

Pantheon Report

Generated at 2018-01-10 02:25:56 (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.

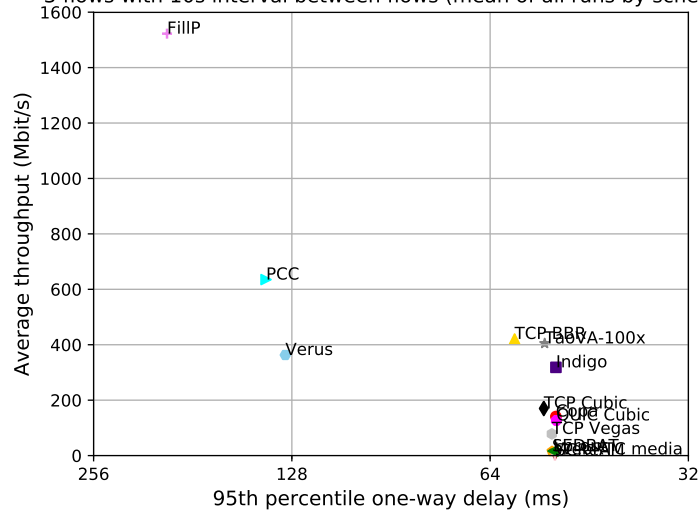
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

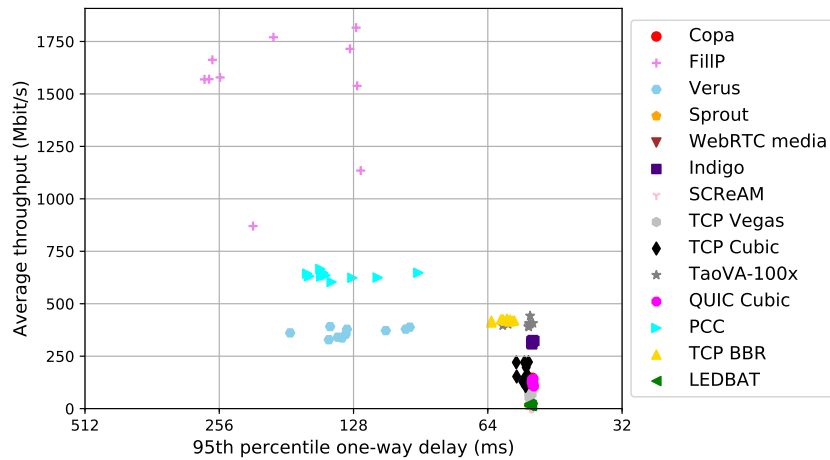
Git summary:

```
branch: master @ 56d1792c316a5efca3f2d21342905405fedffb48
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ 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



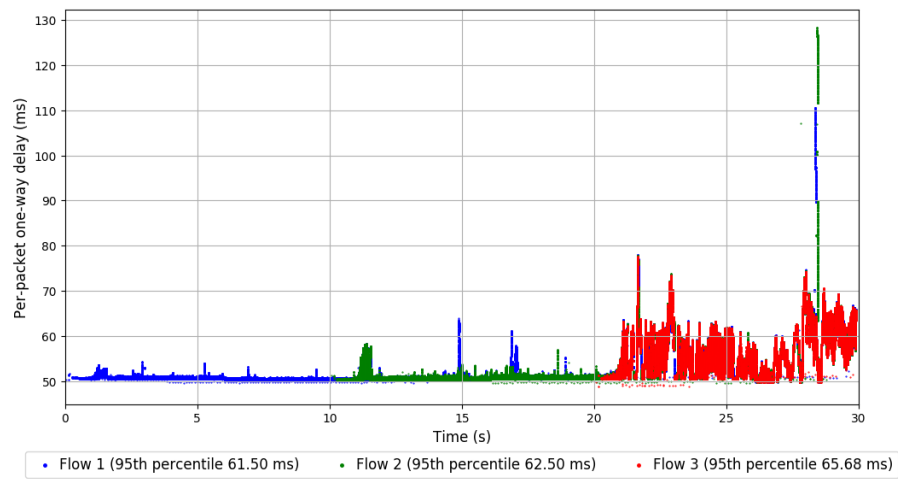
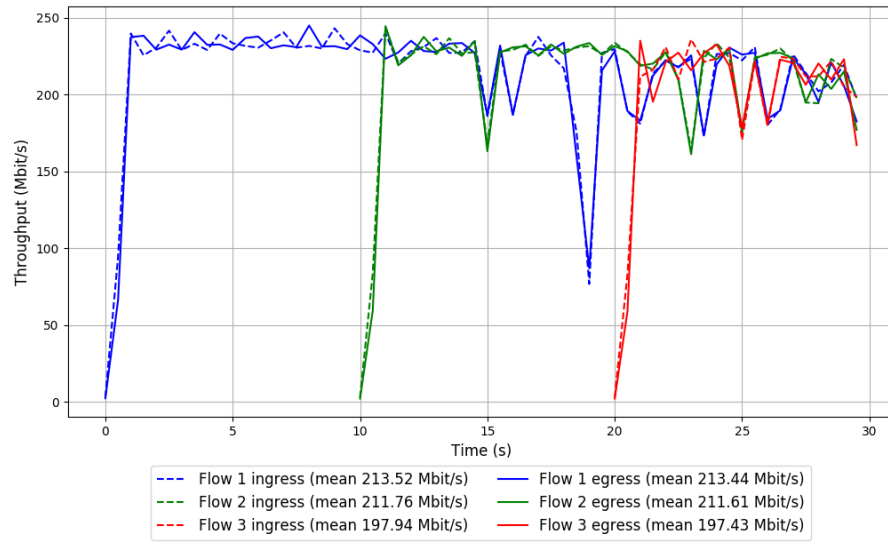
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	214.01	212.06	200.15	57.75	58.69	60.67	0.39	0.55	1.21
TCP Cubic	10	78.42	88.57	99.61	52.45	53.18	53.40	0.59	0.83	1.16
LEDBAT	10	8.66	8.59	6.08	51.40	51.23	51.33	1.20	1.30	2.38
PCC	10	583.19	52.81	51.88	141.11	135.32	135.50	1.00	0.95	1.71
QUIC Cubic	10	68.36	62.92	51.11	50.58	50.70	50.44	0.36	0.48	0.96
SCReAM	10	0.22	0.22	0.22	50.95	50.85	50.59	0.26	0.46	1.14
WebRTC media	10	2.23	1.41	0.57	50.93	50.87	50.81	0.43	0.61	1.48
Sprout	10	7.83	7.75	7.45	51.55	51.51	51.49	0.83	0.86	1.43
TaoVA-100x	10	220.50	211.46	179.21	52.50	51.98	54.28	0.28	0.46	1.53
TCP Vegas	10	32.61	40.30	57.43	51.72	51.57	51.99	0.51	0.68	1.39
Verus	10	218.04	160.88	119.02	118.32	138.72	135.87	0.87	0.95	1.52
Copa	10	76.47	71.47	66.53	50.78	50.78	50.67	0.33	0.50	1.41
FillP	10	838.37	655.39	758.15	174.52	195.63	147.41	3.47	6.95	5.09
Indigo	8	170.99	159.94	127.61	50.81	50.88	50.83	0.31	0.49	1.06

```
Run 1: Statistics of TCP BBR

Start at: 2018-01-09 20:05:55
End at: 2018-01-09 20:06:25

# Below is generated by plot.py at 2018-01-10 01:00:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 419.19 Mbit/s
95th percentile per-packet one-way delay: 62.838 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 213.44 Mbit/s
95th percentile per-packet one-way delay: 61.501 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 211.61 Mbit/s
95th percentile per-packet one-way delay: 62.496 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 197.43 Mbit/s
95th percentile per-packet one-way delay: 65.682 ms
Loss rate: 1.26%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-09 20:20:11

End at: 2018-01-09 20:20:41

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 425.77 Mbit/s

95th percentile per-packet one-way delay: 59.808 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 216.77 Mbit/s

95th percentile per-packet one-way delay: 58.901 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 214.72 Mbit/s

95th percentile per-packet one-way delay: 59.539 ms

Loss rate: 0.55%

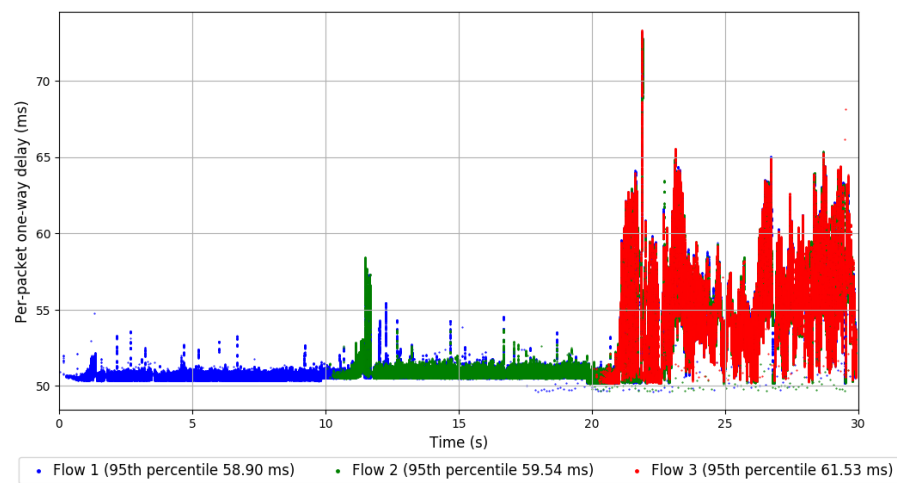
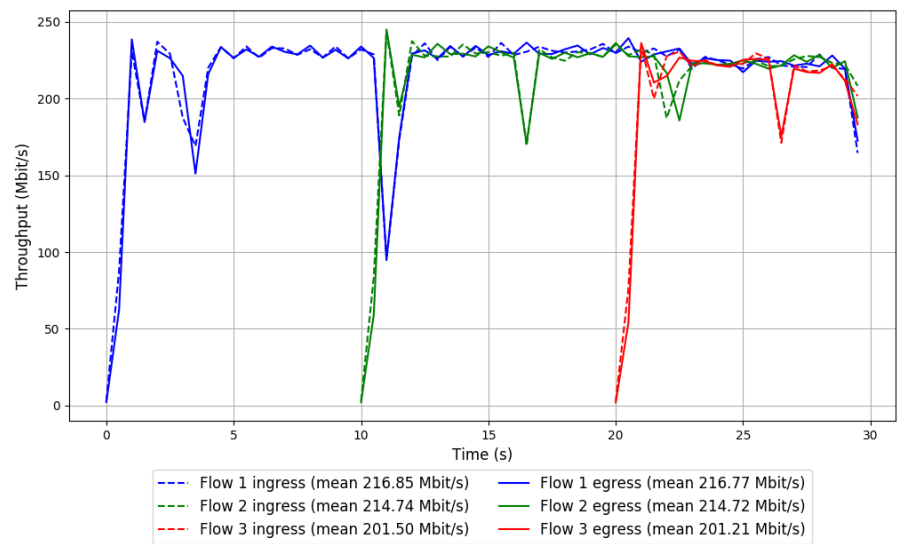
-- Flow 3:

Average throughput: 201.21 Mbit/s

95th percentile per-packet one-way delay: 61.529 ms

Loss rate: 1.14%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-09 20:33:43

End at: 2018-01-09 20:34:13

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 426.30 Mbit/s

95th percentile per-packet one-way delay: 59.201 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 218.62 Mbit/s

95th percentile per-packet one-way delay: 58.392 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 210.24 Mbit/s

95th percentile per-packet one-way delay: 59.103 ms

Loss rate: 0.11%

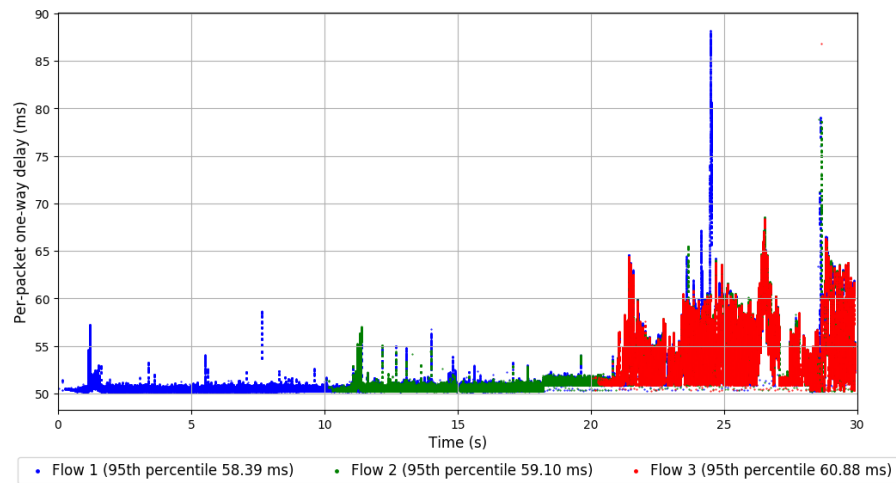
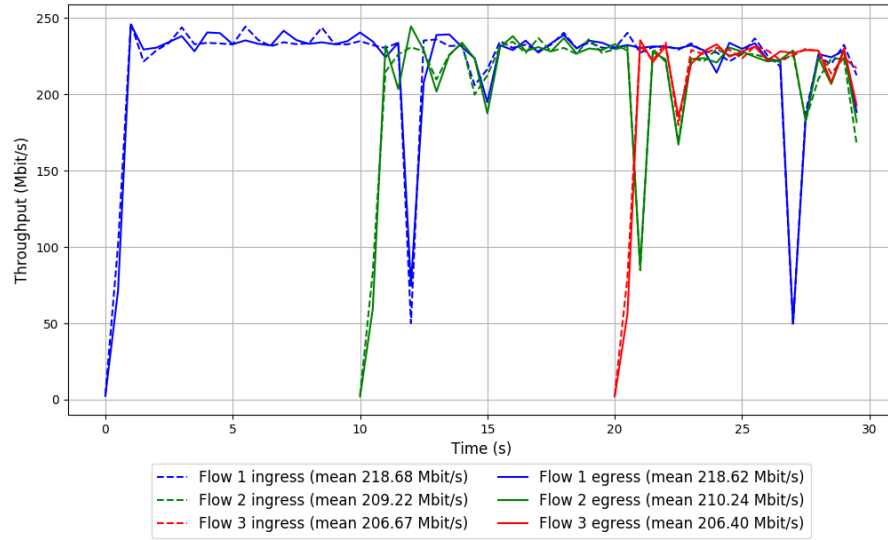
-- Flow 3:

Average throughput: 206.40 Mbit/s

95th percentile per-packet one-way delay: 60.878 ms

Loss rate: 1.16%

Run 3: Report of TCP BBR — Data Link

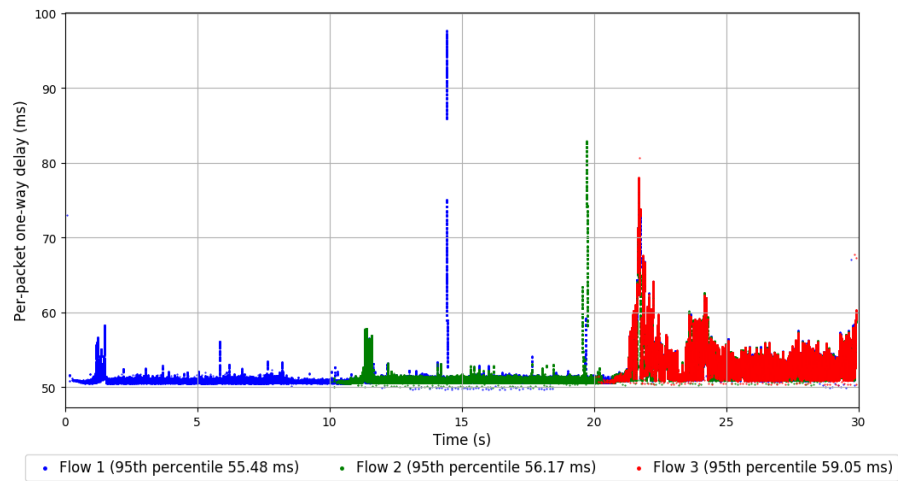
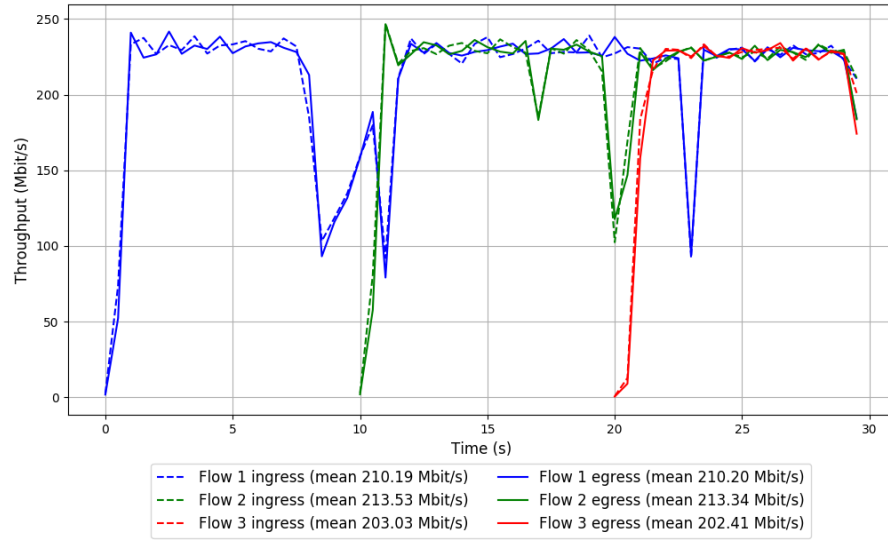


```
Run 4: Statistics of TCP BBR

Start at: 2018-01-09 20:48:00
End at: 2018-01-09 20:48:30

# Below is generated by plot.py at 2018-01-10 01:01:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 418.73 Mbit/s
95th percentile per-packet one-way delay: 56.423 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 210.20 Mbit/s
95th percentile per-packet one-way delay: 55.476 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 213.34 Mbit/s
95th percentile per-packet one-way delay: 56.167 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 202.41 Mbit/s
95th percentile per-packet one-way delay: 59.045 ms
Loss rate: 1.25%
```

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-09 21:02:01

End at: 2018-01-09 21:02:31

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 420.50 Mbit/s

95th percentile per-packet one-way delay: 55.845 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 213.97 Mbit/s

95th percentile per-packet one-way delay: 54.855 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 210.07 Mbit/s

95th percentile per-packet one-way delay: 55.801 ms

Loss rate: 0.53%

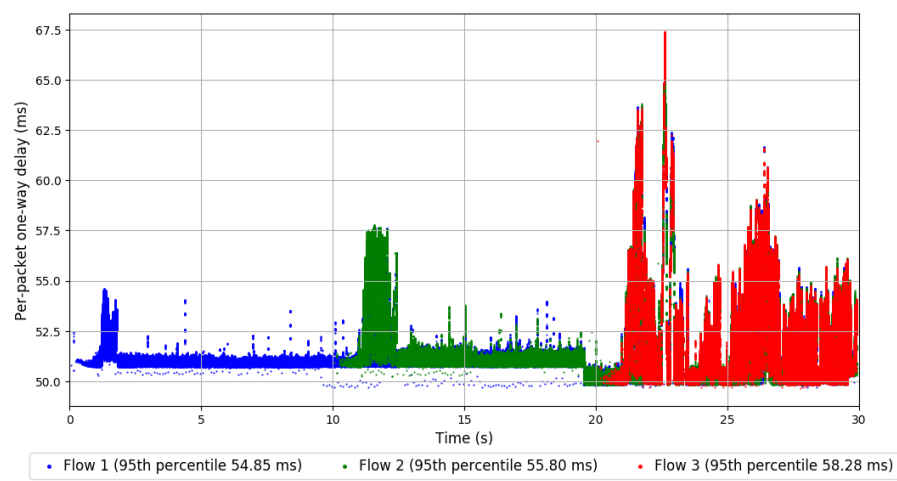
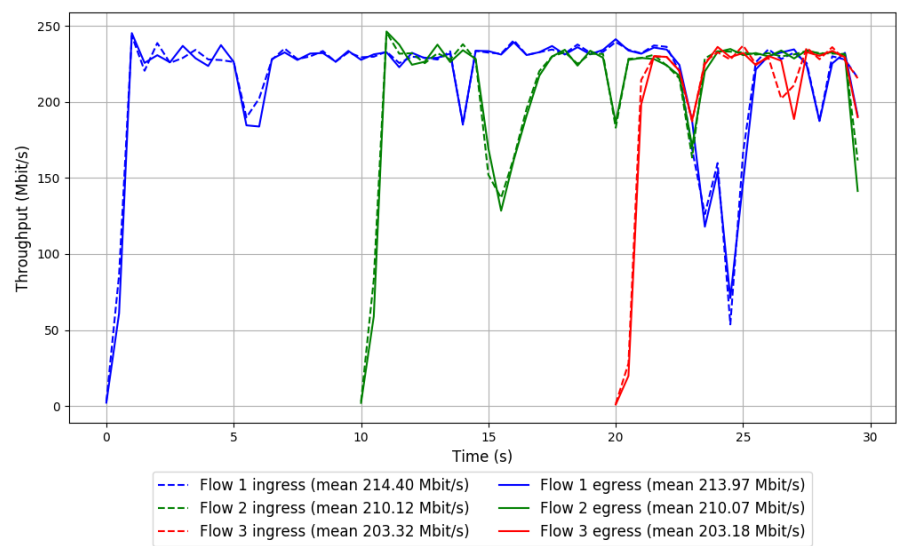
-- Flow 3:

Average throughput: 203.18 Mbit/s

95th percentile per-packet one-way delay: 58.282 ms

Loss rate: 1.22%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-09 21:16:20

End at: 2018-01-09 21:16:50

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 428.34 Mbit/s

95th percentile per-packet one-way delay: 57.931 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 217.48 Mbit/s

95th percentile per-packet one-way delay: 57.094 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 218.89 Mbit/s

95th percentile per-packet one-way delay: 57.778 ms

Loss rate: 0.54%

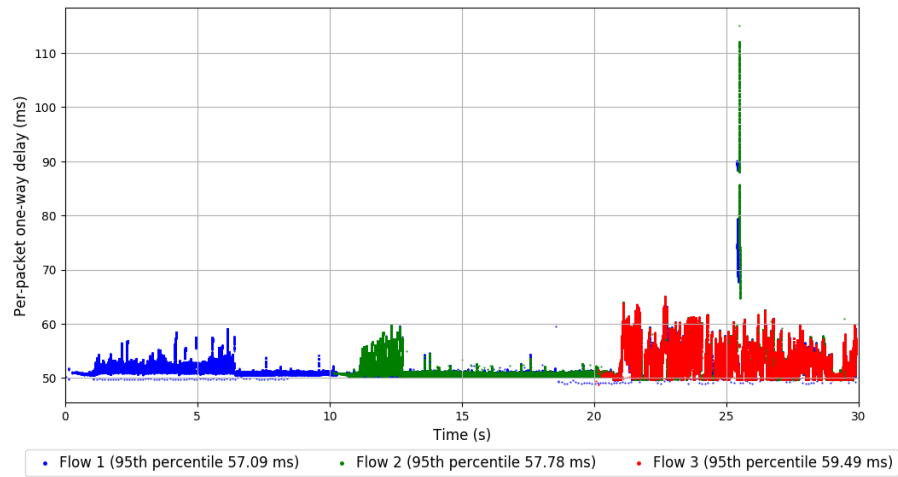
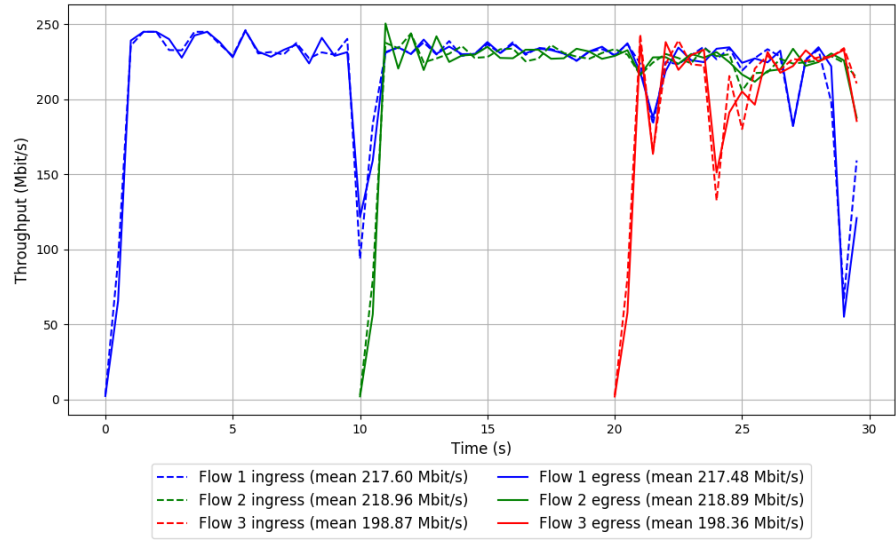
-- Flow 3:

Average throughput: 198.36 Mbit/s

95th percentile per-packet one-way delay: 59.486 ms

Loss rate: 1.27%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-09 21:30:43

End at: 2018-01-09 21:31:13

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 419.59 Mbit/s

95th percentile per-packet one-way delay: 58.417 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 213.95 Mbit/s

95th percentile per-packet one-way delay: 57.236 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 208.57 Mbit/s

95th percentile per-packet one-way delay: 58.529 ms

Loss rate: 0.88%

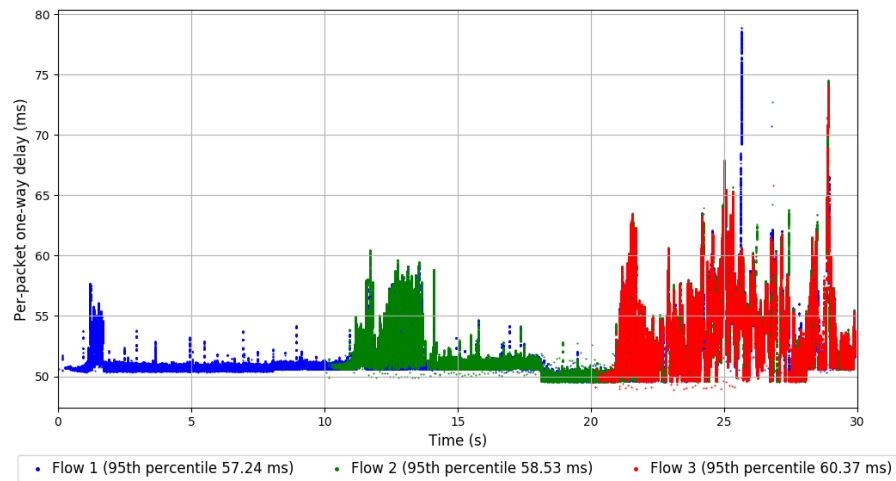
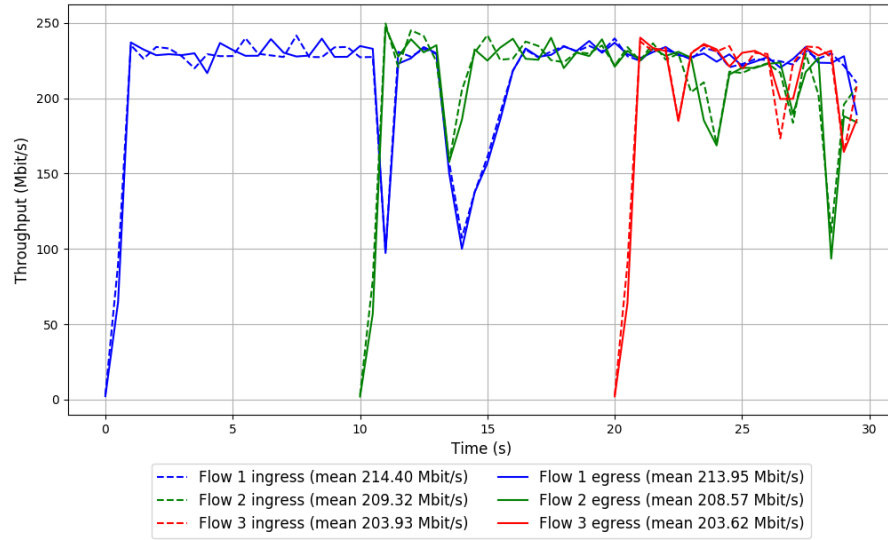
-- Flow 3:

Average throughput: 203.62 Mbit/s

95th percentile per-packet one-way delay: 60.369 ms

Loss rate: 1.16%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-09 21:44:57

End at: 2018-01-09 21:45:27

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 424.08 Mbit/s

95th percentile per-packet one-way delay: 57.083 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 219.58 Mbit/s

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

Loss rate: 0.36%

-- Flow 2:

Average throughput: 209.78 Mbit/s

95th percentile per-packet one-way delay: 57.271 ms

Loss rate: 0.59%

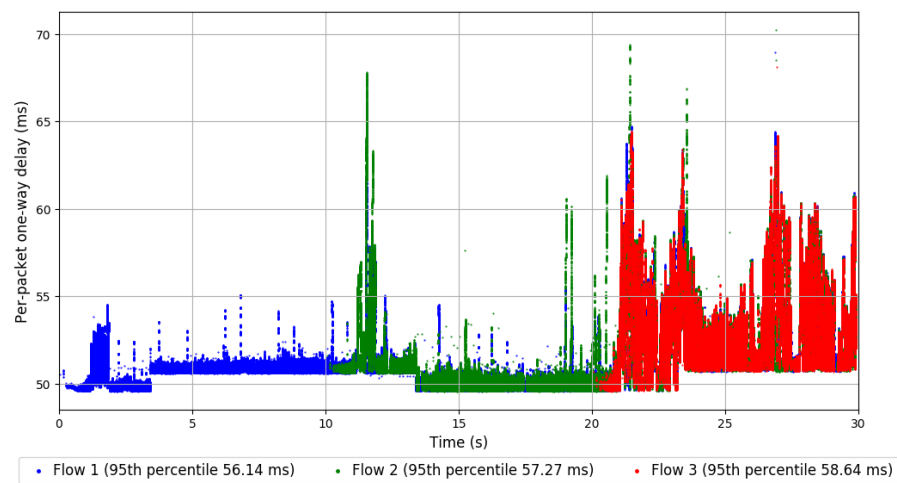
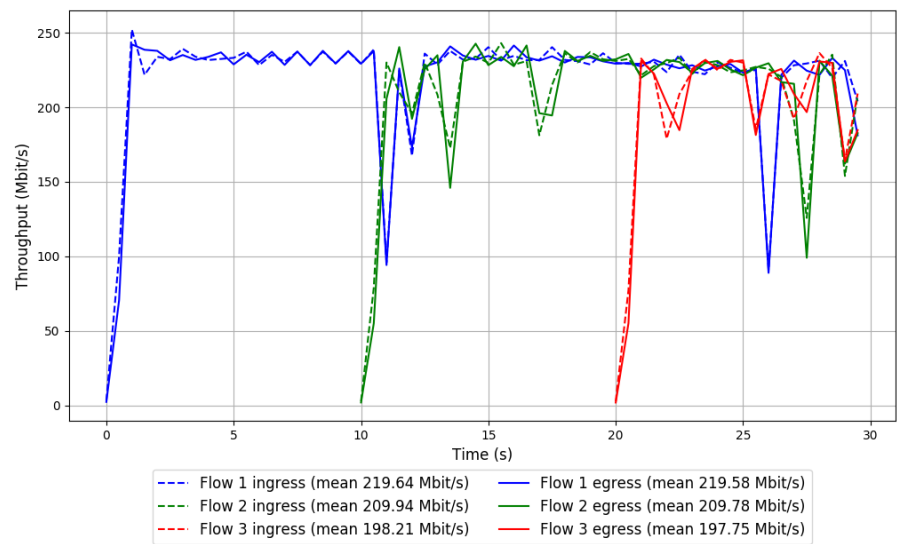
-- Flow 3:

Average throughput: 197.75 Mbit/s

95th percentile per-packet one-way delay: 58.641 ms

Loss rate: 1.25%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-09 21:58:19

End at: 2018-01-09 21:58:49

Below is generated by plot.py at 2018-01-10 01:07:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 410.64 Mbit/s

95th percentile per-packet one-way delay: 62.824 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 209.92 Mbit/s

95th percentile per-packet one-way delay: 61.572 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 208.12 Mbit/s

95th percentile per-packet one-way delay: 62.952 ms

Loss rate: 0.58%

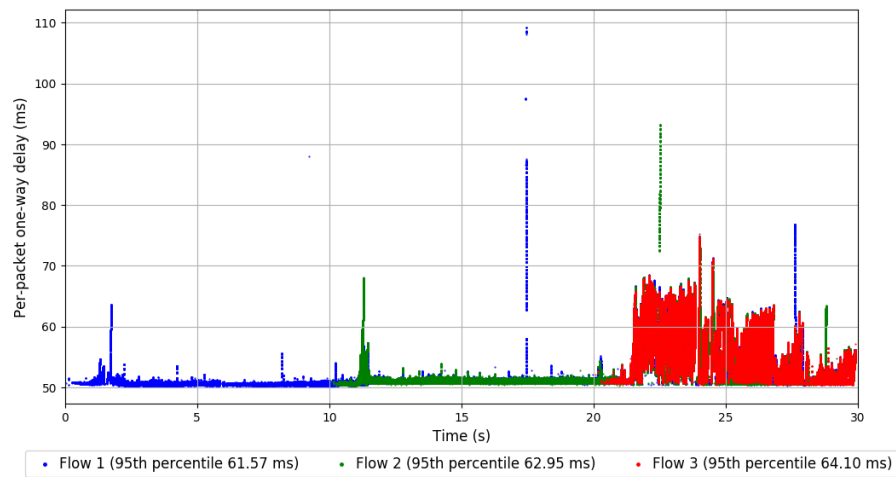
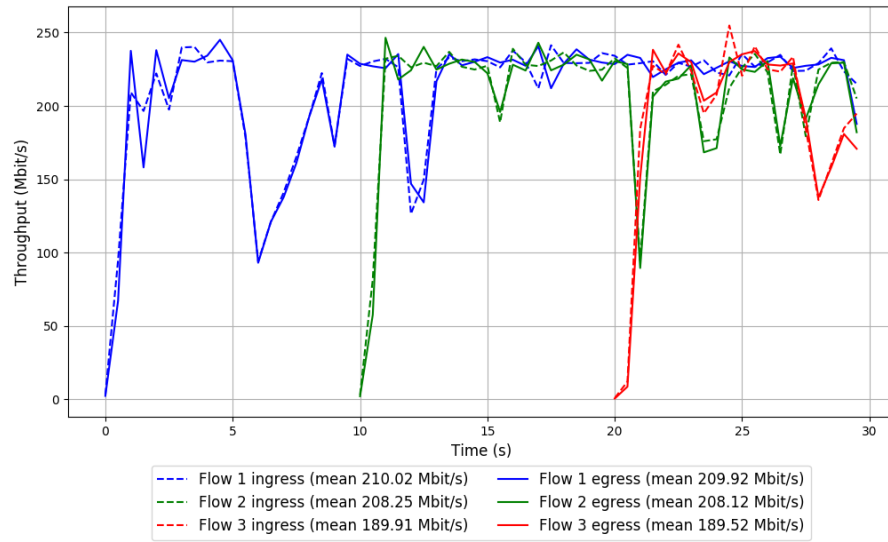
-- Flow 3:

Average throughput: 189.52 Mbit/s

95th percentile per-packet one-way delay: 64.099 ms

Loss rate: 1.22%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-09 22:12:28

End at: 2018-01-09 22:12:58

Below is generated by plot.py at 2018-01-10 01:07:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 415.62 Mbit/s

95th percentile per-packet one-way delay: 57.161 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 206.14 Mbit/s

95th percentile per-packet one-way delay: 56.316 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 215.21 Mbit/s

95th percentile per-packet one-way delay: 57.283 ms

Loss rate: 0.54%

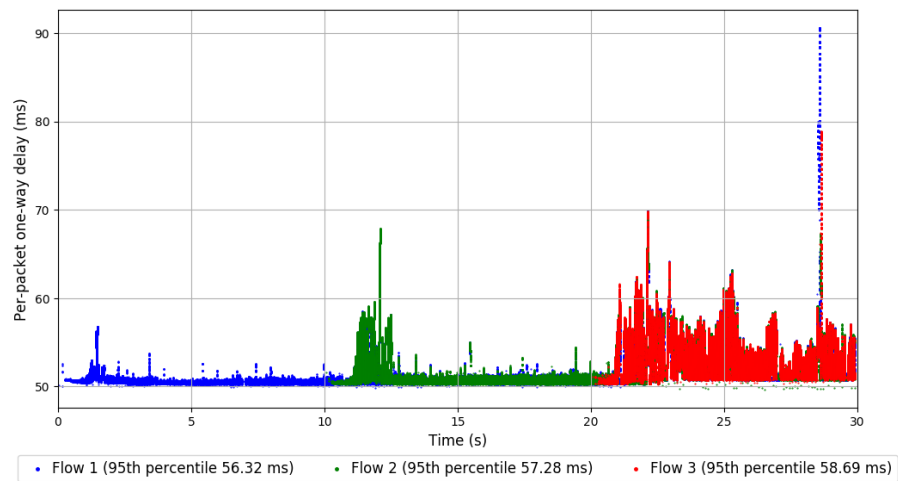
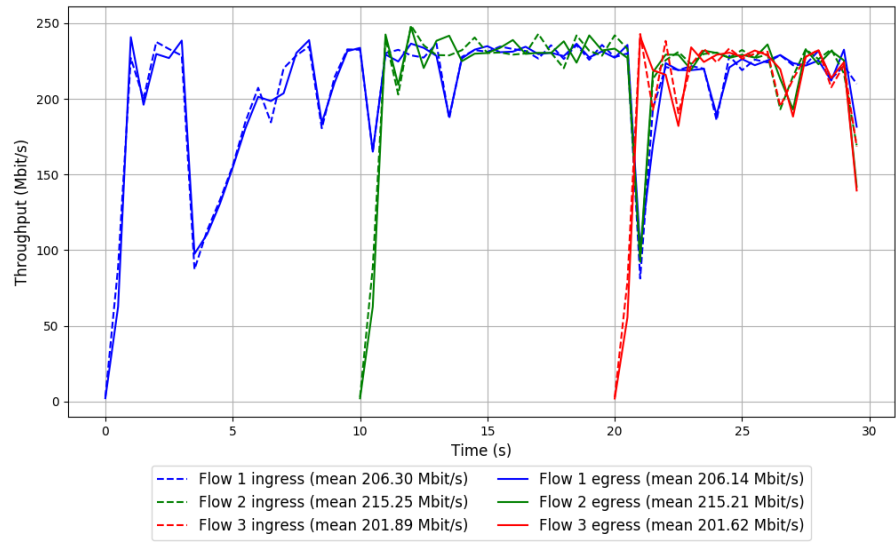
-- Flow 3:

Average throughput: 201.62 Mbit/s

95th percentile per-packet one-way delay: 58.687 ms

Loss rate: 1.15%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-09 20:07:45

End at: 2018-01-09 20:08:15

Below is generated by plot.py at 2018-01-10 01:07:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 153.19 Mbit/s

95th percentile per-packet one-way delay: 55.142 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 105.40 Mbit/s

95th percentile per-packet one-way delay: 54.191 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 5.55 Mbit/s

95th percentile per-packet one-way delay: 53.890 ms

Loss rate: 2.15%

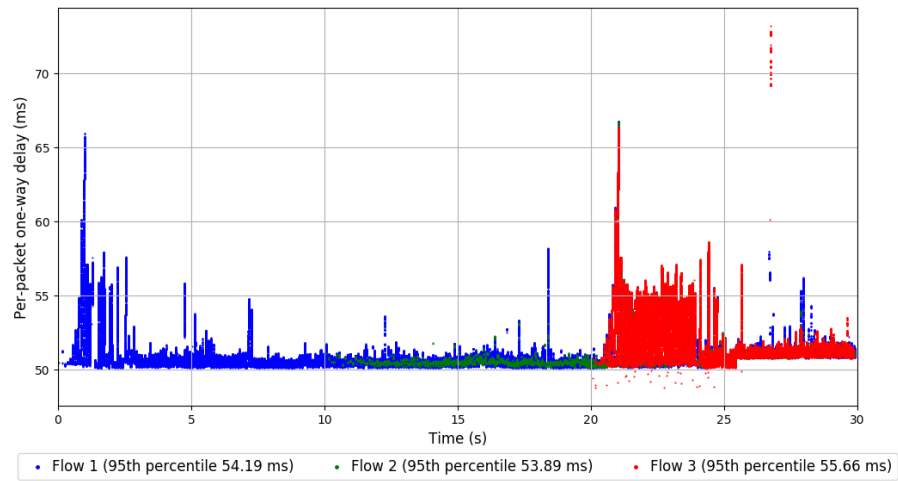
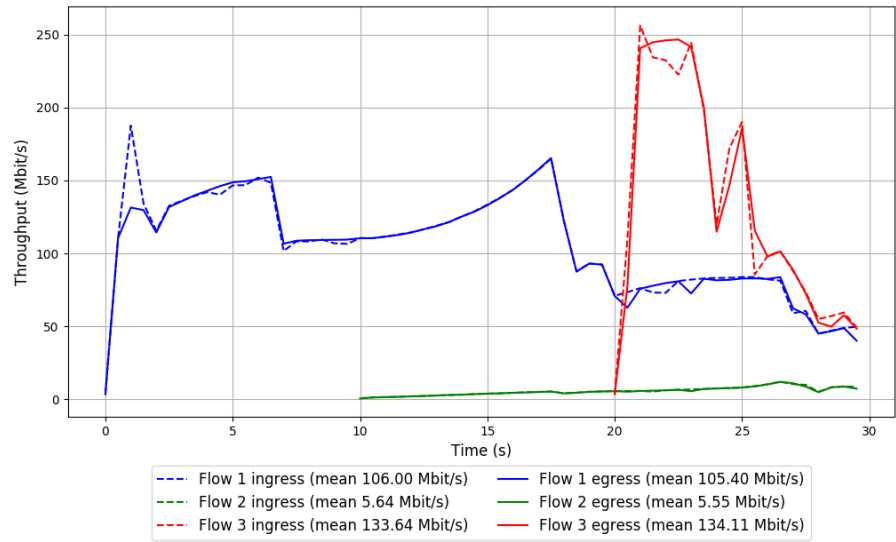
-- Flow 3:

Average throughput: 134.11 Mbit/s

95th percentile per-packet one-way delay: 55.661 ms

Loss rate: 0.70%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-09 20:22:00

End at: 2018-01-09 20:22:30

Below is generated by plot.py at 2018-01-10 01:07:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 153.18 Mbit/s

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

Loss rate: 0.63%

-- Flow 1:

Average throughput: 66.52 Mbit/s

95th percentile per-packet one-way delay: 52.400 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 77.49 Mbit/s

95th percentile per-packet one-way delay: 53.198 ms

Loss rate: 0.71%

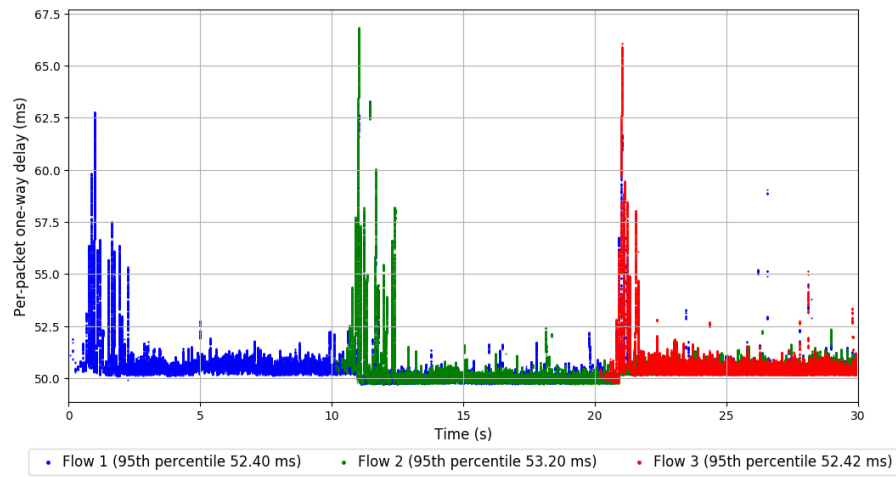
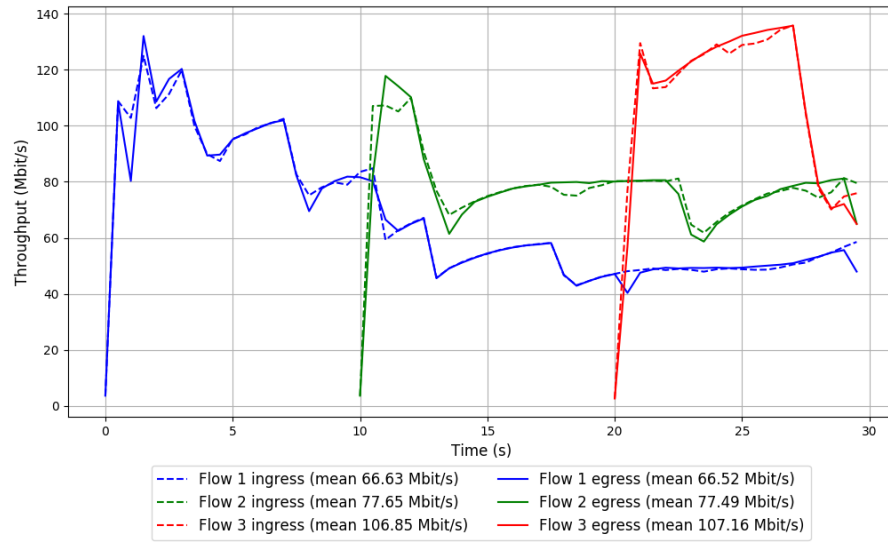
-- Flow 3:

Average throughput: 107.16 Mbit/s

95th percentile per-packet one-way delay: 52.425 ms

Loss rate: 0.74%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-09 20:35:33

End at: 2018-01-09 20:36:03

Below is generated by plot.py at 2018-01-10 01:07:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.32 Mbit/s

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

Loss rate: 0.64%

-- Flow 1:

Average throughput: 70.43 Mbit/s

95th percentile per-packet one-way delay: 52.796 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 39.00 Mbit/s

95th percentile per-packet one-way delay: 51.924 ms

Loss rate: 1.12%

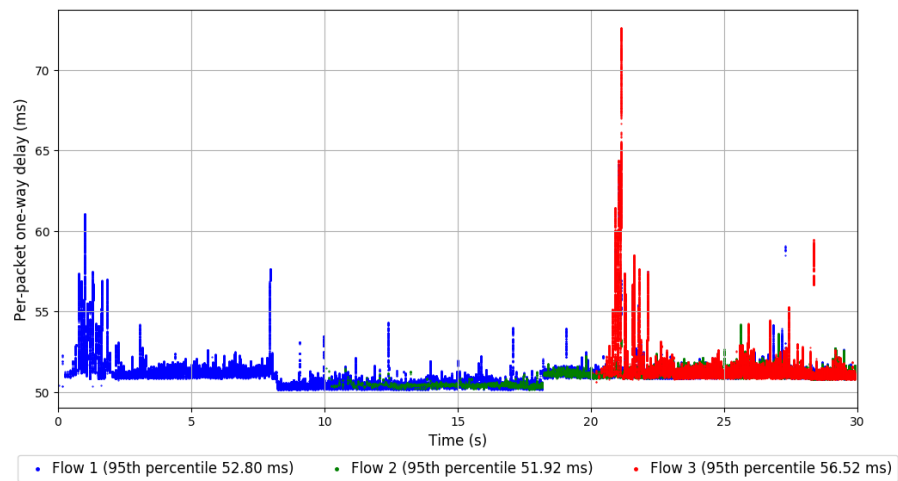
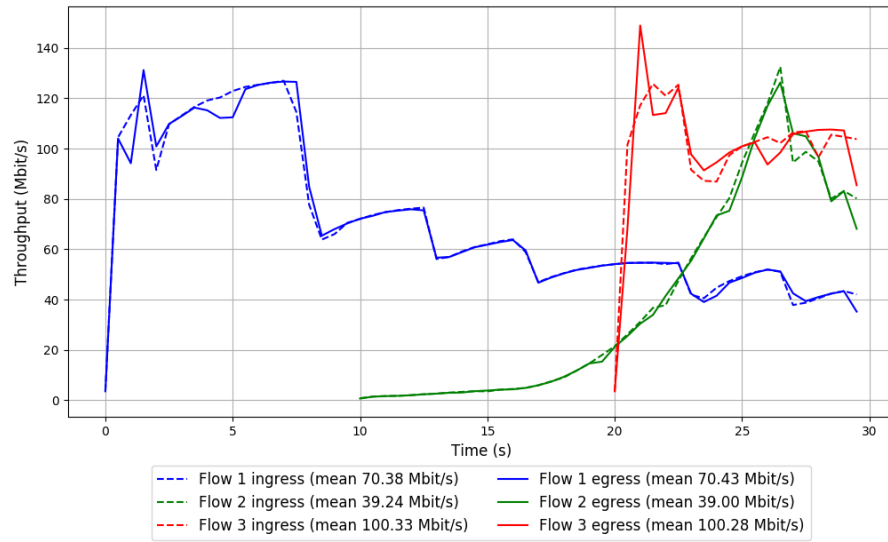
-- Flow 3:

Average throughput: 100.28 Mbit/s

95th percentile per-packet one-way delay: 56.523 ms

Loss rate: 1.07%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-09 20:49:49

End at: 2018-01-09 20:50:19

Below is generated by plot.py at 2018-01-10 01:07:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.02 Mbit/s

95th percentile per-packet one-way delay: 52.661 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 23.99 Mbit/s

95th percentile per-packet one-way delay: 51.519 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 85.25 Mbit/s

95th percentile per-packet one-way delay: 53.674 ms

Loss rate: 0.78%

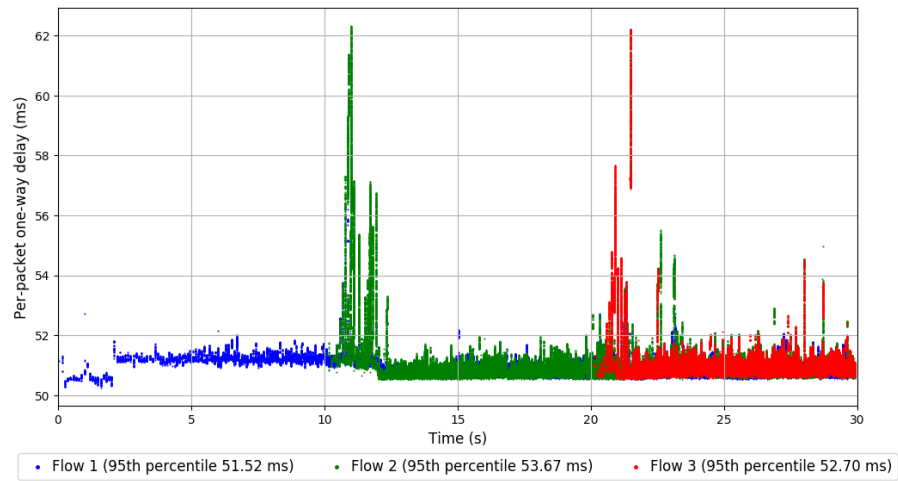
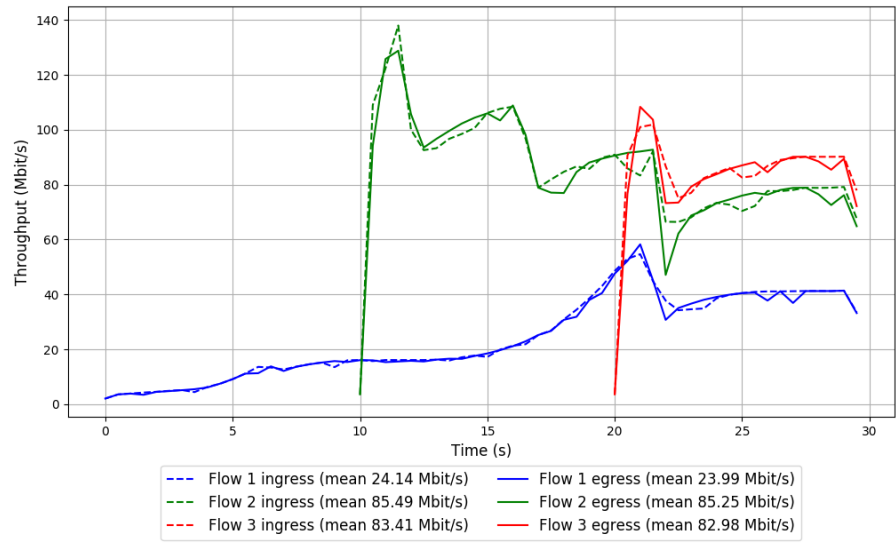
-- Flow 3:

Average throughput: 82.98 Mbit/s

95th percentile per-packet one-way delay: 52.697 ms

Loss rate: 1.48%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-09 21:03:51

End at: 2018-01-09 21:04:21

Below is generated by plot.py at 2018-01-10 01:07:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 159.73 Mbit/s

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

Loss rate: 0.80%

-- Flow 1:

Average throughput: 56.90 Mbit/s

95th percentile per-packet one-way delay: 51.653 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 103.30 Mbit/s

95th percentile per-packet one-way delay: 52.067 ms

Loss rate: 0.55%

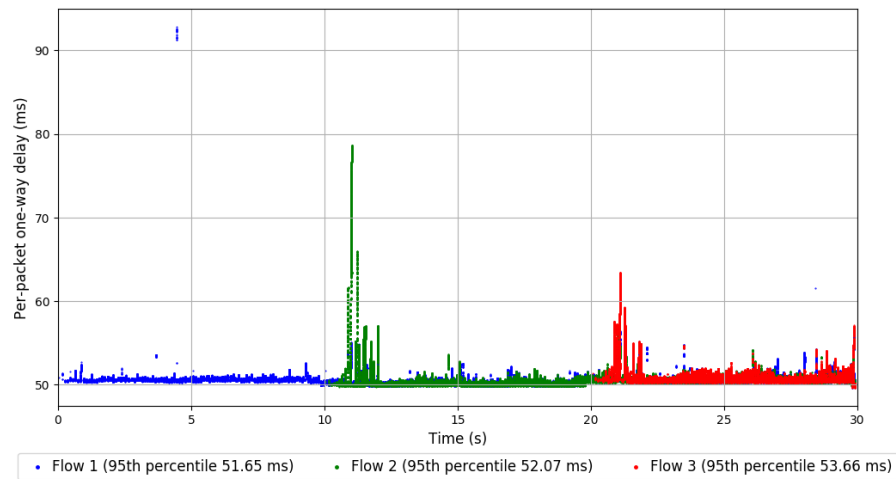
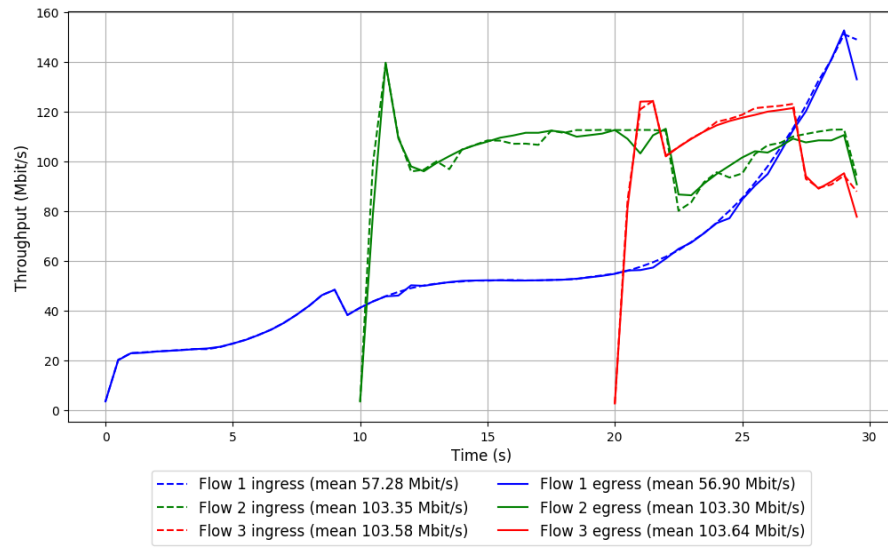
-- Flow 3:

Average throughput: 103.64 Mbit/s

95th percentile per-packet one-way delay: 53.660 ms

Loss rate: 0.94%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-09 21:18:09

End at: 2018-01-09 21:18:39

Below is generated by plot.py at 2018-01-10 01:07:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 220.67 Mbit/s

95th percentile per-packet one-way delay: 52.980 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 100.29 Mbit/s

95th percentile per-packet one-way delay: 52.365 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 119.73 Mbit/s

95th percentile per-packet one-way delay: 53.272 ms

Loss rate: 0.69%

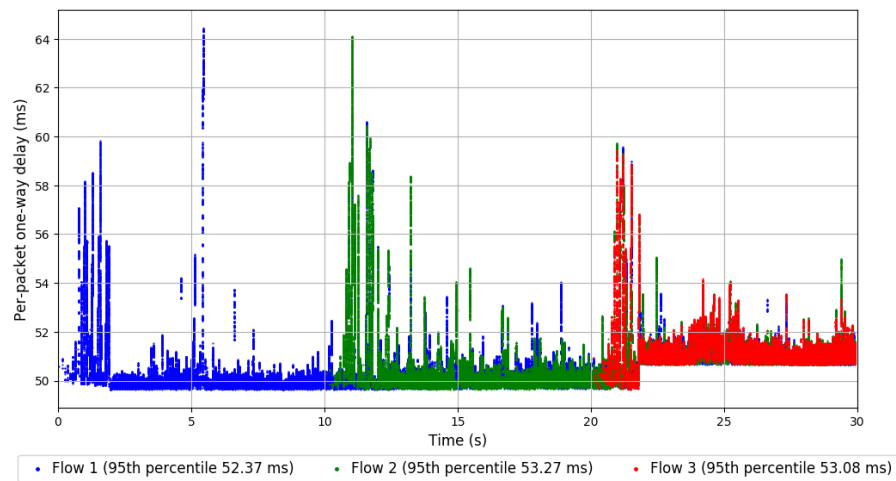
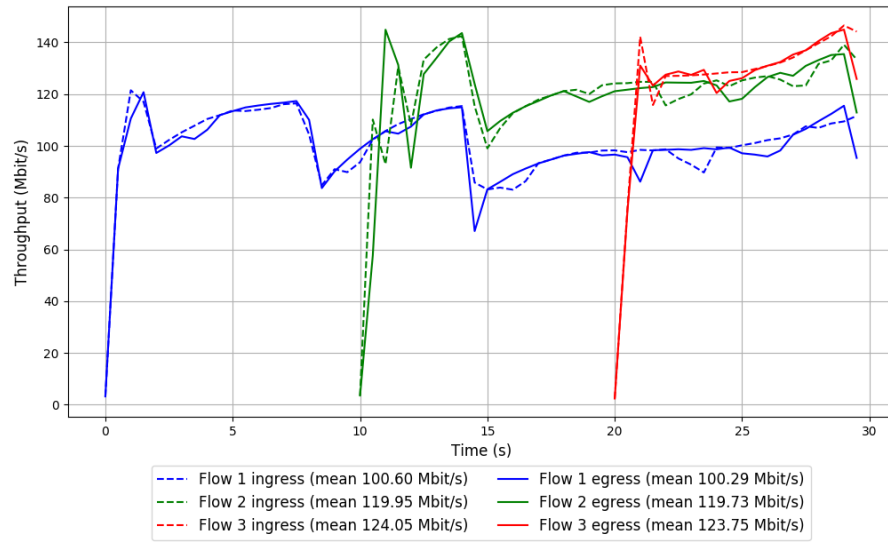
-- Flow 3:

Average throughput: 123.75 Mbit/s

95th percentile per-packet one-way delay: 53.083 ms

Loss rate: 1.24%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-09 21:32:32

End at: 2018-01-09 21:33:02

Below is generated by plot.py at 2018-01-10 01:07:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 137.42 Mbit/s

95th percentile per-packet one-way delay: 51.892 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 80.15 Mbit/s

95th percentile per-packet one-way delay: 52.340 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 84.41 Mbit/s

