

Pantheon Report

Generated at 2018-01-10 03:46:38 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

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

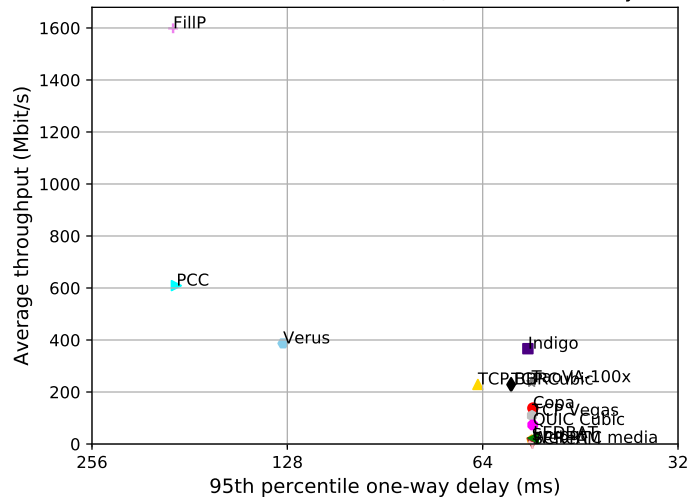
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

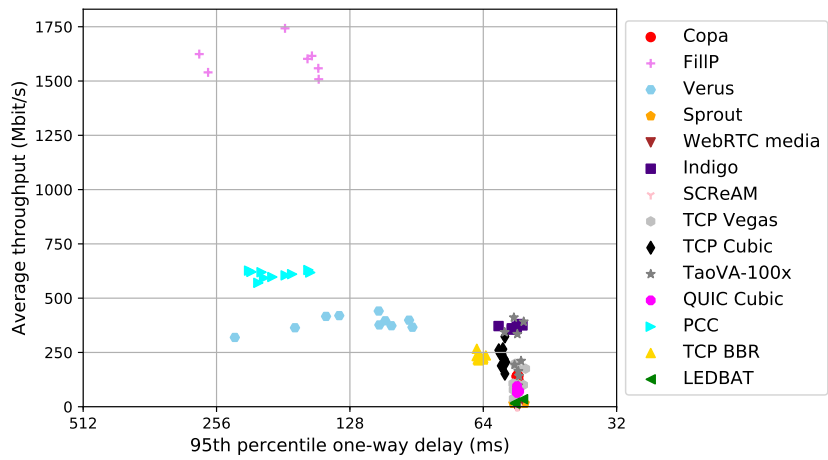
Git summary:

```
branch: master @ 56d1792c316a5efca3f2d21342905405fedffb48
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
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-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



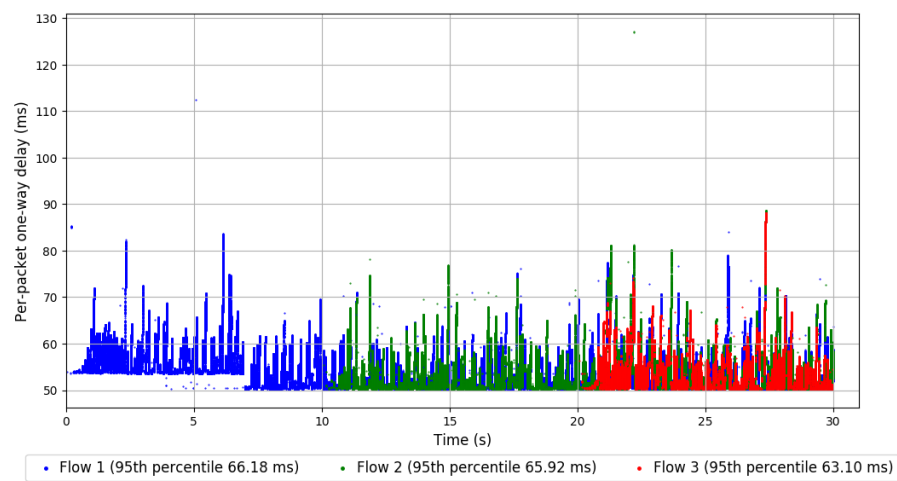
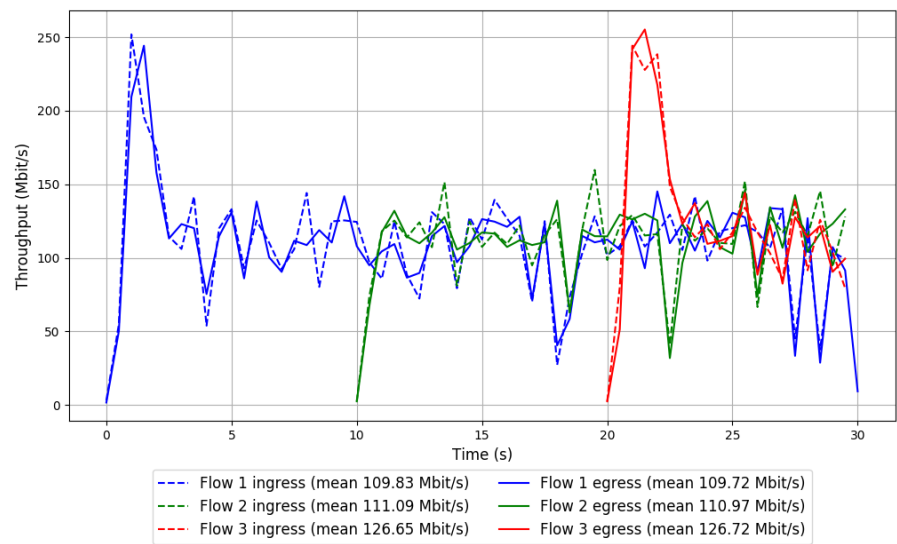
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	111.07	112.11	131.54	64.52	65.08	65.80	0.12	0.25	0.00
TCP Cubic	10	121.22	113.51	95.78	57.78	57.41	56.44	0.22	0.15	0.03
LEDBAT	3	12.89	11.75	6.34	53.58	52.69	51.47	0.26	0.84	1.78
PCC	10	525.52	97.98	56.42	198.28	166.14	157.45	3.42	2.78	4.66
QUIC Cubic	10	44.89	34.67	16.82	52.69	53.19	52.93	0.02	0.03	0.00
SCReAM	10	0.21	0.21	0.22	52.74	53.03	51.81	0.00	0.00	0.00
WebRTC media	10	2.25	1.41	0.58	52.99	52.72	53.03	0.00	0.00	0.01
Sprout	9	7.72	7.71	7.44	53.79	53.52	53.06	0.11	0.01	0.25
TaoVA-100x	10	97.09	152.10	182.83	54.22	52.34	55.08	0.00	0.00	0.00
TCP Vegas	10	38.19	85.02	43.03	53.81	53.59	53.10	0.15	0.20	0.04
Verus	10	236.66	162.74	130.23	126.83	126.28	130.57	1.22	2.21	0.53
Copa	5	76.09	66.76	67.66	53.50	53.57	53.08	0.00	0.00	0.00
FillP	7	846.63	752.27	688.36	191.64	168.18	183.14	6.81	8.10	14.39
Indigo	10	185.65	184.68	177.99	54.07	55.20	54.40	0.02	0.00	0.01

```
Run 1: Statistics of TCP BBR

Start at: 2018-01-09 22:23:51
End at: 2018-01-09 22:24:21

# Below is generated by plot.py at 2018-01-10 02:23:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 225.45 Mbit/s
95th percentile per-packet one-way delay: 65.524 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 109.72 Mbit/s
95th percentile per-packet one-way delay: 66.180 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 110.97 Mbit/s
95th percentile per-packet one-way delay: 65.925 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 126.72 Mbit/s
95th percentile per-packet one-way delay: 63.100 ms
Loss rate: 0.01%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-09 22:37:38

End at: 2018-01-09 22:38:08

Below is generated by plot.py at 2018-01-10 02:23:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 217.94 Mbit/s

95th percentile per-packet one-way delay: 65.856 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 107.50 Mbit/s

95th percentile per-packet one-way delay: 62.854 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 106.34 Mbit/s

95th percentile per-packet one-way delay: 66.762 ms

Loss rate: 0.00%

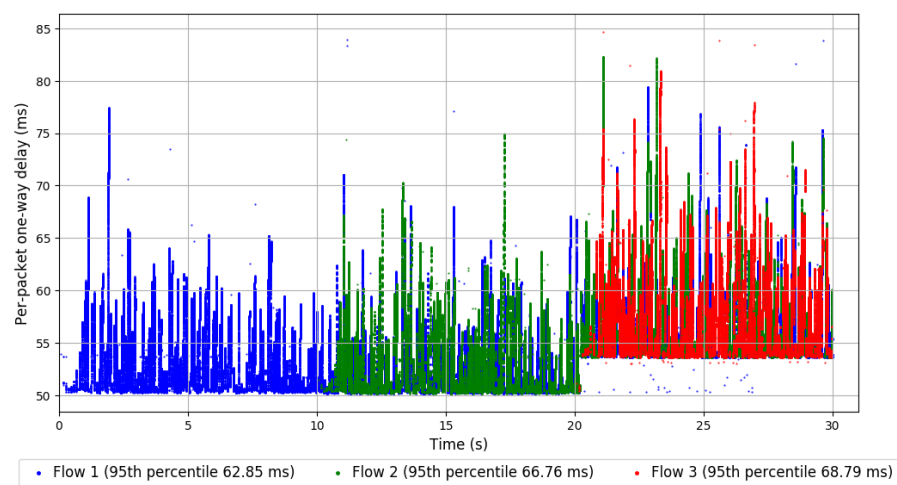
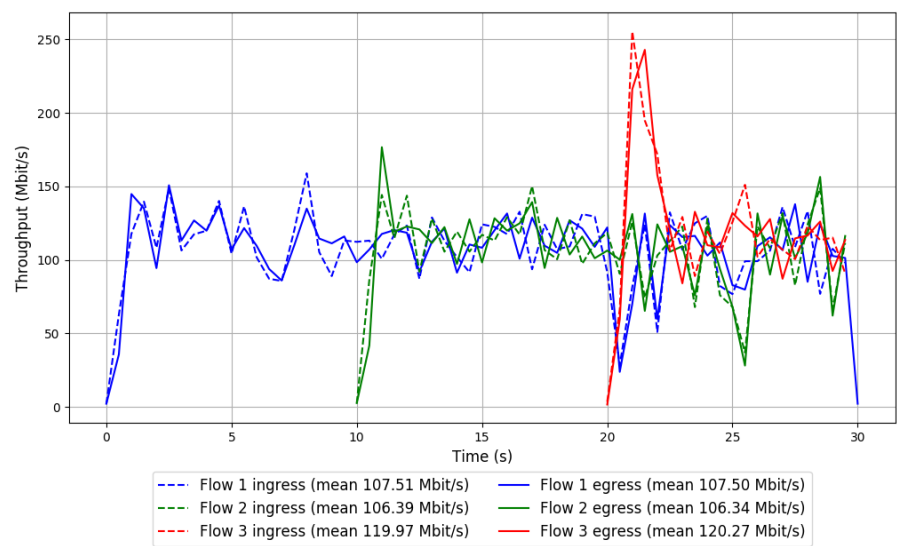
-- Flow 3:

Average throughput: 120.27 Mbit/s

95th percentile per-packet one-way delay: 68.790 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-09 22:51:25

End at: 2018-01-09 22:51:55

Below is generated by plot.py at 2018-01-10 02:23:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 233.30 Mbit/s

95th percentile per-packet one-way delay: 66.250 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 115.22 Mbit/s

95th percentile per-packet one-way delay: 66.154 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 118.64 Mbit/s

95th percentile per-packet one-way delay: 65.712 ms

Loss rate: 0.00%

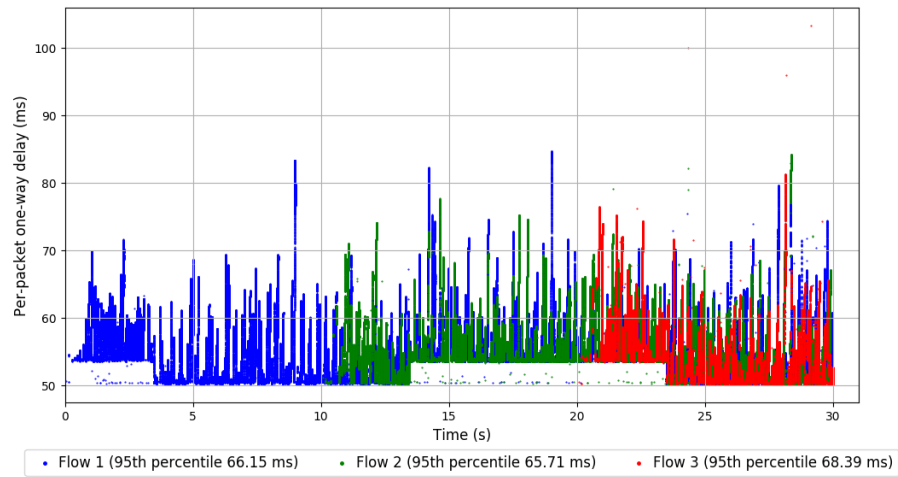
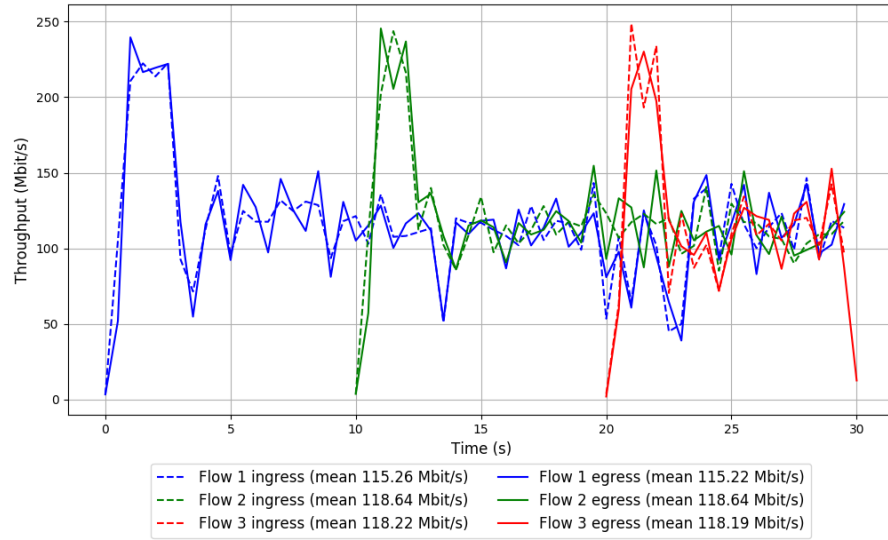
-- Flow 3:

Average throughput: 118.19 Mbit/s

95th percentile per-packet one-way delay: 68.391 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-09 23:05:13

End at: 2018-01-09 23:05:43

Below is generated by plot.py at 2018-01-10 02:23:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 213.50 Mbit/s

95th percentile per-packet one-way delay: 65.570 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 106.29 Mbit/s

95th percentile per-packet one-way delay: 65.083 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 105.31 Mbit/s

95th percentile per-packet one-way delay: 65.394 ms

Loss rate: 1.00%

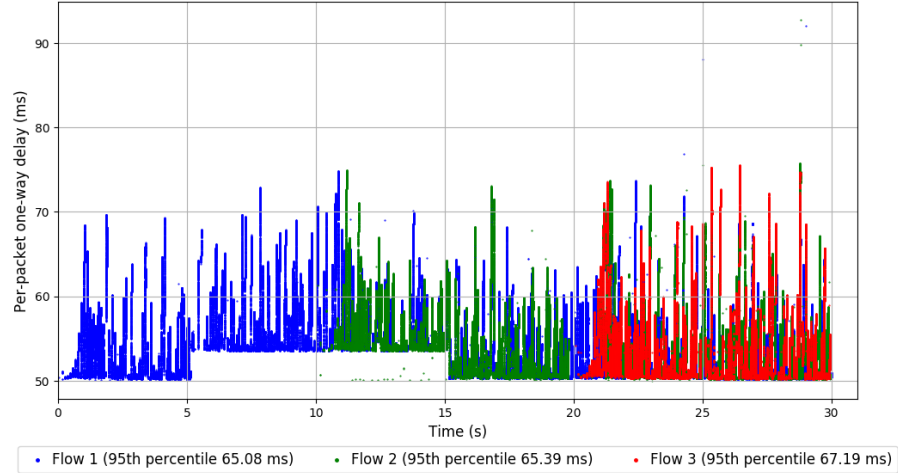
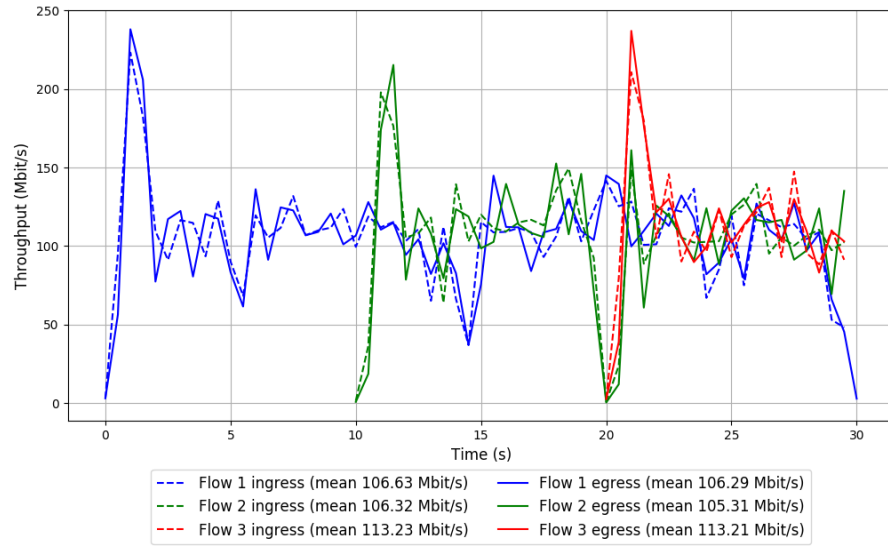
-- Flow 3:

Average throughput: 113.21 Mbit/s

95th percentile per-packet one-way delay: 67.190 ms

Loss rate: 0.01%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-09 23:19:09

End at: 2018-01-09 23:19:39

Below is generated by plot.py at 2018-01-10 02:23:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 236.29 Mbit/s

95th percentile per-packet one-way delay: 63.152 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 114.86 Mbit/s

95th percentile per-packet one-way delay: 62.668 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 118.74 Mbit/s

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

Loss rate: 0.01%

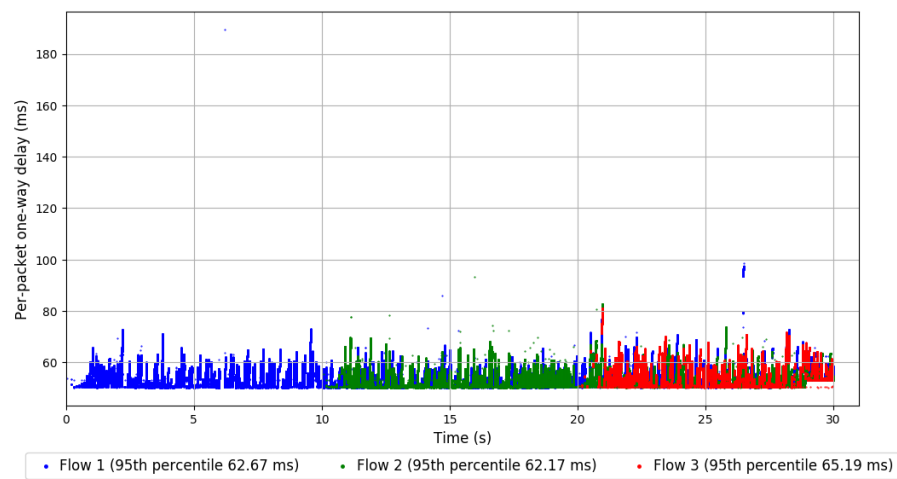
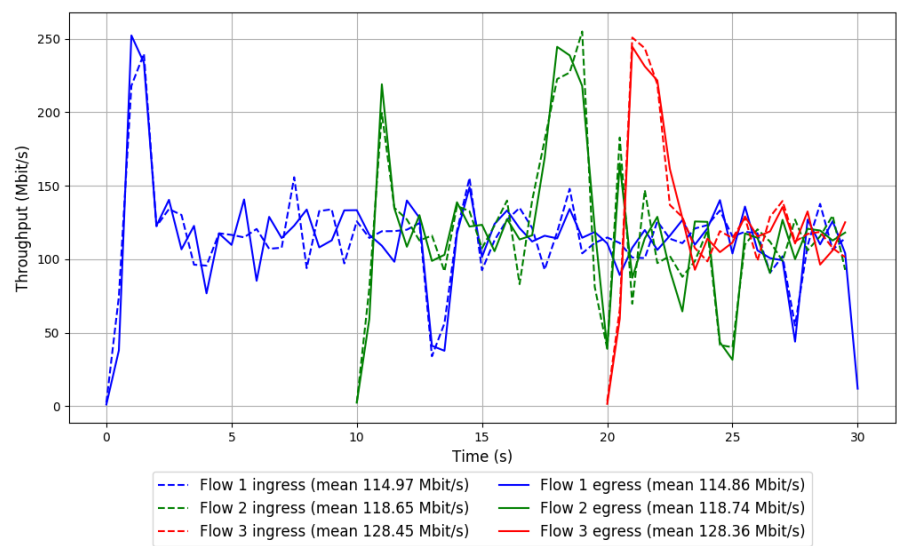
-- Flow 3:

Average throughput: 128.36 Mbit/s

95th percentile per-packet one-way delay: 65.189 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-09 23:33:02

End at: 2018-01-09 23:33:32

Below is generated by plot.py at 2018-01-10 02:23:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 219.49 Mbit/s

95th percentile per-packet one-way delay: 65.128 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 109.62 Mbit/s

95th percentile per-packet one-way delay: 65.714 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 106.21 Mbit/s

95th percentile per-packet one-way delay: 64.877 ms

Loss rate: 0.54%

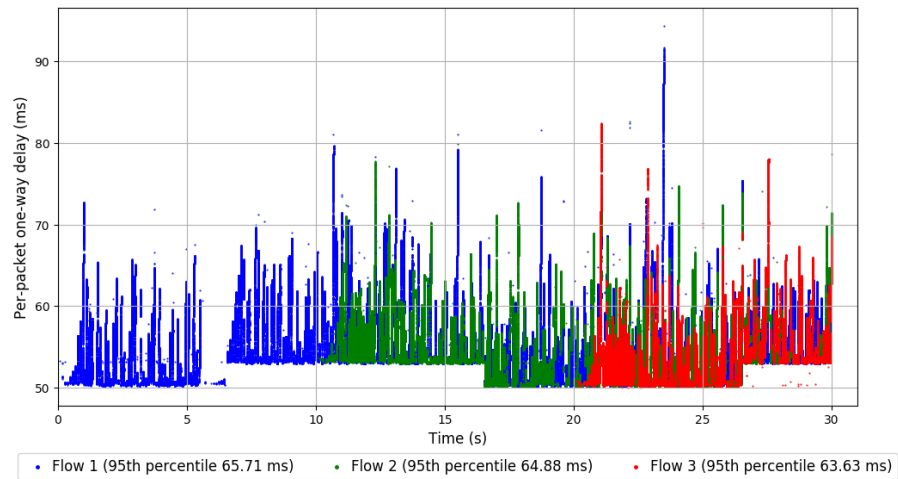
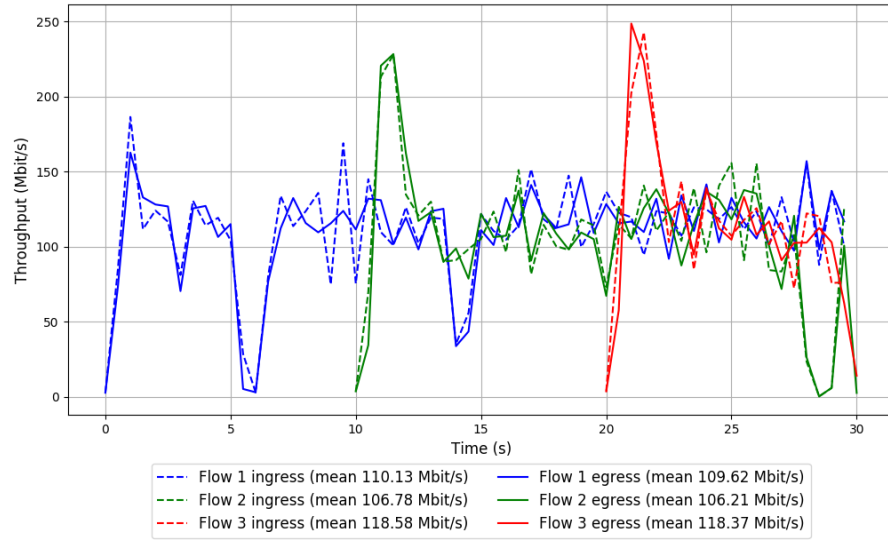
-- Flow 3:

Average throughput: 118.37 Mbit/s

95th percentile per-packet one-way delay: 63.626 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-09 23:46:52

End at: 2018-01-09 23:47:22

Below is generated by plot.py at 2018-01-10 02:23:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 236.39 Mbit/s

95th percentile per-packet one-way delay: 65.192 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 116.29 Mbit/s

95th percentile per-packet one-way delay: 65.045 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 108.38 Mbit/s

95th percentile per-packet one-way delay: 64.573 ms

Loss rate: 0.37%

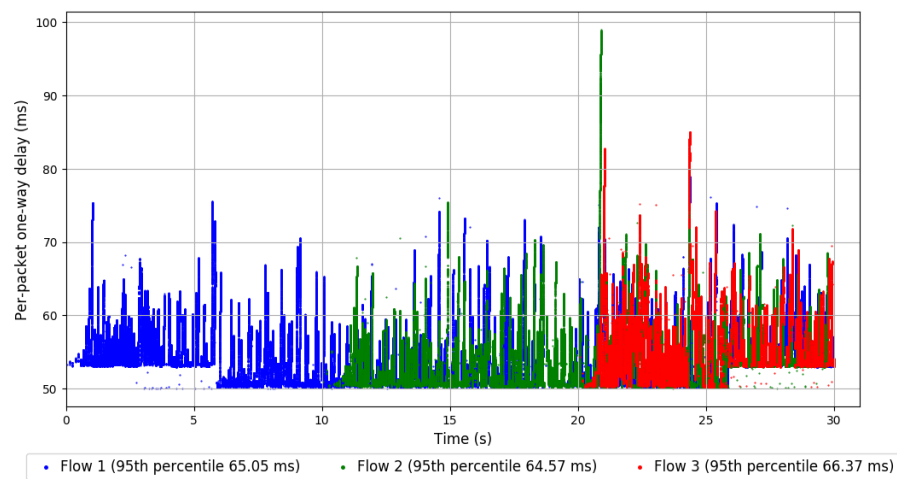
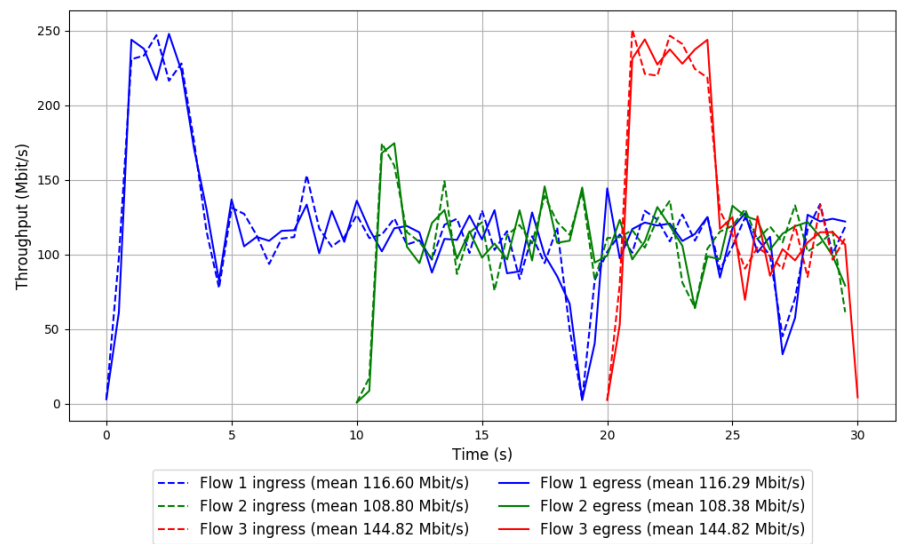
-- Flow 3:

Average throughput: 144.82 Mbit/s

95th percentile per-packet one-way delay: 66.372 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-10 00:00:38

End at: 2018-01-10 00:01:08

Below is generated by plot.py at 2018-01-10 02:23:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 224.10 Mbit/s

95th percentile per-packet one-way delay: 64.008 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 107.18 Mbit/s

95th percentile per-packet one-way delay: 62.094 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 114.63 Mbit/s

95th percentile per-packet one-way delay: 65.308 ms

Loss rate: 0.38%

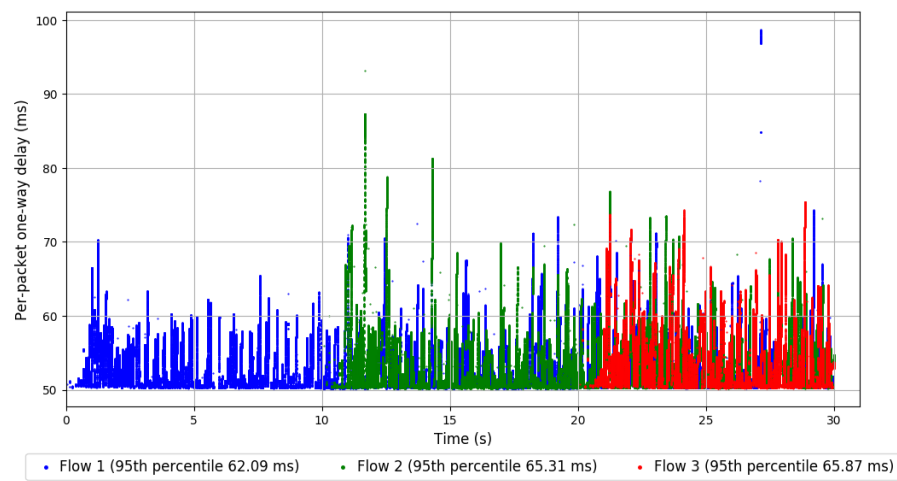
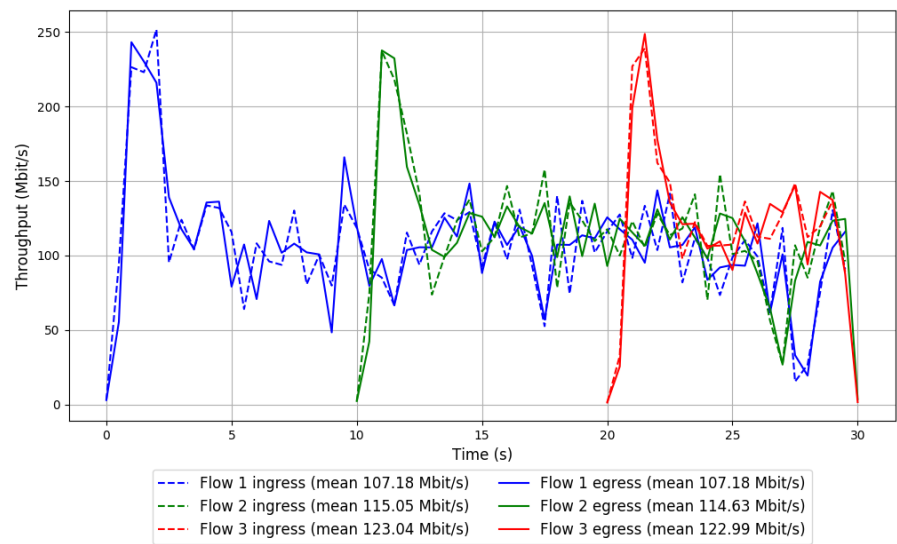
-- Flow 3:

Average throughput: 122.99 Mbit/s

95th percentile per-packet one-way delay: 65.871 ms

Loss rate: 0.02%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-10 00:14:16

End at: 2018-01-10 00:14:46

Below is generated by plot.py at 2018-01-10 02:26:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 217.74 Mbit/s

95th percentile per-packet one-way delay: 64.129 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 110.33 Mbit/s

95th percentile per-packet one-way delay: 65.053 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 106.42 Mbit/s

95th percentile per-packet one-way delay: 63.216 ms

Loss rate: 0.00%

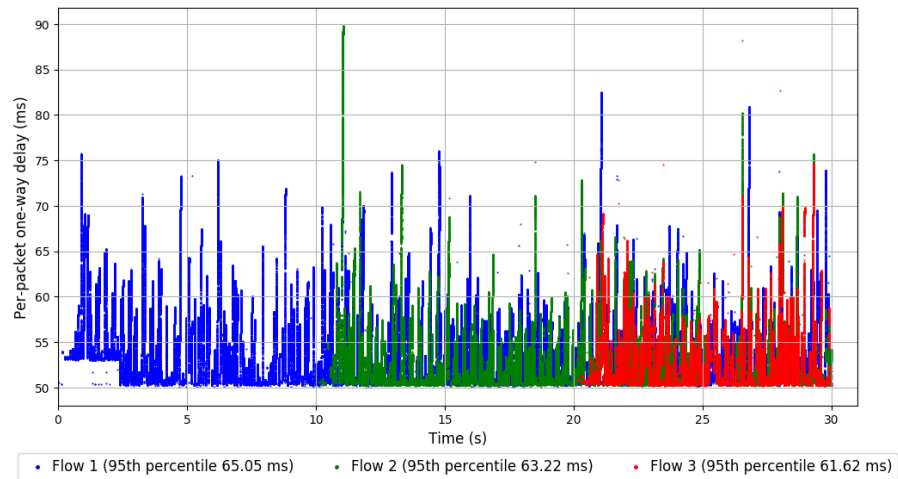
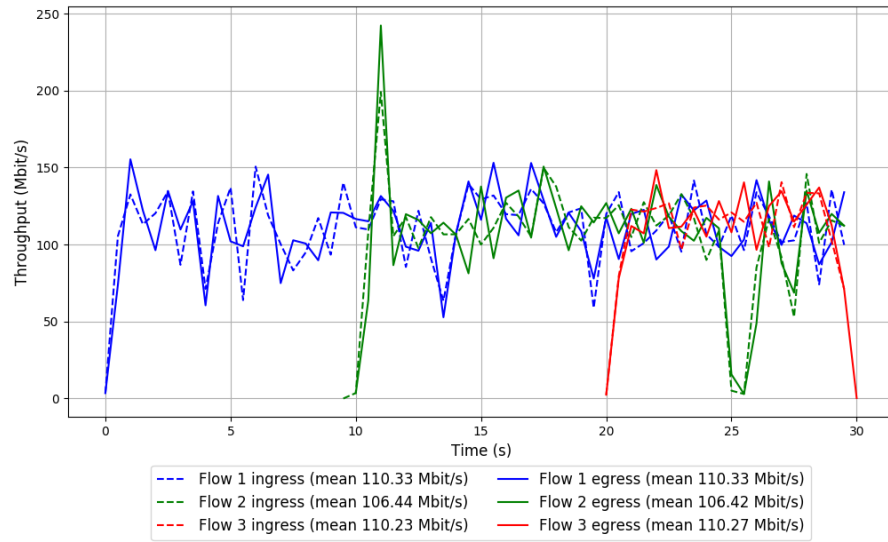
-- Flow 3:

Average throughput: 110.27 Mbit/s

95th percentile per-packet one-way delay: 61.622 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-10 00:28:16

End at: 2018-01-10 00:28:46

Below is generated by plot.py at 2018-01-10 02:27:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 267.09 Mbit/s

95th percentile per-packet one-way delay: 66.199 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 113.70 Mbit/s

95th percentile per-packet one-way delay: 64.342 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 125.46 Mbit/s

95th percentile per-packet one-way delay: 66.875 ms

Loss rate: 0.00%

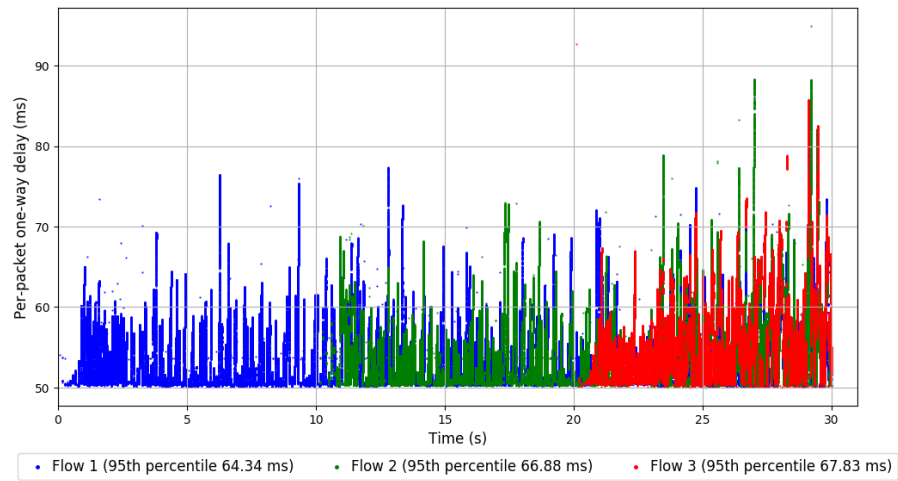
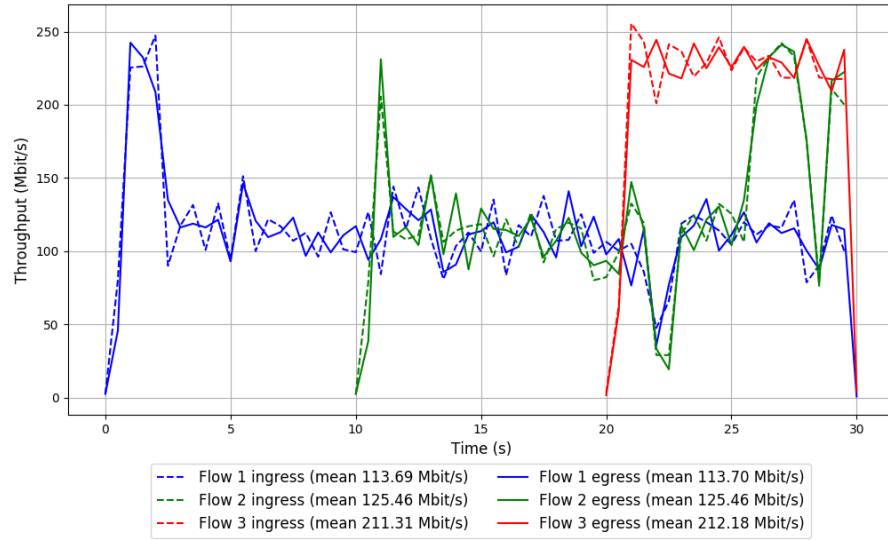
-- Flow 3:

Average throughput: 212.18 Mbit/s

95th percentile per-packet one-way delay: 67.832 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-09 22:31:24

End at: 2018-01-09 22:31:54

Below is generated by plot.py at 2018-01-10 02:27:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 218.85 Mbit/s

95th percentile per-packet one-way delay: 57.368 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 111.94 Mbit/s

95th percentile per-packet one-way delay: 58.768 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 110.61 Mbit/s

95th percentile per-packet one-way delay: 54.806 ms

Loss rate: 0.00%

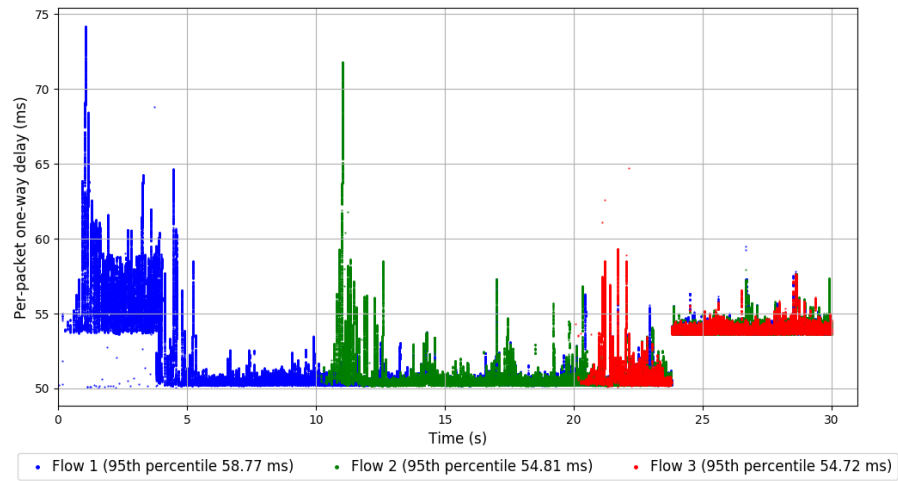
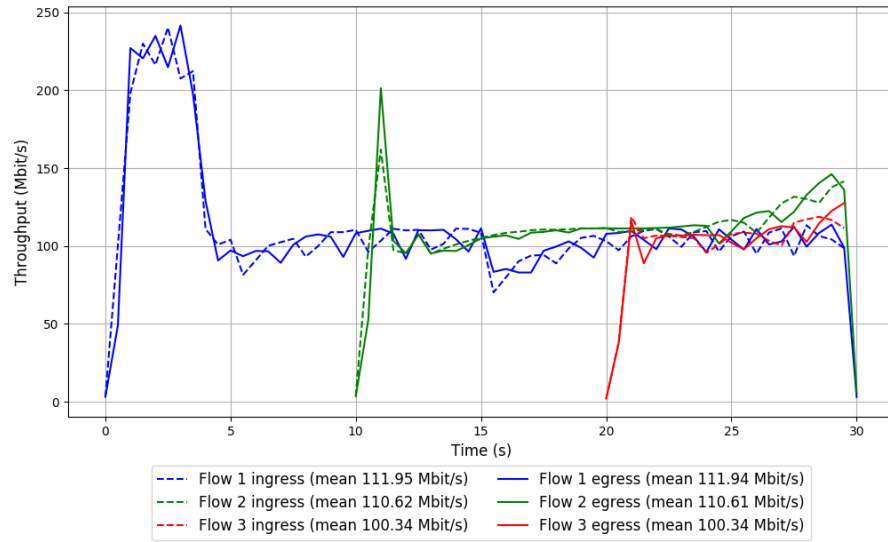
-- Flow 3:

Average throughput: 100.34 Mbit/s

95th percentile per-packet one-way delay: 54.719 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-09 22:45:03

End at: 2018-01-09 22:45:33

Below is generated by plot.py at 2018-01-10 02:27:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.74 Mbit/s

95th percentile per-packet one-way delay: 58.293 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 98.39 Mbit/s

95th percentile per-packet one-way delay: 59.711 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 84.60 Mbit/s

95th percentile per-packet one-way delay: 56.585 ms

Loss rate: 0.01%

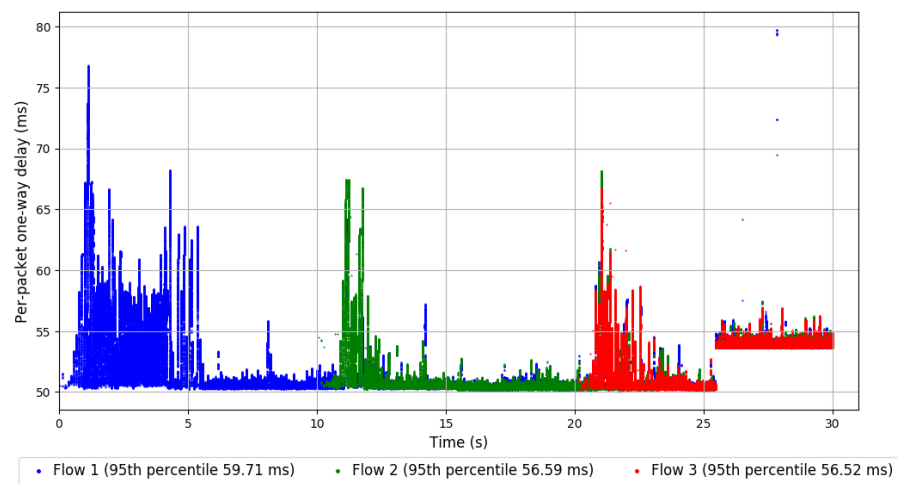
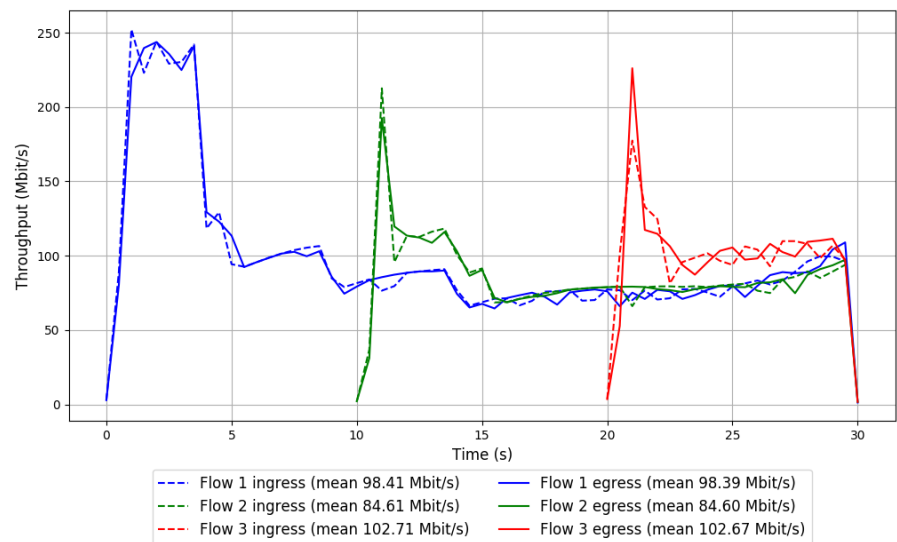
-- Flow 3:

Average throughput: 102.67 Mbit/s

95th percentile per-packet one-way delay: 56.516 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-09 22:59:10

End at: 2018-01-09 22:59:40

Below is generated by plot.py at 2018-01-10 02:27:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 152.01 Mbit/s

95th percentile per-packet one-way delay: 57.198 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 74.61 Mbit/s

95th percentile per-packet one-way delay: 55.986 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 64.31 Mbit/s

95th percentile per-packet one-way delay: 58.091 ms

Loss rate: 1.23%

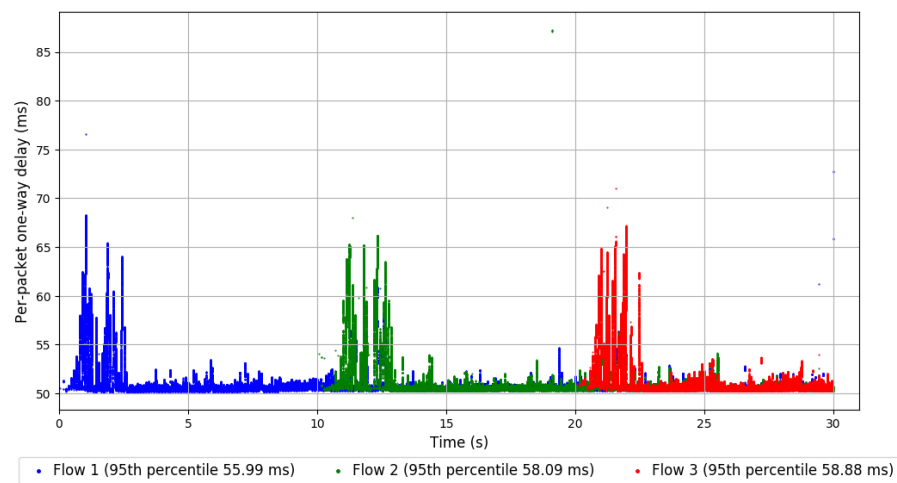
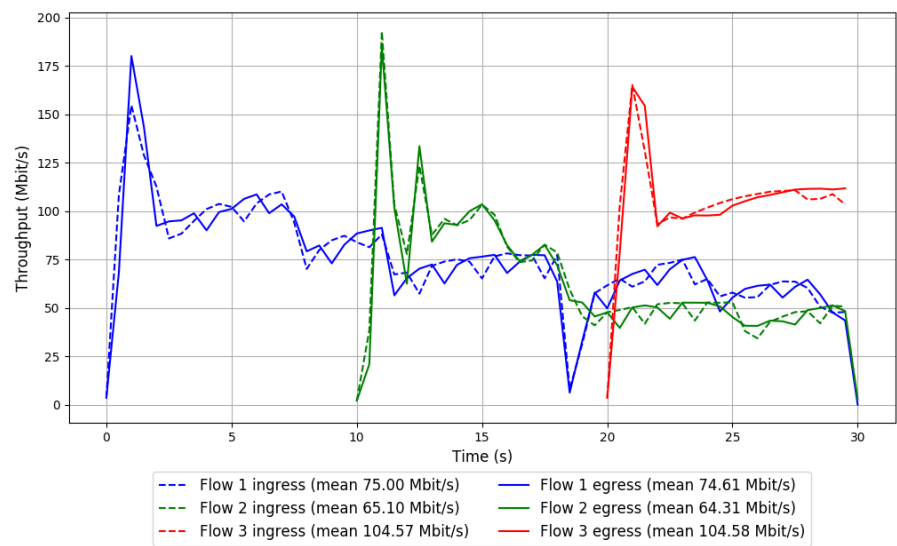
-- Flow 3:

Average throughput: 104.58 Mbit/s

95th percentile per-packet one-way delay: 58.883 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-09 23:12:52

End at: 2018-01-09 23:13:22

Below is generated by plot.py at 2018-01-10 02:27:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.93 Mbit/s

95th percentile per-packet one-way delay: 57.941 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 91.12 Mbit/s

95th percentile per-packet one-way delay: 57.440 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 84.36 Mbit/s

95th percentile per-packet one-way delay: 59.385 ms

Loss rate: 0.01%

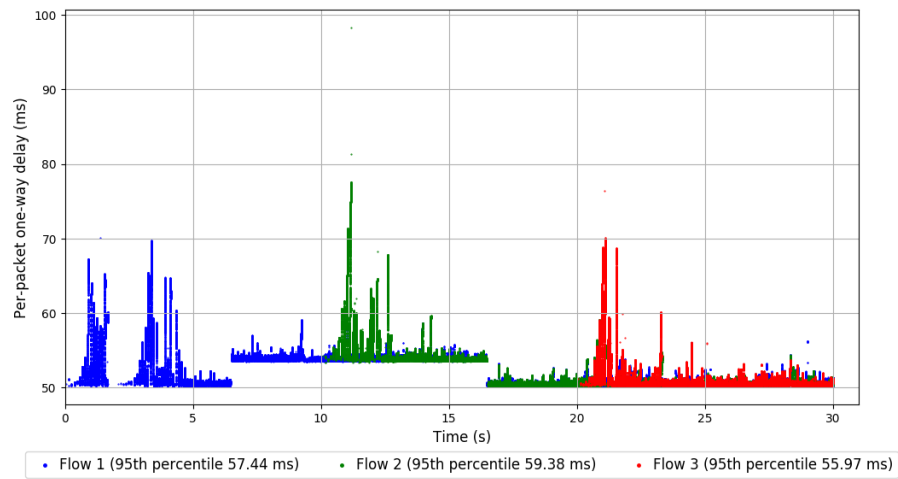
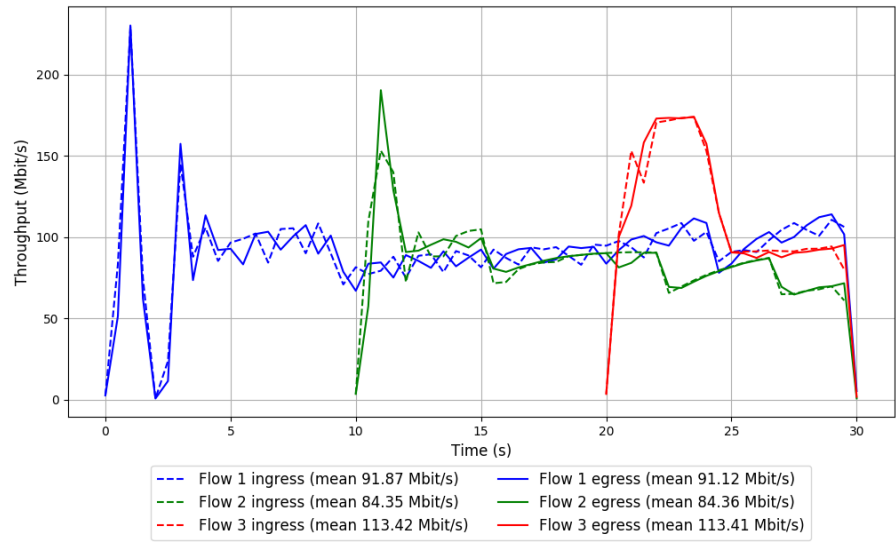
-- Flow 3:

Average throughput: 113.41 Mbit/s

95th percentile per-packet one-way delay: 55.969 ms

Loss rate: 0.01%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-09 23:26:41

End at: 2018-01-09 23:27:11

Below is generated by plot.py at 2018-01-10 02:27:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 260.09 Mbit/s

95th percentile per-packet one-way delay: 59.050 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 149.58 Mbit/s

95th percentile per-packet one-way delay: 58.553 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 115.04 Mbit/s

95th percentile per-packet one-way delay: 57.877 ms

Loss rate: 0.01%

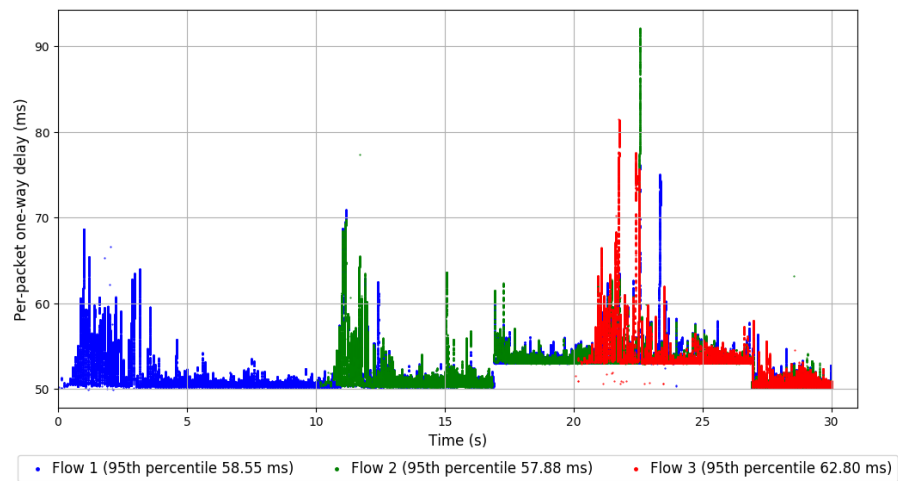
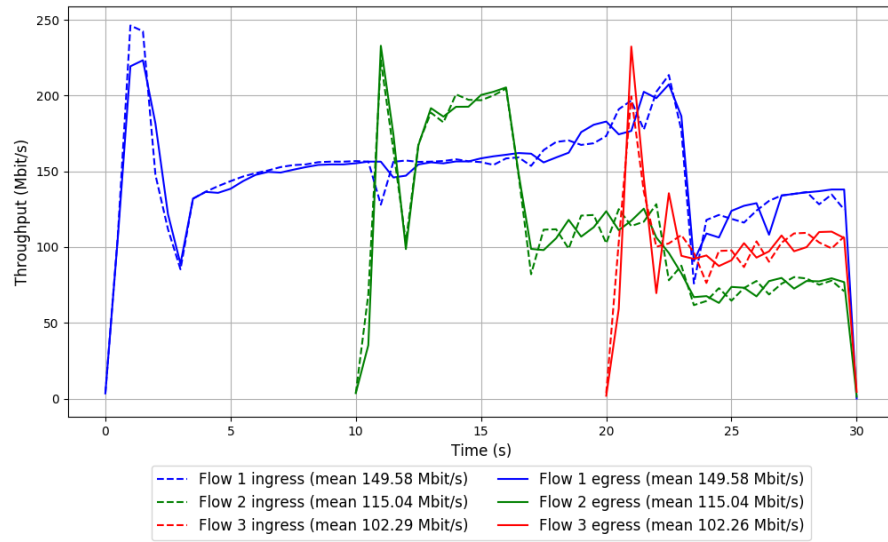
-- Flow 3:

Average throughput: 102.26 Mbit/s

95th percentile per-packet one-way delay: 62.795 ms

Loss rate: 0.04%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-09 23:40:31

End at: 2018-01-09 23:41:01

Below is generated by plot.py at 2018-01-10 02:27:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 241.74 Mbit/s

95th percentile per-packet one-way delay: 58.048 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 112.82 Mbit/s

95th percentile per-packet one-way delay: 56.731 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 191.28 Mbit/s

95th percentile per-packet one-way delay: 59.042 ms

Loss rate: 0.00%

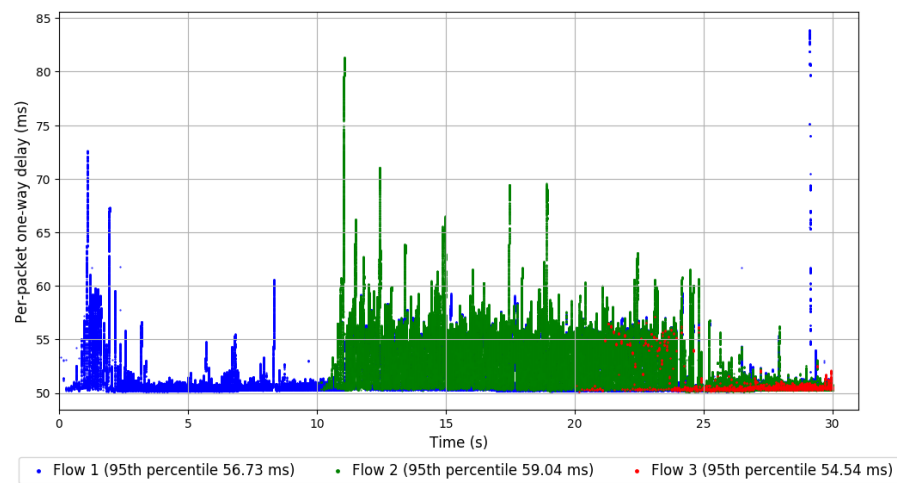
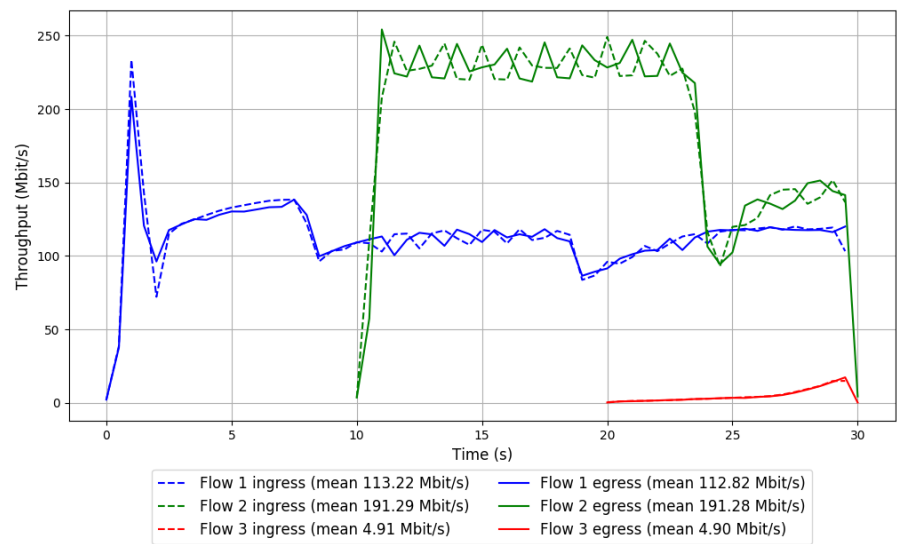
-- Flow 3:

Average throughput: 4.90 Mbit/s

95th percentile per-packet one-way delay: 54.543 ms

Loss rate: 0.22%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-09 23:54:20

