

## Pantheon Report

Generated at 2018-01-03 04:50:29 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

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

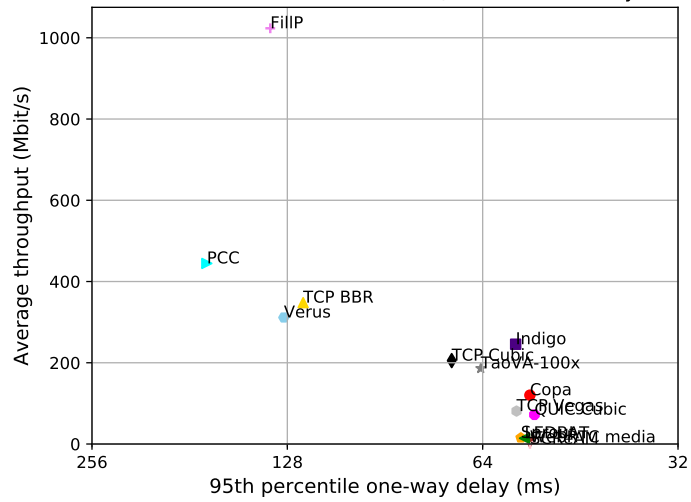
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

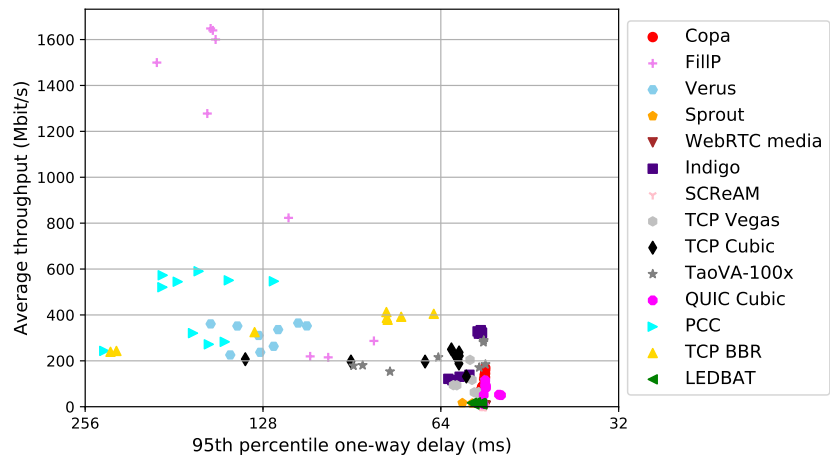
Git summary:

```
branch: master @ 904a5750834816b1e46a2c86405d707788d27c16
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ dcaef6b00654e660f73f7ed679d2eab61ce08639
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
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 Tokyo Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme  
3 flows with 10s interval between flows (mean of all runs by scheme)



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	8	183.63	170.49	145.94	111.98	124.02	139.18	0.44	0.65	1.63
TCP Cubic	10	120.94	94.04	66.75	72.01	70.39	65.39	0.46	1.08	2.40
LEDBAT	10	7.62	7.04	5.76	55.16	55.13	55.33	1.86	2.05	3.36
PCC	10	373.09	89.25	37.95	168.57	170.90	182.16	1.62	1.92	2.80
QUIC Cubic	10	32.28	42.80	35.32	53.30	52.91	51.83	0.27	0.81	1.35
SCReAM	10	0.21	0.21	0.21	54.12	52.84	54.14	0.31	0.42	1.06
WebRTC media	10	2.21	1.38	0.55	53.84	53.19	54.18	0.43	0.59	1.73
Sprout	7	7.52	7.59	7.42	55.74	55.92	56.16	1.08	0.85	1.17
TaoVA-100x	10	103.10	96.06	104.79	62.23	66.72	71.84	0.49	0.42	1.60
TCP Vegas	9	38.95	51.96	23.17	56.34	56.06	56.39	0.46	0.58	1.59
Verus	9	189.72	140.90	91.56	123.93	144.08	145.71	1.41	1.24	1.39
Copa	10	67.28	61.59	48.18	54.10	54.13	54.27	0.28	0.57	1.64
FillP	9	552.91	453.80	509.97	125.11	135.56	136.52	4.24	5.81	8.76
Indigo	10	134.23	118.81	100.91	56.21	57.77	58.90	0.32	0.50	1.14

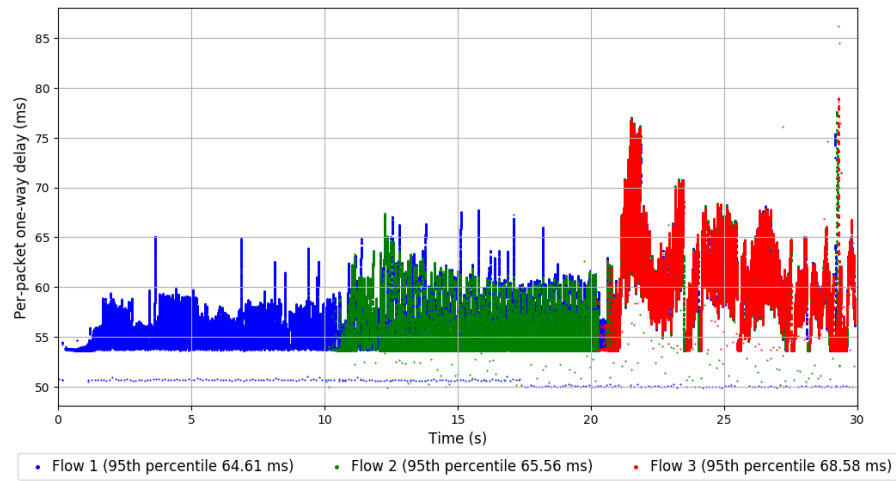
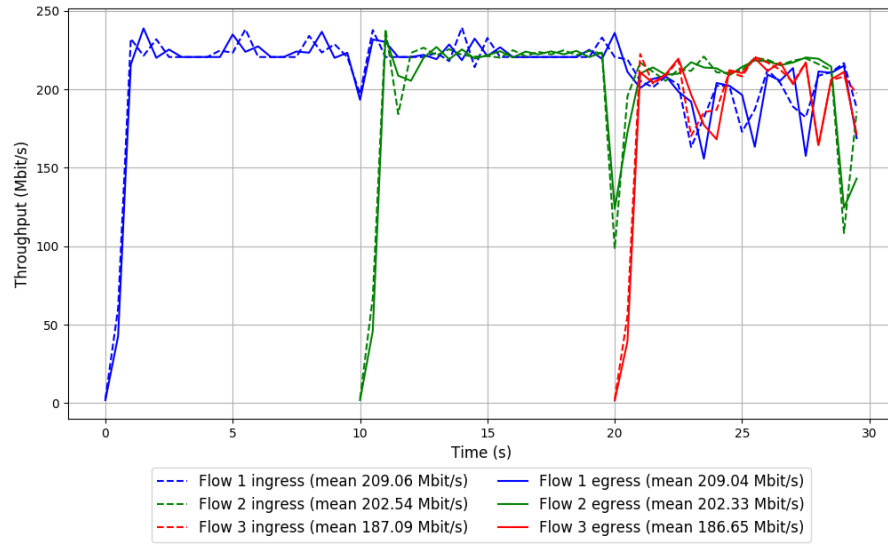
```
Run 1: Statistics of TCP BBR

Start at: 2018-01-02 23:17:37
End at: 2018-01-02 23:18:07

# Below is generated by plot.py at 2018-01-03 03:47:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 404.97 Mbit/s
95th percentile per-packet one-way delay: 65.788 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 209.04 Mbit/s
95th percentile per-packet one-way delay: 64.609 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 202.33 Mbit/s
95th percentile per-packet one-way delay: 65.555 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 186.65 Mbit/s
95th percentile per-packet one-way delay: 68.576 ms
Loss rate: 1.32%
```



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



Run 2: Statistics of TCP BBR

Start at: 2018-01-02 23:31:42

End at: 2018-01-02 23:32:12

# Below is generated by plot.py at 2018-01-03 03:47:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 387.45 Mbit/s

95th percentile per-packet one-way delay: 78.986 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 192.10 Mbit/s

95th percentile per-packet one-way delay: 76.086 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 201.39 Mbit/s

95th percentile per-packet one-way delay: 79.894 ms

Loss rate: 0.59%

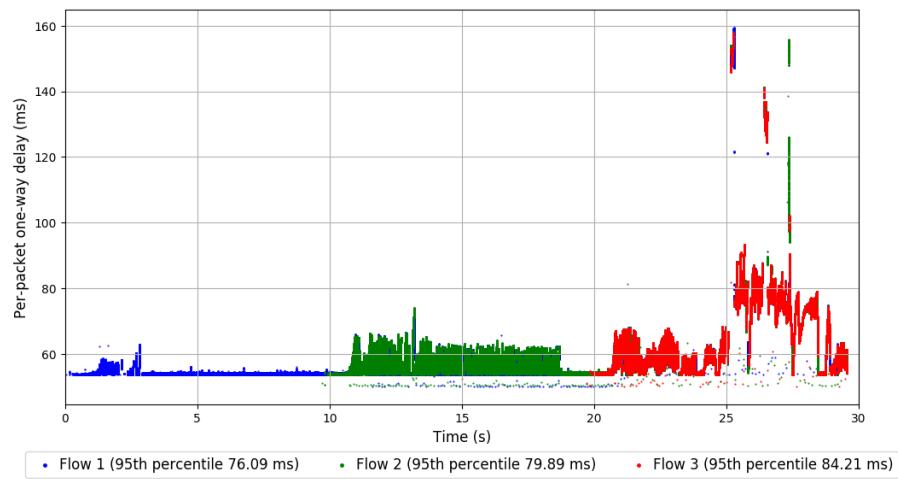
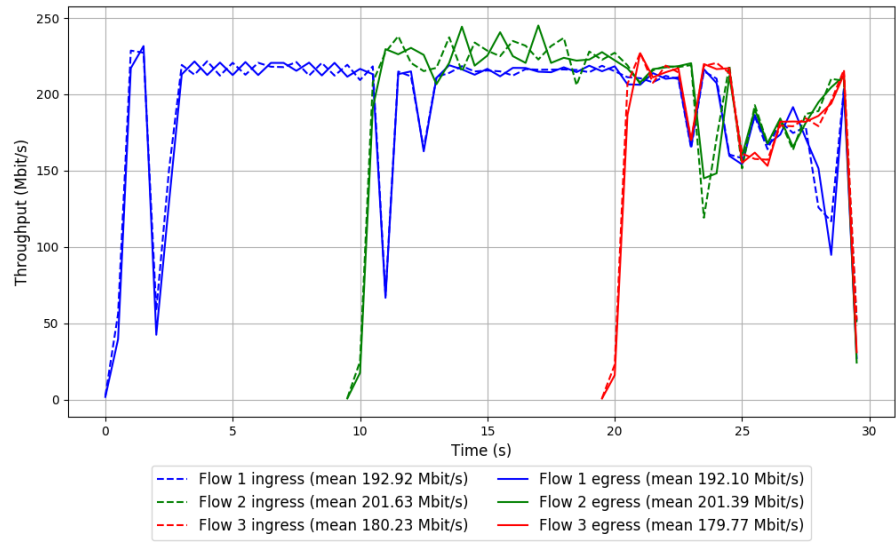
-- Flow 3:

Average throughput: 179.77 Mbit/s

95th percentile per-packet one-way delay: 84.206 ms

Loss rate: 1.30%

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

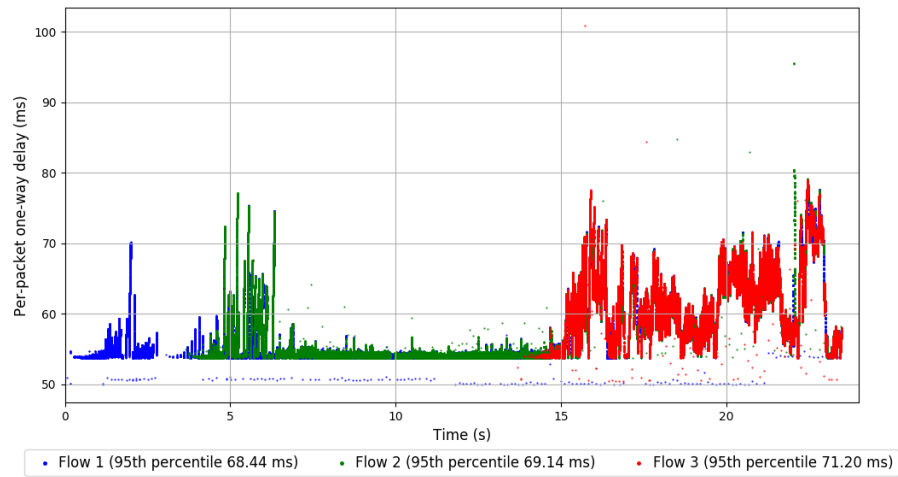
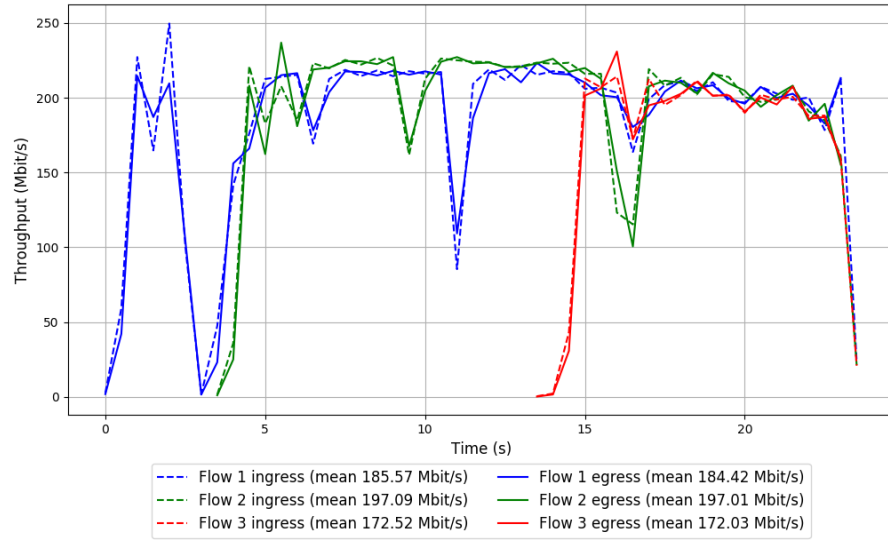


Run 3: Statistics of TCP BBR

Start at: 2018-01-02 23:45:57

End at: 2018-01-02 23:46:27

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



Run 4: Statistics of TCP BBR

Start at: 2018-01-02 23:58:12

End at: 2018-01-02 23:58:42

# Below is generated by plot.py at 2018-01-03 03:47:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 325.18 Mbit/s

95th percentile per-packet one-way delay: 132.267 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 177.89 Mbit/s

95th percentile per-packet one-way delay: 126.922 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 152.40 Mbit/s

95th percentile per-packet one-way delay: 137.765 ms

Loss rate: 0.71%

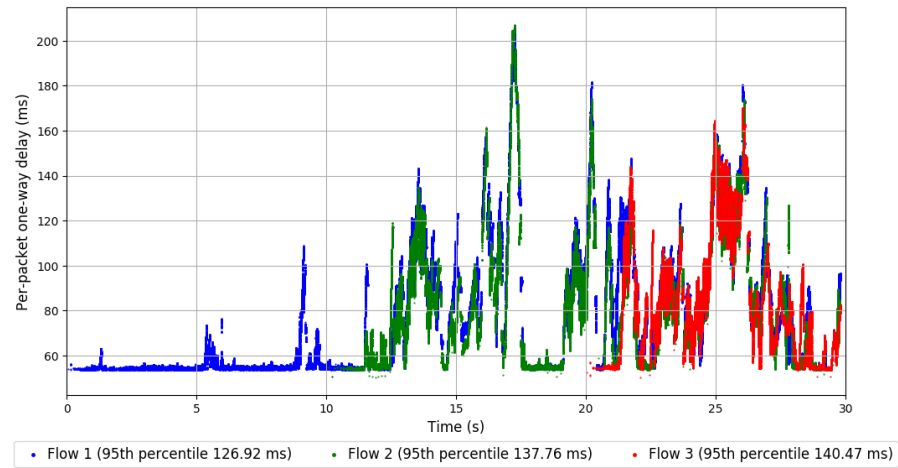
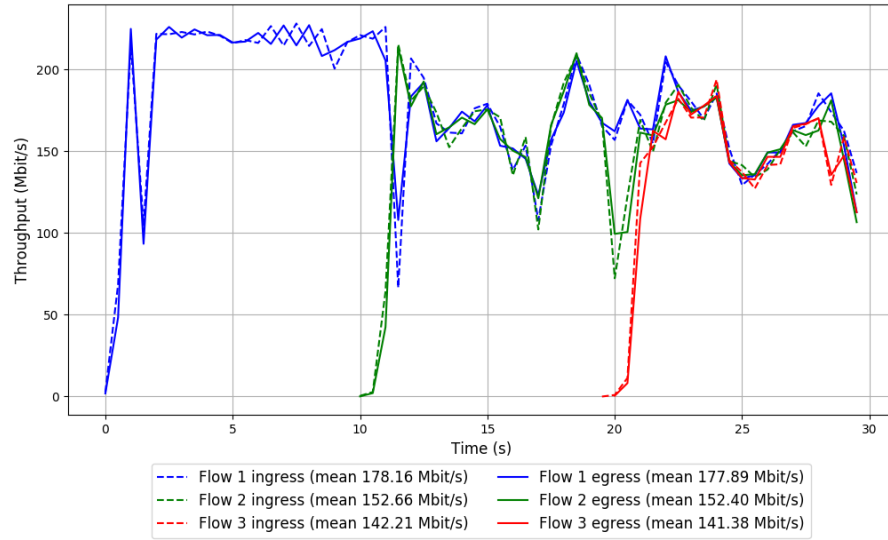
-- Flow 3:

Average throughput: 141.38 Mbit/s

95th percentile per-packet one-way delay: 140.473 ms

Loss rate: 1.65%

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



Run 5: Statistics of TCP BBR

Start at: 2018-01-03 00:10:25

End at: 2018-01-03 00:10:55

# Below is generated by plot.py at 2018-01-03 03:47:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 378.97 Mbit/s

95th percentile per-packet one-way delay: 78.746 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 194.98 Mbit/s

95th percentile per-packet one-way delay: 73.829 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 193.90 Mbit/s

95th percentile per-packet one-way delay: 78.339 ms

Loss rate: 0.61%

-- Flow 3:

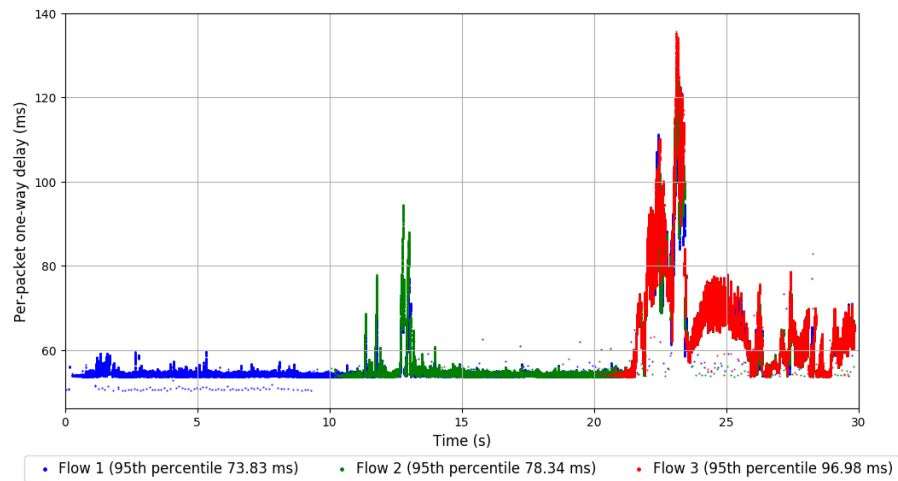
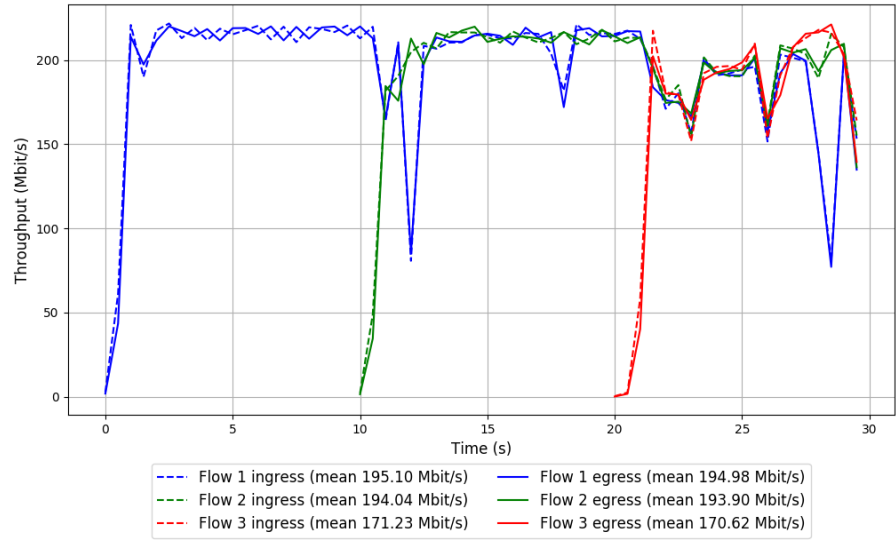
Average throughput: 170.62 Mbit/s

95th percentile per-packet one-way delay: 96.976 ms

Loss rate: 1.45%



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



Run 6: Statistics of TCP BBR

Start at: 2018-01-03 00:22:36

End at: 2018-01-03 00:23:06

# Below is generated by plot.py at 2018-01-03 03:47:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 239.56 Mbit/s

95th percentile per-packet one-way delay: 231.924 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 145.78 Mbit/s

95th percentile per-packet one-way delay: 193.613 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 109.97 Mbit/s

95th percentile per-packet one-way delay: 253.137 ms

Loss rate: 0.81%

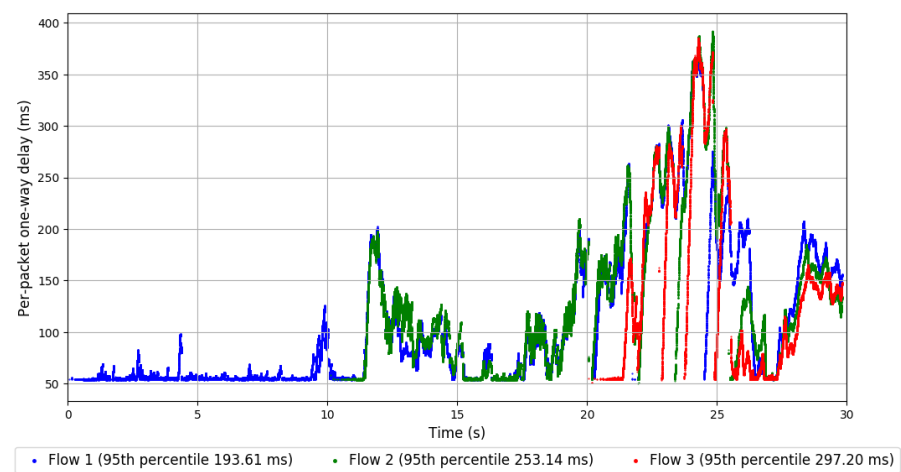
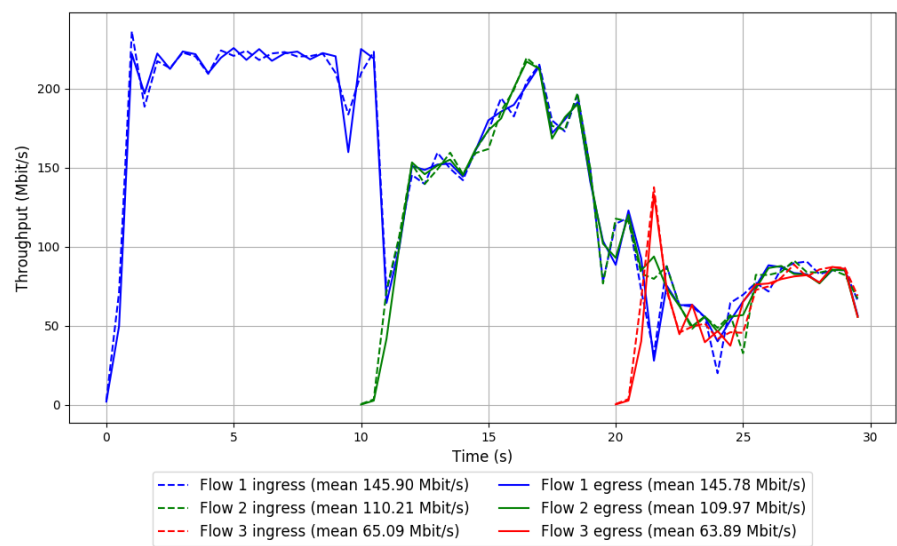
-- Flow 3:

Average throughput: 63.89 Mbit/s

95th percentile per-packet one-way delay: 297.204 ms

Loss rate: 2.95%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-03 00:34:27

End at: 2018-01-03 00:34:57

# Below is generated by plot.py at 2018-01-03 03:47:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 243.23 Mbit/s

95th percentile per-packet one-way delay: 226.628 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 142.34 Mbit/s

95th percentile per-packet one-way delay: 211.093 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 114.57 Mbit/s

95th percentile per-packet one-way delay: 224.619 ms

Loss rate: 0.69%

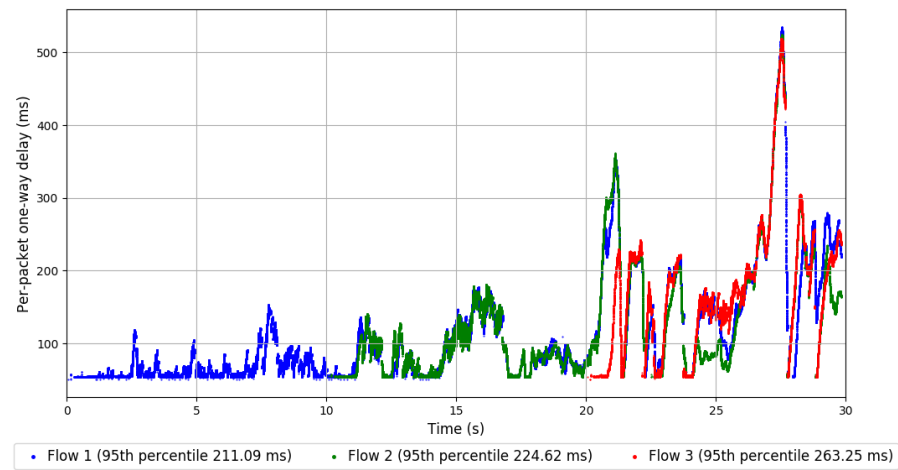
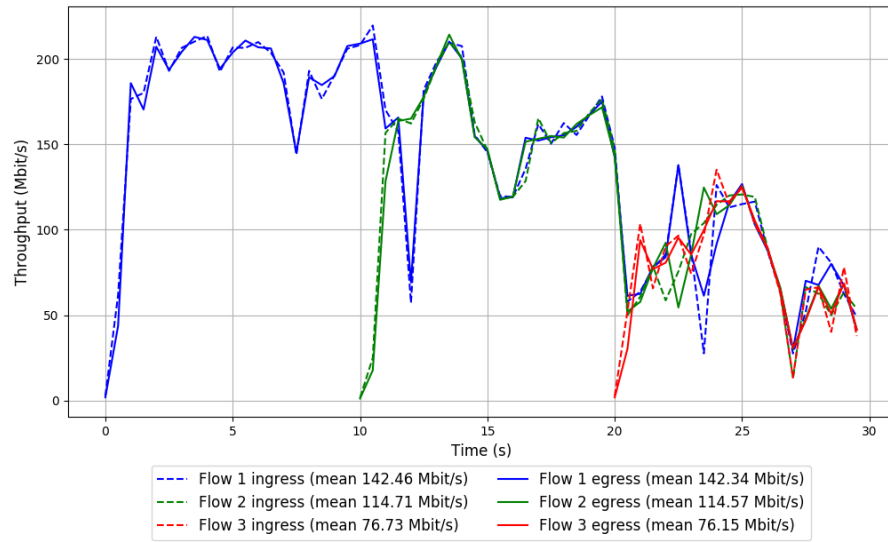
-- Flow 3:

Average throughput: 76.15 Mbit/s

95th percentile per-packet one-way delay: 263.249 ms

Loss rate: 1.80%

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

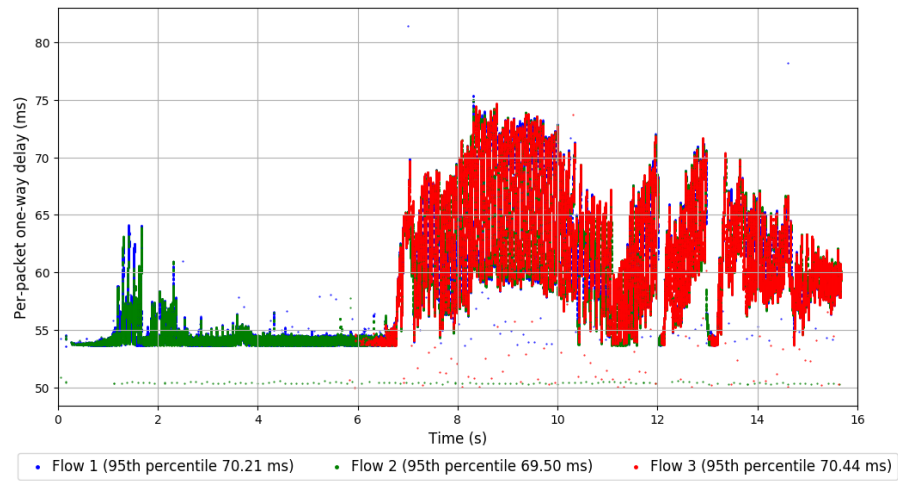
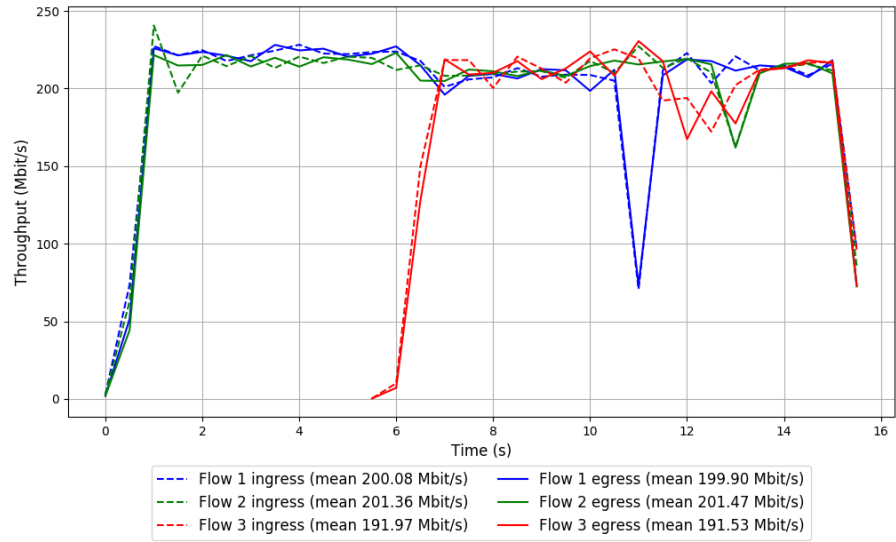


Run 8: Statistics of TCP BBR

Start at: 2018-01-03 00:47:09

End at: 2018-01-03 00:47:39

# Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-03 01:00:26

End at: 2018-01-03 01:00:56

# Below is generated by plot.py at 2018-01-03 03:50:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 412.61 Mbit/s

95th percentile per-packet one-way delay: 79.120 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 201.68 Mbit/s

95th percentile per-packet one-way delay: 78.153 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 195.97 Mbit/s

95th percentile per-packet one-way delay: 78.442 ms

Loss rate: 0.63%

-- Flow 3:

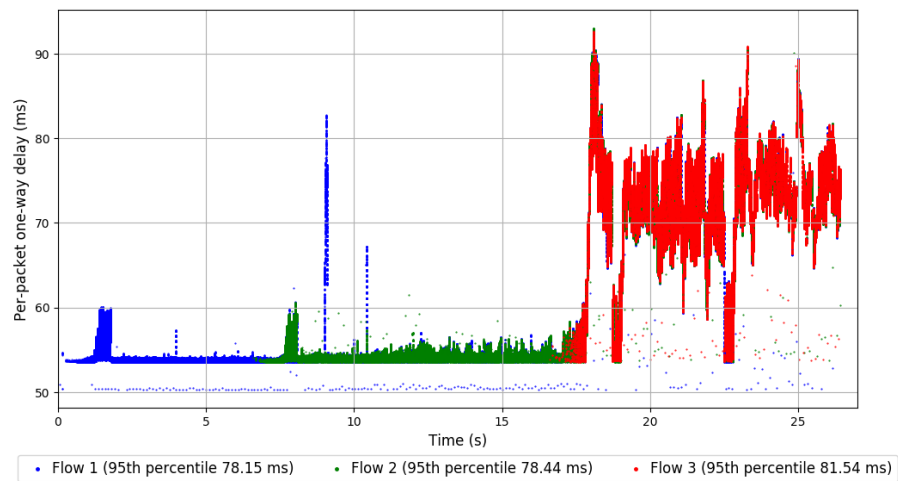
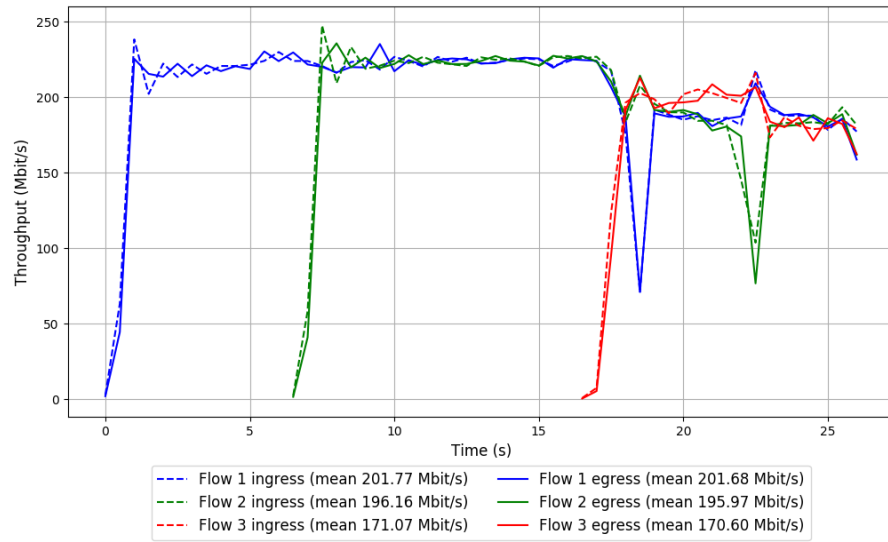
Average throughput: 170.60 Mbit/s

95th percentile per-packet one-way delay: 81.538 ms

Loss rate: 1.32%



# Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-03 01:14:18

End at: 2018-01-03 01:14:48

# Below is generated by plot.py at 2018-01-03 03:51:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 392.12 Mbit/s

95th percentile per-packet one-way delay: 74.685 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 205.26 Mbit/s

95th percentile per-packet one-way delay: 71.498 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 193.35 Mbit/s

95th percentile per-packet one-way delay: 74.381 ms

Loss rate: 0.59%

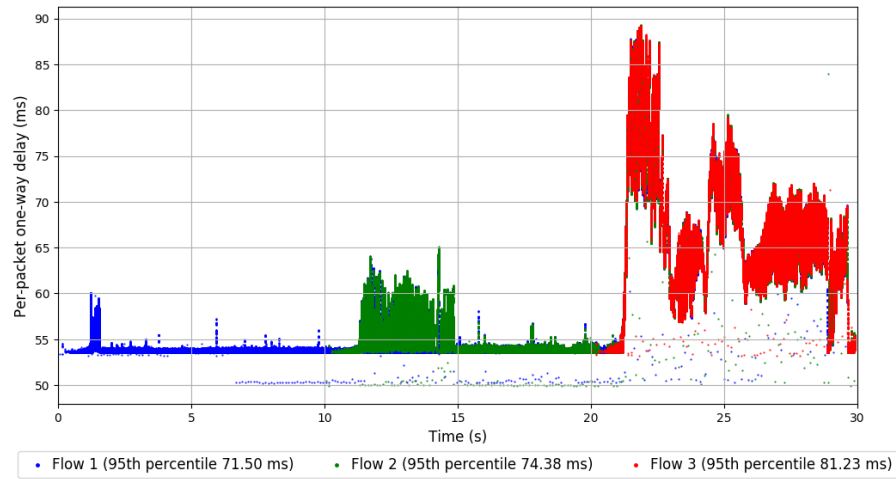
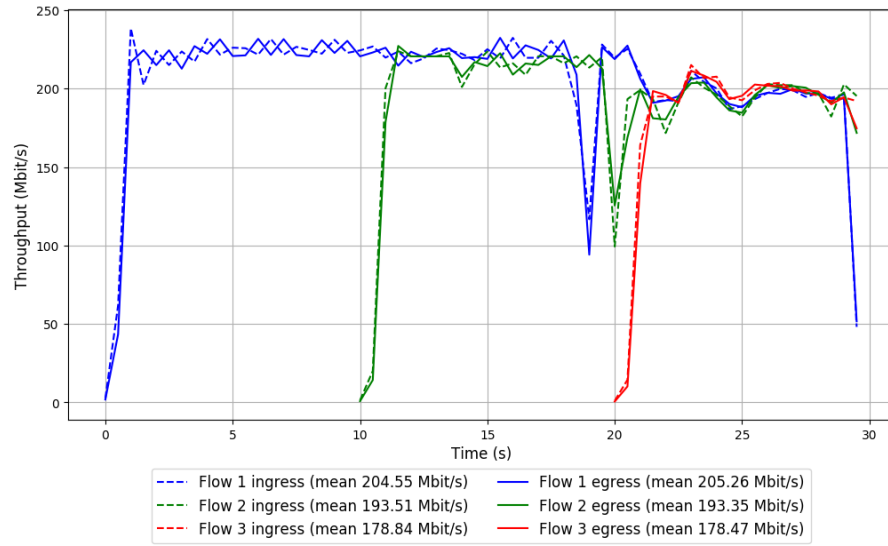
-- Flow 3:

Average throughput: 178.47 Mbit/s

95th percentile per-packet one-way delay: 81.234 ms

Loss rate: 1.25%

# Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-02 23:10:15

End at: 2018-01-02 23:10:45

# Below is generated by plot.py at 2018-01-03 03:51:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 236.72 Mbit/s

95th percentile per-packet one-way delay: 59.599 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 118.60 Mbit/s

95th percentile per-packet one-way delay: 59.730 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 128.05 Mbit/s

95th percentile per-packet one-way delay: 59.225 ms

Loss rate: 0.43%

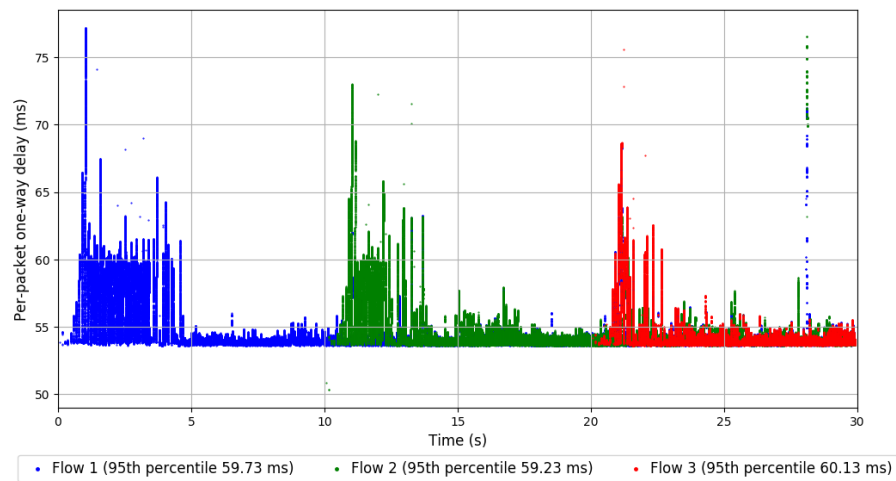
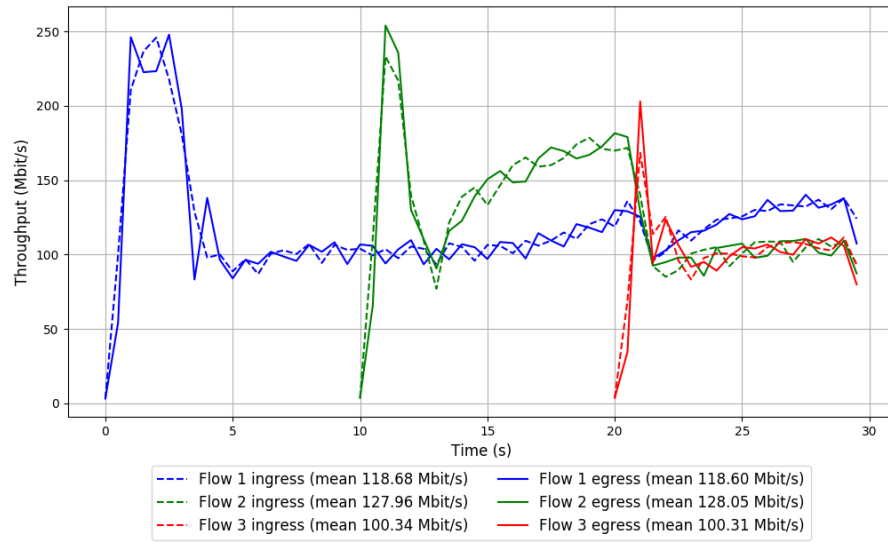
-- Flow 3:

Average throughput: 100.31 Mbit/s

95th percentile per-packet one-way delay: 60.129 ms

Loss rate: 1.12%

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



Run 2: Statistics of TCP Cubic

Start at: 2018-01-02 23:24:27

End at: 2018-01-02 23:24:57

# Below is generated by plot.py at 2018-01-03 03:51:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 219.52 Mbit/s

95th percentile per-packet one-way delay: 60.359 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 96.87 Mbit/s

95th percentile per-packet one-way delay: 60.402 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 132.44 Mbit/s

95th percentile per-packet one-way delay: 60.545 ms

Loss rate: 0.69%

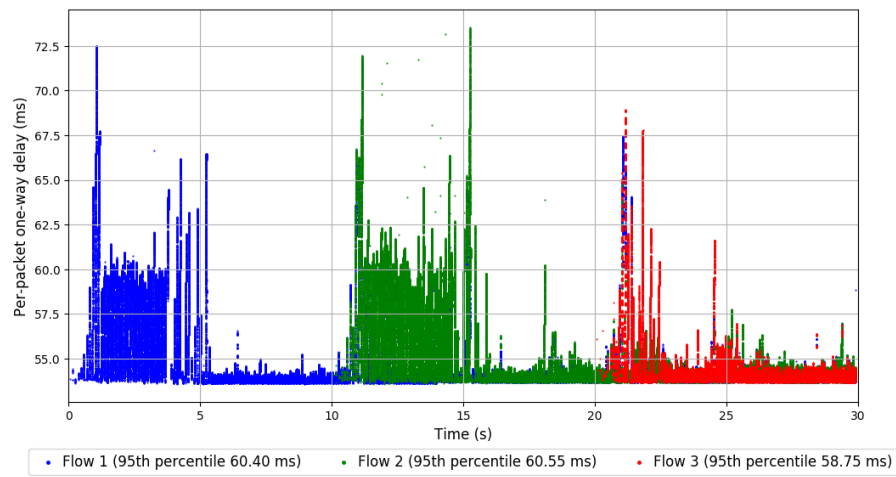
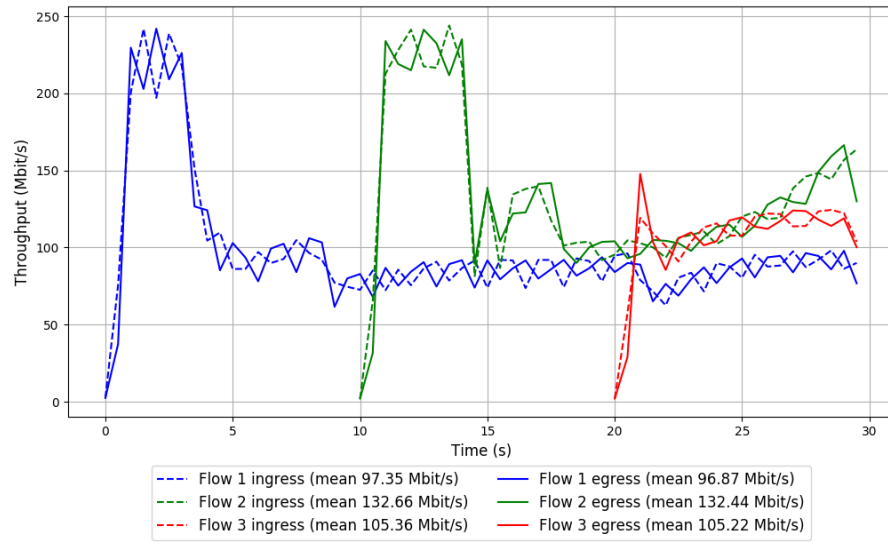
-- Flow 3:

Average throughput: 105.22 Mbit/s

95th percentile per-packet one-way delay: 58.753 ms

Loss rate: 1.20%

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



Run 3: Statistics of TCP Cubic

Start at: 2018-01-02 23:38:23

End at: 2018-01-02 23:38:53

# Below is generated by plot.py at 2018-01-03 03:51:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 250.00 Mbit/s

95th percentile per-packet one-way delay: 61.409 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 149.50 Mbit/s

95th percentile per-packet one-way delay: 61.337 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 104.85 Mbit/s

95th percentile per-packet one-way delay: 61.585 ms

Loss rate: 0.43%

-- Flow 3:

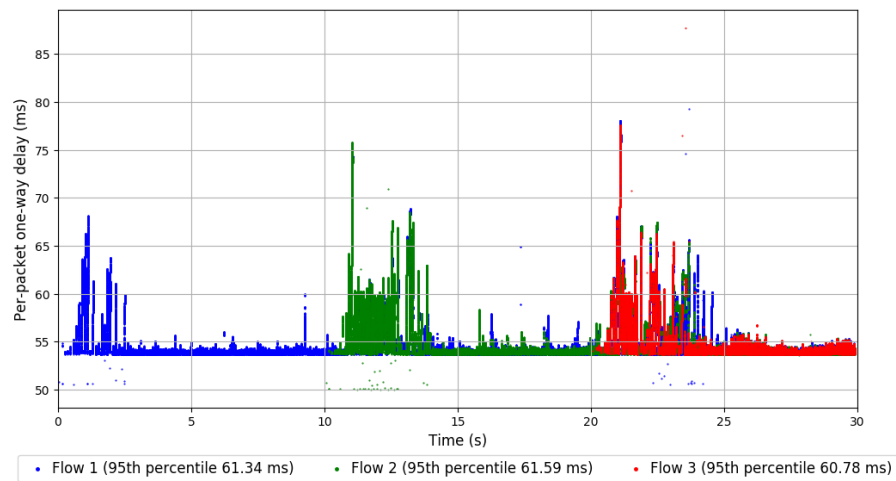
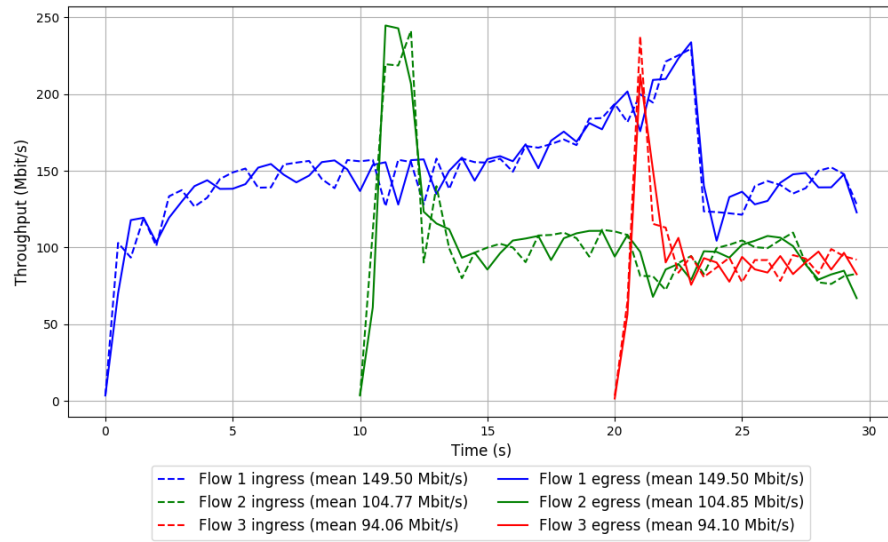
Average throughput: 94.10 Mbit/s

95th percentile per-packet one-way delay: 60.785 ms

Loss rate: 1.14%



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



Run 4: Statistics of TCP Cubic

Start at: 2018-01-02 23:51:20

End at: 2018-01-02 23:51:50

# Below is generated by plot.py at 2018-01-03 03:51:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 196.89 Mbit/s

95th percentile per-packet one-way delay: 68.047 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 116.35 Mbit/s

95th percentile per-packet one-way delay: 68.174 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 119.23 Mbit/s

95th percentile per-packet one-way delay: 68.089 ms

Loss rate: 0.54%

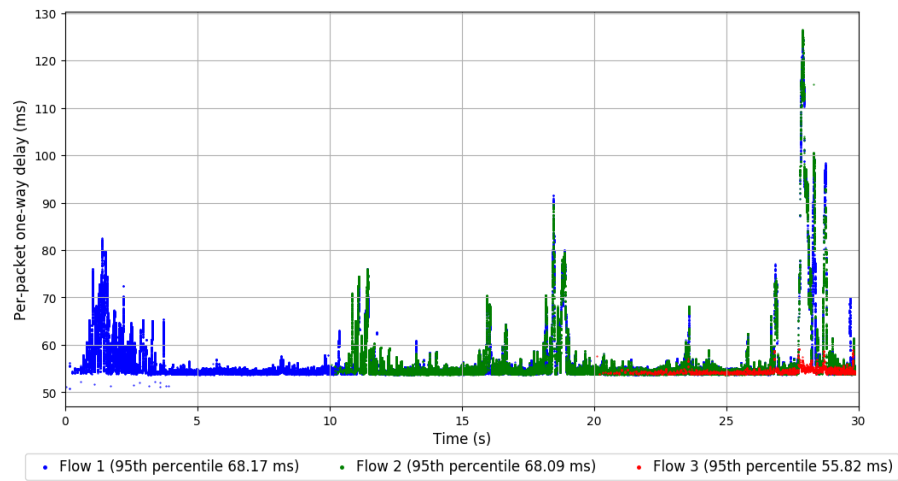
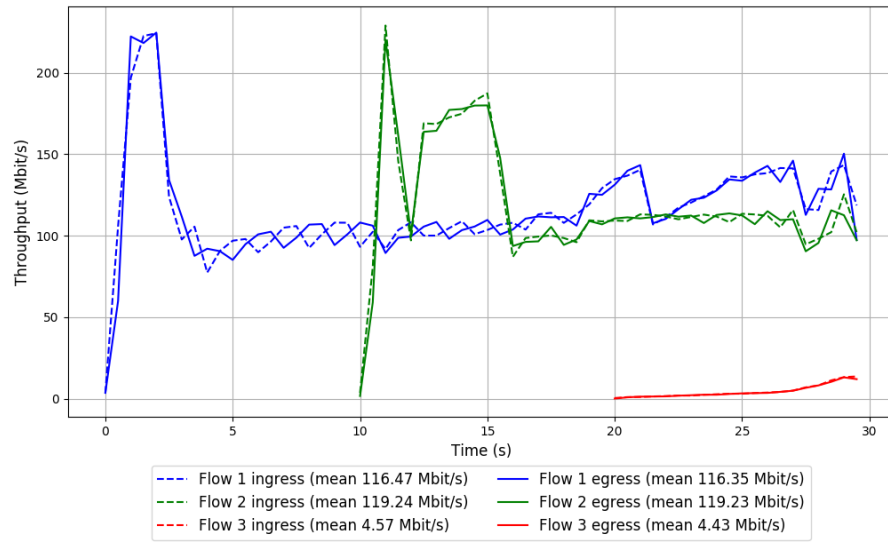
-- Flow 3:

Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 55.819 ms

Loss rate: 4.20%

# Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-03 00:03:26

End at: 2018-01-03 00:03:56

# Below is generated by plot.py at 2018-01-03 03:51:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 197.10 Mbit/s

95th percentile per-packet one-way delay: 90.849 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 134.35 Mbit/s

95th percentile per-packet one-way delay: 97.359 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 46.01 Mbit/s

95th percentile per-packet one-way delay: 83.867 ms

Loss rate: 1.89%

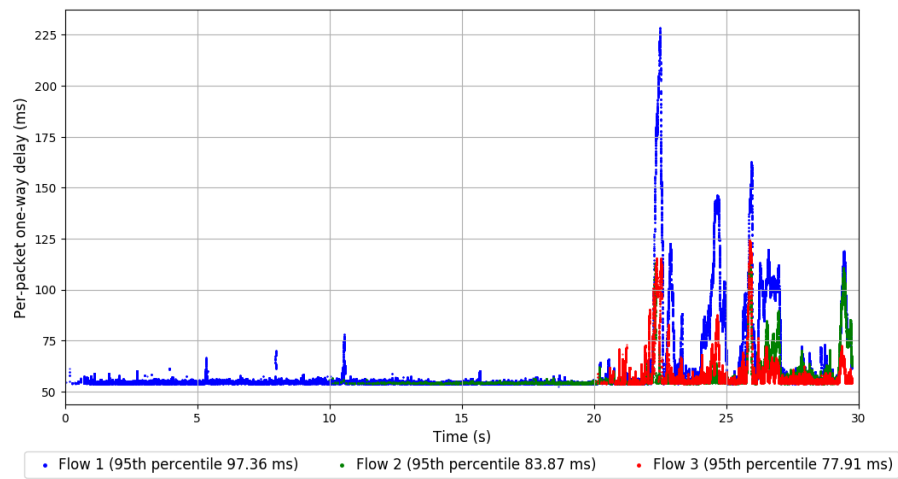
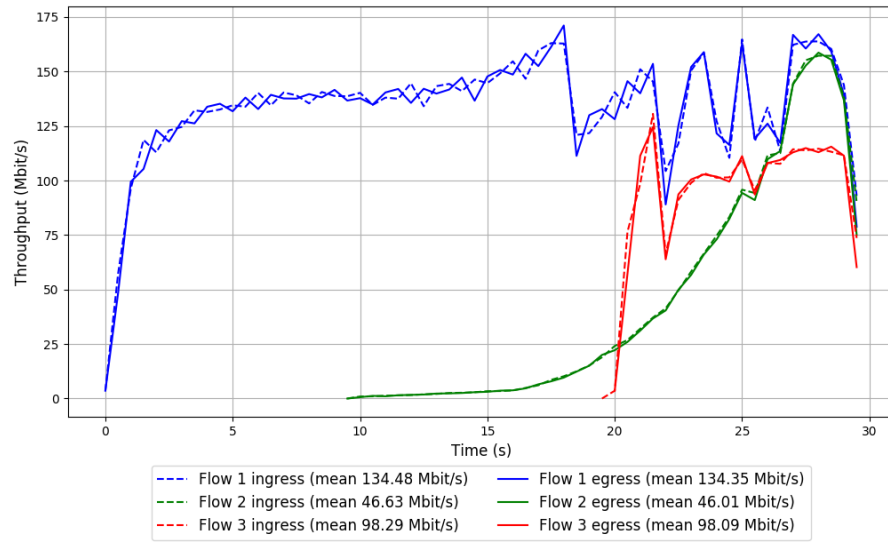
-- Flow 3:

Average throughput: 98.09 Mbit/s

95th percentile per-packet one-way delay: 77.912 ms

Loss rate: 1.29%

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



Run 6: Statistics of TCP Cubic

Start at: 2018-01-03 00:15:46

End at: 2018-01-03 00:16:16

# Below is generated by plot.py at 2018-01-03 03:51:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 207.12 Mbit/s

95th percentile per-packet one-way delay: 137.127 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 121.86 Mbit/s

95th percentile per-packet one-way delay: 138.976 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 126.94 Mbit/s

95th percentile per-packet one-way delay: 134.919 ms

Loss rate: 0.72%

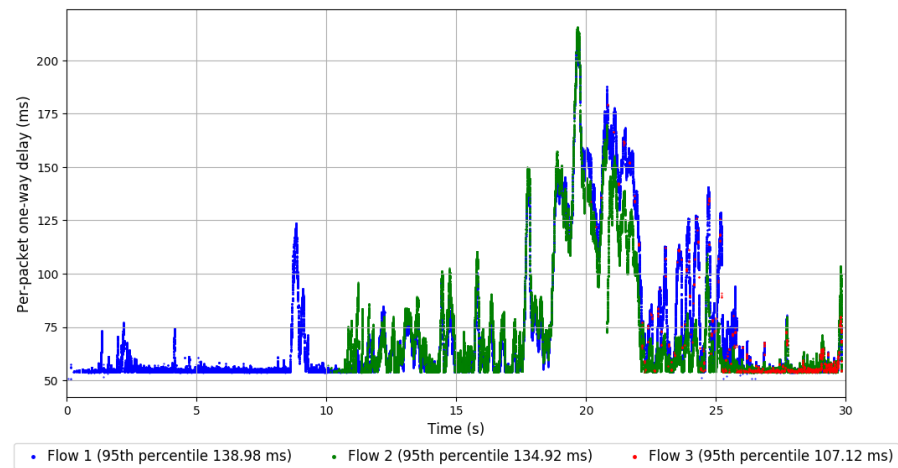
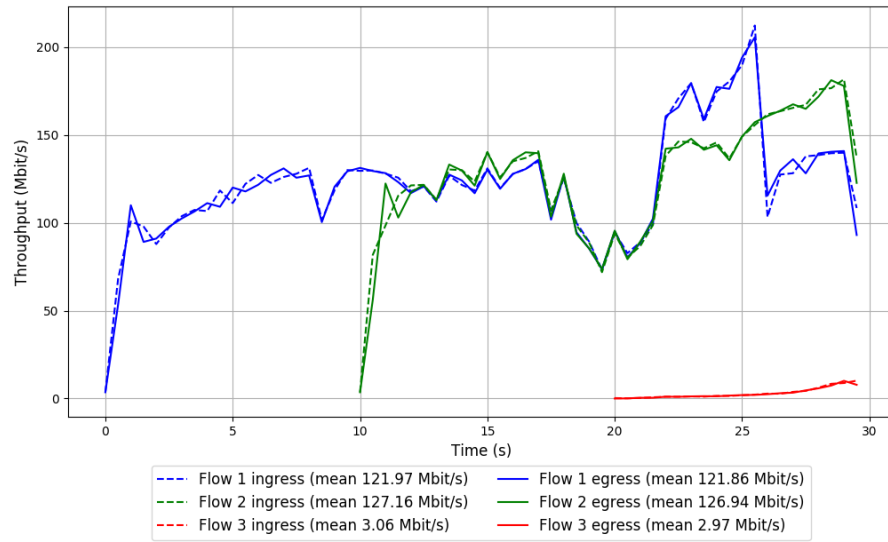
-- Flow 3:

Average throughput: 2.97 Mbit/s

95th percentile per-packet one-way delay: 107.123 ms

Loss rate: 5.06%

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



Run 7: Statistics of TCP Cubic

Start at: 2018-01-03 00:27:38

End at: 2018-01-03 00:28:08

# Below is generated by plot.py at 2018-01-03 03:51:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 131.75 Mbit/s

95th percentile per-packet one-way delay: 57.930 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 120.97 Mbit/s

95th percentile per-packet one-way delay: 58.027 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 14.10 Mbit/s

95th percentile per-packet one-way delay: 57.085 ms

Loss rate: 2.73%

-- Flow 3:

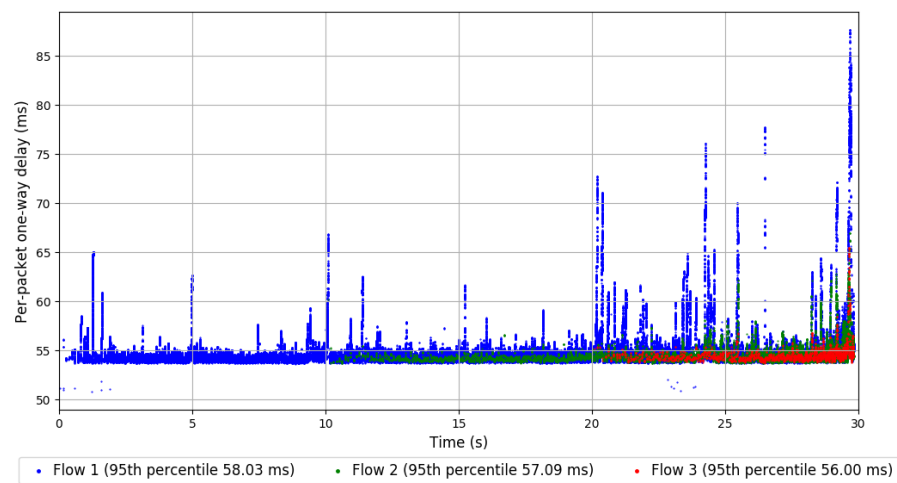
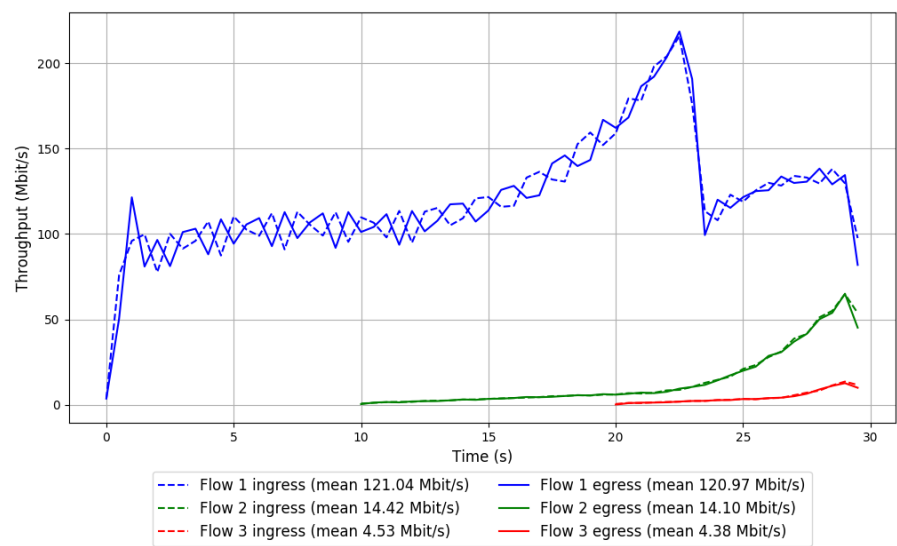
Average throughput: 4.38 Mbit/s

95th percentile per-packet one-way delay: 56.000 ms

Loss rate: 4.29%



Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-03 00:39:41

End at: 2018-01-03 00:40:11

# Below is generated by plot.py at 2018-01-03 03:53:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 221.42 Mbit/s

95th percentile per-packet one-way delay: 59.556 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 116.51 Mbit/s

95th percentile per-packet one-way delay: 57.171 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 98.55 Mbit/s

95th percentile per-packet one-way delay: 59.835 ms

Loss rate: 0.58%

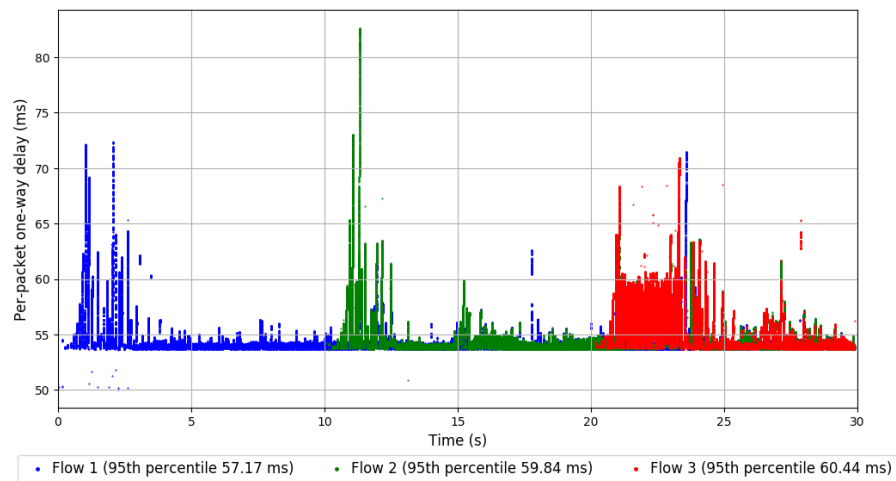
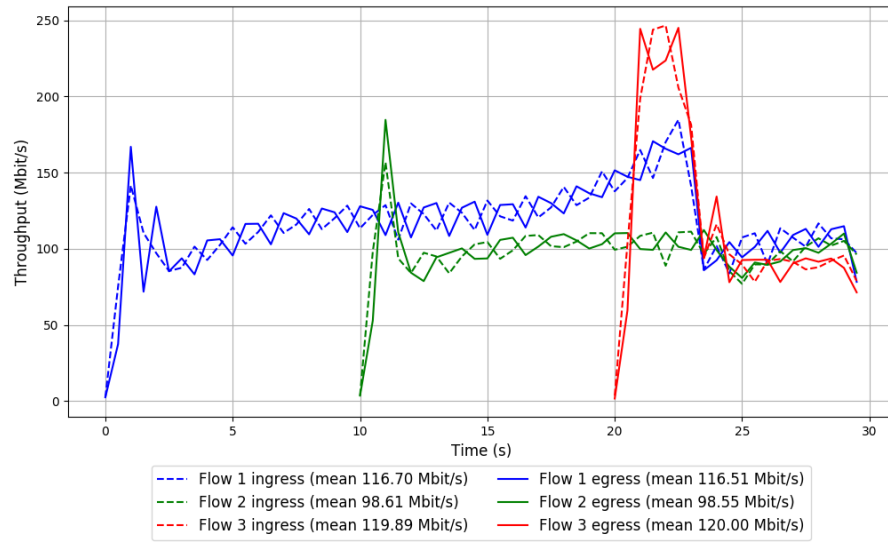
-- Flow 3:

Average throughput: 120.00 Mbit/s

95th percentile per-packet one-way delay: 60.435 ms

Loss rate: 0.83%

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



Run 9: Statistics of TCP Cubic

Start at: 2018-01-03 00:53:16

End at: 2018-01-03 00:53:46

# Below is generated by plot.py at 2018-01-03 03:53:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 204.90 Mbit/s

95th percentile per-packet one-way delay: 59.848 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 123.47 Mbit/s

95th percentile per-packet one-way delay: 59.320 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 120.22 Mbit/s

95th percentile per-packet one-way delay: 60.075 ms

Loss rate: 0.53%

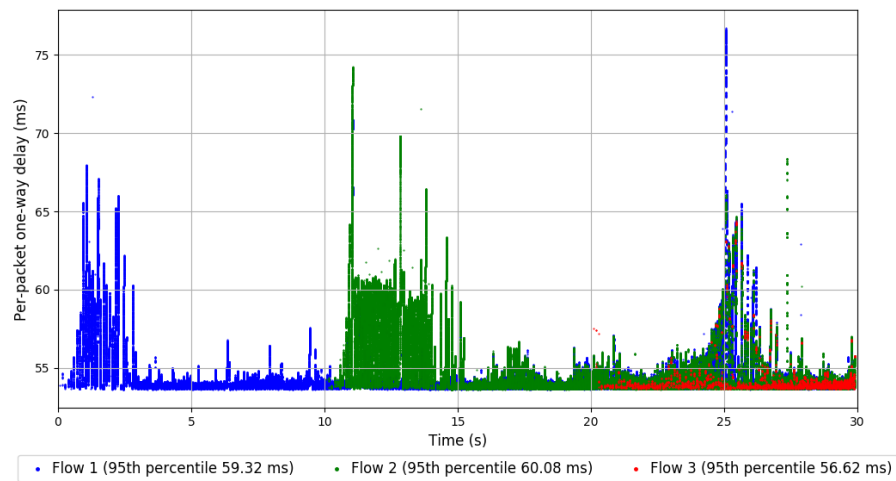
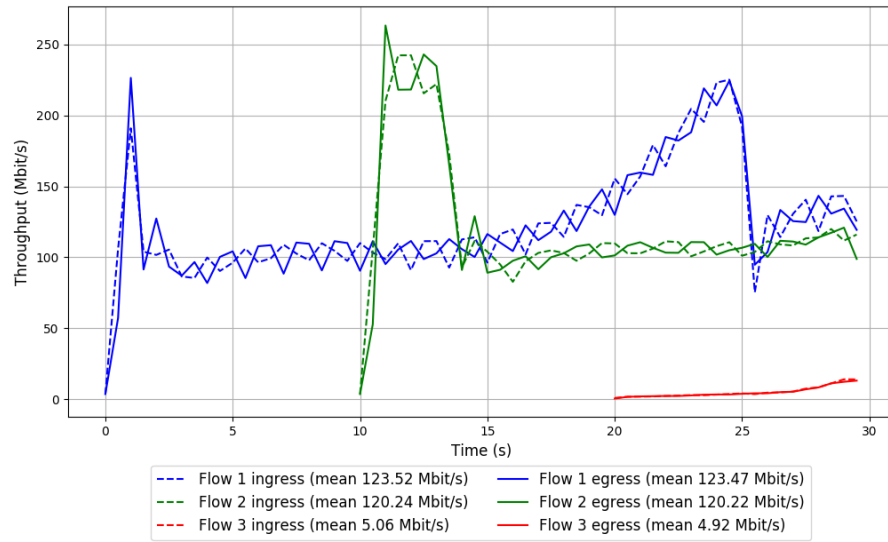
-- Flow 3:

Average throughput: 4.92 Mbit/s

95th percentile per-packet one-way delay: 56.625 ms

Loss rate: 3.73%

# Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-03 01:07:05

End at: 2018-01-03 01:07:35

# Below is generated by plot.py at 2018-01-03 03:53:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 188.01 Mbit/s

95th percentile per-packet one-way delay: 59.636 ms

Loss rate: 0.88%

-- Flow 1:

Average throughput: 110.93 Mbit/s

95th percentile per-packet one-way delay: 59.618 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 50.01 Mbit/s

95th percentile per-packet one-way delay: 58.633 ms

Loss rate: 2.24%

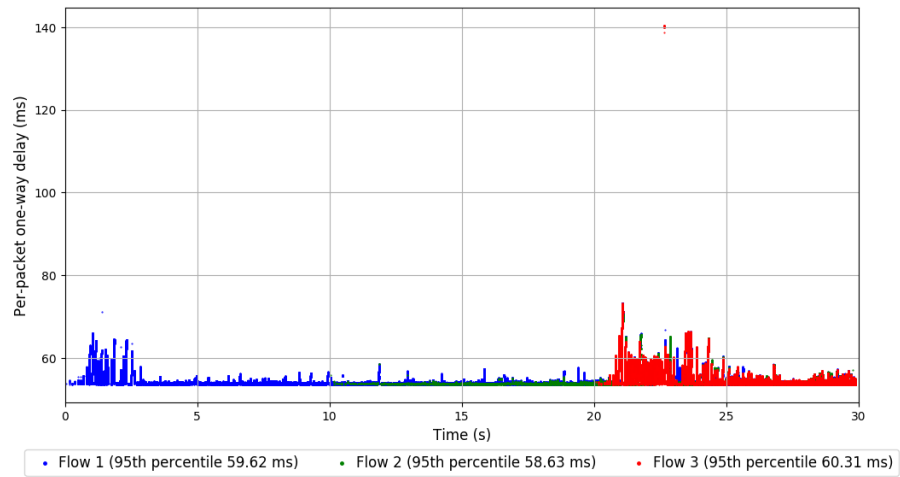
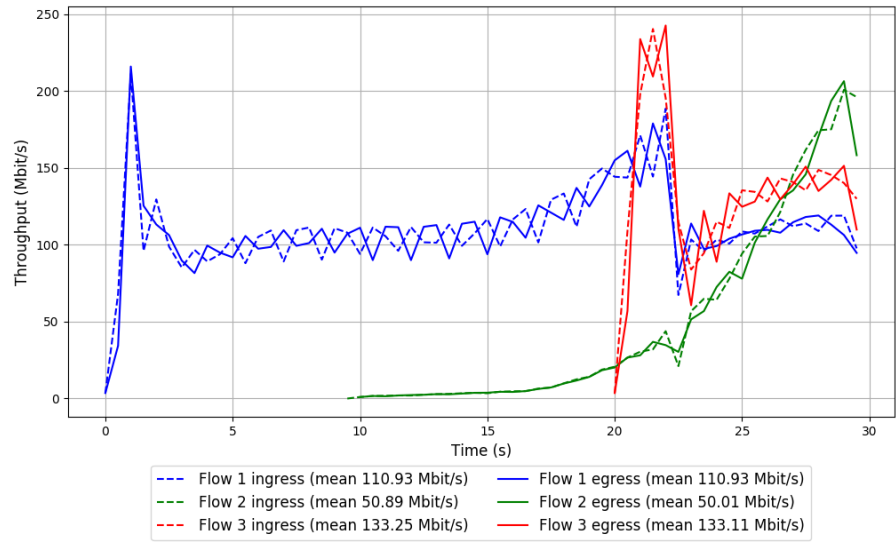
-- Flow 3:

Average throughput: 133.11 Mbit/s

95th percentile per-packet one-way delay: 60.307 ms

Loss rate: 1.15%

# Run 10: Report of TCP Cubic — Data Link



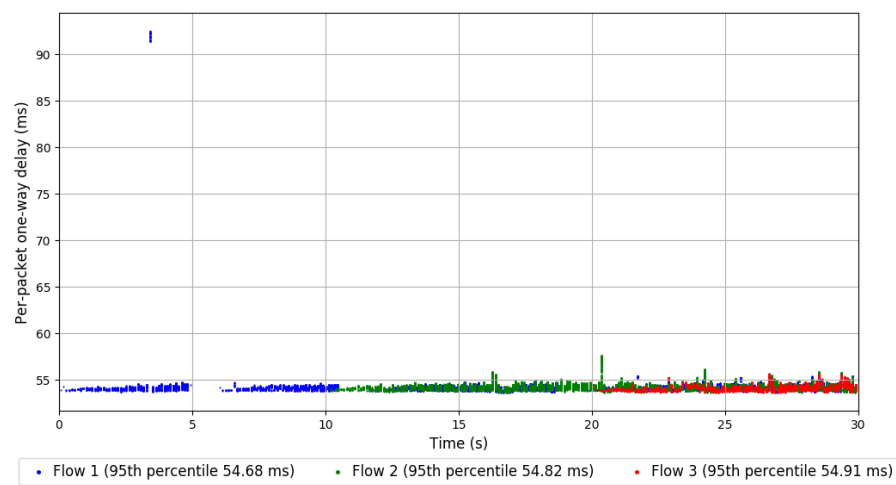
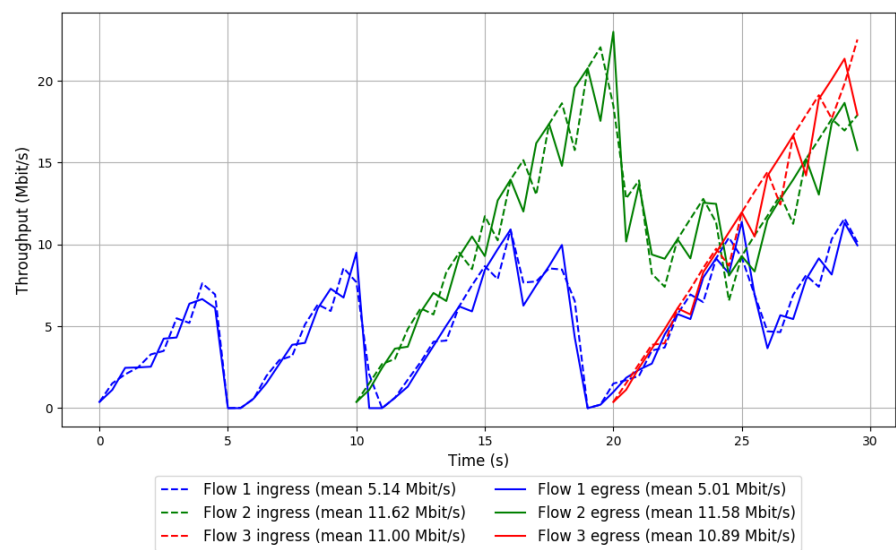
```
Run 1: Statistics of LEDBAT

