

Pantheon Report

Generated at 2017-10-12 16:07:52 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

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

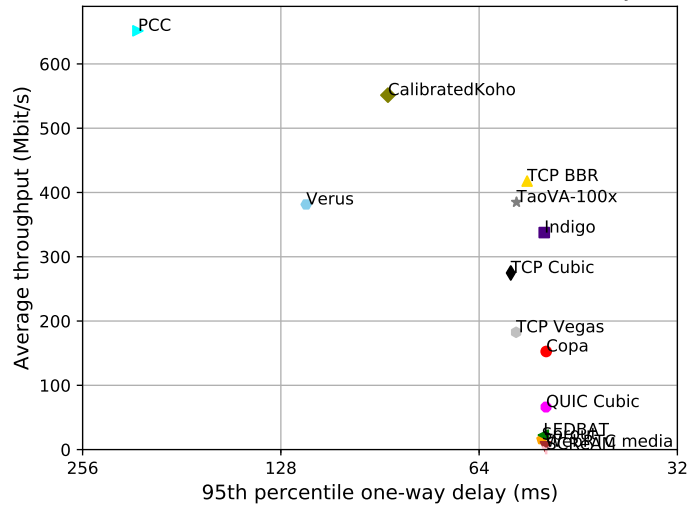
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

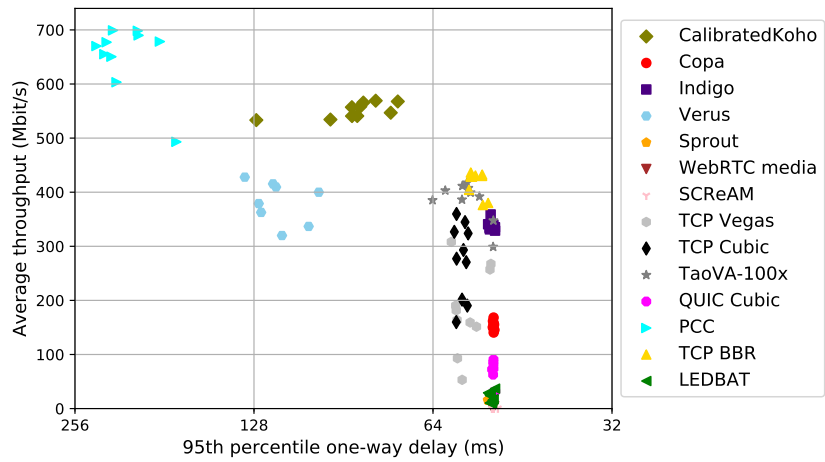
Git summary:

```
branch: indigos @ 45998d6404be7c5106956530acb9cfc43bd06e7d
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fab936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
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 London Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



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



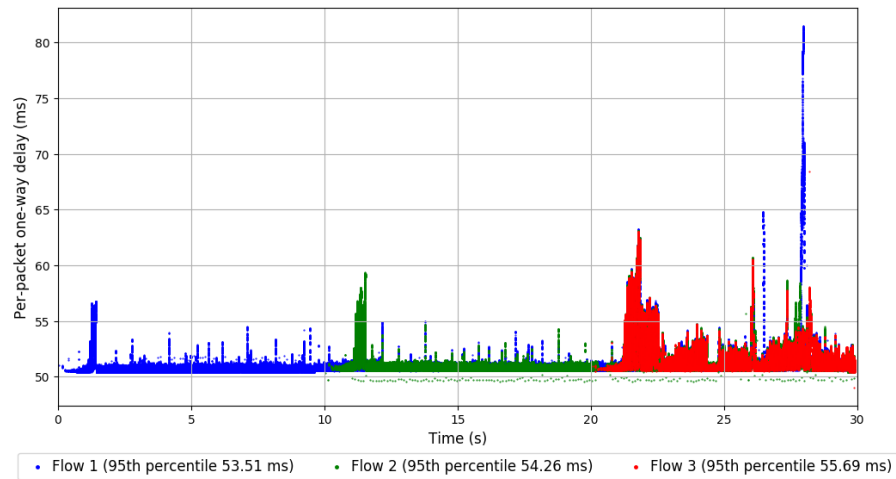
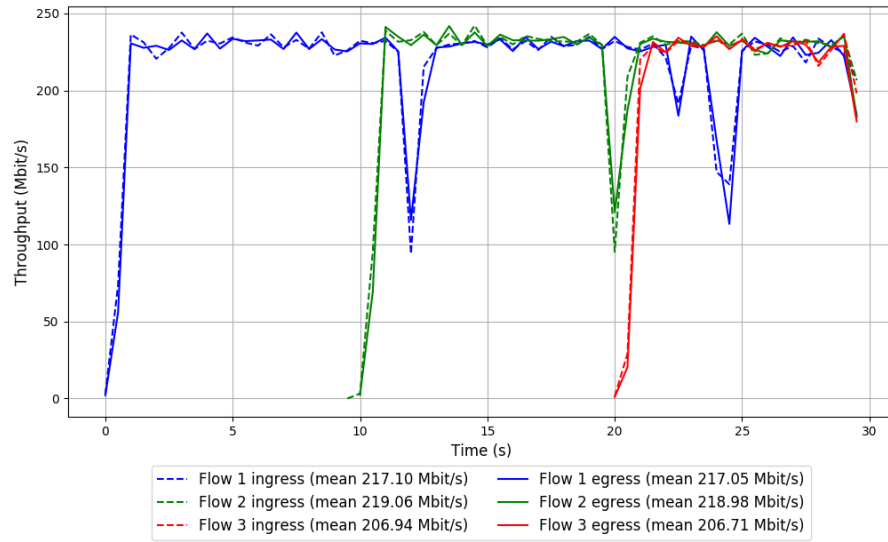
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	212.85	206.62	205.72	54.09	53.25	53.34	0.35	0.56	0.97
TCP Cubic	10	144.95	135.03	122.00	56.54	56.96	55.28	0.24	0.50	1.20
LEDBAT	10	11.07	14.19	8.41	589.26	51.06	51.06	0.71	0.83	1.84
PCC	10	501.26	188.99	72.10	550.59	142.18	123.54	6.46	2.11	2.75
QUIC Cubic	8	29.96	38.57	28.08	50.57	50.38	50.46	0.27	0.64	1.79
SCReAM	10	0.22	0.22	0.22	50.48	50.53	50.29	0.34	0.42	0.89
WebRTC media	10	2.28	1.48	0.62	50.65	50.49	50.43	0.39	0.70	1.50
Sprout	10	7.98	7.85	7.51	51.41	51.41	51.28	0.31	0.46	1.18
TaoVA-100x	10	192.89	217.17	188.41	53.18	55.94	65.98	0.29	0.49	1.25
TCP Vegas	10	106.87	76.62	75.10	54.94	53.93	54.82	0.22	0.46	1.06
Verus	8	222.89	174.86	114.66	111.00	114.76	140.16	0.92	1.13	1.69
Copa	10	78.32	76.47	90.08	50.58	50.62	50.42	0.26	0.47	1.13
CalibratedKoho	10	325.61	262.36	156.09	82.75	96.27	91.95	0.31	0.47	2.29
Indigo	10	179.69	167.79	143.35	50.92	51.37	50.54	0.33	0.51	1.09

```
Run 1: Statistics of TCP BBR

Start at: 2017-10-12 10:22:14
End at: 2017-10-12 10:22:44

# Below is generated by plot.py at 2017-10-12 14:46:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 430.83 Mbit/s
95th percentile per-packet one-way delay: 54.298 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 217.05 Mbit/s
95th percentile per-packet one-way delay: 53.514 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 218.98 Mbit/s
95th percentile per-packet one-way delay: 54.259 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 206.71 Mbit/s
95th percentile per-packet one-way delay: 55.691 ms
Loss rate: 1.13%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-10-12 10:34:46

End at: 2017-10-12 10:35:16

Below is generated by plot.py at 2017-10-12 14:46:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 429.83 Mbit/s

95th percentile per-packet one-way delay: 55.325 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 216.76 Mbit/s

95th percentile per-packet one-way delay: 56.060 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 215.83 Mbit/s

95th percentile per-packet one-way delay: 53.159 ms

Loss rate: 0.62%

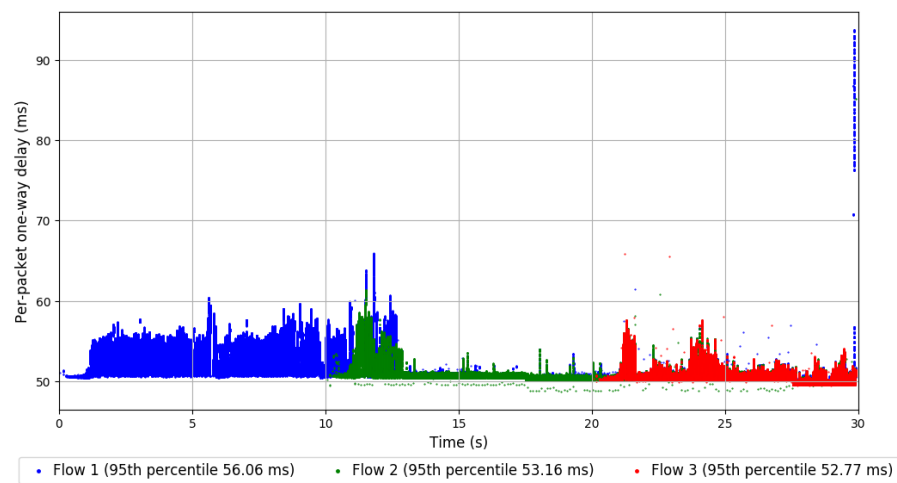
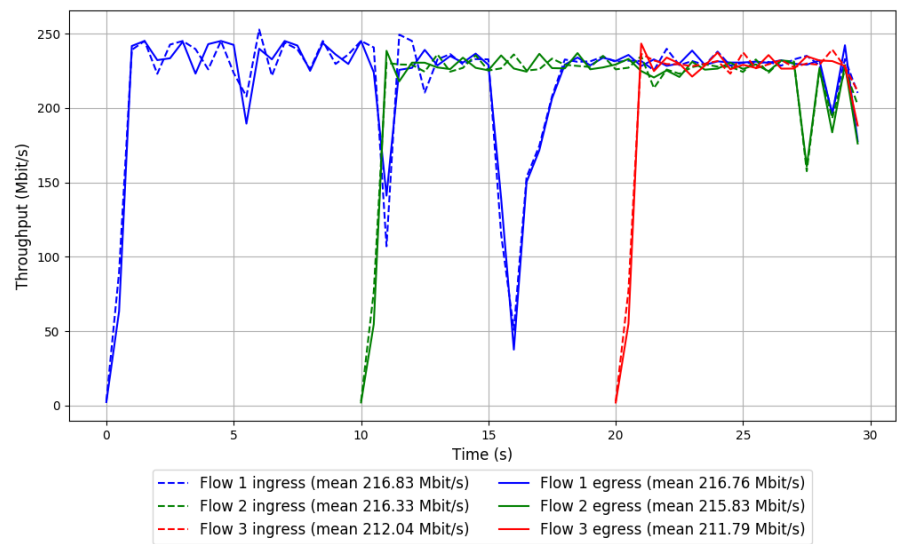
-- Flow 3:

Average throughput: 211.79 Mbit/s

95th percentile per-packet one-way delay: 52.769 ms

Loss rate: 1.16%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-10-12 10:47:36

End at: 2017-10-12 10:48:06

Below is generated by plot.py at 2017-10-12 14:46:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 430.09 Mbit/s

95th percentile per-packet one-way delay: 52.927 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 221.37 Mbit/s

95th percentile per-packet one-way delay: 51.990 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 215.15 Mbit/s

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

Loss rate: 0.54%

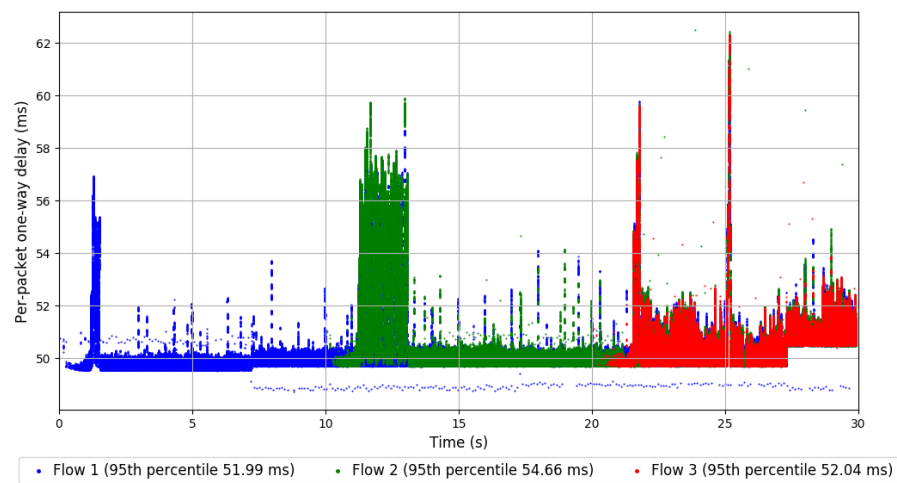
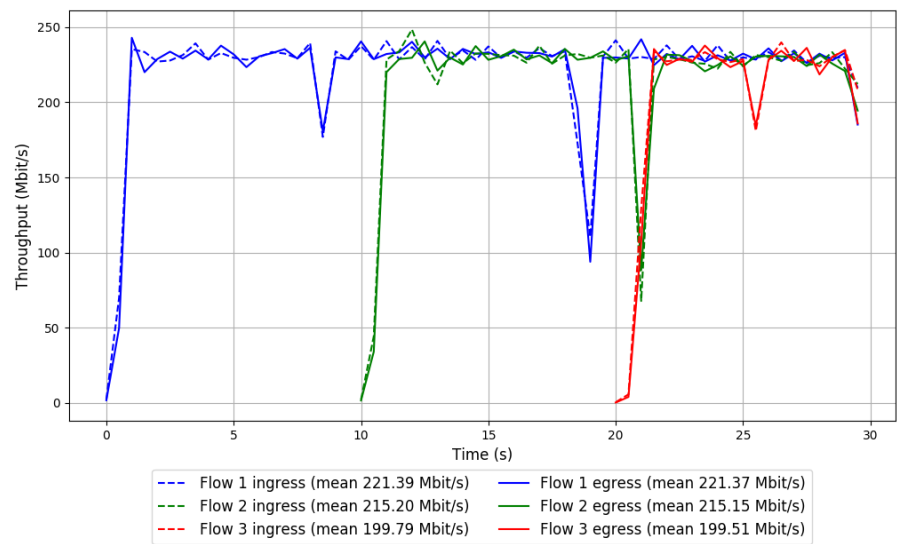
-- Flow 3:

Average throughput: 199.51 Mbit/s

95th percentile per-packet one-way delay: 52.038 ms

Loss rate: 1.16%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-10-12 11:00:27

End at: 2017-10-12 11:00:57

Below is generated by plot.py at 2017-10-12 14:46:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 428.71 Mbit/s

95th percentile per-packet one-way delay: 55.004 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 219.96 Mbit/s

95th percentile per-packet one-way delay: 55.403 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 210.49 Mbit/s

95th percentile per-packet one-way delay: 53.956 ms

Loss rate: 0.56%

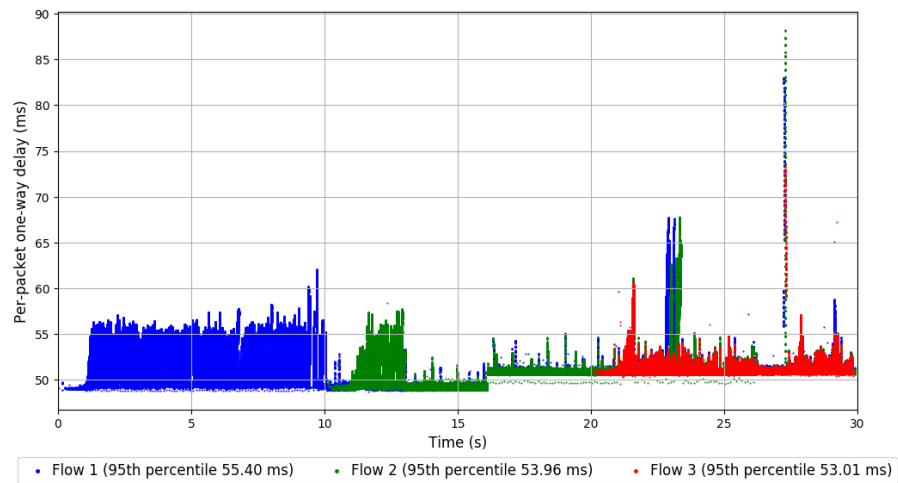
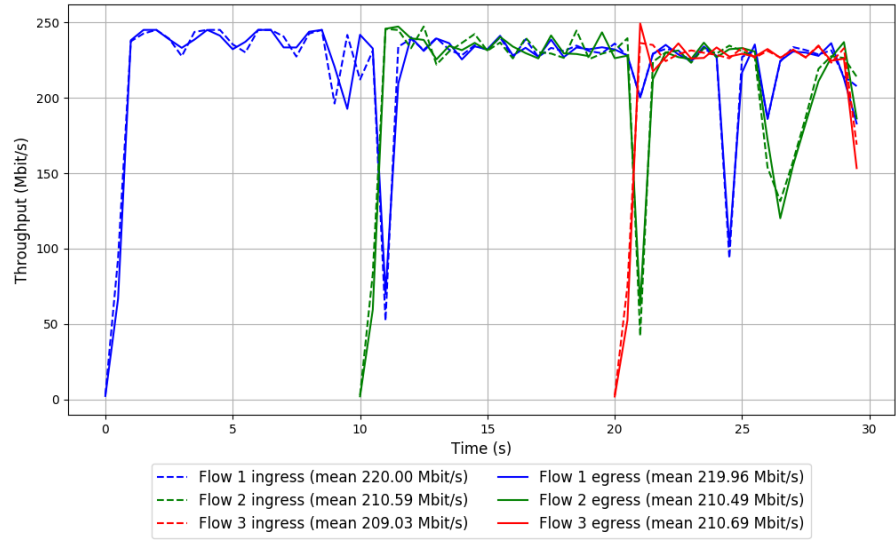
-- Flow 3:

Average throughput: 210.69 Mbit/s

95th percentile per-packet one-way delay: 53.014 ms

Loss rate: 1.08%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-10-12 11:13:29

End at: 2017-10-12 11:13:59

Below is generated by plot.py at 2017-10-12 14:46:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 432.60 Mbit/s

95th percentile per-packet one-way delay: 52.900 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 221.56 Mbit/s

95th percentile per-packet one-way delay: 52.332 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 212.48 Mbit/s

95th percentile per-packet one-way delay: 52.828 ms

Loss rate: 0.54%

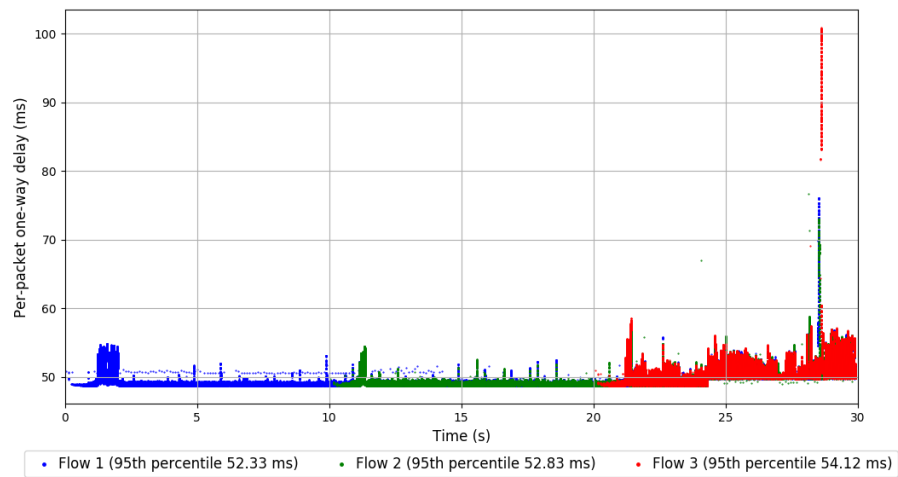
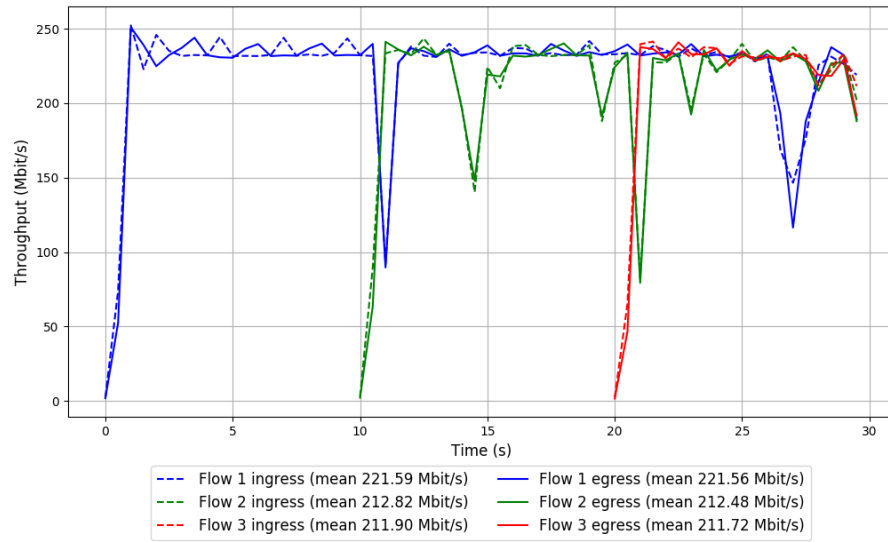
-- Flow 3:

Average throughput: 211.72 Mbit/s

95th percentile per-packet one-way delay: 54.121 ms

Loss rate: 1.11%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-10-12 11:26:08

End at: 2017-10-12 11:26:38

Below is generated by plot.py at 2017-10-12 14:46:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 436.37 Mbit/s

95th percentile per-packet one-way delay: 55.284 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 220.37 Mbit/s

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

Loss rate: 0.36%

-- Flow 2:

Average throughput: 220.57 Mbit/s

95th percentile per-packet one-way delay: 52.145 ms

Loss rate: 0.53%

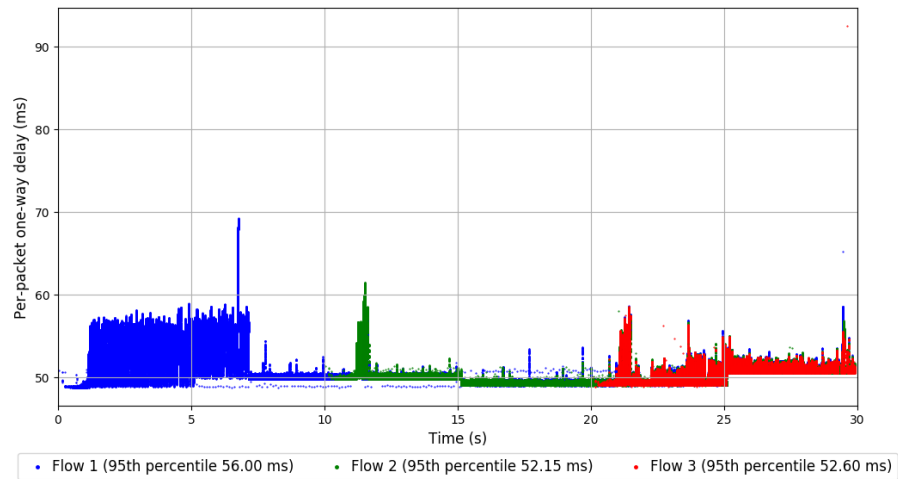
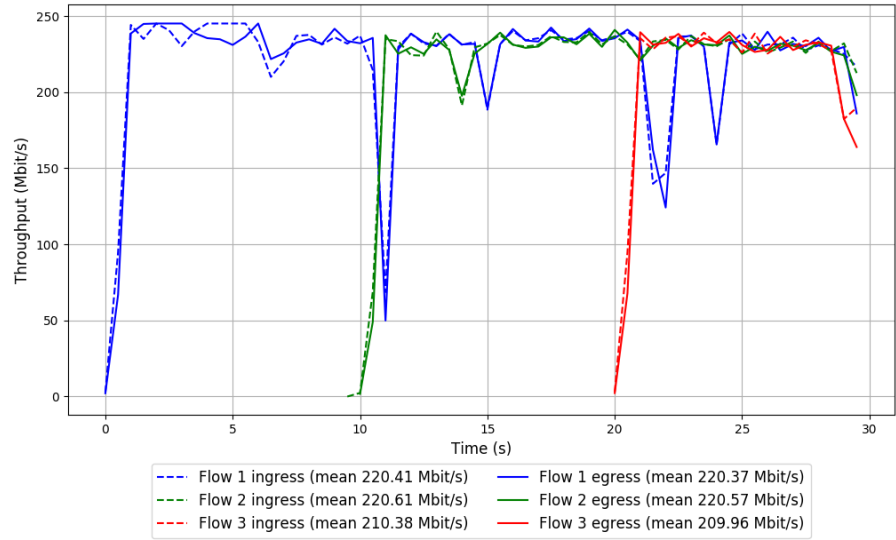
-- Flow 3:

Average throughput: 209.96 Mbit/s

95th percentile per-packet one-way delay: 52.603 ms

Loss rate: 1.13%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-10-12 11:39:03

End at: 2017-10-12 11:39:33

Below is generated by plot.py at 2017-10-12 14:46:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 376.33 Mbit/s

95th percentile per-packet one-way delay: 52.767 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 191.06 Mbit/s

95th percentile per-packet one-way delay: 52.055 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 172.37 Mbit/s

95th percentile per-packet one-way delay: 53.442 ms

Loss rate: 0.71%

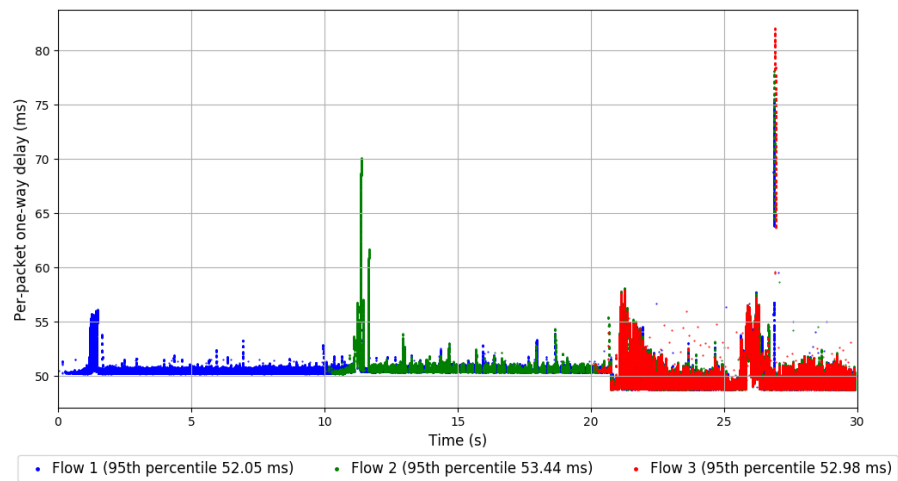
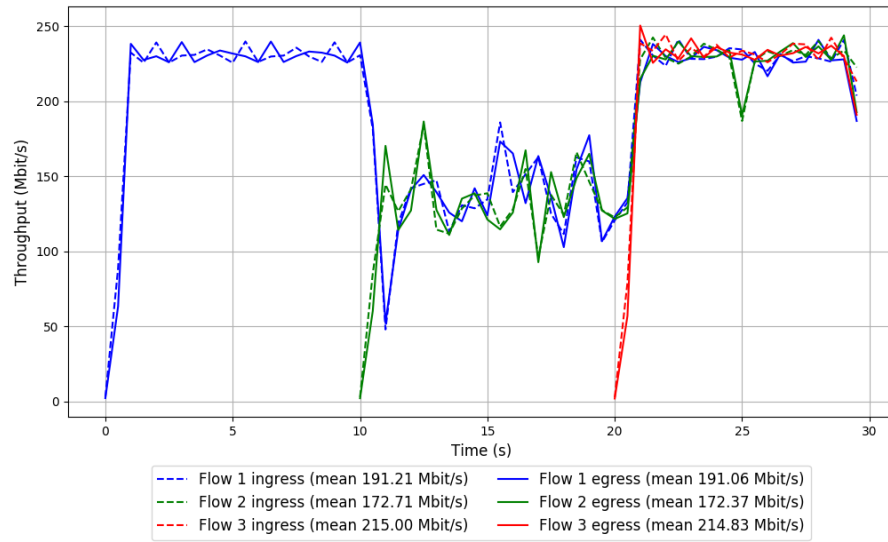
-- Flow 3:

Average throughput: 214.83 Mbit/s

95th percentile per-packet one-way delay: 52.985 ms

Loss rate: 1.12%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-10-12 11:51:25

End at: 2017-10-12 11:51:55

Below is generated by plot.py at 2017-10-12 14:46:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 380.13 Mbit/s

95th percentile per-packet one-way delay: 51.698 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 193.08 Mbit/s

95th percentile per-packet one-way delay: 51.730 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 181.46 Mbit/s

95th percentile per-packet one-way delay: 51.482 ms

Loss rate: 0.48%

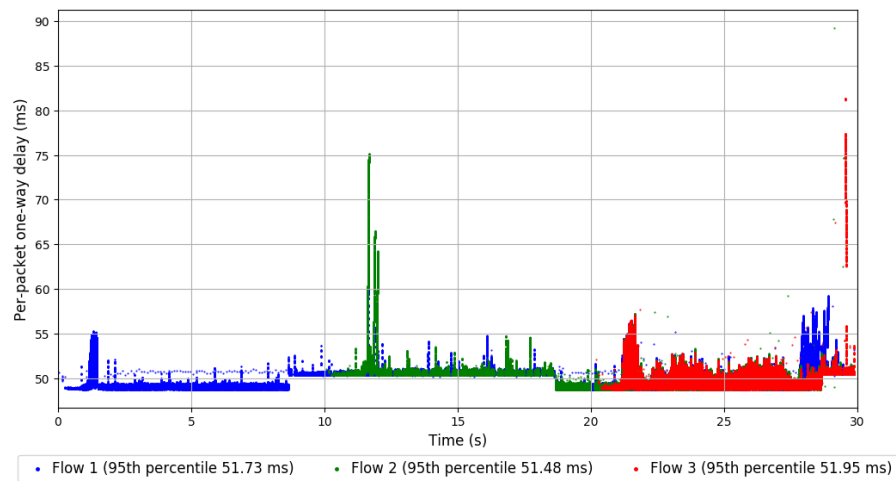
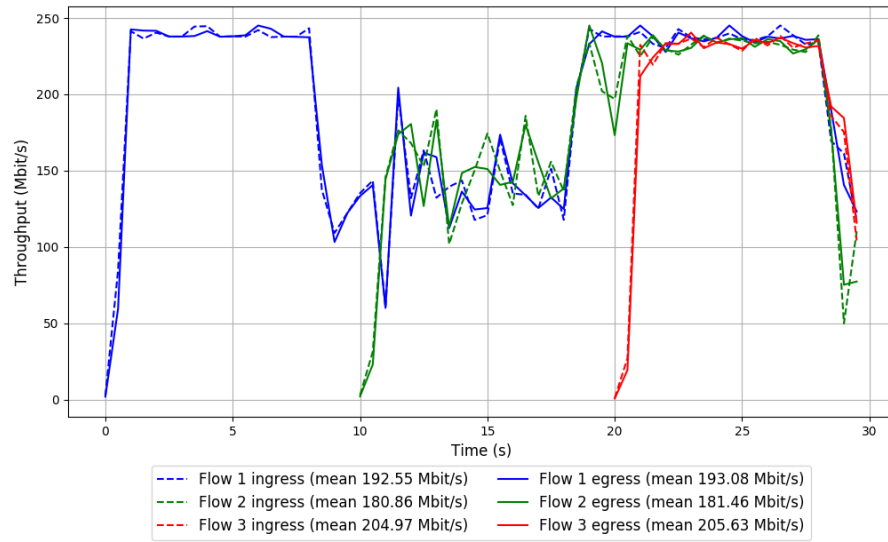
-- Flow 3:

Average throughput: 205.63 Mbit/s

95th percentile per-packet one-way delay: 51.955 ms

Loss rate: 0.01%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-10-12 12:04:07

End at: 2017-10-12 12:04:37

Below is generated by plot.py at 2017-10-12 14:52:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 404.39 Mbit/s

95th percentile per-packet one-way delay: 55.668 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 210.14 Mbit/s

95th percentile per-packet one-way delay: 56.010 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 202.11 Mbit/s

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

Loss rate: 0.59%

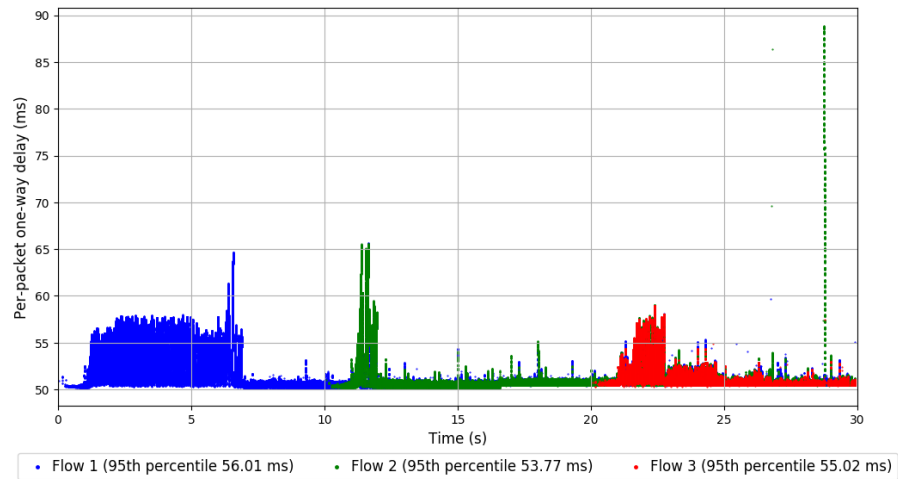
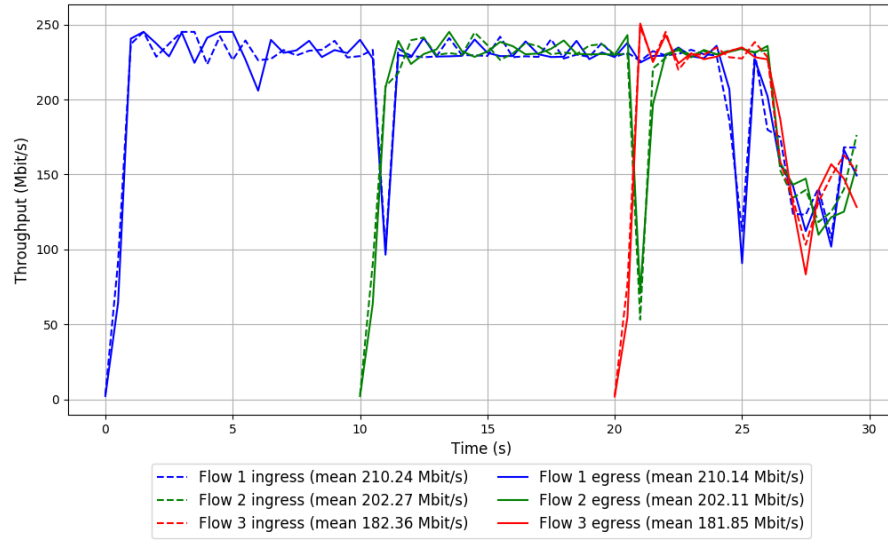
-- Flow 3:

Average throughput: 181.85 Mbit/s

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

Loss rate: 1.30%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-10-12 12:16:54

End at: 2017-10-12 12:17:24

Below is generated by plot.py at 2017-10-12 14:53:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 428.69 Mbit/s

95th percentile per-packet one-way delay: 55.285 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 217.16 Mbit/s

95th percentile per-packet one-way delay: 55.797 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 216.80 Mbit/s

95th percentile per-packet one-way delay: 52.828 ms

Loss rate: 0.54%

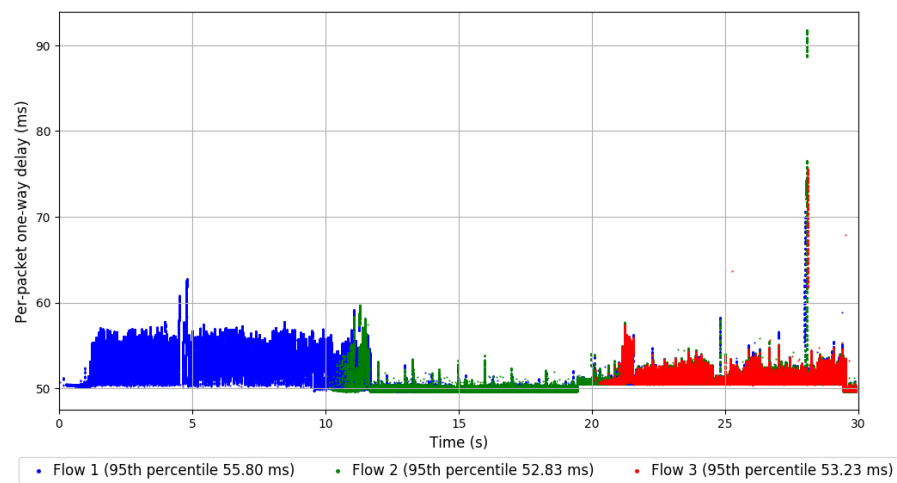
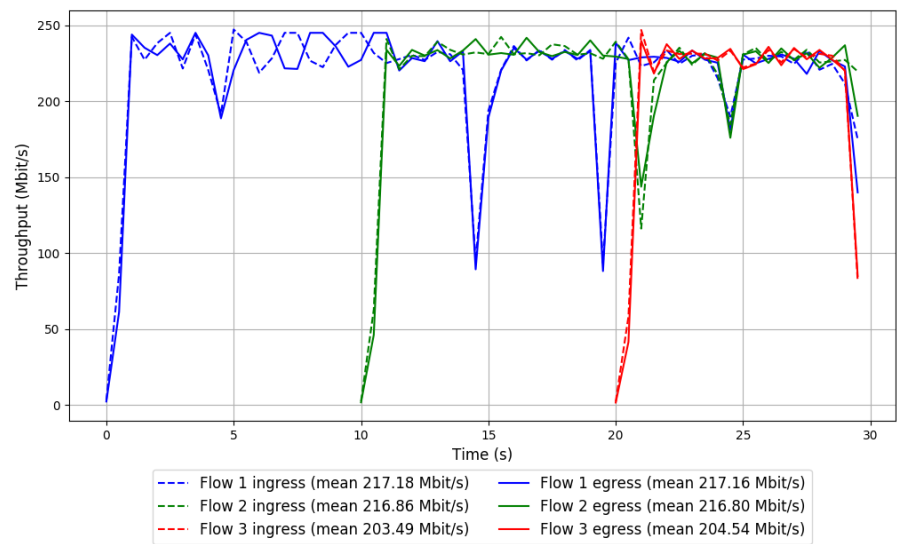
-- Flow 3:

Average throughput: 204.54 Mbit/s

95th percentile per-packet one-way delay: 53.226 ms

Loss rate: 0.51%

Run 10: Report of TCP BBR — Data Link

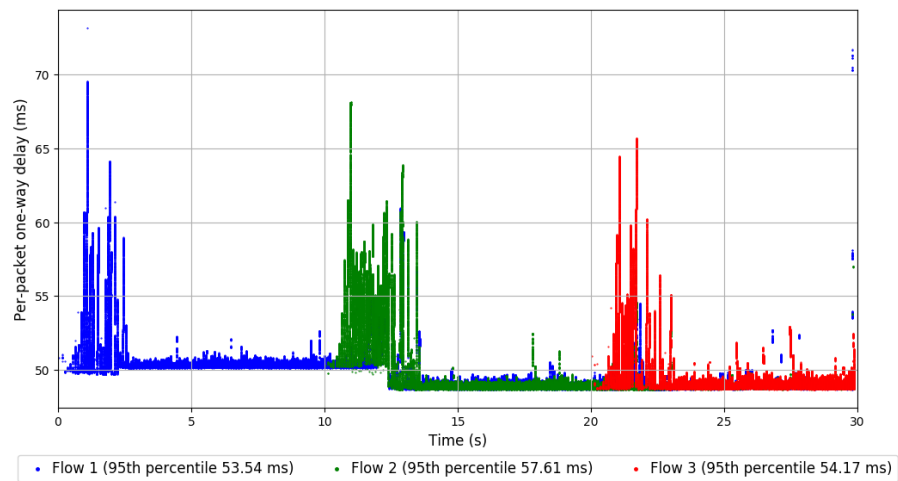
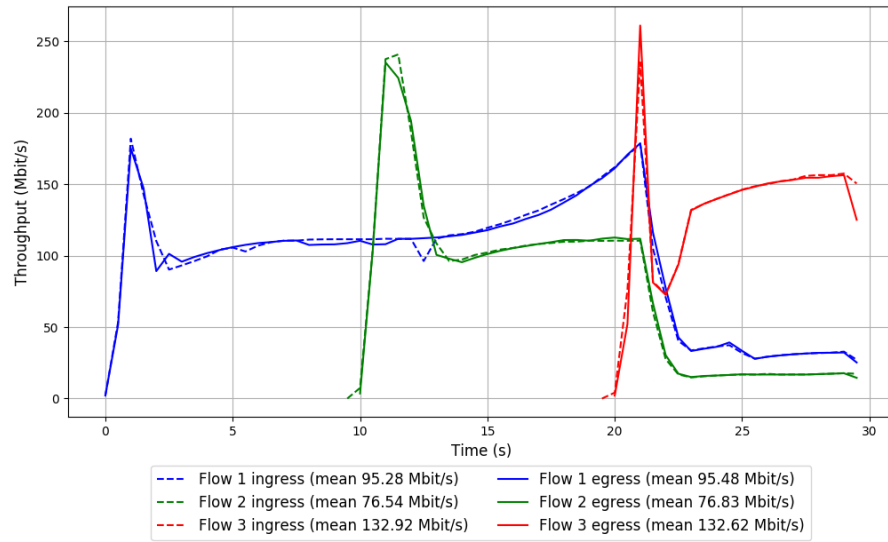


```
Run 1: Statistics of TCP Cubic

Start at: 2017-10-12 10:25:01
End at: 2017-10-12 10:25:31

# Below is generated by plot.py at 2017-10-12 14:53:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 190.32 Mbit/s
95th percentile per-packet one-way delay: 56.030 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 95.48 Mbit/s
95th percentile per-packet one-way delay: 53.539 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 76.83 Mbit/s
95th percentile per-packet one-way delay: 57.607 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 132.62 Mbit/s
95th percentile per-packet one-way delay: 54.167 ms
Loss rate: 1.25%
```

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-10-12 10:37:32

End at: 2017-10-12 10:38:02

Below is generated by plot.py at 2017-10-12 14:53:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 323.82 Mbit/s

95th percentile per-packet one-way delay: 55.851 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 176.41 Mbit/s

95th percentile per-packet one-way delay: 56.270 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 158.72 Mbit/s

95th percentile per-packet one-way delay: 51.419 ms

Loss rate: 0.43%

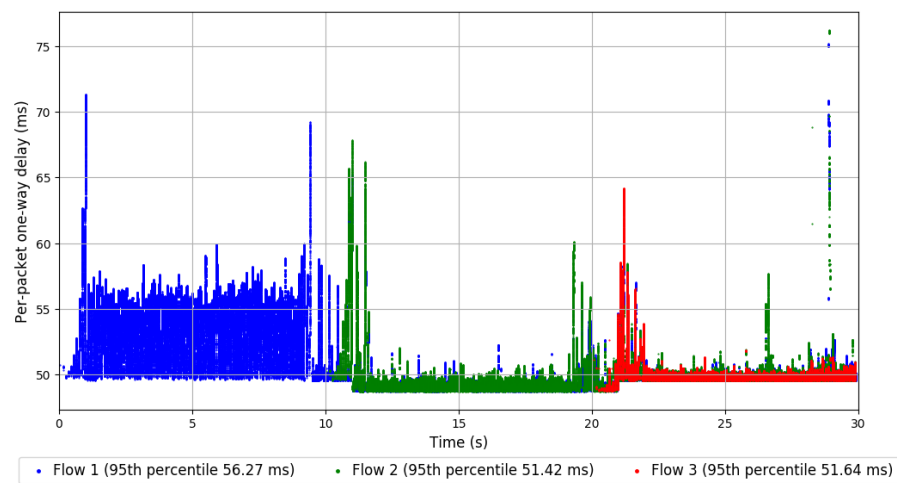
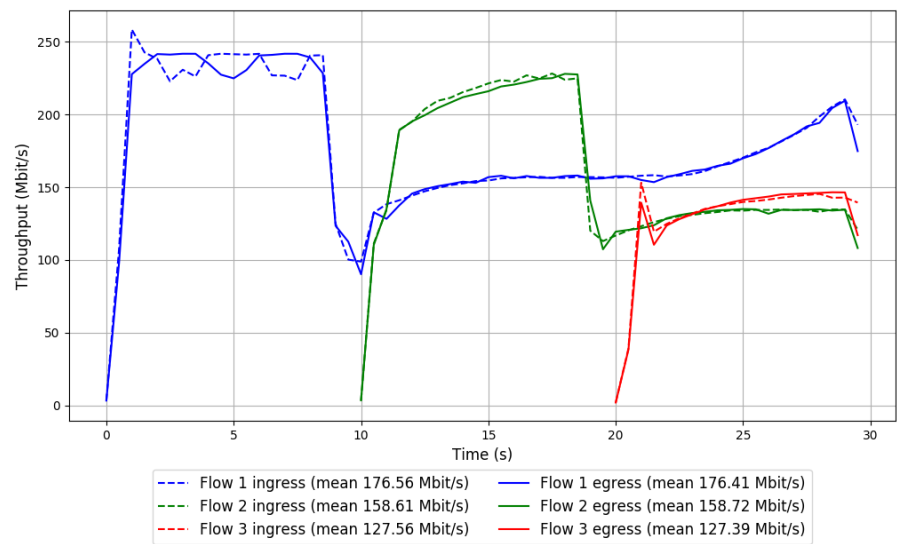
-- Flow 3:

Average throughput: 127.39 Mbit/s

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

Loss rate: 1.15%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-10-12 10:50:27

End at: 2017-10-12 10:50:57

Below is generated by plot.py at 2017-10-12 14:53:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 359.74 Mbit/s

95th percentile per-packet one-way delay: 58.425 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 160.40 Mbit/s

95th percentile per-packet one-way delay: 57.696 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 226.53 Mbit/s

95th percentile per-packet one-way delay: 58.821 ms

Loss rate: 0.53%

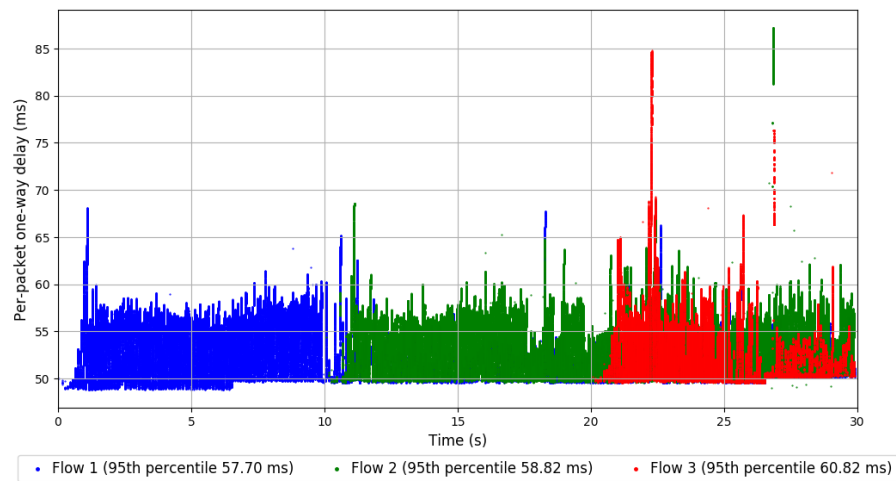
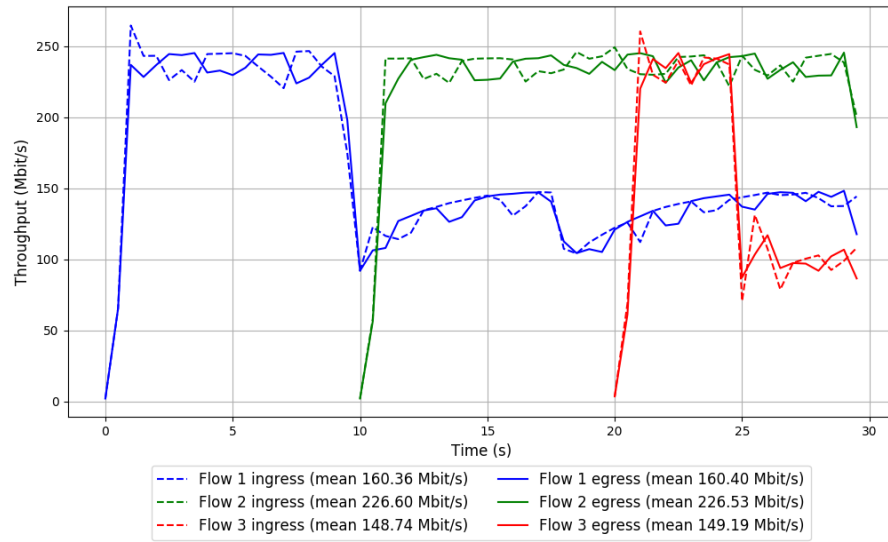
-- Flow 3:

Average throughput: 149.19 Mbit/s

95th percentile per-packet one-way delay: 60.816 ms

Loss rate: 0.74%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-10-12 11:03:13

End at: 2017-10-12 11:03:43

Below is generated by plot.py at 2017-10-12 14:53:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 344.74 Mbit/s

95th percentile per-packet one-way delay: 56.532 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 173.94 Mbit/s

95th percentile per-packet one-way delay: 56.442 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 190.67 Mbit/s

95th percentile per-packet one-way delay: 57.022 ms

Loss rate: 0.38%

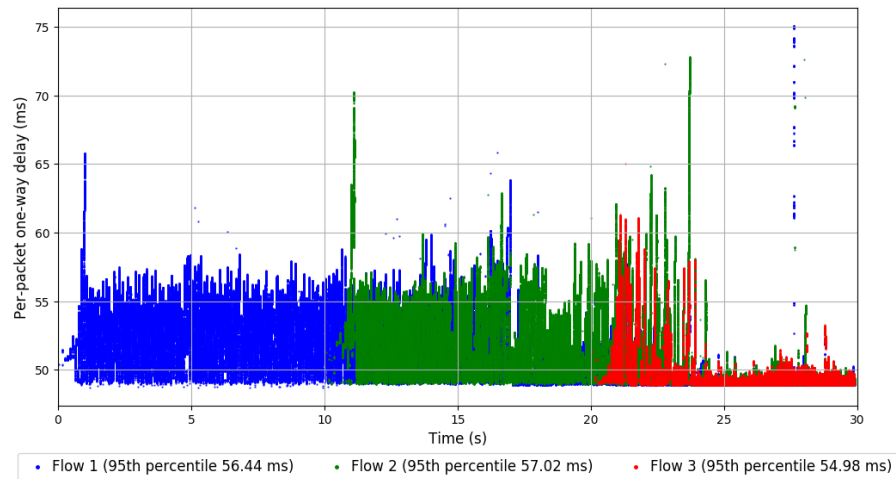
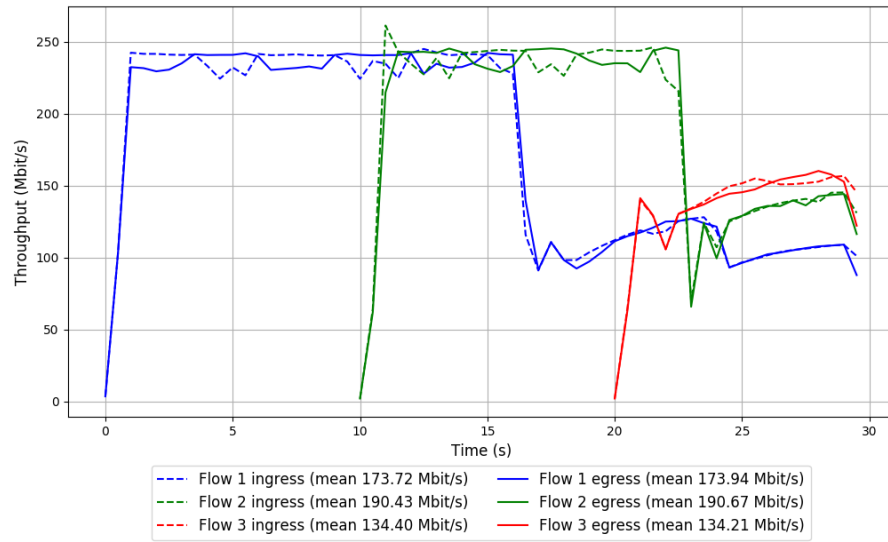
-- Flow 3:

Average throughput: 134.21 Mbit/s

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

Loss rate: 1.15%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-10-12 11:16:10

End at: 2017-10-12 11:16:40

Below is generated by plot.py at 2017-10-12 14:53:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 270.69 Mbit/s

95th percentile per-packet one-way delay: 56.266 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 149.71 Mbit/s

95th percentile per-packet one-way delay: 55.364 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 124.57 Mbit/s

95th percentile per-packet one-way delay: 57.764 ms

Loss rate: 0.52%

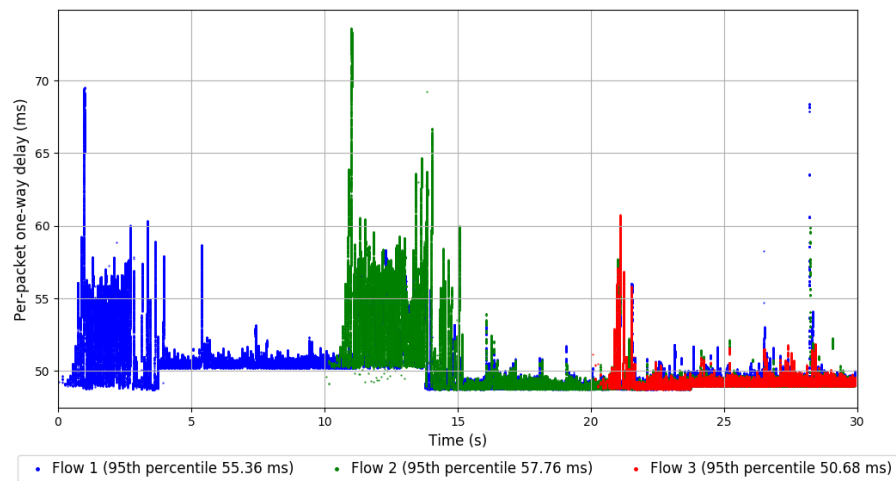
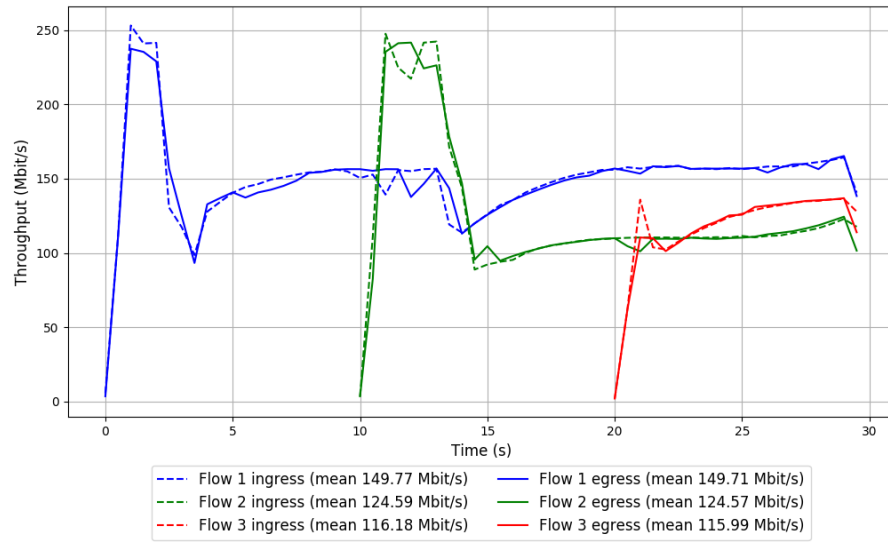
-- Flow 3:

Average throughput: 115.99 Mbit/s

95th percentile per-packet one-way delay: 50.683 ms

Loss rate: 1.18%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-10-12 11:28:57

End at: 2017-10-12 11:29:27

Below is generated by plot.py at 2017-10-12 14:53:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 326.73 Mbit/s

95th percentile per-packet one-way delay: 58.925 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 150.68 Mbit/s

95th percentile per-packet one-way delay: 57.337 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 160.00 Mbit/s

95th percentile per-packet one-way delay: 58.046 ms

Loss rate: 0.29%

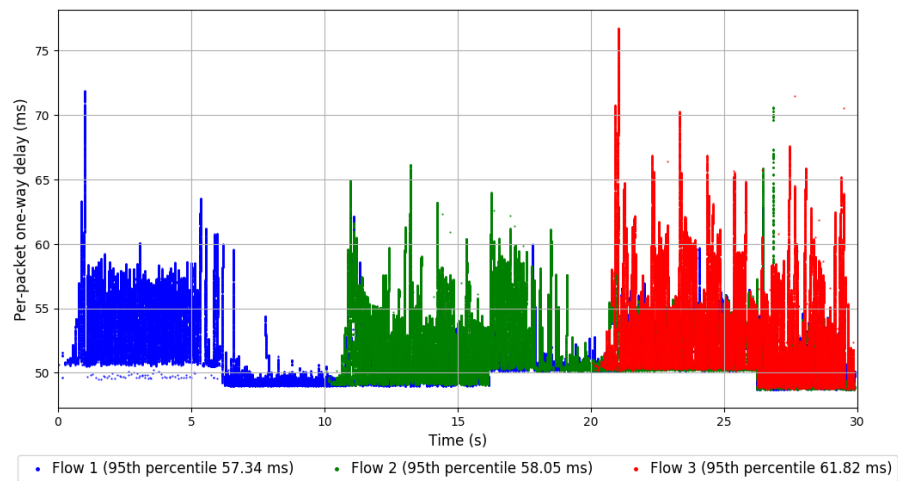
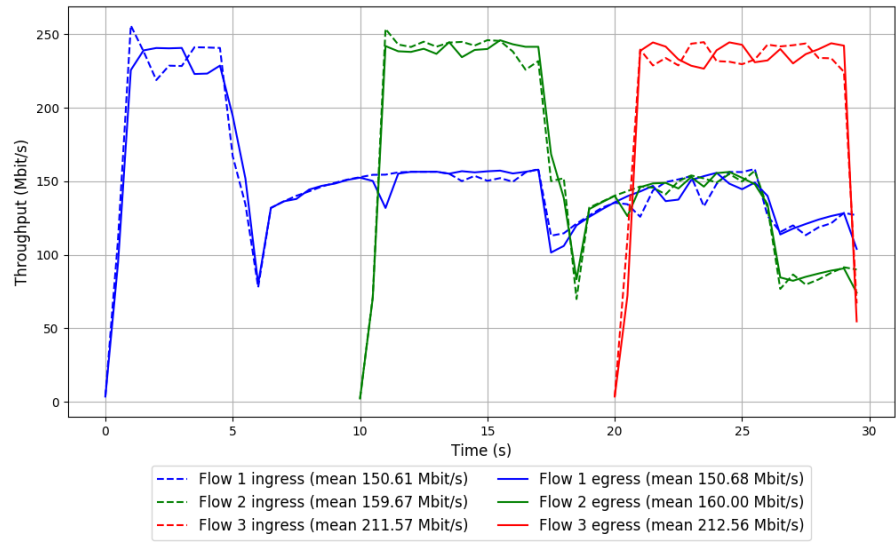
-- Flow 3:

Average throughput: 212.56 Mbit/s

95th percentile per-packet one-way delay: 61.822 ms

Loss rate: 0.56%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-10-12 11:41:45

End at: 2017-10-12 11:42:15

Below is generated by plot.py at 2017-10-12 14:55:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 277.09 Mbit/s

95th percentile per-packet one-way delay: 58.413 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 129.24 Mbit/s

95th percentile per-packet one-way delay: 57.147 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 148.22 Mbit/s

