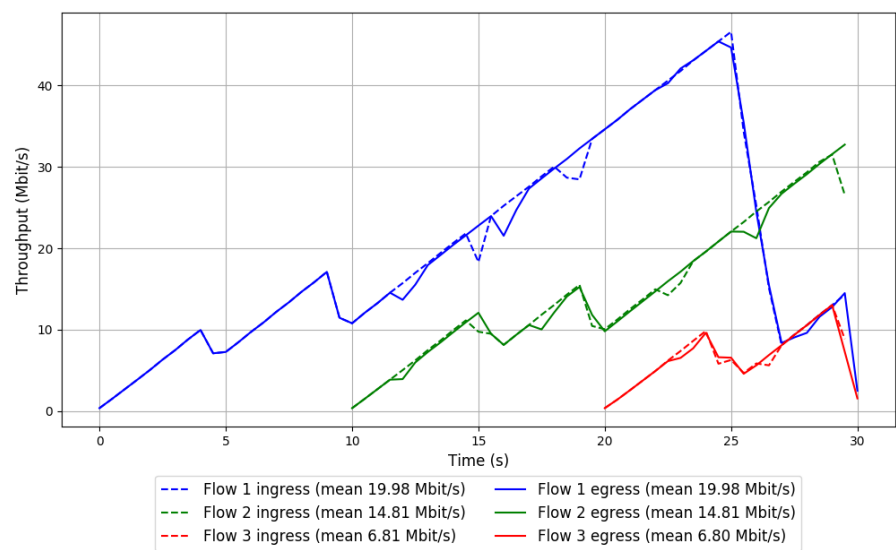


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-21 21:39:27
End at: 2017-11-21 21:39:57

# Below is generated by plot.py at 2017-11-22 01:10:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.07 Mbit/s
95th percentile per-packet one-way delay: 53.304 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 19.98 Mbit/s
95th percentile per-packet one-way delay: 53.429 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 14.81 Mbit/s
95th percentile per-packet one-way delay: 53.210 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.80 Mbit/s
95th percentile per-packet one-way delay: 52.858 ms
Loss rate: 0.03%
```

Run 1: Report of LEDBAT — Data Link

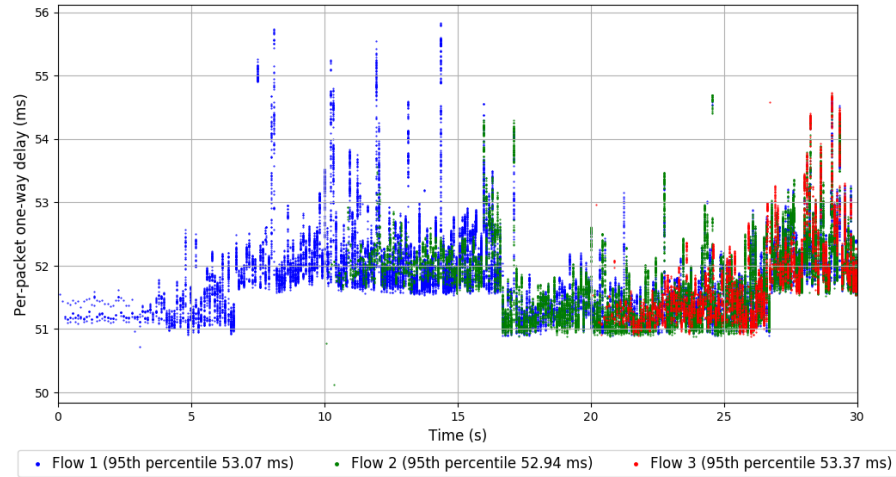
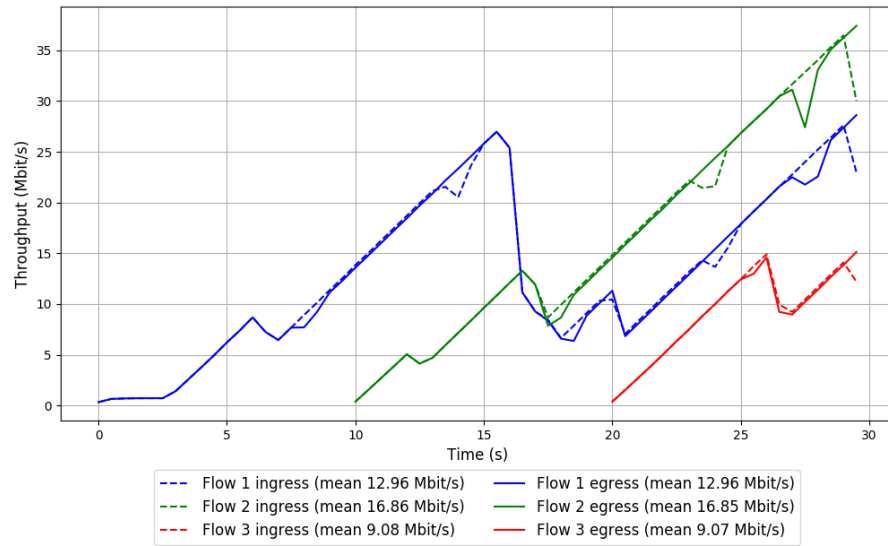


```
Run 2: Statistics of LEDBAT

Start at: 2017-11-21 21:51:02
End at: 2017-11-21 21:51:32

# Below is generated by plot.py at 2017-11-22 01:10:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.16 Mbit/s
95th percentile per-packet one-way delay: 53.053 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 12.96 Mbit/s
95th percentile per-packet one-way delay: 53.069 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 16.85 Mbit/s
95th percentile per-packet one-way delay: 52.940 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.07 Mbit/s
95th percentile per-packet one-way delay: 53.372 ms
Loss rate: 0.05%
```

## Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-21 22:02:57

End at: 2017-11-21 22:03:27

# Below is generated by plot.py at 2017-11-22 01:10:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 23.26 Mbit/s

95th percentile per-packet one-way delay: 53.241 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 12.96 Mbit/s

95th percentile per-packet one-way delay: 53.336 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 10.15 Mbit/s

95th percentile per-packet one-way delay: 53.077 ms

Loss rate: 0.01%

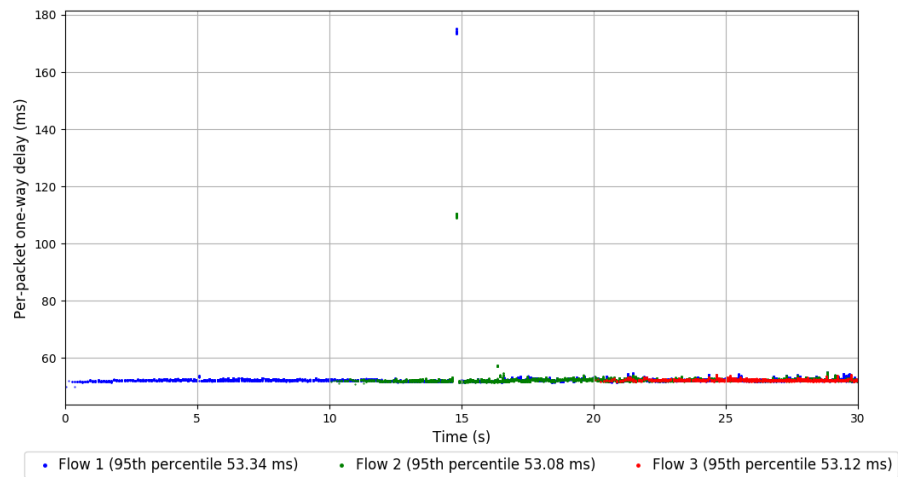
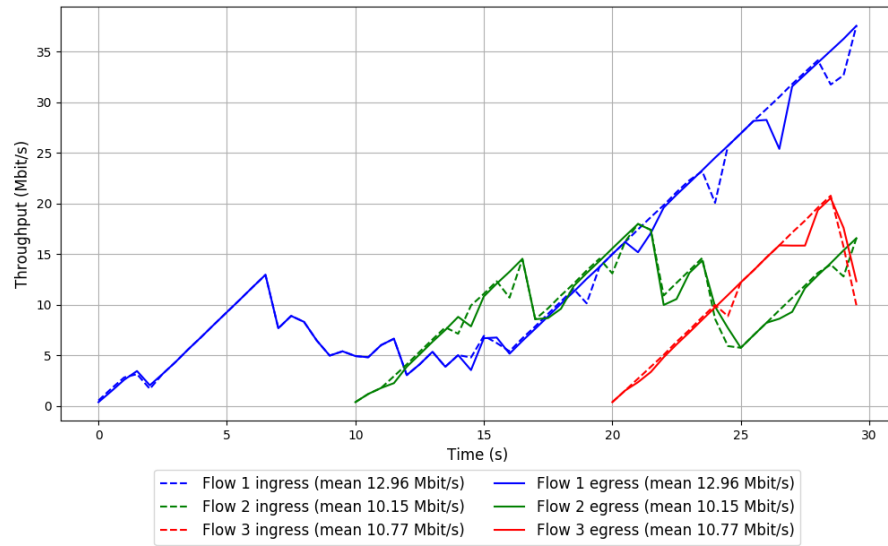
-- Flow 3:

Average throughput: 10.77 Mbit/s

95th percentile per-packet one-way delay: 53.117 ms

Loss rate: 0.00%

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



Run 4: Statistics of LEDBAT

Start at: 2017-11-21 22:14:46

End at: 2017-11-21 22:15:16

# Below is generated by plot.py at 2017-11-22 01:10:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 25.12 Mbit/s

95th percentile per-packet one-way delay: 53.471 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 14.83 Mbit/s

95th percentile per-packet one-way delay: 53.401 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 9.81 Mbit/s

95th percentile per-packet one-way delay: 53.357 ms

Loss rate: 0.02%

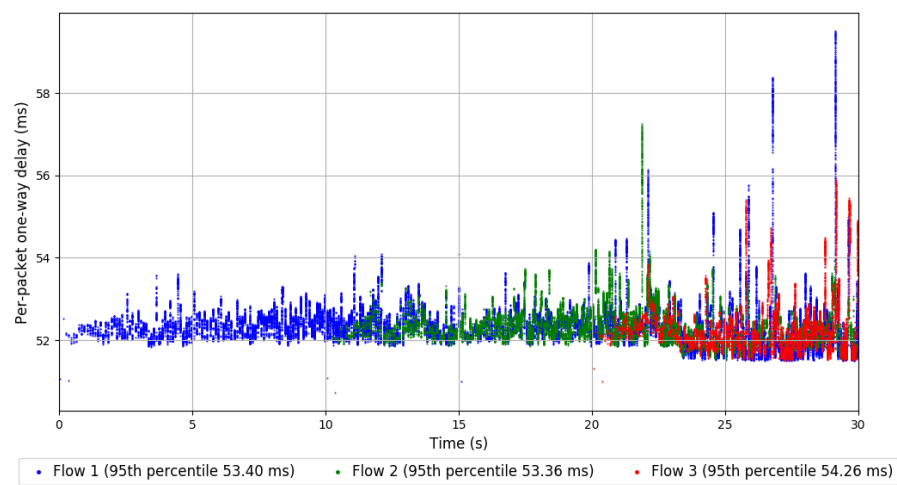
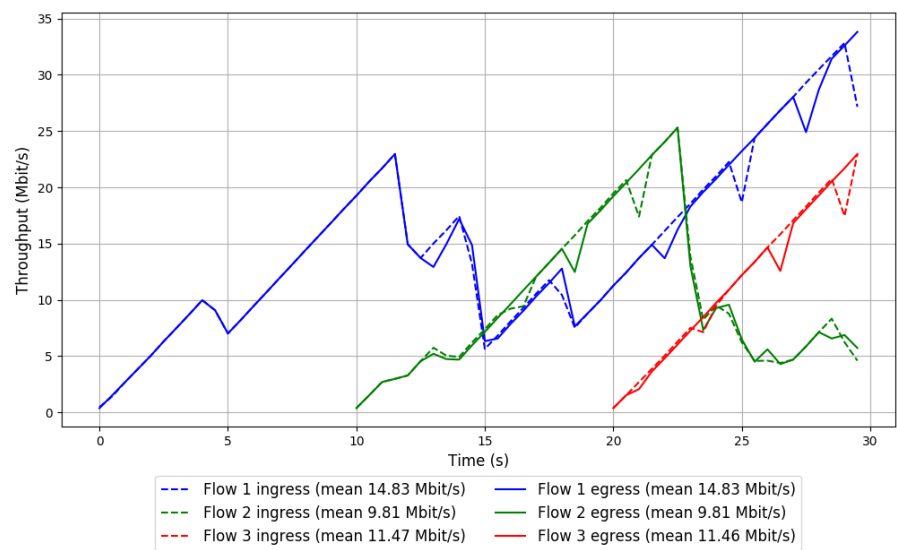
-- Flow 3:

Average throughput: 11.46 Mbit/s

95th percentile per-packet one-way delay: 54.260 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-21 22:26:44

End at: 2017-11-21 22:27:14

# Below is generated by plot.py at 2017-11-22 01:10:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 33.65 Mbit/s

95th percentile per-packet one-way delay: 53.044 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 19.31 Mbit/s

95th percentile per-packet one-way delay: 53.151 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 17.02 Mbit/s

95th percentile per-packet one-way delay: 52.708 ms

Loss rate: 0.00%

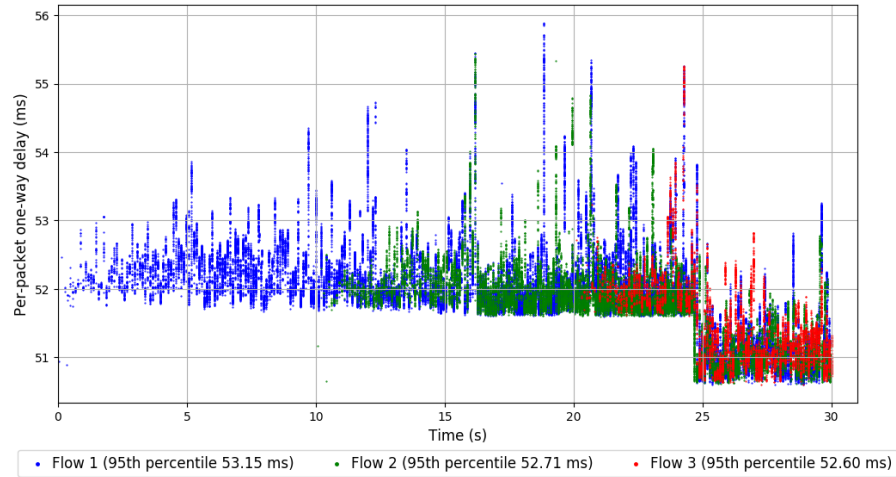
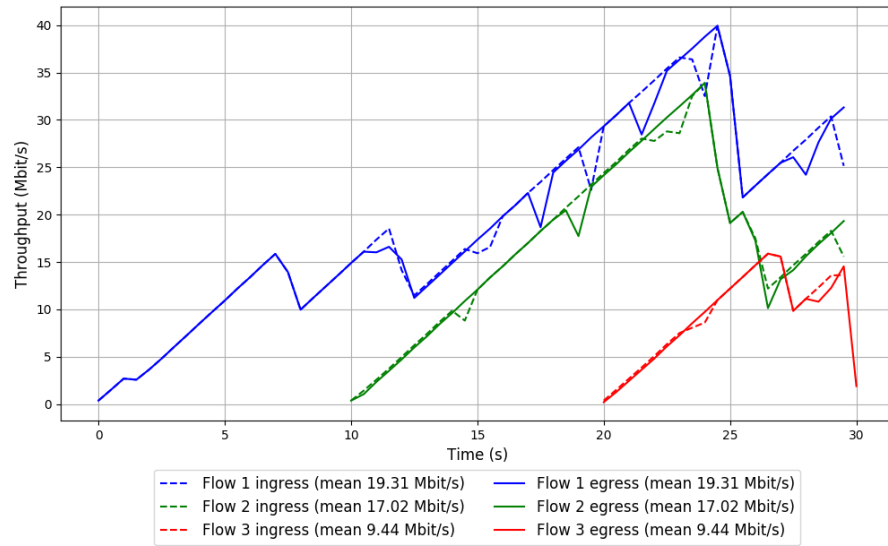
-- Flow 3:

Average throughput: 9.44 Mbit/s

95th percentile per-packet one-way delay: 52.600 ms

Loss rate: 0.00%

## Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-21 22:38:45

End at: 2017-11-21 22:39:15

# Below is generated by plot.py at 2017-11-22 01:10:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 30.40 Mbit/s

95th percentile per-packet one-way delay: 52.830 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 19.96 Mbit/s

95th percentile per-packet one-way delay: 52.951 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 11.68 Mbit/s

95th percentile per-packet one-way delay: 52.514 ms

Loss rate: 0.02%

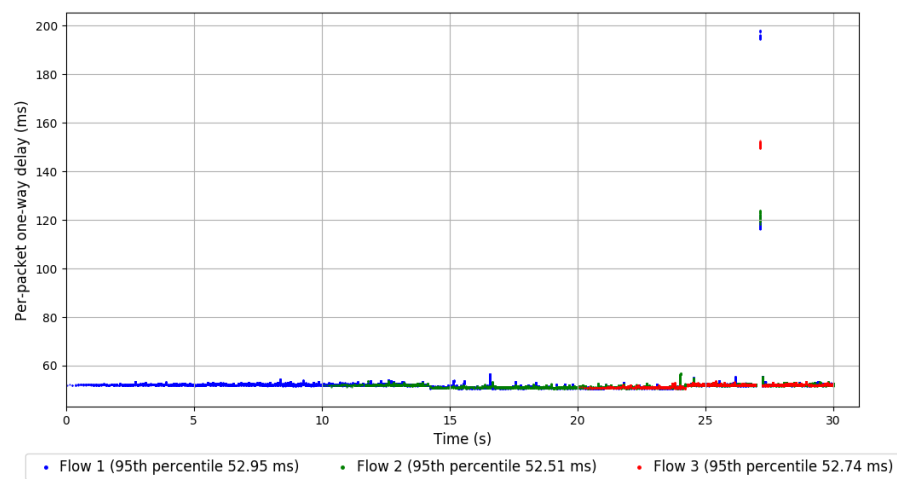
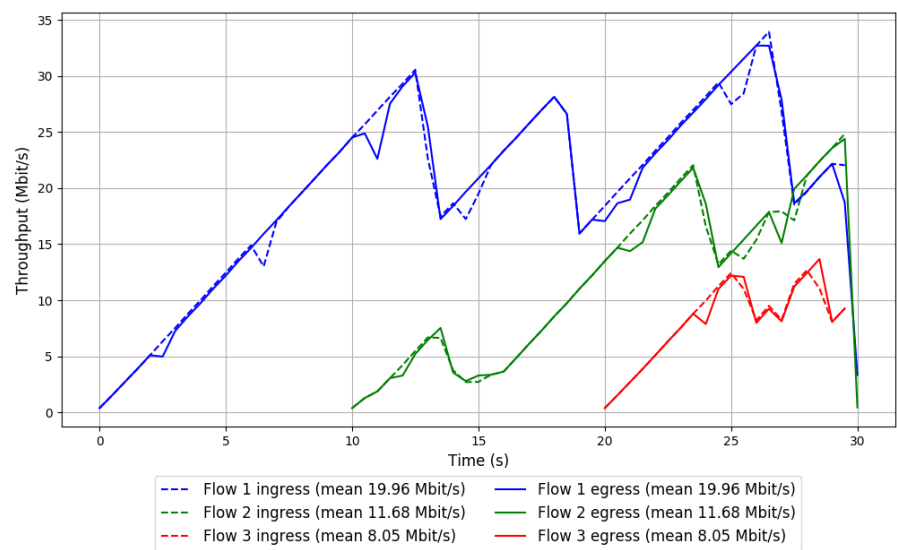
-- Flow 3:

Average throughput: 8.05 Mbit/s

95th percentile per-packet one-way delay: 52.740 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-21 22:50:26

End at: 2017-11-21 22:50:56

# Below is generated by plot.py at 2017-11-22 01:10:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 20.56 Mbit/s

95th percentile per-packet one-way delay: 52.640 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 10.22 Mbit/s

95th percentile per-packet one-way delay: 52.336 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 11.17 Mbit/s

95th percentile per-packet one-way delay: 52.975 ms

Loss rate: 0.00%

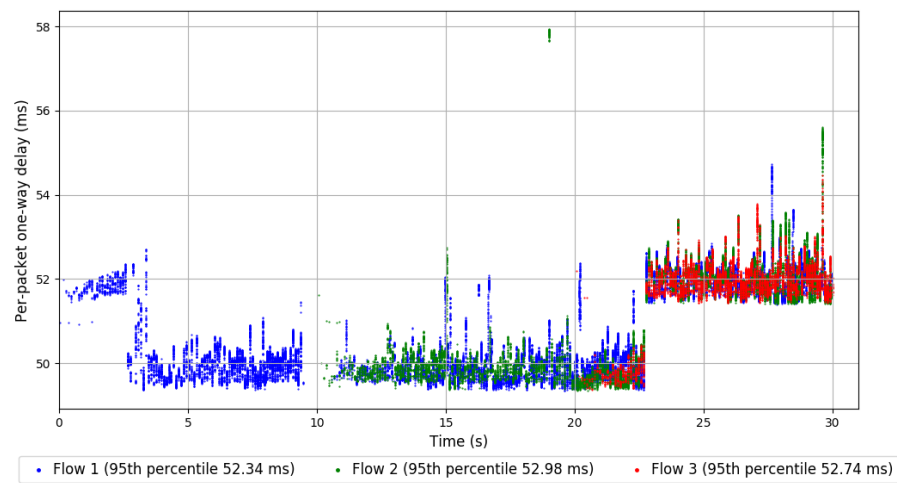
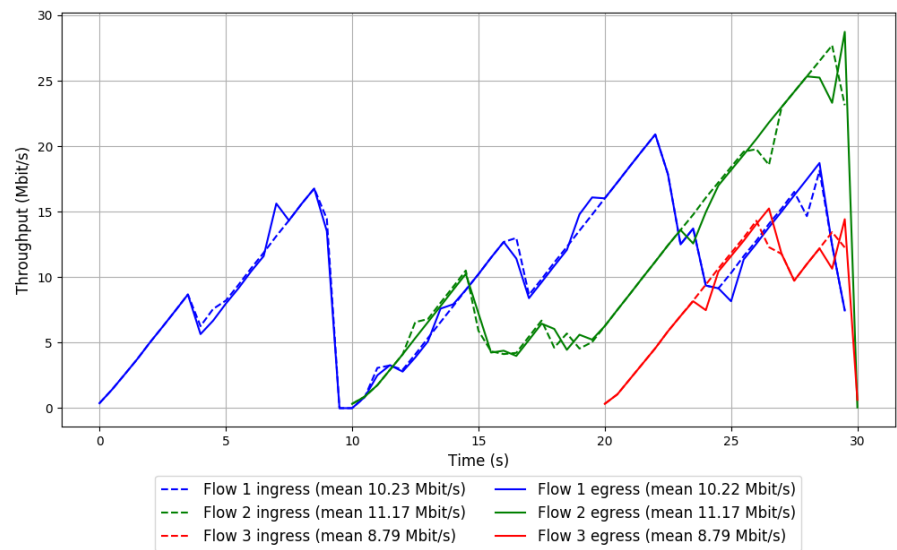
-- Flow 3:

Average throughput: 8.79 Mbit/s

95th percentile per-packet one-way delay: 52.736 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-21 23:02:12

End at: 2017-11-21 23:02:42

# Below is generated by plot.py at 2017-11-22 01:10:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 16.11 Mbit/s

95th percentile per-packet one-way delay: 51.938 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 8.58 Mbit/s

95th percentile per-packet one-way delay: 51.971 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 8.53 Mbit/s

95th percentile per-packet one-way delay: 51.943 ms

Loss rate: 0.03%

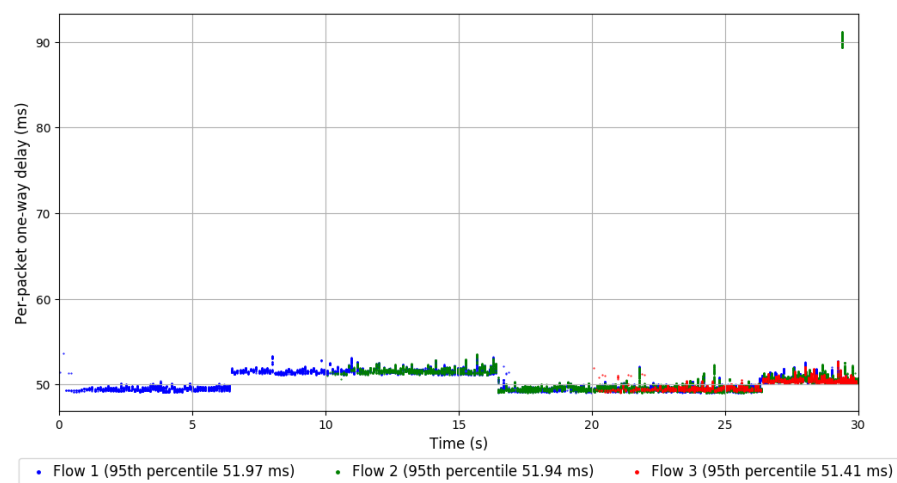
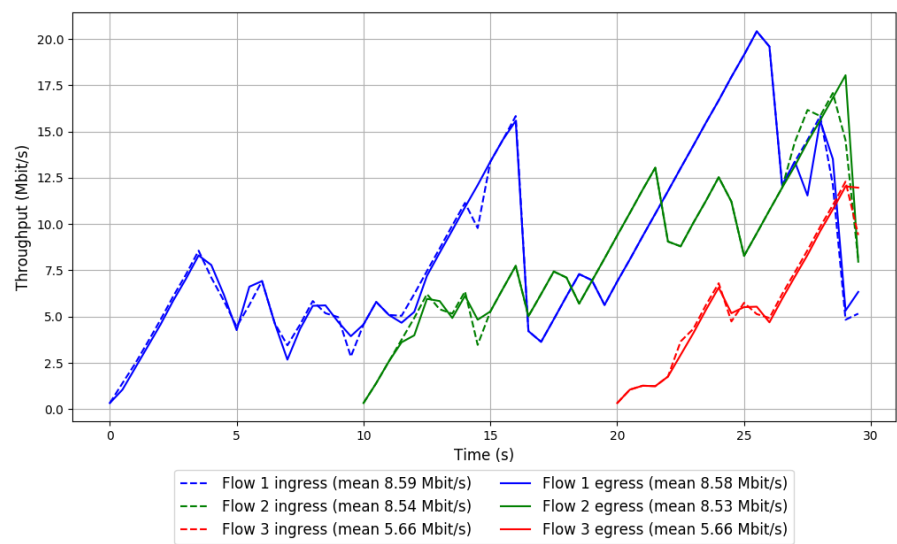
-- Flow 3:

Average throughput: 5.66 Mbit/s

95th percentile per-packet one-way delay: 51.411 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-21 23:14:09

End at: 2017-11-21 23:14:39

# Below is generated by plot.py at 2017-11-22 01:10:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 21.81 Mbit/s

95th percentile per-packet one-way delay: 50.417 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 10.30 Mbit/s

95th percentile per-packet one-way delay: 50.481 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 11.58 Mbit/s

95th percentile per-packet one-way delay: 50.390 ms

Loss rate: 0.01%

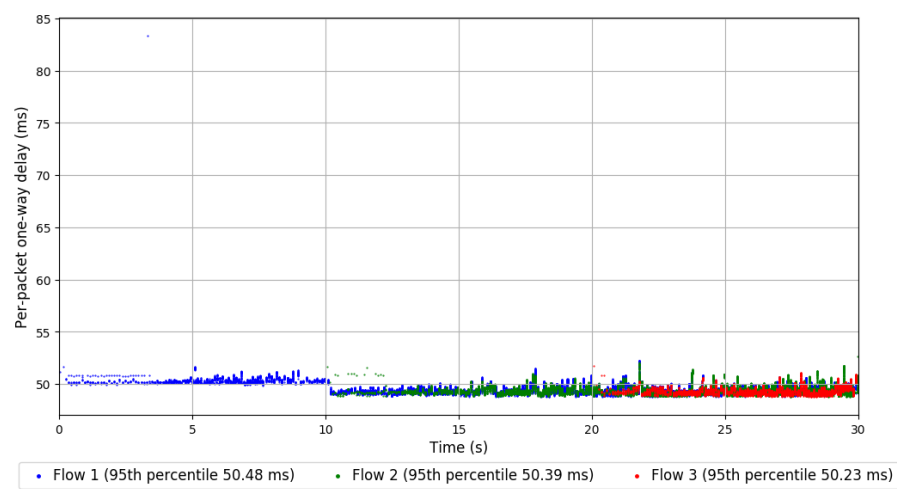
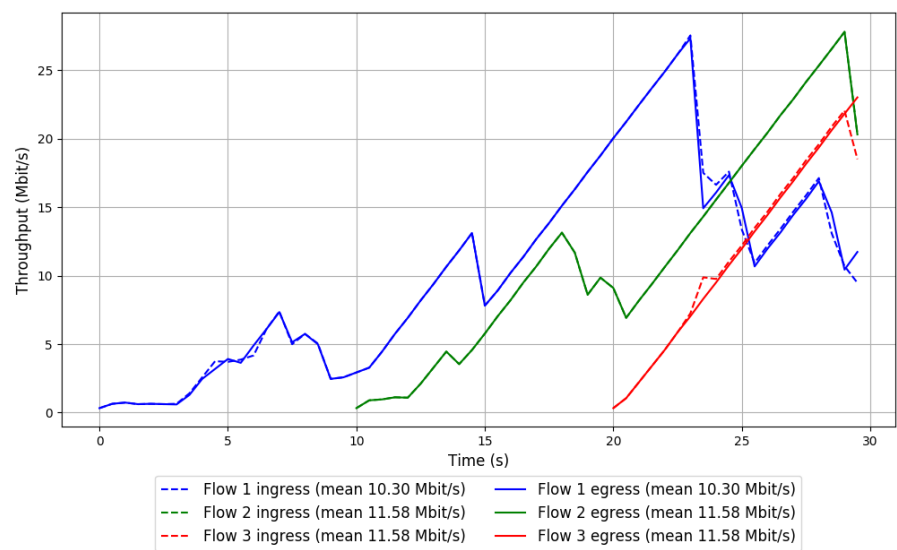
-- Flow 3:

Average throughput: 11.58 Mbit/s

95th percentile per-packet one-way delay: 50.235 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-11-21 23:26:05

End at: 2017-11-21 23:26:35

# Below is generated by plot.py at 2017-11-22 01:10:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 23.70 Mbit/s

95th percentile per-packet one-way delay: 51.829 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 8.87 Mbit/s

95th percentile per-packet one-way delay: 51.628 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 17.80 Mbit/s

95th percentile per-packet one-way delay: 52.044 ms

Loss rate: 0.00%

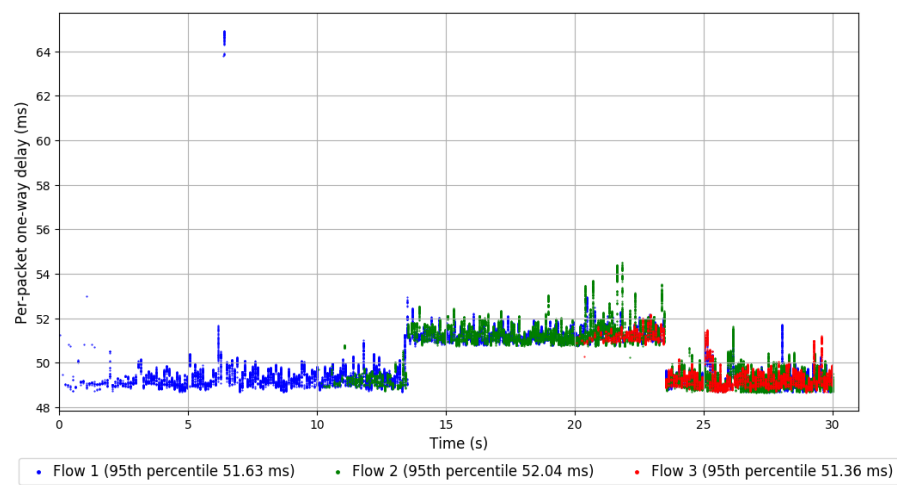
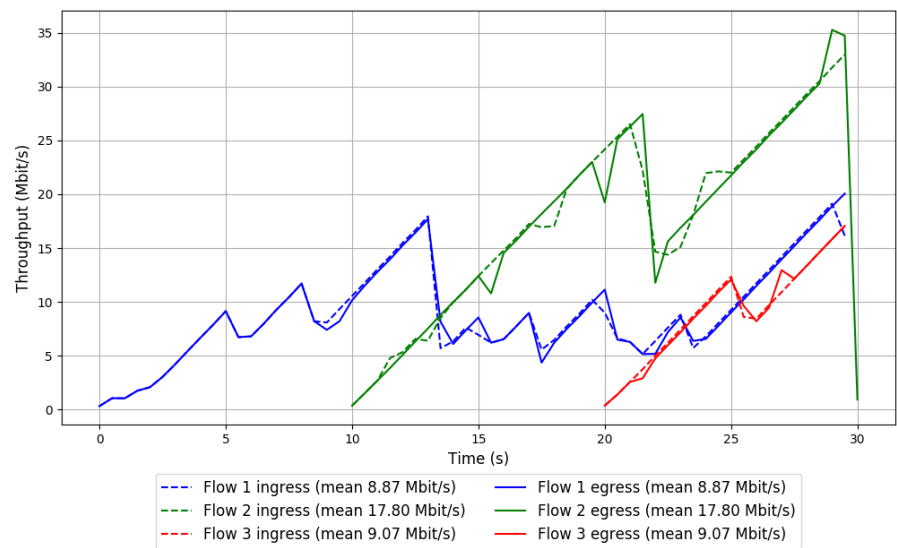
-- Flow 3:

Average throughput: 9.07 Mbit/s

95th percentile per-packet one-way delay: 51.364 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

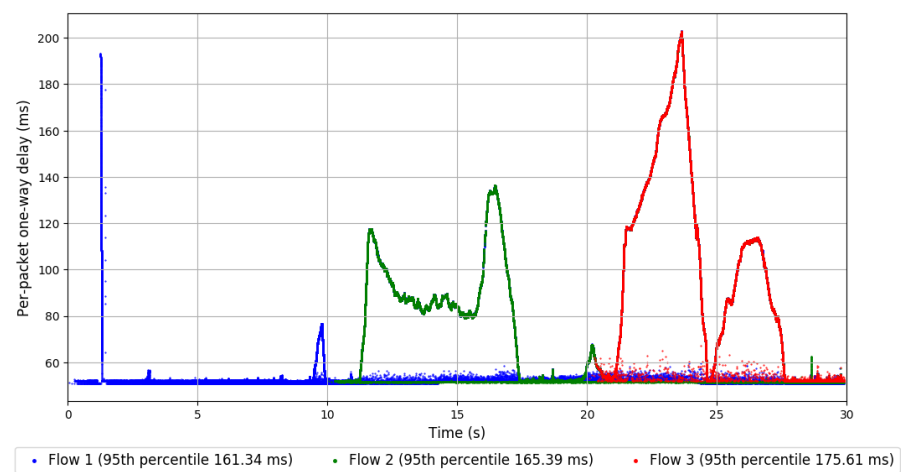
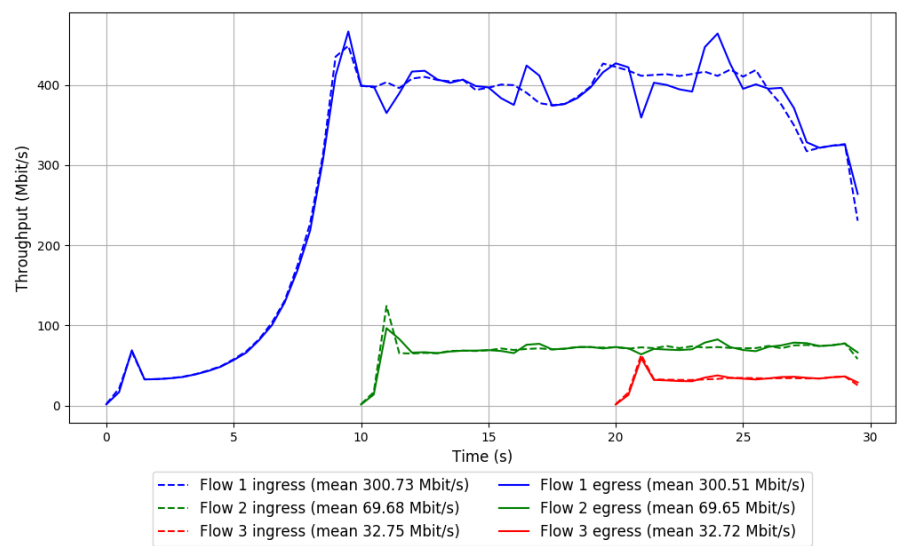


```
Run 1: Statistics of PCC

Start at: 2017-11-21 21:37:40
End at: 2017-11-21 21:38:10

# Below is generated by plot.py at 2017-11-22 01:14:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.57 Mbit/s
95th percentile per-packet one-way delay: 163.293 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 300.51 Mbit/s
95th percentile per-packet one-way delay: 161.339 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 69.65 Mbit/s
95th percentile per-packet one-way delay: 165.394 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 32.72 Mbit/s
95th percentile per-packet one-way delay: 175.609 ms
Loss rate: 0.12%
```

Run 1: Report of PCC — Data Link

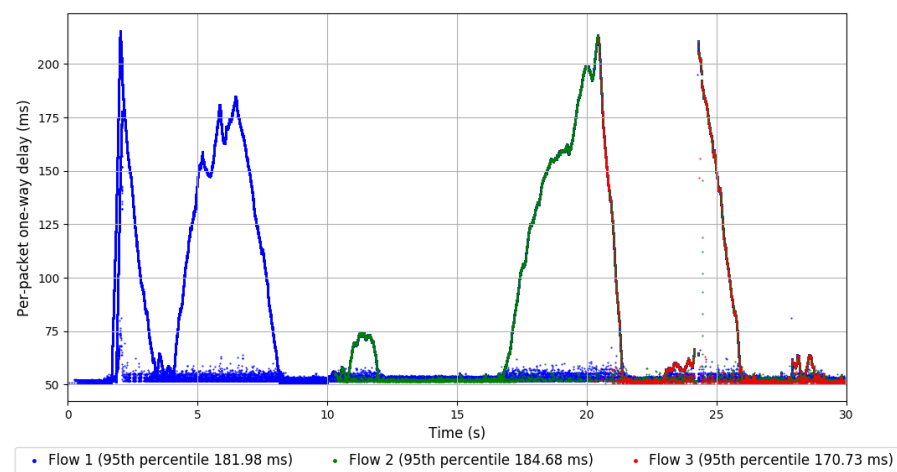
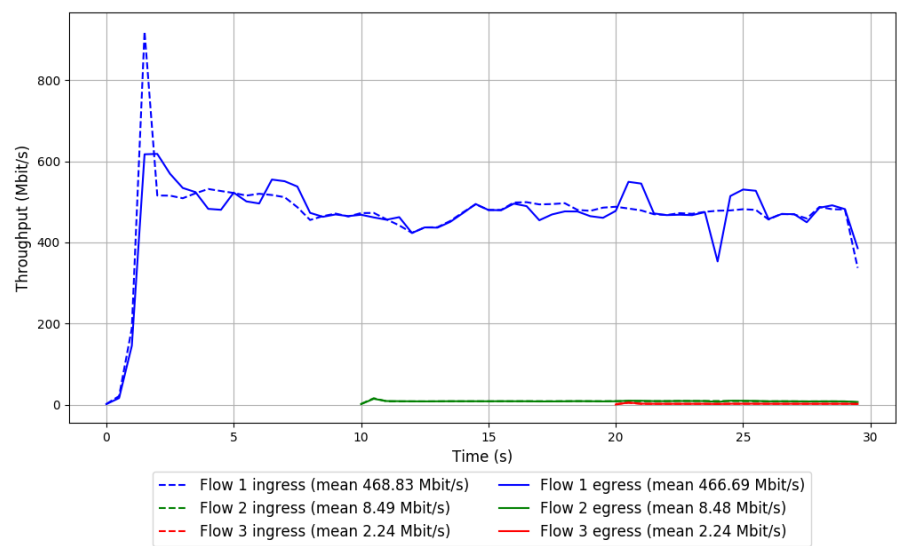


```
Run 2: Statistics of PCC

Start at: 2017-11-21 21:49:17
End at: 2017-11-21 21:49:47

# Below is generated by plot.py at 2017-11-22 01:16:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 473.07 Mbit/s
95th percentile per-packet one-way delay: 182.016 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 466.69 Mbit/s
95th percentile per-packet one-way delay: 181.977 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 184.682 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 170.726 ms
Loss rate: 0.16%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-21 22:01:02

End at: 2017-11-21 22:01:32

# Below is generated by plot.py at 2017-11-22 01:16:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 443.64 Mbit/s

95th percentile per-packet one-way delay: 184.939 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 379.45 Mbit/s

95th percentile per-packet one-way delay: 182.061 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 65.26 Mbit/s

95th percentile per-packet one-way delay: 186.241 ms

Loss rate: 0.96%

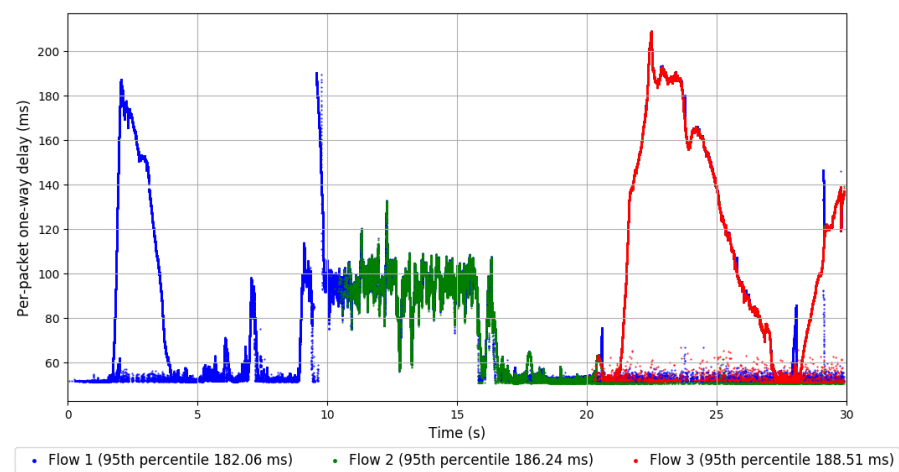
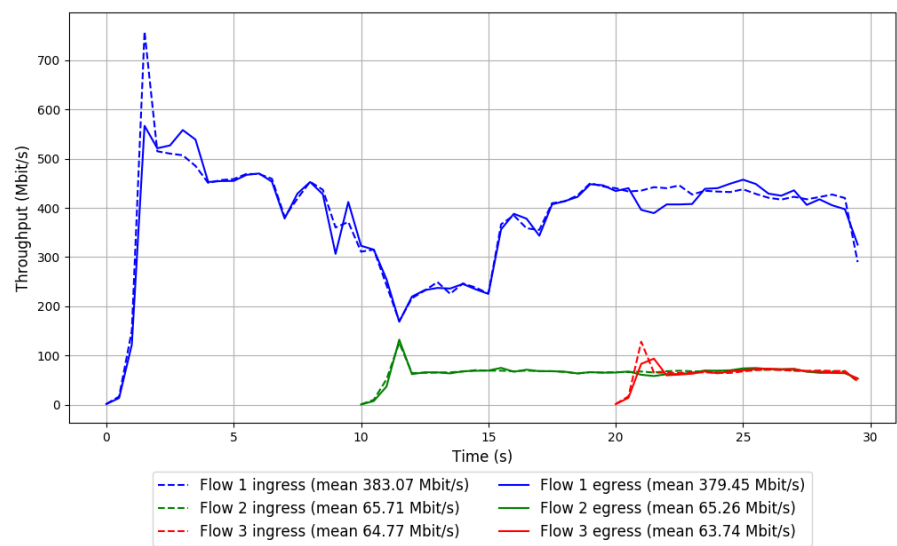
-- Flow 3:

Average throughput: 63.74 Mbit/s

95th percentile per-packet one-way delay: 188.515 ms

Loss rate: 1.58%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

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

End at: 2017-11-21 22:13:27

# Below is generated by plot.py at 2017-11-22 01:16:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 421.85 Mbit/s

95th percentile per-packet one-way delay: 196.673 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 265.87 Mbit/s

95th percentile per-packet one-way delay: 192.145 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 233.59 Mbit/s

95th percentile per-packet one-way delay: 201.980 ms

Loss rate: 1.51%

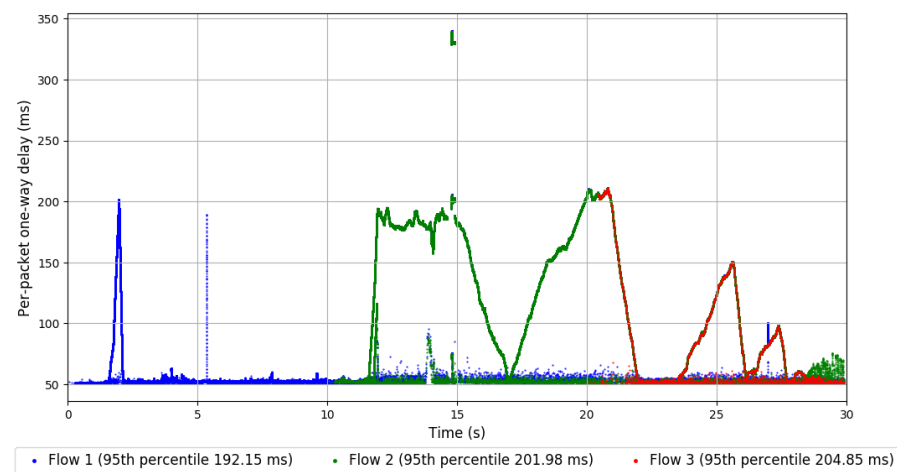
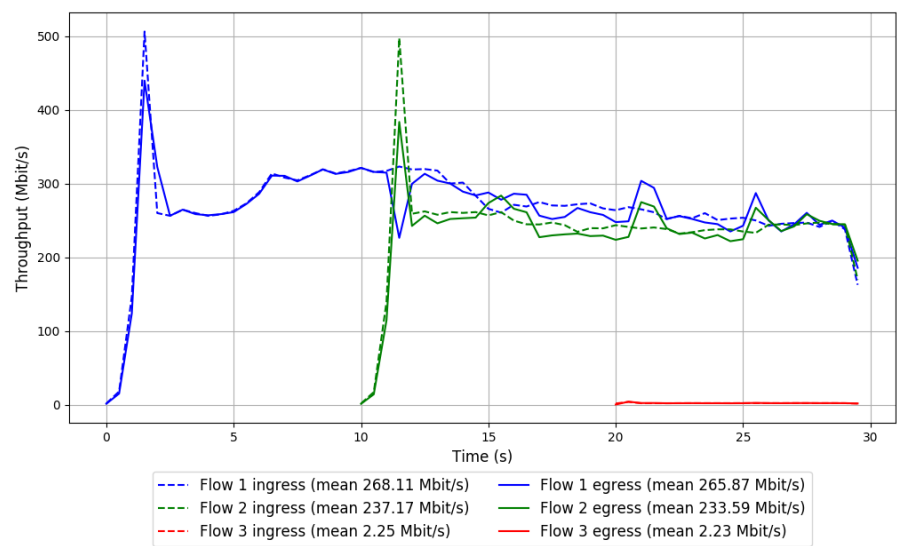
-- Flow 3:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 204.847 ms

Loss rate: 0.81%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-21 22:24:50

End at: 2017-11-21 22:25:20

# Below is generated by plot.py at 2017-11-22 01:19:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 511.33 Mbit/s

95th percentile per-packet one-way delay: 203.620 ms

Loss rate: 2.81%

-- Flow 1:

Average throughput: 488.25 Mbit/s

95th percentile per-packet one-way delay: 203.778 ms

Loss rate: 2.83%

-- Flow 2:

Average throughput: 4.76 Mbit/s

95th percentile per-packet one-way delay: 196.025 ms

Loss rate: 1.64%

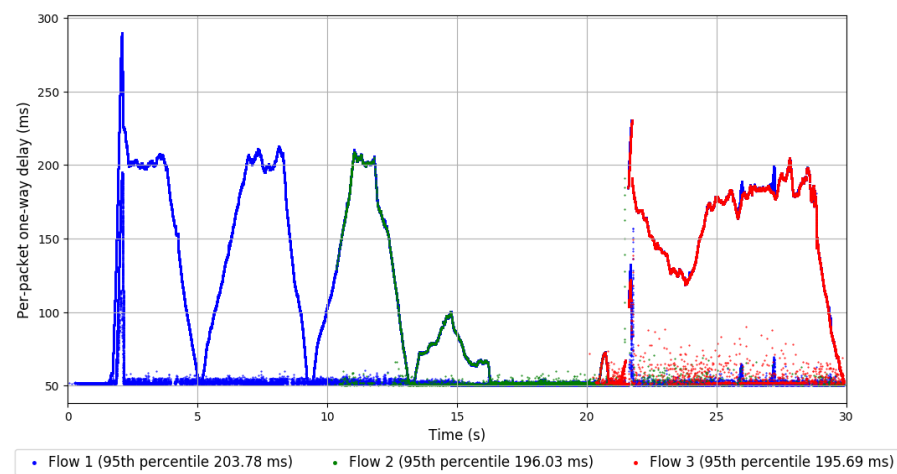
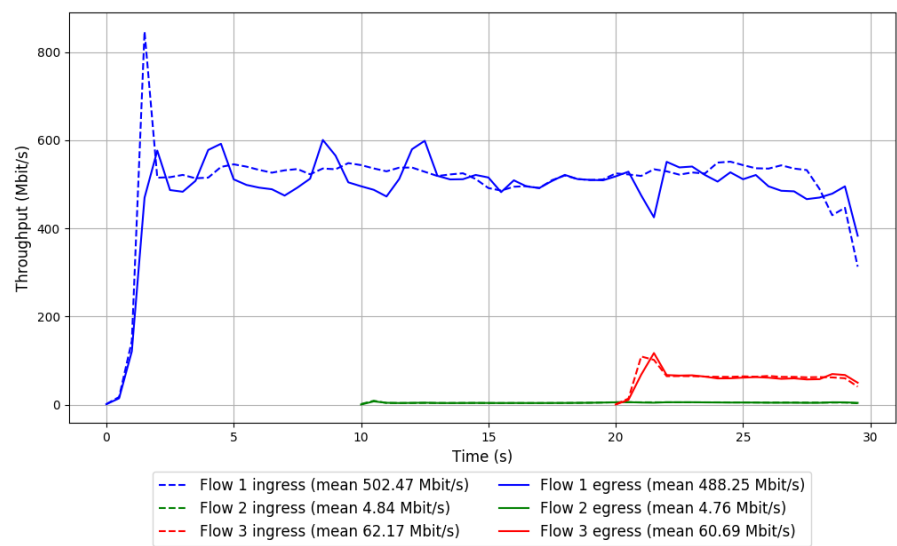
-- Flow 3:

Average throughput: 60.69 Mbit/s

95th percentile per-packet one-way delay: 195.692 ms

Loss rate: 2.57%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-21 22:36:52

End at: 2017-11-21 22:37:22

# Below is generated by plot.py at 2017-11-22 01:20:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 518.32 Mbit/s

95th percentile per-packet one-way delay: 201.587 ms

Loss rate: 2.66%

-- Flow 1:

Average throughput: 497.36 Mbit/s

95th percentile per-packet one-way delay: 201.579 ms

Loss rate: 2.62%

-- Flow 2:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 201.693 ms

Loss rate: 3.52%

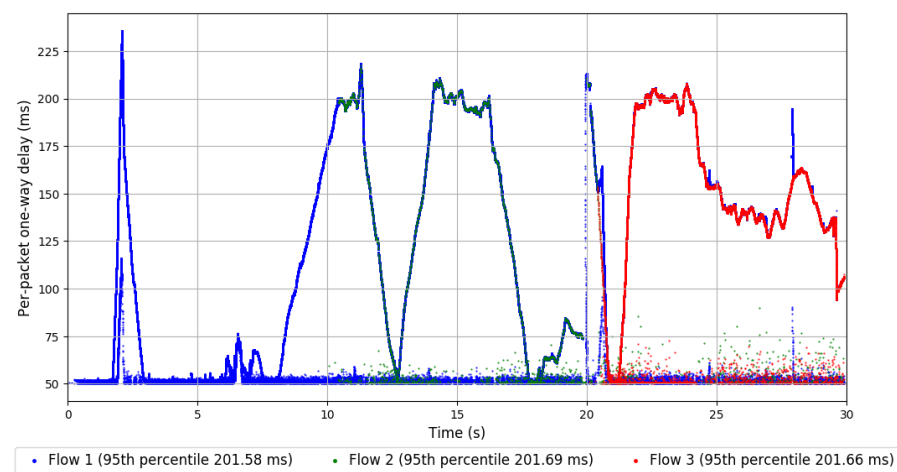
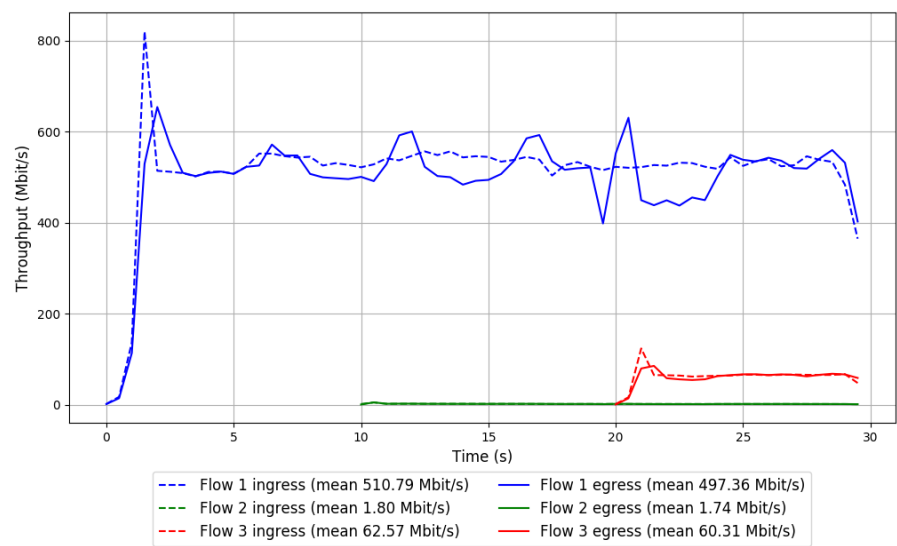
-- Flow 3:

Average throughput: 60.31 Mbit/s

95th percentile per-packet one-way delay: 201.657 ms

Loss rate: 3.58%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-21 22:48:30

End at: 2017-11-21 22:49:00

# Below is generated by plot.py at 2017-11-22 01:20:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 523.06 Mbit/s

95th percentile per-packet one-way delay: 181.303 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 463.97 Mbit/s

95th percentile per-packet one-way delay: 181.413 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 59.31 Mbit/s

95th percentile per-packet one-way delay: 182.825 ms

Loss rate: 0.86%

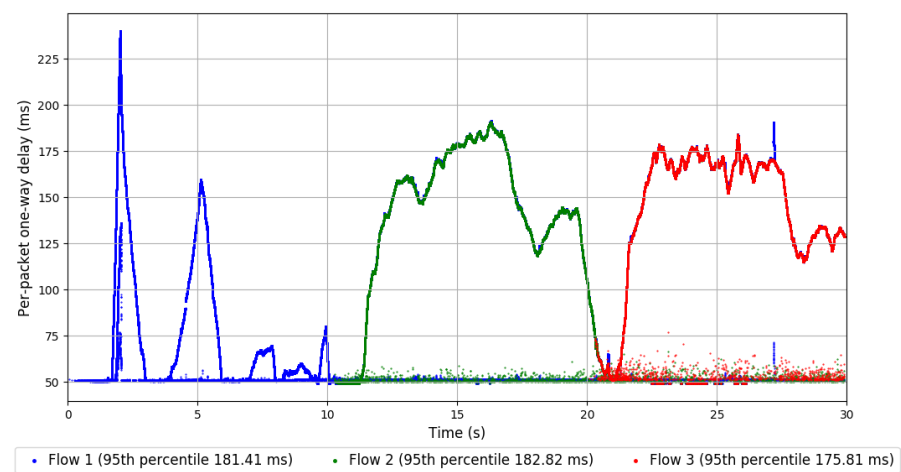
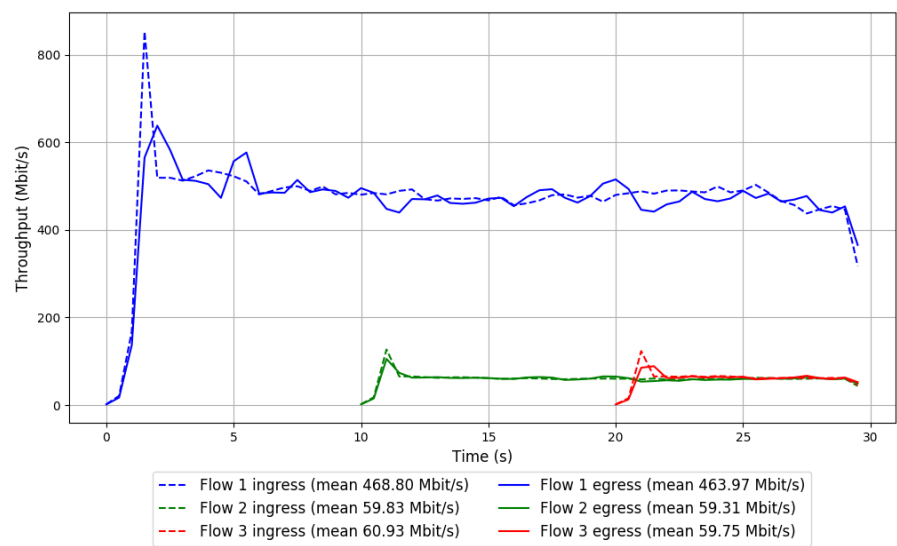
-- Flow 3:

Average throughput: 59.75 Mbit/s

95th percentile per-packet one-way delay: 175.814 ms

Loss rate: 1.92%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-21 23:00:18

End at: 2017-11-21 23:00:48

# Below is generated by plot.py at 2017-11-22 01:20:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 460.64 Mbit/s

95th percentile per-packet one-way delay: 190.690 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 394.39 Mbit/s

95th percentile per-packet one-way delay: 192.530 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 67.01 Mbit/s

95th percentile per-packet one-way delay: 155.473 ms

Loss rate: 0.29%

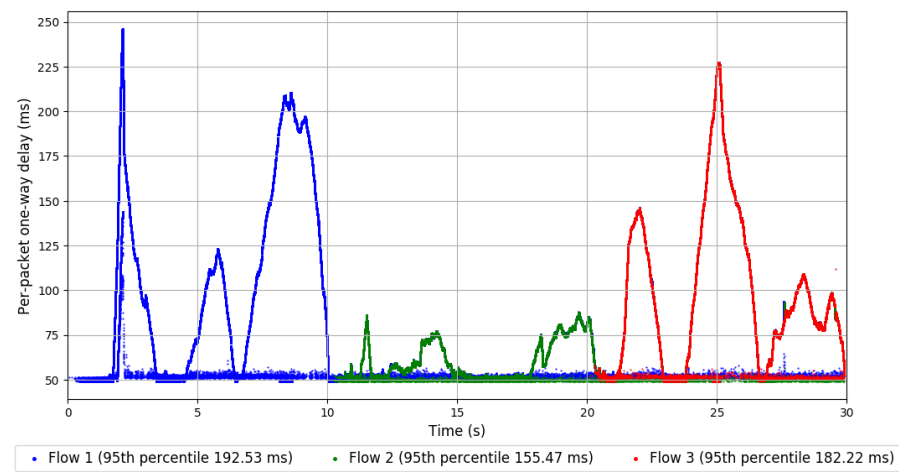
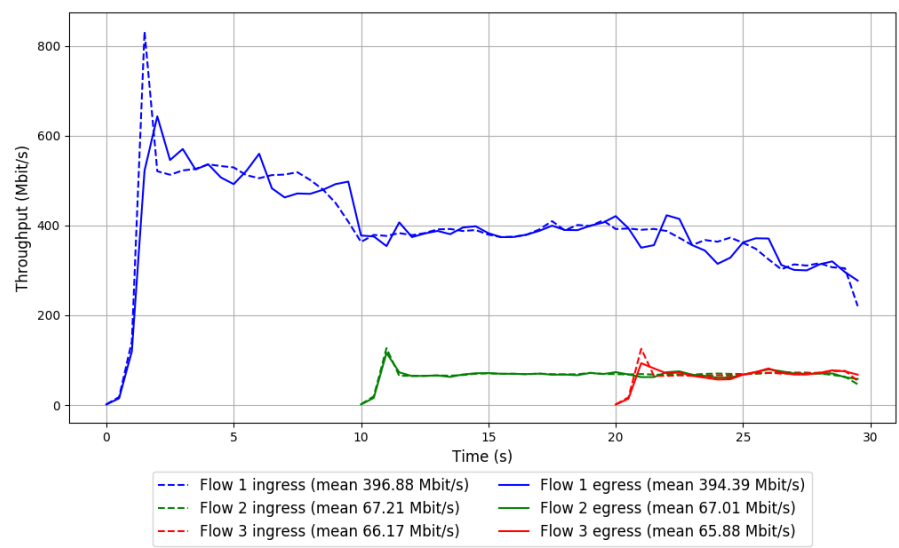
-- Flow 3:

Average throughput: 65.88 Mbit/s

95th percentile per-packet one-way delay: 182.217 ms

Loss rate: 0.43%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

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

End at: 2017-11-21 23:12:42

# Below is generated by plot.py at 2017-11-22 01:24:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 493.14 Mbit/s

95th percentile per-packet one-way delay: 207.793 ms

Loss rate: 6.63%

-- Flow 1:

Average throughput: 454.60 Mbit/s

95th percentile per-packet one-way delay: 208.255 ms

Loss rate: 6.51%

-- Flow 2:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 205.150 ms

Loss rate: 7.38%

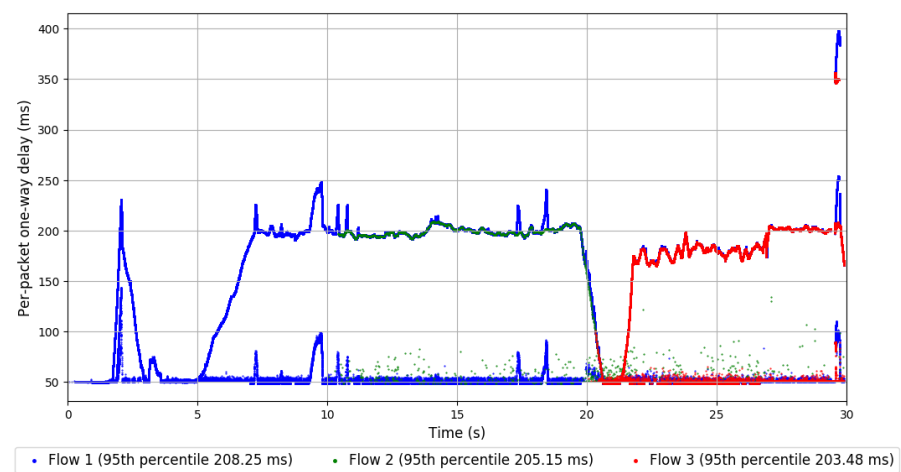
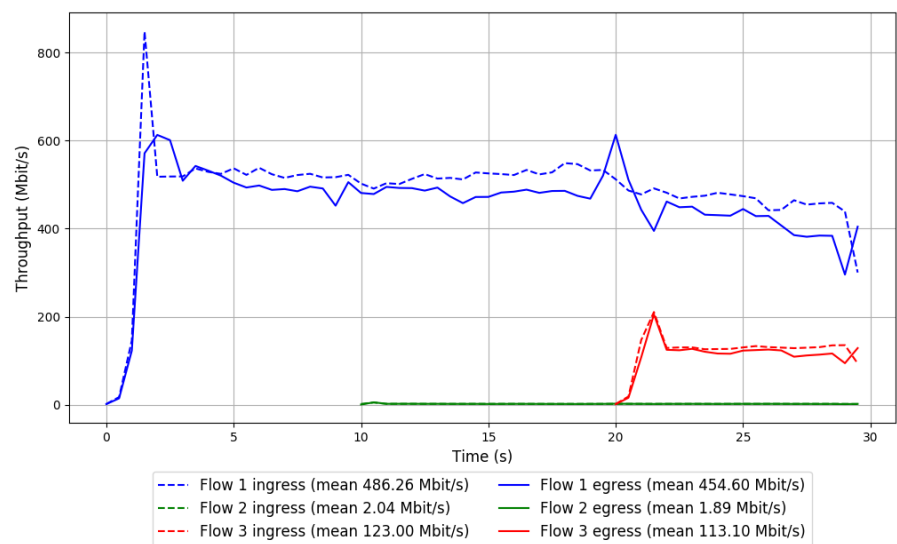
-- Flow 3:

Average throughput: 113.10 Mbit/s

95th percentile per-packet one-way delay: 203.483 ms

Loss rate: 8.07%

Run 9: Report of PCC — Data Link

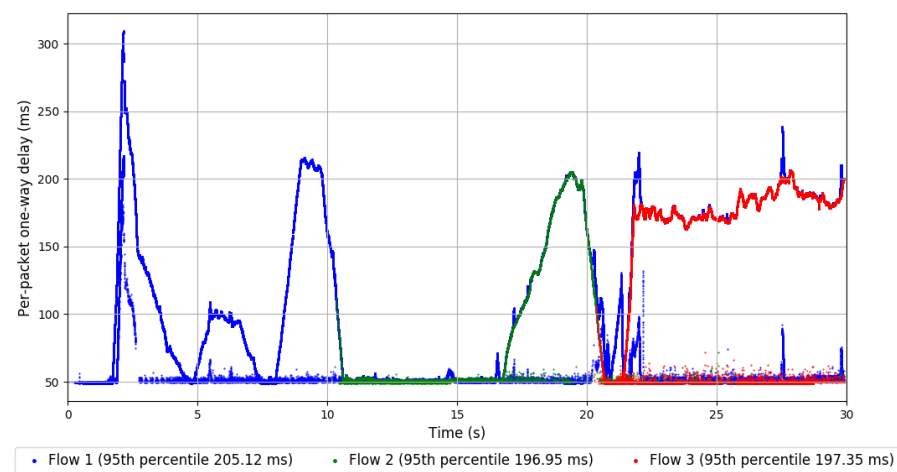
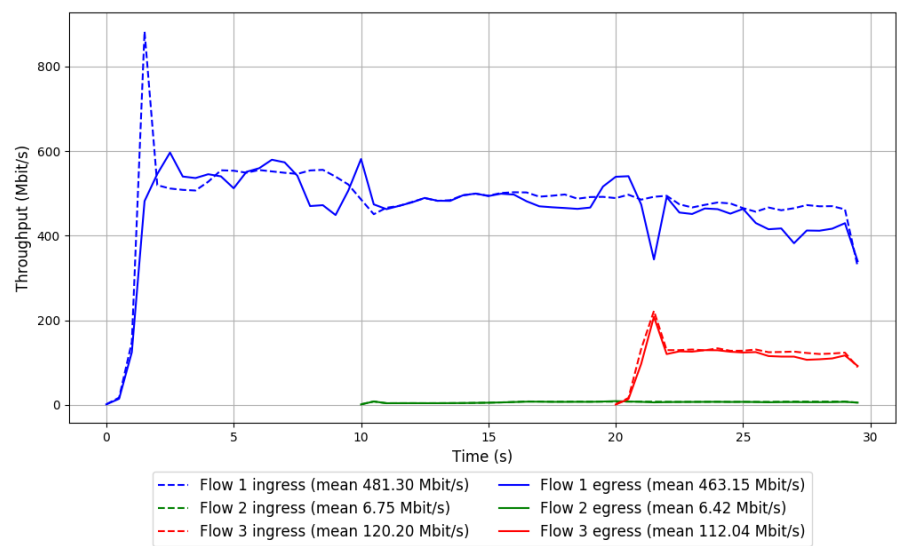


```
Run 10: Statistics of PCC

Start at: 2017-11-21 23:24:10
End at: 2017-11-21 23:24:40

# Below is generated by plot.py at 2017-11-22 01:26:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 504.32 Mbit/s
95th percentile per-packet one-way delay: 204.256 ms
Loss rate: 4.01%
-- Flow 1:
Average throughput: 463.15 Mbit/s
95th percentile per-packet one-way delay: 205.125 ms
Loss rate: 3.77%
-- Flow 2:
Average throughput: 6.42 Mbit/s
95th percentile per-packet one-way delay: 196.953 ms
Loss rate: 4.92%
-- Flow 3:
Average throughput: 112.04 Mbit/s
95th percentile per-packet one-way delay: 197.346 ms
Loss rate: 6.84%
```

Run 10: Report of PCC — Data Link

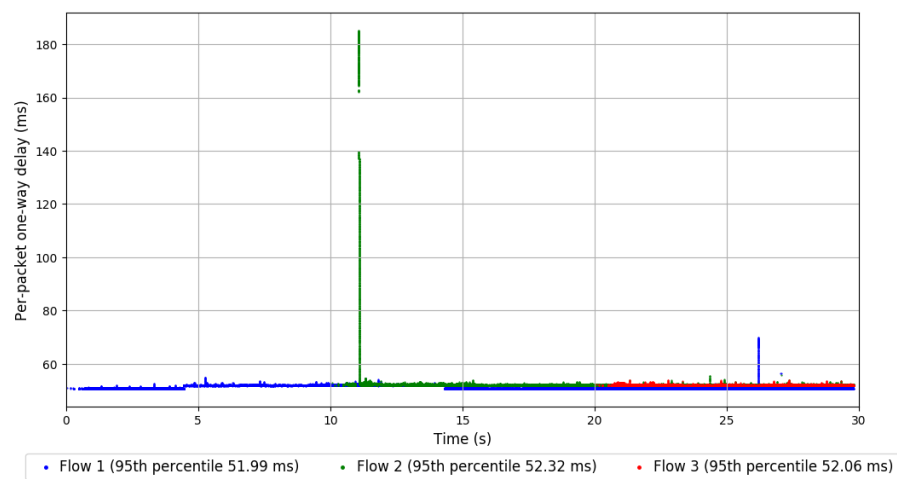
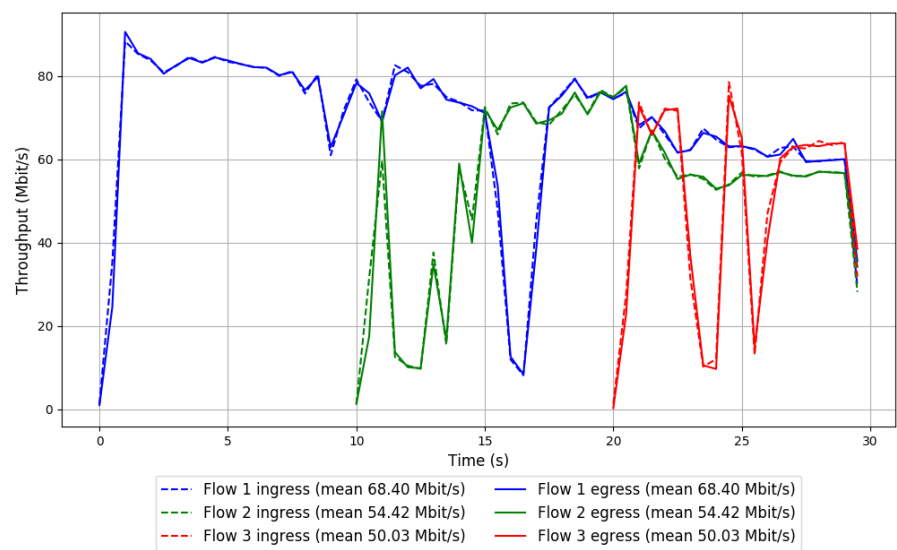


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-11-21 21:36:00
End at: 2017-11-21 21:36:30

# Below is generated by plot.py at 2017-11-22 01:26:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 120.89 Mbit/s
95th percentile per-packet one-way delay: 52.124 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 68.40 Mbit/s
95th percentile per-packet one-way delay: 51.987 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 54.42 Mbit/s
95th percentile per-packet one-way delay: 52.316 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 50.03 Mbit/s
95th percentile per-packet one-way delay: 52.063 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-11-21 21:47:37

End at: 2017-11-21 21:48:07

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 123.25 Mbit/s

95th percentile per-packet one-way delay: 51.827 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 69.50 Mbit/s

95th percentile per-packet one-way delay: 51.867 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 56.30 Mbit/s

95th percentile per-packet one-way delay: 51.513 ms

Loss rate: 0.00%

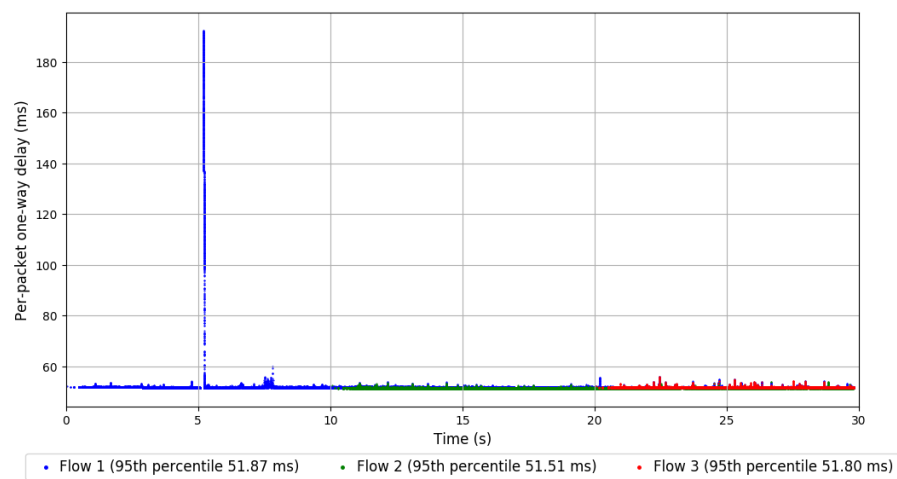
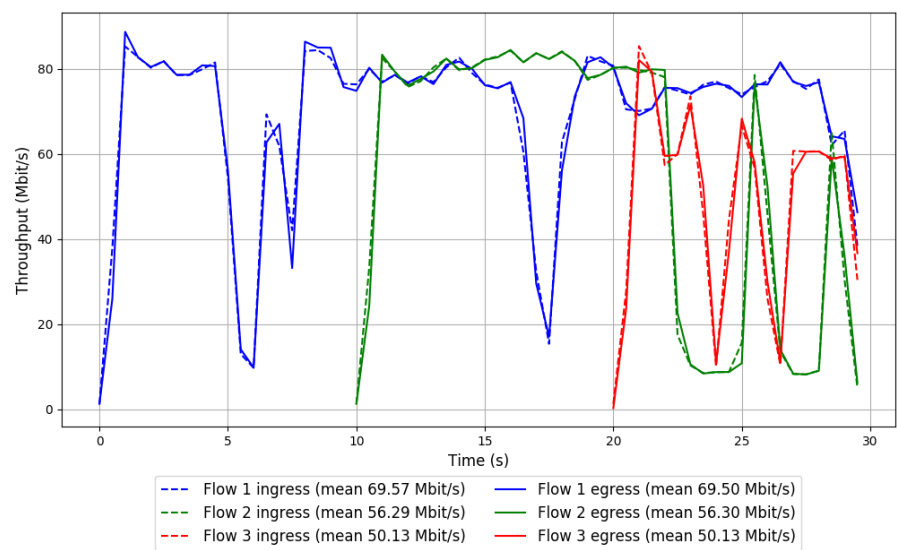
-- Flow 3:

Average throughput: 50.13 Mbit/s

95th percentile per-packet one-way delay: 51.803 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-21 21:59:20

End at: 2017-11-21 21:59:51

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 120.71 Mbit/s

95th percentile per-packet one-way delay: 51.631 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.01 Mbit/s

95th percentile per-packet one-way delay: 51.044 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.34 Mbit/s

95th percentile per-packet one-way delay: 51.723 ms

Loss rate: 0.00%

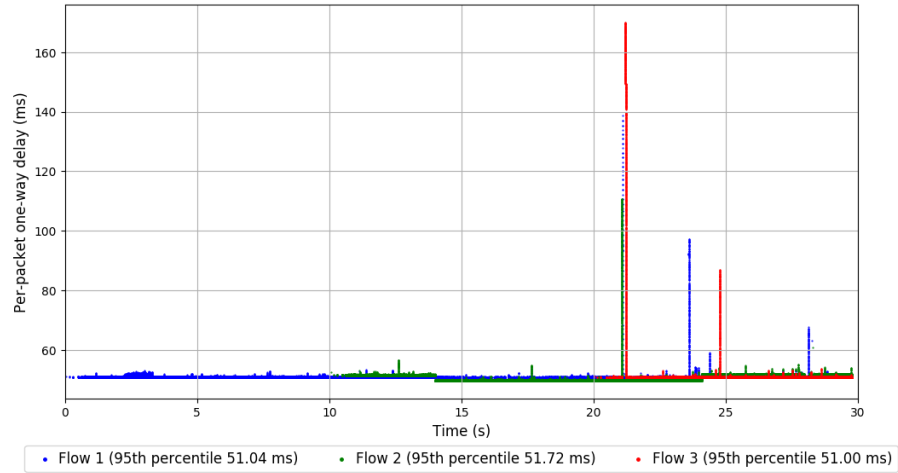
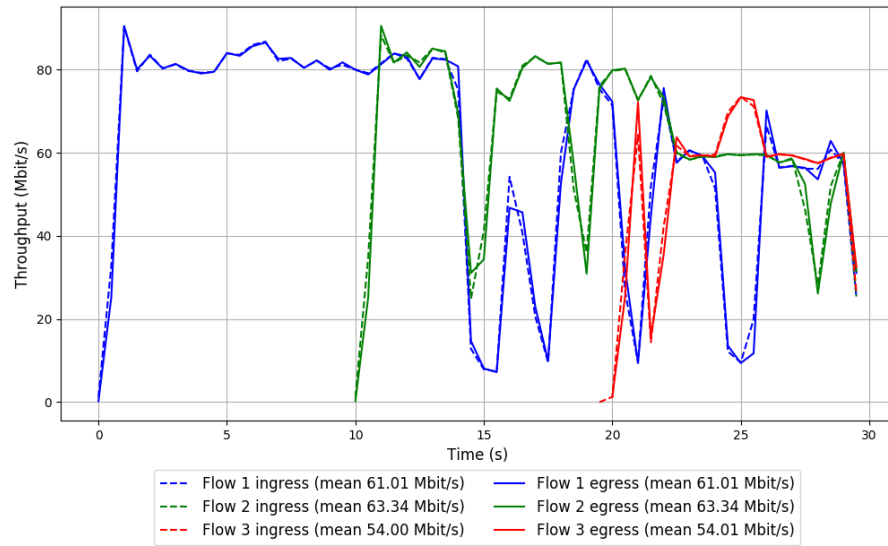
-- Flow 3:

Average throughput: 54.01 Mbit/s

95th percentile per-packet one-way delay: 51.003 ms

Loss rate: 0.00%

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



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-21 22:11:22

End at: 2017-11-21 22:11:52

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 136.25 Mbit/s

95th percentile per-packet one-way delay: 51.724 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.25 Mbit/s

95th percentile per-packet one-way delay: 51.589 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.04 Mbit/s

95th percentile per-packet one-way delay: 51.801 ms

Loss rate: 0.00%

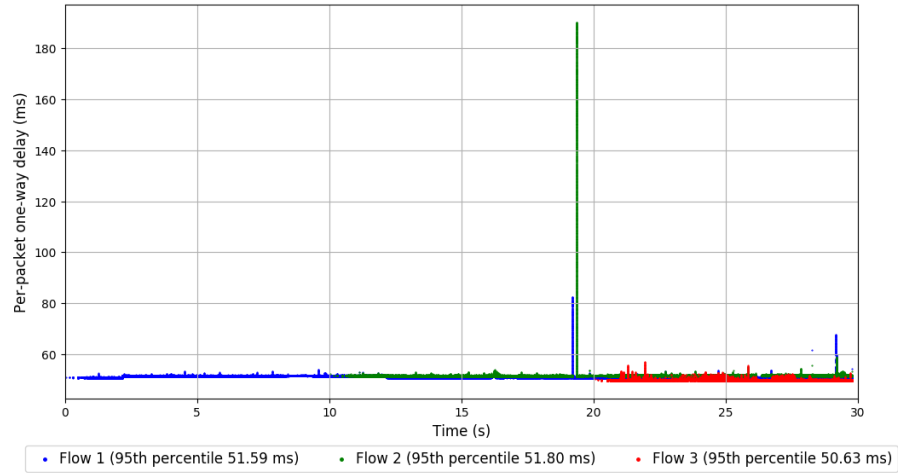
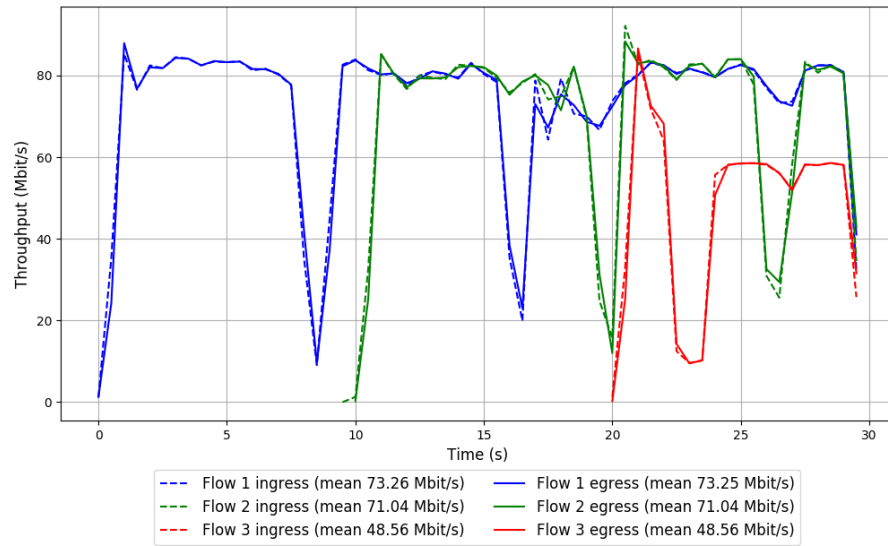
-- Flow 3:

Average throughput: 48.56 Mbit/s

95th percentile per-packet one-way delay: 50.632 ms

Loss rate: 0.00%

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



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-21 22:23:10

End at: 2017-11-21 22:23:40

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 123.39 Mbit/s

95th percentile per-packet one-way delay: 51.729 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.14 Mbit/s

95th percentile per-packet one-way delay: 51.772 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 64.26 Mbit/s

95th percentile per-packet one-way delay: 50.883 ms

Loss rate: 0.00%

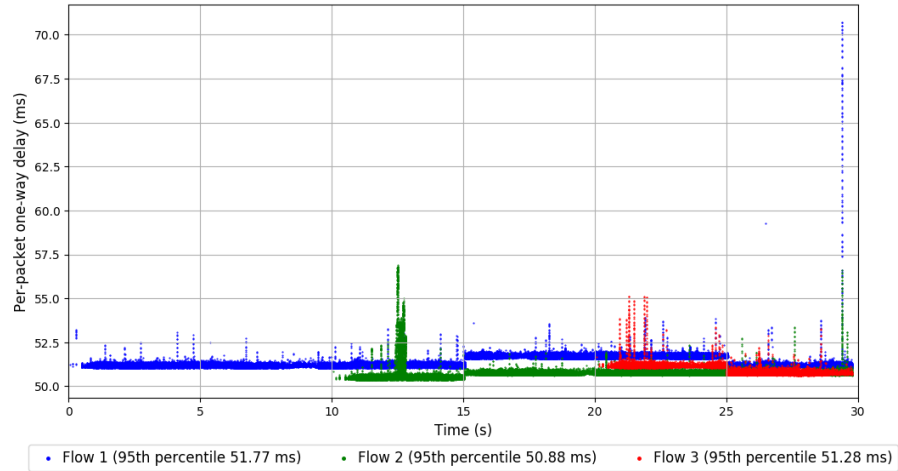
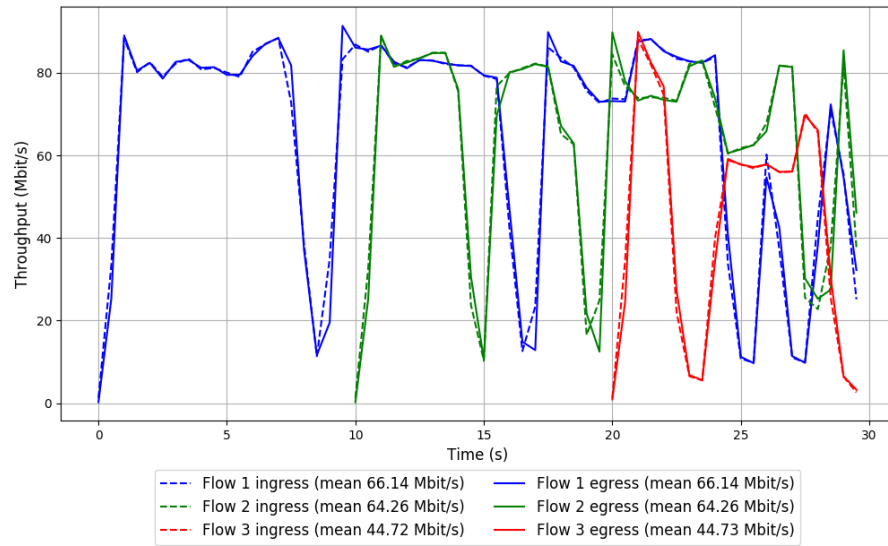
-- Flow 3:

Average throughput: 44.73 Mbit/s

95th percentile per-packet one-way delay: 51.276 ms

Loss rate: 0.00%

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



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-21 22:35:14

End at: 2017-11-21 22:35:44

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 98.02 Mbit/s

95th percentile per-packet one-way delay: 51.790 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.45 Mbit/s

95th percentile per-packet one-way delay: 51.877 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 59.31 Mbit/s

95th percentile per-packet one-way delay: 51.766 ms

Loss rate: 0.00%

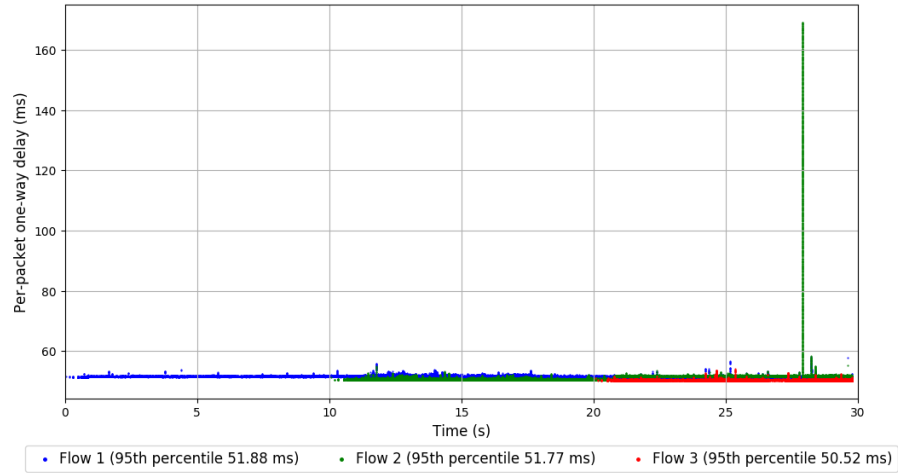
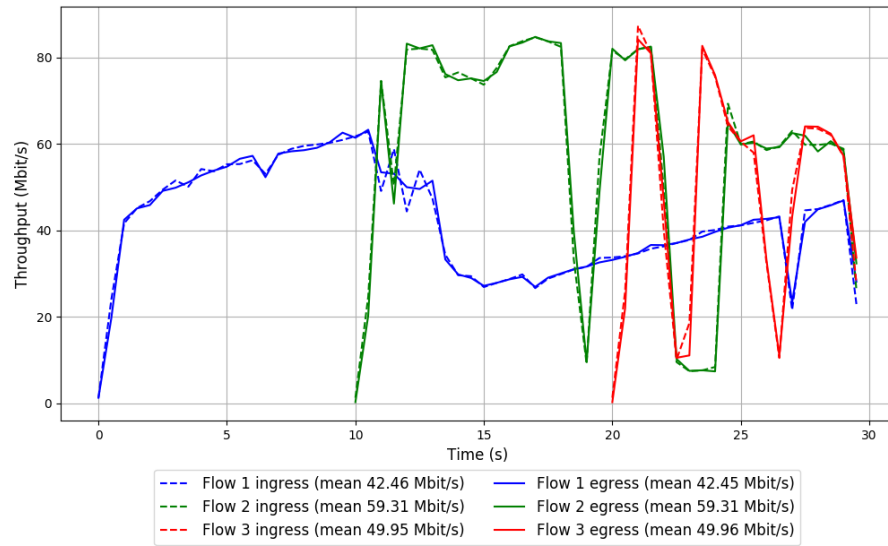
-- Flow 3:

Average throughput: 49.96 Mbit/s

95th percentile per-packet one-way delay: 50.523 ms

Loss rate: 0.00%

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



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-21 22:46:51

End at: 2017-11-21 22:47:21

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 91.78 Mbit/s

95th percentile per-packet one-way delay: 51.549 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 68.86 Mbit/s

95th percentile per-packet one-way delay: 50.730 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.84 Mbit/s

95th percentile per-packet one-way delay: 51.634 ms

Loss rate: 2.97%

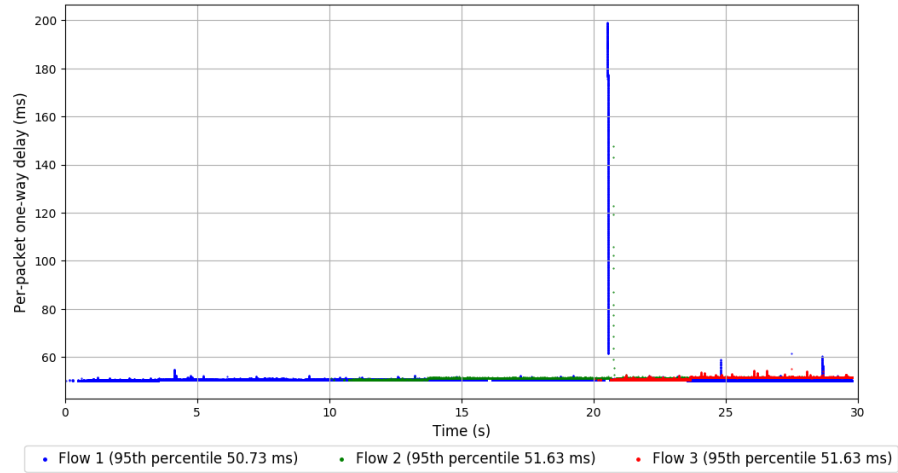
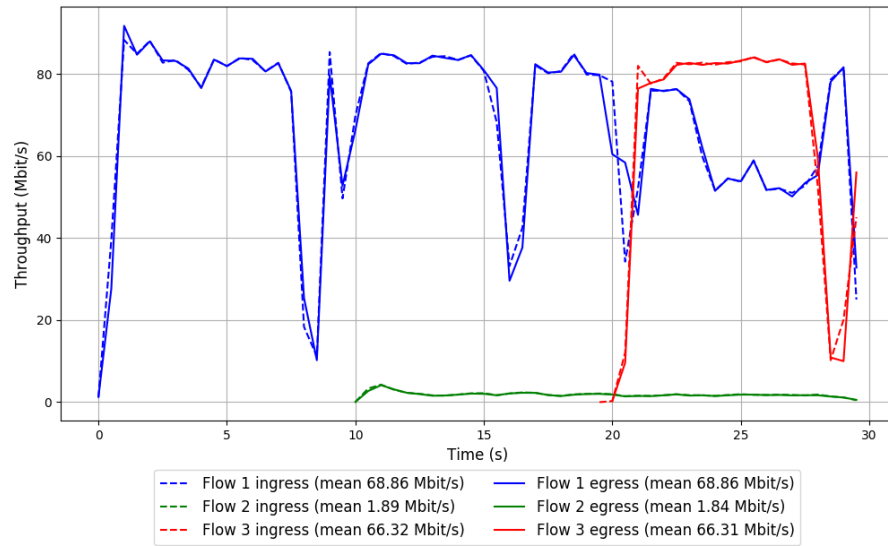
-- Flow 3:

Average throughput: 66.31 Mbit/s

95th percentile per-packet one-way delay: 51.635 ms

Loss rate: 0.00%

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



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-21 22:58:38

End at: 2017-11-21 22:59:08

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 115.36 Mbit/s

95th percentile per-packet one-way delay: 51.461 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.88 Mbit/s

95th percentile per-packet one-way delay: 51.485 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.14 Mbit/s

95th percentile per-packet one-way delay: 51.403 ms

Loss rate: 0.00%

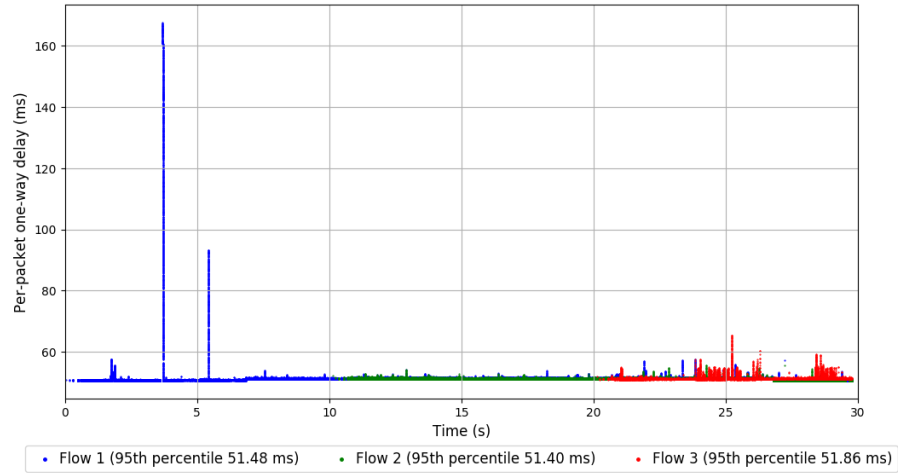
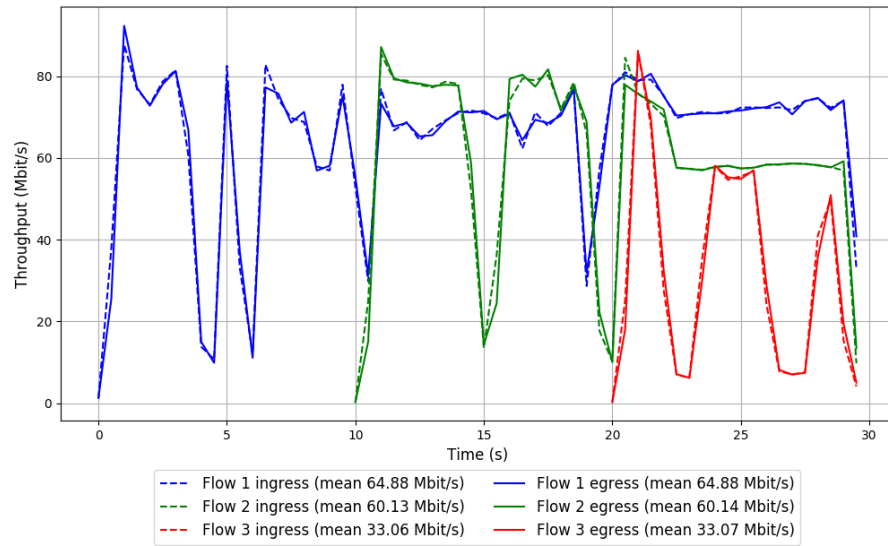
-- Flow 3:

Average throughput: 33.07 Mbit/s

95th percentile per-packet one-way delay: 51.856 ms

Loss rate: 0.00%

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



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-21 23:10:33

End at: 2017-11-21 23:11:03

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 122.47 Mbit/s

95th percentile per-packet one-way delay: 50.952 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.65 Mbit/s

95th percentile per-packet one-way delay: 49.907 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.74 Mbit/s

95th percentile per-packet one-way delay: 49.159 ms

Loss rate: 0.00%

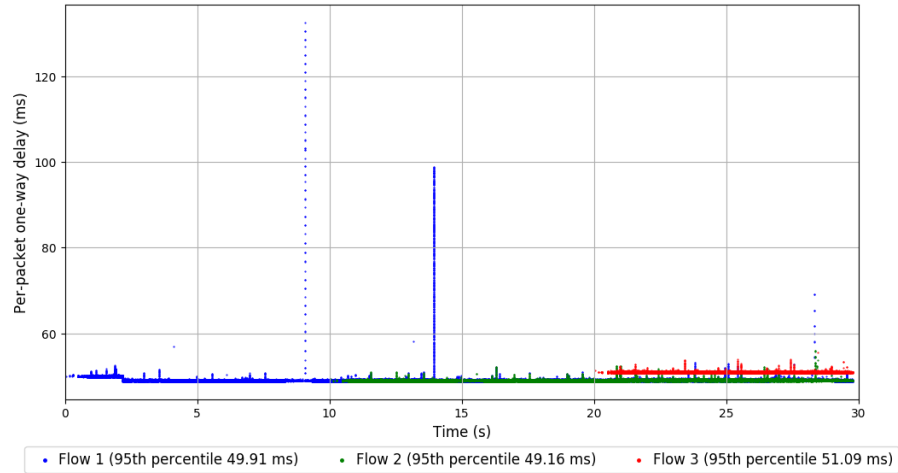
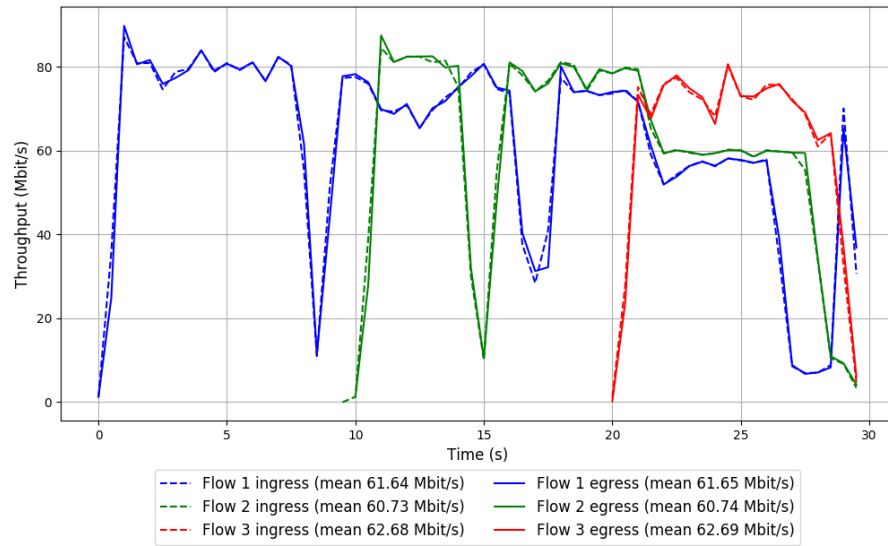
-- Flow 3:

Average throughput: 62.69 Mbit/s

95th percentile per-packet one-way delay: 51.087 ms

Loss rate: 0.00%

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



Run 10: Statistics of QUIC Cubic

Start at: 2017-11-21 23:22:31

End at: 2017-11-21 23:23:01

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 101.11 Mbit/s

95th percentile per-packet one-way delay: 50.919 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.19 Mbit/s

95th percentile per-packet one-way delay: 50.975 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.20 Mbit/s

95th percentile per-packet one-way delay: 49.096 ms

Loss rate: 0.00%

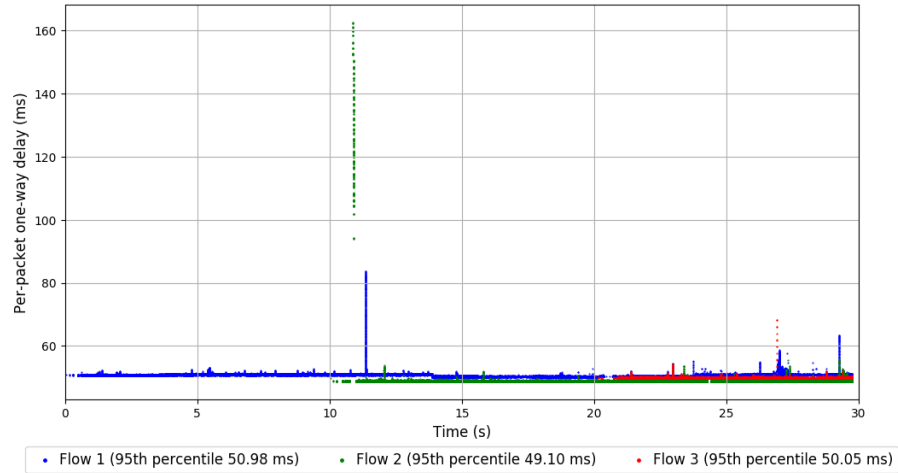
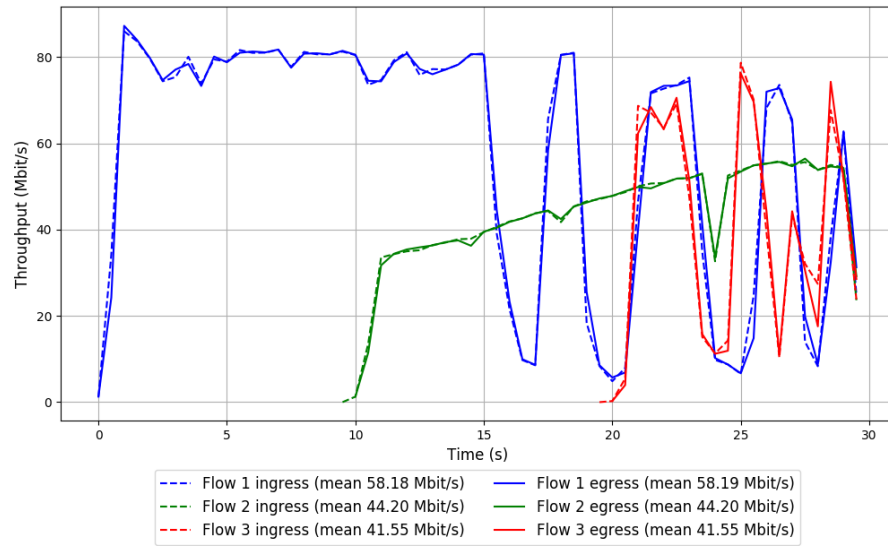
-- Flow 3:

Average throughput: 41.55 Mbit/s

95th percentile per-packet one-way delay: 50.052 ms

Loss rate: 0.00%

# Run 10: Report of QUIC Cubic — Data Link

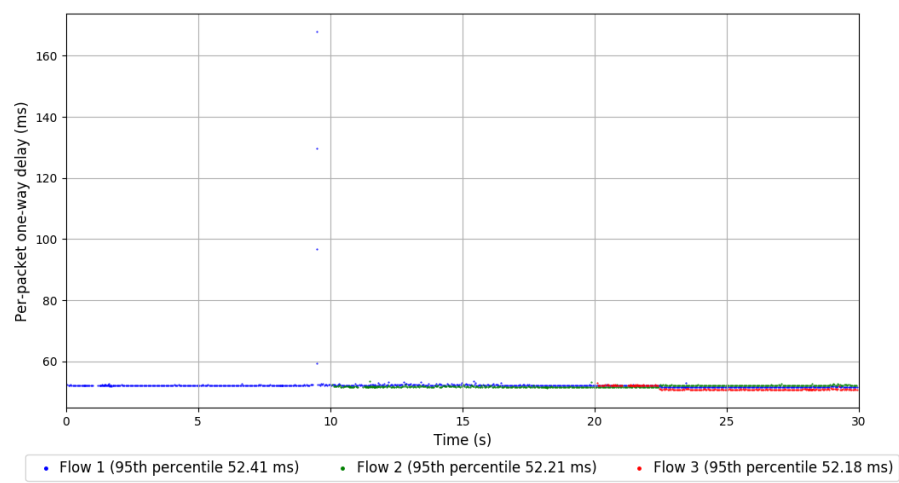
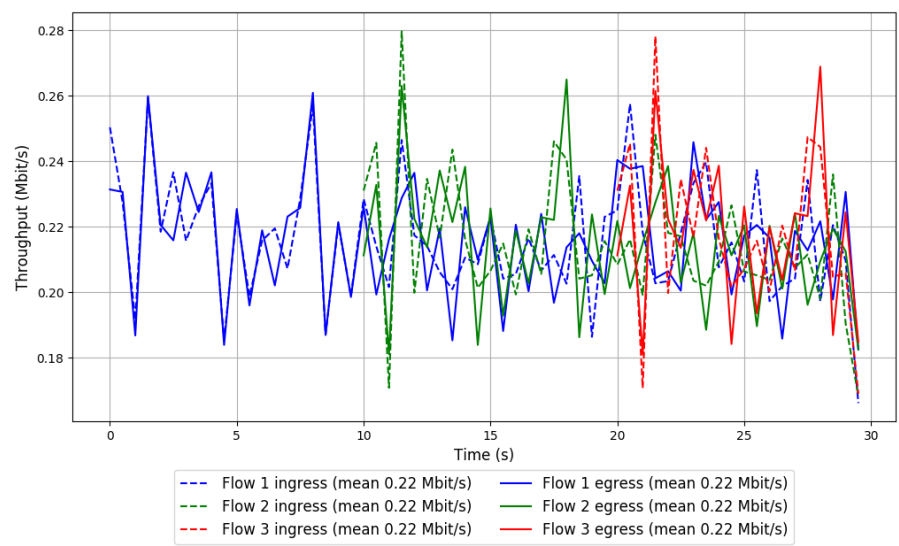


```
Run 1: Statistics of SCReAM

Start at: 2017-11-21 21:46:02
End at: 2017-11-21 21:46:32

# Below is generated by plot.py at 2017-11-22 01:26:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 52.316 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 52.407 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 52.207 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 52.183 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

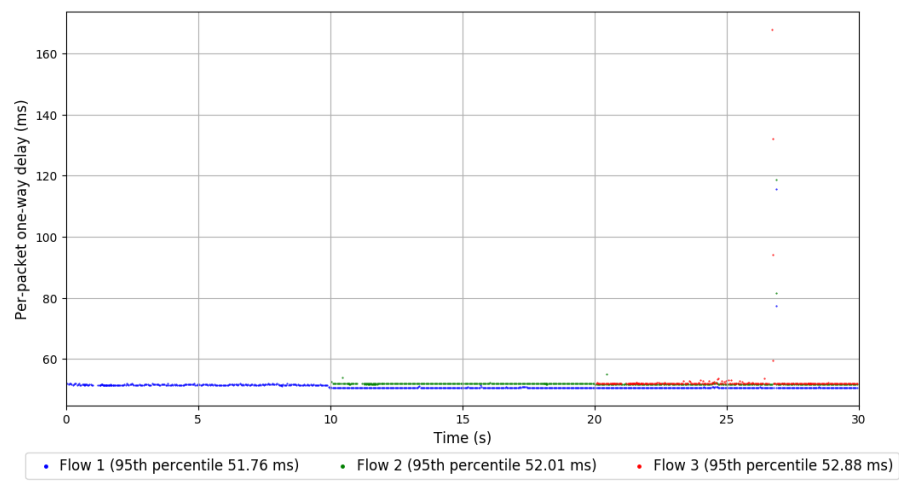
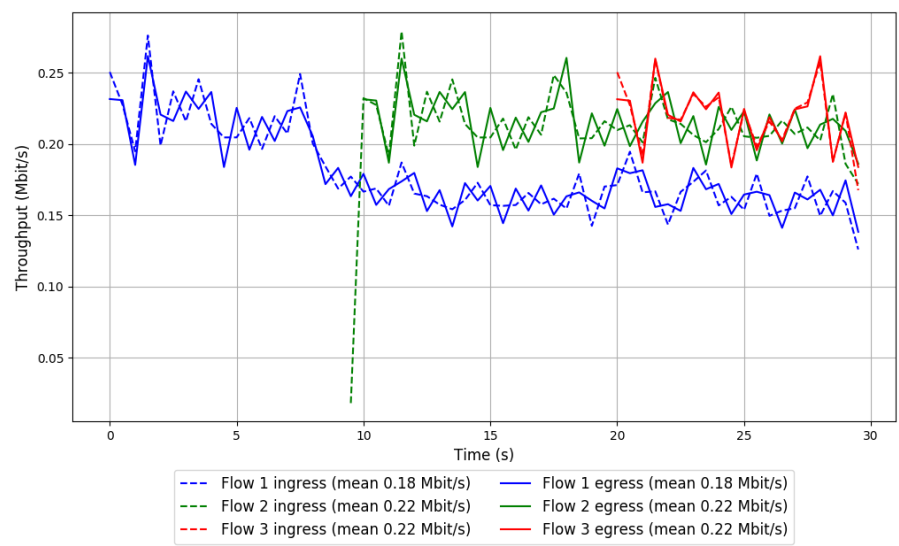


```
Run 2: Statistics of SCReAM

Start at: 2017-11-21 21:57:45
End at: 2017-11-21 21:58:15

# Below is generated by plot.py at 2017-11-22 01:26:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 52.048 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 51.761 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 52.008 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 52.879 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2017-11-21 22:09:48

End at: 2017-11-21 22:10:18

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 51.930 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.423 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.718 ms

Loss rate: 0.00%

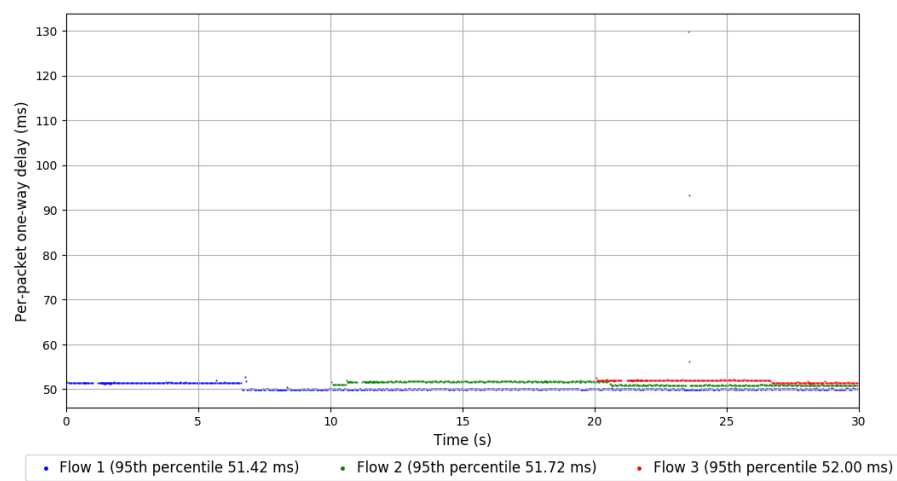
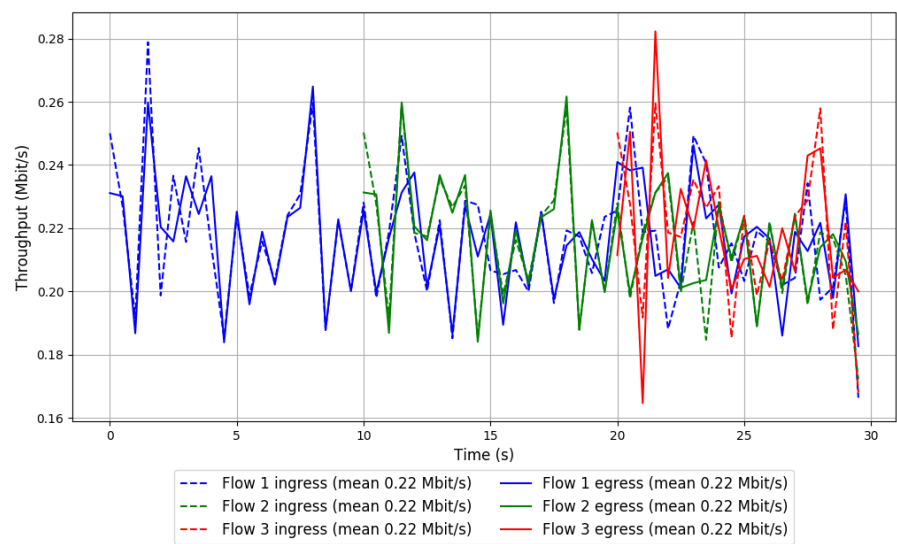
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.996 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

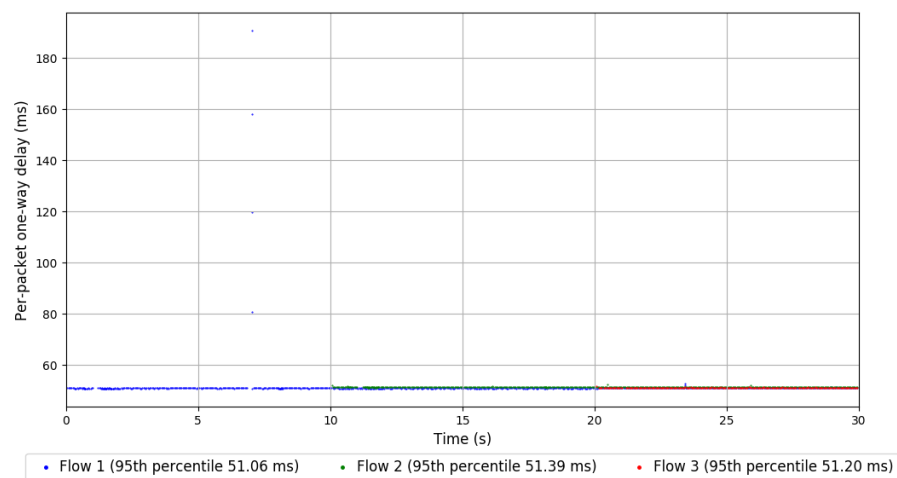
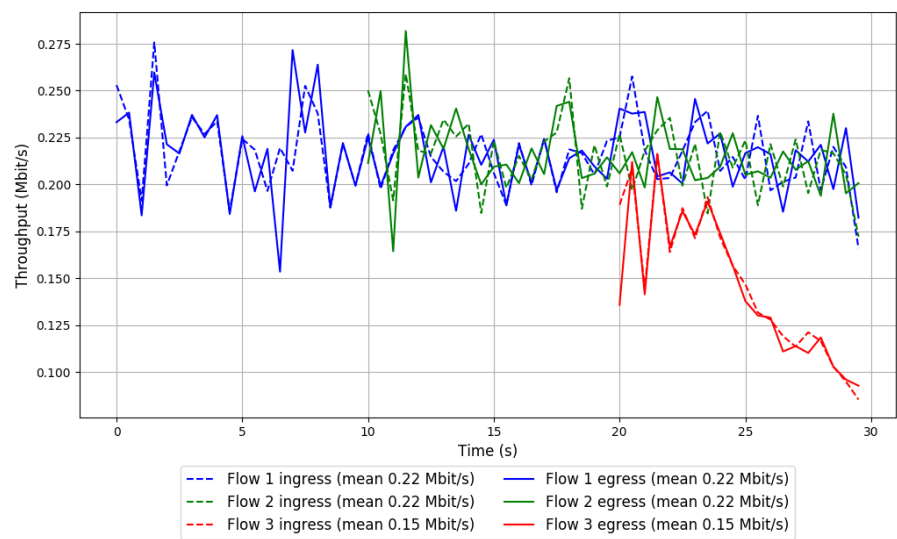


```
Run 4: Statistics of SCReAM

Start at: 2017-11-21 22:21:35
End at: 2017-11-21 22:22:05

# Below is generated by plot.py at 2017-11-22 01:26:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 51.354 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.057 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.387 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 51.196 ms
Loss rate: 2.28%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-11-21 22:33:40

End at: 2017-11-21 22:34:10

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 51.662 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.271 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.216 ms

Loss rate: 0.00%

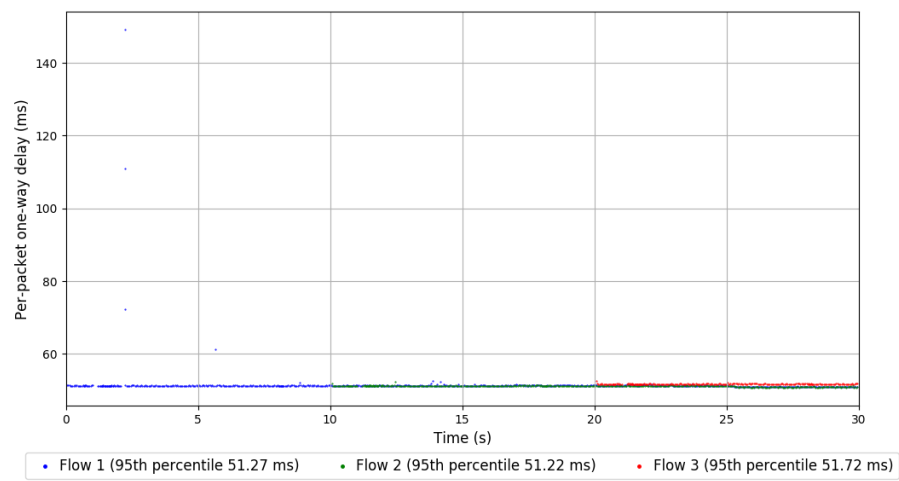
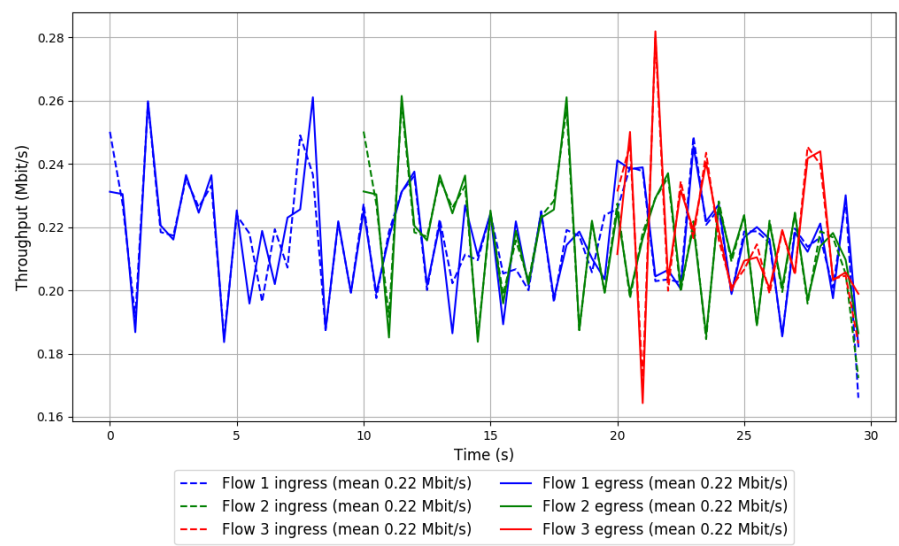
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.721 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

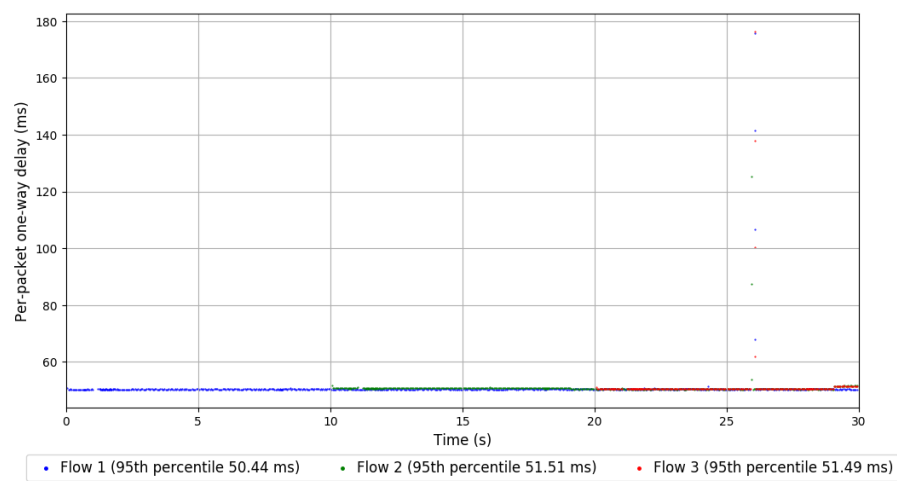
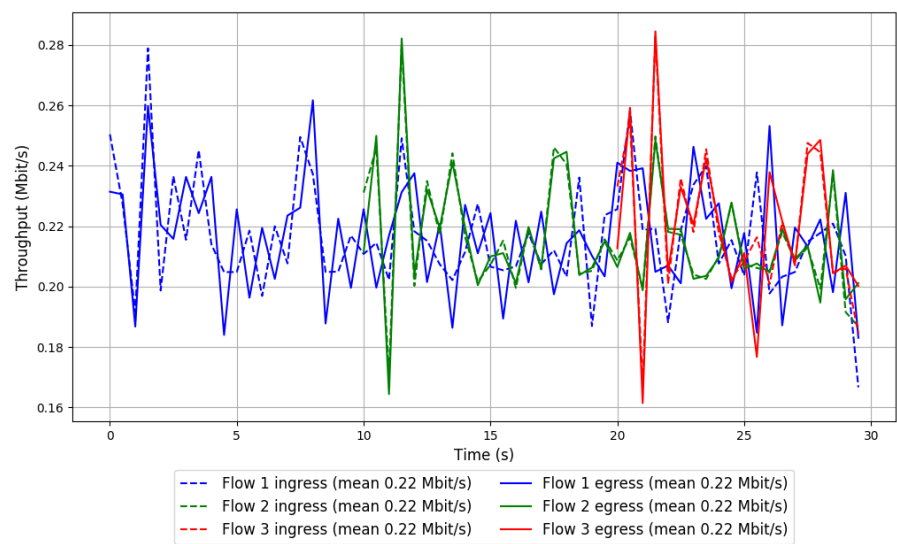


```
Run 6: Statistics of SReAM

Start at: 2017-11-21 22:45:16
End at: 2017-11-21 22:45:46

# Below is generated by plot.py at 2017-11-22 01:26:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 50.771 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.436 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.508 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.490 ms
Loss rate: 0.00%
```

Run 6: Report of SReAM — Data Link

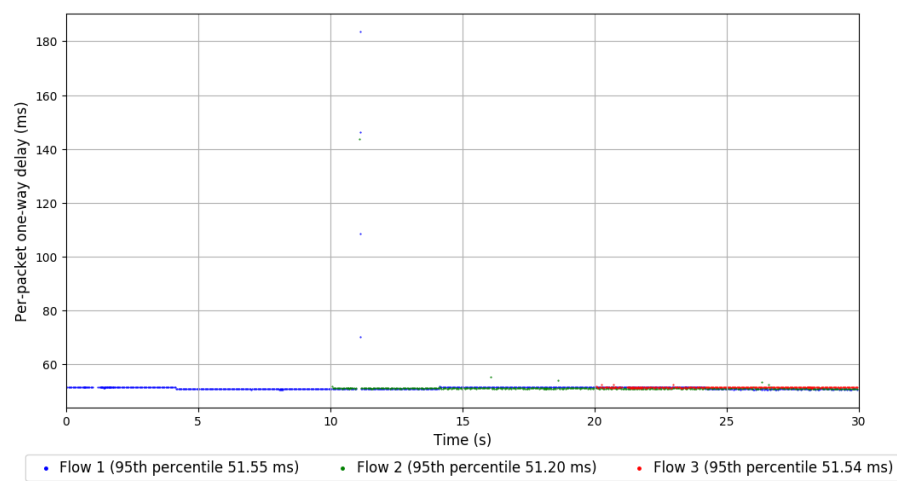
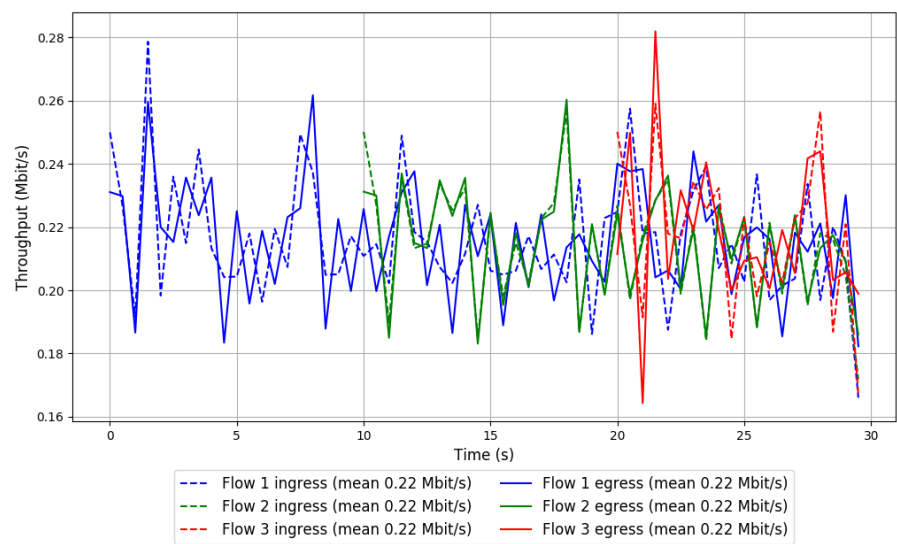


```
Run 7: Statistics of SReAM

Start at: 2017-11-21 22:57:01
End at: 2017-11-21 22:57:31

# Below is generated by plot.py at 2017-11-22 01:26:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 51.543 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.552 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.199 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.538 ms
Loss rate: 0.00%
```

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-11-21 23:08:58

End at: 2017-11-21 23:09:28

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 51.035 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.710 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.035 ms

Loss rate: 0.00%

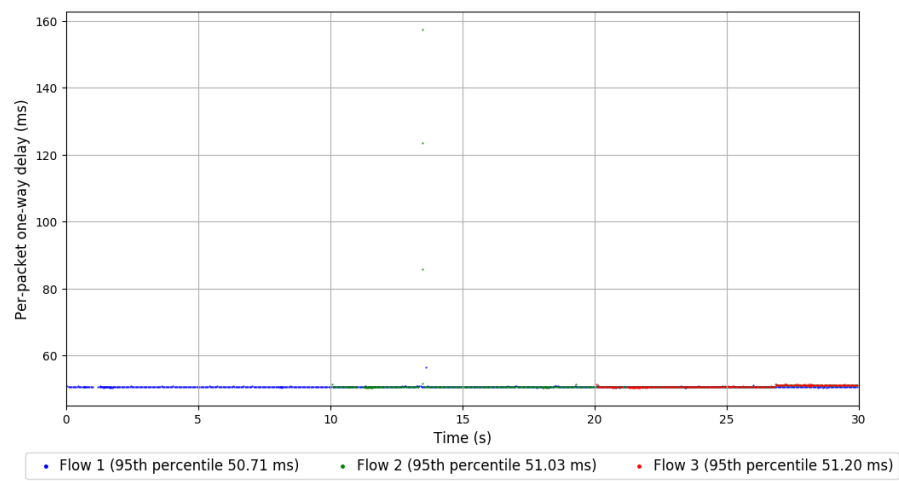
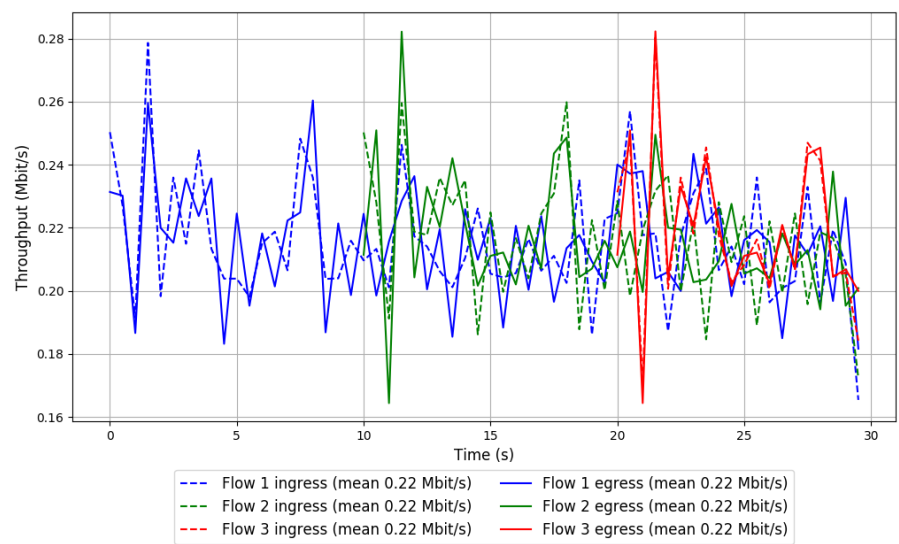
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.200 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2017-11-21 23:20:56

End at: 2017-11-21 23:21:26

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 51.012 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.902 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.863 ms

Loss rate: 0.00%

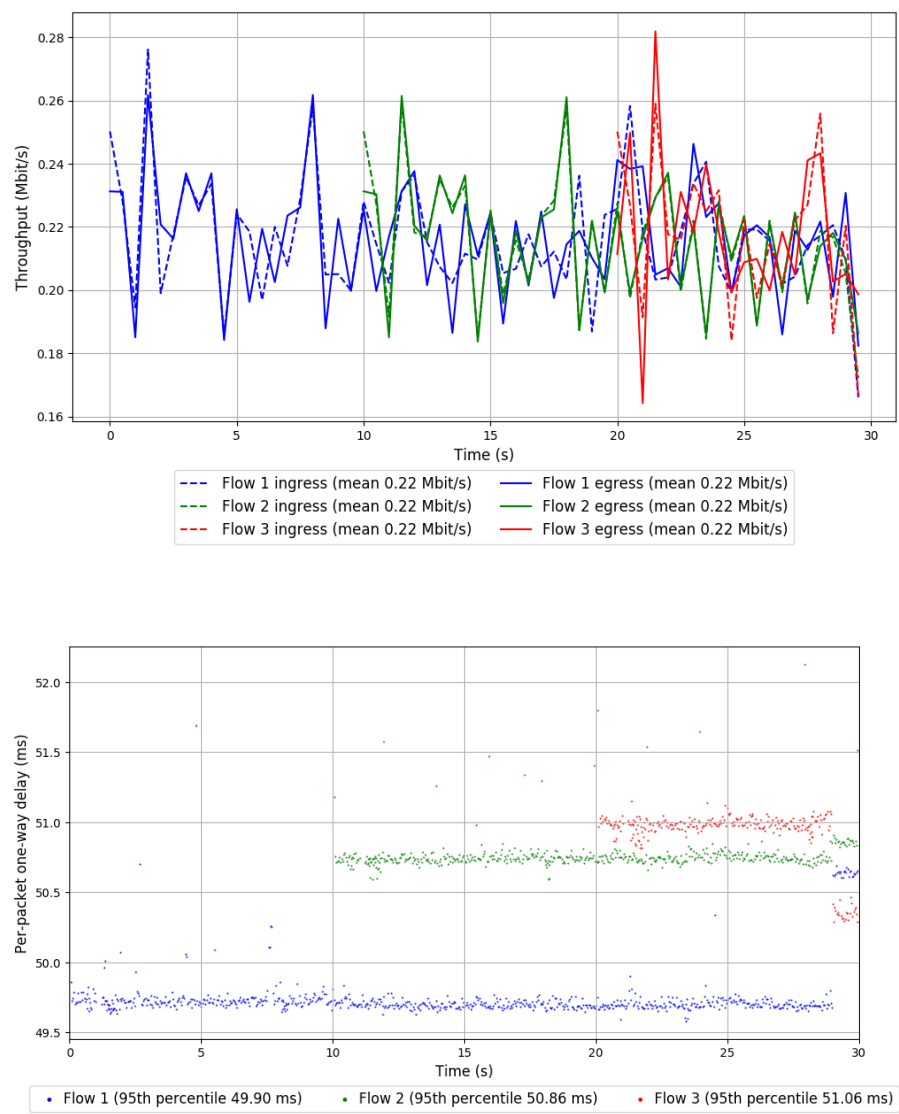
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.058 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

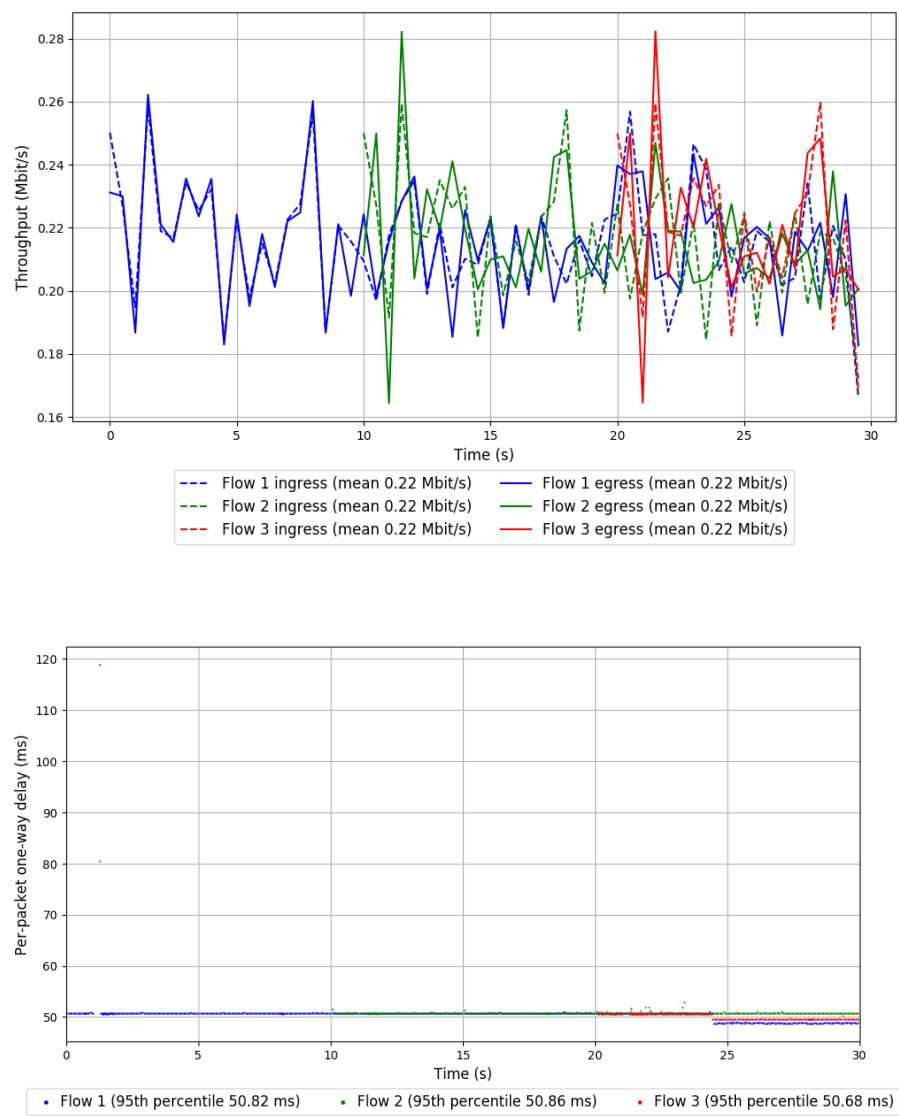