95th percentile per-packet one-way delay: 51.448 ms

Loss rate: 0.89%

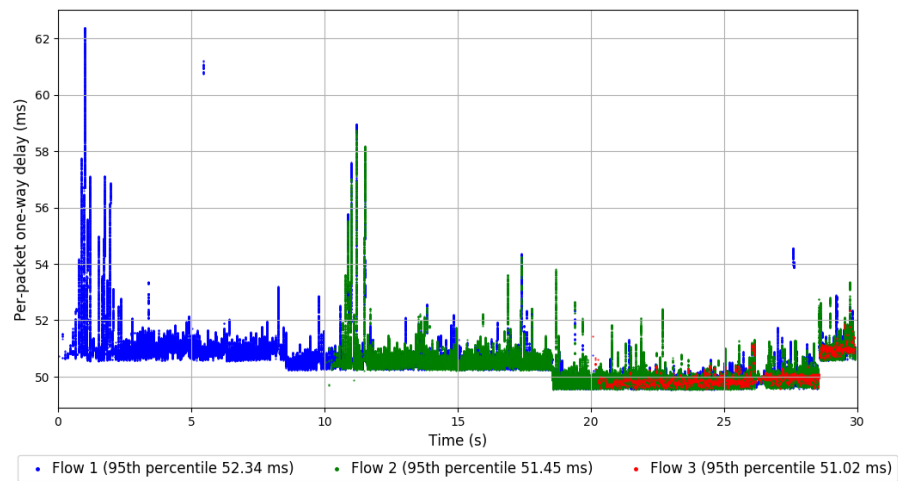
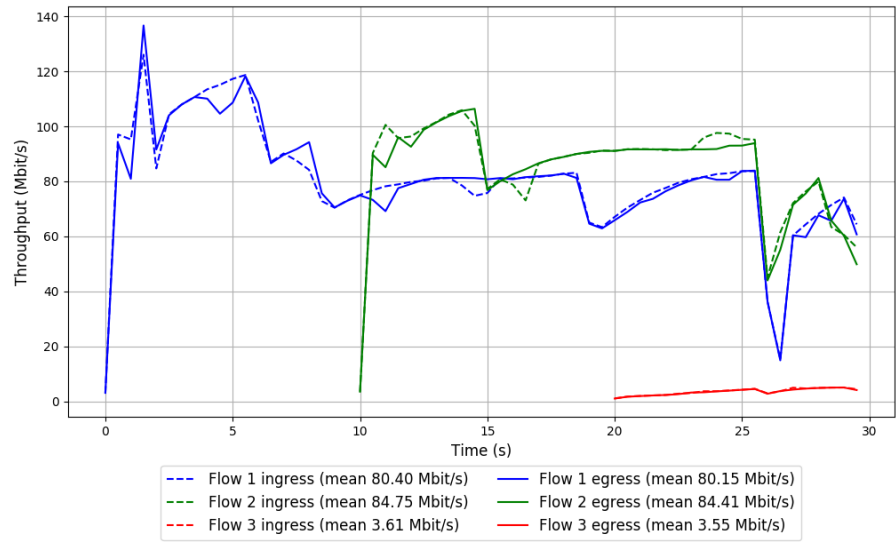
-- Flow 3:

Average throughput: 3.55 Mbit/s

95th percentile per-packet one-way delay: 51.025 ms

Loss rate: 2.62%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-09 21:46:47

End at: 2018-01-09 21:47:17

Below is generated by plot.py at 2018-01-10 01:07:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 222.04 Mbit/s

95th percentile per-packet one-way delay: 51.881 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 98.06 Mbit/s

95th percentile per-packet one-way delay: 51.744 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 125.54 Mbit/s

95th percentile per-packet one-way delay: 52.125 ms

Loss rate: 0.45%

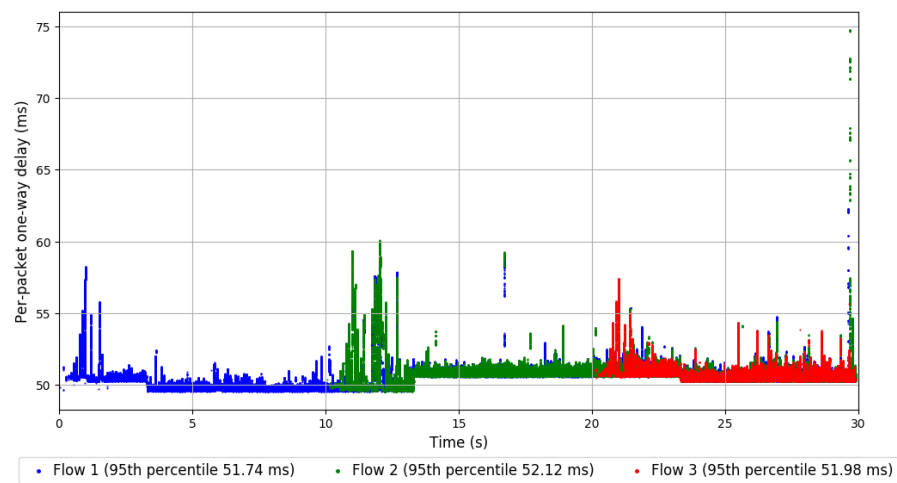
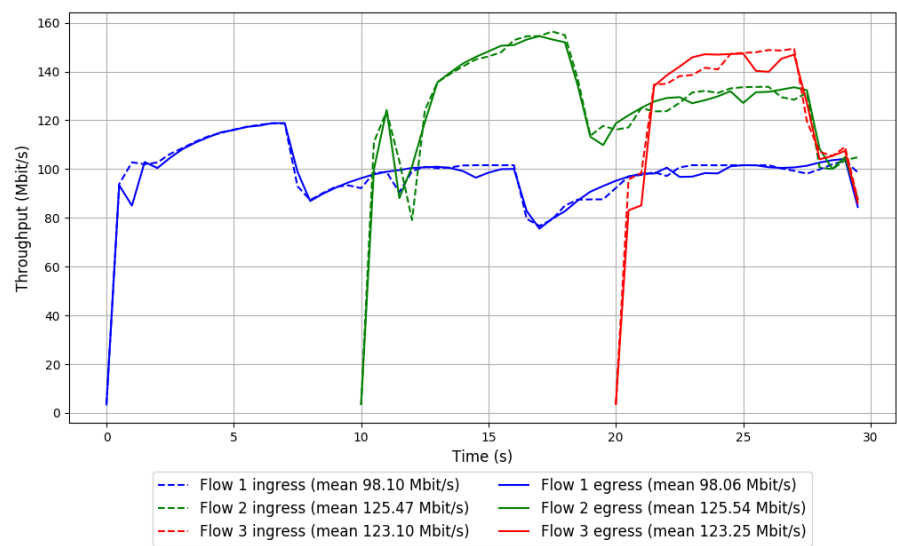
-- Flow 3:

Average throughput: 123.25 Mbit/s

95th percentile per-packet one-way delay: 51.981 ms

Loss rate: 0.88%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-09 22:00:08

End at: 2018-01-09 22:00:38

Below is generated by plot.py at 2018-01-10 01:07:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 196.54 Mbit/s

95th percentile per-packet one-way delay: 52.504 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 73.76 Mbit/s

95th percentile per-packet one-way delay: 51.825 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 130.02 Mbit/s

95th percentile per-packet one-way delay: 52.555 ms

Loss rate: 0.48%

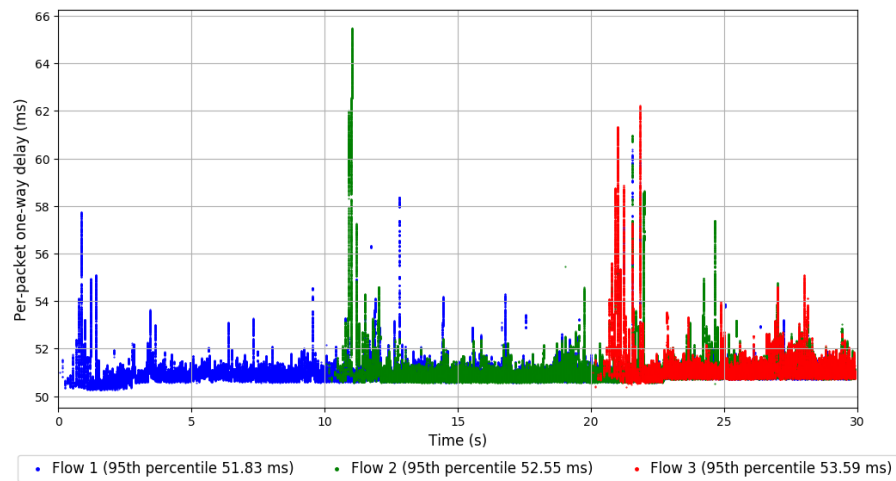
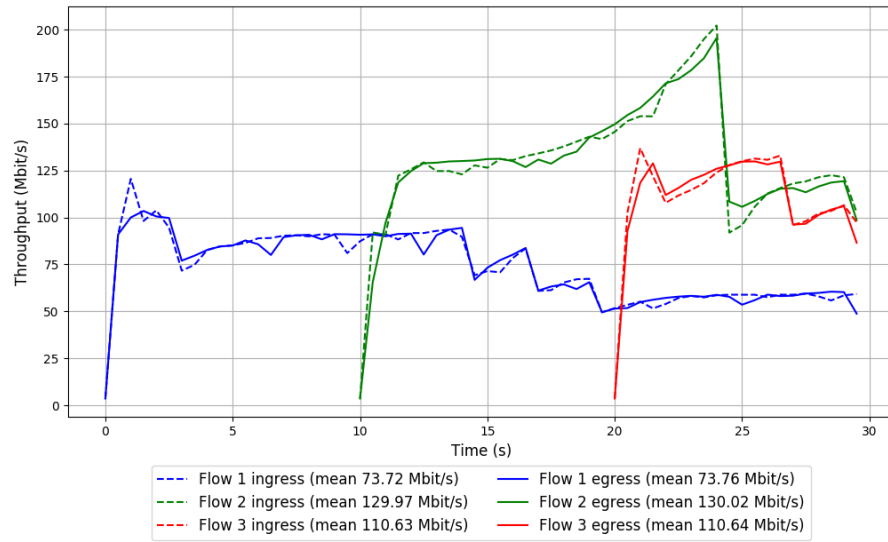
-- Flow 3:

Average throughput: 110.64 Mbit/s

95th percentile per-packet one-way delay: 53.593 ms

Loss rate: 0.98%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-09 22:14:18

End at: 2018-01-09 22:14:48

Below is generated by plot.py at 2018-01-10 01:07:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 220.49 Mbit/s

95th percentile per-packet one-way delay: 55.235 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 108.69 Mbit/s

95th percentile per-packet one-way delay: 53.640 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 115.42 Mbit/s

95th percentile per-packet one-way delay: 57.674 ms

Loss rate: 0.46%

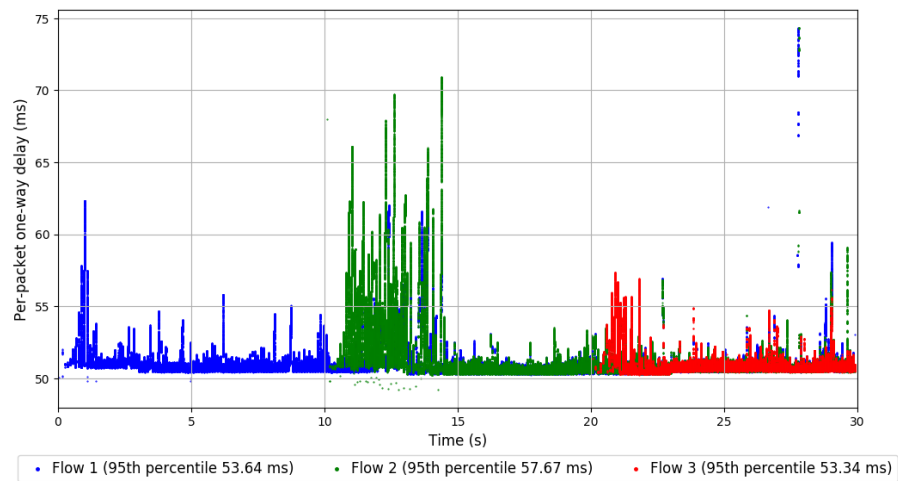
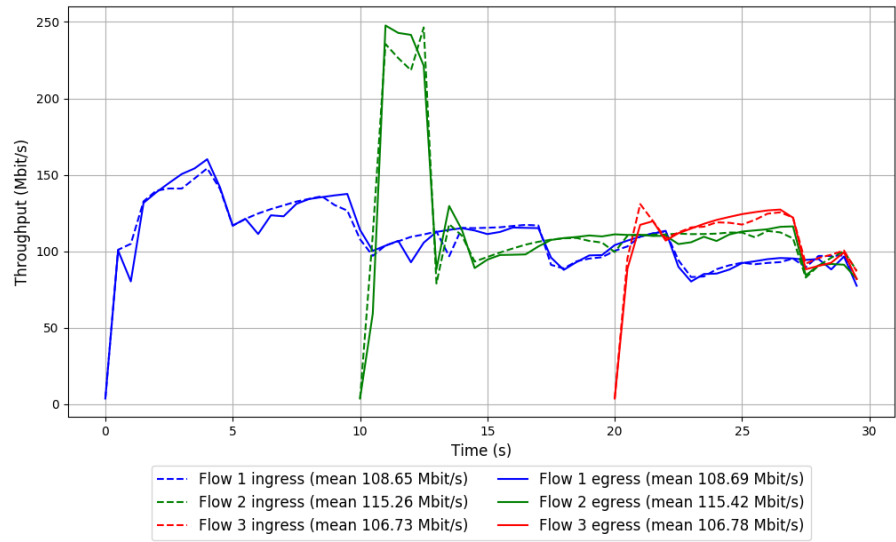
-- Flow 3:

Average throughput: 106.78 Mbit/s

95th percentile per-packet one-way delay: 53.337 ms

Loss rate: 0.97%

Run 10: Report of TCP Cubic — Data Link

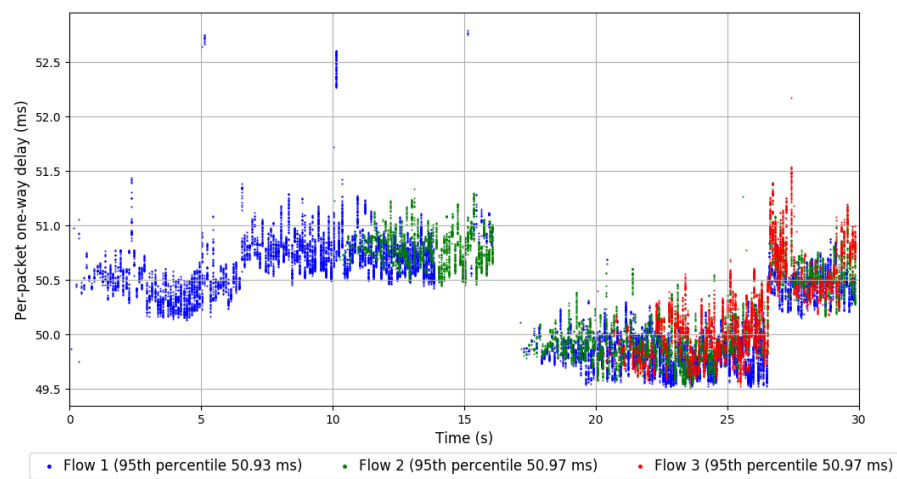
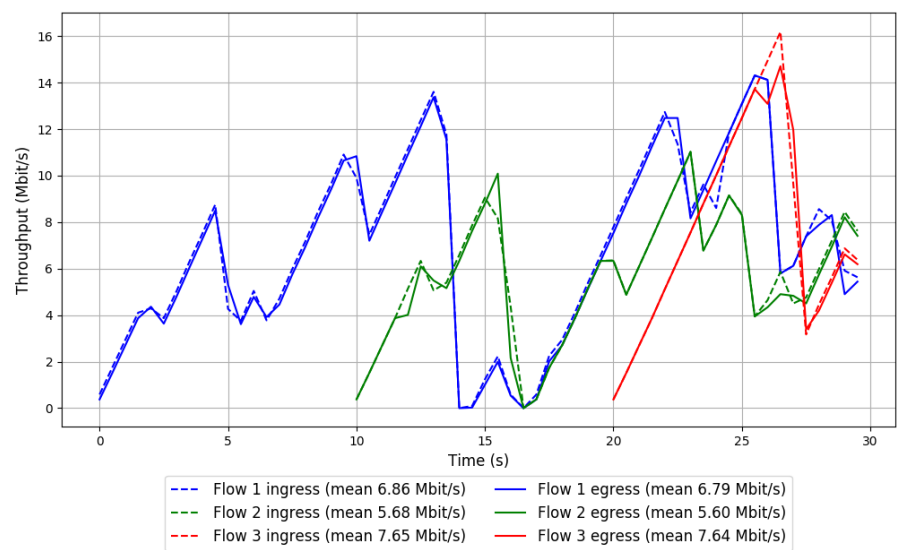


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-09 20:04:34
End at: 2018-01-09 20:05:04

# Below is generated by plot.py at 2018-01-10 01:07:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.00 Mbit/s
95th percentile per-packet one-way delay: 50.954 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 6.79 Mbit/s
95th percentile per-packet one-way delay: 50.932 ms
Loss rate: 1.40%
-- Flow 2:
Average throughput: 5.60 Mbit/s
95th percentile per-packet one-way delay: 50.972 ms
Loss rate: 1.95%
-- Flow 3:
Average throughput: 7.64 Mbit/s
95th percentile per-packet one-way delay: 50.972 ms
Loss rate: 1.15%
```


Run 1: Report of LEDBAT — Data Link

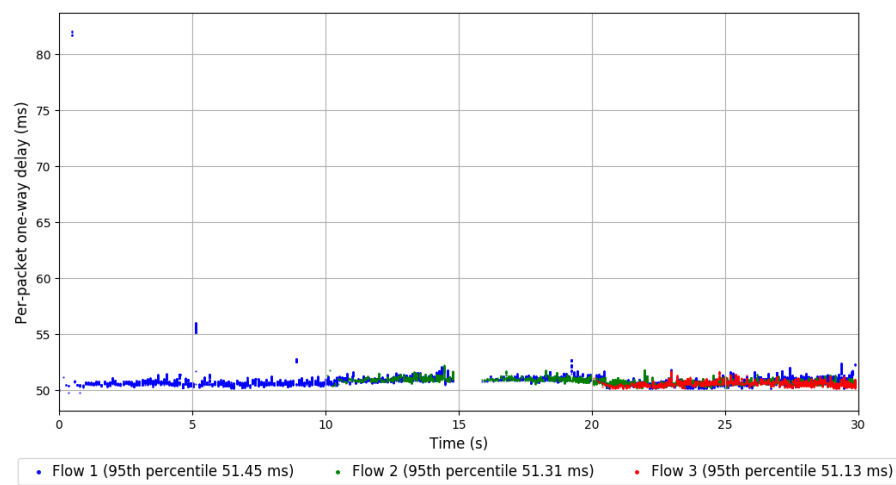
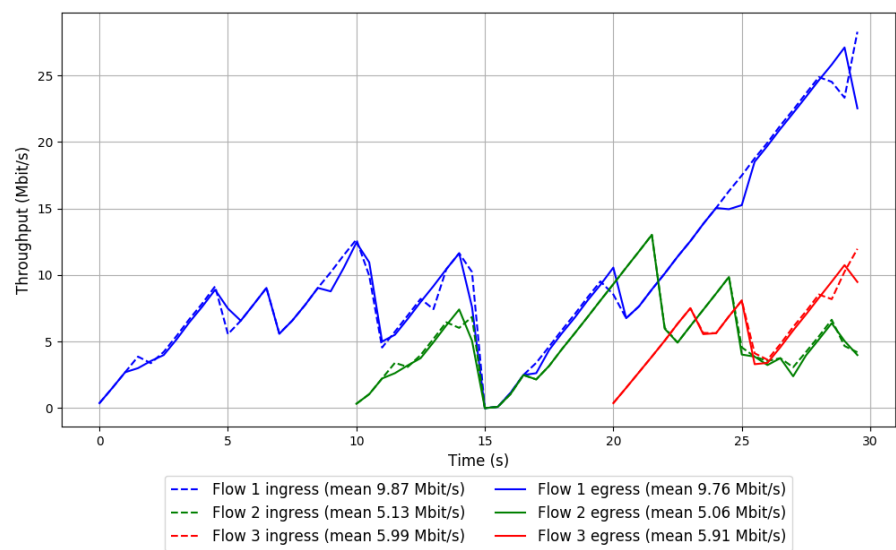


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-09 20:18:50
End at: 2018-01-09 20:19:20

# Below is generated by plot.py at 2018-01-10 01:07:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.06 Mbit/s
95th percentile per-packet one-way delay: 51.394 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 9.76 Mbit/s
95th percentile per-packet one-way delay: 51.450 ms
Loss rate: 1.45%
-- Flow 2:
Average throughput: 5.06 Mbit/s
95th percentile per-packet one-way delay: 51.315 ms
Loss rate: 1.94%
-- Flow 3:
Average throughput: 5.91 Mbit/s
95th percentile per-packet one-way delay: 51.131 ms
Loss rate: 2.39%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-09 20:32:21

End at: 2018-01-09 20:32:51

Below is generated by plot.py at 2018-01-10 01:07:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 22.40 Mbit/s

95th percentile per-packet one-way delay: 51.653 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 16.77 Mbit/s

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

Loss rate: 0.17%

-- Flow 2:

Average throughput: 7.36 Mbit/s

95th percentile per-packet one-way delay: 51.553 ms

Loss rate: 0.83%

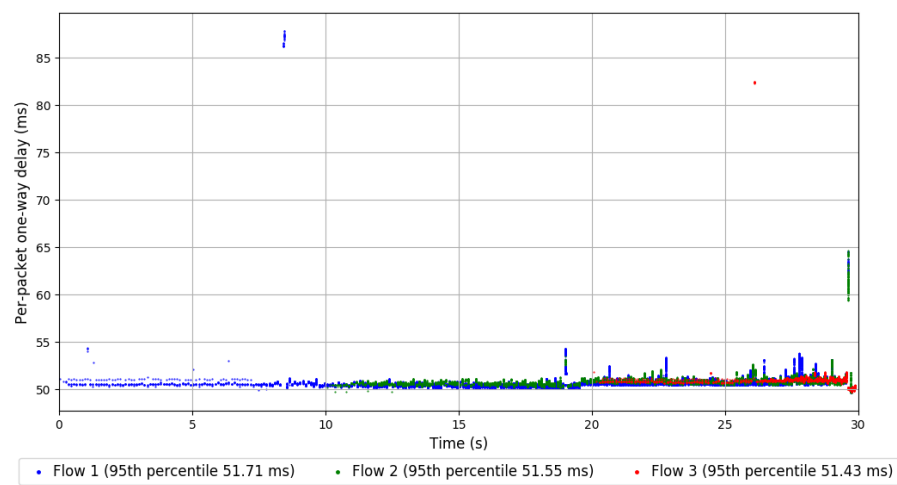
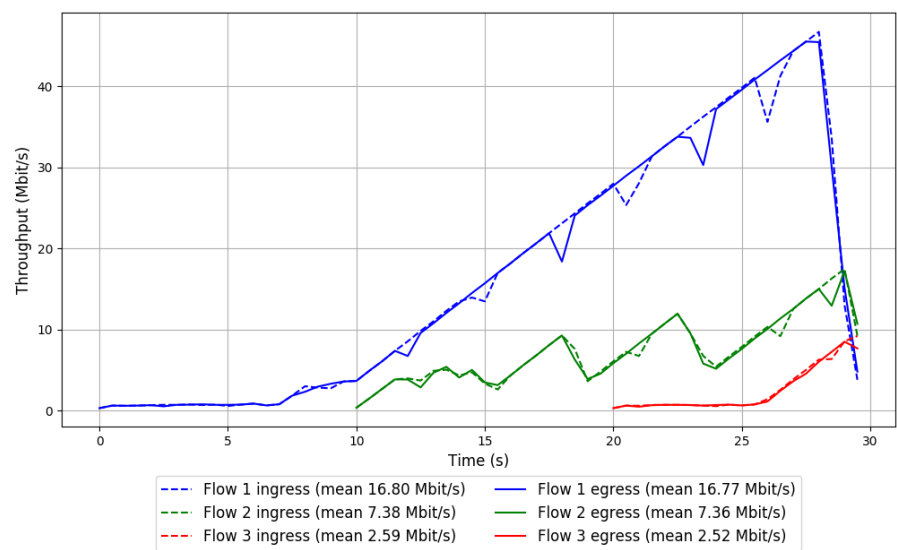
-- Flow 3:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 51.433 ms

Loss rate: 3.98%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-09 20:46:39

End at: 2018-01-09 20:47:09

Below is generated by plot.py at 2018-01-10 01:07:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.15 Mbit/s

95th percentile per-packet one-way delay: 51.591 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 6.31 Mbit/s

95th percentile per-packet one-way delay: 51.580 ms

Loss rate: 1.25%

-- Flow 2:

Average throughput: 8.38 Mbit/s

95th percentile per-packet one-way delay: 51.371 ms

Loss rate: 0.76%

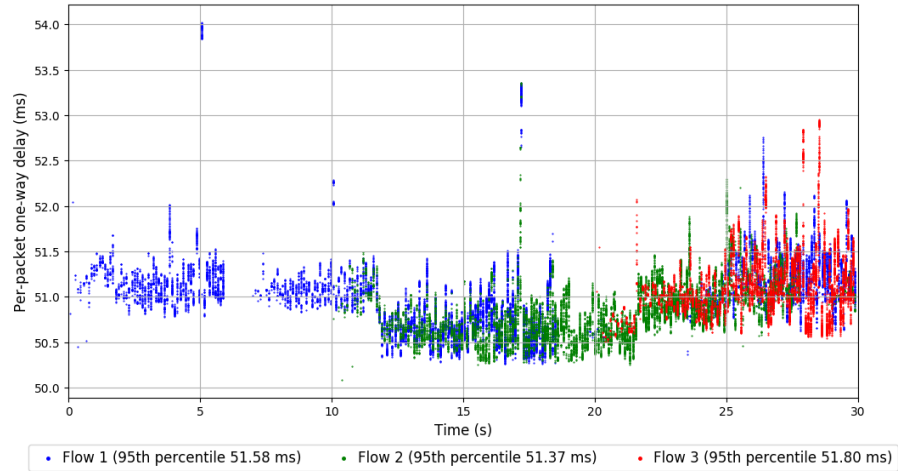
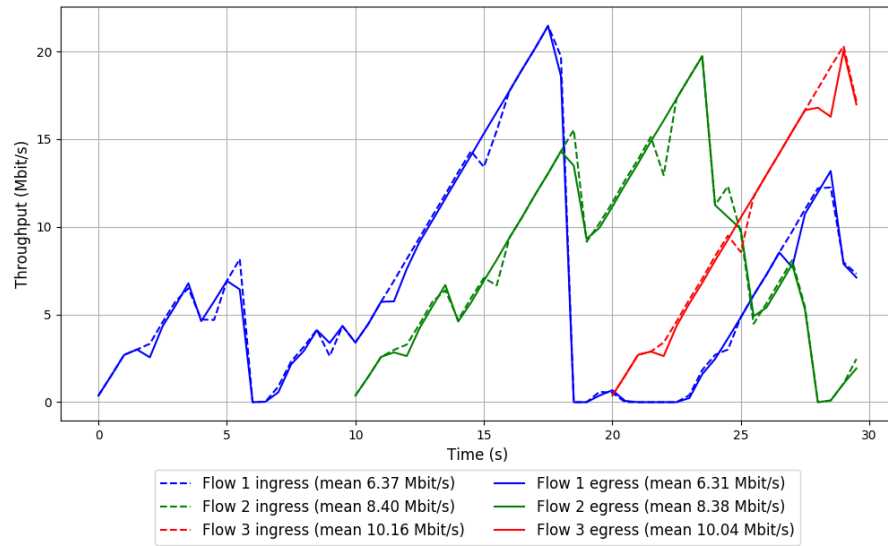
-- Flow 3:

Average throughput: 10.04 Mbit/s

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

Loss rate: 2.18%

Run 4: Report of LEDBAT — Data Link

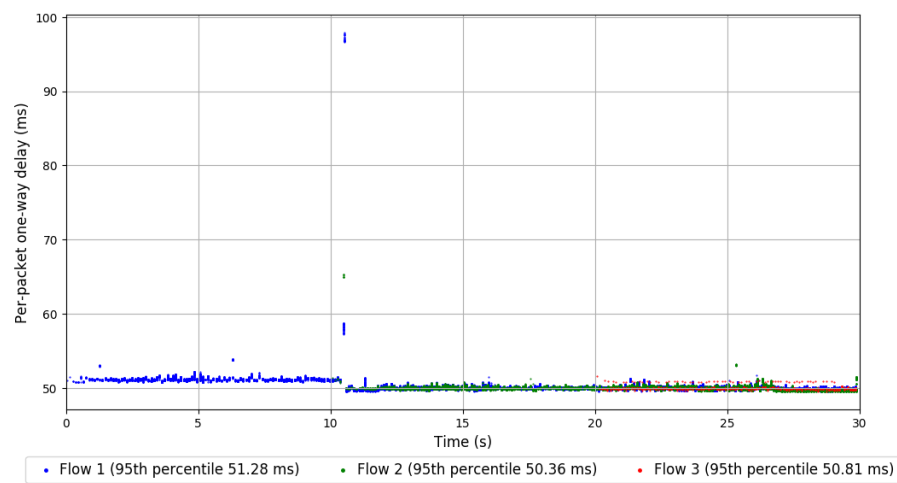
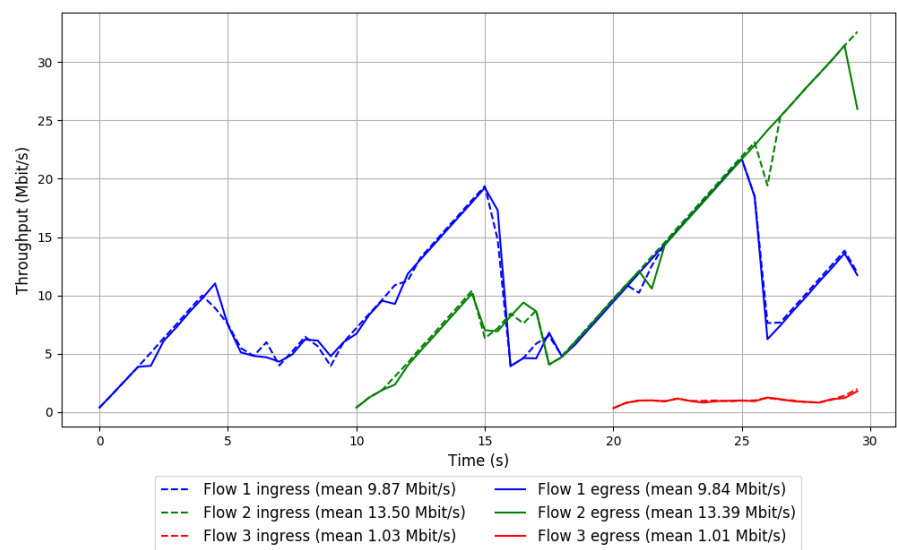


```
Run 5: Statistics of LEDBAT

Start at: 2018-01-09 21:00:40
End at: 2018-01-09 21:01:10

# Below is generated by plot.py at 2018-01-10 01:07:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.05 Mbit/s
95th percentile per-packet one-way delay: 51.156 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 9.84 Mbit/s
95th percentile per-packet one-way delay: 51.277 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 13.39 Mbit/s
95th percentile per-packet one-way delay: 50.362 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 50.811 ms
Loss rate: 2.78%
```


Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-09 21:14:59

End at: 2018-01-09 21:15:29

Below is generated by plot.py at 2018-01-10 01:07:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.13 Mbit/s

95th percentile per-packet one-way delay: 51.170 ms

Loss rate: 1.89%

-- Flow 1:

Average throughput: 8.60 Mbit/s

95th percentile per-packet one-way delay: 51.239 ms

Loss rate: 1.73%

-- Flow 2:

Average throughput: 6.04 Mbit/s

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

Loss rate: 2.06%

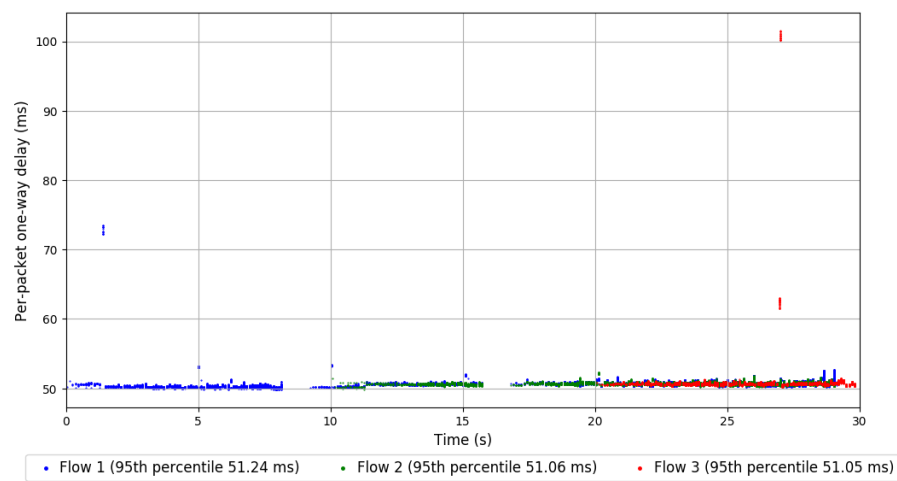
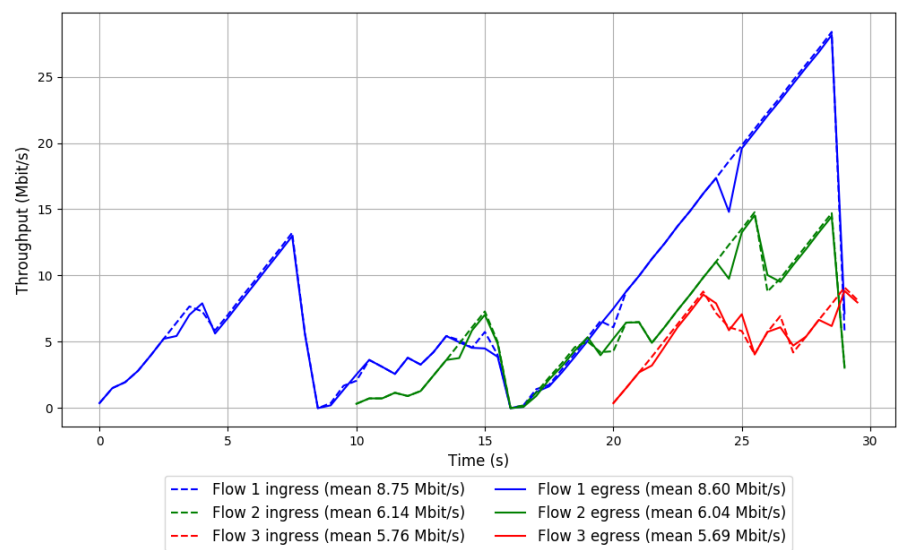
-- Flow 3:

Average throughput: 5.69 Mbit/s

95th percentile per-packet one-way delay: 51.049 ms

Loss rate: 2.21%

Run 6: Report of LEDBAT — Data Link

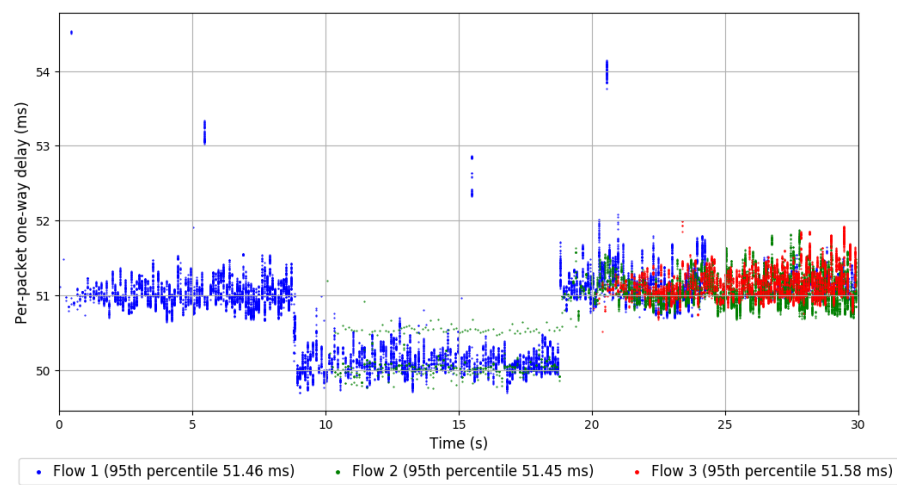
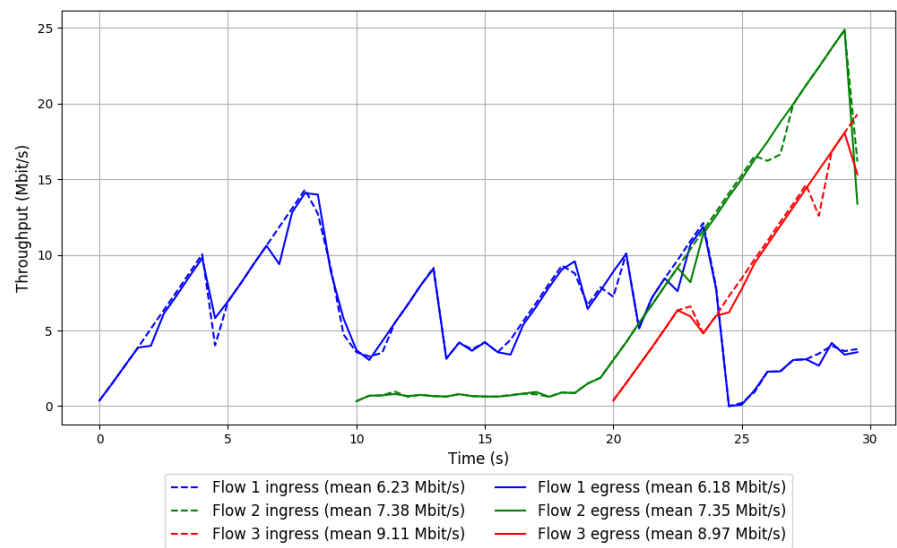


```
Run 7: Statistics of LEDBAT

Start at: 2018-01-09 21:29:22
End at: 2018-01-09 21:29:52

# Below is generated by plot.py at 2018-01-10 01:07:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.00 Mbit/s
95th percentile per-packet one-way delay: 51.489 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 6.18 Mbit/s
95th percentile per-packet one-way delay: 51.464 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 7.35 Mbit/s
95th percentile per-packet one-way delay: 51.448 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 8.97 Mbit/s
95th percentile per-packet one-way delay: 51.583 ms
Loss rate: 2.56%
```

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-09 21:43:36

End at: 2018-01-09 21:44:06

Below is generated by plot.py at 2018-01-10 01:07:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.87 Mbit/s

95th percentile per-packet one-way delay: 51.518 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 8.07 Mbit/s

95th percentile per-packet one-way delay: 51.431 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 13.20 Mbit/s

95th percentile per-packet one-way delay: 51.475 ms

Loss rate: 0.49%

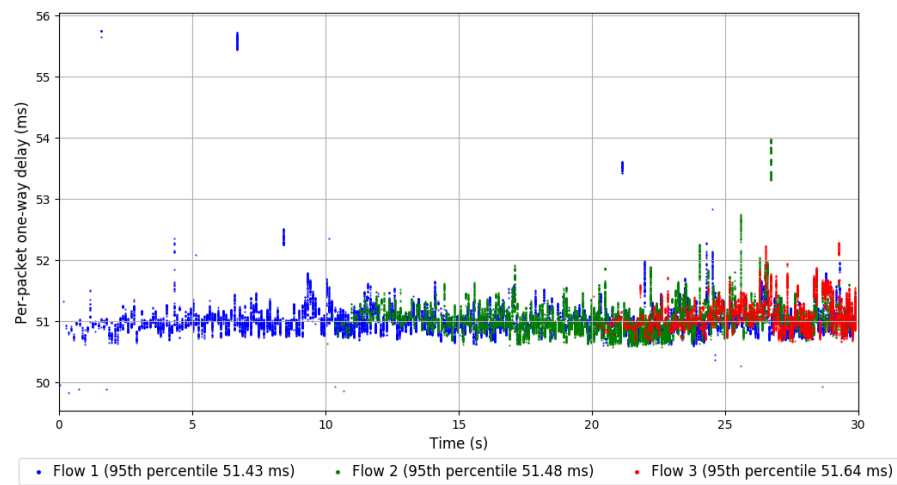
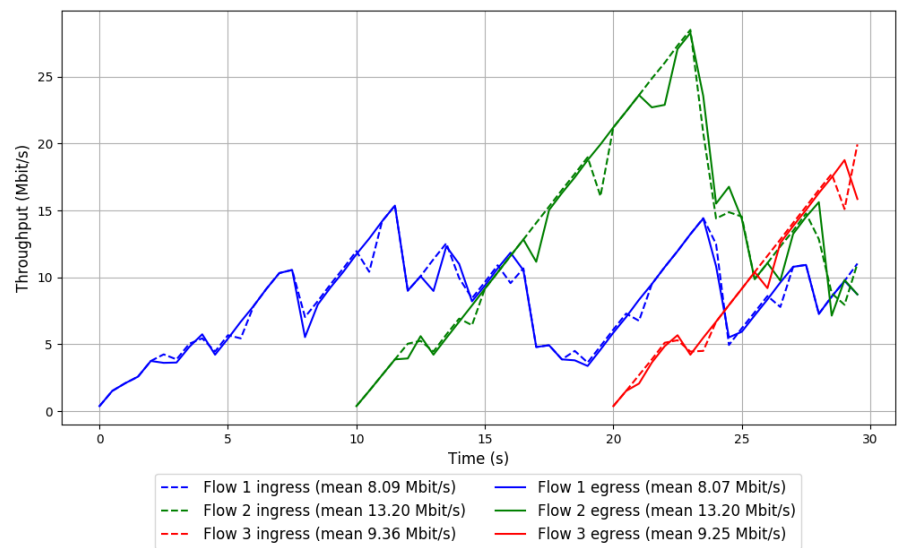
-- Flow 3:

Average throughput: 9.25 Mbit/s

95th percentile per-packet one-way delay: 51.641 ms

Loss rate: 2.20%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-09 21:56:58

End at: 2018-01-09 21:57:28

Below is generated by plot.py at 2018-01-10 01:07:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.03 Mbit/s

95th percentile per-packet one-way delay: 51.123 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 6.84 Mbit/s

95th percentile per-packet one-way delay: 51.254 ms

Loss rate: 1.28%

-- Flow 2:

Average throughput: 13.39 Mbit/s

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

Loss rate: 0.73%

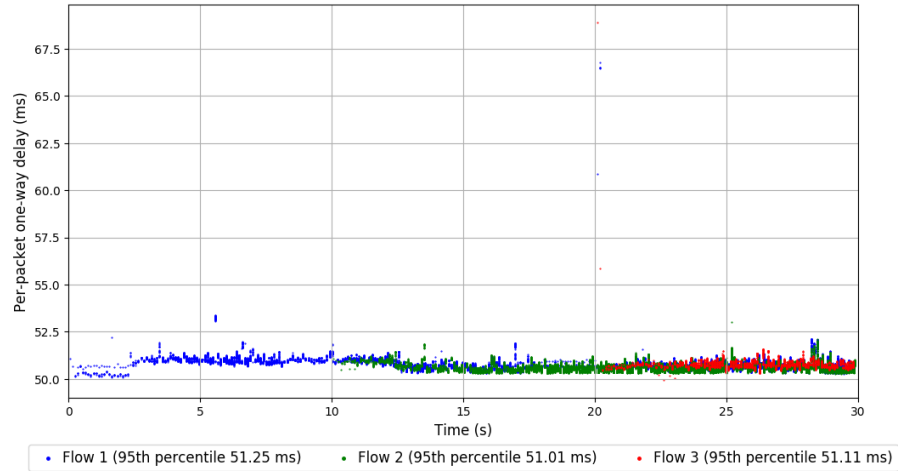
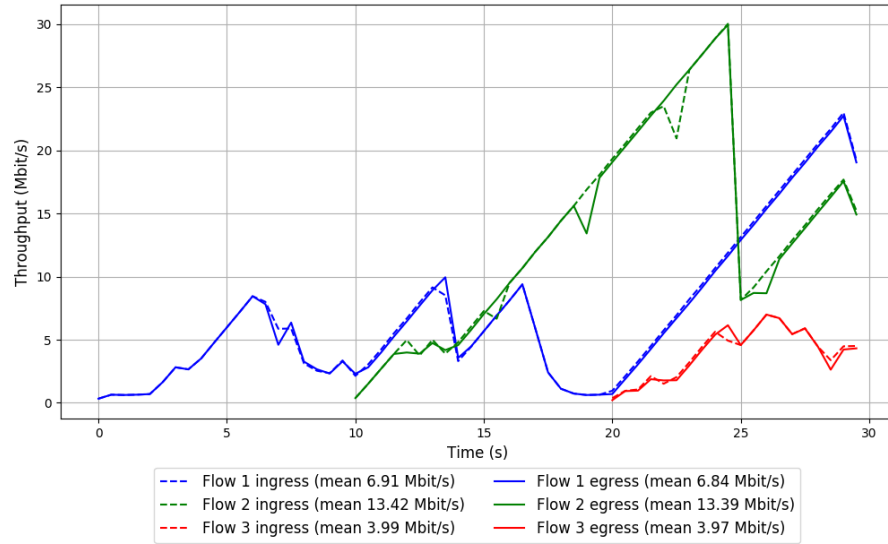
-- Flow 3:

Average throughput: 3.97 Mbit/s

95th percentile per-packet one-way delay: 51.109 ms

Loss rate: 1.55%

Run 9: Report of LEDBAT — Data Link

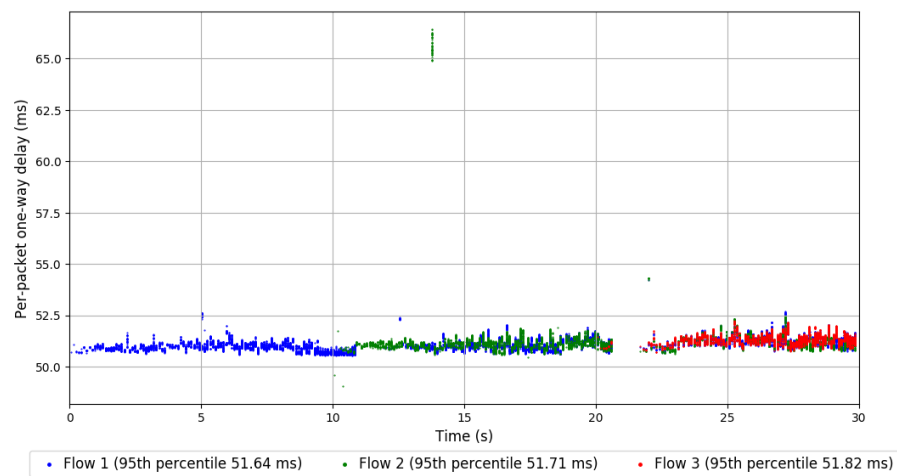
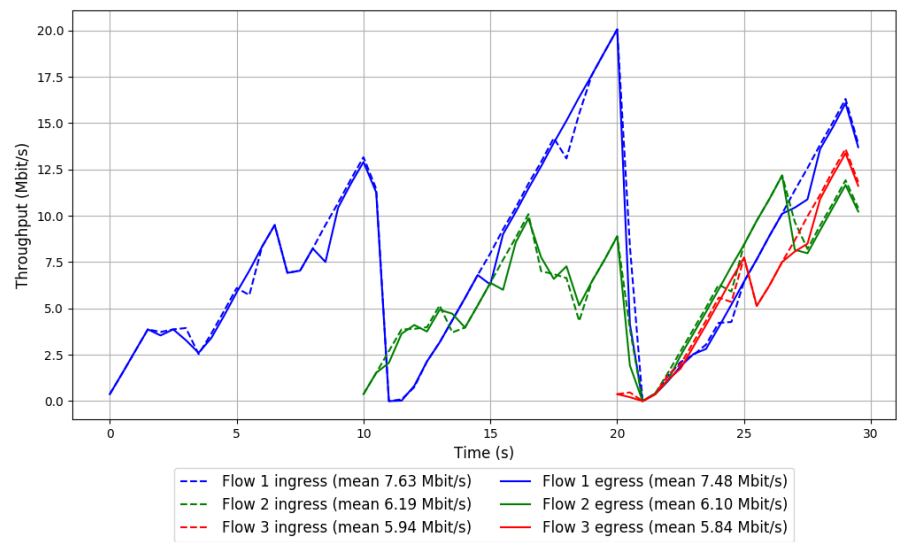


```
Run 10: Statistics of LEDBAT

Start at: 2018-01-09 22:11:08
End at: 2018-01-09 22:11:38

# Below is generated by plot.py at 2018-01-10 01:07:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.44 Mbit/s
95th percentile per-packet one-way delay: 51.694 ms
Loss rate: 2.32%
-- Flow 1:
Average throughput: 7.48 Mbit/s
95th percentile per-packet one-way delay: 51.639 ms
Loss rate: 2.38%
-- Flow 2:
Average throughput: 6.10 Mbit/s
95th percentile per-packet one-way delay: 51.708 ms
Loss rate: 1.99%
-- Flow 3:
Average throughput: 5.84 Mbit/s
95th percentile per-packet one-way delay: 51.818 ms
Loss rate: 2.80%
```

Run 10: Report of LEDBAT — Data Link

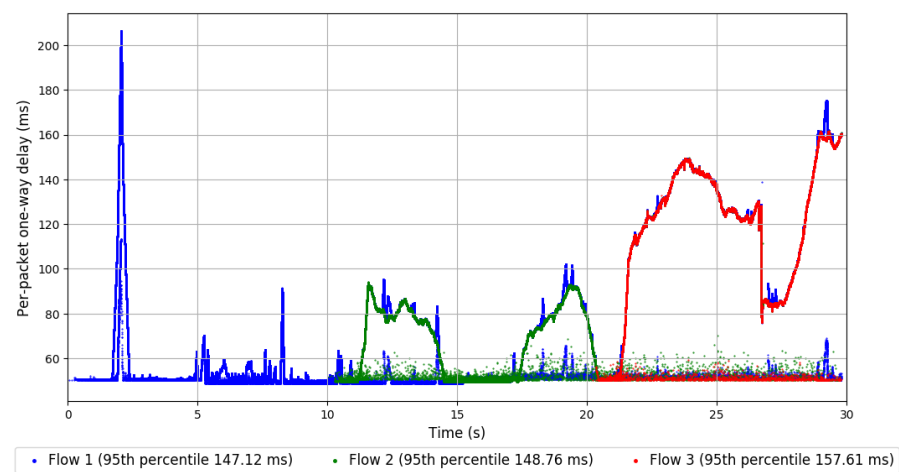
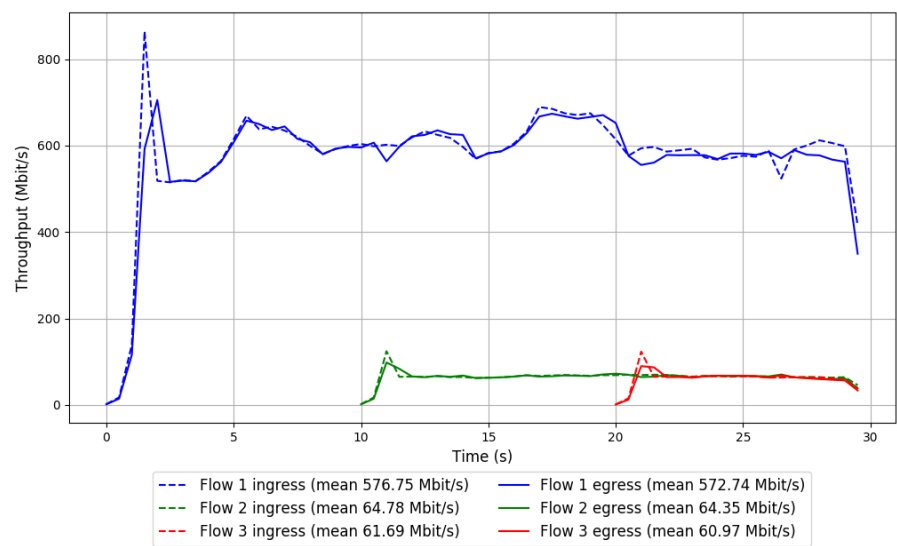


```
Run 1: Statistics of PCC

Start at: 2018-01-09 20:16:43
End at: 2018-01-09 20:17:13

# Below is generated by plot.py at 2018-01-10 01:15:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 635.27 Mbit/s
95th percentile per-packet one-way delay: 147.992 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 572.74 Mbit/s
95th percentile per-packet one-way delay: 147.119 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 64.35 Mbit/s
95th percentile per-packet one-way delay: 148.758 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 60.97 Mbit/s
95th percentile per-packet one-way delay: 157.610 ms
Loss rate: 2.22%
```

Run 1: Report of PCC — Data Link

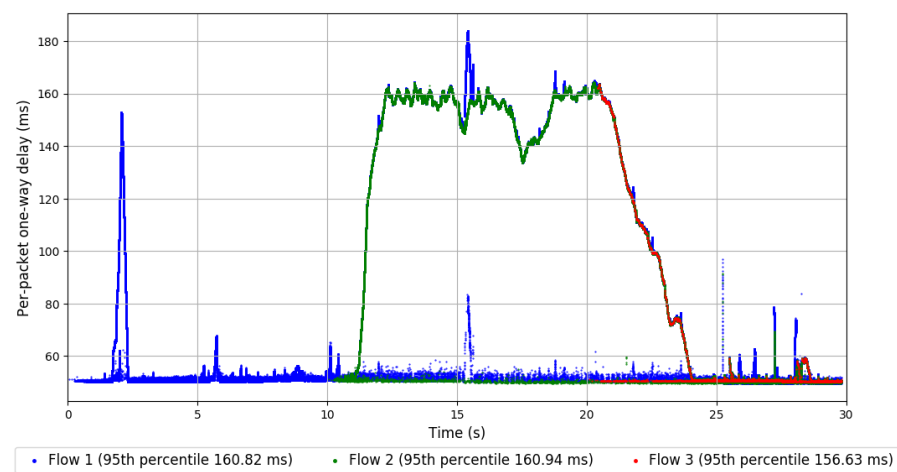
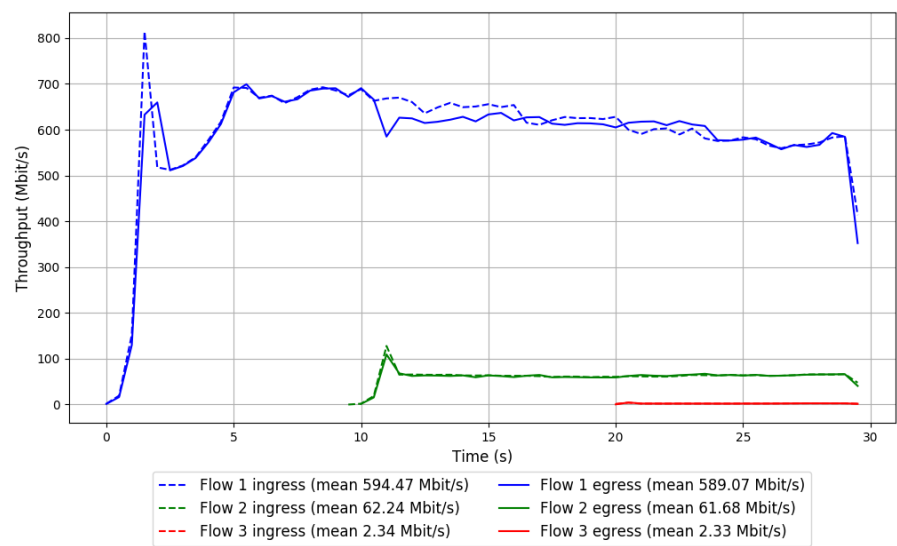


```
Run 2: Statistics of PCC

Start at: 2018-01-09 20:30:33
End at: 2018-01-09 20:31:03

# Below is generated by plot.py at 2018-01-10 01:15:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 630.78 Mbit/s
95th percentile per-packet one-way delay: 160.832 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 589.07 Mbit/s
95th percentile per-packet one-way delay: 160.823 ms
Loss rate: 1.24%
-- Flow 2:
Average throughput: 61.68 Mbit/s
95th percentile per-packet one-way delay: 160.941 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 156.628 ms
Loss rate: 1.09%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-09 20:44:32

End at: 2018-01-09 20:45:02

Below is generated by plot.py at 2018-01-10 01:15:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 603.48 Mbit/s

95th percentile per-packet one-way delay: 143.311 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 536.35 Mbit/s

95th percentile per-packet one-way delay: 152.459 ms

Loss rate: 1.65%

-- Flow 2:

Average throughput: 85.61 Mbit/s

95th percentile per-packet one-way delay: 111.193 ms

Loss rate: 0.71%

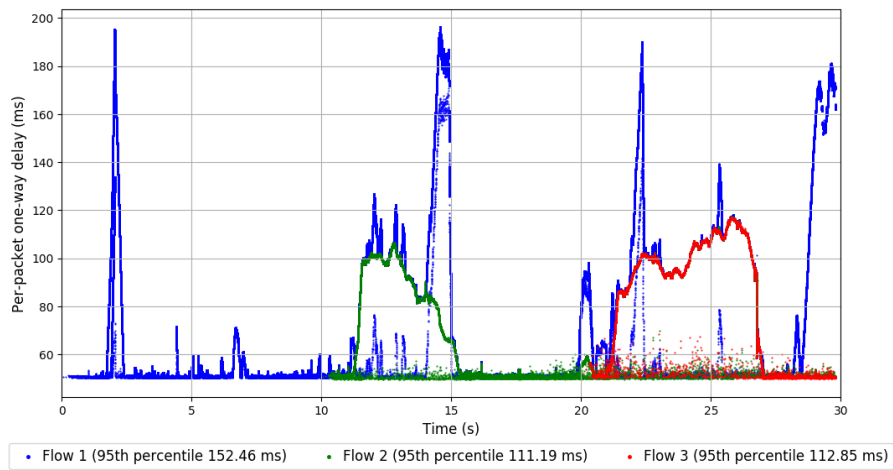
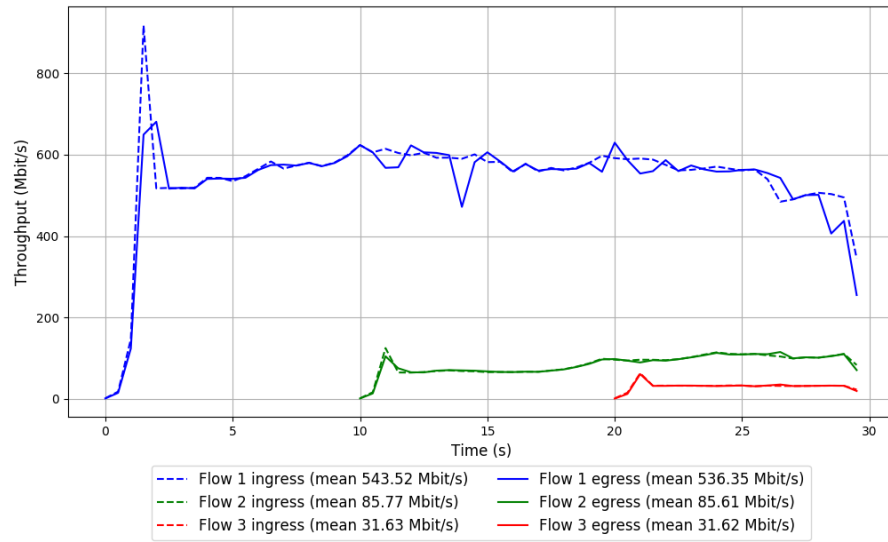
-- Flow 3:

Average throughput: 31.62 Mbit/s

95th percentile per-packet one-way delay: 112.848 ms

Loss rate: 1.07%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-09 20:58:34

End at: 2018-01-09 20:59:04

Below is generated by plot.py at 2018-01-10 01:16:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 643.46 Mbit/s

95th percentile per-packet one-way delay: 162.595 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 611.95 Mbit/s

95th percentile per-packet one-way delay: 162.574 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 16.61 Mbit/s