95th percentile per-packet one-way delay: 58.994 ms

Loss rate: 0.39%

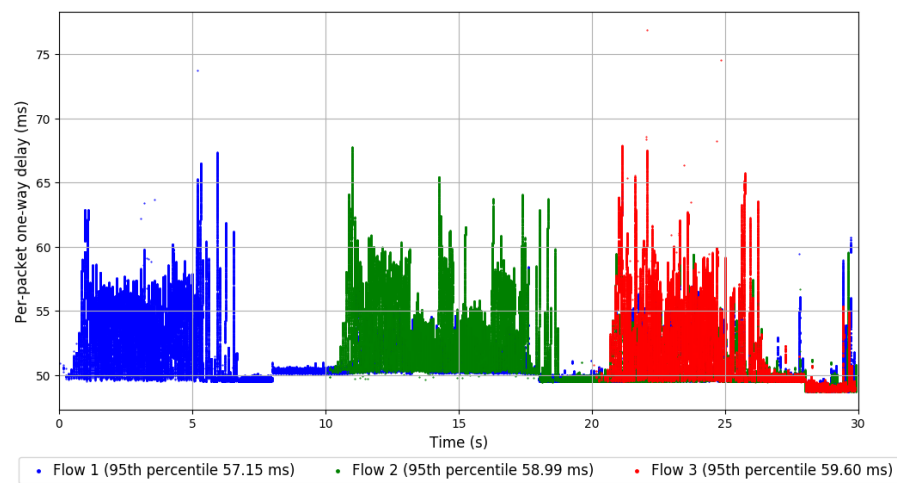
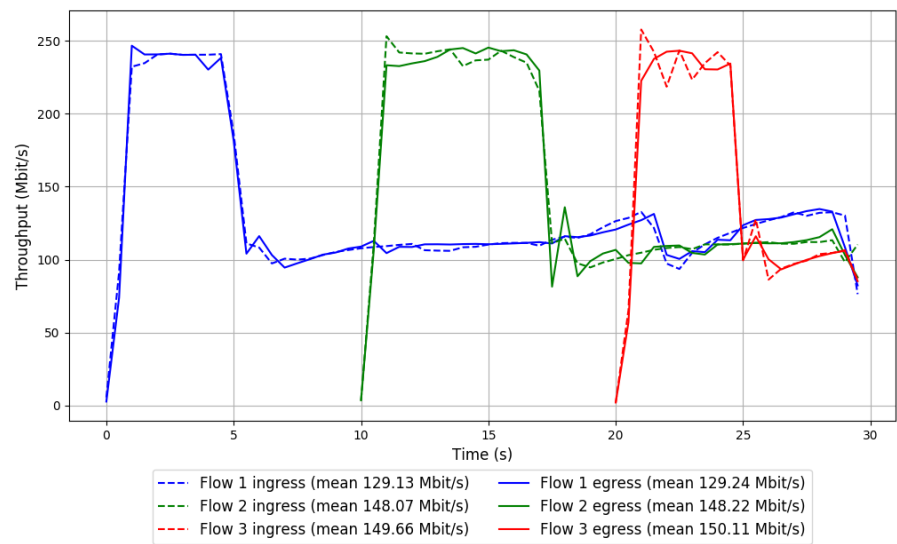
-- Flow 3:

Average throughput: 150.11 Mbit/s

95th percentile per-packet one-way delay: 59.603 ms

Loss rate: 0.73%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-10-12 11:54:13

End at: 2017-10-12 11:54:43

Below is generated by plot.py at 2017-10-12 14:55:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 201.43 Mbit/s

95th percentile per-packet one-way delay: 57.188 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 125.58 Mbit/s

95th percentile per-packet one-way delay: 55.867 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 112.39 Mbit/s

95th percentile per-packet one-way delay: 58.055 ms

Loss rate: 0.04%

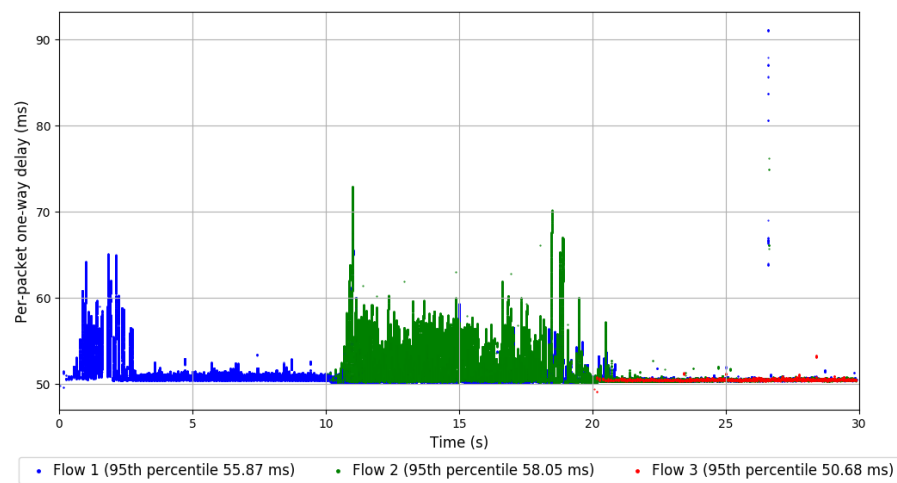
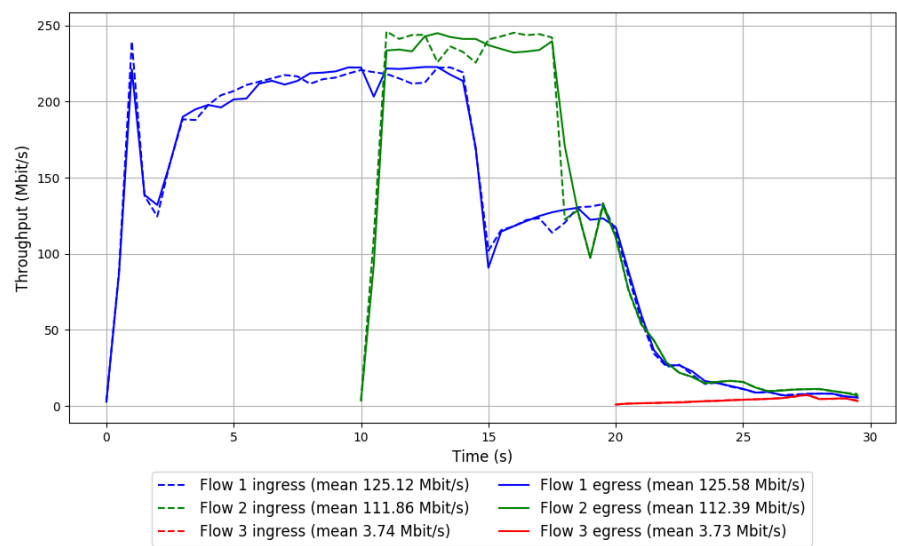
-- Flow 3:

Average throughput: 3.73 Mbit/s

95th percentile per-packet one-way delay: 50.678 ms

Loss rate: 1.33%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-10-12 12:06:55

End at: 2017-10-12 12:07:25

Below is generated by plot.py at 2017-10-12 14:55:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 159.89 Mbit/s

95th percentile per-packet one-way delay: 58.476 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 80.98 Mbit/s

95th percentile per-packet one-way delay: 58.814 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 25.53 Mbit/s

95th percentile per-packet one-way delay: 54.954 ms

Loss rate: 1.78%

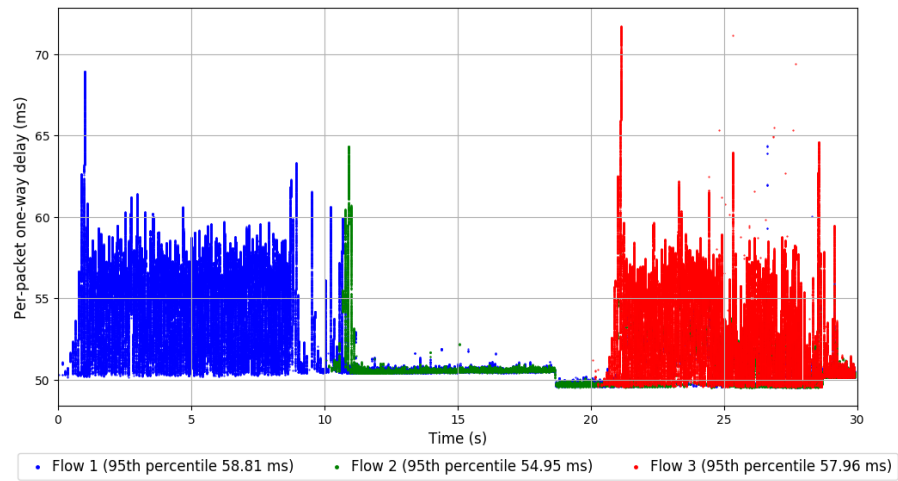
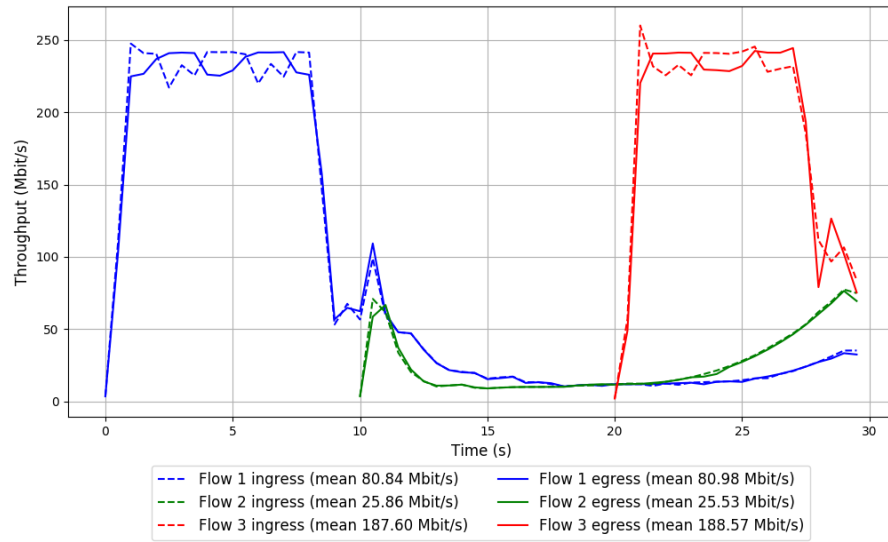
-- Flow 3:

Average throughput: 188.57 Mbit/s

95th percentile per-packet one-way delay: 57.963 ms

Loss rate: 0.52%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-10-12 12:19:39

End at: 2017-10-12 12:20:09

Below is generated by plot.py at 2017-10-12 14:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 293.17 Mbit/s

95th percentile per-packet one-way delay: 56.881 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 207.08 Mbit/s

95th percentile per-packet one-way delay: 56.898 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 126.81 Mbit/s

95th percentile per-packet one-way delay: 56.873 ms

Loss rate: 0.46%

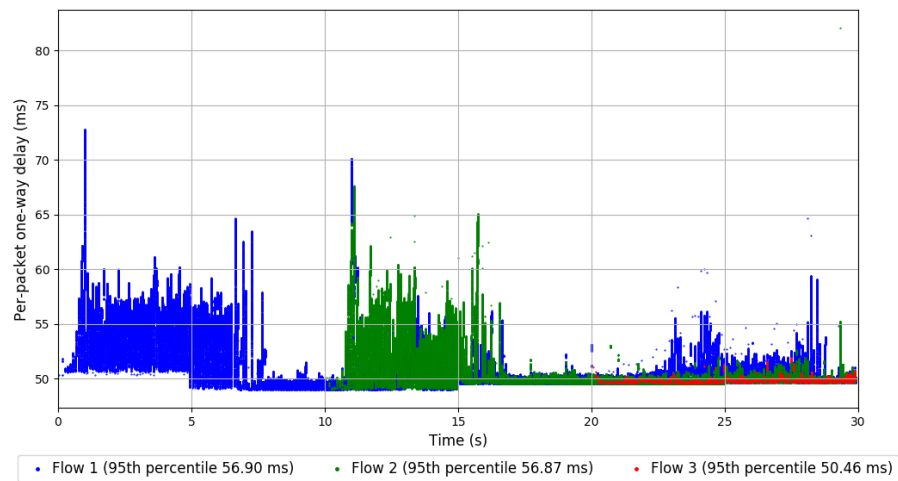
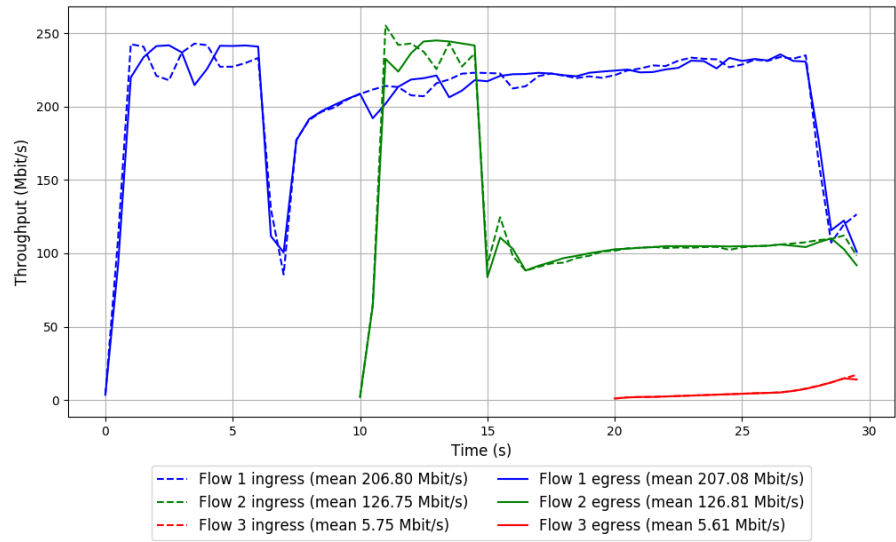
-- Flow 3:

Average throughput: 5.61 Mbit/s

95th percentile per-packet one-way delay: 50.463 ms

Loss rate: 3.43%

Run 10: Report of TCP Cubic — Data Link

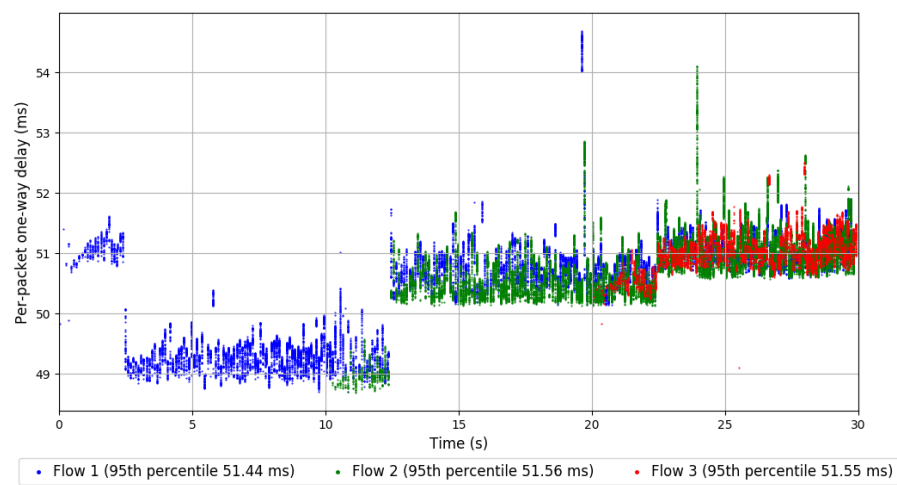
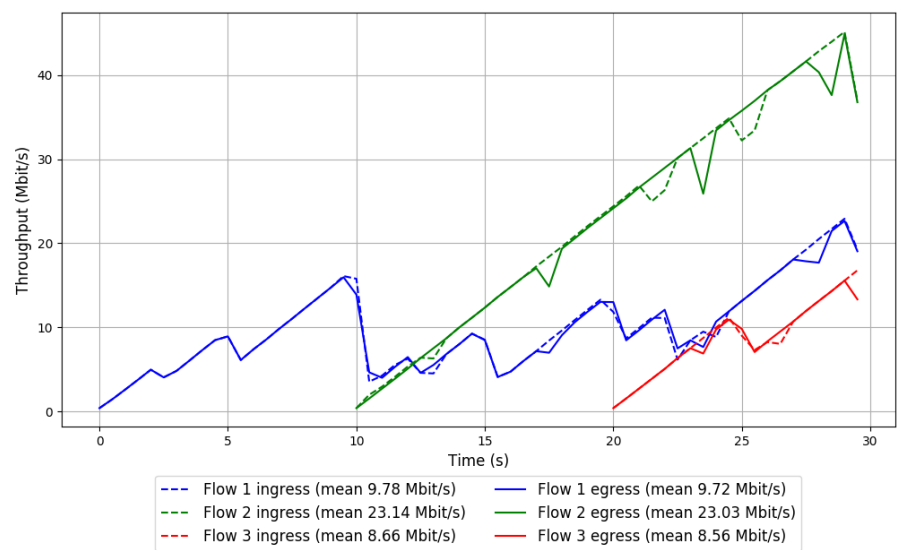


```
Run 1: Statistics of LEDBAT

Start at: 2017-10-12 10:25:51
End at: 2017-10-12 10:26:21

# Below is generated by plot.py at 2017-10-12 14:57:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.77 Mbit/s
95th percentile per-packet one-way delay: 51.520 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 9.72 Mbit/s
95th percentile per-packet one-way delay: 51.435 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 23.03 Mbit/s
95th percentile per-packet one-way delay: 51.560 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 8.56 Mbit/s
95th percentile per-packet one-way delay: 51.549 ms
Loss rate: 2.11%
```


Run 1: Report of LEDBAT — Data Link

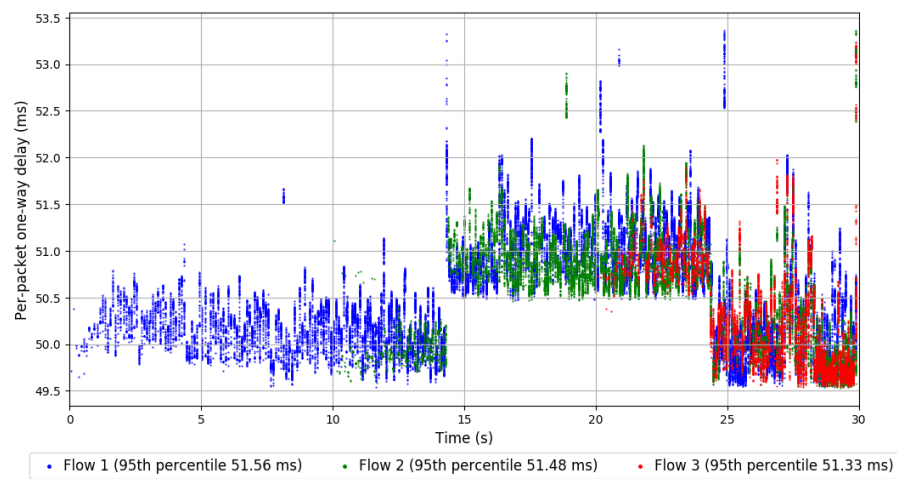
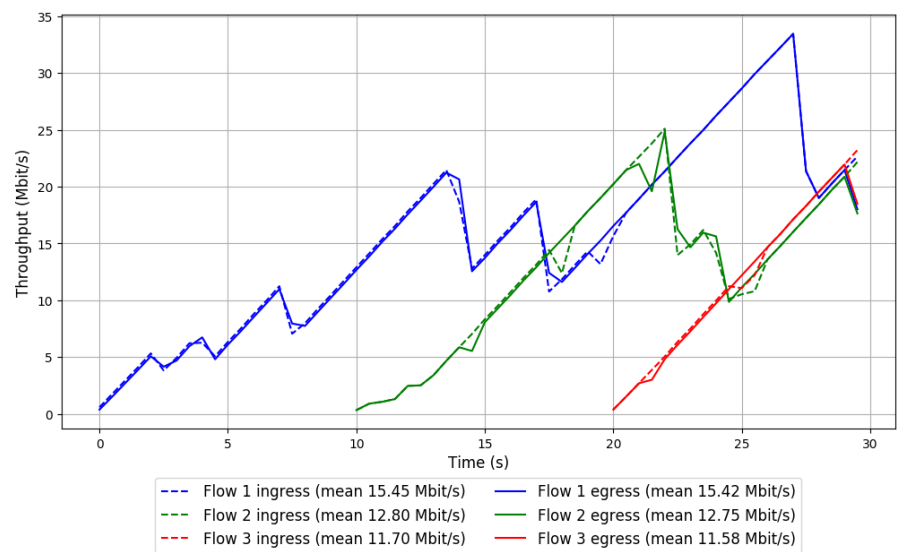


```
Run 2: Statistics of LEDBAT

Start at: 2017-10-12 10:38:29
End at: 2017-10-12 10:38:59

# Below is generated by plot.py at 2017-10-12 14:57:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.70 Mbit/s
95th percentile per-packet one-way delay: 51.506 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 15.42 Mbit/s
95th percentile per-packet one-way delay: 51.558 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 12.75 Mbit/s
95th percentile per-packet one-way delay: 51.476 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 11.58 Mbit/s
95th percentile per-packet one-way delay: 51.328 ms
Loss rate: 2.04%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-10-12 10:51:26

End at: 2017-10-12 10:51:56

Below is generated by plot.py at 2017-10-12 14:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.13 Mbit/s

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

Loss rate: 1.01%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 2197.896 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 11.73 Mbit/s

95th percentile per-packet one-way delay: 50.841 ms

Loss rate: 0.59%

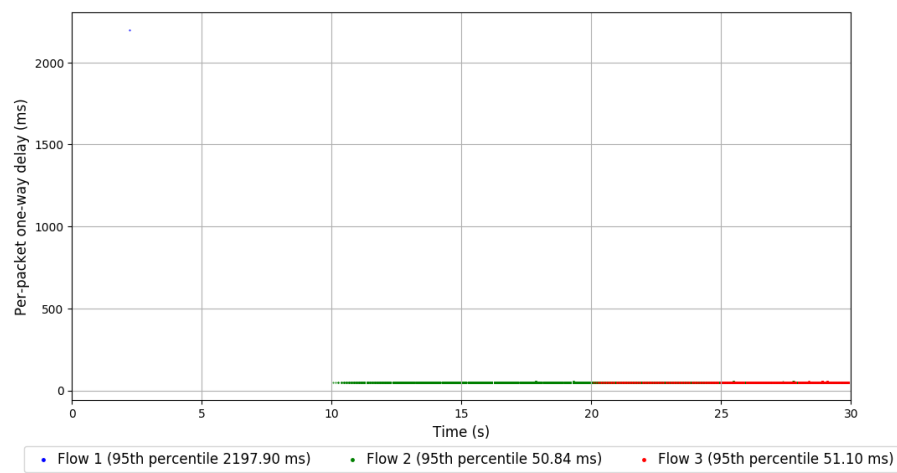
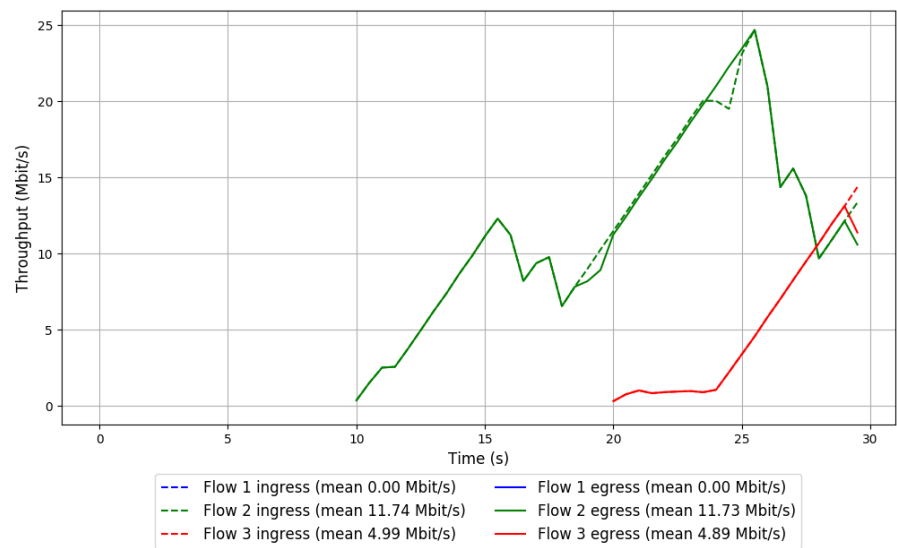
-- Flow 3:

Average throughput: 4.89 Mbit/s

95th percentile per-packet one-way delay: 51.104 ms

Loss rate: 3.01%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-10-12 11:04:11

End at: 2017-10-12 11:04:41

Below is generated by plot.py at 2017-10-12 14:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.11 Mbit/s

95th percentile per-packet one-way delay: 51.713 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 10.17 Mbit/s

95th percentile per-packet one-way delay: 51.507 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 23.24 Mbit/s

95th percentile per-packet one-way delay: 51.759 ms

Loss rate: 1.00%

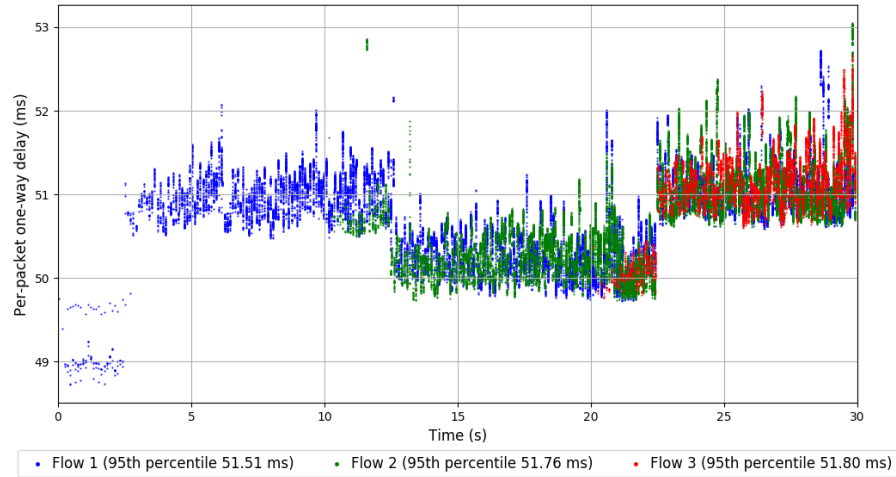
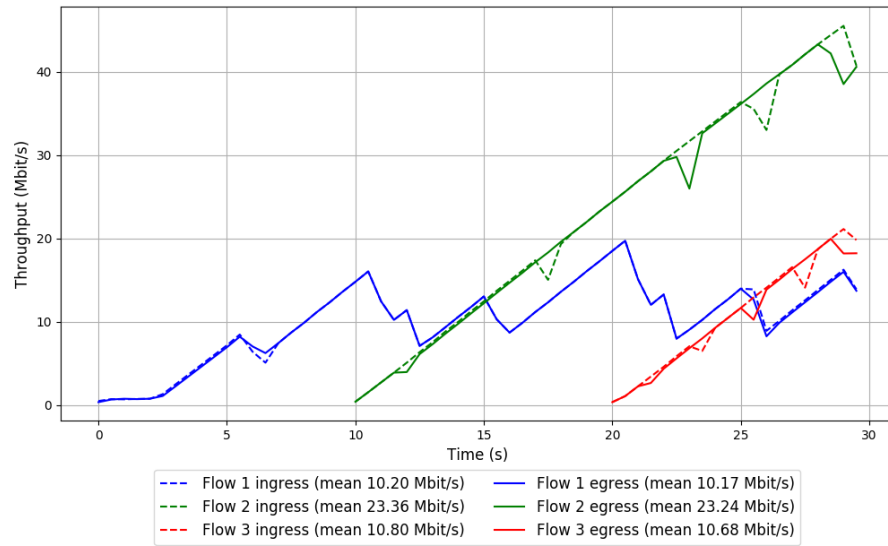
-- Flow 3:

Average throughput: 10.68 Mbit/s

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

Loss rate: 2.11%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-10-12 11:17:04

End at: 2017-10-12 11:17:34

Below is generated by plot.py at 2017-10-12 14:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.31 Mbit/s

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

Loss rate: 1.06%

-- Flow 1:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 50.912 ms

Loss rate: 1.83%

-- Flow 2:

Average throughput: 14.84 Mbit/s

95th percentile per-packet one-way delay: 50.565 ms

Loss rate: 0.38%

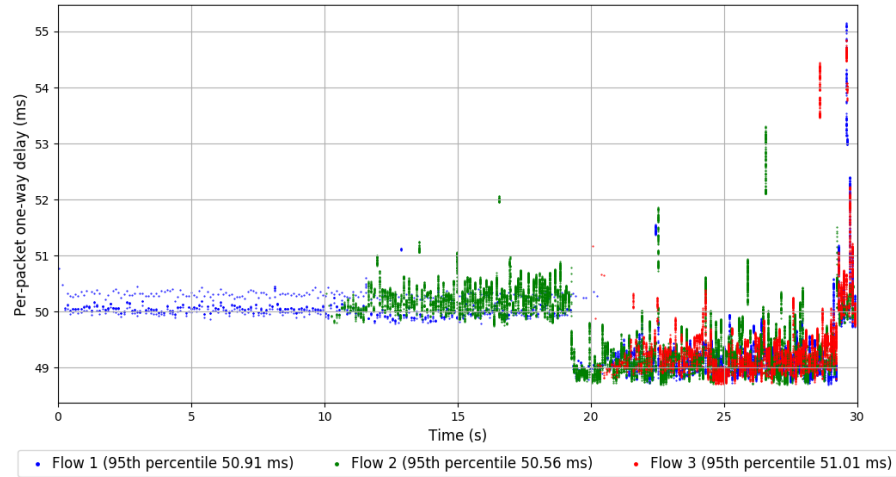
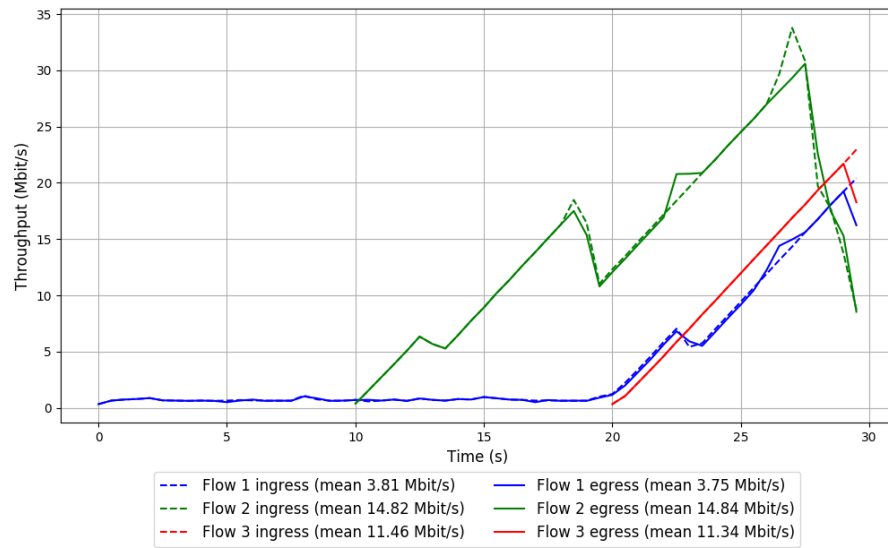
-- Flow 3:

Average throughput: 11.34 Mbit/s

95th percentile per-packet one-way delay: 51.006 ms

Loss rate: 2.06%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-10-12 11:29:55

End at: 2017-10-12 11:30:25

Below is generated by plot.py at 2017-10-12 14:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.32 Mbit/s

95th percentile per-packet one-way delay: 51.370 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 8.73 Mbit/s

95th percentile per-packet one-way delay: 3285.467 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 9.38 Mbit/s

95th percentile per-packet one-way delay: 51.447 ms

Loss rate: 1.22%

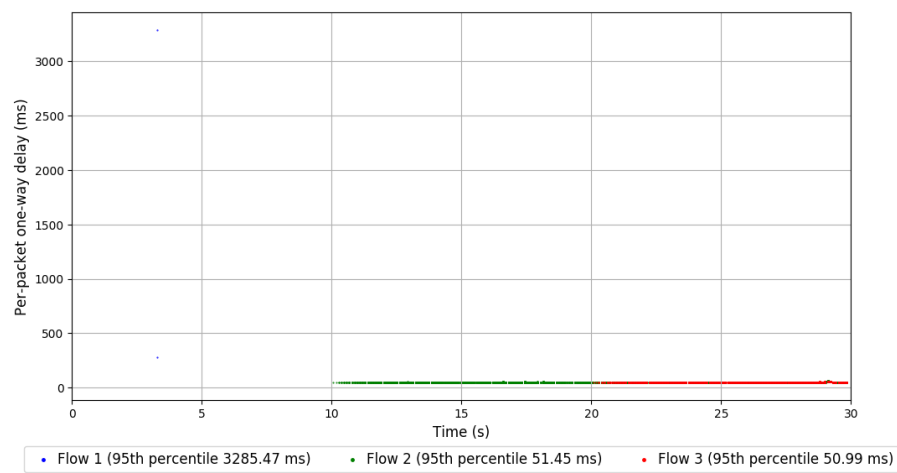
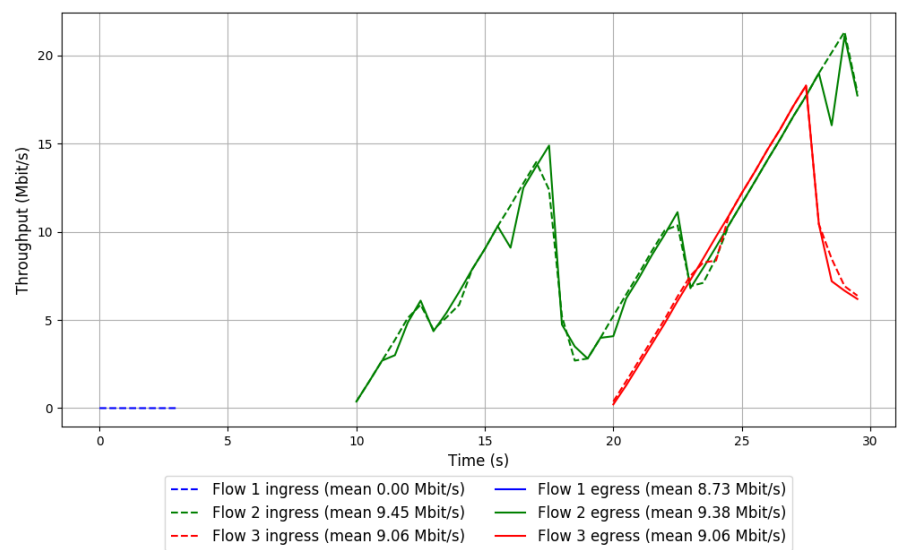
-- Flow 3:

Average throughput: 9.06 Mbit/s

95th percentile per-packet one-way delay: 50.993 ms

Loss rate: 0.96%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-10-12 11:42:40

End at: 2017-10-12 11:43:10

Below is generated by plot.py at 2017-10-12 14:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 36.91 Mbit/s

95th percentile per-packet one-way delay: 50.324 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 25.68 Mbit/s

95th percentile per-packet one-way delay: 50.421 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 12.12 Mbit/s

95th percentile per-packet one-way delay: 49.807 ms

Loss rate: 1.13%

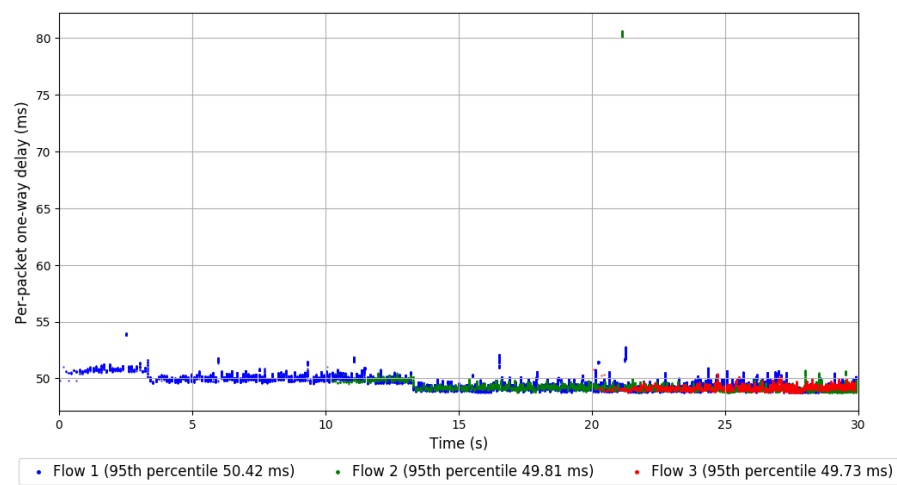
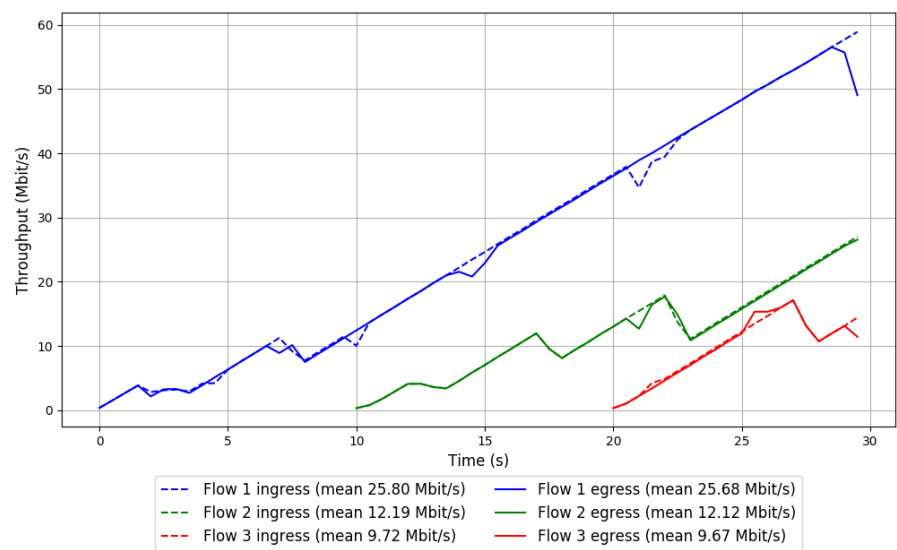
-- Flow 3:

Average throughput: 9.67 Mbit/s

95th percentile per-packet one-way delay: 49.734 ms

Loss rate: 1.55%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-10-12 11:55:04

End at: 2017-10-12 11:55:34

Below is generated by plot.py at 2017-10-12 14:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 26.85 Mbit/s

95th percentile per-packet one-way delay: 51.194 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 14.50 Mbit/s

95th percentile per-packet one-way delay: 50.942 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 12.92 Mbit/s

95th percentile per-packet one-way delay: 51.298 ms

Loss rate: 0.51%

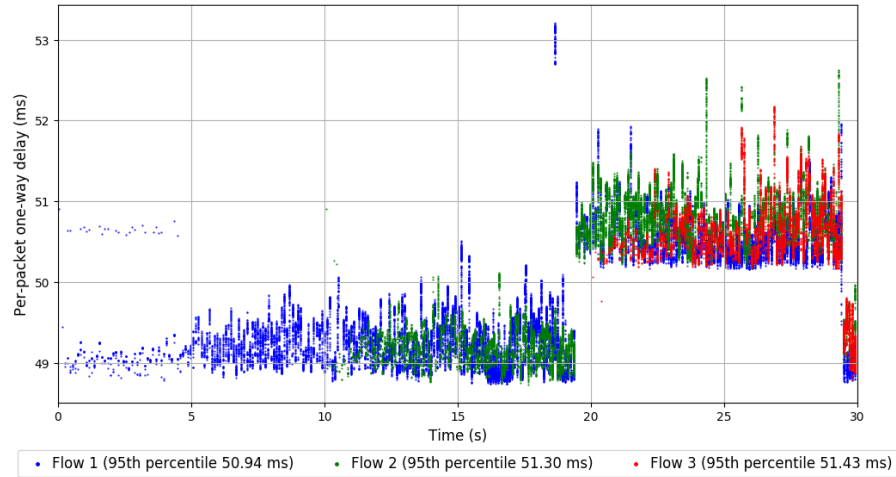
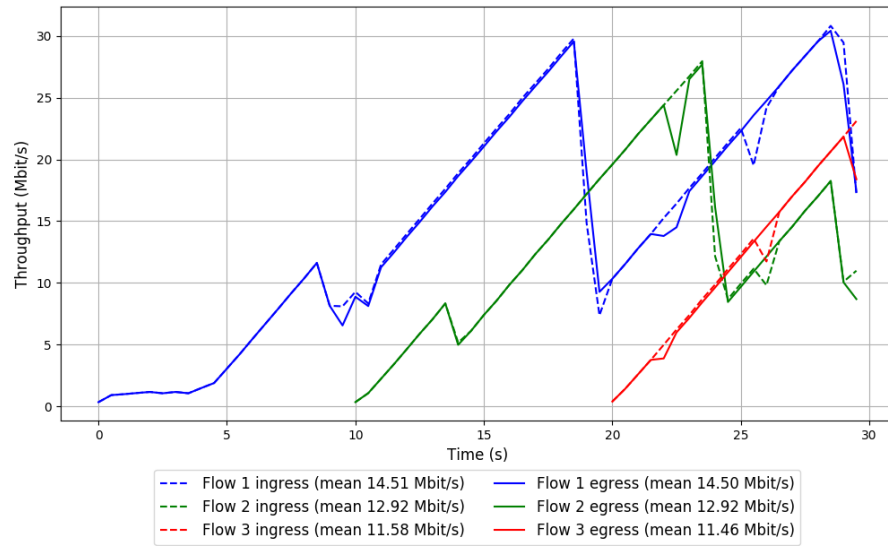
-- Flow 3:

Average throughput: 11.46 Mbit/s

95th percentile per-packet one-way delay: 51.429 ms

Loss rate: 2.05%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-10-12 12:07:43

End at: 2017-10-12 12:08:13

Below is generated by plot.py at 2017-10-12 14:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 24.23 Mbit/s

95th percentile per-packet one-way delay: 51.344 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 16.96 Mbit/s

95th percentile per-packet one-way delay: 51.390 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 10.69 Mbit/s

95th percentile per-packet one-way delay: 51.219 ms

Loss rate: 1.05%

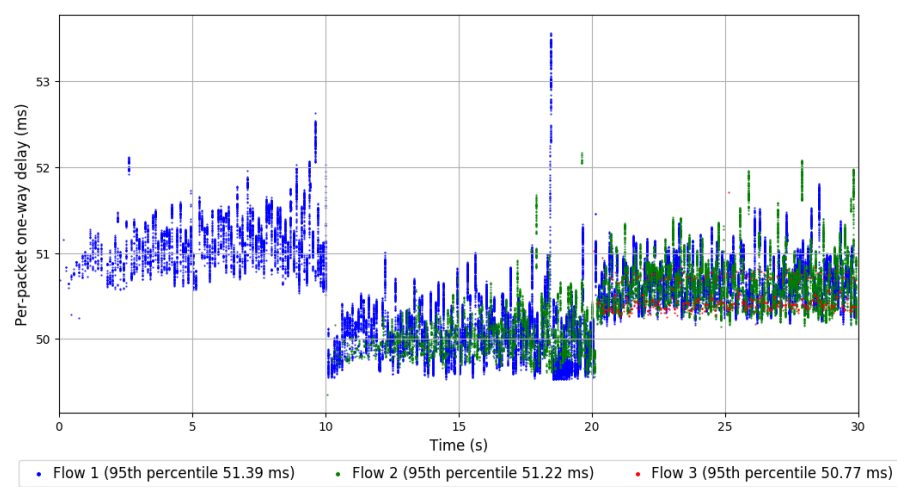
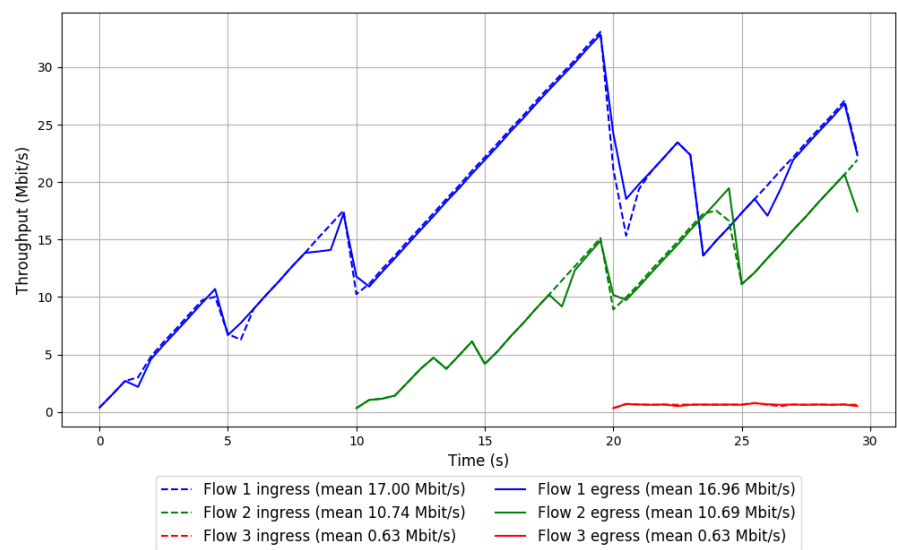
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 50.768 ms

Loss rate: 0.93%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-10-12 12:20:34

End at: 2017-10-12 12:21:04

Below is generated by plot.py at 2017-10-12 14:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.29 Mbit/s

95th percentile per-packet one-way delay: 50.851 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 5.81 Mbit/s

95th percentile per-packet one-way delay: 51.031 ms

Loss rate: 1.59%

-- Flow 2:

Average throughput: 11.20 Mbit/s

95th percentile per-packet one-way delay: 50.582 ms

Loss rate: 0.57%

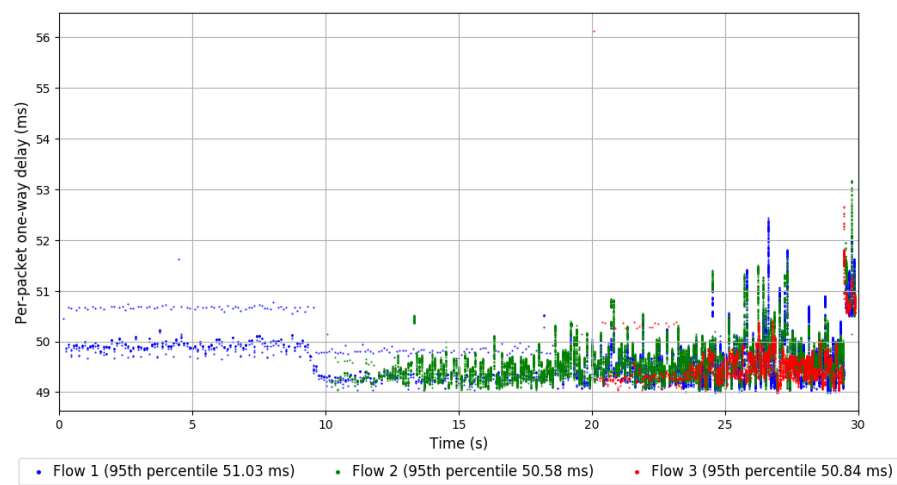
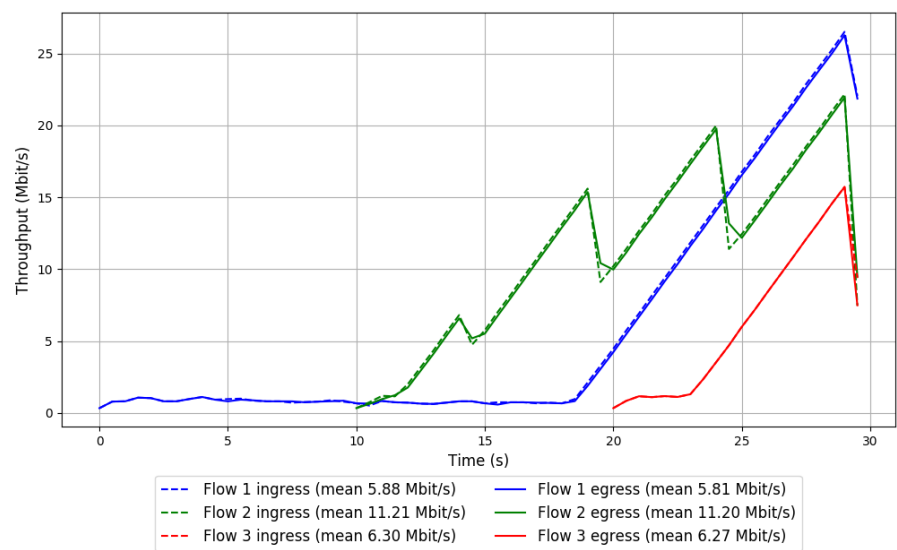
-- Flow 3:

Average throughput: 6.27 Mbit/s

95th percentile per-packet one-way delay: 50.839 ms

Loss rate: 1.53%

Run 10: Report of LEDBAT — Data Link

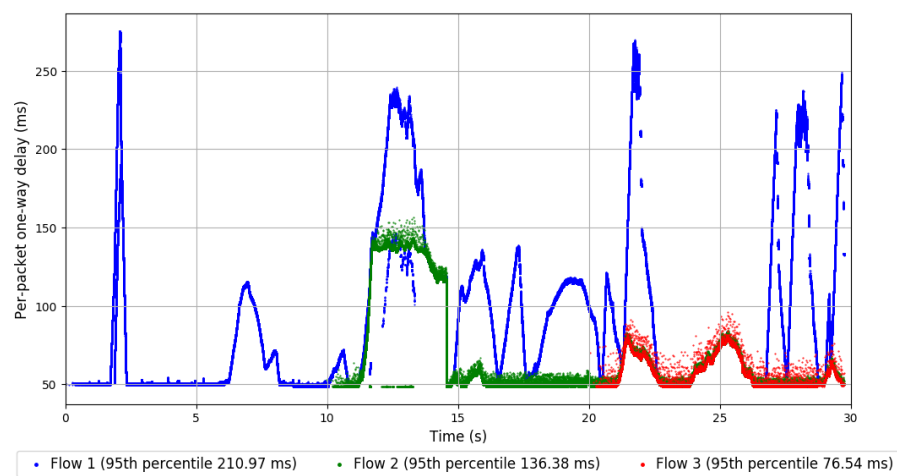
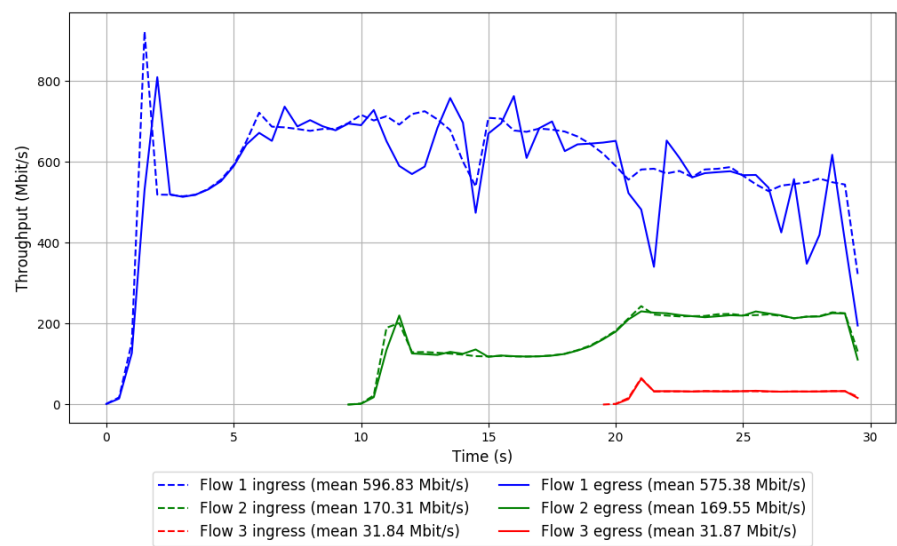


```
Run 1: Statistics of PCC

Start at: 2017-10-12 10:27:35
End at: 2017-10-12 10:28:05

# Below is generated by plot.py at 2017-10-12 15:07:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 698.40 Mbit/s
95th percentile per-packet one-way delay: 200.691 ms
Loss rate: 3.41%
-- Flow 1:
Average throughput: 575.38 Mbit/s
95th percentile per-packet one-way delay: 210.969 ms
Loss rate: 3.92%
-- Flow 2:
Average throughput: 169.55 Mbit/s
95th percentile per-packet one-way delay: 136.385 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 31.87 Mbit/s
95th percentile per-packet one-way delay: 76.538 ms
Loss rate: 1.06%
```

Run 1: Report of PCC — Data Link

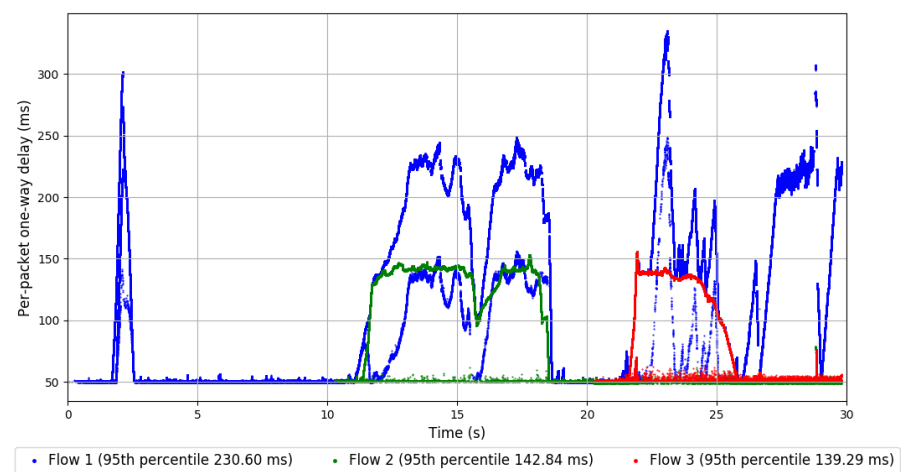
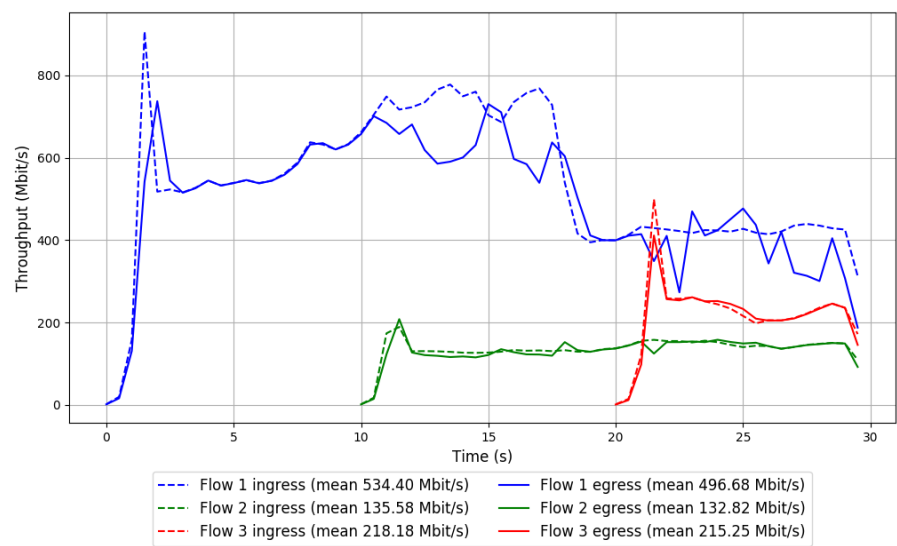


```
Run 2: Statistics of PCC

Start at: 2017-10-12 10:40:13
End at: 2017-10-12 10:40:43

# Below is generated by plot.py at 2017-10-12 15:07:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 655.12 Mbit/s
95th percentile per-packet one-way delay: 228.458 ms
Loss rate: 6.24%
-- Flow 1:
Average throughput: 496.68 Mbit/s
95th percentile per-packet one-way delay: 230.603 ms
Loss rate: 7.37%
-- Flow 2:
Average throughput: 132.82 Mbit/s
95th percentile per-packet one-way delay: 142.844 ms
Loss rate: 2.54%
-- Flow 3:
Average throughput: 215.25 Mbit/s
95th percentile per-packet one-way delay: 139.295 ms
Loss rate: 2.40%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-10-12 10:53:09

End at: 2017-10-12 10:53:39

Below is generated by plot.py at 2017-10-12 15:07:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 678.45 Mbit/s

95th percentile per-packet one-way delay: 184.279 ms

Loss rate: 4.00%

-- Flow 1:

Average throughput: 563.87 Mbit/s

95th percentile per-packet one-way delay: 197.023 ms

Loss rate: 4.20%

-- Flow 2:

Average throughput: 170.65 Mbit/s

95th percentile per-packet one-way delay: 149.955 ms

Loss rate: 2.98%

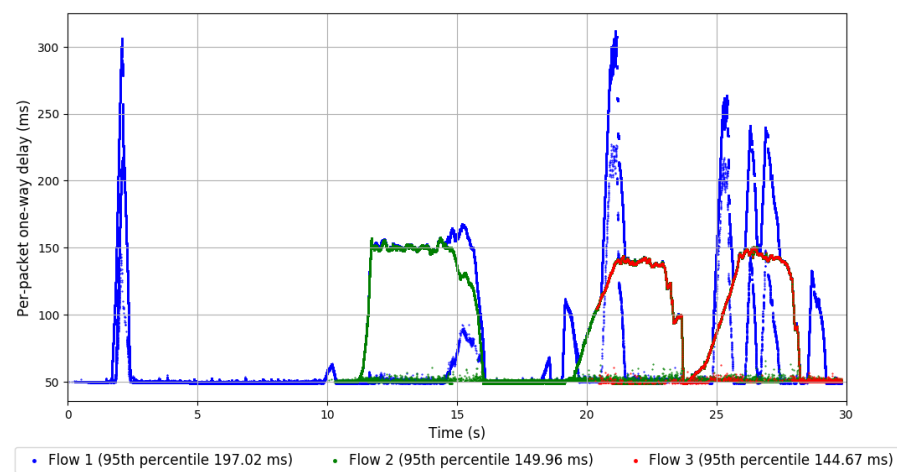
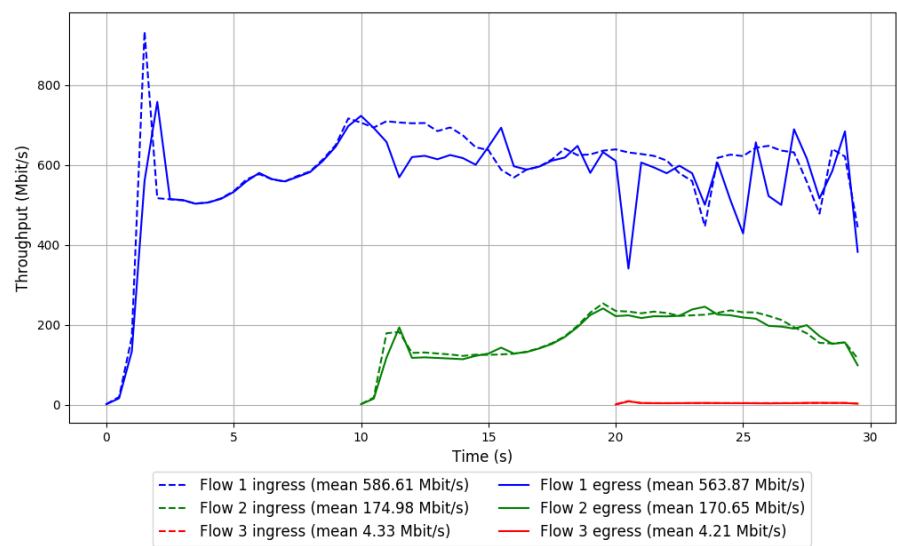
-- Flow 3:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 144.670 ms

Loss rate: 3.68%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-10-12 11:05:56

End at: 2017-10-12 11:06:26

Below is generated by plot.py at 2017-10-12 15:07:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 699.17 Mbit/s

95th percentile per-packet one-way delay: 220.929 ms

Loss rate: 4.79%

-- Flow 1:

Average throughput: 552.99 Mbit/s

95th percentile per-packet one-way delay: 224.176 ms

Loss rate: 5.30%

-- Flow 2:

Average throughput: 189.00 Mbit/s

95th percentile per-packet one-way delay: 143.583 ms

Loss rate: 2.66%

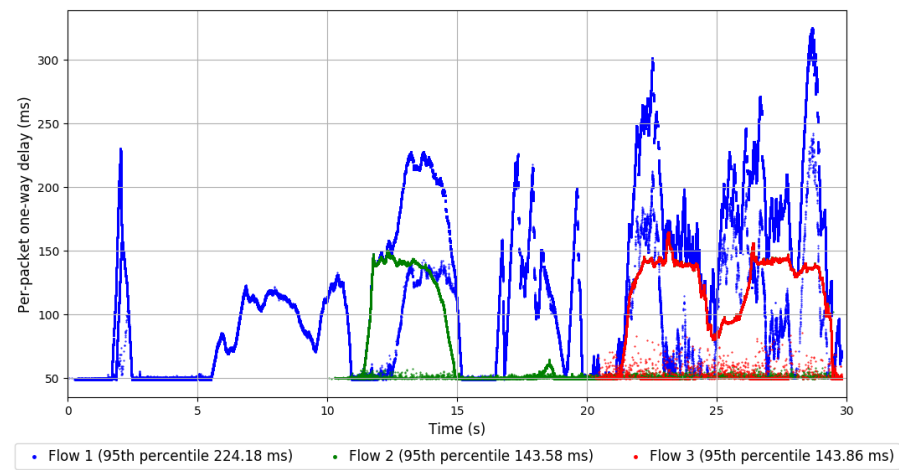
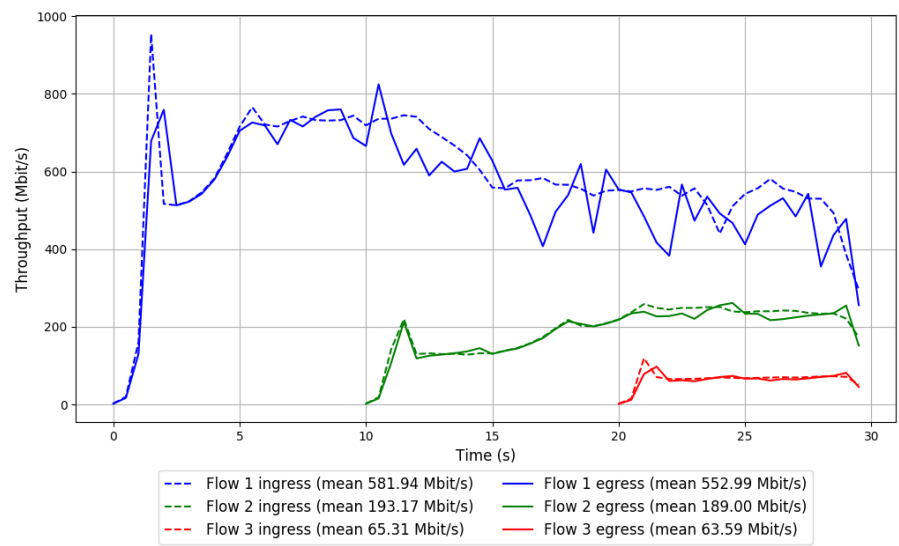
-- Flow 3:

Average throughput: 63.59 Mbit/s

95th percentile per-packet one-way delay: 143.859 ms

Loss rate: 3.67%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-10-12 11:18:47

End at: 2017-10-12 11:19:17

Below is generated by plot.py at 2017-10-12 15:08:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 650.48 Mbit/s

95th percentile per-packet one-way delay: 222.290 ms

Loss rate: 6.67%

-- Flow 1:

Average throughput: 577.59 Mbit/s

95th percentile per-packet one-way delay: 225.330 ms

Loss rate: 7.27%

-- Flow 2:

Average throughput: 80.41 Mbit/s

95th percentile per-packet one-way delay: 155.172 ms

Loss rate: 1.77%

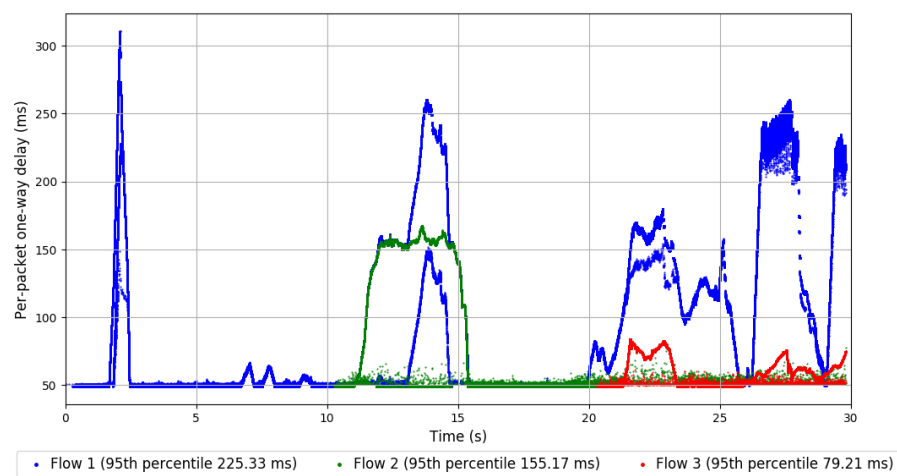
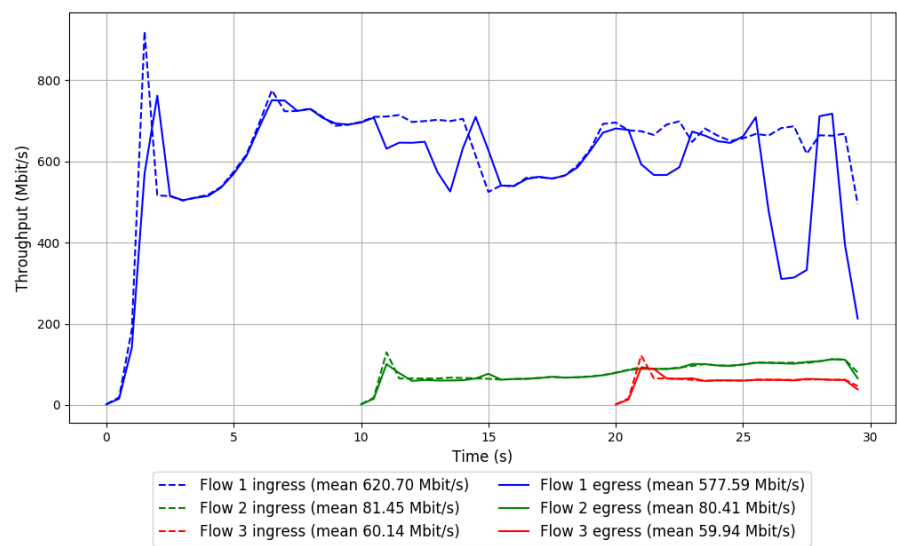
-- Flow 3:

Average throughput: 59.94 Mbit/s

95th percentile per-packet one-way delay: 79.212 ms

Loss rate: 1.38%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-10-12 11:31:38

End at: 2017-10-12 11:32:08

Below is generated by plot.py at 2017-10-12 15:08:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 689.87 Mbit/s

95th percentile per-packet one-way delay: 200.073 ms

Loss rate: 4.95%

-- Flow 1:

Average throughput: 587.16 Mbit/s

95th percentile per-packet one-way delay: 203.321 ms

Loss rate: 5.35%

-- Flow 2:

Average throughput: 152.76 Mbit/s

95th percentile per-packet one-way delay: 145.649 ms

Loss rate: 2.52%

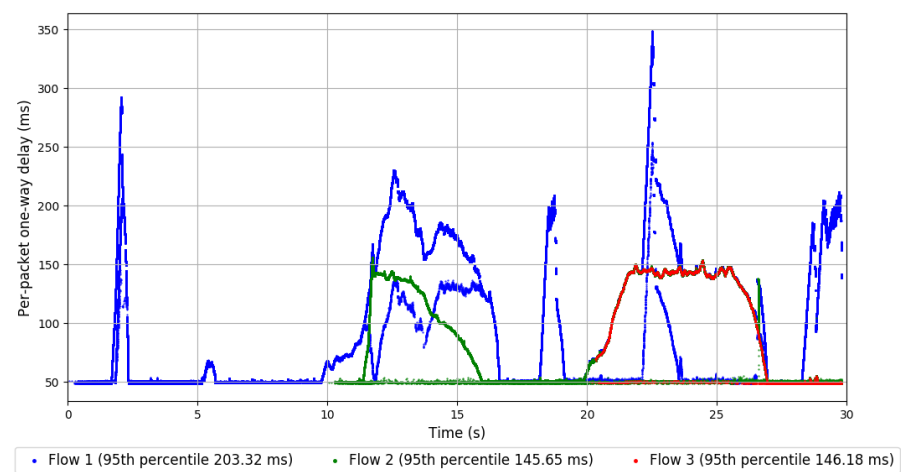
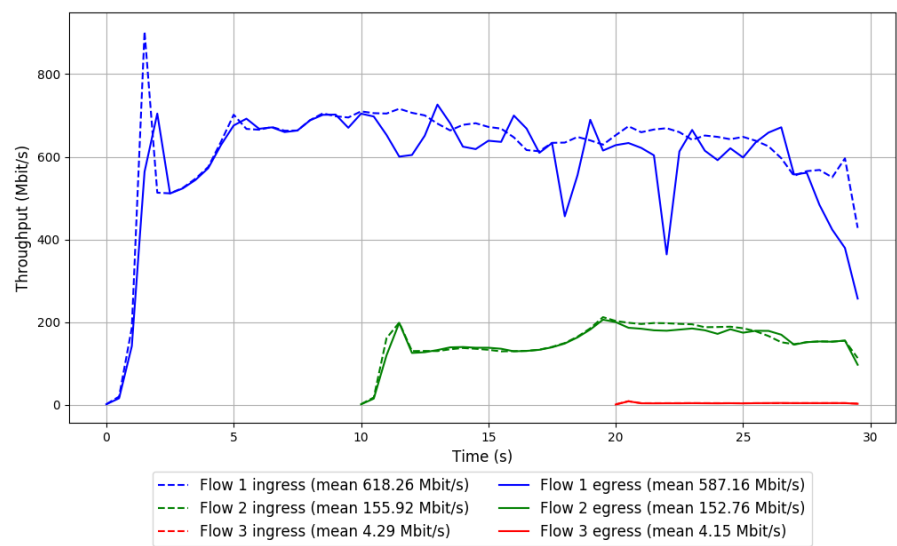
-- Flow 3:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 146.179 ms

Loss rate: 4.08%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-10-12 11:44:25

End at: 2017-10-12 11:44:55

Below is generated by plot.py at 2017-10-12 15:08:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 493.10 Mbit/s

95th percentile per-packet one-way delay: 172.852 ms

Loss rate: 3.16%

-- Flow 1:

Average throughput: 48.96 Mbit/s

95th percentile per-packet one-way delay: 3518.208 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 530.77 Mbit/s

95th percentile per-packet one-way delay: 176.904 ms

Loss rate: 2.93%

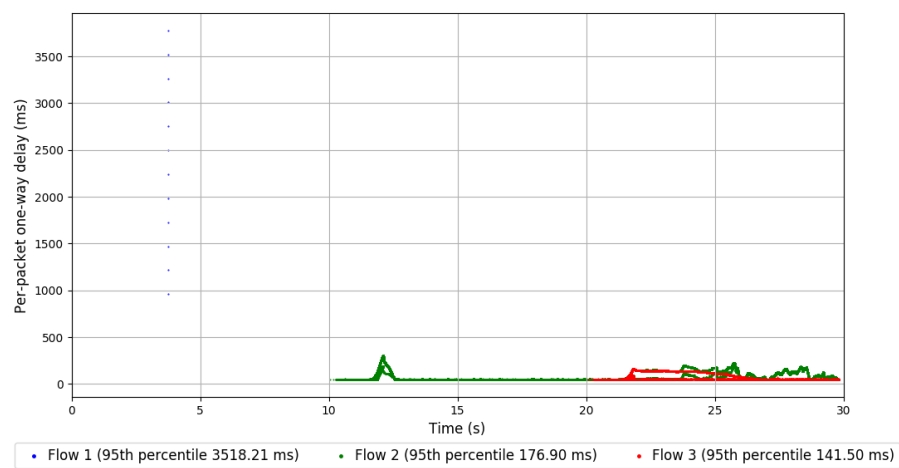
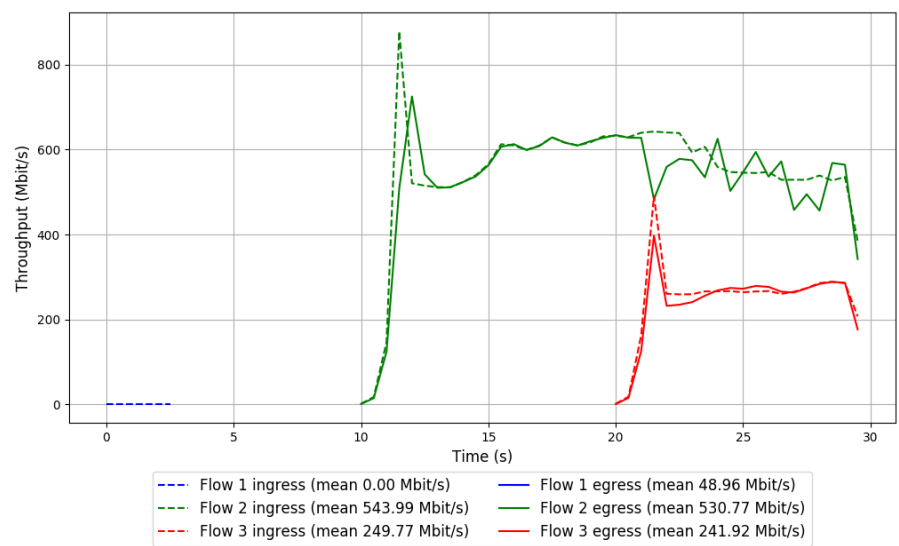
-- Flow 3:

Average throughput: 241.92 Mbit/s

95th percentile per-packet one-way delay: 141.505 ms

Loss rate: 4.15%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-10-12 11:56:48

End at: 2017-10-12 11:57:18

Below is generated by plot.py at 2017-10-12 15:11:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 670.13 Mbit/s

95th percentile per-packet one-way delay: 235.574 ms

Loss rate: 8.40%

-- Flow 1:

Average throughput: 585.79 Mbit/s

95th percentile per-packet one-way delay: 238.063 ms

Loss rate: 9.36%

-- Flow 2:

Average throughput: 124.89 Mbit/s

95th percentile per-packet one-way delay: 141.232 ms

Loss rate: 1.16%

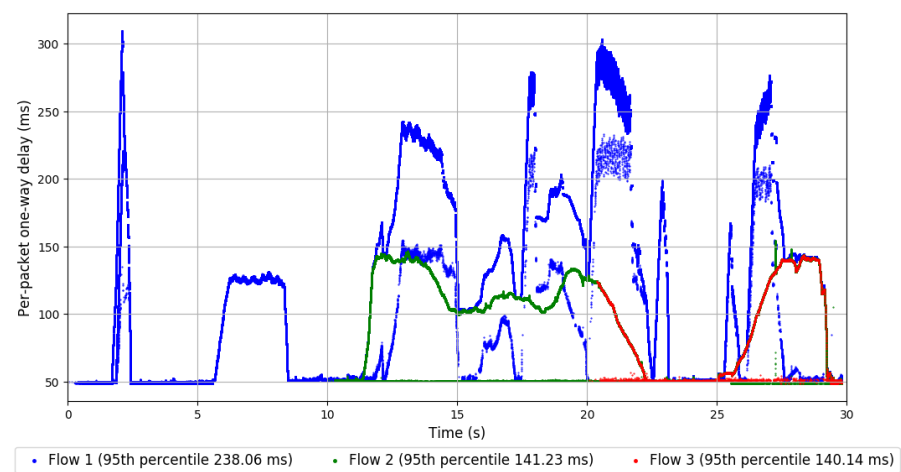
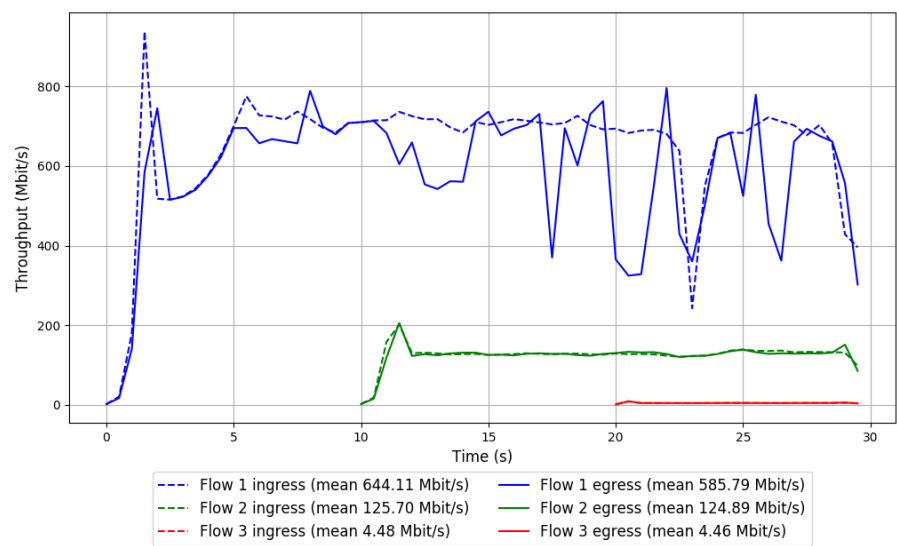
-- Flow 3:

Average throughput: 4.46 Mbit/s

95th percentile per-packet one-way delay: 140.138 ms

Loss rate: 1.50%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-10-12 12:09:27

End at: 2017-10-12 12:09:57

Below is generated by plot.py at 2017-10-12 15:16:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 603.26 Mbit/s

95th percentile per-packet one-way delay: 217.954 ms

Loss rate: 12.25%

-- Flow 1:

Average throughput: 486.75 Mbit/s

95th percentile per-packet one-way delay: 221.652 ms

Loss rate: 14.54%

-- Flow 2:

Average throughput: 143.37 Mbit/s

95th percentile per-packet one-way delay: 86.235 ms

Loss rate: 1.11%

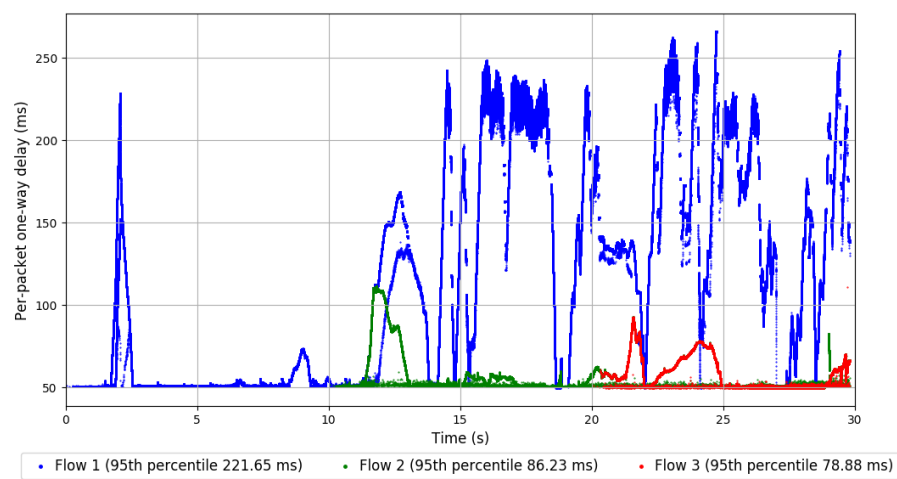
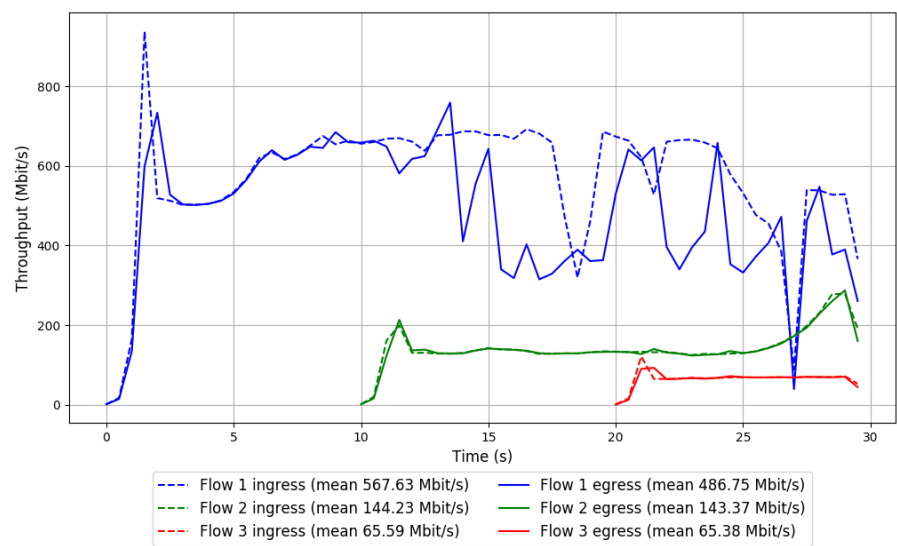
-- Flow 3:

Average throughput: 65.38 Mbit/s

95th percentile per-packet one-way delay: 78.879 ms

Loss rate: 1.36%

Run 9: Report of PCC — Data Link

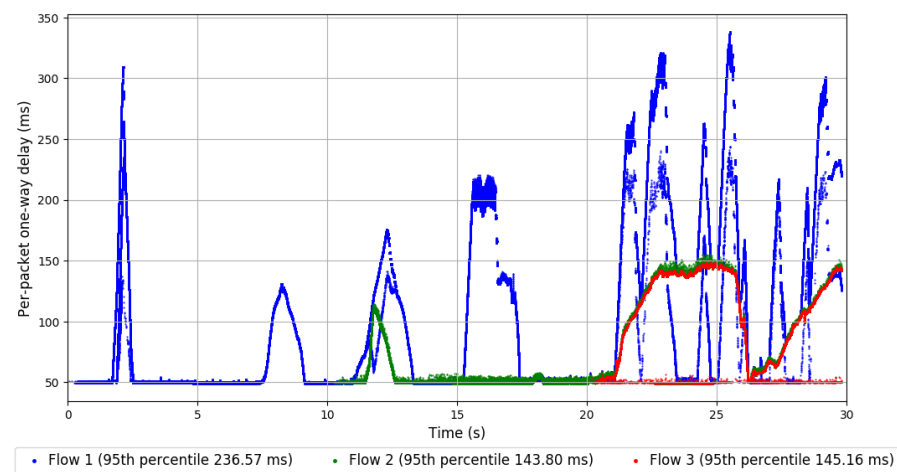
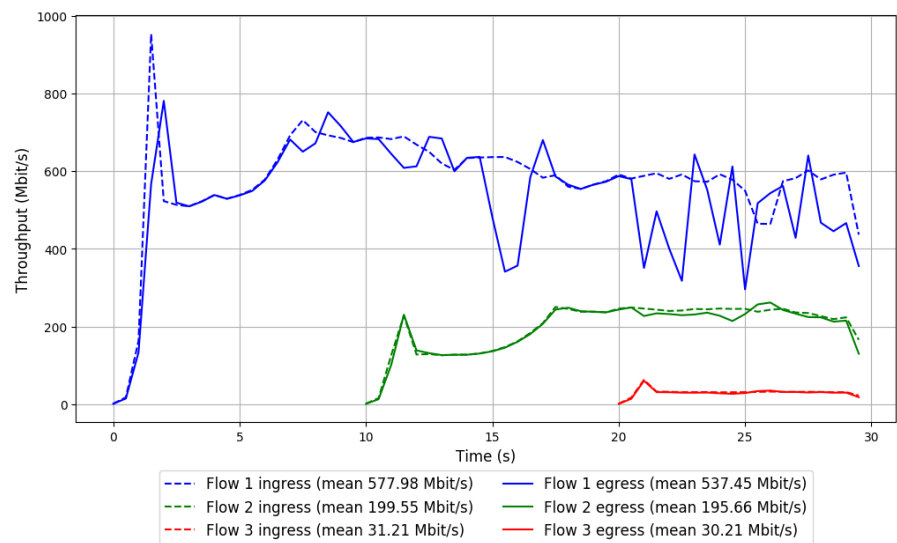


```
Run 10: Statistics of PCC

Start at: 2017-10-12 12:22:19
End at: 2017-10-12 12:22:49

# Below is generated by plot.py at 2017-10-12 15:20:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 677.20 Mbit/s
95th percentile per-packet one-way delay: 226.470 ms
Loss rate: 6.39%
-- Flow 1:
Average throughput: 537.45 Mbit/s
95th percentile per-packet one-way delay: 236.571 ms
Loss rate: 7.33%
-- Flow 2:
Average throughput: 195.66 Mbit/s
95th percentile per-packet one-way delay: 143.804 ms
Loss rate: 2.45%
-- Flow 3:
Average throughput: 30.21 Mbit/s
95th percentile per-packet one-way delay: 145.157 ms
Loss rate: 4.20%
```

Run 10: Report of PCC — Data Link

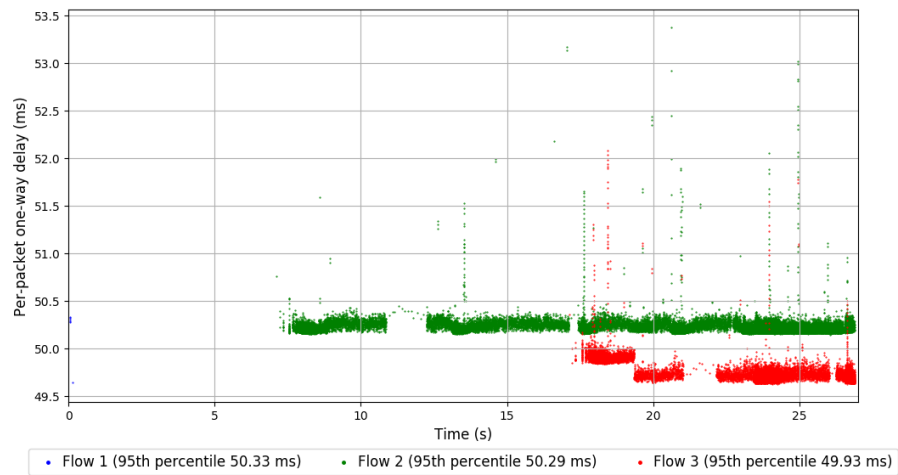
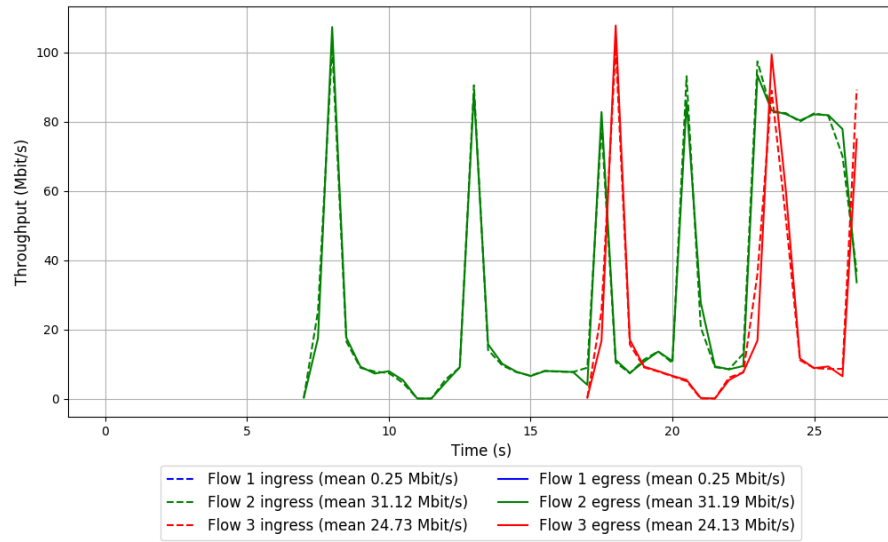


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-10-12 10:28:41
End at: 2017-10-12 10:29:11

# Below is generated by plot.py at 2017-10-12 15:20:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.76 Mbit/s
95th percentile per-packet one-way delay: 50.278 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 50.327 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.19 Mbit/s
95th percentile per-packet one-way delay: 50.288 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 24.13 Mbit/s
95th percentile per-packet one-way delay: 49.928 ms
Loss rate: 3.42%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-10-12 10:41:18

End at: 2017-10-12 10:41:48

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.19 Mbit/s

95th percentile per-packet one-way delay: 50.679 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 55.07 Mbit/s

95th percentile per-packet one-way delay: 50.215 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 19.89 Mbit/s

95th percentile per-packet one-way delay: 50.685 ms

Loss rate: 0.95%

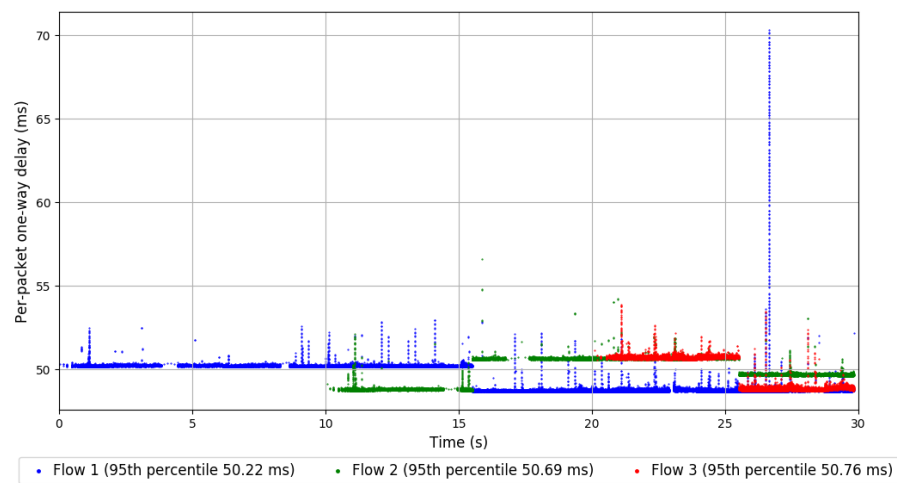
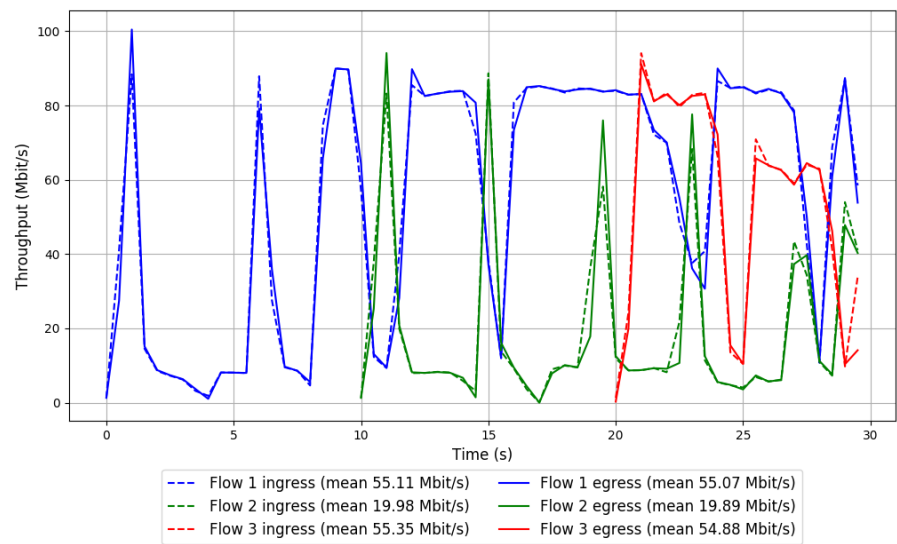
-- Flow 3:

Average throughput: 54.88 Mbit/s

95th percentile per-packet one-way delay: 50.756 ms

Loss rate: 1.89%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-10-12 10:54:14

End at: 2017-10-12 10:54:44

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.79 Mbit/s

95th percentile per-packet one-way delay: 50.634 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 47.66 Mbit/s

95th percentile per-packet one-way delay: 50.653 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 31.25 Mbit/s

95th percentile per-packet one-way delay: 49.662 ms

Loss rate: 0.29%

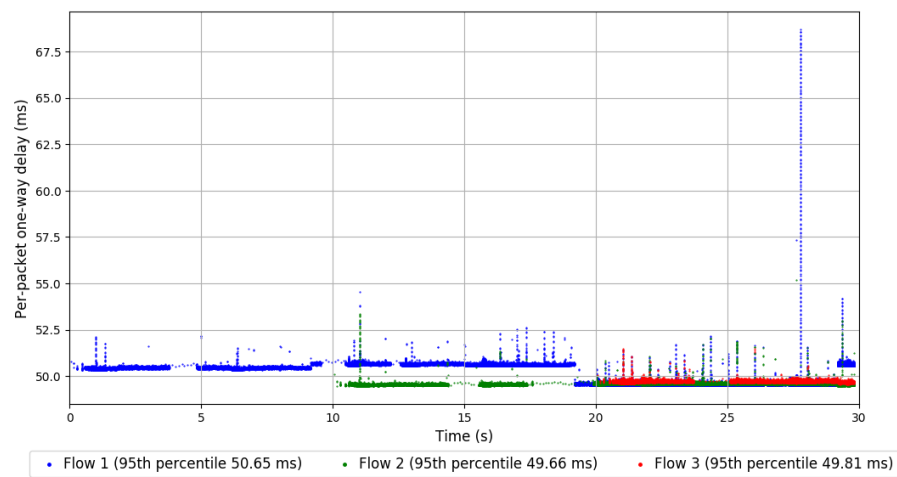
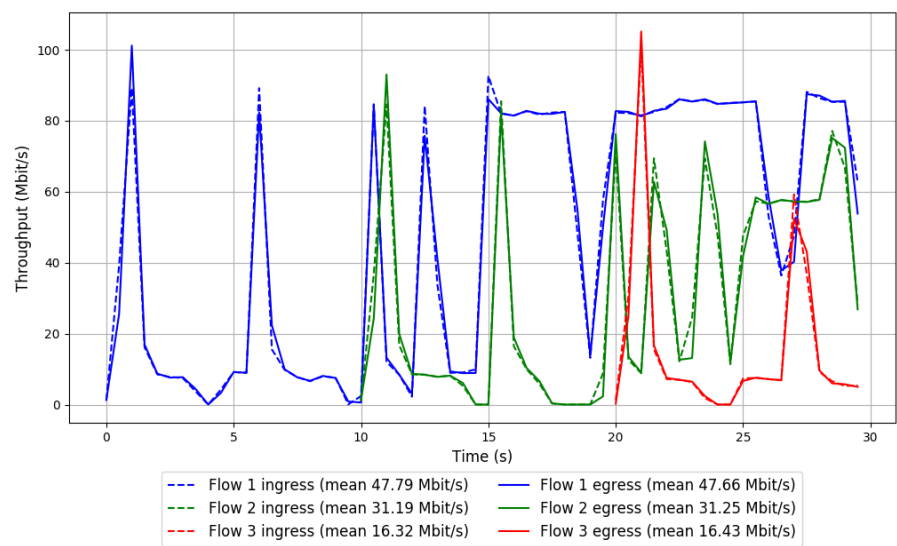
-- Flow 3:

Average throughput: 16.43 Mbit/s

95th percentile per-packet one-way delay: 49.813 ms

Loss rate: 0.39%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-10-12 11:07:02

End at: 2017-10-12 11:07:32

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.84 Mbit/s

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

Loss rate: 0.63%

-- Flow 1:

Average throughput: 49.37 Mbit/s

95th percentile per-packet one-way delay: 50.327 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 43.09 Mbit/s

95th percentile per-packet one-way delay: 50.403 ms

Loss rate: 1.07%

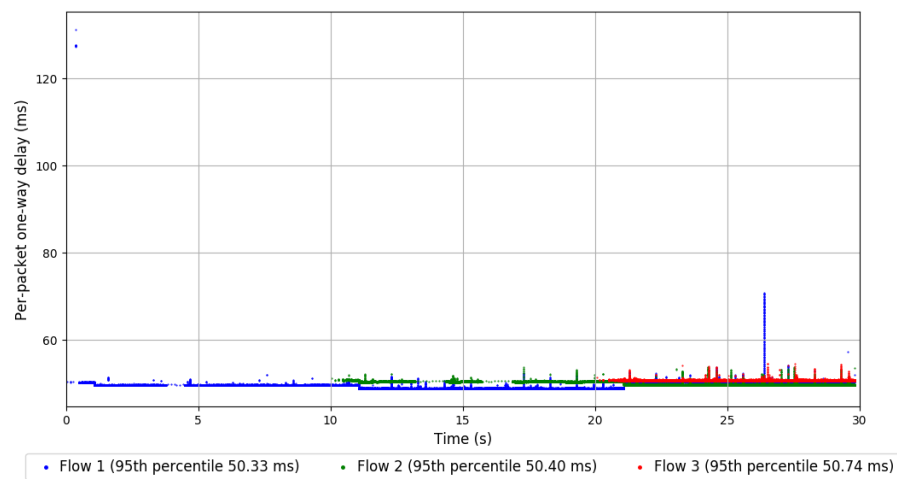
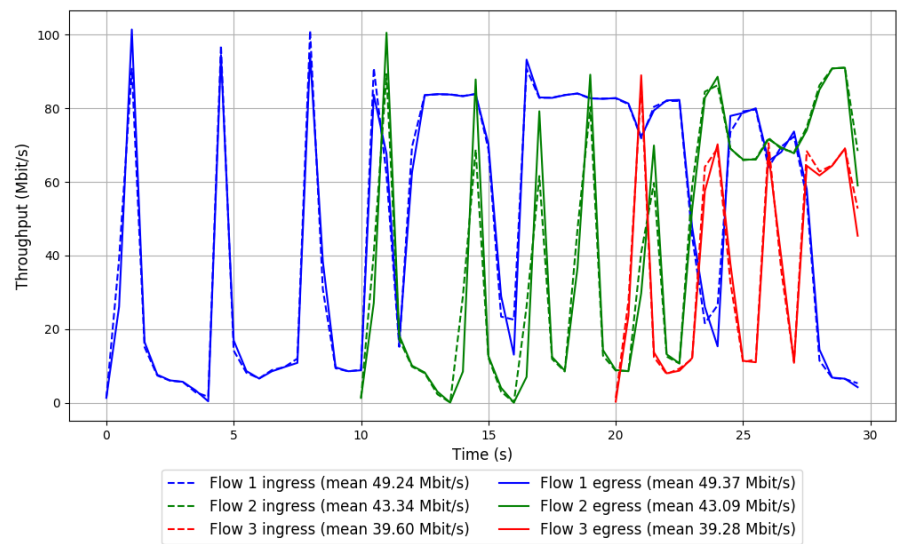
-- Flow 3:

Average throughput: 39.28 Mbit/s

95th percentile per-packet one-way delay: 50.745 ms

Loss rate: 1.83%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-10-12 11:19:52

End at: 2017-10-12 11:20:22

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.64 Mbit/s

95th percentile per-packet one-way delay: 50.709 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 51.352 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 74.47 Mbit/s

95th percentile per-packet one-way delay: 50.589 ms

Loss rate: 0.57%

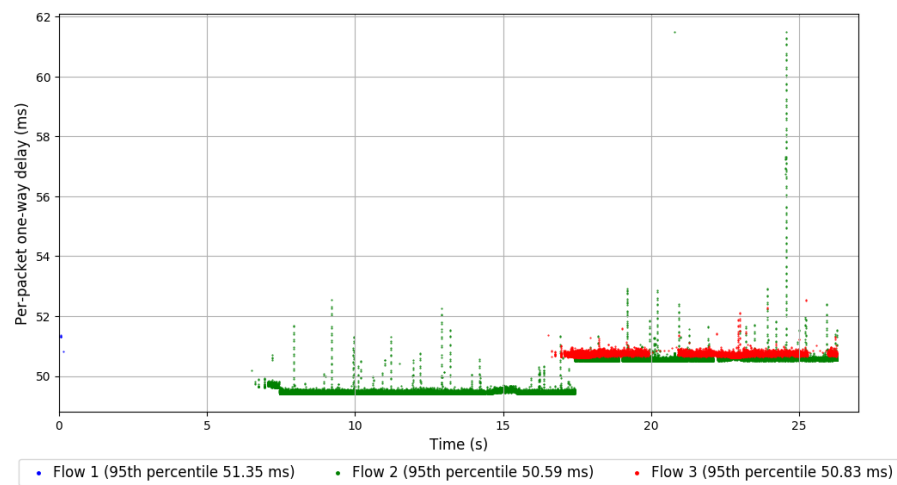
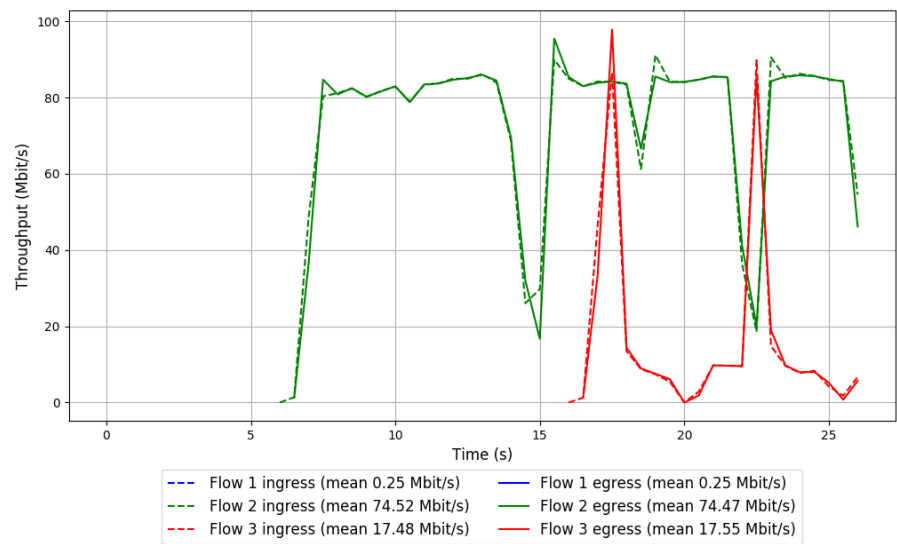
-- Flow 3:

Average throughput: 17.55 Mbit/s

95th percentile per-packet one-way delay: 50.825 ms

Loss rate: 0.60%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-10-12 11:32:44

End at: 2017-10-12 11:33:14

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.46 Mbit/s

95th percentile per-packet one-way delay: 50.912 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 42.43 Mbit/s

95th percentile per-packet one-way delay: 50.933 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 37.56 Mbit/s

95th percentile per-packet one-way delay: 50.361 ms

Loss rate: 1.09%

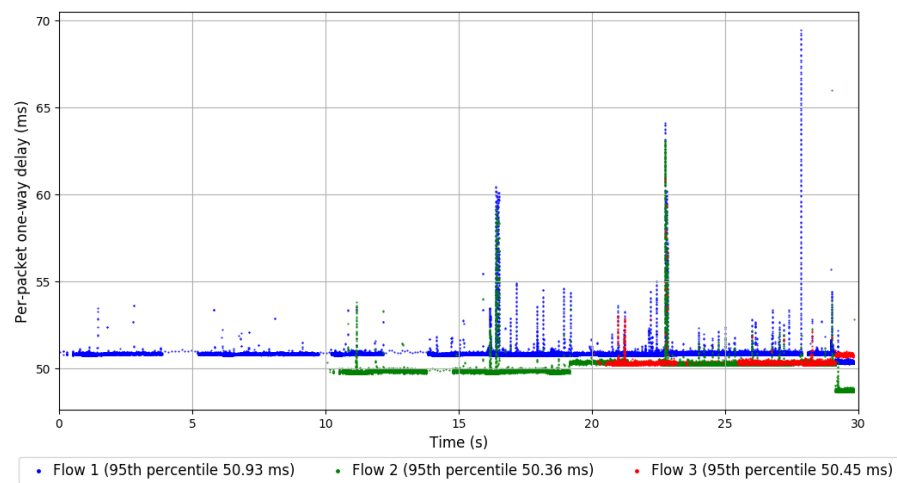
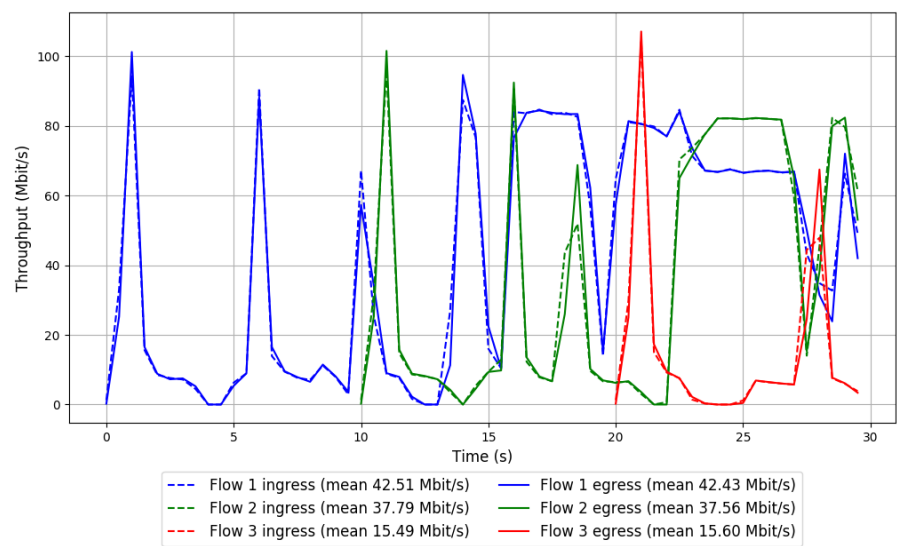
-- Flow 3:

Average throughput: 15.60 Mbit/s

95th percentile per-packet one-way delay: 50.451 ms

Loss rate: 0.33%

Run 6: Report of QUIC Cubic — Data Link

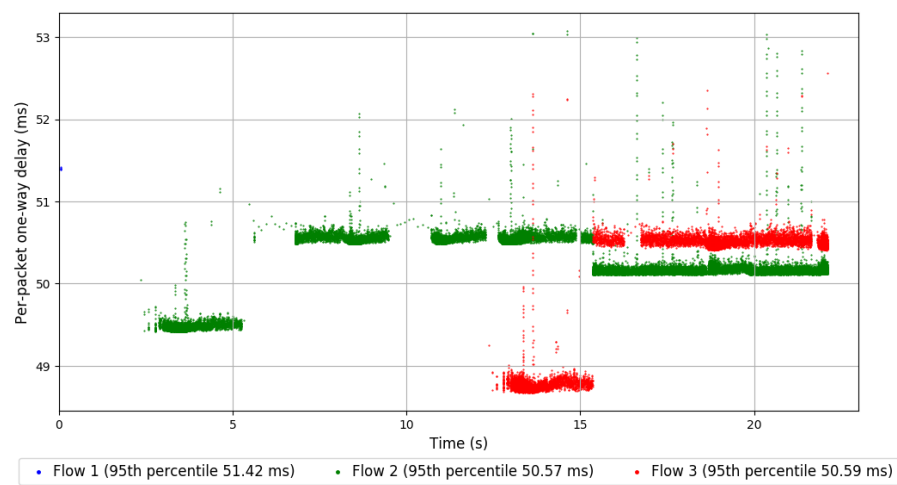
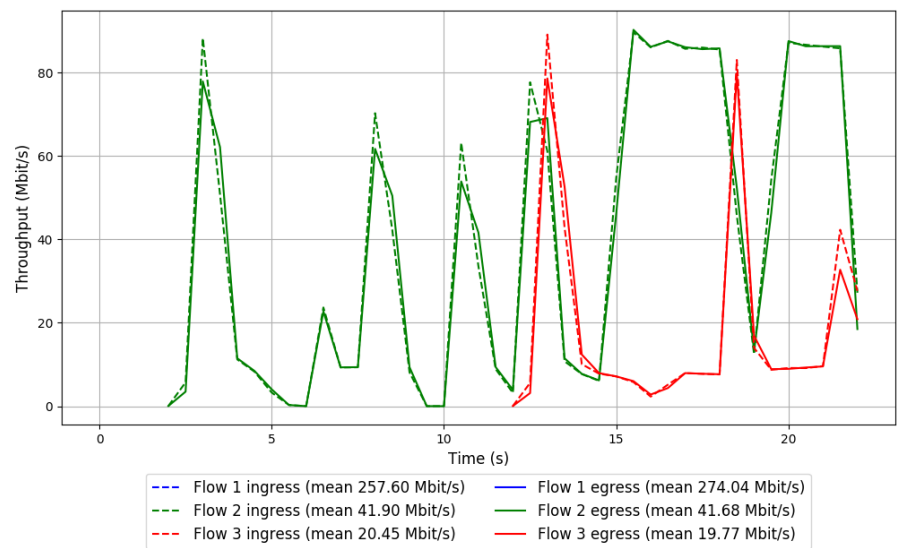


Run 7: Statistics of QUIC Cubic

Start at: 2017-10-12 11:45:20

End at: 2017-10-12 11:45:50

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-10-12 11:57:54

End at: 2017-10-12 11:58:24

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.88 Mbit/s

95th percentile per-packet one-way delay: 50.755 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.324 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 31.81 Mbit/s

95th percentile per-packet one-way delay: 50.772 ms

Loss rate: 0.18%

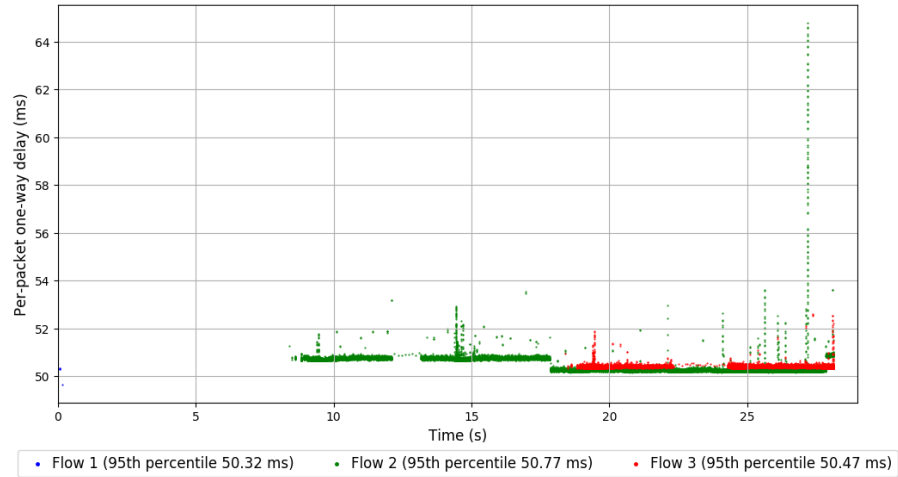
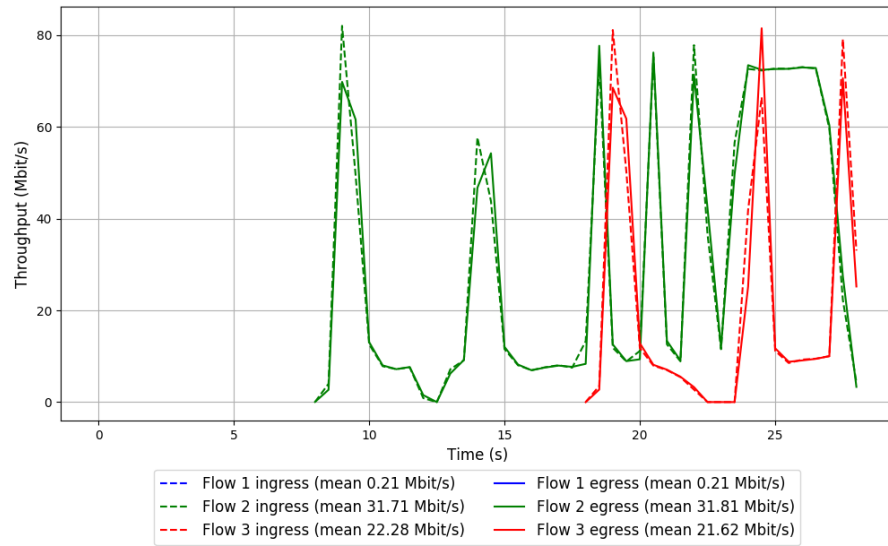
-- Flow 3:

Average throughput: 21.62 Mbit/s

95th percentile per-packet one-way delay: 50.471 ms

Loss rate: 3.94%

Run 8: Report of QUIC Cubic — Data Link

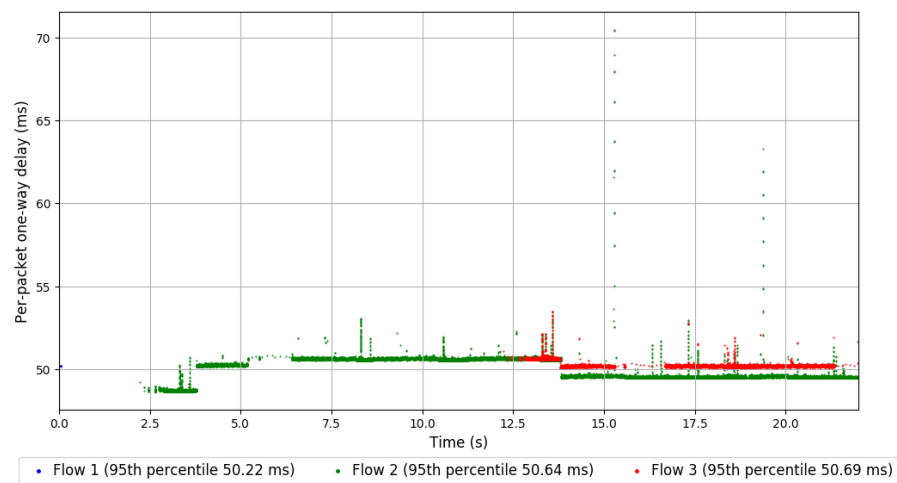
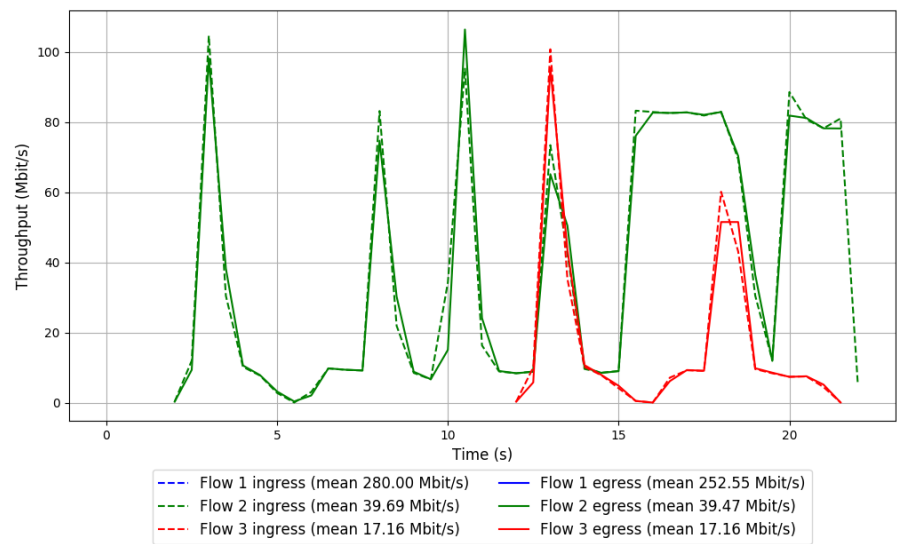


Run 9: Statistics of QUIC Cubic

Start at: 2017-10-12 12:10:32

End at: 2017-10-12 12:11:02

Run 9: Report of QUIC Cubic — Data Link

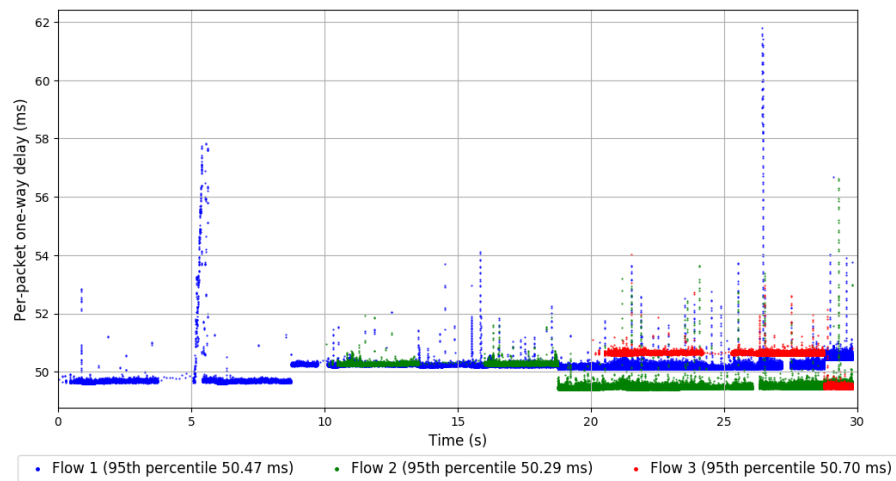
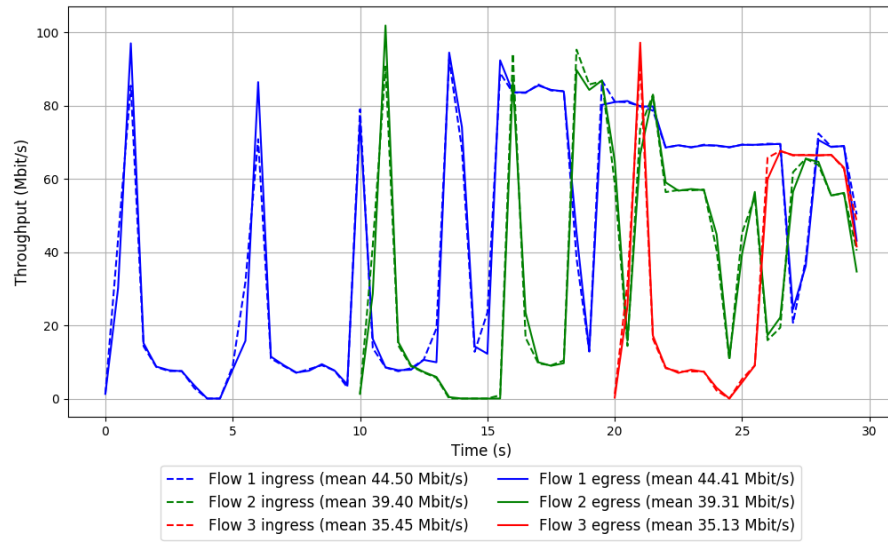


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-10-12 12:23:25
End at: 2017-10-12 12:23:55

# Below is generated by plot.py at 2017-10-12 15:20:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.01 Mbit/s
95th percentile per-packet one-way delay: 50.641 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 44.41 Mbit/s
95th percentile per-packet one-way delay: 50.465 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 39.31 Mbit/s
95th percentile per-packet one-way delay: 50.288 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 35.13 Mbit/s
95th percentile per-packet one-way delay: 50.702 ms
Loss rate: 1.92%
```

Run 10: Report of QUIC Cubic — Data Link

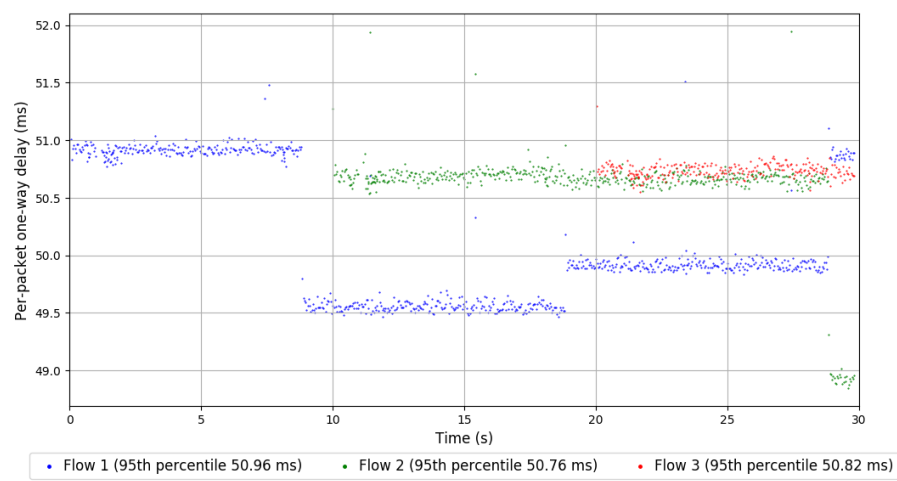
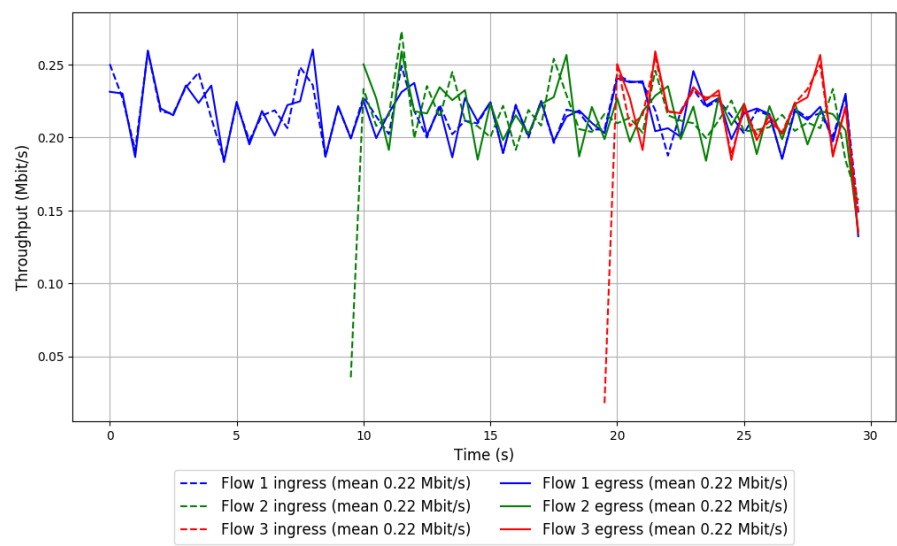