Start at: 2018-01-02 23:16:10
End at: 2018-01-02 23:16:40

# Below is generated by plot.py at 2018-01-03 03:53:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.28 Mbit/s
95th percentile per-packet one-way delay: 54.794 ms
Loss rate: 1.76%
-- Flow 1:
Average throughput: 5.01 Mbit/s
95th percentile per-packet one-way delay: 54.682 ms
Loss rate: 2.82%
-- Flow 2:
Average throughput: 11.58 Mbit/s
95th percentile per-packet one-way delay: 54.816 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 10.89 Mbit/s
95th percentile per-packet one-way delay: 54.909 ms
Loss rate: 2.10%
```



Run 1: Report of LEDBAT — Data Link

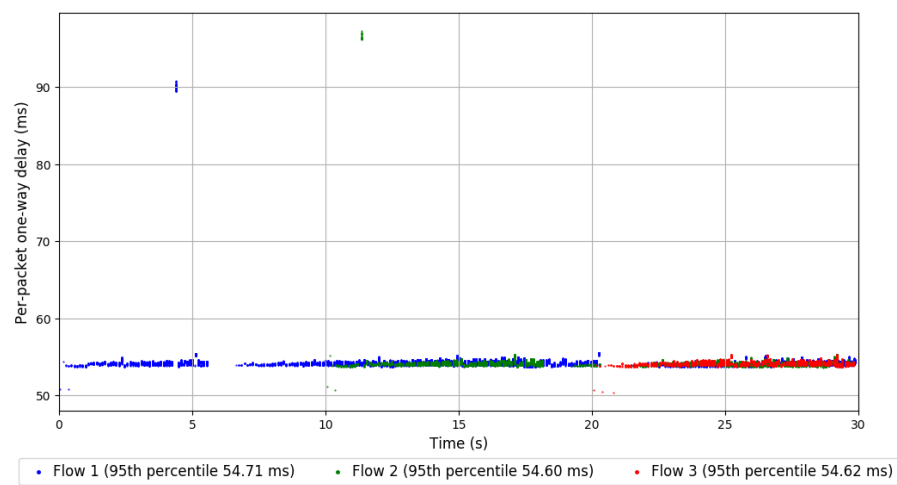
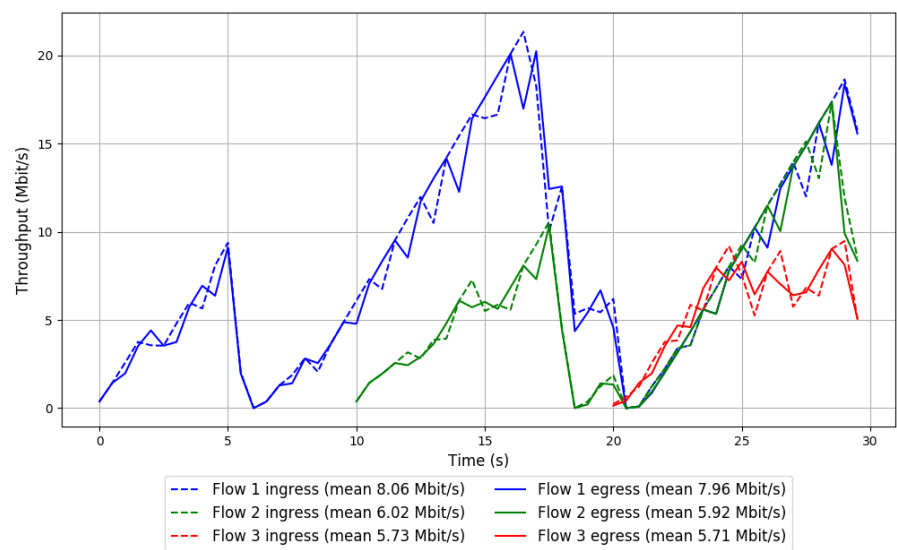


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-02 23:30:17
End at: 2018-01-02 23:30:47

# Below is generated by plot.py at 2018-01-03 03:53:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.75 Mbit/s
95th percentile per-packet one-way delay: 54.681 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 54.711 ms
Loss rate: 1.59%
-- Flow 2:
Average throughput: 5.92 Mbit/s
95th percentile per-packet one-way delay: 54.604 ms
Loss rate: 2.11%
-- Flow 3:
Average throughput: 5.71 Mbit/s
95th percentile per-packet one-way delay: 54.622 ms
Loss rate: 1.27%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-02 23:44:29

End at: 2018-01-02 23:44:59

# Below is generated by plot.py at 2018-01-03 03:53:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.64 Mbit/s

95th percentile per-packet one-way delay: 54.753 ms

Loss rate: 1.34%

-- Flow 1:

Average throughput: 7.39 Mbit/s

95th percentile per-packet one-way delay: 54.715 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 9.53 Mbit/s

95th percentile per-packet one-way delay: 54.774 ms

Loss rate: 1.00%

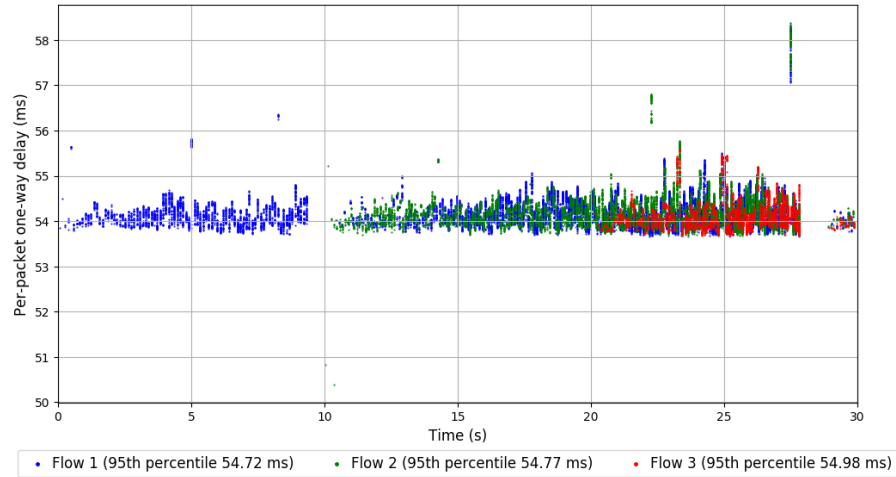
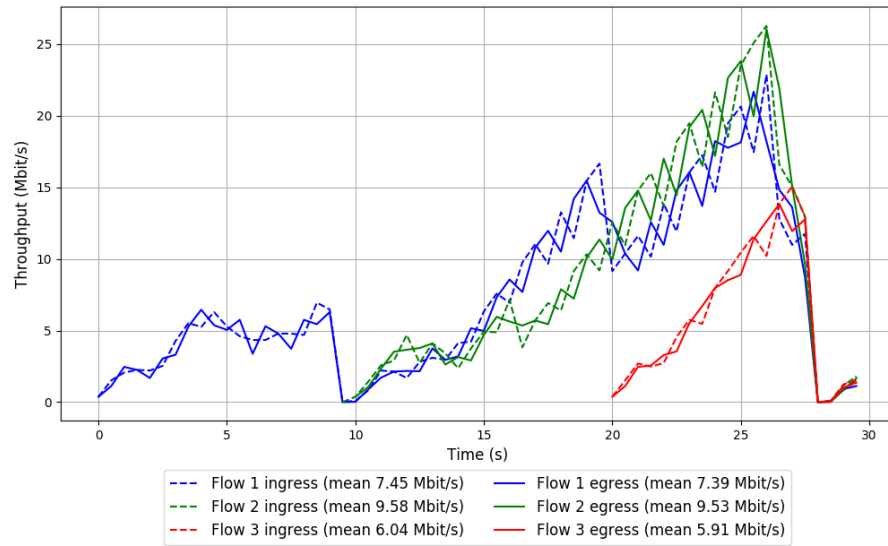
-- Flow 3:

Average throughput: 5.91 Mbit/s

95th percentile per-packet one-way delay: 54.980 ms

Loss rate: 3.14%

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

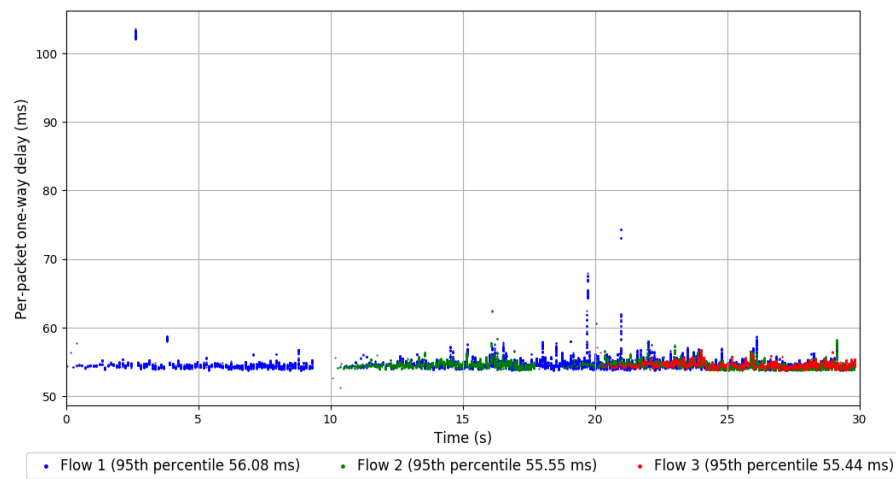
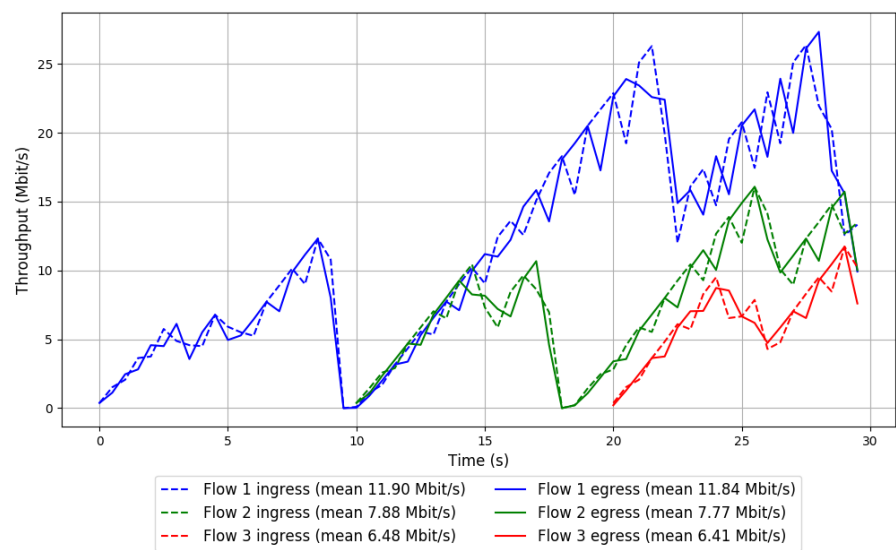


```
Run 4: Statistics of LEDBAT

Start at: 2018-01-02 23:56:47
End at: 2018-01-02 23:57:17

# Below is generated by plot.py at 2018-01-03 03:53:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.08 Mbit/s
95th percentile per-packet one-way delay: 55.842 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 11.84 Mbit/s
95th percentile per-packet one-way delay: 56.084 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 7.77 Mbit/s
95th percentile per-packet one-way delay: 55.549 ms
Loss rate: 1.86%
-- Flow 3:
Average throughput: 6.41 Mbit/s
95th percentile per-packet one-way delay: 55.437 ms
Loss rate: 2.17%
```

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-03 00:09:01

End at: 2018-01-03 00:09:31

# Below is generated by plot.py at 2018-01-03 03:53:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.66 Mbit/s

95th percentile per-packet one-way delay: 54.960 ms

Loss rate: 2.78%

-- Flow 1:

Average throughput: 7.24 Mbit/s

95th percentile per-packet one-way delay: 54.952 ms

Loss rate: 2.42%

-- Flow 2:

Average throughput: 6.13 Mbit/s

95th percentile per-packet one-way delay: 55.017 ms

Loss rate: 2.76%

-- Flow 3:

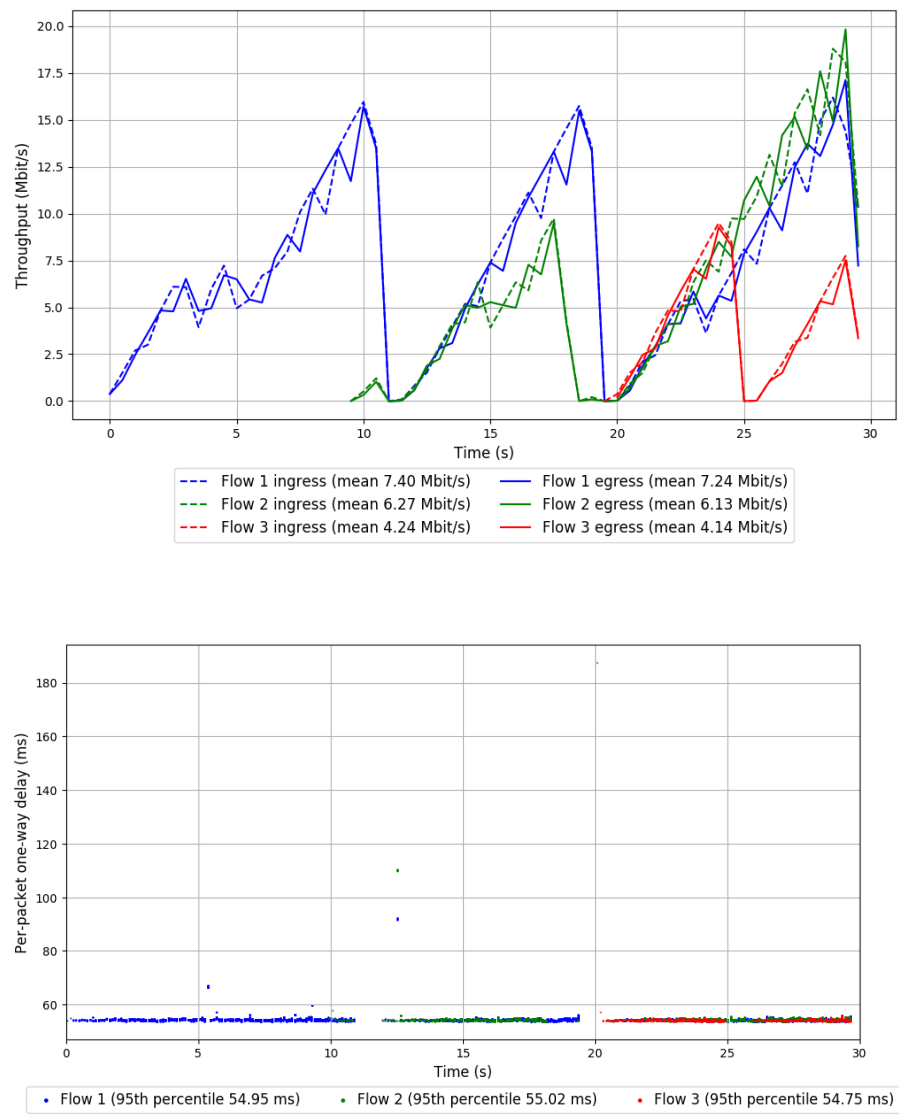
Average throughput: 4.14 Mbit/s

95th percentile per-packet one-way delay: 54.746 ms

Loss rate: 4.76%



Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-03 00:21:15

End at: 2018-01-03 00:21:45

# Below is generated by plot.py at 2018-01-03 03:53:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 9.73 Mbit/s

95th percentile per-packet one-way delay: 56.142 ms

Loss rate: 3.08%

-- Flow 1:

Average throughput: 6.40 Mbit/s

95th percentile per-packet one-way delay: 56.109 ms

Loss rate: 2.15%

-- Flow 2:

Average throughput: 3.46 Mbit/s

95th percentile per-packet one-way delay: 55.772 ms

Loss rate: 4.55%

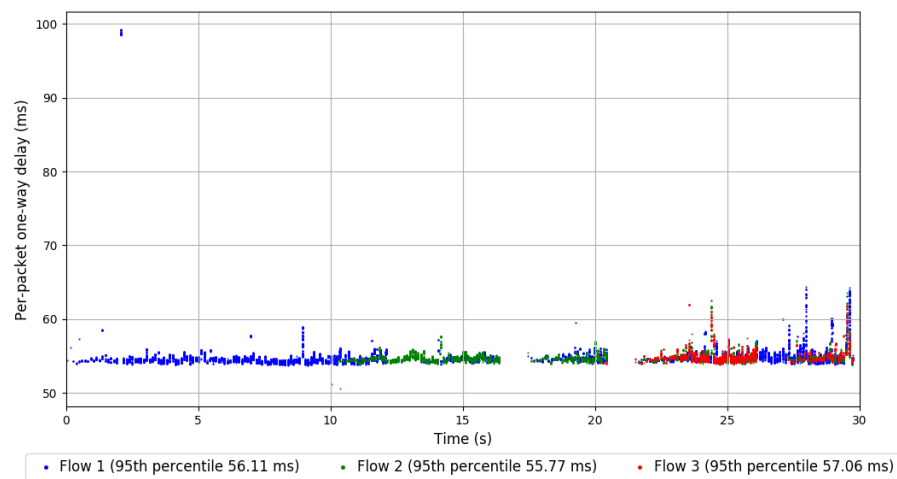
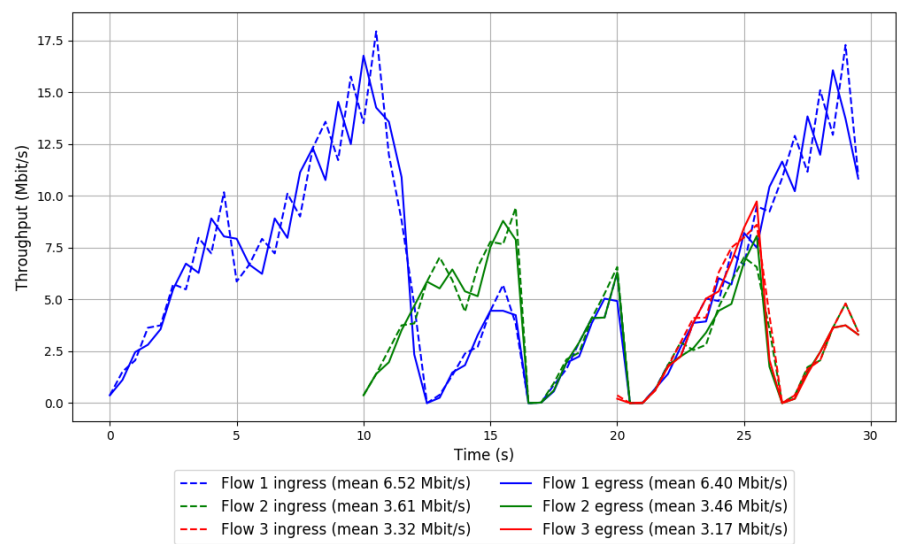
-- Flow 3:

Average throughput: 3.17 Mbit/s

95th percentile per-packet one-way delay: 57.061 ms

Loss rate: 5.41%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-03 00:33:03

End at: 2018-01-03 00:33:33

# Below is generated by plot.py at 2018-01-03 03:53:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 17.02 Mbit/s

95th percentile per-packet one-way delay: 56.706 ms

Loss rate: 2.20%

-- Flow 1:

Average throughput: 8.47 Mbit/s

95th percentile per-packet one-way delay: 56.480 ms

Loss rate: 2.20%

-- Flow 2:

Average throughput: 8.43 Mbit/s

95th percentile per-packet one-way delay: 57.113 ms

Loss rate: 2.16%

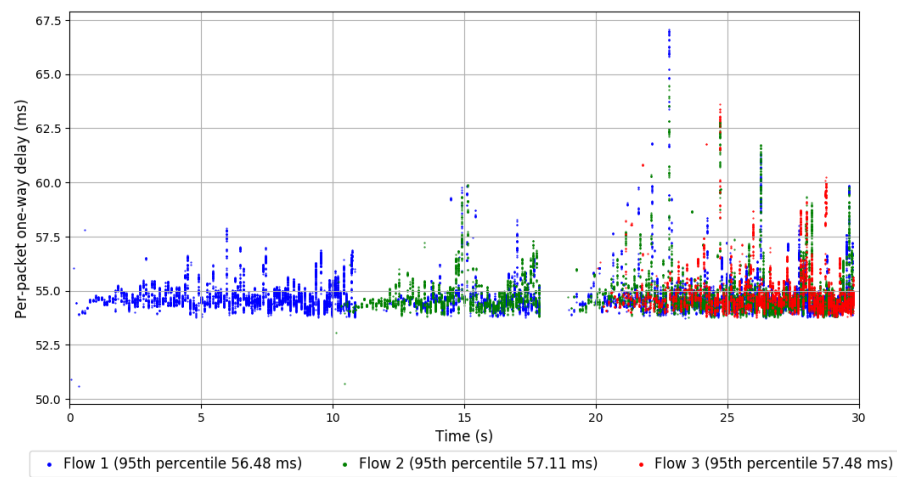
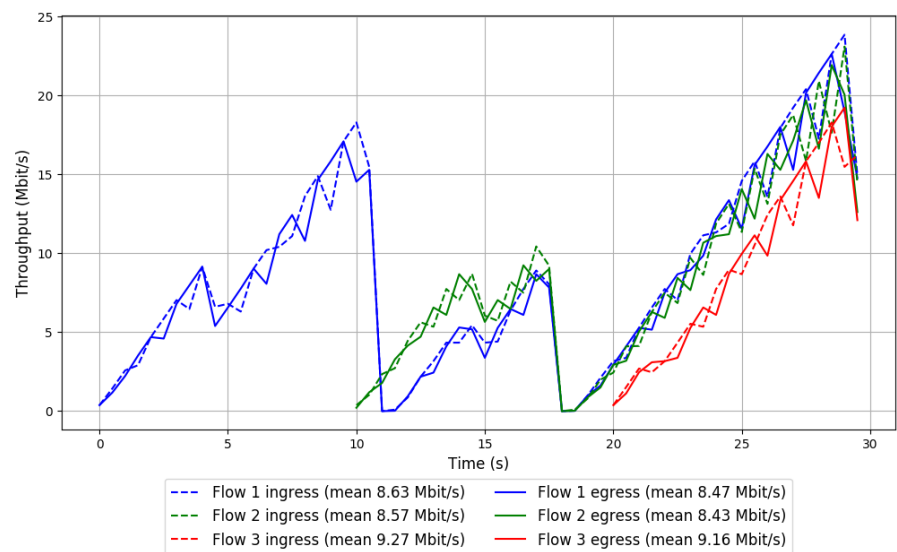
-- Flow 3:

Average throughput: 9.16 Mbit/s

95th percentile per-packet one-way delay: 57.480 ms

Loss rate: 2.27%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-03 00:45:43

End at: 2018-01-03 00:46:13

# Below is generated by plot.py at 2018-01-03 03:53:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 13.35 Mbit/s

95th percentile per-packet one-way delay: 54.768 ms

Loss rate: 1.80%

-- Flow 1:

Average throughput: 8.98 Mbit/s

95th percentile per-packet one-way delay: 54.803 ms

Loss rate: 1.82%

-- Flow 2:

Average throughput: 5.39 Mbit/s

95th percentile per-packet one-way delay: 54.560 ms

Loss rate: 0.74%

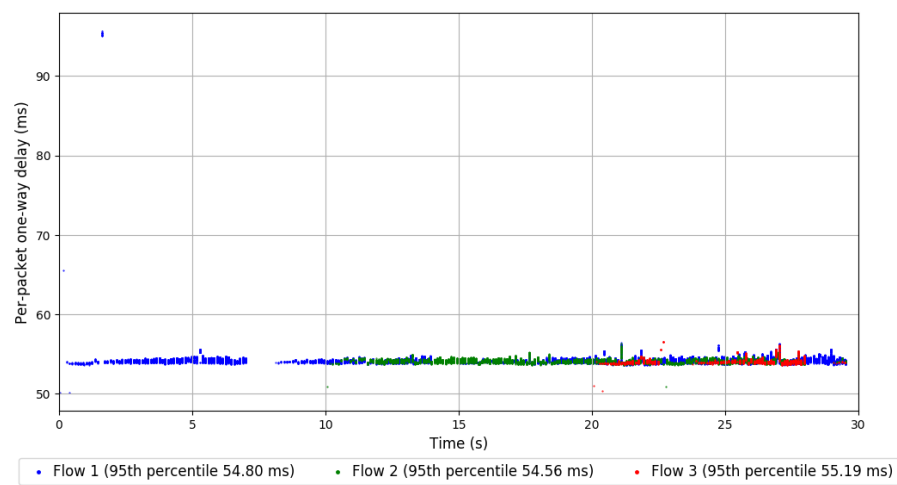
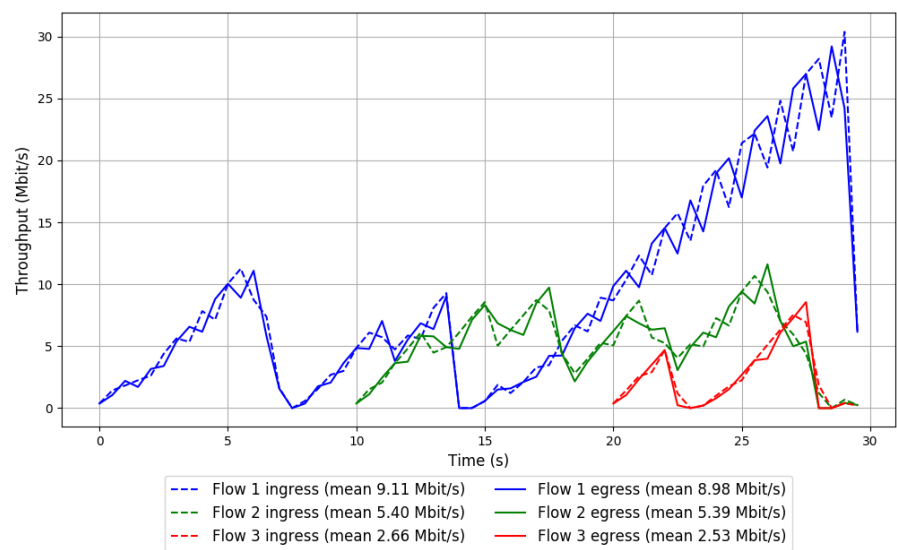
-- Flow 3:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 55.187 ms

Loss rate: 5.97%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-03 00:59:00

End at: 2018-01-03 00:59:30

# Below is generated by plot.py at 2018-01-03 03:53:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 10.00 Mbit/s

95th percentile per-packet one-way delay: 54.458 ms

Loss rate: 2.33%

-- Flow 1:

Average throughput: 5.48 Mbit/s

95th percentile per-packet one-way delay: 54.455 ms

Loss rate: 1.81%

-- Flow 2:

Average throughput: 5.37 Mbit/s

95th percentile per-packet one-way delay: 54.482 ms

Loss rate: 2.51%

-- Flow 3:

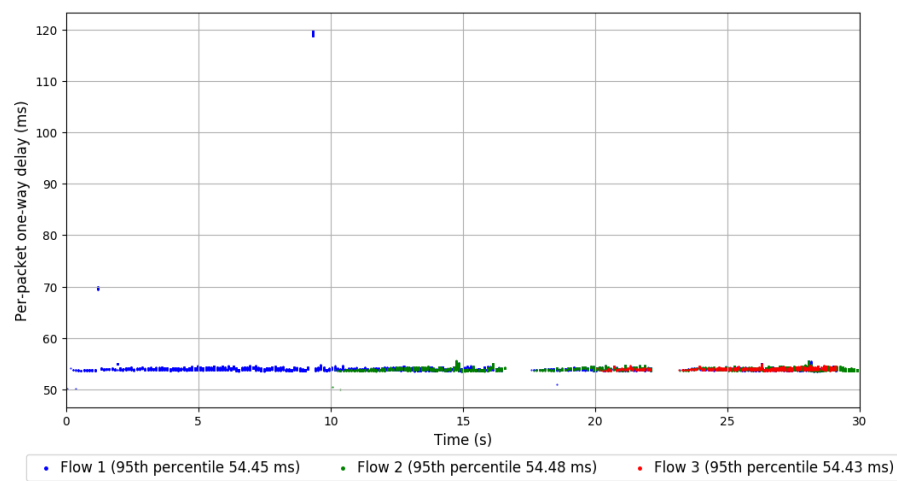
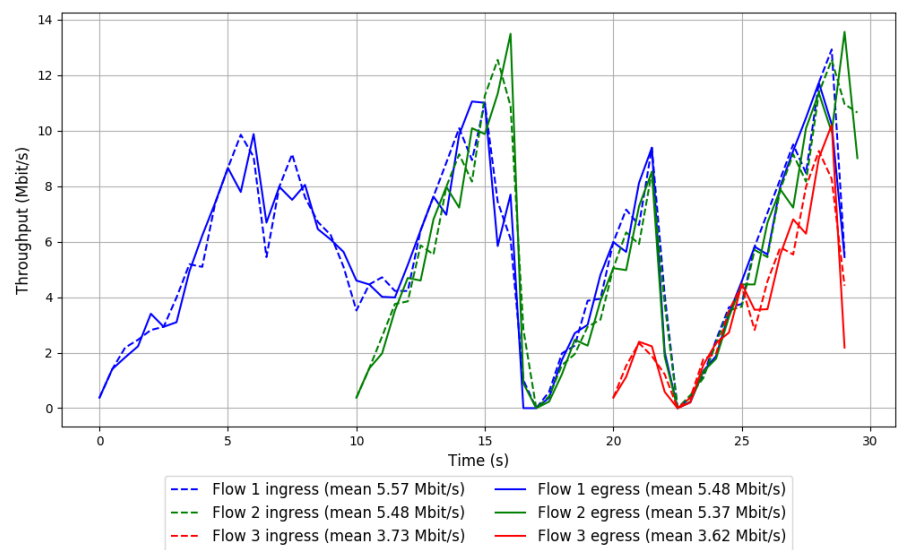
Average throughput: 3.62 Mbit/s

95th percentile per-packet one-way delay: 54.429 ms

Loss rate: 4.21%



Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-03 01:12:52

End at: 2018-01-03 01:13:22

# Below is generated by plot.py at 2018-01-03 03:53:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 13.82 Mbit/s

95th percentile per-packet one-way delay: 54.601 ms

Loss rate: 1.88%

-- Flow 1:

Average throughput: 7.41 Mbit/s

95th percentile per-packet one-way delay: 54.624 ms

Loss rate: 1.74%

-- Flow 2:

Average throughput: 6.87 Mbit/s

95th percentile per-packet one-way delay: 54.610 ms

Loss rate: 1.91%

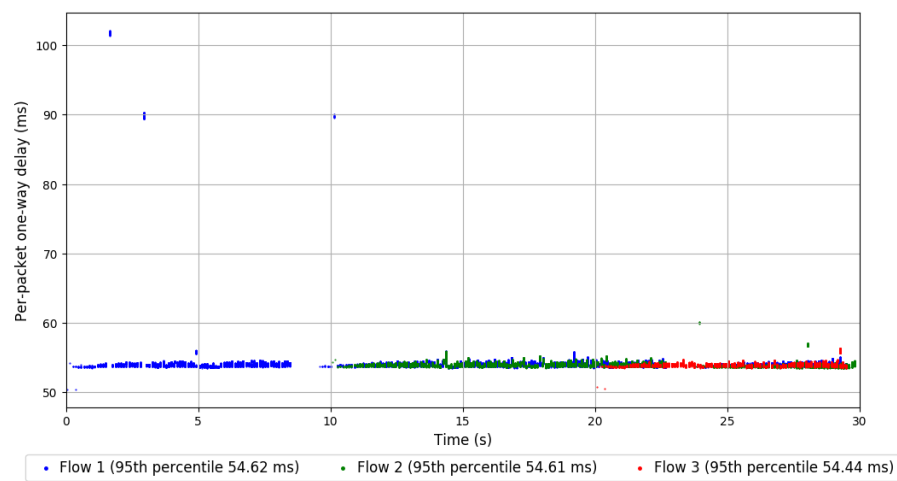
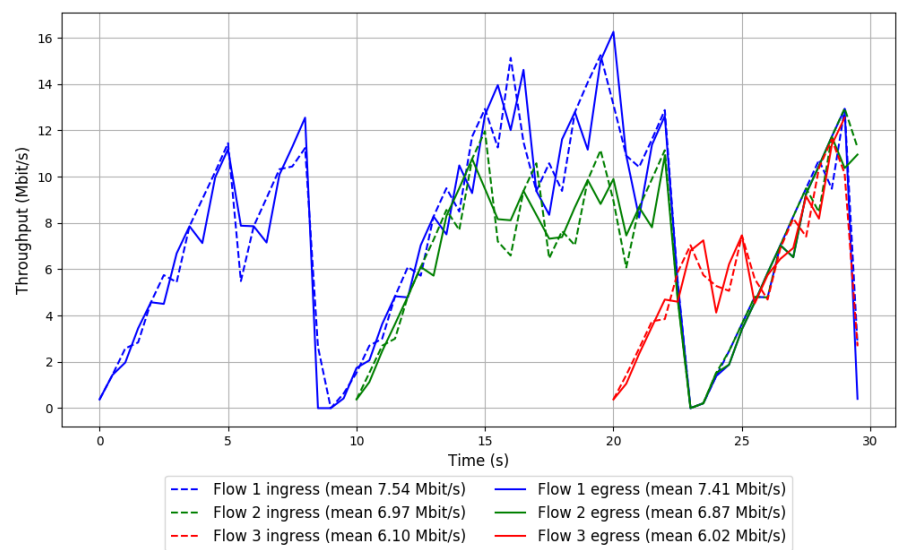
-- Flow 3:

Average throughput: 6.02 Mbit/s

95th percentile per-packet one-way delay: 54.441 ms

Loss rate: 2.30%

Run 10: Report of LEDBAT — Data Link

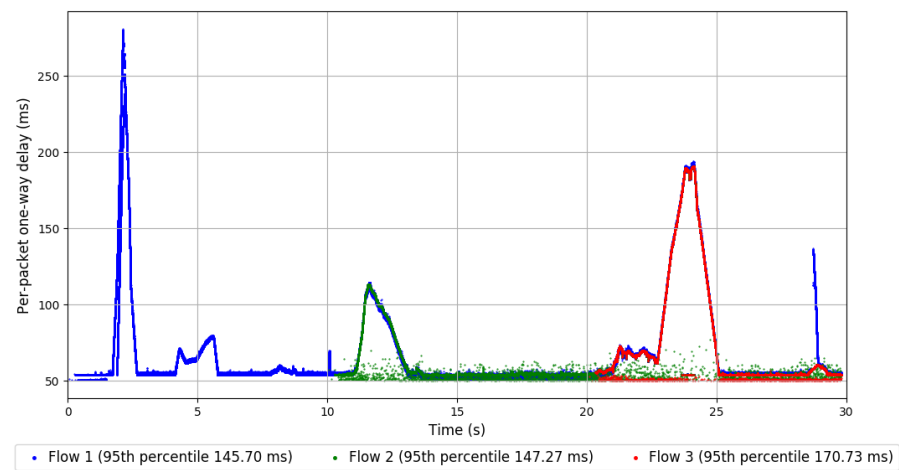
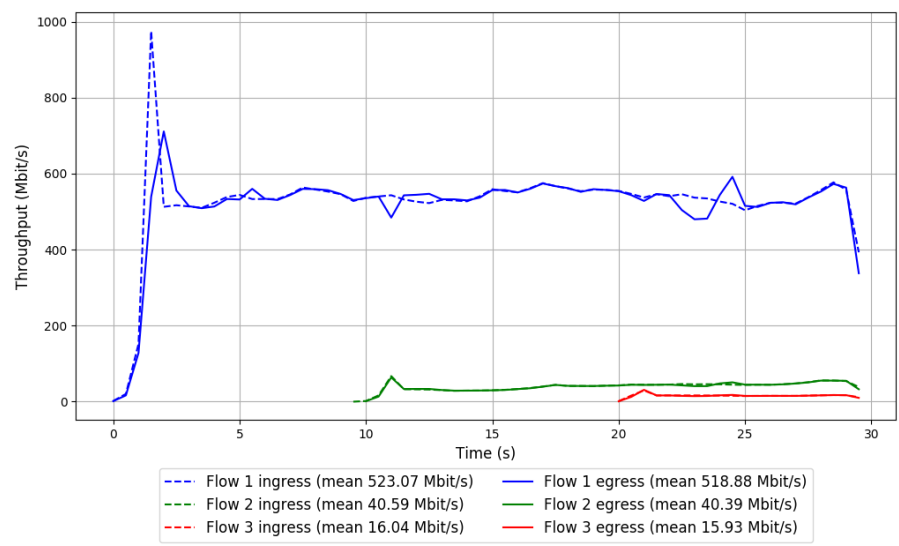


```
Run 1: Statistics of PCC

Start at: 2018-01-02 23:13:24
End at: 2018-01-02 23:13:54

# Below is generated by plot.py at 2018-01-03 04:01:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 550.89 Mbit/s
95th percentile per-packet one-way delay: 146.241 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 518.88 Mbit/s
95th percentile per-packet one-way delay: 145.703 ms
Loss rate: 1.14%
-- Flow 2:
Average throughput: 40.39 Mbit/s
95th percentile per-packet one-way delay: 147.274 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 15.93 Mbit/s
95th percentile per-packet one-way delay: 170.732 ms
Loss rate: 1.68%
```

Run 1: Report of PCC — Data Link

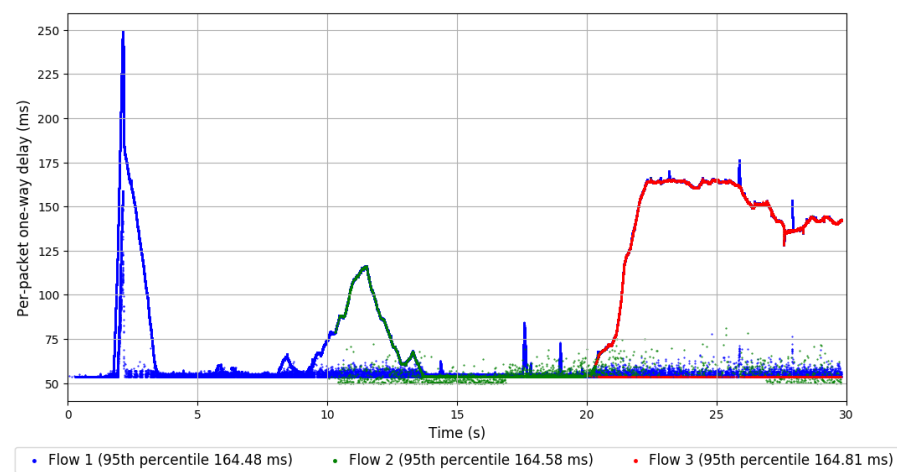
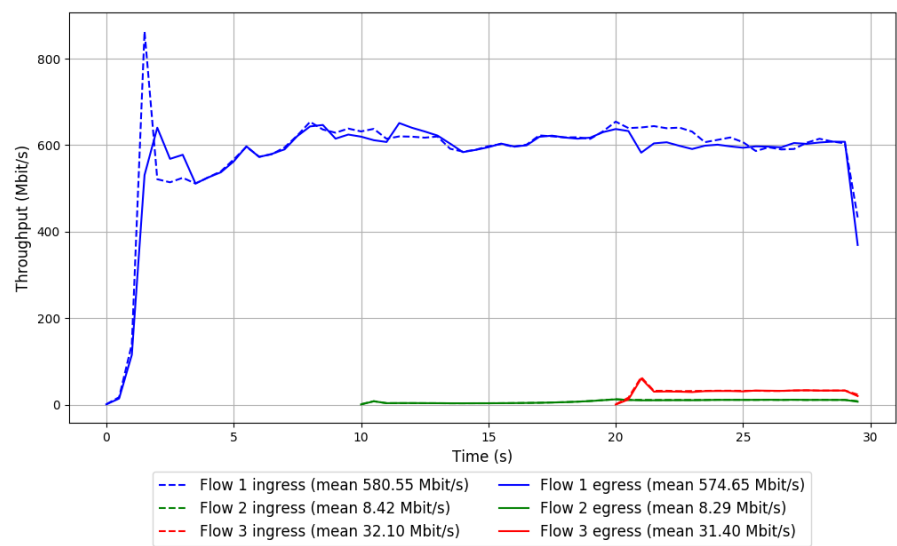


```
Run 2: Statistics of PCC

Start at: 2018-01-02 23:27:29
End at: 2018-01-02 23:27:59

# Below is generated by plot.py at 2018-01-03 04:01:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 590.36 Mbit/s
95th percentile per-packet one-way delay: 164.497 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 574.65 Mbit/s
95th percentile per-packet one-way delay: 164.484 ms
Loss rate: 1.37%
-- Flow 2:
Average throughput: 8.29 Mbit/s
95th percentile per-packet one-way delay: 164.576 ms
Loss rate: 2.04%
-- Flow 3:
Average throughput: 31.40 Mbit/s
95th percentile per-packet one-way delay: 164.813 ms
Loss rate: 3.27%
```

Run 2: Report of PCC — Data Link



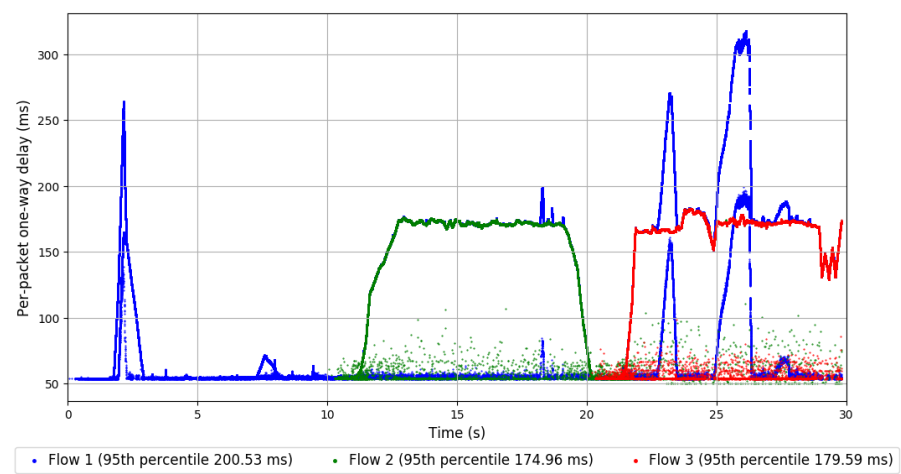
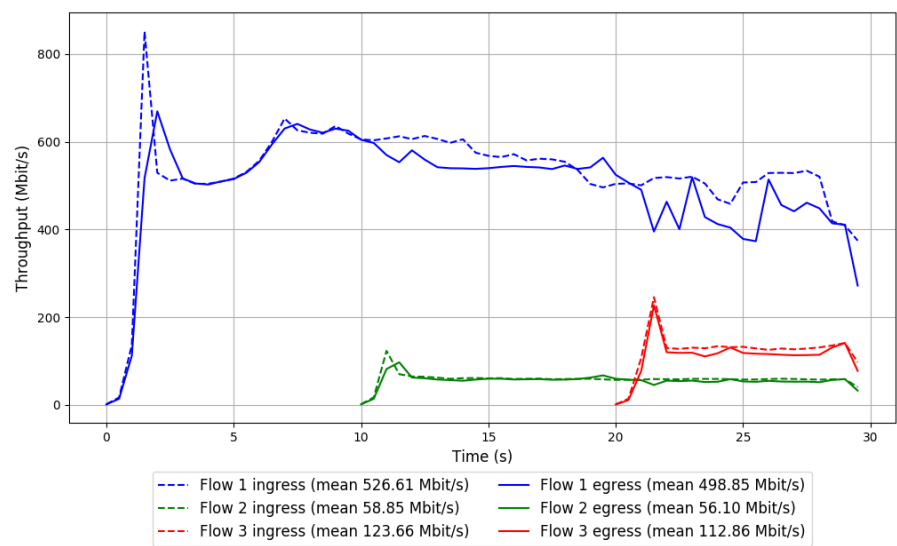
```
Run 3: Statistics of PCC