End at: 2018-01-09 23:54:50

Below is generated by plot.py at 2018-01-10 02:29:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 245.73 Mbit/s

95th percentile per-packet one-way delay: 58.683 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 141.47 Mbit/s

95th percentile per-packet one-way delay: 59.455 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 103.38 Mbit/s

95th percentile per-packet one-way delay: 55.196 ms

Loss rate: 0.00%

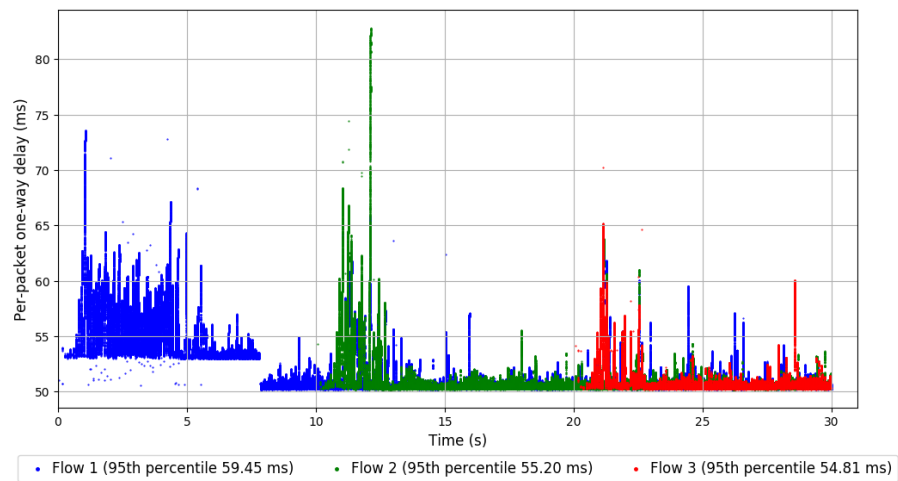
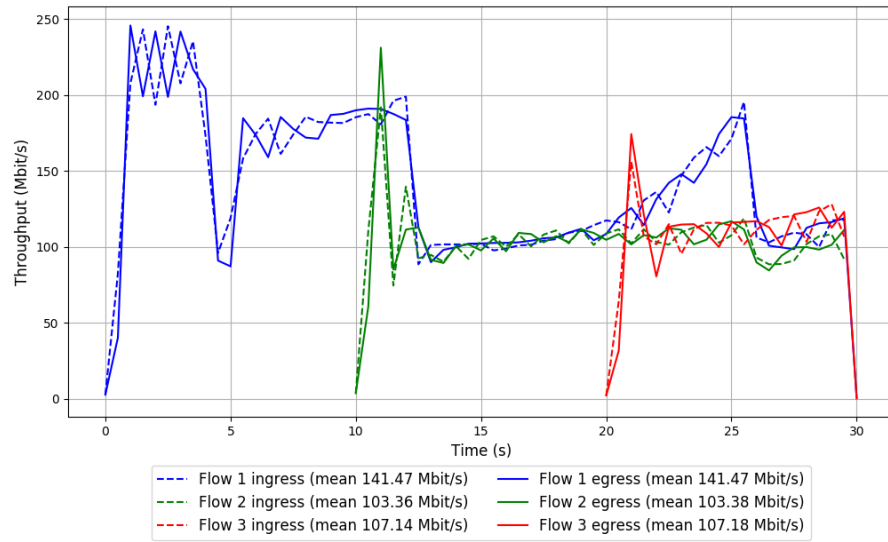
-- Flow 3:

Average throughput: 107.18 Mbit/s

95th percentile per-packet one-way delay: 54.806 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-10 00:07:54

End at: 2018-01-10 00:08:24

Below is generated by plot.py at 2018-01-10 02:29:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 204.73 Mbit/s

95th percentile per-packet one-way delay: 56.927 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 114.39 Mbit/s

95th percentile per-packet one-way delay: 56.683 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 93.87 Mbit/s

95th percentile per-packet one-way delay: 56.951 ms

Loss rate: 0.24%

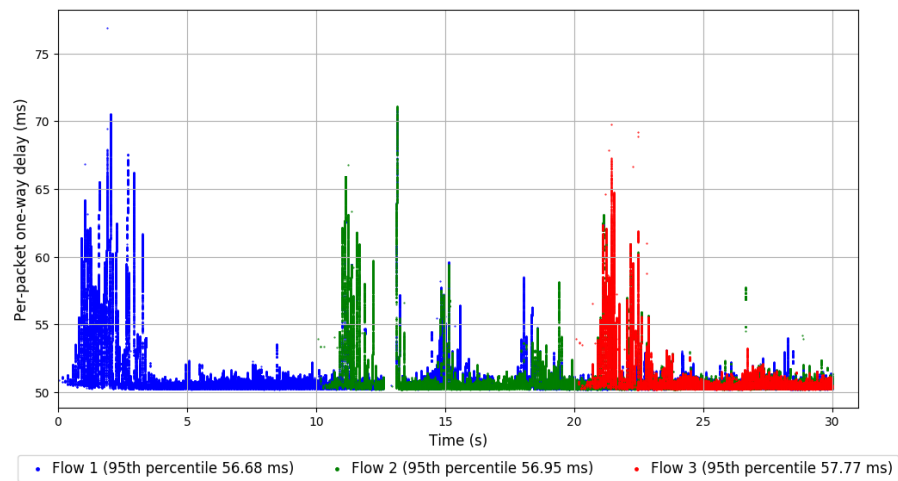
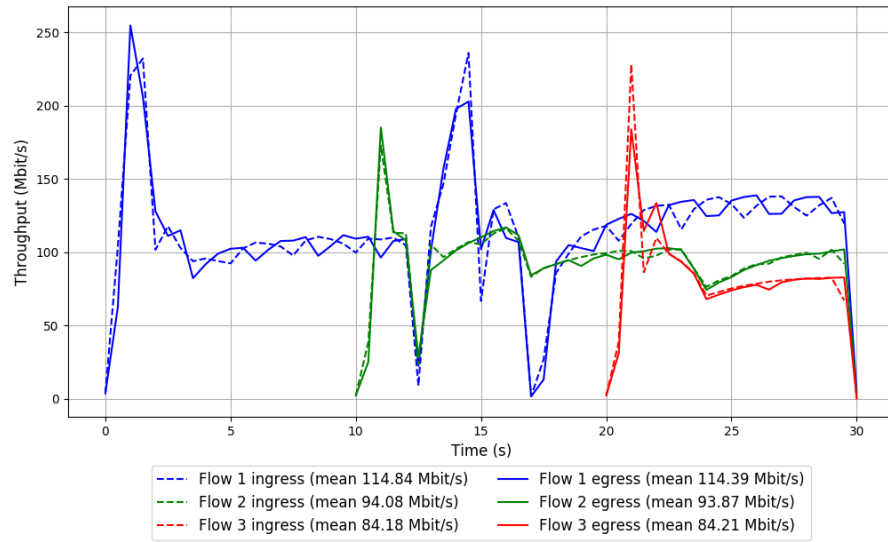
-- Flow 3:

Average throughput: 84.21 Mbit/s

95th percentile per-packet one-way delay: 57.775 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-10 00:22:01

End at: 2018-01-10 00:22:31

Below is generated by plot.py at 2018-01-10 02:30:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 265.04 Mbit/s

95th percentile per-packet one-way delay: 57.805 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 144.79 Mbit/s

95th percentile per-packet one-way delay: 58.968 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 122.45 Mbit/s

95th percentile per-packet one-way delay: 56.553 ms

Loss rate: 0.00%

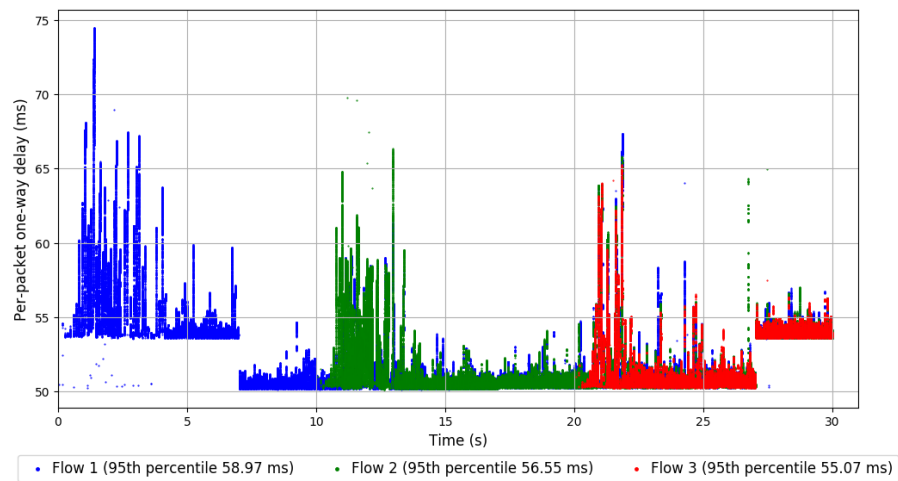
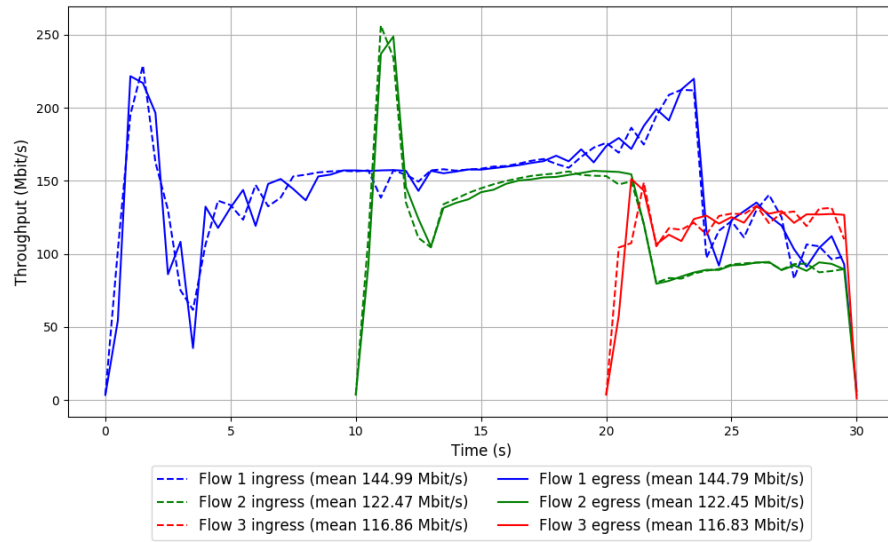
-- Flow 3:

Average throughput: 116.83 Mbit/s

95th percentile per-packet one-way delay: 55.070 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-10 00:36:09

End at: 2018-01-10 00:36:39

Below is generated by plot.py at 2018-01-10 02:31:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 323.40 Mbit/s

95th percentile per-packet one-way delay: 57.206 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 173.12 Mbit/s

95th percentile per-packet one-way delay: 55.518 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 165.18 Mbit/s

95th percentile per-packet one-way delay: 59.660 ms

Loss rate: 0.00%

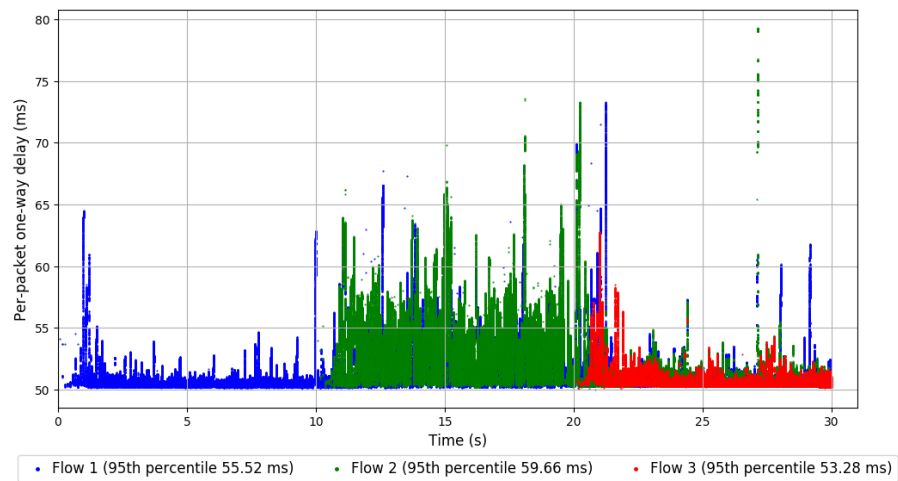
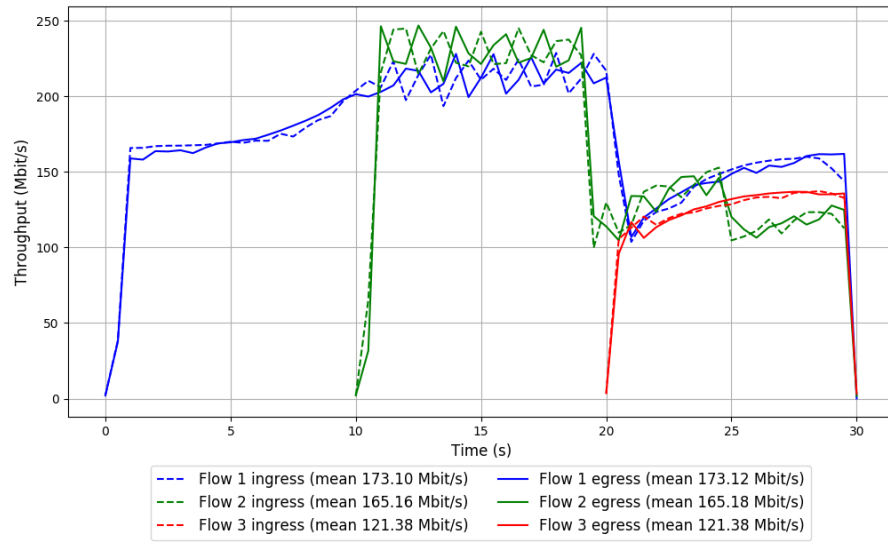
-- Flow 3:

Average throughput: 121.38 Mbit/s

95th percentile per-packet one-way delay: 53.280 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

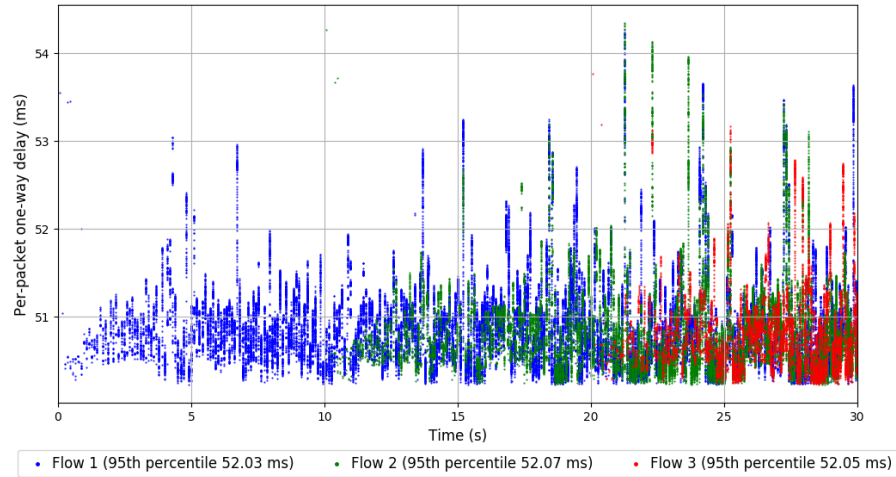
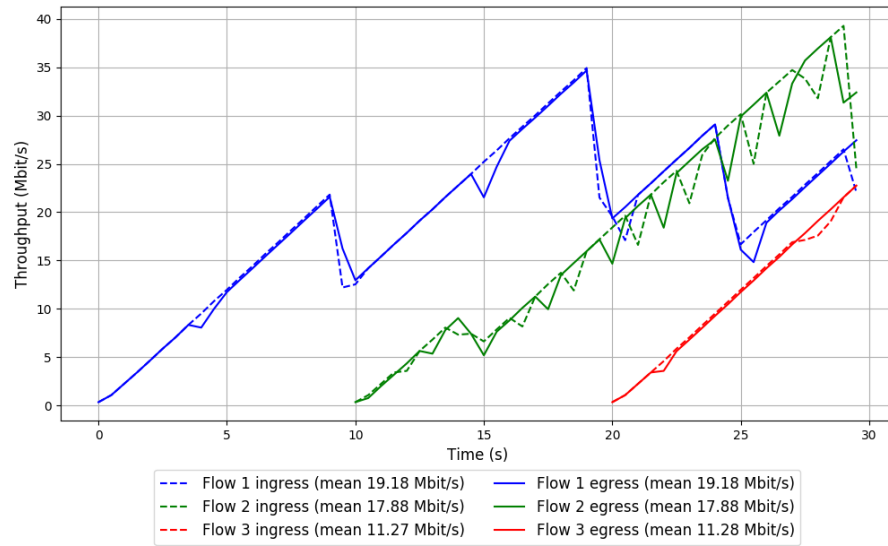


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-09 22:27:15
End at: 2018-01-09 22:27:45

# Below is generated by plot.py at 2018-01-10 02:31:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.77 Mbit/s
95th percentile per-packet one-way delay: 52.043 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 19.18 Mbit/s
95th percentile per-packet one-way delay: 52.031 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 17.88 Mbit/s
95th percentile per-packet one-way delay: 52.069 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.28 Mbit/s
95th percentile per-packet one-way delay: 52.045 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

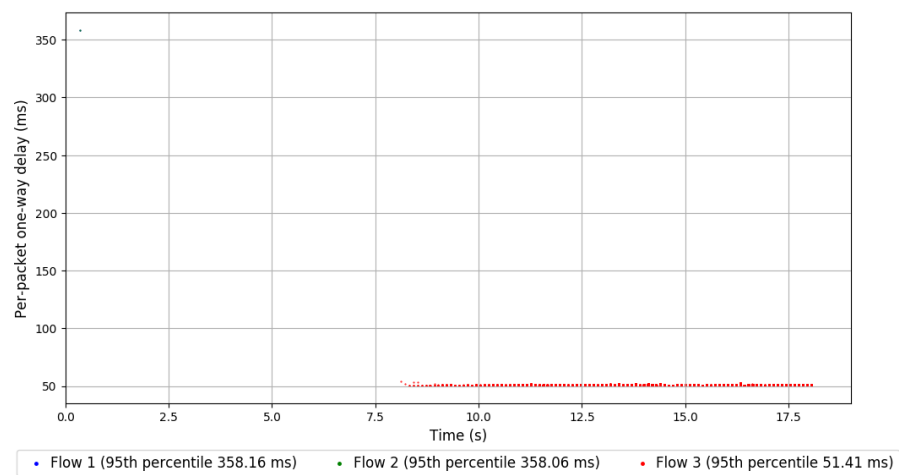
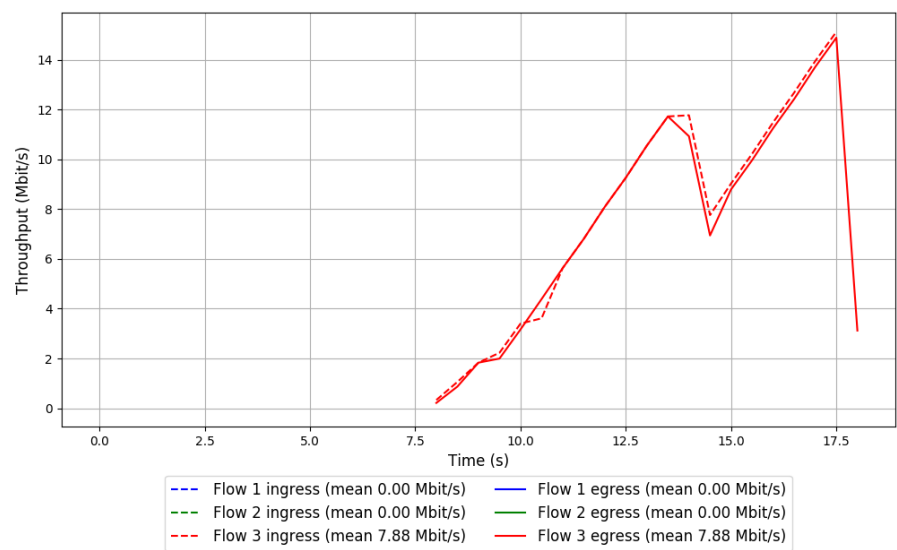


Run 2: Statistics of LEDBAT

Start at: 2018-01-09 22:41:00

End at: 2018-01-09 22:41:30

Run 2: Report of LEDBAT — Data Link

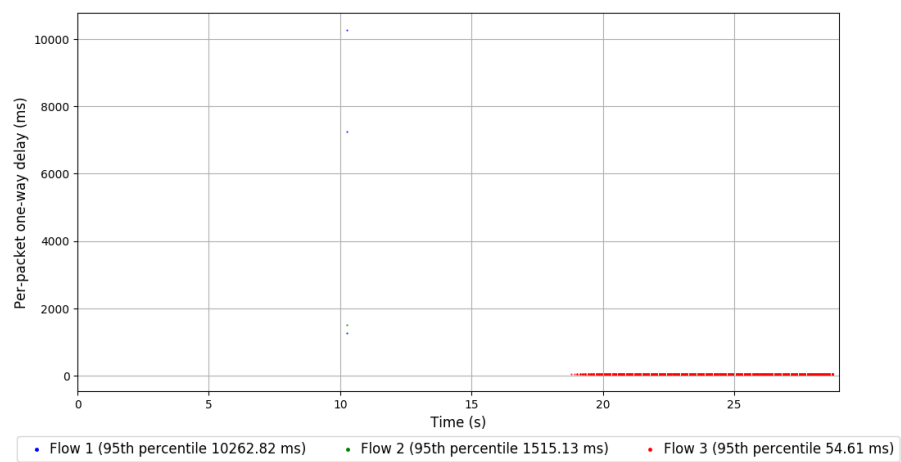
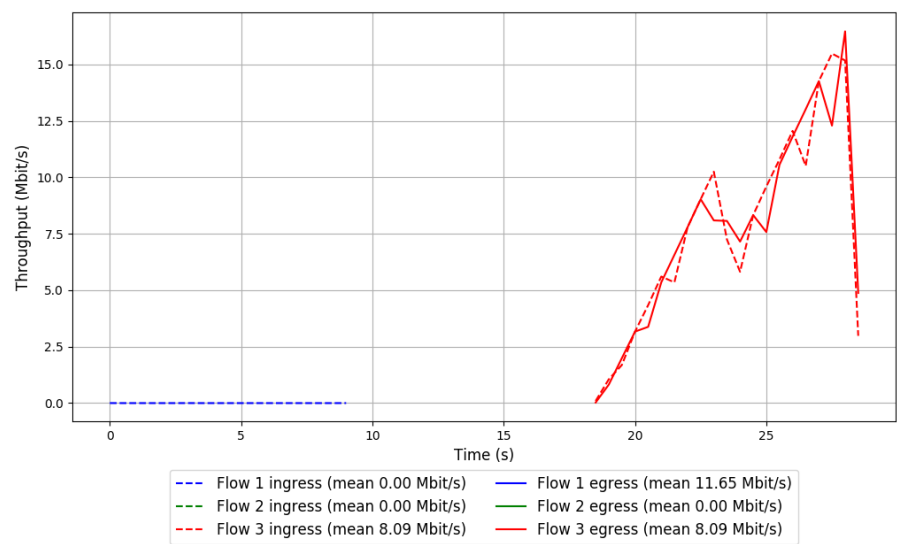


Run 3: Statistics of LEDBAT

Start at: 2018-01-09 22:54:48

End at: 2018-01-09 22:55:18

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-09 23:08:36

End at: 2018-01-09 23:09:06

Below is generated by plot.py at 2018-01-10 02:31:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.13 Mbit/s

95th percentile per-packet one-way delay: 54.161 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 12.45 Mbit/s

95th percentile per-packet one-way delay: 54.253 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.02 Mbit/s

95th percentile per-packet one-way delay: 51.822 ms

Loss rate: 1.10%

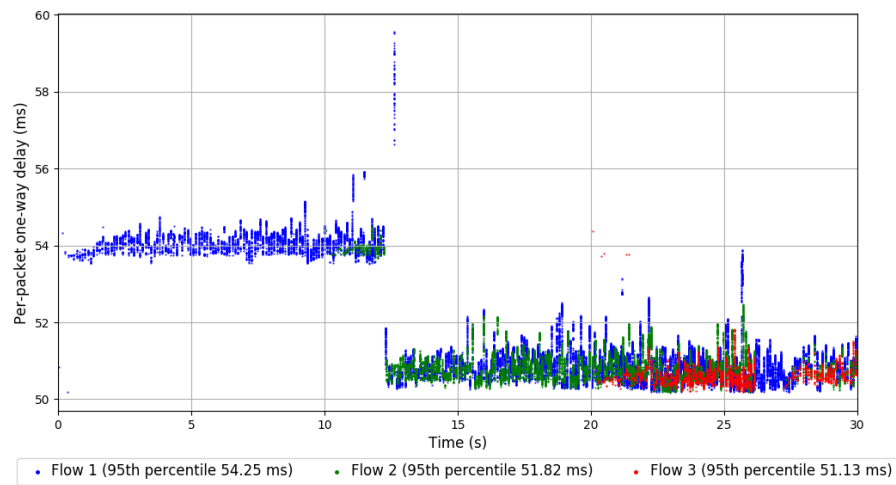
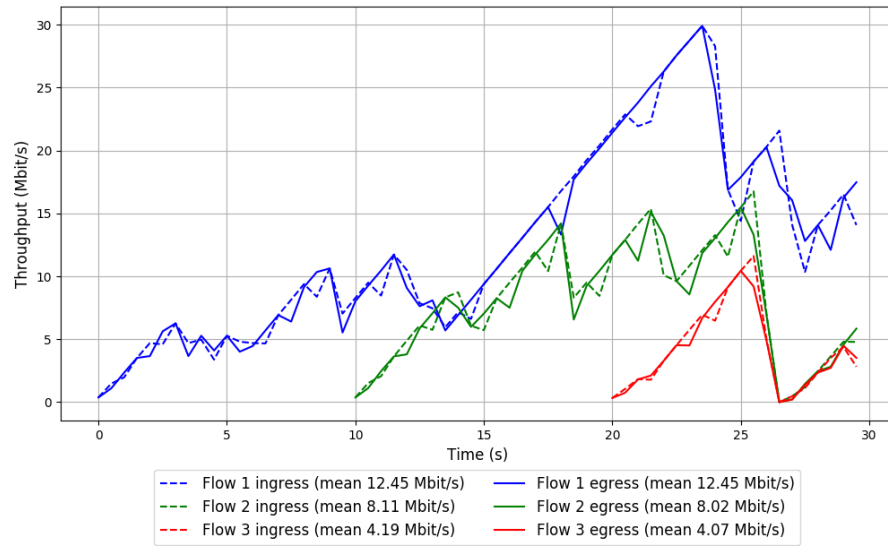
-- Flow 3:

Average throughput: 4.07 Mbit/s

95th percentile per-packet one-way delay: 51.133 ms

Loss rate: 3.06%

Run 4: Report of LEDBAT — Data Link

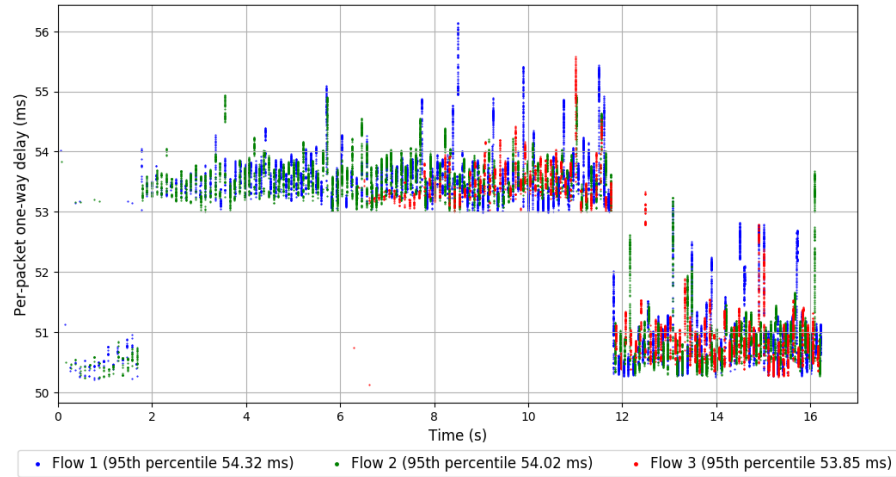
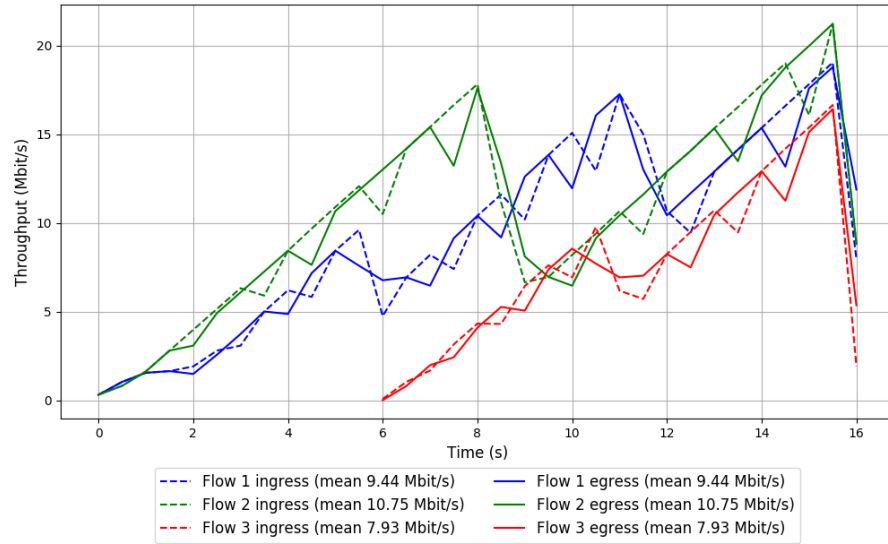


Run 5: Statistics of LEDBAT

Start at: 2018-01-09 23:22:33

End at: 2018-01-09 23:23:03

Run 5: Report of LEDBAT — Data Link

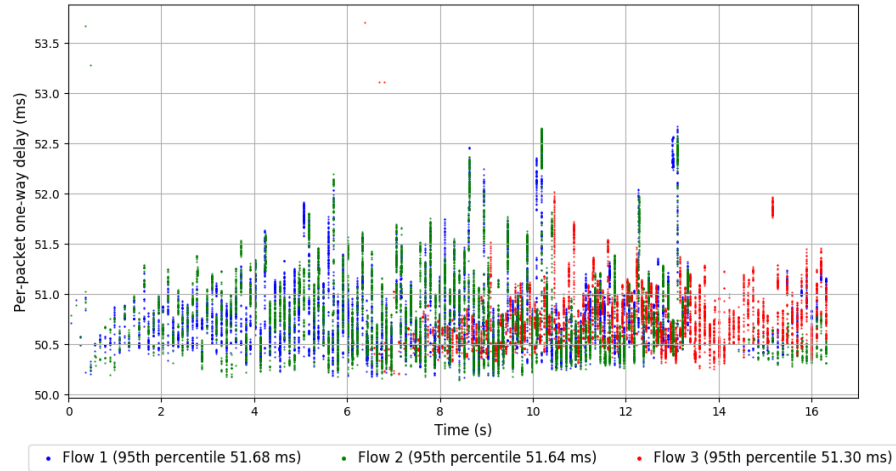
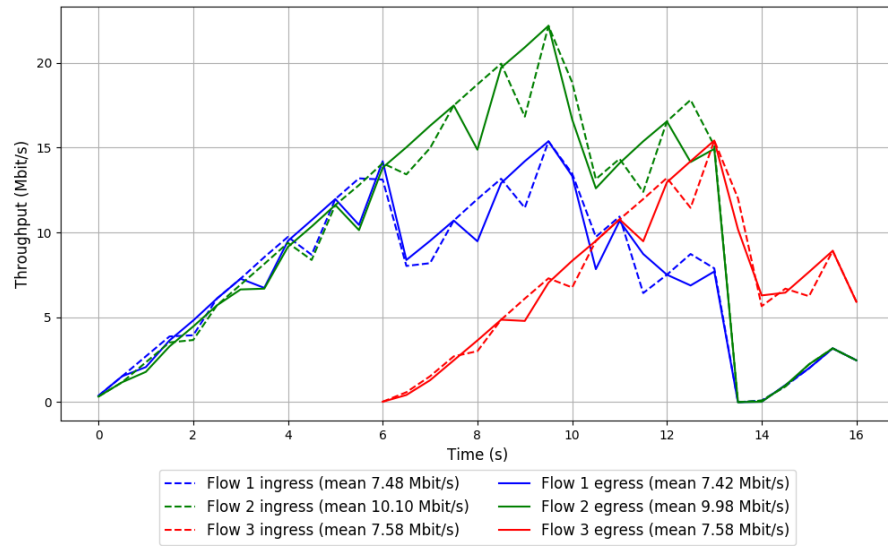


Run 6: Statistics of LEDBAT

Start at: 2018-01-09 23:36:24

End at: 2018-01-09 23:36:54

Run 6: Report of LEDBAT — Data Link

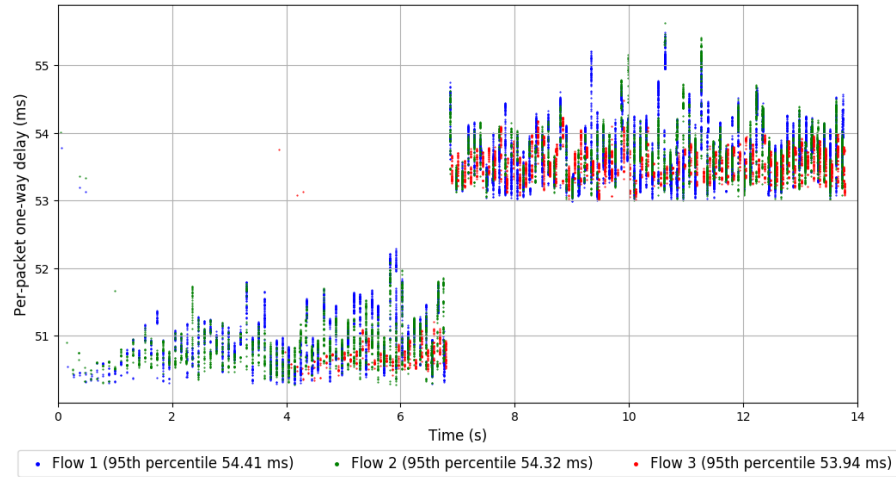
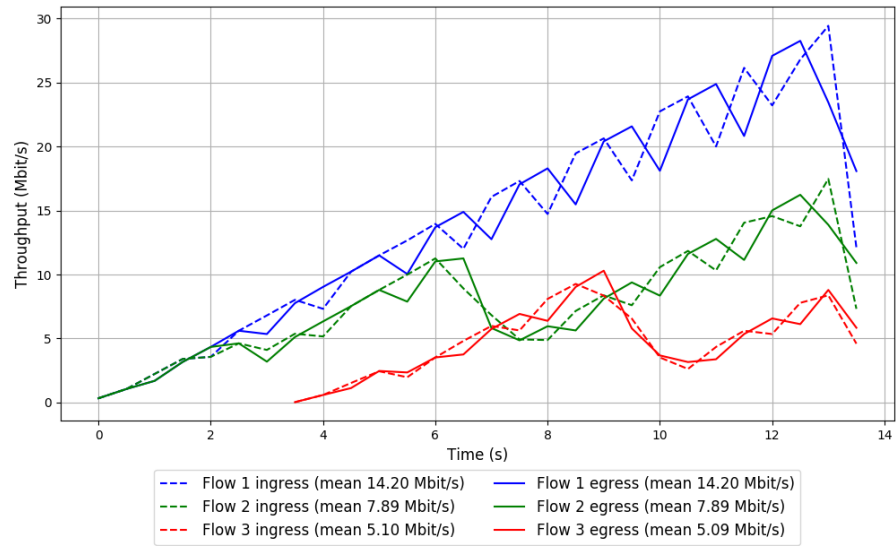


Run 7: Statistics of LEDBAT

Start at: 2018-01-09 23:50:15

End at: 2018-01-09 23:50:45

Run 7: Report of LEDBAT — Data Link

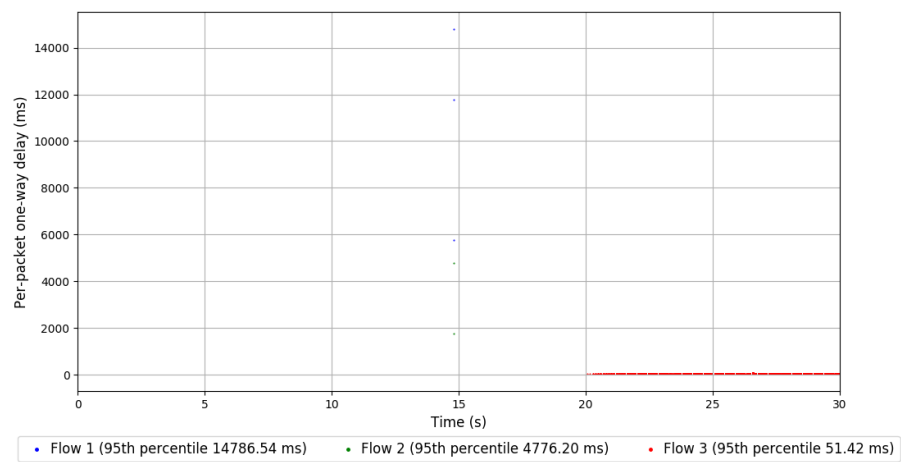
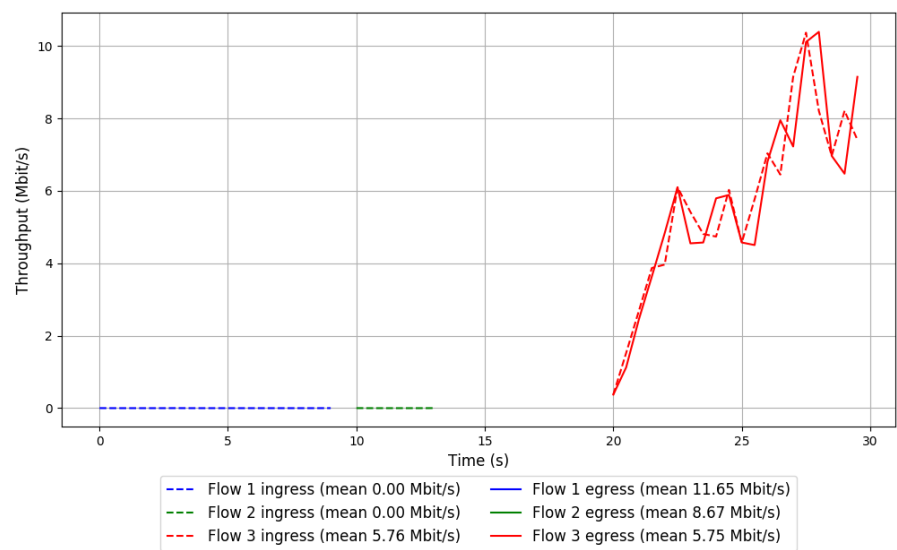


Run 8: Statistics of LEDBAT

Start at: 2018-01-10 00:04:01

End at: 2018-01-10 00:04:31

Run 8: Report of LEDBAT — Data Link

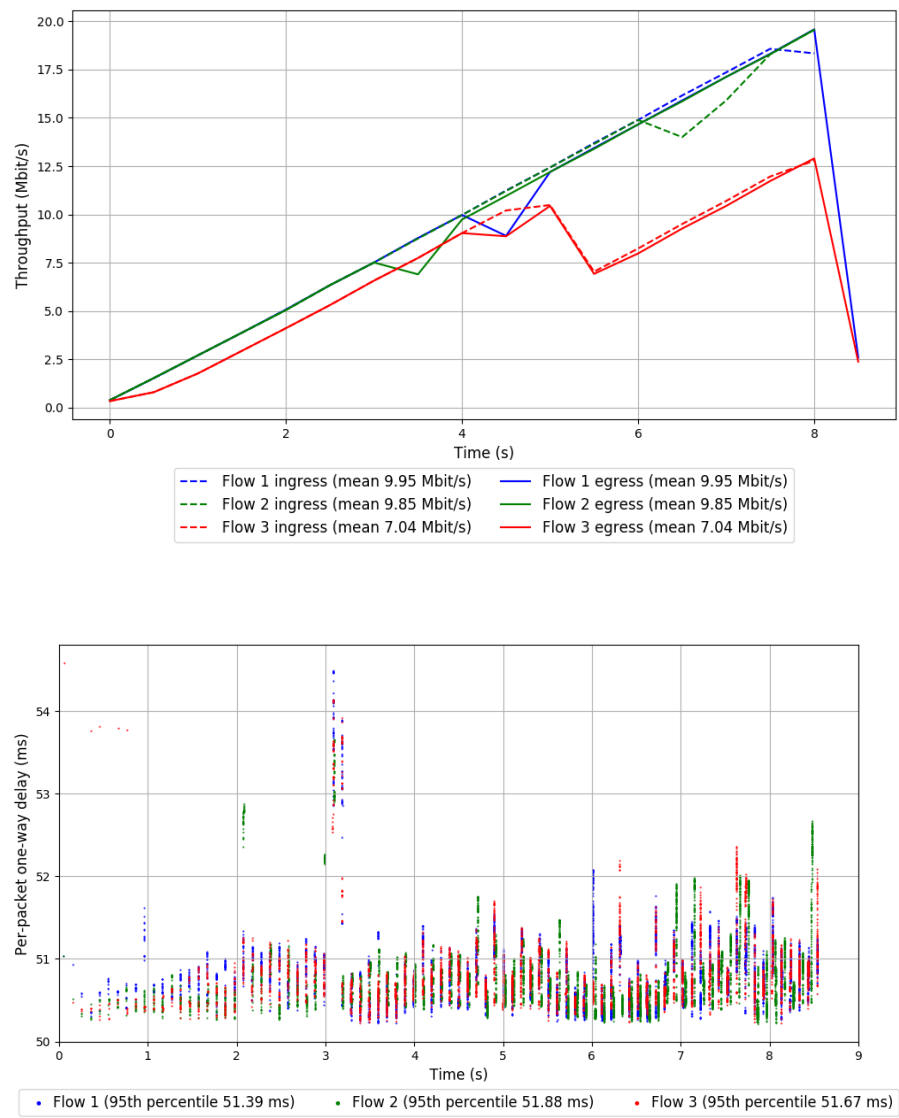


Run 9: Statistics of LEDBAT

Start at: 2018-01-10 00:17:38

End at: 2018-01-10 00:18:08

Run 9: Report of LEDBAT — Data Link

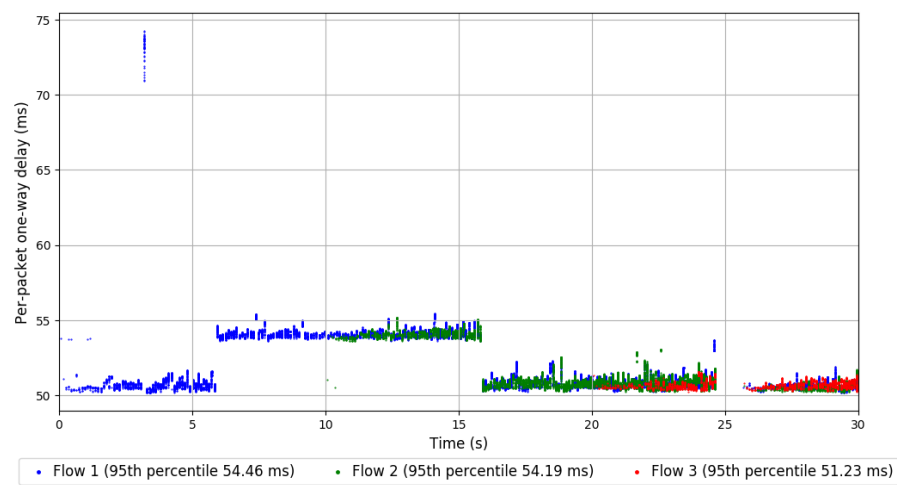
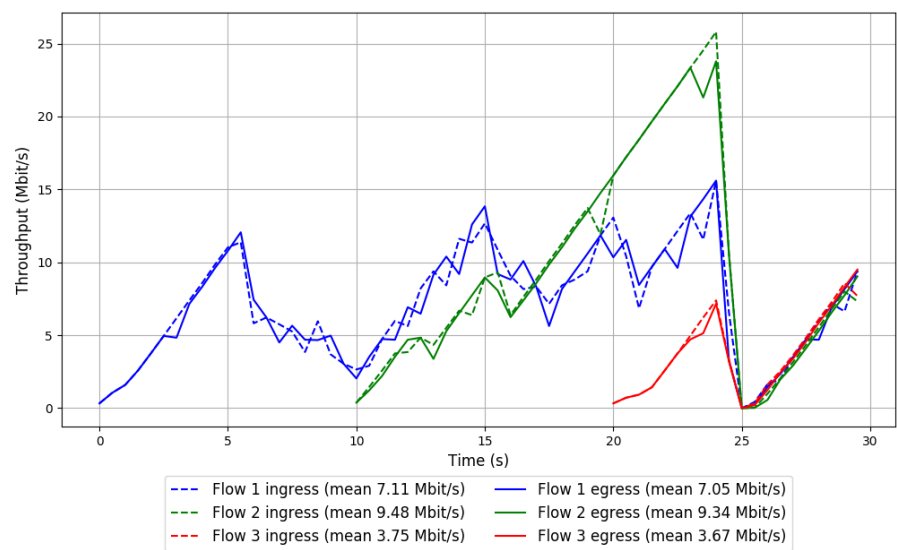


```
Run 10: Statistics of LEDBAT

Start at: 2018-01-10 00:31:42
End at: 2018-01-10 00:32:12

# Below is generated by plot.py at 2018-01-10 02:31:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.48 Mbit/s
95th percentile per-packet one-way delay: 54.299 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 7.05 Mbit/s
95th percentile per-packet one-way delay: 54.457 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 9.34 Mbit/s
95th percentile per-packet one-way delay: 54.186 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 51.230 ms
Loss rate: 2.28%
```