```
Run 1: Statistics of SCReAM

Start at: 2017-10-12 10:21:34
End at: 2017-10-12 10:22:05

# Below is generated by plot.py at 2017-10-12 15:20:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.937 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.957 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.758 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.816 ms
Loss rate: 0.74%
```

Run 1: Report of SReAM — Data Link

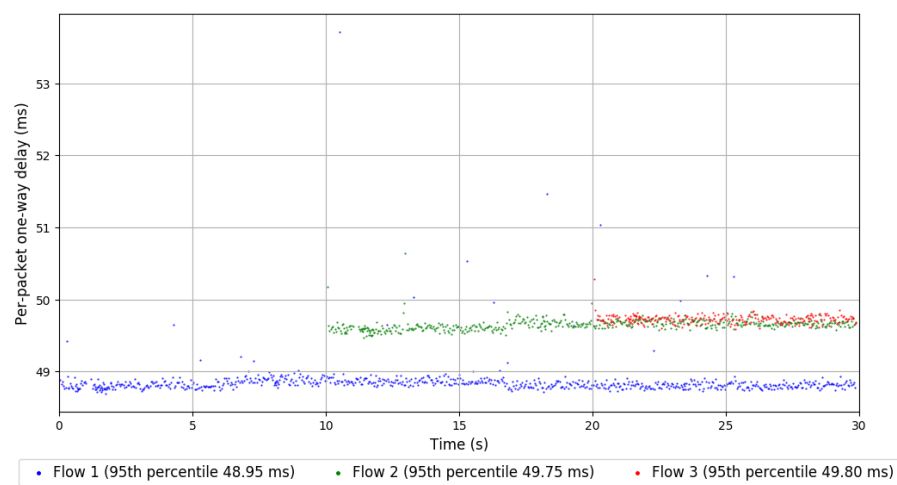
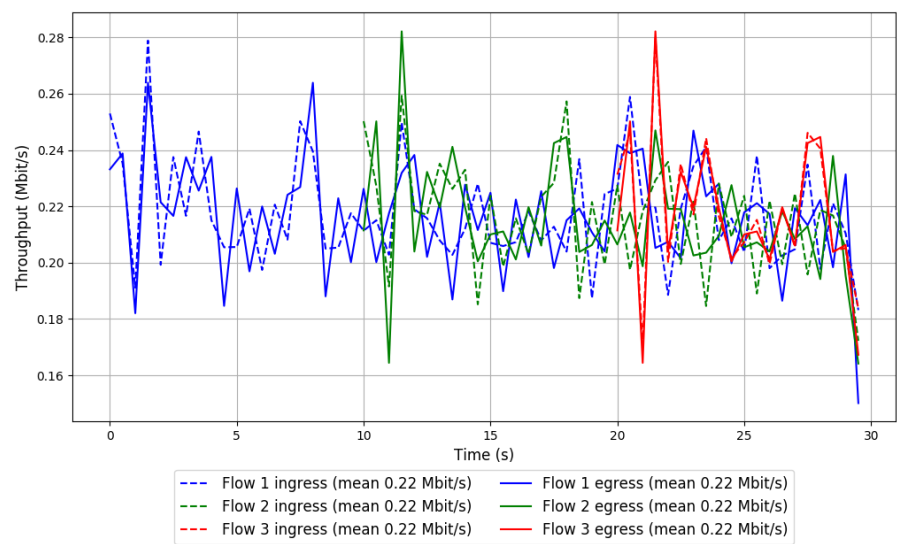


```
Run 2: Statistics of SReAM

Start at: 2017-10-12 10:34:07
End at: 2017-10-12 10:34:37

# Below is generated by plot.py at 2017-10-12 15:20:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 49.774 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.945 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.752 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.803 ms
Loss rate: 0.74%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-10-12 10:46:57

End at: 2017-10-12 10:47:27

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.834 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.782 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.860 ms

Loss rate: 0.42%

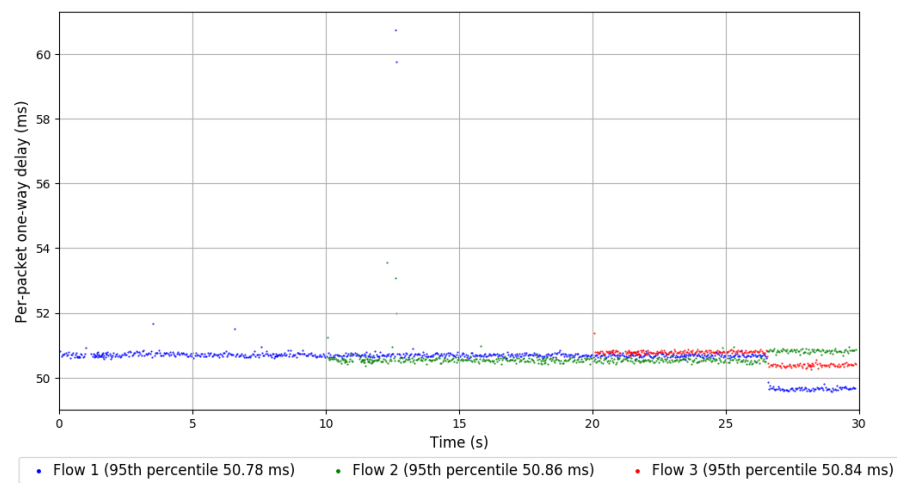
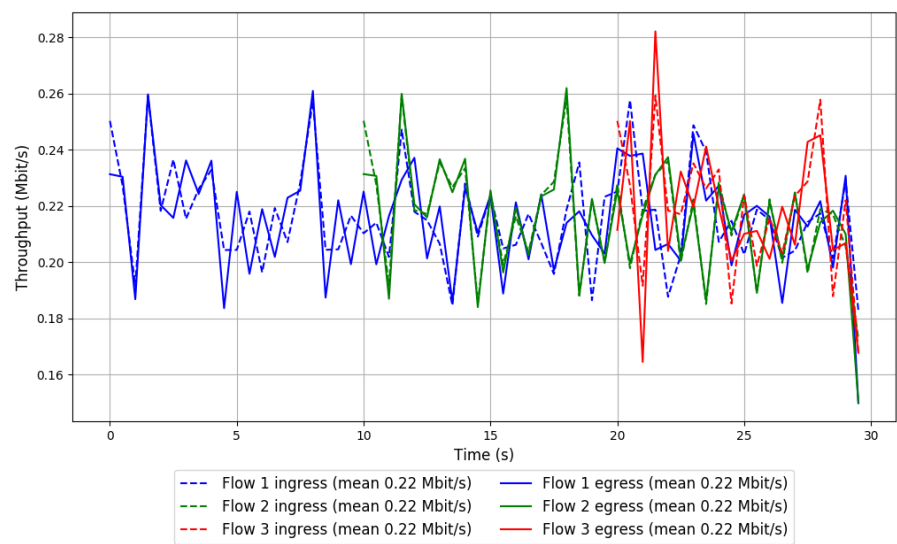
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.840 ms

Loss rate: 0.74%

Run 3: Report of SReAM — Data Link

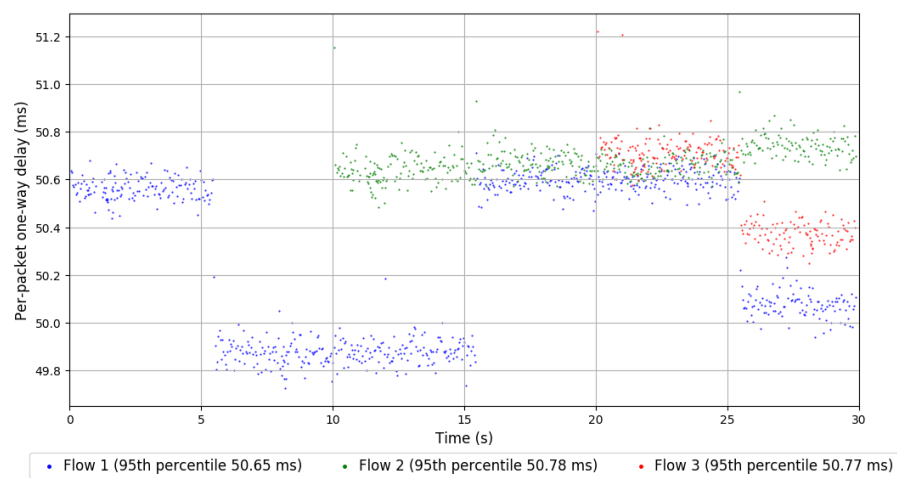
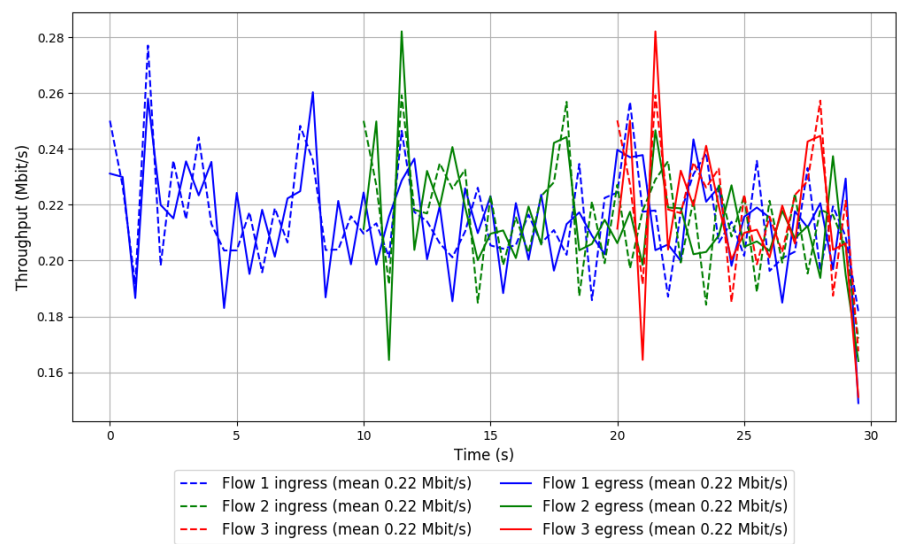


```
Run 4: Statistics of SCReAM

Start at: 2017-10-12 10:59:48
End at: 2017-10-12 11:00:18

# Below is generated by plot.py at 2017-10-12 15:20:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.755 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.646 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.776 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.775 ms
Loss rate: 1.11%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-10-12 11:12:50

End at: 2017-10-12 11:13:20

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.618 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.470 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.637 ms

Loss rate: 0.42%

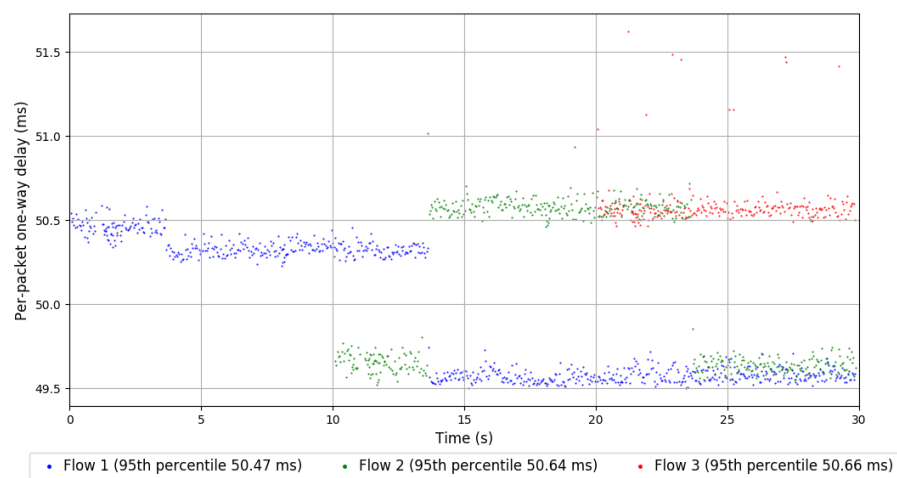
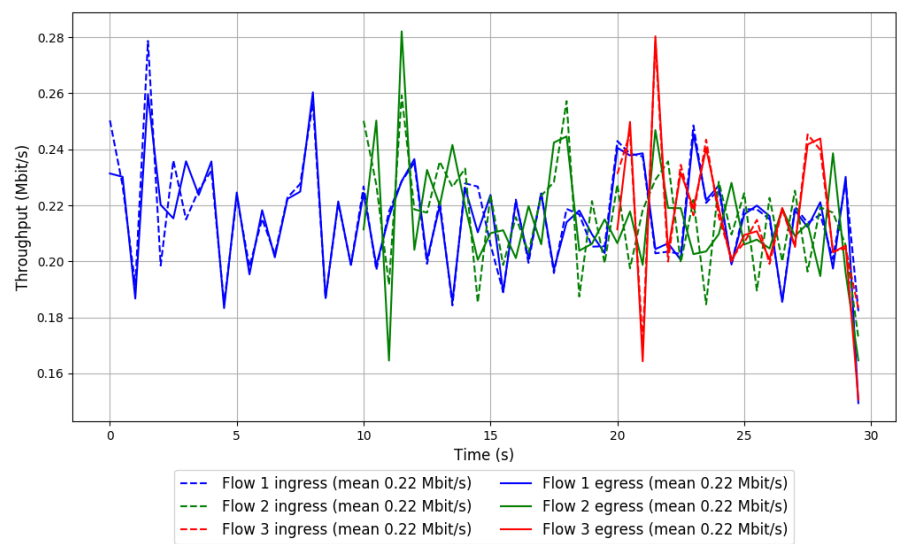
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.659 ms

Loss rate: 1.11%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2017-10-12 11:25:29

End at: 2017-10-12 11:25:59

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.654 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.680 ms

Loss rate: 0.42%

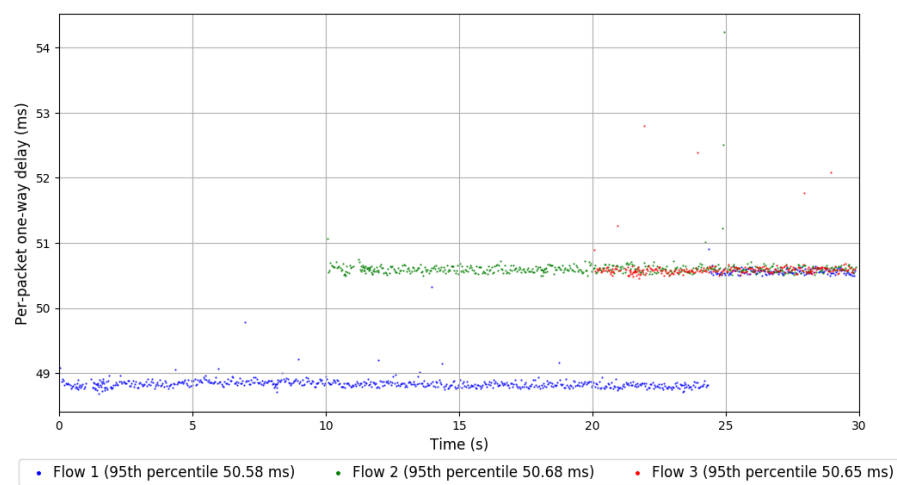
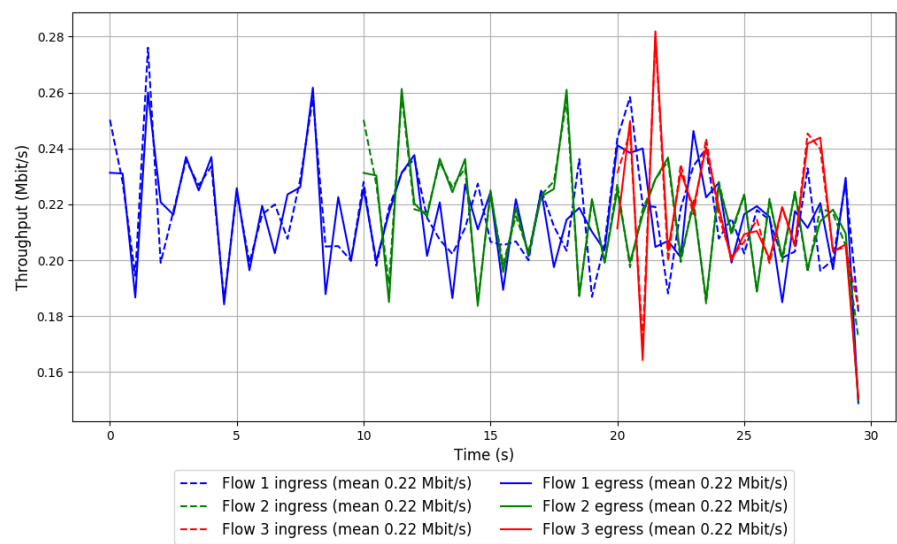
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.648 ms

Loss rate: 1.11%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SReAM

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

End at: 2017-10-12 11:38:53

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.697 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.722 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.814 ms

Loss rate: 0.42%

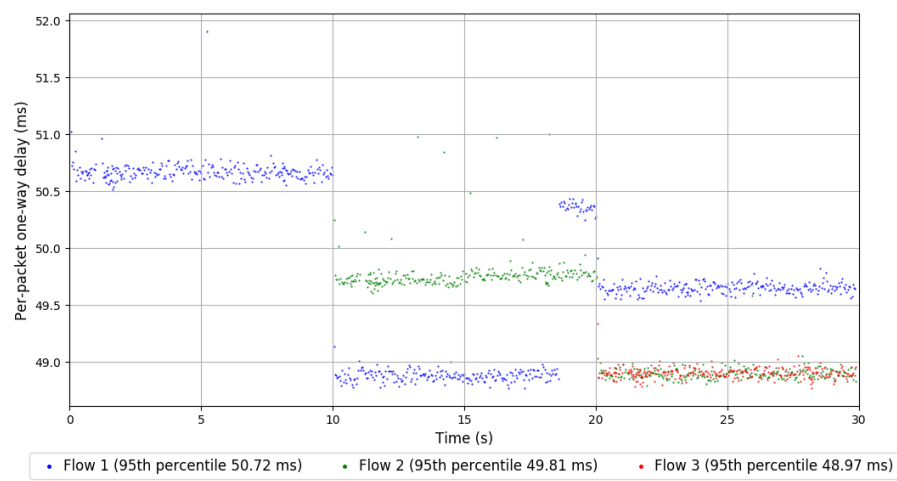
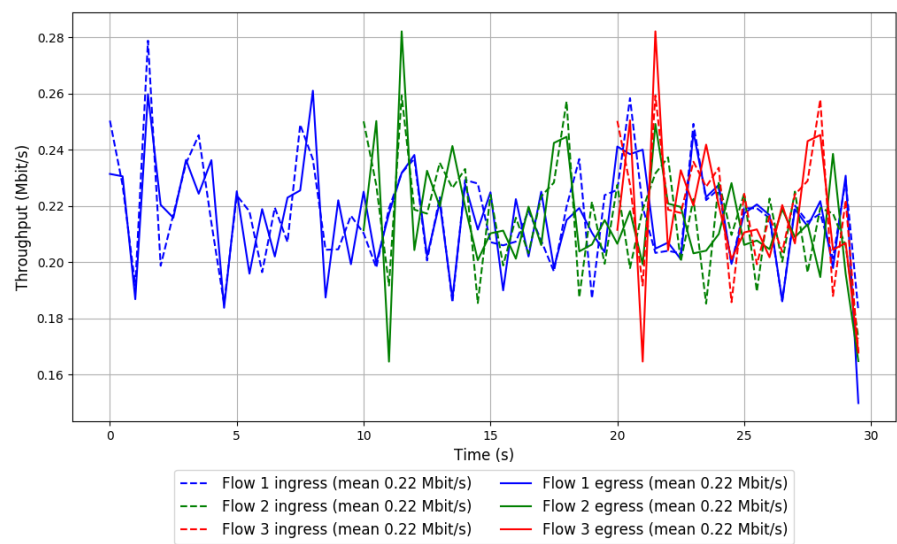
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.971 ms

Loss rate: 0.74%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-10-12 11:50:45

End at: 2017-10-12 11:51:15

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.590 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.503 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.608 ms

Loss rate: 0.42%

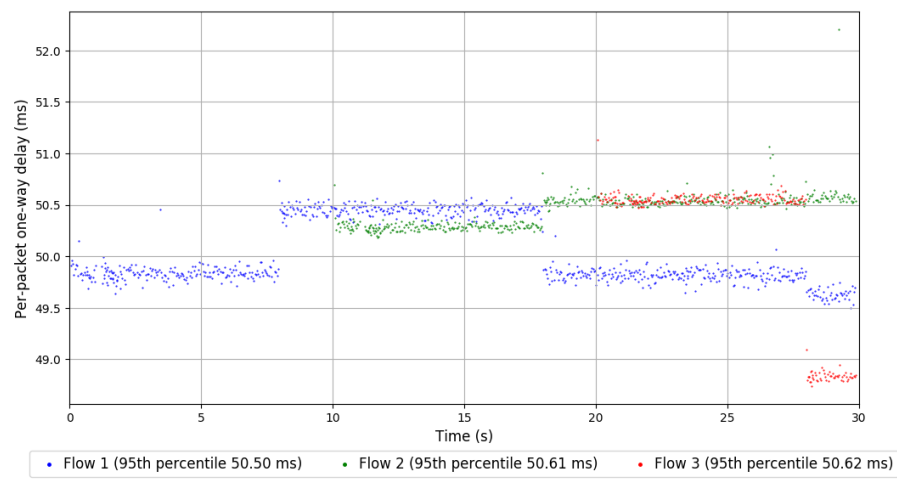
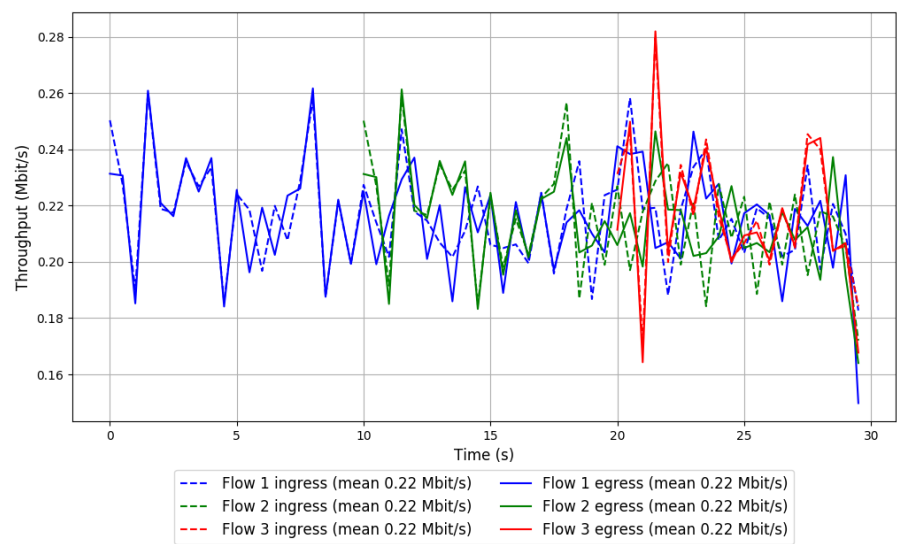
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.616 ms

Loss rate: 0.74%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2017-10-12 12:03:28

End at: 2017-10-12 12:03:58

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.39%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.489 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.742 ms

Loss rate: 0.42%

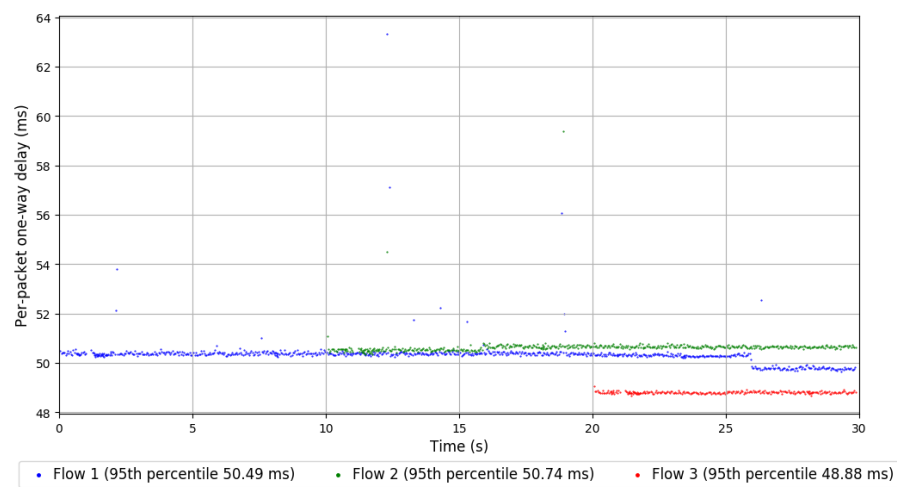
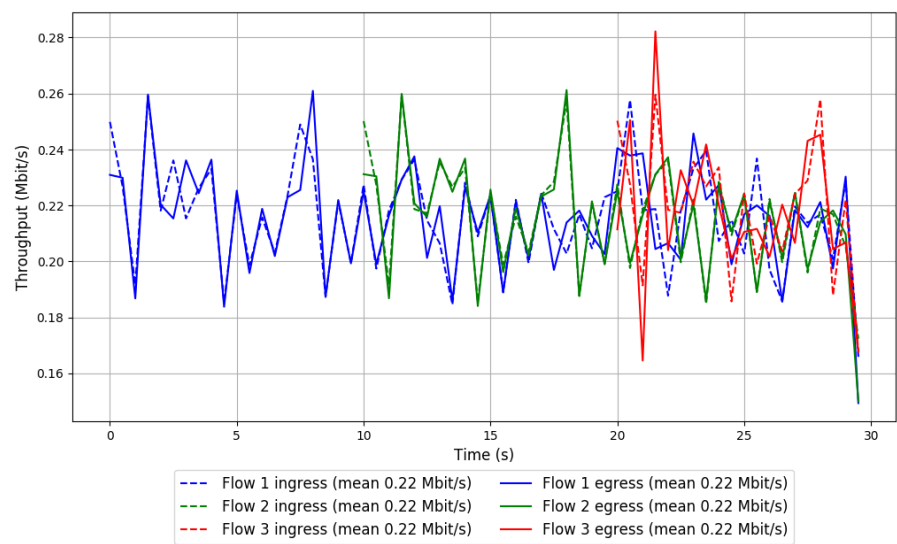
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.884 ms

Loss rate: 0.74%

Run 9: Report of SReAM — Data Link

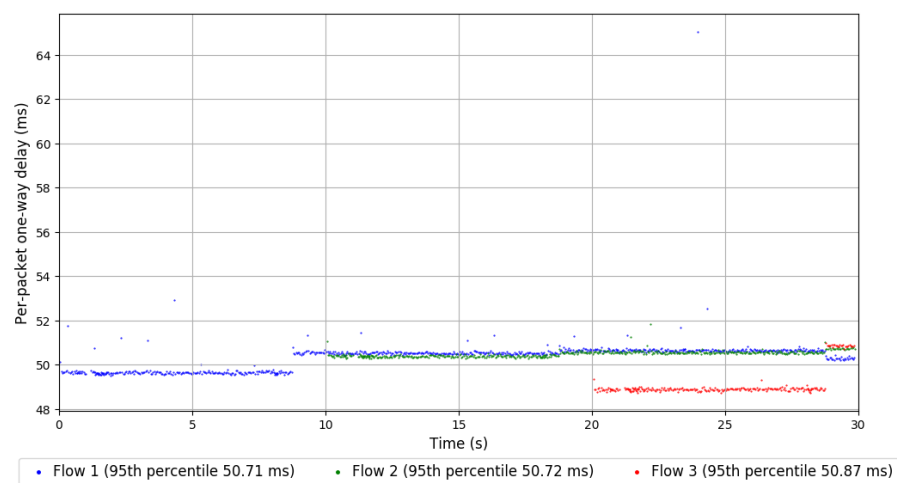
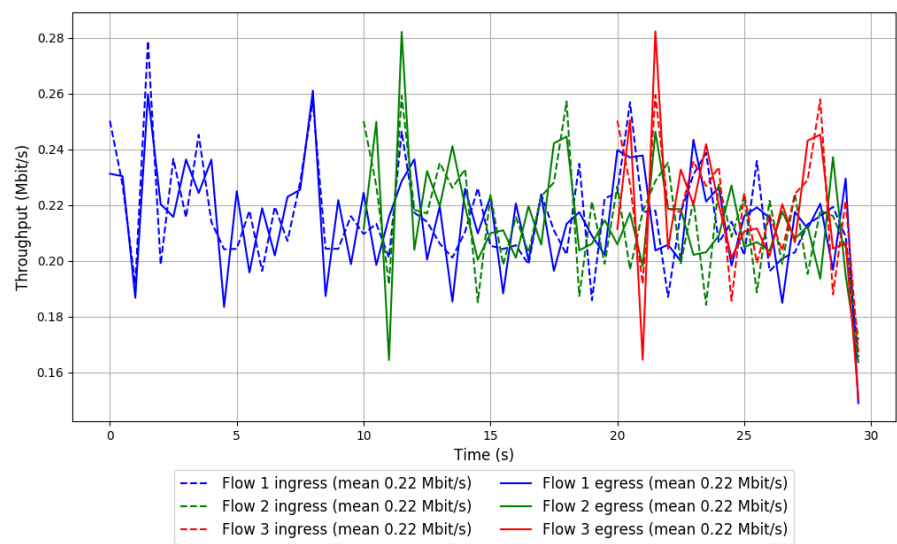


```
Run 10: Statistics of SReAM

Start at: 2017-10-12 12:16:15
End at: 2017-10-12 12:16:45

# Below is generated by plot.py at 2017-10-12 15:20:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.728 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.710 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.718 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.871 ms
Loss rate: 1.10%
```

Run 10: Report of SCReAM — Data Link

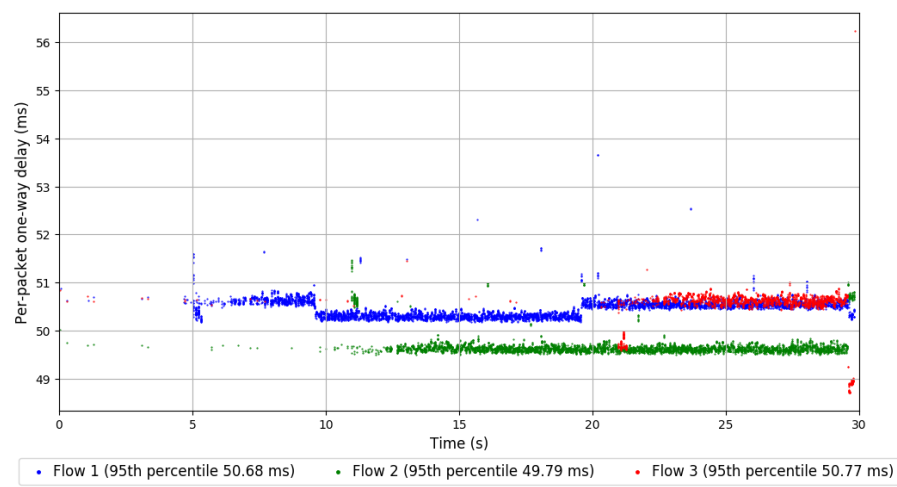
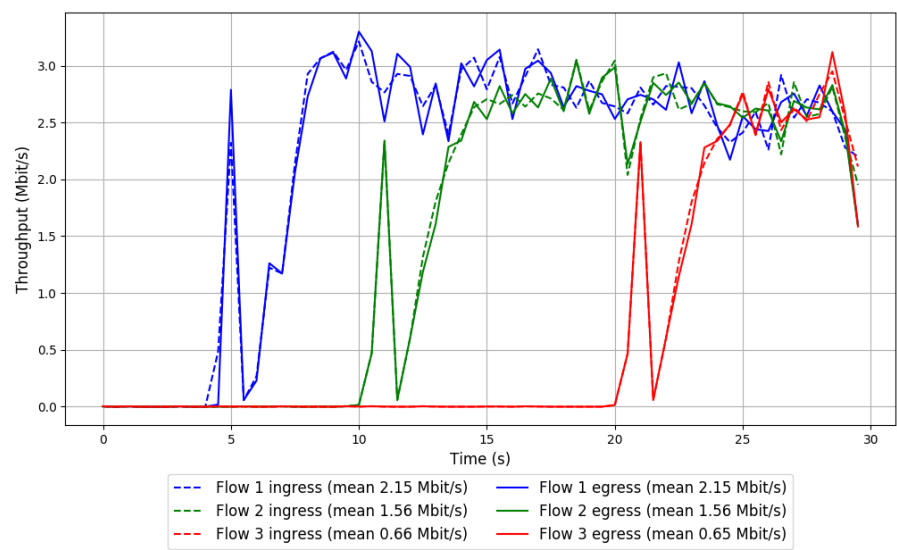


```
Run 1: Statistics of WebRTC media

Start at: 2017-10-12 10:17:54
End at: 2017-10-12 10:18:24

# Below is generated by plot.py at 2017-10-12 15:20:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 50.704 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 50.679 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 49.794 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 50.768 ms
Loss rate: 1.83%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-10-12 10:30:28

End at: 2017-10-12 10:30:58

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 51.000 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 2.26 Mbit/s

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

Loss rate: 0.45%

-- Flow 2:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 51.005 ms

Loss rate: 0.67%

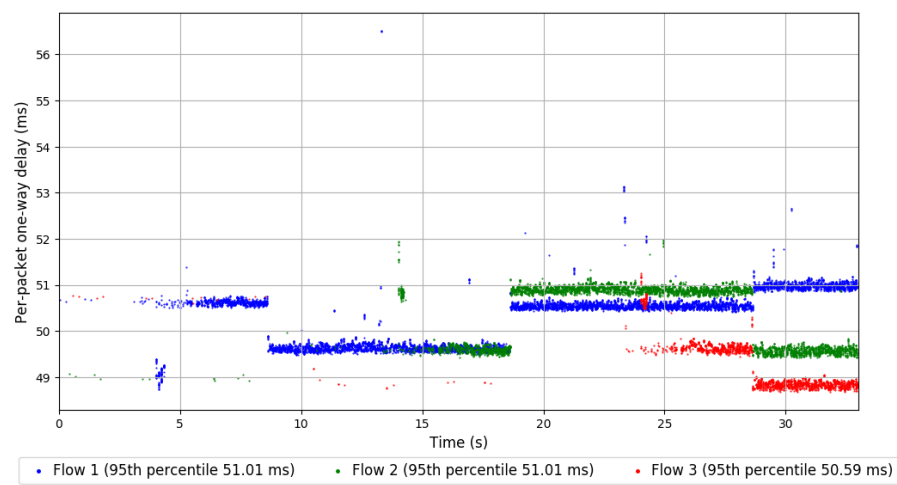
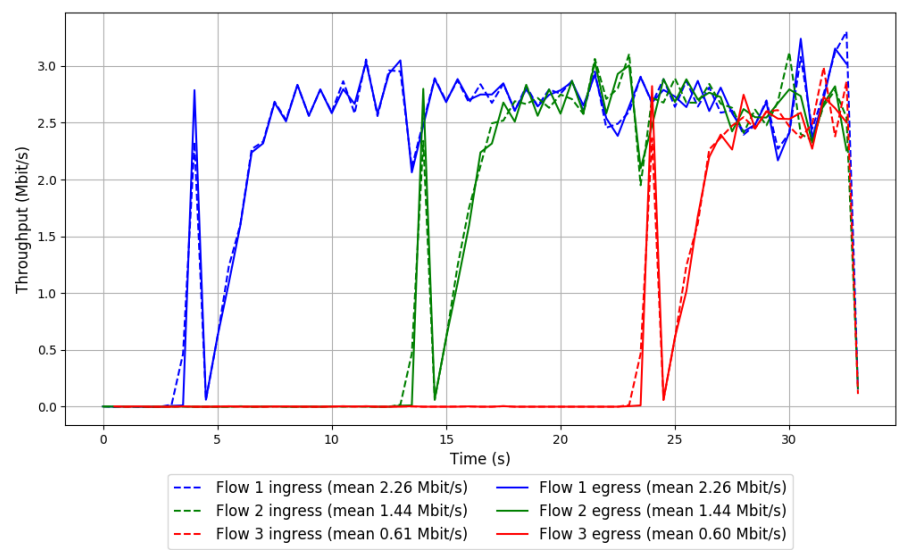
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 50.587 ms

Loss rate: 1.79%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-10-12 10:43:16

End at: 2017-10-12 10:43:46

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 50.772 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 50.805 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 49.924 ms

Loss rate: 0.74%

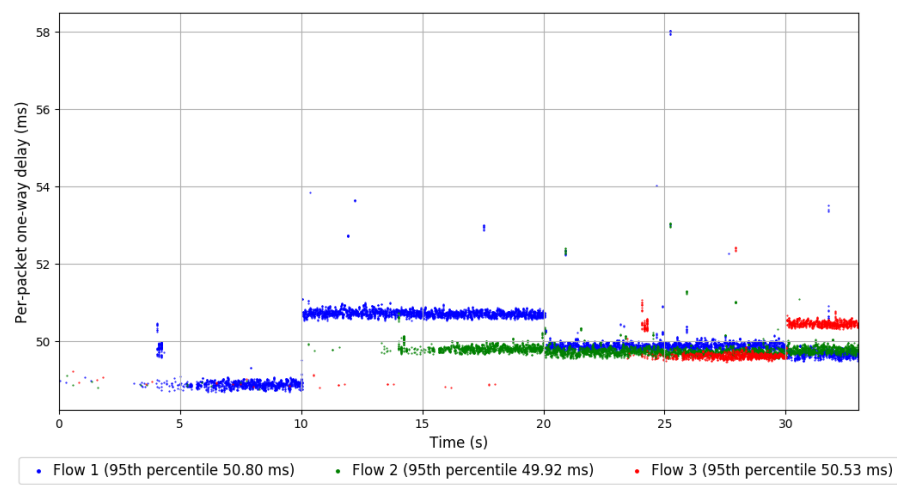
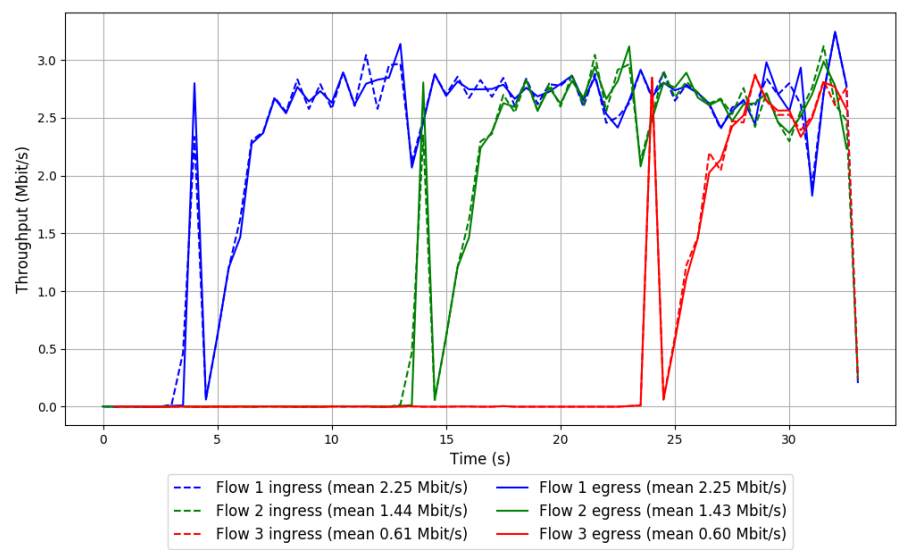
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 50.534 ms

Loss rate: 1.30%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-10-12 10:56:14

End at: 2017-10-12 10:56:44

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 50.861 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 50.851 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 50.890 ms

Loss rate: 0.66%

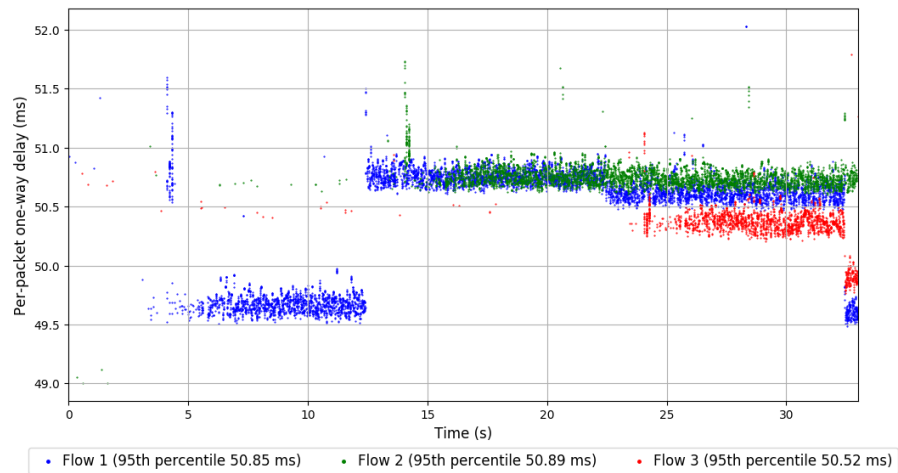
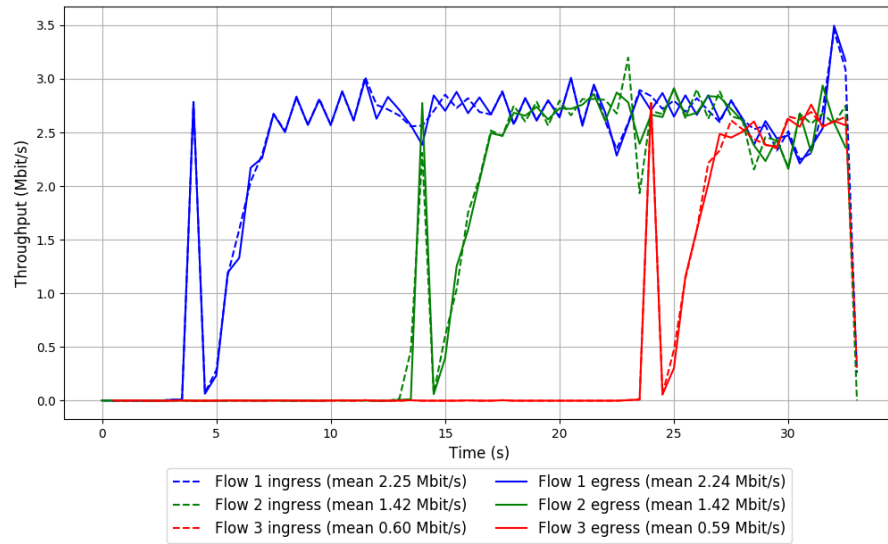
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 50.515 ms

Loss rate: 1.57%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-10-12 11:09:02

End at: 2017-10-12 11:09:32

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 50.718 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 50.667 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 50.743 ms

Loss rate: 0.70%

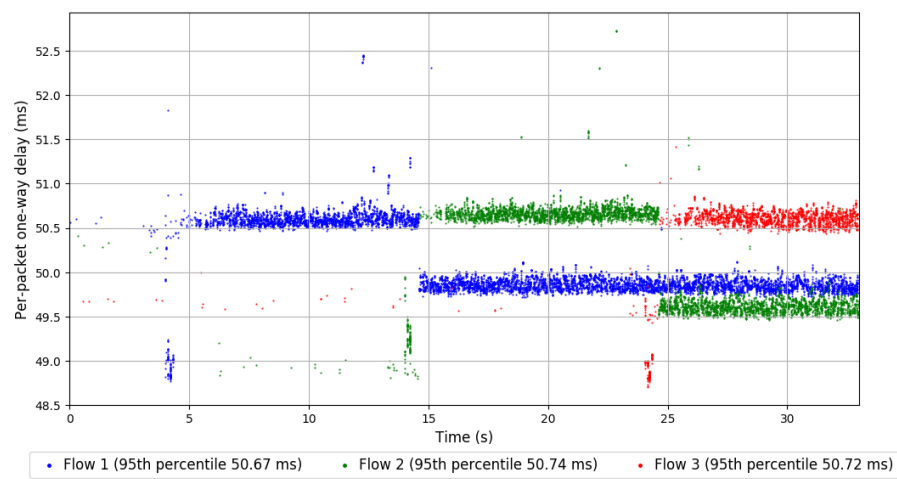
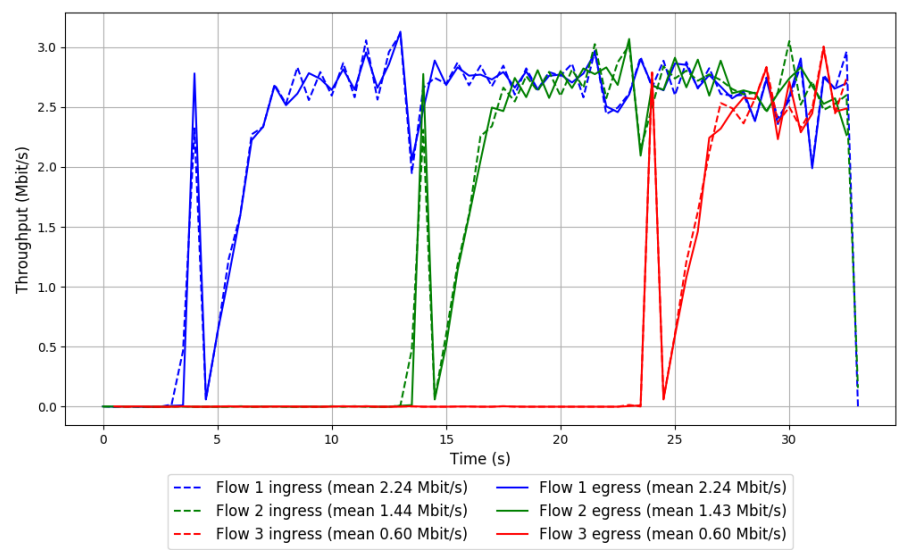
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 50.724 ms

Loss rate: 1.23%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-10-12 11:21:47

End at: 2017-10-12 11:22:17

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 50.731 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 49.838 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 50.784 ms

Loss rate: 0.75%

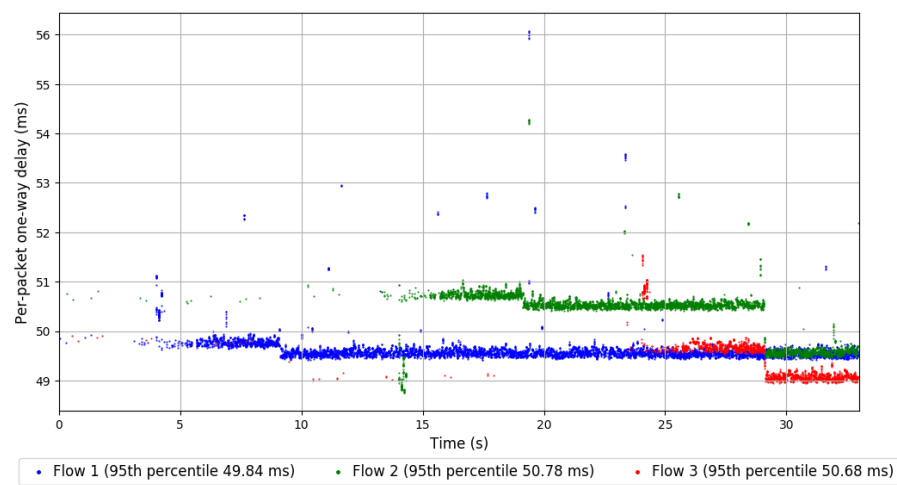
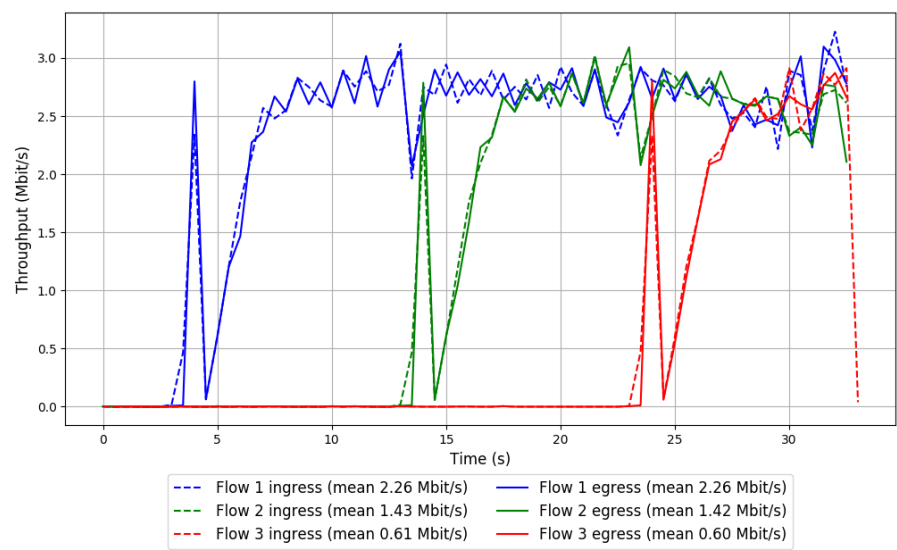
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 50.677 ms

Loss rate: 1.31%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-10-12 11:34:44

End at: 2017-10-12 11:35:14

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 50.754 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 50.772 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 50.734 ms

Loss rate: 0.76%

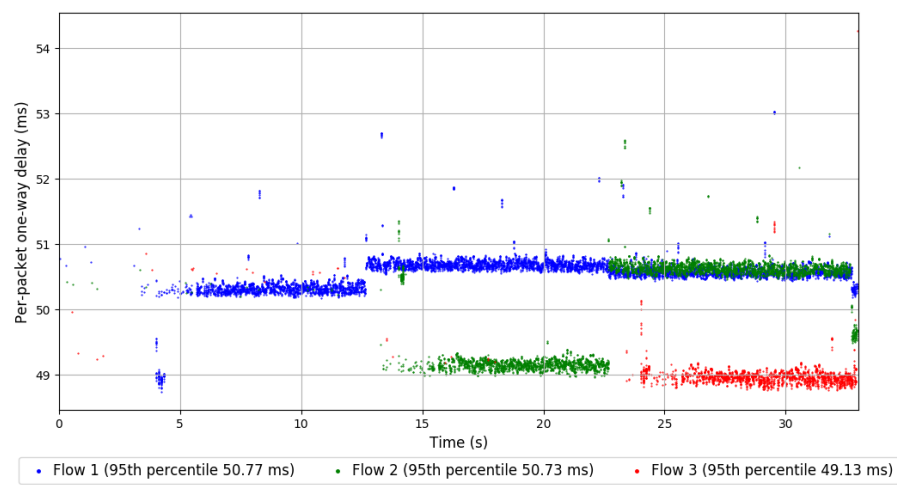
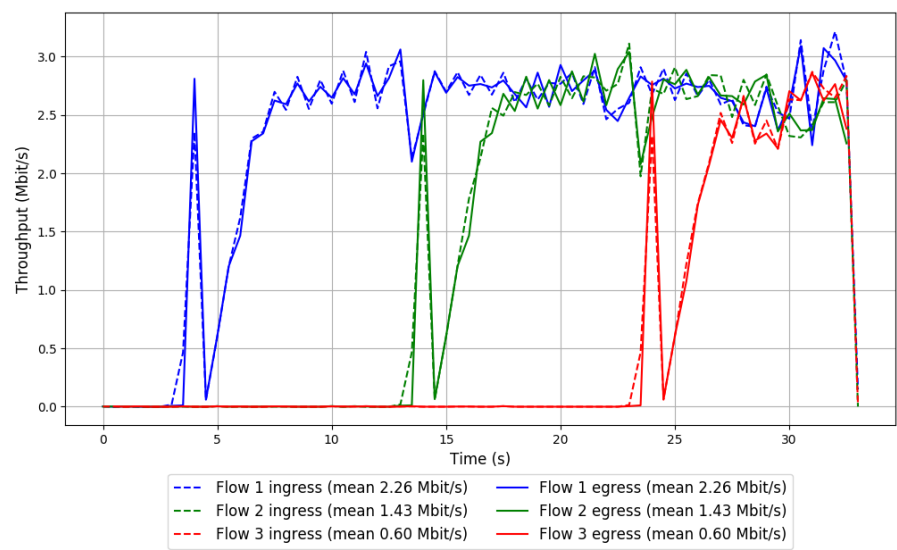
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 49.133 ms

Loss rate: 1.78%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-10-12 11:47:15

End at: 2017-10-12 11:47:45

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.92 Mbit/s

95th percentile per-packet one-way delay: 50.658 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 50.520 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 50.704 ms

Loss rate: 0.58%

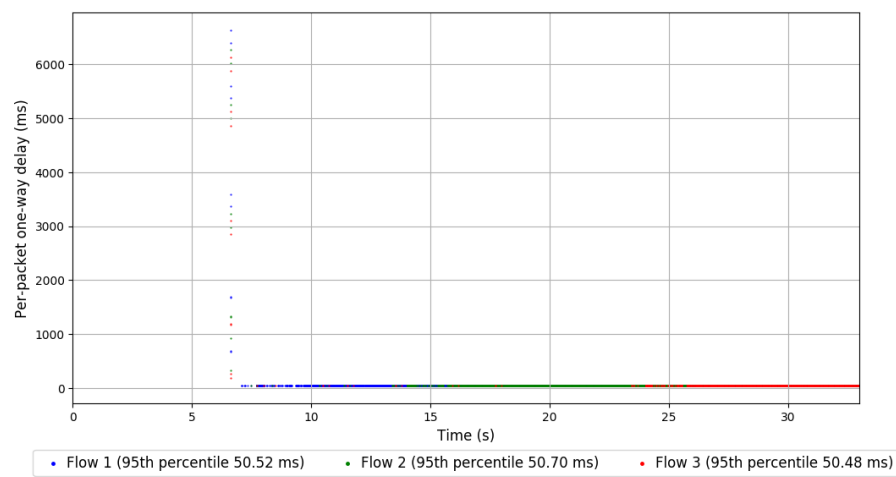
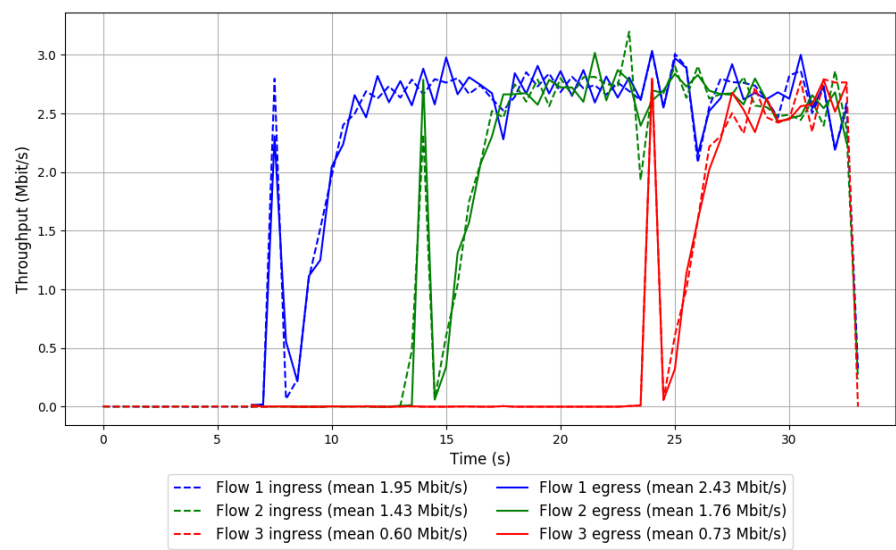
-- Flow 3:

Average throughput: 0.73 Mbit/s

95th percentile per-packet one-way delay: 50.482 ms

Loss rate: 1.20%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-10-12 11:59:48

End at: 2017-10-12 12:00:18

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 50.833 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 50.869 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 50.549 ms

Loss rate: 0.74%

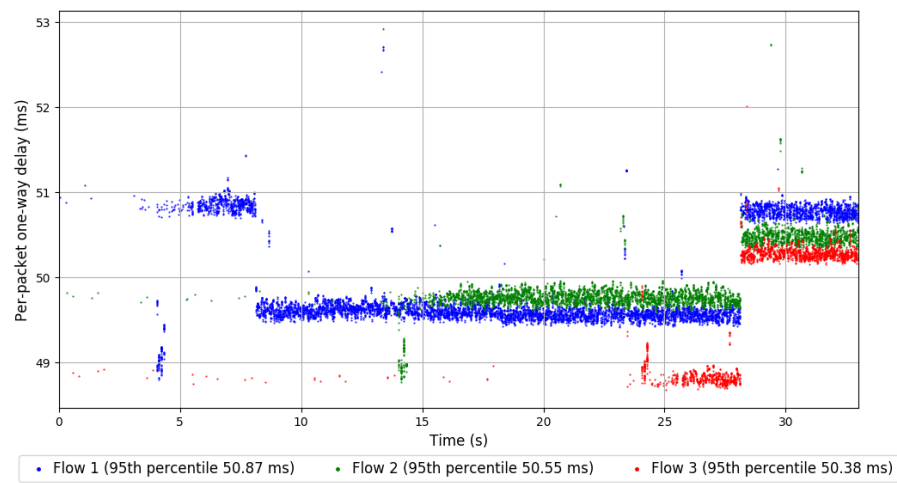
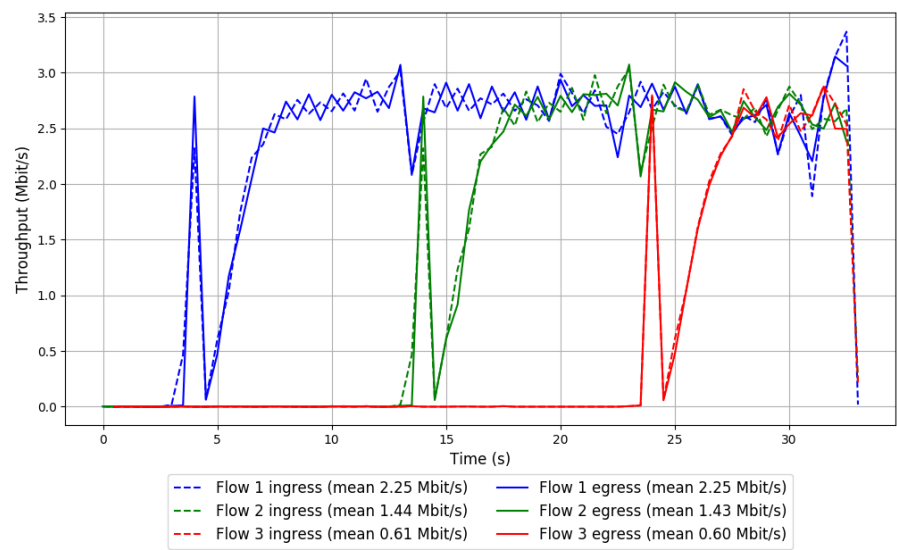
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 50.383 ms

Loss rate: 1.77%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-10-12 12:12:31

End at: 2017-10-12 12:13:01

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.56 Mbit/s

95th percentile per-packet one-way delay: 50.499 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 50.519 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 49.802 ms

Loss rate: 0.83%

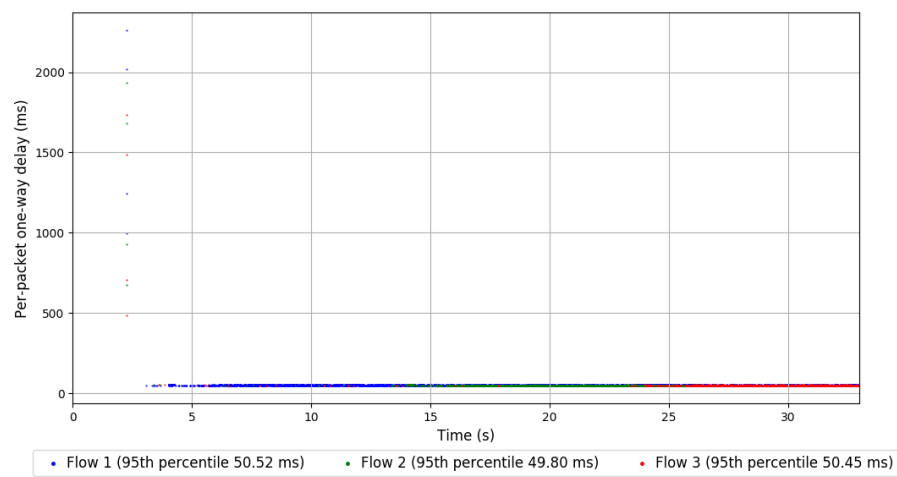
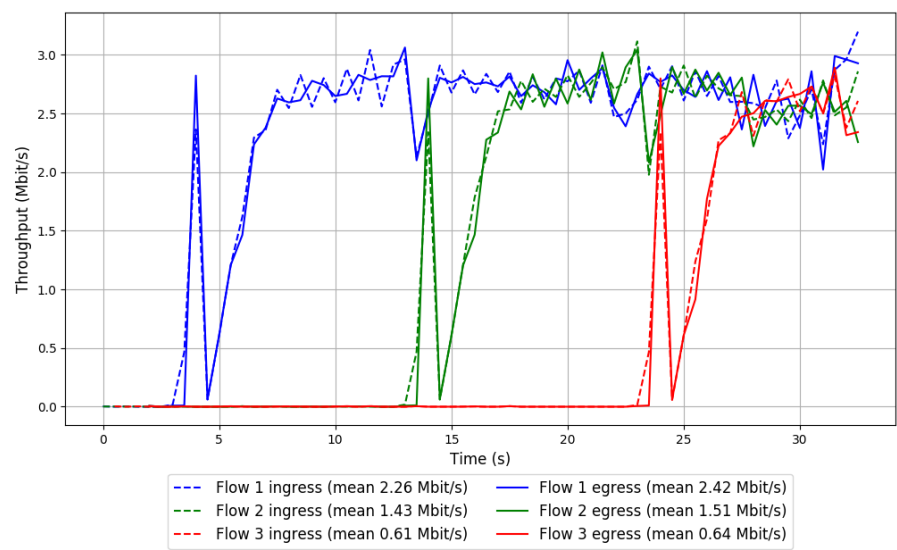
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 50.453 ms