```
Run 10: Statistics of SCReAM

Start at: 2017-11-21 23:33:10
End at: 2017-11-21 23:33:41

# Below is generated by plot.py at 2017-11-22 01:26:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.828 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.821 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.864 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.680 ms
Loss rate: 0.00%
```

Run 10: Report of SCReAM — Data Link

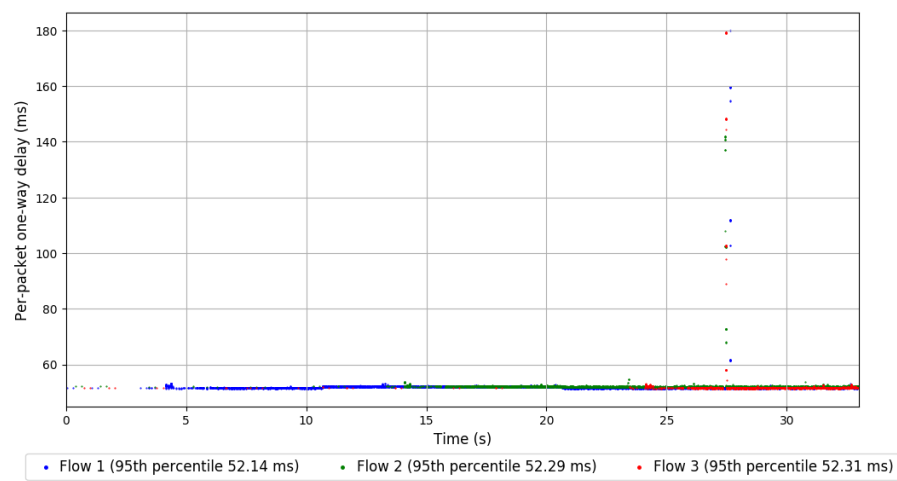
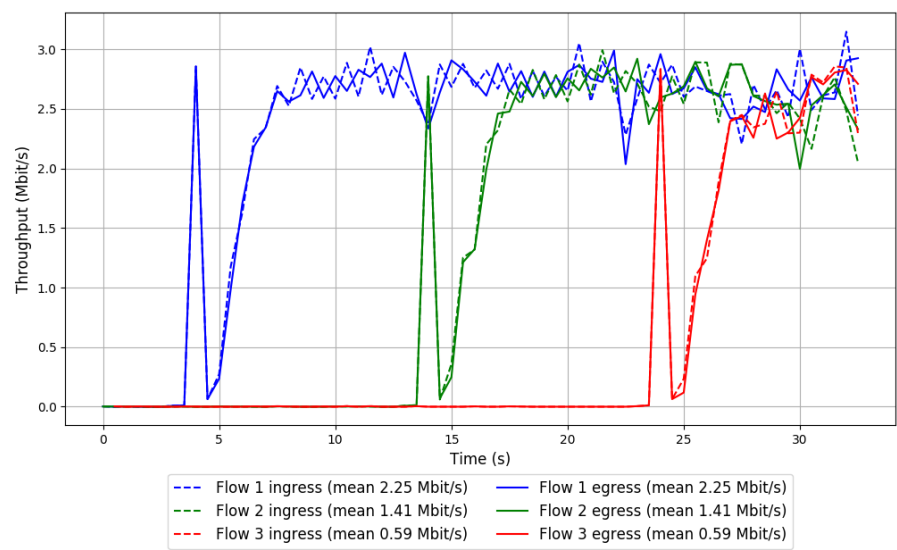


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-21 21:41:17
End at: 2017-11-21 21:41:47

# Below is generated by plot.py at 2017-11-22 01:26:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.21 Mbit/s
95th percentile per-packet one-way delay: 52.215 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 52.144 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 52.291 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 52.310 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-21 21:52:56

End at: 2017-11-21 21:53:26

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 52.138 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 52.157 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 52.080 ms

Loss rate: 0.00%

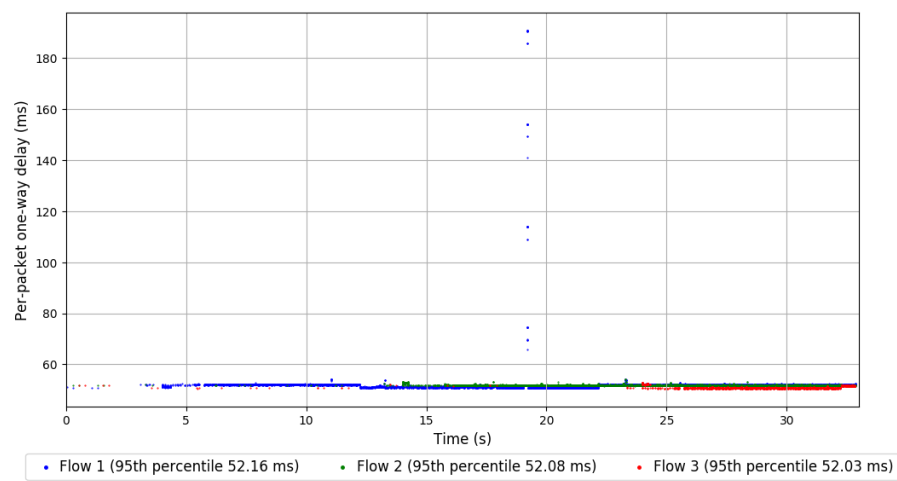
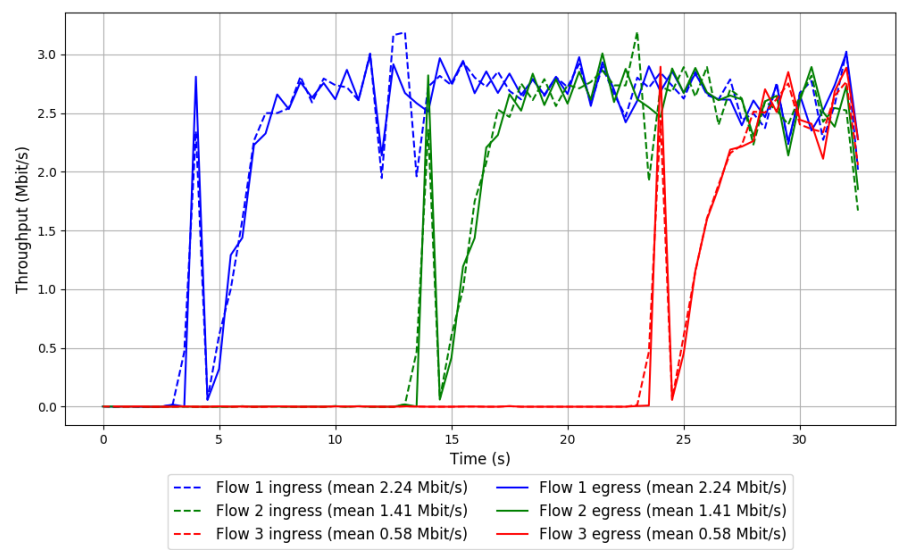
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 52.031 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-21 22:04:49

End at: 2017-11-21 22:05:19

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 51.975 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 51.783 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 52.031 ms

Loss rate: 0.00%

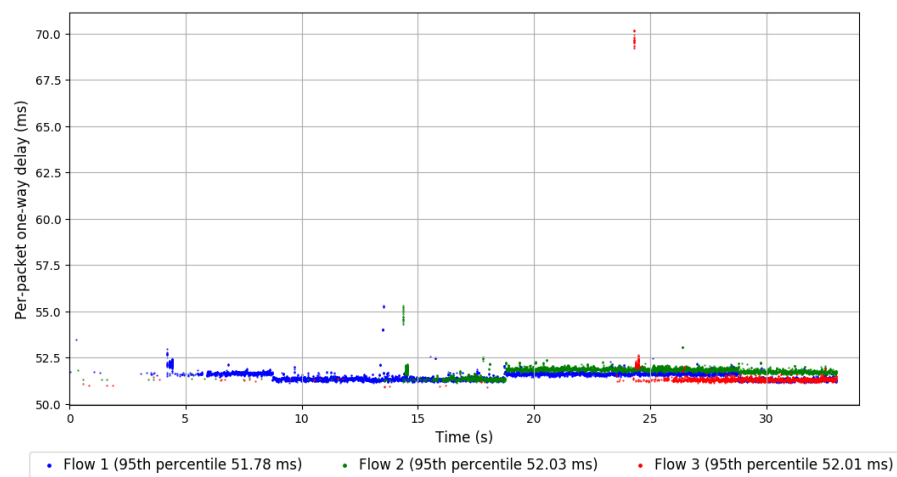
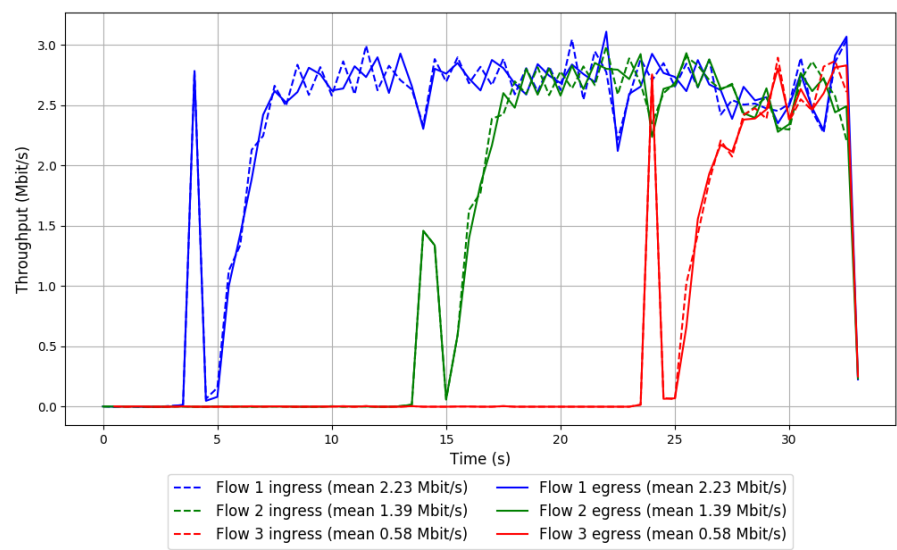
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 52.007 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-21 22:16:36

End at: 2017-11-21 22:17:06

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 52.099 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 52.077 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 52.077 ms

Loss rate: 0.00%

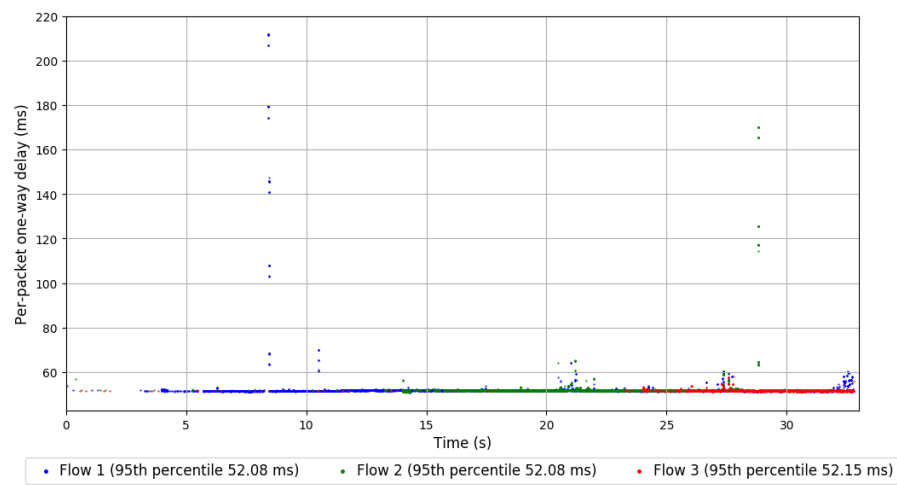
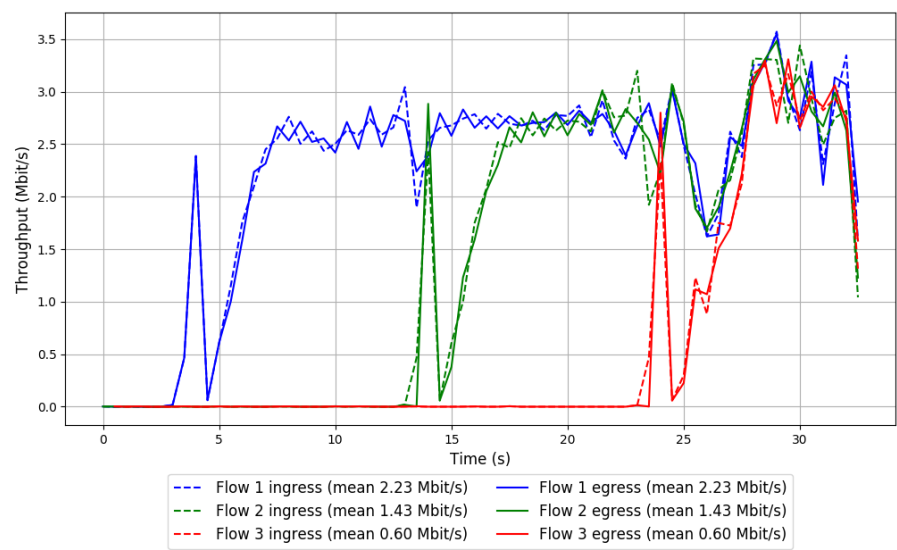
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 52.146 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-21 22:28:35

End at: 2017-11-21 22:29:05

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 51.835 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 51.872 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 50.741 ms

Loss rate: 0.00%

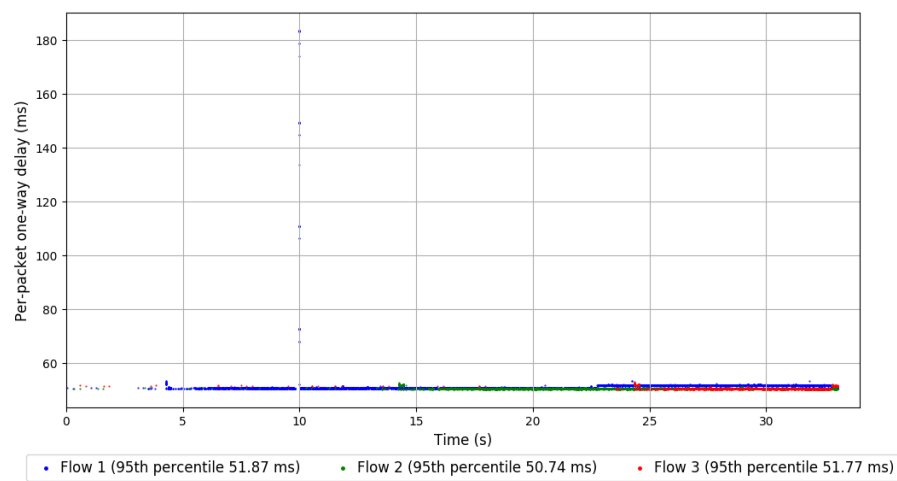
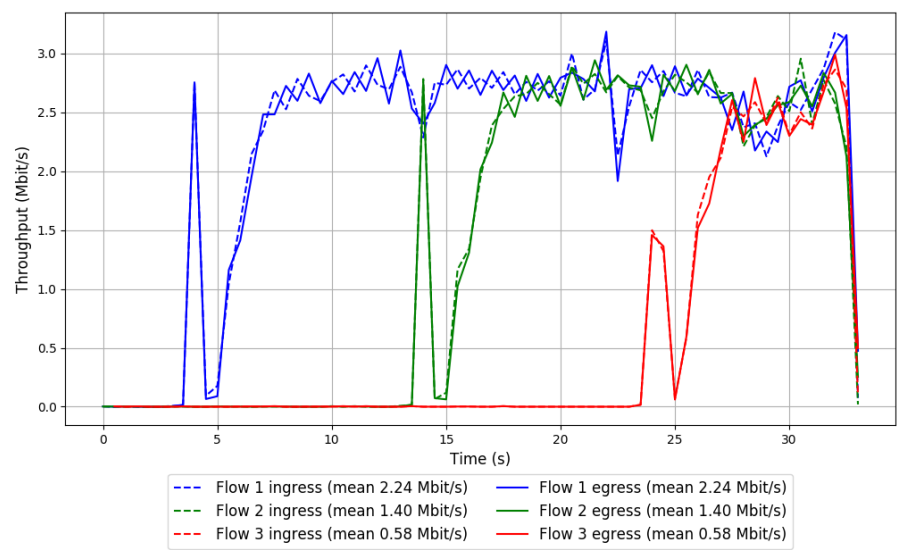
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 51.765 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-21 22:40:31

End at: 2017-11-21 22:41:01

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.28 Mbit/s

95th percentile per-packet one-way delay: 51.734 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 50.767 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 51.711 ms

Loss rate: 0.00%

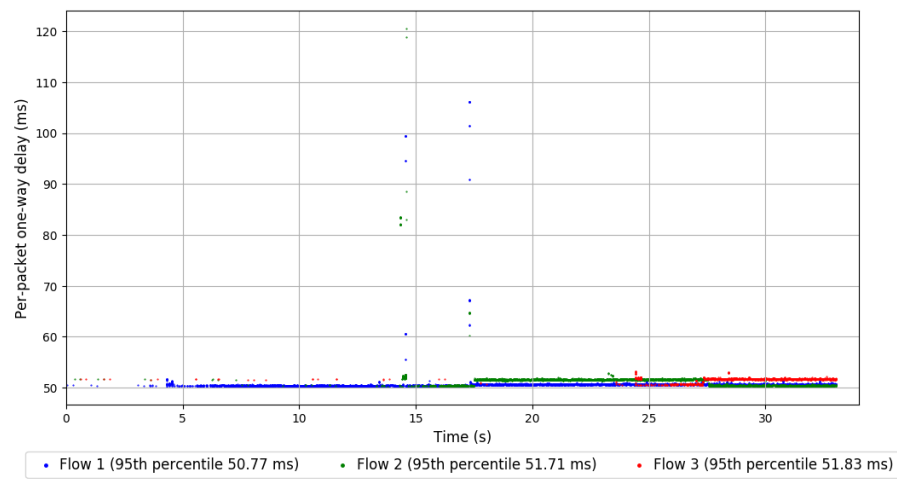
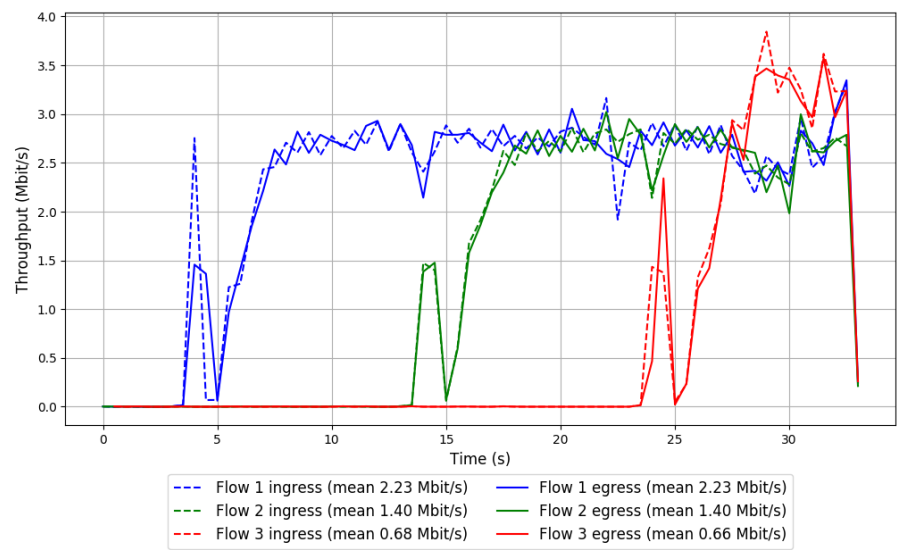
-- Flow 3:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 51.833 ms

Loss rate: 2.24%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-21 22:52:09

End at: 2017-11-21 22:52:39

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 51.601 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 51.477 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 51.456 ms

Loss rate: 0.00%

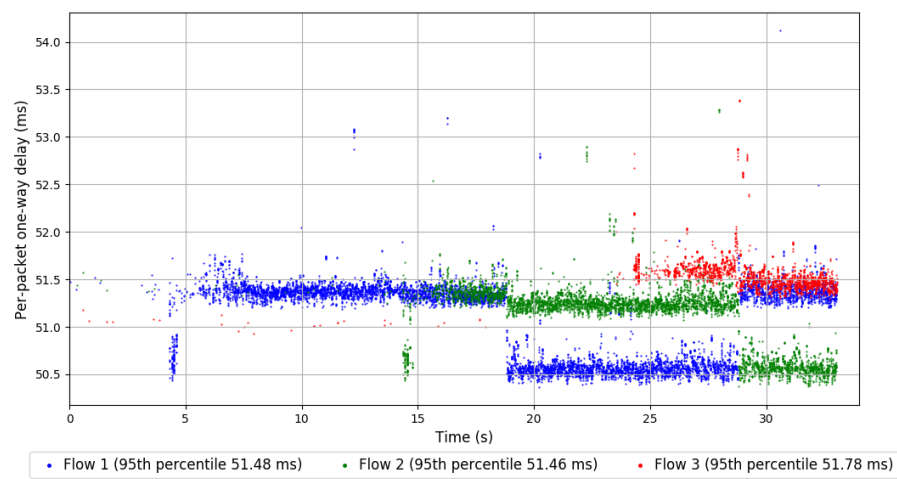
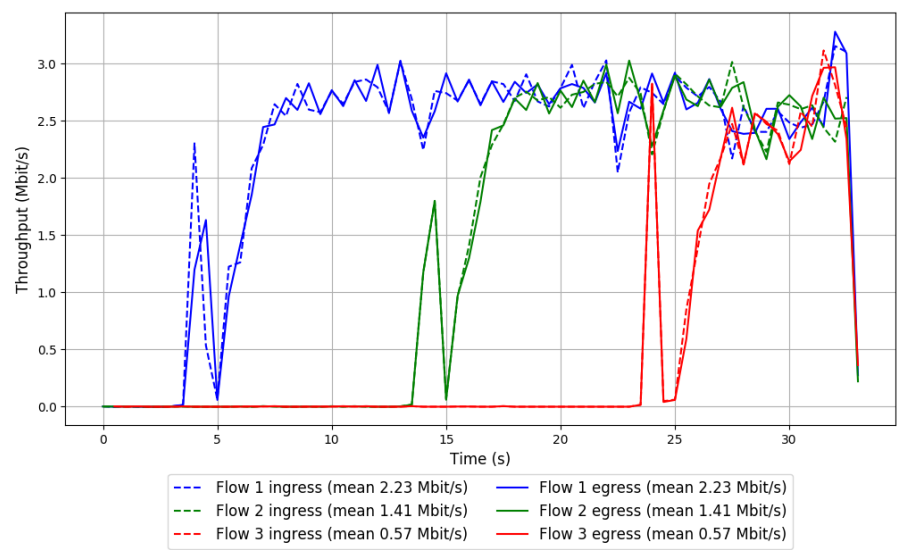
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 51.784 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-21 23:04:05

End at: 2017-11-21 23:04:35

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 51.281 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 51.303 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 50.986 ms

Loss rate: 0.00%

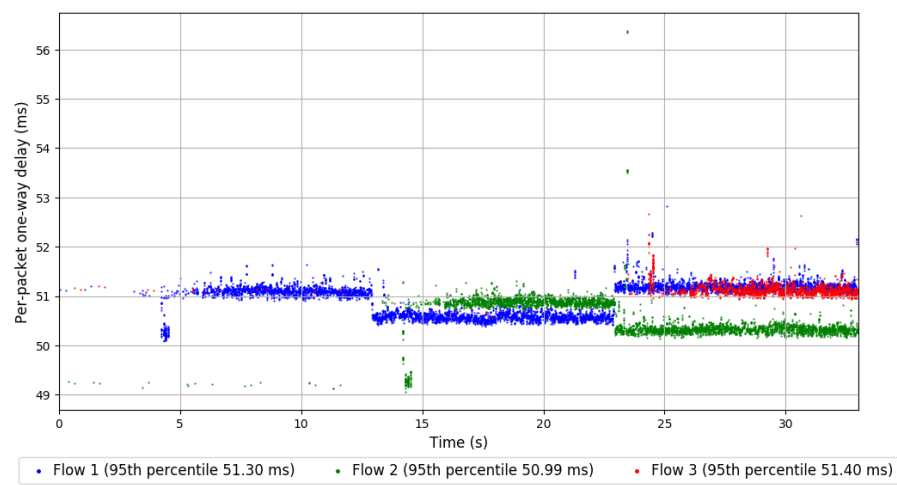
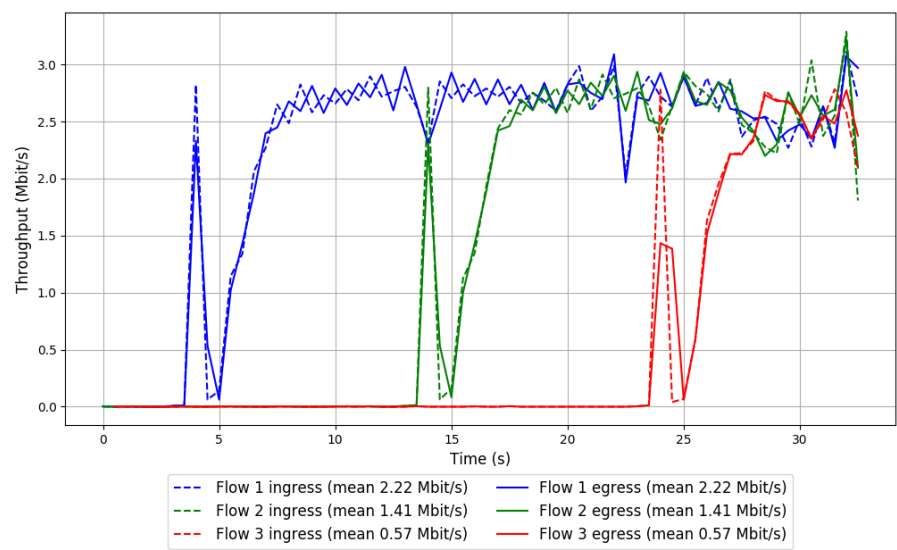
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 51.404 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-21 23:15:55

End at: 2017-11-21 23:16:25

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.14 Mbit/s

95th percentile per-packet one-way delay: 50.982 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 50.944 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 50.607 ms

Loss rate: 0.04%

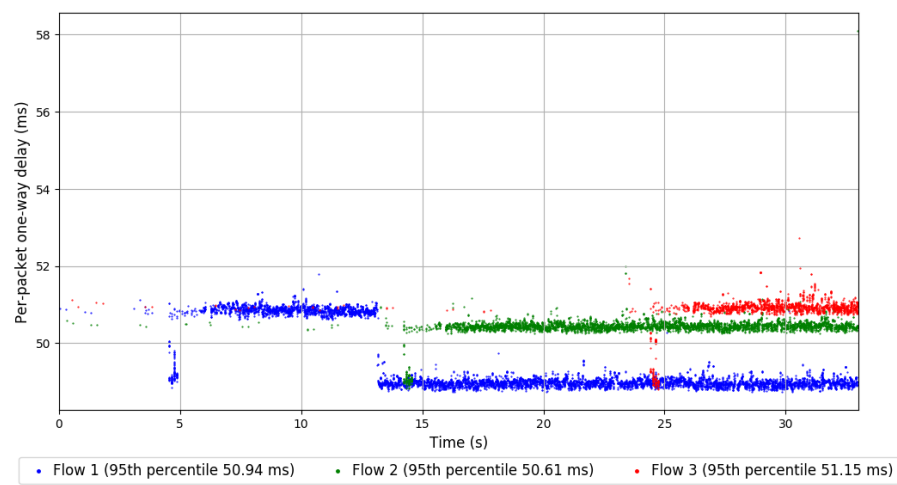
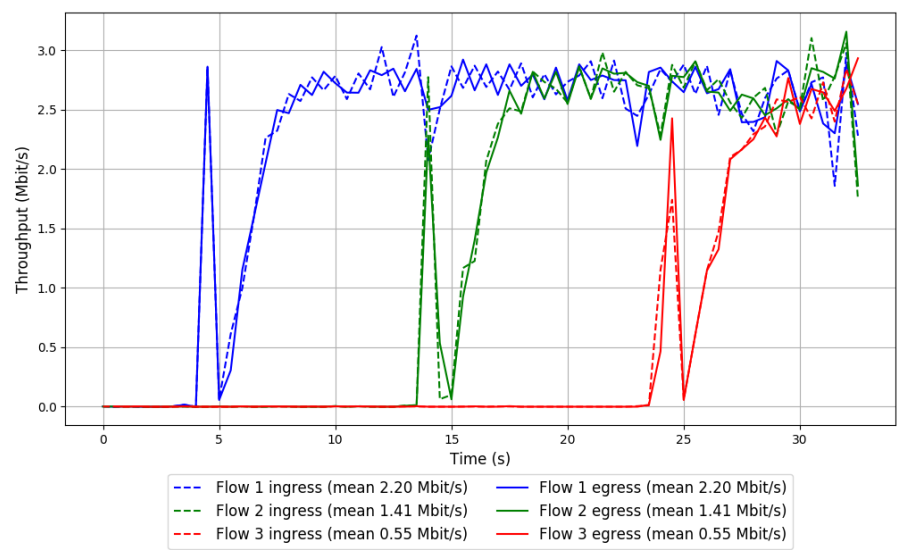
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 51.149 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-21 23:27:56

End at: 2017-11-21 23:28:26

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 50.886 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 49.068 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 50.952 ms

Loss rate: 0.00%

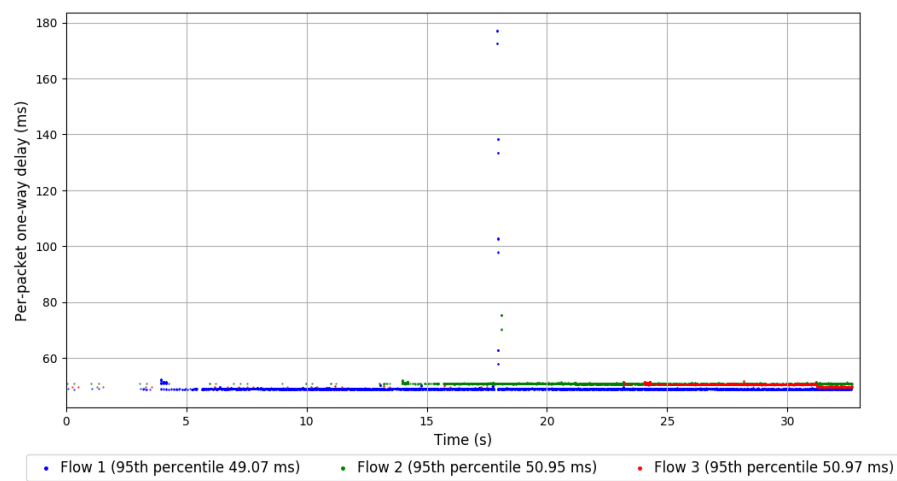
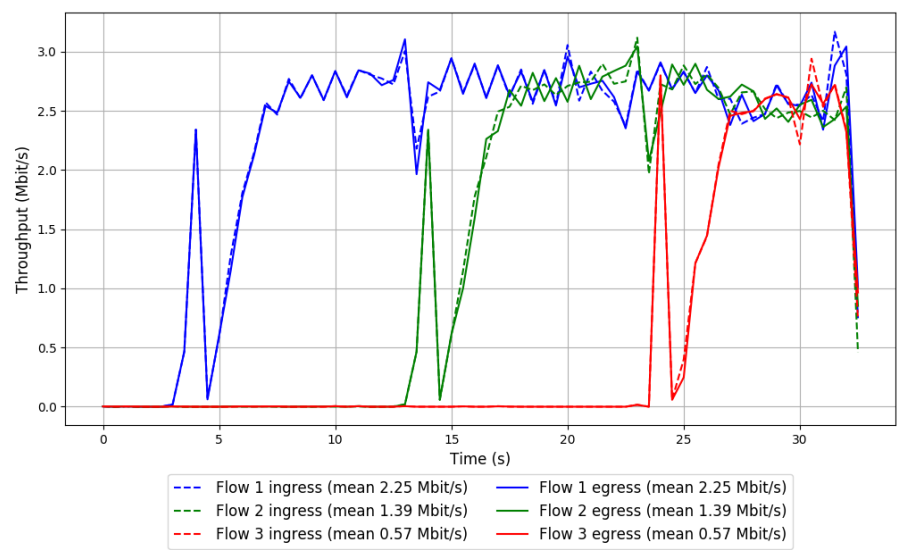
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 50.966 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

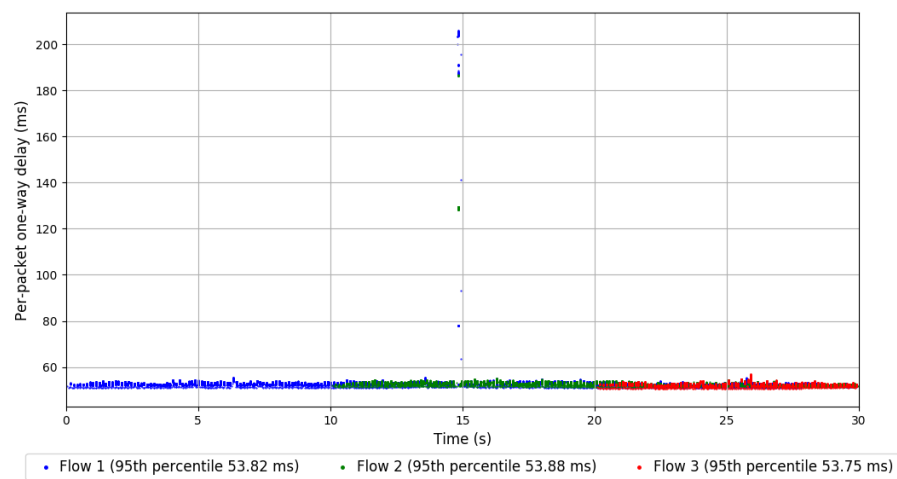
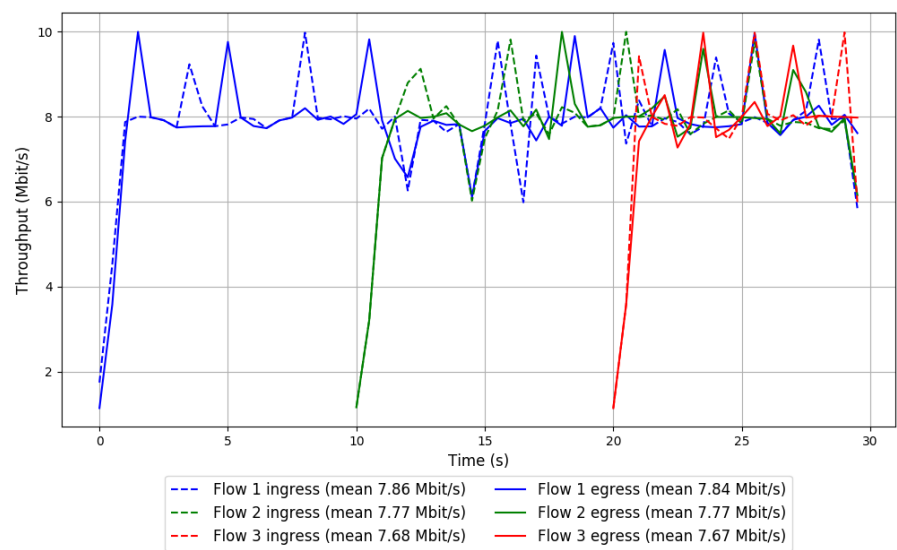


```
Run 1: Statistics of Sprout

Start at: 2017-11-21 21:41:57
End at: 2017-11-21 21:42:27

# Below is generated by plot.py at 2017-11-22 01:26:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.52 Mbit/s
95th percentile per-packet one-way delay: 53.841 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 7.84 Mbit/s
95th percentile per-packet one-way delay: 53.818 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 7.77 Mbit/s
95th percentile per-packet one-way delay: 53.878 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.67 Mbit/s
95th percentile per-packet one-way delay: 53.753 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-11-21 21:53:35

End at: 2017-11-21 21:54:05

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.46 Mbit/s

95th percentile per-packet one-way delay: 53.606 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 53.653 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.70 Mbit/s

95th percentile per-packet one-way delay: 53.631 ms

Loss rate: 0.00%

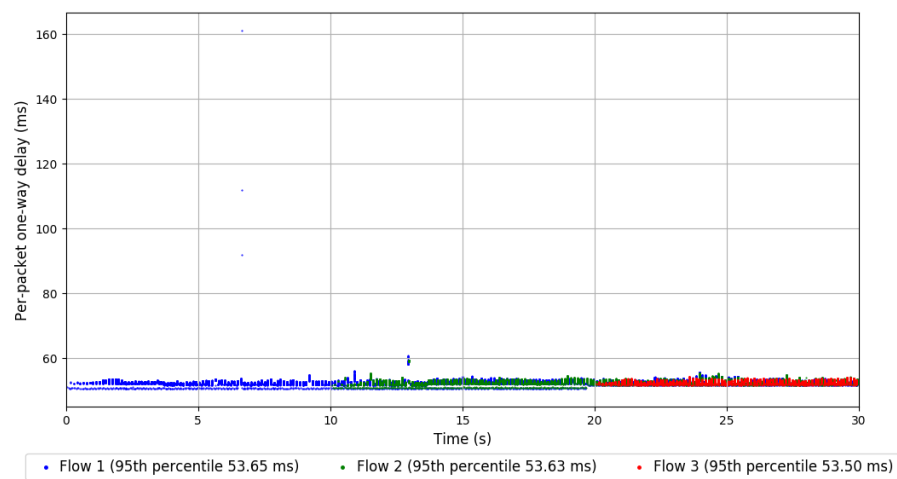
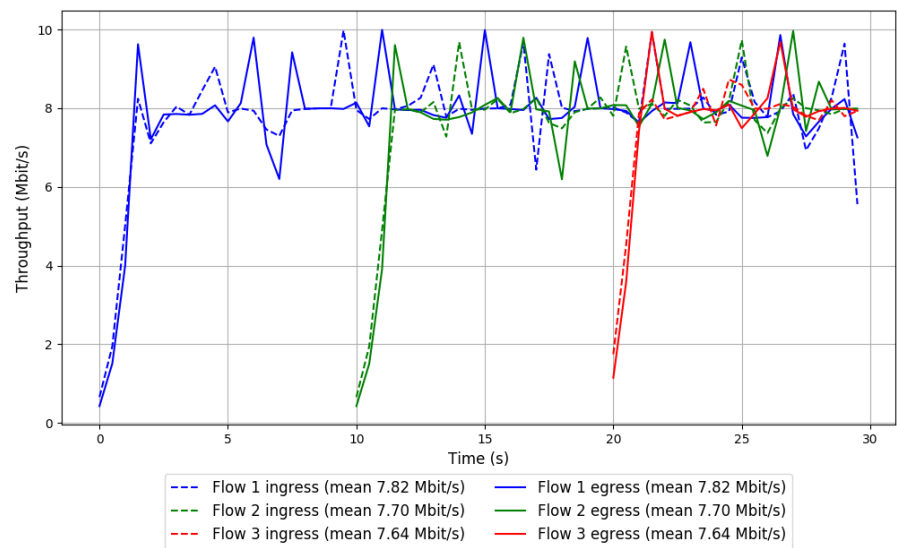
-- Flow 3:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 53.502 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-21 22:05:29

End at: 2017-11-21 22:05:59

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.70 Mbit/s

95th percentile per-packet one-way delay: 53.525 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 53.638 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 53.501 ms

Loss rate: 0.01%

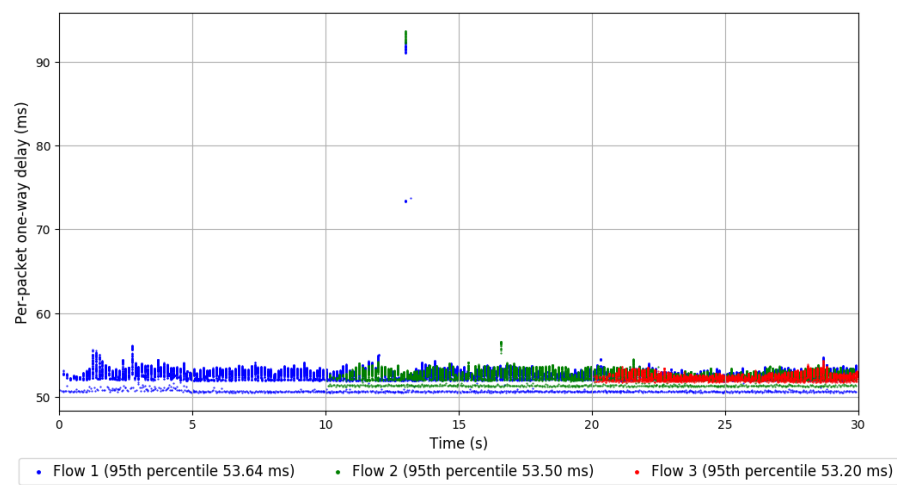
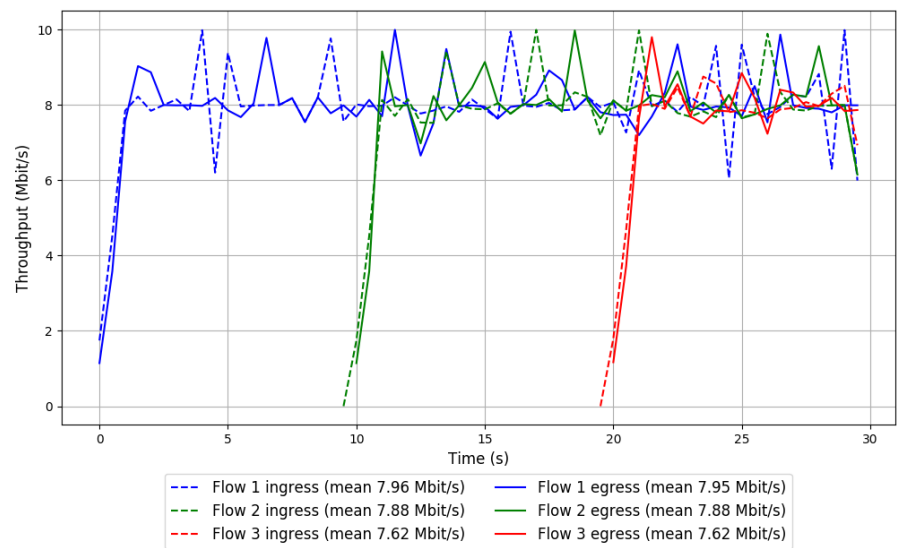
-- Flow 3:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 53.197 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-21 22:17:16

End at: 2017-11-21 22:17:46

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.56 Mbit/s

95th percentile per-packet one-way delay: 53.584 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 53.582 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 53.561 ms

Loss rate: 0.00%

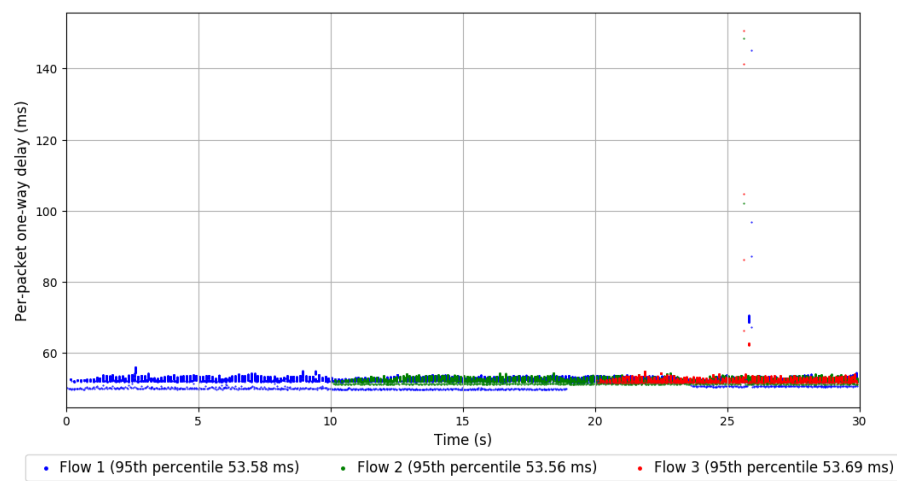
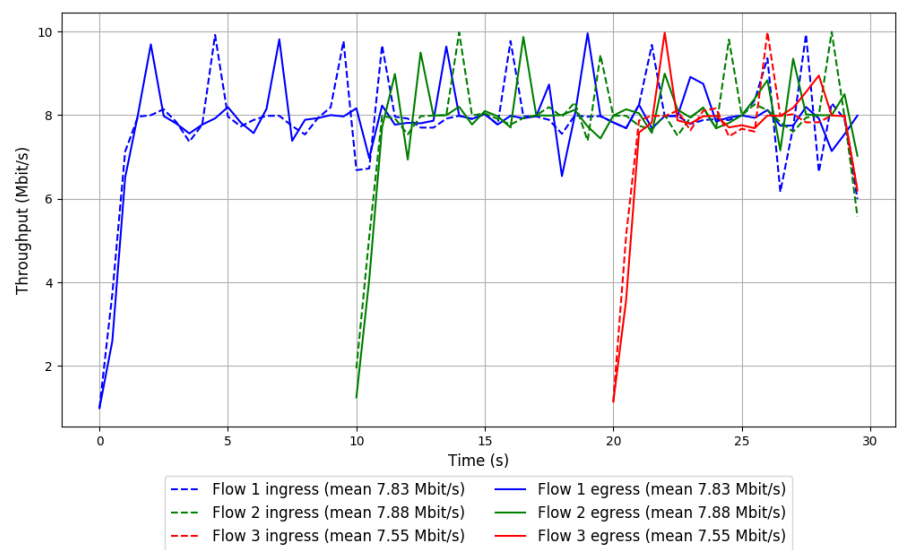
-- Flow 3:

Average throughput: 7.55 Mbit/s

95th percentile per-packet one-way delay: 53.689 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-21 22:29:15

End at: 2017-11-21 22:29:45

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.58 Mbit/s

95th percentile per-packet one-way delay: 53.324 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 53.255 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 53.350 ms

Loss rate: 0.02%

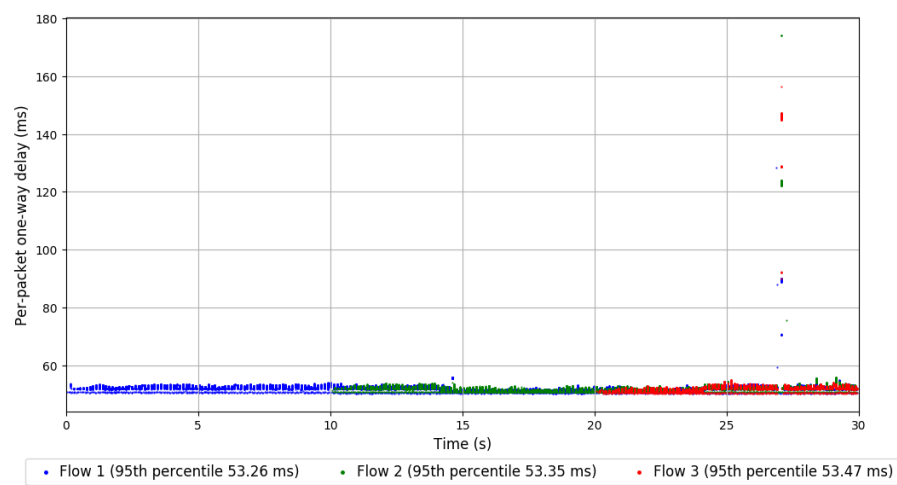
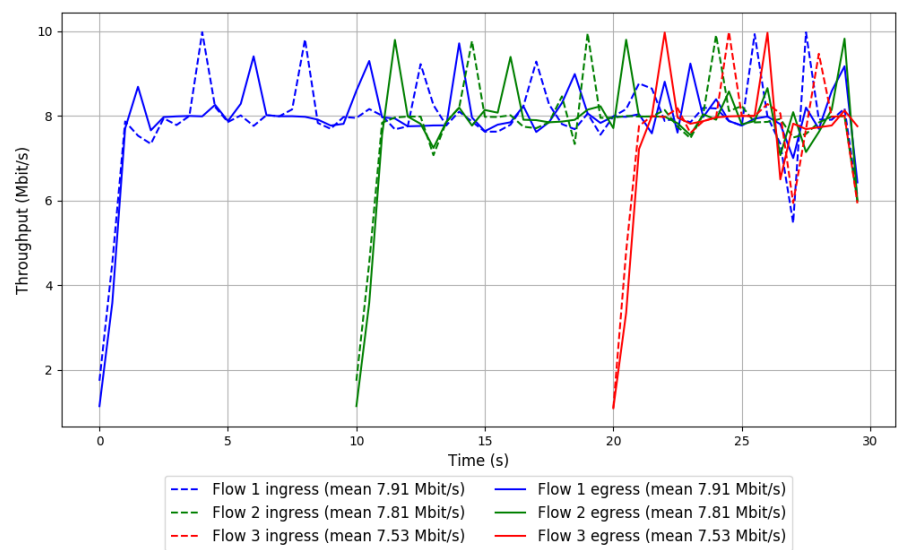
-- Flow 3:

Average throughput: 7.53 Mbit/s

95th percentile per-packet one-way delay: 53.474 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-21 22:41:10

End at: 2017-11-21 22:41:40

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.51 Mbit/s

95th percentile per-packet one-way delay: 53.210 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 53.098 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 53.253 ms

Loss rate: 0.00%

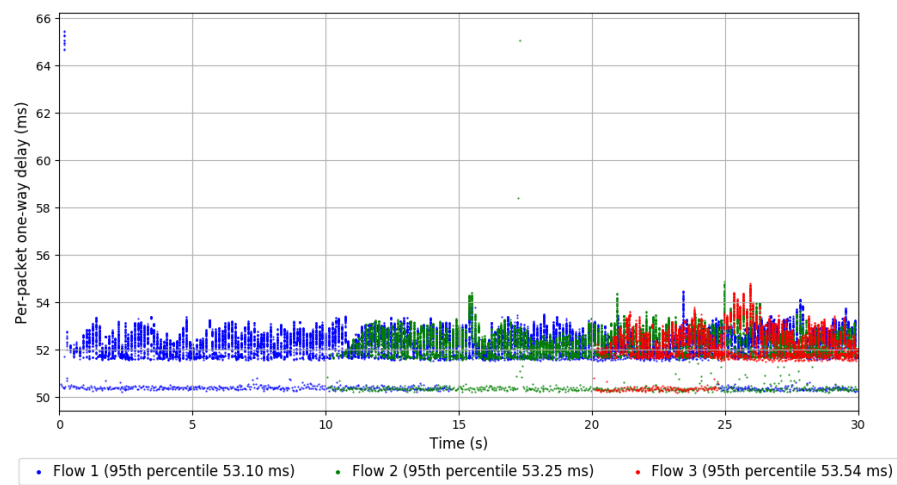
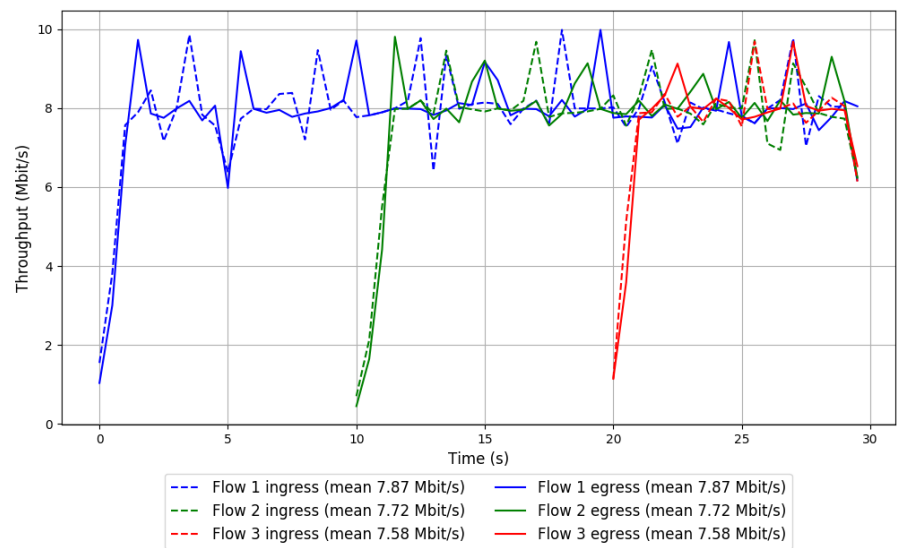
-- Flow 3:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 53.539 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-21 22:52:49

End at: 2017-11-21 22:53:19

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.53 Mbit/s

95th percentile per-packet one-way delay: 51.880 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 51.662 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 51.992 ms

Loss rate: 0.00%

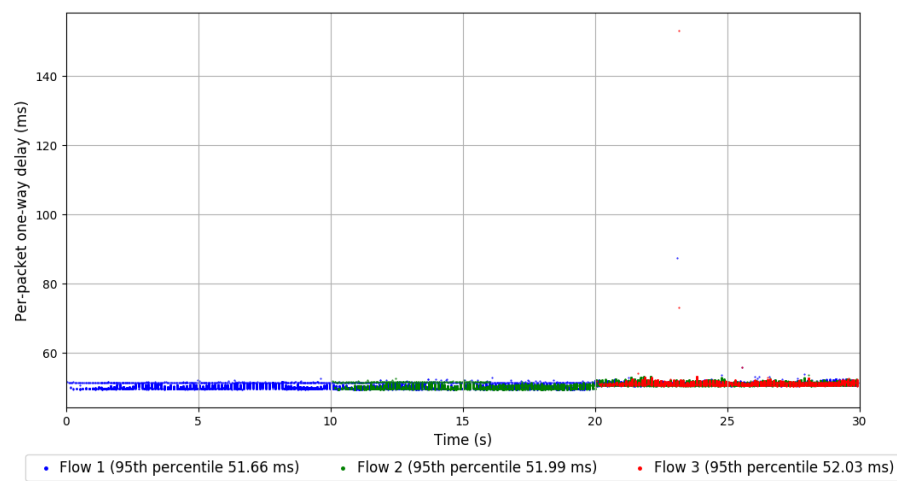
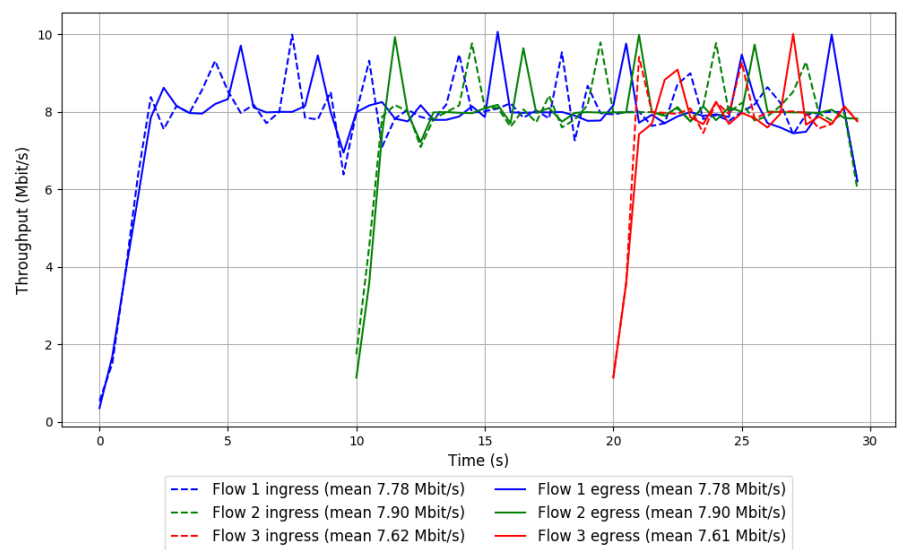
-- Flow 3:

Average throughput: 7.61 Mbit/s

95th percentile per-packet one-way delay: 52.026 ms

Loss rate: 0.21%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-21 23:04:45

End at: 2017-11-21 23:05:15

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.49 Mbit/s

95th percentile per-packet one-way delay: 51.760 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 52.013 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 51.498 ms

Loss rate: 0.00%

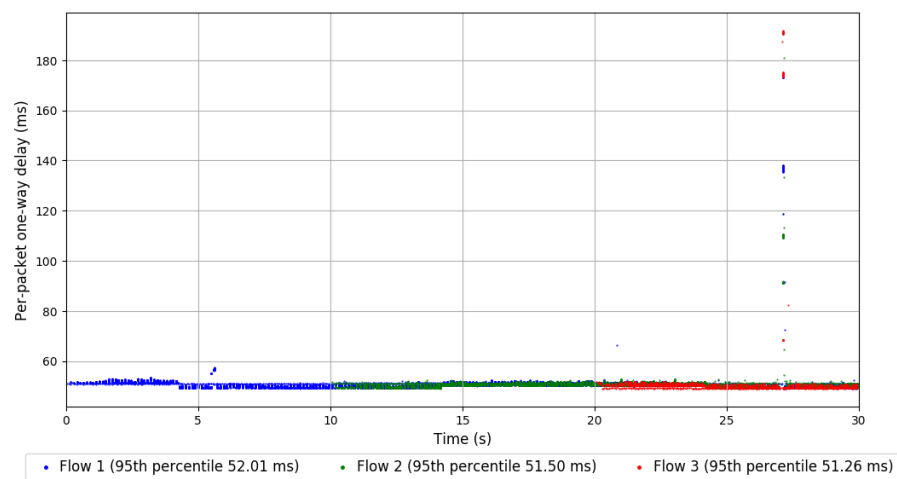
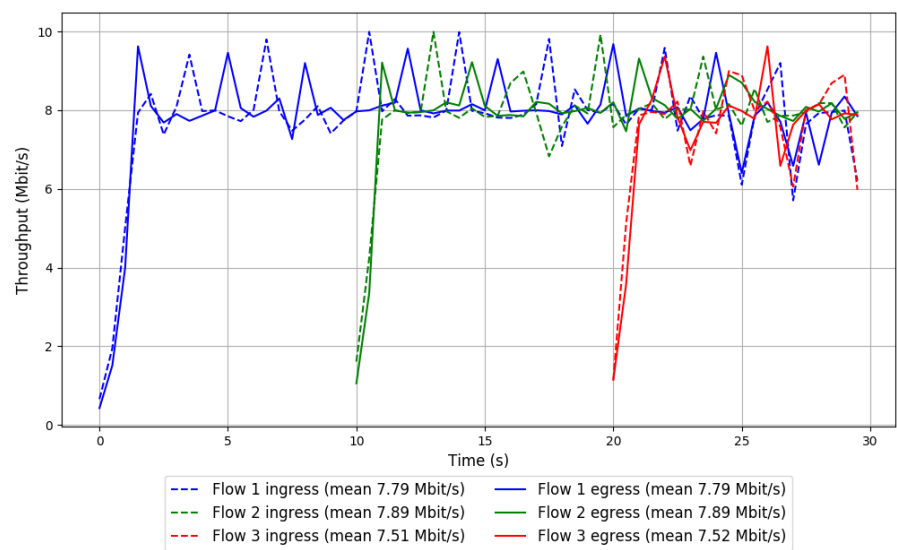
-- Flow 3:

Average throughput: 7.52 Mbit/s

95th percentile per-packet one-way delay: 51.257 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-21 23:16:34

End at: 2017-11-21 23:17:04

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.59 Mbit/s

95th percentile per-packet one-way delay: 52.176 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 52.367 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 7.71 Mbit/s

95th percentile per-packet one-way delay: 51.797 ms

Loss rate: 0.05%

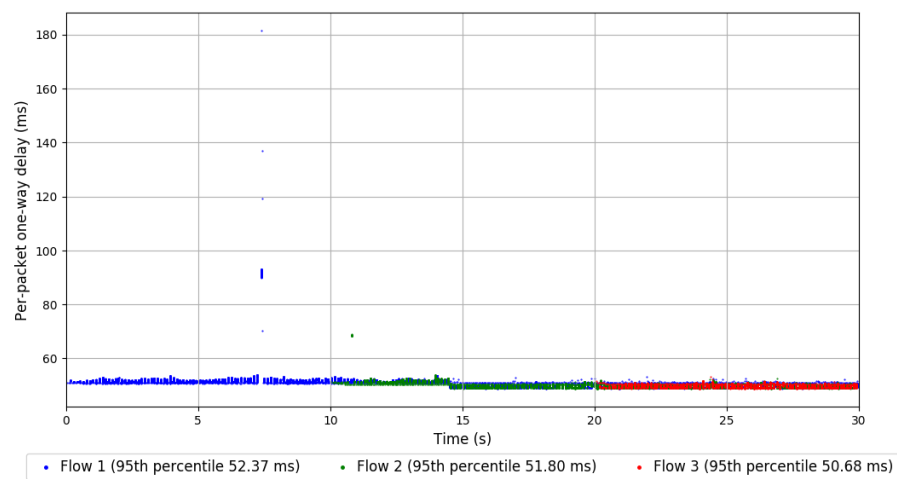
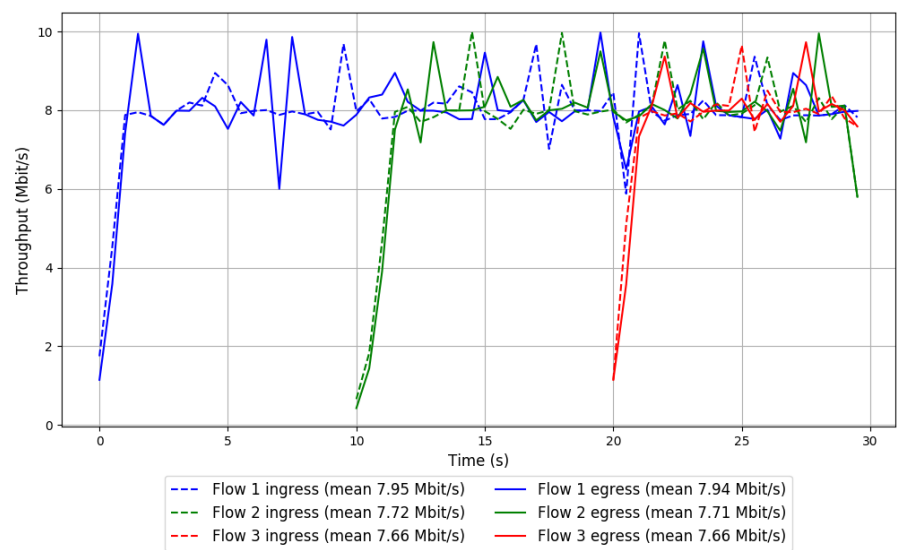
-- Flow 3:

Average throughput: 7.66 Mbit/s

95th percentile per-packet one-way delay: 50.684 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-21 23:28:36

End at: 2017-11-21 23:29:06

# Below is generated by plot.py at 2017-11-22 01:26:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.66 Mbit/s

95th percentile per-packet one-way delay: 52.044 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 52.211 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 51.637 ms

Loss rate: 0.00%

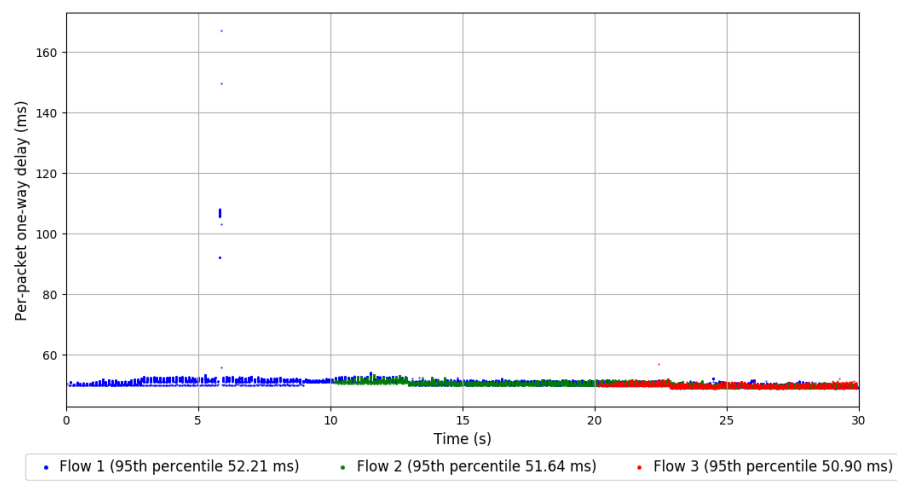
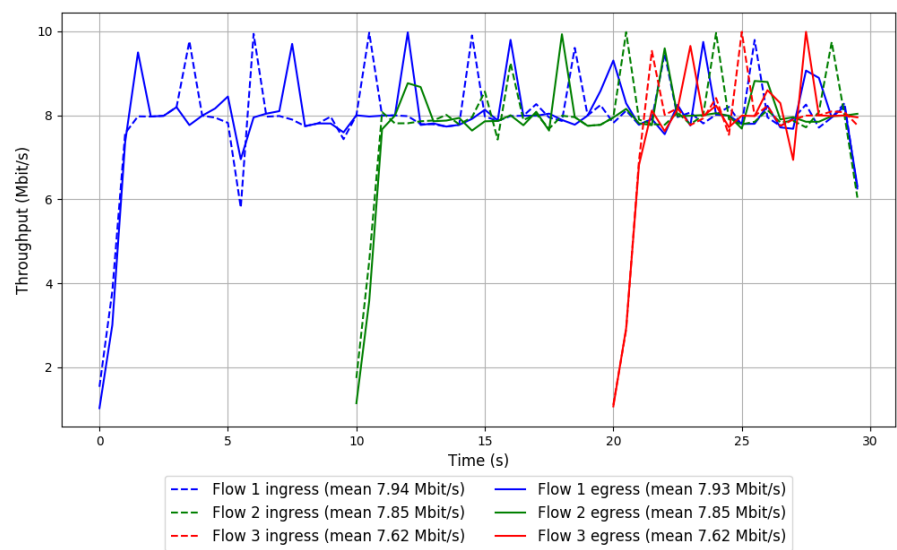
-- Flow 3:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 50.903 ms

Loss rate: 0.03%

Run 10: Report of Sprout — Data Link

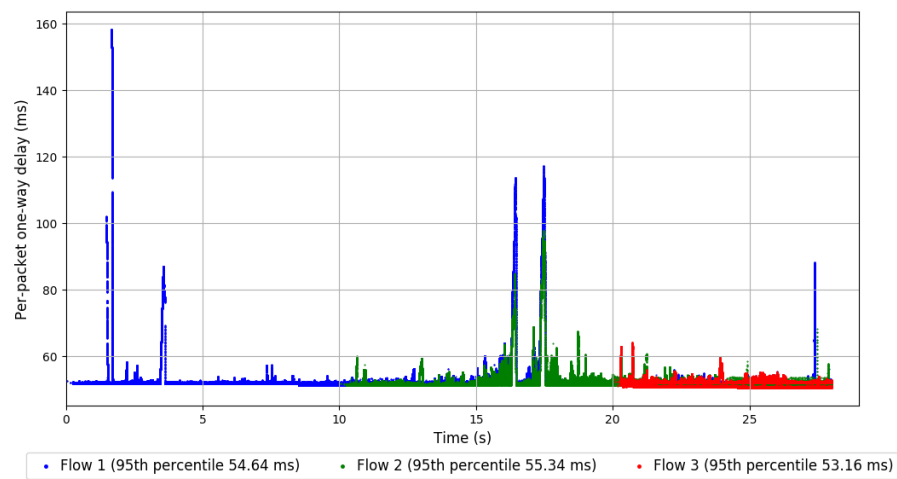
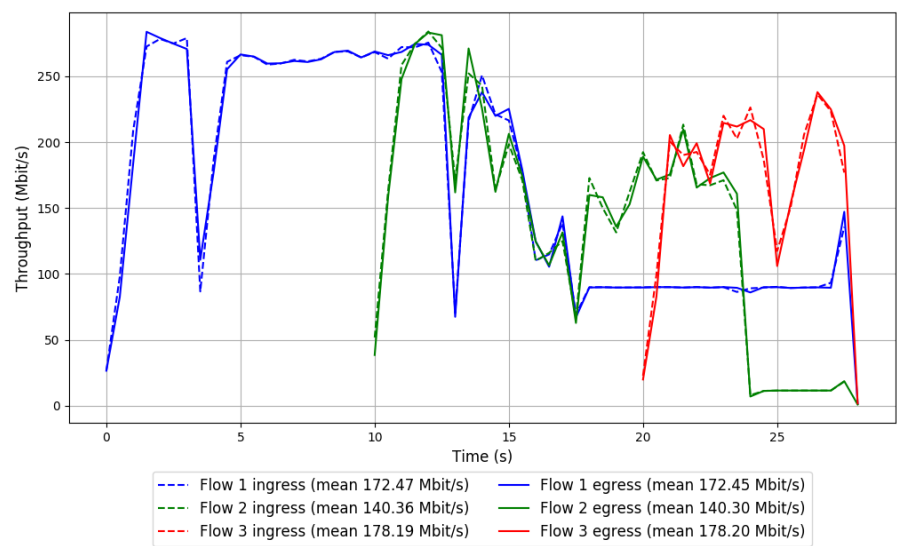


