

Pantheon Report

Generated at 2018-01-03 06:40:24 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

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

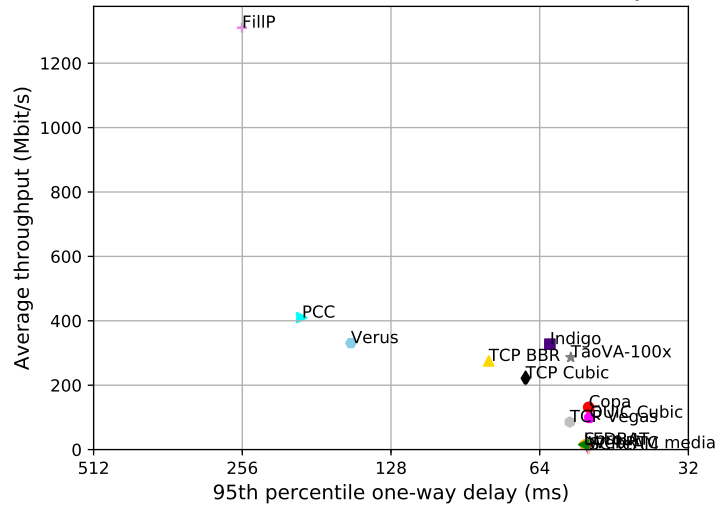
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

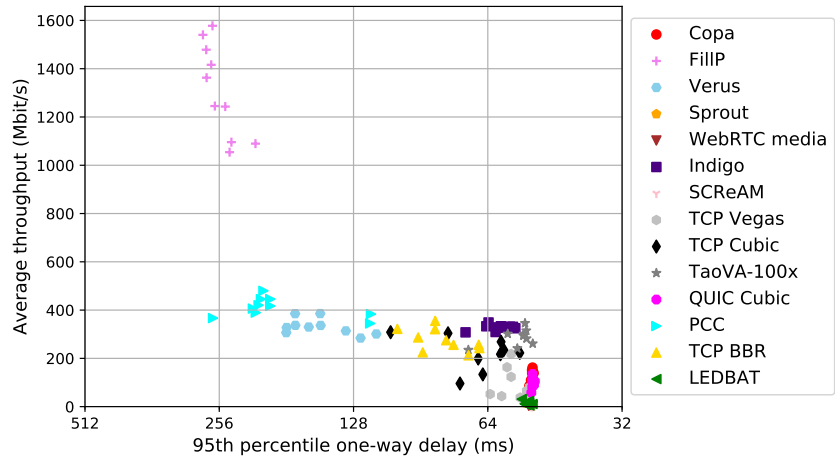
Git summary:

```
branch: master @ 904a5750834816b1e46a2c86405d707788d27c16
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/fillp @ dcaef6b00654e660f73f7ed679d2eab61ce08639
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	121.31	156.24	151.23	76.16	80.65	87.99	0.19	0.11	0.24
TCP Cubic	10	110.48	103.32	127.09	64.26	69.25	70.29	0.21	0.16	0.10
LEDBAT	10	8.32	8.74	6.78	454.79	52.06	51.94	1.02	1.32	1.13
PCC	10	367.85	52.75	21.02	198.94	183.70	169.54	1.86	1.38	1.49
QUIC Cubic	10	58.57	41.77	39.24	50.63	50.55	50.38	0.03	0.00	0.00
SCReAM	10	0.22	0.21	0.22	50.68	50.75	50.74	0.00	0.00	0.00
WebRTC media	10	2.21	1.43	0.56	50.69	50.88	50.94	0.01	0.00	0.00
Sprout	10	7.75	7.67	7.47	51.96	51.96	51.97	0.52	0.49	0.21
TaoVA-100x	9	149.74	151.37	140.25	52.88	56.79	58.47	0.04	0.00	0.09
TCP Vegas	10	40.78	45.13	44.31	53.56	54.91	53.72	0.43	0.16	0.37
Verus	10	191.95	162.65	94.55	144.95	163.40	168.42	0.88	0.81	1.19
Copa	10	73.66	56.98	74.07	50.89	58.13	51.09	0.00	9.24	0.00
FillP	10	621.40	727.93	617.59	256.14	248.25	256.49	9.10	10.79	10.79
Indigo	10	174.46	168.94	122.47	58.30	62.80	64.73	0.07	0.02	0.03

Run 1: Statistics of TCP BBR

Start at: 2018-01-03 01:26:15

End at: 2018-01-03 01:26:45

Below is generated by plot.py at 2018-01-03 05:19:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 286.64 Mbit/s

95th percentile per-packet one-way delay: 91.670 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 97.36 Mbit/s

95th percentile per-packet one-way delay: 88.444 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 193.61 Mbit/s

95th percentile per-packet one-way delay: 89.562 ms

Loss rate: 0.12%

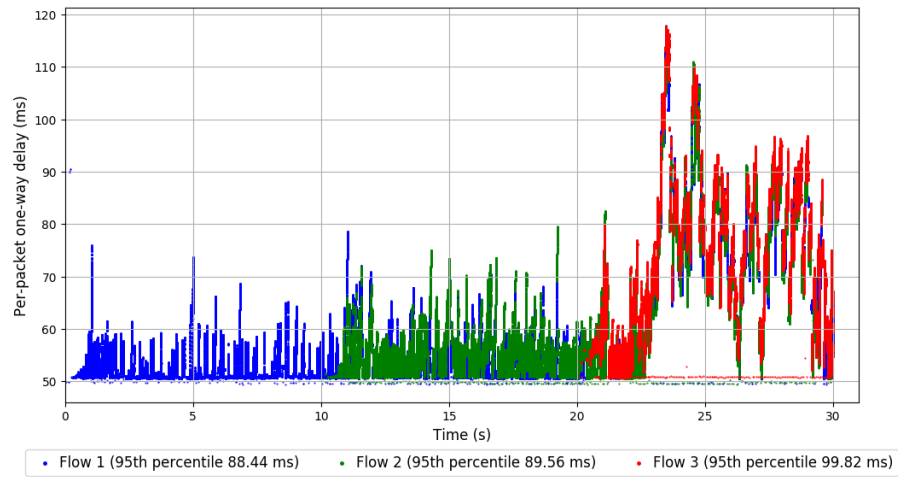
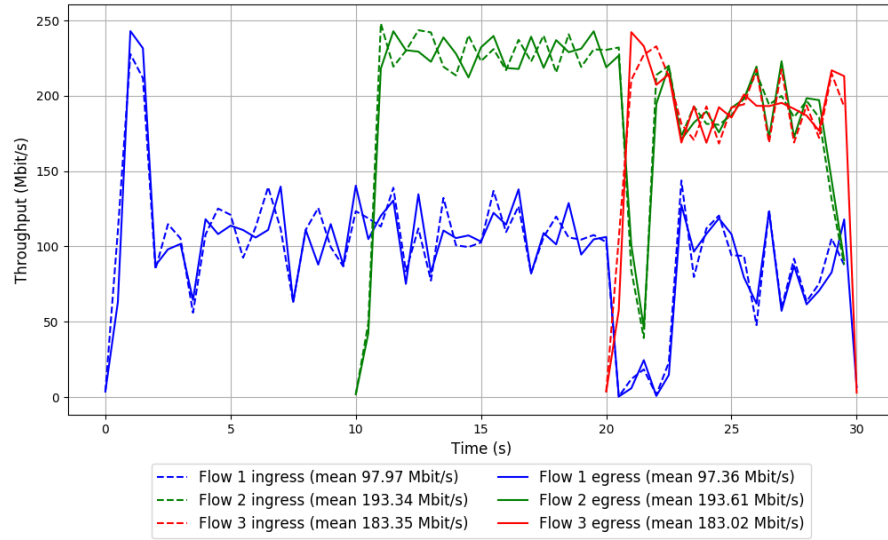
-- Flow 3:

Average throughput: 183.02 Mbit/s

95th percentile per-packet one-way delay: 99.817 ms

Loss rate: 0.02%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-03 01:39:57

End at: 2018-01-03 01:40:27

Below is generated by plot.py at 2018-01-03 05:19:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 256.13 Mbit/s

95th percentile per-packet one-way delay: 76.391 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 121.27 Mbit/s

95th percentile per-packet one-way delay: 68.986 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 101.17 Mbit/s

95th percentile per-packet one-way delay: 77.915 ms

Loss rate: 0.00%

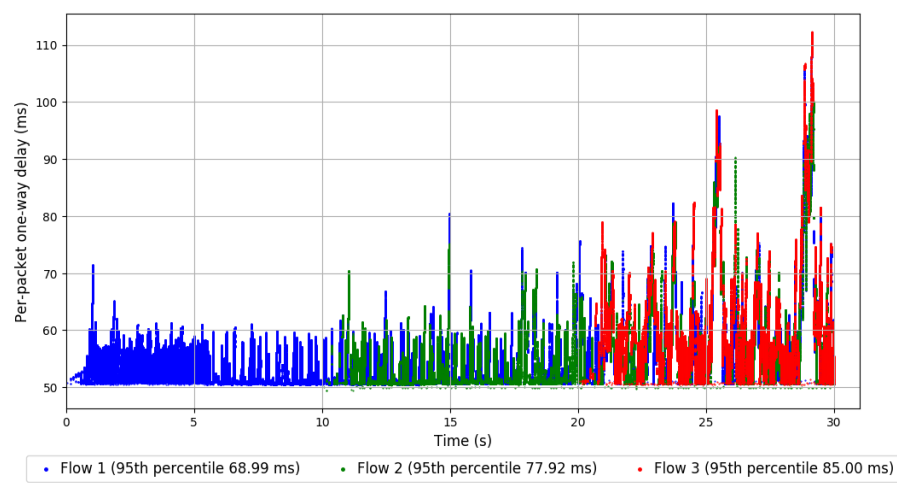
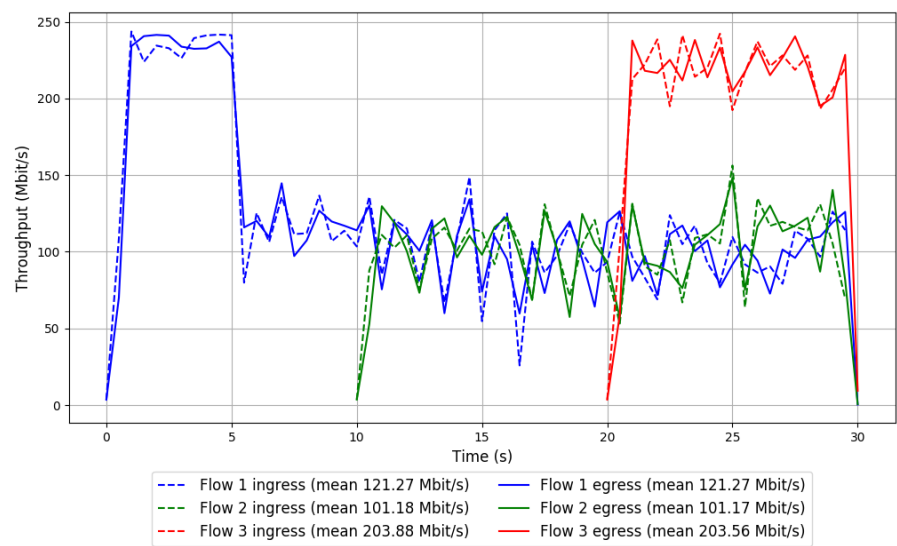
-- Flow 3:

Average throughput: 203.56 Mbit/s

95th percentile per-packet one-way delay: 85.000 ms

Loss rate: 0.15%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-03 01:53:30

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

Below is generated by plot.py at 2018-01-03 05:21:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 355.59 Mbit/s

95th percentile per-packet one-way delay: 83.965 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 168.70 Mbit/s

95th percentile per-packet one-way delay: 75.237 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 189.19 Mbit/s

95th percentile per-packet one-way delay: 85.131 ms

Loss rate: 0.00%

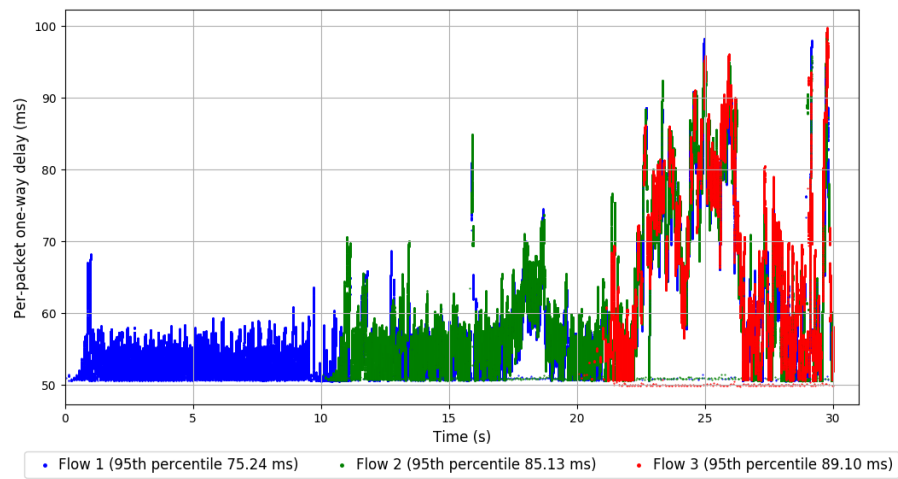
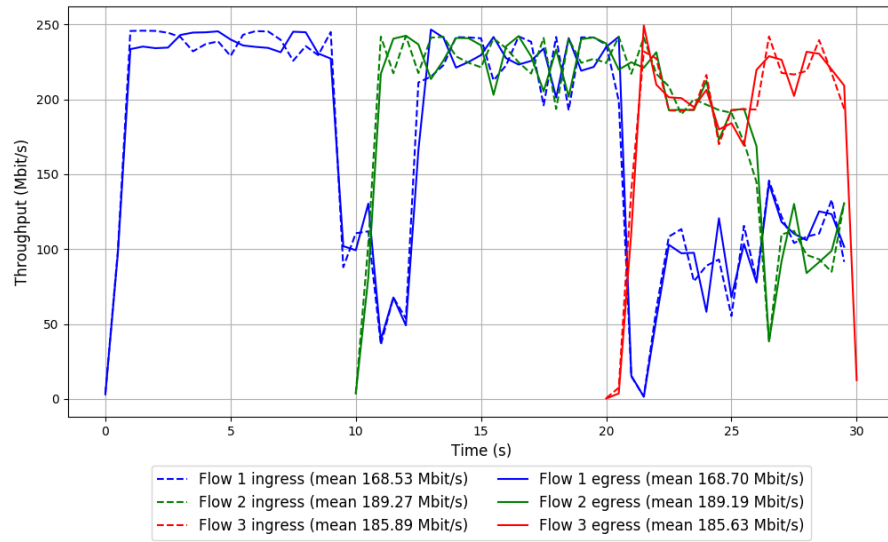
-- Flow 3:

Average throughput: 185.63 Mbit/s

95th percentile per-packet one-way delay: 89.102 ms

Loss rate: 0.12%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-03 02:07:11

End at: 2018-01-03 02:07:41

Below is generated by plot.py at 2018-01-03 05:21:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 275.12 Mbit/s

95th percentile per-packet one-way delay: 79.351 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 108.07 Mbit/s

95th percentile per-packet one-way delay: 74.107 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 163.31 Mbit/s

95th percentile per-packet one-way delay: 74.979 ms

Loss rate: 0.11%

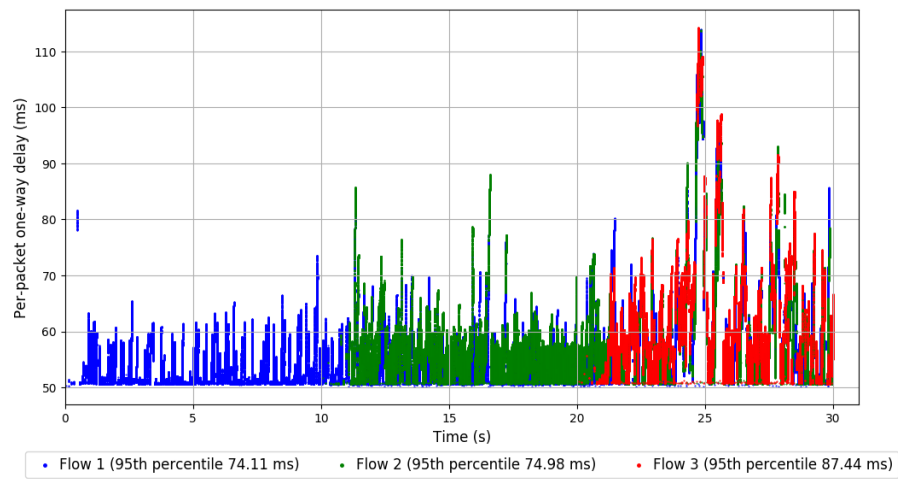
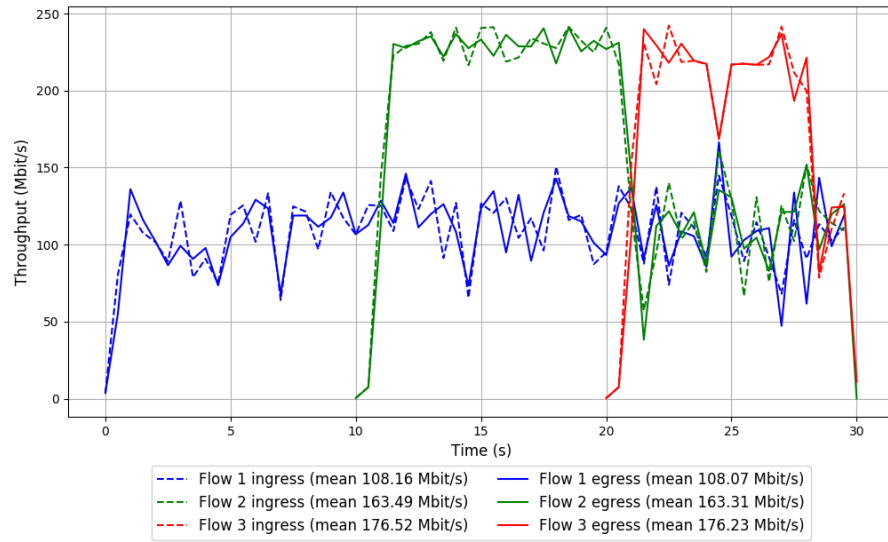
-- Flow 3:

Average throughput: 176.23 Mbit/s

95th percentile per-packet one-way delay: 87.441 ms

Loss rate: 0.04%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-03 02:20:43

End at: 2018-01-03 02:21:13

Below is generated by plot.py at 2018-01-03 05:21:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 320.92 Mbit/s

95th percentile per-packet one-way delay: 84.042 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 142.39 Mbit/s

95th percentile per-packet one-way delay: 75.351 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 171.51 Mbit/s

95th percentile per-packet one-way delay: 83.650 ms

Loss rate: 0.00%

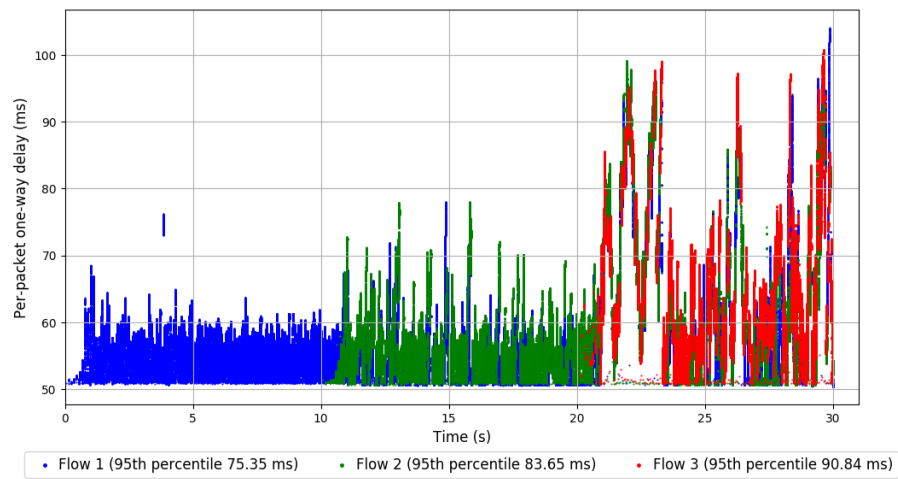
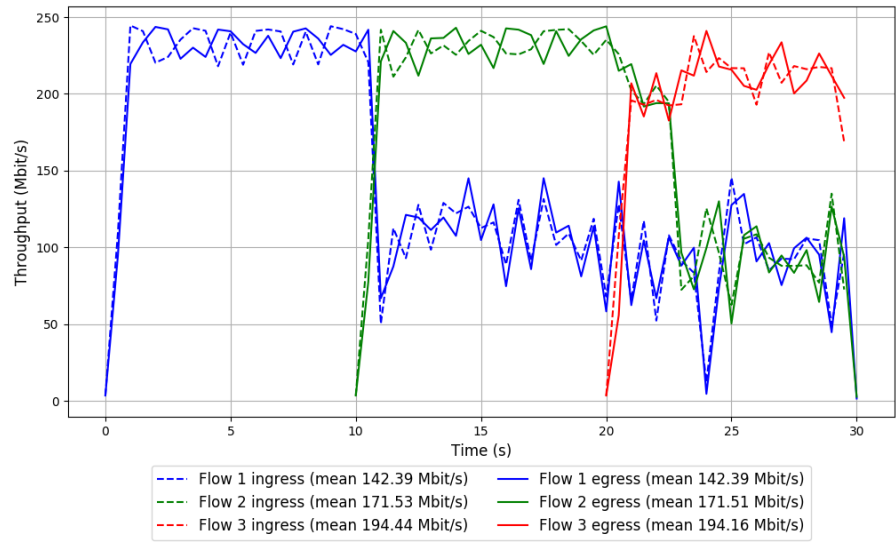
-- Flow 3:

Average throughput: 194.16 Mbit/s

95th percentile per-packet one-way delay: 90.836 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-03 02:33:49

End at: 2018-01-03 02:34:19

Below is generated by plot.py at 2018-01-03 05:21:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 322.21 Mbit/s

95th percentile per-packet one-way delay: 102.075 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 133.85 Mbit/s

95th percentile per-packet one-way delay: 95.737 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 200.91 Mbit/s

95th percentile per-packet one-way delay: 98.966 ms

Loss rate: 0.00%

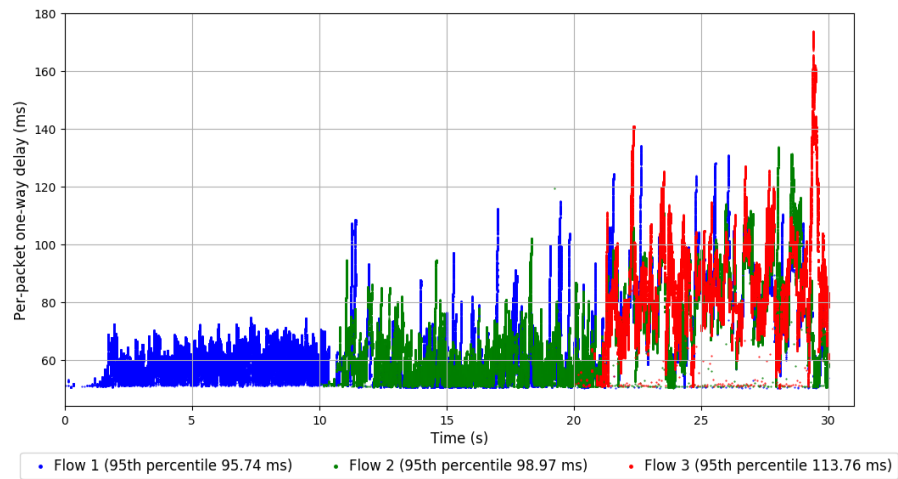
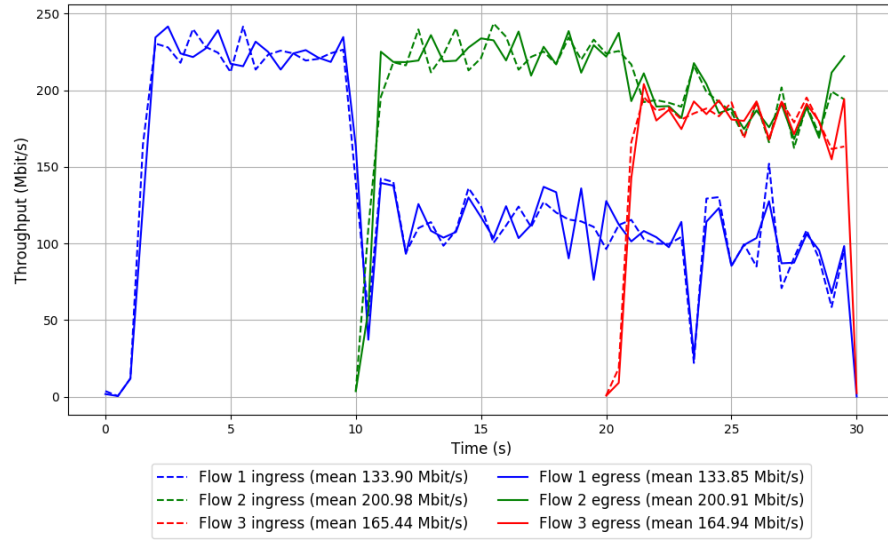
-- Flow 3:

Average throughput: 164.94 Mbit/s

95th percentile per-packet one-way delay: 113.761 ms

Loss rate: 0.30%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-03 02:47:02

End at: 2018-01-03 02:47:32

Below is generated by plot.py at 2018-01-03 05:21:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 256.26 Mbit/s

95th percentile per-packet one-way delay: 67.078 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 114.79 Mbit/s

95th percentile per-packet one-way delay: 65.975 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 167.18 Mbit/s

95th percentile per-packet one-way delay: 66.919 ms

Loss rate: 0.03%

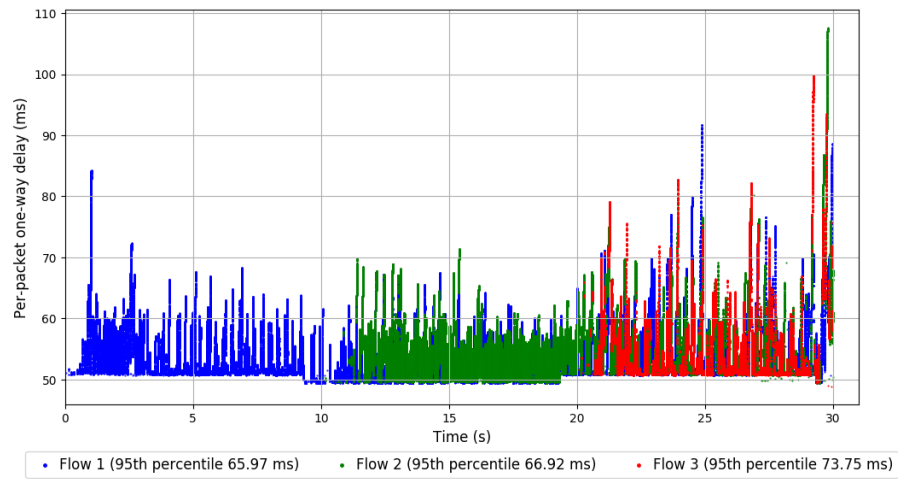
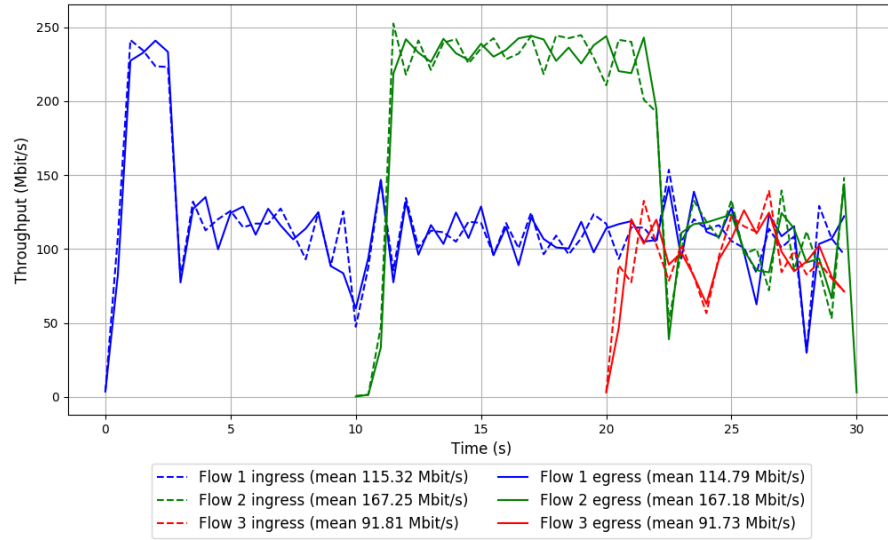
-- Flow 3:

Average throughput: 91.73 Mbit/s

95th percentile per-packet one-way delay: 73.745 ms

Loss rate: 0.03%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

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

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

Below is generated by plot.py at 2018-01-03 05:21:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 242.64 Mbit/s

95th percentile per-packet one-way delay: 66.848 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 105.39 Mbit/s

95th percentile per-packet one-way delay: 64.656 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 159.39 Mbit/s

95th percentile per-packet one-way delay: 69.225 ms

Loss rate: 0.12%

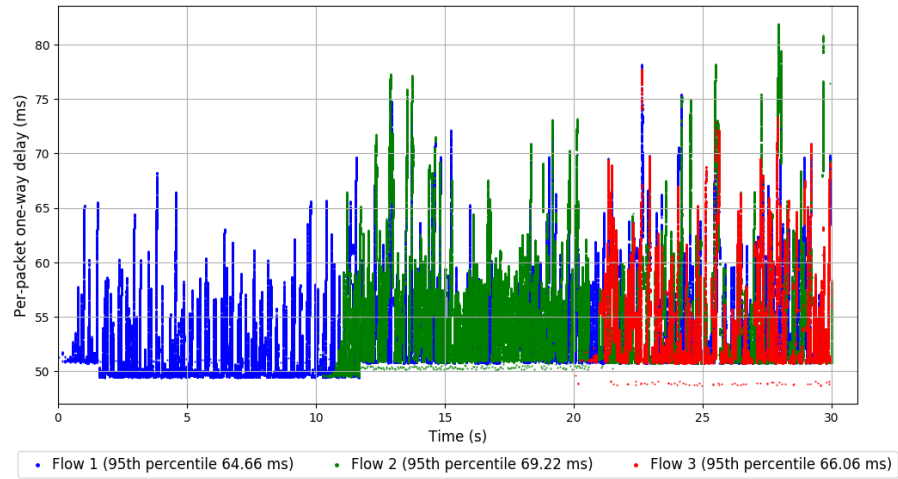
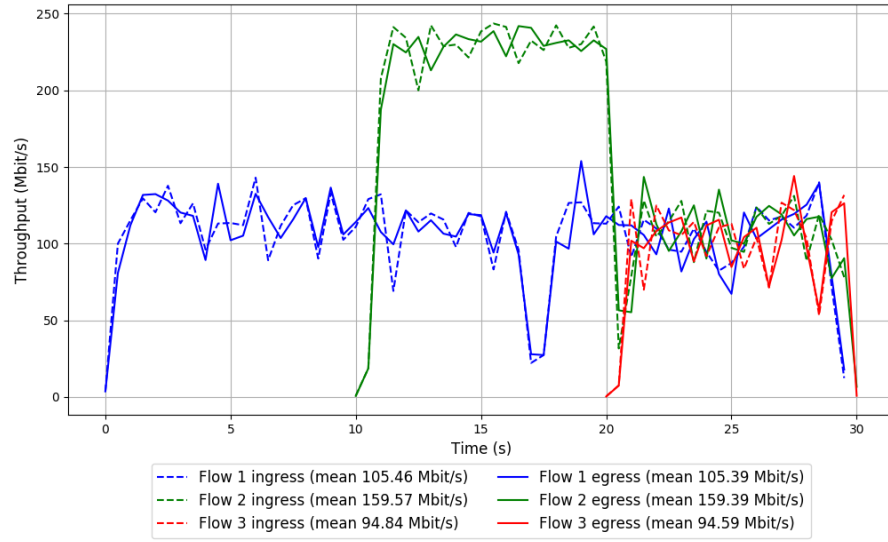
-- Flow 3:

Average throughput: 94.59 Mbit/s

95th percentile per-packet one-way delay: 66.062 ms

Loss rate: 0.26%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-03 03:14:05

End at: 2018-01-03 03:14:35

Below is generated by plot.py at 2018-01-03 05:22:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 212.72 Mbit/s

95th percentile per-packet one-way delay: 70.702 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 104.02 Mbit/s

95th percentile per-packet one-way delay: 67.758 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 108.68 Mbit/s

95th percentile per-packet one-way delay: 69.663 ms

Loss rate: 0.03%

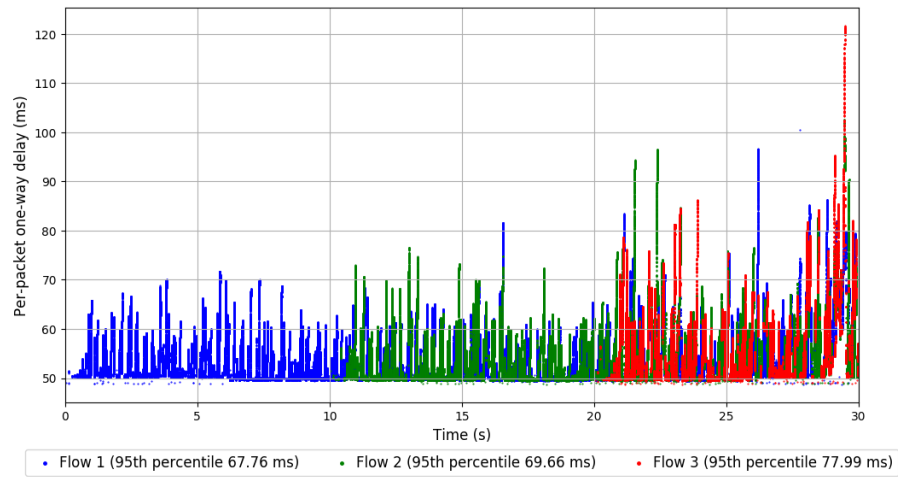
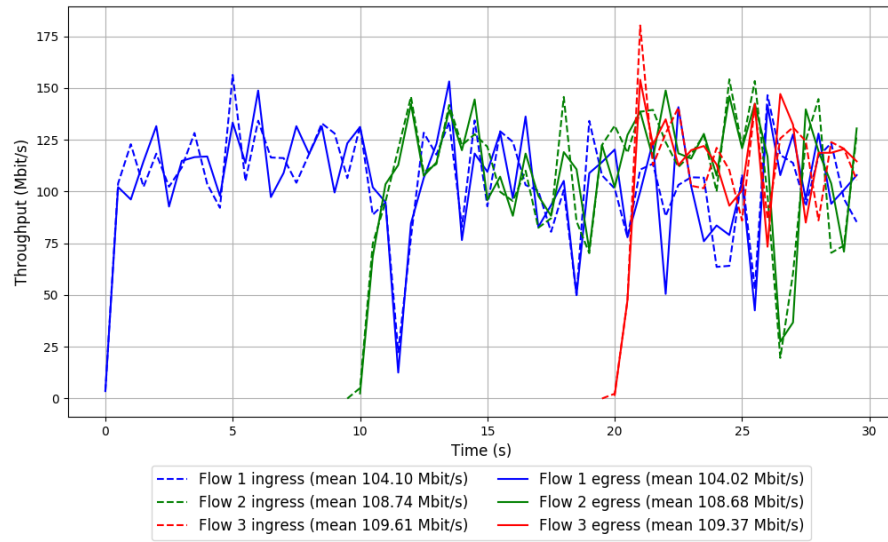
-- Flow 3:

Average throughput: 109.37 Mbit/s

95th percentile per-packet one-way delay: 77.990 ms

Loss rate: 0.15%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-03 03:27:24

End at: 2018-01-03 03:27:54

Below is generated by plot.py at 2018-01-03 05:23:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 224.83 Mbit/s

95th percentile per-packet one-way delay: 89.536 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 117.29 Mbit/s

95th percentile per-packet one-way delay: 85.350 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 107.45 Mbit/s

95th percentile per-packet one-way delay: 90.506 ms

Loss rate: 0.64%

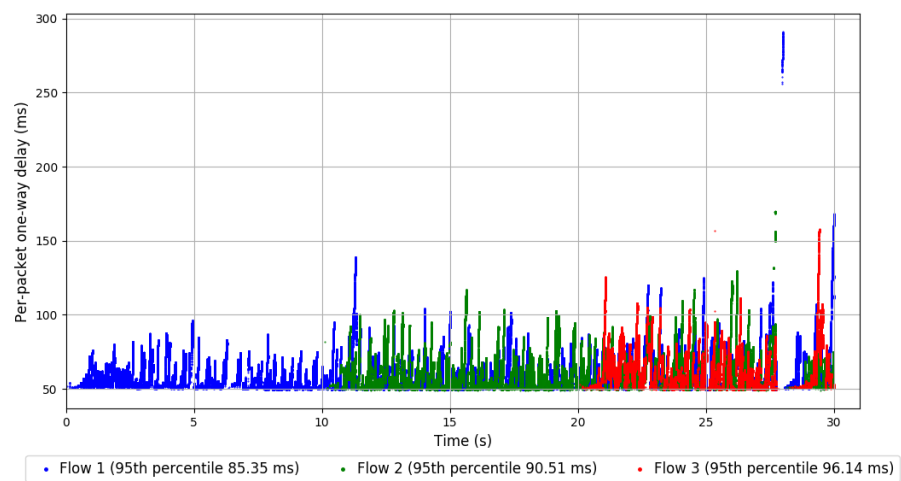
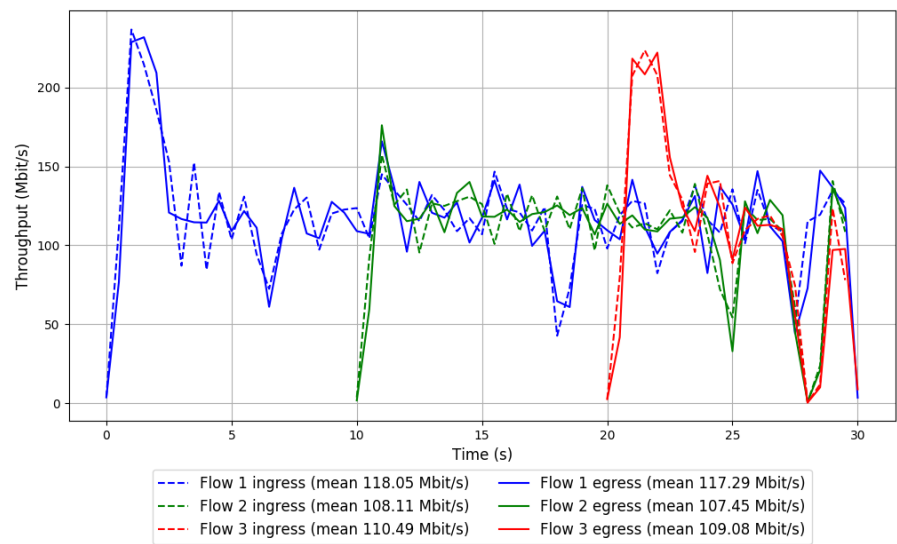
-- Flow 3:

Average throughput: 109.08 Mbit/s

95th percentile per-packet one-way delay: 96.138 ms

Loss rate: 1.28%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-03 01:35:43

End at: 2018-01-03 01:36:13

Below is generated by plot.py at 2018-01-03 05:23:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 268.58 Mbit/s

95th percentile per-packet one-way delay: 59.757 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 193.58 Mbit/s

95th percentile per-packet one-way delay: 59.787 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 24.18 Mbit/s

95th percentile per-packet one-way delay: 58.069 ms

Loss rate: 0.02%

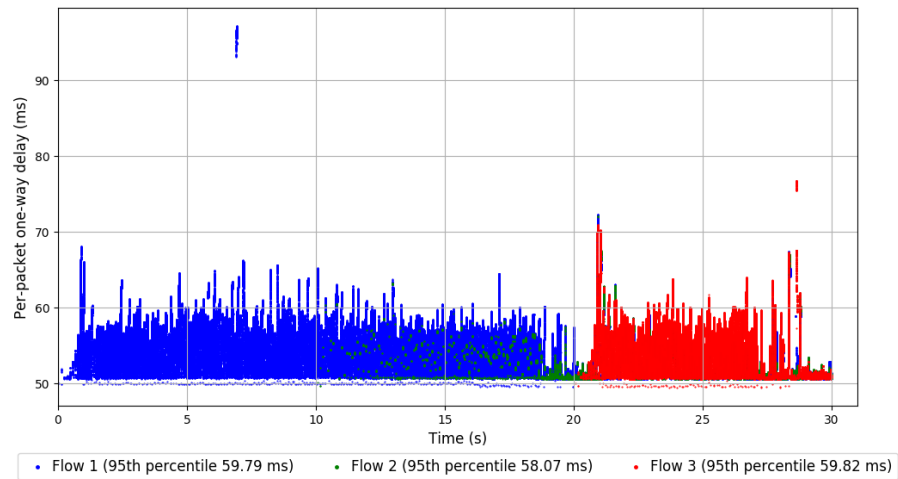
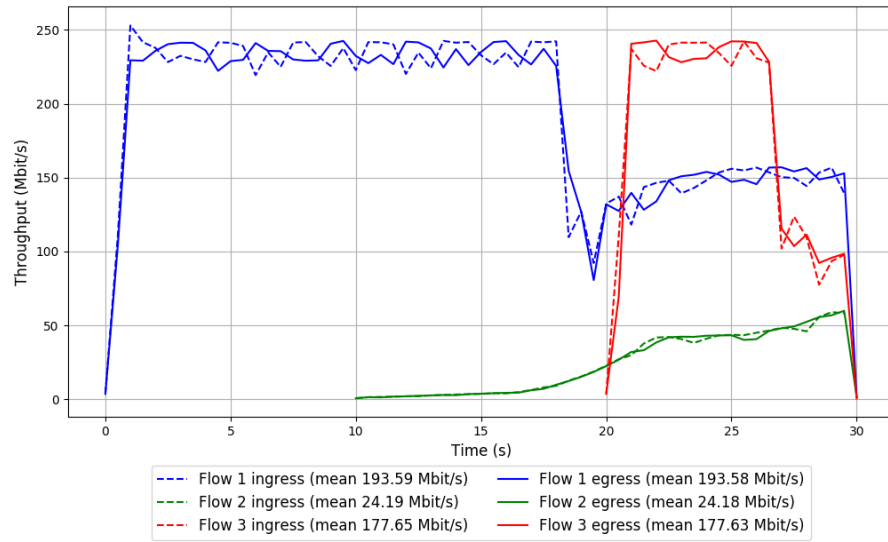
-- Flow 3:

Average throughput: 177.63 Mbit/s

95th percentile per-packet one-way delay: 59.817 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-03 01:49:18

End at: 2018-01-03 01:49:48

Below is generated by plot.py at 2018-01-03 05:24:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 303.90 Mbit/s

95th percentile per-packet one-way delay: 78.588 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 221.25 Mbit/s

95th percentile per-packet one-way delay: 72.100 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 28.40 Mbit/s

95th percentile per-packet one-way delay: 91.432 ms

Loss rate: 0.01%

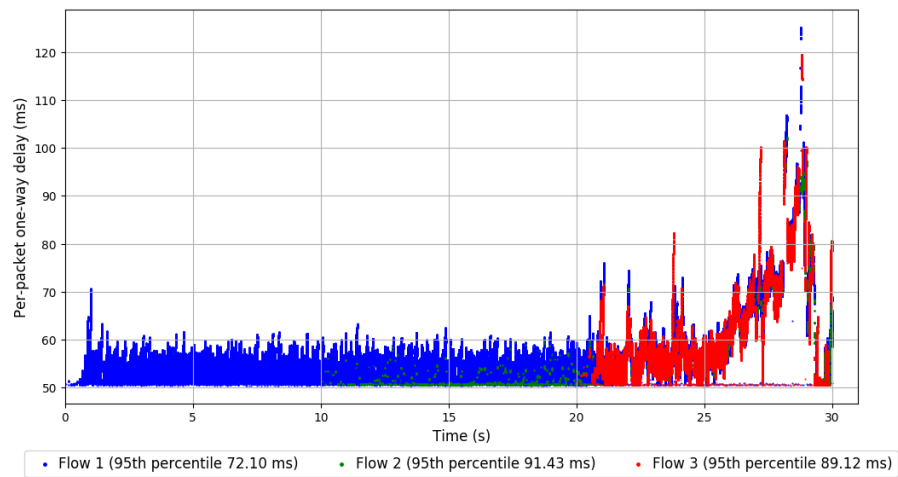
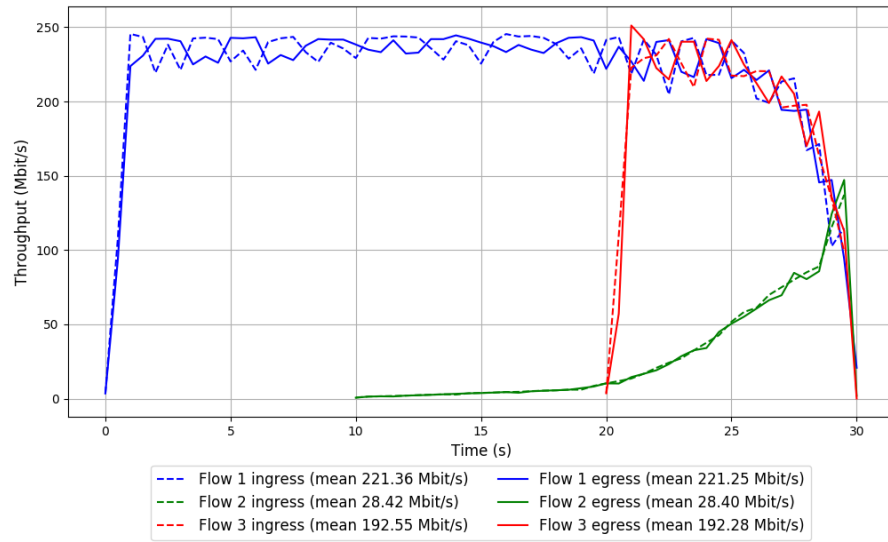
-- Flow 3:

Average throughput: 192.28 Mbit/s

95th percentile per-packet one-way delay: 89.116 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-03 02:03:05

End at: 2018-01-03 02:03:35

Below is generated by plot.py at 2018-01-03 05:25:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 308.33 Mbit/s

95th percentile per-packet one-way delay: 105.703 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 133.21 Mbit/s

95th percentile per-packet one-way delay: 102.803 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 189.81 Mbit/s

95th percentile per-packet one-way delay: 105.944 ms

Loss rate: 0.06%

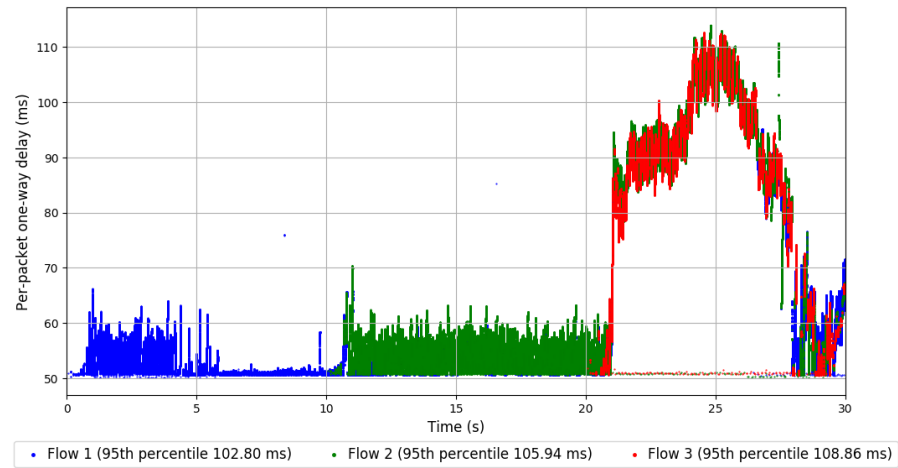
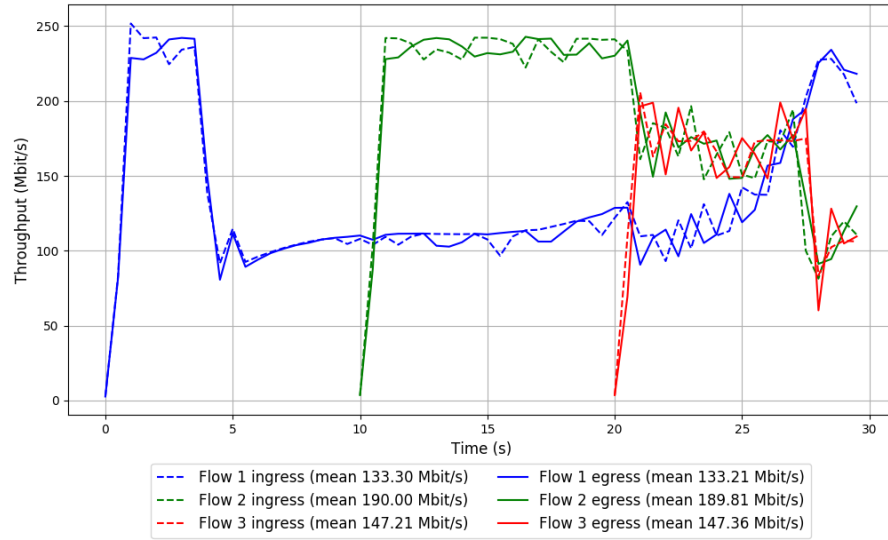
-- Flow 3:

Average throughput: 147.36 Mbit/s

95th percentile per-packet one-way delay: 108.857 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-03 02:16:41

End at: 2018-01-03 02:17:11

Below is generated by plot.py at 2018-01-03 05:25:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 217.23 Mbit/s

95th percentile per-packet one-way delay: 59.958 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 72.12 Mbit/s

95th percentile per-packet one-way delay: 59.876 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 139.61 Mbit/s

95th percentile per-packet one-way delay: 59.820 ms

Loss rate: 0.01%

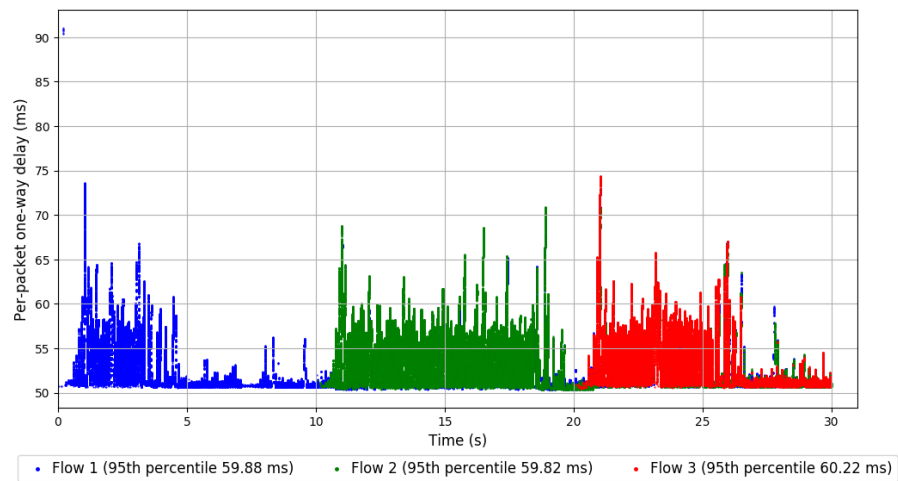
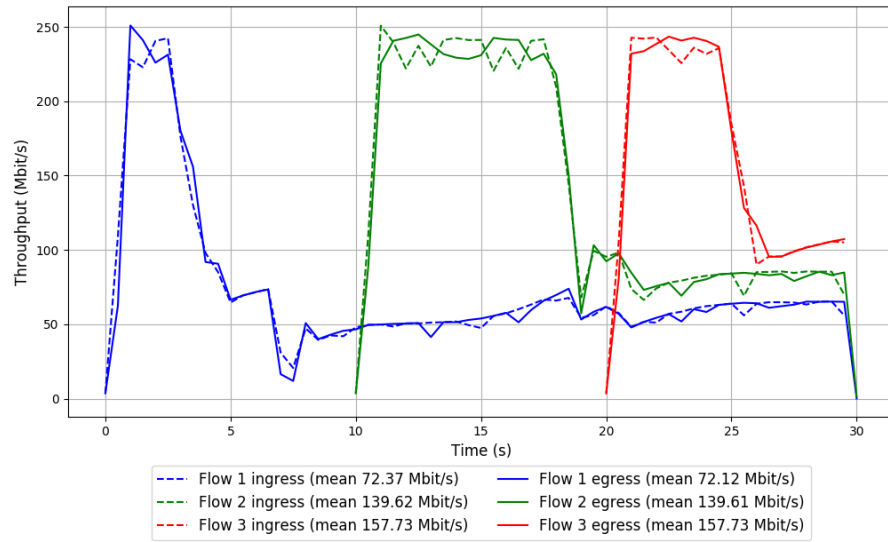
-- Flow 3:

Average throughput: 157.73 Mbit/s

95th percentile per-packet one-way delay: 60.224 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-03 02:29:54

End at: 2018-01-03 02:30:25

Below is generated by plot.py at 2018-01-03 05:25:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 133.50 Mbit/s

95th percentile per-packet one-way delay: 65.669 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 42.91 Mbit/s

95th percentile per-packet one-way delay: 64.267 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 95.18 Mbit/s

95th percentile per-packet one-way delay: 65.092 ms

Loss rate: 0.09%

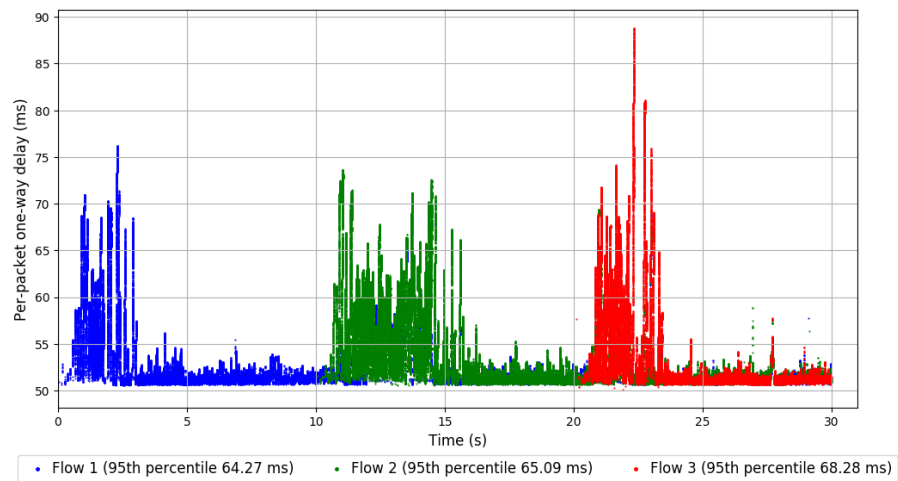
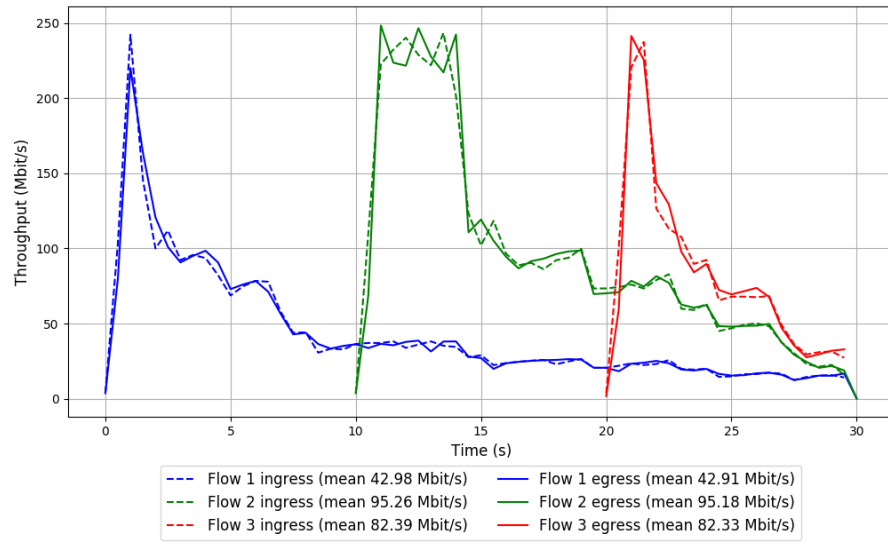
-- Flow 3:

Average throughput: 82.33 Mbit/s

95th percentile per-packet one-way delay: 68.281 ms

Loss rate: 0.13%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

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

End at: 2018-01-03 02:43:32

Below is generated by plot.py at 2018-01-03 05:25:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 229.01 Mbit/s

95th percentile per-packet one-way delay: 59.423 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 91.31 Mbit/s

95th percentile per-packet one-way delay: 57.333 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 100.32 Mbit/s

95th percentile per-packet one-way delay: 59.876 ms

Loss rate: 0.01%

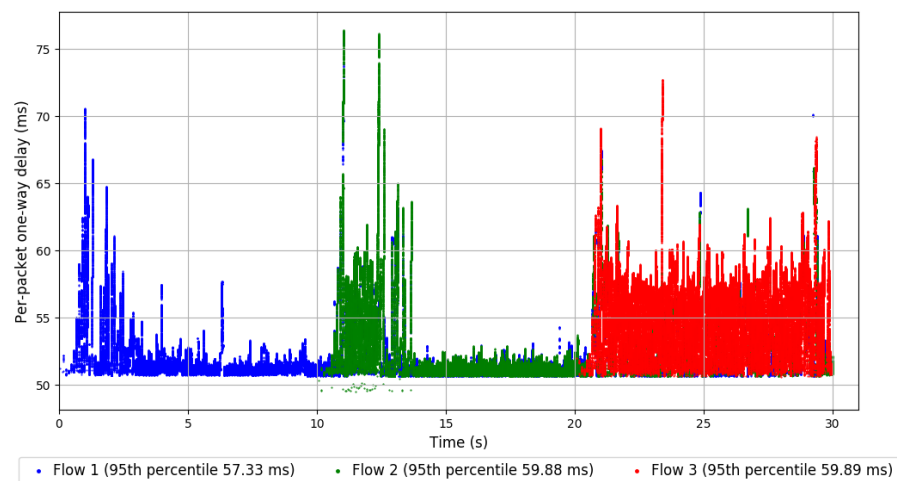
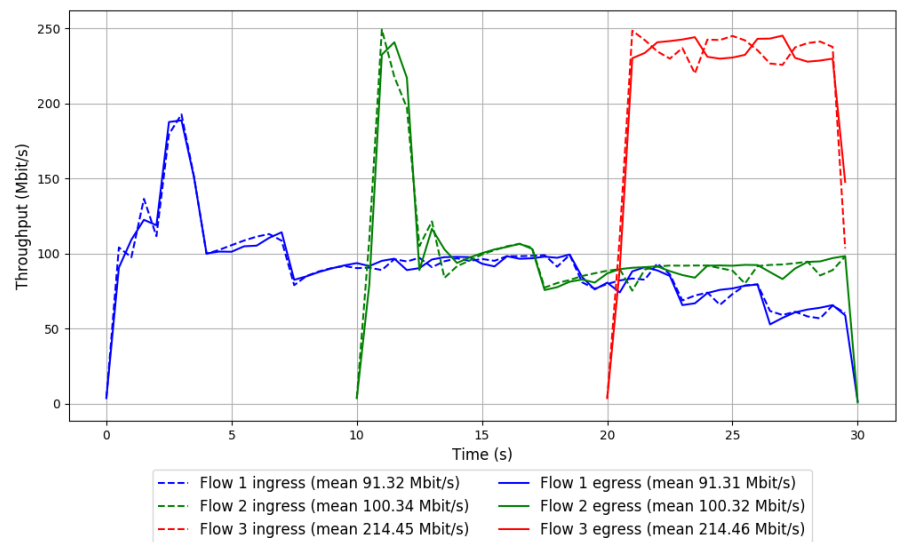
-- Flow 3:

Average throughput: 214.46 Mbit/s

95th percentile per-packet one-way delay: 59.887 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-03 02:56:35

End at: 2018-01-03 02:57:05

Below is generated by plot.py at 2018-01-03 05:26:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 222.69 Mbit/s

95th percentile per-packet one-way delay: 54.259 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 121.98 Mbit/s

95th percentile per-packet one-way delay: 55.304 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 105.78 Mbit/s

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

Loss rate: 0.06%

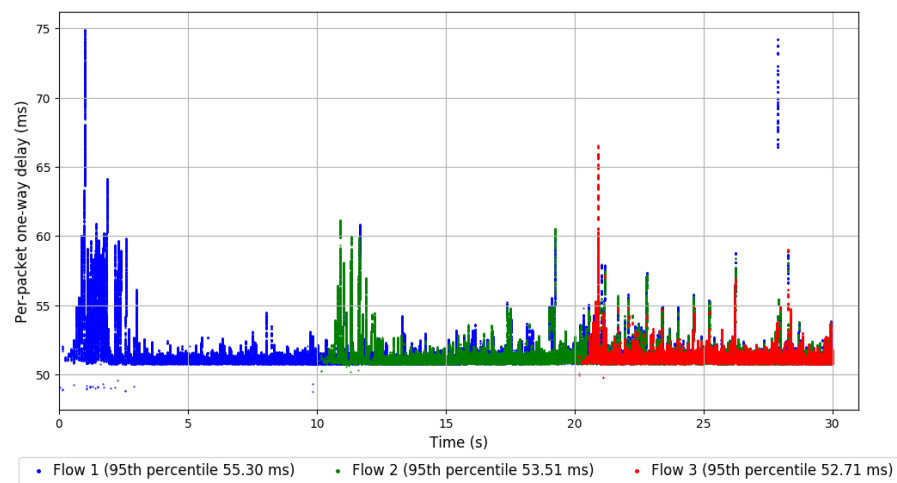
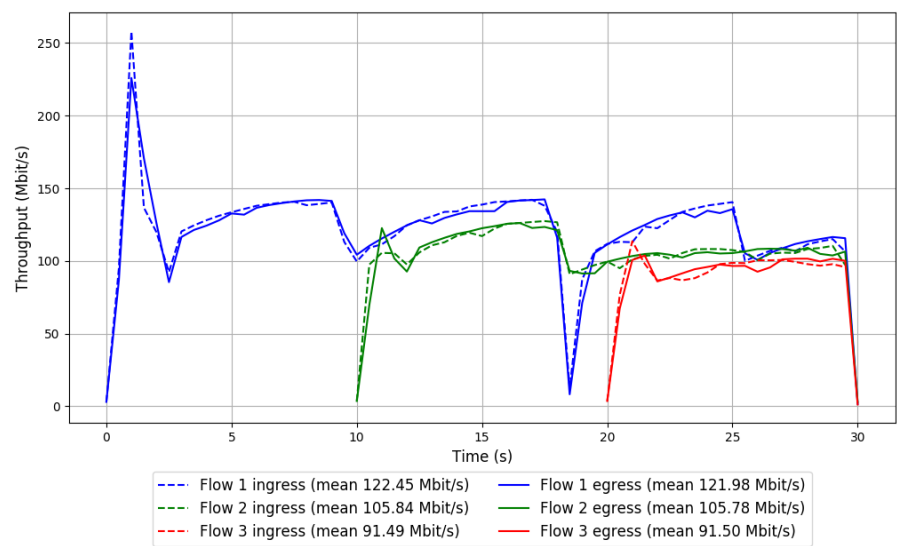
-- Flow 3:

Average throughput: 91.50 Mbit/s

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

Loss rate: 0.04%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

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

End at: 2018-01-03 03:10:31

Below is generated by plot.py at 2018-01-03 05:26:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 234.88 Mbit/s

95th percentile per-packet one-way delay: 58.935 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 125.29 Mbit/s

95th percentile per-packet one-way delay: 58.503 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 163.42 Mbit/s

95th percentile per-packet one-way delay: 59.317 ms

Loss rate: 0.20%

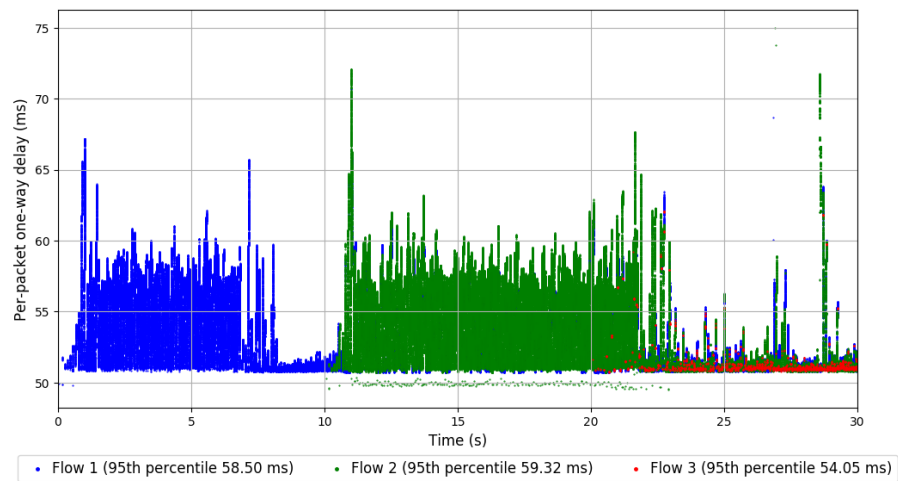
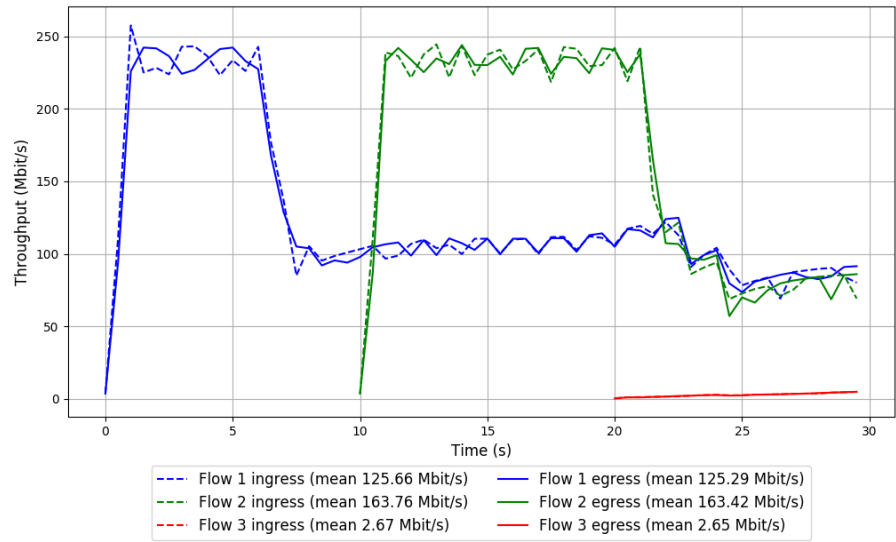
-- Flow 3:

Average throughput: 2.65 Mbit/s

95th percentile per-packet one-way delay: 54.052 ms

Loss rate: 0.59%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-03 03:23:24

End at: 2018-01-03 03:23:54

Below is generated by plot.py at 2018-01-03 05:26:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 199.38 Mbit/s

95th percentile per-packet one-way delay: 67.242 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 79.96 Mbit/s

95th percentile per-packet one-way delay: 58.705 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 122.69 Mbit/s

95th percentile per-packet one-way delay: 69.863 ms

Loss rate: 0.05%

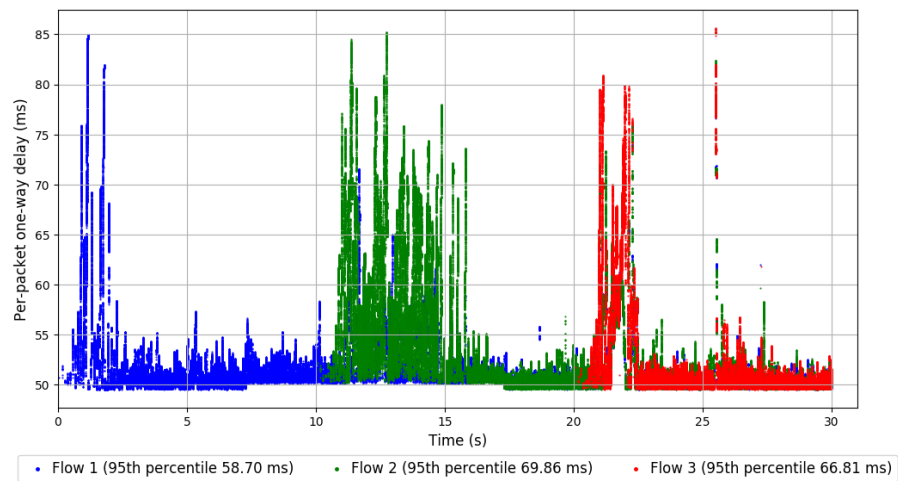
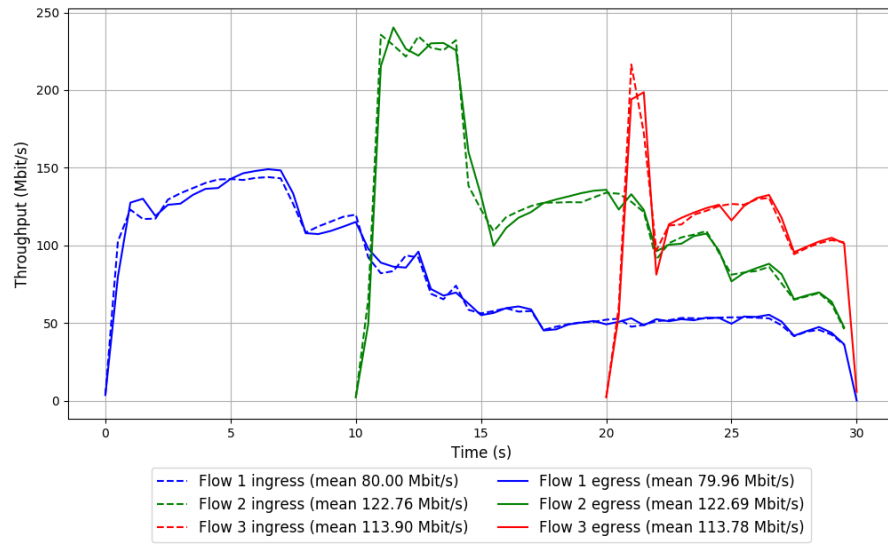
-- Flow 3:

Average throughput: 113.78 Mbit/s

95th percentile per-packet one-way delay: 66.810 ms

Loss rate: 0.12%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-03 03:36:21

End at: 2018-01-03 03:36:51

Below is generated by plot.py at 2018-01-03 05:26:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.83 Mbit/s

95th percentile per-packet one-way delay: 73.883 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 23.16 Mbit/s

95th percentile per-packet one-way delay: 53.891 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 63.77 Mbit/s

95th percentile per-packet one-way delay: 69.558 ms

Loss rate: 1.12%

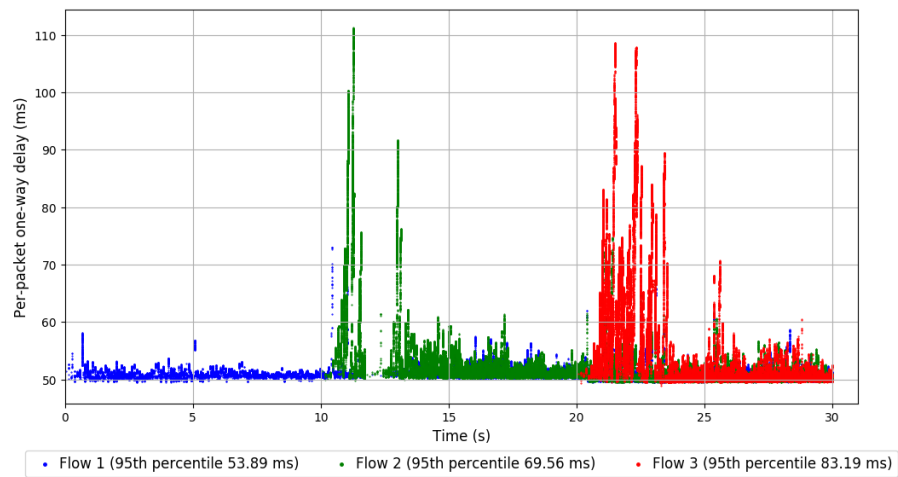
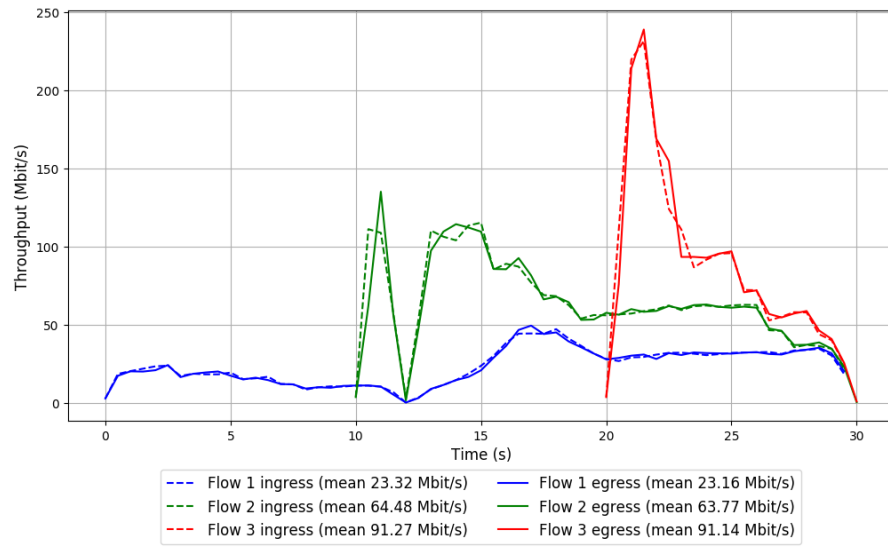
-- Flow 3:

Average throughput: 91.14 Mbit/s

95th percentile per-packet one-way delay: 83.186 ms

Loss rate: 0.14%

Run 10: Report of TCP Cubic — Data Link

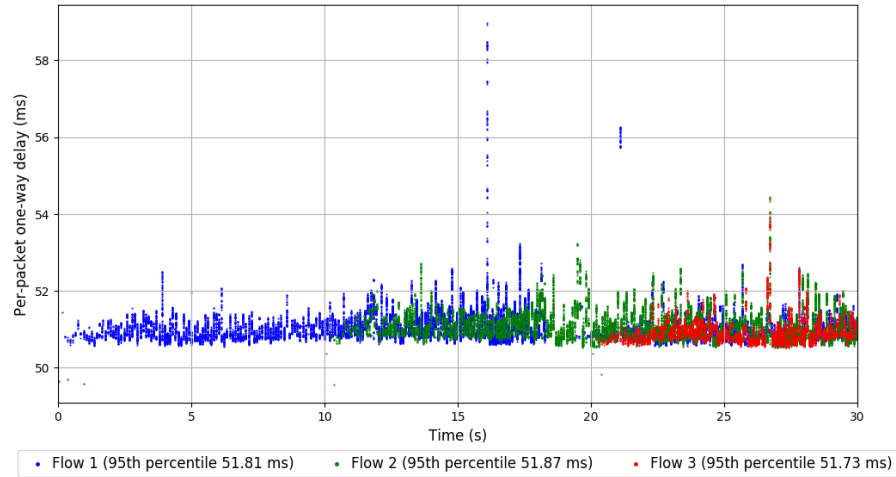
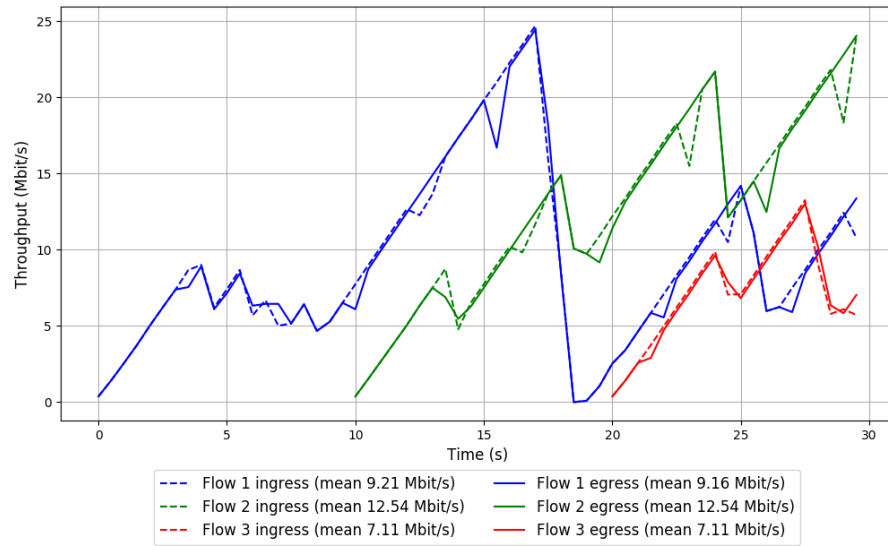


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-03 01:27:13
End at: 2018-01-03 01:27:43

# Below is generated by plot.py at 2018-01-03 05:26:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.84 Mbit/s
95th percentile per-packet one-way delay: 51.835 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 9.16 Mbit/s
95th percentile per-packet one-way delay: 51.815 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 12.54 Mbit/s
95th percentile per-packet one-way delay: 51.869 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.11 Mbit/s
95th percentile per-packet one-way delay: 51.735 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

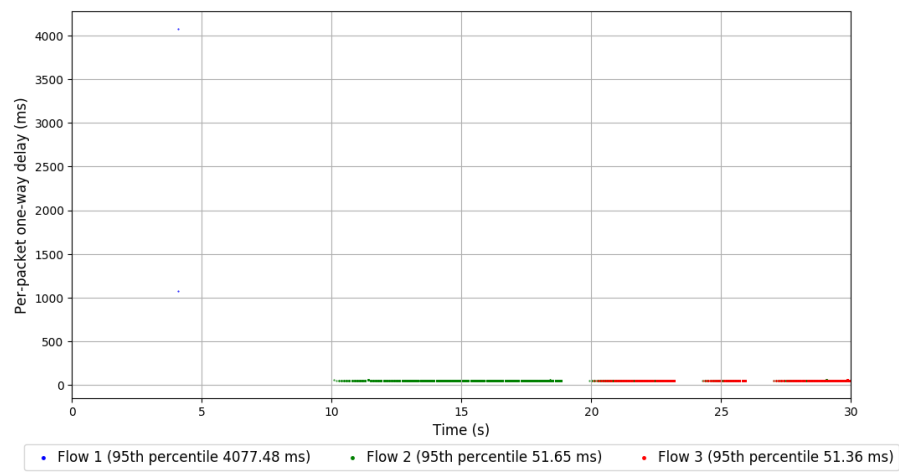
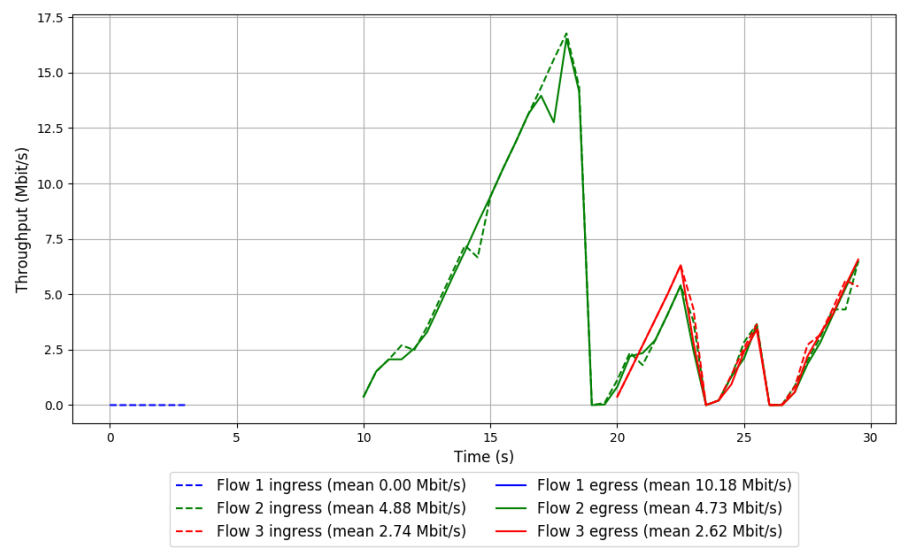


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-03 01:40:54
End at: 2018-01-03 01:41:24

# Below is generated by plot.py at 2018-01-03 05:26:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.64 Mbit/s
95th percentile per-packet one-way delay: 51.626 ms
Loss rate: 3.25%
-- Flow 1:
Average throughput: 10.18 Mbit/s
95th percentile per-packet one-way delay: 4077.479 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.73 Mbit/s
95th percentile per-packet one-way delay: 51.649 ms
Loss rate: 2.96%
-- Flow 3:
Average throughput: 2.62 Mbit/s
95th percentile per-packet one-way delay: 51.363 ms
Loss rate: 4.30%
```