Loss rate: 1.22%

Run 10: Report of WebRTC media — Data Link

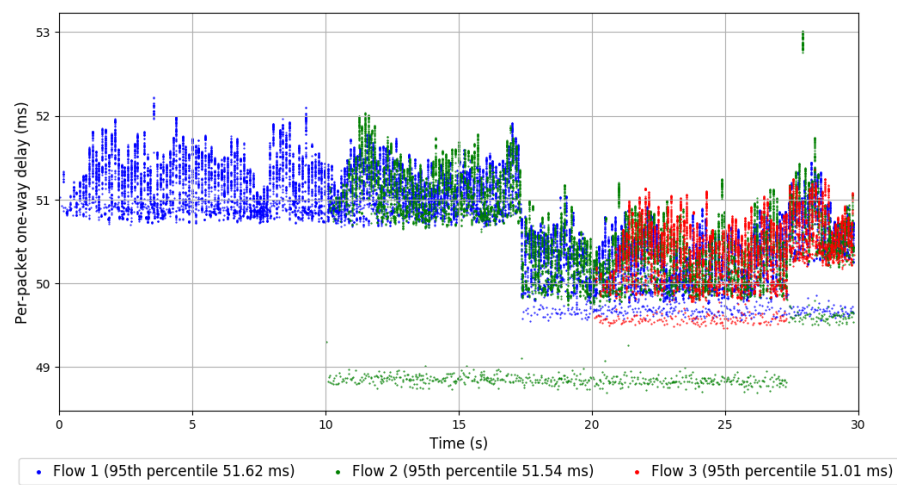
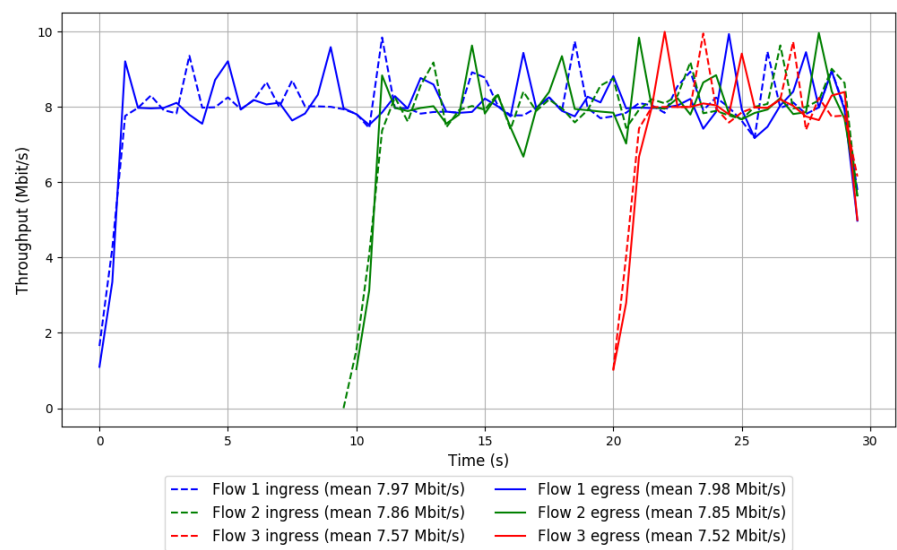


```
Run 1: Statistics of Sprout

Start at: 2017-10-12 10:23:16
End at: 2017-10-12 10:23:46

# Below is generated by plot.py at 2017-10-12 15:20:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.66 Mbit/s
95th percentile per-packet one-way delay: 51.560 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 7.98 Mbit/s
95th percentile per-packet one-way delay: 51.615 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 7.85 Mbit/s
95th percentile per-packet one-way delay: 51.543 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 7.52 Mbit/s
95th percentile per-packet one-way delay: 51.012 ms
Loss rate: 1.29%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-10-12 10:35:48

End at: 2017-10-12 10:36:18

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.42 Mbit/s

95th percentile per-packet one-way delay: 51.557 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 51.473 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 51.648 ms

Loss rate: 0.63%

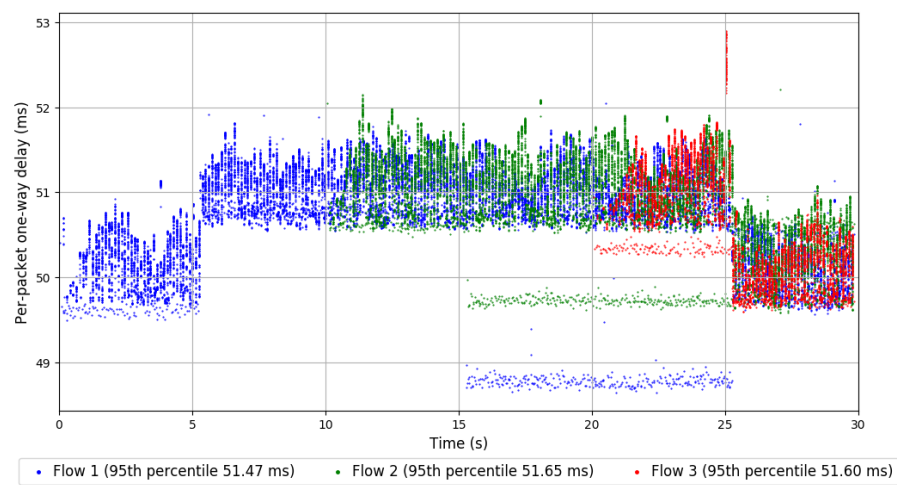
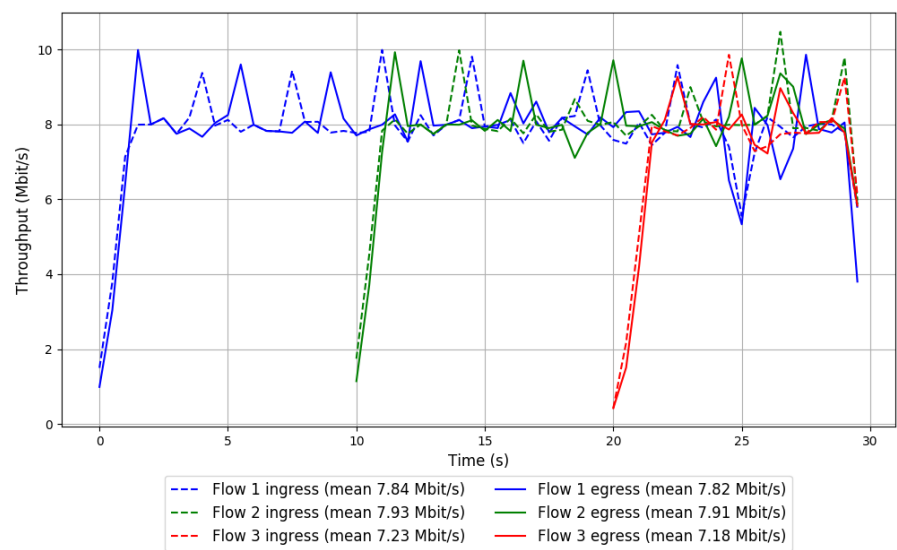
-- Flow 3:

Average throughput: 7.18 Mbit/s

95th percentile per-packet one-way delay: 51.596 ms

Loss rate: 1.36%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-10-12 10:48:38

End at: 2017-10-12 10:49:08

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.84 Mbit/s

95th percentile per-packet one-way delay: 51.090 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 8.09 Mbit/s

95th percentile per-packet one-way delay: 51.134 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 51.106 ms

Loss rate: 0.00%

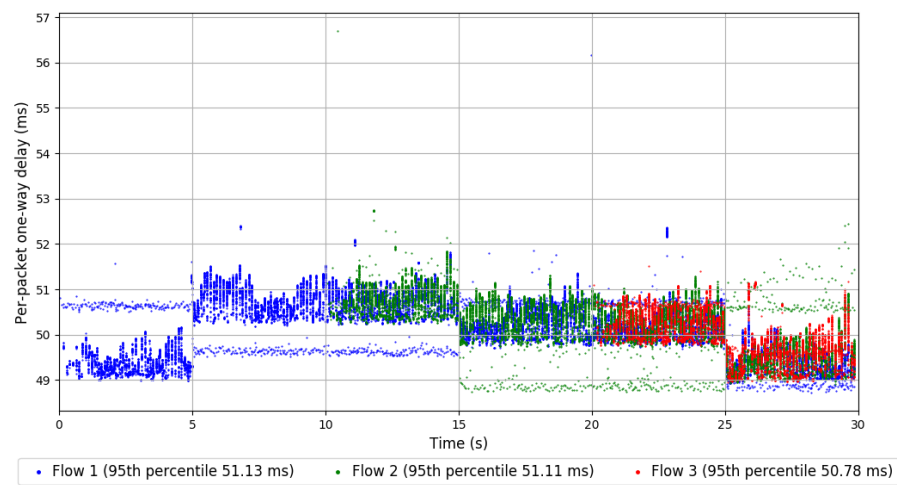
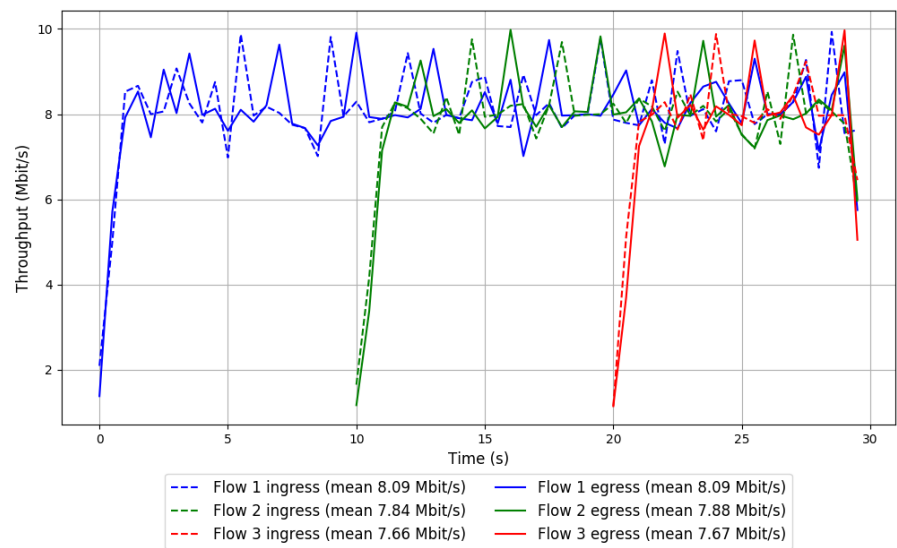
-- Flow 3:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 50.776 ms

Loss rate: 0.93%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-10-12 11:01:30

End at: 2017-10-12 11:02:00

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.73 Mbit/s

95th percentile per-packet one-way delay: 51.702 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 7.99 Mbit/s

95th percentile per-packet one-way delay: 51.707 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 51.672 ms

Loss rate: 0.50%

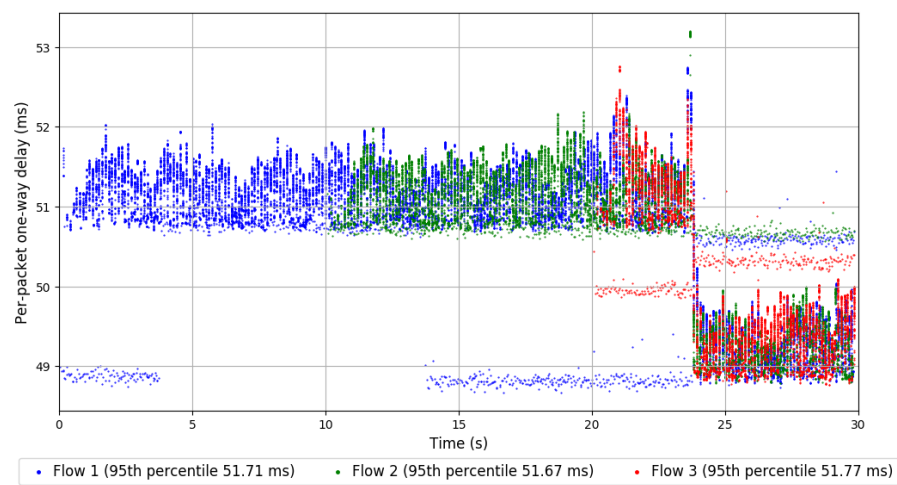
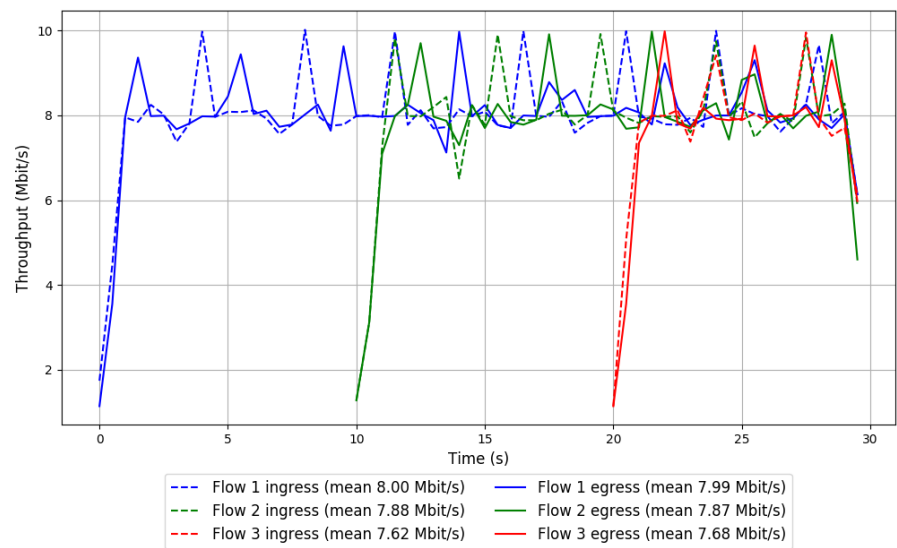
-- Flow 3:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 51.770 ms

Loss rate: 0.09%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-10-12 11:14:32

End at: 2017-10-12 11:15:02

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.56 Mbit/s

95th percentile per-packet one-way delay: 50.764 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 8.01 Mbit/s

95th percentile per-packet one-way delay: 50.838 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 7.80 Mbit/s

95th percentile per-packet one-way delay: 50.686 ms

Loss rate: 0.63%

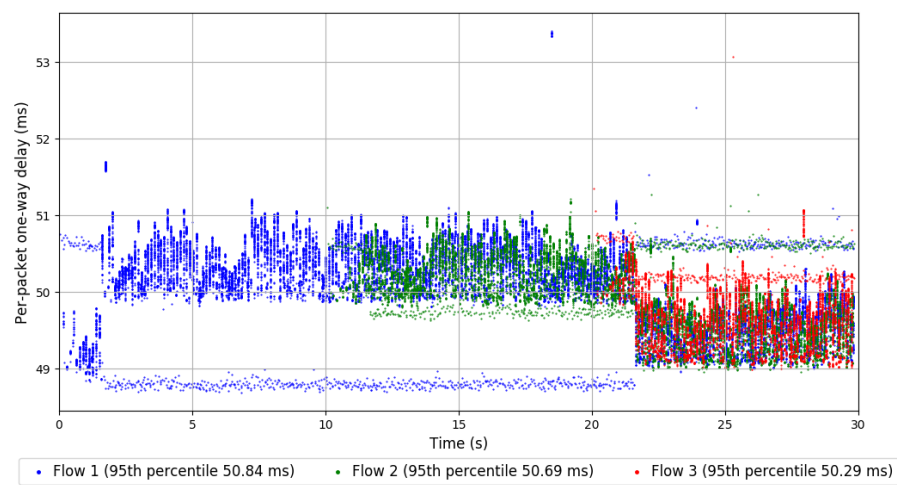
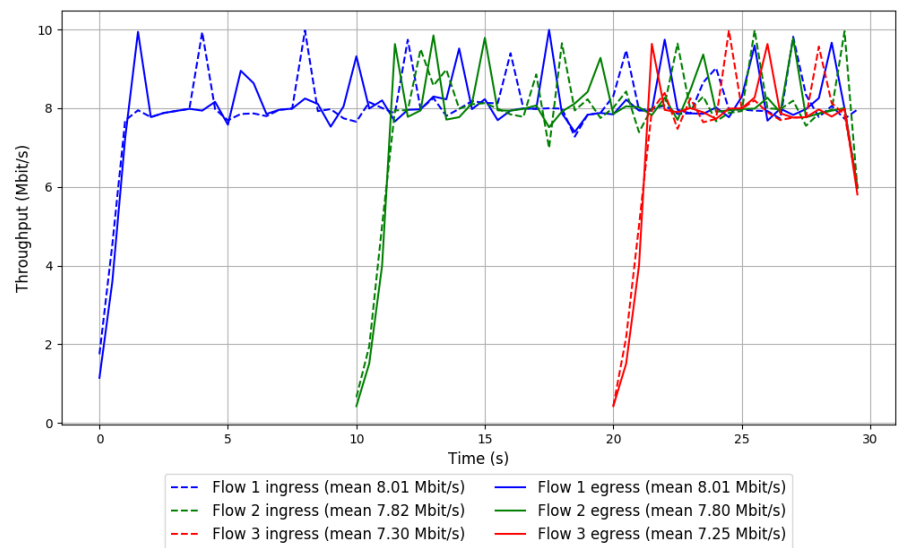
-- Flow 3:

Average throughput: 7.25 Mbit/s

95th percentile per-packet one-way delay: 50.286 ms

Loss rate: 1.39%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-10-12 11:27:11

End at: 2017-10-12 11:27:41

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.54 Mbit/s

95th percentile per-packet one-way delay: 51.568 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 7.97 Mbit/s

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

Loss rate: 0.39%

-- Flow 2:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 51.402 ms

Loss rate: 0.65%

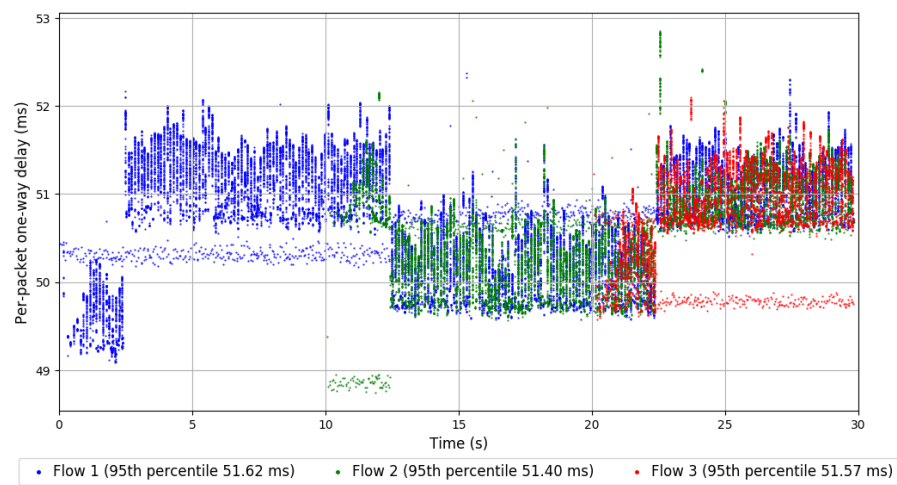
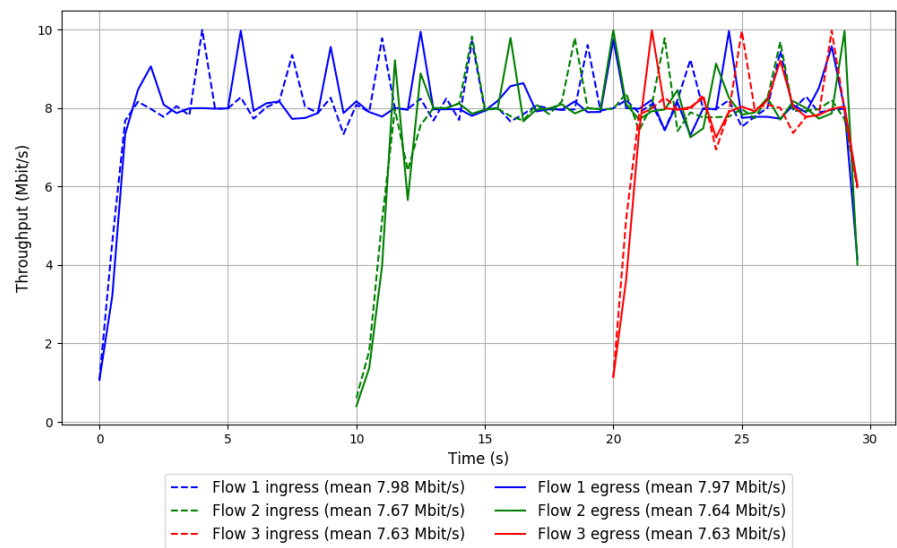
-- Flow 3:

Average throughput: 7.63 Mbit/s

95th percentile per-packet one-way delay: 51.572 ms

Loss rate: 1.21%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-10-12 11:40:03

End at: 2017-10-12 11:40:33

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.92 Mbit/s

95th percentile per-packet one-way delay: 51.202 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 51.190 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 51.235 ms

Loss rate: 0.72%

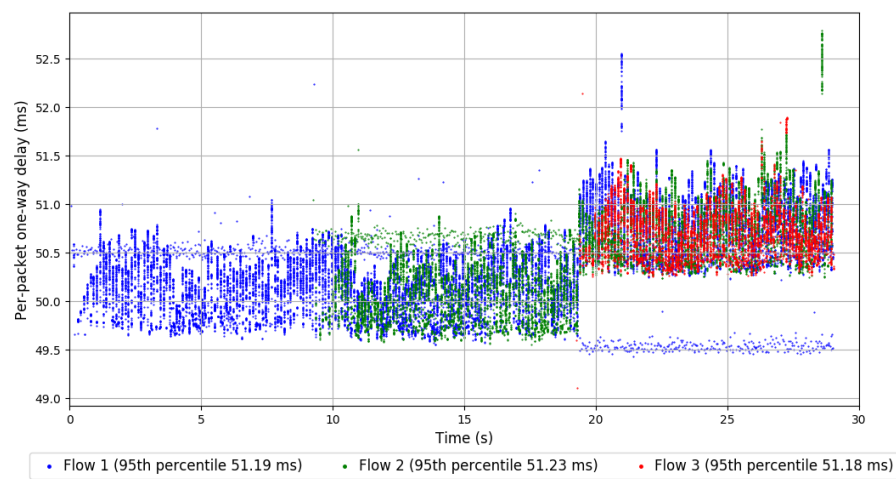
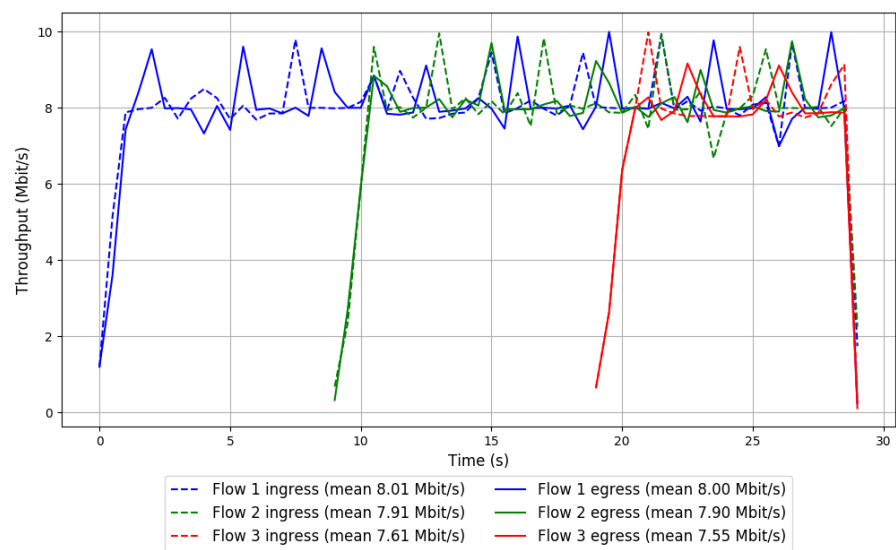
-- Flow 3:

Average throughput: 7.55 Mbit/s

95th percentile per-packet one-way delay: 51.178 ms

Loss rate: 1.43%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-10-12 11:52:25

End at: 2017-10-12 11:52:55

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.71 Mbit/s

95th percentile per-packet one-way delay: 51.414 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 51.401 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 51.470 ms

Loss rate: 0.06%

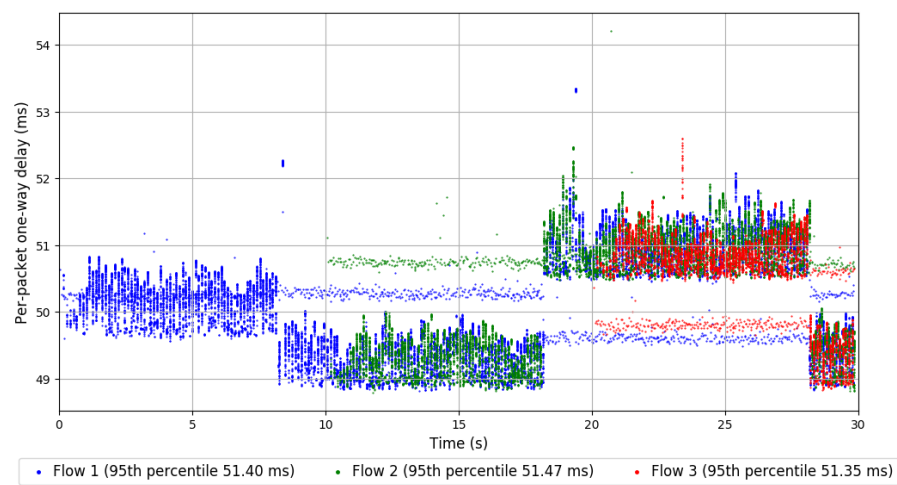
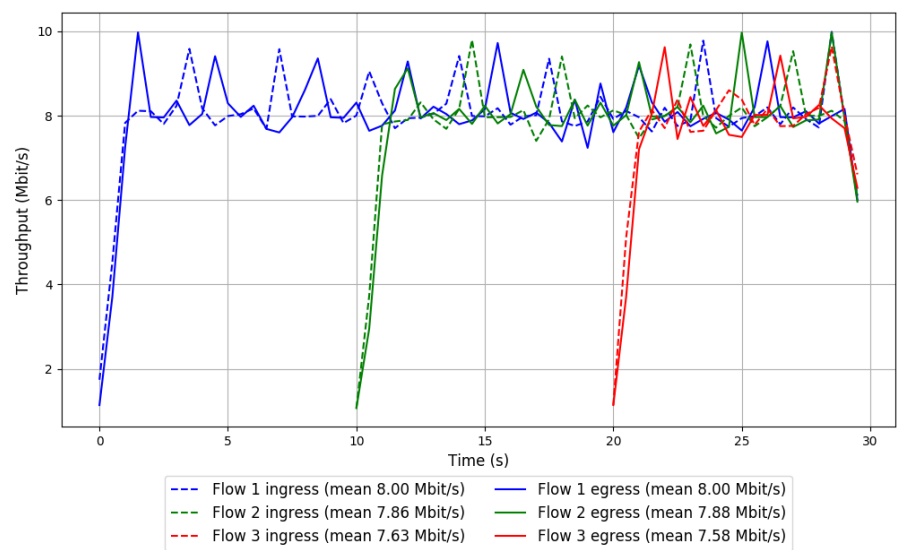
-- Flow 3:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 51.348 ms

Loss rate: 1.54%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-10-12 12:05:08

End at: 2017-10-12 12:05:38

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.70 Mbit/s

95th percentile per-packet one-way delay: 51.777 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 8.02 Mbit/s

95th percentile per-packet one-way delay: 51.776 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 51.795 ms

Loss rate: 0.22%

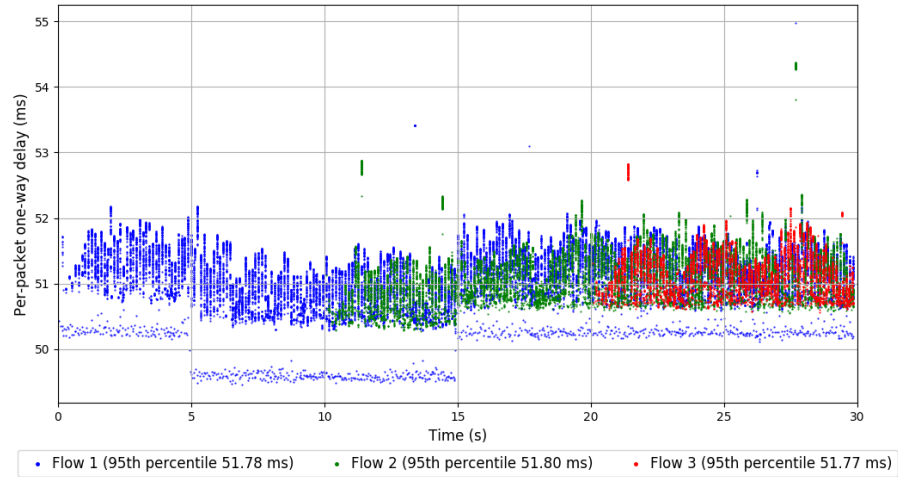
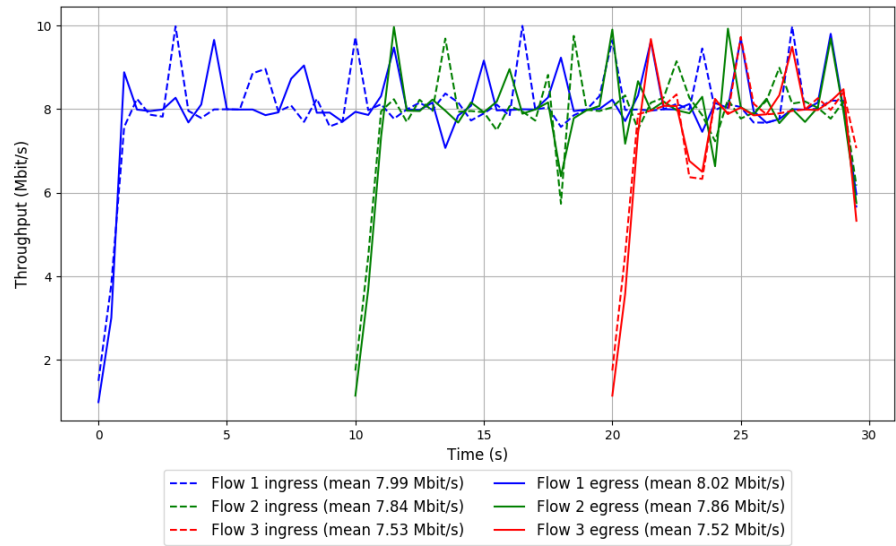
-- Flow 3:

Average throughput: 7.52 Mbit/s

95th percentile per-packet one-way delay: 51.767 ms

Loss rate: 1.17%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-10-12 12:17:56

End at: 2017-10-12 12:18:26

Below is generated by plot.py at 2017-10-12 15:20:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.69 Mbit/s

95th percentile per-packet one-way delay: 51.471 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 51.390 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 51.571 ms

Loss rate: 0.62%

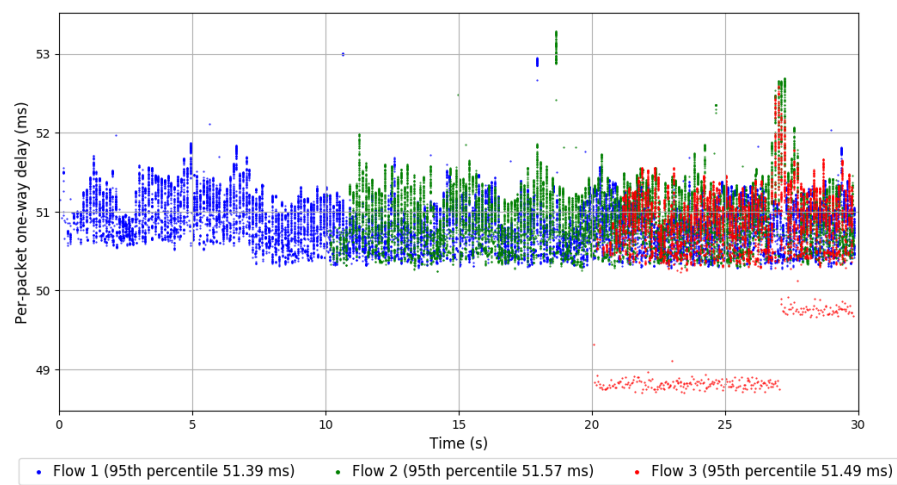
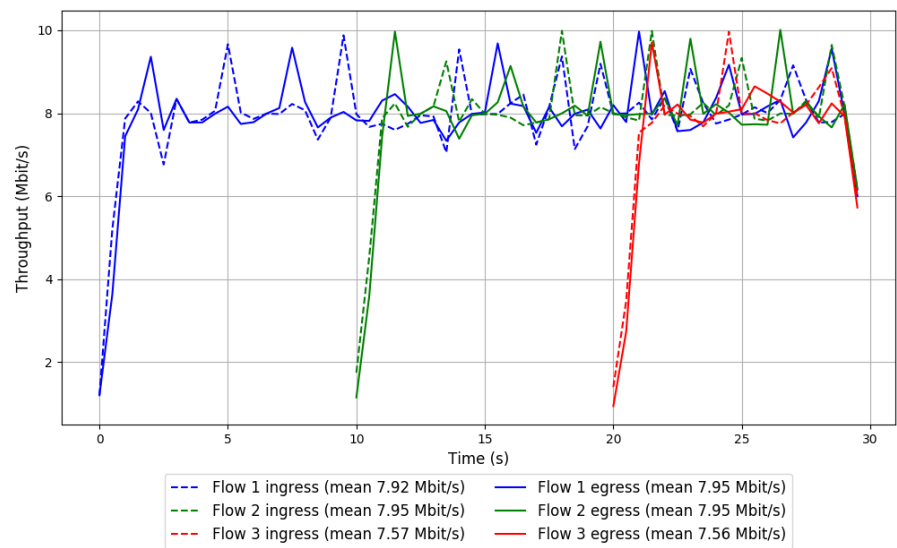
-- Flow 3:

Average throughput: 7.56 Mbit/s

95th percentile per-packet one-way delay: 51.494 ms

Loss rate: 1.34%

Run 10: Report of Sprout — Data Link

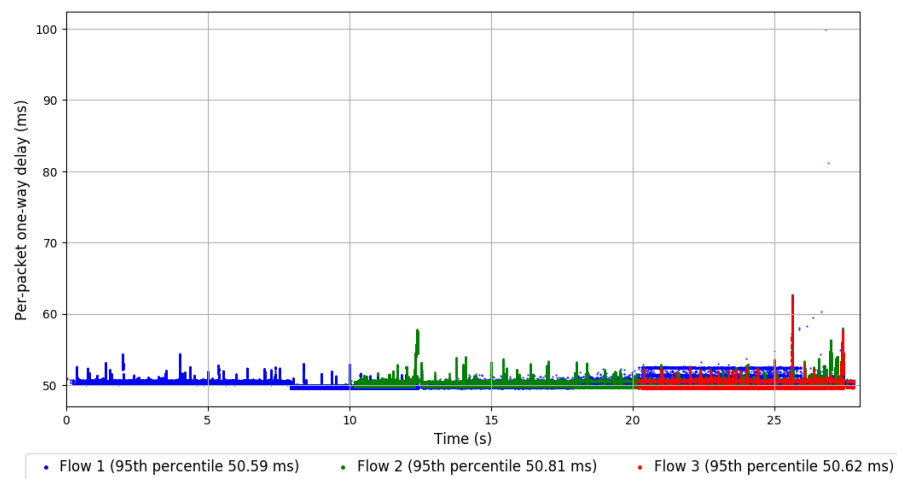
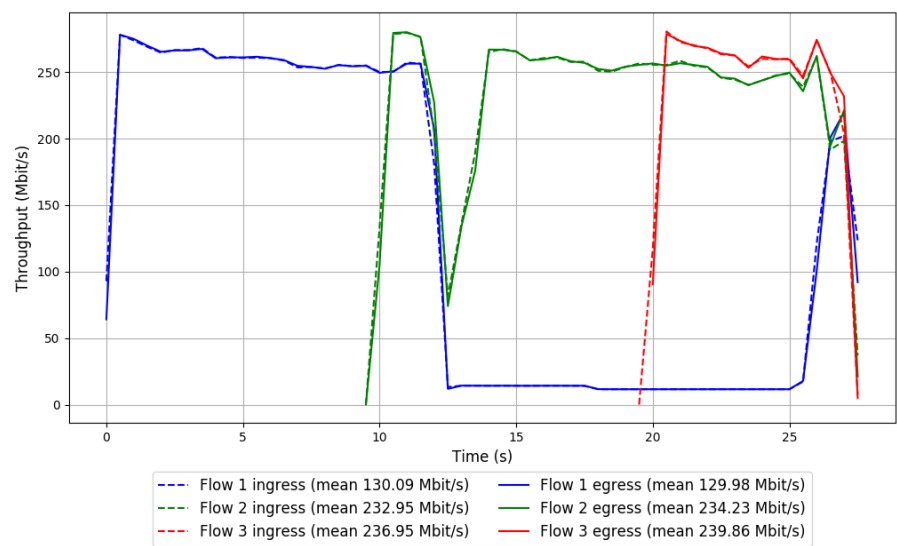


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-10-12 10:16:43
End at: 2017-10-12 10:17:13

# Below is generated by plot.py at 2017-10-12 15:22:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 347.68 Mbit/s
95th percentile per-packet one-way delay: 50.656 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 129.98 Mbit/s
95th percentile per-packet one-way delay: 50.595 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 234.23 Mbit/s
95th percentile per-packet one-way delay: 50.809 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 239.86 Mbit/s
95th percentile per-packet one-way delay: 50.619 ms
Loss rate: 0.08%
```


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

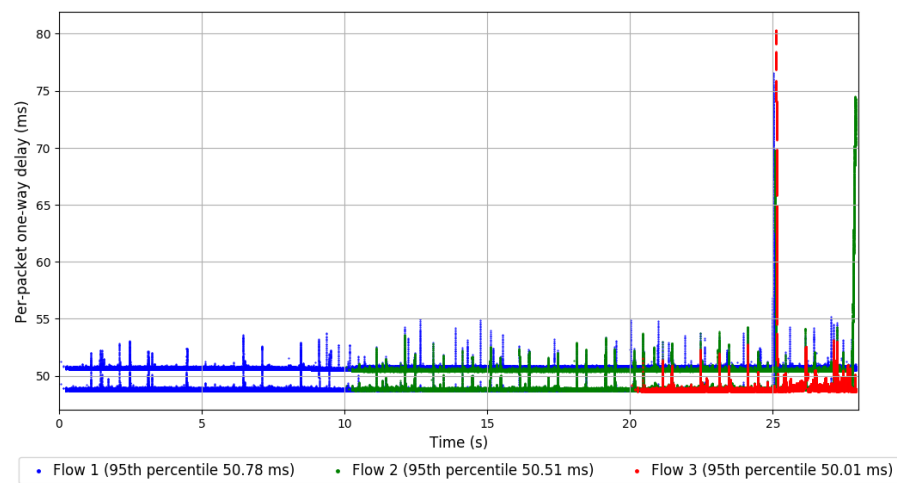
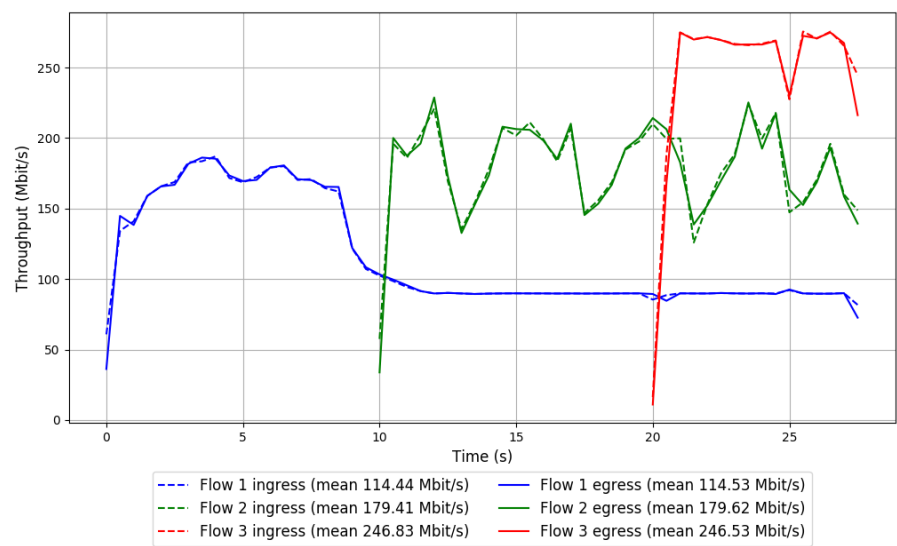


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-10-12 10:29:23
End at: 2017-10-12 10:29:53

# Below is generated by plot.py at 2017-10-12 15:22:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 298.96 Mbit/s
95th percentile per-packet one-way delay: 50.704 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 114.53 Mbit/s
95th percentile per-packet one-way delay: 50.780 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 179.62 Mbit/s
95th percentile per-packet one-way delay: 50.514 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 246.53 Mbit/s
95th percentile per-packet one-way delay: 50.005 ms
Loss rate: 1.39%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-10-12 10:42:02

End at: 2017-10-12 10:42:32

Below is generated by plot.py at 2017-10-12 15:23:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 399.27 Mbit/s

95th percentile per-packet one-way delay: 55.342 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 210.10 Mbit/s

95th percentile per-packet one-way delay: 50.745 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 217.92 Mbit/s

95th percentile per-packet one-way delay: 57.920 ms

Loss rate: 0.36%

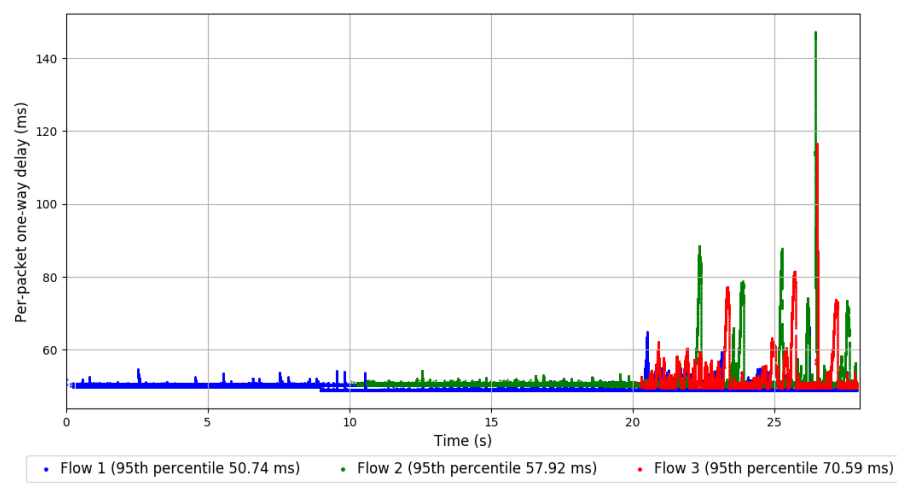
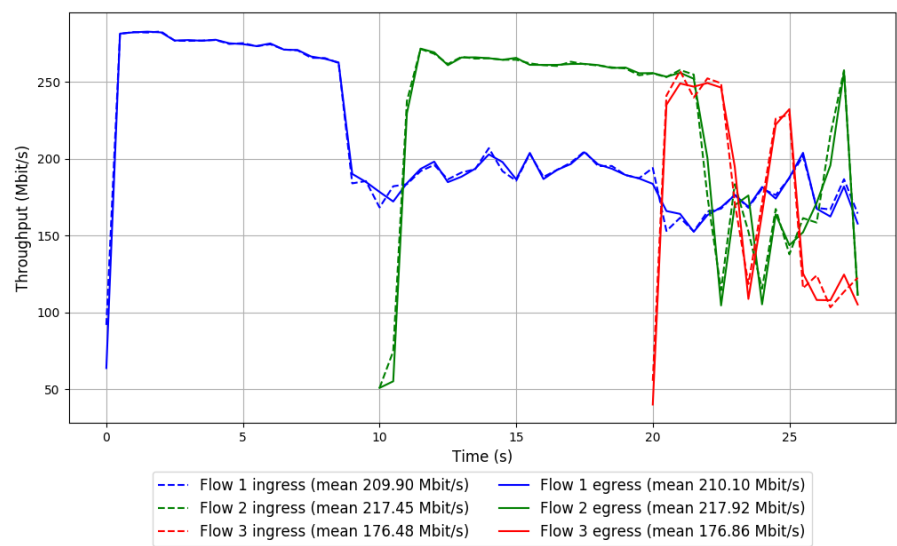
-- Flow 3:

Average throughput: 176.86 Mbit/s

95th percentile per-packet one-way delay: 70.586 ms

Loss rate: 1.07%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-10-12 10:54:58

End at: 2017-10-12 10:55:28

Below is generated by plot.py at 2017-10-12 15:24:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 411.63 Mbit/s

95th percentile per-packet one-way delay: 57.116 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 215.66 Mbit/s

95th percentile per-packet one-way delay: 50.702 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 224.05 Mbit/s

95th percentile per-packet one-way delay: 60.538 ms

Loss rate: 0.69%

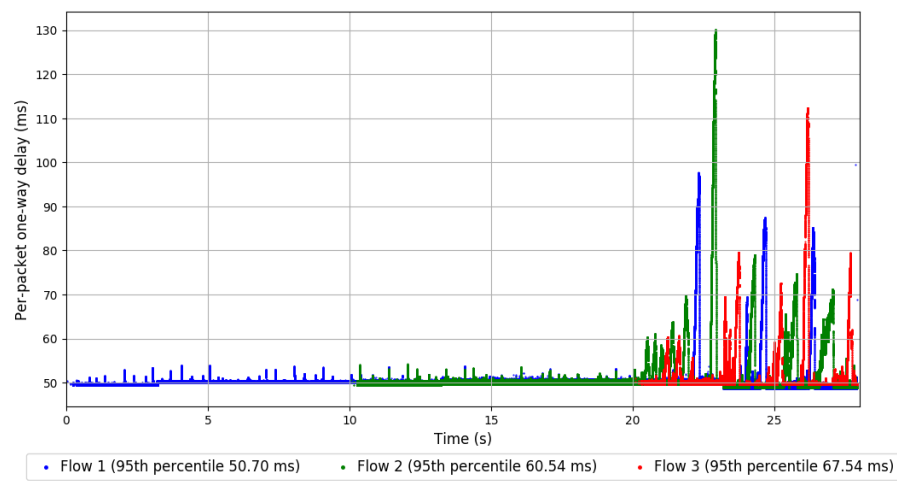
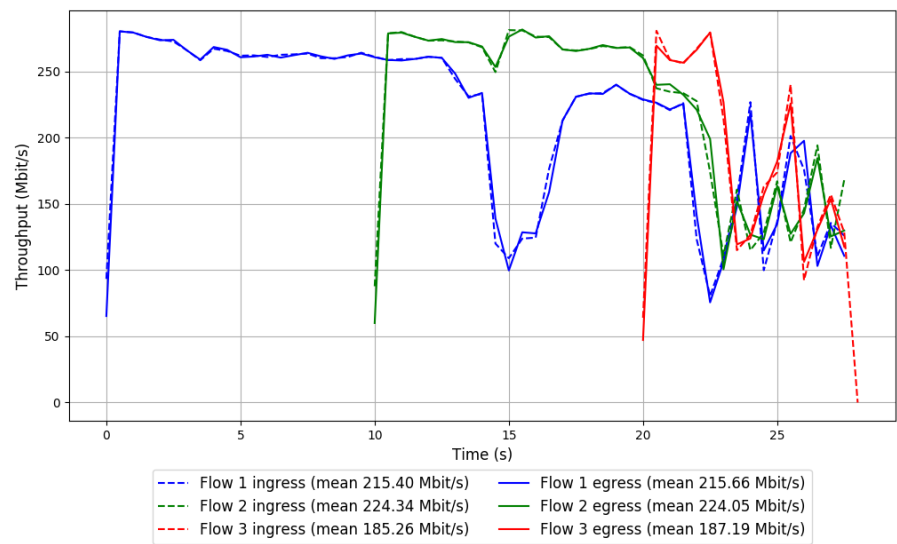
-- Flow 3:

Average throughput: 187.19 Mbit/s

95th percentile per-packet one-way delay: 67.541 ms

Loss rate: 0.98%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-10-12 11:07:47

End at: 2017-10-12 11:08:17

Below is generated by plot.py at 2017-10-12 15:24:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 407.72 Mbit/s

95th percentile per-packet one-way delay: 55.840 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 200.64 Mbit/s

95th percentile per-packet one-way delay: 50.897 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 231.64 Mbit/s

95th percentile per-packet one-way delay: 53.693 ms

Loss rate: 0.65%

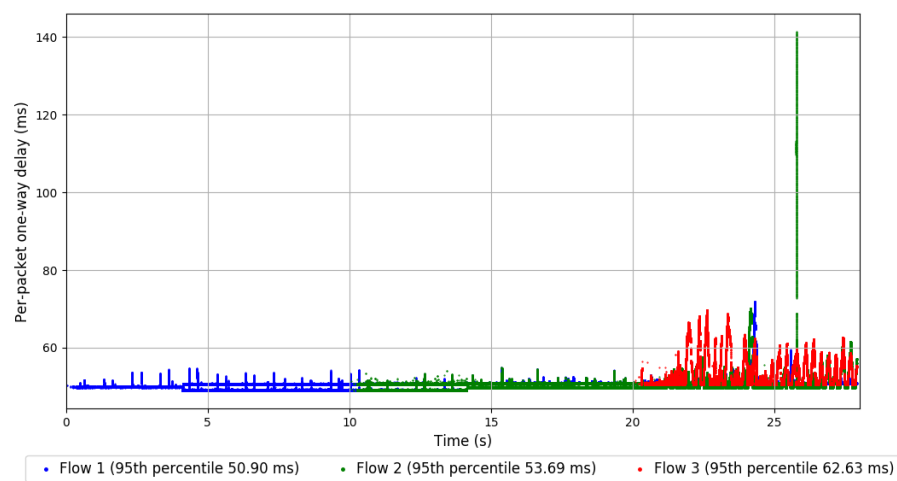
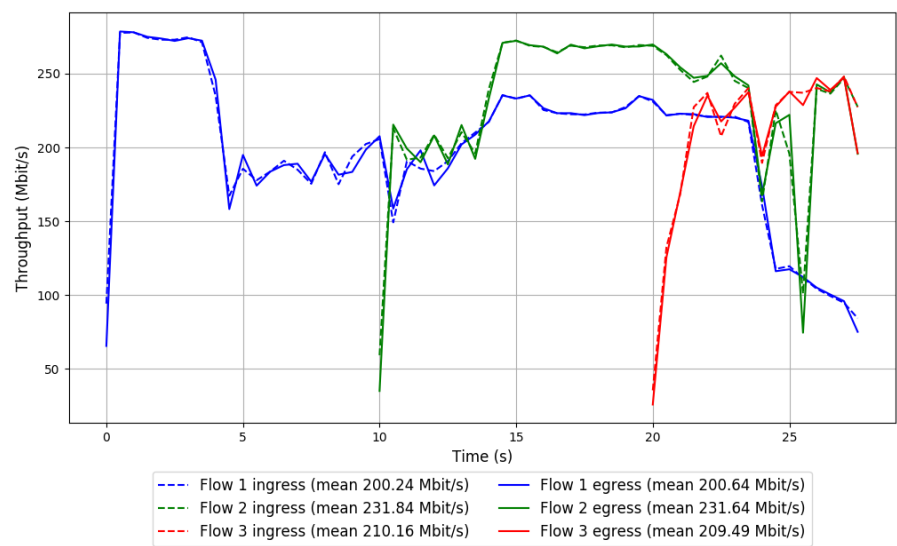
-- Flow 3:

Average throughput: 209.49 Mbit/s

95th percentile per-packet one-way delay: 62.630 ms

Loss rate: 1.62%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-10-12 11:20:35

End at: 2017-10-12 11:21:05

Below is generated by plot.py at 2017-10-12 15:24:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 391.97 Mbit/s

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

Loss rate: 0.55%

-- Flow 1:

Average throughput: 212.66 Mbit/s

95th percentile per-packet one-way delay: 55.113 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 209.66 Mbit/s

95th percentile per-packet one-way delay: 50.636 ms

Loss rate: 0.72%

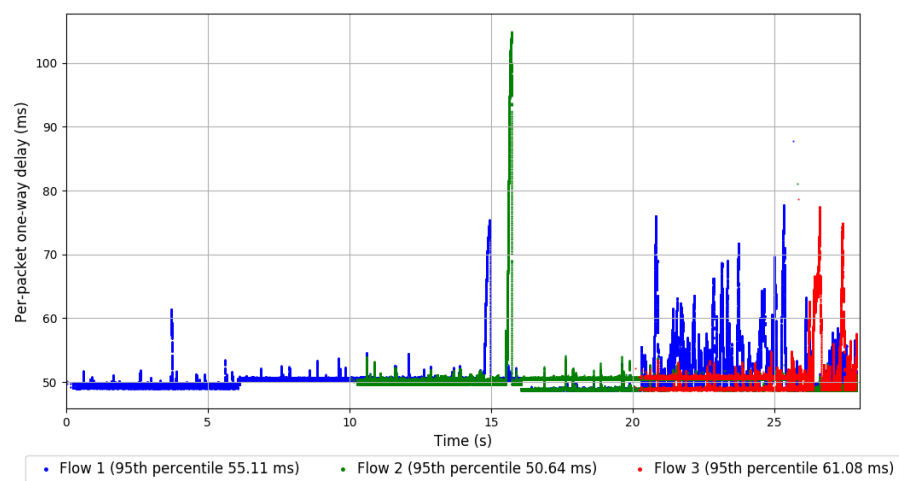
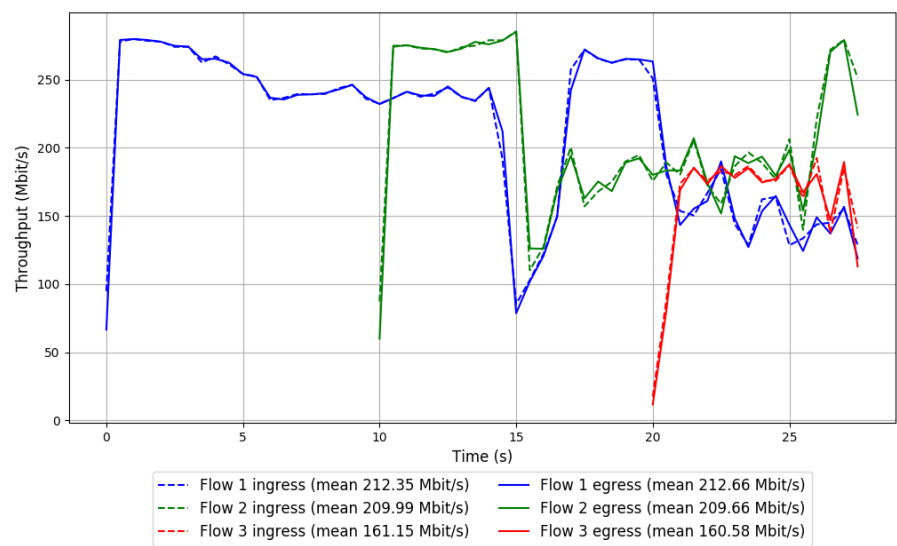
-- Flow 3:

Average throughput: 160.58 Mbit/s

95th percentile per-packet one-way delay: 61.083 ms

Loss rate: 1.61%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-10-12 11:33:28

End at: 2017-10-12 11:33:58

Below is generated by plot.py at 2017-10-12 15:29:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 403.18 Mbit/s

95th percentile per-packet one-way delay: 61.024 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 215.81 Mbit/s

95th percentile per-packet one-way delay: 55.336 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 212.86 Mbit/s

95th percentile per-packet one-way delay: 63.071 ms

Loss rate: 0.42%

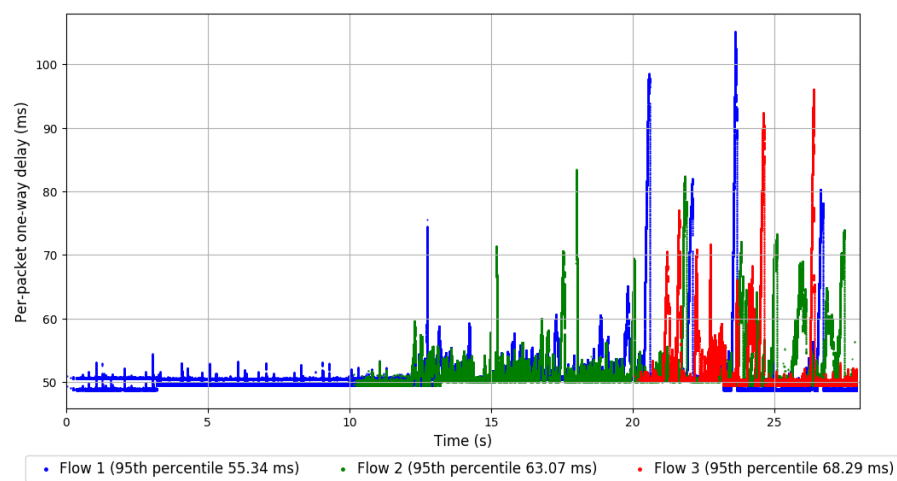
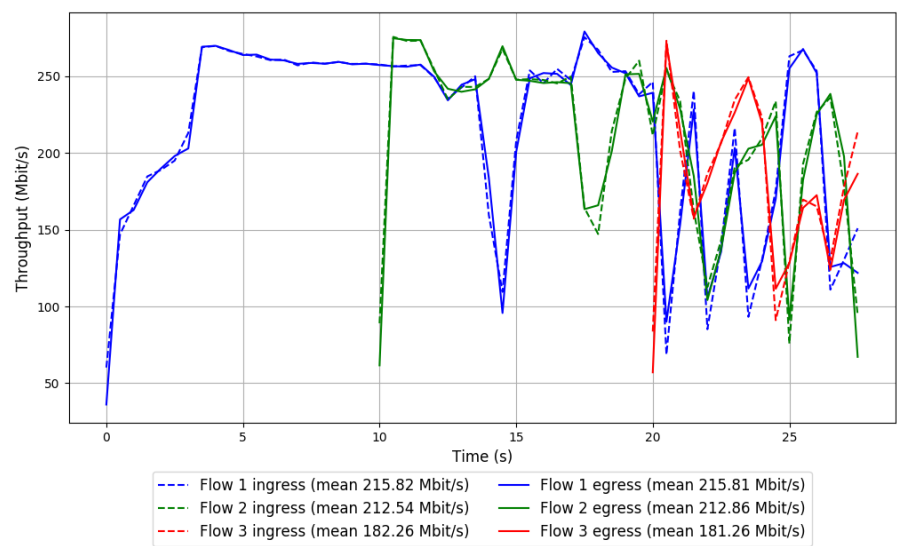
-- Flow 3:

Average throughput: 181.26 Mbit/s

95th percentile per-packet one-way delay: 68.290 ms

Loss rate: 1.82%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-10-12 11:46:02

End at: 2017-10-12 11:46:32

Below is generated by plot.py at 2017-10-12 15:33:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 385.25 Mbit/s

95th percentile per-packet one-way delay: 64.116 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 200.22 Mbit/s

95th percentile per-packet one-way delay: 63.510 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 220.03 Mbit/s