95th percentile per-packet one-way delay: 161.218 ms

Loss rate: 1.21%

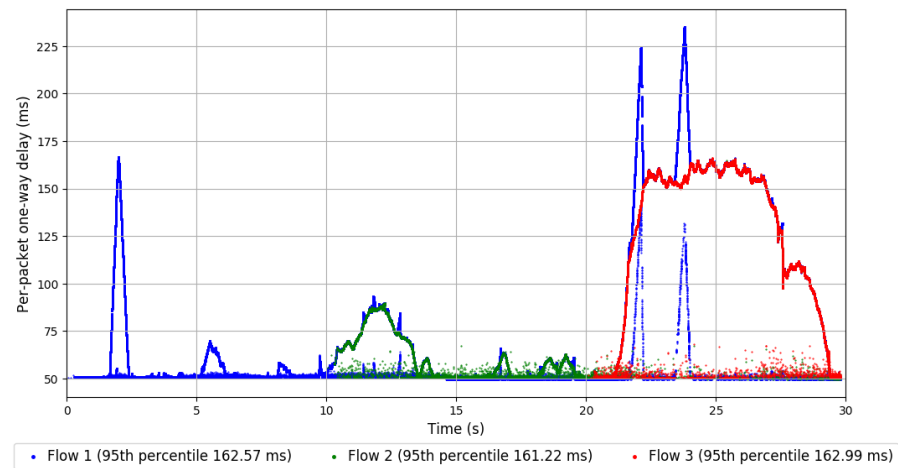
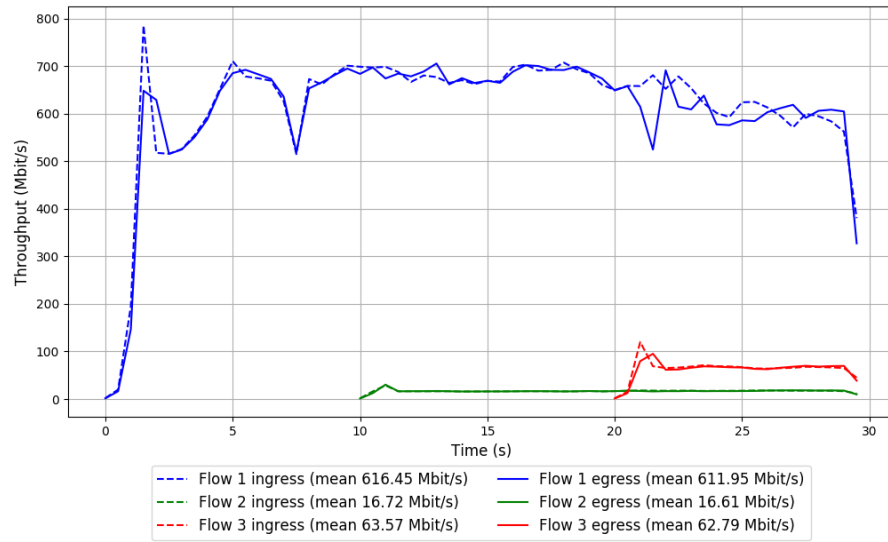
-- Flow 3:

Average throughput: 62.79 Mbit/s

95th percentile per-packet one-way delay: 162.986 ms

Loss rate: 2.27%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-09 21:12:52

End at: 2018-01-09 21:13:22

Below is generated by plot.py at 2018-01-10 01:16:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 647.51 Mbit/s

95th percentile per-packet one-way delay: 149.645 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 605.57 Mbit/s

95th percentile per-packet one-way delay: 149.586 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 32.62 Mbit/s

95th percentile per-packet one-way delay: 149.696 ms

Loss rate: 1.00%

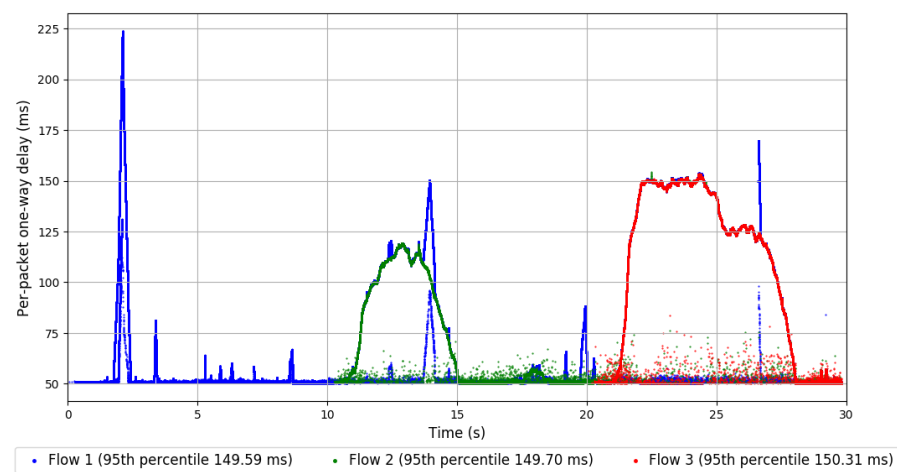
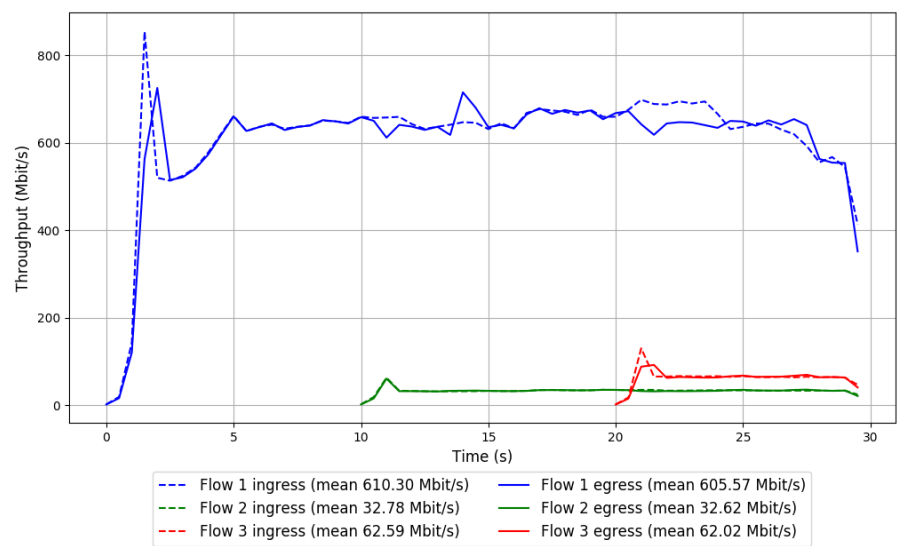
-- Flow 3:

Average throughput: 62.02 Mbit/s

95th percentile per-packet one-way delay: 150.313 ms

Loss rate: 1.98%

Run 5: Report of PCC — Data Link

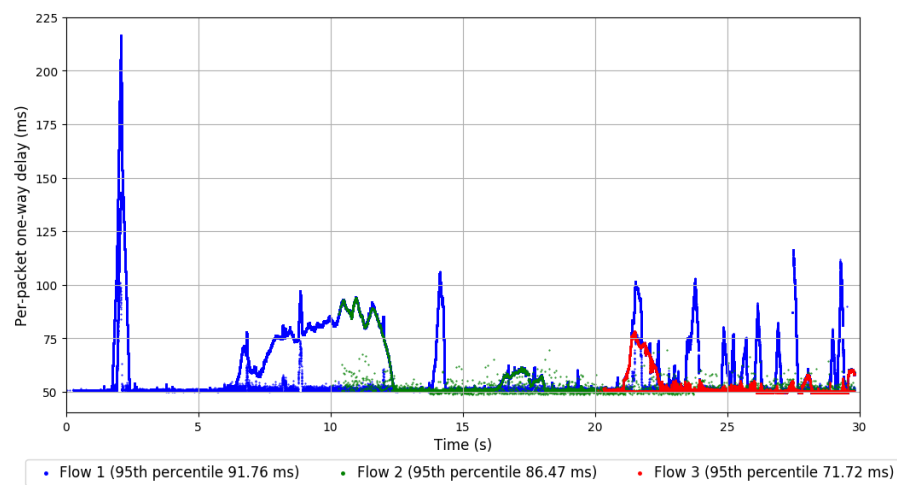
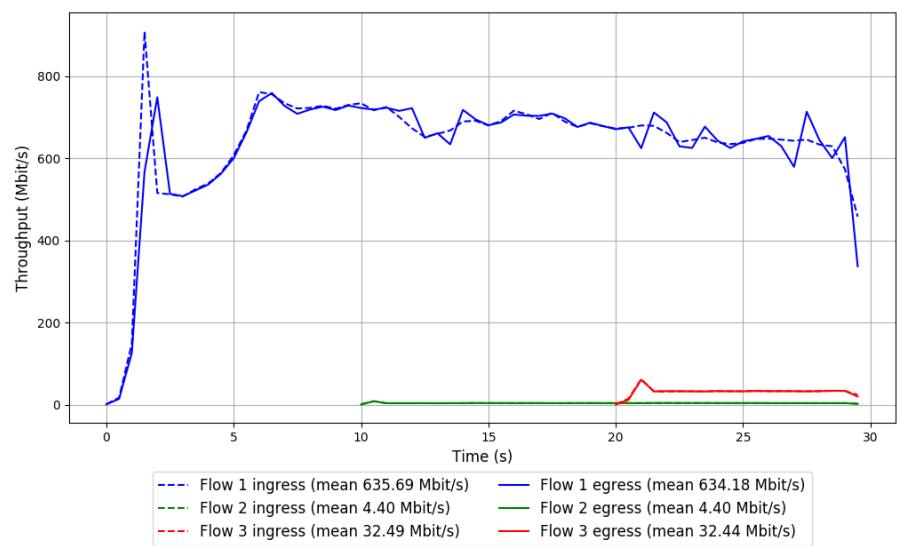


```
Run 6: Statistics of PCC

Start at: 2018-01-09 21:27:15
End at: 2018-01-09 21:27:45

# Below is generated by plot.py at 2018-01-10 01:16:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 647.66 Mbit/s
95th percentile per-packet one-way delay: 91.597 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 634.18 Mbit/s
95th percentile per-packet one-way delay: 91.761 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 4.40 Mbit/s
95th percentile per-packet one-way delay: 86.470 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 32.44 Mbit/s
95th percentile per-packet one-way delay: 71.725 ms
Loss rate: 1.16%
```

Run 6: Report of PCC — Data Link

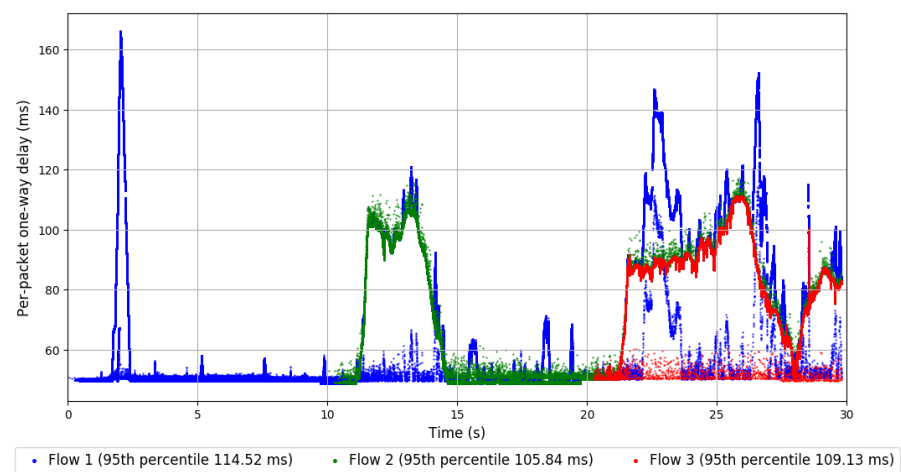
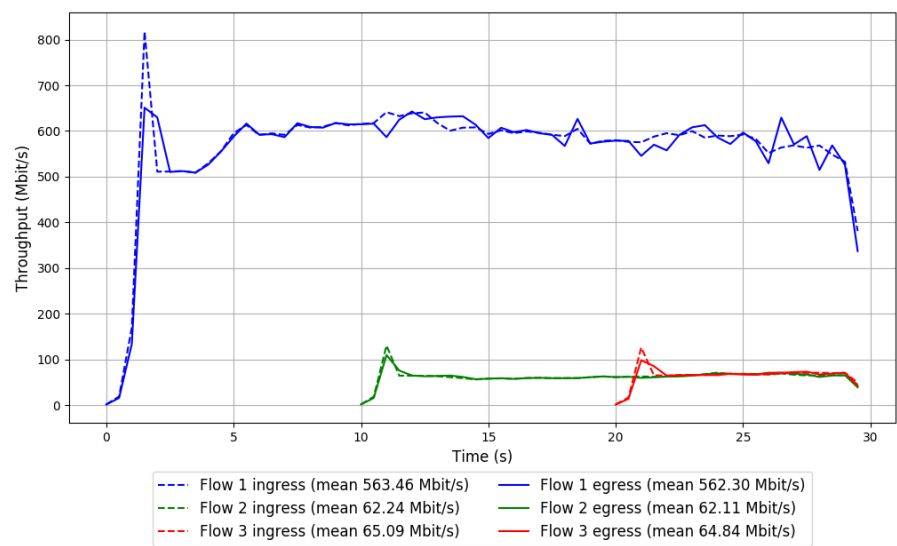


```
Run 7: Statistics of PCC

Start at: 2018-01-09 21:41:31
End at: 2018-01-09 21:42:01

# Below is generated by plot.py at 2018-01-10 01:17:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 624.66 Mbit/s
95th percentile per-packet one-way delay: 112.989 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 562.30 Mbit/s
95th percentile per-packet one-way delay: 114.522 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 62.11 Mbit/s
95th percentile per-packet one-way delay: 105.839 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 64.84 Mbit/s
95th percentile per-packet one-way delay: 109.127 ms
Loss rate: 1.41%
```


Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-09 21:55:09

End at: 2018-01-09 21:55:39

Below is generated by plot.py at 2018-01-10 01:17:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 665.68 Mbit/s

95th percentile per-packet one-way delay: 151.875 ms

Loss rate: 1.42%

-- Flow 1:

Average throughput: 583.46 Mbit/s

95th percentile per-packet one-way delay: 151.554 ms

Loss rate: 1.31%

-- Flow 2:

Average throughput: 64.88 Mbit/s

95th percentile per-packet one-way delay: 152.289 ms

Loss rate: 1.38%

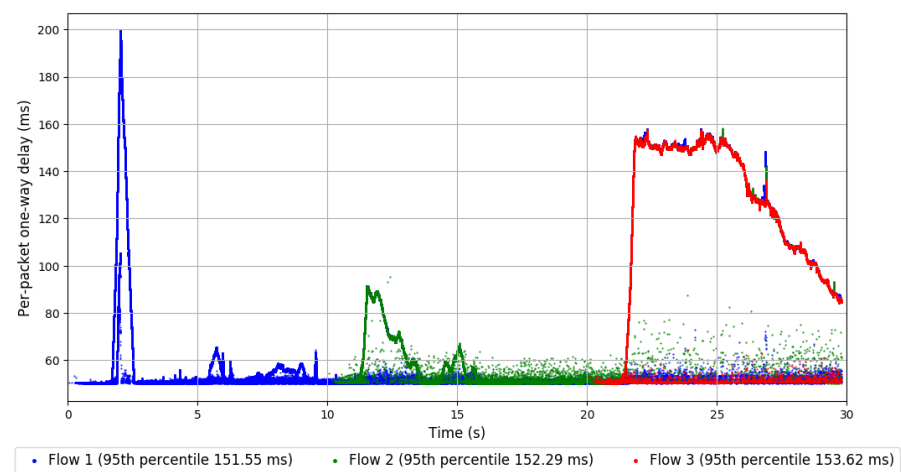
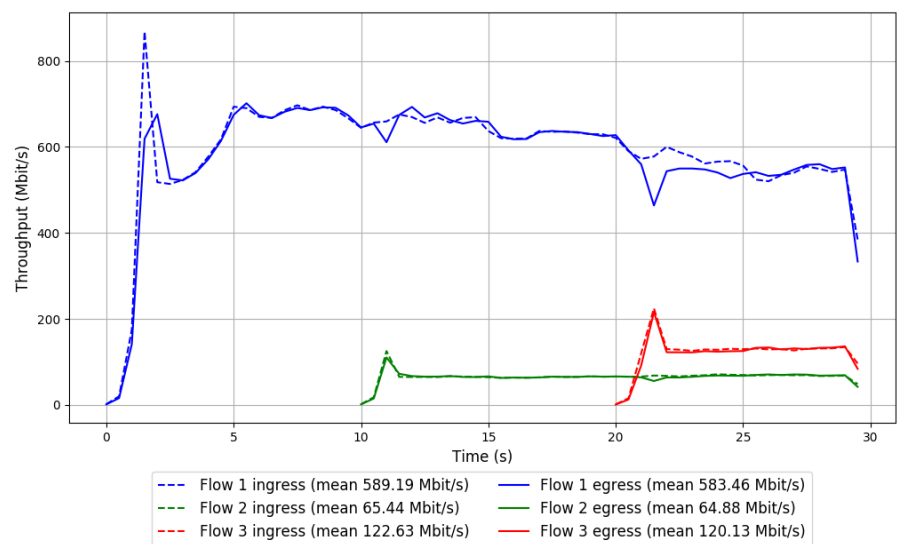
-- Flow 3:

Average throughput: 120.13 Mbit/s

95th percentile per-packet one-way delay: 153.616 ms

Loss rate: 3.08%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

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

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

Below is generated by plot.py at 2018-01-10 01:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 623.45 Mbit/s

95th percentile per-packet one-way delay: 128.738 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 526.81 Mbit/s

95th percentile per-packet one-way delay: 129.571 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 130.86 Mbit/s

95th percentile per-packet one-way delay: 127.000 ms

Loss rate: 0.47%

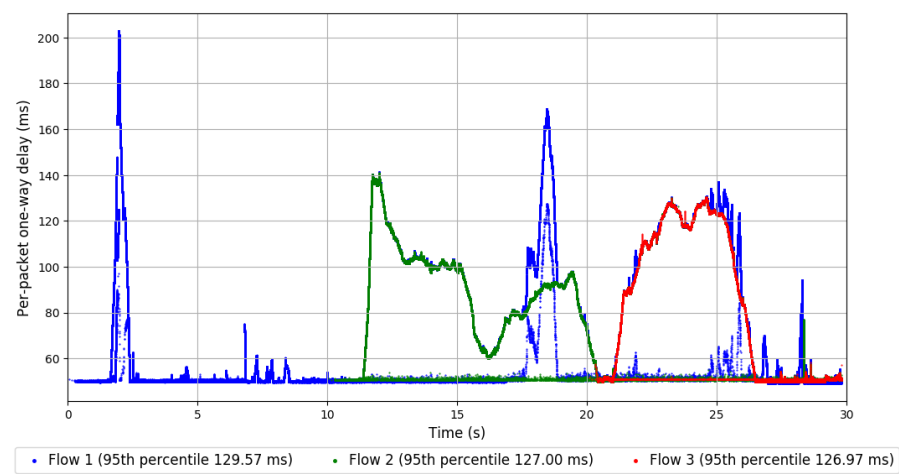
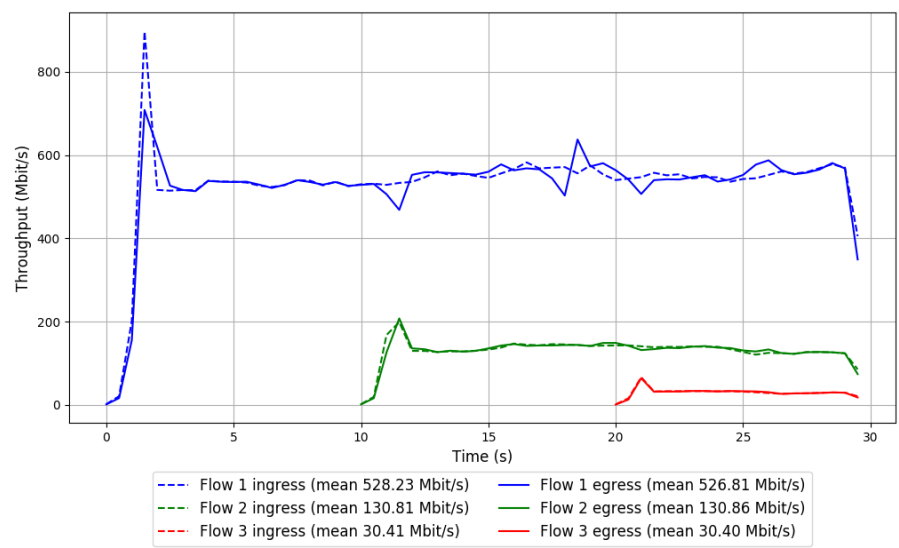
-- Flow 3:

Average throughput: 30.40 Mbit/s

95th percentile per-packet one-way delay: 126.975 ms

Loss rate: 1.00%

Run 9: Report of PCC — Data Link

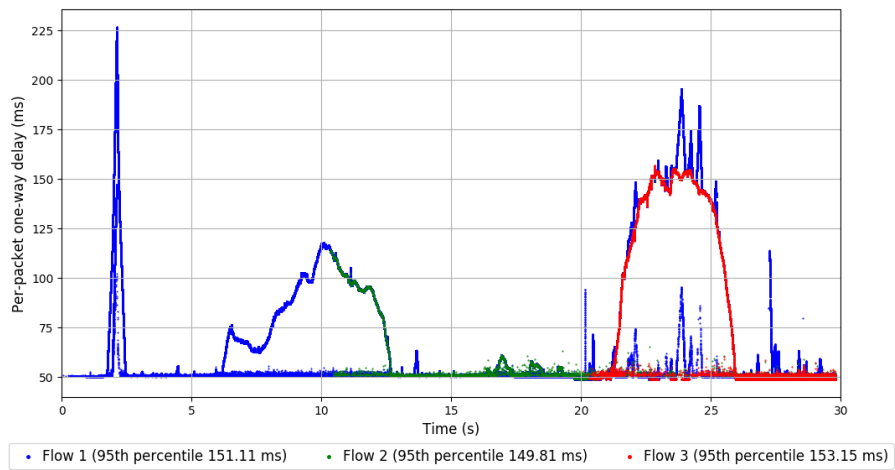
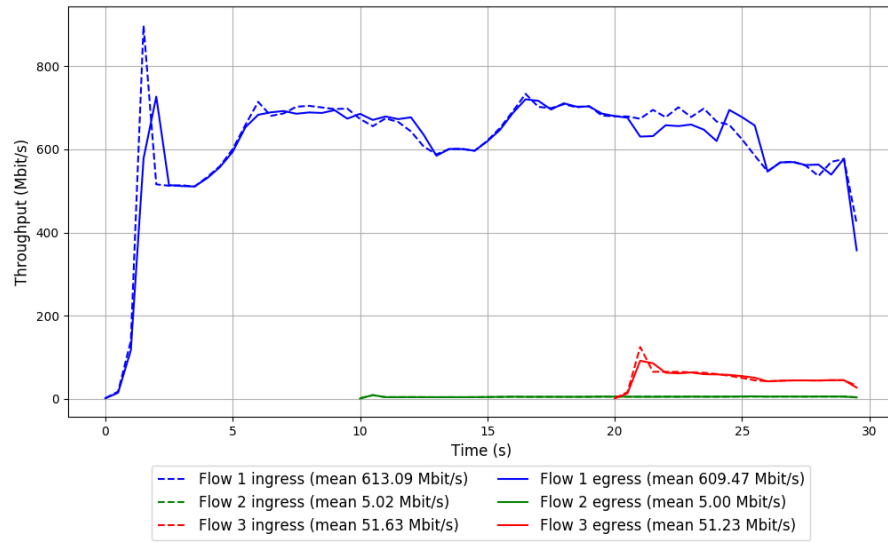


```
Run 10: Statistics of PCC

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

# Below is generated by plot.py at 2018-01-10 01:24:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 629.49 Mbit/s
95th percentile per-packet one-way delay: 151.246 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 609.47 Mbit/s
95th percentile per-packet one-way delay: 151.106 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 5.00 Mbit/s
95th percentile per-packet one-way delay: 149.813 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 51.23 Mbit/s
95th percentile per-packet one-way delay: 153.153 ms
Loss rate: 1.82%
```

Run 10: Report of PCC — Data Link

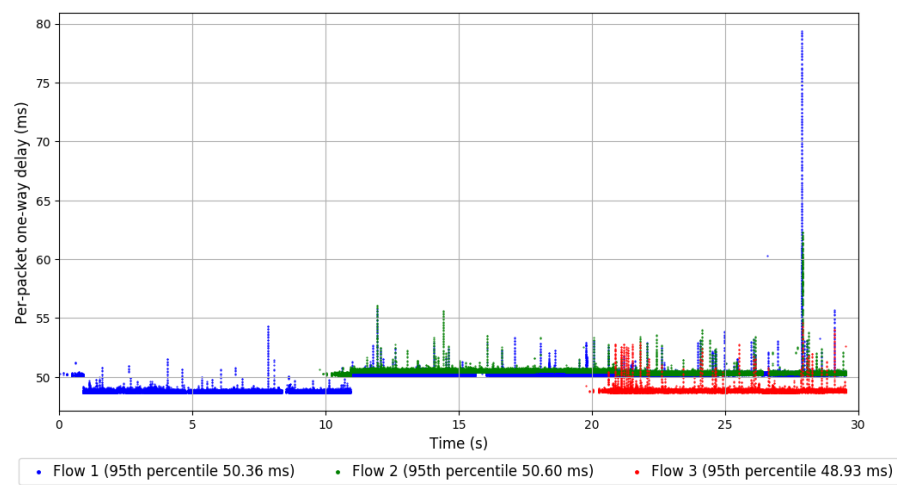
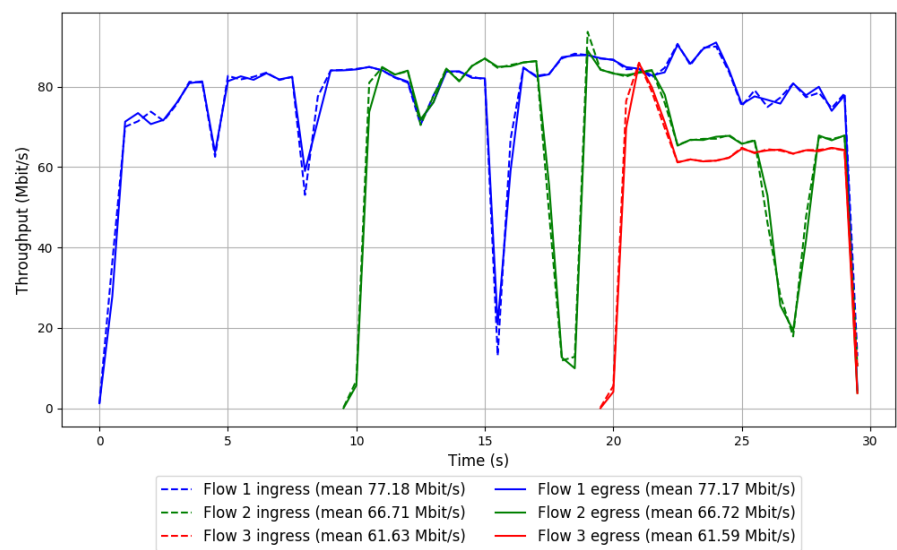


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-09 20:06:57
End at: 2018-01-09 20:07:27

# Below is generated by plot.py at 2018-01-10 01:24:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 142.19 Mbit/s
95th percentile per-packet one-way delay: 50.542 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 77.17 Mbit/s
95th percentile per-packet one-way delay: 50.356 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 66.72 Mbit/s
95th percentile per-packet one-way delay: 50.601 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 61.59 Mbit/s
95th percentile per-packet one-way delay: 48.928 ms
Loss rate: 1.05%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-09 20:21:14

End at: 2018-01-09 20:21:44

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.62 Mbit/s

95th percentile per-packet one-way delay: 50.866 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 58.35 Mbit/s

95th percentile per-packet one-way delay: 50.898 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 70.00 Mbit/s

95th percentile per-packet one-way delay: 50.662 ms

Loss rate: 0.70%

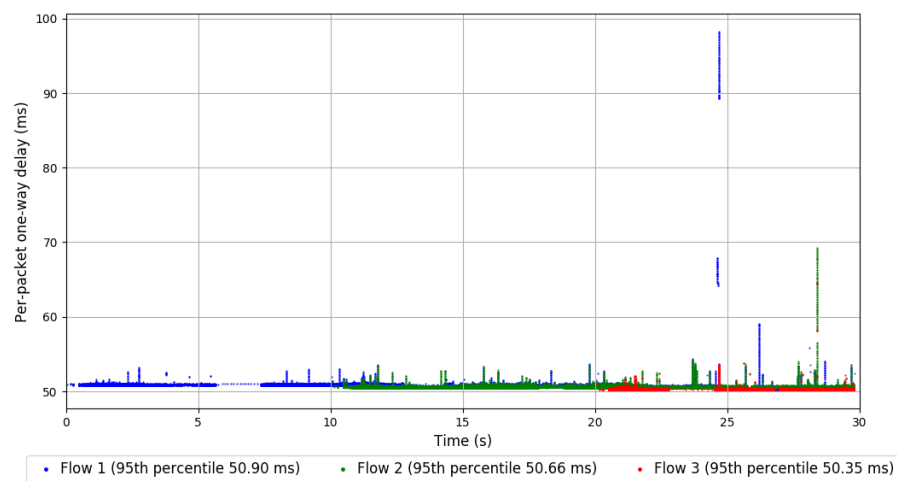
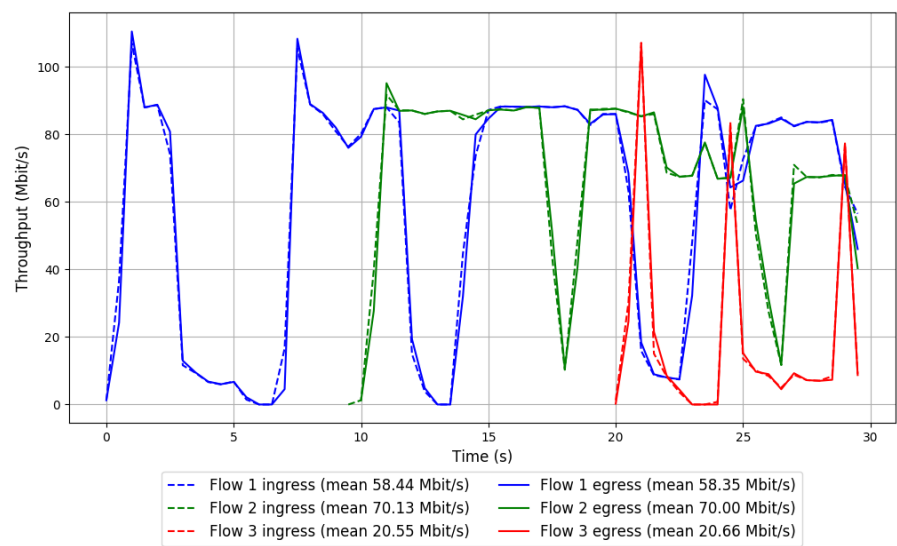
-- Flow 3:

Average throughput: 20.66 Mbit/s

95th percentile per-packet one-way delay: 50.348 ms

Loss rate: 0.51%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-09 20:34:46

End at: 2018-01-09 20:35:16

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 130.56 Mbit/s

95th percentile per-packet one-way delay: 50.996 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 72.72 Mbit/s

95th percentile per-packet one-way delay: 51.029 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 56.72 Mbit/s

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

Loss rate: 0.00%

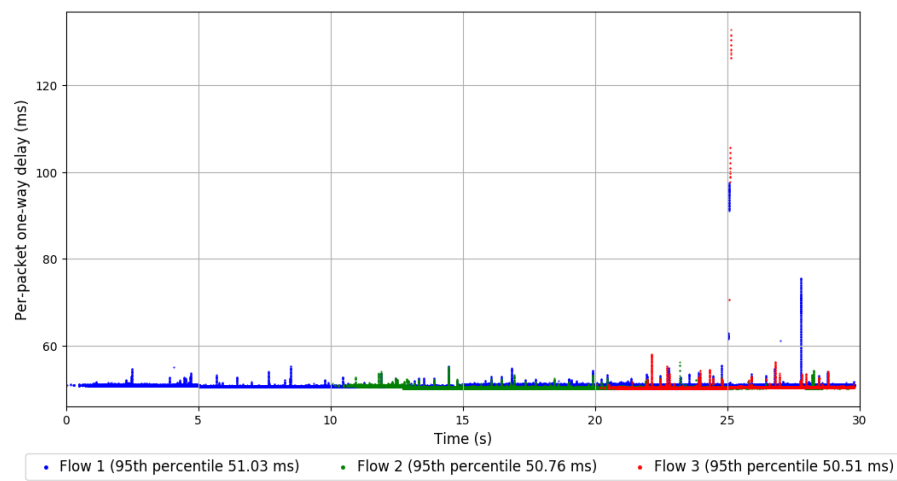
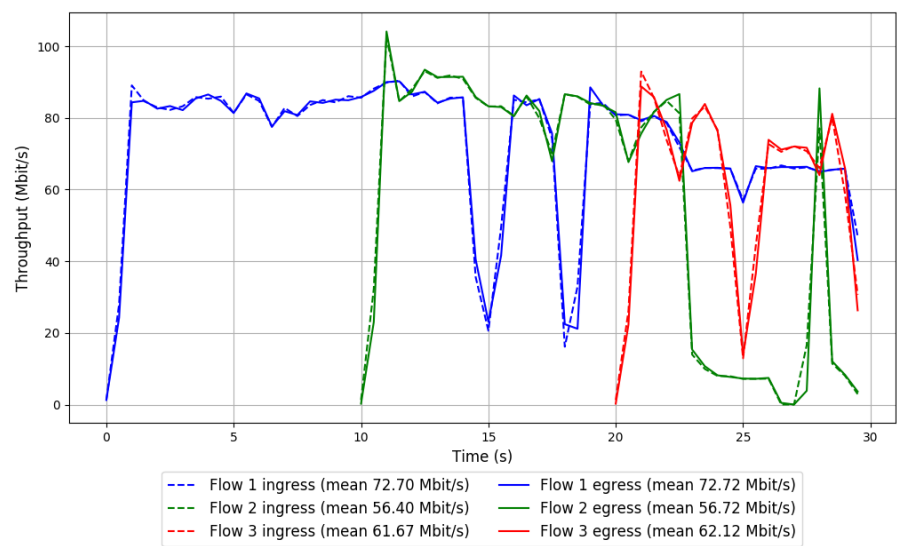
-- Flow 3:

Average throughput: 62.12 Mbit/s

95th percentile per-packet one-way delay: 50.507 ms

Loss rate: 0.36%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-09 20:49:02

End at: 2018-01-09 20:49:32

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 128.33 Mbit/s

95th percentile per-packet one-way delay: 51.025 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 65.65 Mbit/s

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

Loss rate: 0.31%

-- Flow 2:

Average throughput: 65.96 Mbit/s

95th percentile per-packet one-way delay: 51.102 ms

Loss rate: 0.59%

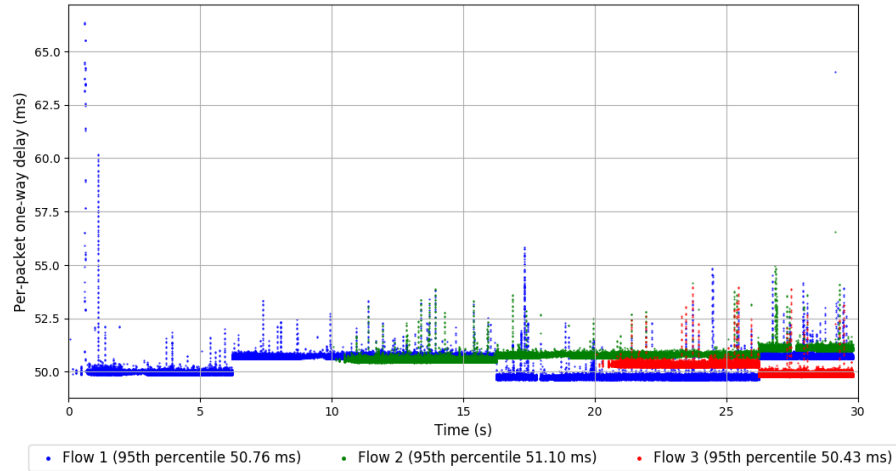
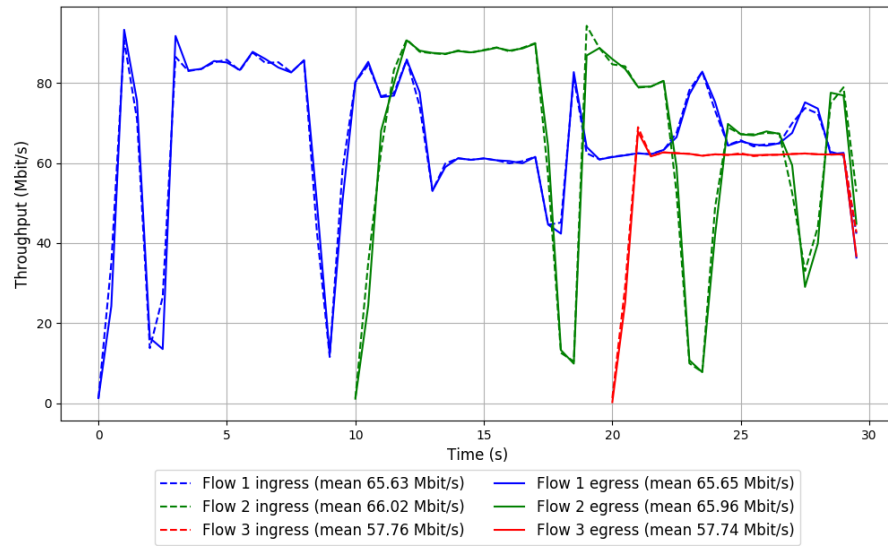
-- Flow 3:

Average throughput: 57.74 Mbit/s

95th percentile per-packet one-way delay: 50.434 ms

Loss rate: 1.06%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-09 21:03:03

End at: 2018-01-09 21:03:33

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.77 Mbit/s

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

Loss rate: 0.59%

-- Flow 1:

Average throughput: 72.99 Mbit/s

95th percentile per-packet one-way delay: 50.254 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 58.06 Mbit/s

95th percentile per-packet one-way delay: 50.923 ms

Loss rate: 0.82%

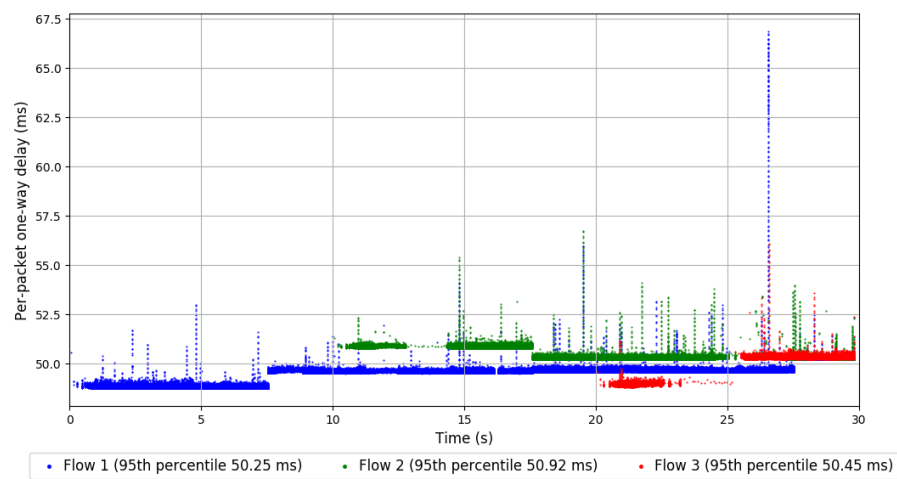
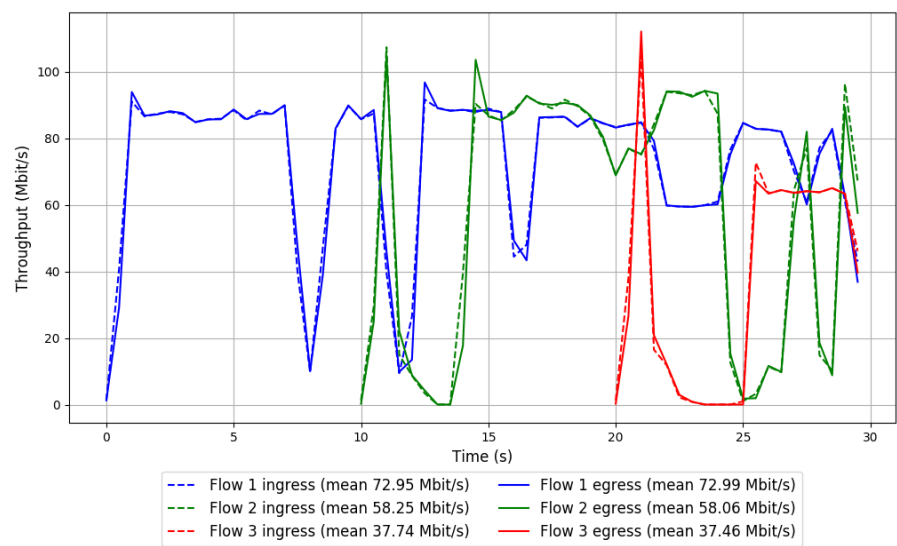
-- Flow 3:

Average throughput: 37.46 Mbit/s

95th percentile per-packet one-way delay: 50.448 ms

Loss rate: 1.75%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-09 21:17:23

End at: 2018-01-09 21:17:53

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 105.17 Mbit/s

95th percentile per-packet one-way delay: 50.438 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 54.09 Mbit/s

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

Loss rate: 0.41%

-- Flow 2:

Average throughput: 64.47 Mbit/s

95th percentile per-packet one-way delay: 50.559 ms

Loss rate: 0.05%

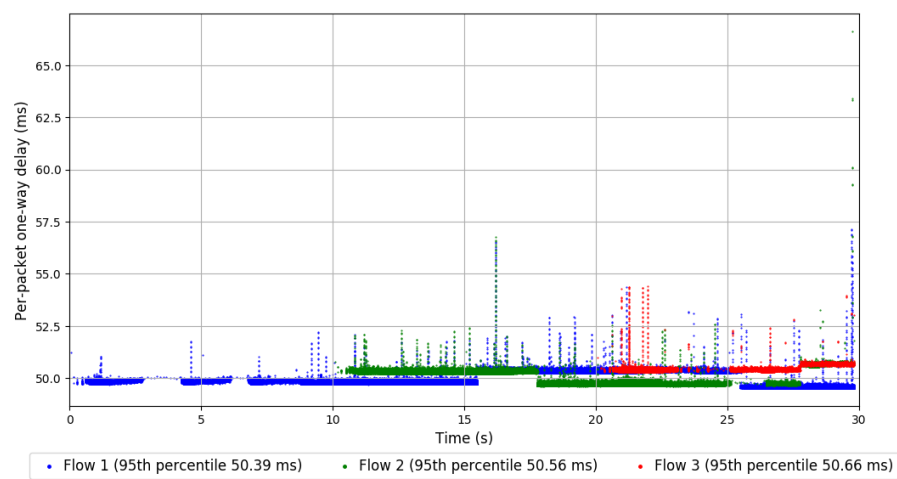
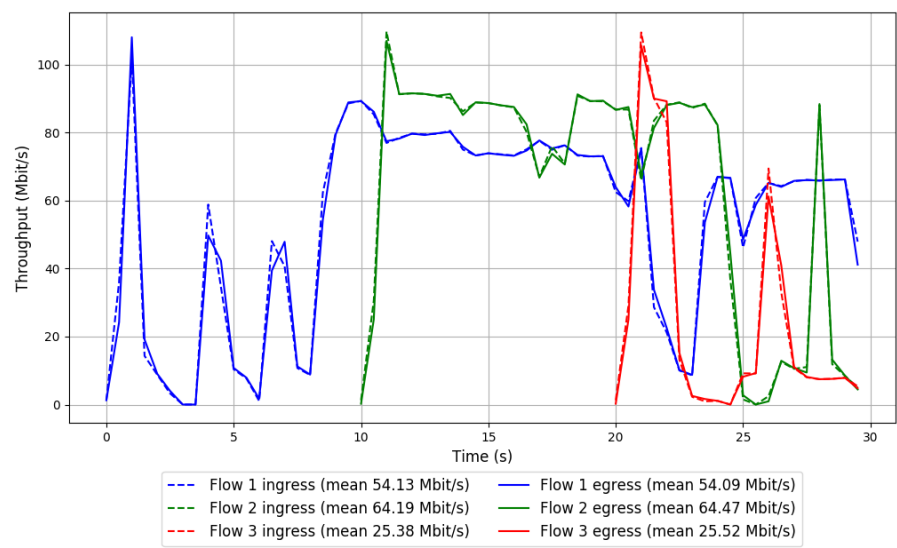
-- Flow 3:

Average throughput: 25.52 Mbit/s

95th percentile per-packet one-way delay: 50.660 ms

Loss rate: 0.28%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-09 21:31:45

End at: 2018-01-09 21:32:15

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.23 Mbit/s

95th percentile per-packet one-way delay: 50.945 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 74.69 Mbit/s

95th percentile per-packet one-way delay: 50.978 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 67.14 Mbit/s

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

Loss rate: 0.48%

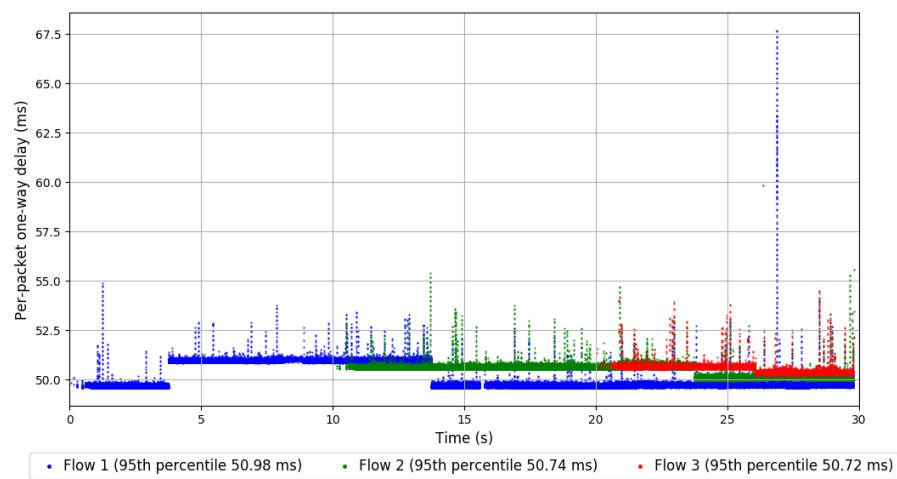
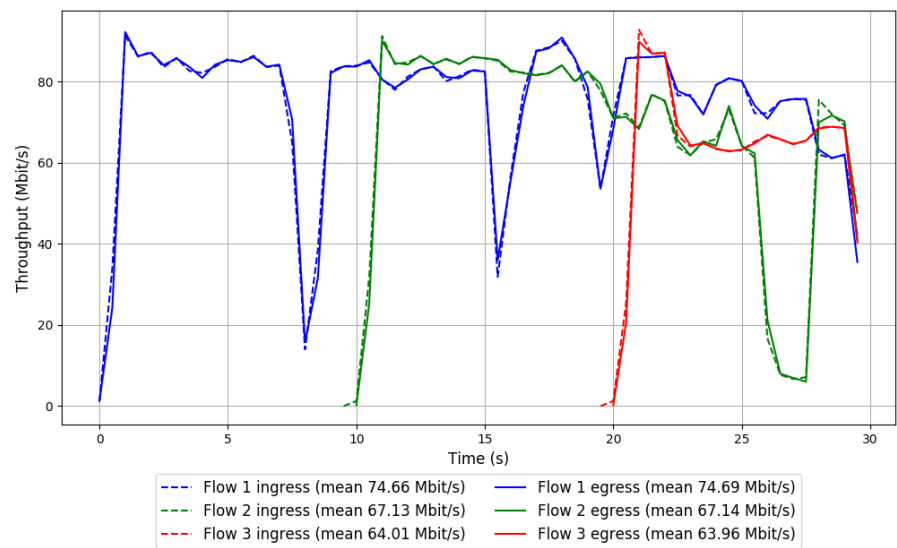
-- Flow 3:

Average throughput: 63.96 Mbit/s

95th percentile per-packet one-way delay: 50.715 ms

Loss rate: 1.13%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-09 21:46:00

End at: 2018-01-09 21:46:30

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.56 Mbit/s

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

Loss rate: 0.53%

-- Flow 1:

Average throughput: 72.65 Mbit/s

95th percentile per-packet one-way delay: 50.796 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 66.88 Mbit/s

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

Loss rate: 0.48%

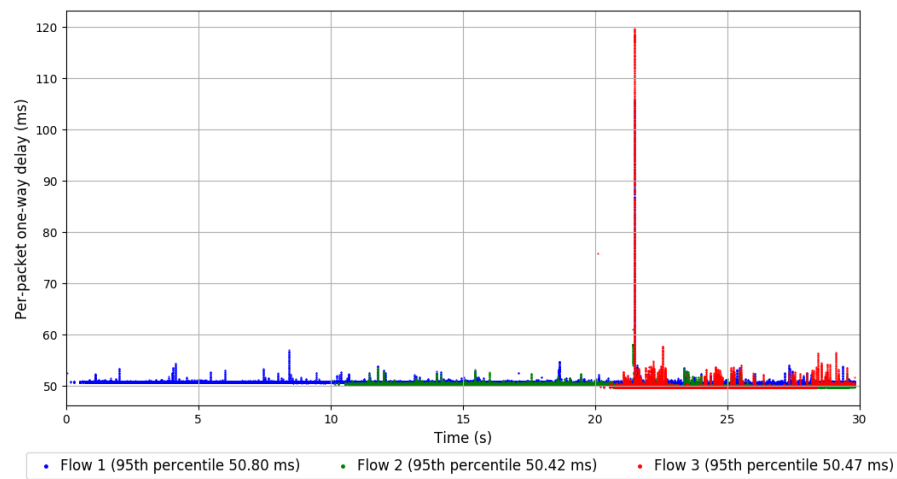
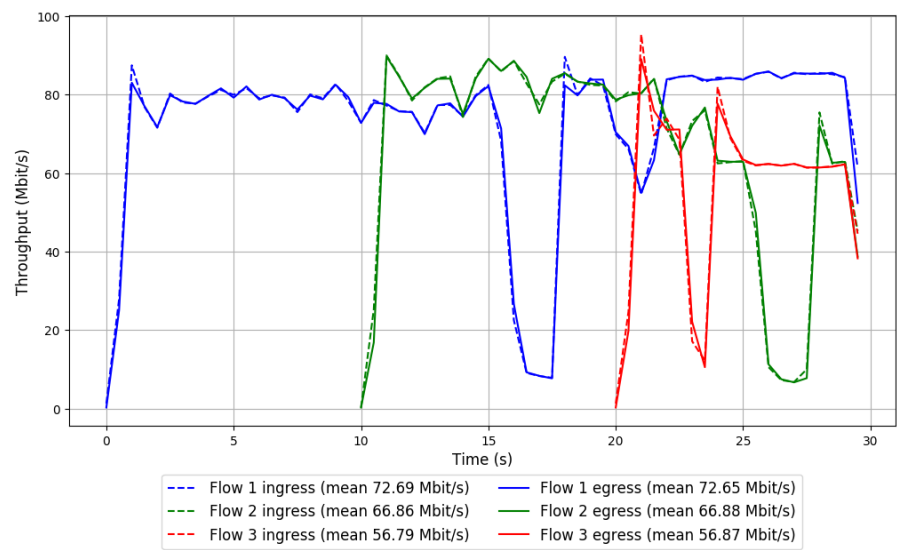
-- Flow 3:

Average throughput: 56.87 Mbit/s

95th percentile per-packet one-way delay: 50.472 ms

Loss rate: 1.12%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-09 21:59:21

End at: 2018-01-09 21:59:51

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 116.26 Mbit/s

95th percentile per-packet one-way delay: 50.510 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 58.18 Mbit/s

95th percentile per-packet one-way delay: 50.473 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 54.67 Mbit/s

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

Loss rate: 0.61%

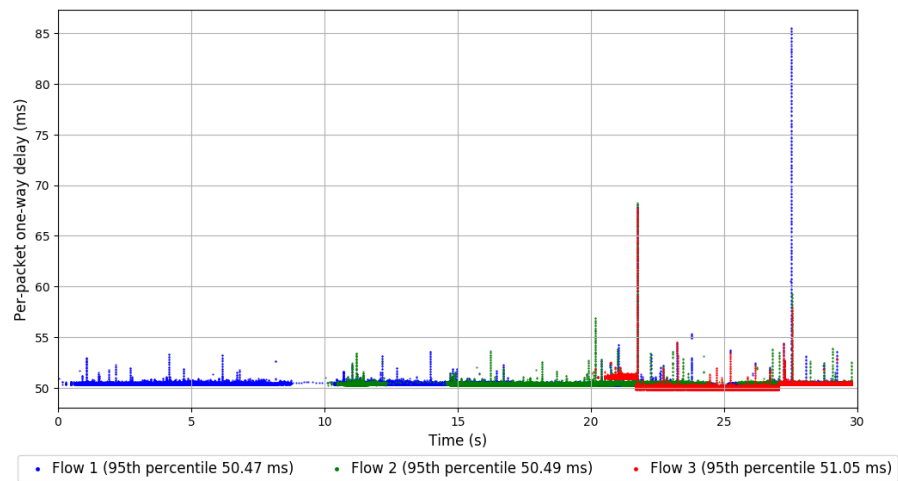
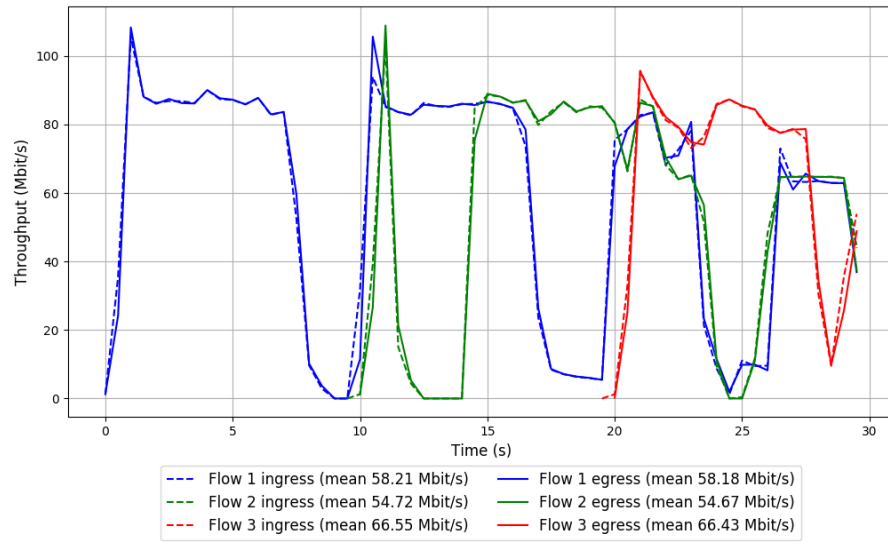
-- Flow 3:

Average throughput: 66.43 Mbit/s

95th percentile per-packet one-way delay: 51.049 ms

Loss rate: 1.21%

Run 9: Report of QUIC Cubic — Data Link

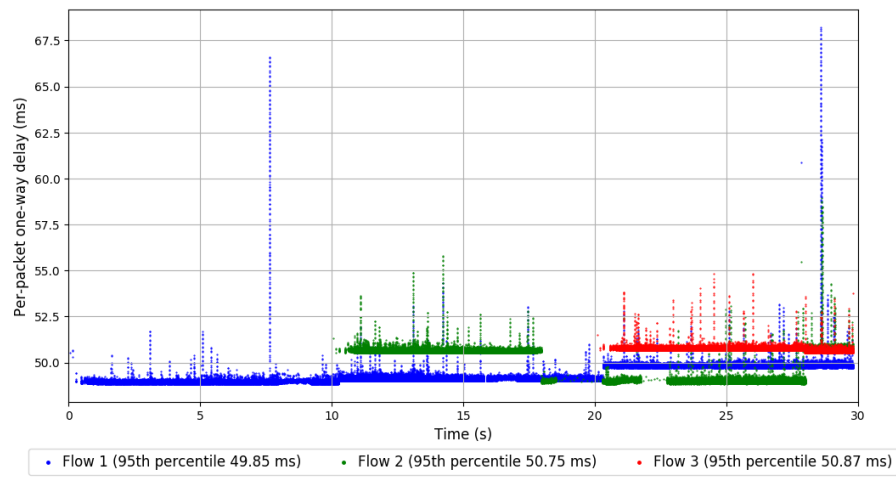
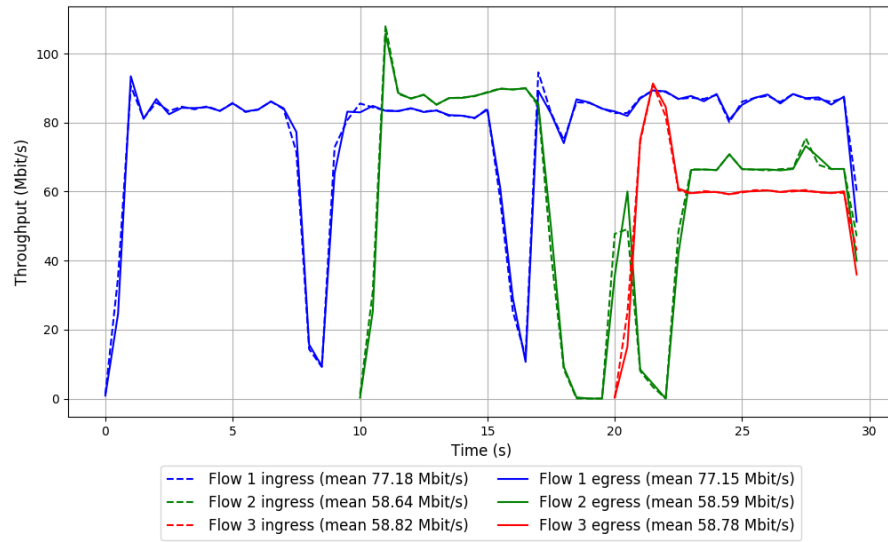


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-09 22:13:30
End at: 2018-01-09 22:14:00

# Below is generated by plot.py at 2018-01-10 01:24:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 135.20 Mbit/s
95th percentile per-packet one-way delay: 50.773 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 77.15 Mbit/s
95th percentile per-packet one-way delay: 49.853 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 58.59 Mbit/s
95th percentile per-packet one-way delay: 50.746 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 58.78 Mbit/s
95th percentile per-packet one-way delay: 50.867 ms
Loss rate: 1.09%
```

Run 10: Report of QUIC Cubic — Data Link

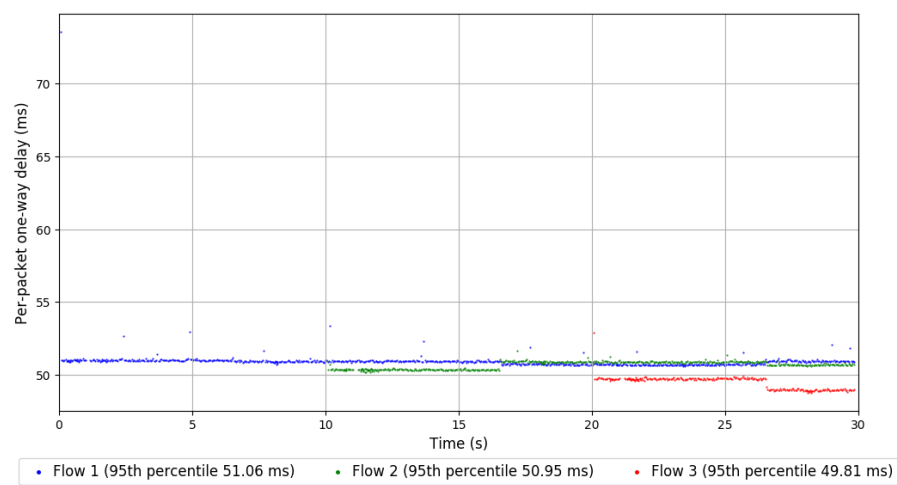
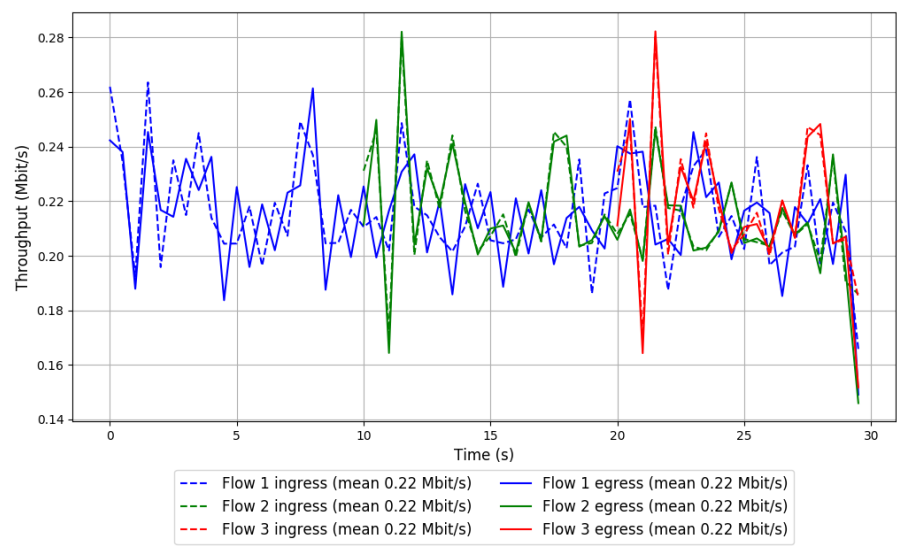