Run 10: Report of LEDBAT — Data Link

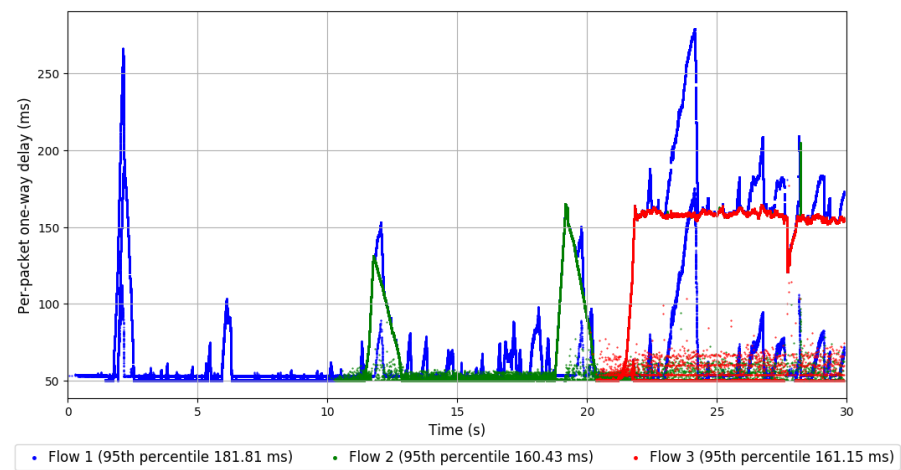
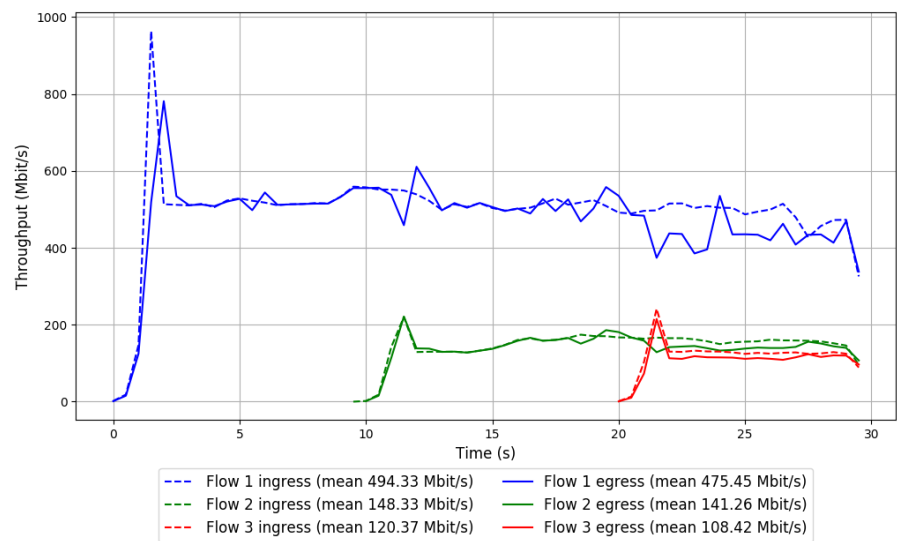


```
Run 1: Statistics of PCC

Start at: 2018-01-09 22:27:57
End at: 2018-01-09 22:28:27

# Below is generated by plot.py at 2018-01-10 02:37:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 604.94 Mbit/s
95th percentile per-packet one-way delay: 178.748 ms
Loss rate: 4.36%
-- Flow 1:
Average throughput: 475.45 Mbit/s
95th percentile per-packet one-way delay: 181.810 ms
Loss rate: 3.82%
-- Flow 2:
Average throughput: 141.26 Mbit/s
95th percentile per-packet one-way delay: 160.431 ms
Loss rate: 4.76%
-- Flow 3:
Average throughput: 108.42 Mbit/s
95th percentile per-packet one-way delay: 161.151 ms
Loss rate: 10.16%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-09 22:41:40

End at: 2018-01-09 22:42:10

Below is generated by plot.py at 2018-01-10 02:37:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 593.10 Mbit/s

95th percentile per-packet one-way delay: 199.980 ms

Loss rate: 6.45%

-- Flow 1:

Average throughput: 585.27 Mbit/s

95th percentile per-packet one-way delay: 200.471 ms

Loss rate: 6.42%

-- Flow 2:

Average throughput: 10.07 Mbit/s

95th percentile per-packet one-way delay: 192.450 ms

Loss rate: 7.20%

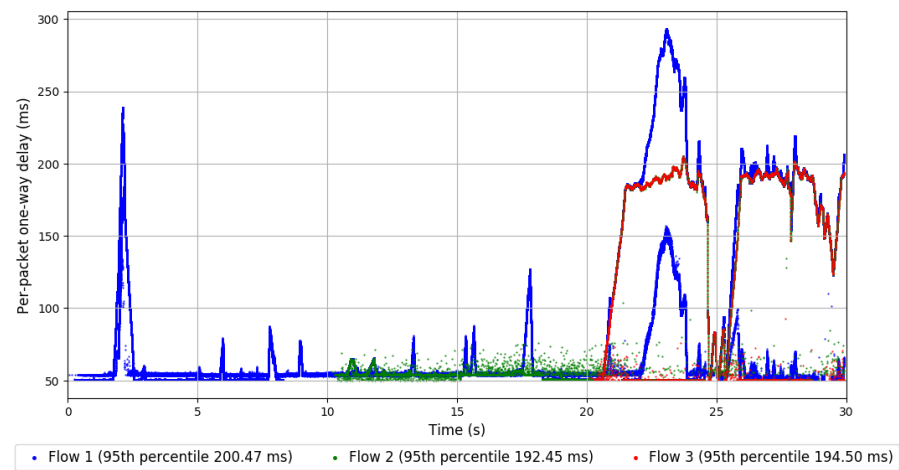
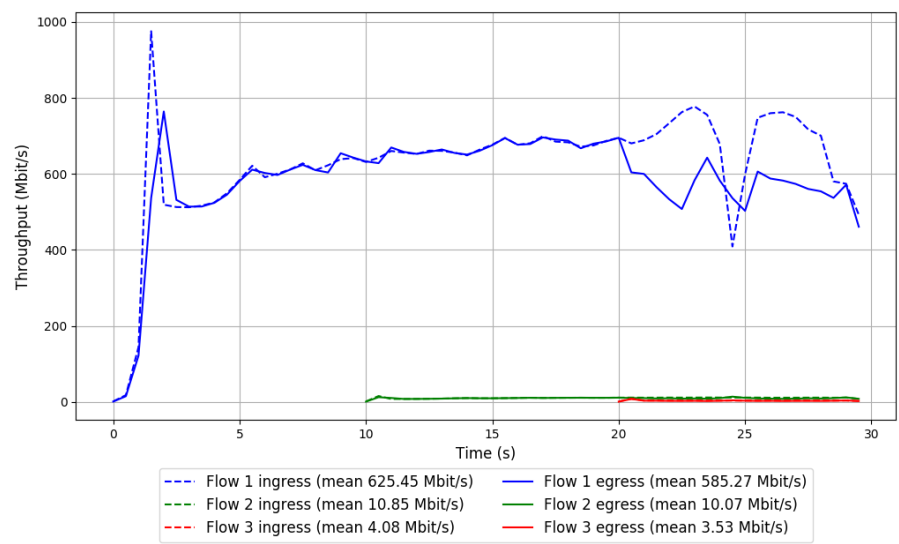
-- Flow 3:

Average throughput: 3.53 Mbit/s

95th percentile per-packet one-way delay: 194.495 ms

Loss rate: 13.39%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-09 22:55:28

End at: 2018-01-09 22:55:58

Below is generated by plot.py at 2018-01-10 02:38:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 618.08 Mbit/s

95th percentile per-packet one-way delay: 157.285 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 492.94 Mbit/s

95th percentile per-packet one-way delay: 157.504 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 129.77 Mbit/s

95th percentile per-packet one-way delay: 157.589 ms

Loss rate: 0.23%

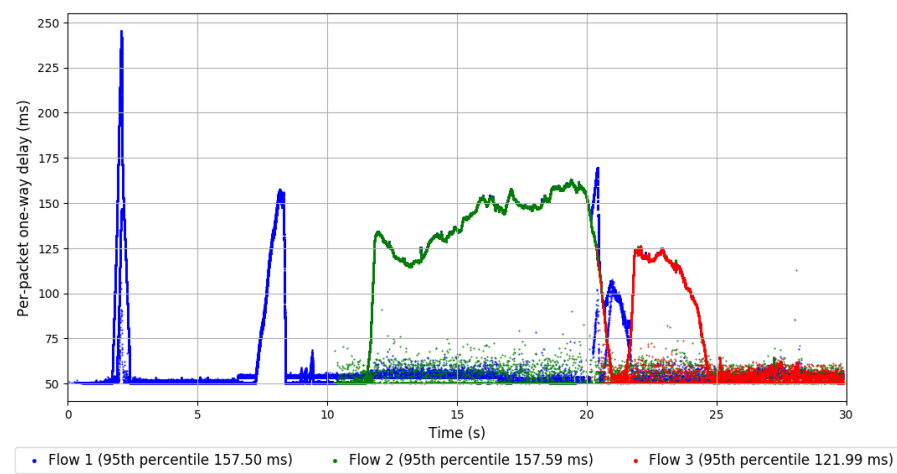
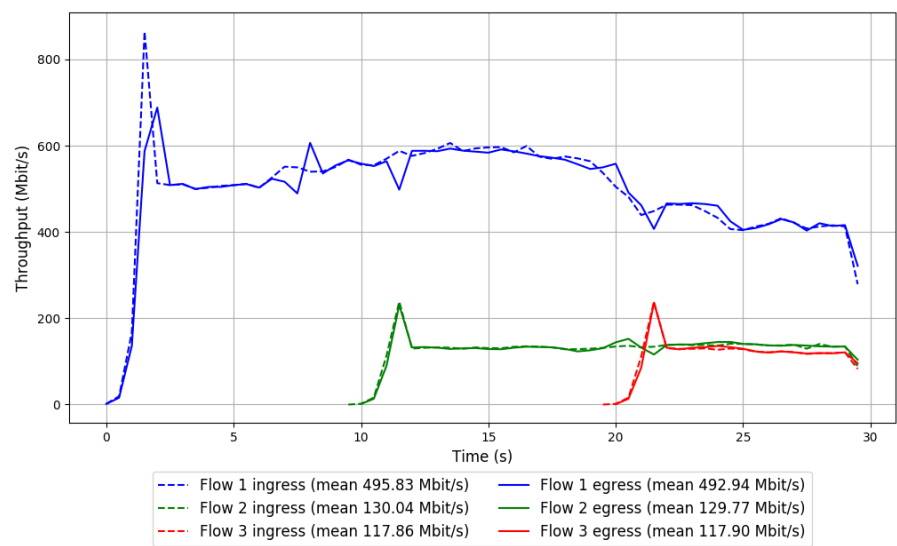
-- Flow 3:

Average throughput: 117.90 Mbit/s

95th percentile per-packet one-way delay: 121.993 ms

Loss rate: 0.00%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-09 23:09:17

End at: 2018-01-09 23:09:47

Below is generated by plot.py at 2018-01-10 02:38:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 626.84 Mbit/s

95th percentile per-packet one-way delay: 216.164 ms

Loss rate: 2.70%

-- Flow 1:

Average throughput: 562.06 Mbit/s

95th percentile per-packet one-way delay: 219.562 ms

Loss rate: 2.91%

-- Flow 2:

Average throughput: 67.83 Mbit/s

95th percentile per-packet one-way delay: 150.695 ms

Loss rate: 0.59%

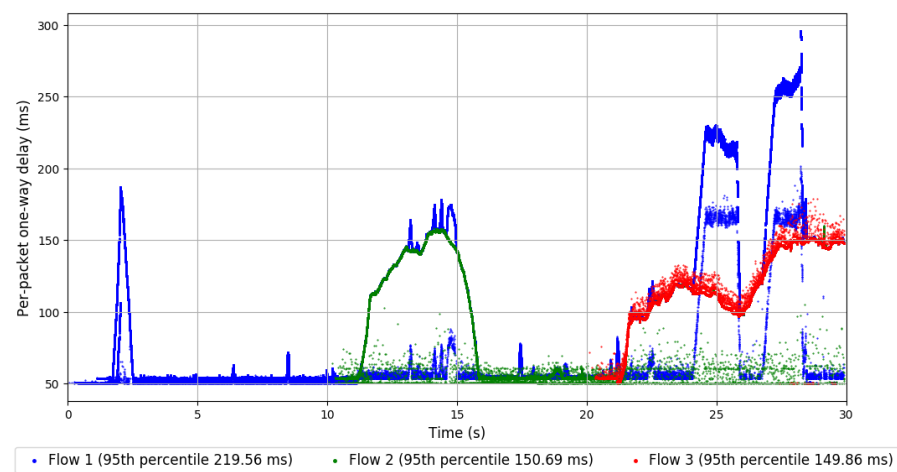
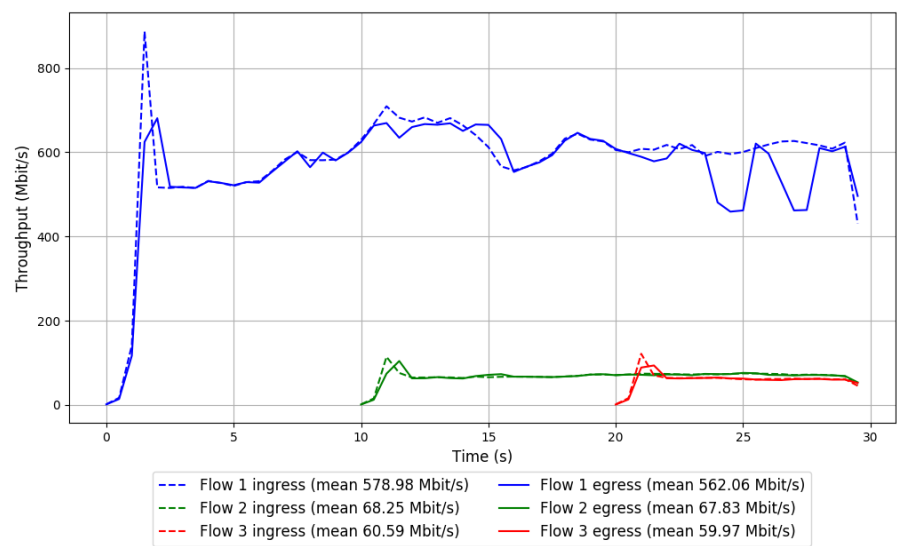
-- Flow 3:

Average throughput: 59.97 Mbit/s

95th percentile per-packet one-way delay: 149.858 ms

Loss rate: 1.21%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-09 23:23:13

End at: 2018-01-09 23:23:43

Below is generated by plot.py at 2018-01-10 02:40:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 610.55 Mbit/s

95th percentile per-packet one-way delay: 172.832 ms

Loss rate: 1.72%

-- Flow 1:

Average throughput: 519.02 Mbit/s

95th percentile per-packet one-way delay: 185.530 ms

Loss rate: 1.98%

-- Flow 2:

Average throughput: 128.18 Mbit/s

95th percentile per-packet one-way delay: 151.578 ms

Loss rate: 0.22%

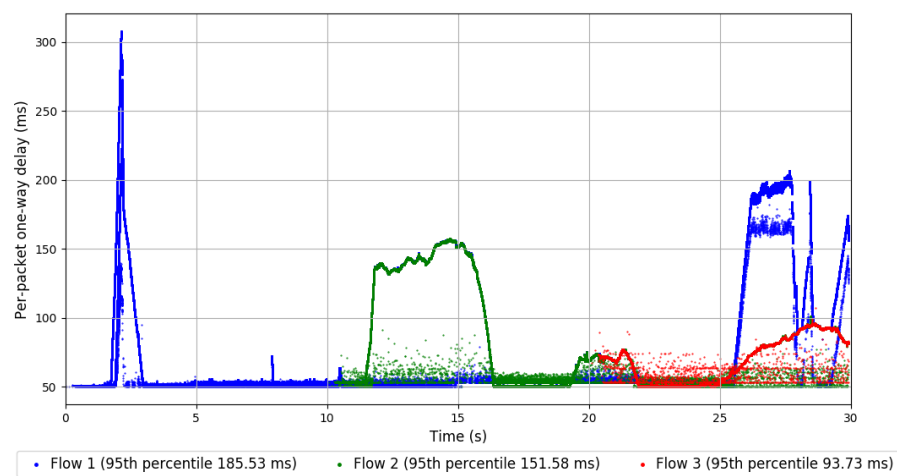
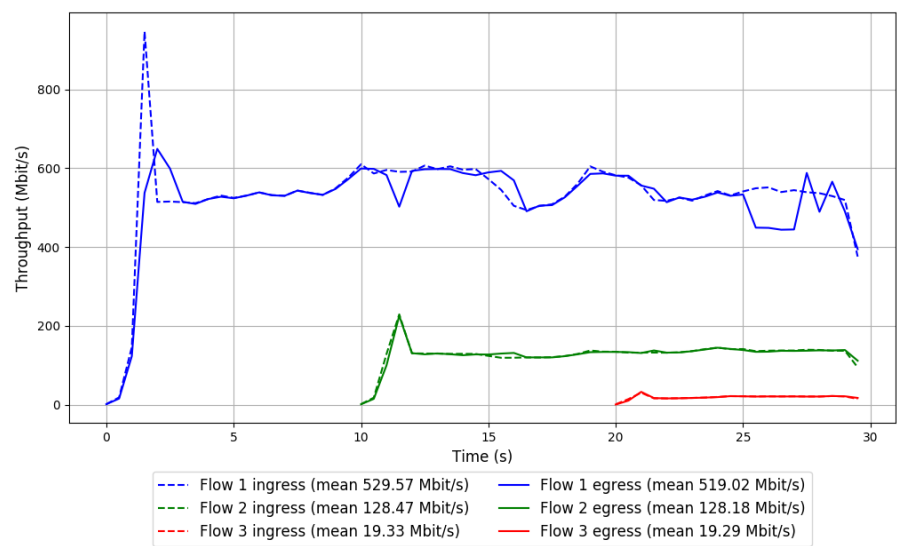
-- Flow 3:

Average throughput: 19.29 Mbit/s

95th percentile per-packet one-way delay: 93.729 ms

Loss rate: 0.30%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-09 23:37:05

End at: 2018-01-09 23:37:35

Below is generated by plot.py at 2018-01-10 02:40:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 570.61 Mbit/s

95th percentile per-packet one-way delay: 205.989 ms

Loss rate: 5.62%

-- Flow 1:

Average throughput: 520.17 Mbit/s

95th percentile per-packet one-way delay: 206.745 ms

Loss rate: 5.72%

-- Flow 2:

Average throughput: 74.97 Mbit/s

95th percentile per-packet one-way delay: 187.698 ms

Loss rate: 4.56%

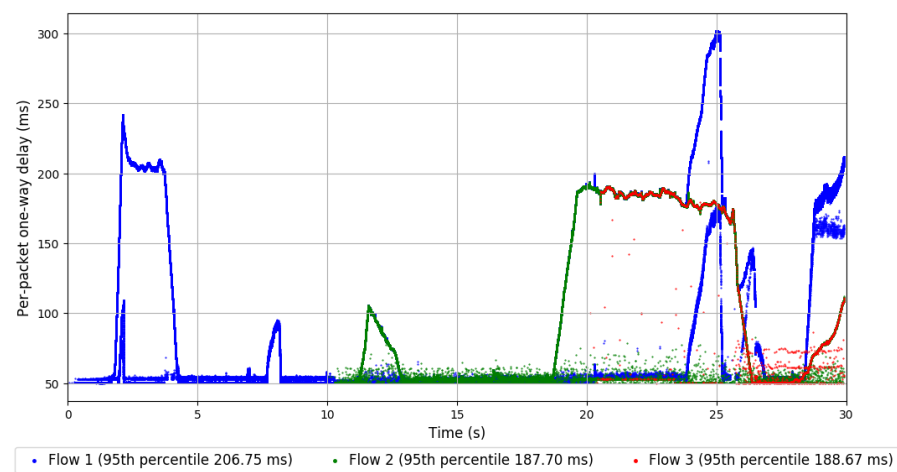
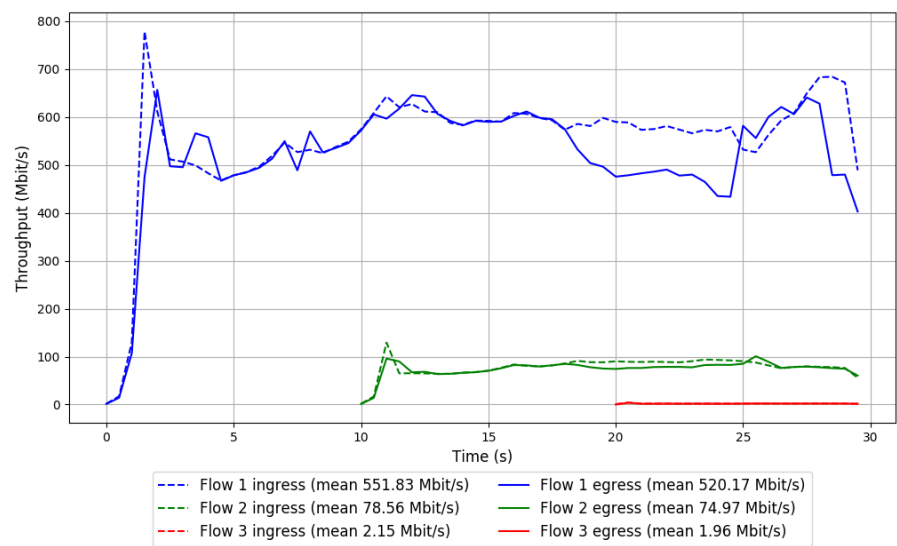
-- Flow 3:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 188.669 ms

Loss rate: 8.94%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-09 23:50:56

End at: 2018-01-09 23:51:26

Below is generated by plot.py at 2018-01-10 02:41:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 620.99 Mbit/s

95th percentile per-packet one-way delay: 213.564 ms

Loss rate: 4.38%

-- Flow 1:

Average throughput: 500.36 Mbit/s

95th percentile per-packet one-way delay: 260.617 ms

Loss rate: 4.59%

-- Flow 2:

Average throughput: 121.59 Mbit/s

95th percentile per-packet one-way delay: 159.735 ms

Loss rate: 3.89%

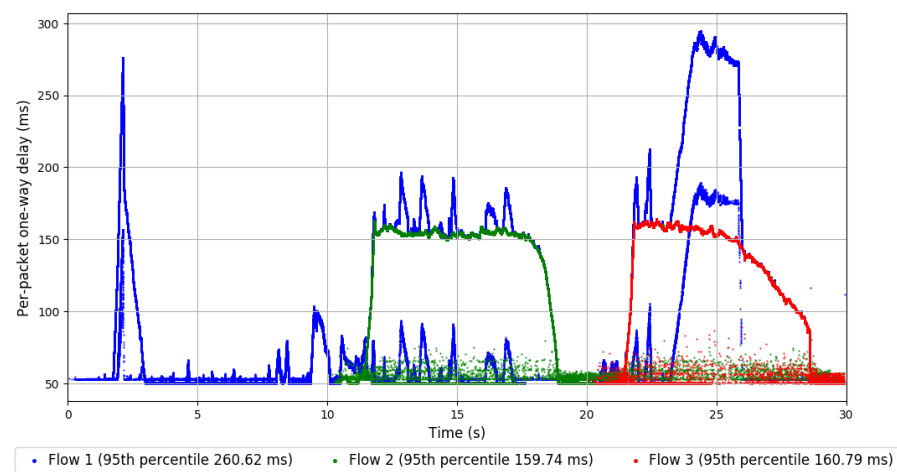
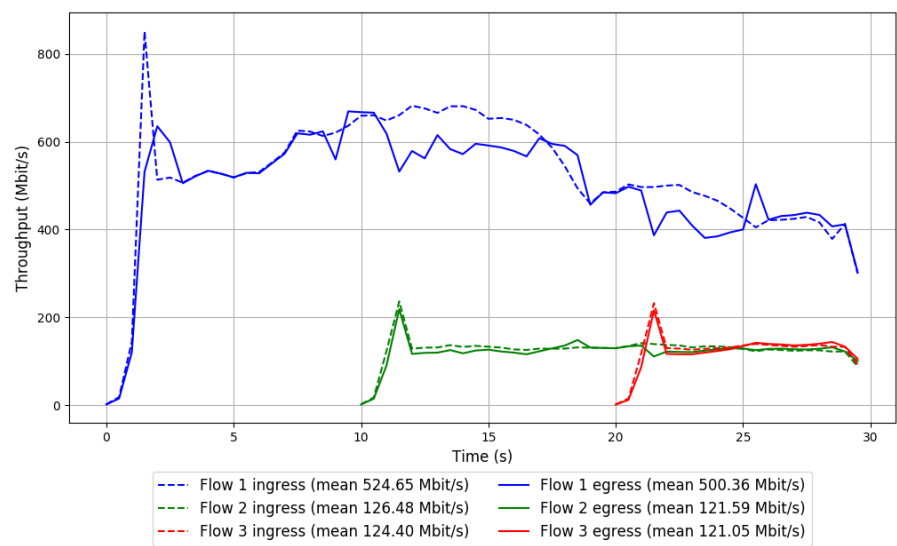
-- Flow 3:

Average throughput: 121.05 Mbit/s

95th percentile per-packet one-way delay: 160.790 ms

Loss rate: 2.73%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-10 00:04:41

End at: 2018-01-10 00:05:11

Below is generated by plot.py at 2018-01-10 02:43:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 619.43 Mbit/s

95th percentile per-packet one-way delay: 202.580 ms

Loss rate: 3.95%

-- Flow 1:

Average throughput: 523.29 Mbit/s

95th percentile per-packet one-way delay: 213.955 ms

Loss rate: 4.04%

-- Flow 2:

Average throughput: 115.96 Mbit/s

95th percentile per-packet one-way delay: 158.433 ms

Loss rate: 3.04%

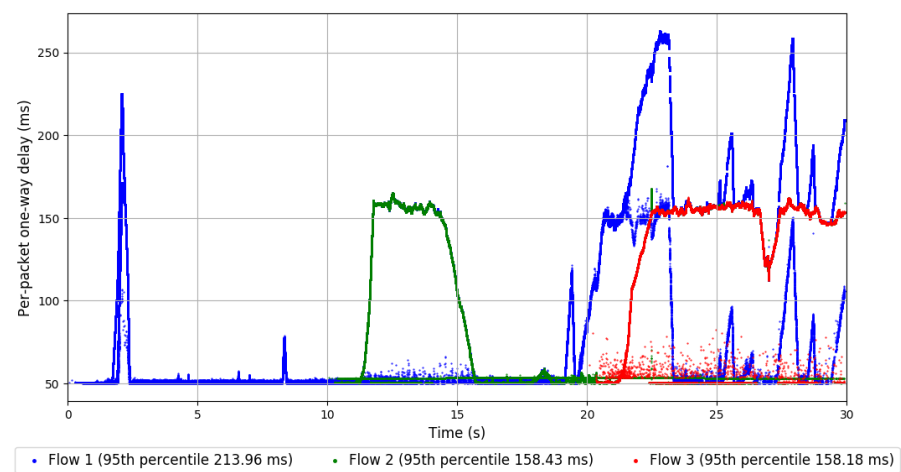
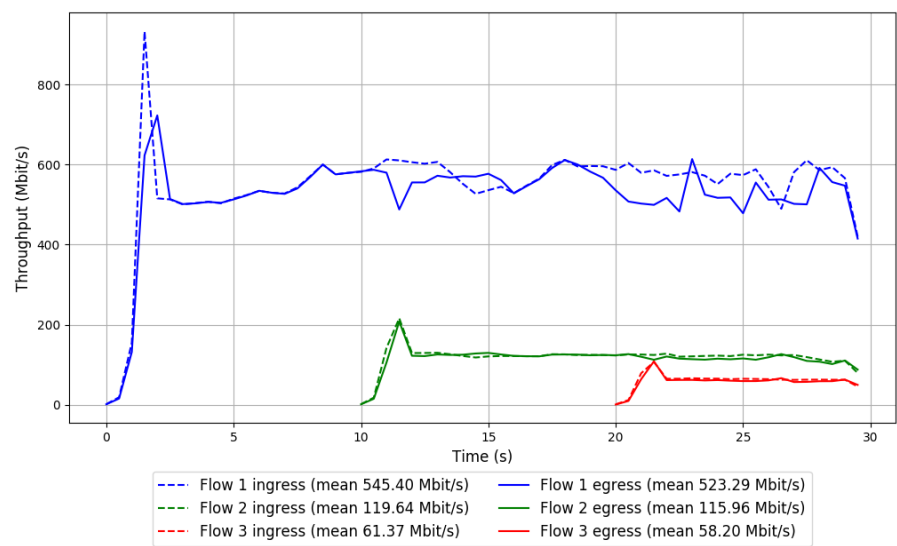
-- Flow 3:

Average throughput: 58.20 Mbit/s

95th percentile per-packet one-way delay: 158.175 ms

Loss rate: 5.22%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-10 00:18:19

End at: 2018-01-10 00:18:49

Below is generated by plot.py at 2018-01-10 02:48:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 597.48 Mbit/s

95th percentile per-packet one-way delay: 191.536 ms

Loss rate: 3.05%

-- Flow 1:

Average throughput: 506.15 Mbit/s

95th percentile per-packet one-way delay: 197.648 ms

Loss rate: 3.06%

-- Flow 2:

Average throughput: 108.81 Mbit/s

95th percentile per-packet one-way delay: 185.028 ms

Loss rate: 2.82%

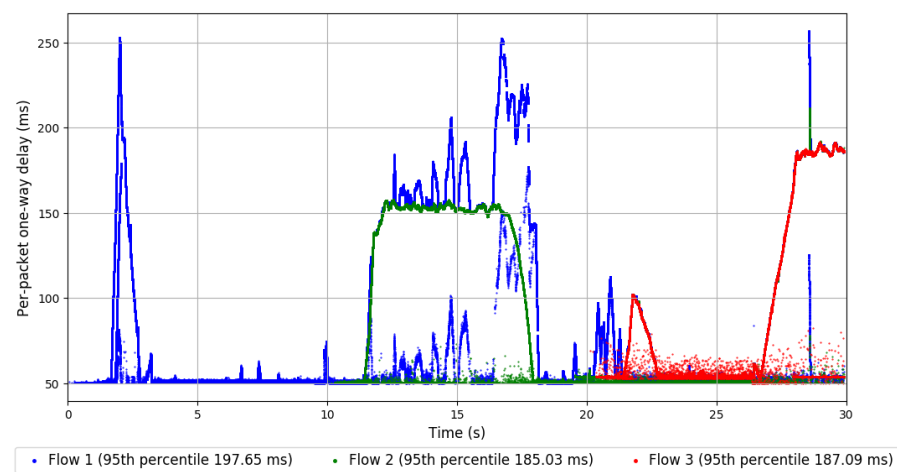
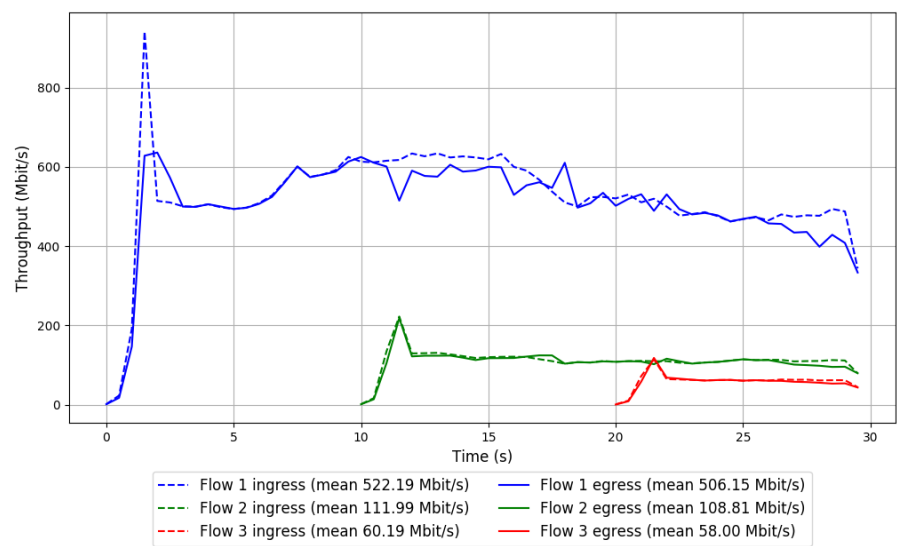
-- Flow 3:

Average throughput: 58.00 Mbit/s

95th percentile per-packet one-way delay: 187.091 ms

Loss rate: 3.79%

Run 9: Report of PCC — Data Link

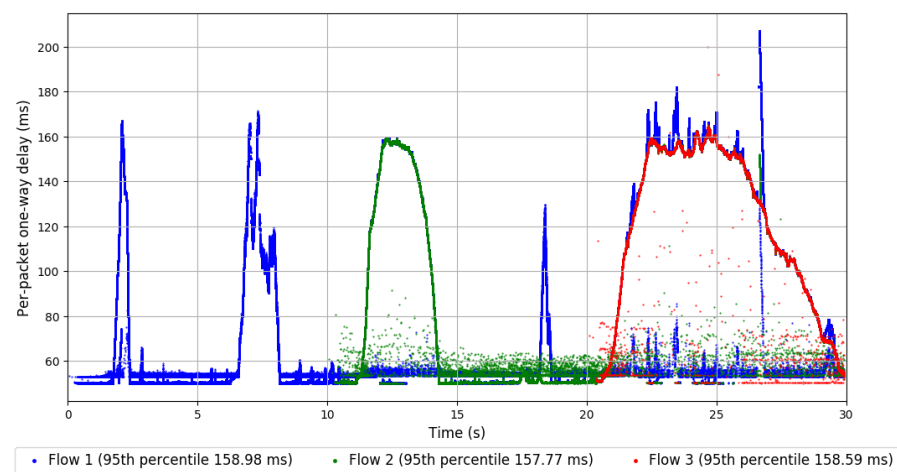
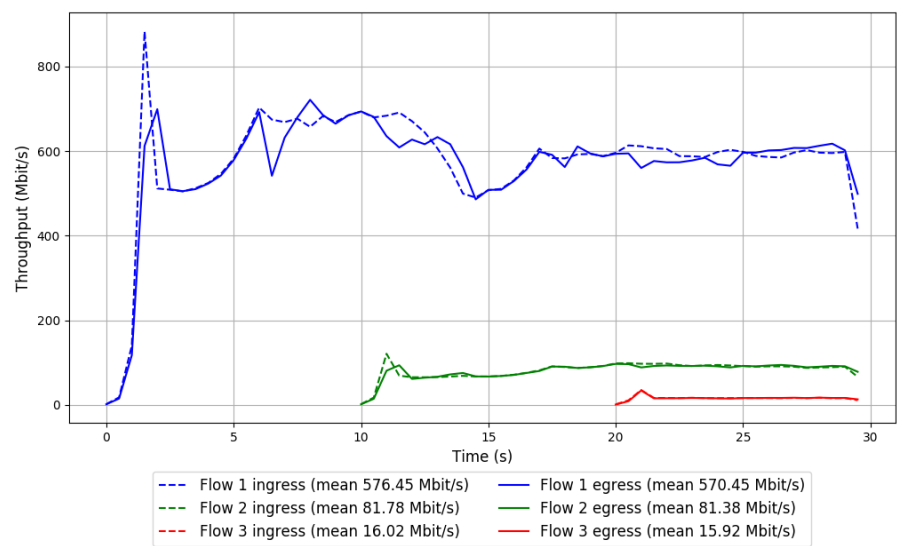


```
Run 10: Statistics of PCC

Start at: 2018-01-10 00:32:23
End at: 2018-01-10 00:32:53

# Below is generated by plot.py at 2018-01-10 02:49:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 629.67 Mbit/s
95th percentile per-packet one-way delay: 158.802 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 570.45 Mbit/s
95th percentile per-packet one-way delay: 158.982 ms
Loss rate: 1.04%
-- Flow 2:
Average throughput: 81.38 Mbit/s
95th percentile per-packet one-way delay: 157.767 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 15.92 Mbit/s
95th percentile per-packet one-way delay: 158.588 ms
Loss rate: 0.81%
```

Run 10: Report of PCC — Data Link

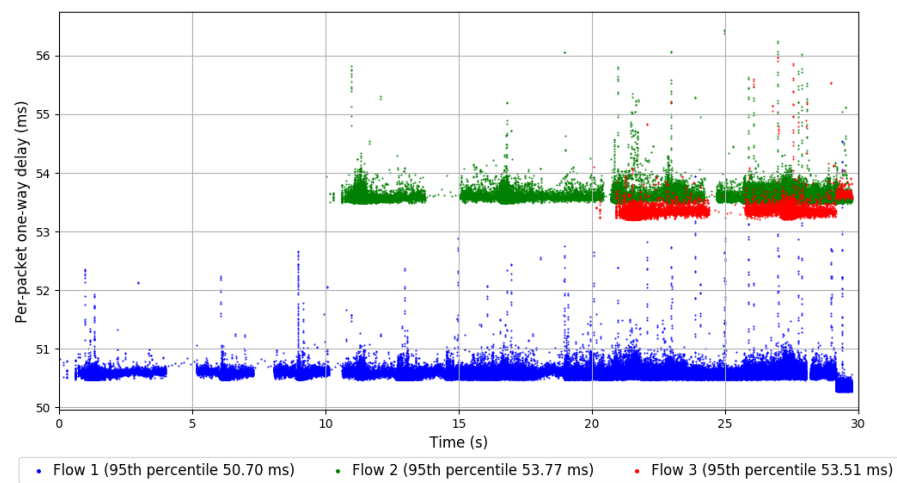
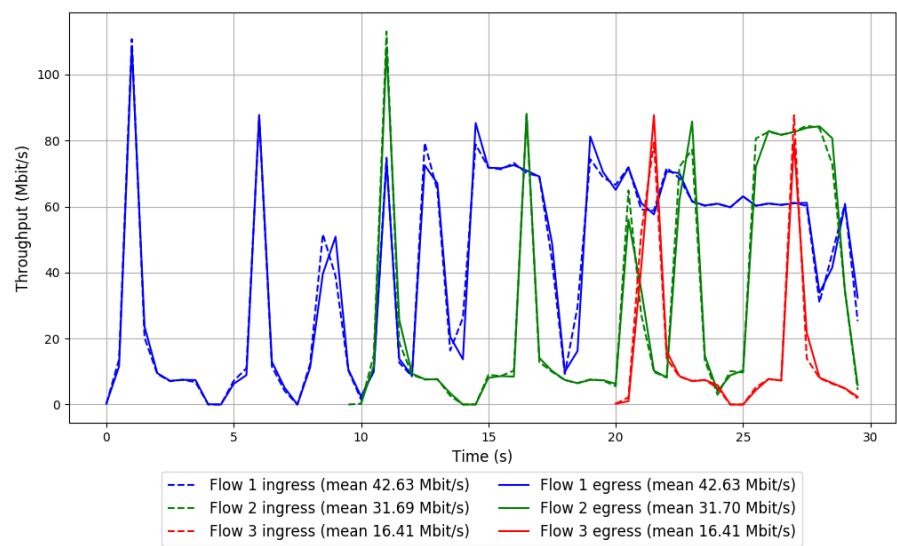


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-09 22:24:46
End at: 2018-01-09 22:25:16

# Below is generated by plot.py at 2018-01-10 02:49:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.02 Mbit/s
95th percentile per-packet one-way delay: 53.662 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.63 Mbit/s
95th percentile per-packet one-way delay: 50.701 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.70 Mbit/s
95th percentile per-packet one-way delay: 53.769 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 16.41 Mbit/s
95th percentile per-packet one-way delay: 53.511 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link

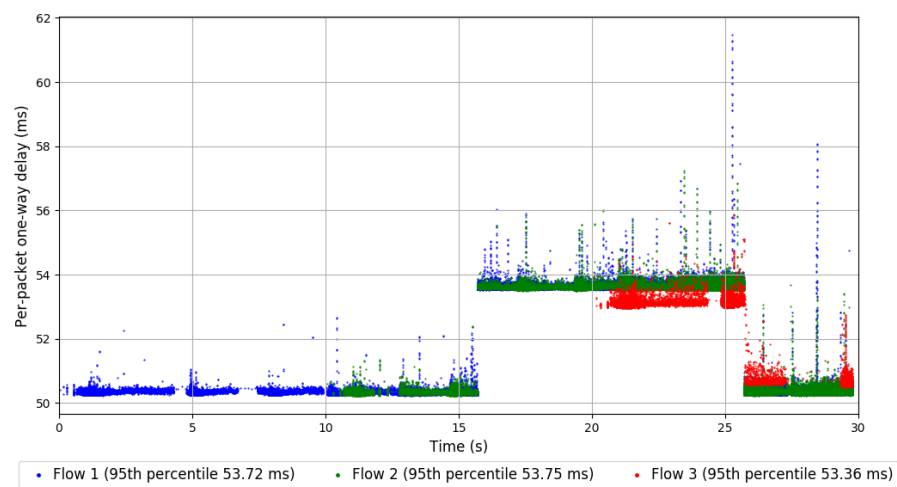
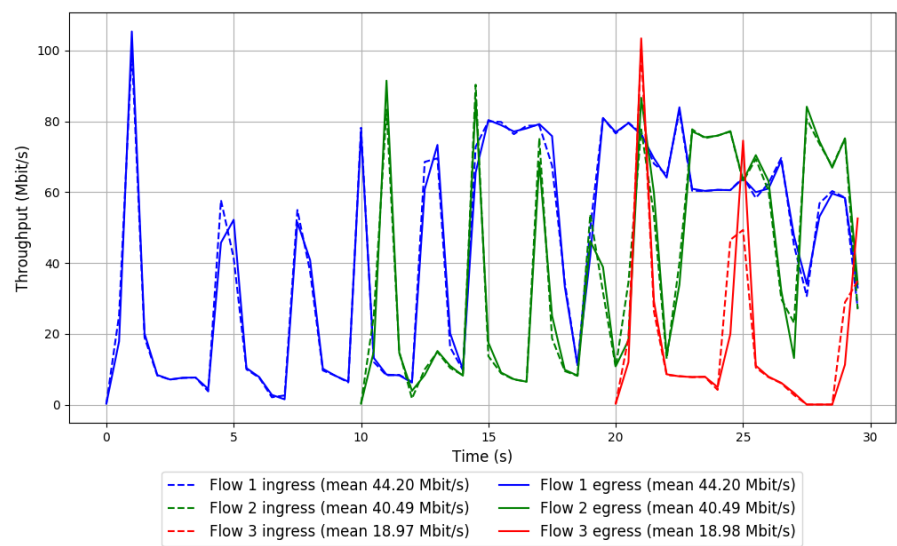


```
Run 2: Statistics of QUIC Cubic

Start at: 2018-01-09 22:38:32
End at: 2018-01-09 22:39:02

# Below is generated by plot.py at 2018-01-10 02:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.25 Mbit/s
95th percentile per-packet one-way delay: 53.725 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.20 Mbit/s
95th percentile per-packet one-way delay: 53.724 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.49 Mbit/s
95th percentile per-packet one-way delay: 53.746 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 18.98 Mbit/s
95th percentile per-packet one-way delay: 53.363 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-09 22:52:20

End at: 2018-01-09 22:52:50

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.08 Mbit/s

95th percentile per-packet one-way delay: 53.686 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 40.55 Mbit/s

95th percentile per-packet one-way delay: 53.692 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 26.78 Mbit/s

95th percentile per-packet one-way delay: 53.403 ms

Loss rate: 0.01%

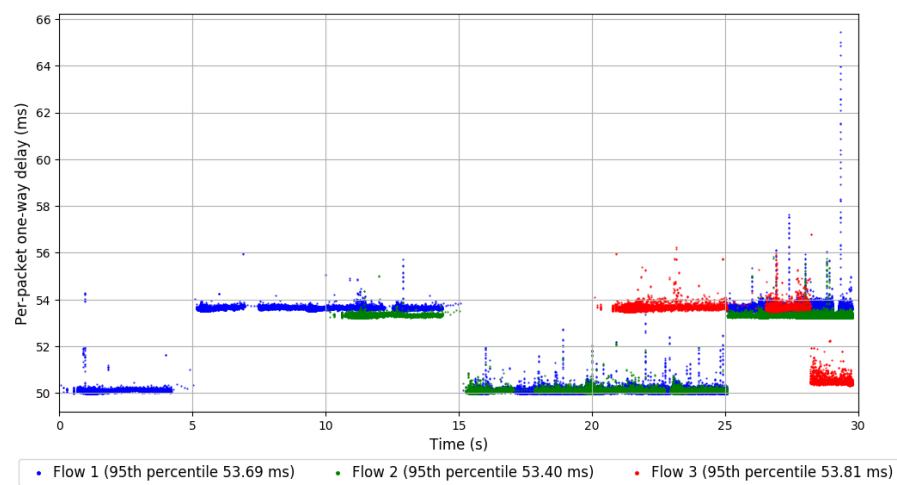
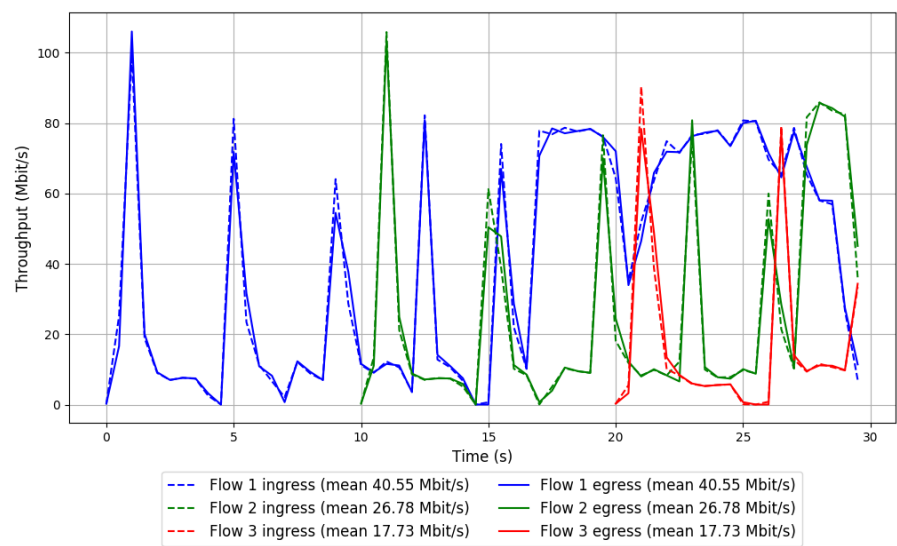
-- Flow 3:

Average throughput: 17.73 Mbit/s

95th percentile per-packet one-way delay: 53.809 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-09 23:06:08

End at: 2018-01-09 23:06:38

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.33 Mbit/s

95th percentile per-packet one-way delay: 53.697 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.32 Mbit/s

95th percentile per-packet one-way delay: 53.712 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 15.60 Mbit/s

95th percentile per-packet one-way delay: 50.578 ms

Loss rate: 0.00%

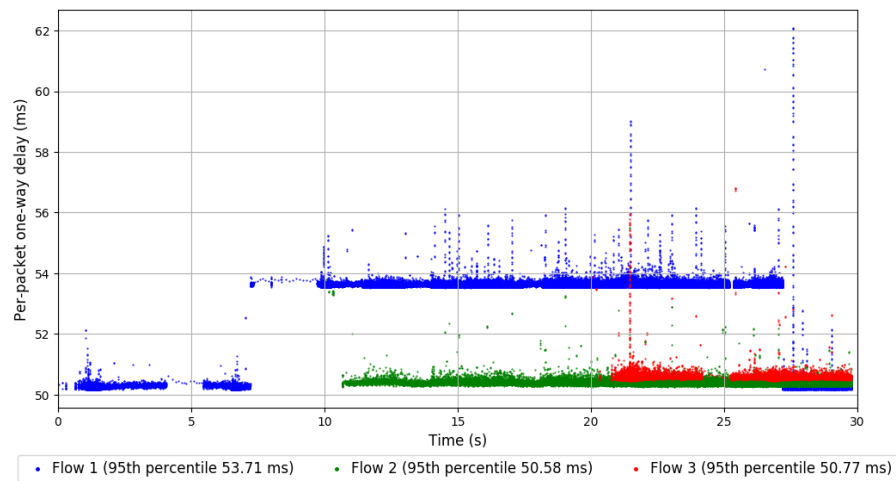
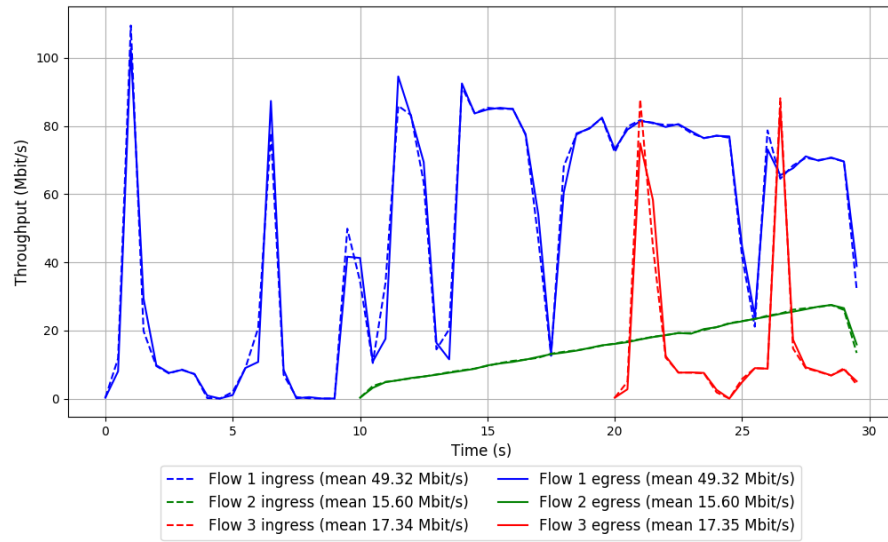
-- Flow 3:

Average throughput: 17.35 Mbit/s

95th percentile per-packet one-way delay: 50.775 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-09 23:20:05

End at: 2018-01-09 23:20:35

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.78 Mbit/s

95th percentile per-packet one-way delay: 53.447 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 43.92 Mbit/s

95th percentile per-packet one-way delay: 53.477 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 34.65 Mbit/s

95th percentile per-packet one-way delay: 53.413 ms

Loss rate: 0.28%

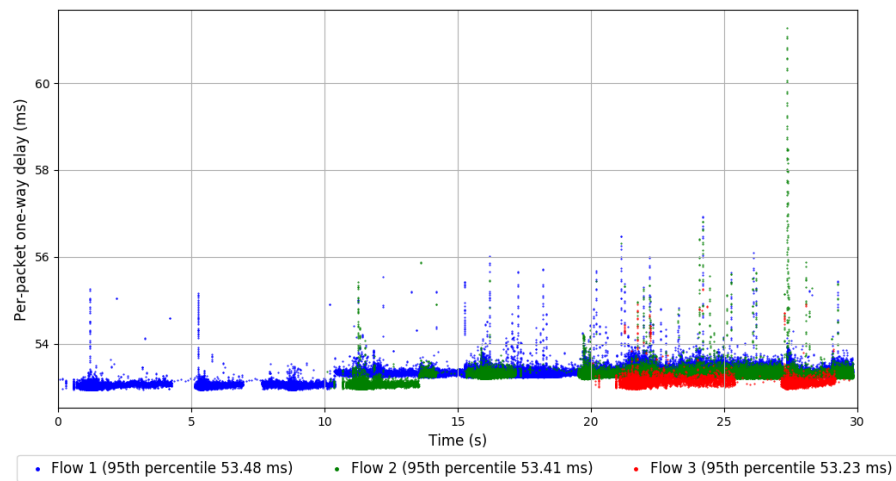
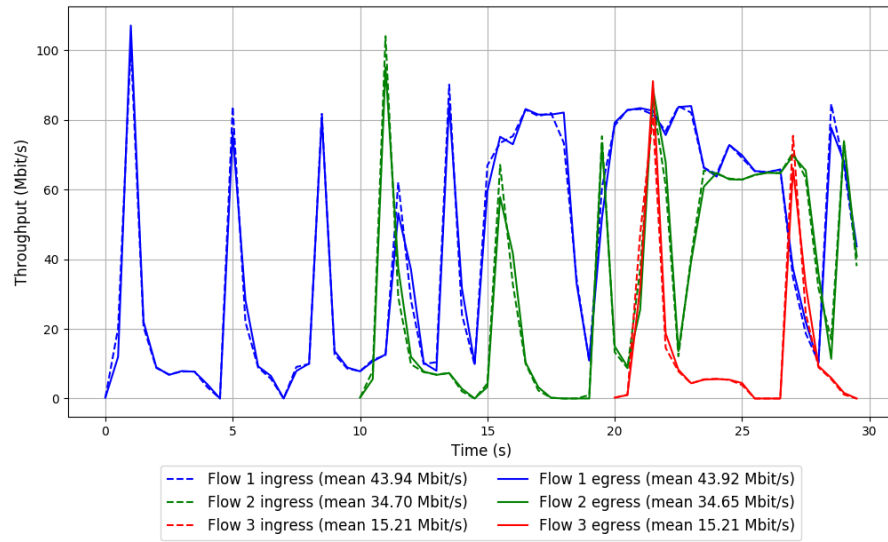
-- Flow 3:

Average throughput: 15.21 Mbit/s

95th percentile per-packet one-way delay: 53.227 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-09 23:33:56

End at: 2018-01-09 23:34:26

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 69.98 Mbit/s

95th percentile per-packet one-way delay: 53.429 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.66 Mbit/s

95th percentile per-packet one-way delay: 53.437 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 33.18 Mbit/s

95th percentile per-packet one-way delay: 53.431 ms

Loss rate: 0.00%

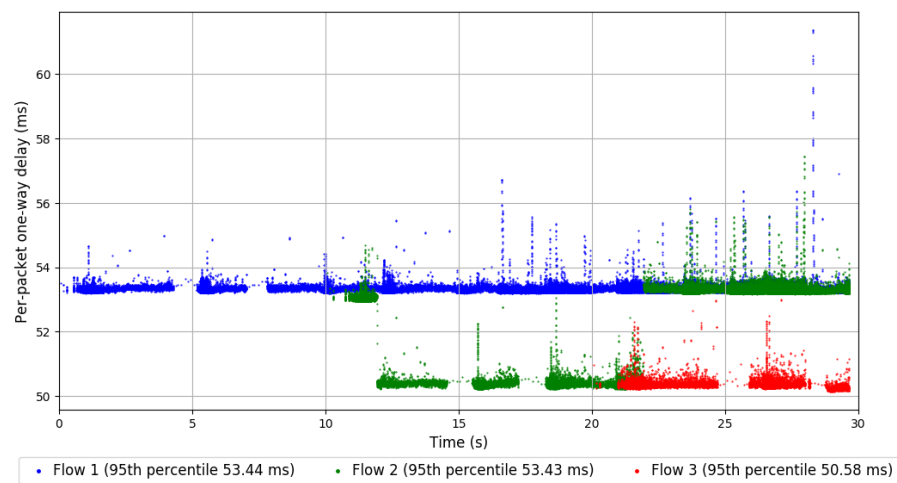
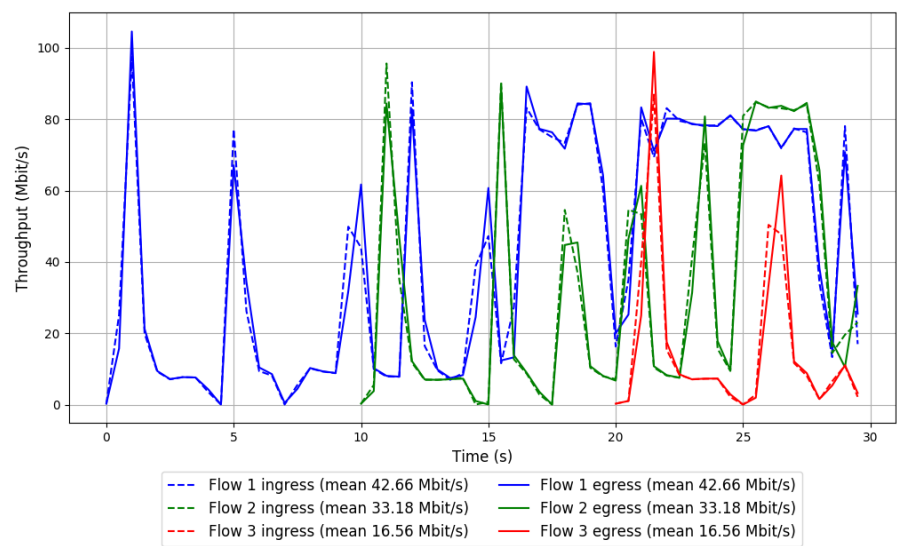
-- Flow 3:

Average throughput: 16.56 Mbit/s

95th percentile per-packet one-way delay: 50.579 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-09 23:47:47

End at: 2018-01-09 23:48:17

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.84 Mbit/s

95th percentile per-packet one-way delay: 53.104 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.37 Mbit/s

95th percentile per-packet one-way delay: 50.551 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 31.71 Mbit/s

95th percentile per-packet one-way delay: 53.175 ms

Loss rate: 0.00%

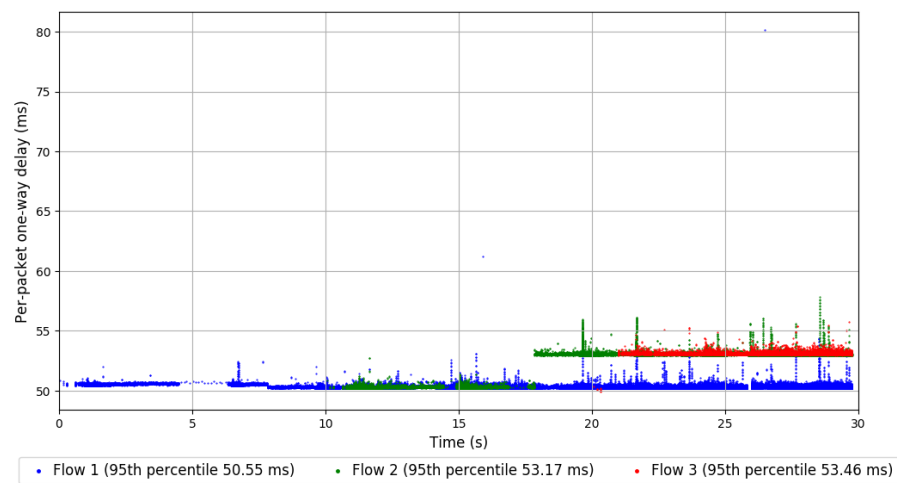
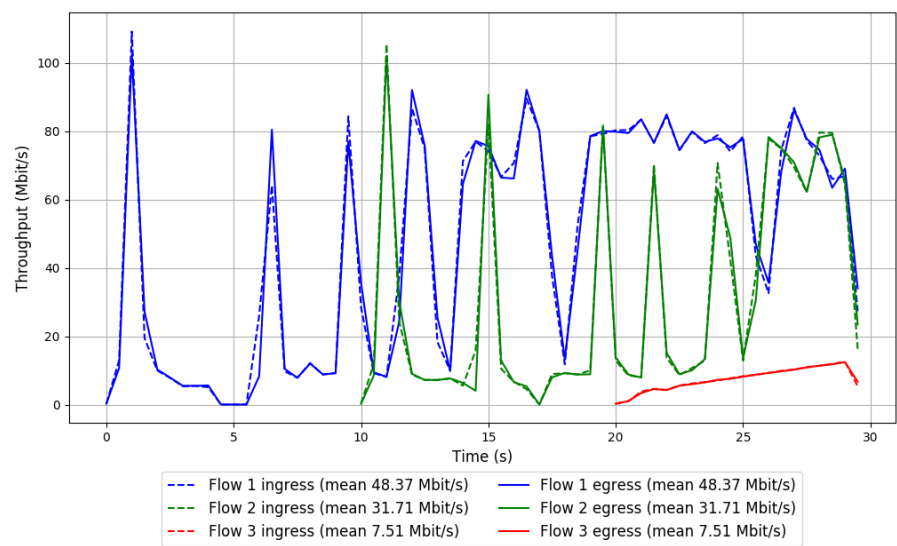
-- Flow 3:

Average throughput: 7.51 Mbit/s

95th percentile per-packet one-way delay: 53.457 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-10 00:01:33

End at: 2018-01-10 00:02:03

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.05 Mbit/s

95th percentile per-packet one-way delay: 53.690 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.35 Mbit/s

95th percentile per-packet one-way delay: 53.712 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 29.45 Mbit/s

95th percentile per-packet one-way delay: 53.174 ms

Loss rate: 0.00%

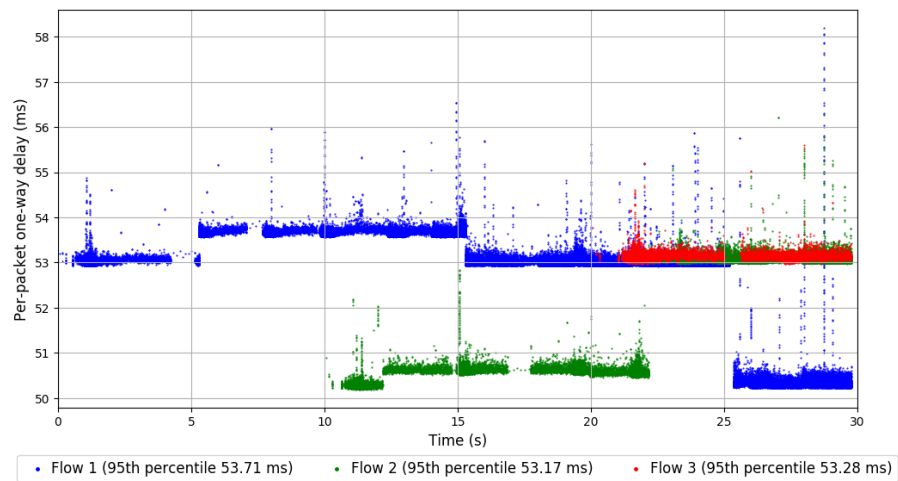
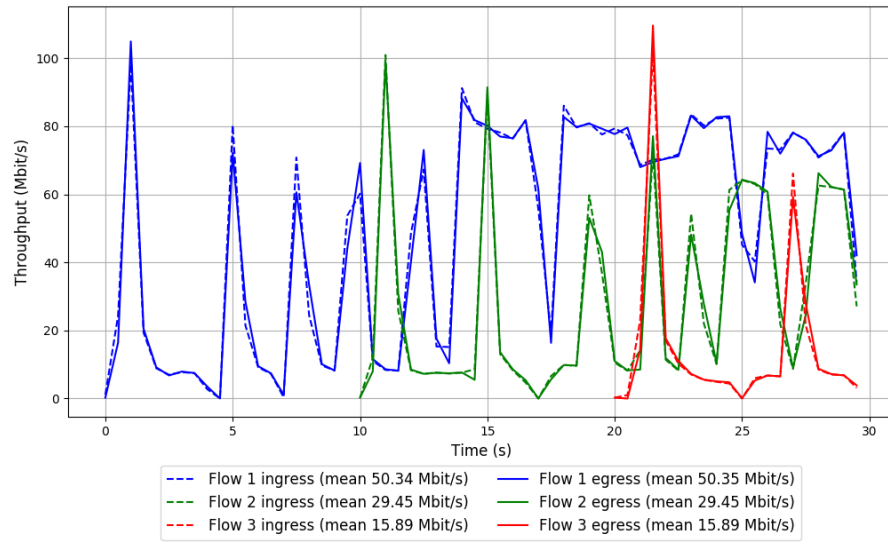
-- Flow 3:

Average throughput: 15.89 Mbit/s

95th percentile per-packet one-way delay: 53.276 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-10 00:15:10

End at: 2018-01-10 00:15:40

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.27 Mbit/s

95th percentile per-packet one-way delay: 53.685 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 41.52 Mbit/s

95th percentile per-packet one-way delay: 53.718 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.15 Mbit/s

95th percentile per-packet one-way delay: 53.432 ms

Loss rate: 0.00%

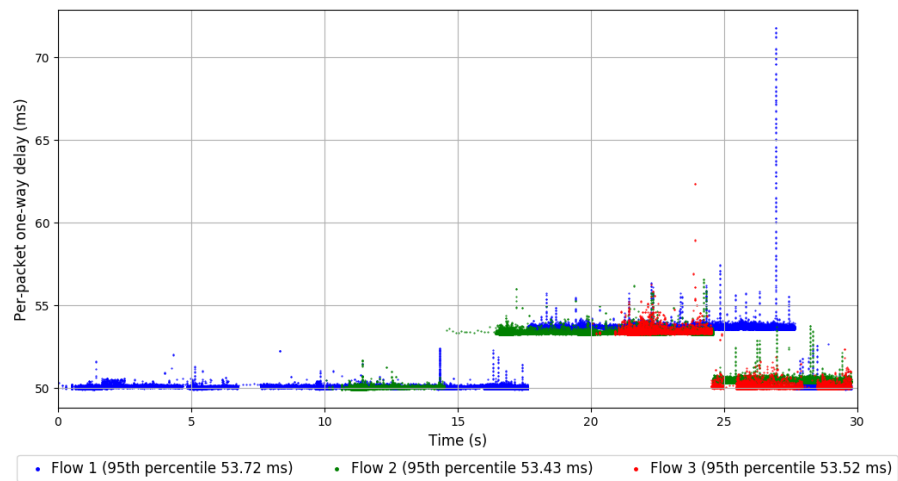
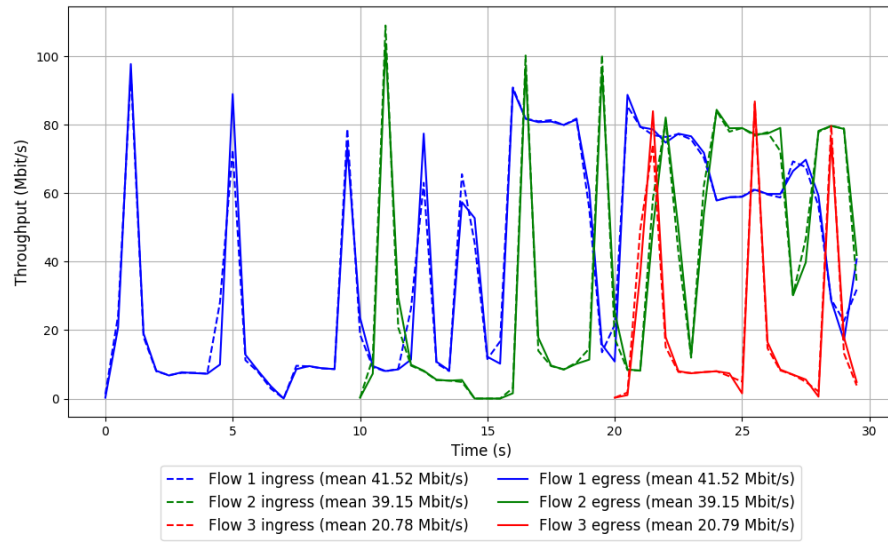
-- Flow 3:

Average throughput: 20.79 Mbit/s

95th percentile per-packet one-way delay: 53.522 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

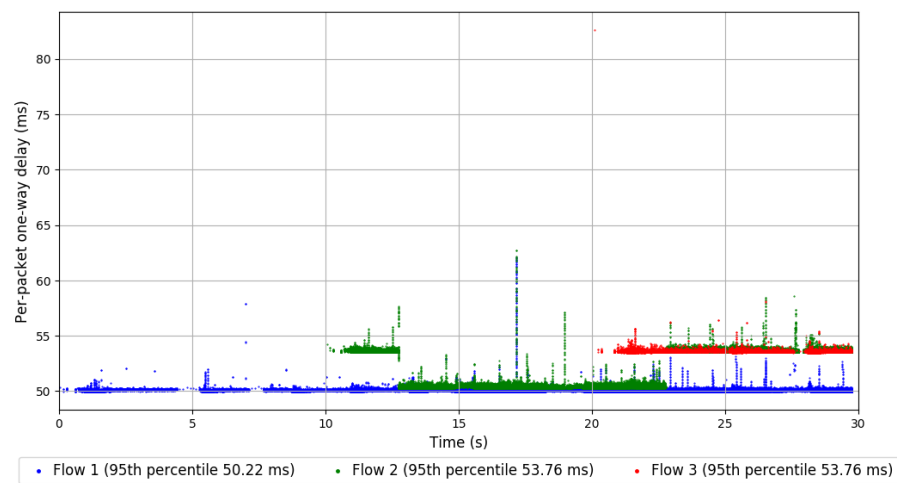
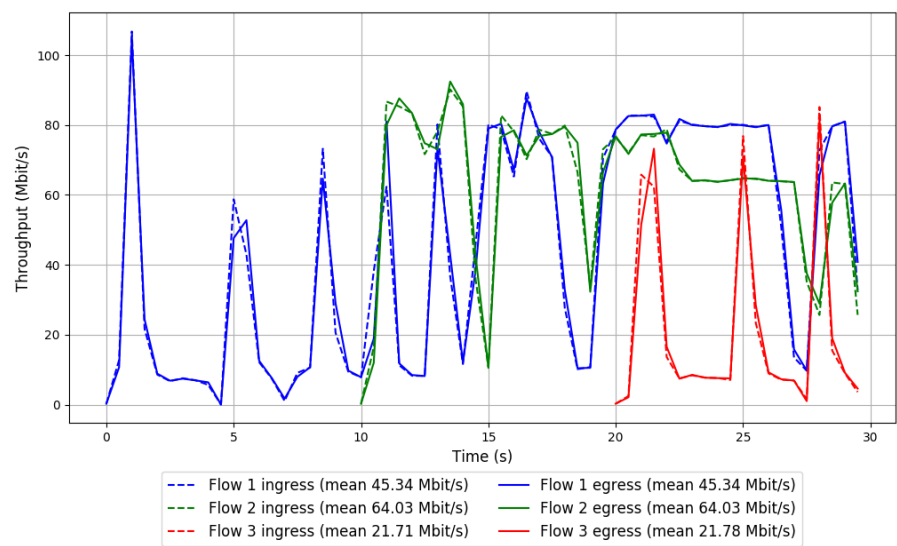


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-10 00:29:12
End at: 2018-01-10 00:29:42

# Below is generated by plot.py at 2018-01-10 02:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.87 Mbit/s
95th percentile per-packet one-way delay: 53.692 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.34 Mbit/s
95th percentile per-packet one-way delay: 50.222 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 64.03 Mbit/s
95th percentile per-packet one-way delay: 53.762 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.78 Mbit/s
95th percentile per-packet one-way delay: 53.759 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

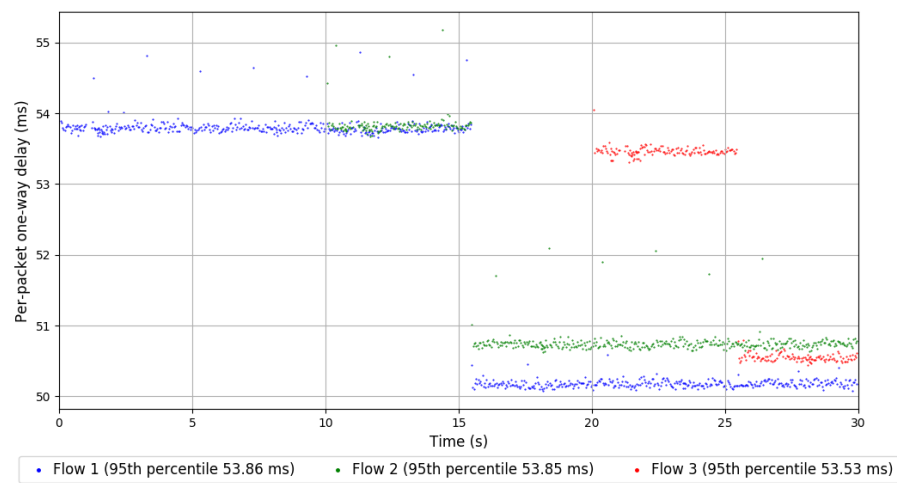
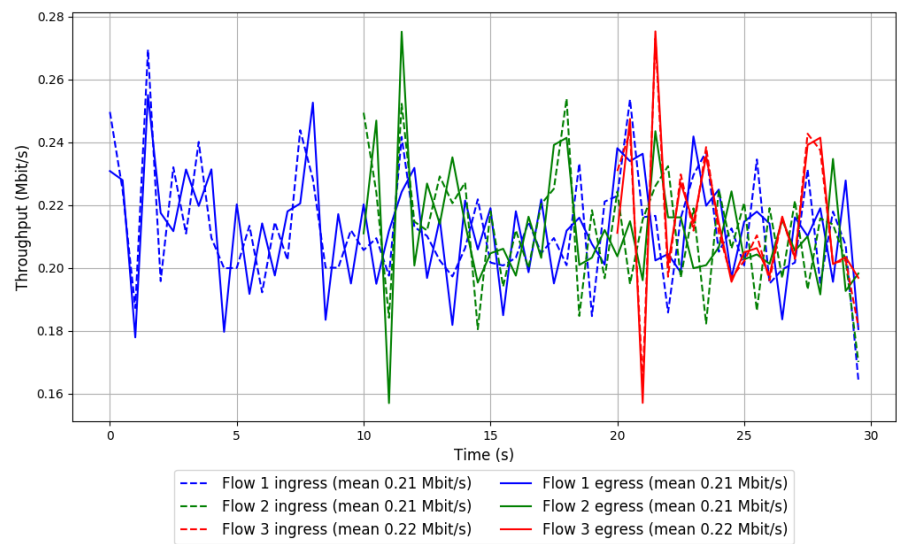


```
Run 1: Statistics of SCReAM

Start at: 2018-01-09 22:25:30
End at: 2018-01-09 22:26:00

# Below is generated by plot.py at 2018-01-10 02:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.854 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.860 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.855 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.532 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

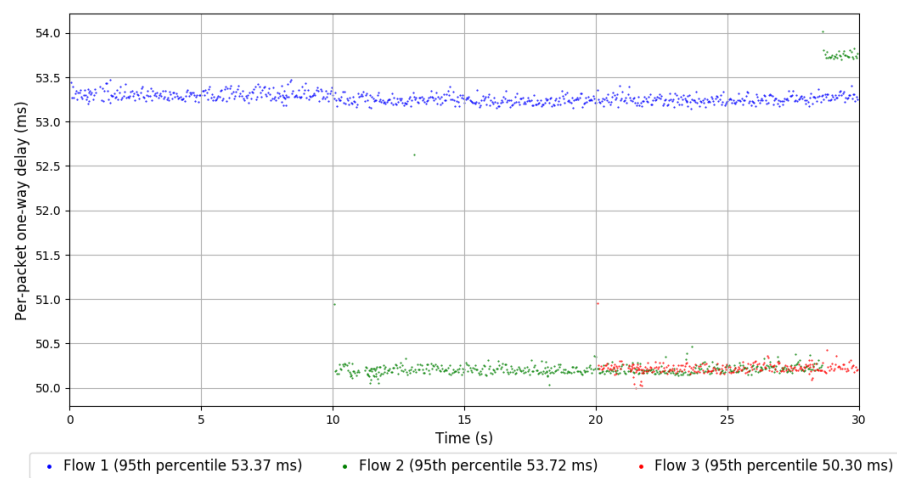
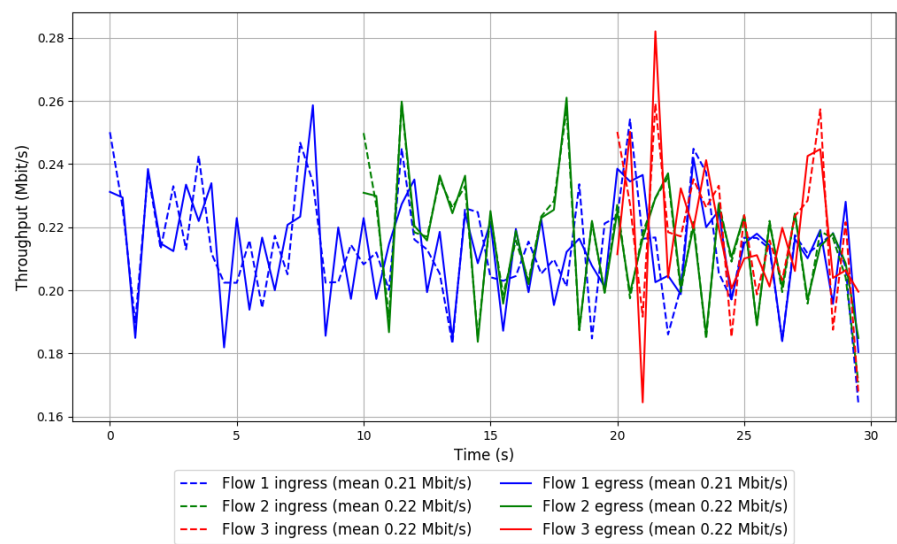