95th percentile per-packet one-way delay: 62.449 ms

Loss rate: 0.41%

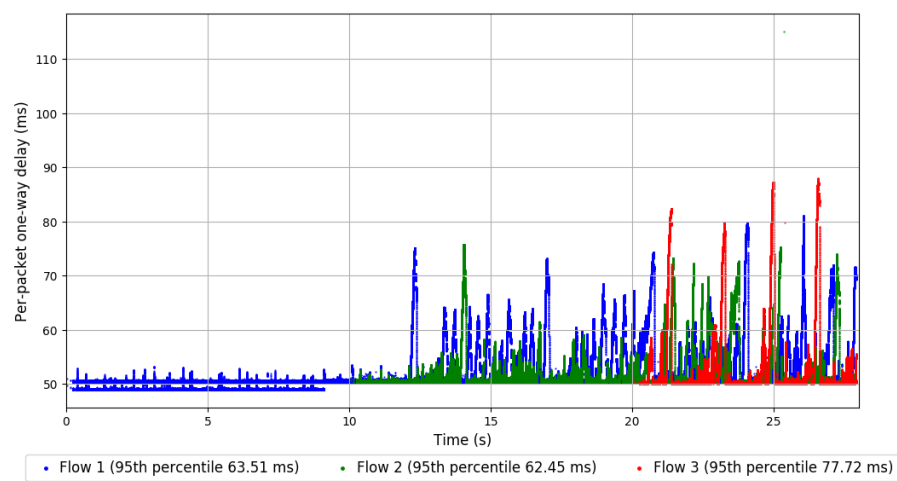
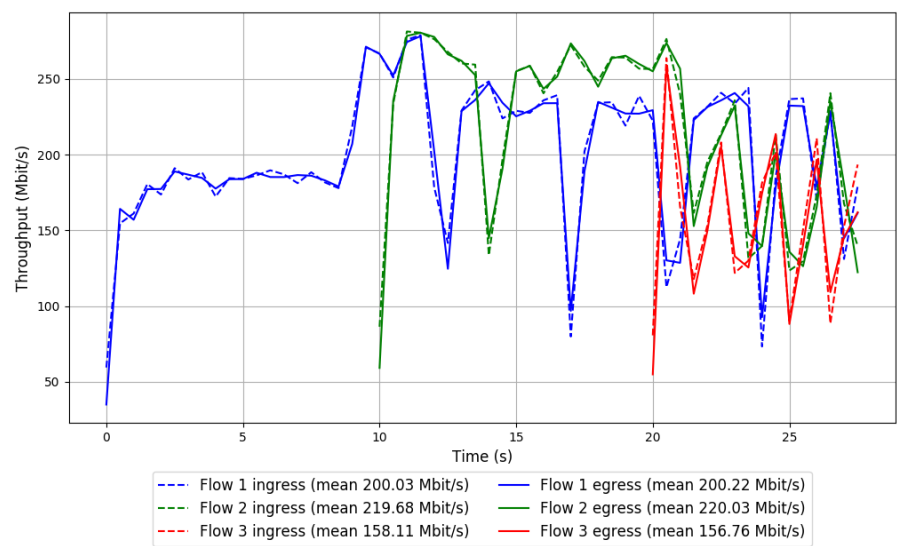
-- Flow 3:

Average throughput: 156.76 Mbit/s

95th percentile per-packet one-way delay: 77.718 ms

Loss rate: 2.12%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-10-12 11:58:35

End at: 2017-10-12 11:59:05

Below is generated by plot.py at 2017-10-12 15:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 386.25 Mbit/s

95th percentile per-packet one-way delay: 57.202 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 193.90 Mbit/s

95th percentile per-packet one-way delay: 50.939 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 226.07 Mbit/s

95th percentile per-packet one-way delay: 55.691 ms

Loss rate: 0.49%

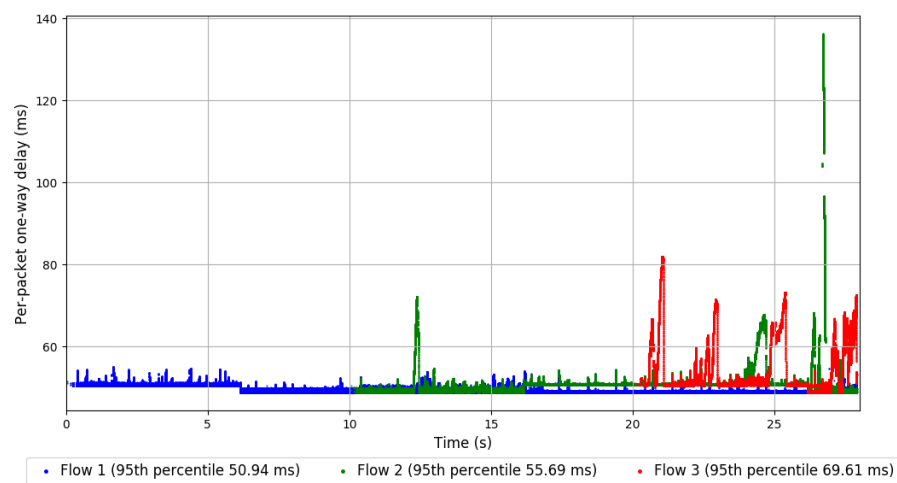
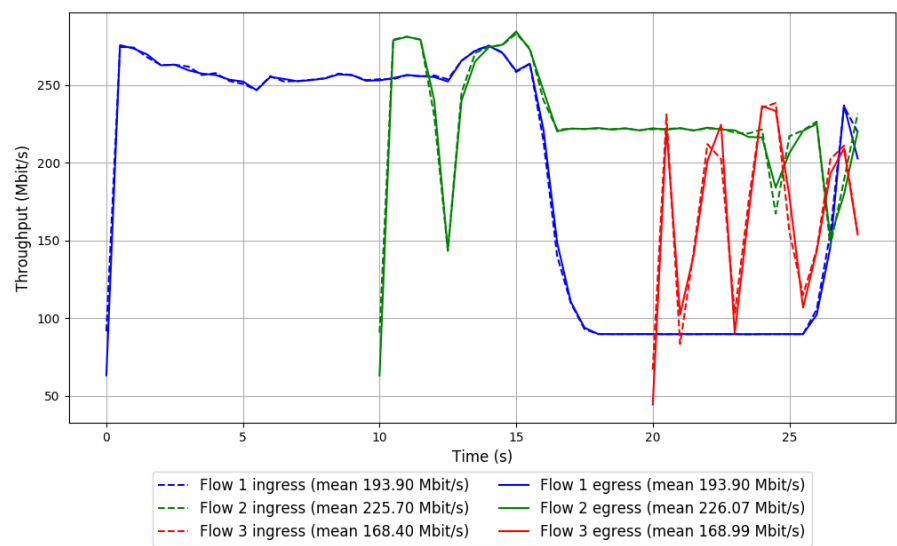
-- Flow 3:

Average throughput: 168.99 Mbit/s

95th percentile per-packet one-way delay: 69.605 ms

Loss rate: 0.97%

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

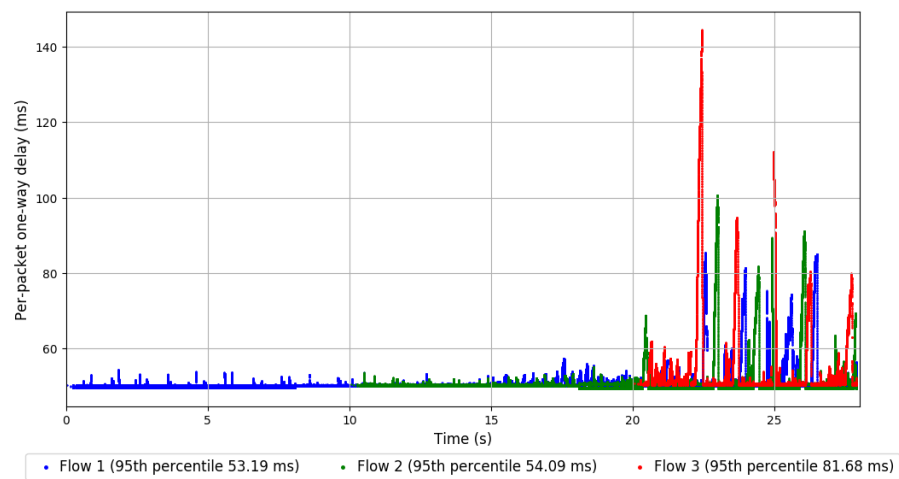
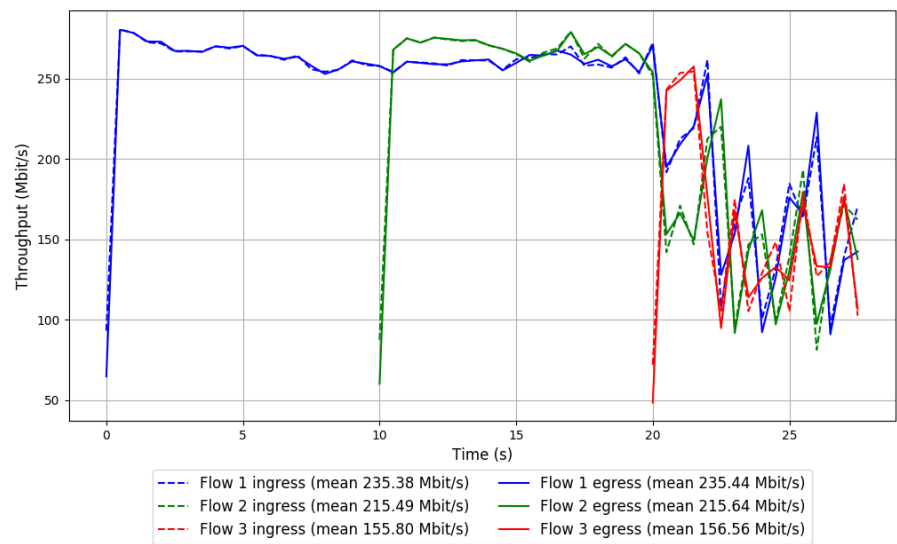


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-10-12 12:11:13
End at: 2017-10-12 12:11:43

# Below is generated by plot.py at 2017-10-12 15:35:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 417.62 Mbit/s
95th percentile per-packet one-way delay: 56.130 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 235.44 Mbit/s
95th percentile per-packet one-way delay: 53.192 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 215.64 Mbit/s
95th percentile per-packet one-way delay: 54.087 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 156.56 Mbit/s
95th percentile per-packet one-way delay: 81.680 ms
Loss rate: 0.80%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-10-12 10:20:45

End at: 2017-10-12 10:21:15

Below is generated by plot.py at 2017-10-12 15:35:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.50 Mbit/s

95th percentile per-packet one-way delay: 58.495 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 143.84 Mbit/s

95th percentile per-packet one-way delay: 58.724 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 12.22 Mbit/s

95th percentile per-packet one-way delay: 51.695 ms

Loss rate: 1.02%

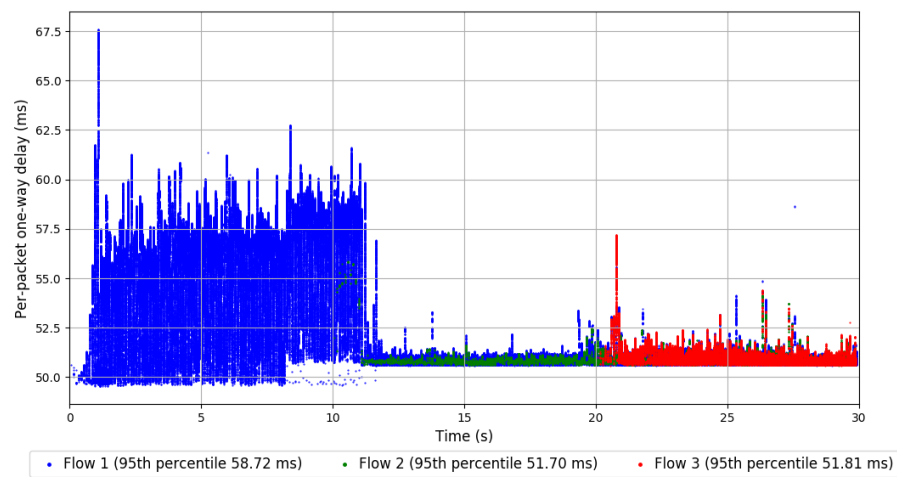
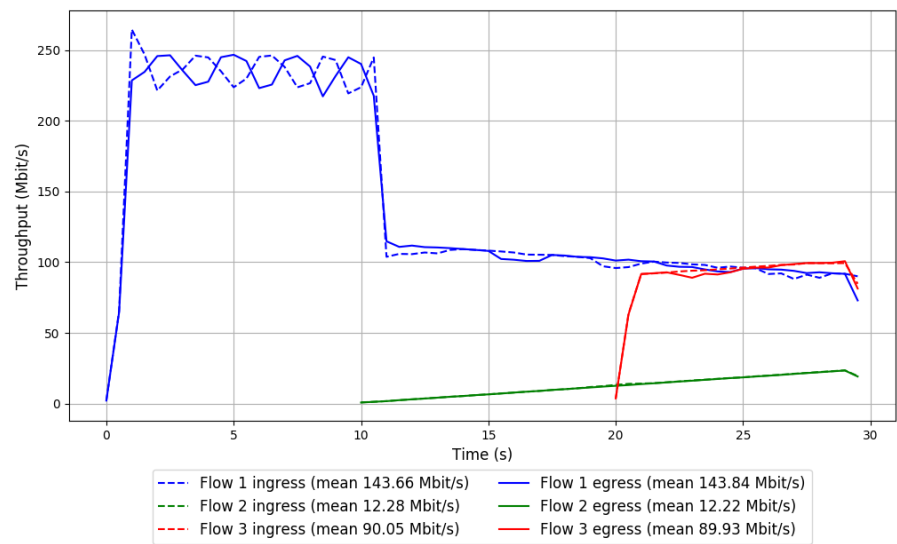
-- Flow 3:

Average throughput: 89.93 Mbit/s

95th percentile per-packet one-way delay: 51.808 ms

Loss rate: 1.14%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-10-12 10:33:19

End at: 2017-10-12 10:33:49

Below is generated by plot.py at 2017-10-12 15:35:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 159.17 Mbit/s

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

Loss rate: 0.60%

-- Flow 1:

Average throughput: 36.84 Mbit/s

95th percentile per-packet one-way delay: 51.814 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 116.94 Mbit/s

95th percentile per-packet one-way delay: 52.392 ms

Loss rate: 0.57%

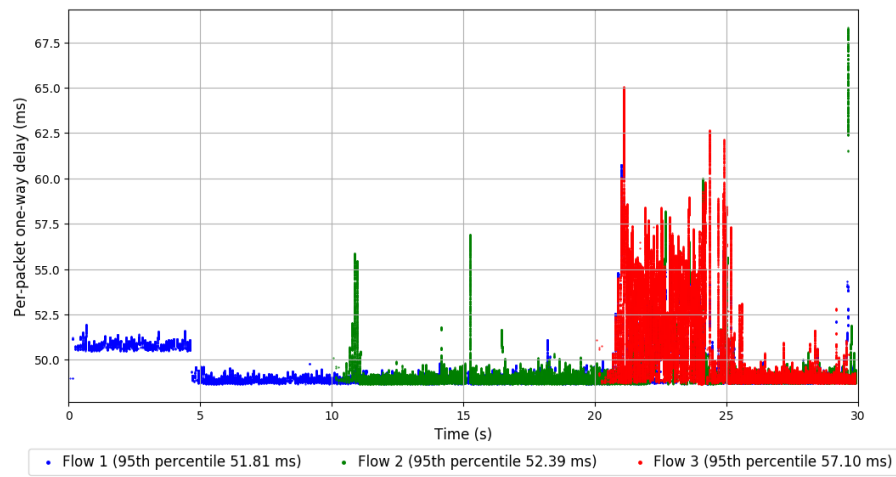
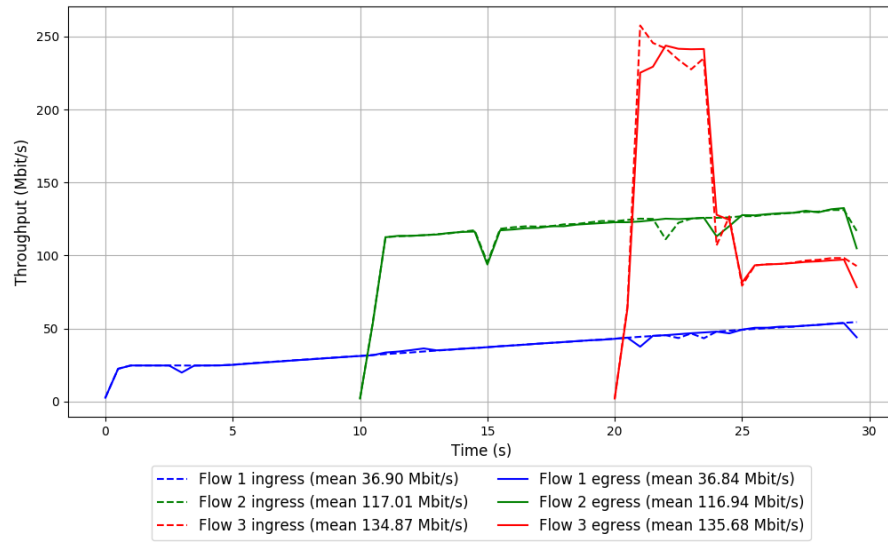
-- Flow 3:

Average throughput: 135.68 Mbit/s

95th percentile per-packet one-way delay: 57.097 ms

Loss rate: 0.73%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-10-12 10:46:08

End at: 2017-10-12 10:46:38

Below is generated by plot.py at 2017-10-12 15:35:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 163.64 Mbit/s

95th percentile per-packet one-way delay: 58.300 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 45.55 Mbit/s

95th percentile per-packet one-way delay: 52.486 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 68.34 Mbit/s

95th percentile per-packet one-way delay: 57.492 ms

Loss rate: 0.21%

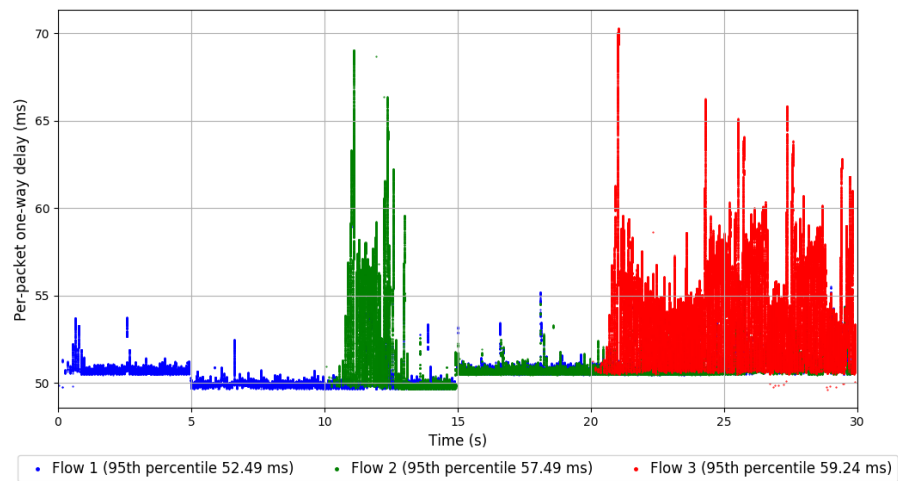
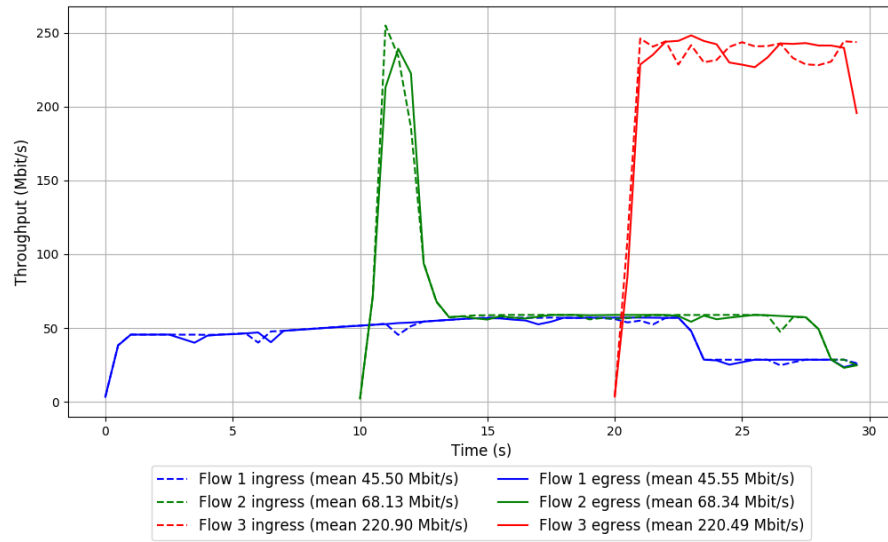
-- Flow 3:

Average throughput: 220.49 Mbit/s

95th percentile per-packet one-way delay: 59.239 ms

Loss rate: 1.20%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-10-12 10:59:04

End at: 2017-10-12 10:59:34

Below is generated by plot.py at 2017-10-12 15:35:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.95 Mbit/s

95th percentile per-packet one-way delay: 58.217 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 30.54 Mbit/s

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

Loss rate: 0.35%

-- Flow 2:

Average throughput: 36.48 Mbit/s

95th percentile per-packet one-way delay: 53.900 ms

Loss rate: 0.53%

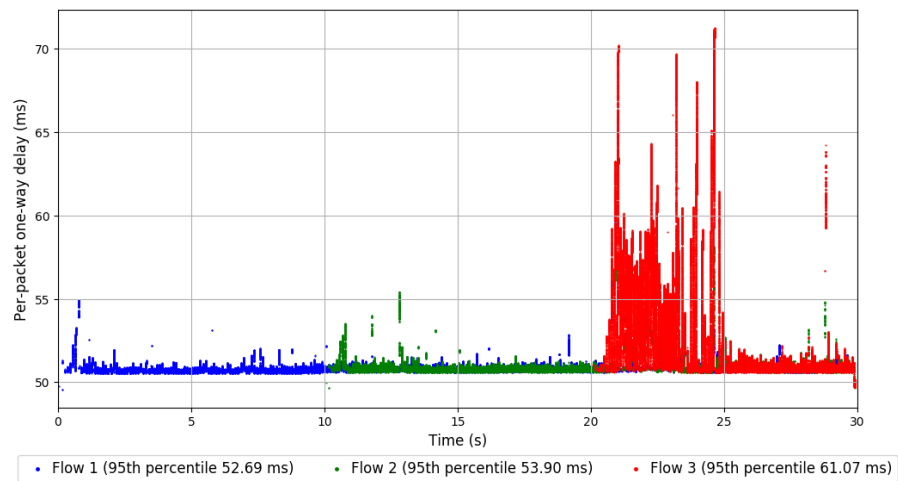
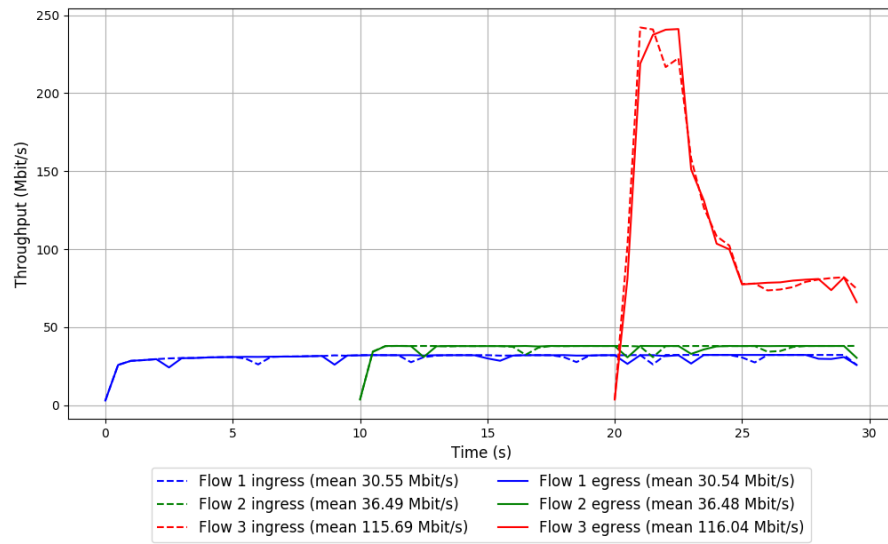
-- Flow 3:

Average throughput: 116.04 Mbit/s

95th percentile per-packet one-way delay: 61.071 ms

Loss rate: 0.72%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-10-12 11:11:53

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

Below is generated by plot.py at 2017-10-12 15:35:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 308.17 Mbit/s

95th percentile per-packet one-way delay: 59.611 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 184.97 Mbit/s

95th percentile per-packet one-way delay: 58.623 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 181.14 Mbit/s

95th percentile per-packet one-way delay: 60.623 ms

Loss rate: 0.25%

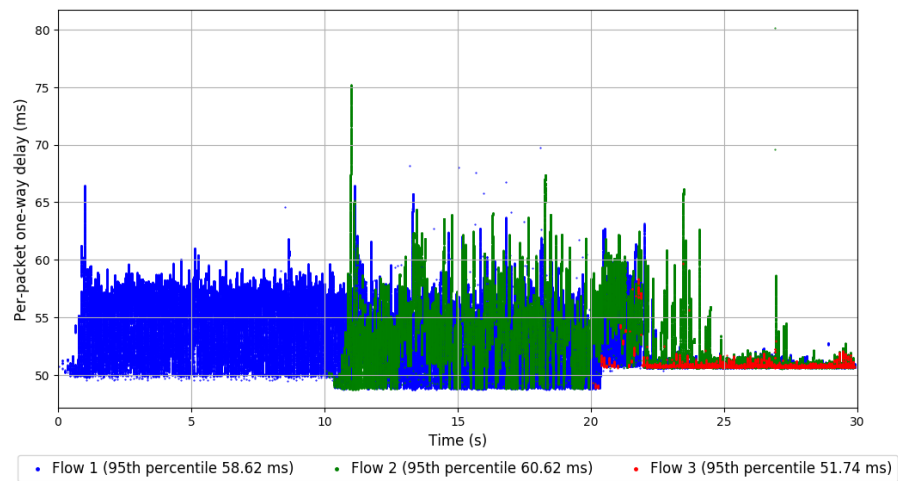
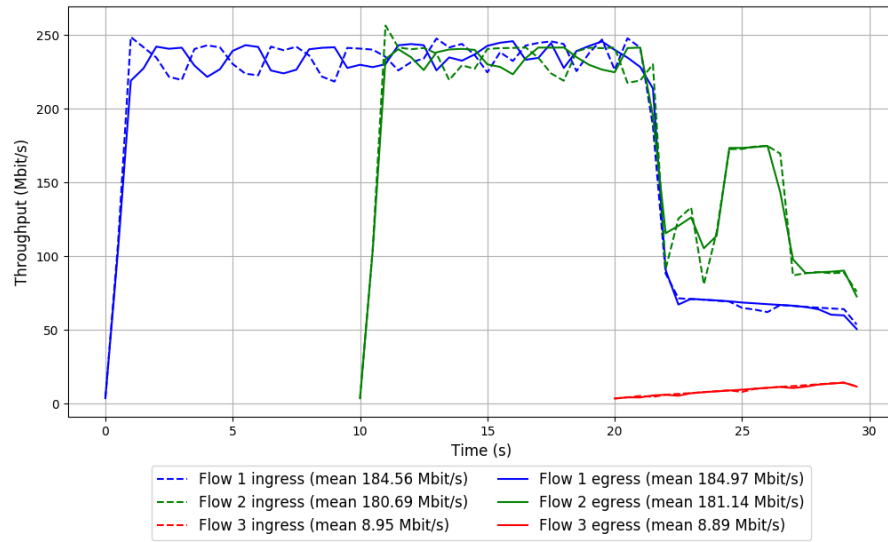
-- Flow 3:

Average throughput: 8.89 Mbit/s

95th percentile per-packet one-way delay: 51.740 ms

Loss rate: 1.67%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-10-12 11:24:35

End at: 2017-10-12 11:25:05

Below is generated by plot.py at 2017-10-12 15:35:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 267.51 Mbit/s

95th percentile per-packet one-way delay: 51.146 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 200.88 Mbit/s

95th percentile per-packet one-way delay: 51.122 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 90.32 Mbit/s

95th percentile per-packet one-way delay: 51.179 ms

Loss rate: 0.50%

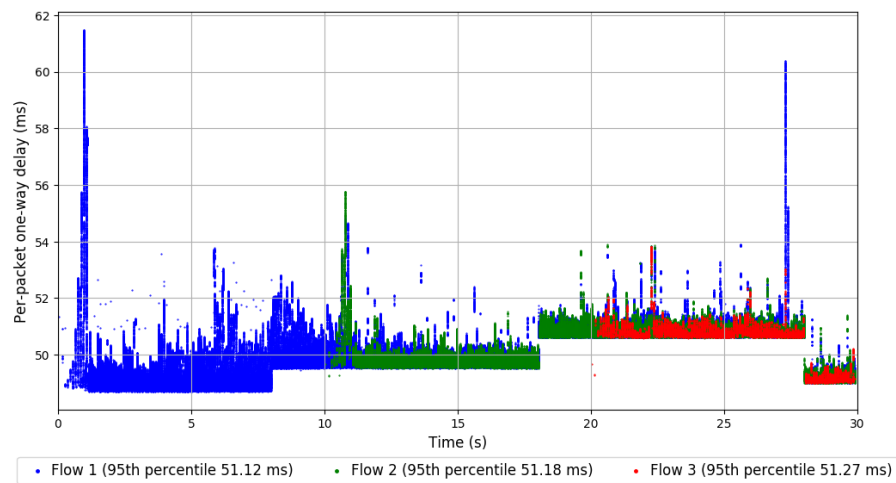
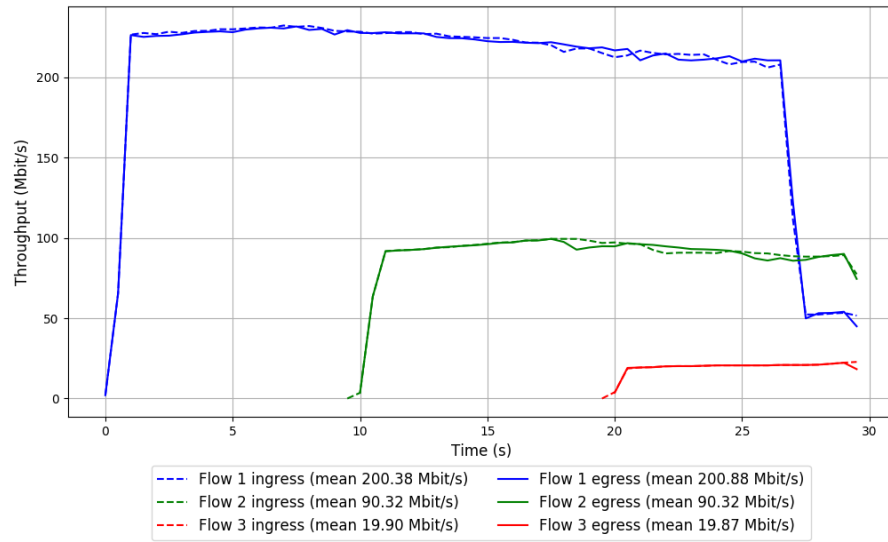
-- Flow 3:

Average throughput: 19.87 Mbit/s

95th percentile per-packet one-way delay: 51.265 ms

Loss rate: 1.16%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-10-12 11:37:35

End at: 2017-10-12 11:38:05

Below is generated by plot.py at 2017-10-12 15:35:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.35 Mbit/s

95th percentile per-packet one-way delay: 54.083 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 139.00 Mbit/s

95th percentile per-packet one-way delay: 54.017 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 10.82 Mbit/s

95th percentile per-packet one-way delay: 52.436 ms

Loss rate: 0.34%

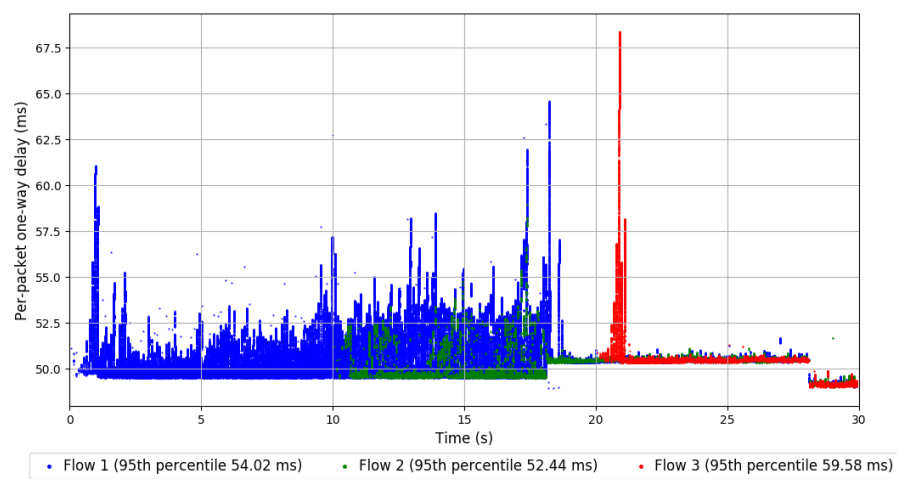
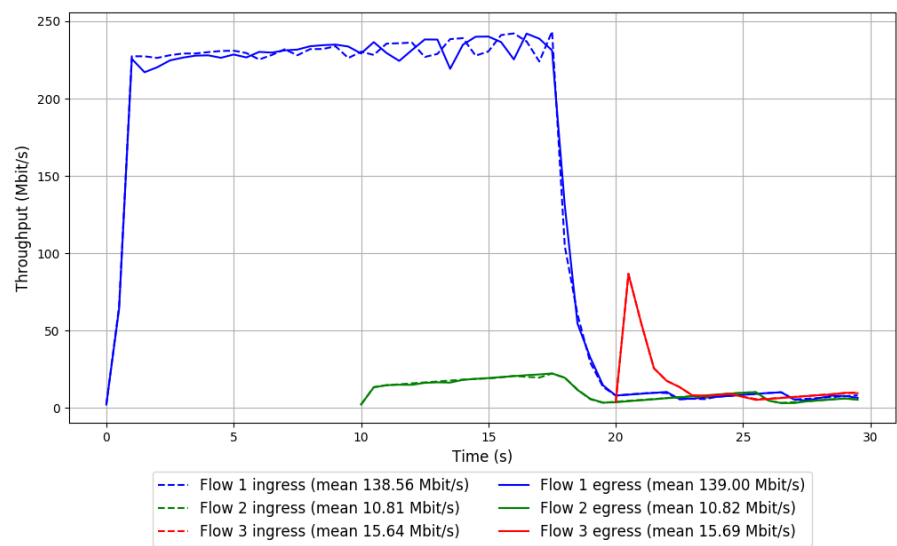
-- Flow 3:

Average throughput: 15.69 Mbit/s

95th percentile per-packet one-way delay: 59.575 ms

Loss rate: 0.71%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-10-12 11:50:03

End at: 2017-10-12 11:50:33

Below is generated by plot.py at 2017-10-12 15:35:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 53.17 Mbit/s

95th percentile per-packet one-way delay: 57.170 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 11.65 Mbit/s

95th percentile per-packet one-way delay: 59.589 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 58.91 Mbit/s

95th percentile per-packet one-way delay: 57.090 ms

Loss rate: 0.07%

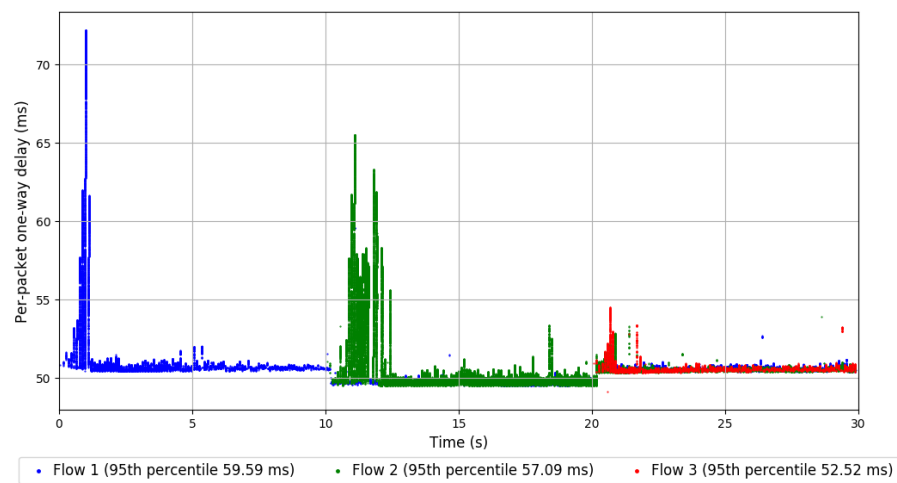
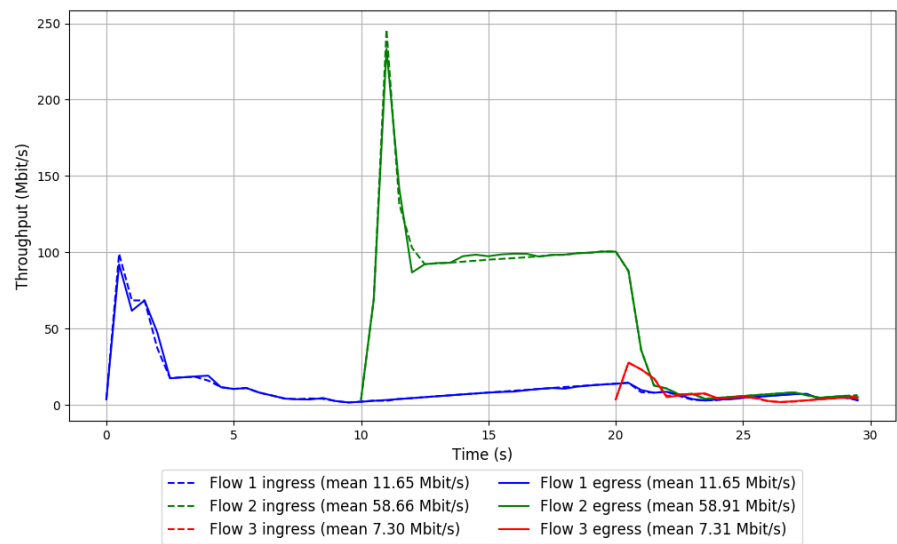
-- Flow 3:

Average throughput: 7.31 Mbit/s

95th percentile per-packet one-way delay: 52.517 ms

Loss rate: 0.89%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-10-12 12:02:38

End at: 2017-10-12 12:03:08

Below is generated by plot.py at 2017-10-12 15:35:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.40 Mbit/s

95th percentile per-packet one-way delay: 58.608 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 111.04 Mbit/s

95th percentile per-packet one-way delay: 59.183 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 109.96 Mbit/s

95th percentile per-packet one-way delay: 51.062 ms

Loss rate: 0.52%

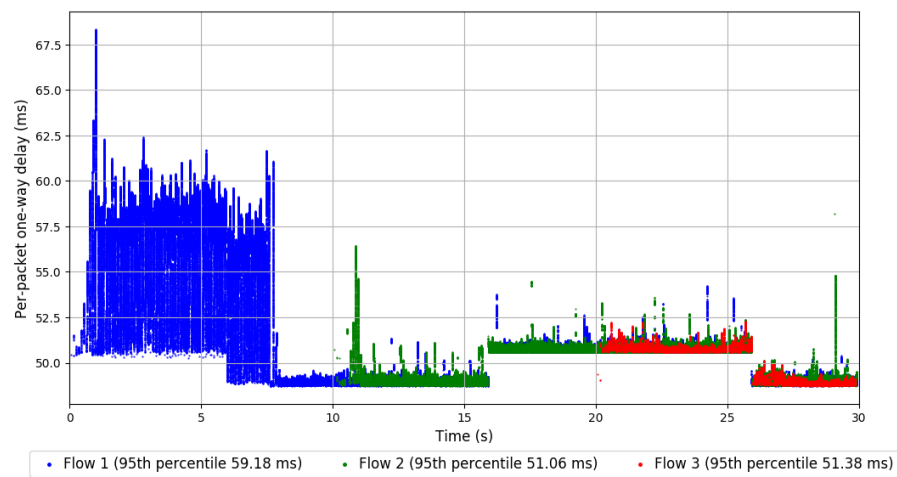
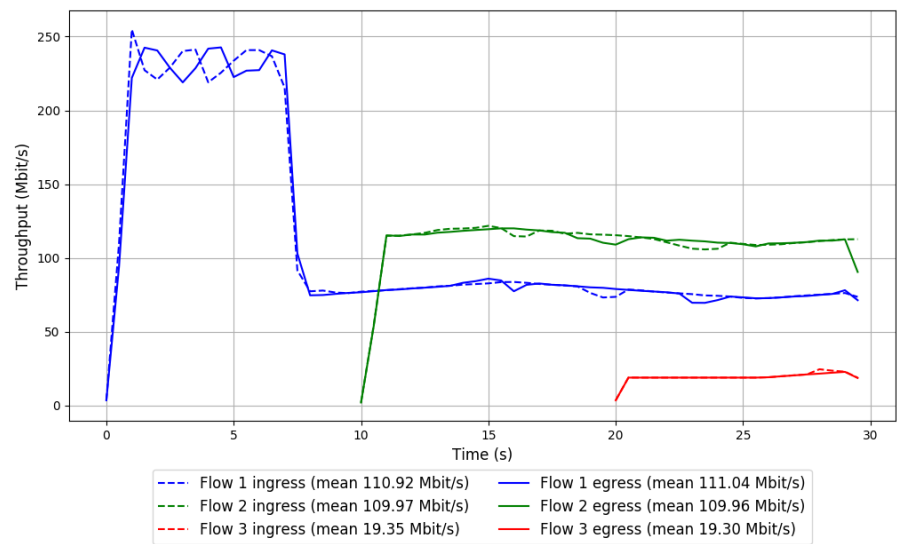
-- Flow 3:

Average throughput: 19.30 Mbit/s

95th percentile per-packet one-way delay: 51.379 ms

Loss rate: 1.24%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-10-12 12:15:21

End at: 2017-10-12 12:15:51

Below is generated by plot.py at 2017-10-12 15:35:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 257.06 Mbit/s

95th percentile per-packet one-way delay: 51.327 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 164.38 Mbit/s

95th percentile per-packet one-way delay: 51.187 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 81.09 Mbit/s

95th percentile per-packet one-way delay: 51.463 ms

Loss rate: 0.55%

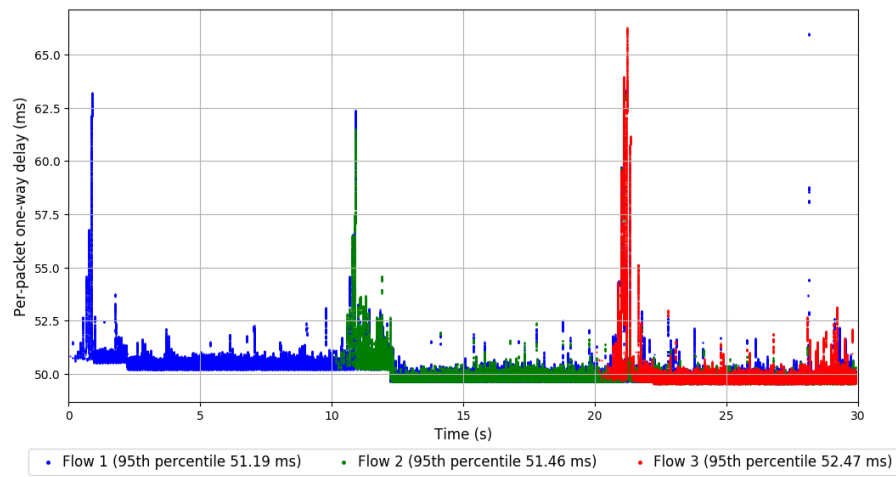
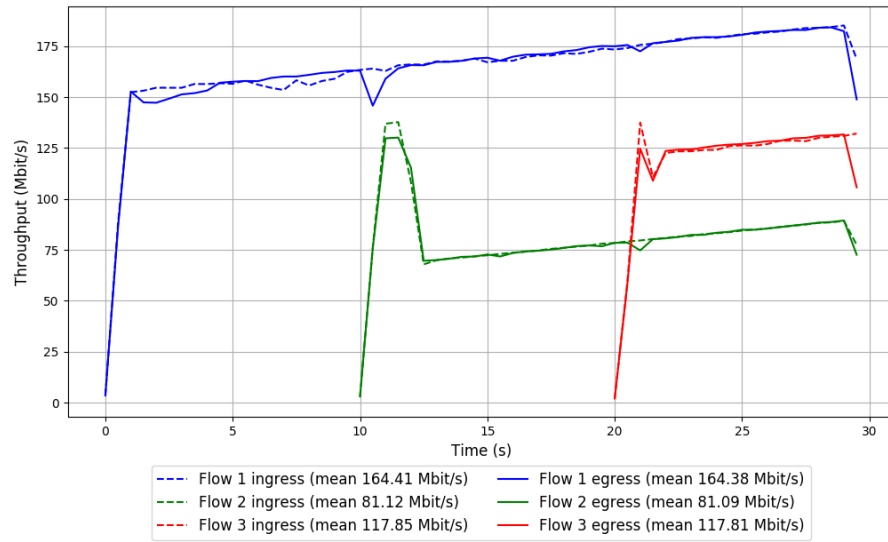
-- Flow 3:

Average throughput: 117.81 Mbit/s

95th percentile per-packet one-way delay: 52.466 ms

Loss rate: 1.13%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-10-12 10:23:56

End at: 2017-10-12 10:24:26

Below is generated by plot.py at 2017-10-12 15:37:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 399.96 Mbit/s

95th percentile per-packet one-way delay: 99.587 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 243.00 Mbit/s

95th percentile per-packet one-way delay: 104.090 ms

Loss rate: 1.17%

-- Flow 2:

Average throughput: 164.18 Mbit/s

95th percentile per-packet one-way delay: 99.449 ms

Loss rate: 1.17%

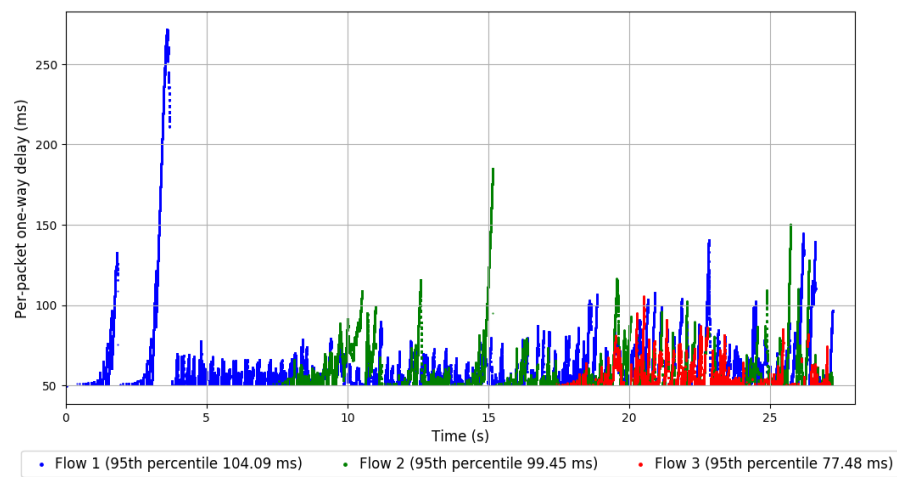
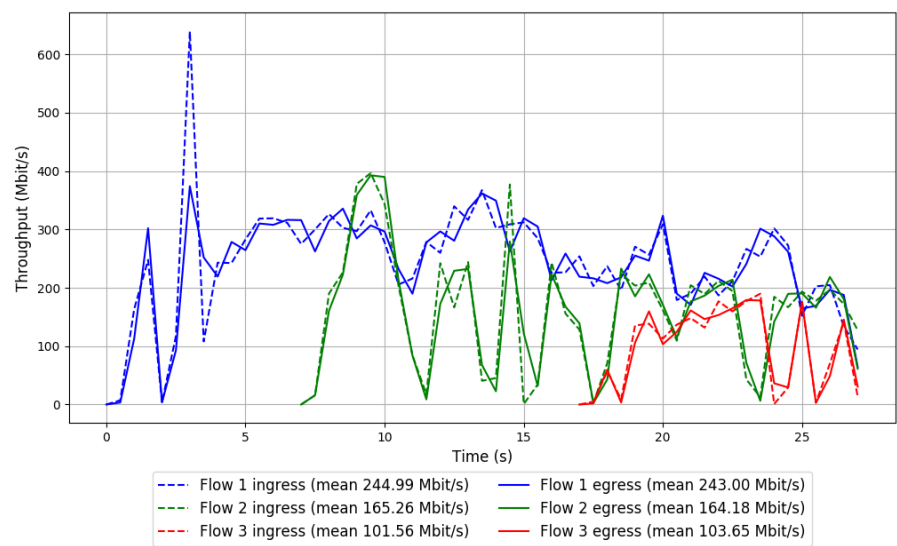
-- Flow 3:

Average throughput: 103.65 Mbit/s

95th percentile per-packet one-way delay: 77.477 ms

Loss rate: 0.01%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-10-12 10:36:28

End at: 2017-10-12 10:36:58

Below is generated by plot.py at 2017-10-12 15:39:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 362.64 Mbit/s

95th percentile per-packet one-way delay: 124.501 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 238.37 Mbit/s

95th percentile per-packet one-way delay: 120.313 ms

Loss rate: 1.67%

-- Flow 2:

Average throughput: 125.34 Mbit/s

95th percentile per-packet one-way delay: 112.126 ms

Loss rate: 1.11%

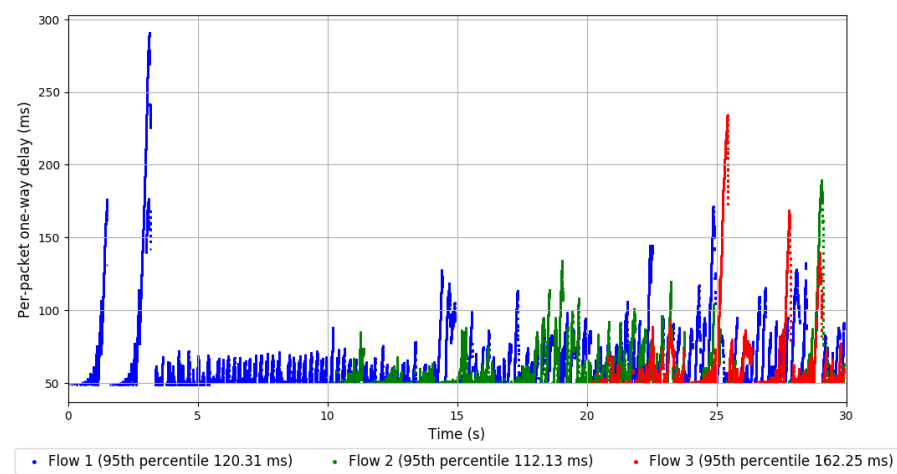
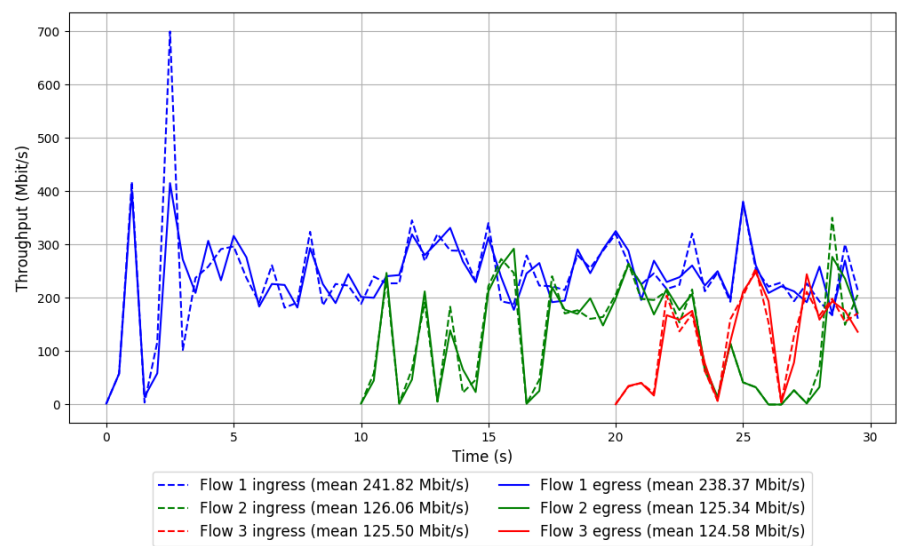
-- Flow 3:

Average throughput: 124.58 Mbit/s

95th percentile per-packet one-way delay: 162.253 ms

Loss rate: 1.74%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-10-12 10:49:18

End at: 2017-10-12 10:49:48

Below is generated by plot.py at 2017-10-12 15:40:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 415.44 Mbit/s

95th percentile per-packet one-way delay: 118.902 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 240.09 Mbit/s

95th percentile per-packet one-way delay: 124.047 ms

Loss rate: 1.46%

-- Flow 2:

Average throughput: 209.16 Mbit/s

95th percentile per-packet one-way delay: 116.792 ms

Loss rate: 0.52%

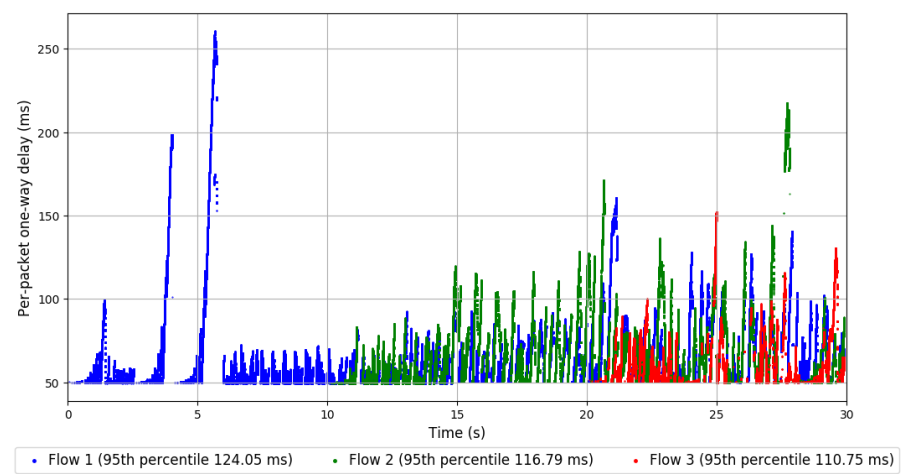
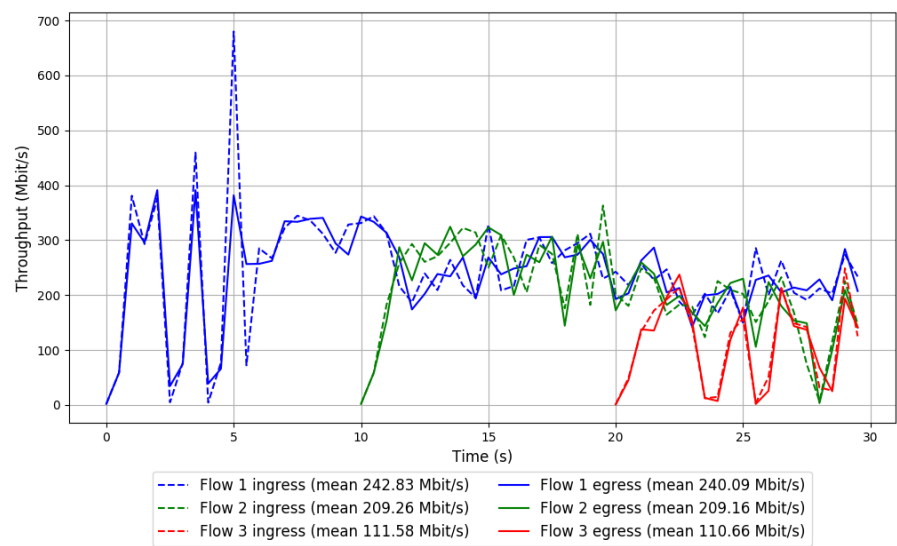
-- Flow 3:

Average throughput: 110.66 Mbit/s

95th percentile per-packet one-way delay: 110.751 ms

Loss rate: 1.86%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-10-12 11:02:10

End at: 2017-10-12 11:02:40

Below is generated by plot.py at 2017-10-12 15:40:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 336.77 Mbit/s

95th percentile per-packet one-way delay: 103.578 ms

Loss rate: 1.81%

-- Flow 1:

Average throughput: 226.92 Mbit/s

95th percentile per-packet one-way delay: 111.379 ms

Loss rate: 2.25%

-- Flow 2:

Average throughput: 107.78 Mbit/s

95th percentile per-packet one-way delay: 91.150 ms

Loss rate: 1.35%

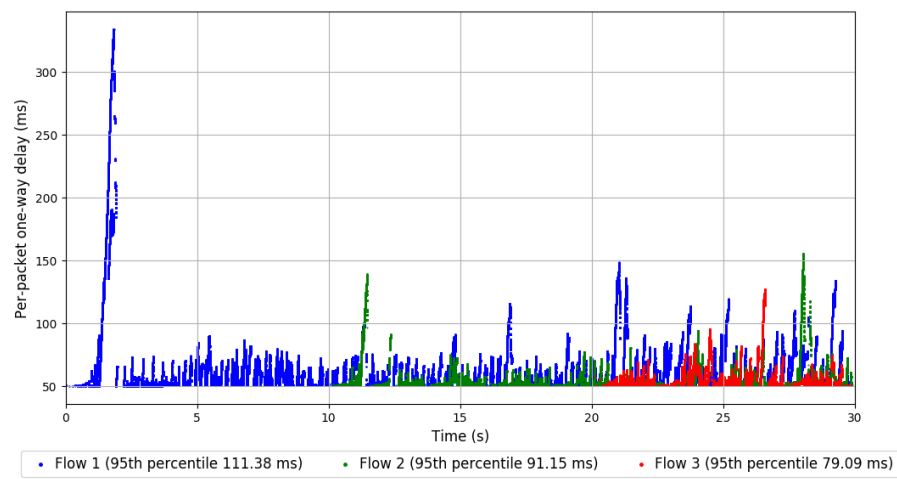
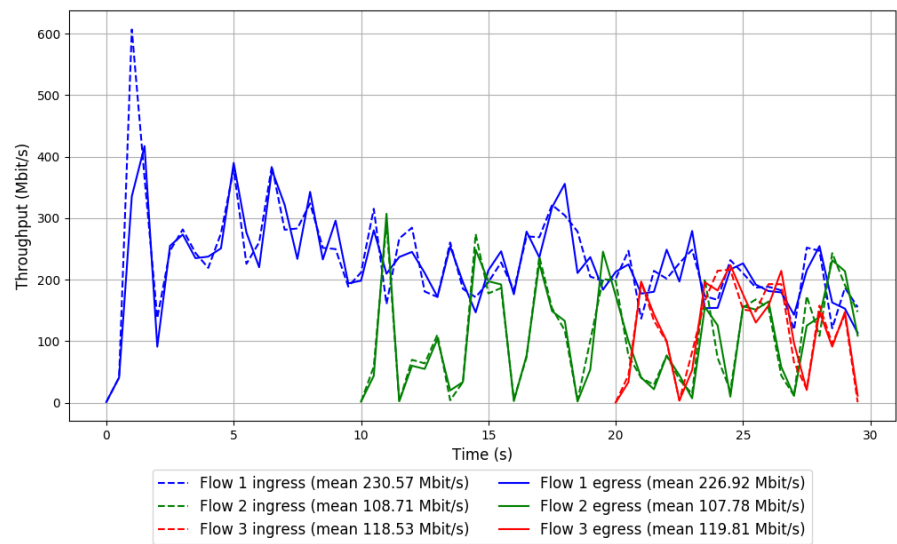
-- Flow 3:

Average throughput: 119.81 Mbit/s

95th percentile per-packet one-way delay: 79.093 ms

Loss rate: 0.02%

Run 4: Report of Verus — Data Link

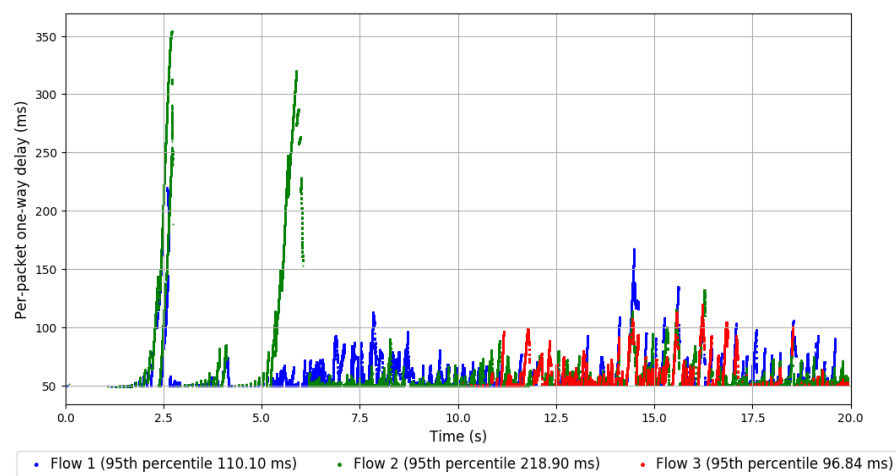
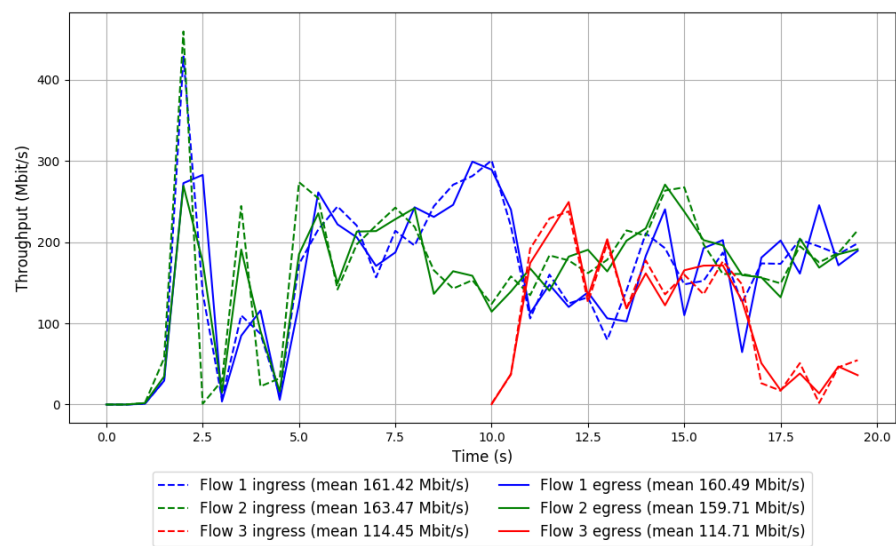