Run 2: Report of LEDBAT — Data Link

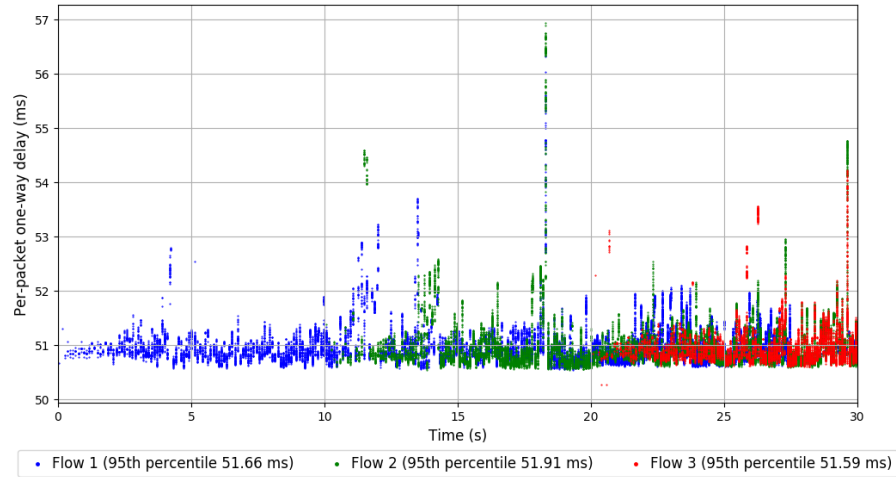
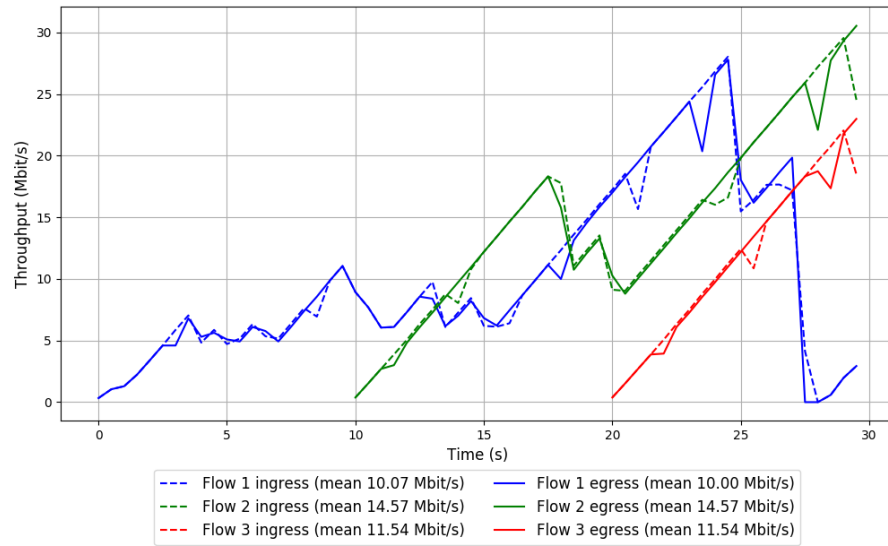


```
Run 3: Statistics of LEDBAT

Start at: 2018-01-03 01:54:31
End at: 2018-01-03 01:55:01

# Below is generated by plot.py at 2018-01-03 05:26:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.47 Mbit/s
95th percentile per-packet one-way delay: 51.715 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 10.00 Mbit/s
95th percentile per-packet one-way delay: 51.663 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 14.57 Mbit/s
95th percentile per-packet one-way delay: 51.906 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.54 Mbit/s
95th percentile per-packet one-way delay: 51.589 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-03 02:08:08

End at: 2018-01-03 02:08:38

Below is generated by plot.py at 2018-01-03 05:26:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.17 Mbit/s

95th percentile per-packet one-way delay: 51.704 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 6.16 Mbit/s

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

Loss rate: 1.06%

-- Flow 2:

Average throughput: 6.20 Mbit/s

95th percentile per-packet one-way delay: 51.676 ms

Loss rate: 2.28%

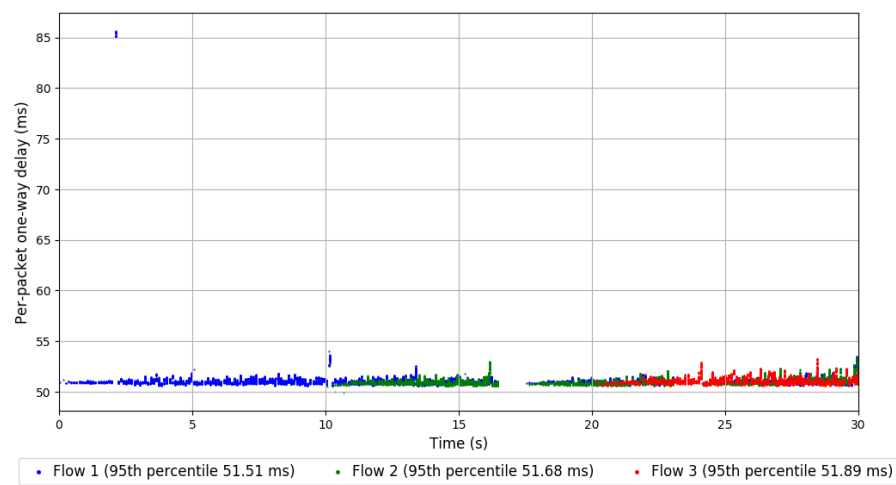
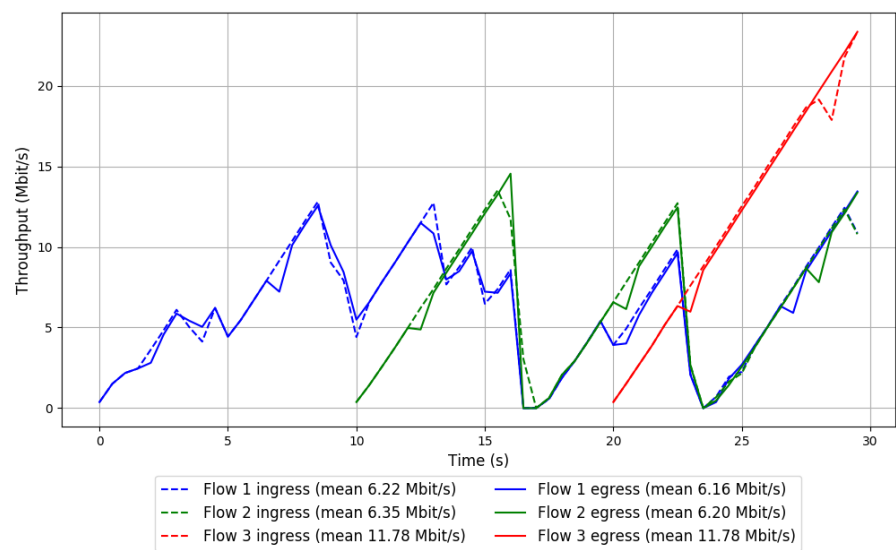
-- Flow 3:

Average throughput: 11.78 Mbit/s

95th percentile per-packet one-way delay: 51.893 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-03 02:21:41

End at: 2018-01-03 02:22:11

Below is generated by plot.py at 2018-01-03 05:26:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.50 Mbit/s

95th percentile per-packet one-way delay: 52.481 ms

Loss rate: 3.40%

-- Flow 1:

Average throughput: 3.65 Mbit/s

95th percentile per-packet one-way delay: 52.377 ms

Loss rate: 3.51%

-- Flow 2:

Average throughput: 3.62 Mbit/s

95th percentile per-packet one-way delay: 52.470 ms

Loss rate: 3.45%

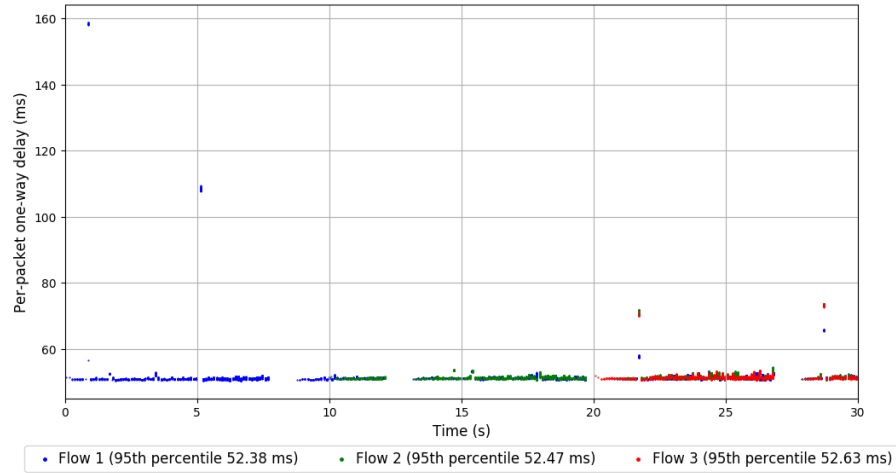
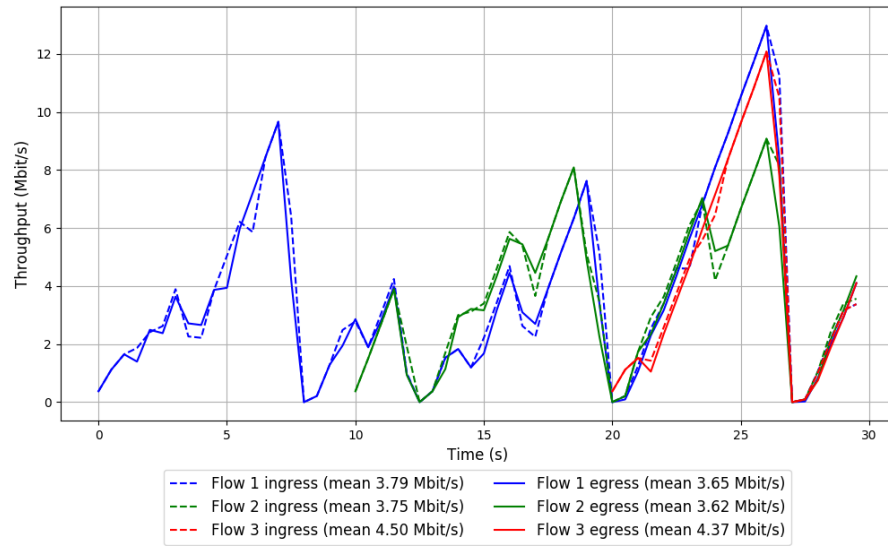
-- Flow 3:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 52.632 ms

Loss rate: 3.03%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-03 02:34:49

End at: 2018-01-03 02:35:19

Below is generated by plot.py at 2018-01-03 05:26:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.93 Mbit/s

95th percentile per-packet one-way delay: 52.931 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 6.59 Mbit/s

95th percentile per-packet one-way delay: 52.931 ms

Loss rate: 1.34%

-- Flow 2:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 52.846 ms

Loss rate: 2.08%

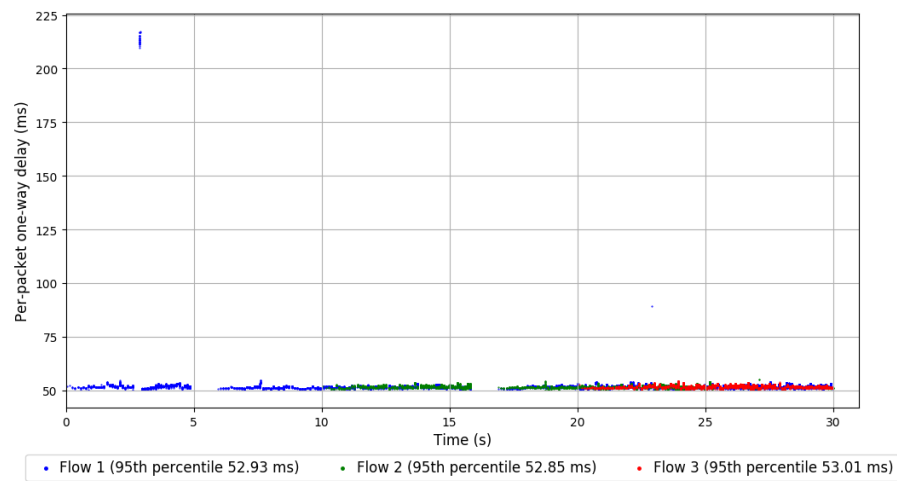
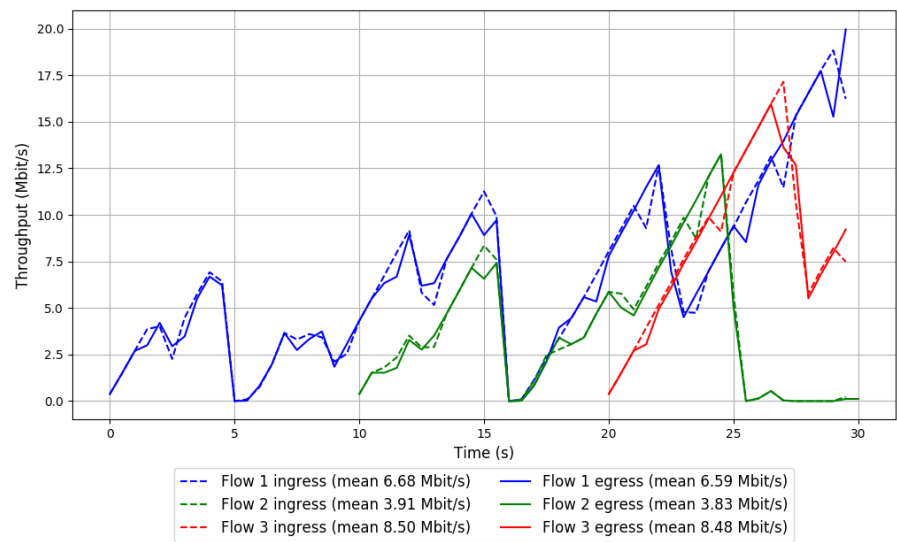
-- Flow 3:

Average throughput: 8.48 Mbit/s

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

Loss rate: 0.27%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-03 02:47:58

End at: 2018-01-03 02:48:28

Below is generated by plot.py at 2018-01-03 05:26:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.89 Mbit/s

95th percentile per-packet one-way delay: 52.464 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 7.26 Mbit/s

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

Loss rate: 1.33%

-- Flow 2:

Average throughput: 9.46 Mbit/s

95th percentile per-packet one-way delay: 52.611 ms

Loss rate: 0.45%

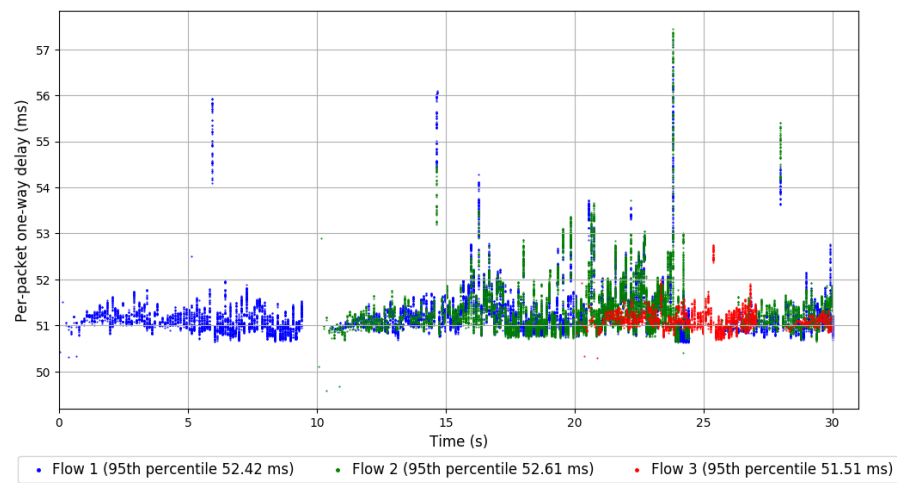
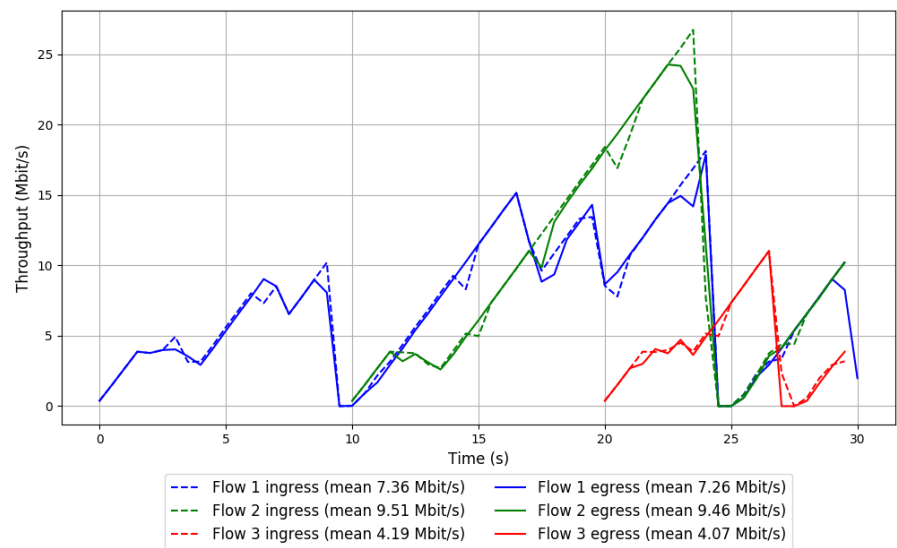
-- Flow 3:

Average throughput: 4.07 Mbit/s

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

Loss rate: 2.90%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

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

End at: 2018-01-03 03:02:06

Below is generated by plot.py at 2018-01-03 05:26:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.43 Mbit/s

95th percentile per-packet one-way delay: 52.128 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 9.06 Mbit/s

95th percentile per-packet one-way delay: 52.326 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 6.27 Mbit/s

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

Loss rate: 1.65%

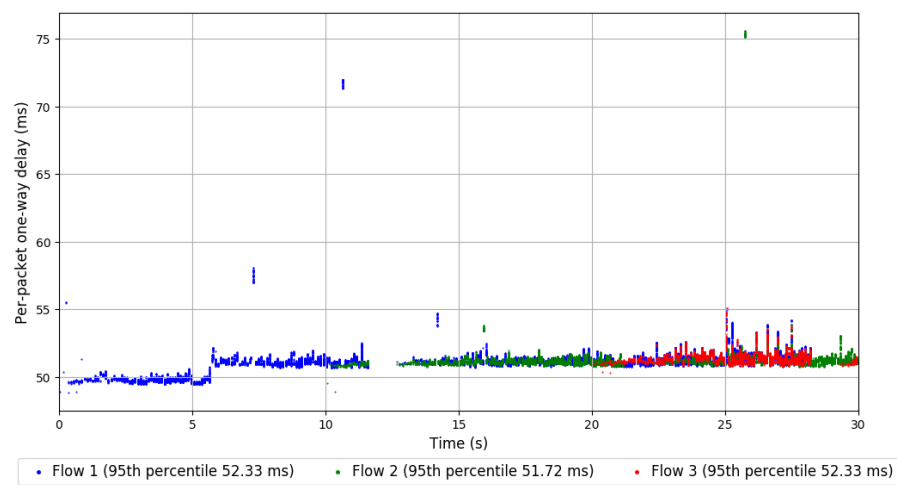
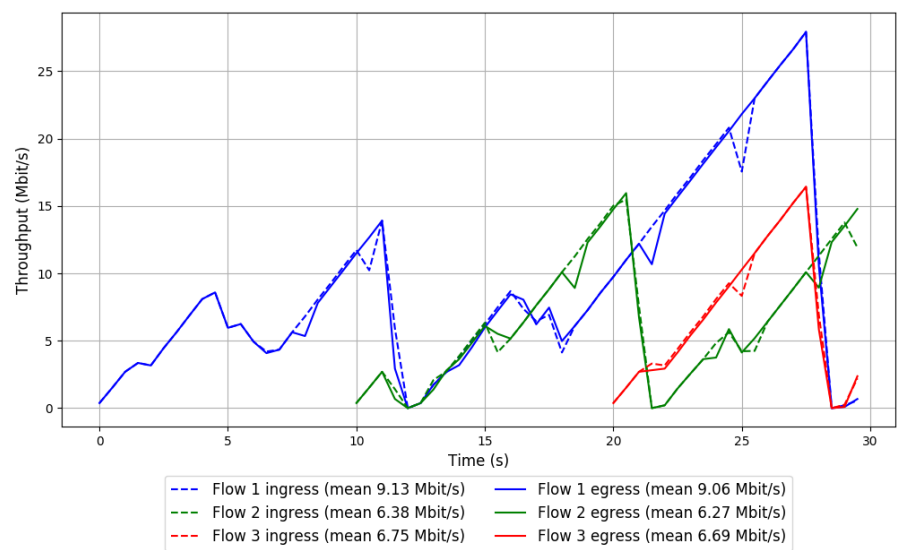
-- Flow 3:

Average throughput: 6.69 Mbit/s

95th percentile per-packet one-way delay: 52.327 ms

Loss rate: 0.81%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

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

End at: 2018-01-03 03:15:30

Below is generated by plot.py at 2018-01-03 05:26:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.93 Mbit/s

95th percentile per-packet one-way delay: 50.813 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 7.06 Mbit/s

95th percentile per-packet one-way delay: 50.788 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 5.49 Mbit/s

95th percentile per-packet one-way delay: 50.859 ms

Loss rate: 0.31%

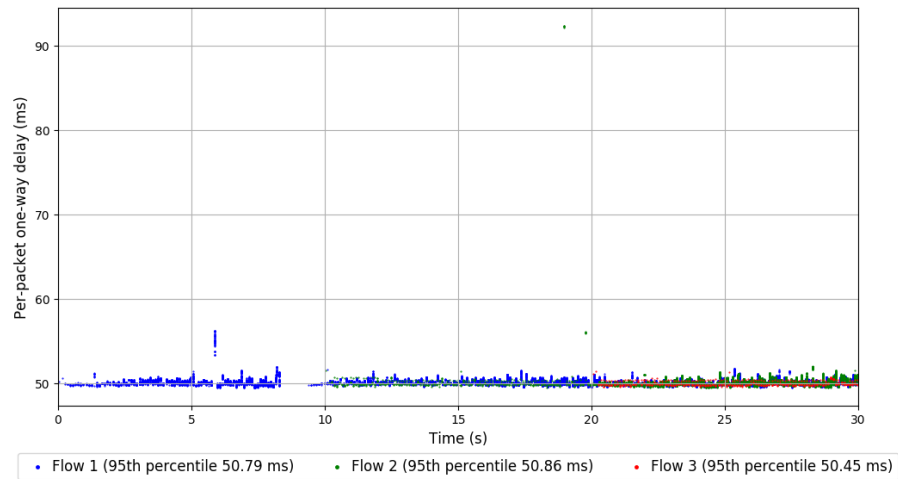
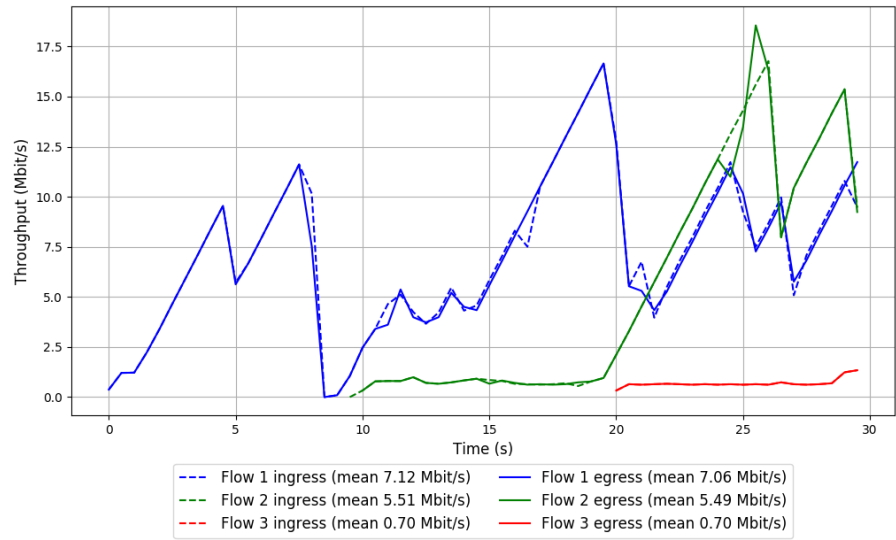
-- Flow 3:

Average throughput: 0.70 Mbit/s

95th percentile per-packet one-way delay: 50.447 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

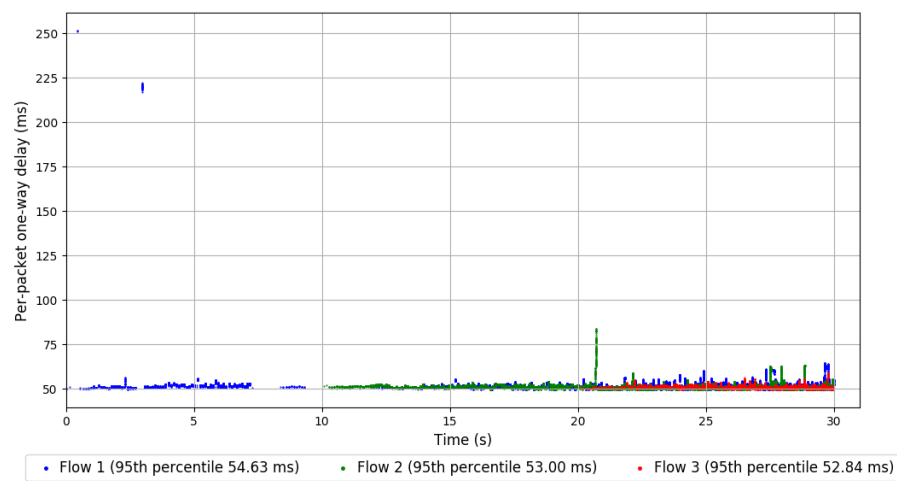
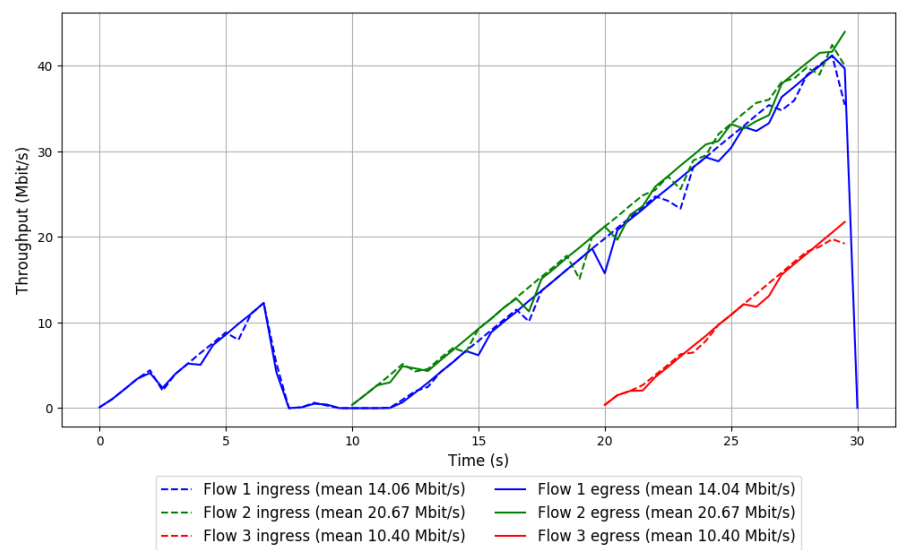


```
Run 10: Statistics of LEDBAT

Start at: 2018-01-03 03:28:19
End at: 2018-01-03 03:28:49

# Below is generated by plot.py at 2018-01-03 05:26:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.23 Mbit/s
95th percentile per-packet one-way delay: 53.732 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 14.04 Mbit/s
95th percentile per-packet one-way delay: 54.631 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 20.67 Mbit/s
95th percentile per-packet one-way delay: 52.996 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.40 Mbit/s
95th percentile per-packet one-way delay: 52.844 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