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-21 21:40:08
End at: 2017-11-21 21:40:38

# Below is generated by plot.py at 2017-11-22 01:34:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 313.06 Mbit/s
95th percentile per-packet one-way delay: 54.484 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 172.45 Mbit/s
95th percentile per-packet one-way delay: 54.642 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 140.30 Mbit/s
95th percentile per-packet one-way delay: 55.340 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 178.20 Mbit/s
95th percentile per-packet one-way delay: 53.164 ms
Loss rate: 0.01%
```

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

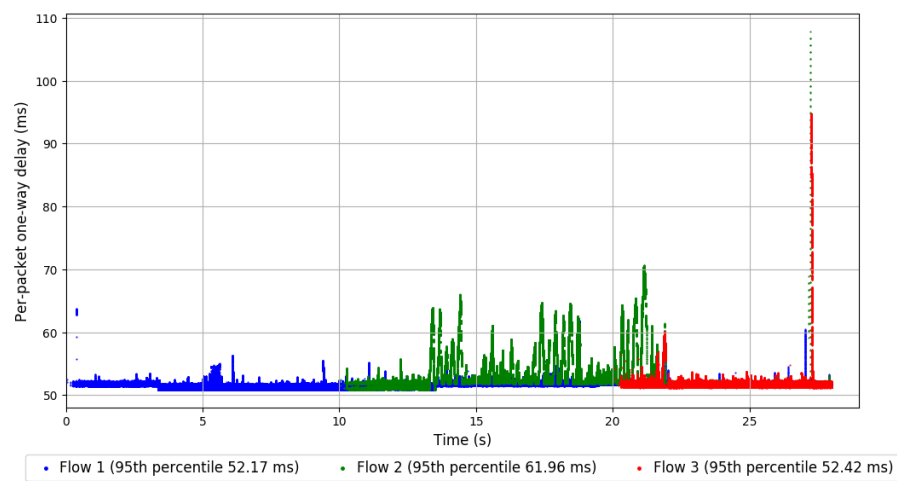
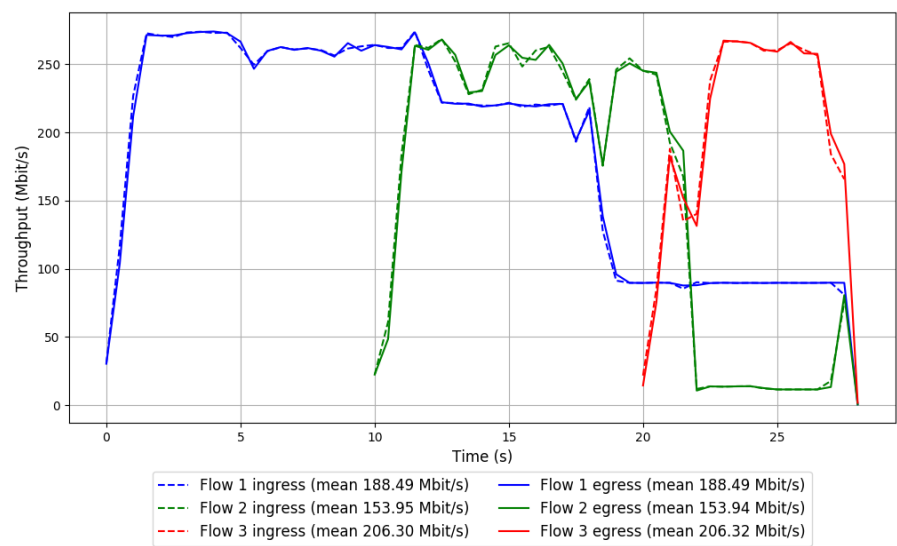


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-21 21:51:43
End at: 2017-11-21 21:52:13

# Below is generated by plot.py at 2017-11-22 01:35:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 345.63 Mbit/s
95th percentile per-packet one-way delay: 56.261 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 188.49 Mbit/s
95th percentile per-packet one-way delay: 52.172 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 153.94 Mbit/s
95th percentile per-packet one-way delay: 61.962 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 206.32 Mbit/s
95th percentile per-packet one-way delay: 52.423 ms
Loss rate: 0.00%
```

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

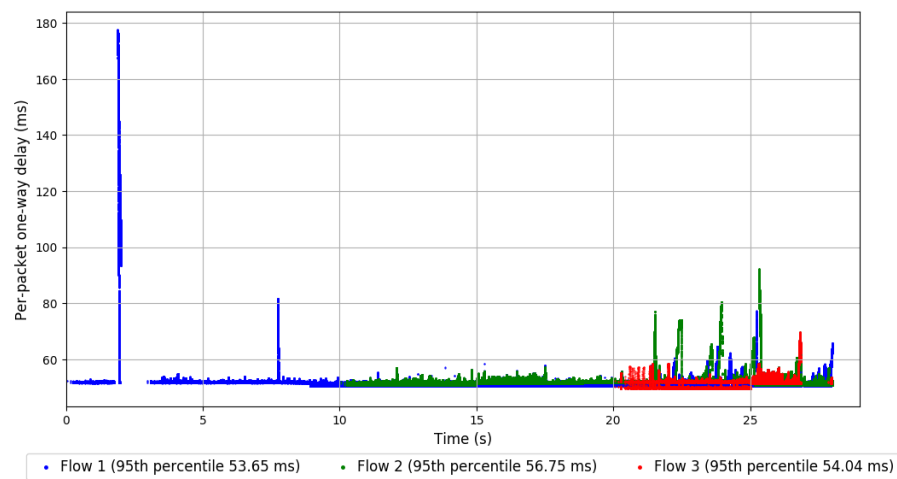
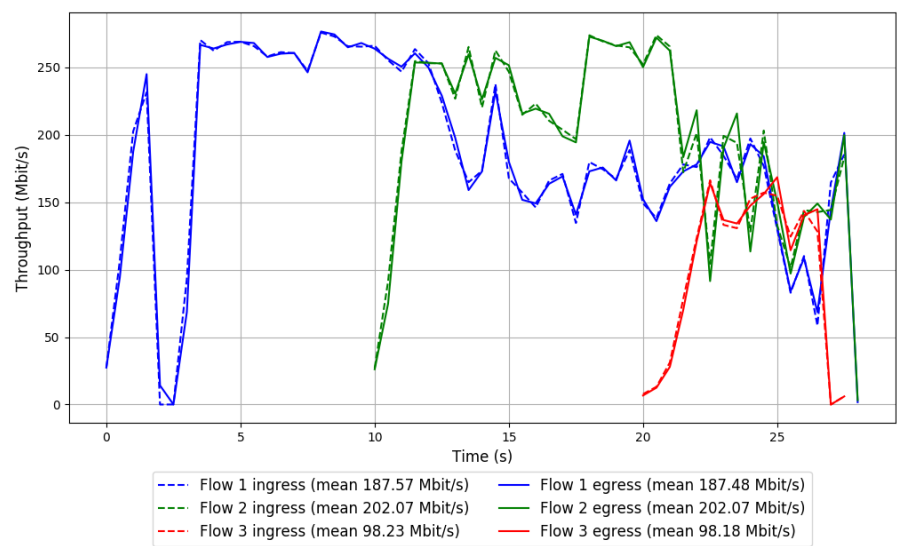


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-11-21 22:03:38
End at: 2017-11-21 22:04:08

# Below is generated by plot.py at 2017-11-22 01:35:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 344.92 Mbit/s
95th percentile per-packet one-way delay: 54.514 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 187.48 Mbit/s
95th percentile per-packet one-way delay: 53.651 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 202.07 Mbit/s
95th percentile per-packet one-way delay: 56.754 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 98.18 Mbit/s
95th percentile per-packet one-way delay: 54.037 ms
Loss rate: 0.00%
```

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

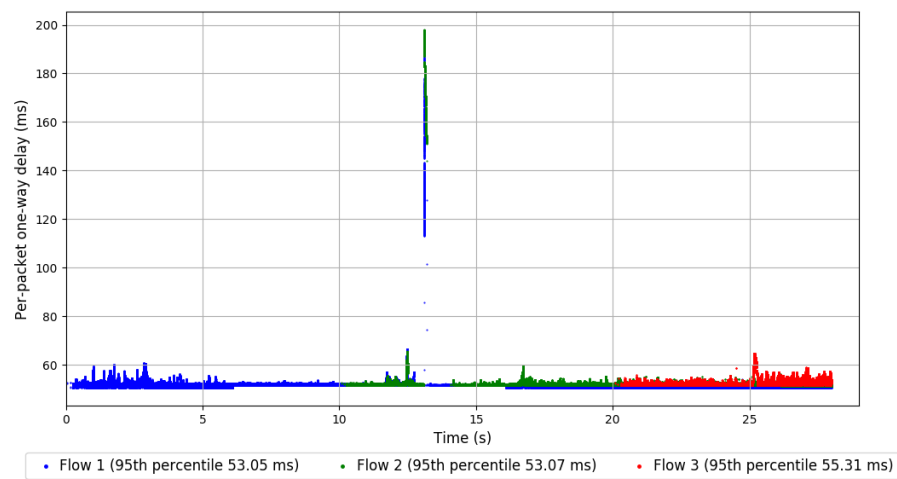
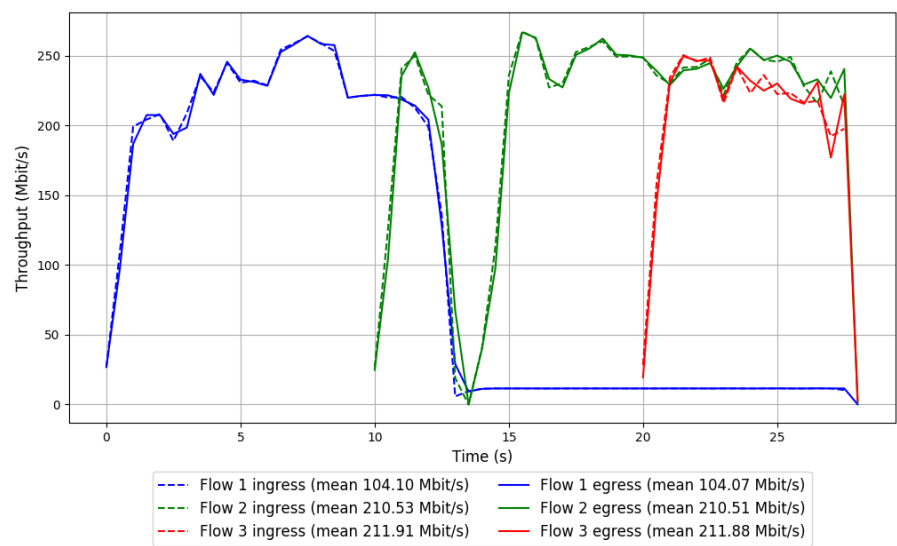


```
Run 4: Statistics of TaoVA-100x

Start at: 2017-11-21 22:15:27
End at: 2017-11-21 22:15:57

# Below is generated by plot.py at 2017-11-22 01:35:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 299.13 Mbit/s
95th percentile per-packet one-way delay: 53.664 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 104.07 Mbit/s
95th percentile per-packet one-way delay: 53.054 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 210.51 Mbit/s
95th percentile per-packet one-way delay: 53.067 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 211.88 Mbit/s
95th percentile per-packet one-way delay: 55.310 ms
Loss rate: 0.01%
```

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

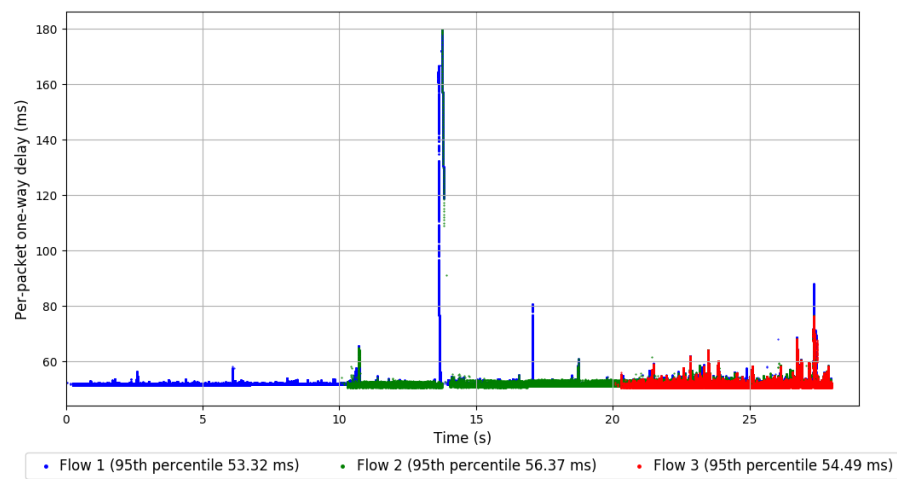
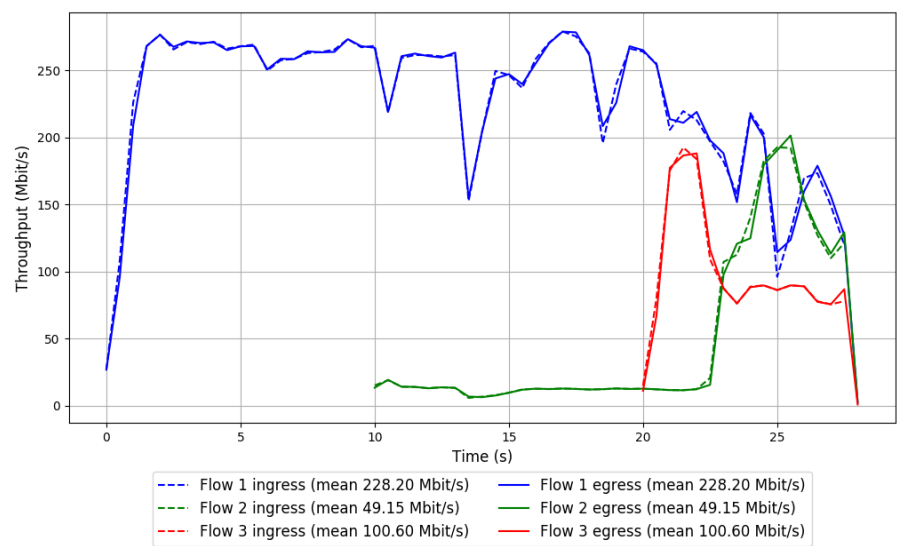


```
Run 5: Statistics of TaoVA-100x

Start at: 2017-11-21 22:27:26
End at: 2017-11-21 22:27:56

# Below is generated by plot.py at 2017-11-22 01:35:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 288.21 Mbit/s
95th percentile per-packet one-way delay: 53.790 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 228.20 Mbit/s
95th percentile per-packet one-way delay: 53.322 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.15 Mbit/s
95th percentile per-packet one-way delay: 56.374 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 100.60 Mbit/s
95th percentile per-packet one-way delay: 54.492 ms
Loss rate: 0.00%
```

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-21 22:39:26

End at: 2017-11-21 22:39:56

# Below is generated by plot.py at 2017-11-22 01:35:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 264.93 Mbit/s

95th percentile per-packet one-way delay: 52.680 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 164.93 Mbit/s

95th percentile per-packet one-way delay: 52.692 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 60.29 Mbit/s

95th percentile per-packet one-way delay: 55.678 ms

Loss rate: 0.01%

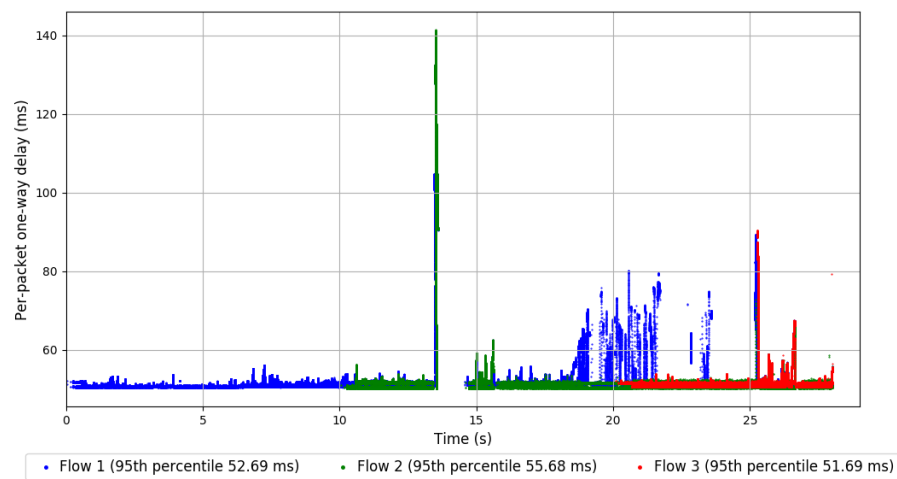
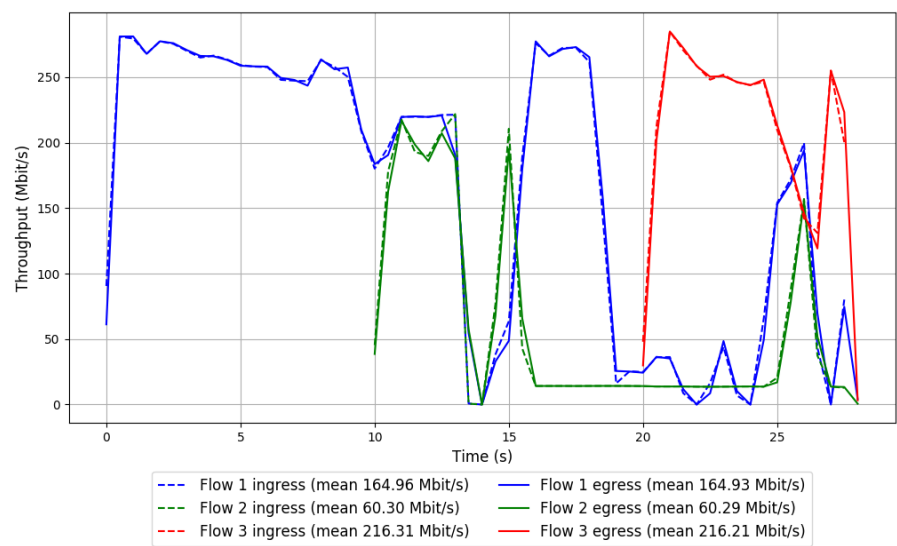
-- Flow 3:

Average throughput: 216.21 Mbit/s

95th percentile per-packet one-way delay: 51.691 ms

Loss rate: 0.03%

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

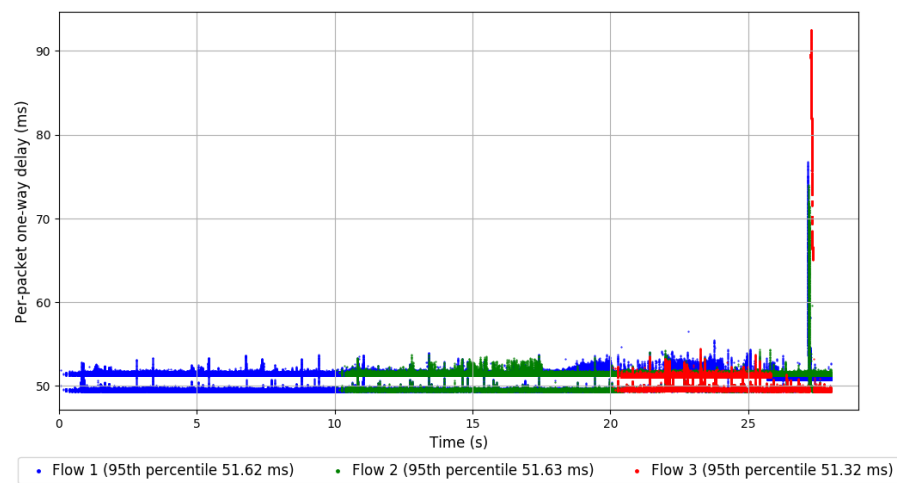
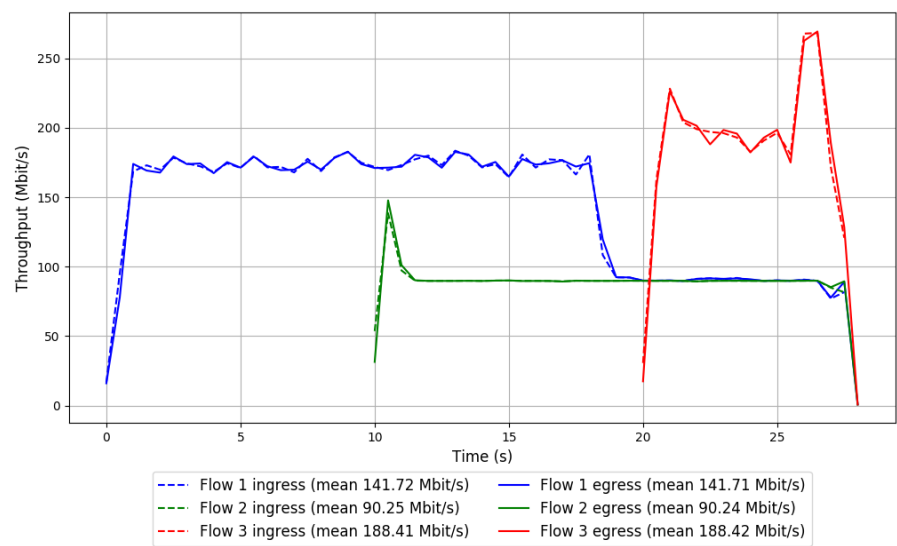


```
Run 7: Statistics of TaoVA-100x

Start at: 2017-11-21 22:51:07
End at: 2017-11-21 22:51:37

# Below is generated by plot.py at 2017-11-22 01:35:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 253.09 Mbit/s
95th percentile per-packet one-way delay: 51.614 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 141.71 Mbit/s
95th percentile per-packet one-way delay: 51.623 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 90.24 Mbit/s
95th percentile per-packet one-way delay: 51.633 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 188.42 Mbit/s
95th percentile per-packet one-way delay: 51.318 ms
Loss rate: 0.00%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-21 23:02:53

End at: 2017-11-21 23:03:23

# Below is generated by plot.py at 2017-11-22 01:38:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 344.55 Mbit/s

95th percentile per-packet one-way delay: 56.790 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 183.41 Mbit/s

95th percentile per-packet one-way delay: 55.066 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 196.76 Mbit/s

95th percentile per-packet one-way delay: 58.229 ms

Loss rate: 0.00%

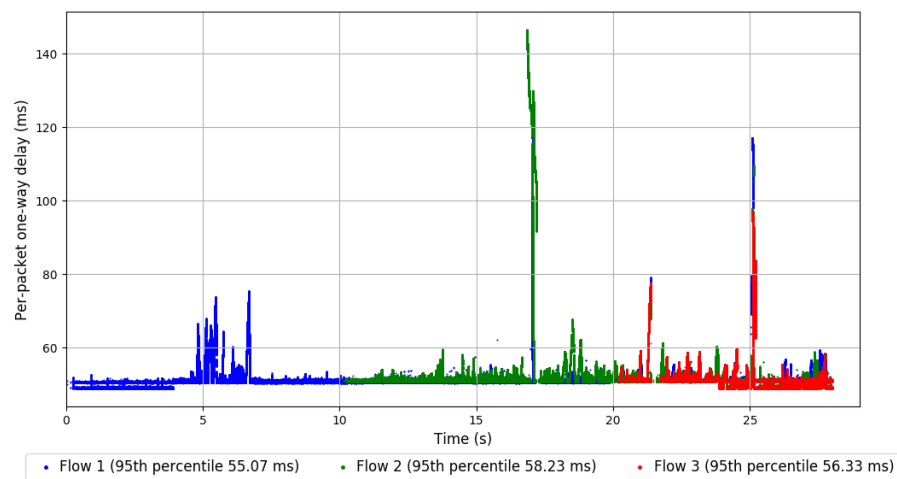
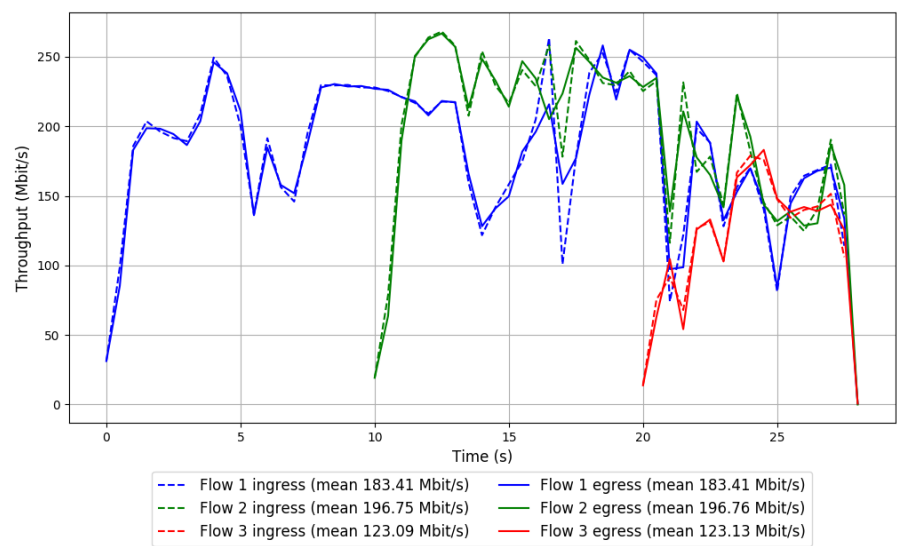
-- Flow 3:

Average throughput: 123.13 Mbit/s

95th percentile per-packet one-way delay: 56.326 ms

Loss rate: 0.00%

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

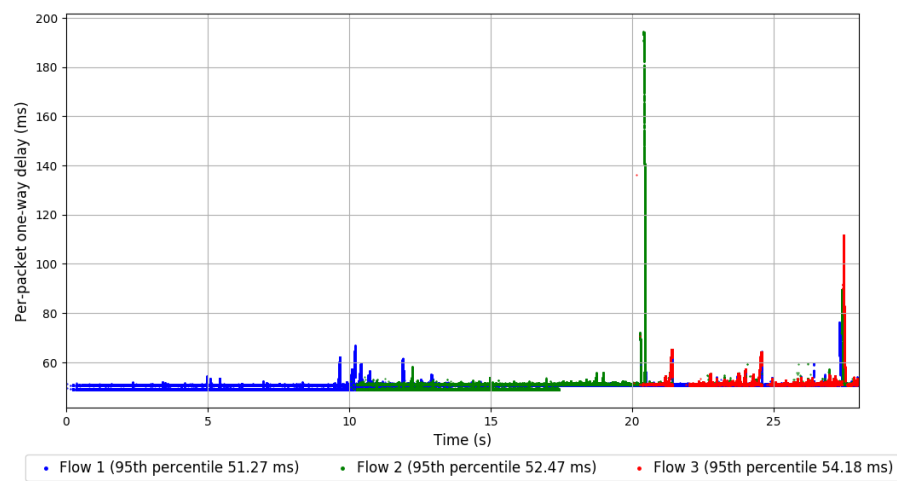
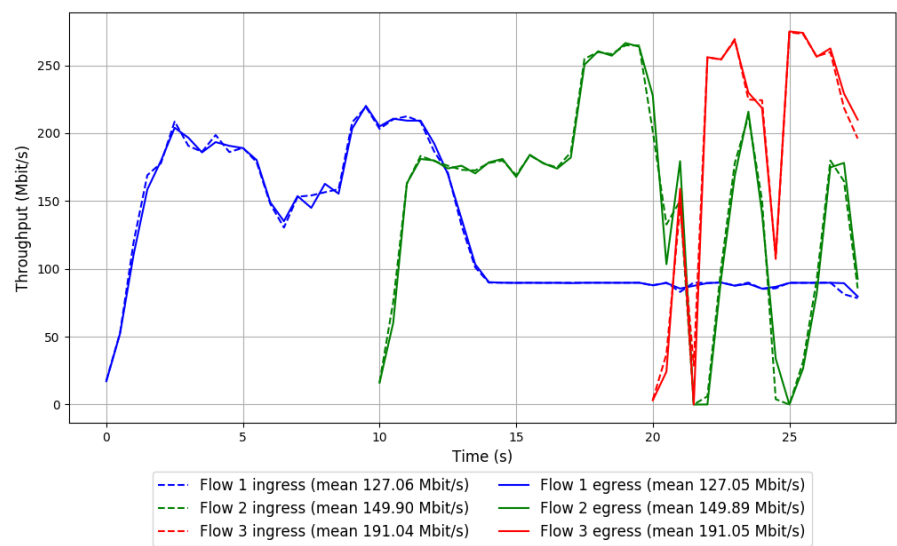


```
Run 9: Statistics of TaoVA-100x

Start at: 2017-11-21 23:14:50
End at: 2017-11-21 23:15:20

# Below is generated by plot.py at 2017-11-22 01:42:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 277.47 Mbit/s
95th percentile per-packet one-way delay: 52.252 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 127.05 Mbit/s
95th percentile per-packet one-way delay: 51.265 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 149.89 Mbit/s
95th percentile per-packet one-way delay: 52.466 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 191.05 Mbit/s
95th percentile per-packet one-way delay: 54.181 ms
Loss rate: 0.00%
```

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

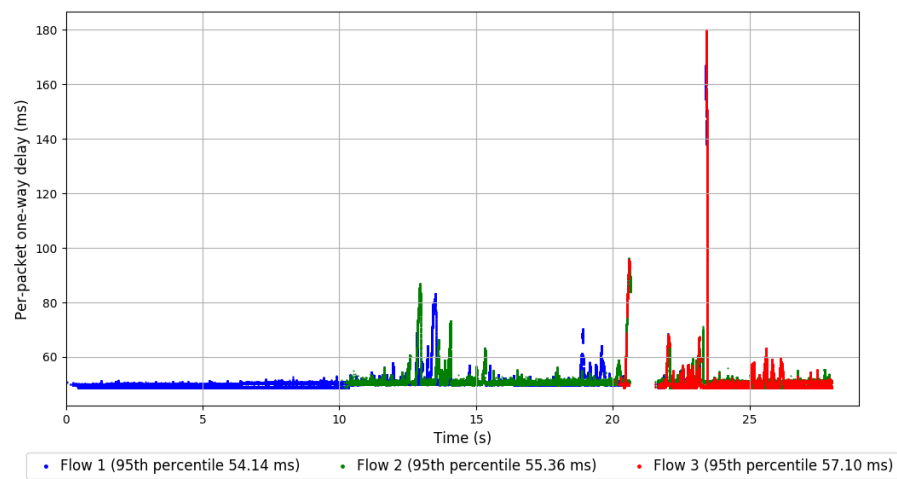
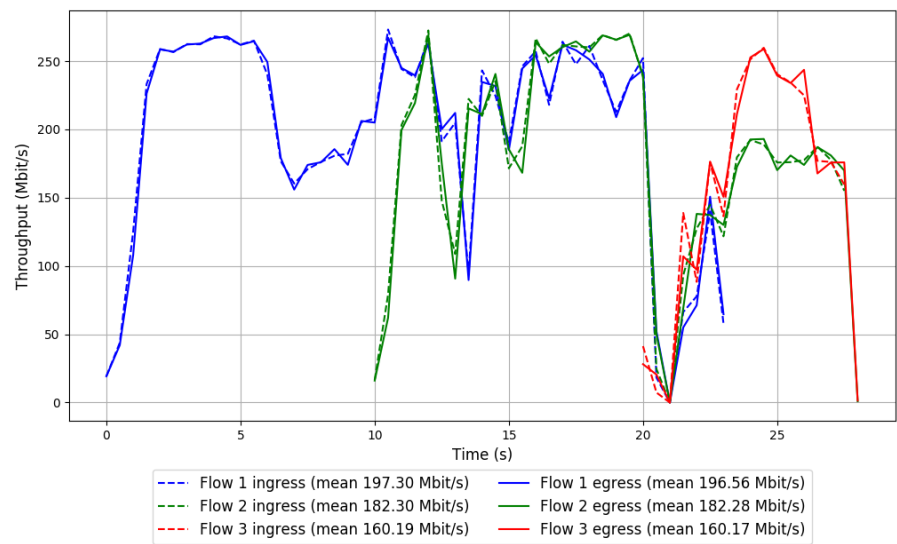


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-21 23:26:47
End at: 2017-11-21 23:27:17

# Below is generated by plot.py at 2017-11-22 01:44:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 326.71 Mbit/s
95th percentile per-packet one-way delay: 55.269 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 196.56 Mbit/s
95th percentile per-packet one-way delay: 54.141 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 182.28 Mbit/s
95th percentile per-packet one-way delay: 55.358 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 160.17 Mbit/s
95th percentile per-packet one-way delay: 57.097 ms
Loss rate: 0.02%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-21 21:45:18

End at: 2017-11-21 21:45:48

# Below is generated by plot.py at 2017-11-22 01:44:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 70.09 Mbit/s

95th percentile per-packet one-way delay: 59.507 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 31.76 Mbit/s

95th percentile per-packet one-way delay: 53.243 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 11.43 Mbit/s

95th percentile per-packet one-way delay: 54.294 ms

Loss rate: 0.09%

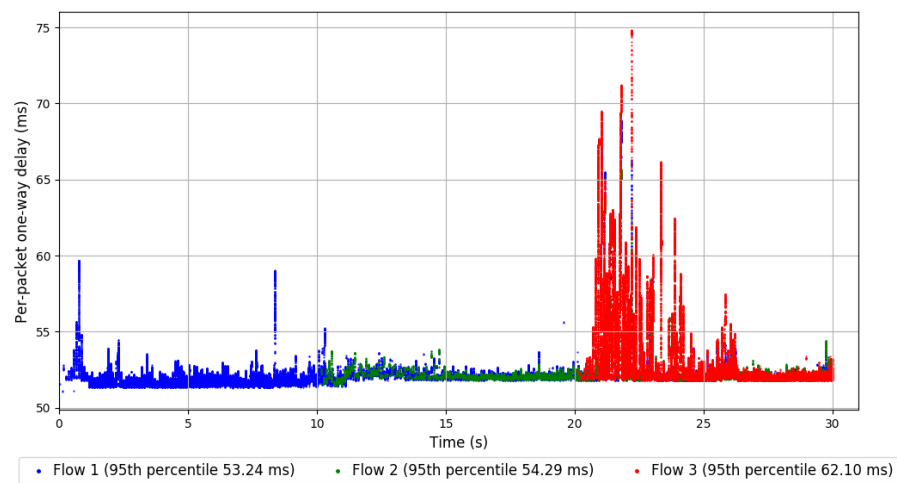
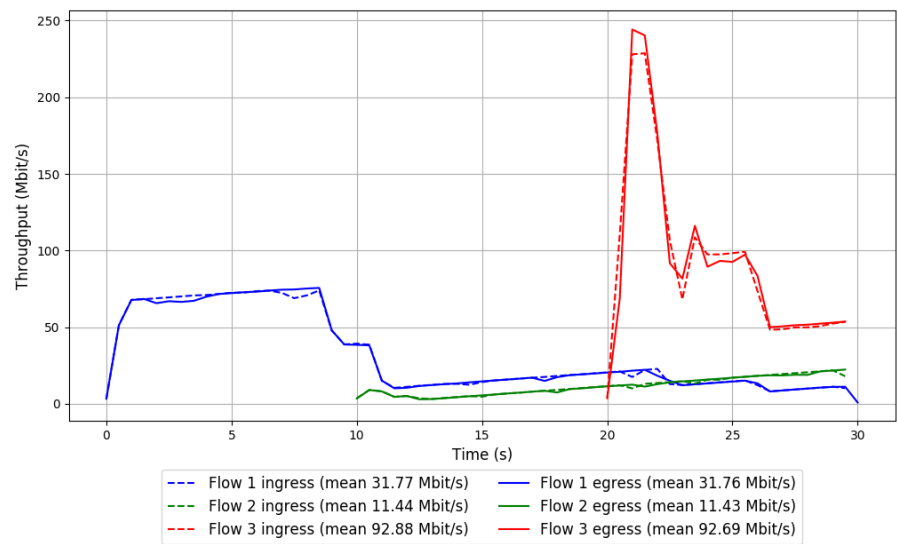
-- Flow 3:

Average throughput: 92.69 Mbit/s

95th percentile per-packet one-way delay: 62.102 ms

Loss rate: 0.21%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-21 21:57:00

End at: 2017-11-21 21:57:30

# Below is generated by plot.py at 2017-11-22 01:44:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 70.01 Mbit/s

95th percentile per-packet one-way delay: 52.824 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 18.07 Mbit/s

95th percentile per-packet one-way delay: 52.842 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 65.12 Mbit/s

95th percentile per-packet one-way delay: 52.848 ms

Loss rate: 0.01%

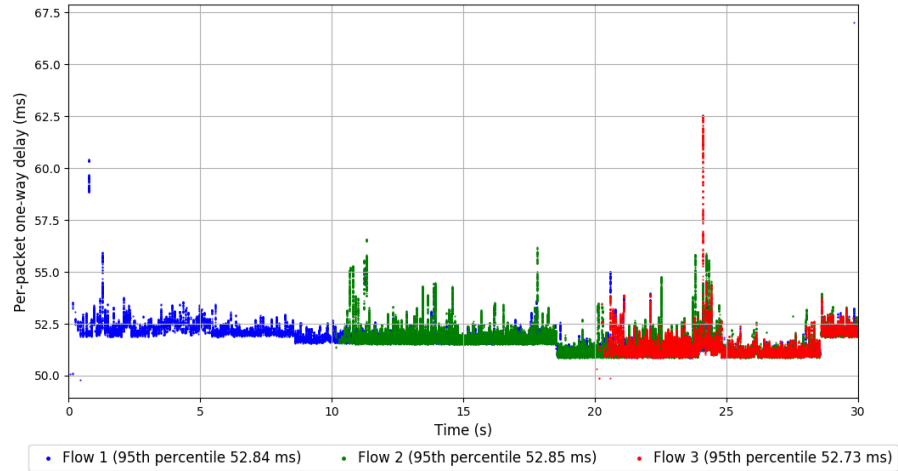
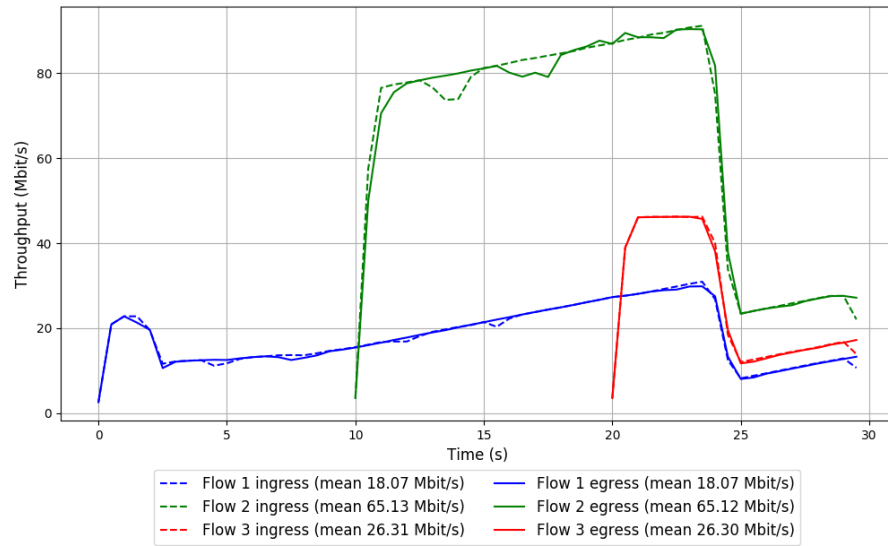
-- Flow 3:

Average throughput: 26.30 Mbit/s

95th percentile per-packet one-way delay: 52.731 ms

Loss rate: 0.01%

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



Run 3: Statistics of TCP Vegas

Start at: 2017-11-21 22:08:55

End at: 2017-11-21 22:09:25

# Below is generated by plot.py at 2017-11-22 01:44:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 237.71 Mbit/s

95th percentile per-packet one-way delay: 58.775 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.48 Mbit/s

95th percentile per-packet one-way delay: 57.264 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 174.11 Mbit/s

95th percentile per-packet one-way delay: 58.002 ms

Loss rate: 0.00%

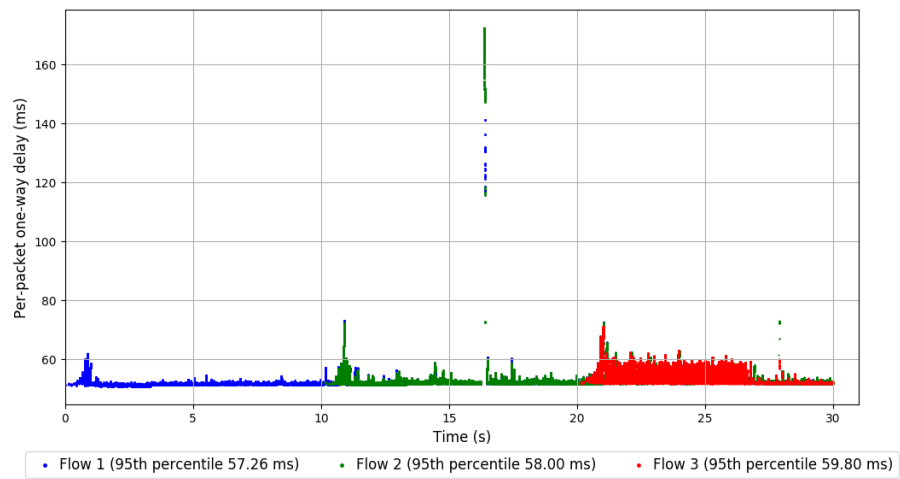
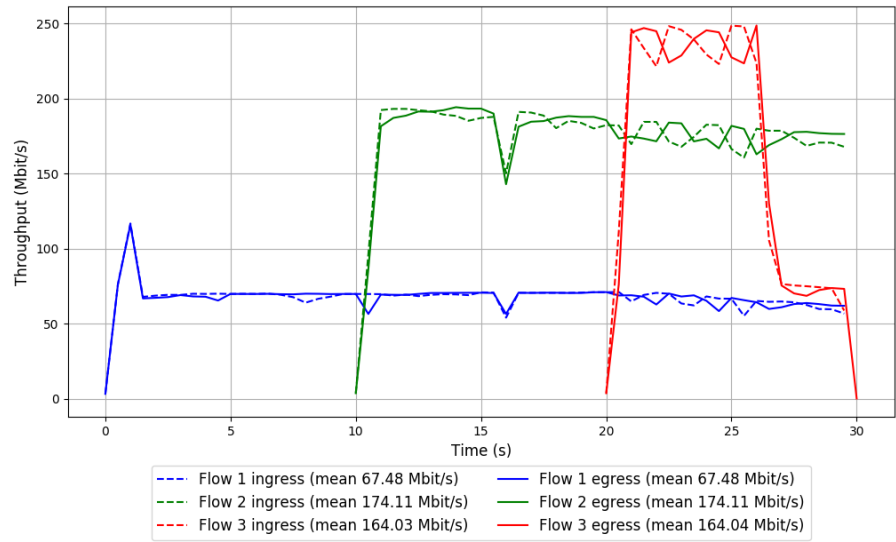
-- Flow 3:

Average throughput: 164.04 Mbit/s

95th percentile per-packet one-way delay: 59.801 ms

Loss rate: 0.00%

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



Run 4: Statistics of TCP Vegas

Start at: 2017-11-21 22:20:51

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

# Below is generated by plot.py at 2017-11-22 01:44:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 70.90 Mbit/s

95th percentile per-packet one-way delay: 52.959 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 36.24 Mbit/s

95th percentile per-packet one-way delay: 53.086 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 28.32 Mbit/s

95th percentile per-packet one-way delay: 52.765 ms

Loss rate: 0.00%

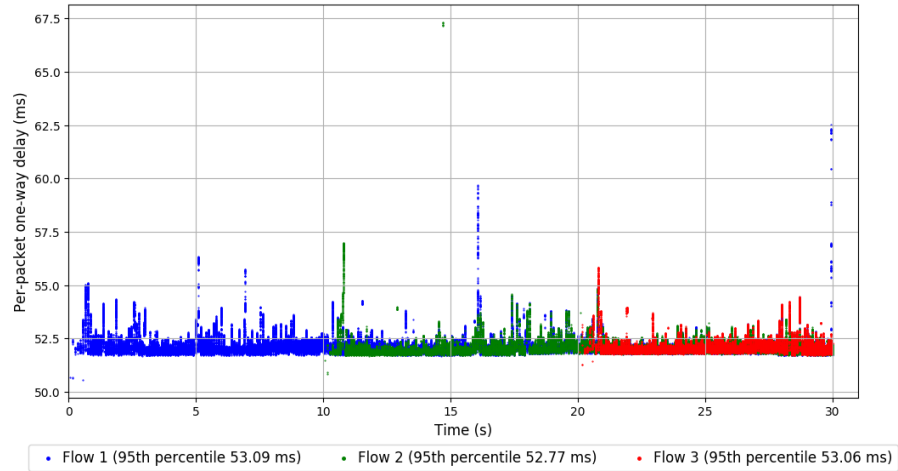
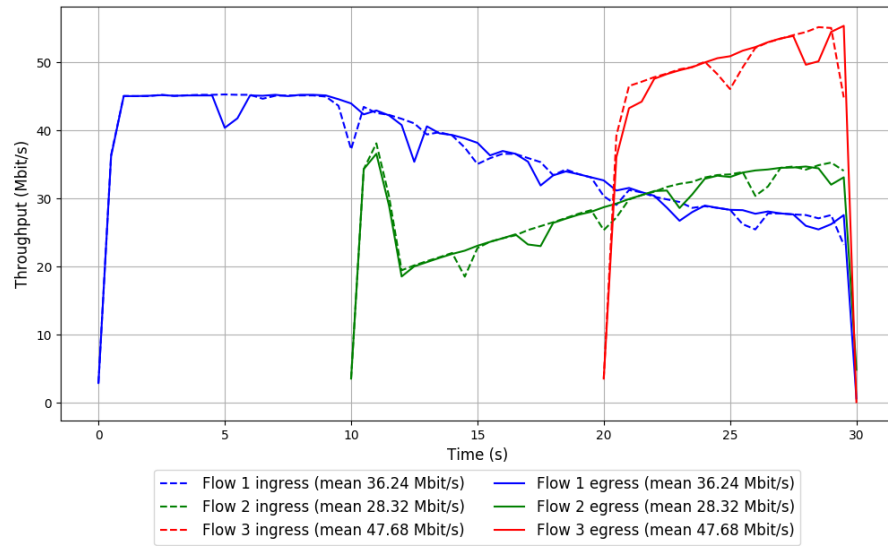
-- Flow 3:

Average throughput: 47.68 Mbit/s

95th percentile per-packet one-way delay: 53.059 ms

Loss rate: 0.00%

# Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-21 22:32:58

End at: 2017-11-21 22:33:28

# Below is generated by plot.py at 2017-11-22 01:44:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 38.94 Mbit/s

95th percentile per-packet one-way delay: 53.085 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 16.34 Mbit/s

95th percentile per-packet one-way delay: 53.103 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 15.99 Mbit/s

95th percentile per-packet one-way delay: 53.606 ms

Loss rate: 0.05%

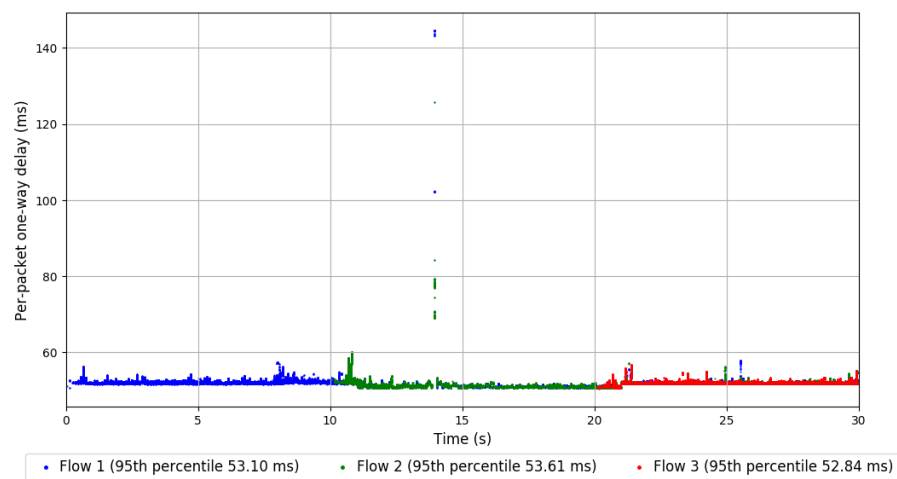
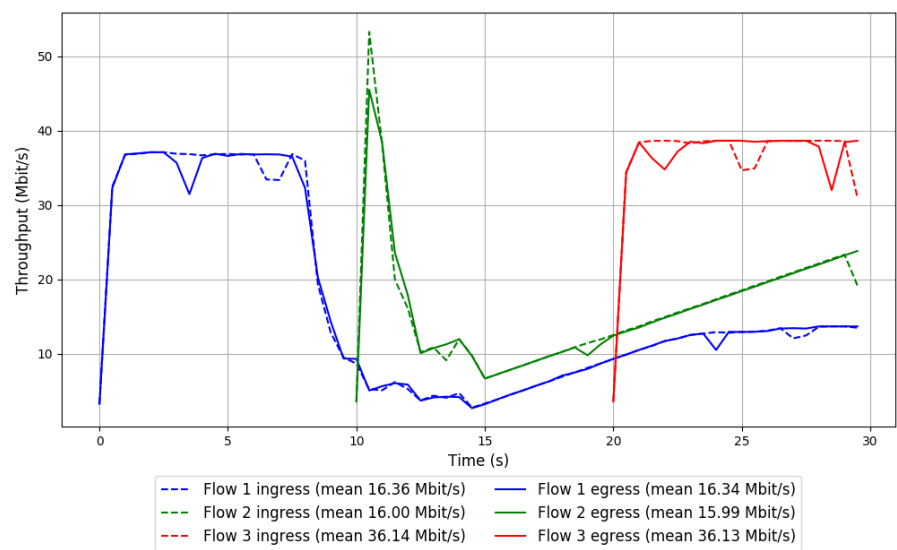
-- Flow 3:

Average throughput: 36.13 Mbit/s

95th percentile per-packet one-way delay: 52.839 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-21 22:44:31

End at: 2017-11-21 22:45:01

# Below is generated by plot.py at 2017-11-22 01:44:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 86.23 Mbit/s

95th percentile per-packet one-way delay: 52.577 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 42.77 Mbit/s