```
Run 1: Statistics of SCReAM

Start at: 2018-01-09 20:10:12
End at: 2018-01-09 20:10:42

# Below is generated by plot.py at 2018-01-10 01:24:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 51.024 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.057 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.950 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.808 ms
Loss rate: 1.11%
```

Run 1: Report of SReAM — Data Link

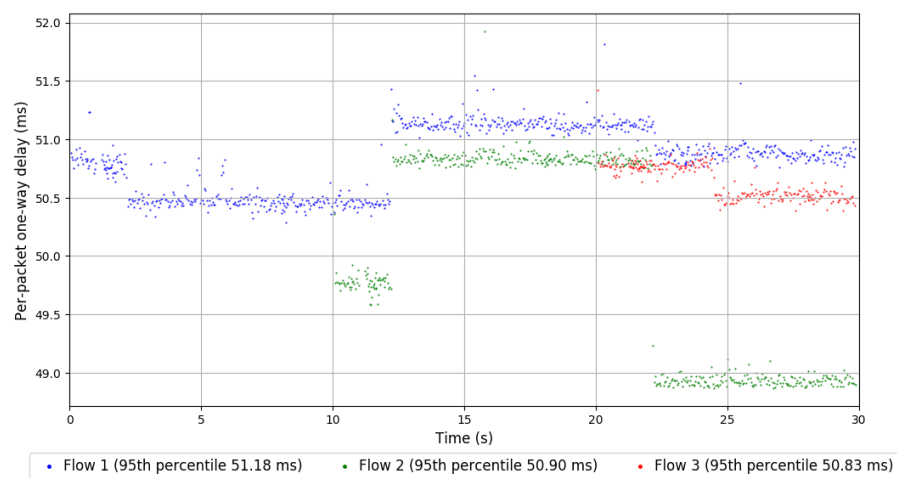
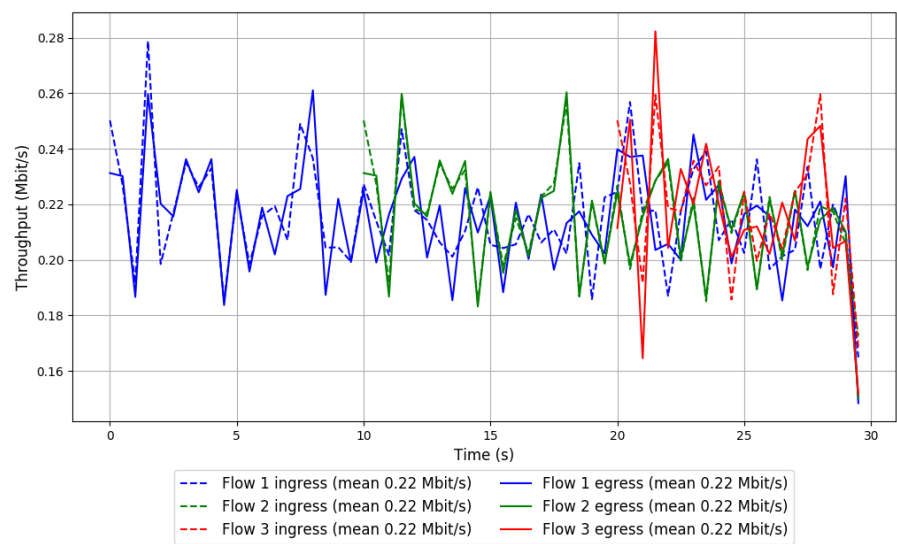


```
Run 2: Statistics of SCReAM

Start at: 2018-01-09 20:24:26
End at: 2018-01-09 20:24:56

# Below is generated by plot.py at 2018-01-10 01:24:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 51.152 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.179 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.896 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.825 ms
Loss rate: 1.11%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-01-09 20:37:55

End at: 2018-01-09 20:38:25

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.951 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.922 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.976 ms

Loss rate: 0.42%

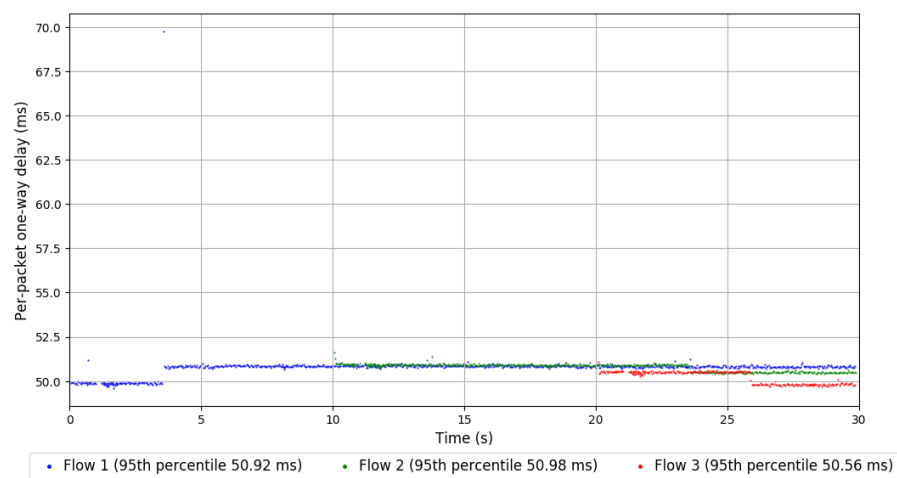
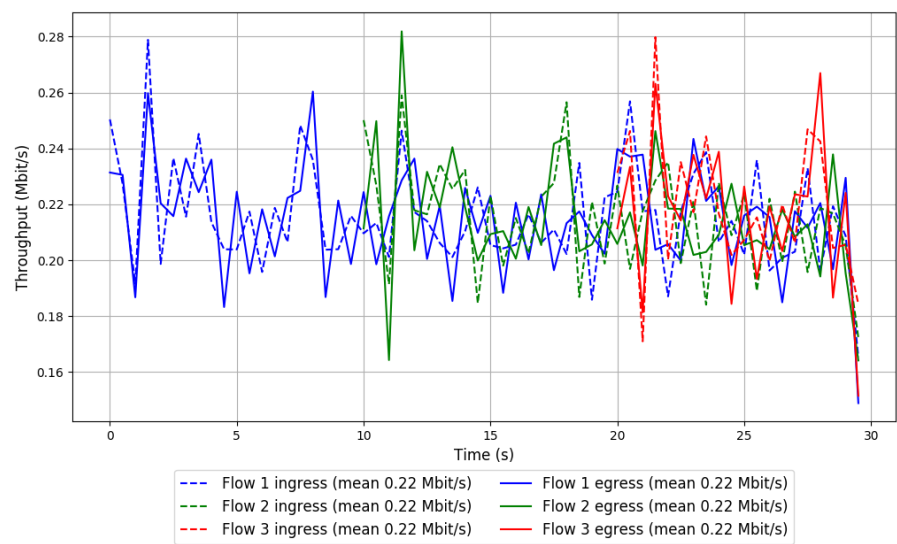
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.560 ms

Loss rate: 1.11%

Run 3: Report of SReAM — Data Link

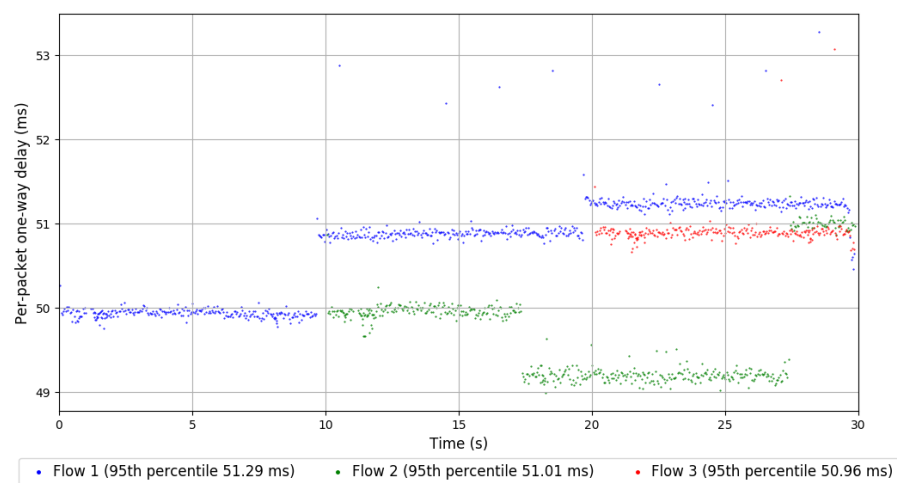
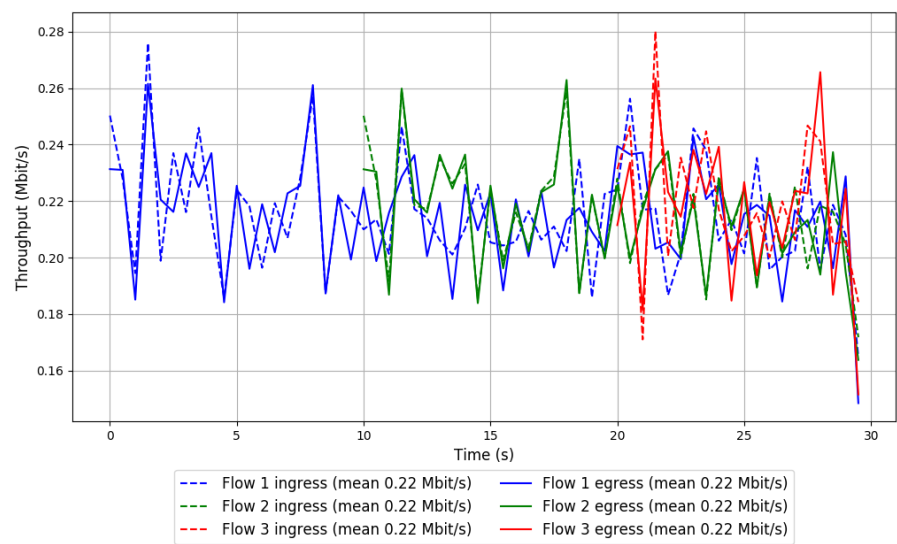


```
Run 4: Statistics of SReAM

Start at: 2018-01-09 20:52:11
End at: 2018-01-09 20:52:41

# Below is generated by plot.py at 2018-01-10 01:24:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 51.260 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.288 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.010 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.961 ms
Loss rate: 1.11%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-01-09 21:06:16

End at: 2018-01-09 21:06:46

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.977 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.002 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.847 ms

Loss rate: 0.42%

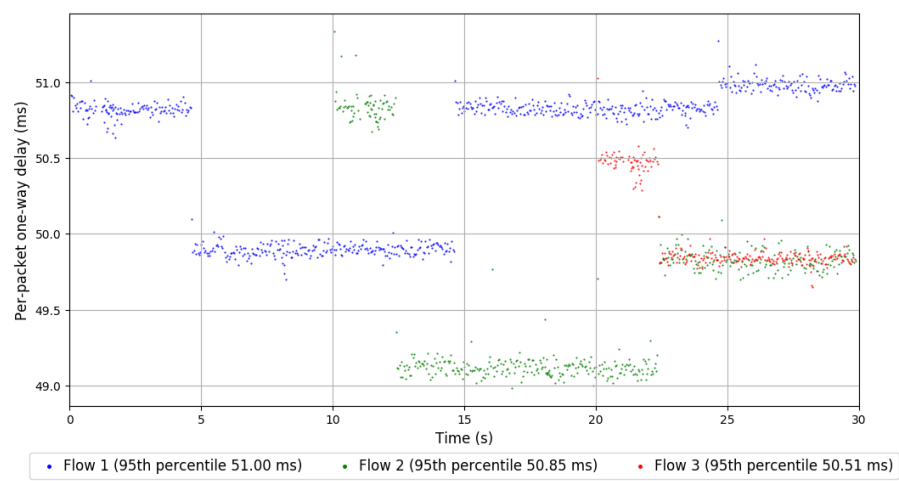
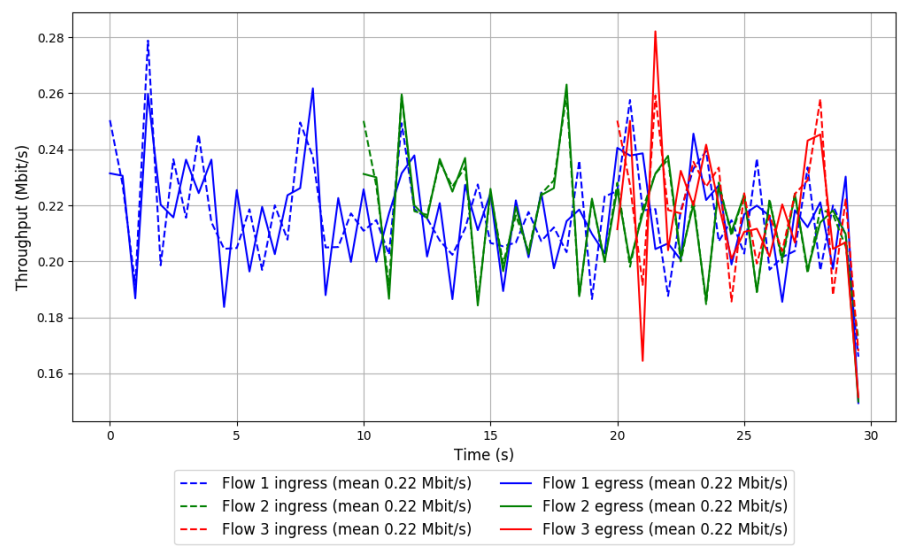
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.508 ms

Loss rate: 1.11%

Run 5: Report of SReAM — Data Link

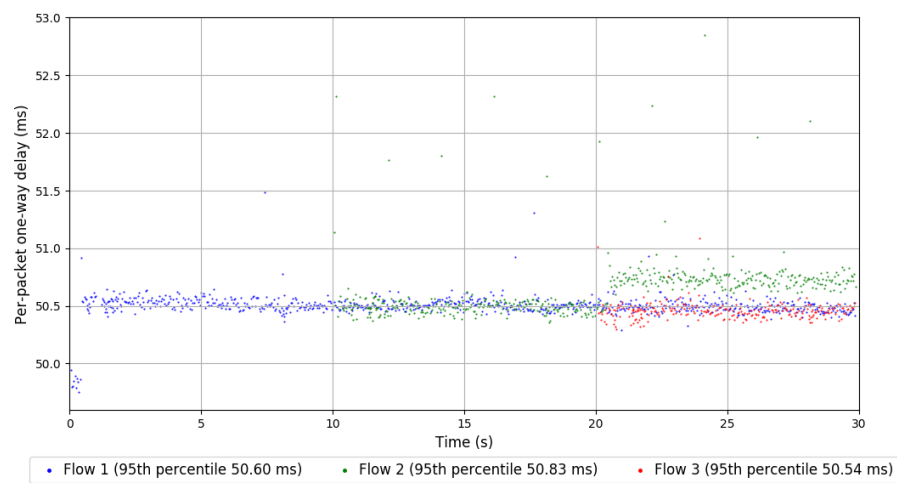
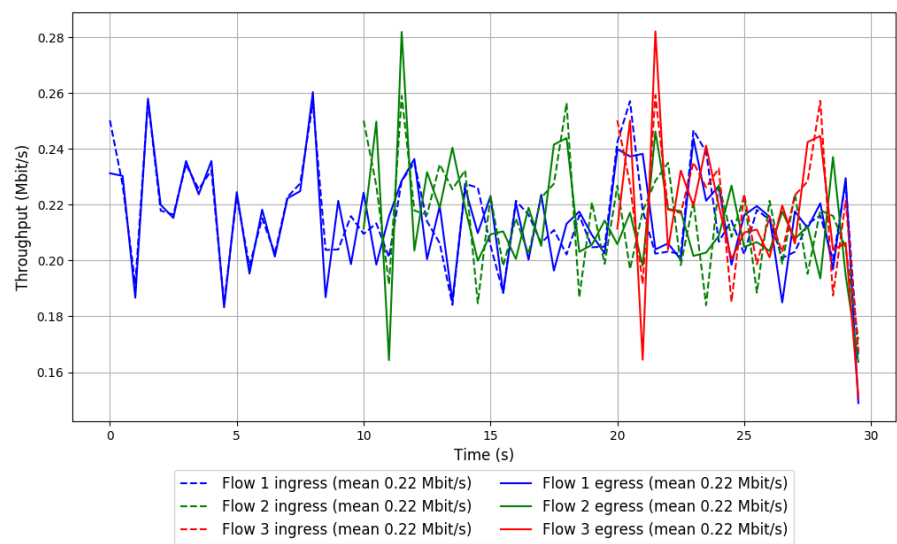


```
Run 6: Statistics of SCReAM

Start at: 2018-01-09 21:20:38
End at: 2018-01-09 21:21:08

# Below is generated by plot.py at 2018-01-10 01:24:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.767 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.597 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.825 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.538 ms
Loss rate: 1.11%
```

Run 6: Report of SReAM — Data Link

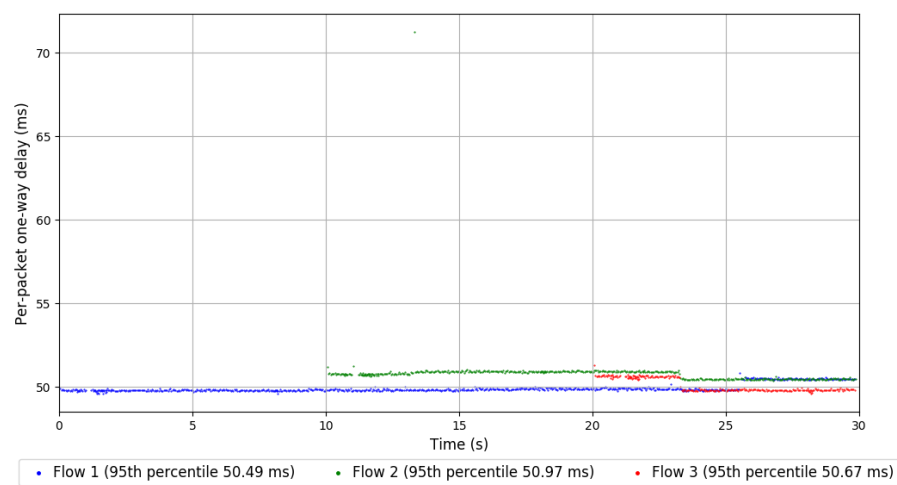
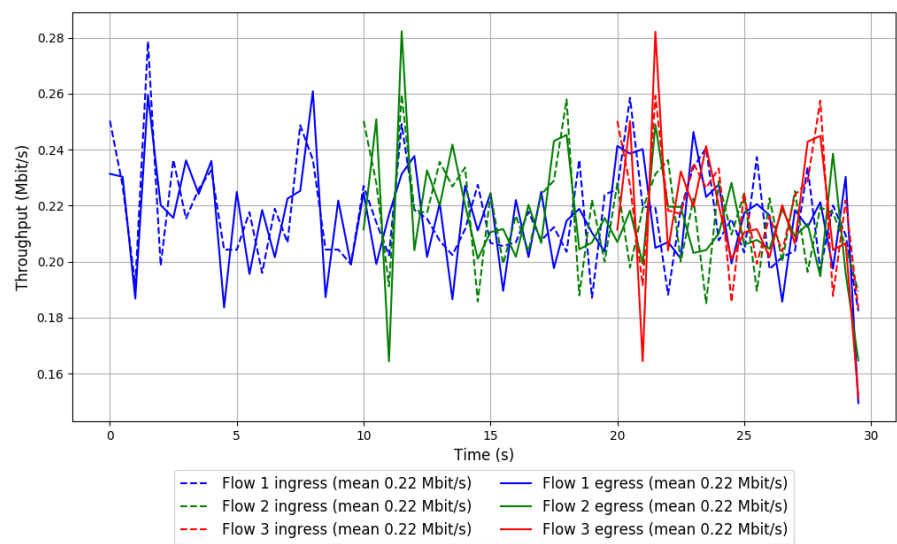


```
Run 7: Statistics of SReAM

Start at: 2018-01-09 21:34:55
End at: 2018-01-09 21:35:25

# Below is generated by plot.py at 2018-01-10 01:24:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.934 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.488 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.968 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.674 ms
Loss rate: 1.46%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-09 21:49:15

End at: 2018-01-09 21:49:45

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.872 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.625 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.42%

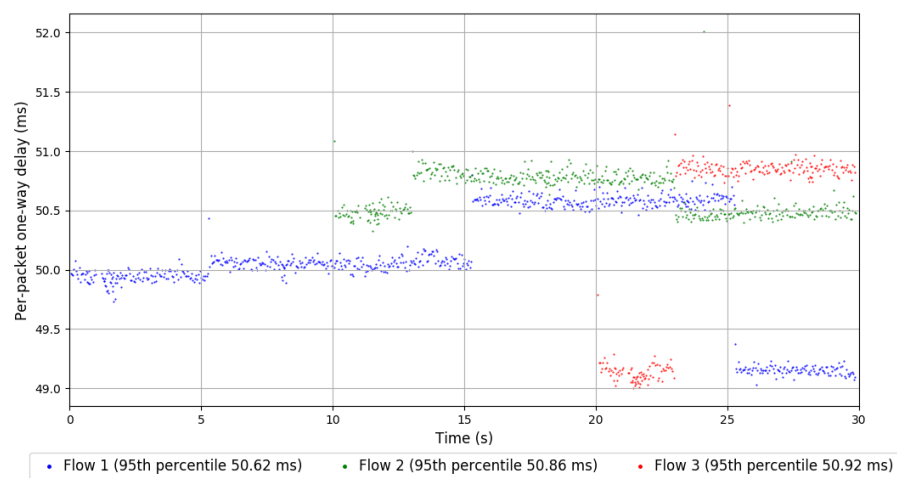
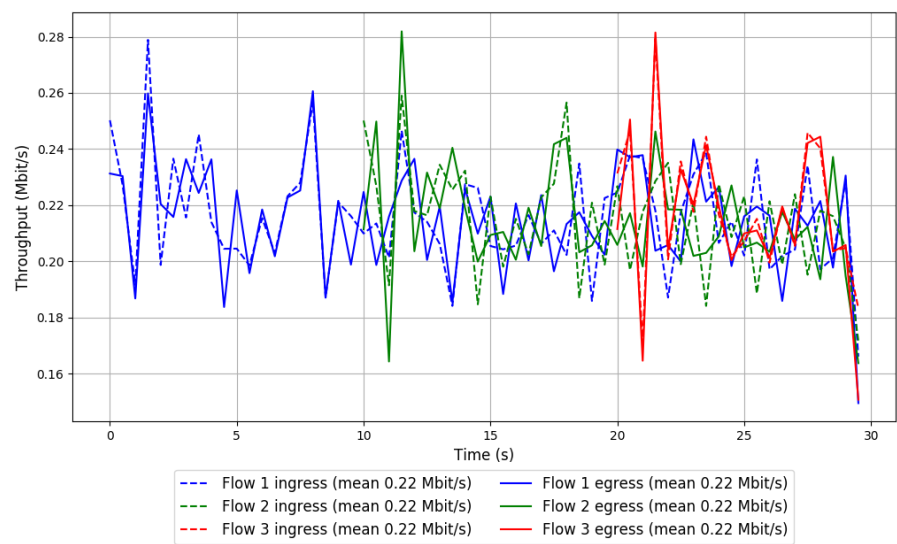
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 1.10%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

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

End at: 2018-01-09 22:03:06

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.45%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.029 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.612 ms

Loss rate: 0.43%

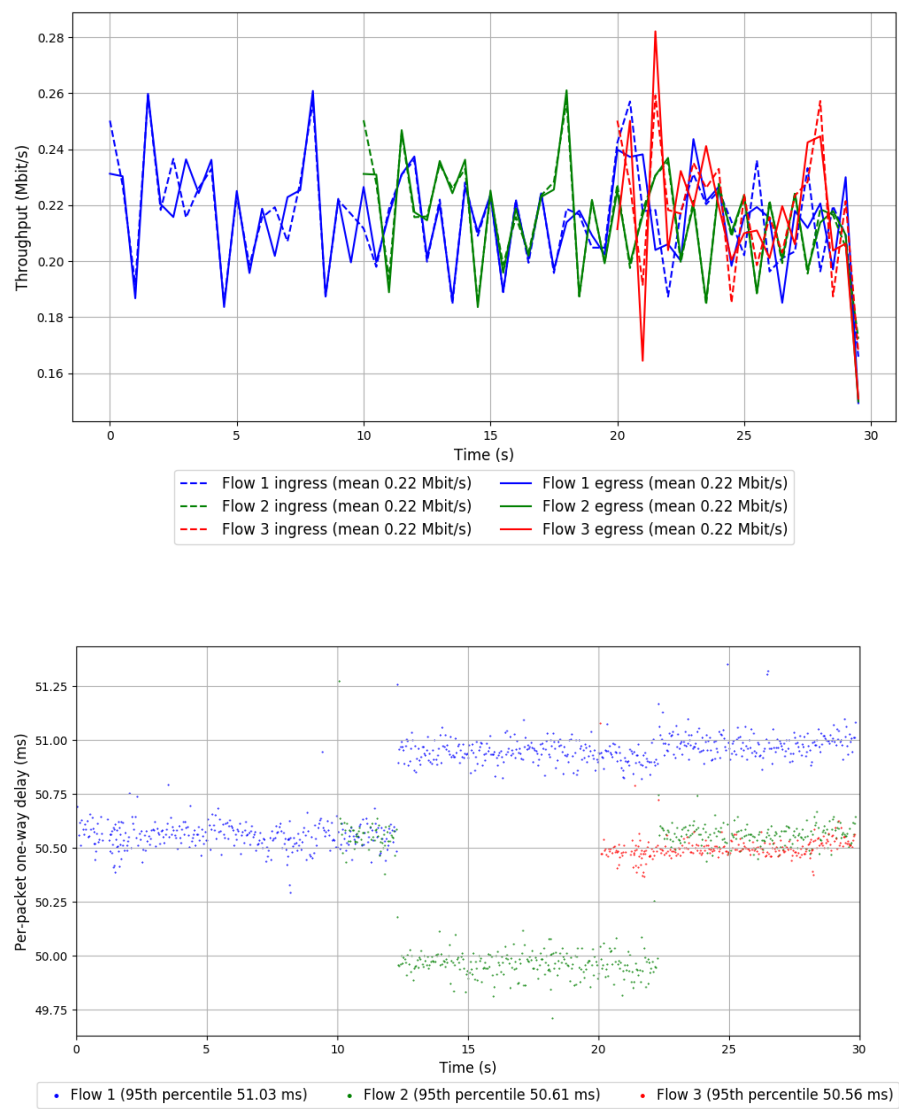
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.564 ms

Loss rate: 1.11%

Run 9: Report of SReAM — Data Link

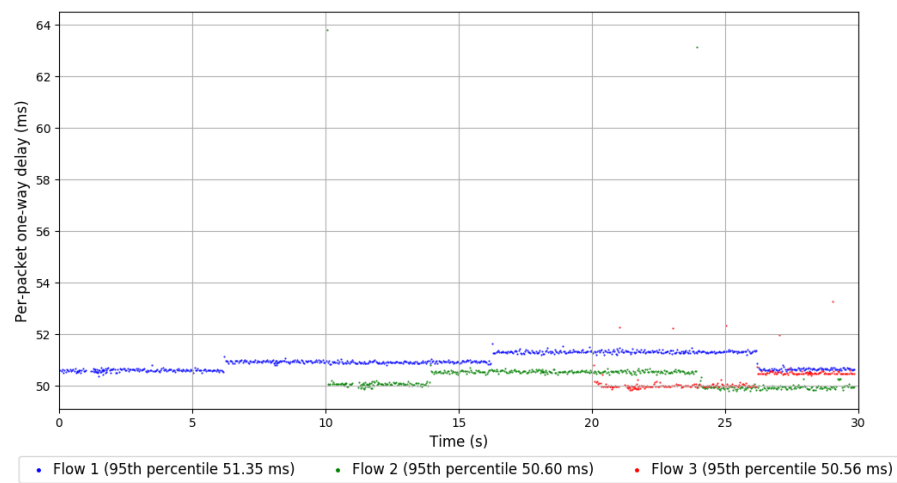
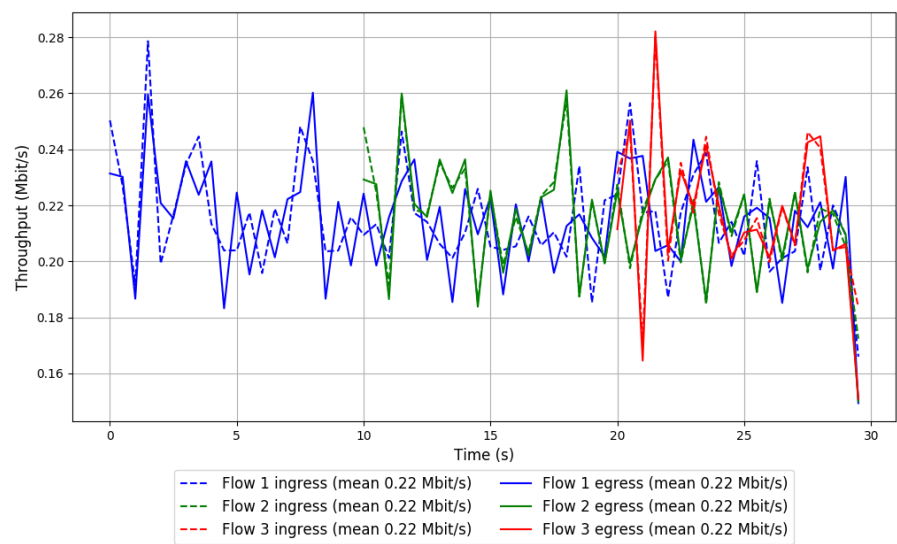


```
Run 10: Statistics of SReAM

Start at: 2018-01-09 22:16:45
End at: 2018-01-09 22:17:15

# Below is generated by plot.py at 2018-01-10 01:24:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 51.331 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.354 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.596 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.556 ms
Loss rate: 1.11%
```

Run 10: Report of SReAM — Data Link

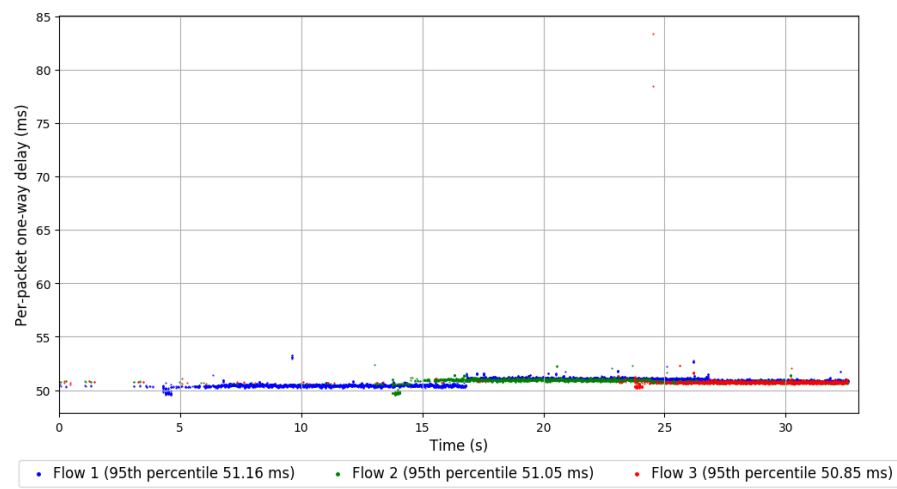
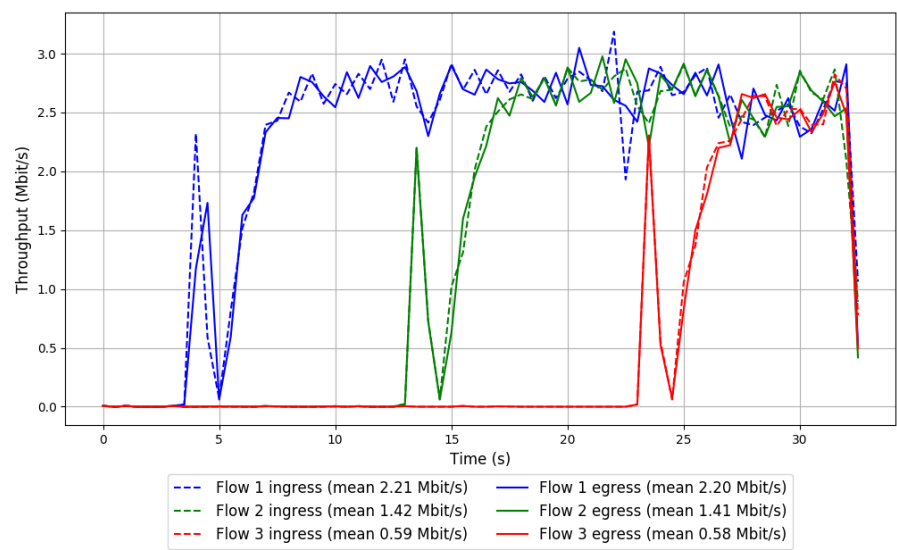


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-09 20:11:57
End at: 2018-01-09 20:12:27

# Below is generated by plot.py at 2018-01-10 01:24:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.19 Mbit/s
95th percentile per-packet one-way delay: 51.129 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 51.158 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 51.052 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 50.849 ms
Loss rate: 2.03%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-09 20:26:12

End at: 2018-01-09 20:26:42

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 51.011 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 50.983 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 51.040 ms

Loss rate: 0.51%

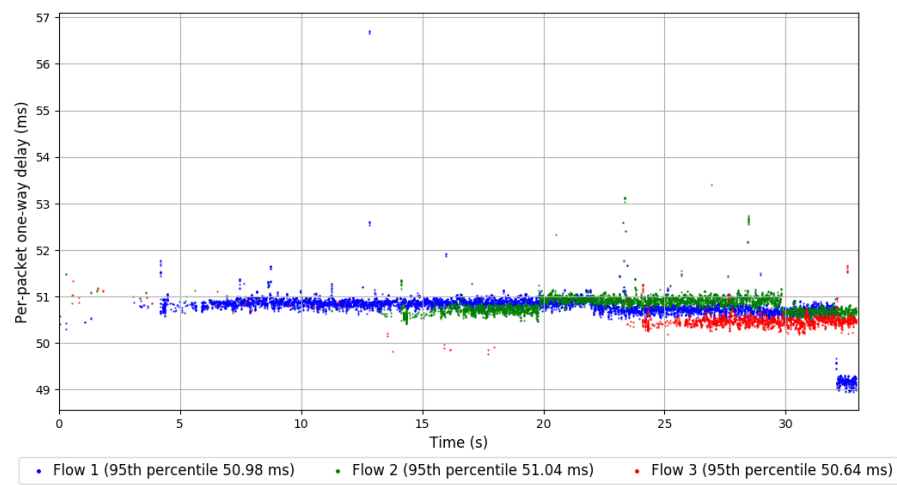
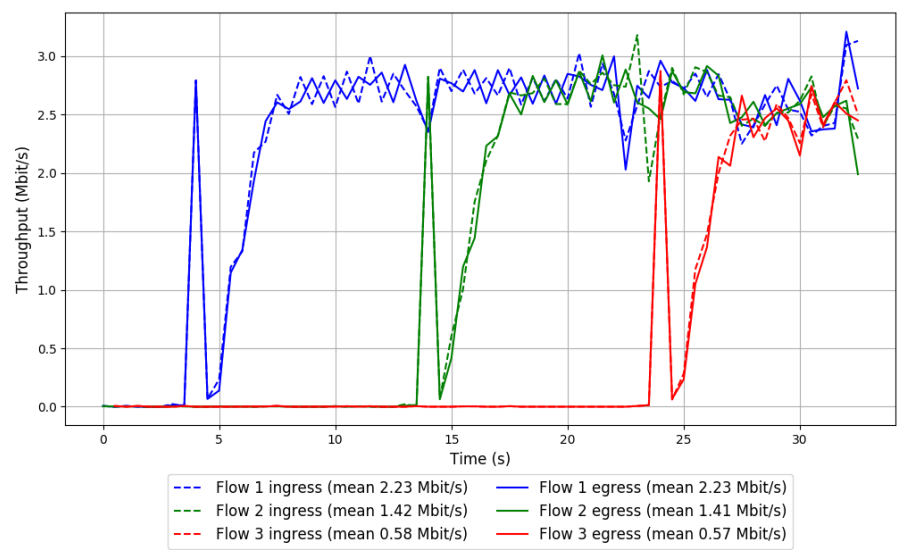
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 50.644 ms

Loss rate: 1.54%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-09 20:39:42

End at: 2018-01-09 20:40:12

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.14 Mbit/s

95th percentile per-packet one-way delay: 51.111 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 51.033 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 51.144 ms

Loss rate: 0.47%

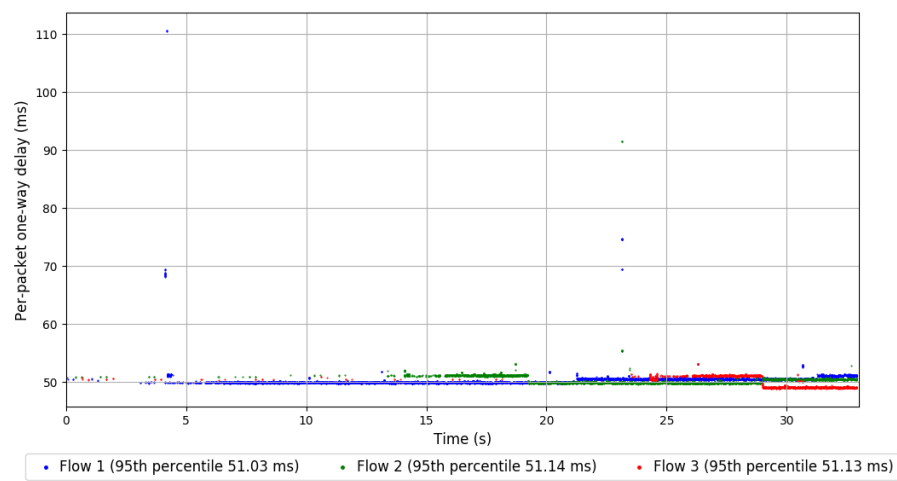
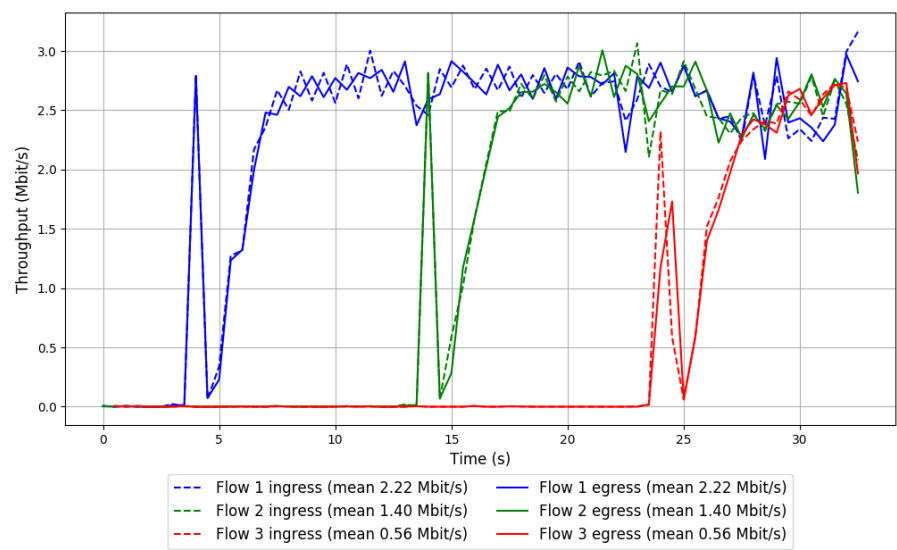
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 51.131 ms

Loss rate: 1.38%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-09 20:53:57

End at: 2018-01-09 20:54:27

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 50.989 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 51.017 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 50.567 ms

Loss rate: 0.52%

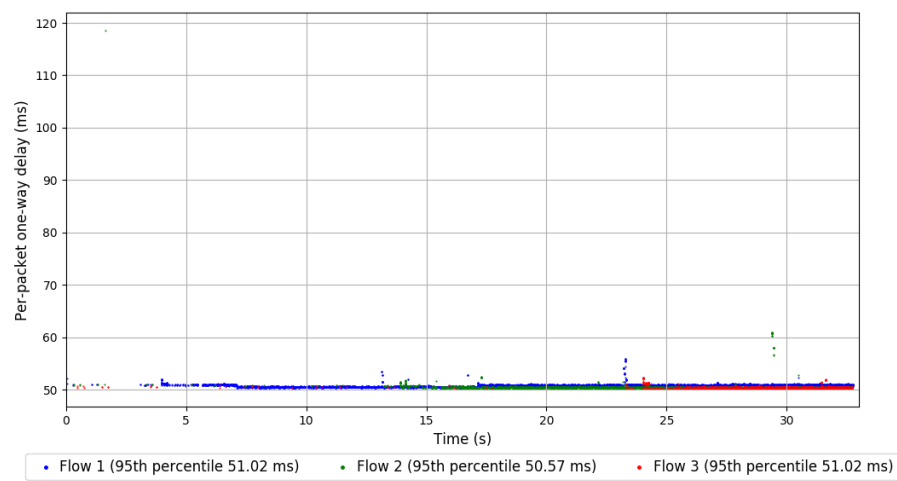
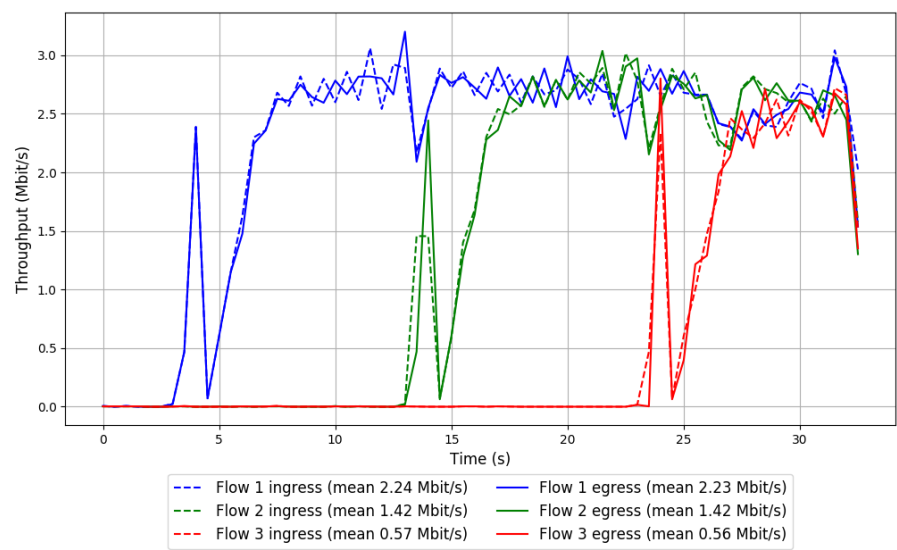
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 51.020 ms

Loss rate: 1.37%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-09 21:07:59

End at: 2018-01-09 21:08:29

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 50.751 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 50.779 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 1.42 Mbit/s

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

Loss rate: 0.50%

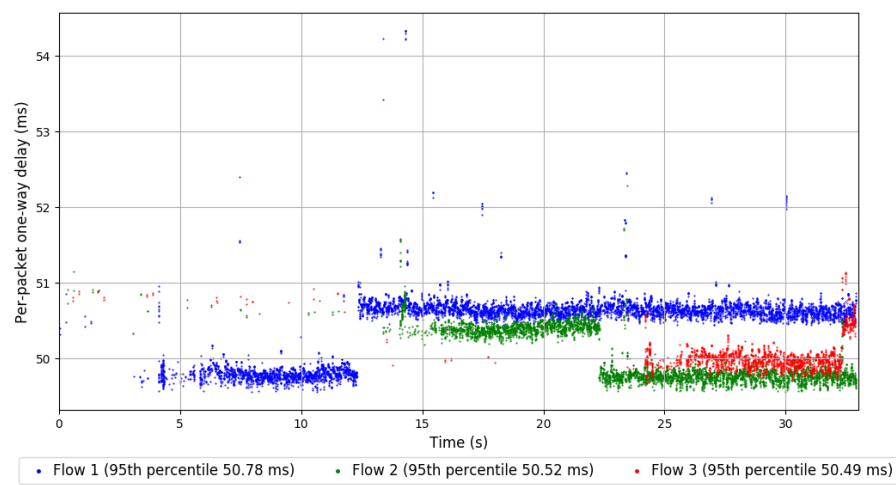
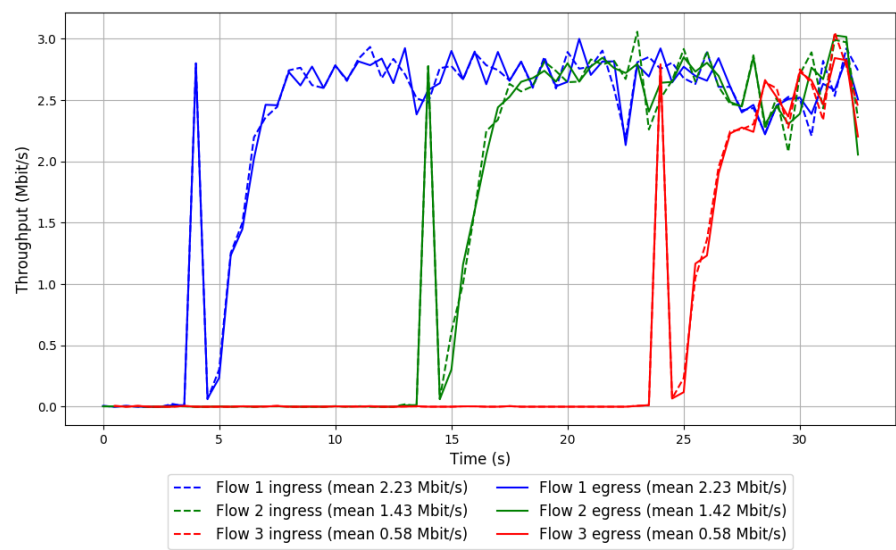
-- Flow 3:

Average throughput: 0.58 Mbit/s

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

Loss rate: 1.28%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-09 21:22:21

End at: 2018-01-09 21:22:51

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 51.129 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 51.153 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 50.909 ms

Loss rate: 0.77%

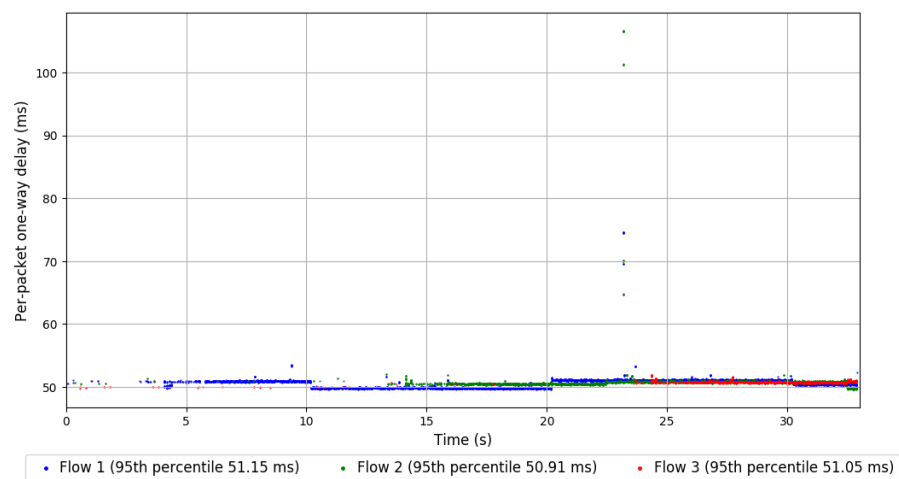
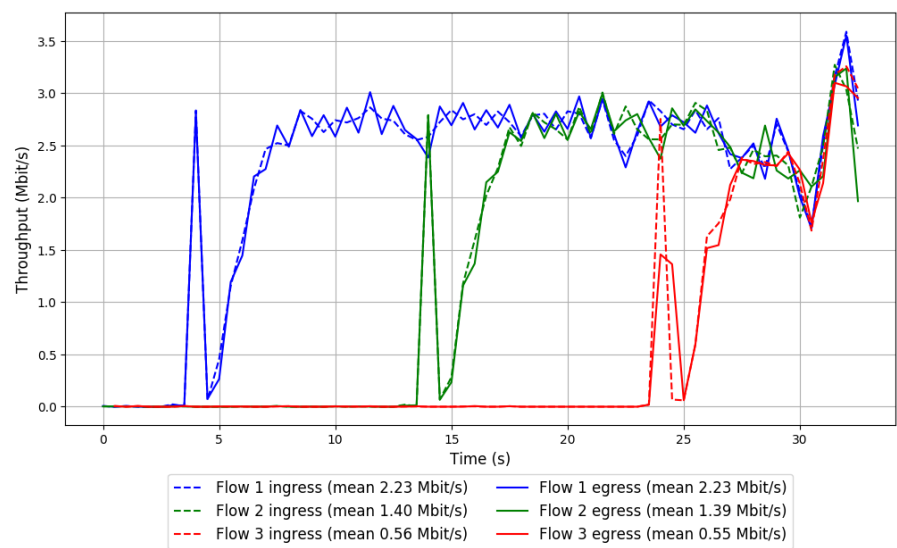
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 51.046 ms

Loss rate: 1.63%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-09 21:36:40

End at: 2018-01-09 21:37:10

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.19 Mbit/s

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

Loss rate: 0.63%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 50.856 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 50.748 ms

Loss rate: 0.73%

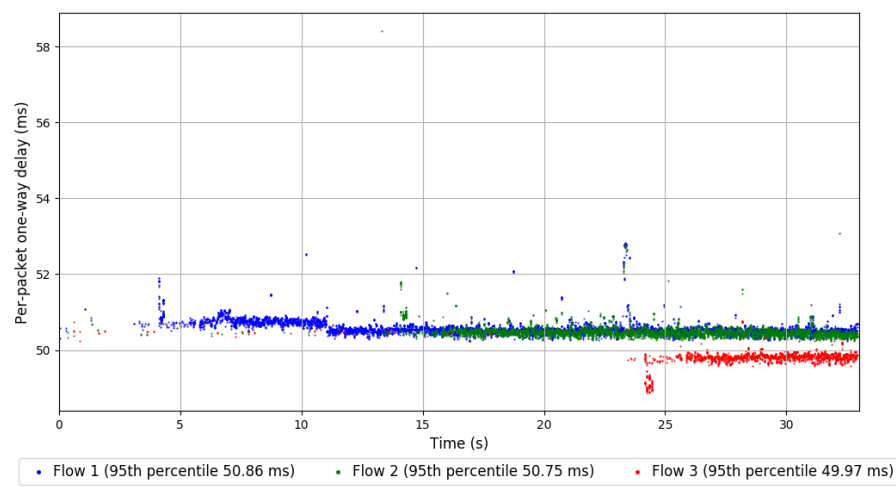
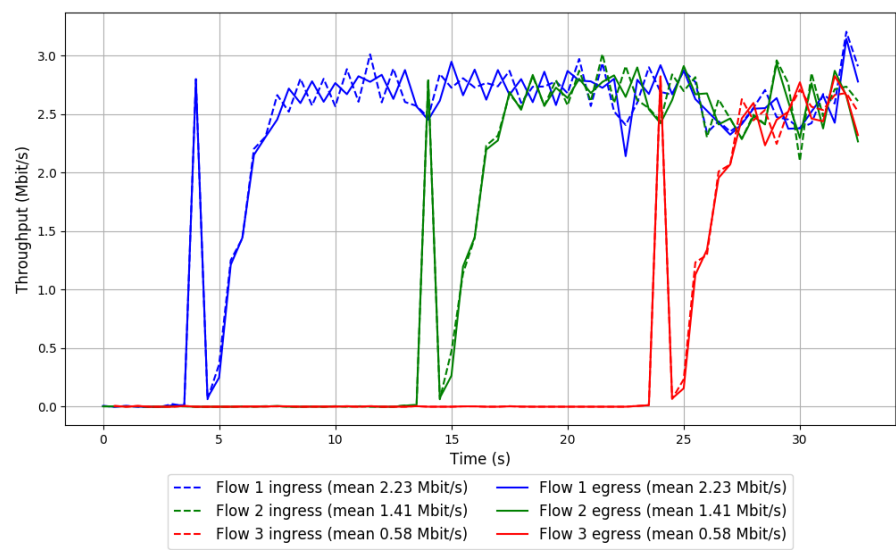
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 49.966 ms

Loss rate: 1.34%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-09 21:50:59

End at: 2018-01-09 21:51:29

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 51.076 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 51.103 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 50.749 ms

Loss rate: 0.76%

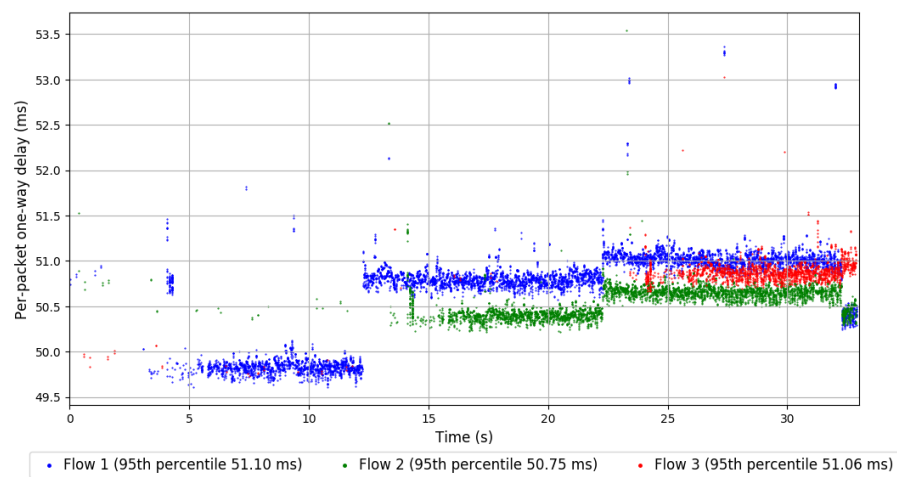
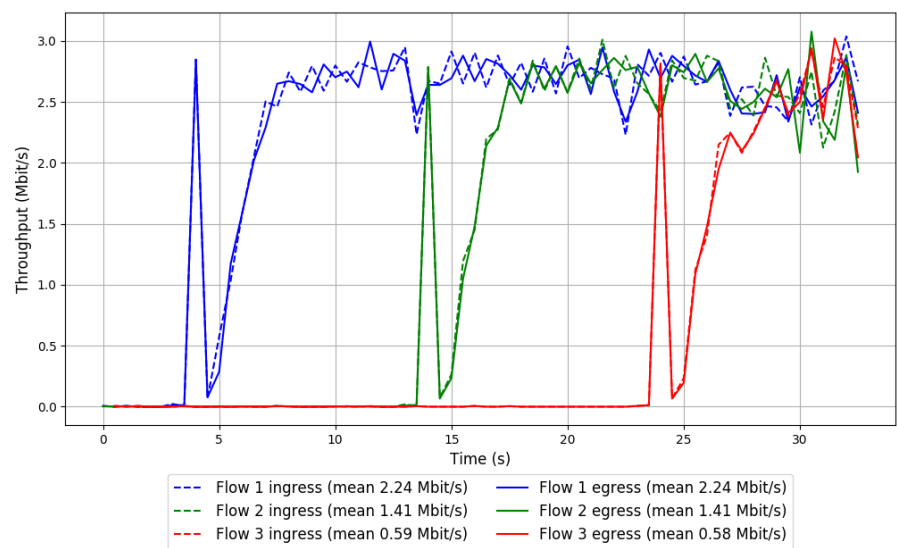
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 51.059 ms

Loss rate: 1.29%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-09 22:04:19

End at: 2018-01-09 22:04:49

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 50.899 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 50.128 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 50.946 ms

Loss rate: 0.62%

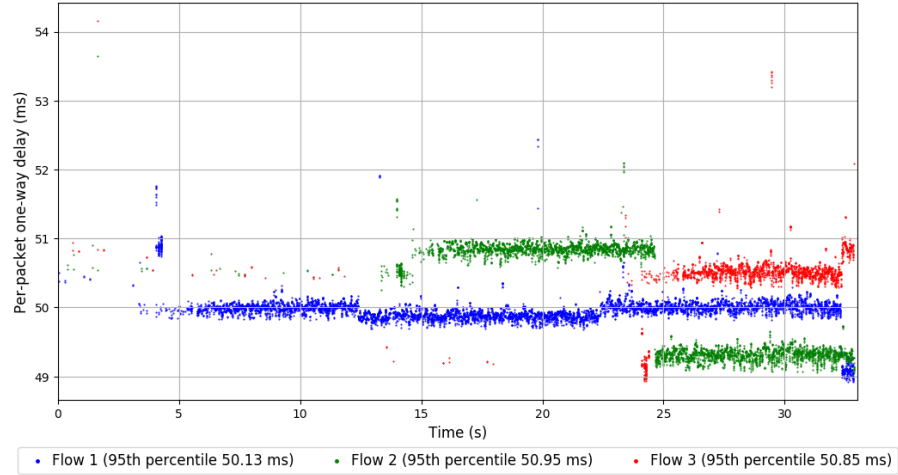
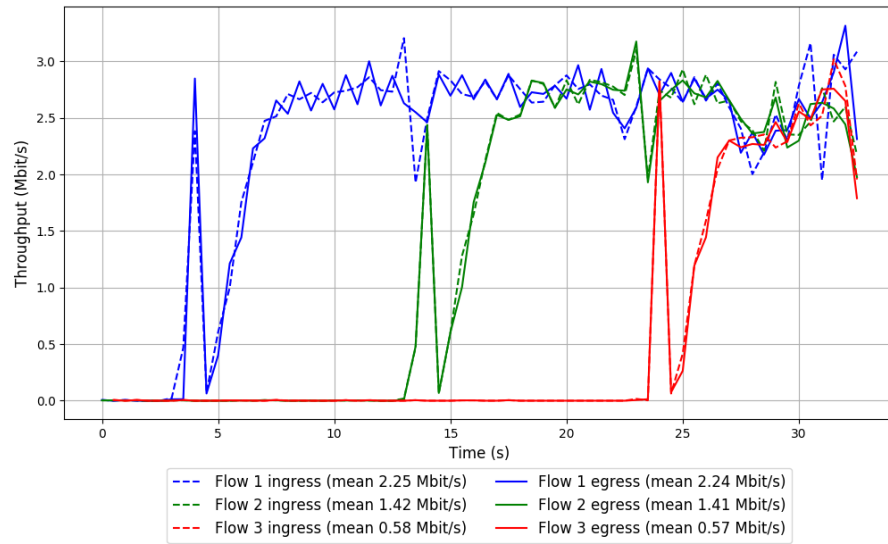
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 50.853 ms

Loss rate: 1.50%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-09 22:18:32

End at: 2018-01-09 22:19:02

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 51.068 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 51.064 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 51.066 ms

Loss rate: 0.50%

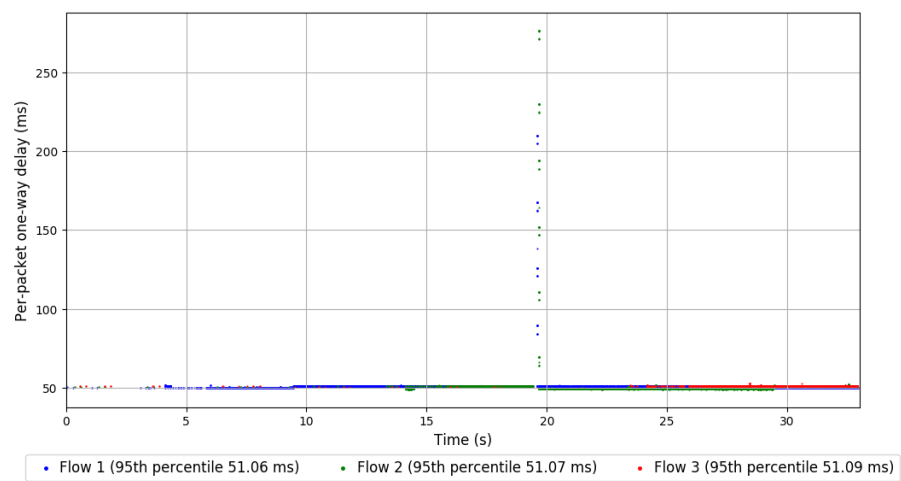
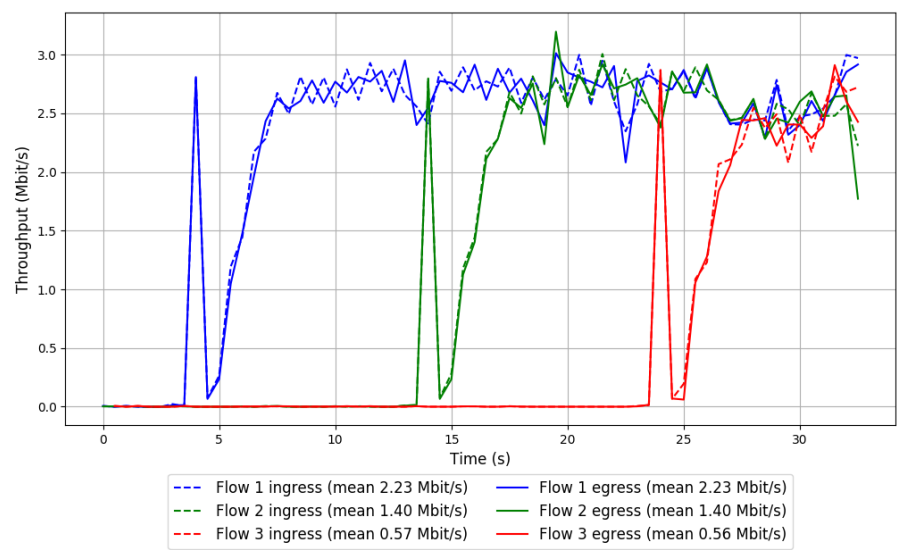
-- Flow 3:

Average throughput: 0.56 Mbit/s

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

Loss rate: 1.45%

Run 10: Report of WebRTC media — Data Link

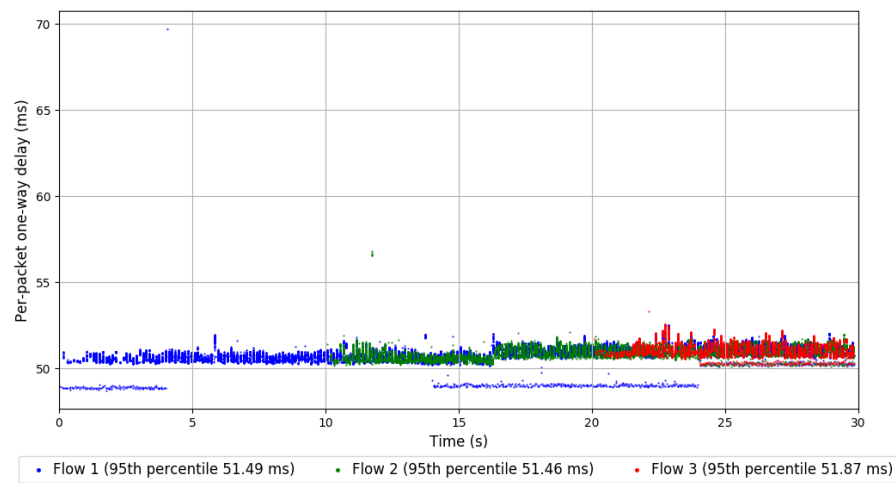
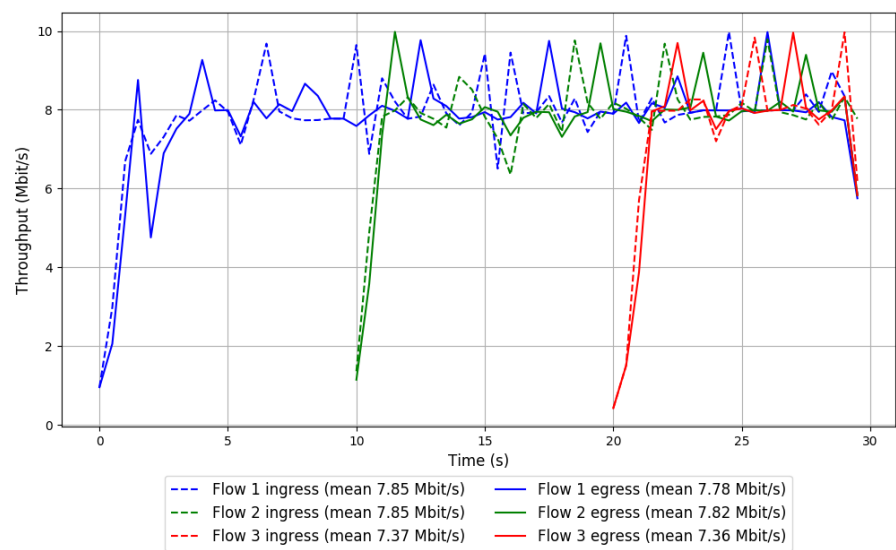


```
Run 1: Statistics of Sprout

Start at: 2018-01-09 20:05:14
End at: 2018-01-09 20:05:44

# Below is generated by plot.py at 2018-01-10 01:24:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.37 Mbit/s
95th percentile per-packet one-way delay: 51.531 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 7.78 Mbit/s
95th percentile per-packet one-way delay: 51.487 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 7.82 Mbit/s
95th percentile per-packet one-way delay: 51.460 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 7.36 Mbit/s
95th percentile per-packet one-way delay: 51.868 ms
Loss rate: 1.37%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-09 20:19:31

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

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.61 Mbit/s

95th percentile per-packet one-way delay: 51.288 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 7.93 Mbit/s

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

Loss rate: 0.35%

-- Flow 2:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 51.336 ms

Loss rate: 0.60%

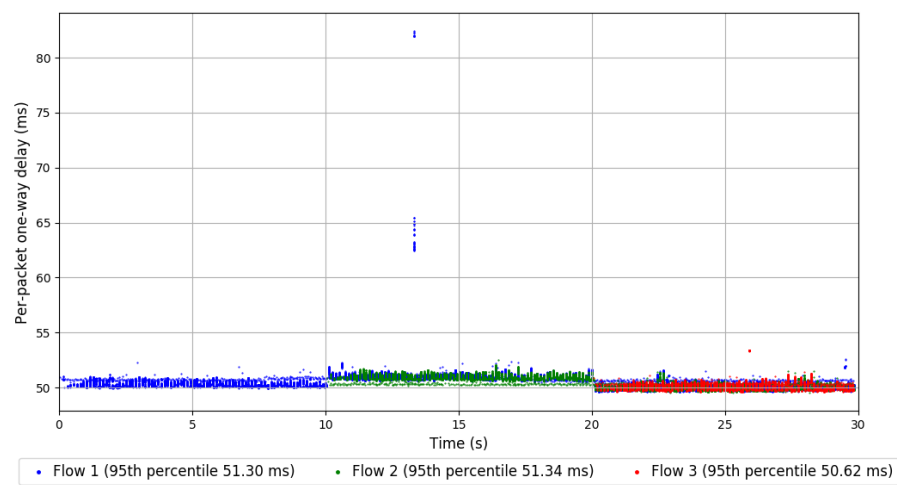
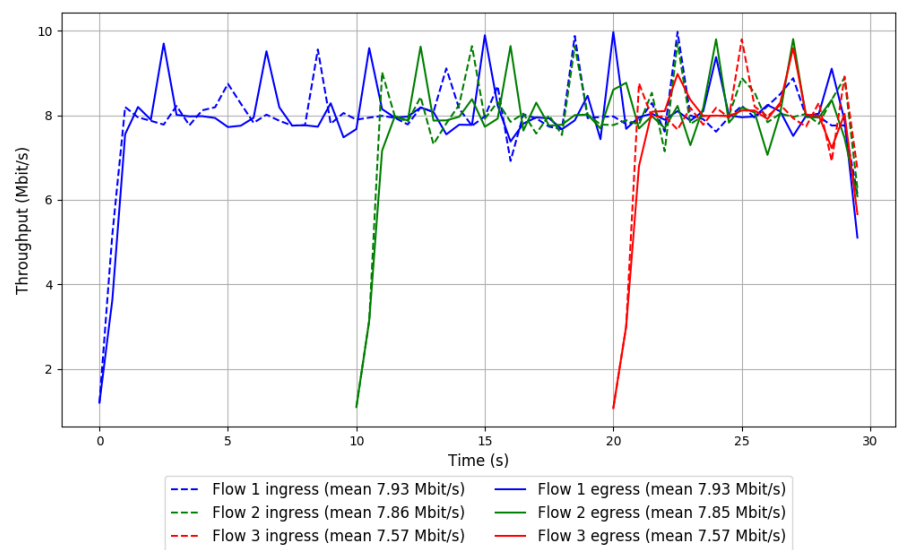
-- Flow 3:

Average throughput: 7.57 Mbit/s

95th percentile per-packet one-way delay: 50.623 ms

Loss rate: 1.31%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-09 20:33:02

End at: 2018-01-09 20:33:32

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.52 Mbit/s

95th percentile per-packet one-way delay: 51.460 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 51.514 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 7.70 Mbit/s

95th percentile per-packet one-way delay: 51.267 ms

Loss rate: 0.56%

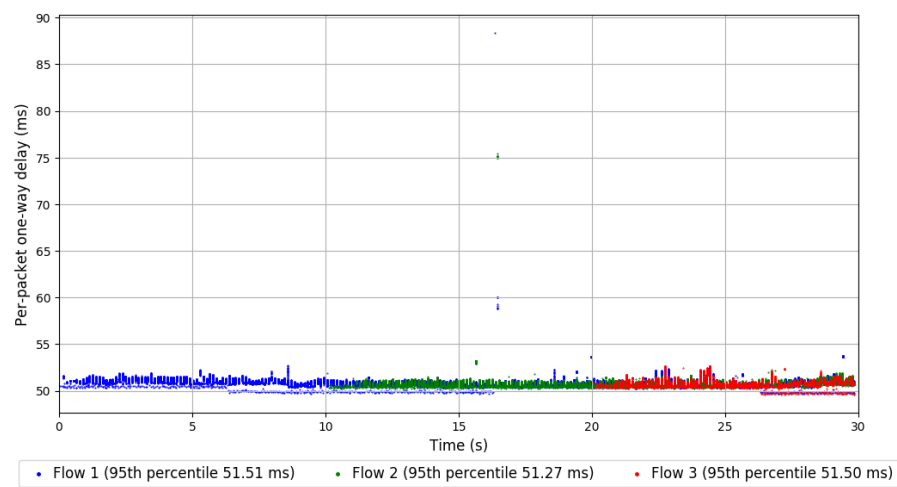
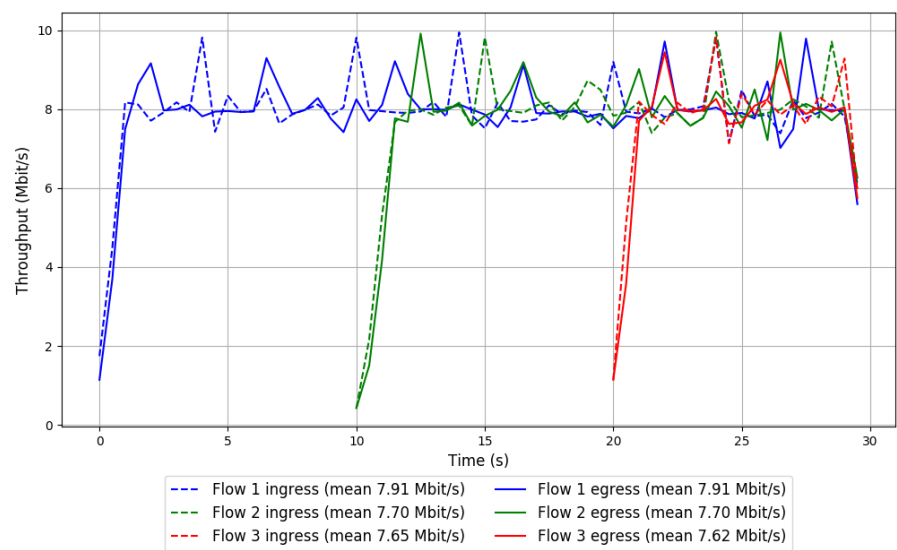
-- Flow 3:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 51.497 ms

Loss rate: 1.23%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-09 20:47:19

End at: 2018-01-09 20:47:49

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.60 Mbit/s

95th percentile per-packet one-way delay: 51.779 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 51.804 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 51.779 ms

Loss rate: 0.95%

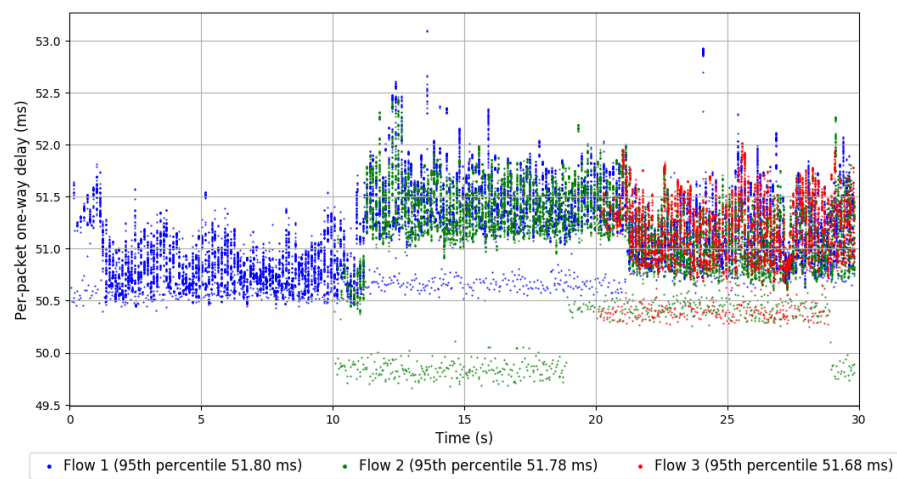
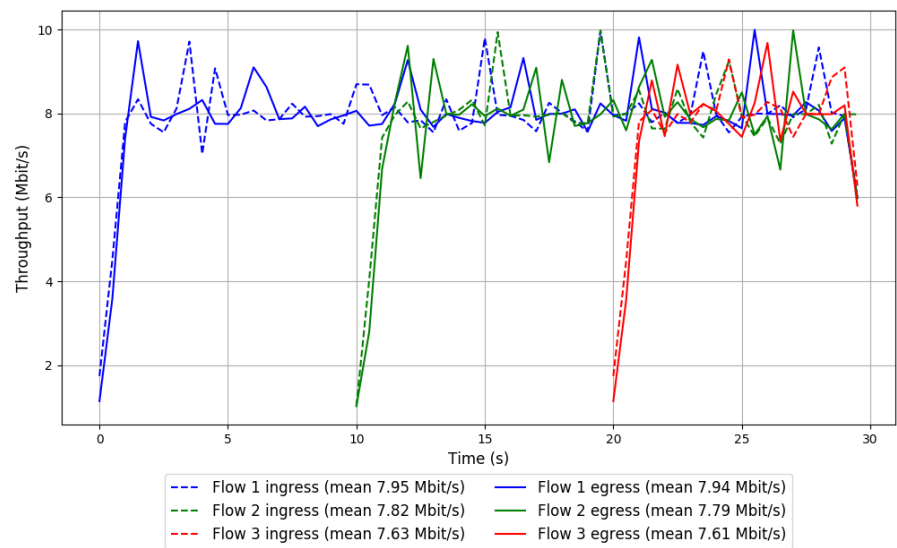
-- Flow 3:

Average throughput: 7.61 Mbit/s

95th percentile per-packet one-way delay: 51.677 ms

Loss rate: 1.50%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

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

End at: 2018-01-09 21:01:51

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.53 Mbit/s

95th percentile per-packet one-way delay: 51.732 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 7.94 Mbit/s

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

Loss rate: 0.45%

-- Flow 2:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 51.800 ms

Loss rate: 0.58%

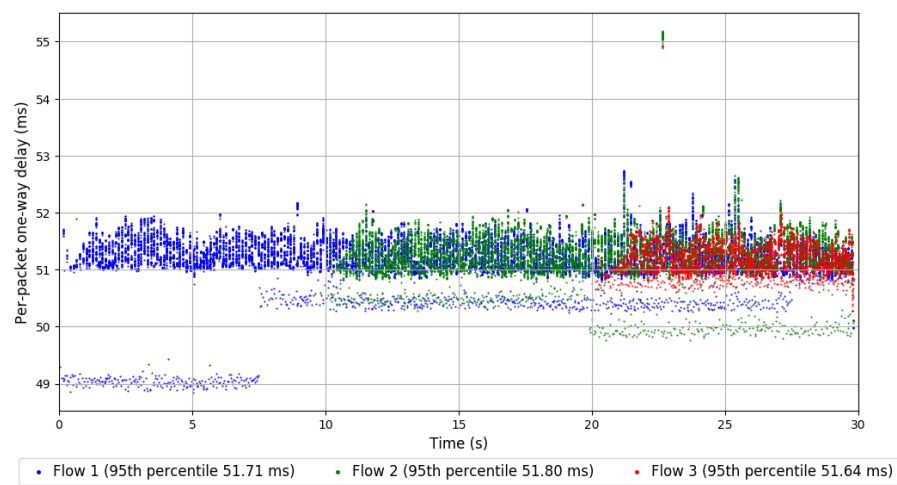
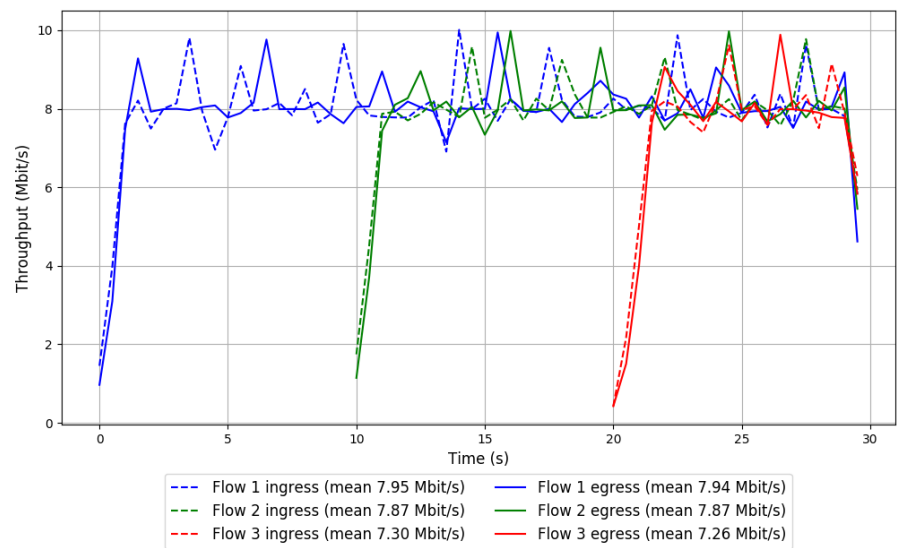
-- Flow 3:

Average throughput: 7.26 Mbit/s

95th percentile per-packet one-way delay: 51.644 ms

Loss rate: 1.35%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-09 21:15:40

End at: 2018-01-09 21:16:10

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.31 Mbit/s

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

Loss rate: 1.07%

-- Flow 1:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 51.269 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 7.93 Mbit/s

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

Loss rate: 0.75%

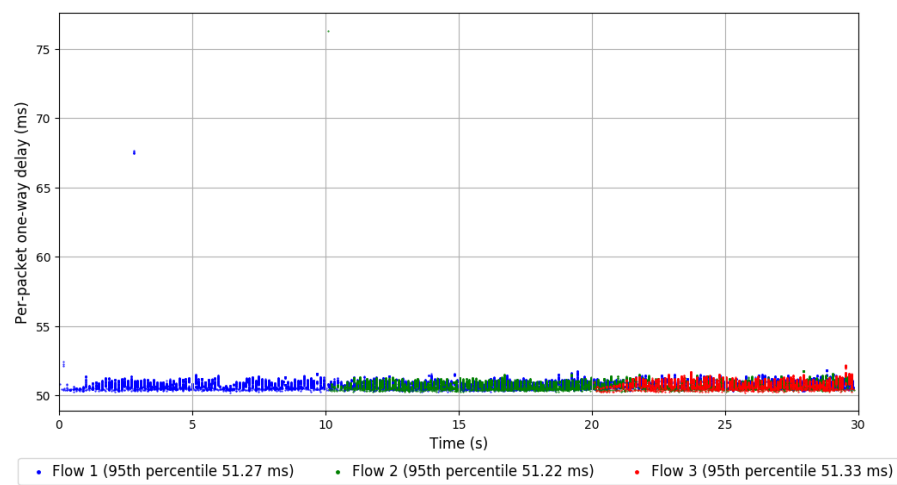
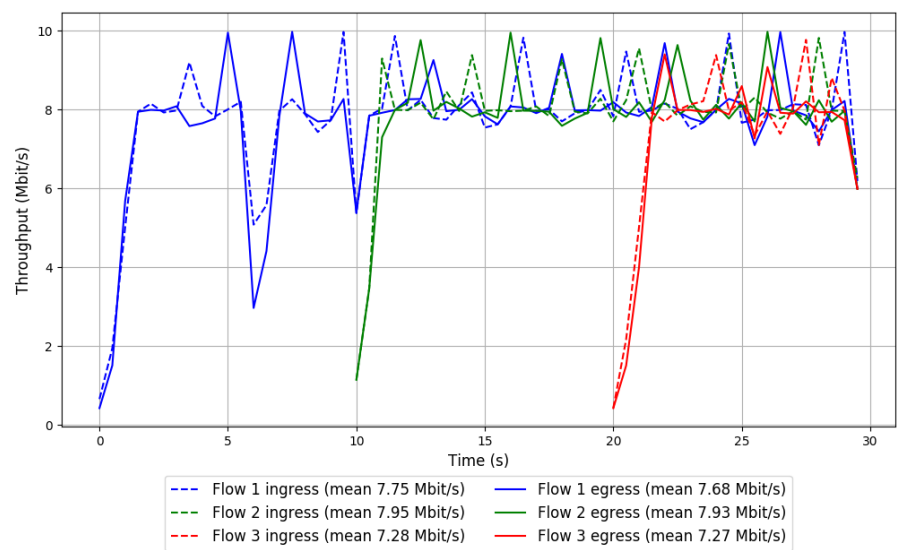
-- Flow 3:

Average throughput: 7.27 Mbit/s

95th percentile per-packet one-way delay: 51.334 ms

Loss rate: 1.39%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-09 21:30:02

End at: 2018-01-09 21:30:32

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.39 Mbit/s

95th percentile per-packet one-way delay: 51.764 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 51.780 ms

Loss rate: 1.15%

-- Flow 2:

Average throughput: 7.66 Mbit/s

95th percentile per-packet one-way delay: 51.753 ms

Loss rate: 1.24%

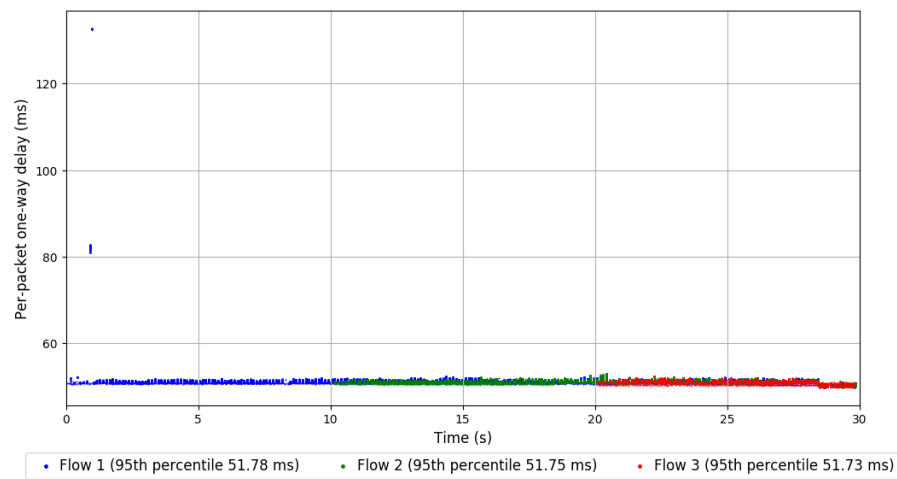
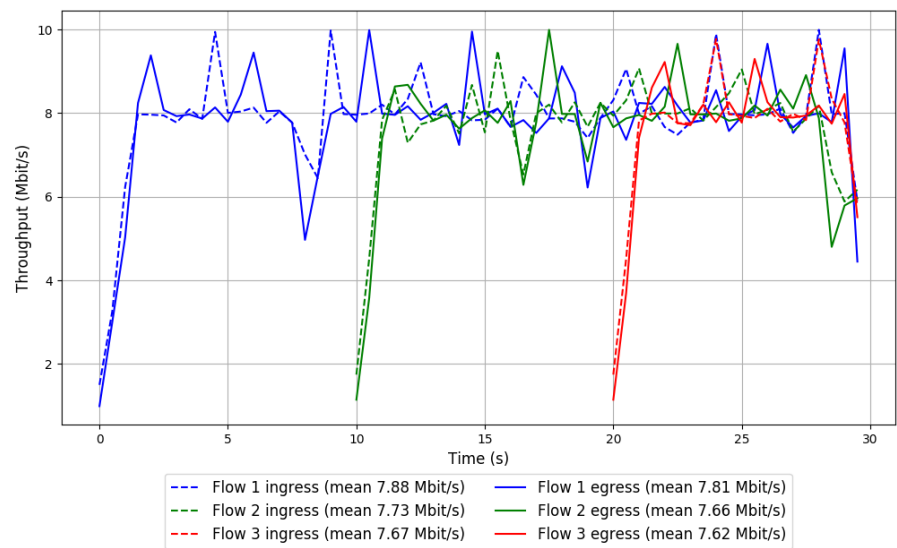
-- Flow 3:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 51.726 ms

Loss rate: 1.32%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-09 21:44:17

End at: 2018-01-09 21:44:47

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.39 Mbit/s

95th percentile per-packet one-way delay: 51.529 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 51.552 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 51.506 ms

Loss rate: 0.67%

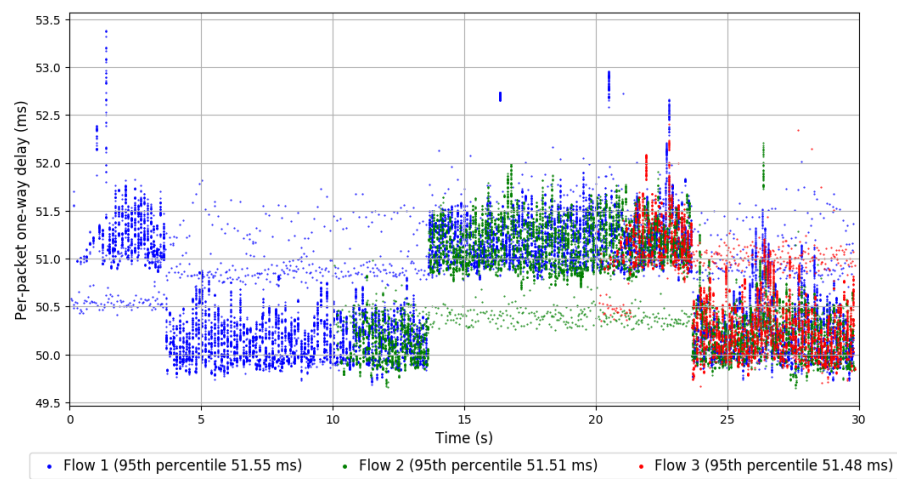
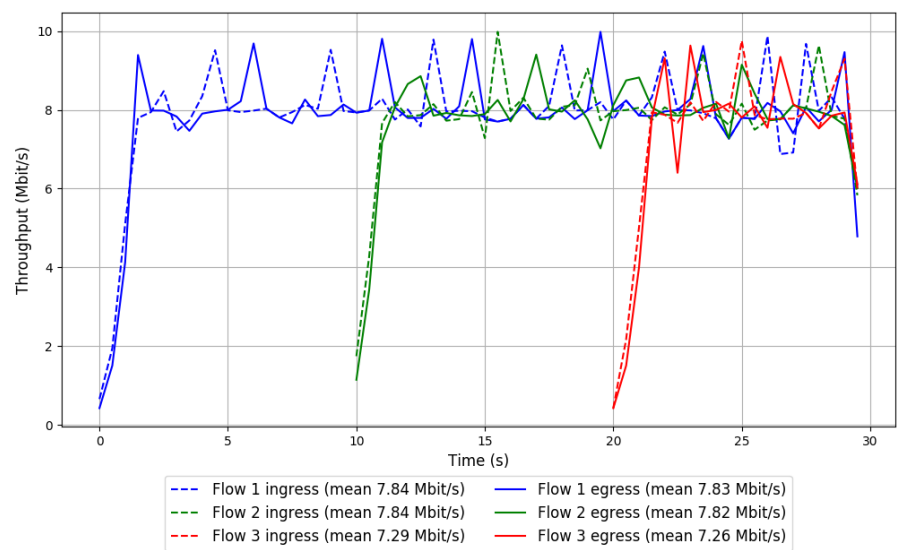
-- Flow 3:

Average throughput: 7.26 Mbit/s

95th percentile per-packet one-way delay: 51.476 ms

Loss rate: 1.29%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-09 21:57:39

End at: 2018-01-09 21:58:09

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.50 Mbit/s

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

Loss rate: 1.17%

-- Flow 1:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 51.599 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 7.84 Mbit/s

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

Loss rate: 0.83%

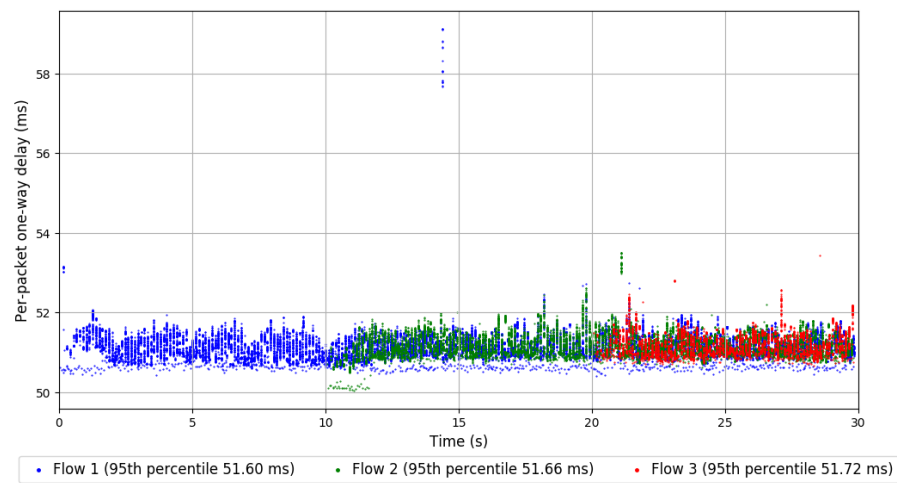
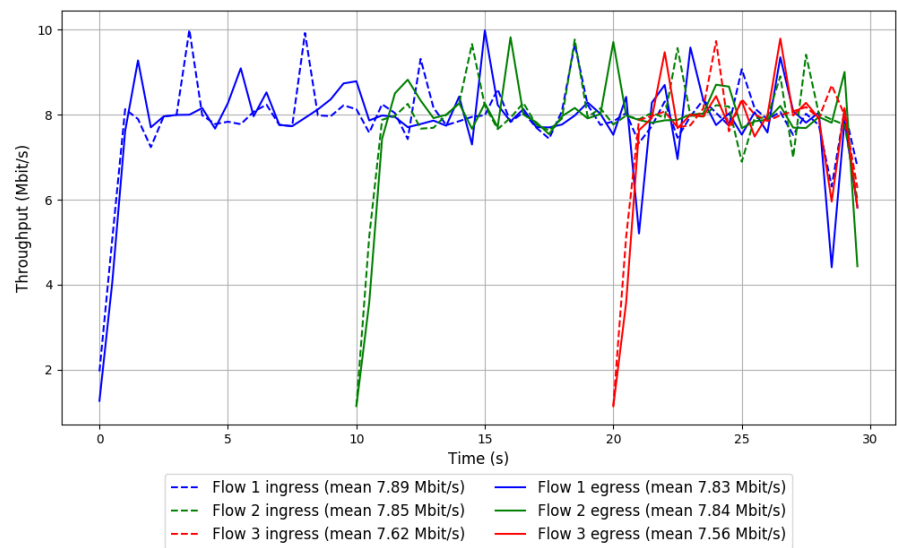
-- Flow 3:

Average throughput: 7.56 Mbit/s

95th percentile per-packet one-way delay: 51.722 ms

Loss rate: 2.14%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-09 22:11:48

End at: 2018-01-09 22:12:18

Below is generated by plot.py at 2018-01-10 01:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.79 Mbit/s

95th percentile per-packet one-way delay: 51.446 ms

Loss rate: 1.59%

-- Flow 1:

Average throughput: 7.61 Mbit/s

95th percentile per-packet one-way delay: 51.529 ms

Loss rate: 1.73%

-- Flow 2:

Average throughput: 7.22 Mbit/s

95th percentile per-packet one-way delay: 51.358 ms

Loss rate: 1.48%

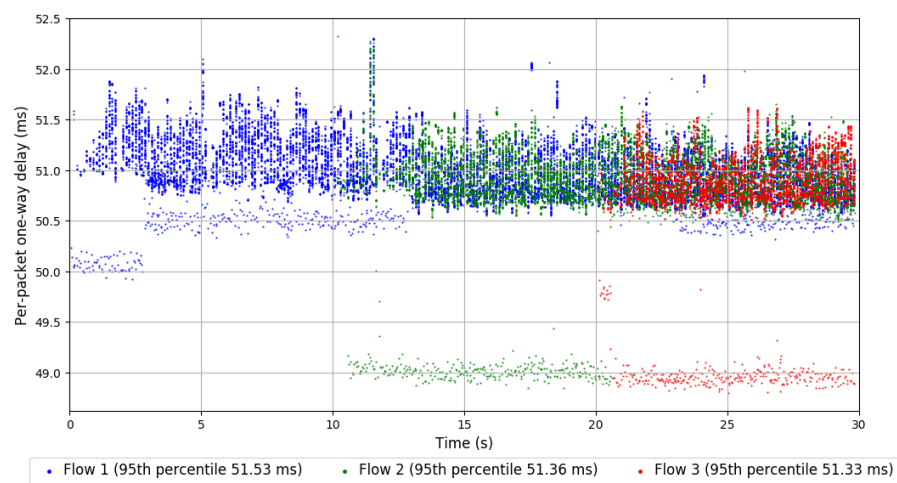
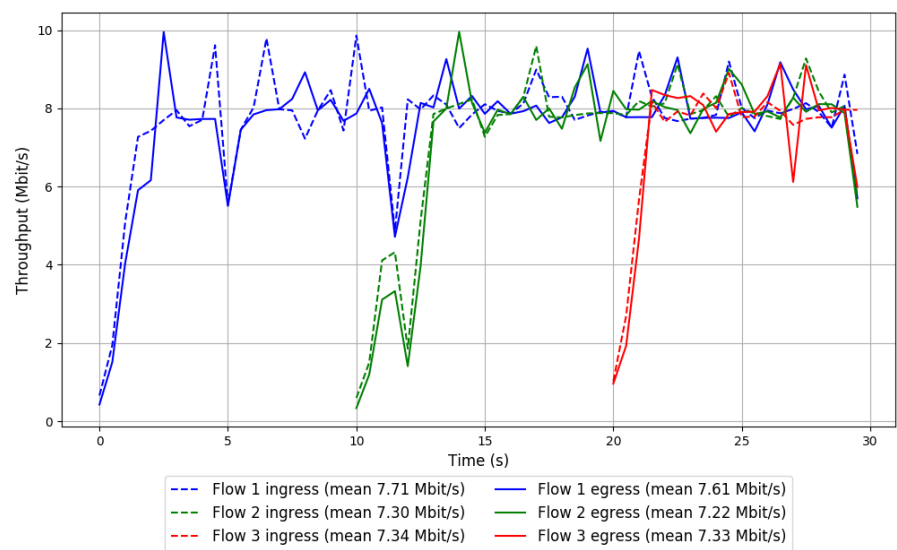
-- Flow 3:

Average throughput: 7.33 Mbit/s

95th percentile per-packet one-way delay: 51.325 ms

Loss rate: 1.36%

Run 10: Report of Sprout — Data Link

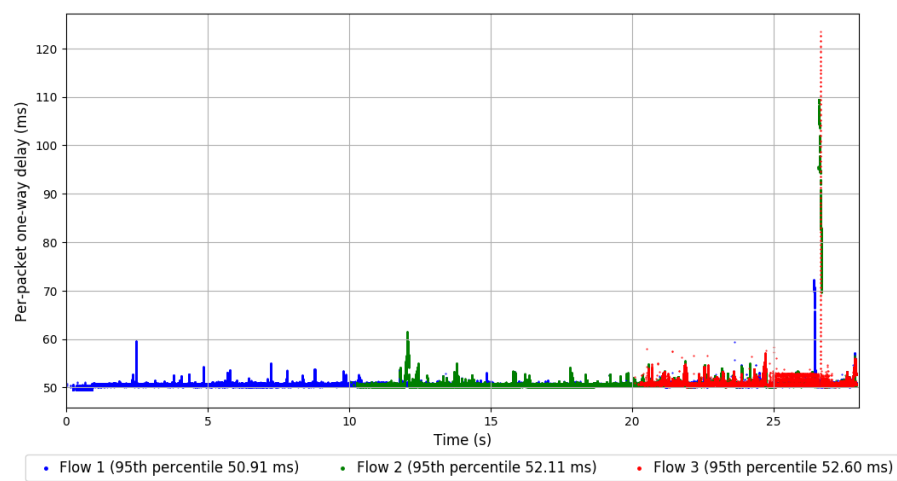
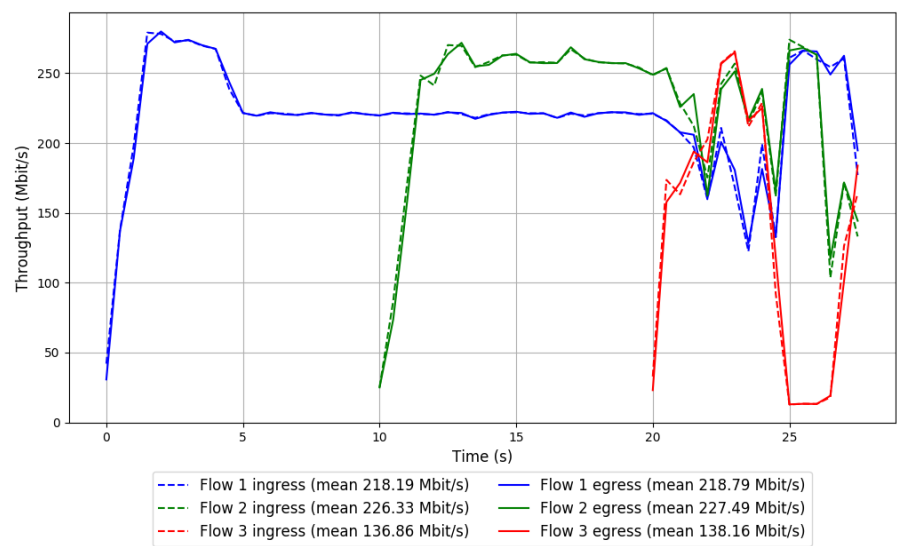


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-09 20:15:28
End at: 2018-01-09 20:15:58

# Below is generated by plot.py at 2018-01-10 01:31:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 403.24 Mbit/s
95th percentile per-packet one-way delay: 51.389 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 218.79 Mbit/s
95th percentile per-packet one-way delay: 50.906 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 227.49 Mbit/s
95th percentile per-packet one-way delay: 52.114 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 138.16 Mbit/s
95th percentile per-packet one-way delay: 52.605 ms
Loss rate: 0.26%
```


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

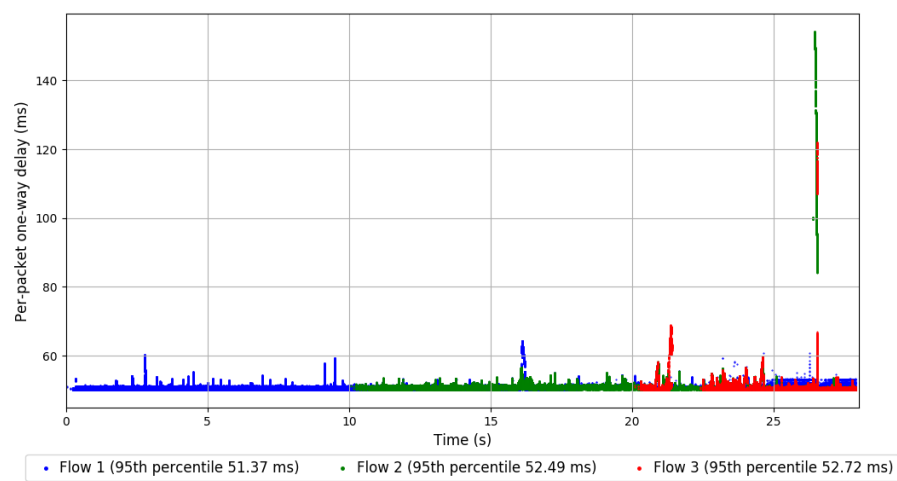
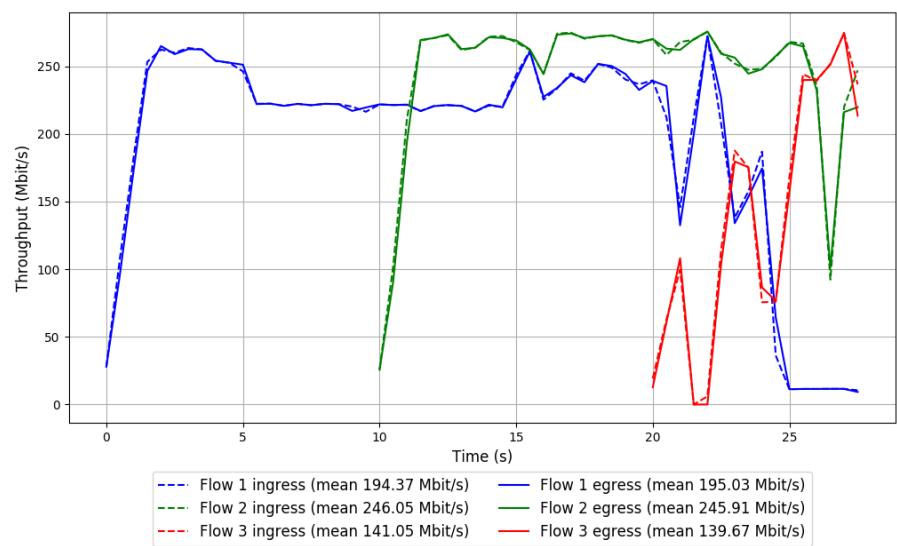


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-09 20:29:18
End at: 2018-01-09 20:29:48

# Below is generated by plot.py at 2018-01-10 01:31:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 391.71 Mbit/s
95th percentile per-packet one-way delay: 51.937 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 195.03 Mbit/s
95th percentile per-packet one-way delay: 51.370 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 245.91 Mbit/s
95th percentile per-packet one-way delay: 52.491 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 139.67 Mbit/s
95th percentile per-packet one-way delay: 52.720 ms
Loss rate: 2.27%
```

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

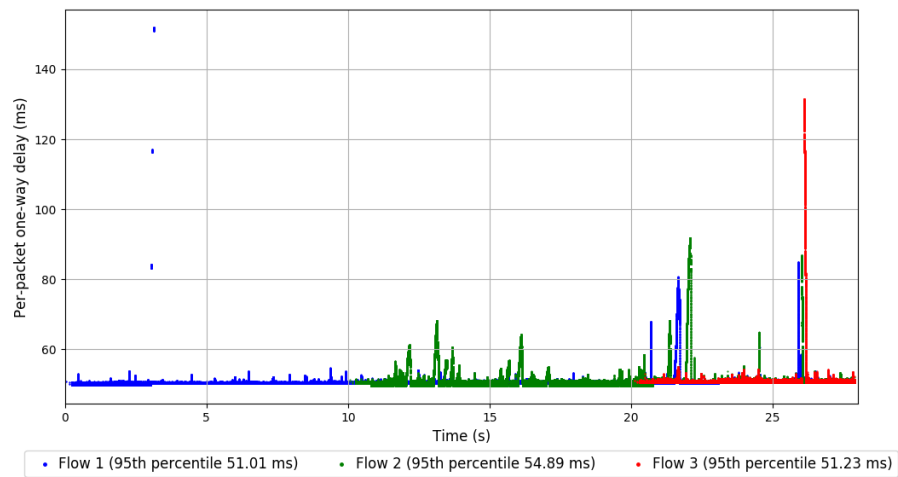
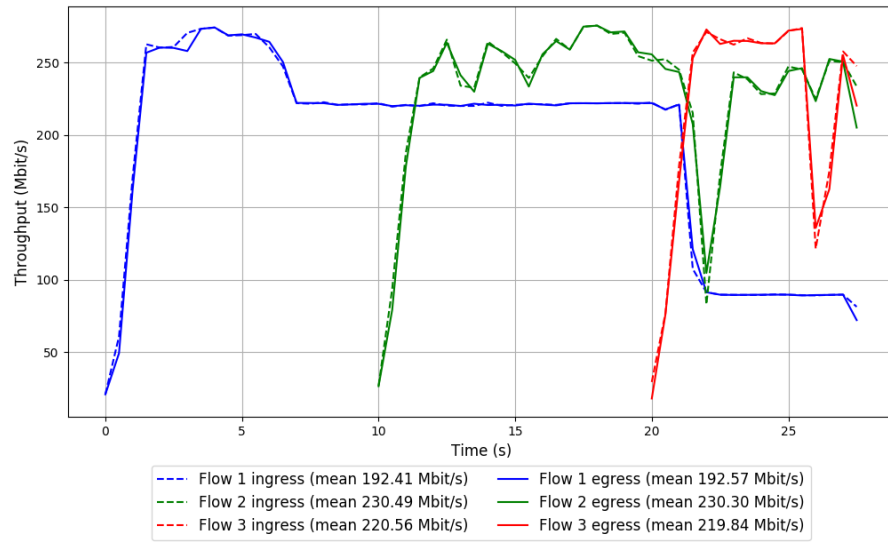


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-09 20:43:16
End at: 2018-01-09 20:43:46

# Below is generated by plot.py at 2018-01-10 01:31:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 401.59 Mbit/s
95th percentile per-packet one-way delay: 51.666 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 192.57 Mbit/s
95th percentile per-packet one-way delay: 51.014 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 230.30 Mbit/s
95th percentile per-packet one-way delay: 54.890 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 219.84 Mbit/s
95th percentile per-packet one-way delay: 51.235 ms
Loss rate: 1.61%
```

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

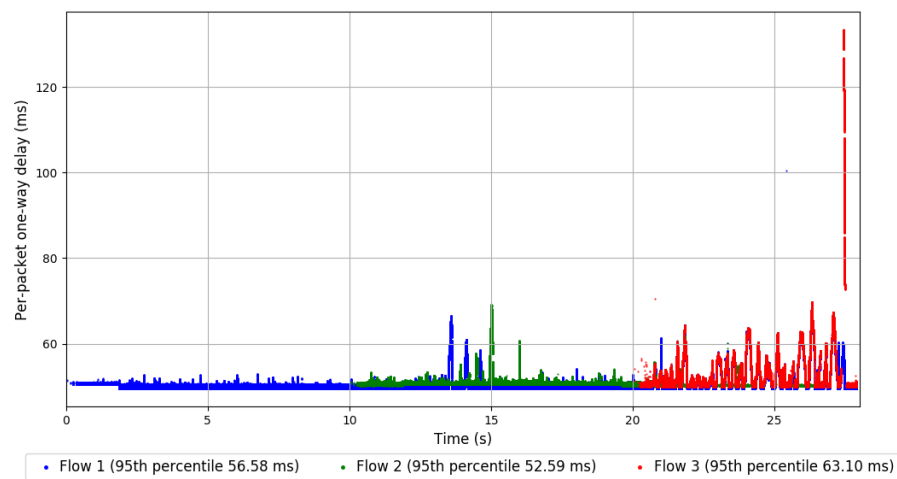
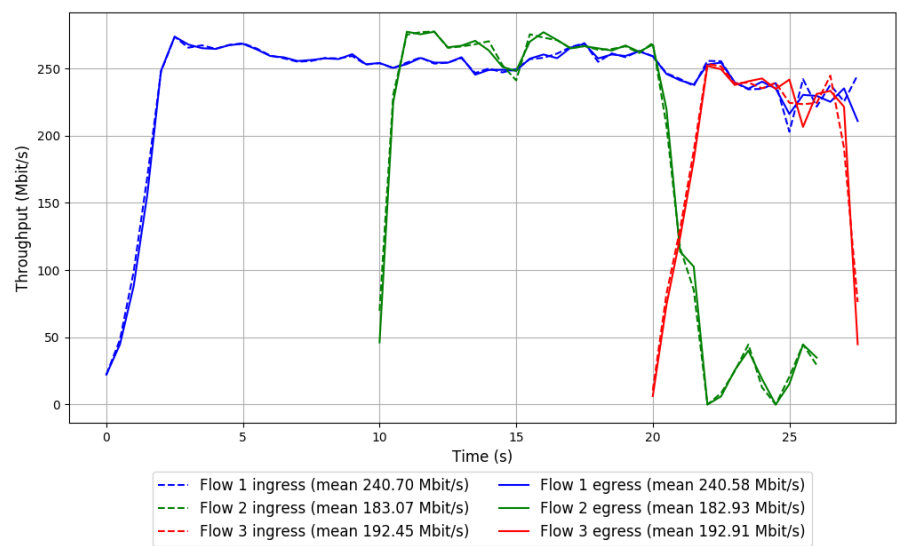


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-01-09 20:57:17
End at: 2018-01-09 20:57:47

# Below is generated by plot.py at 2018-01-10 01:31:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 401.91 Mbit/s
95th percentile per-packet one-way delay: 57.606 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 240.58 Mbit/s
95th percentile per-packet one-way delay: 56.577 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 182.93 Mbit/s
95th percentile per-packet one-way delay: 52.585 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 192.91 Mbit/s
95th percentile per-packet one-way delay: 63.096 ms
Loss rate: 1.05%
```

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

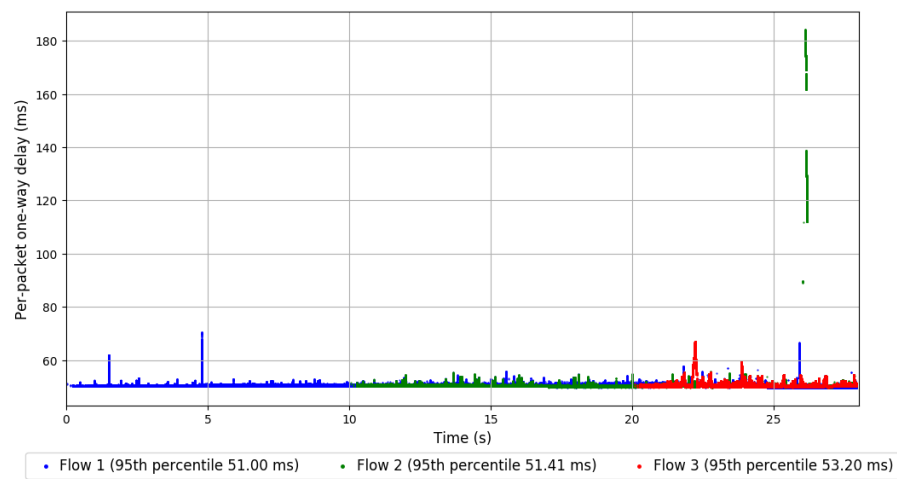
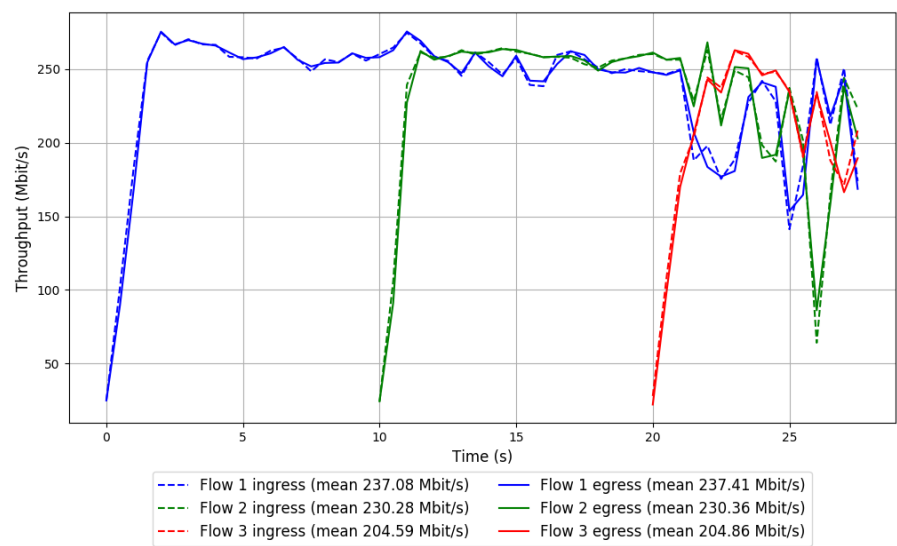


```
Run 5: Statistics of TaoVA-100x

Start at: 2018-01-09 21:11:32
End at: 2018-01-09 21:12:02

# Below is generated by plot.py at 2018-01-10 01:33:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 442.53 Mbit/s
95th percentile per-packet one-way delay: 51.444 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 237.41 Mbit/s
95th percentile per-packet one-way delay: 50.999 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 230.36 Mbit/s
95th percentile per-packet one-way delay: 51.411 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 204.86 Mbit/s
95th percentile per-packet one-way delay: 53.196 ms
Loss rate: 1.14%
```


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

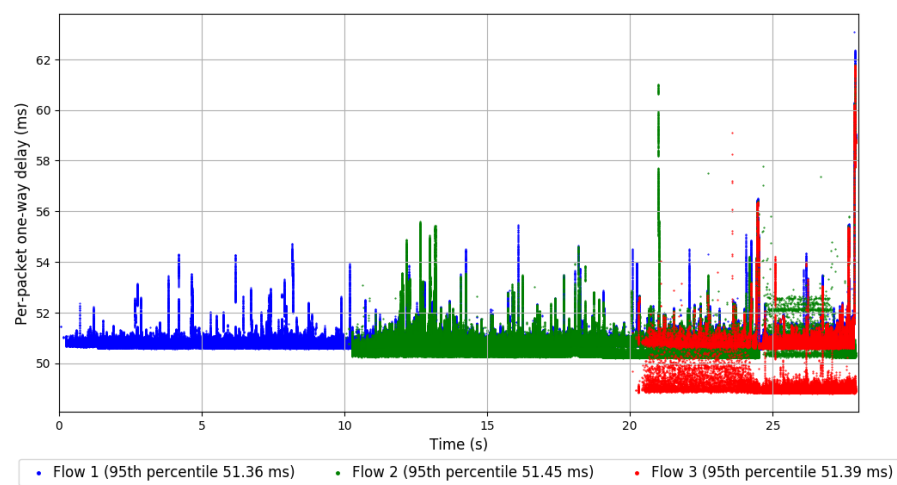
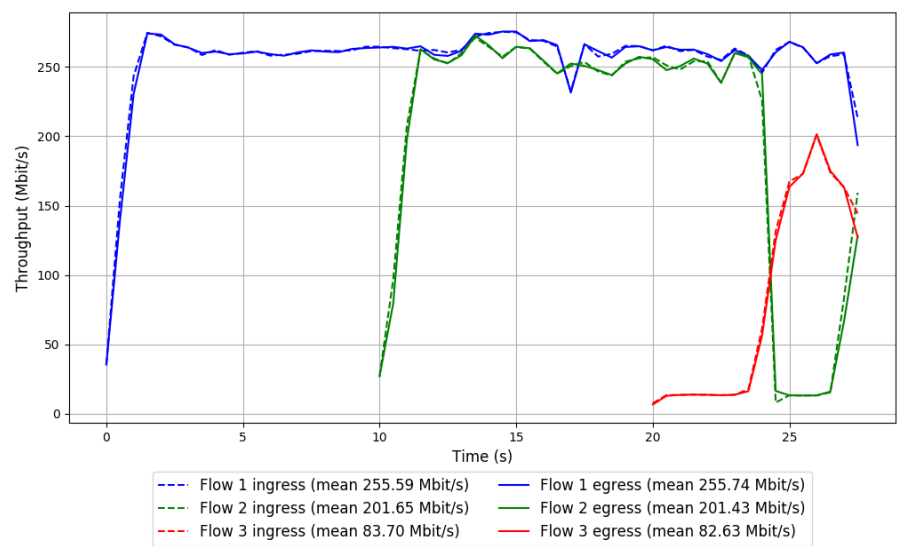