```
Run 2: Statistics of SReAM

Start at: 2018-01-09 22:39:16
End at: 2018-01-09 22:39:46

# Below is generated by plot.py at 2018-01-10 02:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.361 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.367 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.722 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.296 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

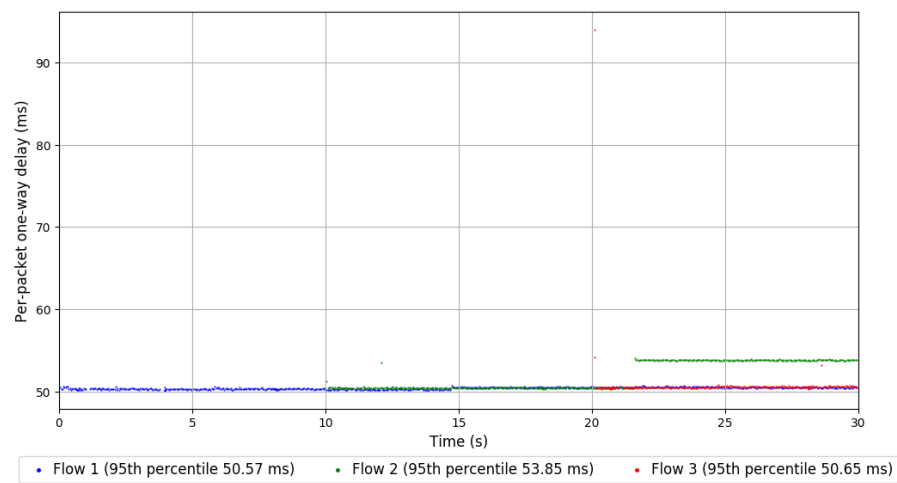
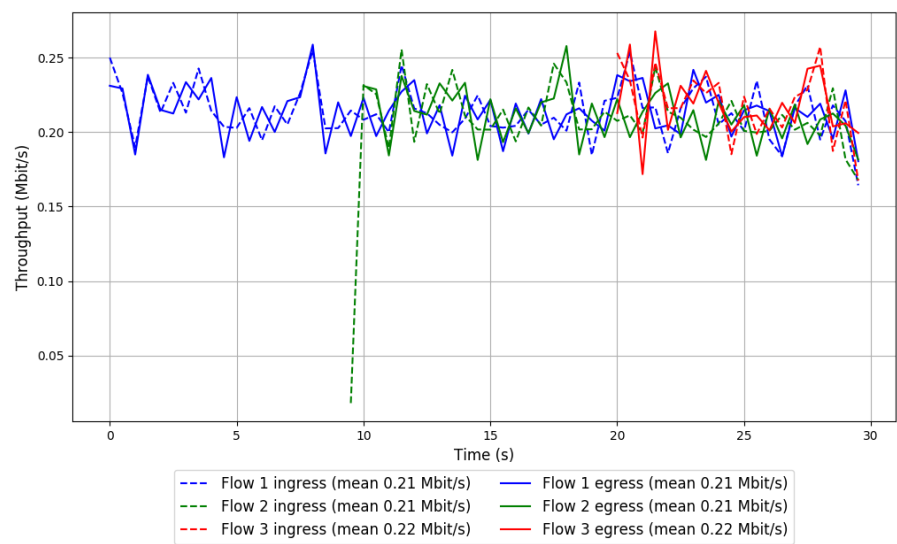


```
Run 3: Statistics of SCReAM

Start at: 2018-01-09 22:53:03
End at: 2018-01-09 22:53:33

# Below is generated by plot.py at 2018-01-10 02:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.813 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.573 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.849 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.645 ms
Loss rate: 0.00%
```


Run 3: Report of SReAM — Data Link

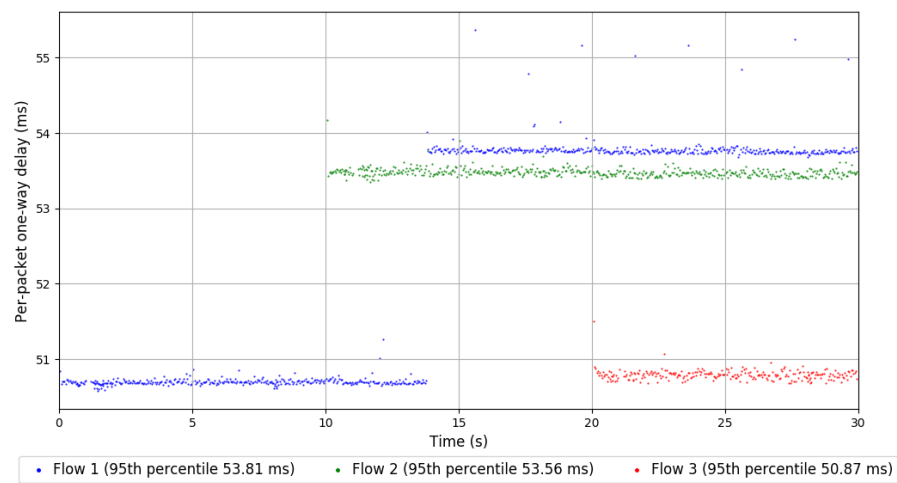
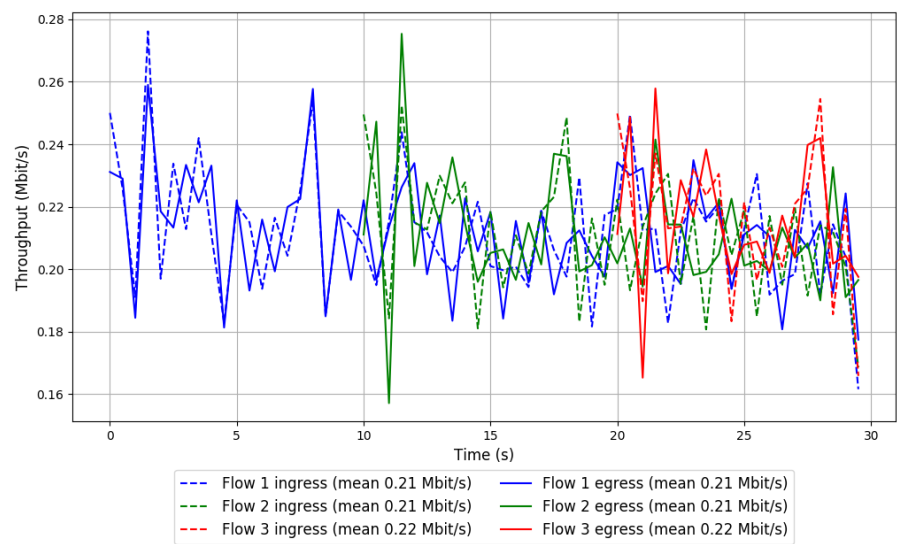


```
Run 4: Statistics of SCReAM

Start at: 2018-01-09 23:06:51
End at: 2018-01-09 23:07:21

# Below is generated by plot.py at 2018-01-10 02:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.792 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.808 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.560 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.870 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link

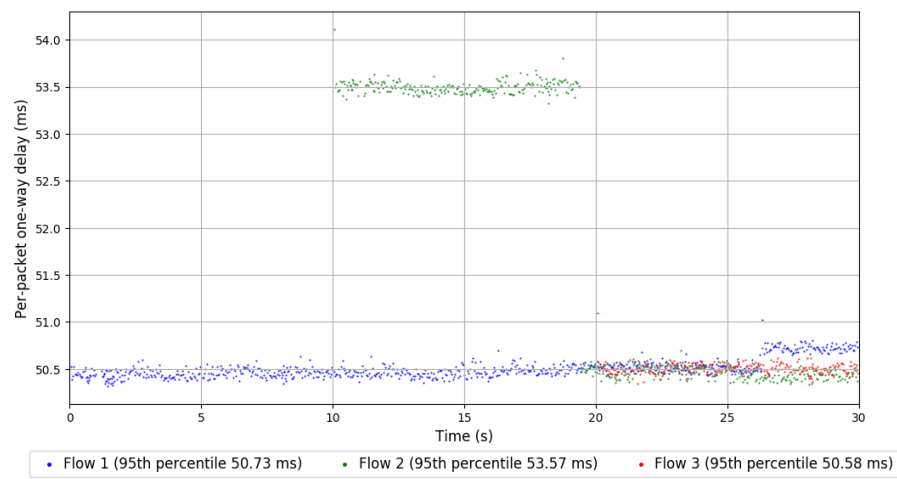
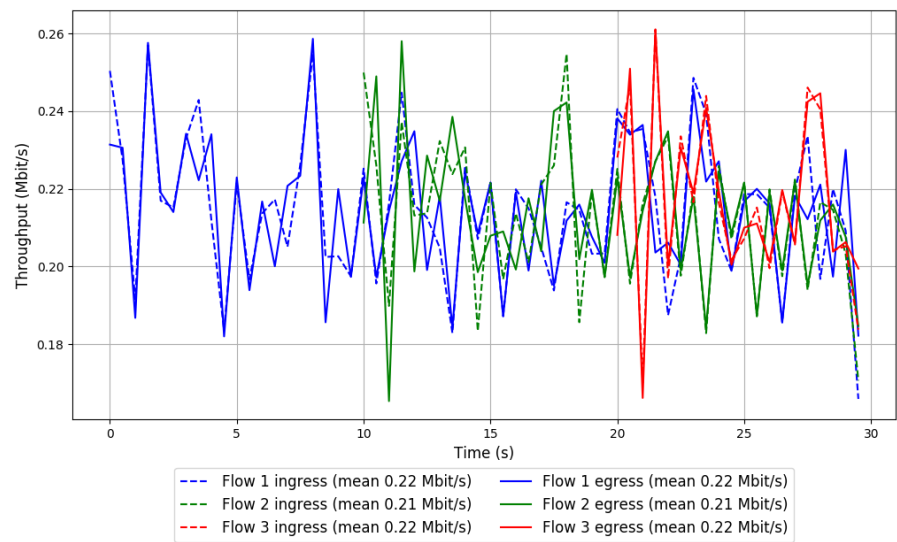


```
Run 5: Statistics of SReAM

Start at: 2018-01-09 23:20:49
End at: 2018-01-09 23:21:19

# Below is generated by plot.py at 2018-01-10 02:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.522 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.730 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.566 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.582 ms
Loss rate: 0.00%
```

Run 5: Report of SReAM — Data Link

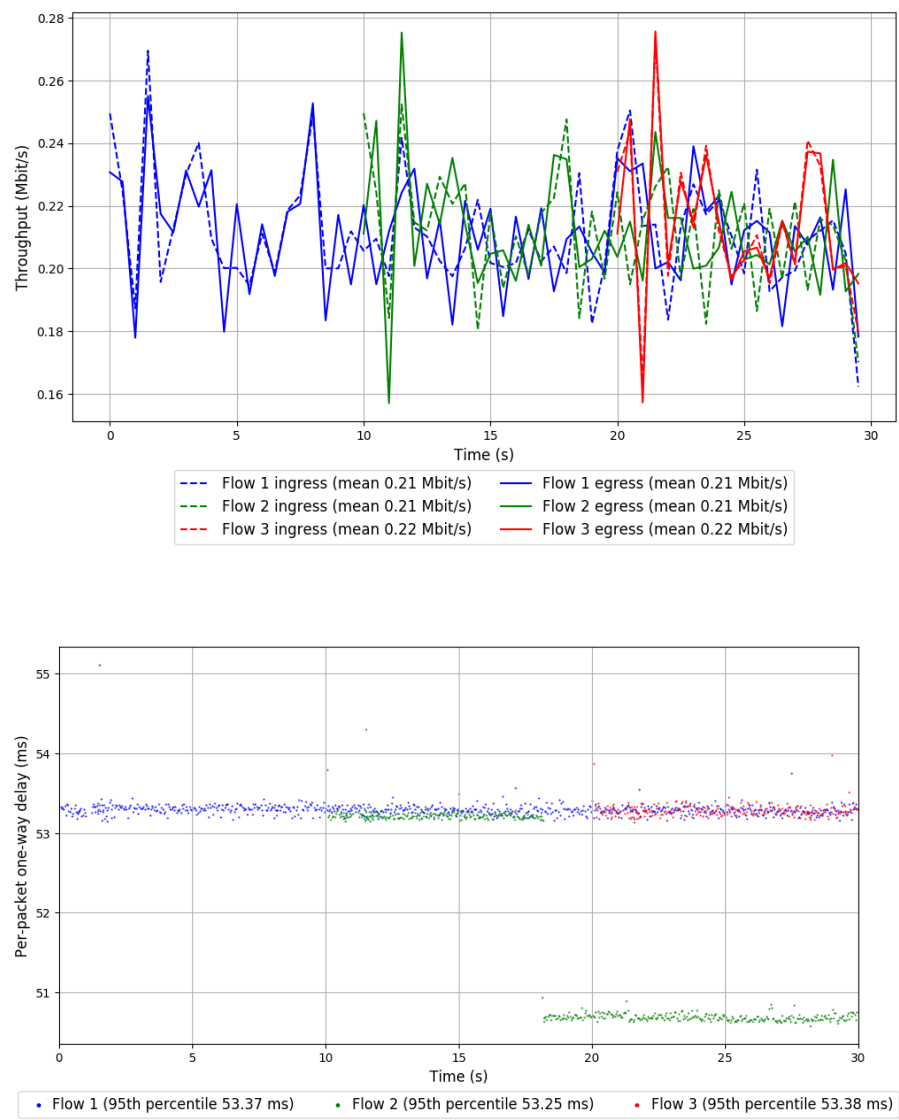


```
Run 6: Statistics of SCReAM

Start at: 2018-01-09 23:34:40
End at: 2018-01-09 23:35:10

# Below is generated by plot.py at 2018-01-10 02:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.367 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.373 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.253 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.382 ms
Loss rate: 0.00%
```

Run 6: Report of SReAM — Data Link

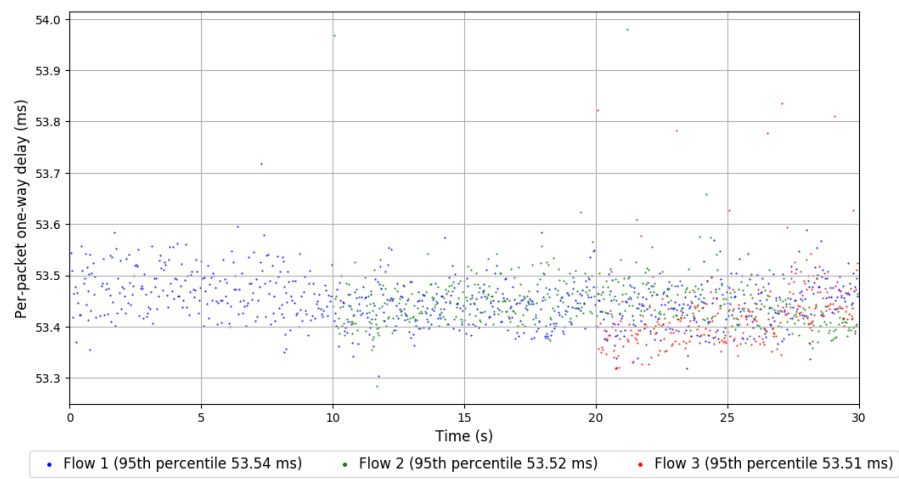
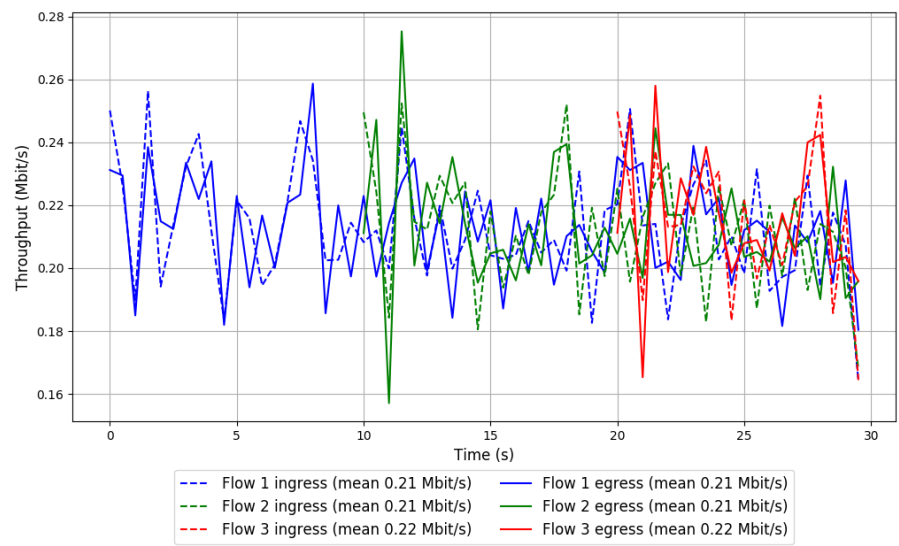


```
Run 7: Statistics of SReAM

Start at: 2018-01-09 23:48:31
End at: 2018-01-09 23:49:01

# Below is generated by plot.py at 2018-01-10 02:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.529 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.536 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.515 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.511 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link

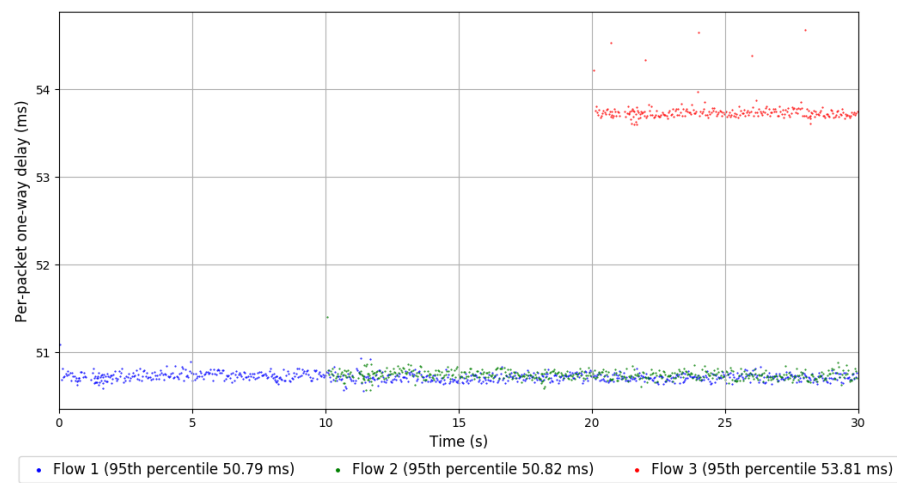
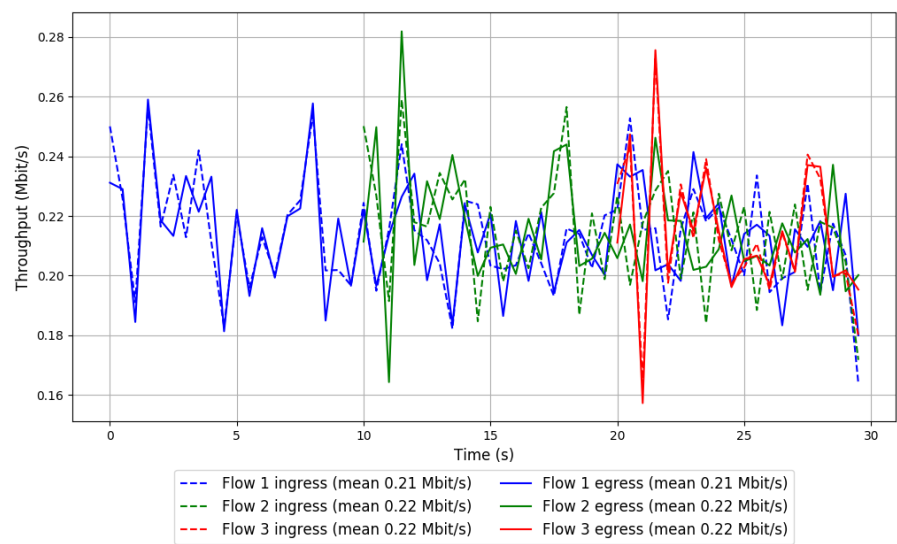


```
Run 8: Statistics of SCReAM

Start at: 2018-01-10 00:02:17
End at: 2018-01-10 00:02:47

# Below is generated by plot.py at 2018-01-10 02:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.748 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.794 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.818 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.809 ms
Loss rate: 0.00%
```

Run 8: Report of SReAM — Data Link

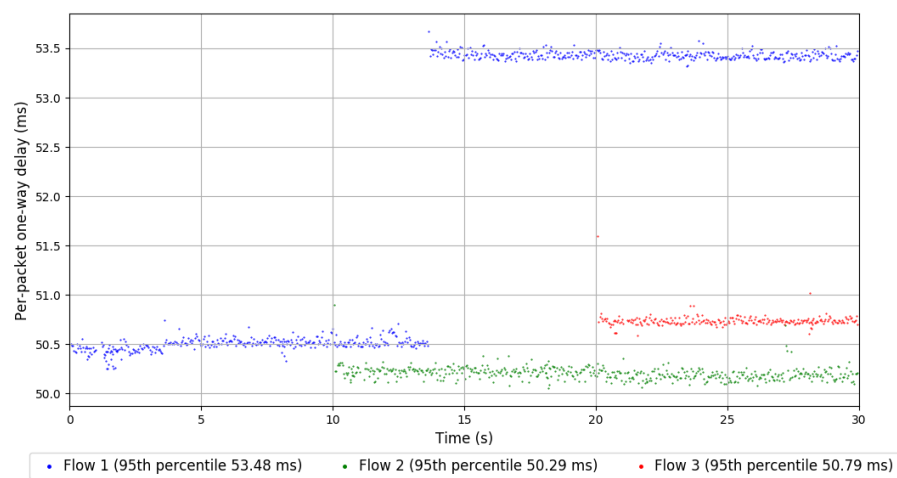
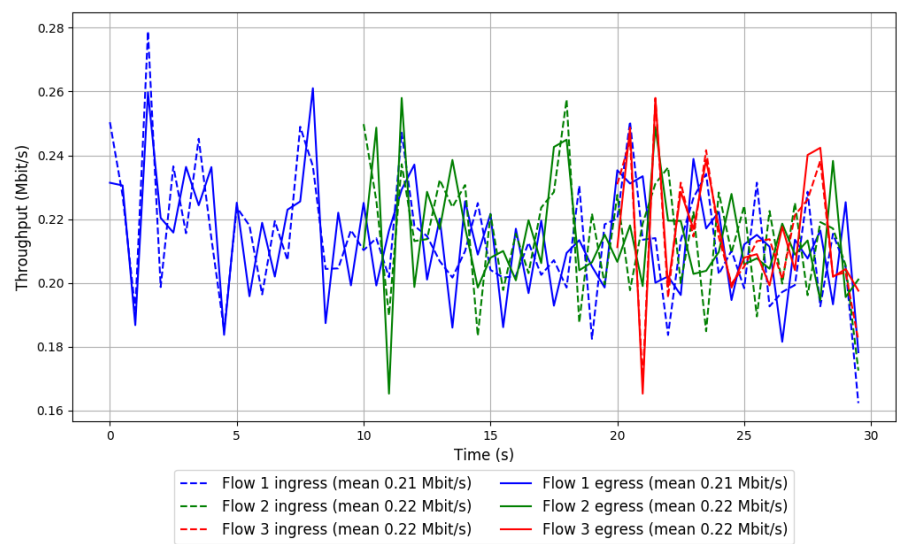


```
Run 9: Statistics of SCReAM

Start at: 2018-01-10 00:15:55
End at: 2018-01-10 00:16:25

# Below is generated by plot.py at 2018-01-10 02:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.462 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.480 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.294 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.789 ms
Loss rate: 0.00%
```

Run 9: Report of SReAM — Data Link

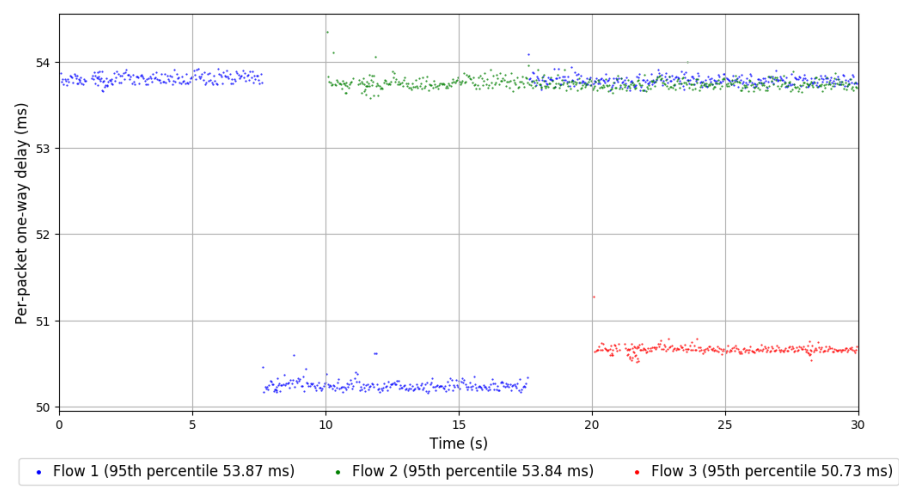
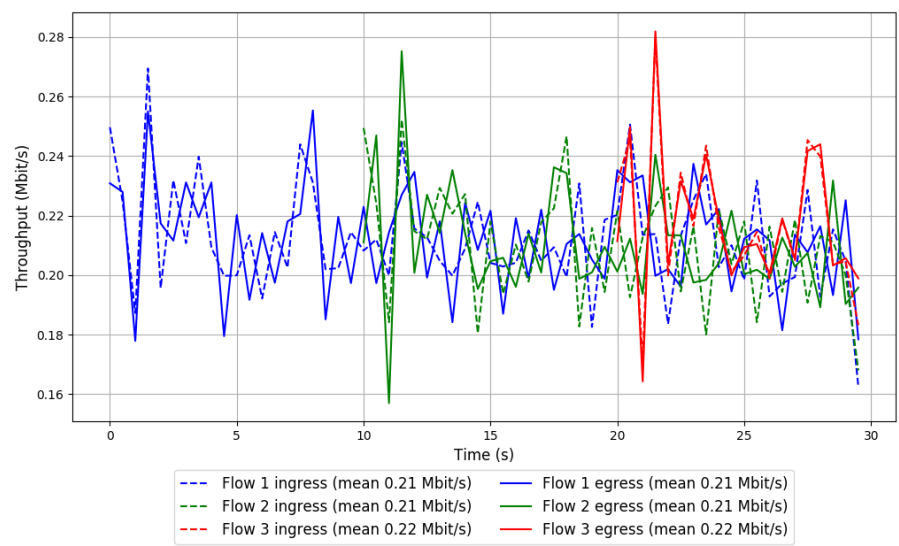


```
Run 10: Statistics of SReAM

Start at: 2018-01-10 00:29:58
End at: 2018-01-10 00:30:28

# Below is generated by plot.py at 2018-01-10 02:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.853 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.867 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.841 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.727 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

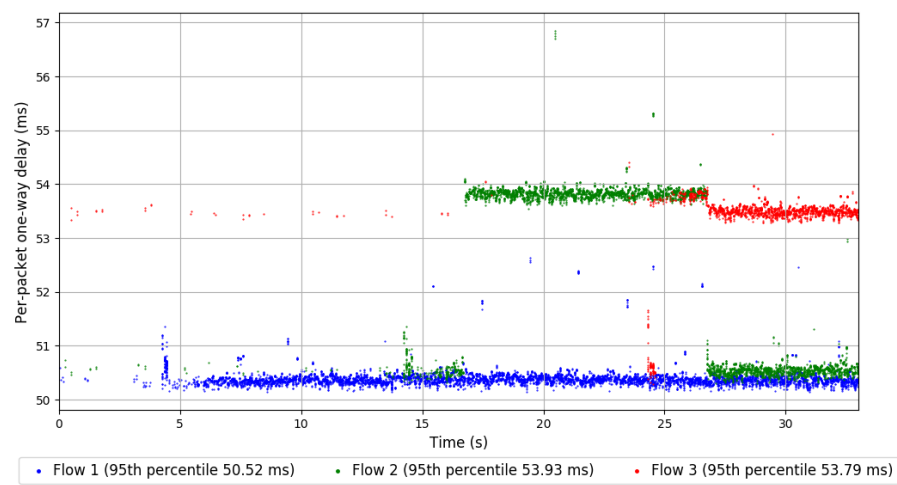
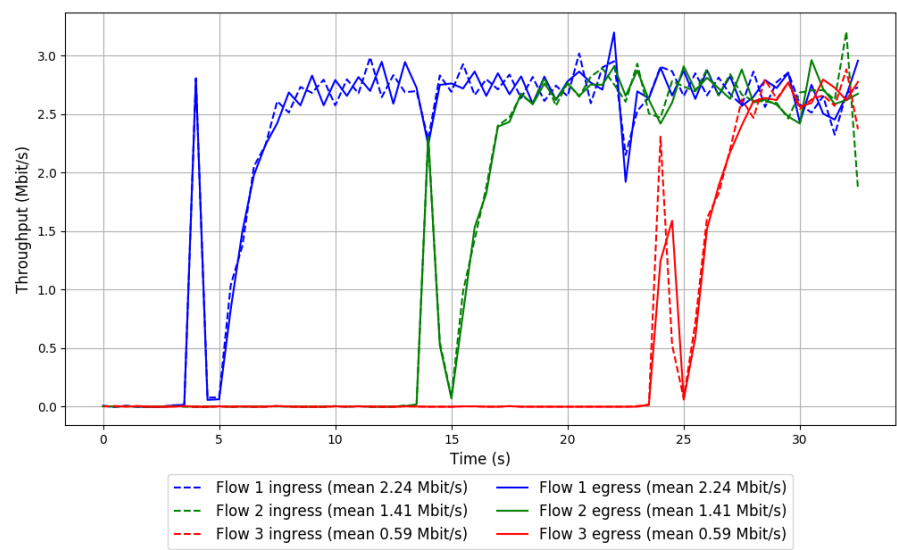


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-09 22:30:44
End at: 2018-01-09 22:31:14

# Below is generated by plot.py at 2018-01-10 02:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.22 Mbit/s
95th percentile per-packet one-way delay: 53.869 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 50.521 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 53.926 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 53.793 ms
Loss rate: 0.05%
```


Run 1: Report of WebRTC media — Data Link

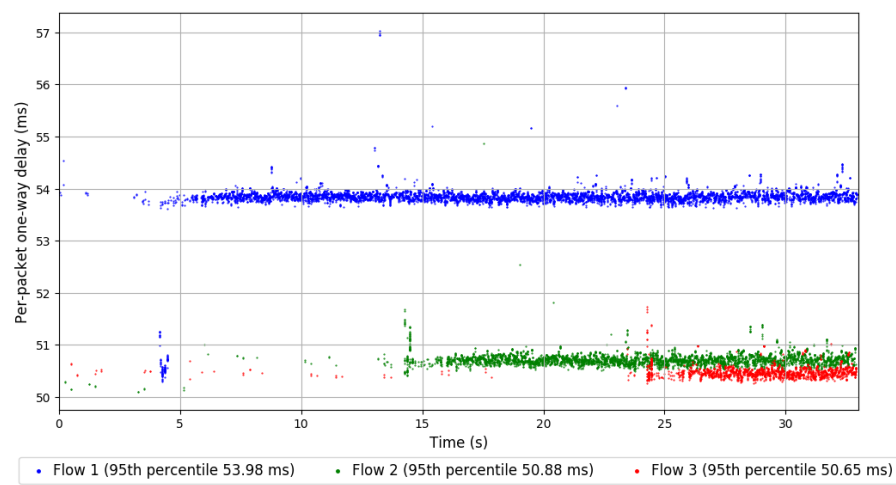
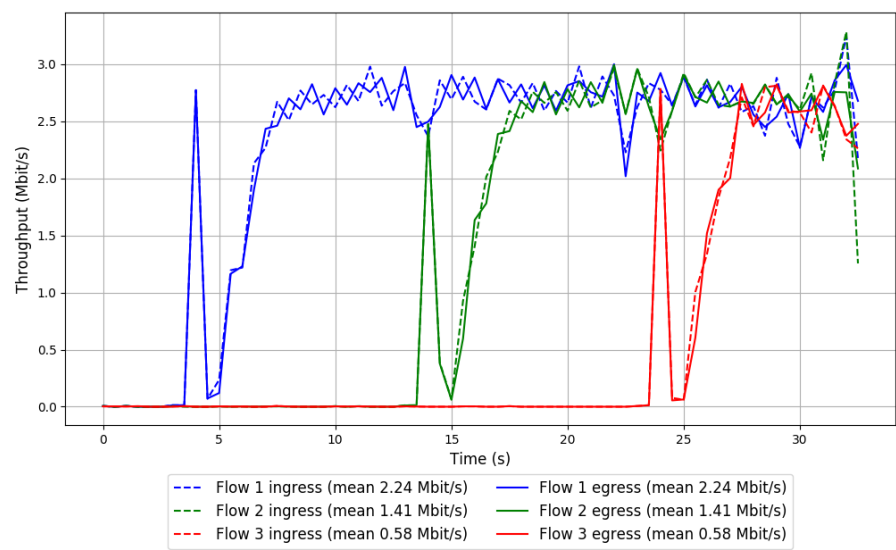


```
Run 2: Statistics of WebRTC media

Start at: 2018-01-09 22:44:23
End at: 2018-01-09 22:44:53

# Below is generated by plot.py at 2018-01-10 02:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.22 Mbit/s
95th percentile per-packet one-way delay: 53.943 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 53.980 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 50.877 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 50.651 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-09 22:58:30

End at: 2018-01-09 22:59:00

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.38 Mbit/s

95th percentile per-packet one-way delay: 53.506 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.33 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.46 Mbit/s

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

Loss rate: 0.00%

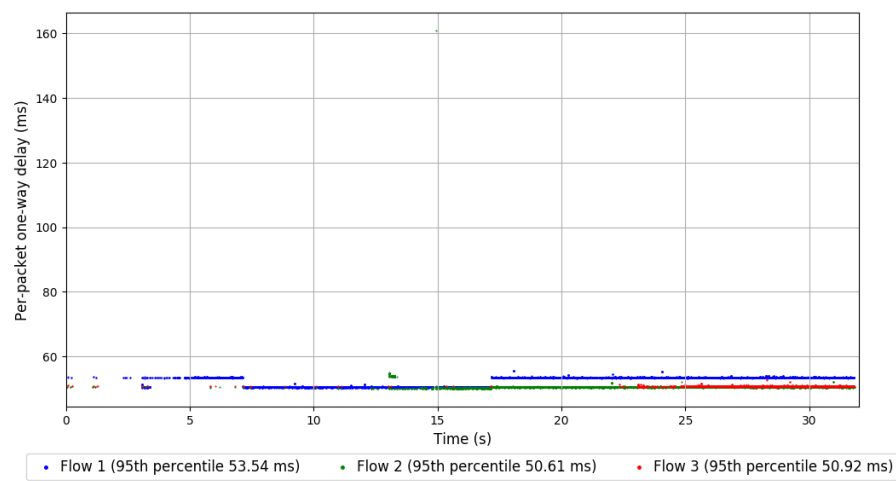
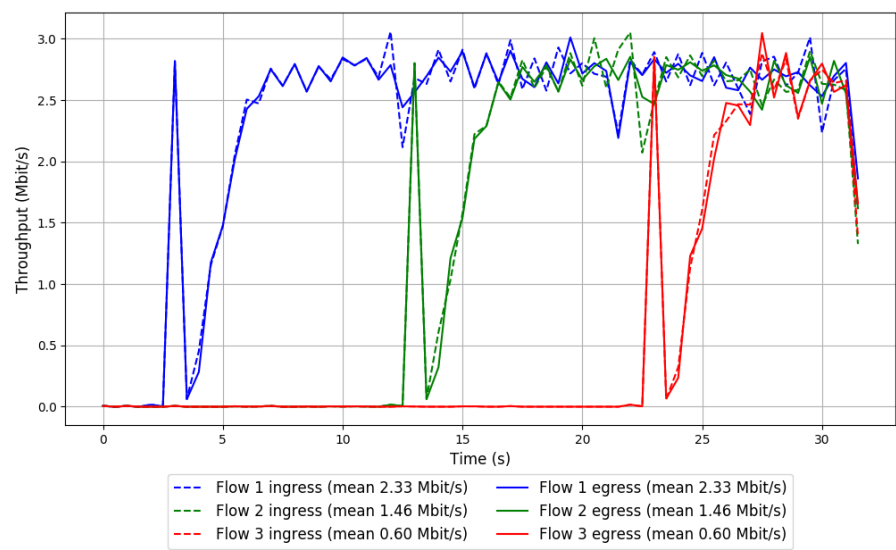
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 50.918 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-09 23:12:12

End at: 2018-01-09 23:12:42

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 53.830 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 53.602 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 53.882 ms

Loss rate: 0.00%

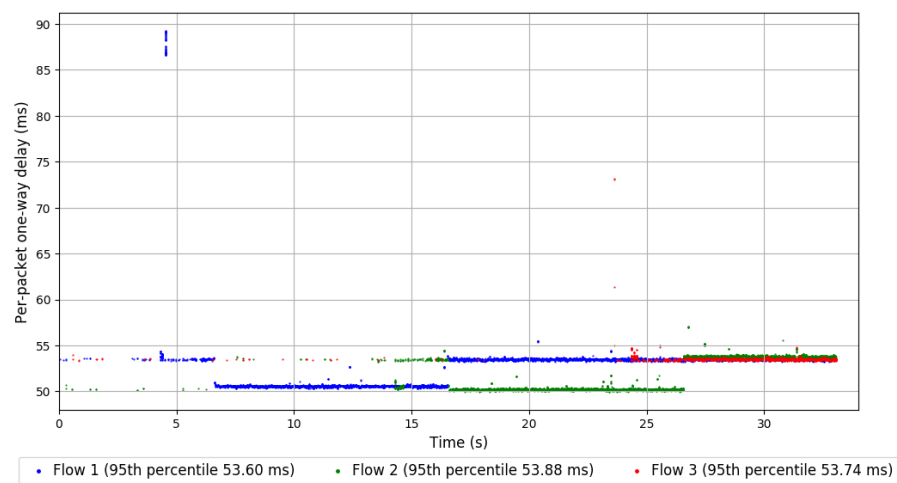
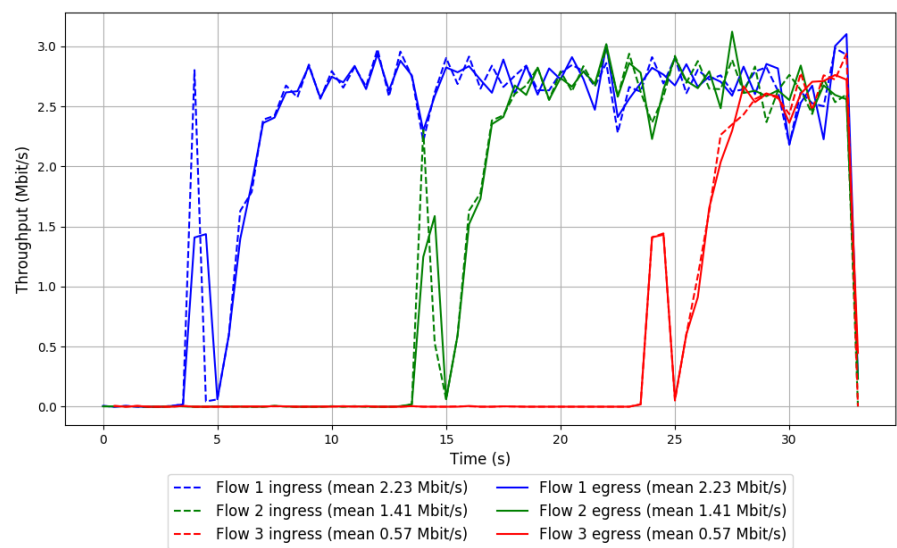
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 53.739 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-09 23:26:01

End at: 2018-01-09 23:26:31

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 53.450 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 50.462 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 53.494 ms

Loss rate: 0.00%

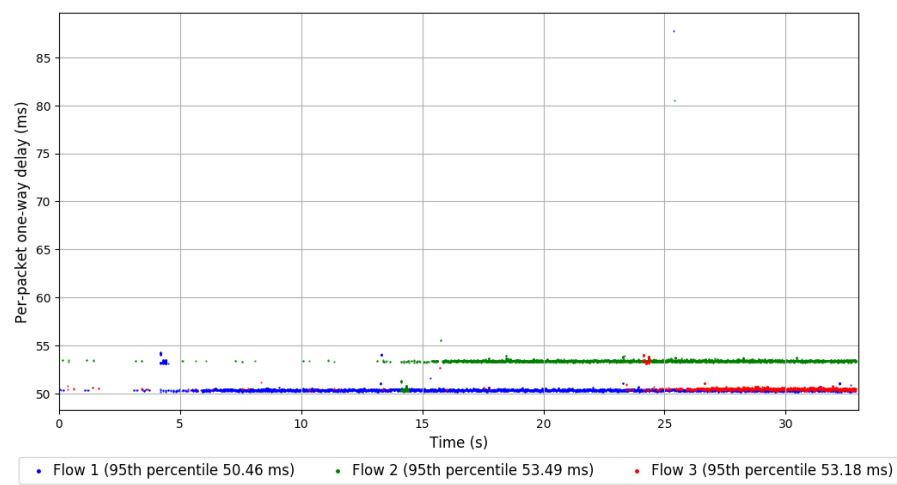
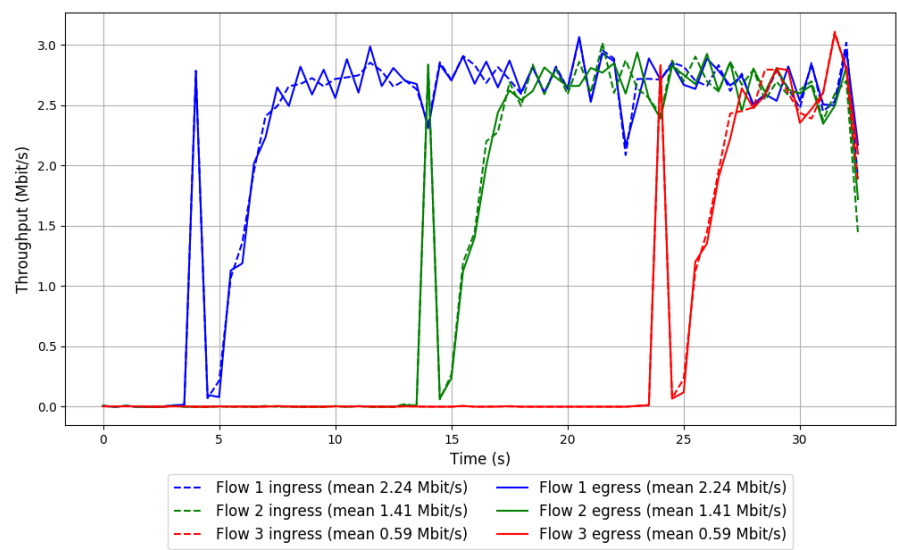
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 53.176 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-09 23:39:51

End at: 2018-01-09 23:40:21

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 53.288 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 53.280 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 53.285 ms

Loss rate: 0.02%

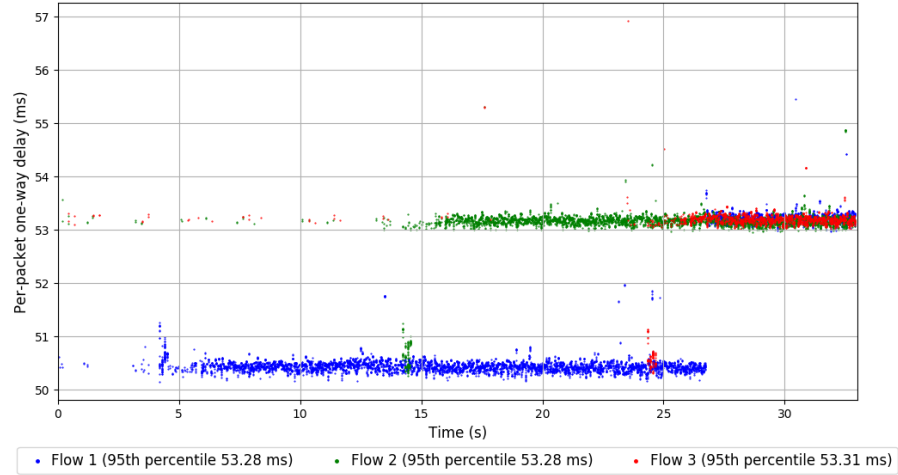
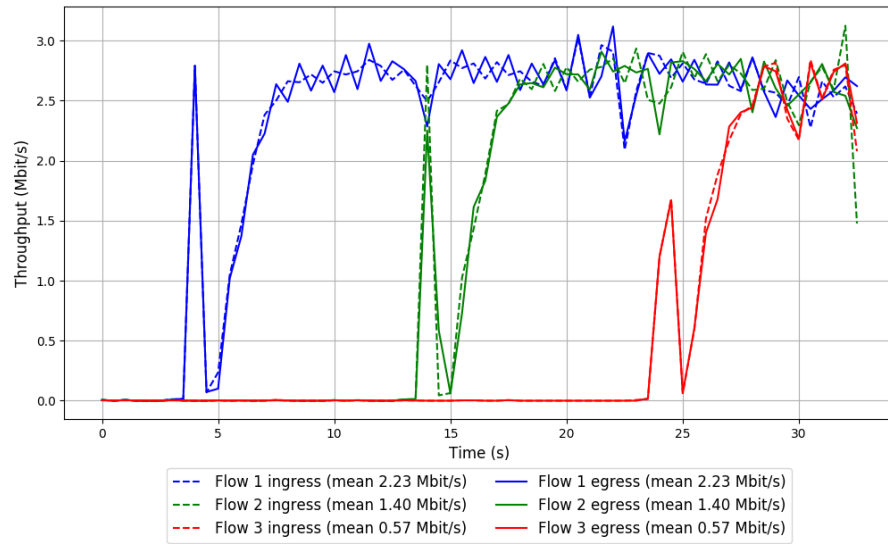
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 53.311 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-09 23:53:40

End at: 2018-01-09 23:54:10

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 53.311 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 53.246 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 53.384 ms

Loss rate: 0.00%

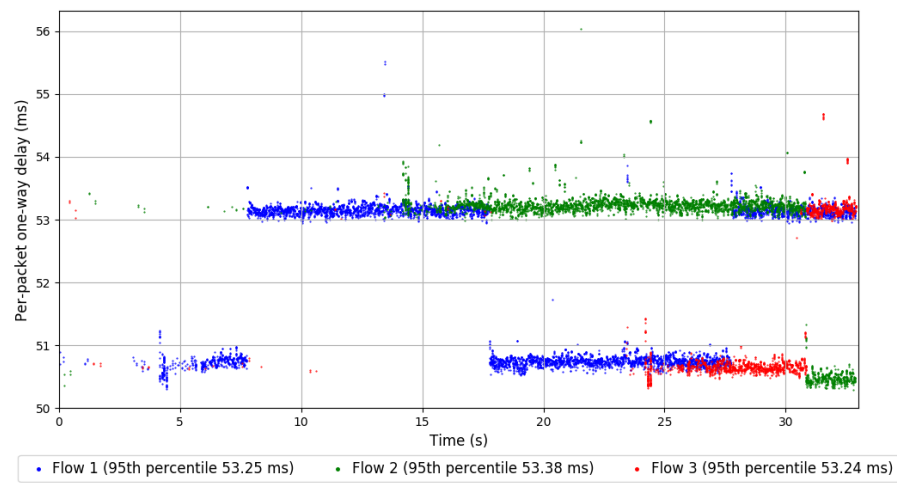
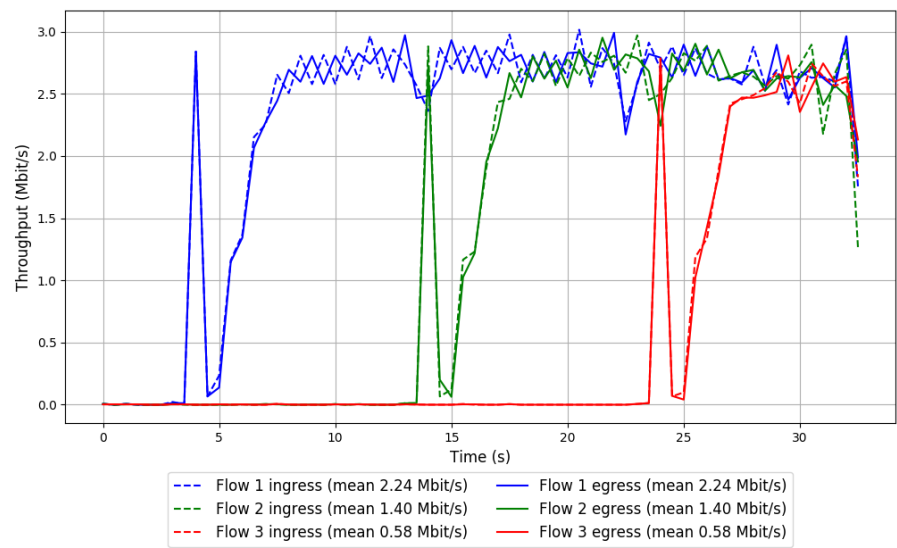
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 53.244 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-10 00:07:15

End at: 2018-01-10 00:07:45

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 53.562 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 53.847 ms

Loss rate: 0.00%

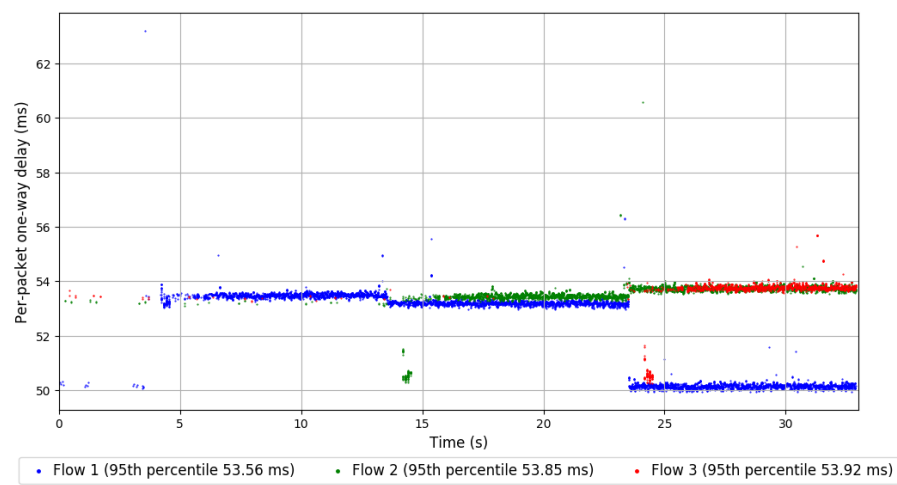
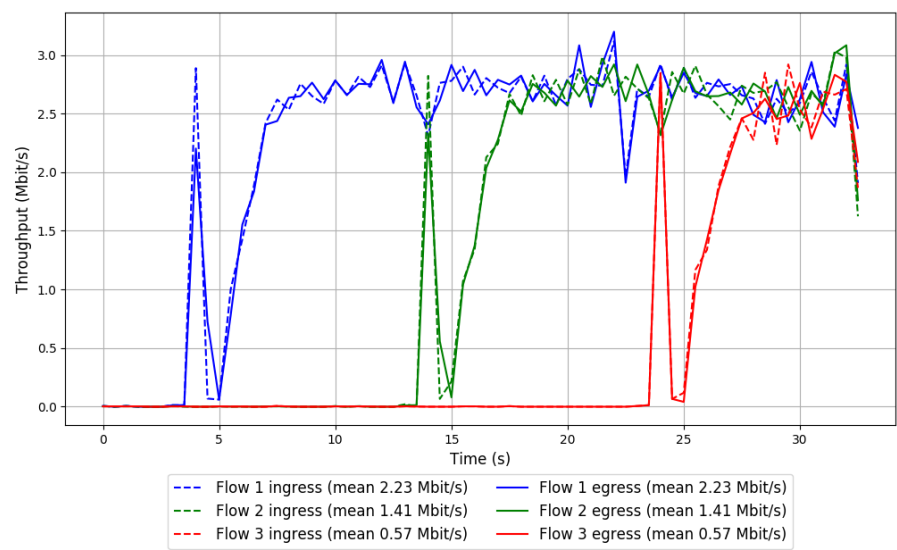
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 53.924 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-10 00:21:21

End at: 2018-01-10 00:21:51

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 53.843 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 53.864 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 53.280 ms

Loss rate: 0.00%

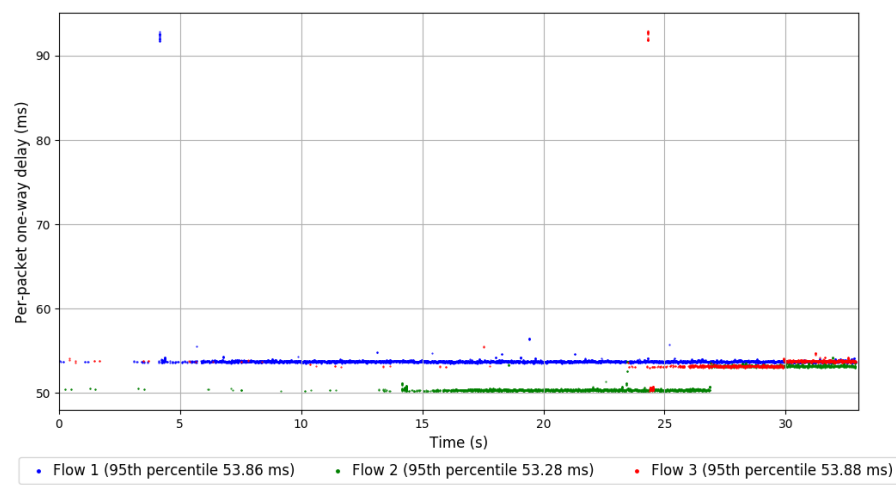
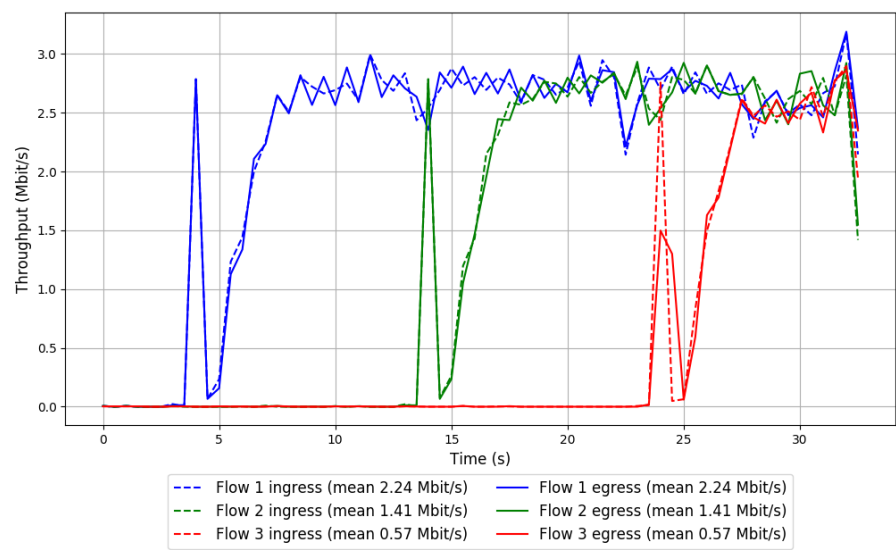
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 53.878 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-10 00:35:29

End at: 2018-01-10 00:35:59

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 53.774 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 53.800 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 50.624 ms

Loss rate: 0.00%

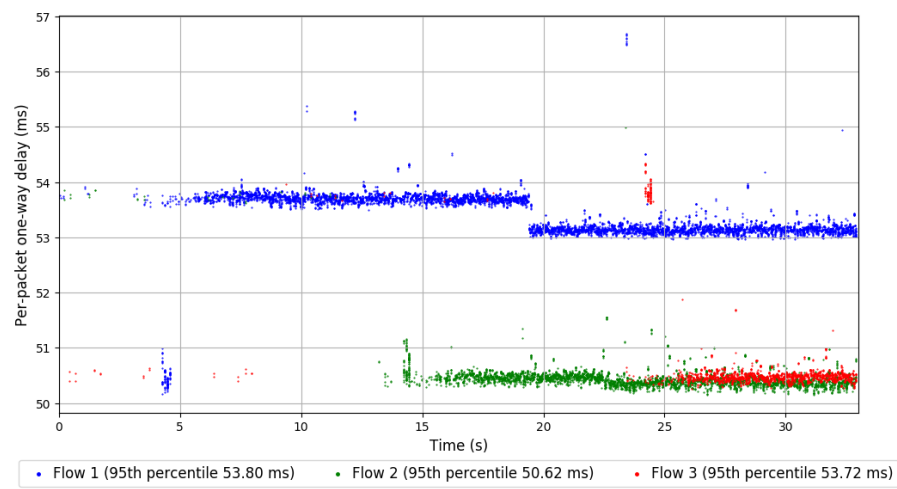
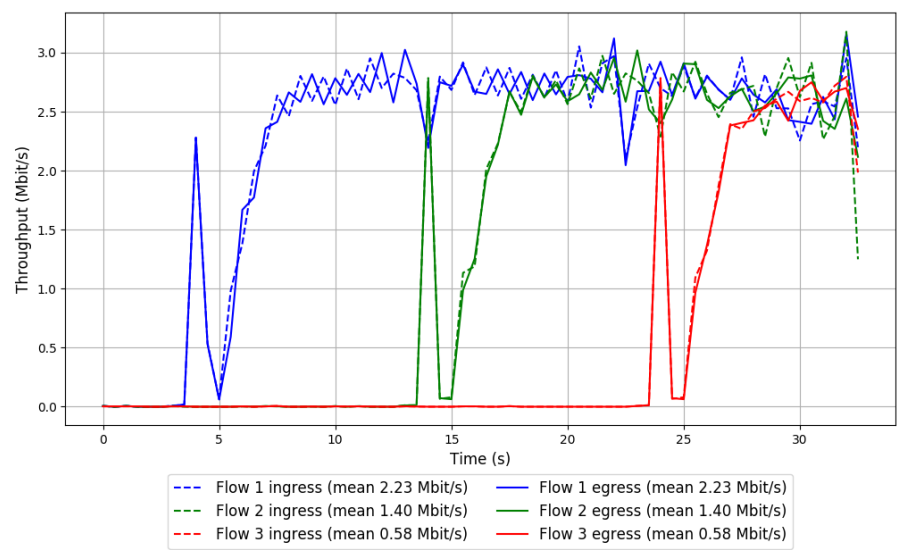
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 53.715 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

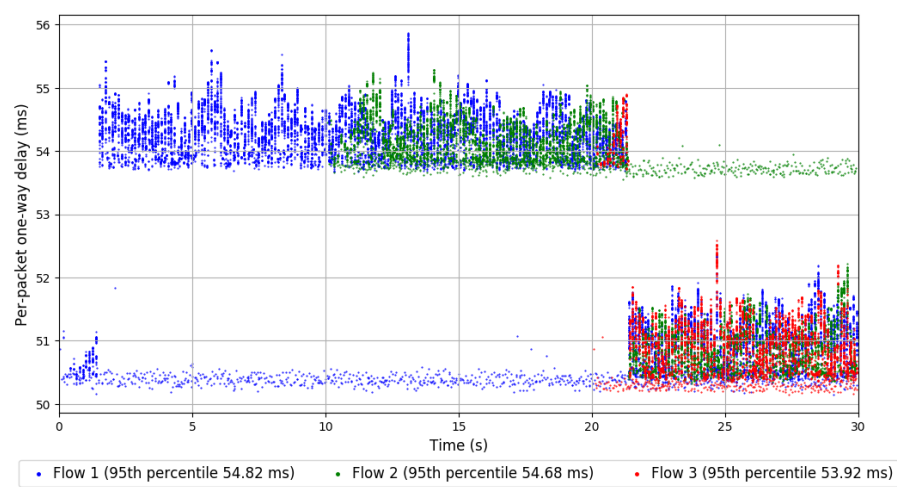
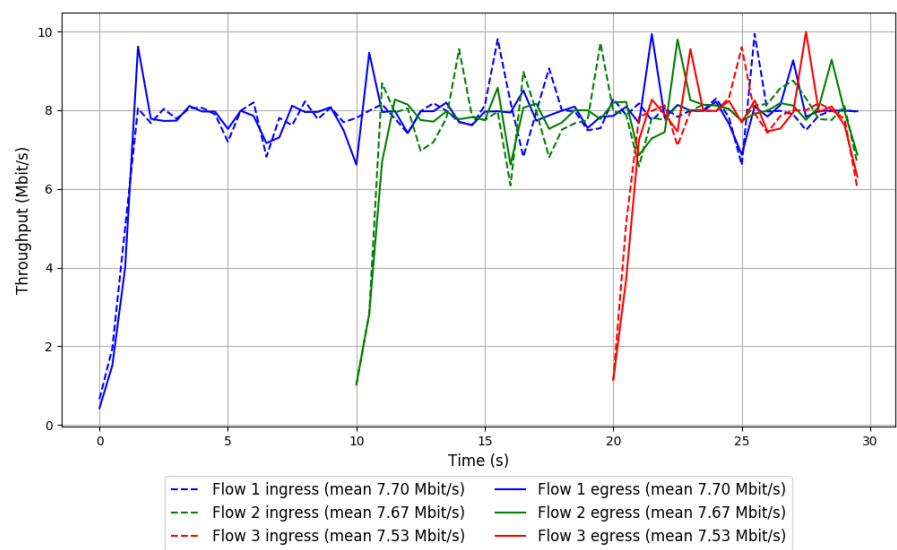