Start at: 2018-01-02 23:41:43
End at: 2018-01-02 23:42:13

# Below is generated by plot.py at 2018-01-03 04:01:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 572.87 Mbit/s
95th percentile per-packet one-way delay: 189.208 ms
Loss rate: 5.86%
-- Flow 1:
Average throughput: 498.85 Mbit/s
95th percentile per-packet one-way delay: 200.533 ms
Loss rate: 5.61%
-- Flow 2:
Average throughput: 56.10 Mbit/s
95th percentile per-packet one-way delay: 174.955 ms
Loss rate: 5.22%
-- Flow 3:
Average throughput: 112.86 Mbit/s
95th percentile per-packet one-way delay: 179.593 ms
Loss rate: 9.74%
```



Run 3: Report of PCC — Data Link

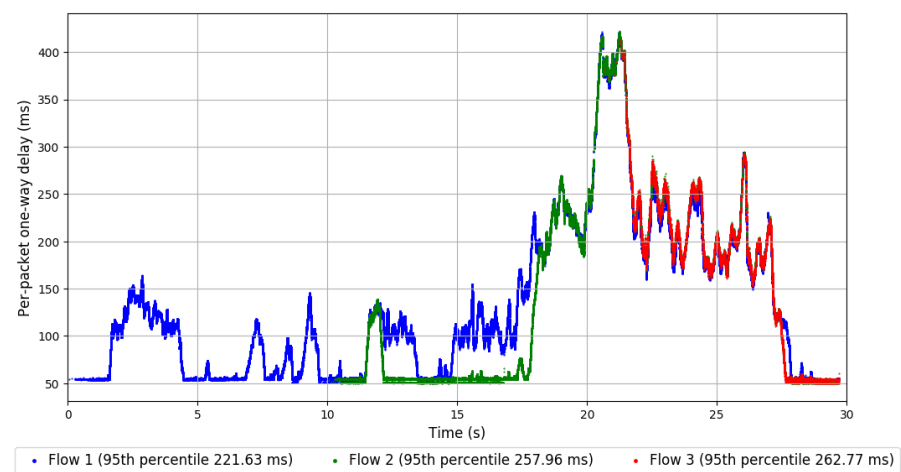
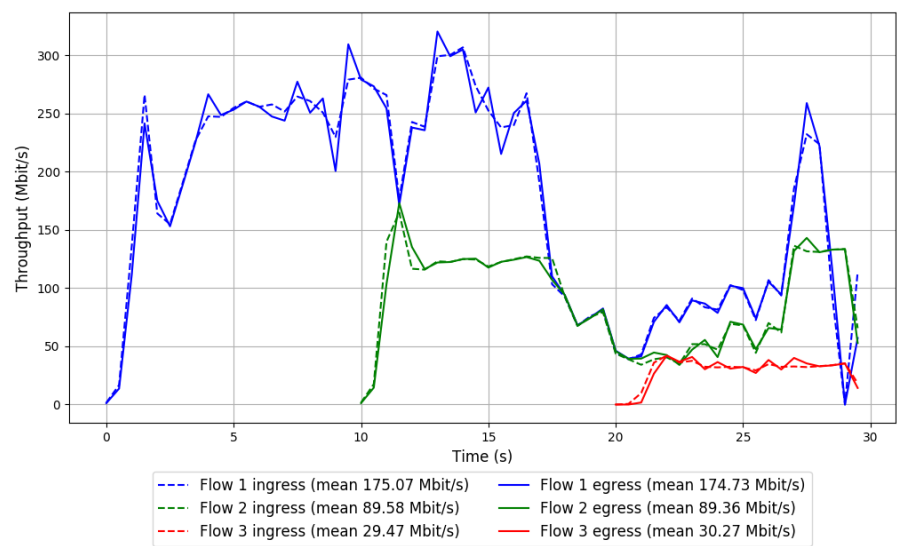


```
Run 4: Statistics of PCC

Start at: 2018-01-02 23:54:27
End at: 2018-01-02 23:54:57

# Below is generated by plot.py at 2018-01-03 04:01:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 243.41 Mbit/s
95th percentile per-packet one-way delay: 237.627 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 174.73 Mbit/s
95th percentile per-packet one-way delay: 221.635 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 89.36 Mbit/s
95th percentile per-packet one-way delay: 257.956 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 30.27 Mbit/s
95th percentile per-packet one-way delay: 262.767 ms
Loss rate: 1.40%
```

Run 4: Report of PCC — Data Link

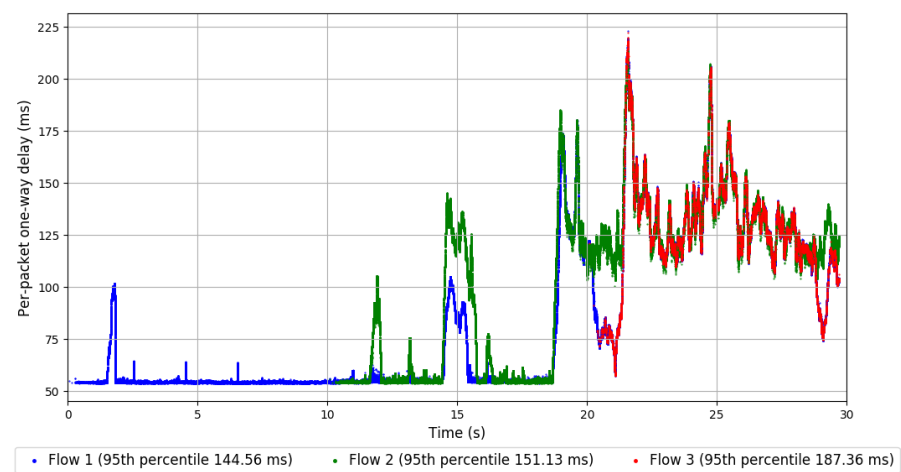
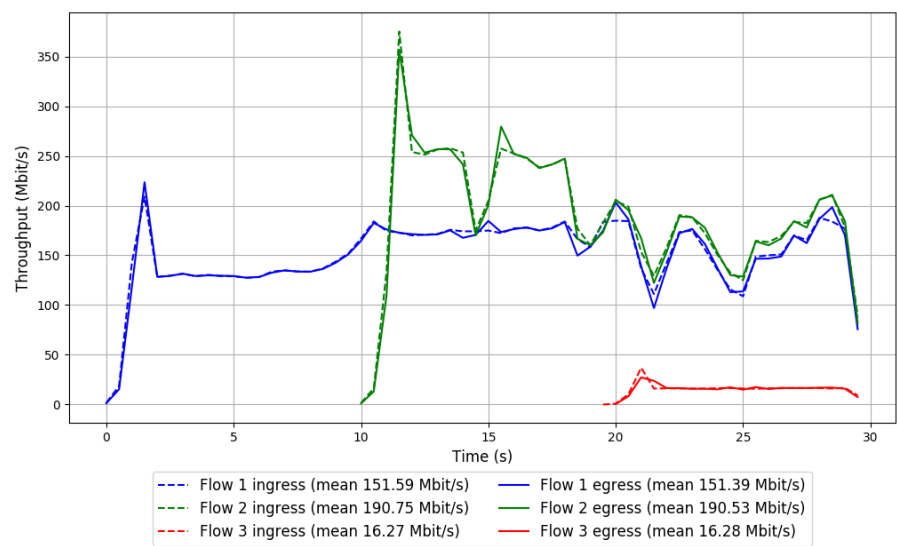


```
Run 5: Statistics of PCC

Start at: 2018-01-03 00:06:37
End at: 2018-01-03 00:07:07

# Below is generated by plot.py at 2018-01-03 04:01:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 282.77 Mbit/s
95th percentile per-packet one-way delay: 148.564 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 151.39 Mbit/s
95th percentile per-packet one-way delay: 144.558 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 190.53 Mbit/s
95th percentile per-packet one-way delay: 151.130 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 16.28 Mbit/s
95th percentile per-packet one-way delay: 187.362 ms
Loss rate: 1.71%
```

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-03 00:18:51

End at: 2018-01-03 00:19:21

# Below is generated by plot.py at 2018-01-03 04:01:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 320.74 Mbit/s

95th percentile per-packet one-way delay: 168.143 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 219.24 Mbit/s

95th percentile per-packet one-way delay: 161.307 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 122.15 Mbit/s

95th percentile per-packet one-way delay: 173.917 ms

Loss rate: 0.65%

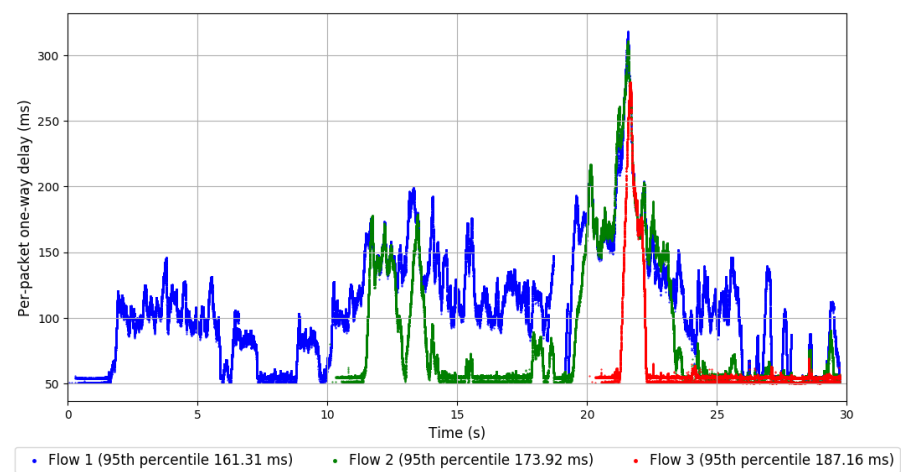
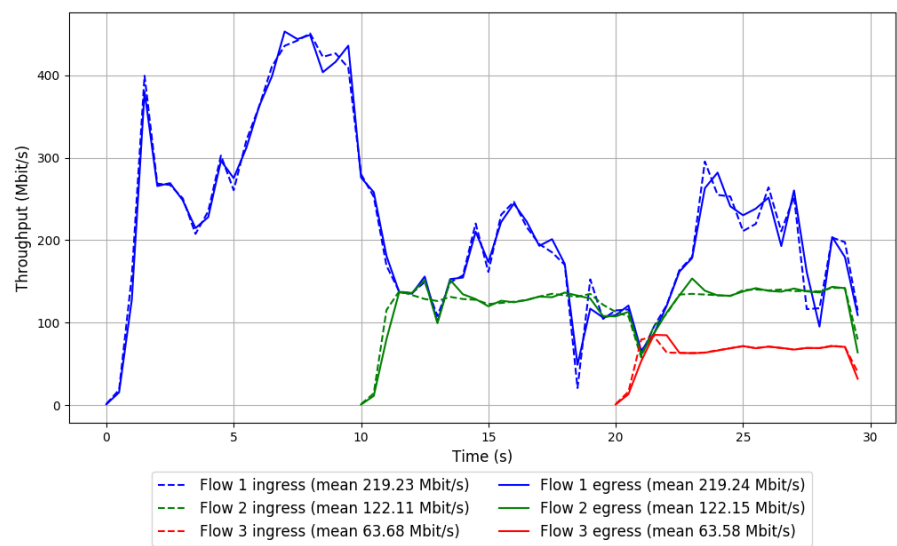
-- Flow 3:

Average throughput: 63.58 Mbit/s

95th percentile per-packet one-way delay: 187.158 ms

Loss rate: 1.28%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-03 00:30:42

End at: 2018-01-03 00:31:12

# Below is generated by plot.py at 2018-01-03 04:01:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 271.99 Mbit/s

95th percentile per-packet one-way delay: 158.078 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 184.79 Mbit/s

95th percentile per-packet one-way delay: 157.854 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 124.14 Mbit/s

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

Loss rate: 1.09%

-- Flow 3:

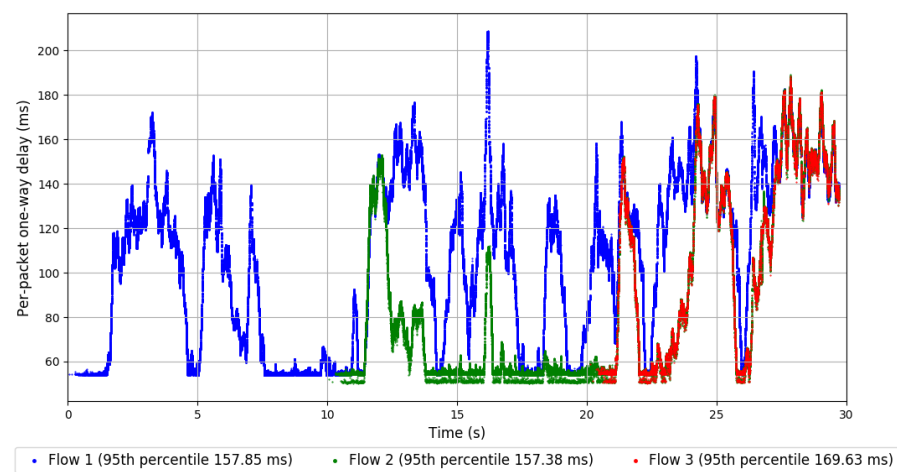
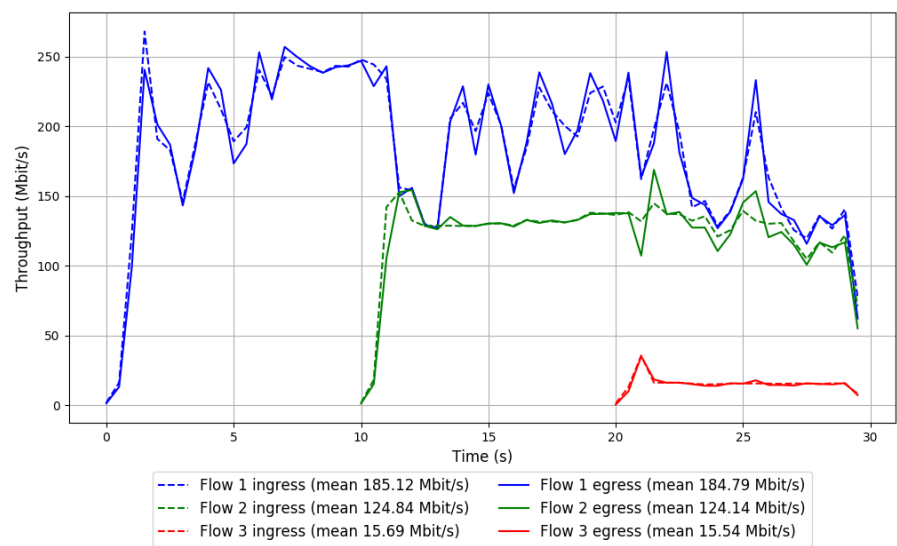
Average throughput: 15.54 Mbit/s

95th percentile per-packet one-way delay: 169.635 ms

Loss rate: 2.07%



Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-03 00:42:59

End at: 2018-01-03 00:43:29

# Below is generated by plot.py at 2018-01-03 04:04:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 546.82 Mbit/s

95th percentile per-packet one-way delay: 122.674 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 532.44 Mbit/s

95th percentile per-packet one-way delay: 122.651 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 5.56 Mbit/s

95th percentile per-packet one-way delay: 112.627 ms

Loss rate: 1.05%

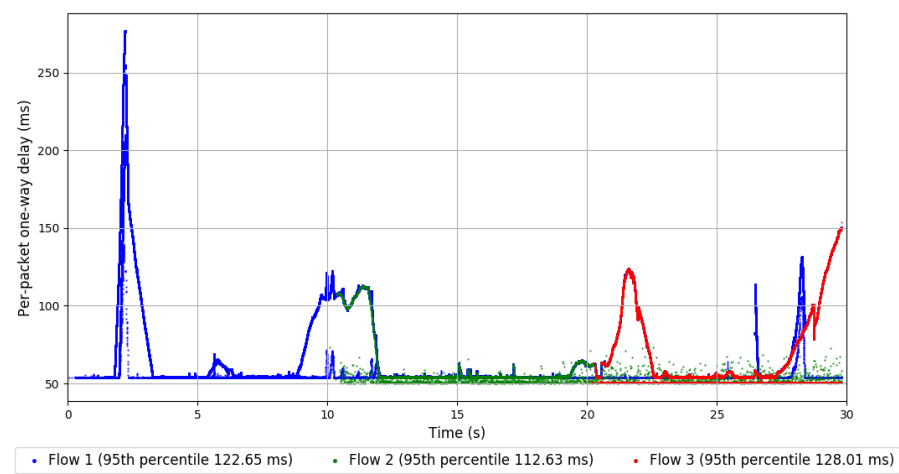
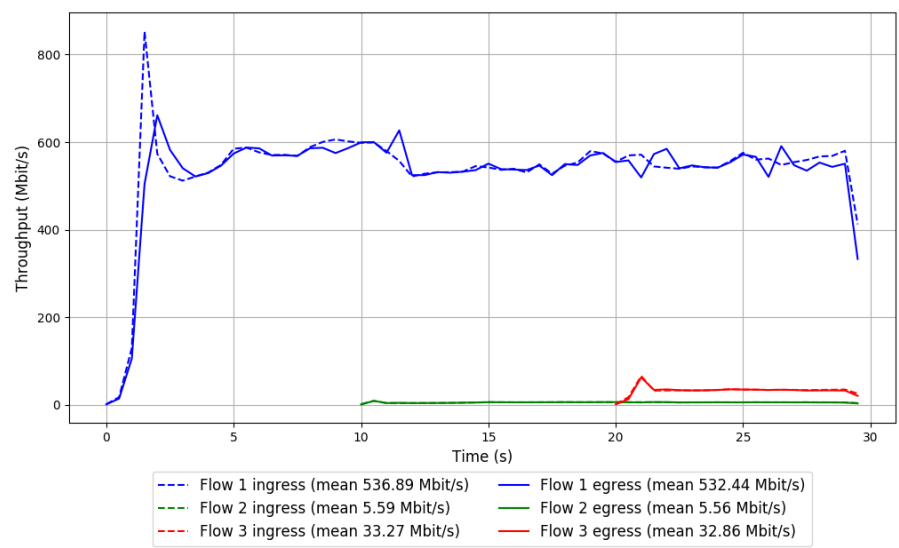
-- Flow 3:

Average throughput: 32.86 Mbit/s

95th percentile per-packet one-way delay: 128.006 ms

Loss rate: 2.26%

Run 8: Report of PCC — Data Link

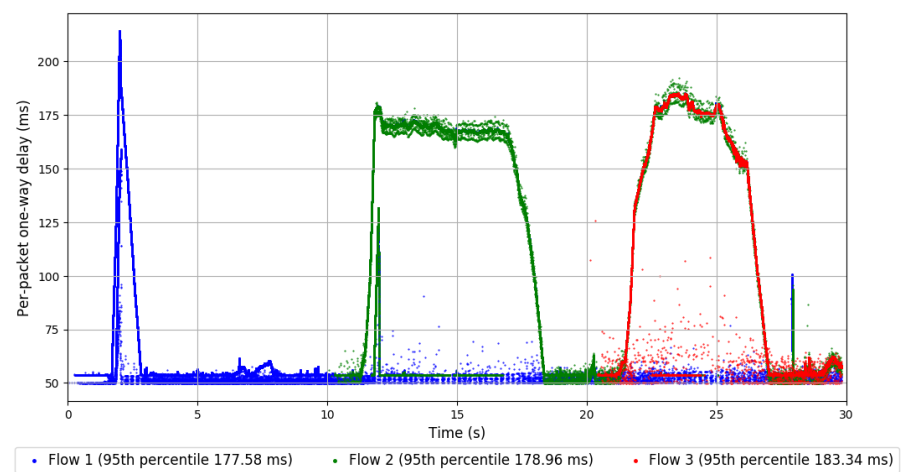
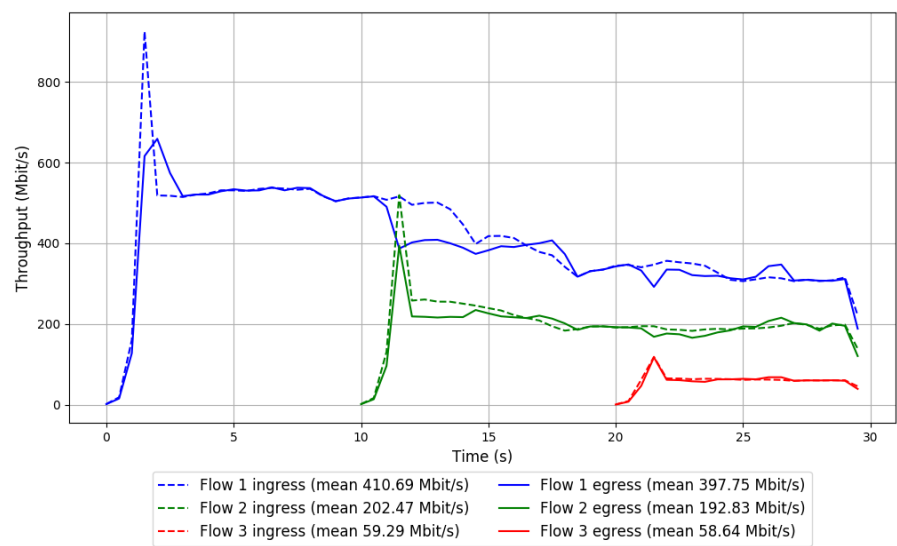


```
Run 9: Statistics of PCC

Start at: 2018-01-03 00:56:14
End at: 2018-01-03 00:56:44

# Below is generated by plot.py at 2018-01-03 04:06:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 544.77 Mbit/s
95th percentile per-packet one-way delay: 178.459 ms
Loss rate: 3.89%
-- Flow 1:
Average throughput: 397.75 Mbit/s
95th percentile per-packet one-way delay: 177.584 ms
Loss rate: 3.49%
-- Flow 2:
Average throughput: 192.83 Mbit/s
95th percentile per-packet one-way delay: 178.959 ms
Loss rate: 5.29%
-- Flow 3:
Average throughput: 58.64 Mbit/s
95th percentile per-packet one-way delay: 183.339 ms
Loss rate: 2.71%
```

Run 9: Report of PCC — Data Link

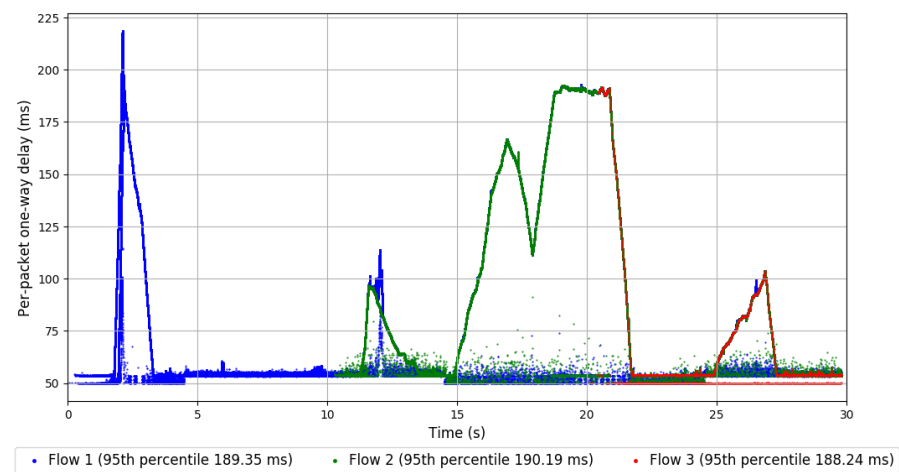
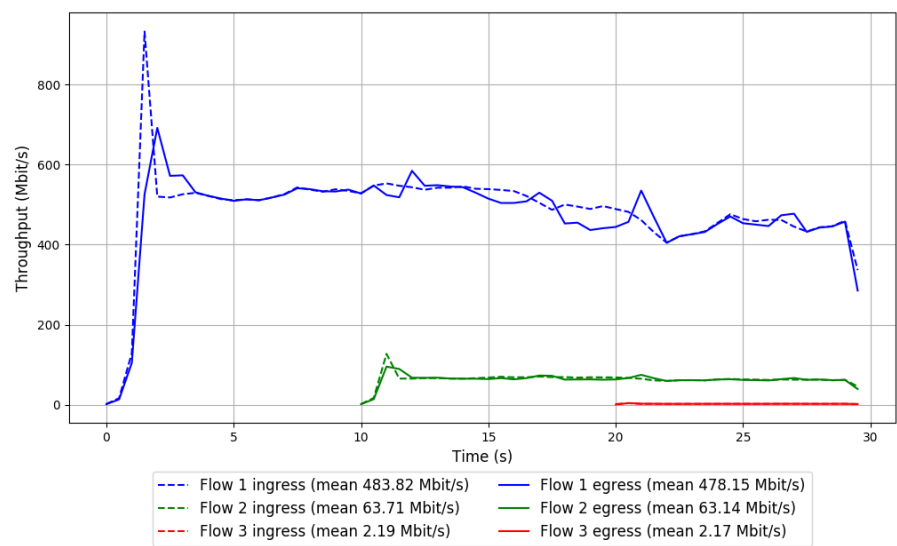


```
Run 10: Statistics of PCC

Start at: 2018-01-03 01:10:10
End at: 2018-01-03 01:10:40

# Below is generated by plot.py at 2018-01-03 04:06:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 520.75 Mbit/s
95th percentile per-packet one-way delay: 189.428 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 478.15 Mbit/s
95th percentile per-packet one-way delay: 189.346 ms
Loss rate: 1.51%
-- Flow 2:
Average throughput: 63.14 Mbit/s
95th percentile per-packet one-way delay: 190.185 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 188.235 ms
Loss rate: 1.84%
```

Run 10: Report of PCC — Data Link



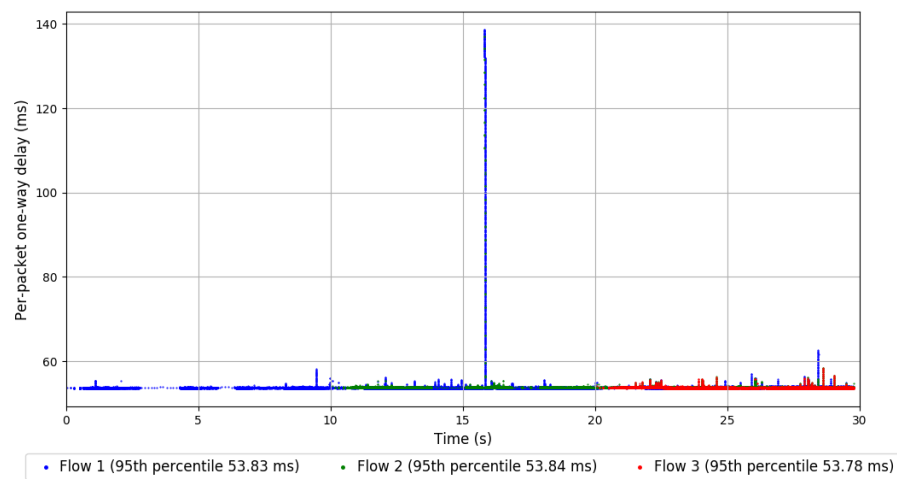
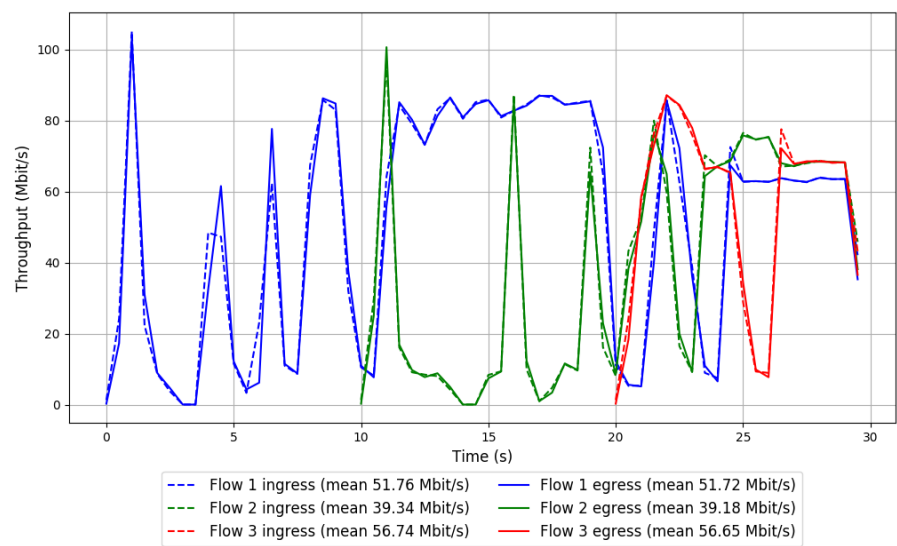
```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-02 23:16:51
End at: 2018-01-02 23:17:21

# Below is generated by plot.py at 2018-01-03 04:06:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.19 Mbit/s
95th percentile per-packet one-way delay: 53.824 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 51.72 Mbit/s
95th percentile per-packet one-way delay: 53.825 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 39.18 Mbit/s
95th percentile per-packet one-way delay: 53.841 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 56.65 Mbit/s
95th percentile per-packet one-way delay: 53.781 ms
Loss rate: 1.25%
```



Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-02 23:30:57

End at: 2018-01-02 23:31:27

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.75 Mbit/s

95th percentile per-packet one-way delay: 53.772 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 45.76 Mbit/s

95th percentile per-packet one-way delay: 53.770 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 51.20 Mbit/s

95th percentile per-packet one-way delay: 53.757 ms

Loss rate: 0.90%

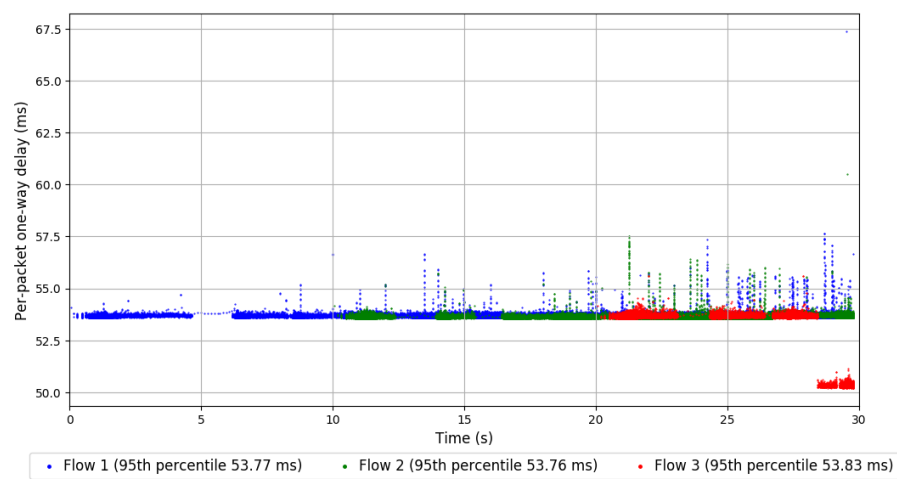
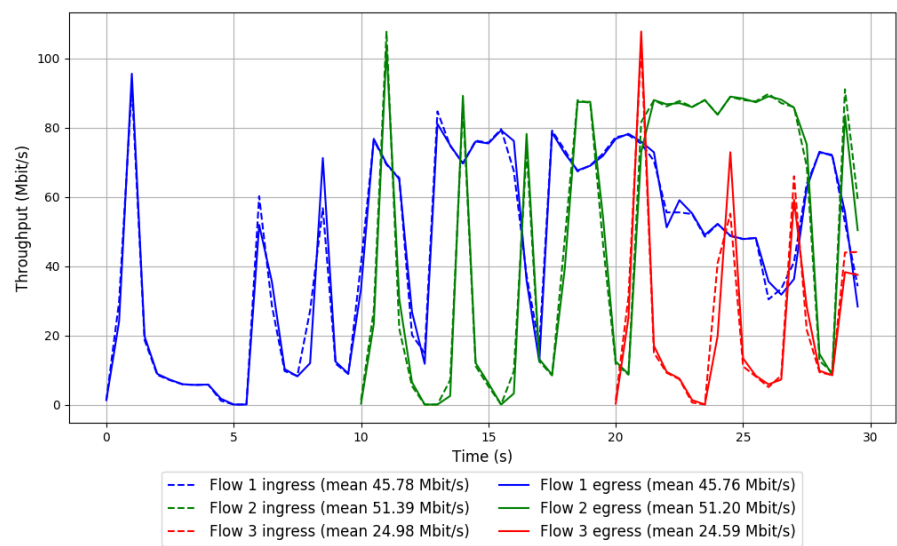
-- Flow 3:

Average throughput: 24.59 Mbit/s

95th percentile per-packet one-way delay: 53.826 ms

Loss rate: 2.68%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-02 23:45:10

End at: 2018-01-02 23:45:40

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 115.08 Mbit/s

95th percentile per-packet one-way delay: 53.827 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 60.41 Mbit/s

95th percentile per-packet one-way delay: 53.780 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 53.79 Mbit/s

95th percentile per-packet one-way delay: 53.889 ms

Loss rate: 0.25%

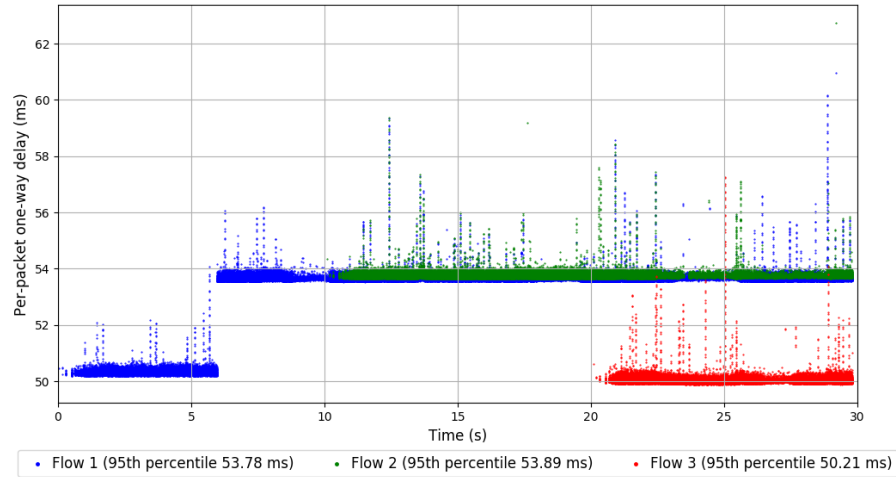
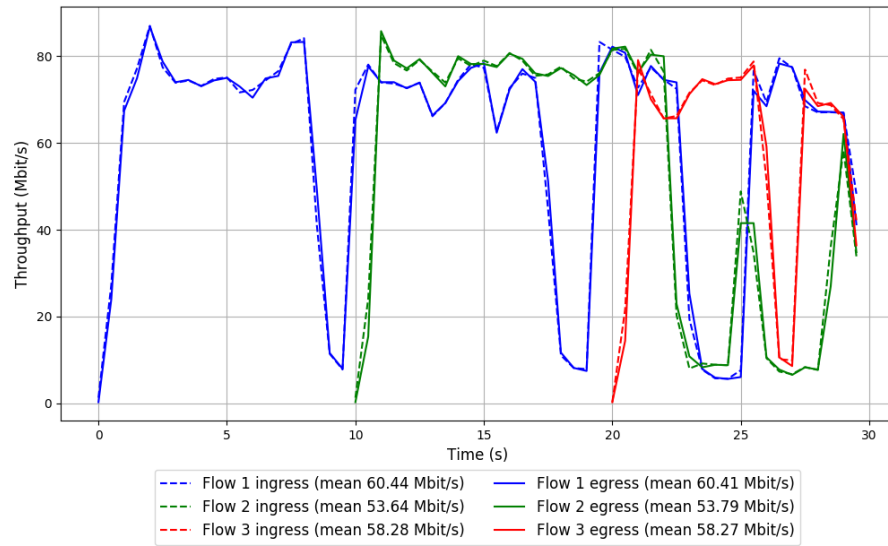
-- Flow 3:

Average throughput: 58.27 Mbit/s

95th percentile per-packet one-way delay: 50.210 ms

Loss rate: 1.05%

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



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-02 23:57:29

End at: 2018-01-02 23:57:59

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 52.66 Mbit/s

95th percentile per-packet one-way delay: 51.014 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 54.158 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.86 Mbit/s

95th percentile per-packet one-way delay: 51.061 ms

Loss rate: 0.52%

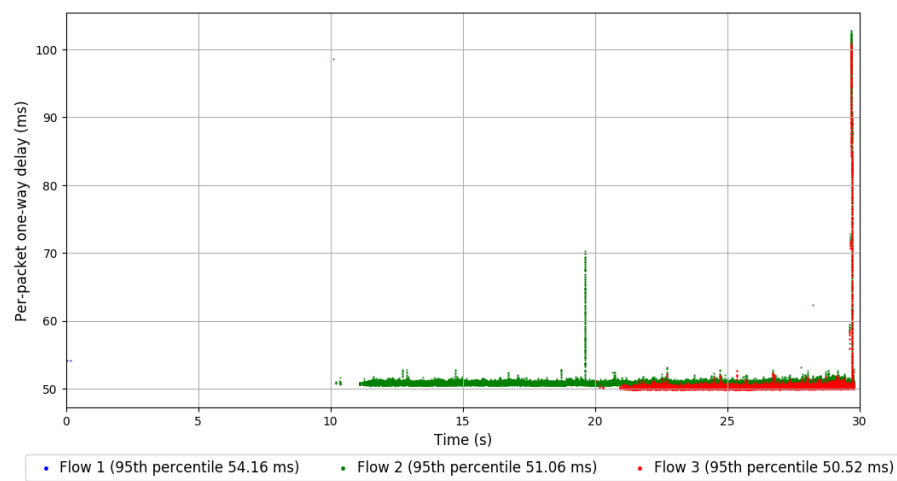
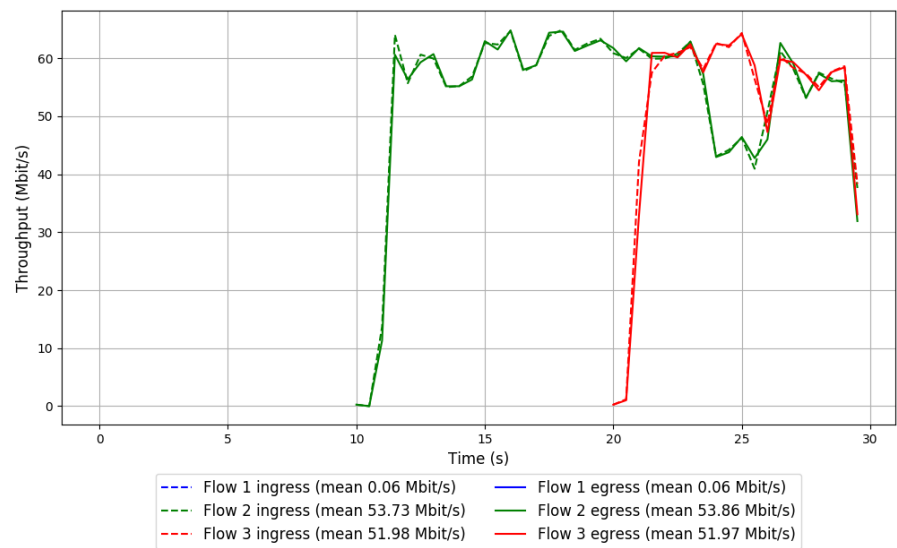
-- Flow 3:

Average throughput: 51.97 Mbit/s

95th percentile per-packet one-way delay: 50.516 ms

Loss rate: 1.11%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-03 00:09:41

End at: 2018-01-03 00:10:11

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 50.40 Mbit/s

95th percentile per-packet one-way delay: 50.621 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 0.06 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.71 Mbit/s

95th percentile per-packet one-way delay: 50.402 ms

Loss rate: 0.67%

-- Flow 3:

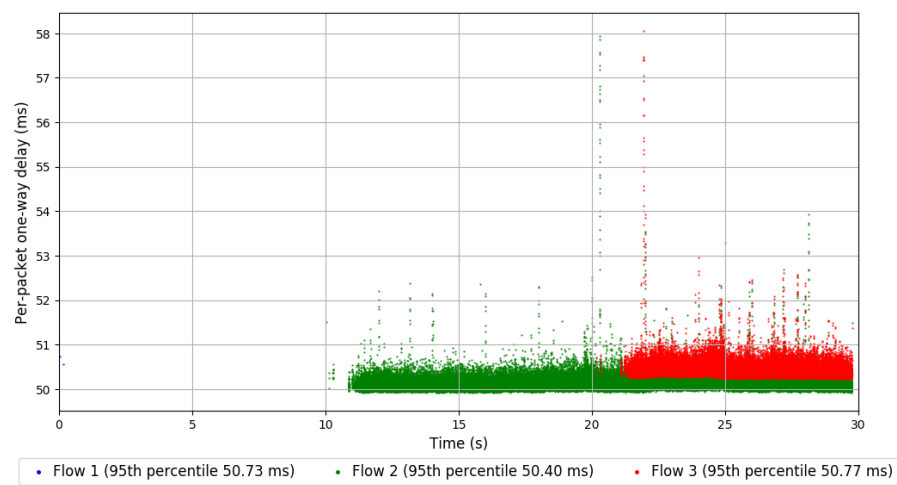
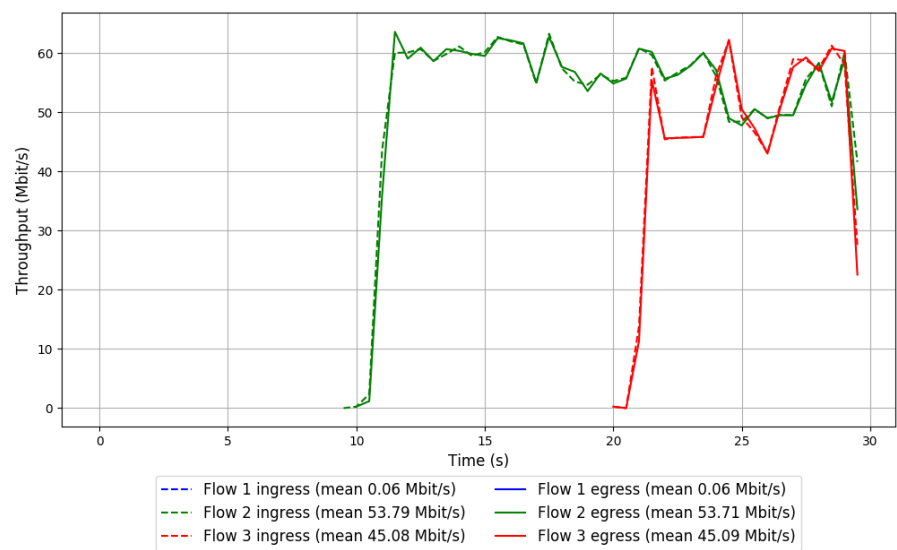
Average throughput: 45.09 Mbit/s

95th percentile per-packet one-way delay: 50.771 ms

Loss rate: 1.04%



Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-03 00:21:55

End at: 2018-01-03 00:22:25

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 10.87 Mbit/s

95th percentile per-packet one-way delay: 54.205 ms

Loss rate: 1.34%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 51.176 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 12.46 Mbit/s

95th percentile per-packet one-way delay: 54.251 ms

Loss rate: 1.18%

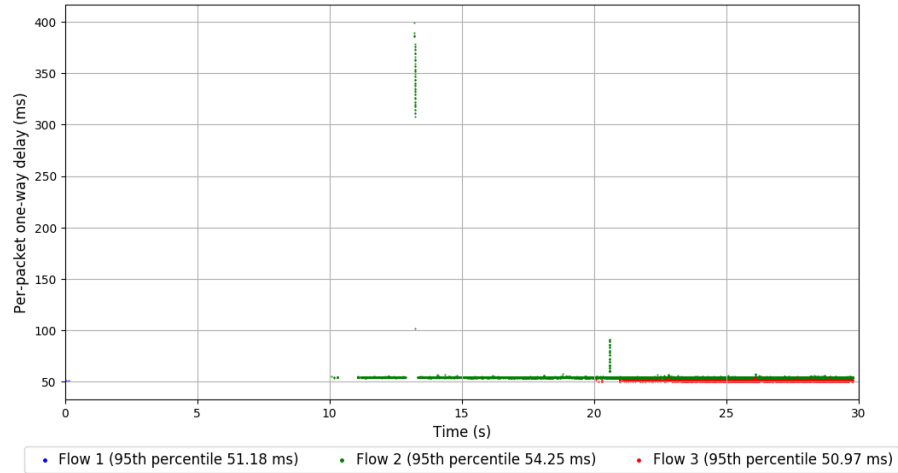
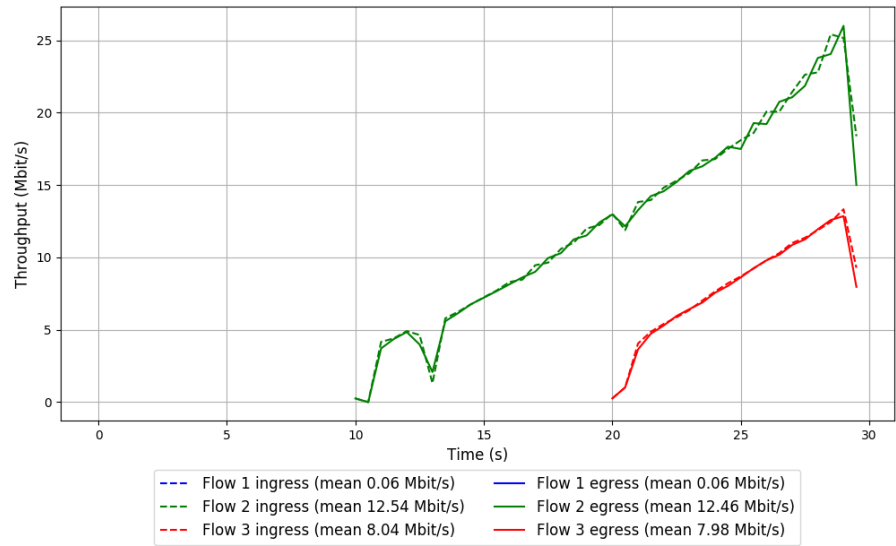
-- Flow 3:

Average throughput: 7.98 Mbit/s

95th percentile per-packet one-way delay: 50.970 ms

Loss rate: 1.83%

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



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-03 00:33:44

End at: 2018-01-03 00:34:14

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 50.73 Mbit/s

95th percentile per-packet one-way delay: 54.148 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 54.540 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.29 Mbit/s

95th percentile per-packet one-way delay: 54.209 ms

Loss rate: 0.52%

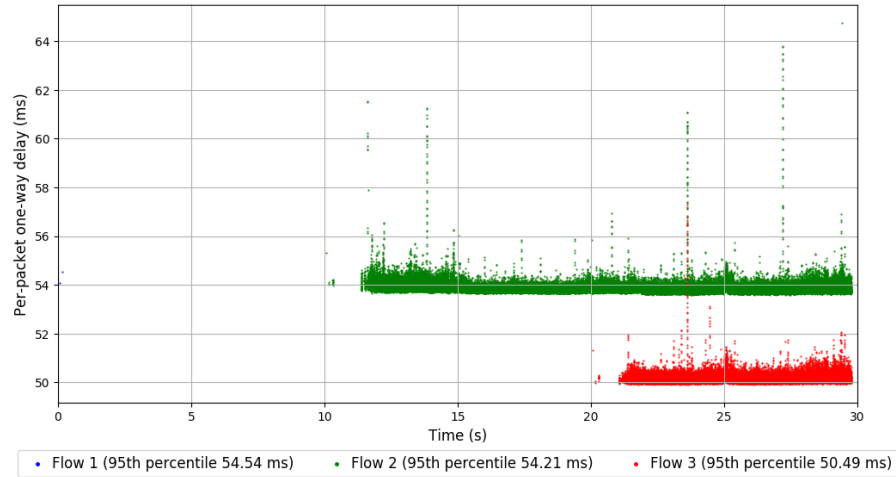
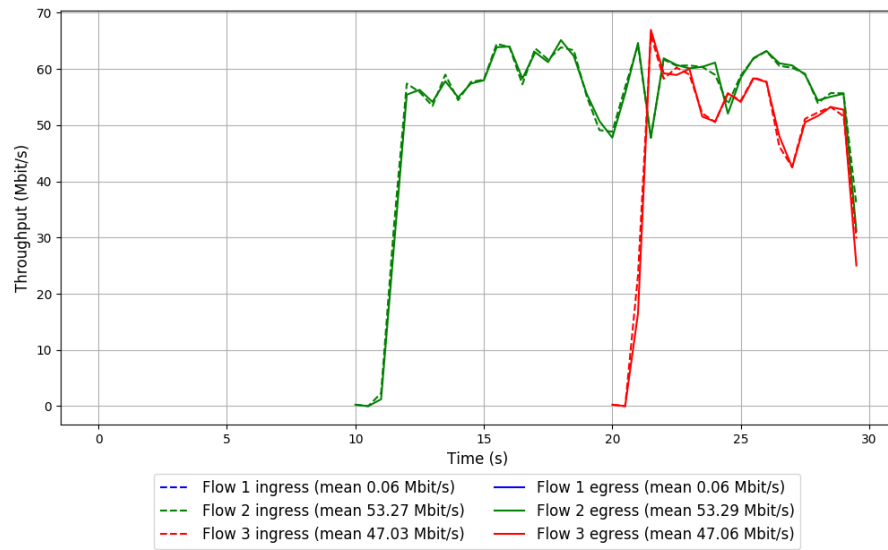
-- Flow 3:

Average throughput: 47.06 Mbit/s

95th percentile per-packet one-way delay: 50.486 ms

Loss rate: 0.99%

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



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-03 00:46:24

End at: 2018-01-03 00:46:54

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 91.89 Mbit/s

95th percentile per-packet one-way delay: 53.748 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 61.21 Mbit/s

95th percentile per-packet one-way delay: 53.666 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 36.39 Mbit/s

95th percentile per-packet one-way delay: 53.813 ms

Loss rate: 0.98%

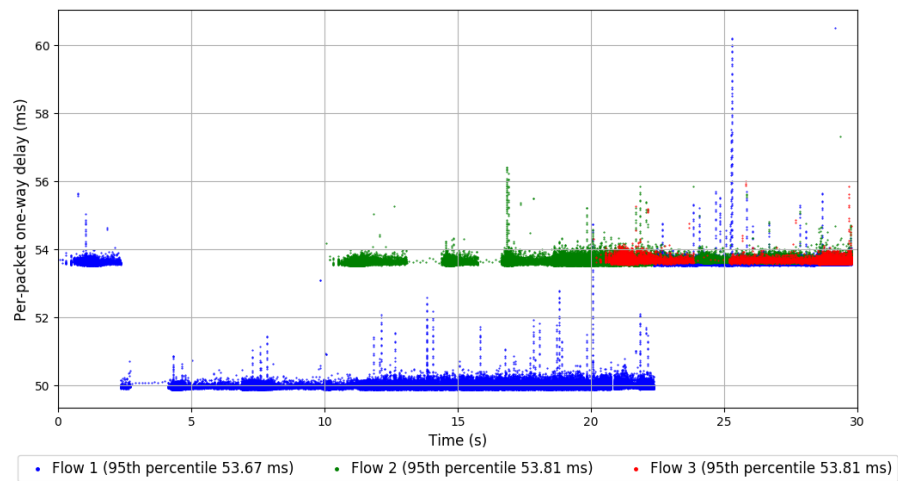
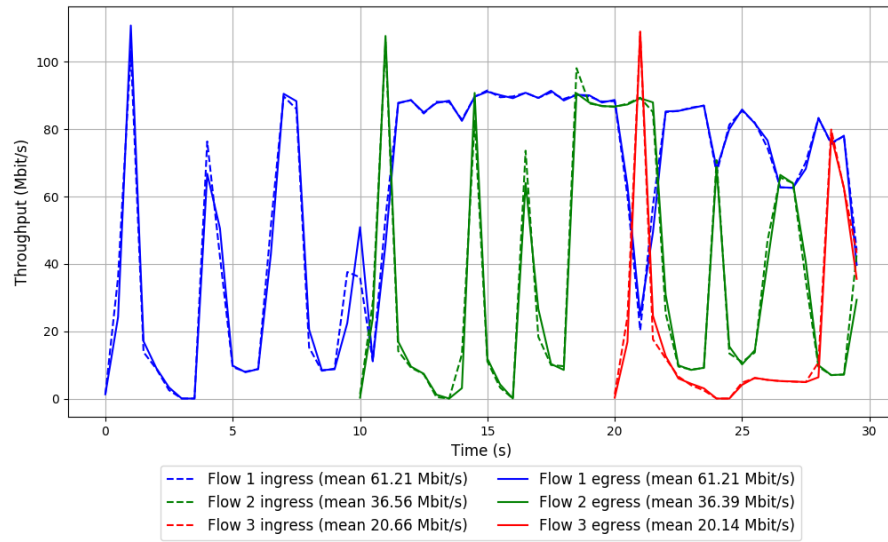
-- Flow 3:

Average throughput: 20.14 Mbit/s

95th percentile per-packet one-way delay: 53.808 ms

Loss rate: 3.52%

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



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-03 00:59:40

End at: 2018-01-03 01:00:10

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.16 Mbit/s

95th percentile per-packet one-way delay: 53.699 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 50.62 Mbit/s

95th percentile per-packet one-way delay: 53.738 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 41.94 Mbit/s

95th percentile per-packet one-way delay: 50.094 ms

Loss rate: 0.78%

-- Flow 3:

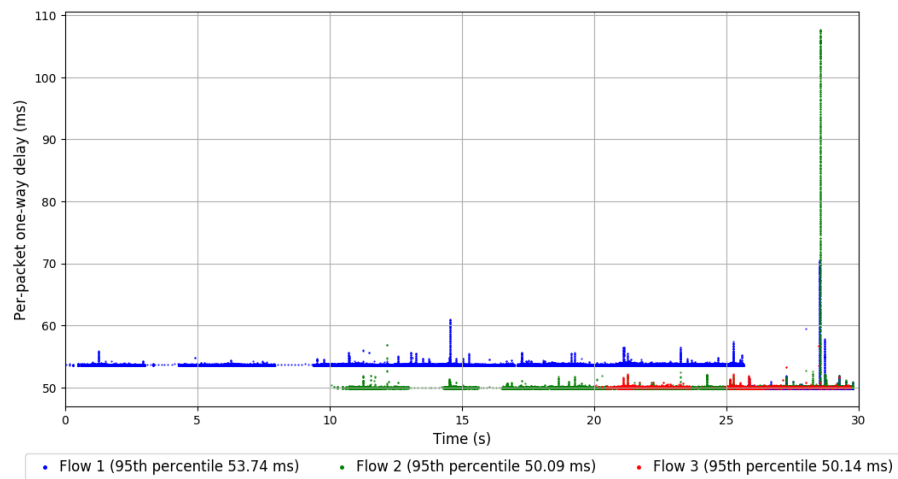
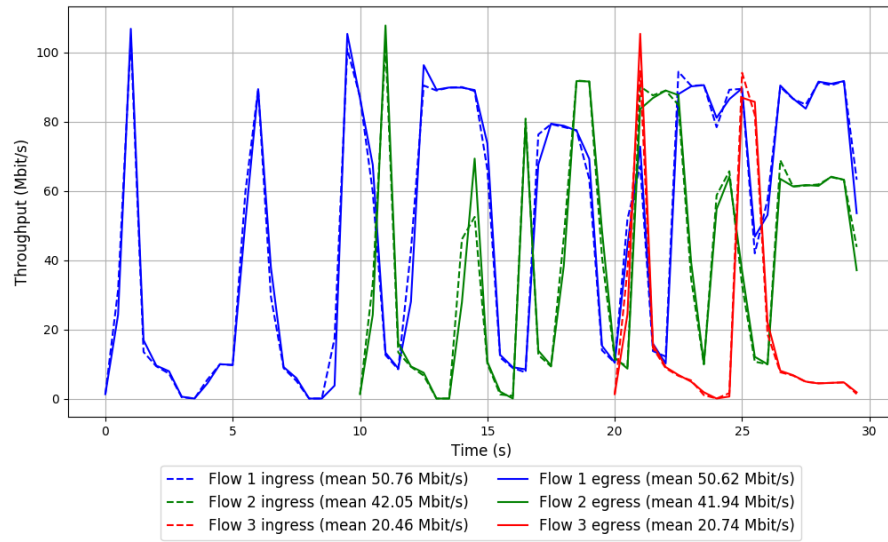
Average throughput: 20.74 Mbit/s

95th percentile per-packet one-way delay: 50.143 ms

Loss rate: 0.00%



# Run 9: Report of QUIC Cubic — Data Link

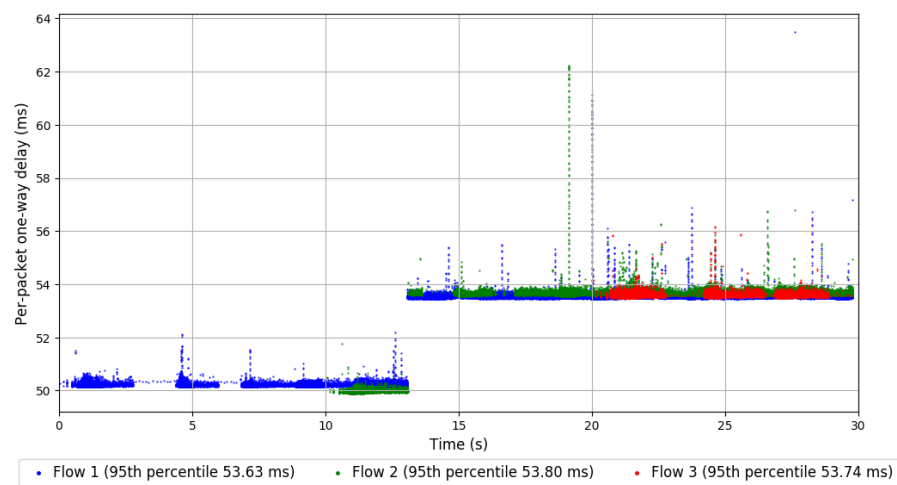
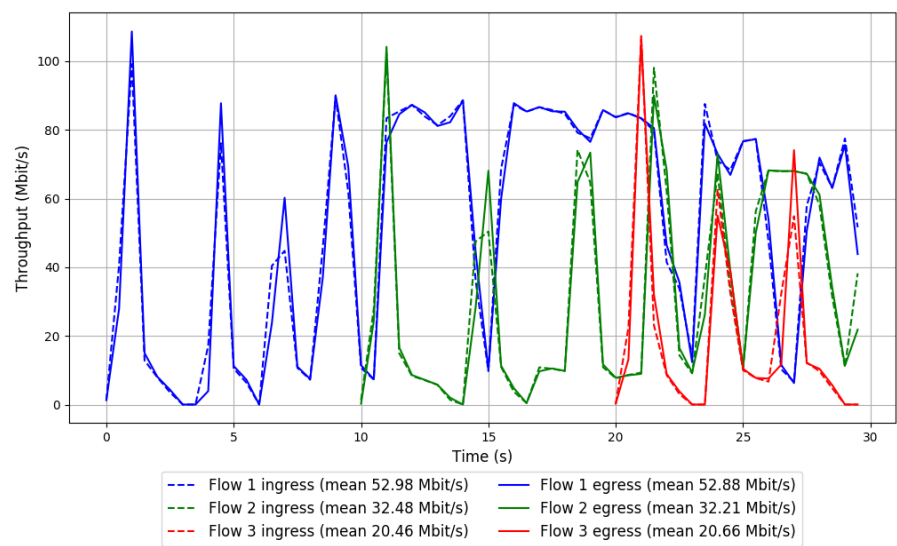


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-03 01:13:33
End at: 2018-01-03 01:14:03

# Below is generated by plot.py at 2018-01-03 04:06:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.93 Mbit/s
95th percentile per-packet one-way delay: 53.718 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 52.88 Mbit/s
95th percentile per-packet one-way delay: 53.626 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 32.21 Mbit/s
95th percentile per-packet one-way delay: 53.800 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 20.66 Mbit/s
95th percentile per-packet one-way delay: 53.743 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

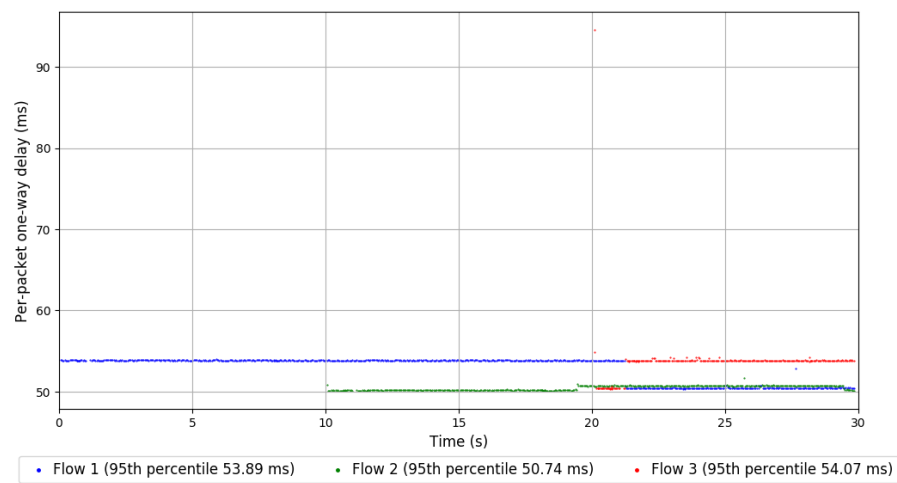
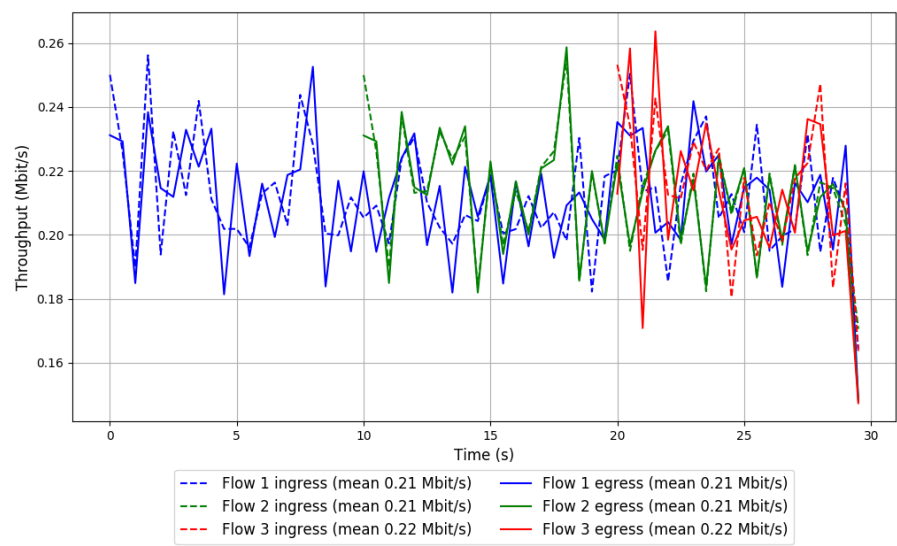