Run 5: Statistics of Verus

Start at: 2017-10-12 11:15:12

End at: 2017-10-12 11:15:42

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-10-12 11:27:51

End at: 2017-10-12 11:28:21

Below is generated by plot.py at 2017-10-12 15:40:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 378.99 Mbit/s

95th percentile per-packet one-way delay: 125.665 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 240.14 Mbit/s

95th percentile per-packet one-way delay: 126.973 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 160.73 Mbit/s

95th percentile per-packet one-way delay: 117.216 ms

Loss rate: 0.28%

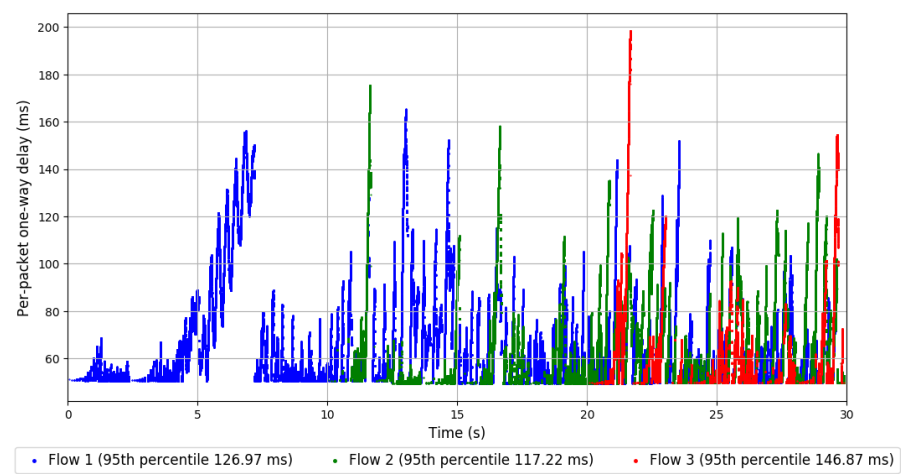
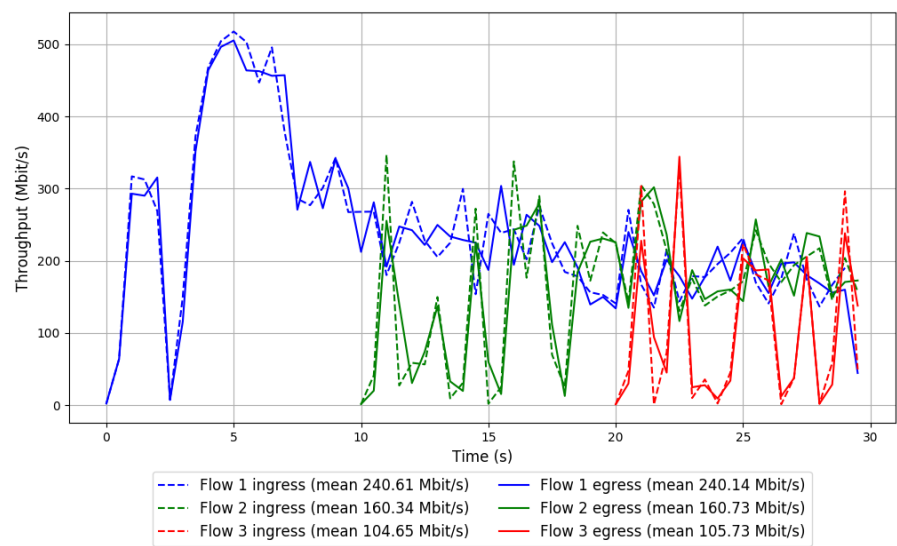
-- Flow 3:

Average throughput: 105.73 Mbit/s

95th percentile per-packet one-way delay: 146.868 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-10-12 11:40:43

End at: 2017-10-12 11:41:13

Below is generated by plot.py at 2017-10-12 15:40:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 319.92 Mbit/s

95th percentile per-packet one-way delay: 114.844 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 173.10 Mbit/s

95th percentile per-packet one-way delay: 77.194 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 165.47 Mbit/s

95th percentile per-packet one-way delay: 133.360 ms

Loss rate: 1.12%

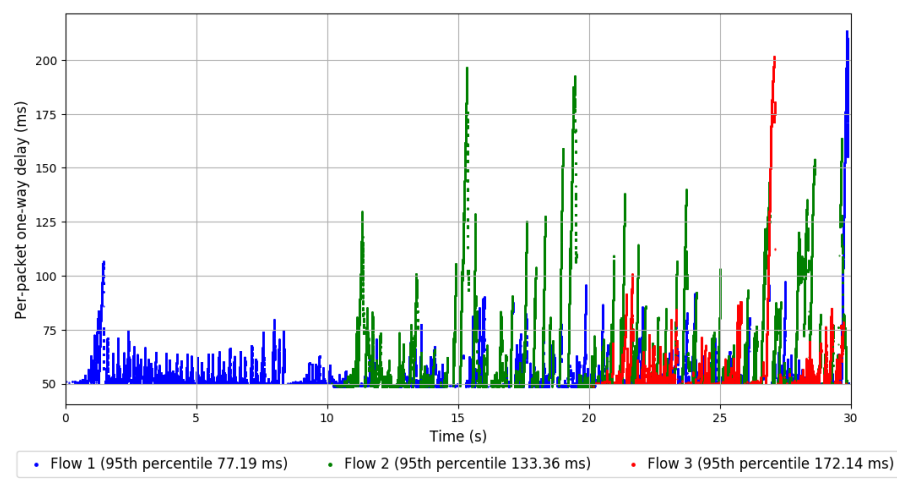
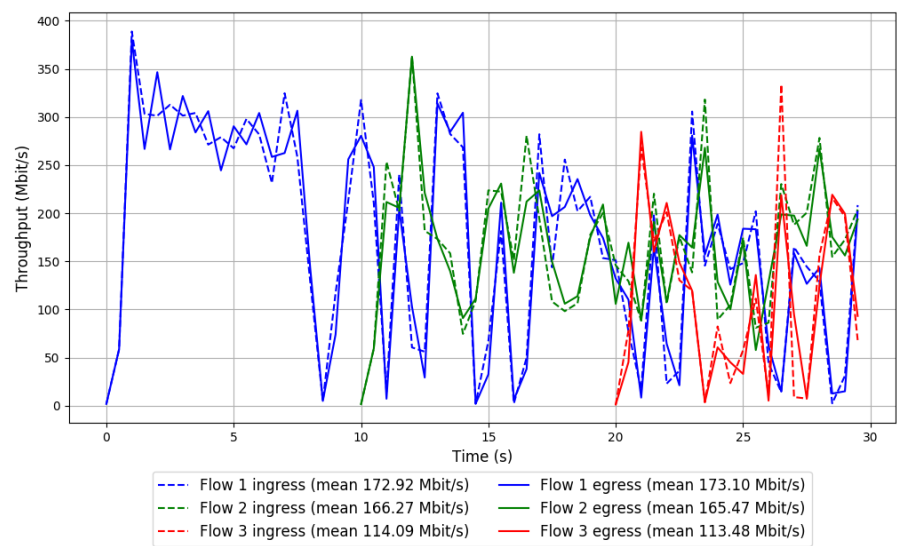
-- Flow 3:

Average throughput: 113.48 Mbit/s

95th percentile per-packet one-way delay: 172.137 ms

Loss rate: 1.54%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-10-12 11:53:05

End at: 2017-10-12 11:53:35

Below is generated by plot.py at 2017-10-12 15:44:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 409.47 Mbit/s

95th percentile per-packet one-way delay: 117.517 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 236.54 Mbit/s

95th percentile per-packet one-way delay: 123.064 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 198.28 Mbit/s

95th percentile per-packet one-way delay: 117.443 ms

Loss rate: 1.25%

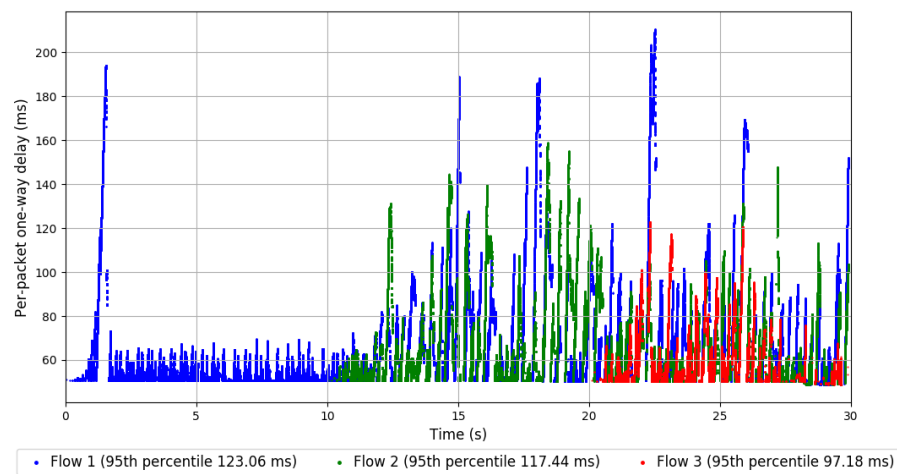
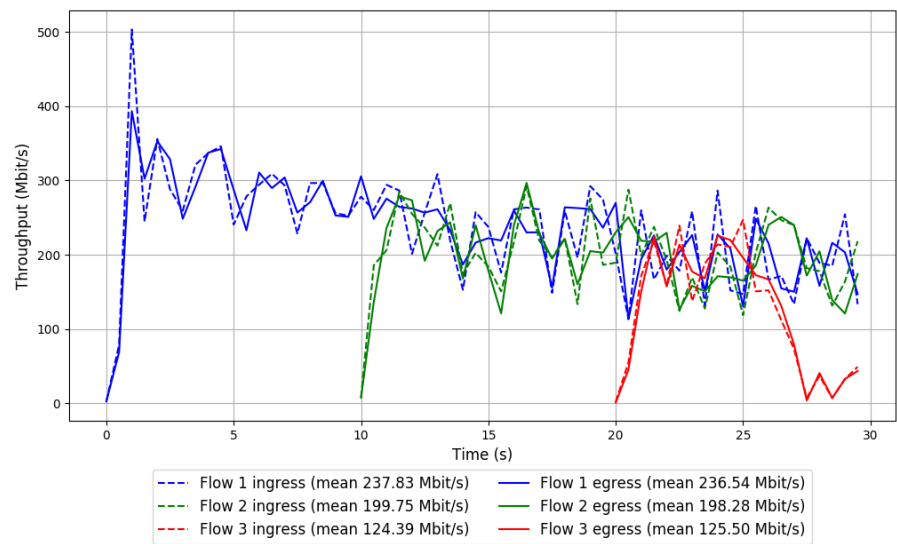
-- Flow 3:

Average throughput: 125.50 Mbit/s

95th percentile per-packet one-way delay: 97.176 ms

Loss rate: 0.23%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-10-12 12:05:49

End at: 2017-10-12 12:06:19

Below is generated by plot.py at 2017-10-12 15:44:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 427.83 Mbit/s

95th percentile per-packet one-way delay: 132.647 ms

Loss rate: 1.94%

-- Flow 1:

Average throughput: 184.99 Mbit/s

95th percentile per-packet one-way delay: 100.958 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 267.92 Mbit/s

95th percentile per-packet one-way delay: 130.529 ms

Loss rate: 2.24%

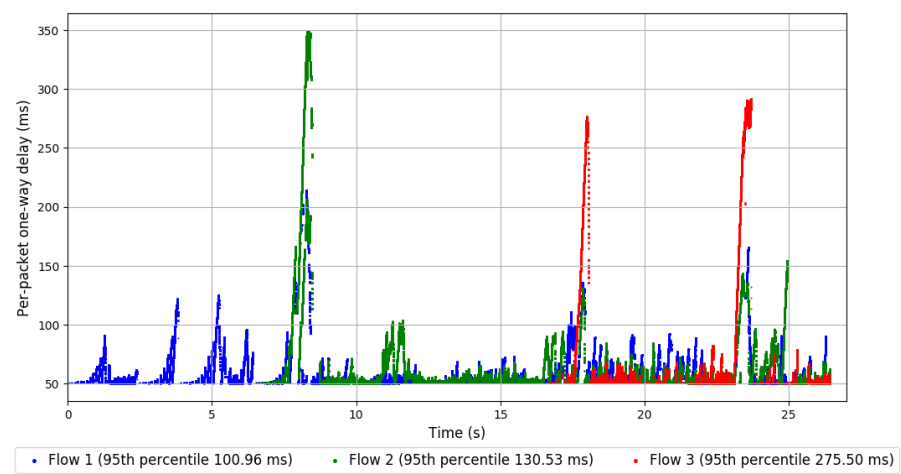
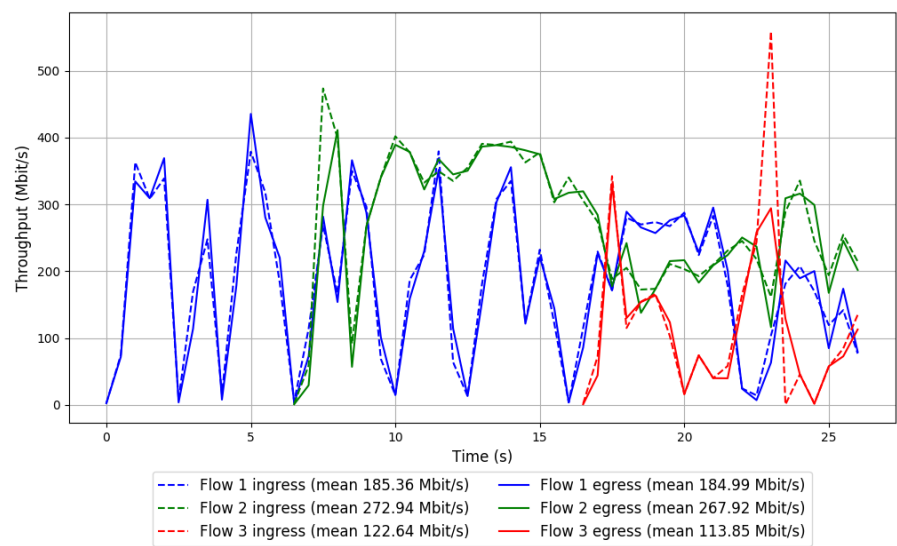
-- Flow 3:

Average throughput: 113.85 Mbit/s

95th percentile per-packet one-way delay: 275.498 ms

Loss rate: 8.10%

Run 9: Report of Verus — Data Link

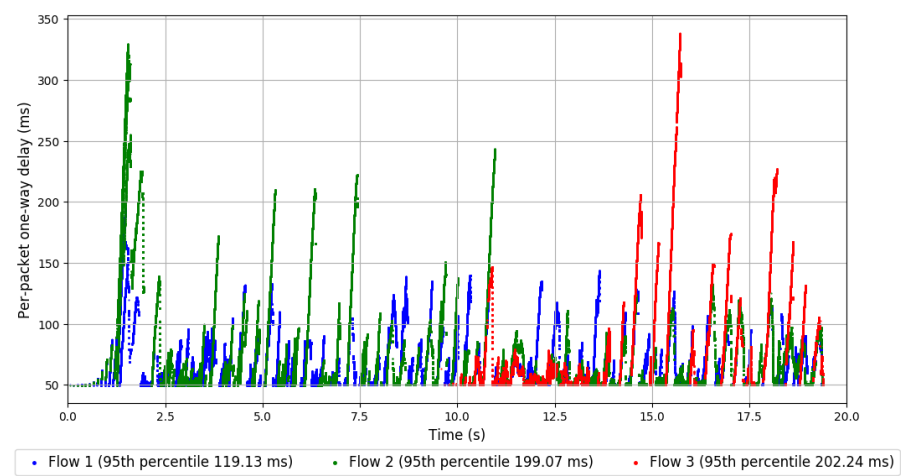
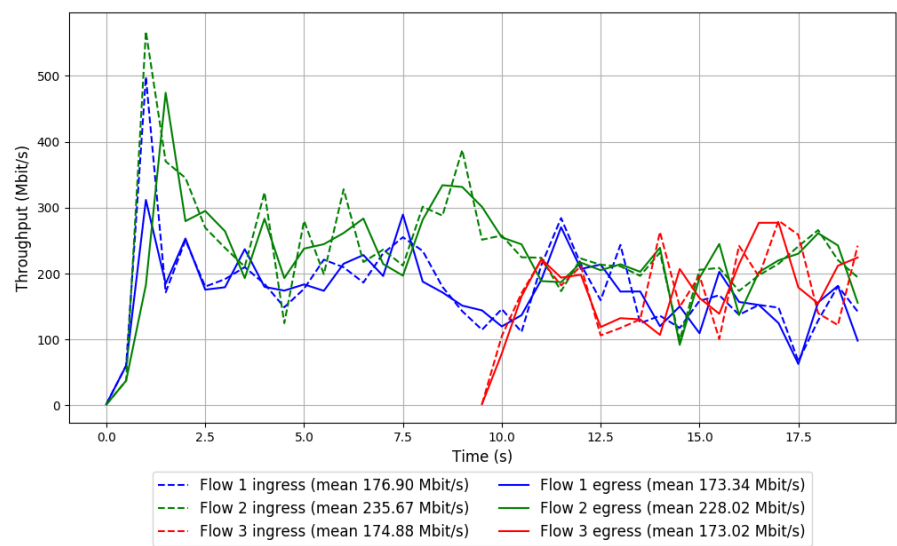


Run 10: Statistics of Verus

Start at: 2017-10-12 12:18:36

End at: 2017-10-12 12:19:06

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-10-12 10:19:51

End at: 2017-10-12 10:20:21

Below is generated by plot.py at 2017-10-12 15:44:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 161.77 Mbit/s

95th percentile per-packet one-way delay: 50.734 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 81.08 Mbit/s

95th percentile per-packet one-way delay: 50.668 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 88.40 Mbit/s

95th percentile per-packet one-way delay: 50.694 ms

Loss rate: 0.73%

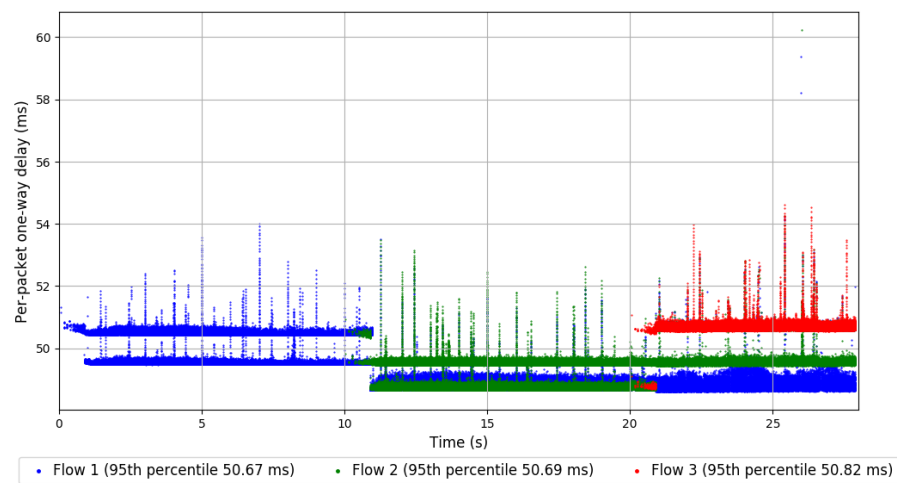
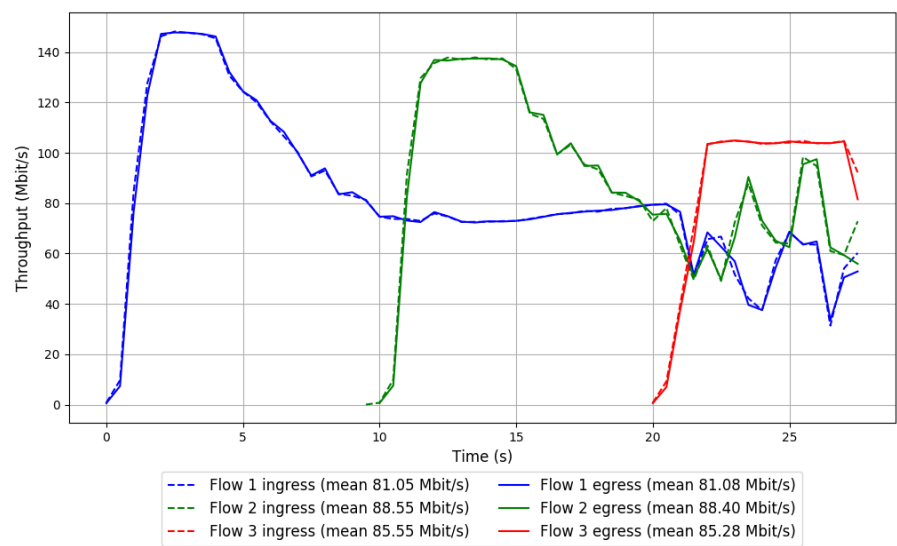
-- Flow 3:

Average throughput: 85.28 Mbit/s

95th percentile per-packet one-way delay: 50.820 ms

Loss rate: 1.57%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-10-12 10:32:25

End at: 2017-10-12 10:32:55

Below is generated by plot.py at 2017-10-12 15:44:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 155.38 Mbit/s

95th percentile per-packet one-way delay: 50.524 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 76.26 Mbit/s

95th percentile per-packet one-way delay: 50.500 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 85.31 Mbit/s

95th percentile per-packet one-way delay: 50.531 ms

Loss rate: 0.47%

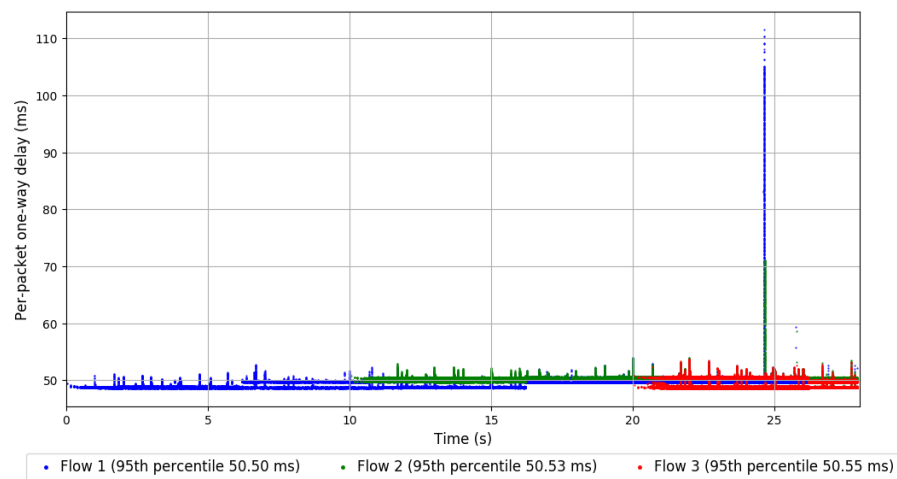
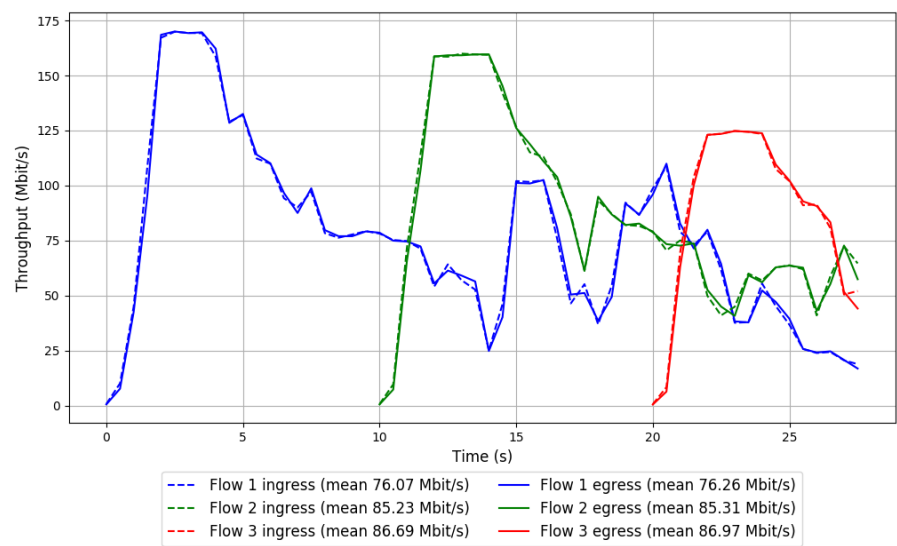
-- Flow 3:

Average throughput: 86.97 Mbit/s

95th percentile per-packet one-way delay: 50.547 ms

Loss rate: 0.94%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-10-12 10:45:14

End at: 2017-10-12 10:45:44

Below is generated by plot.py at 2017-10-12 15:45:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 168.24 Mbit/s

95th percentile per-packet one-way delay: 50.620 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 85.46 Mbit/s

95th percentile per-packet one-way delay: 50.532 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 80.54 Mbit/s

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

Loss rate: 0.47%

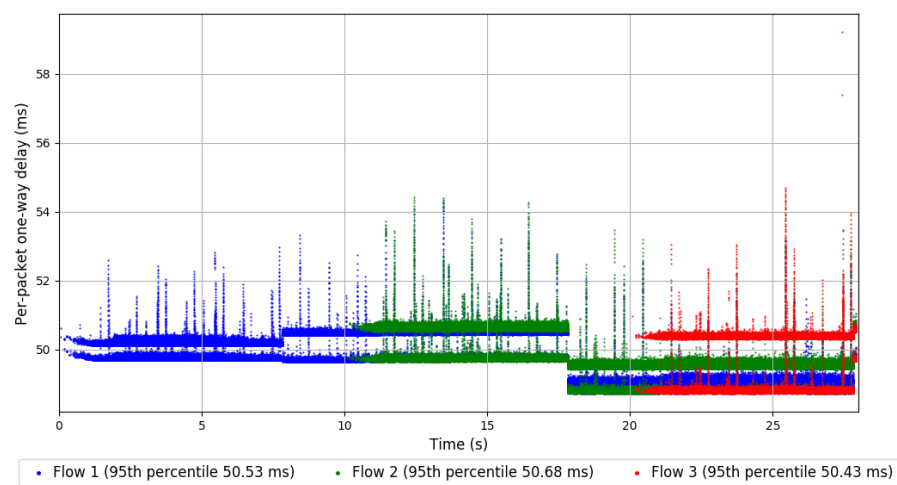
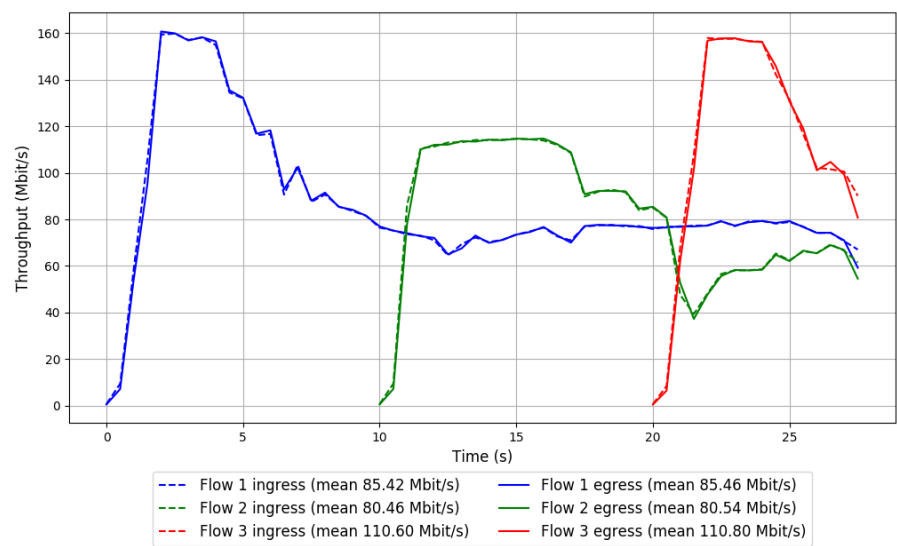
-- Flow 3:

Average throughput: 110.80 Mbit/s

95th percentile per-packet one-way delay: 50.431 ms

Loss rate: 1.08%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-10-12 10:58:10

End at: 2017-10-12 10:58:40

Below is generated by plot.py at 2017-10-12 15:45:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 149.86 Mbit/s

95th percentile per-packet one-way delay: 50.752 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 86.12 Mbit/s

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

Loss rate: 0.23%

-- Flow 2:

Average throughput: 55.61 Mbit/s

95th percentile per-packet one-way delay: 50.761 ms

Loss rate: 0.20%

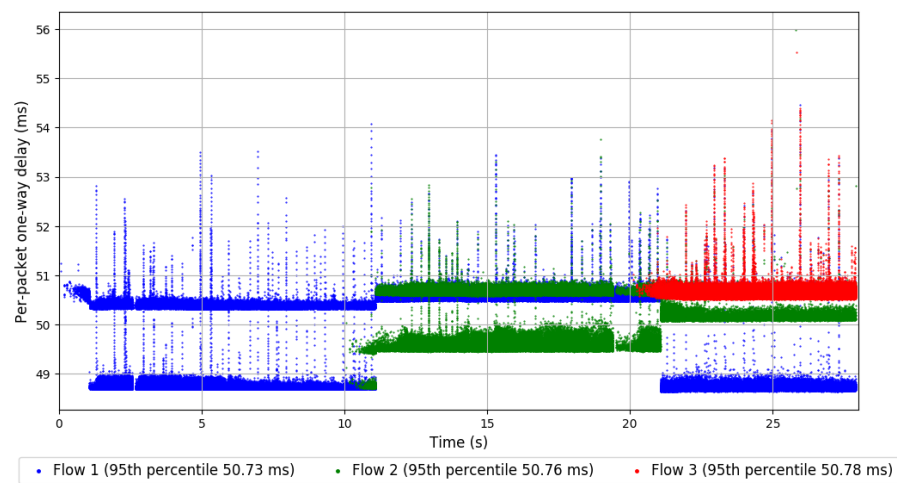
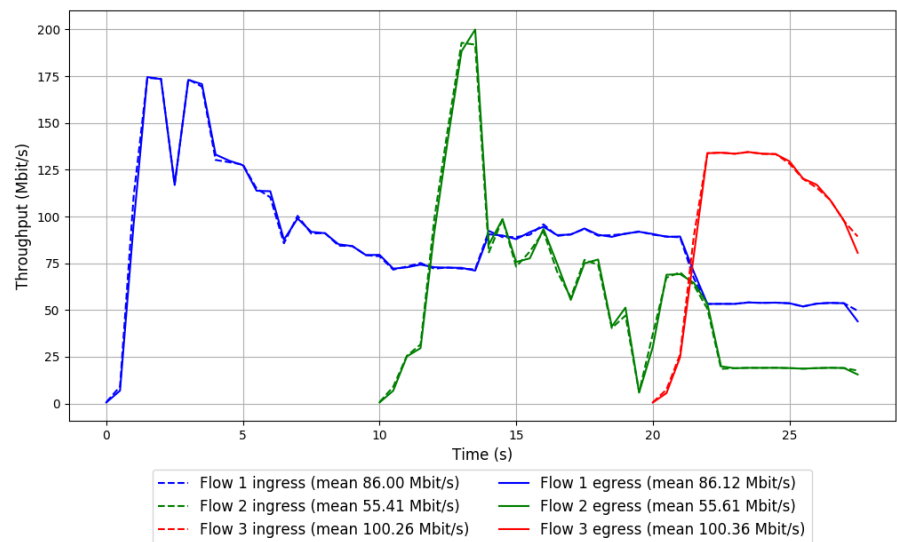
-- Flow 3:

Average throughput: 100.36 Mbit/s

95th percentile per-packet one-way delay: 50.782 ms

Loss rate: 1.21%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-10-12 11:11:00

End at: 2017-10-12 11:11:30

Below is generated by plot.py at 2017-10-12 15:45:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.45 Mbit/s

95th percentile per-packet one-way delay: 50.727 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 80.01 Mbit/s

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

Loss rate: 0.28%

-- Flow 2:

Average throughput: 79.99 Mbit/s

95th percentile per-packet one-way delay: 50.655 ms

Loss rate: 0.54%

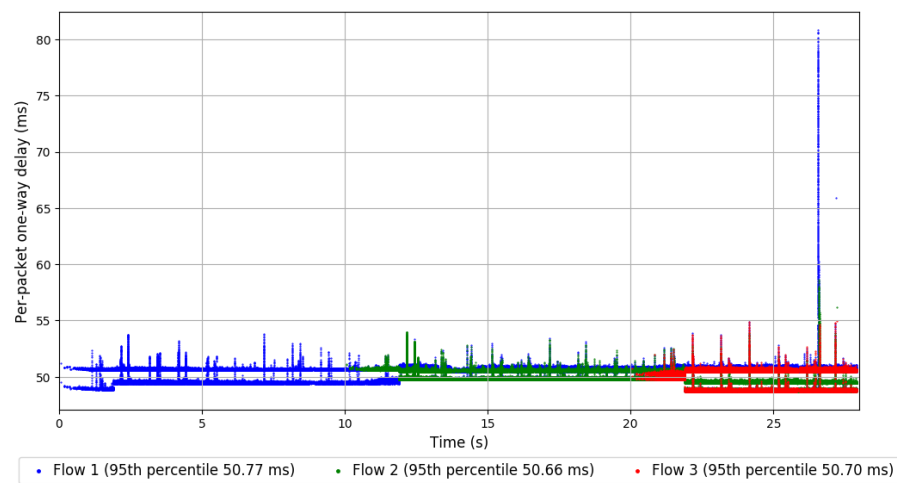
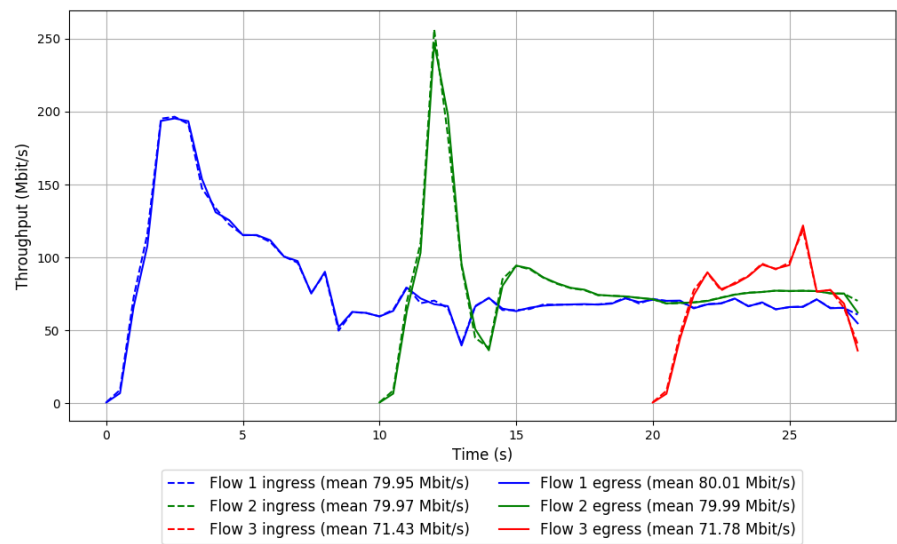
-- Flow 3:

Average throughput: 71.78 Mbit/s

95th percentile per-packet one-way delay: 50.701 ms

Loss rate: 0.81%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-10-12 11:23:43

End at: 2017-10-12 11:24:13

Below is generated by plot.py at 2017-10-12 15:48:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.59 Mbit/s

95th percentile per-packet one-way delay: 50.602 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 76.96 Mbit/s

95th percentile per-packet one-way delay: 50.309 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 73.34 Mbit/s

95th percentile per-packet one-way delay: 50.712 ms

Loss rate: 0.53%

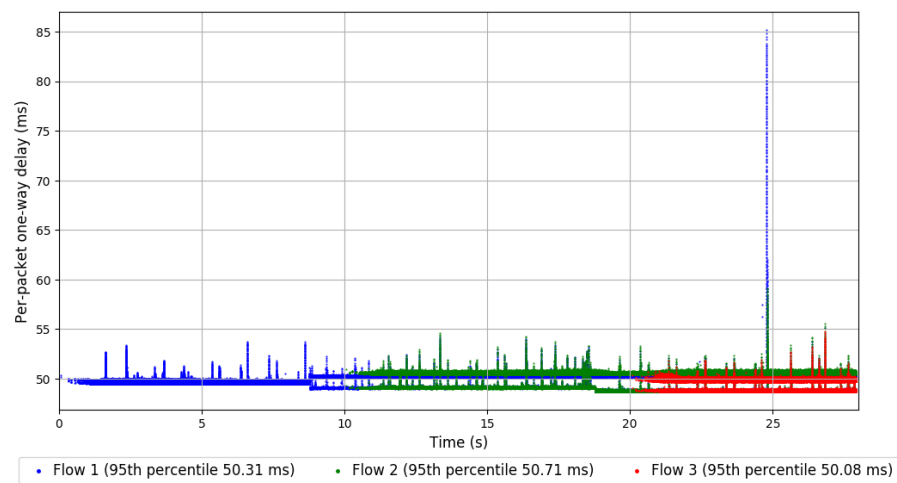
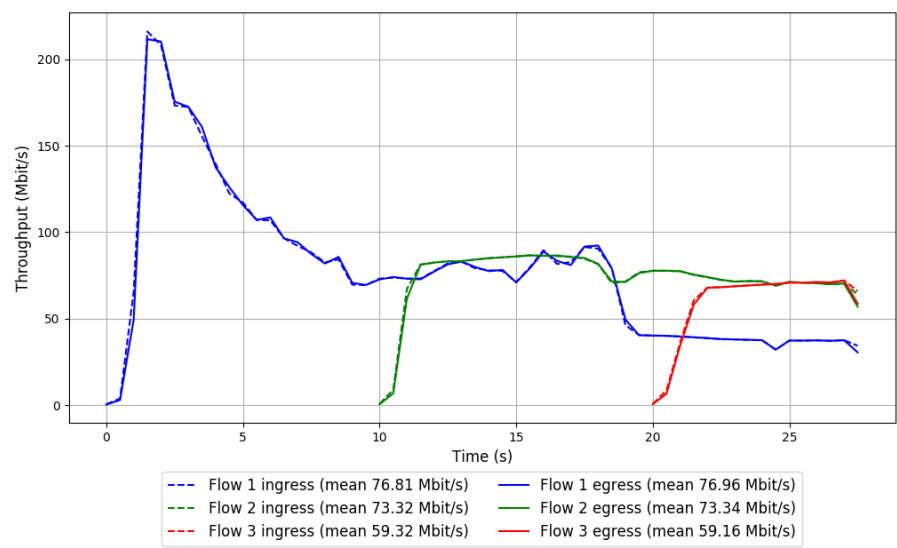
-- Flow 3:

Average throughput: 59.16 Mbit/s

95th percentile per-packet one-way delay: 50.084 ms

Loss rate: 1.53%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-10-12 11:36:41

End at: 2017-10-12 11:37:11

Below is generated by plot.py at 2017-10-12 15:48:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 157.53 Mbit/s

95th percentile per-packet one-way delay: 50.606 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 85.73 Mbit/s

95th percentile per-packet one-way delay: 50.608 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 73.49 Mbit/s

95th percentile per-packet one-way delay: 50.622 ms

Loss rate: 0.51%

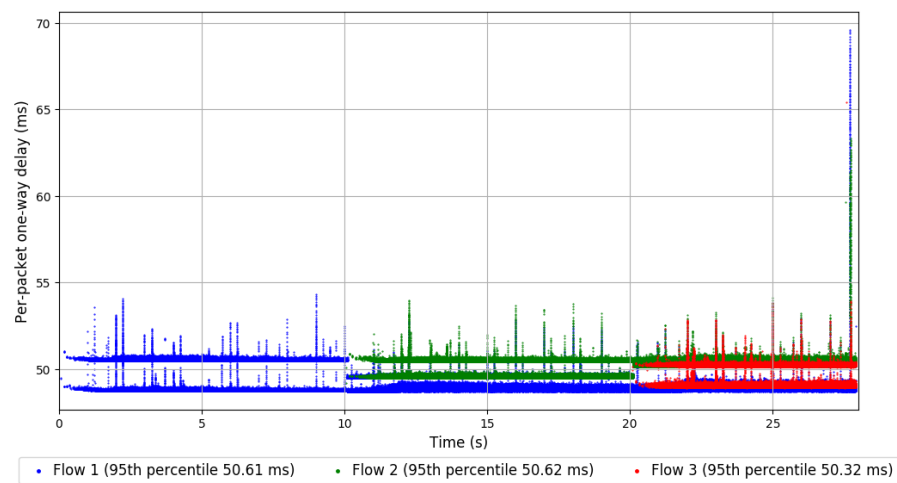
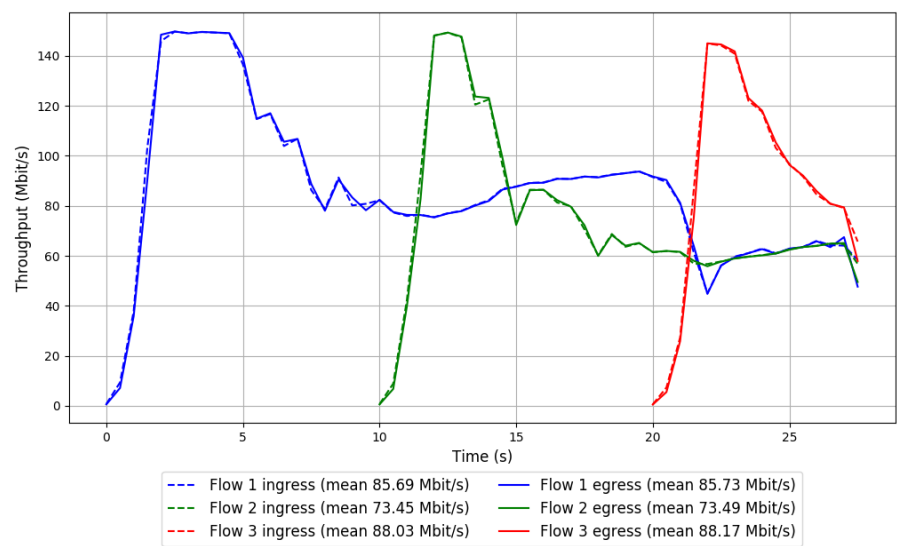
-- Flow 3:

Average throughput: 88.17 Mbit/s

95th percentile per-packet one-way delay: 50.323 ms

Loss rate: 1.12%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-10-12 11:49:10

End at: 2017-10-12 11:49:40

Below is generated by plot.py at 2017-10-12 15:48:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 144.73 Mbit/s

95th percentile per-packet one-way delay: 50.489 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 64.37 Mbit/s

95th percentile per-packet one-way delay: 50.515 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 78.63 Mbit/s

95th percentile per-packet one-way delay: 50.413 ms

Loss rate: 0.37%

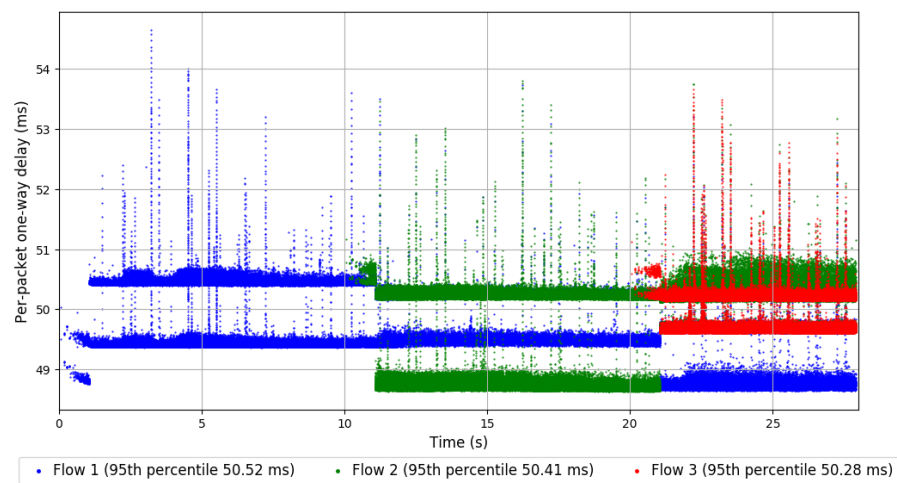
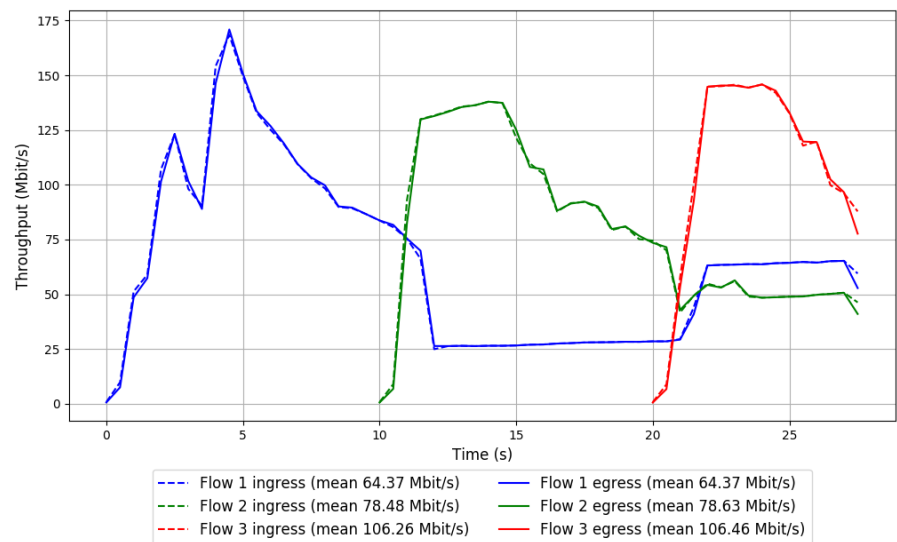
-- Flow 3:

Average throughput: 106.46 Mbit/s

95th percentile per-packet one-way delay: 50.285 ms

Loss rate: 1.11%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-10-12 12:01:44

End at: 2017-10-12 12:02:14

Below is generated by plot.py at 2017-10-12 15:48:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.20 Mbit/s

95th percentile per-packet one-way delay: 50.501 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 76.25 Mbit/s

95th percentile per-packet one-way delay: 50.517 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 65.00 Mbit/s

95th percentile per-packet one-way delay: 50.395 ms

Loss rate: 0.49%

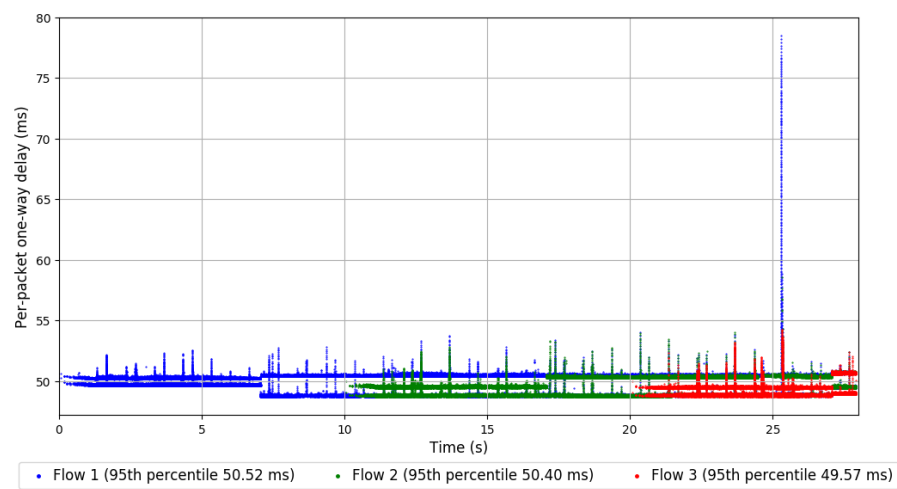
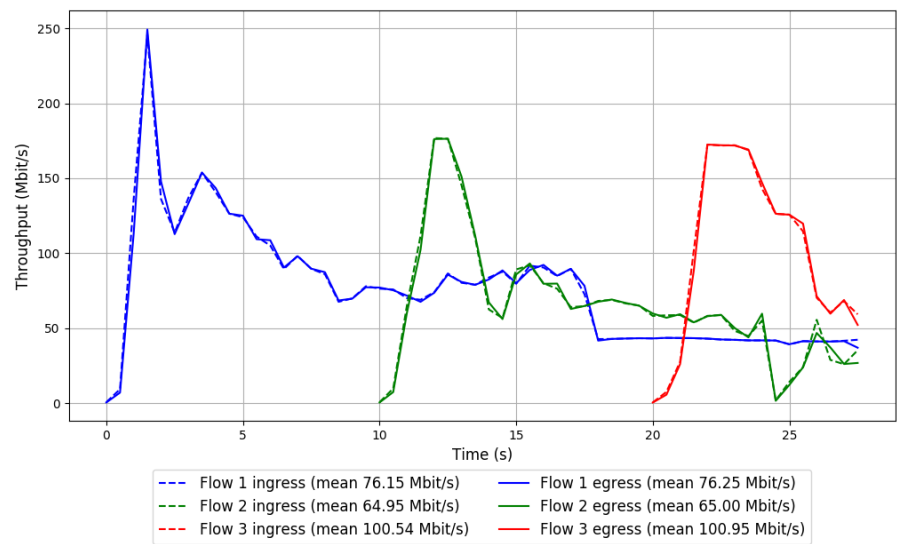
-- Flow 3:

Average throughput: 100.95 Mbit/s

95th percentile per-packet one-way delay: 49.574 ms

Loss rate: 0.85%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-10-12 12:14:28

End at: 2017-10-12 12:14:58

Below is generated by plot.py at 2017-10-12 15:49:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.57 Mbit/s

95th percentile per-packet one-way delay: 50.676 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 70.99 Mbit/s

95th percentile per-packet one-way delay: 50.650 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 84.34 Mbit/s

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

Loss rate: 0.41%

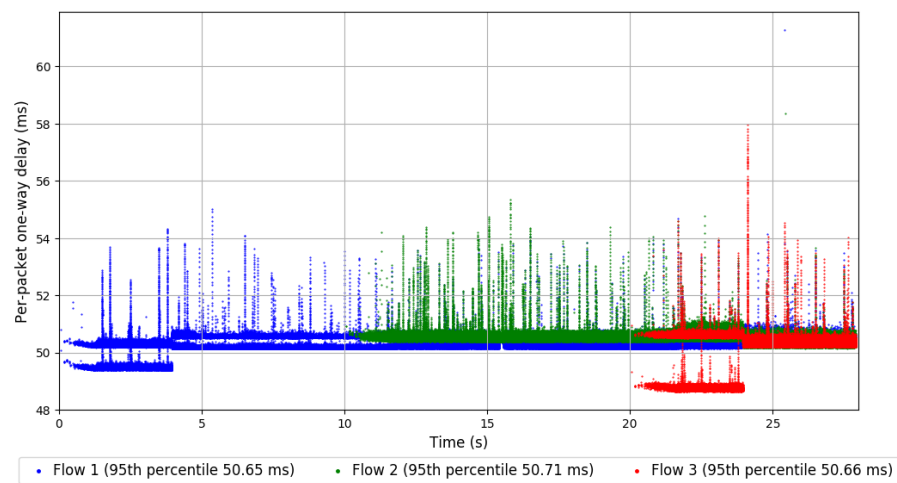
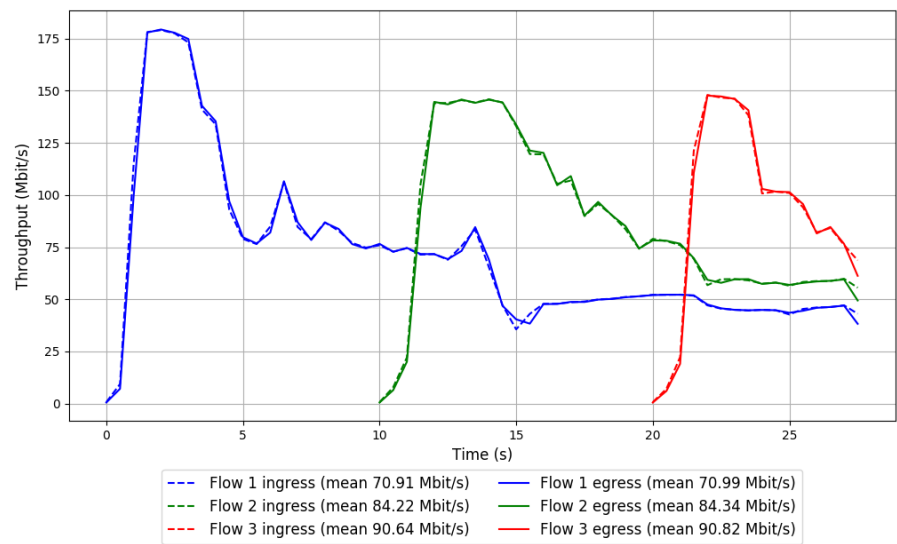
-- Flow 3:

Average throughput: 90.82 Mbit/s

95th percentile per-packet one-way delay: 50.664 ms

Loss rate: 1.06%

Run 10: Report of Copa — Data Link

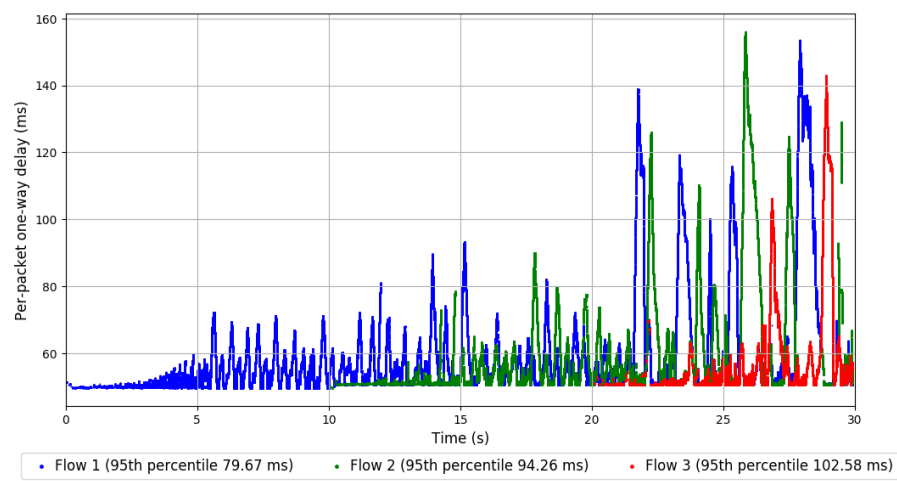
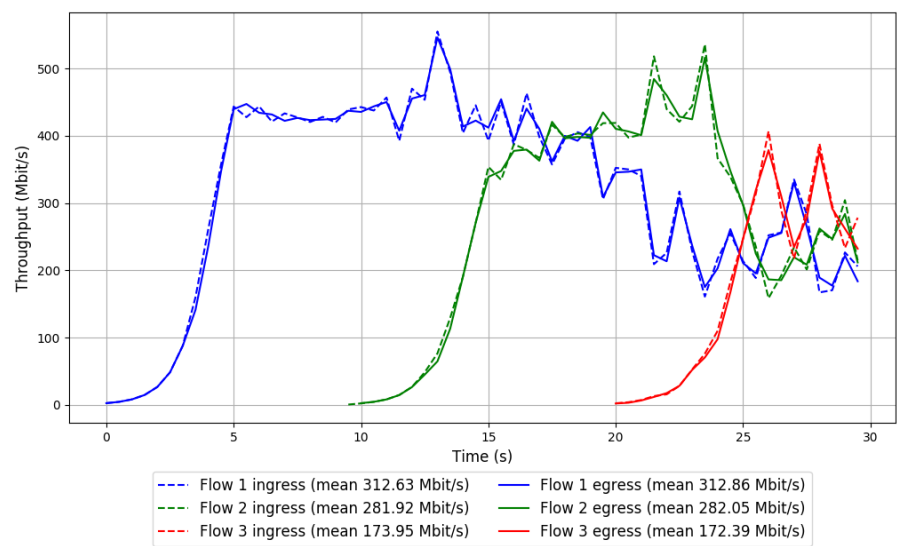


```
Run 1: Statistics of CalibratedKoho

Start at: 2017-10-12 10:18:33
End at: 2017-10-12 10:19:03

# Below is generated by plot.py at 2017-10-12 15:55:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 557.13 Mbit/s
95th percentile per-packet one-way delay: 87.618 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 312.86 Mbit/s
95th percentile per-packet one-way delay: 79.673 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 282.05 Mbit/s
95th percentile per-packet one-way delay: 94.263 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 172.39 Mbit/s
95th percentile per-packet one-way delay: 102.575 ms
Loss rate: 1.91%
```


Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-10-12 10:31:07

End at: 2017-10-12 10:31:37

Below is generated by plot.py at 2017-10-12 15:55:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 558.27 Mbit/s

95th percentile per-packet one-way delay: 84.824 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 334.35 Mbit/s

95th percentile per-packet one-way delay: 81.882 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 257.97 Mbit/s

95th percentile per-packet one-way delay: 88.451 ms

Loss rate: 0.46%

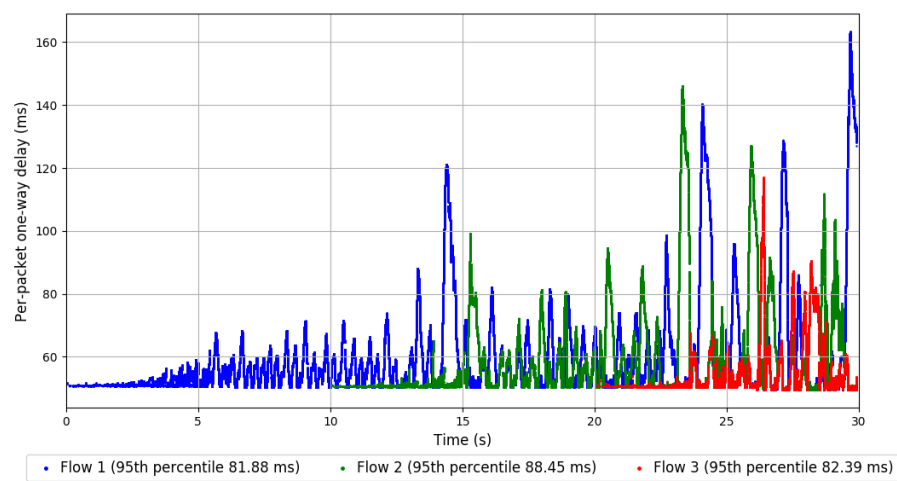
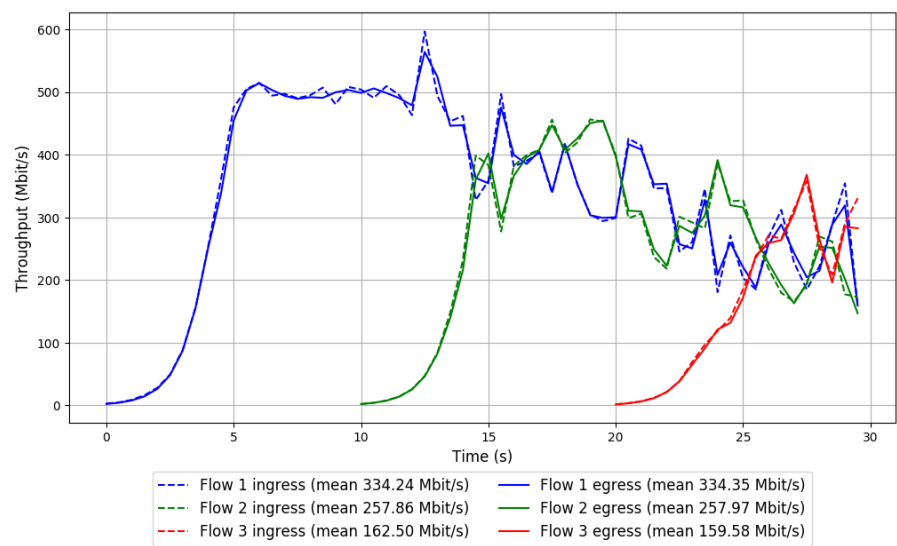
-- Flow 3:

Average throughput: 159.58 Mbit/s

95th percentile per-packet one-way delay: 82.391 ms

Loss rate: 2.79%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-10-12 10:43:56

End at: 2017-10-12 10:44:26

Below is generated by plot.py at 2017-10-12 15:56:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 567.75 Mbit/s

95th percentile per-packet one-way delay: 73.346 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 337.96 Mbit/s

95th percentile per-packet one-way delay: 70.941 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 278.56 Mbit/s