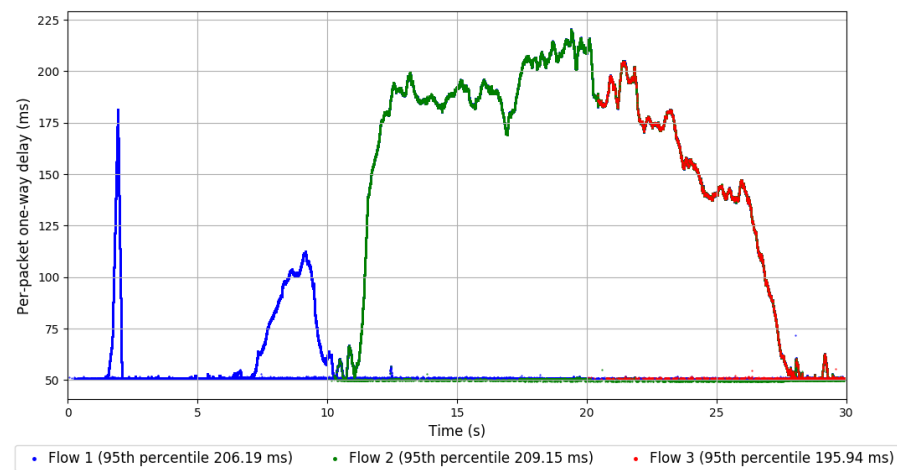
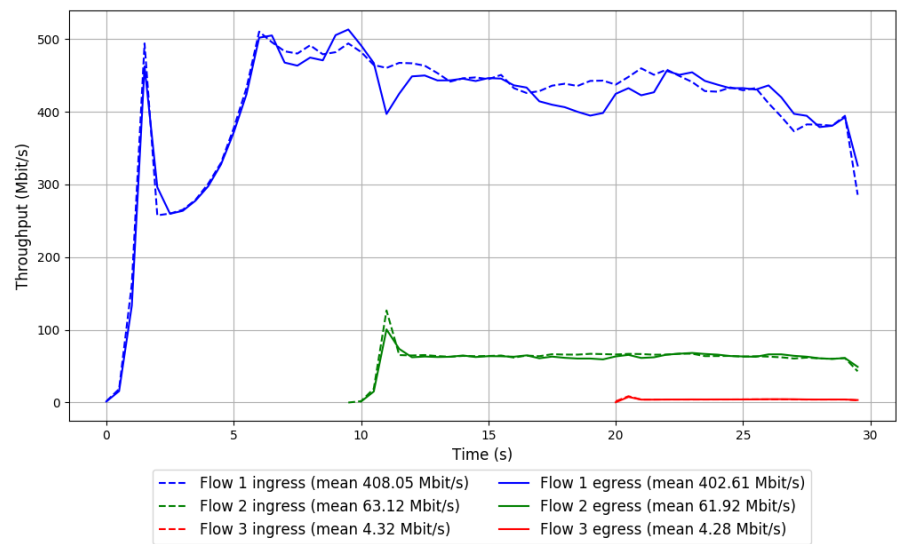


```
Run 1: Statistics of PCC

Start at: 2018-01-03 01:27:54
End at: 2018-01-03 01:28:24

# Below is generated by plot.py at 2018-01-03 05:33:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 445.20 Mbit/s
95th percentile per-packet one-way delay: 206.432 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 402.61 Mbit/s
95th percentile per-packet one-way delay: 206.194 ms
Loss rate: 1.34%
-- Flow 2:
Average throughput: 61.92 Mbit/s
95th percentile per-packet one-way delay: 209.153 ms
Loss rate: 1.90%
-- Flow 3:
Average throughput: 4.28 Mbit/s
95th percentile per-packet one-way delay: 195.941 ms
Loss rate: 1.10%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-03 01:41:34

End at: 2018-01-03 01:42:04

Below is generated by plot.py at 2018-01-03 05:33:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 383.63 Mbit/s

95th percentile per-packet one-way delay: 116.969 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 322.46 Mbit/s

95th percentile per-packet one-way delay: 116.869 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 75.47 Mbit/s

95th percentile per-packet one-way delay: 117.047 ms

Loss rate: 0.01%

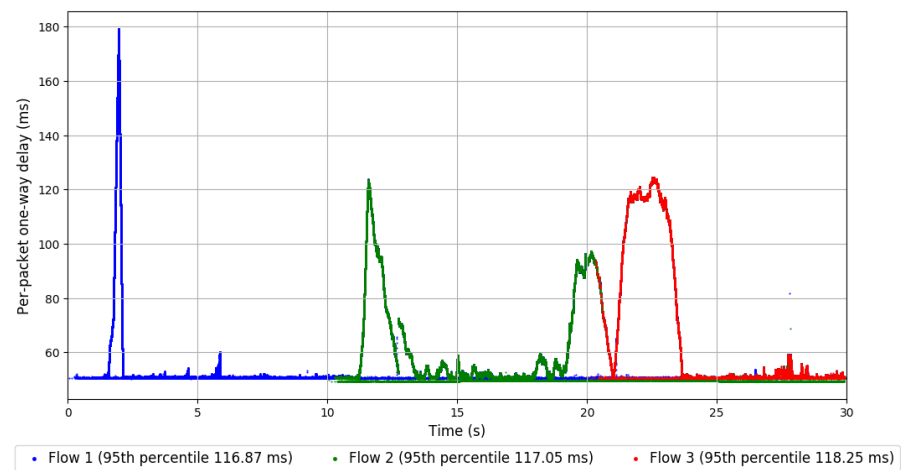
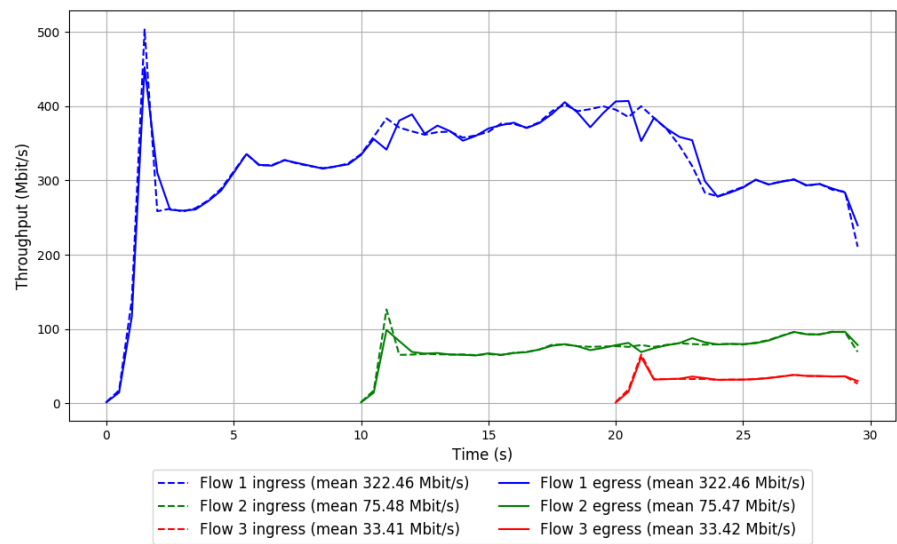
-- Flow 3:

Average throughput: 33.42 Mbit/s

95th percentile per-packet one-way delay: 118.255 ms

Loss rate: 0.00%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-03 01:55:12

End at: 2018-01-03 01:55:42

Below is generated by plot.py at 2018-01-03 05:33:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 417.02 Mbit/s

95th percentile per-packet one-way delay: 196.770 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 395.20 Mbit/s

95th percentile per-packet one-way delay: 196.372 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 17.37 Mbit/s

95th percentile per-packet one-way delay: 201.209 ms

Loss rate: 0.62%

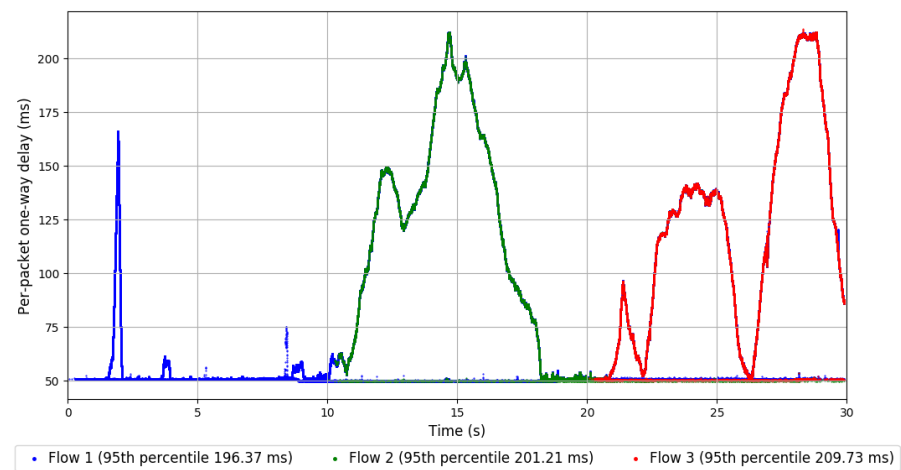
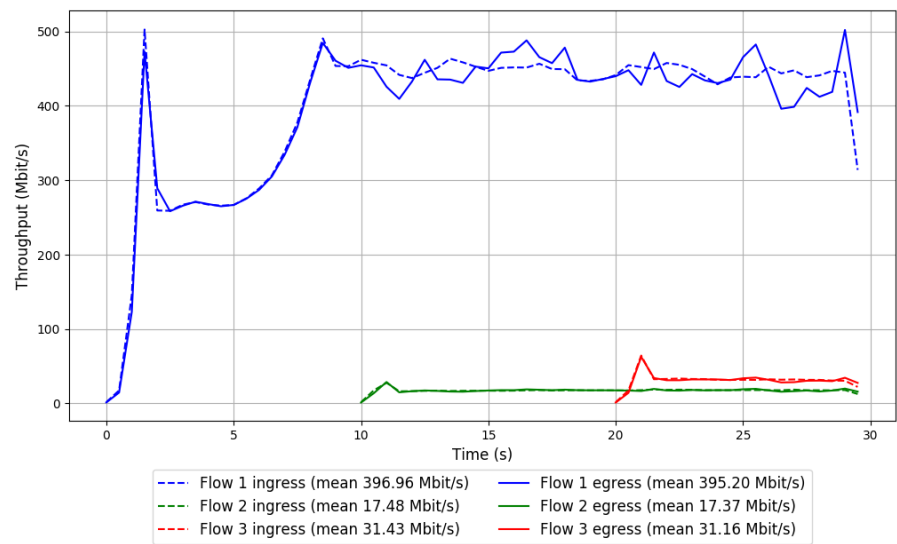
-- Flow 3:

Average throughput: 31.16 Mbit/s

95th percentile per-packet one-way delay: 209.729 ms

Loss rate: 0.86%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-03 02:08:48

End at: 2018-01-03 02:09:18

Below is generated by plot.py at 2018-01-03 05:33:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 445.30 Mbit/s

95th percentile per-packet one-way delay: 196.743 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 432.75 Mbit/s

95th percentile per-packet one-way delay: 196.468 ms

Loss rate: 1.15%

-- Flow 2:

Average throughput: 4.06 Mbit/s

95th percentile per-packet one-way delay: 197.014 ms

Loss rate: 1.45%

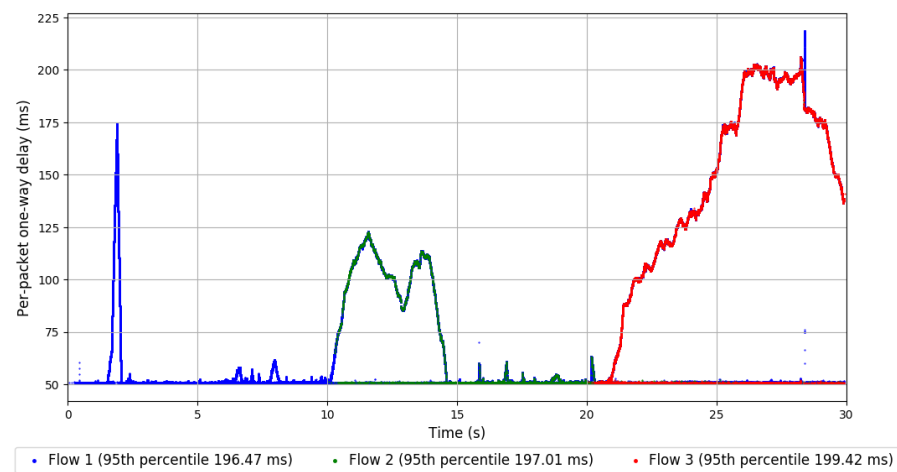
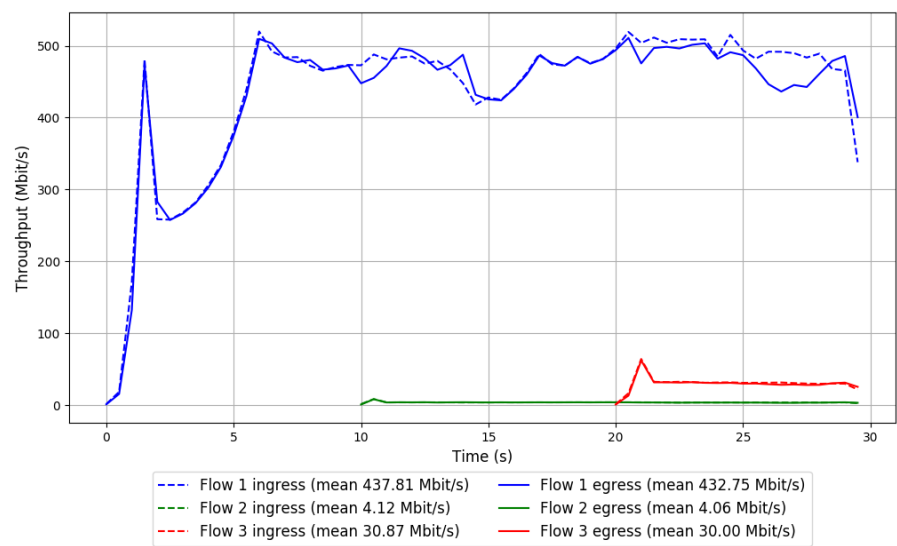
-- Flow 3:

Average throughput: 30.00 Mbit/s

95th percentile per-packet one-way delay: 199.420 ms

Loss rate: 2.78%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-03 02:22:21

End at: 2018-01-03 02:22:51

Below is generated by plot.py at 2018-01-03 05:33:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 389.35 Mbit/s

95th percentile per-packet one-way delay: 211.996 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 340.14 Mbit/s

95th percentile per-packet one-way delay: 211.577 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 71.91 Mbit/s

95th percentile per-packet one-way delay: 215.924 ms

Loss rate: 0.70%

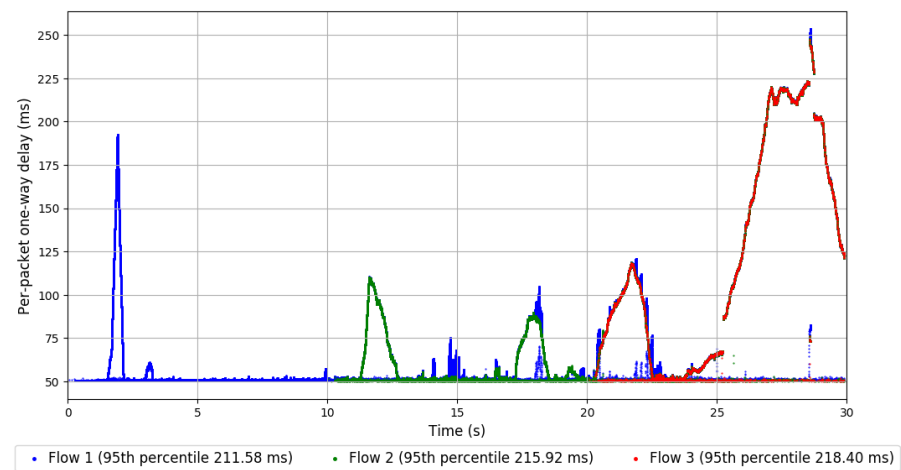
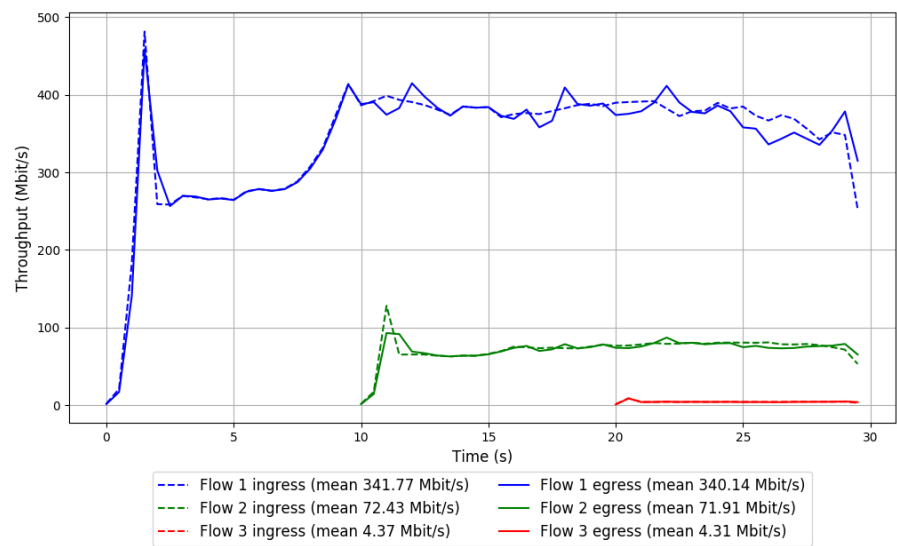
-- Flow 3:

Average throughput: 4.31 Mbit/s

95th percentile per-packet one-way delay: 218.400 ms

Loss rate: 1.32%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-03 02:35:29

End at: 2018-01-03 02:35:59

Below is generated by plot.py at 2018-01-03 05:33:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 344.64 Mbit/s

95th percentile per-packet one-way delay: 117.464 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 250.92 Mbit/s

95th percentile per-packet one-way delay: 125.250 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 133.13 Mbit/s

95th percentile per-packet one-way delay: 73.111 ms

Loss rate: 0.01%

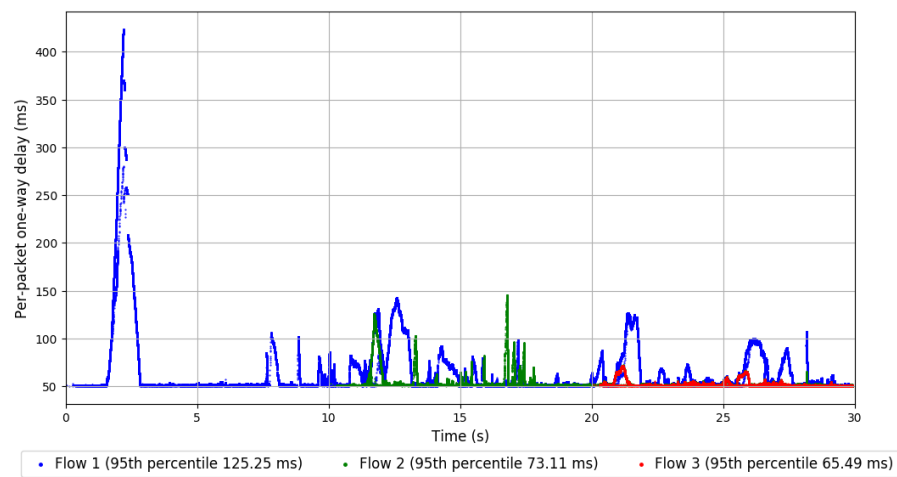
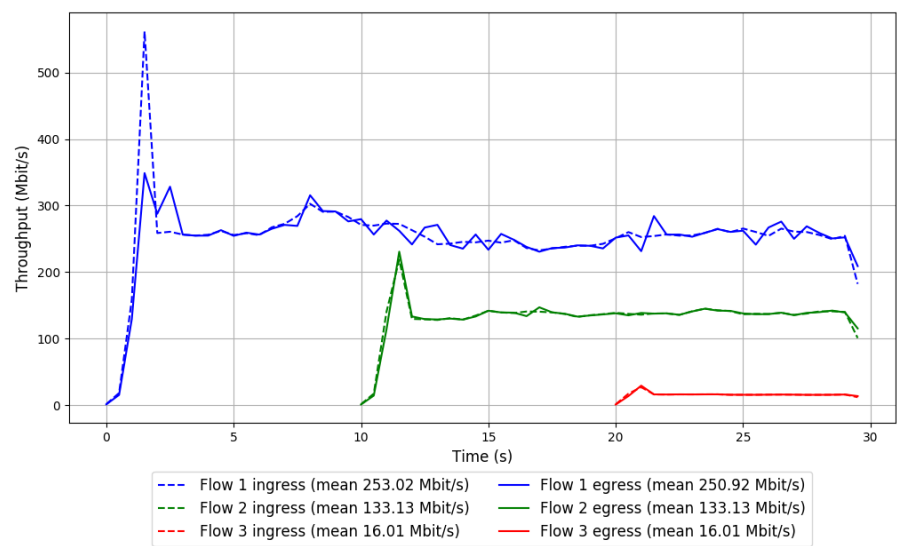
-- Flow 3:

Average throughput: 16.01 Mbit/s

95th percentile per-packet one-way delay: 65.491 ms

Loss rate: 0.00%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-03 02:48:39

End at: 2018-01-03 02:49:09

Below is generated by plot.py at 2018-01-03 05:35:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 479.87 Mbit/s

95th percentile per-packet one-way delay: 203.768 ms

Loss rate: 7.36%

-- Flow 1:

Average throughput: 458.27 Mbit/s

95th percentile per-packet one-way delay: 204.111 ms

Loss rate: 7.62%

-- Flow 2:

Average throughput: 1.87 Mbit/s

95th percentile per-packet one-way delay: 195.970 ms

Loss rate: 5.12%

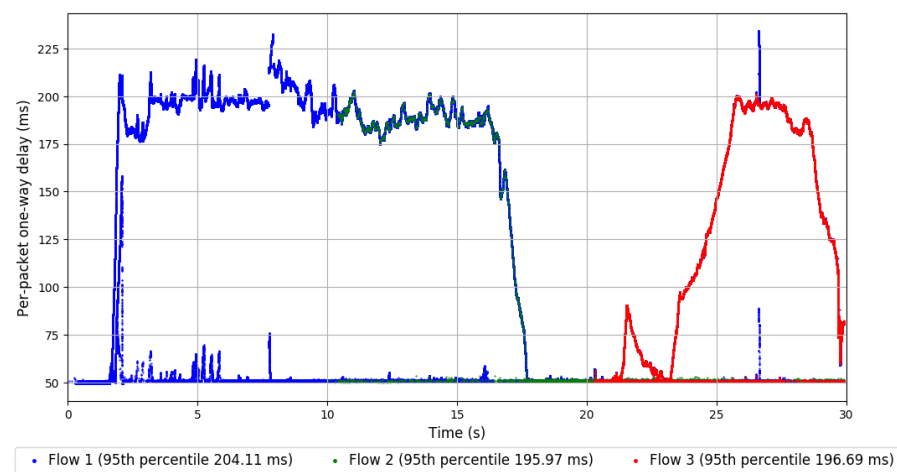
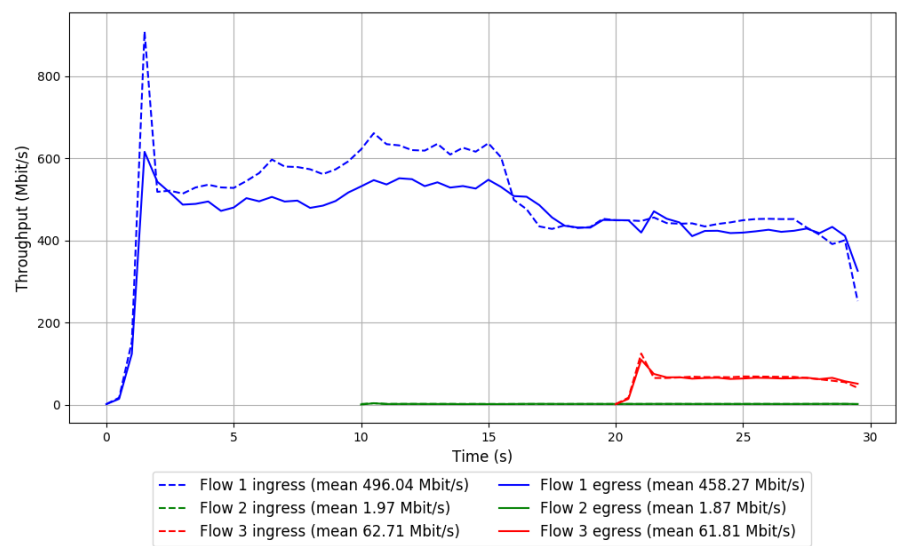
-- Flow 3:

Average throughput: 61.81 Mbit/s

95th percentile per-packet one-way delay: 196.693 ms

Loss rate: 1.44%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-03 03:02:16

End at: 2018-01-03 03:02:46

Below is generated by plot.py at 2018-01-03 05:35:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 420.01 Mbit/s

95th percentile per-packet one-way delay: 208.929 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 400.56 Mbit/s

95th percentile per-packet one-way delay: 209.066 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 19.07 Mbit/s

95th percentile per-packet one-way delay: 209.173 ms

Loss rate: 0.14%

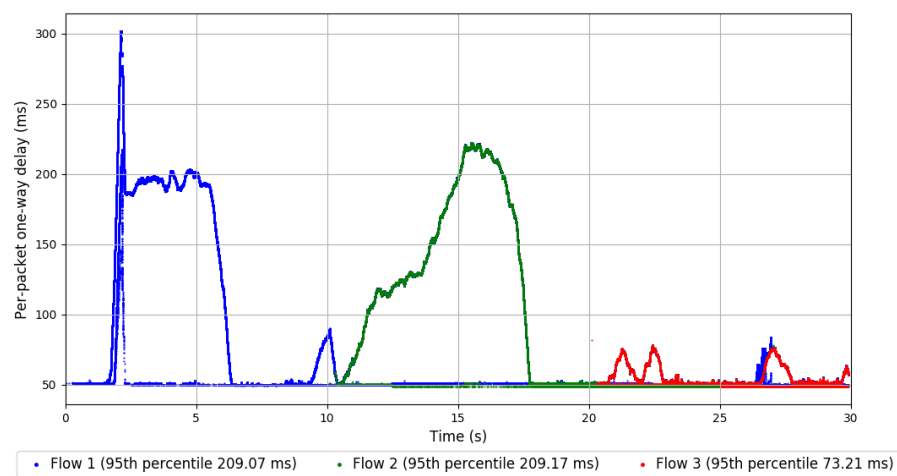
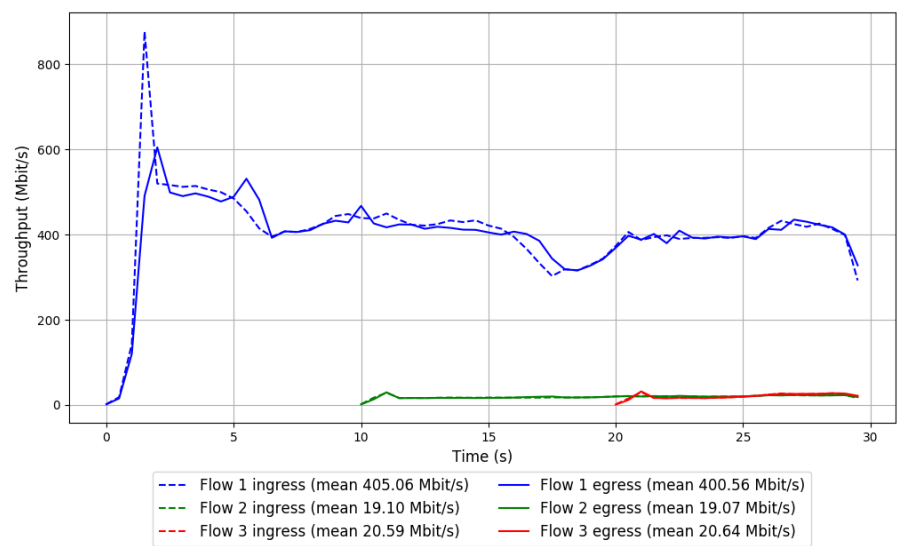
-- Flow 3:

Average throughput: 20.64 Mbit/s

95th percentile per-packet one-way delay: 73.207 ms

Loss rate: 0.09%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-03 03:15:40

End at: 2018-01-03 03:16:10

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 406.23 Mbit/s

95th percentile per-packet one-way delay: 215.193 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 398.67 Mbit/s

95th percentile per-packet one-way delay: 215.537 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 9.10 Mbit/s

95th percentile per-packet one-way delay: 204.977 ms

Loss rate: 0.40%

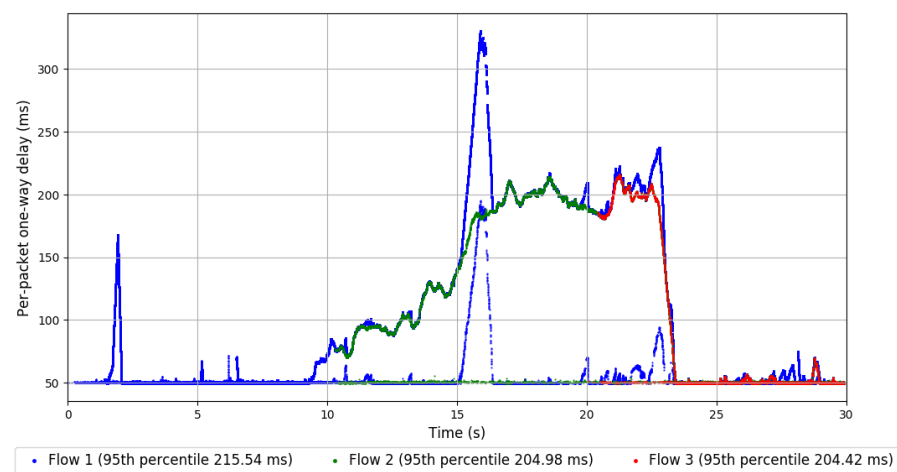
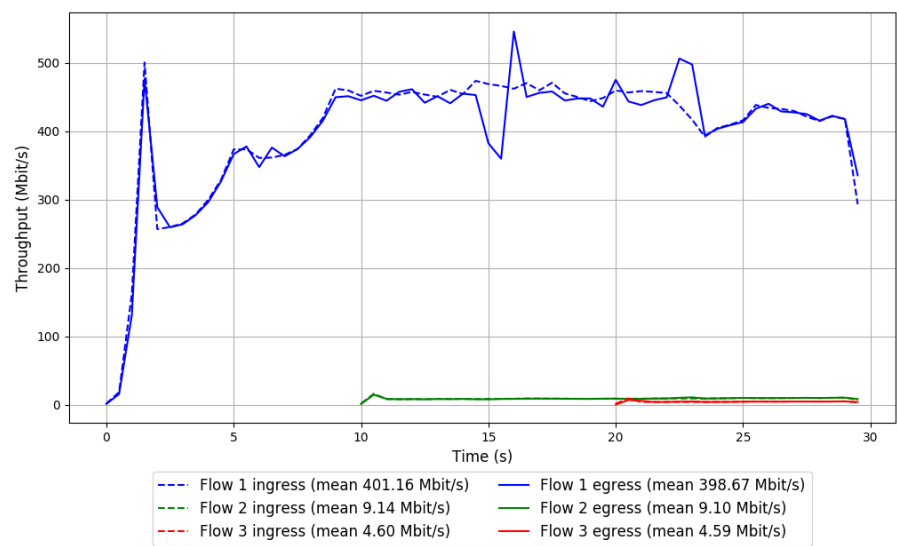
-- Flow 3:

Average throughput: 4.59 Mbit/s

95th percentile per-packet one-way delay: 204.417 ms

Loss rate: 0.29%

Run 9: Report of PCC — Data Link

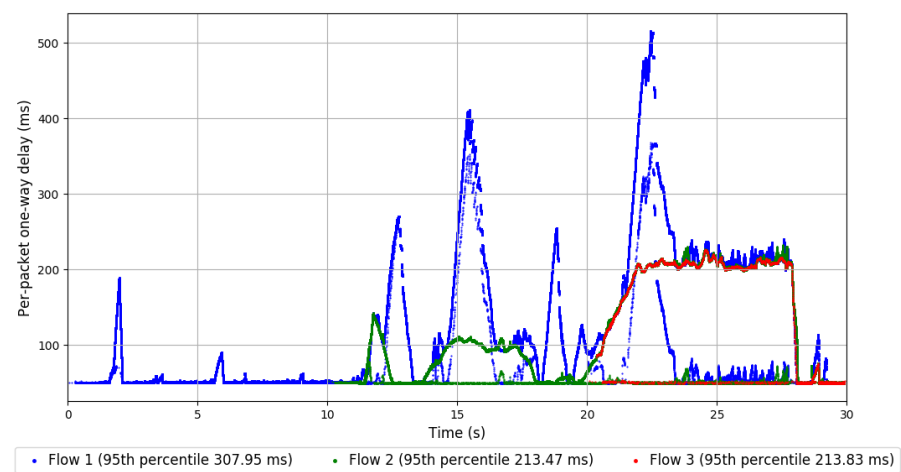
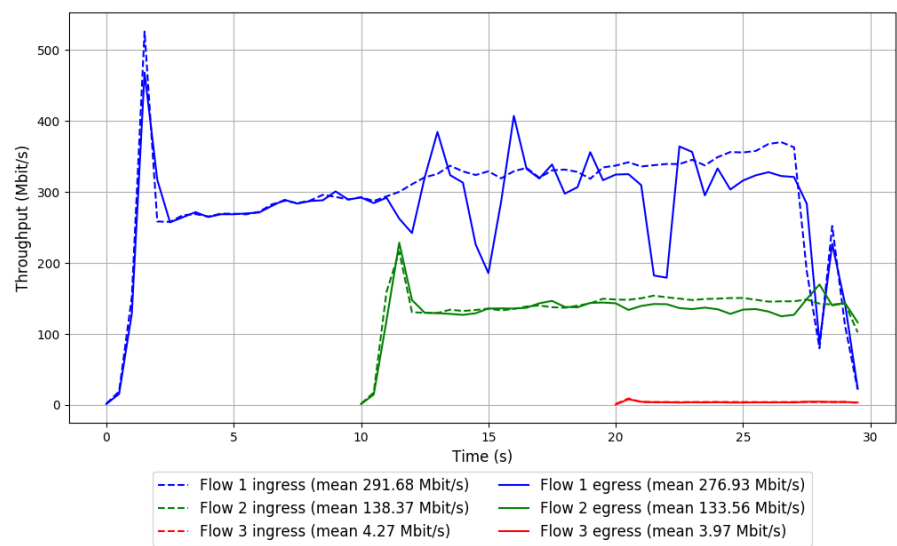


```
Run 10: Statistics of PCC

Start at: 2018-01-03 03:29:00
End at: 2018-01-03 03:29:30

# Below is generated by plot.py at 2018-01-03 05:40:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 366.86 Mbit/s
95th percentile per-packet one-way delay: 264.302 ms
Loss rate: 4.69%
-- Flow 1:
Average throughput: 276.93 Mbit/s
95th percentile per-packet one-way delay: 307.950 ms
Loss rate: 5.06%
-- Flow 2:
Average throughput: 133.56 Mbit/s
95th percentile per-packet one-way delay: 213.470 ms
Loss rate: 3.49%
-- Flow 3:
Average throughput: 3.97 Mbit/s
95th percentile per-packet one-way delay: 213.830 ms
Loss rate: 7.02%
```

Run 10: Report of PCC — Data Link

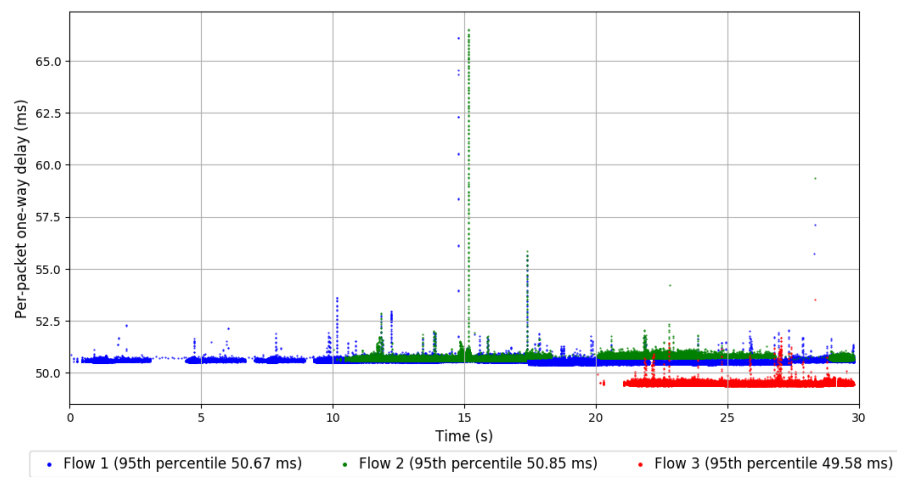
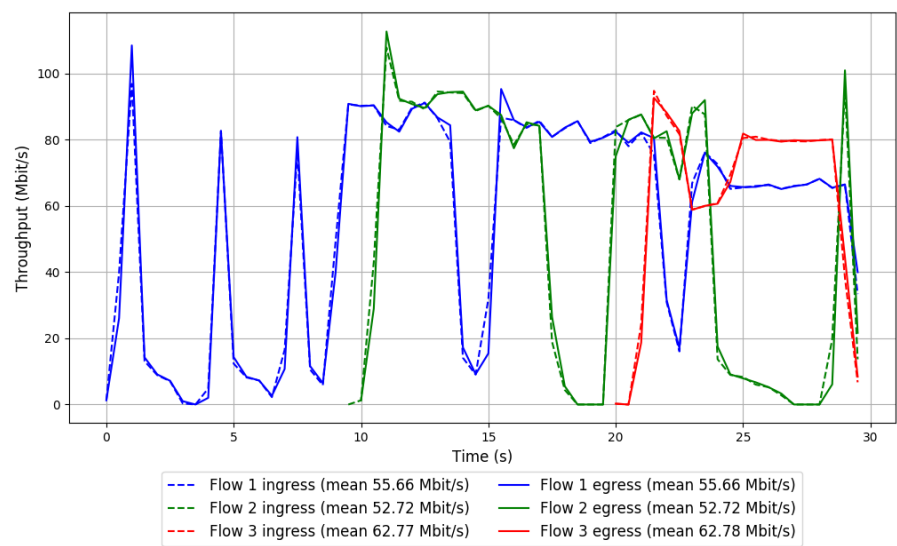


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-03 01:32:31
End at: 2018-01-03 01:33:01

# Below is generated by plot.py at 2018-01-03 05:40:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 111.22 Mbit/s
95th percentile per-packet one-way delay: 50.794 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.66 Mbit/s
95th percentile per-packet one-way delay: 50.672 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 52.72 Mbit/s
95th percentile per-packet one-way delay: 50.852 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 62.78 Mbit/s
95th percentile per-packet one-way delay: 49.584 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link

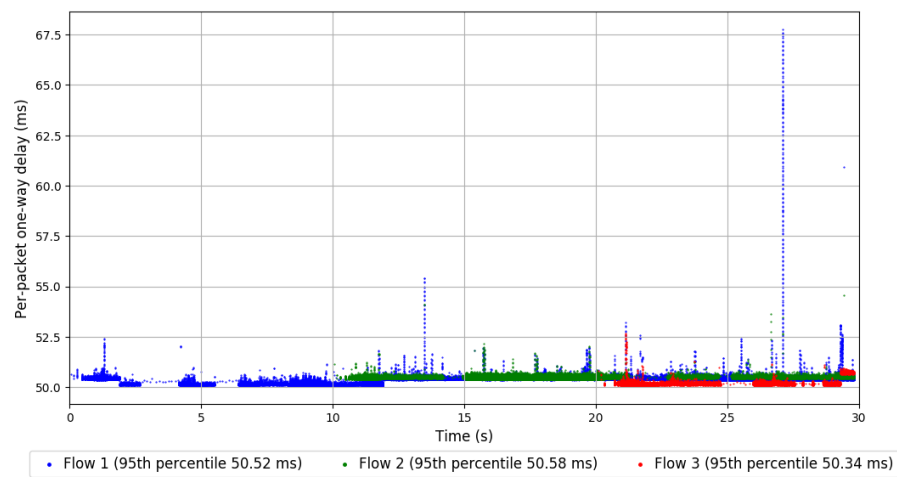
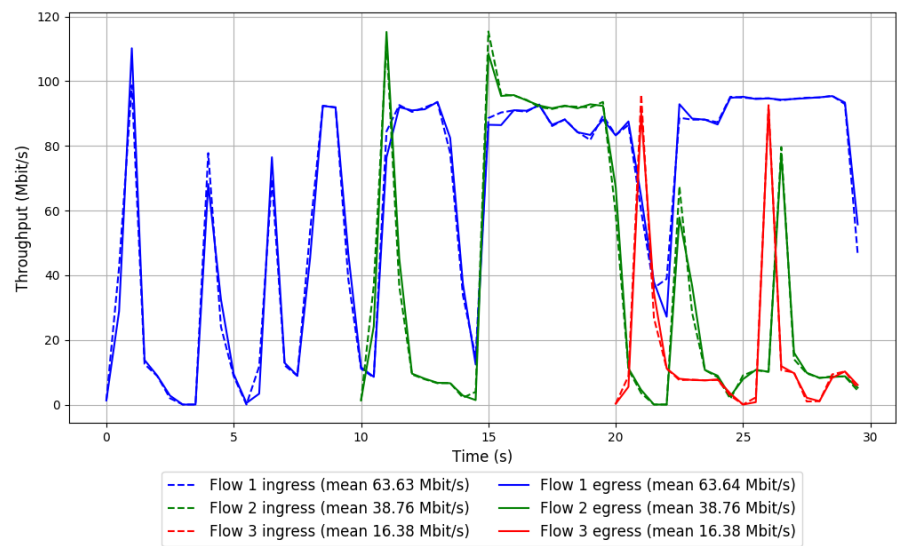


```
Run 2: Statistics of QUIC Cubic

Start at: 2018-01-03 01:46:09
End at: 2018-01-03 01:46:39

# Below is generated by plot.py at 2018-01-03 05:40:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.70 Mbit/s
95th percentile per-packet one-way delay: 50.548 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.64 Mbit/s
95th percentile per-packet one-way delay: 50.517 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.76 Mbit/s
95th percentile per-packet one-way delay: 50.583 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 16.38 Mbit/s
95th percentile per-packet one-way delay: 50.336 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-03 01:59:47

End at: 2018-01-03 02:00:17

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.47 Mbit/s

95th percentile per-packet one-way delay: 50.783 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.20 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.30 Mbit/s

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

Loss rate: 0.00%

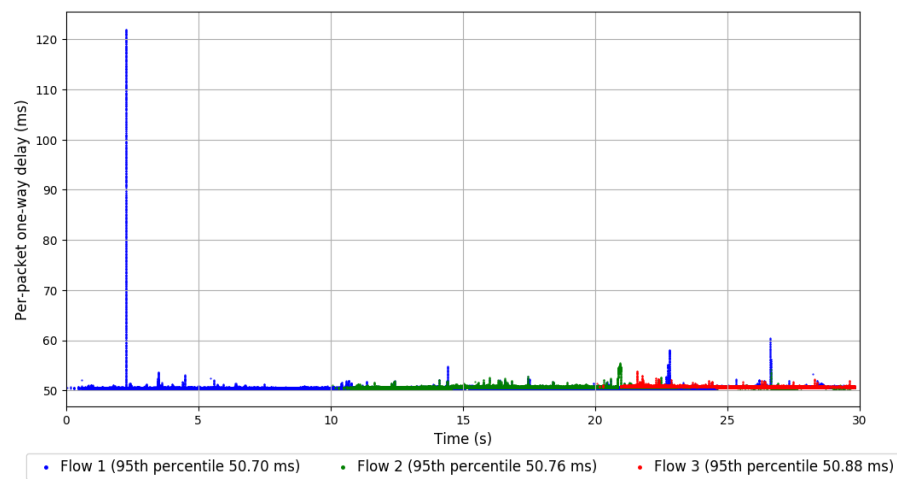
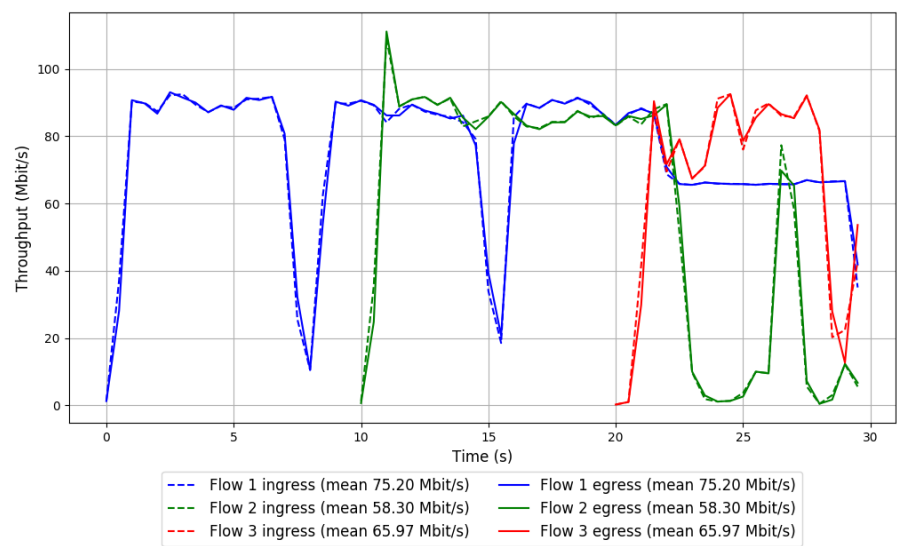
-- Flow 3:

Average throughput: 65.97 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-03 02:13:27

End at: 2018-01-03 02:13:57

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.29 Mbit/s

95th percentile per-packet one-way delay: 50.740 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.47 Mbit/s

95th percentile per-packet one-way delay: 50.526 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.67 Mbit/s

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

Loss rate: 0.00%

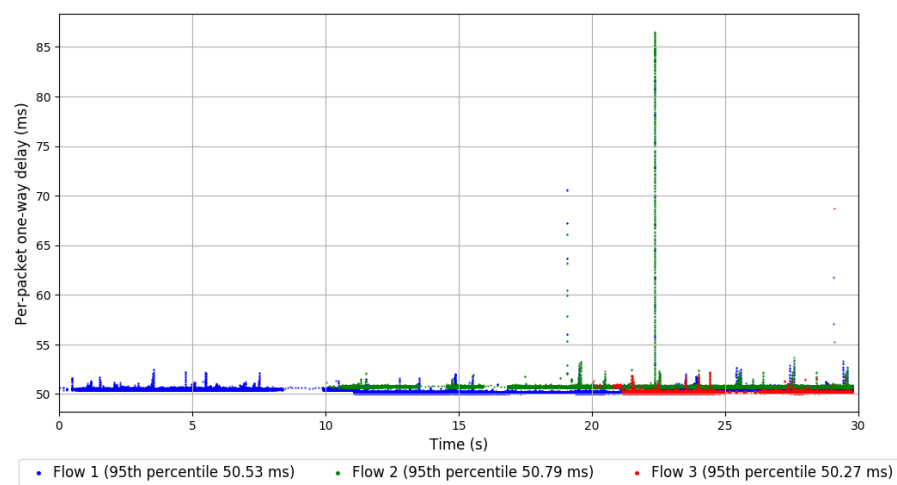
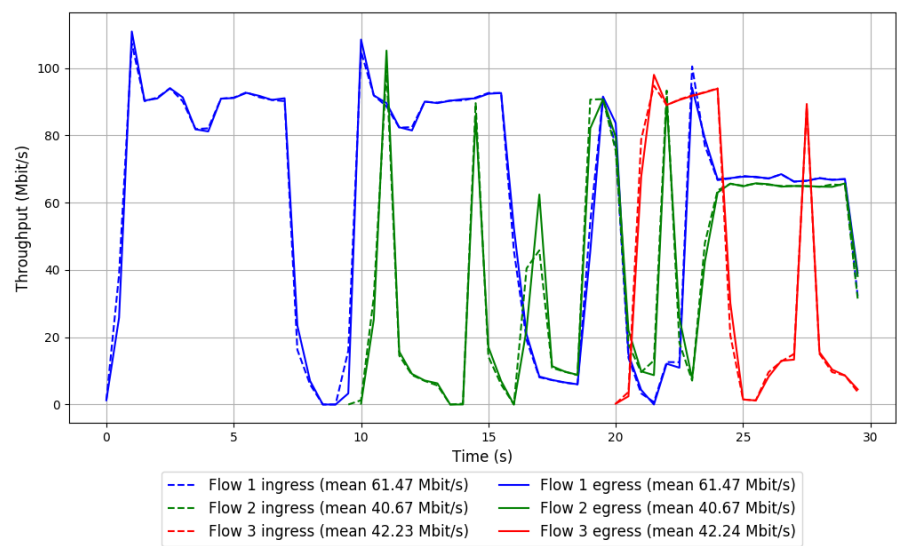
-- Flow 3:

Average throughput: 42.24 Mbit/s

95th percentile per-packet one-way delay: 50.275 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-03 02:26:58

End at: 2018-01-03 02:27:28

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.69 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.42 Mbit/s

95th percentile per-packet one-way delay: 50.938 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.14 Mbit/s

95th percentile per-packet one-way delay: 50.848 ms

Loss rate: 0.00%

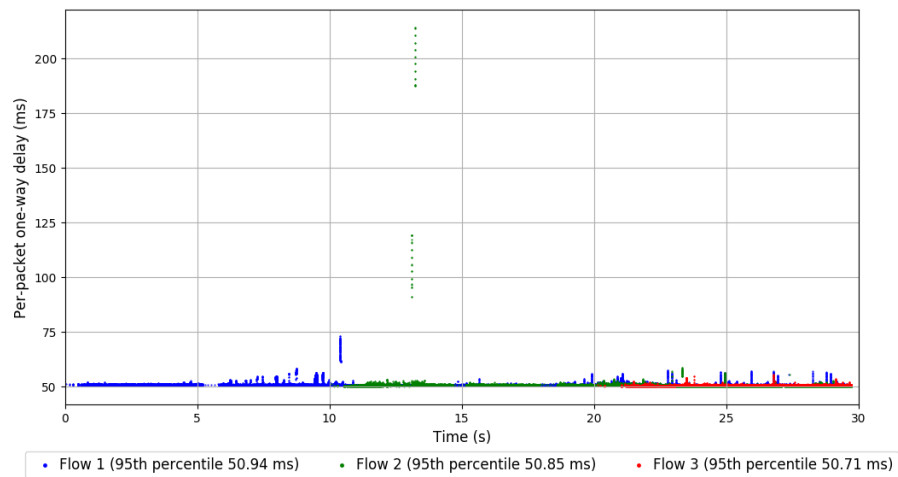
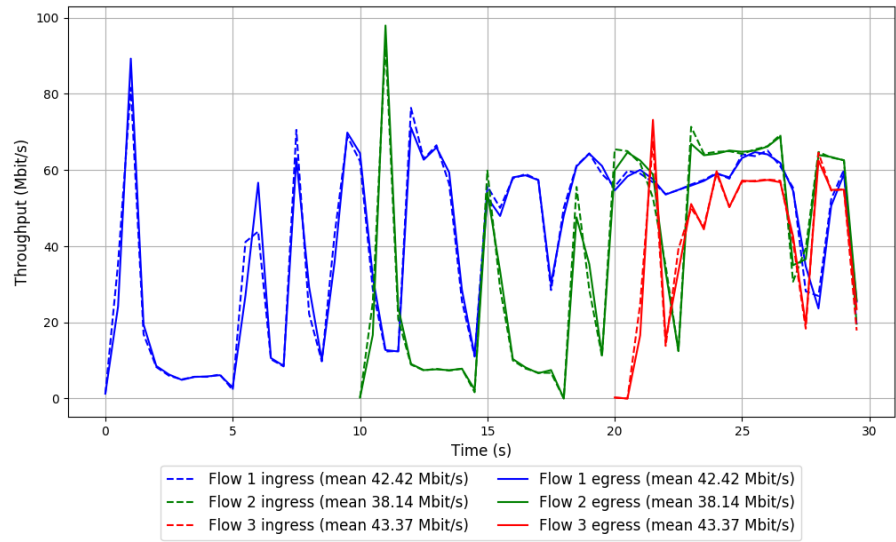
-- Flow 3:

Average throughput: 43.37 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-03 02:39:52

End at: 2018-01-03 02:40:22

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.51 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.88 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.13 Mbit/s

95th percentile per-packet one-way delay: 50.938 ms

Loss rate: 0.00%

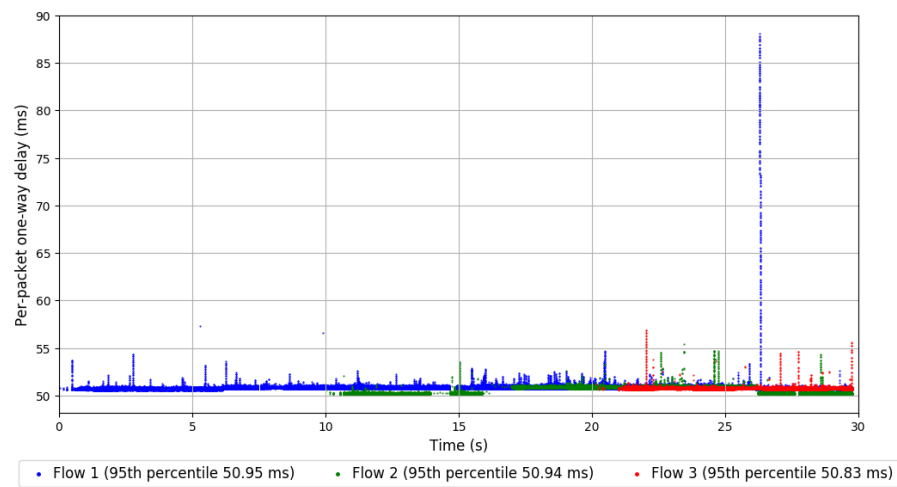
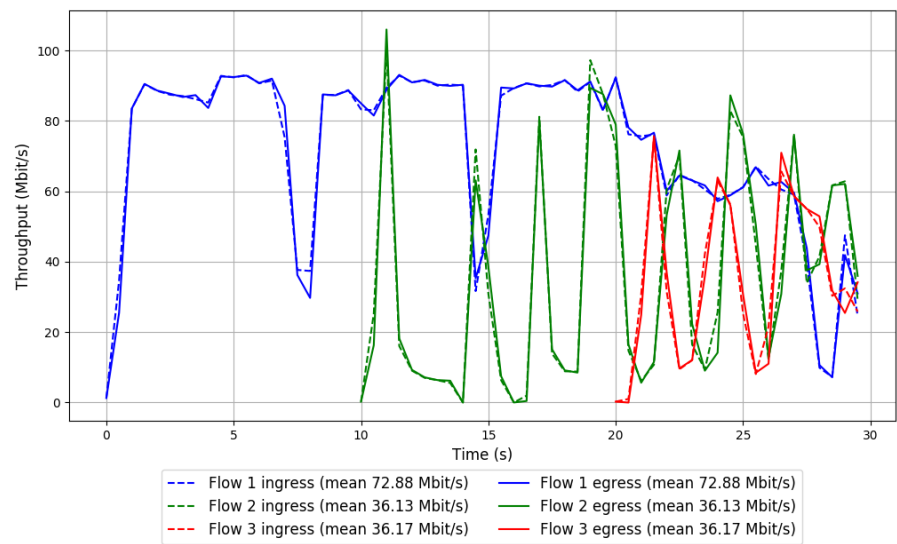
-- Flow 3:

Average throughput: 36.17 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-03 02:53:18

End at: 2018-01-03 02:53:48

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 105.51 Mbit/s

95th percentile per-packet one-way delay: 50.198 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 78.55 Mbit/s

95th percentile per-packet one-way delay: 50.221 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 33.80 Mbit/s

95th percentile per-packet one-way delay: 48.865 ms

Loss rate: 0.00%

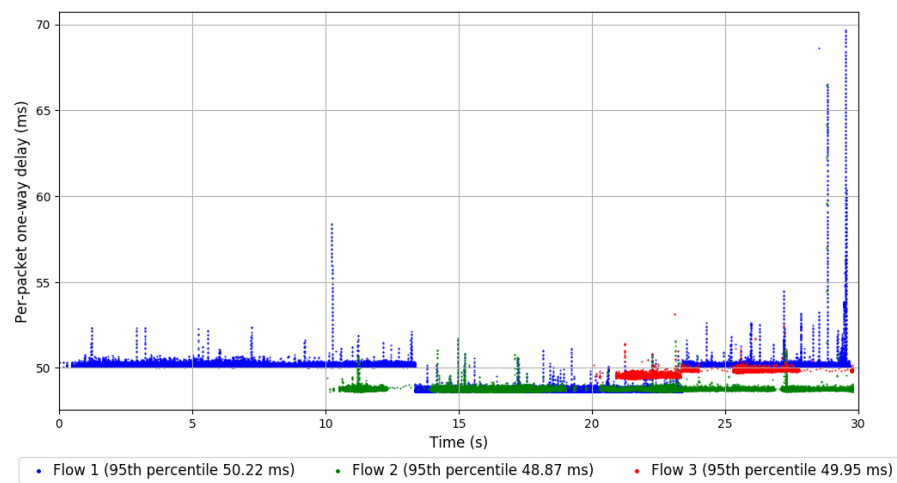
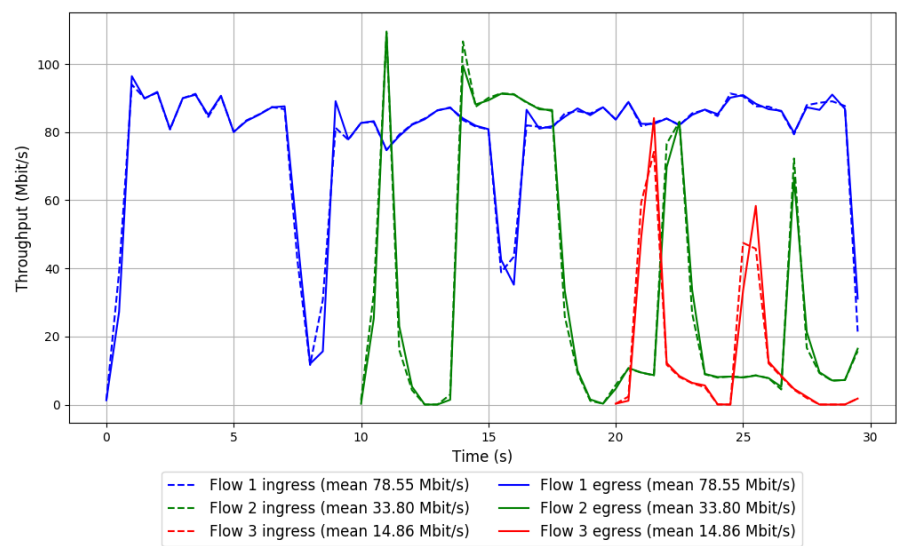
-- Flow 3:

Average throughput: 14.86 Mbit/s

95th percentile per-packet one-way delay: 49.953 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-03 03:06:55

End at: 2018-01-03 03:07:25

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.12 Mbit/s

95th percentile per-packet one-way delay: 50.780 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 56.15 Mbit/s

95th percentile per-packet one-way delay: 50.234 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.53 Mbit/s

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

Loss rate: 0.00%

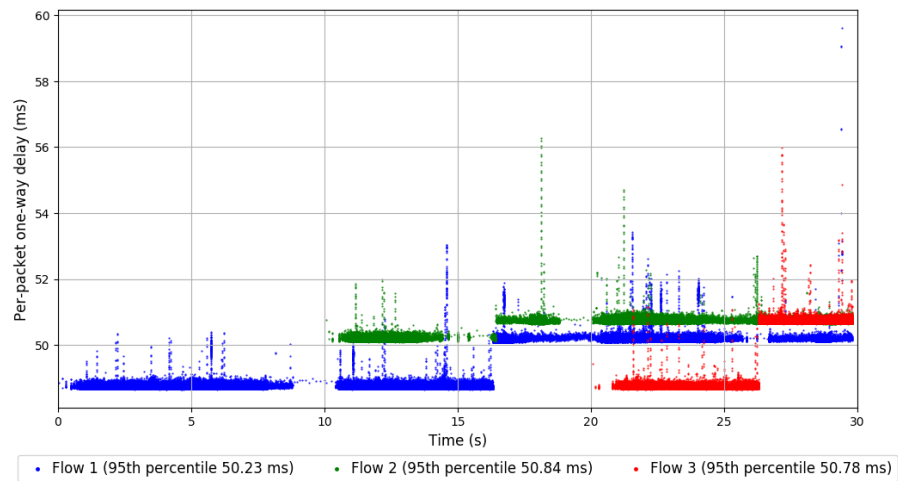
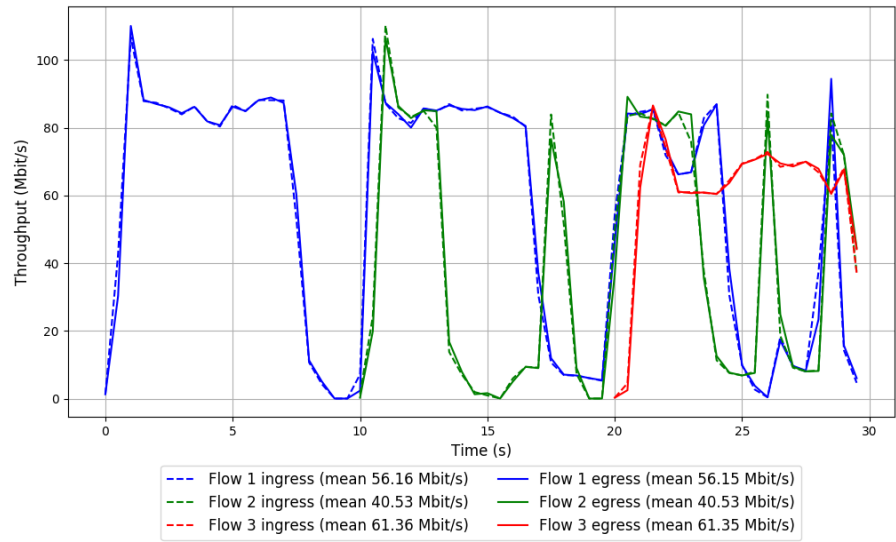
-- Flow 3:

Average throughput: 61.35 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-03 03:20:29

End at: 2018-01-03 03:20:59

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.76 Mbit/s

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

Loss rate: 0.16%

-- Flow 1:

Average throughput: 46.56 Mbit/s

95th percentile per-packet one-way delay: 50.513 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 45.31 Mbit/s

95th percentile per-packet one-way delay: 49.796 ms

Loss rate: 0.00%

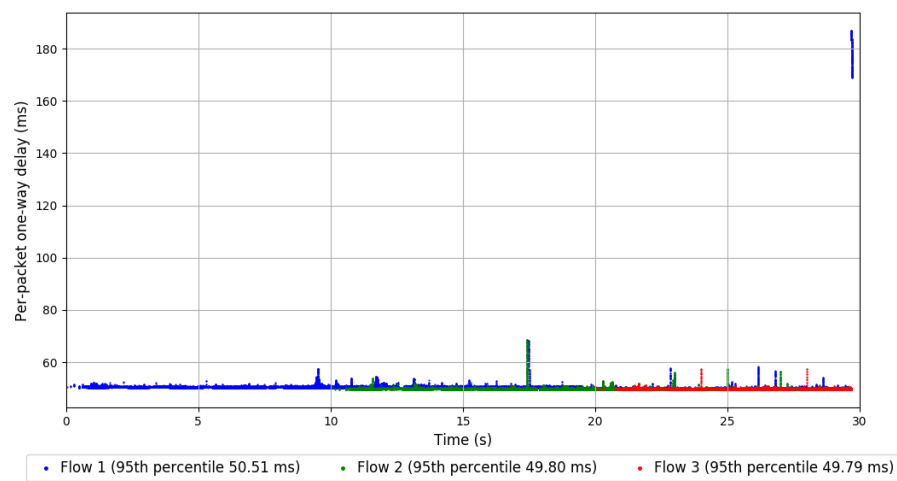
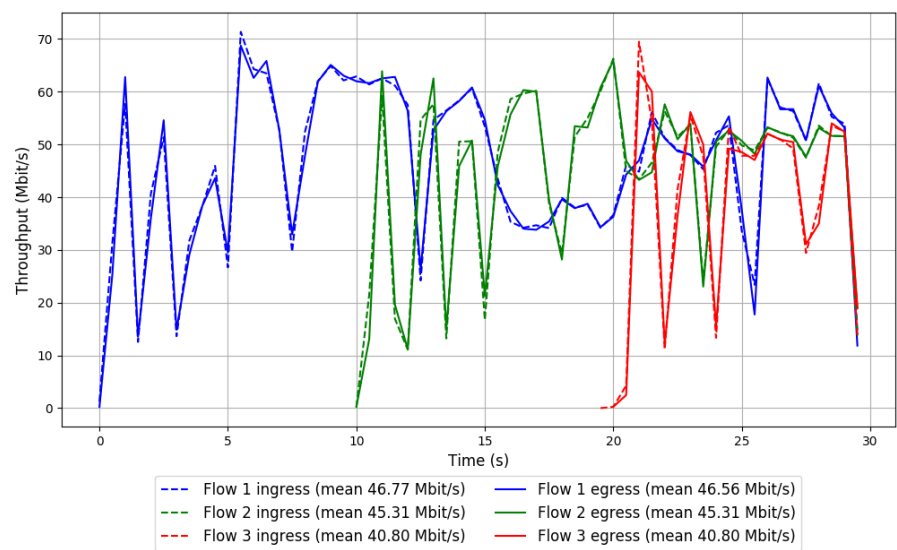
-- Flow 3:

Average throughput: 40.80 Mbit/s

95th percentile per-packet one-way delay: 49.794 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

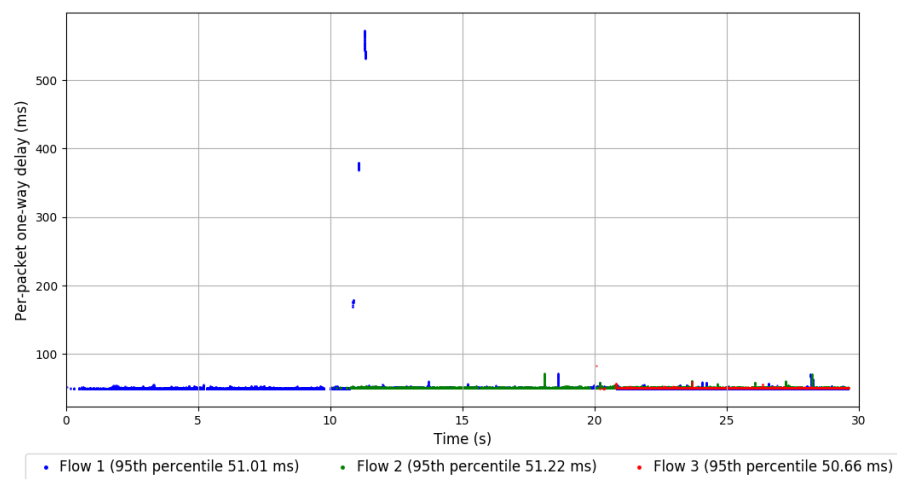
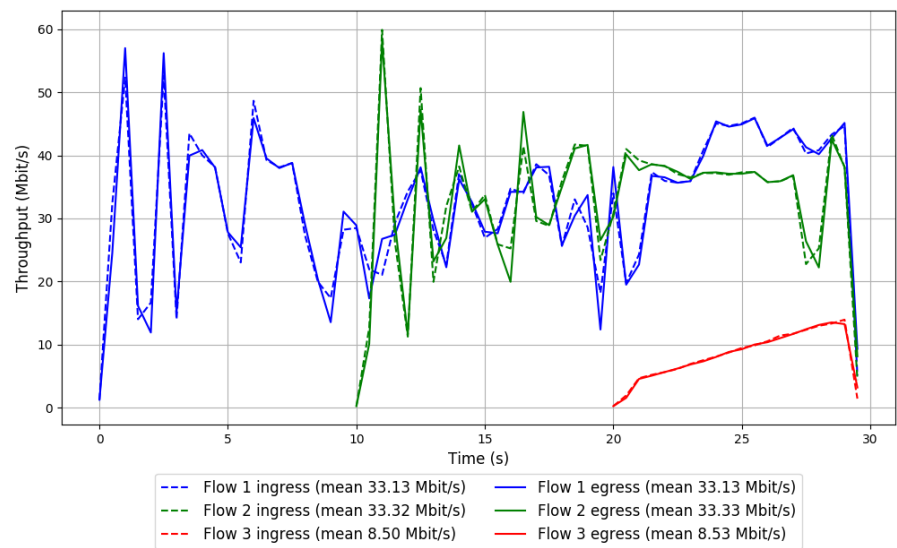


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-03 03:33:28
End at: 2018-01-03 03:33:58

# Below is generated by plot.py at 2018-01-03 05:40:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.85 Mbit/s
95th percentile per-packet one-way delay: 51.123 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 33.13 Mbit/s
95th percentile per-packet one-way delay: 51.006 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 33.33 Mbit/s
95th percentile per-packet one-way delay: 51.224 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.53 Mbit/s
95th percentile per-packet one-way delay: 50.663 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

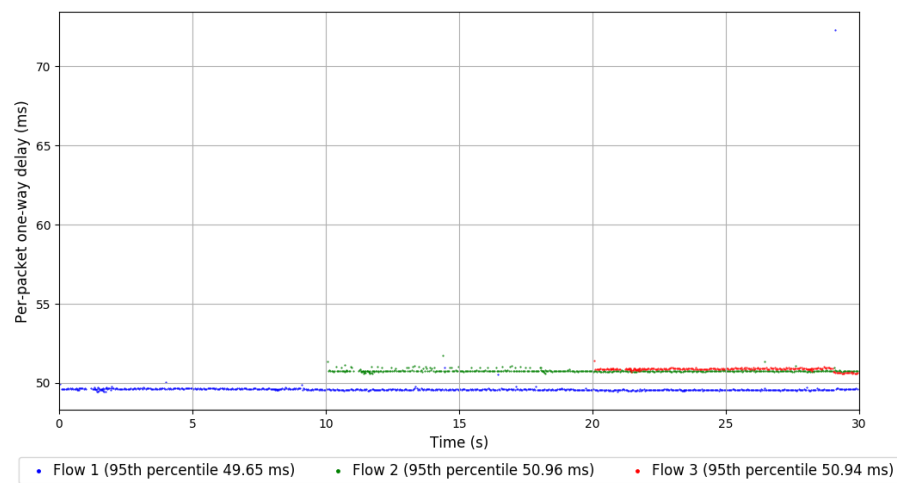
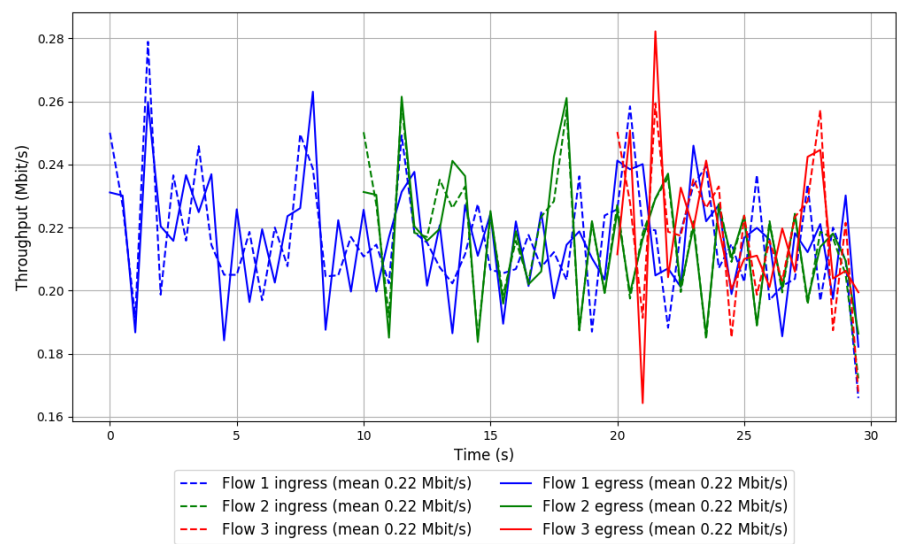


```
Run 1: Statistics of SCReAM

Start at: 2018-01-03 01:30:32
End at: 2018-01-03 01:31:02

# Below is generated by plot.py at 2018-01-03 05:40:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.913 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.647 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.962 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.938 ms
Loss rate: 0.00%
```