```
Run 1: Statistics of SCReAM

Start at: 2018-01-02 23:12:45
End at: 2018-01-02 23:13:15

# Below is generated by plot.py at 2018-01-03 04:06:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.871 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.890 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.745 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 54.074 ms
Loss rate: 1.10%
```

Run 1: Report of SReAM — Data Link

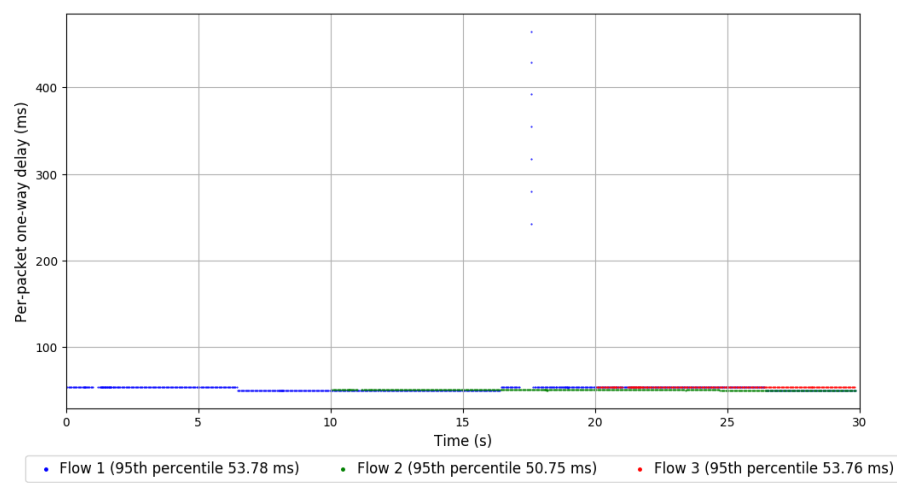
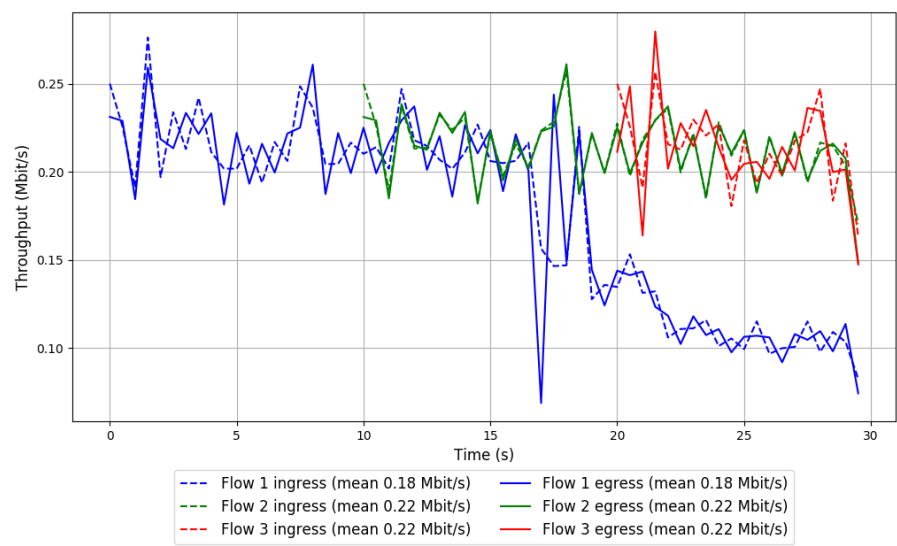


```
Run 2: Statistics of SReAM

Start at: 2018-01-02 23:26:49
End at: 2018-01-02 23:27:19

# Below is generated by plot.py at 2018-01-03 04:06:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 53.759 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 53.776 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.753 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.761 ms
Loss rate: 1.10%
```

Run 2: Report of SReAM — Data Link



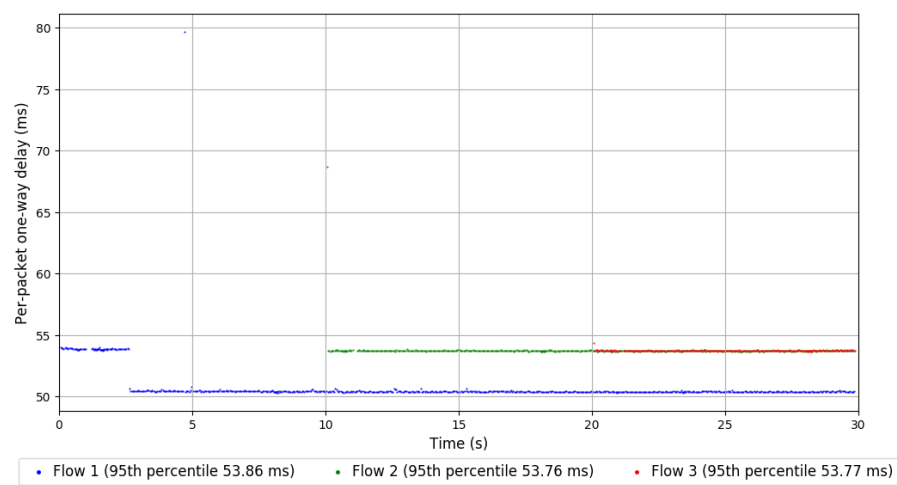
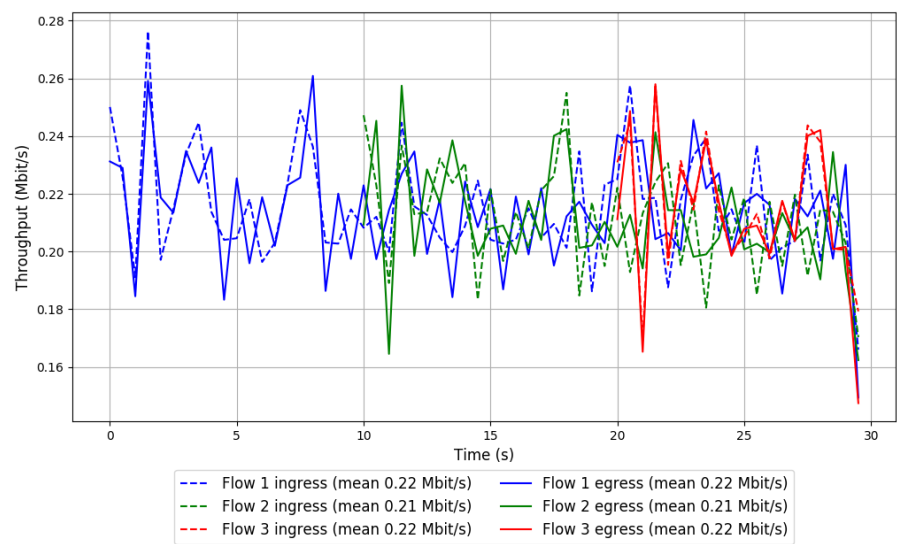
```
Run 3: Statistics of SCReAM

Start at: 2018-01-02 23:41:03
End at: 2018-01-02 23:41:33

# Below is generated by plot.py at 2018-01-03 04:06:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.794 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.862 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.759 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.775 ms
Loss rate: 1.10%
```



Run 3: Report of SReAM — Data Link

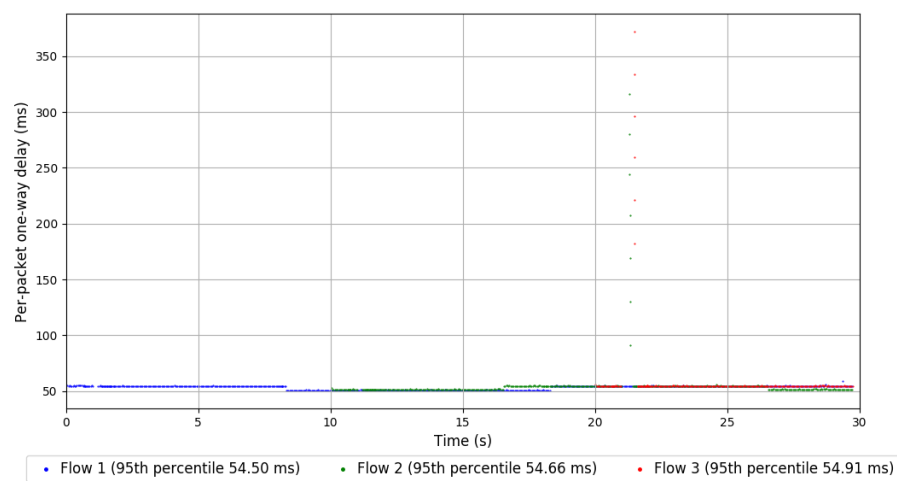
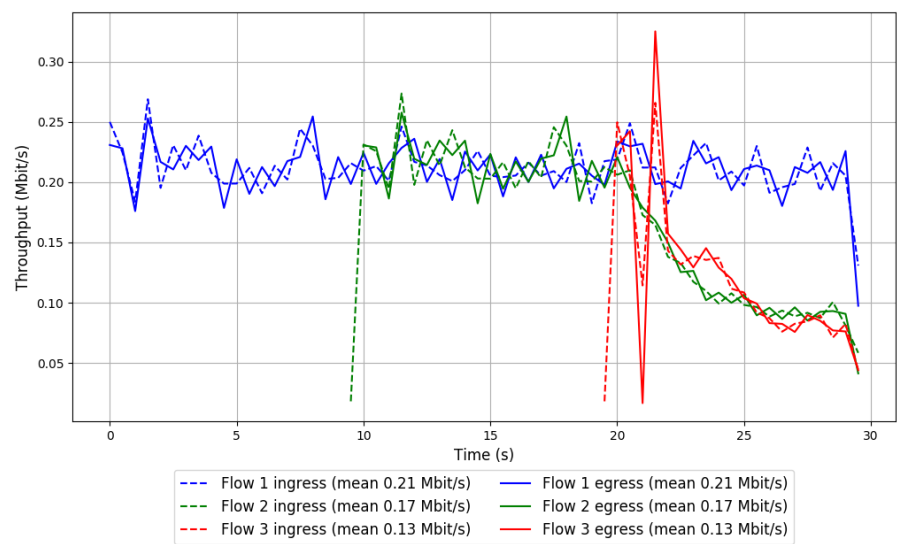


```
Run 4: Statistics of SCReAM

Start at: 2018-01-02 23:53:47
End at: 2018-01-02 23:54:17

# Below is generated by plot.py at 2018-01-03 04:06:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 54.633 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.503 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 54.658 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 54.910 ms
Loss rate: 0.51%
```

Run 4: Report of SReAM — Data Link

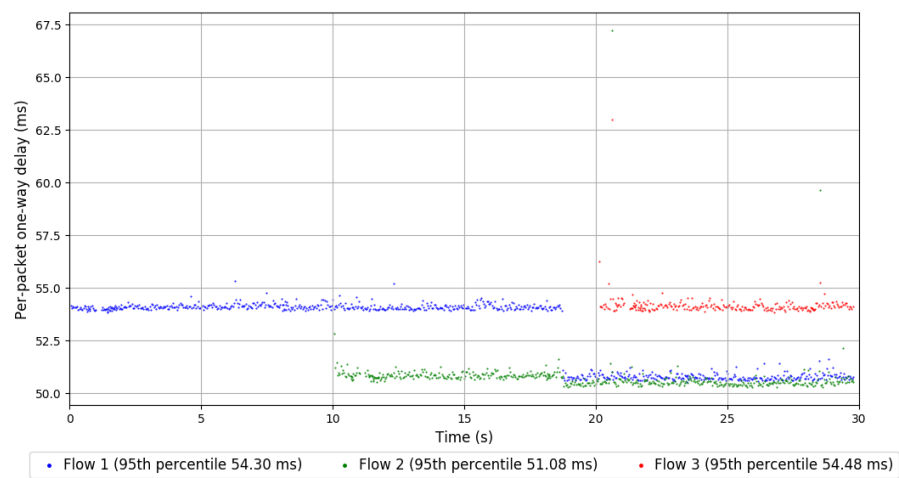
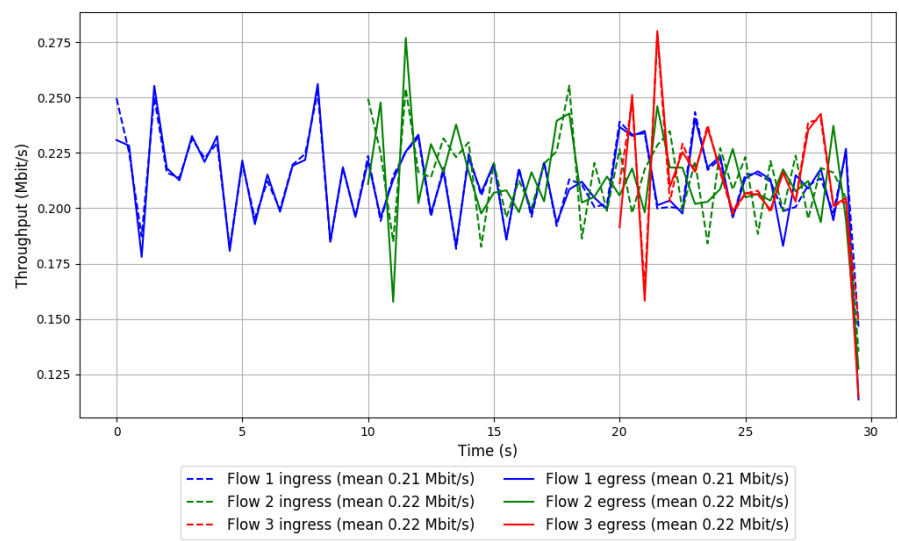


```
Run 5: Statistics of SCReAM

Start at: 2018-01-03 00:05:57
End at: 2018-01-03 00:06:27

# Below is generated by plot.py at 2018-01-03 04:06:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 54.296 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.298 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.082 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 54.485 ms
Loss rate: 1.17%
```

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-03 00:18:11

End at: 2018-01-03 00:18:41

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 54.448 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 54.311 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 54.514 ms

Loss rate: 0.43%

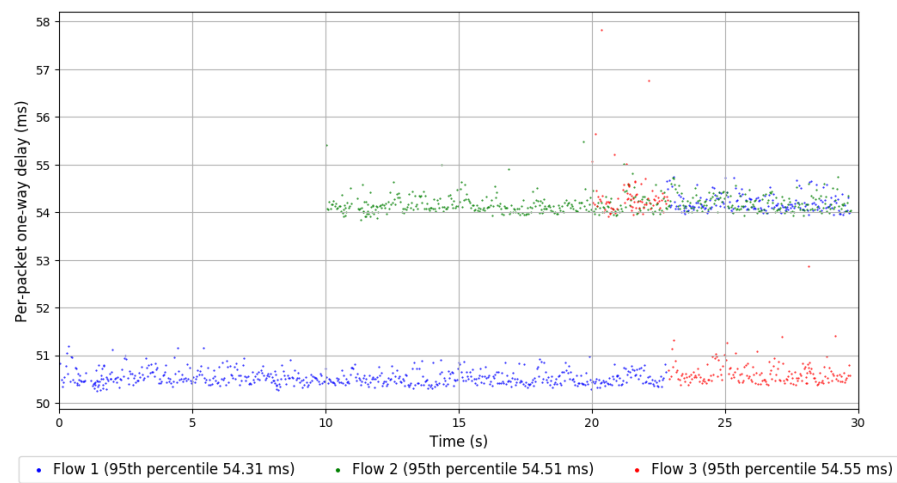
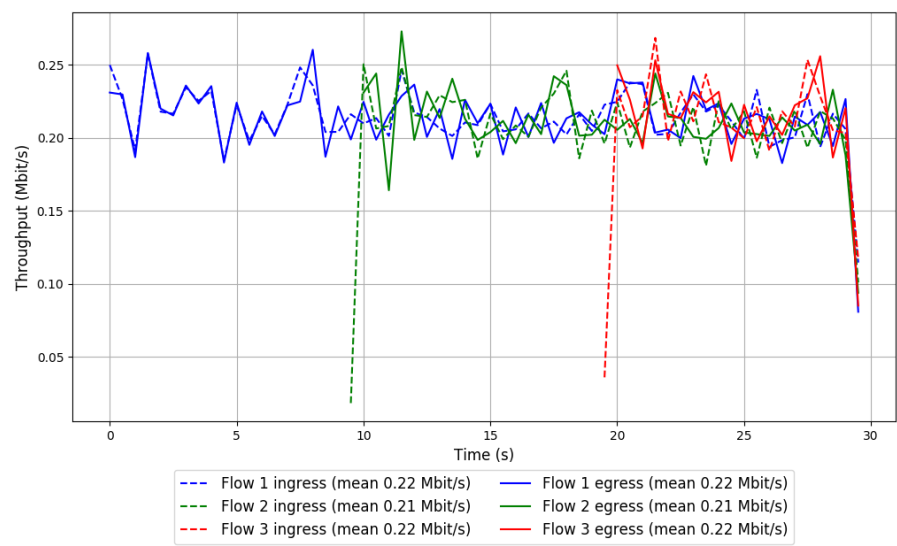
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 54.548 ms

Loss rate: 1.15%

Run 6: Report of SReAM — Data Link



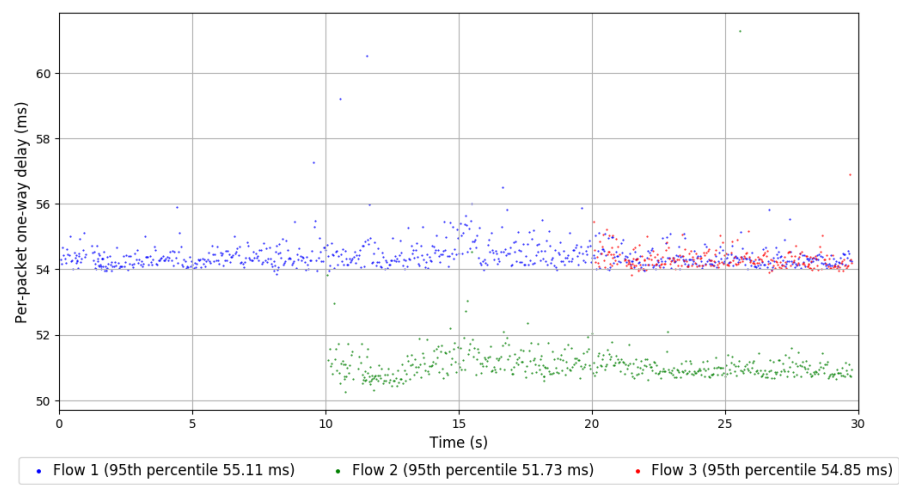
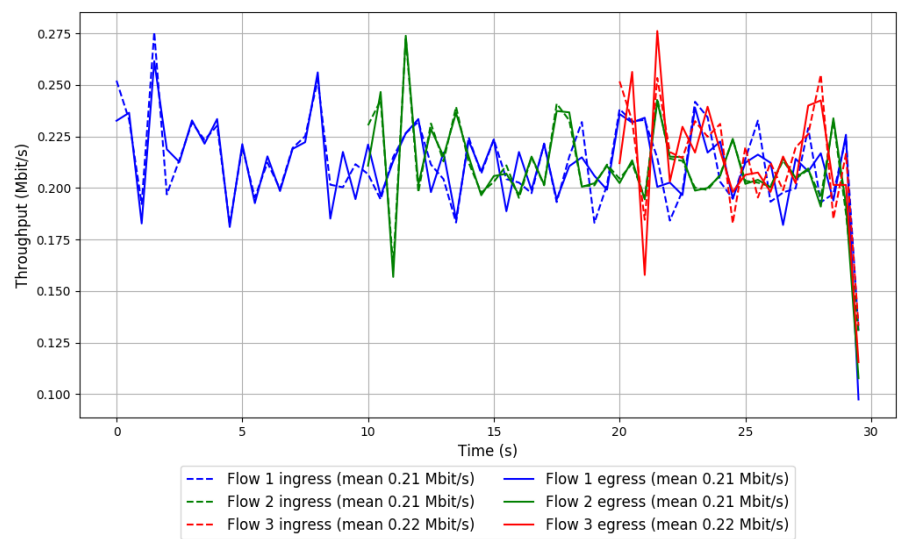
```
Run 7: Statistics of SCReAM

Start at: 2018-01-03 00:30:03
End at: 2018-01-03 00:30:33

# Below is generated by plot.py at 2018-01-03 04:06:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 54.918 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 55.107 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 51.725 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 54.853 ms
Loss rate: 1.15%
```



Run 7: Report of SCReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-01-03 00:42:19

End at: 2018-01-03 00:42:49

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.840 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.851 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.792 ms

Loss rate: 0.43%

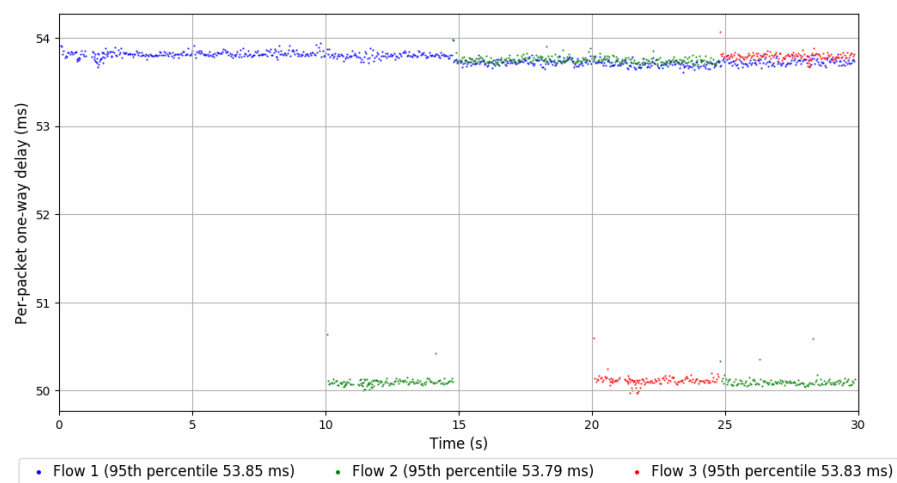
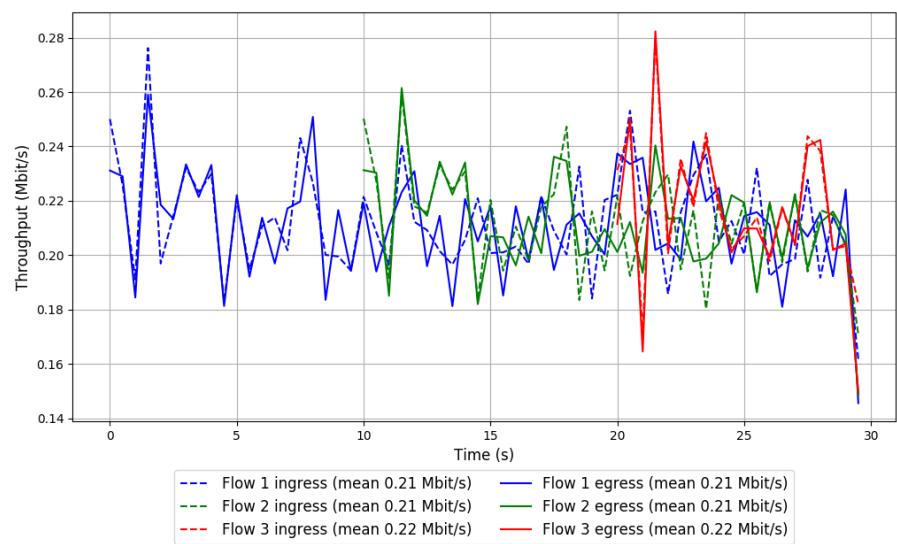
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.828 ms

Loss rate: 1.10%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-01-03 00:55:35

End at: 2018-01-03 00:56:05

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.790 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.807 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.587 ms

Loss rate: 0.42%

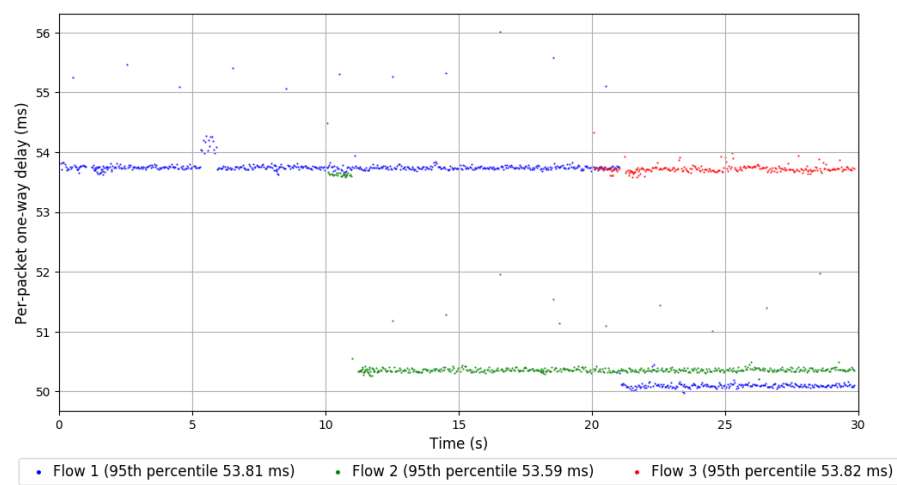
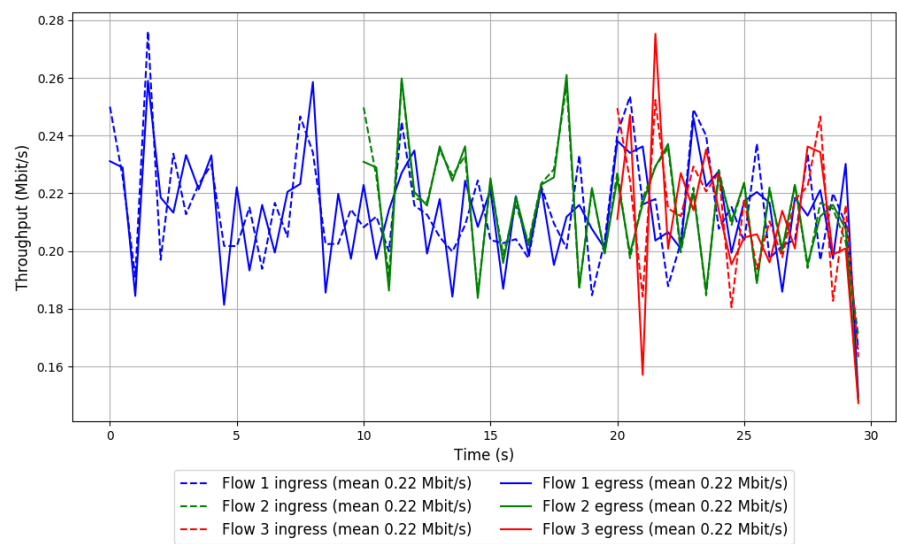
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.824 ms

Loss rate: 1.11%

Run 9: Report of SReAM — Data Link

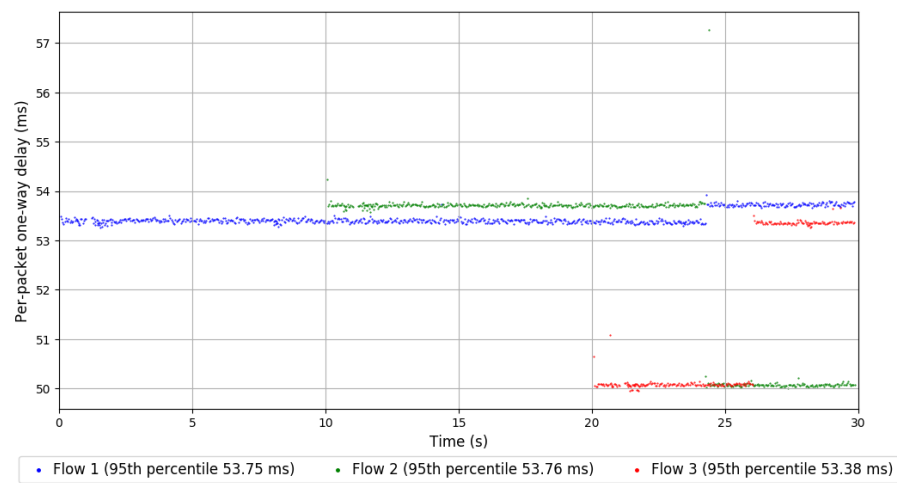
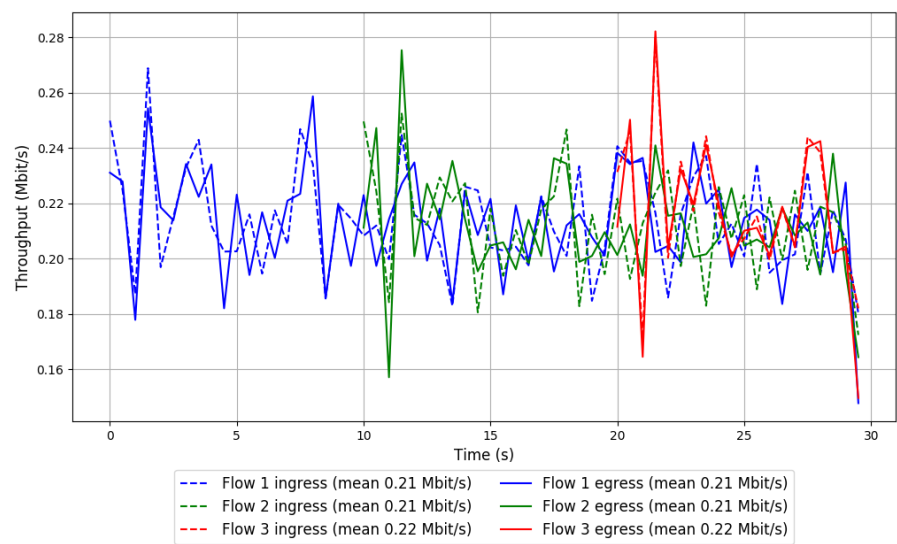


```
Run 10: Statistics of SReAM

Start at: 2018-01-03 01:09:30
End at: 2018-01-03 01:10:00

# Below is generated by plot.py at 2018-01-03 04:06:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.750 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.750 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.757 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.380 ms
Loss rate: 1.10%
```

Run 10: Report of SReAM — Data Link



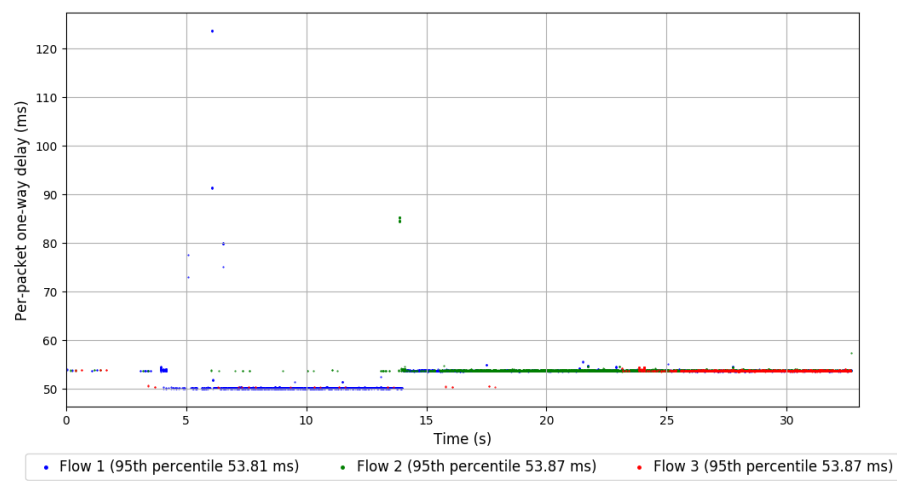
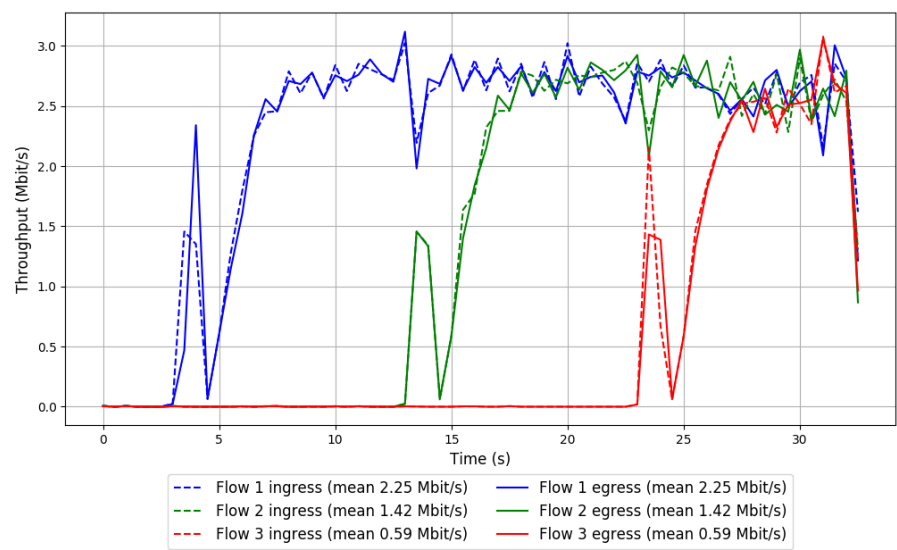
```
Run 1: Statistics of WebRTC media

Start at: 2018-01-02 23:12:05
End at: 2018-01-02 23:12:35

# Below is generated by plot.py at 2018-01-03 04:06:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.24 Mbit/s
95th percentile per-packet one-way delay: 53.843 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 53.810 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 53.874 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 53.869 ms
Loss rate: 1.26%
```



Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-02 23:26:10

End at: 2018-01-02 23:26:40

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 53.834 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 53.799 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 53.861 ms

Loss rate: 0.70%

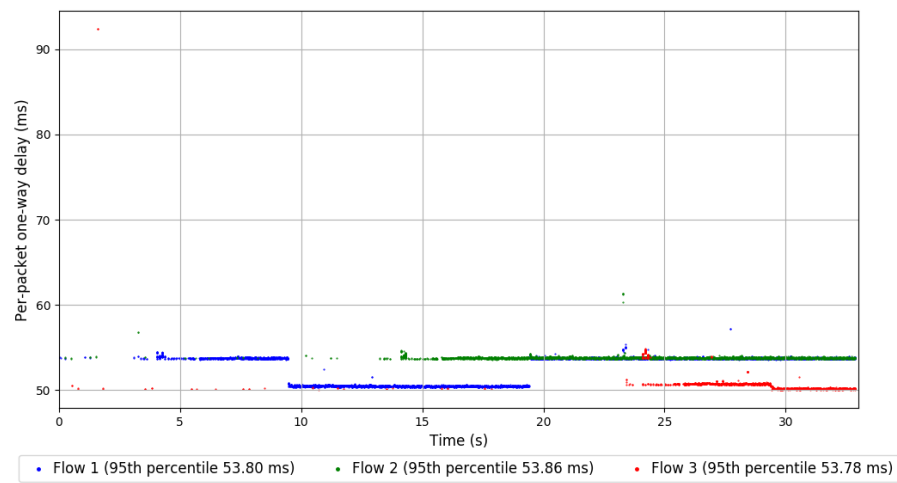
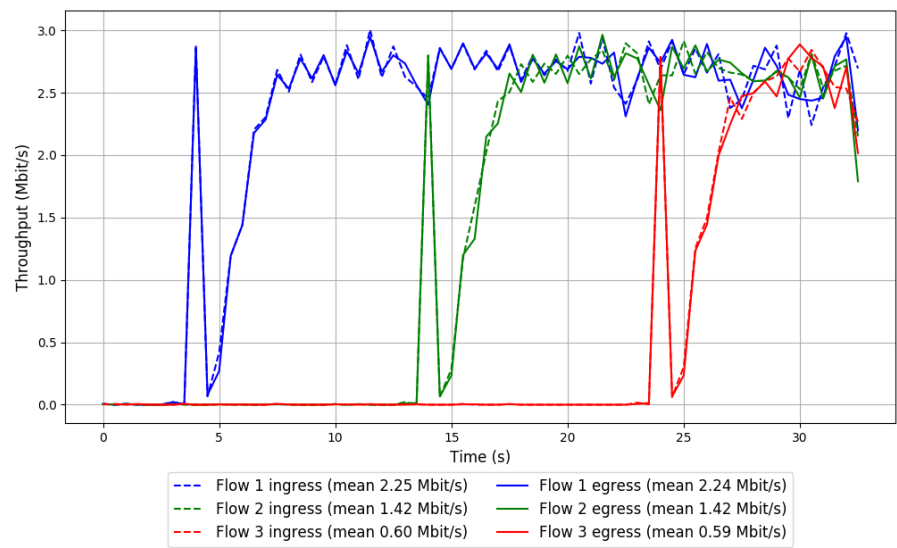
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 53.785 ms

Loss rate: 1.18%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-02 23:40:23

End at: 2018-01-02 23:40:53

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.24 Mbit/s

95th percentile per-packet one-way delay: 53.835 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 50.801 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 53.880 ms

Loss rate: 0.69%

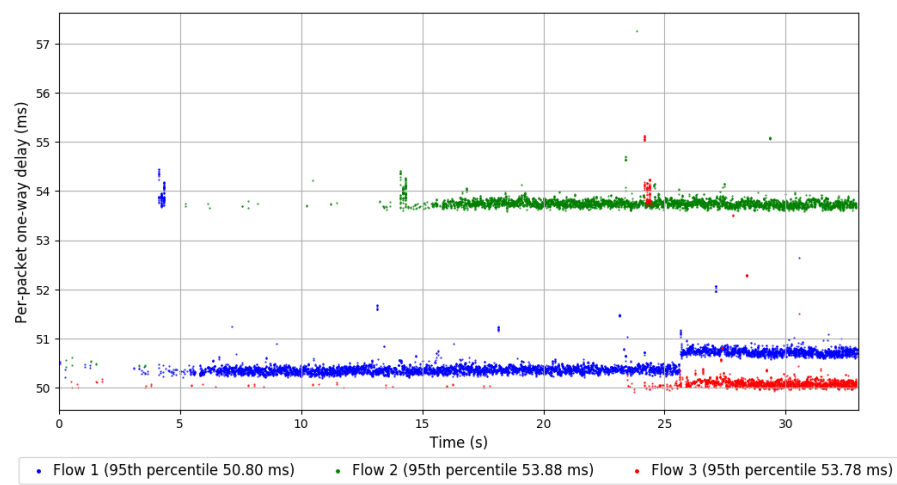
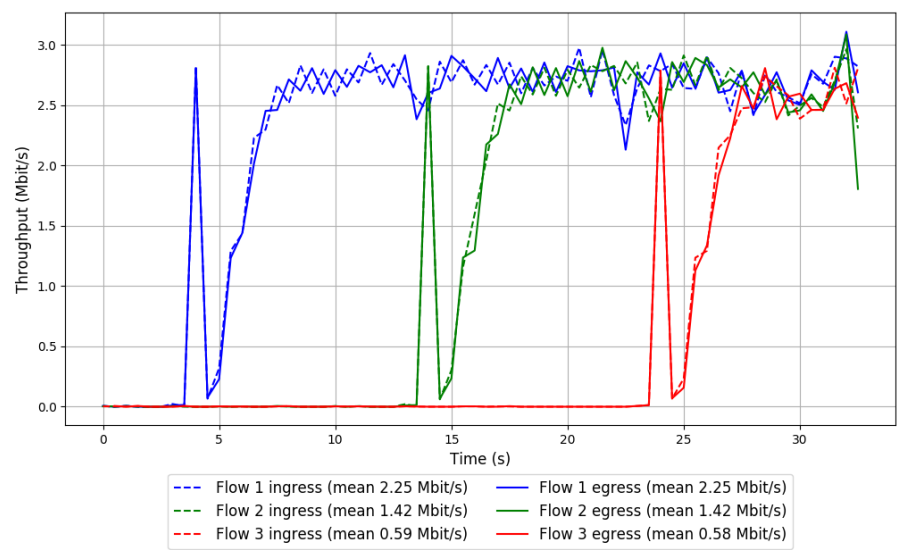
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 53.776 ms

Loss rate: 1.68%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-02 23:53:07

End at: 2018-01-02 23:53:37

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.07 Mbit/s

95th percentile per-packet one-way delay: 54.377 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 54.402 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 51.363 ms

Loss rate: 0.28%

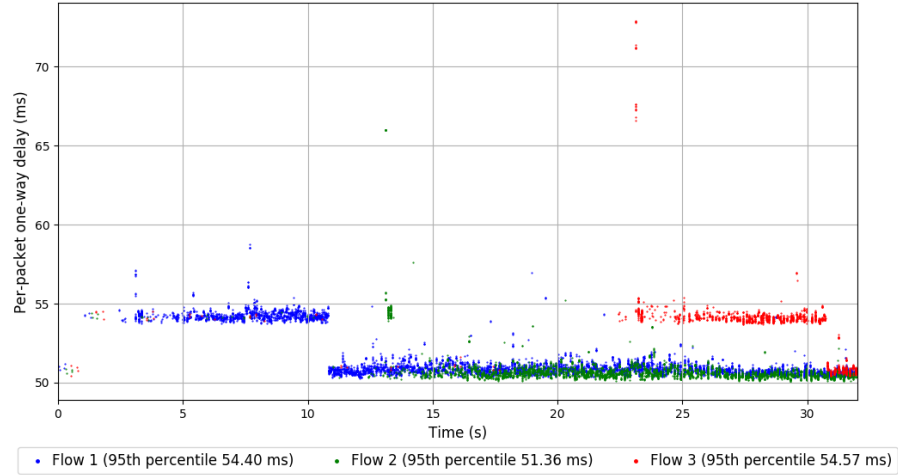
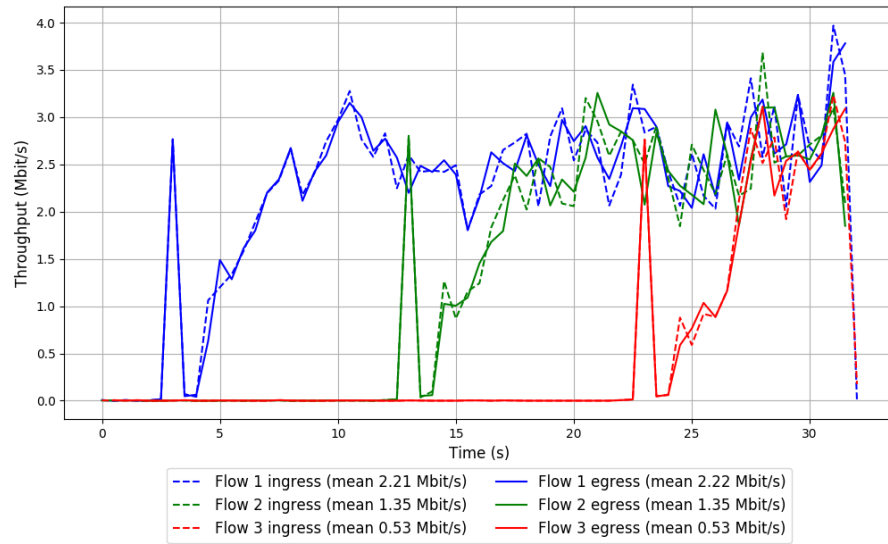
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 54.574 ms

Loss rate: 0.53%

#### Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-03 00:05:17

End at: 2018-01-03 00:05:47

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.91 Mbit/s

95th percentile per-packet one-way delay: 54.564 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 54.657 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 51.532 ms

Loss rate: 0.47%

-- Flow 3:

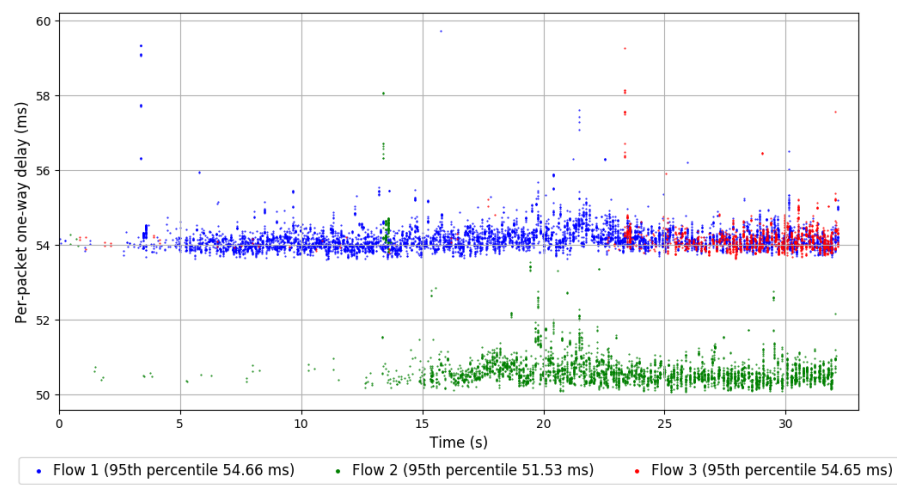
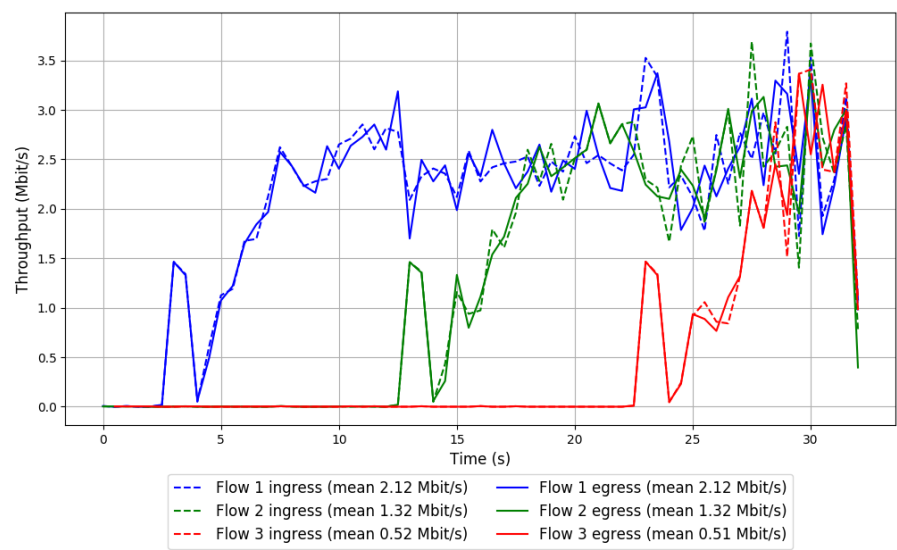
Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 54.654 ms

Loss rate: 1.22%



Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-03 00:17:31

End at: 2018-01-03 00:18:01

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.92 Mbit/s

95th percentile per-packet one-way delay: 54.590 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 54.685 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 51.705 ms

Loss rate: 0.50%

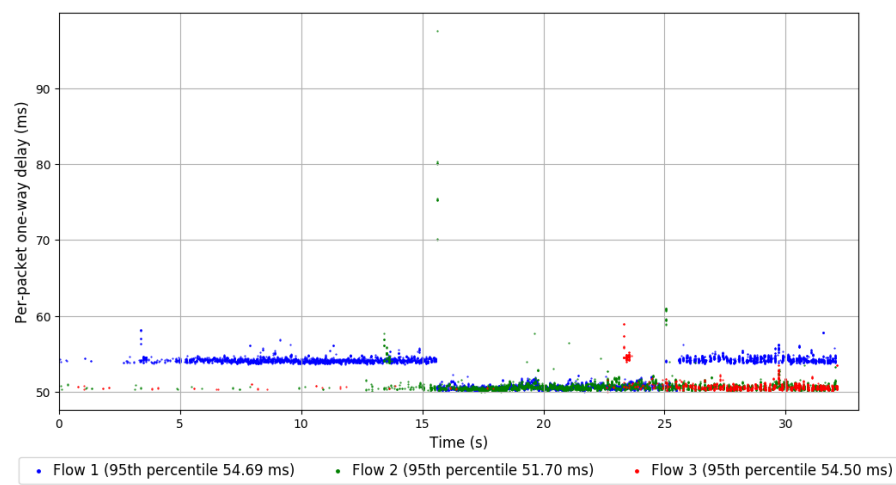
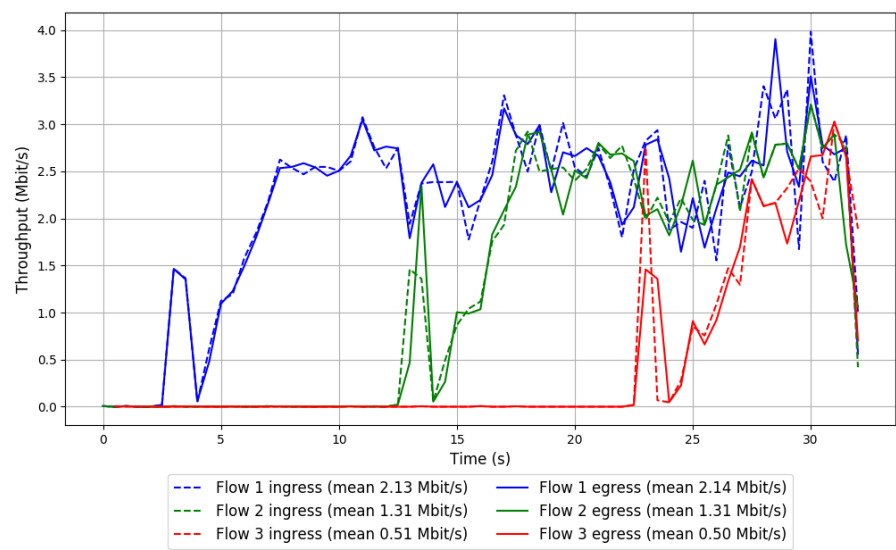
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 54.503 ms

Loss rate: 3.69%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-03 00:29:23

End at: 2018-01-03 00:29:53

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 54.835 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 54.784 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 54.794 ms

Loss rate: 0.46%

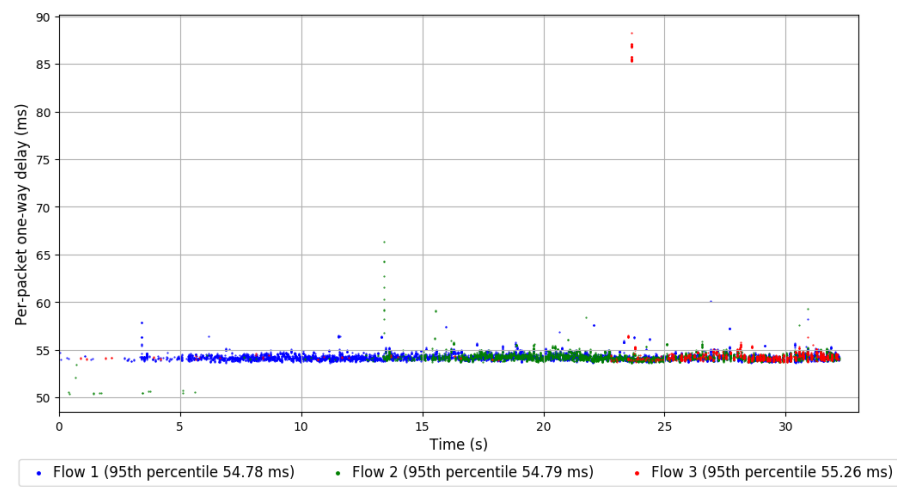
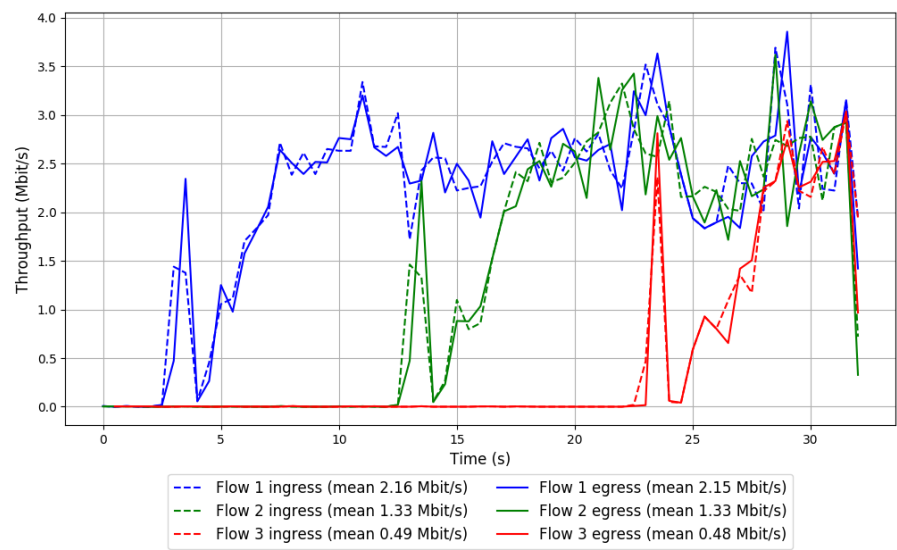
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 55.255 ms

Loss rate: 3.17%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-03 00:41:39

End at: 2018-01-03 00:42:09

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 53.887 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 53.905 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 53.846 ms

Loss rate: 0.64%

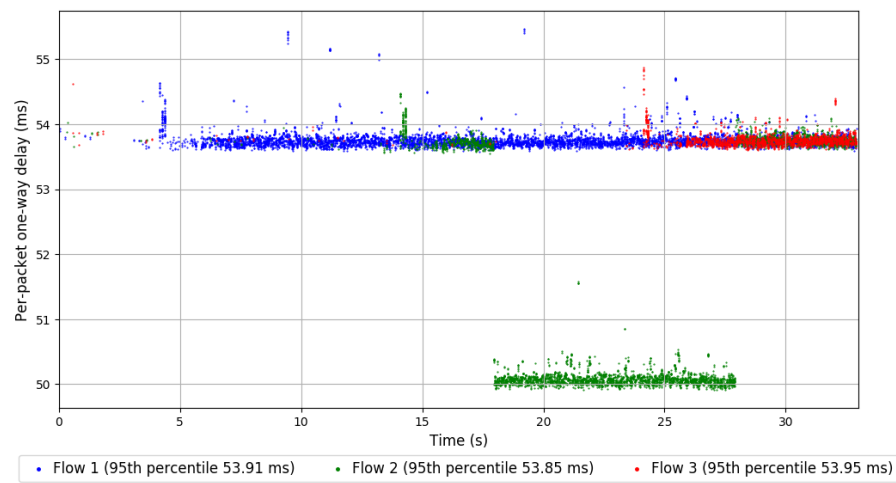
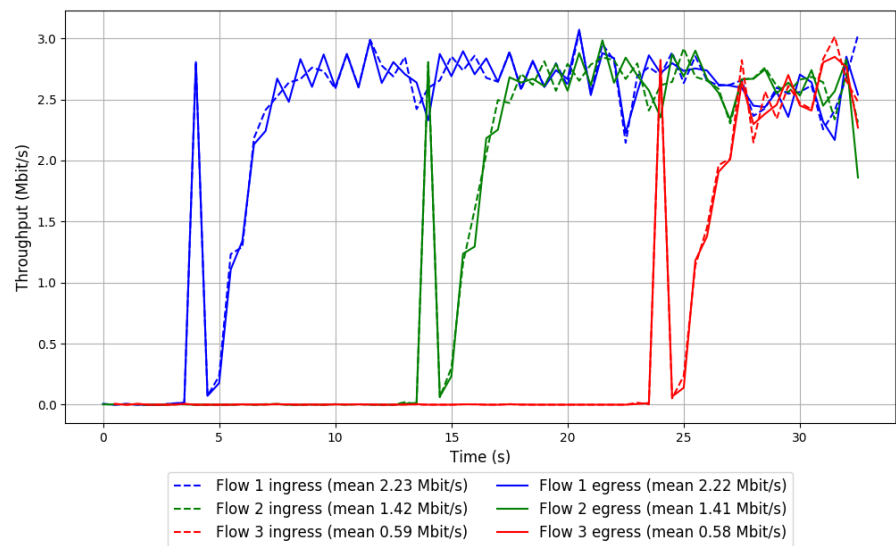
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 53.952 ms

Loss rate: 1.36%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-03 00:54:55

End at: 2018-01-03 00:55:25

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.24 Mbit/s

95th percentile per-packet one-way delay: 53.790 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 53.814 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 53.572 ms

Loss rate: 0.74%

-- Flow 3:

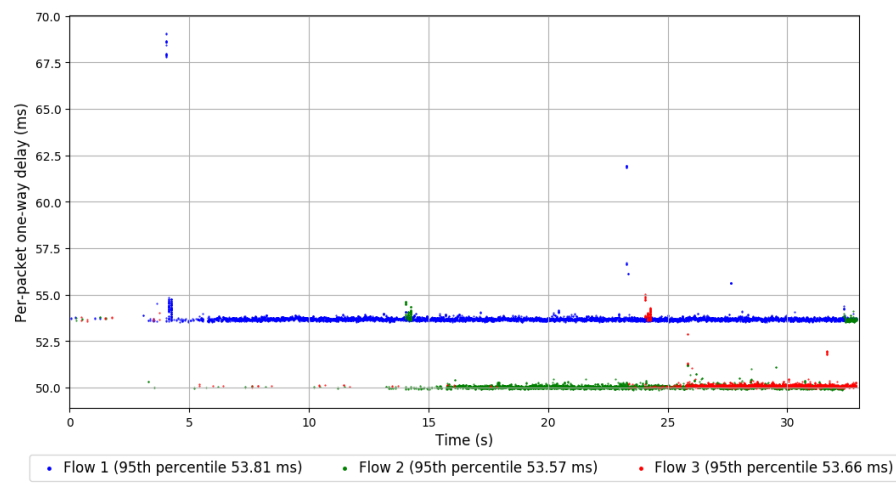
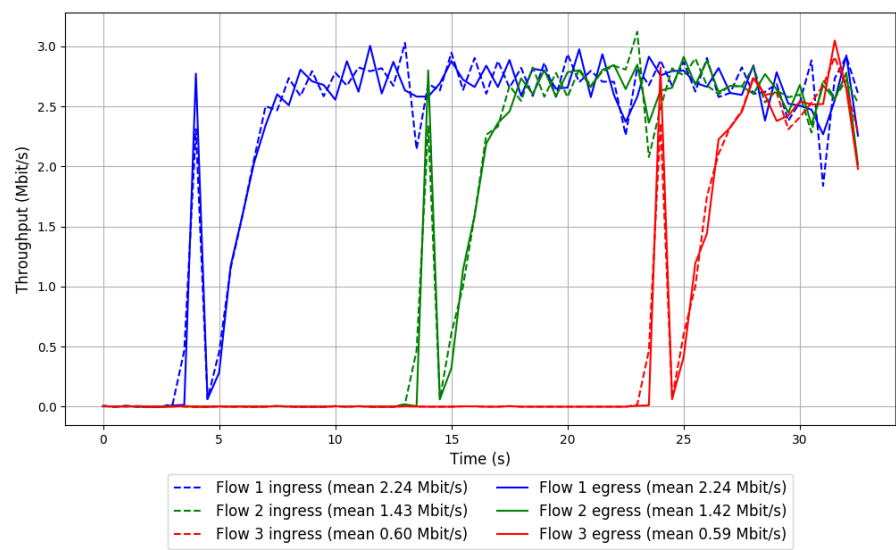
Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 53.665 ms

Loss rate: 1.43%



Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-03 01:08:50

End at: 2018-01-03 01:09:20

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 53.734 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 53.737 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 53.430 ms

Loss rate: 0.69%

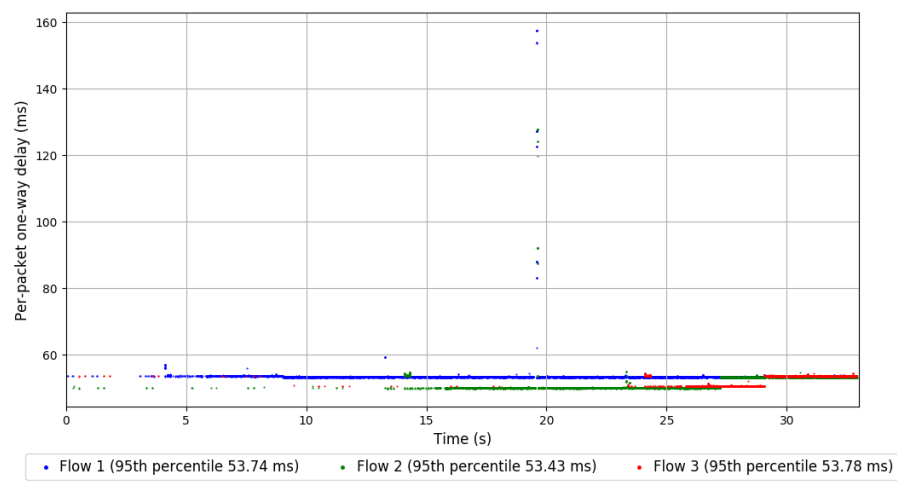
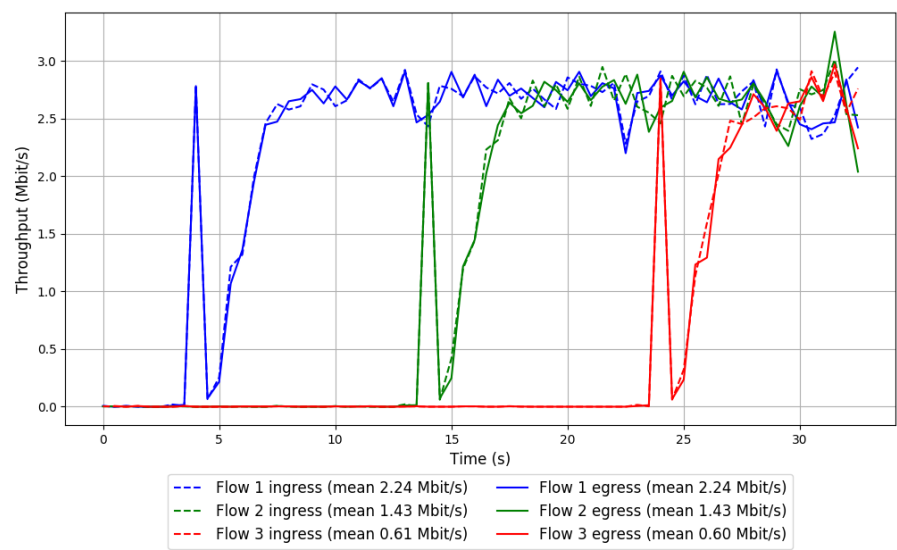
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 53.785 ms

Loss rate: 1.79%

Run 10: Report of WebRTC media — Data Link

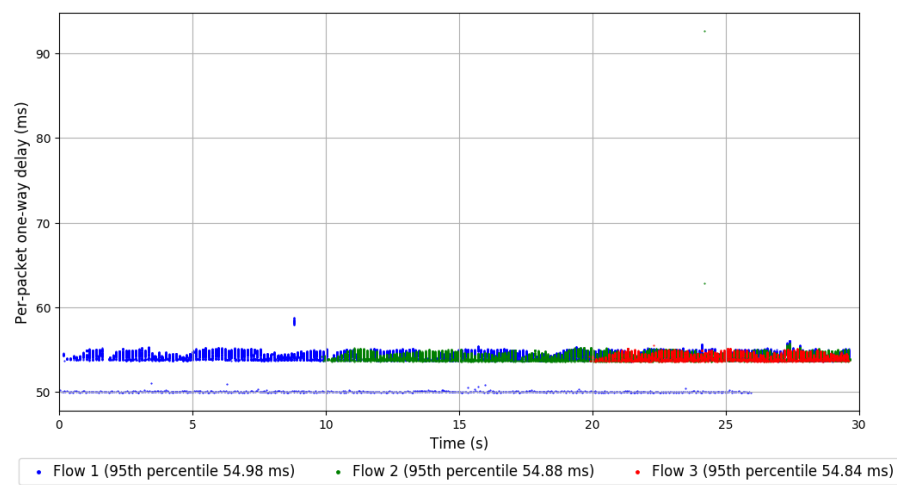
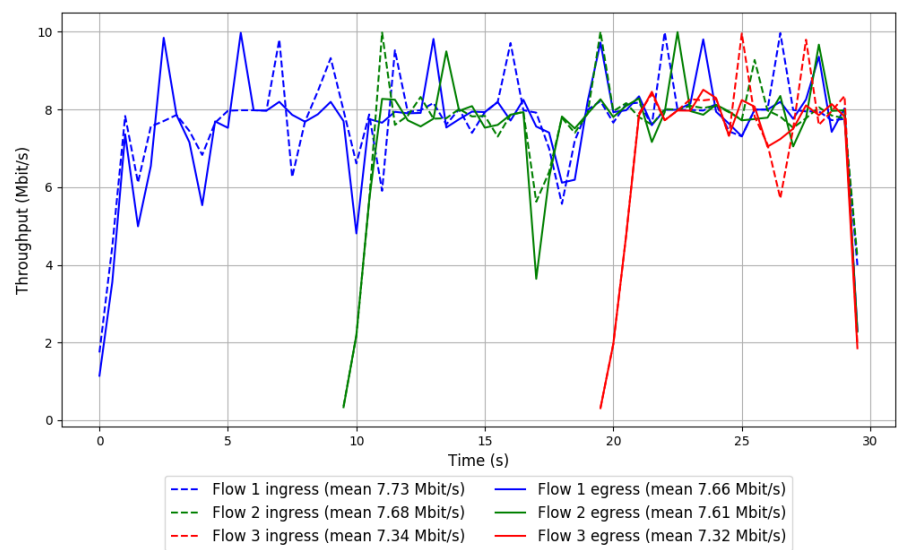