```
Run 6: Statistics of TaoVA-100x

Start at: 2018-01-09 21:25:57
End at: 2018-01-09 21:26:27

# Below is generated by plot.py at 2018-01-10 01:33:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 407.98 Mbit/s
95th percentile per-packet one-way delay: 51.390 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 255.74 Mbit/s
95th percentile per-packet one-way delay: 51.364 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 201.43 Mbit/s
95th percentile per-packet one-way delay: 51.454 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 82.63 Mbit/s
95th percentile per-packet one-way delay: 51.386 ms
Loss rate: 2.54%
```

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

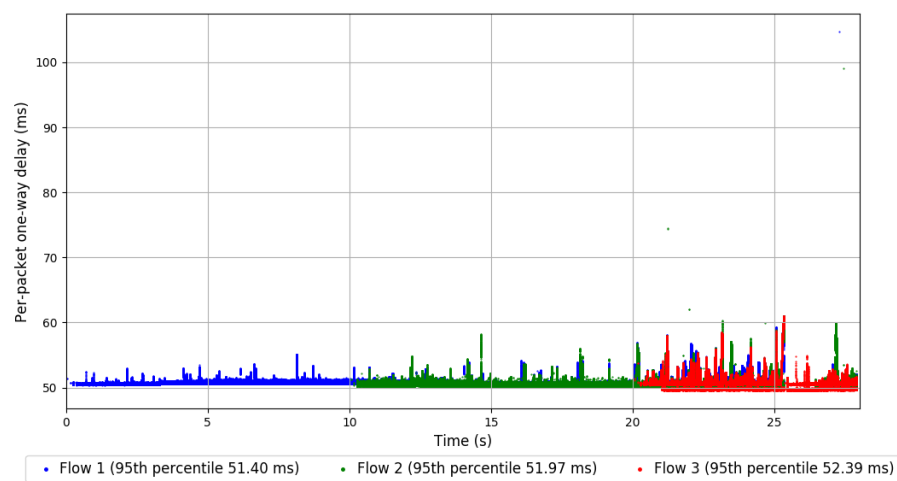
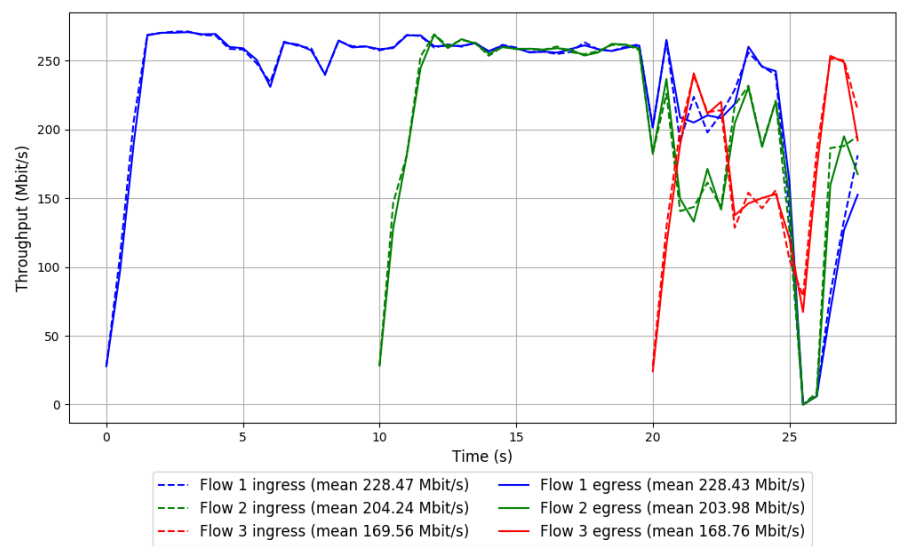


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-01-09 21:40:15
End at: 2018-01-09 21:40:45

# Below is generated by plot.py at 2018-01-10 01:36:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 406.53 Mbit/s
95th percentile per-packet one-way delay: 51.708 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 228.43 Mbit/s
95th percentile per-packet one-way delay: 51.404 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 203.98 Mbit/s
95th percentile per-packet one-way delay: 51.972 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 168.76 Mbit/s
95th percentile per-packet one-way delay: 52.392 ms
Loss rate: 1.73%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-09 21:53:54

End at: 2018-01-09 21:54:24

Below is generated by plot.py at 2018-01-10 01:36:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 388.97 Mbit/s

95th percentile per-packet one-way delay: 51.794 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 197.82 Mbit/s

95th percentile per-packet one-way delay: 52.148 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 194.19 Mbit/s

95th percentile per-packet one-way delay: 50.943 ms

Loss rate: 0.75%

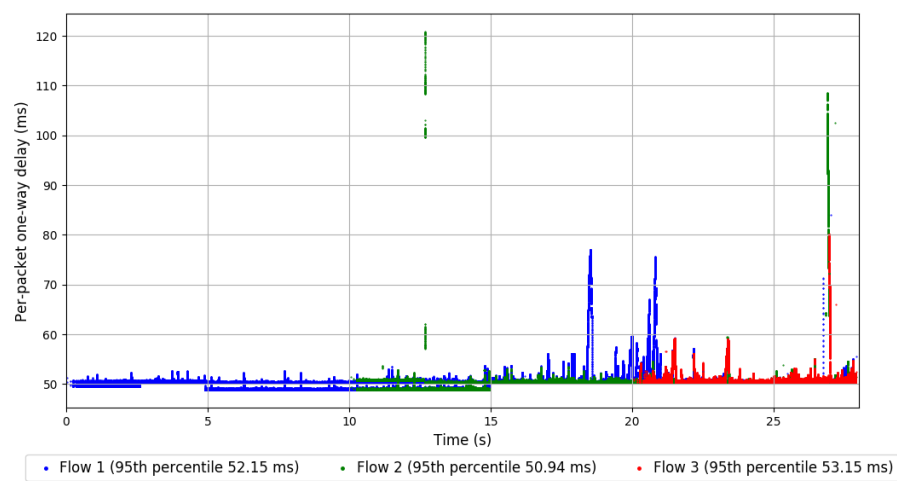
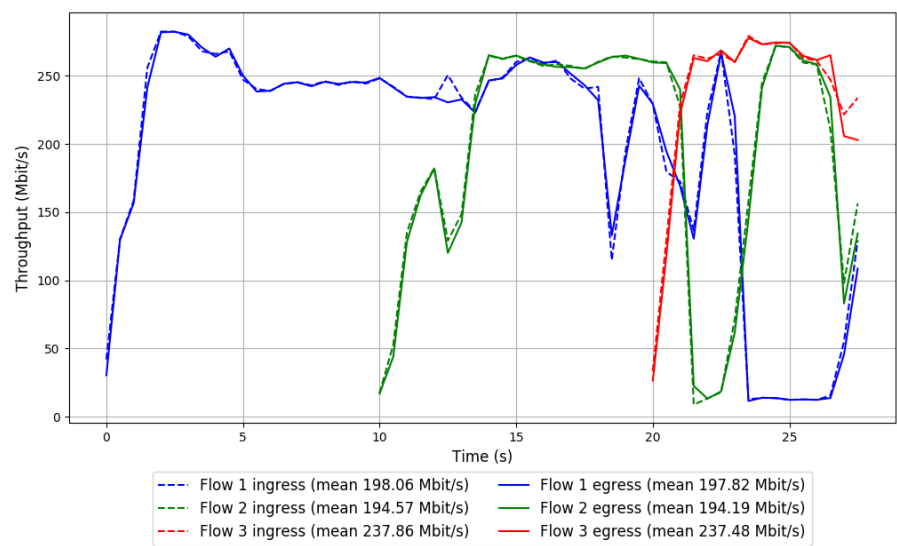
-- Flow 3:

Average throughput: 237.48 Mbit/s

95th percentile per-packet one-way delay: 53.154 ms

Loss rate: 1.45%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-01-09 22:07:46

End at: 2018-01-09 22:08:16

Below is generated by plot.py at 2018-01-10 01:42:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 395.91 Mbit/s

95th percentile per-packet one-way delay: 59.267 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 237.95 Mbit/s

95th percentile per-packet one-way delay: 58.558 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 162.72 Mbit/s

95th percentile per-packet one-way delay: 51.393 ms

Loss rate: 0.02%

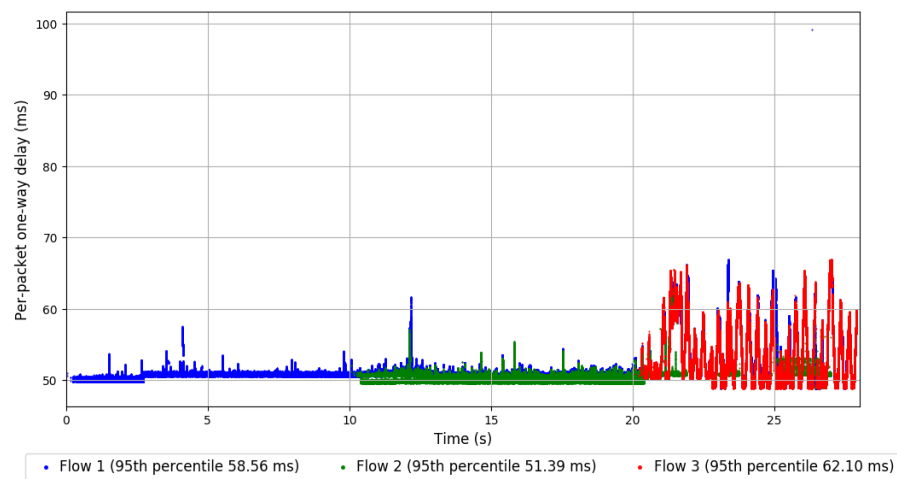
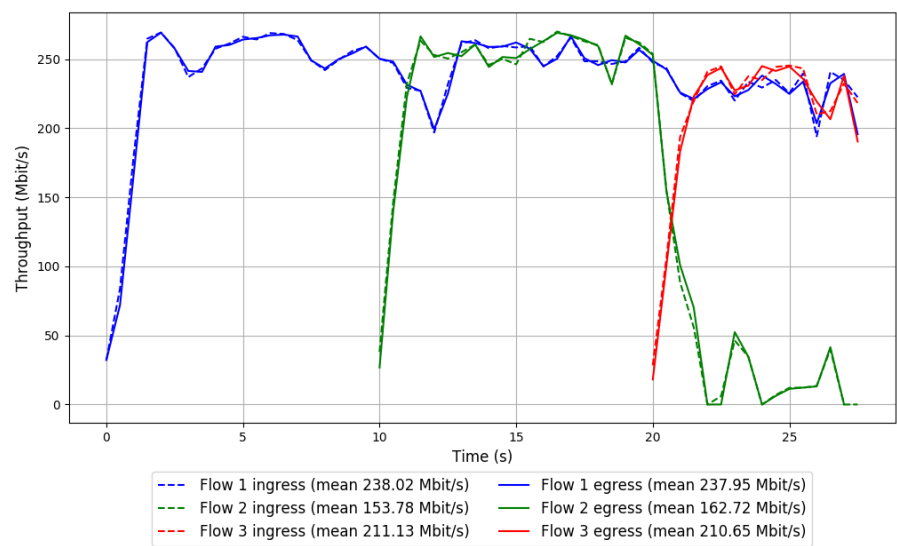
-- Flow 3:

Average throughput: 210.65 Mbit/s

95th percentile per-packet one-way delay: 62.105 ms

Loss rate: 1.51%

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

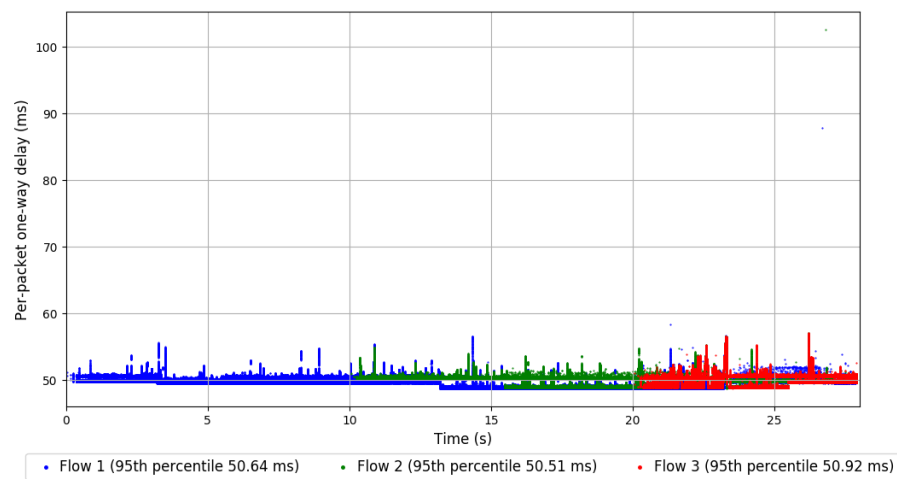
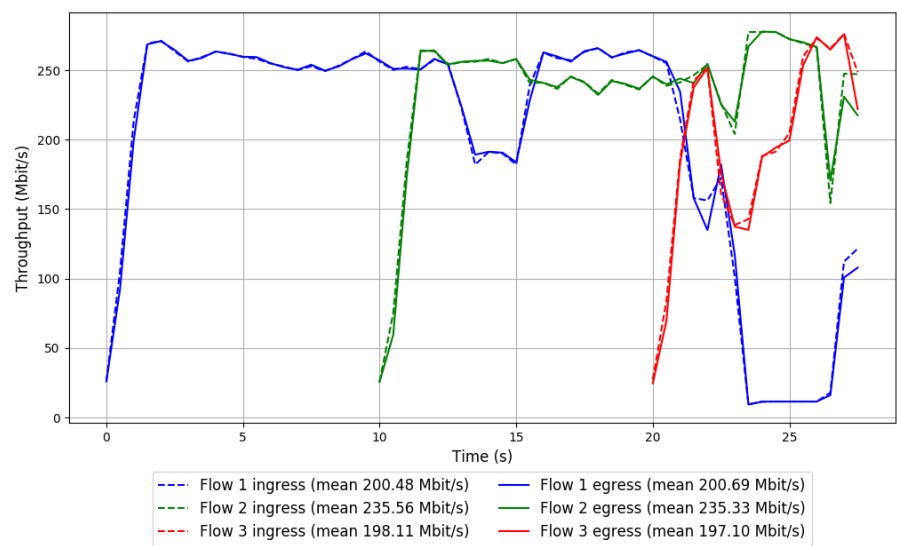


```
Run 10: Statistics of TaoVA-100x

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

# Below is generated by plot.py at 2018-01-10 01:42:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 406.77 Mbit/s
95th percentile per-packet one-way delay: 50.678 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 200.69 Mbit/s
95th percentile per-packet one-way delay: 50.640 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 235.33 Mbit/s
95th percentile per-packet one-way delay: 50.514 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 197.10 Mbit/s
95th percentile per-packet one-way delay: 50.925 ms
Loss rate: 1.77%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-09 20:09:26

End at: 2018-01-09 20:09:56

Below is generated by plot.py at 2018-01-10 01:42:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.75 Mbit/s

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

Loss rate: 0.37%

-- Flow 1:

Average throughput: 37.71 Mbit/s

95th percentile per-packet one-way delay: 50.958 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 83.84 Mbit/s

95th percentile per-packet one-way delay: 52.006 ms

Loss rate: 0.23%

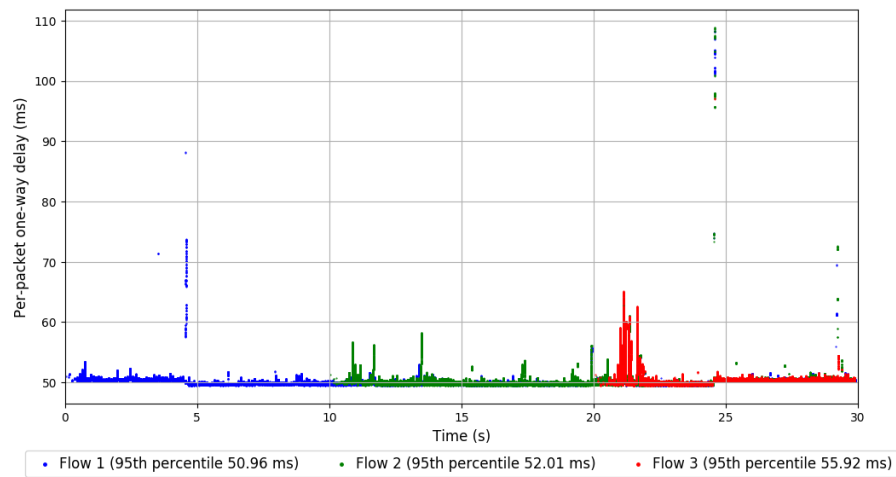
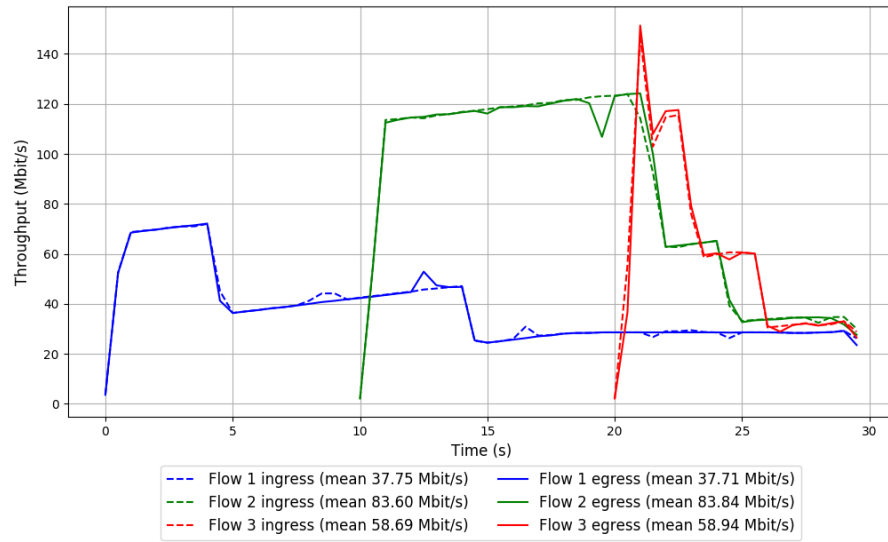
-- Flow 3:

Average throughput: 58.94 Mbit/s

95th percentile per-packet one-way delay: 55.924 ms

Loss rate: 0.62%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-09 20:23:42

End at: 2018-01-09 20:24:12

Below is generated by plot.py at 2018-01-10 01:42:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.42 Mbit/s

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

Loss rate: 0.42%

-- Flow 1:

Average throughput: 28.66 Mbit/s

95th percentile per-packet one-way delay: 51.326 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 56.52 Mbit/s

95th percentile per-packet one-way delay: 51.357 ms

Loss rate: 0.27%

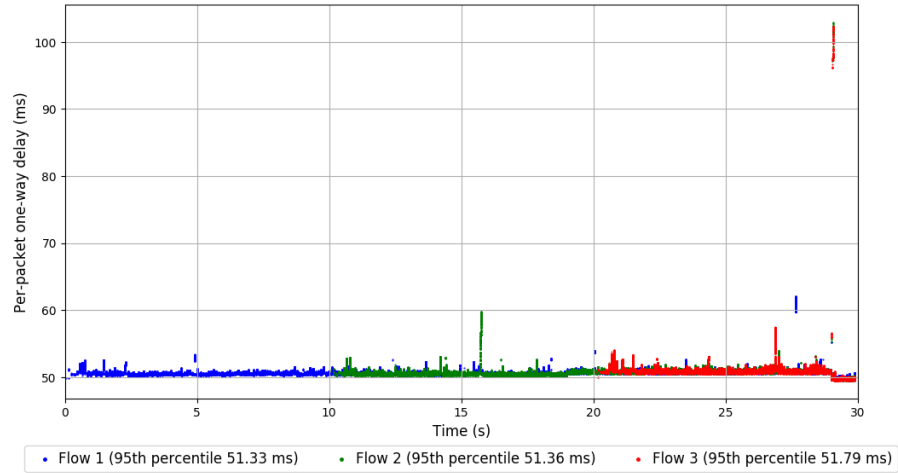
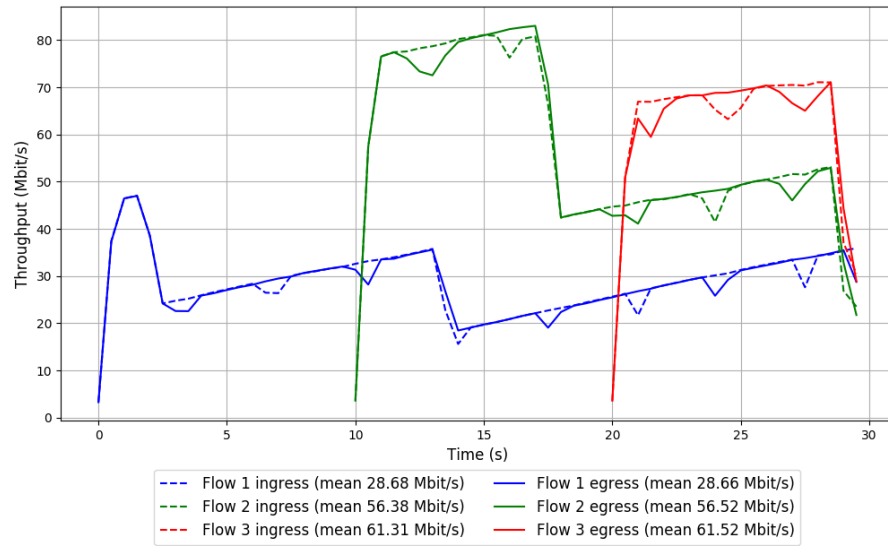
-- Flow 3:

Average throughput: 61.52 Mbit/s

95th percentile per-packet one-way delay: 51.793 ms

Loss rate: 0.68%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-09 20:37:12

End at: 2018-01-09 20:37:42

Below is generated by plot.py at 2018-01-10 01:42:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 53.78 Mbit/s

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

Loss rate: 0.49%

-- Flow 1:

Average throughput: 26.35 Mbit/s

95th percentile per-packet one-way delay: 51.869 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 38.16 Mbit/s

95th percentile per-packet one-way delay: 51.578 ms

Loss rate: 0.48%

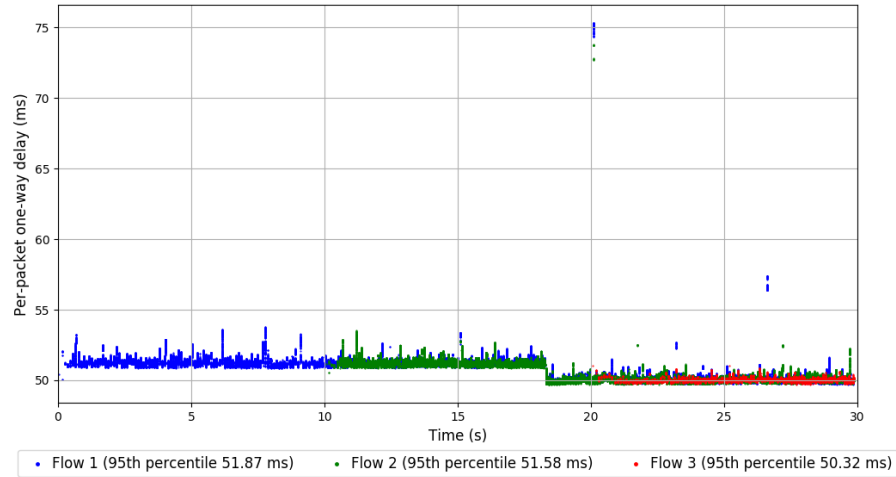
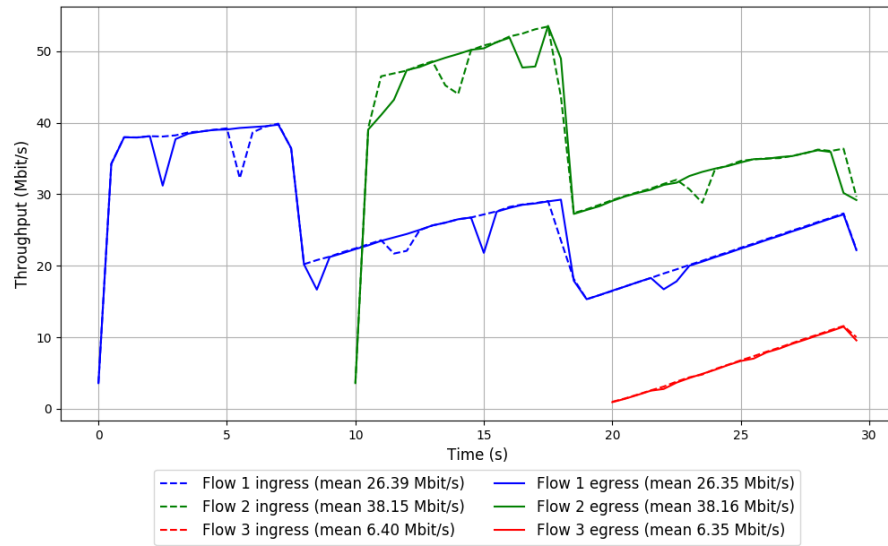
-- Flow 3:

Average throughput: 6.35 Mbit/s

95th percentile per-packet one-way delay: 50.316 ms

Loss rate: 1.98%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-09 20:51:27

End at: 2018-01-09 20:51:57

Below is generated by plot.py at 2018-01-10 01:42:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.14 Mbit/s

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

Loss rate: 0.90%

-- Flow 1:

Average throughput: 28.53 Mbit/s

95th percentile per-packet one-way delay: 51.483 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 24.43 Mbit/s

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

Loss rate: 1.74%

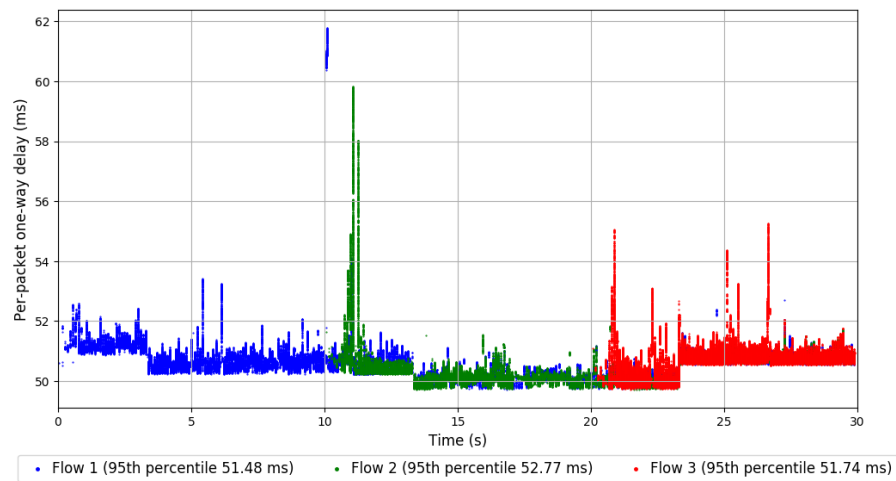
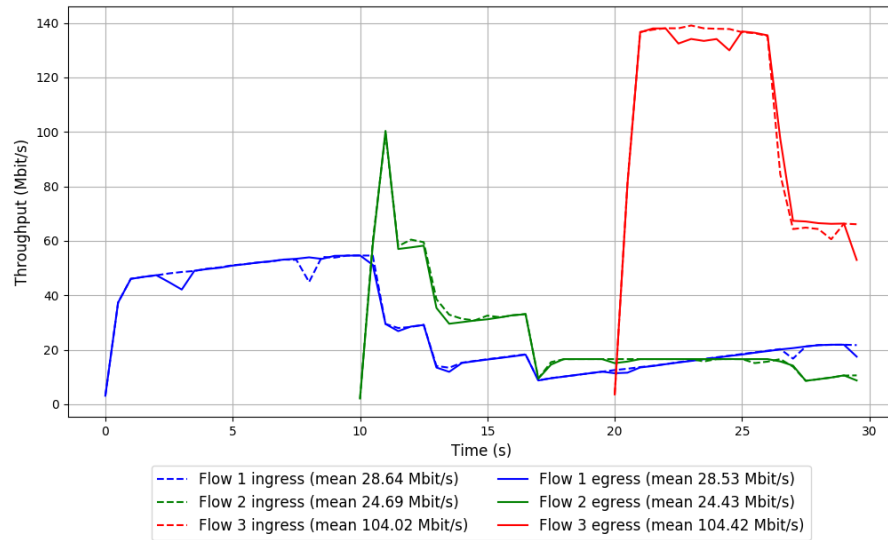
-- Flow 3:

Average throughput: 104.42 Mbit/s

95th percentile per-packet one-way delay: 51.741 ms

Loss rate: 0.64%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-09 21:05:32

End at: 2018-01-09 21:06:02

Below is generated by plot.py at 2018-01-10 01:42:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.43 Mbit/s

95th percentile per-packet one-way delay: 51.517 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 23.40 Mbit/s

95th percentile per-packet one-way delay: 53.798 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 18.03 Mbit/s

95th percentile per-packet one-way delay: 51.270 ms

Loss rate: 0.62%

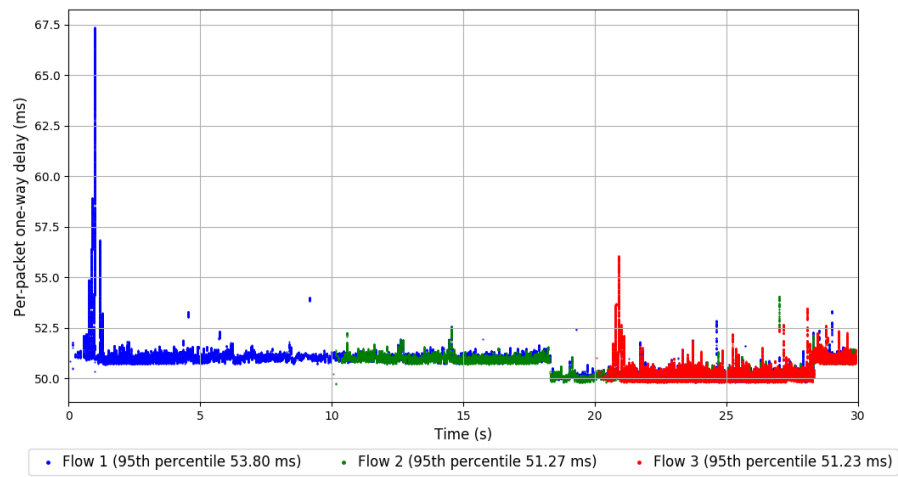
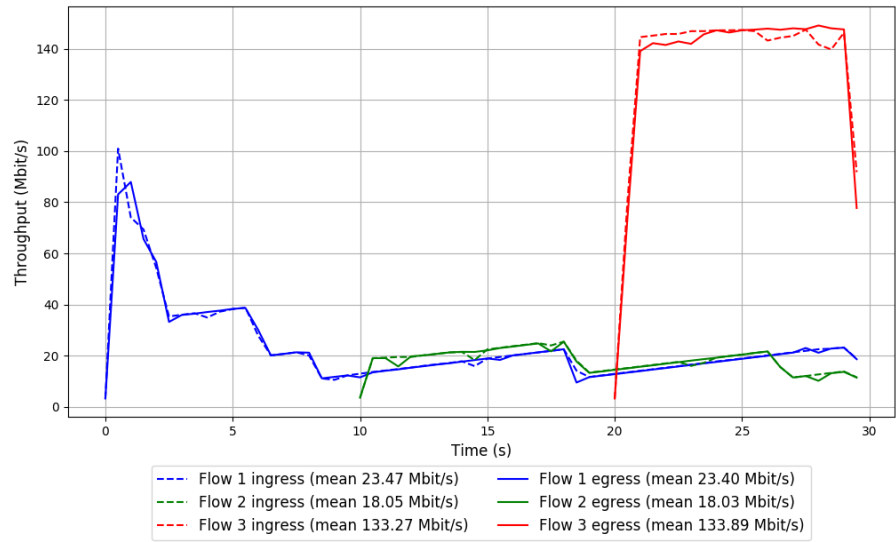
-- Flow 3:

Average throughput: 133.89 Mbit/s

95th percentile per-packet one-way delay: 51.233 ms

Loss rate: 0.56%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-09 21:19:54

End at: 2018-01-09 21:20:24

Below is generated by plot.py at 2018-01-10 01:42:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.54 Mbit/s

95th percentile per-packet one-way delay: 51.694 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 24.28 Mbit/s

95th percentile per-packet one-way delay: 51.534 ms

Loss rate: 1.17%

-- Flow 2:

Average throughput: 66.28 Mbit/s

95th percentile per-packet one-way delay: 51.656 ms

Loss rate: 0.49%

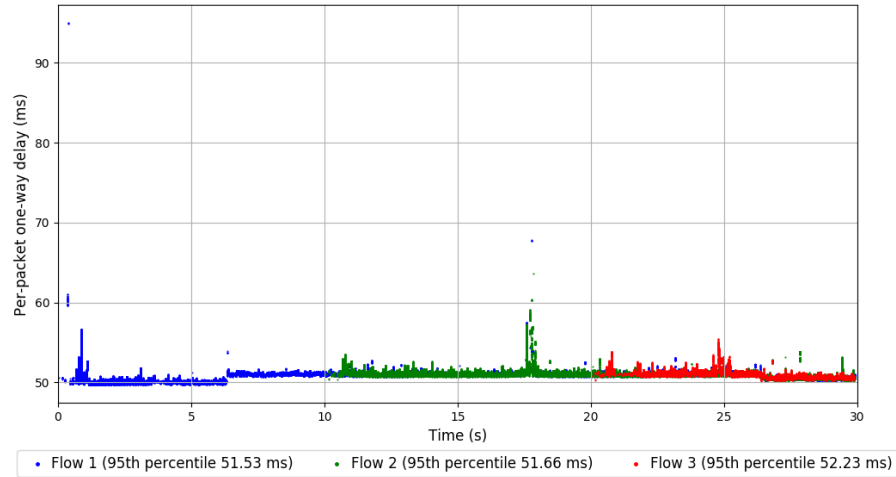
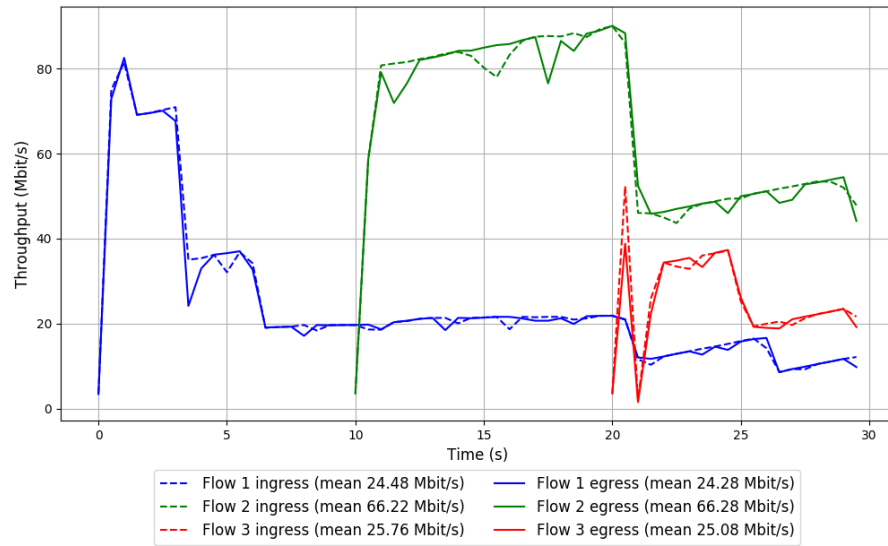
-- Flow 3:

Average throughput: 25.08 Mbit/s

95th percentile per-packet one-way delay: 52.227 ms

Loss rate: 3.64%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-09 21:34:12

End at: 2018-01-09 21:34:42

Below is generated by plot.py at 2018-01-10 01:42:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.19 Mbit/s

95th percentile per-packet one-way delay: 51.714 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 51.01 Mbit/s

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

Loss rate: 0.14%

-- Flow 2:

Average throughput: 18.21 Mbit/s

95th percentile per-packet one-way delay: 51.580 ms

Loss rate: 1.13%

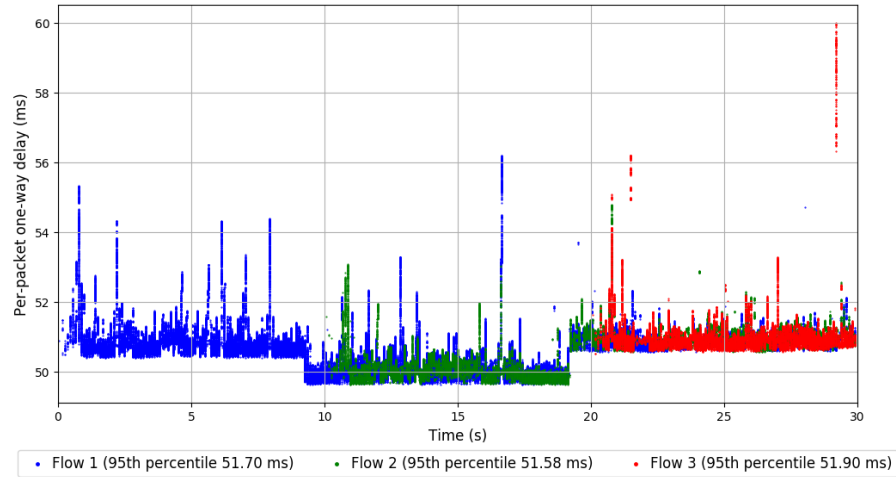
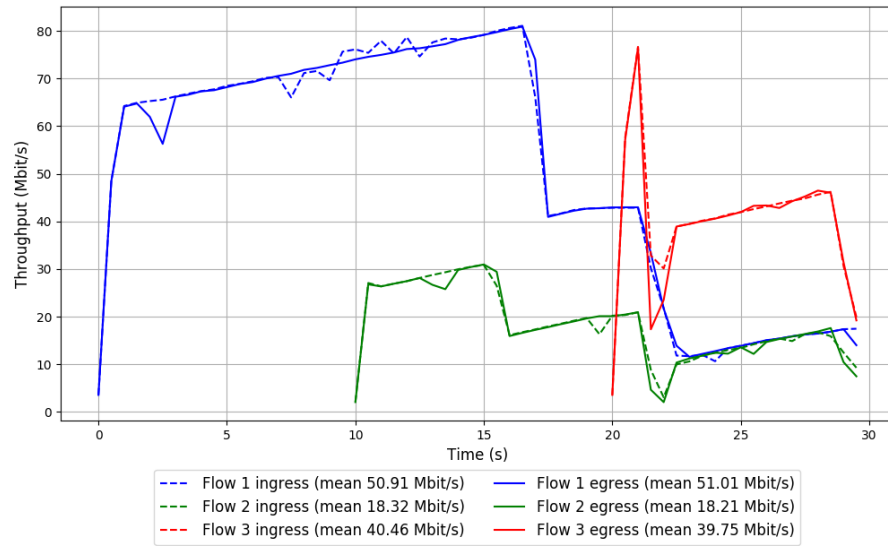
-- Flow 3:

Average throughput: 39.75 Mbit/s

95th percentile per-packet one-way delay: 51.899 ms

Loss rate: 2.74%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-09 21:48:32

End at: 2018-01-09 21:49:02

Below is generated by plot.py at 2018-01-10 01:42:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.99 Mbit/s

95th percentile per-packet one-way delay: 50.950 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 29.66 Mbit/s

95th percentile per-packet one-way delay: 50.921 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 36.78 Mbit/s

95th percentile per-packet one-way delay: 51.089 ms

Loss rate: 0.31%

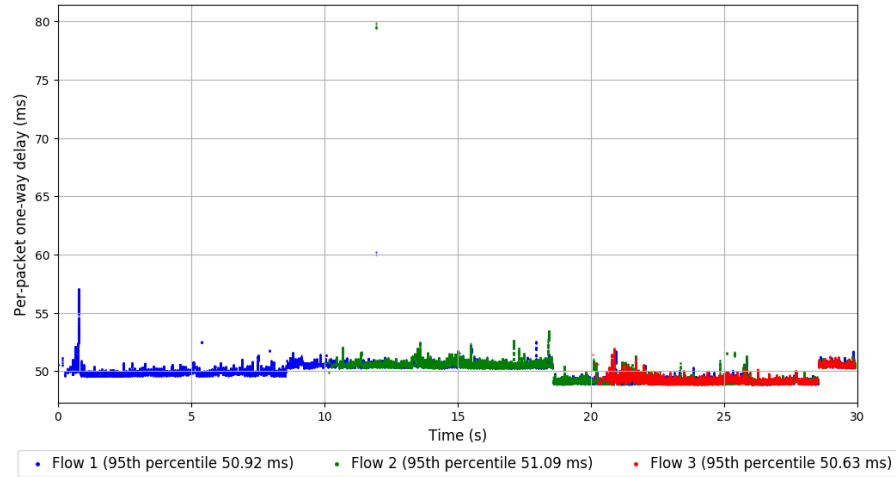
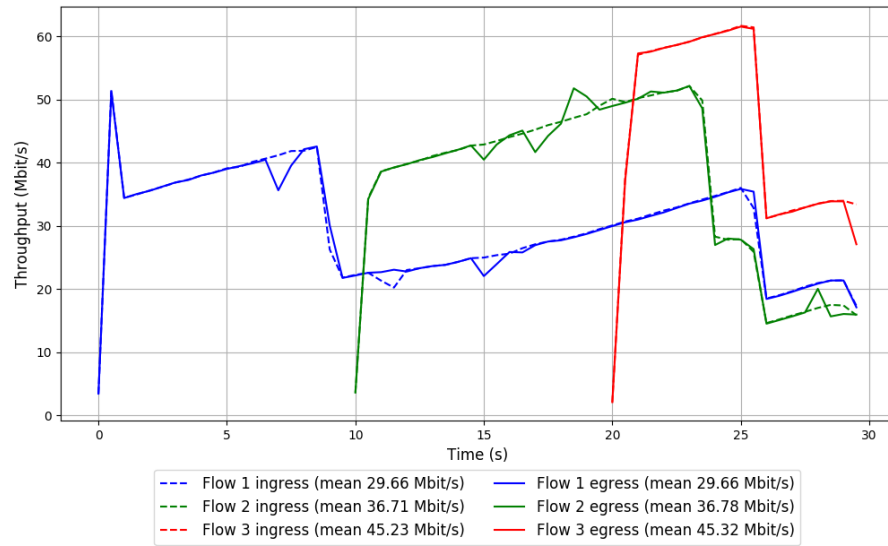
-- Flow 3:

Average throughput: 45.32 Mbit/s

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

Loss rate: 0.83%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

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

End at: 2018-01-09 22:02:21

Below is generated by plot.py at 2018-01-10 01:42:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.67 Mbit/s

95th percentile per-packet one-way delay: 51.811 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 54.19 Mbit/s

95th percentile per-packet one-way delay: 51.865 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 46.70 Mbit/s

95th percentile per-packet one-way delay: 51.354 ms

Loss rate: 0.41%

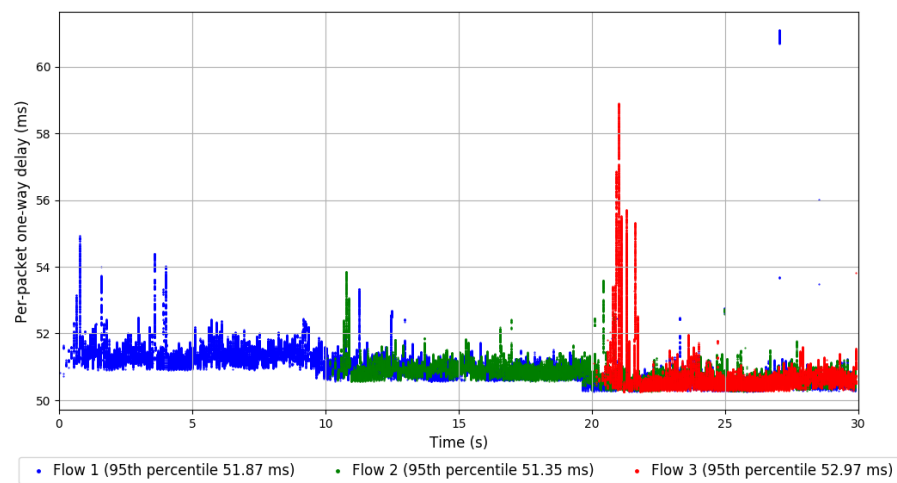
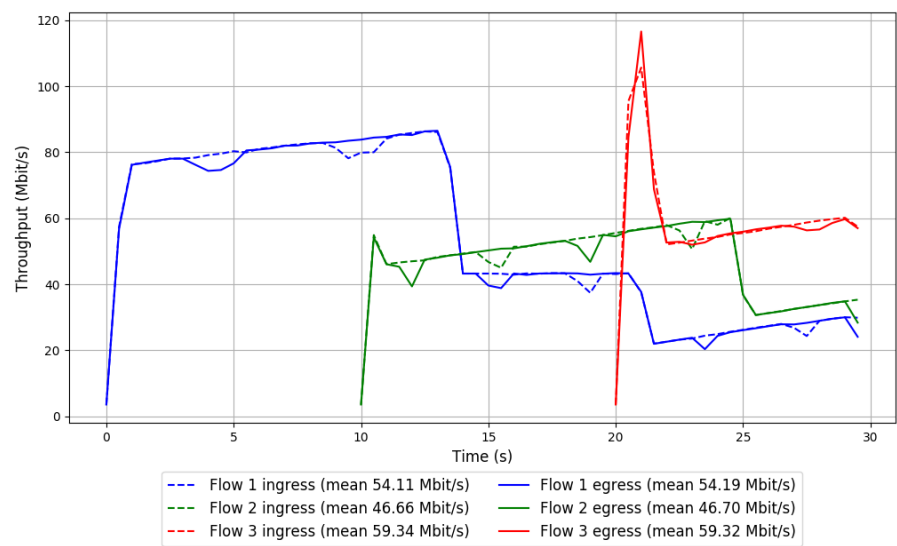
-- Flow 3:

Average throughput: 59.32 Mbit/s

95th percentile per-packet one-way delay: 52.969 ms

Loss rate: 1.03%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-09 22:16:03

End at: 2018-01-09 22:16:33

Below is generated by plot.py at 2018-01-10 01:42:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 44.66 Mbit/s

95th percentile per-packet one-way delay: 51.398 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 22.27 Mbit/s

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

Loss rate: 0.67%

-- Flow 2:

Average throughput: 14.04 Mbit/s

95th percentile per-packet one-way delay: 51.036 ms

Loss rate: 1.11%

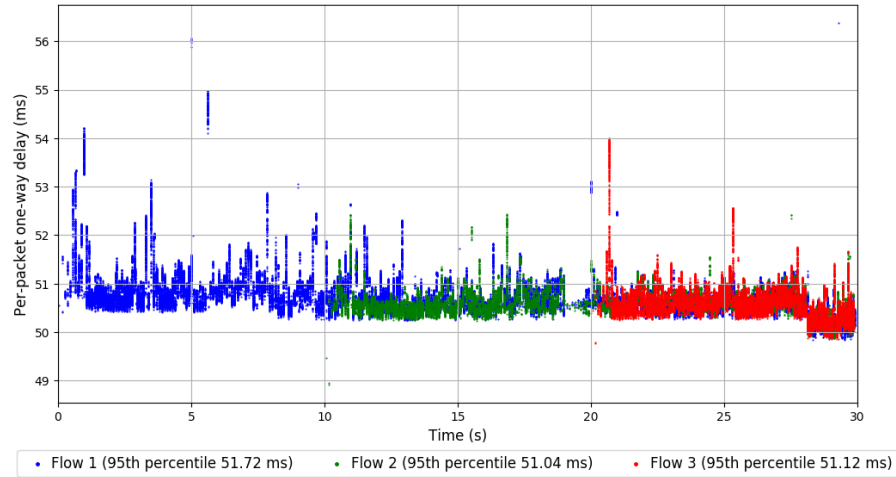
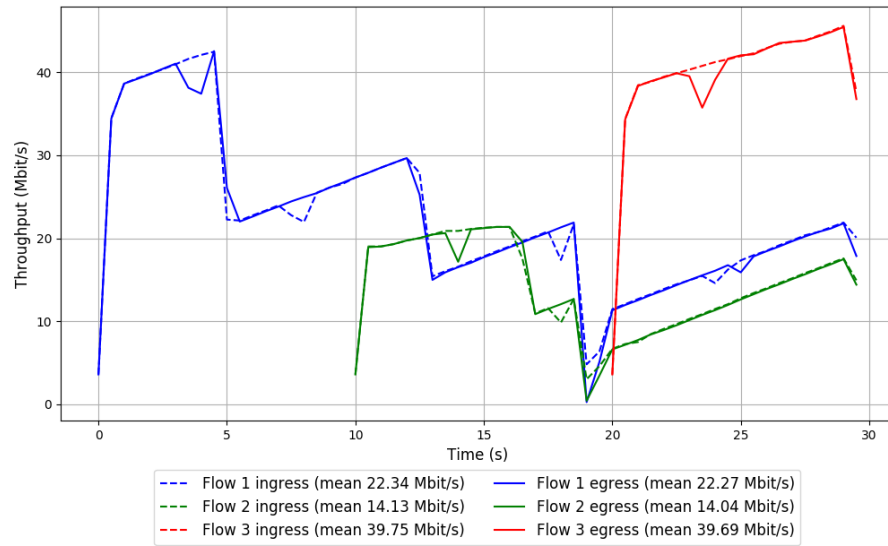
-- Flow 3:

Average throughput: 39.69 Mbit/s

95th percentile per-packet one-way delay: 51.121 ms

Loss rate: 1.17%

Run 10: Report of TCP Vegas — Data Link

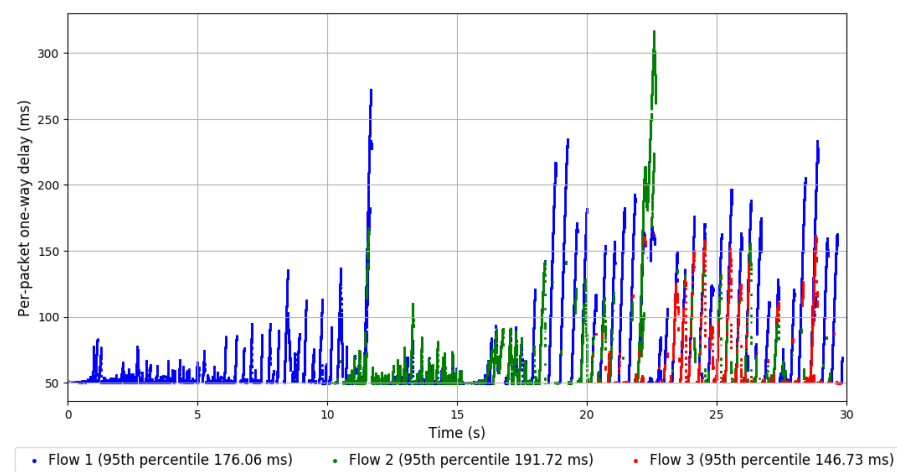
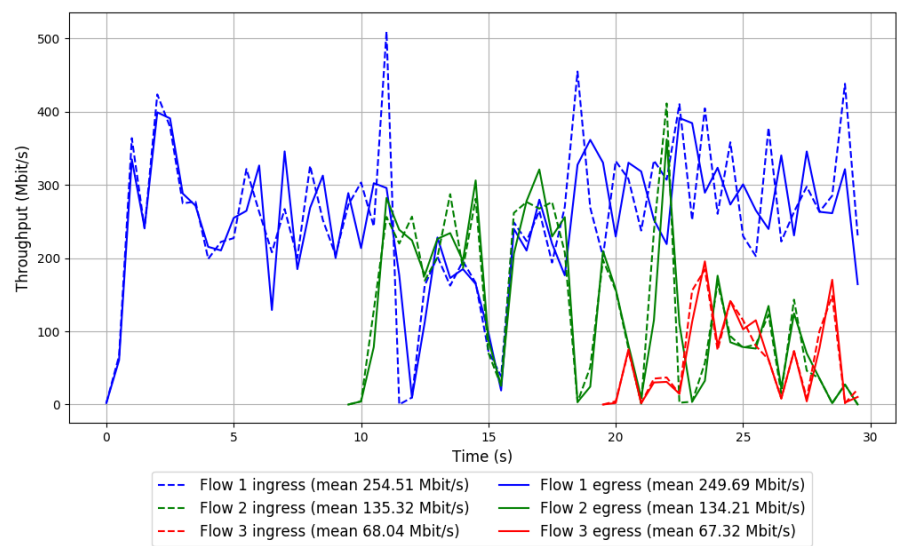


```
Run 1: Statistics of Verus

Start at: 2018-01-09 20:10:51
End at: 2018-01-09 20:11:21

# Below is generated by plot.py at 2018-01-10 01:42:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.02 Mbit/s
95th percentile per-packet one-way delay: 177.520 ms
Loss rate: 2.01%
-- Flow 1:
Average throughput: 249.69 Mbit/s
95th percentile per-packet one-way delay: 176.062 ms
Loss rate: 2.24%
-- Flow 2:
Average throughput: 134.21 Mbit/s
95th percentile per-packet one-way delay: 191.715 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 67.32 Mbit/s
95th percentile per-packet one-way delay: 146.733 ms
Loss rate: 2.20%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-09 20:25:05

End at: 2018-01-09 20:25:35

Below is generated by plot.py at 2018-01-10 01:42:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 378.30 Mbit/s

95th percentile per-packet one-way delay: 132.410 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 197.46 Mbit/s

95th percentile per-packet one-way delay: 101.524 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 163.85 Mbit/s

95th percentile per-packet one-way delay: 111.920 ms

Loss rate: 1.11%

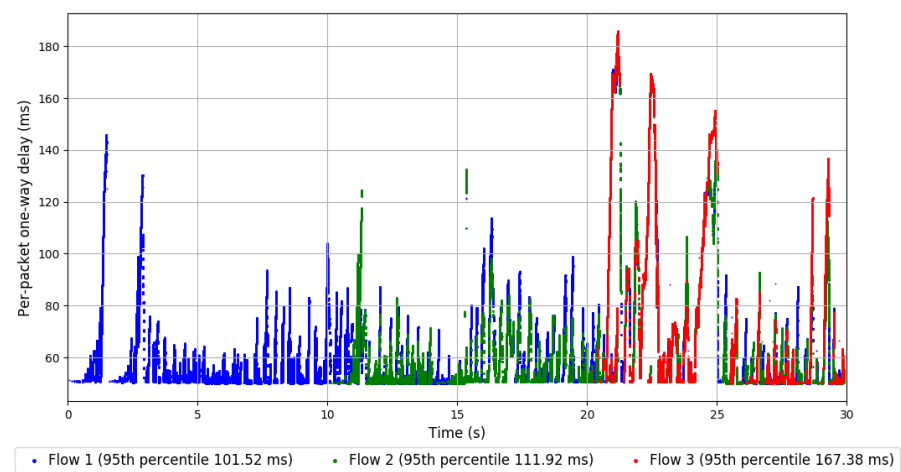
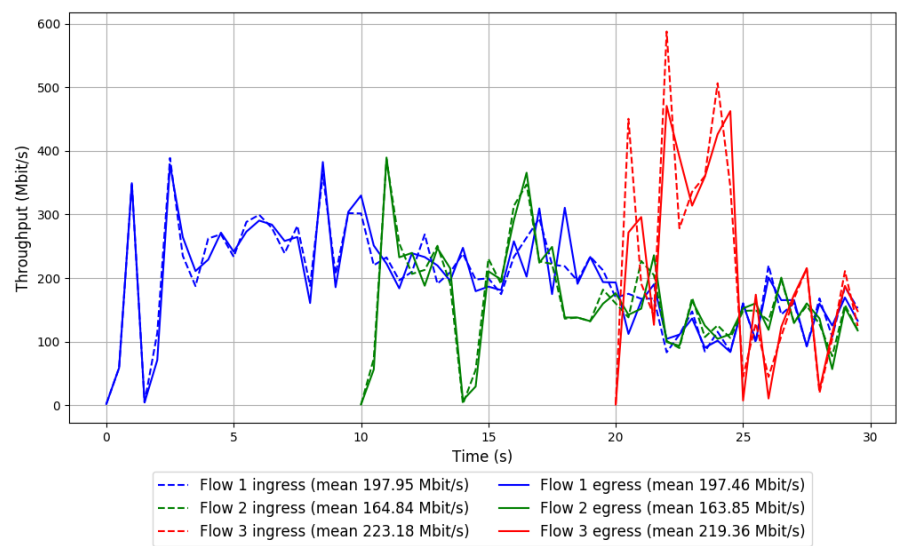
-- Flow 3:

Average throughput: 219.36 Mbit/s

95th percentile per-packet one-way delay: 167.380 ms

Loss rate: 1.61%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-09 20:38:34

End at: 2018-01-09 20:39:04

Below is generated by plot.py at 2018-01-10 01:42:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 390.86 Mbit/s

95th percentile per-packet one-way delay: 144.420 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 217.96 Mbit/s

95th percentile per-packet one-way delay: 137.189 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 196.86 Mbit/s

95th percentile per-packet one-way delay: 148.002 ms

Loss rate: 0.70%

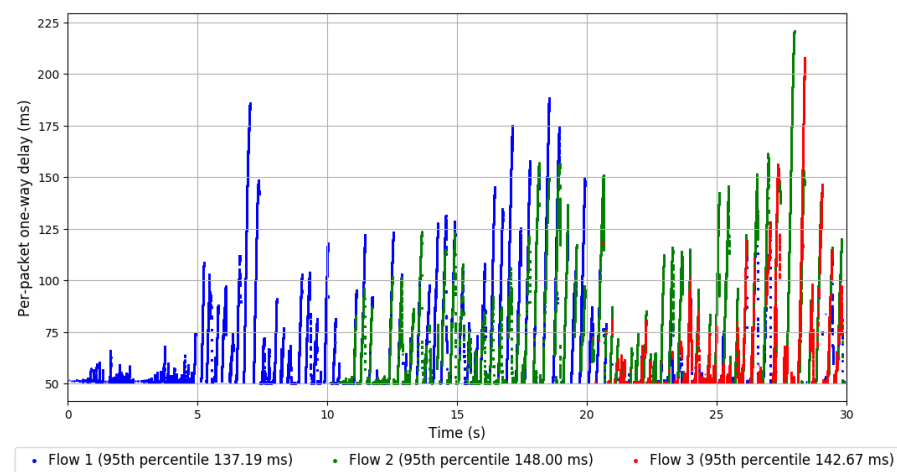
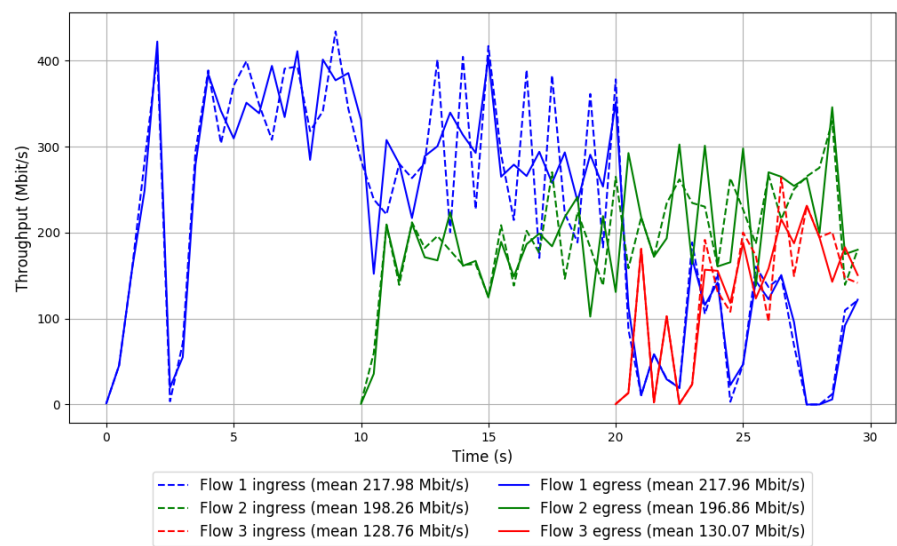
-- Flow 3:

Average throughput: 130.07 Mbit/s

95th percentile per-packet one-way delay: 142.669 ms

Loss rate: 0.94%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-09 20:52:50

End at: 2018-01-09 20:53:20

Below is generated by plot.py at 2018-01-10 01:42:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 371.94 Mbit/s

95th percentile per-packet one-way delay: 108.362 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 236.84 Mbit/s

95th percentile per-packet one-way delay: 109.190 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 145.12 Mbit/s

95th percentile per-packet one-way delay: 119.160 ms

Loss rate: 0.34%

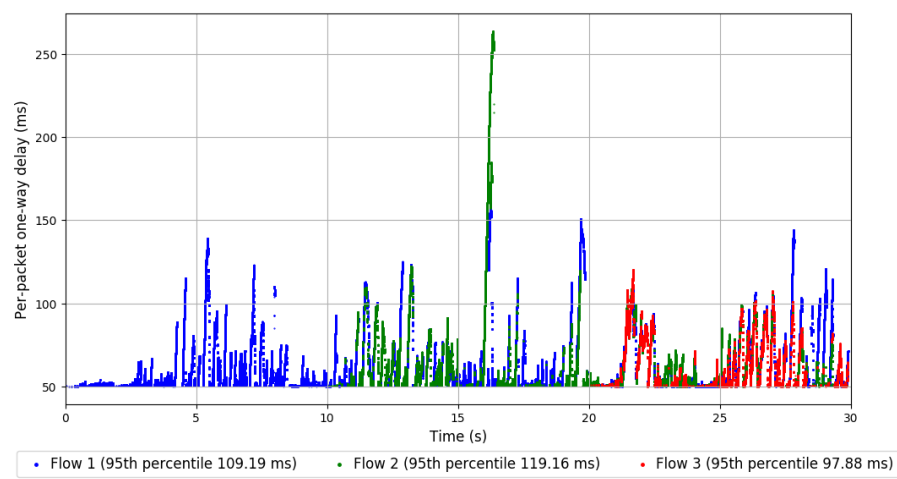
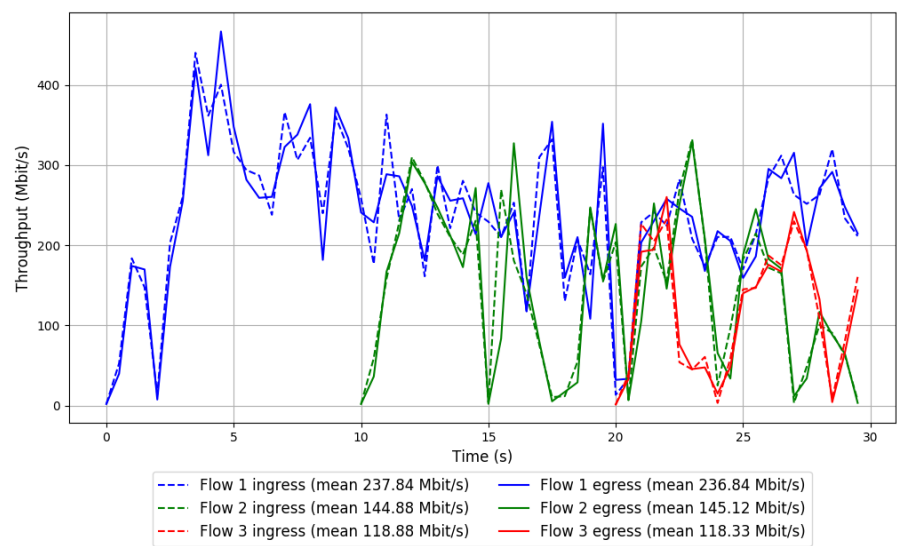
-- Flow 3:

Average throughput: 118.33 Mbit/s

95th percentile per-packet one-way delay: 97.881 ms

Loss rate: 1.50%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-09 21:06:55

End at: 2018-01-09 21:07:25

Below is generated by plot.py at 2018-01-10 01:42:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 340.52 Mbit/s

95th percentile per-packet one-way delay: 138.850 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 235.24 Mbit/s

95th percentile per-packet one-way delay: 146.762 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 110.61 Mbit/s

95th percentile per-packet one-way delay: 131.245 ms

Loss rate: 1.99%

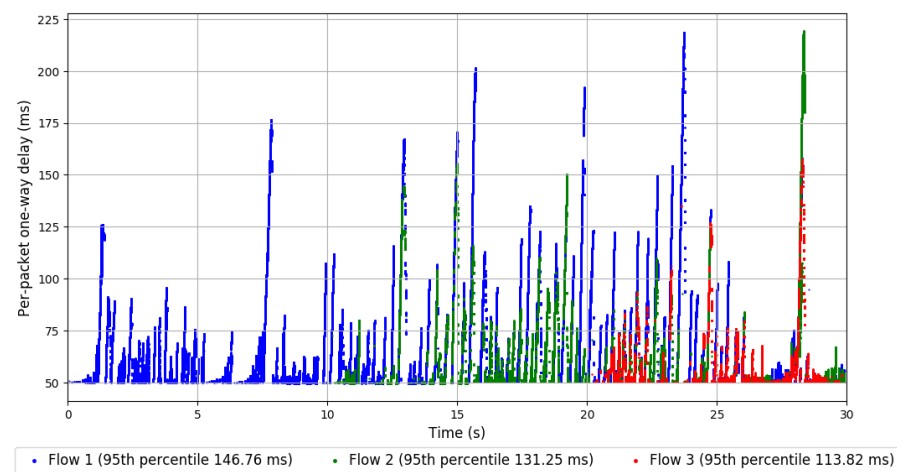
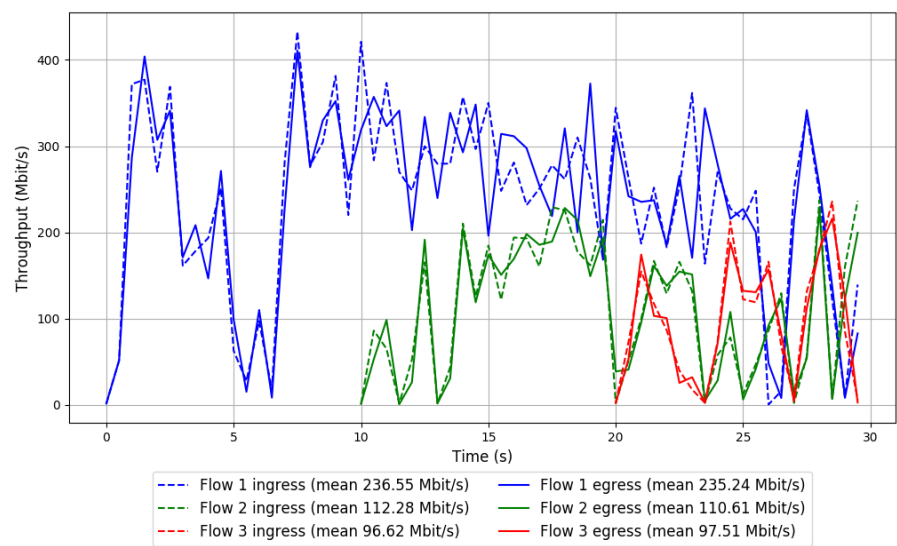
-- Flow 3:

Average throughput: 97.51 Mbit/s

95th percentile per-packet one-way delay: 113.816 ms

Loss rate: 0.28%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-09 21:21:17

End at: 2018-01-09 21:21:47

Below is generated by plot.py at 2018-01-10 01:42:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 328.46 Mbit/s

95th percentile per-packet one-way delay: 145.424 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 185.25 Mbit/s

95th percentile per-packet one-way delay: 82.409 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 191.94 Mbit/s

95th percentile per-packet one-way delay: 183.200 ms

Loss rate: 0.98%

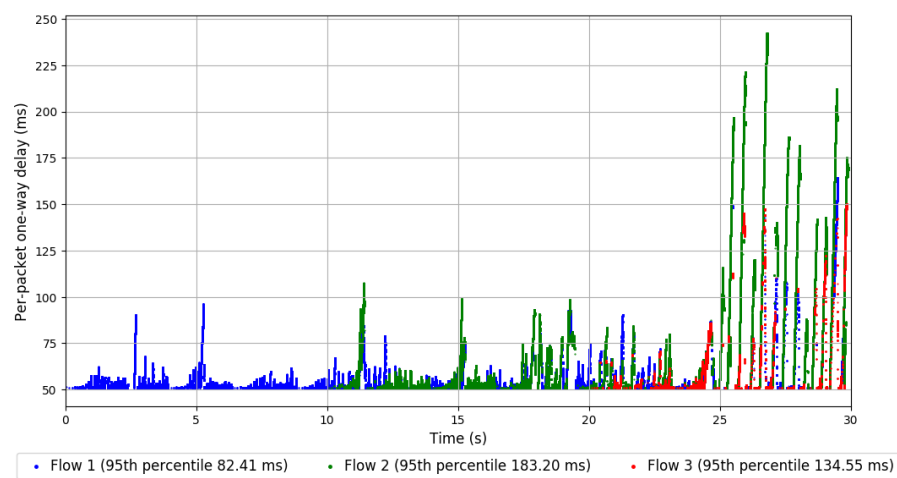
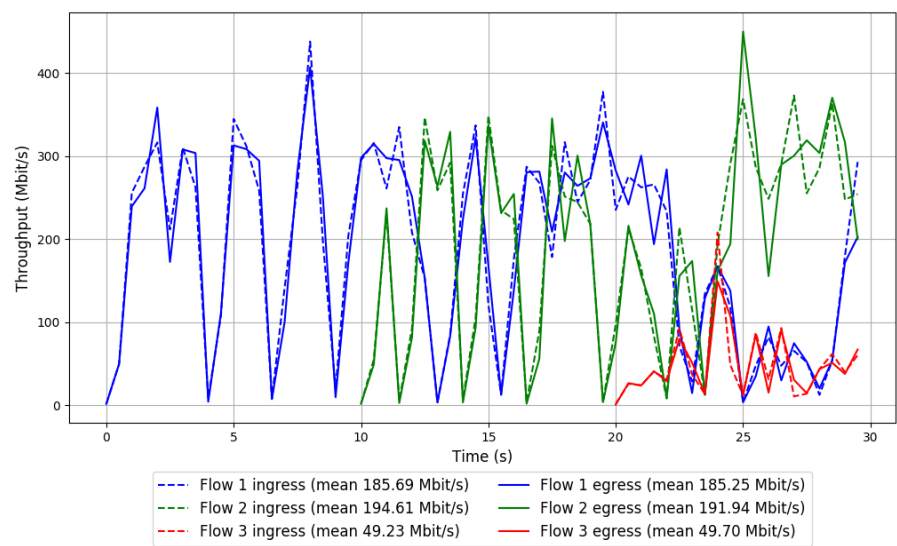
-- Flow 3:

Average throughput: 49.70 Mbit/s

95th percentile per-packet one-way delay: 134.551 ms

Loss rate: 0.65%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-09 21:35:34

End at: 2018-01-09 21:36:04

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 378.95 Mbit/s

95th percentile per-packet one-way delay: 97.749 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 209.27 Mbit/s

95th percentile per-packet one-way delay: 72.493 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 204.16 Mbit/s

95th percentile per-packet one-way delay: 188.520 ms

Loss rate: 1.09%

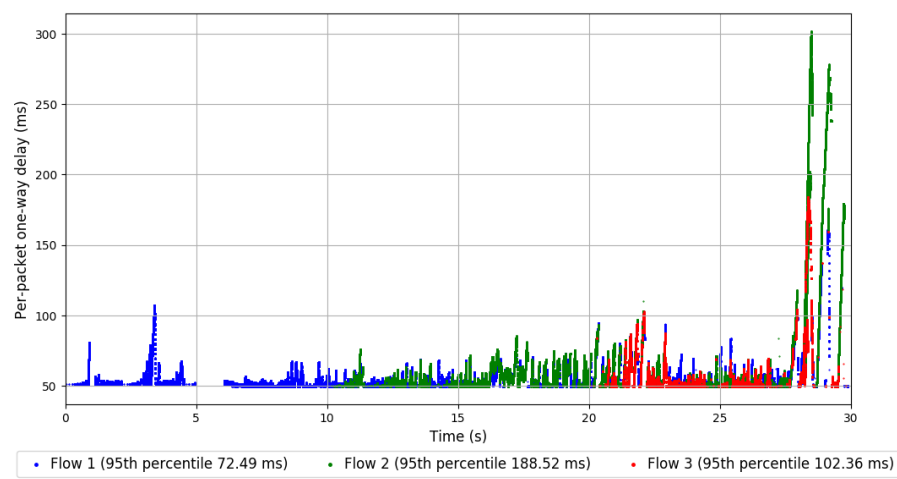
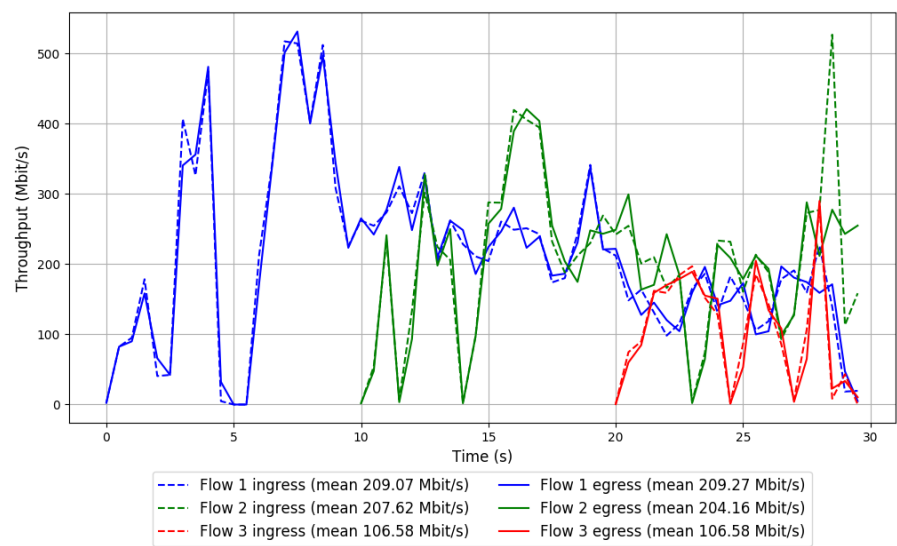
-- Flow 3:

Average throughput: 106.58 Mbit/s

95th percentile per-packet one-way delay: 102.357 ms

Loss rate: 1.02%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-09 21:49:55

End at: 2018-01-09 21:50:25

Below is generated by plot.py at 2018-01-10 01:47:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 354.62 Mbit/s

95th percentile per-packet one-way delay: 133.285 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 199.42 Mbit/s

95th percentile per-packet one-way delay: 115.329 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 195.79 Mbit/s

95th percentile per-packet one-way delay: 124.696 ms

Loss rate: 0.58%

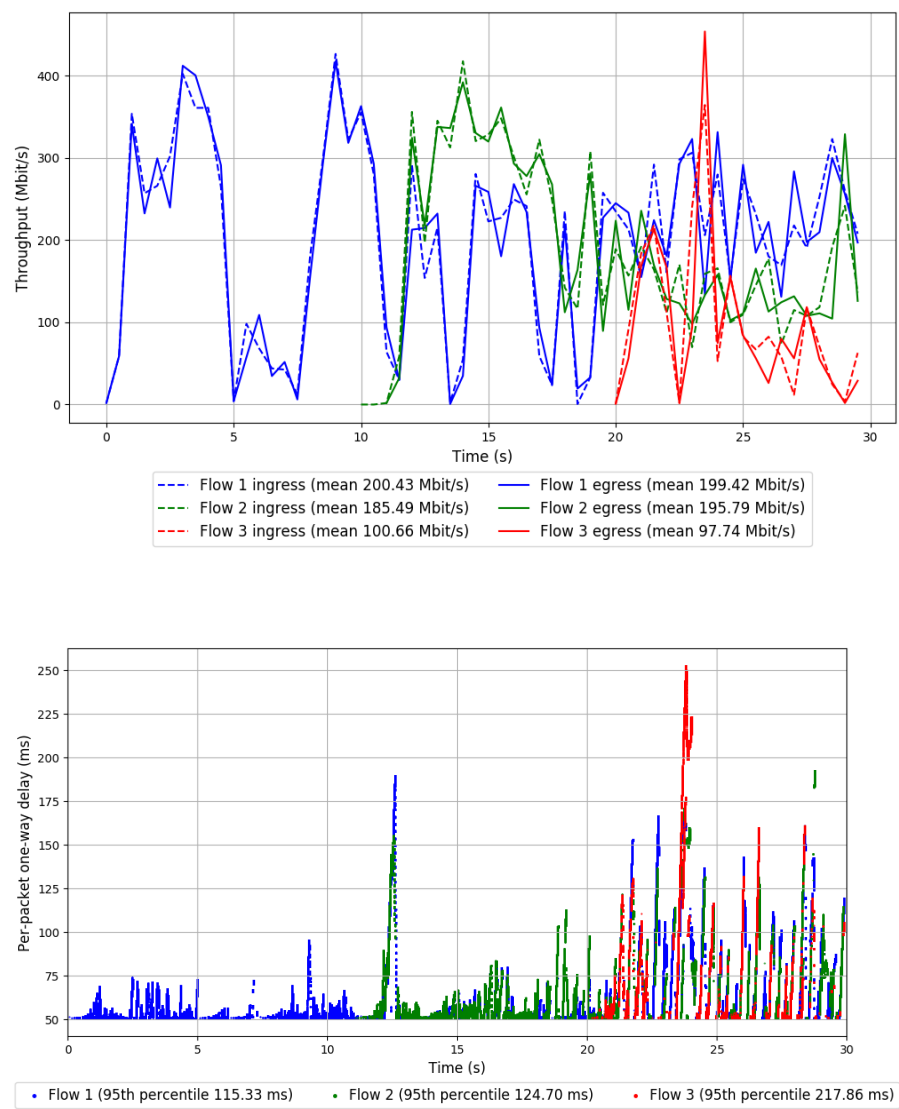
-- Flow 3:

Average throughput: 97.74 Mbit/s

95th percentile per-packet one-way delay: 217.864 ms

Loss rate: 4.21%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-09 22:03:15

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

Below is generated by plot.py at 2018-01-10 01:47:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 336.97 Mbit/s

95th percentile per-packet one-way delay: 135.832 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 211.01 Mbit/s

95th percentile per-packet one-way delay: 152.461 ms

Loss rate: 1.56%

-- Flow 2:

Average throughput: 121.66 Mbit/s

95th percentile per-packet one-way delay: 79.741 ms

Loss rate: 0.37%

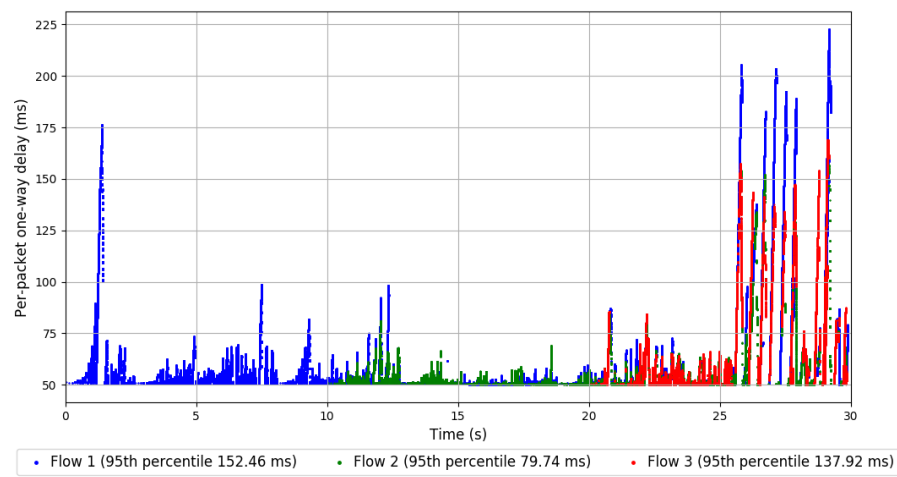
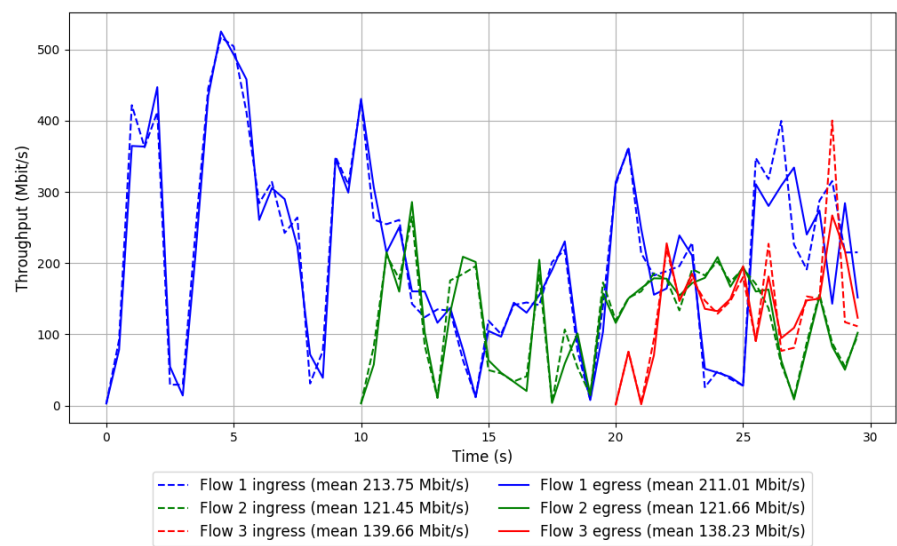
-- Flow 3:

Average throughput: 138.23 Mbit/s

95th percentile per-packet one-way delay: 137.918 ms

Loss rate: 1.00%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-09 22:17:24

End at: 2018-01-09 22:17:54

Below is generated by plot.py at 2018-01-10 01:48:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 388.37 Mbit/s

95th percentile per-packet one-way delay: 95.740 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 238.29 Mbit/s

95th percentile per-packet one-way delay: 89.812 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 144.55 Mbit/s

95th percentile per-packet one-way delay: 108.980 ms

Loss rate: 1.01%

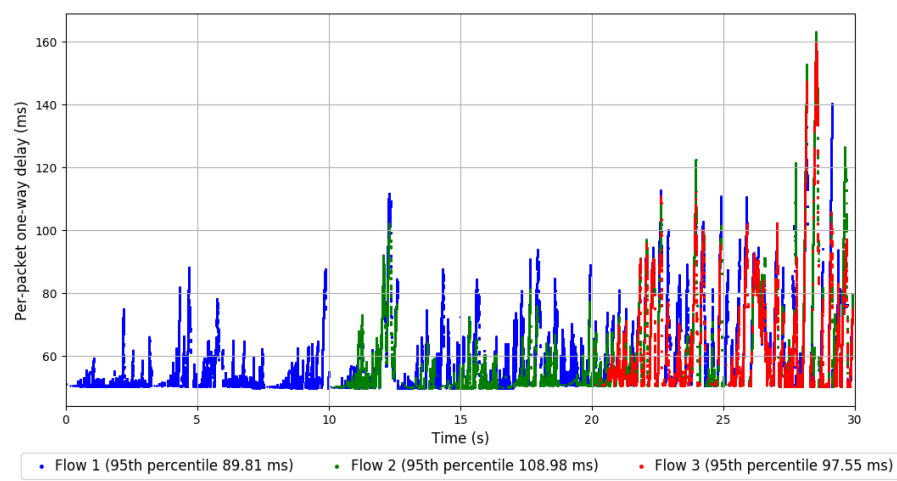
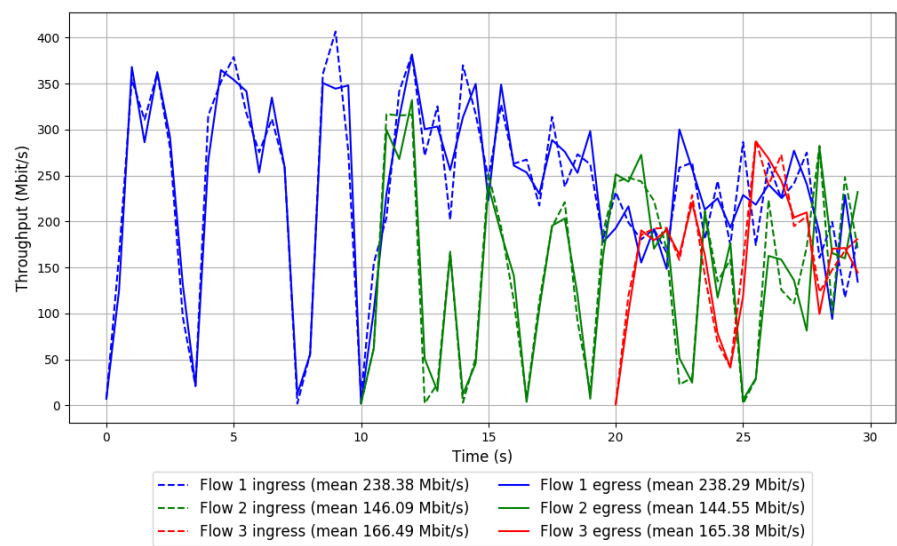
-- Flow 3:

Average throughput: 165.38 Mbit/s

95th percentile per-packet one-way delay: 97.545 ms

Loss rate: 1.80%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-01-09 20:08:33

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

Below is generated by plot.py at 2018-01-10 01:48:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.14 Mbit/s

95th percentile per-packet one-way delay: 50.711 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 83.97 Mbit/s

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

Loss rate: 0.34%

-- Flow 2:

Average throughput: 61.28 Mbit/s

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

Loss rate: 0.30%

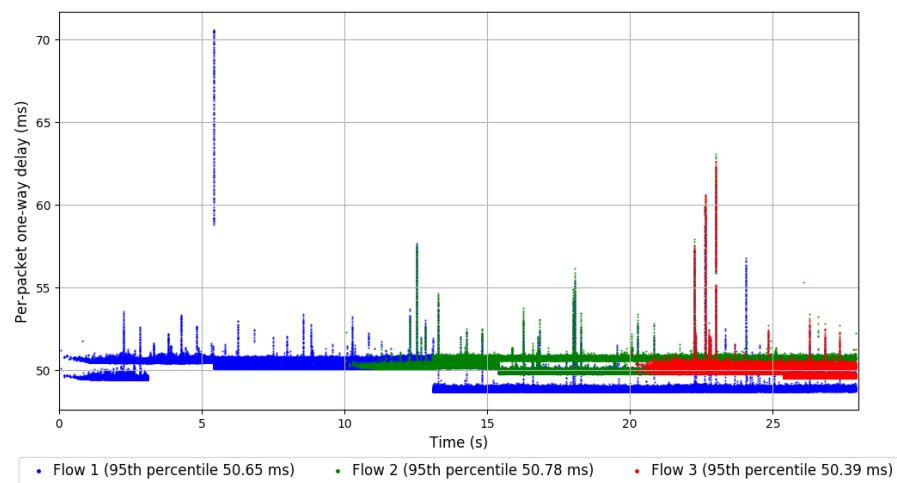
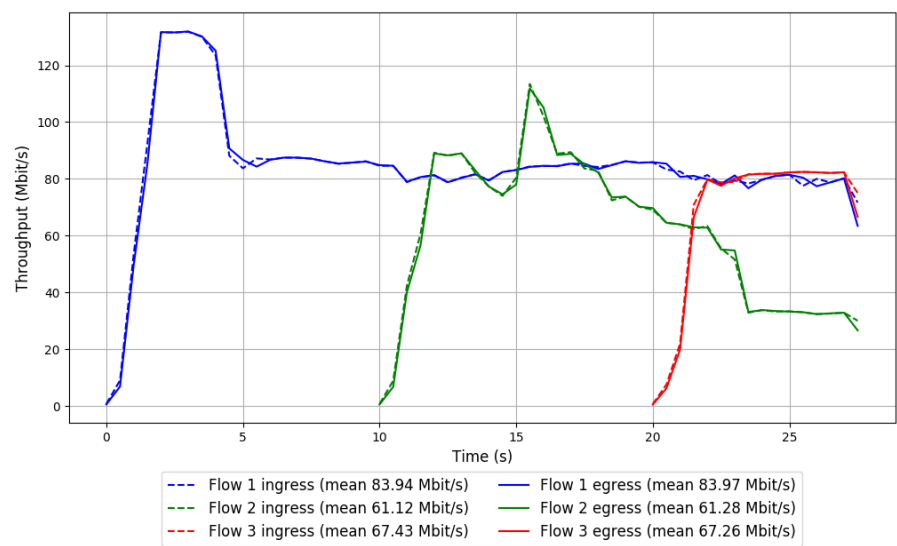
-- Flow 3:

Average throughput: 67.26 Mbit/s

95th percentile per-packet one-way delay: 50.389 ms

Loss rate: 1.55%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-09 20:22:48

End at: 2018-01-09 20:23:18

Below is generated by plot.py at 2018-01-10 01:48:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 147.01 Mbit/s

95th percentile per-packet one-way delay: 50.857 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 78.60 Mbit/s

95th percentile per-packet one-way delay: 50.310 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 73.82 Mbit/s

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

Loss rate: 0.86%

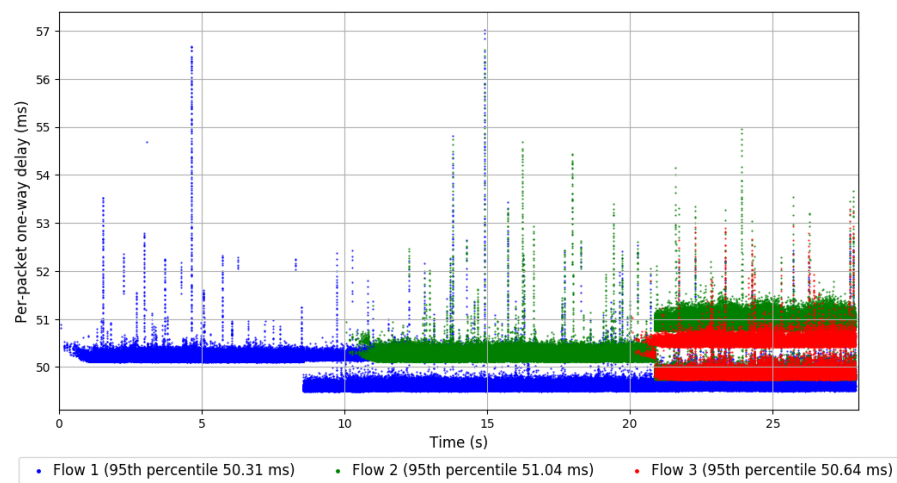
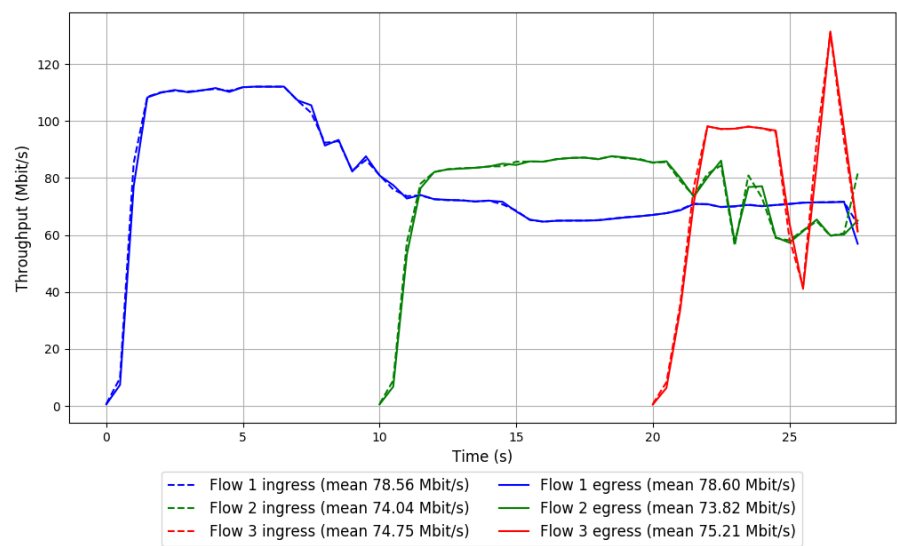
-- Flow 3:

Average throughput: 75.21 Mbit/s

95th percentile per-packet one-way delay: 50.643 ms

Loss rate: 0.68%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-09 20:36:20

End at: 2018-01-09 20:36:50

Below is generated by plot.py at 2018-01-10 01:48:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.10 Mbit/s

95th percentile per-packet one-way delay: 50.976 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 77.31 Mbit/s

95th percentile per-packet one-way delay: 51.022 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 70.98 Mbit/s

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

Loss rate: 0.52%

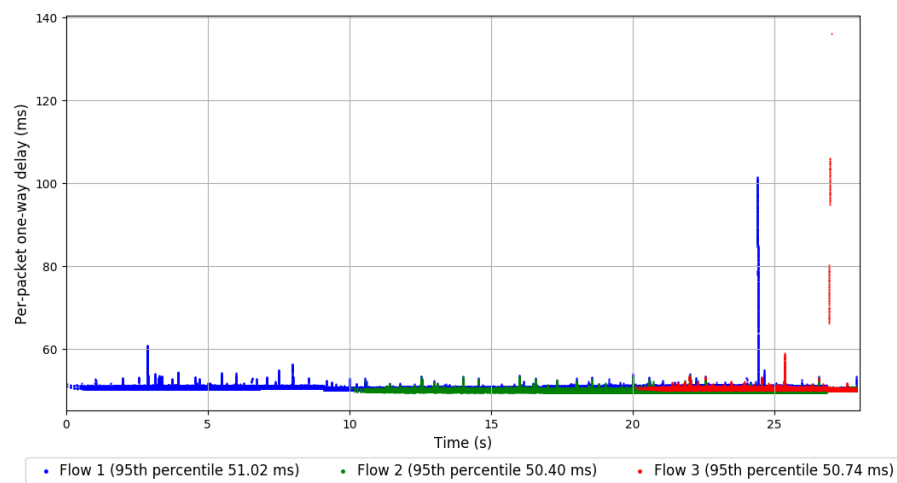
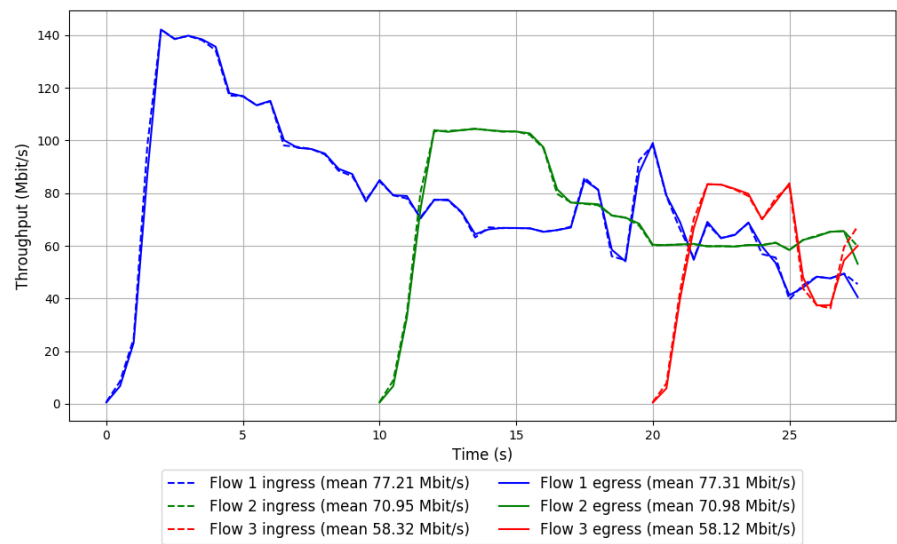
-- Flow 3:

Average throughput: 58.12 Mbit/s

95th percentile per-packet one-way delay: 50.737 ms

Loss rate: 1.62%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-09 20:50:34

End at: 2018-01-09 20:51:04

Below is generated by plot.py at 2018-01-10 01:48:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.84 Mbit/s

95th percentile per-packet one-way delay: 50.706 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 78.25 Mbit/s

95th percentile per-packet one-way delay: 50.708 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 69.03 Mbit/s

95th percentile per-packet one-way delay: 50.725 ms

Loss rate: 0.34%

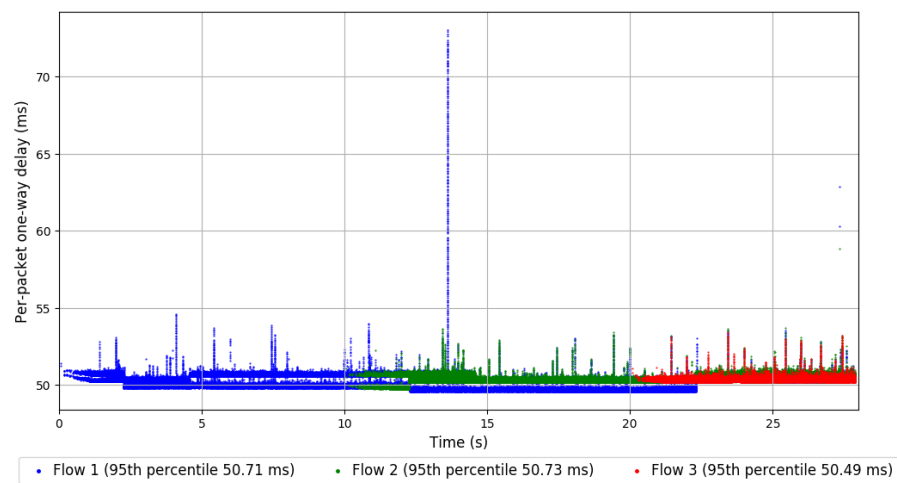
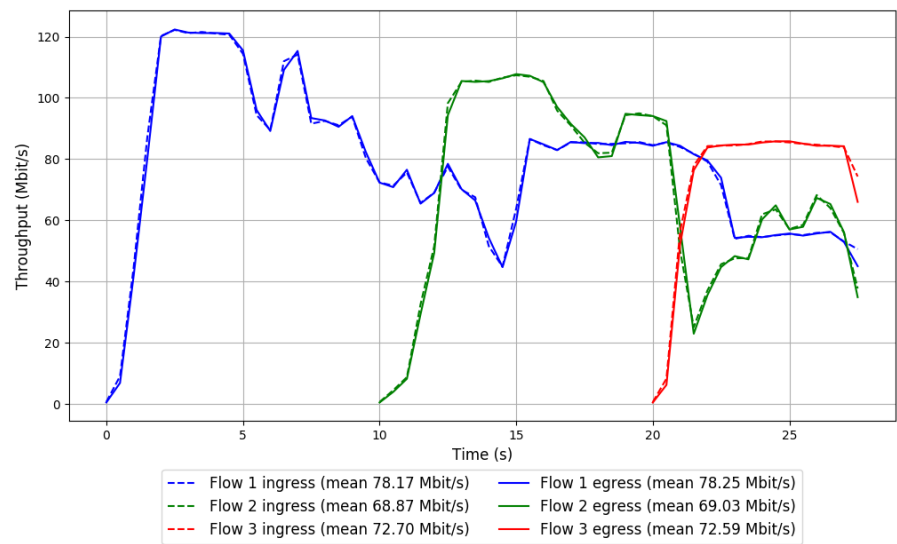
-- Flow 3:

Average throughput: 72.59 Mbit/s

95th percentile per-packet one-way delay: 50.493 ms

Loss rate: 1.42%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-09 21:04:39

End at: 2018-01-09 21:05:09

Below is generated by plot.py at 2018-01-10 01:49:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.15 Mbit/s

95th percentile per-packet one-way delay: 50.849 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 67.13 Mbit/s

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

Loss rate: 0.54%

-- Flow 2:

Average throughput: 84.18 Mbit/s

95th percentile per-packet one-way delay: 50.904 ms

Loss rate: 0.53%

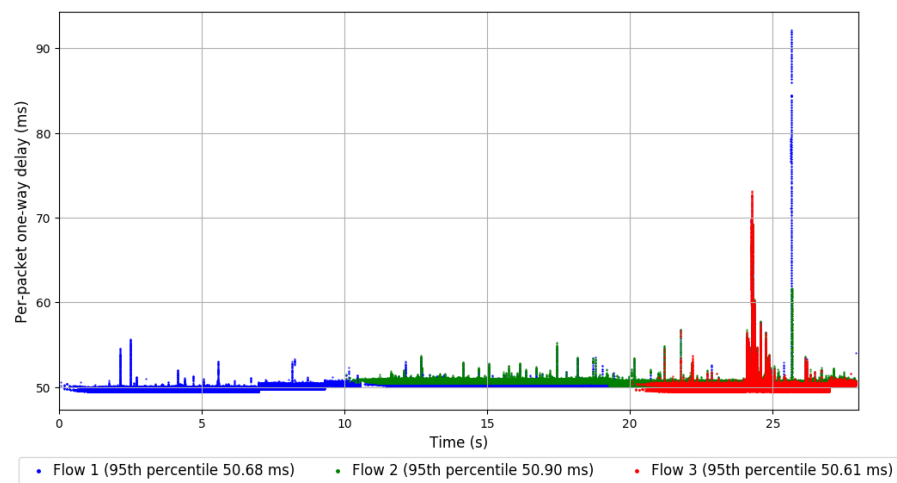
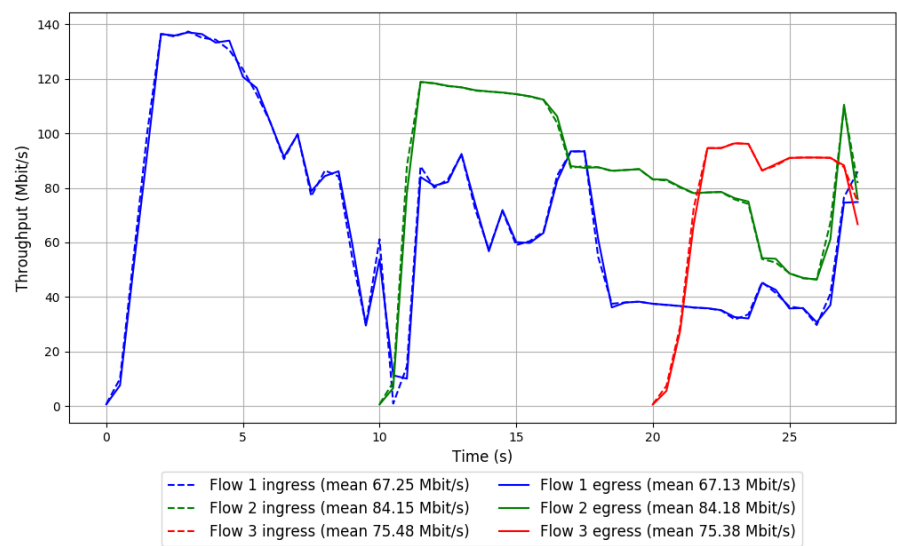
-- Flow 3:

Average throughput: 75.38 Mbit/s

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

Loss rate: 1.40%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-09 21:19:01

End at: 2018-01-09 21:19:31

Below is generated by plot.py at 2018-01-10 01:49:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 144.18 Mbit/s

95th percentile per-packet one-way delay: 50.792 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 83.04 Mbit/s

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

Loss rate: 0.36%

-- Flow 2:

Average throughput: 70.45 Mbit/s

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

Loss rate: 0.53%

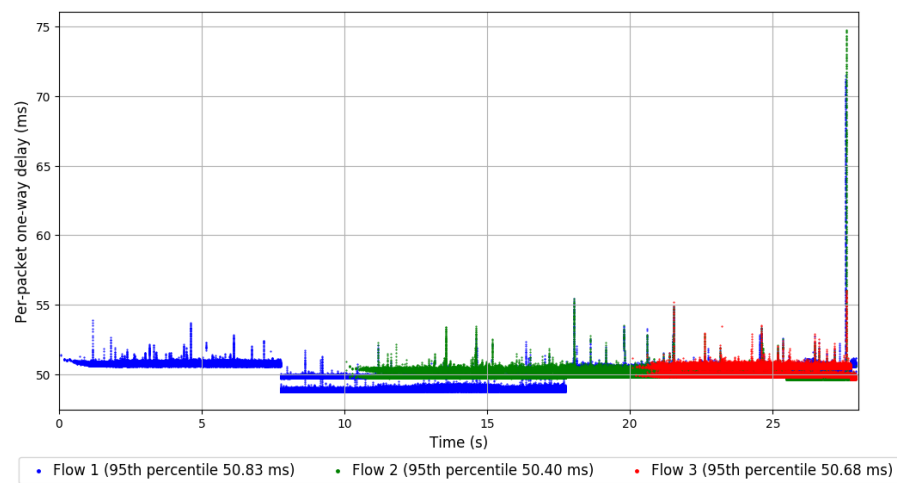
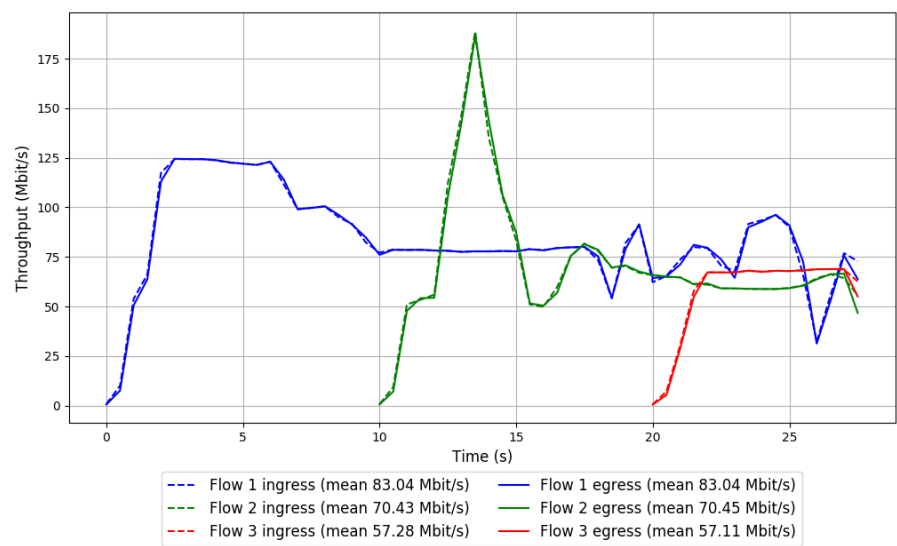
-- Flow 3:

Average throughput: 57.11 Mbit/s

95th percentile per-packet one-way delay: 50.681 ms

Loss rate: 1.56%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-09 21:33:19

End at: 2018-01-09 21:33:49

Below is generated by plot.py at 2018-01-10 01:49:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.77 Mbit/s

95th percentile per-packet one-way delay: 50.961 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 74.04 Mbit/s

95th percentile per-packet one-way delay: 50.899 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 71.16 Mbit/s

95th percentile per-packet one-way delay: 51.010 ms

Loss rate: 0.57%

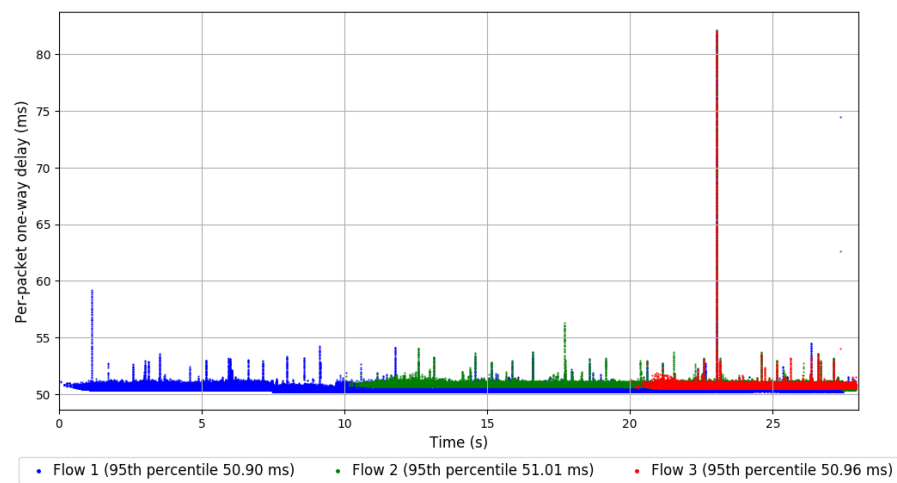
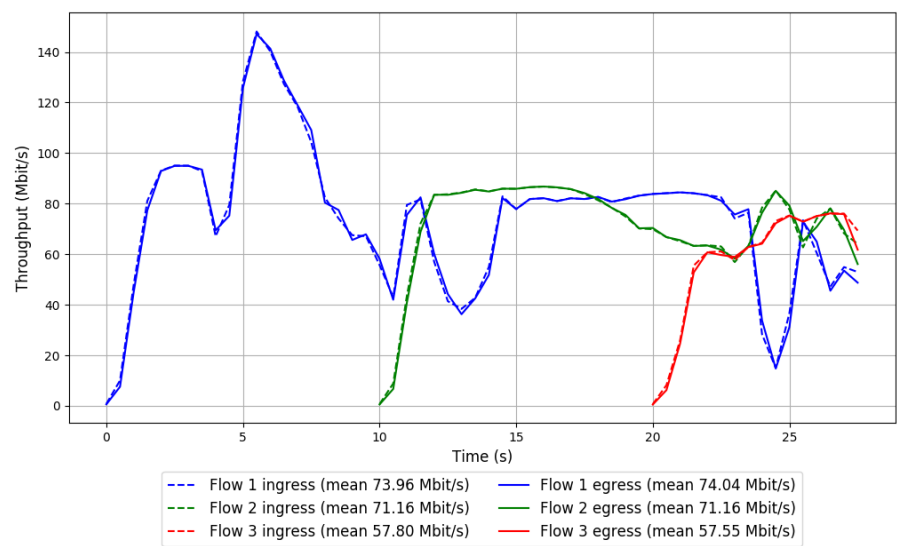
-- Flow 3:

Average throughput: 57.55 Mbit/s

95th percentile per-packet one-way delay: 50.964 ms

Loss rate: 1.69%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-09 21:47:39

End at: 2018-01-09 21:48:09

Below is generated by plot.py at 2018-01-10 01:50:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.40 Mbit/s

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

Loss rate: 0.48%

-- Flow 1:

Average throughput: 79.28 Mbit/s

95th percentile per-packet one-way delay: 50.778 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 66.98 Mbit/s

95th percentile per-packet one-way delay: 50.875 ms

Loss rate: 0.39%

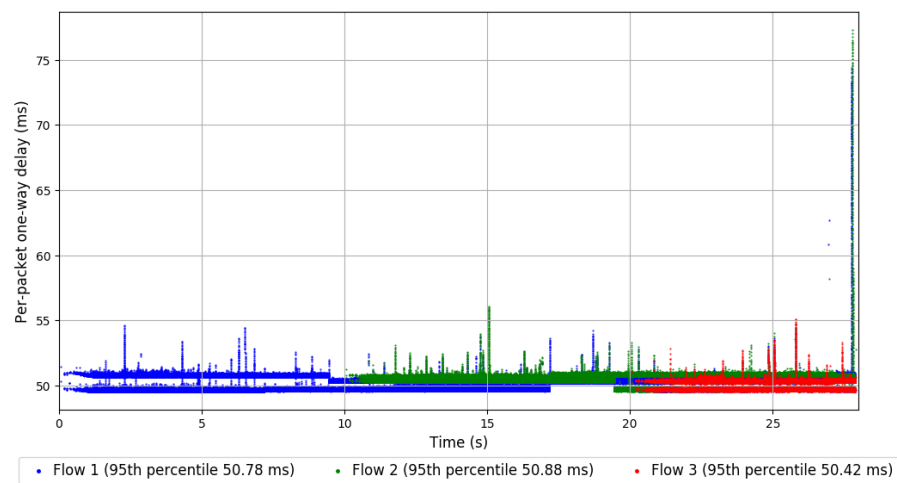
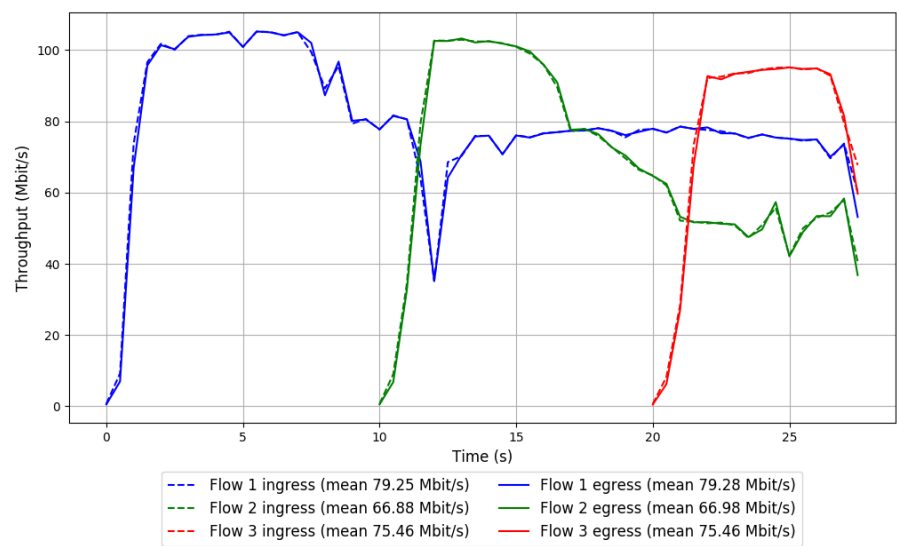
-- Flow 3:

Average throughput: 75.46 Mbit/s

95th percentile per-packet one-way delay: 50.424 ms

Loss rate: 1.27%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

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

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

Below is generated by plot.py at 2018-01-10 01:50:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.33 Mbit/s

95th percentile per-packet one-way delay: 51.017 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 74.94 Mbit/s

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

Loss rate: 0.44%

-- Flow 2:

Average throughput: 69.50 Mbit/s

95th percentile per-packet one-way delay: 50.758 ms

Loss rate: 0.53%

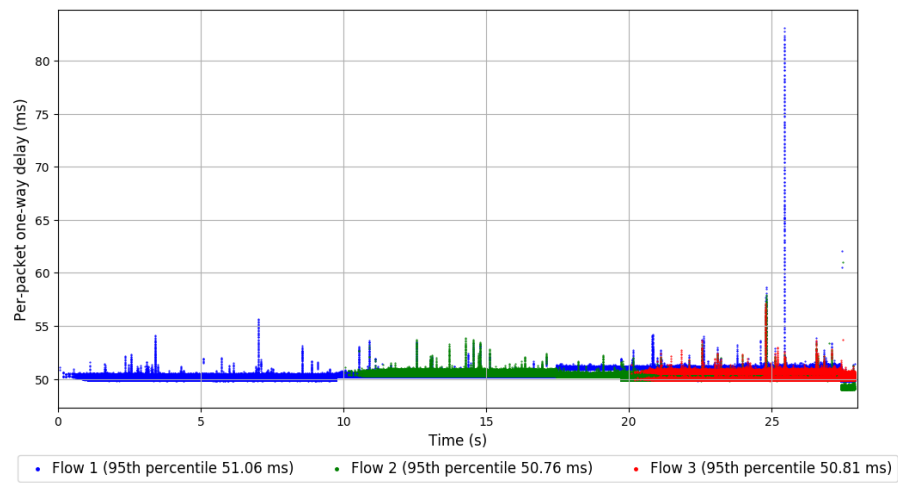
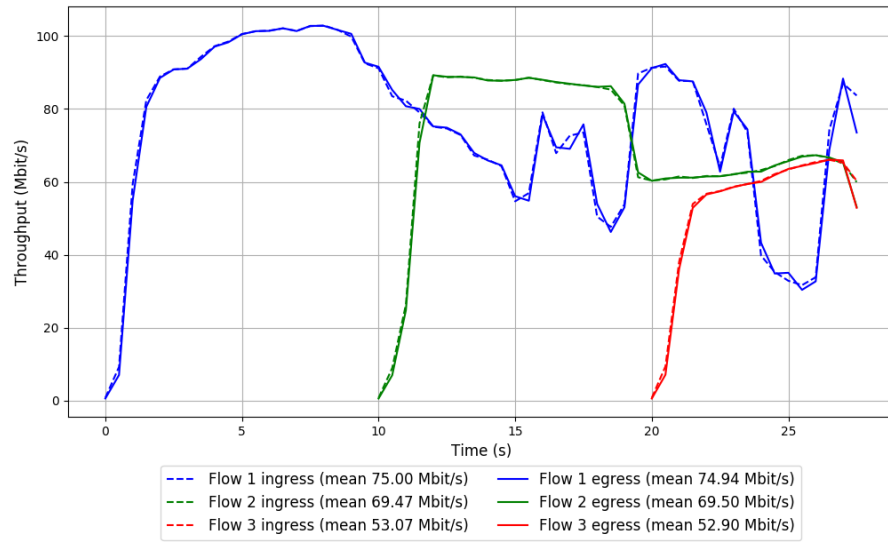
-- Flow 3:

Average throughput: 52.90 Mbit/s

95th percentile per-packet one-way delay: 50.810 ms

Loss rate: 1.59%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-09 22:15:10

End at: 2018-01-09 22:15:40

Below is generated by plot.py at 2018-01-10 01:50:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.43 Mbit/s

95th percentile per-packet one-way delay: 50.904 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 68.11 Mbit/s

95th percentile per-packet one-way delay: 50.874 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 77.35 Mbit/s

95th percentile per-packet one-way delay: 50.941 ms

Loss rate: 0.45%

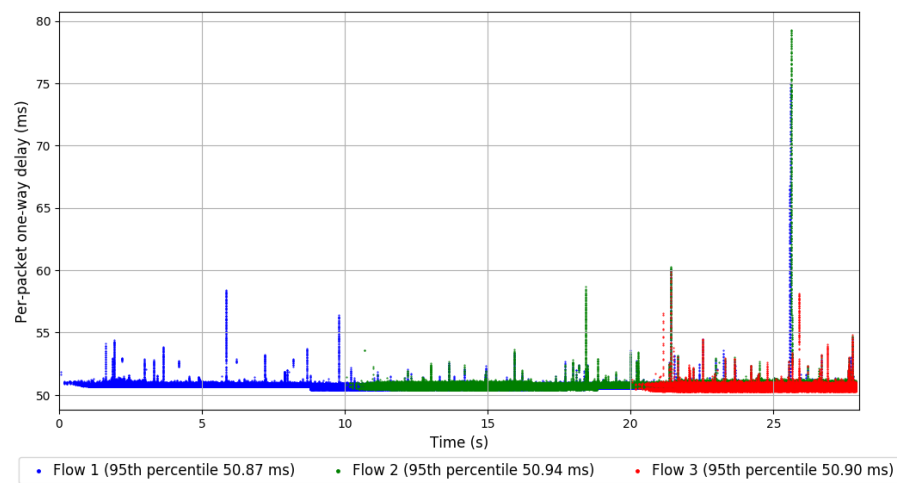
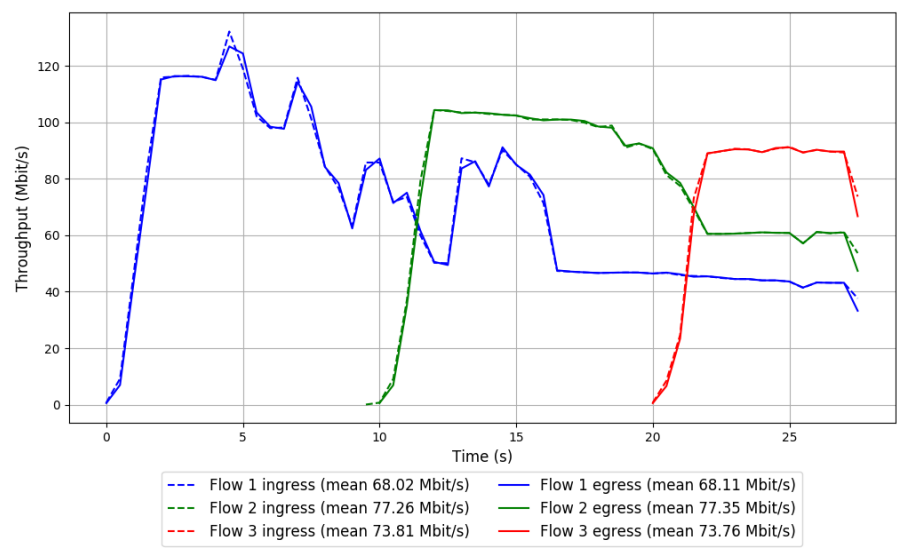
-- Flow 3:

Average throughput: 73.76 Mbit/s

95th percentile per-packet one-way delay: 50.896 ms

Loss rate: 1.35%

Run 10: Report of Copa — Data Link

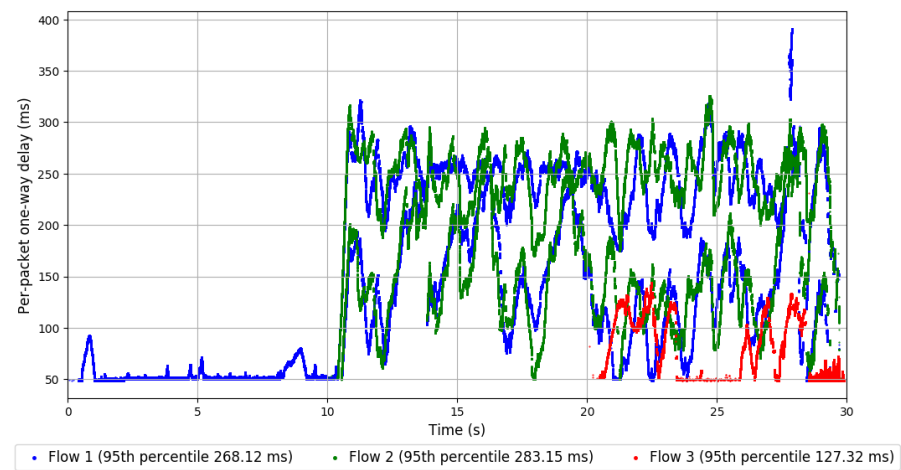
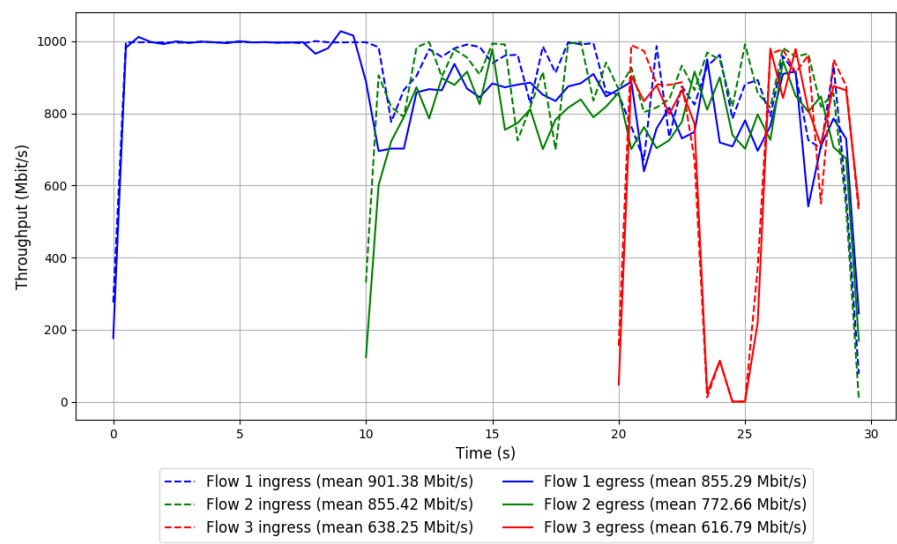


```
Run 1: Statistics of FillP

Start at: 2018-01-09 20:13:36
End at: 2018-01-09 20:14:06

# Below is generated by plot.py at 2018-01-10 02:12:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1569.33 Mbit/s
95th percentile per-packet one-way delay: 276.226 ms
Loss rate: 6.93%
-- Flow 1:
Average throughput: 855.29 Mbit/s
95th percentile per-packet one-way delay: 268.118 ms
Loss rate: 5.43%
-- Flow 2:
Average throughput: 772.66 Mbit/s
95th percentile per-packet one-way delay: 283.149 ms
Loss rate: 10.16%
-- Flow 3:
Average throughput: 616.79 Mbit/s
95th percentile per-packet one-way delay: 127.318 ms
Loss rate: 4.64%
```


Run 1: Report of FillP — Data Link

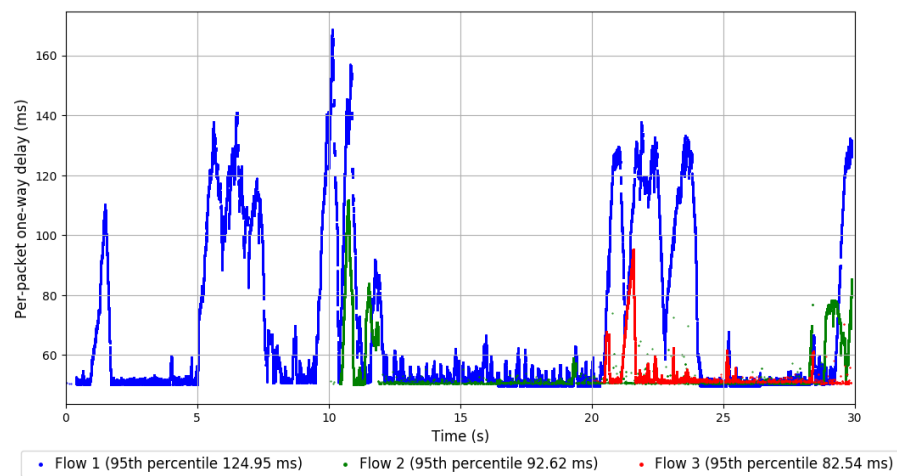
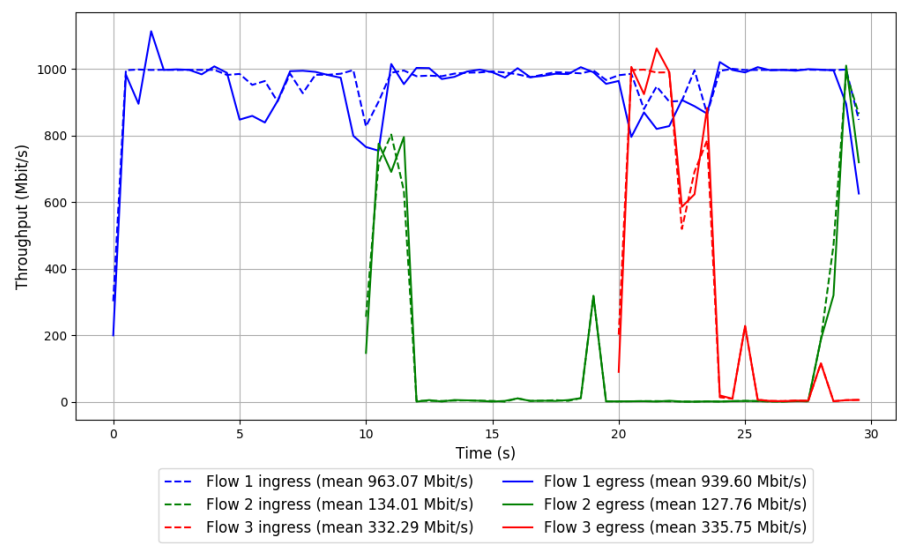


```
Run 2: Statistics of FillP

Start at: 2018-01-09 20:27:52
End at: 2018-01-09 20:28:22

# Below is generated by plot.py at 2018-01-10 02:12:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1134.64 Mbit/s
95th percentile per-packet one-way delay: 123.333 ms
Loss rate: 2.69%
-- Flow 1:
Average throughput: 939.60 Mbit/s
95th percentile per-packet one-way delay: 124.953 ms
Loss rate: 2.77%
-- Flow 2:
Average throughput: 127.76 Mbit/s
95th percentile per-packet one-way delay: 92.625 ms
Loss rate: 5.15%
-- Flow 3:
Average throughput: 335.75 Mbit/s
95th percentile per-packet one-way delay: 82.544 ms
Loss rate: 0.02%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-09 20:41:25