95th percentile per-packet one-way delay: 52.518 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 27.19 Mbit/s

95th percentile per-packet one-way delay: 52.404 ms

Loss rate: 0.00%

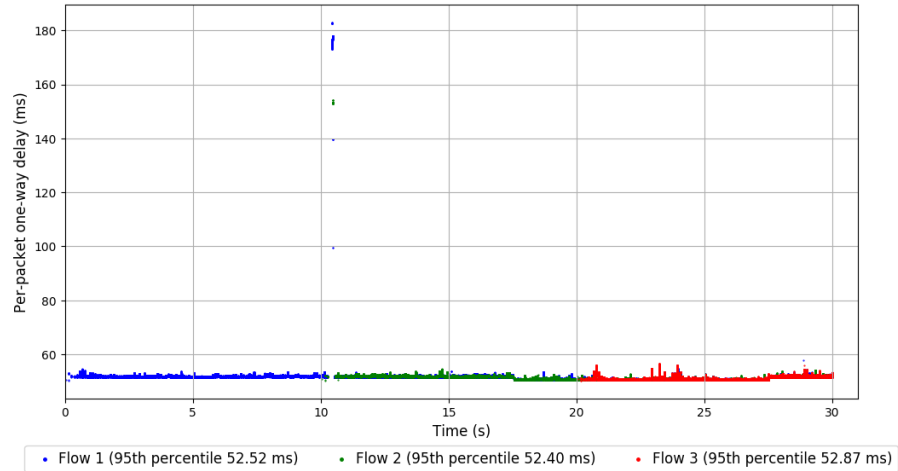
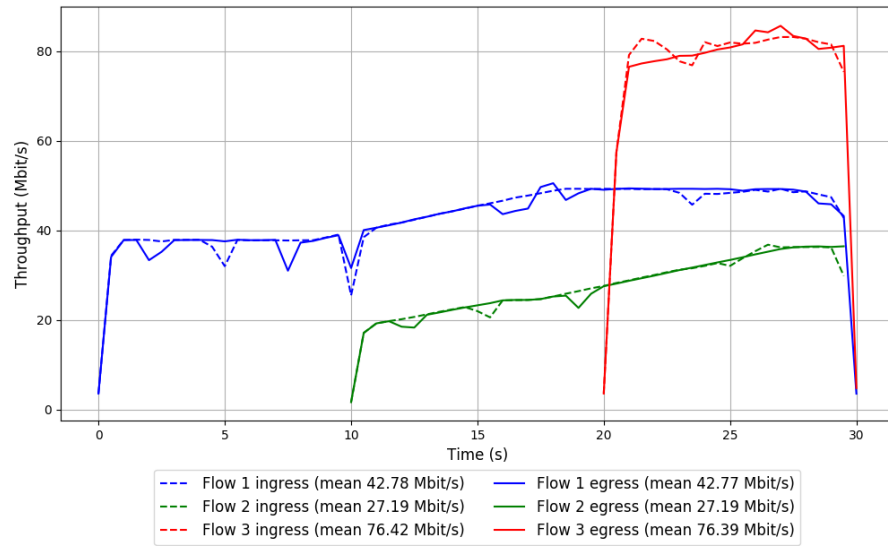
-- Flow 3:

Average throughput: 76.39 Mbit/s

95th percentile per-packet one-way delay: 52.867 ms

Loss rate: 0.03%

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



Run 7: Statistics of TCP Vegas

Start at: 2017-11-21 22:56:11

End at: 2017-11-21 22:56:41

# Below is generated by plot.py at 2017-11-22 01:44:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 167.01 Mbit/s

95th percentile per-packet one-way delay: 52.183 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 57.23 Mbit/s

95th percentile per-packet one-way delay: 51.885 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 161.92 Mbit/s

95th percentile per-packet one-way delay: 52.341 ms

Loss rate: 0.00%

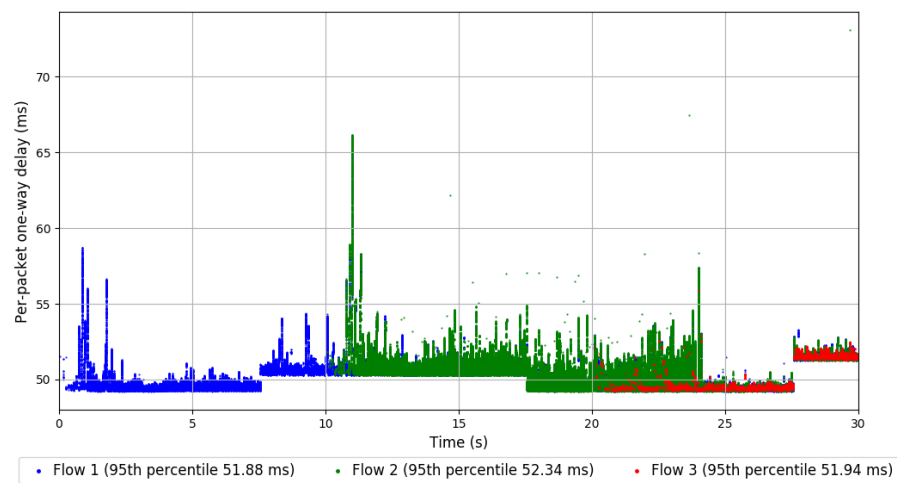
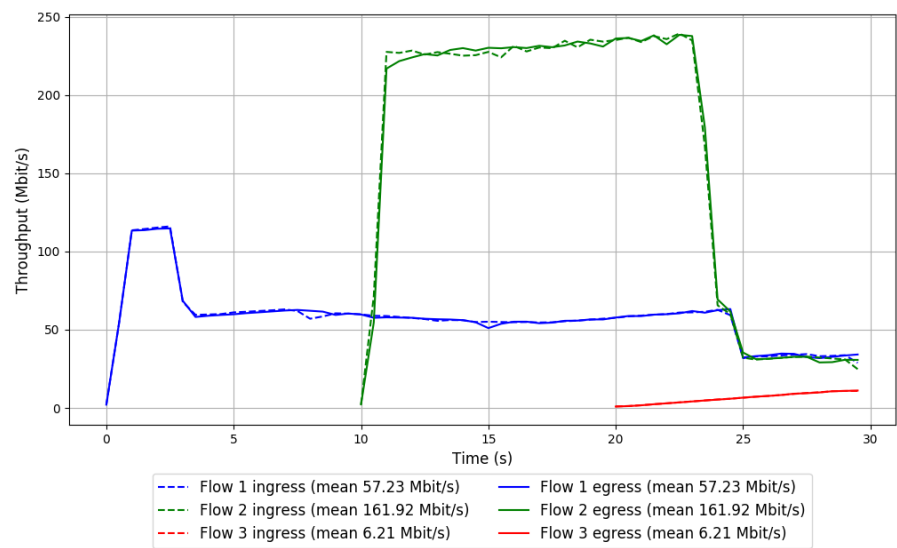
-- Flow 3:

Average throughput: 6.21 Mbit/s

95th percentile per-packet one-way delay: 51.939 ms

Loss rate: 0.06%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-21 23:08:12

End at: 2017-11-21 23:08:42

# Below is generated by plot.py at 2017-11-22 01:44:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 110.84 Mbit/s

95th percentile per-packet one-way delay: 58.071 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 28.31 Mbit/s

95th percentile per-packet one-way delay: 52.576 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 82.19 Mbit/s

95th percentile per-packet one-way delay: 55.424 ms

Loss rate: 0.00%

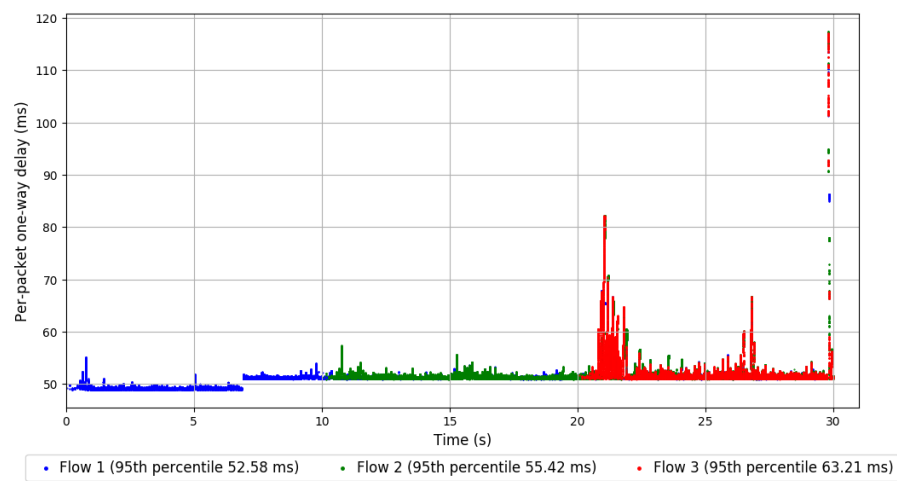
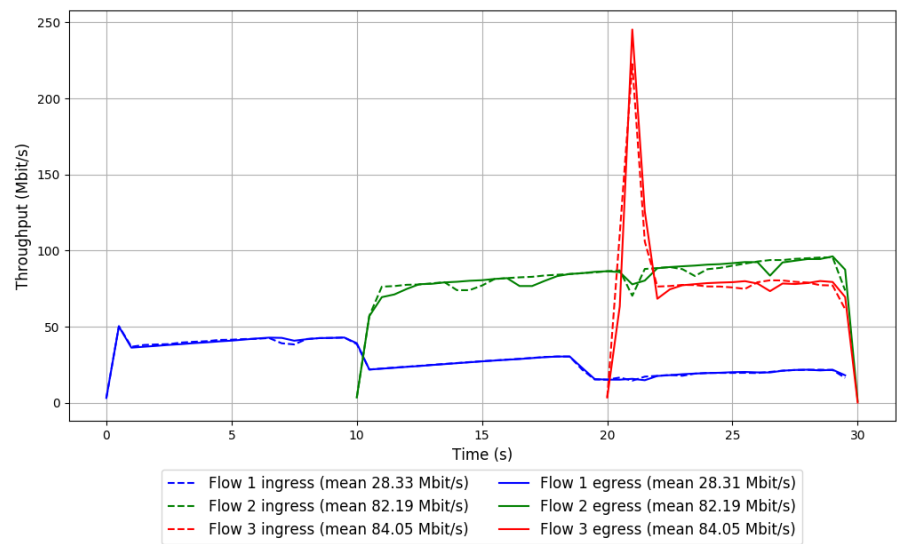
-- Flow 3:

Average throughput: 84.05 Mbit/s

95th percentile per-packet one-way delay: 63.209 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-21 23:20:07

End at: 2017-11-21 23:20:37

# Below is generated by plot.py at 2017-11-22 01:44:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 161.45 Mbit/s

95th percentile per-packet one-way delay: 52.079 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 62.73 Mbit/s

95th percentile per-packet one-way delay: 52.163 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.01 Mbit/s

95th percentile per-packet one-way delay: 51.315 ms

Loss rate: 0.00%

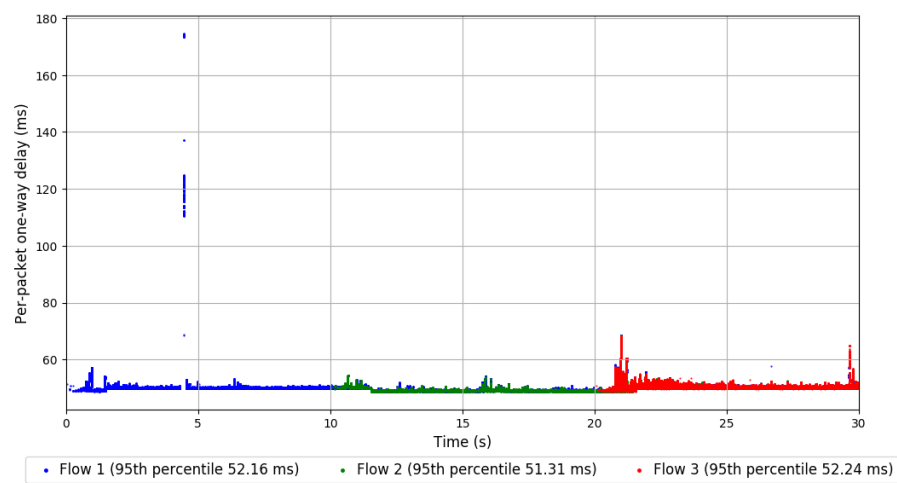
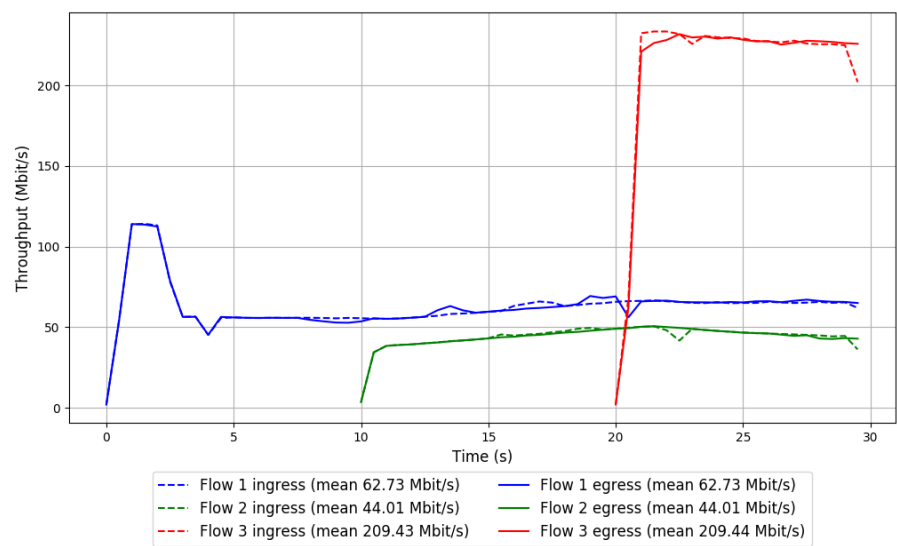
-- Flow 3:

Average throughput: 209.44 Mbit/s

95th percentile per-packet one-way delay: 52.242 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-21 23:32:20

End at: 2017-11-21 23:32:51

# Below is generated by plot.py at 2017-11-22 01:44:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 179.78 Mbit/s

95th percentile per-packet one-way delay: 51.512 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 34.10 Mbit/s

95th percentile per-packet one-way delay: 51.541 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 115.90 Mbit/s

95th percentile per-packet one-way delay: 51.520 ms

Loss rate: 0.00%

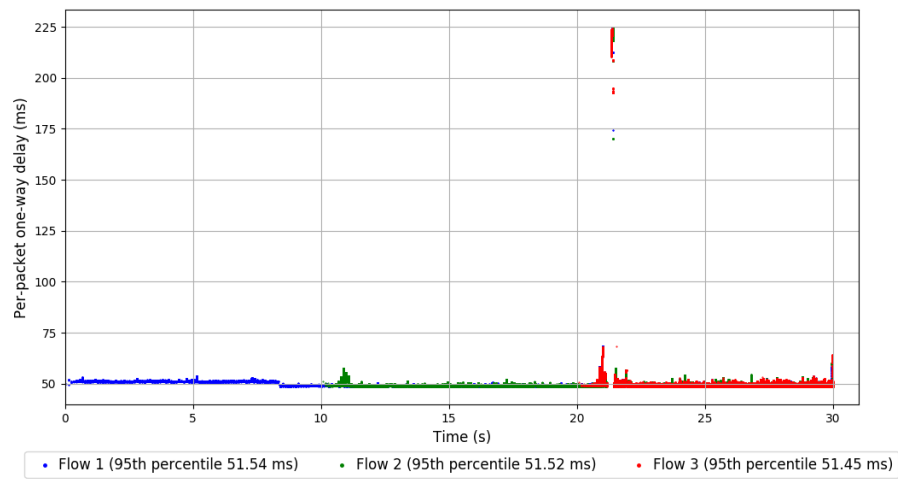
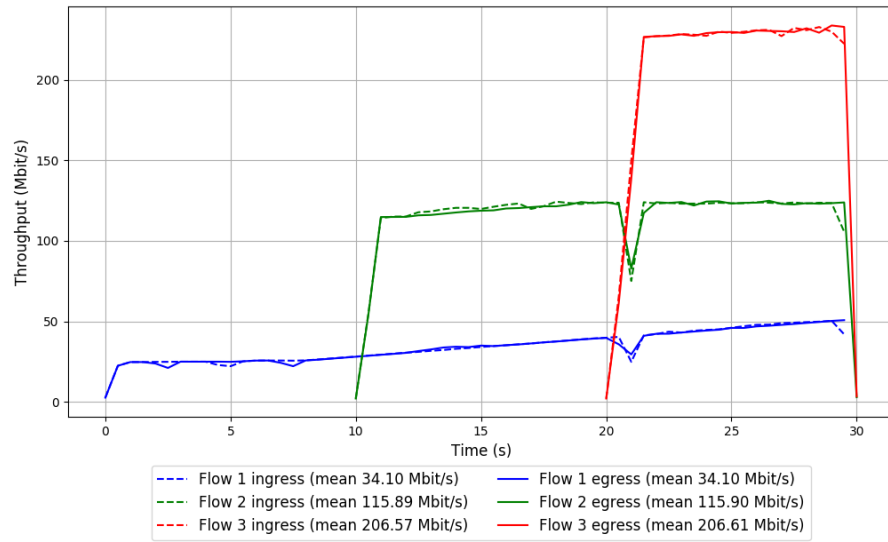
-- Flow 3:

Average throughput: 206.61 Mbit/s

95th percentile per-packet one-way delay: 51.453 ms

Loss rate: 0.00%

# Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-11-21 21:43:36

End at: 2017-11-21 21:44:06

# Below is generated by plot.py at 2017-11-22 01:44:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 286.81 Mbit/s

95th percentile per-packet one-way delay: 114.907 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 147.14 Mbit/s

95th percentile per-packet one-way delay: 106.644 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 143.84 Mbit/s

95th percentile per-packet one-way delay: 116.355 ms

Loss rate: 0.27%

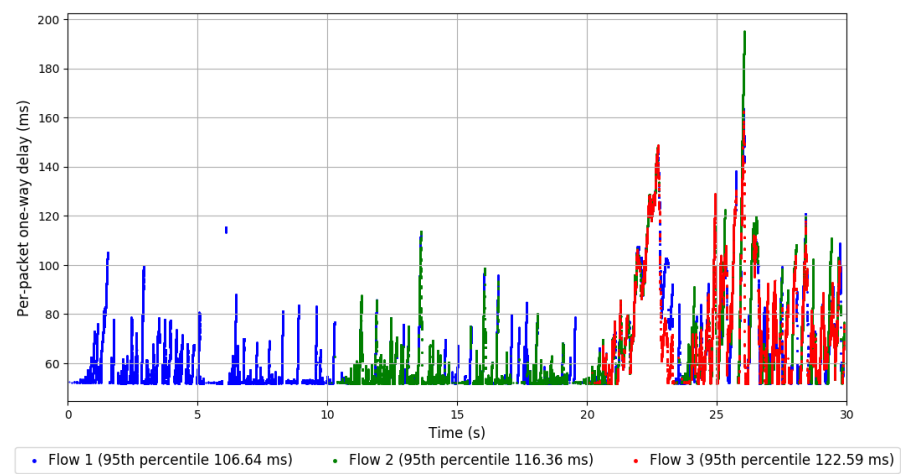
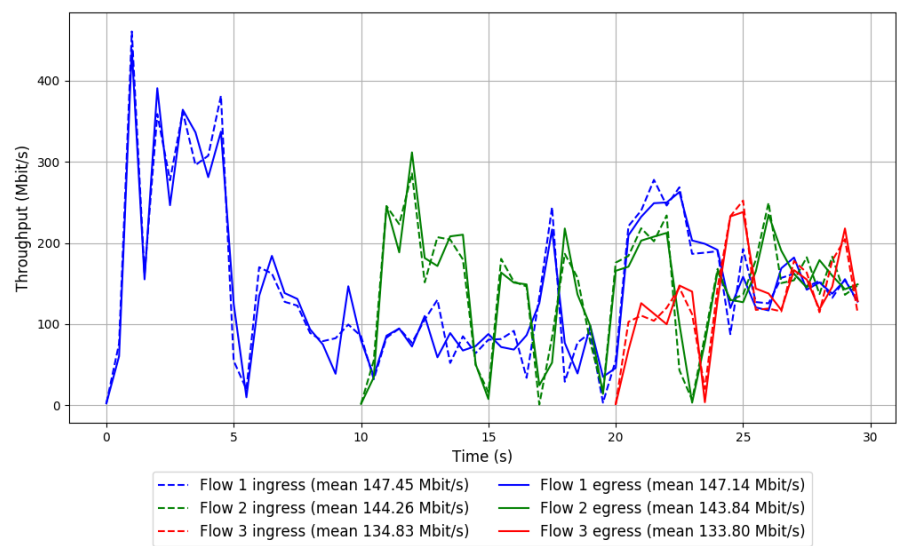
-- Flow 3:

Average throughput: 133.80 Mbit/s

95th percentile per-packet one-way delay: 122.595 ms

Loss rate: 0.78%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-21 21:55:15

End at: 2017-11-21 21:55:45

# Below is generated by plot.py at 2017-11-22 01:44:48

# Datalink statistics

-- Total of 3 flows:

Average throughput: 327.85 Mbit/s

95th percentile per-packet one-way delay: 113.792 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 202.20 Mbit/s

95th percentile per-packet one-way delay: 103.376 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 135.74 Mbit/s

95th percentile per-packet one-way delay: 113.348 ms

Loss rate: 0.50%

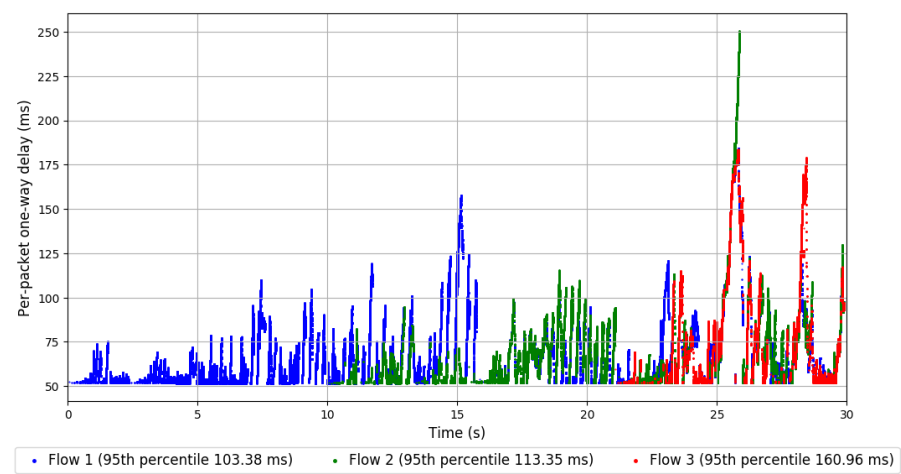
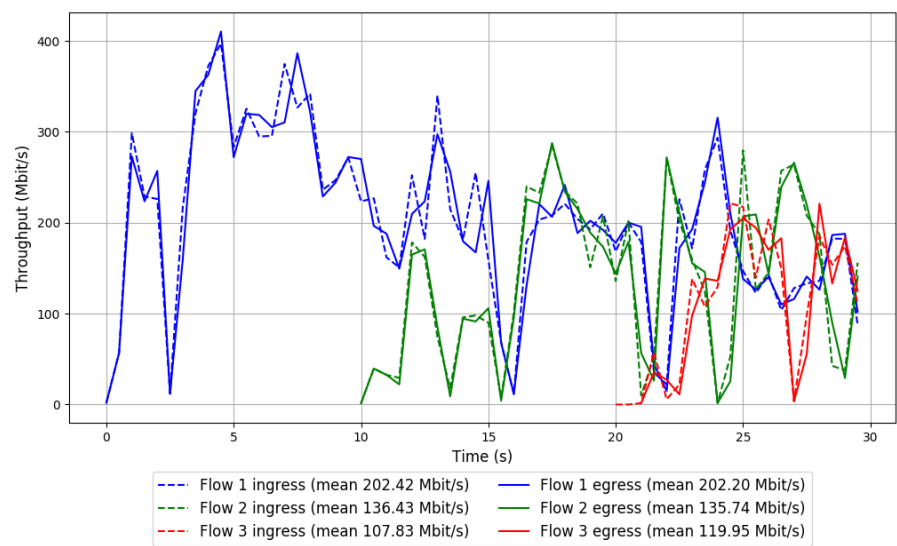
-- Flow 3:

Average throughput: 119.95 Mbit/s

95th percentile per-packet one-way delay: 160.960 ms

Loss rate: 0.20%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-21 22:07:08

End at: 2017-11-21 22:07:38

# Below is generated by plot.py at 2017-11-22 01:45:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 344.47 Mbit/s

95th percentile per-packet one-way delay: 149.896 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 210.20 Mbit/s

95th percentile per-packet one-way delay: 164.199 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 169.59 Mbit/s

95th percentile per-packet one-way delay: 123.752 ms

Loss rate: 0.23%

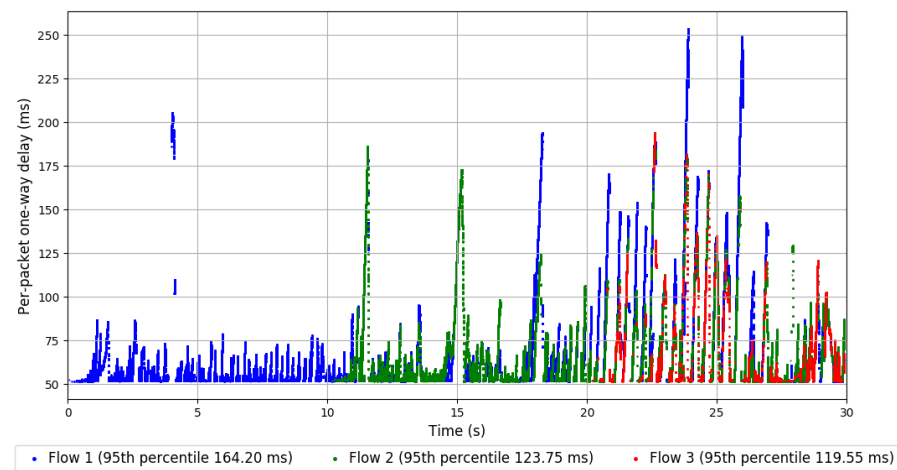
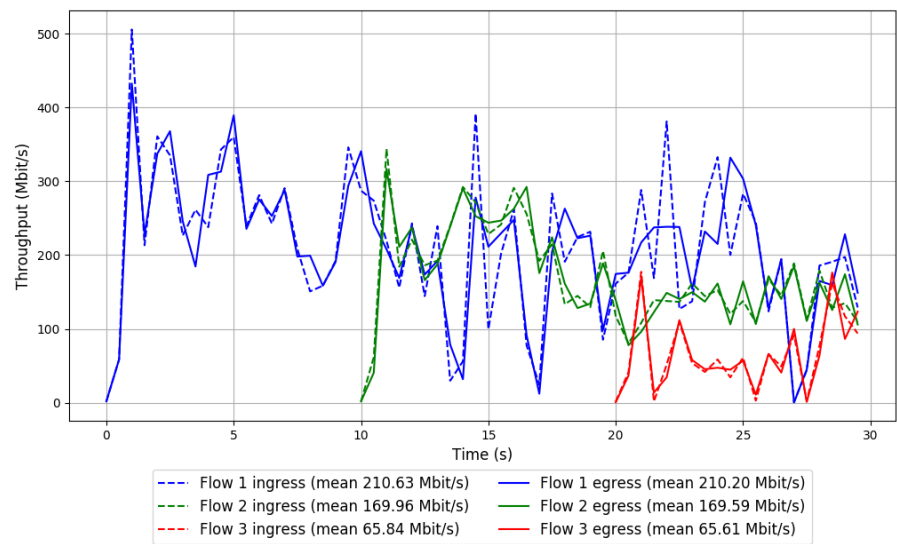
-- Flow 3:

Average throughput: 65.61 Mbit/s

95th percentile per-packet one-way delay: 119.553 ms

Loss rate: 0.44%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-21 22:18:56

End at: 2017-11-21 22:19:26

# Below is generated by plot.py at 2017-11-22 01:45:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 362.80 Mbit/s

95th percentile per-packet one-way delay: 117.806 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 223.48 Mbit/s

95th percentile per-packet one-way delay: 121.334 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 156.62 Mbit/s

95th percentile per-packet one-way delay: 112.269 ms

Loss rate: 0.28%

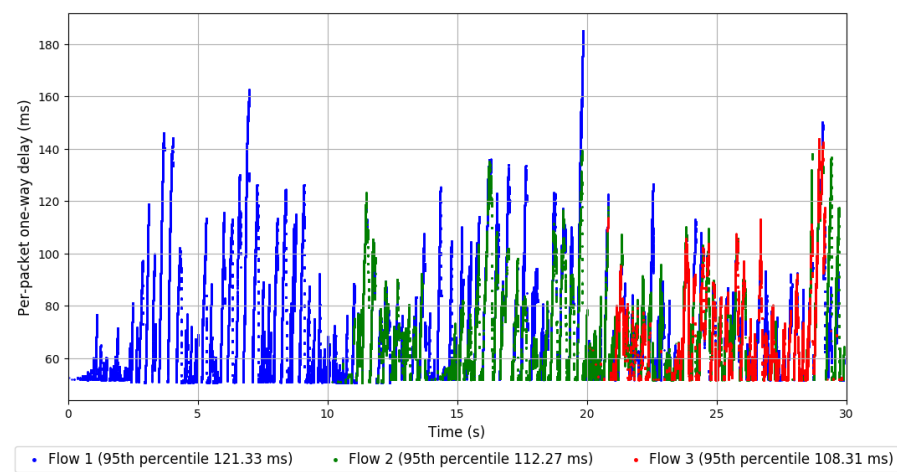
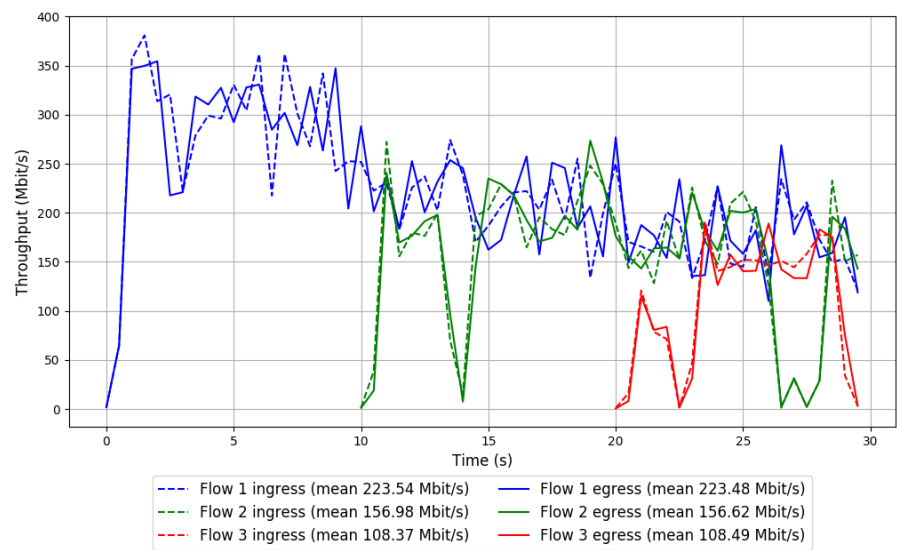
-- Flow 3:

Average throughput: 108.49 Mbit/s

95th percentile per-packet one-way delay: 108.311 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-11-21 22:30:54

End at: 2017-11-21 22:31:24

# Below is generated by plot.py at 2017-11-22 01:45:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 291.33 Mbit/s

95th percentile per-packet one-way delay: 145.447 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 175.09 Mbit/s

95th percentile per-packet one-way delay: 143.378 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 137.38 Mbit/s

95th percentile per-packet one-way delay: 147.552 ms

Loss rate: 0.05%

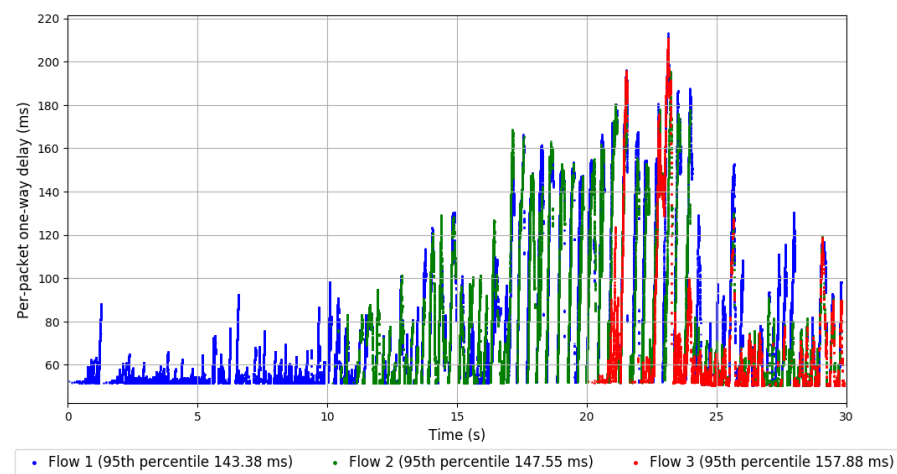
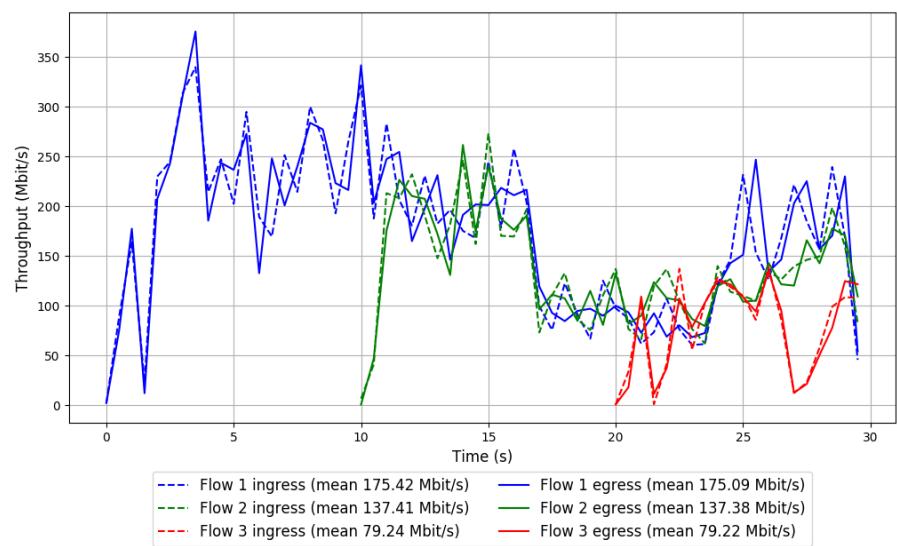
-- Flow 3:

Average throughput: 79.22 Mbit/s

95th percentile per-packet one-way delay: 157.882 ms

Loss rate: 0.05%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-21 22:42:51

End at: 2017-11-21 22:43:21

# Below is generated by plot.py at 2017-11-22 01:46:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 289.43 Mbit/s

95th percentile per-packet one-way delay: 108.543 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 160.35 Mbit/s

95th percentile per-packet one-way delay: 91.120 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 156.05 Mbit/s

95th percentile per-packet one-way delay: 113.463 ms

Loss rate: 0.00%

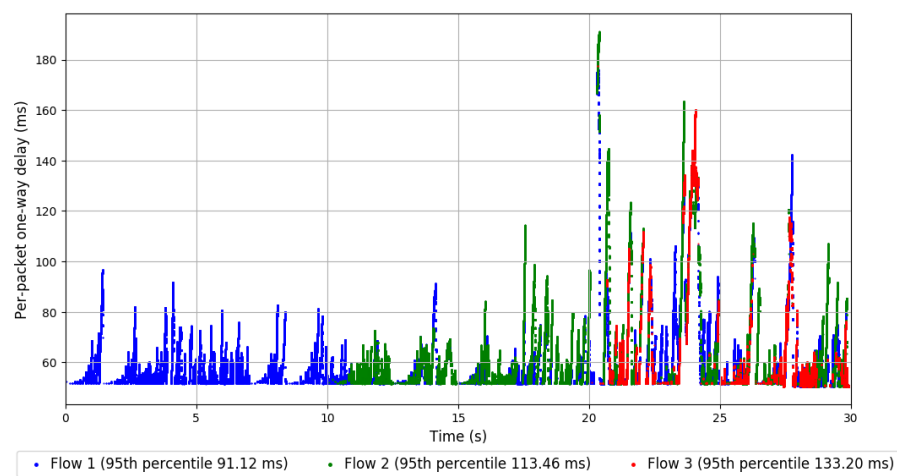
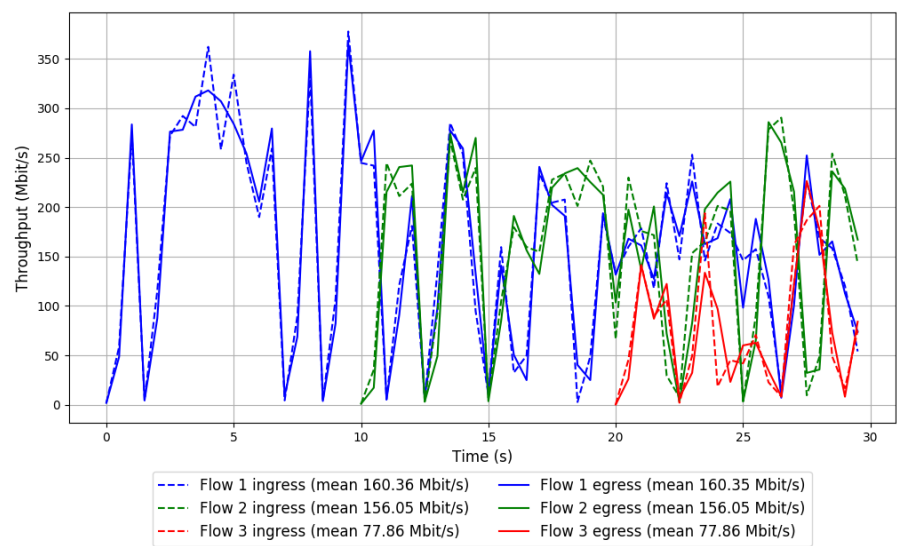
-- Flow 3:

Average throughput: 77.86 Mbit/s

95th percentile per-packet one-way delay: 133.199 ms

Loss rate: 0.01%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-21 22:54:29

End at: 2017-11-21 22:54:59

# Below is generated by plot.py at 2017-11-22 01:48:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 297.65 Mbit/s

95th percentile per-packet one-way delay: 127.419 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 185.13 Mbit/s

95th percentile per-packet one-way delay: 104.565 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 118.99 Mbit/s

95th percentile per-packet one-way delay: 169.793 ms

Loss rate: 0.40%

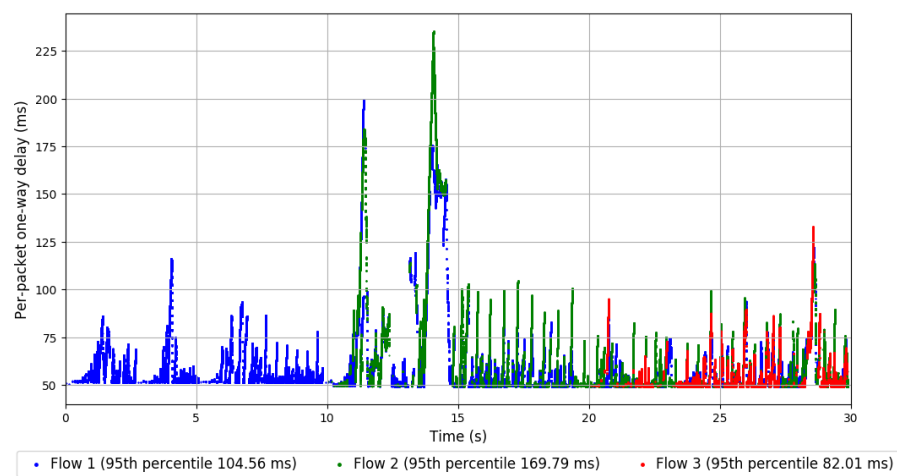
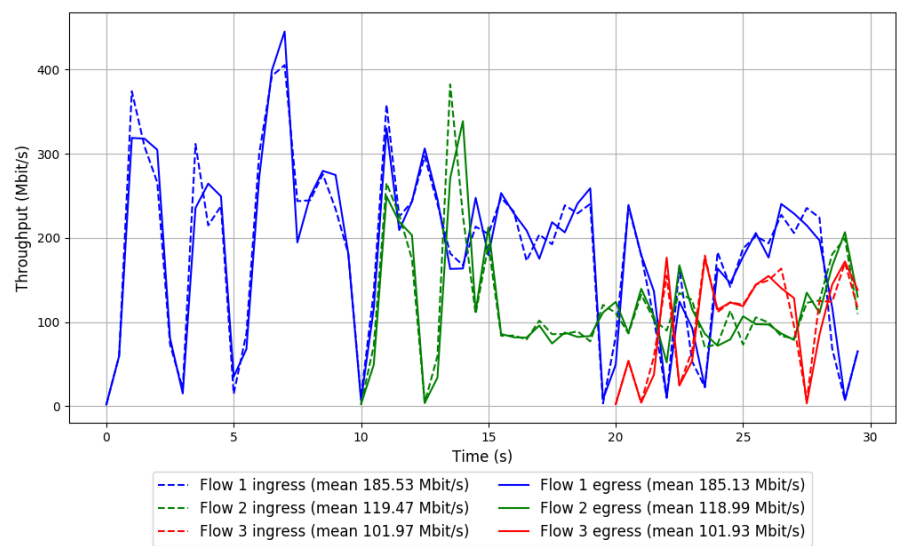
-- Flow 3:

Average throughput: 101.93 Mbit/s

95th percentile per-packet one-way delay: 82.006 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-21 23:06:24

End at: 2017-11-21 23:06:54

# Below is generated by plot.py at 2017-11-22 01:49:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 327.76 Mbit/s

95th percentile per-packet one-way delay: 138.610 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 188.24 Mbit/s

95th percentile per-packet one-way delay: 146.909 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 144.32 Mbit/s

95th percentile per-packet one-way delay: 113.498 ms

Loss rate: 0.12%

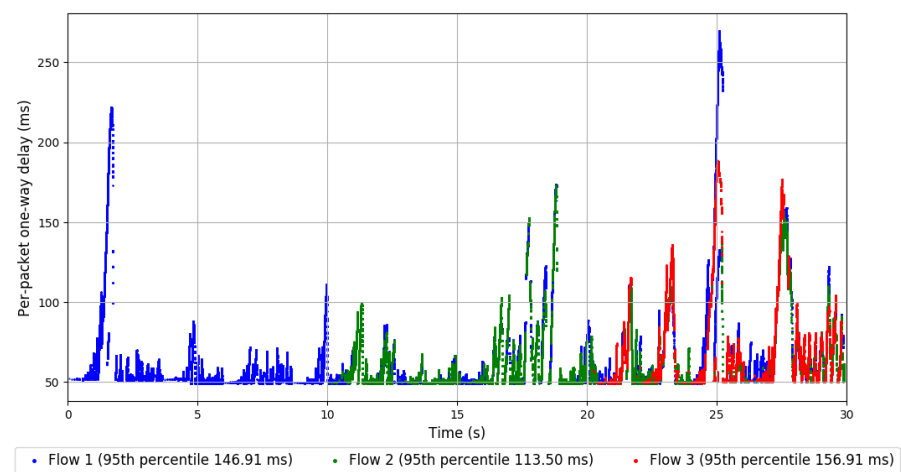
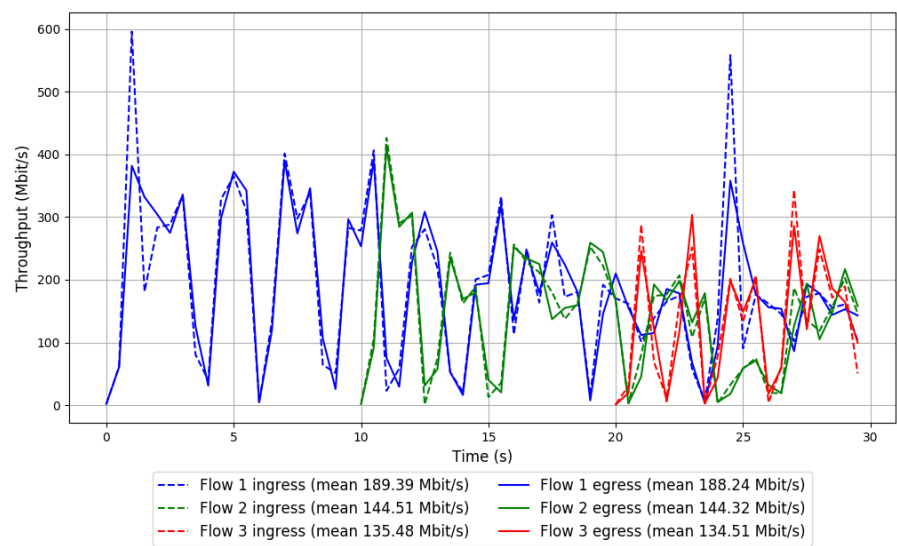
-- Flow 3:

Average throughput: 134.51 Mbit/s

95th percentile per-packet one-way delay: 156.908 ms

Loss rate: 0.42%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-21 23:18:14

End at: 2017-11-21 23:18:44

# Below is generated by plot.py at 2017-11-22 01:50:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 333.61 Mbit/s

95th percentile per-packet one-way delay: 128.396 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 201.13 Mbit/s

95th percentile per-packet one-way delay: 120.274 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 141.70 Mbit/s

95th percentile per-packet one-way delay: 142.901 ms

Loss rate: 0.42%

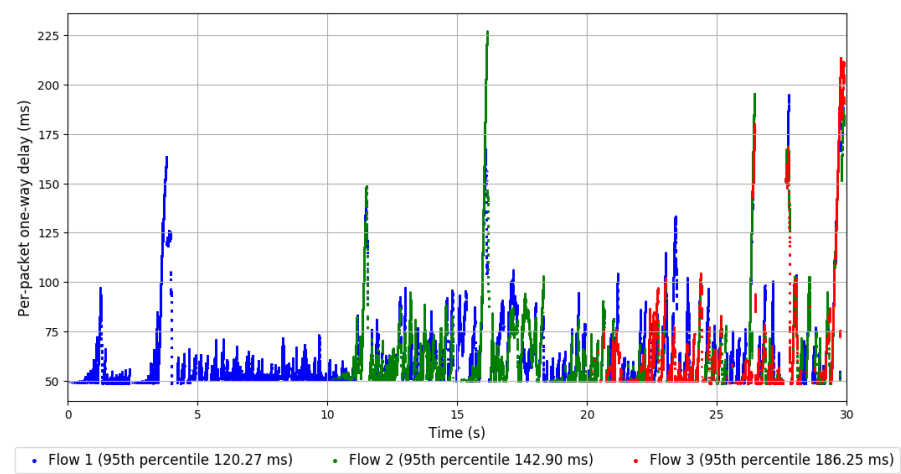
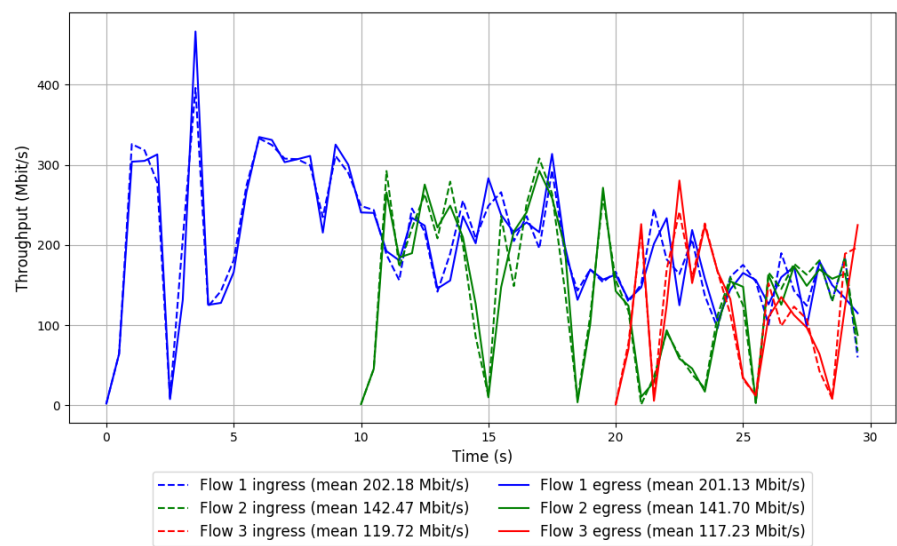
-- Flow 3:

Average throughput: 117.23 Mbit/s

95th percentile per-packet one-way delay: 186.249 ms

Loss rate: 1.89%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-21 23:30:15

End at: 2017-11-21 23:30:45

# Below is generated by plot.py at 2017-11-22 01:51:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 330.35 Mbit/s

95th percentile per-packet one-way delay: 141.770 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 181.71 Mbit/s

95th percentile per-packet one-way delay: 114.988 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 181.45 Mbit/s

95th percentile per-packet one-way delay: 163.920 ms

Loss rate: 0.33%

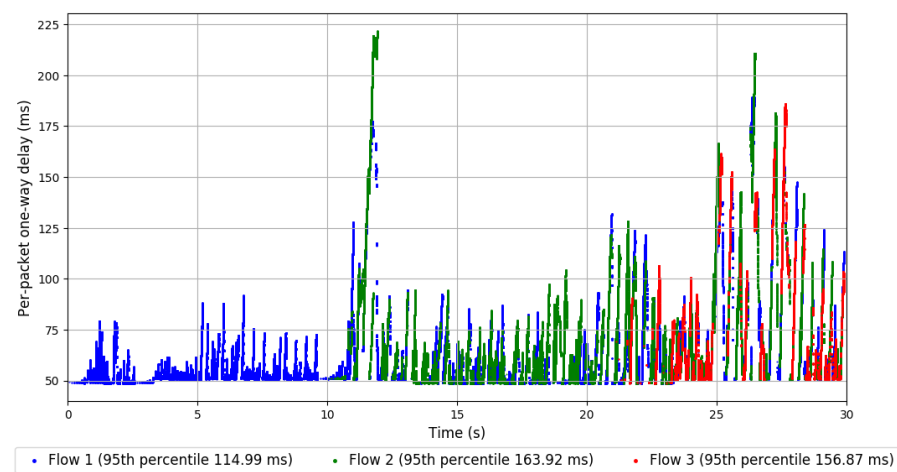
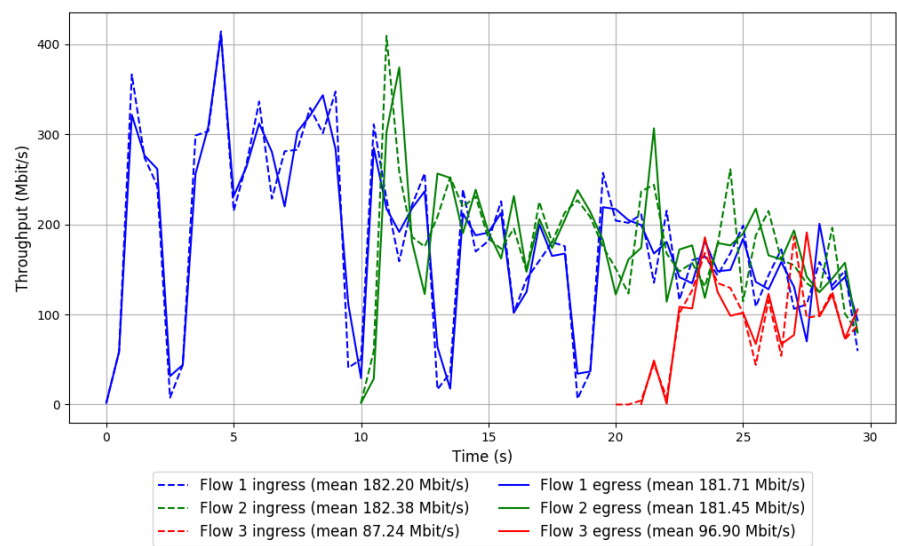
-- Flow 3:

Average throughput: 96.90 Mbit/s

95th percentile per-packet one-way delay: 156.872 ms

Loss rate: 0.00%

Run 10: Report of Verus — Data Link

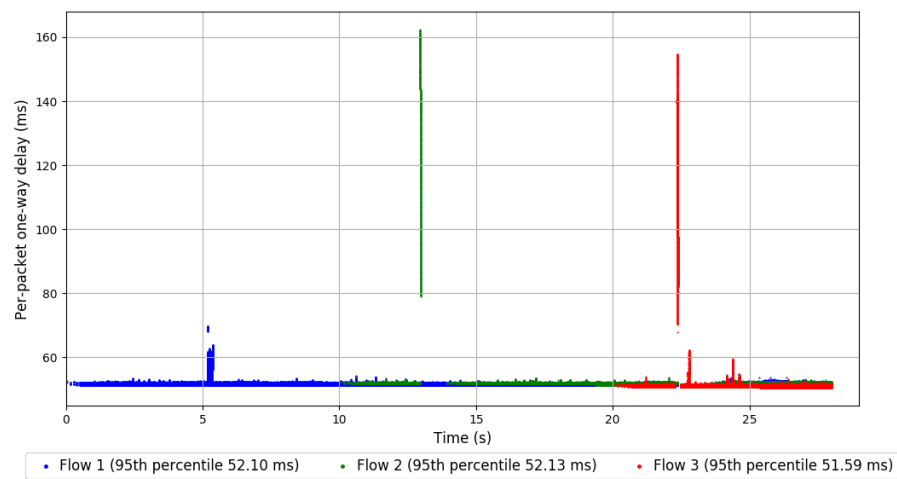
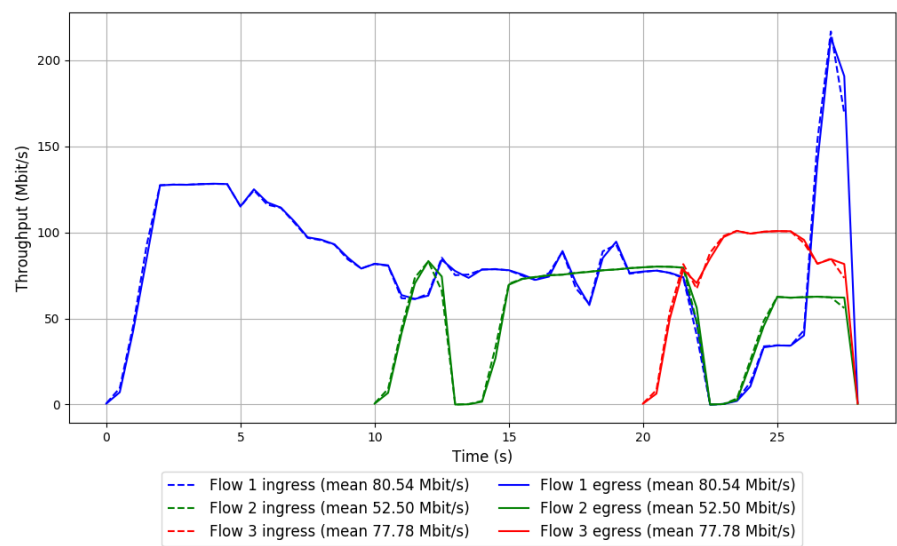


```
Run 1: Statistics of Copa

Start at: 2017-11-21 21:36:47
End at: 2017-11-21 21:37:17

# Below is generated by plot.py at 2017-11-22 01:51:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 136.32 Mbit/s
95th percentile per-packet one-way delay: 52.099 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 80.54 Mbit/s
95th percentile per-packet one-way delay: 52.100 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 52.50 Mbit/s
95th percentile per-packet one-way delay: 52.134 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 77.78 Mbit/s
95th percentile per-packet one-way delay: 51.587 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-21 21:48:24

End at: 2017-11-21 21:48:54

# Below is generated by plot.py at 2017-11-22 01:51:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 142.76 Mbit/s

95th percentile per-packet one-way delay: 52.132 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.58 Mbit/s

95th percentile per-packet one-way delay: 52.112 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.96 Mbit/s

95th percentile per-packet one-way delay: 52.153 ms

Loss rate: 0.00%

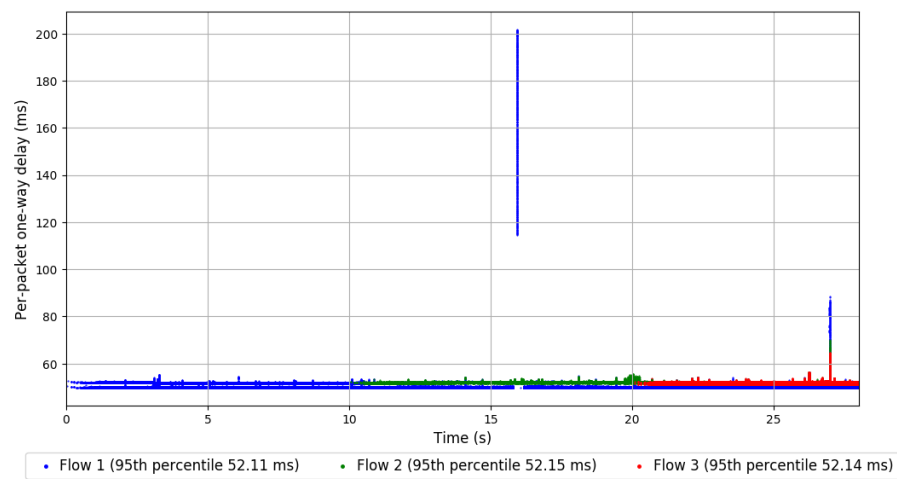
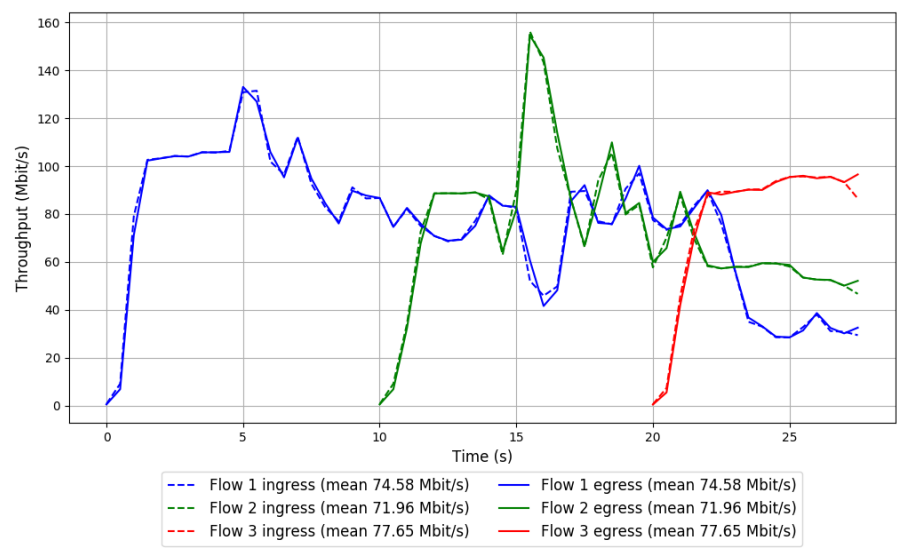
-- Flow 3:

Average throughput: 77.65 Mbit/s

95th percentile per-packet one-way delay: 52.138 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-21 22:00:07

End at: 2017-11-21 22:00:37

# Below is generated by plot.py at 2017-11-22 01:51:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 139.13 Mbit/s

95th percentile per-packet one-way delay: 52.219 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 75.20 Mbit/s

95th percentile per-packet one-way delay: 52.159 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 69.51 Mbit/s

95th percentile per-packet one-way delay: 52.312 ms

Loss rate: 0.04%

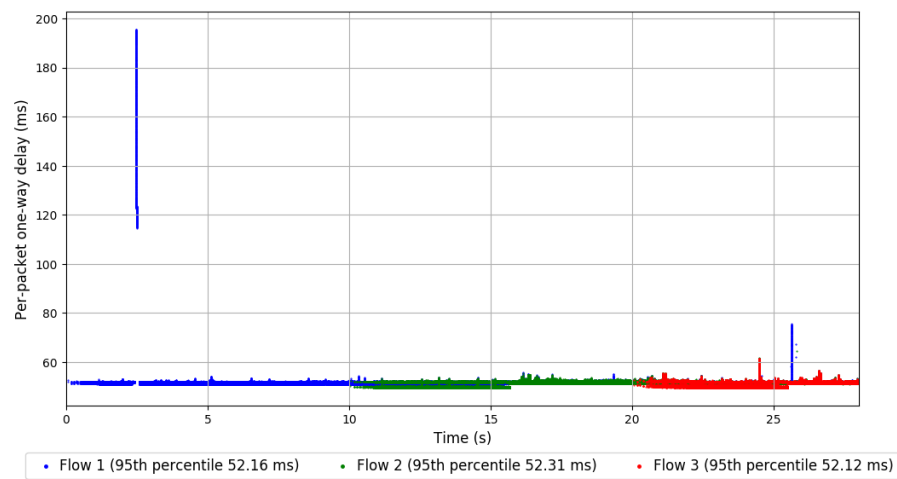
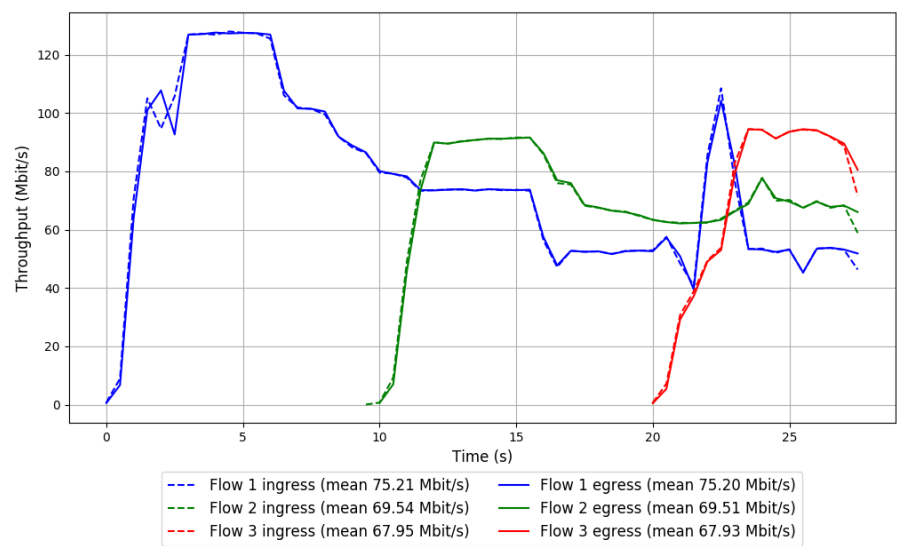
-- Flow 3:

Average throughput: 67.93 Mbit/s

95th percentile per-packet one-way delay: 52.123 ms

Loss rate: 0.02%

Run 3: Report of Copa — Data Link

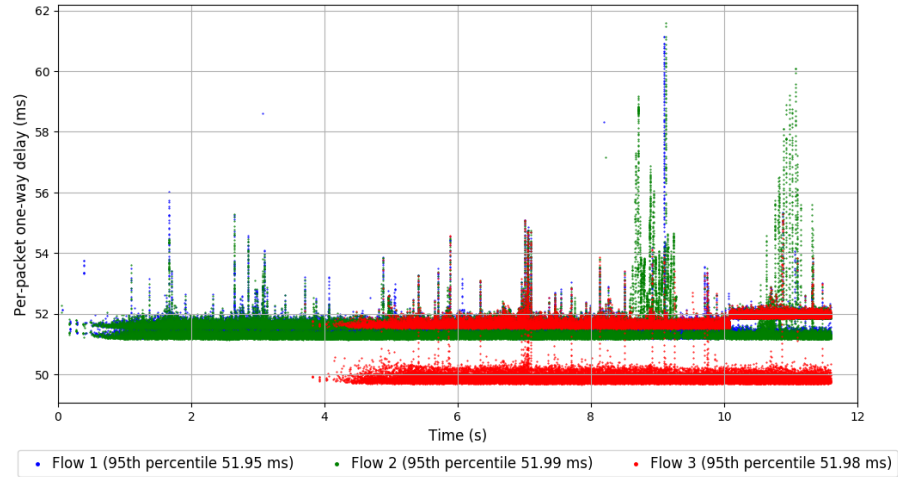
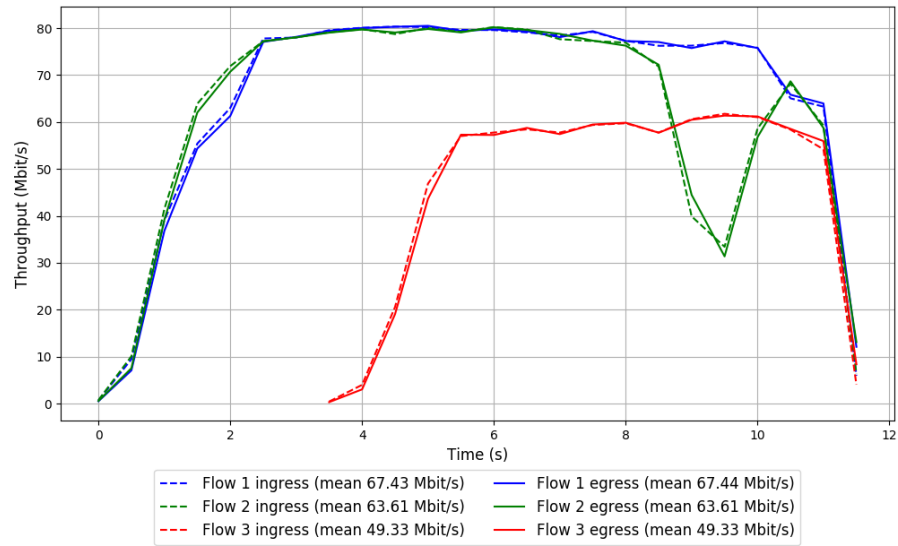


Run 4: Statistics of Copa

Start at: 2017-11-21 22:12:10

End at: 2017-11-21 22:12:40

# Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-21 22:23:57

End at: 2017-11-21 22:24:27

# Below is generated by plot.py at 2017-11-22 01:53:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 139.81 Mbit/s

95th percentile per-packet one-way delay: 52.035 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 76.61 Mbit/s

95th percentile per-packet one-way delay: 52.086 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.93 Mbit/s

95th percentile per-packet one-way delay: 51.950 ms

Loss rate: 0.00%

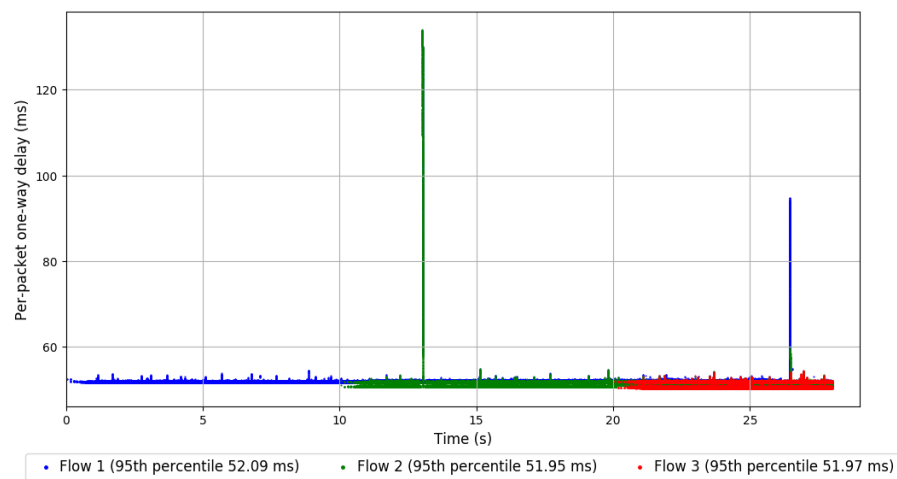
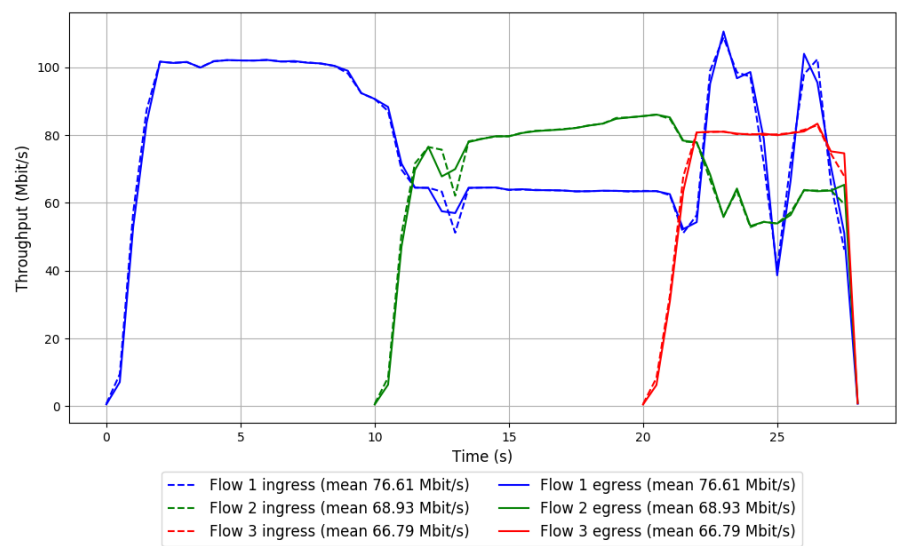
-- Flow 3:

Average throughput: 66.79 Mbit/s

95th percentile per-packet one-way delay: 51.973 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-21 22:35:59

End at: 2017-11-21 22:36:29

# Below is generated by plot.py at 2017-11-22 01:53:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 116.10 Mbit/s

95th percentile per-packet one-way delay: 51.838 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 62.46 Mbit/s

95th percentile per-packet one-way delay: 51.831 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 69.32 Mbit/s

95th percentile per-packet one-way delay: 51.868 ms

Loss rate: 0.00%

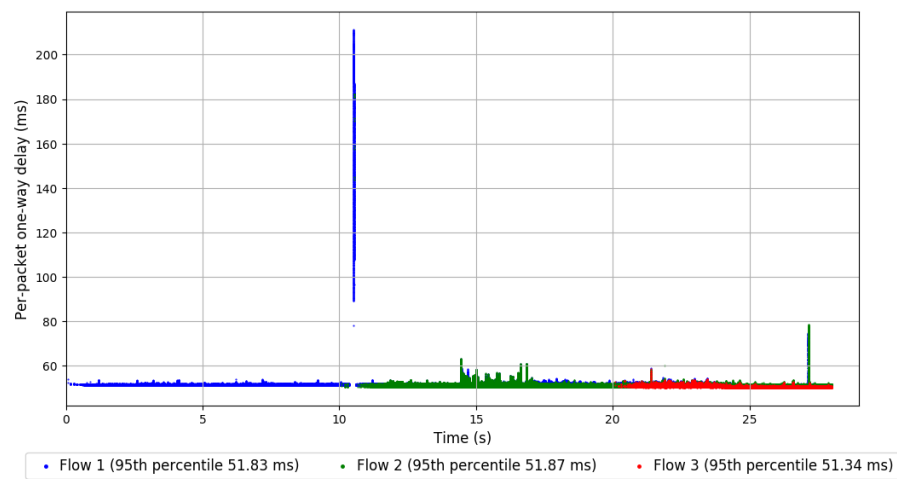
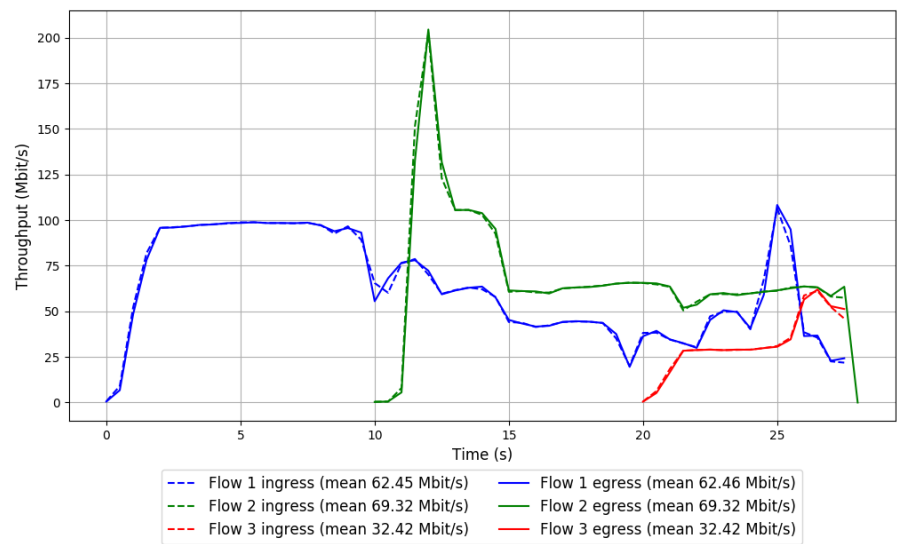
-- Flow 3:

Average throughput: 32.42 Mbit/s

95th percentile per-packet one-way delay: 51.335 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-21 22:47:36

End at: 2017-11-21 22:48:06

# Below is generated by plot.py at 2017-11-22 01:54:40

# Datalink statistics

-- Total of 3 flows:

Average throughput: 145.50 Mbit/s

95th percentile per-packet one-way delay: 51.602 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 82.03 Mbit/s

95th percentile per-packet one-way delay: 51.607 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 74.86 Mbit/s

95th percentile per-packet one-way delay: 51.608 ms

Loss rate: 0.00%

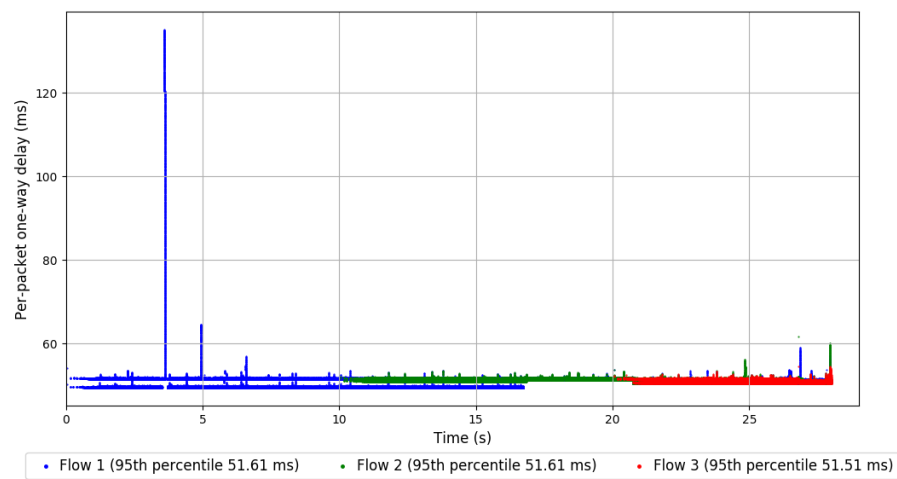
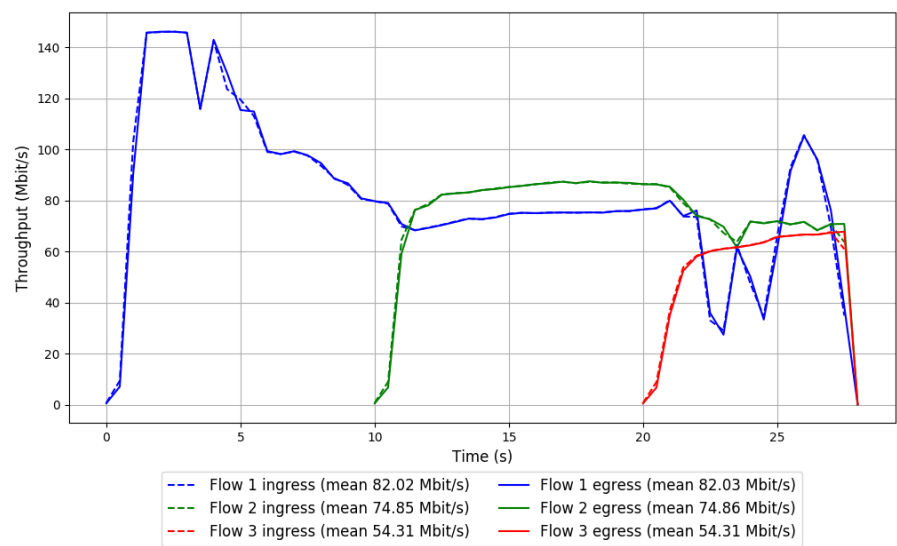
-- Flow 3:

Average throughput: 54.31 Mbit/s

95th percentile per-packet one-way delay: 51.508 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-21 22:59:25

End at: 2017-11-21 22:59:55

# Below is generated by plot.py at 2017-11-22 01:55:01

# Datalink statistics

-- Total of 3 flows:

Average throughput: 146.28 Mbit/s

95th percentile per-packet one-way delay: 51.321 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 80.02 Mbit/s

95th percentile per-packet one-way delay: 51.362 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 76.89 Mbit/s

95th percentile per-packet one-way delay: 51.258 ms

Loss rate: 0.00%

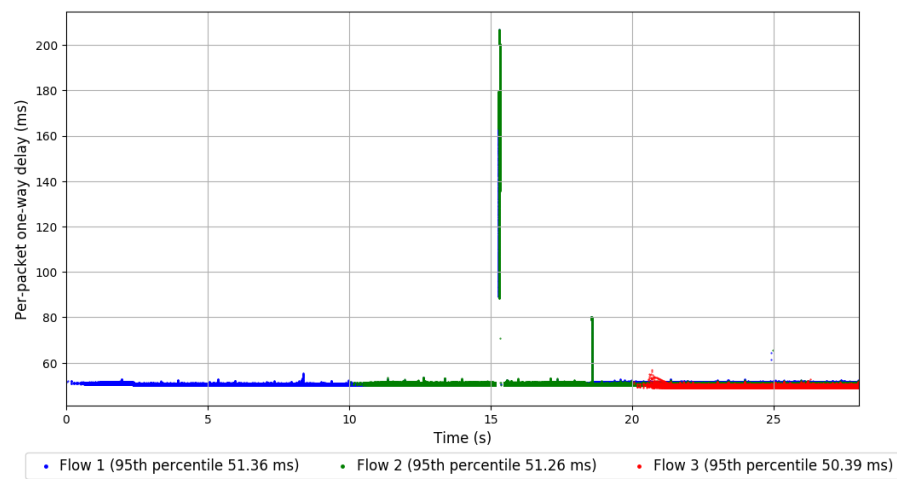
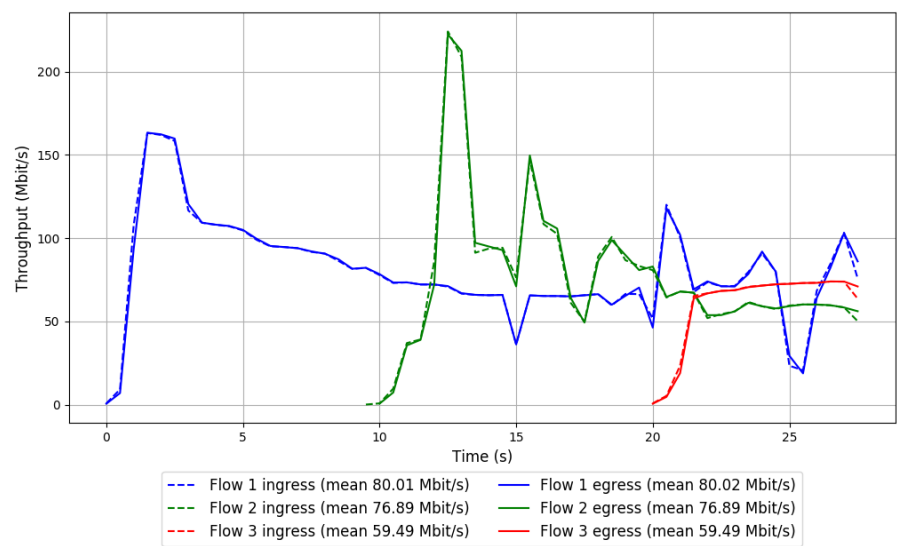
-- Flow 3:

Average throughput: 59.49 Mbit/s

95th percentile per-packet one-way delay: 50.386 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-11-21 23:11:20

End at: 2017-11-21 23:11:50

# Below is generated by plot.py at 2017-11-22 01:55:01

# Datalink statistics

-- Total of 3 flows:

Average throughput: 121.51 Mbit/s

95th percentile per-packet one-way delay: 51.158 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.30 Mbit/s

95th percentile per-packet one-way delay: 51.161 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.63 Mbit/s

95th percentile per-packet one-way delay: 51.210 ms

Loss rate: 0.00%

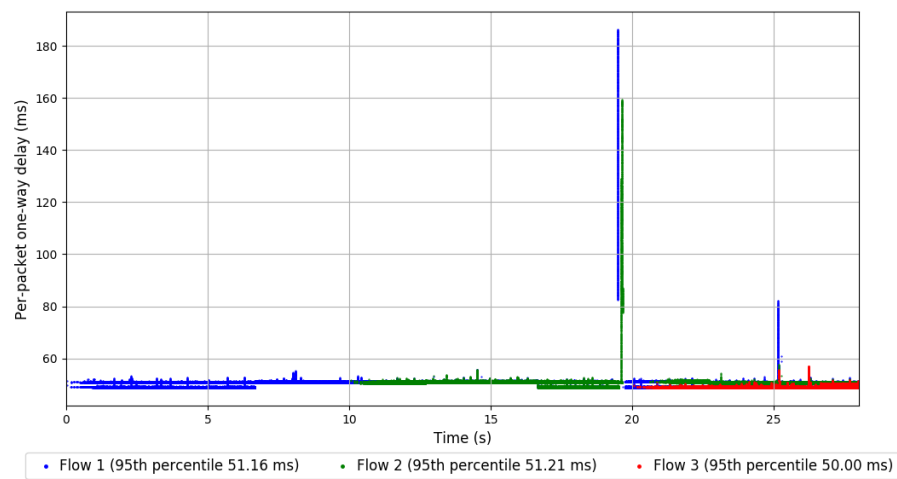
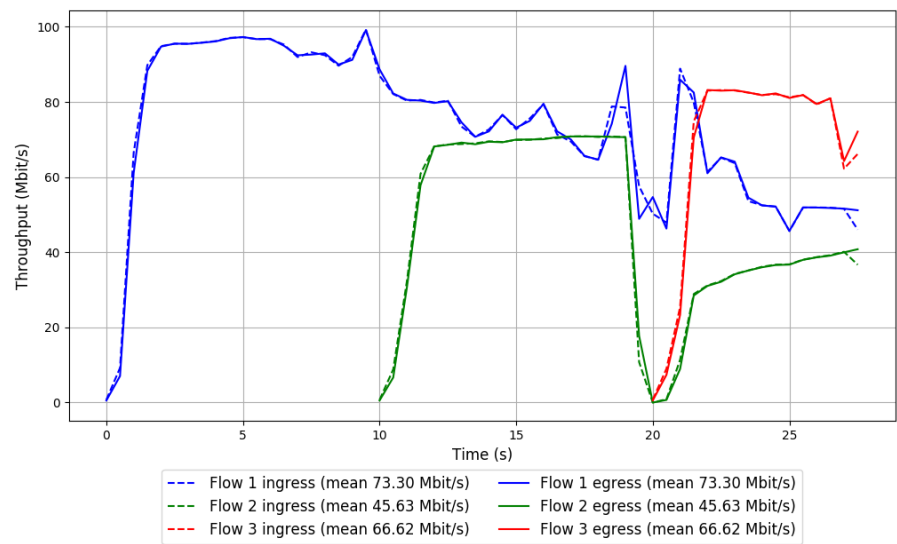
-- Flow 3:

Average throughput: 66.62 Mbit/s

95th percentile per-packet one-way delay: 50.002 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-21 23:23:17

End at: 2017-11-21 23:23:47

# Below is generated by plot.py at 2017-11-22 01:55:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 135.42 Mbit/s

95th percentile per-packet one-way delay: 50.915 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.83 Mbit/s

95th percentile per-packet one-way delay: 50.969 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 73.75 Mbit/s

95th percentile per-packet one-way delay: 50.614 ms

Loss rate: 0.01%

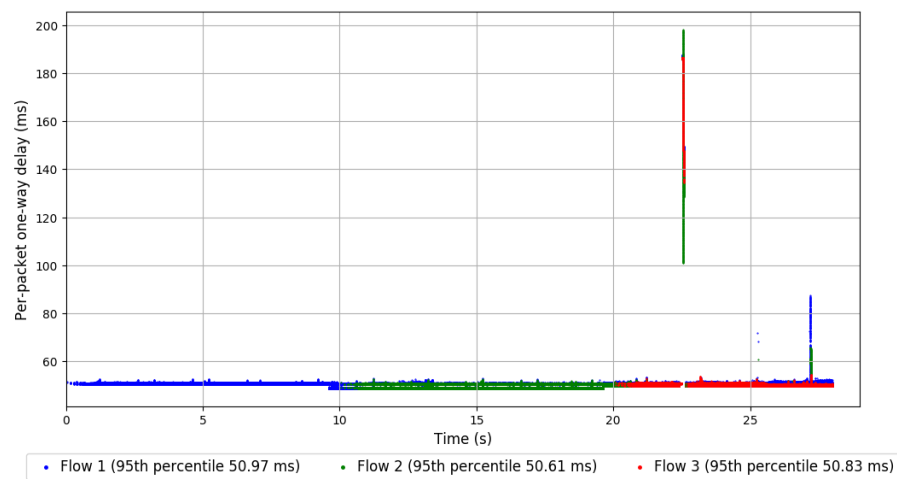
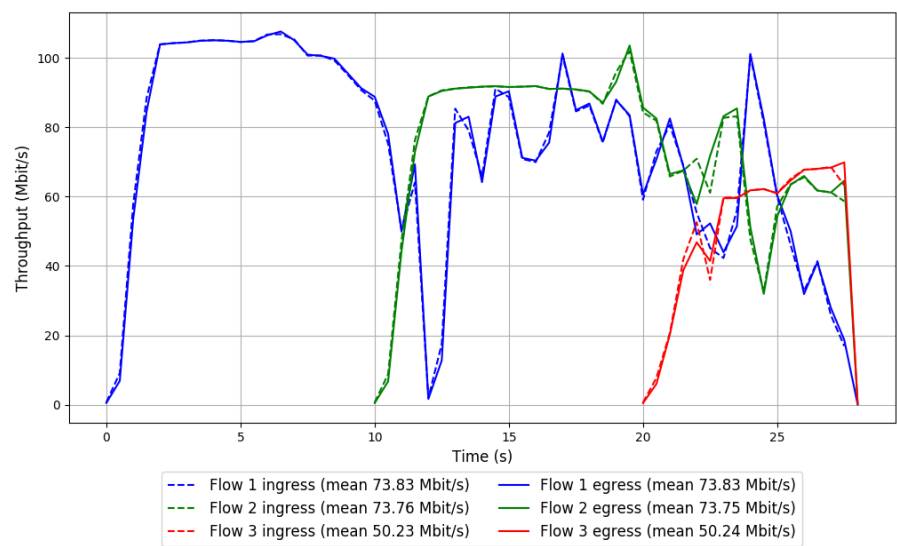
-- Flow 3:

Average throughput: 50.24 Mbit/s

95th percentile per-packet one-way delay: 50.830 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

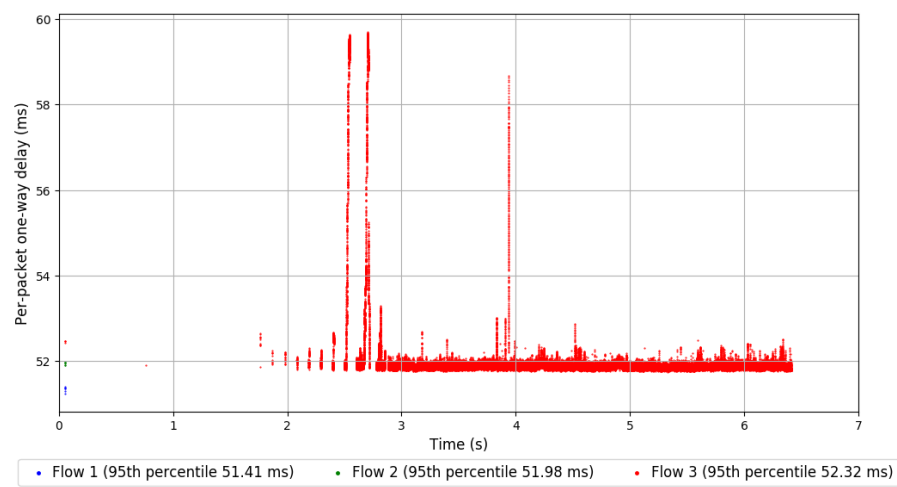
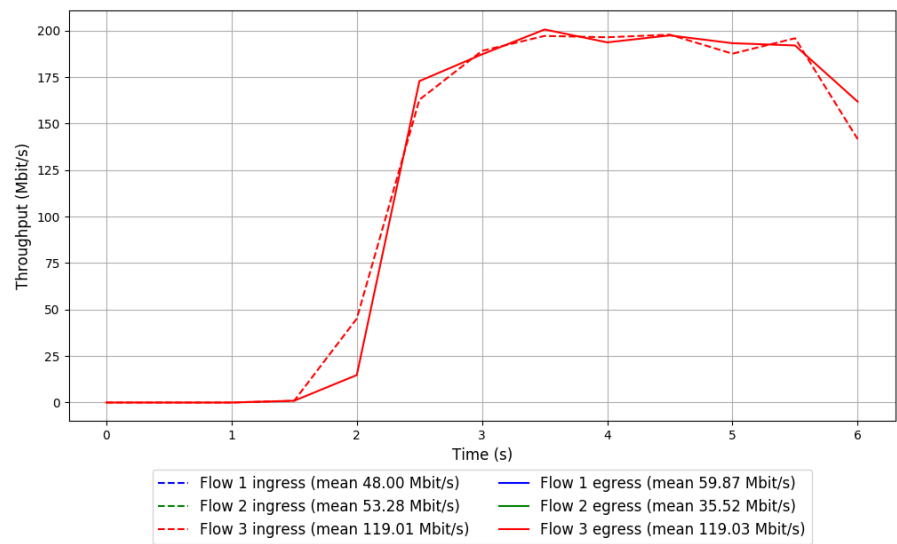


Run 1: Statistics of Indigo

Start at: 2017-11-21 21:44:36

End at: 2017-11-21 21:45:06

Run 1: Report of Indigo — Data Link

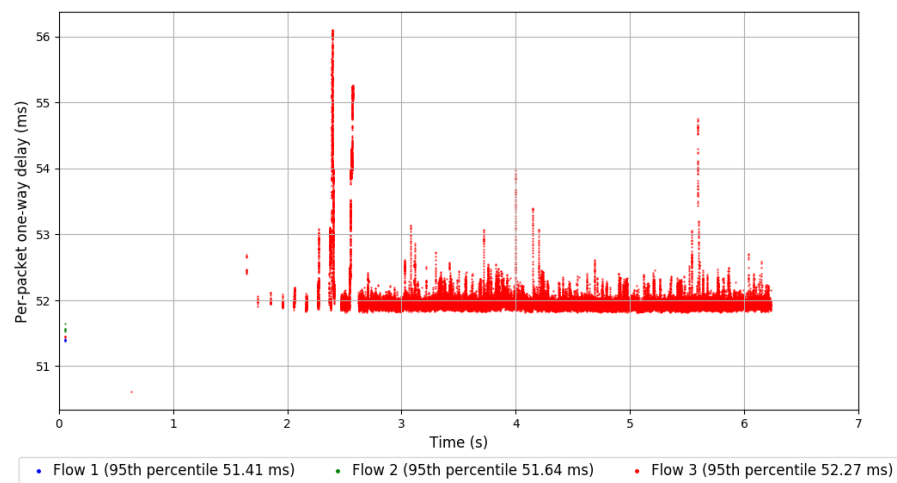
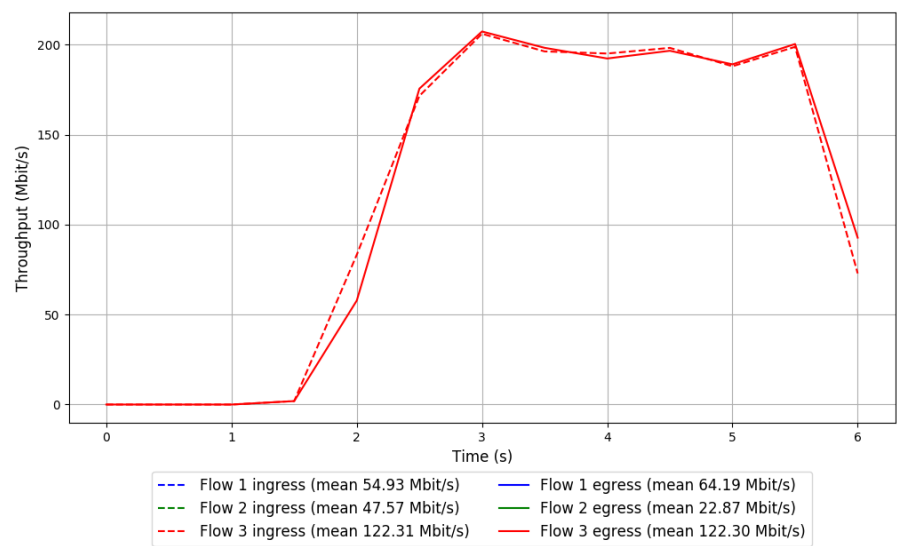


Run 2: Statistics of Indigo

Start at: 2017-11-21 21:56:19

End at: 2017-11-21 21:56:49

Run 2: Report of Indigo — Data Link

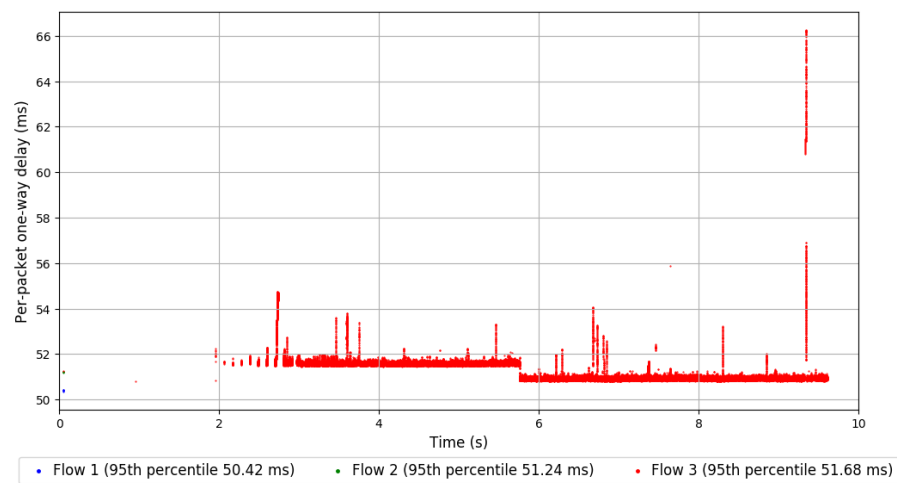
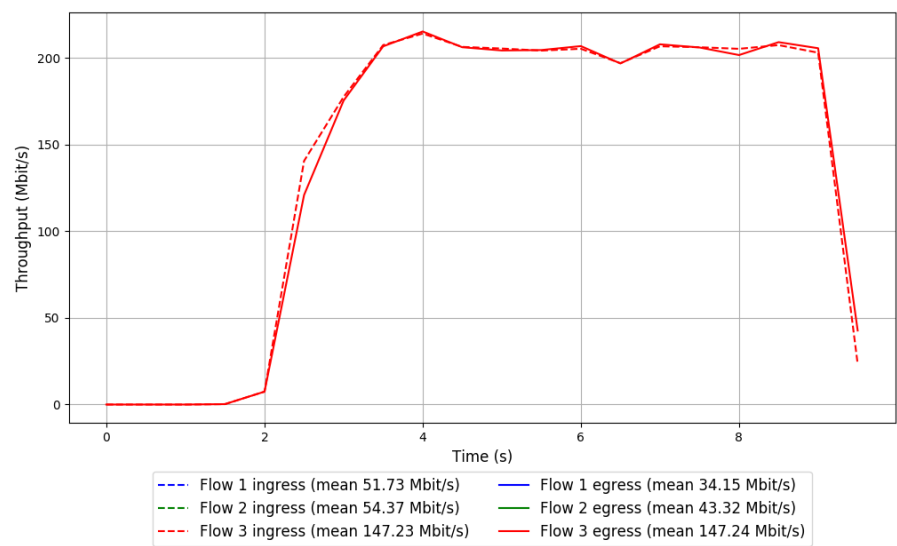


Run 3: Statistics of Indigo

Start at: 2017-11-21 22:08:13

End at: 2017-11-21 22:08:43

Run 3: Report of Indigo — Data Link

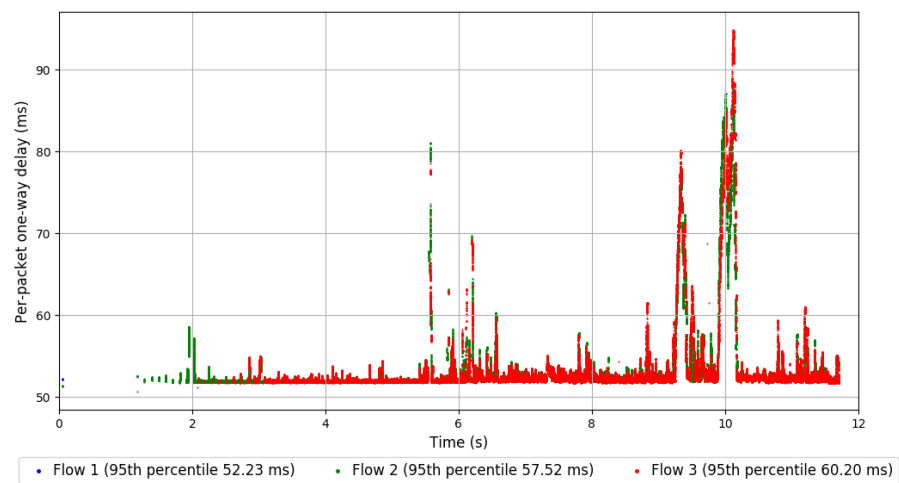
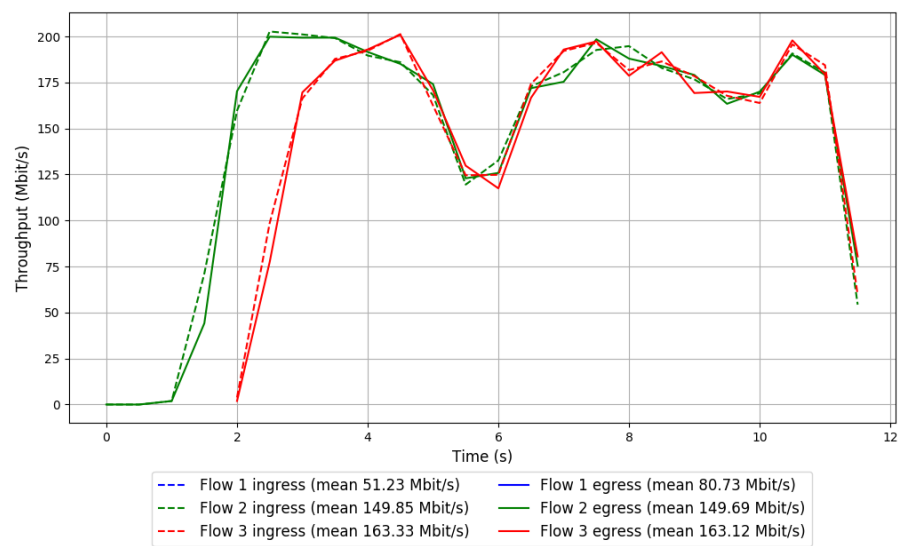


Run 4: Statistics of Indigo

Start at: 2017-11-21 22:20:03

End at: 2017-11-21 22:20:33

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-21 22:31:58

End at: 2017-11-21 22:32:28

# Below is generated by plot.py at 2017-11-22 01:57:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 272.21 Mbit/s

95th percentile per-packet one-way delay: 54.521 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 148.16 Mbit/s

95th percentile per-packet one-way delay: 54.040 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 137.59 Mbit/s

95th percentile per-packet one-way delay: 55.037 ms

Loss rate: 0.00%

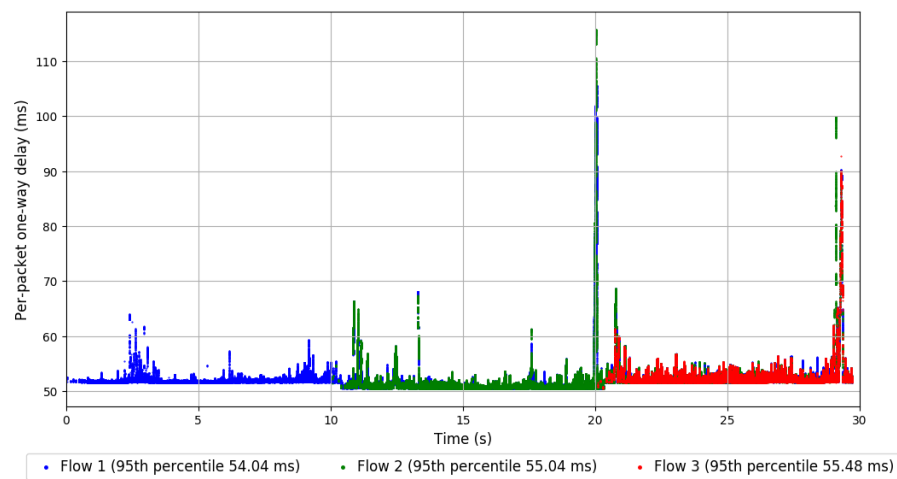
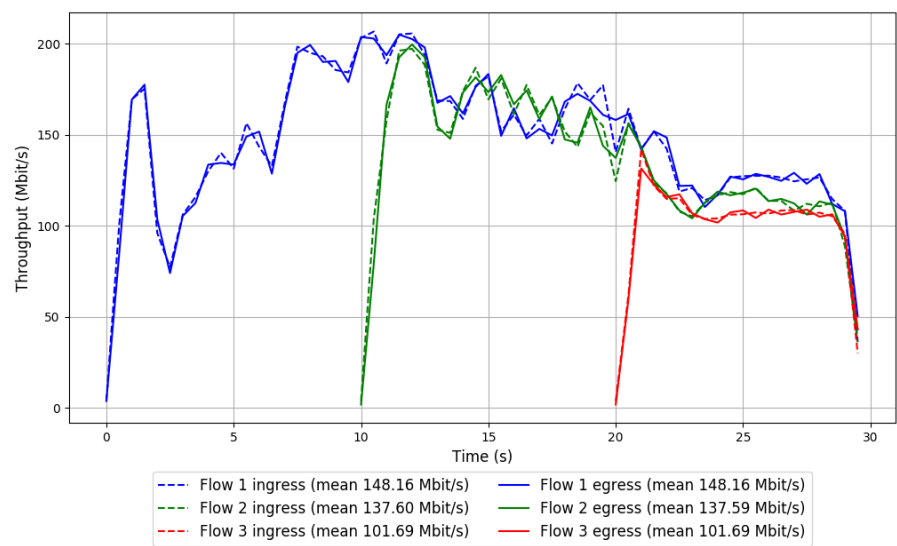
-- Flow 3:

Average throughput: 101.69 Mbit/s

95th percentile per-packet one-way delay: 55.482 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link

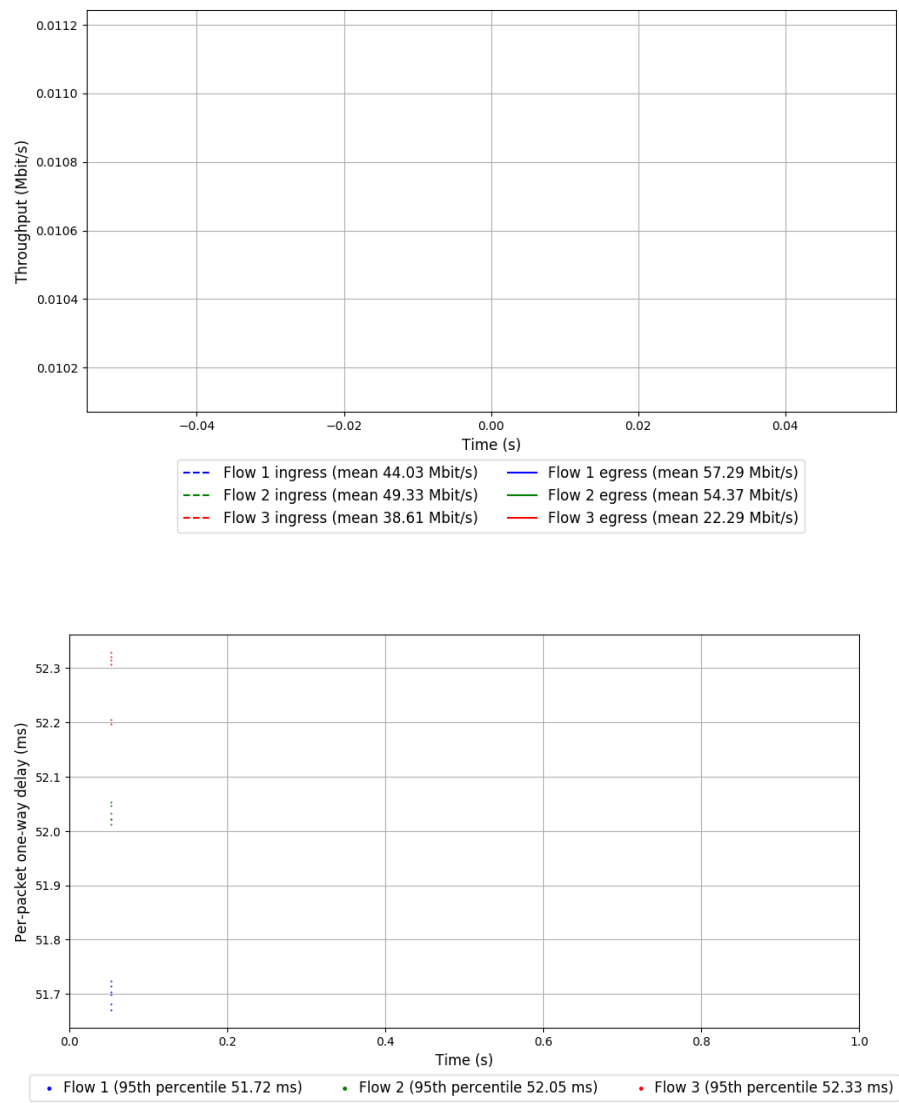


Run 6: Statistics of Indigo

Start at: 2017-11-21 22:43:52

End at: 2017-11-21 22:44:22

Run 6: Report of Indigo — Data Link

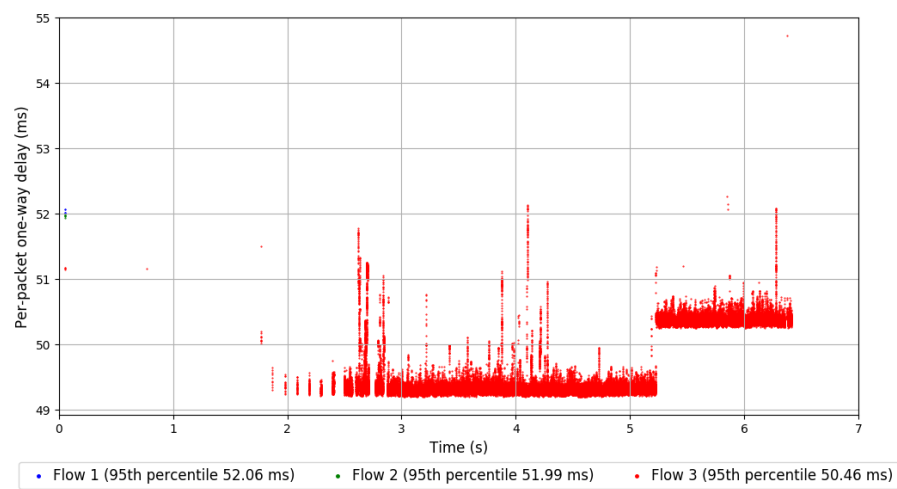
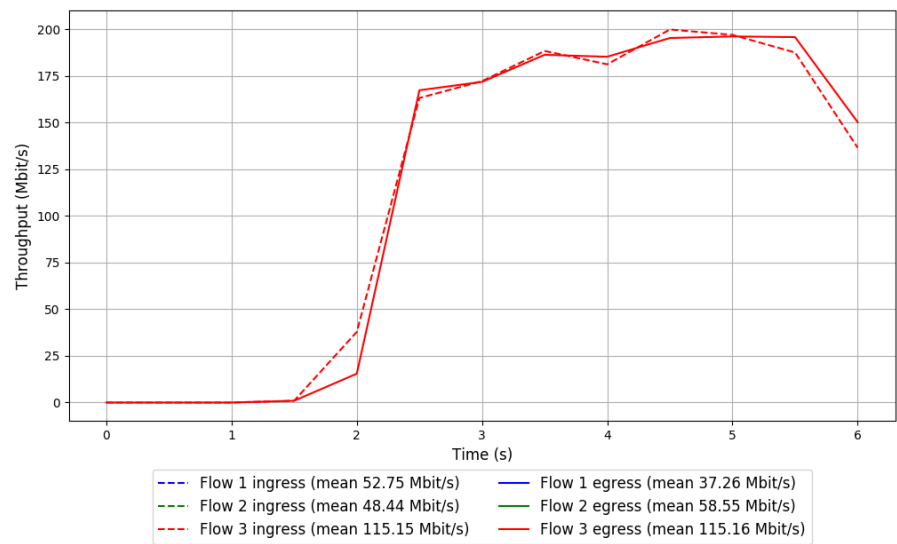


Run 7: Statistics of Indigo

Start at: 2017-11-21 22:55:30

End at: 2017-11-21 22:56:00

Run 7: Report of Indigo — Data Link

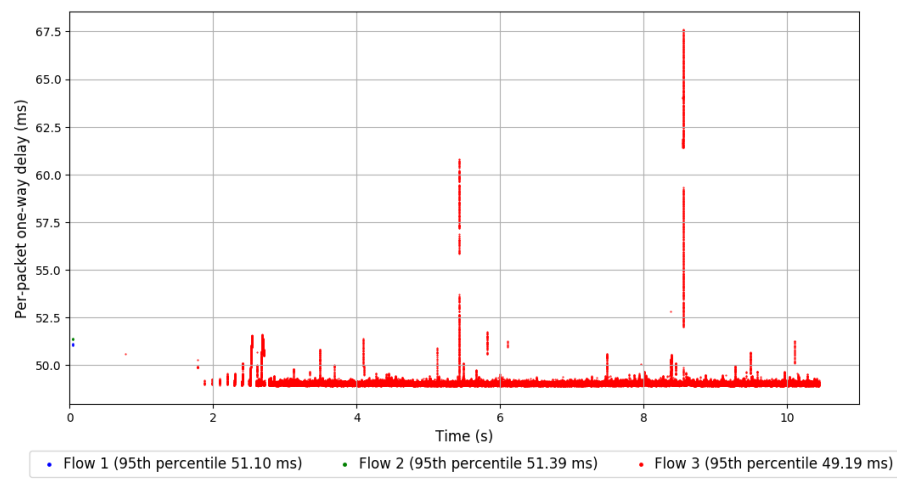
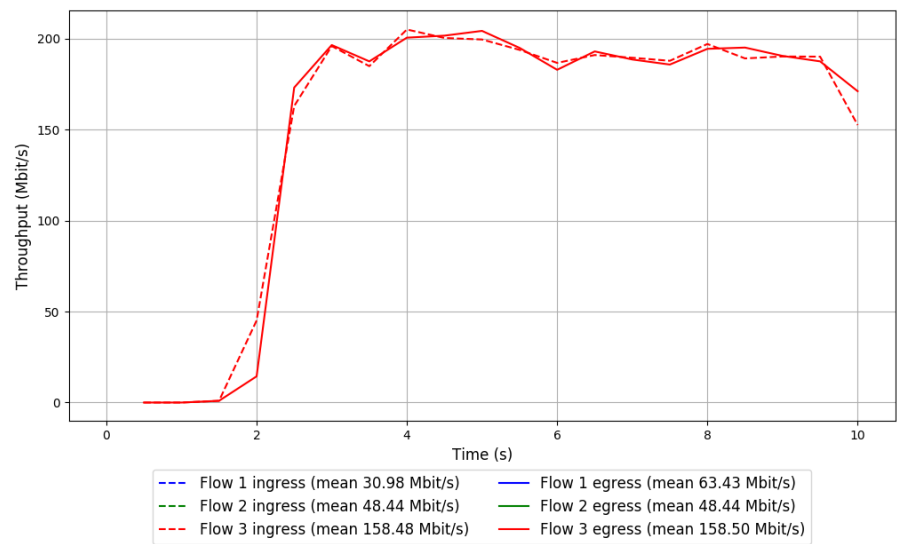


Run 8: Statistics of Indigo

Start at: 2017-11-21 23:07:29

End at: 2017-11-21 23:07:59

Run 8: Report of Indigo — Data Link

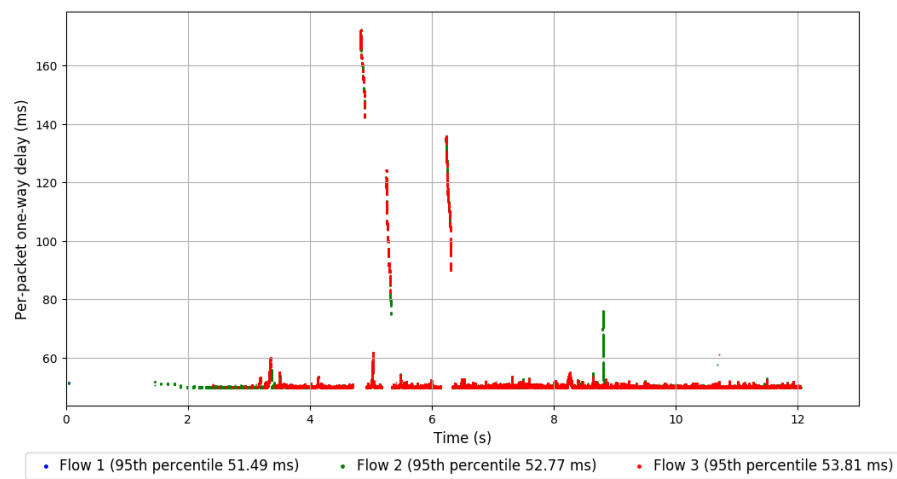
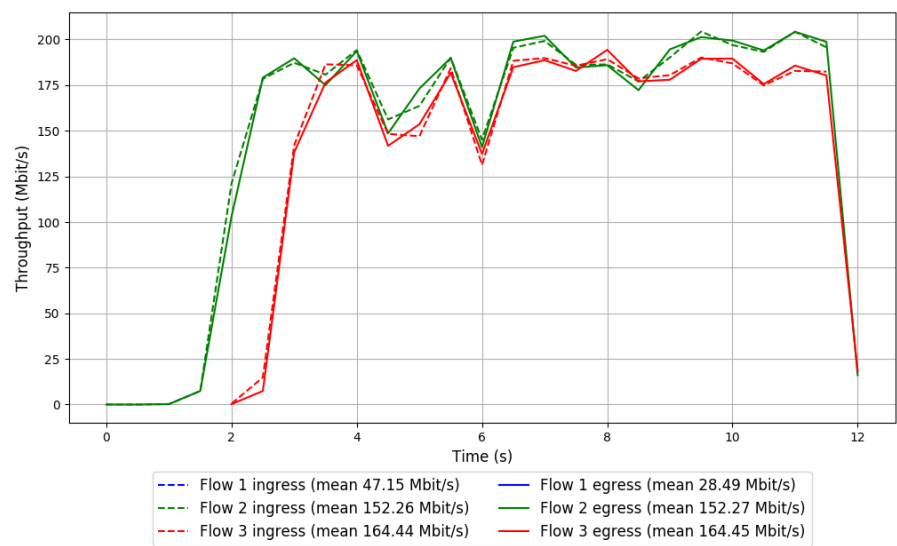


Run 9: Statistics of Indigo

Start at: 2017-11-21 23:19:19

End at: 2017-11-21 23:19:49

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-21 23:31:20

End at: 2017-11-21 23:31:50

# Below is generated by plot.py at 2017-11-22 01:59:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 281.57 Mbit/s

95th percentile per-packet one-way delay: 50.871 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 152.92 Mbit/s

95th percentile per-packet one-way delay: 50.282 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 143.43 Mbit/s

95th percentile per-packet one-way delay: 51.450 ms

Loss rate: 0.00%

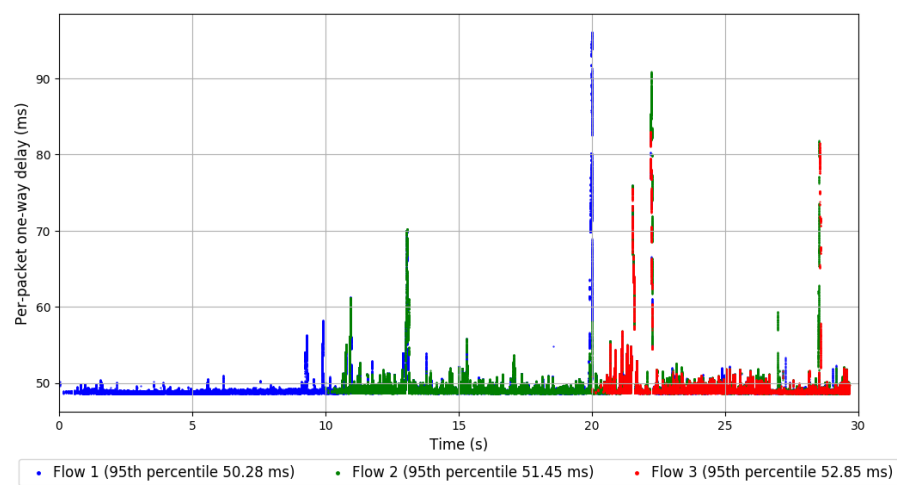
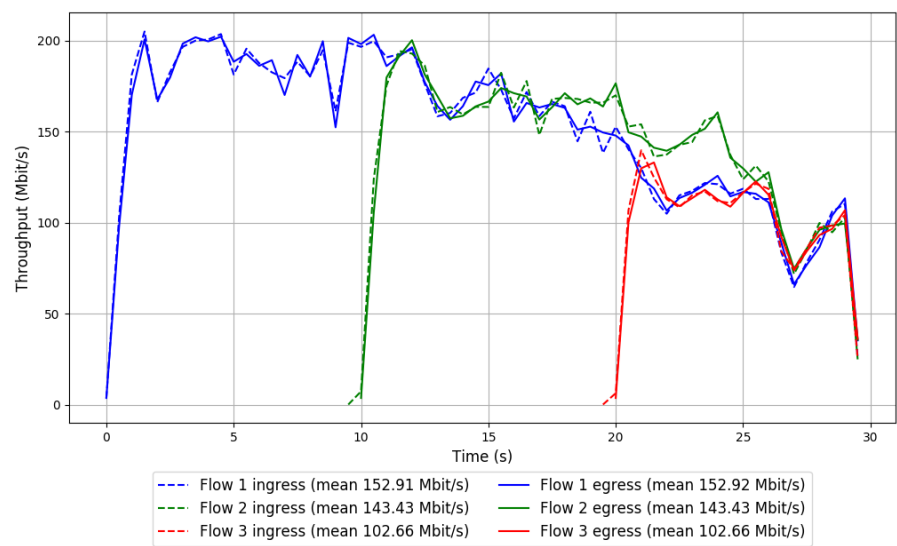
-- Flow 3:

Average throughput: 102.66 Mbit/s

95th percentile per-packet one-way delay: 52.847 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

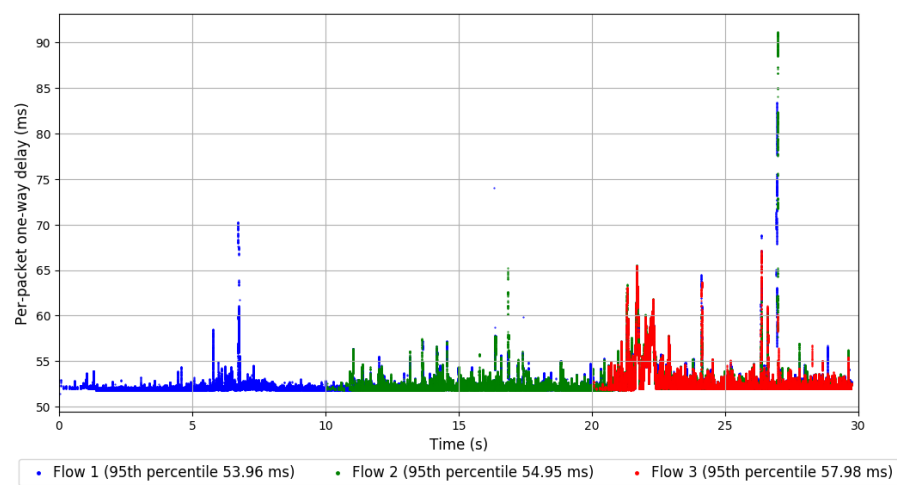
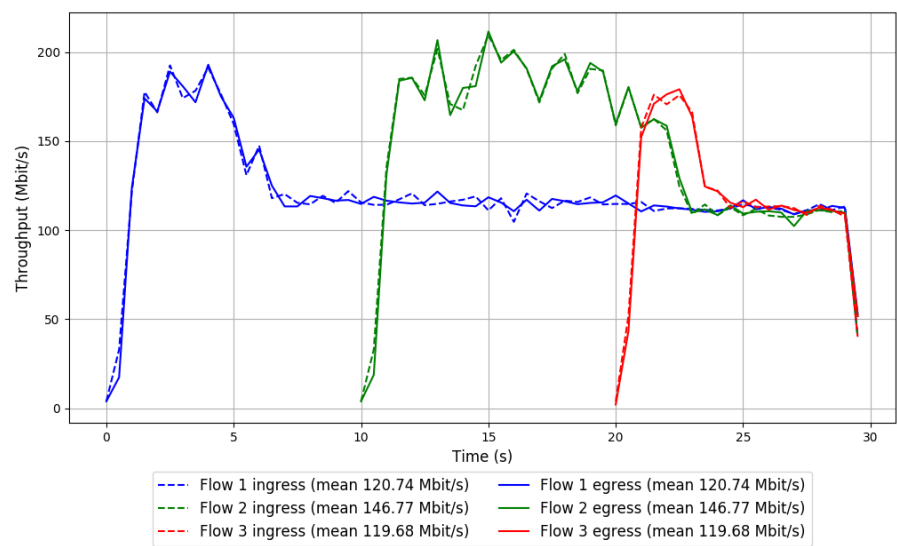


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-21 21:42:37
End at: 2017-11-21 21:43:07

# Below is generated by plot.py at 2017-11-22 01:59:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 256.98 Mbit/s
95th percentile per-packet one-way delay: 55.092 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 120.74 Mbit/s
95th percentile per-packet one-way delay: 53.957 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 146.77 Mbit/s
95th percentile per-packet one-way delay: 54.945 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 119.68 Mbit/s
95th percentile per-packet one-way delay: 57.978 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-calib — Data Link

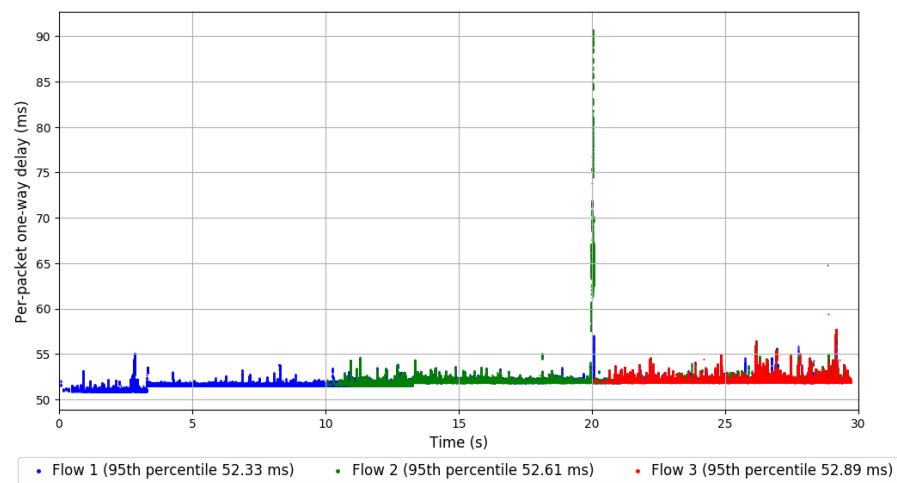
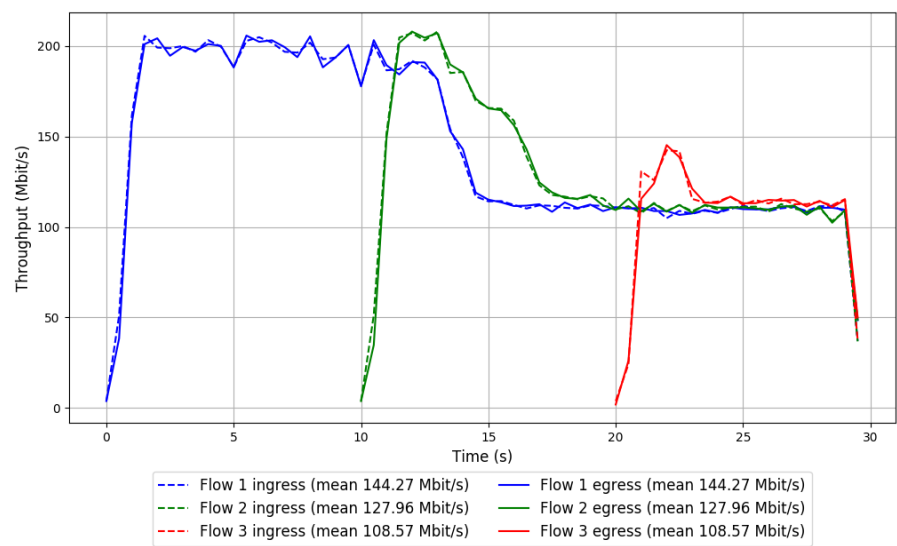


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-21 21:54:15
End at: 2017-11-21 21:54:45

# Below is generated by plot.py at 2017-11-22 01:59:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 264.22 Mbit/s
95th percentile per-packet one-way delay: 52.518 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 144.27 Mbit/s
95th percentile per-packet one-way delay: 52.332 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 127.96 Mbit/s
95th percentile per-packet one-way delay: 52.613 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 108.57 Mbit/s
95th percentile per-packet one-way delay: 52.889 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-calib — Data Link

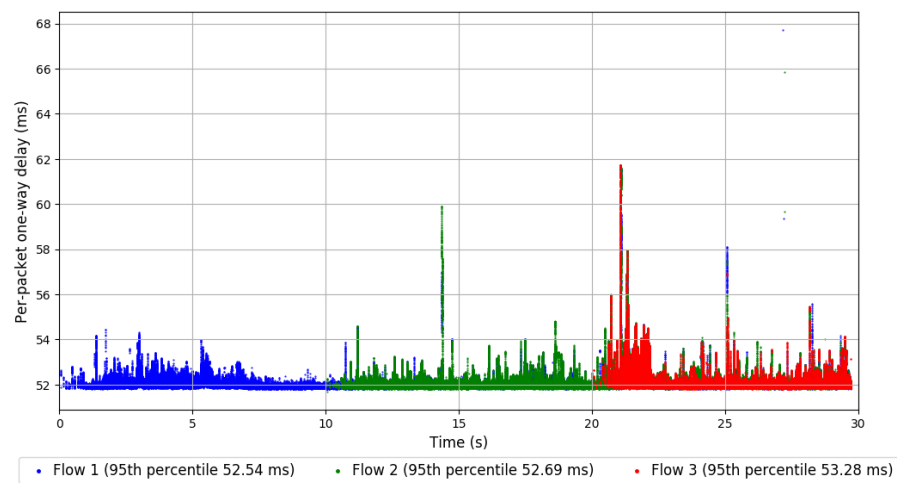
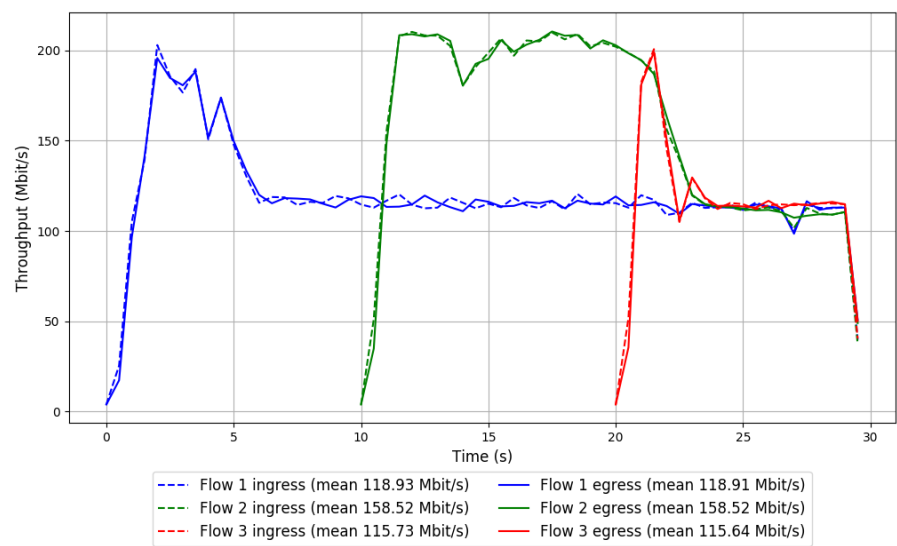