```
Run 1: Statistics of Sprout

Start at: 2018-01-02 23:15:30
End at: 2018-01-02 23:16:00

# Below is generated by plot.py at 2018-01-03 04:06:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.16 Mbit/s
95th percentile per-packet one-way delay: 54.926 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 7.66 Mbit/s
95th percentile per-packet one-way delay: 54.980 ms
Loss rate: 1.33%
-- Flow 2:
Average throughput: 7.61 Mbit/s
95th percentile per-packet one-way delay: 54.878 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 7.32 Mbit/s
95th percentile per-packet one-way delay: 54.836 ms
Loss rate: 1.30%
```

Run 1: Report of Sprout — Data Link

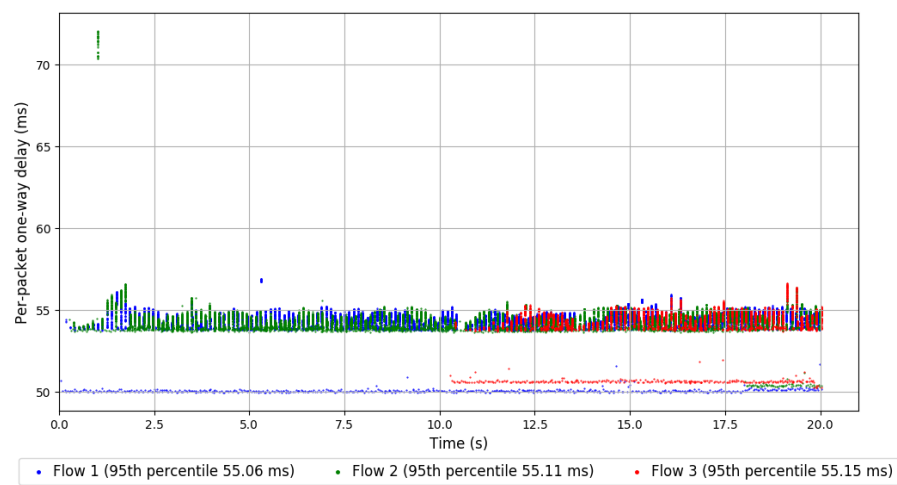
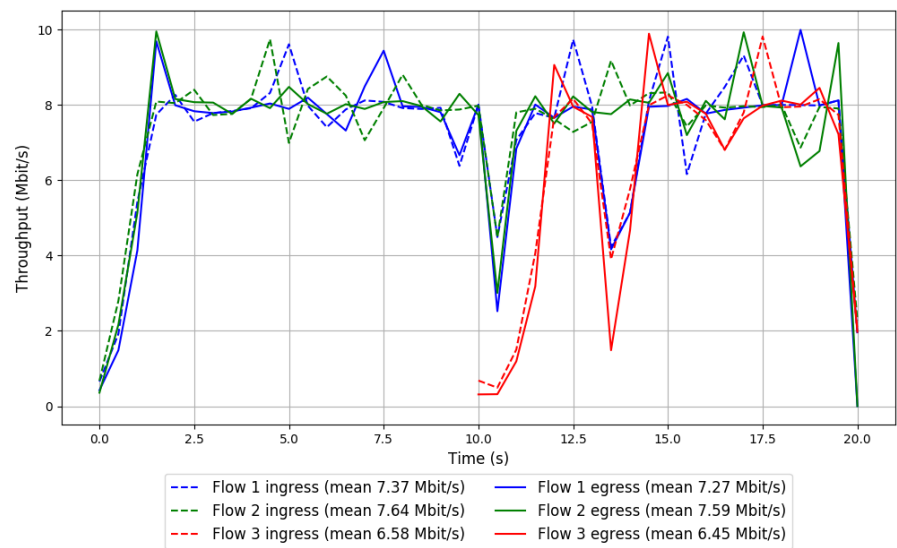


Run 2: Statistics of Sprout

Start at: 2018-01-02 23:29:36

End at: 2018-01-02 23:30:06

Run 2: Report of Sprout — Data Link



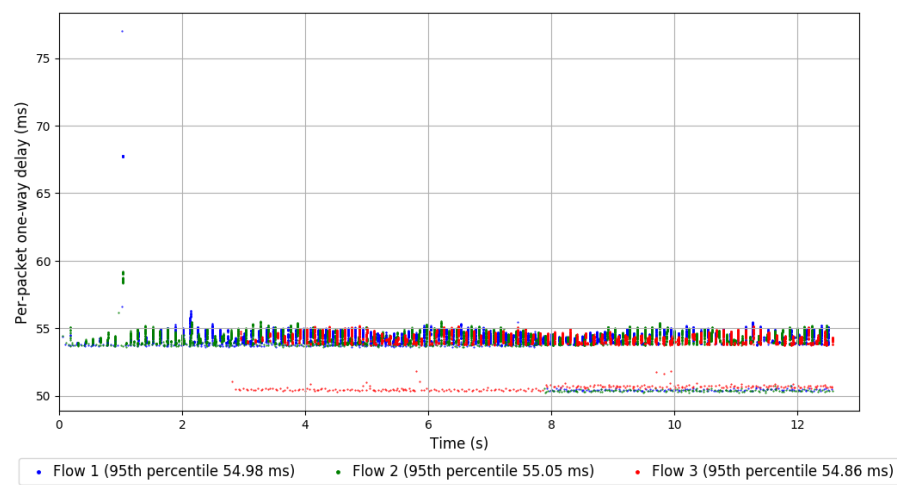
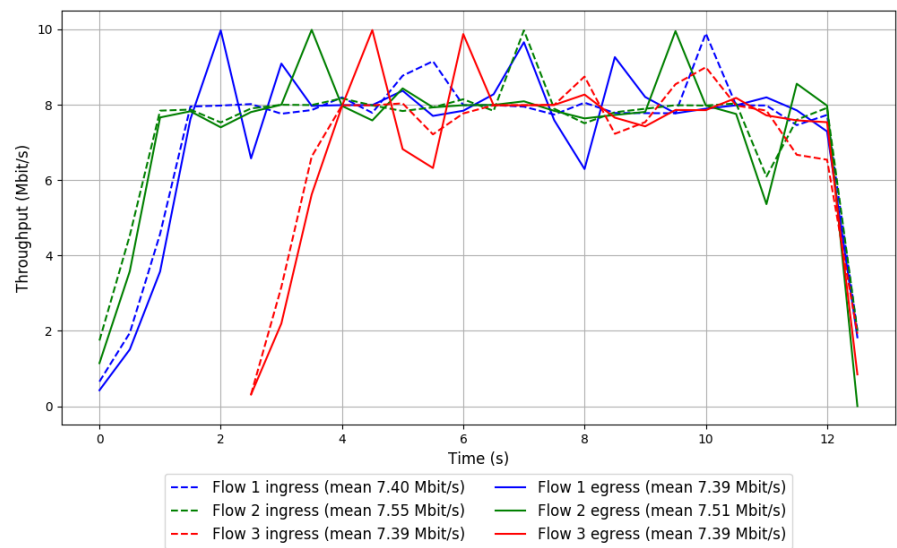
Run 3: Statistics of Sprout

Start at: 2018-01-02 23:43:49

End at: 2018-01-02 23:44:19



Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-02 23:56:06

End at: 2018-01-02 23:56:36

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 14.71 Mbit/s

95th percentile per-packet one-way delay: 56.600 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 7.22 Mbit/s

95th percentile per-packet one-way delay: 56.294 ms

Loss rate: 1.74%

-- Flow 2:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 56.497 ms

Loss rate: 0.63%

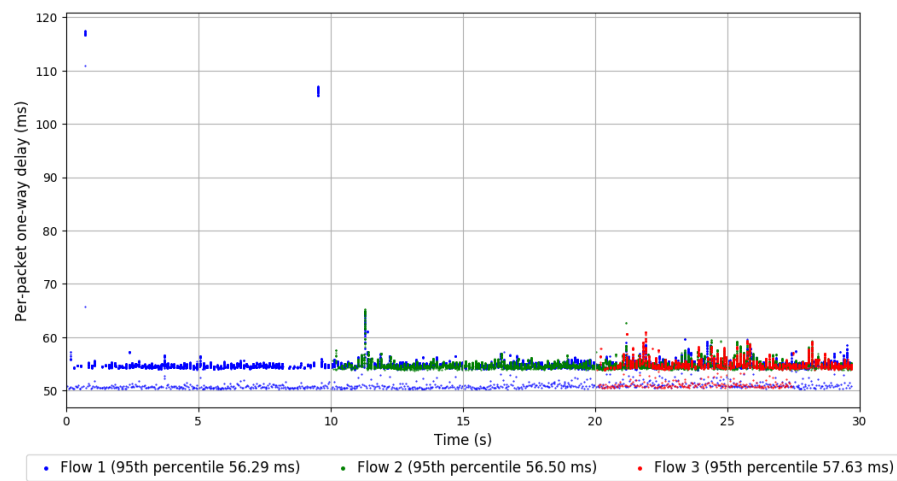
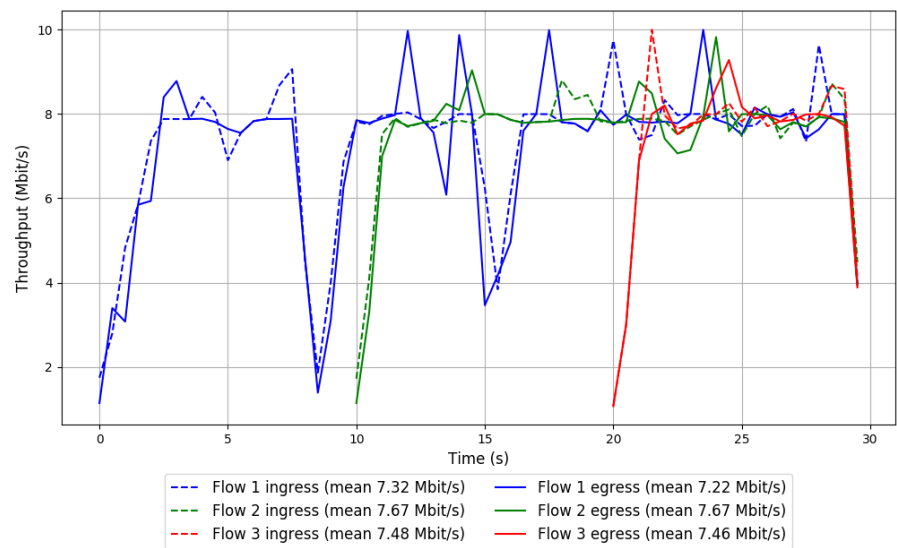
-- Flow 3:

Average throughput: 7.46 Mbit/s

95th percentile per-packet one-way delay: 57.629 ms

Loss rate: 1.26%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-03 00:08:20

End at: 2018-01-03 00:08:50

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.06 Mbit/s

95th percentile per-packet one-way delay: 55.406 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 7.57 Mbit/s

95th percentile per-packet one-way delay: 55.319 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 55.544 ms

Loss rate: 0.65%

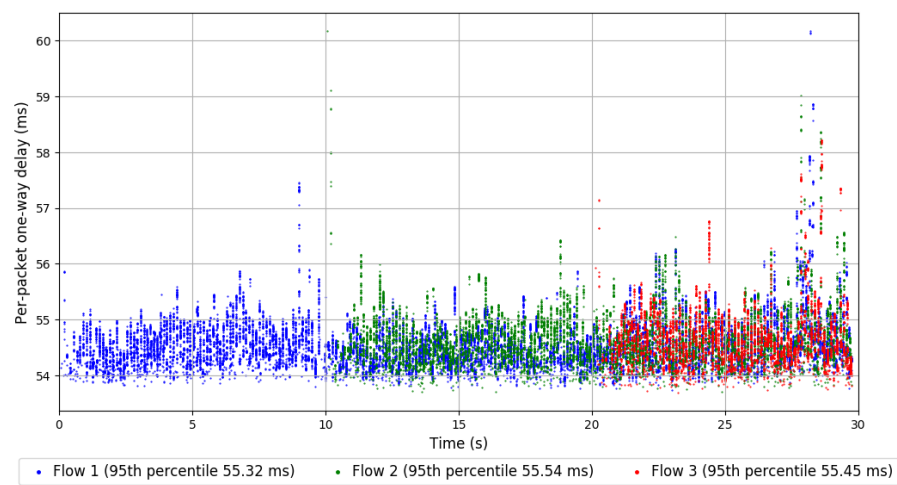
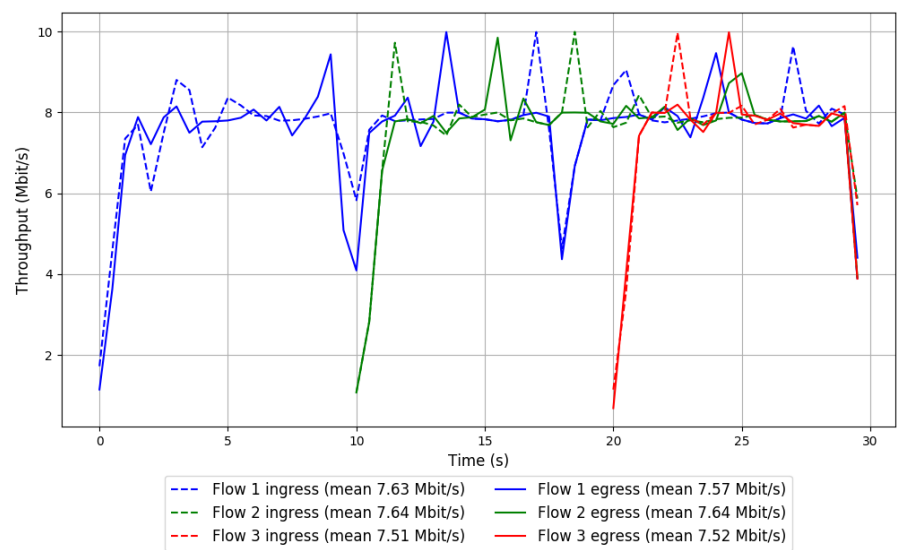
-- Flow 3:

Average throughput: 7.52 Mbit/s

95th percentile per-packet one-way delay: 55.445 ms

Loss rate: 1.43%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-03 00:20:34

End at: 2018-01-03 00:21:04

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 14.58 Mbit/s

95th percentile per-packet one-way delay: 55.499 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 7.38 Mbit/s

95th percentile per-packet one-way delay: 55.451 ms

Loss rate: 1.32%

-- Flow 2:

Average throughput: 7.19 Mbit/s

95th percentile per-packet one-way delay: 55.483 ms

Loss rate: 2.03%

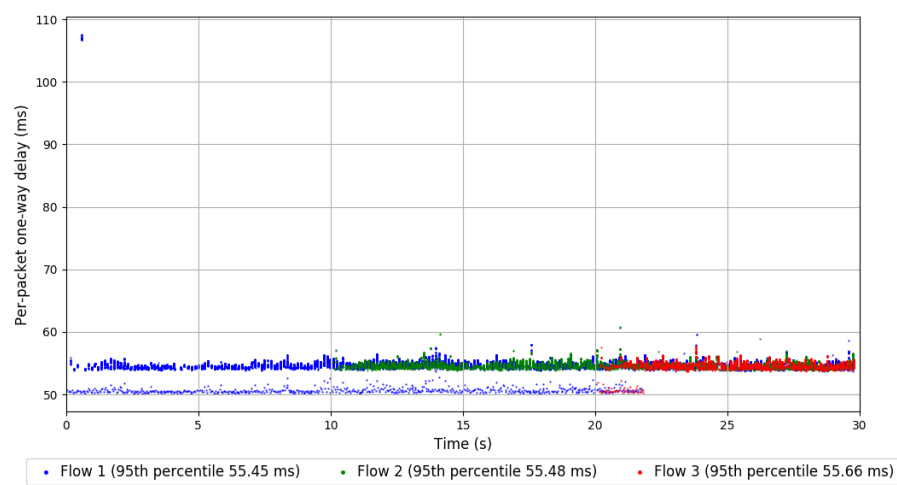
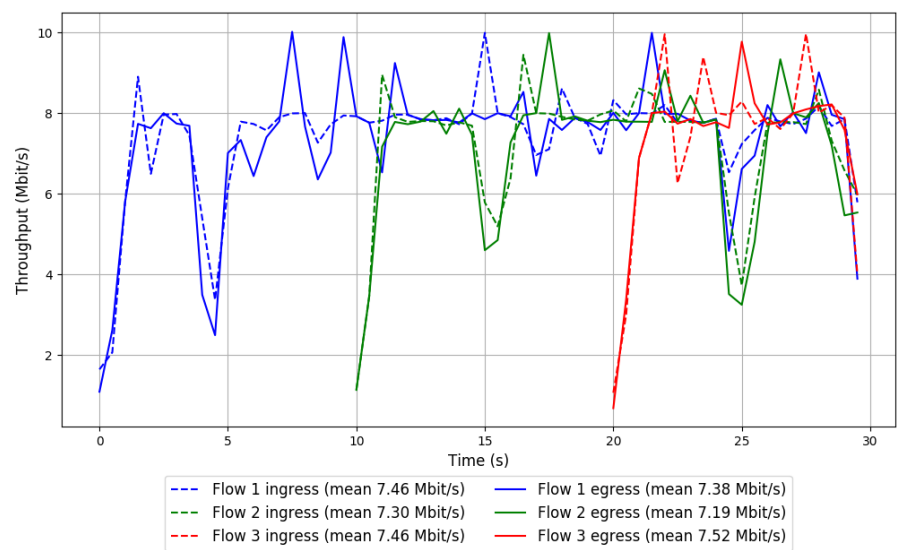
-- Flow 3:

Average throughput: 7.52 Mbit/s

95th percentile per-packet one-way delay: 55.664 ms

Loss rate: 0.18%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-03 00:32:22

End at: 2018-01-03 00:32:52

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 16.35 Mbit/s

95th percentile per-packet one-way delay: 58.837 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 58.165 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 59.118 ms

Loss rate: 0.64%

-- Flow 3:

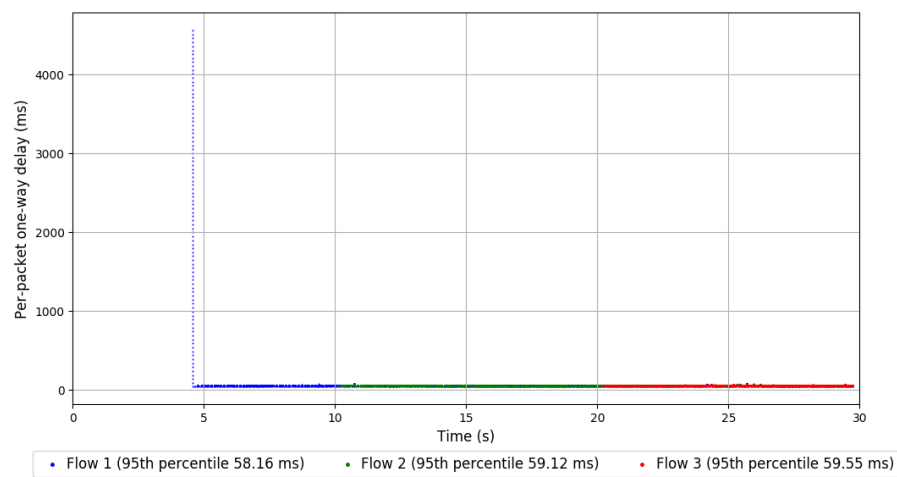
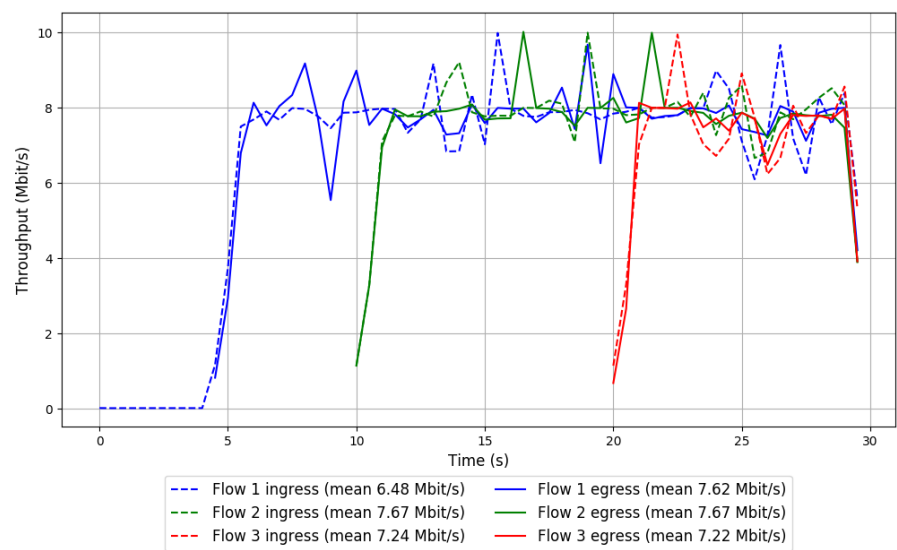
Average throughput: 7.22 Mbit/s

95th percentile per-packet one-way delay: 59.553 ms

Loss rate: 1.42%



Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-03 00:45:02

End at: 2018-01-03 00:45:32

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.29 Mbit/s

95th percentile per-packet one-way delay: 55.108 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 7.63 Mbit/s

95th percentile per-packet one-way delay: 55.027 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 55.175 ms

Loss rate: 0.42%

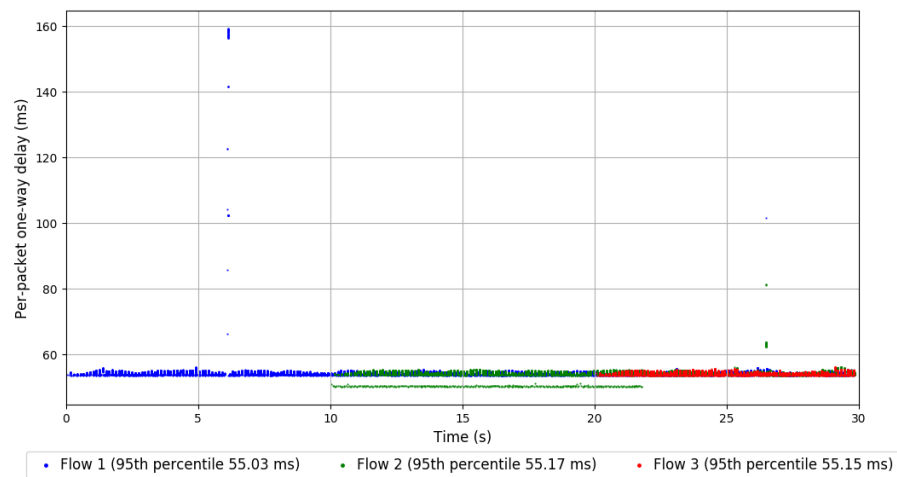
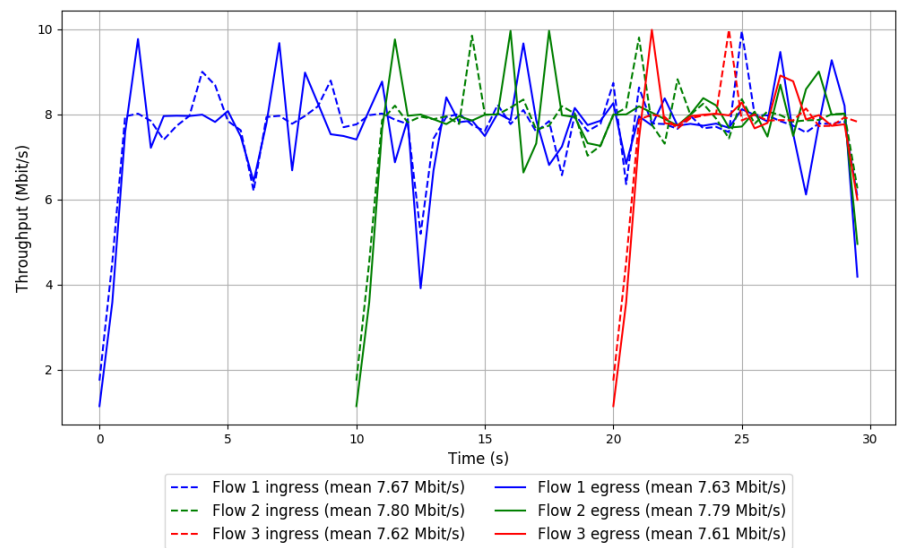
-- Flow 3:

Average throughput: 7.61 Mbit/s

95th percentile per-packet one-way delay: 55.152 ms

Loss rate: 1.33%

Run 8: Report of Sprout — Data Link

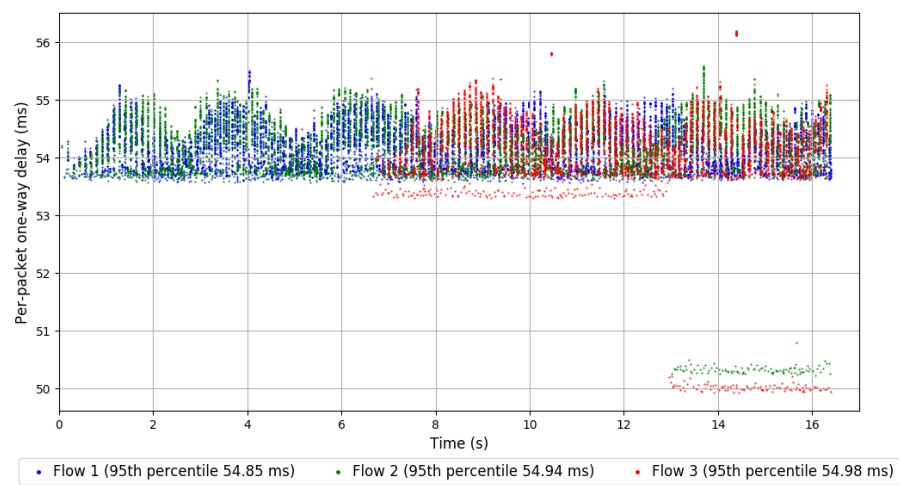
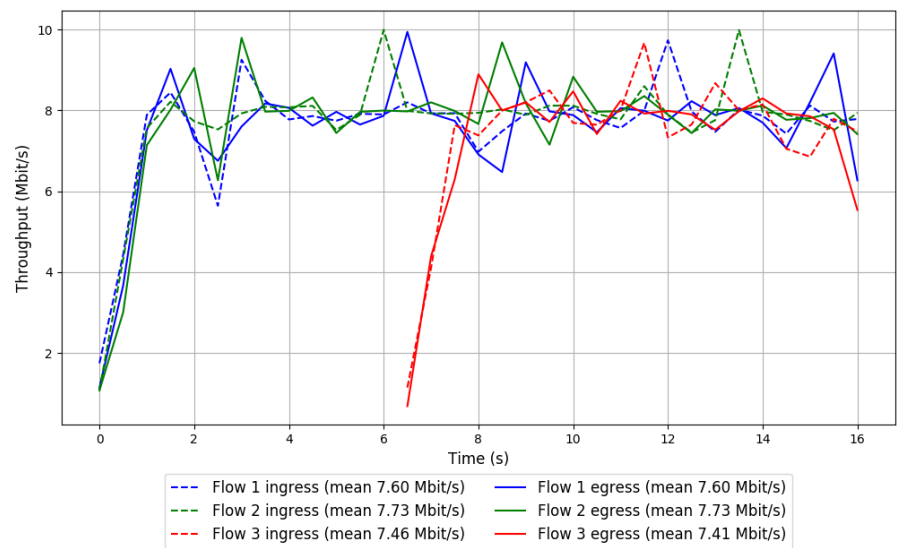


Run 9: Statistics of Sprout

Start at: 2018-01-03 00:58:20

End at: 2018-01-03 00:58:50

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-03 01:12:12

End at: 2018-01-03 01:12:42

# Below is generated by plot.py at 2018-01-03 04:06:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 16.19 Mbit/s

95th percentile per-packet one-way delay: 54.880 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 54.950 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 7.55 Mbit/s

95th percentile per-packet one-way delay: 54.712 ms

Loss rate: 0.31%

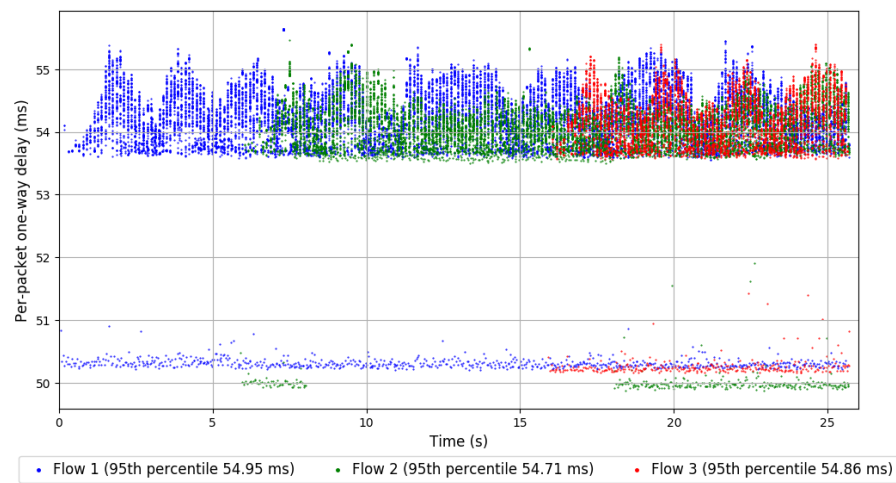
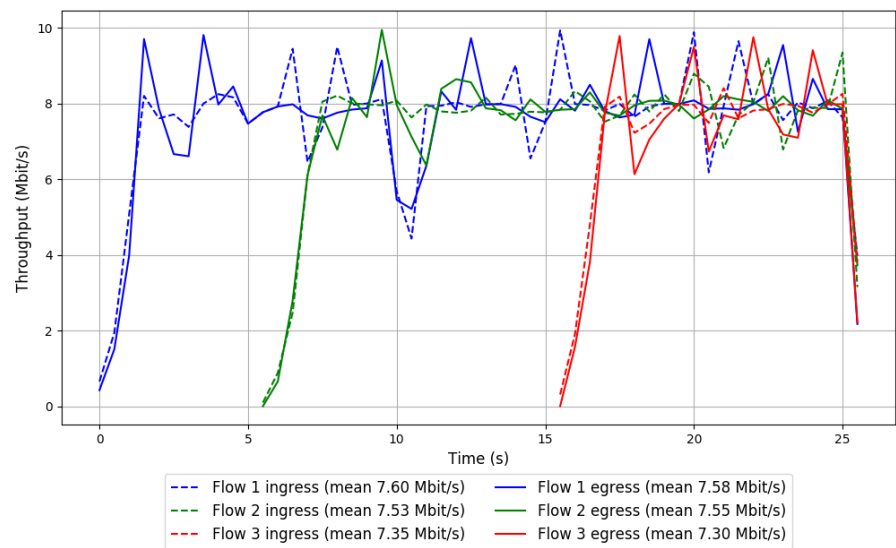
-- Flow 3:

Average throughput: 7.30 Mbit/s

95th percentile per-packet one-way delay: 54.863 ms

Loss rate: 1.30%

Run 10: Report of Sprout — Data Link



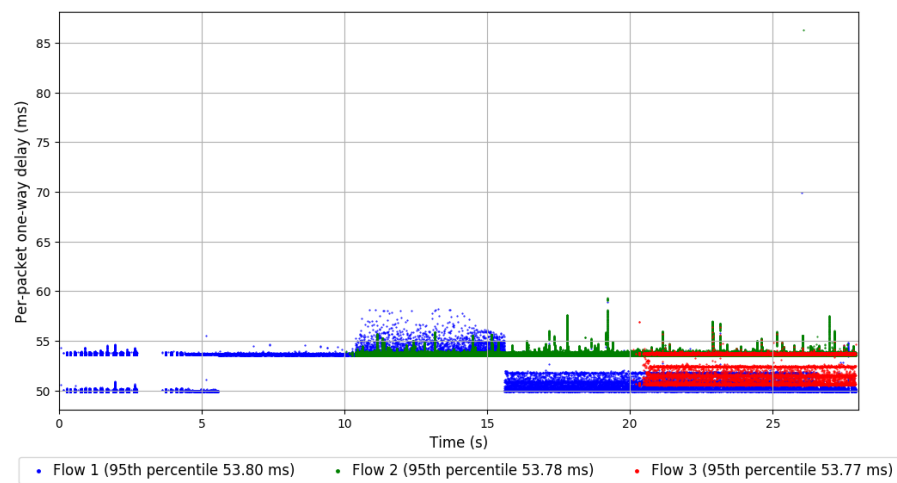
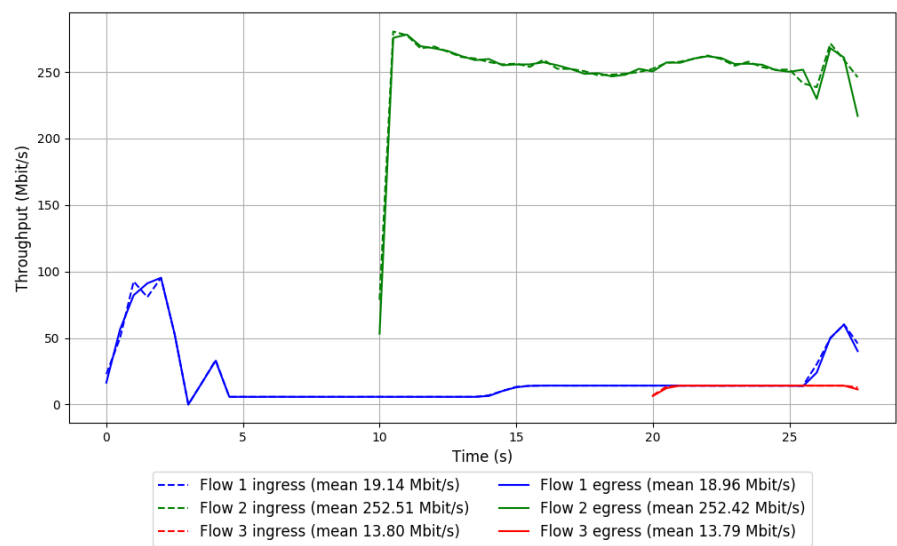
```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-02 23:11:08
End at: 2018-01-02 23:11:38

# Below is generated by plot.py at 2018-01-03 04:09:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 184.53 Mbit/s
95th percentile per-packet one-way delay: 53.782 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 18.96 Mbit/s
95th percentile per-packet one-way delay: 53.796 ms
Loss rate: 1.28%
-- Flow 2:
Average throughput: 252.42 Mbit/s
95th percentile per-packet one-way delay: 53.781 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 13.79 Mbit/s
95th percentile per-packet one-way delay: 53.768 ms
Loss rate: 1.39%
```



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

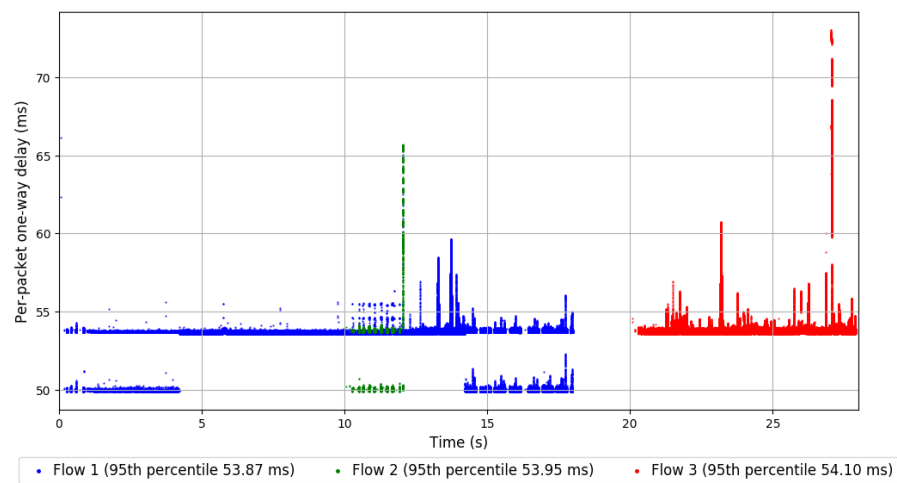
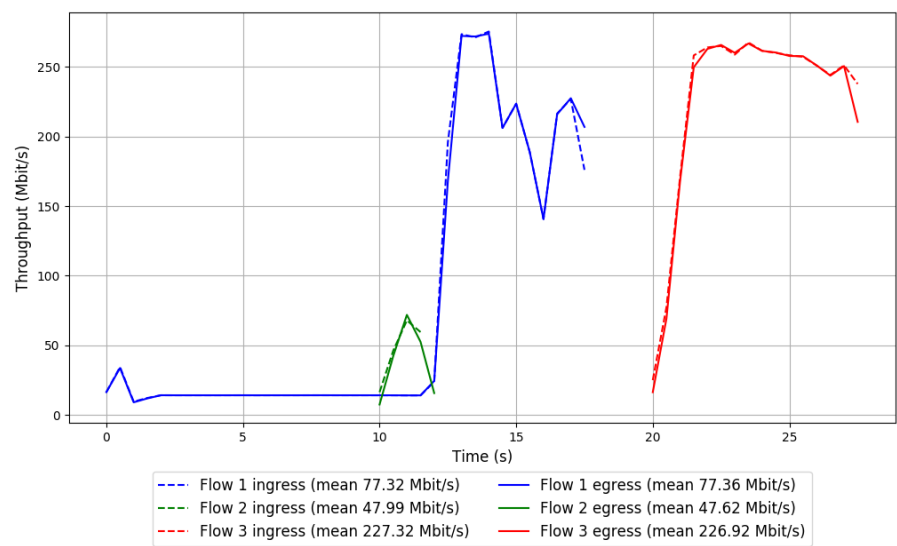


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-02 23:25:20
End at: 2018-01-02 23:25:50

# Below is generated by plot.py at 2018-01-03 04:09:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 117.01 Mbit/s
95th percentile per-packet one-way delay: 53.973 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 77.36 Mbit/s
95th percentile per-packet one-way delay: 53.865 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 47.62 Mbit/s
95th percentile per-packet one-way delay: 53.951 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 226.92 Mbit/s
95th percentile per-packet one-way delay: 54.098 ms
Loss rate: 1.56%
```

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

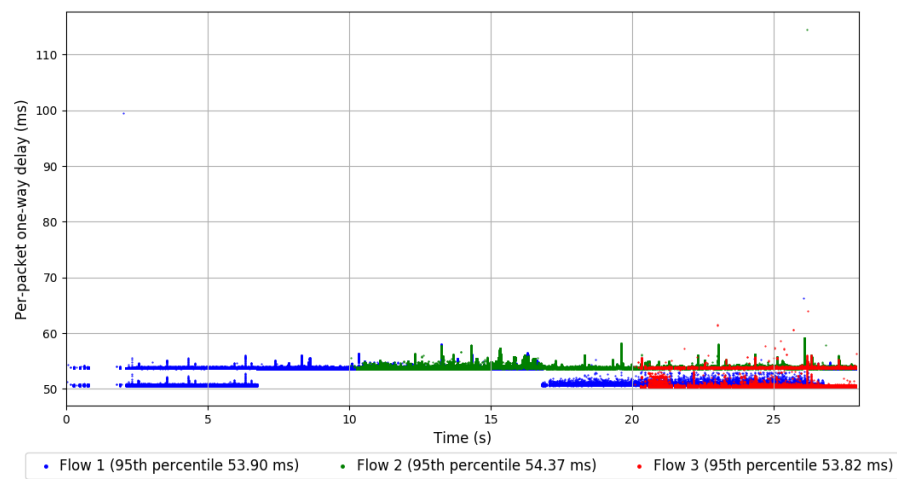
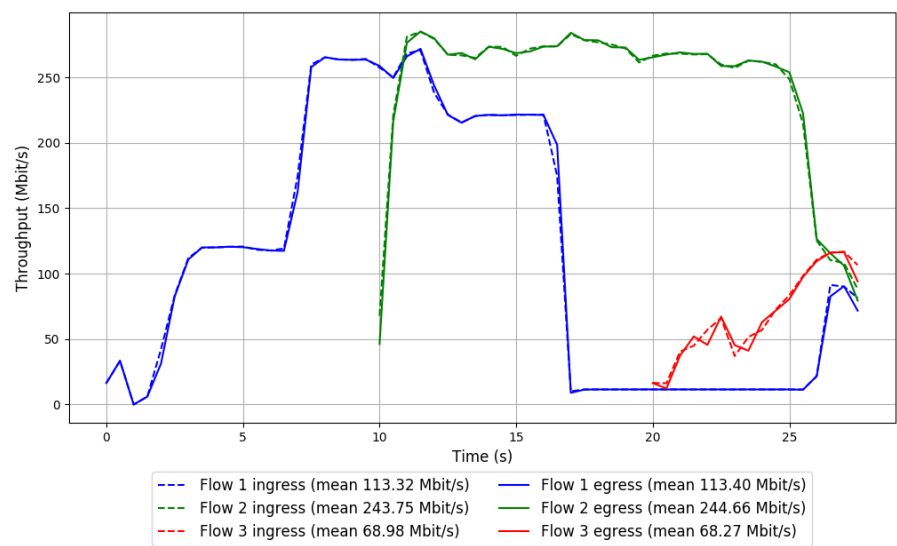


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-02 23:39:17
End at: 2018-01-02 23:39:47