```
Run 1: Statistics of Sprout

Start at: 2018-01-09 22:32:17
End at: 2018-01-09 22:32:47

# Below is generated by plot.py at 2018-01-10 02:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.27 Mbit/s
95th percentile per-packet one-way delay: 54.751 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.70 Mbit/s
95th percentile per-packet one-way delay: 54.821 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.67 Mbit/s
95th percentile per-packet one-way delay: 54.679 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.53 Mbit/s
95th percentile per-packet one-way delay: 53.923 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-09 22:45:53

End at: 2018-01-09 22:46:23

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.37 Mbit/s

95th percentile per-packet one-way delay: 54.028 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 7.80 Mbit/s

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

Loss rate: 0.02%

-- Flow 2:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 51.874 ms

Loss rate: 0.00%

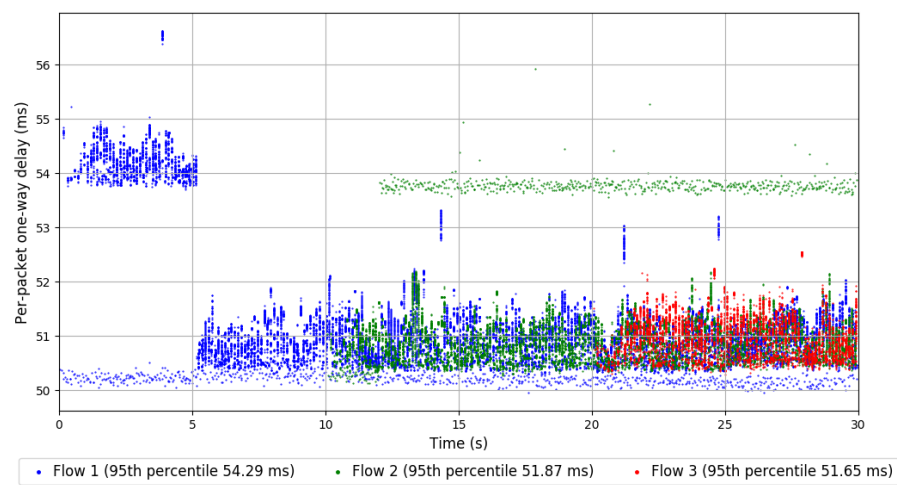
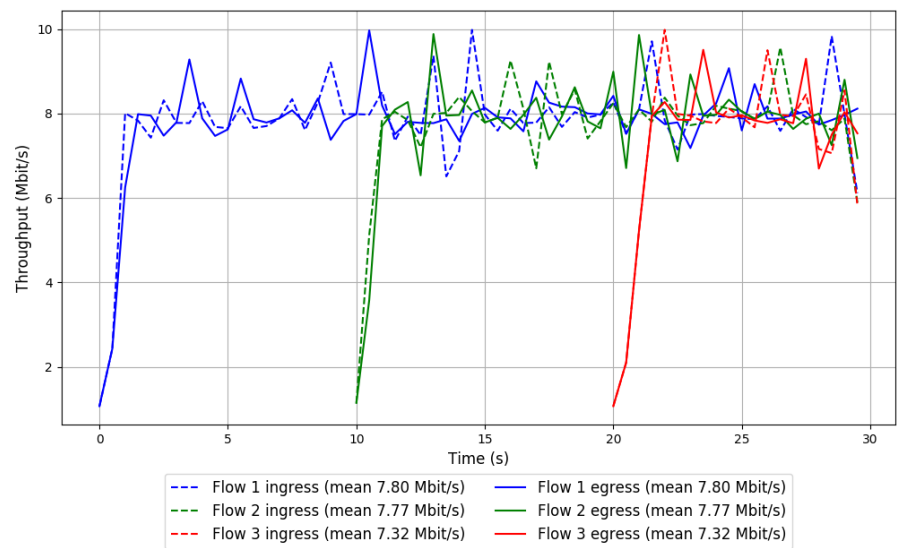
-- Flow 3:

Average throughput: 7.32 Mbit/s

95th percentile per-packet one-way delay: 51.650 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-09 22:59:58

End at: 2018-01-09 23:00:28

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.16 Mbit/s

95th percentile per-packet one-way delay: 54.659 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 7.55 Mbit/s

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

Loss rate: 0.05%

-- Flow 2:

Average throughput: 7.69 Mbit/s

95th percentile per-packet one-way delay: 54.593 ms

Loss rate: 0.00%

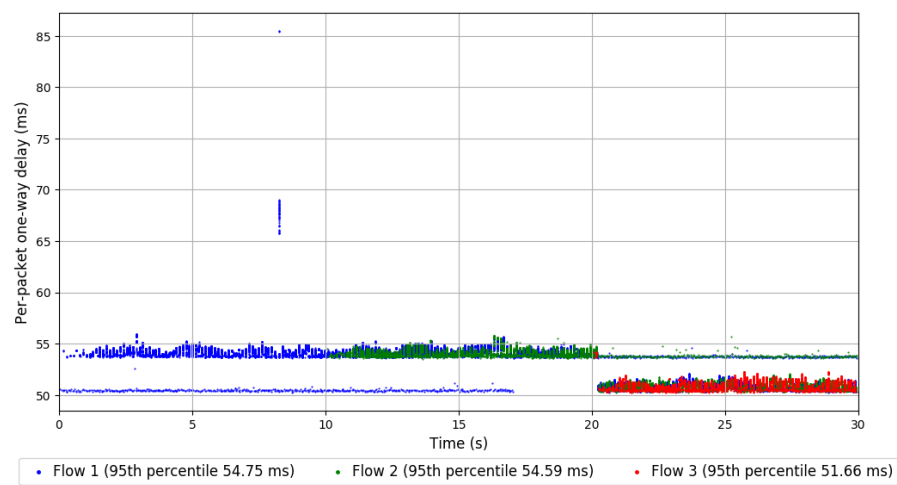
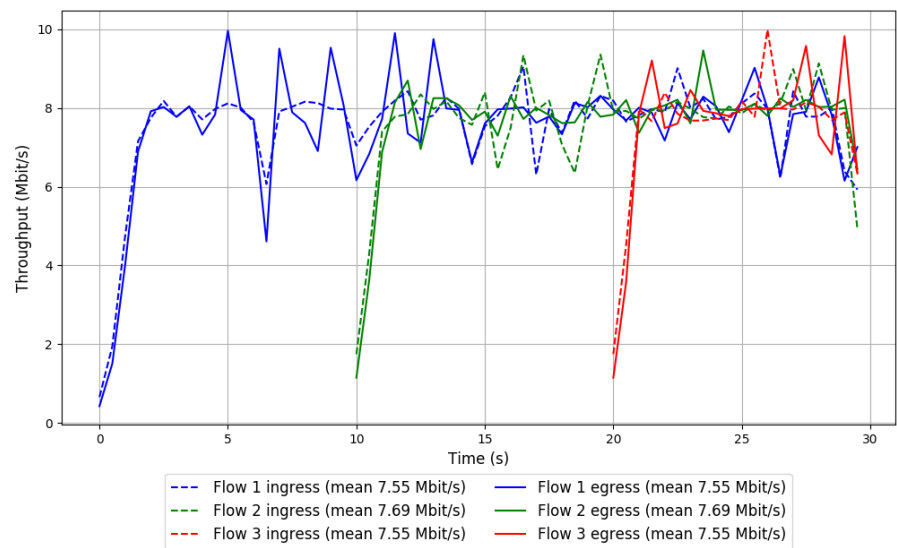
-- Flow 3:

Average throughput: 7.55 Mbit/s

95th percentile per-packet one-way delay: 51.665 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-09 23:13:42

End at: 2018-01-09 23:14:12

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.35 Mbit/s

95th percentile per-packet one-way delay: 54.392 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.71 Mbit/s

95th percentile per-packet one-way delay: 54.437 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 54.323 ms

Loss rate: 0.00%

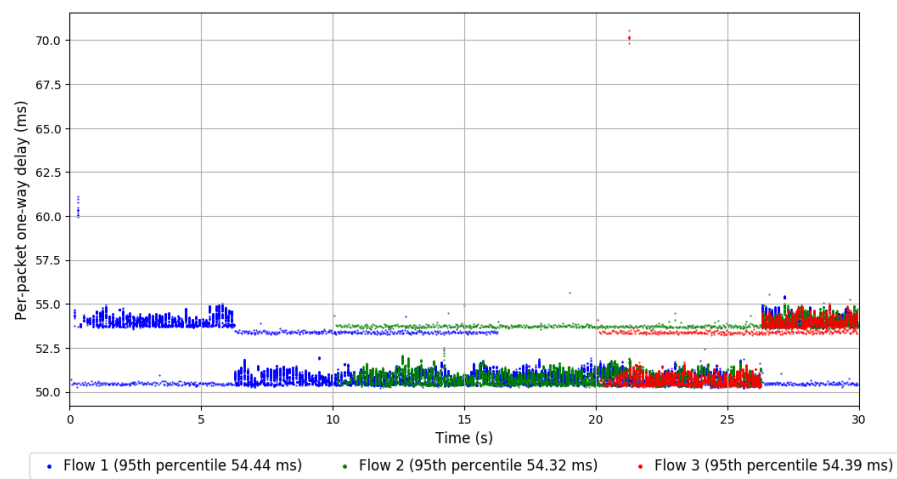
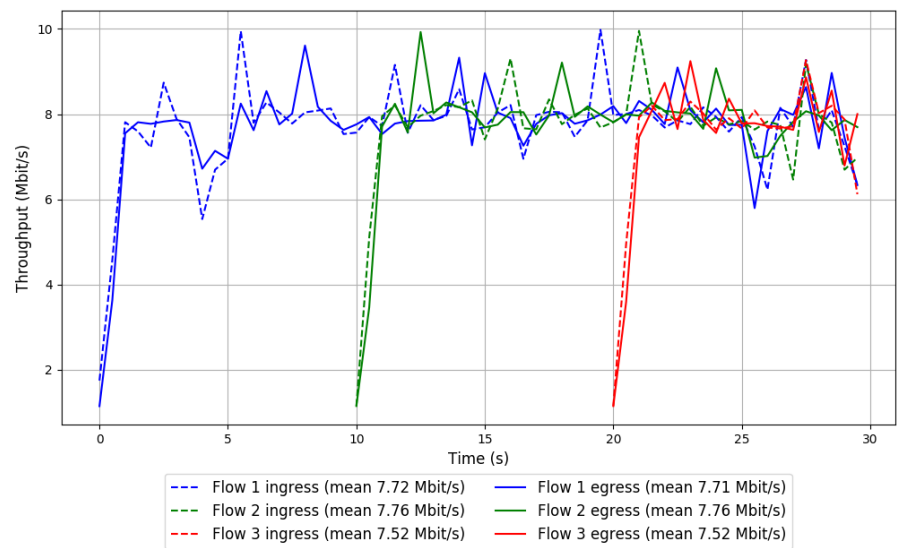
-- Flow 3:

Average throughput: 7.52 Mbit/s

95th percentile per-packet one-way delay: 54.390 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link

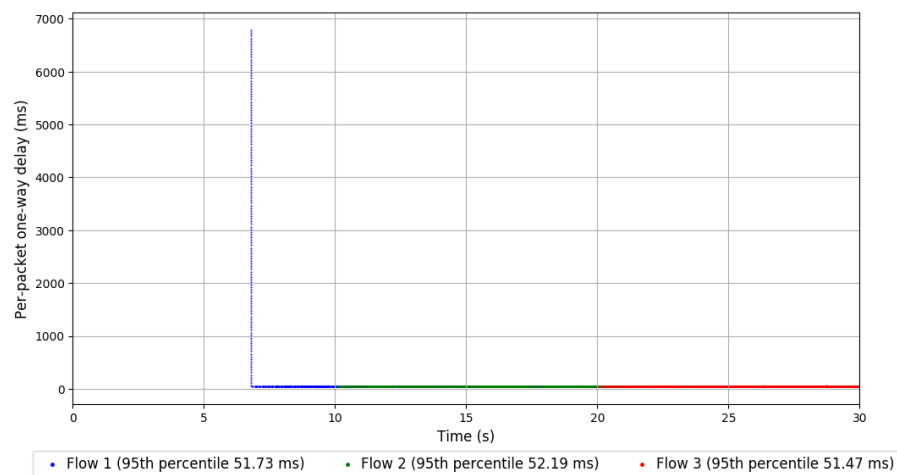
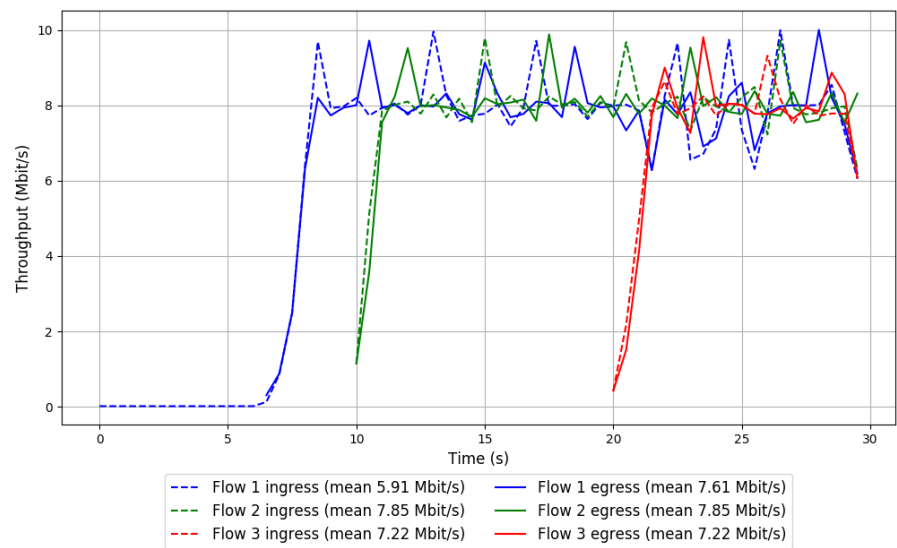


Run 5: Statistics of Sprout

Start at: 2018-01-09 23:27:36

End at: 2018-01-09 23:28:06

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-09 23:41:24

End at: 2018-01-09 23:41:54

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.14 Mbit/s

95th percentile per-packet one-way delay: 54.100 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 7.56 Mbit/s

95th percentile per-packet one-way delay: 53.965 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 54.162 ms

Loss rate: 0.00%

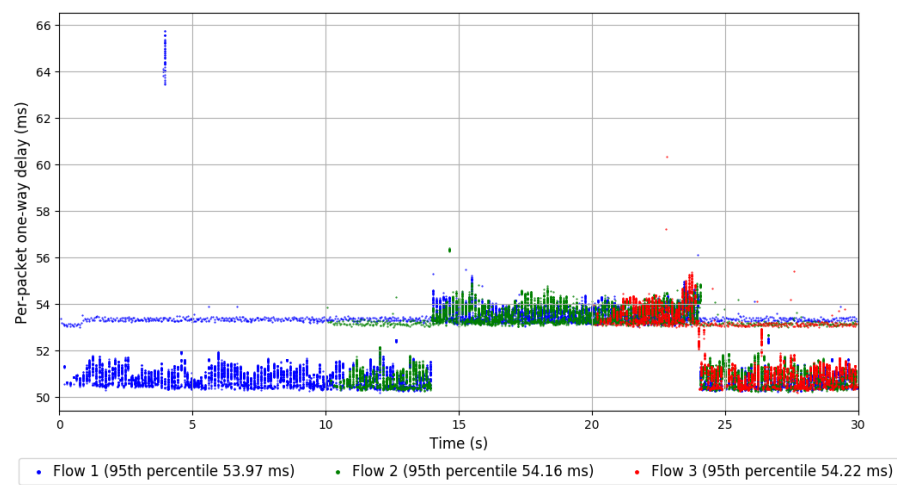
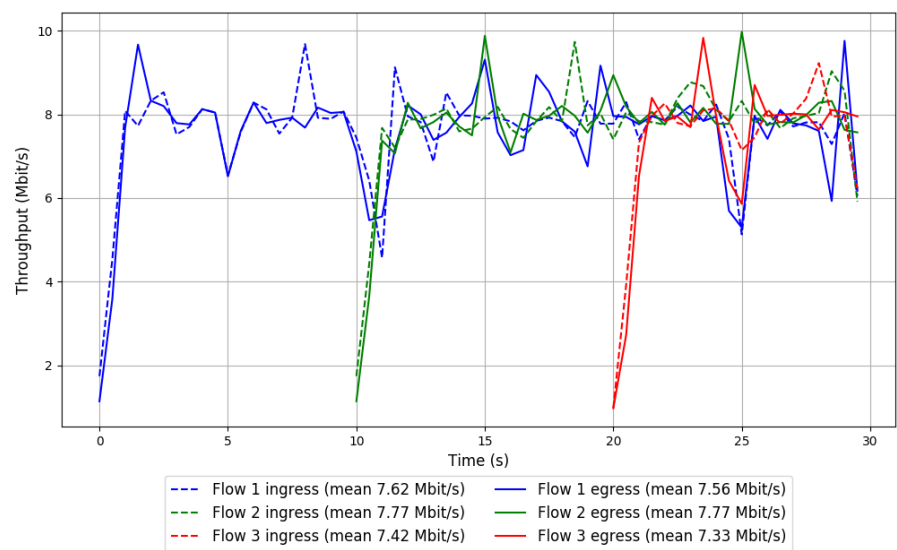
-- Flow 3:

Average throughput: 7.33 Mbit/s

95th percentile per-packet one-way delay: 54.216 ms

Loss rate: 1.17%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-09 23:55:14

End at: 2018-01-09 23:55:44

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.50 Mbit/s

95th percentile per-packet one-way delay: 51.619 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 51.658 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.80 Mbit/s

95th percentile per-packet one-way delay: 51.561 ms

Loss rate: 0.00%

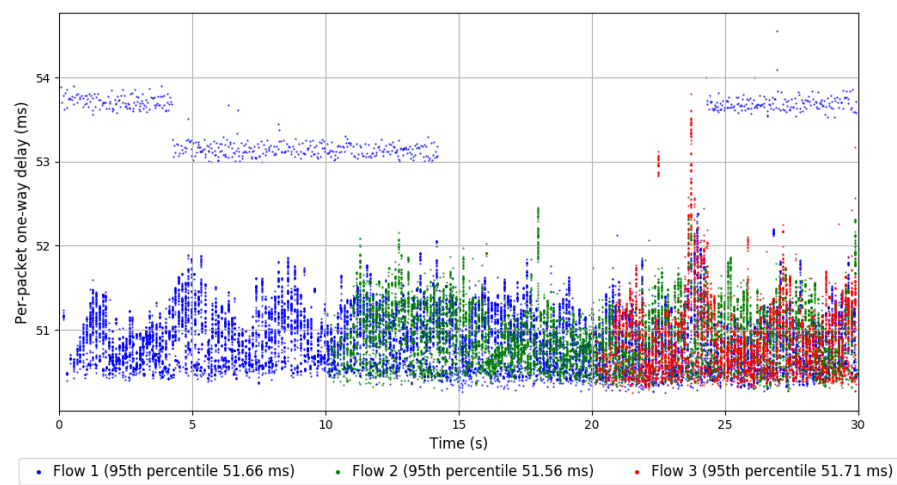
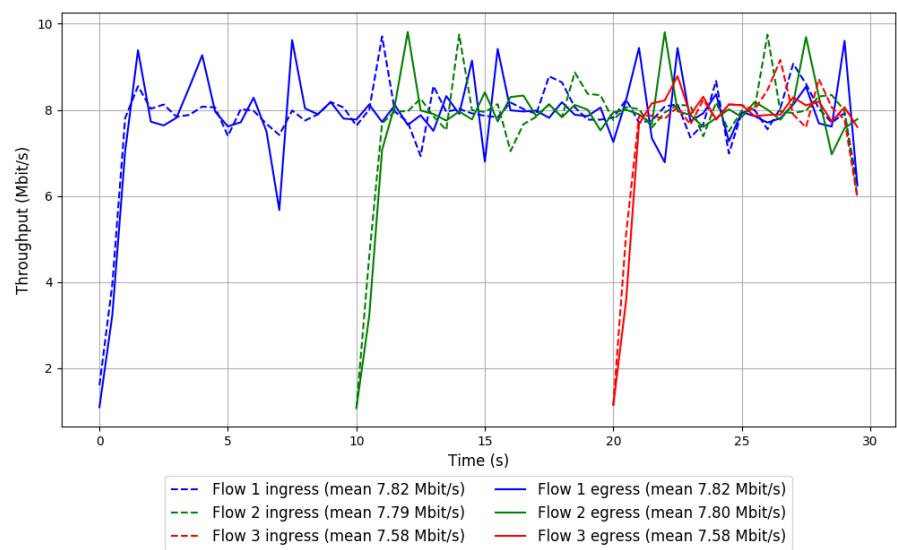
-- Flow 3:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 51.708 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-10 00:08:46

End at: 2018-01-10 00:09:16

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.21 Mbit/s

95th percentile per-packet one-way delay: 54.025 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 53.980 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 54.120 ms

Loss rate: 0.08%

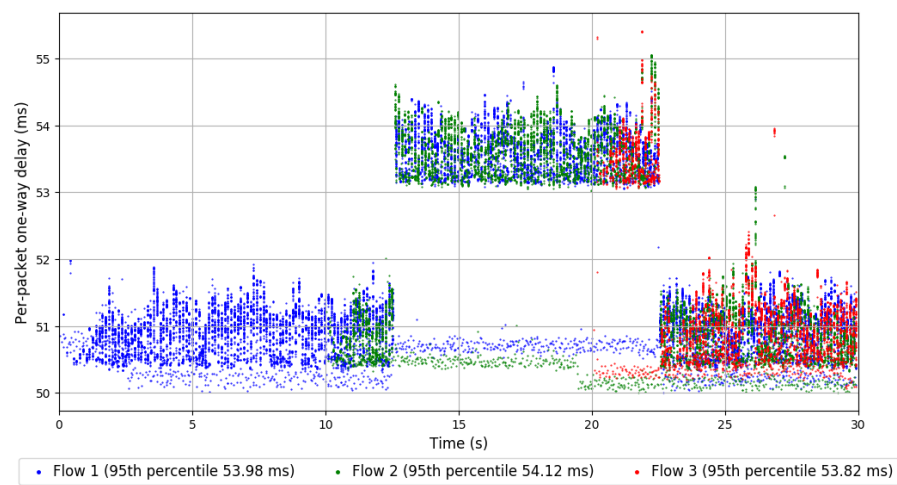
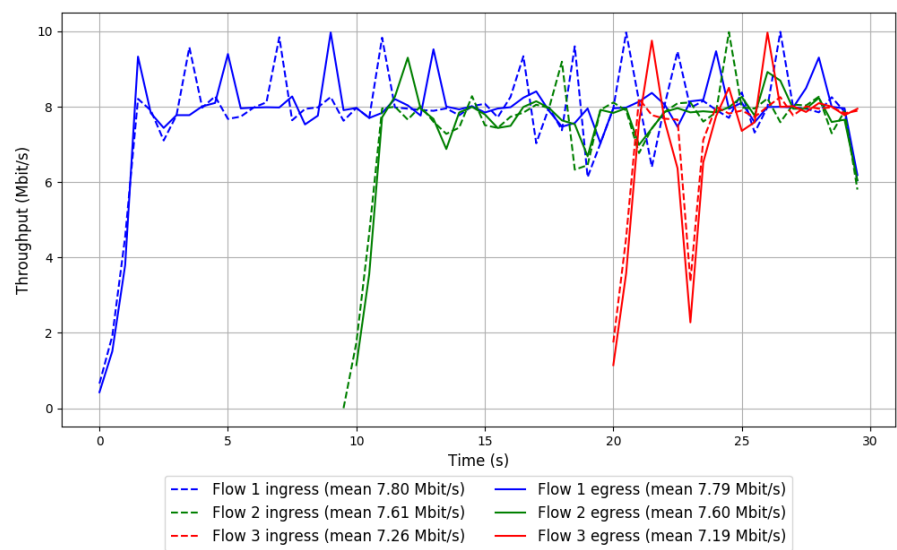
-- Flow 3:

Average throughput: 7.19 Mbit/s

95th percentile per-packet one-way delay: 53.816 ms

Loss rate: 1.06%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-10 00:22:56

End at: 2018-01-10 00:23:26

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.10 Mbit/s

95th percentile per-packet one-way delay: 54.600 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.61 Mbit/s

95th percentile per-packet one-way delay: 54.584 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 54.631 ms

Loss rate: 0.00%

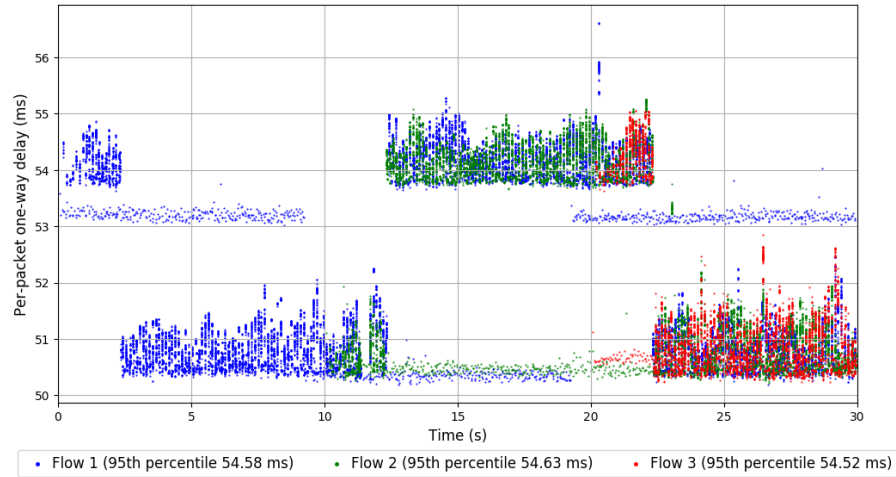
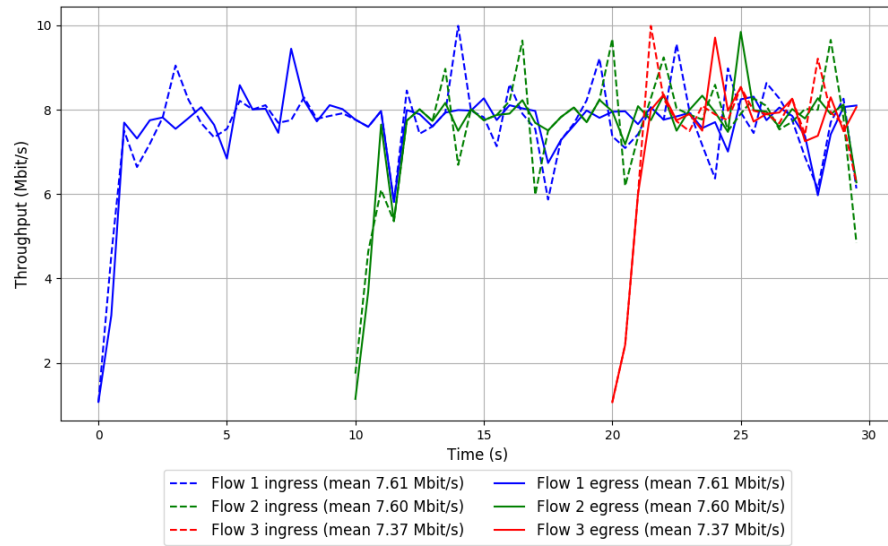
-- Flow 3:

Average throughput: 7.37 Mbit/s

95th percentile per-packet one-way delay: 54.519 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-10 00:37:06

End at: 2018-01-10 00:37:36

Below is generated by plot.py at 2018-01-10 02:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.59 Mbit/s

95th percentile per-packet one-way delay: 51.666 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 51.657 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 51.735 ms

Loss rate: 0.00%

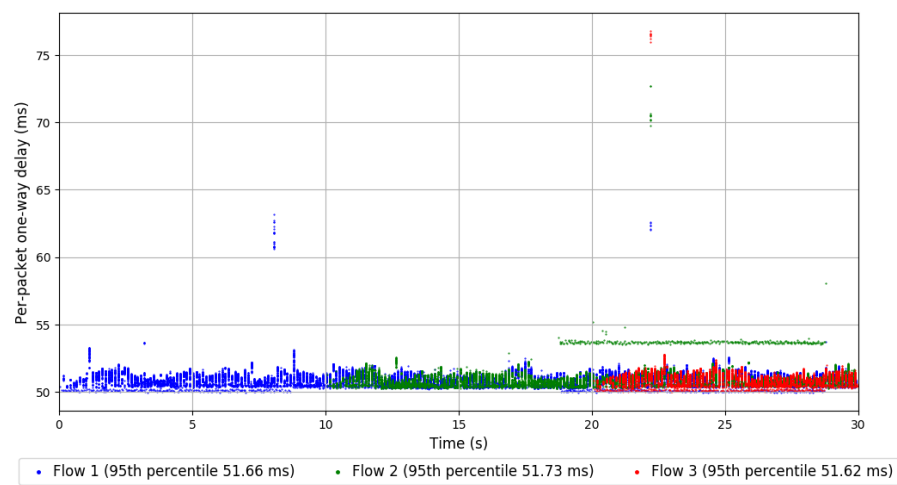
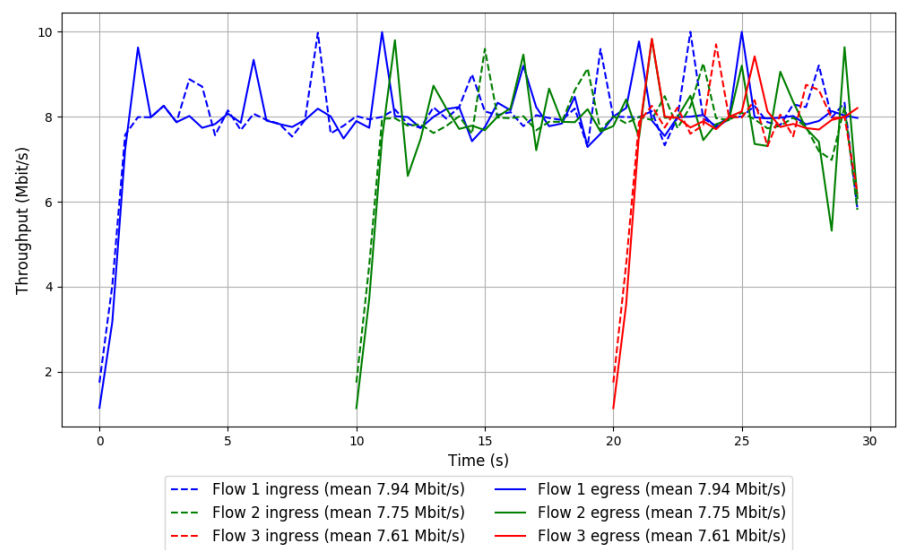
-- Flow 3:

Average throughput: 7.61 Mbit/s

95th percentile per-packet one-way delay: 51.619 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

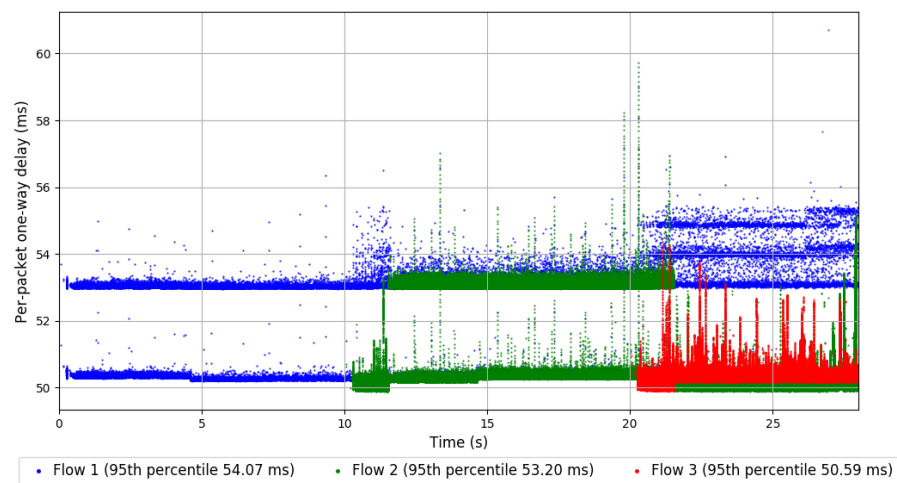
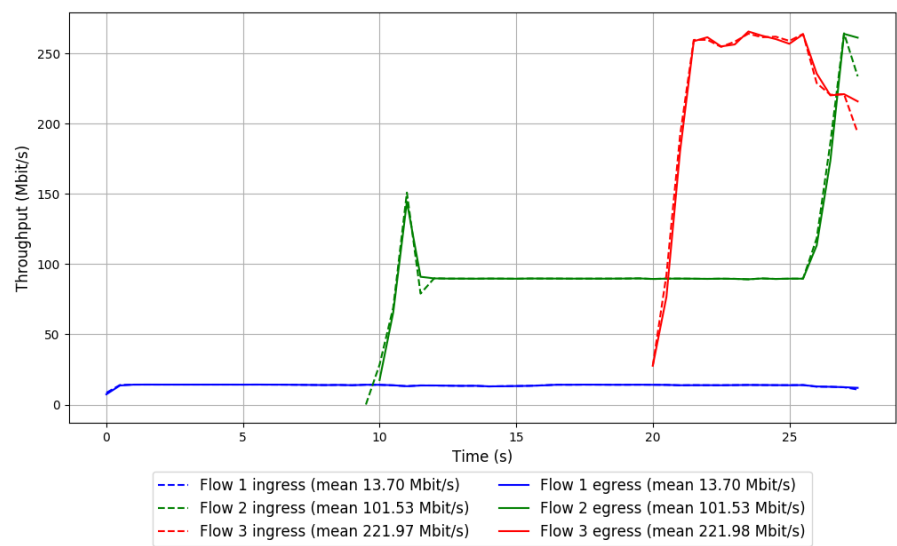


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-09 22:29:52
End at: 2018-01-09 22:30:22

# Below is generated by plot.py at 2018-01-10 02:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 141.91 Mbit/s
95th percentile per-packet one-way delay: 53.154 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.70 Mbit/s
95th percentile per-packet one-way delay: 54.066 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 101.53 Mbit/s
95th percentile per-packet one-way delay: 53.201 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 221.98 Mbit/s
95th percentile per-packet one-way delay: 50.586 ms
Loss rate: 0.00%
```


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

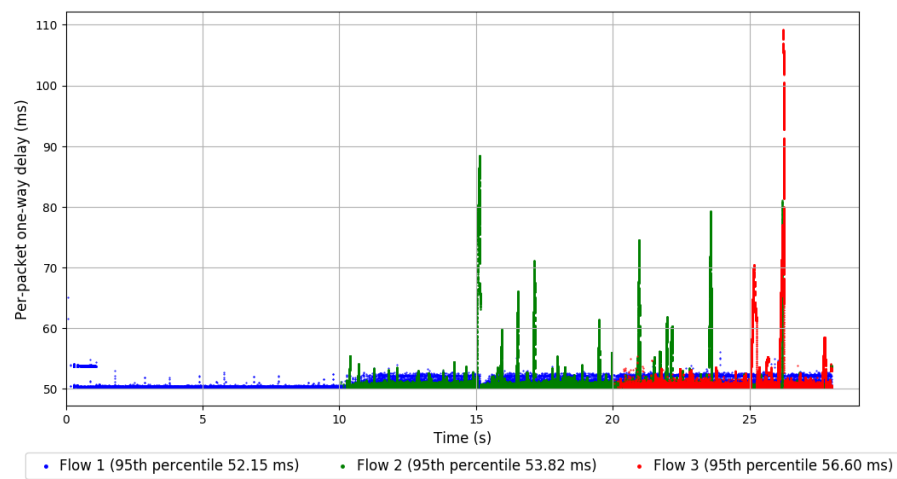
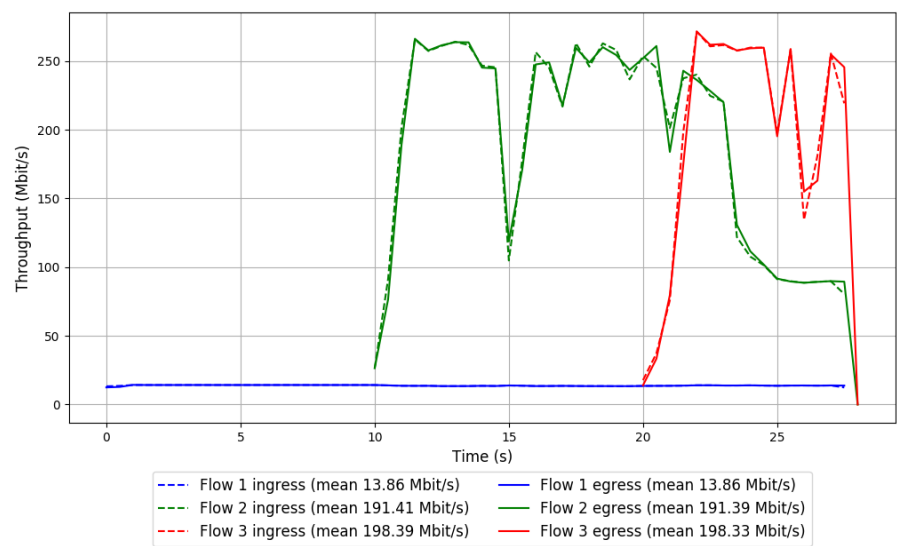


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-09 22:43:25
End at: 2018-01-09 22:43:55

# Below is generated by plot.py at 2018-01-10 02:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 193.09 Mbit/s
95th percentile per-packet one-way delay: 54.402 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.86 Mbit/s
95th percentile per-packet one-way delay: 52.149 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 191.39 Mbit/s
95th percentile per-packet one-way delay: 53.822 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 198.33 Mbit/s
95th percentile per-packet one-way delay: 56.603 ms
Loss rate: 0.00%
```

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

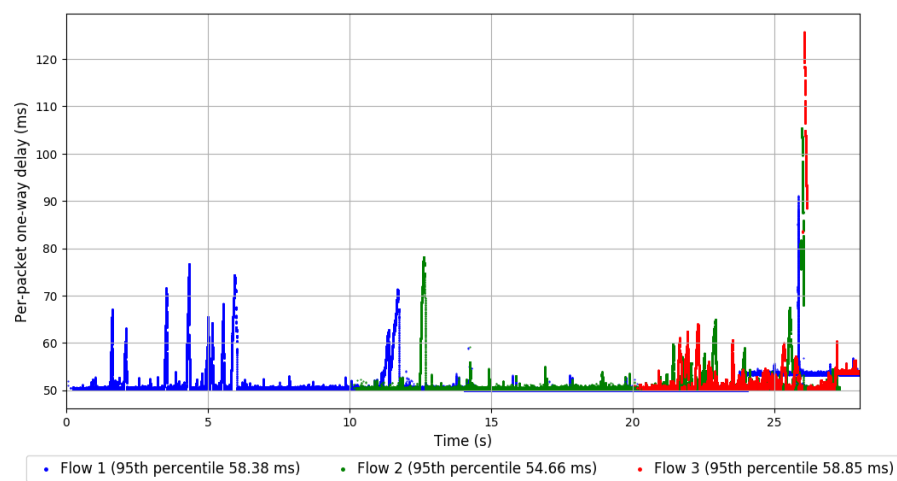
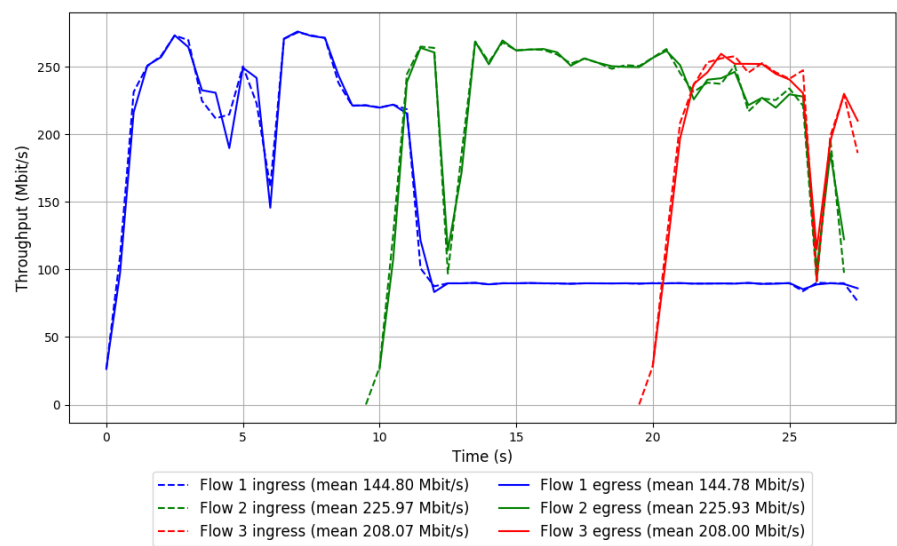


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-09 22:57:19
End at: 2018-01-09 22:57:49

# Below is generated by plot.py at 2018-01-10 02:53:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 343.36 Mbit/s
95th percentile per-packet one-way delay: 57.269 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 144.78 Mbit/s
95th percentile per-packet one-way delay: 58.376 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 225.93 Mbit/s
95th percentile per-packet one-way delay: 54.663 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 208.00 Mbit/s
95th percentile per-packet one-way delay: 58.850 ms
Loss rate: 0.00%
```

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

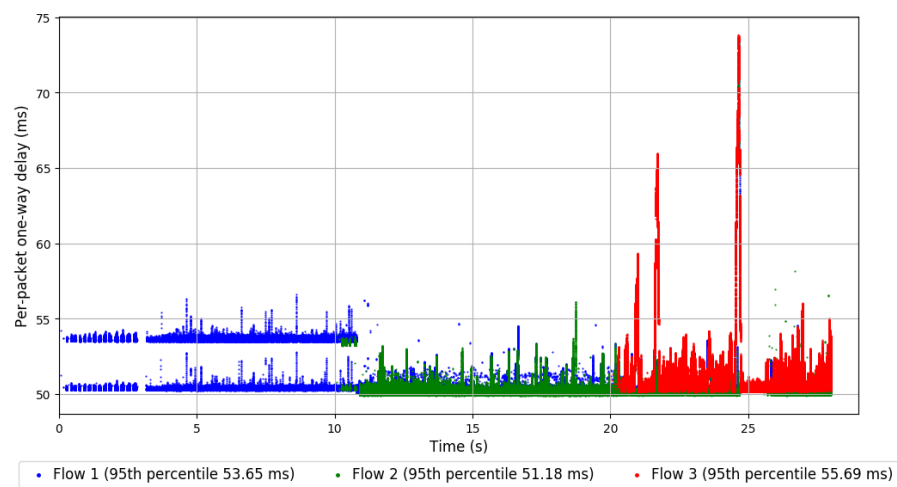
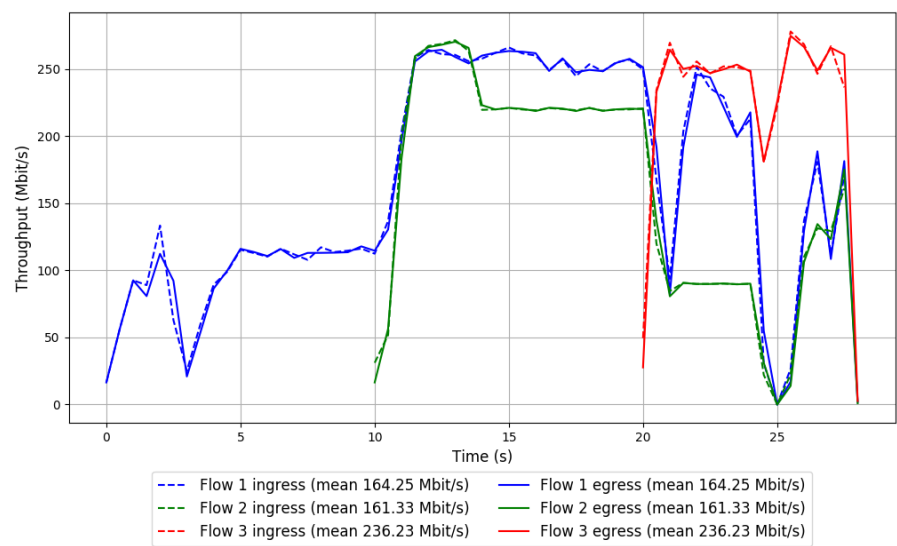


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-01-09 23:11:02
End at: 2018-01-09 23:11:32

# Below is generated by plot.py at 2018-01-10 02:53:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 334.89 Mbit/s
95th percentile per-packet one-way delay: 53.617 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 164.25 Mbit/s
95th percentile per-packet one-way delay: 53.650 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 161.33 Mbit/s
95th percentile per-packet one-way delay: 51.179 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 236.23 Mbit/s
95th percentile per-packet one-way delay: 55.685 ms
Loss rate: 0.00%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-09 23:25:06

End at: 2018-01-09 23:25:36

Below is generated by plot.py at 2018-01-10 02:53:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 163.91 Mbit/s

95th percentile per-packet one-way delay: 53.343 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 14.49 Mbit/s

95th percentile per-packet one-way delay: 54.255 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 131.15 Mbit/s

95th percentile per-packet one-way delay: 50.812 ms

Loss rate: 0.00%

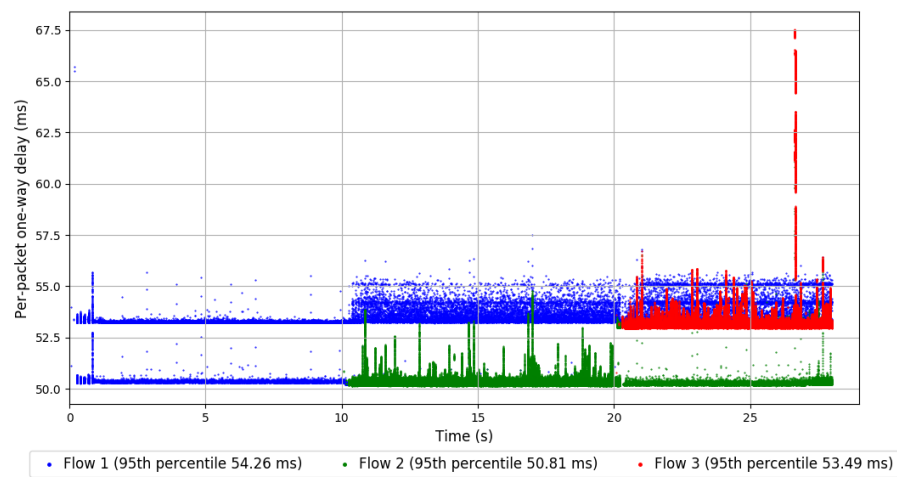
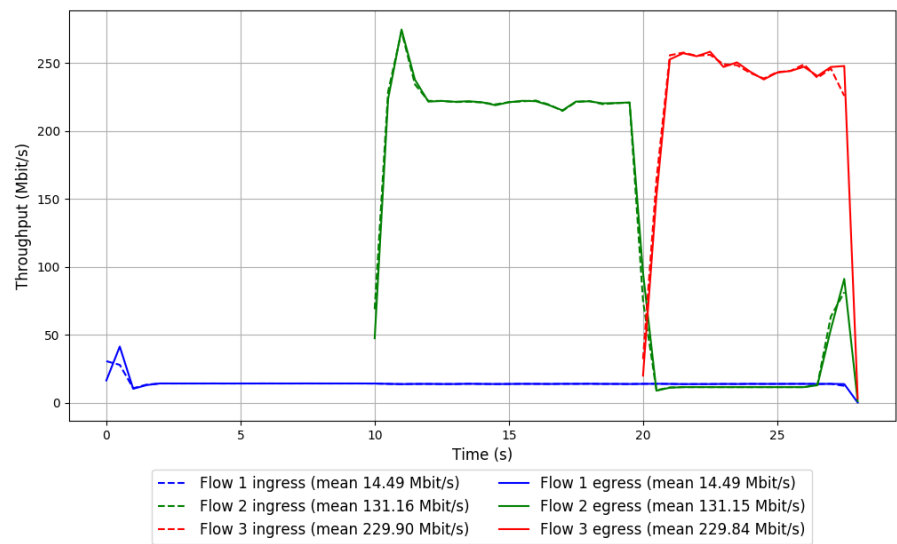
-- Flow 3:

Average throughput: 229.84 Mbit/s

95th percentile per-packet one-way delay: 53.491 ms

Loss rate: 0.00%

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

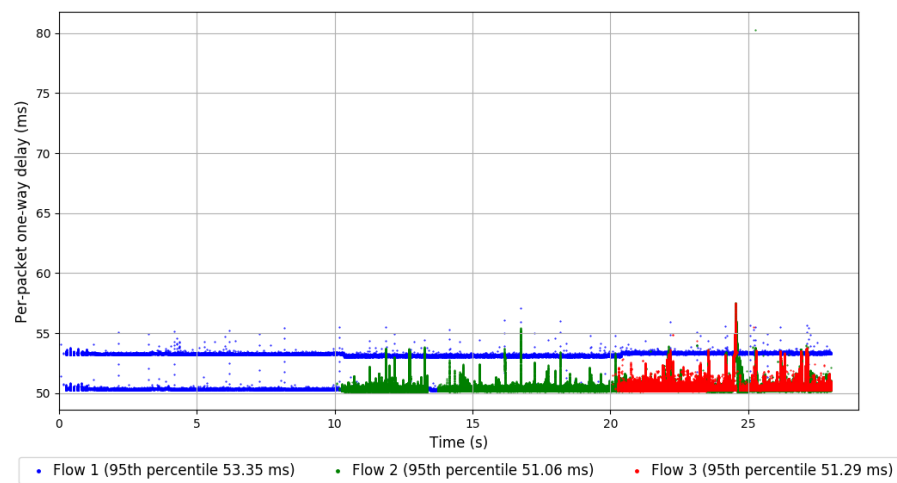
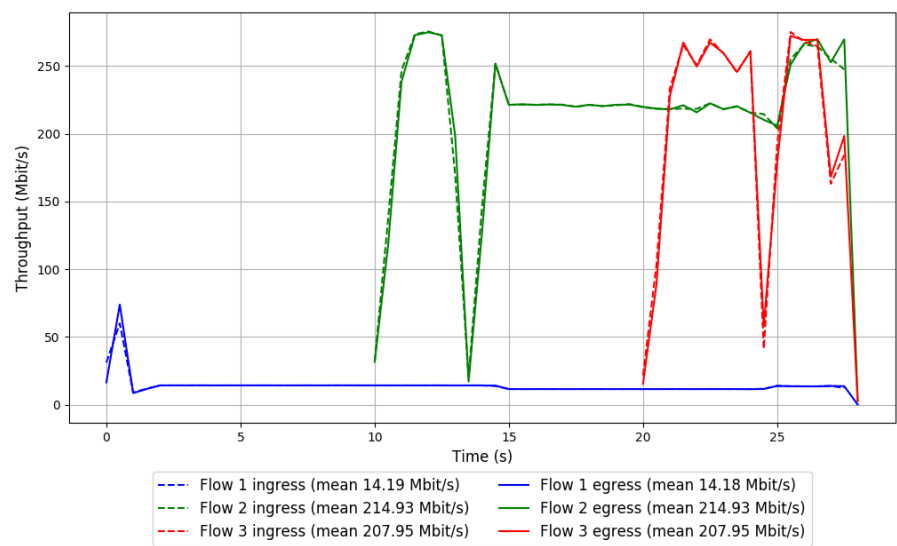