End at: 2018-01-09 20:41:55

Below is generated by plot.py at 2018-01-10 02:17:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 1714.95 Mbit/s

95th percentile per-packet one-way delay: 130.395 ms

Loss rate: 4.68%

-- Flow 1:

Average throughput: 859.60 Mbit/s

95th percentile per-packet one-way delay: 127.760 ms

Loss rate: 3.90%

-- Flow 2:

Average throughput: 908.62 Mbit/s

95th percentile per-packet one-way delay: 129.497 ms

Loss rate: 4.39%

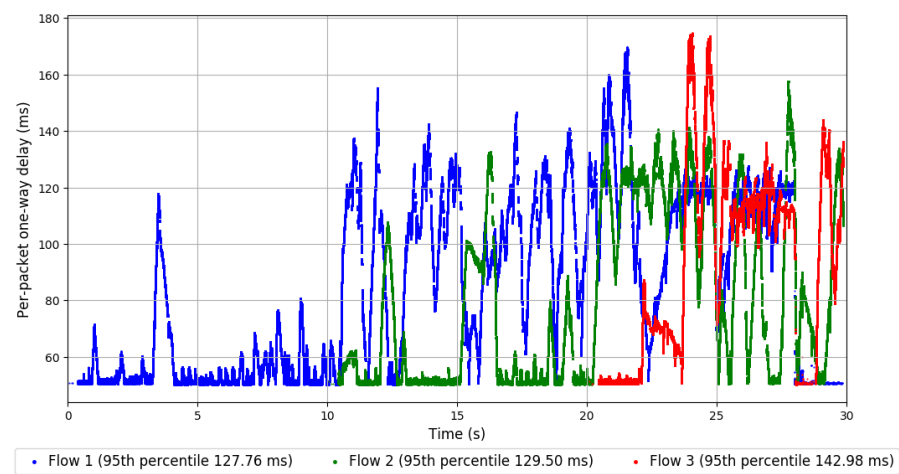
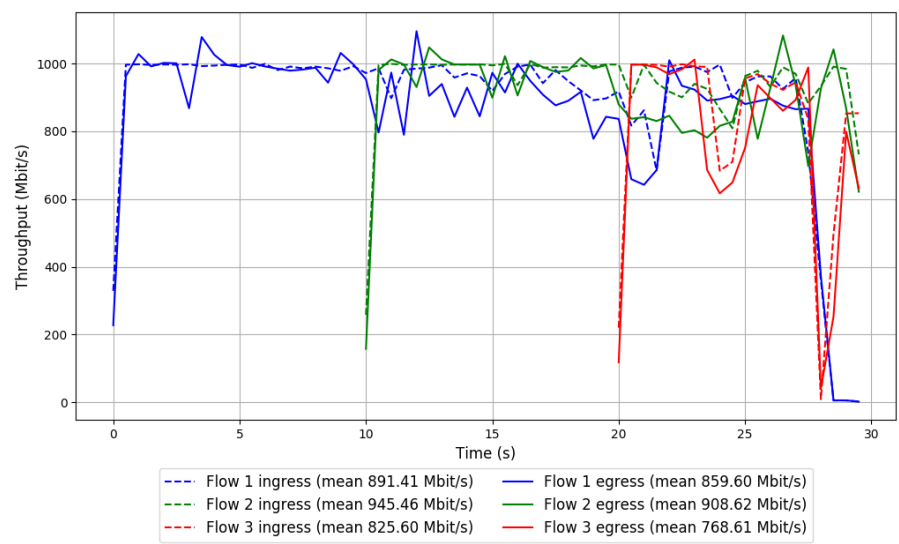
-- Flow 3:

Average throughput: 768.61 Mbit/s

95th percentile per-packet one-way delay: 142.976 ms

Loss rate: 7.87%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-09 20:55:37

End at: 2018-01-09 20:56:07

Below is generated by plot.py at 2018-01-10 02:17:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 1538.50 Mbit/s

95th percentile per-packet one-way delay: 125.635 ms

Loss rate: 2.87%

-- Flow 1:

Average throughput: 956.48 Mbit/s

95th percentile per-packet one-way delay: 122.205 ms

Loss rate: 1.97%

-- Flow 2:

Average throughput: 444.72 Mbit/s

95th percentile per-packet one-way delay: 127.765 ms

Loss rate: 3.79%

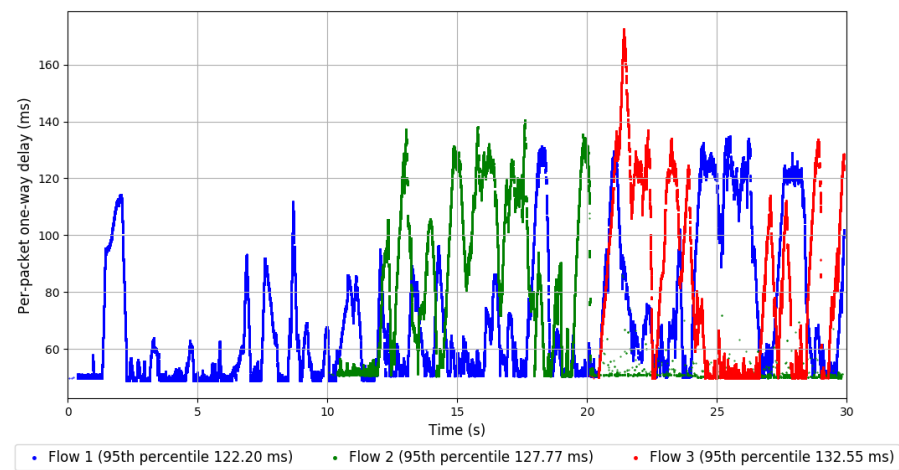
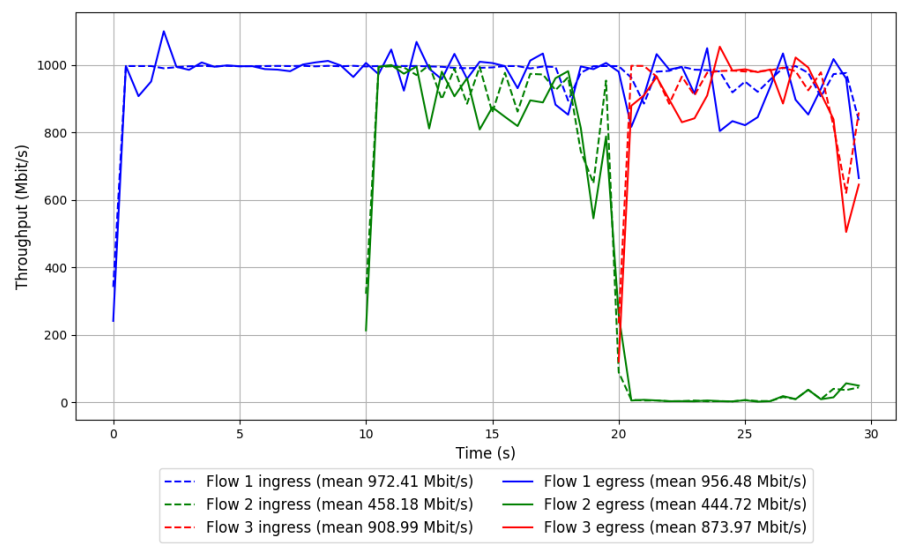
-- Flow 3:

Average throughput: 873.97 Mbit/s

95th percentile per-packet one-way delay: 132.553 ms

Loss rate: 4.83%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-09 21:09:39

End at: 2018-01-09 21:10:09

Below is generated by plot.py at 2018-01-10 02:20:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 1815.84 Mbit/s

95th percentile per-packet one-way delay: 126.306 ms

Loss rate: 4.85%

-- Flow 1:

Average throughput: 944.08 Mbit/s

95th percentile per-packet one-way delay: 122.315 ms

Loss rate: 2.76%

-- Flow 2:

Average throughput: 885.74 Mbit/s

95th percentile per-packet one-way delay: 129.362 ms

Loss rate: 6.87%

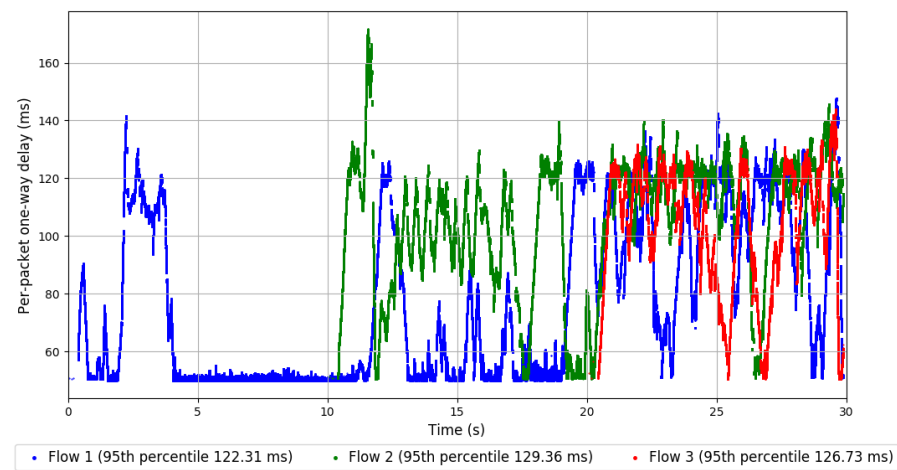
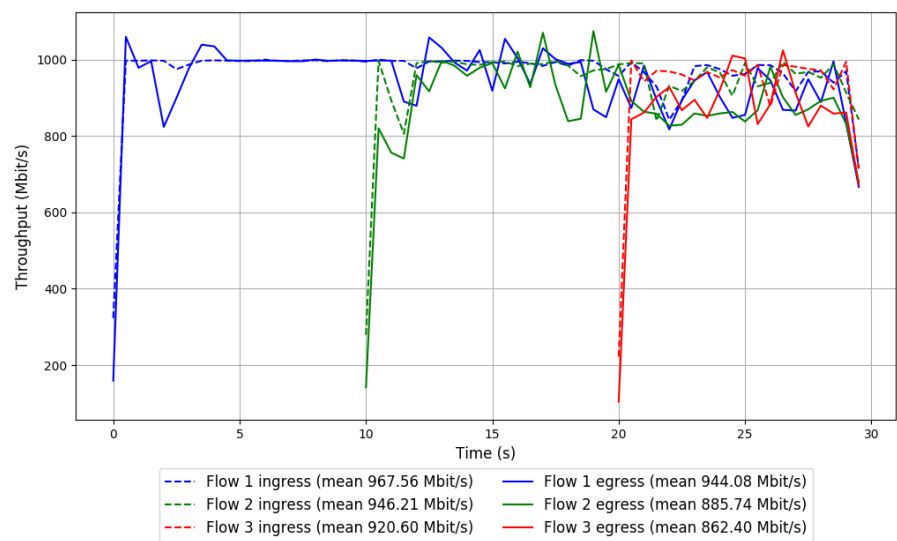
-- Flow 3:

Average throughput: 862.40 Mbit/s

95th percentile per-packet one-way delay: 126.727 ms

Loss rate: 7.30%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-09 21:24:01

End at: 2018-01-09 21:24:31

Below is generated by plot.py at 2018-01-10 02:20:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 1662.51 Mbit/s

95th percentile per-packet one-way delay: 265.218 ms

Loss rate: 7.87%

-- Flow 1:

Average throughput: 849.15 Mbit/s

95th percentile per-packet one-way delay: 265.167 ms

Loss rate: 7.07%

-- Flow 2:

Average throughput: 801.63 Mbit/s

95th percentile per-packet one-way delay: 270.905 ms

Loss rate: 9.09%

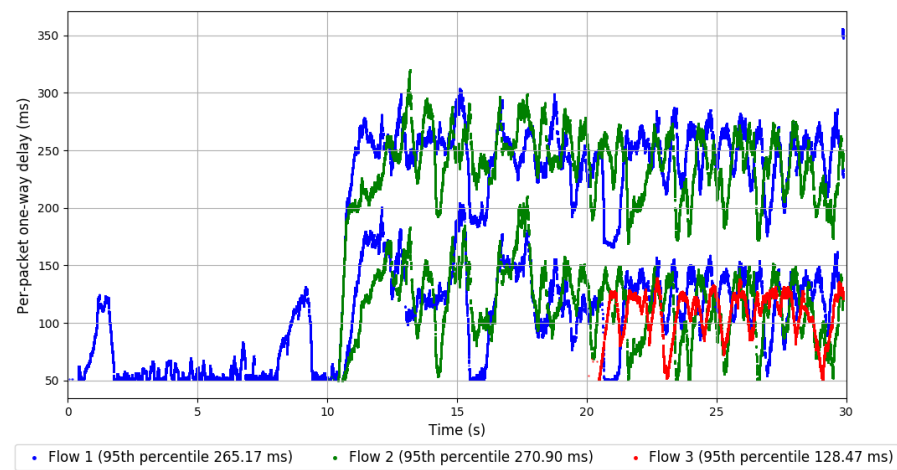
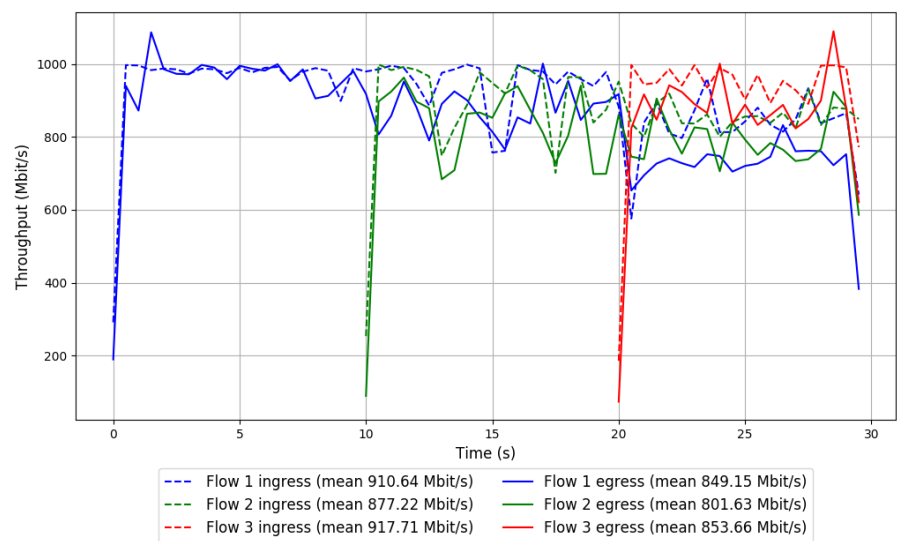
-- Flow 3:

Average throughput: 853.66 Mbit/s

95th percentile per-packet one-way delay: 128.467 ms

Loss rate: 7.91%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-09 21:38:23

End at: 2018-01-09 21:38:53

Below is generated by plot.py at 2018-01-10 02:20:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 1570.18 Mbit/s

95th percentile per-packet one-way delay: 269.824 ms

Loss rate: 6.29%

-- Flow 1:

Average throughput: 879.92 Mbit/s

95th percentile per-packet one-way delay: 252.576 ms

Loss rate: 2.69%

-- Flow 2:

Average throughput: 728.35 Mbit/s

95th percentile per-packet one-way delay: 279.506 ms

Loss rate: 13.28%

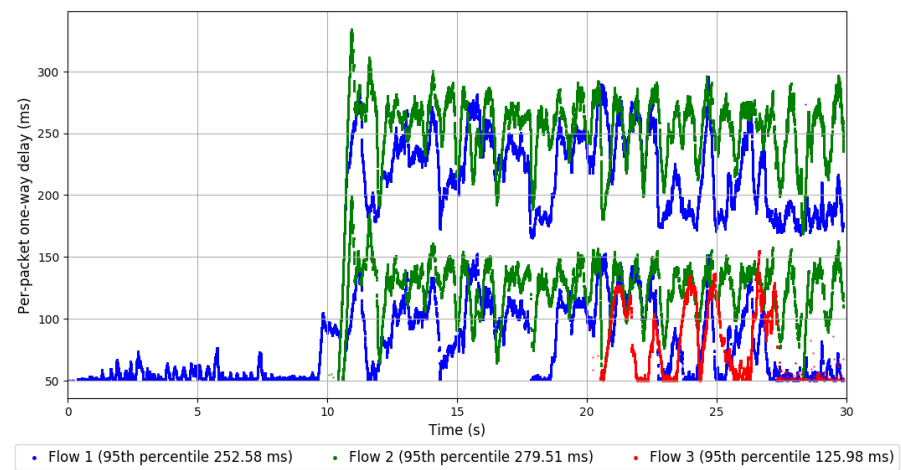
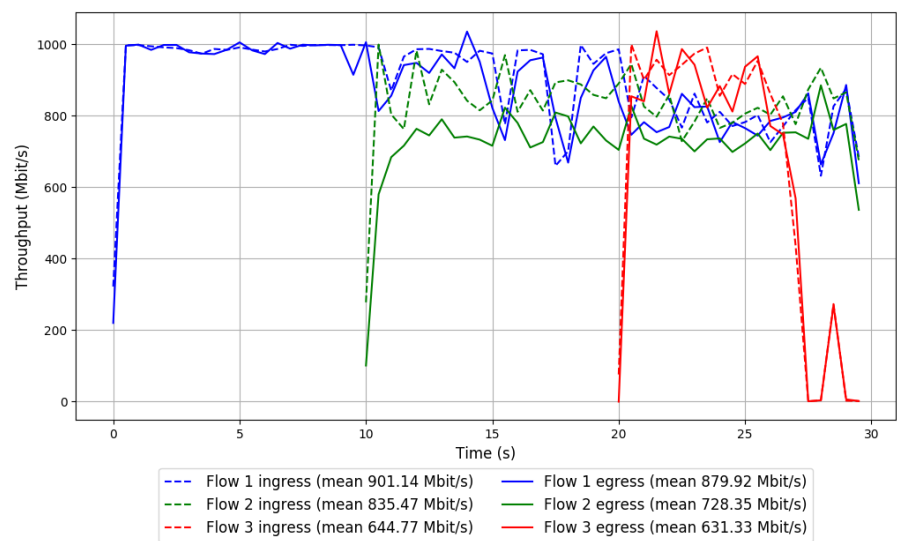
-- Flow 3:

Average throughput: 631.33 Mbit/s

95th percentile per-packet one-way delay: 125.979 ms

Loss rate: 3.25%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-09 21:52:38

End at: 2018-01-09 21:53:08

Below is generated by plot.py at 2018-01-10 02:20:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 870.07 Mbit/s

95th percentile per-packet one-way delay: 214.995 ms

Loss rate: 1.33%

-- Flow 1:

Average throughput: 442.83 Mbit/s

95th percentile per-packet one-way delay: 205.751 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 167.47 Mbit/s

95th percentile per-packet one-way delay: 240.862 ms

Loss rate: 3.69%

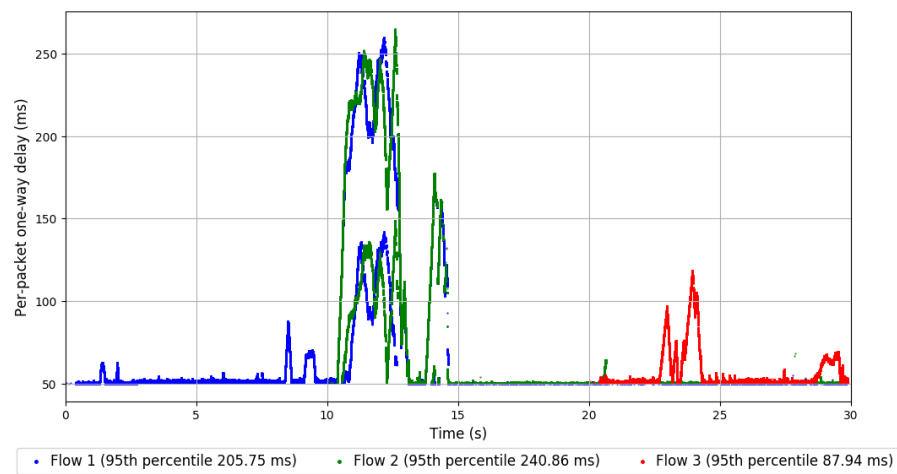
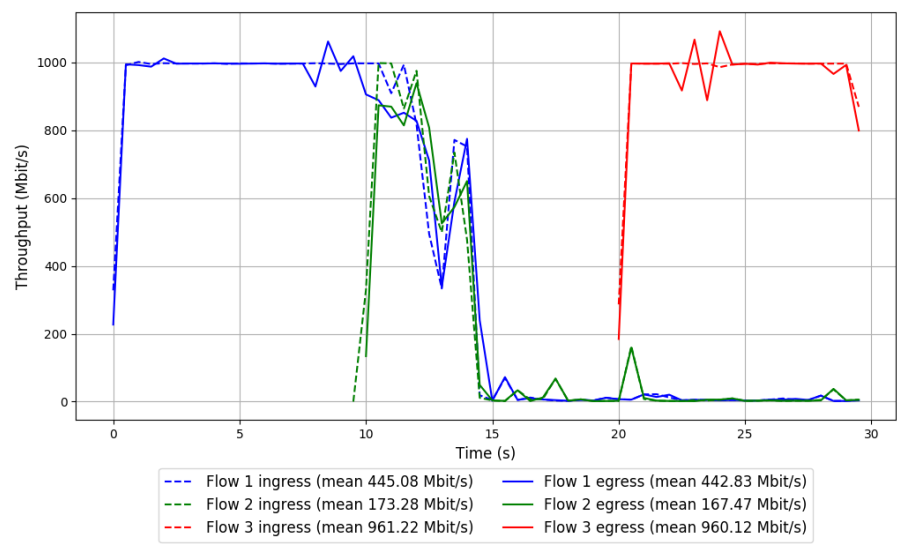
-- Flow 3:

Average throughput: 960.12 Mbit/s

95th percentile per-packet one-way delay: 87.939 ms

Loss rate: 1.14%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-09 22:05:59

End at: 2018-01-09 22:06:29

Below is generated by plot.py at 2018-01-10 02:25:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 1578.61 Mbit/s

95th percentile per-packet one-way delay: 254.907 ms

Loss rate: 5.27%

-- Flow 1:

Average throughput: 737.11 Mbit/s

95th percentile per-packet one-way delay: 127.598 ms

Loss rate: 3.60%

-- Flow 2:

Average throughput: 848.31 Mbit/s

95th percentile per-packet one-way delay: 268.817 ms

Loss rate: 7.24%

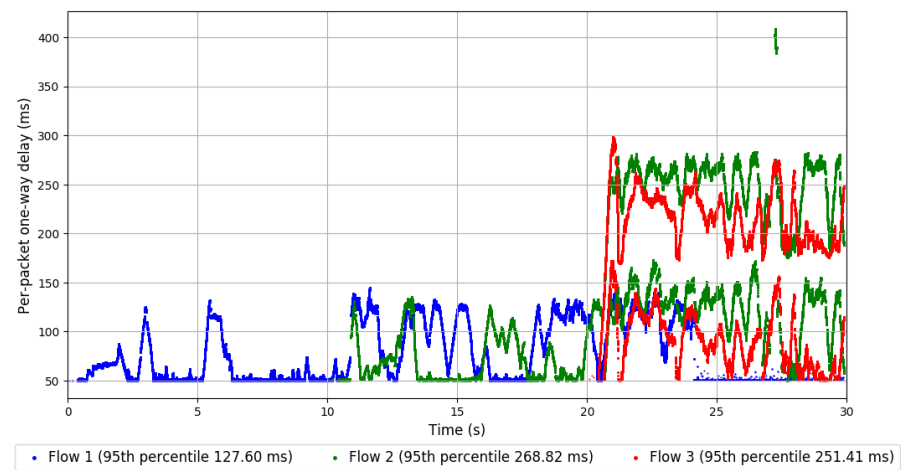
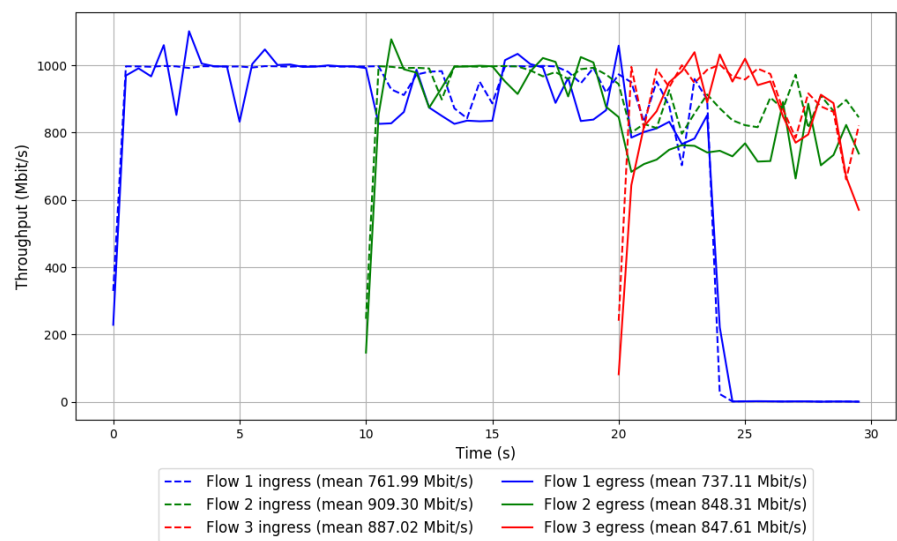
-- Flow 3:

Average throughput: 847.61 Mbit/s

95th percentile per-packet one-way delay: 251.405 ms

Loss rate: 5.53%

Run 9: Report of FillP — Data Link

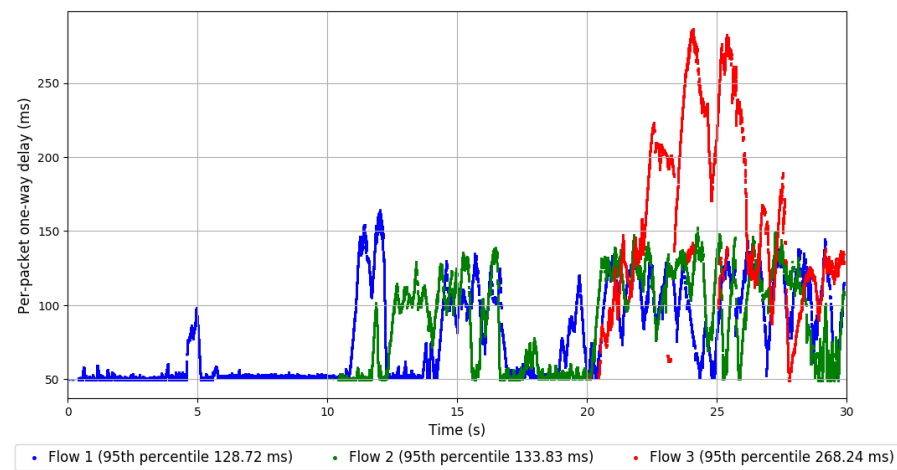
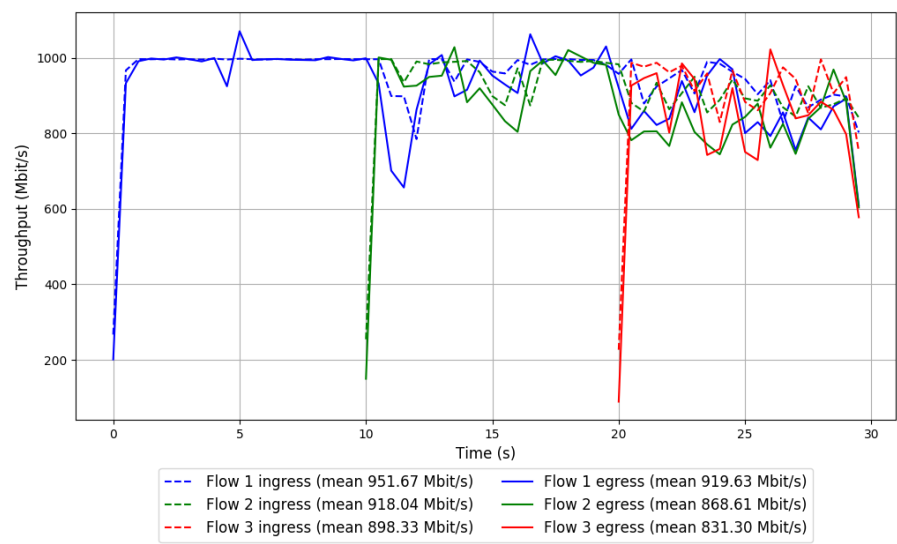


```
Run 10: Statistics of FillP

Start at: 2018-01-09 22:20:13
End at: 2018-01-09 22:20:43

# Below is generated by plot.py at 2018-01-10 02:25:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1770.12 Mbit/s
95th percentile per-packet one-way delay: 193.530 ms
Loss rate: 5.17%
-- Flow 1:
Average throughput: 919.63 Mbit/s
95th percentile per-packet one-way delay: 128.715 ms
Loss rate: 3.69%
-- Flow 2:
Average throughput: 868.61 Mbit/s
95th percentile per-packet one-way delay: 133.834 ms
Loss rate: 5.87%
-- Flow 3:
Average throughput: 831.30 Mbit/s
95th percentile per-packet one-way delay: 268.236 ms
Loss rate: 8.42%
```

Run 10: Report of FillP — Data Link

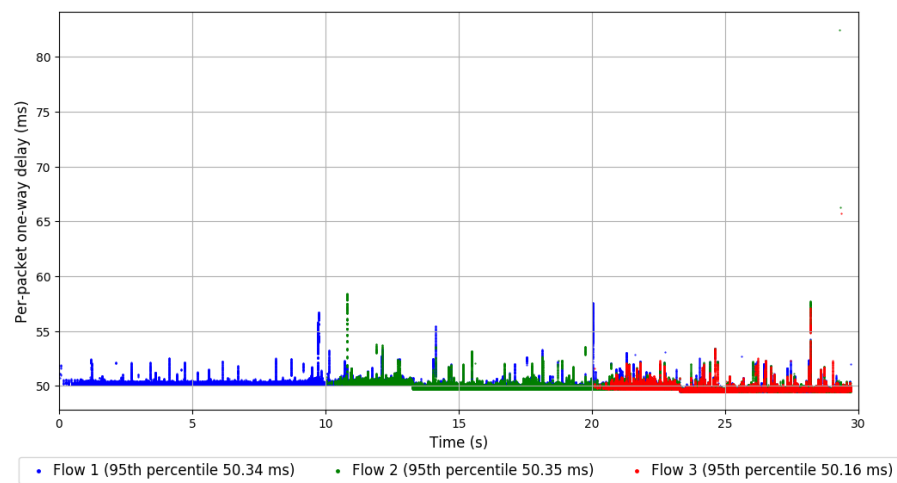
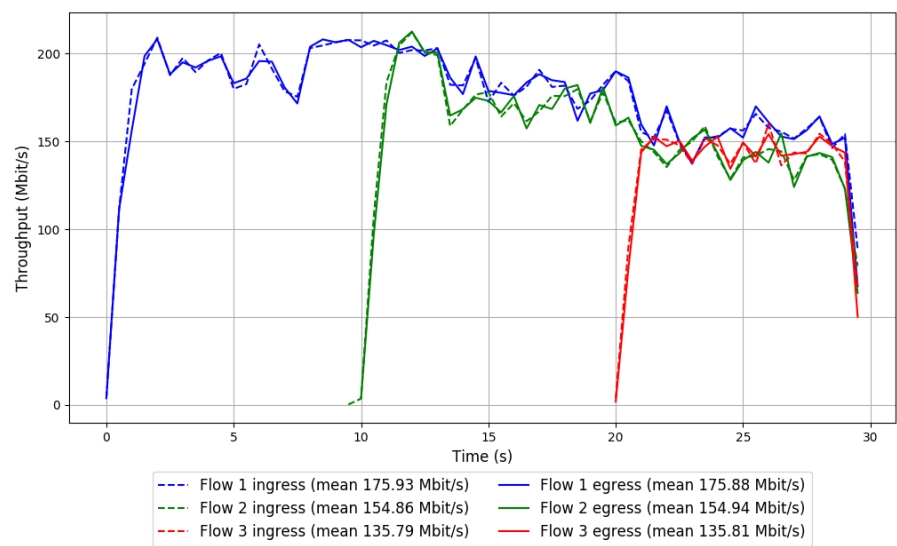


```
Run 1: Statistics of Indigo

Start at: 2018-01-09 20:17:47
End at: 2018-01-09 20:18:17

# Below is generated by plot.py at 2018-01-10 02:25:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 322.74 Mbit/s
95th percentile per-packet one-way delay: 50.336 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 175.88 Mbit/s
95th percentile per-packet one-way delay: 50.341 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 154.94 Mbit/s
95th percentile per-packet one-way delay: 50.347 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 135.81 Mbit/s
95th percentile per-packet one-way delay: 50.162 ms
Loss rate: 1.00%
```

Run 1: Report of Indigo — Data Link

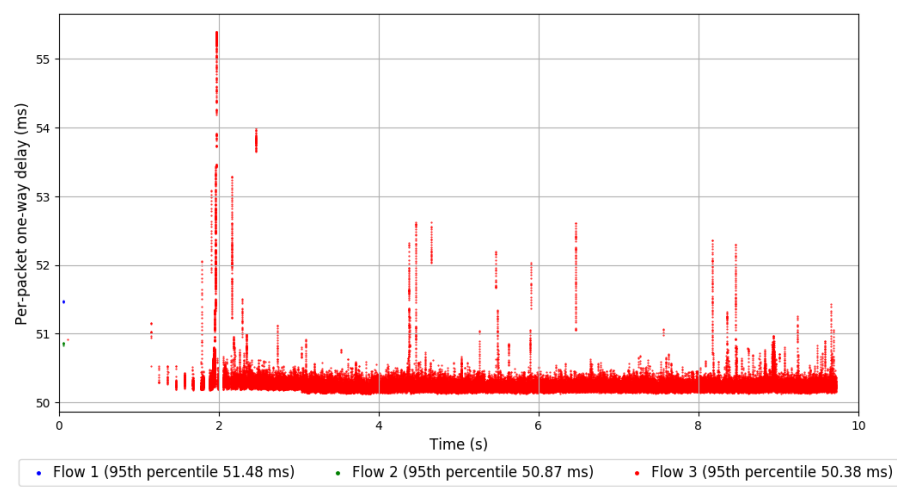
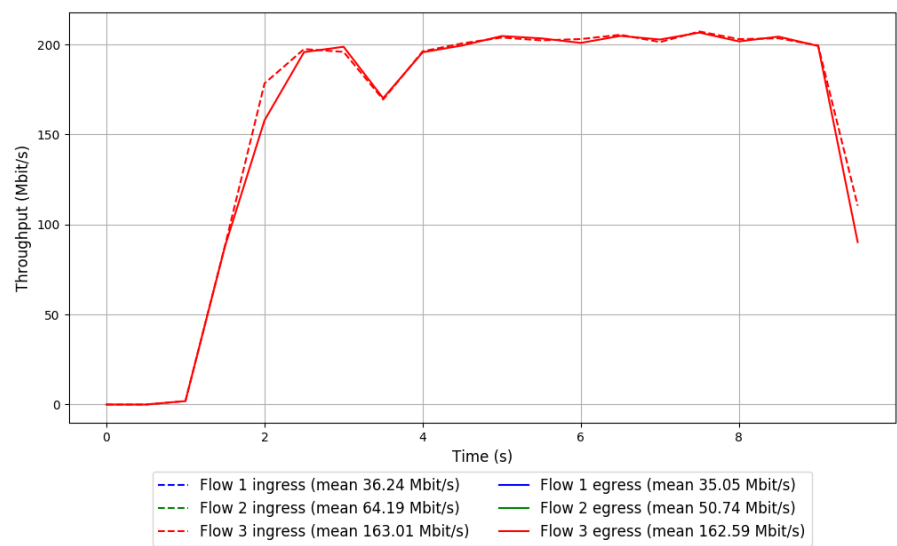


Run 2: Statistics of Indigo

Start at: 2018-01-09 20:31:38

End at: 2018-01-09 20:32:08

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-09 20:45:36

End at: 2018-01-09 20:46:06

Below is generated by plot.py at 2018-01-10 02:25:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 320.95 Mbit/s

95th percentile per-packet one-way delay: 50.819 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 169.62 Mbit/s

95th percentile per-packet one-way delay: 50.778 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 158.36 Mbit/s

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

Loss rate: 0.52%

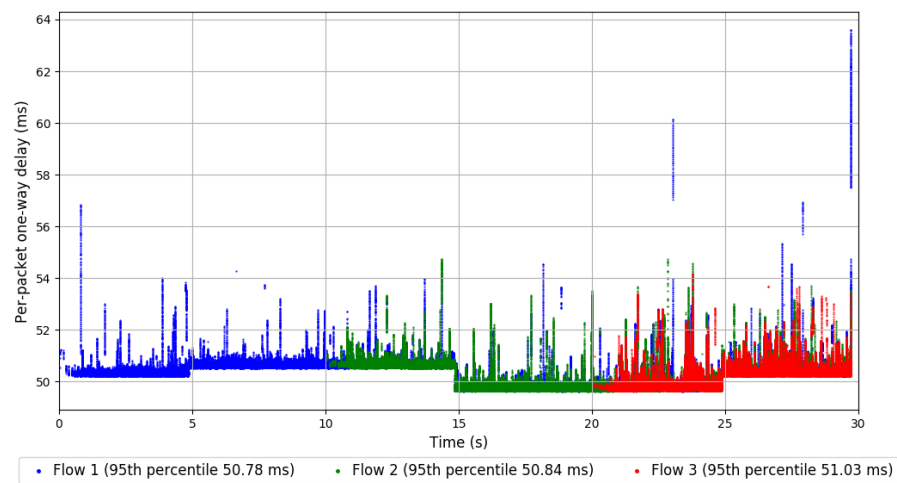
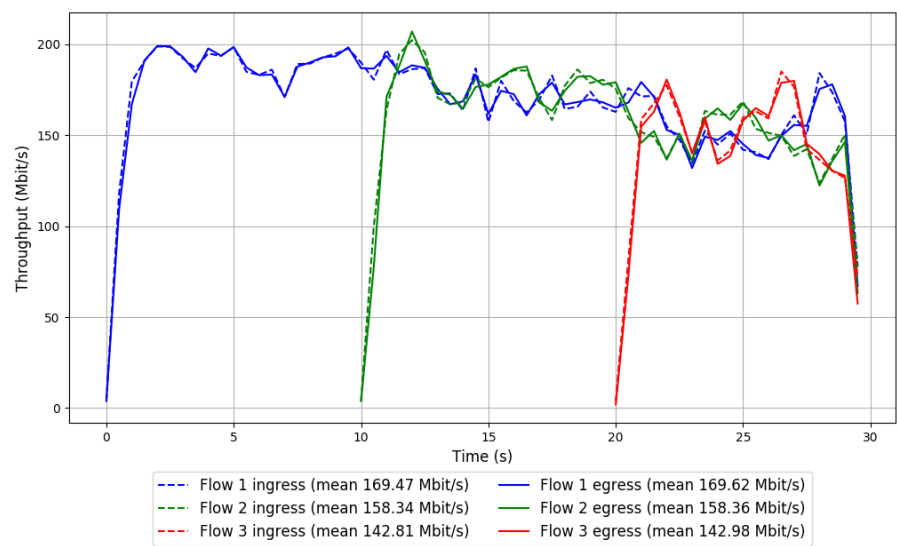
-- Flow 3:

Average throughput: 142.98 Mbit/s

95th percentile per-packet one-way delay: 51.026 ms

Loss rate: 0.95%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-09 20:59:38

End at: 2018-01-09 21:00:08

Below is generated by plot.py at 2018-01-10 02:25:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 318.25 Mbit/s

95th percentile per-packet one-way delay: 50.794 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 172.20 Mbit/s

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

Loss rate: 0.37%

-- Flow 2:

Average throughput: 163.81 Mbit/s

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

Loss rate: 0.54%

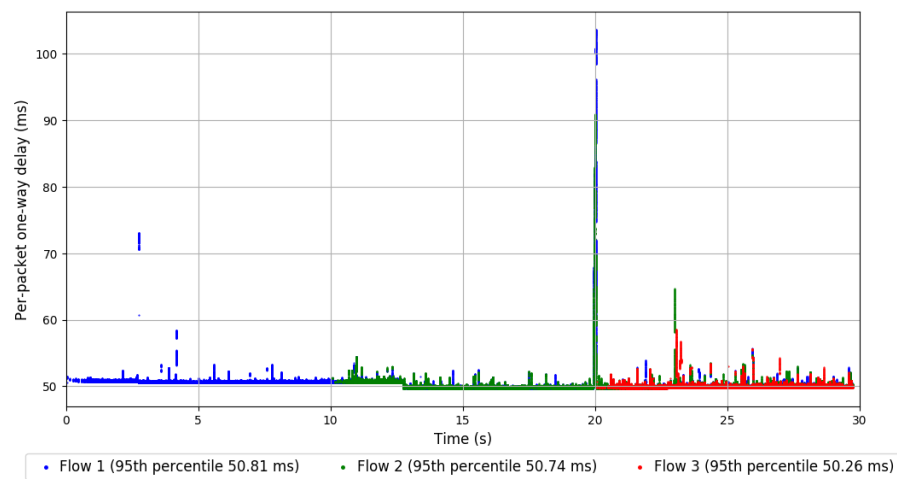
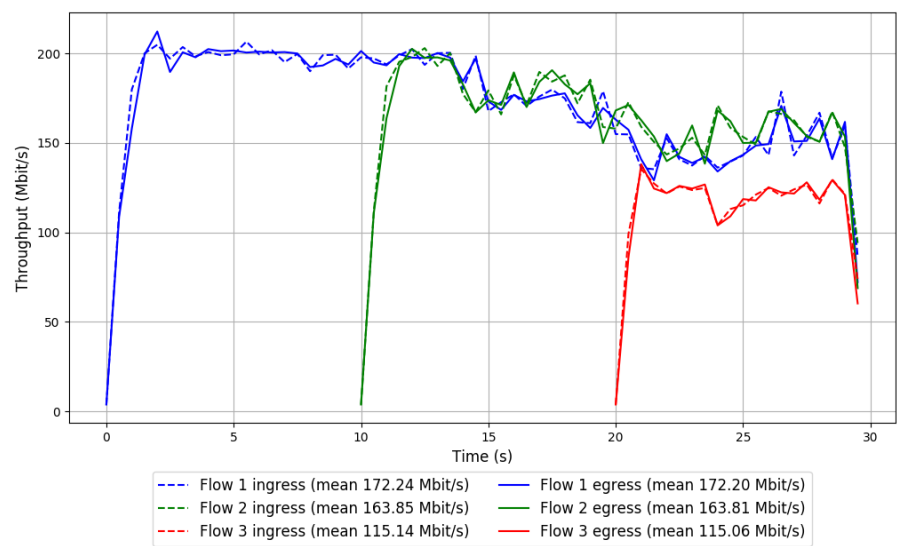
-- Flow 3:

Average throughput: 115.06 Mbit/s

95th percentile per-packet one-way delay: 50.262 ms

Loss rate: 1.11%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-09 21:13:57

End at: 2018-01-09 21:14:27

Below is generated by plot.py at 2018-01-10 02:25:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 322.42 Mbit/s

95th percentile per-packet one-way delay: 51.001 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 170.20 Mbit/s

95th percentile per-packet one-way delay: 50.954 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 157.71 Mbit/s

95th percentile per-packet one-way delay: 51.041 ms

Loss rate: 0.40%

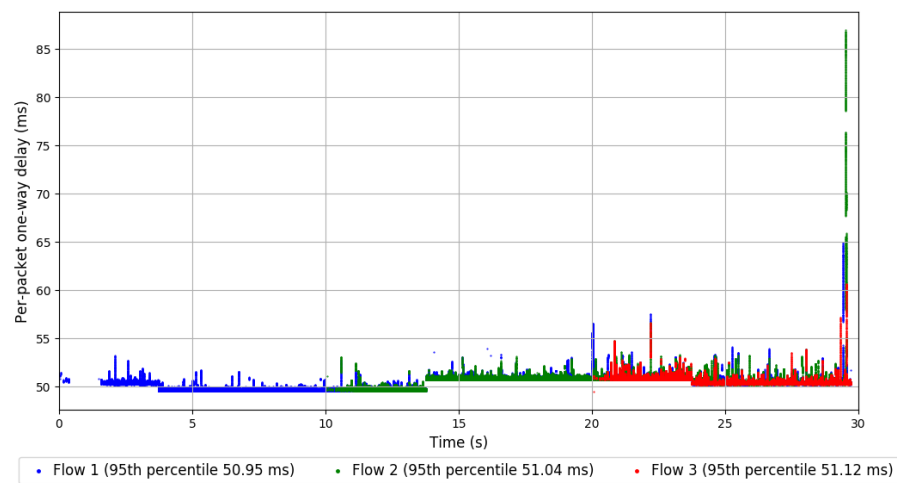
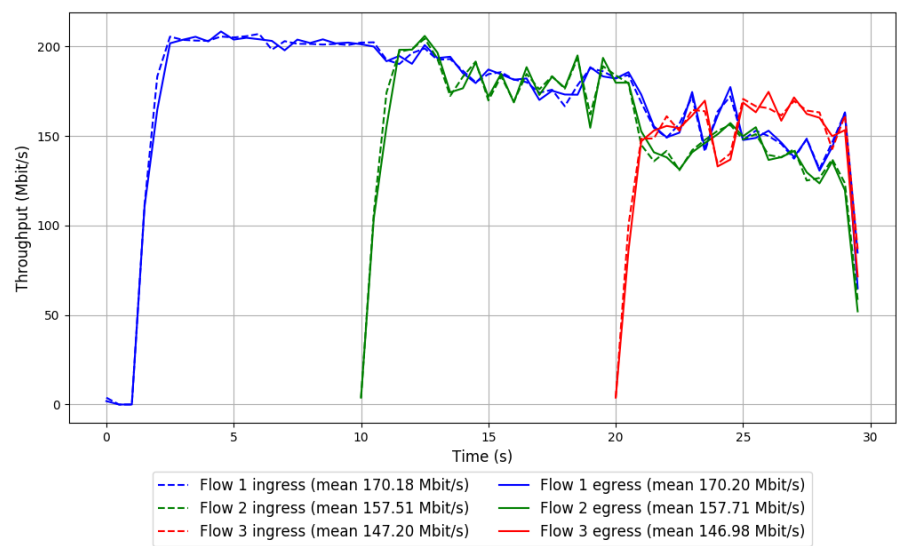
-- Flow 3:

Average throughput: 146.98 Mbit/s

95th percentile per-packet one-way delay: 51.117 ms

Loss rate: 1.25%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-09 21:28:19

End at: 2018-01-09 21:28:49

Below is generated by plot.py at 2018-01-10 02:25:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 319.83 Mbit/s

95th percentile per-packet one-way delay: 51.083 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 175.79 Mbit/s

95th percentile per-packet one-way delay: 51.023 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 163.01 Mbit/s

95th percentile per-packet one-way delay: 51.116 ms

Loss rate: 0.57%

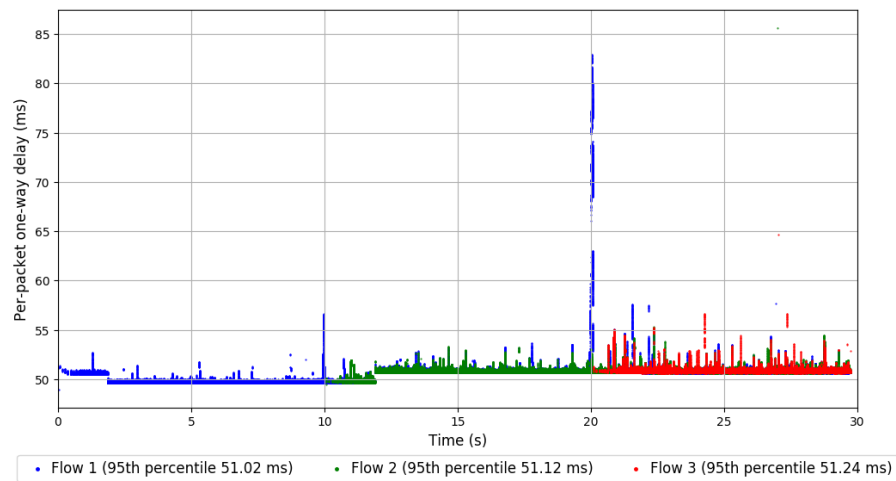
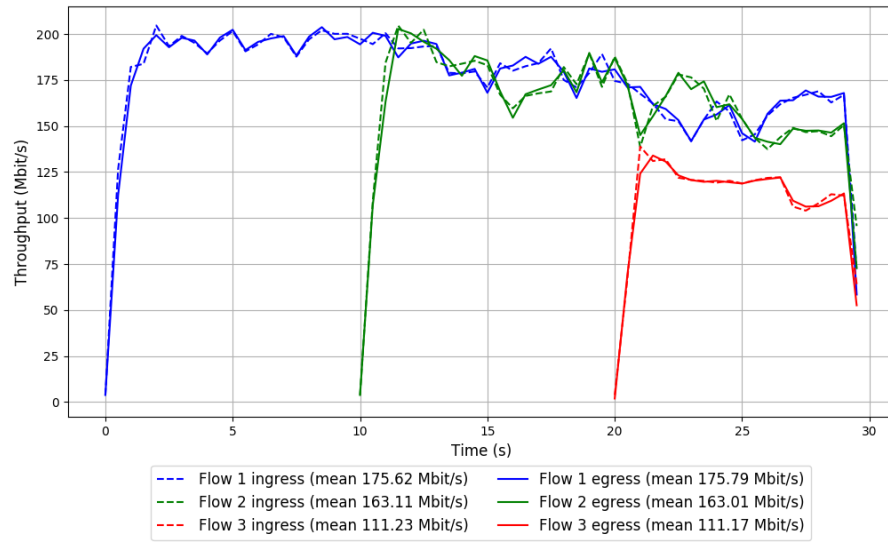
-- Flow 3:

Average throughput: 111.17 Mbit/s

95th percentile per-packet one-way delay: 51.236 ms

Loss rate: 1.07%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-09 21:42:34

End at: 2018-01-09 21:43:04

Below is generated by plot.py at 2018-01-10 02:25:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 309.87 Mbit/s

95th percentile per-packet one-way delay: 51.118 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 165.84 Mbit/s

95th percentile per-packet one-way delay: 51.072 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 159.37 Mbit/s

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

Loss rate: 0.40%

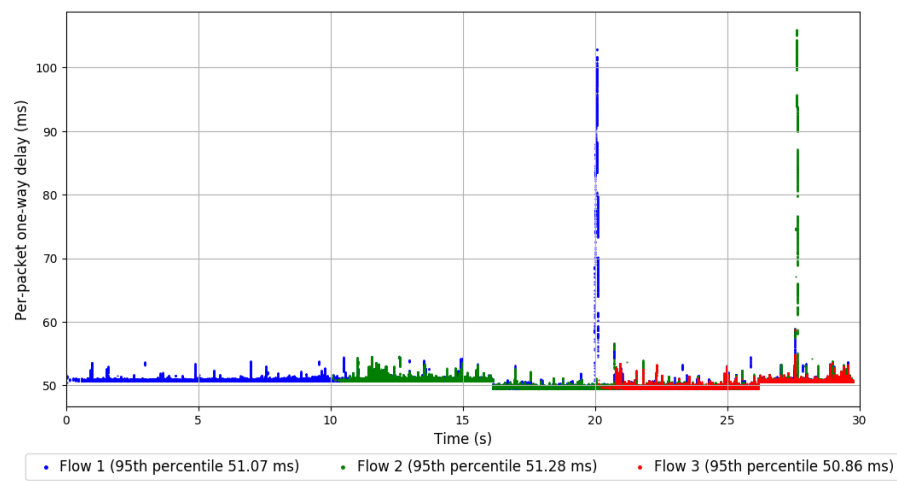
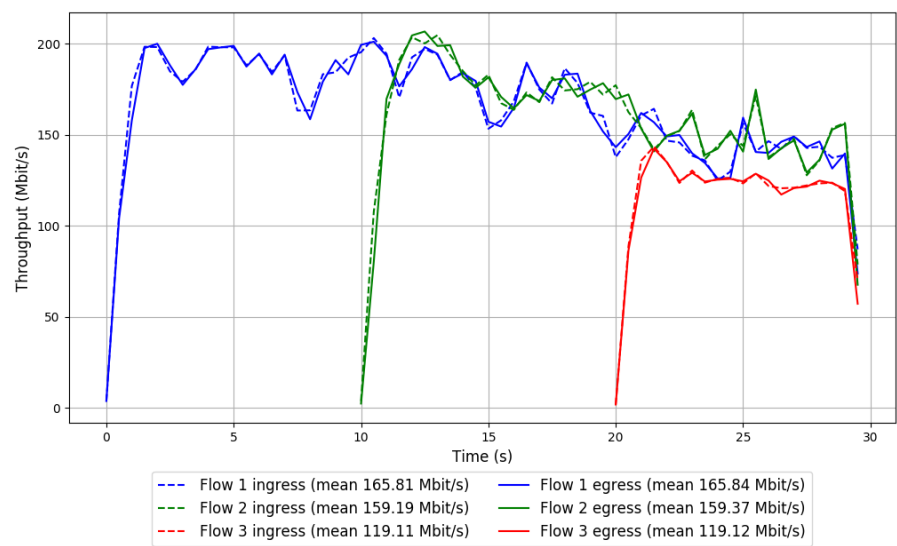
-- Flow 3:

Average throughput: 119.12 Mbit/s

95th percentile per-packet one-way delay: 50.856 ms

Loss rate: 1.05%

Run 7: Report of Indigo — Data Link

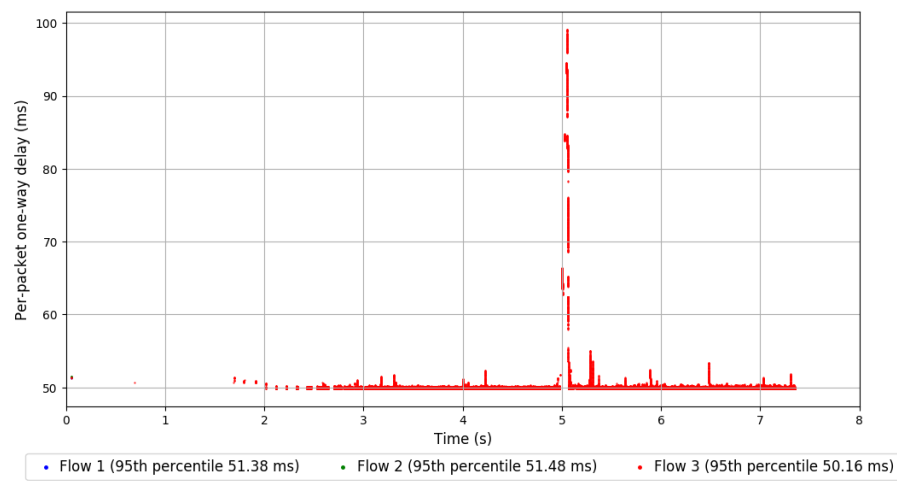
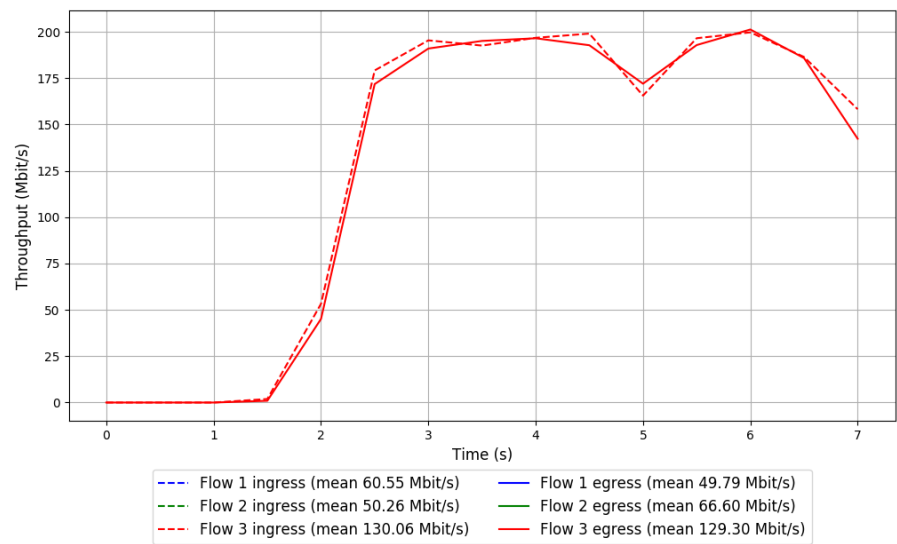


Run 8: Statistics of Indigo

Start at: 2018-01-09 21:56:16

End at: 2018-01-09 21:56:46

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-09 22:10:05

End at: 2018-01-09 22:10:35

Below is generated by plot.py at 2018-01-10 02:25:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 306.57 Mbit/s

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

Loss rate: 0.46%

-- Flow 1:

Average throughput: 162.45 Mbit/s

95th percentile per-packet one-way delay: 50.832 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 155.73 Mbit/s

95th percentile per-packet one-way delay: 50.946 ms

Loss rate: 0.52%

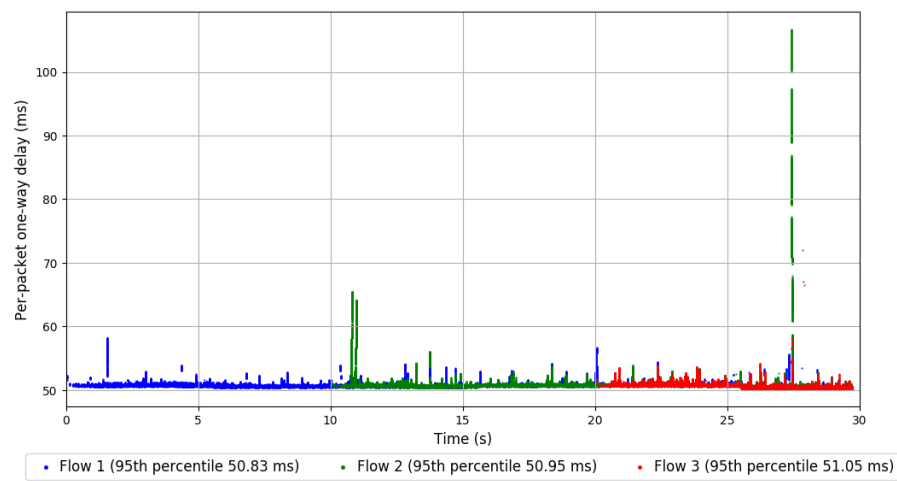
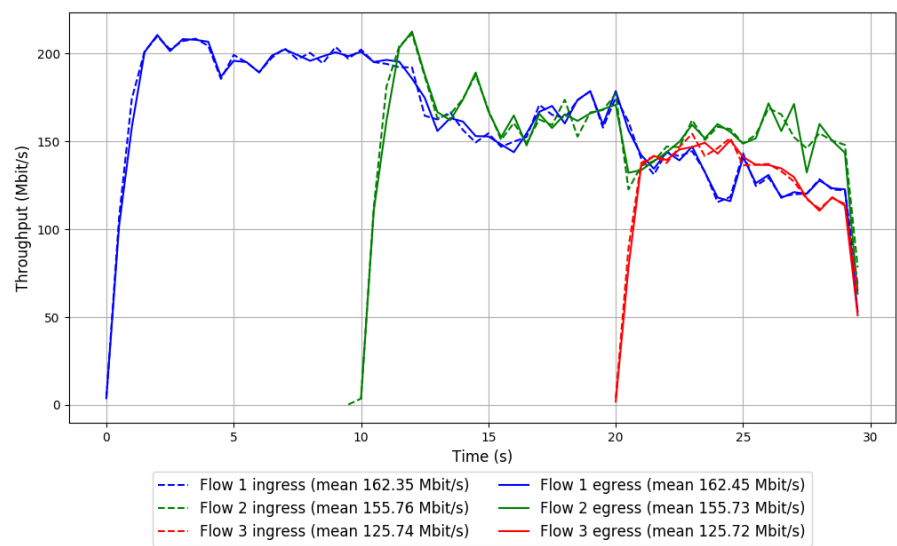
-- Flow 3:

Average throughput: 125.72 Mbit/s

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

Loss rate: 1.04%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

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

End at: 2018-01-09 22:24:54

Below is generated by plot.py at 2018-01-10 02:25:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 326.70 Mbit/s

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

Loss rate: 0.46%

-- Flow 1:

Average throughput: 175.95 Mbit/s

95th percentile per-packet one-way delay: 50.696 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 166.60 Mbit/s

95th percentile per-packet one-way delay: 50.762 ms

Loss rate: 0.48%

-- Flow 3:

Average throughput: 124.06 Mbit/s

95th percentile per-packet one-way delay: 50.932 ms

Loss rate: 1.05%

Run 10: Report of Indigo — Data Link