# Below is generated by plot.py at 2018-01-03 04:13:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 289.23 Mbit/s
95th percentile per-packet one-way delay: 54.141 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 113.40 Mbit/s
95th percentile per-packet one-way delay: 53.896 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 244.66 Mbit/s
95th percentile per-packet one-way delay: 54.367 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 68.27 Mbit/s
95th percentile per-packet one-way delay: 53.824 ms
Loss rate: 2.32%
```

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

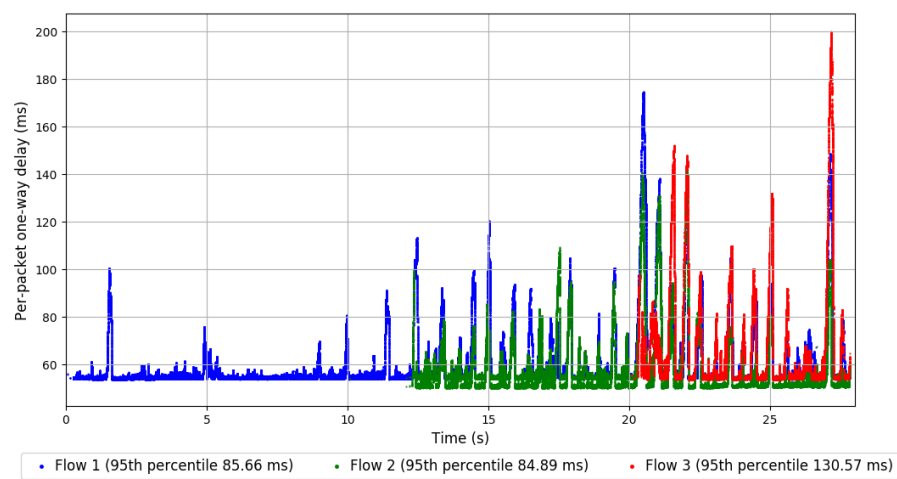
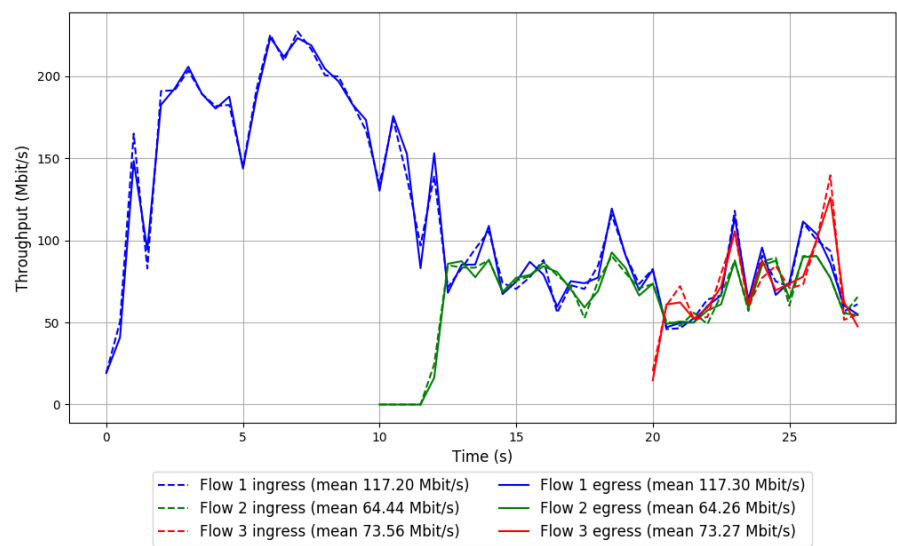


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-01-02 23:52:11
End at: 2018-01-02 23:52:41

# Below is generated by plot.py at 2018-01-03 04:13:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 178.76 Mbit/s
95th percentile per-packet one-way delay: 89.959 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 117.30 Mbit/s
95th percentile per-packet one-way delay: 85.662 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 64.26 Mbit/s
95th percentile per-packet one-way delay: 84.888 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 73.27 Mbit/s
95th percentile per-packet one-way delay: 130.566 ms
Loss rate: 1.76%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-03 00:04:17

End at: 2018-01-03 00:04:47

# Below is generated by plot.py at 2018-01-03 04:13:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 215.18 Mbit/s

95th percentile per-packet one-way delay: 64.620 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 140.55 Mbit/s

95th percentile per-packet one-way delay: 60.815 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 95.60 Mbit/s

95th percentile per-packet one-way delay: 74.682 ms

Loss rate: 0.56%

-- Flow 3:

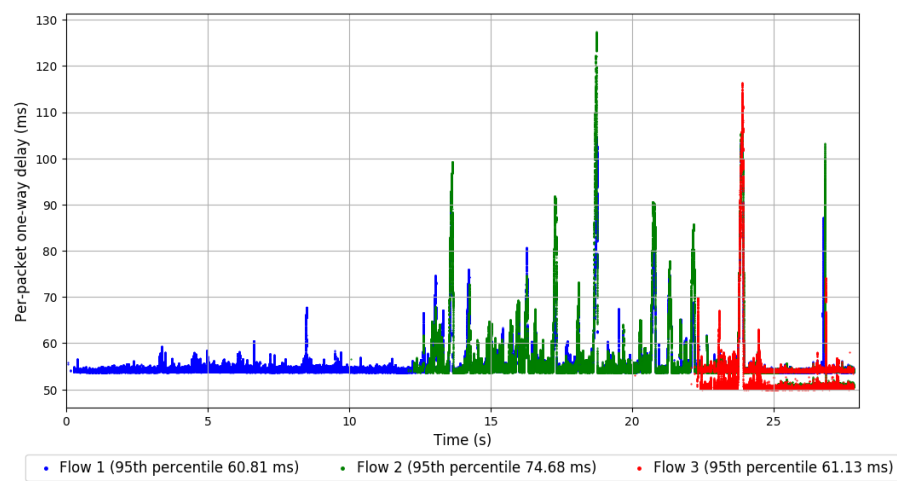
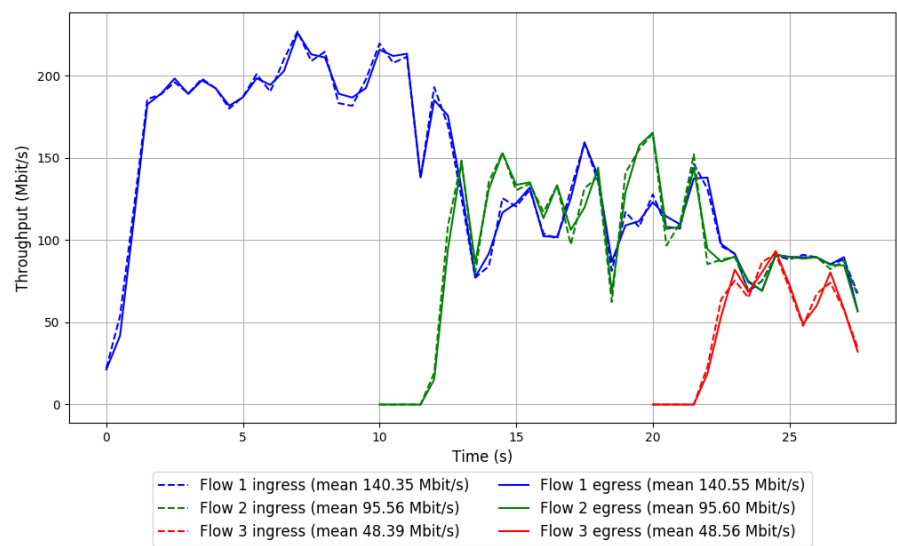
Average throughput: 48.56 Mbit/s

95th percentile per-packet one-way delay: 61.129 ms

Loss rate: 1.12%



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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-03 00:16:37

End at: 2018-01-03 00:17:07

# Below is generated by plot.py at 2018-01-03 04:13:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 153.31 Mbit/s

95th percentile per-packet one-way delay: 78.018 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 95.38 Mbit/s

95th percentile per-packet one-way delay: 74.986 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 63.01 Mbit/s

95th percentile per-packet one-way delay: 84.495 ms

Loss rate: 0.71%

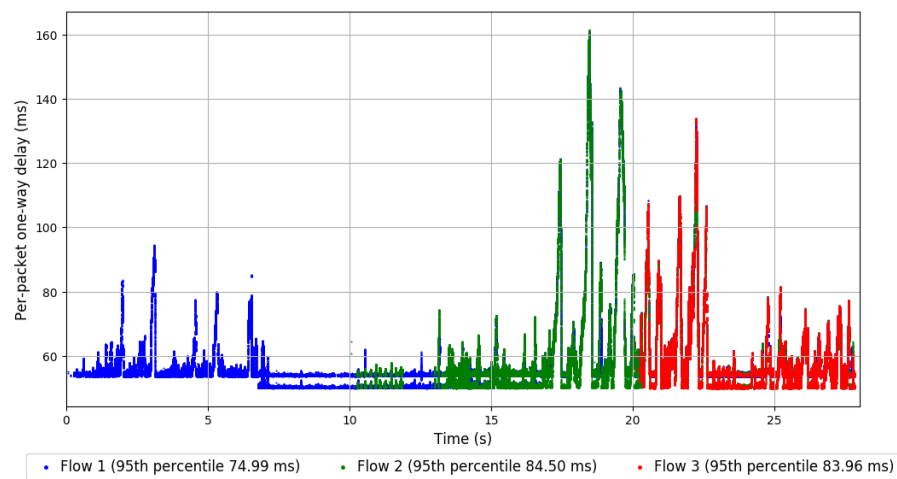
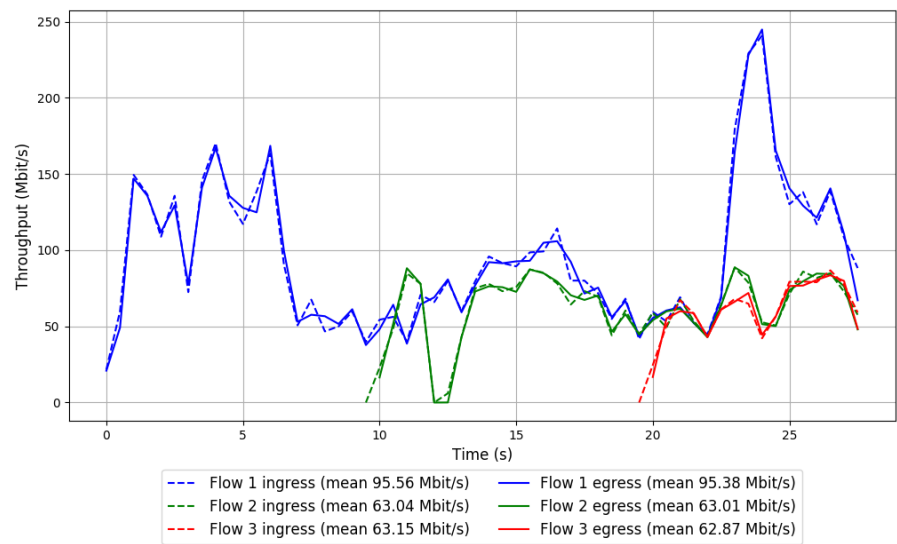
-- Flow 3:

Average throughput: 62.87 Mbit/s

95th percentile per-packet one-way delay: 83.964 ms

Loss rate: 1.85%

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

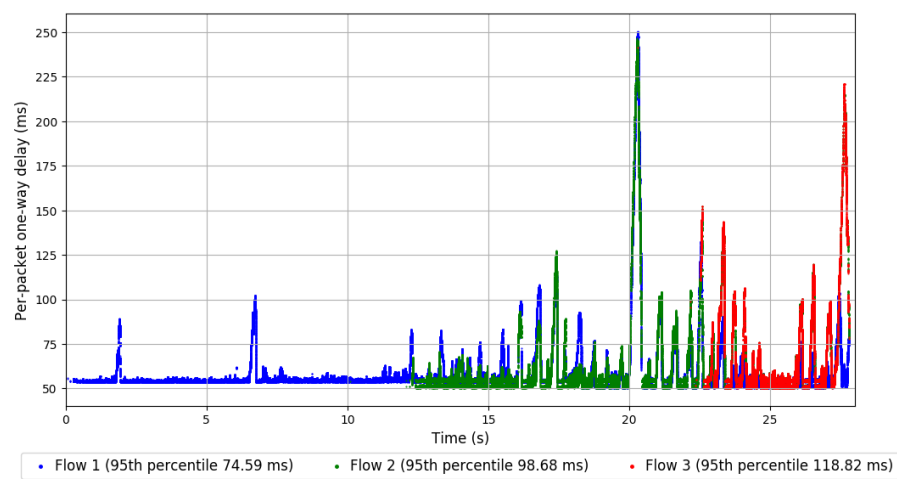
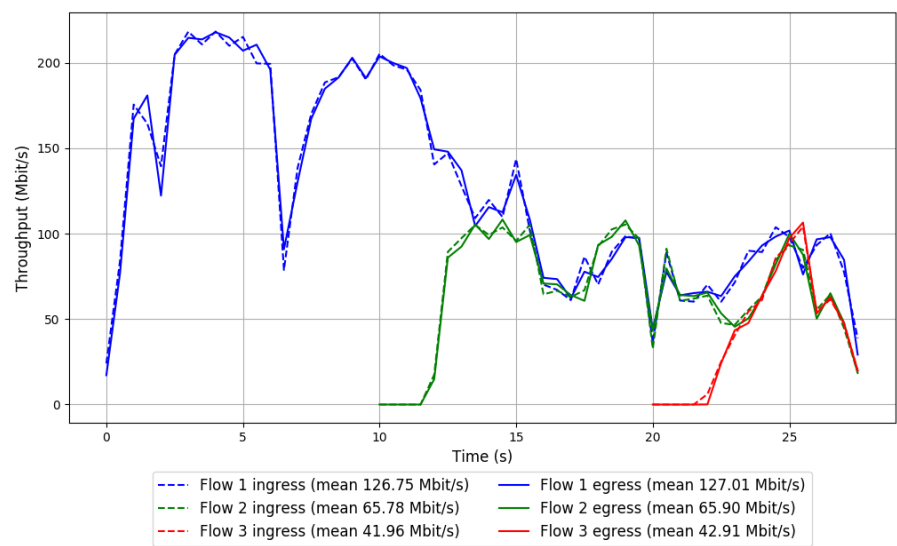


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-01-03 00:28:26
End at: 2018-01-03 00:28:56

# Below is generated by plot.py at 2018-01-03 04:13:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 180.70 Mbit/s
95th percentile per-packet one-way delay: 86.809 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 127.01 Mbit/s
95th percentile per-packet one-way delay: 74.588 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 65.90 Mbit/s
95th percentile per-packet one-way delay: 98.679 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 42.91 Mbit/s
95th percentile per-packet one-way delay: 118.821 ms
Loss rate: 1.61%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-03 00:40:34

End at: 2018-01-03 00:41:04

# Below is generated by plot.py at 2018-01-03 04:15:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 280.94 Mbit/s

95th percentile per-packet one-way delay: 54.209 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 248.19 Mbit/s

95th percentile per-packet one-way delay: 54.289 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 71.97 Mbit/s

95th percentile per-packet one-way delay: 54.113 ms

Loss rate: 0.00%

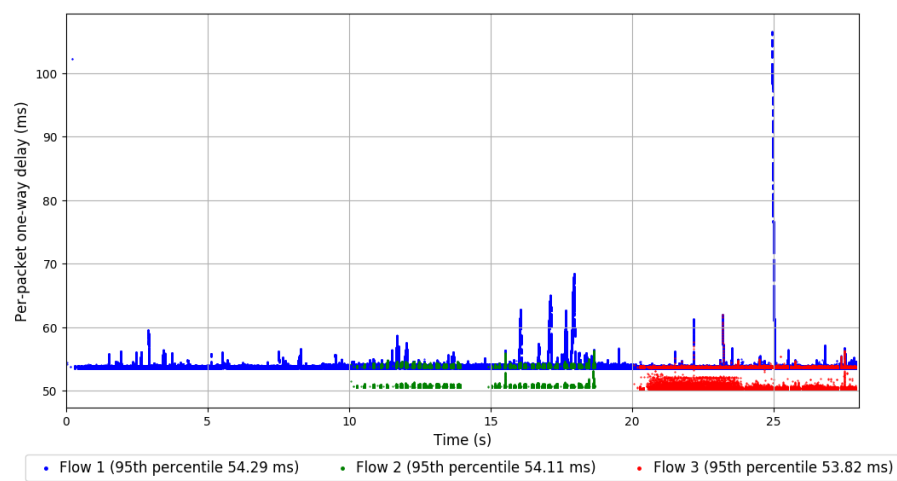
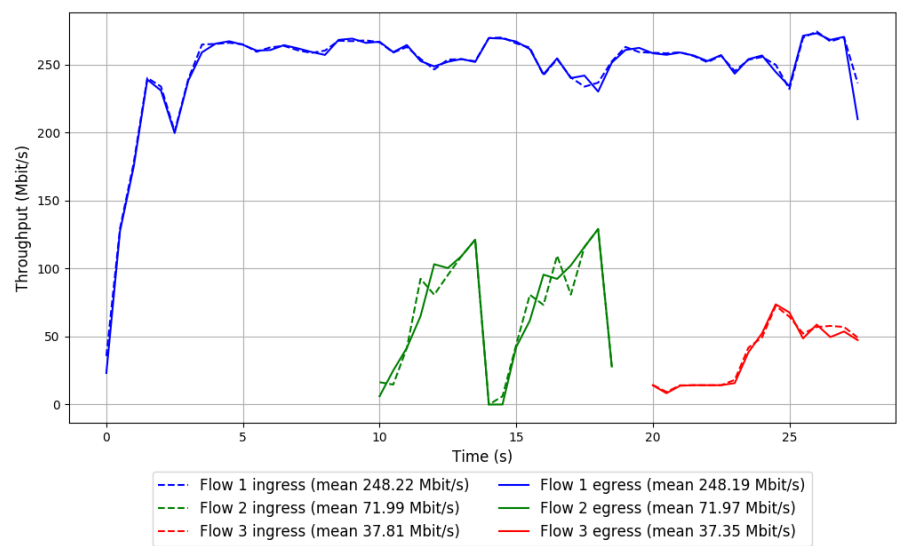
-- Flow 3:

Average throughput: 37.35 Mbit/s

95th percentile per-packet one-way delay: 53.822 ms

Loss rate: 2.54%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-01-03 00:54:07

End at: 2018-01-03 00:54:37

# Below is generated by plot.py at 2018-01-03 04:15:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 90.22 Mbit/s

95th percentile per-packet one-way delay: 53.810 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 14.01 Mbit/s

95th percentile per-packet one-way delay: 54.439 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 17.59 Mbit/s

95th percentile per-packet one-way delay: 53.789 ms

Loss rate: 0.47%

-- Flow 3:

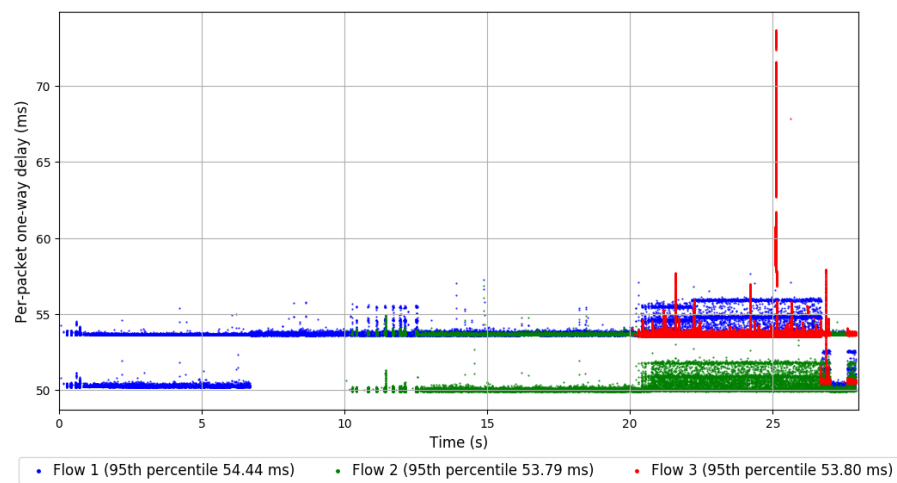
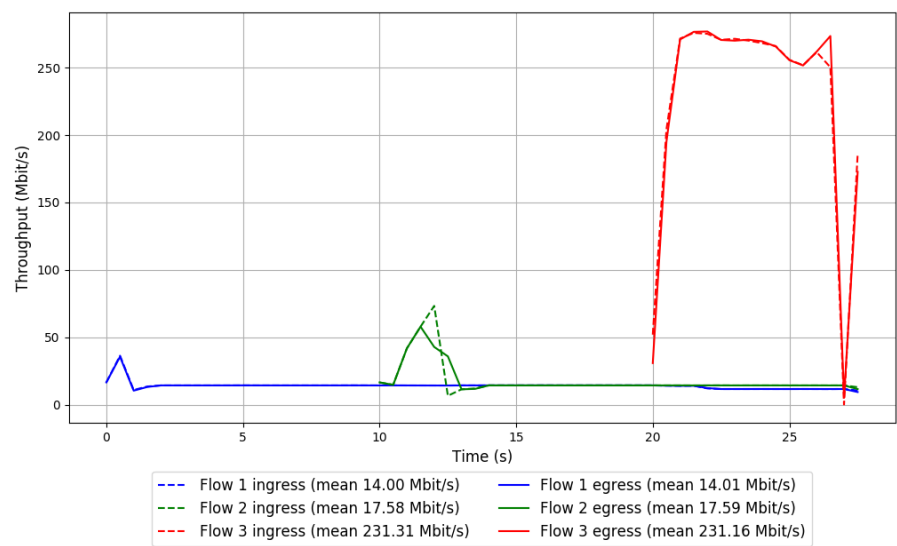
Average throughput: 231.16 Mbit/s

95th percentile per-packet one-way delay: 53.799 ms

Loss rate: 0.37%



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

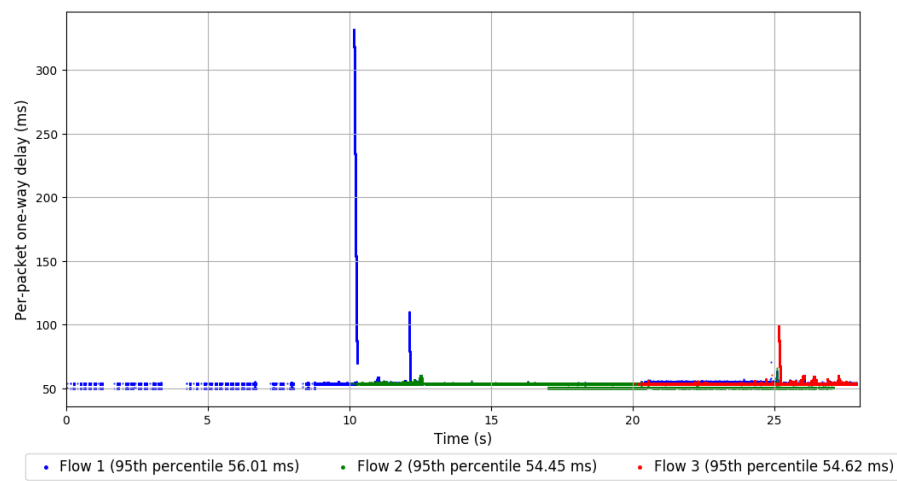
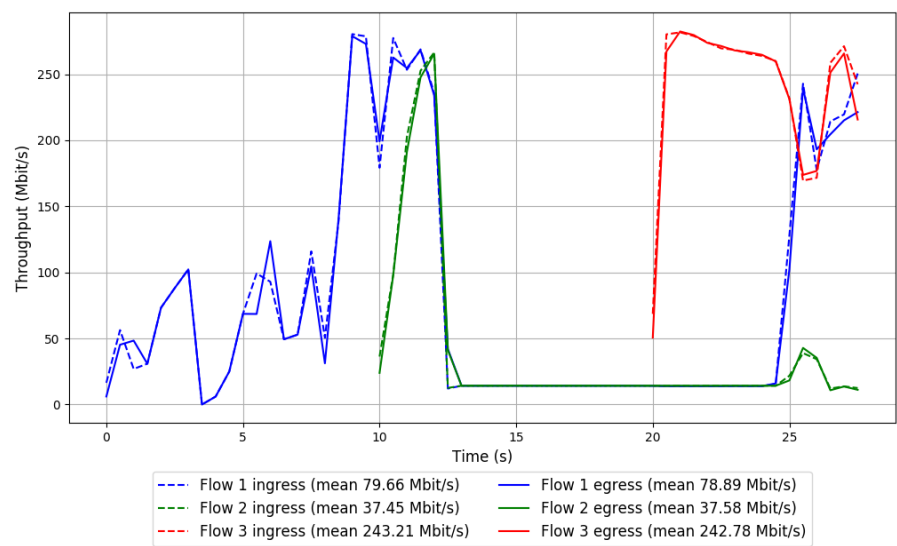


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-03 01:07:55
End at: 2018-01-03 01:08:25

# Below is generated by plot.py at 2018-01-03 04:15:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 171.16 Mbit/s
95th percentile per-packet one-way delay: 55.094 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 78.89 Mbit/s
95th percentile per-packet one-way delay: 56.007 ms
Loss rate: 1.33%
-- Flow 2:
Average throughput: 37.58 Mbit/s
95th percentile per-packet one-way delay: 54.451 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 242.78 Mbit/s
95th percentile per-packet one-way delay: 54.617 ms
Loss rate: 1.50%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-02 23:09:34

End at: 2018-01-02 23:10:04

# Below is generated by plot.py at 2018-01-03 04:15:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 23.43 Mbit/s

95th percentile per-packet one-way delay: 54.368 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 8.88 Mbit/s

95th percentile per-packet one-way delay: 54.292 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 17.58 Mbit/s

95th percentile per-packet one-way delay: 54.408 ms

Loss rate: 0.53%

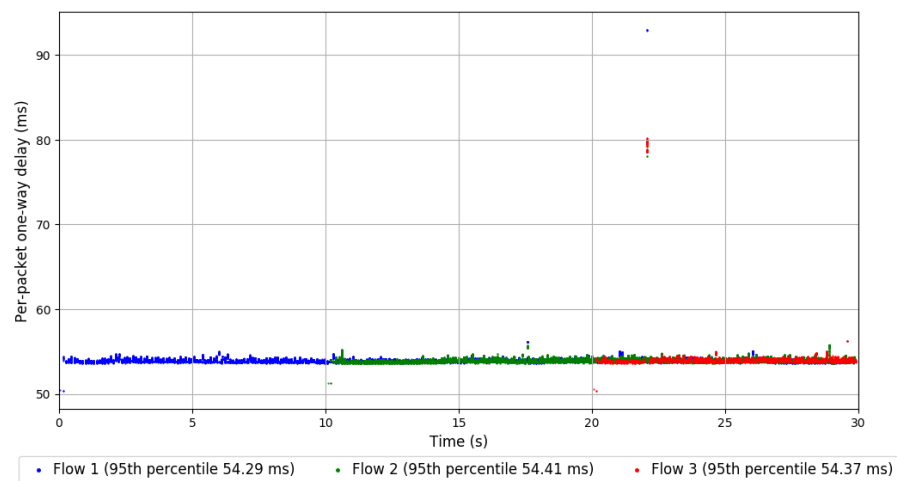
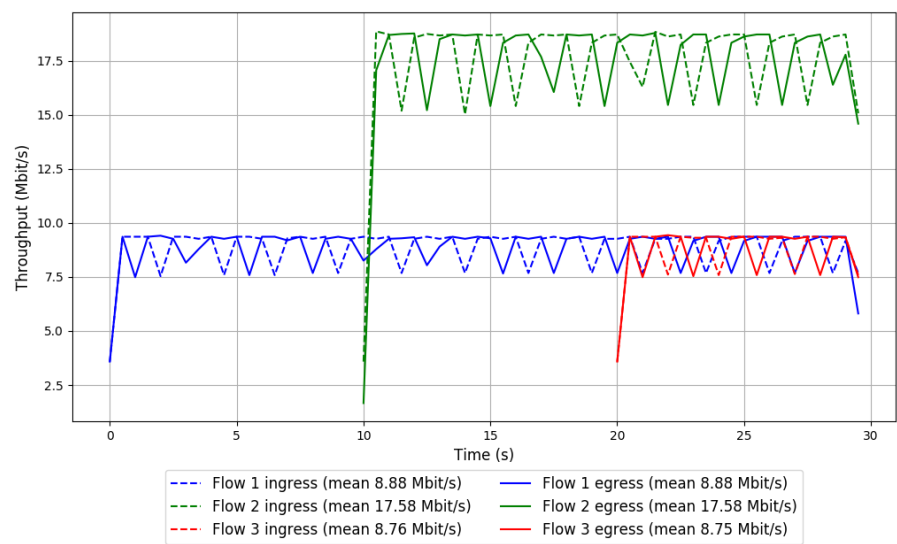
-- Flow 3:

Average throughput: 8.75 Mbit/s

95th percentile per-packet one-way delay: 54.373 ms

Loss rate: 1.08%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-02 23:23:35

End at: 2018-01-02 23:24:05

# Below is generated by plot.py at 2018-01-03 04:15:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 204.15 Mbit/s

95th percentile per-packet one-way delay: 57.113 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 85.67 Mbit/s

95th percentile per-packet one-way delay: 56.031 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 144.86 Mbit/s

95th percentile per-packet one-way delay: 56.810 ms

Loss rate: 0.60%

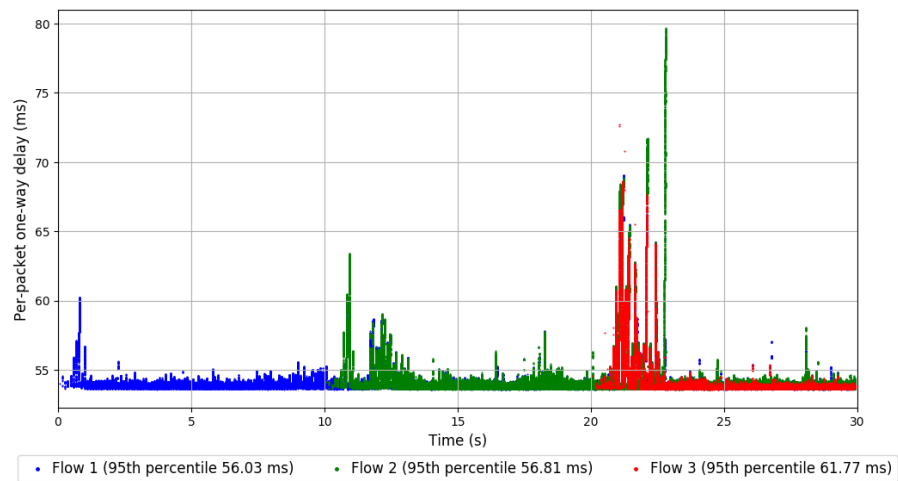
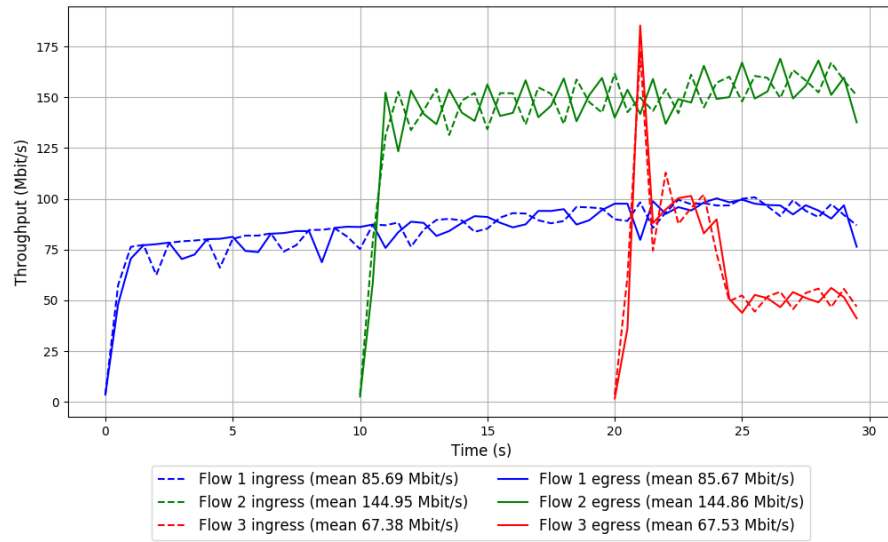
-- Flow 3:

Average throughput: 67.53 Mbit/s

95th percentile per-packet one-way delay: 61.767 ms

Loss rate: 0.87%

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



Run 3: Statistics of TCP Vegas

Start at: 2018-01-02 23:37:38

End at: 2018-01-02 23:38:08

# Below is generated by plot.py at 2018-01-03 04:15:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 94.00 Mbit/s

95th percentile per-packet one-way delay: 60.943 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 56.96 Mbit/s

95th percentile per-packet one-way delay: 58.858 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 60.713 ms

Loss rate: 0.49%

-- Flow 3:

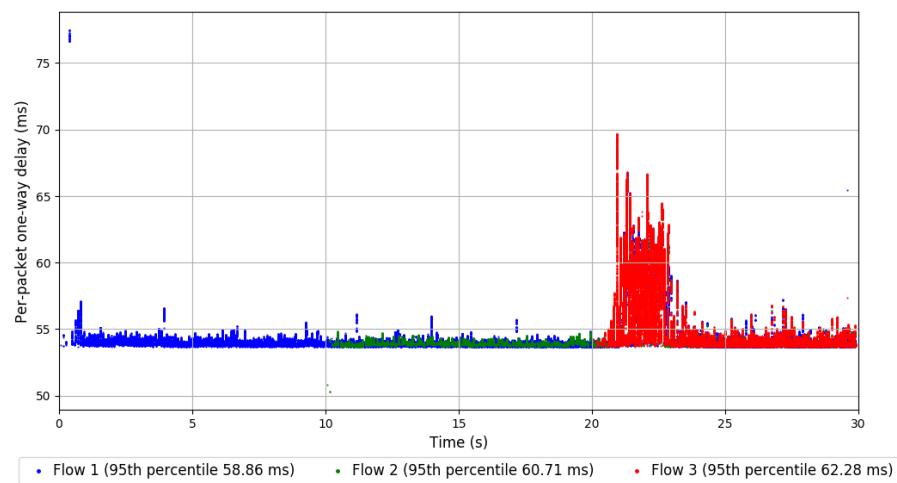
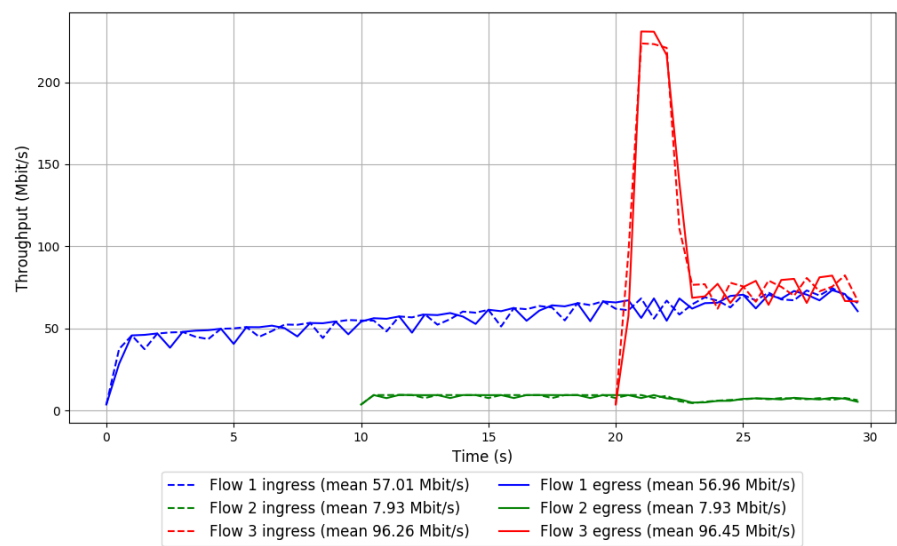
Average throughput: 96.45 Mbit/s

95th percentile per-packet one-way delay: 62.278 ms

Loss rate: 0.88%



Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-02 23:50:39

End at: 2018-01-02 23:51:09

# Below is generated by plot.py at 2018-01-03 04:15:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 21.65 Mbit/s

95th percentile per-packet one-way delay: 55.207 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 10.50 Mbit/s

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

Loss rate: 0.37%

-- Flow 2:

Average throughput: 14.31 Mbit/s

95th percentile per-packet one-way delay: 55.431 ms

Loss rate: 0.59%

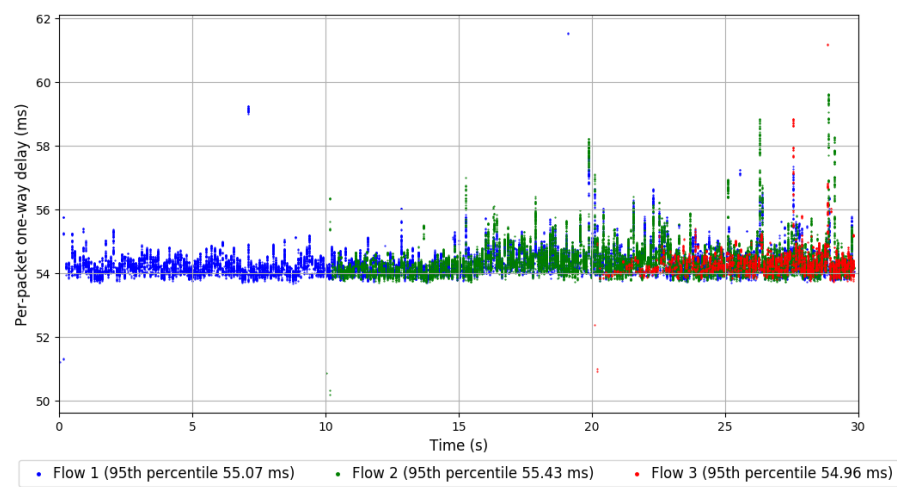
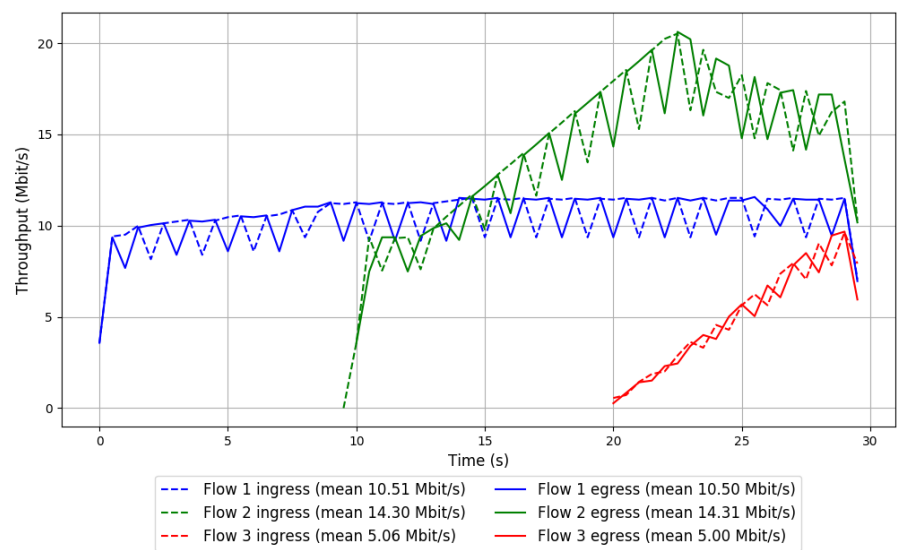
-- Flow 3:

Average throughput: 5.00 Mbit/s

95th percentile per-packet one-way delay: 54.959 ms

Loss rate: 2.19%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-03 00:02:43

End at: 2018-01-03 00:03:13

# Below is generated by plot.py at 2018-01-03 04:15:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 49.65 Mbit/s

95th percentile per-packet one-way delay: 54.975 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 7.55 Mbit/s

95th percentile per-packet one-way delay: 54.840 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 61.53 Mbit/s

95th percentile per-packet one-way delay: 54.997 ms

Loss rate: 0.97%

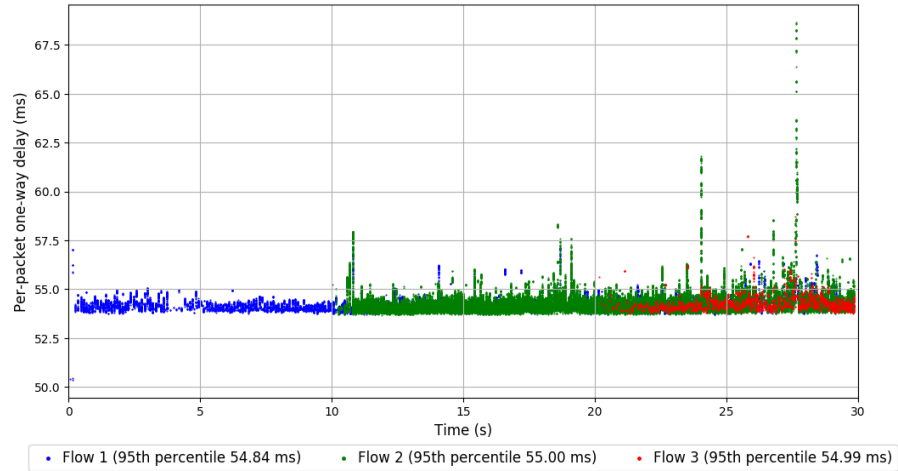
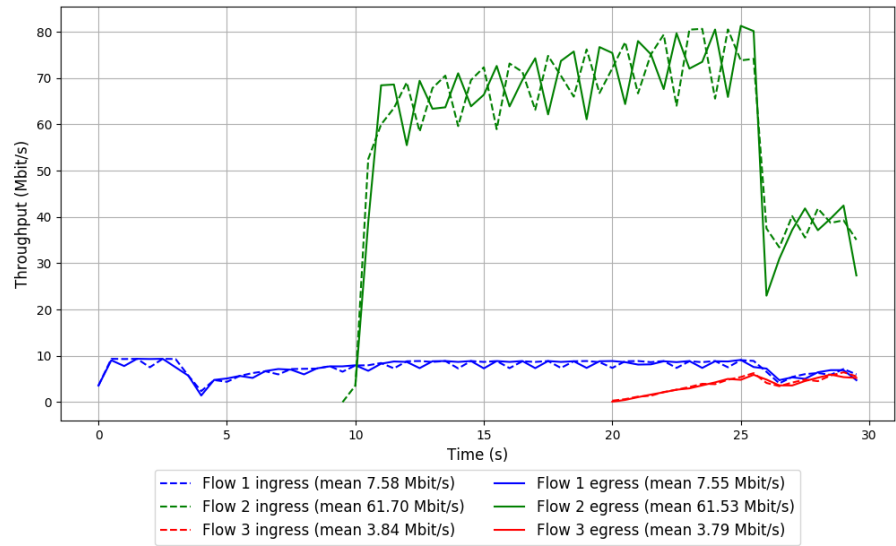
-- Flow 3:

Average throughput: 3.79 Mbit/s

95th percentile per-packet one-way delay: 54.989 ms

Loss rate: 2.46%

# Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-03 00:15:02

End at: 2018-01-03 00:15:32

# Below is generated by plot.py at 2018-01-03 04:15:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 62.80 Mbit/s

95th percentile per-packet one-way delay: 56.173 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 17.55 Mbit/s

95th percentile per-packet one-way delay: 55.624 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 65.73 Mbit/s

95th percentile per-packet one-way delay: 56.457 ms

Loss rate: 0.53%

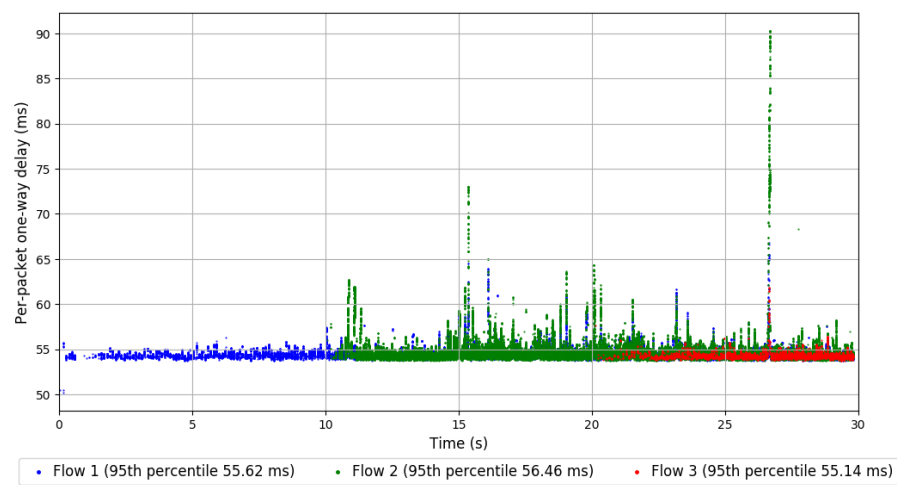
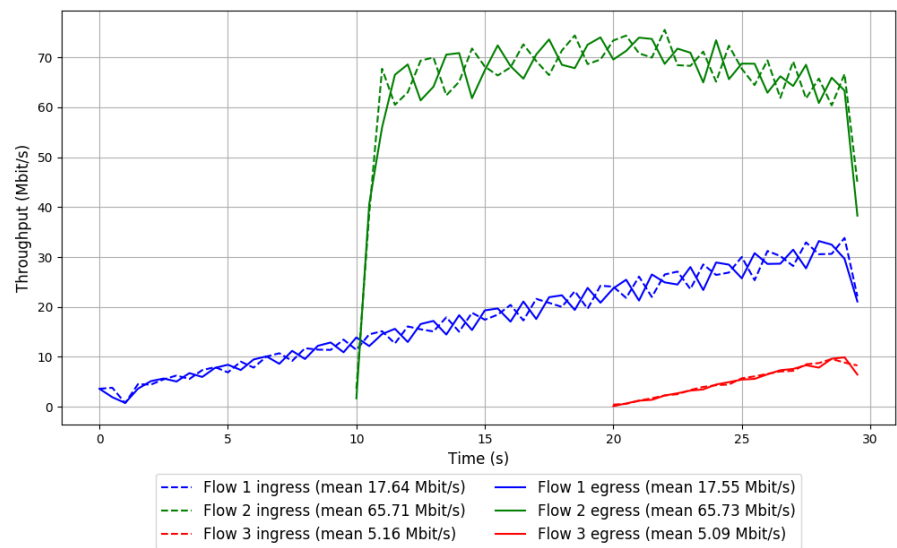
-- Flow 3:

Average throughput: 5.09 Mbit/s

95th percentile per-packet one-way delay: 55.137 ms

Loss rate: 2.40%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-03 00:26:52

End at: 2018-01-03 00:27:22

# Below is generated by plot.py at 2018-01-03 04:15:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 116.93 Mbit/s

95th percentile per-packet one-way delay: 56.668 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 69.89 Mbit/s

95th percentile per-packet one-way delay: 57.473 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 68.61 Mbit/s

95th percentile per-packet one-way delay: 56.068 ms

Loss rate: 0.63%

-- Flow 3:

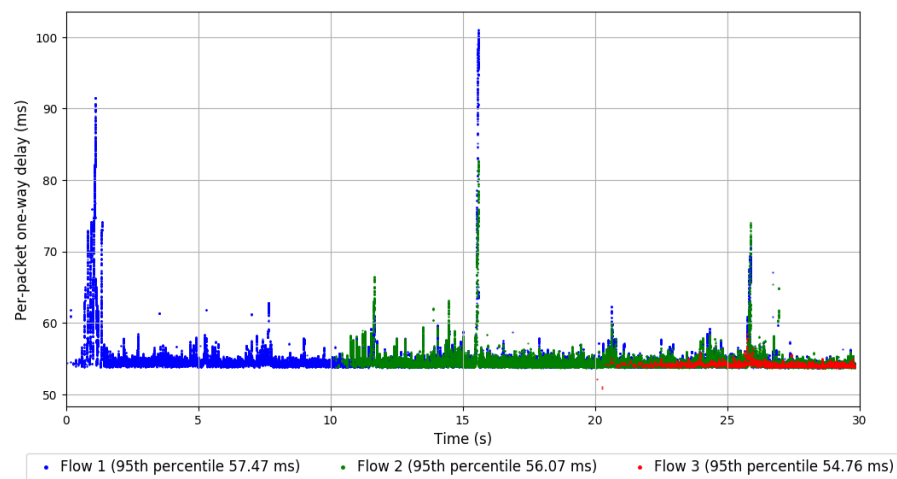
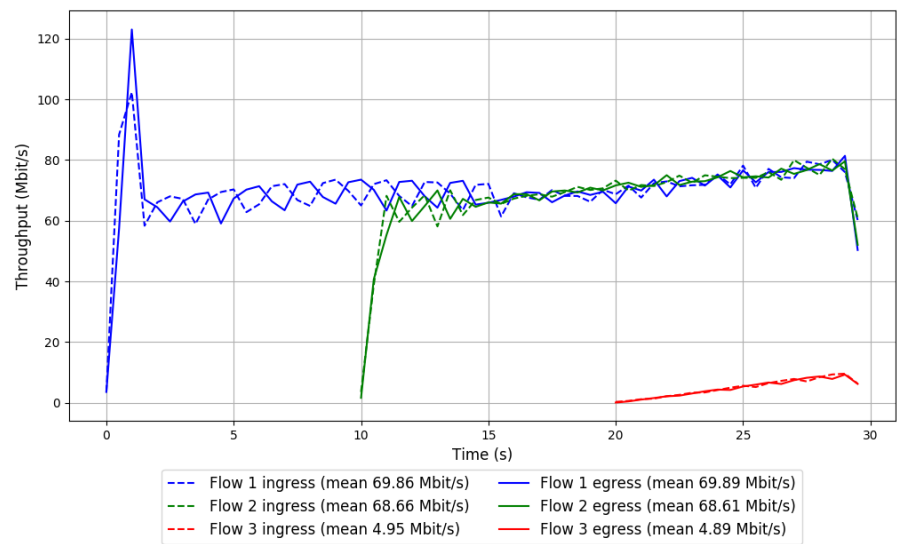
Average throughput: 4.89 Mbit/s

95th percentile per-packet one-way delay: 54.757 ms

Loss rate: 2.24%



Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-03 00:38:58

End at: 2018-01-03 00:39:28

# Below is generated by plot.py at 2018-01-03 04:15:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 63.55 Mbit/s

95th percentile per-packet one-way delay: 55.218 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 8.75 Mbit/s

95th percentile per-packet one-way delay: 54.610 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 78.21 Mbit/s

95th percentile per-packet one-way delay: 55.313 ms

Loss rate: 0.39%

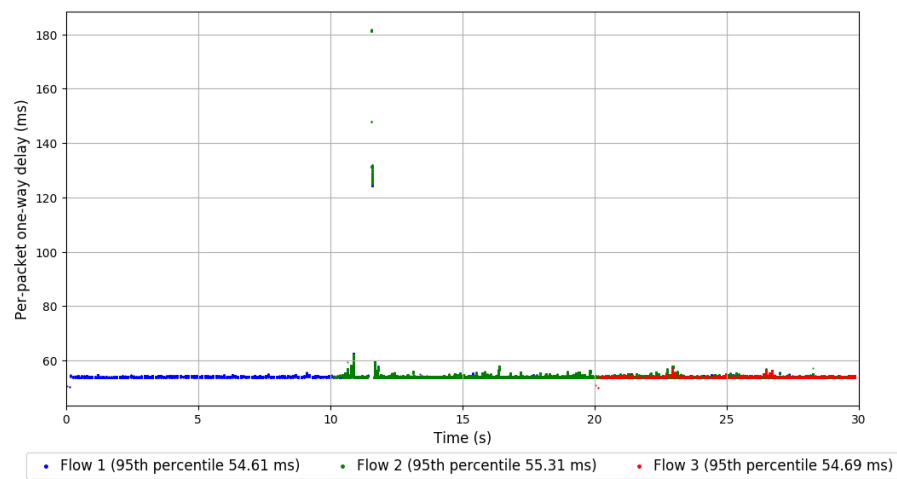
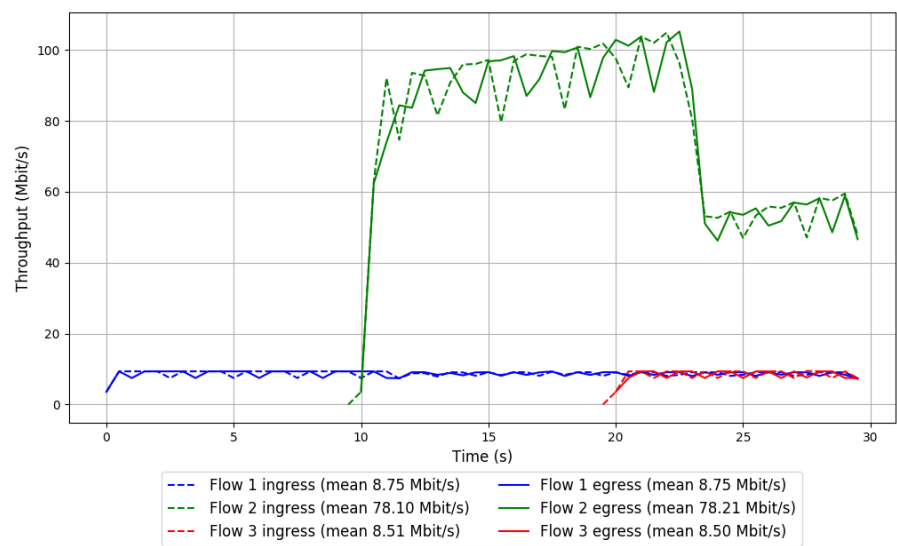
-- Flow 3:

Average throughput: 8.50 Mbit/s

95th percentile per-packet one-way delay: 54.686 ms

Loss rate: 1.11%

Run 8: Report of TCP Vegas — Data Link

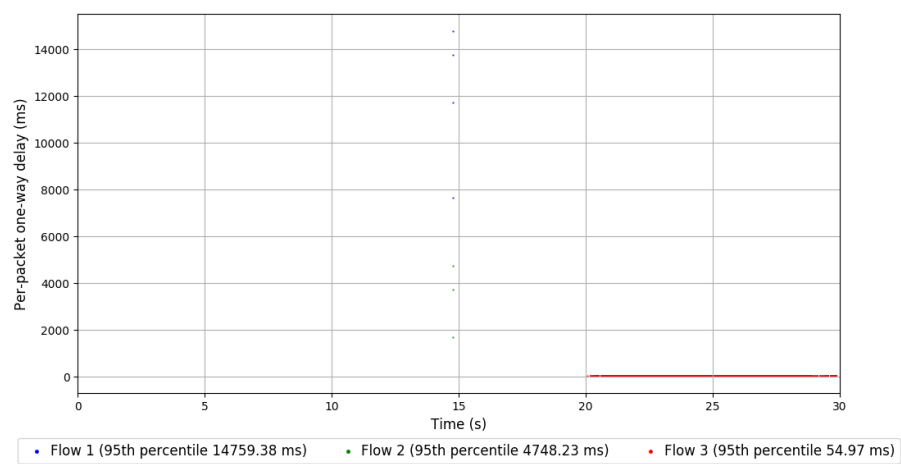
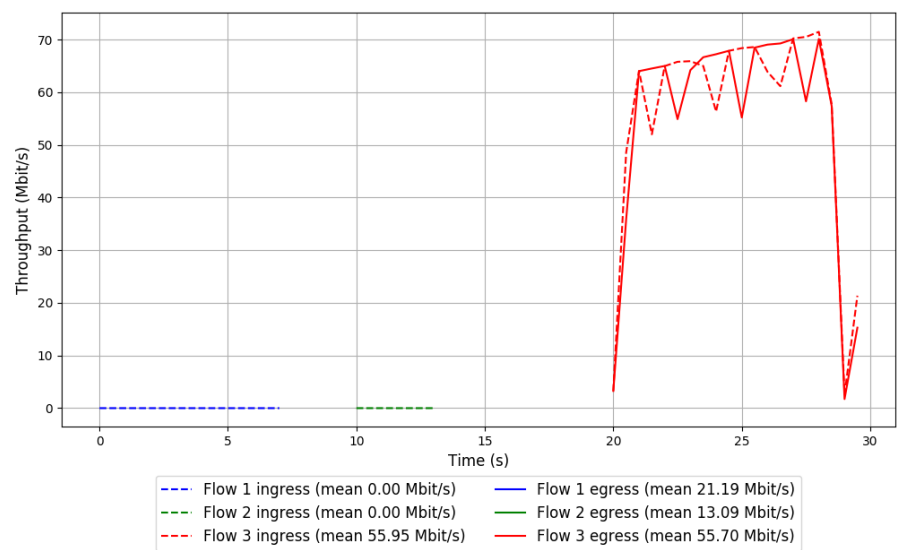


Run 9: Statistics of TCP Vegas

Start at: 2018-01-03 00:52:35

End at: 2018-01-03 00:53:05

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-03 01:06:20

End at: 2018-01-03 01:06:50

# Below is generated by plot.py at 2018-01-03 04:15:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 93.46 Mbit/s

95th percentile per-packet one-way delay: 60.138 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 84.78 Mbit/s

95th percentile per-packet one-way delay: 60.242 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 8.88 Mbit/s

95th percentile per-packet one-way delay: 54.332 ms

Loss rate: 0.53%

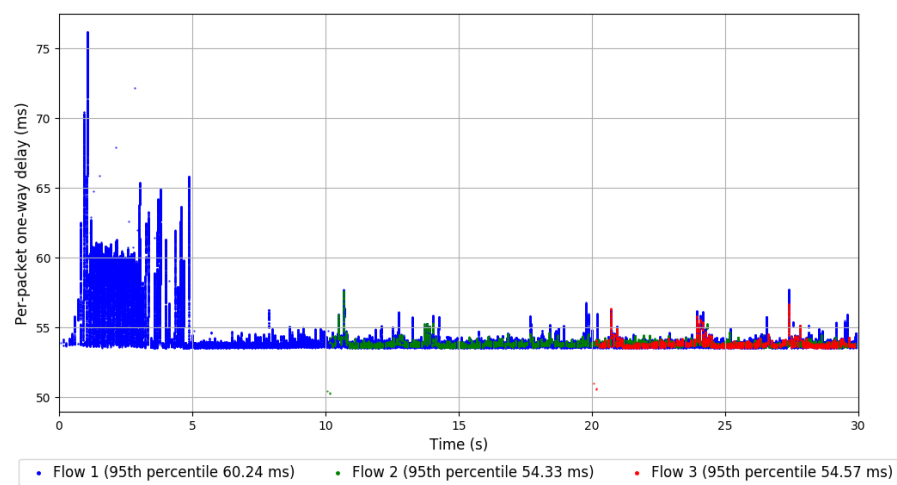
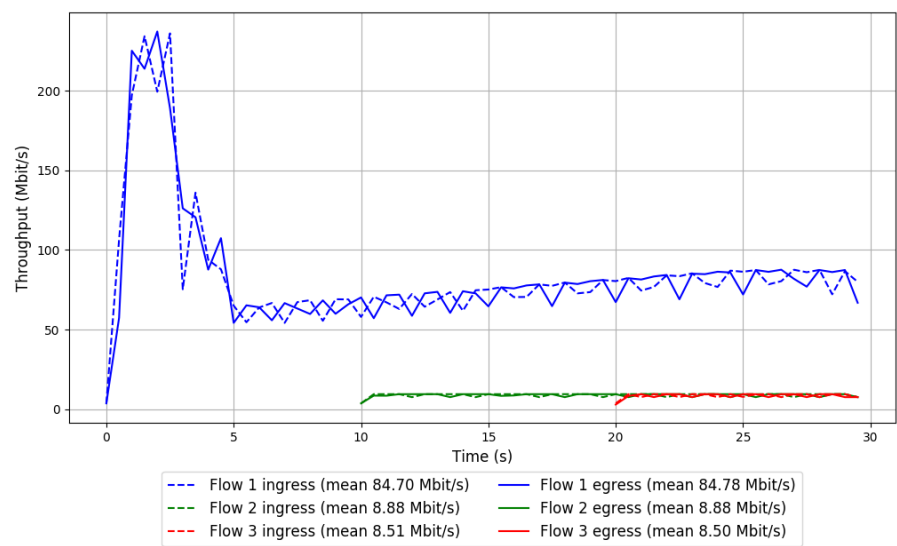
-- Flow 3:

Average throughput: 8.50 Mbit/s

95th percentile per-packet one-way delay: 54.567 ms

Loss rate: 1.11%

Run 10: Report of TCP Vegas — Data Link



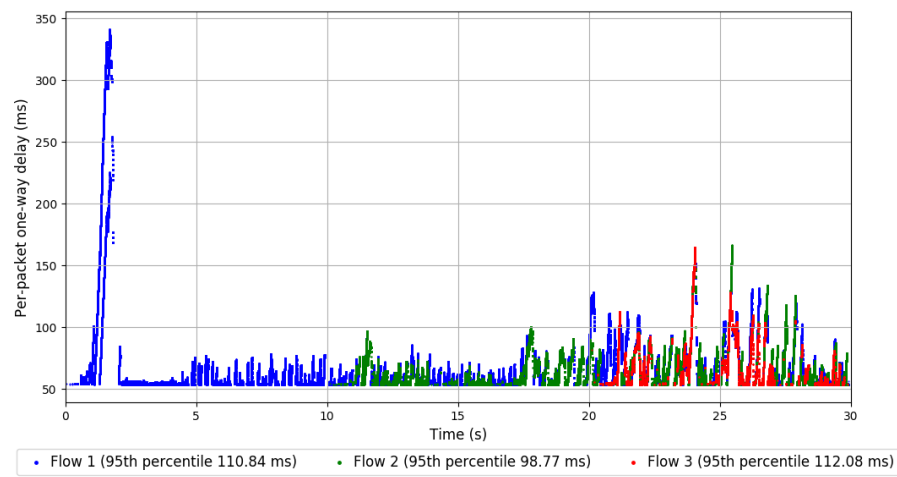
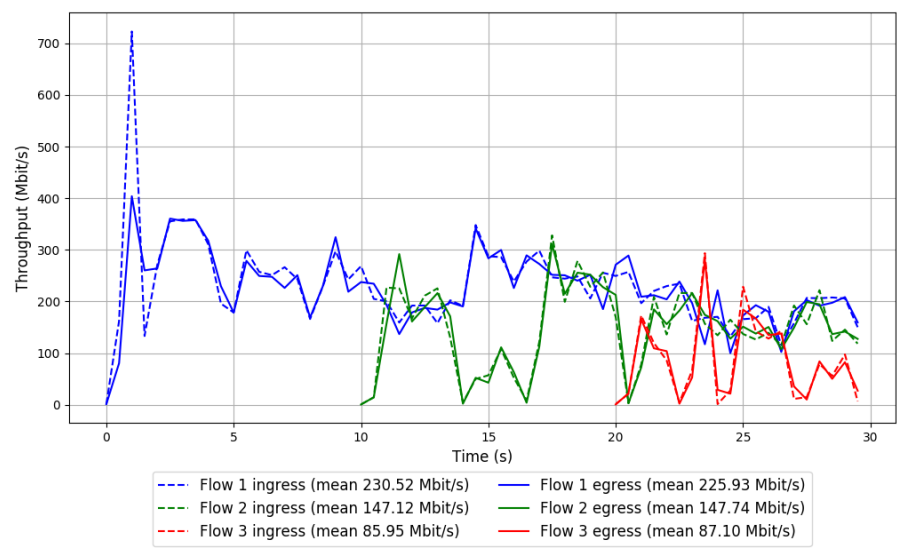
```
Run 1: Statistics of Verus