```
Run 6: Statistics of TaoVA-100x

Start at: 2018-01-09 23:38:53
End at: 2018-01-09 23:39:23

# Below is generated by plot.py at 2018-01-10 02:53:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 211.17 Mbit/s
95th percentile per-packet one-way delay: 52.591 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 14.18 Mbit/s
95th percentile per-packet one-way delay: 53.348 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 214.93 Mbit/s
95th percentile per-packet one-way delay: 51.058 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 207.95 Mbit/s
95th percentile per-packet one-way delay: 51.287 ms
Loss rate: 0.00%
```

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

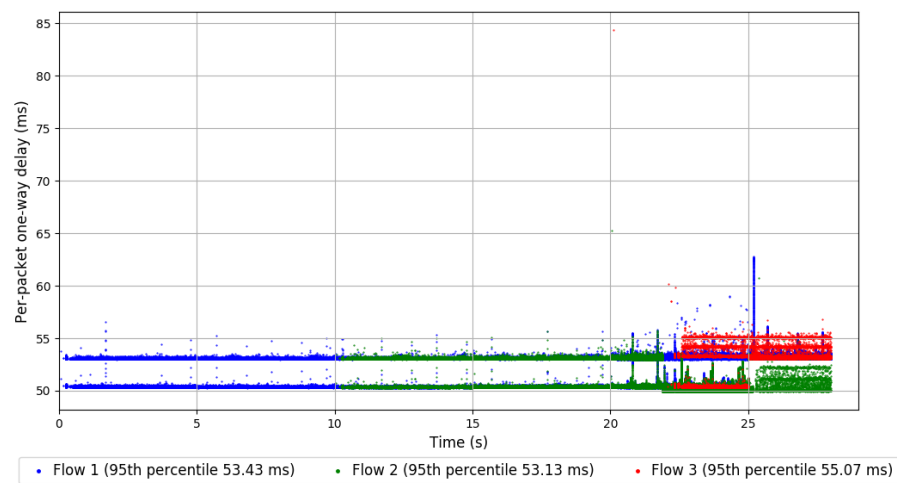
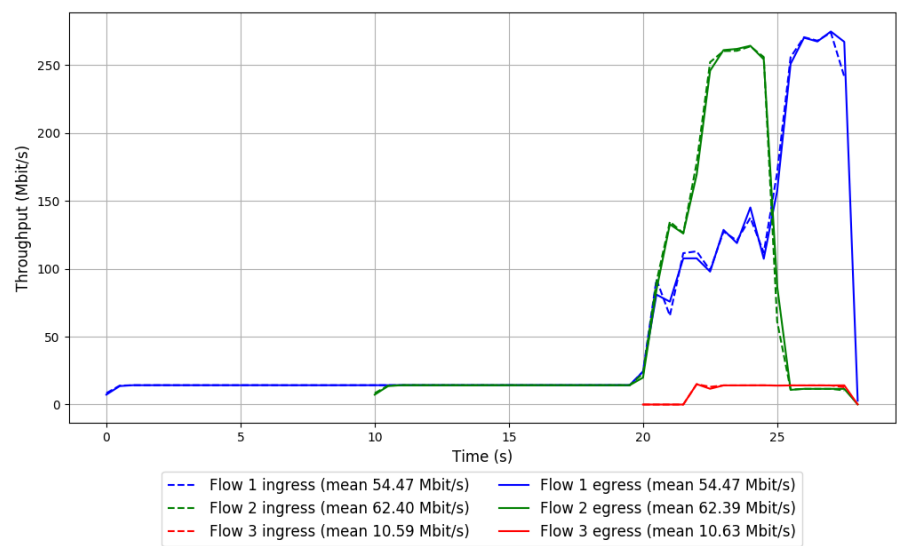


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-01-09 23:52:51
End at: 2018-01-09 23:53:21

# Below is generated by plot.py at 2018-01-10 02:53:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.52 Mbit/s
95th percentile per-packet one-way delay: 53.392 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 54.47 Mbit/s
95th percentile per-packet one-way delay: 53.430 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 62.39 Mbit/s
95th percentile per-packet one-way delay: 53.126 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.63 Mbit/s
95th percentile per-packet one-way delay: 55.068 ms
Loss rate: 0.02%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-10 00:06:27

End at: 2018-01-10 00:06:57

Below is generated by plot.py at 2018-01-10 02:53:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.28 Mbit/s

95th percentile per-packet one-way delay: 53.718 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 95.91 Mbit/s

95th percentile per-packet one-way delay: 53.764 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 14.51 Mbit/s

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

Loss rate: 0.00%

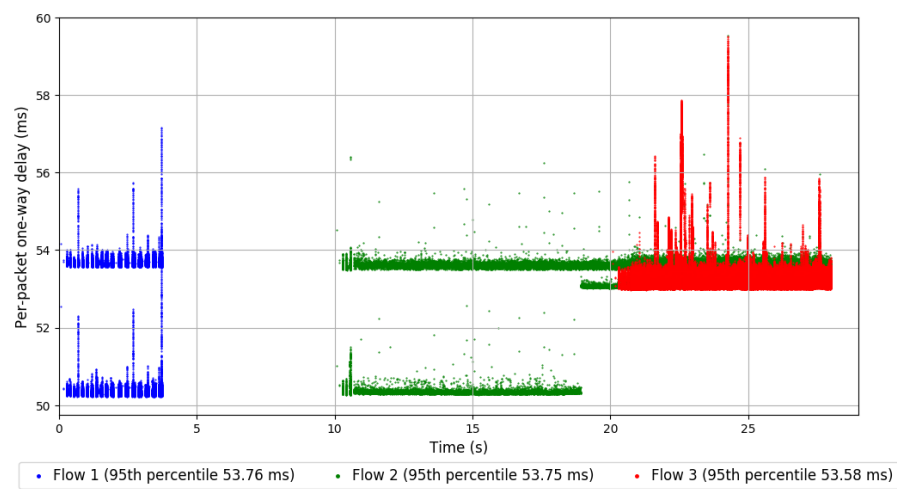
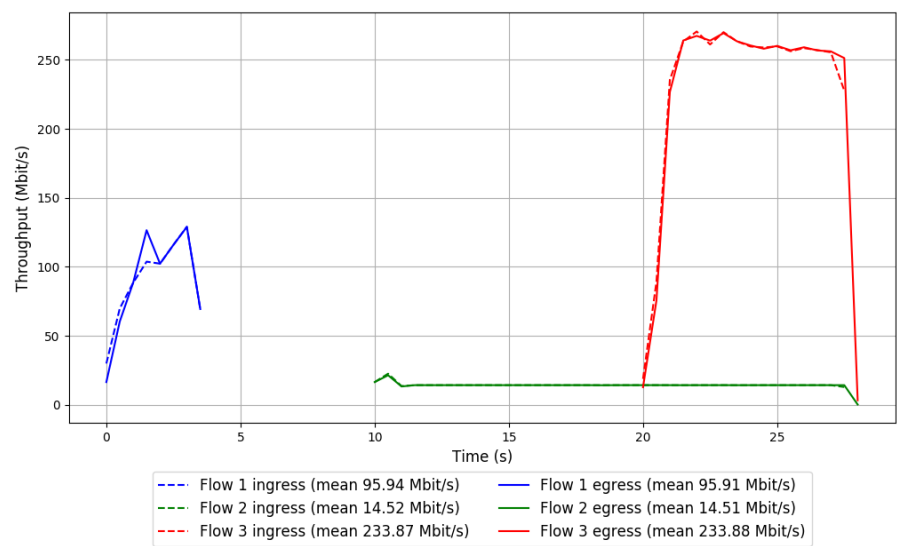
-- Flow 3:

Average throughput: 233.88 Mbit/s

95th percentile per-packet one-way delay: 53.576 ms

Loss rate: 0.00%

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

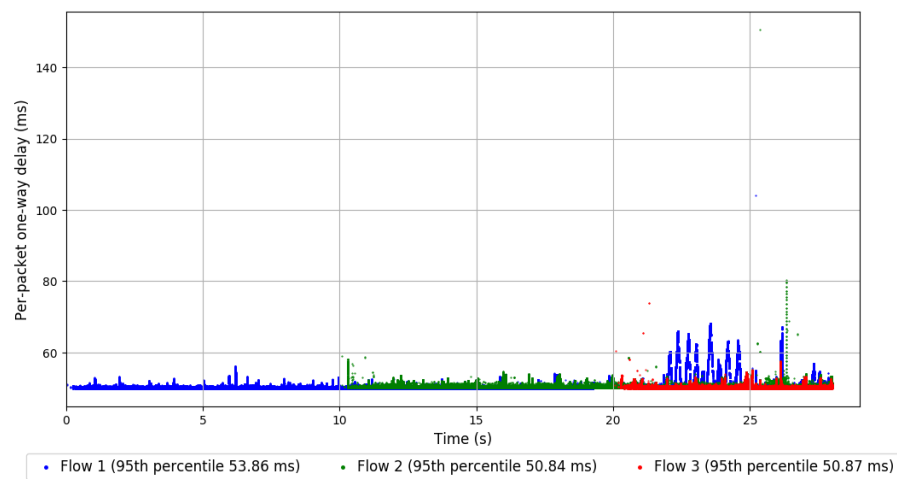
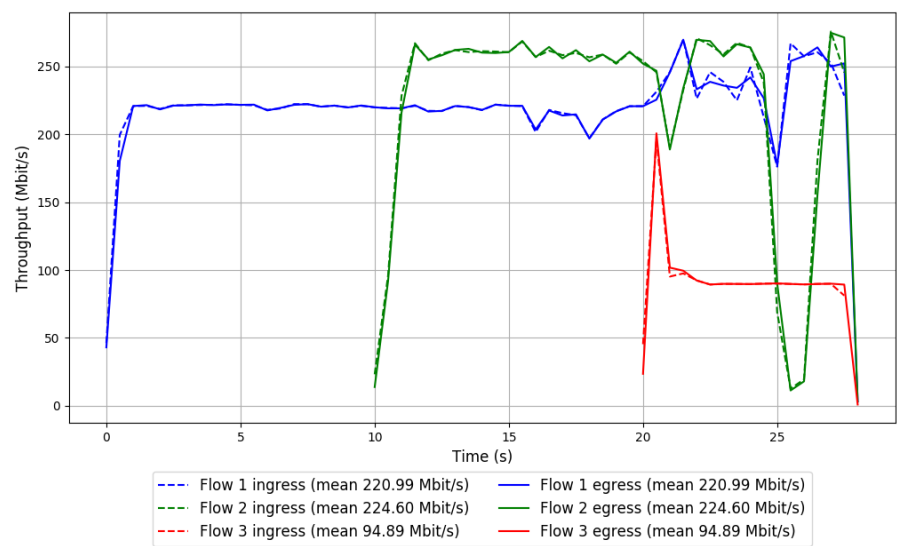


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-01-10 00:20:07
End at: 2018-01-10 00:20:37

# Below is generated by plot.py at 2018-01-10 03:00:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 391.96 Mbit/s
95th percentile per-packet one-way delay: 51.875 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 220.99 Mbit/s
95th percentile per-packet one-way delay: 53.859 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 224.60 Mbit/s
95th percentile per-packet one-way delay: 50.843 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 94.89 Mbit/s
95th percentile per-packet one-way delay: 50.872 ms
Loss rate: 0.00%
```


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

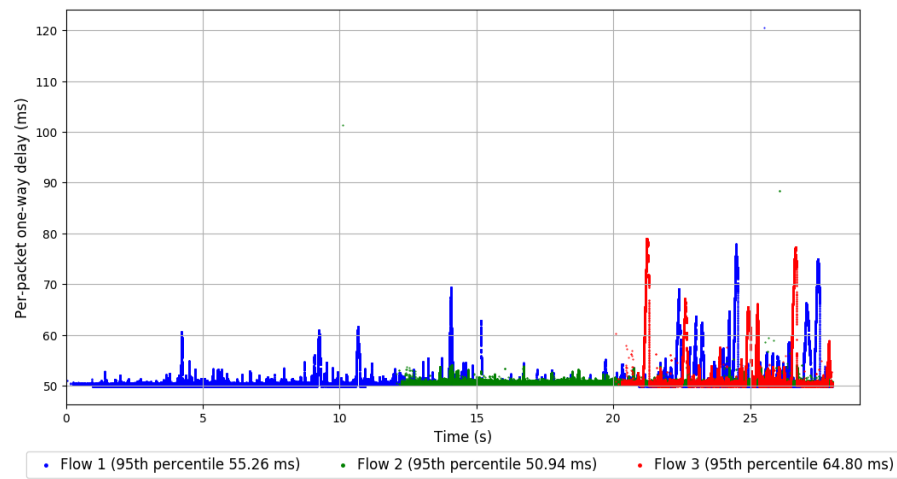
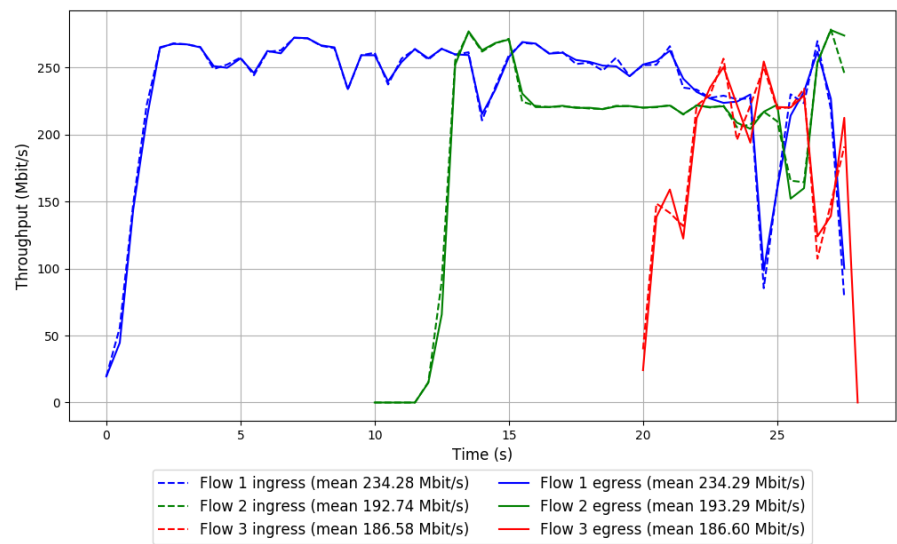


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-10 00:34:12
End at: 2018-01-10 00:34:42

# Below is generated by plot.py at 2018-01-10 03:00:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 410.93 Mbit/s
95th percentile per-packet one-way delay: 54.590 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 234.29 Mbit/s
95th percentile per-packet one-way delay: 55.264 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 193.29 Mbit/s
95th percentile per-packet one-way delay: 50.942 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 186.60 Mbit/s
95th percentile per-packet one-way delay: 64.801 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-09 22:29:01

End at: 2018-01-09 22:29:31

Below is generated by plot.py at 2018-01-10 03:00:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 198.25 Mbit/s

95th percentile per-packet one-way delay: 54.212 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 78.09 Mbit/s

95th percentile per-packet one-way delay: 54.459 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 145.62 Mbit/s

95th percentile per-packet one-way delay: 54.010 ms

Loss rate: 0.00%

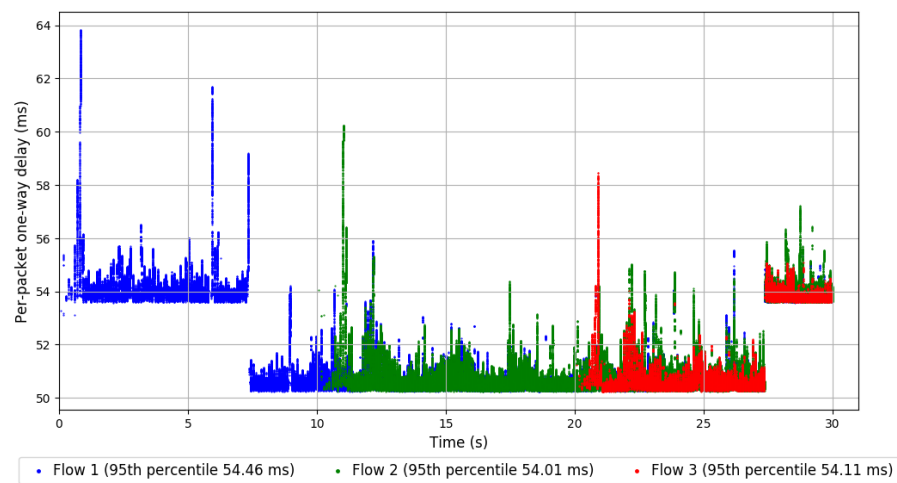
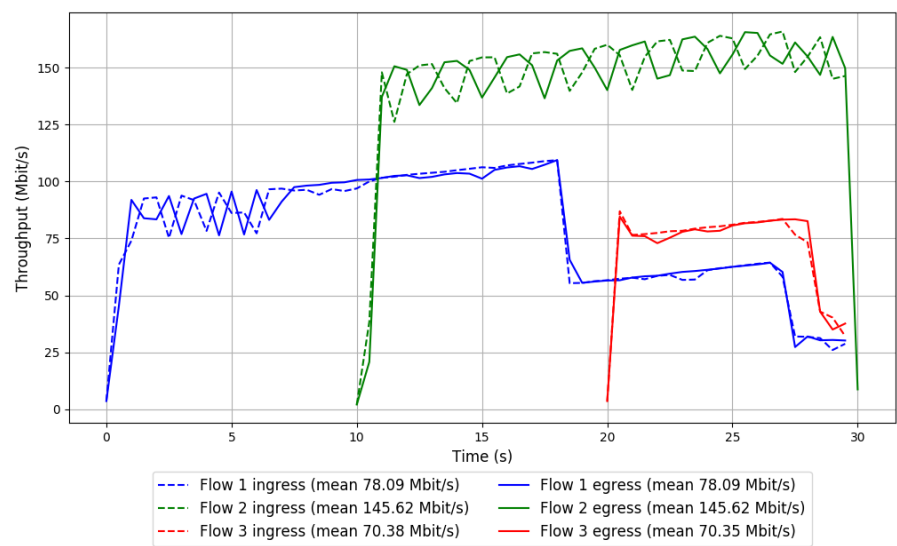
-- Flow 3:

Average throughput: 70.35 Mbit/s

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

Loss rate: 0.01%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-09 22:42:43

End at: 2018-01-09 22:43:13

Below is generated by plot.py at 2018-01-10 03:00:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 37.55 Mbit/s

95th percentile per-packet one-way delay: 54.710 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 24.76 Mbit/s

95th percentile per-packet one-way delay: 54.630 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 14.86 Mbit/s

95th percentile per-packet one-way delay: 54.849 ms

Loss rate: 0.00%

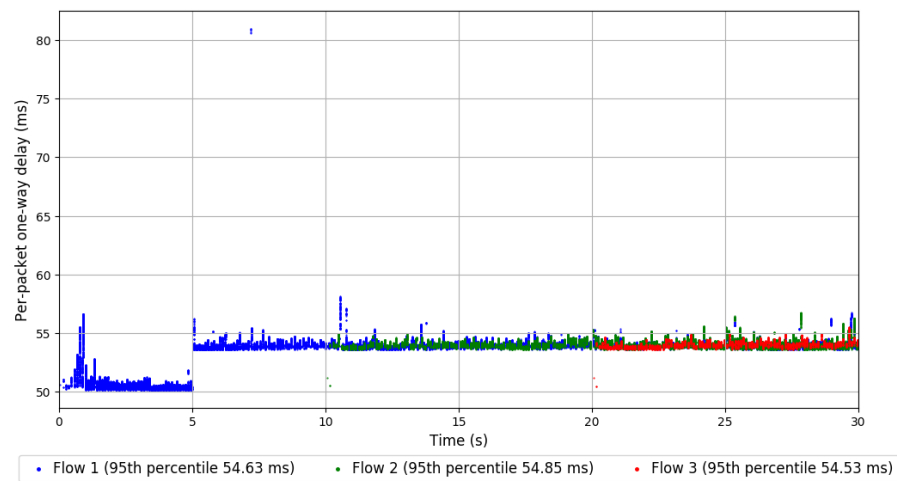
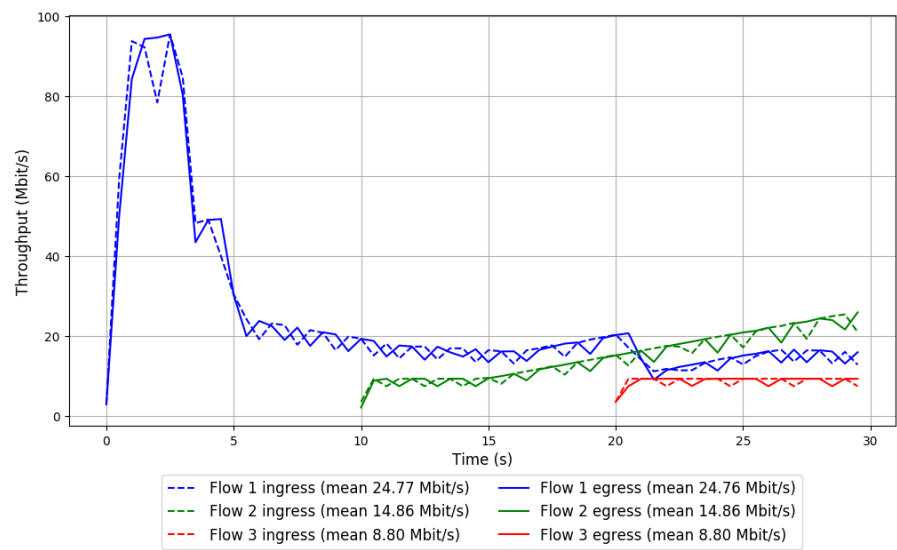
-- Flow 3:

Average throughput: 8.80 Mbit/s

95th percentile per-packet one-way delay: 54.527 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-09 22:56:34

End at: 2018-01-09 22:57:04

Below is generated by plot.py at 2018-01-10 03:00:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.77 Mbit/s

95th percentile per-packet one-way delay: 54.833 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 47.95 Mbit/s

95th percentile per-packet one-way delay: 54.297 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 83.40 Mbit/s

95th percentile per-packet one-way delay: 55.433 ms

Loss rate: 0.00%

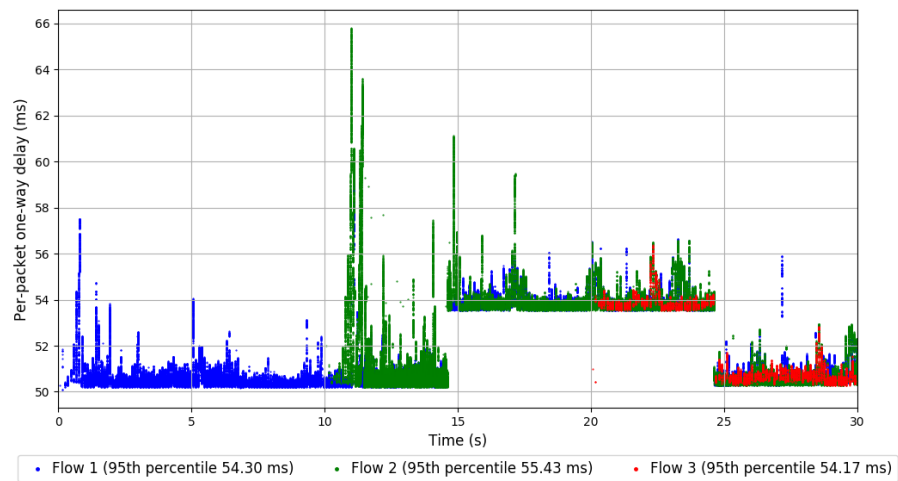
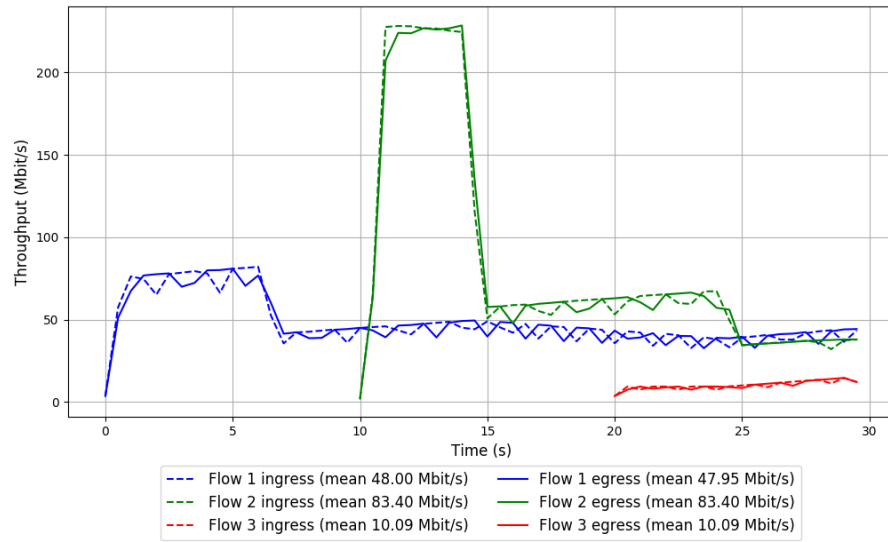
-- Flow 3:

Average throughput: 10.09 Mbit/s

95th percentile per-packet one-way delay: 54.166 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-09 23:10:21

End at: 2018-01-09 23:10:51

Below is generated by plot.py at 2018-01-10 03:00:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 34.85 Mbit/s

95th percentile per-packet one-way delay: 54.580 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 8.10 Mbit/s

95th percentile per-packet one-way delay: 54.353 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 35.62 Mbit/s

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

Loss rate: 0.04%

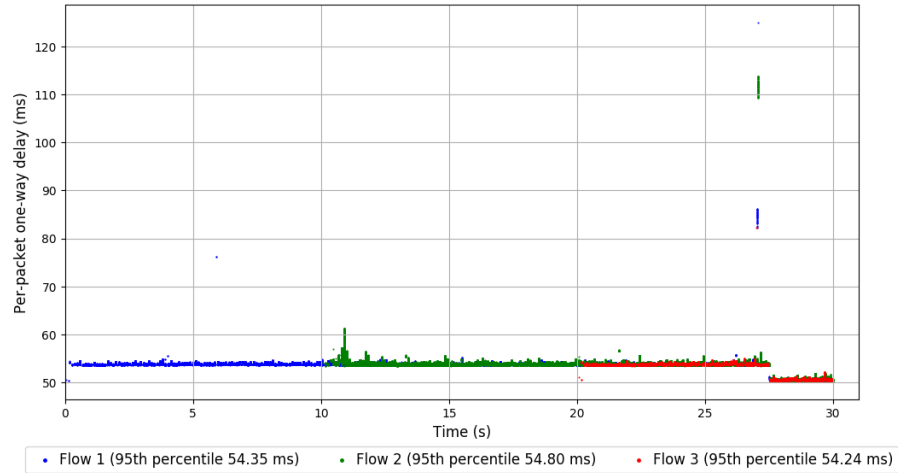
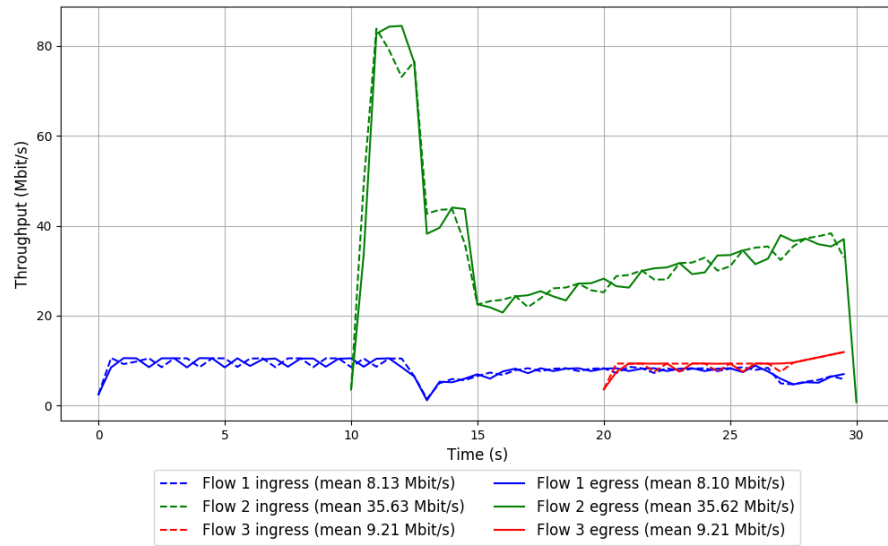
-- Flow 3:

Average throughput: 9.21 Mbit/s

95th percentile per-packet one-way delay: 54.245 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-09 23:24:17

End at: 2018-01-09 23:24:47

Below is generated by plot.py at 2018-01-10 03:00:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 175.24 Mbit/s

95th percentile per-packet one-way delay: 51.406 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.54 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 151.31 Mbit/s

95th percentile per-packet one-way delay: 51.425 ms

Loss rate: 0.00%

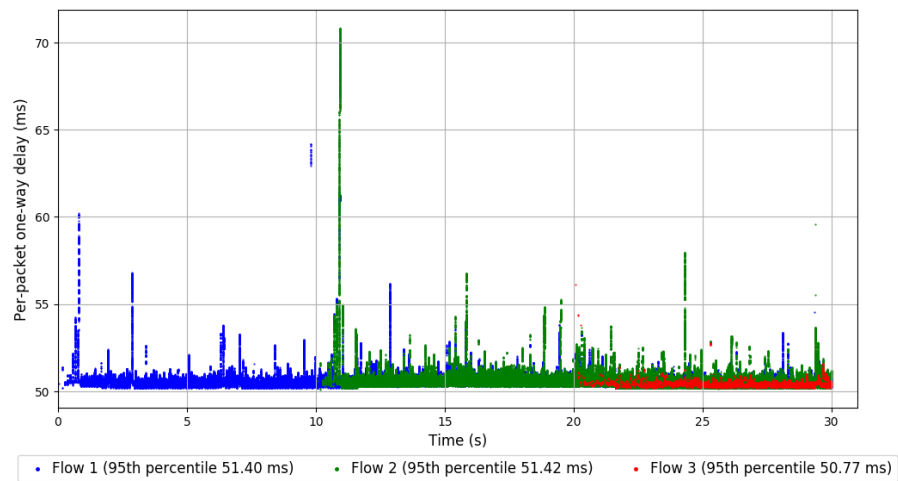
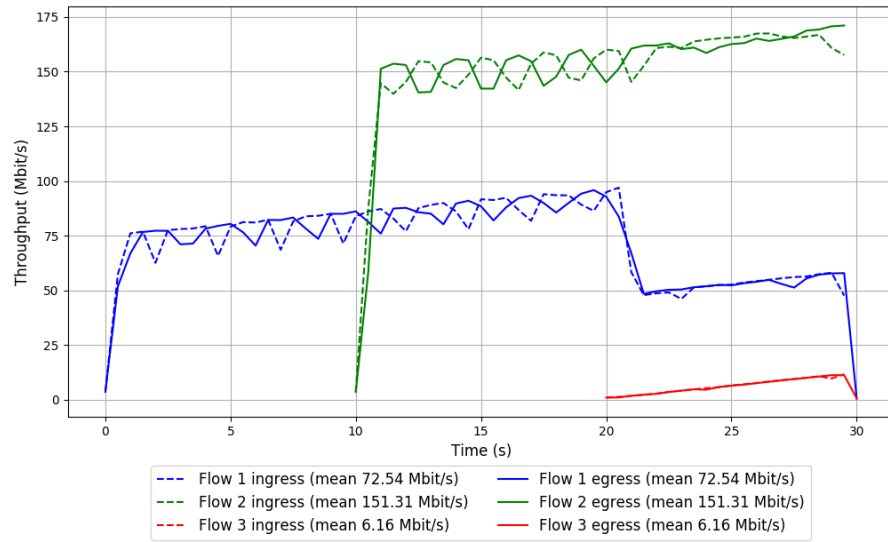
-- Flow 3:

Average throughput: 6.16 Mbit/s

95th percentile per-packet one-way delay: 50.774 ms

Loss rate: 0.04%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-09 23:38:07

End at: 2018-01-09 23:38:37

Below is generated by plot.py at 2018-01-10 03:00:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.93 Mbit/s

95th percentile per-packet one-way delay: 53.802 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.78 Mbit/s

95th percentile per-packet one-way delay: 52.809 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 88.11 Mbit/s

95th percentile per-packet one-way delay: 54.844 ms

Loss rate: 0.00%

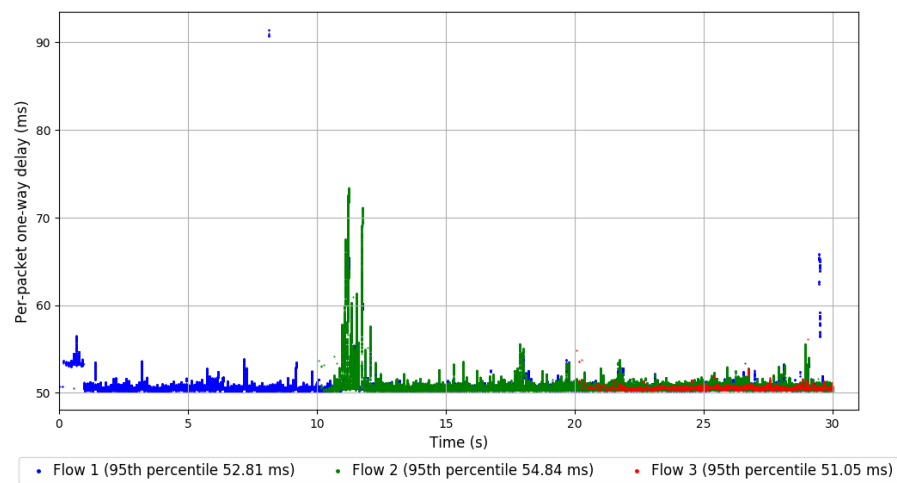
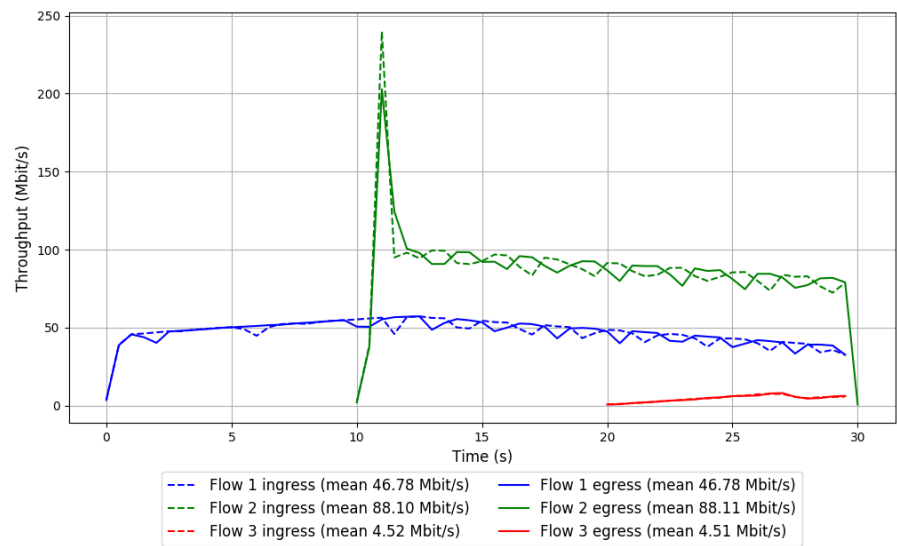
-- Flow 3:

Average throughput: 4.51 Mbit/s

95th percentile per-packet one-way delay: 51.047 ms

Loss rate: 0.29%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-09 23:52:01

End at: 2018-01-09 23:52:31

Below is generated by plot.py at 2018-01-10 03:00:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.80 Mbit/s

95th percentile per-packet one-way delay: 53.722 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.14 Mbit/s

95th percentile per-packet one-way delay: 54.075 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 154.66 Mbit/s

95th percentile per-packet one-way delay: 52.053 ms

Loss rate: 0.00%

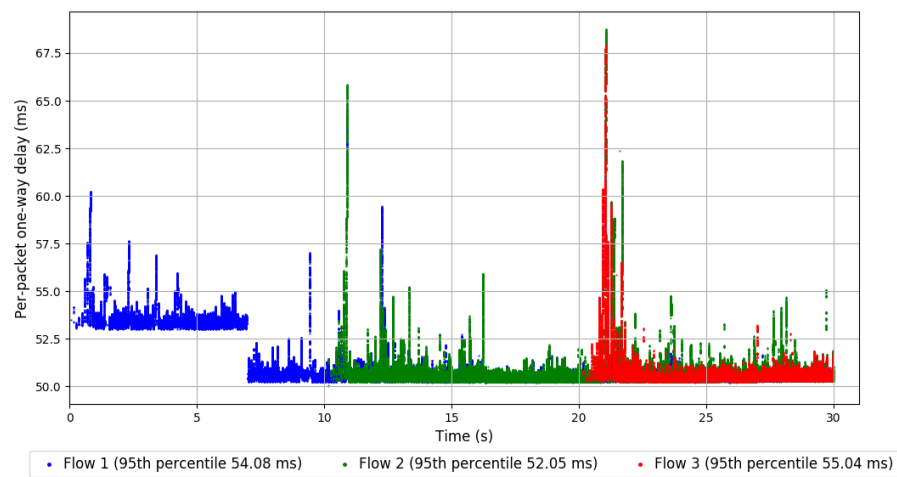
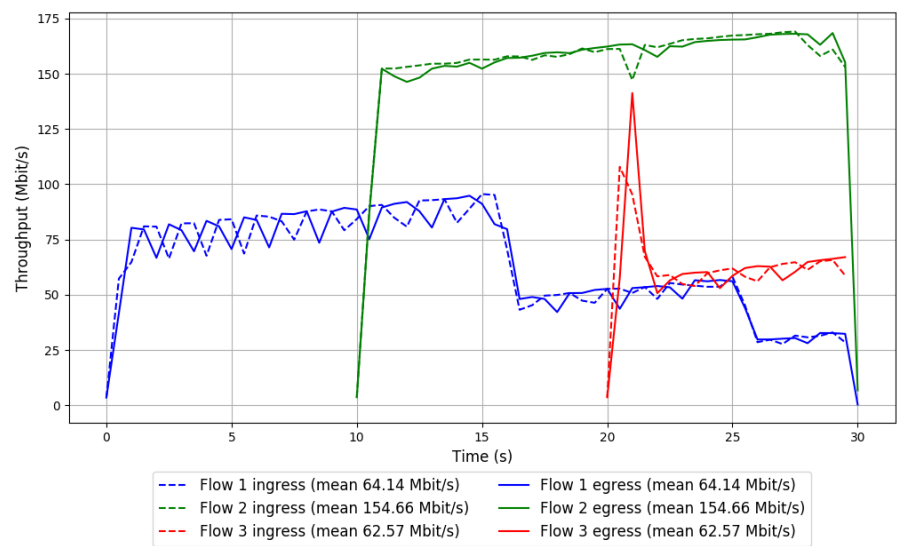
-- Flow 3:

Average throughput: 62.57 Mbit/s

95th percentile per-packet one-way delay: 55.042 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-10 00:05:44

End at: 2018-01-10 00:06:14

Below is generated by plot.py at 2018-01-10 03:00:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.57 Mbit/s

95th percentile per-packet one-way delay: 53.256 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 10.15 Mbit/s

95th percentile per-packet one-way delay: 53.630 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 27.87 Mbit/s

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

Loss rate: 1.65%

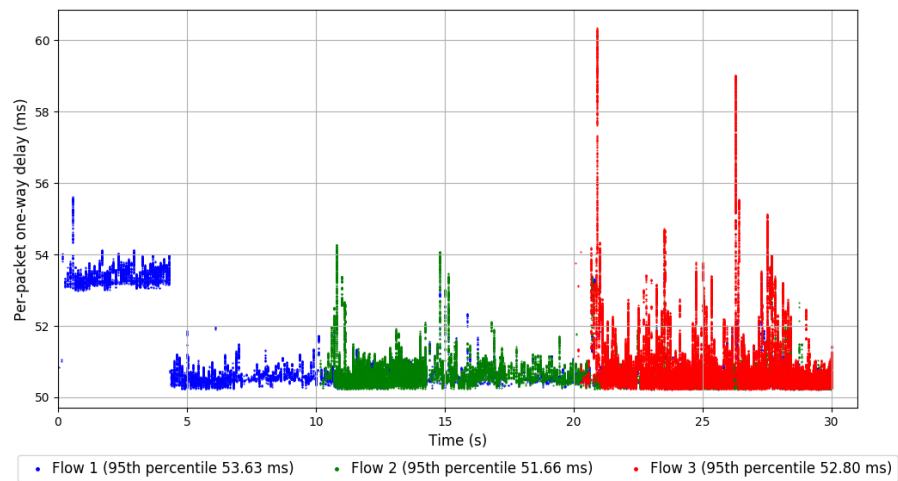
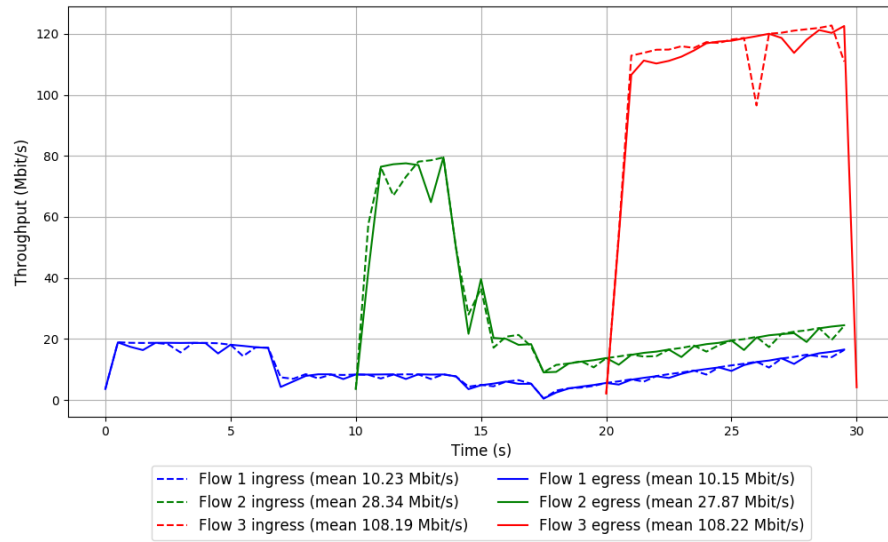
-- Flow 3:

Average throughput: 108.22 Mbit/s

95th percentile per-packet one-way delay: 52.804 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-10 00:19:22

End at: 2018-01-10 00:19:52

Below is generated by plot.py at 2018-01-10 03:00:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.19 Mbit/s

95th percentile per-packet one-way delay: 51.965 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 17.98 Mbit/s

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

Loss rate: 0.19%

-- Flow 2:

Average throughput: 80.96 Mbit/s

95th percentile per-packet one-way delay: 51.615 ms

Loss rate: 0.00%

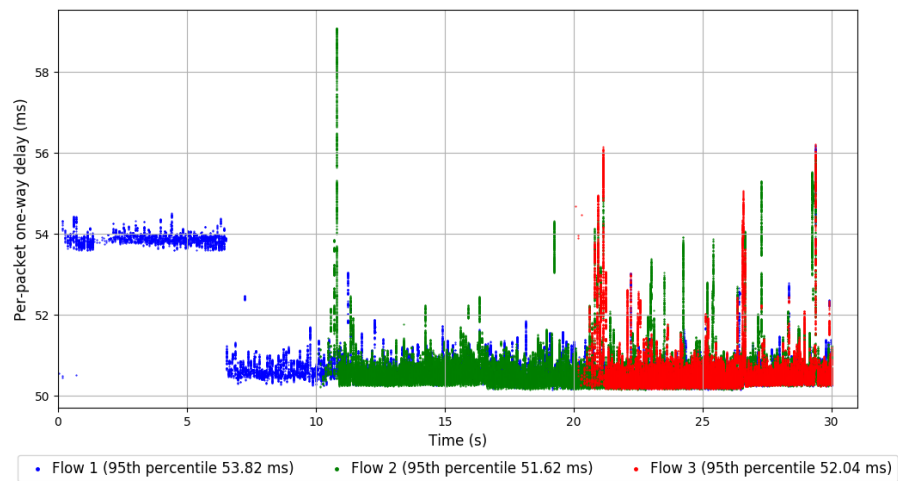
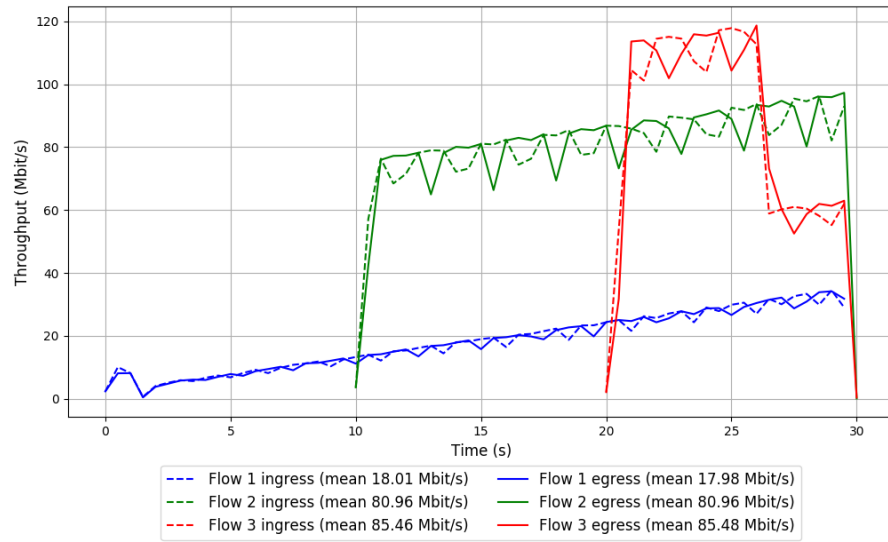
-- Flow 3:

Average throughput: 85.48 Mbit/s

95th percentile per-packet one-way delay: 52.043 ms

Loss rate: 0.02%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-10 00:33:28

End at: 2018-01-10 00:33:58

Below is generated by plot.py at 2018-01-10 03:00:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.95 Mbit/s

95th percentile per-packet one-way delay: 54.741 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 11.39 Mbit/s

95th percentile per-packet one-way delay: 54.630 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 67.77 Mbit/s

95th percentile per-packet one-way delay: 55.174 ms

Loss rate: 0.29%

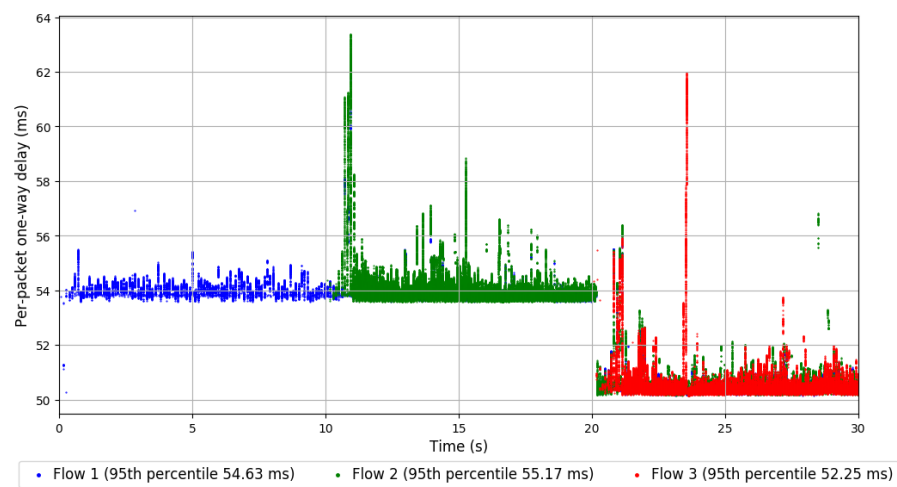
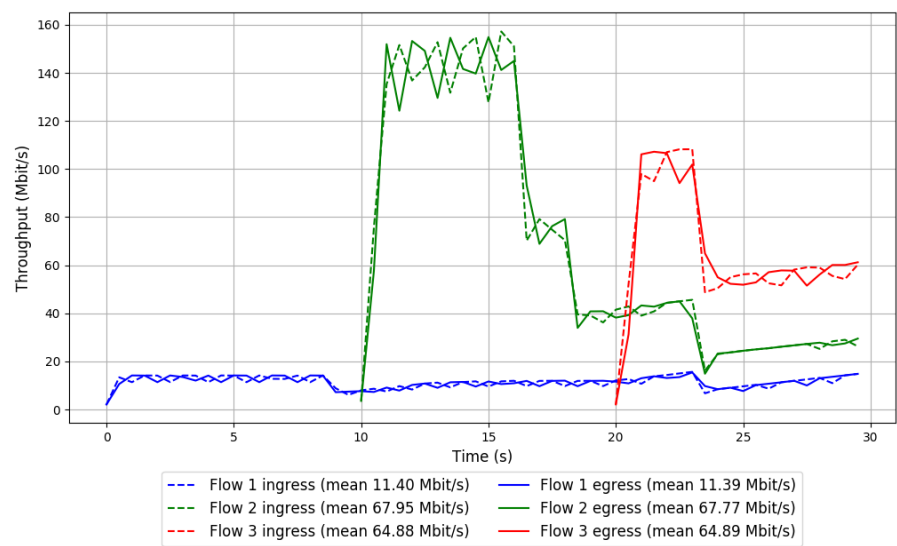
-- Flow 3:

Average throughput: 64.89 Mbit/s

95th percentile per-packet one-way delay: 52.247 ms

Loss rate: 0.02%

Run 10: Report of TCP Vegas — Data Link

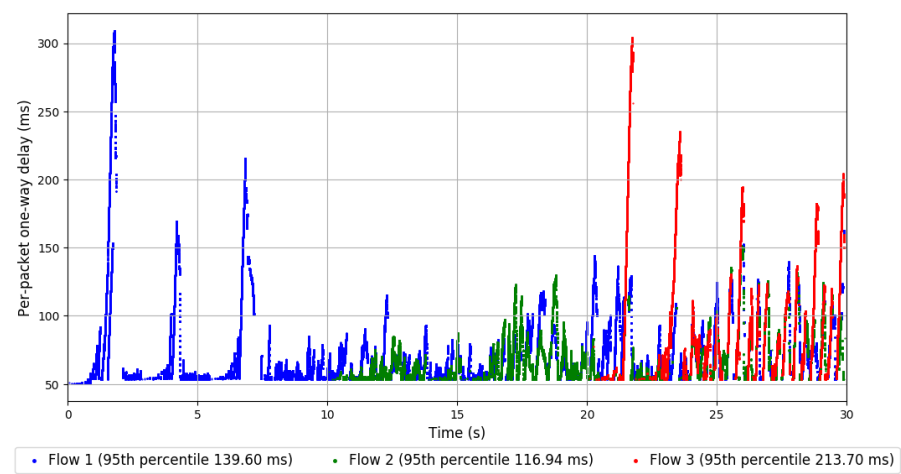
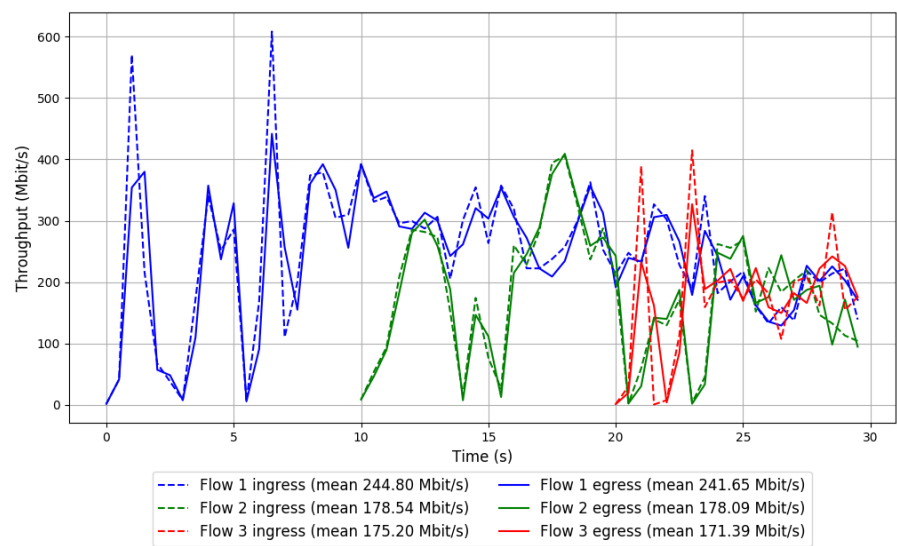


```
Run 1: Statistics of Verus

Start at: 2018-01-09 22:32:57
End at: 2018-01-09 22:33:27

# Below is generated by plot.py at 2018-01-10 03:00:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 416.04 Mbit/s
95th percentile per-packet one-way delay: 144.895 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 241.65 Mbit/s
95th percentile per-packet one-way delay: 139.602 ms
Loss rate: 1.26%
-- Flow 2:
Average throughput: 178.09 Mbit/s
95th percentile per-packet one-way delay: 116.943 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 171.39 Mbit/s
95th percentile per-packet one-way delay: 213.700 ms
Loss rate: 1.21%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-09 22:46:34

End at: 2018-01-09 22:47:04

Below is generated by plot.py at 2018-01-10 03:00:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 319.14 Mbit/s

95th percentile per-packet one-way delay: 232.782 ms

Loss rate: 7.40%

-- Flow 1:

Average throughput: 180.88 Mbit/s

95th percentile per-packet one-way delay: 170.252 ms

Loss rate: 2.13%

-- Flow 2:

Average throughput: 125.59 Mbit/s

95th percentile per-packet one-way delay: 263.394 ms

Loss rate: 19.54%

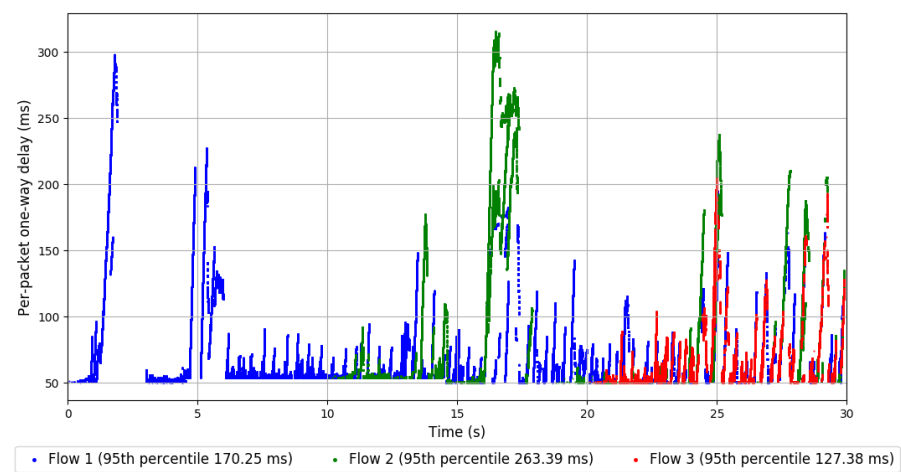
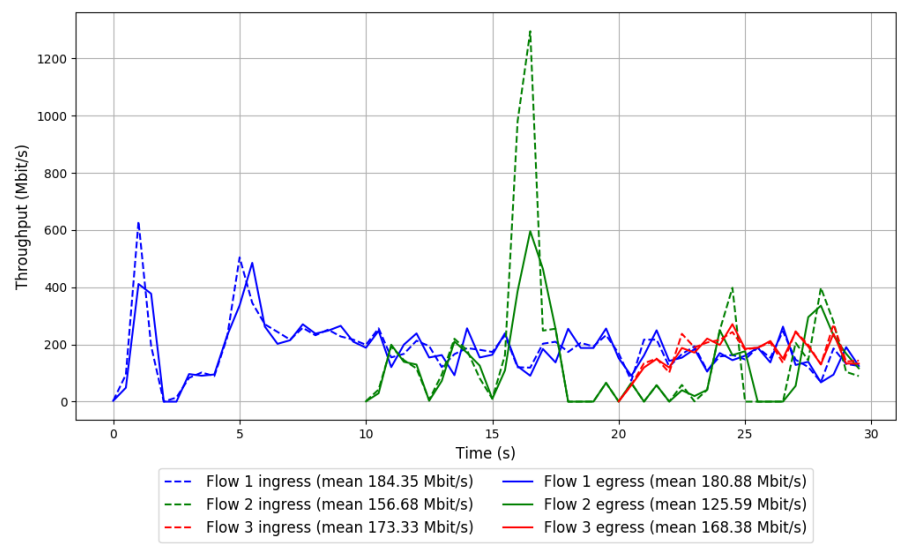
-- Flow 3:

Average throughput: 168.38 Mbit/s

95th percentile per-packet one-way delay: 127.380 ms

Loss rate: 2.34%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-09 23:00:39

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

Below is generated by plot.py at 2018-01-10 03:00:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 373.11 Mbit/s

95th percentile per-packet one-way delay: 103.127 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 210.62 Mbit/s

95th percentile per-packet one-way delay: 127.315 ms

Loss rate: 1.49%

-- Flow 2:

Average throughput: 162.51 Mbit/s

95th percentile per-packet one-way delay: 90.161 ms

Loss rate: 0.24%

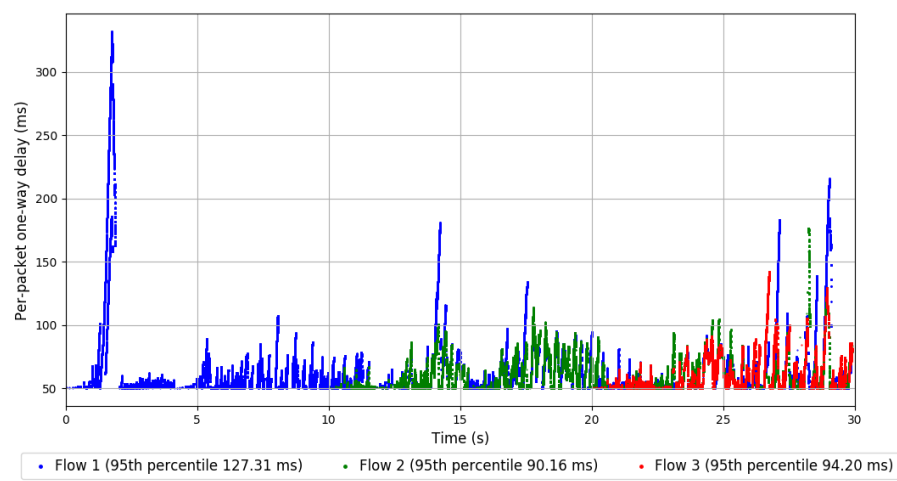
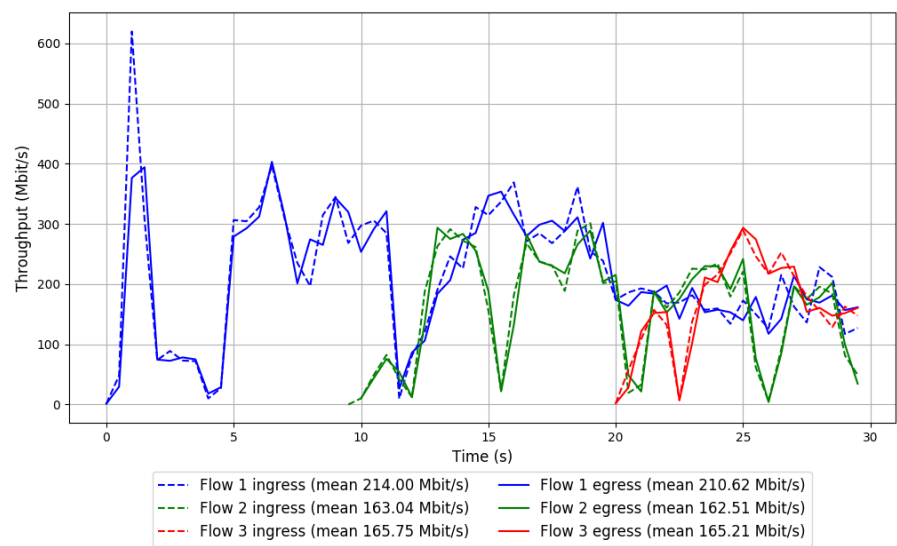
-- Flow 3:

Average throughput: 165.21 Mbit/s

95th percentile per-packet one-way delay: 94.200 ms

Loss rate: 0.30%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-09 23:14:22

End at: 2018-01-09 23:14:52

Below is generated by plot.py at 2018-01-10 03:01:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 440.72 Mbit/s

95th percentile per-packet one-way delay: 110.203 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 269.48 Mbit/s

95th percentile per-packet one-way delay: 107.907 ms

Loss rate: 1.53%

-- Flow 2:

Average throughput: 184.99 Mbit/s

95th percentile per-packet one-way delay: 101.727 ms

Loss rate: 0.04%

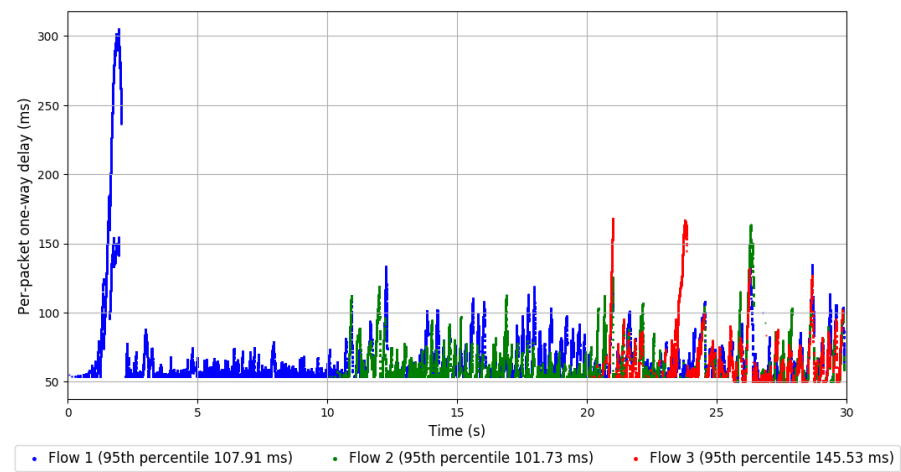
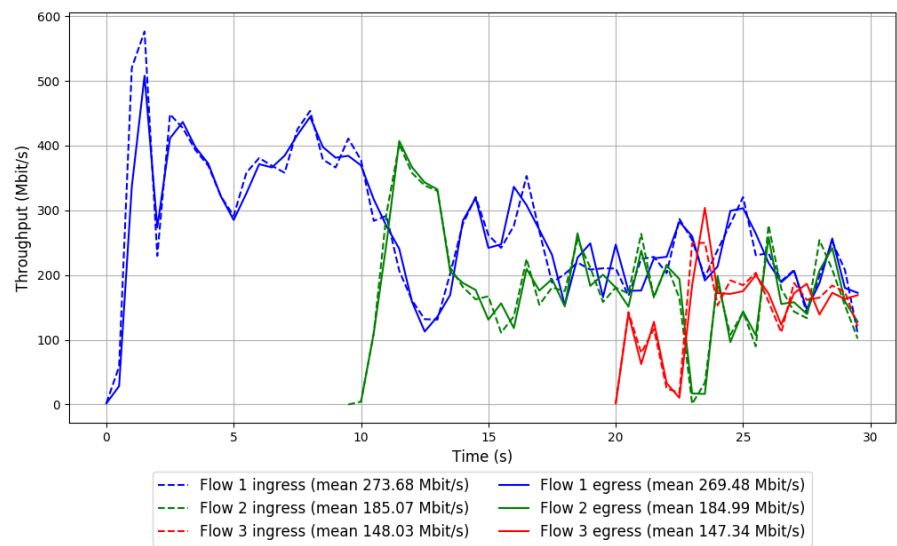
-- Flow 3:

Average throughput: 147.34 Mbit/s

95th percentile per-packet one-way delay: 145.530 ms

Loss rate: 0.01%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-09 23:28:16

End at: 2018-01-09 23:28:46

Below is generated by plot.py at 2018-01-10 03:01:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 363.80 Mbit/s

95th percentile per-packet one-way delay: 170.290 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 254.60 Mbit/s

95th percentile per-packet one-way delay: 184.857 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 114.50 Mbit/s

95th percentile per-packet one-way delay: 129.918 ms

Loss rate: 0.26%

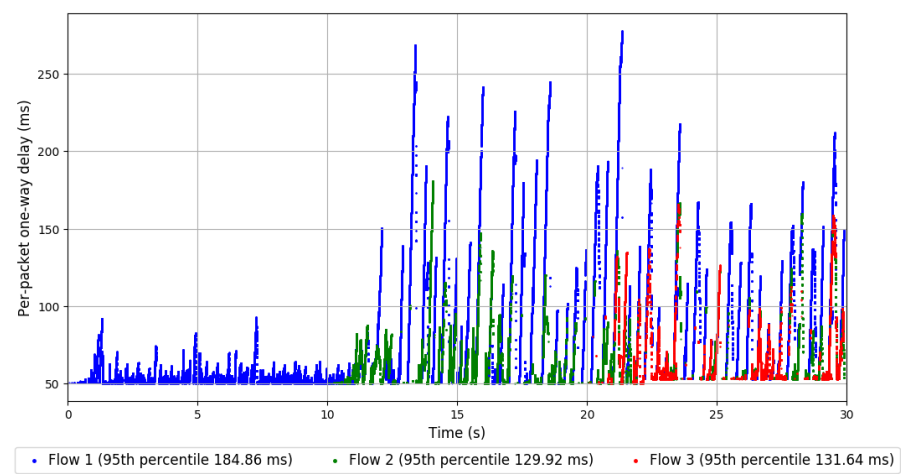
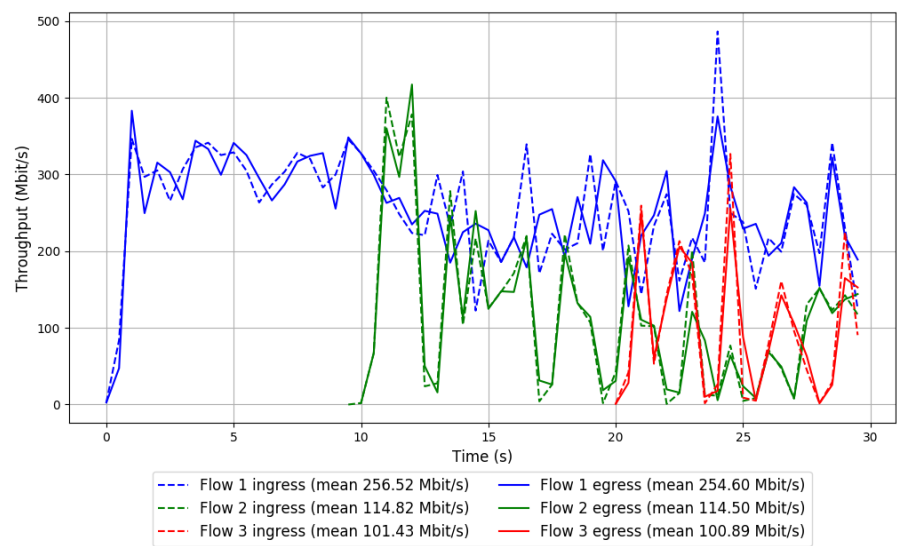
-- Flow 3:

Average throughput: 100.89 Mbit/s

95th percentile per-packet one-way delay: 131.637 ms

Loss rate: 0.24%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-09 23:42:05

End at: 2018-01-09 23:42:35

Below is generated by plot.py at 2018-01-10 03:01:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 366.11 Mbit/s

95th percentile per-packet one-way delay: 92.482 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 241.68 Mbit/s

95th percentile per-packet one-way delay: 95.615 ms

Loss rate: 1.79%

-- Flow 2:

Average throughput: 144.65 Mbit/s

95th percentile per-packet one-way delay: 90.758 ms

Loss rate: 0.00%

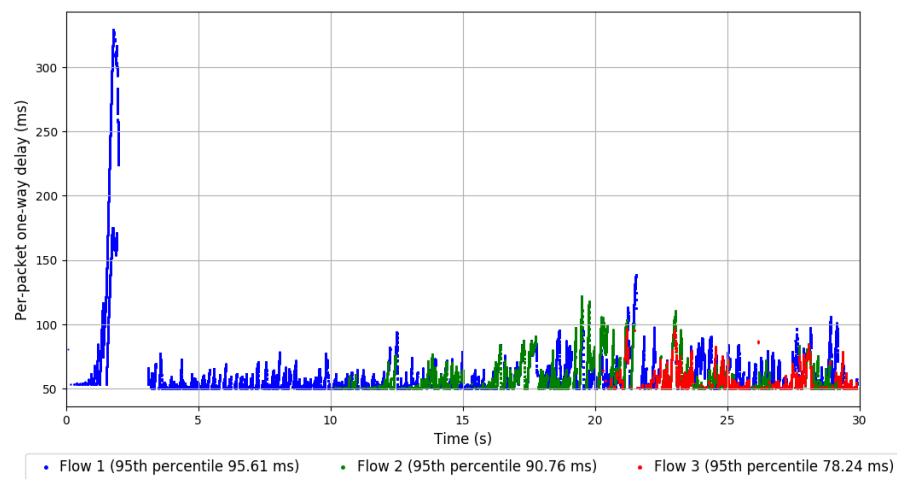
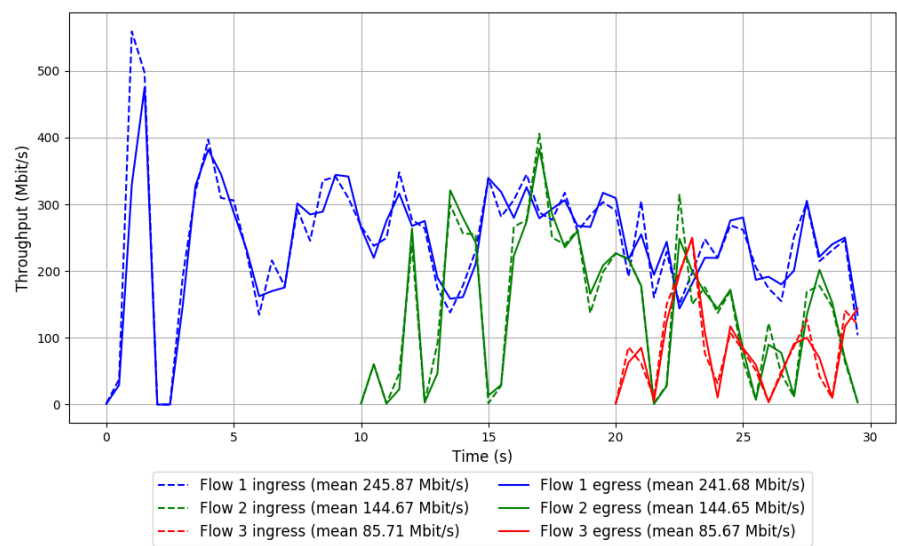
-- Flow 3:

Average throughput: 85.67 Mbit/s

95th percentile per-packet one-way delay: 78.236 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-09 23:55:54

End at: 2018-01-09 23:56:24

Below is generated by plot.py at 2018-01-10 03:05:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 376.70 Mbit/s

95th percentile per-packet one-way delay: 109.845 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 212.32 Mbit/s

95th percentile per-packet one-way delay: 98.452 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 186.47 Mbit/s

95th percentile per-packet one-way delay: 119.684 ms

Loss rate: 0.41%

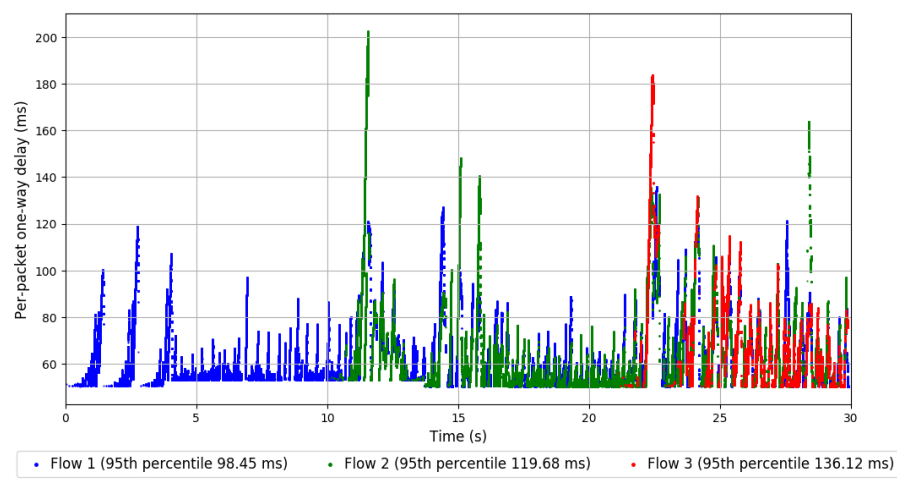
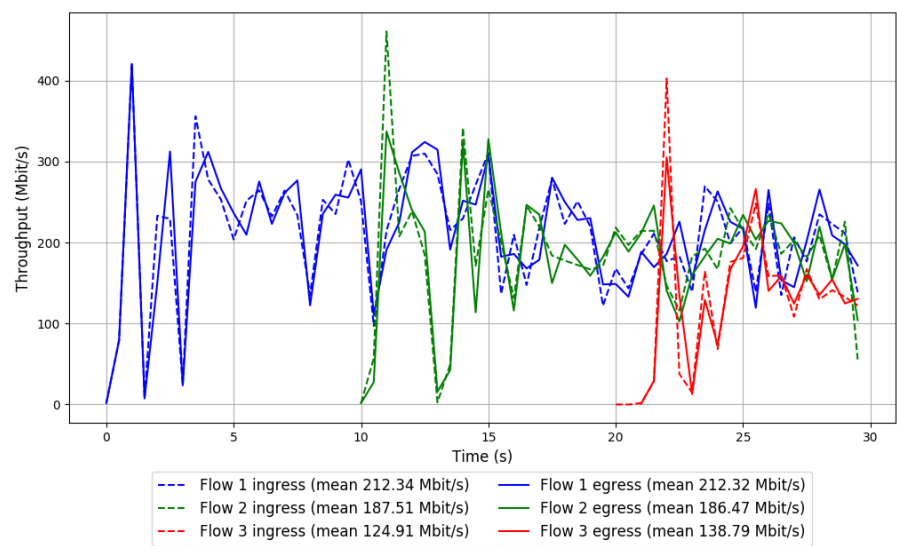
-- Flow 3:

Average throughput: 138.79 Mbit/s

95th percentile per-packet one-way delay: 136.124 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-10 00:09:26

End at: 2018-01-10 00:09:56

Below is generated by plot.py at 2018-01-10 03:07:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 419.63 Mbit/s

95th percentile per-packet one-way delay: 135.283 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 268.68 Mbit/s

95th percentile per-packet one-way delay: 114.594 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 169.83 Mbit/s

95th percentile per-packet one-way delay: 164.372 ms

Loss rate: 1.36%

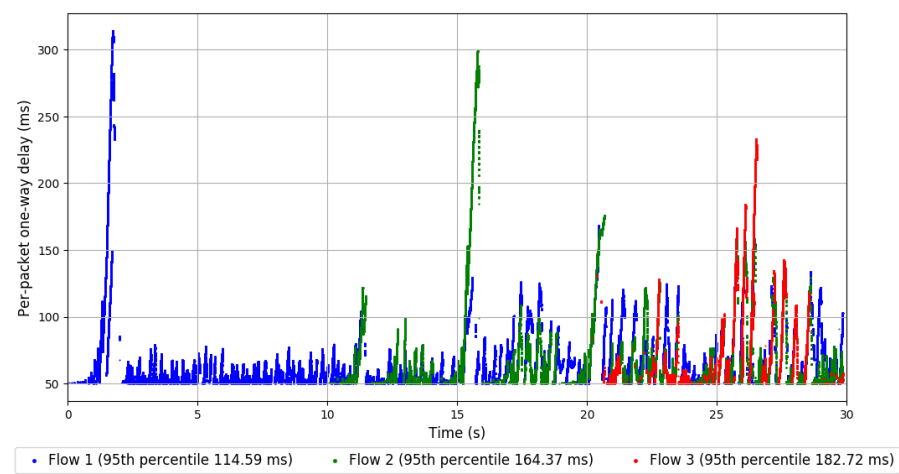
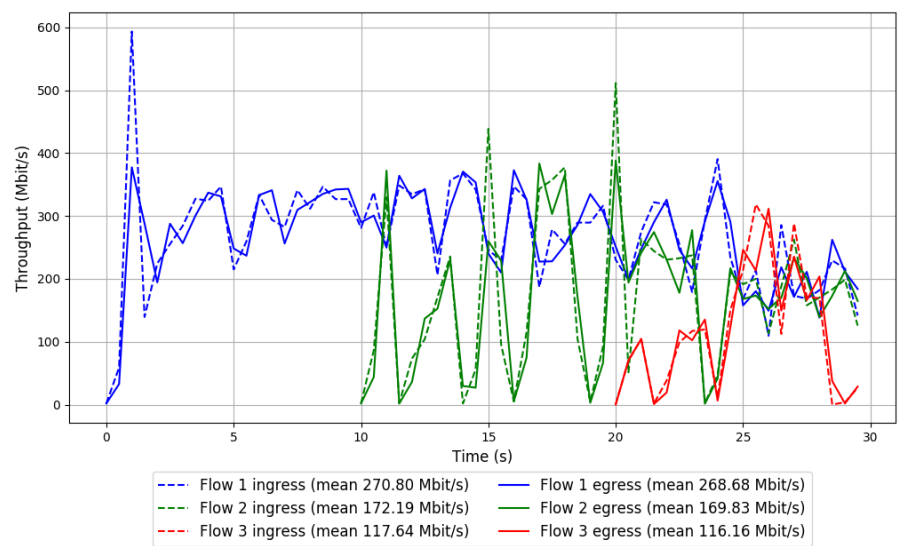
-- Flow 3:

Average throughput: 116.16 Mbit/s

95th percentile per-packet one-way delay: 182.716 ms

Loss rate: 1.19%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-10 00:23:36

End at: 2018-01-10 00:24:06

Below is generated by plot.py at 2018-01-10 03:07:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 395.79 Mbit/s

95th percentile per-packet one-way delay: 106.506 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 245.49 Mbit/s

95th percentile per-packet one-way delay: 124.785 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 169.76 Mbit/s

95th percentile per-packet one-way delay: 97.906 ms

Loss rate: 0.02%

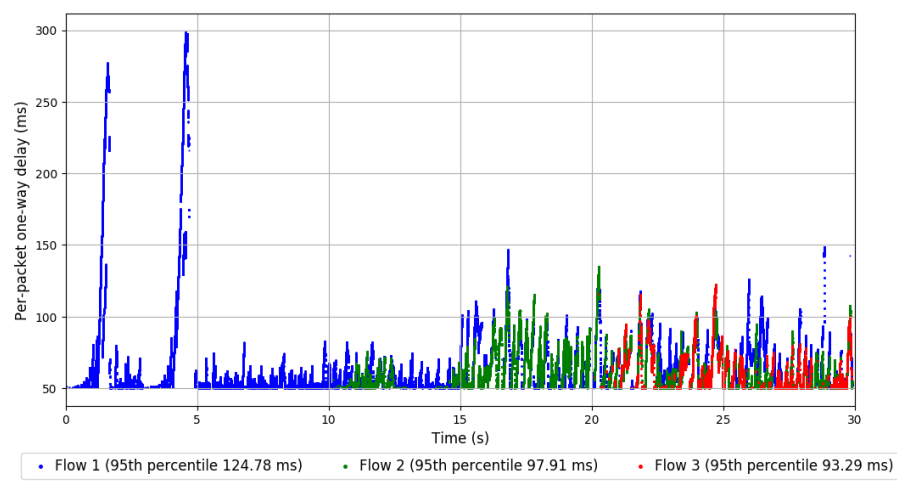
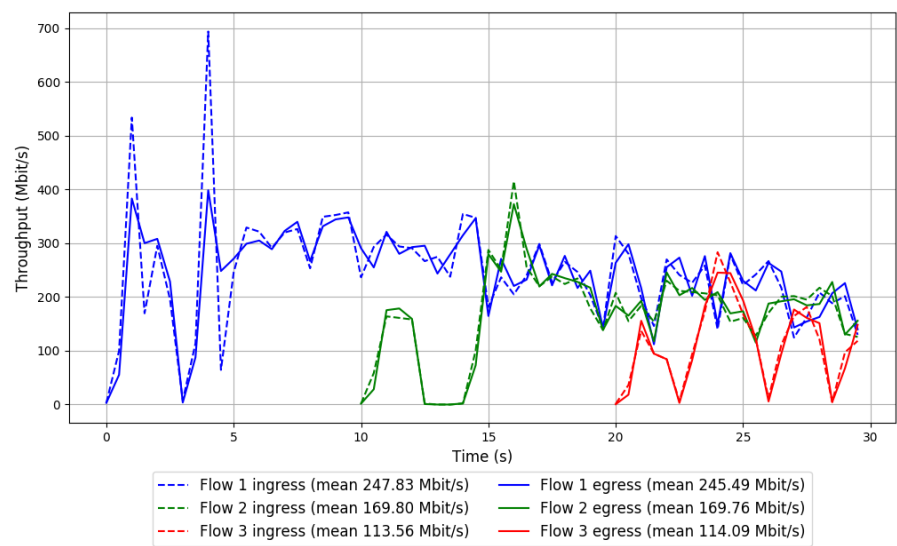
-- Flow 3:

Average throughput: 114.09 Mbit/s

95th percentile per-packet one-way delay: 93.291 ms

Loss rate: 0.00%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-10 00:37:47

End at: 2018-01-10 00:38:17

Below is generated by plot.py at 2018-01-10 03:07:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 398.66 Mbit/s

95th percentile per-packet one-way delay: 94.125 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 241.21 Mbit/s

95th percentile per-packet one-way delay: 104.929 ms

Loss rate: 1.97%

-- Flow 2:

Average throughput: 191.01 Mbit/s

95th percentile per-packet one-way delay: 87.893 ms

Loss rate: 0.01%

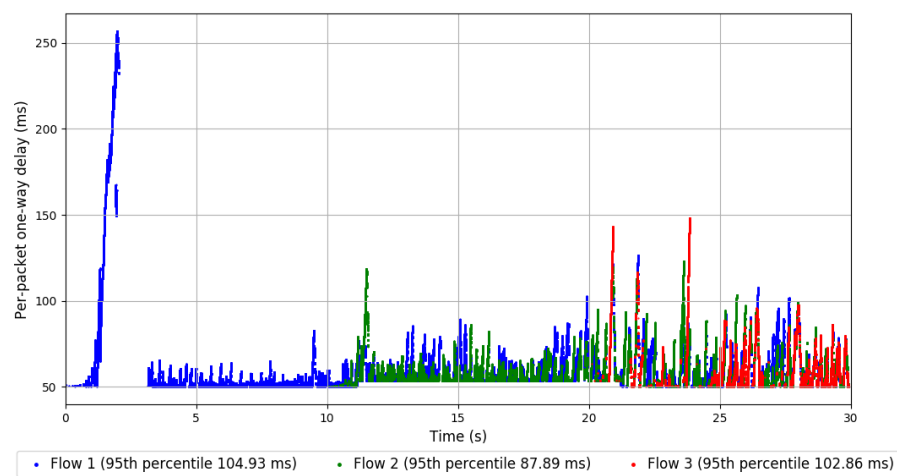
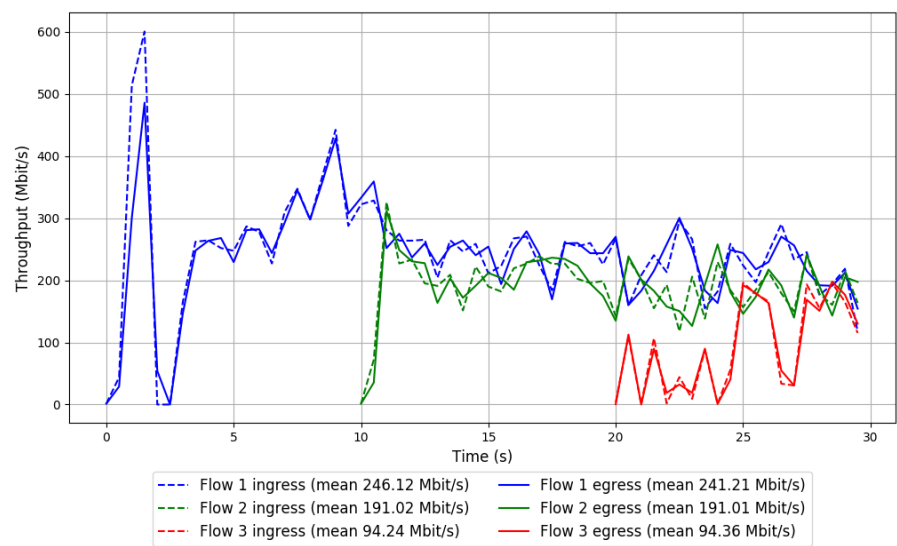
-- Flow 3:

Average throughput: 94.36 Mbit/s

95th percentile per-packet one-way delay: 102.861 ms

Loss rate: 0.00%

Run 10: Report of Verus — Data Link

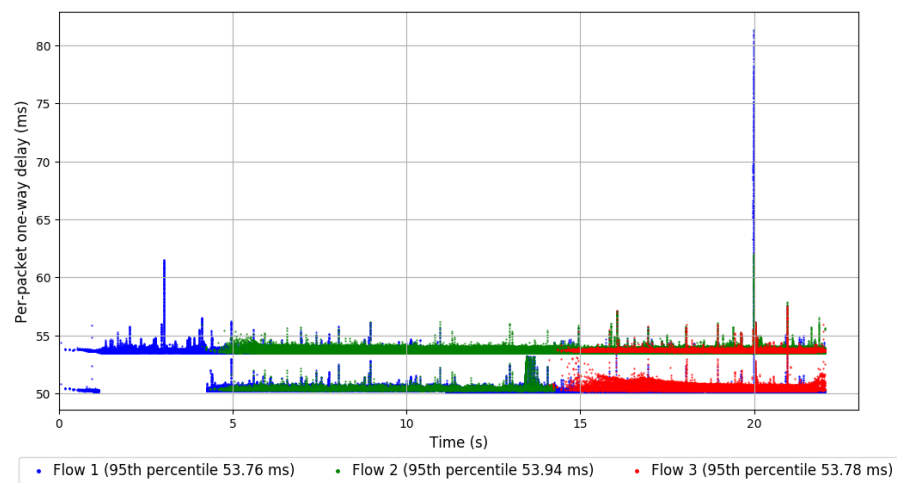
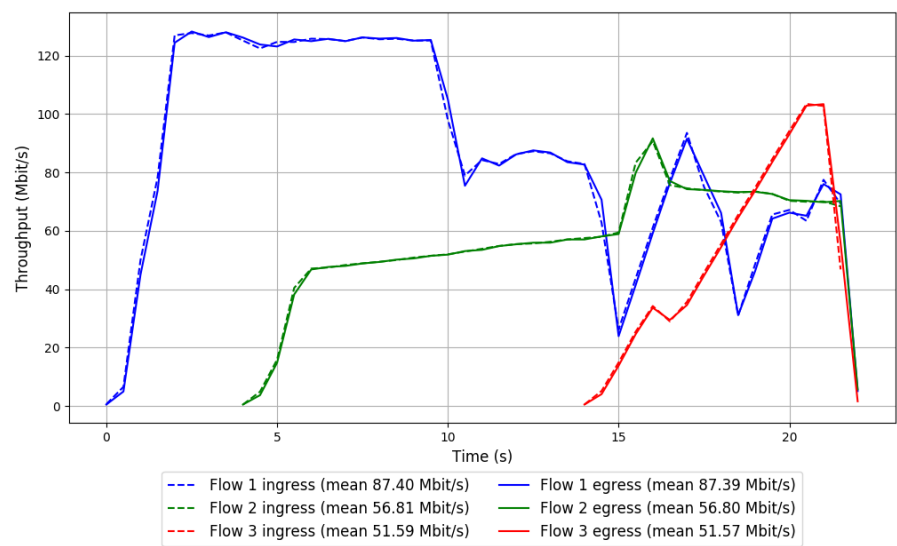


Run 1: Statistics of Copa

Start at: 2018-01-09 22:34:06

End at: 2018-01-09 22:34:36

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-09 22:47:36

End at: 2018-01-09 22:48:06

Below is generated by plot.py at 2018-01-10 03:07:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.35 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 62.94 Mbit/s

95th percentile per-packet one-way delay: 53.839 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 79.58 Mbit/s

95th percentile per-packet one-way delay: 53.805 ms

Loss rate: 0.00%

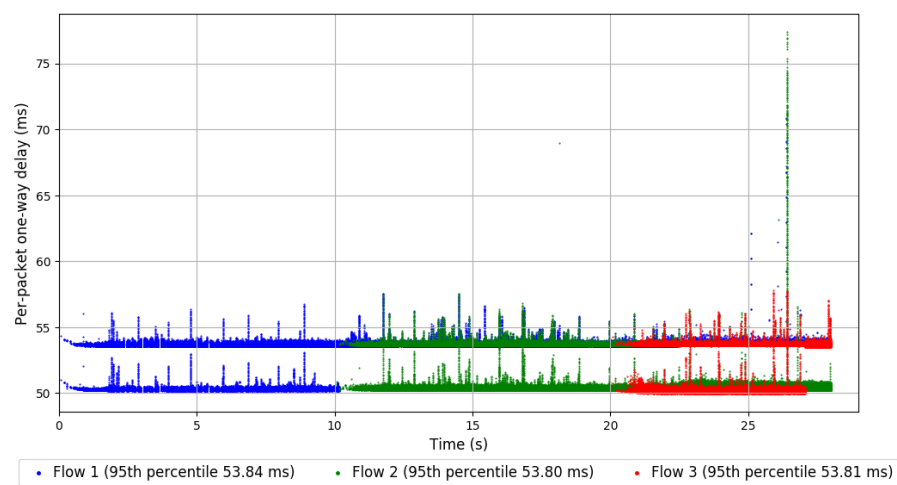
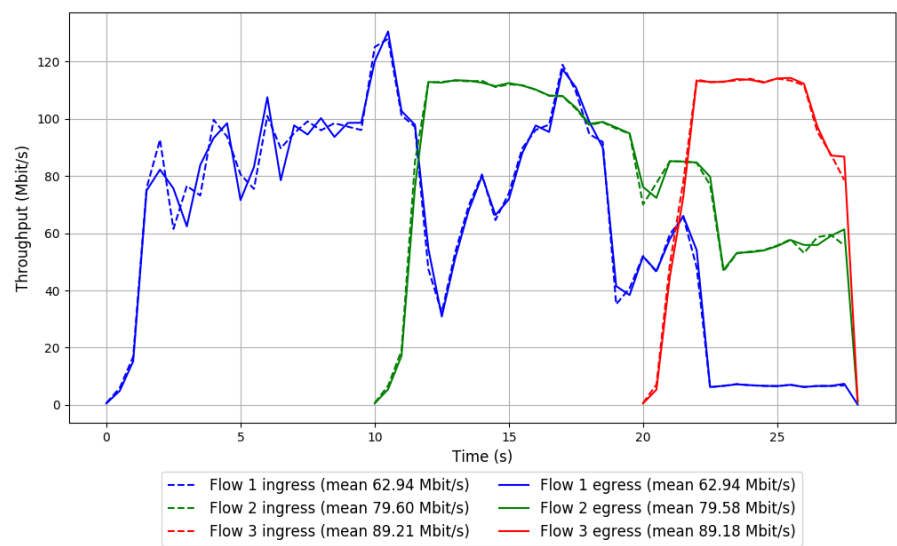
-- Flow 3:

Average throughput: 89.18 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-09 23:01:44

End at: 2018-01-09 23:02:14

Below is generated by plot.py at 2018-01-10 03:07:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 145.67 Mbit/s

95th percentile per-packet one-way delay: 53.595 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.54 Mbit/s

95th percentile per-packet one-way delay: 53.641 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 77.25 Mbit/s

95th percentile per-packet one-way delay: 53.356 ms

Loss rate: 0.00%

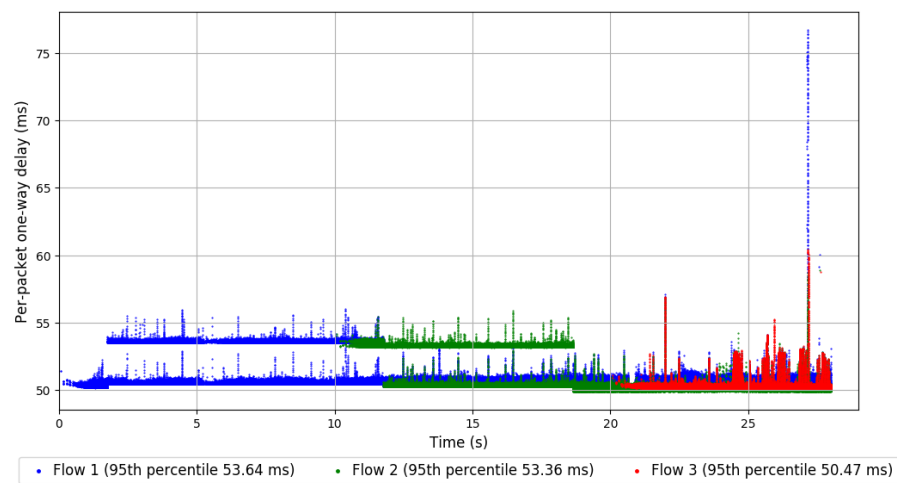
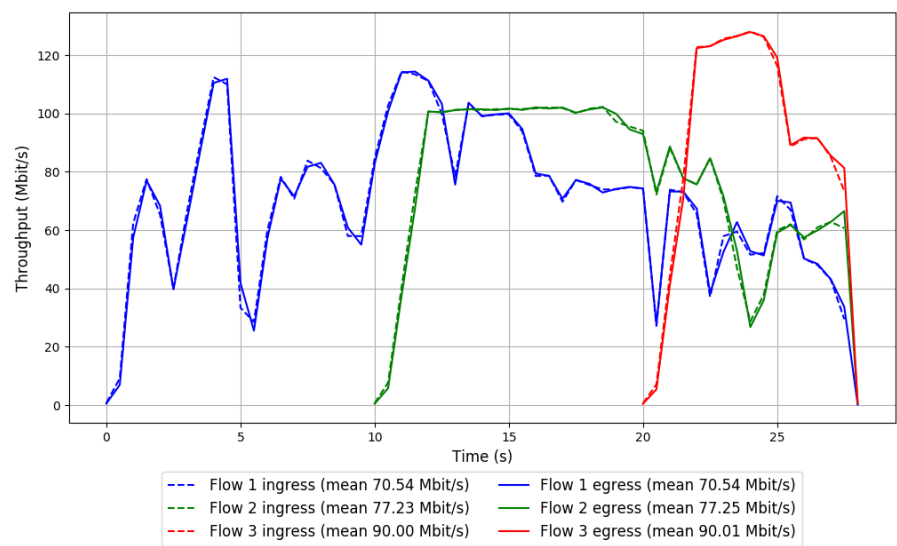
-- Flow 3:

Average throughput: 90.01 Mbit/s

95th percentile per-packet one-way delay: 50.468 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-09 23:15:34

End at: 2018-01-09 23:16:04

Below is generated by plot.py at 2018-01-10 03:07:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.89 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 88.85 Mbit/s

95th percentile per-packet one-way delay: 53.710 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.27 Mbit/s

95th percentile per-packet one-way delay: 53.812 ms

Loss rate: 0.00%

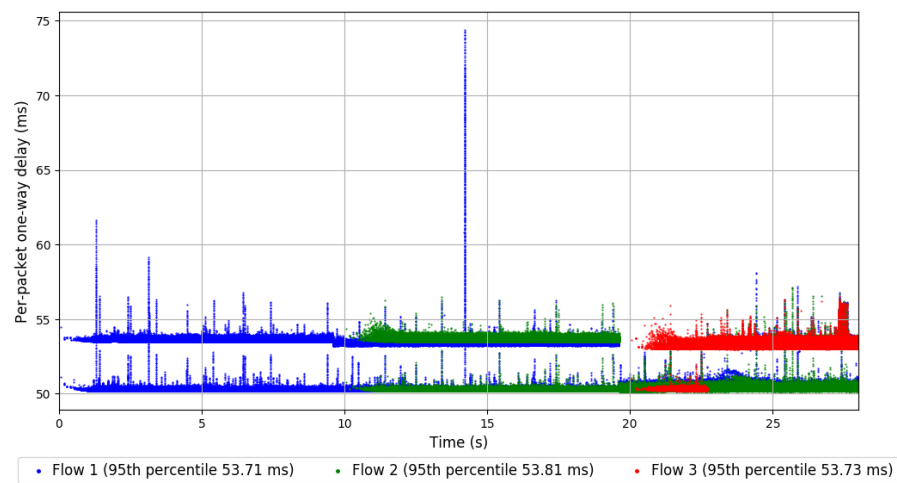
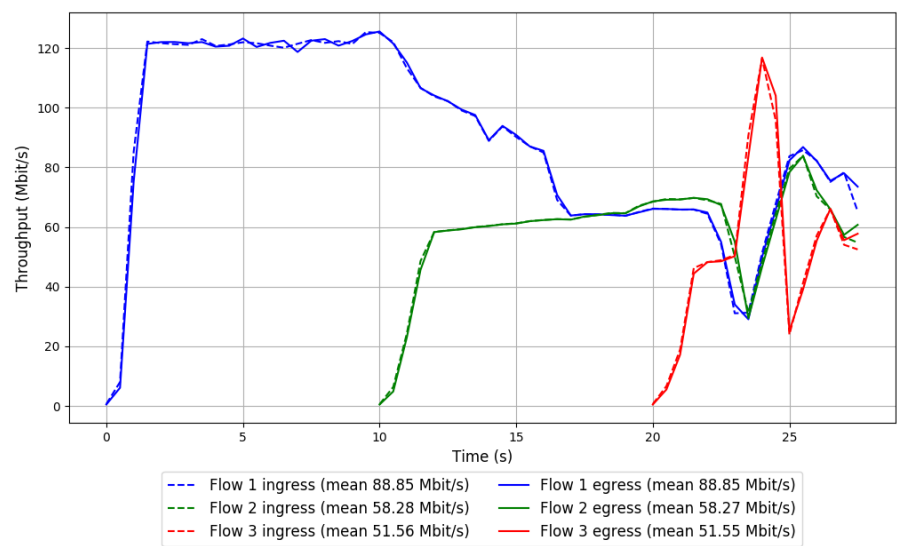
-- Flow 3:

Average throughput: 51.55 Mbit/s

95th percentile per-packet one-way delay: 53.732 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link

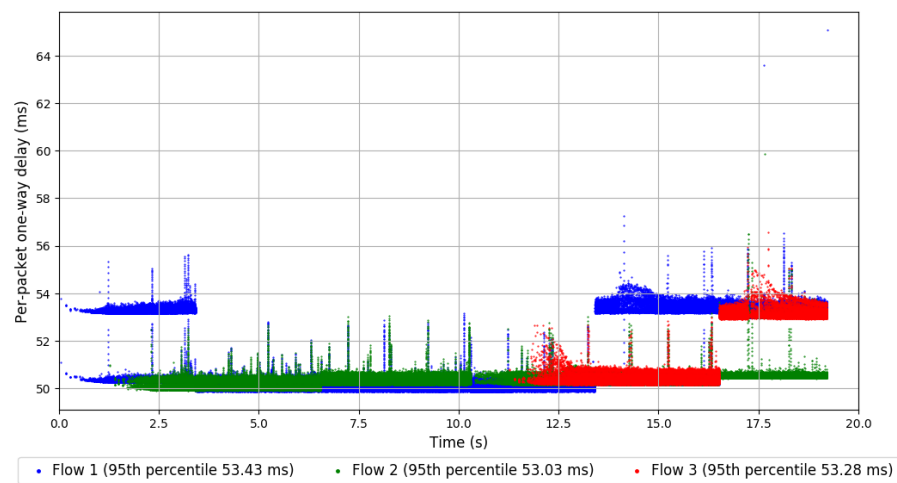
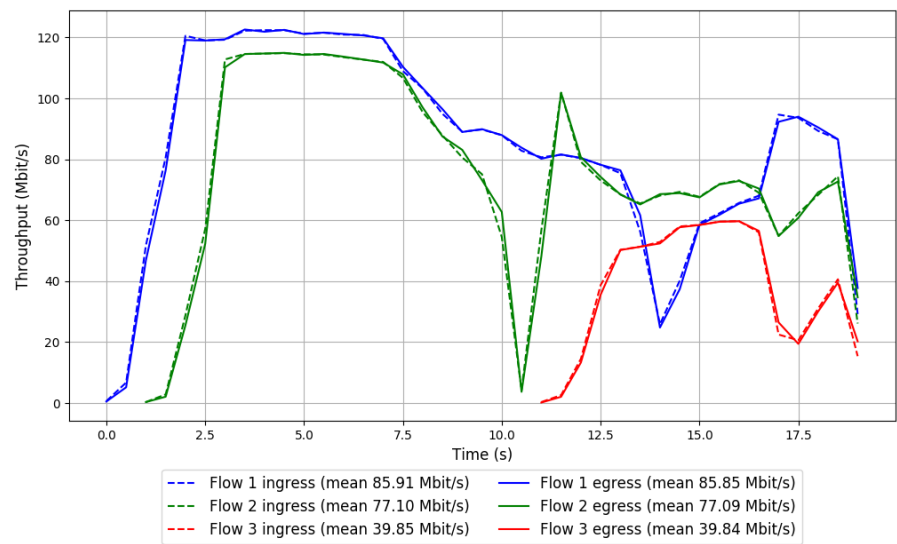


Run 5: Statistics of Copa

Start at: 2018-01-09 23:29:21

End at: 2018-01-09 23:29:51

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-09 23:43:11

End at: 2018-01-09 23:43:41

Below is generated by plot.py at 2018-01-10 03:08:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.68 Mbit/s

95th percentile per-packet one-way delay: 53.303 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 85.00 Mbit/s

95th percentile per-packet one-way delay: 53.018 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.41 Mbit/s

95th percentile per-packet one-way delay: 53.458 ms

Loss rate: 0.00%

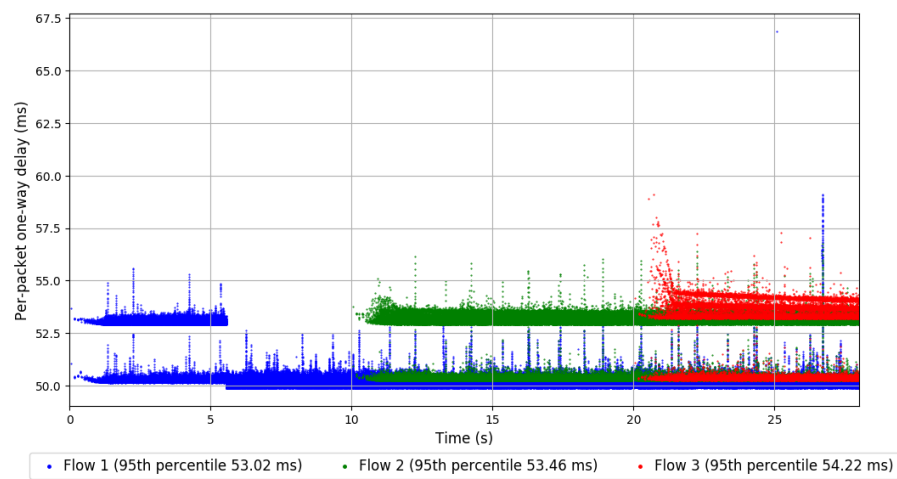
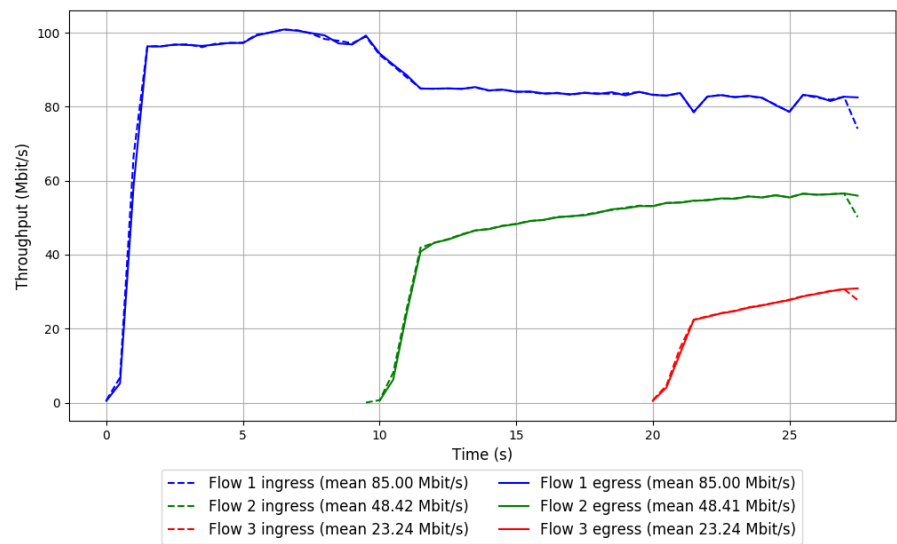
-- Flow 3:

Average throughput: 23.24 Mbit/s

95th percentile per-packet one-way delay: 54.219 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-09 23:57:01

End at: 2018-01-09 23:57:31

Below is generated by plot.py at 2018-01-10 03:09:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.21 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.12 Mbit/s

95th percentile per-packet one-way delay: 53.297 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.30 Mbit/s

95th percentile per-packet one-way delay: 53.407 ms

Loss rate: 0.00%

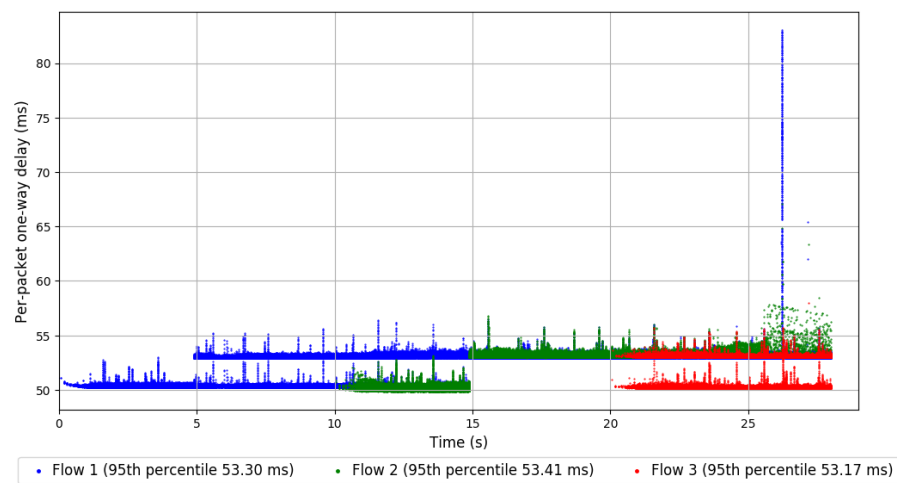
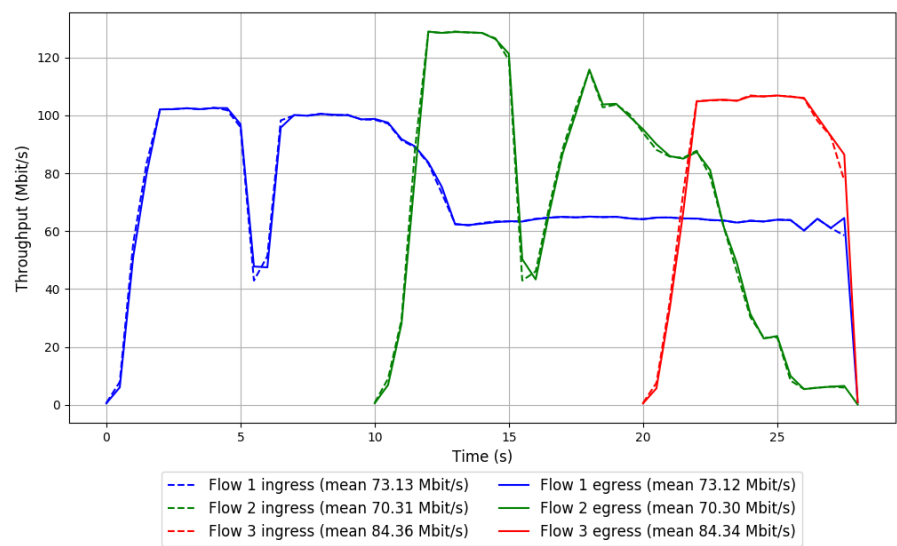
-- Flow 3:

Average throughput: 84.34 Mbit/s

95th percentile per-packet one-way delay: 53.173 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link

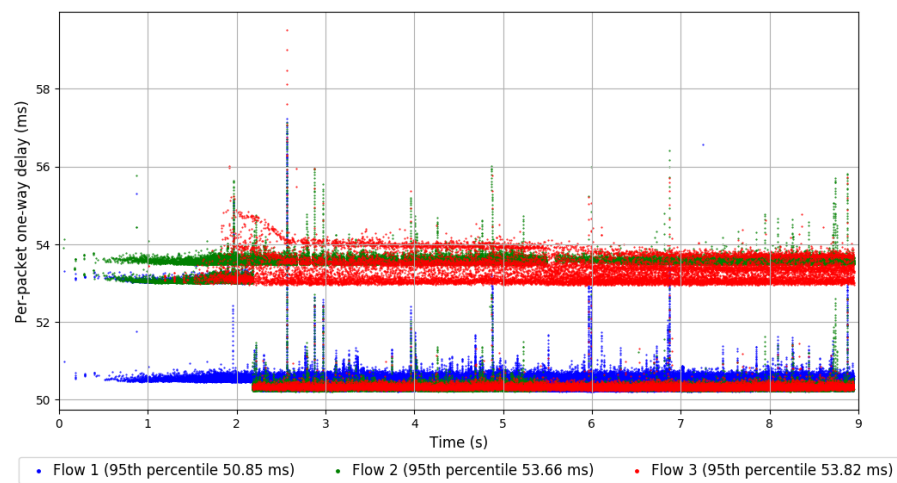
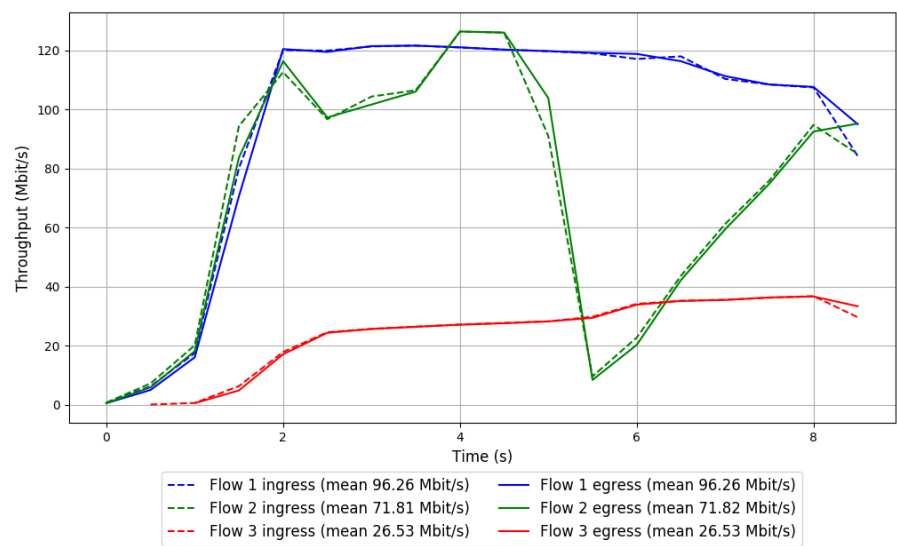


Run 8: Statistics of Copa

Start at: 2018-01-10 00:10:35

End at: 2018-01-10 00:11:05

Run 8: Report of Copa — Data Link

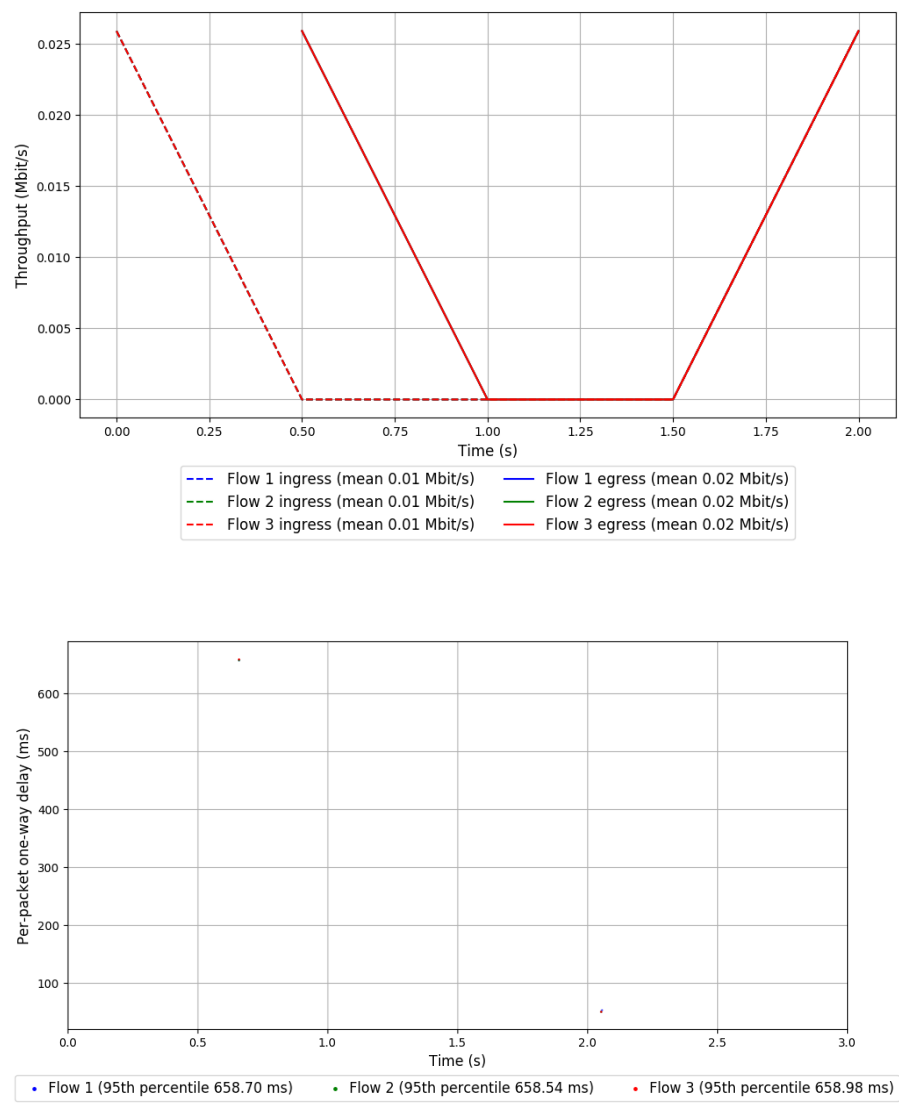


Run 9: Statistics of Copa

Start at: 2018-01-10 00:24:45

End at: 2018-01-10 00:25:15

Run 9: Report of Copa — Data Link

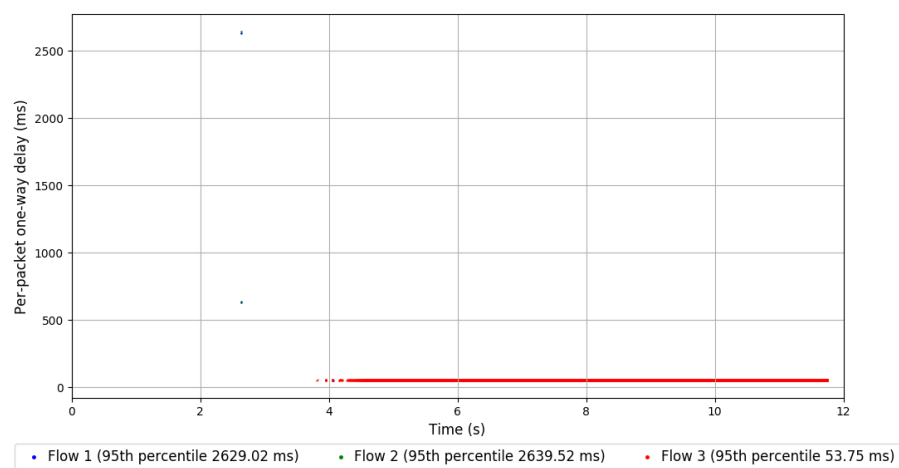
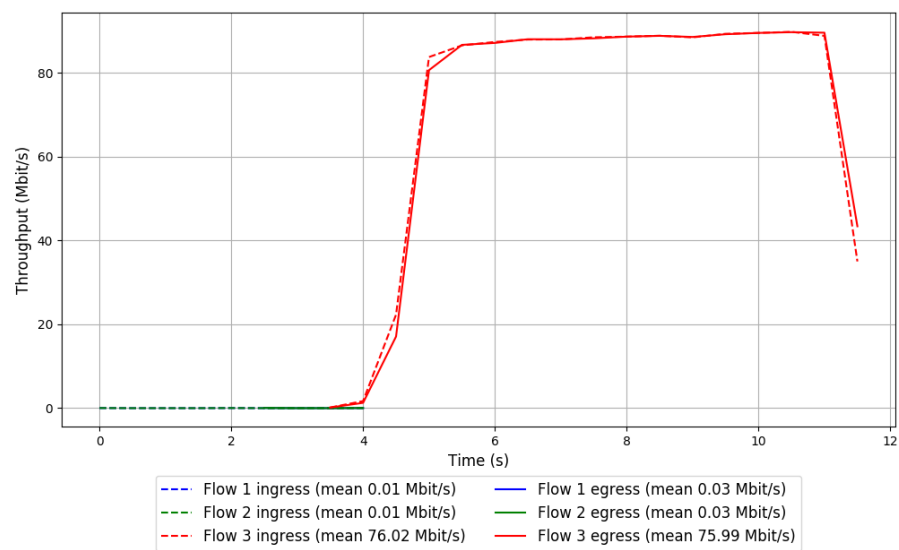


Run 10: Statistics of Copa

Start at: 2018-01-10 00:38:56

End at: 2018-01-10 00:39:26

Run 10: Report of Copa — Data Link

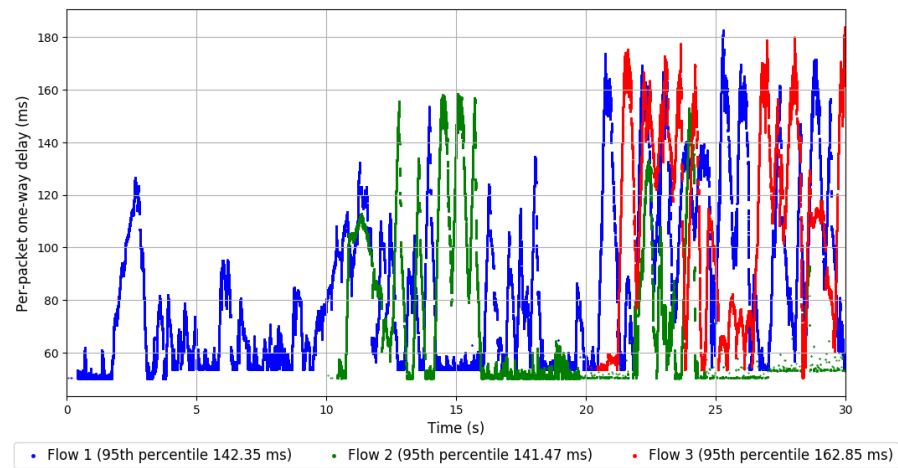
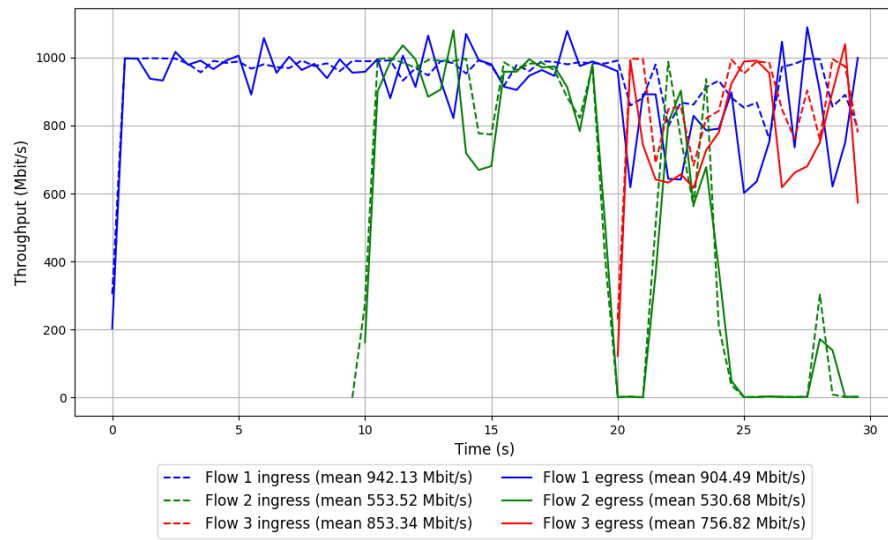