Run 1: Report of SCRaM — Data Link

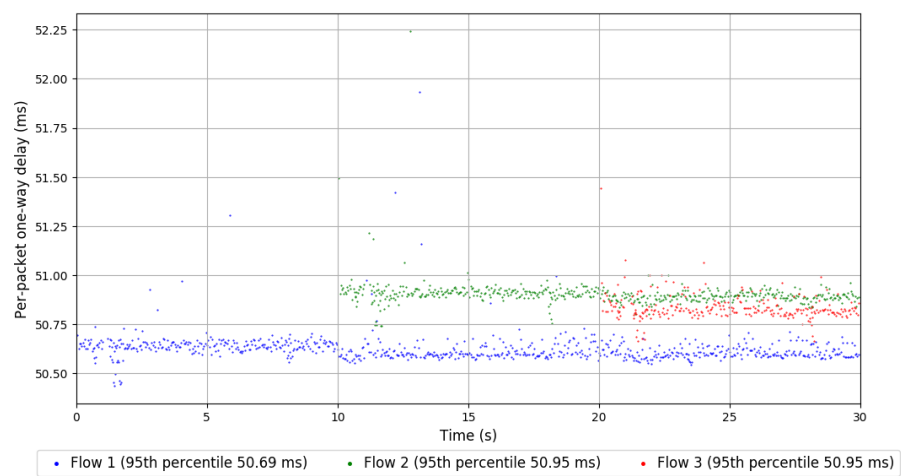
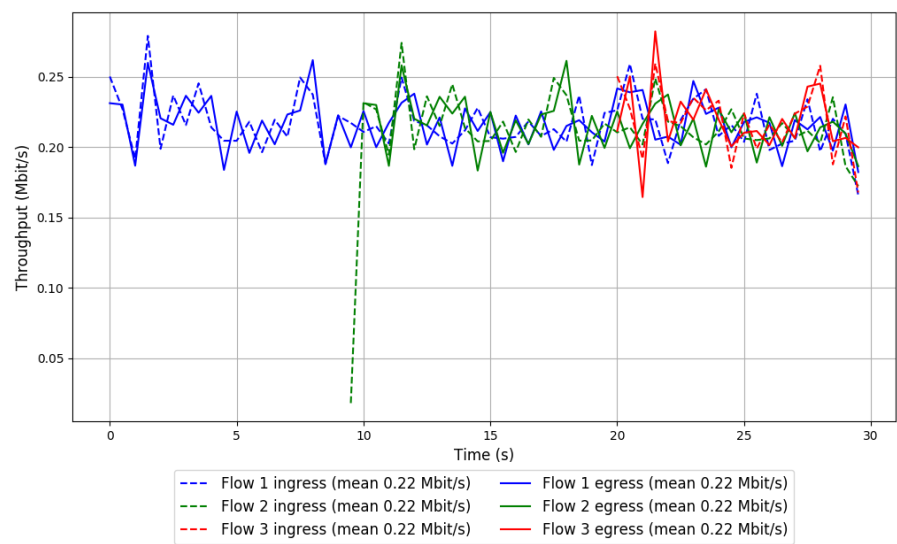


```
Run 2: Statistics of SCReAM

Start at: 2018-01-03 01:44:10
End at: 2018-01-03 01:44:40

# Below is generated by plot.py at 2018-01-03 05:40:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.936 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.686 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.948 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.946 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

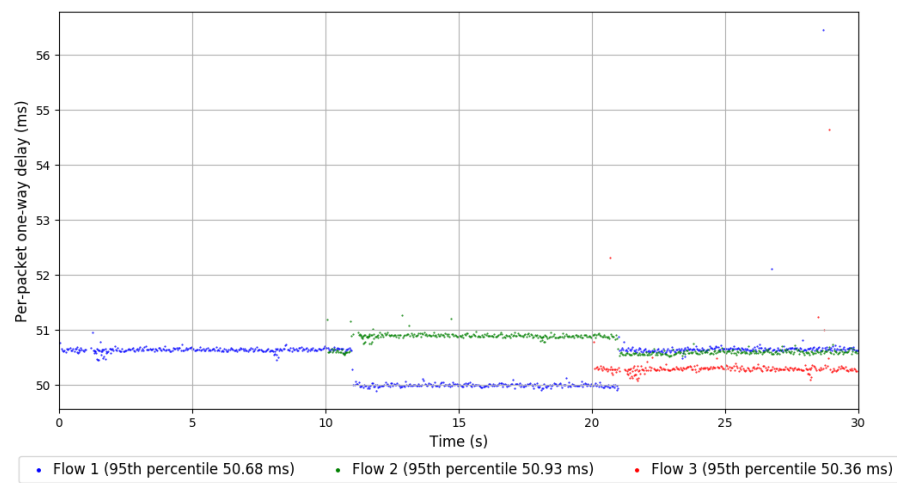
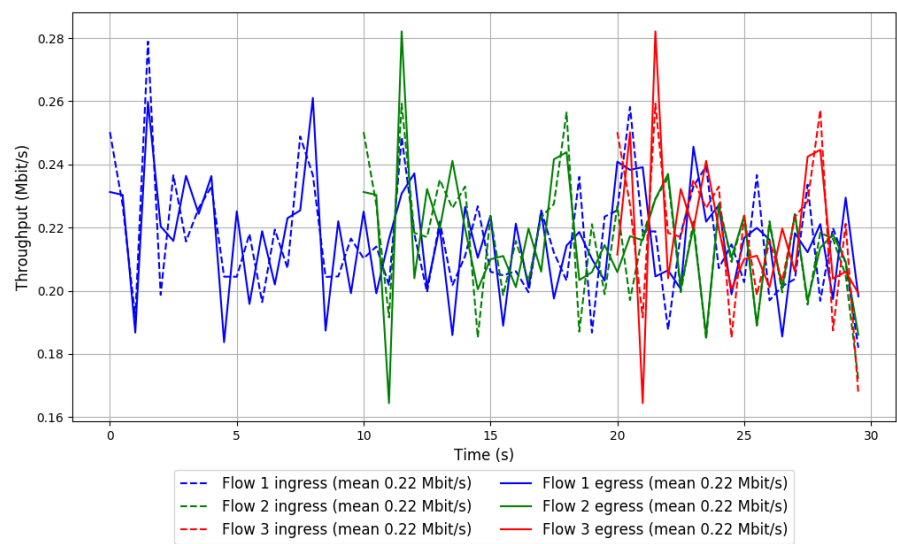


```
Run 3: Statistics of SReAM

Start at: 2018-01-03 01:57:48
End at: 2018-01-03 01:58:18

# Below is generated by plot.py at 2018-01-03 05:40:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.908 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.683 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.929 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.359 ms
Loss rate: 0.00%
```


Run 3: Report of SReAM — Data Link

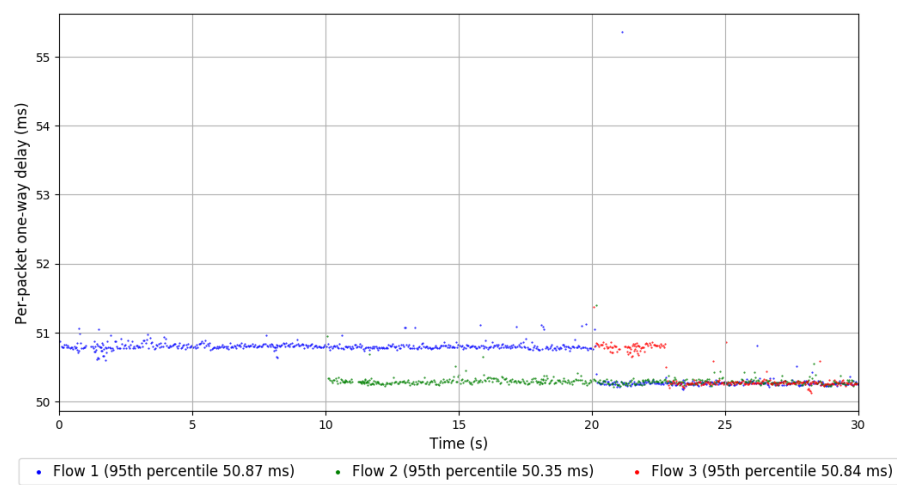
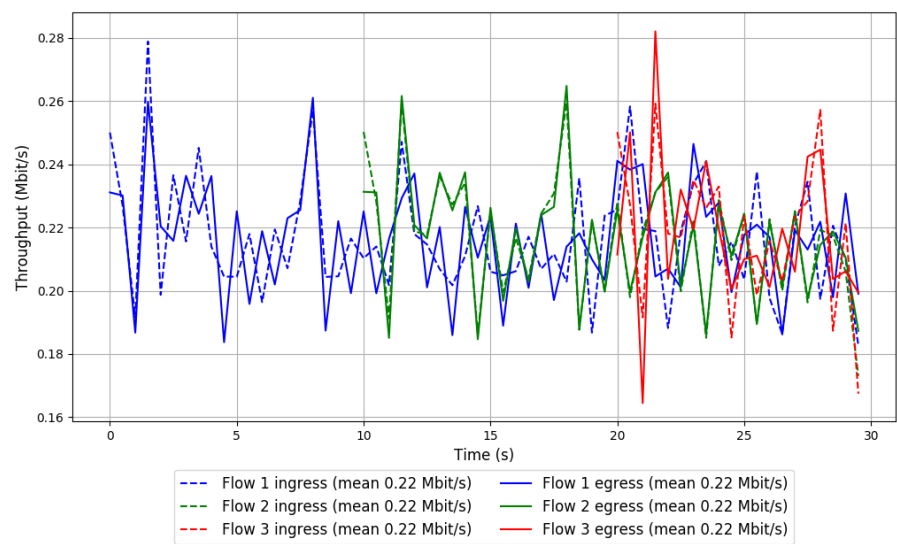


```
Run 4: Statistics of SCReAM

Start at: 2018-01-03 02:11:29
End at: 2018-01-03 02:11:59

# Below is generated by plot.py at 2018-01-03 05:40:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.839 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.865 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.352 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.835 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link

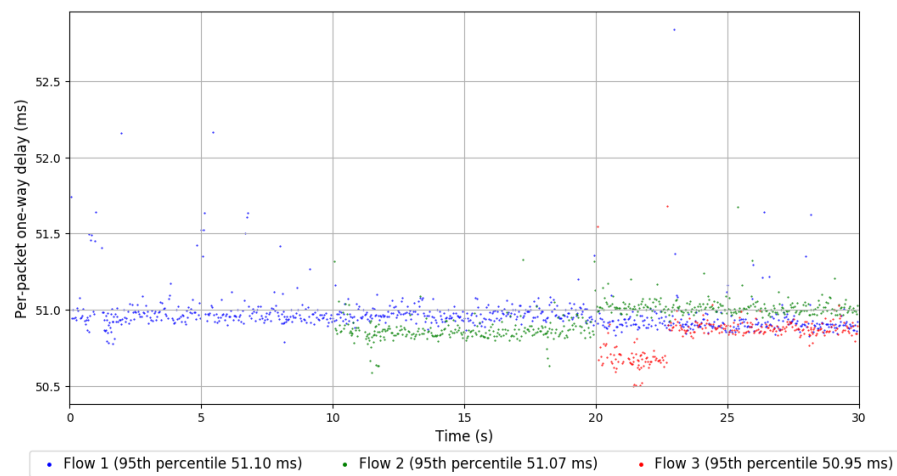
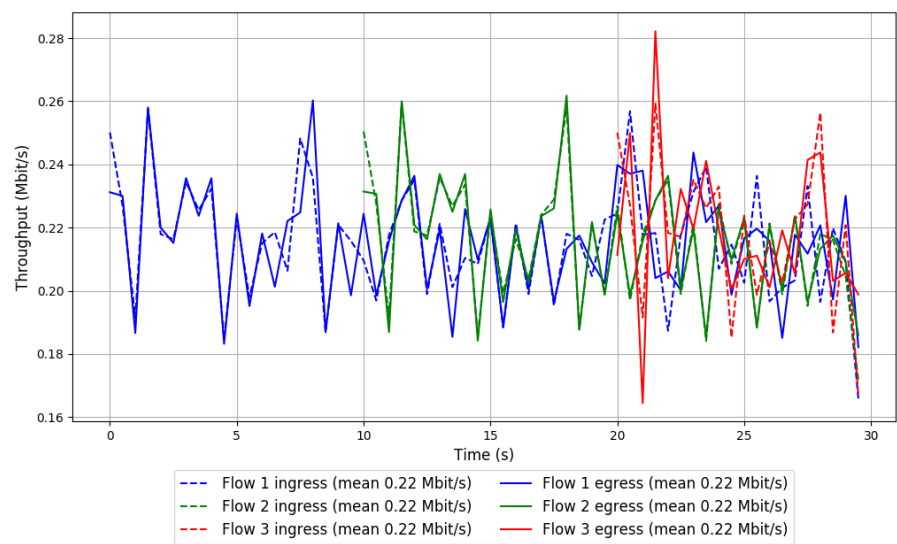


```
Run 5: Statistics of SCReAM

Start at: 2018-01-03 02:24:59
End at: 2018-01-03 02:25:29

# Below is generated by plot.py at 2018-01-03 05:40:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 51.077 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.097 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.074 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.945 ms
Loss rate: 0.00%
```

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-03 02:37:53

End at: 2018-01-03 02:38:23

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.913 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.661 ms

Loss rate: 0.00%

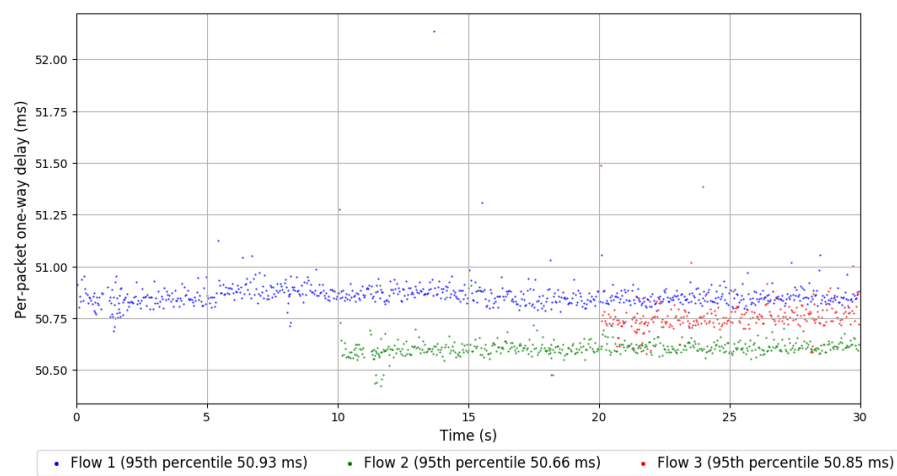
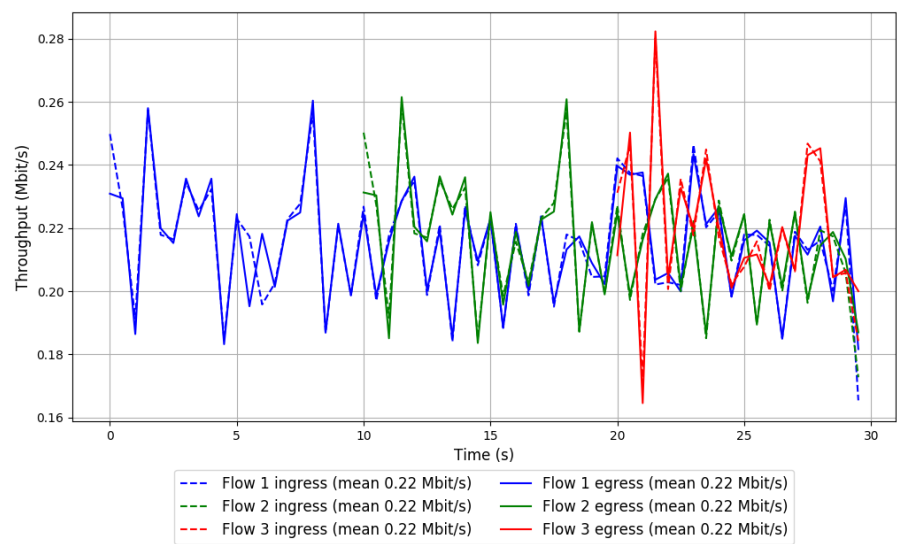
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.850 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

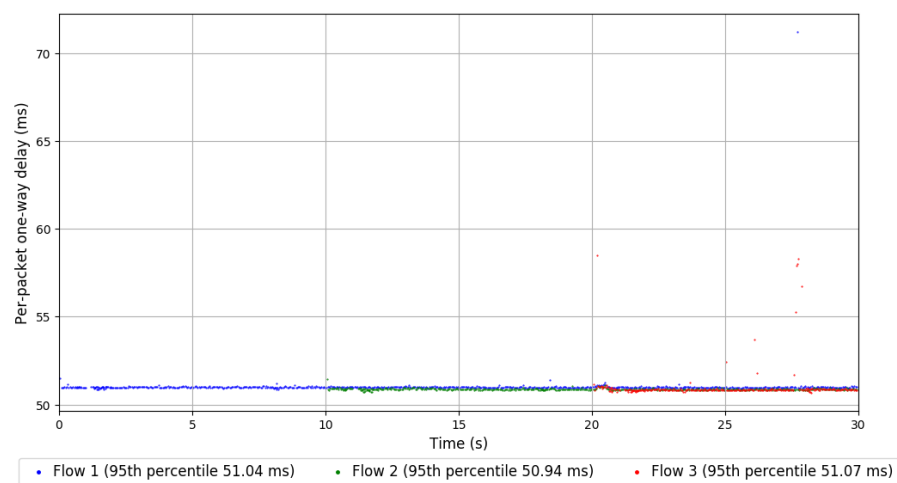
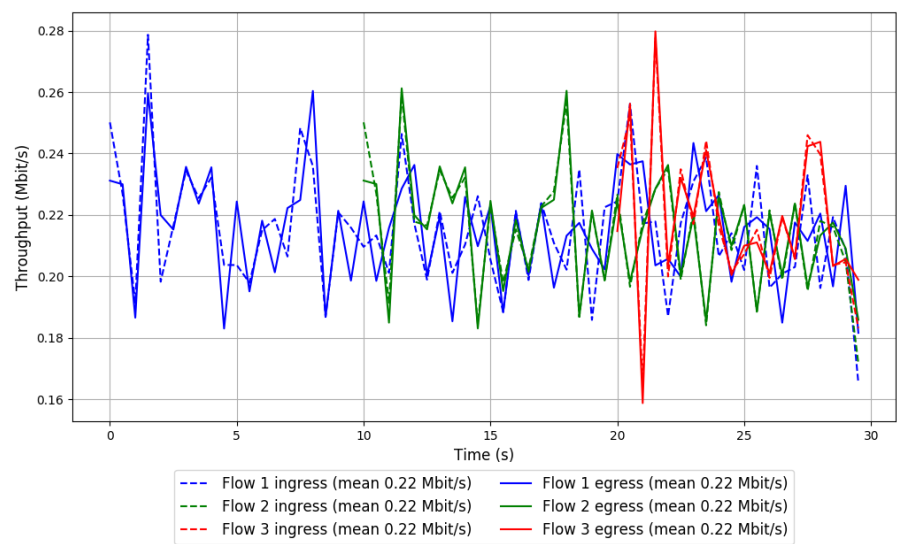


```
Run 7: Statistics of SReAM

Start at: 2018-01-03 02:51:19
End at: 2018-01-03 02:51:49

# Below is generated by plot.py at 2018-01-03 05:40:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 51.032 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.044 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.944 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.068 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-01-03 03:04:56

End at: 2018-01-03 03:05:26

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.319 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.331 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.773 ms

Loss rate: 0.00%

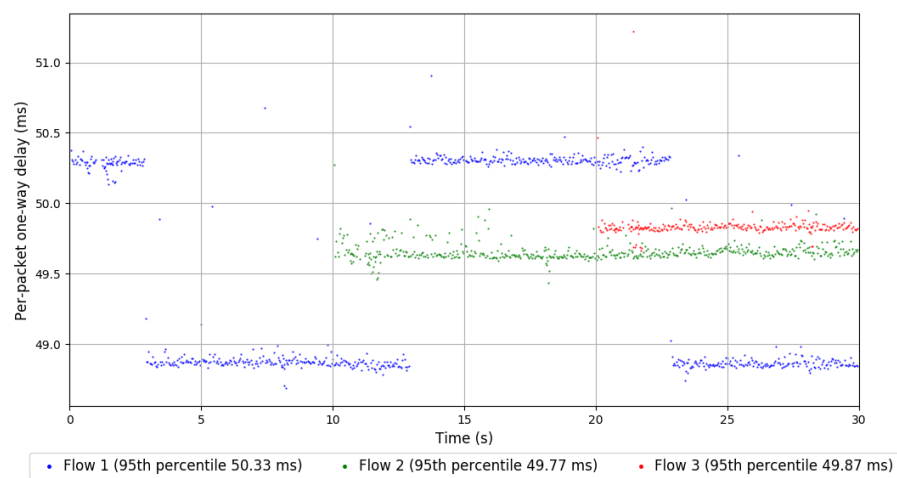
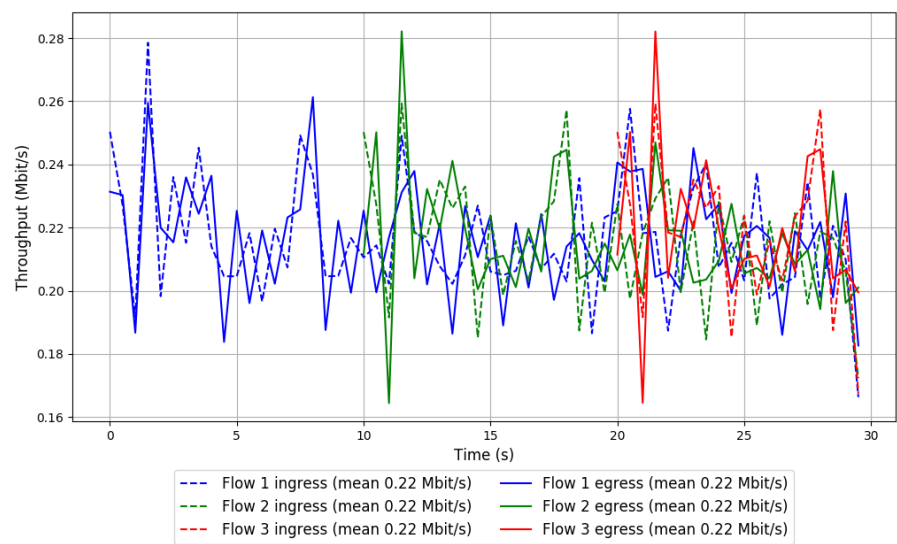
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.870 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link

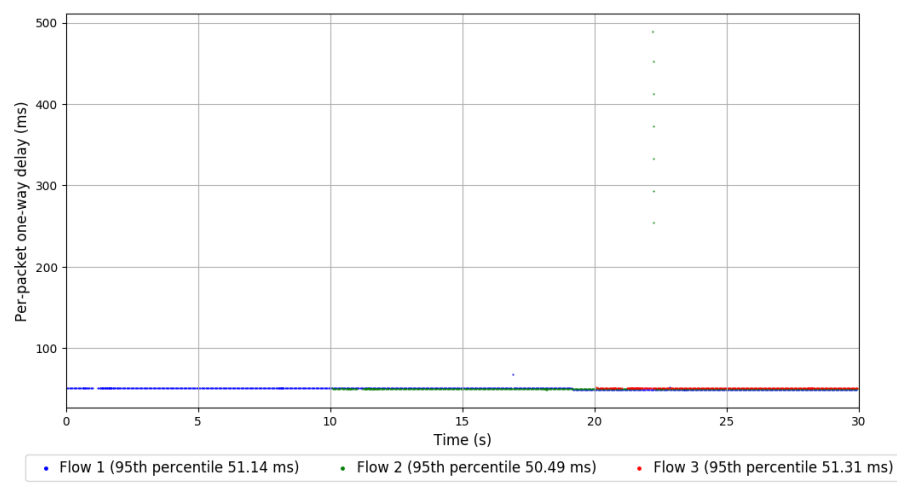
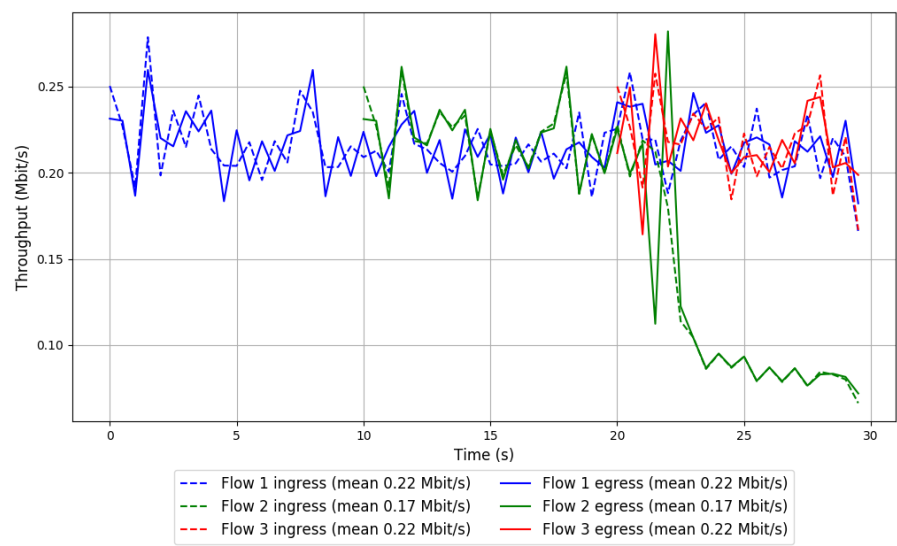


```
Run 9: Statistics of SCReAM

Start at: 2018-01-03 03:18:30
End at: 2018-01-03 03:19:00

# Below is generated by plot.py at 2018-01-03 05:40:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 51.180 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.141 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 50.487 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.306 ms
Loss rate: 0.00%
```

Run 9: Report of SReAM — Data Link

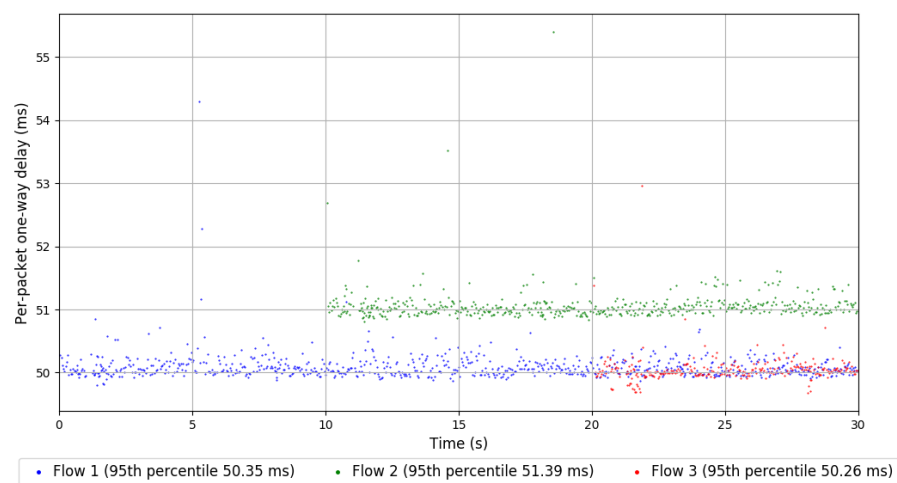
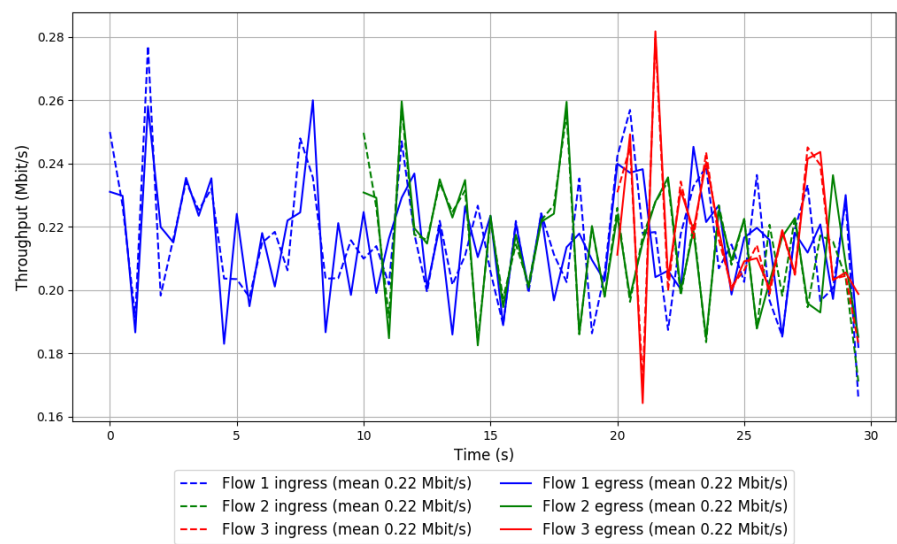


```
Run 10: Statistics of SReAM

Start at: 2018-01-03 03:31:28
End at: 2018-01-03 03:31:58

# Below is generated by plot.py at 2018-01-03 05:40:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 51.141 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.347 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.388 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.256 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

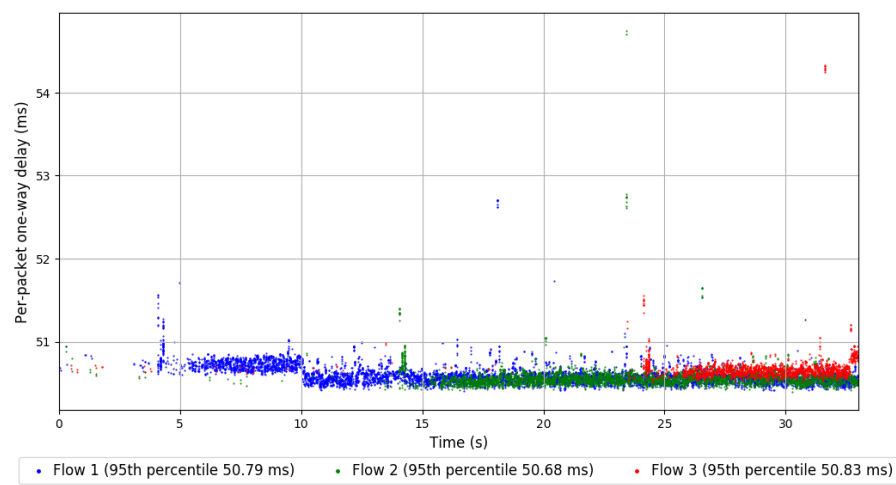
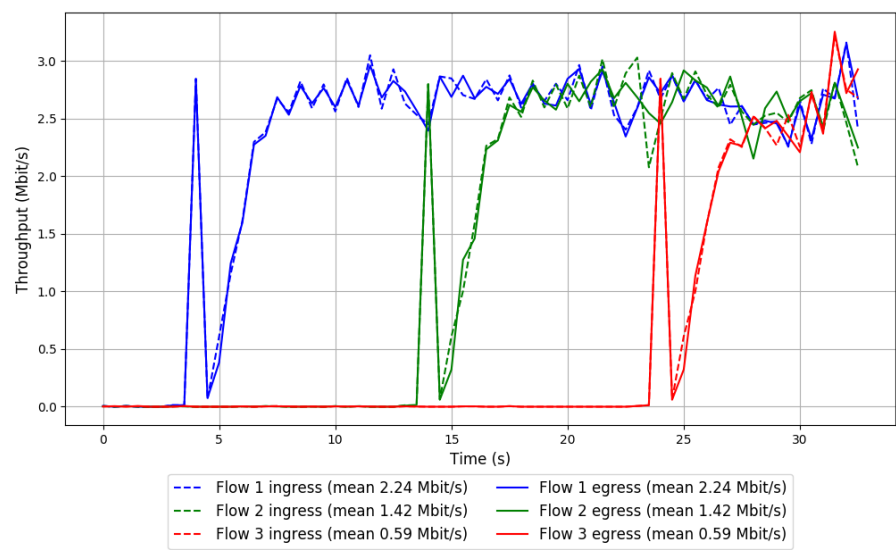


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-03 01:31:52
End at: 2018-01-03 01:32:22

# Below is generated by plot.py at 2018-01-03 05:40:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.24 Mbit/s
95th percentile per-packet one-way delay: 50.782 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 50.793 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 50.681 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 50.827 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link

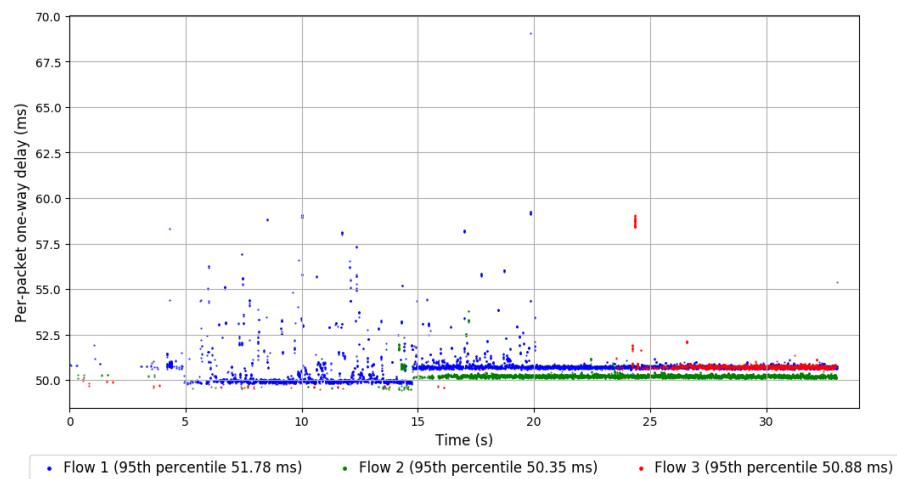
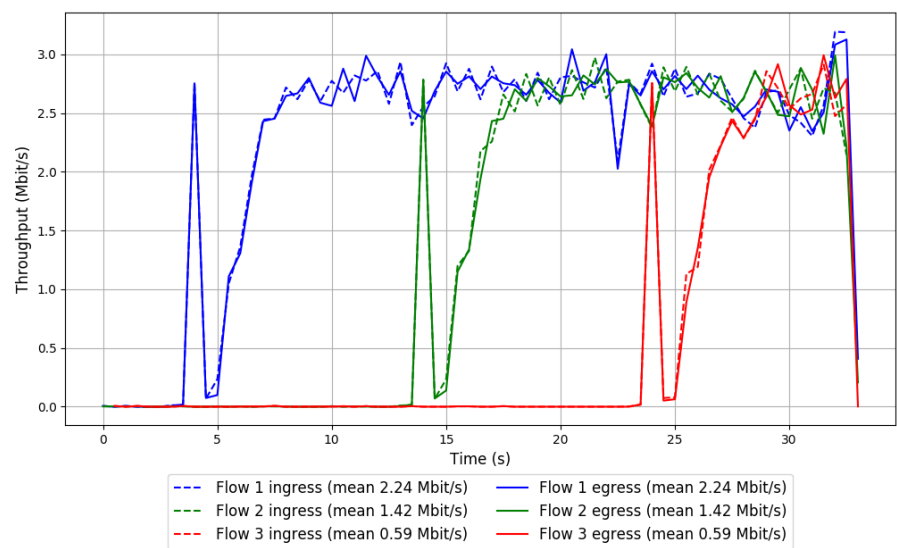


```
Run 2: Statistics of WebRTC media

Start at: 2018-01-03 01:45:30
End at: 2018-01-03 01:46:00

# Below is generated by plot.py at 2018-01-03 05:40:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.22 Mbit/s
95th percentile per-packet one-way delay: 51.127 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 51.778 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 50.348 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 50.875 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-03 01:59:07

End at: 2018-01-03 01:59:37

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 50.960 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 50.705 ms

Loss rate: 0.00%

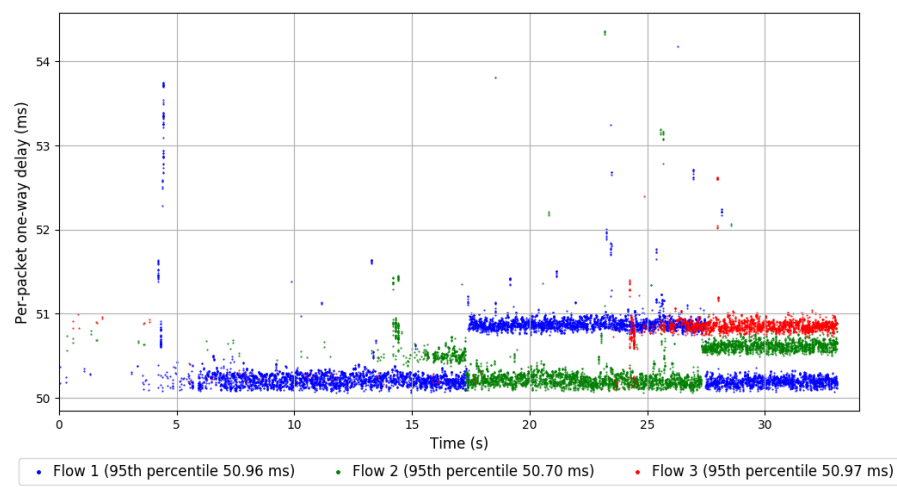
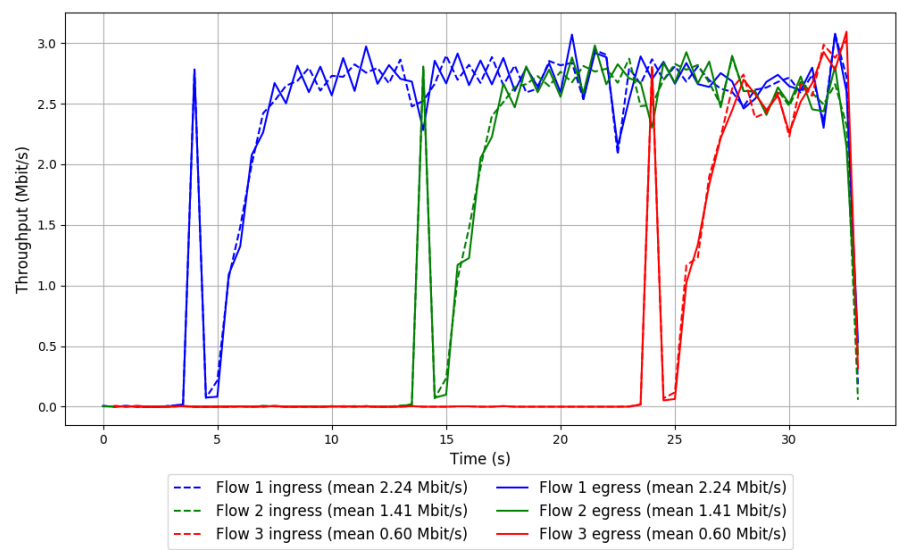
-- Flow 3:

Average throughput: 0.60 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-03 02:12:48

End at: 2018-01-03 02:13:18

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.02 Mbit/s

95th percentile per-packet one-way delay: 50.858 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 50.446 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.85 Mbit/s

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

Loss rate: 0.00%

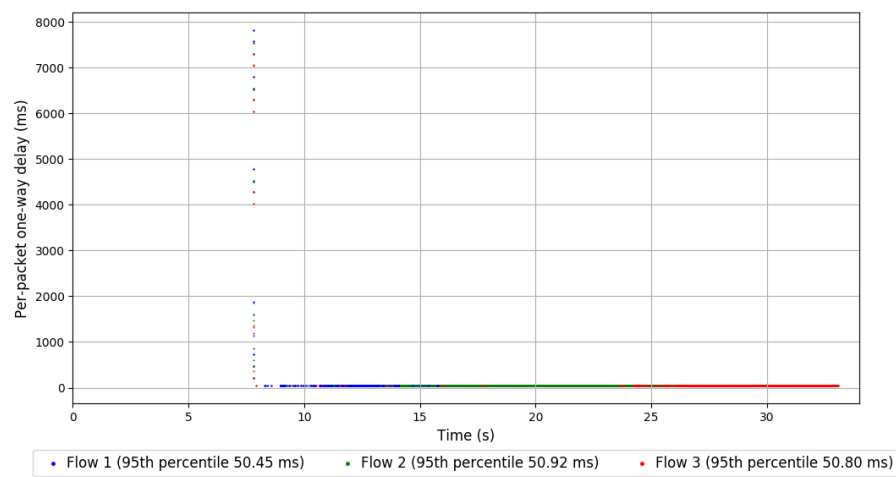
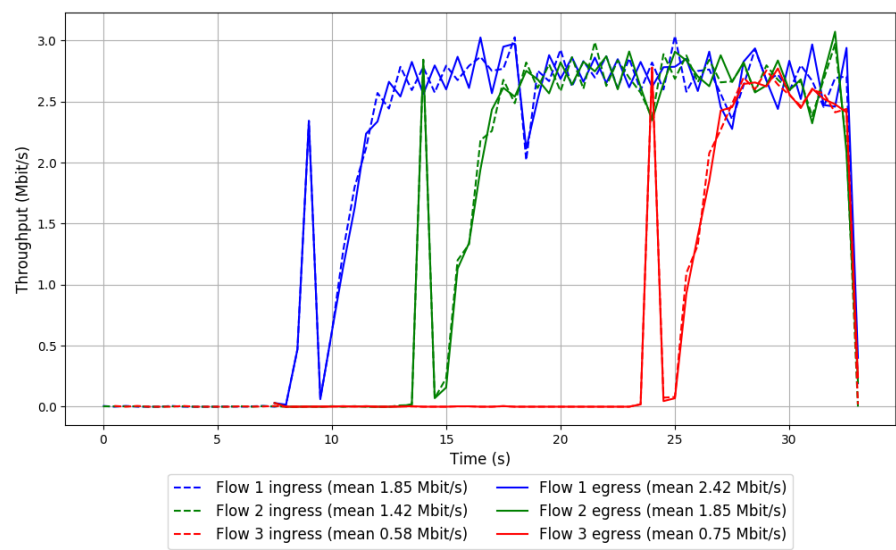
-- Flow 3:

Average throughput: 0.75 Mbit/s

95th percentile per-packet one-way delay: 50.797 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-03 02:26:18

End at: 2018-01-03 02:26:48

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.07 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 51.287 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 50.991 ms

Loss rate: 0.00%

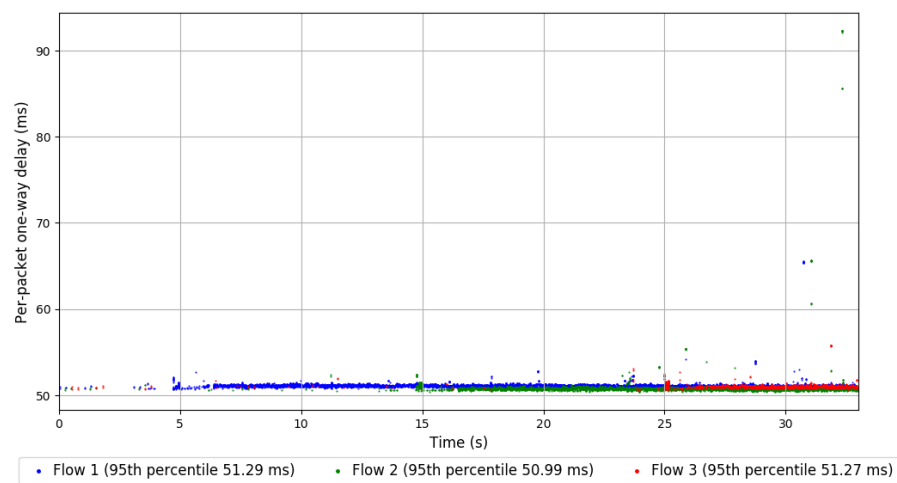
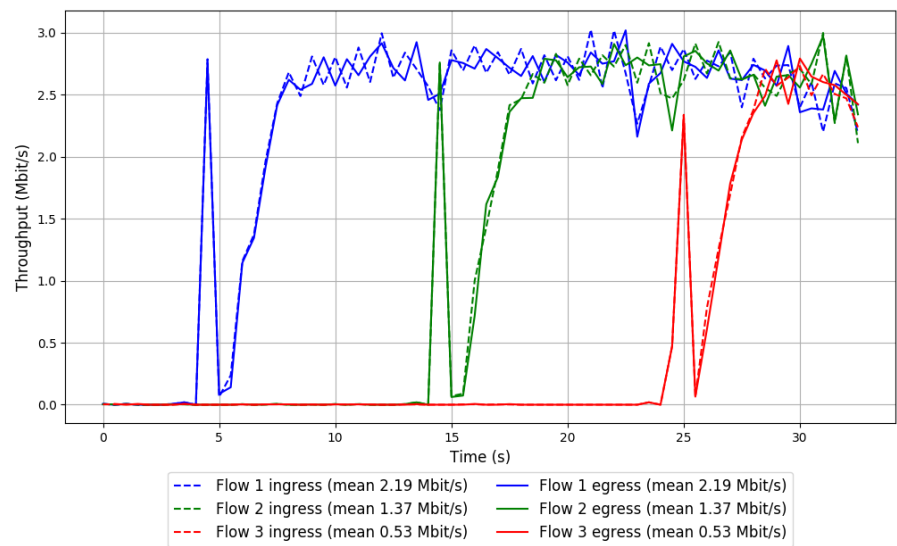
-- Flow 3:

Average throughput: 0.53 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-03 02:39:13

End at: 2018-01-03 02:39:43

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 51.028 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 50.965 ms

Loss rate: 0.00%

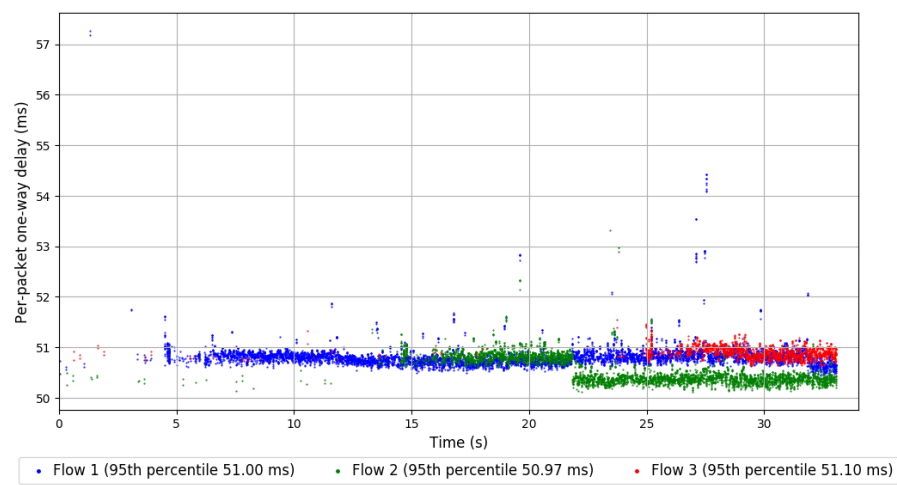
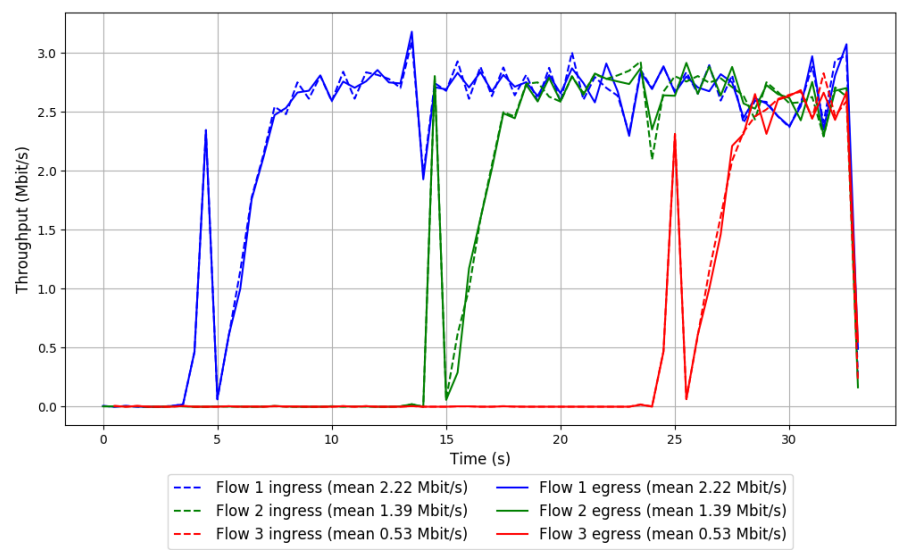
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 51.098 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-03 02:52:38

End at: 2018-01-03 02:53:08

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.18 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 49.026 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.40 Mbit/s

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

Loss rate: 0.00%

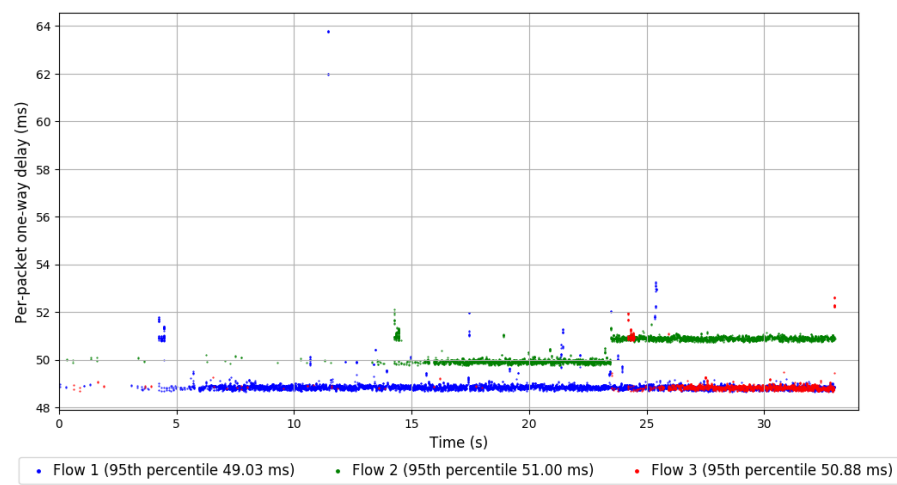
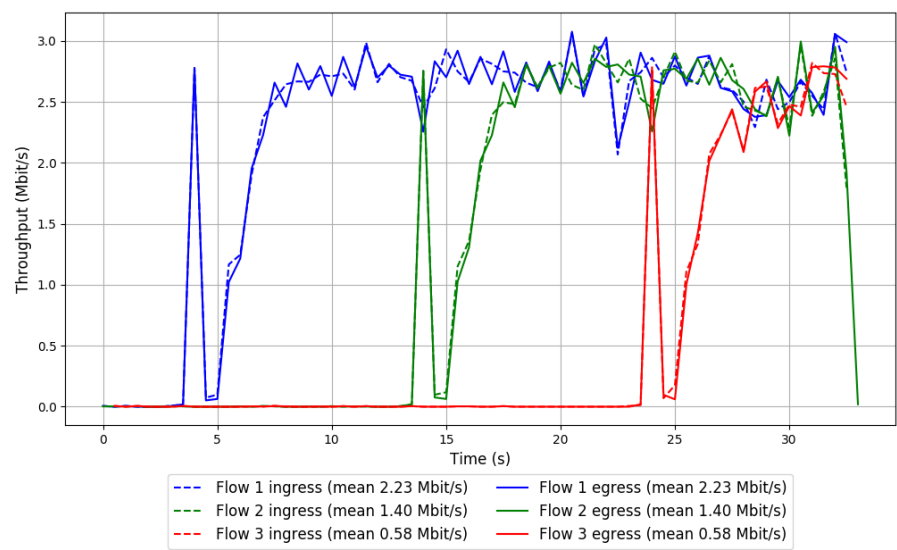
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 50.876 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-03 03:06:15

End at: 2018-01-03 03:06:45

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 50.938 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 48.973 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 50.998 ms

Loss rate: 0.00%

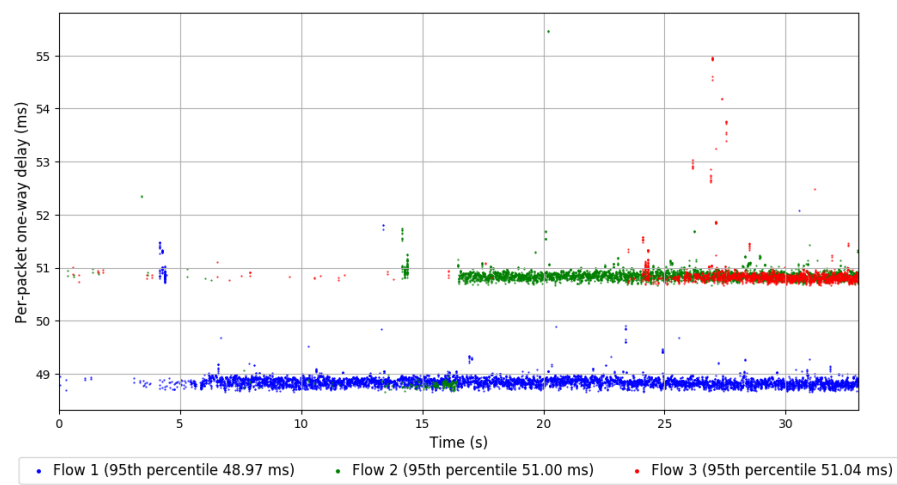
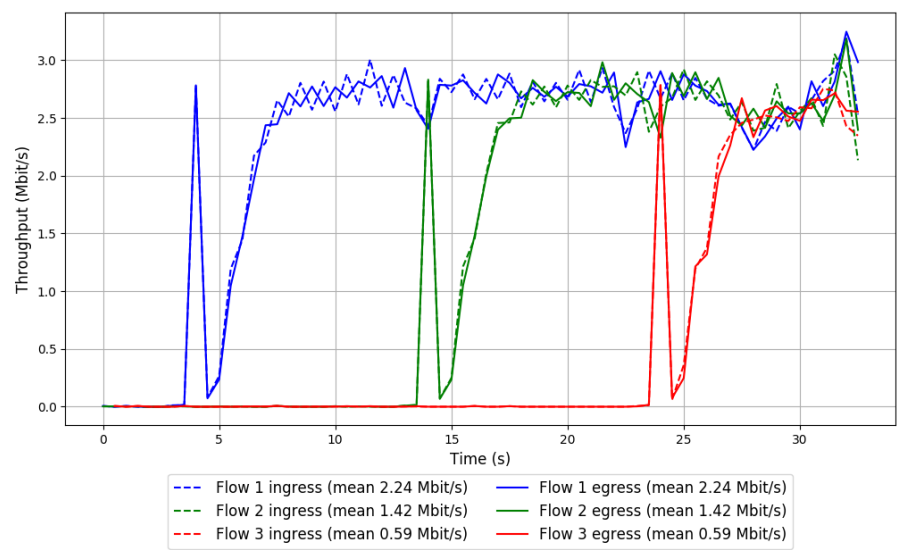
-- Flow 3:

Average throughput: 0.59 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-03 03:19:49

End at: 2018-01-03 03:20:19

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.98 Mbit/s

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

Loss rate: 0.05%

-- Flow 1:

Average throughput: 2.14 Mbit/s

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

Loss rate: 0.08%

-- Flow 2:

Average throughput: 1.36 Mbit/s

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

Loss rate: 0.00%

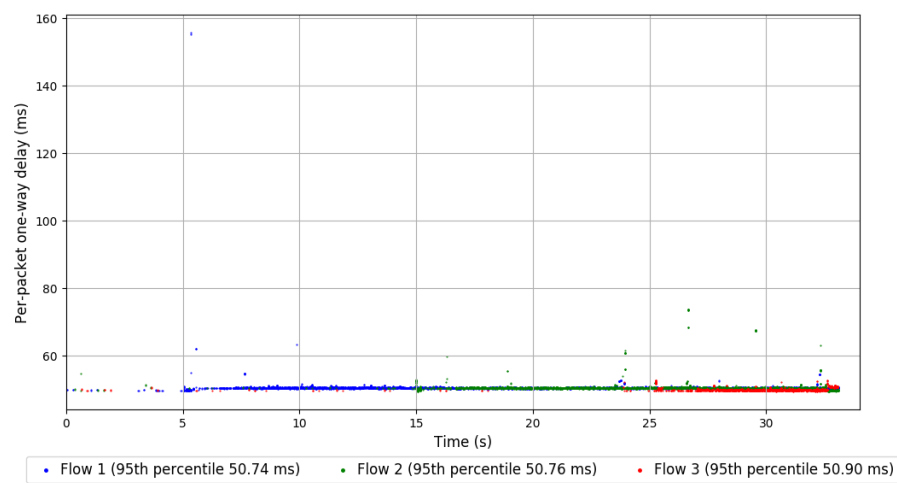
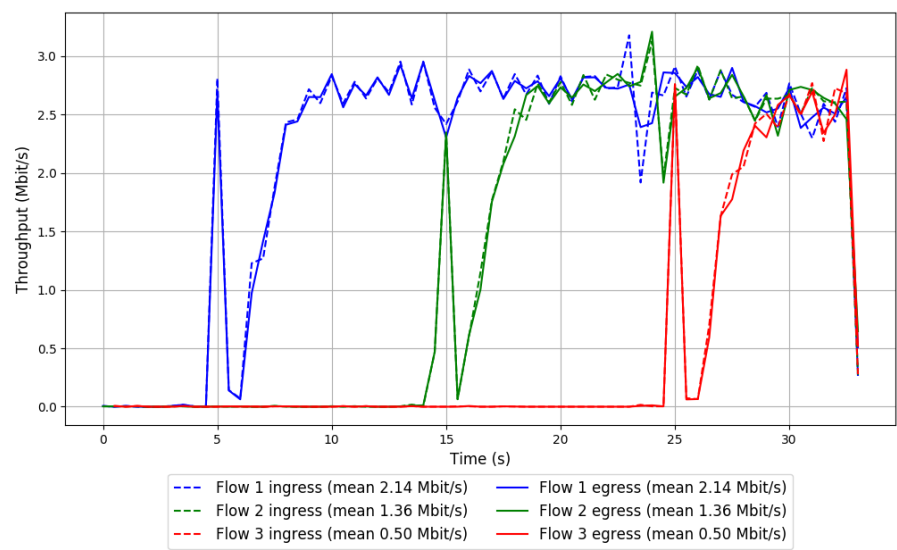
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 50.895 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-03 03:32:48

End at: 2018-01-03 03:33:18

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.53 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 51.893 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 51.430 ms

Loss rate: 0.00%

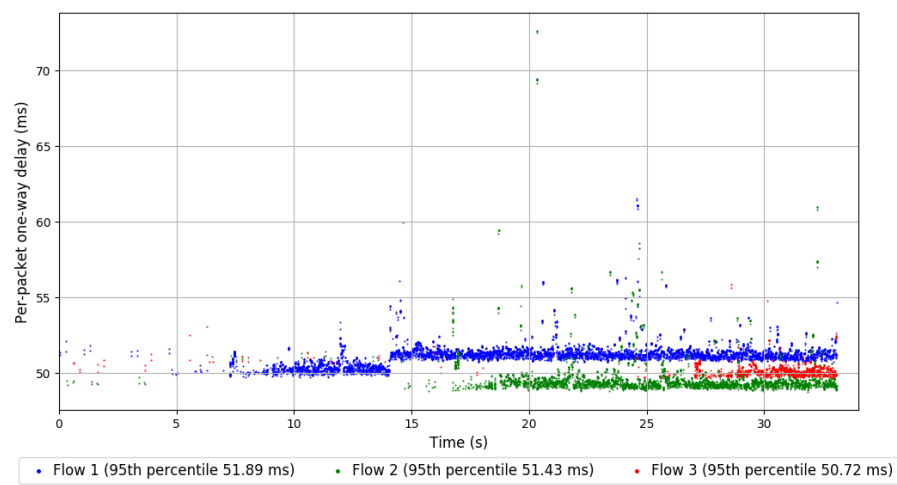
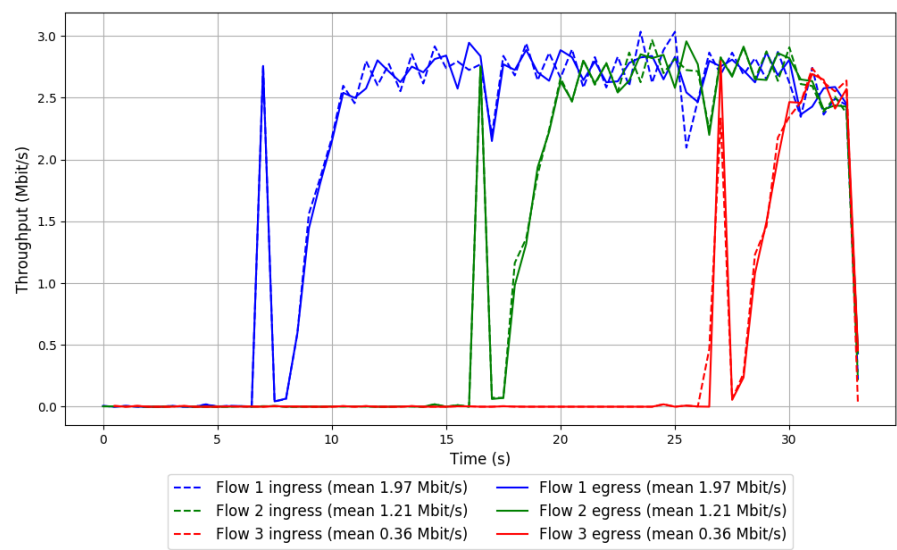
-- Flow 3:

Average throughput: 0.36 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

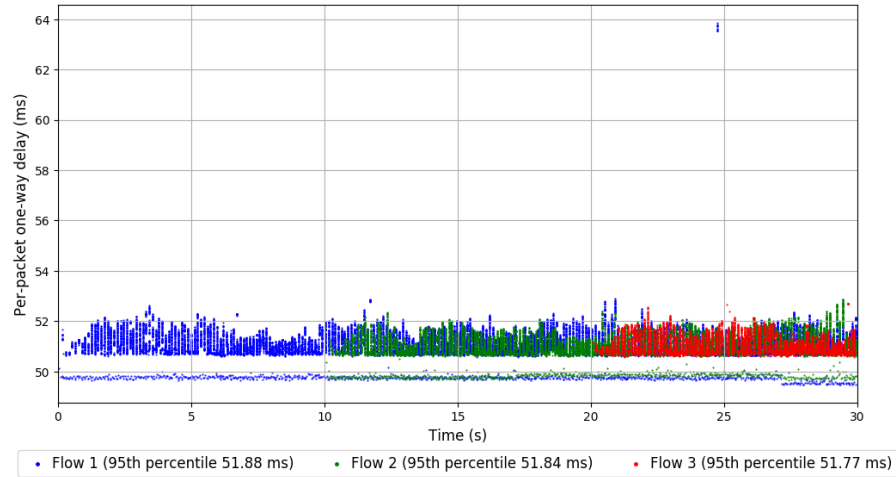
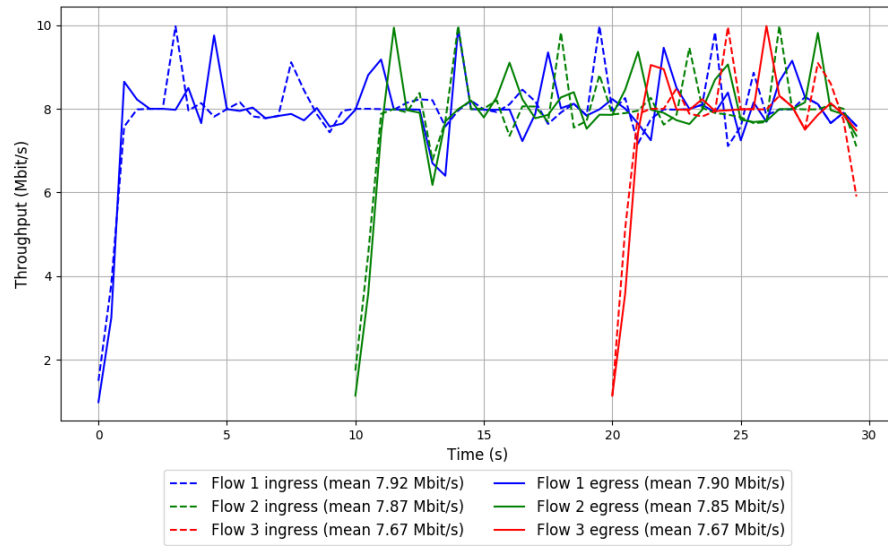