Start at: 2018-01-02 23:06:44
End at: 2018-01-02 23:07:14

# Below is generated by plot.py at 2018-01-03 04:18:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 352.21 Mbit/s
95th percentile per-packet one-way delay: 107.898 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 225.93 Mbit/s
95th percentile per-packet one-way delay: 110.838 ms
Loss rate: 2.29%
-- Flow 2:
Average throughput: 147.74 Mbit/s
95th percentile per-packet one-way delay: 98.765 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 87.10 Mbit/s
95th percentile per-packet one-way delay: 112.078 ms
Loss rate: 0.01%
```



Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-02 23:20:39

End at: 2018-01-02 23:21:09

# Below is generated by plot.py at 2018-01-03 04:19:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 360.94 Mbit/s

95th percentile per-packet one-way delay: 156.976 ms

Loss rate: 2.31%

-- Flow 1:

Average throughput: 234.45 Mbit/s

95th percentile per-packet one-way delay: 121.934 ms

Loss rate: 1.22%

-- Flow 2:

Average throughput: 151.61 Mbit/s

95th percentile per-packet one-way delay: 254.316 ms

Loss rate: 4.76%

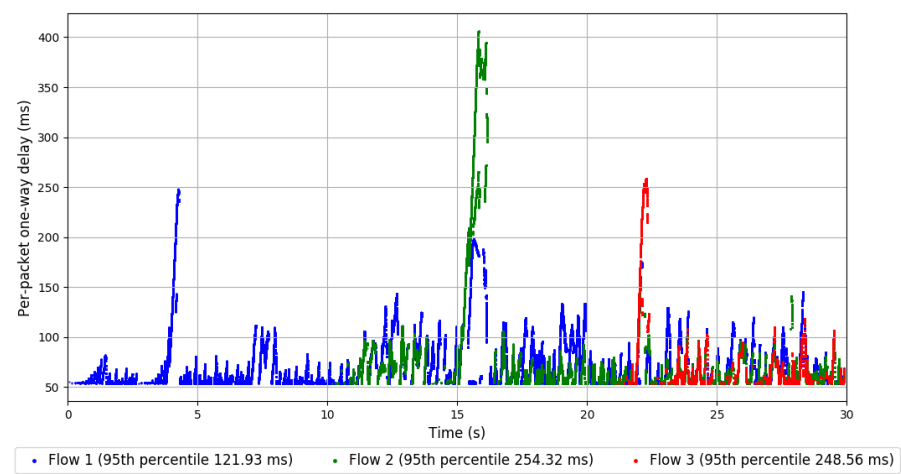
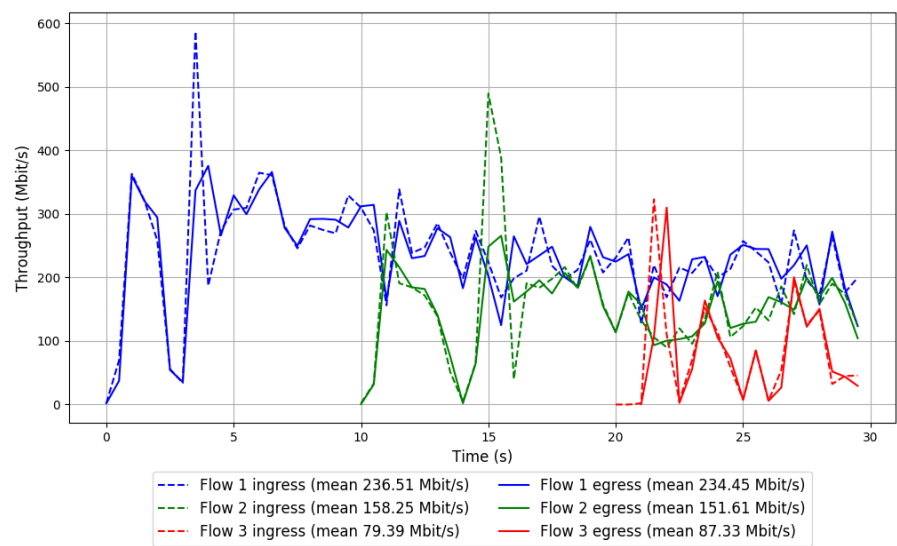
-- Flow 3:

Average throughput: 87.33 Mbit/s

95th percentile per-packet one-way delay: 248.565 ms

Loss rate: 2.21%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-02 23:34:40

End at: 2018-01-02 23:35:10

# Below is generated by plot.py at 2018-01-03 04:19:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 364.70 Mbit/s

95th percentile per-packet one-way delay: 111.595 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 243.99 Mbit/s

95th percentile per-packet one-way delay: 114.043 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 137.74 Mbit/s

95th percentile per-packet one-way delay: 109.682 ms

Loss rate: 0.82%

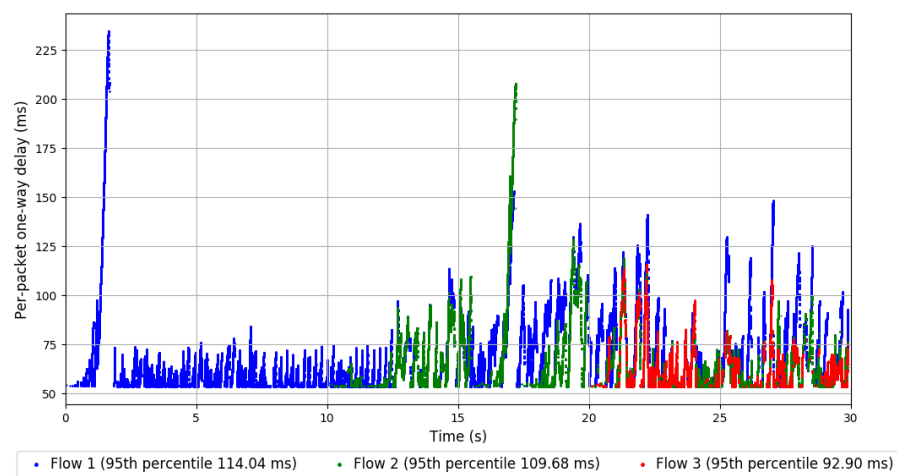
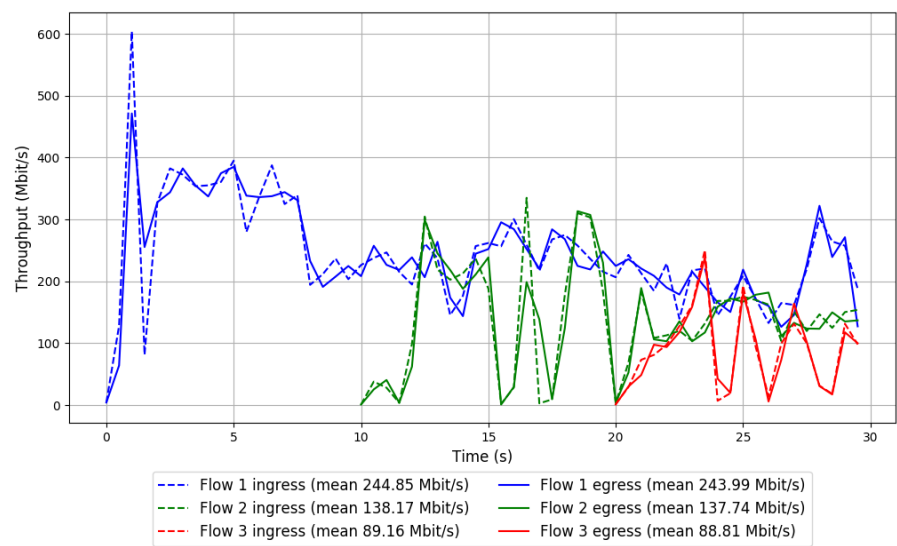
-- Flow 3:

Average throughput: 88.81 Mbit/s

95th percentile per-packet one-way delay: 92.900 ms

Loss rate: 0.78%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-02 23:48:45

End at: 2018-01-02 23:49:15

# Below is generated by plot.py at 2018-01-03 04:19:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 237.23 Mbit/s

95th percentile per-packet one-way delay: 129.380 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 115.53 Mbit/s

95th percentile per-packet one-way delay: 100.047 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 140.39 Mbit/s

95th percentile per-packet one-way delay: 147.688 ms

Loss rate: 1.36%

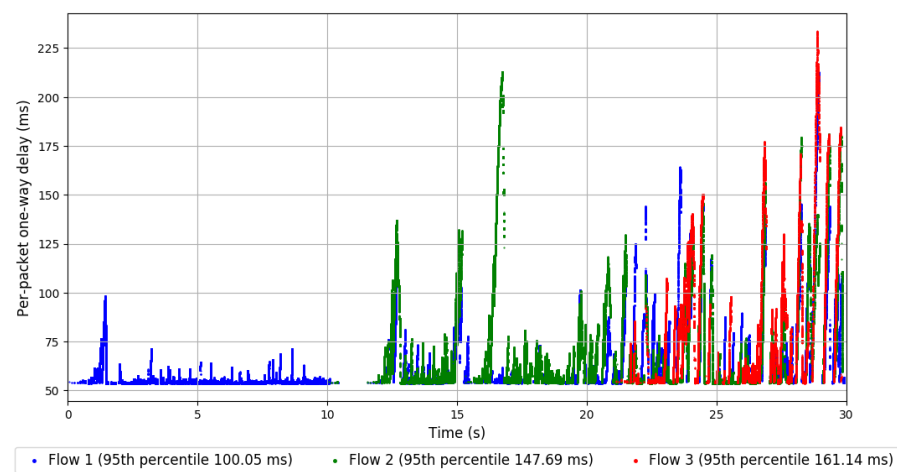
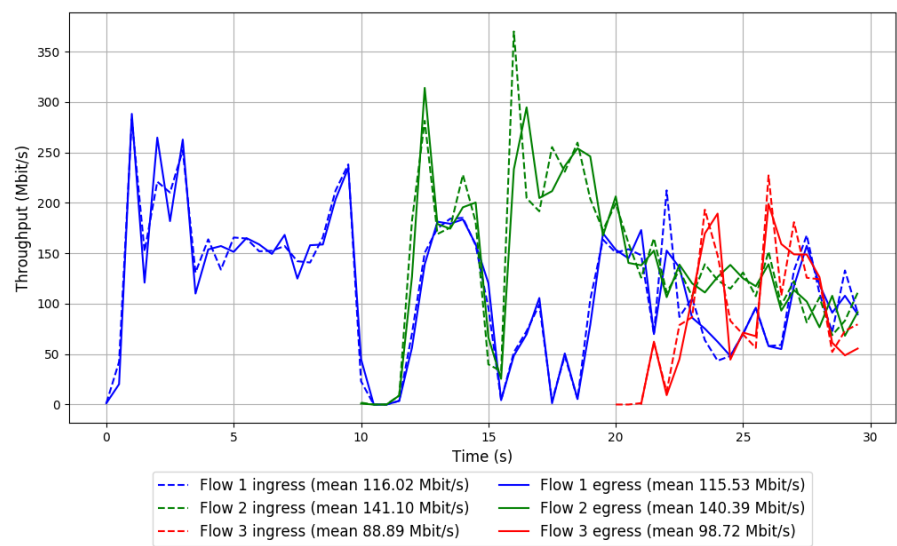
-- Flow 3:

Average throughput: 98.72 Mbit/s

95th percentile per-packet one-way delay: 161.143 ms

Loss rate: 2.74%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-03 00:00:52

End at: 2018-01-03 00:01:22

# Below is generated by plot.py at 2018-01-03 04:19:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 263.36 Mbit/s

95th percentile per-packet one-way delay: 122.781 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 139.86 Mbit/s

95th percentile per-packet one-way delay: 115.324 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 132.97 Mbit/s

95th percentile per-packet one-way delay: 130.885 ms

Loss rate: 0.33%

-- Flow 3:

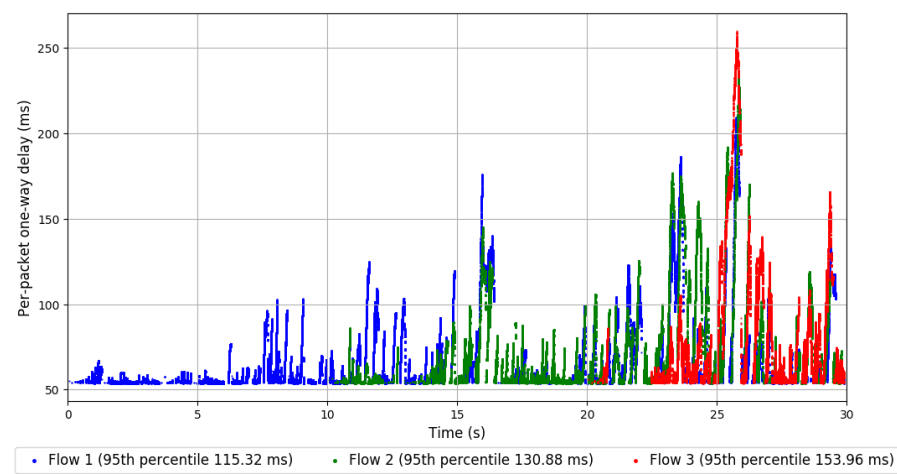
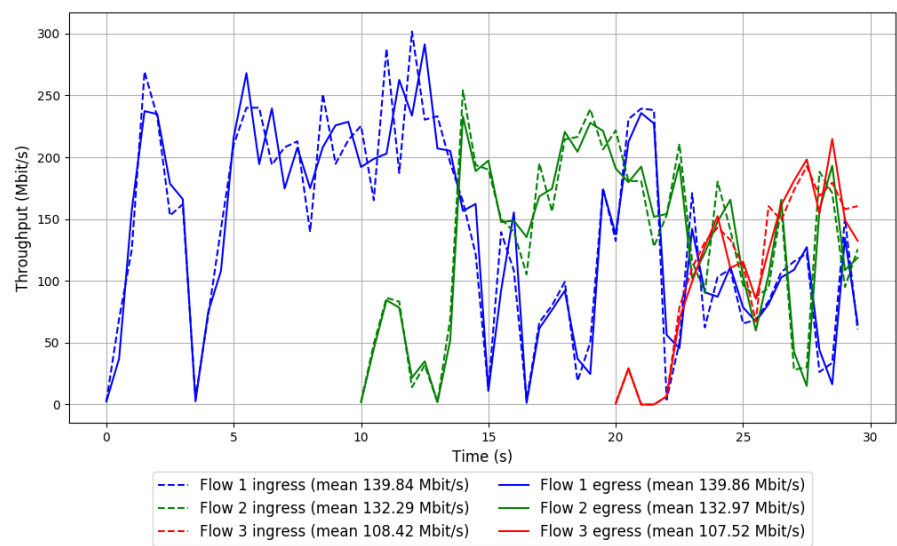
Average throughput: 107.52 Mbit/s

95th percentile per-packet one-way delay: 153.957 ms

Loss rate: 1.94%



Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-03 00:13:07

End at: 2018-01-03 00:13:37

# Below is generated by plot.py at 2018-01-03 04:19:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 310.56 Mbit/s

95th percentile per-packet one-way delay: 130.203 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 185.67 Mbit/s

95th percentile per-packet one-way delay: 142.304 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 144.01 Mbit/s

95th percentile per-packet one-way delay: 105.287 ms

Loss rate: 0.34%

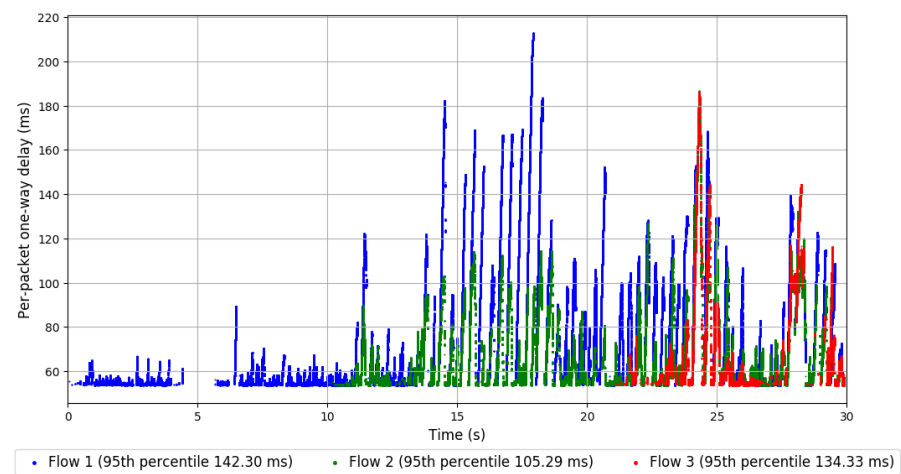
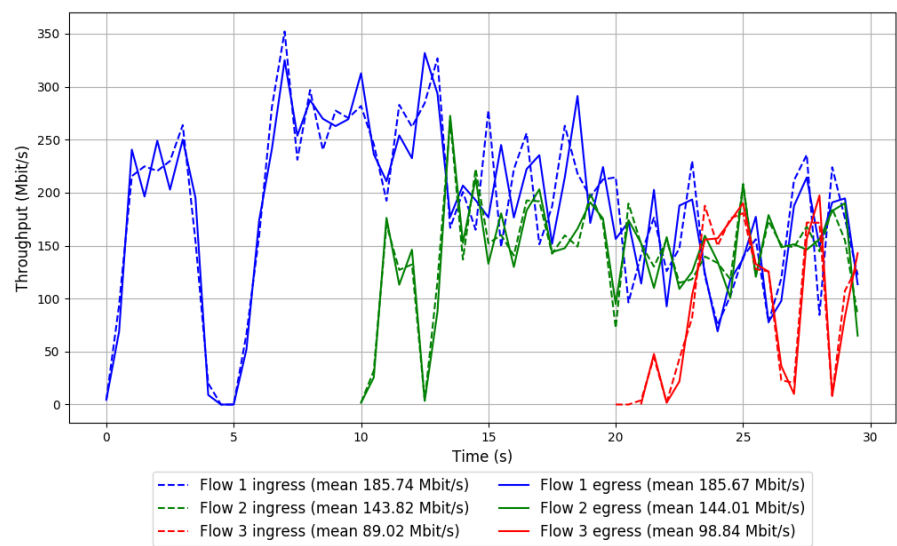
-- Flow 3:

Average throughput: 98.84 Mbit/s

95th percentile per-packet one-way delay: 134.327 ms

Loss rate: 0.69%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-03 00:25:10

End at: 2018-01-03 00:25:40

# Below is generated by plot.py at 2018-01-03 04:19:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 225.67 Mbit/s

95th percentile per-packet one-way delay: 145.426 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 151.15 Mbit/s

95th percentile per-packet one-way delay: 140.465 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 89.48 Mbit/s

95th percentile per-packet one-way delay: 149.102 ms

Loss rate: 1.16%

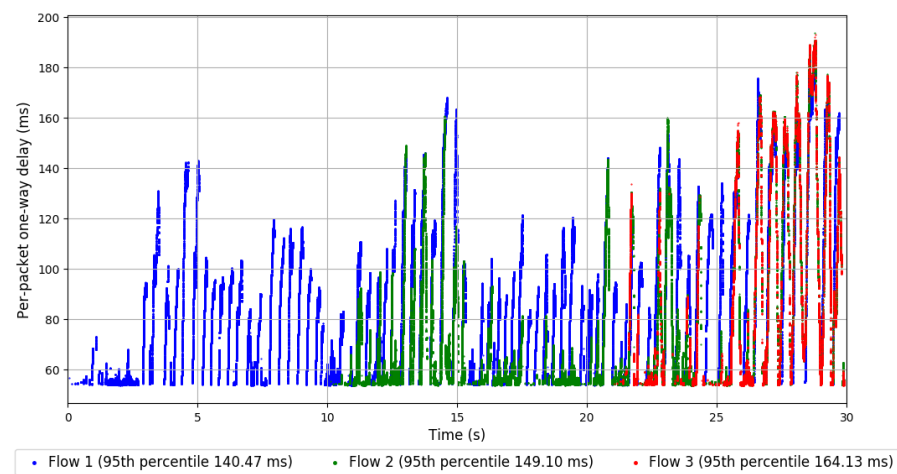
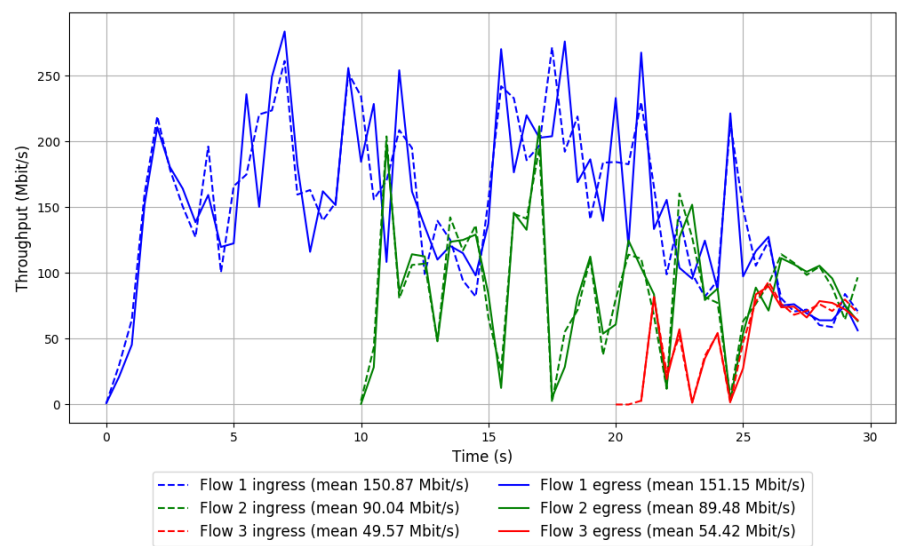
-- Flow 3:

Average throughput: 54.42 Mbit/s

95th percentile per-packet one-way delay: 164.131 ms

Loss rate: 2.41%

Run 7: Report of Verus — Data Link

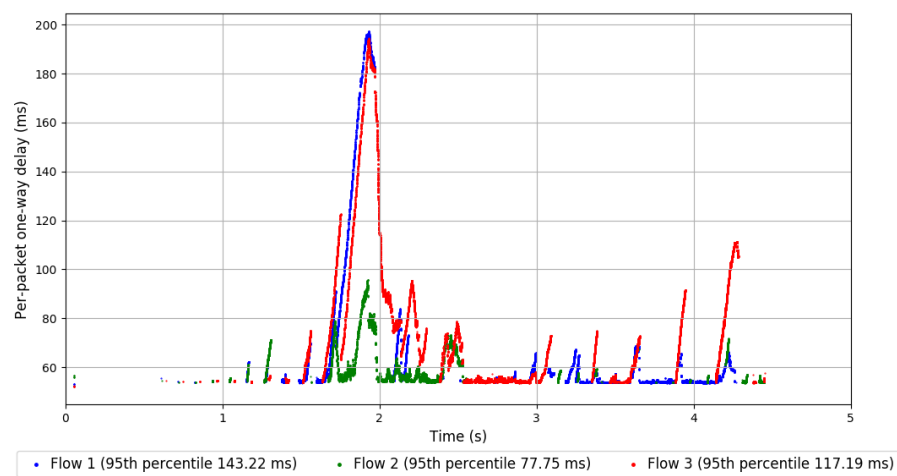
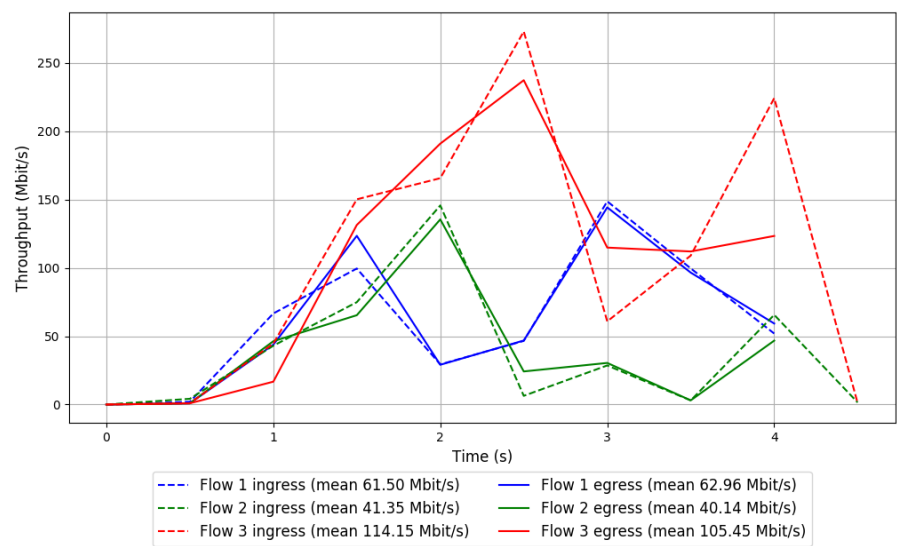


Run 8: Statistics of Verus

Start at: 2018-01-03 00:37:02

End at: 2018-01-03 00:37:32

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-03 00:49:57

End at: 2018-01-03 00:50:27

# Below is generated by plot.py at 2018-01-03 04:22:28

# Datalink statistics

-- Total of 3 flows:

Average throughput: 336.14 Mbit/s

95th percentile per-packet one-way delay: 120.658 ms

Loss rate: 2.96%

-- Flow 1:

Average throughput: 209.38 Mbit/s

95th percentile per-packet one-way delay: 132.841 ms

Loss rate: 4.37%

-- Flow 2:

Average throughput: 152.65 Mbit/s

95th percentile per-packet one-way delay: 117.640 ms

Loss rate: 0.65%

-- Flow 3:

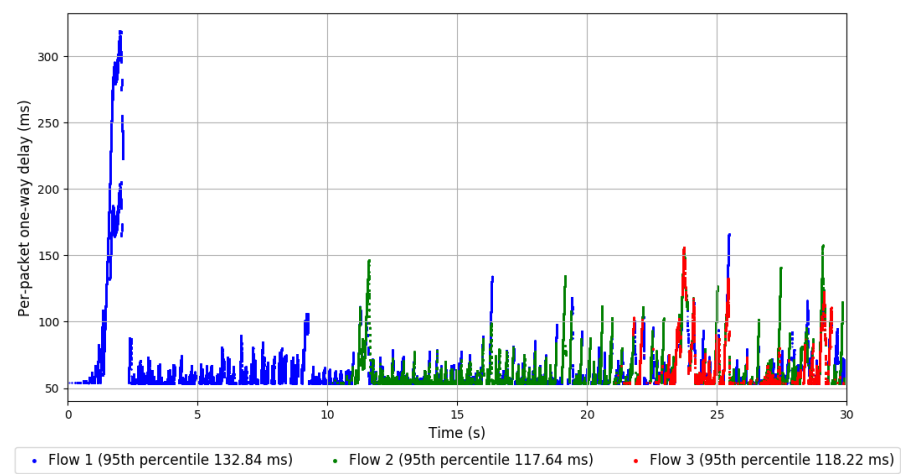
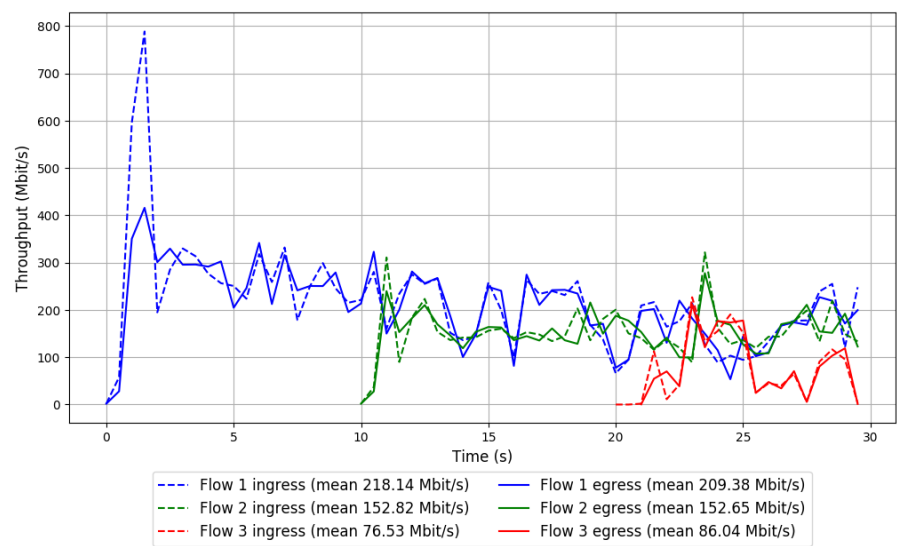
Average throughput: 86.04 Mbit/s

95th percentile per-packet one-way delay: 118.225 ms

Loss rate: 0.13%



Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-03 01:03:24

End at: 2018-01-03 01:03:54

# Below is generated by plot.py at 2018-01-03 04:23:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 351.82 Mbit/s

95th percentile per-packet one-way delay: 141.449 ms

Loss rate: 1.65%

-- Flow 1:

Average throughput: 201.56 Mbit/s

95th percentile per-packet one-way delay: 137.584 ms

Loss rate: 1.76%

-- Flow 2:

Average throughput: 171.53 Mbit/s

95th percentile per-packet one-way delay: 183.356 ms

Loss rate: 1.47%

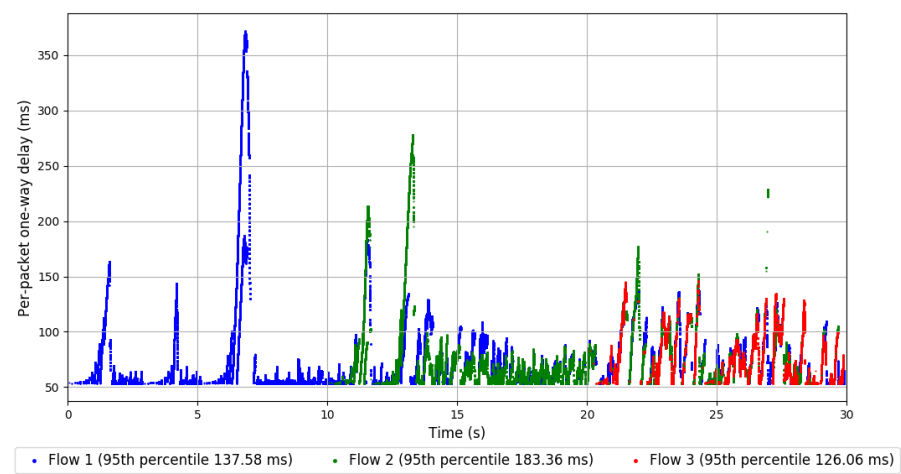
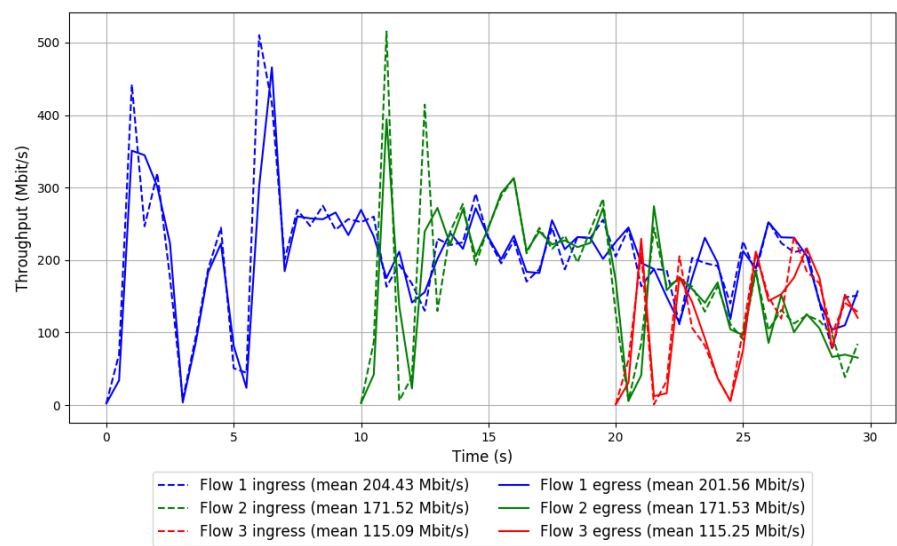
-- Flow 3:

Average throughput: 115.25 Mbit/s

95th percentile per-packet one-way delay: 126.063 ms

Loss rate: 1.56%

Run 10: Report of Verus — Data Link

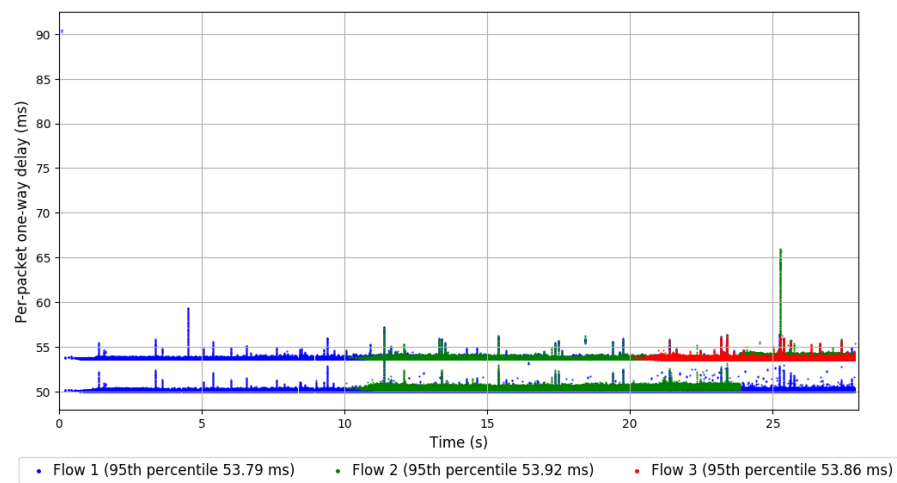
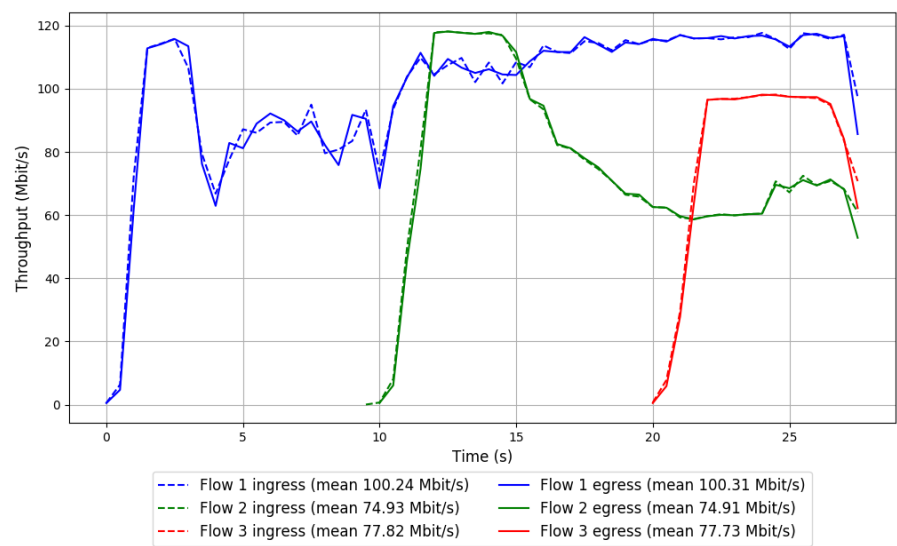


```
Run 1: Statistics of Copa

Start at: 2018-01-02 23:05:50
End at: 2018-01-02 23:06:20

# Below is generated by plot.py at 2018-01-03 04:23:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 170.22 Mbit/s
95th percentile per-packet one-way delay: 53.828 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 100.31 Mbit/s
95th percentile per-packet one-way delay: 53.786 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 74.91 Mbit/s
95th percentile per-packet one-way delay: 53.921 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 77.73 Mbit/s
95th percentile per-packet one-way delay: 53.863 ms
Loss rate: 1.44%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-02 23:19:44

End at: 2018-01-02 23:20:14

# Below is generated by plot.py at 2018-01-03 04:23:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 159.75 Mbit/s

95th percentile per-packet one-way delay: 53.845 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 87.58 Mbit/s

95th percentile per-packet one-way delay: 53.845 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 90.01 Mbit/s

95th percentile per-packet one-way delay: 53.850 ms

Loss rate: 0.43%

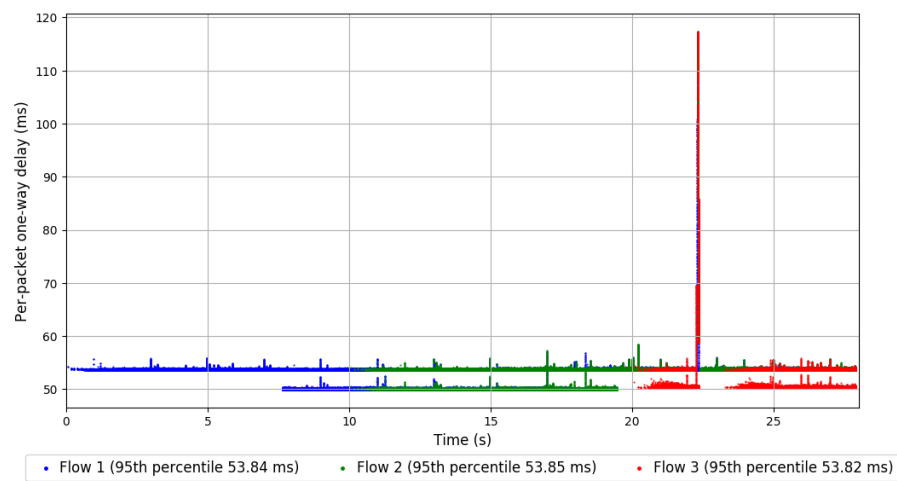
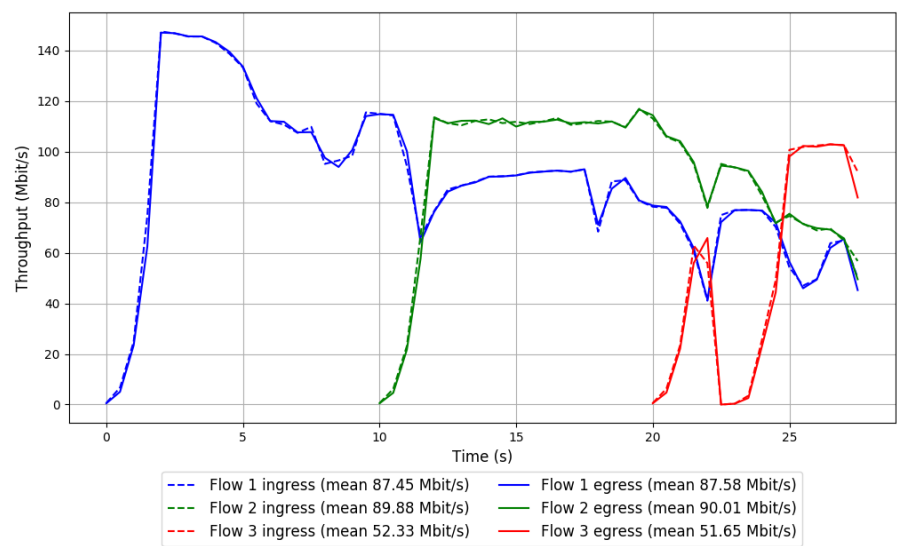
-- Flow 3:

Average throughput: 51.65 Mbit/s

95th percentile per-packet one-way delay: 53.820 ms

Loss rate: 2.56%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-02 23:33:47

End at: 2018-01-02 23:34:17

# Below is generated by plot.py at 2018-01-03 04:23:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 137.81 Mbit/s

95th percentile per-packet one-way delay: 53.939 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 70.37 Mbit/s

95th percentile per-packet one-way delay: 53.925 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 75.37 Mbit/s

95th percentile per-packet one-way delay: 53.948 ms

Loss rate: 0.53%

-- Flow 3:

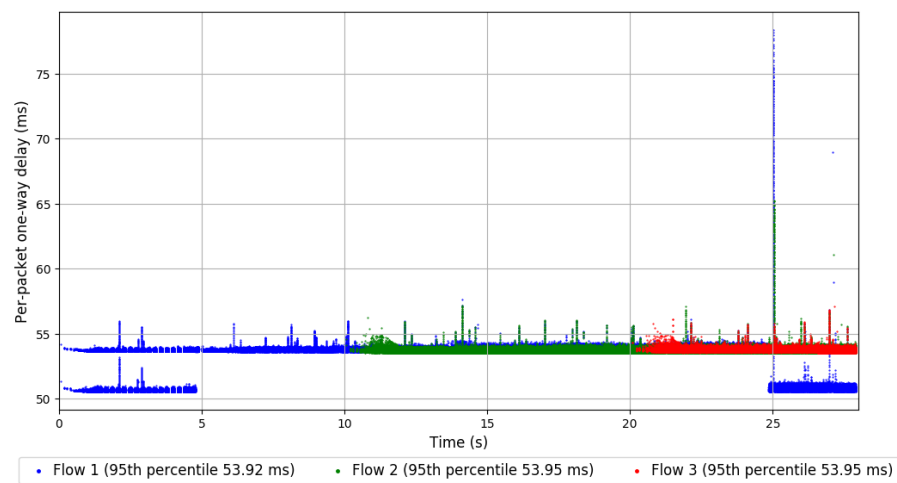
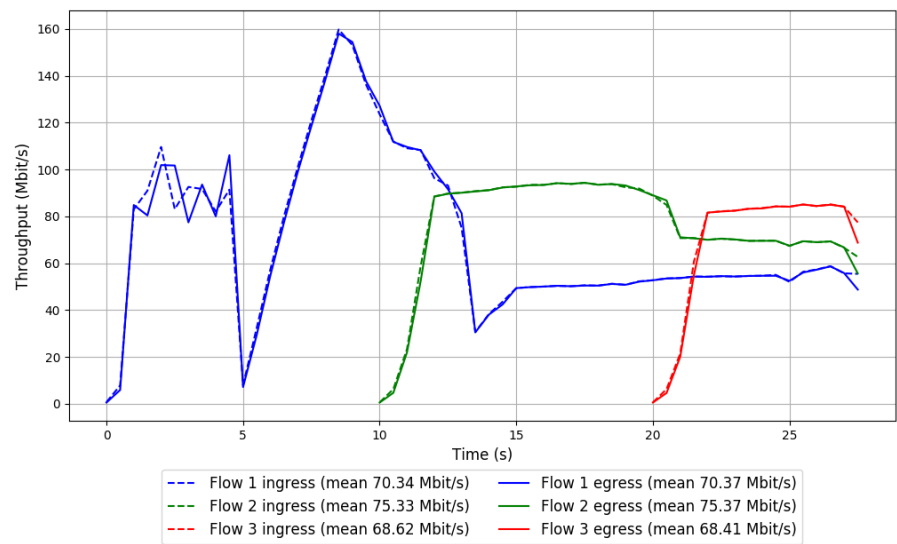
Average throughput: 68.41 Mbit/s

95th percentile per-packet one-way delay: 53.952 ms

Loss rate: 1.63%



Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-02 23:47:53

End at: 2018-01-02 23:48:23

# Below is generated by plot.py at 2018-01-03 04:23:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 121.07 Mbit/s

95th percentile per-packet one-way delay: 54.057 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 64.77 Mbit/s

95th percentile per-packet one-way delay: 54.050 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 63.71 Mbit/s

95th percentile per-packet one-way delay: 54.074 ms

Loss rate: 0.89%

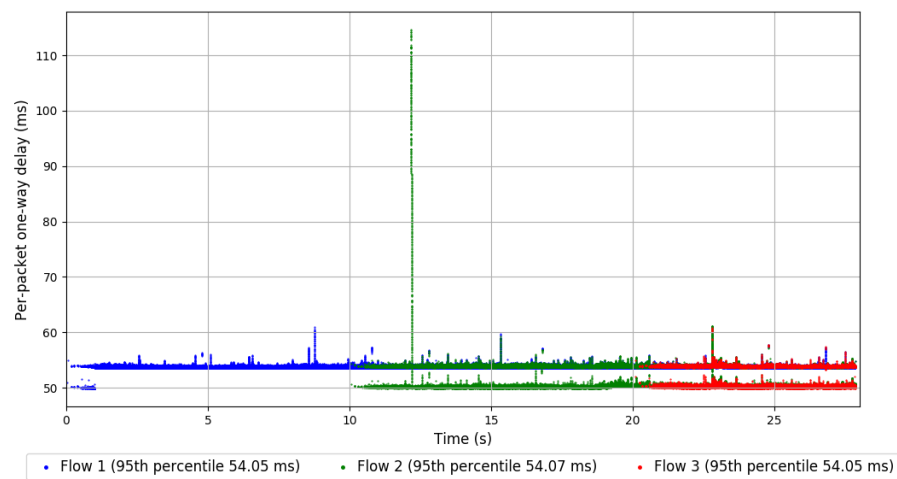
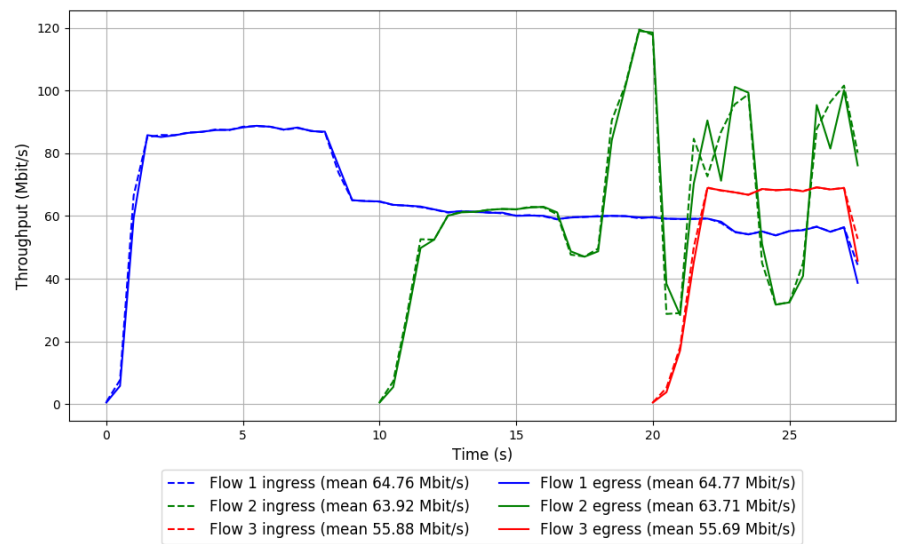
-- Flow 3:

Average throughput: 55.69 Mbit/s

95th percentile per-packet one-way delay: 54.050 ms

Loss rate: 1.64%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-03 00:00:04

End at: 2018-01-03 00:00:34

# Below is generated by plot.py at 2018-01-03 04:23:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 78.25 Mbit/s

95th percentile per-packet one-way delay: 54.622 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 46.07 Mbit/s

95th percentile per-packet one-way delay: 54.640 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 36.96 Mbit/s

95th percentile per-packet one-way delay: 54.634 ms

Loss rate: 0.58%

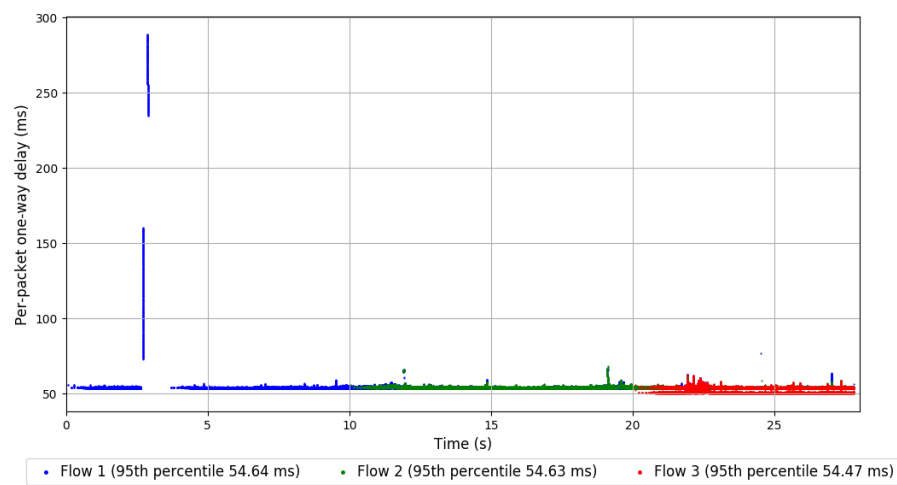
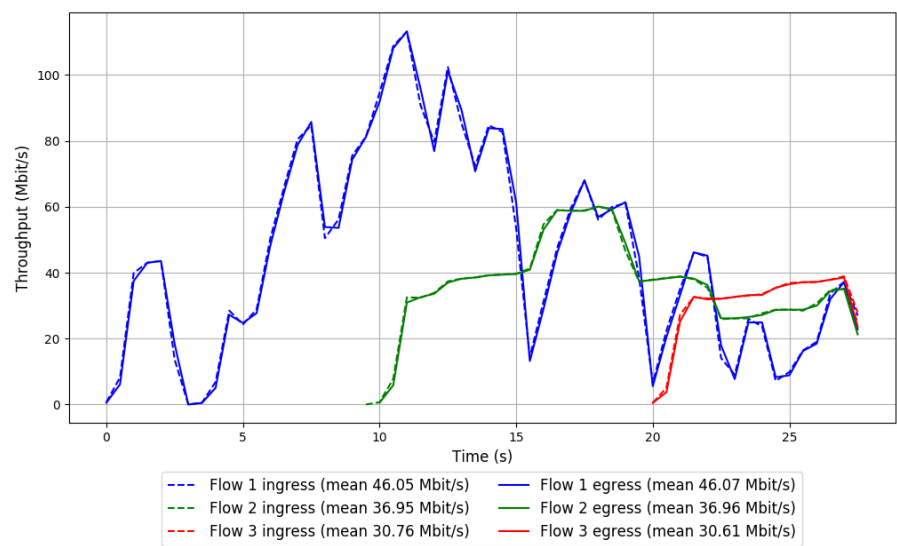
-- Flow 3:

Average throughput: 30.61 Mbit/s

95th percentile per-packet one-way delay: 54.473 ms

Loss rate: 1.78%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-03 00:12:18

End at: 2018-01-03 00:12:48

# Below is generated by plot.py at 2018-01-03 04:23:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.02 Mbit/s

95th percentile per-packet one-way delay: 54.438 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 45.12 Mbit/s

95th percentile per-packet one-way delay: 54.275 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 48.98 Mbit/s

95th percentile per-packet one-way delay: 54.498 ms

Loss rate: 0.43%

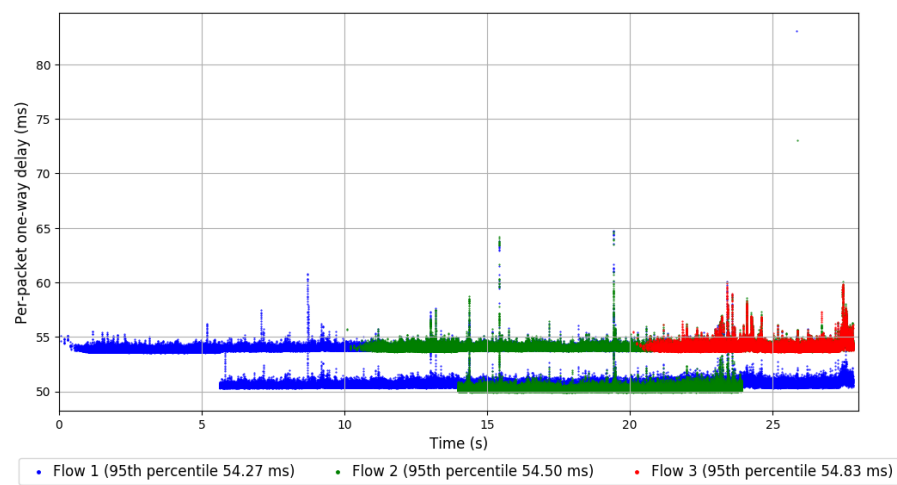
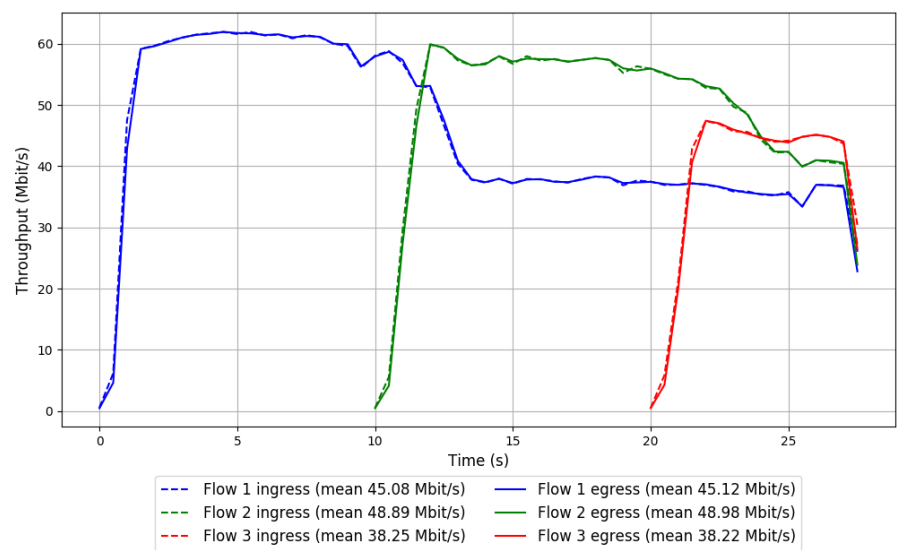
-- Flow 3:

Average throughput: 38.22 Mbit/s

95th percentile per-packet one-way delay: 54.825 ms

Loss rate: 1.42%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-03 00:24:20

End at: 2018-01-03 00:24:50

# Below is generated by plot.py at 2018-01-03 04:24:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 86.23 Mbit/s

95th percentile per-packet one-way delay: 54.439 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 52.93 Mbit/s

95th percentile per-packet one-way delay: 54.348 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 41.25 Mbit/s

95th percentile per-packet one-way delay: 54.448 ms

Loss rate: 0.30%

-- Flow 3:

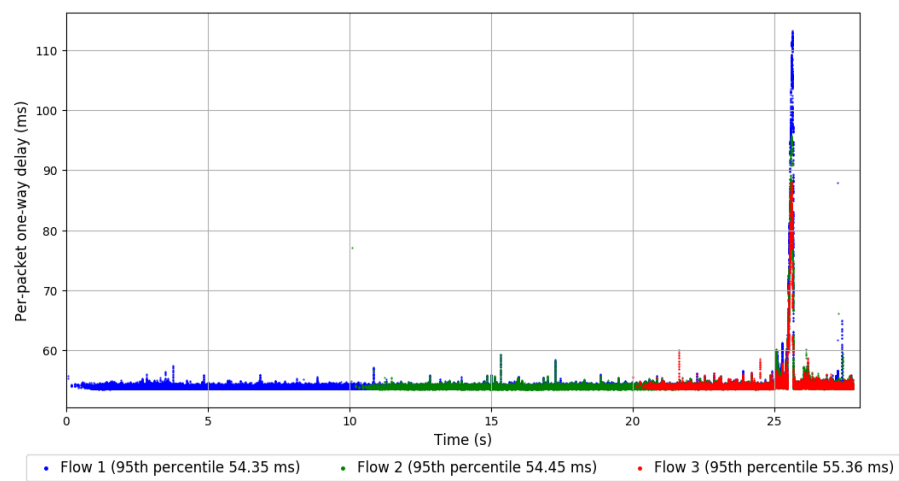
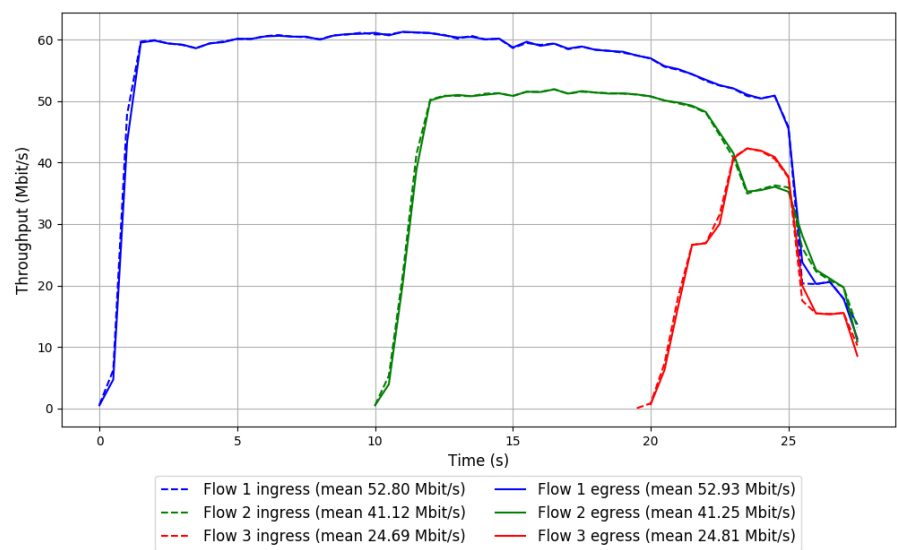
Average throughput: 24.81 Mbit/s

95th percentile per-packet one-way delay: 55.363 ms

Loss rate: 0.87%



Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-03 00:36:13

End at: 2018-01-03 00:36:43

# Below is generated by plot.py at 2018-01-03 04:24:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 88.91 Mbit/s

95th percentile per-packet one-way delay: 54.372 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 56.11 Mbit/s

95th percentile per-packet one-way delay: 54.402 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 34.43 Mbit/s

95th percentile per-packet one-way delay: 54.347 ms

Loss rate: 0.69%

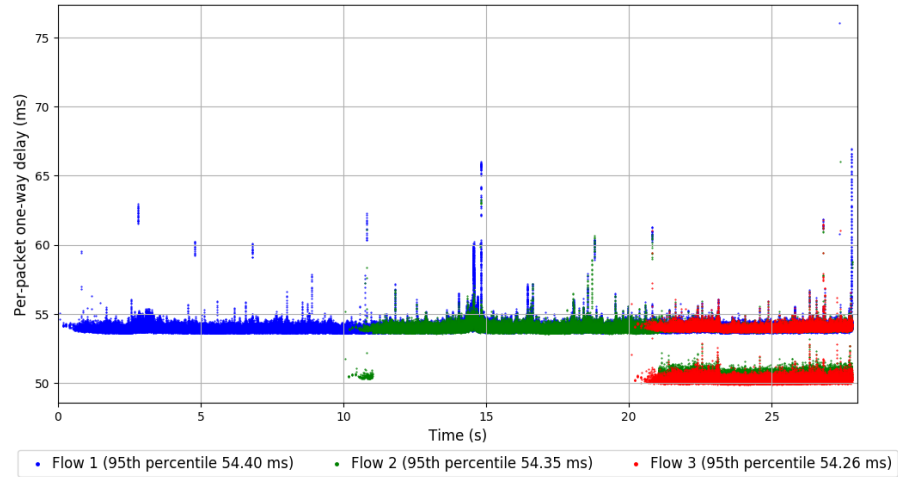
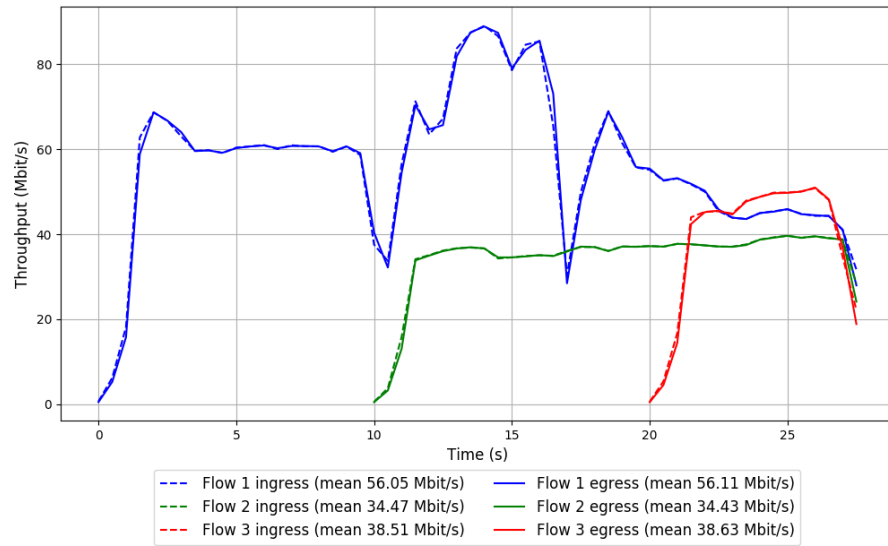
-- Flow 3:

Average throughput: 38.63 Mbit/s

95th percentile per-packet one-way delay: 54.262 ms

Loss rate: 1.05%

## Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-03 00:49:06

End at: 2018-01-03 00:49:36

# Below is generated by plot.py at 2018-01-03 04:25:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 128.12 Mbit/s

95th percentile per-packet one-way delay: 53.872 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 74.63 Mbit/s

95th percentile per-packet one-way delay: 53.841 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 70.28 Mbit/s

95th percentile per-packet one-way delay: 53.869 ms

Loss rate: 0.66%

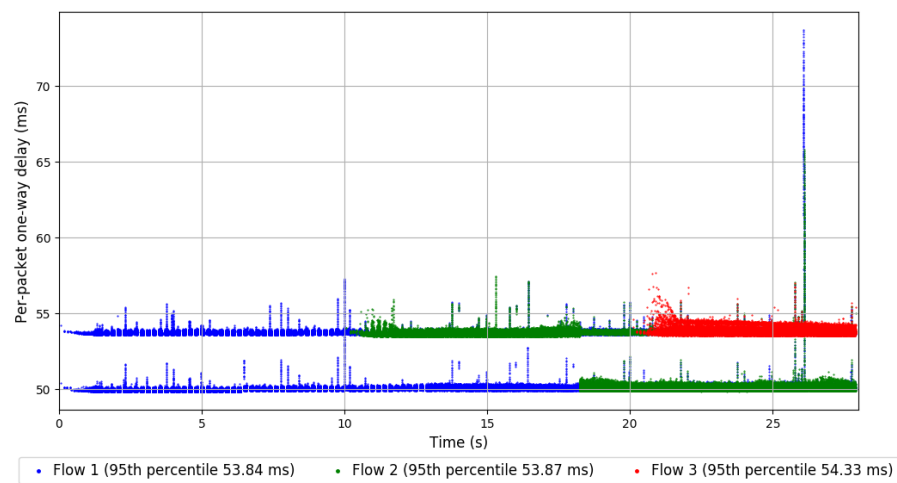
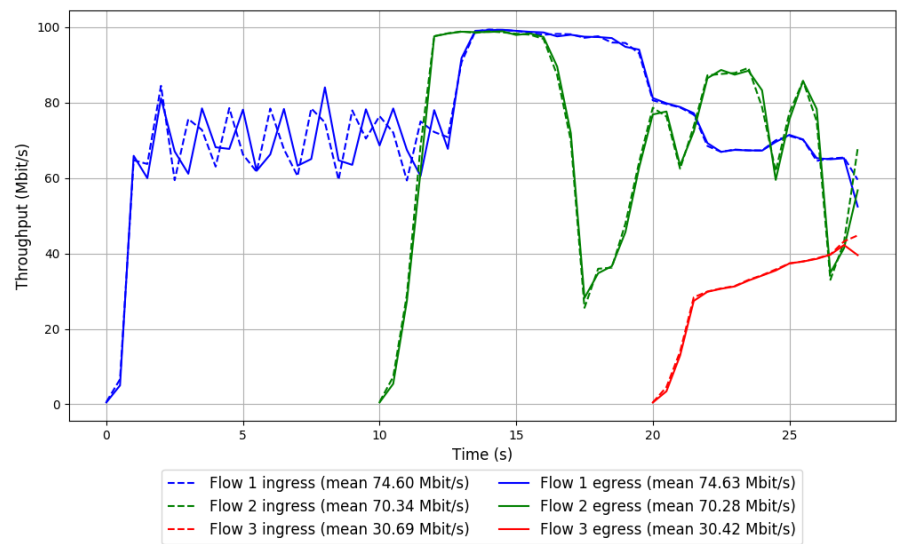
-- Flow 3:

Average throughput: 30.42 Mbit/s

95th percentile per-packet one-way delay: 54.328 ms

Loss rate: 2.16%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-03 01:02:31

End at: 2018-01-03 01:03:01

# Below is generated by plot.py at 2018-01-03 04:26:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 144.66 Mbit/s

95th percentile per-packet one-way delay: 53.862 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 74.96 Mbit/s

95th percentile per-packet one-way delay: 53.928 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 80.03 Mbit/s

95th percentile per-packet one-way delay: 53.750 ms

Loss rate: 0.57%

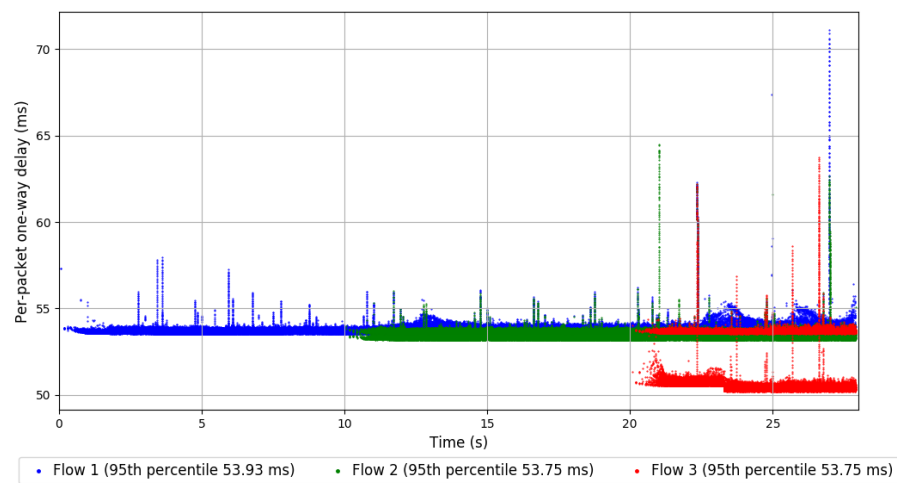
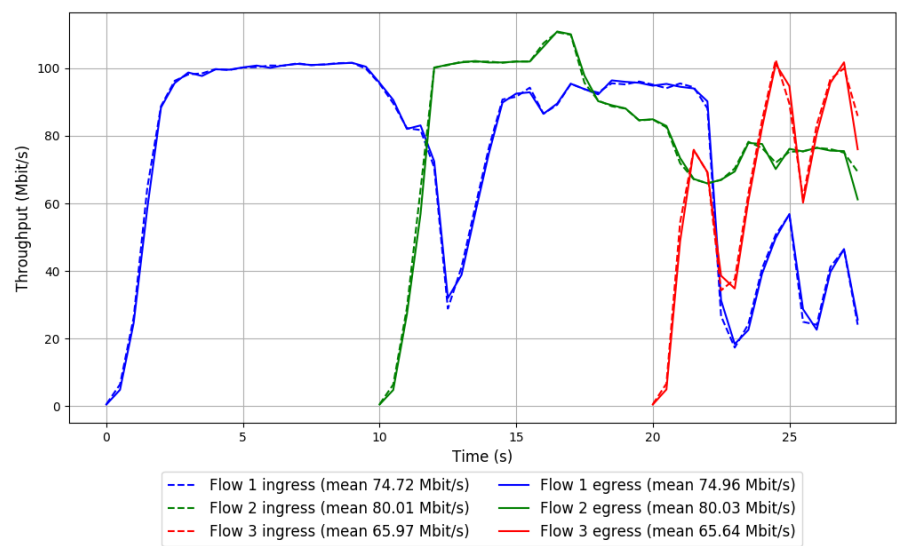
-- Flow 3:

Average throughput: 65.64 Mbit/s

95th percentile per-packet one-way delay: 53.749 ms

Loss rate: 1.83%

Run 10: Report of Copa — Data Link



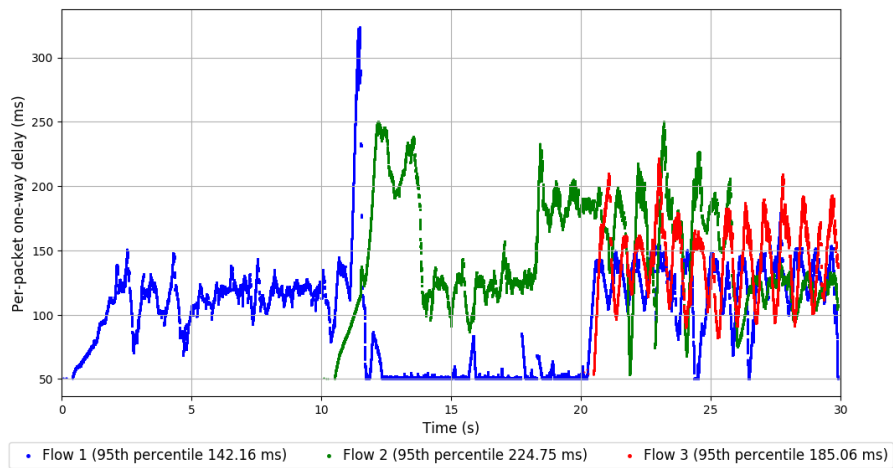
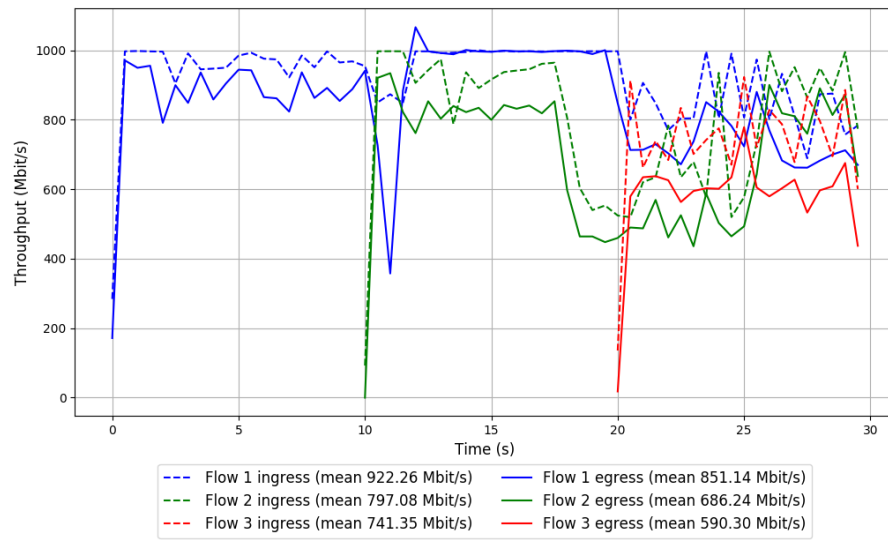
```
Run 1: Statistics of FillP

Start at: 2018-01-02 23:07:49
End at: 2018-01-02 23:08:19

# Below is generated by plot.py at 2018-01-03 04:49:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1499.71 Mbit/s
95th percentile per-packet one-way delay: 193.601 ms
Loss rate: 11.90%
-- Flow 1:
Average throughput: 851.14 Mbit/s
95th percentile per-packet one-way delay: 142.162 ms
Loss rate: 8.02%
-- Flow 2:
Average throughput: 686.24 Mbit/s
95th percentile per-packet one-way delay: 224.749 ms
Loss rate: 14.35%
-- Flow 3:
Average throughput: 590.30 Mbit/s
95th percentile per-packet one-way delay: 185.061 ms
Loss rate: 21.21%
```



# Run 1: Report of FillP — Data Link

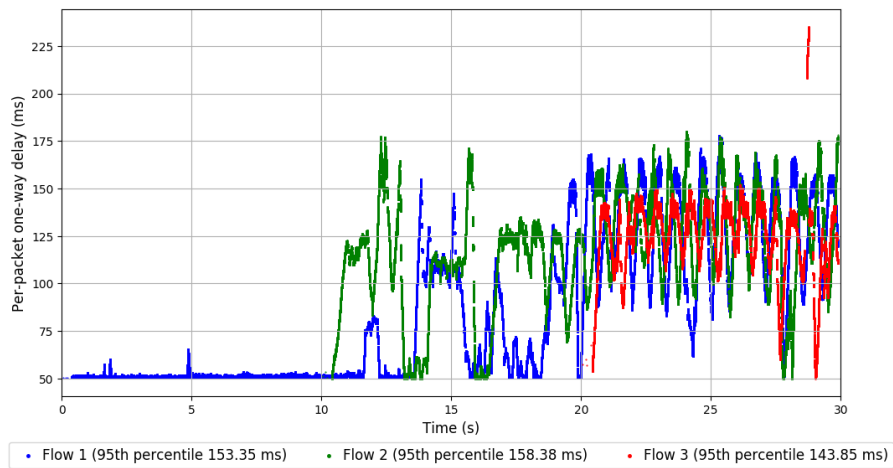
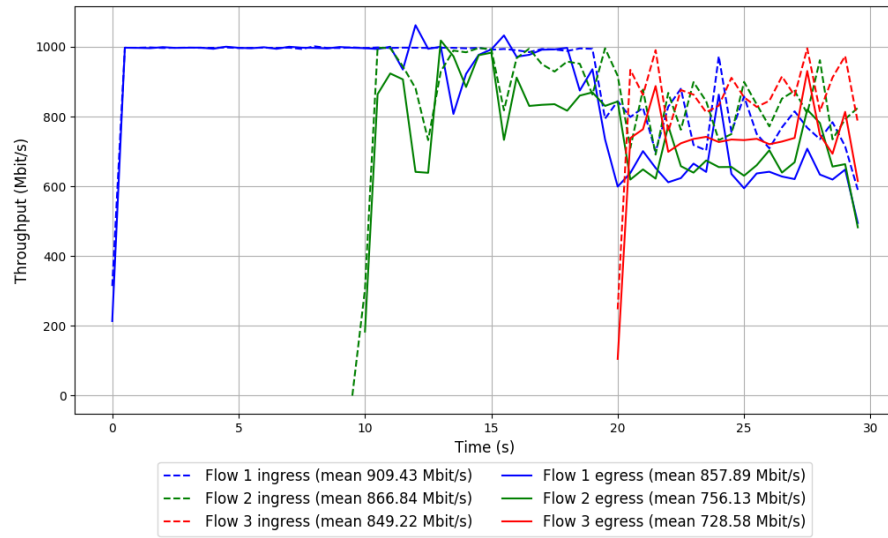


```
Run 2: Statistics of FillP

Start at: 2018-01-02 23:21:46
End at: 2018-01-02 23:22:16

# Below is generated by plot.py at 2018-01-03 04:49:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1600.41 Mbit/s
95th percentile per-packet one-way delay: 153.969 ms
Loss rate: 9.81%
-- Flow 1:
Average throughput: 857.89 Mbit/s
95th percentile per-packet one-way delay: 153.354 ms
Loss rate: 5.99%
-- Flow 2:
Average throughput: 756.13 Mbit/s
95th percentile per-packet one-way delay: 158.377 ms
Loss rate: 13.22%
-- Flow 3:
Average throughput: 728.58 Mbit/s
95th percentile per-packet one-way delay: 143.849 ms
Loss rate: 15.14%
```

## Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-02 23:35:47

End at: 2018-01-02 23:36:17

# Below is generated by plot.py at 2018-01-03 04:49:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1639.94 Mbit/s

95th percentile per-packet one-way delay: 155.643 ms

Loss rate: 9.76%

-- Flow 1:

Average throughput: 858.42 Mbit/s

95th percentile per-packet one-way delay: 144.522 ms

Loss rate: 8.49%

-- Flow 2:

Average throughput: 831.09 Mbit/s

95th percentile per-packet one-way delay: 143.623 ms

Loss rate: 9.04%

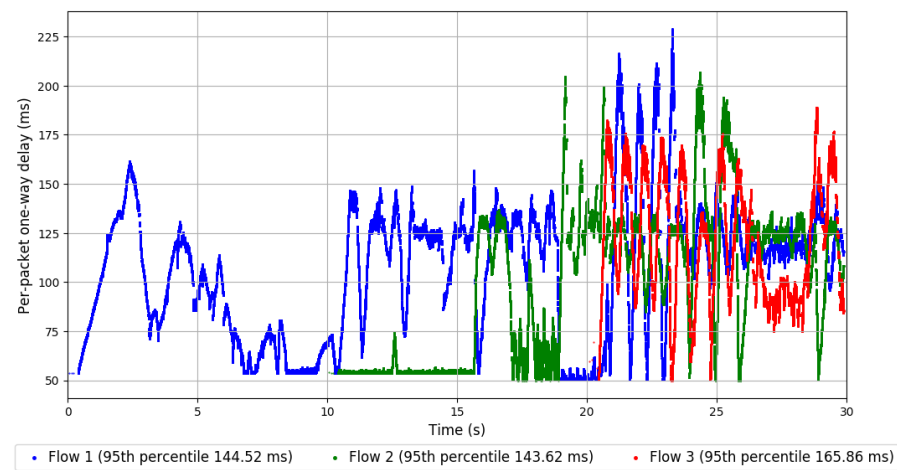
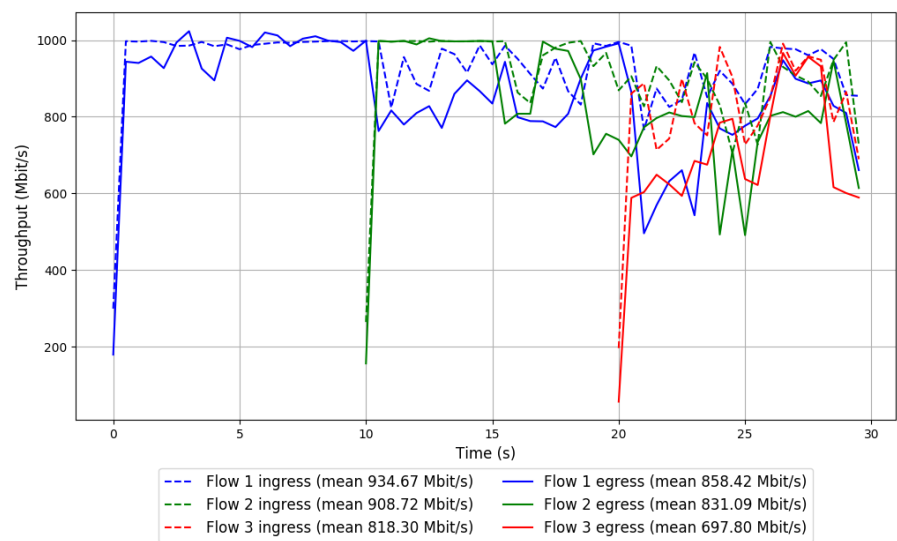
-- Flow 3:

Average throughput: 697.80 Mbit/s

95th percentile per-packet one-way delay: 165.862 ms

Loss rate: 15.72%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-02 23:49:43

End at: 2018-01-02 23:50:13

# Below is generated by plot.py at 2018-01-03 04:49:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 286.80 Mbit/s

95th percentile per-packet one-way delay: 83.072 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 117.54 Mbit/s

95th percentile per-packet one-way delay: 86.816 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 166.62 Mbit/s

95th percentile per-packet one-way delay: 89.011 ms

Loss rate: 2.53%

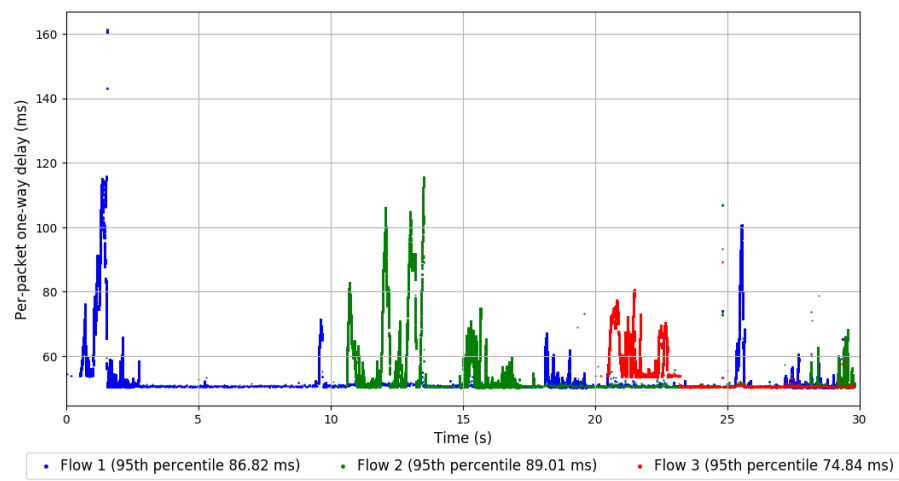
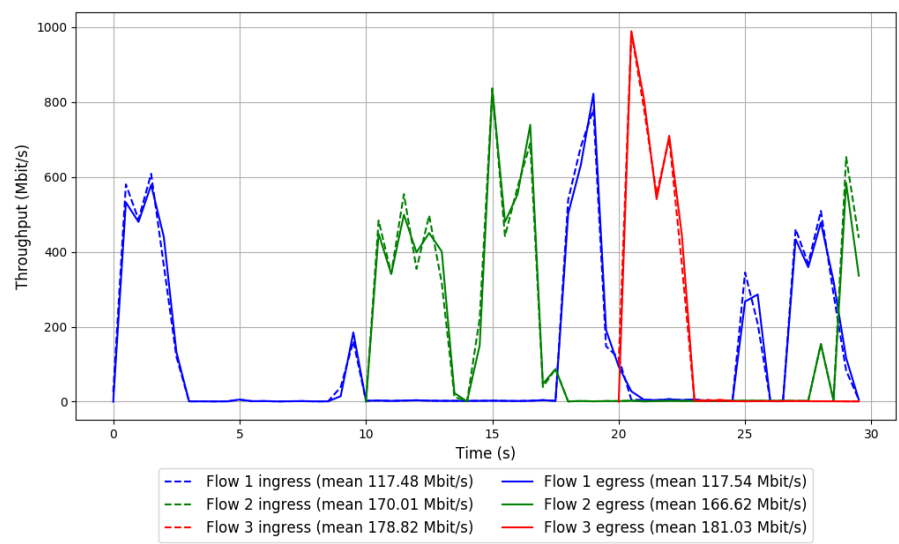
-- Flow 3:

Average throughput: 181.03 Mbit/s

95th percentile per-packet one-way delay: 74.839 ms

Loss rate: 0.01%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-03 00:01:52

End at: 2018-01-03 00:02:22

# Below is generated by plot.py at 2018-01-03 04:49:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 219.44 Mbit/s

95th percentile per-packet one-way delay: 106.500 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 42.21 Mbit/s

95th percentile per-packet one-way delay: 74.524 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 111.50 Mbit/s

95th percentile per-packet one-way delay: 88.703 ms

Loss rate: 0.01%

-- Flow 3:

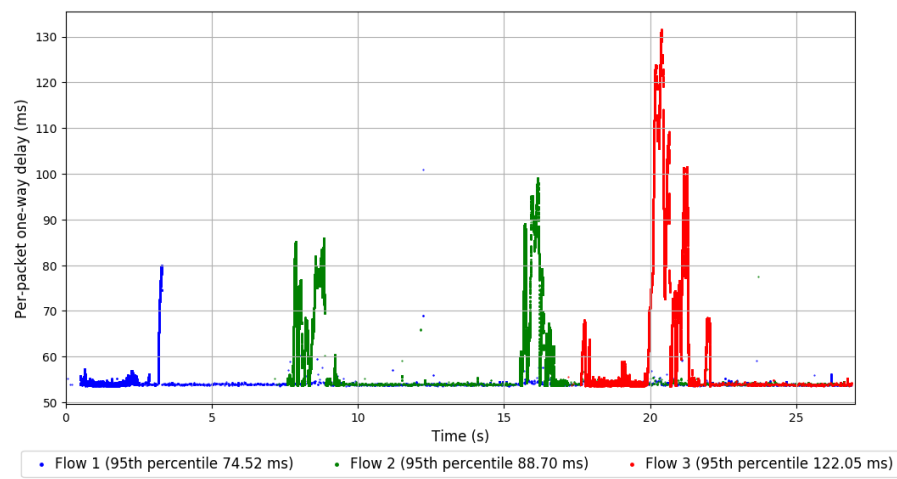
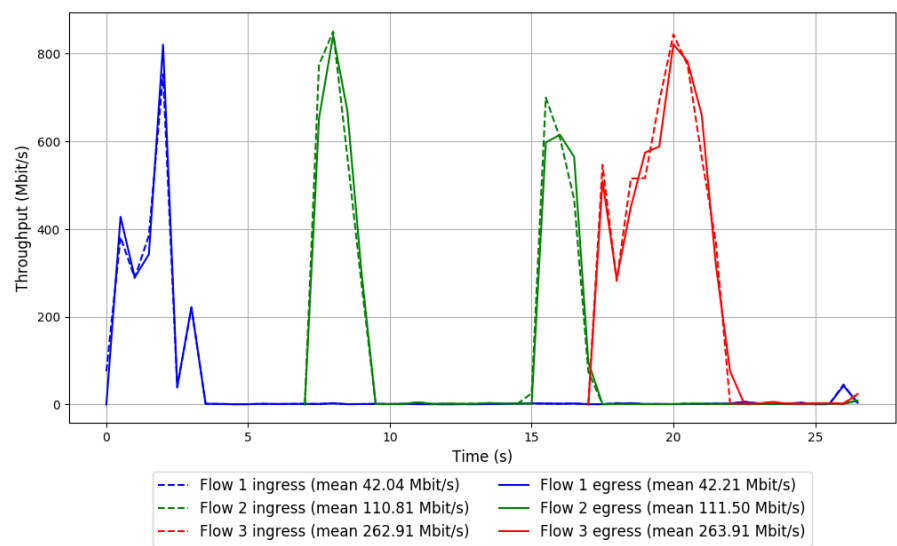
Average throughput: 263.91 Mbit/s

95th percentile per-packet one-way delay: 122.045 ms

Loss rate: 0.73%



Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-03 00:14:10

End at: 2018-01-03 00:14:40

# Below is generated by plot.py at 2018-01-03 04:49:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 215.20 Mbit/s

95th percentile per-packet one-way delay: 99.266 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 84.50 Mbit/s

95th percentile per-packet one-way delay: 96.191 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 142.31 Mbit/s

95th percentile per-packet one-way delay: 100.555 ms

Loss rate: 0.00%

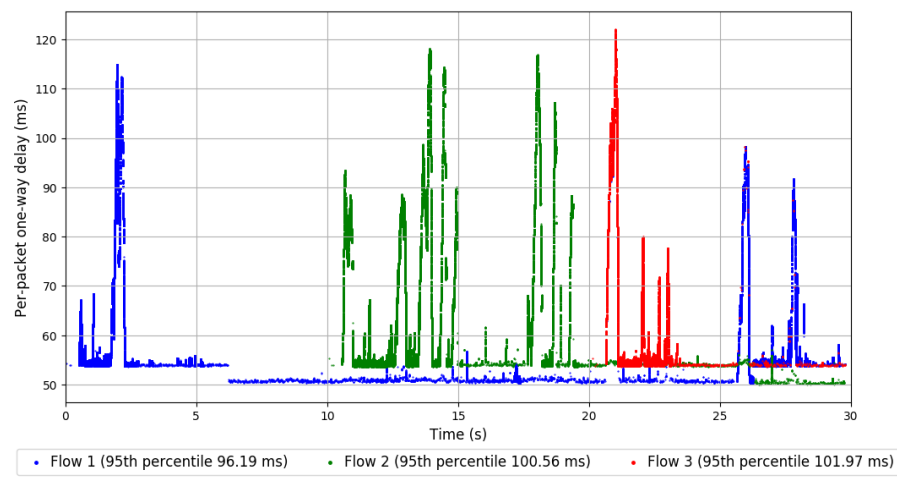
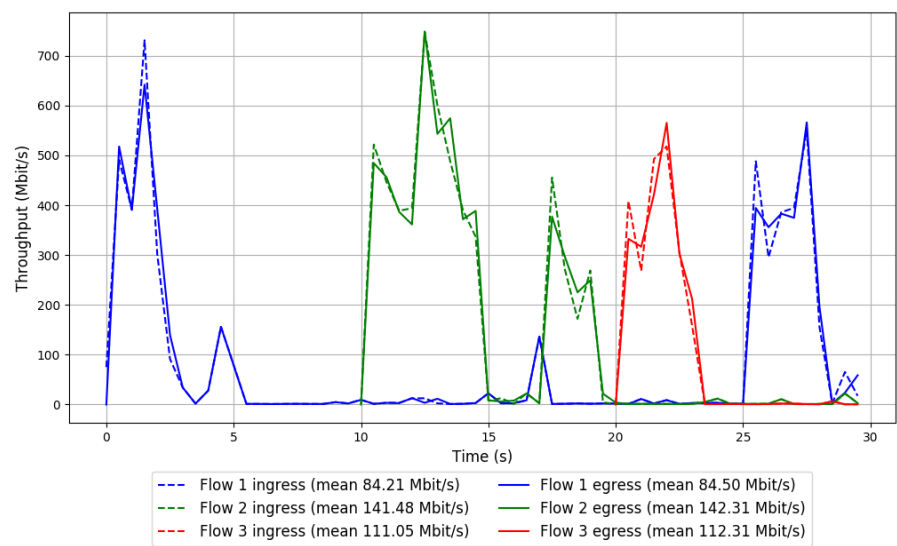
-- Flow 3:

Average throughput: 112.31 Mbit/s

95th percentile per-packet one-way delay: 101.970 ms

Loss rate: 0.01%

Run 6: Report of FillP — Data Link

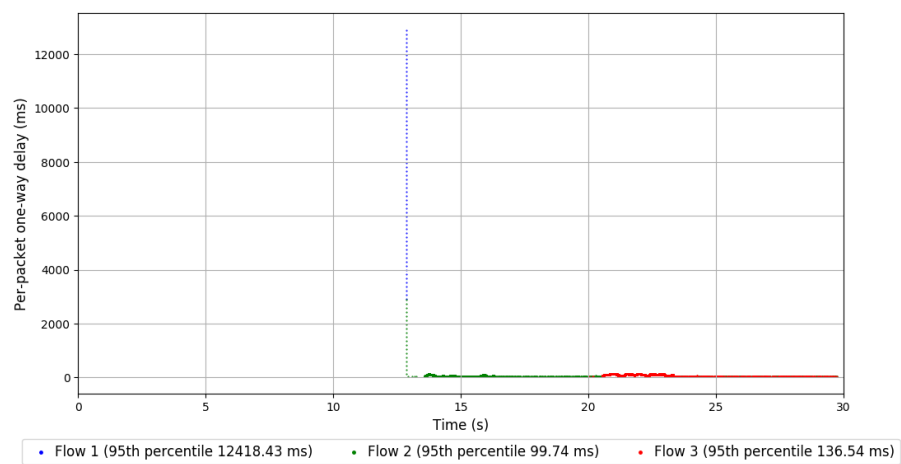
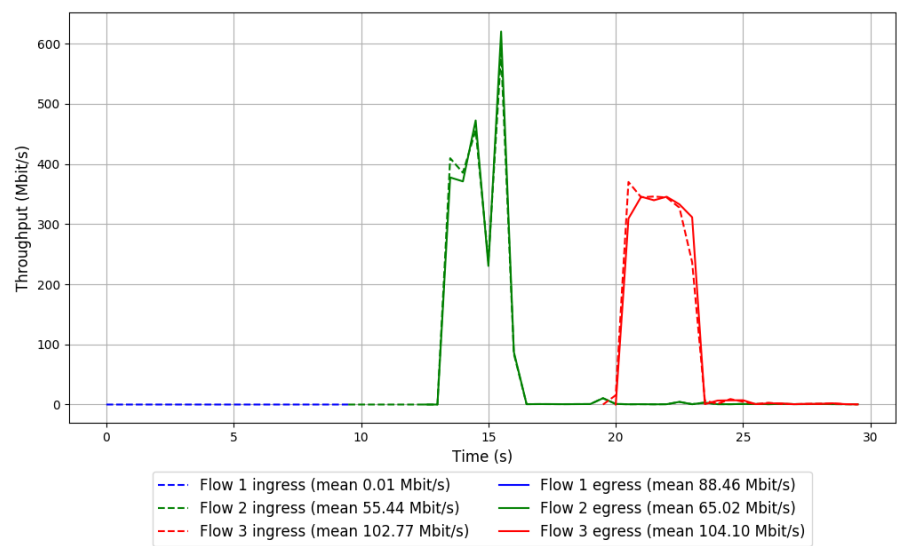


Run 7: Statistics of FillP

Start at: 2018-01-03 00:26:07

End at: 2018-01-03 00:26:37

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-03 00:37:44

End at: 2018-01-03 00:38:14

# Below is generated by plot.py at 2018-01-03 04:49:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 823.00 Mbit/s

95th percentile per-packet one-way delay: 115.870 ms

Loss rate: 1.52%

-- Flow 1:

Average throughput: 432.48 Mbit/s

95th percentile per-packet one-way delay: 113.529 ms

Loss rate: 2.31%

-- Flow 2:

Average throughput: 346.72 Mbit/s

95th percentile per-packet one-way delay: 116.259 ms

Loss rate: 1.06%

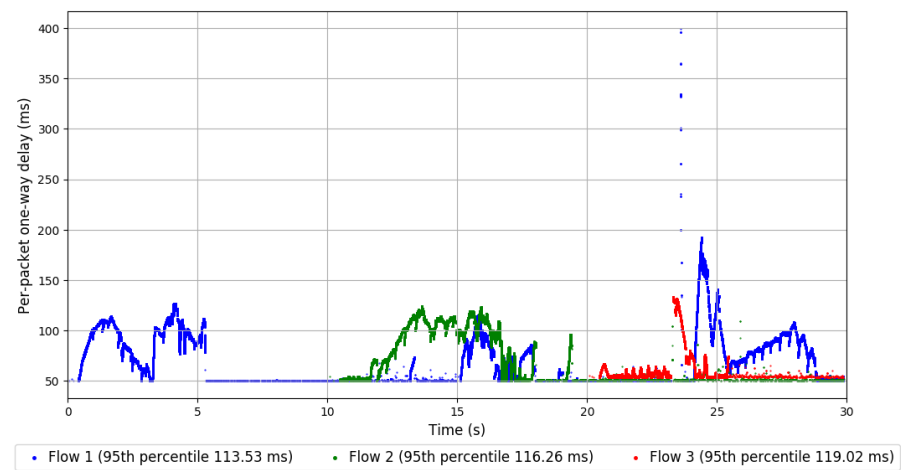
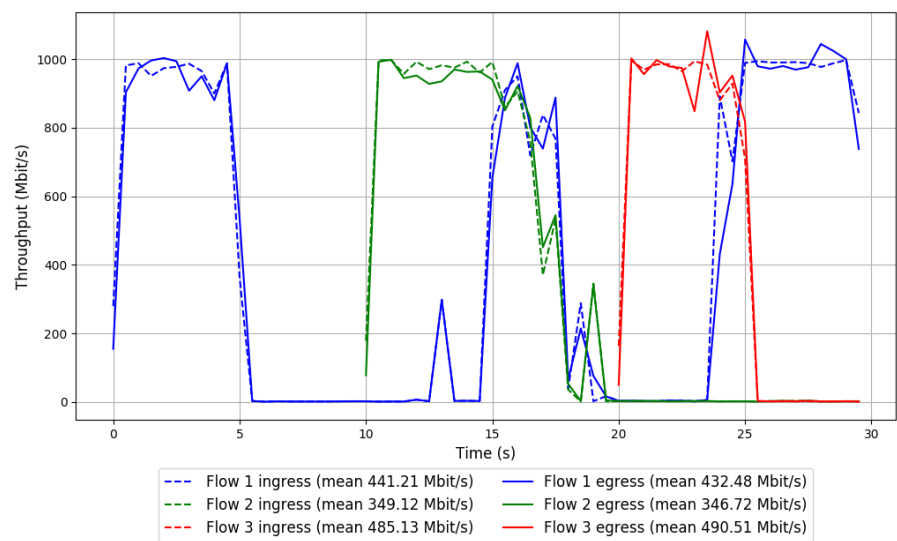
-- Flow 3:

Average throughput: 490.51 Mbit/s

95th percentile per-packet one-way delay: 119.024 ms

Loss rate: 0.00%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-03 00:51:02

End at: 2018-01-03 00:51:32

# Below is generated by plot.py at 2018-01-03 04:49:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1277.63 Mbit/s

95th percentile per-packet one-way delay: 159.032 ms

Loss rate: 7.33%

-- Flow 1:

Average throughput: 874.21 Mbit/s

95th percentile per-packet one-way delay: 156.240 ms

Loss rate: 5.94%

-- Flow 2:

Average throughput: 233.93 Mbit/s

95th percentile per-packet one-way delay: 141.153 ms

Loss rate: 2.54%

-- Flow 3:

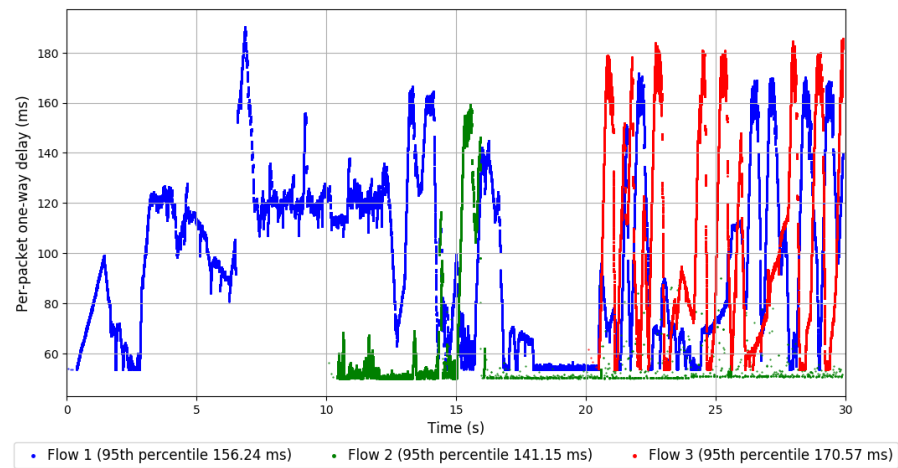
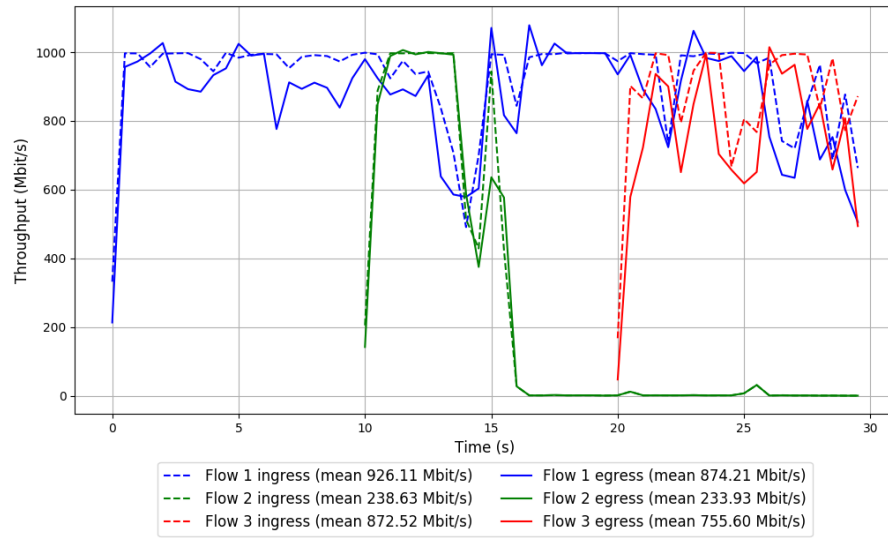
Average throughput: 755.60 Mbit/s

95th percentile per-packet one-way delay: 170.572 ms

Loss rate: 14.41%



# Run 9: Report of FillP — Data Link

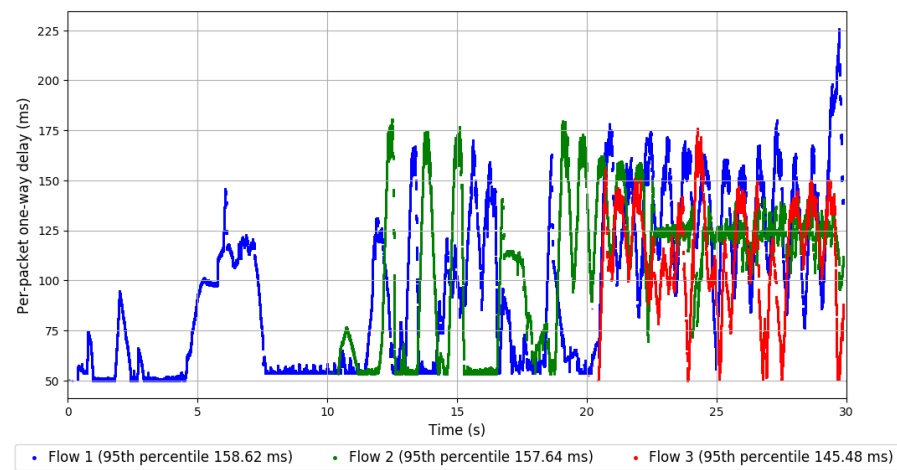
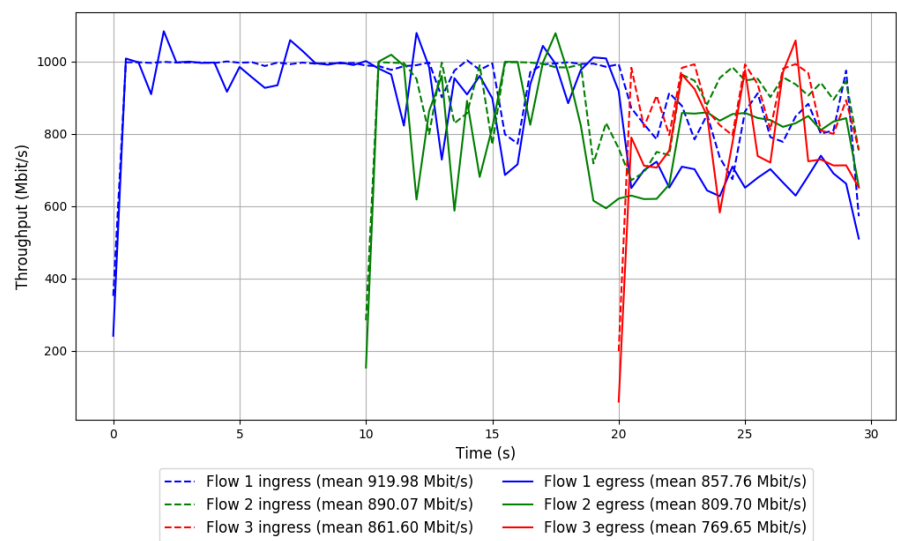


```
Run 10: Statistics of FillP

Start at: 2018-01-03 01:04:31
End at: 2018-01-03 01:05:01

# Below is generated by plot.py at 2018-01-03 04:50:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1648.29 Mbit/s
95th percentile per-packet one-way delay: 156.984 ms
Loss rate: 8.62%
-- Flow 1:
Average throughput: 857.76 Mbit/s
95th percentile per-packet one-way delay: 158.615 ms
Loss rate: 7.09%
-- Flow 2:
Average throughput: 809.70 Mbit/s
95th percentile per-packet one-way delay: 157.637 ms
Loss rate: 9.53%
-- Flow 3:
Average throughput: 769.65 Mbit/s
95th percentile per-packet one-way delay: 145.476 ms
Loss rate: 11.65%
```

Run 10: Report of FillP — Data Link

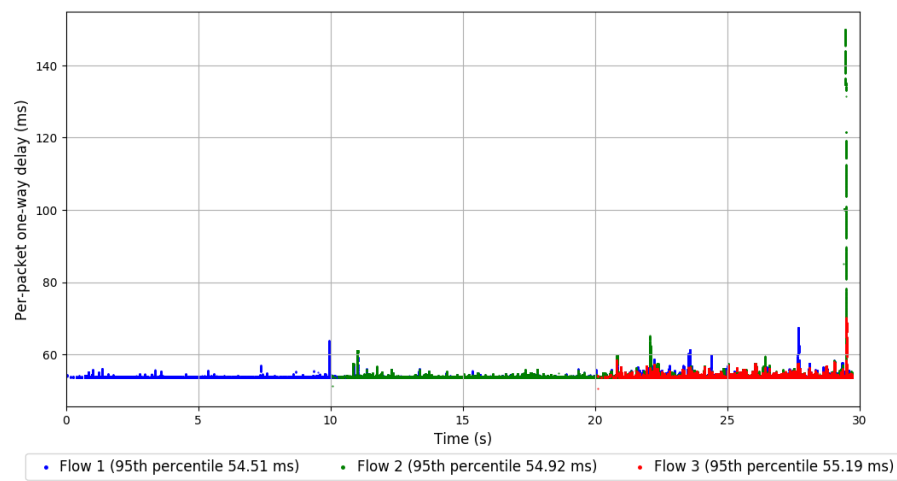
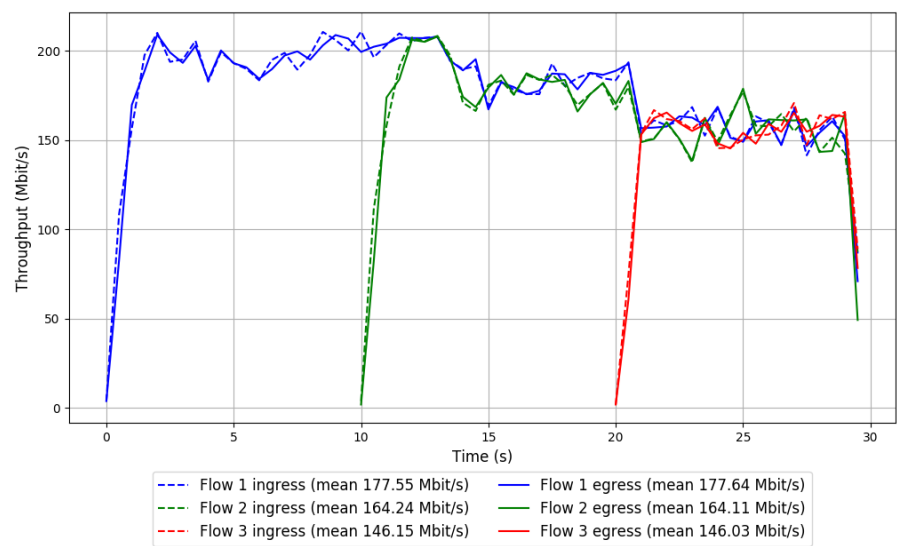


```
Run 1: Statistics of Indigo

Start at: 2018-01-02 23:14:26
End at: 2018-01-02 23:14:56

# Below is generated by plot.py at 2018-01-03 04:50:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 333.63 Mbit/s
95th percentile per-packet one-way delay: 54.771 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 177.64 Mbit/s
95th percentile per-packet one-way delay: 54.508 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 164.11 Mbit/s
95th percentile per-packet one-way delay: 54.920 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 146.03 Mbit/s
95th percentile per-packet one-way delay: 55.192 ms
Loss rate: 1.12%
```

Run 1: Report of Indigo — Data Link

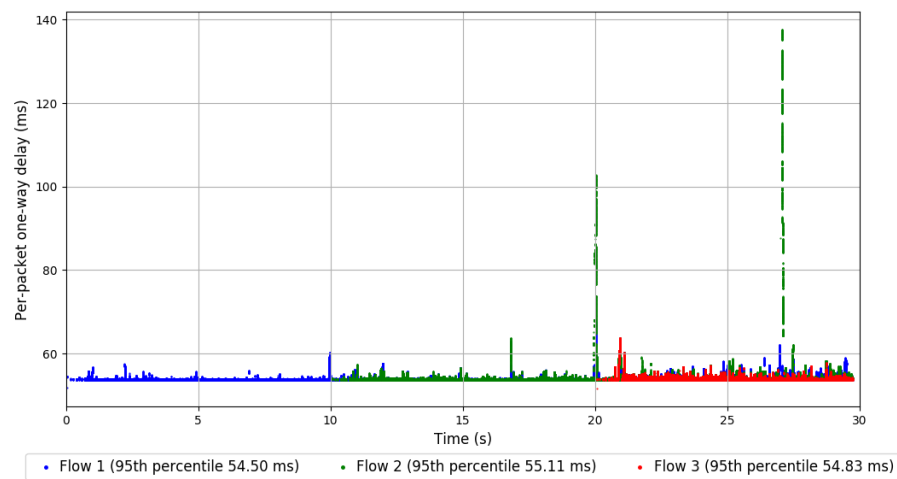
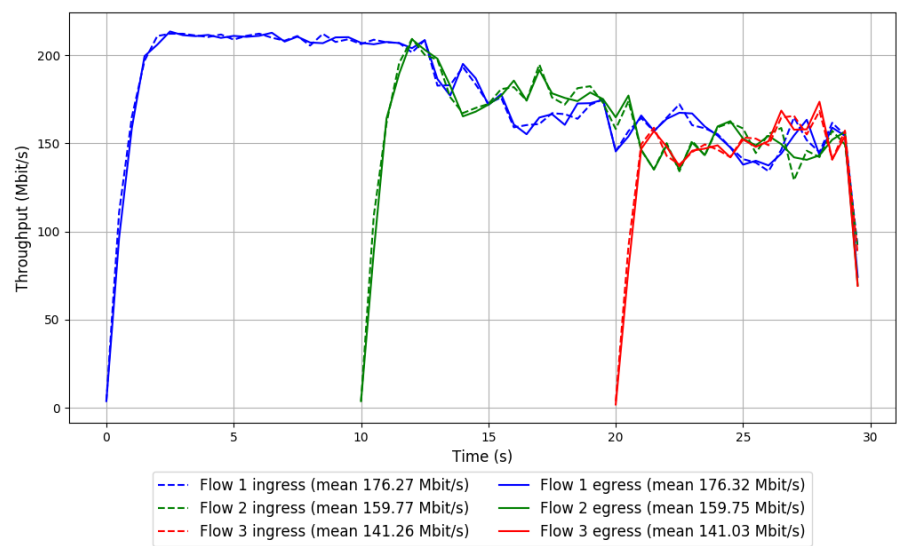


```
Run 2: Statistics of Indigo

Start at: 2018-01-02 23:28:32
End at: 2018-01-02 23:29:02

# Below is generated by plot.py at 2018-01-03 04:50:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 328.11 Mbit/s
95th percentile per-packet one-way delay: 54.737 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 176.32 Mbit/s
95th percentile per-packet one-way delay: 54.499 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 159.75 Mbit/s
95th percentile per-packet one-way delay: 55.110 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 141.03 Mbit/s
95th percentile per-packet one-way delay: 54.832 ms
Loss rate: 1.24%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-02 23:42:46

End at: 2018-01-02 23:43:16

# Below is generated by plot.py at 2018-01-03 04:50:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 318.12 Mbit/s

95th percentile per-packet one-way delay: 54.581 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 172.52 Mbit/s

95th percentile per-packet one-way delay: 54.369 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 151.66 Mbit/s

95th percentile per-packet one-way delay: 54.721 ms

Loss rate: 0.27%

-- Flow 3:

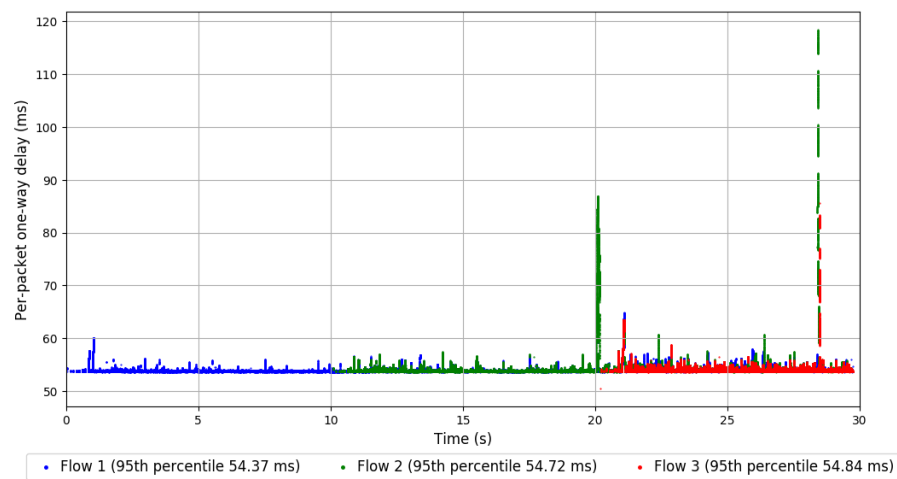
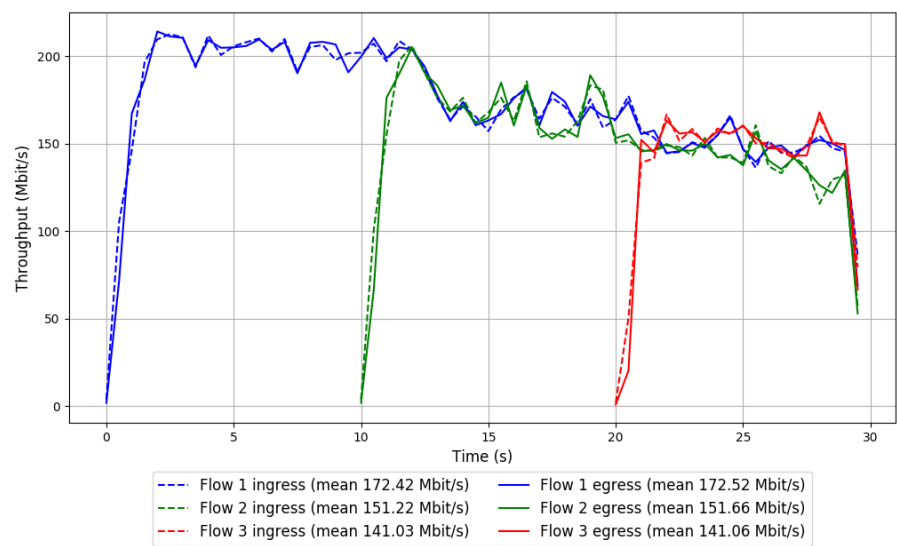
Average throughput: 141.06 Mbit/s

95th percentile per-packet one-way delay: 54.839 ms

Loss rate: 1.06%



Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-02 23:55:17

End at: 2018-01-02 23:55:47

# Below is generated by plot.py at 2018-01-03 04:50:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 121.56 Mbit/s

95th percentile per-packet one-way delay: 62.152 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 68.47 Mbit/s

95th percentile per-packet one-way delay: 60.633 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 61.73 Mbit/s

95th percentile per-packet one-way delay: 66.719 ms

Loss rate: 0.54%

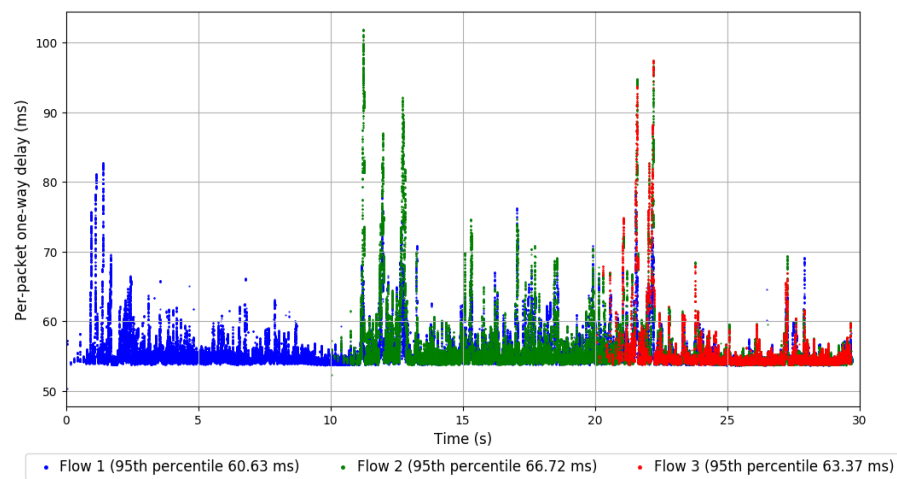
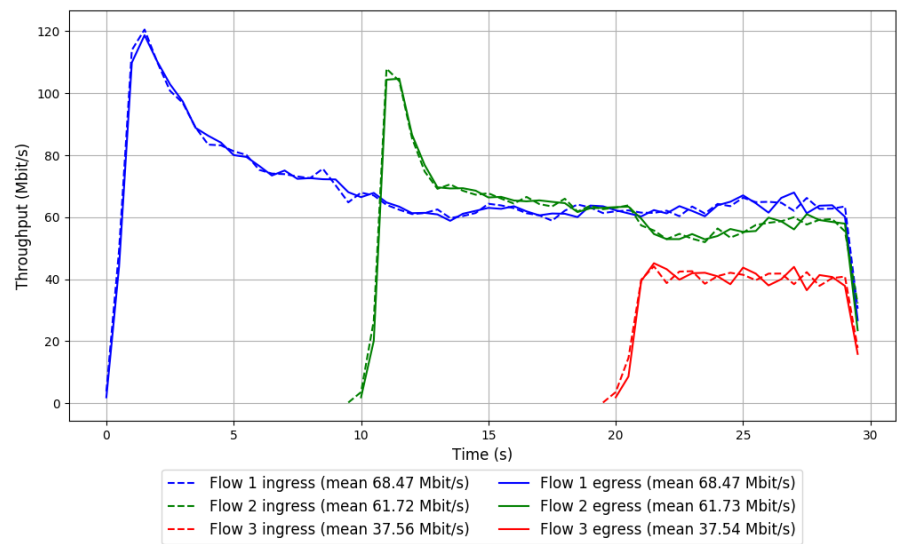
-- Flow 3:

Average throughput: 37.54 Mbit/s

95th percentile per-packet one-way delay: 63.368 ms

Loss rate: 1.22%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-03 00:07:29

End at: 2018-01-03 00:07:59

# Below is generated by plot.py at 2018-01-03 04:50:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 139.16 Mbit/s

95th percentile per-packet one-way delay: 57.258 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 71.11 Mbit/s

95th percentile per-packet one-way delay: 55.919 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 70.57 Mbit/s

95th percentile per-packet one-way delay: 57.075 ms

Loss rate: 0.58%

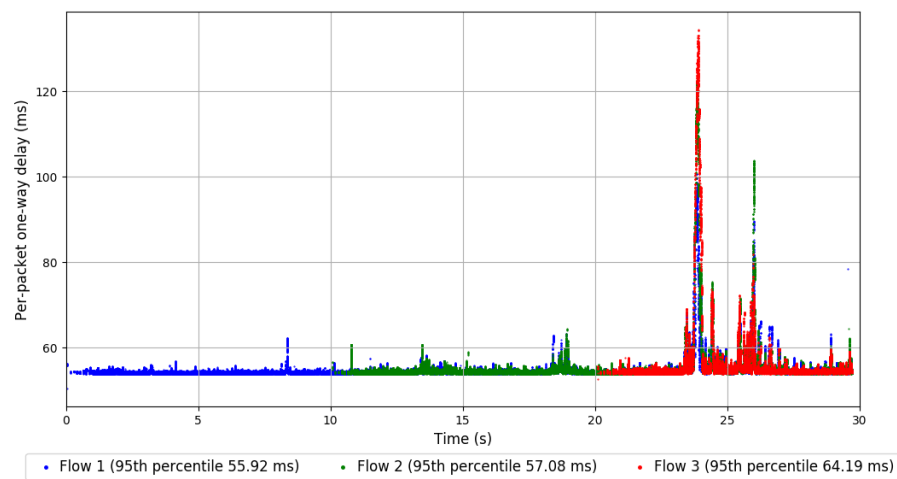
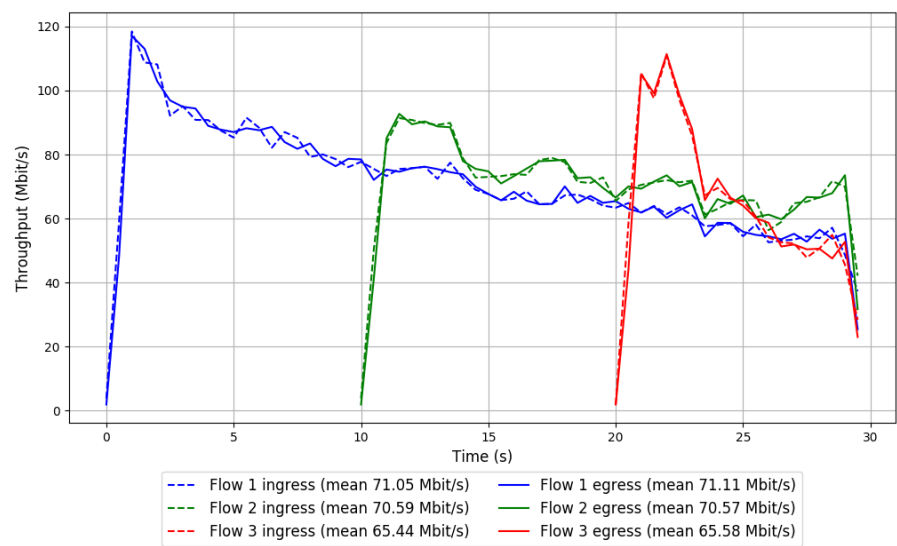
-- Flow 3:

Average throughput: 65.58 Mbit/s

95th percentile per-packet one-way delay: 64.193 ms

Loss rate: 0.74%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-03 00:19:44

End at: 2018-01-03 00:20:14

# Below is generated by plot.py at 2018-01-03 04:50:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 130.70 Mbit/s

95th percentile per-packet one-way delay: 59.474 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 84.62 Mbit/s

95th percentile per-packet one-way delay: 58.177 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 52.56 Mbit/s

95th percentile per-packet one-way delay: 61.081 ms

Loss rate: 0.44%

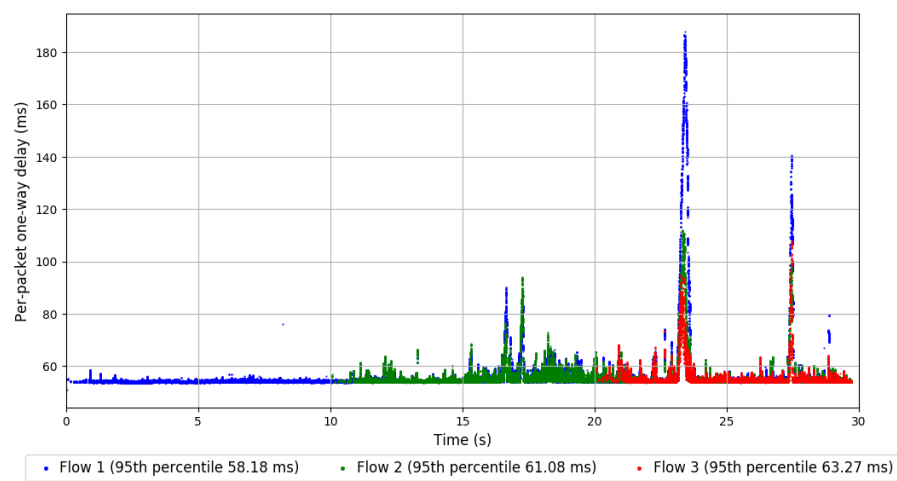
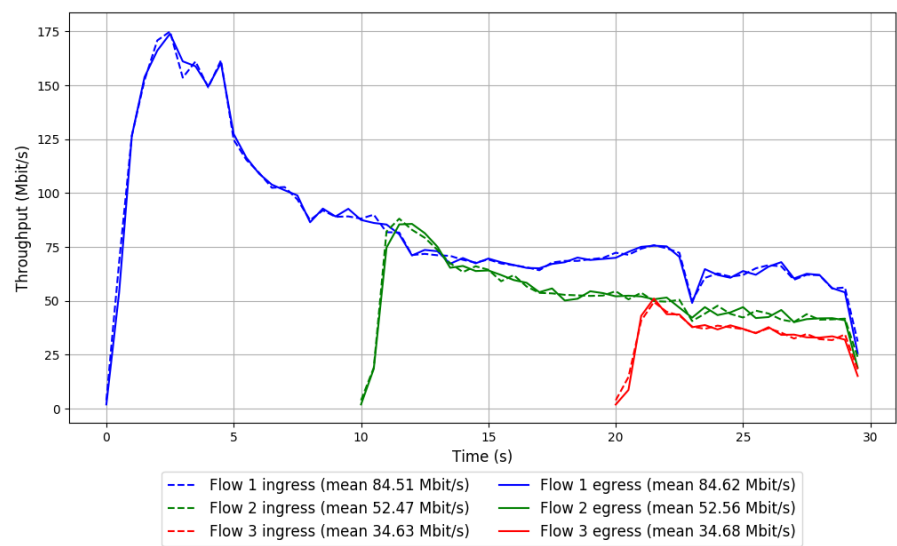
-- Flow 3:

Average throughput: 34.68 Mbit/s

95th percentile per-packet one-way delay: 63.274 ms

Loss rate: 1.11%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-03 00:31:33

End at: 2018-01-03 00:32:03

# Below is generated by plot.py at 2018-01-03 04:50:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 115.83 Mbit/s

95th percentile per-packet one-way delay: 61.187 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 65.78 Mbit/s

95th percentile per-packet one-way delay: 59.999 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 47.96 Mbit/s

95th percentile per-packet one-way delay: 62.173 ms

Loss rate: 0.46%

-- Flow 3:

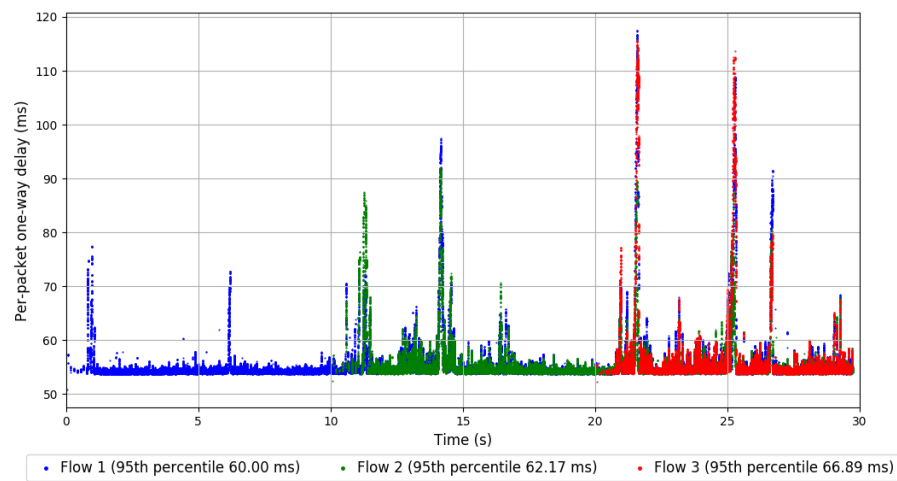
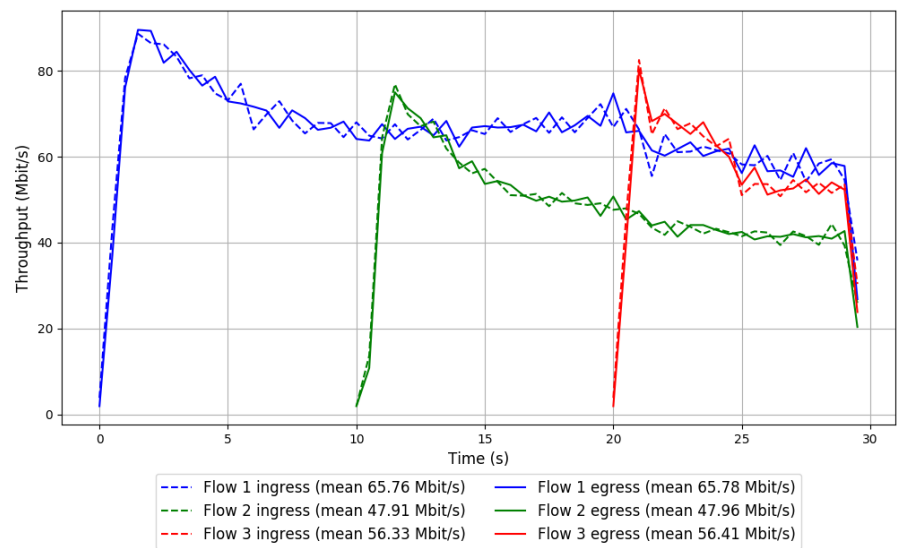
Average throughput: 56.41 Mbit/s

95th percentile per-packet one-way delay: 66.886 ms

Loss rate: 1.09%



Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-03 00:44:00

End at: 2018-01-03 00:44:30

# Below is generated by plot.py at 2018-01-03 04:50:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 318.65 Mbit/s

95th percentile per-packet one-way delay: 55.179 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 176.86 Mbit/s

95th percentile per-packet one-way delay: 54.852 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 158.54 Mbit/s

95th percentile per-packet one-way delay: 55.589 ms

Loss rate: 0.53%

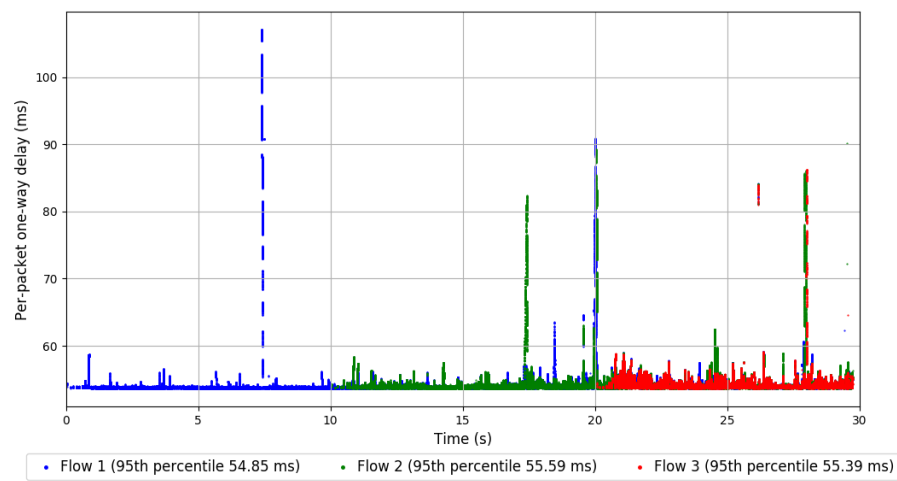
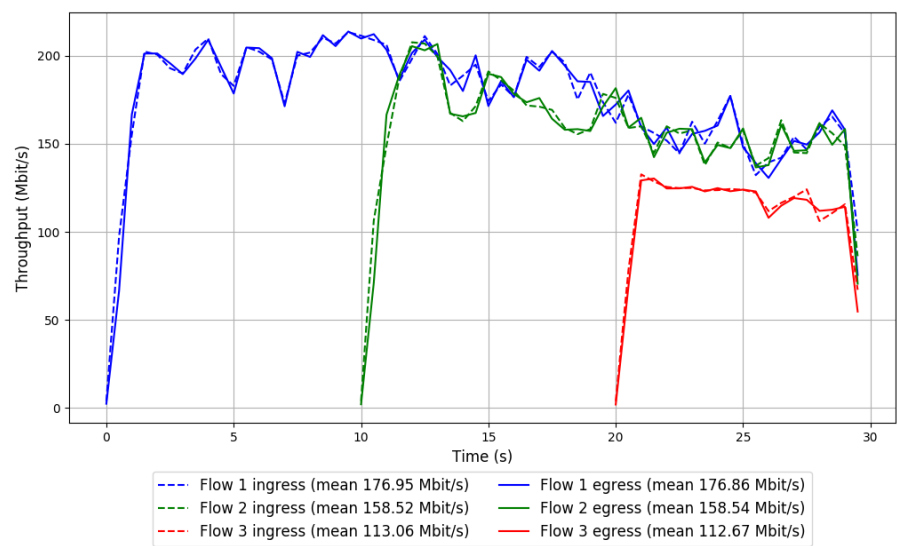
-- Flow 3:

Average throughput: 112.67 Mbit/s

95th percentile per-packet one-way delay: 55.389 ms

Loss rate: 1.42%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-03 00:57:16

End at: 2018-01-03 00:57:46

# Below is generated by plot.py at 2018-01-03 04:50:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 328.24 Mbit/s

95th percentile per-packet one-way delay: 55.454 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 176.58 Mbit/s

95th percentile per-packet one-way delay: 54.922 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 161.04 Mbit/s

95th percentile per-packet one-way delay: 55.613 ms

Loss rate: 0.54%

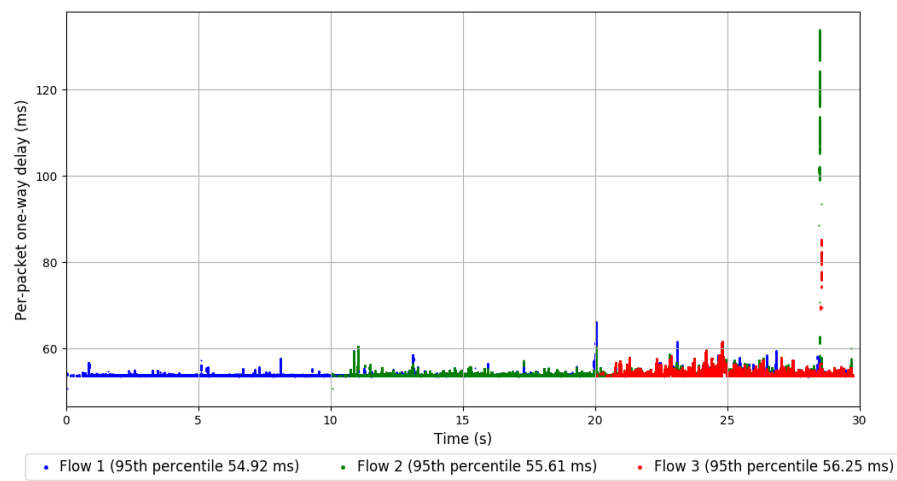
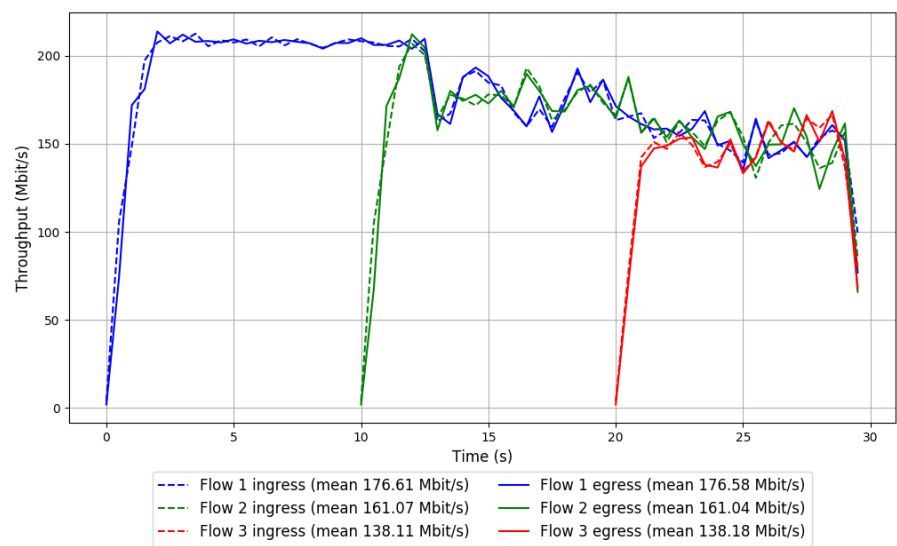
-- Flow 3:

Average throughput: 138.18 Mbit/s

95th percentile per-packet one-way delay: 56.254 ms

Loss rate: 1.05%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-03 01:11:09

End at: 2018-01-03 01:11:39

# Below is generated by plot.py at 2018-01-03 04:50:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 322.59 Mbit/s

95th percentile per-packet one-way delay: 54.506 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 172.36 Mbit/s

95th percentile per-packet one-way delay: 54.266 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 160.15 Mbit/s

95th percentile per-packet one-way delay: 54.677 ms

Loss rate: 0.46%

-- Flow 3:

Average throughput: 135.89 Mbit/s

95th percentile per-packet one-way delay: 54.768 ms

Loss rate: 1.35%

Run 10: Report of Indigo — Data Link