```
Run 1: Statistics of FillP

Start at: 2018-01-09 22:22:11
End at: 2018-01-09 22:22:41

# Below is generated by plot.py at 2018-01-10 03:32:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1508.21 Mbit/s
95th percentile per-packet one-way delay: 150.536 ms
Loss rate: 5.31%
-- Flow 1:
Average throughput: 904.49 Mbit/s
95th percentile per-packet one-way delay: 142.353 ms
Loss rate: 3.98%
-- Flow 2:
Average throughput: 530.68 Mbit/s
95th percentile per-packet one-way delay: 141.468 ms
Loss rate: 4.12%
-- Flow 3:
Average throughput: 756.82 Mbit/s
95th percentile per-packet one-way delay: 162.853 ms
Loss rate: 11.31%
```


Run 1: Report of FillP — Data Link

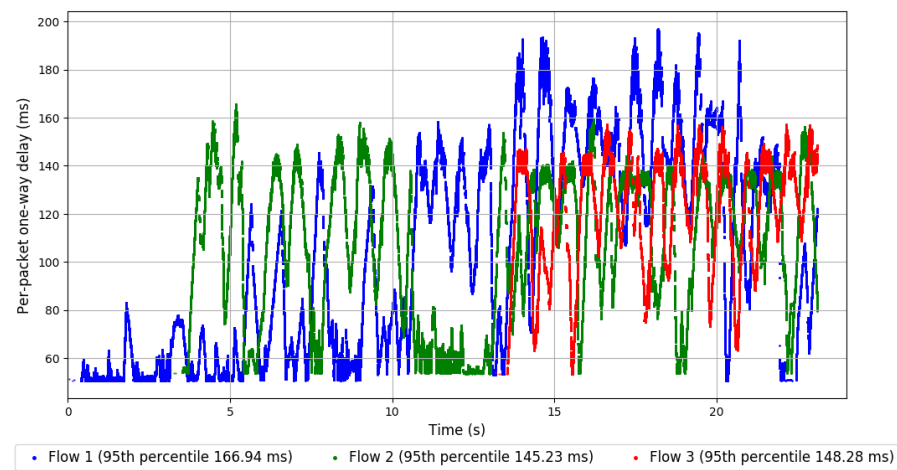
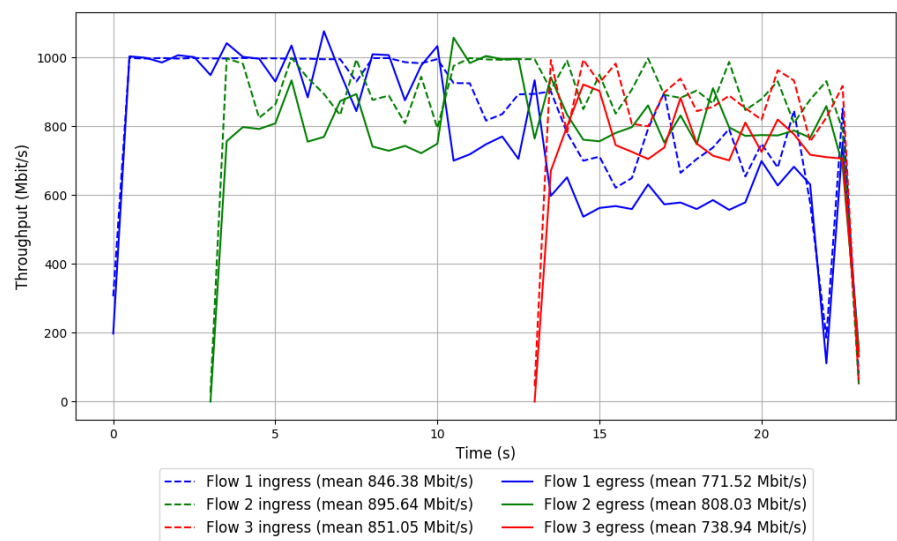


Run 2: Statistics of FillP

Start at: 2018-01-09 22:36:02

End at: 2018-01-09 22:36:32

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-09 22:49:35

End at: 2018-01-09 22:50:05

Below is generated by plot.py at 2018-01-10 03:33:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 1539.83 Mbit/s

95th percentile per-packet one-way delay: 267.518 ms

Loss rate: 11.27%

-- Flow 1:

Average throughput: 749.89 Mbit/s

95th percentile per-packet one-way delay: 270.904 ms

Loss rate: 13.39%

-- Flow 2:

Average throughput: 788.72 Mbit/s

95th percentile per-packet one-way delay: 266.215 ms

Loss rate: 8.51%

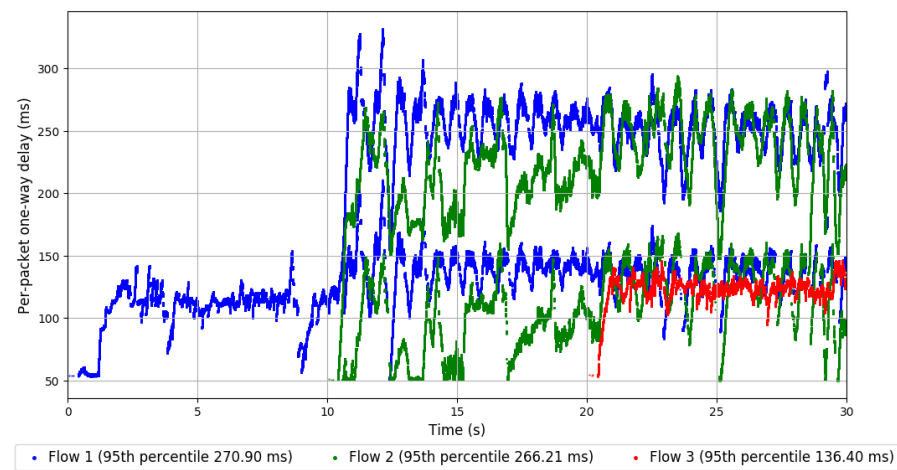
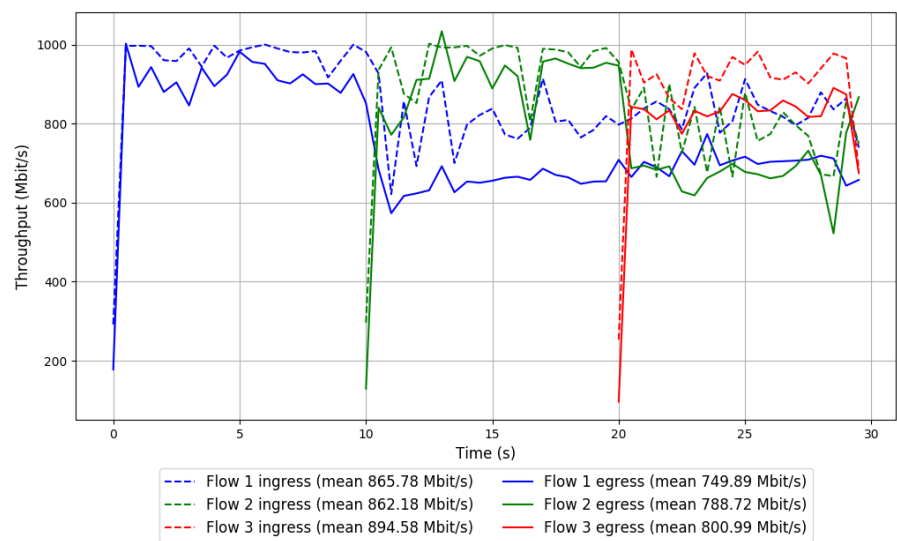
-- Flow 3:

Average throughput: 800.99 Mbit/s

95th percentile per-packet one-way delay: 136.402 ms

Loss rate: 10.46%

Run 3: Report of FillP — Data Link

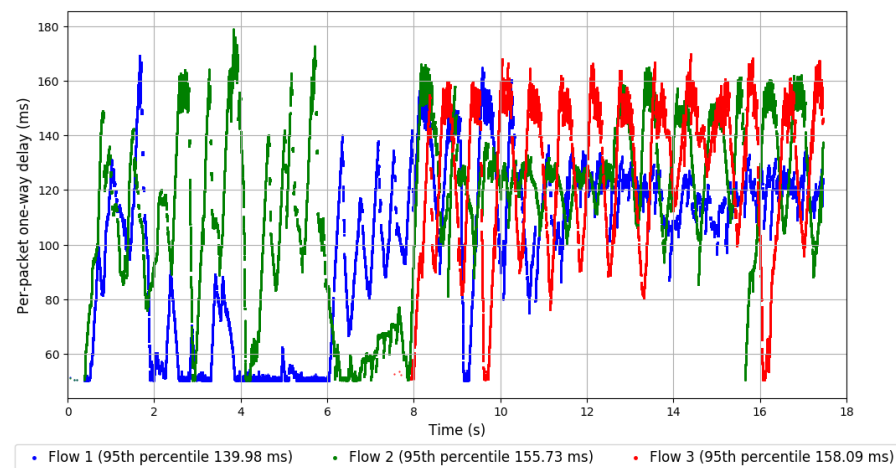
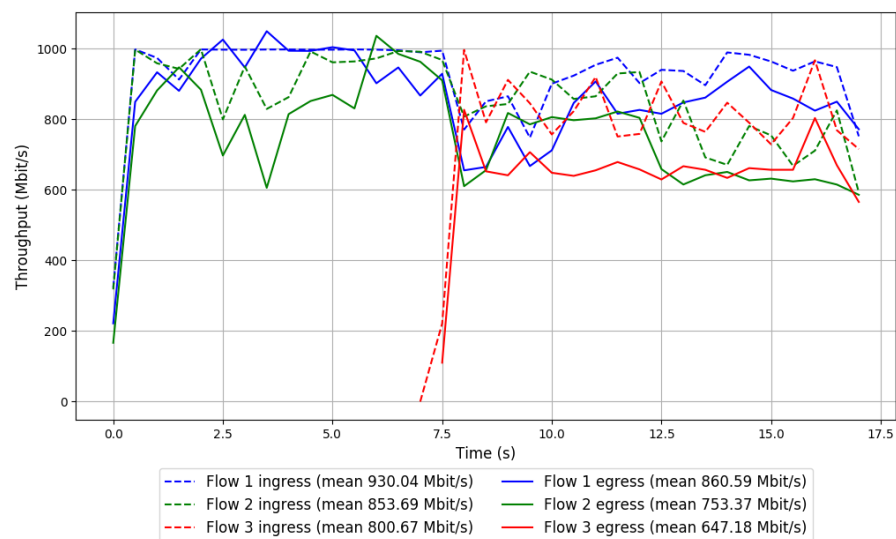


Run 4: Statistics of FillP

Start at: 2018-01-09 23:03:45

End at: 2018-01-09 23:04:15

Run 4: Report of FillP — Data Link

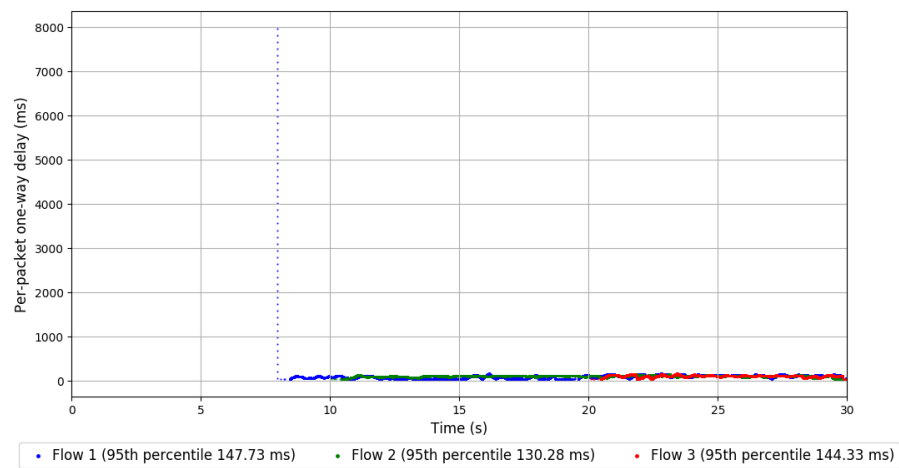
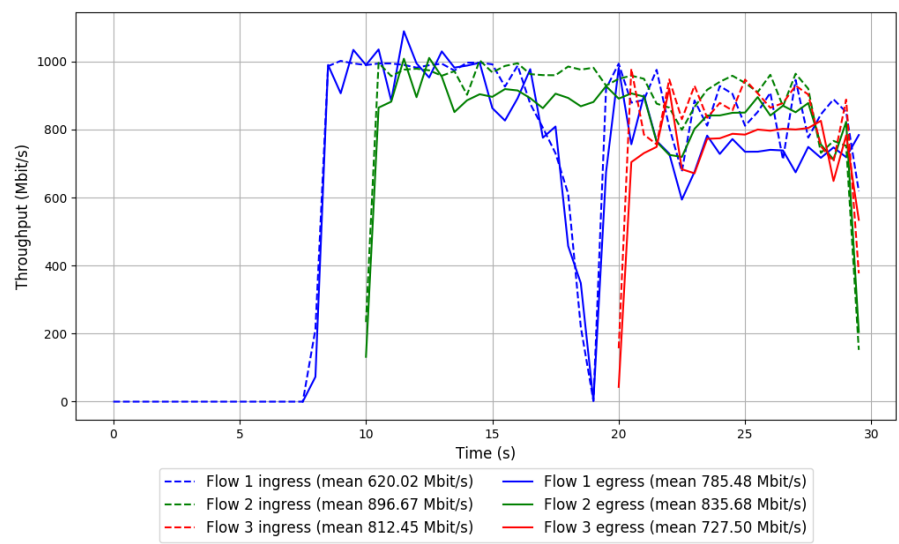


Run 5: Statistics of FillP

Start at: 2018-01-09 23:17:32

End at: 2018-01-09 23:18:02

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-09 23:31:19

End at: 2018-01-09 23:31:49

Below is generated by plot.py at 2018-01-10 03:34:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 1558.67 Mbit/s

95th percentile per-packet one-way delay: 150.855 ms

Loss rate: 7.07%

-- Flow 1:

Average throughput: 859.73 Mbit/s

95th percentile per-packet one-way delay: 147.134 ms

Loss rate: 4.46%

-- Flow 2:

Average throughput: 736.13 Mbit/s

95th percentile per-packet one-way delay: 154.329 ms

Loss rate: 9.99%

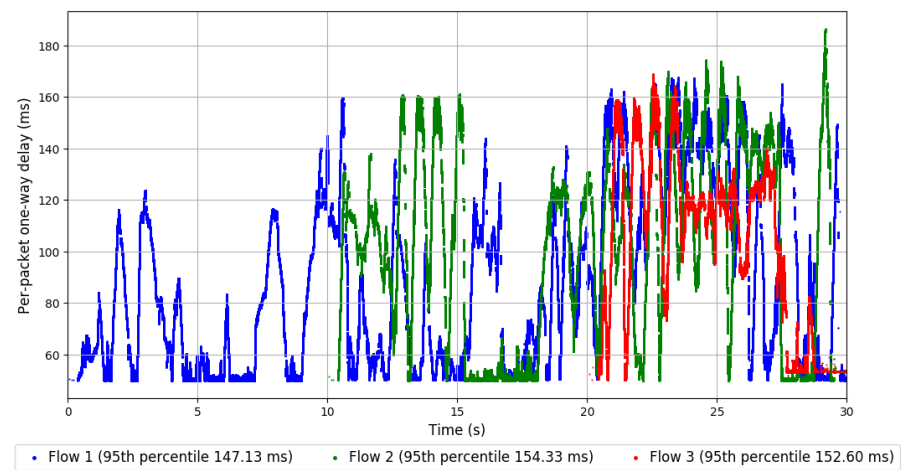
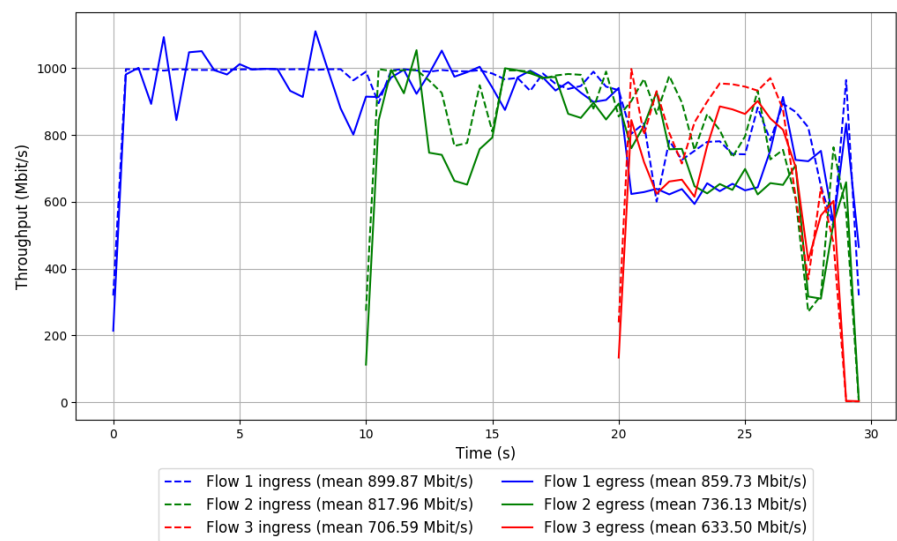
-- Flow 3:

Average throughput: 633.50 Mbit/s

95th percentile per-packet one-way delay: 152.601 ms

Loss rate: 10.33%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-09 23:45:08

End at: 2018-01-09 23:45:38

Below is generated by plot.py at 2018-01-10 03:36:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 1615.76 Mbit/s

95th percentile per-packet one-way delay: 155.947 ms

Loss rate: 7.76%

-- Flow 1:

Average throughput: 905.74 Mbit/s

95th percentile per-packet one-way delay: 132.938 ms

Loss rate: 3.60%

-- Flow 2:

Average throughput: 746.20 Mbit/s

95th percentile per-packet one-way delay: 153.502 ms

Loss rate: 9.55%

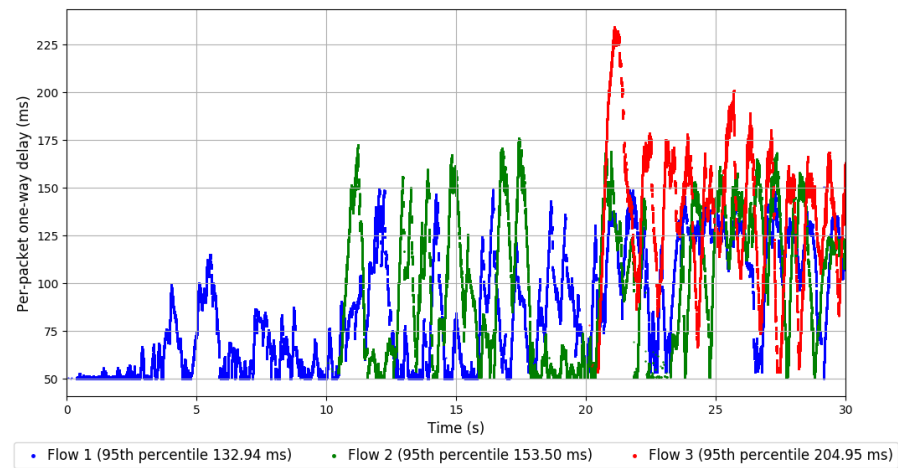
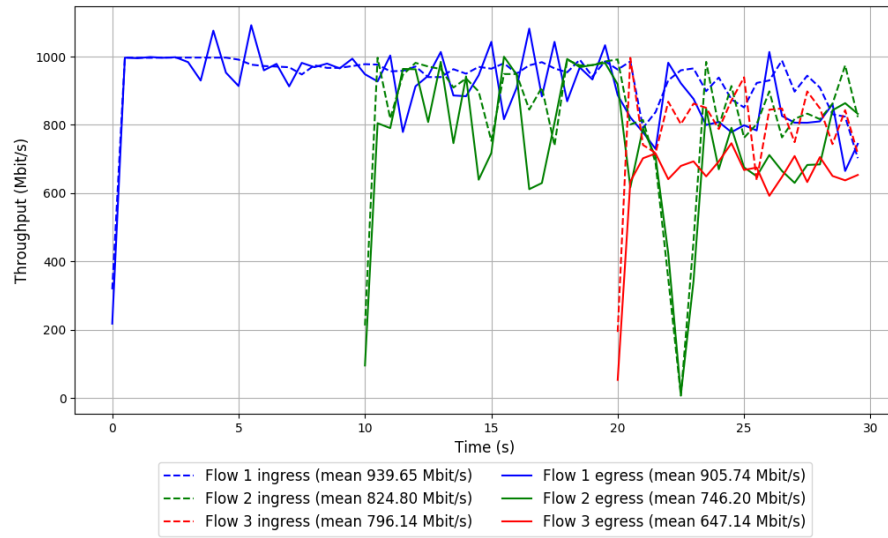
-- Flow 3:

Average throughput: 647.14 Mbit/s

95th percentile per-packet one-way delay: 204.952 ms

Loss rate: 18.91%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-09 23:59:00

End at: 2018-01-09 23:59:30

Below is generated by plot.py at 2018-01-10 03:36:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 1742.67 Mbit/s

95th percentile per-packet one-way delay: 179.344 ms

Loss rate: 9.83%

-- Flow 1:

Average throughput: 805.04 Mbit/s

95th percentile per-packet one-way delay: 226.697 ms

Loss rate: 7.71%

-- Flow 2:

Average throughput: 783.84 Mbit/s

95th percentile per-packet one-way delay: 157.338 ms

Loss rate: 11.03%

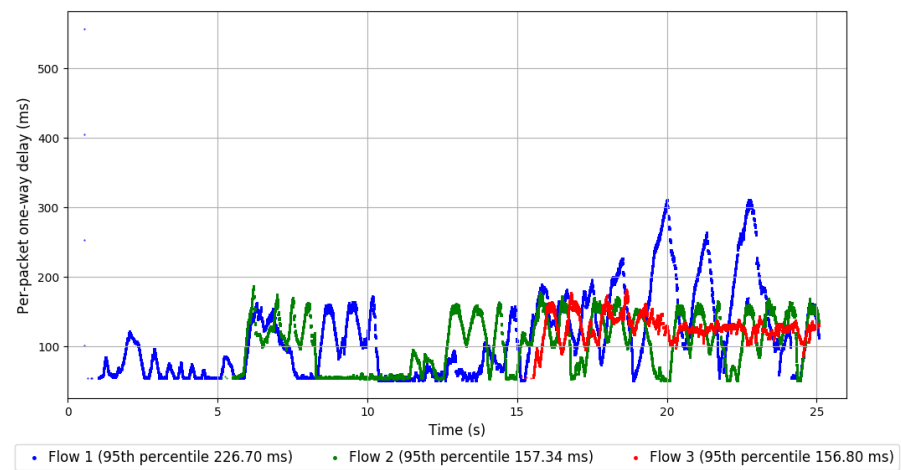
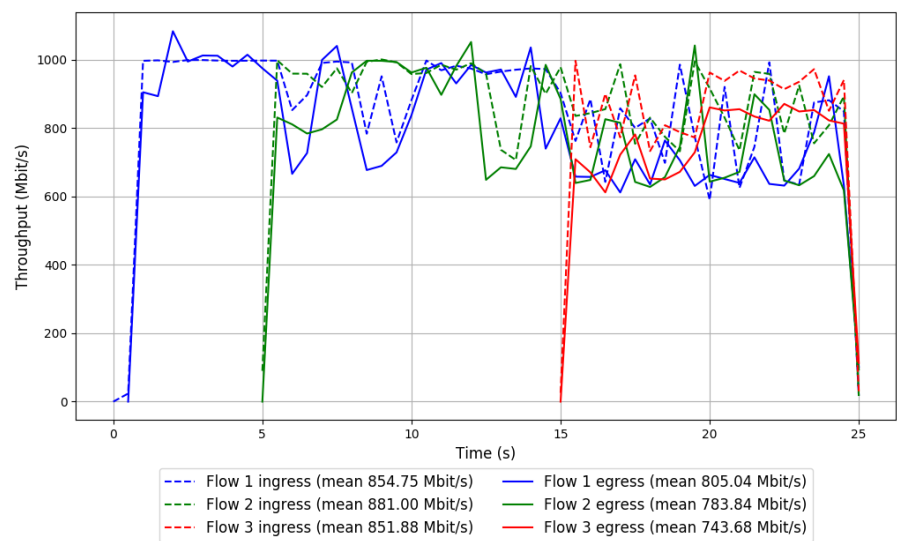
-- Flow 3:

Average throughput: 743.68 Mbit/s

95th percentile per-packet one-way delay: 156.798 ms

Loss rate: 12.72%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-10 00:12:28

End at: 2018-01-10 00:12:58

Below is generated by plot.py at 2018-01-10 03:46:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 1624.06 Mbit/s

95th percentile per-packet one-way delay: 280.051 ms

Loss rate: 8.55%

-- Flow 1:

Average throughput: 843.53 Mbit/s

95th percentile per-packet one-way delay: 273.248 ms

Loss rate: 7.52%

-- Flow 2:

Average throughput: 865.47 Mbit/s

95th percentile per-packet one-way delay: 137.755 ms

Loss rate: 6.19%

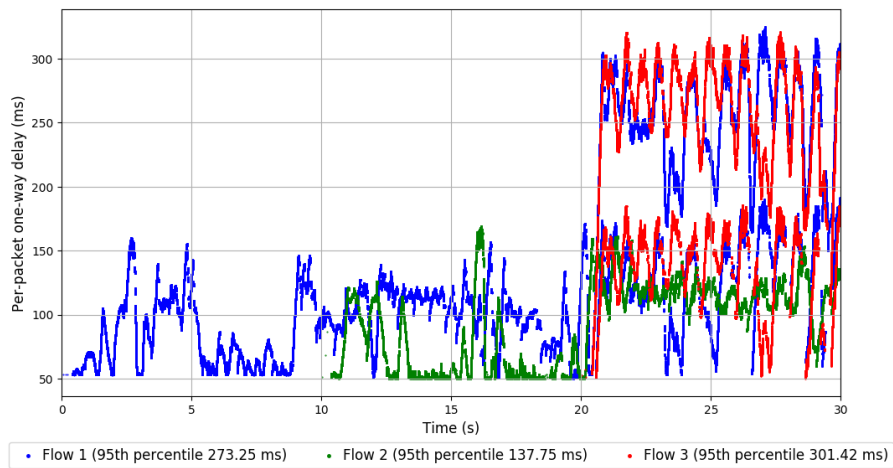
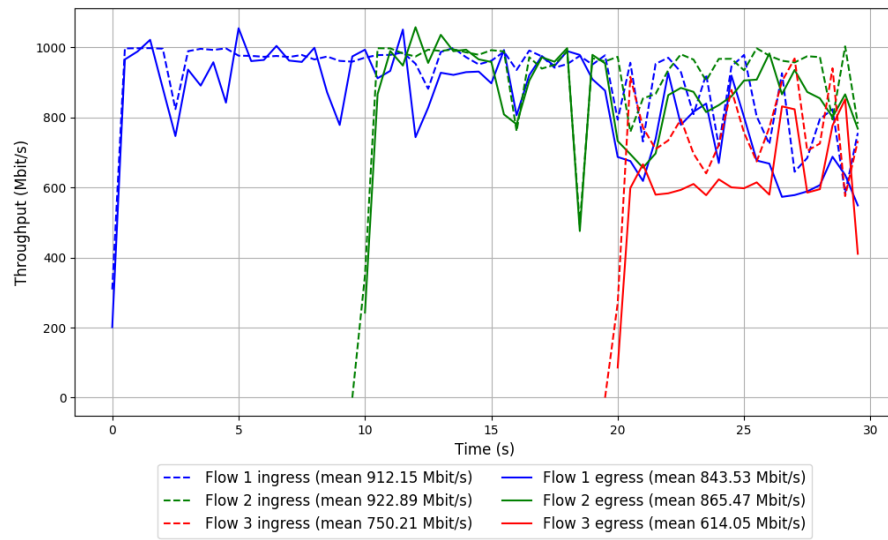
-- Flow 3:

Average throughput: 614.05 Mbit/s

95th percentile per-packet one-way delay: 301.417 ms

Loss rate: 18.13%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-10 00:26:30

End at: 2018-01-10 00:27:00

Below is generated by plot.py at 2018-01-10 03:46:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 1602.15 Mbit/s

95th percentile per-packet one-way delay: 159.560 ms

Loss rate: 8.84%

-- Flow 1:

Average throughput: 857.98 Mbit/s

95th percentile per-packet one-way delay: 148.238 ms

Loss rate: 7.01%

-- Flow 2:

Average throughput: 814.85 Mbit/s

95th percentile per-packet one-way delay: 166.633 ms

Loss rate: 7.34%

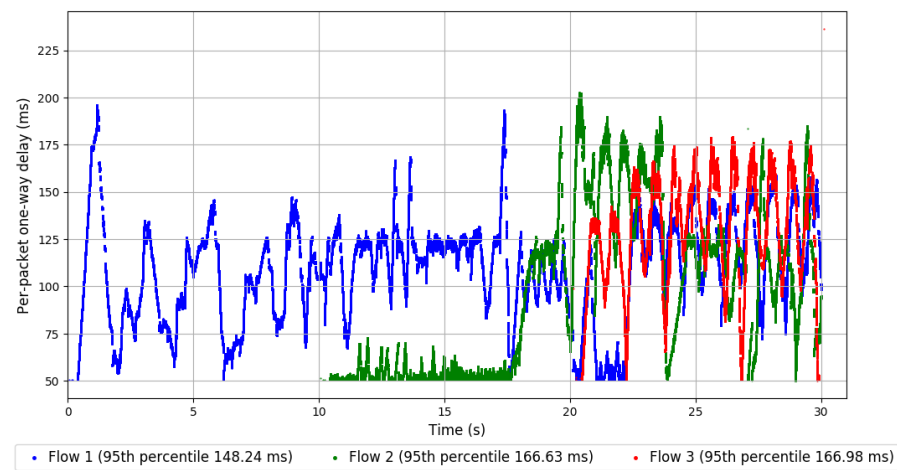
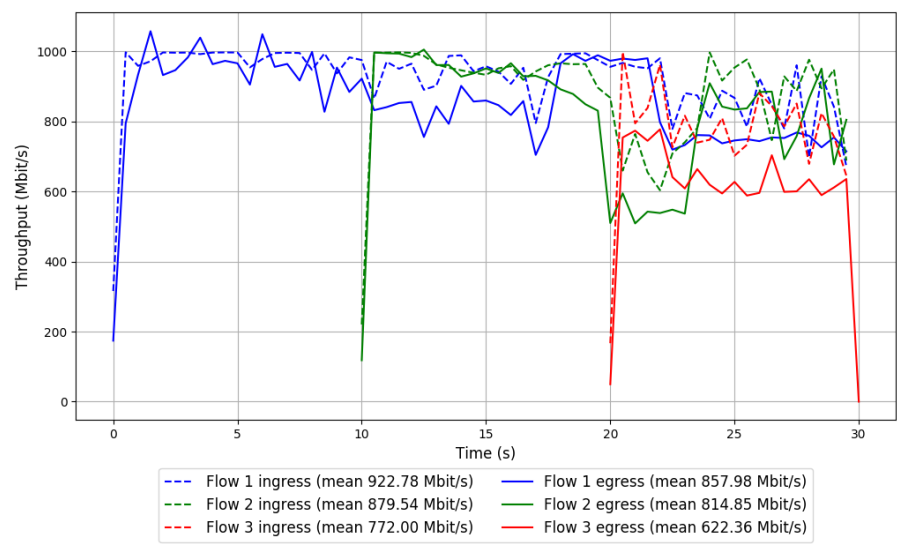
-- Flow 3:

Average throughput: 622.36 Mbit/s

95th percentile per-packet one-way delay: 166.977 ms

Loss rate: 18.87%

Run 10: Report of FillP — Data Link

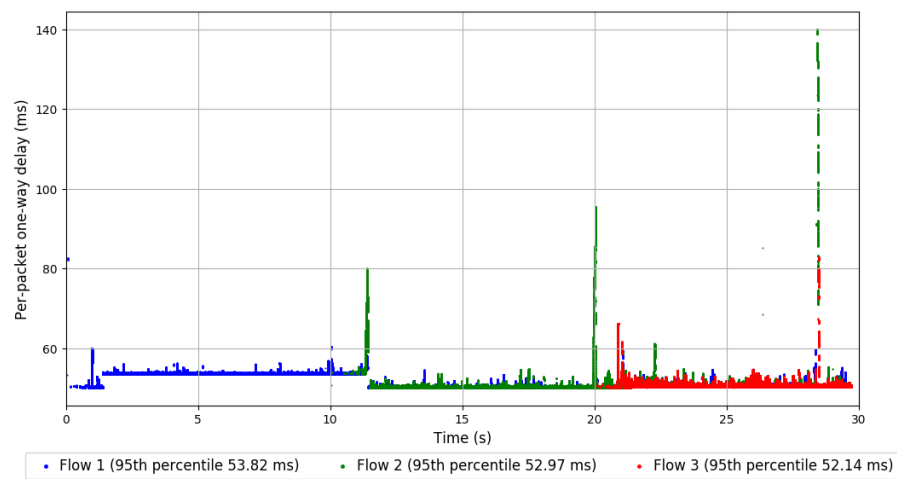
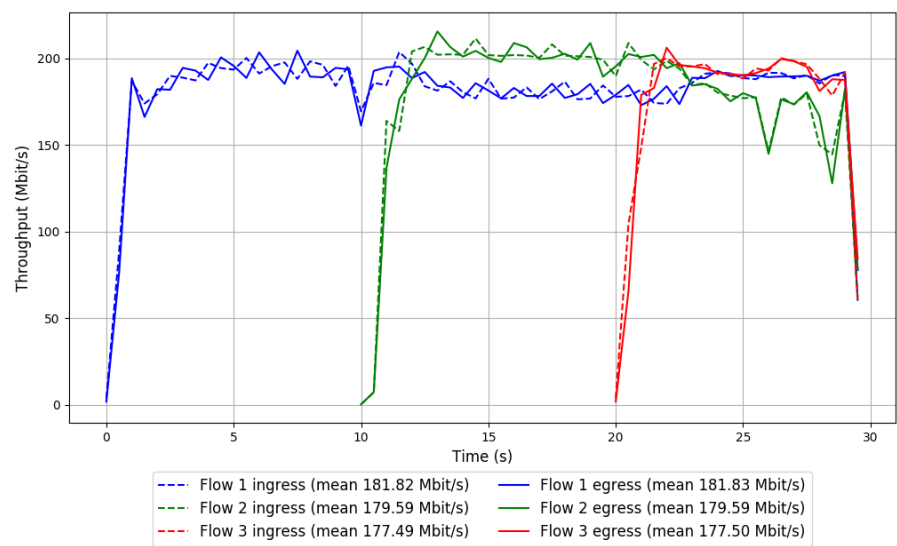


```
Run 1: Statistics of Indigo

Start at: 2018-01-09 22:34:57
End at: 2018-01-09 22:35:27

# Below is generated by plot.py at 2018-01-10 03:46:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 358.43 Mbit/s
95th percentile per-packet one-way delay: 53.790 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 181.83 Mbit/s
95th percentile per-packet one-way delay: 53.823 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 179.59 Mbit/s
95th percentile per-packet one-way delay: 52.965 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 177.50 Mbit/s
95th percentile per-packet one-way delay: 52.142 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

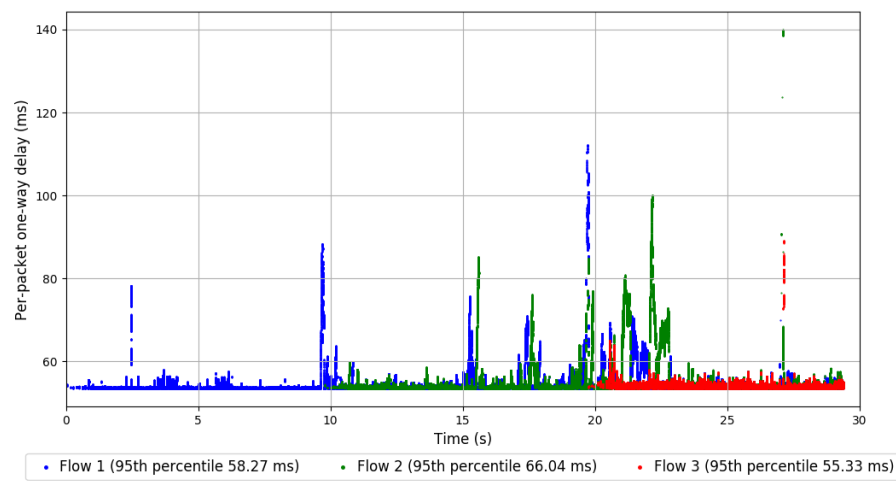
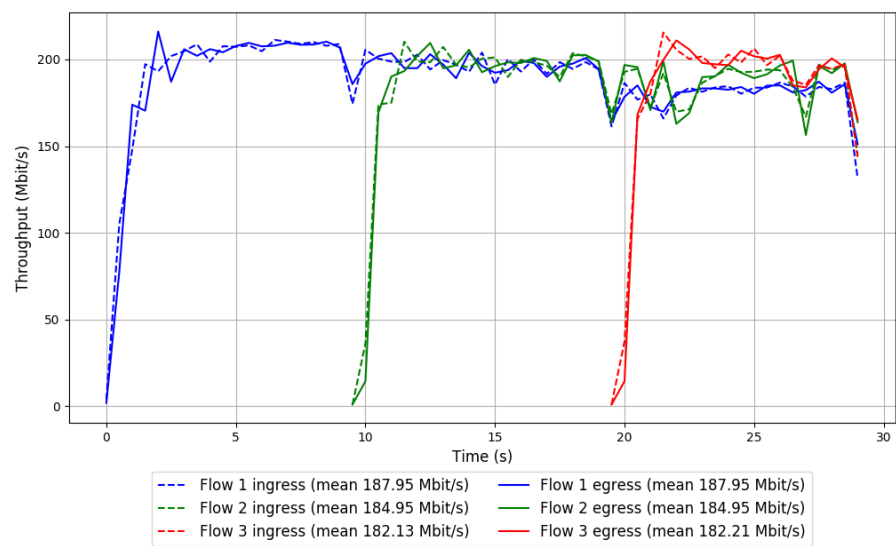


```
Run 2: Statistics of Indigo

Start at: 2018-01-09 22:48:28
End at: 2018-01-09 22:48:58

# Below is generated by plot.py at 2018-01-10 03:46:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 371.47 Mbit/s
95th percentile per-packet one-way delay: 59.115 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 187.95 Mbit/s
95th percentile per-packet one-way delay: 58.268 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 184.95 Mbit/s
95th percentile per-packet one-way delay: 66.042 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 182.21 Mbit/s
95th percentile per-packet one-way delay: 55.325 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-09 23:02:39

End at: 2018-01-09 23:03:09

Below is generated by plot.py at 2018-01-10 03:46:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 374.65 Mbit/s

95th percentile per-packet one-way delay: 52.206 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 190.88 Mbit/s

95th percentile per-packet one-way delay: 51.932 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 191.09 Mbit/s

95th percentile per-packet one-way delay: 52.701 ms

Loss rate: 0.00%

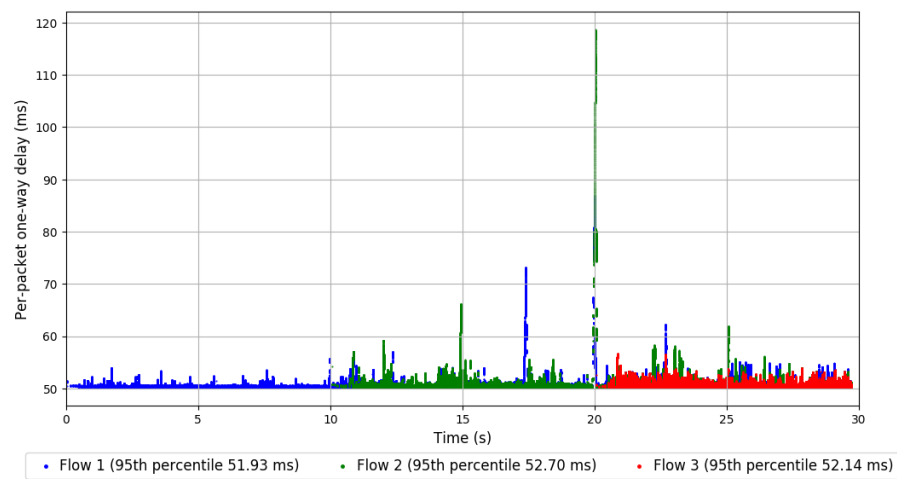
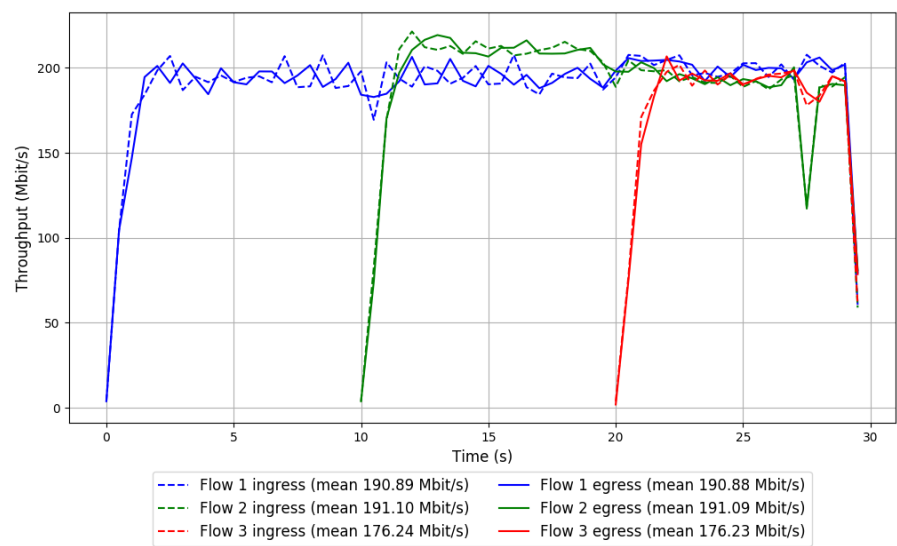
-- Flow 3:

Average throughput: 176.23 Mbit/s

95th percentile per-packet one-way delay: 52.136 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-09 23:16:26

End at: 2018-01-09 23:16:56

Below is generated by plot.py at 2018-01-10 03:46:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 355.93 Mbit/s

95th percentile per-packet one-way delay: 55.160 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 181.93 Mbit/s

95th percentile per-packet one-way delay: 54.419 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 176.99 Mbit/s

95th percentile per-packet one-way delay: 55.600 ms

Loss rate: 0.00%

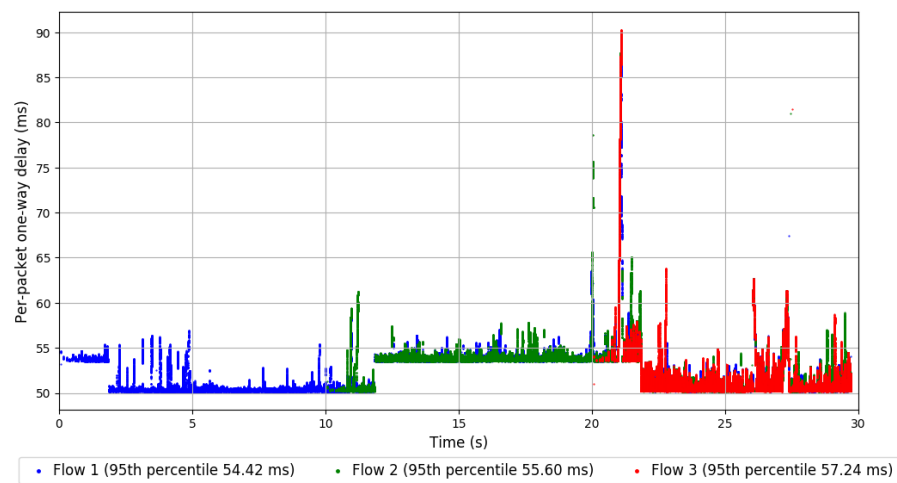
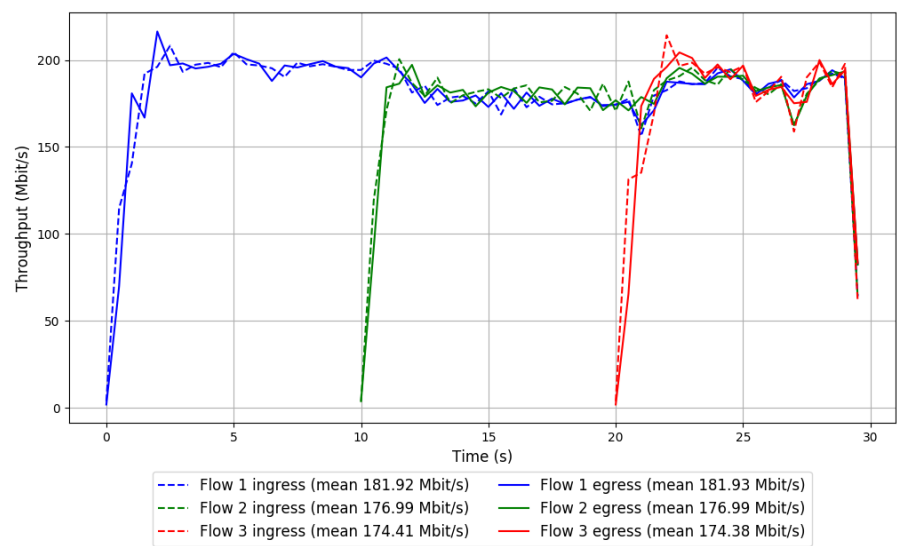
-- Flow 3:

Average throughput: 174.38 Mbit/s

95th percentile per-packet one-way delay: 57.243 ms

Loss rate: 0.01%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-09 23:30:13

End at: 2018-01-09 23:30:43

Below is generated by plot.py at 2018-01-10 03:46:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 361.08 Mbit/s

95th percentile per-packet one-way delay: 55.181 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 180.26 Mbit/s

95th percentile per-packet one-way delay: 54.687 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 186.23 Mbit/s

95th percentile per-packet one-way delay: 55.602 ms

Loss rate: 0.00%

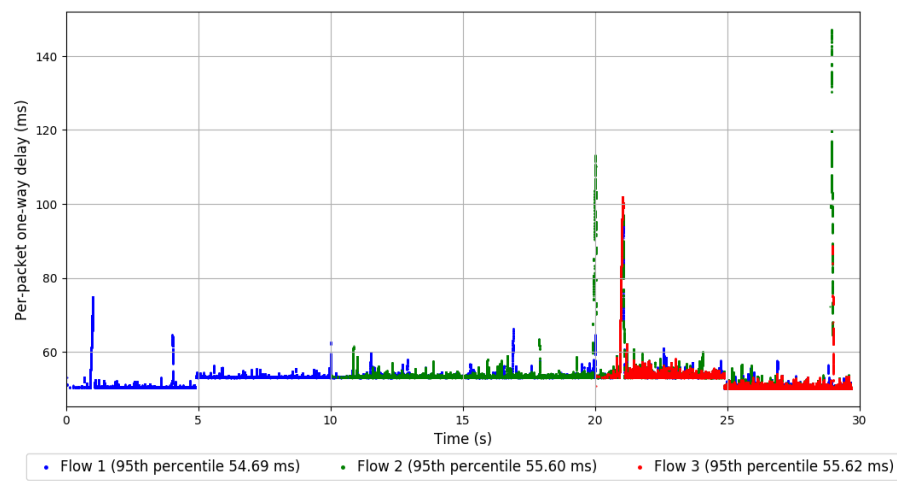
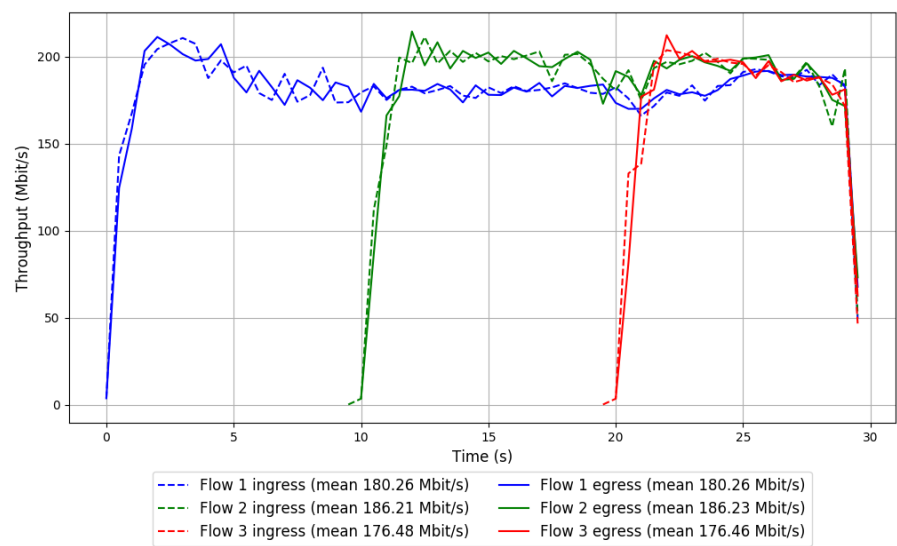
-- Flow 3:

Average throughput: 176.46 Mbit/s

95th percentile per-packet one-way delay: 55.625 ms

Loss rate: 0.01%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-09 23:44:02

End at: 2018-01-09 23:44:32

Below is generated by plot.py at 2018-01-10 03:46:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 379.13 Mbit/s

95th percentile per-packet one-way delay: 53.109 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 188.62 Mbit/s

95th percentile per-packet one-way delay: 53.142 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 189.09 Mbit/s

95th percentile per-packet one-way delay: 52.358 ms

Loss rate: 0.00%

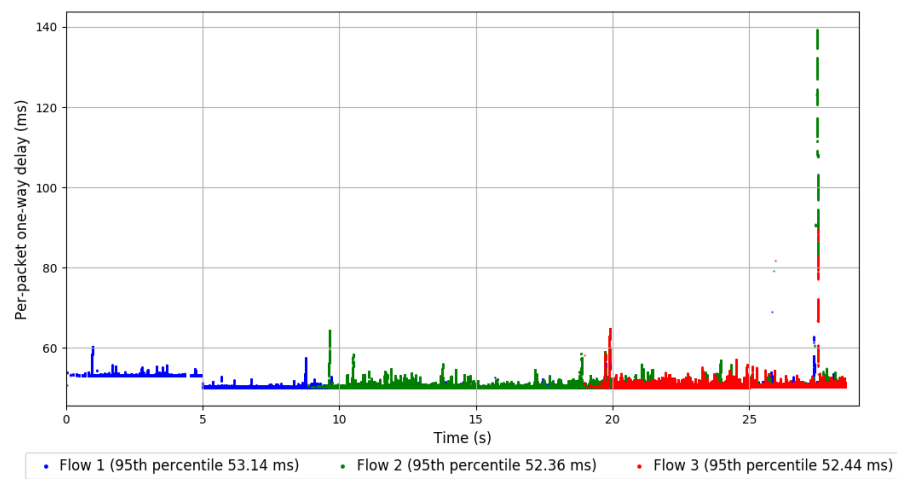
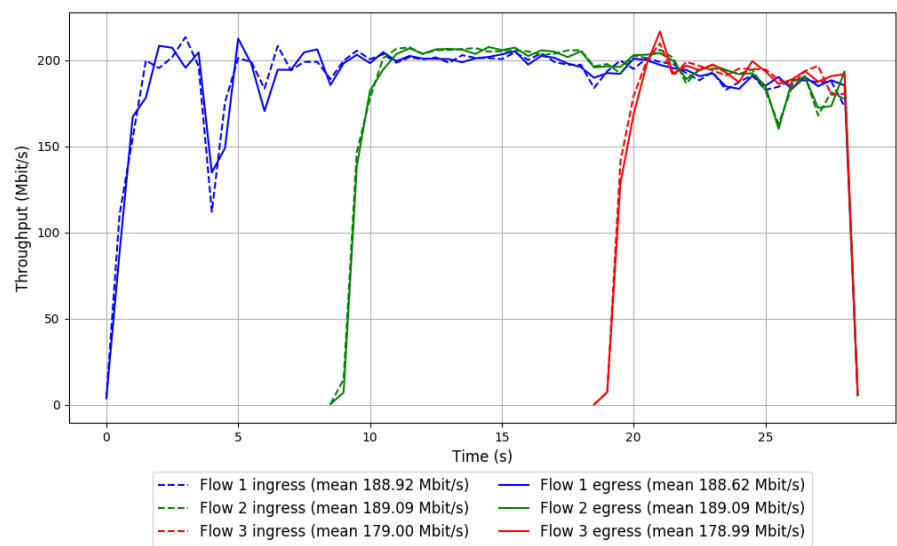
-- Flow 3:

Average throughput: 178.99 Mbit/s

95th percentile per-packet one-way delay: 52.440 ms

Loss rate: 0.01%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-09 23:57:55

End at: 2018-01-09 23:58:25

Below is generated by plot.py at 2018-01-10 03:46:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 356.99 Mbit/s

95th percentile per-packet one-way delay: 54.828 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 178.43 Mbit/s

95th percentile per-packet one-way delay: 54.413 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 182.95 Mbit/s

95th percentile per-packet one-way delay: 55.086 ms

Loss rate: 0.01%

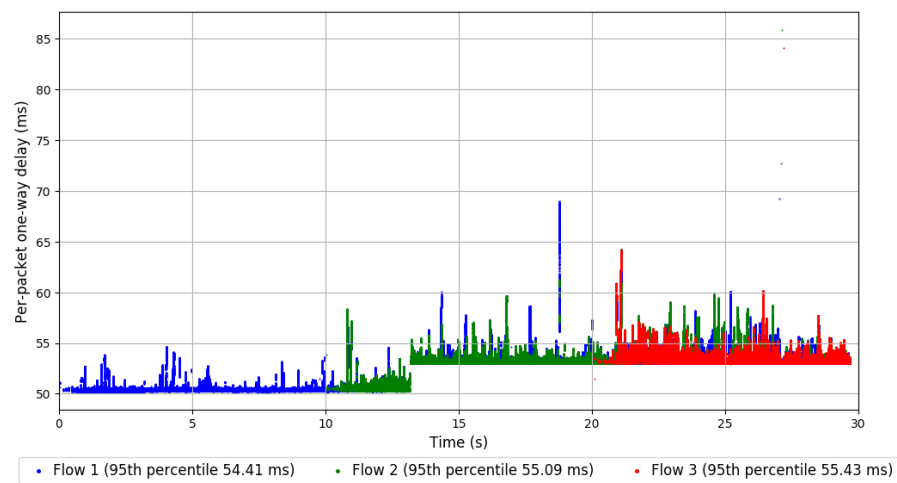
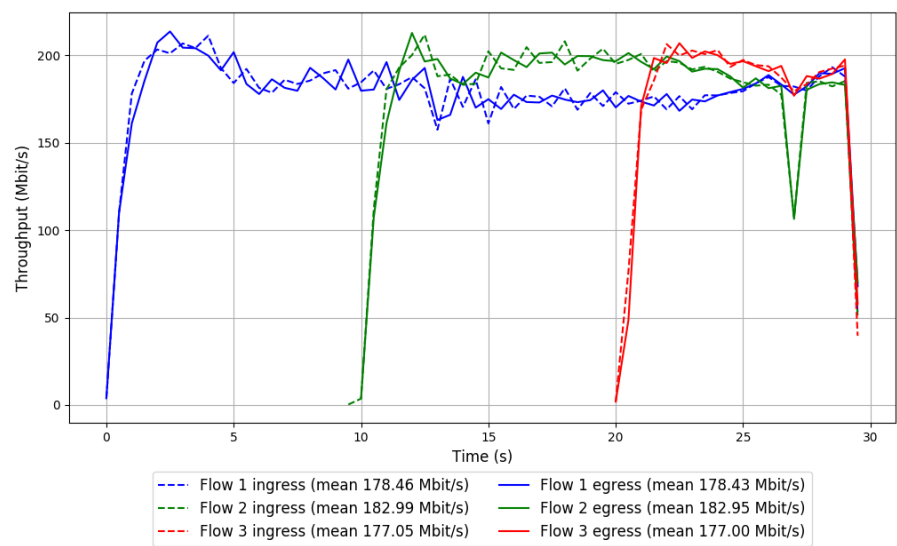
-- Flow 3:

Average throughput: 177.00 Mbit/s

95th percentile per-packet one-way delay: 55.433 ms

Loss rate: 0.03%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-10 00:11:21

End at: 2018-01-10 00:11:51

Below is generated by plot.py at 2018-01-10 03:46:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 380.91 Mbit/s

95th percentile per-packet one-way delay: 53.131 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 197.40 Mbit/s

95th percentile per-packet one-way delay: 53.174 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 187.30 Mbit/s

95th percentile per-packet one-way delay: 52.009 ms

Loss rate: 0.00%

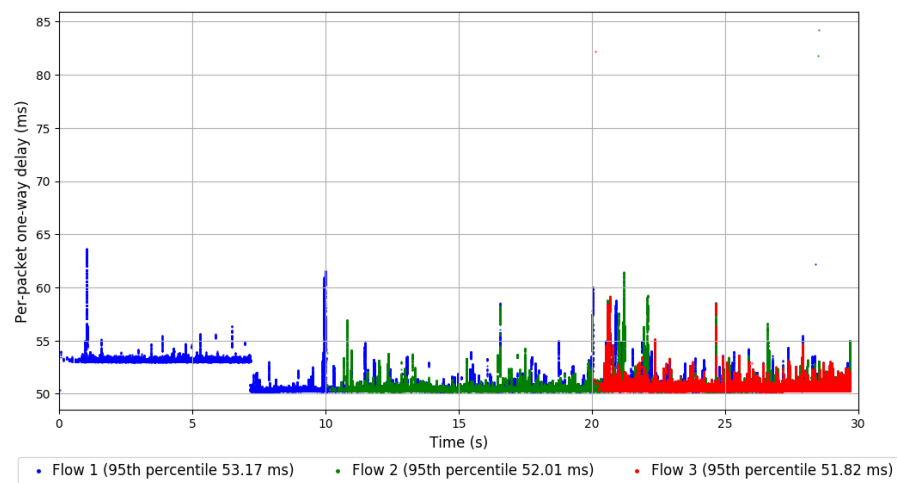
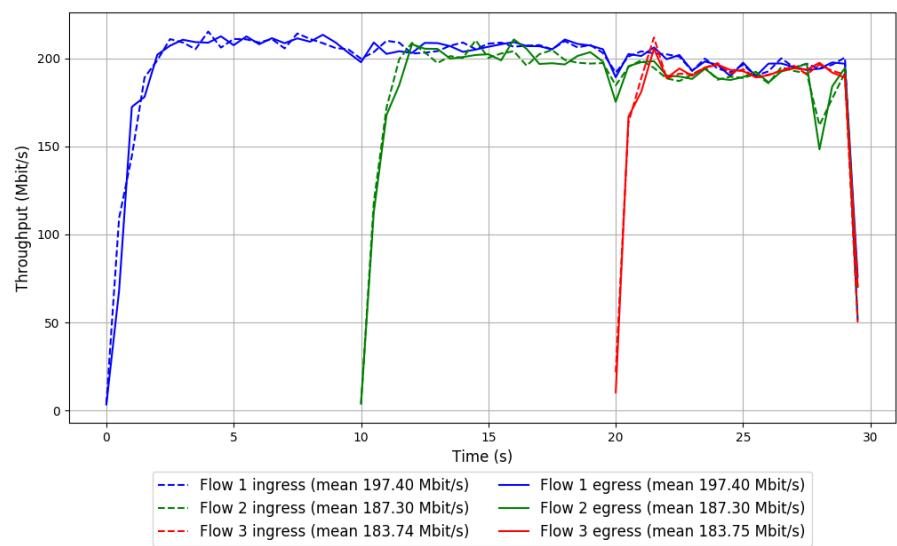
-- Flow 3:

Average throughput: 183.75 Mbit/s

95th percentile per-packet one-way delay: 51.817 ms

Loss rate: 0.01%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-10 00:25:24

End at: 2018-01-10 00:25:54

Below is generated by plot.py at 2018-01-10 03:46:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 368.90 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 187.11 Mbit/s

95th percentile per-packet one-way delay: 52.437 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 187.32 Mbit/s

95th percentile per-packet one-way delay: 54.086 ms

Loss rate: 0.00%

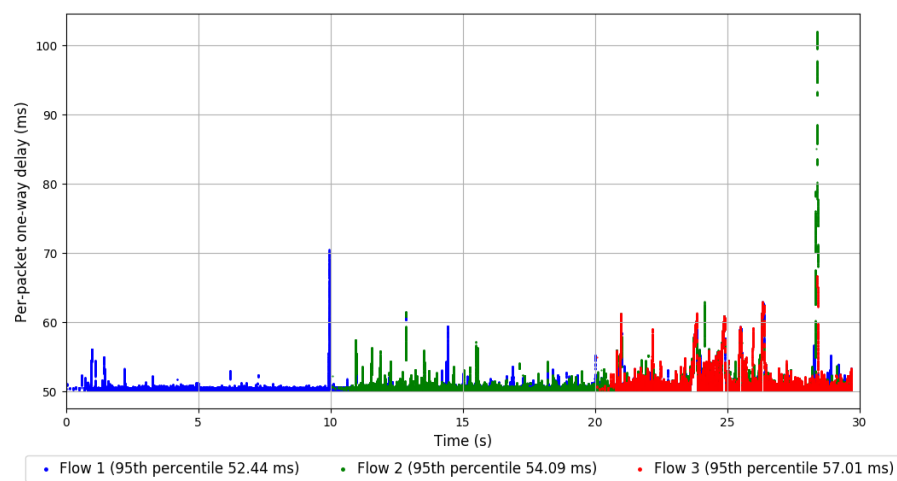
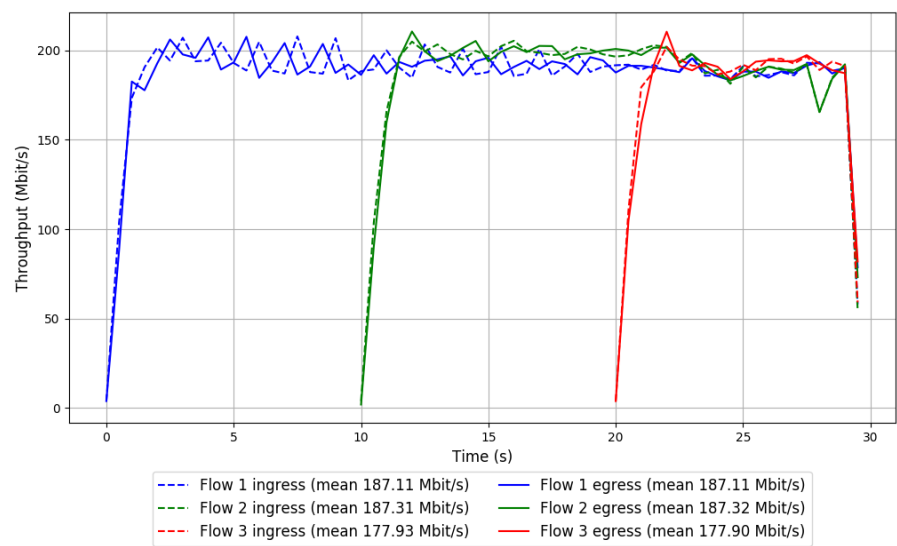
-- Flow 3:

Average throughput: 177.90 Mbit/s

95th percentile per-packet one-way delay: 57.005 ms

Loss rate: 0.01%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-10 00:39:38

End at: 2018-01-10 00:40:08

Below is generated by plot.py at 2018-01-10 03:46:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 358.73 Mbit/s

95th percentile per-packet one-way delay: 54.824 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 182.05 Mbit/s

95th percentile per-packet one-way delay: 54.392 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 181.33 Mbit/s

95th percentile per-packet one-way delay: 55.541 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 175.47 Mbit/s

95th percentile per-packet one-way delay: 54.801 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