```
Run 3: Statistics of Indigo-calib

Start at: 2017-11-21 22:06:09
End at: 2017-11-21 22:06:39

# Below is generated by plot.py at 2017-11-22 01:59:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 261.55 Mbit/s
95th percentile per-packet one-way delay: 52.709 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 118.91 Mbit/s
95th percentile per-packet one-way delay: 52.544 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 158.52 Mbit/s
95th percentile per-packet one-way delay: 52.687 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 115.64 Mbit/s
95th percentile per-packet one-way delay: 53.276 ms
Loss rate: 0.09%
```

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-11-21 22:17:56

End at: 2017-11-21 22:18:26

# Below is generated by plot.py at 2017-11-22 02:00:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 279.77 Mbit/s

95th percentile per-packet one-way delay: 53.053 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 151.86 Mbit/s

95th percentile per-packet one-way delay: 52.820 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 140.51 Mbit/s

95th percentile per-packet one-way delay: 53.254 ms

Loss rate: 0.00%

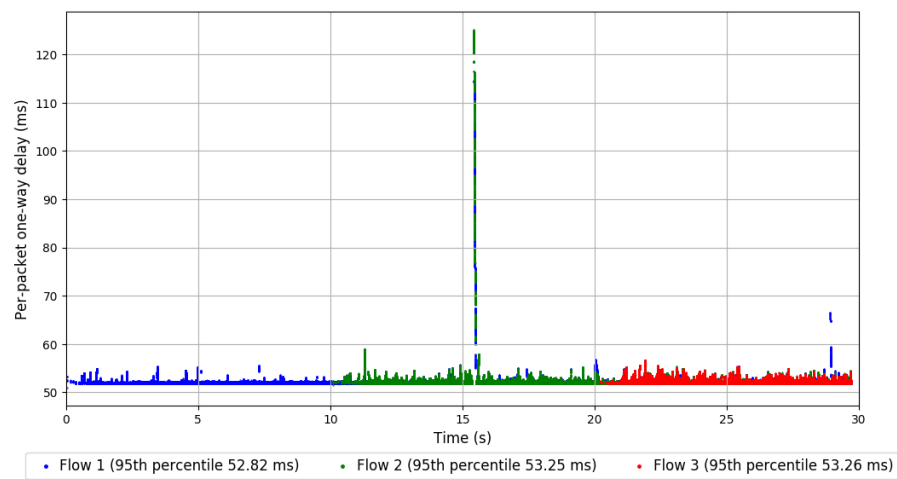
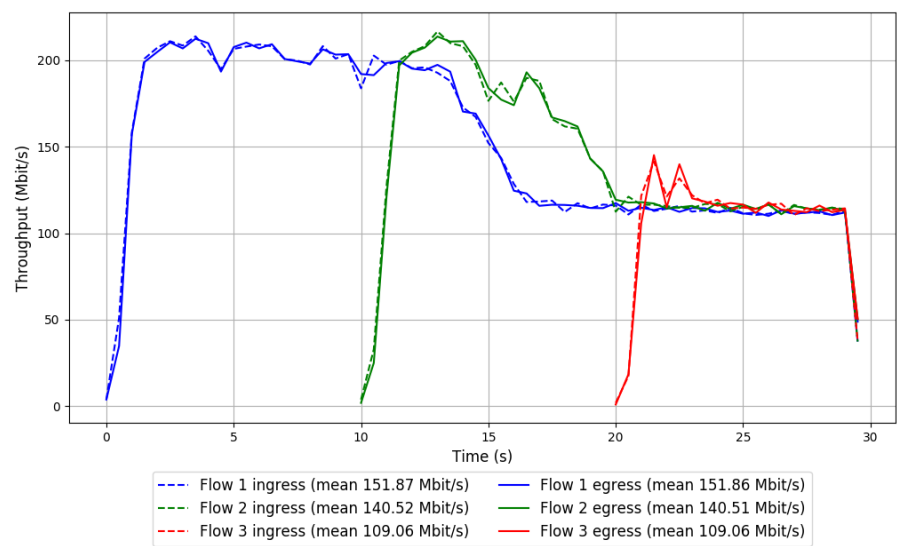
-- Flow 3:

Average throughput: 109.06 Mbit/s

95th percentile per-packet one-way delay: 53.255 ms

Loss rate: 0.00%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-11-21 22:29:55

End at: 2017-11-21 22:30:25

# Below is generated by plot.py at 2017-11-22 02:00:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 260.75 Mbit/s

95th percentile per-packet one-way delay: 52.088 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 139.45 Mbit/s

95th percentile per-packet one-way delay: 51.959 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 129.82 Mbit/s

95th percentile per-packet one-way delay: 52.207 ms

Loss rate: 0.00%

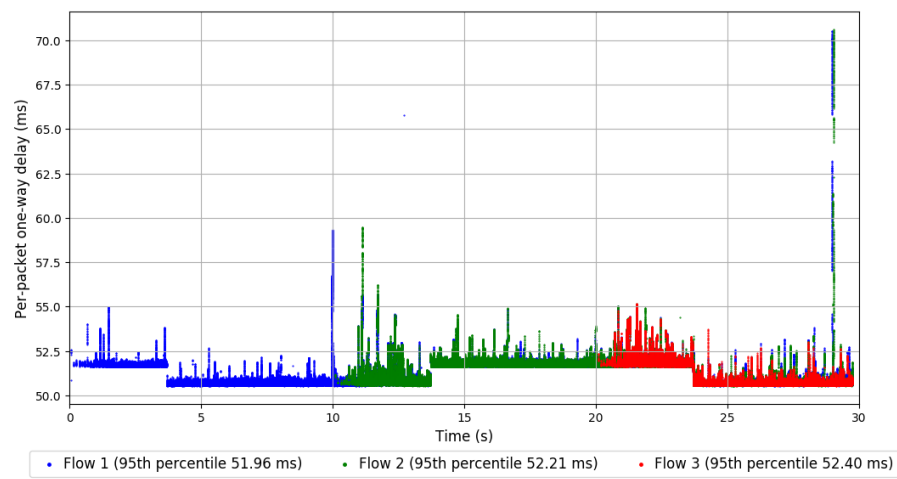
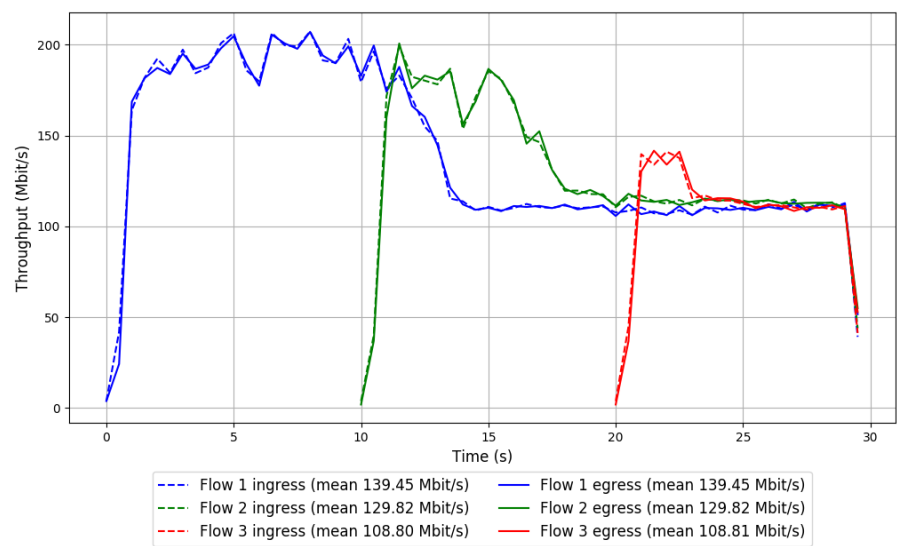
-- Flow 3:

Average throughput: 108.81 Mbit/s

95th percentile per-packet one-way delay: 52.401 ms

Loss rate: 0.00%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-11-21 22:41:50

End at: 2017-11-21 22:42:20

# Below is generated by plot.py at 2017-11-22 02:00:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 257.00 Mbit/s

95th percentile per-packet one-way delay: 52.676 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 143.99 Mbit/s

95th percentile per-packet one-way delay: 52.268 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 122.20 Mbit/s

95th percentile per-packet one-way delay: 53.106 ms

Loss rate: 0.00%

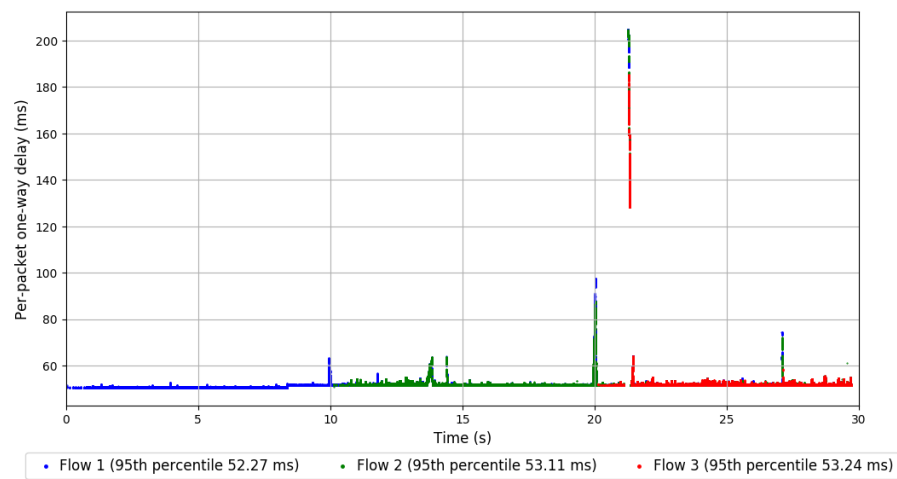
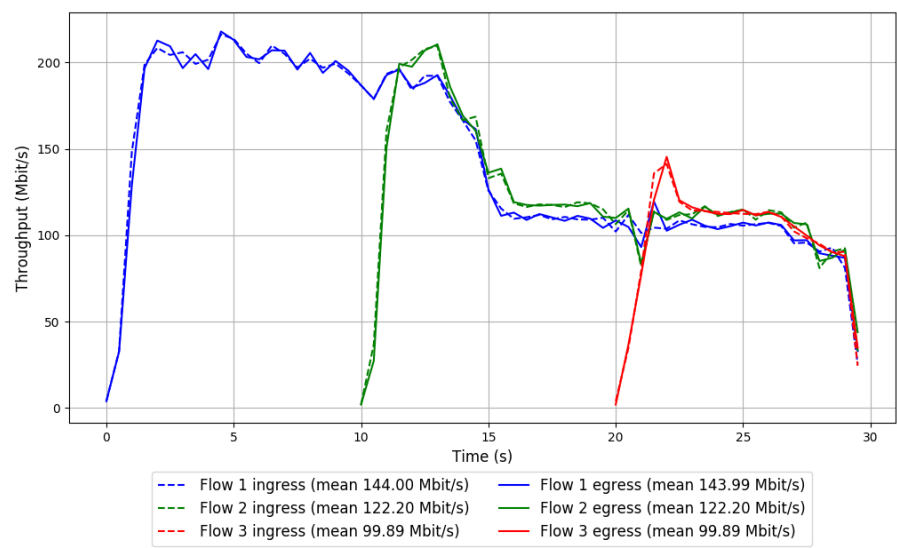
-- Flow 3:

Average throughput: 99.89 Mbit/s

95th percentile per-packet one-way delay: 53.237 ms

Loss rate: 0.00%

Run 6: Report of Indigo-calib — Data Link

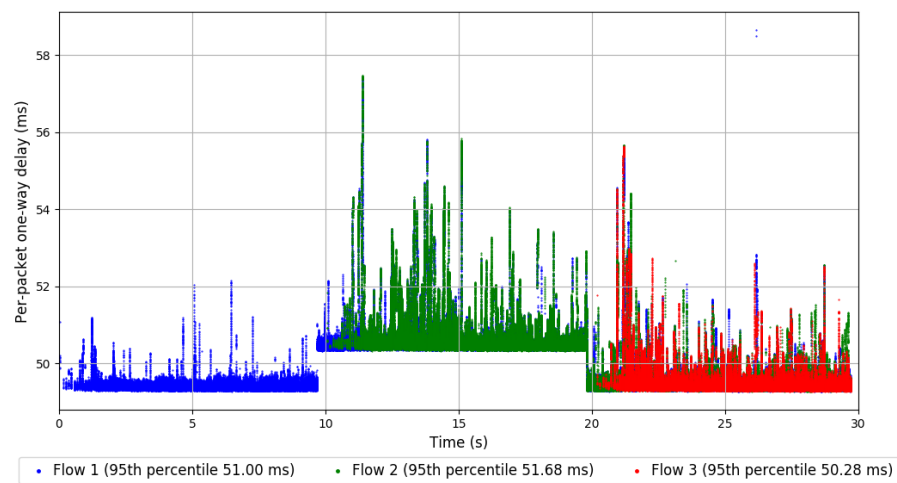
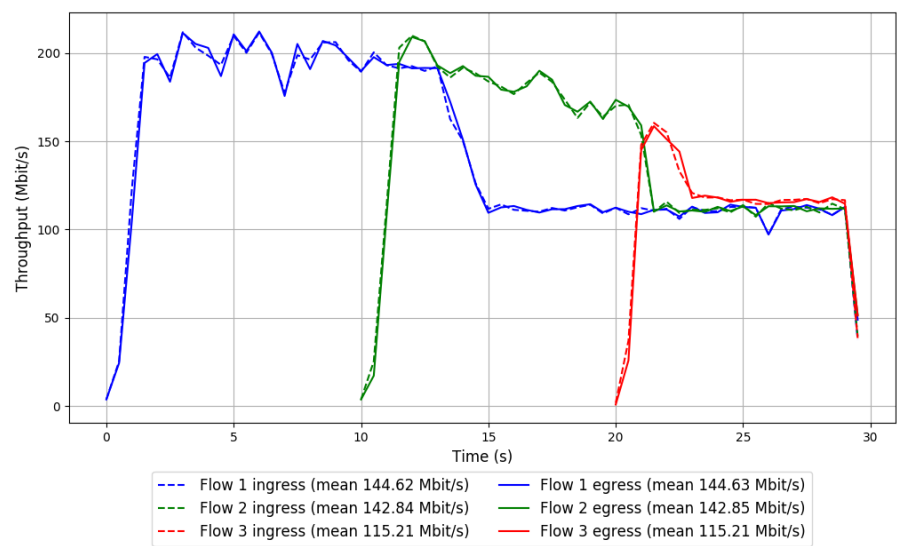


```
Run 7: Statistics of Indigo-calib

Start at: 2017-11-21 22:53:29
End at: 2017-11-21 22:53:59

# Below is generated by plot.py at 2017-11-22 02:01:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 276.13 Mbit/s
95th percentile per-packet one-way delay: 51.175 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 144.63 Mbit/s
95th percentile per-packet one-way delay: 51.004 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 142.85 Mbit/s
95th percentile per-packet one-way delay: 51.676 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 115.21 Mbit/s
95th percentile per-packet one-way delay: 50.282 ms
Loss rate: 0.00%
```

Run 7: Report of Indigo-calib — Data Link

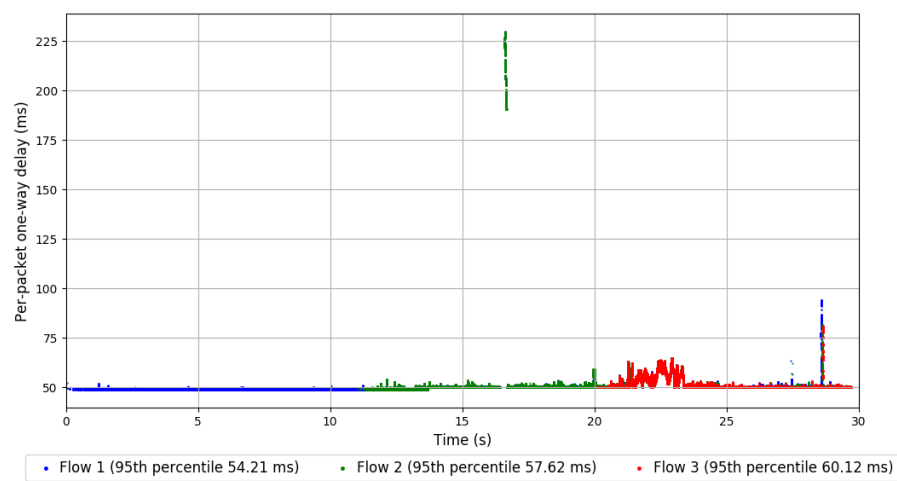
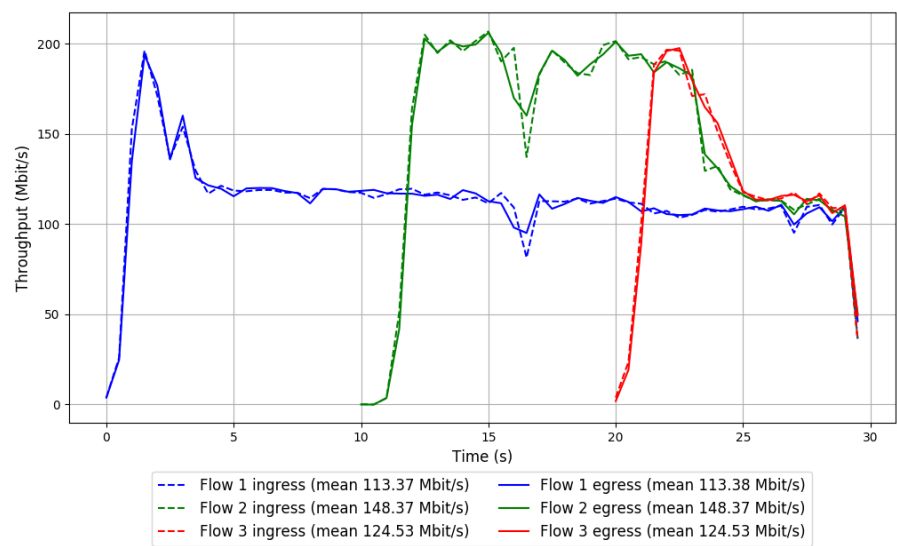


```
Run 8: Statistics of Indigo-calib

Start at: 2017-11-21 23:05:25
End at: 2017-11-21 23:05:55

# Below is generated by plot.py at 2017-11-22 02:01:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 252.09 Mbit/s
95th percentile per-packet one-way delay: 57.373 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 113.38 Mbit/s
95th percentile per-packet one-way delay: 54.212 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 148.37 Mbit/s
95th percentile per-packet one-way delay: 57.618 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 124.53 Mbit/s
95th percentile per-packet one-way delay: 60.121 ms
Loss rate: 0.00%
```

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-11-21 23:17:15

End at: 2017-11-21 23:17:45

# Below is generated by plot.py at 2017-11-22 02:01:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 255.33 Mbit/s

95th percentile per-packet one-way delay: 51.681 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 143.82 Mbit/s

95th percentile per-packet one-way delay: 51.581 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 115.78 Mbit/s

95th percentile per-packet one-way delay: 51.757 ms

Loss rate: 0.00%

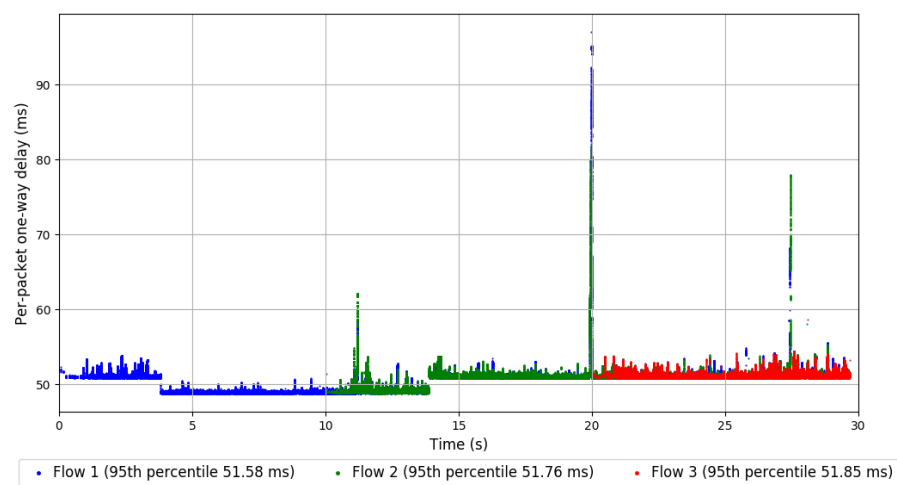
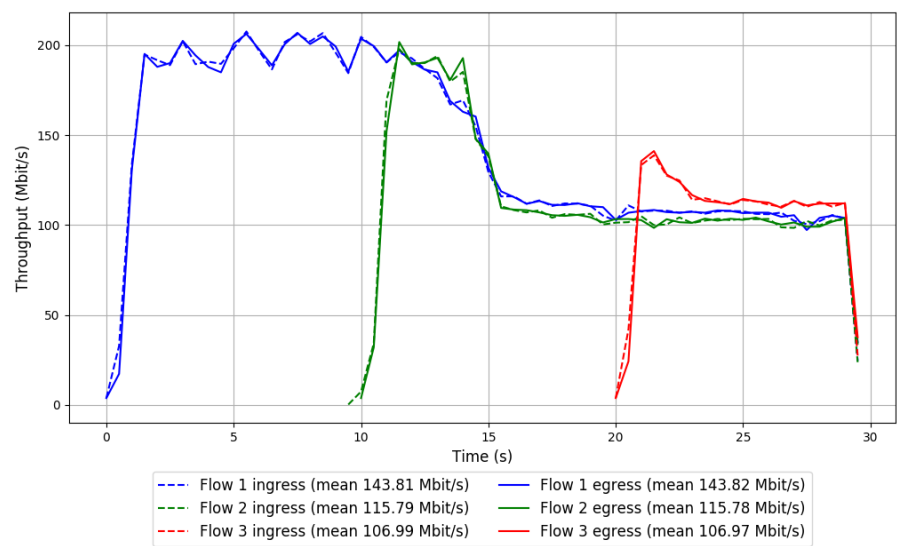
-- Flow 3:

Average throughput: 106.97 Mbit/s

95th percentile per-packet one-way delay: 51.851 ms

Loss rate: 0.00%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-21 23:29:16

End at: 2017-11-21 23:29:46

# Below is generated by plot.py at 2017-11-22 02:01:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 256.73 Mbit/s

95th percentile per-packet one-way delay: 51.382 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 131.82 Mbit/s

95th percentile per-packet one-way delay: 51.118 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 129.39 Mbit/s

95th percentile per-packet one-way delay: 51.346 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 121.14 Mbit/s

95th percentile per-packet one-way delay: 52.316 ms

Loss rate: 0.00%

Run 10: Report of Indigo-calib — Data Link