```
Run 1: Statistics of Sprout

Start at: 2018-01-03 01:31:11
End at: 2018-01-03 01:31:41

# Below is generated by plot.py at 2018-01-03 05:40:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.65 Mbit/s
95th percentile per-packet one-way delay: 51.848 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 7.90 Mbit/s
95th percentile per-packet one-way delay: 51.877 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 7.85 Mbit/s
95th percentile per-packet one-way delay: 51.837 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 7.67 Mbit/s
95th percentile per-packet one-way delay: 51.775 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-03 01:44:49

End at: 2018-01-03 01:45:19

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.52 Mbit/s

95th percentile per-packet one-way delay: 51.916 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 51.949 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 7.71 Mbit/s

95th percentile per-packet one-way delay: 51.882 ms

Loss rate: 1.19%

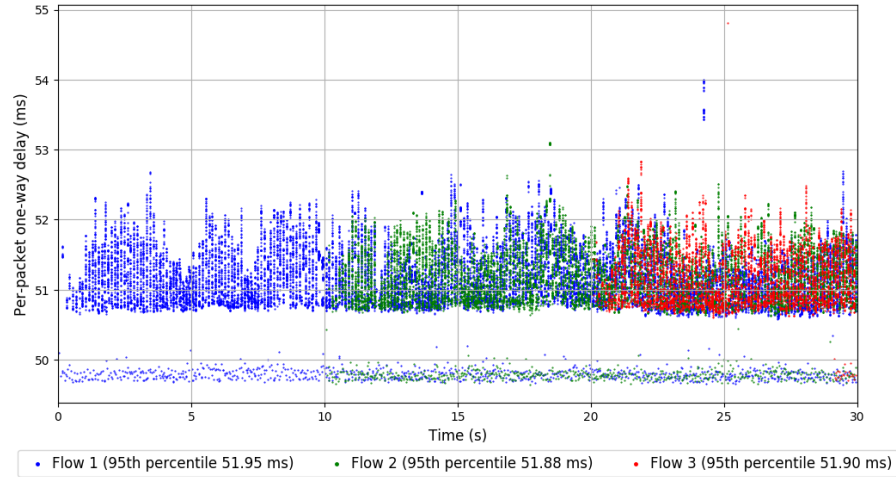
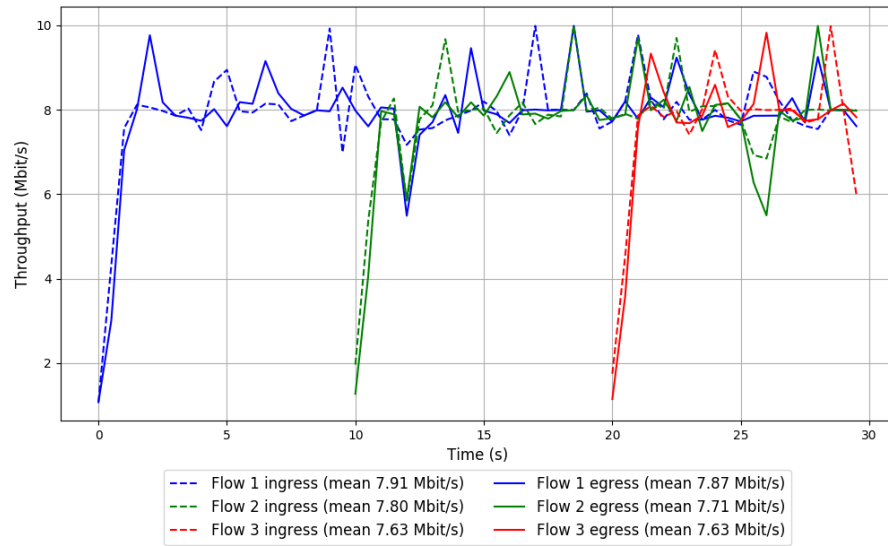
-- Flow 3:

Average throughput: 7.63 Mbit/s

95th percentile per-packet one-way delay: 51.896 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-03 01:58:27

End at: 2018-01-03 01:58:57

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.60 Mbit/s

95th percentile per-packet one-way delay: 52.015 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 51.966 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 51.849 ms

Loss rate: 0.63%

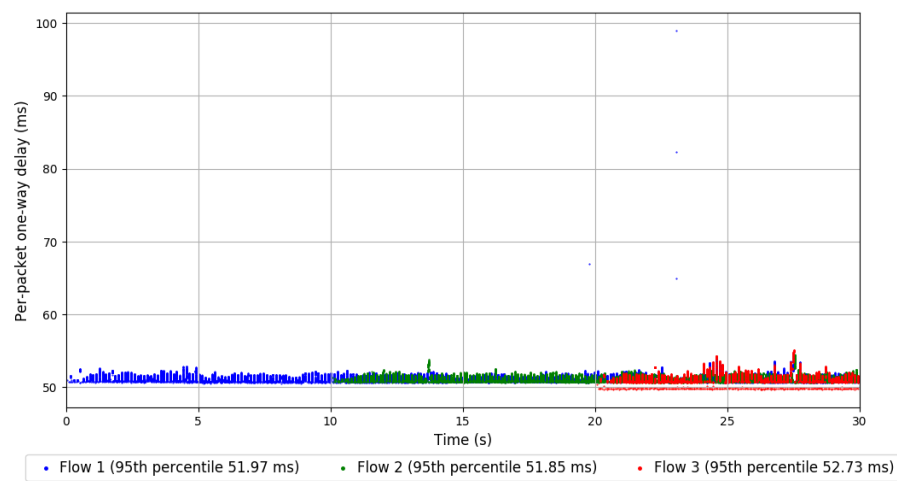
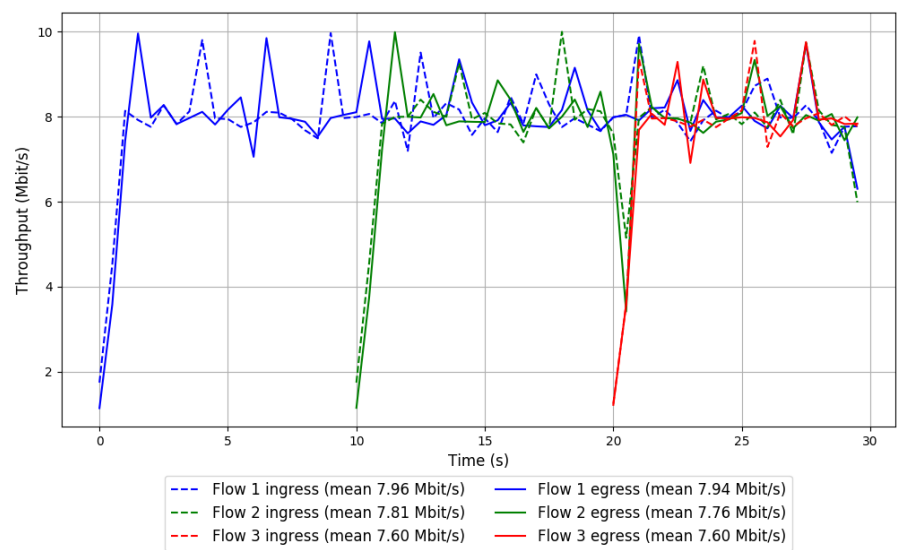
-- Flow 3:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 52.728 ms

Loss rate: 0.10%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-03 02:12:08

End at: 2018-01-03 02:12:38

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.71 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 51.773 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.86 Mbit/s

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

Loss rate: 0.00%

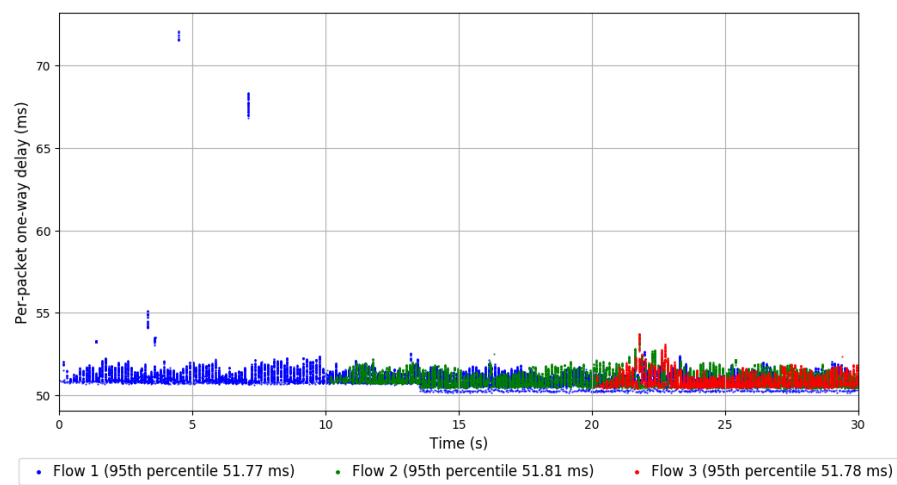
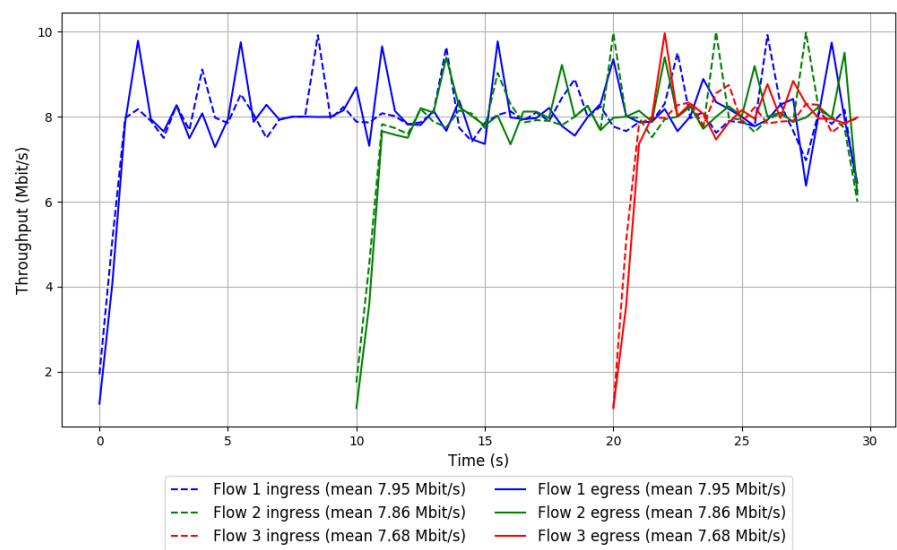
-- Flow 3:

Average throughput: 7.68 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-03 02:25:38

End at: 2018-01-03 02:26:08

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.04 Mbit/s

95th percentile per-packet one-way delay: 52.039 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 7.59 Mbit/s

95th percentile per-packet one-way delay: 52.029 ms

Loss rate: 1.46%

-- Flow 2:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 52.061 ms

Loss rate: 0.31%

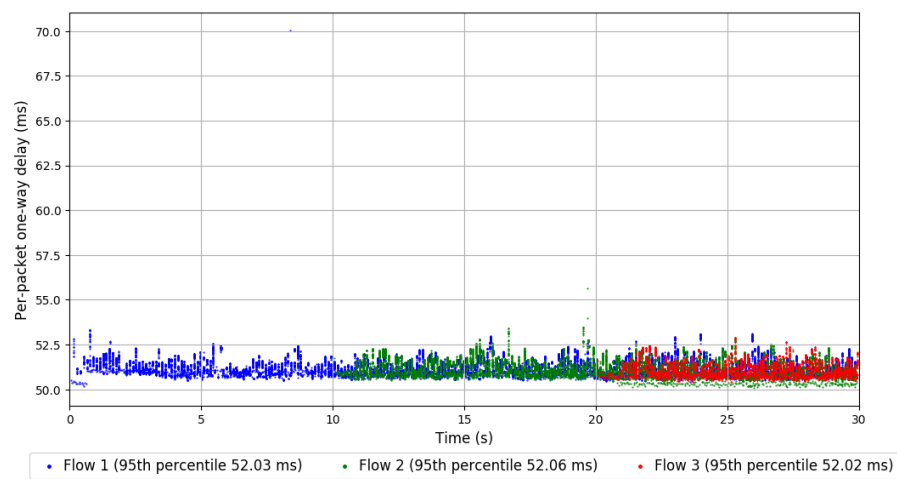
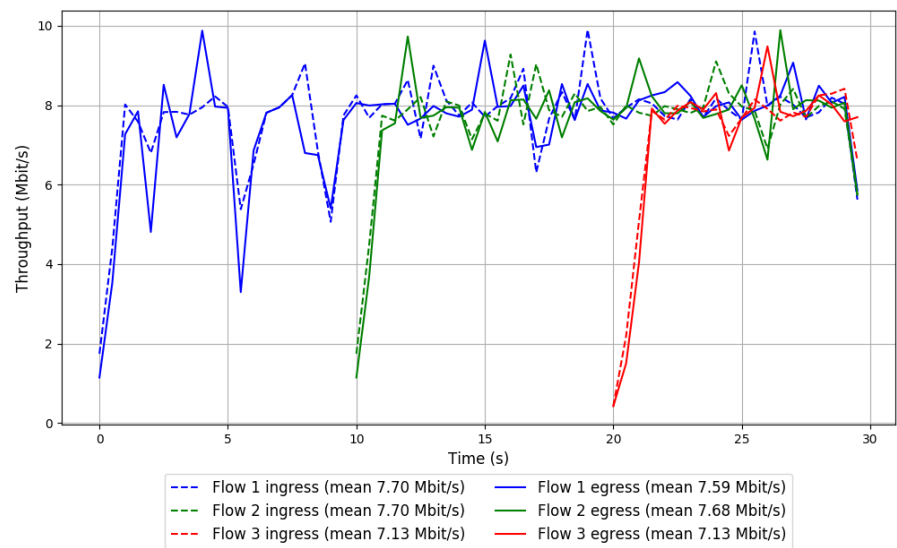
-- Flow 3:

Average throughput: 7.13 Mbit/s

95th percentile per-packet one-way delay: 52.017 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-03 02:38:32

End at: 2018-01-03 02:39:02

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.35 Mbit/s

95th percentile per-packet one-way delay: 51.909 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 7.70 Mbit/s

95th percentile per-packet one-way delay: 51.888 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 51.920 ms

Loss rate: 0.14%

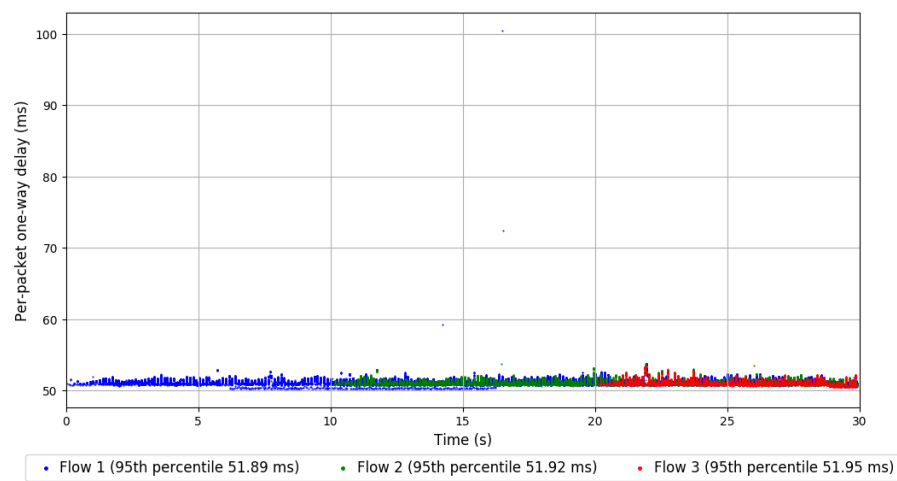
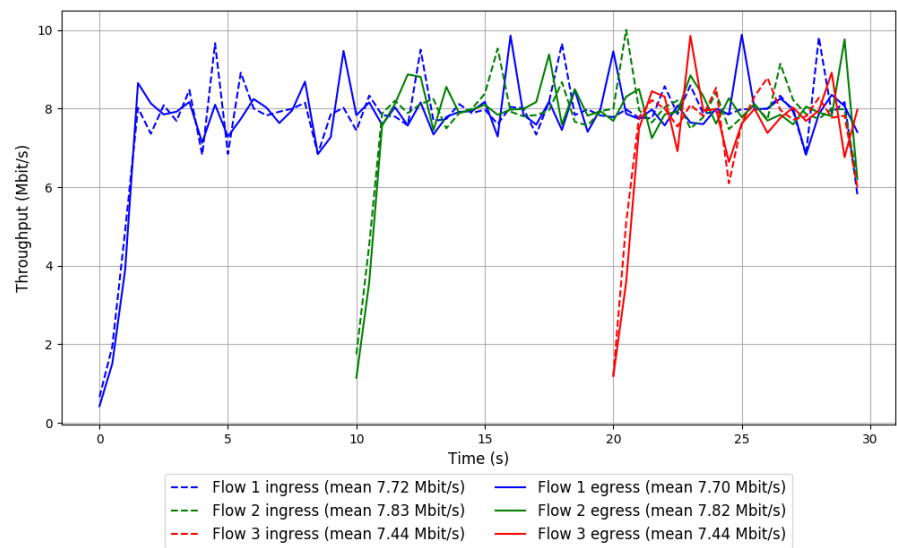
-- Flow 3:

Average throughput: 7.44 Mbit/s

95th percentile per-packet one-way delay: 51.952 ms

Loss rate: 0.02%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-03 02:51:58

End at: 2018-01-03 02:52:28

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.32 Mbit/s

95th percentile per-packet one-way delay: 52.073 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 7.79 Mbit/s

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

Loss rate: 0.42%

-- Flow 2:

Average throughput: 7.59 Mbit/s

95th percentile per-packet one-way delay: 52.028 ms

Loss rate: 0.68%

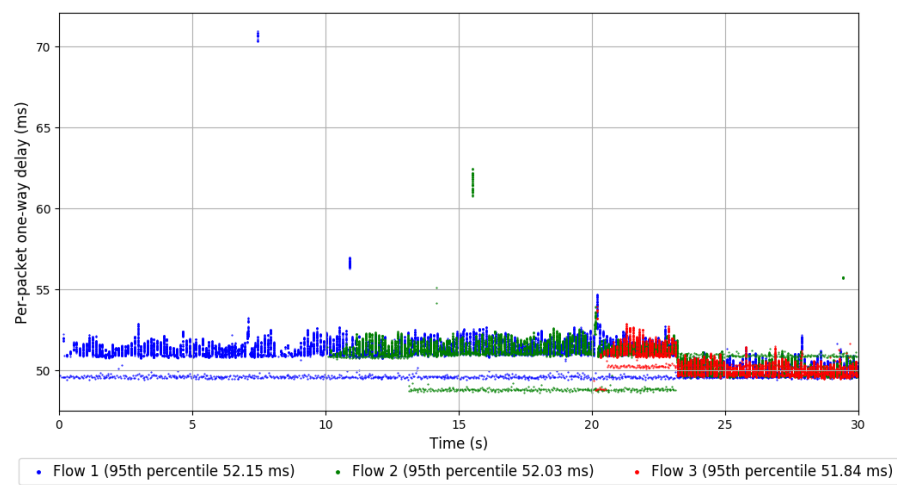
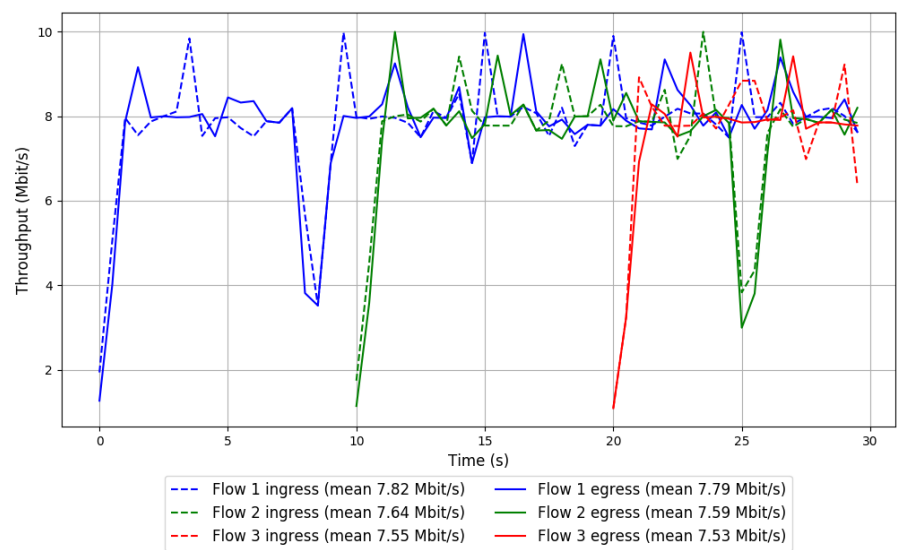
-- Flow 3:

Average throughput: 7.53 Mbit/s

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

Loss rate: 0.22%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-03 03:05:35

End at: 2018-01-03 03:06:05

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.56 Mbit/s

95th percentile per-packet one-way delay: 51.995 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 51.964 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 7.73 Mbit/s

95th percentile per-packet one-way delay: 52.098 ms

Loss rate: 0.46%

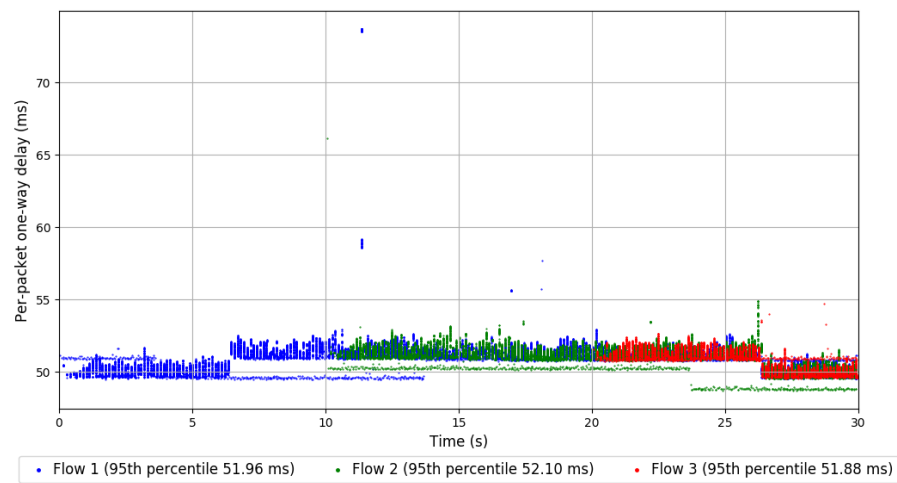
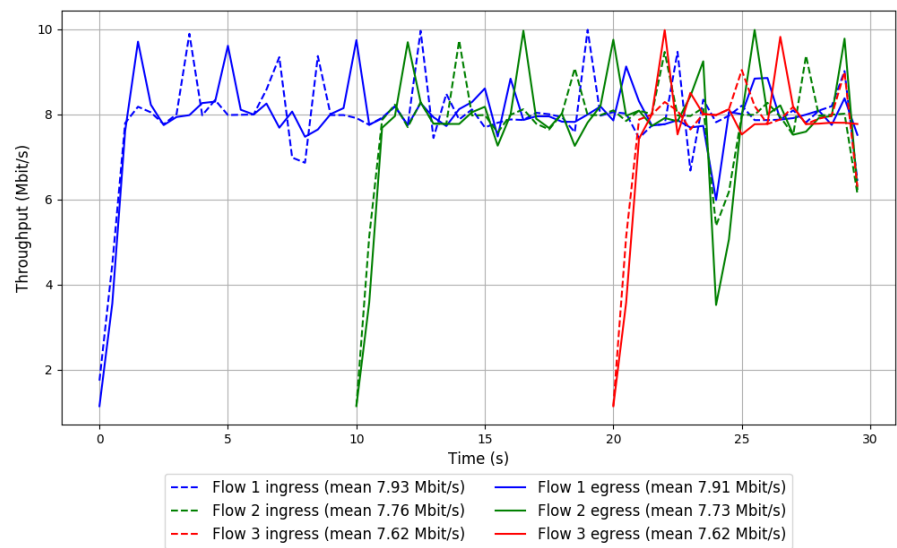
-- Flow 3:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 51.879 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-03 03:19:09

End at: 2018-01-03 03:19:39

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.79 Mbit/s

95th percentile per-packet one-way delay: 51.472 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 7.53 Mbit/s

95th percentile per-packet one-way delay: 51.597 ms

Loss rate: 1.17%

-- Flow 2:

Average throughput: 7.28 Mbit/s

95th percentile per-packet one-way delay: 51.491 ms

Loss rate: 1.11%

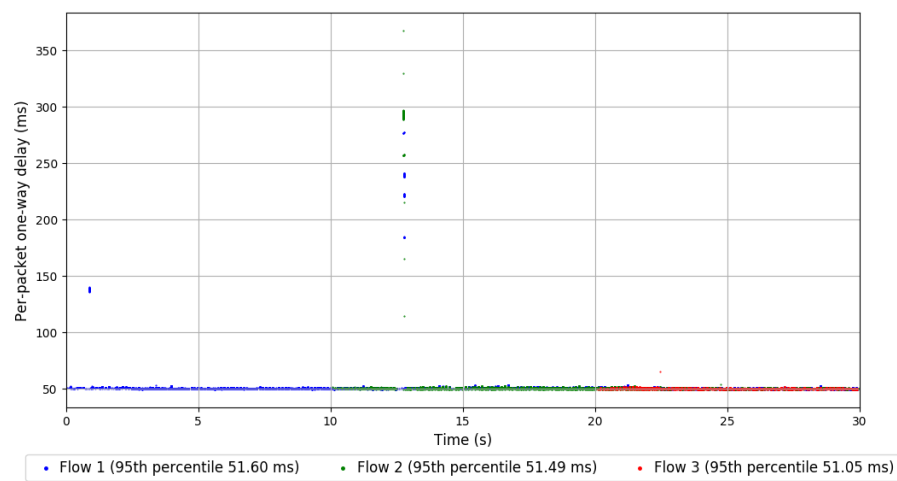
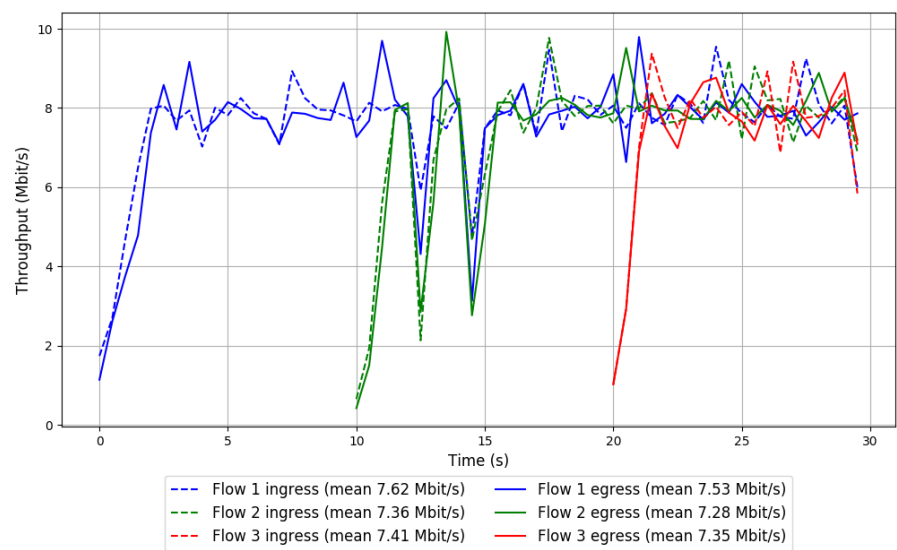
-- Flow 3:

Average throughput: 7.35 Mbit/s

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

Loss rate: 0.72%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-03 03:32:07

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

Below is generated by plot.py at 2018-01-03 05:40:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.53 Mbit/s

95th percentile per-packet one-way delay: 52.521 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 7.30 Mbit/s

95th percentile per-packet one-way delay: 52.413 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 7.38 Mbit/s

95th percentile per-packet one-way delay: 52.587 ms

Loss rate: 0.02%

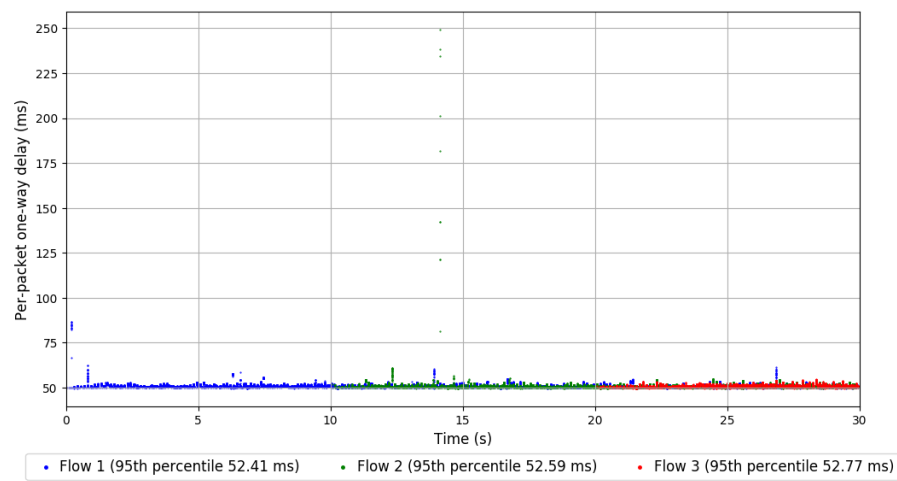
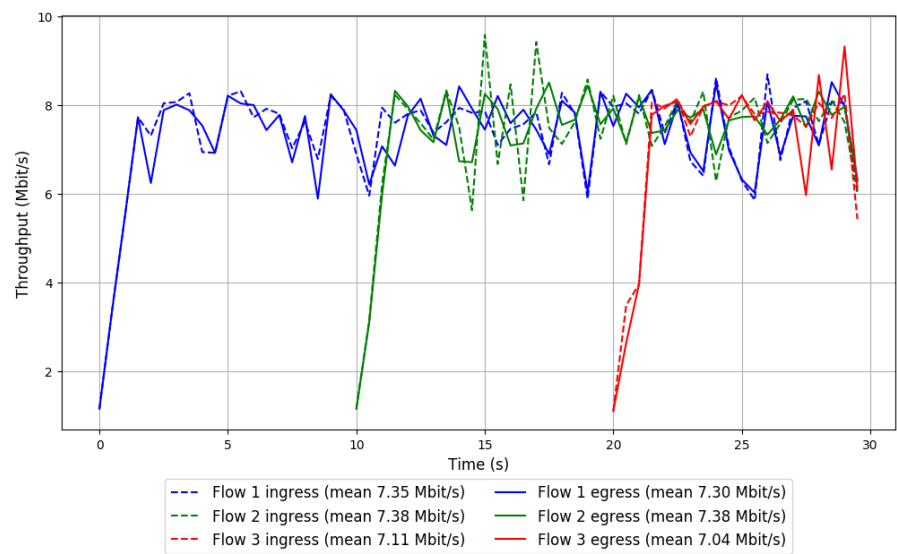
-- Flow 3:

Average throughput: 7.04 Mbit/s

95th percentile per-packet one-way delay: 52.774 ms

Loss rate: 1.01%

Run 10: Report of Sprout — Data Link

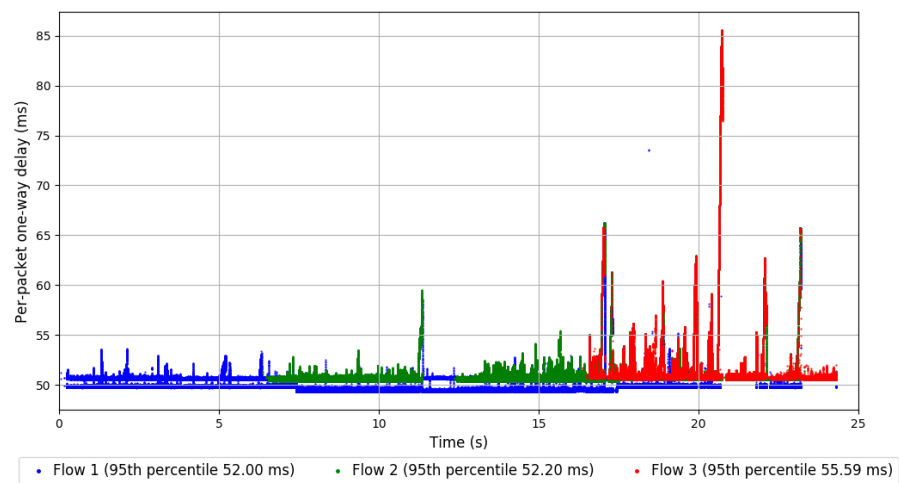
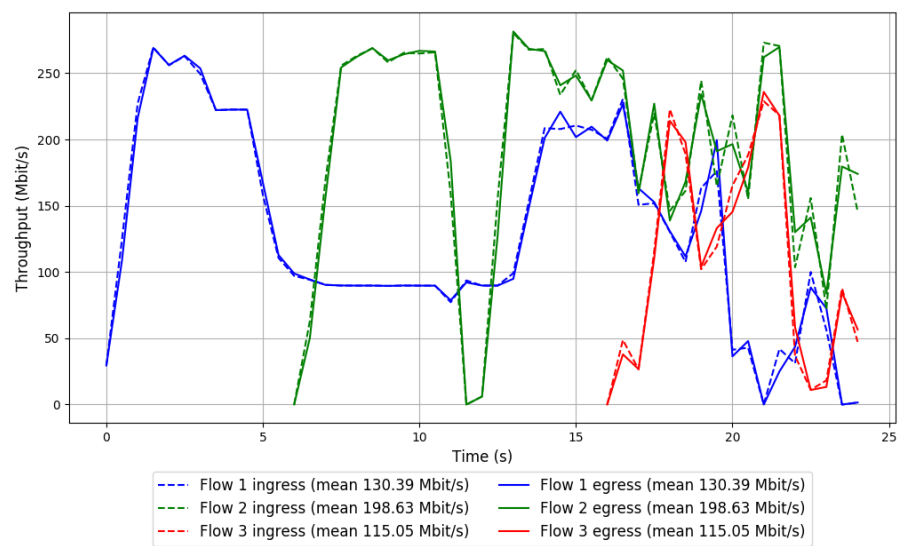


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-03 01:24:08
End at: 2018-01-03 01:24:38

# Below is generated by plot.py at 2018-01-03 05:45:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 314.90 Mbit/s
95th percentile per-packet one-way delay: 52.479 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 130.39 Mbit/s
95th percentile per-packet one-way delay: 51.996 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 198.63 Mbit/s
95th percentile per-packet one-way delay: 52.203 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 115.05 Mbit/s
95th percentile per-packet one-way delay: 55.590 ms
Loss rate: 0.00%
```


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

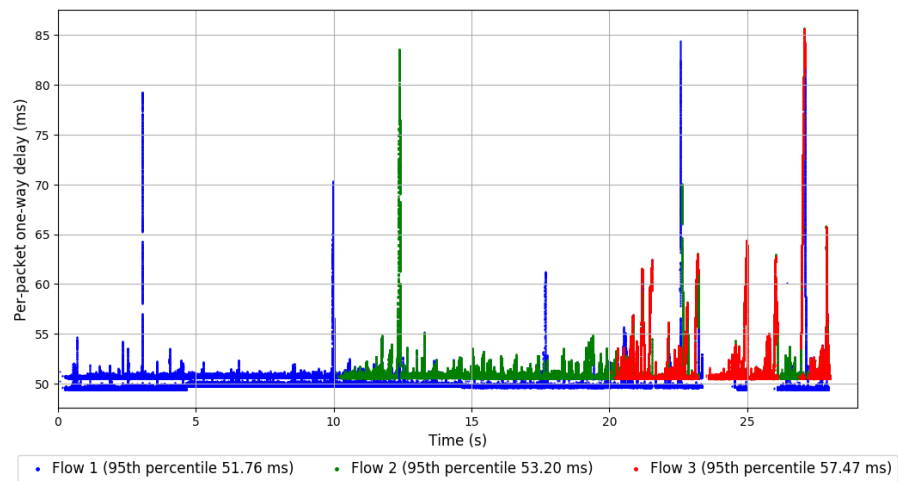
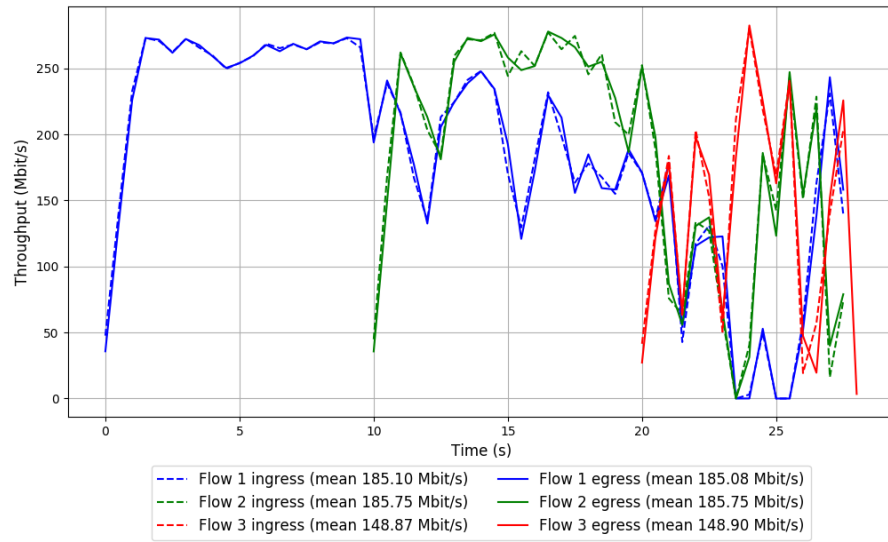


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-03 01:37:45
End at: 2018-01-03 01:38:15

# Below is generated by plot.py at 2018-01-03 05:48:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 345.87 Mbit/s
95th percentile per-packet one-way delay: 52.812 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.08 Mbit/s
95th percentile per-packet one-way delay: 51.763 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 185.75 Mbit/s
95th percentile per-packet one-way delay: 53.196 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 148.90 Mbit/s
95th percentile per-packet one-way delay: 57.465 ms
Loss rate: 0.00%
```

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

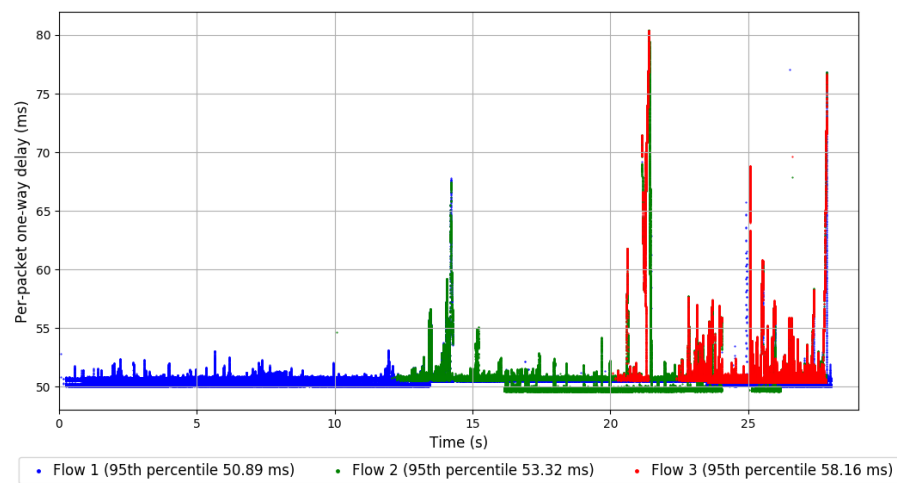
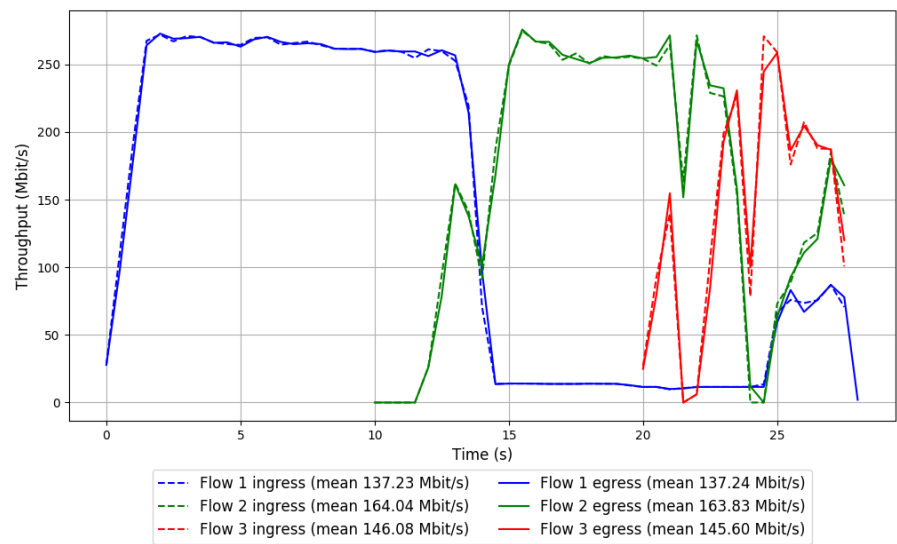


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-03 01:51:23
End at: 2018-01-03 01:51:53

# Below is generated by plot.py at 2018-01-03 05:48:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 282.01 Mbit/s
95th percentile per-packet one-way delay: 52.409 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 137.24 Mbit/s
95th percentile per-packet one-way delay: 50.894 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 163.83 Mbit/s
95th percentile per-packet one-way delay: 53.321 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 145.60 Mbit/s
95th percentile per-packet one-way delay: 58.164 ms
Loss rate: 0.00%
```

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

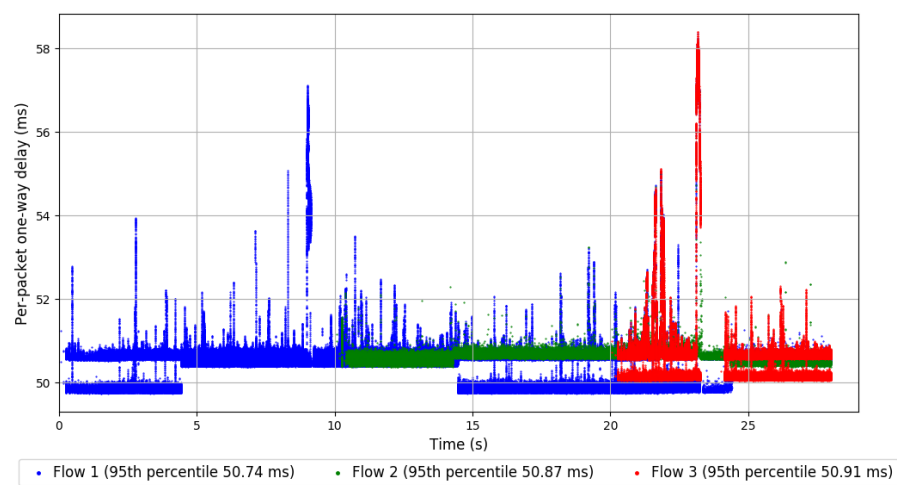
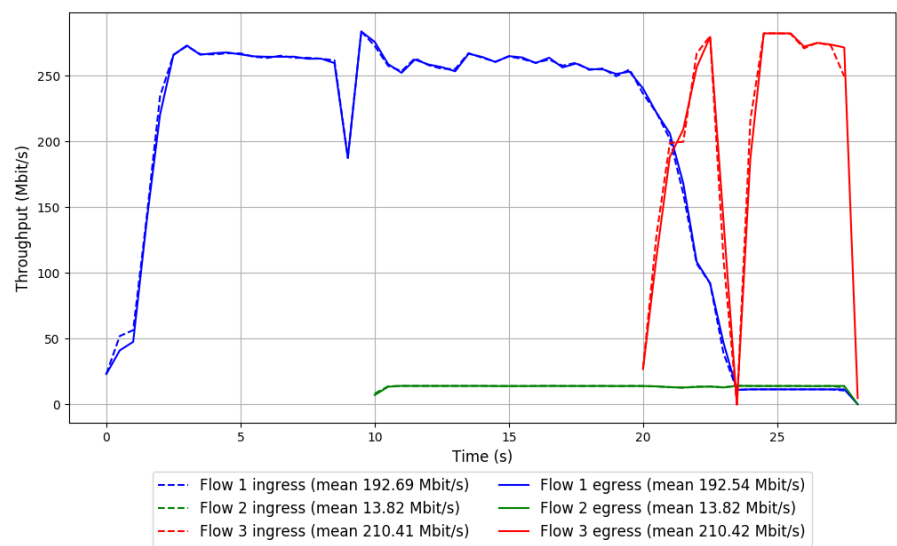


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-01-03 02:05:05
End at: 2018-01-03 02:05:35

# Below is generated by plot.py at 2018-01-03 05:48:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 261.17 Mbit/s
95th percentile per-packet one-way delay: 50.755 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 192.54 Mbit/s
95th percentile per-packet one-way delay: 50.736 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 13.82 Mbit/s
95th percentile per-packet one-way delay: 50.872 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 210.42 Mbit/s
95th percentile per-packet one-way delay: 50.910 ms
Loss rate: 0.00%
```

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

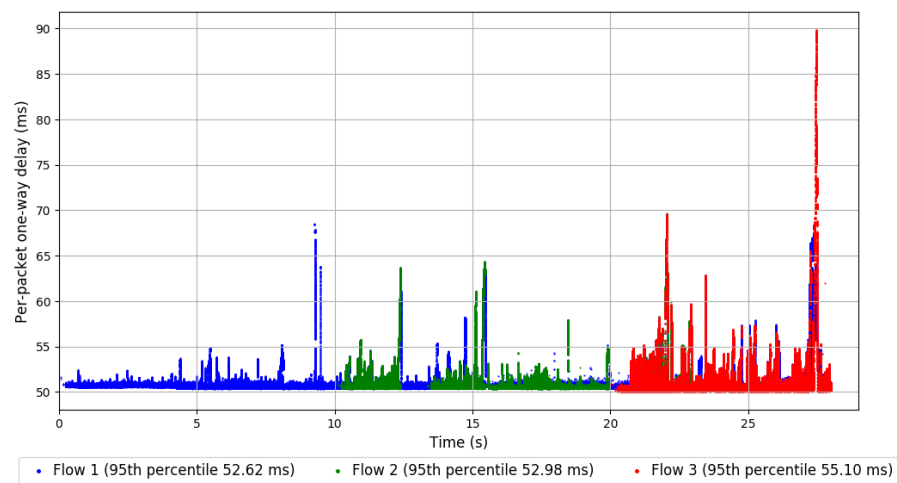
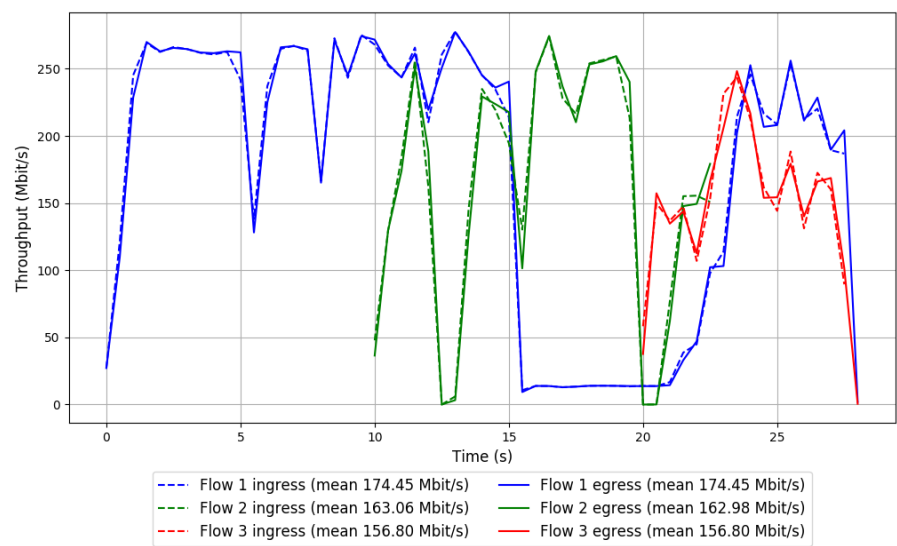


```
Run 5: Statistics of TaoVA-100x

Start at: 2018-01-03 02:18:35
End at: 2018-01-03 02:19:05

# Below is generated by plot.py at 2018-01-03 05:48:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 294.02 Mbit/s
95th percentile per-packet one-way delay: 53.245 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 174.45 Mbit/s
95th percentile per-packet one-way delay: 52.618 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 162.98 Mbit/s
95th percentile per-packet one-way delay: 52.982 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 156.80 Mbit/s
95th percentile per-packet one-way delay: 55.105 ms
Loss rate: 0.00%
```


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

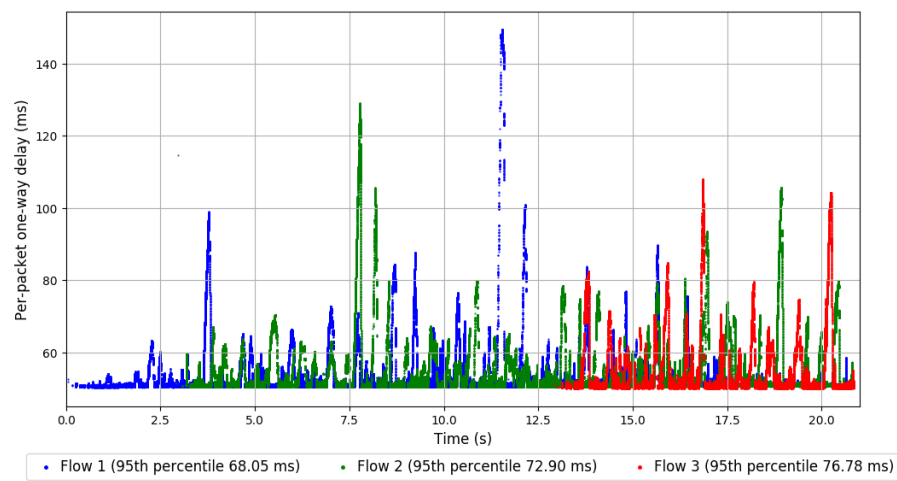
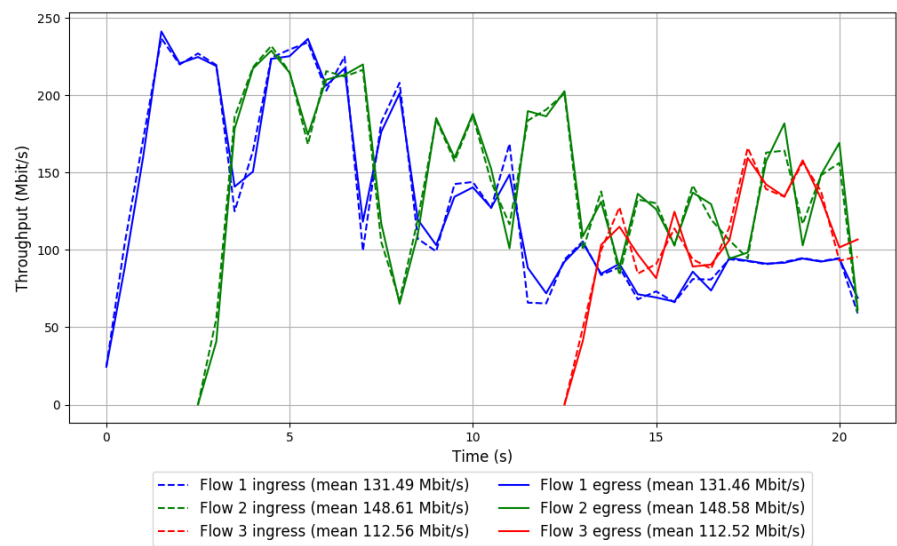


Run 6: Statistics of TaoVA-100x

Start at: 2018-01-03 02:31:46

End at: 2018-01-03 02:32:16

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

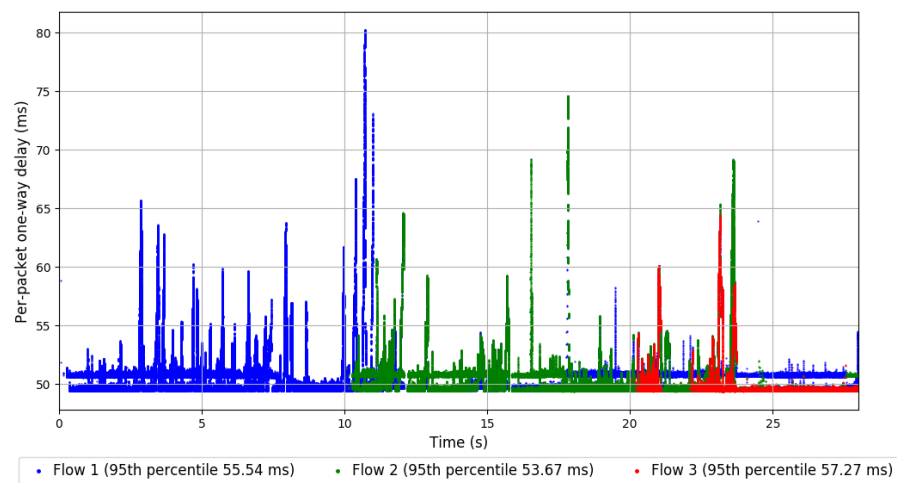
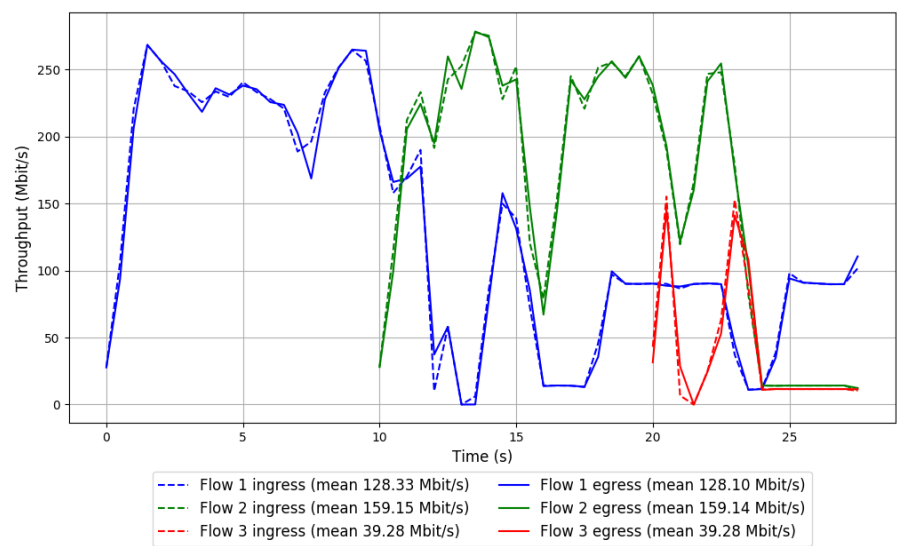


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-01-03 02:44:59
End at: 2018-01-03 02:45:29

# Below is generated by plot.py at 2018-01-03 05:48:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 241.44 Mbit/s
95th percentile per-packet one-way delay: 54.952 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 128.10 Mbit/s
95th percentile per-packet one-way delay: 55.539 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 159.14 Mbit/s
95th percentile per-packet one-way delay: 53.675 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.28 Mbit/s
95th percentile per-packet one-way delay: 57.269 ms
Loss rate: 0.00%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-03 02:58:29

End at: 2018-01-03 02:58:59

Below is generated by plot.py at 2018-01-03 05:49:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.74 Mbit/s

95th percentile per-packet one-way delay: 53.181 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 133.78 Mbit/s

95th percentile per-packet one-way delay: 51.007 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 181.03 Mbit/s

95th percentile per-packet one-way delay: 51.289 ms

Loss rate: 0.00%

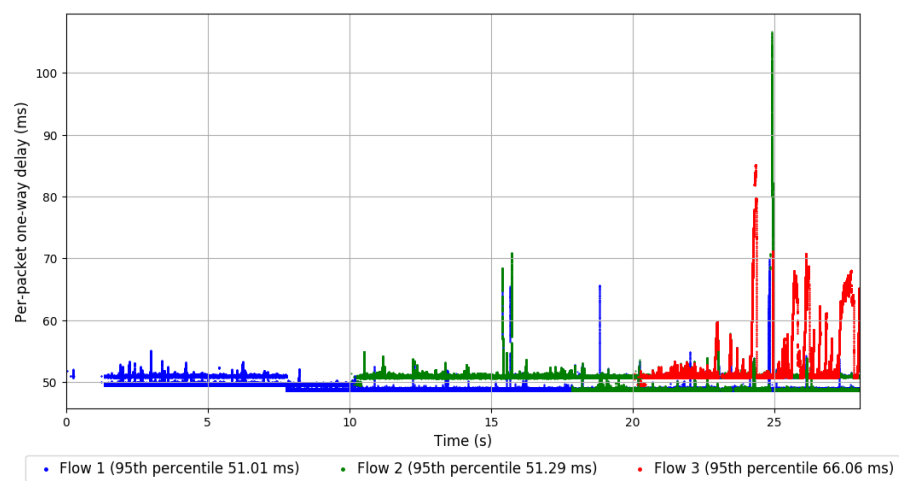
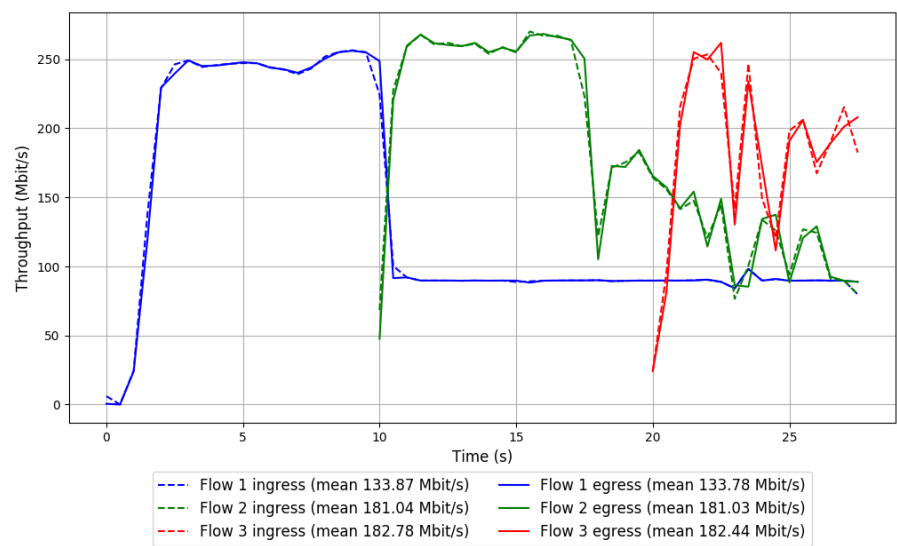
-- Flow 3:

Average throughput: 182.44 Mbit/s

95th percentile per-packet one-way delay: 66.057 ms

Loss rate: 0.09%

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

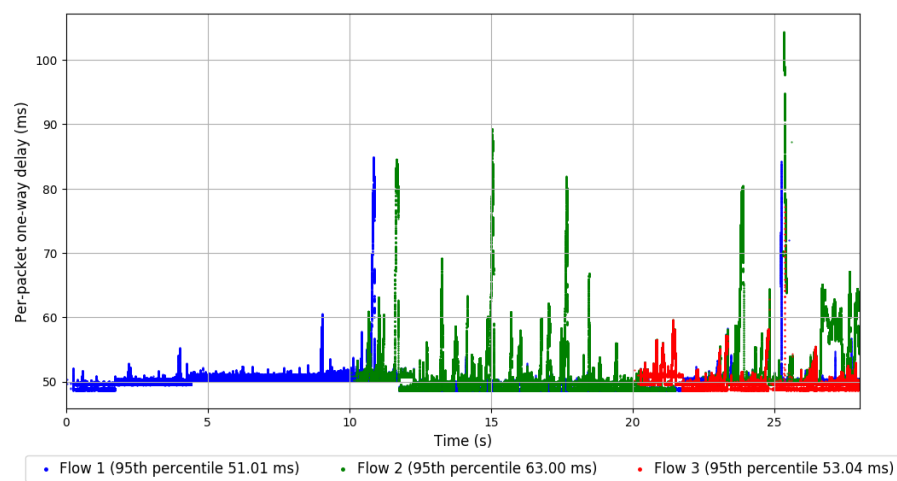
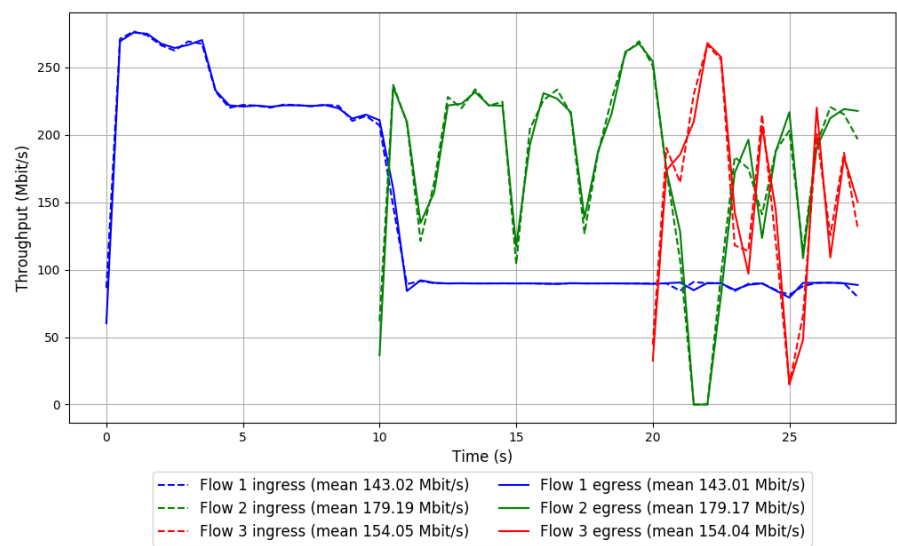


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-01-03 03:11:55
End at: 2018-01-03 03:12:25

# Below is generated by plot.py at 2018-01-03 05:54:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 301.73 Mbit/s
95th percentile per-packet one-way delay: 57.759 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 143.01 Mbit/s
95th percentile per-packet one-way delay: 51.013 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 179.17 Mbit/s
95th percentile per-packet one-way delay: 62.997 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 154.04 Mbit/s
95th percentile per-packet one-way delay: 53.039 ms
Loss rate: 0.01%
```


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

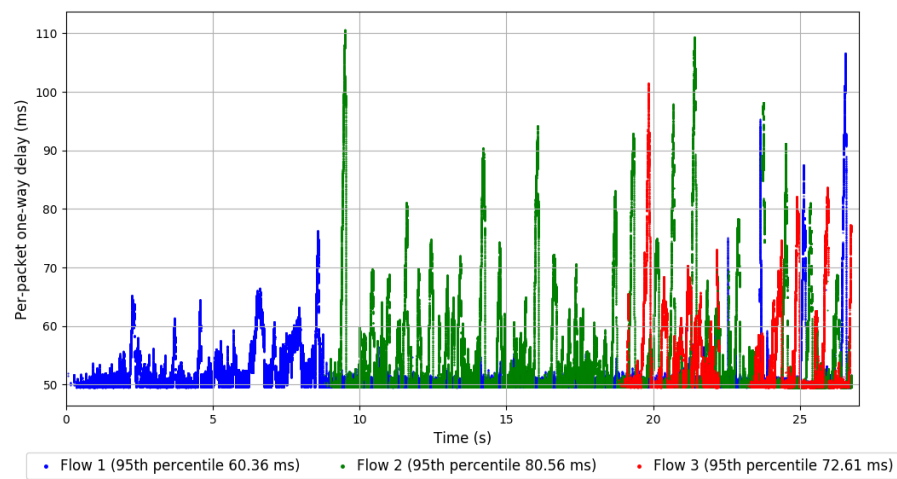
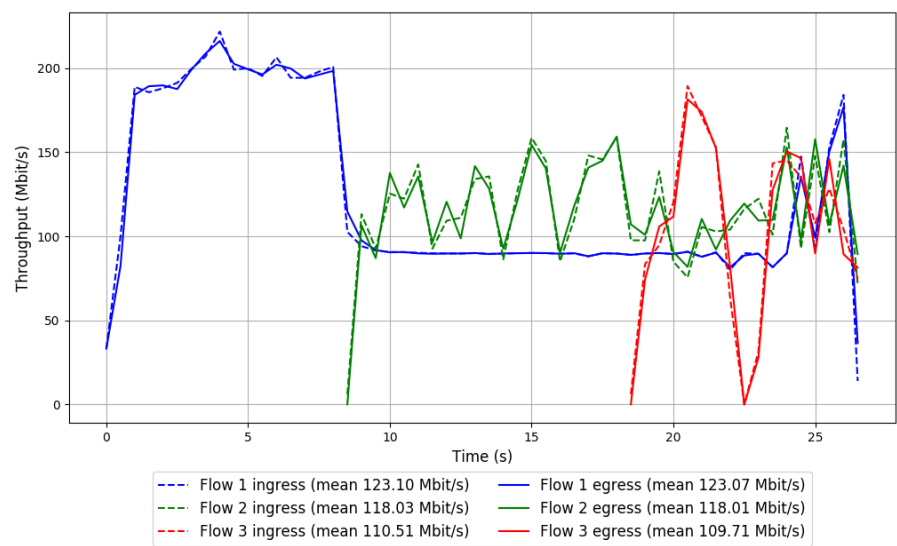


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-03 03:25:21
End at: 2018-01-03 03:25:51

# Below is generated by plot.py at 2018-01-03 05:54:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 235.01 Mbit/s
95th percentile per-packet one-way delay: 70.751 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 123.07 Mbit/s
95th percentile per-packet one-way delay: 60.356 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 118.01 Mbit/s
95th percentile per-packet one-way delay: 80.562 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 109.71 Mbit/s
95th percentile per-packet one-way delay: 72.615 ms
Loss rate: 0.69%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-03 01:34:59

End at: 2018-01-03 01:35:29

Below is generated by plot.py at 2018-01-03 05:54:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.30 Mbit/s

95th percentile per-packet one-way delay: 51.584 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 39.12 Mbit/s

95th percentile per-packet one-way delay: 51.500 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 40.81 Mbit/s

95th percentile per-packet one-way delay: 51.550 ms

Loss rate: 0.00%

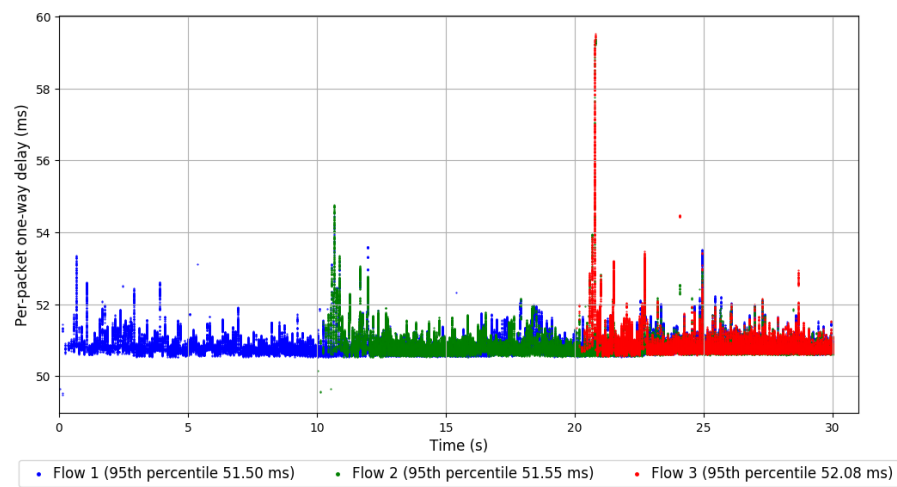
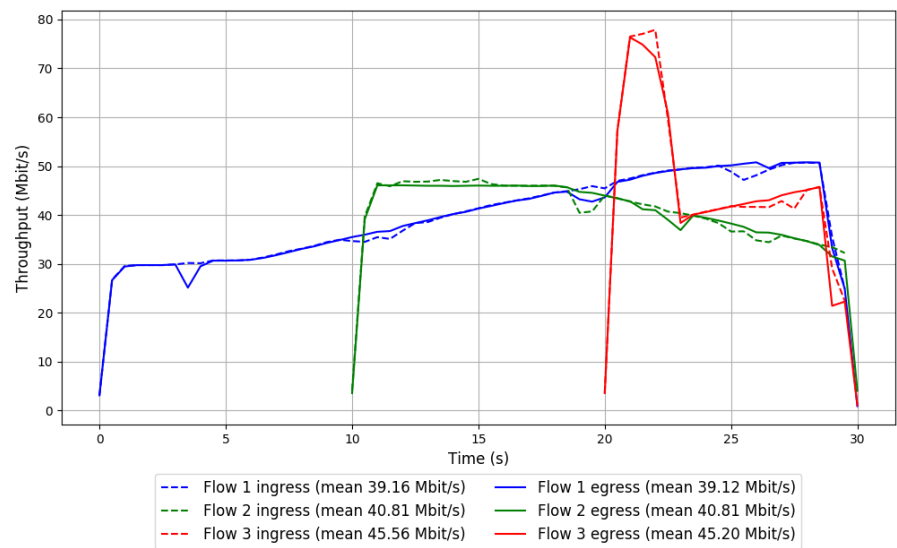
-- Flow 3:

Average throughput: 45.20 Mbit/s

95th percentile per-packet one-way delay: 52.082 ms

Loss rate: 0.81%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-03 01:48:27

End at: 2018-01-03 01:48:57

Below is generated by plot.py at 2018-01-03 05:54:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 218.49 Mbit/s

95th percentile per-packet one-way delay: 56.733 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 120.52 Mbit/s

95th percentile per-packet one-way delay: 57.257 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 75.33 Mbit/s

95th percentile per-packet one-way delay: 52.291 ms

Loss rate: 0.00%

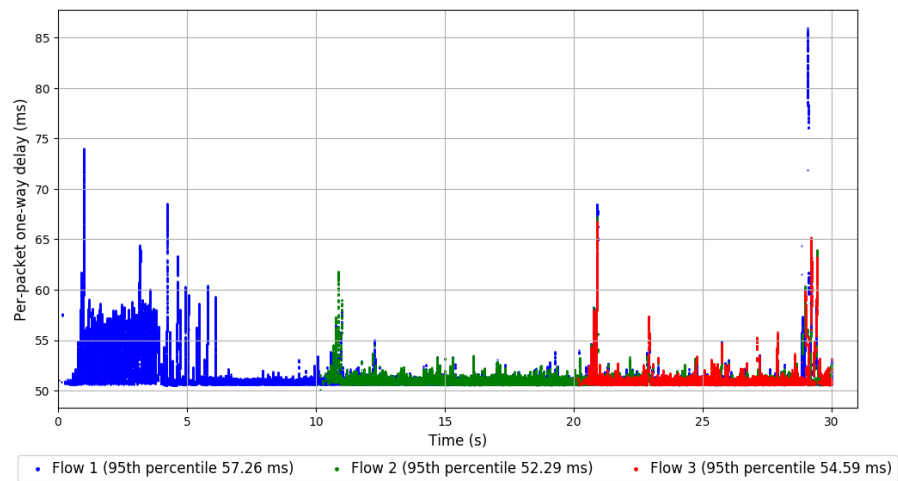
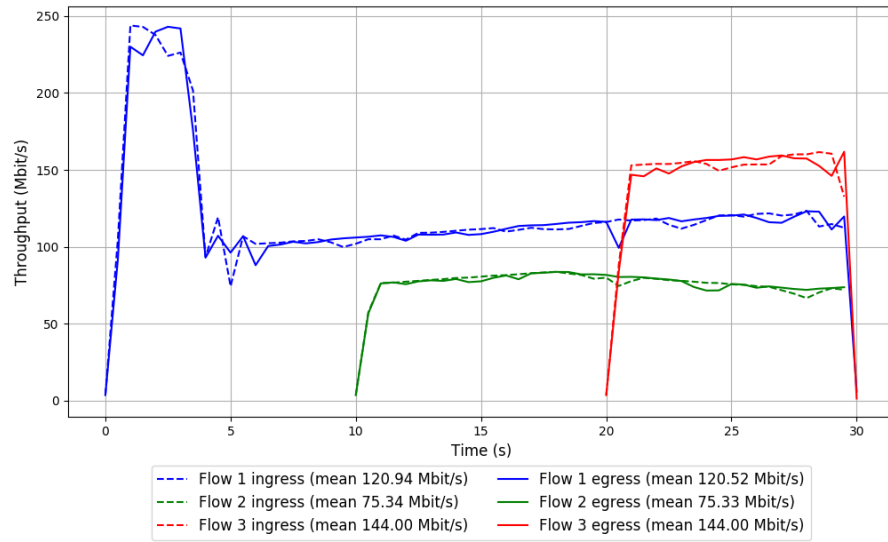
-- Flow 3:

Average throughput: 144.00 Mbit/s

95th percentile per-packet one-way delay: 54.587 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-03 02:02:16

End at: 2018-01-03 02:02:46

Below is generated by plot.py at 2018-01-03 05:54:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 163.19 Mbit/s

95th percentile per-packet one-way delay: 57.949 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.47 Mbit/s

95th percentile per-packet one-way delay: 54.637 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 111.60 Mbit/s

95th percentile per-packet one-way delay: 59.000 ms

Loss rate: 0.00%

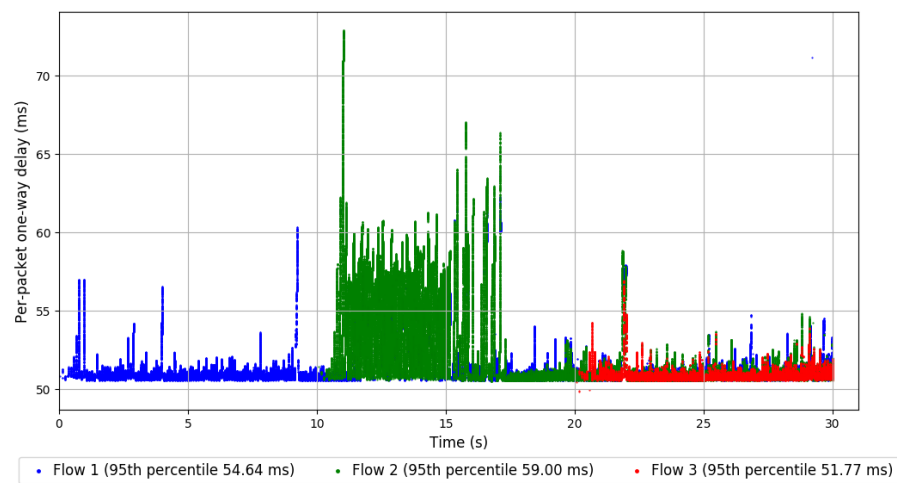
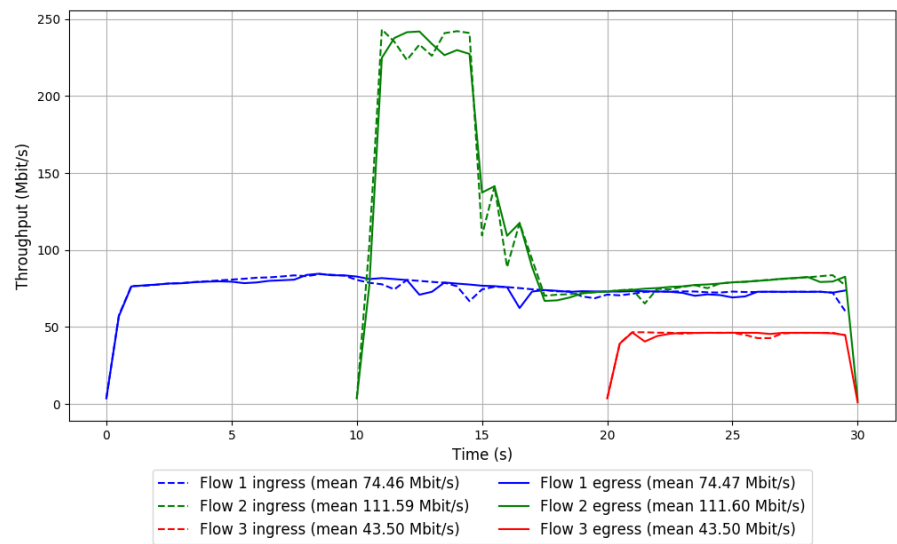
-- Flow 3:

Average throughput: 43.50 Mbit/s

95th percentile per-packet one-way delay: 51.773 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-03 02:15:58

End at: 2018-01-03 02:16:28

Below is generated by plot.py at 2018-01-03 05:54:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.37 Mbit/s

95th percentile per-packet one-way delay: 52.380 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 22.27 Mbit/s

95th percentile per-packet one-way delay: 52.150 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 42.31 Mbit/s

95th percentile per-packet one-way delay: 52.506 ms

Loss rate: 0.01%

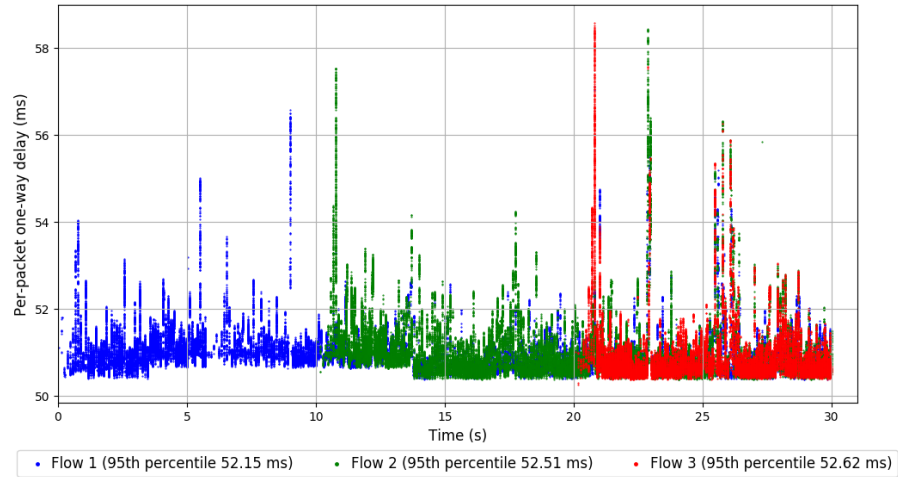
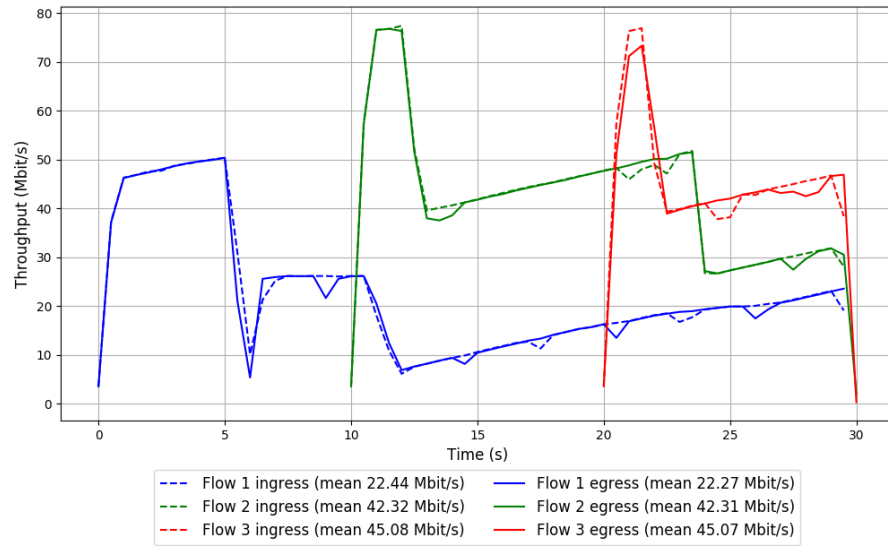
-- Flow 3:

Average throughput: 45.07 Mbit/s

95th percentile per-packet one-way delay: 52.621 ms

Loss rate: 0.03%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-03 02:29:12

End at: 2018-01-03 02:29:42

Below is generated by plot.py at 2018-01-03 05:54:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 37.63 Mbit/s

95th percentile per-packet one-way delay: 54.131 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 9.08 Mbit/s

95th percentile per-packet one-way delay: 52.215 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 38.34 Mbit/s

95th percentile per-packet one-way delay: 57.773 ms

Loss rate: 0.70%

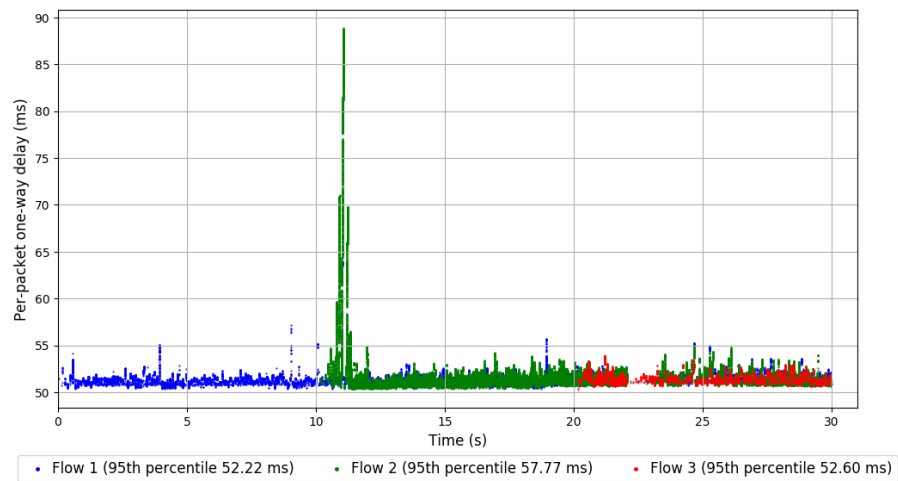
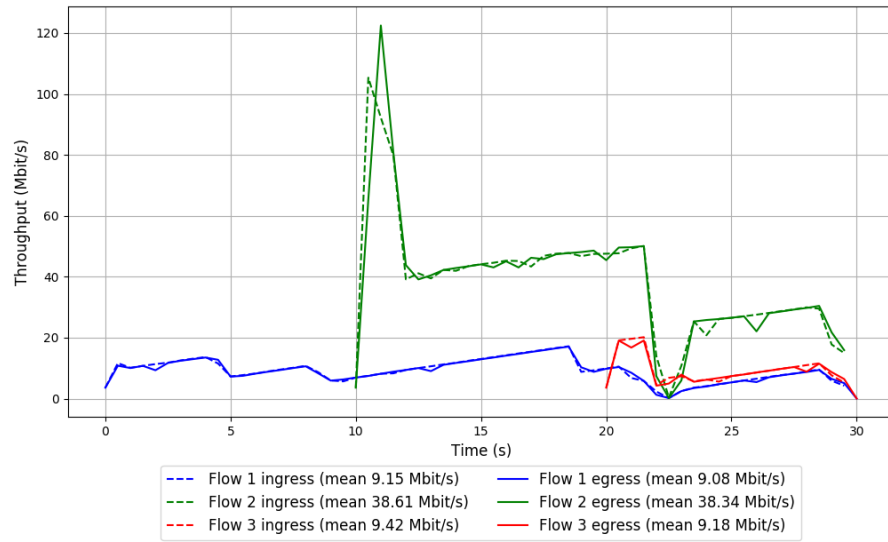
-- Flow 3:

Average throughput: 9.18 Mbit/s

95th percentile per-packet one-way delay: 52.604 ms

Loss rate: 2.49%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-03 02:42:20

End at: 2018-01-03 02:42:50

Below is generated by plot.py at 2018-01-03 05:54:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 36.45 Mbit/s

95th percentile per-packet one-way delay: 52.017 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 11.04 Mbit/s

95th percentile per-packet one-way delay: 51.837 ms

Loss rate: 1.23%

-- Flow 2:

Average throughput: 35.06 Mbit/s

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

Loss rate: 0.02%

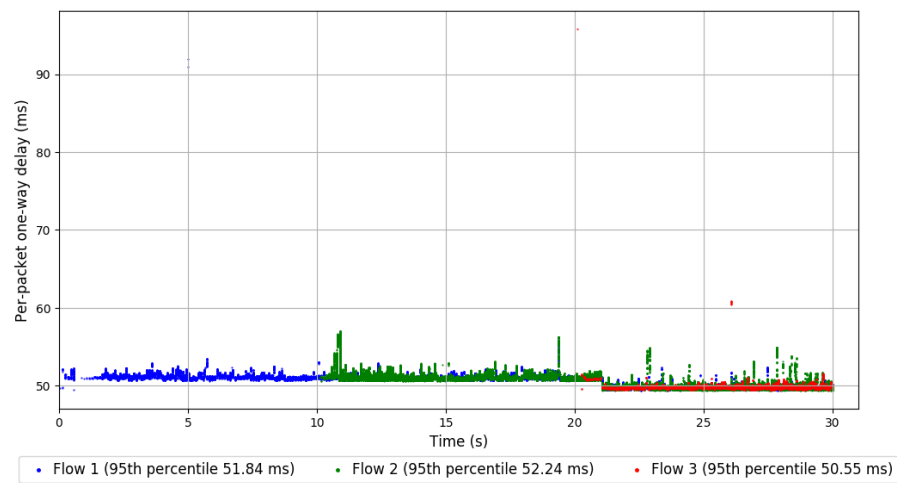
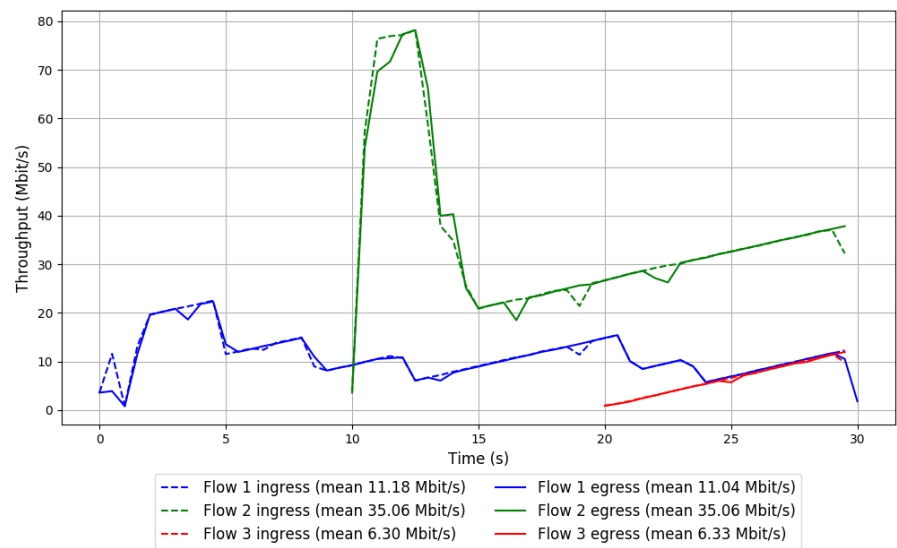
-- Flow 3:

Average throughput: 6.33 Mbit/s

95th percentile per-packet one-way delay: 50.552 ms

Loss rate: 0.02%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-03 02:55:54

End at: 2018-01-03 02:56:24

Below is generated by plot.py at 2018-01-03 05:54:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 33.83 Mbit/s

95th percentile per-packet one-way delay: 51.802 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 17.25 Mbit/s

95th percentile per-packet one-way delay: 51.894 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 17.14 Mbit/s

95th percentile per-packet one-way delay: 51.696 ms

Loss rate: 0.54%

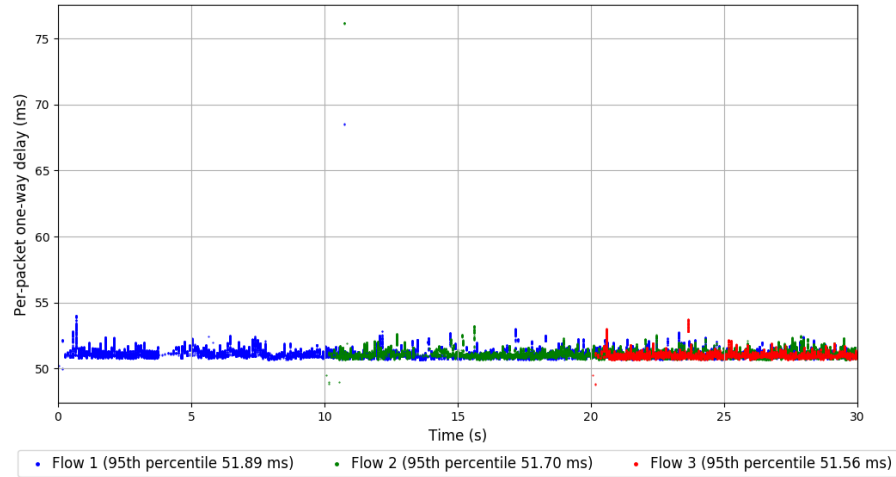
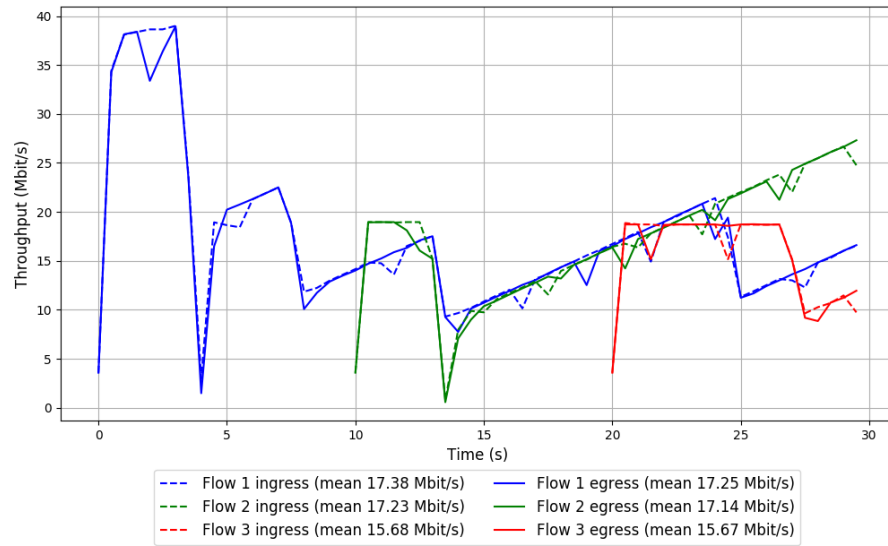
-- Flow 3:

Average throughput: 15.67 Mbit/s

95th percentile per-packet one-way delay: 51.558 ms

Loss rate: 0.02%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-03 03:09:14

End at: 2018-01-03 03:09:44

Below is generated by plot.py at 2018-01-03 05:54:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.40 Mbit/s

95th percentile per-packet one-way delay: 56.749 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 68.09 Mbit/s

95th percentile per-packet one-way delay: 57.917 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.07 Mbit/s

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

Loss rate: 0.02%

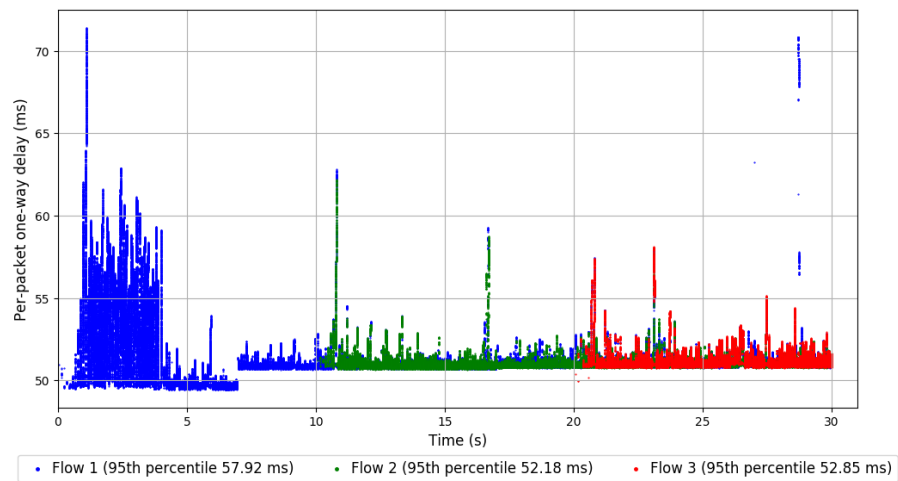
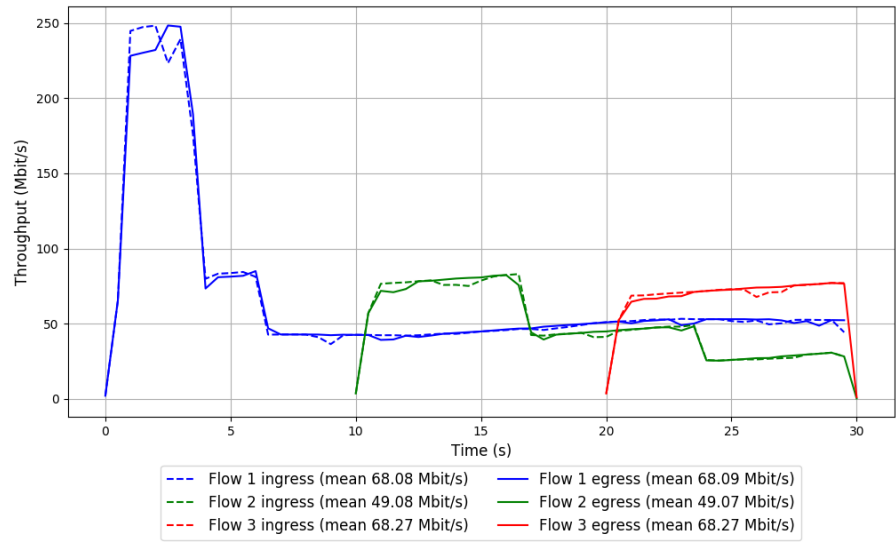
-- Flow 3:

Average throughput: 68.27 Mbit/s

95th percentile per-packet one-way delay: 52.853 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-03 03:22:42

End at: 2018-01-03 03:23:12

Below is generated by plot.py at 2018-01-03 05:54:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 52.06 Mbit/s

95th percentile per-packet one-way delay: 63.222 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 28.04 Mbit/s

95th percentile per-packet one-way delay: 52.688 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 28.79 Mbit/s

95th percentile per-packet one-way delay: 67.093 ms

Loss rate: 0.21%

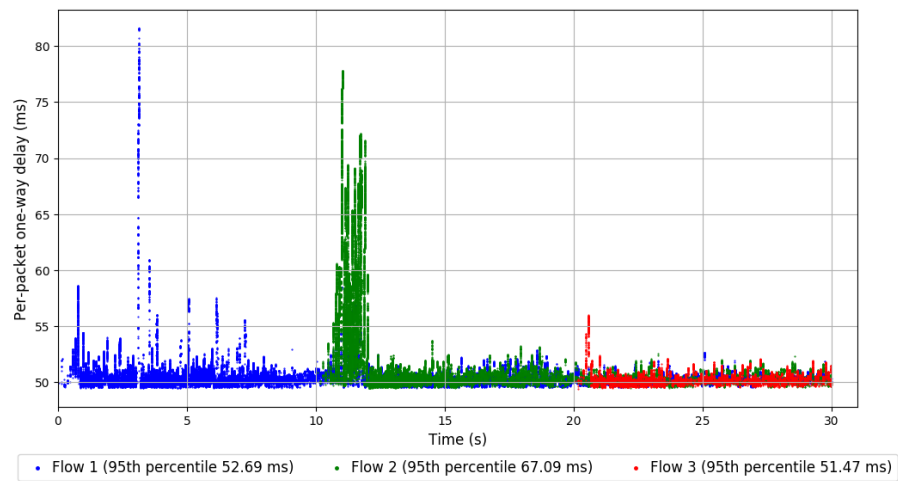
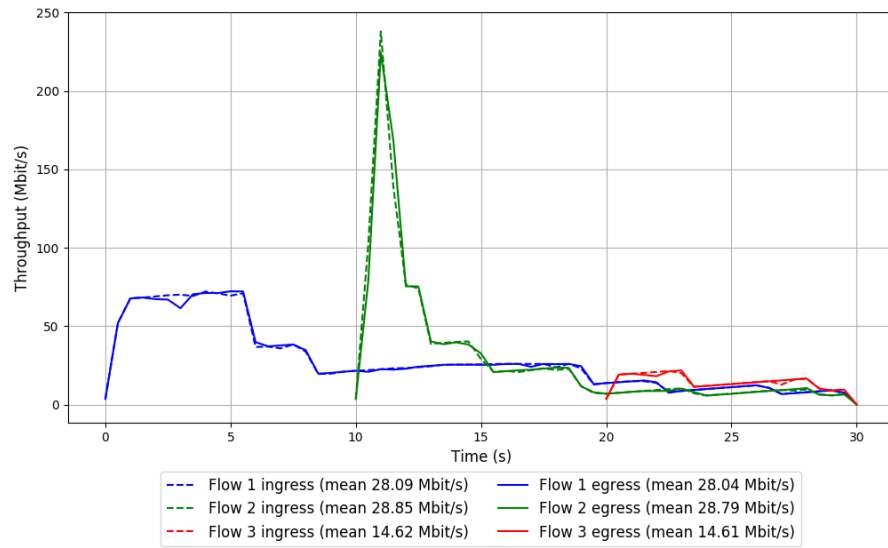
-- Flow 3:

Average throughput: 14.61 Mbit/s

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

Loss rate: 0.10%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-03 03:35:39

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

Below is generated by plot.py at 2018-01-03 05:54:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 43.49 Mbit/s

95th percentile per-packet one-way delay: 59.583 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 17.94 Mbit/s

95th percentile per-packet one-way delay: 53.528 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 12.82 Mbit/s

95th percentile per-packet one-way delay: 52.786 ms

Loss rate: 0.07%

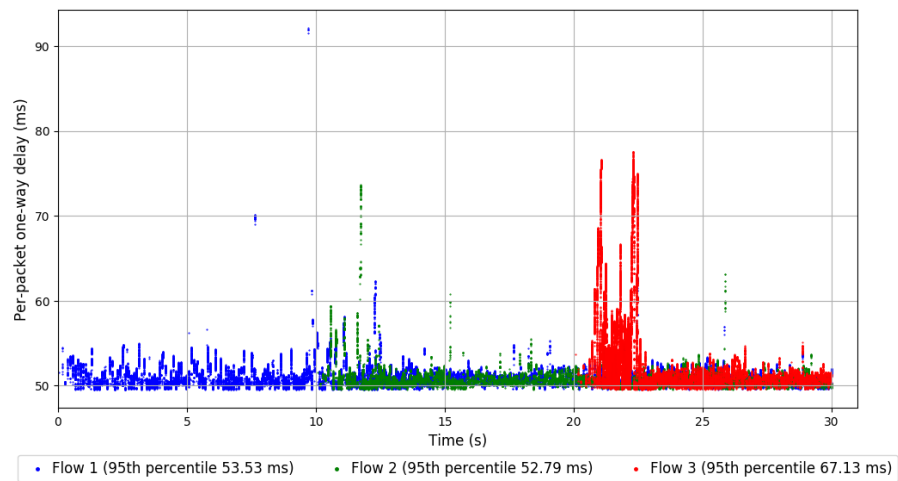
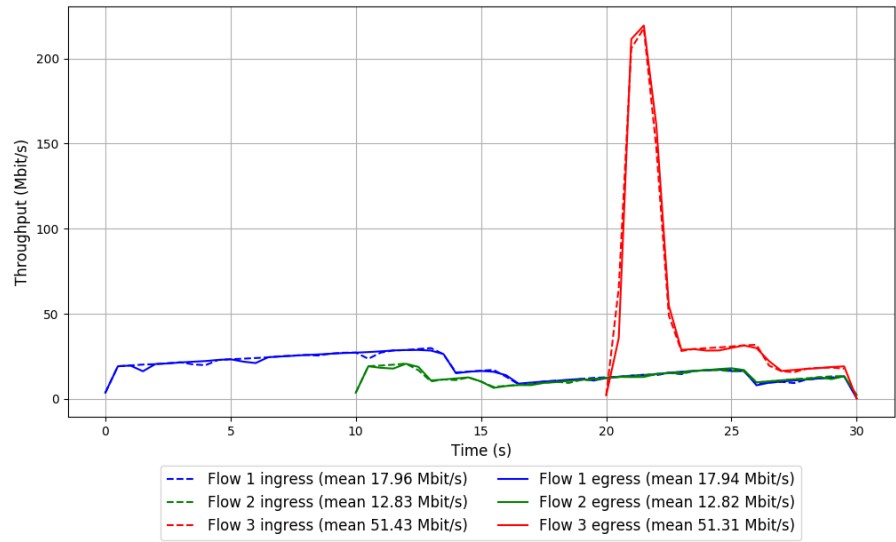
-- Flow 3:

Average throughput: 51.31 Mbit/s

95th percentile per-packet one-way delay: 67.127 ms

Loss rate: 0.26%

Run 10: Report of TCP Vegas — Data Link

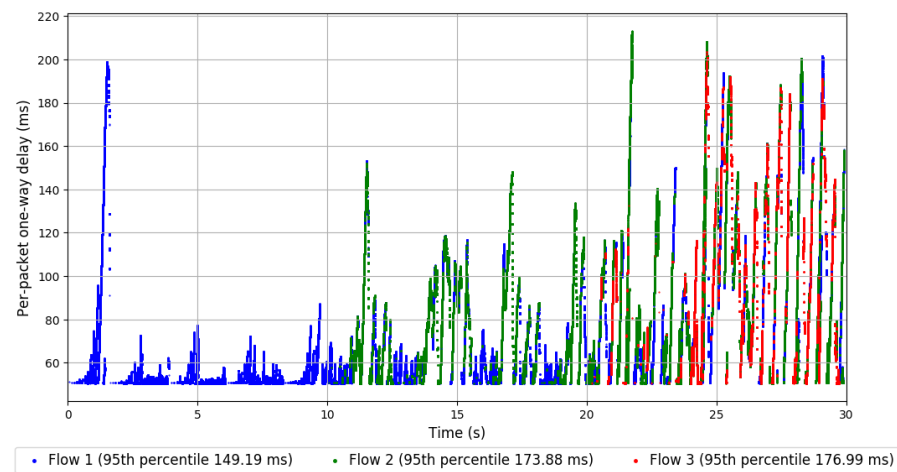
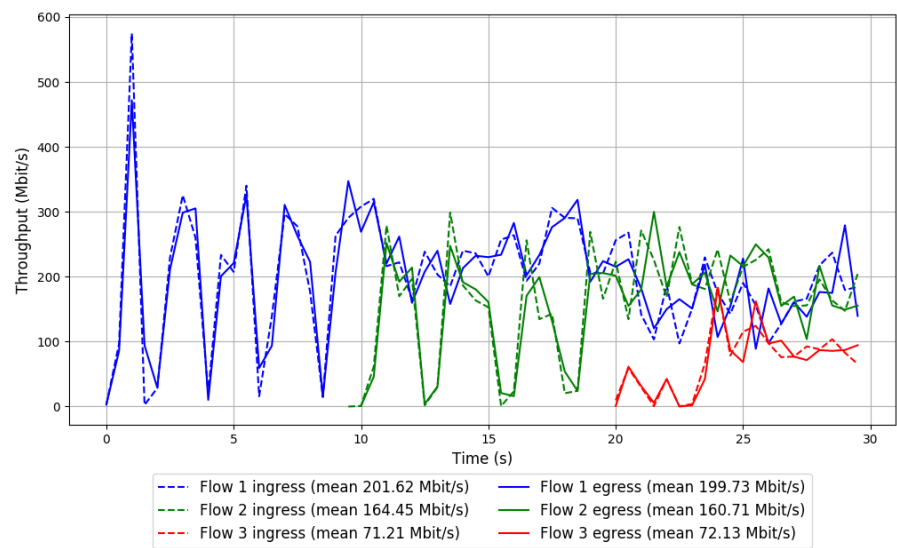


```
Run 1: Statistics of Verus

Start at: 2018-01-03 01:23:04
End at: 2018-01-03 01:23:35

# Below is generated by plot.py at 2018-01-03 05:54:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 329.84 Mbit/s
95th percentile per-packet one-way delay: 161.280 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 199.73 Mbit/s
95th percentile per-packet one-way delay: 149.194 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 160.71 Mbit/s
95th percentile per-packet one-way delay: 173.878 ms
Loss rate: 2.09%
-- Flow 3:
Average throughput: 72.13 Mbit/s
95th percentile per-packet one-way delay: 176.986 ms
Loss rate: 0.88%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-03 01:36:38

End at: 2018-01-03 01:37:08

Below is generated by plot.py at 2018-01-03 05:55:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 385.59 Mbit/s

95th percentile per-packet one-way delay: 152.021 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 223.89 Mbit/s

95th percentile per-packet one-way delay: 131.634 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 174.37 Mbit/s

95th percentile per-packet one-way delay: 177.762 ms

Loss rate: 0.61%

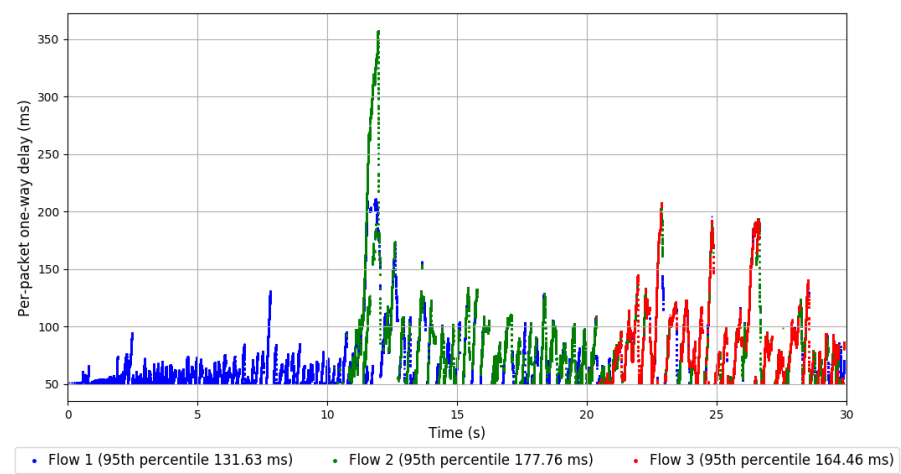
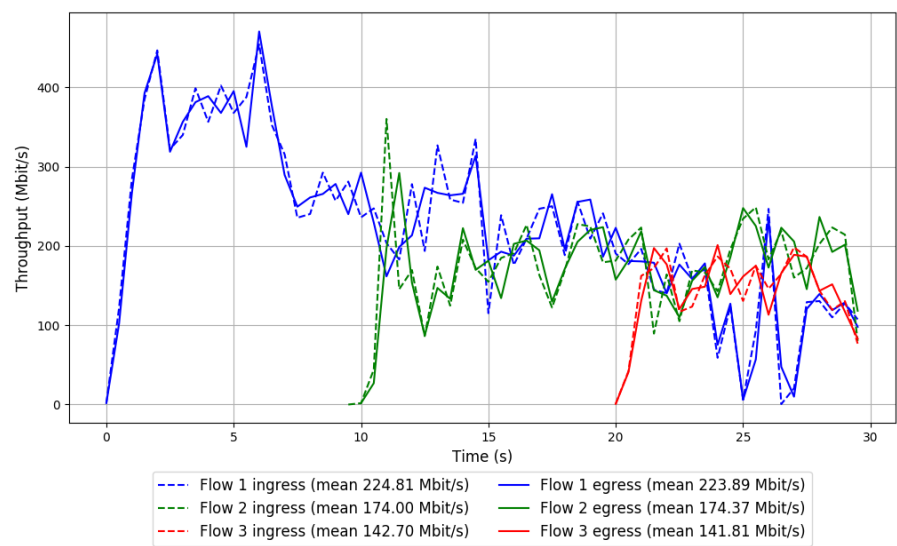
-- Flow 3:

Average throughput: 141.81 Mbit/s

95th percentile per-packet one-way delay: 164.461 ms

Loss rate: 0.67%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-03 01:50:16

End at: 2018-01-03 01:50:46

Below is generated by plot.py at 2018-01-03 05:56:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 385.24 Mbit/s

95th percentile per-packet one-way delay: 173.040 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 232.45 Mbit/s

95th percentile per-packet one-way delay: 170.394 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 181.00 Mbit/s

95th percentile per-packet one-way delay: 174.194 ms

Loss rate: 0.56%

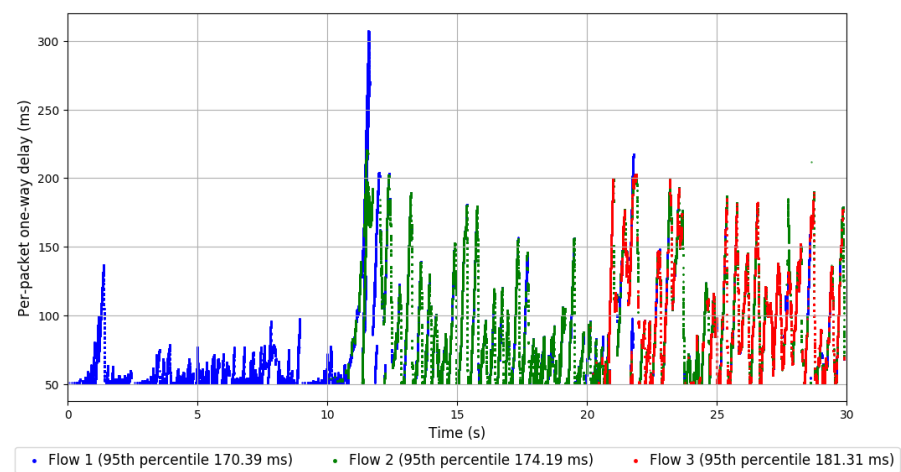
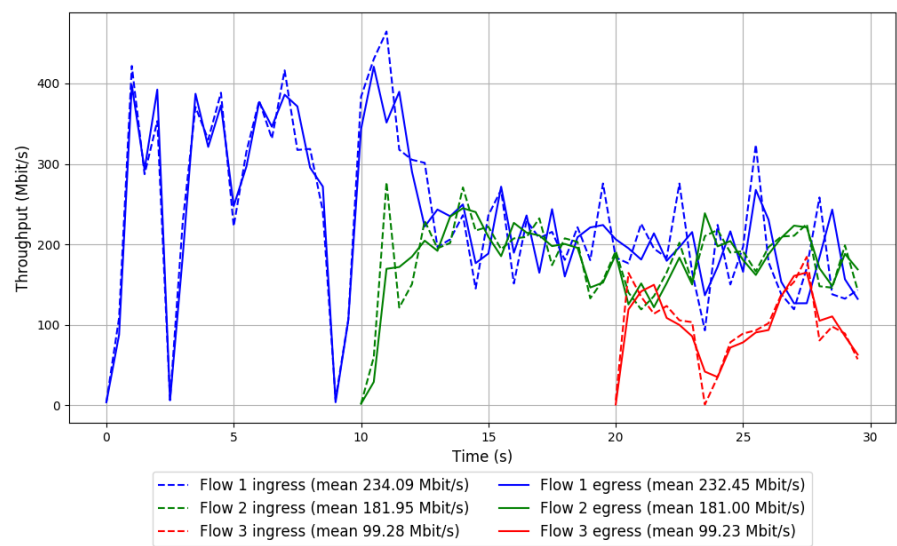
-- Flow 3:

Average throughput: 99.23 Mbit/s

95th percentile per-packet one-way delay: 181.310 ms

Loss rate: 0.42%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-03 02:04:04

End at: 2018-01-03 02:04:34

Below is generated by plot.py at 2018-01-03 05:56:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 306.61 Mbit/s

95th percentile per-packet one-way delay: 181.157 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 128.52 Mbit/s

95th percentile per-packet one-way delay: 151.231 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 242.39 Mbit/s

95th percentile per-packet one-way delay: 191.975 ms

Loss rate: 1.16%

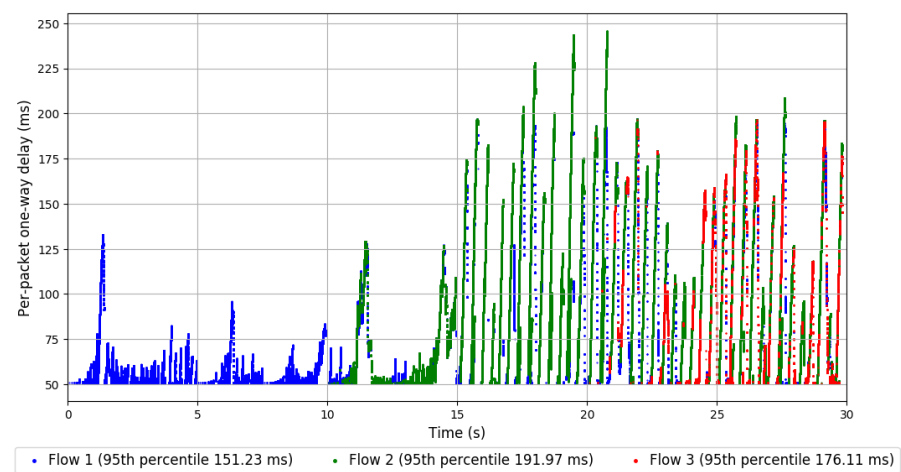
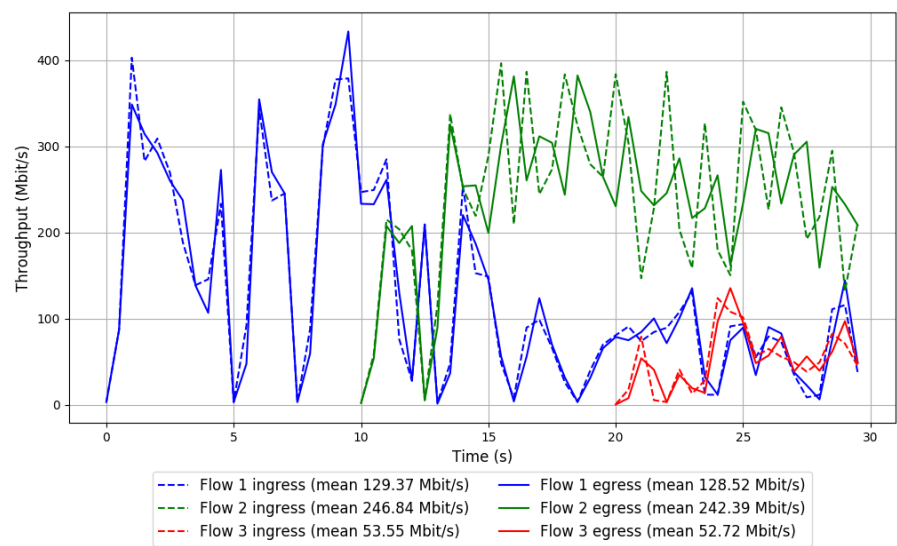
-- Flow 3:

Average throughput: 52.72 Mbit/s

95th percentile per-packet one-way delay: 176.107 ms

Loss rate: 0.60%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-03 02:17:33

End at: 2018-01-03 02:18:03

Below is generated by plot.py at 2018-01-03 05:56:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 313.85 Mbit/s

95th percentile per-packet one-way delay: 133.197 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 180.94 Mbit/s

95th percentile per-packet one-way delay: 133.643 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 145.28 Mbit/s

95th percentile per-packet one-way delay: 133.909 ms

Loss rate: 0.14%

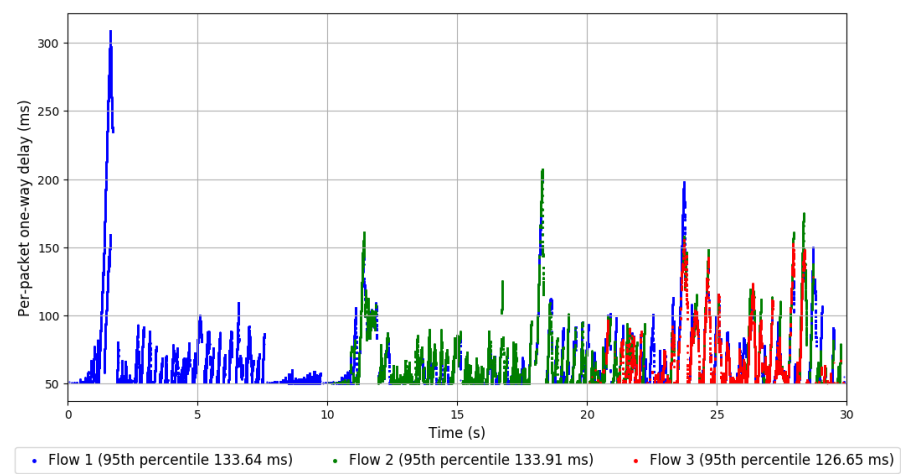
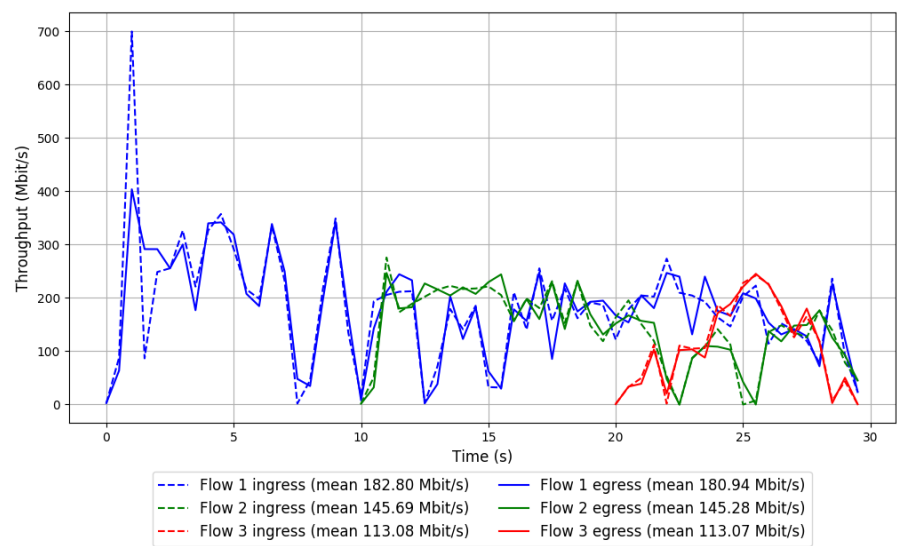
-- Flow 3:

Average throughput: 113.07 Mbit/s

95th percentile per-packet one-way delay: 126.649 ms

Loss rate: 0.01%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-03 02:30:43

End at: 2018-01-03 02:31:13

Below is generated by plot.py at 2018-01-03 05:56:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 327.60 Mbit/s

95th percentile per-packet one-way delay: 180.803 ms

Loss rate: 1.99%

-- Flow 1:

Average throughput: 200.79 Mbit/s

95th percentile per-packet one-way delay: 164.617 ms

Loss rate: 2.23%

-- Flow 2:

Average throughput: 155.70 Mbit/s

95th percentile per-packet one-way delay: 194.920 ms

Loss rate: 1.92%

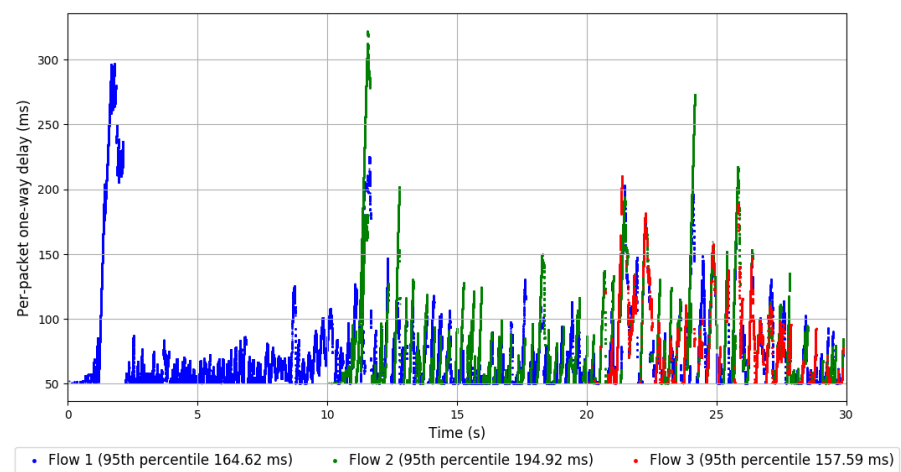
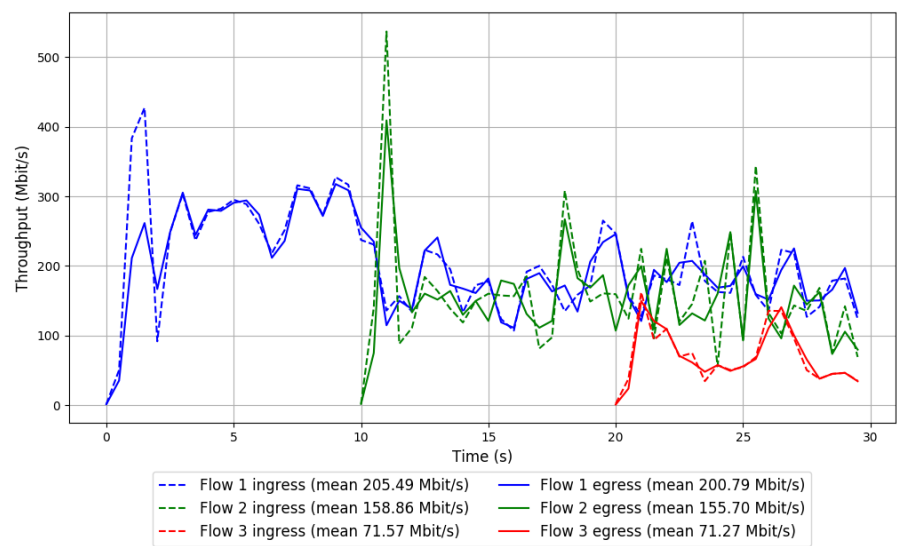
-- Flow 3:

Average throughput: 71.27 Mbit/s

95th percentile per-packet one-way delay: 157.587 ms

Loss rate: 0.26%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-03 02:43:55

End at: 2018-01-03 02:44:25

Below is generated by plot.py at 2018-01-03 05:58:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 336.50 Mbit/s

95th percentile per-packet one-way delay: 151.687 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 219.60 Mbit/s

95th percentile per-packet one-way delay: 148.831 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 141.28 Mbit/s

95th percentile per-packet one-way delay: 146.913 ms

Loss rate: 0.08%

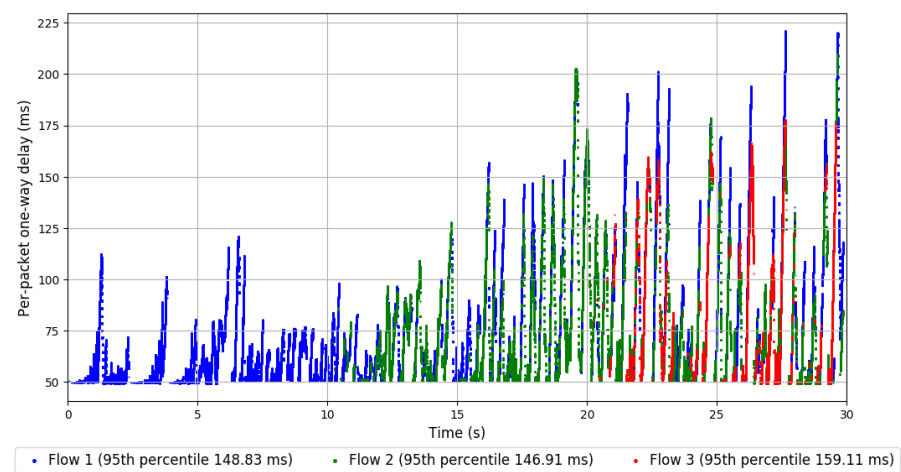
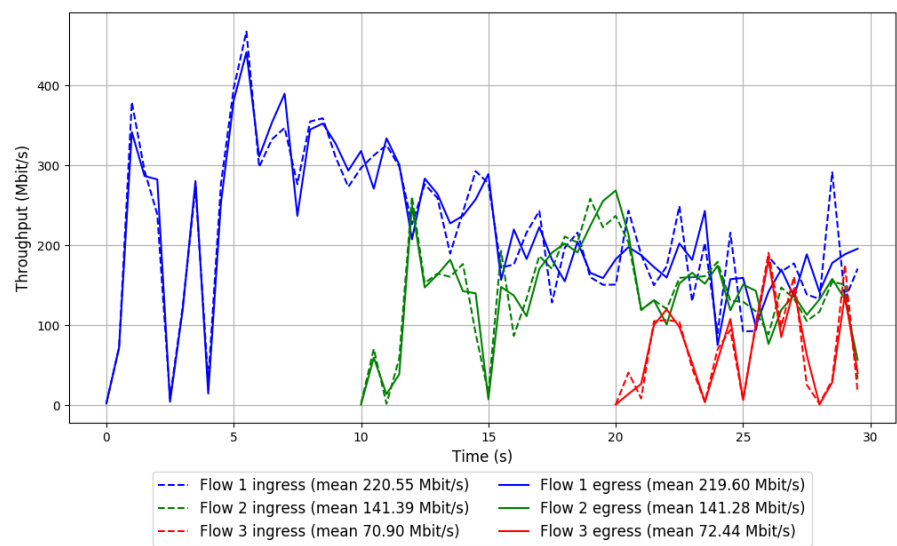
-- Flow 3:

Average throughput: 72.44 Mbit/s

95th percentile per-packet one-way delay: 159.106 ms

Loss rate: 1.19%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-03 02:57:28

End at: 2018-01-03 02:57:58

Below is generated by plot.py at 2018-01-03 05:59:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 284.13 Mbit/s

95th percentile per-packet one-way delay: 123.429 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 142.44 Mbit/s

95th percentile per-packet one-way delay: 119.986 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 157.18 Mbit/s

95th percentile per-packet one-way delay: 133.229 ms

Loss rate: 0.26%

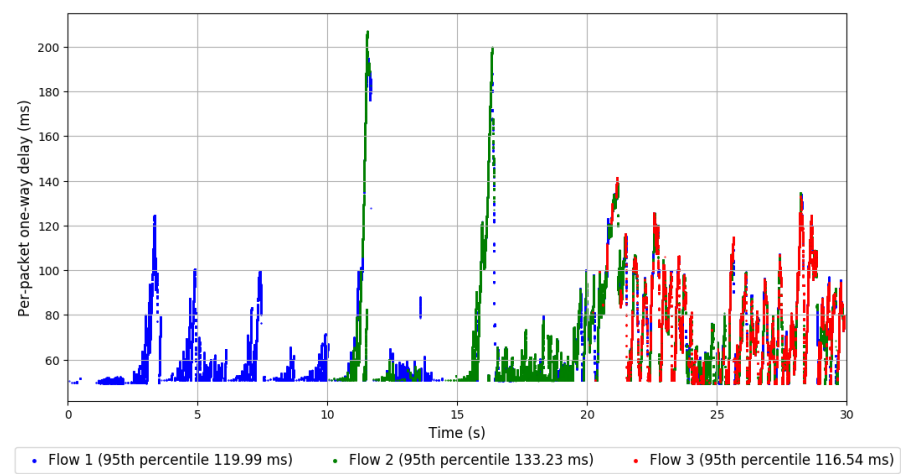
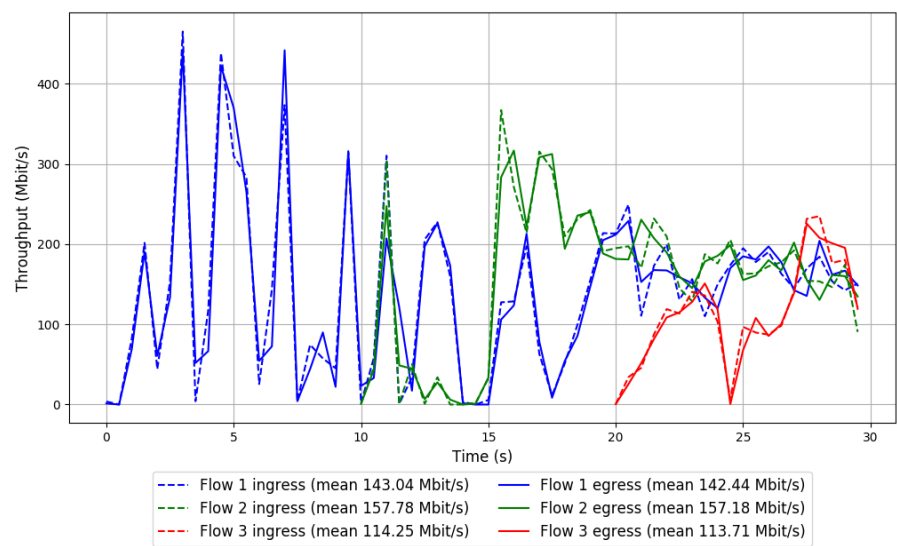
-- Flow 3:

Average throughput: 113.71 Mbit/s

95th percentile per-packet one-way delay: 116.543 ms

Loss rate: 0.62%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-03 03:10:54

End at: 2018-01-03 03:11:24

Below is generated by plot.py at 2018-01-03 06:00:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.01 Mbit/s

95th percentile per-packet one-way delay: 113.797 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 212.01 Mbit/s

95th percentile per-packet one-way delay: 107.308 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 100.96 Mbit/s

95th percentile per-packet one-way delay: 159.374 ms

Loss rate: 0.40%

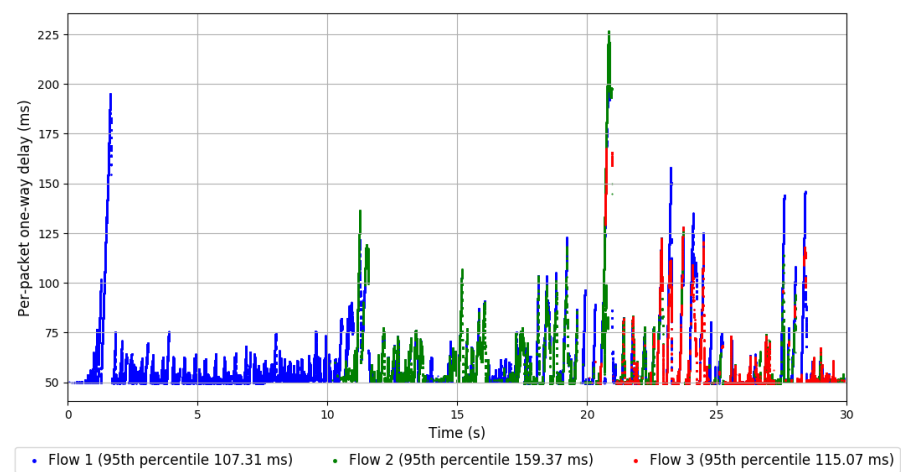
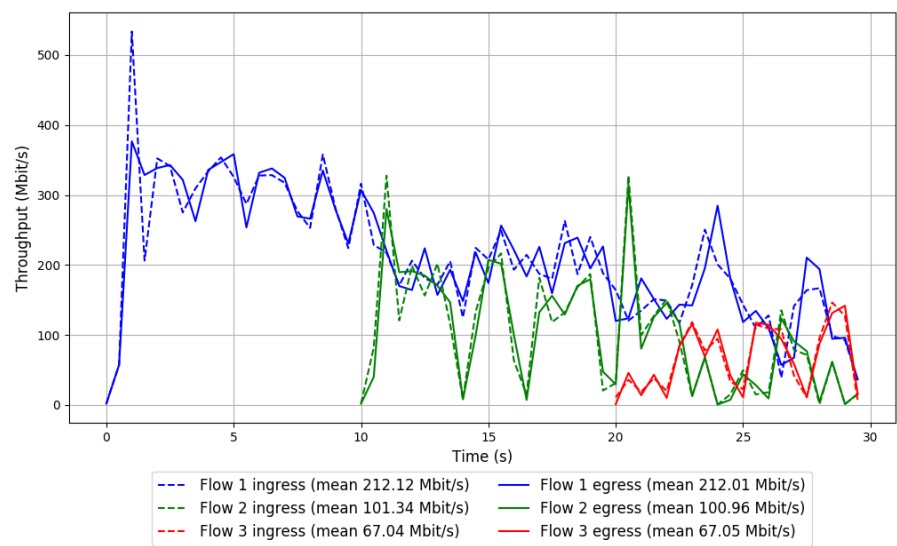
-- Flow 3:

Average throughput: 67.05 Mbit/s

95th percentile per-packet one-way delay: 115.071 ms

Loss rate: 0.00%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-03 03:24:16

End at: 2018-01-03 03:24:46

Below is generated by plot.py at 2018-01-03 06:00:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 336.77 Mbit/s

95th percentile per-packet one-way delay: 172.820 ms

Loss rate: 2.58%

-- Flow 1:

Average throughput: 179.13 Mbit/s

95th percentile per-packet one-way delay: 172.689 ms

Loss rate: 2.35%

-- Flow 2:

Average throughput: 167.58 Mbit/s

95th percentile per-packet one-way delay: 147.833 ms

Loss rate: 0.85%

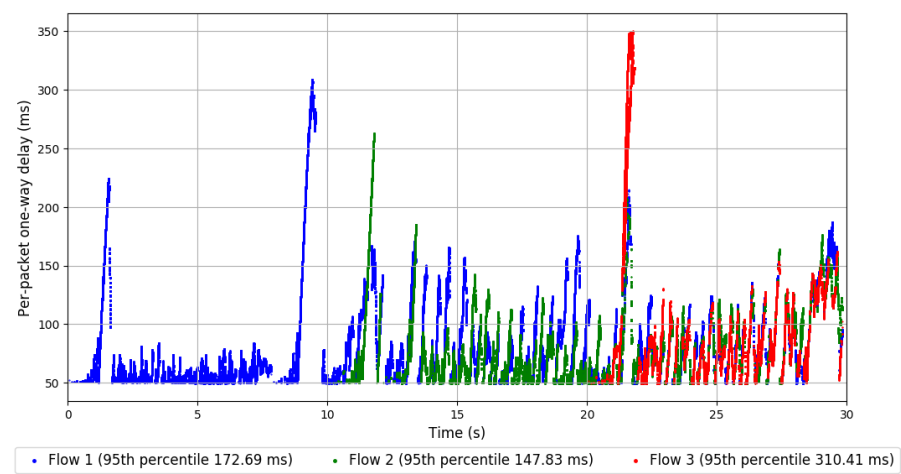
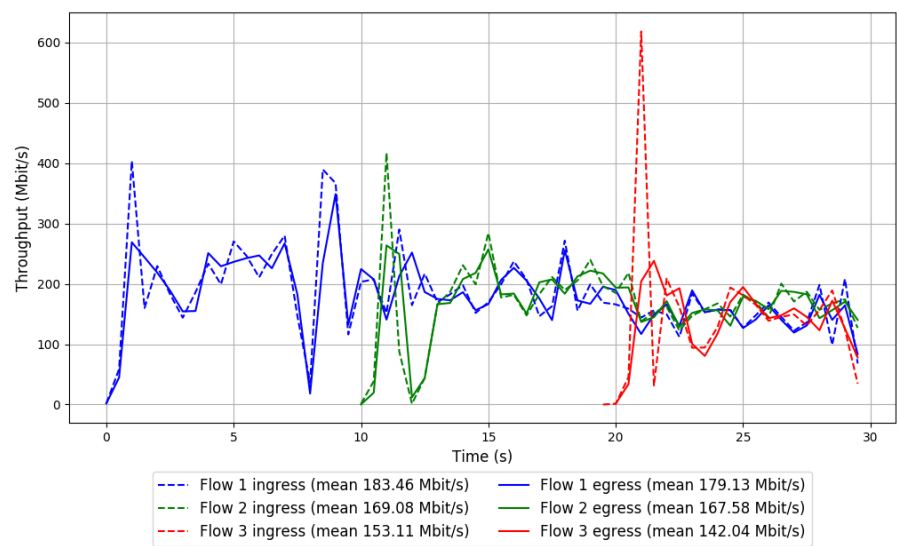
-- Flow 3:

Average throughput: 142.04 Mbit/s

95th percentile per-packet one-way delay: 310.408 ms

Loss rate: 7.25%

Run 10: Report of Verus — Data Link

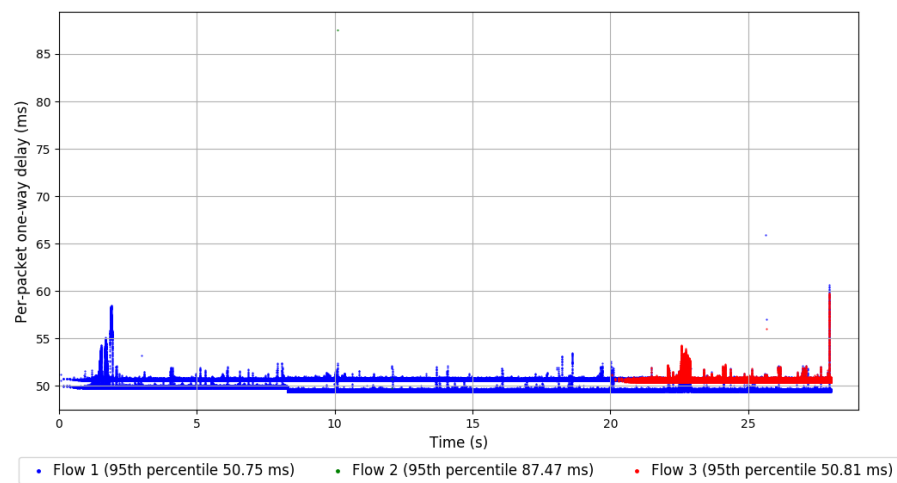
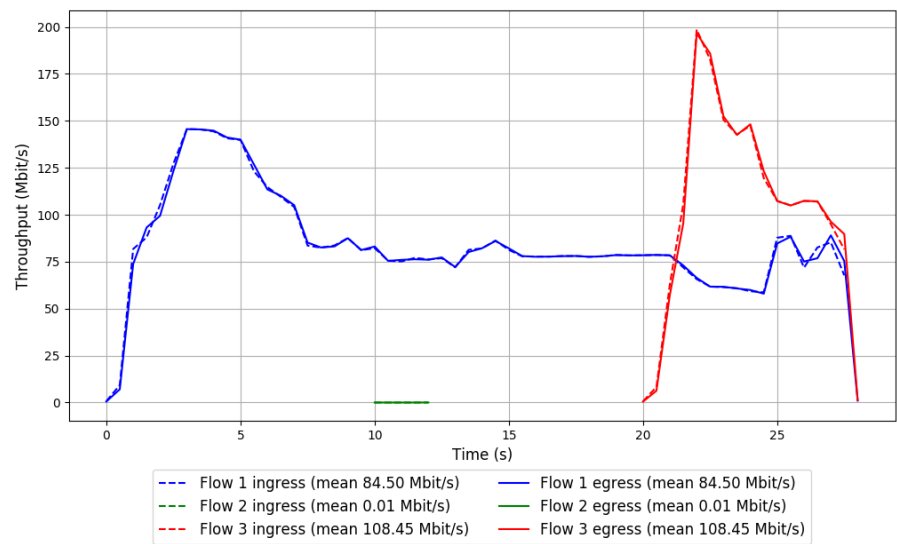


```
Run 1: Statistics of Copa

Start at: 2018-01-03 01:28:51
End at: 2018-01-03 01:29:21

# Below is generated by plot.py at 2018-01-03 06:00:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 115.30 Mbit/s
95th percentile per-packet one-way delay: 50.773 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 84.50 Mbit/s
95th percentile per-packet one-way delay: 50.753 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 87.474 ms
Loss rate: 46.17%
-- Flow 3:
Average throughput: 108.45 Mbit/s
95th percentile per-packet one-way delay: 50.814 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-03 01:42:28

End at: 2018-01-03 01:42:58

Below is generated by plot.py at 2018-01-03 06:00:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 149.10 Mbit/s

95th percentile per-packet one-way delay: 50.846 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.78 Mbit/s

95th percentile per-packet one-way delay: 50.798 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 77.50 Mbit/s

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

Loss rate: 0.00%

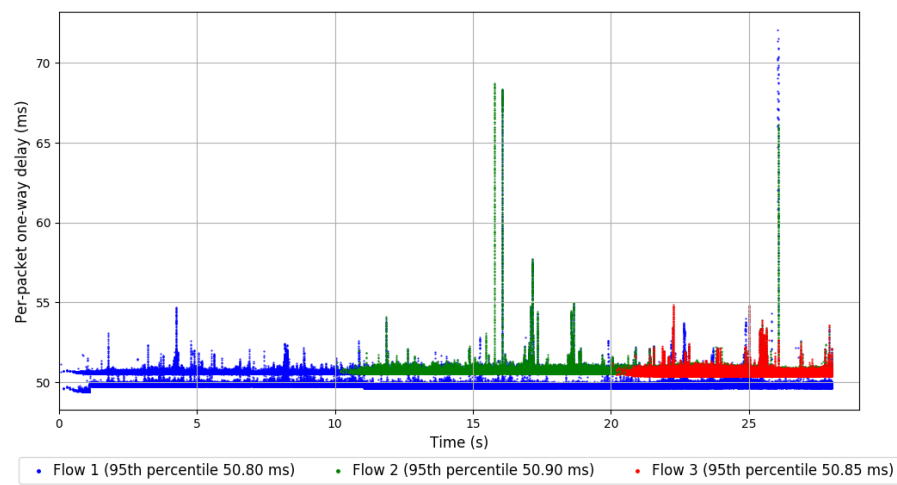
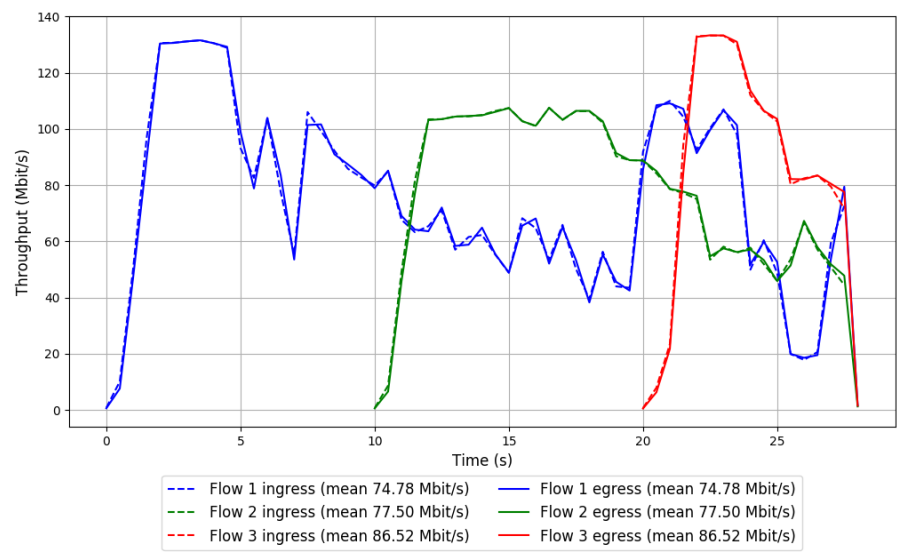
-- Flow 3:

Average throughput: 86.52 Mbit/s

95th percentile per-packet one-way delay: 50.850 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-03 01:56:08

End at: 2018-01-03 01:56:38

Below is generated by plot.py at 2018-01-03 06:00:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.25 Mbit/s

95th percentile per-packet one-way delay: 50.803 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 88.03 Mbit/s

95th percentile per-packet one-way delay: 50.804 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 86.170 ms

Loss rate: 46.17%

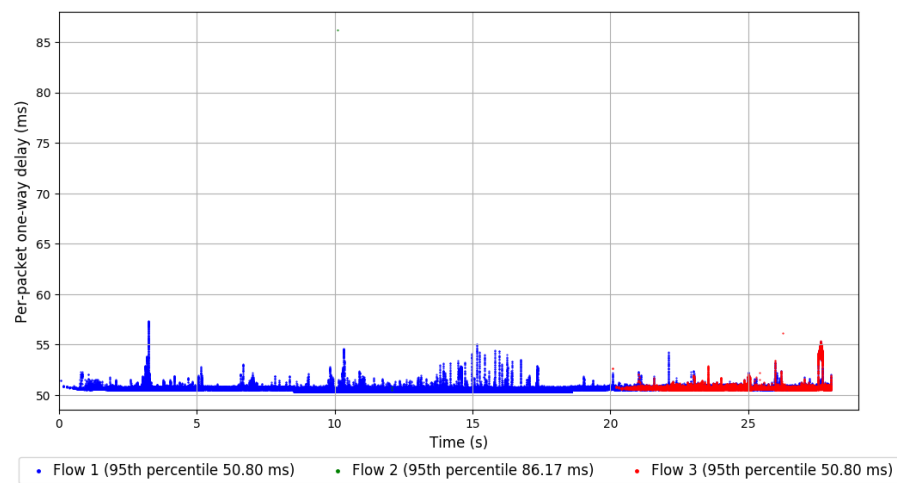
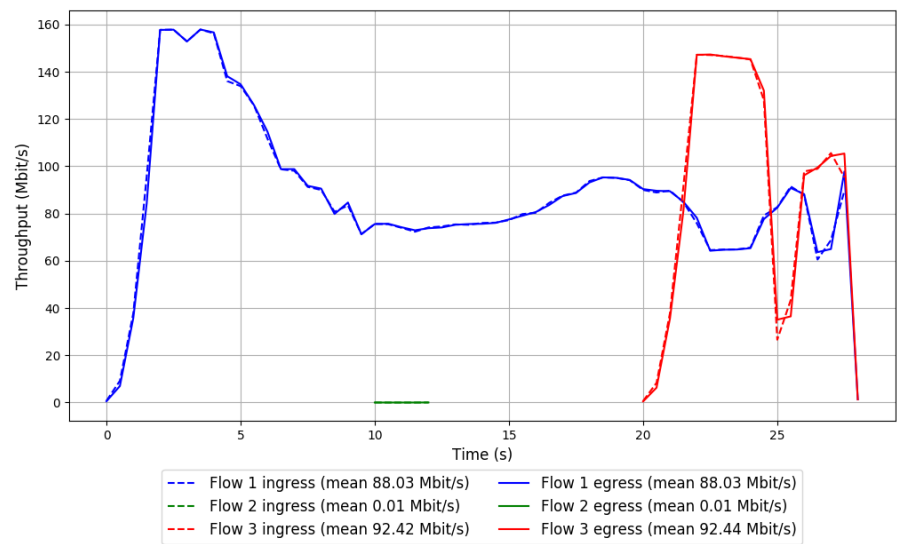
-- Flow 3:

Average throughput: 92.44 Mbit/s

95th percentile per-packet one-way delay: 50.798 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-03 02:09:45

End at: 2018-01-03 02:10:15

Below is generated by plot.py at 2018-01-03 06:01:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 161.87 Mbit/s

95th percentile per-packet one-way delay: 50.808 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 84.73 Mbit/s

95th percentile per-packet one-way delay: 50.759 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 89.03 Mbit/s

95th percentile per-packet one-way delay: 50.818 ms

Loss rate: 0.00%

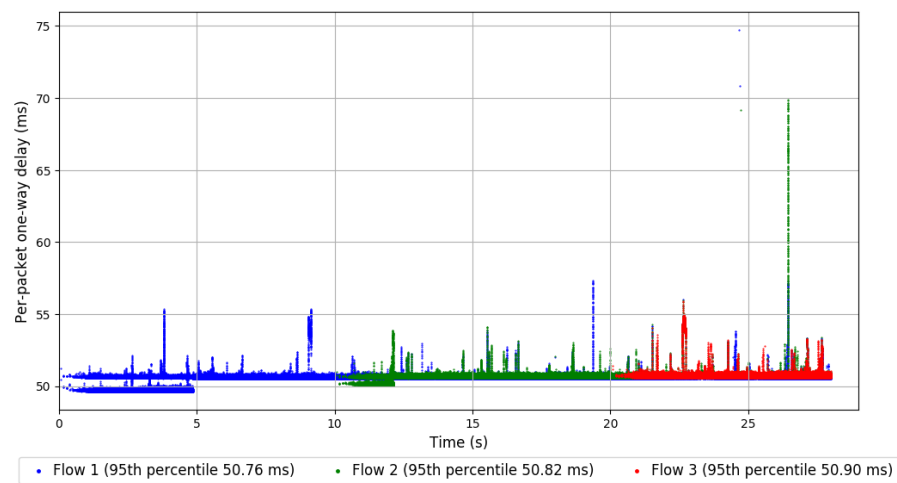
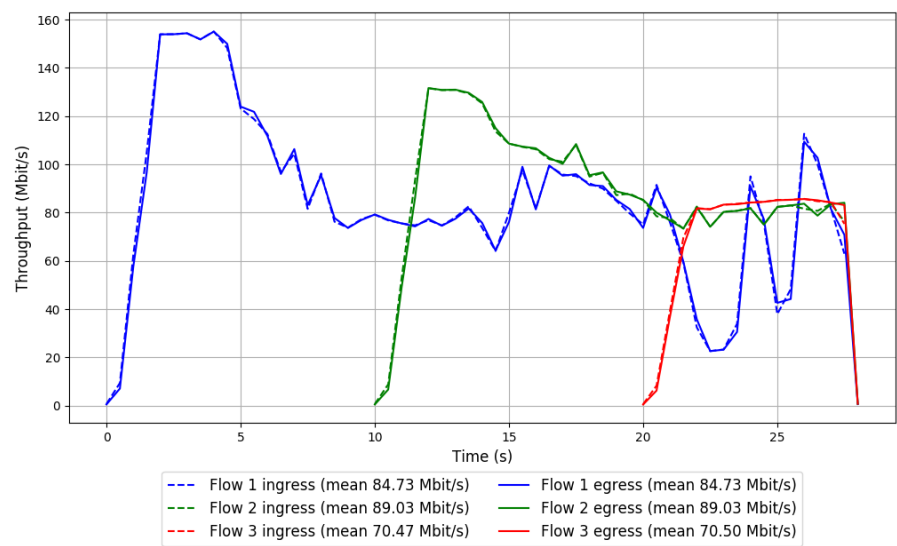
-- Flow 3:

Average throughput: 70.50 Mbit/s

95th percentile per-packet one-way delay: 50.895 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-03 02:23:16

End at: 2018-01-03 02:23:46

Below is generated by plot.py at 2018-01-03 06:03:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 147.86 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 78.04 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 79.20 Mbit/s

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

Loss rate: 0.00%

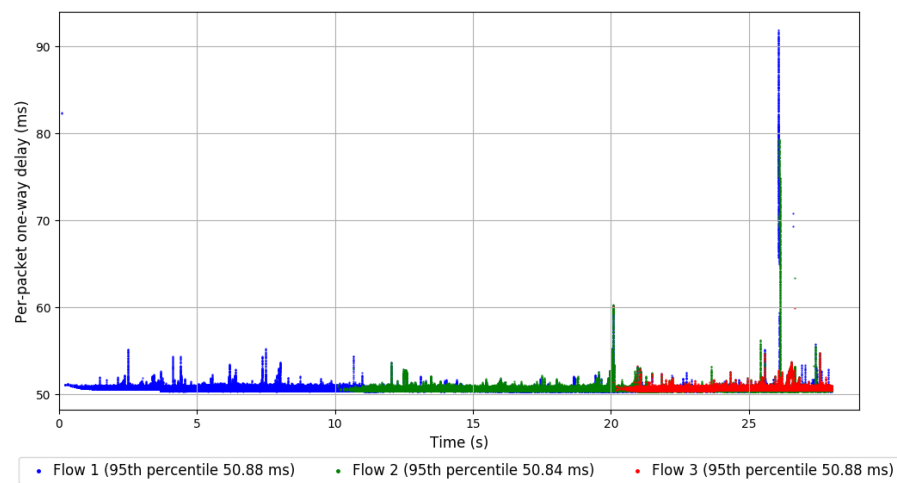
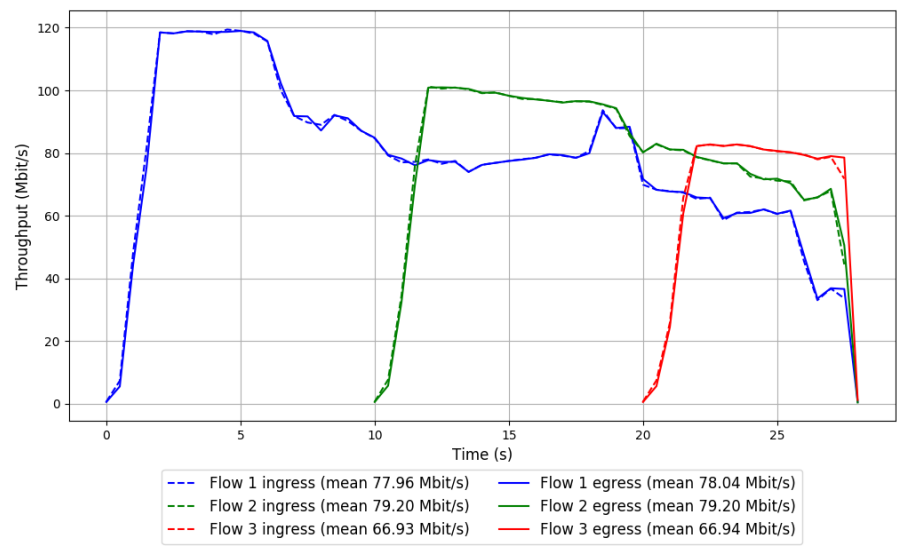
-- Flow 3:

Average throughput: 66.94 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-03 02:36:23

End at: 2018-01-03 02:36:53

Below is generated by plot.py at 2018-01-03 06:03:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.18 Mbit/s

95th percentile per-packet one-way delay: 51.640 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.93 Mbit/s

95th percentile per-packet one-way delay: 51.301 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.29 Mbit/s

95th percentile per-packet one-way delay: 51.649 ms

Loss rate: 0.00%

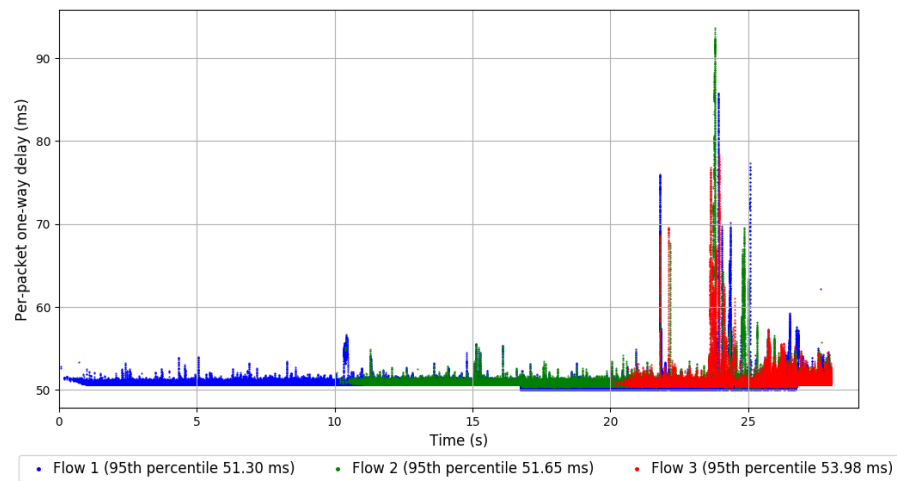
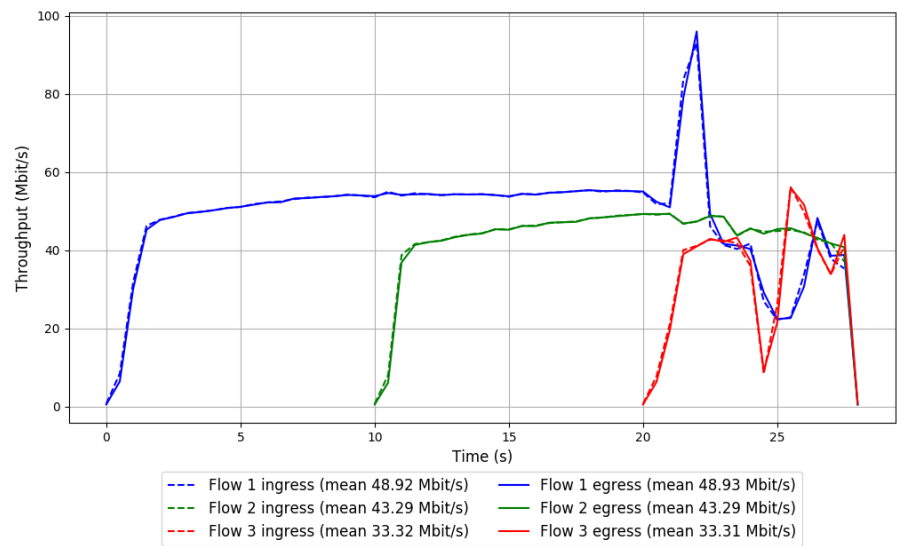
-- Flow 3:

Average throughput: 33.31 Mbit/s

95th percentile per-packet one-way delay: 53.982 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-03 02:49:37

End at: 2018-01-03 02:50:07

Below is generated by plot.py at 2018-01-03 06:03:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.02 Mbit/s

95th percentile per-packet one-way delay: 50.908 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 65.04 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 79.62 Mbit/s

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

Loss rate: 0.00%

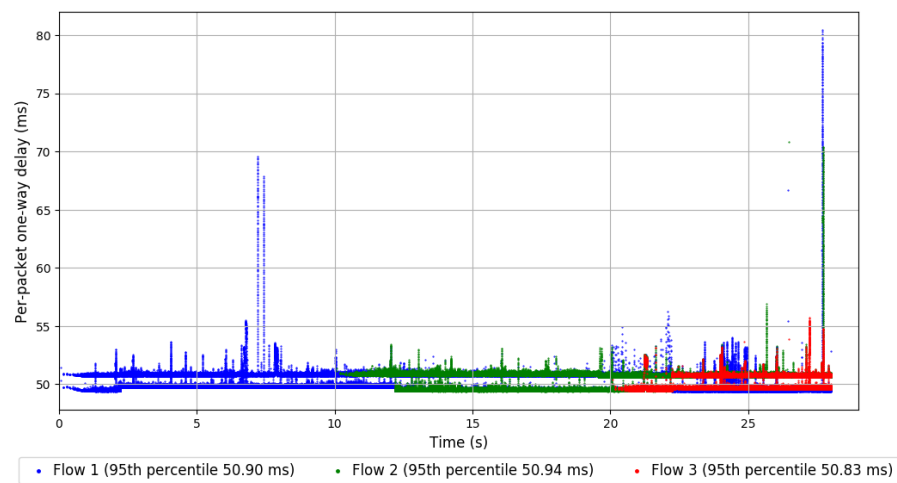
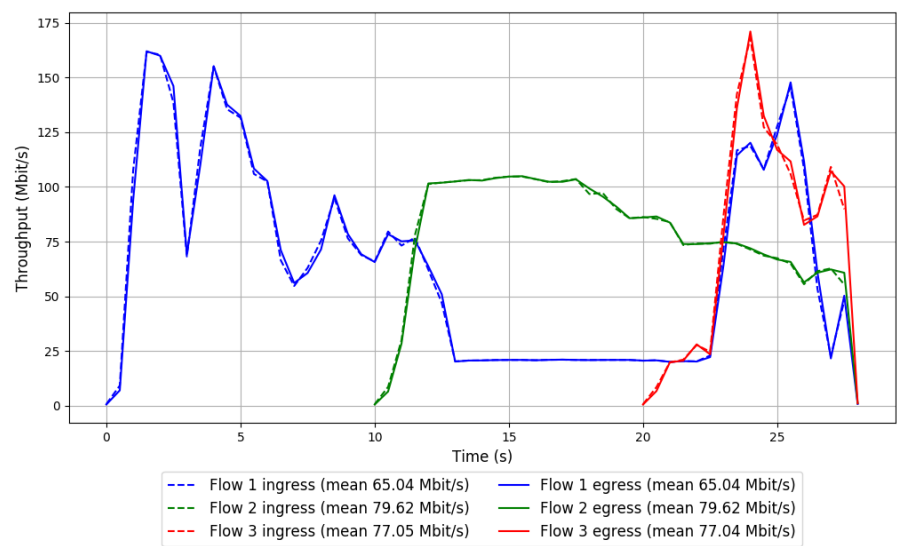
-- Flow 3:

Average throughput: 77.04 Mbit/s

95th percentile per-packet one-way delay: 50.826 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

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

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

Below is generated by plot.py at 2018-01-03 06:03:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.88 Mbit/s

95th percentile per-packet one-way delay: 50.929 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 79.73 Mbit/s

95th percentile per-packet one-way delay: 50.938 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 74.78 Mbit/s

95th percentile per-packet one-way delay: 50.938 ms

Loss rate: 0.00%

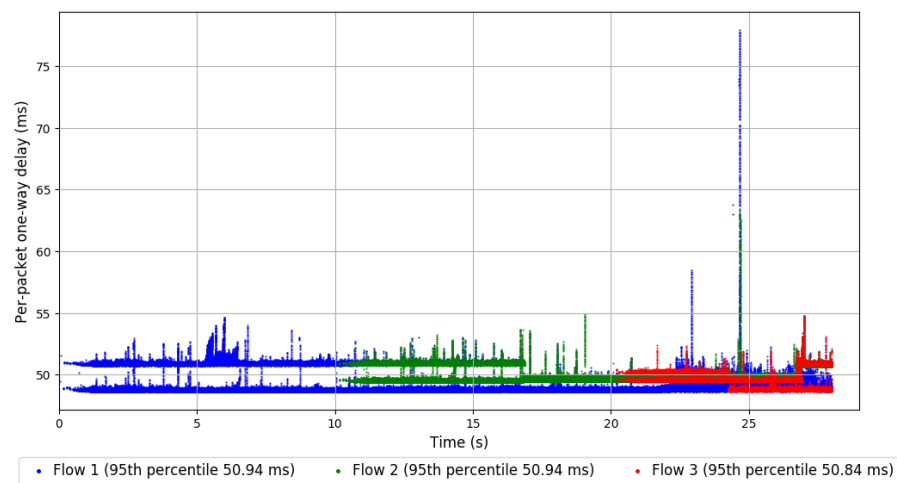
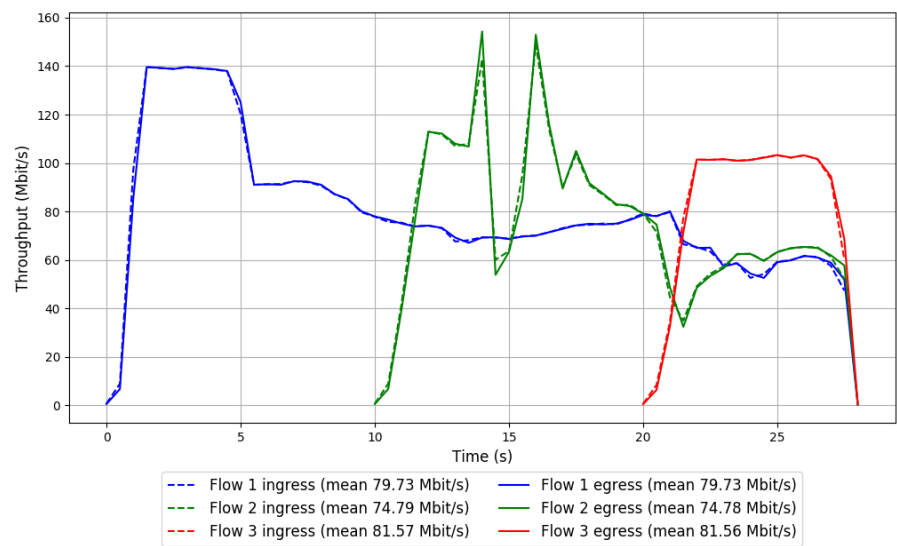
-- Flow 3:

Average throughput: 81.56 Mbit/s

95th percentile per-packet one-way delay: 50.837 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-03 03:16:35

End at: 2018-01-03 03:17:05

Below is generated by plot.py at 2018-01-03 06:04:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.23 Mbit/s

95th percentile per-packet one-way delay: 50.509 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 77.09 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 64.63 Mbit/s

95th percentile per-packet one-way delay: 50.601 ms

Loss rate: 0.00%

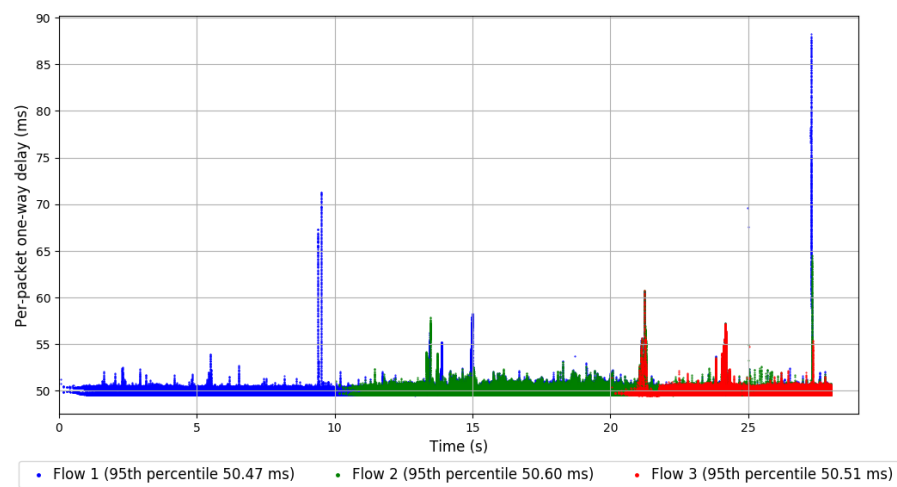
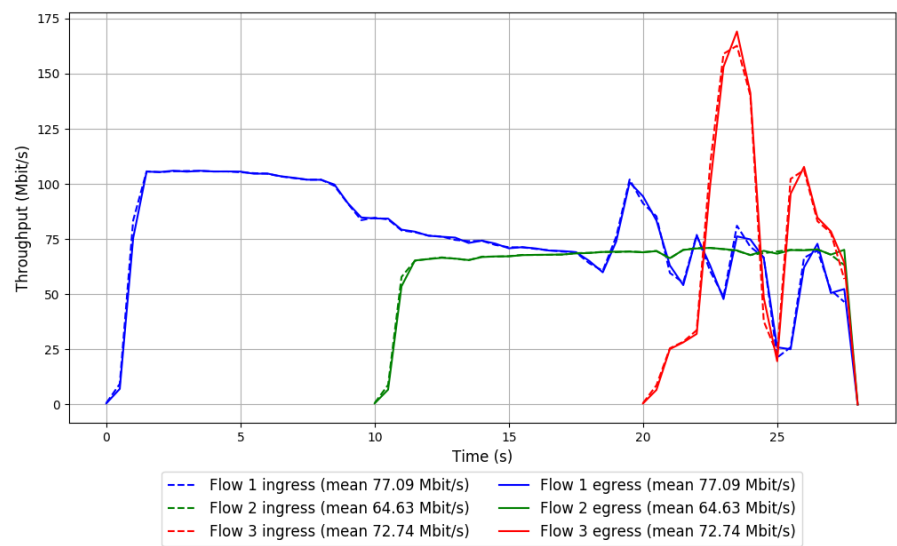
-- Flow 3:

Average throughput: 72.74 Mbit/s

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

Loss rate: 0.01%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-03 03:29:54

End at: 2018-01-03 03:30:24

Below is generated by plot.py at 2018-01-03 06:04:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.90 Mbit/s

95th percentile per-packet one-way delay: 51.201 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 55.77 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 61.75 Mbit/s

95th percentile per-packet one-way delay: 50.972 ms

Loss rate: 0.01%

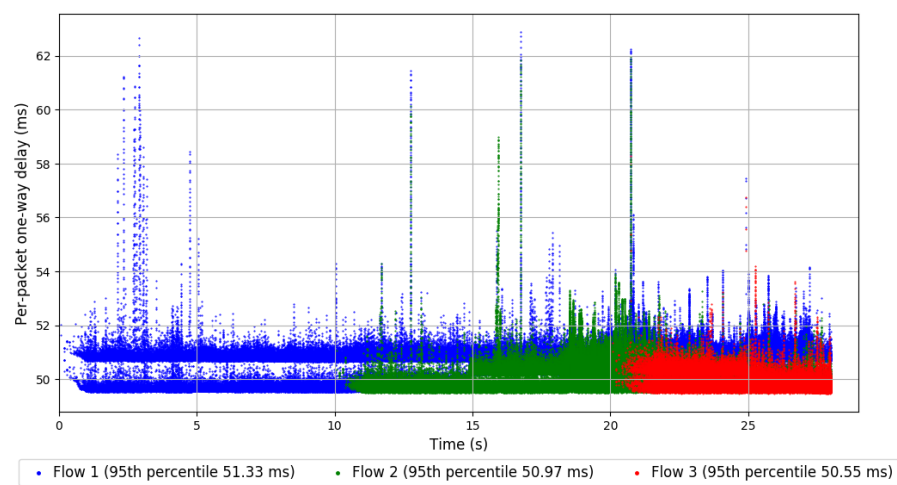
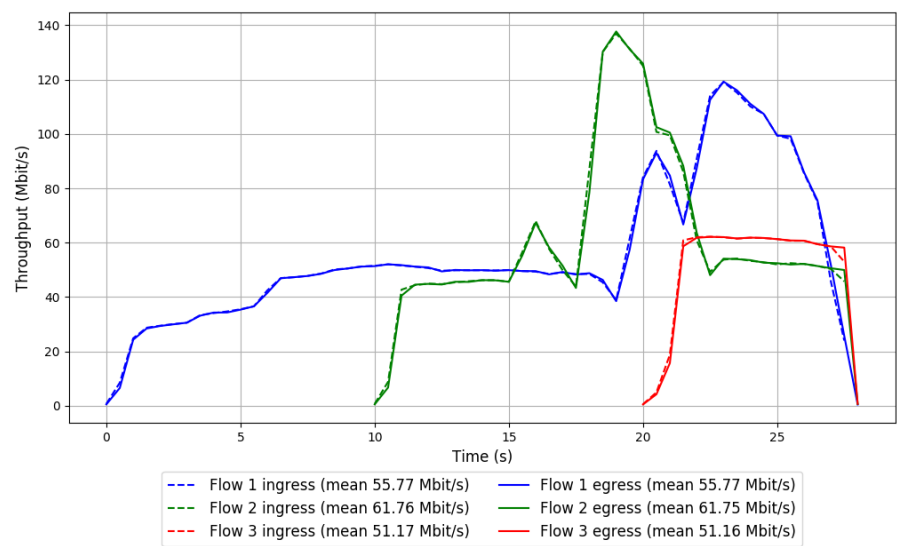
-- Flow 3:

Average throughput: 51.16 Mbit/s

95th percentile per-packet one-way delay: 50.554 ms

Loss rate: 0.02%

Run 10: Report of Copa — Data Link

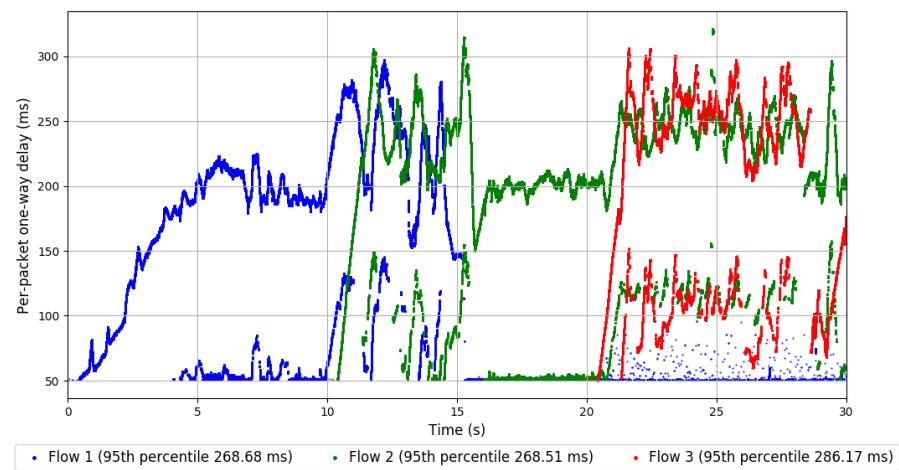
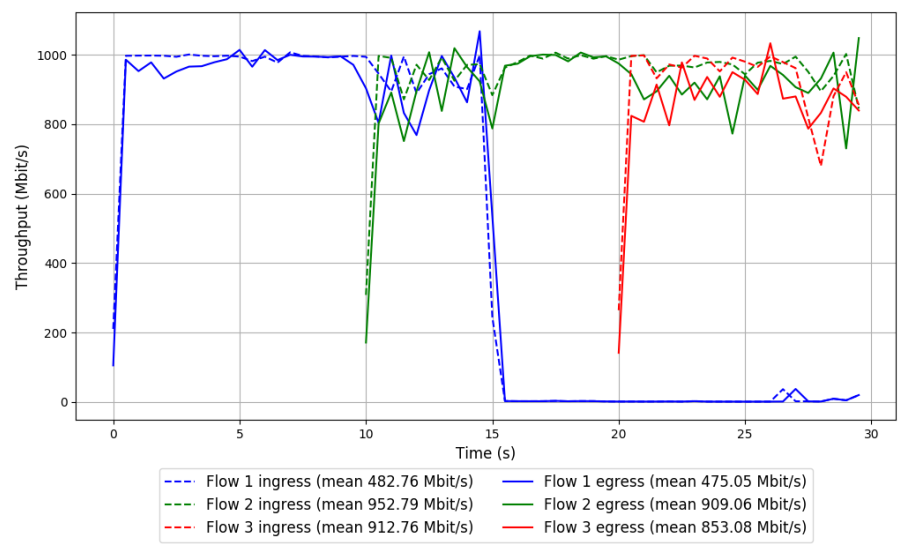


```
Run 1: Statistics of FillP

Start at: 2018-01-03 01:33:18
End at: 2018-01-03 01:33:48

# Below is generated by plot.py at 2018-01-03 06:25:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1362.81 Mbit/s
95th percentile per-packet one-way delay: 273.300 ms
Loss rate: 3.98%
-- Flow 1:
Average throughput: 475.05 Mbit/s
95th percentile per-packet one-way delay: 268.683 ms
Loss rate: 1.59%
-- Flow 2:
Average throughput: 909.06 Mbit/s
95th percentile per-packet one-way delay: 268.512 ms
Loss rate: 4.59%
-- Flow 3:
Average throughput: 853.08 Mbit/s
95th percentile per-packet one-way delay: 286.165 ms
Loss rate: 6.53%
```


Run 1: Report of FillP — Data Link

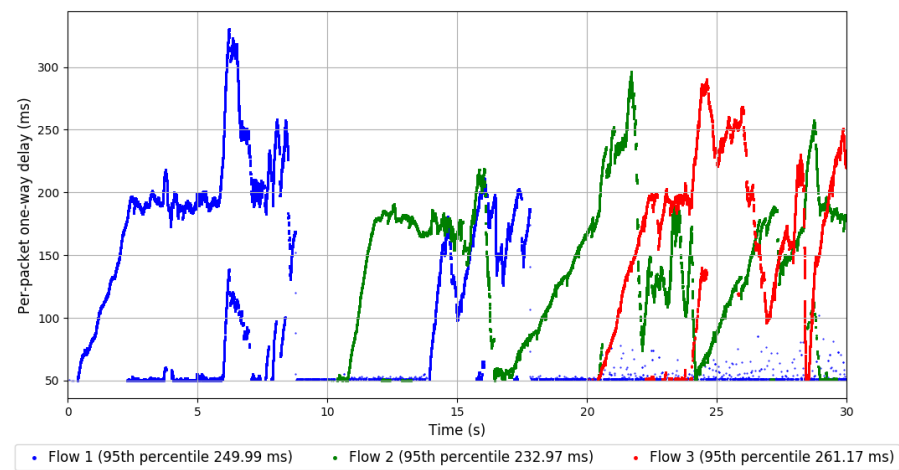
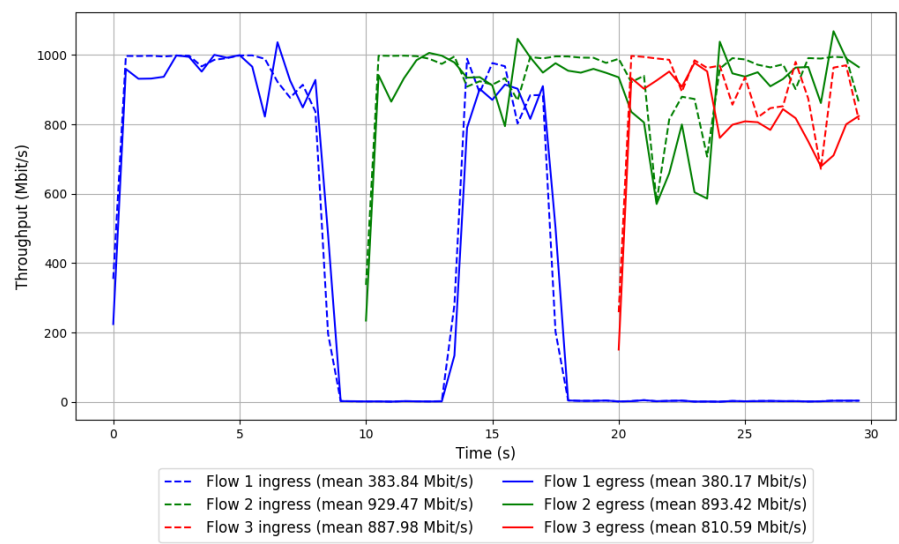


```
Run 2: Statistics of FillP

Start at: 2018-01-03 01:46:55
End at: 2018-01-03 01:47:25

# Below is generated by plot.py at 2018-01-03 06:25:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1243.11 Mbit/s
95th percentile per-packet one-way delay: 248.185 ms
Loss rate: 4.11%
-- Flow 1:
Average throughput: 380.17 Mbit/s
95th percentile per-packet one-way delay: 249.992 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 893.42 Mbit/s
95th percentile per-packet one-way delay: 232.968 ms
Loss rate: 3.88%
-- Flow 3:
Average throughput: 810.59 Mbit/s
95th percentile per-packet one-way delay: 261.166 ms
Loss rate: 8.70%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-03 02:00:34

End at: 2018-01-03 02:01:04

Below is generated by plot.py at 2018-01-03 06:28:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 1478.67 Mbit/s

95th percentile per-packet one-way delay: 273.819 ms

Loss rate: 4.50%

-- Flow 1:

Average throughput: 907.05 Mbit/s

95th percentile per-packet one-way delay: 238.729 ms

Loss rate: 3.78%

-- Flow 2:

Average throughput: 719.09 Mbit/s

95th percentile per-packet one-way delay: 291.259 ms

Loss rate: 5.98%

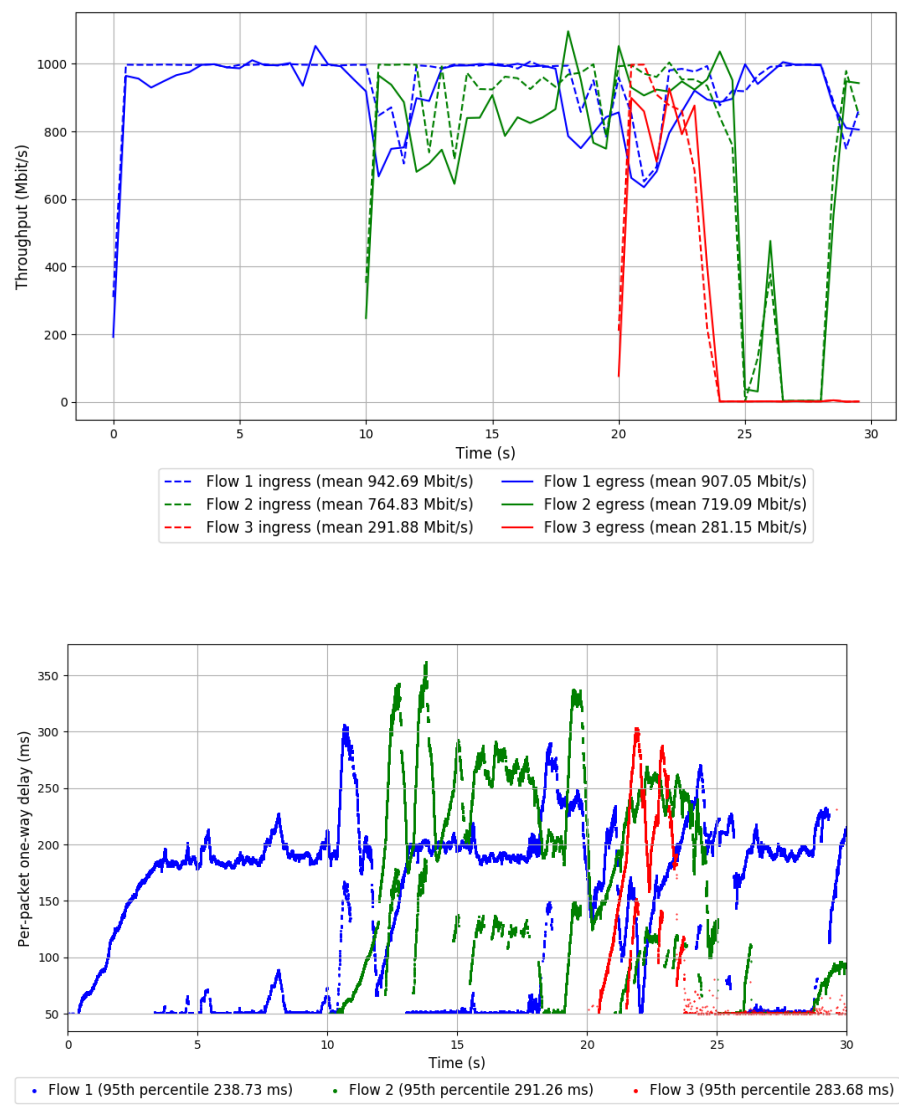
-- Flow 3:

Average throughput: 281.15 Mbit/s

95th percentile per-packet one-way delay: 283.677 ms

Loss rate: 3.68%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-03 02:14:13

End at: 2018-01-03 02:14:43

Below is generated by plot.py at 2018-01-03 06:32:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 1540.25 Mbit/s

95th percentile per-packet one-way delay: 278.539 ms

Loss rate: 7.09%

-- Flow 1:

Average throughput: 716.70 Mbit/s

95th percentile per-packet one-way delay: 278.462 ms

Loss rate: 5.37%

-- Flow 2:

Average throughput: 850.37 Mbit/s

95th percentile per-packet one-way delay: 274.807 ms

Loss rate: 7.32%

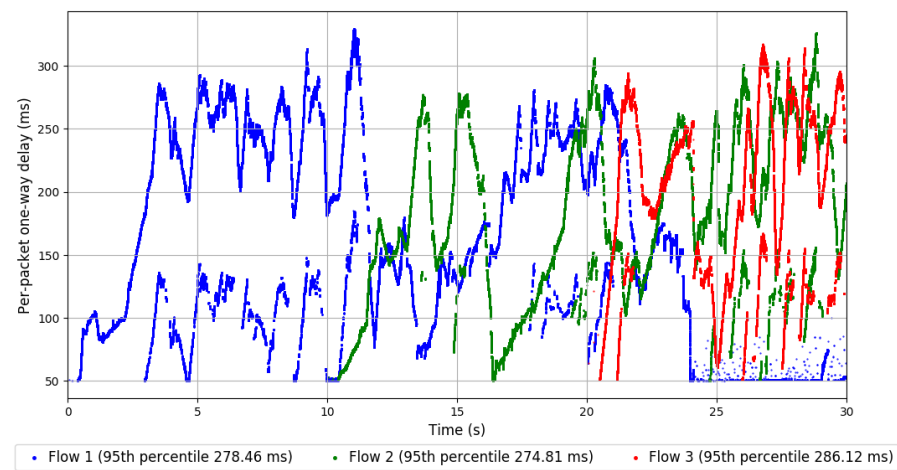
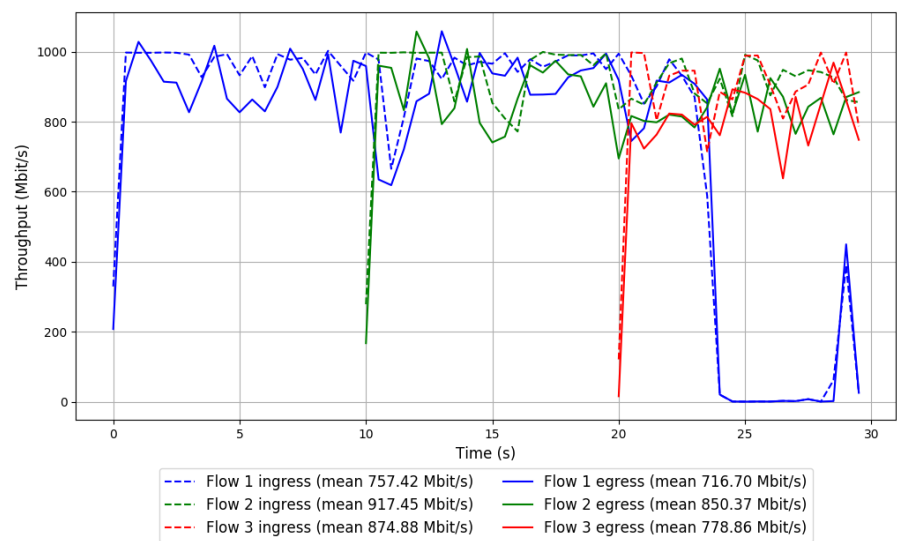
-- Flow 3:

Average throughput: 778.86 Mbit/s

95th percentile per-packet one-way delay: 286.121 ms

Loss rate: 11.08%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-03 02:27:43

End at: 2018-01-03 02:28:13

Below is generated by plot.py at 2018-01-03 06:32:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 1095.77 Mbit/s

95th percentile per-packet one-way delay: 240.447 ms

Loss rate: 18.78%

-- Flow 1:

Average throughput: 565.37 Mbit/s

95th percentile per-packet one-way delay: 244.471 ms

Loss rate: 18.36%

-- Flow 2:

Average throughput: 480.10 Mbit/s

95th percentile per-packet one-way delay: 237.110 ms

Loss rate: 21.06%

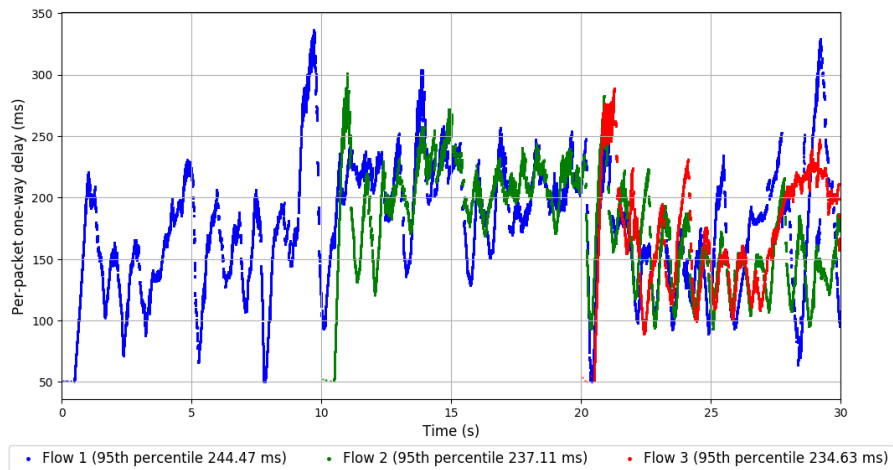
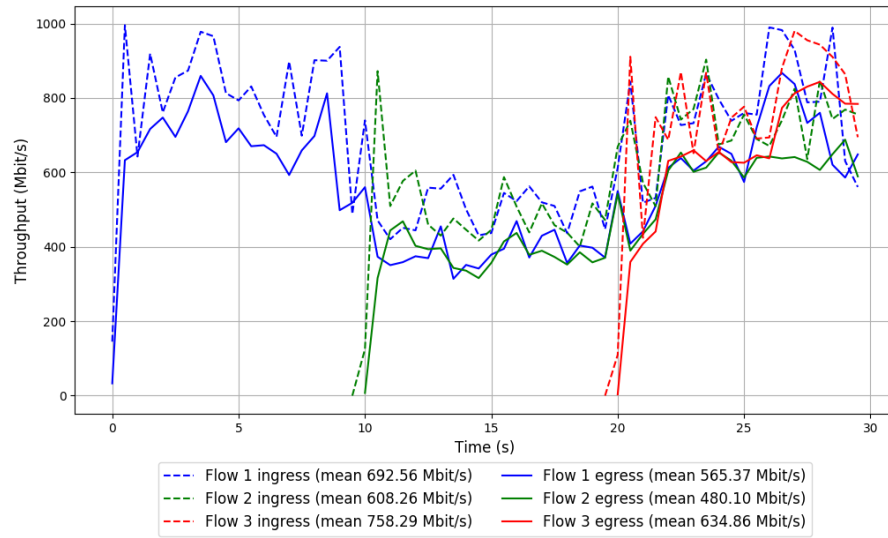
-- Flow 3:

Average throughput: 634.86 Mbit/s

95th percentile per-packet one-way delay: 234.633 ms

Loss rate: 16.28%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-03 02:40:39

End at: 2018-01-03 02:41:09

Below is generated by plot.py at 2018-01-03 06:32:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 1416.12 Mbit/s

95th percentile per-packet one-way delay: 266.859 ms

Loss rate: 12.35%

-- Flow 1:

Average throughput: 753.49 Mbit/s

95th percentile per-packet one-way delay: 268.960 ms

Loss rate: 10.84%

-- Flow 2:

Average throughput: 690.53 Mbit/s

95th percentile per-packet one-way delay: 239.587 ms

Loss rate: 13.45%

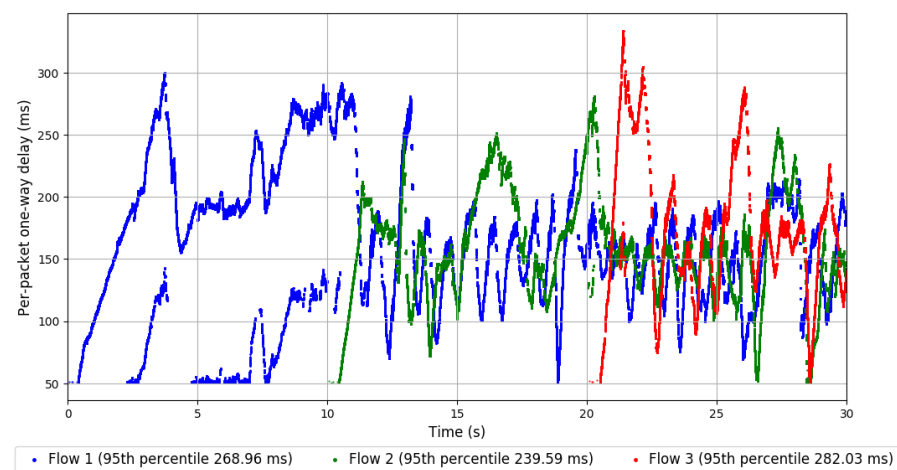
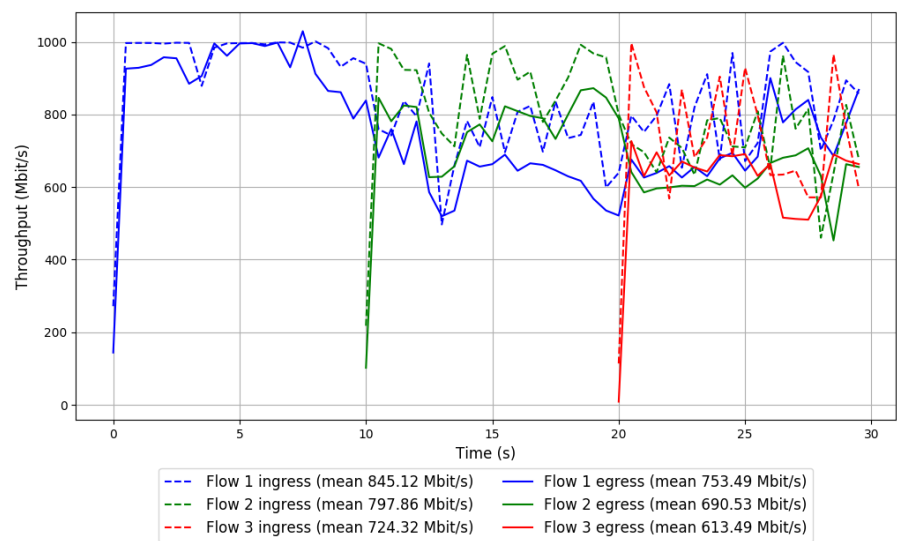
-- Flow 3:

Average throughput: 613.49 Mbit/s

95th percentile per-packet one-way delay: 282.034 ms

Loss rate: 15.24%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-03 02:54:04

End at: 2018-01-03 02:54:34

Below is generated by plot.py at 2018-01-03 06:34:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 1577.75 Mbit/s

95th percentile per-packet one-way delay: 265.118 ms

Loss rate: 9.09%

-- Flow 1:

Average throughput: 805.42 Mbit/s

95th percentile per-packet one-way delay: 257.992 ms

Loss rate: 9.44%

-- Flow 2:

Average throughput: 834.29 Mbit/s

95th percentile per-packet one-way delay: 269.236 ms

Loss rate: 6.10%

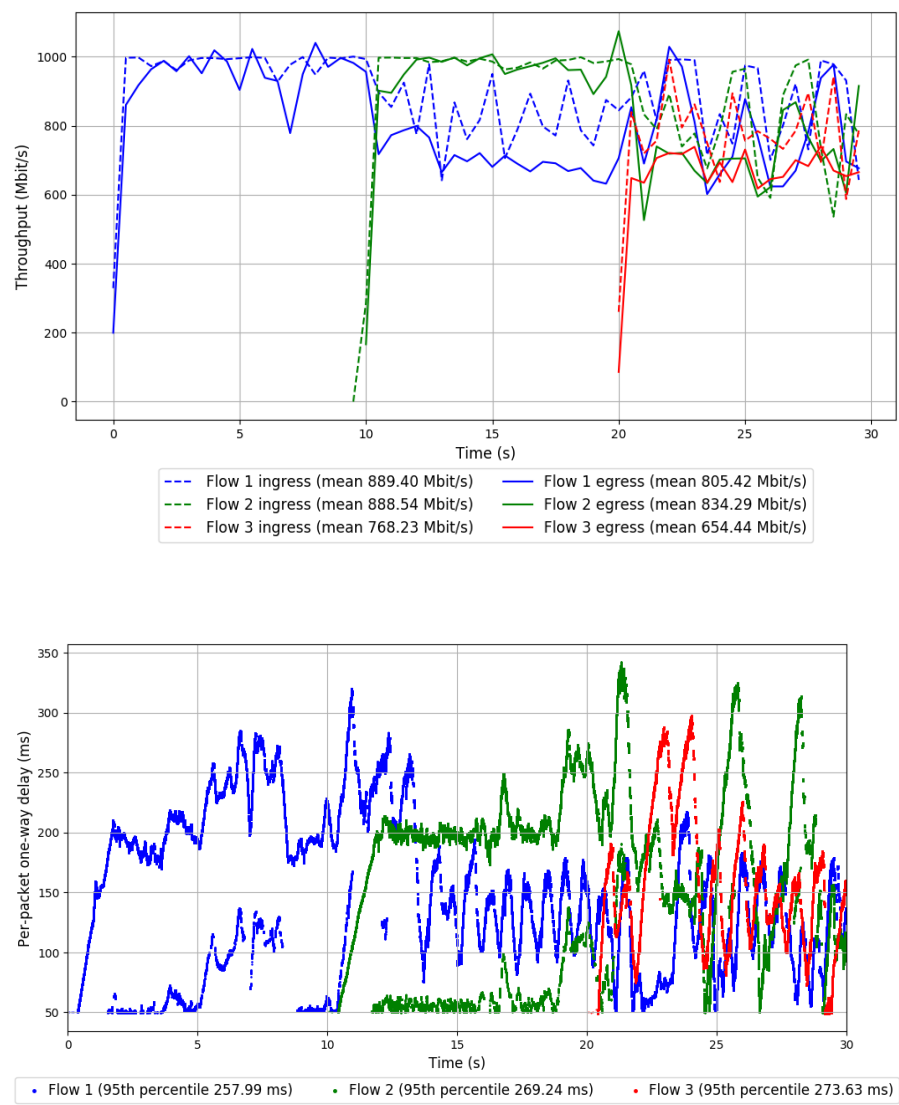
-- Flow 3:

Average throughput: 654.44 Mbit/s

95th percentile per-packet one-way delay: 273.630 ms

Loss rate: 14.81%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-03 03:07:41

End at: 2018-01-03 03:08:11

Below is generated by plot.py at 2018-01-03 06:34:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 1245.28 Mbit/s

95th percentile per-packet one-way delay: 261.890 ms

Loss rate: 3.05%

-- Flow 1:

Average throughput: 554.12 Mbit/s

95th percentile per-packet one-way delay: 272.524 ms

Loss rate: 2.67%

-- Flow 2:

Average throughput: 883.75 Mbit/s

95th percentile per-packet one-way delay: 234.913 ms

Loss rate: 3.87%

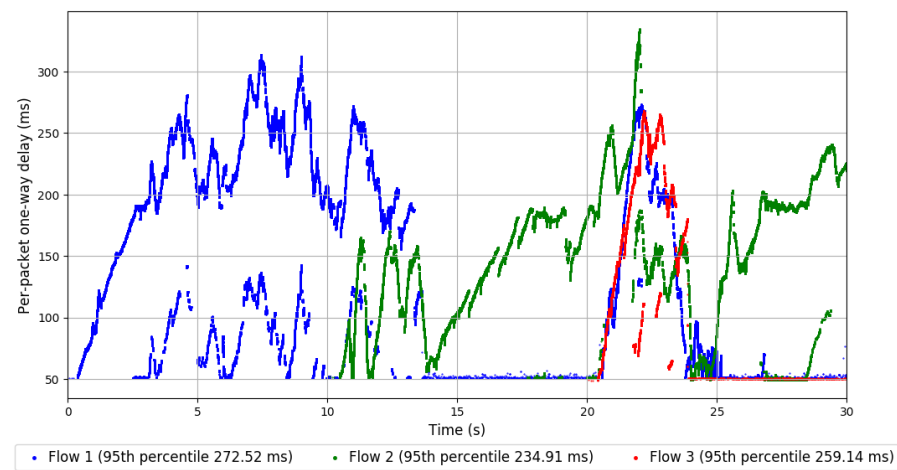
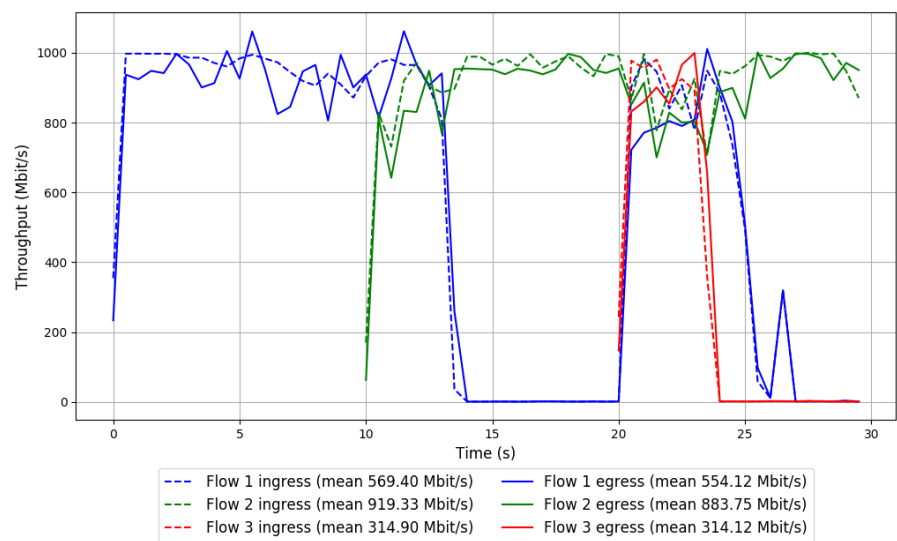
-- Flow 3:

Average throughput: 314.12 Mbit/s

95th percentile per-packet one-way delay: 259.139 ms

Loss rate: 0.24%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

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

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

Below is generated by plot.py at 2018-01-03 06:40:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 1054.24 Mbit/s

95th percentile per-packet one-way delay: 242.724 ms

Loss rate: 18.17%

-- Flow 1:

Average throughput: 508.47 Mbit/s

95th percentile per-packet one-way delay: 254.963 ms

Loss rate: 17.04%

-- Flow 2:

Average throughput: 516.91 Mbit/s

95th percentile per-packet one-way delay: 231.346 ms

Loss rate: 21.15%

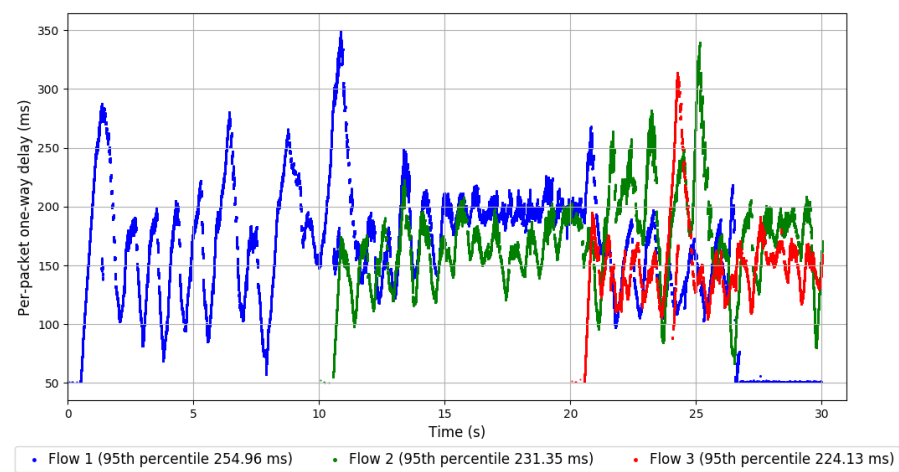
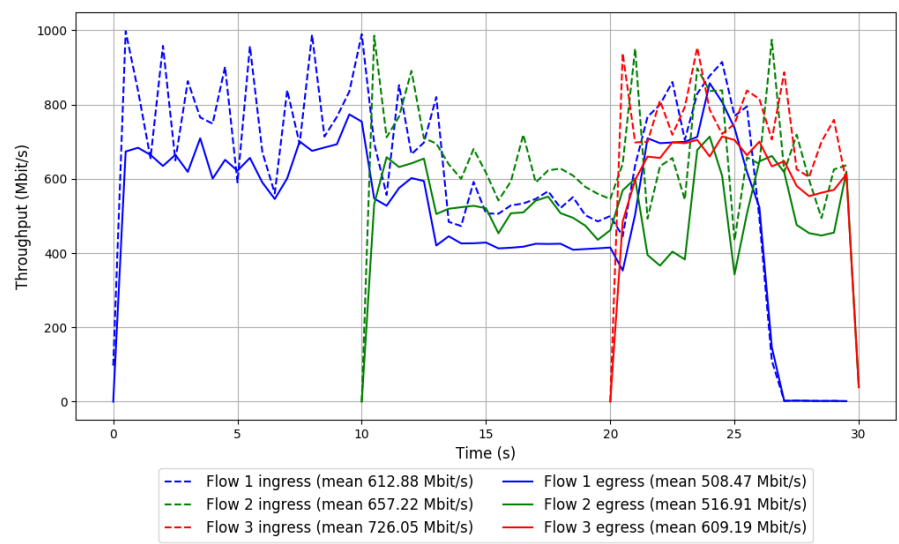
-- Flow 3:

Average throughput: 609.19 Mbit/s

95th percentile per-packet one-way delay: 224.126 ms

Loss rate: 15.66%

Run 9: Report of FillP — Data Link

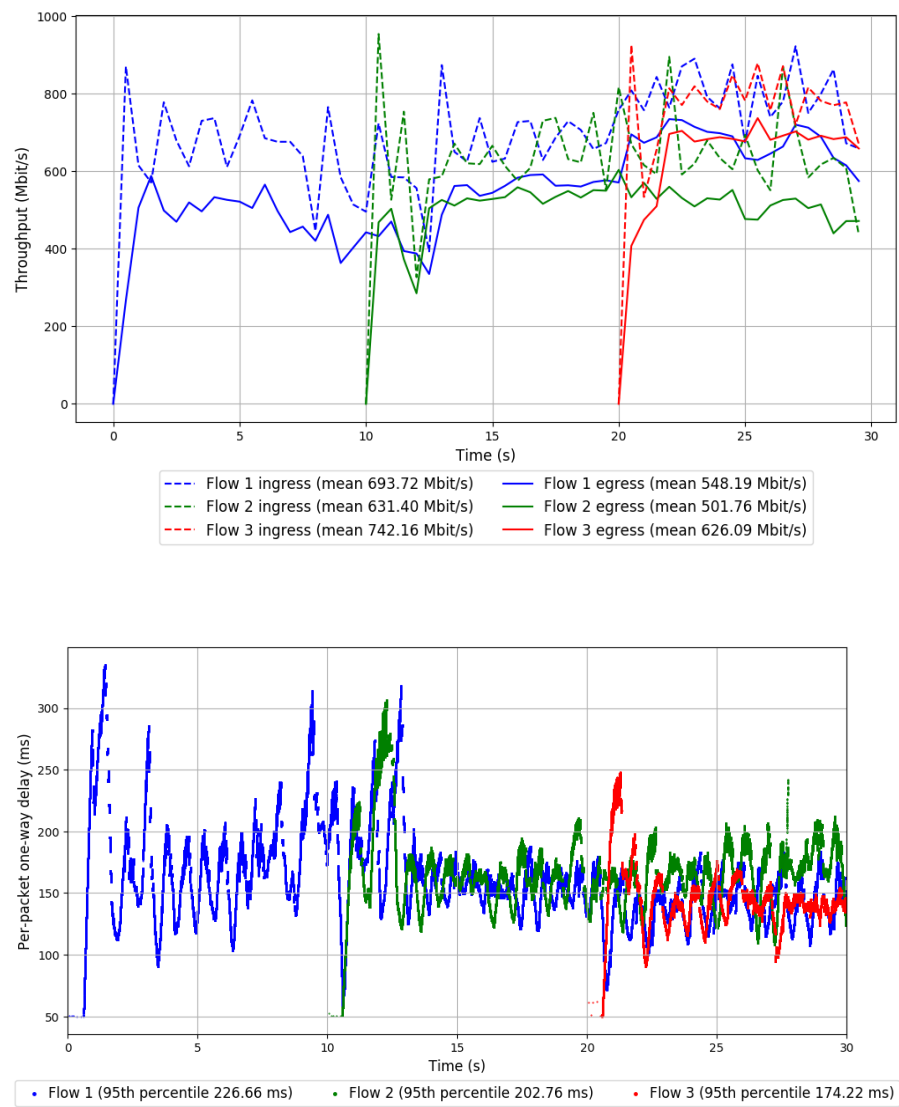


```
Run 10: Statistics of FillP

Start at: 2018-01-03 03:34:11
End at: 2018-01-03 03:34:41

# Below is generated by plot.py at 2018-01-03 06:40:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1089.64 Mbit/s
95th percentile per-packet one-way delay: 212.364 ms
Loss rate: 19.89%
-- Flow 1:
Average throughput: 548.19 Mbit/s
95th percentile per-packet one-way delay: 226.665 ms
Loss rate: 20.97%
-- Flow 2:
Average throughput: 501.76 Mbit/s
95th percentile per-packet one-way delay: 202.758 ms
Loss rate: 20.54%
-- Flow 3:
Average throughput: 626.09 Mbit/s
95th percentile per-packet one-way delay: 174.218 ms
Loss rate: 15.73%
```

Run 10: Report of FillP — Data Link

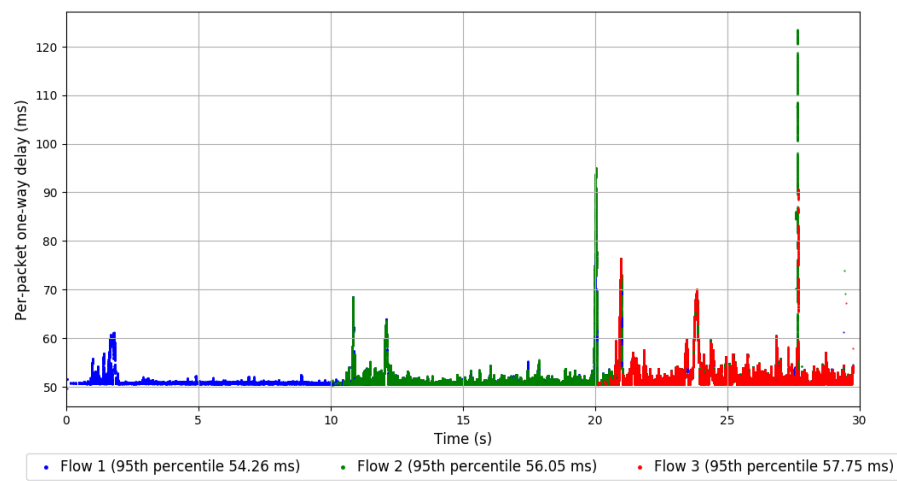
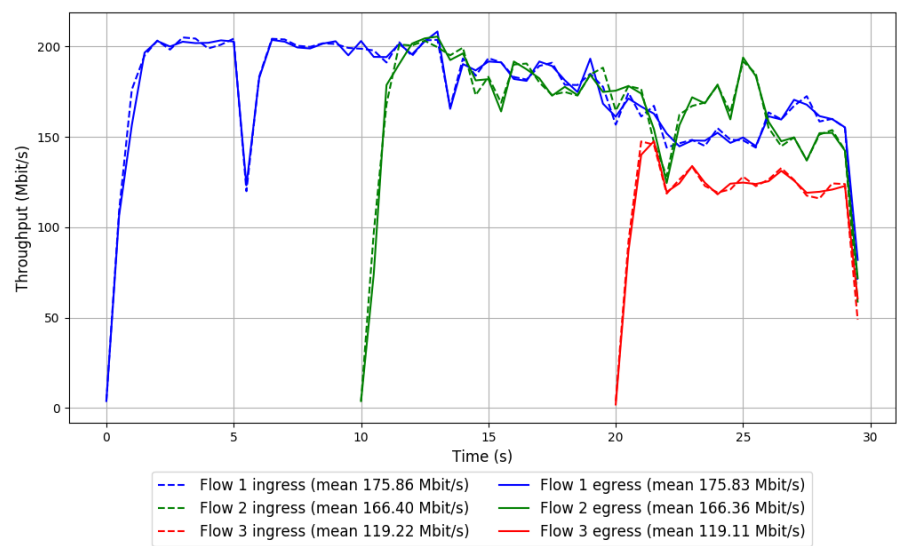


```
Run 1: Statistics of Indigo

Start at: 2018-01-03 01:25:12
End at: 2018-01-03 01:25:42

# Below is generated by plot.py at 2018-01-03 06:40:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 324.74 Mbit/s
95th percentile per-packet one-way delay: 55.524 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 175.83 Mbit/s
95th percentile per-packet one-way delay: 54.256 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 166.36 Mbit/s
95th percentile per-packet one-way delay: 56.054 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 119.11 Mbit/s
95th percentile per-packet one-way delay: 57.752 ms
Loss rate: 0.09%
```

Run 1: Report of Indigo — Data Link

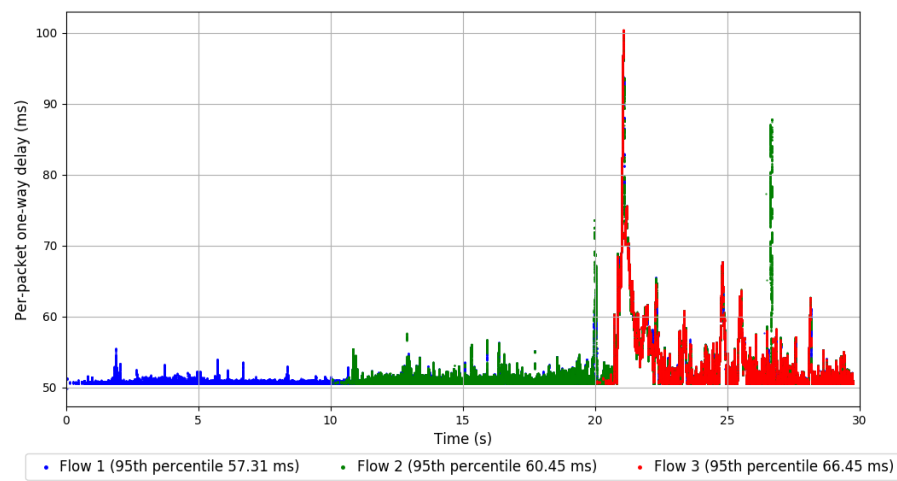
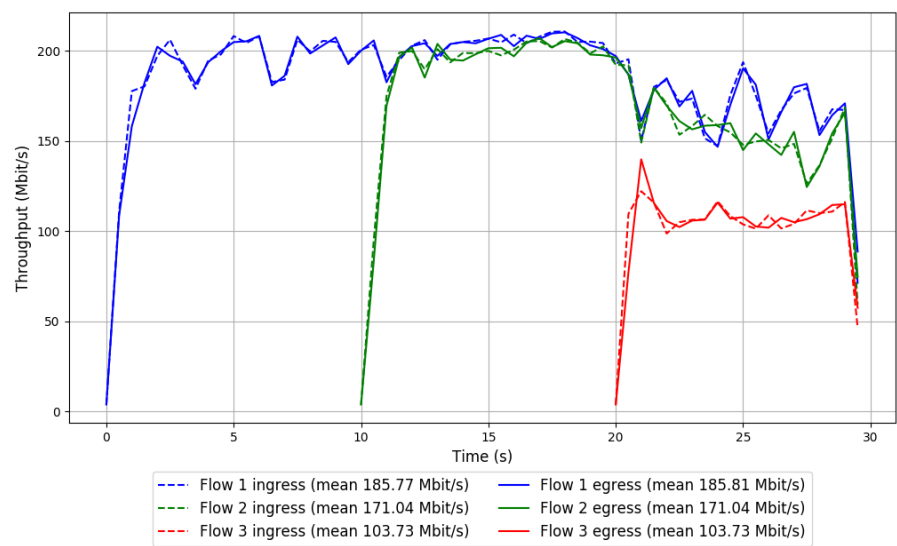


```
Run 2: Statistics of Indigo

Start at: 2018-01-03 01:38:54
End at: 2018-01-03 01:39:24

# Below is generated by plot.py at 2018-01-03 06:40:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.99 Mbit/s
95th percentile per-packet one-way delay: 59.833 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.81 Mbit/s
95th percentile per-packet one-way delay: 57.313 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 171.04 Mbit/s
95th percentile per-packet one-way delay: 60.454 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 103.73 Mbit/s
95th percentile per-packet one-way delay: 66.452 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-03 01:52:28

End at: 2018-01-03 01:52:58

Below is generated by plot.py at 2018-01-03 06:40:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 331.38 Mbit/s

95th percentile per-packet one-way delay: 57.127 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 181.66 Mbit/s

95th percentile per-packet one-way delay: 54.613 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 174.62 Mbit/s

95th percentile per-packet one-way delay: 58.064 ms

Loss rate: 0.00%

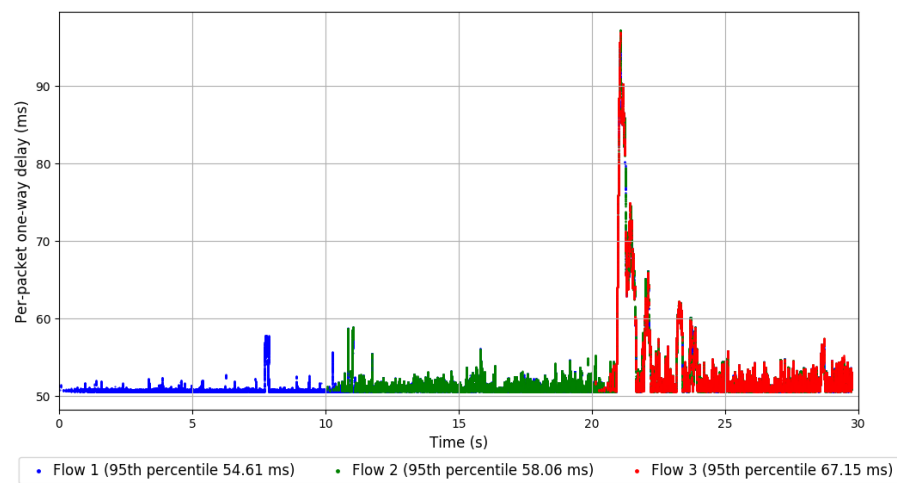
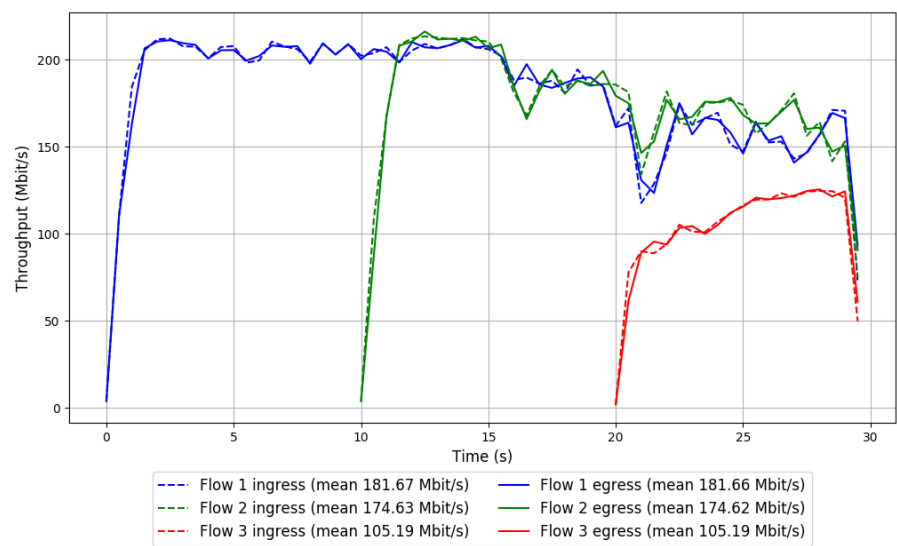
-- Flow 3:

Average throughput: 105.19 Mbit/s

95th percentile per-packet one-way delay: 67.152 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-03 02:06:08

End at: 2018-01-03 02:06:38

Below is generated by plot.py at 2018-01-03 06:40:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 332.95 Mbit/s

95th percentile per-packet one-way delay: 64.491 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 174.70 Mbit/s

95th percentile per-packet one-way delay: 60.869 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 164.39 Mbit/s

95th percentile per-packet one-way delay: 65.172 ms

Loss rate: 0.01%

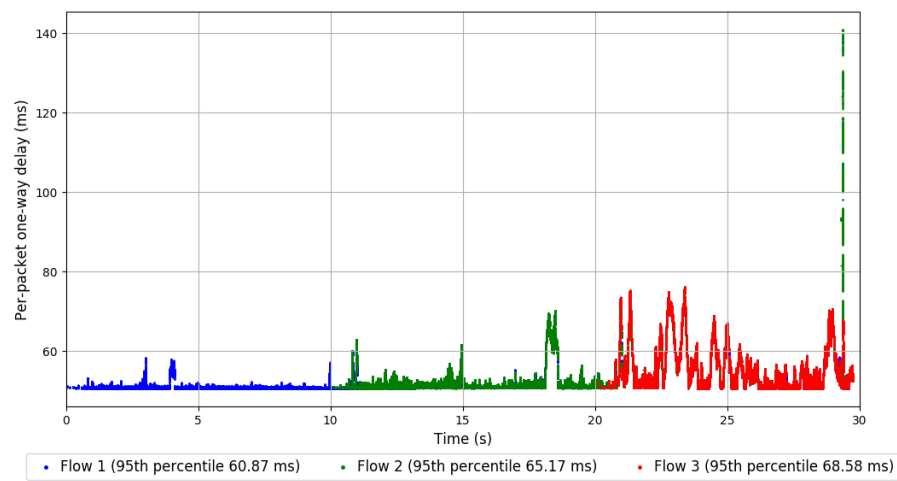
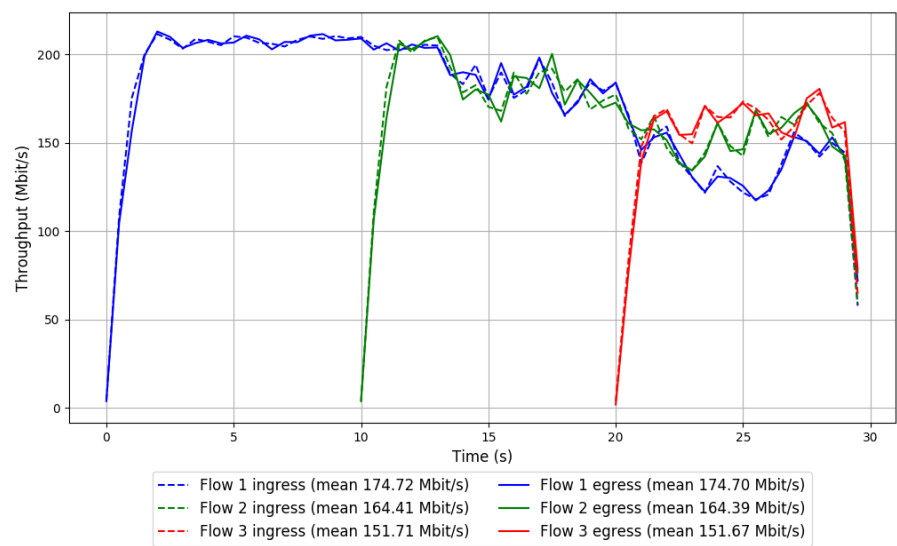
-- Flow 3:

Average throughput: 151.67 Mbit/s

95th percentile per-packet one-way delay: 68.581 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-03 02:19:41

End at: 2018-01-03 02:20:11

Below is generated by plot.py at 2018-01-03 06:40:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 348.73 Mbit/s

95th percentile per-packet one-way delay: 63.760 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 171.67 Mbit/s

95th percentile per-packet one-way delay: 61.643 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 170.96 Mbit/s

95th percentile per-packet one-way delay: 63.807 ms

Loss rate: 0.00%

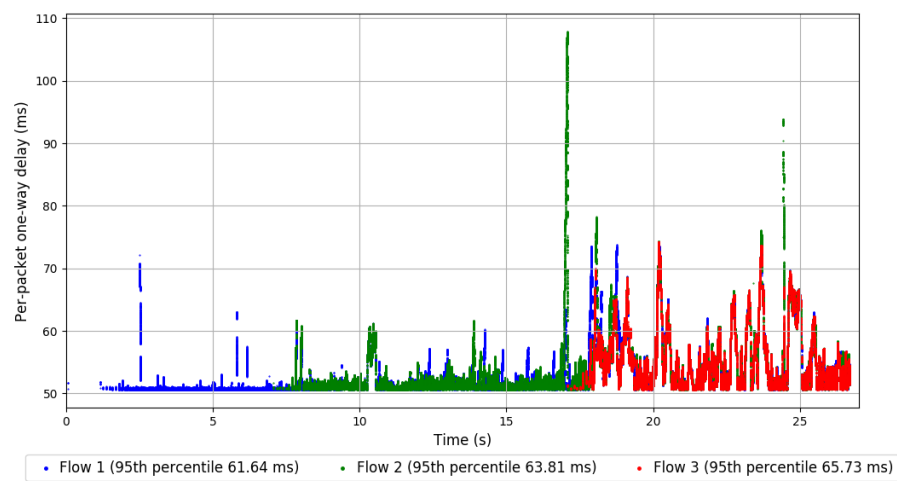
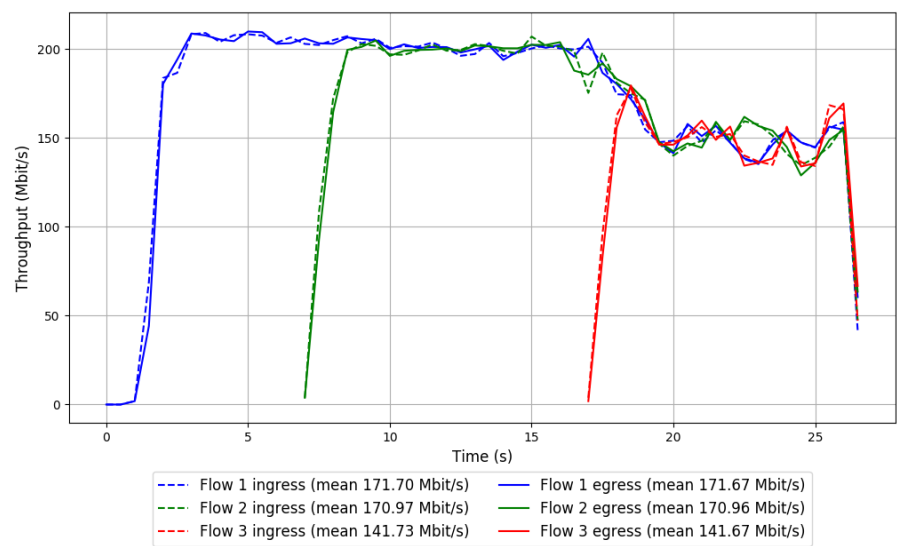
-- Flow 3:

Average throughput: 141.67 Mbit/s

95th percentile per-packet one-way delay: 65.729 ms

Loss rate: 0.02%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-03 02:32:46

End at: 2018-01-03 02:33:16

Below is generated by plot.py at 2018-01-03 06:40:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 328.20 Mbit/s

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

Loss rate: 0.32%

-- Flow 1:

Average throughput: 170.83 Mbit/s

95th percentile per-packet one-way delay: 58.274 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 169.81 Mbit/s

95th percentile per-packet one-way delay: 62.333 ms

Loss rate: 0.02%

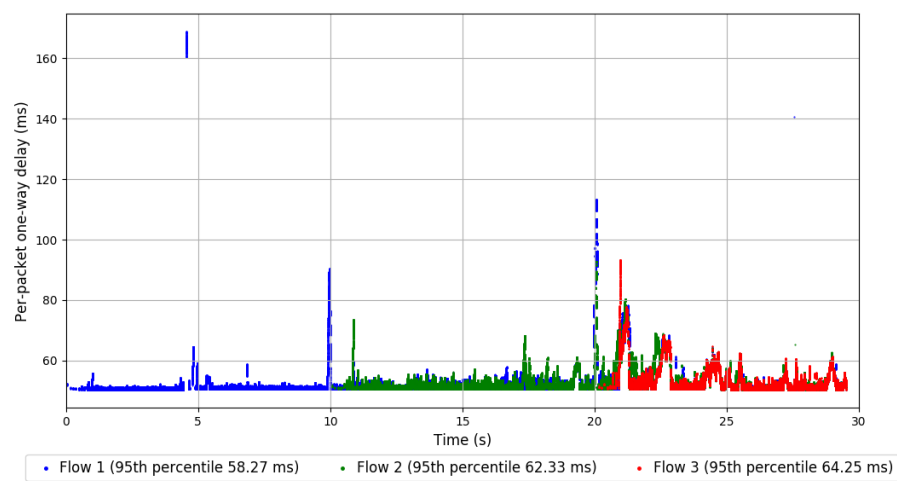
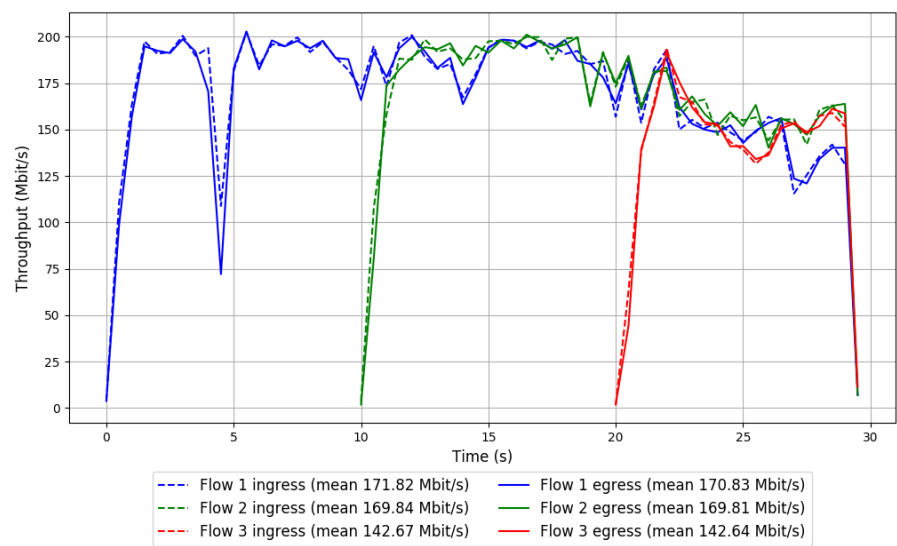
-- Flow 3:

Average throughput: 142.64 Mbit/s

95th percentile per-packet one-way delay: 64.252 ms

Loss rate: 0.03%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-03 02:46:00

End at: 2018-01-03 02:46:30

Below is generated by plot.py at 2018-01-03 06:40:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 309.20 Mbit/s

95th percentile per-packet one-way delay: 61.485 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 179.88 Mbit/s

95th percentile per-packet one-way delay: 60.425 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 172.53 Mbit/s

95th percentile per-packet one-way delay: 62.313 ms

Loss rate: 0.00%

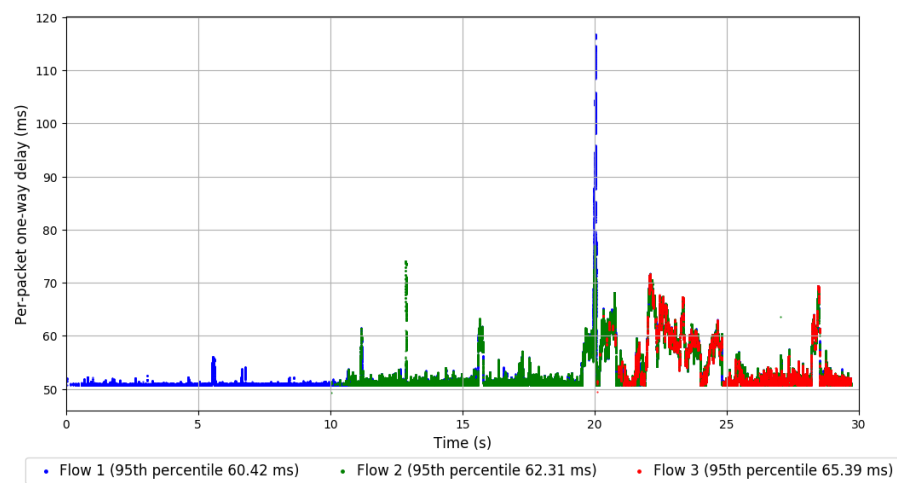
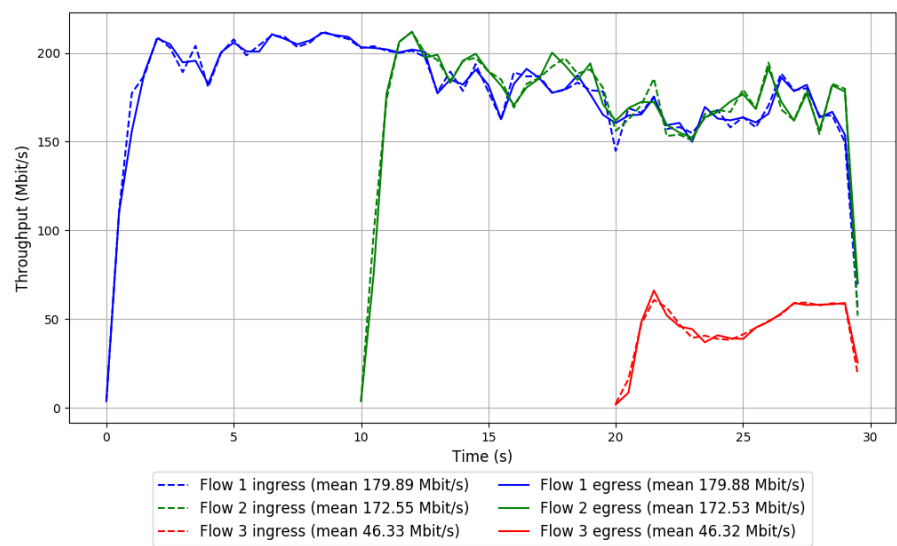
-- Flow 3:

Average throughput: 46.32 Mbit/s

95th percentile per-packet one-way delay: 65.386 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-03 02:59:36

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

Below is generated by plot.py at 2018-01-03 06:40:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 327.12 Mbit/s

95th percentile per-packet one-way delay: 59.013 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 176.63 Mbit/s

95th percentile per-packet one-way delay: 56.822 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 172.07 Mbit/s

95th percentile per-packet one-way delay: 59.301 ms

Loss rate: 0.00%

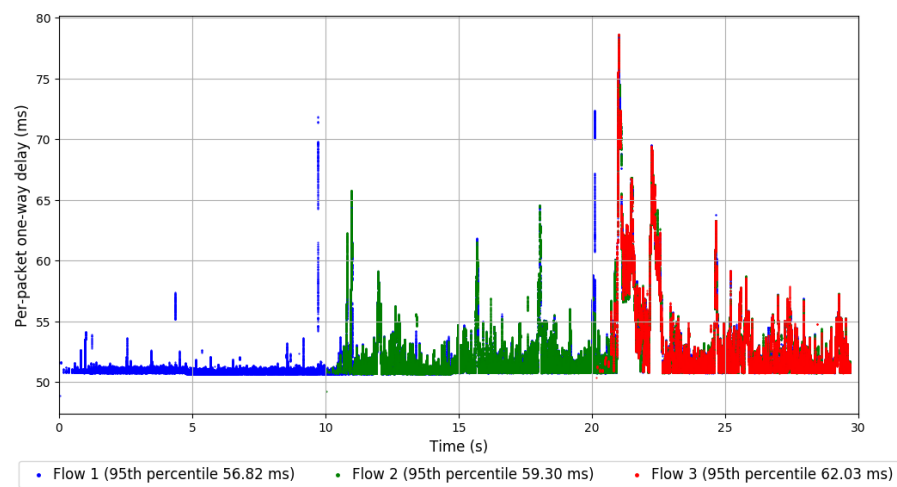
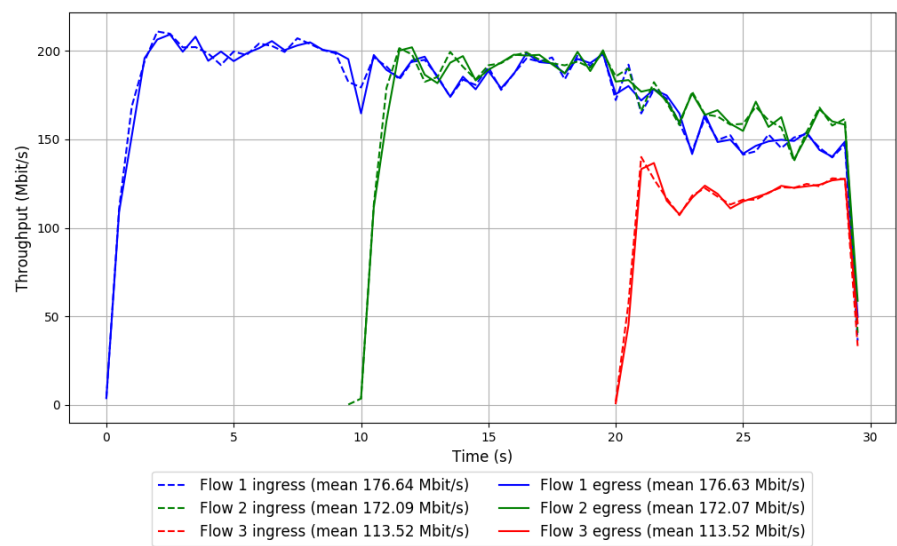
-- Flow 3:

Average throughput: 113.52 Mbit/s

95th percentile per-packet one-way delay: 62.033 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-03 03:13:02

End at: 2018-01-03 03:13:32

Below is generated by plot.py at 2018-01-03 06:40:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 330.78 Mbit/s

95th percentile per-packet one-way delay: 56.194 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 174.92 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 166.22 Mbit/s

95th percentile per-packet one-way delay: 56.611 ms

Loss rate: 0.00%

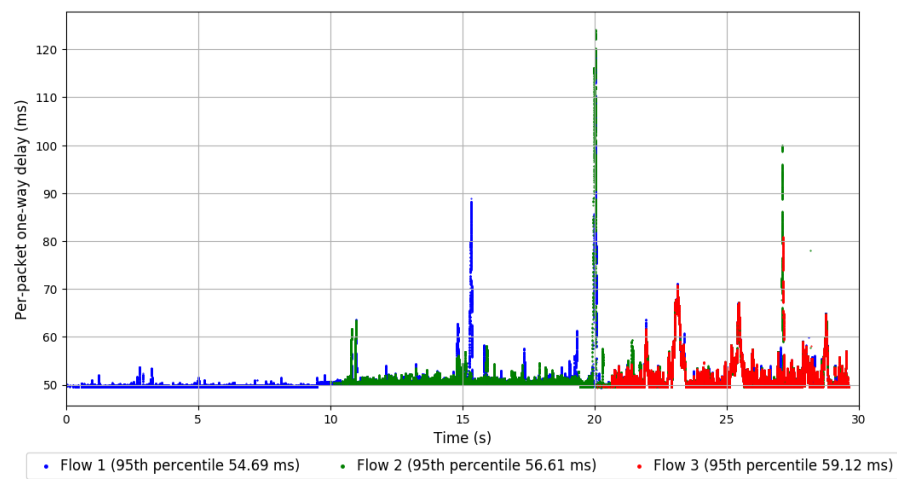
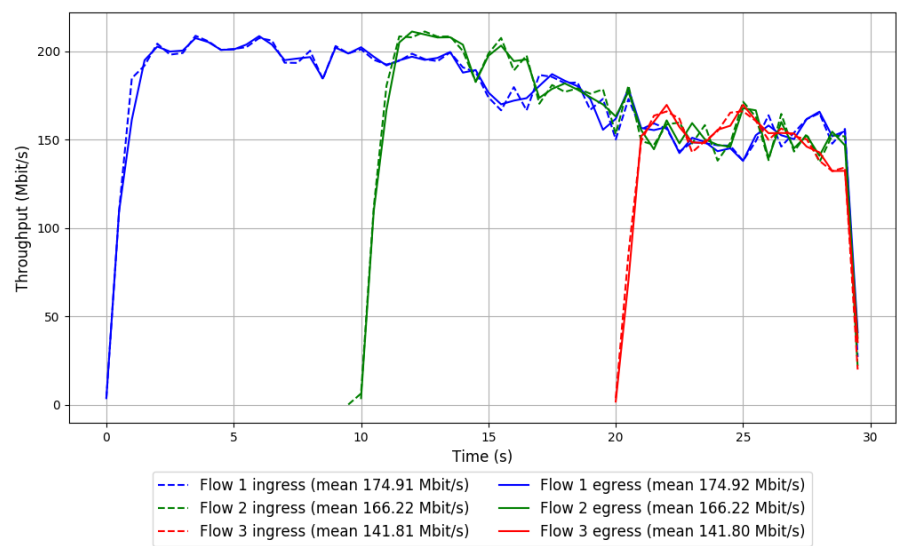
-- Flow 3:

Average throughput: 141.80 Mbit/s

95th percentile per-packet one-way delay: 59.120 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



```
Run 10: Statistics of Indigo

Start at: 2018-01-03 03:26:22
End at: 2018-01-03 03:26:52

# Below is generated by plot.py at 2018-01-03 06:40:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 307.77 Mbit/s
95th percentile per-packet one-way delay: 71.797 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 152.62 Mbit/s
95th percentile per-packet one-way delay: 64.134 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 161.37 Mbit/s
95th percentile per-packet one-way delay: 83.915 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 159.00 Mbit/s
95th percentile per-packet one-way delay: 70.880 ms
Loss rate: 0.11%
```

Run 10: Report of Indigo — Data Link