95th percentile per-packet one-way delay: 76.650 ms

Loss rate: 0.17%

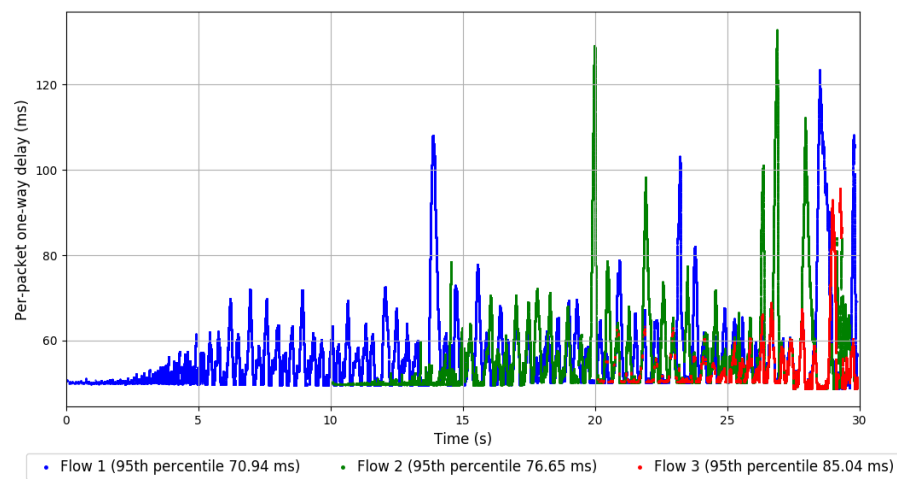
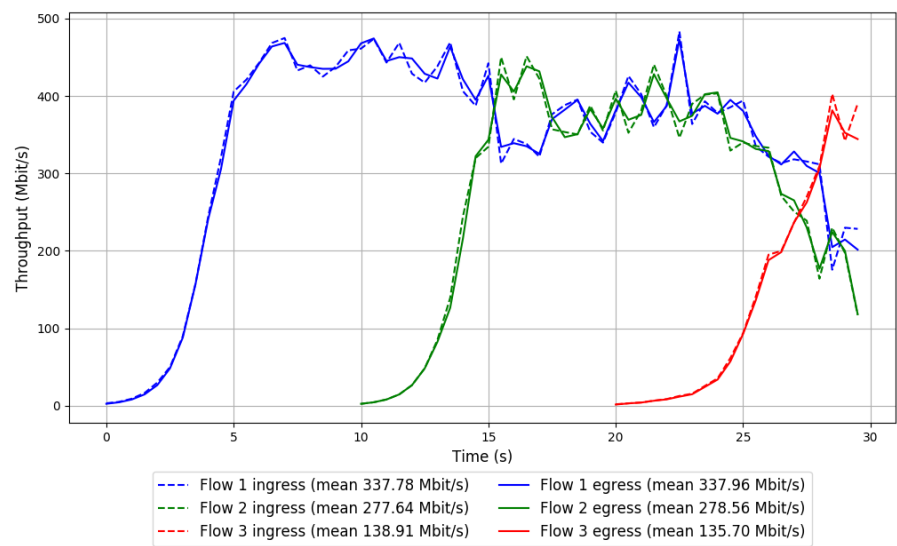
-- Flow 3:

Average throughput: 135.70 Mbit/s

95th percentile per-packet one-way delay: 85.044 ms

Loss rate: 3.30%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-10-12 10:56:54

End at: 2017-10-12 10:57:24

Below is generated by plot.py at 2017-10-12 15:58:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 540.75 Mbit/s

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

Loss rate: 0.55%

-- Flow 1:

Average throughput: 322.52 Mbit/s

95th percentile per-packet one-way delay: 81.756 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 267.41 Mbit/s

95th percentile per-packet one-way delay: 94.536 ms

Loss rate: 0.62%

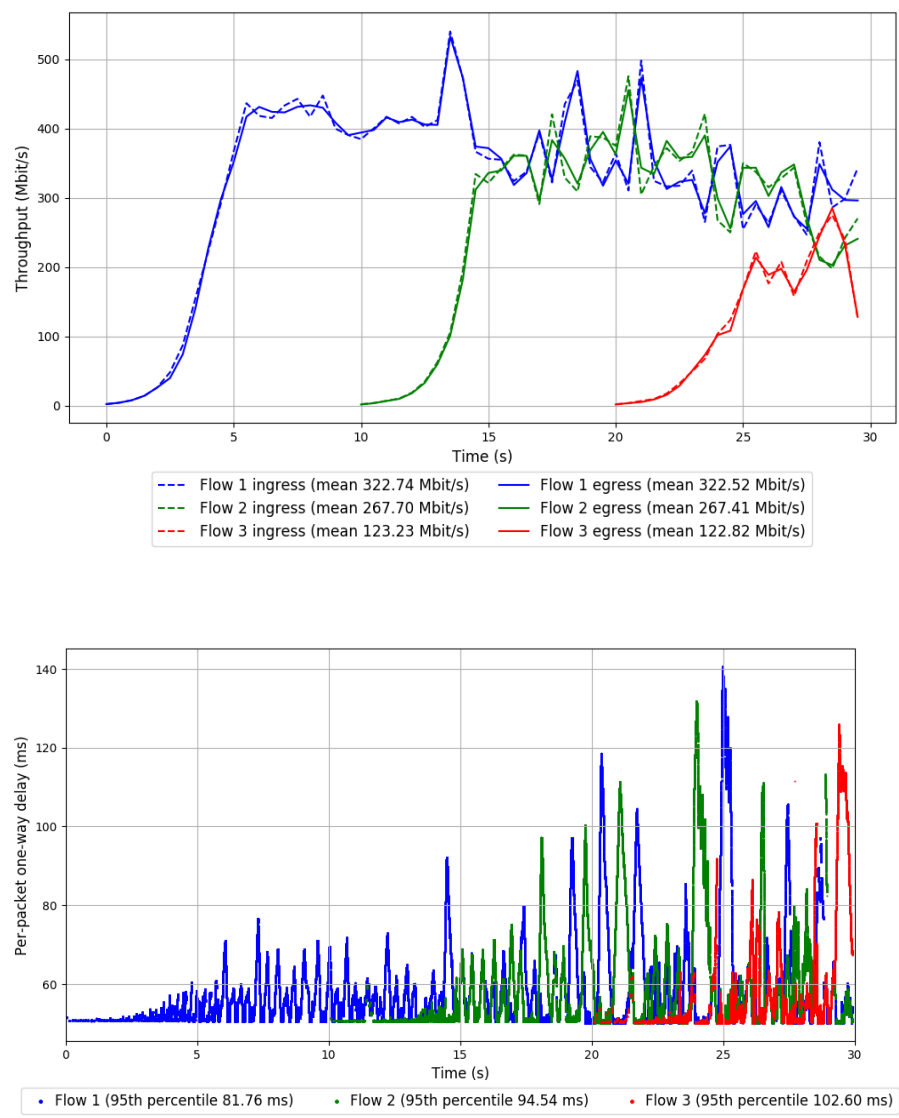
-- Flow 3:

Average throughput: 122.82 Mbit/s

95th percentile per-packet one-way delay: 102.601 ms

Loss rate: 1.35%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-10-12 11:09:41

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

Below is generated by plot.py at 2017-10-12 15:59:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 569.15 Mbit/s

95th percentile per-packet one-way delay: 79.900 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 332.32 Mbit/s

95th percentile per-packet one-way delay: 81.800 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 256.96 Mbit/s

95th percentile per-packet one-way delay: 83.423 ms

Loss rate: 0.50%

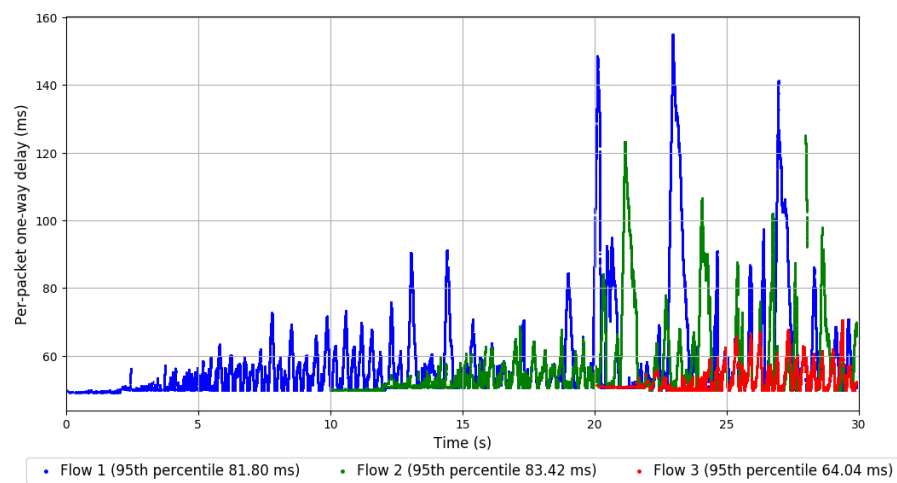
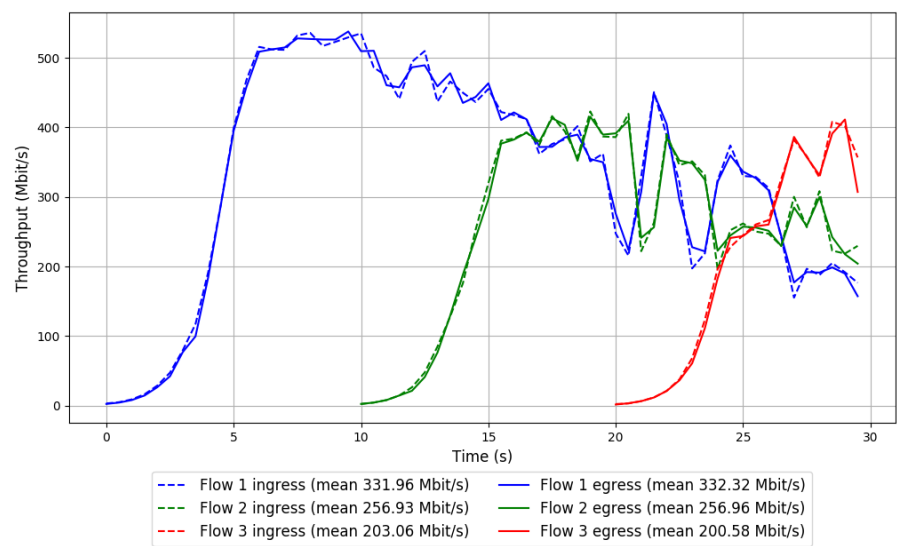
-- Flow 3:

Average throughput: 200.58 Mbit/s

95th percentile per-packet one-way delay: 64.042 ms

Loss rate: 2.24%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-10-12 11:22:27

End at: 2017-10-12 11:22:57

Below is generated by plot.py at 2017-10-12 15:59:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 533.28 Mbit/s

95th percentile per-packet one-way delay: 126.847 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 321.14 Mbit/s

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

Loss rate: 0.33%

-- Flow 2:

Average throughput: 248.62 Mbit/s

95th percentile per-packet one-way delay: 162.216 ms

Loss rate: 0.46%

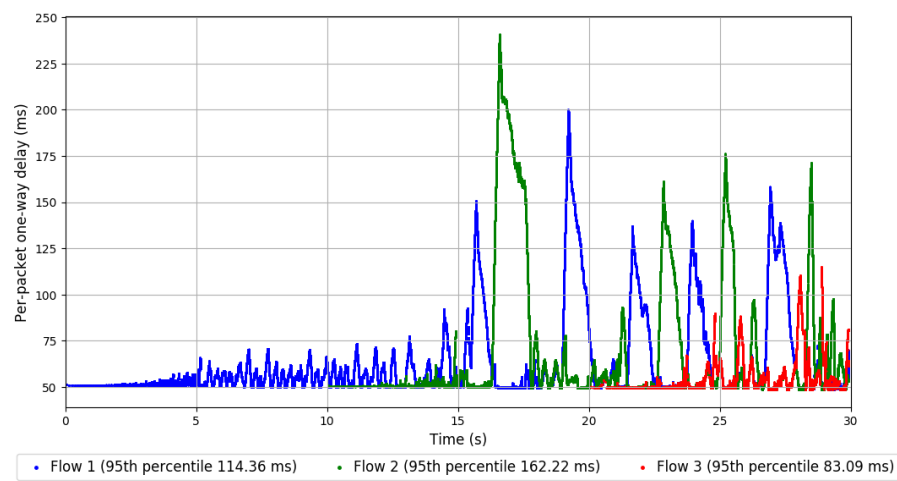
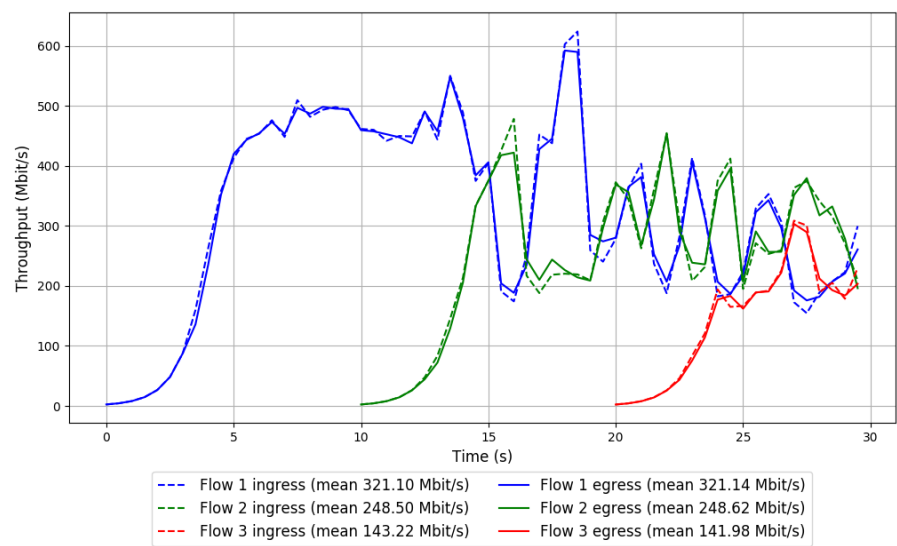
-- Flow 3:

Average throughput: 141.98 Mbit/s

95th percentile per-packet one-way delay: 83.094 ms

Loss rate: 1.87%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-10-12 11:35:23

End at: 2017-10-12 11:35:53

Below is generated by plot.py at 2017-10-12 15:59:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 565.69 Mbit/s

95th percentile per-packet one-way delay: 83.809 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 336.36 Mbit/s

95th percentile per-packet one-way delay: 70.746 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 262.39 Mbit/s

95th percentile per-packet one-way delay: 99.481 ms

Loss rate: 0.49%

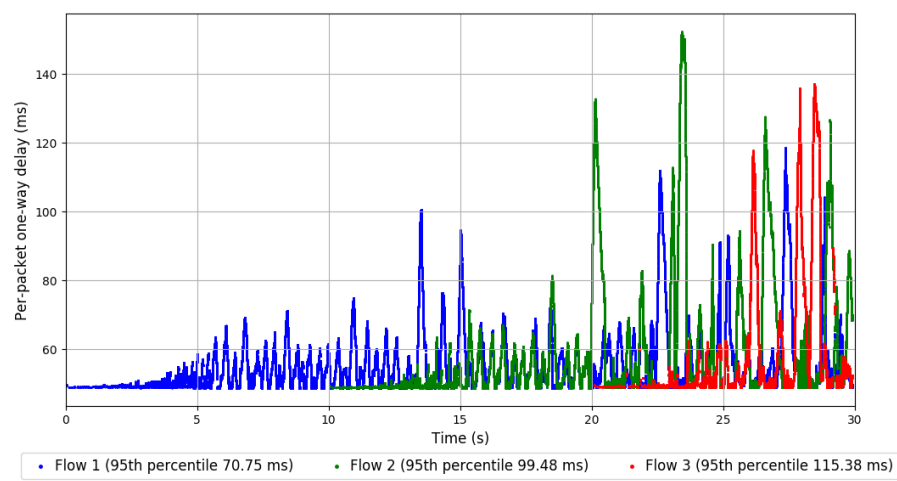
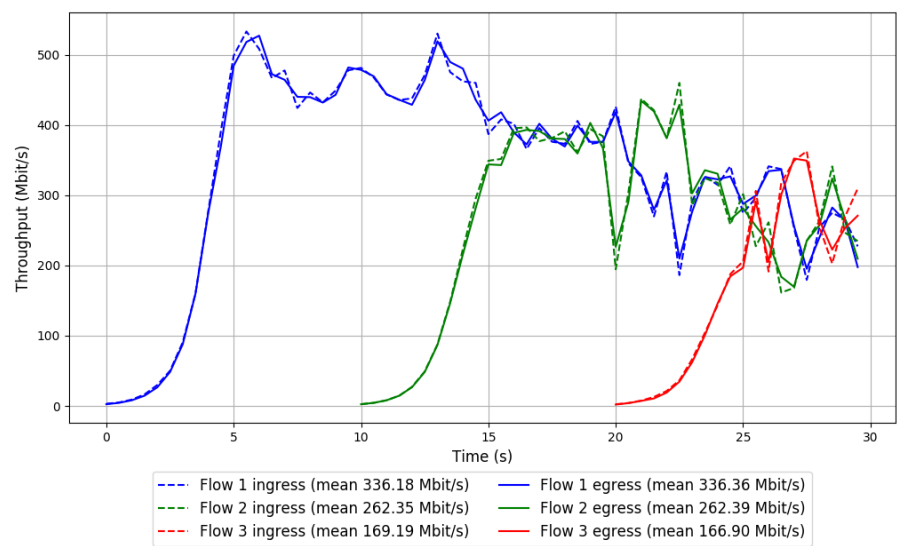
-- Flow 3:

Average throughput: 166.90 Mbit/s

95th percentile per-packet one-way delay: 115.377 ms

Loss rate: 2.35%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-10-12 11:47:55

End at: 2017-10-12 11:48:25

Below is generated by plot.py at 2017-10-12 15:59:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 534.31 Mbit/s

95th percentile per-packet one-way delay: 95.204 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 327.26 Mbit/s

95th percentile per-packet one-way delay: 97.738 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 230.67 Mbit/s

95th percentile per-packet one-way delay: 91.654 ms

Loss rate: 0.71%

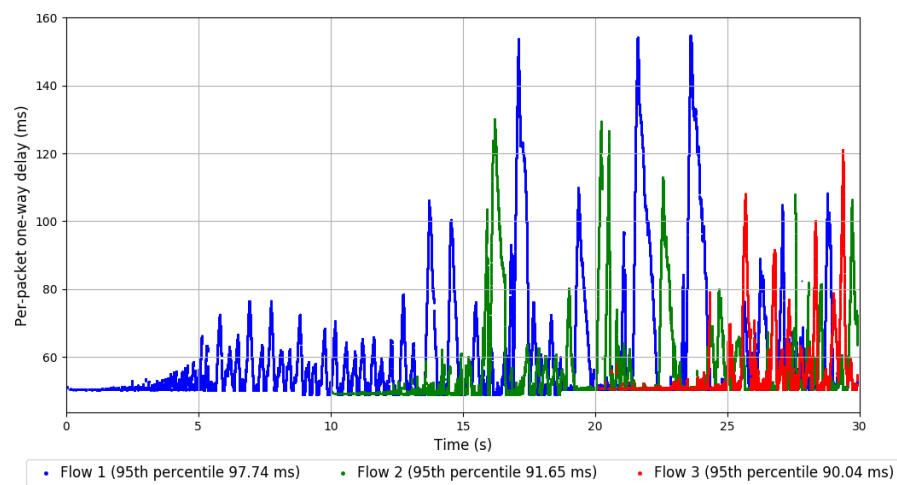
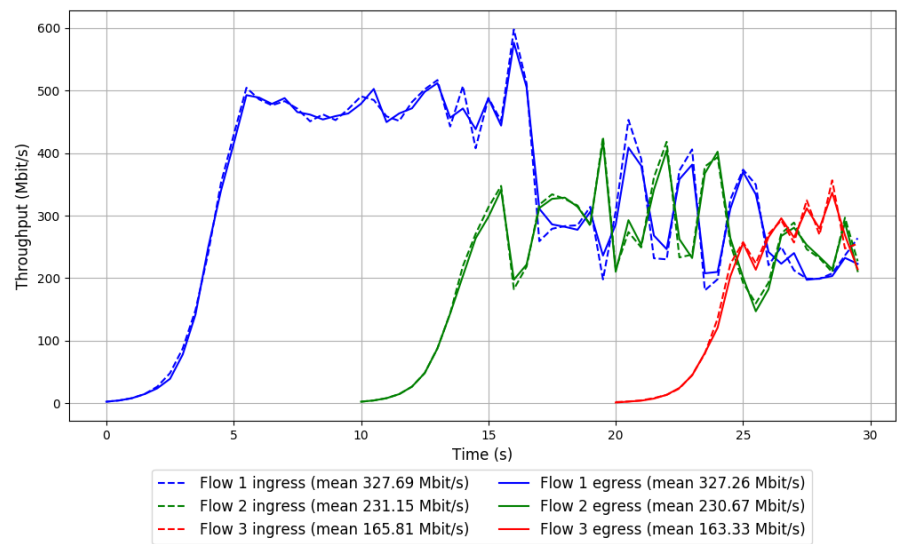
-- Flow 3:

Average throughput: 163.33 Mbit/s

95th percentile per-packet one-way delay: 90.044 ms

Loss rate: 2.51%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-10-12 12:00:28

End at: 2017-10-12 12:00:58

Below is generated by plot.py at 2017-10-12 16:05:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 540.85 Mbit/s

95th percentile per-packet one-way delay: 85.812 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 312.34 Mbit/s

95th percentile per-packet one-way delay: 76.237 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 263.19 Mbit/s

95th percentile per-packet one-way delay: 90.777 ms

Loss rate: 0.26%

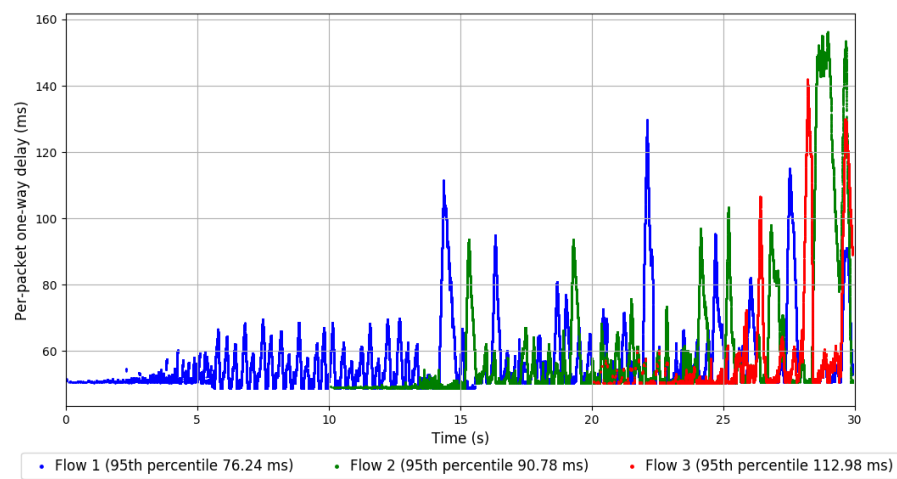
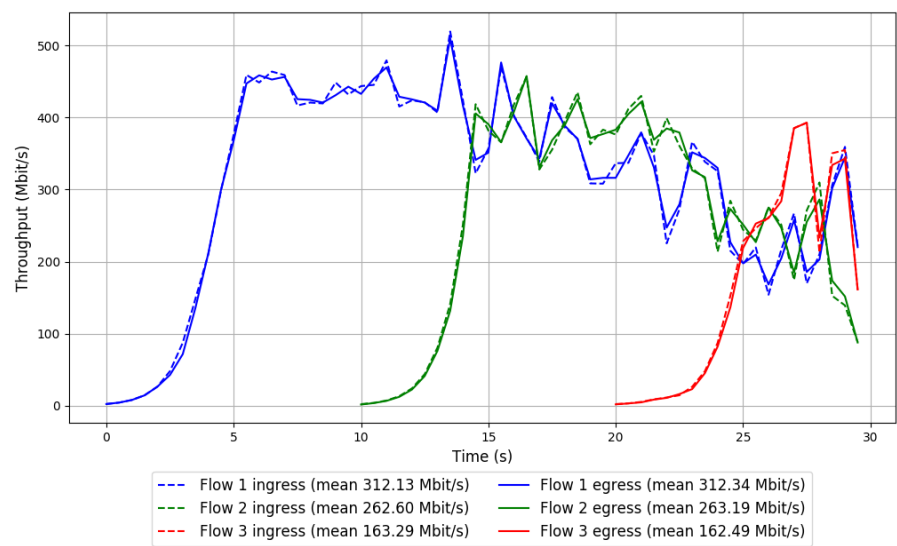
-- Flow 3:

Average throughput: 162.49 Mbit/s

95th percentile per-packet one-way delay: 112.985 ms

Loss rate: 1.50%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-10-12 12:13:10

End at: 2017-10-12 12:13:40

Below is generated by plot.py at 2017-10-12 16:05:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 546.90 Mbit/s

95th percentile per-packet one-way delay: 75.375 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 318.95 Mbit/s

95th percentile per-packet one-way delay: 72.374 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 275.82 Mbit/s

95th percentile per-packet one-way delay: 81.218 ms

Loss rate: 0.60%

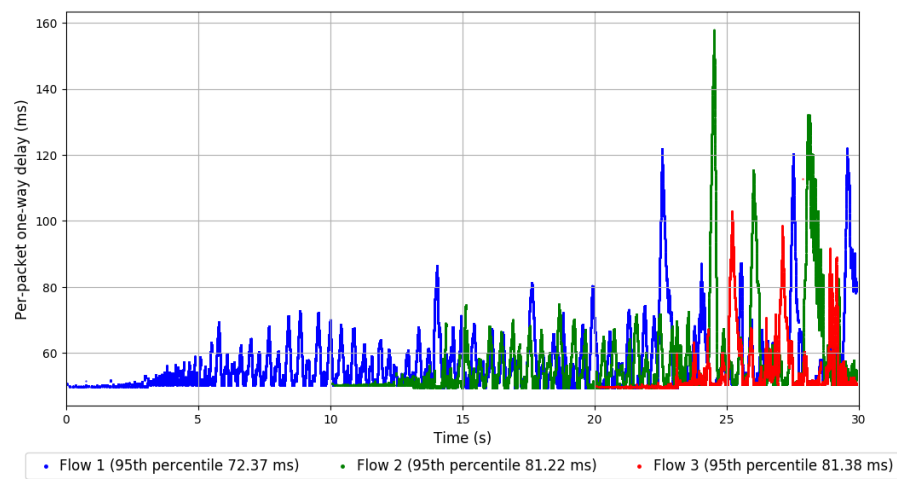
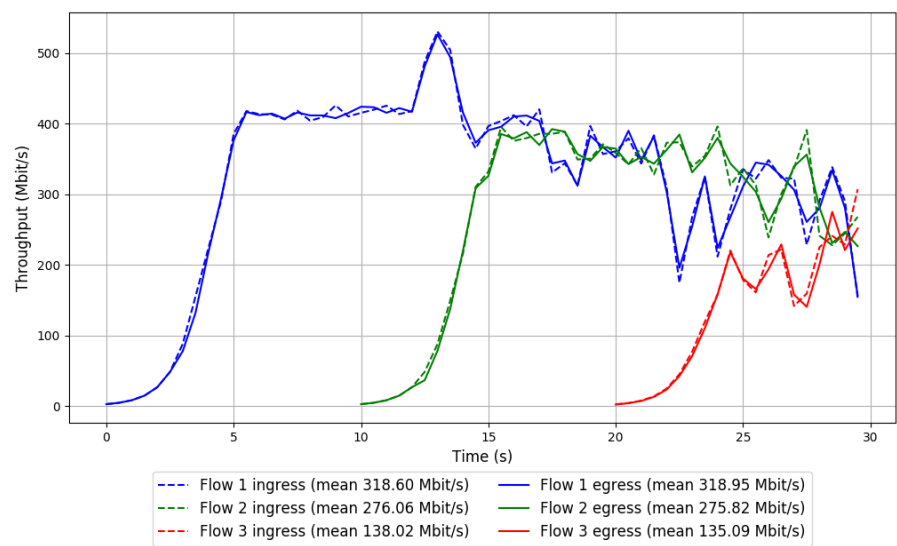
-- Flow 3:

Average throughput: 135.09 Mbit/s

95th percentile per-packet one-way delay: 81.376 ms

Loss rate: 3.12%

Run 10: Report of CalibratedKoho — Data Link

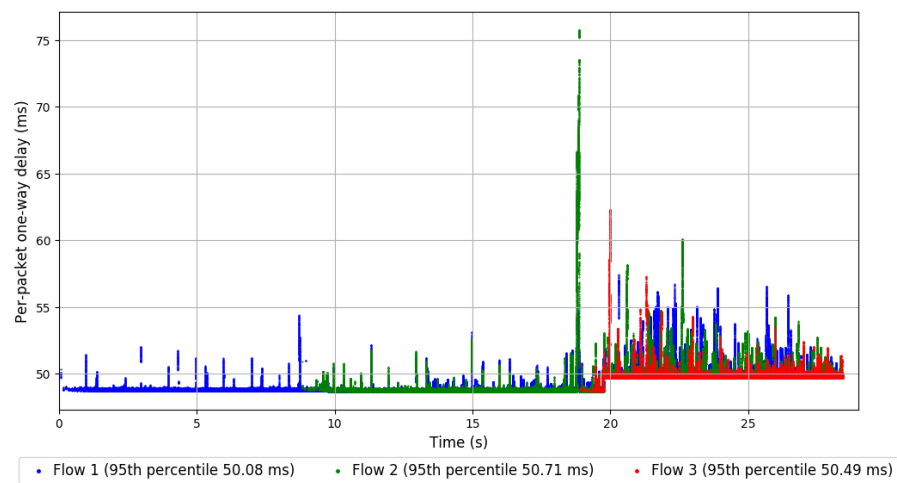
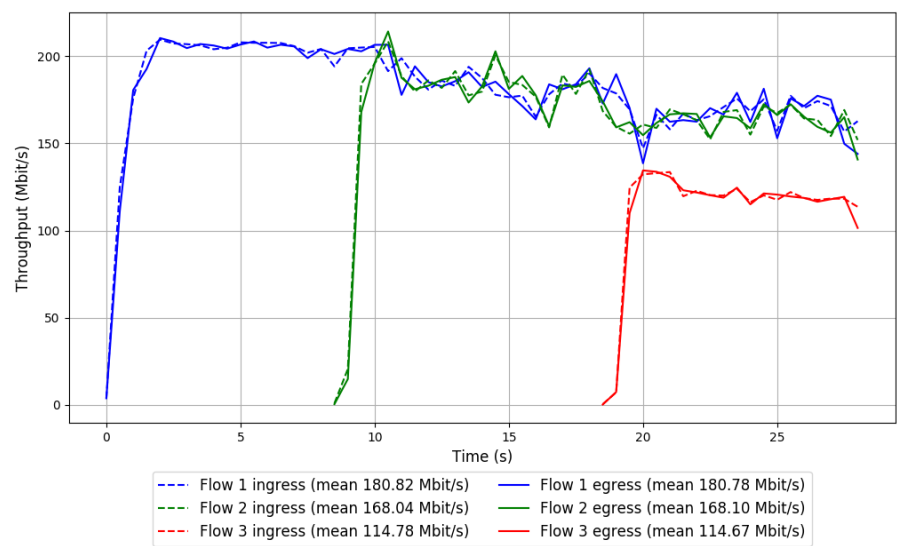


```
Run 1: Statistics of Indigo

Start at: 2017-10-12 10:26:32
End at: 2017-10-12 10:27:02

# Below is generated by plot.py at 2017-10-12 16:05:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 335.26 Mbit/s
95th percentile per-packet one-way delay: 50.347 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 180.78 Mbit/s
95th percentile per-packet one-way delay: 50.083 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 168.10 Mbit/s
95th percentile per-packet one-way delay: 50.709 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 114.67 Mbit/s
95th percentile per-packet one-way delay: 50.488 ms
Loss rate: 1.11%
```

Run 1: Report of Indigo — Data Link

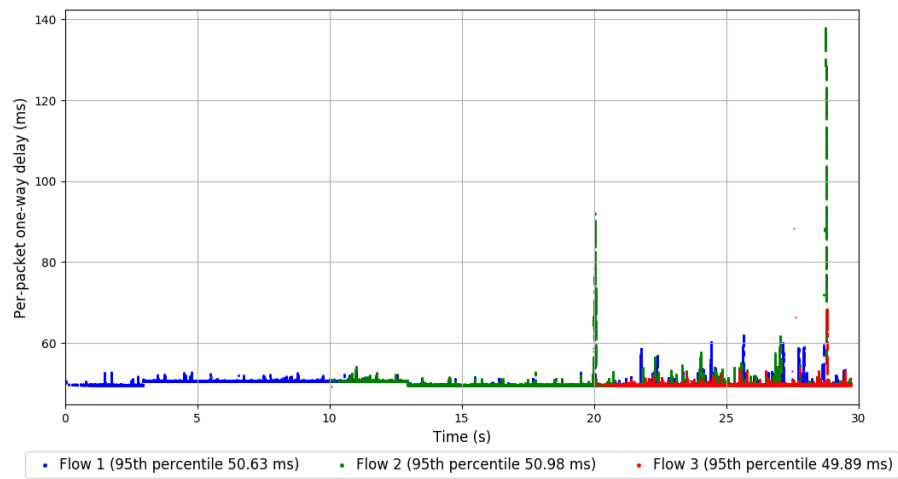
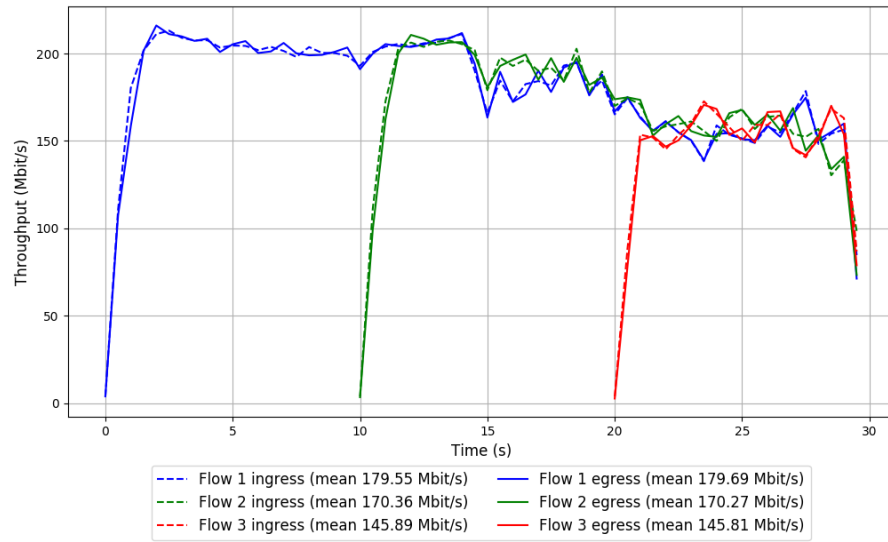


```
Run 2: Statistics of Indigo

Start at: 2017-10-12 10:39:10
End at: 2017-10-12 10:39:40

# Below is generated by plot.py at 2017-10-12 16:05:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 339.79 Mbit/s
95th percentile per-packet one-way delay: 50.648 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 179.69 Mbit/s
95th percentile per-packet one-way delay: 50.632 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 170.27 Mbit/s
95th percentile per-packet one-way delay: 50.984 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 145.81 Mbit/s
95th percentile per-packet one-way delay: 49.894 ms
Loss rate: 1.07%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-10-12 10:52:06

End at: 2017-10-12 10:52:36

Below is generated by plot.py at 2017-10-12 16:05:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 340.78 Mbit/s

95th percentile per-packet one-way delay: 51.694 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 179.78 Mbit/s

95th percentile per-packet one-way delay: 52.032 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 169.59 Mbit/s

95th percentile per-packet one-way delay: 51.709 ms

Loss rate: 0.60%

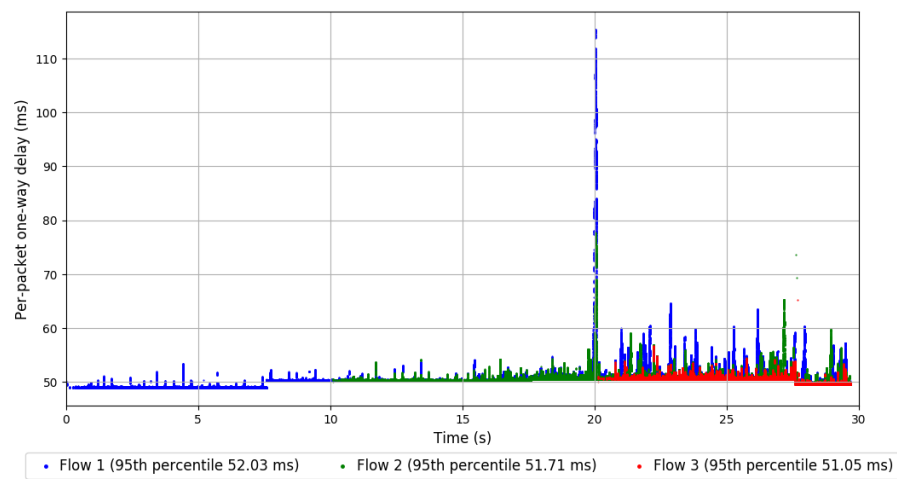
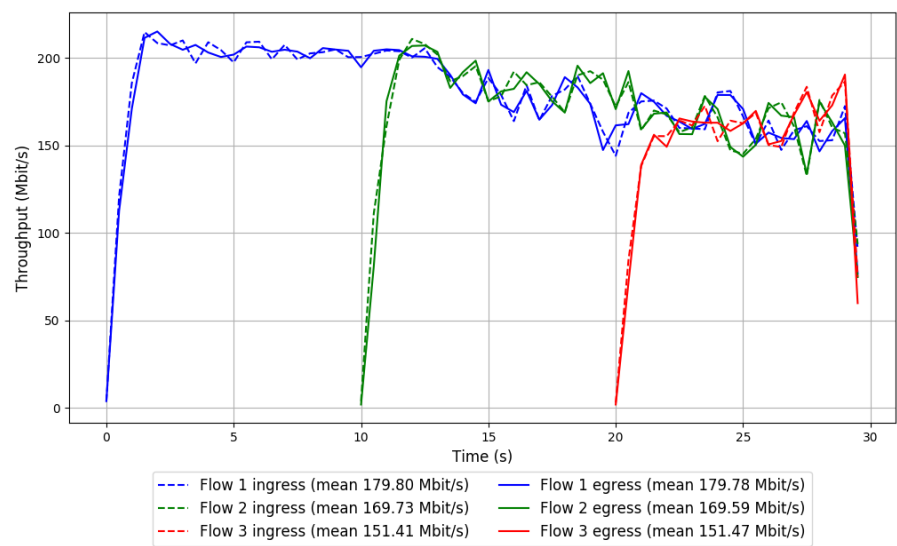
-- Flow 3:

Average throughput: 151.47 Mbit/s

95th percentile per-packet one-way delay: 51.050 ms

Loss rate: 1.01%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-10-12 11:04:52

End at: 2017-10-12 11:05:22

Below is generated by plot.py at 2017-10-12 16:05:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.77 Mbit/s

95th percentile per-packet one-way delay: 50.972 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 178.24 Mbit/s

95th percentile per-packet one-way delay: 50.920 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 167.54 Mbit/s

95th percentile per-packet one-way delay: 51.367 ms

Loss rate: 0.45%

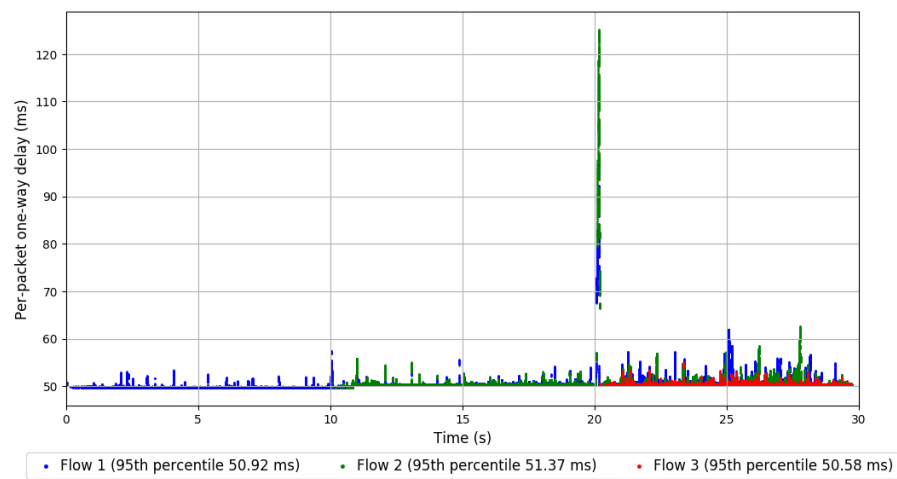
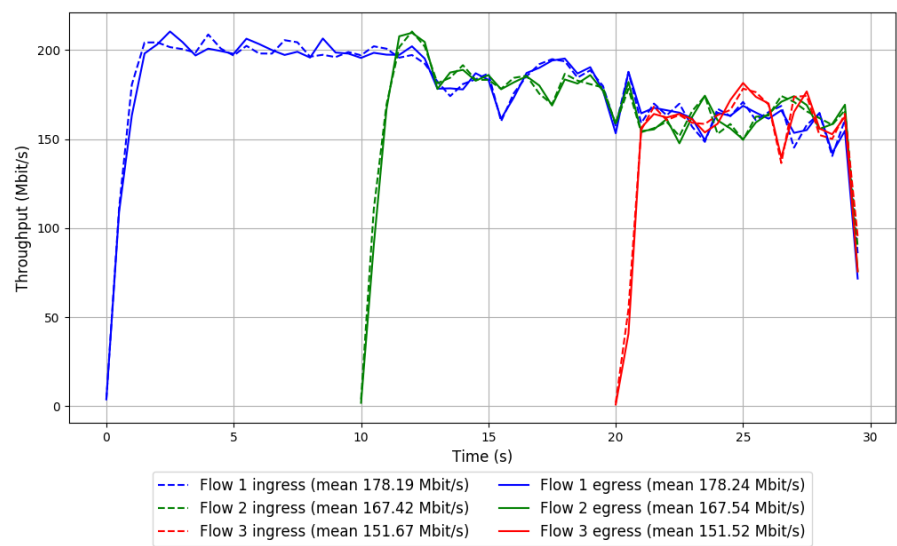
-- Flow 3:

Average throughput: 151.52 Mbit/s

95th percentile per-packet one-way delay: 50.577 ms

Loss rate: 1.17%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-10-12 11:17:45

End at: 2017-10-12 11:18:15

Below is generated by plot.py at 2017-10-12 16:05:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 335.66 Mbit/s

95th percentile per-packet one-way delay: 50.927 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 180.50 Mbit/s

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

Loss rate: 0.36%

-- Flow 2:

Average throughput: 165.17 Mbit/s

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

Loss rate: 0.48%

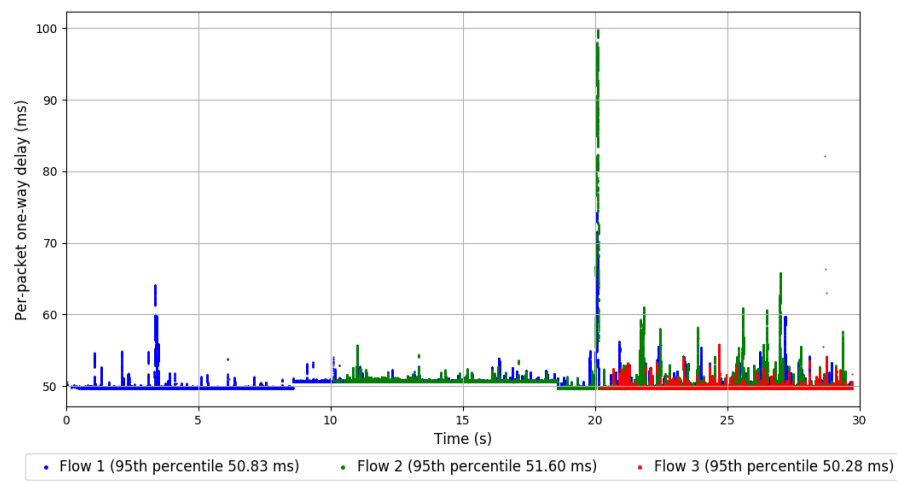
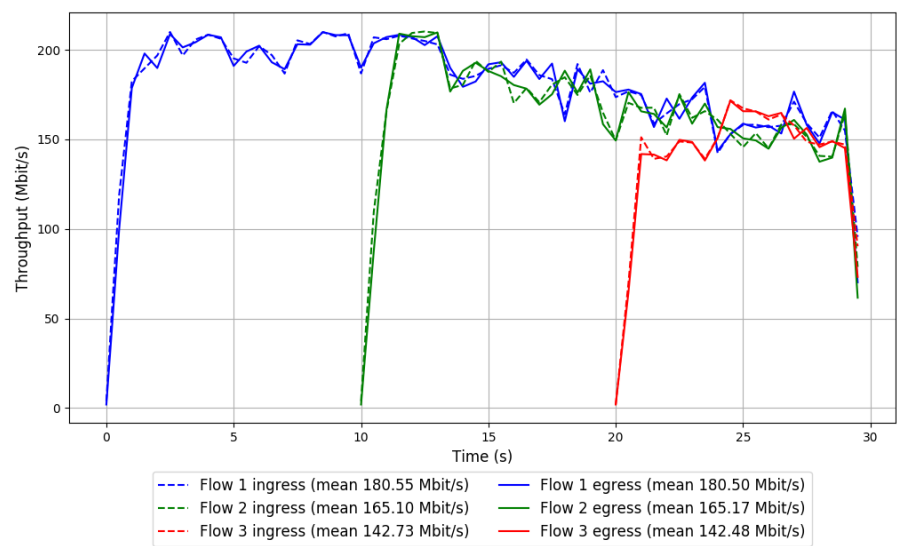
-- Flow 3:

Average throughput: 142.48 Mbit/s

95th percentile per-packet one-way delay: 50.279 ms

Loss rate: 1.21%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-10-12 11:30:35

End at: 2017-10-12 11:31:05

Below is generated by plot.py at 2017-10-12 16:06:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 334.15 Mbit/s

95th percentile per-packet one-way delay: 51.415 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 177.79 Mbit/s

95th percentile per-packet one-way delay: 51.497 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 164.22 Mbit/s

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

Loss rate: 0.53%

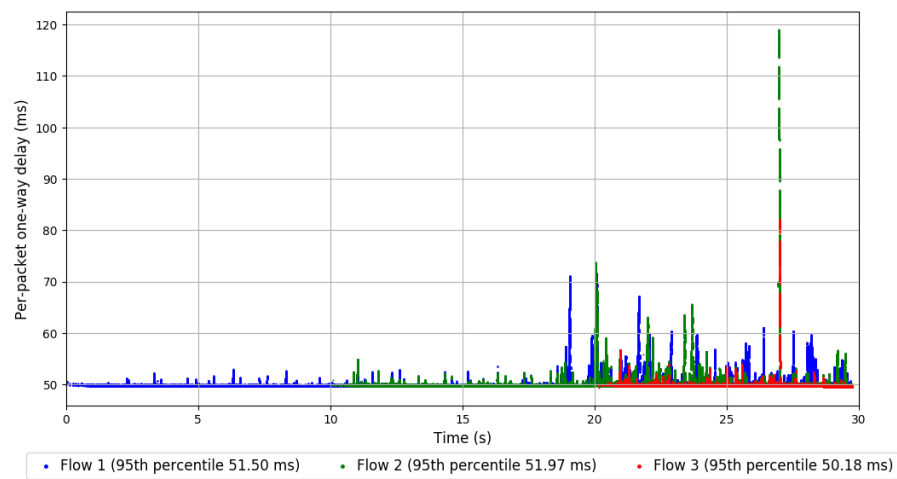
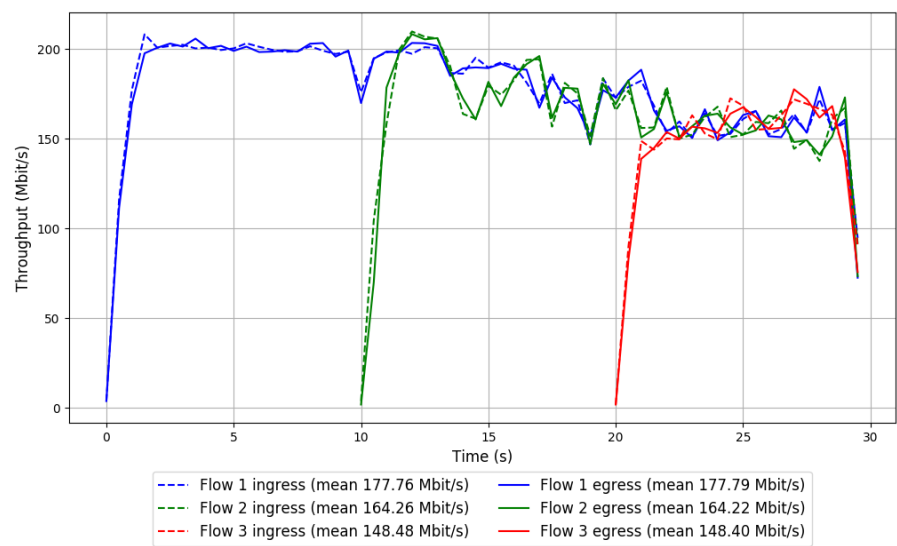
-- Flow 3:

Average throughput: 148.40 Mbit/s

95th percentile per-packet one-way delay: 50.181 ms

Loss rate: 1.09%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-10-12 11:43:22

End at: 2017-10-12 11:43:52

Below is generated by plot.py at 2017-10-12 16:07:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 328.98 Mbit/s

95th percentile per-packet one-way delay: 50.329 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 176.11 Mbit/s

95th percentile per-packet one-way delay: 50.289 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 162.35 Mbit/s

95th percentile per-packet one-way delay: 50.659 ms

Loss rate: 0.40%

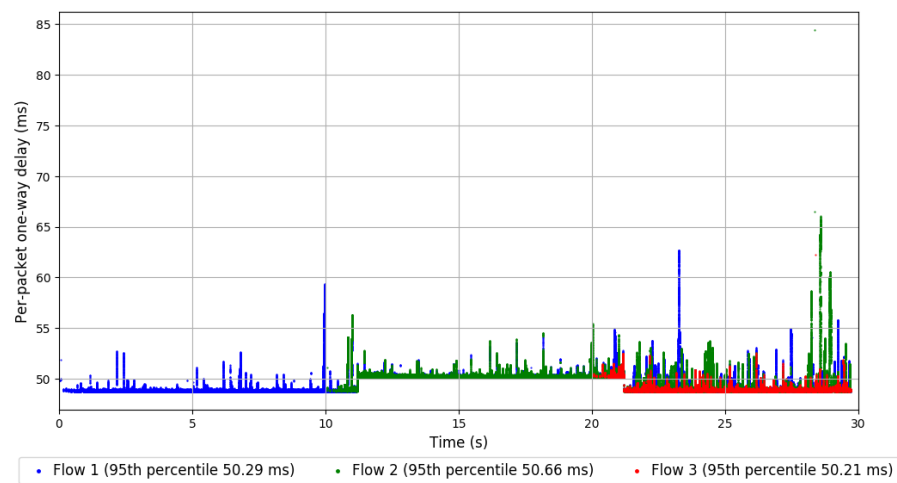
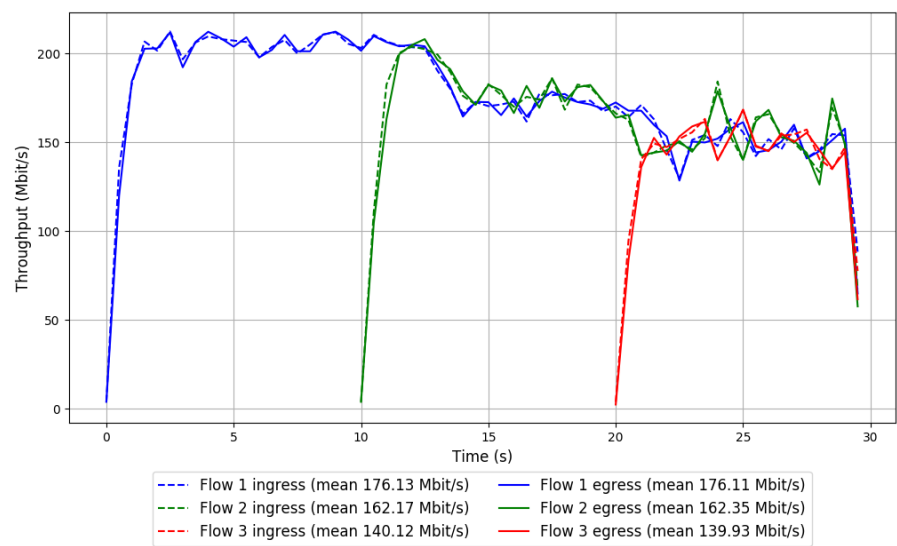
-- Flow 3:

Average throughput: 139.93 Mbit/s

95th percentile per-packet one-way delay: 50.214 ms

Loss rate: 1.18%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-10-12 11:55:45

End at: 2017-10-12 11:56:15

Below is generated by plot.py at 2017-10-12 16:07:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 333.74 Mbit/s

95th percentile per-packet one-way delay: 50.806 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 178.34 Mbit/s

95th percentile per-packet one-way delay: 50.733 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 160.47 Mbit/s

95th percentile per-packet one-way delay: 51.051 ms

Loss rate: 0.60%

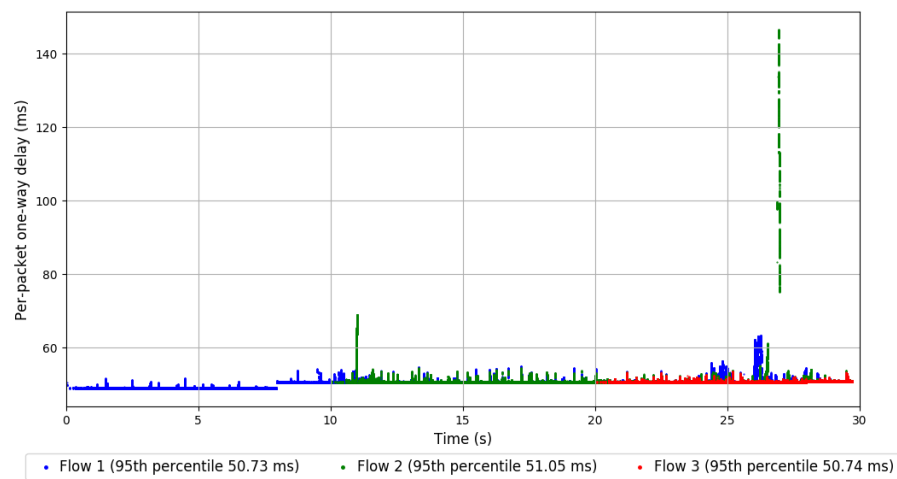
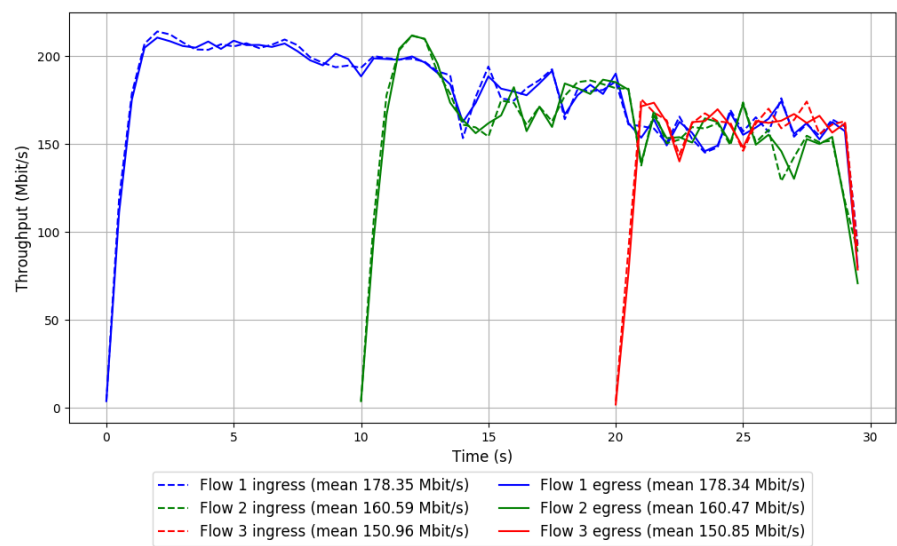
-- Flow 3:

Average throughput: 150.85 Mbit/s

95th percentile per-packet one-way delay: 50.738 ms

Loss rate: 1.14%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-10-12 12:08:25

End at: 2017-10-12 12:08:55

Below is generated by plot.py at 2017-10-12 16:07:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 331.32 Mbit/s

95th percentile per-packet one-way delay: 51.349 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 179.28 Mbit/s

95th percentile per-packet one-way delay: 51.215 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 168.27 Mbit/s

95th percentile per-packet one-way delay: 52.049 ms

Loss rate: 0.57%

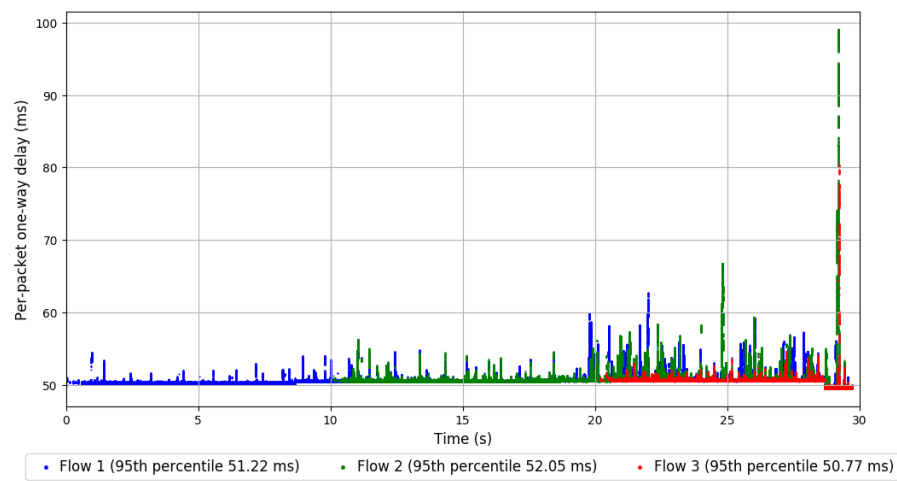
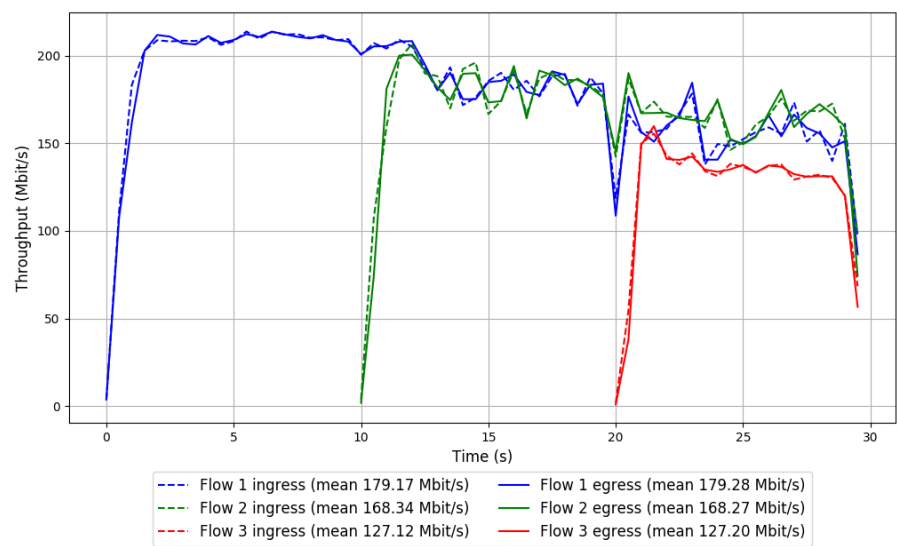
-- Flow 3:

Average throughput: 127.20 Mbit/s

95th percentile per-packet one-way delay: 50.773 ms

Loss rate: 0.99%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-10-12 12:21:14

End at: 2017-10-12 12:21:44

Below is generated by plot.py at 2017-10-12 16:07:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 358.87 Mbit/s

95th percentile per-packet one-way delay: 51.198 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 186.38 Mbit/s

95th percentile per-packet one-way delay: 51.008 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 181.89 Mbit/s

95th percentile per-packet one-way delay: 51.565 ms

Loss rate: 0.46%

-- Flow 3:

Average throughput: 161.13 Mbit/s

95th percentile per-packet one-way delay: 51.162 ms

Loss rate: 0.93%

Run 10: Report of Indigo — Data Link

